North Shore Multi-Use Indoor Facility

GALENA PARK ISD

HOUSTON, TEXAS

GPISD PROJECT #: 1001
CSP# 25-603



VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER

Adico Consulting Engineers
205 E. Edgewood Dr.
Friendswood, Texas, 77546
Main Phone: 346.385.1016
https://adico-llc.com/

STRUCTURAL ENGINEER

Matrix Structural
5177 Richmond Avenue, Suite 670
Houston, Texas, 77056
Main Phone: 713.333.0104
https://matrixstructural.com/

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

COVER

SHEET NO.

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

COVER

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

North Shore Multi-Use Indoor Facility

GALENA PARK ISD

HOUSTON, TEXAS

ABBREVIATIONS

A

AFF	ABOVE FINISH FLOOR
ACT	ACOUSTICAL CEILING TILE
ADDL	ADDITIONAL
AB	AIR BARRIER
ACM	ALUMINUM COMPOSITE PANEL
ADA	AMERICANS WITH DISABILITIES ACT
AL/ALUM	ALUMINUM
APPROX	APPROXIMATE OR APPROXIMATELY
ARCH	ARCHITECT OR ARCHITECTURAL

B

BD	BOARD
BOW	BOTTOM OF WALL
BUR	BUILT-UP ROOFING
BLDG	BUILDING

C

℄	CENTER LINE
CR	CLASSROOM
CFS	COLD-FORMED STEEL
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CM	CONSTRUCTION MANAGER
CONT	CONTINUOUS
CI	CONTINUOUS INSULATION
CJ	CONTROL JOINT
COORD	COORDINATE
CORR	CORRIDOR

D

DIA	DIAMETER
DO	DOOR OPENING
DN	DOWN
DS	DOWNSPOUT

E

EA	EACH
EW	EACH WAY
ELEC	ELECTRICAL
EWC	ELECTRIC WATER COOLER
ELEV	ELEVATION
EQ	EQUAL
EQPT	EQUIPMENT
EXIST	EXISTING
EJ	EXPANSION JOINT
EXT	EXTERIOR
EIFS	EXTERIOR INSULATION & FINISH SYSTEM

F

FT	FEET or FOOT
FRP	FIBERGLASS REINFORCED PLASTIC
FV	FIELD-VERIFY
FIN	FINISH
FF	FINISH FLOOR
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER & CABINET
FHC	FIRE HOSE CABINET
FHCS	FLAT-HEAD COUNTERSUNK
FL	FLOOR
FD	FLOOR DRAIN
FLR	FLUORESCENT

G / H

GALV	GALVANIZED
GA	GAGE
GC	GENERAL CONTRACTOR
GO	GLAZED OPENING
GYP	GYPSUM
HT	HEIGHT
HP	HIGH POINT
HM	HOLLOW METAL
HORZ	HORIZONTAL
HB	HORIZONTAL BLINDS
HDG	HOT-DIP GALVANIZED
HR	HOUR

I / J / K

ID	INSIDE DIAMETER
INSUL	INSULATION
IFP	INTERACTIVE FLAT PANEL
IMB	INTERACTIVE MARKERBOARD
INT	INTERIOR
IBC	INTERNATIONAL BUILDING CODE

L

LAV	LAVATORY
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LOW POINT
LVT	LUXURY VINYL TILE

M

MFR	MANUFACTURER
MFG	MANUFACTURING
MB	MARKER BOARD
MO	MASONRY OPENING
MAX	MAXIMUM
MECH	MECHANICAL

M (CONT.)

MOD BIT	MODIFIED BITUMEN
MULL	MULLION
MEP	MECHANICAL-ELECTRICAL-PLUMBING
MCM	METAL COMPOSITE MATERIAL
MIN.	MINIMUM
MISC	MISCELLANEOUS

N

NOM	NOMINAL
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NO. / #	NUMBER

O

OC	ON CENTER
OD	OUTSIDE DIAMETER
OPP HAND	OPPOSITE HAND
OH	OVERHEAD
OFCI	OWNER-FURNISHED, CONTRACTOR-INSTALLED
OFOI	OWNER-FURNISHED, OWNER INSTALLED

P / Q

PR	PAIR
P.LAM.	PLASTIC LAMINATE
PLT	PLATE
PLMB	PLUMBING
PT	POINT
PCF	POUNDS PER CUBIC FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PREFAB	PREFABRICATED
PROJ	PROJECTOR or PROJECTION
QT	QUARRY TILE

R

R.	RADIUS
REBAR	REINFORCING BAR
REF.	REFERENCE or REFER TO
RCP	REFLECTED CEILING PLAN
RE:	REGARDING
REFG	REFRIGERATOR
REINF	REINFORCE or REINFORCING
REQD	REQUIRED
R.	RISER (STAIR)
	ROLLING WINDOW SHADES
RD	ROOF DRAIN
RO	ROUGH OPENING

S

SIM.	SIMILAR
SC	SOLID CORE
SAB	SOUND ATTENUATION BLANKET
SAFB	SOUND ATTENUATION FIRE BLANKET
STC	SOUND TRANSMISSION CLASS
SPEC	SPECIFICATION
SQ	SQUARE
SF	SQUARE FOOT
SS	STAINLESS STEEL
STRUC.	STRUCTURAL
SUSP.	SUSPENDED

T

TB	TACKBOARD
TS	TACKSTRIP
TW	TACK WALL
TC	TEACHER'S CABINET
TAS	TEXAS ACCESSIBILITY STANDARDS
T.	TREAD (STAIR)
T&B	TOP & BOTTOM
TO.	TOP OF
TC	TOP OF CURB
TOD	TOP OF DECK
TOJ	TOP OF JOIST
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP.	TYPICAL

U / V

U/C	UNDER COUNTER
U.L.	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
VERT	VERTICAL
VCT	VINYL COMPOSITION TILE
VWC	VINYL WALL COVERING

W / X / Y / Z

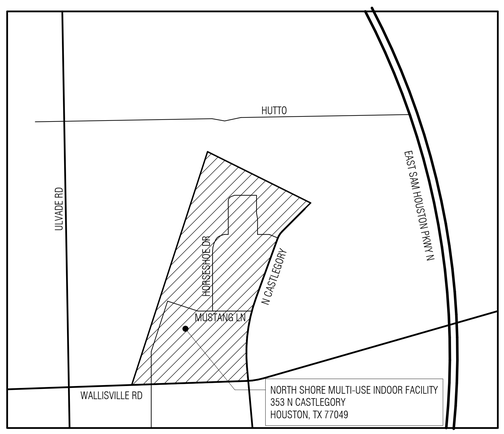
WC	WATER CLOSET
WRB	WATER-RESISTIVE BARRIER
WT	WEIGHT
W	WIDE
W/	WITH
W/O	WITHOUT
WP	WORKING POINT
WWF	WELDED WIRE FABRIC

SYMBOLS LEGEND

ROOM NAME 101	ROOM NAME & NUMBER	SFX	ALUMINUM-FRAMED GLAZED OPENING SYSTEM
101	DOOR NUMBER	SFX 1	HOLLOW METAL-FRAMED GLAZED OPENING SYSTEM
AC	ACCESS CONTROL	X1	PARTITION TYPE
X	SIGNAGE TAG	X1	TOILET ACCESSORY
HB	HORIZONTAL BLINDS	X1	SPECIALTY EQUIPMENT
1	DEMO/PLAN NOTE		
XXX-01	ROOF TYPE MARK	XXX-01	FLOOR TYPE MARK
XXX-01	ASSEMBLY TYPE	1ℓ 1' - 0"	CEILING TAG
1/ A101	DETAIL SECTION MARKER	X HR	FIRE RESISTANCE TAG
X1	PLUMBING TAG	←C→	FLOOR TRANSITION TAG
1 A101 SIM	BUILDING SECTION MARKER	1 Ref ←Ref A101 →Ref 1 Ref	BUILDING ELEVATION MARKER
1 A101 SIM	WALL SECTION MARKER	1/ A101 Ref	INTERIOR/ CASEWORK ELEVATION MARKER
1 A101 SIM	CALLOUT HEAD	N	PLAN NORTH/ TRUE NORTH MARKER
Name Elevation			DATUM ELEVATION

MATERIAL LEGEND

EARTH	CERAMIC TILE
POROUS FILL	GLASS (LARGE SCALE)
CONCRETE/ GROUT	INSULATION (RIGID FOAM BOARD)
BRICK	INSULATION (EPS FOAM BOARD)
CMU (LARGE SCALE)	INSULATION (BATT/ BLANKET)
MARBLE	INSULATION (SEMI-RIGID BOARD)
METAL (LARGE SCALE)	WOOD, ROUGH (CONTINUOUS)
METAL (SMALL SCALE)	WOOD, ROUGH (BLOCKING)
RESILIENT FLOORING	WOOD, FINISH
ACOUSTICAL TILE	PLYWOOD (LARGE SCALE)
TERRAZZO	FIBER CEMENT PANEL
PLASTER, SAND, GROUT, GYPSUM BOARD	METAL LATH
	GYPSUM BOARD



SITE LOCATION MAP

PROJECT INFORMATION

TDLR PROJECT REGISTRATION NUMBER: TABSXXXXXXXX

APPROXIMATE BUILDING AREAS

GROUND LEVEL AREA.:	92,856 S.F.
UPPER LEVEL AREA.:	1,598 S.F.
TOTAL BLDG AREA.:	94,454 S.F.
LEGAL DESCRIPTION:	RES A BLK 1 SENIOR HIGH SCHOOL COMPLEX GALENA PARK ISD NORTHSHORE

BUILDING CONSTRUCTION INFORMATION

TYPE OF CONSTRUCTION (TABLE 601 - IBC):	TYPE II-B
FIRE PROTECTION SYSTEM:	AUTOMATIC SPRINKLER SYSTEM THROUGHOUT

GENERAL NOTES

1. Refer to the CODE-series sheets for Code Information, Design Criteria and Fire Protection Requirements.
2. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
3. Based on the applicable design criteria, submit Shop Drawings of the proposed pattern of control joints in masonry veneer, CMU, gypsum board, plaster and stucco to the Architect for review and approval prior to construction.
4. In case of discrepancies in or between the Contract Documents, the greater quantity or better quality shall be bid. Clarifications regarding the discrepancies shall be requested from the Architect prior to construction, and the resulting interpretations implemented in accordance with the Contract Documents.

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
COVER, INDEX, CODE	
COVER	COVER
INDEX	INDEX, GENERAL NOTES AND ABBREVIATIONS
CODE1.1	FIRE CODE REVIEW
CODE1.2	FIRE CODE REVIEW - ALTERNATE
CODE2.1	CODE REVIEW
CODE2.2	LIFE SAFETY PLAN
CODE2.3	LIFE SAFETY PLAN - ALTERNATE
CIVIL	
C0	COVER SHEET
C1	GENERAL NOTES
C2	TOPOGRAPHIC SURVEY (1 OF 2)
C2.1	TOPOGRAPHIC SURVEY (2 OF 2)
C3	OVERALL SITE LAYOUT PLAN
C4	DEMOLITION PLAN
C5	SITE DIMENSION PLAN
C6	SITE UTILITY PLAN
C7	GRADING & DRAINAGE PLAN
C8	PAVING PLAN
C9	DRAINAGE AREA MAP
C10	FIRE ACCESS LANE
C11	STORM WATER POLLUTION PREVENTION PLAN
C12	STORM WATER POLLUTION PREVENTION DETAILS
C13	PAVING AND GRADING DETAILS
C14	MISCELLANEOUS DETAILS
ARCHITECTURAL	
A0.21	TEXAS ACCESSIBILITY STANDARDS REQUIREMENTS
A1.01	OVERALL DEMO SITE PLAN
A1.11	OVERALL SITE PLAN
A1.21	ENLARGED ARCHITECTURAL SITE PLANS, CANOPY PLANS
A1.22	ENLARGED ARCHITECTURAL SITE PLANS AND DETAILS
A1.31	ARCHITECTURAL SITE DETAILS
A2.01	DEMO FLOOR PLAN - LEVEL ONE - UNIT A
A2.11	ORIENTATION PLAN - LEVEL ONE
A2.11.1	ORIENTATION PLAN - LEVEL ONE - ALTERNATE
A2.11A	FLOOR PLAN - LEVEL ONE - UNIT A
A2.11B	FLOOR PLAN - LEVEL ONE - UNIT B
A2.11C	FLOOR PLAN - LEVEL ONE - UNIT C
A2.11C.1	FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE BID
A2.11D	FLOOR PLAN - LEVEL ONE - UNIT D
A2.11D.1	FLOOR PLAN - LEVEL ONE - UNIT D - ALTERNATE BID
A2.12B	FLOOR PLAN - LEVEL TWO - UNIT B
A2.12B.1	FLOOR PLAN - LEVEL TWO - UNIT B - ALTERNATE
A2.21	PARTITION TYPES
A2.22	PARTITION DETAILS
A2.23	LOCKER DETAILS
A2.31	ENLARGED TOILET PLANS AND ELEVATIONS
A2.38	TYPICAL TOILET ROOM DETAILS, TOILET ACCESSORY LEGEND
A2.39	TYPICAL SHOWER DETAILS
A2.42	ENLARGED CATWALK PLANS & SECTIONS
A2.59	PLAN DETAILS
A2.61	MISCELLANEOUS DETAILS
A3.00	OVERALL EXTERIOR ELEVATIONS
A3.00.1	OVERALL EXTERIOR ELEVATIONS - (ALTERNATE)
A3.01	EXTERIOR ELEVATIONS
A3.02	EXTERIOR ELEVATIONS
A3.03	EXTERIOR ELEVATIONS
A3.04	EXTERIOR ELEVATIONS - (ALTERNATE)
A3.05	EXTERIOR ELEVATIONS - (ALTERNATE)
A3.06	EXTERIOR ELEVATIONS - (RECLAD ALTERNATE)
A3.11	EXTERIOR ELEVATION DETAILS
A3.21	INTERIOR ELEVATIONS
A3.22	INTERIOR ELEVATIONS
A3.23	INTERIOR ELEVATIONS
A3.31	INTERIOR ELEVATION DETAILS
A4.01	BUILDING SECTIONS
A4.02	BUILDING SECTIONS
A4.11	BUILDING ASSEMBLY TYPES
A4.12	BUILDING ASSEMBLY DETAILS
A4.21	WALL SECTIONS
A4.22	WALL SECTIONS
A4.31	WALL ASSEMBLY DETAILS
A4.32	WALL ASSEMBLY DETAILS
A4.41	FIELD DETAILS
A5.10	DEMO ROOF PLAN
A5.11	OVERALL ROOF PLAN
A5.21	ROOF PLAN - UNIT A
A5.22	ROOF PLAN - UNIT B
A5.23	ROOF PLAN - UNIT C
A5.23.1	ROOF PLAN - UNIT C - ALTERNATE
A5.24	ROOF PLAN - UNIT D
A5.24.1	ROOF PLAN - UNIT D - ALTERNATE
A5.31	ROOF DETAILS
A6.01A	DEMO REFLECTED CEILING PLAN - LEVEL ONE - UNIT A
A6.11A	REFLECTED CEILING PLAN - LEVEL ONE - UNIT A
A6.11B	REFLECTED CEILING PLAN - LEVEL ONE - UNIT B
A6.11C	REFLECTED CEILING PLAN - LEVEL ONE - UNIT C

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
A6.11C.1	REFLECTED CEILING PLAN - LEVEL ONE - UNIT C - ALTERNATE
A6.11D	REFLECTED CEILING PLAN - LEVEL ONE - UNIT D
A6.11D.1	REFLECTED CEILING PLAN - LEVEL ONE - UNIT D - ALTERNATE
A6.12B	REFLECTED CEILING PLAN - LEVEL TWO - UNIT B
A6.31	CEILING DETAILS
A7.01	DOOR SCHEDULE
A7.02	DOOR TYPE ELEVATIONS
A7.21	GLAZING ASSEMBLY ELEVATIONS
A7.22	TRANSLUCENT PANEL ASSEMBLY ELEVATIONS
A7.31	GLAZING ASSEMBLY DETAILS
A9.01	MATERIAL FINISH SCHEDULES
A9.11A	INTERIOR FINISH PLAN - LEVEL ONE - UNIT A
A9.11B	INTERIOR FINISH PLAN - LEVEL ONE - UNIT B
A9.11C	INTERIOR FINISH PLAN - LEVEL ONE - UNIT C
A9.11D	INTERIOR FINISH PLAN - LEVEL ONE - UNIT D
A9.21	ENLARGED INTERIOR FINISH PLANS
A9.22	ENLARGED INTERIOR FINISH PLANS
A9.41A	WAYFINDING PLAN - LEVEL ONE - UNIT A
A9.41B	WAYFINDING PLAN - LEVEL ONE - UNIT B
A9.41C	WAYFINDING PLAN - LEVEL ONE - UNIT C
A9.41C.1	WAYFINDING PLAN - LEVEL ONE - UNIT C - ALTERNATE
A9.41D	WAYFINDING PLAN - LEVEL ONE - UNIT D
A9.41D.1	WAYFINDING PLAN - LEVEL ONE - UNIT D - ALTERNATE
A9.48	WAYFINDING DETAILS
STRUCTURAL	
S1.01	GENERAL NOTES
S1.02	ABBREVIATIONS, SYMBOLS, AND SHEET INDEX
S1.03	3D VIEW
S2.00	FOUNDATION PLAN - OVERALL
S2.01B	FOUNDATION PLAN - UNIT B
S2.02C	FOUNDATION PLAN - UNIT C
S2.02C.1	FOUNDATION PLAN - UNIT C - ALTERNATE BID
S2.03D	FOUNDATION PLAN - UNIT D
S2.10	MEZZANINE FRAMING PLAN - OVERALL
S2.11B	MEZZANINE FRAMING PLAN - UNIT B
S2.11B.1	MEZZANINE FRAMING PLAN - UNIT B ALTERNATE BID
S2.12C	MEZZANINE FRAMING PLAN - UNIT C
S2.20	ROOF FRAMING PLAN - OVERALL
S2.21B	ROOF FRAMING PLAN - UNIT B
S2.22D	ROOF FRAMING PLAN - UNIT D
S3.01	FOUNDATION DETAILS
S3.02	FOUNDATION DETAILS
S3.03	FOUNDATION DETAILS
S3.04	FOUNDATION DETAILS
S4.01	STEEL DETAILS
S4.02	STEEL DETAILS
S4.03	STEEL DETAILS
S5.01	FLOOR DETAILS
S5.02	FLOOR DETAILS
S6.01	ROOF DETAILS
S6.02	ROOF DETAILS
S7.01	CMU DETAILS
S7.02	CMU DETAILS
S7.03	CMU DETAILS
MECHANICAL	
M1.01A	MECHANICAL DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A
M2.01	MECHANICAL FLOOR PLAN - LEVEL ONE - OVERALL
M2.03A	MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT A
M2.04B	MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT B
M2.06C	MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT C
M2.06C.1	MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE
M2.08D	MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT D
M2.10	MECHANICAL ROOF PLAN
M3.01	MECHANICAL ENLARGED PLAN
M3.02	MECHANICAL ENLARGED PLAN
M4.01	MECHANICAL PIPING DIAGRAMS
M5.01	MECHANICAL DETAILS AND LEGENDS
M5.02	MECHANICAL DETAILS
M5.03	MECHANICAL DETAILS
M6.01	MECHANICAL SCHEDULES
ELECTRICAL	
E0.00	ELECTRICAL ESSENTIALS
E0.01	ELECTRICAL DEMOLITION SITE PLAN
E0.02A	ELECTRICAL DEMOLTION LIGHTING PLAN - LEVEL ONE - UNIT A
E0.03A	ELECTRICAL DEMOLTION POWER PLAN - LEVEL ONE - UNIT A
E1.01A	ELECTRICAL SITE PLAN - AREA A
E1.02B	ELECTRICAL SITE PLAN - AREA B
E2.01	ELECTRICAL COMPOSITE PLAN - LEVEL ONE - OVERALL
E2.02A	ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT A
E2.03B	ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT B
E2.04C	ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT C

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
E2.04C.1	ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT C - ALTERNATE
E2.05D	ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT D
E3.02A	ELECTRICAL POWER PLAN - LEVEL ONE - UNIT A
E3.03B	ELECTRICAL POWER PLAN - LEVEL ONE - UNIT B
E3.04C	ELECTRICAL POWER PLAN - LEVEL ONE - UNIT C
E3.05D	ELECTRICAL POWER PLAN - LEVEL ONE - UNIT D
E3.07A	ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT A
E3.08B	ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT B
E3.09C	ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT C
E3.09D	ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT C - ALTERNATE
E3.10D	ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT D
E4.01	ELECTRICAL ENLARGED PLANS
E4.02	ELECTRICAL ENLARGED PLANS
E4.03	ELECTRICAL ENLARGED PLANS
E5.01	ELECTRICAL ONE-LINE DIAGRAM
E5.02	ELECTRICAL PANEL SCHEDULES
E5.03	ELECTRICAL PANEL SCHEDULES
E5.04	ELECTRICAL DETAILS, AND SCHEDULES
E5.05	ELECTRICAL DETAILS, AND SCHEDULES
PLUMBING	
P1.00	PLUMBING SITE PLAN
P1.01A	PLUMBING DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A
P1.01A.1	PLUMBING DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A - ALTERNATE
P2.02A	PLUMBING UNDERFLOOR PLAN - UNIT A
P2.03B	PLUMBING UNDERFLOOR PLAN - UNIT B
P2.05D	PLUMBING UNDERFLOOR PLAN - UNIT D
P3.01	PLUMBING FLOOR PLAN - LEVEL ONE - OVERALL
P3.02A	PLUMBING FLOOR PLAN - LEVEL ONE - UNIT A
P3.02A.1	PLUMBING FLOOR PLAN - LEVEL ONE - UNIT A - ALTERNATE
P3.03B	PLUMBING FLOOR PLAN - LEVEL ONE - UNIT B
P3.04C	PLUMBING FLOOR PLAN - LEVEL ONE - UNIT C
P3.05D	PLUMBING FLOOR PLAN - LEVEL ONE - UNIT D
P3.06B	PLUMBING FLOOR PLAN - LEVEL ONE - UNIT B
P4.01	PLUMBING ENLARGED FLOOR PLAN
P5.01	PLUMBING DETAILS
P5.02	PLUMBING DETAILS
P6.01	PLUMBING SCHEDULES
TECHNOLOGY	
T0.00	TECHNOLOGY NOTES AND LEGENDS
T1.01A	TECHNOLOGY DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A
T2.01	TECHNOLOGY FLOOR PLAN - LEVEL ONE - OVERALL
T2.02	TECHNOLOGY FLOOR PLAN - LEVEL ONE - OVERALL - ALTERNATE
T2.02A	TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT A
T2.03B	TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT B
T2.04C	TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT C
T2.04C.1	TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE
T2.05D	TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT D
T2.06D	TECHNOLOGY FLOOR PLAN - LEVEL TWO - UNIT D
T3.01	TECHNOLOGY ENLARGED PLAN
T5.01	TECHNOLOGY DETAILS
T5.02	TECHNOLOGY DETAILS
T5.03	TECHNOLOGY DETAILS
T5.04	TECHNOLOGY DETAILS
PREFABRICATED	
DW-100.1	FLOOR PLAN - FIRST FLOOR
DW-100.2	FLOOR PLAN - FIRST FLOOR AREA C
DW-100.3	FLOOR PLAN - FIRST FLOOR AREA D
DW-100.4	FLOOR PLAN - FIRST FLOOR AREA B
DW-100.5	FLOOR PLAN - FIRST FLOOR AREA A
DW-100.6	HIGHLIGHTED PLAN LEVEL 1
DW-200.1	ELEVATIONS
DW-200.2	ELEVATIONS
DW-200.3	ELEVATIONS
DW-300.1	INTERSECTION DETAILS AND DOOR SCHEDULE
DW-400.1	WALL DETAILS

Sheet Count: 224

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER

Adico Consulting Engineers
205 E. Edgewood Dr.
Friendswood, Texas, 77546
Main Phone: 346.385.1016
https://adico-llc.com/

STRUCTURAL ENGINEER

Matrix Structural
5177 Richmond Avenue, Suite 670
Houston, Texas, 77056
Main Phone: 713.333.0104
https://matrixstructural.com/

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT MONIKA C. CASTILLO 36558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Todd Hangar
Drawn By	VLK

PROJECT NO.

25-0056.00

SHEET TITLE

INDEX, GENERAL NOTES AND ABBREVIATIONS

SHEET NO.

INDEX

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

1 BUILDING PLANNING & DESCRIPTION

☐ NEW CONSTRUCTION ☐ SHELL BUILDING
☐ LEASE SPACE BUILD-OUT (LSBO) ☐ CHANGE OF OCCUPANCY
☒ SUBSTANTIAL IMPROVEMENT ☐ OTHER: _____

☒ SINGLE OCCUPANCY | MIXED OCCUPANCY: ☐ SEPARATED USE ☐ NON-SEPARATED USE
(SECTION 508.3 OR 508.4 IBC 2021)

TYPE OF CONSTRUCTION: II-B *(CHAPTER 6 IBC 2021)*
HEIGHT LIMITATION: 55' AREA LIMITATION: UNLIMITED *(TABLES 504.3, 504.4, 506.2 IBC 2021)*
FRONTAGE INCREASE CALCULATIONS ARE SHOWN ON SHEET: CODE1.1

BUILDING VALUATION

BUILDING NUMBER: 1 & 2 OF 3
ADDRESS: 353 N. CASTLEGORY RD
CITY, ST: HOUSTON, TX ZIP CODE: 77049 SUITE: _____
CALL CENTERPOINT ENERGY AHEAD OF TIME, AT 713-207-4460, TO OBTAIN AN ADDRESS
HCAD #. OR PROPERTY TAX #: 1197870010001 (13 DIGITS)
(http://www.hcad.org)
BUILDING LOCATED IN FLOODPLAIN: BFE _____ FFE _____ NG _____ X-UNSHADED ____ 500-YR ____ 100-YR ____ OTHER ____
GROSS SQUARE FOOTAGE: 92,856 SF #OF FLOORS: 1 HEIGHT: 50'
ESTIMATED COST OF CONSTRUCTION: $ 26,000,000
T.D.L.R #: _____ *(REQUIRED FOR CONSTRUCTION OVER $50,000)*
TEXAS DEPARTMENT OF LICENSING AND REGULATIONS
(https://www.tdlr.texas.gov/ab/ab.htm)
TELEPHONE: (512) 463-6599 TOLL FREE (IN TEXAS): 800-803-9202
FAX: (512) 475-2871 RELAY TEXAS-TDD: 800-735-2989
SHELL BUILDING PERMIT #: _____ CIVIL PROJECT #: _____
PUBLIC UTILITIES: YES ☒ NO ☐
OSSF : YES ☐ NO ☒ PROJECT/PERMIT #: _____

LIST BELOW THE PURPOSE/USE OF THE BUILDING OR AREA BEING REVIEWED. INCLUDE DETAILS ON THE PRODUCTS/MATERIALS BEING STORED/FABRICATED AND NOTE HOW THEY ARE BEING PACKAGED.

2 OCCUPANCY TYPE AND LOAD

CHAPTER 2, 3 & TABLE 1004.5 IBC 2021

BREAK DOWN AREAS AND OCCUPANT LOADS PER FLOOR

OCC. CLASS	AREA SPECIFIC USE	GROSS SF	NET SF	SF PER OCC.	DESIGN OCC.
B	OFFICES	1,859		150	13
A	MEETING ROOM, CONFERENCE ROOM		3,944	15	263
I	TRAINER'S ROOM, REHAB	1,606		240	7
A	WEIGHT ROOM	9,084		50	182
A	LOCKER ROOMS	6,141		50	123
A	INDOOR PRACTICE FIELD	51,404		50	1,029
A	MECHANICAL & STORAGE	7,896		300	27
TOTAL NET			3,944		263
TOTAL GROSS		77,990			1,381

3 MEANS OF EGRESS

CHAPTER 10 IBC 2021

MEANS OF EGRESS	# OF REQUIRED EXITS	# OF EXITS PROVIDED	SHEET #
STAIRWAYS (PER FLOOR)	N/A		
EGRESS @ 1ST FL OR LSBO	2	8	CODE2.2

(SECTIONS 1005 & 1006 IBC 2021)

PANIC HARDWARE ON EXIT DOORS? YES ☒ NO ☐ *(SECTION 1010.2.9 IBC 2021)*

STAIRWAYS *(SECTION 1011 IBC 2021)*
STAIR DETAILS AND EGRESS WIDTHS SHOWN ON: N/A

EXIT SIGNS/EGRESS ILLUMINATION *(SECTIONS 1008 & 1013 IBC 2021)*
REQUIRED AND SHOWN ON: _____ *(HIGHLIGHT ON PLANS)*
EXTERIOR MEANS OF EGRESS LIGHTING PROVIDED? YES ☐ *(SECTION 1008 IBC 2021)*

EXIT TRAVEL DISTANCE *(SECTION 1017 IBC 2021)*

OCCUPANCY TYPE	MAX TRAVEL DISTANCE	PROVIDE TRAVEL DISTANCE	SHEET #
ASSEMBLY	250'	220' (PATH-4)	CODE2.2
BUSINESS	300'	151' (PATH-1)	CODE2.2

ELEVATORS NO ELEVATORS IN THE PROJECT
NEW ☐ EXISTING ☐ ELEVATOR HOISTWAY IBC SECTION 3006.2.1? YES ☐ NO ☐
ELEVATOR KEYBOX LOCATED IN LOBBY? YES ☐ NO ☐

4 FIRE PROTECTION & LIFE SAFETY SYS.

CHAPTER 9 IFC & IBC 2021

ALL FIRE PROTECTION PLANS SHALL BE SUBMITTED FOR REVIEW AFTER BUILDING PERMIT HAS BEEN ISSUED ***(I.E. UNDERGROUND FIRE LINE, SPRINKLER SYSTEM, FIRE ALARM SYSTEM, STANDPIPE, FIRE PUMP ROOM, AND FIRE PROTECTION WATER SUPPLY SYSTEMS)***

AUTOMATIC FIRE SPRINKLER SYSTEM/ALTERNATIVE AUTOMATIC FIRE EXTINGUISHING SYSTEM **SECTION 903 IFC 2021**
ALL SPRINKLERS SHALL COMPLY WITH MONITORING AND OCCUPANT NOTIFICATION PER 903.4.2.1 **SECTION 903.4.1 IFC 2021 AMENDMENTS**

☒ PROVIDED AS NOTED ON: _____ ☐ NOT REQUIRED PER SECTION 903

SYSTEM PROVIDED:
☒ NFPA 13
☐ NFPA 13R
☐ NFPA 13D
☐ OTHER: _____

SPRINKLER HEAD PROVIDED:
☒ STANDARD
☐ ELO
☐ ESFR
☐ QUICK RESPONSE

FIRE PUMP PROVIDED:
☒ YES ☐ NO
FIRE PUMP SEPARATION:
SEE SECTION 913.2.1 IFC 2021

FIRE DEPARTMENT ACCESS TO SPRINKLER CONTROLS:
☒ SPRINKLER RISER ROOM OR POST INDICATOR VALVE SHOWN ON: _____ *(SECTION 901.4.7 HC AMENDMENTS IFC 2021)*
☒ FDC SHOWN ON: _____ *(FDC SHALL COMPLY WITH SECTION 912 IFC 2021)*

ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS *(SECTION 904 IFC 2021)*
☐ REQUIRED AND SHOWN ON: _____
☒ NOT REQUIRED

STANDPIPE SYSTEM & HOSE CONNECTIONS *(SECTION 905 IFC 2021)*
(I.E. IN STAIRWAYS, STAGES, MALLS)
☐ PROVIDED AS NOTED ON: _____, TYPE OF SYSTEM PROVIDED: _____ *(CLASS I, II OR III)*
☐ NOT REQUIRED

PORTABLE FIRE EXTINGUISHERS *(SECTION 906 IFC 2021)*
☒ PROVIDED AS NOTED ON: _____, NUMBER PROVIDED: _____ *(HIGHLIGHT ON PLANS)*

FIRE ALARM & DETECTION SYSTEMS *(SECTION 907 HC AMENDMENTS IFC 2021)*
☒ FIRE ALARM SYSTEM (DEFERRED SUBMITTAL) ☐ ELEVATOR RECALL
☐ NOT REQUIRED ☐ GAS DETECTION SYSTEM SECTION 909
☒ EMERGENCY VOICE EVACUATION
☐ OTHER: _____

HVAC & AIR DISTRIBUTION SYSTEM CONTROLS *(SECTION 907.3.1 IFC 2021)*
☒ SMOKE DETECTORS PROVIDED TO SHUT DOWN UNITS OVER 2,000 CFM PROVIDED ON: _____
☐ NO HVAC UNITS OVER 2,000 CFM
☒ FIRE/SMOKE DAMPERS IN THE BUILDING SHOWN ON: _____
☐ NO FIRE/SMOKE DAMPERS IN THE BUILDING

SMOKE CONTROL SYSTEM *(SECTION 909 IFC 2021)*
☐ PROVIDED AS NOTED ON: _____
☒ NOT REQUIRED

SMOKE & HEAT VENTILATION *(SECTION 910 IFC 2021)*
☐ CALCULATIONS PROVIDED AS NOTED ON: _____
☒ NOT REQUIRED

ENHANCED RESPONDER COMMUNICATIONS COVERAGE SYSTEM (ERCCS) *(SECTION 510 HC AMENDMENTS)*
☐ PROVIDED AS NOTED ON: _____
☒ NOT REQUIRED

5 FIRE-RESISTANCE RATE CONSTRUCTION

CHAPTERS 6, 7 AND 10 IBC 2021

*Provide section details on the plans showing compliance for any proposed fire rated construction (walls, partitions, floors, roof, etc.).
*Please reference and provide standard for the rated design.

FIRE-RESISTANCE RATING REQUIREMENTS *TABLE 601 & PROPOSED OR REQUIRED CONSTRUCTION PER IBC 2021*

BUILDING ELEMENTS	HOURS REQUIRED	HOURS PROVIDED	UL OR IBC STANDARD USED & DESIGN DETAIL SHOWN ON
STRUCTURAL FRAME	0	0	0
EXTERIOR BEARING WALLS	0	0	0
EXTERIOR NON-BEARING WALLS	0	0	0
INTERIOR BEARING WALLS	0	0	0
INTERIOR NON-BEARING WALLS	0	0	1-HR AT MECH RM., A2.21
FLOOR CONSTRUCTION	0	0	0
ROOF CONSTRUCTION	0	0	0
STAIRWELLS *(SECTION 1023)*	0	0	0
ELEVATOR SHAFTS *(SECTION 713)*	0	0	0
CORRIDORS *(SECTION 1020)*	0	0	0
FIRE RATED DOORS *(TABLE 716.1(2))*	0	0	0
DEMISING/PARTITION WALL *(SECTION 708)*	0	0	0
FIRE BARRIER *(SECTION 707)*	0	0	0
FIRE WALL *(SECTION 706)*	0	0	0
DRAFTSTOPS: ☐ YES, SHOWN ON: _____ ☐ NO (SPRINKLED ATTIC) ☐ N/A *(SECTION 718.4)*			
FIRE SEPARATION DISTANCE (FEET) *(SECTION 602 IBC 2021)*	NORTH	SOUTH	EAST / WEST
ROOF COVERING CLASSIFICATION PROVIDED: A ☐ B ☐ C ☐ *(TABLE 1505.1 IBC 2021)*			

6 WATER SUPPLY (FOR FIREFIGHTING)

CHAPTER 5, APPENDIX B & C IFC 2018

92,856 SF GROSS SIZE OF BUILDING IN SQUARE FEET *(INCLUDE ALL OVERHANGS UNDER ROOF)*

PUBLIC WATER SUPPLY WITH FIRE HYDRANTS
(FOR PROPOSED AND EXISTING FIRE HYDRANTS ONLY)
NAME OF THE MUNICIPAL UTILITY DISTRICT: _____
NUMBER OF HYDRANTS WITHIN 400 FT (NON-SPRINKLED) OR 600 FT (SPRINKLED) OF BUILDING: 1, SHOWN ON: C6
REQUIRED GPM: 1,625 DURATION: 4 *(TABLE B105.1(2) IFC 2021)*
75% REDUCTION? YES ☒ NO ☐ *(MUST MAINTAIN MINIMUM PER TABLE B105.2 IFC 2021)*

OR

WATER SOURCE FOR RURAL AREAS WITHOUT FIRE HYDRANTS
☐ ***DRY HYDRANT ☐ UNDERGROUND STORAGE ☐ PRIVATE HYDRANT
☐ ABOVEGROUND STORAGE ☐ OTHER: _____

DESIGN SPECIFICATIONS AND LOCATIONS SHOULD MEET MINIMUM REQUIRED WATER SUPPLY IN ACCORDANCE WITH SECTION B103.3 IN THE HARRIS COUNTY FIRE CODE. THE FIRE CODE OFFICIAL IS AUTHORIZED TO UTILIZE NFPA 1142 OR THE INTERNATIONAL WILDLAND-URBAN INTERFACE CODE.

7 FIRE LANE ACCESS

CHAPTER 5, APPENDIX D IFC 2021

FIRE LANE LAYOUT PLAN, WHICH SHALL INCLUDE THE SITE PLAN, THE FIRE LANE & FIRE HYDRANTS, IS SHOWN ON: C10 *(HIGHLIGHT THE FIRE HYDRANT LOCATIONS ON THE PLANS)* AERIAL ACCESS LAYOUT, FOR BUILDINGS OVER 30 FT, IS SHOWN ON: _____.

FIRE LANES WILL BE APPROVED CONCEPTUALLY DURING THE CIVIL REVIEW PROCESS. HOWEVER, THE FIRE CODE PLAN REVIEWER MAY CHANGE THE FIRE LANE LAYOUT BASED ON THE BUILDING SPECIFICATIONS.

☒ GATES AND BARRICADES ACROSS THE FIRE ACCESS ROAD
PROPERTIES WITH FENCE AND GATES SHALL PROVIDE A 911 KEY BOX AT ENTRY GATE.

8 INTERIOR FINISH

CHAPTER 8, TABLE 803.13 IBC 2021

OCCUPANCY GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES	SHEET #
A-3	B	B	C	A2.21

9 STORAGE: STANDARD

YES ☐ NO ☒ PRODUCTS BEING STORED: _____
YES ☐ NO ☒ STORAGE METHOD *(I.E. RACKS, PALLETS ON FLOOR, ETC.)*: _____
STORAGE LAYOUT SHOWN ON: _____
YES ☐ NO ☒ MAXIMUM HEIGHT STORAGE: _____

10 STORAGE: HIGH PILED

CHAPTER 32 IFC 2021 - SEE ALSO SECTION 3203.3 & HC AMENDMENTS IFC 2021
***DEFERRED SUBMITTAL THAT MUST BE SUBMITTED WITHIN 180 DAYS OF ORIGINAL PERMITTING.**

YES ☐ NO ☒ PRODUCTS BEING STORED: _____
YES ☐ NO ☒ STORAGE PACKAGING *(I.E. PALLETS, RACKS, SOLID PILED, DRUMS, CARDBOARD BOXES, WRAPPED IN PLASTIC, ETC.)*: _____
YES ☐ NO ☒ MAXIMUM HEIGHT OF COMMODITY: _____
YES ☐ NO ☒ ***THIS BUILDING IS DESIGNED FOR THE INTENT OF HIGH PILED STORAGE. IF YES, THEN PROVIDE HIGH PILED STORAGE FORM FOUND ON HC WEBSITE
YES ☐ NO ☒ FIRE DEPARTMENT ACCESS DOORS
YES ☐ NO ☒ HIGH PILED STORAGE RACK LAYOUT/ELEVATIONS, CODE ANALYSIS, ETC. SHOWN ON: _____

11 HAZARDOUS MATERIALS

CHAPTER 50 IFC 2021 - SEE ALSO SECTION 5001.7 HC AMENDMENTS IFC 2021
HMIS FORM FOUND ON HC WEBSITE.

YES ☐ NO ☒ DOES THE BUILDING HAVE HAZARDOUS MATERIAL USE OR STORAGE? IF YES, THEN PROVIDE ALL HMIS SUMMARY AND MSDS REPORTS.
YES ☐ NO ☐ IF YES, DO THE QUANTITIES EXCEED THE MAXIMUM ALLOWABLE PER IFC 2021?
IF YES, YOU WILL BE REQUIRED TO PROVIDE THE FOLLOWING:
CODE ANALYSIS BY FIRE PROTECTION ENGINEER TO SHOW COMPLIANCE WITH IFC 2021.
CODES AND REFERENCED STANDARDS SHOWN ON SHEET(S) _____

12 SPECIAL CONDITIONS

YES ☐ NO ☒ ATRIUM(S) SECTION 404 IBC 2021
YES ☐ NO ☒ HIGH RISE BLDG SECTION 403 IBC 2021 & 914.3 IFC 2021
YES ☐ NO ☒ ANY FUEL STORAGE TANKS CHAPTERS 23, 50, 57 IFC 2021
YES ☐ NO ☒ CRITICAL FACILITIES (HARRIS COUNTY SECTION 1203.2.20 HC AMENDMENTS IFC 2021)
YES ☐ NO ☒ COMPRESSED GASES CHAPTERS 53,58 IFC 2021
YES ☐ NO ☒ CRYOGENIC FLUIDS CHAPTER 55 IFC 2021
YES ☐ NO ☒ FLAMMABLE & COMBUSTIBLE LIQUIDS CHAPTERS 50 & 57 IFC 2021
YES ☐ NO ☒ PAINT SPRAY BOOTHS, COATINGS, DIPPING OR INDUSTRIAL OVENS USED CHAPTERS 24 & 30 IFC 2021
YES ☐ NO ☒ HEALTH DEPARTMENT APPROVAL? REQUIRED FOR ALL ESTABLISHMENTS THAT SERVE/PREPARE FOOD AND BEVERAGES FOR THE PUBLIC OR HAVE REFRIGERATED FOOD STORAGE.
YES ☐ NO ☒ LP GAS CHAPTER 61 IFC 2021
YES ☒ NO ☐ PROPOSING PHASED PERMITS PHASING PLAN SHOWN ON: _____
YES ☐ NO ☐ OTHER: _____

COMMENTS & NOTES

A COPY OF THESE APPROVED CONSTRUCTION PLANS MUST BE KEPT AT PROJECT SITE FOR THE FINAL INSPECTION OF THE BUILDING

PROJECT NUMBER:

THE PROJECT KNOWN AS
(MUST BE THE NAME OF BUSINESS/DBA IF BUILDING IS FOR A SPECIFIC COMPANY)
NORTH SHORE MULTI-USE INDOOR FACILITY

WAS ACCEPTED BY HARRIS COUNTY FOR THE PURPOSES LISTED BELOW:

REVIEWER'S SIGNATURE BLOCK

PERMIT OFFICE

THE PROJECT WAS REVIEWED; HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER / ARCHITECT LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE PROFESSIONAL'S RESPONSIBILITY AND ACCOUNTABILITY. THIS ACCEPTANCE DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO DEVELOPMENT.

HCED REVIEW:

CERTIFICATION

I, MONIKA CASTILLO, A LICENSED PROFESSIONAL 'ARCHITECT IN THE STATE OF TEXAS DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I AM/ A DESIGNER OF RECORD FOR THIS PROJECT. THE PROJECT CONSISTS OF DRAWING SHEETS CODE1.1 THROUGH A9.48.
ENGINEERING FIRM _____ FIRM# _____

SEAL 10/01/2025 SIGNATURE DATE

HARRIS COUNTY (IFC & IBC 2021)
FIRE CODE DESIGN AND COMPLIANCE REVIEW SHEET VERSION 9.0 (JAN 2025)

REVISIONS (DO NOT USE THIS BLOCK UNTIL AFTER PERMIT IS ISSUED)

DATE	SHEET NO.(S)	DESCRIPTION	REVIEWER

FIRE CODE REVIEW
SHEET NUMBER
_____ OF _____

Total Building Gross Sq. Ft.: 92,856 s.f.
Construction Classification: TYPE II-B, Not Sprinklered

Chapter 3
Classification: Group A-3

Chapter 5
Section 507.6
The area of a Group A-3 building not more than one story above grade plane, used as a ... [gymnasium] ... of Type II construction, shall not be limited provided that the following criteria are met:

1. the building shall not have a stage other than a platform
   - COMPLIES
2. the building shall be equipped throughout with an automatic sprinkler system in accordance with 903.3.1.1.
   - COMPLIES. Deffered submittal per AHJ
3. the building shall be surrounded and adjoined by public ways or yards not less than 60 feet in width.
   - COMPLIES, see A1.11

Total Perimeter: 1422'
Open Perimeter: 1422'
Percentage Open: 100%
Open Space: >60'
Allowable Area: Unlimited
Total Building Gross Sq. Ft.: 92,856 SF

VLK
ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS
Revision No. Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Todd Hanger
Drawn By	TQ

PROJECT NO.
25-0056.00

SHEET TITLE
FIRE CODE REVIEW

SHEET NO.
CODE1.1

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

1 BUILDING PLANNING & DESCRIPTION

☐ NEW CONSTRUCTION ☐ SHELL BUILDING
☐ LEASE SPACE BUILD-OUT (LSBO) ☐ CHANGE OF OCCUPANCY
☒ SUBSTANTIAL IMPROVEMENT ☐ OTHER: _____

☒ SINGLE OCCUPANCY | MIXED OCCUPANCY: ☐ SEPARATED USE ☐ NON-SEPARATED USE
(SECTION 508.3 OR 508.4 IBC 2021)

TYPE OF CONSTRUCTION: II-B *(CHAPTER 6 IBC 2021)*
HEIGHT LIMITATION: 55' AREA LIMITATION: UNLIMITED *(TABLES 504.3, 504.4, 506.2 IBC 2021)*
FRONTAGE INCREASE CALCULATIONS ARE SHOWN ON SHEET: CODE1.1

BUILDING VALUATION

BUILDING NUMBER: 1 & 2 OF 3
ADDRESS: 353 N. CASTLEGORY RD
CITY, ST: HOUSTON, TX ZIP CODE: 77049 SUITE: _____
CALL CENTERPOINT ENERGY AHEAD OF TIME, AT 713-207-4460, TO OBTAIN AN ADDRESS
HCAD #. OR PROPERTY TAX #: 1197870010001 (13 DIGITS)
(http://www.hcad.org)
BUILDING LOCATED IN FLOODPLAIN: X-UNSHADED ____ 500-YR ____ 100-YR ____ OTHER ____
BFE _____ FFE _____ NG _____
GROSS SQUARE FOOTAGE: 92,856 SF #OF FLOORS: 1 HEIGHT: 50'
ESTIMATED COST OF CONSTRUCTION: $ 26,000,000
T.D.L.R #: _____ *(REQUIRED FOR CONSTRUCTION OVER $50,000)*
TEXAS DEPARTMENT OF LICENSING AND REGULATIONS
(https://www.tdlr.texas.gov/ab/ab.htm)
TELEPHONE: (512) 463-6599 TOLL FREE (IN TEXAS): 800-803-9202
FAX: (512) 475-2871 RELAY TEXAS-TDD: 800-735-2989
SHELL BUILDING PERMIT #: _____ CIVIL PROJECT #: _____
PUBLIC UTILITIES: YES ☒ NO ☐
OSSF : YES ☐ NO ☒ PROJECT/PERMIT #: _____

LIST BELOW THE PURPOSE/USE OF THE BUILDING OR AREA BEING REVIEWED. INCLUDE DETAILS ON THE PRODUCTS/MATERIALS BEING STORED/FABRICATED AND NOTE HOW THEY ARE BEING PACKAGED.

2 OCCUPANCY TYPE AND LOAD
CHAPTER 2, 3 & TABLE 1004.5 IBC 2021

BREAK DOWN AREAS AND OCCUPANT LOADS PER FLOOR

OCC. CLASS	AREA SPECIFIC USE	GROSS SF	NET SF	SF PER OCC.	DESIGN OCC.
B	OFFICES	1,859		150	13
A	MEETING ROOM, CONFERENCE ROOM		3,944	15	263
I	TRAINER'S ROOM, REHAB	1,606		240	7
A	WEIGHT ROOM	9,084		50	182
A	LOCKER ROOMS	6,141		50	123
A	INDOOR PRACTICE FIELD	74,200		50	1,484
A	MECHANICAL & STORAGE	7,896		300	27
TOTAL NET			3,944		263
TOTAL GROSS		100,786			1,836

3 MEANS OF EGRESS
CHAPTER 10 IBC 2021

MEANS OF EGRESS	# OF REQUIRED EXITS	# OF EXITS PROVIDED	SHEET #
STAIRWAYS (PER FLOOR)	N/A		
EGRESS @ 1ST FL OR LSBO	2	8	CODE2.2

(SECTIONS 1005 & 1006 IBC 2021)

PANIC HARDWARE ON EXIT DOORS? YES ☒ NO ☐ *(SECTION 1010.2.9 IBC 2021)*

STAIRWAYS *(SECTION 1011 IBC 2021)*
STAIR DETAILS AND EGRESS WIDTHS SHOWN ON: N/A

EXIT SIGNS/EGRESS ILLUMINATION *(SECTIONS 1008 & 1013 IBC 2021)*
REQUIRED AND SHOWN ON: _____ *(HIGHLIGHT ON PLANS)*
EXTERIOR MEANS OF EGRESS LIGHTING PROVIDED? YES ☐ *(SECTION 1008 IBC 2021)*

EXIT TRAVEL DISTANCE *(SECTION 1017 IBC 2021)*

OCCUPANCY TYPE	MAX TRAVEL DISTANCE	PROVIDE TRAVEL DISTANCE	SHEET #
ASSEMBLY	250'	220' (PATH-4)	CODE2.2
BUSINESS	300'	151' (PATH-1)	CODE2.2

ELEVATORS NO ELEVATORS IN THE PROJECT
NEW ☐ EXISTING ☐ ELEVATOR HOISTWAY IBC SECTION 3006.2.1? YES ☐ NO ☐
ELEVATOR KEYBOX LOCATED IN LOBBY? YES ☐ NO ☐

4 FIRE PROTECTION & LIFE SAFETY SYS.
CHAPTER 9 IFC & IBC 2021

ALL FIRE PROTECTION PLANS SHALL BE SUBMITTED FOR REVIEW AFTER BUILDING PERMIT HAS BEEN ISSUED ***(I.E. UNDERGROUND FIRE LINE, SPRINKLER SYSTEM, FIRE ALARM SYSTEM, STANDPIPE, FIRE PUMP ROOM, AND FIRE PROTECTION WATER SUPPLY SYSTEMS)***

AUTOMATIC FIRE SPRINKLER SYSTEM/ALTERNATIVE AUTOMATIC FIRE EXTINGUISHING SYSTEM **SECTION 903 IFC 2021**
ALL SPRINKLERS SHALL COMPLY WITH MONITORING AND OCCUPANT NOTIFICATION PER 903.4.2.1 **SECTION 903.4.1 IFC 2021 AMENDMENTS**

☒ PROVIDED AS NOTED ON: _____ ☐ NOT REQUIRED PER SECTION 903

SYSTEM PROVIDED:
☒ NFPA 13
☐ NFPA 13R
☐ NFPA 13D
☐ OTHER: _____

SPRINKLER HEAD PROVIDED:
☒ STANDARD
☐ ELO
☐ ESFR
☐ QUICK RESPONSE

FIRE PUMP PROVIDED:
☒ YES ☐ NO
FIRE PUMP SEPARATION:
SEE SECTION 913.2.1 IFC 2021

FIRE DEPARTMENT ACCESS TO SPRINKLER CONTROLS:
☒ SPRINKLER RISER ROOM OR POST INDICATOR VALVE SHOWN ON: _____ *(SECTION 901.4.7 HC AMENDMENTS IFC 2021)*
☒ FDC SHOWN ON: _____ *(FDC SHALL COMPLY WITH SECTION 912 IFC 2021)*

ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS *(SECTION 904 IFC 2021)*
☐ REQUIRED AND SHOWN ON: _____
☒ NOT REQUIRED

STANDPIPE SYSTEM & HOSE CONNECTIONS *(SECTION 905 IFC 2021)*
(I.E. IN STAIRWAYS, STAGES, MALLS)
☐ PROVIDED AS NOTED ON: _____, TYPE OF SYSTEM PROVIDED: _____ *(CLASS I, II OR III)*
☐ NOT REQUIRED

PORTABLE FIRE EXTINGUISHERS *(SECTION 906 IFC 2021)*
☒ PROVIDED AS NOTED ON: _____, NUMBER PROVIDED: _____ *(HIGHLIGHT ON PLANS)*

FIRE ALARM & DETECTION SYSTEMS *(SECTION 907 HC AMENDMENTS IFC 2021)*
☒ FIRE ALARM SYSTEM (DEFERRED SUBMITTAL) ☐ ELEVATOR RECALL
☐ NOT REQUIRED ☐ GAS DETECTION SYSTEM SECTION 909
☒ EMERGENCY VOICE EVACUATION
☐ OTHER: _____

HVAC & AIR DISTRIBUTION SYSTEM CONTROLS *(SECTION 907.3.1 IFC 2021)*
☒ SMOKE DETECTORS PROVIDED TO SHUT DOWN UNITS OVER 2,000 CFM PROVIDED ON: _____
☐ NO HVAC UNITS OVER 2,000 CFM
☒ FIRE/SMOKE DAMPERS IN THE BUILDING SHOWN ON: _____
☐ NO FIRE/SMOKE DAMPERS IN THE BUILDING

SMOKE CONTROL SYSTEM *(SECTION 909 IFC 2021)*
☐ PROVIDED AS NOTED ON: _____
☒ NOT REQUIRED

SMOKE & HEAT VENTILATION *(SECTION 910 IFC 2021)*
☐ CALCULATIONS PROVIDED AS NOTED ON: _____
☒ NOT REQUIRED

ENHANCED RESPONDER COMMUNICATIONS COVERAGE SYSTEM (ERCCS) *(SECTION 510 HC AMENDMENTS)*
☐ PROVIDED AS NOTED ON: _____
☒ NOT REQUIRED

5 FIRE-RESISTANCE RATE CONSTRUCTION
CHAPTERS 6, 7 AND 10 IBC 2021

*Provide section details on the plans showing compliance for any proposed fire rated construction (walls, partitions, floors, roof, etc.).
*Please reference and provide standard for the rated design.

FIRE-RESISTANCE RATING REQUIREMENTS *TABLE 601 & PROPOSED OR REQUIRED CONSTRUCTION PER IBC 2021*

BUILDING ELEMENTS	HOURS REQUIRED	HOURS PROVIDED	UL OR IBC STANDARD USED & DESIGN DETAIL SHOWN ON
STRUCTURAL FRAME	0	0	0
EXTERIOR BEARING WALLS	0	0	0
EXTERIOR NON-BEARING WALLS	0	0	0
INTERIOR BEARING WALLS	0	0	0
INTERIOR NON-BEARING WALLS	0	0	1-HR AT MECH RM., A2.21
FLOOR CONSTRUCTION	0	0	0
ROOF CONSTRUCTION	0	0	0
STAIRWELLS *(SECTION 1023)*	0	0	0
ELEVATOR SHAFTS *(SECTION 713)*	0	0	0
CORRIDORS *(SECTION 1020)*	0	0	0
FIRE RATED DOORS *(TABLE 716.1(2))*	0	0	0
DEMISING/PARTITION WALL *(SECTION 708)*	0	0	0
FIRE BARRIER *(SECTION 707)*	0	0	0
FIRE WALL *(SECTION 706)*	0	0	0
DRAFTSTOPS: ☐ YES, SHOWN ON: _____ ☐ NO (SPRINKLED ATTIC) ☐ N/A *(SECTION 718.4)*			
FIRE SEPARATION DISTANCE (FEET) *(SECTION 602 IBC 2021)*	>60' NORTH	>60' SOUTH	>60' EAST	>60' WEST
ROOF COVERING CLASSIFICATION PROVIDED: *(TABLE 1505.1 IBC 2021)*	A ☒ B ☐ C ☐			

6 WATER SUPPLY (FOR FIREFIGHTING)
CHAPTER 5, APPENDIX B & C IFC 2018

92,856 SF GROSS SIZE OF BUILDING IN SQUARE FEET *(INCLUDE ALL OVERHANGS UNDER ROOF)*

PUBLIC WATER SUPPLY WITH FIRE HYDRANTS
(FOR PROPOSED AND EXISTING FIRE HYDRANTS ONLY)
NAME OF THE MUNICIPAL UTILITY DISTRICT: _____
NUMBER OF HYDRANTS WITHIN 400 FT (NON-SPRINKLED) OR 600 FT (SPRINKLED) OF BUILDING: 1, SHOWN ON: C6
REQUIRED GPM: 1,625 DURATION: 4 *(TABLE B105.1(2) IFC 2021)*
75% REDUCTION? YES ☒ NO ☐ *(MUST MAINTAIN MINIMUM PER TABLE B105.2 IFC 2021)*

OR

WATER SOURCE FOR RURAL AREAS WITHOUT FIRE HYDRANTS
☐ ***DRY HYDRANT ☐ UNDERGROUND STORAGE ☐ PRIVATE HYDRANT
☐ ABOVEGROUND STORAGE ☐ OTHER: _____

DESIGN SPECIFICATIONS AND LOCATIONS SHOULD MEET MINIMUM REQUIRED WATER SUPPLY IN ACCORDANCE WITH SECTION B103.3 IN THE HARRIS COUNTY FIRE CODE. THE FIRE CODE OFFICIAL IS AUTHORIZED TO UTILIZE NFPA 1142 OR THE INTERNATIONAL WILDLAND-URBAN INTERFACE CODE.

7 FIRE LANE ACCESS
CHAPTER 5, APPENDIX D IFC 2021

FIRE LANE LAYOUT PLAN, WHICH SHALL INCLUDE THE SITE PLAN, THE FIRE LANE & FIRE HYDRANTS, IS SHOWN ON: C10 *(HIGHLIGHT THE FIRE HYDRANT LOCATIONS ON THE PLANS)* AERIAL ACCESS LAYOUT, FOR BUILDINGS OVER 30 FT, IS SHOWN ON: _____.

FIRE LANES WILL BE APPROVED CONCEPTUALLY DURING THE CIVIL REVIEW PROCESS. HOWEVER, THE FIRE CODE PLAN REVIEWER MAY CHANGE THE FIRE LANE LAYOUT BASED ON THE BUILDING SPECIFICATIONS.
☒ GATES AND BARRICADES ACROSS THE FIRE ACCESS ROAD
PROPERTIES WITH FENCE AND GATES SHALL PROVIDE A 911 KEY BOX AT ENTRY GATE.

8 INTERIOR FINISH
CHAPTER 8, TABLE 803.13 IBC 2021

OCCUPANCY GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES	SHEET #
A-3	B	B	C	A2.21

9 STORAGE: STANDARD

YES ☐ NO ☒ PRODUCTS BEING STORED: _____
YES ☐ NO ☒ STORAGE METHOD *(I.E. RACKS, PALLETS ON FLOOR, ETC.)*: _____
STORAGE LAYOUT SHOWN ON: _____
YES ☐ NO ☒ MAXIMUM HEIGHT STORAGE: _____

10 STORAGE: HIGH PILED
CHAPTER 32 IFC 2021 - SEE ALSO SECTION 3203.3 & HC AMENDMENTS IFC 2021
***DEFERRED SUBMITTAL THAT MUST BE SUBMITTED WITHIN 180 DAYS OF ORIGINAL PERMITTING.*

YES ☐ NO ☒ PRODUCTS BEING STORED: _____
YES ☐ NO ☒ STORAGE PACKAGING *(I.E. PALLETS, RACKS, SOLID PILED, DRUMS, CARDBOARD BOXES, WRAPPED IN PLASTIC, ETC.)*: _____
YES ☐ NO ☒ MAXIMUM HEIGHT OF COMMODITY: _____
YES ☐ NO ☒ ***THIS BUILDING IS DESIGNED FOR THE INTENT OF HIGH PILED STORAGE. IF YES, THEN PROVIDE HIGH PILED STORAGE FORM FOUND ON HC WEBSITE
YES ☐ NO ☒ FIRE DEPARTMENT ACCESS DOORS
YES ☐ NO ☒ HIGH PILED STORAGE RACK LAYOUT/ELEVATIONS, CODE ANALYSIS, ETC. SHOWN ON: _____

11 HAZARDOUS MATERIALS
CHAPTER 50 IFC 2021 - SEE ALSO SECTION 5001.7 HC AMENDMENTS IFC 2021
HMIS FORM FOUND ON HC WEBSITE.

YES ☐ NO ☒ DOES THE BUILDING HAVE HAZARDOUS MATERIAL USE OR STORAGE? IF YES, THEN PROVIDE ALL HMIS SUMMARY AND MSDS REPORTS.
YES ☐ NO ☐ IF YES, DO THE QUANTITIES EXCEED THE MAXIMUM ALLOWABLE PER IFC 2021?
IF YES, YOU WILL BE REQUIRED TO PROVIDE THE FOLLOWING:
CODE ANALYSIS BY FIRE PROTECTION ENGINEER TO SHOW COMPLIANCE WITH IFC 2021.
CODES AND REFERENCED STANDARDS SHOWN ON SHEET(S) _____

12 SPECIAL CONDITIONS

YES ☐ NO ☒ ATRIUM(S) SECTION 404 IBC 2021
YES ☐ NO ☒ HIGH RISE BLDG SECTION 403 IBC 2021 & 914.3 IFC 2021
YES ☐ NO ☒ ANY FUEL STORAGE TANKS CHAPTERS 23, 50, 57 IFC 2021
YES ☐ NO ☒ CRITICAL FACILITIES (HARRIS COUNTY SECTION 1203.2.20 HC AMENDMENTS IFC 2021)
YES ☐ NO ☒ COMPRESSED GASES CHAPTERS 53,58 IFC 2021
YES ☐ NO ☒ CRYOGENIC FLUIDS CHAPTER 55 IFC 2021
YES ☐ NO ☒ FLAMMABLE & COMBUSTIBLE LIQUIDS CHAPTERS 50 & 57 IFC 2021

YES ☐ NO ☒ PAINT SPRAY BOOTHS, COATINGS, DIPPING OR INDUSTRIAL OVENS USED CHAPTERS 24 & 30 IFC 2021
YES ☐ NO ☒ HEALTH DEPARTMENT APPROVAL? REQUIRED FOR ALL ESTABLISHMENTS THAT SERVE/PREPARE FOOD AND BEVERAGES FOR THE PUBLIC OR HAVE REFRIGERATED FOOD STORAGE.
YES ☐ NO ☒ LP GAS CHAPTER 61 IFC 2021
YES ☒ NO ☐ PROPOSING PHASED PERMITS PHASING PLAN SHOWN ON: _____
YES ☐ NO ☐ OTHER: _____

COMMENTS & NOTES

A COPY OF THESE APPROVED CONSTRUCTION PLANS MUST BE KEPT AT PROJECT SITE FOR THE FINAL INSPECTION OF THE BUILDING

PROJECT NUMBER:

THE PROJECT KNOWN AS
(MUST BE THE NAME OF BUSINESS/DBA IF BUILDING IS FOR A SPECIFIC COMPANY)
NORTH SHORE MULTI-USE INDOOR FACILITY

WAS ACCEPTED BY HARRIS COUNTY FOR THE PURPOSES LISTED BELOW:

REVIEWER'S SIGNATURE BLOCK

PERMIT OFFICE

THE PROJECT WAS REVIEWED; HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER / ARCHITECT LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE PROFESSIONAL'S RESPONSIBILITY AND ACCOUNTABILITY. THIS ACCEPTANCE DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO DEVELOPMENT.

HCED REVIEW:

CERTIFICATION

I, MONIKA CASTILLO, A LICENSED PROFESSIONAL 'ARCHITECT IN THE STATE OF TEXAS DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I AM/ A DESIGNER OF RECORD FOR THIS PROJECT. THE PROJECT CONSISTS OF DRAWING SHEETS CODE1.1 THROUGH A9.48.
ENGINEERING FIRM _____ FIRM# _____

SEAL 10/01/2025 SIGNATURE DATE

HARRIS COUNTY (IFC & IBC 2021)
FIRE CODE DESIGN AND COMPLIANCE REVIEW SHEET VERSION 9.0 (JAN 2025)

REVISIONS (DO NOT USE THIS BLOCK UNTIL AFTER PERMIT IS ISSUED)

DATE	SHEET NO.(S)	DESCRIPTION	REVIEWER

FIRE CODE REVIEW
SHEET NUMBER
_____ OF _____

Total Building Gross Sq. Ft.: 117,358 SF
Construction Classification: TYPE II-B, Not Sprinklered

Chapter 3
Classification: Group A-3

Chapter 5
Section 507.6
The area of a Group A-3 building not more than one story above grade plane, used as a ... [gymnasium] ... of Type II construction, shall not be limited provided that the following criteria are met:
1. the building shall not have a stage other than a platform
   - COMPLIES
2. the building shall be equipped throughout with an automatic sprinkler system in accordance with 903.3.1.1.
   - COMPLIES. Deffered submittal per AHJ
3. the building shall be surrounded and adjoined by public ways or yards not less than 60 feet in width.
   - COMPLIES, see A1.11

Total Perimeter: 1650'
Open Perimeter: 1650'
Percentage Open: 100%
Open Space: >60'
Allowable Area: Unlimited
Total Building Gross Sq. Ft.: 117,358 SF

VLK
ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS
Revision No. Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
FIRE CODE REVIEW - ALTERNATE

SHEET NO.
CODE1.2

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

Project Name: North Shore Multiuse Indoor Practice Facility
Owner: Galena Park Independent School District
Project Number: 25-0056.00
Project Location: 15025 Wallisville Rd, Houston, TX 77049

County Codes: 2021, International Building Code with Harris County Amendments
2021, International Fire Code with City of Katy Amendments
2018, International Plumbing Code
2018, International Mechanical Code
2018, National Electric Code

State Codes: 2012, Texas Accessibility Standards
2018, International Energy Conservation Code

CODE EXCEPTIONS AND CALCULATIONS

Total Building Gross Sq. Ft.: 23,542 s.f.
Construction Classification: TYPE II-B, Not Sprinklered

Chapter 3
Classification: Group A-3

Chapter 5
Section 507.6
The area of a Group A-3 building not more than one story above grade plane, used as a ... [gymnasium] ... of Type II construction, shall not be limited provided that the following criteria are met:

1. the building shall not have a stage other than a platform
   - **COMPLIES**
2. the building shall be equipped throughout with an automatic sprinkler system in accordance with 903.3.1.1.
   - **COMPLIES**, Deffered submittal per AHJ
3. the building shall be surrounded and adjoined by public ways or yards not less than 60 feet in width.
   - **COMPLIES,** see A1.11

Base Bid (80 Yard Covered Field)
Total Perimeter: 1422'
Open Perimeter: 1422'
Percentage Open: 100%
Open Space: >60'
Allowable Area: Unlimited
Total Building Gross Sq. Ft.: 94,454 SF

Alternate Bid (120 Yard Covered Field)
Total Perimeter: 1650'
Open Perimeter: 1650'
Percentage Open: 100%
Open Space: >60'
Allowable Area: Unlimited
Total Building Gross Sq. Ft.: 115,956 SF

Chapter 6
Section 603 Combustible Material - Allowable uses:
Section 603.1 Fire-retardant-treated wood shall be permitted in:
1.1 Nonbearing partitions where the required rating is 2 hrs or less.
1.2 Nonbearing exterior walls where no fire rating is required.
1.3 Roof Construction as permitted in Table 601
11 Blocking for handrails, millwork, cabinets and windows and door frames.

Chapter 29
Section 2902.1 Minimum Number of Required Plumbing Facilities
The number of occupants used to calculate plumbing fixture requirements is based on section 2902.1 and Table 2902.1; reduced by the occupant loads for rooms which have not been included due to non-simultaneous use by the same students, staff and visitors who are already included.
Base Bid
Occupant Load: 1,492 total occupancy (Assume 746 Men and 746 Women)
Use: Assembly, Gymnasiums

		Required	Provided
Water Closets:			
Male	1/125	6	21 (10 Urinals)
Female	1/65	12	12
Lavatories:			
Male	1/200	4	13
Female	1/200	4	6
Bathtubs/Showers:		n/a	
Drinking Fountains:	1/500	3	8
Other:		1 Service Sink	1

Base Bid
Occupant Load: 1,936 total occupancy (Assume 968 Men and 968 Women)
Use: Assembly, Gymnasiums

		Required	Provided
Water Closets:			
Male	1/125	8	21 (10 Urinals)
Female	1/65	15	12
Lavatories:			
Male	1/200	5	13
Female	1/200	5	6
Bathtubs/Showers:		n/a	
Drinking Fountains:	1/500	4	8
Other:		1 Service Sink	1

OCCUPANCY TABULATION PER 2021 IBC

ROOM NUMBER	ROOM NAME	FLOOR AREA	FLOOR AREA PER OCCUPANT	OCC LOAD	NON - SIMULTANEOUS USE	NON - SIMULTANEOUS OCC. LOAD
ASSEMBLY, TABLES AND CHAIRS						
C105	CONF. ROOM	468 SF	15	32	No	32
C130A	PLAYER MEETING ROOM 1	799 SF	15	54	No	54
C130B	PLAYER MEETING ROOM 2	780 SF	15	52	No	52
C130C	PLAYER MEETING ROOM 3	896 SF	15	60	No	60
C130D	PLAYER MEETING ROOM 4	989 SF	15	66	No	66
		3931 SF		264		264
BUSINESS						
C106	HEAD COACH	359 SF	150	3	No	3
C116	COACHES' OFFICE	958 SF	150	7	No	7
C123	TRAINER'S OFFICE	290 SF	150	2	No	2
C124	TRAINER'S OFFICE	252 SF	150	2	No	2
		1860 SF		14		14
EXERCISE ROOM						
C148	WEIGHT ROOM	9079 SF	50	182	No	182
C152	MULTI USE INDOOR FACILLITY	51395 SF	50	1028	No	1028
		60474 SF		1210		1210
INST., TREATMENT						
C122	TRAINERS ROOM	1219 SF	240	6	Yes	0
C128	THERAPY	278 SF	240	2	Yes	0
C129	EXAM ROOM	109 SF	240	1	Yes	0
		1607 SF		9		0
LOCKERS						
C117	COACHES LOCKER	440 SF	50	9	Yes	0
C133	JV LOCKERS	3173 SF	50	64	Yes	0
C138	VARSITY LOCKERS	2528 SF	50	51	Yes	0
		6141 SF		124		0
STOR/MECH						
C108	MECHANICAL	278 SF	300	1	Yes	0
C109	ELECTRICAL	134 SF	300	1	Yes	0
C111	STORAGE	533 SF	300	2	Yes	0
C112	STORAGE	234 SF	300	1	Yes	0
C125	STORAGE	131 SF	300	1	Yes	0
C131	MECHANICAL	513 SF	300	2	Yes	0
C136	LAUNDRY DISTRIBUTION	387 SF	300	2	No	2
C137	LAUNDRY	271 SF	300	1	No	1
C141	MECHANICAL	483 SF	300	2	Yes	0
C141A	STORAGE	26 SF	300	1	Yes	0
C144	JAN.	59 SF	300	1	Yes	0
C150	FOOTBALL EQUIP. ROOM	1456 SF	300	5	No	5
C151	IT ROOM	138 SF	300	1	Yes	0
C153	CATWALK	86 SF	300	1		
C154	ATHLETIC STORAGE	338 SF	300	2	Yes	0
C155	BAND STORAGE	352 SF	300	2	Yes	0
C156	JAN	42 SF	300	1		
C157	IDF	44 SF	300	1	Yes	0
C160	BOILER/RISER	562 SF	300	2		
C161	ELECTRICAL	83 SF	300	1	Yes	0
C162	ELECTRICAL	81 SF	300	1	Yes	0
C164	MECH STAIR	66 SF	300	1		
C201	MEZZANINE	1456 SF	300	5	Yes	0
		7755 SF		38		8
TOTAS:		81767 SF		1659		1496

OCCUPANCY TABULATION PER 2021 IBC - ALTERNATE

ROOM NUMBER	ROOM NAME	FLOOR AREA	FLOOR AREA PER OCCUPANT	OCC LOAD	NON - SIMULTANEOUS USE	NON - SIMULTANEOUS OCC. LOAD
ASSEMBLY, TABLES AND CHAIRS						
C105	CONF. ROOM	468 SF	15	32	No	32
C130A	PLAYER MEETING ROOM 1	799 SF	15	54	No	54
C130B	PLAYER MEETING ROOM 2	780 SF	15	52	No	52
C130C	PLAYER MEETING ROOM 3	896 SF	15	60	No	60
C130D	PLAYER MEETING ROOM 4	989 SF	15	66	No	66
BUSINESS						
C106	HEAD COACH	359 SF	150	3	No	3
C116	COACHES' OFFICE	958 SF	150	7	No	7
C123	TRAINER'S OFFICE	290 SF	150	2	No	2
C124	TRAINER'S OFFICE	252 SF	150	2	No	2
EXERCISE ROOM						
C148	WEIGHT ROOM	9079 SF	50	182	No	182
C152	MULTI USE INDOOR FACILLITY	74200 SF	50	1484	No	1484
INST., TREATMENT						
C122	TRAINERS ROOM	1219 SF	240	6	Yes	0
C128	THERAPY	278 SF	240	2	Yes	0
C129	EXAM ROOM	109 SF	240	1	Yes	0
LOCKERS						
C117	COACHES LOCKER	440 SF	50	9	Yes	0
C133	JV LOCKERS	3173 SF	50	64	Yes	0
C138	VARSITY LOCKERS	2528 SF	50	51	Yes	0
STOR/MECH						
C108	MECHANICAL	278 SF	300	1	Yes	0
C109	ELECTRICAL	134 SF	300	1	Yes	0
C111	STORAGE	533 SF	300	2	Yes	0
C112	STORAGE	234 SF	300	1	Yes	0
C125	STORAGE	131 SF	300	1	Yes	0
C131	MECHANICAL	513 SF	300	2	Yes	0
C136	LAUNDRY DISTRIBUTION	387 SF	300	2	No	2
C137	LAUNDRY	271 SF	300	1	No	1
C141	MECHANICAL	483 SF	300	2	Yes	0
C141A	STORAGE	26 SF	300	1	Yes	0
C144	JAN.	59 SF	300	1	Yes	0
C150	FOOTBALL EQUIP. ROOM	1456 SF	300	5	No	5
C151	IT ROOM	138 SF	300	1	Yes	0
C155	BAND STORAGE	352 SF	300	2	Yes	0
C157	IDF	44 SF	300	1	Yes	0
C161	ELECTRICAL	83 SF	300	1	Yes	0
C162	ELECTRICAL	81 SF	300	1	Yes	0
C164	MECH STAIR	66 SF	300	1		
C201	MEZZANINE	1456 SF	300	5	Yes	0
TOTAL OCC. LOAD:				2109		1952

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

MONIKA C. CASTILLO — REGISTERED ARCHITECT — 26648 — STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
CODE REVIEW

SHEET NO.
CODE2.1

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 OVERALL LIFE SAFETY FLOOR PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"

LIFE SAFETY PLAN LEGEND

- EXIT ACCESS PATH
- EXISTING EXIT ACCESS PATH
- EXIT ACCESS PATH NUMBER / TRAVEL DISTANCE → PATH-00 / Length — EXIT ACCESS PATH NUMBER & TRAVEL DISTANCE
- EXIT ACCESS PATH NUMBER / TRAVEL DISTANCE → PATH-X00 / Length — EXISTING EXIT ACCESS PATH NUMBER & TRAVEL DISTANCE
- EXIT NUMBER / EGRESS WIDTH PROVIDED → EXIT-00 / XX" — MEANS OF EGRESS EXIT
- EXIT DOOR NUMBER / NUMBER OF OCCUPANTS THRU EXIT / EGRESS WIDTH REQUIRED/PROVIDED → EDN- 00 / OCC- ## / XX" | XX" — MEANS OF EGRESS EXIT AT DOOR (w/ Occupant Load)
- ROOM NAME / OCCUPANT LOAD → ROOM NAME / # — ROOM NAME & OCCUPANT LOAD
- FEC — FIRE EXTINGUISHER W/ CABINET & BRACKET
- FE — FIRE EXTINGUISHER W/ BRACKET
- FHC — FIRE HOSE CABINET
- KB — KNOX BOX
- FIRE RISER — FIRE RISER LOCATION

NOTES:
1. All CODE1 sheets to be printed in color.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT · MONIKA C. CASTILLO · 26558 · STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
LIFE SAFETY PLAN

SHEET NO.
CODE2.2

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 OVERALL LIFE SAFETY FLOOR PLAN - LEVEL ONE

SCALE: 1/16" = 1'-0"

LIFE SAFETY PLAN LEGEND

- EXIT ACCESS PATH
- EXISTING EXIT ACCESS PATH
- EXIT ACCESS PATH NUMBER / TRAVEL DISTANCE → PATH-00 / Length — EXIT ACCESS PATH NUMBER & TRAVEL DISTANCE
- EXIT ACCESS PATH NUMBER / TRAVEL DISTANCE → PATH-X00 / Length — EXISTING EXIT ACCESS PATH NUMBER & TRAVEL DISTANCE
- EXIT NUMBER / EGRESS WIDTH PROVIDED → EXIT-00 / XX" — MEANS OF EGRESS EXIT
- EXIT DOOR NUMBER / NUMBER OF OCCUPANTS THRU EXIT / EGRESS WIDTH REQUIRED/PROVIDED → EDN- 00 / OCC- ## / XX" | XX" — MEANS OF EGRESS EXIT AT DOOR (w/ Occupant Load)
- ROOM NAME / OCCUPANT LOAD → ROOM NAME / # — ROOM NAME & OCCUPANT LOAD
- FEC — FIRE EXTINGUISHER W/ CABINET & BRACKET
- FE — FIRE EXTINGUISHER W/ BRACKET
- FHC — FIRE HOSE CABINET
- KB — KNOX BOX
- FIRE RISER — FIRE RISER LOCATION

NOTES:

1. All CODE1 sheets to be printed in color.

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT — MONIKA C. CASTILLO — 26558 — STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

LIFE SAFETY PLAN - ALTERNATE

SHEET NO.

CODE2.3

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

CONSTRUCTION PLAN FOR PRIVATE WATER, SANITARY SEWER, STORM SEWER AND PAVING

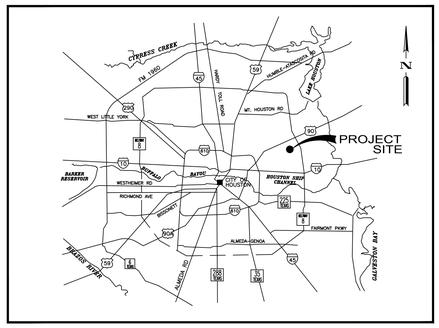
TO SERVE

NORTH SHORE MULTI-USE INDOOR FACILITY"

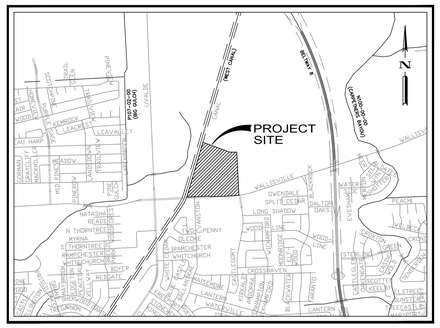
15025 WALLISVILLE ROAD, HOUSTON, TX 77049

(INSIDE HARRIS COUNTY)

JOB No.: 207-25-003-01 DATE: OCTOBER 2025



LOCATION MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

SHEET	DESCRIPTION
C0	COVER SHEET
C1	GENERAL NOTES
C2	TOPOGRAPHIC SURVEY (1 OF 2)
C2.1	TOPOGRAPHIC SURVEY (2 OF 2)
C3	OVERALL SITE LAYOUT PLAN
C4	DEMOLITION PLAN
C5	SITE DIMENSION PLAN
C6	SITE UTILITY PLAN
C7	GRADING & DRAINAGE PLAN
C8	PAVING PLAN
C9	DRAINAGE AREA MAP
C10	FIRE ACCESS LANE
C11	STORM WATER POLLUTION PREVENTION PLAN
C12	STORM WATER POLLUTION PREVENTION DETAILS
C13	PAVING AND GRADING DETAILS
C14	MISCELLANEOUS DETAILS

48 HOUR NOTICE:

CONTRACTOR SHALL NOTIFY HARRIS COUNTY PRIOR TO COMMENCING CONSTRUCTION AND/OR BACKFILLING ANY UTILITIES. CONTRACTOR(S) TO CONTACT PUBLIC REVIEW DEPARTMENT @ (713-274-3931) OR (public.review@hcpid.org)

STOP - CALL BEFORE YOU DIG!!

CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITY LINES BY CONTACTING "TEXAS ONE CALL" AT 1-800-245-4545 AT LEAST 48 HOURS BEFORE YOU DIG, DRILL OR BLAST.

EXISTING, WATER, SANITARY, GAS, ELECTRICAL, TELECOMMUNICATIONS AND ALL OTHER UTILITY LINES ARE SHOWN PER RECORD DRAWINGS. CONTRACTOR SHALL VERIFY LOCATION AT THE SITE PRIOR TO CONSTRUCTION.

AUTHORIZATION NOTICE ISSUED BY HARRIS COUNTY ENGINEERING AND PUBLIC INFRASTRUCTURE DEPARTMENT, PERMIT OFFICE, REQUIRED PRIOR TO CONSTRUCTION OF UTILITIES OR LEFT TURN LANES WITHIN HARRIS COUNTY PUBLIC RIGHTS-OF-WAY.

CONTRACTOR AND OWNER SHALL COMPLY WITH THE REGULATIONS OF CITY OF HOUSTON AND HARRIS COUNTY, TEXAS FOR FLOODPLAIN MANAGEMENT.

HARRIS COUNTY MAY HAVE EXISTING UNDERGROUND / OVERHEAD UTILITIES WITHIN THE PROPOSED PROJECT LIMITS. PLEASE CONTACT THE CALL CENTER AT 713-881-3210, OR SUBMIT A WORK ORDER REQUESTS THROUGH http://www.eng.hctx.net/SignalOut TO OBTAIN FIELD LOCATES.

PROJECT ADDRESS:
15025 WALLISVILLE ROAD
HOUSTON, TX 77049

KEY MAP # 457 T
ZIP CODE 77447

HARRIS COUNTY MUD 285

1. CONTRACTOR SHALL CONTACT HARRIS COUNTY MUD 285 (DISTRICT OPERATOR, CONTACT: CALVIN BROWNE WITH MUNICIPAL DISTRICT SERVICES, LLC AT 281-290-3133) AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION. ONLY THE DISTRICT'S OPERATOR CAN OPERATE THE DISTRICT'S WATER DISTRIBUTION FACILITIES. ALL WATER TAPS ARE TO BE MADE BY AND THE METER SHALL BE INSTALLED BY THE DISTRICT'S OPERATOR. ALL SANITARY SEWER CONNECTIONS SHALL BE INSPECTED BY THE DISTRICT'S OPERATOR. ALL CONSTRUCTION SHALL COMPLY WITH THE DISTRICT'S RATE ORDER.

2. CONTRACTOR SHALL CONTACT THE DISTRICT ENGINEER'S CONSTRUCTION OFFICE, MARK H. SWANSON WITH LJA ENGINEERING AND SURVEYING, INC. AT 713-953-5205 AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO ANY FINAL INSPECTIONS.

WARNING:

CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITY LINES BY CONTACTING "TEXAS 811" AT 811 OR 713-223-4567 AT LEAST 48 HOURS BEFORE YOU DIG, DRILL OR BLAST.

EXISTING, WATER, SANITARY, GAS, ELECTRICAL, TELECOMMUNICATIONS AND ALL OTHER UTILITY LINES ARE SHOWN PER RECORD DRAWINGS. CONTRACTOR SHALL VERIFY LOCATION AT THE SITE PRIOR TO CONSTRUCTION.

ADICO
CONSULTING ENGINEERS
205 E. EDGEWOOD DRIVE, FRIENDSWOOD, TX 77546
PHONE: 832-895-1093 WWW.ADICO-LLC.COM
TBPE FIRM NO. 16423

100% CONSTRUCTION DOCUMENTS REVIEW

STATE OF TEXAS
NANTHAVONGNGAM
99284
LICENSED
PROFESSIONAL ENGINEER
10-01-2025

SHEET NO.
C0

GENERAL CONSTRUCTION NOTES

GENERAL NOTES:

1. THESE PLANS WERE PREPARED TO MEET OR EXCEED CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, HARRIS COUNTY RULES AND REGULATIONS AS AMENDED.
2. WATER LINES, WASTEWATER COLLECTION SYSTEMS, STORM DRAINAGE SYSTEMS AND STREET PAVING ARE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE DOCUMENTS – "DESIGN MANUAL, STANDARD CONSTRUCTION SPECIFICATIONS, AND DETAILS FOR WASTEWATER COLLECTIONS SYSTEMS, WATER LINES, STORM DRAINAGE AND STREET PAVING" PUBLISHED BY CITY OF HOUSTON AND HARRIS COUNTY'S ENGINEERING DEPARTMENT, CURRENT LATEST EDITION.
3. ALL UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY IN THE FIELD THE EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL NOTIFY TEXAS ONE CALL AT 713–223–4567 AT LEAST 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION.
4. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGES TO EXISTING WATER, WASTEWATER, STORM WATER LINES AND TRAFFIC CONTROL DEVICES. CONTRACTOR SHALL MAKE ALL REPAIRS TO EXISTING UTILITIES WITH HARRIS COUNTY, ENGINEERING DEPARTMENT'S "STANDARD CONSTRUCTION SPECIFICATIONS" REFERENCED ABOVE, AT NO COST TO HARRIS COUNTY.
5. OWNER TO OBTAIN ALL PERMITS REQUIRED BY HARRIS COUNTY, TEXAS PRIOR TO STARTING CONSTRUCTION OF UTILITIES AND/OR CULVERTS WITHIN HARRIS COUNTY'S ROAD RIGHTS–OF–WAY.
6. CONTRACTOR TO OBTAIN ALL CONSTRUCTION PERMITS REQUIRED BY THE "REGULATIONS OF HARRIS COUNTY, TEXAS FOR FLOOD PLAIN MANAGEMENT" PRIOR TO COMMENCING CONSTRUCTION.
7. CONTRACTOR SHALL NOTIFY THE OFFICE OF THE COUNTY ENGINEER, PUBLIC IMPROVEMENTS DEPARTMENT – PERMITS DIVISION AT (713) 274–3931 FOR INSPECTION AT LEAST 48 HOURS PRIOR TO COMMENCING THE CONSTRUCTION.
8. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE OWNING AUTHORITY.
9. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG THE AREA OF EXCAVATION.
10. AUTHORIZATION NOTICE ISSUED BY THE HARRIS COUNTY PUBLIC IMPROVEMENTS DEPARTMENT – PERMIT DIVISION, REQUIRED PRIOR TO CONSTRUCTION OF UTILITIES OR LEFT HAND TURN LANES WITHIN HARRIS COUNTY RIGHT–OF–WAY. CONTACT HARRIS COUNTY PERMIT OFFICE AT (713) 274–3931.
11. CONTRACTOR SHALL COMPLY WITH THE LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.
12. IF THE CONSTRUCTION DOES NOT BEGIN WITHIN A YEAR AFTER THE PLANS HAVE BEEN SIGNED, NEW SIGNATURES MUST BE OBTAINED AND LETTERS OF AVAILABILITY MUST BE UPDATED.
13. CONTRACTOR SHALL PREPARE A SET OF "AS–BUILT" DRAWINGS SHOWING ANY FIELD CHANGES MADE TO THE APPROVED ENGINEER PLANS AND SUBMIT TO THE DESIGN CONSULTANT FOR SUBMISSION TO THE CITY ENGINEER.
14. MAINTAIN A MINIMUM OF 12–INCHES (12") CLEARANCE BETWEEN ALL UTILITIES, UNLESS OTHERWISE NOTED ON THE PLANS.
15. ALL UTILITIES WITHIN EASEMENTS SHALL BE LOCATED IN ACCORDANCE WITH STANDARDS OUTLINED BY THE MOST CURRENT UTILITY COORDINATING COMMITTEE DRAWINGS.
16. CONTRACTOR TO OBTAIN ALL CONSTRUCTION PERMITS REQUIRED BY THE REGULATIONS OF HARRIS COUNTY, TEXAS AT HIS EXPENSE PRIOR TO COMMENCEMENT OF WORK.
17. CONTRACTOR SHALL GIVE NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS. IN CHARGE OF PRIVATE AND PUBLIC UTILITIES OR RAILROADS AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL ASSURE HIMSELF THAT ALL CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF WORK.
18. SEWER MATERIALS, CONSTRUCTION, AND TESTING TO BE IN ACCORDANCE WITH HARRIS COUNTY SPECIFICATIONS STANDARDS, LATEST PRINTING OF AMENDMENTS THERETO.
19. FLOW LINE ELEVATIONS AT MANHOLES ARE BASED ON DISTANCE BETWEEN MANHOLES AND NOT CENTERLINE RIGHT–OF–WAY STATIONING.
20. NATURAL GROUND ON PLAN AND PROFILE SHEETS ARE FOR CENTERLINE OF ROADWAY ONLY, UNLESS OTHERWISE NOTED ON THE PLANS.
21. ALL EXCAVATION UNDER PROPOSED AND FUTURE PAVEMENT OR WITHIN TWO FEET BEHIND BACK OF ALL CURBS TO BE BACKFILLED WITH 1–1/2 SACKS CEMENT PER CUBIC YARD CEMENT STABILIZED SAND TO BOTTOM OF SUBGRADE. THE REMAINING BACKFILL TO BE MADE WITH COMPACTED–SELECT MATERIALS PLACED IN 8–INCH MAXIMUM LAYERS AND COMPACTED TO A DENSITY OF 95% STANDARD PROCTOR.
22. ALL PROPOSED PIPE STUB–OUTS ARE TO BE PLUGGED. PLUG STORM SEWER PIPES WITH 8–INCH BRICK WALL; SANITARY SEWERS AND WATERLINES WITH PLUG AND CLAMP.
23. CONTRACTOR TO REMOVE PLUGS AND CONNECT TO EXISTING UTILITY LINES AS INDICATED ON PLANS.
24. UNLESS OTHERWISE NOTED ON PLANS, WHERE SANITARY AND/OR STORM SEWER MANHOLES ARE LOCATED WITHIN THE STREET R.O.W. OR EASEMENTS, CONTRACTOR SHALL SET RIM ELEVATIONS 3 TO 6 INCHES ABOVE FINISHED GROUND ELEVATION. FINISHED GROUND ELEVATION TO BE A STRAIGHT LINE FROM NATURAL GROUND AT PROPERTY LINE TO TOP OF CURB. UTILITY CONTRACTOR TO MAKE FINAL RIM ELEVATION ADJUSTMENTS SUBSEQUENT TO FINAL LOT GRADING.
25. ALL BASES FOR SANITARY AND STORM SEWER MANHOLES TO BE REINFORCED WITH #4 BARS AT 12–INCH C–C EACH WAY OR 6x6x6 GAUGE WELDED WIRE MESH. CONCRETE FOR SANITARY MANHOLES BASES TO BE 6 SACK CEMENT/C.Y. CONCRETE AND FOR STORM MANHOLES IT SHALL BE 5 SACKS CEMENT/C.Y.
26. FILL TO BE PLACED IN MAXIMUM 8–INCH LIFTS AND COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY PER ASTM D–698.
27. ALL UNSATISFACTORY AND/OR WASTE MATERIALS INCLUDING VEGETATION, ROOTS, CONCRETE, AND DEBRIS SHALL BE DISPOSED OF OFF–SITE BY THE CONTRACTOR. NO DIRECT PAYMENT WILL BE MADE, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE VARIOUS BID ITEMS.
28. CONTRACTOR IS RESPONSIBLE FOR CLEANING MUD AND/OR DIRT TRACKED ONTO EXISTING STREETS BY HIS WORKMEN'S, SUPPLIER'S, OR SUBCONTRACTOR'S VEHICLES. STREETS MUST BE CLEANED WITHIN 2 HOURS OF WHEN THE TRACKING OCCURS. NO SEPARATE PAY.
29. RETESTING OF ALL UTILITIES AND ACCEPTANCE BY HARRIS COUNTY SUBSEQUENT TO THE PAVEMENT CONSTRUCTION WILL BE THE UTILITY CONTRACTOR'S RESPONSIBILITY. NO SEPARATE PAY.
30. CONTRACTOR IS HEREBY INFORMED THAT ALL TRENCHING AND SHORING WILL BE DONE IN STRICT ACCORDANCE WITH THE LATEST OSHA STANDARDS.
31. TRAFFIC CONTROL CONSTRUCTION WARNING SIGNALS AND FLAGMEN, WHEN NECESSARY, SHALL BE PROVIDED BY THE CONTRACTOR AT NO SEPARATE PAY. OPERATION ON ROADS SHALL BE PERFORMED IN SUCH A MANNER THAT OPERATING EQUIPMENT AND EXCAVATED MATERIAL ARE KEPT OFF THE PAVEMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY TRAFFIC CONTROL DEVICES AS PER THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
32. BORE PITS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL HARRIS COUNTY RULES AND REGULATIONS REGARDING SIZE, LOCATION, DEPTH, BACKFILL AND SHEETING REQUIREMENTS.
33. ANY SOIL BORINGS THE CONTRACTOR REQUIRES ARE TO BE DONE BY THE CONTRACTOR AT HIS EXPENSE.
34. ALL DISTURBED AREAS WITHIN THE RIGHT–OF–WAY SHALL BE RESTORED TO ITS EXISTING CONDITION BY HYDROMULCH SEEDING AS PER THE SATISFACTION OF HARRIS COUNTY, ENGINEER AND THE OWNER.
35. OVERHEAD LINES MAY EXIST ON THE PROPERTY. WE HAVE NOT MARKED THOSE LINES SINCE THEY ARE CLEARLY VISIBLE, BUT CONTRACTOR SHOULD LOCATE THEM PRIOR TO CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE, FORBIDS ALL ACTIVITIES IN WHICH PERSONS OR THINGS MAY COME WITHIN SIX FEET (6') OF LIVE OVERHEAD HIGH VOLTAGE LINES. CONTRACTORS AND OWNERS ARE LEGALLY RESPONSIBLE FOR SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY.
36. ANY DEBRIS, ROOTS, ETC. LEFT OVER FROM THE SITE CLEARING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE & DISPOSE.

WATER LINE NOTES:

1. FITTINGS TO BE DUCTILE IRON (ALL BELL) AND WRAPPED WITH POLYETHYLENE IN ACCORDANCE WITH CITY OF HOUSTON AND HCMUD MEETING REQUIREMENTS OF AWWA C104 AND BITUMASTIC COATING. INCLUDING PRICE OF FITTINGS IN UNIT PRICE BID PER LINEAR FOOT OF WATERLINES IN APPROPRIATE SIZES.
2. CONTRACTOR TO ALLOW A MINIMUM 12–INCH (12") VERTICAL CLEARANCE BETWEEN PROPOSED WATERLINES AND OTHER EXISTING OR PROPOSED UTILITIES UNLESS OTHERWISE NOTED.
3. VALVES TO BE LOCATED AT END OF CURB RETURNS NEAR INTERSECTIONS UNLESS OTHERWISE SHOWN ON PLANS. CONSTRUCT WATERLINES WITH ONE JOINT OF PIPE BEYOND VALVES AND PLUG FOR FUTURE LINES UNLESS DISTANCES SHOWN ON PLANS INDICATE OTHERWISE.
4. VALVES ARE TO BE RESILIENT SEATED AND EQUIPPED WITH OPERATING NUT EXTENSIONS TO WITHIN 2 FEET (2') OF NATURAL GROUND. OPERATE COUNTER–CLOCKWISE TO OPEN.
5. ALL WATERLINE VALVE BOXES TO BE ADJUSTABLE TYPE.
6. ALL WATERLINES SHALL HAVE A MINIMUM FOUR FEET (4') OF COVER TO THE TOP OF CURB OR AS SHOWN ON PLANS.
7. ALL WATERLINES, AFTER INSTALLATION AND HYDROSTATIC TESTING ARE COMPLETE, SHALL BE THOROUGHLY DISINFECTED ACCORDING TO AWWA SPECIFICATIONS C–651 AND THEN FLUSHED BEFORE BEING PLACED INTO SERVICE. WATER SAMPLES SHALL BE COLLECTED FOR BACTERIOLOGIC ANALYSIS AND LINES WILL NOT BE ACCEPTED FOR SERVICE UNTIL WATER SAMPLES MEET THE REQUIREMENTS OF THE TEXAS STATE DEPARTMENT OF HEALTH AND HARRIS COUNTY. HARRIS COUNTY TO ADMINISTER TESTING AT CONTRACTOR'S EXPENSE.
8. ALL WATERLINES TO BE POLYVINYL CHLORIDE (PVC) AWWA C–900, WITH BELL AND SPIGOT JOINTS. SIX INCH (6") AND LARGER PIPES SHALL BE DR 18 – PRESSURE CLASS 235. FOUR INCH (4") PIPES SHALL BE DR 14 – CLASS 200. ALL PVC WATERLINES SHALL BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL. CONTRACTOR SHALL USE ONLY NEW PIPE DURING CONSTRUCTION.
9. ALL WATERLINES SHALL BE ENCASED IN BANK SAND AS PER BEDDING AND BACKFILL DETAIL. COST OF BANK SAND TO BE INCLUDED IN UNIT PRICE OF WATERLINE.
10. WATERLINE TRENCHES UNDER PAVEMENT OR WITHIN TWO FEET OF PROPOSED CURBS SHALL BE ENCASED WITH BANK SAND TO SIX INCHES (6") OVER PIPE AND BACKFILLED WITH CEMENT STABILIZED SAND (1–1/2 SACK/CUBIC YARD) UP TO BOTTOM OF SUBGRADE. COST OF BACKFILL SHALL NOT BE PAID DIRECTLY BUT SHALL BE INCLUDED IN UNIT PRICE OF WATERLINE.
11. MAINTAIN MINIMUM 9–FOOT HORIZONTAL CLEARANCE BETWEEN OUTSIDE OF SANITARY SEWER MANHOLE AND WATERLINE.
12. CENTER OF FIRE HYDRANT TO BE LOCATED THREE FEET (3') FROM BACK OF CURB WITH CENTER LINE OF STEAMER NOZZLE EIGHTEEN INCHES (18") ABOVE FINISHED GRADE, UNLESS OTHERWISE SHOWN.
13. ALL FIRE HYDRANTS TO BE STANDARD FIRE HYDRANT (MUELLER A–423).
14. FIRE HYDRANTS TO BE PAINTED RED WITH WHITE BONNETS.
15. WATERLINE SHALL BE CONSTRUCTED SUCH THAT ALL CROSSES AND TEES WILL NOT BE LOCATED UNDER PROPOSED OR FUTURE PAVING.
16. CONTRACTOR TO TURN FIRE HYDRANTS AND MAKE ALL FINAL ADJUSTMENTS AFTER COMPLETION OF PAVING.
17. TAPPING SLEEVE AND VALVE SHALL BE FULL BODY STAINLESS STEEL.
18. ALL TEES, ELBOWS, BENDS, AND END PLUGS SHALL INCLUDE RESTRAINT OF FITTINGS. RESTRAINT MAY BE BY MEANS OF THRUST BLOCKS OR RESTRAINED JOINT PIPE (OF APPROVED MANUFACTURER). IF RESTRAINED JOINT PIPE IS USED, ALL PIPES LESS THAN 12–INCHES (12") DIAMETER SHALL INCLUDE A MINIMUM OF TWO (2) JOINTS OF RESTRAINED JOINT PIPE ON EACH SIDE OF THE FITTING. ALL PIPES EQUAL TO OR GREATER THAN 12–INCHES (12") IN DIAMETER SHALL INCLUDE A MINIMUM OF THREE (3) JOINTS OF RESTRAINED JOINT PIPE ON EACH SIDE OF THE FITTING.

PAVING CONSTRUCTION NOTES:

1. AUTHORIZATION NOTICE ISSUED BY HARRIS COUNTY PUBLIC INFRASTRUCTURE ENGINEERING DEPARTMENT PERMIT OFFICE REQUIRED PRIOR TO CONSTRUCTION OF UTILITIES OR LEFT TURN LANES WITHIN HARRIS COUNTY FLOOD CONTROL DISTRICT AND HARRIS COUNTY RIGHTS–OF–WAY. CONTACT HARRIS COUNTY PERMIT OFFICE AT 713–274–3931.
2. WATER, SANITARY AND STORM SEWER ARE SHOWN FOR INFORMATION ONLY AND ARE NOT INCLUDED IN THE PAVING CONTRACT.
3. PAVING IN PUBLIC RIGHT–OF–WAY SHALL BE IN ACCORDANCE WITH HARRIS COUNTY STANDARD, AND THESE PLANS AND SPECIFICATIONS.
4. ALL ROAD WIDTH, CURB RADII, AND CURB ALIGNMENT SHOWN INDICATE BACK OF CURB. T.C. INDICATES TOP OF CURB. T.P. INDICATES TOP OF PAVEMENT.
5. GUIDELINES SET FORTH IN THE 1980 "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE OBSERVED. THERE WILL BE NO SEPARATE PAYMENT FOR THIS ITEM.
6. TRANSVERSE EXPANSION JOINTS SHALL BE INSTALLED AT EACH CURB RETURN AND AT A MAXIMUM SPACING OF 60 FEET.
7. THE SUBGRADE IS TO BE SIX INCHES (6") DEEP SCARIFIED, LIME STABILIZED AS DETERMINED BY LAB TESTS, BUT NOT LESS THAN 5%, AND COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM D–698.
8. SIX INCH (6") CONCRETE PAVEMENT TO BE 5.0 SACK MIX. REINFORCING STEEL TO CONFORM TO ASTM A–615, GRADE 40. PROVIDE MINIMUM TEN INCH (10") LAPS, MINIMUM #4 REBARS.
9. AT EACH FLUSHING VALVE LOCATION, THE CONTRACTOR SHALL SET ONE BLUE REFLECTORIZED BUTTON SIX INCHES (6") OFF THE CENTERLINE OF PAVING ON THE FLUSHING VALVE SIDE (NO SEPARATE PAY).
10. WHERE PROPOSED PAVEMENT IS TO MATCH EXISTING PAVEMENT, EXISTING REBARS OR DOWELS PROJECTING FROM PAVEMENT TO BE CLEANED AND TIED INTO PROPOSED PAVEMENT. REMOVE EXISTING BARRICADES. NO SEPARATE PAY.
11. WHERE PROPOSED PAVEMENT ENDS AT A CONSTRUCTION JOINT, EXTEND REBARS EIGHTEEN INCHES (18"), COAT WITH ASPHALT AND WRAP WITH BURLAP; AT EXPANSION JOINTS, EXTEND DOWEL FIVE INCHES (5"), COAT AND WRAP SAME AS CONSTRUCTION JOINT. NO SEPARATE PAY.
12. ALL CURB RETURN RADII SHALL BE 25 FEET UNLESS NOTED OTHERWISE.
13. NECESSARY TESTING OF SUBGRADE, FLEXIBLE BASE PAVEMENT AND CONCRETE PAVEMENT, TO PROVE THAT THESE ITEMS MEET REQUIREMENTS, SHALL BE DONE BY A COMMERCIAL TESTING LABORATORY APPROVED BY THE CITY ENGINEER AND OWNER.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLANNING OF TRAFFIC DETOURS THROUGHOUT ALL CONSTRUCT PHASES AND WILL BE REQUIRED TO SUBMIT TO THE ENGINEER THE DETOUR PLANS NOT LESS THAN FOURTEEN (14) DAYS BEFORE DETOUR CONSTRUCTION. THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE FOLLOWED.
15. OWNER'S LABORATORY SERVICES TEST REQUIREMENTS FOR LIME STABILIZED SUBGRADE, CONCRETE PAVEMENT CONSTRUCTION.

SIDEWALKS AND DRIVEWAYS ON CURBED TYPE STREETS:

1. PROPOSED DRIVEWAY, SIDEWALK, CURB, GUTTER LINE AND GRADE SHALL MATCH EXISTING STREET.
2. PROPOSED SIDEWALK SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE, 4–1/2" SACK CEMENT PER CUBIC YARD, 4–1/2" INCHES THICK AND 4 FEET MINIMUM WIDTH. SEE DRAWING NO. 3 FOR ADDITIONAL INFORMATION AND DETAILS.
3. PROPOSED DRIVEWAY SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE, 5 SACK CEMENT PER CUBIC YARD, 7 INCHES THICK, FROM PROPOSED SAW CUT TO RIGHT–OF–WAY LINE (PROPERTY LINE).
4. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE #4 DEFORMED SPACED AT 24 INCHES C.C., EACH WAY, WITH 10 INCHES MINIMUM LAP (6"x12" W5xW4 AS ALTERNATE) FROM PROPOSED SAW CUT TO RIGHT–OF–WAY LINE.
5. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE TIED TO EXISTING ROADWAY REINFORCING STEEL WITH A MINIMUM LAP OF 8 INCHES.
6. PROPOSED GUTTER LINE IS TO BE MAINTAINED AT FACE OF EXISTING CURB.
7. SAW CUT EXISTING CURB AT EACH END AND KNOCK OUT CURB FROM BEGINNING TO END OF PROPOSED DRIVEWAY.
8. SAW CUT EXISTING PAVEMENT A MINIMUM OF 12 INCHES AWAY FROM FACE OF CURB (GUTTER LINE) AND BREAK OUT TO EXPOSE EXISTING REINFORCEMENT STEEL.
9. COMPACT SUBGRADE FOR PROPOSED DRIVEWAY CONNECTION FROM PROPOSED SAW CUT AT EXISTING PAVEMENT TO RIGHT–OF–WAY LINE, COMPACT TO 95% OF STANDARD PROCTOR DENSITY (+/– 2% OPT. MOISTURE). THE COUNTY ENGINEER RESERVES THE RIGHT TO REQUIRE LABORATORY TESTS TO BE CONDUCTED.
10. IF MORE THAN ONE PROPOSED DRIVEWAY IS BUILT ON THE SAME PROPERTY, SAID DRIVEWAYS SHALL BE SEPARATED BY A MINIMUM DISTANCE OF 20 FEET (ROADWAYS WITH CURBS AND SIDEWALKS).
11. REINFORCING STEEL TO BE ELEVATED A MINIMUM OF 3" ABOVE SUBGRADE (3 INCHES MANUFACTURED CHAIRS ARE REQUIRED WITH MAXIMUM SPACING OF 72 INCHES C/C EACH WAY).

STORM SEWER AND DRAINAGE NOTES:

1. STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE LATEST HARRIS COUNTY STANDARDS OF CONSTRUCTION WITH ALL AMENDMENTS THERETO, AND THESE PLANS AND SPECIFICATIONS.
2. ALL STORM SEWER PIPES LOCATED UNDER OR WITHIN TWO FEET OF PROPOSED OR FUTURE PAVING SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND (1–1/2 SACK/CUBIC YARD) UP TO BOTTOM OF SUBGRADE.
3. ALL STORM SEWER PIPES IN THE RIGHT OF WAY TO BE R.C.P. C–76, CLASS III, WITH RUBBER GASKET JOINTS, BEDDED PER HARRIS COUNTY DETAILS, AS APPROPRIATE. PRIVATE STORM SEWER SHALL BE HDPE AND HP STORM (HIGH–PERFORMANCE POLYPROPYLENE), SMOOTH INTERIOR, WATERTIGHT JOINT, UNLESS OTHERWISE NOTED.
4. CATCH BASIN INLETS SHALL BE TYPE "A", CURB INLET SHALL BE B–B INLET UNLESS OTHERWISE NOTED.
5. FIRST STAGE INLET TO BE CONSTRUCTED TO WITHIN APPROXIMATELY ONE FOOT BELOW BOTTOM OF PROPOSED PAVEMENT. COVER WITH TIMBER GRATE.
6. ALL STORM SEWER MANHOLES SHALL BE STANDARD, TYPE "C' UNLESS OTHERWISE NOTED.
7. MANHOLE & INLET COVERS SHALL BE CAST WITH THE LOGO "STORM" AND BE RATED FOR H–20 DESIGN LOADING.
8. CEMENT STABILIZED SAND BEDDING AND/OR BACKFILL FOR INSTALLATION UNDER OR WITHIN ONE FOOT OF PAVEMENT SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE INCLUDED IN THE UNIT PRICE OF STORM SEWER PIPE.

SANITARY SEWER NOTES:

1. SANITARY SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE LATEST CITY OF HOUSTON STANDARDS OF CONSTRUCTION WITH ALL AMENDMENTS THERETO, AND THESE PLANS AND SPECIFICATIONS.
2. SANITARY SEWERS LOCATED UNDER OR WITHIN TWO FEET (2') OF PROPOSED OR FUTURE PAVING SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND (1–1/2 SACK/CUBIC YARD) UP TO BOTTOM OF SUBGRADE.
3. ALL NEW SANITARY SEWER LINES SHALL BE PLUGGED UNTIL ACCEPTED BY THE DISTRICT ENGINEER.
4. ALL SANITARY SEWERS SHALL BE AIR TESTED AND VIDEOTAPE TELEVISION INSPECTED AS PER CONTRACT SPECIFICATIONS AND CITY OF HOUSTON REQUIREMENTS. CONTRACTOR TO MAKE ANY REPAIRS AS REQUIRED.
5. DEFLECTION TEST: DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE AND SEMI–RIGID PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID BALL OR MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
6. FLOWLINE ELEVATION ARE BASED ON LENGTHS BETWEEN MANHOLE CENTERS.
7. MANHOLE COVERS SHALL BE CAST WITH THE LOGO "SANITARY" AND BE RATED FOR H–20 DESIGN LOADING.
8. ALL EXPOSED CONCRETE SURFACES INSIDE OF MANHOLES, EXCEPT INVERT, TO BE BITUMASTIC COATED AS PER PLAN AND STANDARD SPECIFICATIONS.
9. ALL SANITARY SEWER PIPES SHALL HAVE BEDDING AND BACKFILL PER PLAN AND STANDARD SPECIFICATION. THE PRICE OF ALL BEDDING AND BACKFILL REQUIRED FOR SANITARY SEWER LINES SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE.
10. ALL SANITARY SEWER PIPES AND SERVICE CONNECTIONS SHALL BE SDR 26 PVC HEAVY WALL PER ASTM D–2241 AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF HOUSTON STANDARD DRAWINGS. EXCEPTION: WHERE WATERLINE AND SANITARY SEWER CROSS, SANITARY PIPE SHALL BE SDR 26 PVC FROM MANHOLE TO MANHOLE, WITH ONE JOINT CENTERED AT WATER LINE CROSSING.
11. ALL SANITARY CLEANOUT "Y" BRANCHES TO BE CONSTRUCTED THREE FEET (3') MINIMUM BELOW TOP OF CURB.
12. WATERLINE/MANHOLE SEPARATION–UNLESS SANITARY SEWER MANHOLES AND THE CONNECTING SEWER CAN BE MADE COMPLETELY WATERTIGHT AND TESTED FOR NO LEAKAGE, THEY MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE FEET (9') OF HORIZONTAL CLEARANCE FROM AN EXISTING OR PROPOSED WATERLINE.
13. WHERE A NEW SANITARY SEWER FORCE MAIN PARALLELS THE WATER MAIN, THE SANITARY SEWER SHALL BE CONSTRUCTED OF LINED DUCTILE IRON, OR PVC PIPE MEETING AWWA SPECIFICATIONS, HAVING A MINIMUM WORKING PRESSURE RATING OF 150 PSI OR GREATER, AND EQUIPPED WITH PRESSURE TYPE JOINTS. THE WATER MAIN AND SANITARY SEWER SHALL BE SEPARATED BY A MINIMUM VERTICAL DISTANCE OF TWO FEET (2') AND A MINIMUM HORIZONTAL DISTANCE OF FOUR FEET (4'), MEASURED BETWEEN THE NEAREST OUTSIDE DIAMETERS OF THE PIPES, AND THE WATER MAIN SHALL BE LOCATED ABOVE THE SEWER.
14. WHERE A NEW GRAVITY SANITARY SEWER PARALLELS A NEW WATER MAIN THE SANITARY SEWER SHALL BE CONSTRUCTED OF LINED DUCTILE IRON, OR PVC PIPE MEETING AWWA SPECIFICATIONS, OR HAVING NATIONAL SANITARY FOUNDATION APPROVAL FOR USE AS POTABLE WATER PIPE, WITH A PRESSURE RATING FOR BOTH THE PIPE AND THE JOINTS OF GREATER THAN OR EQUAL TO 150 PSI. THE NEW SEWER LINE MAY BE PLACED NO CLOSER THAN TWO FEET (2') VERTICALLY AND FOUR FEET (4') HORIZONTALLY FROM THE WATER LINE, WITH THE SEPARATION DISTANCES MEASURED BETWEEN THE NEAREST OUTSIDE PIPE DIAMETERS. THE SANITARY SEWER SHALL BE INSTALLED AT A LOWER ELEVATION THAN THE WATER LINE.
15. WHERE A NEW SANITARY SEWER CROSSES A WATER LINE AND THAT PORTION OF THE SEWER IS WITHIN NINE FEET (9') OF THE WATER MAIN IS CONSTRUCTED AS DESCRIBED IN NOTE 11 ABOVE, THE SEWER LINE MAY BE PLACED NO CLOSER THAN ONE FOOT (1') FROM THE WATER LINE. THE SEPARATION DISTANCE MUST BE MEASURED BETWEEN THE NEAREST OUTSIDE PIPE DIAMETERS. THE SEWER LINE SHALL BE LOCATED AT A LOWER ELEVATION THAN THE WATER LINE WHEREVER POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATER LINE.
16. SANITARY SEWER MANHOLE COVER SHALL HAVE NO LIFT OR VENT HOLES.
17. WHERE NINE FOOT (9') SEPARATION DISTANCE CANNOT BE ACHIEVED BETWEEN CROSSING SANITARY AND WATER LINES, THE CEMENT STABILIZED SAND SHALL HAVE A MINIMUM OF TEN PERCENT (10%) CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE). THE CEMENT STABILIZED SAND BEDDING SHALL BE A MINIMUM OF SIX INCHES (6") ABOVE AND SIX INCHES (6") BELOW THE SEWER PIPE. THE USE OF BROWN COLORING IN CEMENT STABILIZED SAND FOR WASTEWATER LINE BEDDING IS RECOMMENDED FOR THE IDENTIFICATION OF WASTEWATER FORCE MAINS DURING FUTURE CONSTRUCTION.

AT&T TEXAS/SWBT FACILITIES NOTES:

1. THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL CALL 1–800–344–8377 (TEXAS 811) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON–MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.
4. WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES, THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.
5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN CONDUIT IN THE AREA.
6. PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER ROOSEVELT LEE JR. AT (713) 567–4552 OR EMAIL HIM AT RL7259@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATING NEAR AT&T TEXAS/SWBT FACILITIES.

CENTERPOINT ENERGY UTILITY NOTES:

CAUTION: UNDERGROUND GAS FACILITIES

LOCATIONS OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE CENTERPOINT ENERGY, INTRASTATE PIPELINE, LLC. WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. OUR SIGNATURE ON THESE PLANS ONLY INDICATES THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT (713) 223–4567, 1–800–669–8344 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL (713) 967–8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
- WHEN EXCAVATING WITHI

DETAILS

DETAIL 1
"BB" INLET
TC=31.45
FL 12" HDP (S) 26.16

DETAIL 2
STM. SWR. MH.
TR=31.96
FL 60" RCP (W) 23.47
FL 36" RCP (N) 25.49
FL 60" RCP (E) 23.23
FL 36" RCP (SE) 23.85

DETAIL 3
STM. SWR. MH.
TR=31.48
FL 36" RCP (NW) 23.73
FL 12" PVC (SE) 26.98
FL 36" RCP (S) 23.78

DETAIL 4
GRATE INLET
TG=31.38
FL 12" PVC (NW) 27.86

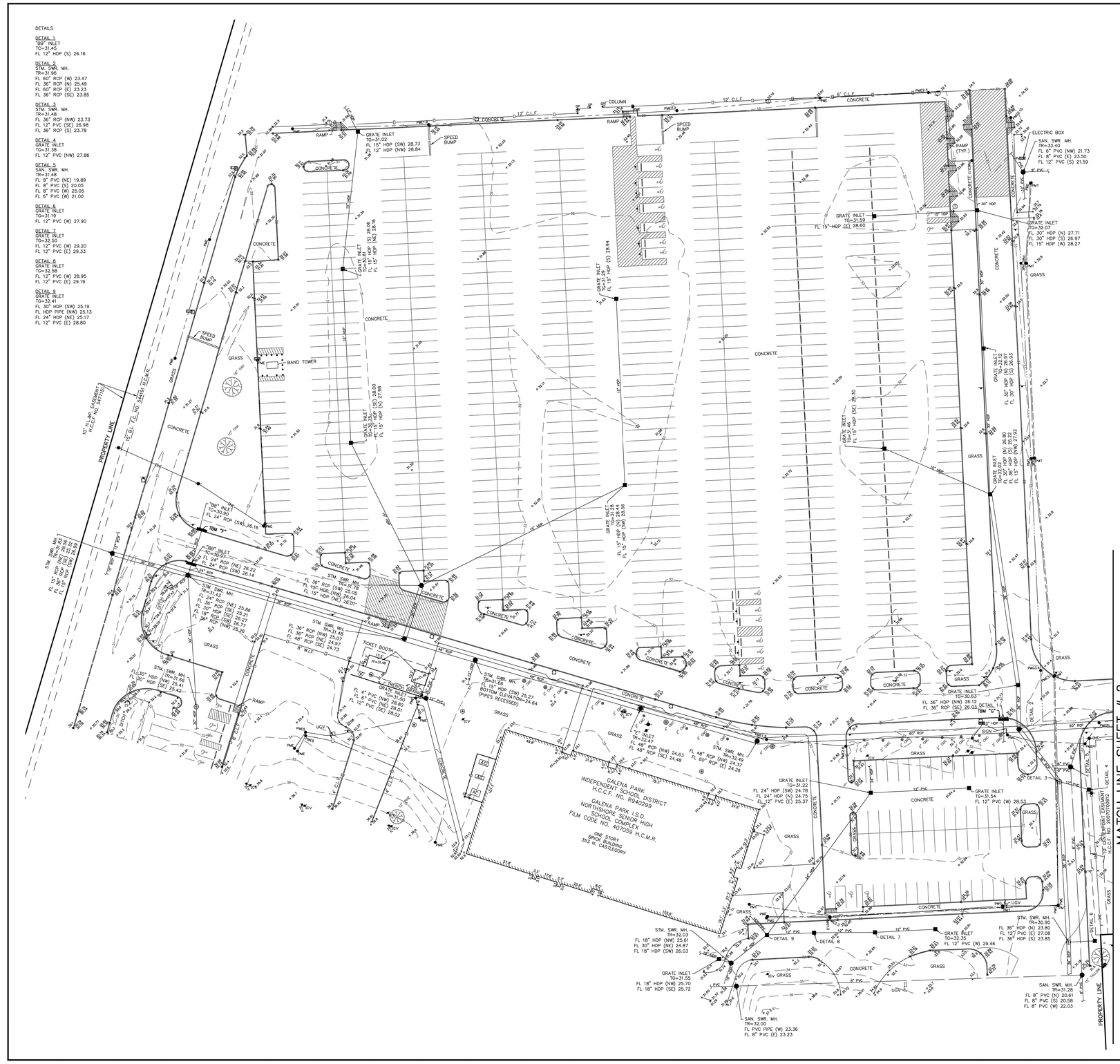
DETAIL 5
SAN. SWR. MH.
TR=31.48
FL 8" PVC (NE) 19.89
FL 8" PVC (S) 20.05
FL 8" PVC (W) 25.05
FL 6" PVC (W) 21.00

DETAIL 6
GRATE INLET
TG=31.19
FL 12" PVC (W) 27.90

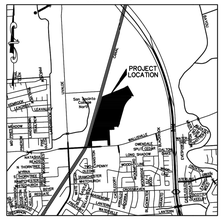
DETAIL 7
GRATE INLET
TG=32.50
FL 12" PVC (W) 29.20
FL 12" PVC (E) 29.33

DETAIL 8
GRATE INLET
TG=32.58
FL 12" PVC (W) 28.95
FL 12" PVC (E) 29.19

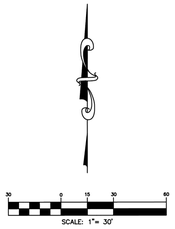
DETAIL 9
GRATE INLET
TG=32.41
FL 30" HDP (SW) 25.19
FL HDP PIPE (NW) 25.13
FL 24" HDP (NE) 25.17
FL 12" PVC (E) 28.80



VICINITY MAP



KEY MAP 457 T&U
SCALE 1" = 3000'



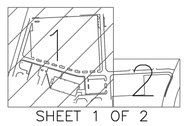
SCALE: 1"= 30'

LEGEND

- AIR CONDITIONING UNIT
- "BB" INLET
- BENCHMARK
- BOLLARD
- CLEANOUT
- "E" INLET
- ELECTRIC JUNCTION BOX
- FIRE HYDRANT
- GATE POST
- GRATE TOP MANHOLE
- GUY WIRE
- INLET
- IRRIGATION CONTROL VALVE
- LIGHT STANDARD
- MANHOLE
- PAINT MARKER (ELECTRIC)
- PAINT MARKER (GAS)
- PAINT MARKER (TELEPHONE)
- PEDESTAL
- POWER POLE
- SIGN
- TRASH CAN
- WATER VALVE
- WHEEL STOP

ABBREVIATIONS

B.L.–BUILDING LINE
C.L.F.–CHAIN LINK FENCE
CMC–CREPE MYRTLE CLUSTER
F.C.–FILM CODE
FF–FINISH FLOOR
FL–FLOW LINE
H.C.C.F.–HARRIS COUNTY CLERK'S FILE
H.C.M.R.–HARRIS COUNTY MAP RECORDS
HDP–HIGH DENSITY POLYETHYLENE PIPE
MH–MANHOLE
OHE–OVERHEAD ELECTRIC
PVC–POLYVINYL CHLORIDE PIPE
RCP–REINFORCED CONCRETE PIPE
R.O.W.–RIGHT–OF–WAY
SAN.–SANITARY
STM.–STORM
SWR.–SEWER
TG–TOP OF GRATE
TR–TOP OF RIM
TYP.–TYPICAL
UGV–UNDERGROUND VAULT
W.I.F.–WROUGHT IRON FENCE



SHEET 1 OF 2

REGISTERED JOEL D. WALKER 5189 PROFESSIONAL SURVEYOR

TO: GALENA PARK INDEPENDENT SCHOOL DISTRICT

THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS STANDARDS AND SPECIFICATIONS FOR A CATEGORY 6, CONDITION 1 SURVEY AND THE CURRENT MINIMUM REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYING ACT.

7/16/25
DATE

JOEL D. WALKER, R.P.L.S.
TEXAS REGISTRATION NO. 5189

SURVEYOR'S NOTES:

1. THE CAD FILE OF THE DRAWING SHOWN HEREIN IS BASED ON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE SURFACE VALUE (NAD83) AND MAY BE CONVERTED TO GRID BY SCALING THE DRAWING BY THE FOLLOWING COMBINED SCALE FACTOR OF 0.99990162873.

2. ACCORDING TO F.I.R.M. MAP NOS. 48201C0720M (COMMUNITY–PANEL NO. 480287072OM), MAP REVISED DATE: JUNE 18, 2007. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

THIS STATEMENT IS BASED ON SCALING THE LOCATION OF THE SUBJECT TRACT ON THE ABOVE REFERENCED MAP. THIS INFORMATION IS TO DETERMINE FLOOD INSURANCE RATES ONLY AND IS NOT INTENDED TO IDENTIFY SPECIFIC FLOODING CONDITIONS.

3. ALL UTILITIES SHOWN HEREON ARE LOCATED USING "APPARENT & VISIBLE" EVIDENCE BY ON–SITE OBSERVATION UNLESS OTHERWISE NOTED.

4. –I– INDICATES AN UNDERGROUND SEWER LINE WITH UNKNOWN DIRECTION, SIZE OR LOCATION OR A POSSIBLE STUB–OUT.

5. UNDERGROUND UTILITY LOCATIONS PROVIDED BY LONESTAR LOCATING, LLC. PAINT MARKS WITH NUMERIC VALUES INDICATES COVER (FEET AND INCHES) DETERMINED BY ELECTRONIC TONING.

ALWAYS CONTACT TEXAS 811 PRIOR TO DIGGING. SOME UTILITIES SUCH AS FIBER OPTIC W/O TRACERS, PLASTIC GAS, FIBERGLASS/PVC ARE NOT LOCATABLE BY TRANSMISSION SIGNAL.

REFERENCE BENCHMARK:

RM130120 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 130120 IS A BRASS DISK STAMPED 130120 LOCATED ON THE CENTERLINE OF A CONCRETE HEADWALL OF STREAM 111–01–00 ON THE SOUTH SIDE OF WALLISVILLE ROAD ±1170 FEET EAST OF NORTH CASTLEGORY ROAD IN KEY MAP 457U. ELEVATION = 30.90' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM "F" – BOX CUT ON "BB" INLET LOCATED ±165' NORTHWEST FROM THE NORTHWEST CORNER OF TICKET BOOTH. ELEVATION=30.91'

TBM "G" – BOX CUT ON "BB" INLET LOCATED ±212' NORTHEAST FROM THE NORTHEAST BUILDING CORNER. ELEVATION =31.43'

NOT TO SCALE

NO.	DATE	REVISIONS	BY

DRAWN BY: DB	CHECKED BY: MDL
SCALE: 1"=30'	APPROVED BY: JDW
PROJECT NO. S425–0051H	DATE: JULY 16, 2025

WEST BELT SURVEYING, INC.
21020 PARK ROW, KATY, TX. 77449 PHONE: (281) 599-8288 FAX: (281) 492-6020
CERTIFIED FIRM NO. 100720600

16 Jul 2025 1:19PM dorrenb
G:\stdsk\proj\S425005 1H\DWG\T062725.dwg

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER
Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

GALENA PARK INDEPENDENT SCHOOL DISTRICT

TOPOGRAPHIC SURVEY

GALENA PARK ISD
NORTH SHORE SENIOR HIGH SCHOOL
OUT OF THE
T.O. MEUX SURVEY,
ABSTRACT NO. 596
HARRIS COUNTY, TEXAS

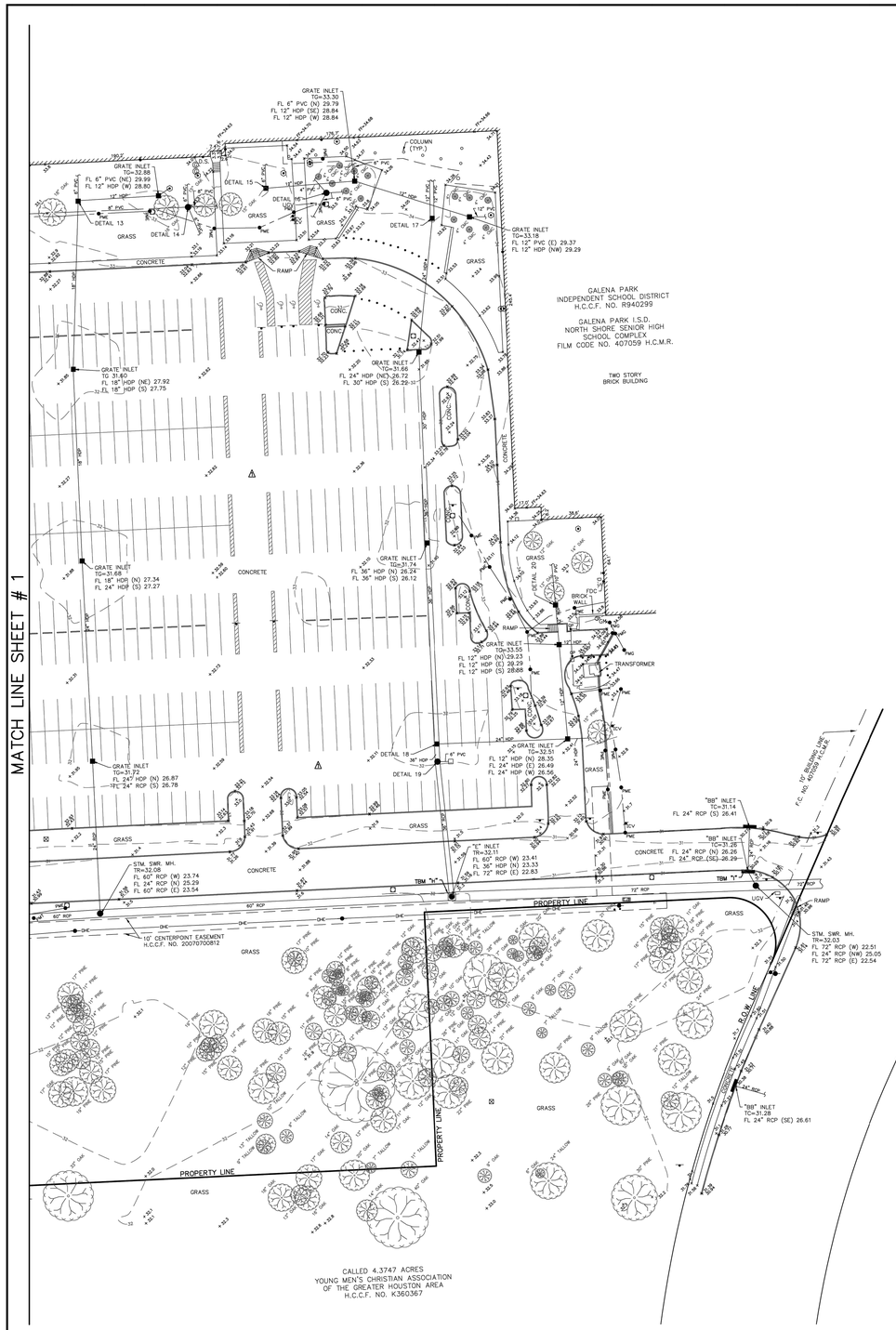
Principal DH
Proj. Eng. SN

PROJECT NO.
25-0056.00

SHEET TITLE
TOPOGRAPHIC SURVEY (1 OF 2)

SHEET NO.
C2

COPYRIGHT © 2025 VLK ARCHITECTS



NOT TO SCALE

DETAILS

DETAIL 13
GRATE INLET
TG=33.15
FL 6 " PVC (N) 29.38
FL 12" HDP (E) 28.49
FL 18" HDP (SW) 28.04

DETAIL 14
SAN. SWR. MH.
TR=33.45
FL 6" PVC (N) 29.68
FL 8" PVC (E) 24.59
FL 6" PVC (SE) 25.48
FL 8" PVC (W) 24.47

DETAIL 15
GRATE INLET
TG=32.97
FL 6" PVC (N) 30.03
FL 12" HDP (E) 28.08

DETAIL 16
SAN. SWR. MH.
TR=33.76
FL 4" PVC (NW) 27.40
FL 6" PVC (E) 28.81
FL 6" PVC (SW) 27.19

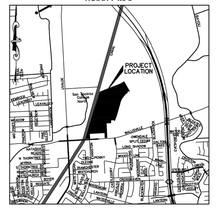
DETAIL 17
GRATE INLET
TG=34.03
FL 12" PVC (N) 28.17
FL 12" PVC (N) 28.15
FL 24" HDP (SW) 27.27

DETAIL 18
GRATE INLET
TG=31.79
FL 36" HDP (N) 26.19
FL 24" HDP (E) 26.22
FL 36" HDP (S) 26.32

DETAIL 19
STM. SWR. MH.
TR=31.98
FL 36" HDP (N) 26.16
FL 6" PVC (E) 25.96
FL 36" HDP (S) 25.93

DETAIL 20
GRATE INLET
TG=33.26
FL 12" HDP (S) 29.10
FL 10" PVC (N) 29.34

VICINITY MAP



KEY MAP 457 T&U
SCALE 1" = 3000'

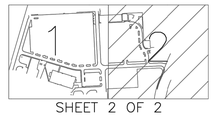
SCALE: 1"= 30'

LEGEND

- AIR CONDITIONING UNIT
- "BB" INLET
- BENCHMARK
- BOLLARD
- CLEANOUT
- "E" INLET
- ELECTRIC JUNCTION BOX
- FIRE HYDRANT
- GATE POST
- GRATE TOP MANHOLE
- GUY WIRE
- INLET
- IRRIGATION CONTROL VALVE
- LIGHT STANDARD
- MANHOLE
- PAINT MARKER (ELECTRIC)
- PAINT MARKER (GAS)
- PAINT MARKER (TELEPHONE)
- PEDESTAL
- POWER POLE
- SIGN
- TRASH CAN
- WATER VALVE
- WHEEL STOP

ABBREVIATIONS

B.L.–BUILDING LINE
C.L.F.–CHAIN LINK FENCE
CMC–CREPE MYRTLE CLUSTER
F.C.–FILM CODE
FF–FINISH FLOOR
FL–FLOW LINE
H.C.C.F.–HARRIS COUNTY CLERK'S FILE
H.C.M.R.–HARRIS COUNTY MAP RECORDS
HDP–HIGH DENSITY POLYETHYLENE PIPE
MH–MANHOLE
OHE–OVERHEAD ELECTRIC
PVC–POLYVINYL CHLORIDE PIPE
RCP–REINFORCED CONCRETE PIPE
R.O.W.–RIGHT–OF–WAY
SAN.–SANITARY
STM.–STORM
SWR.–SEWER
TG–TOP OF GRATE
TR–TOP OF RIM
TYP.–TYPICAL
UGV–UNDERGROUND VAULT
W.I.F.–WROUGHT IRON FENCE



SHEET 2 OF 2

REGISTERED PROFESSIONAL LAND SURVEYOR
JOEL D. WALKER
5189
STATE OF TEXAS
LAND SURVEYOR

TO: GALENA PARK INDEPENDENT SCHOOL DISTRICT

THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS STANDARDS AND SPECIFICATIONS FOR A CATEGORY 6, CONDITION 1 SURVEY AND THE CURRENT MINIMUM REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYING ACT.

8/27/25
DATE

Joel D. Walker
JOEL D. WALKER, R.P.L.S.
TEXAS REGISTRATION NO. 5189

SURVEYOR'S NOTES:

1. THE CAD FILE OF THE DRAWING SHOWN HEREIN IS BASED ON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE SURFACE VALUE (NAD83) AND MAY BE CONVERTED TO GRID BY SCALING THE DRAWING BY THE FOLLOWING COMBINED SCALE FACTOR OF 0.99990162873.

2. ACCORDING TO F.I.R.M. MAP NOS. 48201C0720M (COMMUNITY–PANEL NO. 480287 0720M), MAP REVISED DATE: JUNE 18, 2007, THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

THIS STATEMENT IS BASED ON SCALING THE LOCATION OF THE SUBJECT TRACT ON THE ABOVE REFERENCED MAP. THIS INFORMATION IS TO DETERMINE FLOOD INSURANCE RATES ONLY AND IS NOT INTENDED TO IDENTIFY SPECIFIC FLOODING CONDITIONS.

3. ALL UTILITIES SHOWN HEREON ARE LOCATED USING "APPARENT & VISIBLE" EVIDENCE BY ON–SITE OBSERVATION UNLESS OTHERWISE NOTED.

4. –/– INDICATES AN UNDERGROUND SEWER LINE WITH UNKNOWN DIRECTION, SIZE OR LOCATION OR A POSSIBLE STUB–OUT.

5. UNDERGROUND UTILITY LOCATIONS PROVIDED BY LONESTAR LOCATING, LLC. PAINT MARKS WITH NUMERIC VALUES INDICATES COVER (FEET AND INCHES) DETERMINED BY ELECTRONIC TONING.

ALWAYS CONTACT TEXAS 811 PRIOR TO DIGGING. SOME UTILITIES SUCH AS FIBER OPTIC W/O TRACERS, PLASTIC GAS, FIBERGLASS/PVC ARE NOT LOCATABLE BY TRANSMISSION SIGNAL.

6. THE SUBJECT TRACT IS AFFECTED BY A SHORT FORM BLANKET EASEMENT TO CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC, RECORDED UNDER H.C.C.F. NO. 20080072489.

REFERENCE BENCHMARK:

RM130120 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 130120 IS A BRASS DISK STAMPED 130120 LOCATED ON THE CENTERLINE OF A CONCRETE HEADWALL OF STREAM 111–01–00 ON THE SOUTH SIDE OF WALLISVILLE ROAD ±1170 FEET EAST OF NORTH CASTLEGORY ROAD IN KEY MAP 457U. ELEVATION = 30.90' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM "H" – BOX CUT ON "E" INLET LOCATED ON THE SOUTH SIDE OF MUSTANG LN ±257' WEST OF CASTLEGORY.
ELEVATION=32.10'

TBM "I" – BOX CUT ON "BB" INLET LOCATED ON THE SOUTH SIDE OF MUSTANG LANE ±62' WEST OF N. CASTELGORY.
ELEVATION=31.24'

GALENA PARK
INDEPENDENT
SCHOOL DISTRICT

TOPOGRAPHIC SURVEY

GALENA PARK ISD
NORTH SHORE SENIOR
HIGH SCHOOL
OUT OF THE
T.O. MEUX SURVEY,
ABSTRACT NO. 596
HARRIS COUNTY, TEXAS

WEST BELT
SURVEYING, INC.
21030 PARK ROW
KATY, TX. 77449
PHONE: (281) 599-8288
FAX: (281) 492-6020
CERTIFIED FIRM NO. 10078800

NO.	DATE	REVISIONS	BY
1	8/27/25	ADDITIONAL TOPO OF EAST PARKING LOT	DB

DRAWN BY: DB	CHECKED BY: MDL
SCALE: 1"=30'	APPROVED BY: JDW
PROJECT NO. S425–0051H	DATE: JULY 16, 2025

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER
Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

Principal DH
Proj. Eng. SN

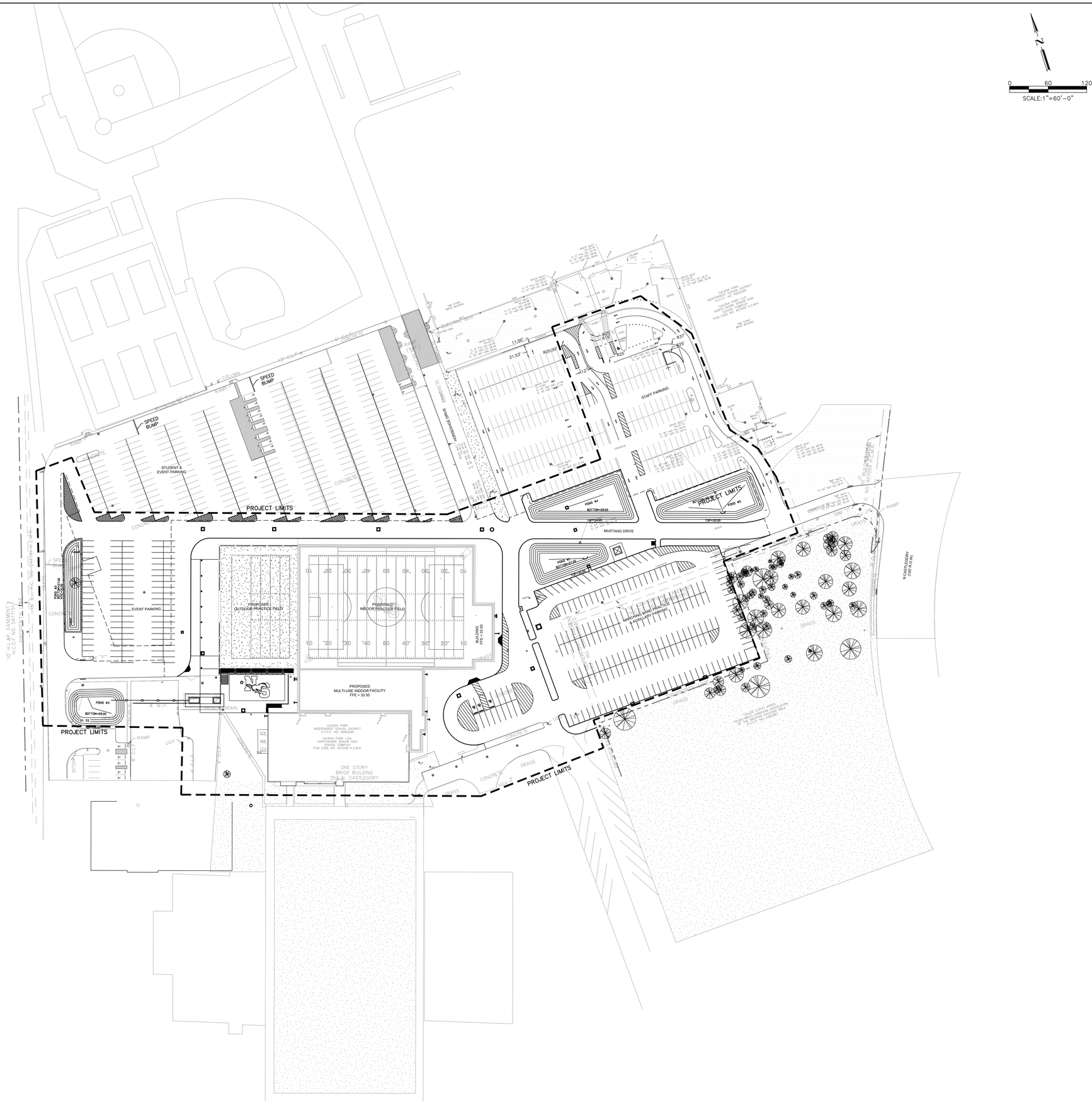
PROJECT NO.
25-0056.00

SHEET TITLE
TOPOGRAPHIC SURVEY (2 OF 2)

SHEET NO.
C2.1

COPYRIGHT © 2025 VLK ARCHITECTS

27 Aug 2025 4:06PM markl
G:\sdsk\pro1\542500511\DWG\T082025.dwg



0 60 120

SCALE:1"=60'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER

Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

REGISTERED
NANTHAVANH NAVISY
99284
LICENSED
PROFESSIONAL ENGINEER
10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

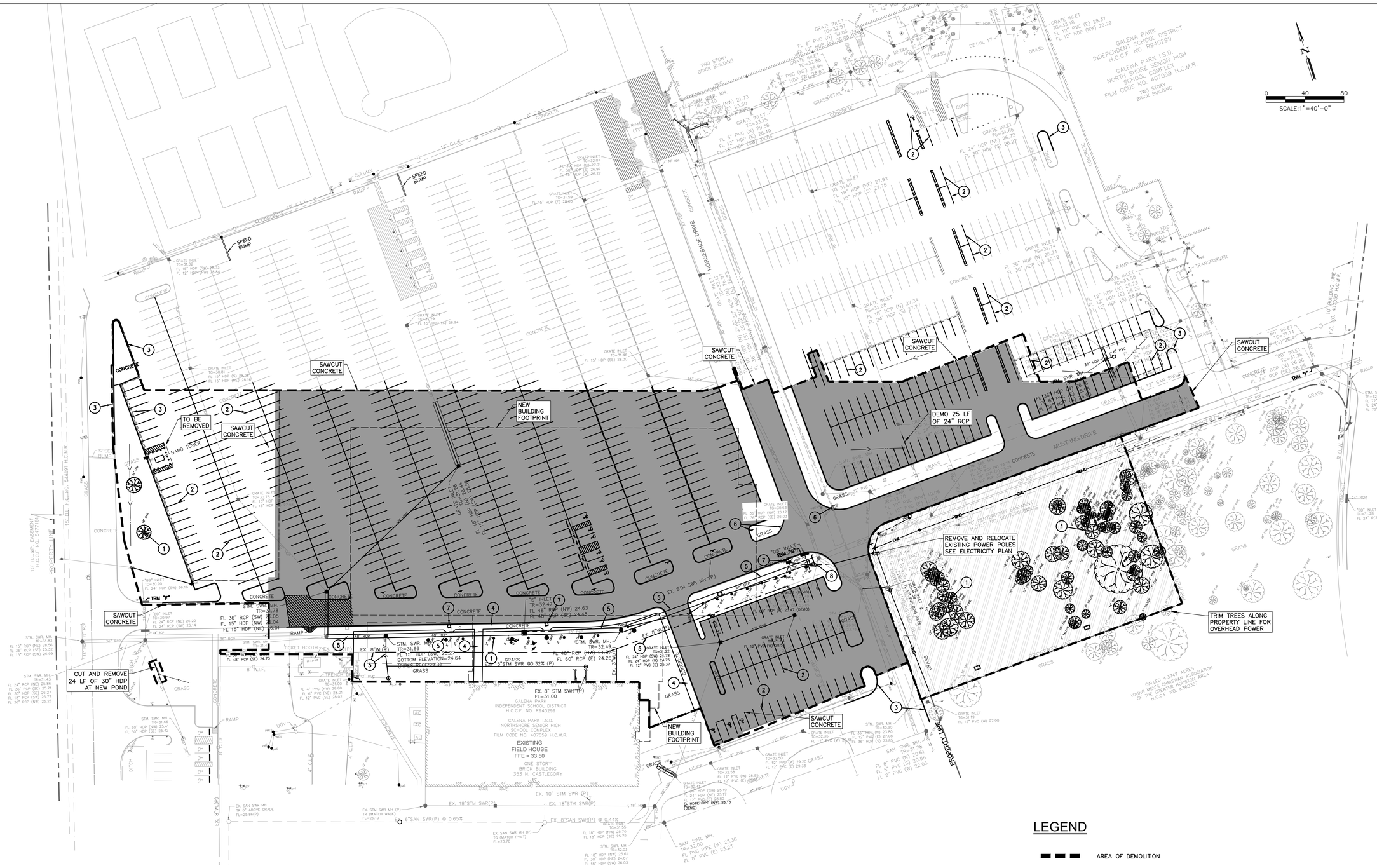
Principal	DH
Proj. Eng.	SN

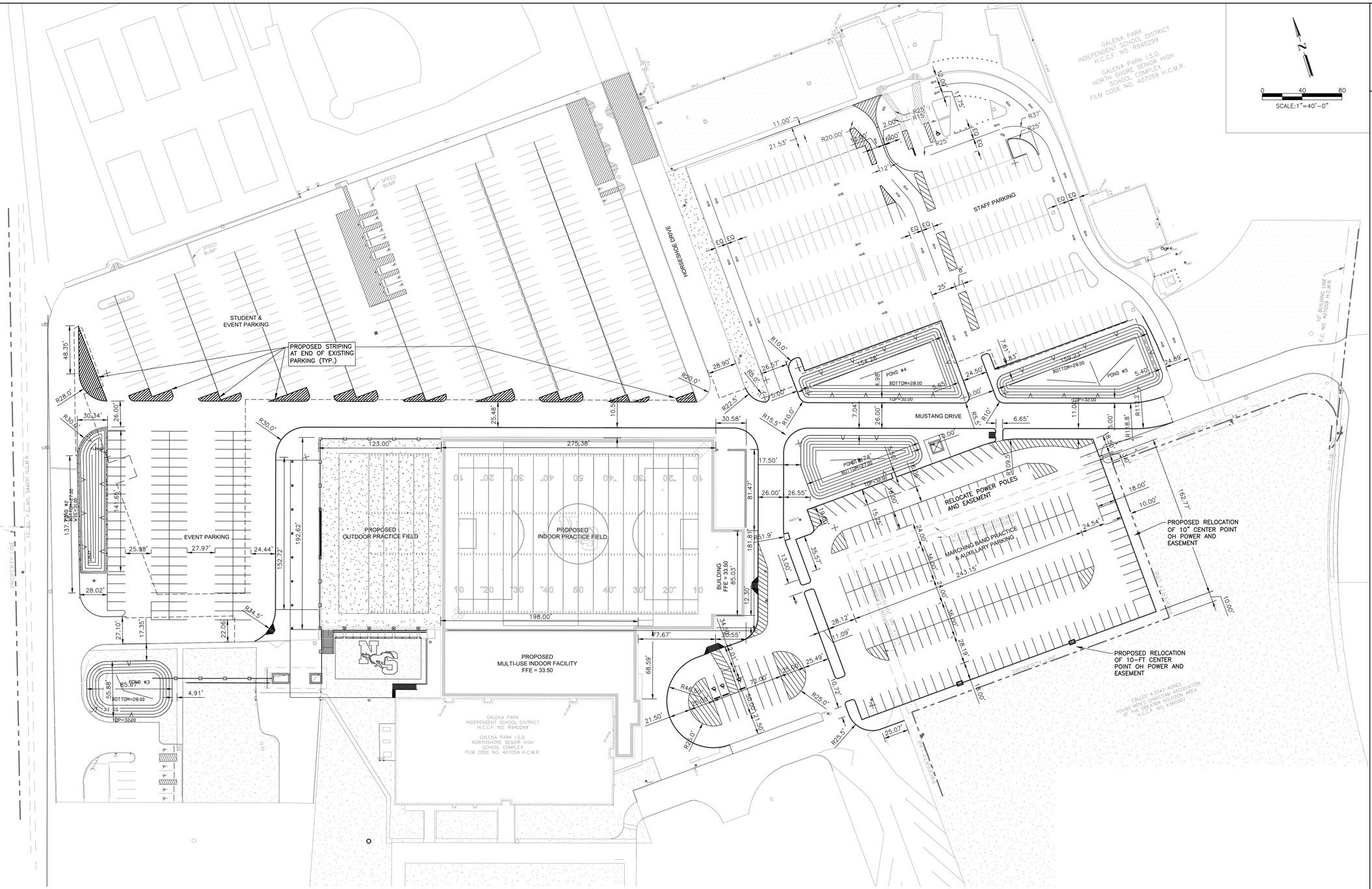
PROJECT NO.
25-0056.00

SHEET TITLE
OVERALL SITE LAYOUT PLAN

SHEET NO.
C3

COPYRIGHT © 2025 VLK ARCHITECTS


SCALE:1"=40'-0"
0
40
80
N
SAWCUT CONCRETE
NEW BUILDING FOOTPRINT
TO BE REMOVED
BAND TOWER
DEMO 25 LF OF 24" RCP
REMOVE AND RELOCATE EXISTING POWER POLES SEE ELECTRICITY PLAN
TRIM TREES ALONG PROPERTY LINE FOR OVERHEAD POWER
CUT AND REMOVE 24 LF OF 30" HDP AT NEW POND
EXISTING FIELD HOUSE FFE = 33.50
ONE STORY BRICK BUILDING 353 N. CASTLEGORY
GALENA PARK INDEPENDENT SCHOOL DISTRICT H.C.C.F. NO. R940299
GALENA PARK I.S.D. NORTHSHORE SENIOR HIGH SCHOOL COMPLEX FILM CODE NO. 407059 H.C.M.R.
MUSTANG DRIVE
HORSESHOE DRIVE
PROSPERITY LANE
SPEED BUMP
TBM "E"
TBM "F"
EX. 8" STM SWR (P) FL=31.00
EX. 18"STM SWR(P)
EX. 8"SAN SWR(P) @ 0.44%
6"SAN SWR(P) @ 0.65%
EX. 10" STM SWR(P)
EX. STM SWR MH(P)
EX. SAN SWR MH (P)
EX. 8"W.(P)
6" W.I.F.
STM. SWR. MH. TR=31.66 FL 15" HDP (SW) 26.47 BOTTOM ELEVATION=24.64 (PIPES TRESPASSED)
STM. SWR. MH. TR=31.83 FL 15" RCP (NE) 28.56 FL 36" RCP (SE) 25.32 FL 15" RCP (SW) 26.69
STM. SWR. MH. TR=31.43 FL 24" RCP (NE) 25.80 FL 36" RCP (SE) 25.21 FL 30" HDP (SE) 26.27 FL 18" RCP (SW) 26.77 FL 36" RCP (NW) 25.26
STM. SWR. MH. TR=31.66 FL 30" HDP (N) 23.80 FL 30" HDP (SE) 25.42
STM. SWR. MH. TR=32.03 FL 18" HDP (NW) 25.61 FL 30" HDP (NE) 24.87 FL 18" HDP (SW) 26.03
SAN. SWR. MH. TR=32.00 FL PVC PIPE (W) 23.36 FL 8" PVC (E) 23.23
SAN. SWR. MH. TR=31.28 FL 8" PVC (N) 20.61 FL 8" PVC (S) 20.58 FL 8" PVC (W) 22.03
GRATE INLET TG=31.02 FL 15" HDP (SE) 28.73 FL 12" HDP (NW) 28.84
GRATE INLET TG=31.59 FL 15" HDP (S) 28.94
GRATE INLET TG=31.46 FL 15" HDP (SE) 28.30
GRATE INLET TG=30.81 FL 15" HDP (S) 28.46 FL 15" HDP (NE) 28.16
GRATE INLET TG=30.75 FL 15" HDP (NW) 28.06 FL 15" HDP (E) 28.06
GRATE INLET TG=30.63 FL 30" HDP (NW) 26.12 FL 30" HDP (SE) 26.03
GRATE INLET TG=31.55 FL 18" HDP (NW) 25.70 FL 18" HDP (SE) 25.72
GRATE INLET TG=31.22 FL 24" HDP (SW) 24.78 FL 24" HDP (N) 24.75 FL 12" PVC (E) 28.37
GRATE INLET TG=31.60 FL 18" HDP (NE) 27.92 FL 18" HDP (S) 27.75
GRATE INLET TG=31.66 FL 24" HDP (NE) 26.72 FL 30" HDP (S) 26.22
GRATE INLET TG=31.74 FL 36" HDP (N) 26.24 FL 36" HDP (S) 26.12
GRATE INLET TG=31.68 FL 24" HDP (N) 27.34 FL 24" HDP (S) 27.27
GRATE INLET TG=31.68 FL 18" HDP (N) 27.51 FL 24" HDP (S) 27.37
GRATE INLET TG=33.55 FL 12" HDP (N) 29.23 FL 12" HDP (E) 29.08 FL 12" HDP (S) 28.98
GRATE INLET TG=33.18 FL 12" HDP (NW) 29.29
GRATE INLET TG=32.97 FL 6" PVC (N) 30.03
GRATE INLET TG=32.88 FL 6" PVC (NE) 29.88
GRATE INLET TG=33.15 FL 6" PVC (N) 29.58 FL 12" HDP (E) 28.49 FL 12" HDP (W) 28.01
GRATE INLET TG=32.07 FL 12" HDP (N)-27.71 FL 30" HDP (S) 26.97 FL 15" HDP (E) 26.27
GRATE INLET TG=31.59 FL 45° HDP (E) 28.40
GRATE INLET TG=31.00 FL 4" PVC (NW) 28.80 FL 6" PVC (NE) 28.01 FL 12" PVC (SE) 28.01
GRATE INLET TG=30.63 FL 12" HDP (SW) 25.19 FL 24" HDP (NE) 25.17 FL HDPE PIPE (NW) 25.13 (DEMO)
GRATE INLET TG=32.56 FL 12" PVC (W) 28.95 FL 12" PVC (E) 28.80
GRATE INLET TG=32.35 FL 12" PVC (W) 28.92 FL 12" PVC (E) 29.33
GRATE INLET TG=32.50 FL 12" PVC (W) 29.20 FL 12" PVC (E) 29.03
GRATE INLET TG=31.19 FL 12" PVC (W) 27.90
"BB" INLET TG=31.14 FL 24" RCP (S) 25.47
"BB" INLET TG=31.26 FL 24" RCP (N) 26.26 FL 24" RCP (SE) 26.09
"BB" INLET TG=31.28 FL 24" RCP
"BB" INLET TG=30.90 FL 24" RCP (SW) 26.16
"BB" INLET TG=30.97 FL 24" RCP (NE) 26.22 FL 24" RCP (SW) 26.14
"E" INLET TR=32.47 FL 48" RCP (NW) 24.63 FL 48" RCP (SE) 24.48
48" RCP
FL 48" RCP (NW) 24.26 FL 60" RCP (E) 24.26
FL 36" RCP (SW) 25.05 FL 15" HDP (NW) 25.04 FL 15" HDP (NE) 25.01
FL 36" RCP (N) 23.47 (DEMO)
FL 24" RCP (NW) 23.47
FL 24" RCP (E) 23.47
FL 24" RCP (SW) 23.47
FL 24" RCP (NE) 23.47
FL 24" RCP (W) 23.47
FL 24" RCP (SE) 23.47



SITE PLAN NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
3. ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
4. ALL ISLANDS WITH CURB SHALL BE LANDSCAPED PER LANDSCAPE PLAN.
5. NOT ALL DIMENSIONS ARE SHOWN ON THIS PLAN, SEE ARCHITECTURAL SITE PLAN FOR DETAILED DIMENSIONS.
6. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
8. REFER TO TOPOGRAPHICAL SURVEY ON SHEET C2 FOR EXISTING CONDITIONS, REFER TO PLAT FOR PROPERTY BOUNDARIES.
9. THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE STANDARD SITE WORK SPECIFICATION.
10. PROVIDE SOLID SOD AT ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER
Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

STATE OF TEXAS
NATHAN SIMMONS
99264
LICENSED
PROFESSIONAL ENGINEER
10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

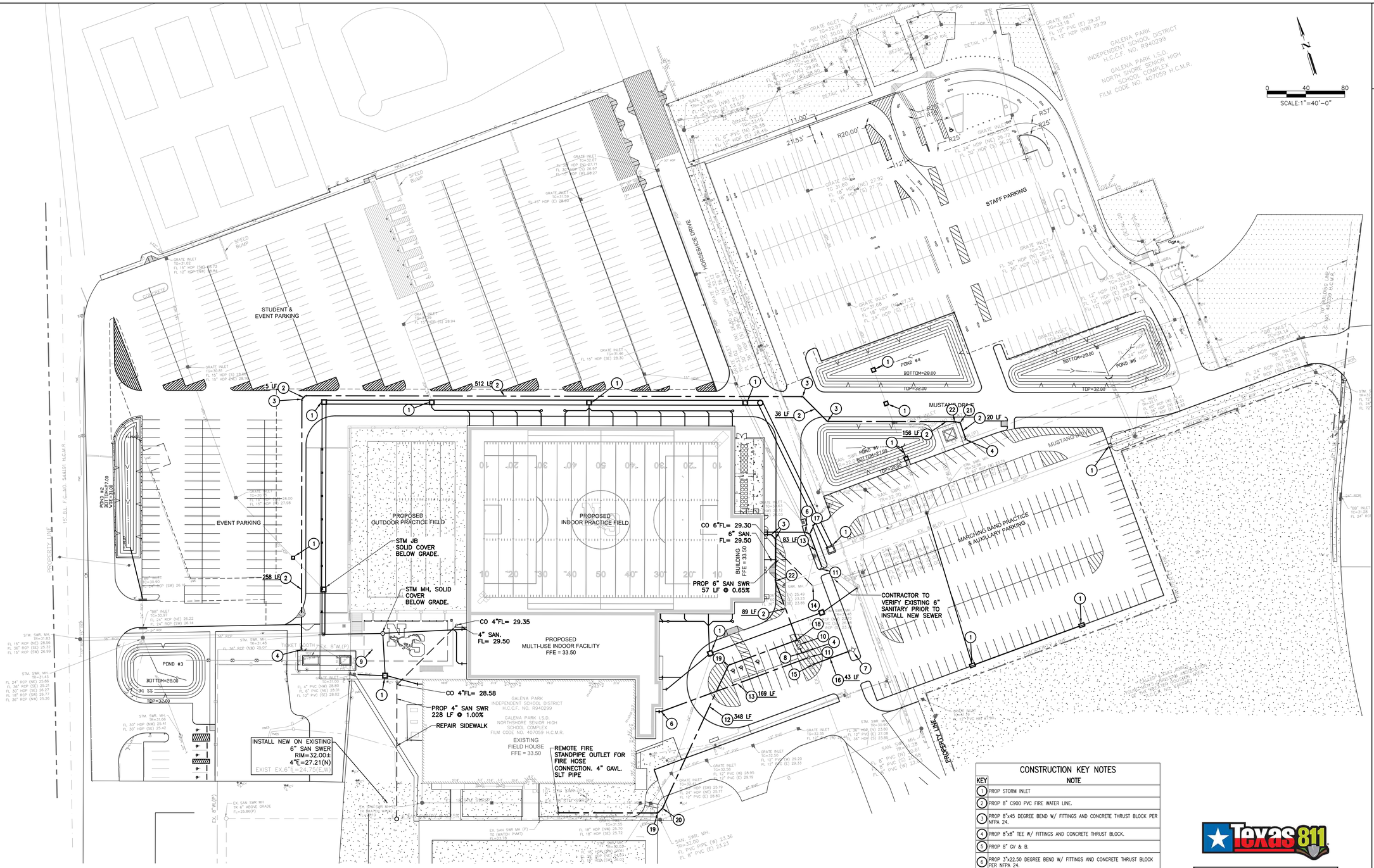
Principal DH
Proj. Eng. SN

PROJECT NO.
25-0056.00

SHEET TITLE
SITE DIMENSION PLAN

SHEET NO.
C5

COPYRIGHT © 2025 VLK ARCHITECTS



0 40 80
SCALE:1"=40'-0"

WATER LINE AND SANITARY SEWER NOTES:

1. CONTRACTOR TO ALLOW A MINIMUM OF 12 INCHES VERTICAL CLEARANCE BETWEEN PROPOSED WATER LINE AND OTHER EXISTING OR PROPOSED UTILITIES. MINIMUM 2 FT CLEAR FROM SANITARY SEWER.
2. ALL WATER LINES TO HAVE A MINIMUM COVER OF 4' BELOW FINISHED GRADE. VARY THE FLOWLINE UNIFORMLY FROM DEPTH AND LOCATION SHOWN TO ACHIEVE COVER.
3. ALL WATER LINE FITTINGS TO BE EITHER: BRONZE, PVC, OR DUCTILE IRON.
4. ALL WATER LINE FITTINGS TO BE INSTALLED WITH ADEQUATE CONCRETE THRUST BLOCKS.
5. ALL WATER LINES TO BE TESTED AS PER THE CITY OF PEARLAND SPECIFICATIONS, DETAILS AND FIRE MARSHALL AS APPLICABLE.
6. ALL WATER LINES TO BE WRAPPED IN A MINIMUM OF 12-INCHES OF CLEAN BANK SAND, OR ONSITE SUITABLE FILL MATERIAL, UNLESS OTHERWISE NOTED. REMAINING BACKFILL TO BE MADE WITH COMPACTED SELECT MATERIAL UNLESS OTHERWISE NOTED.
7. WHENEVER NEW WATER LINES CROSS SANITARY SEWER LINES WITH LESS THAN TWENTY FOUR (24) INCHES OF VERTICAL CLEARANCE, THE SEWER LINE SHALL BE CONSTRUCTED IN A CONTINUOUS CAST IRON CASING FOR A DISTANCE OF NINE (9) FEET EACH SIDE OF THE WATER LINE. MINIMUM VERTICAL CLEARANCE TO BE SIX (6) INCHES WITH THE SEWER LINE LOCATED LOWER THAN THE WATER LINE.
8. ALL SANITARY SEWERS CROSSING WATER LINES WITH A 6 INCHES TO 9 FEET CLEARANCE SHALL HAVE A MINIMUM OF 18' JOINT OF 150 P.S.I. SDR 26 PVC PIPE MEETING ASTM SPECIFICATION D2241 CENTERED ON WATER LINE. WHEN WATER LINE IS BELOW SANITARY SEWER PROVIDE MINIMUM 2 FOOT SEPARATION.
9. REFER TO GENERAL NOTES SHEET C1 FOR WATER AND SANITARY SEWER PIPE MATERIAL AND SPECIFICATIONS REQUIRED BY CITY OF PEARLAND.

UTILITY NOTES:

1. UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ENGINEER OF ANY CONFLICT OR DISCREPANCIES.
2. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES FOR SERVICE ORIGINATION AND CONNECTION.
3. CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ANY EXISTING ITEMS ONSITE.
4. CONTRACTOR SHALL KEEP THE SITE CLEAN OF DEBRIS AND ANY EROSION CONTROL MEASURES ARE ADEQUATELY PLACED.
5. CONTRACTOR TO COORDINATE LOCATIONS OF UNDERGROUND IRRIGATION SLEEVING PRIOR TO PAVING. SEE LANDSCAPE PLANS.
6. CONTRACTOR TO COORDINATE LOCATIONS OF UNDERGROUND CONDUIT FOR SITE LIGHTING PRIOR TO PAVING.
7. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION. COPIES OF OSHA STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 903 SAN JACINTO, RM 319, AUSTIN, TX. 78701. TEL: (512) 916-5783.
8. REFERENCE MEP PLANS FOR UTILITY CONDUIT LOCATIONS.
9. GAS LINE SHALL BE POLYETHYLENE (PE) PIPE ASTM D 2513 SDR 11 WITH FITTINGS POLYETHYLENE ASTM D 2683, SOCKET FUSION TYPE OR ASTM D 3261 BUTT FUSION TYPE WITH DIMENSIONS MATCHING PE PIPE. PE TRANSITION FITTINGS: FACTORY FABRICATED FITTINGS WITH PE PIPE COMPLYING WITH ASTM D 2513, SDR 11; AND STEEL PIPE COMPLYING WITH ASTM A 53/A 53M, BLACK STEEL, SCHEDULE 40, TYPE E OR S, GRADE B. TRANSITION SERVICE RISER: PE TRANSITION FITTING WITH CORROSION PROTECTIVE COATING FOR ABOVE GROUND STEEL PIPE.

CONSTRUCTION KEY NOTES

KEY	NOTE
1	PROP STORM INLET
2	PROP 8" C900 PVC FIRE WATER LINE.
3	PROP 8"x45 DEGREE BEND W/ FITTINGS AND CONCRETE THRUST BLOCK PER NFPA 24.
4	PROP 8"x8" TEE W/ FITTINGS AND CONCRETE THRUST BLOCK.
5	PROP 8" GV & B.
6	PROP 3"x22.50 DEGREE BEND W/ FITTINGS AND CONCRETE THRUST BLOCK PER NFPA 24.
7	PROP FIRE HYDRANT ASSEMBLY INCLUDING, 8"x6" TEE, 6" 90 DEGREE ELBOW 6" G.V. W/ BOX. SEE DETAILS SHEET C14
8	PROP 8"x90 DEGREE BEND W/ FITTINGS AND CONCRETE THRUST BLOCK PER NFPA 24.
9	CUT AND CAP EXISTING 8" WL, MECH. RESTRAIN
10	8" DOUBLE CHECK BACKFLOW PREVENTER IN VAULT, WITH FDC AND PVI
11	PROP 8"x3" T.S&V
12	PROP 4" C900 PVC FIRE WATER LINE FROM FDC TO REMOTE FIRE HOSE CONNECTION.
13	PROP 3" SCH 40 PVC WATER LINE.
14	PROP 6" SAN. DROP CONNECTION TO EXISTING 6" SS. FIELD TO VERIFY LOCATION OF EXISTING 6" SAN. SWR
15	PROP 8"x6" TEE W/ FITTINGS AND CONCRETE THRUST BLOCK.
16	PROP 6" C900 PVC FIRE WATER LINE.
17	PROP 3"x45 DEGREE BEND W/ FITTINGS AND CONCRETE THRUST BLOCK PER NFPA 24.
18	PROP 8"x4" TEE W/ FITTINGS AND CONCRETE THRUST BLOCK.
19	PROP 4"x45 DEGREE BEND W/ FITTINGS AND CONCRETE THRUST BLOCK PER NFPA 24.
20	PROP 4"x22.5 DEGREE BEND W/ FITTINGS AND CONCRETE THRUST BLOCK PER NFPA 24.
21	PROP 8"x60 DEGREE BEND W/ FITTINGS AND CONCRETE THRUST BLOCK PER NFPA 24.
22	PROP 8"x22.5 DEGREE BEND W/ FITTINGS AND CONCRETE THRUST BLOCK PER NFPA 24.

Texas 811

WARNING:

CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITY LINES BY CONTACTING "TEXAS 811" AT 811 OR 713-223-4567 AT LEAST 48 HOURS BEFORE YOU DIG, DRILL OR BLAST.

EXISTING, WATER, SANITARY, GAS, ELECTRICAL, TELECOMMUNICATIONS AND ALL OTHER UTILITY LINES ARE SHOWN PER RECORD DRAWINGS. CONTRACTOR SHALL VERIFY LOCATION AT THE SITE PRIOR TO CONSTRUCTION.

LEGEND:

- PROPOSED STORM SEWER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED GATE VALVE
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY/ STORM CLEAN OUT
- PROPOSED STORM MANHOLE
- PROPOSED STORM INLET
- PROPOSED WATER TAP SLEEVE AND VALVE

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER

Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423



ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

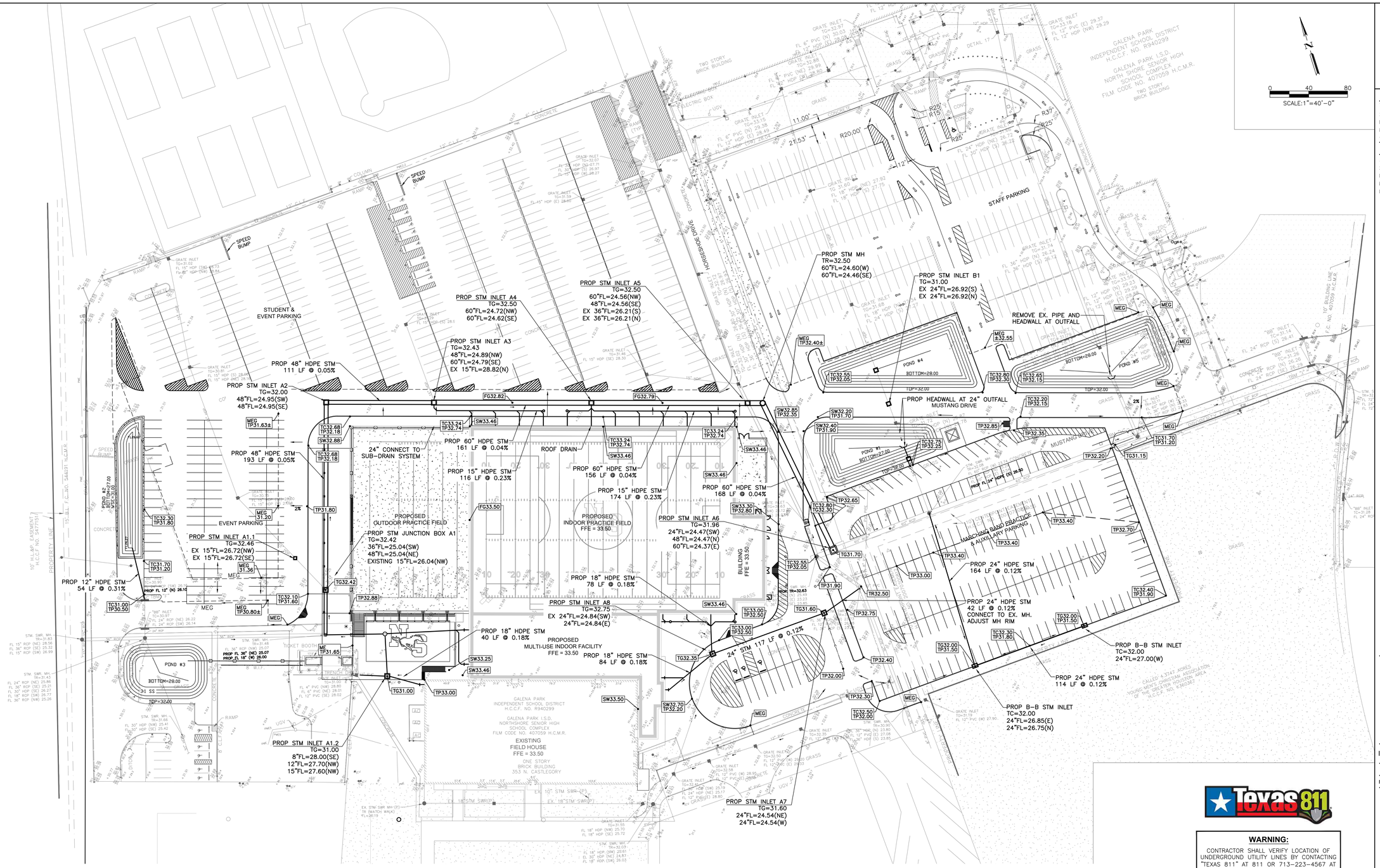
Principal DH
Proj. Eng. SN

PROJECT NO.
25-0056.00

SHEET TITLE
SITE UTILITY PLAN

SHEET NO.
C6

COPYRIGHT © 2025 VLK ARCHITECTS



ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER

Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

WARNING:

CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITY LINES BY CONTACTING "TEXAS 811" AT 811 OR 713-223-4567 AT LEAST 48 HOURS BEFORE YOU DIG, DRILL OR BLAST.

EXISTING, WATER, SANITARY, GAS, ELECTRICAL, TELECOMMUNICATIONS AND ALL OTHER UTILITY LINES ARE SHOWN PER RECORD DRAWINGS. CONTRACTOR SHALL VERIFY LOCATION AT THE SITE PRIOR TO CONSTRUCTION.

LEGEND:

	PROPOSED STORM INLET
	PROPOSED STORM SEWER
	PROPOSED SWALES
53.00	EXISTING CONTOUR
MEG	MATCH EXISTING GRADE
TC14.00	PROPOSED TOP OF CURB ELEVATION
TP14.00	PROPOSED TOP OF PAVEMENT
SW14.00	PROPOSED TOP OF SIDEWALK ELEVATION
FG14.00	PROPOSED FINISH GRADE ELEVATION
FF14.00	PROPOSED FINISHED FLOOR ELEVATION
TG14.00	PROPOSED TOP OF GRATE ELEVATION
TW14.00	PROPOSED TOP OF WALL ELEVATION
FL14.00	PROPOSED FLOW LINE ELEVATION

Principal	DH
Proj. Eng.	SN

PROJECT NO.

25-0056.00

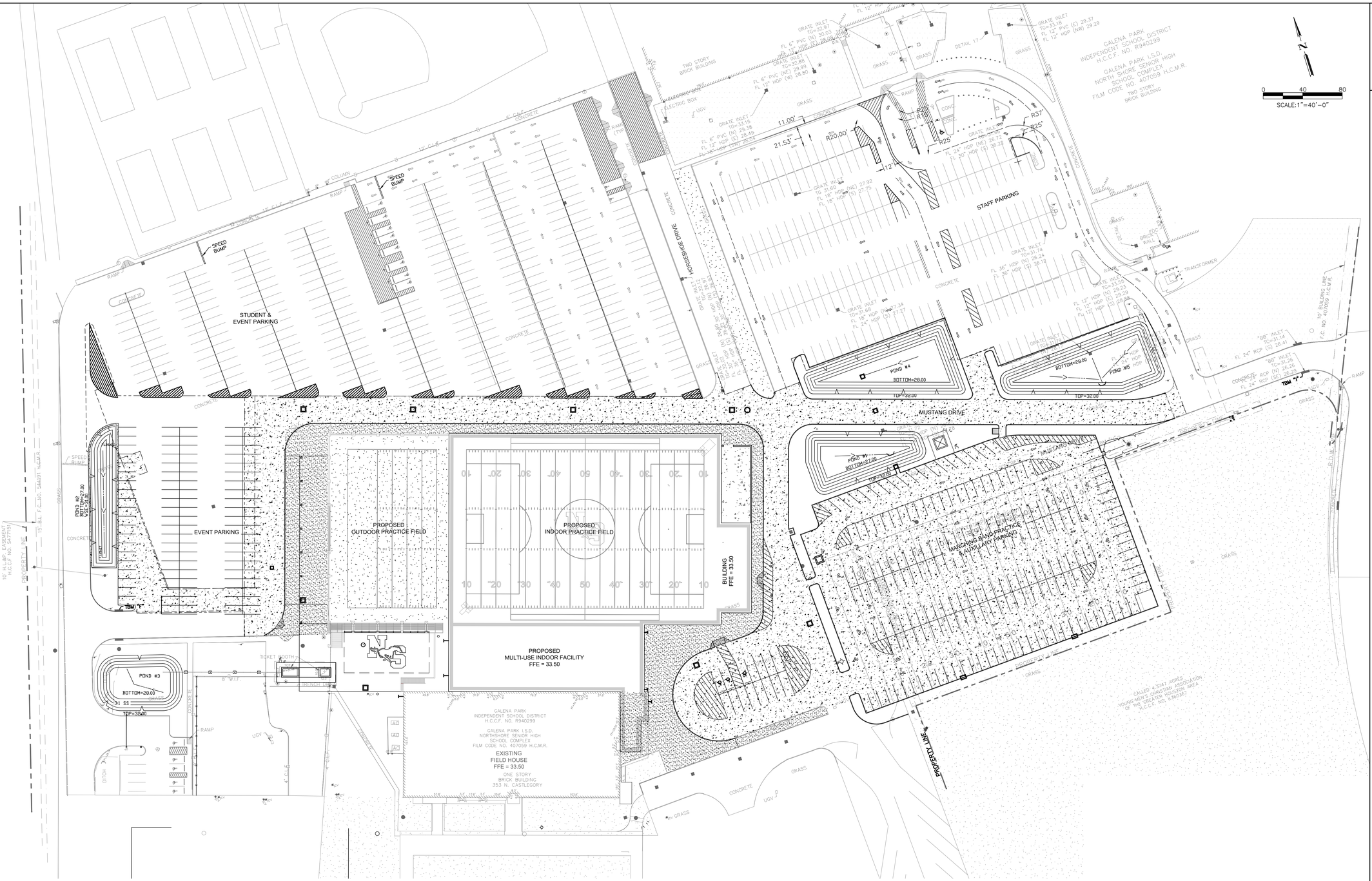
SHEET TITLE

GRADING & DRAINAGE PLAN

SHEET NO.

C7

COPYRIGHT © 2025 VLK ARCHITECTS



LEGEND

- PROPOSED 4.5"-INCH THICK CONCRETE PAVING W/ #3 REBAR @ 18" OC EA WAY
- PROPOSED 5"-INCH THICK CONCRETE PAVING W/ #3 REBAR @ 18" OC EA WAY OR #4 REBAR @ 24" OC EA WAY
- PROPOSED 6"-INCH THICK CONCRETE PAVING W/ #3 REBAR @ 12" OC EA WAY OR #4 REBAR @ 18" OC EA WAY
- PROPOSED 7"-INCH THICK CONCRETE PAVING W/ #4 REBAR @ 18" OC EA WAY
- EJ — EXPANSION JOINT

NOTE:
CONTROL JOINT OR SAW JOINT NOT SHOWN. SEE TYPICAL PAVING DETAIL SHEET CX FOR DETAILS

Texas 811

WARNING:

CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITY LINES BY CONTACTING "TEXAS 811" AT 811 OR 713-223-4567 AT LEAST 48 HOURS BEFORE YOU DIG, DRILL OR BLAST.

EXISTING, WATER, SANITARY, GAS, ELECTRICAL, TELECOMMUNICATIONS AND ALL OTHER UTILITY LINES ARE SHOWN PER RECORD DRAWINGS. CONTRACTOR SHALL VERIFY LOCATION AT THE SITE PRIOR TO CONSTRUCTION.

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER
Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

STATE OF TEXAS — SHANNON NGUYEN — 99254 — LICENSED PROFESSIONAL ENGINEER — 10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

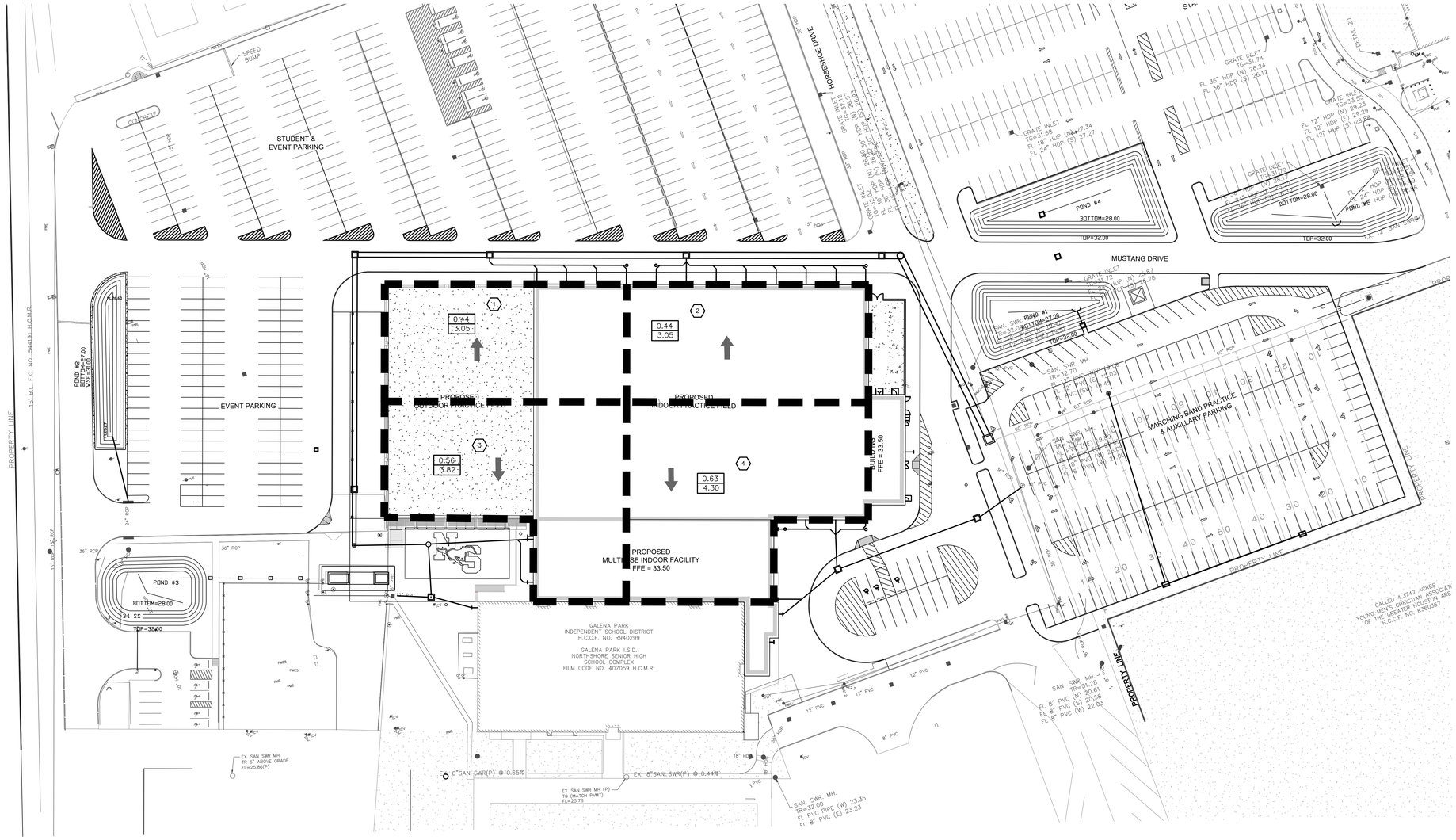
Principal DH
Proj. Eng. SN

PROJECT NO.
25-0056.00

SHEET TITLE
PAVING PLAN

SHEET NO.
C8

COPYRIGHT © 2025 VLK ARCHITECTS



100-YEAR FREQUENCY STORM SEWER CALCULATIONS:

STORM SEWER CALCULATIONS

Project: North Shore High School
Job No.: 207-25-003-01
By: HK
Date: 9/22/2025

Storm Frequency: 100 year
Runoff Coefficient: Business Districts 0.80

b = 86.2332
d = 11.1001
e = 0.6829

Total Drainage Area = 0.44 acres

C:\Users\hkidd\ADICO Dropbox\ADICO\ALLC\00 - CLIENTS\207 - VLK\207-25-003-01 Galena Park ISD - Northshore HS Multi-Use Facility\2 - Eng\[Storm Sewer Calculations Galena Park ISD.xlsx]storm sewer design

M.H. From	M.H. To	Pipe Length (feet)	Pipe Size (inches)	Pipe Material	Pipe Slope %	Area (SF)	Area (acres)	Runoff Coeff. C	Total Area (acres)	Time of Conc. (min.)	Intensity I (in./hr.)	Inlet Flows (cfs)	Sum of Flows (cfs)	Design Flow (cfs)	Design Velocity (fps)
System A															
A4	OF	162.00	18	HDPE	0.18%	27,530.8	0.63	0.90	0.63	24.2	7.56	4.30	4.30	5.27	2.98
A3	OF	35.00	18	HDPE	0.18%	24,382.3	0.56	0.90	0.56	24.0	7.59	3.82	3.82	5.27	2.98
A2	OF	174.00	15	HDPE	0.23%	19,289.0	0.44	0.90	0.44	23.7	7.64	3.05	3.05	3.66	2.98
A1	OF	116.00	15	HDPE	0.23%	19,289.5	0.44	0.90	0.44	23.7	7.64	3.05	3.05	3.66	2.98

DETENTION SUMMARY

Required Detention Volume Per Harris County at 0.75 ac-ft/ ac

Total Required Det. Volume **65,217** CF
1.497 AC-FT

Existing Impervious To Be Removed

Remove Concrete for Landscape Island 783 SF
Existing ImperviousTotal 783 SF
0.02 AC

New Impervious

New Paving and Impeverious Area 77,788 SF
Pond Areas 9,951

New Impervious Total 87,739 SF
2.01 AC

Net Increase of Impervious = 86,956 SF
1.996 AC

	Pond 1 SS=1:1	Pond 2 SS=3:1	Pond 3 SS=3:1	Elevation
A2 (Area of WSE, SF) =	4786	3161	3725	31.00
A1 (Area of Bottom, SF) =	4786	620	1428	23.70
Depth (FT) =	7.30	3.00	4.00	
Volume (CF) =	34,938	5,181	9,946	
(AC-FT)	0.80	0.12	0.23	
	1,294	192	368	

Total Volume in Ponds 50,065 CF
1,149 AC-FT
1,854 CY

Storage in Pipe

Pipe Dia. (Inch.)	Pipe Area (SF)	Length (LF)	Volume (CF)
36	7.07	230	1,625
48	12.56	300	3,768
60	19.63	500	9,813

Total Vol. in Pipe = 15,205

Total Vol. in Pond and Pipes = 65,270 CF
1,498 AC-FT
2,417 CY

Total Provided Volume = **1.498** AC-FT
Net Volume = 0.00 AC-FT

NOTE: ALL PRIVATE DETENTION SHALL BE MAINTAINED BY THE OWNER AND SHALL HAVE NO ADVERSE IMPACTS TO ADJACENT PROPERTIES

DRAINAGE LEGEND

- --------- DRAINAGE AREA BOUNDARY
- --------- SYSTEM BOUNDARY
- 1.21 / 2.10 --------- ACREAGE (AC) / 5-YEAR RUNOFF (CFS)
- --------- CUMULATIVE ACREAGE (AC)
- 3.25 / 12 / 9.25 --------- MANHOLE NUMBER / CUMULATIVE 5-YEAR RUNOFF (CFS)
- SHEET FLOW DIRECTION
- OFFSITE SHEET FLOW DIRECTION

N

0 40 80
SCALE:1"=40'-0"

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER
Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

STATE OF TEXAS — HOWARD NANTHAVANHVANSY — 99284 — LICENSED PROFESSIONAL ENGINEER — 10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

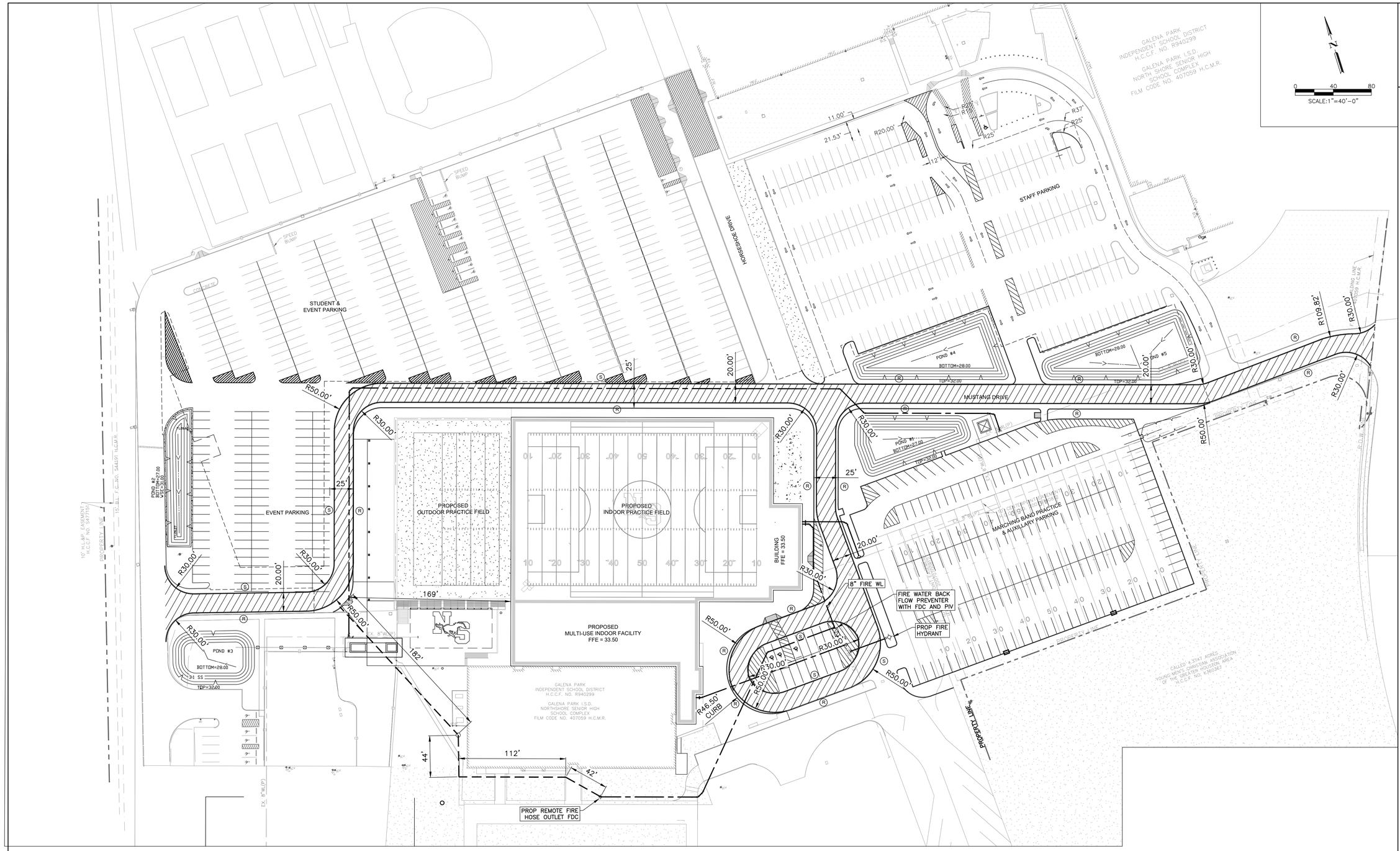
Principal DH
Proj. Eng. SN

PROJECT NO.
25-0056.00

SHEET TITLE
DRAINAGE AREA MAP

SHEET NO.
C9

COPYRIGHT © 2025 VLK ARCHITECTS



FIRE ACCESS ROAD/FIRE LANE NOTES:

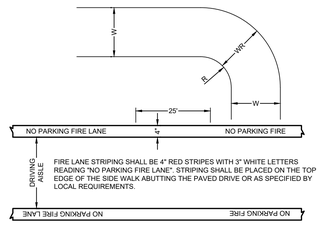
1. ANY COLOR OTHER THAN RED MAY BE USED IN "NO PARKING" AREAS THAT ARE NOT APPROVED FIRE LANES.
2. RED COLORED CURBS, PAVEMENT STRIPING OR WHEEL STOPS SHALL BE USED ONLY TO DESIGNATE APPROVED FIRE LANES.
3. WHERE FIRE LANES ARE CLEARLY DEFINED BY CURB/PAVEMENT STRIPING, FIRE LANE SIGNS ARE NOT REQUIRED.
4. ALL CURBS LOCATED ON EITHER SIDE OF A FIRE LANE SHALL BE PAINTED RED OR A RED STRIPE SHALL BE PLACED ALONE THE PAVEMENT WHERE THERE IS NO CURB. PAINTED CURBS AND FIRE LANE STRIPED SHALL ALSO BE CONSPICUOUSLY AND LEGIBLY MARKER WITH THE WARNING "FIRE LANE–TOW AWAY ZONE" IN WHITE LETTERS AT LEAST THREE (3) INCHES IN HEIGHT, AT INTERVALS NOT EXCEEDING (50) FEET.

FIRE LANE/ACCESS LEGEND:

- DESIGNATED FIRE LANE AREA FOR PERMIT APPROVAL PURPOSES. VERIFY FINAL APPROVED LOCATION WITH ARCHITECTURAL PLANS.
- (R) PAINT CURBS WITH RED PAINT TO SIGNIFY FIRE LANE.
- (S) (S) PAVEMENT SHALL BE PAINTED WITH RED STRIPED TO SIGNIFY FIRE LANE.

W	R	WR
20'	30'	30' MIN.
25'	20'	30' MIN.
30'	10'	30' MIN.

W = WIDTH (FEET) OF FIRE LANE
R = RADIUS NECESSARY TO ACCOMMODATE FIRE VEHICLES
WR = TURNING RADIUS PAVEMENT WIDTH



FIRE LANE STRIPING DETAIL

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER
Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

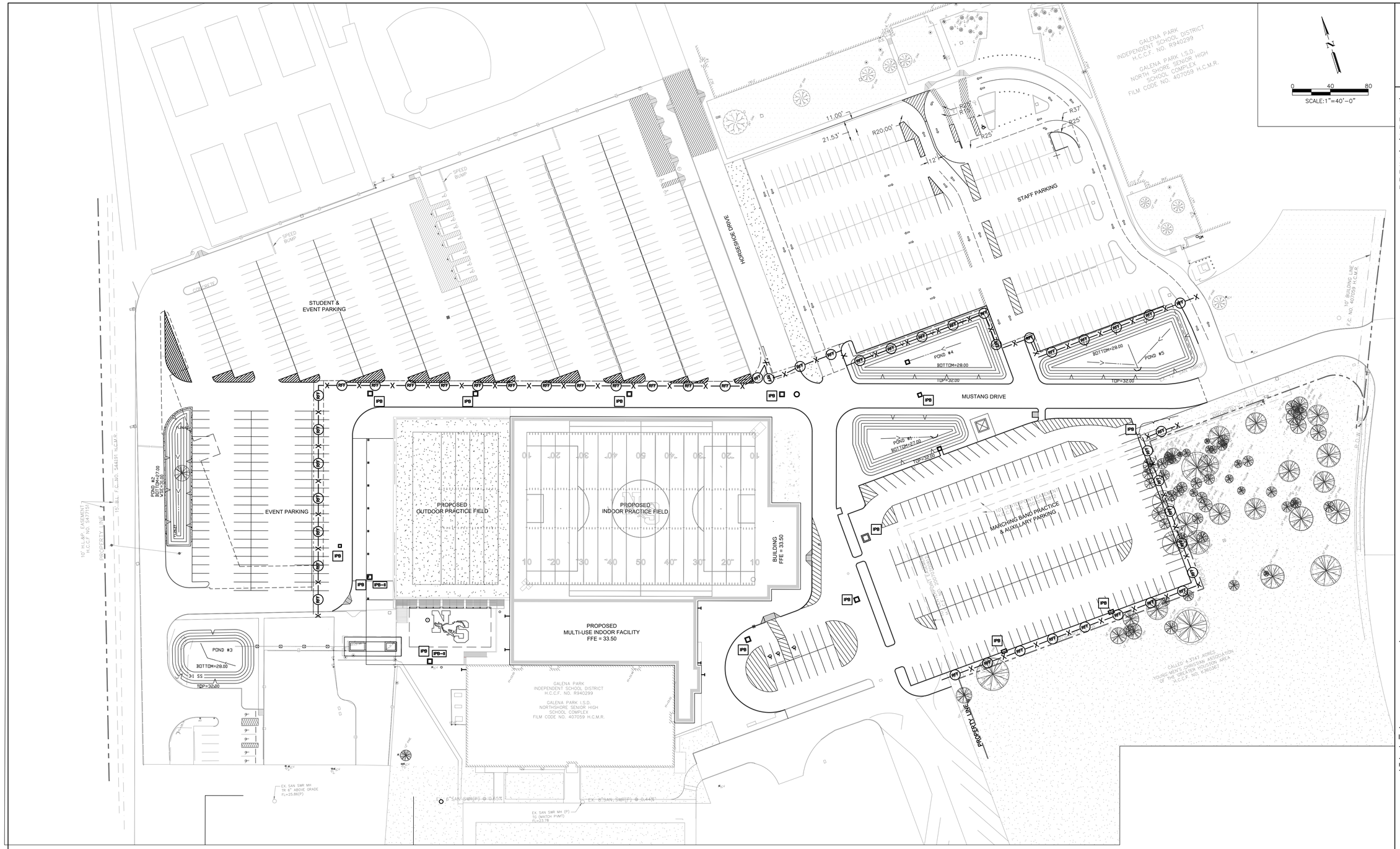
Principal DH
Proj. Eng. SN

PROJECT NO.
25-0056.00

SHEET TITLE
FIRE ACCESS LANE

SHEET NO.
C10

COPYRIGHT © 2025 VLK ARCHITECTS



SWPPP LEGEND:

FF	FILTER FABRIC FENCE
RFF	REINFORCED FILTER FABRIC FENCE
IPB–II	INLET PROTECTION BARRIER (STAGE II INLET)
IPB	INLET PROTECTION BARRIER
SC	STABILIZED CONSTRUCTION ENTRANCE/EXIT
FD–TYPE1	FILTER DAM – TYPE 1
CTW	CONCRETE TRUCK WASHOUT

NOTE: SEE C12 FOR STORM WATER POLLUTION PREVENTION DETAILS

POLLUTION PREVENTION NOTES:

1. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL INSTALL POLLUTION PREVENTION SYSTEMS AT LOCATIONS SHOWN ON PLANS.
2. IF POLLUTION PREVENTION SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER AND/OR OWNER'S REPRESENTATIVE WITH THE CONTRACTOR SHALL EXAMINE THE EXISTING POLLUTION PREVENTION SYSTEMS FOR DAMAGE PRIOR TO CONTRACTOR STARTING CONSTRUCTION OF THE CONTRACT. ANY DAMAGE NOTED AT THIS ITEM SHALL BE REPAIRED AT OWNER'S EXPENSE.
3. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE OWNING AUTHORITY. ALL CONSTRUCTION STORM RUNOFF SHALL COMPLY WITH THE TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES) REQUIREMENTS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ENFORCEMENT OF TPDES REQUIREMENTS PER "GENERAL REQUIREMENTS FOR PERMIT TXR150000".
5. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING GENERAL SOURCE CONTROLS.
6. THE LOCATION OF THE STABILIZED CONSTRUCTION ACCESS IS TO BE DETERMINED BY THE CONTRACTOR.
7. ALL RESERVES AND AREAS BETWEEN BACK-OF-CURB AND RIGHT-OF-WAY SHALL BE HYDRO-MULCHED SEEDED. ALL LOTS AND OTHER AREAS DISTURBED DURING CONSTRUCTION SHALL BE BROADCAST SEEDED.
8. CONTRACTOR SHALL INSPECT ALL POLLUTION PREVENTION SYSTEMS SPECIFIED HEREIN, AS REQUIRED IN THE PERMIT.
9. CONTRACTOR SHALL MAINTAIN, REPAIR AND/OR REPLACE DAMAGED EROSION AND SEDIMENTATION CONTROL SYSTEMS THROUGHOUT THE DURATION OF THE CONTRACT.
10. CONTRACTOR SHALL PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS AND OTHER POTENTIALLY TOXIC MATERIALS.
11. CONTRACTOR SHALL LOCATE FUEL/MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. CONTRACTOR SHALL USE A LINER UNDER ABOVE GROUND STORAGE TANKS. CONTRACTOR SHALL USE FILTER FABRIC FENCING, HAY BALES, OR BERMS AROUND FUEL STORAGE AREAS.
12. CONTRACTOR SHALL ADVISE OWNER IMMEDIATELY, VERBALLY, AND IN WRITING OF ANY FUEL OR TOXIC MATERIAL SPILLS ONTO THE PROJECT/CONSTRUCTION AREA AND THE ACTIONS TAKEN TO REMEDY THE PROBLEM.
13. CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF HIS FUELS, MATERIALS, AND CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
14. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATELY MAINTAINED SANITARY FACILITIES.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR STREET CLEANING, ON A DAILY BASIS, ALL MUD AND DIRT DEPOSITED ON THE EXISTING PAVEMENT DUE TO HIS CONSTRUCTION ACTIVITY.
16. CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION ENTRANCE/EXIT.
17. SEDIMENT WILL BE REMOVED FROM BEHIND THE FILTER FABRIC FENCE WHEN IT BECOMES ABOUT ONE-THIRD OF THE HEIGHT OF THE FENCE.
18. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE HAS BEEN ESTABLISHED, STRUCTURAL CONTROLS WILL BE REMOVED AND ALL DISTURBED AREAS WILL BE RESTABILIZED.
19. AT THE COMPLETION OF THE PROJECT/CONTRACT, THE OWNER AND/OR OWNER'S REPRESENTATIVE AND THE CONTRACTOR SHALL EXAMINE THE POLLUTION PREVENTION SYSTEM BEFORE RELIEVING CONTRACTOR OF HIS MAINTENANCE RESPONSIBILITIES.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER

Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423



ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

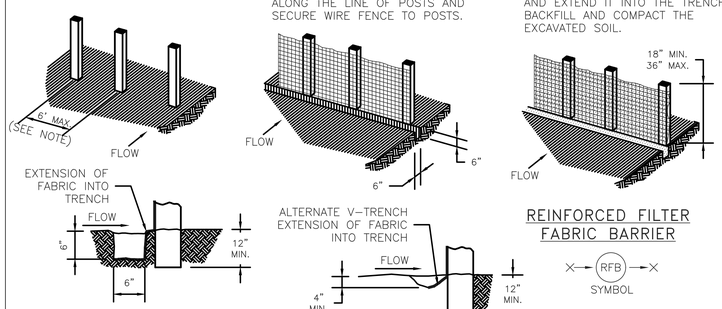
Principal	DH
Proj. Eng.	SN

PROJECT NO.
25-0056.00

SHEET TITLE
STORM WATER POLLUTION PREVENTION PLAN

SHEET NO.
C11

COPYRIGHT © 2025 VLK ARCHITECTS

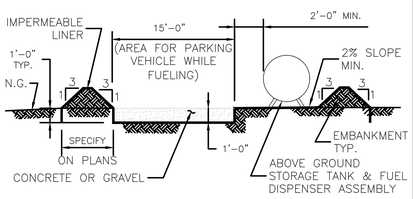


REINFORCED FILTER FABRIC BARRIER

RFB — SYMBOL

GENERAL NOTES:

1. SECURELY FASTEN MESH FENCING TO POSTS WITH STAPLES OR TIE WIRES.
2. SECURELY FASTEN FILTER FABRIC TO MESH FENCING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT A POST, FOLD TOGETHER, AND ATTACH TO A POST.
4. REMOVE SEDIMENT DEPOSITS WHEN SILT REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE IN DEPTH.

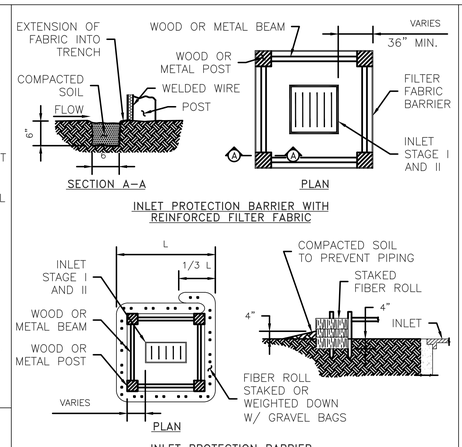


ABOVE GROUND TEMP. VEHICLE & EQUIPMENT FUELING AREA WITH TANK

TFA — SYMBOL

GENERAL NOTES:

1. THE SIZE OF TANK FOUNDATION AREA DEPENDS ON THE SIZE OF ABOVE GROUND STORAGE TANK AND DISPENSER ASSEMBLY.
2. PROVIDE A MINIMUM SLOPE OF 2 % TOWARD THE SUMP PIT.
3. INSTALL IMPERMEABLE LINER AS PER MANUFACTURER'S RECOMMENDATIONS.



INLET PROTECTION BARRIER WITH REINFORCED FILTER FABRIC

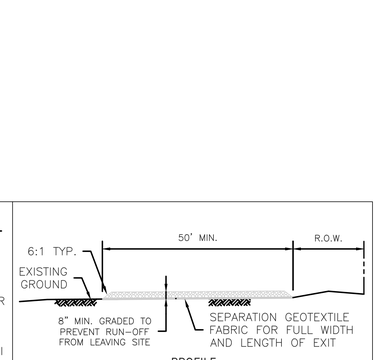
INLET PROTECTION BARRIER WITH FILTER ROLLS

GENERAL NOTES:

1. FIBER ROLLS WILL BE UTILIZED ONLY WHEN SITE CONDITIONS DO NOT PERMIT THE USE OF FILTER FABRIC BARRIER, AND AS APPROVED BY THE ENGINEER.

INLET PROTECTION BARRIERS FOR STAGE I INLETS

IPB — SYMBOL

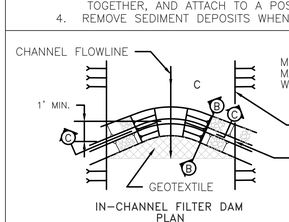


STABILIZED CONSTRUCTION ACCESS

SC-1 — SYMBOL

GENERAL NOTES:

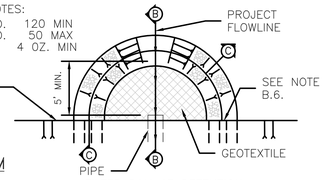
1. MINIMUM LENGTH IS AS SHOWN ON CONSTRUCTION DRAWINGS OR 50 FEET, WHICHEVER IS MORE.
2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.
3. UNLESS SHOWN ON THE CONSTRUCTION DRAWINGS, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT.
4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDEN OR LENGTHEN STABILIZED AREA TO ACCOMMODATE A TRUCK WASHING AREA. PROVIDE OUTLET SEDIMENT TRAP FOR THE TRUCK WASHING AREA.
5. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL COARSE AGGREGATE TO MAINTAIN THE REQUIRED DEPTH OR WHEN SURFACE BECOMES PACKED WITH MUD.
6. PERIODICALLY TURN AGGREGATE TO EXPOSE A CLEAN DRIVING SURFACE.
7. MINIMUM 14' WIDTH FOR ONE WAY TRAFFIC AND 20' WIDTH FOR TWO WAY TRAFFIC.



IN-CHANNEL FILTER DAM PLAN

GEOTEXTILE NOTES:

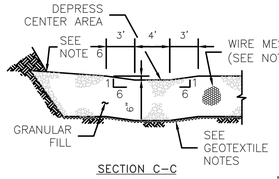
MIN. AOS	SIEVE NO.	120 MIN
MAX. AOS	SIEVE NO.	50 MAX
WEIGHT	OZ/SY	4 OZ. MIN



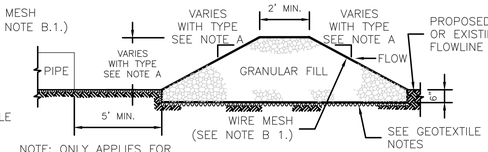
FILTER DAM AT DETENTION BASIN OUTFALL PIPE PLAN

FILTER DAM

RFD-TYPE — SYMBOL



SECTION C-C



NOTE: ONLY APPLIES FOR DETENTION BASIN OUTFALL PIPE PROTECTION.

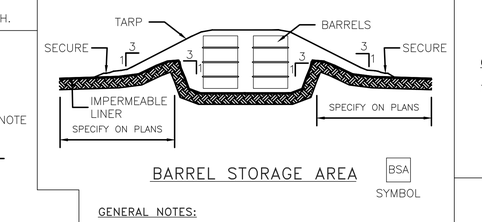
SECTION B-B

A. TYPES OF FILTER DAMS

1. TYPE 1 (NON-REINFORCED)
   a. HEIGHT - 18-24 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH - 2 FEET (MINIMUM)
   c. SLOPES - 2:1 (MAXIMUM).
2. TYPE 2 (REINFORCED).
   a. HEIGHT - 18-36 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH - 2 FEET (MINIMUM).
   c. SLOPES - 2:1 (MAXIMUM).
3. TYPE 3 (REINFORCED)
   a. HEIGHT - 36-48 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH - 2 FEET (MINIMUM).
   c. SLOPES - 3:1 (MAXIMUM).
4. TYPE 4 (GABION)
   a. HEIGHT - 30 INCHES (MINIMUM). MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH - 2 FEET (MINIMUM).
5. TYPE 5. AS SHOWN ON THE PLANS.

B. CONSTRUCT FILTER DAMS ACCORDING TO THE FOLLOWING CRITERIA UNLESS SHOWN OTHERWISE ON THE PLANS.

1. TYPE 2 AND 3 FILTER DAMS: SECURE WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1 INCH DIAMETER HEXAGONAL OPENINGS.
2. PLACE GRANULAR FILL ON THE WIRE MESH TO HEIGHT AND SLOPES SHOWN ON PLANS OR AS SPECIFIED BY THE ENGINEER.
   a. 3-5 INCHES FOR ROCK FILTER DAM TYPES 1, 2 AND 4.
   b. 4-8 INCHES FOR ROCK FILTER DAM TYPE REFER TO GRANULAR FILL IN SPECIFICATION SECTION No. 02378 RIPRAP AND GRANULAR FILL.
3. FOLD WIRE MESH AT UPSTREAM SIDE OVER GRANULAR FILL AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS.
4. IN STREAMS: SECURE OR STAKE MESH TO STREAM BED PRIOR TO AGGREGATE PLACEMENT.
5. SEE HCFCD SPECIFICATION SECTION NO. 02364-FILTER DAMS.
6. EMBED ONE FOOT MINIMUM INTO SLOPE AND RAISE ONE FOOT HIGHER THAN CENTER OF DEPRESSED AREA AT SLOPE.

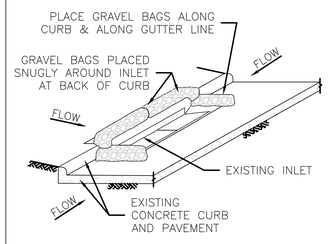


BARREL STORAGE AREA

BSA — SYMBOL

GENERAL NOTES:

1. ALTERNATIVELY, STORE BARRELS IN AN ENCLOSED BUILDING OR SHED.
2. INSTALL IMPERMEABLE LINER AS PER MANUFACTURER'S RECOMMENDATIONS. 60 mil MINIMUM.
3. CONSTRUCT BERMED AREA WITH VOLUME GREATER THAN OR EQUAL TO 110% VOLUME OF BARRELS.

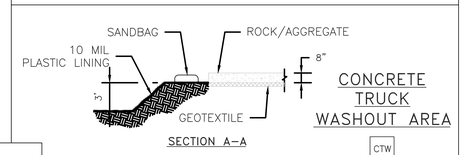


INLET PROTECTION BARRIERS FOR STAGE II INLETS

IPB-II — SYMBOL

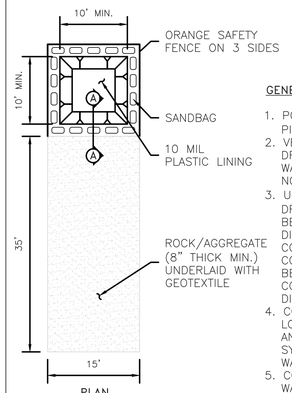
GENERAL NOTES:

1. REMOVE SEDIMENT DEPOSIT WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE BARRIER.
2. GRAVEL BAGS SHALL NOT BLOCK THROAT OF INLET UNLESS DIRECTED BY ENGINEER.



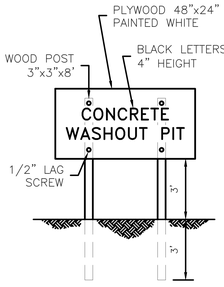
CONCRETE TRUCK WASHOUT AREA

CTW — SYMBOL



GENERAL NOTES:

1. POST A SIGN READING "CONCRETE WASHOUT PIT" NEXT TO THE PIT.
2. VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASHOUT THEIR TRUCKS IN THE PIT AND NOWHERE ELSE.
3. UPON THE CONCRETE SETTING UP (CURING, DRYING OUT), THE CONCRETE WASTE SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR. AFTER REMOVAL OF THE CONCRETE WASTE, THE WASHOUT PIT SHALL BE FILLED WITH CLEAN FILL MATERIAL AND COMPACTED TO IN-SITU CONDITIONS, OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.
4. CONCRETE WASHOUT PITS SHALL NOT BE LOCATED DIRECTLY ADJACENT TO, NOR AT ANY TIME DRAIN INTO THE STORM SEWER SYSTEM OR ANY OTHER SWALE, DITCH, OR WATERWAY.
5. CONSTRUCT ENTRY ROAD AND BOTTOM OF WASHOUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCKS EQUIPMENT.



SIGN DETAIL (OR EQUIVALENT)

NO.	REVISIONS	DATE	NAME
1			
2			
3			
4			
5			

HARRIS COUNTY ENGINEERING DEPARTMENT

CONSULTANT LOGO/INFORMATION

PROJECT TITLE:

DRAWN BY: JDZ		HCED STANDARD
CK'D BY: NR	SHEET DESCRIPTION: STORM WATER POLLUTION	29
SCALE: NONE	PREVENTION PLAN DETAILS	SHEET NO: /
DATE:	APPROVED BY:	

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER
Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

North Shore Multi-use Indoor Facility

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

STATE OF TEXAS — NATHAN ROBERT — 99284 — LICENSED PROFESSIONAL ENGINEER — 10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

Principal DH
Proj. Eng. SN

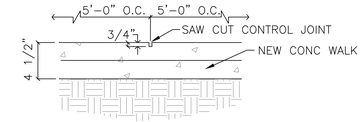
PROJECT NO.
25-0056.00

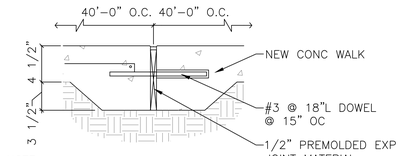
SHEET TITLE
STORM WATER POLLUTION PREVENTION DETAILS

SHEET NO.
C12

COPYRIGHT © 2025 VLK ARCHITECTS

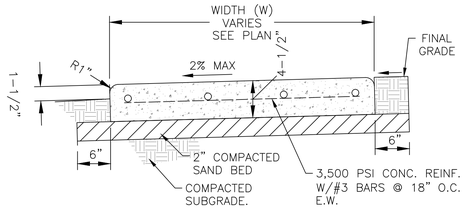
c:\users\hkidd\adico dropbox\adico\adico 00 - clients\207 - vlk\207-25-003-01 galena park isd - north shore hs multi-use facility\6 - drawings\c12 swpp details.dwg





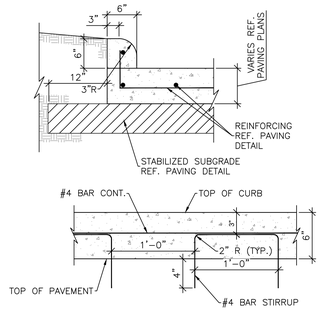
NOTE:
ALIGN WALK EXP JOINTS
WITH PAVING EXP JOINTS

SIDEWALK CONTROL & EXPANSION JOINT



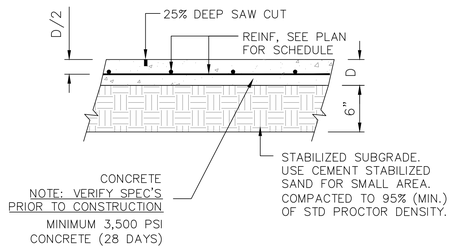
PROVIDE A SAWED JOINT SPACED EQUAL TO WIDTH (W)
AND EXPANSION JOINTS TO BE PLACED @ 4 X WIDTH

1 CONCRETE SIDEWALK DETAIL NTS

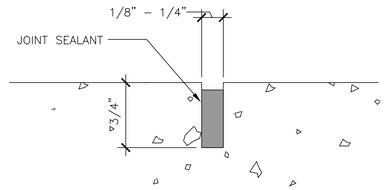


NOTES:
1. FOR NEW PAVEMENT STIRRUPS SHALL BE SET IN FRESH CONCRETE AND SECURED.
2. FOR NEW CURB ON EXISTING PAVEMENT STIRRUPS SHALL BE DRILLED AND EPOXIED INTO THE EXISTING PAVEMENT.
3. MIN COVER ON ALL REINFORCING STEEL SHALL BE 2".
4. PLACE ¾" INCH PREFORMED EXPANSION JOINTS THROUGH CURB AND GUTTERS AT LOCATIONS OF EXPANSION JOINTS IN PAVEMENT, AT END OF RADIUS RETURNS AT STREET INTERSECTIONS AND DRIVEWAYS, AND AT CURB INLETS. MAXIMUM SPACING SHALL BE 60' CENTERS.
5. PLACE ¾" TOOLED JOINTS THROUGH CURB AND GUTTERS AT LOCATIONS OF SAWED JOINTS IN PAVEMENT.

2 CONCRETE CURB NTS

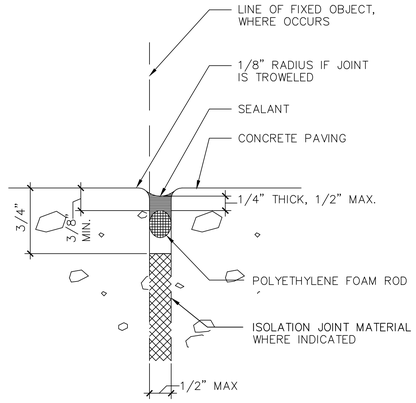


3 CONCRETE PAVEMENT NTS

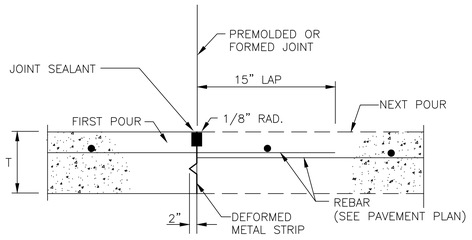


NOTE: JOINT IS TO BE SAWCUT WITHIN
2 HRS. OF CONCRETE POUR.

4 TYPICAL PAVEMENT CONTROL JOINT (SAWCUT) NTS

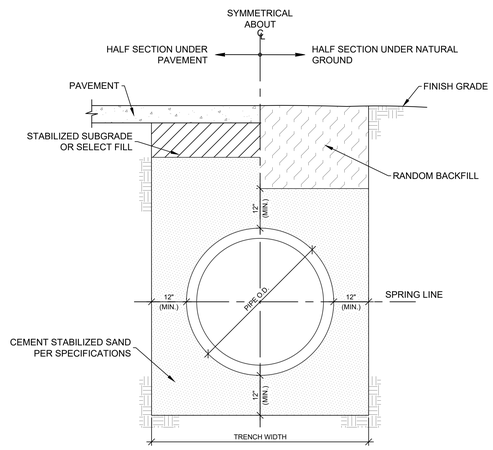


5 ISOLATION JOINT NTS



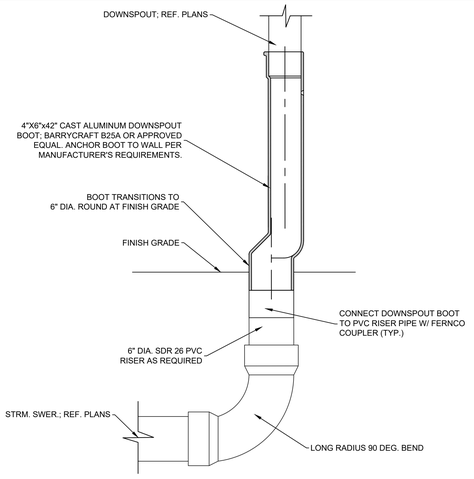
NOTE: CONSTRUCTION JOINT TO BE
USED WHEN POURING OPERATION IS
DELAYED (NOT TO REPLACE
EXPANSION JOINT)

6 CONSTRUCTION JOINT NTS

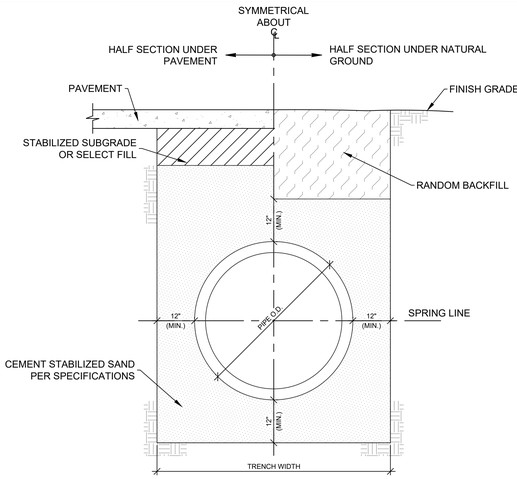


NOTES:
1. THIS DETAIL MAY BE USED ONLY FOR DRY STABLE TRENCH CONDITIONS. WHERE WET SAND CONDITIONS ARE ENCOUNTERED SEWERS SHALL BE BACKFILLED PER THE REQUIREMENTS OF THE WET CONDITION BEDDING AND BACKFILLING DETAIL.
2. ALL BACKFILL SHALL SHALL BE PLACED IN 8-INCH THICK LOOSE LIFTS AND COMPACTED TO AN IN-PLACE DENSITY EQUAL TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN +/-2% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698.
3. FOR R.C.P. STORM SEWERS MIN. TRENCH WIDTH SHALL BE PIPE O.D. PLUS 24-INCHES FOR PIPES WITH A NOMINAL SIZE OF 30-INCHES OR LESS AND O.D. PLUS 36-INCHES FOR PIPES WITH A NOMINAL SIZE GREATER THAN 30-INCHES.
4. FOR H.D.P.E. STORM SEWERS MIN. TRENCH WIDTH SHALL BE PIPE O.D. PLUS 24-INCHES FOR PIPES WITH A NOMINAL SIZE OF 24-INCHES OR LESS AND O.D. PLUS 36-INCHES FOR PIPES WITH A NOMINAL SIZE GREATER THAN 24-INCHES.

10 STORM SEWER BEDDING AND BACKFILL NTS

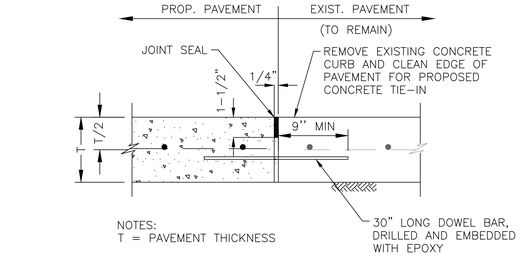


9 DOWNSPOUT CONNECTION NTS



NOTES:
1. THIS DETAIL MAY BE USED ONLY FOR DRY STABLE TRENCH CONDITIONS. WHERE WET SAND CONDITIONS ARE ENCOUNTERED SEWERS SHALL BE BACKFILLED PER THE REQUIREMENTS OF THE WET CONDITION BEDDING AND BACKFILLING DETAIL.
2. ALL BACKFILL SHALL SHALL BE PLACED IN 8-INCH THICK LOOSE LIFTS AND COMPACTED TO AN IN-PLACE DENSITY EQUAL TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN +/-2% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698.
3. MIN. TRENCH WIDTH SHALL BE PIPE O.D. PLUS 24-INCHES FOR PIPES WITH A NOMINAL SIZE OF 30-INCHES OR LESS AND O.D. PLUS 36-INCHES FOR PIPES WITH A NOMINAL SIZE GREATER THAN 30-INCHES.

12 SANITARY SEWER BEDDING & BACKFILL NTS

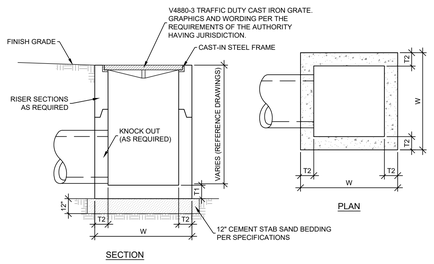


NOTES:
T = PAVEMENT THICKNESS

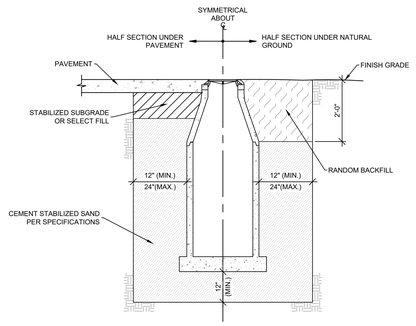
7 PROPOSED CONCRETE TO EXISTING CONCRETE TIE IN NTS

KNOCK OUT	W	GRATE SIZE	T1	T2
10"	15"	12"X12"X1"	3"	2 1/2"
12"	20"	14"X14"X1 1/2"	4"	3"
15"	24"	18"X18"X1 1/2"	4"	4"
17"	26"	20"X20"X1 1/2"	4"	4"
22"	32"	24"X24"X2"	5"	5"
24"	37"	27"X27"X2"	6"	6"
30"	42"	32"X32"X2"	6"	6"
32"	48"	38"X38"X2"	6"	6"
48"	60"	38"X38"X2"	6"	6"
60"	72"	38"X38"X2"	6"	6"
72"	84"	38"X38"X2"	6"	6"
84"	96"	38"X38"X2"	6"	6"

NOTES:
1. PRECAST CONCRETE MANHOLES SHALL BE MADE OF CLASS II CONCRETE WITH A DESIGN STRENGTH OF 4,500 PSI AT 28 DAYS AND RATED FOR H-20 LOADING.
2. STRUCTURAL REINFORCEMENT SHALL BE GRADE 60 CONFORMING TO ASTM A-615.
3. DEPTH OF INLET SHALL DETERMINE THE NUMBER OF RISER SECTIONS AND ADJUSTMENT RINGS REQUIRED. BRICKS SHALL NOT BE USED.
4. GROUT INSIDE AND OUTSIDE OF EXTENSION RING(S) AND ALL PIPES.
5. ALL PIPES SHALL BE CUT FLUSH WITH THE INLET.



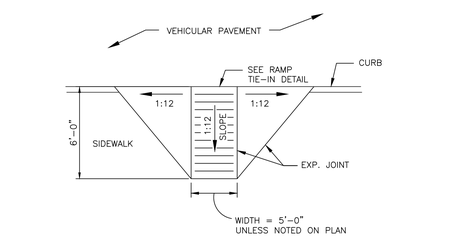
GRATE INLET (ALL NON-PAVED AREAS) N.T.S.



NOTES:
1. THIS DETAIL MAY BE USED ONLY FOR BEDDING AND BACKFILLING OF MANHOLES, INLETS AND OTHER STRUCTURES IN DRY STABLE TRENCH CONDITIONS. WHERE WET SAND CONDITIONS ARE ENCOUNTERED STRUCTURES SHALL BE BACKFILLED PER THE REQUIREMENTS OF THE WET CONDITION BEDDING AND BACKFILLING DETAIL.
2. ALL BACKFILL SHALL SHALL BE PLACED IN 8-INCH THICK LOOSE LIFTS AND COMPACTED TO AN IN-PLACE DENSITY EQUAL TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN +/-2% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698.

STORM STRUCTURE BEDDING & BACKFILL N.T.S.

8 PRECAST CONCRETE CATCH BASIN/JUNCTION BOX AND BACKFILL NTS



THE FINISHED SURFACE OF A WHEEL CHAIR RAMP IS TO BE GROOVED LATERALLY WITH 1/4" WIDE BY 1/4" DEEP GROOVES, SPACED 2-1/4" C-C, & ROUGHENED NO LESS THAN A BROOM FINISH TO PREVENT SLIPPING, & TO DIFFERENTIATE TEXTURE FROM THAT OF A STANDARD SIDEWALK.

11 ADA WHEELCHAIR RAMP NTS

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER
Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

STATE OF TEXAS
TIMOTHY
NANTHAVONGXAY
99284
LICENSED
PROFESSIONAL ENGINEER
10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

Principal DH
Proj. Eng. SN

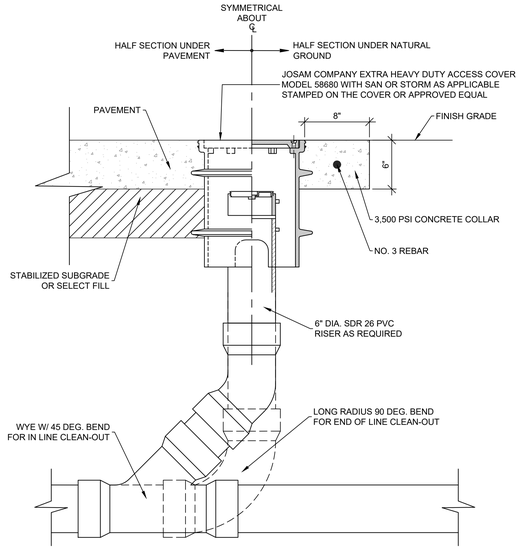
PROJECT NO.
25-0056.00

SHEET TITLE
UTILITY, STORM AND PAVING DETAILS

SHEET NO.
C13

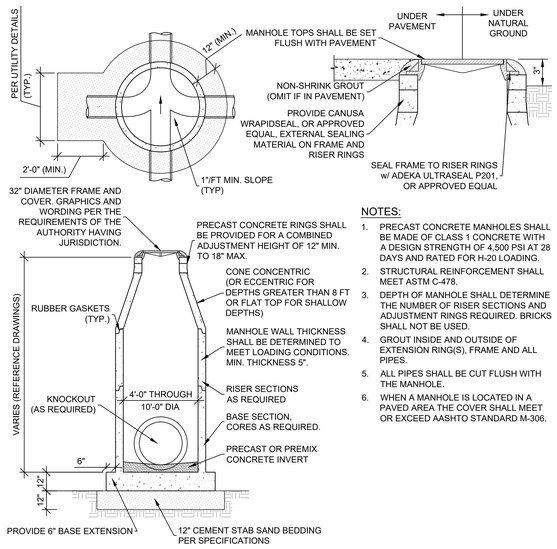
North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS



STORM SEWER CLEAN OUT

N.T.S.

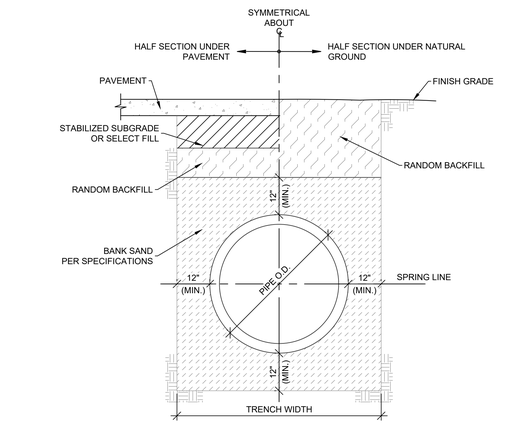


NOTES:

1. PRECAST CONCRETE MANHOLES SHALL BE MADE OF CLASS 1 CONCRETE WITH A DESIGN STRENGTH OF 4,500 PSI AT 28 DAYS AND RATED FOR H-20 LOADING.
2. STRUCTURAL REINFORCEMENT SHALL MEET ASTM C-478.
3. DEPTH OF MANHOLE SHALL DETERMINE THE NUMBER OF RISER SECTIONS AND ADJUSTMENT RINGS REQUIRED. BRICKS SHALL NOT BE USED.
4. GROUT INSIDE AND OUTSIDE OF EXTENSION RING(S), FRAME AND ALL PIPES.
5. ALL PIPES SHALL BE CUT FLUSH WITH THE MANHOLE.
6. WHEN A MANHOLE IS LOCATED IN A PAVED AREA THE COVER SHALL MEET OR EXCEED AASHTO STANDARD M-306.

TYPE "C" STORM SEWER MANHOLE

N.T.S.

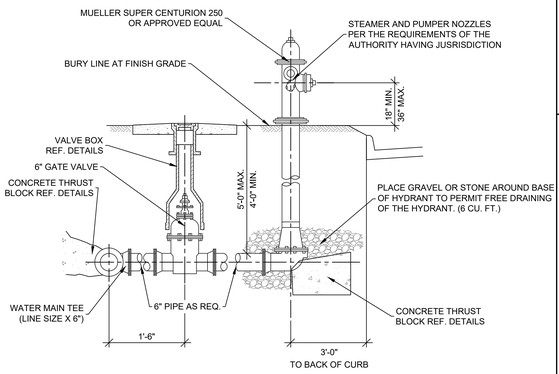


NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR DRY STABLE TRENCH CONDITIONS. WHERE WET SAND CONDITIONS ARE ENCOUNTERED SEWERS SHALL BE BACKFILLED PER THE REQUIREMENTS OF THE WET CONDITION BEDDING AND BACKFILLING DETAIL.
2. ALL BACKFILL SHALL SHALL BE PLACED IN 8-INCH THICK LOOSE LIFTS AND COMPACTED TO AN IN-PLACE DENSITY EQUAL TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN +/-2% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698.
3. MIN. TRENCH WIDTH SHALL BE PIPE O.D. PLUS 24-INCHES FOR PIPES WITH A NOMINAL SIZE OF 30-INCHES OR LESS AND O.D. PLUS 36-INCHES FOR PIPES WITH A NOMINAL SIZE GREATER THAN 30-INCHES.

WATER LINE BEDDING & BACKFILL

N.T.S.

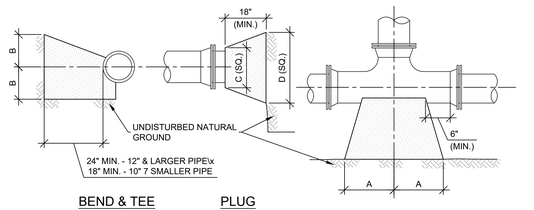


NOTES:

1. 5/8" ALL-THREAD IS TO BE USED TO TIE VALVE TO TEE AND VALVE TO HYDRANT.
2. PROVIDE MECHANICAL RESTRAINED JOINTS (EBBA IRON, SERIES 2000PV, OR APPROVED EQUAL).
3. PAINT ALL FIRE HYDRANTS PER THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

FIRE HYDRANT

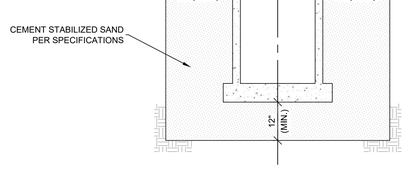
N.T.S.



90° BEND		45° BEND		22½° BEND		TEES		PLUGS	
A	B	A	B	A	B	A	B	C	D
12"	7"	6"	7"	6"	6"	7"	8"	8"	14"
14"	8"	7"	9"	6"	6"	8"	11"	8"	18"
16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
38"	27"	21"	27"	12"	24"	24"	30"	20"	54"

NOTES:

1. THRUST BLOCKS AT TRENCH FACE MUST HAVE A MINIMUM BEARING SURFACE OF 1.0 SF AND THE LEAST DIMENSION SHALL BE NO SMALLER THAN 1.5 TIMES PIPE DIAMETER, BUT NOT LESS THAN 1.0 FT.
2. THRUST BLOCKS SHALL BE PACKED AT ALL FITTINGS.
3. ALL FITTINGS SHALL BE M.J. RESTRAINED JOINT (EBAA IRON, SERIES 2000PV, OR APPROVED EQUAL).

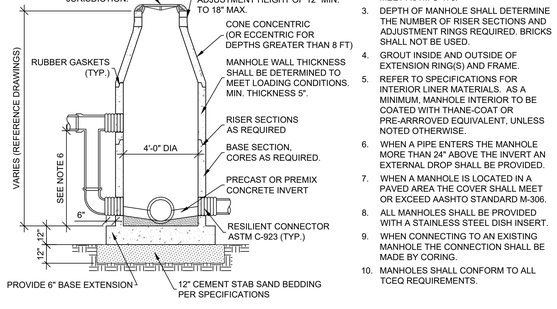


NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR BEDDING AND BACKFILLING OF MANHOLES, CLEAN-OUTS AND OTHER STRUCTURES IN DRY STABLE TRENCH CONDITIONS. WHERE WET SAND CONDITIONS ARE ENCOUNTERED STRUCTURES SHALL BE BACKFILLED PER THE REQUIREMENTS OF THE WET CONDITION BEDDING AND BACKFILLING DETAIL.
2. ALL BACKFILL SHALL SHALL BE PLACED IN 8-INCH THICK LOOSE LIFTS AND COMPACTED TO AN IN-PLACE DENSITY EQUAL TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN +/-2% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698.

SANITARY STRUCTURE BEDDING & BACKFILL

N.T.S.

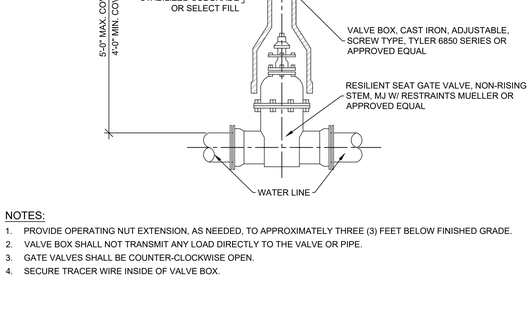


NOTES:

1. PRECAST CONCRETE MANHOLES SHALL BE MADE OF CLASS 1 CONCRETE WITH A DESIGN STRENGTH OF 4,500 PSI AT 28 DAYS AND RATED FOR H-20 LOADING.
2. STRUCTURAL REINFORCEMENT SHALL MEET ASTM C-478.
3. DEPTH OF MANHOLE SHALL DETERMINE THE NUMBER OF RISER SECTIONS AND ADJUSTMENT RINGS REQUIRED. BRICKS SHALL NOT BE USED.
4. GROUT INSIDE AND OUTSIDE OF EXTENSION RING(S) AND FRAME.
5. REFER TO SPECIFICATIONS FOR INTERIOR LINER MATERIALS. AS A MINIMUM, MANHOLE INTERIOR TO BE COATED WITH THANE-COAT OR PRE-ARRROVED EQUIVALENT, UNLESS NOTED OTHERWISE.
6. WHEN A PIPE ENTERS THE MANHOLE MORE THAN 24" ABOVE THE INVERT AN EXTERNAL DROP SHALL BE PROVIDED.
7. WHEN A MANHOLE IS LOCATED IN A PAVED AREA THE COVER SHALL MEET OR EXCEED AASHTO STANDARD M-306.
8. ALL MANHOLES SHALL BE PROVIDED WITH A STAINLESS STEEL DISH INSERT.
9. WHEN CONNECTING TO AN EXISTING MANHOLE THE CONNECTION SHALL BE MADE BY CORING.
10. MANHOLES SHALL CONFORM TO ALL TCEQ REQUIREMENTS.

SANITARY SEWER MANHOLE

N.T.S.



NOTES:

1. PROVIDE OPERATING NUT EXTENSION, AS NEEDED, TO APPROXIMATELY THREE (3) FEET BELOW FINISHED GRADE.
2. VALVE BOX SHALL NOT TRANSMIT ANY LOAD DIRECTLY TO THE VALVE OR PIPE.
3. GATE VALVES SHALL BE COUNTER-CLOCKWISE OPEN.
4. SECURE TRACER WIRE INSIDE OF VALVE BOX.

GATE VALVE

N.T.S.

MODEL	SIZE	L1	W1	H1	WEIGHT LBS
DDBPPF-04	4"	7'-10"	4'-4"	5'-6"	11,000
DDBPPF-06	6"	7'-10"	4'-4"	5'-6"	12,000
DDBPPF-08	8"	8'-8"	5'-0"	5'-6"	14,000
DDBPPF-10	10"	9'-2"	5'-8"	6'-6"	18,000
DDBPPF-12	12"	X'-X"	X'-X"	X'-X"	XX,000

Specifications

CONCRETE: Class I/II concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

ACCESS COVER: 1/4" steel skid-resistant floor plate welded to 3" angle frame with (2) 3"x2-3/8" I-beam supports. Hatch to be furnished with 316 stainless steel bolts and hinges

HATCHWAY: 1/4" Aluminum diamond plate cover with extruded aluminum frame. Hatch to be furnished with 316 stainless steel slam lock & hinges.

Engineering Data

The backflow assembly shall be factory assembled in vault & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

FM AWWA UL IAPMO NPCA CERTIFIED PLANT

DOUBLE DETECTOR BACKFLOW PREVENTER W/ PIV AND FDC

SCALE: N.T.S.

SANITARY SEWER CLEAN OUT

N.T.S.

KNOCK OUT	W	GRATE SIZE
30"	42"	30"X30"X2"
36"	48"	30"X30"X2"
48"	60"	30"X30"X2"
60"	72"	30"X30"X2"
72"	84"	30"X30"X2"
84"	96"	30"X30"X2"

NOTES:

1. PRECAST CONCRETE MANHOLES SHALL BE MADE OF CLASS II CONCRETE WITH A DESIGN STRENGTH OF 4,500 PSI AT 28 DAYS AND RATED FOR H-20 LOADING.
2. STRUCTURAL REINFORCEMENT SHALL BE GRADE 60 CONFORMING TO ASTM A-615.
3. DEPTH OF INLET SHALL DETERMINE THE NUMBER OF RISER SECTIONS AND ADJUSTMENT RINGS REQUIRED. BRICKS SHALL NOT BE USED.
4. GROUT INSIDE AND OUTSIDE OF EXTENSION RING(S) AND ALL PIPES.
5. ALL PIPES SHALL BE CUT FLUSH WITH THE INLET.
6. IF BOTTOM SECTION INSIDE DIMENSIONS ARE GREATER THAN 30"X30", PROVIDE A TRANSITION SECTION TO ACCEPT A 30"X30" FRAME AND GRATE.

GRATE INLET (ALL PAVED AREAS)

N.T.S.

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER

Adico Consulting Engineers
205 E Edgewood Drive
Friendswood, Texas 77546
Main Phone: 832.895.1093
https://adico-llc.com/

GALENA PARK ISD
HOUSTON, TX

100% Construction Documents Review

ADICO, LLC
TBPE FIRM NO. F-16423

10-01-2025

ISSUED: SEPTEMBER 22, 2025

REVISIONS

Revision No.	Revision Date

Principal DH
Proj. Eng. SN

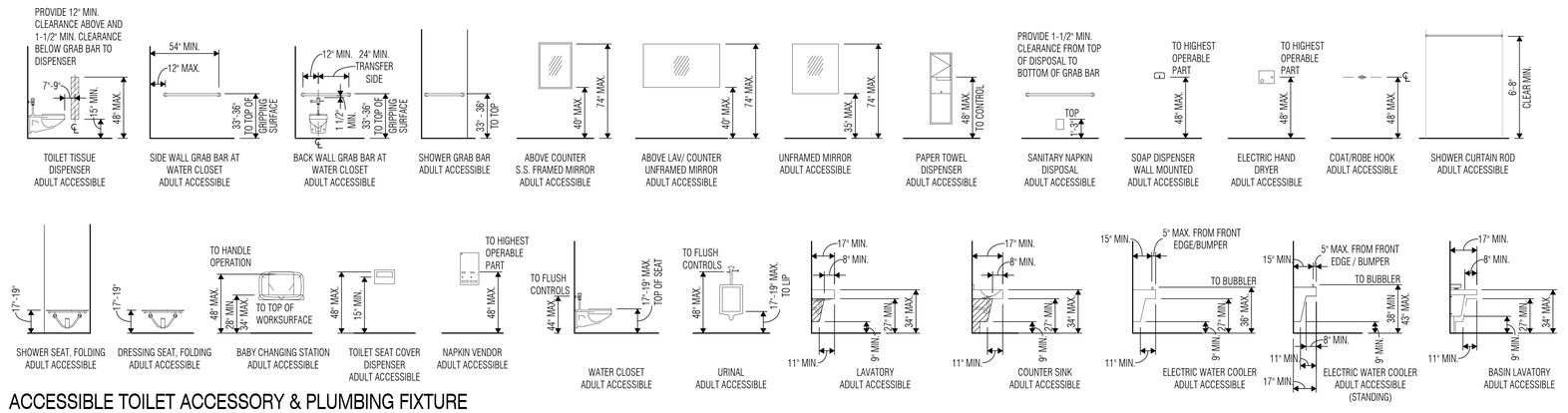
PROJECT NO.
25-0056.00

SHEET TITLE
MISCELLANEOUS DETAILS

SHEET NO.
C14

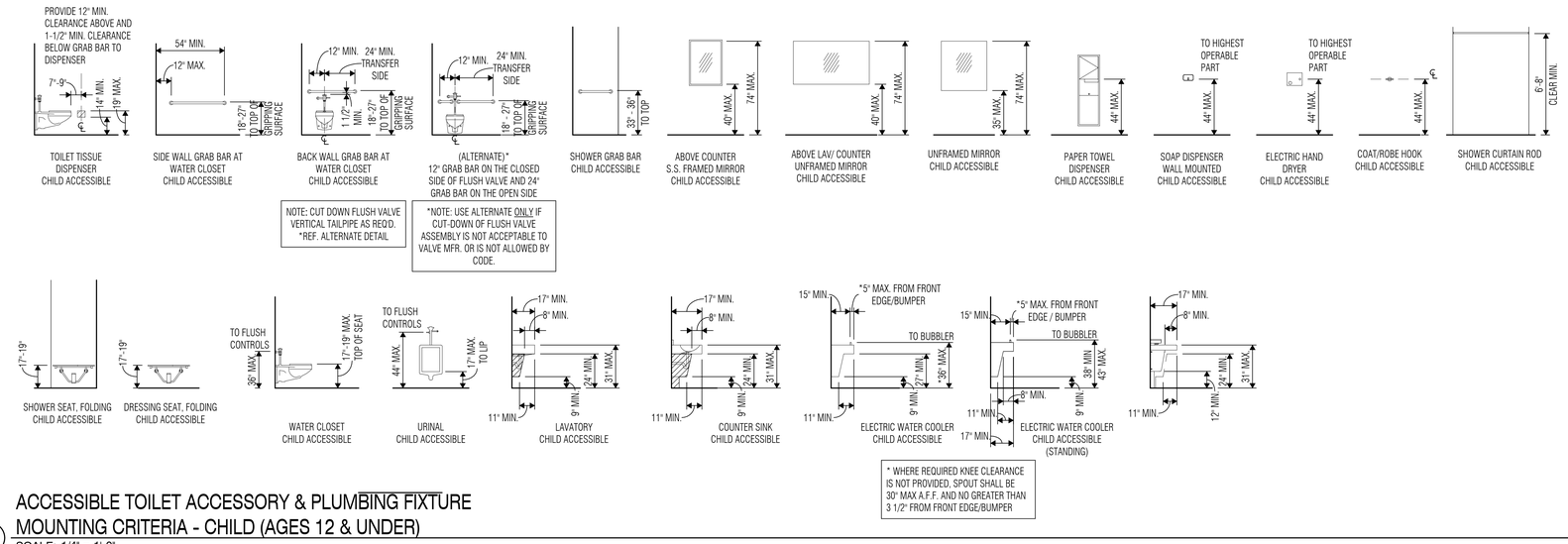
North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS



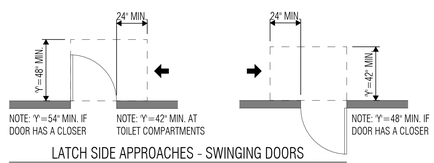
ACCESSIBLE TOILET ACCESSORY & PLUMBING FIXTURE MOUNTING CRITERIA - ADULT (AGES 13 & ABOVE)

1 SCALE: 1/4" = 1'-0"



ACCESSIBLE TOILET ACCESSORY & PLUMBING FIXTURE MOUNTING CRITERIA - CHILD (AGES 12 & UNDER)

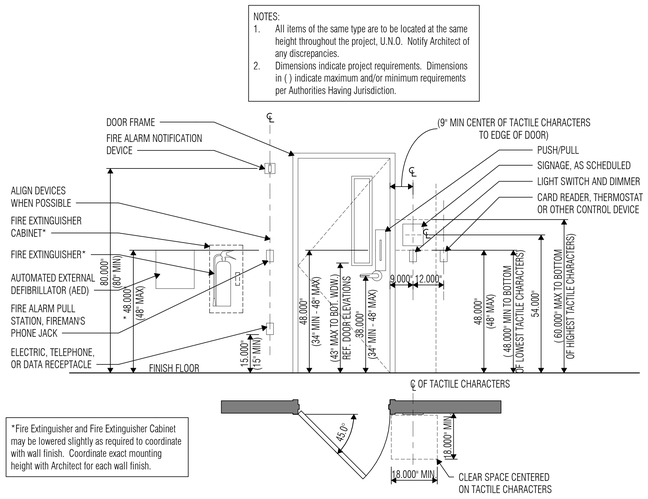
2 SCALE: 1/4" = 1'-0"



MINIMUM MANEUVERING CLEARANCES AT DOORS

3 SCALE: 1/4" = 1'-0"

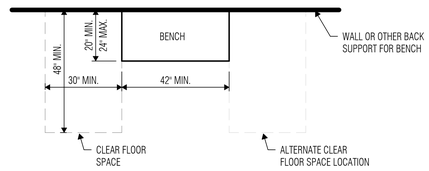
NOTES:
1. All items of the same type are to be located at the same height throughout the project, U.N.O. Notify Architect of any discrepancies.
2. Dimensions indicate project requirements. Dimensions in ( ) indicate maximum and/or minimum requirements per Authorities Having Jurisdiction.



*Fire Extinguisher and Fire Extinguisher Cabinet may be lowered slightly as required to coordinate with wall finish. Coordinate exact mounting height with Architect for each wall finish.

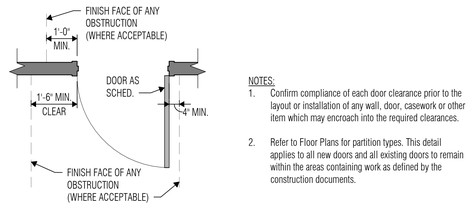
MISC ACCESSIBLE MOUNTING CRITERIA

4 SCALE: 1/2" = 1'-0"



TYPICAL BENCH SIZE & CLEAR FLOOR SPACE

5 SCALE: 1/2" = 1'-0"



NOTES:
1. Confirm compliance of each door clearance prior to the layout or installation of any wall, door, casework or other item which may encroach into the required clearances.
2. Refer to Floor Plans for partition types. This detail applies to all new doors and all existing doors to remain within the areas containing work as defined by the construction documents.

TYPICAL DOOR CLEARANCES AT HINGE & STRIKE SIDE

6 SCALE: 1/2" = 1'-0"

TEXAS ACCESSIBILITY STANDARDS

PROVISIONS FOR ADULTS AND CHILDREN	ADULTS AGES 13 & ABOVE	CHILDREN AGES 12 & UNDER
REACH RANGES		
UNOBSTRUCTED FRONTAL AND SIDE APPROACH	15" MIN. - 48" MAX.	16" MIN. - 44" MAX.
OBSTRUCTED FRONT APPROACH ≤ 20" D. (OPEN UNDER)	48" MAX.	44" MAX.
OBSTRUCTED FRONT APPROACH > 20" D. - 25" D. MAX (OPEN UNDER)	44" MAX.	44" MAX.
OBSTRUCTED SIDE APPROACH ≤ 10" D. - 34" H. MAX	48" MAX.	44" MAX.
OBSTRUCTED SIDE APPROACH > 10" D. - 24" D. MAX & 34" H. MAX	46" MAX.	44" MAX.
RAMPS AND STAIRS		
TOP OF HANDRAIL GRIPPING SURFACE	34" - 38"	34" - 38"
DRINKING FOUNTAINS AND WATER COOLERS		
FRONTAL APPROACH		
SPOUT HEIGHT (TO OUTLET)	36" MAX.	36" MAX.[3]
KNEE CLEARANCE	27" MIN.	27" MIN.[3]
SIDE APPROACH		
SPOUT HEIGHT (TO OUTLET)	USE FRONT APPROACH	USE FRONT APPROACH[3]
KNEE CLEARANCE		
STANDING		
SPOUT HEIGHT (TO OUTLET)	38" MIN. - 43" MAX.	38" MIN. - 43" MAX.[1]
WATER CLOSETS		
CENTERLINE TO WALL OR PARTITION	16" - 18"	12" - 18"
CENTERLINE TO WALL OR PARTITION AT AMBULATORY STALL	17" - 19"	17" - 19"
TOP OF SEAT	17" - 19"	11" - 17"
GRAB BARS (TO TOP OF GRIPPING SURFACE)	33" - 36"	18" - 27"
TOILET TISSUE DISPENSER HEIGHT	15" - 48"	14" - 19"
HAND-OPERATED FLUSH CONTROLS	44" MAX.	36" MAX.
URINALS		
RIM OF BASIN	17" MAX.	17" MAX.[1]
HAND-OPERATED FLUSH CONTROLS	48" MAX.	44" MAX.
LAVATORIES AND SINKS		
RIM OR COUNTER SURFACE	34" MAX.	31" MAX.
KNEE CLEARANCE (LAVATORIES)	27" MIN.	24" MIN.
KNEE CLEARANCE (SINKS)	27" MIN.	24" MIN.
TO FAUCET HANDLES FROM FRONT EDGE	25" MAX.[2]	25" MAX.[1,2]
MIRRORS		
TO TOP OF REFLECTING SURFACE	74" MIN.	74" MIN.
TO BOTTOM OF REFLECTING SURFACE AT LAVS & COUNTERS	40" MAX.	40" MAX.[1]
TO BOTTOM OF REFLECTING SURFACE	35" MAX.	35" MAX.[1]
CONTROLS AND OPERATING MECHANISMS		
HIGHEST OPERABLE PART		
UNOBSTRUCTED FRONTAL AND SIDE APPROACH	48" MAX.	44" MAX.
OBSTRUCTED FRONT APPROACH ≤ 20" D. (OPEN UNDER)	48" MAX.	44" MAX.
OBSTRUCTED FRONT APPROACH > 20" D. - 25" D. MAX. (OPEN UNDER)	44" MAX.	44" MAX.
OBSTRUCTED SIDE APPROACH ≤ 10" D. - 34" D. MAX. & 34" H. MAX.	48" MAX.	44" MAX.
OBSTRUCTED SIDE APPROACH > 10" D. - 24" D. MAX. & 34" H. MAX.	46" MAX.	44" MAX.
FIXED OR BUILT-IN SEATING, TABLES, & WORK STATIONS		
HEIGHT OF TABLES OR COUNTERS	28" - 34"	26" - 30"
KNEE CLEARANCES	27" MIN.	24" MIN.
DRESSING, FITTING & LOCKER ROOMS		
TOP OF BENCH	17" - 19"	17" - 19"[1]
BACK SUPPORT 18" H MIN. OR AFFIX BENCH TO WALL		
FOOD SERVICE LINES		
TOP OF TRAY SLIDE	28" - 34"	28" - 34"[1]

[1] NOTE: Dimension for Children is not specifically addressed in 2012 T.A.S.
[2] NOTE: Faucet handle location cannot be past the back of the allowable toe space, and only 6" deep toe space from the bottom portion of the provided kneespace is allowable for consideration.
[3] NOTE: Where required knee clearance is not provided, spout shall be 30" maximum a.f.f. and no greater than 3 1/2" from front edge/bumper.

T.A.S. NOTES

1. The dimensional ranges included for items on this sheet are the maximum and minimum dimensions allowed by the Texas Accessibility Standards (TAS). There are no tolerances allowed for these dimensions.
2. Mounting criteria for Toilet Accessories on this sheet is the allowable criteria per the TAS. Refer to Sheet A2.38 for project-specific mounting criteria (if different than the TAS requirements), as well as for non-accessible mounting criteria.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

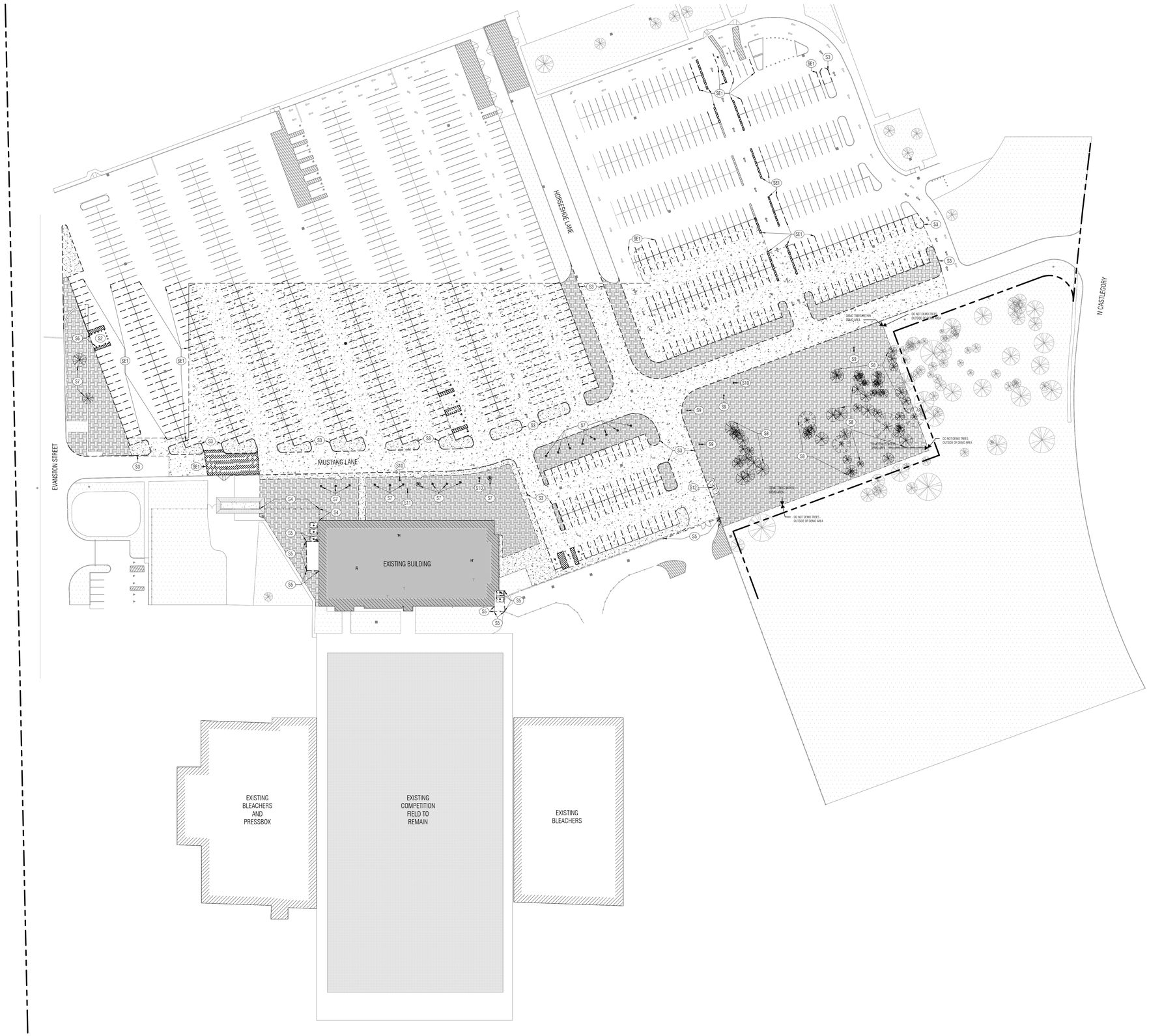
SHEET TITLE

TEXAS ACCESSIBILITY STANDARDS REQUIREMENTS

SHEET NO.

A0.21

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



SITE PLAN NOTES

1. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
2. To prevent damage to existing trees and shrubs in proximity to the Work, provide and maintain protective barriers around those items in accordance with the specified procedures, or in the absence of those procedures, with recognized landscaping and horticultural practices.

SITE PLAN LEGEND

- FIRE LANE (PER CITY STANDARDS)
- CHAIN LINK FENCE, See Plan for Heights
- EXISTING CHAIN LINK FENCE, See Plan for Heights
- ORNAMENTAL FENCE, See Plan for Heights
- EXISTING ORNAMENTAL FENCE, See Plan for Heights
- EXISTING BUILDING TO REMAIN
- NEW PAVING
- NEW VEGETATION
- EXISTING PAVING TO REMAIN
- EXISTING VEGETATION TO REMAIN
- EXISTING VEGETATION TO BE REMOVED
- ITEM TO BE REMOVED
- PROPERTY LINE

SITE DEMO KEYNOTE SCHEDULE

NUMBER	NOTE TEXT
S2	BAND TOWER TO BE RELOCATED BY DISTRICT
S3	DEMOLISH EXISTING CURB
S4	DEMOLISH ORNAMENTAL FENCING
S5	DEMOLISH CHAINLINK FENCING
S6	DEMO BOLLARDS
S7	DEMO TREES
S8	DEMO CLUSTER OF TREES
S9	DEMO UTILITY POLE
S10	DEMO MAN HOLE
S11	RELOCATE FIRE HYDRANT
S12	DEMO PAD AND RELOCATE DUMPSTERS
SE1	REMOVE EXISTING STRIPING

PLAN NORTH

TRUE NORTH

1 OVERALL DEMO SITE PLAN
SCALE: 1" = 50'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

MONIKA C. CASTILLO
REGISTERED ARCHITECT
26598
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

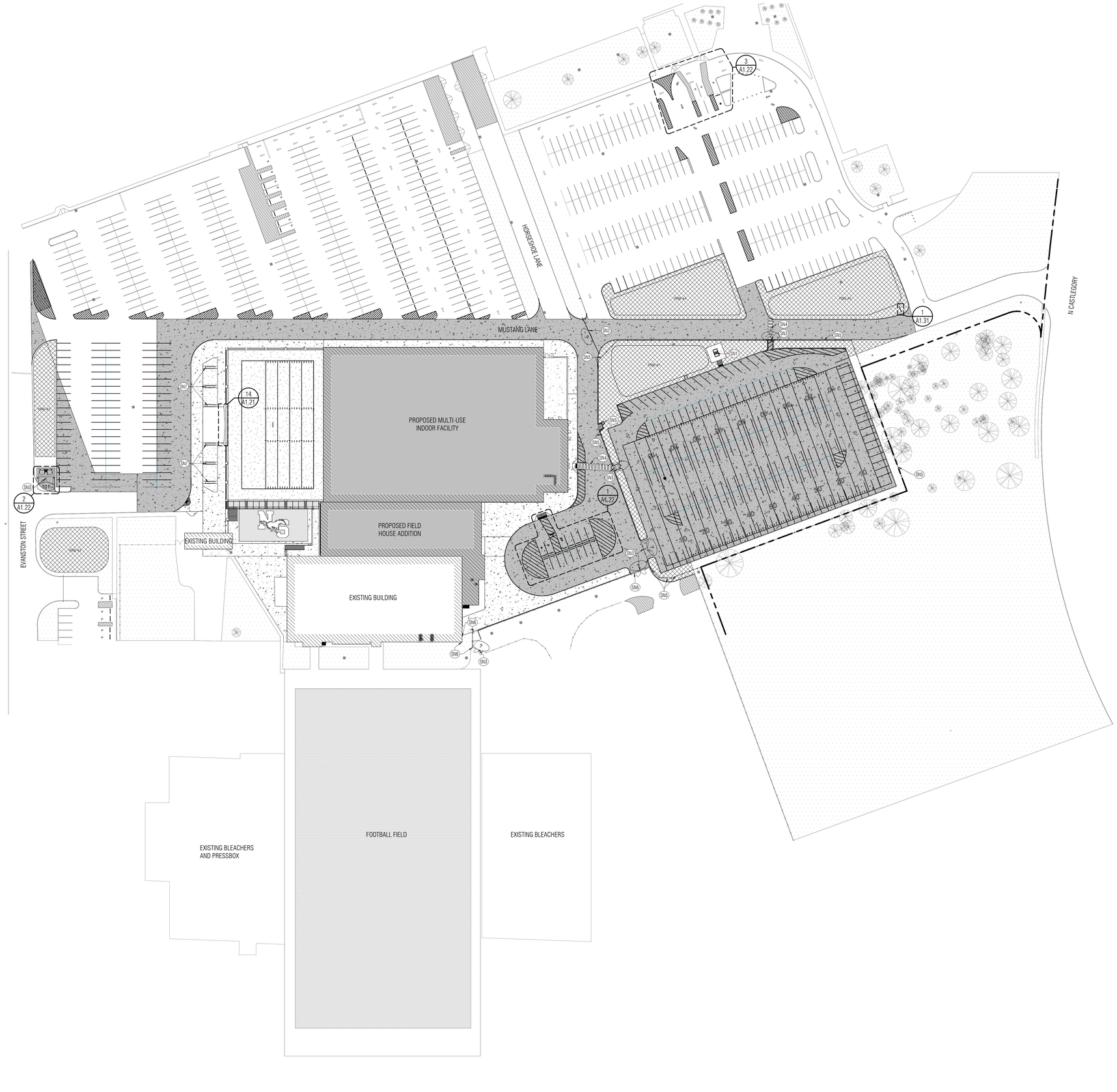
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
OVERALL DEMO SITE PLAN

SHEET NO.
A1.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



SITE PLAN NOTES

1. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
2. To prevent damage to existing trees and shrubs in proximity to the Work, provide and maintain protective barriers around those items in accordance with the specified procedures, or in the absence of those procedures, with recognized landscaping and horticultural practices.

SITE PLAN LEGEND

- FIRE LANE (PER CITY STANDARDS)
- CHAIN LINK FENCE, See Plan for Heights
- EXISTING CHAIN LINK FENCE, See Plan for Heights
- ORNAMENTAL FENCE, See Plan for Heights
- EXISTING ORNAMENTAL FENCE, See Plan for Heights
- EXISTING BUILDING TO REMAIN
- NEW PAVING
- NEW VEGETATION
- EXISTING PAVING TO REMAIN
- EXISTING VEGETATION TO REMAIN
- EXISTING VEGETATION TO BE REMOVED
- ITEM TO BE REMOVED
- PROPERTY LINE

SITE KEYNOTE SCHEDULE

NUMBER	NOTE TEXT
SN1	RELOCATED BAND TOWER AND NEW BASE
SN2	50' DOUBLE TRAFFIC GATE
SN3	DOUBLE GATE. REF. DOOR SCHEDULE
SN4	CROSSWALK STRIPING
SN5	8'H BLACK VINYL CHAINLINK FENCE
SN6	BLACK VINYL CHAINLINK FENCE. MATCH EXISTING HEIGHT
SN7	BUILT-IN CONCRETE BENCHES

PLAN NORTH TRUE NORTH

1 OVERALL SITE PLAN
SCALE: 1" = 50'-0"

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT · MONIKA C. CASTILLO · 26058 · STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

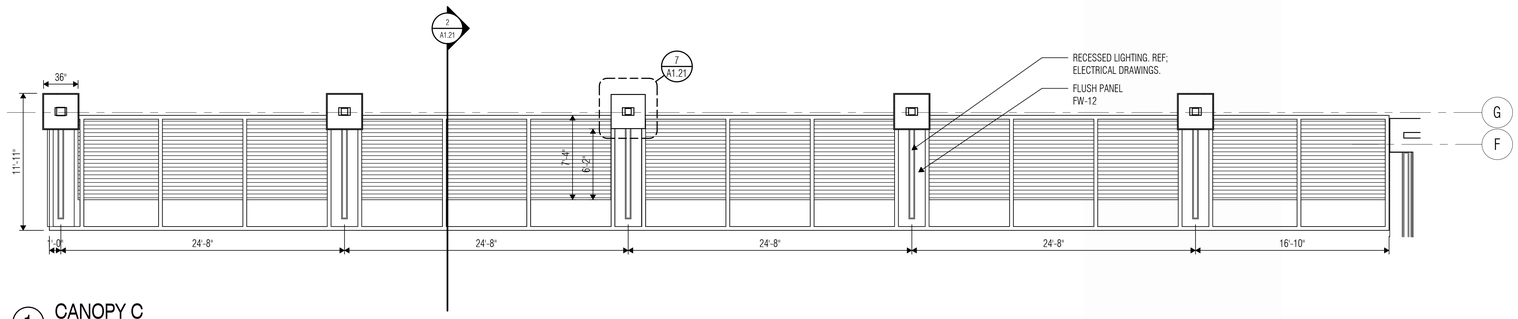
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

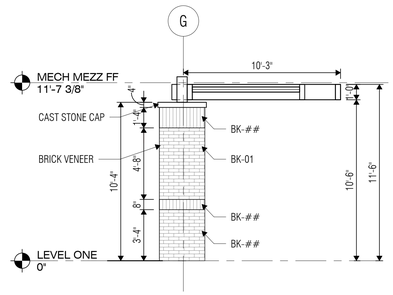
SHEET TITLE
OVERALL SITE PLAN

SHEET NO.
A1.11

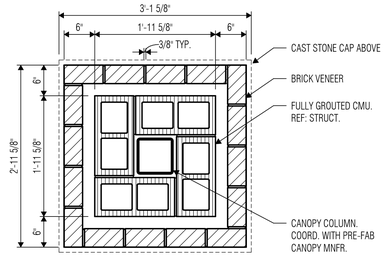
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



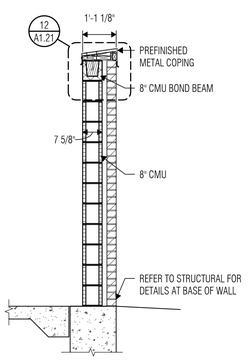
1 CANOPY C
SCALE: 3/16" = 1'-0"



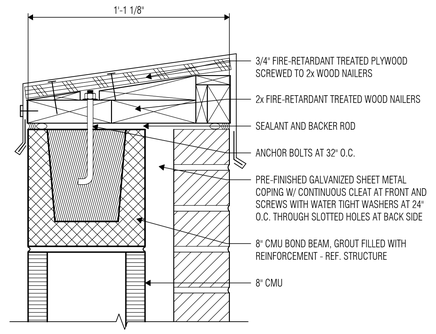
2 CANOPY C SECTION
SCALE: 1/4" = 1'-0"



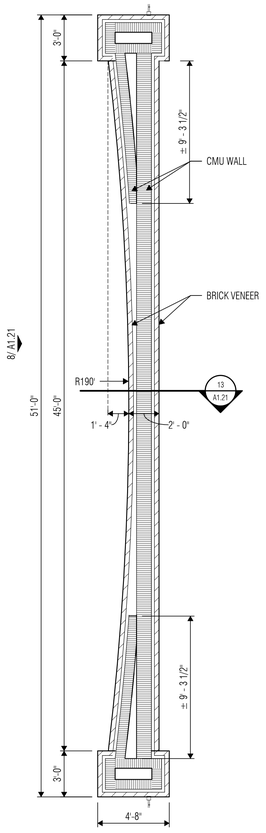
7 CANOPY C - MASONRY POST - PLAN
SCALE: 1" = 1'-0"



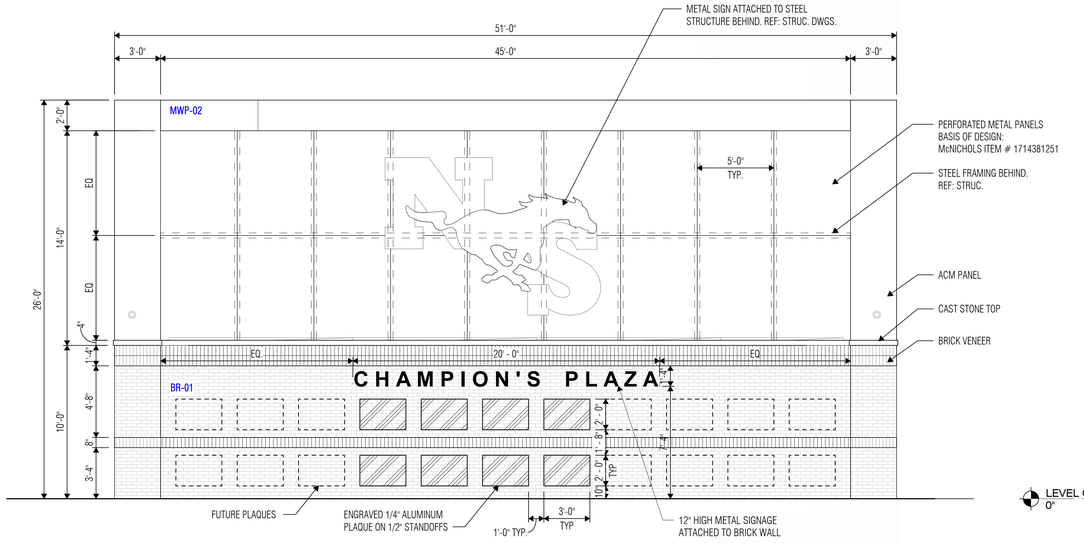
11 DUMPSTER SCREEN WALL
SCALE: 1/2" = 1'-0"



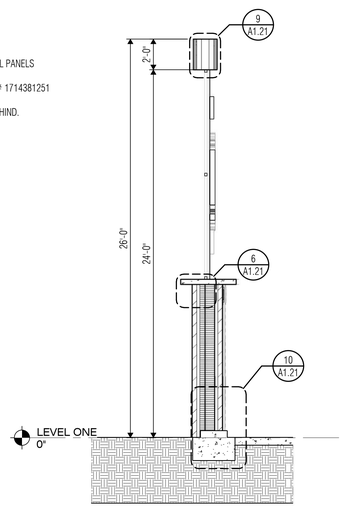
12 DUMPSTER SCREEN WALL DETAIL AT METAL COPING
SCALE: 3" = 1'-0"



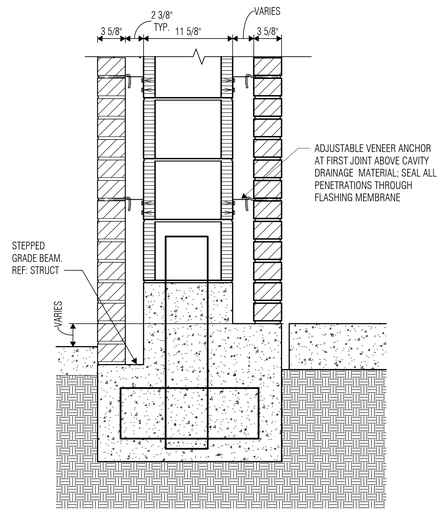
14 ENL SITE PLAN - CHAMPIONS PLAZA
SCALE: 1/4" = 1'-0"



8 NORTH SHORE CHAMPIONS PLAZA SIGN
SCALE: 1/4" = 1'-0"



13 CHAMPIONS PLAZA SECTION
SCALE: 1/4" = 1'-0"



10 CHAMPIONS PAZA BASE
SCALE: 1 1/2" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT — MONIKA C. CASTILLO — 26668 — STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

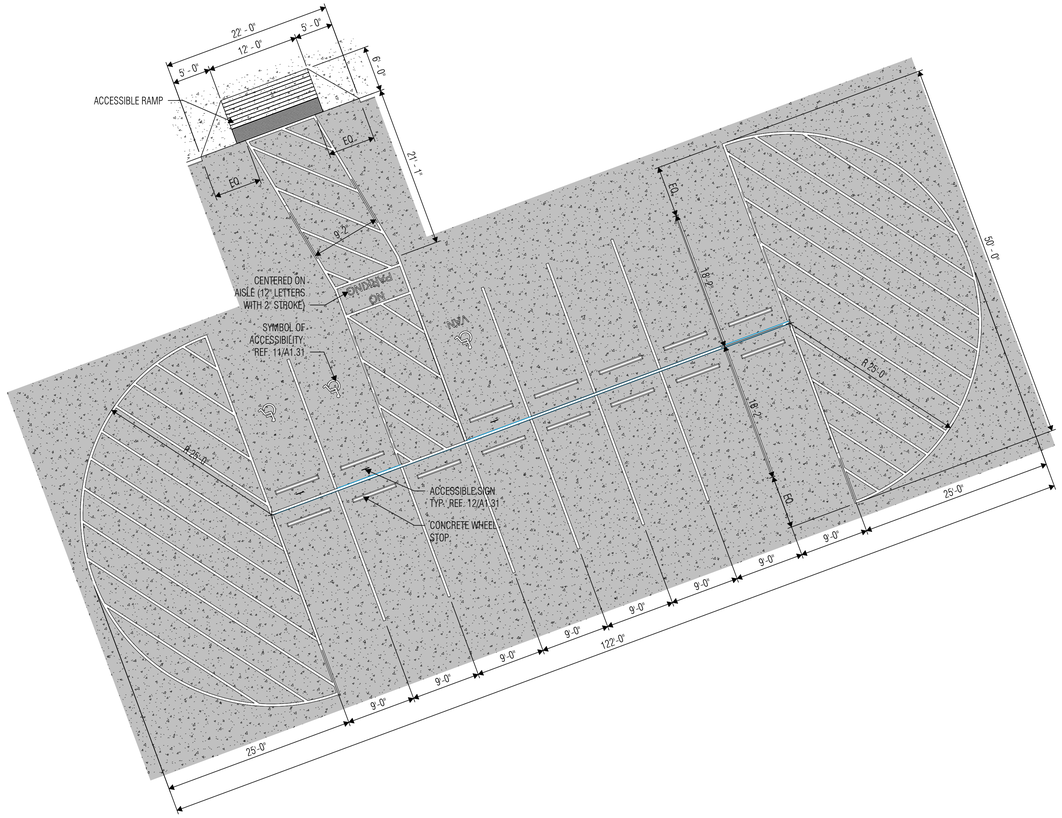
SHEET TITLE

ENLARGED ARCHITECTURAL SITE PLANS, CANOPY PLANS

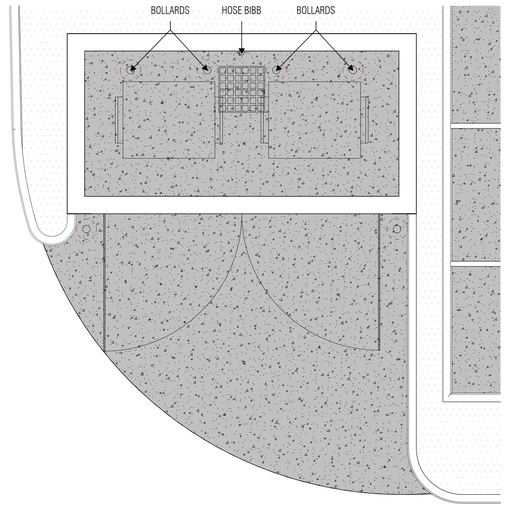
SHEET NO.

A1.21

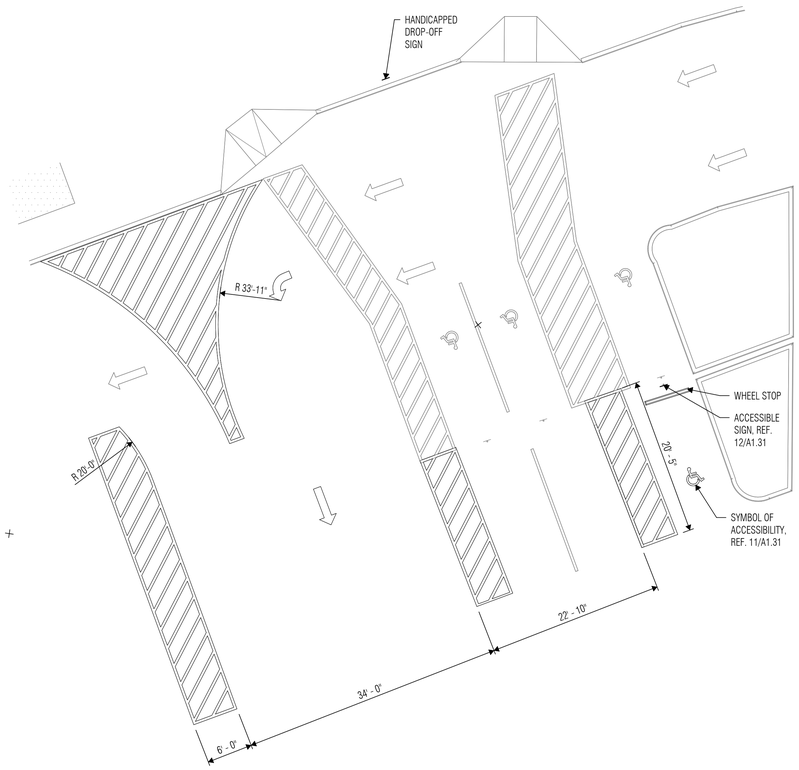
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 STRIPING SPACE 1
SCALE: 1/8" = 1'-0"



2 DUMPSTER LAYOUT
SCALE: 1/4" = 1'-0"



3 STRIPING SPACE 2
SCALE: 1/8" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

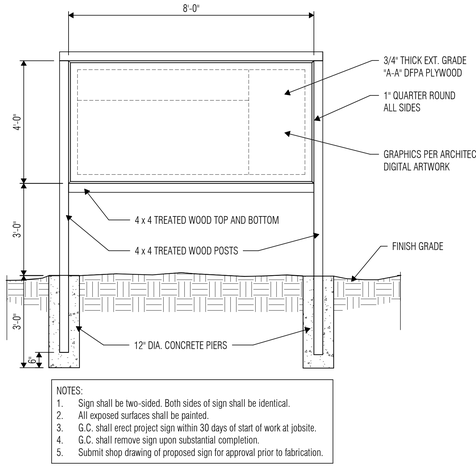
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ENLARGED ARCHITECTURAL SITE PLANS AND DETAILS

SHEET NO.
A1.22

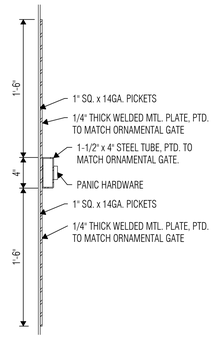
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



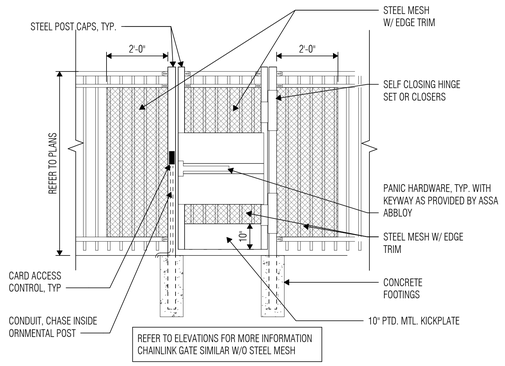
NOTES:
1. Sign shall be two-sided. Both sides of sign shall be identical.
2. All exposed surfaces shall be painted.
3. G.C. shall erect project sign within 30 days of start of work at jobsite.
4. G.C. shall remove sign upon substantial completion.
5. Submit shop drawing of proposed sign for approval prior to fabrication.

MC602

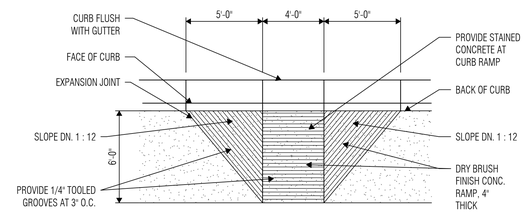
1 MC602 - PROJECT SIGN ELEVATION
SCALE: 1/2" = 1'-0"



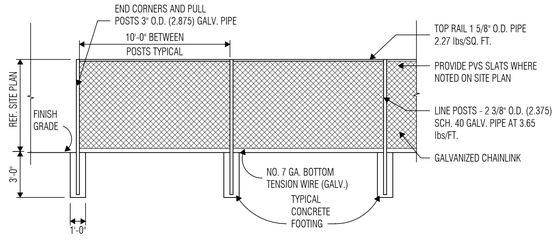
2 ORNAMENTAL EGRESS GATE
SCALE: 1 1/2" = 1'-0"



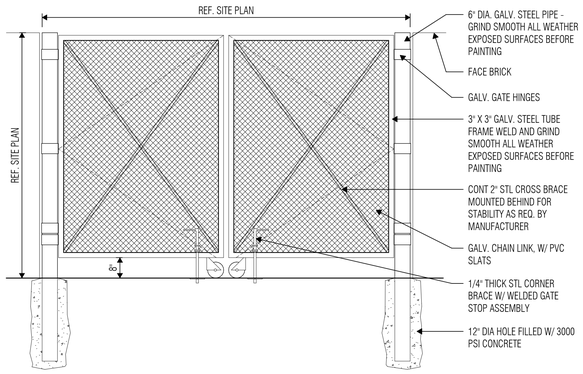
3 ORNAMENTAL GATE
SCALE: 1/2" = 1'-0"



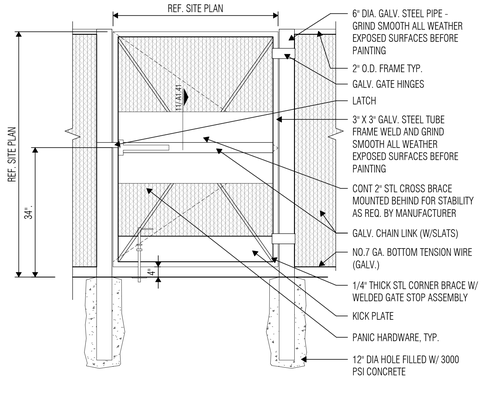
4 CURB RAMP PLAN
SCALE: 1/4" = 1'-0"



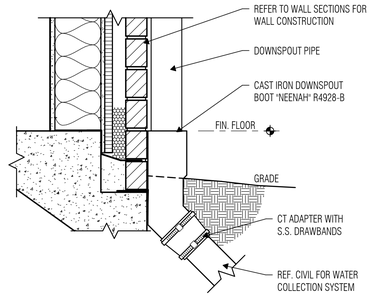
5 CHAINLINK FENCE
SCALE: 1/4" = 1'-0"



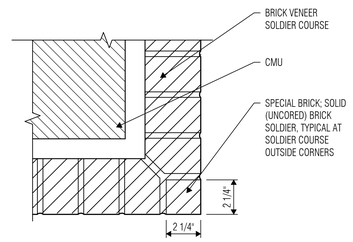
6 CHAINLINK FENCE DOUBLE GATE
SCALE: 1/2" = 1'-0"



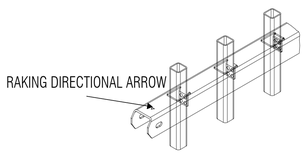
7 CHAINLINK FENCE GATE
SCALE: 1/2" = 1'-0"



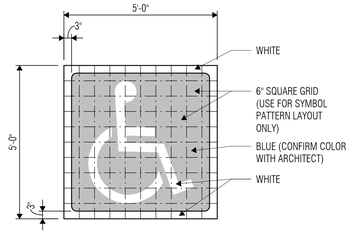
8 MC611 - DOWNSPOUT BOOT
SCALE: 1 1/2" = 1'-0"



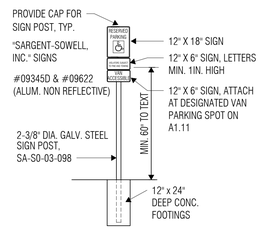
9 SOLDIER COURSE OUTSIDE CORNER
SCALE: 3" = 1'-0"



10 RAKING DIRECTION
SCALE: 3/8" = 1'-0"



11 SYMBOL OF ACCESSIBLITY
SCALE: 1/2" = 1'-0"



12 ADA PARKING SIGN
SCALE: 3/8" = 1'-0"

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ARCHITECTURAL SITE DETAILS

SHEET NO.
A1.31

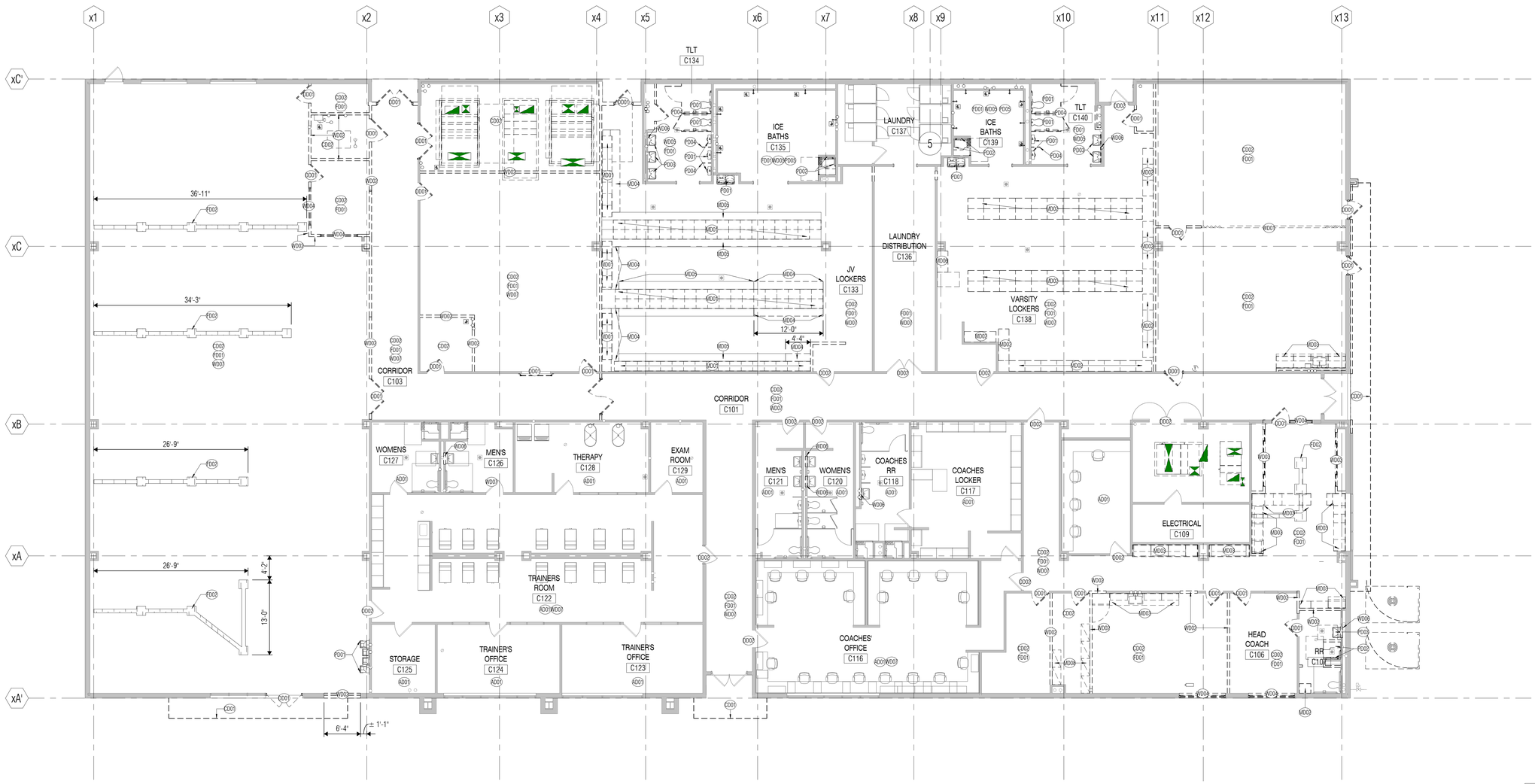
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
AD01	ALTERNATE: REMOVE EXISTING FLOOR FINISH, BASE AND CASEWORK. REMOVE ALL PLUMBING FIXTURES, SHOWERS AND ALL ACCESSORIES. REMOVE LOCKERS. REMOVE EXSITING CEILING SYSTEM, LIGHTS, AND DEVICES. PREPARE WALLS AND DOOR FRAMES TO RECEIVE PAINT. PREPARE FLOORS TO RECEIVE NEW FINISHES AND CASEWORK. PREPARE TO RECEIVE NEW CEILING SYSTEM, LIGHTS, AND DEVICES.
CD01	REMOVE CANOPY
CD02	REMOVE EXISTING CEILING SYSTEM, LIGHTS AND DEVICES
DD01	CAREFULLY REMOVE AND PROPERLY DISPOSE OF DOOR, HARDWARE, AND FRAME. PREPARE AREA TO RECEIVE NEW CONSTRUCTION.
DD02	PREPARE EXISTING DOOR FRAME AND VISION LITES TO RECEIVE PAINT.
FD01	REMOVE EXISTING FLOOR FINISH AND BASE. CLEAN AND PREPARE EXISTING CONCRETE FOR INSTALLATION OF NEW FINISH AS SCHEDULED
FD02	TRENCH THROUGH EXISTING FLOOR FOR NEW ELECTRICAL WORK. REF: ELEC DWGS.
MD01	EXISTING LOCKERS TO BE REMOVED; CONCRETE BENCHES TO BE SALVAGED.
MD02	CAREFULLY REMOVE AND PROTECT LOCKERS IN PREPARATION FOR RELOCATION. RE: RESPECTIVE UNIT FLOOR PLAN FOR NEW LOCATION.
MD03	REMOVE CASEWORK AND PREPARE AREA FOR NEW CONSTRUCTION.
MD04	REMOVE EXISTING CONCRETE BENCH & PATCH FLOOR TO MATCH EXISTING
MD05	EXISTING CONCRETE BENCH TO REMAIN
MD06	REMOVE ADA BENCH AND PREPARE FLOOR FOR NEW CONSTRUCTION
MD08	SALVAGE METAL SHELVING AND PREPARE AREA FOR NEW CONSTRUCTION.
PD01	REMOVE EXISTING PLUMBING FIXTURE.
PD02	REMOVE SHOWER FIXTURE, GRAB BAR AND BENCH TO PREPARE FOR NEW CONSTRUCTION
PD03	REMOVE SINK AND MIRROR PREPARE FOR NEW CONSTRUCTION
PD04	REMOVE EXISTING PARTITION AND PLUMBING ACCESSORIES.
PD05	REMOVE EXISTING SHOWER FIXTURES.
WD01	REMOVE PARTITION WALL AND PREPARE AREA FOR NEW CONSTRUCTION.
WD02	REMOVE STUD WALL AND PREPARE AREA FOR NEW CONSTRUCTION.
WD03	REMOVE DISPLAY CASE AND WALL. PREPARE AREA FOR NEW CONSTRUCTION.
WD04	REMOVE STOREFRONT AND PREPARE AREA FOR NEW CONSTRUCTION.
WD05	REMOVE EXISTING WALL TILE. PATCH AND REPAIR WALL AS NEEDED TO RECIEVE NEW FINISHES.
WD06	REMOVE PORTION OF WET WALL AS NEEDED TO COMPLETE PLUMBING SCOPE OF WORK.
WD07	REMOVE EXISTING WALL FINISHES AND ROOM SIGNAGE. LEAVE SUBSTRATE SUITABLE FOR NEW FINISH.

DEMOLITION NOTES

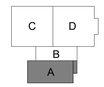
1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
6. Refer to electrical and mechanical demolition plan for additional information.
7. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.



TRUE NORTH

1 DEMO FLOOR PLAN - LEVEL ONE - UNIT A

SCALE: 1/8" = 1'-0"



KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
36558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

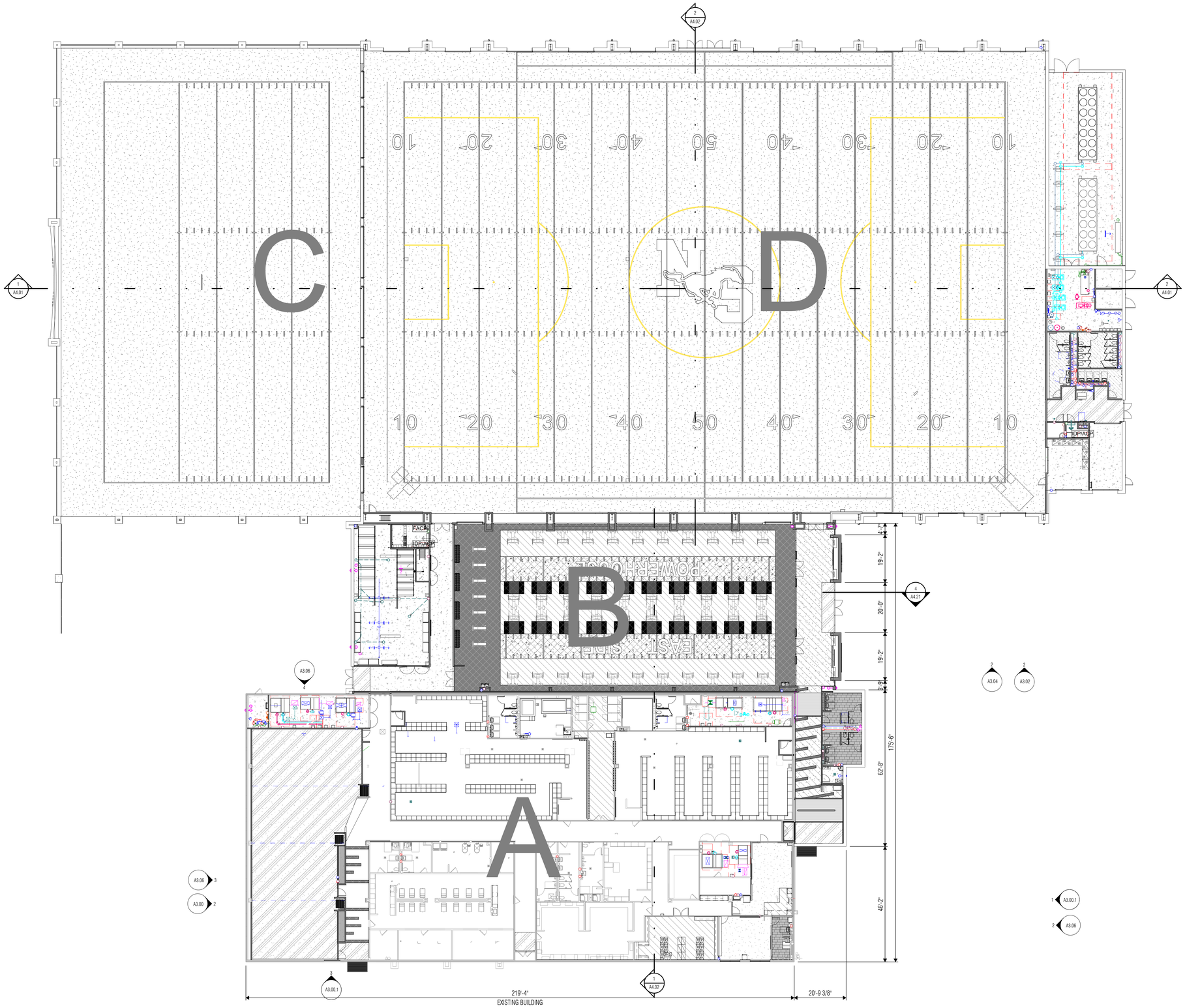
SHEET TITLE

DEMO FLOOR PLAN - LEVEL ONE - UNIT A

SHEET NO.

A2.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



TRUE NORTH

1 OVERALL FLOOR PLAN - LEVEL ONE

SCALE: 1/16" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

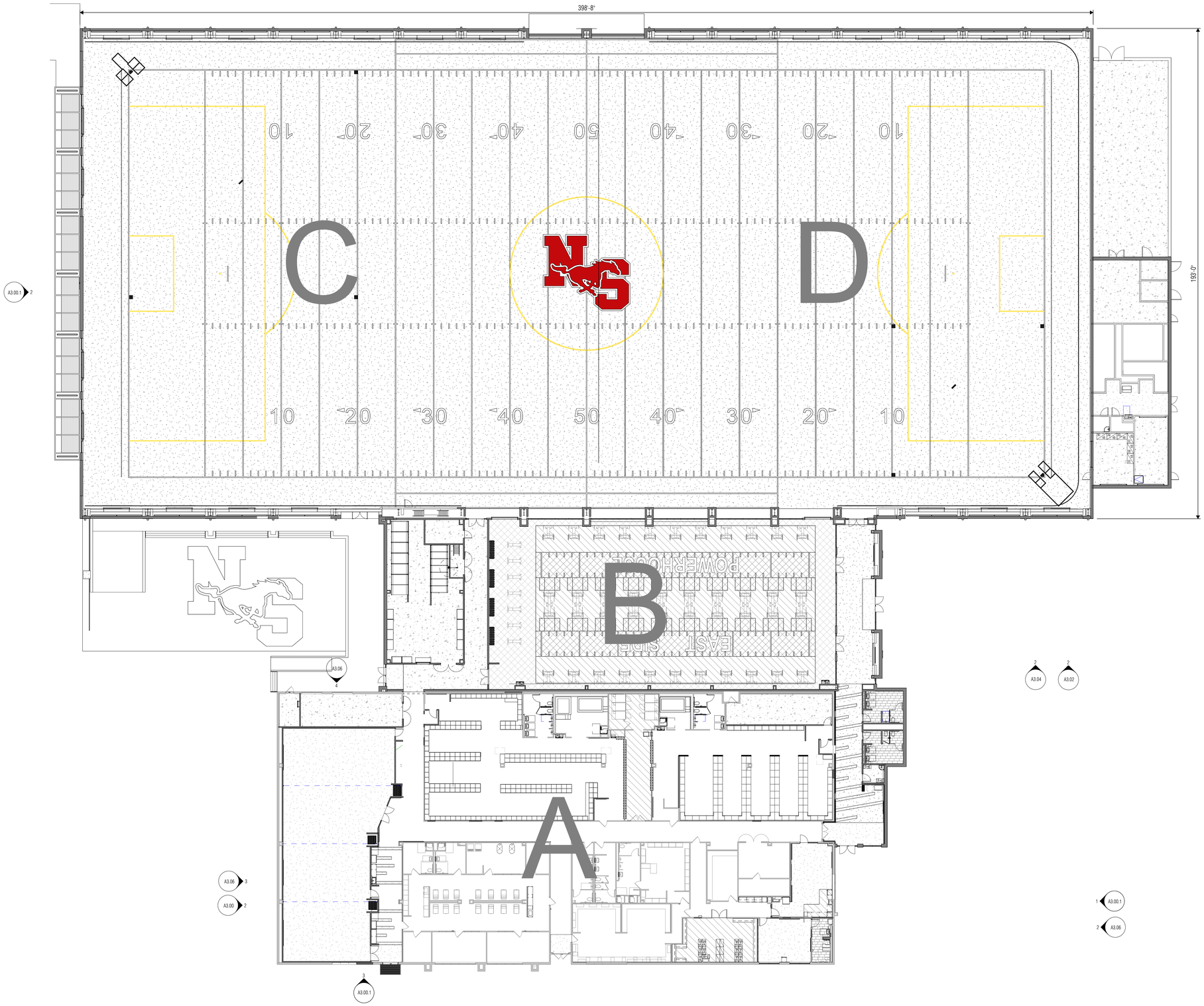
SHEET TITLE

ORIENTATION PLAN - LEVEL ONE

SHEET NO.

A2.11

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



A3.00.1 2

TRUE NORTH

1 OVERALL FLOOR PLAN - LEVEL ONE - ALTERNATE
SCALE: 1/16" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26058
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ORIENTATION PLAN - LEVEL ONE - ALTERNATE

SHEET NO.
A2.11.1

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

KEY NOTE SCHEDULE

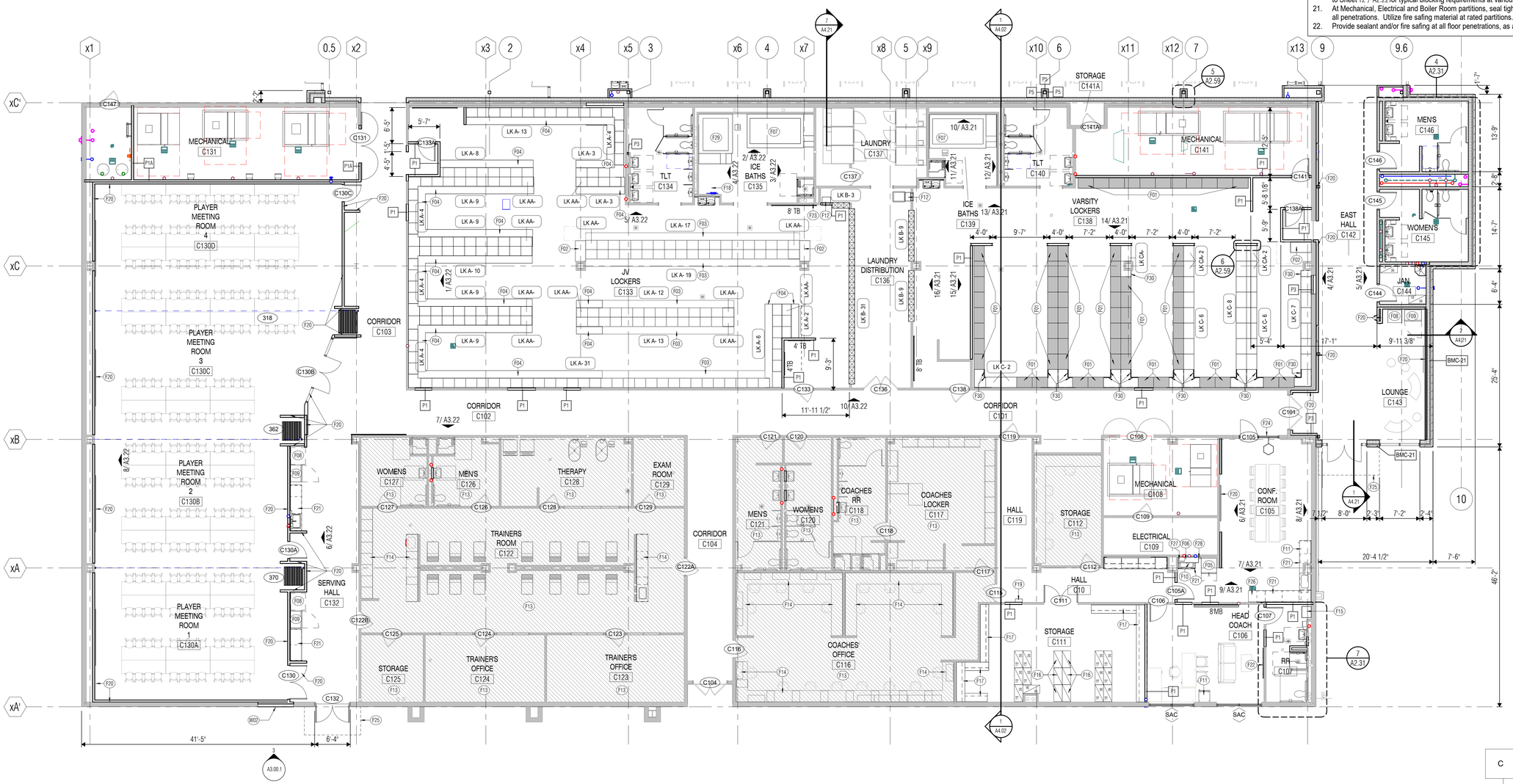
NUMBER	NOTE TEXT
F01	SALVAGED LOCKERS RELOCATION
F02	22" X 44" ADA BENCH
F03	EXISTING CONCRETE BENCH
F04	CONCRETE BENCH TO MATCH EXISTING
F05	REFRIGERATOR
F06	MICROWAVE ABOVE
F07	WHIRLPOOL, TYPE A
F08	WARMING CABINET, OFOI
F09	COOLER, OFOI
F10	LOW PROFILE GARBAGE DISPOSAL
F11	UNDERCOUNTER BEVERAGE COOLER
F12	LAUNDRY CHUTE
F13	ALTERNATE: PAINT ALL WALLS AND DOOR FRAMES. REPLACE PLUMBING FIXTURES, FLOORING, AND CASEWORK
F14	ALTERNATE: PREFABRICATED CASEWORK; REF. DW-100.1 THRU DW-400.1
F15	RELOCATED EXISTING LOCKER
F16	RELOCATED EXISTING METAL SHELVING UNITS
F17	DOUBLE TIER CLOTHES ROD W/SHELF
F18	ICE MAKER
F19	DIGITAL EMPLOYEE TIME CLOCK, OFCI
F20	PREFABRICATED WALL SYSTEM; REF. DW-100.1 THRU DW-400.1
F21	PREFABRICATED CASEWORK; REF. DW-100.1 THRU DW-400.1
F22	DISPLAY
F23	PATCH HOLE AT EXISTING GYP. WALL
F24	PROVIDE PRIVACY FILM FOR STOREFRONT
F25	PREFABRICATED WALKWAY COVER ABOVE
F26	UNDERCOUNTER ICE MAKER
F27	PAPER TOWEL DISPENSER; OFCI
F28	SOAP DISPENSER; OFCI
F29	WHIRLPOOL, TYPE B
F30	LOCKER FILLER PANEL
W02	INFILL EXISTING OPENING TO MATCH EXISTING EXTERIOR WALL.

FLOOR PLAN LEGEND

	METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
	CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
LKA-4	LOCKER TYPE For locker types, ref. 1 / A2.23 LOCKER QUANTITY
	FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.
18 / 36	METAL SHELVING UNIT. Depth/width as shown.
	ALTERNATE
MB	MARKERBOARD. Preceding number is length, in feet.
GMB	GLASS MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
MW	MARKERWALL. Refer to Finish Plans for dimensions.
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
HB	HORIZONTAL BLINDS; EXCLUDE ALL TRANSOMS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

FLOOR PLAN NOTES

1. Primary Ground Level floor elevation is 33.50' (Mean Sea Level), which equals to 100'-0" datum.
2. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
3. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
4. Exterior wall construction is identified on the Wall Sections. Refer to the A4 series sheets for Wall Sections, and to Sheet A4.11 for Exterior Wall Assemblies.
5. Refer to Exterior Elevation Notes for control joint requirements at all inside corners of masonry veneer.
6. Refer to Sheet A2.21 for Partition Types.
7. Interior partitions are Type "P6" unless noted otherwise.
8. Refer to Detail 4 / A0.21 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
9. Refer to Sheet 10 / A2.22 for Typical Gypsum Board Control Joint Details at all CFS and light-gage steel stud partition openings.
10. Refer to Sheet A2.22 for Typical Partition Penetration Details, including pipe, conduit and ductwork penetrations.
11. Refer to Sheet A2.22 for Typical Bracing at Non-Loadbearing CMU Partitions.
12. Refer to Exterior Elevations for exact locations of downspouts.
13. Provide factory bullnose units at all interior exposed vertical edges of CMU, except at starter course with applied base material where square-edge units shall be provided in lieu of bullnose units.
14. Provide 8" starter courses at all CMU walls and partitions unless noted otherwise.
15. Provide steel or masonry lintels over all openings in CMU walls, including those required for mechanical ductwork and dampers, whether specifically indicated on the drawings or not.
16. Provide minimum 20 gage (33 mils) light-gage steel studs at all interior partitions scheduled to receive ceramic tile, plaster, abuse-resistant gyp board or impact-resistant gyp board.
17. Provide minimum 18 (43 mils) gage cold-formed steel studs at all interior partitions scheduled to receive anchored masonry or stone veneer as well as interior partitions with steel plate or steel sheet X-bracing.
18. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
19. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
20. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet 12 / A2.22for typical blocking requirements at various conditions.
21. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
22. Provide sealant and/or fire safing at all floor penetrations, as applicable.



TRUE NORTH

1 FLOOR PLAN - LEVEL ONE - UNIT A
SCALE: 1/8" = 1'-0"

KEY PLAN

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT MONIKA C. CASTILLO 36558 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
FLOOR PLAN - LEVEL ONE - UNIT A

SHEET NO.
A2.11A

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

FLOOR PLAN NOTES

1. Primary Ground Level floor elevation is 33.50' (Mean Sea Level), which equals to 100'-0" datum.
2. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
3. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
4. Exterior wall construction is identified on the Wall Sections. Refer to the A4 series sheets for Wall Sections, and to Sheet A4.11 for Exterior Wall Assemblies.
5. Refer to Exterior Elevation Notes for control joint requirements at all inside corners of masonry veneer.
6. Refer to Sheet A2.21 for Partition Types.
7. Interior partitions are Type "P6" unless noted otherwise.
8. Refer to Detail 4 / A0.21 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
9. Refer to Sheet 10 / A2.22 for Typical Gypsum Board Control Joint Details at all CFS and light-gage steel stud partition openings.
10. Refer to Sheet A2.22 for Typical Partition Penetration Details, including pipe, conduit and ductwork penetrations.
11. Refer to Sheet A2.22 for Typical Bracing at Non-Loadbearing CMU Partitions.
12. Refer to Exterior Elevations for exact locations of downspouts.
13. Provide factory bullnose units at all interior exposed vertical edges of CMU, except at starter course with applied base material where square-edge units shall be provided in lieu of bullnose units.
14. Provide 8" starter courses at all CMU walls and partitions unless noted otherwise.
15. Provide steel or masonry lintels over all openings in CMU walls, including those required for mechanical ductwork and dampers, whether specifically indicated on the drawings or not.
16. Provide minimum 20 gage (33 mils) light-gage steel studs at all interior partitions scheduled to receive ceramic tile, plaster, abuse-resistant gyp board or impact-resistant gyp board.
17. Provide minimum 18 (43 mils) gage cold-formed steel studs at all interior partitions scheduled to receive anchored masonry or stone veneer as well as interior partitions with steel plate or steel sheet X-bracing.
18. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
19. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
20. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet 12 / A2.22for typical blocking requirements at various conditions.
21. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
22. Provide sealant and/or fire safing at all floor penetrations, as applicable.

FLOOR PLAN LEGEND

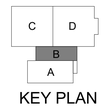
- METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- LOCKER TYPE (LKA-4) — For locker types, ref. 1 / A2.23 — LOCKER QUANTITY
- FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.
- 18 / 36 — METAL SHELVING UNIT. Depth/width as shown.

MB	MARKERBOARD. Preceding number is length, in feet.
GMB	GLASS MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
MW	MARKERWALL. Refer to Finish Plans for dimensions.
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
HB	HORIZONTAL BLINDS; EXCLUDE ALL TRANSOMS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F01	DISPLAY CASE; REF. CONSULTANT DWGS
F02	DIGITAL SIGNAGE DISPLAY; REF. CONSULTANT DWGS
F03	PREFABRICATED WALKWAY COVER ABOVE
F04	HIGH DENSITY STORAGE
F05	WALL MOUNTED ATHLETIC SHELVING
F06	DRINKING FOUNTAIN WITH BOTTLE FILLER
F07	MODULAR CASEWORK; REF. CONSULTANT DWGS

1 FLOOR PLAN - LEVEL ONE - UNIT B
SCALE: 1/8" = 1'-0"



KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

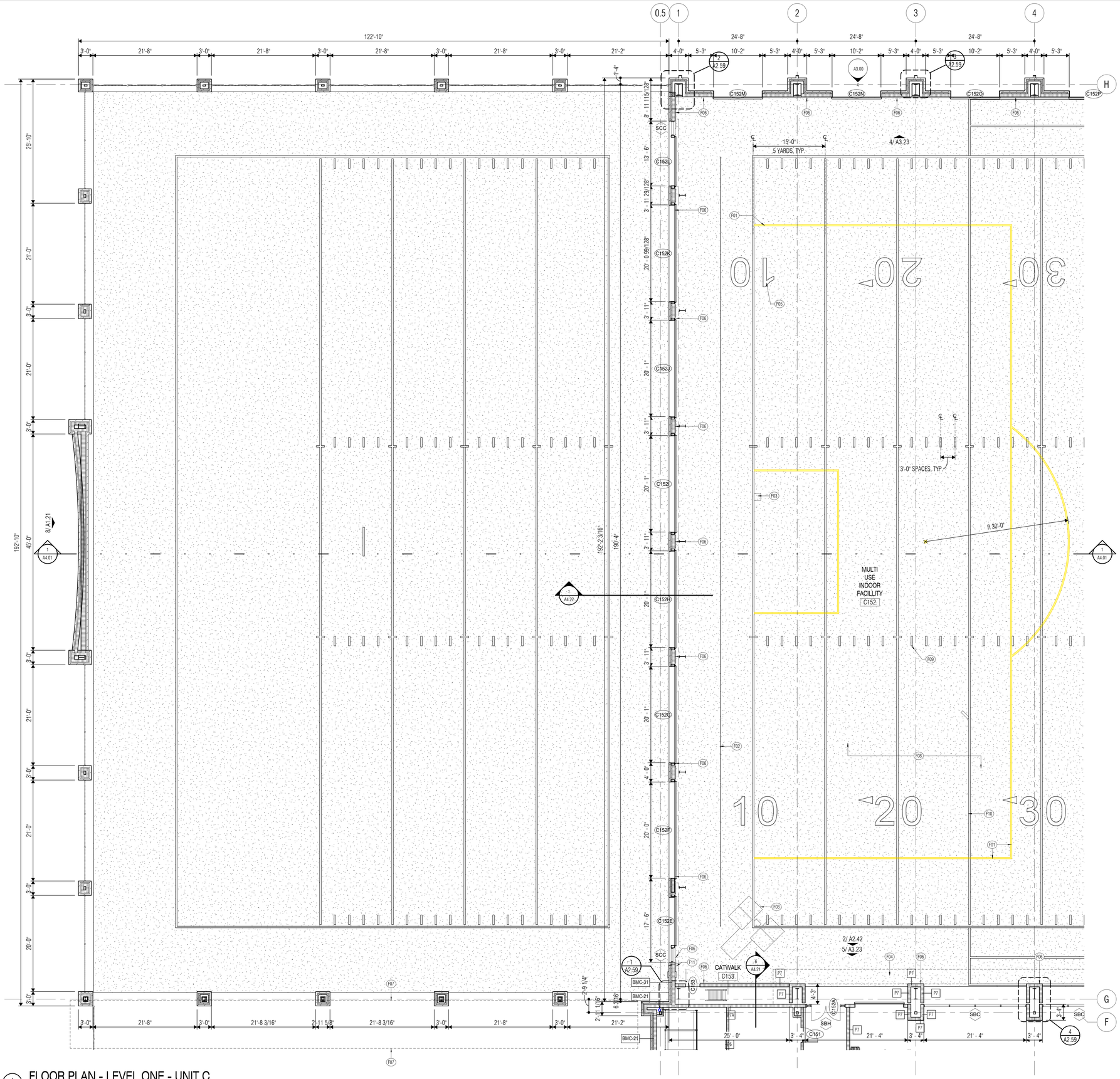
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
FLOOR PLAN - LEVEL ONE - UNIT B

SHEET NO.
A2.11B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 FLOOR PLAN - LEVEL ONE - UNIT C
SCALE: 1/8" = 1'-0"

TRUE NORTH

FLOOR PLAN NOTES

1. Primary Ground Level floor elevation is 33.50' (Mean Sea Level), which equals to 100'-0" datum.
2. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
3. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
4. Exterior wall construction is identified on the Wall Sections. Refer to the A4 series sheets for Wall Sections, and to Sheet A4.11 for Exterior Wall Assemblies.
5. Refer to Exterior Elevation Notes for control joint requirements at all inside corners of masonry veneer.
6. Refer to Sheet A2.21 for Partition Types.
7. Interior partitions are Type "P6" unless noted otherwise.
8. Refer to Detail 4 / A0.21 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
9. Refer to Sheet 10 / A2.22 for Typical Gypsum Board Control Joint Details at all CFS and light-gage steel stud partition openings.
10. Refer to Sheet A2.22 for Typical Partition Penetration Details, including pipe, conduit and ductwork penetrations.
11. Refer to Sheet A2.22 for Typical Bracing at Non-Loadbearing CMU Partitions.
12. Refer to Exterior Elevations for exact locations of downspouts.
13. Provide factory bullnose units at all interior exposed vertical edges of CMU, except at starter course with applied base material where square-edge units shall be provided in lieu of bullnose units.
14. Provide 8" starter courses at all CMU walls and partitions unless noted otherwise.
15. Provide steel or masonry lintels over all openings in CMU walls, including those required for mechanical ductwork and dampers, whether specifically indicated on the drawings or not.
16. Provide minimum 20 gage (33 mils) light-gage steel studs at all interior partitions scheduled to receive ceramic tile, plaster, abuse-resistant gyp board or impact-resistant gyp board.
17. Provide minimum 18 (43 mils) gage cold-formed steel studs at all interior partitions scheduled to receive anchored masonry or stone veneer as well as interior partitions with steel plate or steel sheet X-bracing.
18. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
19. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
20. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet 12 / A2.22for typical blocking requirements at various conditions.
21. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
22. Provide sealant and/or fire safing at all floor penetrations, as applicable.

FLOOR PLAN LEGEND

- METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- LOCKER TYPE (LKR-4)
  For locker types, ref. 1 / A2.23
  LOCKER QUANTITY
- FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.
- 18 / 36 METAL SHELVING UNIT. Depth/width as shown.

MB	MARKERBOARD. Preceding number is length, in feet.
GMB	GLASS MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
MW	MARKERWALL. Refer to Finish Plans for dimensions.
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
HB	HORIZONTAL BLINDS; EXCLUDE ALL TRANSOMS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F01	4" WIDE INLAID SOCCER STRIPING (YELLOW)
F02	MOTORIZED DROP DOWN NETTING
F03	BASEBALL INFIELD STRIPING (BLACK)
F04	CATWALK ABOVE
F05	INLAID YARDAGE BLOCK NUMBERS, (WHITE) TYP.
F06	7' TALL WALL PADS AT ALL EXPOSED WALLS, TYP.
F07	PREFABRICATED WALKWAY COVER ABOVE
F08	SYNTHETIC TURF
F09	INBOUND LINES INLAID (WHITE) TYP.
F10	INLAID YARDLINE MARKERS, (WHITE) TYP.
F11	TIME CLOCK; SYNC WITH ALL TIMERS, COORDINATE MOUNTING HEIGHT WITH OWNER

KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

MONIKA C. CASTILLO — 26558 — REGISTERED ARCHITECT — STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

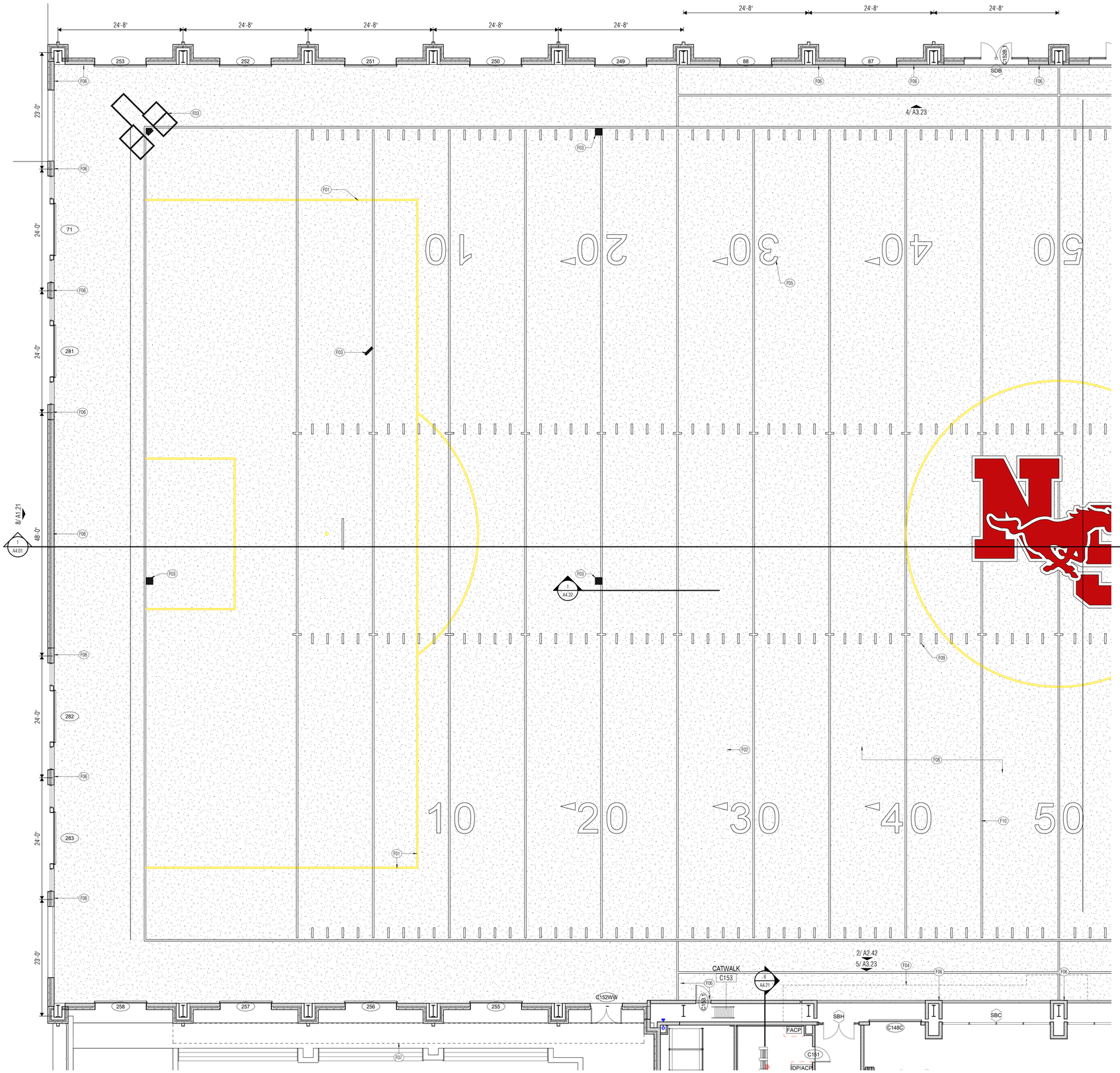
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
FLOOR PLAN - LEVEL ONE - UNIT C

SHEET NO.
A2.11C

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



TRUE NORTH

1 FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE
SCALE: 1/8" = 1'-0"

FLOOR PLAN NOTES

1. Primary Ground Level floor elevation is 33.50' (Mean Sea Level), which equals to 100'-0" datum.
2. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
3. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
4. Exterior wall construction is identified on the Wall Sections. Refer to the A4 series sheets for Wall Sections, and to Sheet A4.11 for Exterior Wall Assemblies.
5. Refer to Exterior Elevation Notes for control joint requirements at all inside corners of masonry veneer.
6. Refer to Sheet A2.21 for Partition Types.
7. Interior partitions are Type "P6" unless noted otherwise.
8. Refer to Detail 4 / A0.21 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
9. Refer to Sheet 10 / A2.22 for Typical Gypsum Board Control Joint Details at all CFS and light-gage steel stud partition openings.
10. Refer to Sheet A2.22 for Typical Partition Penetration Details, including pipe, conduit and ductwork penetrations.
11. Refer to Sheet A2.22 for Typical Bracing at Non-Loadbearing CMU Partitions.
12. Refer to Exterior Elevations for exact locations of downspouts.
13. Provide factory bullnose units at all interior exposed vertical edges of CMU, except at starter course with applied base material where square-edge units shall be provided in lieu of bullnose units.
14. Provide 8" starter courses at all CMU walls and partitions unless noted otherwise.
15. Provide steel or masonry lintels over all openings in CMU walls, including those required for mechanical ductwork and dampers, whether specifically indicated on the drawings or not.
16. Provide minimum 20 gage (33 mils) light-gage steel studs at all interior partitions scheduled to receive ceramic tile, plaster, abuse-resistant gyp board or impact-resistant gyp board.
17. Provide minimum 18 (43 mils) gage cold-formed steel studs at all interior partitions scheduled to receive anchored masonry or stone veneer as well as interior partitions with steel plate or steel sheet X-bracing.
18. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
19. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
20. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet 12 / A2.22for typical blocking requirements at various conditions.
21. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
22. Provide sealant and/or fire safing at all floor penetrations, as applicable.

FLOOR PLAN LEGEND

- METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- 1 A4.01 / LK4-4 — LOCKER TYPE; For locker types, ref. 1 / A2.23; LOCKER QUANTITY
- FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.
- 18 / 36 — METAL SHELVING UNIT. Depth/width as shown.

MB	MARKERBOARD. Preceding number is length, in feet.
GMB	GLASS MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
MW	MARKERWALL. Refer to Finish Plans for dimensions.
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
HB	HORIZONTAL BLINDS; EXCLUDE ALL TRANSOMS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F01	4" WIDE INLAID SOCCER STRIPING (YELLOW)
F02	MOTORIZED DROP DOWN NETTING
F03	BASEBALL INFIELD STRIPING (BLACK)
F04	CATWALK ABOVE
F05	INLAID YARDAGE BLOCK NUMBERS, (WHITE) TYP.
F06	7' TALL WALL PADS AT ALL EXPOSED WALLS, TYP.
F07	PREFABRICATED WALKWAY COVER ABOVE
F08	SYNTHETIC TURF
F09	INBOUND LINES INLAID (WHITE) TYP.
F10	INLAID YARDLINE MARKERS, (WHITE) TYP.

KEY PLAN
C D B A

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

MONIKA C. CASTILLO — REGISTERED ARCHITECT — 26558 — STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

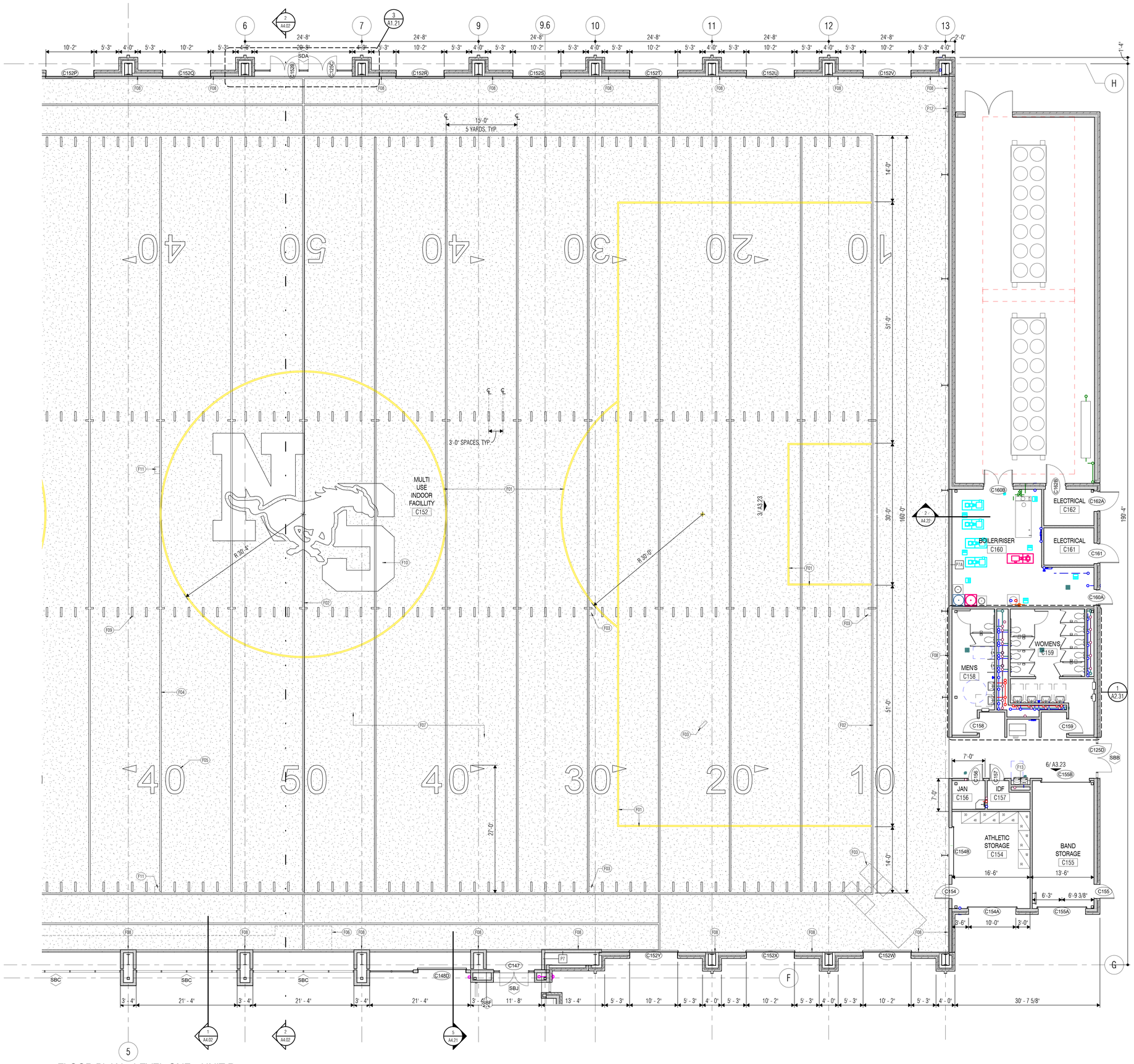
PROJECT NO.
25-0056.00

SHEET TITLE
FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE BID

SHEET NO.
A2.11C.1

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



FLOOR PLAN NOTES

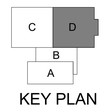
1. Primary Ground Level floor elevation is 33.50' (Mean Sea Level), which equals to 100'-0" datum.
2. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
3. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
4. Exterior wall construction is identified on the Wall Sections. Refer to the A4 series sheets for Wall Sections, and to Sheet A4.11 for Exterior Wall Assemblies.
5. Refer to Exterior Elevation Notes for control joint requirements at all inside corners of masonry veneer.
6. Refer to Sheet A2.21 for Partition Types.
7. Interior partitions are Type "P6" unless noted otherwise.
8. Refer to Detail 4 / A0.21 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
9. Refer to Sheet 10 / A2.22 for Typical Gypsum Board Control Joint Details at all CFS and light-gage steel stud partition openings.
10. Refer to Sheet A2.22 for Typical Partition Penetration Details, including pipe, conduit and ductwork penetrations.
11. Refer to Sheet A2.22 for Typical Bracing at Non-Loadbearing CMU Partitions.
12. Refer to Exterior Elevations for exact locations of downspouts.
13. Provide factory bullnose units at all interior exposed vertical edges of CMU, except at starter course with applied base material where square-edge units shall be provided in lieu of bullnose units.
14. Provide 8" starter courses at all CMU walls and partitions unless noted otherwise.
15. Provide steel or masonry lintels over all openings in CMU walls, including those required for mechanical ductwork and dampers, whether specifically indicated on the drawings or not.
16. Provide minimum 20 gage (33 mils) light-gage steel studs at all interior partitions scheduled to receive ceramic tile, plaster, abuse-resistant gyp board or impact-resistant gyp board.
17. Provide minimum 18 (43 mils) gage cold-formed steel studs at all interior partitions scheduled to receive anchored masonry or stone veneer as well as interior partitions with steel plate or steel sheet X-bracing.
18. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
19. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
20. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet 12 / A2.22for typical blocking requirements at various conditions.
21. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
22. Provide sealant and/or fire safing at all floor penetrations, as applicable.

FLOOR PLAN LEGEND

	METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
	CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
LX4-4	LOCKER TYPE For locker types, ref. 1 / A2.23 LOCKER QUANTITY
	FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.
18 36	METAL SHELVING UNIT. Depth/width as shown.
MB	MARKERBOARD. Preceding number is length, in feet.
GMB	GLASS MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
MW	MARKERWALL. Refer to Finish Plans for dimensions.
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
HB	HORIZONTAL BLINDS; EXCLUDE ALL TRANSOMS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F01	4" WIDE INLAID SOCCER STRIPING (YELLOW)
F02	MOTORIZED DROP DOWN NETTING
F03	SOFTBALL INFIELD STRIPING (BLACK)
F04	INLAID YARDLINE MARKERS, (WHITE) TYP.
F05	INLAID YARDAGE BLOCK NUMBERS, (WHITE) TYP.
F06	CATWALK ABOVE
F07	SYNTHETIC TURF
F08	7' TALL WALL PADS AT ALL EXPOSED WALLS, TYP.
F09	INBOUND LINES INLAID (WHITE) TYP.
F10	INLAID CUSTOM LOGO
F11	BASEBALL INFIELD STRIPING (BLACK)
F12	TIME CLOCK; SYNC WITH ALL TIMERS, COORDINATE MOUNTING HEIGHT WITH OWNER
F13	ICE MAKER, TYPE?



KEY PLAN

N

TRUE NORTH

1 FLOOR PLAN - LEVEL ONE - UNIT D

SCALE: 1/8" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT — MONIKA C. CASTILLO — 26668 — STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

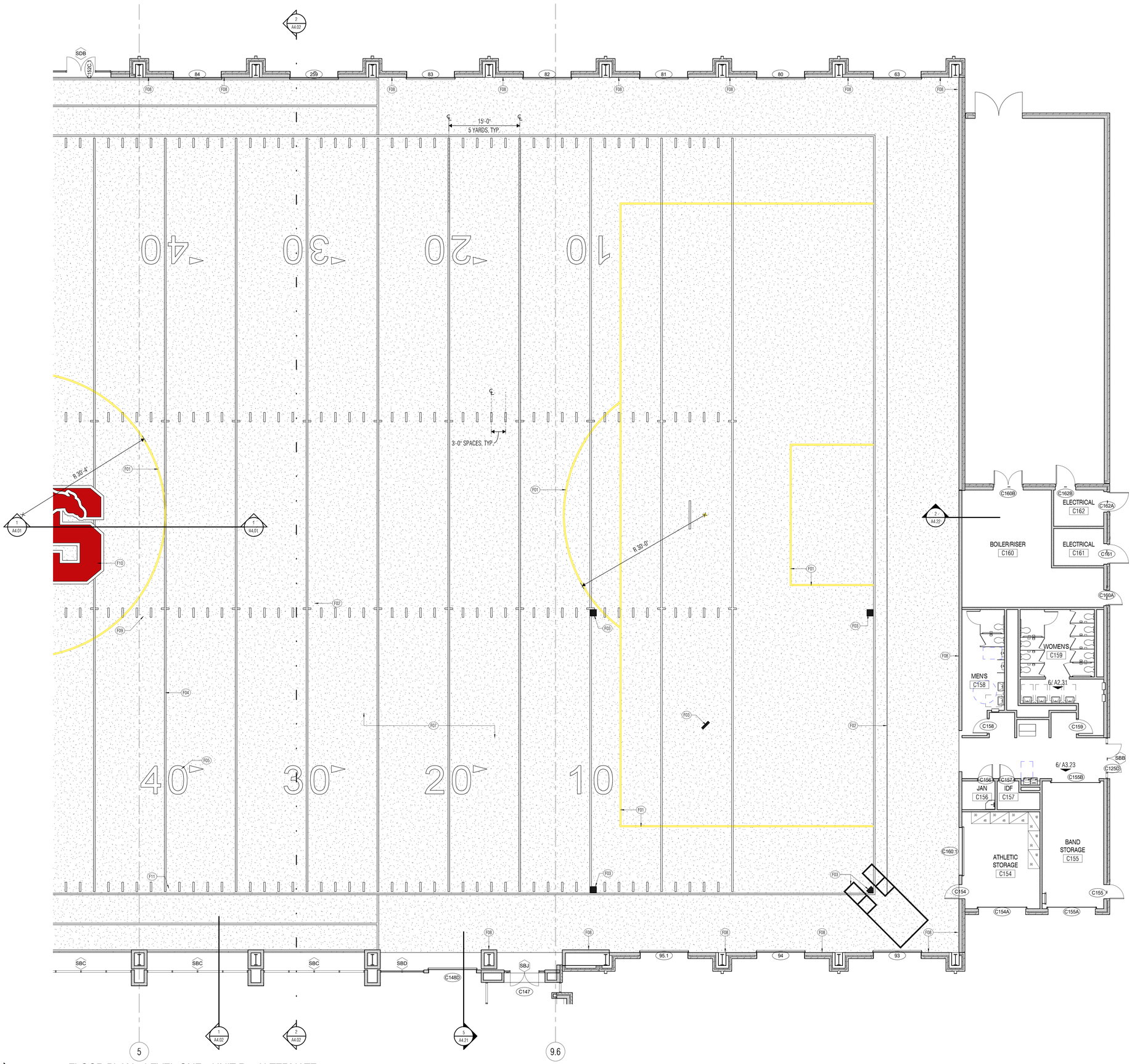
SHEET TITLE

FLOOR PLAN - LEVEL ONE - UNIT D

SHEET NO.

A2.11D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 FLOOR PLAN - LEVEL ONE - UNIT D - ALTERNATE
SCALE: 1/8" = 1'-0"

TRUE NORTH

FLOOR PLAN NOTES

1. Primary Ground Level floor elevation is 33.50' (Mean Sea Level), which equals to 100'-0" datum.
2. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
3. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
4. Exterior wall construction is identified on the Wall Sections. Refer to the A4 series sheets for Wall Sections, and to Sheet A4.11 for Exterior Wall Assemblies.
5. Refer to Exterior Elevation Notes for control joint requirements at all inside corners of masonry veneer.
6. Refer to Sheet A2.21 for Partition Types.
7. Interior partitions are Type "P6" unless noted otherwise.
8. Refer to Detail 4 / A0.21 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
9. Refer to Sheet 10 / A2.22 for Typical Gypsum Board Control Joint Details at all CFS and light-gage steel stud partition openings.
10. Refer to Sheet A2.22 for Typical Partition Penetration Details, including pipe, conduit and ductwork penetrations.
11. Refer to Sheet A2.22 for Typical Bracing at Non-Loadbearing CMU Partitions.
12. Refer to Exterior Elevations for exact locations of downspouts.
13. Provide factory bullnose units at all interior exposed vertical edges of CMU, except at starter course with applied base material where square-edge units shall be provided in lieu of bullnose units.
14. Provide 8" starter courses at all CMU walls and partitions unless noted otherwise.
15. Provide steel or masonry lintels over all openings in CMU walls, including those required for mechanical ductwork and dampers, whether specifically indicated on the drawings or not.
16. Provide minimum 20 gage (33 mils) light-gage steel studs at all interior partitions scheduled to receive ceramic tile, plaster, abuse-resistant gyp board or impact-resistant gyp board.
17. Provide minimum 18 (43 mils) gage cold-formed steel studs at all interior partitions scheduled to receive anchored masonry or stone veneer as well as interior partitions with steel plate or steel sheet X-bracing.
18. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
19. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
20. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet 12 / A2.22for typical blocking requirements at various conditions.
21. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
22. Provide sealant and/or fire safing at all floor penetrations, as applicable.

FLOOR PLAN LEGEND

- METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- LOCKER TYPE (LKA-4)
  - For locker types, ref. 1 / A2.23
  - LOCKER QUANTITY
- FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.
- 18 / 36 METAL SHELVING UNIT. Depth/width as shown.

MB	MARKERBOARD. Preceding number is length, in feet.
GMB	GLASS MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
MW	MARKERWALL. Refer to Finish Plans for dimensions.
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
HB	HORIZONTAL BLINDS; EXCLUDE ALL TRANSOMS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F01	4" WIDE INLAID SOCCER STRIPING (YELLOW)
F02	MOTORIZED DROP DOWN NETTING
F03	SOFTBALL INFIELD STRIPING (BLACK)
F04	INLAID YARDLINE MARKERS, (WHITE) TYP.
F05	INLAID YARDAGE BLOCK NUMBERS, (WHITE) TYP.
F07	SYNTHETIC TURF
F08	7' TALL WALL PADS AT ALL EXPOSED WALLS, TYP.
F09	INBOUND LINES INLAID (WHITE) TYP.
F10	INLAID CUSTOM LOGO
F11	BASEBALL INFIELD STRIPING (BLACK)

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

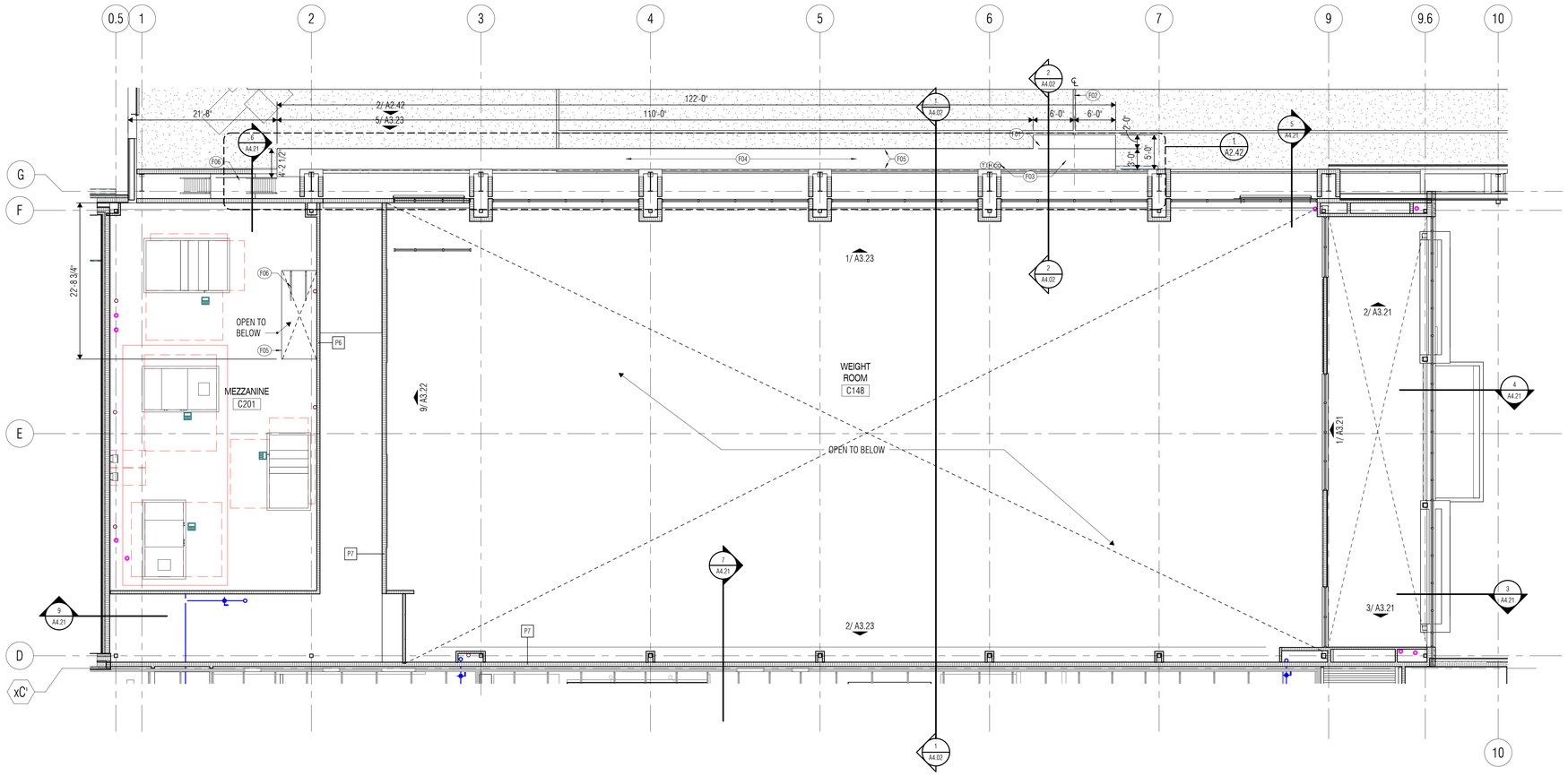
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
FLOOR PLAN - LEVEL ONE - UNIT D - ALTERNATE BID

SHEET NO.
A2.11D.1

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



TRUE NORTH

1 FLOOR PLAN - LEVEL TWO - UNIT B

SCALE: 1/8" = 1'-0"

FLOOR PLAN NOTES

1. Primary Ground Level floor elevation is 33.50' (Mean Sea Level), which equals to 100'-0" datum.
2. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
3. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
4. Exterior wall construction is identified on the Wall Sections. Refer to the A4 series sheets for Wall Sections, and to Sheet A4.11 for Exterior Wall Assemblies.
5. Refer to Exterior Elevation Notes for control joint requirements at all inside corners of masonry veneer.
6. Refer to Sheet A2.21 for Partition Types.
7. Interior partitions are Type "P6" unless noted otherwise.
8. Refer to Detail 4 / A0.21 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
9. Refer to Sheet 10 / A2.22 for Typical Gypsum Board Control Joint Details at all CFS and light-gage steel stud partition openings.
10. Refer to Sheet A2.22 for Typical Partition Penetration Details, including pipe, conduit and ductwork penetrations.
11. Refer to Sheet A2.22 for Typical Bracing at Non-Loadbearing CMU Partitions.
12. Refer to Exterior Elevations for exact locations of downspouts.
13. Provide factory bullnose units at all interior exposed vertical edges of CMU, except at starter course with applied base material where square-edge units shall be provided in lieu of bullnose units.
14. Provide 8" starter courses at all CMU walls and partitions unless noted otherwise.
15. Provide steel or masonry lintels over all openings in CMU walls, including those required for mechanical ductwork and dampers, whether specifically indicated on the drawings or not.
16. Provide minimum 20 gage (33 mils) light-gage steel studs at all interior partitions scheduled to receive ceramic tile, plaster, abuse-resistant gyp board or impact-resistant gyp board.
17. Provide minimum 18 (43 mils) gage cold-formed steel studs at all interior partitions scheduled to receive anchored masonry or stone veneer as well as interior partitions with steel plate or steel sheet X-bracing.
18. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
19. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
20. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet 12 / A2.22for typical blocking requirements at various conditions.
21. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
22. Provide sealant and/or fire safing at all floor penetrations, as applicable.

FLOOR PLAN LEGEND

METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.

CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.

LOCKER TYPE
For locker types, ref. 1 / A2.23
LOCKER QUANTITY

FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.

METAL SHELVING UNIT. Depth/width as shown.

MB	MARKERBOARD. Preceding number is length, in feet.
GMB	GLASS MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
MW	MARKERWALL. Refer to Finish Plans for dimensions.
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
HB	HORIZONTAL BLINDS; EXCLUDE ALL TRANSOMS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F01	OBSERVATION DECK
F02	ALIGN CENTER OF OBESERVATION DECK TO 50 YARD LINE
F03	1/4" STEEL PLATE WELDED TO FRAME, REF. STRUCTURAL
F04	CATWALK
F05	36" HIGH RAIL; 1 1-/" STEEL PIPE GUARDRAIL
F06	SHIPS LADDER

KEY PLAN

C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

MONIKA C. CASTILLO 26558 REGISTERED ARCHITECT STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

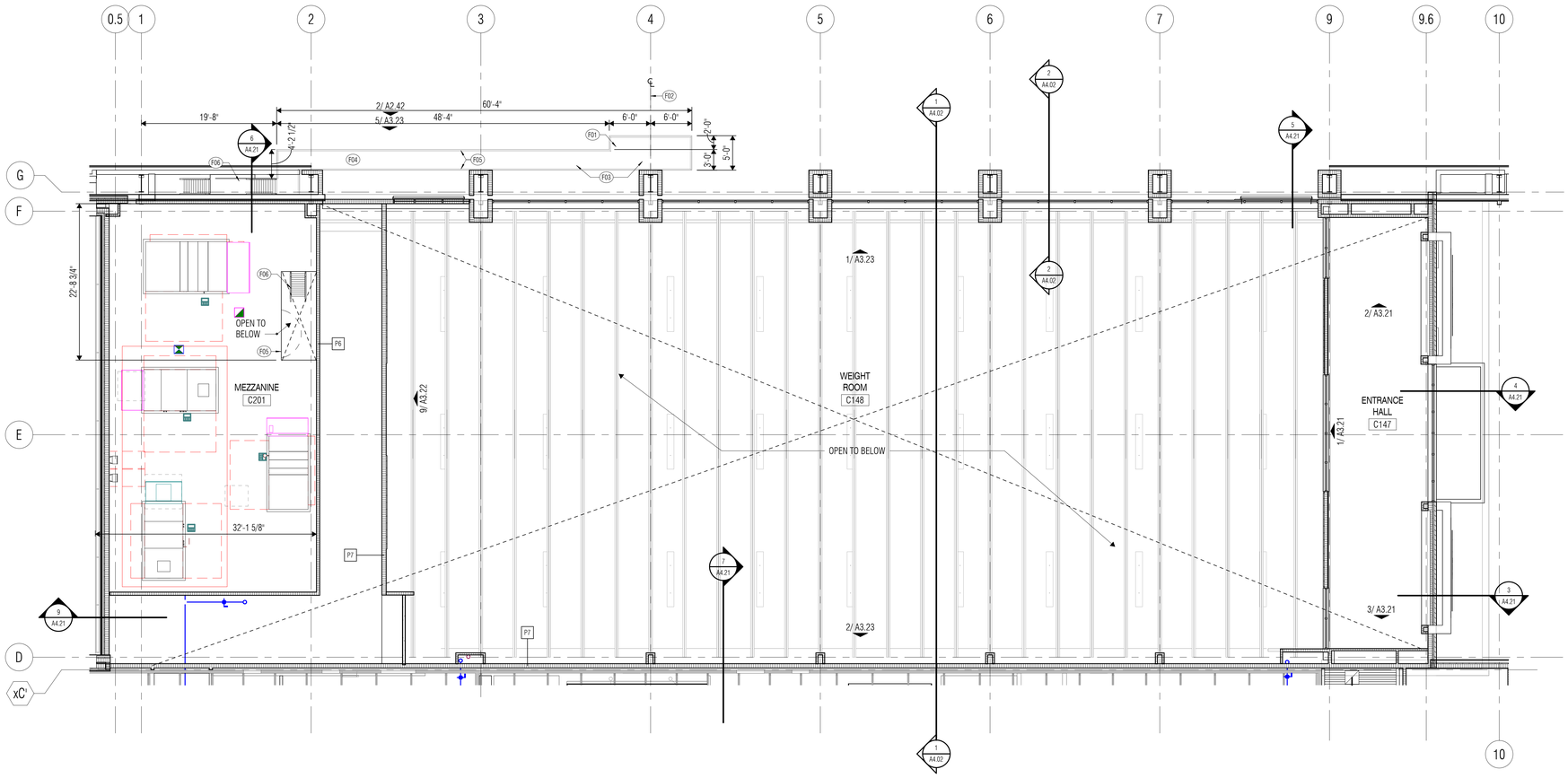
FLOOR PLAN - LEVEL TWO - UNIT B

SHEET NO.

A2.12B

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 FLOOR PLAN - LEVEL TWO - UNIT B - ALTERNATE

SCALE: 1/8" = 1'-0"

TRUE NORTH

FLOOR PLAN NOTES

1. Primary Ground Level floor elevation is 33.50' (Mean Sea Level), which equals to 100'-0" datum.
2. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
3. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
4. Exterior wall construction is identified on the Wall Sections. Refer to the A4 series sheets for Wall Sections, and to Sheet A4.11 for Exterior Wall Assemblies.
5. Refer to Exterior Elevation Notes for control joint requirements at all inside corners of masonry veneer.
6. Refer to Sheet A2.21 for Partition Types.
7. Interior partitions are Type "P6" unless noted otherwise.
8. Refer to Detail 4 / A0.21 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
9. Refer to Sheet 10 / A2.22 for Typical Gypsum Board Control Joint Details at all CFS and light-gage steel stud partition openings.
10. Refer to Sheet A2.22 for Typical Partition Penetration Details, including pipe, conduit and ductwork penetrations.
11. Refer to Sheet A2.22 for Typical Bracing at Non-Loadbearing CMU Partitions.
12. Refer to Exterior Elevations for exact locations of downspouts.
13. Provide factory bullnose units at all interior exposed vertical edges of CMU, except at starter course with applied base material where square-edge units shall be provided in lieu of bullnose units.
14. Provide 8" starter courses at all CMU walls and partitions unless noted otherwise.
15. Provide steel or masonry lintels over all openings in CMU walls, including those required for mechanical ductwork and dampers, whether specifically indicated on the drawings or not.
16. Provide minimum 20 gage (33 mils) light-gage steel studs at all interior partitions scheduled to receive ceramic tile, plaster, abuse-resistant gyp board or impact-resistant gyp board.
17. Provide minimum 18 (43 mils) gage cold-formed steel studs at all interior partitions scheduled to receive anchored masonry or stone veneer as well as interior partitions with steel plate or steel sheet X-bracing.
18. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
19. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
20. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet 12 / A2.22for typical blocking requirements at various conditions.
21. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
22. Provide sealant and/or fire safing at all floor penetrations, as applicable.

FLOOR PLAN LEGEND

- METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Life Safety and Floor Plan sheets for fire, smoke and sound-conditioned partitions that extend to deck above.
- (1X3.4) LOCKER TYPE — For locker types, ref. 1 / A2.23 — LOCKER QUANTITY
- FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.
- 18 / 36 METAL SHELVING UNIT. Depth/width as shown.

MB	MARKERBOARD. Preceding number is length, in feet.
GMB	GLASS MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
MW	MARKERWALL. Refer to Finish Plans for dimensions.
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
HB	HORIZONTAL BLINDS; EXCLUDE ALL TRANSOMS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F01	OBSERVATION DECK
F02	ALIGN CENTER OF OBESERVATION DECK TO 50 YARD LINE
F03	1/4" STEEL PLATE WELDED TO FRAME, REF. STRUCTURAL
F04	CATWALK
F05	36" HIGH RAIL; 1 1-/" STEEL PIPE GUARDRAIL
F06	SHIPS LADDER

KEY PLAN

C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT — MONIKA C. CASTILLO — 26668 — STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

FLOOR PLAN - LEVEL TWO - UNIT B - ALTERNATE

SHEET NO.

A2.12B.1

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

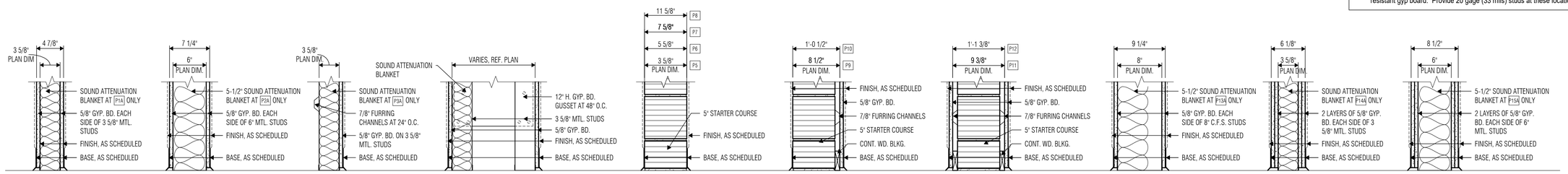
PARTITION NOTES

1. Refer to Floor Plan Notes for additional metal stud requirements at Ceramic Tile, Plaster, Anchored Masonry or Stone Veneer, and Adhered Masonry or Stone Veneer.
2. Refer to Floor Plan Notes for CMU starter course requirements.
3. Refer to Sheet A2.22 for typical partition details.
4. Refer to Life Safety sheets for location of fire rated partitions.
5. Refer to Reflected Ceiling Plan Sheets for location of non-rated partitions that extend to the structural deck above.
6. Provide firestopping as required to achieve the fire-resistive rating at all penetrations, gaps and other openings through or around rated floors, roofs, walls and partitions.
7. At all rated and acoustical partitions that extend to structural deck above, seal to the floor below and to the structure above. Provide firestopping at rated partitions, and acoustical sealant at acoustical and sound conditioned other partitions.
8. At all partitions that extend to structural deck above, provide gypsum board enclosure around beams, joists, ducts, etc. as required to maintain fire-resistive ratings and acoustical requirements.
9. Typical CMU notes, unless otherwise noted on structural drawings:
   A. Provide steel bracing as shown on Sheet A2.2__ .
   B. Provide continuous bond beam with (2) #4 reinforcing bars at top course of all 6" and 8" CMU partitions, whether indicated on details or not.
10. 4" CMU shall not be used for interior partitions, except at chase walls where specifically indicated.
11. All non-rated partitions shall extend to 4" above ceiling, unless noted otherwise, refer to RCP Sheets. Brace partitions per Floor Plan Notes.

STUD PARTITION SIZING SCHEDULE

STUD DEPTH	STUD SPACING	STUD GAGE	EQ STUD	MAX LENGTH	MAX LENGTH (at Tile/Plaster)
2-1/2"	16" O.C	25 (18 mils)	25EQ	12'-0"	N/A
2-1/2"	16" O.C	20 (30 mils)	20EQ	12'-6"	N/A
2-1/2"	16" O.C	20 (33 mils)	N/A	13'-6"	N/A
3-5/8"	16" O.C	25 (18 mils)	25EQ	15'-6"	N/A
3-5/8"	16" O.C	20 (30 mils)	20EQ	16'-0"	N/A
3-5/8"	16" O.C	20 (33 mils)	N/A	17'-0"	14'-6" (2)
6"	16" O.C	25 (18 mils)	25EQ	21'-6"	N/A
6"	16" O.C	20 (30 mils)	20EQ	22'-6"	N/A
6"	16" O.C	20 (33 mils)	N/A	25'-0"	21'-6" (2)

NOTES:
1. All doors shall have a minimum of 20 gage (30 mils) framing where required by specifications.
2. See Floor Plan Notes and Partition Notes for additional metal stud requirements at ceramic tile, plaster, anchored masonry/stone veneer, or adhered masonry/stone veneer.
3. Max. Lengths assume both sides of studs braced full-height of partition.
4. Max. Lengths are unbraces lengths based on 5 psf lateral loading and L/240 deflection (L/360 at tile/plaster).
5. Equivalent (EQ) studs are not allowable at abuse-resistant or impact-resistant gyp board. Provide 20 gage (33 mils) studs at these locations.



P1 P1A U.L. DESIGN #U423 or #U425 - ONE HOUR RATED WHERE INDICATED ON DRAWINGS

P2 P2A U.L. DESIGN #U423 or #U425 - ONE HOUR RATED WHERE INDICATED ON DRAWINGS

P3 P3A

P4

P5 4" CMU
P6 6" CMU
P6S 6" CMU - GROUT FILLED
P6A 6" CMU - U.L. #U906 - Up to 2 HR
P7 8" CMU
P7S 8" CMU - GROUT FILLED
P7A 8" CMU - U.L. #U907 - Up to 4 HR (Nonbearing)
P7B 8" CMU - U.L. #U901 - Up to 4 HR (Bearing)
P8 12" CMU
P8S 12" CMU - GROUT FILLED
P8A 12" CMU - U.L. #U901 - Up to 4 HR

P9 8" CMU
P9S 8" CMU - GROUT FILLED
P9A 8" CMU - U.L. #U907 - Up to 4 HR (Nonbearing)
P9B 8" CMU - U.L. #U901 - Up to 4 HR (Bearing)
P10 12" CMU
P10S 12" CMU - GROUT FILLED
P10A 12" CMU - U.L. #U901 - Up to 4 HR (Bearing)

P11 8" CMU
P11S 8" CMU - GROUT FILLED
P11A 8" CMU - U.L. #U907 - Up to 4 HR (Nonbearing)
P11B 8" CMU - U.L. #U901 - Up to 4 HR (Bearing)
P12 12" CMU
P12S 12" CMU - GROUT FILLED
P12A 12" CMU - U.L. #U901 - Up to 4 HR (Bearing)

P13 P13A

P14 P14A U.L. DESIGN #U423 or #U425 - TWO HOUR RATED WHERE INDICATED ON DRAWINGS

P15 P15A U.L. DESIGN #U423 or #U425 - TWO HOUR RATED WHERE INDICATED ON DRAWINGS

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

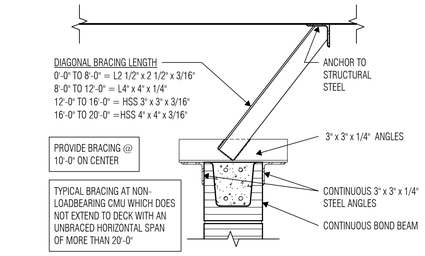
PARTITION TYPES

SHEET NO.

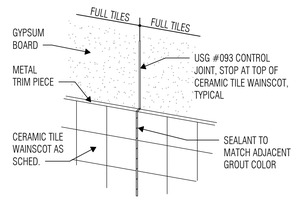
A2.21

North Shore Multi-Use Indoor Facility

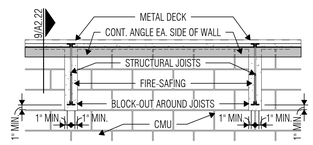
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



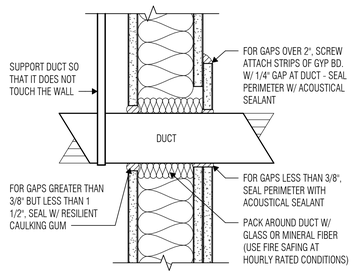
1 DETAIL
SCALE: 1 1/2" = 1'-0"



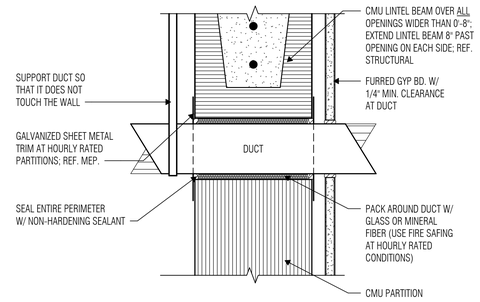
2 DETAIL OF GYP CONTROL JOINT
SCALE: 1 1/2" = 1'-0"



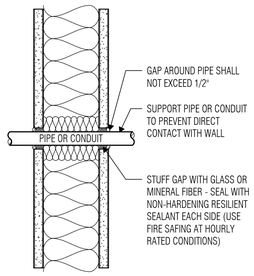
3 DETAIL
SCALE: 1/2" = 1'-0"



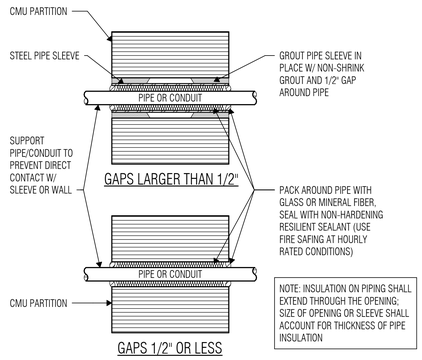
4 PARTITION DETAIL
SCALE: 3" = 1'-0"



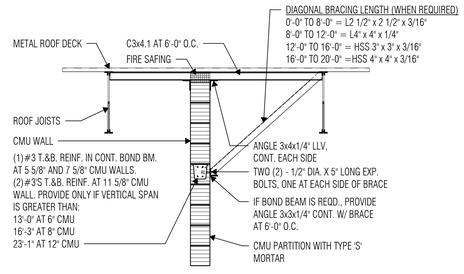
5 PARTITION DETAIL
SCALE: 3" = 1'-0"



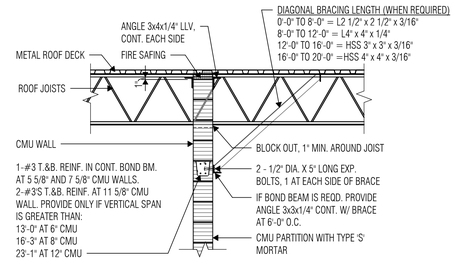
6 PARTITION DETAIL
SCALE: 3" = 1'-0"



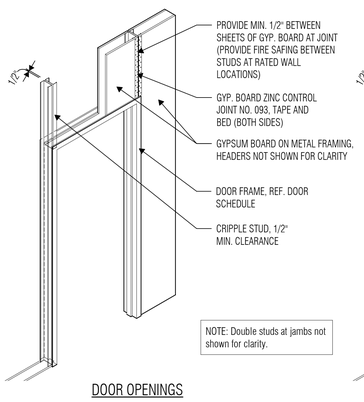
7 PARTITION DETAIL
SCALE: 3" = 1'-0"

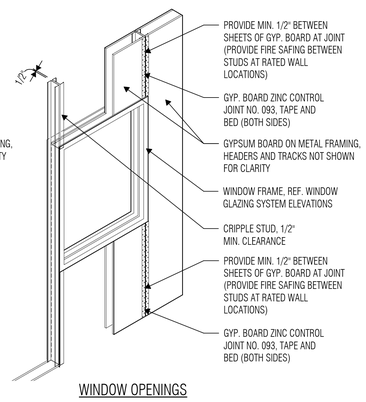


8 DETAIL
SCALE: 1/2" = 1'-0"

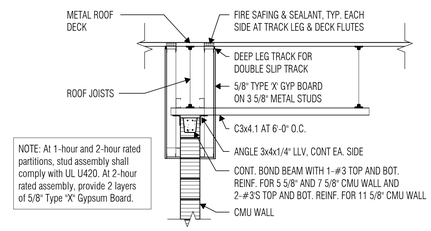


9 DETAIL
SCALE: 1/2" = 1'-0"

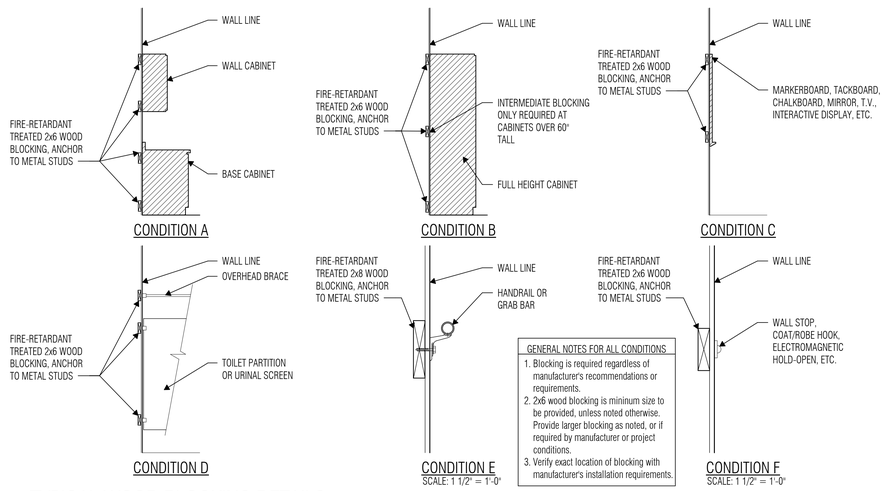




10 TYPICAL CONTROL JOINT DETAIL AT OPENINGS
SCALE: 1/2" = 1'-0"



11 DETAIL
SCALE: 1/2" = 1'-0"



12 TYPICAL WOOD BLOCKING DETAILS
SCALE: 3/8" = 1'-0"

VLK
ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

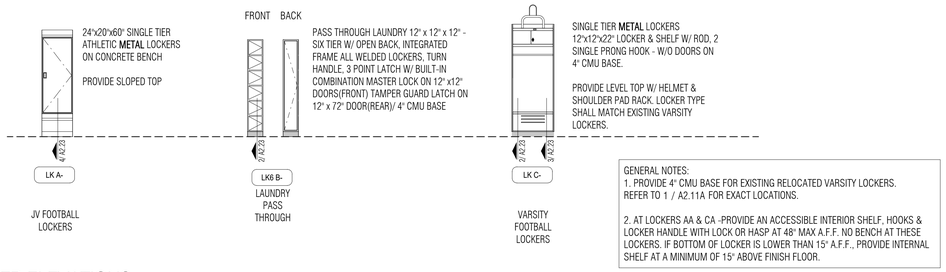
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PARTITION DETAILS

SHEET NO.
A2.22

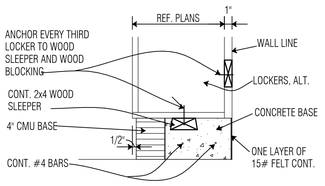
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



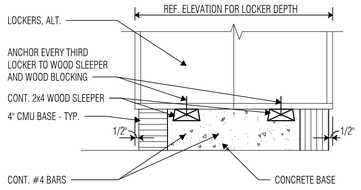
GENERAL NOTES:
1. PROVIDE 4" CMU BASE FOR EXISTING RELOCATED VARSITY LOCKERS. REFER TO 1 / A2.11A FOR EXACT LOCATIONS.

2. AT LOCKERS AA & CA -PROVIDE AN ACCESSIBLE INTERIOR SHELF, HOOKS & LOCKER HANDLE WITH LOCK OR HASP AT 48" MAX A.F.F. NO BENCH AT THESE LOCKERS. IF BOTTOM OF LOCKER IS LOWER THAN 15" A.F.F., PROVIDE INTERNAL SHELF AT A MINIMUM OF 15" ABOVE FINISH FLOOR.

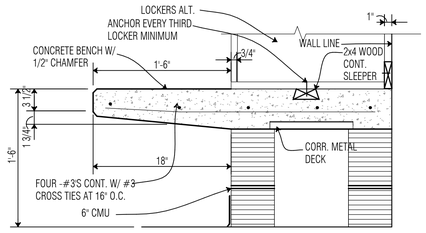
1 LOCKER ELEVATIONS
SCALE: 1/4" = 1'-0"



2 LOCKER BASE DETAIL
SCALE: 1 1/2" = 1'-0"



3 REAR ADJOINING LOCKER BASE DETAIL
SCALE: 1 1/2" = 1'-0"



4 LOCKER BENCH DETAIL
SCALE: 1 1/2" = 1'-0"

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

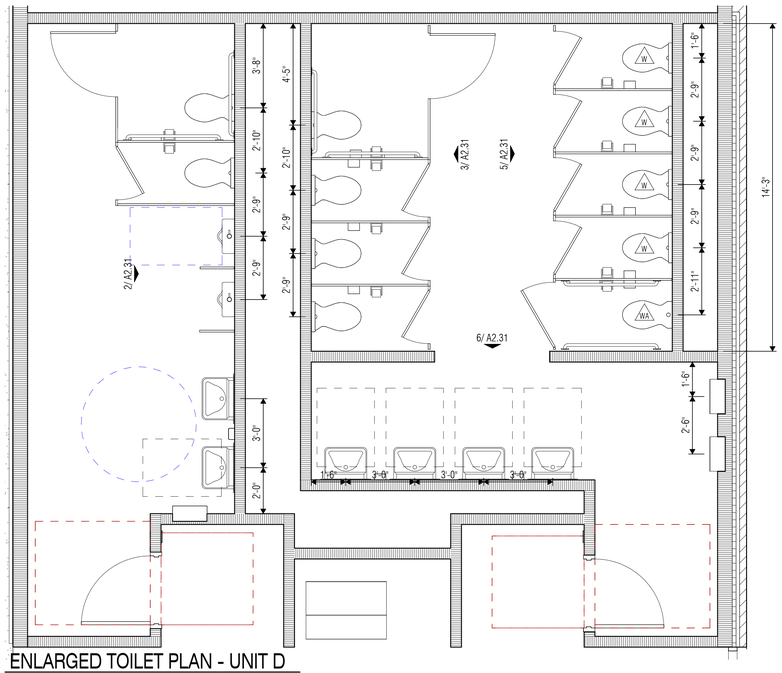
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

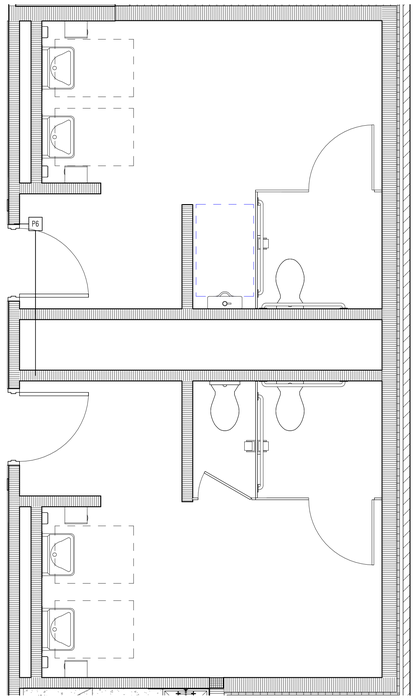
SHEET TITLE
LOCKER DETAILS

SHEET NO.
A2.23

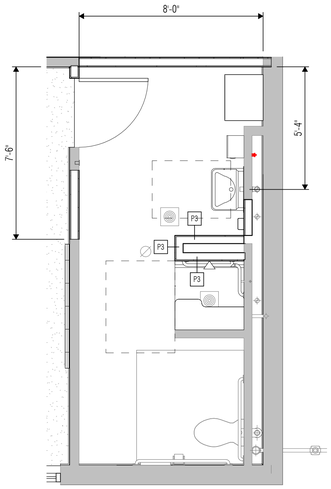
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ENLARGED TOILET PLAN - UNIT D
SCALE: 3/8" = 1'-0"



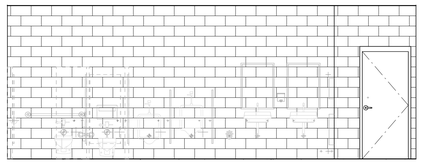
4 ENLARGED TOILET PLAN - UNIT A
SCALE: 3/8" = 1'-0"



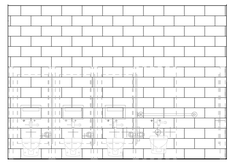
7 HEAD COACH ROOM
SCALE: NTS

ENLARGED FLOOR PLAN NOTES

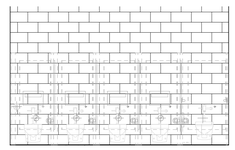
1. Dimensions on Enlarged Floor Plans are to face of wall finish material unless noted otherwise.
2. Dashed lines shown on Enlarged Floor Plans indicate accessibility requirements and are indicated for information only.
3. Install all accessible plumbing fixtures and toilet accessories in accordance with the Texas Accessibility Standards and as indicated on Sheets A0.31, Sheet A2.38, and Sheet A2.39.
4. Install all non-accessible plumbing fixtures and toilet accessories at manufacturers' recommended mounting heights, unless noted otherwise.
5. Refer to Toilet Accessory Legend on Sheet A2.38 for Toilet Accessory information and mounting heights.
6. At accessible toilet compartments, install water closets with the centerline of fixture at 1'-5" off the side wall finish material. At both ambulatory-accessible and non-accessible toilet compartments, install water closets at the centerline of the compartment.
7. Install hand-operated flush controls for wheelchair accessible water closets on the open side of the water closet. Flush control assembly shall not extend above grab bar, and top of flush control assembly shall be held a minimum of 1-1/2" below the grab bar.
8. Provide pipe protection for all exposed piping at both accessible and non-accessible lavatories.
9. Floor drains are indicated for location purposes only. Refer to Plumbing Drawings for floor drain sizes and plumbing information.



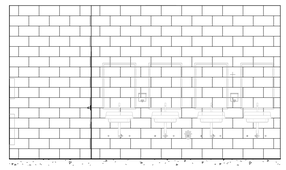
2 MEN'S - UNIT D - EAST
SCALE: 1/4" = 1'-0"



3 WOMEN'S - UNIT D - WEST
SCALE: 1/4" = 1'-0"



5 WOMEN'S - UNIT D - EAST
SCALE: 1/4" = 1'-0"



6 WOMEN'S - UNIT D - SOUTH
SCALE: 1/4" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

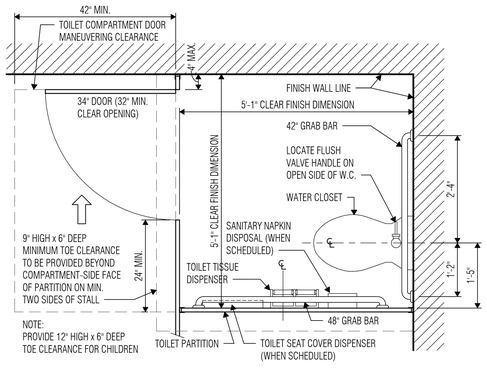
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

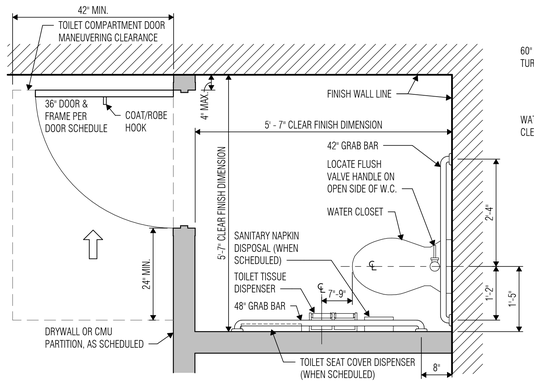
SHEET TITLE
ENLARGED TOILET PLANS AND ELEVATIONS

SHEET NO.
A2.31

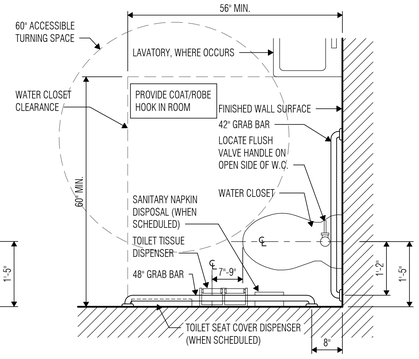
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



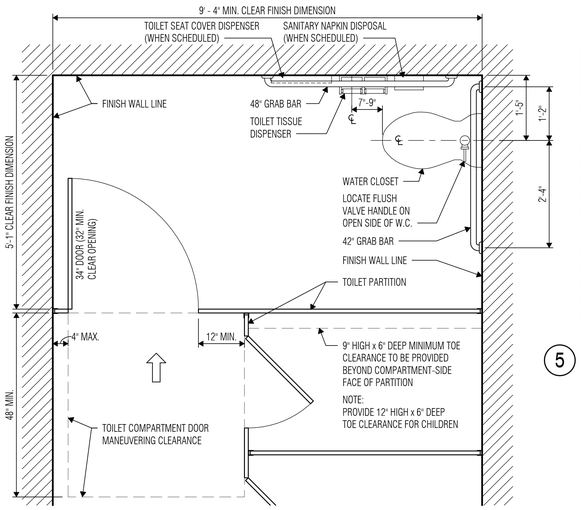
1 ACCESSIBLE TOILET COMPARTMENT
SCALE: 3/4" = 1'-0"



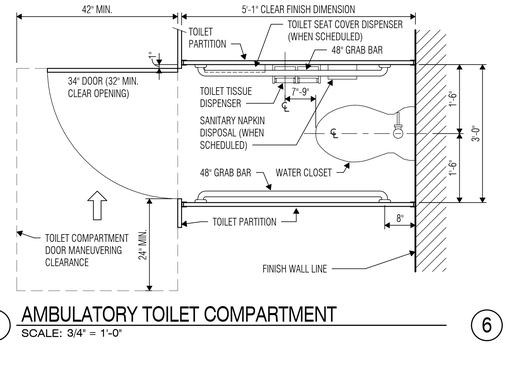
2 ACCESSIBLE TOILET COMPARTMENT (ENCLOSED)
SCALE: 3/4" = 1'-0"



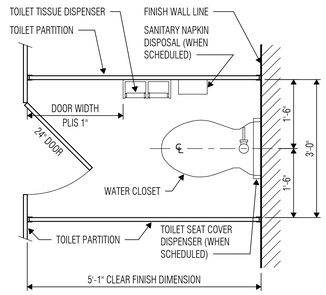
3 ACCESSIBLE TOILET ROOM
SCALE: 3/4" = 1'-0"



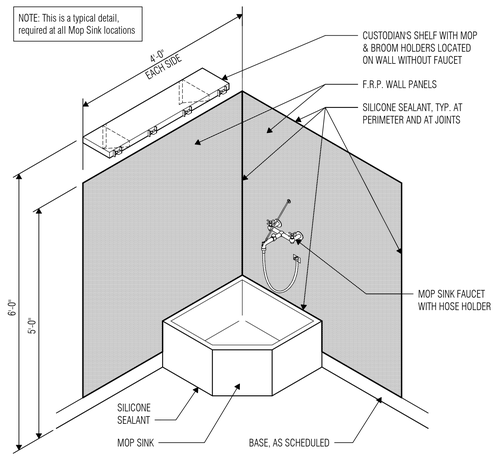
4 ACCESSIBLE TOILET COMPARTMENT (END OF AISLE)
SCALE: 3/4" = 1'-0"



5 AMBULATORY TOILET COMPARTMENT
SCALE: 3/4" = 1'-0"



6 STANDARD TOILET COMPARTMENT
SCALE: 3/4" = 1'-0"



7 CUSTODIAN ROOM WAINSCOT & ACCESSORIES
SCALE: 3/4" = 1'-0"

TOILET ACCESSORY LEGEND

TYPE MARK	FAMILY AND TYPE	MOUNTING HEIGHT	OFCI	OFOI
	<varies>	<varies>		
A	Locker_1 Tier: 24x20x60 with High Base			
AA	Locker_1 Tier: 24x20x60 with High Base ADA			
B	Locker_6 Tier: 12x12x72 with 4" Base			
C5	Mirror - Unframed: Above Counters (Adult) - 24"x36"	39" to Bottom of Reflective Surface	No	No
D1	Paper Towel Dispenser + Waste Receptacle, Semi-Recessed: Standard (Adult Accessible)	47" to Control	No	No
D5	Paper Towel Dispenser, Surface Mounted: Standard (Adult Accessible)	47" to Control	No	No
E2	10 - Paper Towel Roll Dispenser: B-2860	Satin Finish		
LK B	Locker_Six Tier: TYPE H - 12x12x12			
LK C	varsity lockers: TYPE G - 33x22x84 with Bench			
LK CA	varsity lockers: TYPE G - 33x22x84 with Bench ADA			
RH	Roof_Hatch: Roof Hatch			

TOILET ACCESSORY NOTES

1. All items are contractor-furnished and installed unless noted otherwise.
2. Provide blocking in walls for all wall-mounted items, including O.F.C.I. and O.F.O.I. items. Refer to Sheet A2.21
3. All mounting heights are from finished flooring material at centerline of accessory unless noted otherwise.
4. Roll-in Type Showers larger than 30"x60" will require different toilet accessories.
5. Set height of curtain rod so curtain is 1" above threshold.
6. Mounting height of mirrors at Standard Height Lavatories should be installed such that the bottom of mirror aligns with bottom of accessible mirror when possible.
7. Child Accessible Mounting Height shall be 40" when primary users are ages 6 through 8, and 36" when primary users are ages 3 through 4.

PLUMBING FIXTURE LEGEND

TYPE MARK	FAMILY AND TYPE	MOUNTING HEIGHT
	<varies>	<varies>
DS	<varies>	
EC1	Electric Water Cooler, Double Unit: Adult Accessible	36" to Low Spout
MS	<varies>	
OD	Roof_Drain: OD	
RD	Roof_Drain: 15" Strainer - 8" Drain	
UA	22-Toilet_Urinal_2D_Nested: HC-Adult Accessible	
W	22-Toilet_Wall Mounted_2D_Nested: HC-Standard	
WA	22-Toilet_Wall Mounted_2D_Nested: HC-Adult Accessible	

PLUMBING FIXTURE NOTES

NOTES:

1. Note that the architectural marks in this legend may differ from the designations in the MEP Plumbing Legend.
2. Reference MEP Plumbing drawings and legends for additional fixtures.
3. Mounting height at floor-mounted fixture might vary slightly based on actual product selected.
4. Mounting height is based on maximum allowable and cannot be exceeded.
5. The TAS required kneespace of 27" is not provided using this mounting height; ensure spout is located 3-1/2" max. from front edge/bumper as required for parallel approach per the TAS.
6. For standard urinals at child-only facilities, provide 20" to rim.
7. Install all accessible plumbing fixtures and toilet accessories in accordance with the Texas Accessibility Standards, and as indicated on this sheet. Install all non-accessible plumbing fixtures and toilet accessories at manufacturers' recommended mounting heights, unless noted otherwise.
8. At accessible toilet rooms and compartments, install water closets with the centerline of fixture at 1'-5" off the side wall finish material. At both ambulatory-accessible and non-accessible toilet compartments, install water closets at the center of the compartment.
9. Install hand-operated flush controls for wheelchair accessible water closets on the open side of the water closet. Flush control assembly shall not extend above grab bar, and top of flush control assembly shall be held a minimum of 1-1/2" below the grab bar.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT MONIKA C. CASTILLO 26554 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

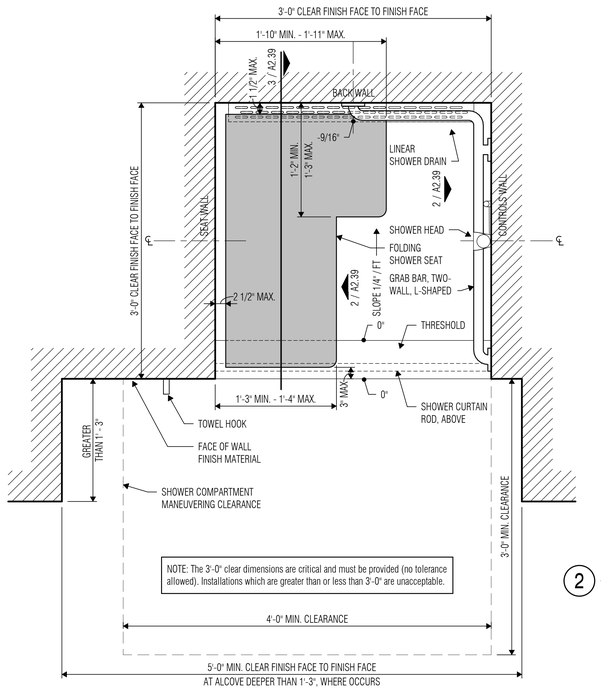
PROJECT NO.
25-0056.00

SHEET TITLE
TYPICAL TOILET ROOM DETAILS, TOILET ACCESSORY LEGEND

SHEET NO.
A2.38

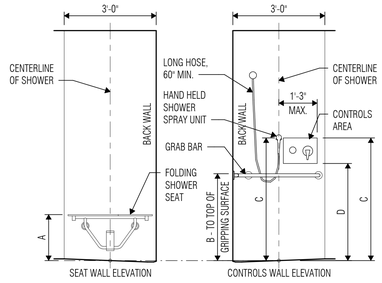
North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

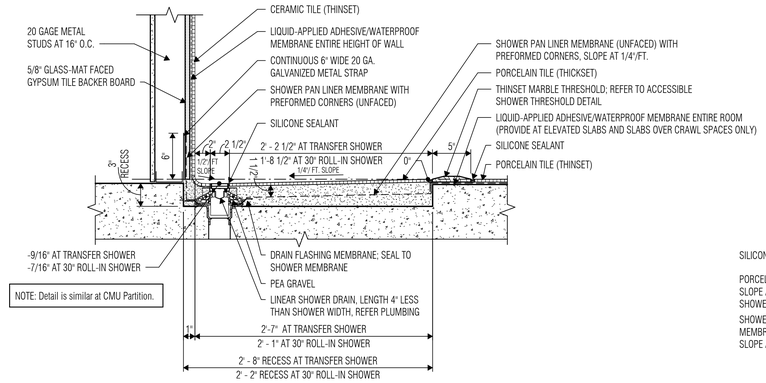


1 ACCESSIBLE SHOWER COMPARTMENT
SCALE: 1 1/2" = 1'-0"

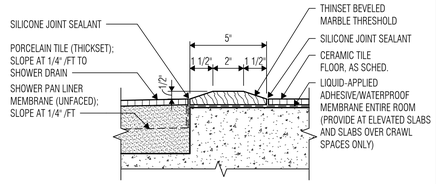
	HEIGHT ABOVE SHOWER FLOOR			
	A	B	C	D
ADULT	18"	34"	48"	38"
CHILD	18"	34"	44"	38"



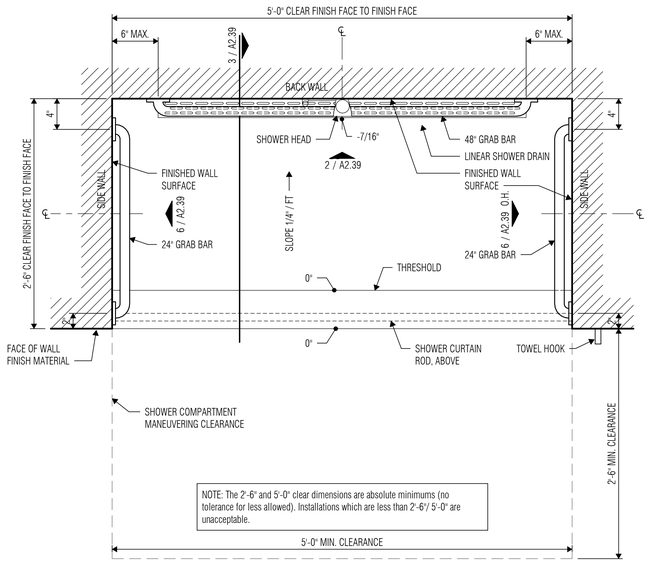
2 ELEV. OF ACCESSIBLE SHOWER COMPARTMENT
SCALE: 1/2" = 1'-0"



3 ACCESSIBLE SHOWER PAN DETAIL
SCALE: 1 1/2" = 1'-0"

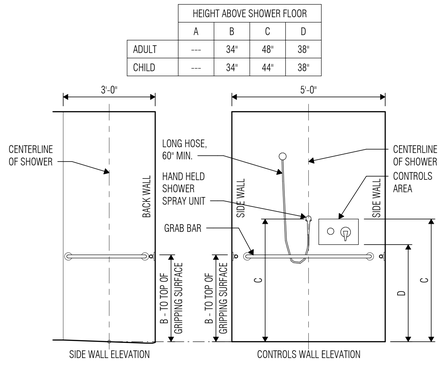


4 ACCESSIBLE SHOWER THRESHOLD
SCALE: 3" = 1'-0"

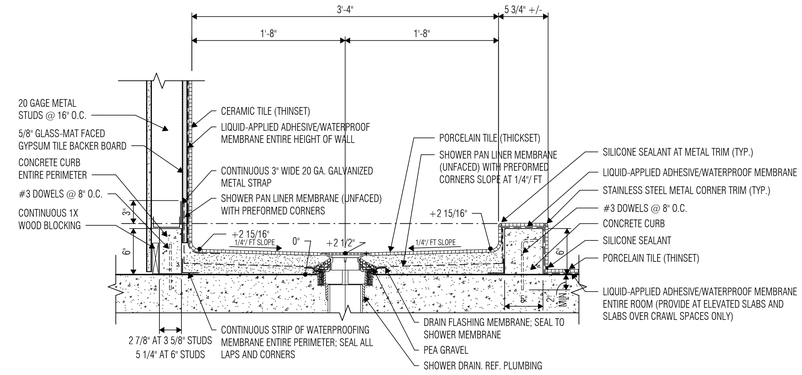


5 ACCESSIBLE SHOWER COMPARTMENT
SCALE: 1 1/2" = 1'-0"

	HEIGHT ABOVE SHOWER FLOOR			
	A	B	C	D
ADULT	---	34"	48"	38"
CHILD	---	34"	44"	38"



6 ELEV. OF ACCESSIBLE SHOWER COMPARTMENT
SCALE: 1/2" = 1'-0"



7 NON-ACCESSIBLE SHOWER PAN & CURB DETAIL
SCALE: 1 1/2" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

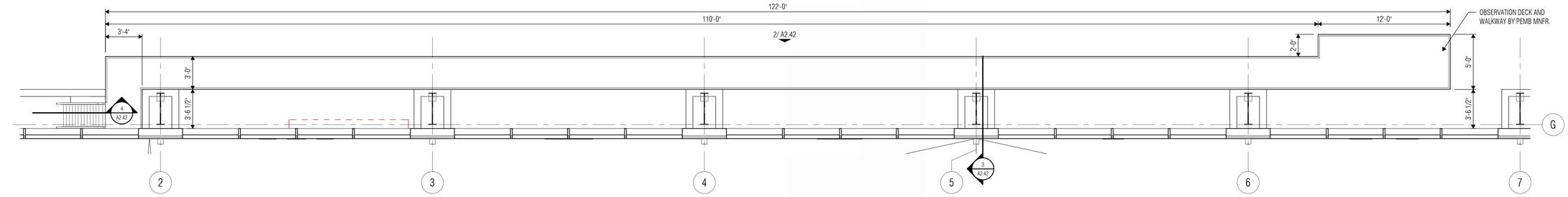
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

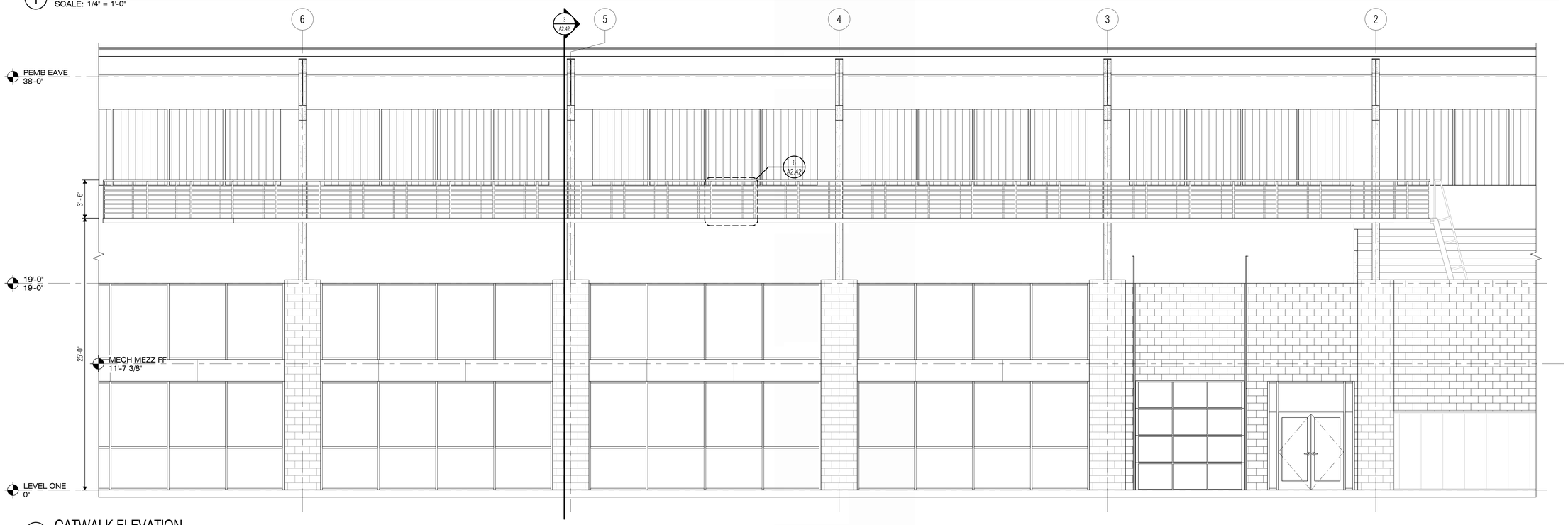
SHEET TITLE
TYPICAL SHOWER DETAILS

SHEET NO.
A2.39

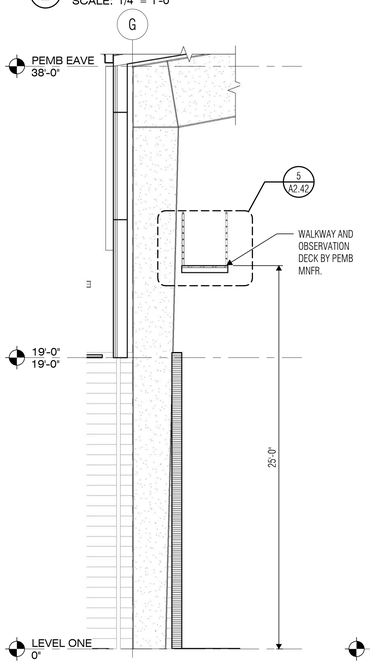
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



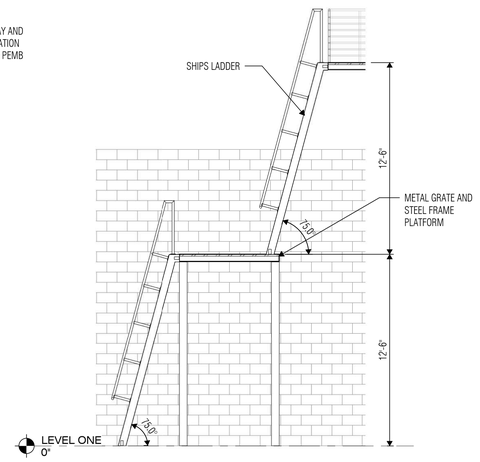
1 CATWALK - PLAN
SCALE: 1/4" = 1'-0"



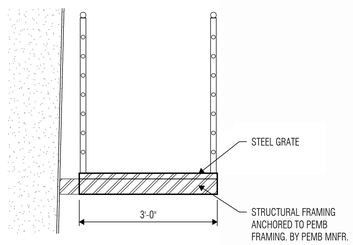
2 CATWALK ELEVATION
SCALE: 1/4" = 1'-0"



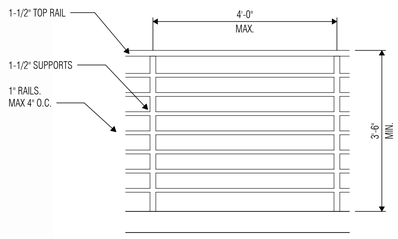
3 CATWALK - SECTION
SCALE: 1/4" = 1'-0"



4 Section 6
SCALE: 1/4" = 1'-0"



5 CATWALK DETAIL
SCALE: 3/4" = 1'-0"



6 CATWALK - RAIL ELEVATION
SCALE: 3/4" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

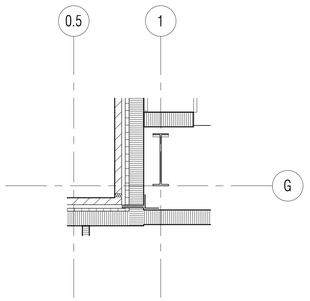
PROJECT NO.
25-0056.00

SHEET TITLE
ENLARGED CATWALK PLANS & SECTIONS

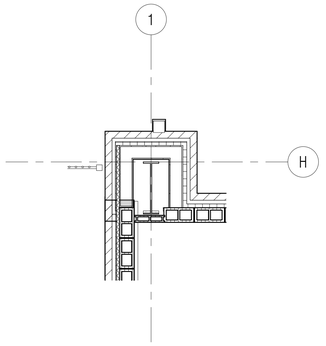
SHEET NO.
A2.42

North Shore Multi-Use Indoor Facility

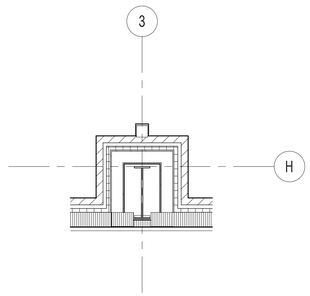
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



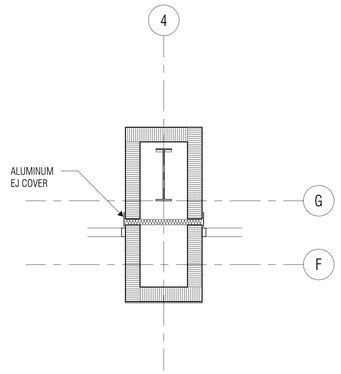
1 PLAN DETAIL
SCALE: 3/8" = 1'-0"



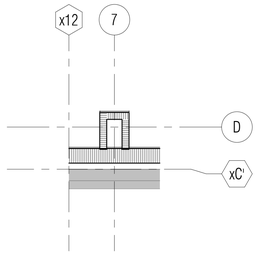
2 PLAN DETAIL
SCALE: 3/8" = 1'-0"



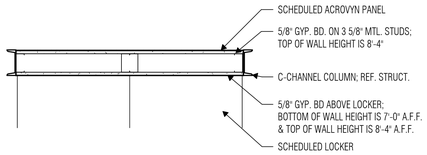
3 PLAN DETAIL
SCALE: 3/8" = 1'-0"



4 PLAN DETAIL
SCALE: 3/8" = 1'-0"



5 PLAN DETAIL
SCALE: 3/8" = 1'-0"



6 ENLARGED PLAN DETAIL @ LOCKER END PANEL
SCALE: 1" = 1'-0"

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26598
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

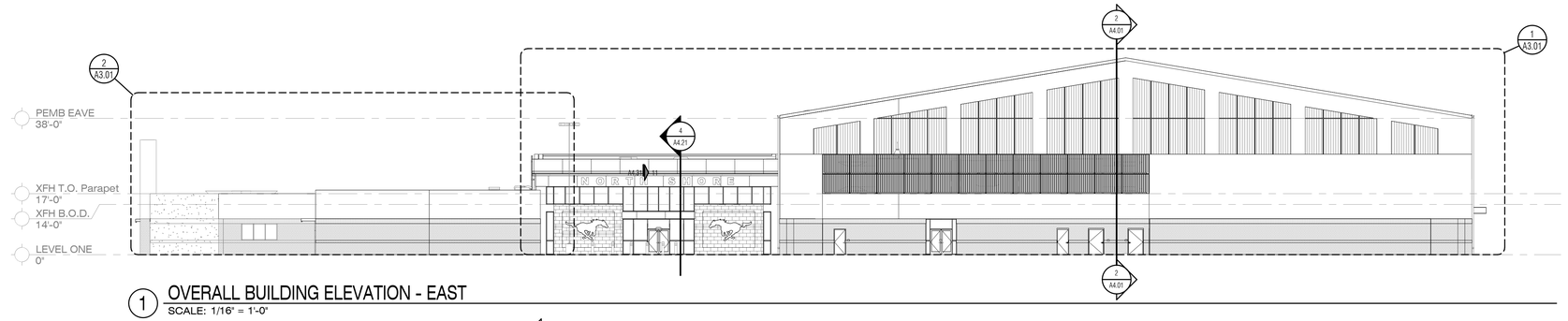
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

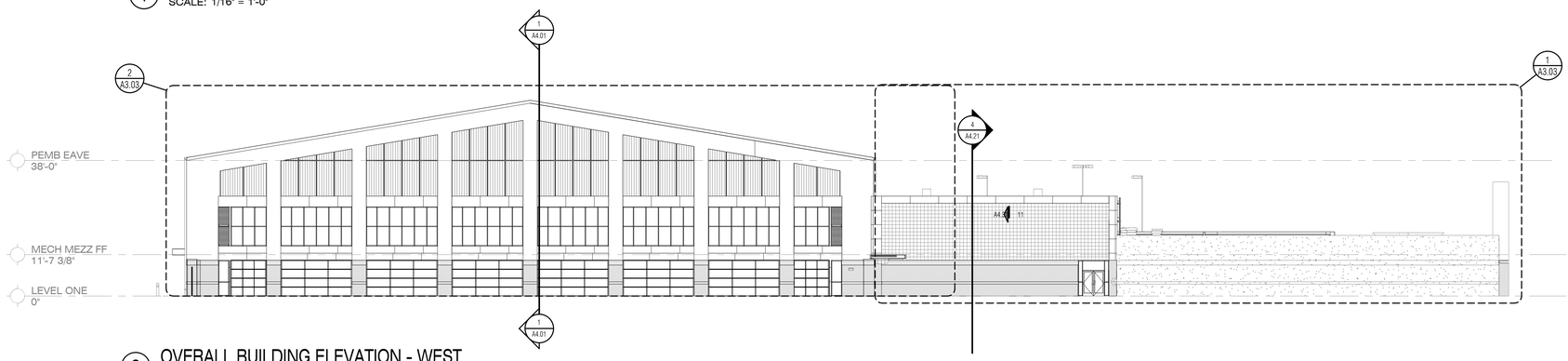
SHEET TITLE
PLAN DETAILS

SHEET NO.
A2.59

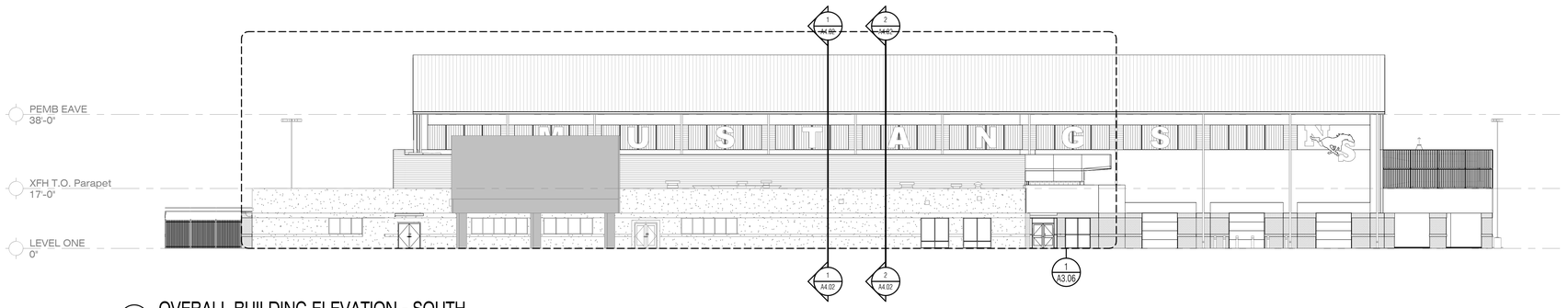
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



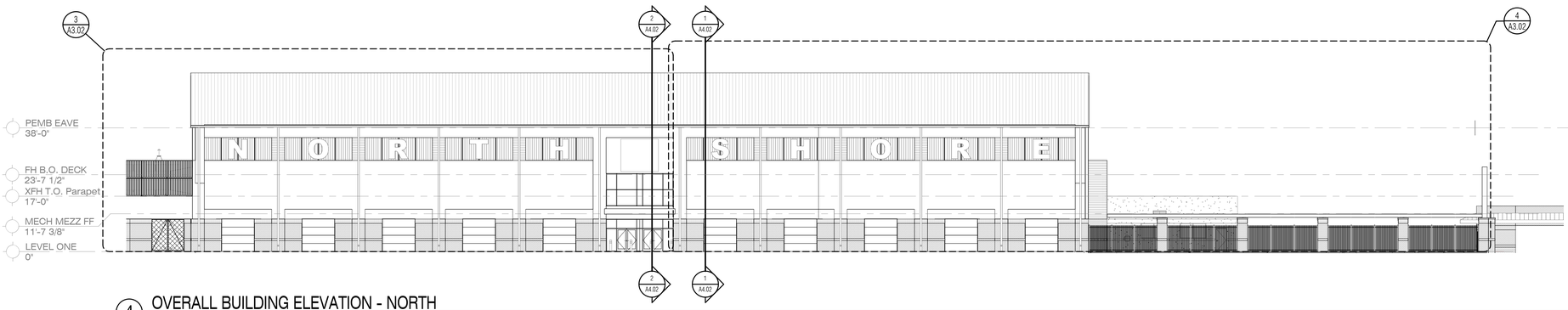
1 OVERALL BUILDING ELEVATION - EAST
SCALE: 1/16" = 1'-0"



2 OVERALL BUILDING ELEVATION - WEST
SCALE: 1/16" = 1'-0"



5 OVERALL BUILDING ELEVATION - SOUTH
SCALE: 1/16" = 1'-0"



4 OVERALL BUILDING ELEVATION - NORTH
SCALE: 1/16" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

MONIKA C. CASTILLO
REGISTERED ARCHITECT
28556
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

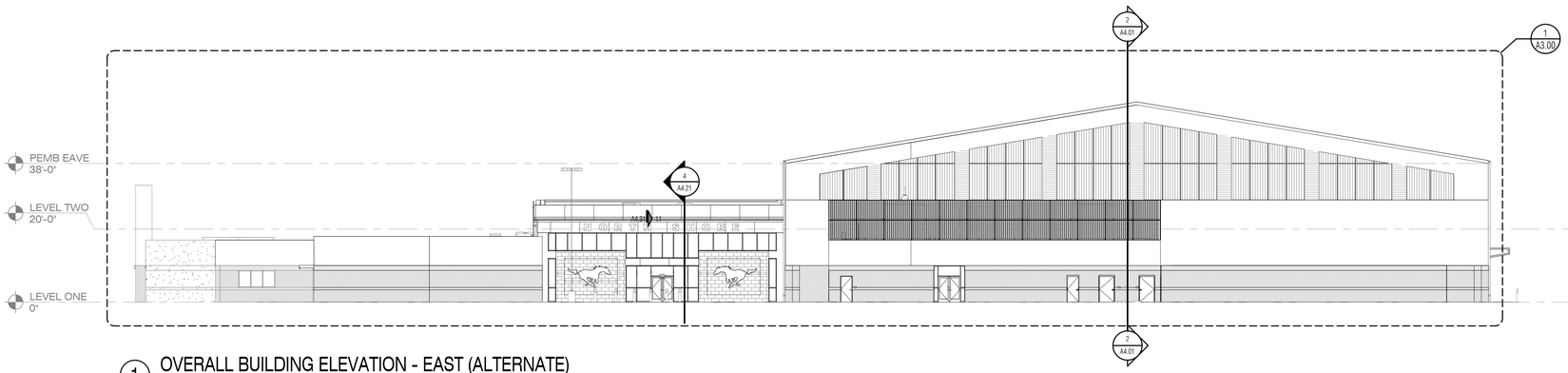
PROJECT NO.
25-0056.00

SHEET TITLE
OVERALL EXTERIOR ELEVATIONS

SHEET NO.
A3.00

North Shore Multi-Use Indoor Facility

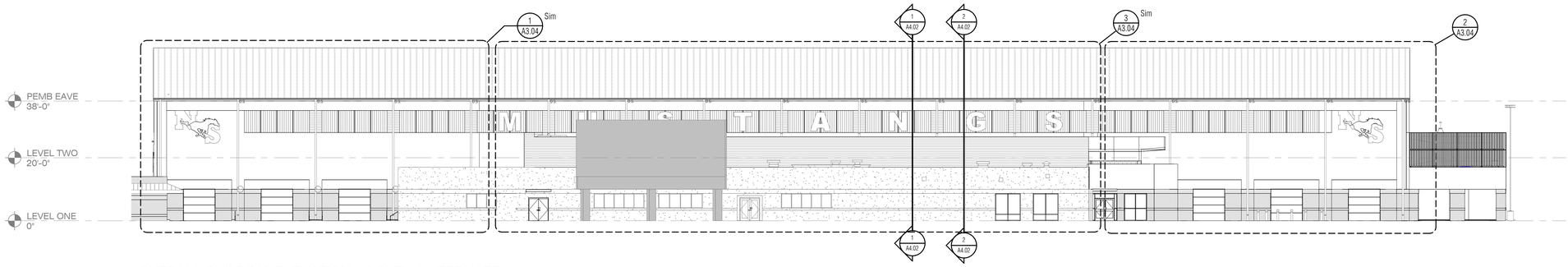
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



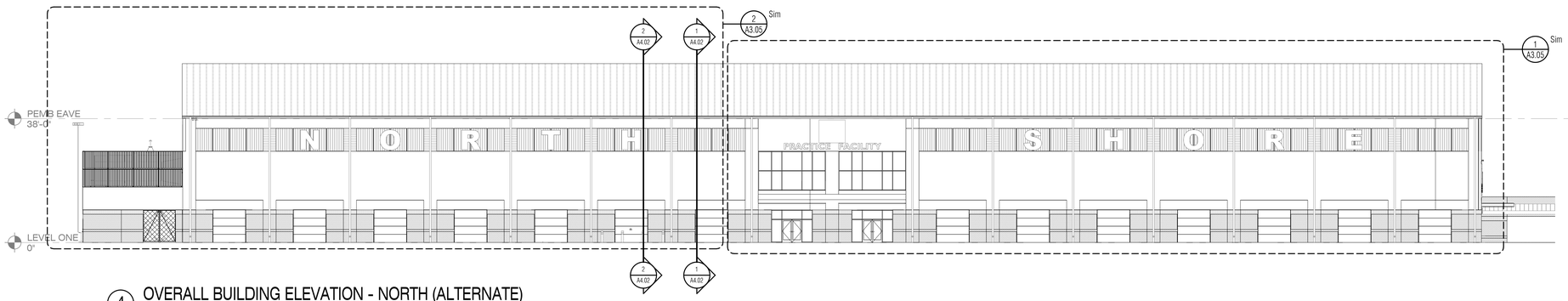
1 OVERALL BUILDING ELEVATION - EAST (ALTERNATE)
SCALE: 1/16" = 1'-0"



2 OVERALL BUILDING ELEVATION - WEST (ALTERNATE)
SCALE: 1/16" = 1'-0"



3 OVERALL BUILDING ELEVATION - SOUTH (ALTERNATE)
SCALE: 1/16" = 1'-0"



4 OVERALL BUILDING ELEVATION - NORTH (ALTERNATE)
SCALE: 1/16" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
OVERALL EXTERIOR ELEVATIONS - (ALTERNATE)

SHEET NO.
A3.00.1

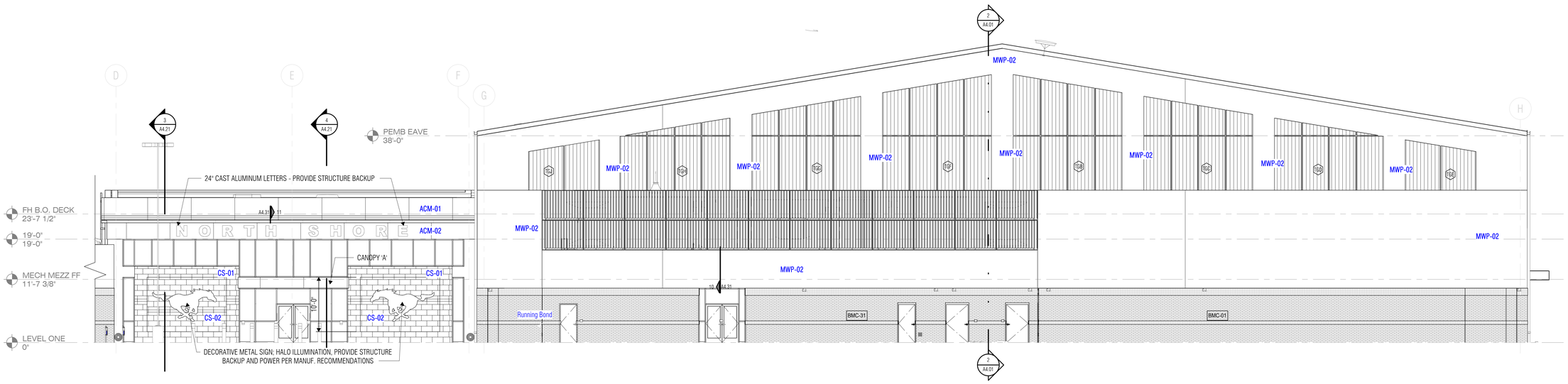
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

EXTERIOR ELEVATION LEGEND

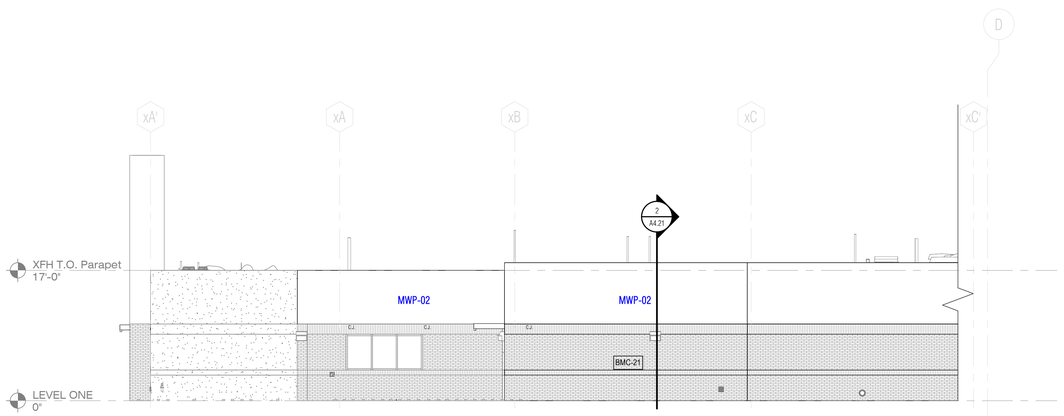
A	BRICK VENEER, TYPE 'A'
B	BRICK VENEER, TYPE 'B'
DS	DOWNSPOUT
OS	OVERFLOW SCUPPER, REF.
CJ	CONTROL JOINT, REF. 1/A3.11 & 3/A3.11
EJ	EXPANSION JOINT, REF.
SFX	ALUMINUM STOREFRONT, REF. SHEET A7.__
SFX	ALUMINUM CURTAIN WALL, REF. SHEET A7.__

EXTERIOR ELEVATION NOTES

1. Refer to Sheet A3.11 for Typical Control Joint and Building Expansion Joint Details.
2. Based on the applicable design criteria, submit the proposed pattern of control joints in masonry veneer, CMU and stucco/cement plaster to the Architect for review and approval prior to construction.
3. Verify mounting heights of all Electrical and Mechanical items on the exterior of the building prior to construction, whether specifically indicated on the Exterior Elevations or not.
4. Install cast stone in accordance with the recommendations of the Cast Stone Institute, unless specifically noted or detailed otherwise.
5. Refer to Sheet A3.11 for Loose Lintel Details. Refer to Structural Drawings for maximum span and bearing requirements.
6. Terminate recessed and projected masonry veneer courses at 4" from intersecting window frames, door frames, sloping roofs, etc., unless noted otherwise.
7. Provide solid bricks for soldier courses at exterior corners (do not miter). Refer to Detail - / ---



1 EXTERIOR ELEVATION - UNIT B & D - EAST
SCALE: 1/8" = 1'-0"



2 EXTERIOR ELEVATION - UNIT A - EAST
SCALE: 1/8" = 1'-0"

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

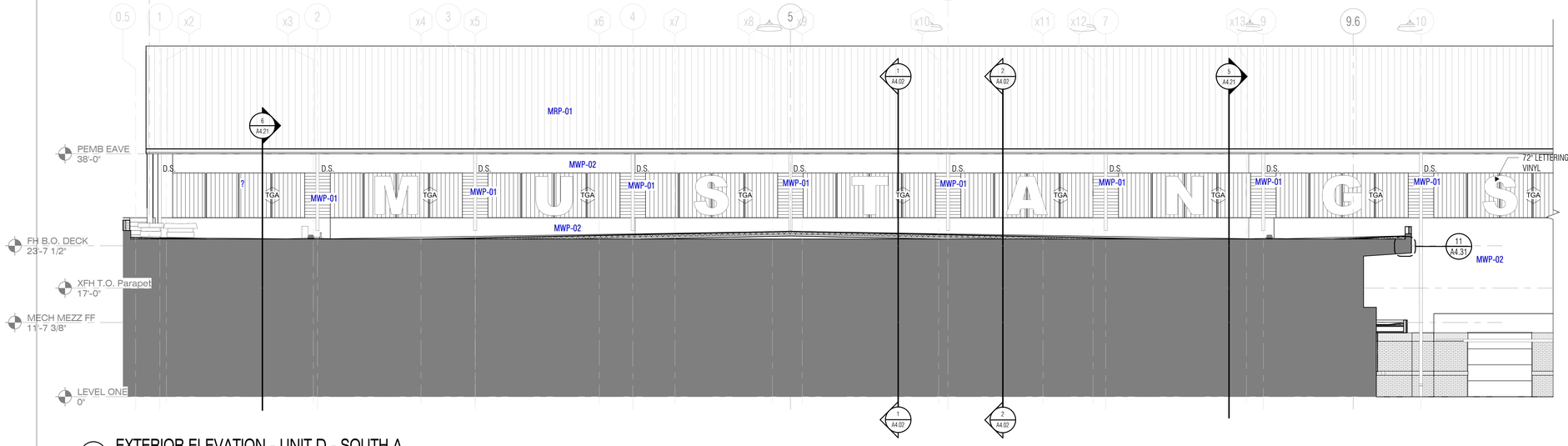
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
EXTERIOR ELEVATIONS

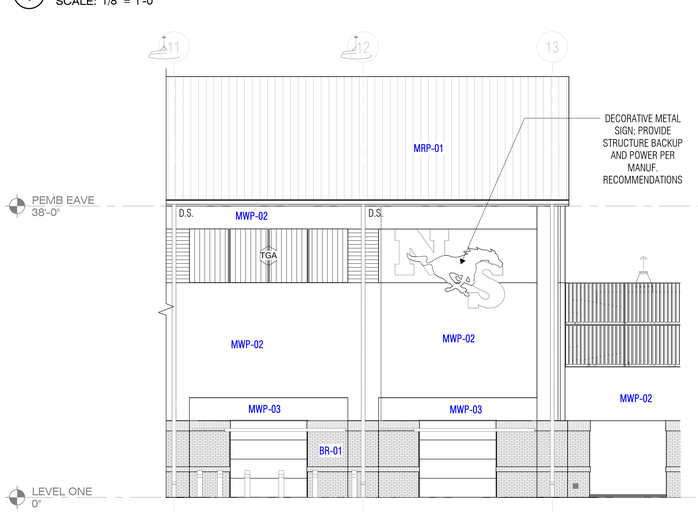
SHEET NO.
A3.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



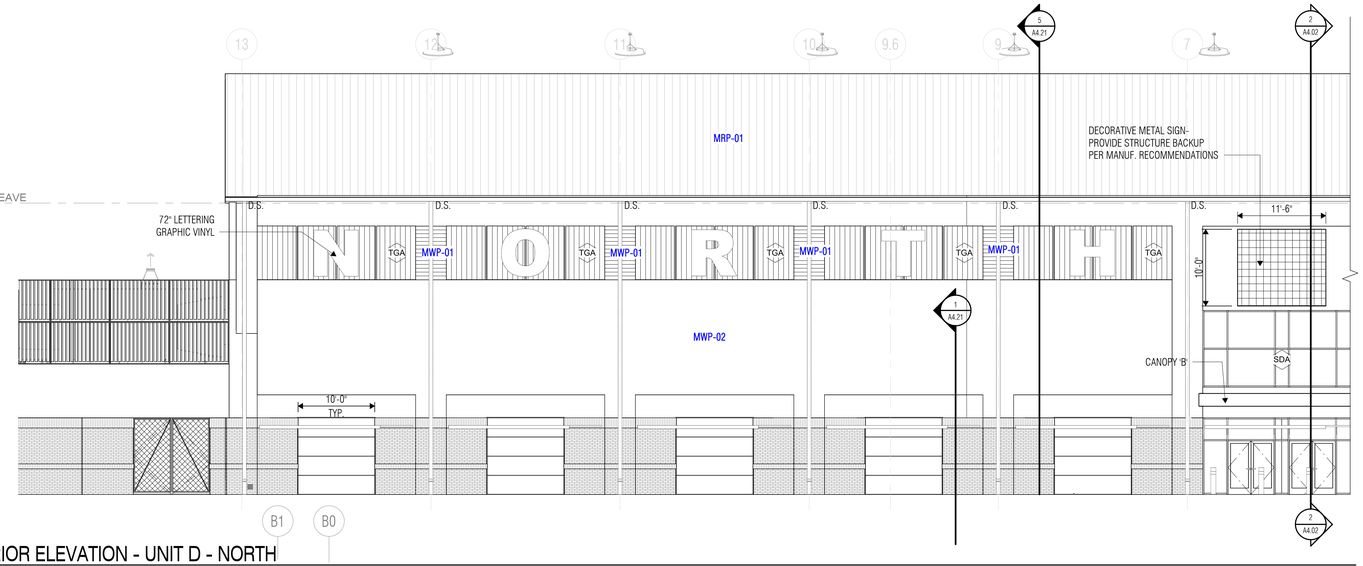
1 EXTERIOR ELEVATION - UNIT D - SOUTH A

SCALE: 1/8" = 1'-0"



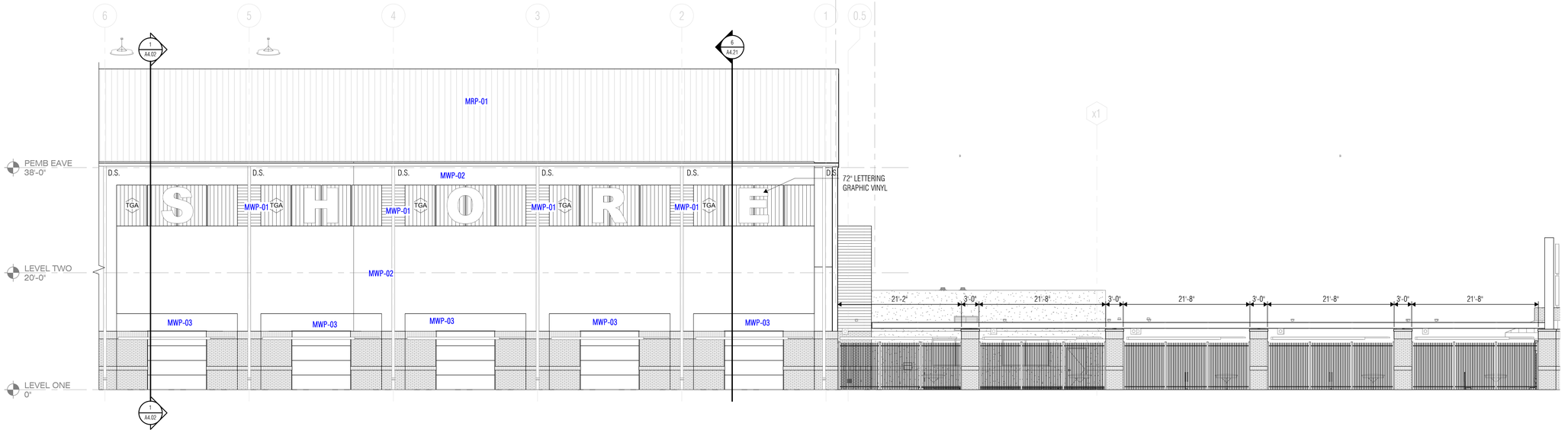
2 EXTERIOR ELEVATION - UNIT D - SOUTH B

SCALE: 1/8" = 1'-0"



3 EXTERIOR ELEVATION - UNIT D - NORTH

SCALE: 1/8" = 1'-0"



4 EXTERIOR ELEVATION - UNIT C & D - NORTH

SCALE: 1/8" = 1'-0"

EXTERIOR ELEVATION NOTES

1. Refer to Sheet A3.11 for Typical Control Joint and Building Expansion Joint Details.
2. Based on the applicable design criteria, submit the proposed pattern of control joints in masonry veneer, CMU and stucco/cement plaster to the Architect for review and approval prior to construction.
3. Verify mounting heights of all Electrical and Mechanical items on the exterior of the building prior to construction, whether specifically indicated on the Exterior Elevations or not.
4. Install cast stone in accordance with the recommendations of the Cast Stone Institute, unless specifically noted or detailed otherwise.
5. Refer to Sheet A3.11 for Loose Lintel Details. Refer to Structural Drawings for maximum span and bearing requirements.
6. Terminate recessed and projected masonry veneer courses at 4" from intersecting window frames, door frames, sloping roofs, etc., unless noted otherwise.
7. Provide solid bricks for soldier courses at exterior corners (do not miter). Refer to Detail - / ---

EXTERIOR ELEVATION LEGEND

A	BRICK VENEER, TYPE 'A'	
B	BRICK VENEER, TYPE 'B'	
DS	DOWNSPOUT	
OS	OVERFLOW SCUPPER, REF.	
CJ	CONTROL JOINT, REF.	1/A3.11 & 3/A3.11
EJ	EXPANSION JOINT, REF.	
SFX	ALUMINUM STOREFRONT, REF. SHEET A7.__	
SFX	ALUMINUM CURTAIN WALL, REF. SHEET A7.__	

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 31668 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

EXTERIOR ELEVATIONS

SHEET NO.

A3.02

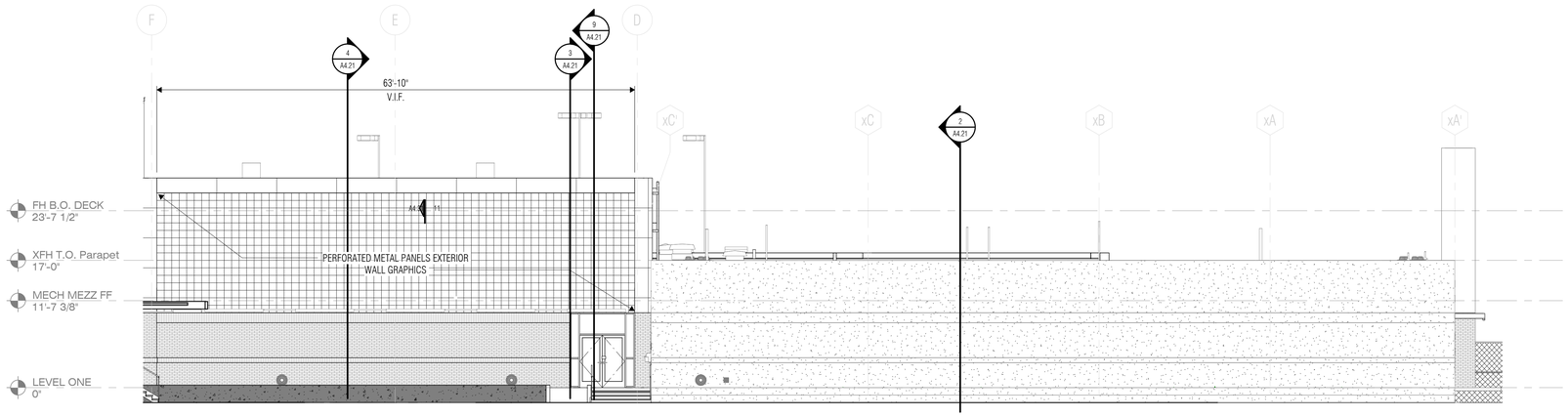
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

EXTERIOR ELEVATION NOTES

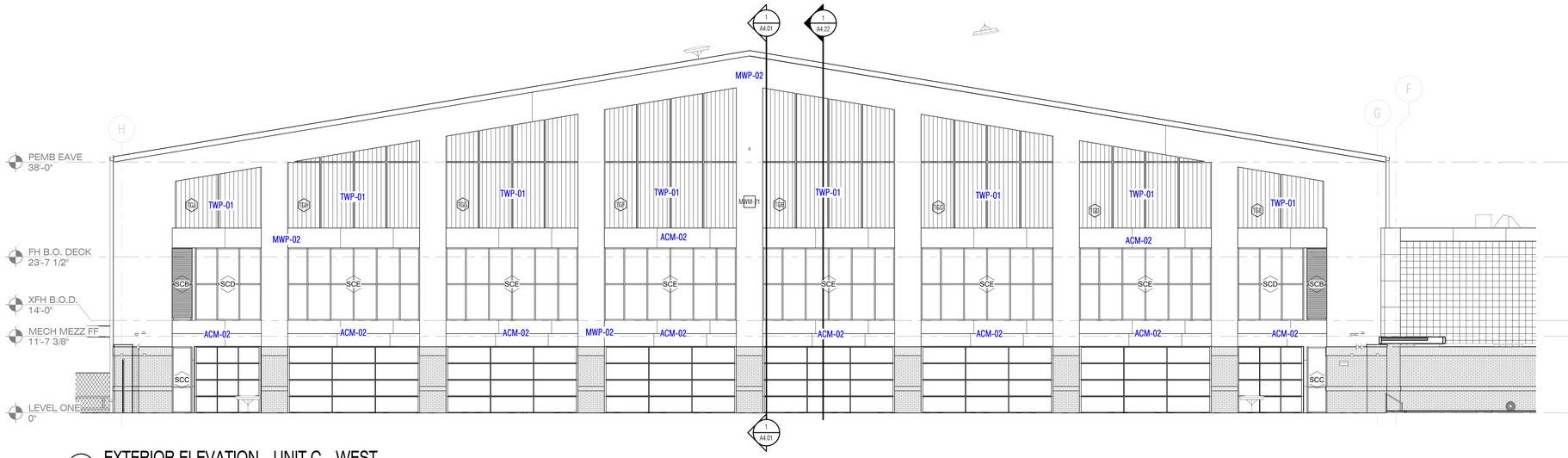
1. Refer to Sheet A3.11 for Typical Control Joint and Building Expansion Joint Details.
2. Based on the applicable design criteria, submit the proposed pattern of control joints in masonry veneer, CMU and stucco/cement plaster to the Architect for review and approval prior to construction.
3. Verify mounting heights of all Electrical and Mechanical items on the exterior of the building prior to construction, whether specifically indicated on the Exterior Elevations or not.
4. Install cast stone in accordance with the recommendations of the Cast Stone Institute, unless specifically noted or detailed otherwise.
5. Refer to Sheet A3.11 for Loose Lintel Details. Refer to Structural Drawings for maximum span and bearing requirements.
6. Terminate recessed and projected masonry veneer courses at 4" from intersecting window frames, door frames, sloping roofs, etc., unless noted otherwise.
7. Provide solid bricks for soldier courses at exterior corners (do not miter). Refer to Detail - / ---

EXTERIOR ELEVATION LEGEND

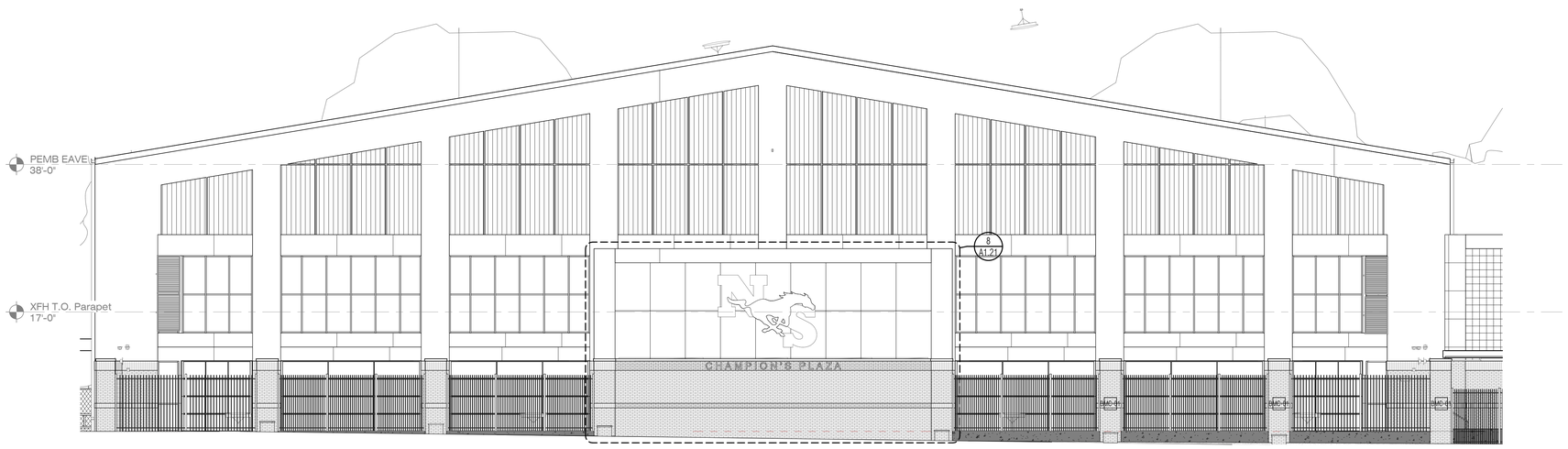
A	BRICK VENEER, TYPE 'A'	
B	BRICK VENEER, TYPE 'B'	
DS	DOWNSPOUT	
OS	OVERFLOW SCUPPER, REF.	
CJ	CONTROL JOINT, REF.	1/A3.11 & 3/A3.11
EJ	EXPANSION JOINT, REF.	
SFX	ALUMINUM STOREFRONT, REF. SHEET A7.__	
SFX	ALUMINUM CURTAIN WALL, REF. SHEET A7.__	



1 EXTERIOR ELEVATION - UNIT B & A - WEST
SCALE: 1/8" = 1'-0"



2 EXTERIOR ELEVATION - UNIT C - WEST
SCALE: 1/8" = 1'-0"



3 EXTERIOR ELEVATION - CHAMPIONS PLAZA
SCALE: 1/8" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 36598 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

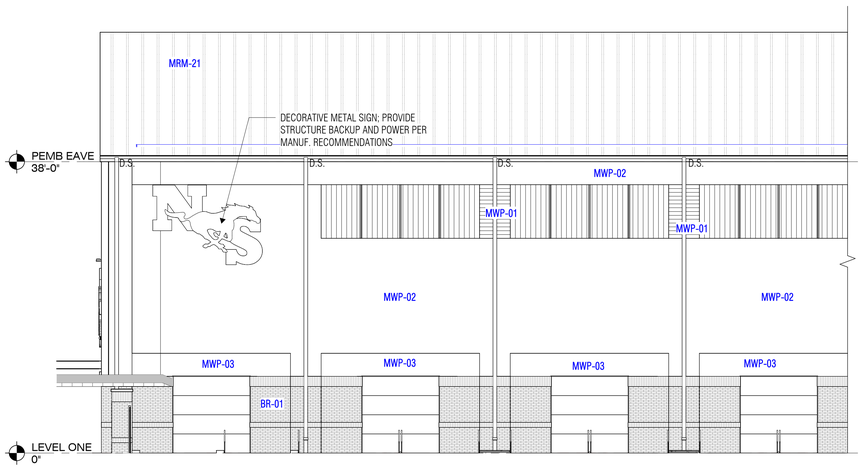
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

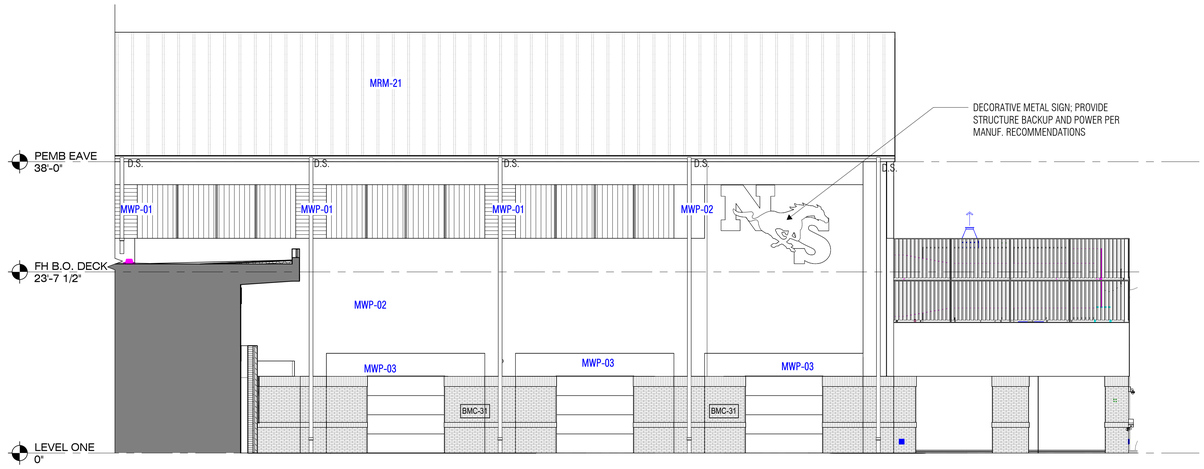
SHEET TITLE
EXTERIOR ELEVATIONS

SHEET NO.
A3.03

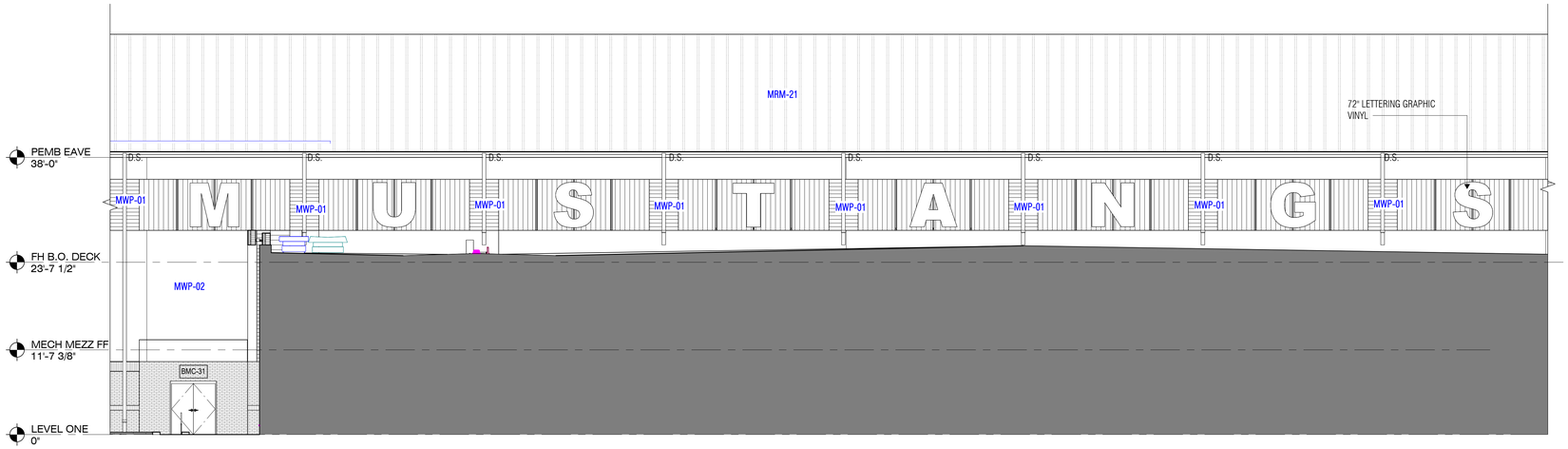
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 EXTERIOR ELEVATION - UNIT D - SOUTH A (ALTERNATE)
SCALE: 1/8" = 1'-0"



2 EXTERIOR ELEVATION - UNIT D - SOUTH C (ALTERNATE)
SCALE: 1/8" = 1'-0"



3 EXTERIOR ELEVATION - UNIT D - SOUTH B (ALTERNATE)
SCALE: 1/8" = 1'-0"

EXTERIOR ELEVATION NOTES

1. Refer to Sheet A3.11 for Typical Control Joint and Building Expansion Joint Details.
2. Based on the applicable design criteria, submit the proposed pattern of control joints in masonry veneer, CMU and stucco/cement plaster to the Architect for review and approval prior to construction.
3. Verify mounting heights of all Electrical and Mechanical items on the exterior of the building prior to construction, whether specifically indicated on the Exterior Elevations or not.
4. Install cast stone in accordance with the recommendations of the Cast Stone Institute, unless specifically noted or detailed otherwise.
5. Refer to Sheet A3.11 for Loose Lintel Details. Refer to Structural Drawings for maximum span and bearing requirements.
6. Terminate recessed and projected masonry veneer courses at 4" from intersecting window frames, door frames, sloping roofs, etc., unless noted otherwise.
7. Provide solid bricks for soldier courses at exterior corners (do not miter). Refer to Detail - / ---

EXTERIOR ELEVATION LEGEND

A	BRICK VENEER, TYPE 'A'	
B	BRICK VENEER, TYPE 'B'	
DS	DOWNSPOUT	
OS	OVERFLOW SCUPPER, REF.	
CJ	CONTROL JOINT, REF.	1/A3.11 & 3/A3.11
EJ	EXPANSION JOINT, REF.	
SFX	ALUMINUM STOREFRONT, REF. SHEET A7.__	
SFX	ALUMINUM CURTAIN WALL, REF. SHEET A7.__	

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

MONIKA C. CASTILLO
REGISTERED ARCHITECT
26558
STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

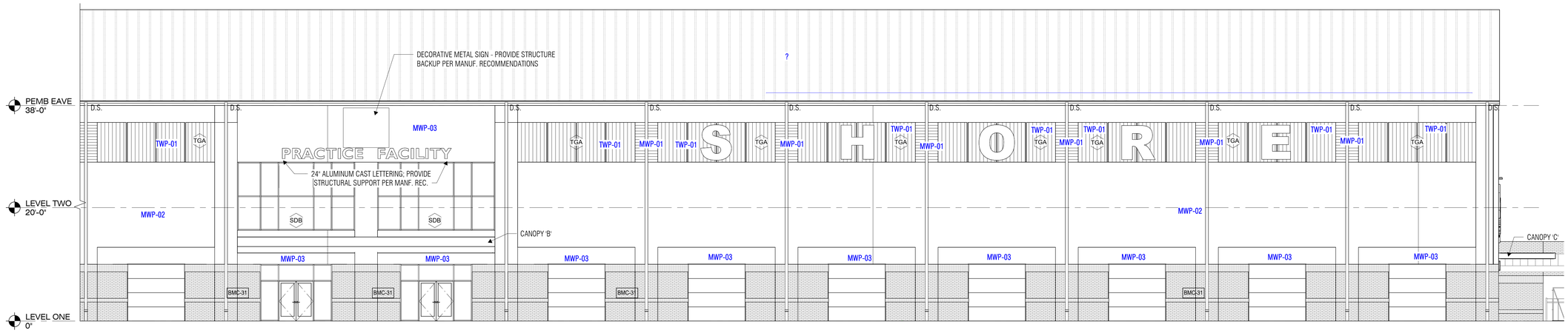
PROJECT NO.
25-0056.00

SHEET TITLE
EXTERIOR ELEVATIONS - (ALTERNATE)

SHEET NO.
A3.04

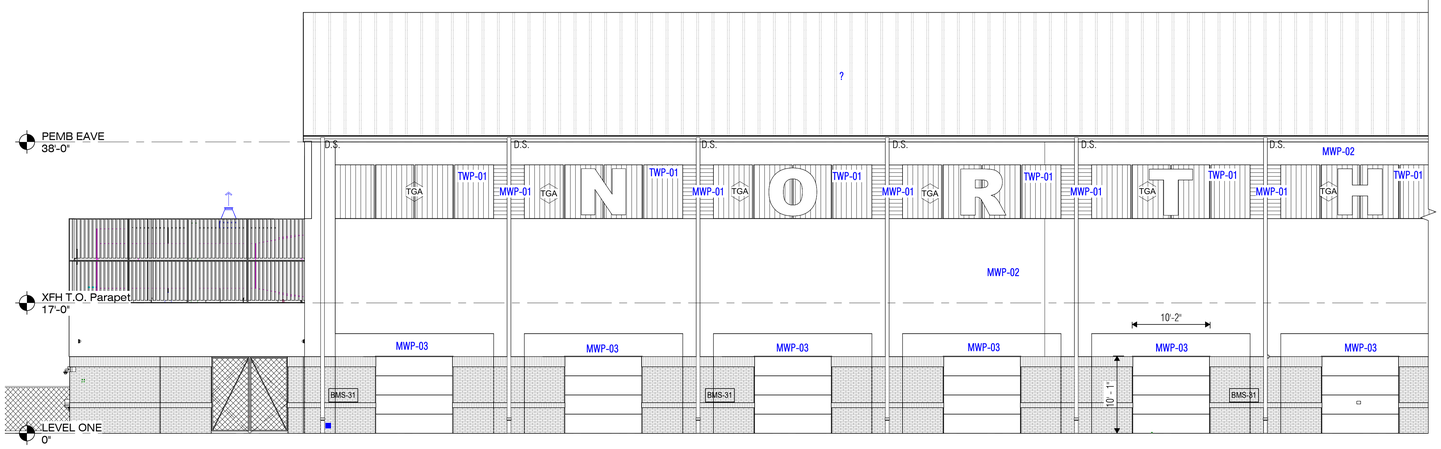
North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



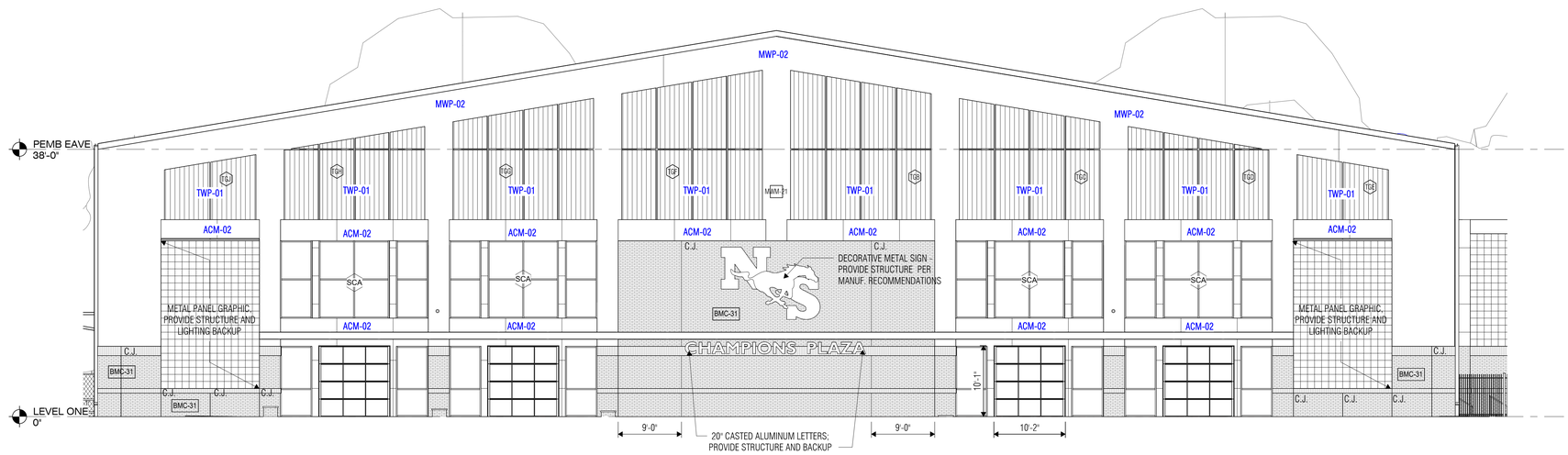
1 EXTERIOR ELEVATION - UNIT C & D - NORTH A (ALTERNATE)

SCALE: 1/8" = 1'-0"



2 EXTERIOR ELEVATION - UNIT D - NORTH B (ALTERNATE)

SCALE: 1/8" = 1'-0"



3 EXTERIOR ELEVATION - CHAMPIONS PLAZA (ALTERNATE)

SCALE: 1/8" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
36558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

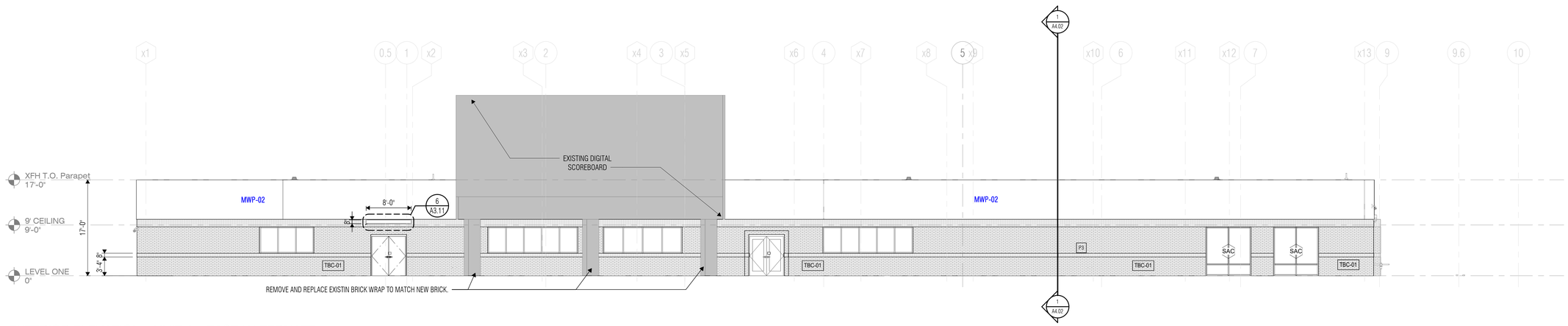
EXTERIOR ELEVATIONS - (ALTERNATE)

SHEET NO.

A3.05

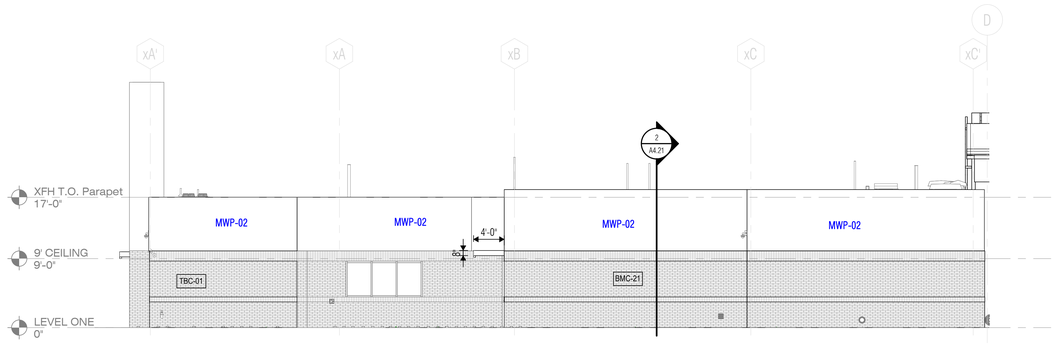
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

ALTERNATE: PROVIDE THIN BRICK CLADDING AND METAL PANEL OVER HAT CHANNELS ON EXISTING TILT-UP WALLS.



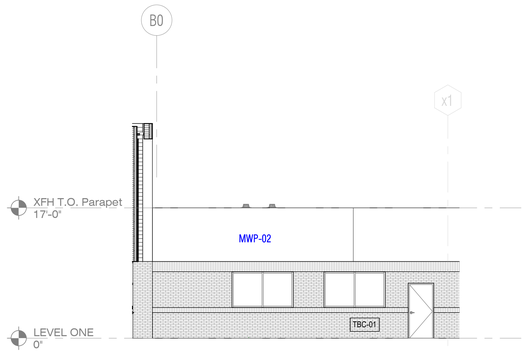
1 EXTERIOR ELEVATION - UNIT A - EAST (ALTERNATE)

SCALE: 1/8" = 1'-0"



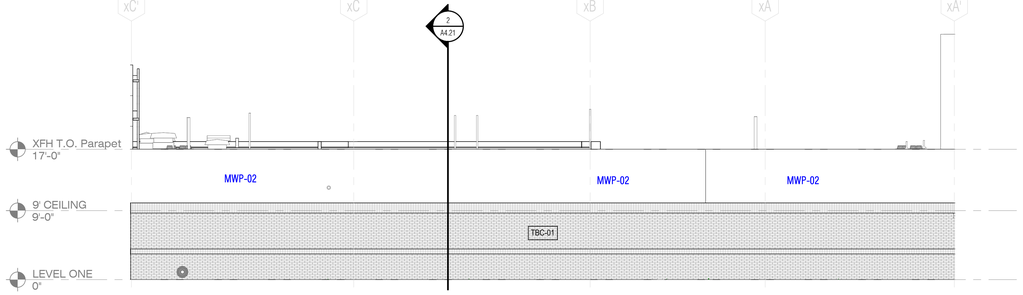
2 EXTERIOR ELEVATION - UNIT A - SOUTH (ALTERNATE)

SCALE: 1/8" = 1'-0"



3 EXTERIOR ELEVATION - UNIT A - NORTH (ALTERNATE)

SCALE: 1/8" = 1'-0"



4 EXTERIOR ELEVATION - UNIT A - WEST (ALTERNATE)

SCALE: 1/8" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

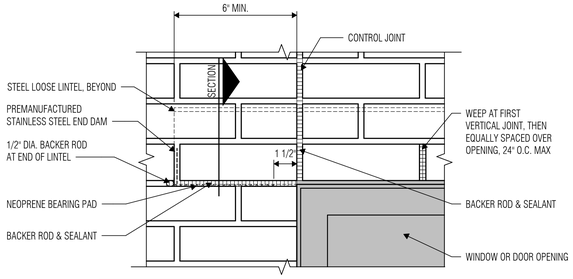
SHEET TITLE

EXTERIOR ELEVATIONS - (RECLAD ALTERNATE)

SHEET NO.

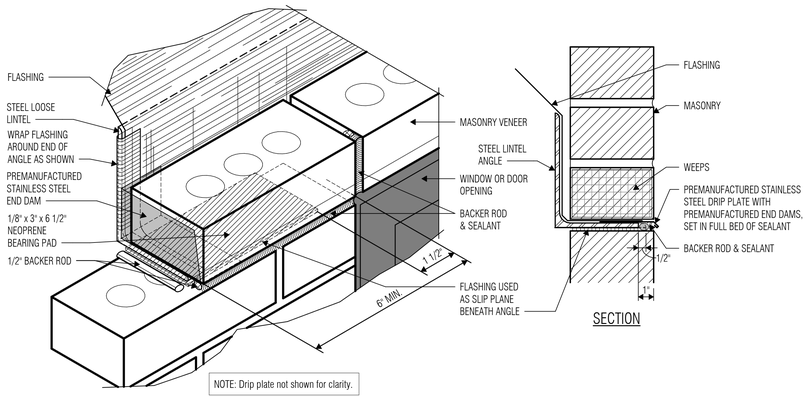
A3.06

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



NOTE: Drip plate not shown for clarity.

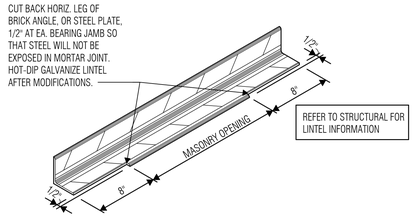
ELEVATION



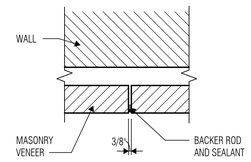
NOTE: Drip plate not shown for clarity.

SECTION

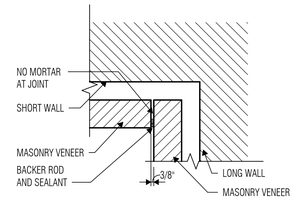
1 MASONRY VENEER CONTROL JOINT AT LOOSE LINTEL
SCALE: 3" = 1'-0"



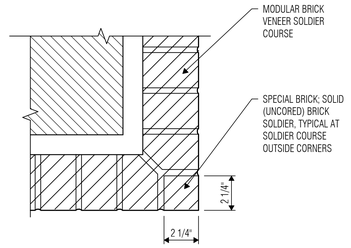
2 LOOSE LINTEL DETAIL, TYP.
SCALE: 1 1/2" = 1'-0"



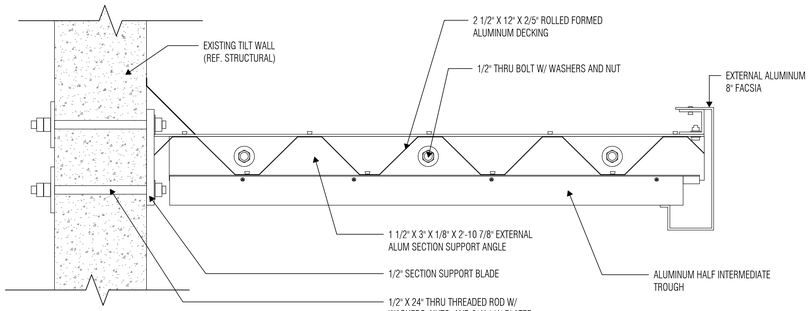
3 EXT. CONTROL JOINT
SCALE: 1 1/2" = 1'-0"

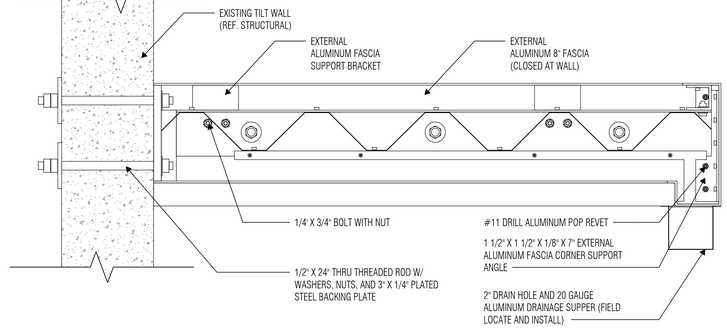


4 CONTROL JOINT INSIDE CORNER
SCALE: 1 1/2" = 1'-0"



5 PLAN FOR SOLDIER COURSE OUTSIDE CORNER
SCALE: 3" = 1'-0"





6 CANTILEVER CANOPY DETAILS
SCALE: 3" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

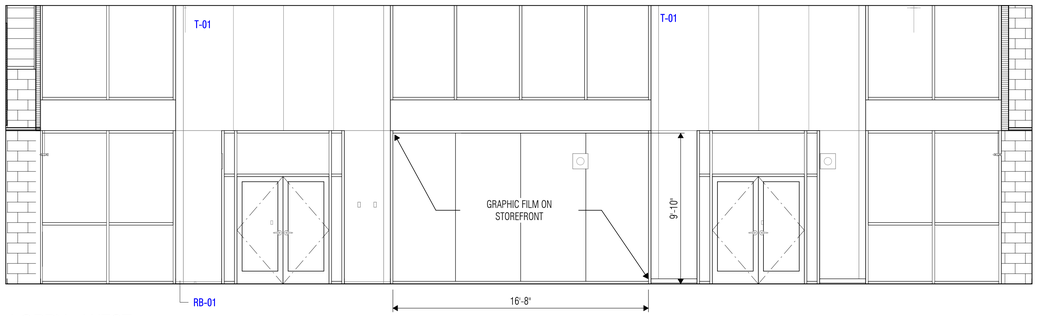
PROJECT NO.
25-0056.00

SHEET TITLE
EXTERIOR ELEVATION DETAILS

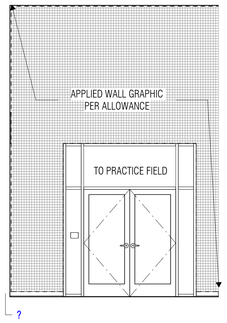
SHEET NO.
A3.11

North Shore Multi-Use Indoor Facility

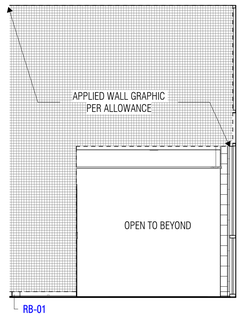
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



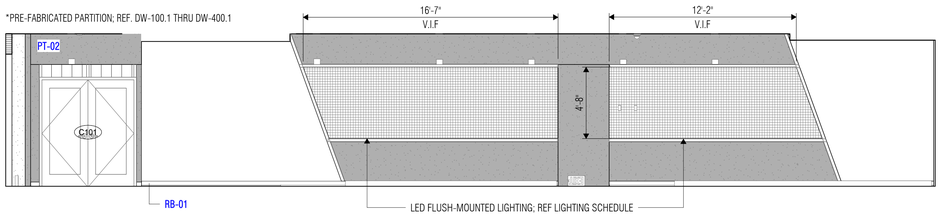
1 LOBBY - WEST
SCALE: 1/4" = 1'-0"



2 LOBBY - NORTH TO PRACTICE FIELD
SCALE: 1/4" = 1'-0"



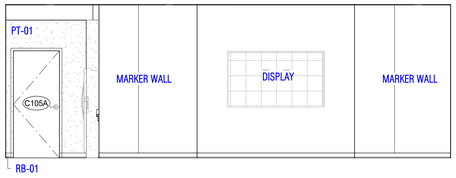
3 LOBBY - EAST TO LOUNGE
SCALE: 1/4" = 1'-0"



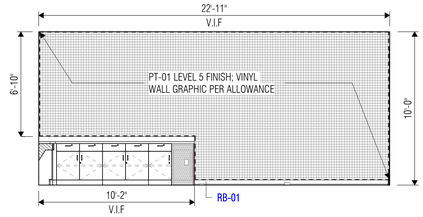
4 HALL C142 - WEST
SCALE: 1/4" = 1'-0"



5 HALL C142 - EAST
SCALE: 1/4" = 1'-0"



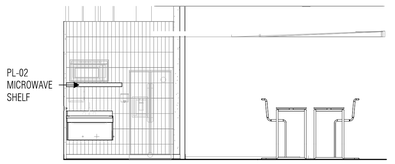
6 CONFERENCE ROOM - WEST
SCALE: 1/4" = 1'-0"



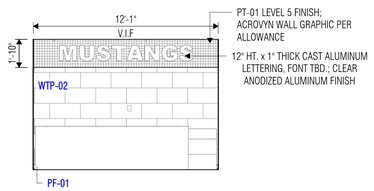
7 CONFERENCE ROOM - SOUTH
SCALE: 1/4" = 1'-0"



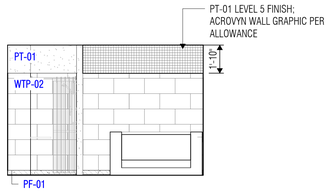
8 CONFERENCE ROOM - EAST
SCALE: 1/4" = 1'-0"



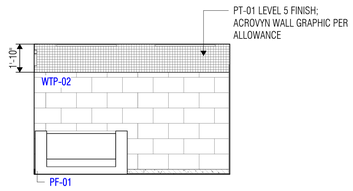
9 CONFERENCE ROOM - KITCHENETTE
SCALE: 1/4" = 1'-0"



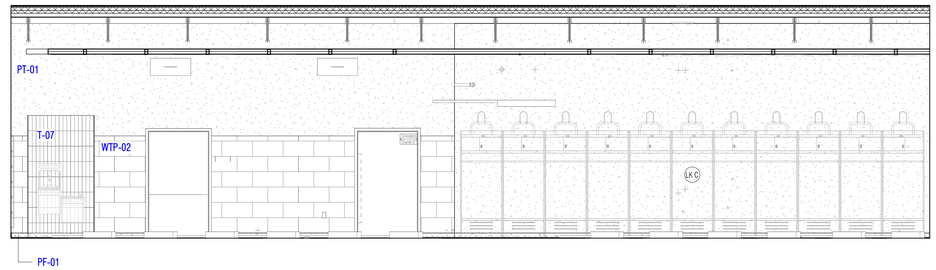
10 ICE BATH C139 - NORTH
SCALE: 1/4" = 1'-0"



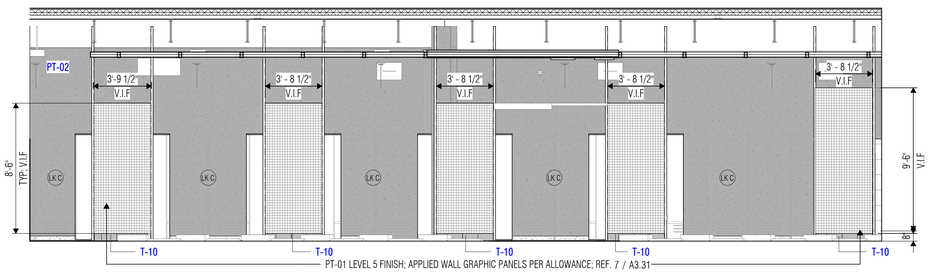
11 ICE BATH C139 - WEST
SCALE: 1/4" = 1'-0"



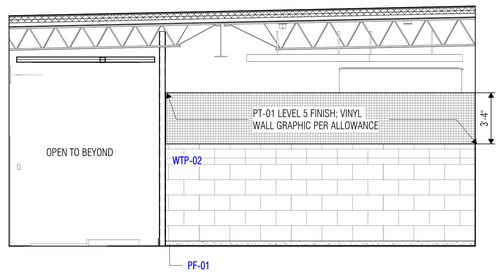
12 ICE BATH C139 - EAST
SCALE: 1/4" = 1'-0"



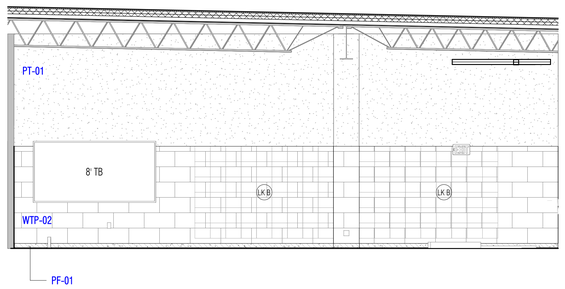
13 VARSITY LOCKER ROOM - NORTH
SCALE: 1/4" = 1'-0"



14 VARSITY LOCKER ROOM - LOCKER END PANELS
SCALE: 1/4" = 1'-0"



15 VARISTY LOCKER ROOM - ENTRY EAST
SCALE: 1/4" = 1'-0"



16 VARSITY LOCKER ROOM - ENTRY WEST
SCALE: 1/4" = 1'-0"

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

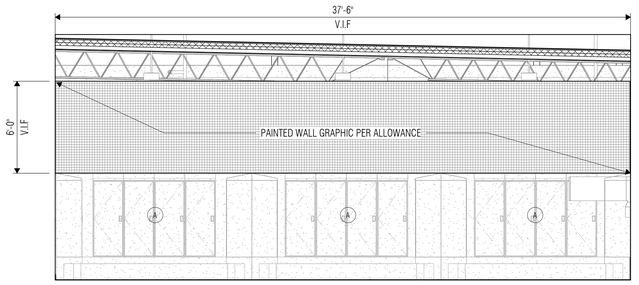
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

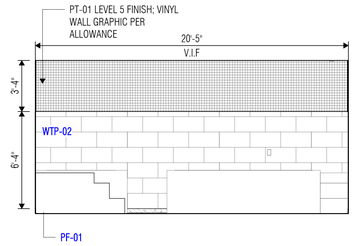
SHEET TITLE
INTERIOR ELEVATIONS

SHEET NO.
A3.21

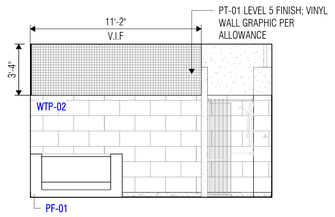
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



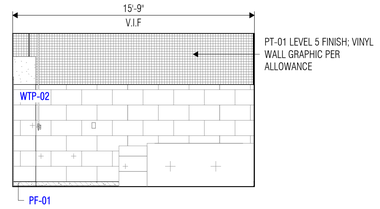
1 JUNIOR VARSITY LOCKER ROOM - WEST
SCALE: 1/4" = 1'-0"



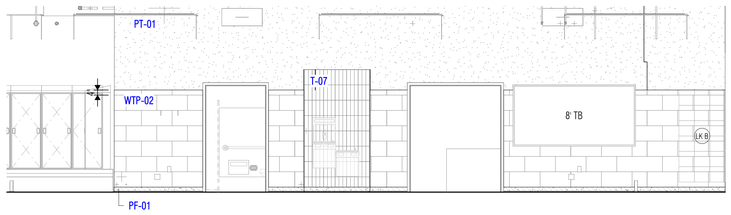
2 ICE BATH C135 - NORTH
SCALE: 1/4" = 1'-0"



3 ICE BATH C135 - EAST
SCALE: 1/4" = 1'-0"



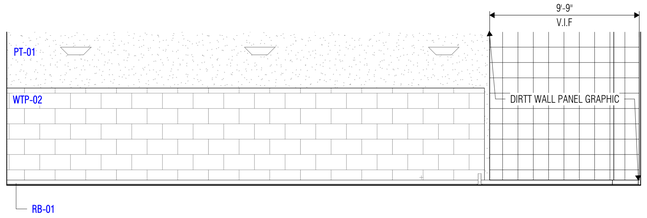
4 ICE BATH C135 - WEST
SCALE: 1/4" = 1'-0"



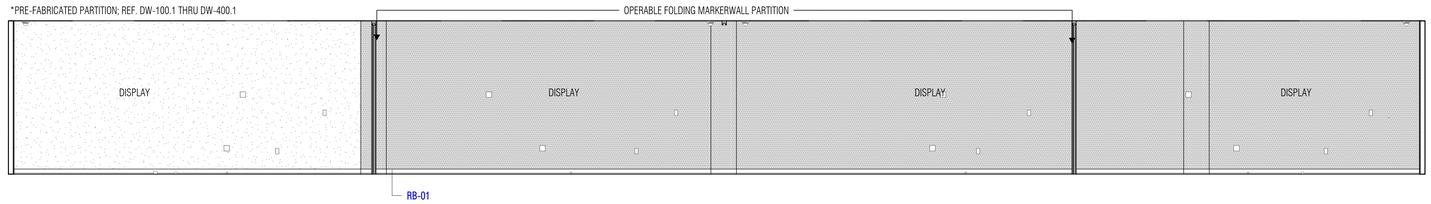
5 JUNIOR VARSITY LOCKER ROOM - NORTH
SCALE: 1/4" = 1'-0"



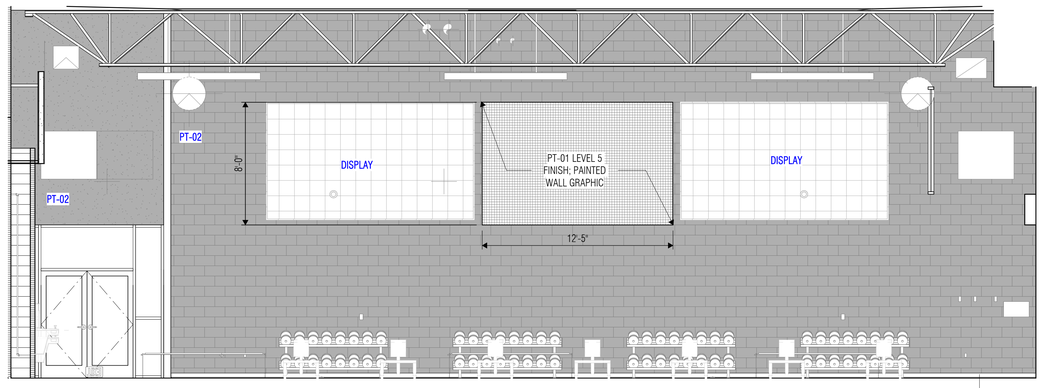
6 SERVING HALL CORRIDOR - WEST
SCALE: 1/4" = 1'-0"



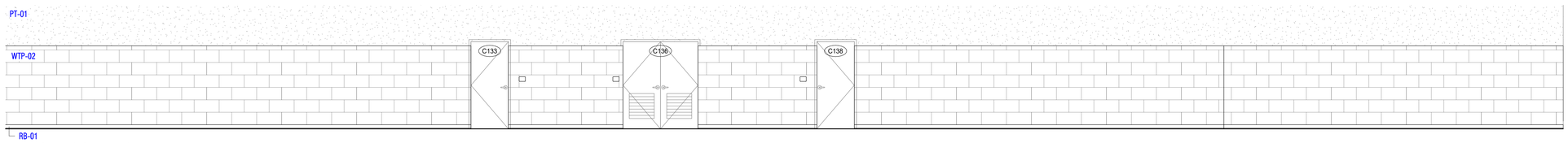
7 CORRIDOR C102 - SOUTH
SCALE: 1/4" = 1'-0"



8 PLAYER MEETING ROOMS - WEST
SCALE: 1/4" = 1'-0"



9 WEIGHT ROOM - WEST
SCALE: 1/4" = 1'-0"



10 TYPICAL CORRIDOR
SCALE: 1/4" = 1'-0"

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

MONIKA C. CASTILLO 26558 REGISTERED ARCHITECT STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

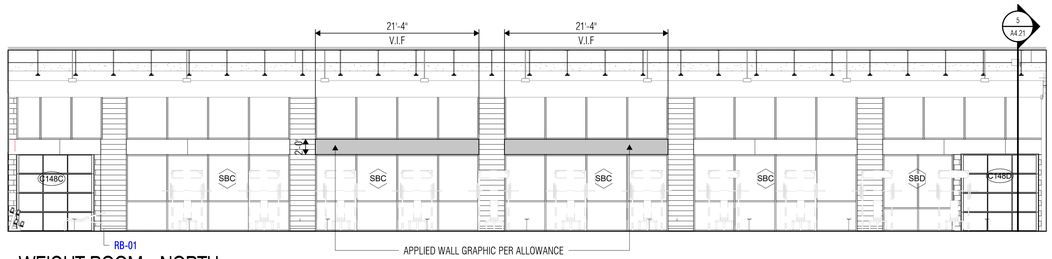
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

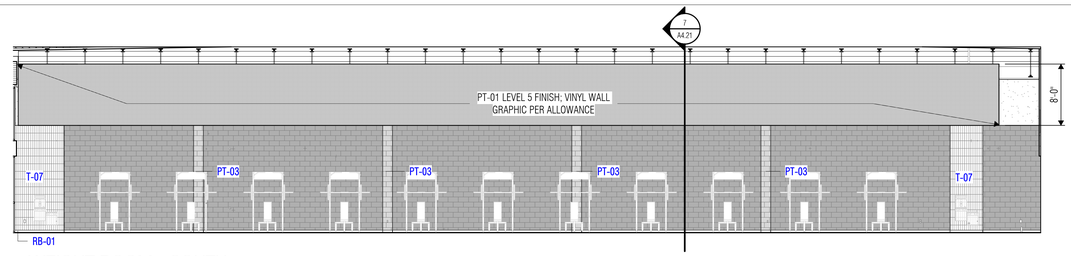
SHEET TITLE
INTERIOR ELEVATIONS

SHEET NO.
A3.22

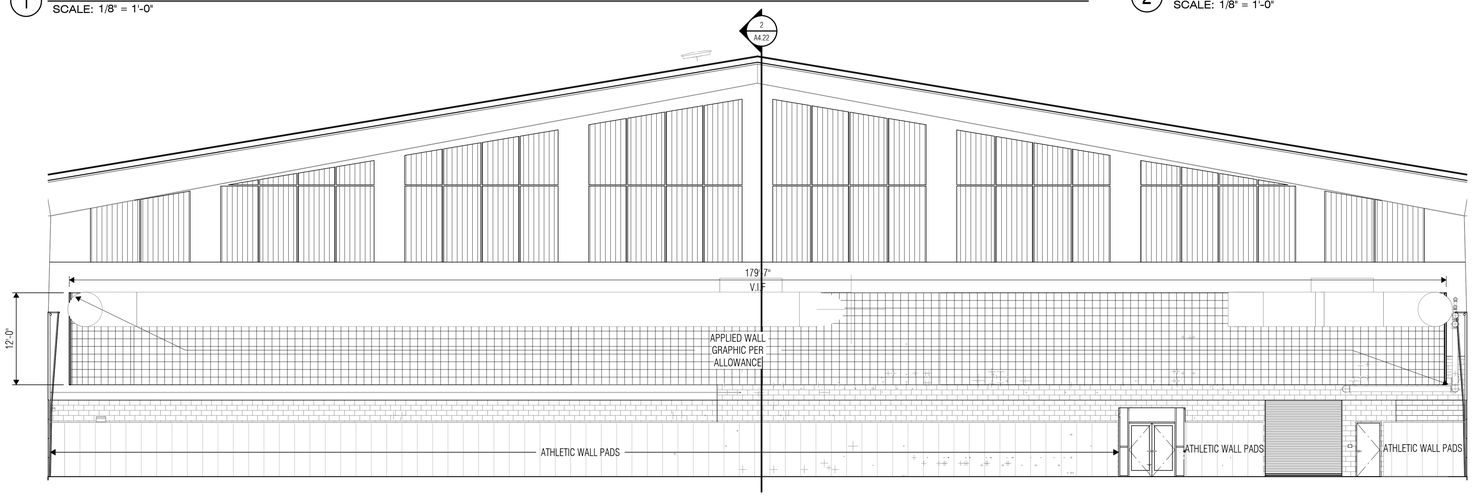
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 WEIGHT ROOM - NORTH
SCALE: 1/8" = 1'-0"



2 WEIGHT ROOM - SOUTH
SCALE: 1/8" = 1'-0"



3 PRACTICE FIELD - EAST
SCALE: 1/8" = 1'-0"



6 PRACTICE FIELD - ENTRY
SCALE: 1/4" = 1'-0"

4 PRACTICE FIELD - NORTH
SCALE: 1/8" = 1'-0"



5 PRACTICE FIELD - SOUTH
SCALE: 1/8" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

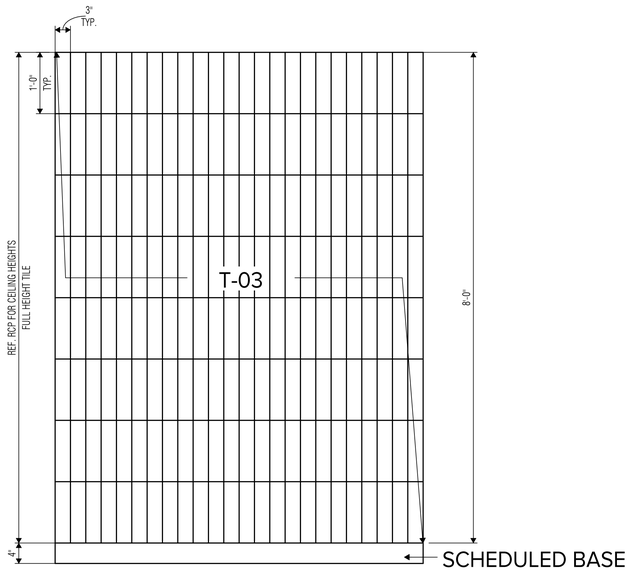
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

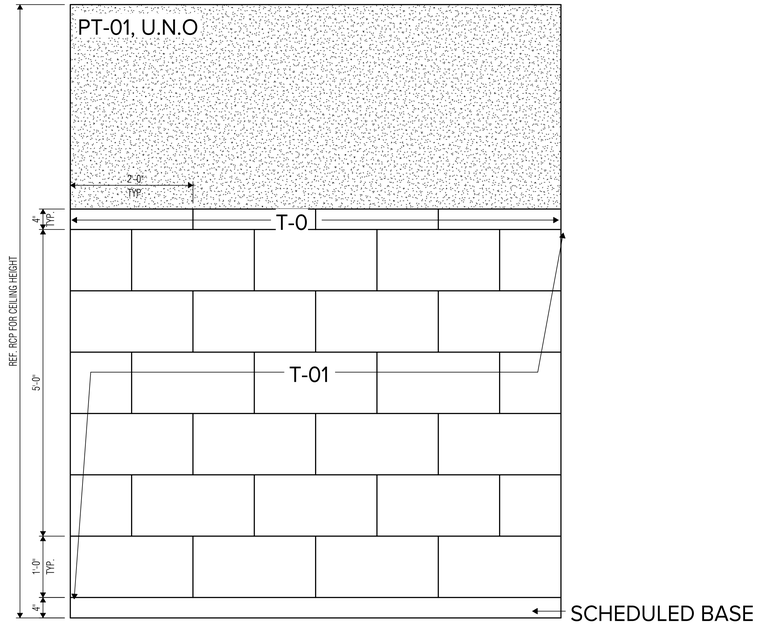
SHEET TITLE
INTERIOR ELEVATIONS

SHEET NO.
A3.23

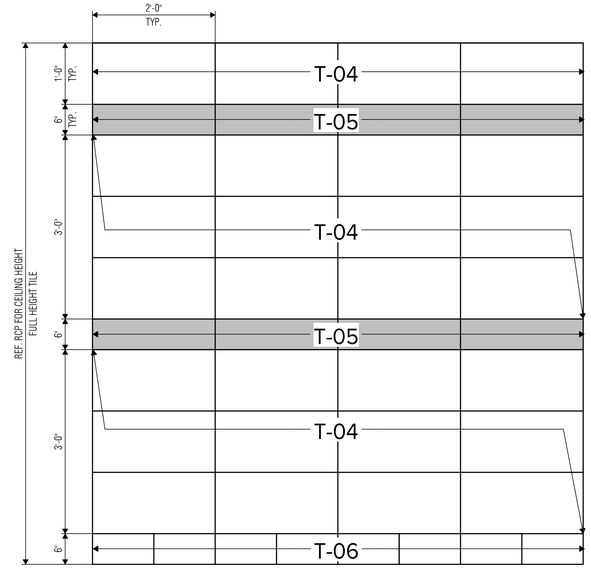
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



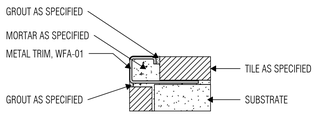
1 DRINKING FOUNTAIN TILE PATTERN
SCALE: 1" = 1'-0"



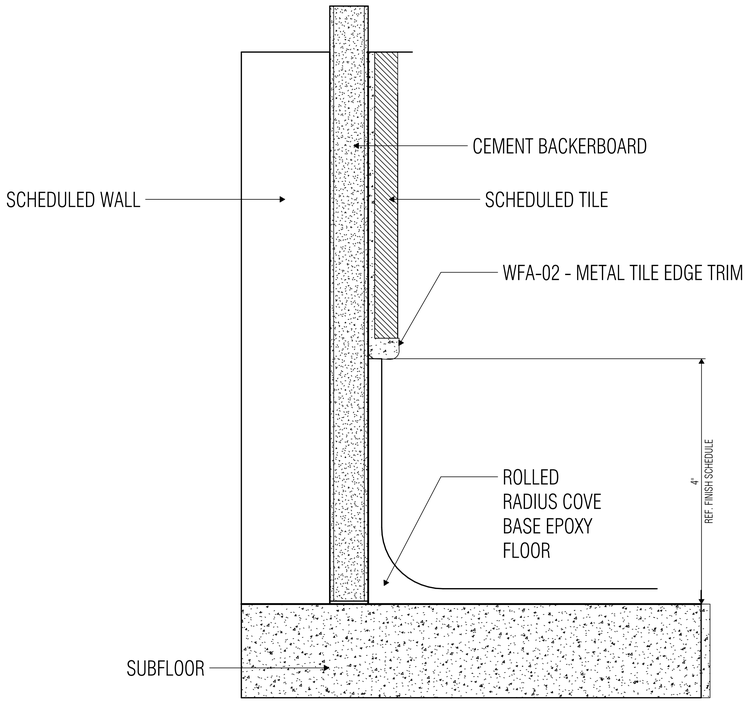
2 WAINSCOT TILE PATTERN (WTP-01)
SCALE: 1" = 1'-0"



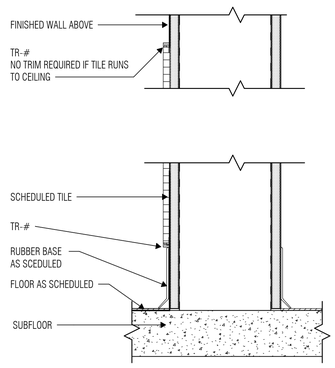
3 RESTROOM TILE PATTERN
SCALE: 1" = 1'-0"



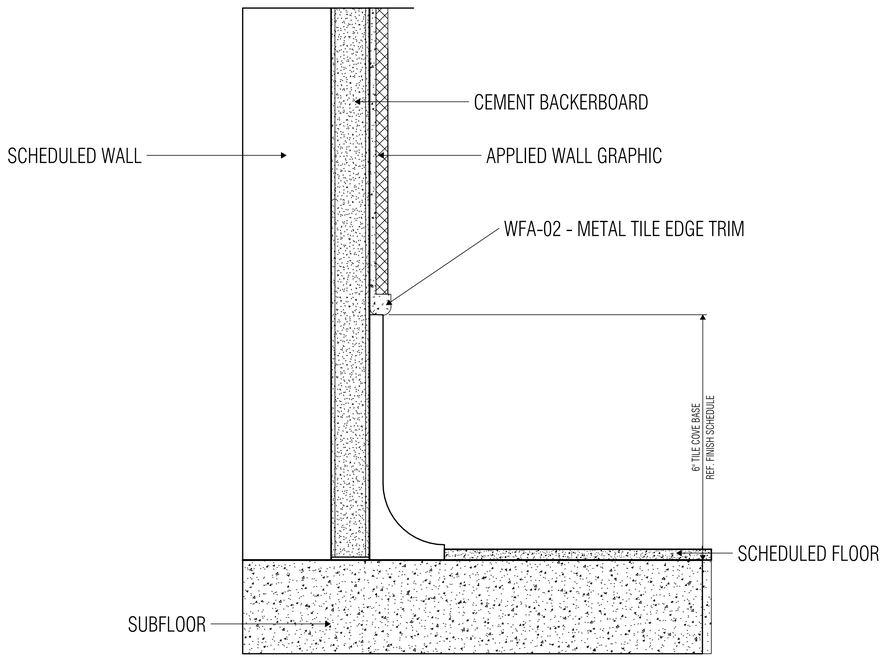
4 TILE EDGE CORNER TRIM DETAIL
SCALE: 12" = 1'-0"



5 EPOXY COVE BASE DETAIL
SCALE: 12" = 1'-0"



6 WALL TILE TO RUBBER BASE DETAIL
SCALE: 3" = 1'-0"



7 TILE BASE DETAIL
SCALE: 12" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26598
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

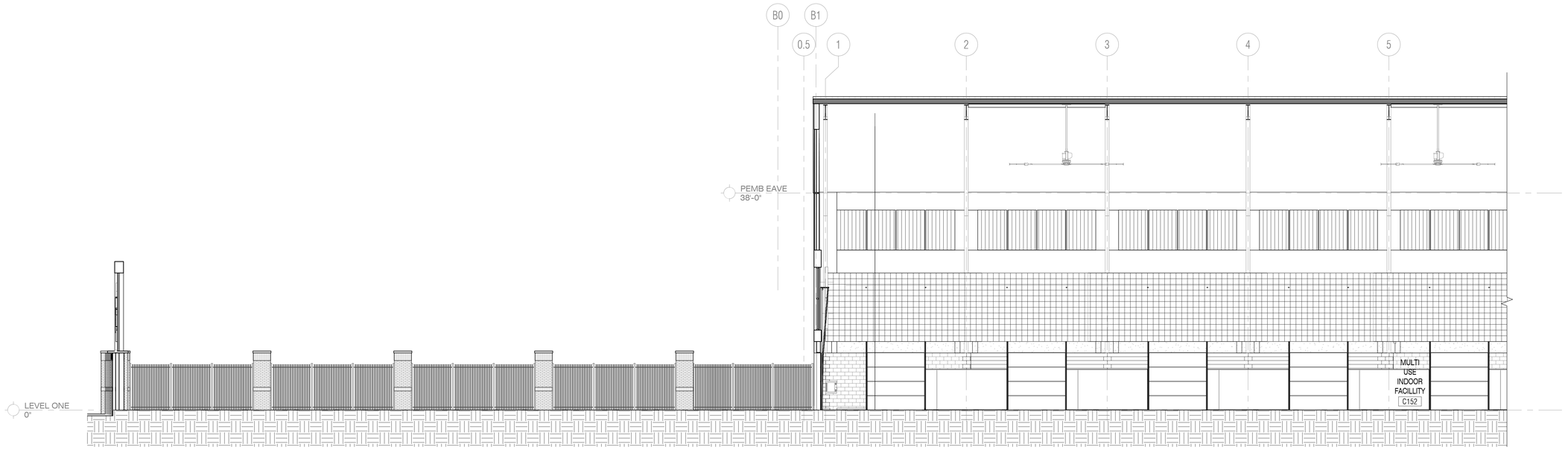
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

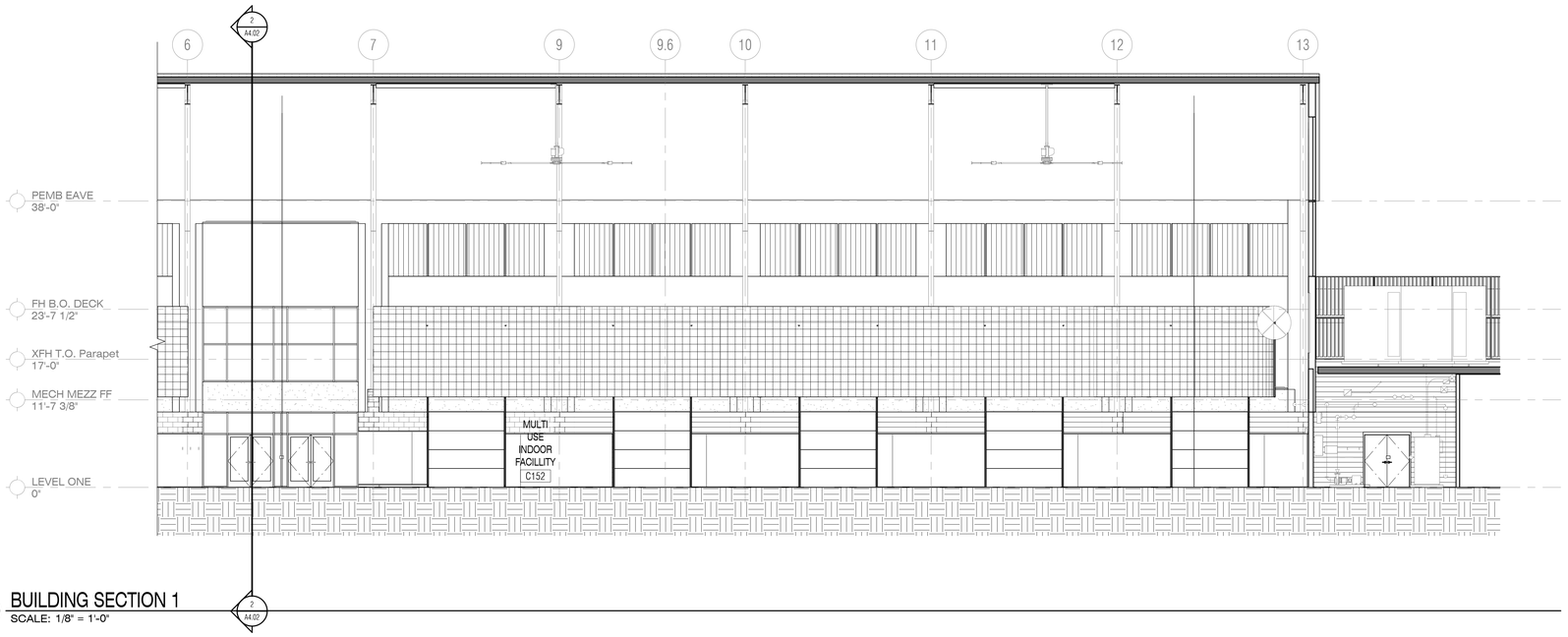
SHEET TITLE
INTERIOR ELEVATION DETAILS

SHEET NO.
A3.31

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 BUILDING SECTION 1
SCALE: 1/8" = 1'-0"



2 BUILDING SECTION 1
SCALE: 1/8" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

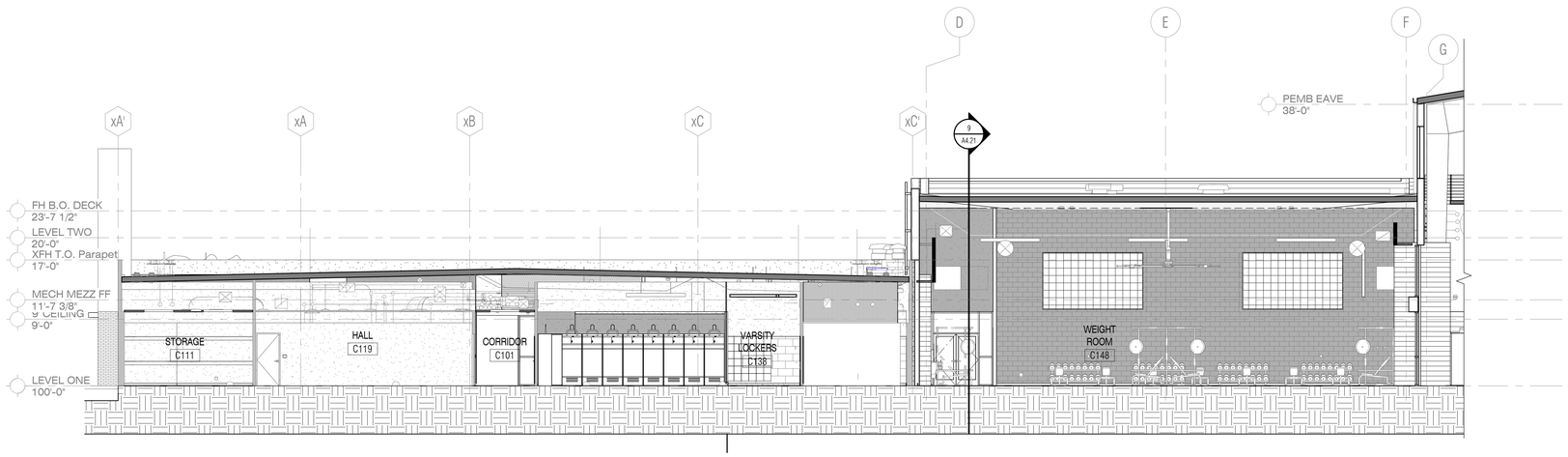
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

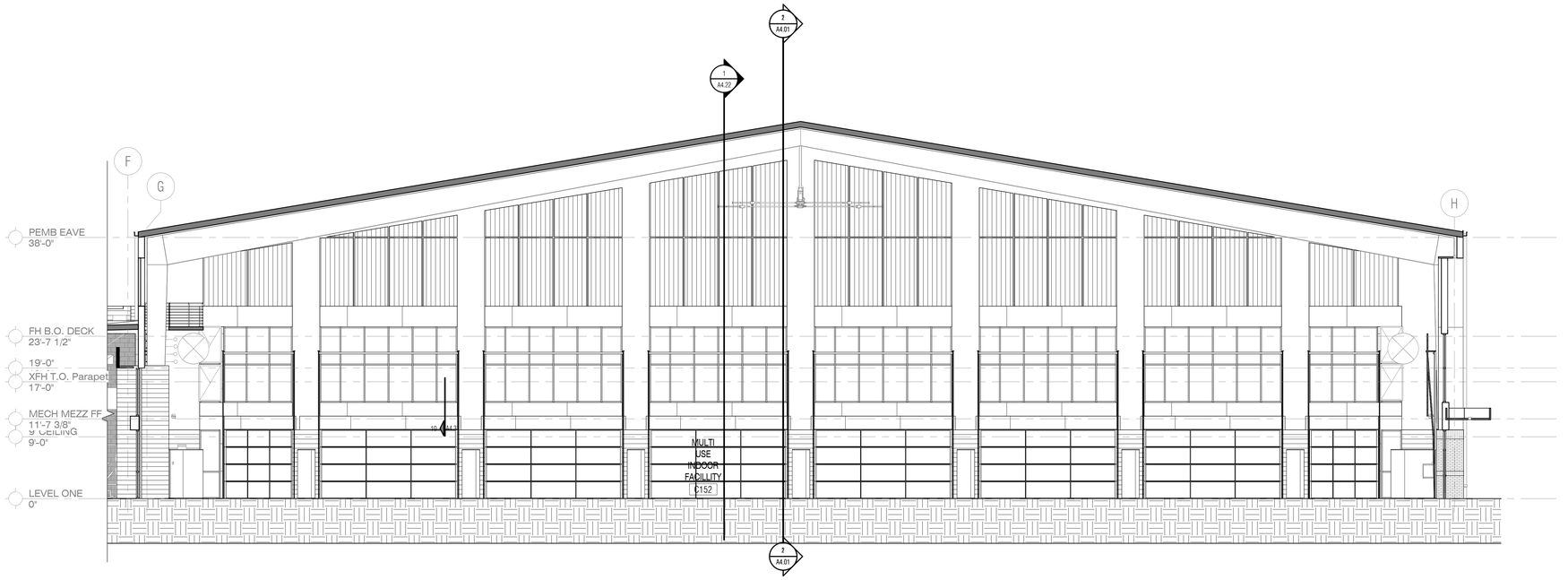
SHEET TITLE
BUILDING SECTIONS

SHEET NO.
A4.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 BUILDING SECTION 2
SCALE: 1/8" = 1'-0"



2 BUILDING SECTION 2
SCALE: 1/8" = 1'-0"

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

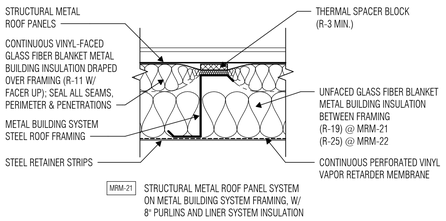
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

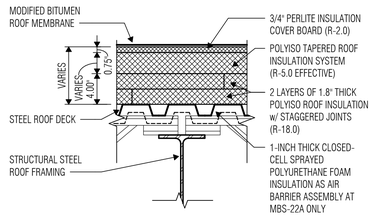
SHEET TITLE
BUILDING SECTIONS

SHEET NO.
A4.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

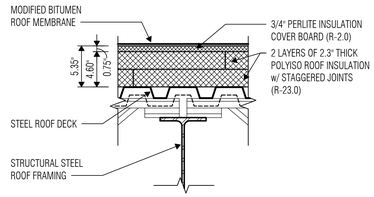


MRM-21 STRUCTURAL METAL ROOF PANEL SYSTEM ON METAL BUILDING SYSTEM FRAMING, W/ 8" PURLINS AND LINER SYSTEM INSULATION



MBS-22 MODIFIED BITUMEN ROOF SYSTEM ON STEEL DECK & FRAMING, NON-SLOPING

MBS-22A MODIFIED BITUMEN ROOF SYSTEM ON STEEL DECK & FRAMING, NON-SLOPING (OVER EXTERIOR VENTILATED SOFFIT)

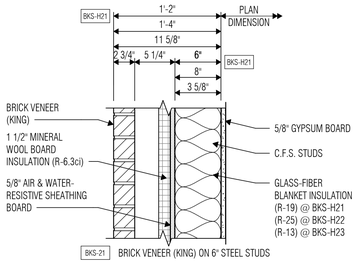


MBS-21 MODIFIED BITUMEN ROOF SYSTEM ON EXISTING STEEL DECK & FRAMING, SLOPING

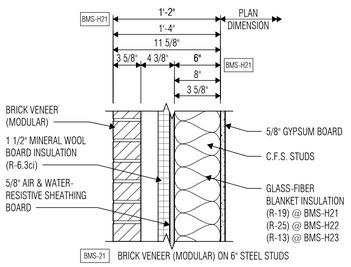
MBS-21A MODIFIED BITUMEN ROOF SYSTEM ON EXISTING STEEL DECK & FRAMING, SLOPING (OVER EXTERIOR VENTILATED SOFFIT)

1 ROOF ASSEMBLIES

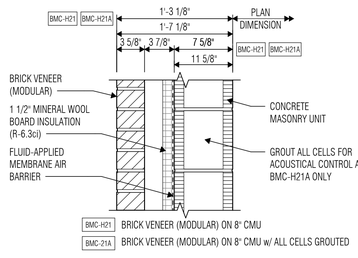
SCALE: 1 1/2" = 1'-0"



BKS-21 BRICK VENEER (KING) ON 6" STEEL STUDS

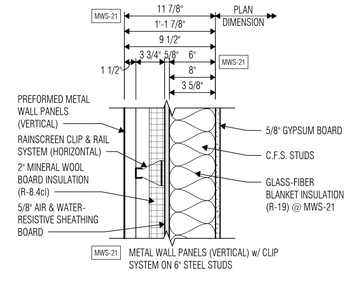


BMS-21 BRICK VENEER (MODULAR) ON 6" STEEL STUDS

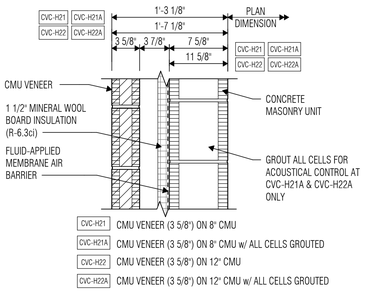


BMC-H21 BRICK VENEER (MODULAR) ON 8" CMU

BMC-21A BRICK VENEER (MODULAR) ON 8" CMU w/ ALL CELLS GROUTED



MWS-21 METAL WALL PANELS (VERTICAL) w/ CLIP SYSTEM ON 6" STEEL STUDS

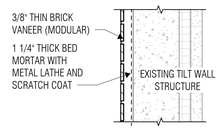


CVC-H21 CMU VENEER (3 5/8") ON 8" CMU

CVC-H21A CMU VENEER (3 5/8") ON 8" CMU w/ ALL CELLS GROUTED

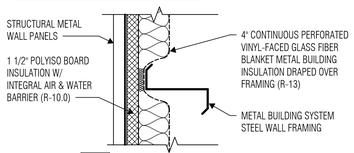
CVC-H22 CMU VENEER (3 5/8") ON 12" CMU

CVC-H22A CMU VENEER (3 5/8") ON 12" CMU w/ ALL CELLS GROUTED



TBK-21 MODULAR THIN BRICK VENEER APPLIED ON EXISTING TILT WALL STRUCTURE

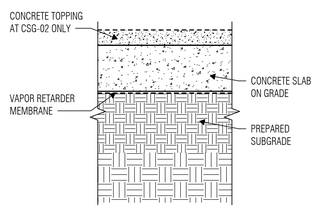
SEAL PERIMETER OF BOARD INSULATION, AS WELL AS ALL JOINTS AND PENETRATIONS, AS AN AIR- & WATER-RESISTIVE BARRIER ASSEMBLY.



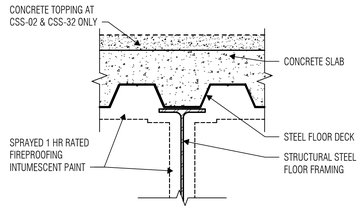
MWM-21 STRUCTURAL METAL PANEL ON METAL BUILDING SYSTEM FRAMING

2 BUILDING ENVELOPE ASSEMBLY WALL TYPES

SCALE: 1 1/2" = 1'-0"



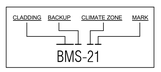
CSG-01 CONCRETE SLAB ON GRADE



CSS-01 CONCRETE SLAB ON STEEL DECK & FRAMING

3 FLOOR TYPES

SCALE: 1 1/2" = 1'-0"



BUILDING ASSEMBLY MASTER LIST

TYPE MARK	DESCRIPTION
Wall	
TBC-01	
Floor	
CSG-01	Concrete Slab on Grade
CSS-01	Concrete Slab on Steel Deck & Framing
SW-1	Sidewalk
TF-03	
TZ-01	
TZ-02	Concrete Slab on Grade
Wall	
ACS-21	ACM Wall Panel w/ Clip System on 6" Steel Studs
BKS-21	Brick Veneer (King Size) on 6" Steel Studs
BMC-01	Brick Veneer (Modular) on 8" CMU (screen wall; non-conditioned building)
BMC-21	Brick Veneer (Modular) on 8" CMU
BMC-31	Brick Veneer (Modular) on 8" CMU
BMS-31	Brick Veneer (Modular) on 6" Steel Studs
MWS-31	Metal Wall Panel (Vertical) w/ Clip System on 6" Steel Studs
Roof	
MBL-32	Modified Bitumen Roof System on Lightweight Insulating Concrete System on Steel Deck & Framing, Non-Sloping
MBS-02	Modified Bitumen Roof System on Steel Deck & Framing, Non-Sloping (Unconditioned Bldg)
MBS-31	Modified Bitumen Roof System on Steel Deck & Framing, Sloping

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

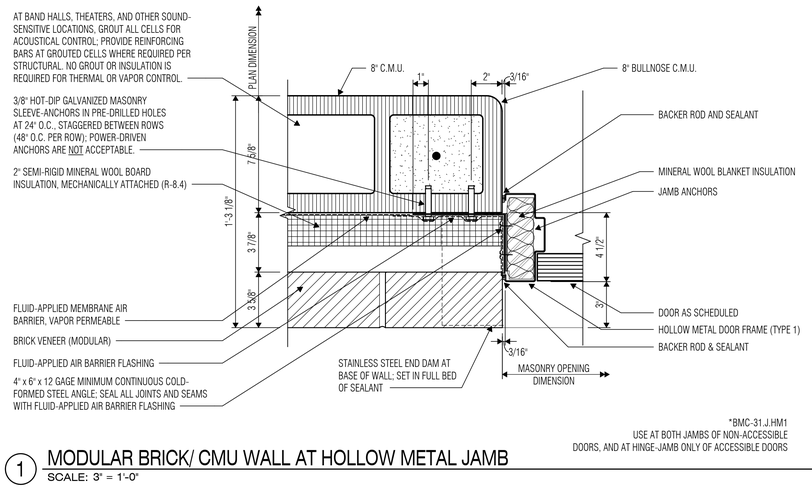
SHEET TITLE

BUILDING ASSEMBLY TYPES

SHEET NO.

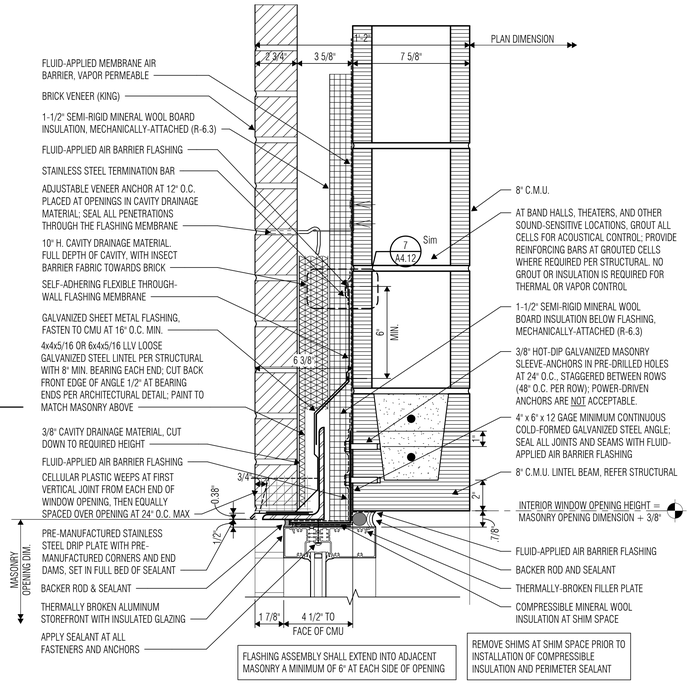
A4.11

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

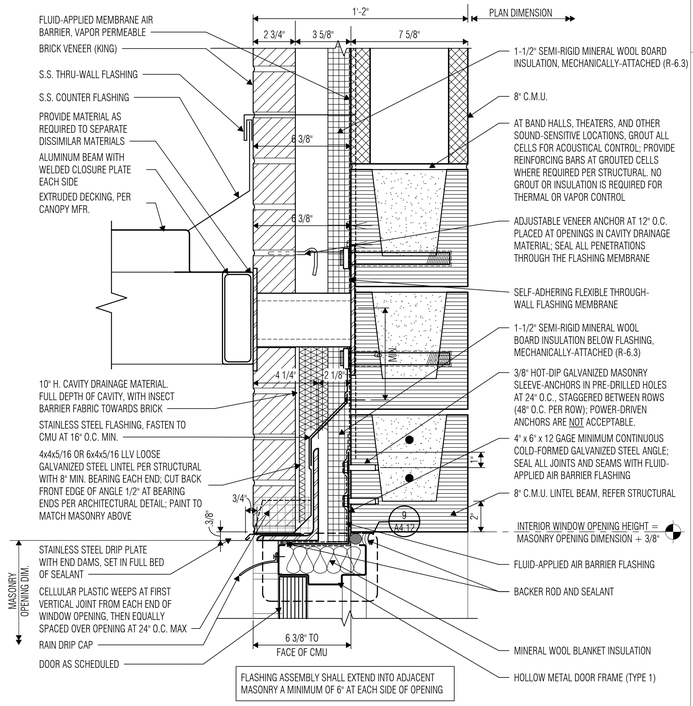


*BMC-31.J.HM1
USE AT BOTH JAMBS OF NON-ACCESSIBLE DOORS, AND AT HINGE-JAMB ONLY OF ACCESSIBLE DOORS

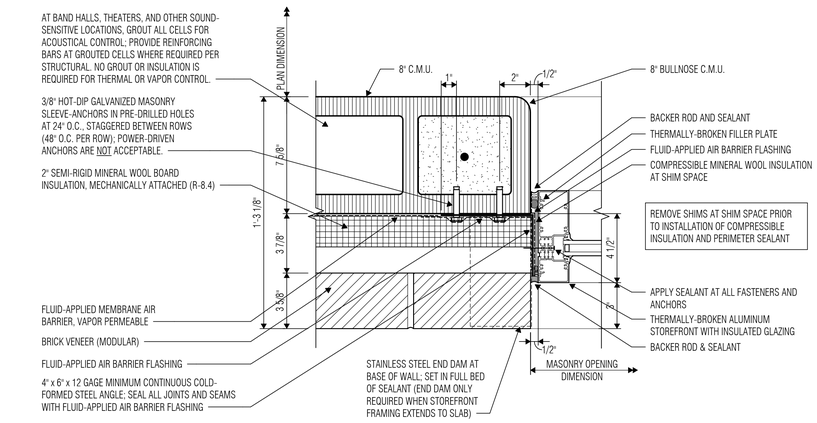
1 MODULAR BRICK/ CMU WALL AT HOLLOW METAL JAMB
SCALE: 3" = 1'-0"



6 MODULAR BRICK AT STOREFRONT
SCALE: 3" = 1'-0"

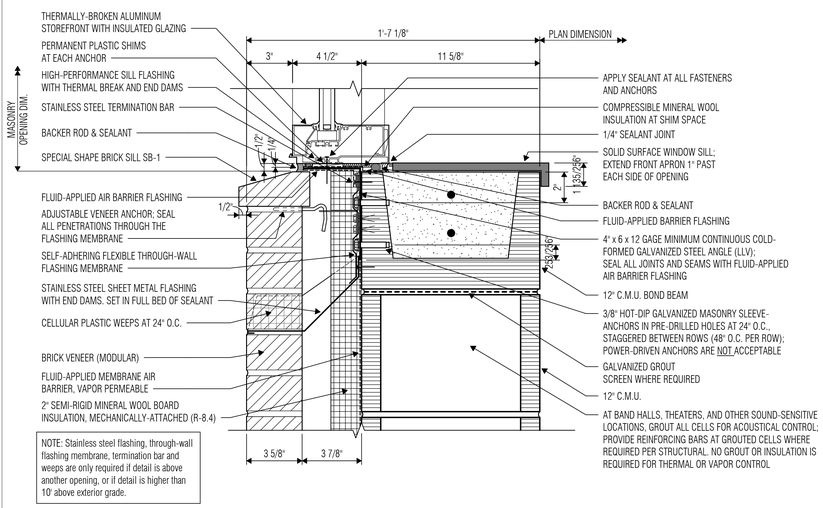


8 CANOPY AT H.M. HEAD
SCALE: 3" = 1'-0"



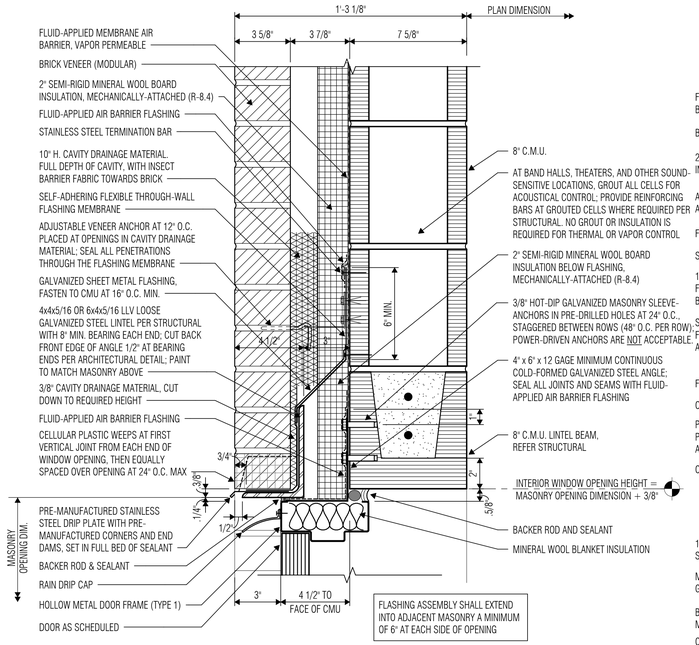
2 MODULAR BRICK/ CMU WALL AT STOREFRONT JAMB
SCALE: 3" = 1'-0"

*BMC-31.J.60SF



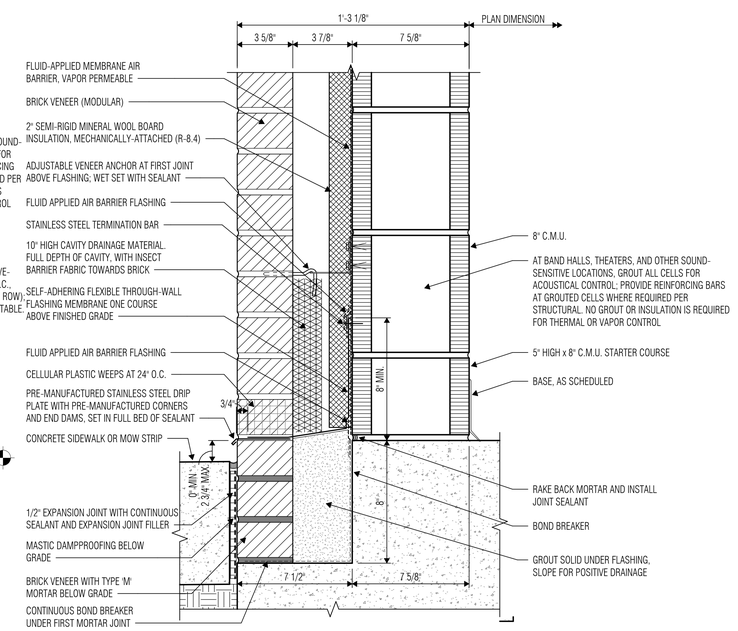
3 MODULAR BRICK/ CMU WALL AT STOREFRONT SILL - BRICK SILL
SCALE: 3" = 1'-0"

*BMC-32.S.60SF.SB



5 MODULAR BRICK/ CMU WALL AT HOLLOW METAL FRAME HEAD - LOOSE LINTEL
SCALE: 3" = 1'-0"

*BMC-31.H.HM1.LL



*BMC-31.B.SW
WHERE GRADE IS LESS THAN 2 3/4" BELOW FINISH FLOOR

4 MODULAR BRICK / CMU WALL AT SIDEWALK
SCALE: 3" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

MONIKA C. CASTILLO — 29056 — REGISTERED ARCHITECT — STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

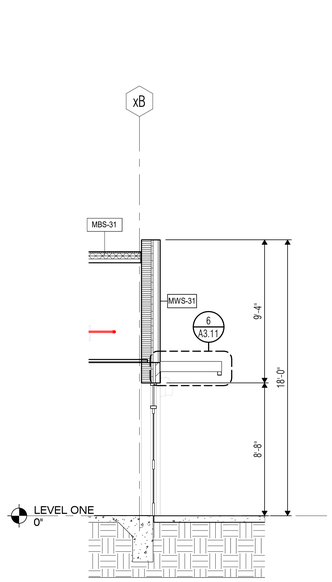
SHEET TITLE

BUILDING ASSEMBLY DETAILS

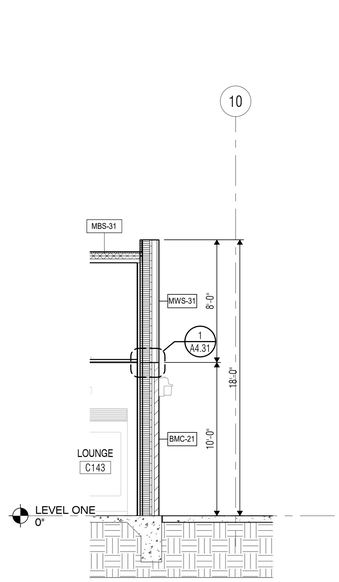
SHEET NO.

A4.12

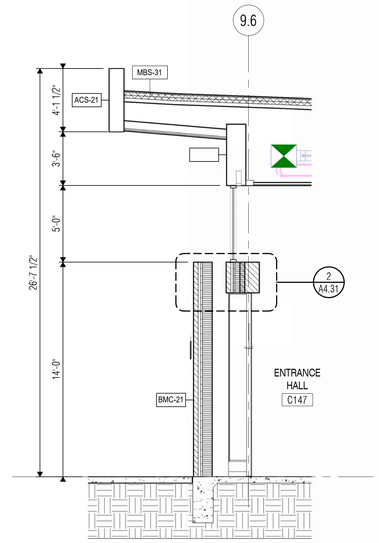
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



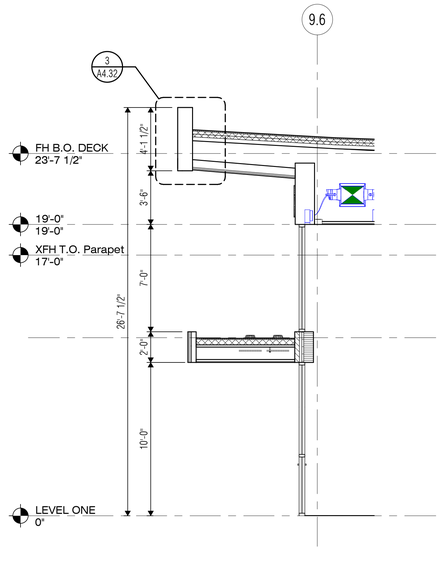
1 WALL SECTION
SCALE: 1/4" = 1'-0"



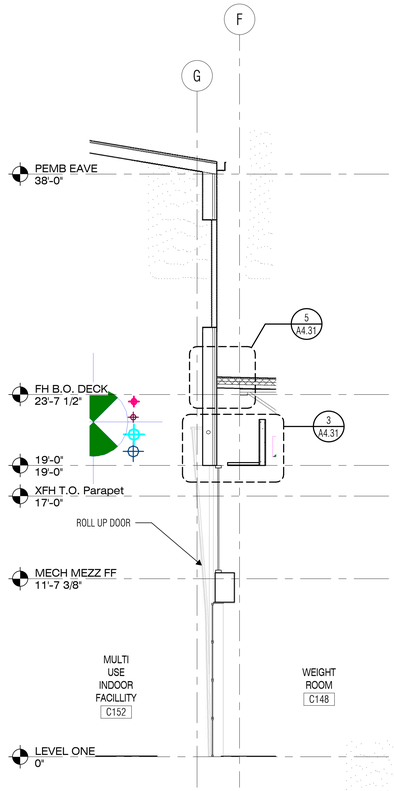
2 WALL SECTION
SCALE: 1/4" = 1'-0"



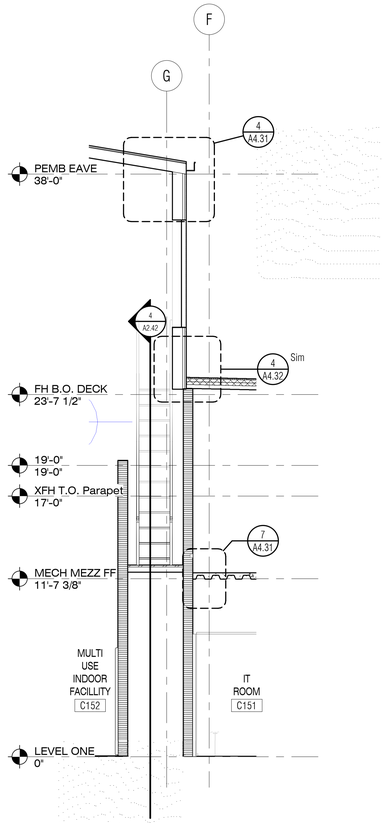
3 WALL SECTION
SCALE: 1/4" = 1'-0"



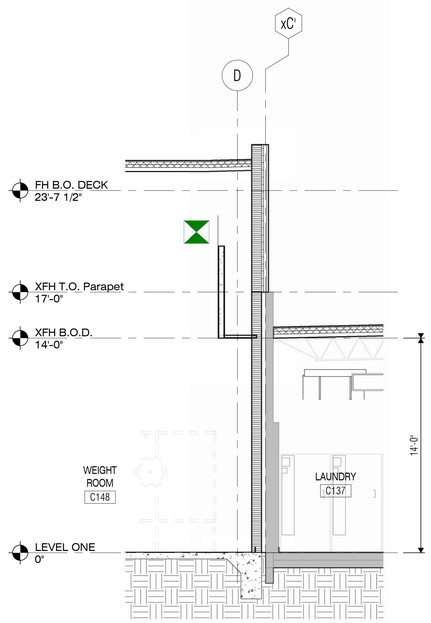
4 WALL SECTION
SCALE: 1/4" = 1'-0"



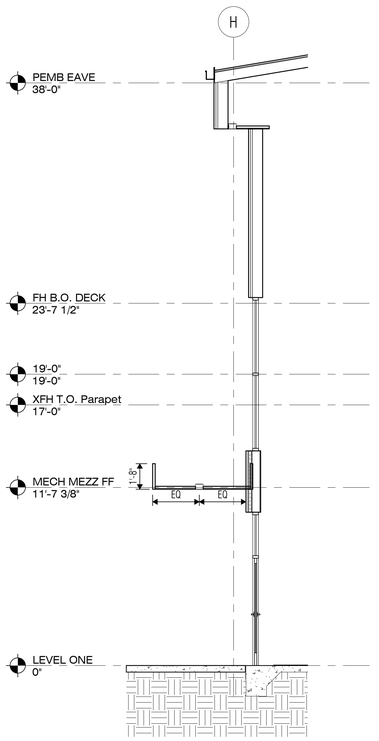
5 WALL SECTION
SCALE: 1/4" = 1'-0"



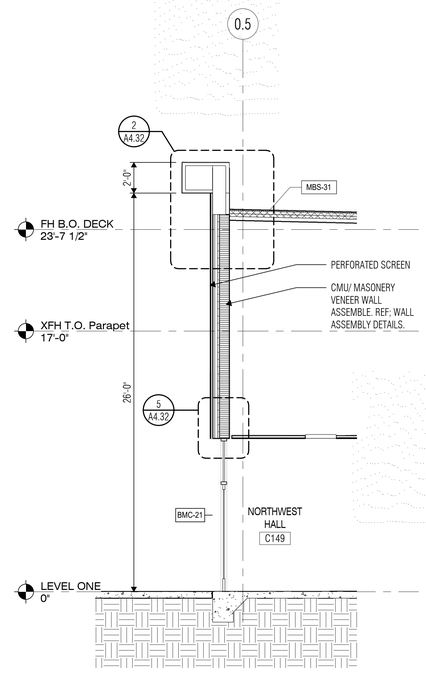
6 WALL SECTION
SCALE: 1/4" = 1'-0"



7 WALL SECTION
SCALE: 1/4" = 1'-0"



8 CANOPY B SECTION
SCALE: 1/4" = 1'-0"



9 WALL SECTION
SCALE: 1/4" = 1'-0"

CLADDING BACKUP CLIMATE ZONE MARK
BMS-21

BUILDING ASSEMBLY LEGEND

TYPE MARK	DESCRIPTION
Floor	
CSG-01	Concrete Slab on Grade
CSS-01	Concrete Slab on Steel Deck & Framing
SW-1	Sidewalk
TF-03	
TZ-01	
TZ-02	Concrete Slab on Grade
Wall	
ACS-21	ACM Wall Panel w/ Clip System on 6" Steel Studs
BMC-21	Brick Veneer (Modular) on 8" CMU
MWS-31	Metal Wall Panel (Vertical) w/ Clip System on 6" Steel Studs
Roof	
MBS-02	Modified Bitumen Roof System on Steel Deck & Framing, Non-Sloping (Unconditioned Bldg)
MBS-31	Modified Bitumen Roof System on Steel Deck & Framing, Sloping
MRM-21	Structural Metal Roof Panel System on Metal Building System Framing, w/8" Purlins and Liner System Insulation

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 36558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

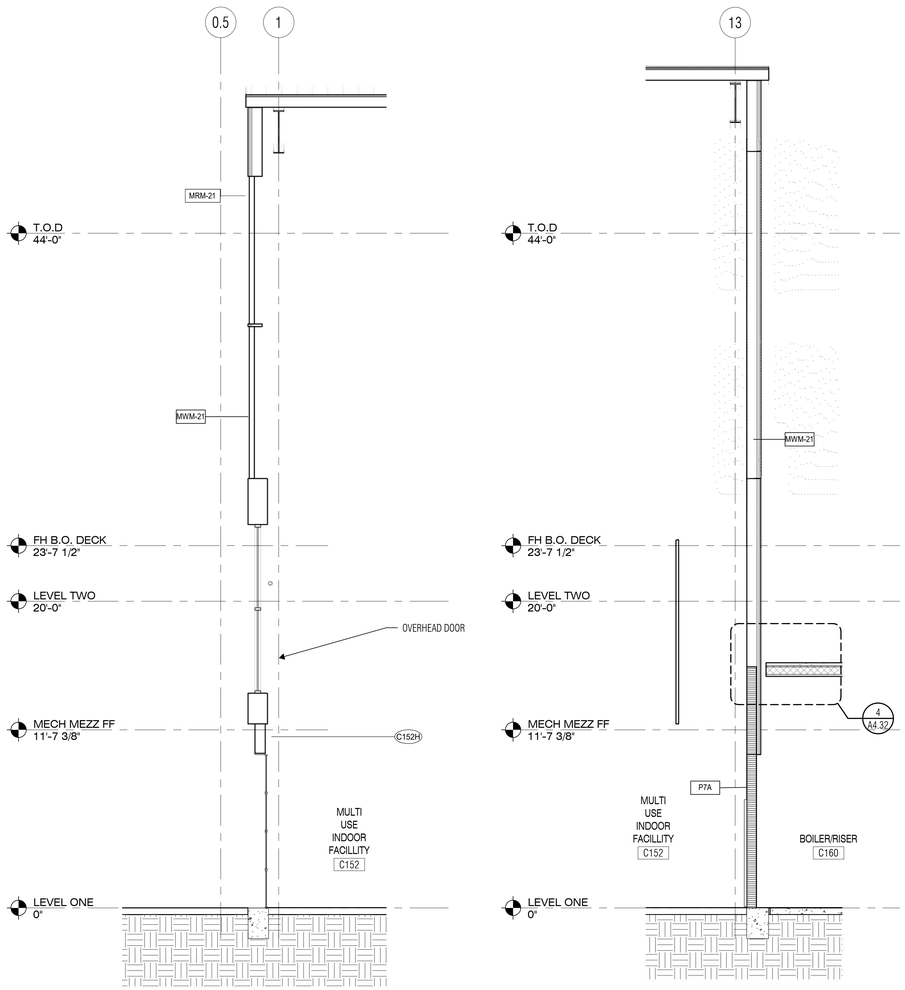
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
WALL SECTIONS

SHEET NO.
A4.21

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 WALL SECTION 7
SCALE: 1/4" = 1'-0"

2 WALL SECTION 8
SCALE: 1/4" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

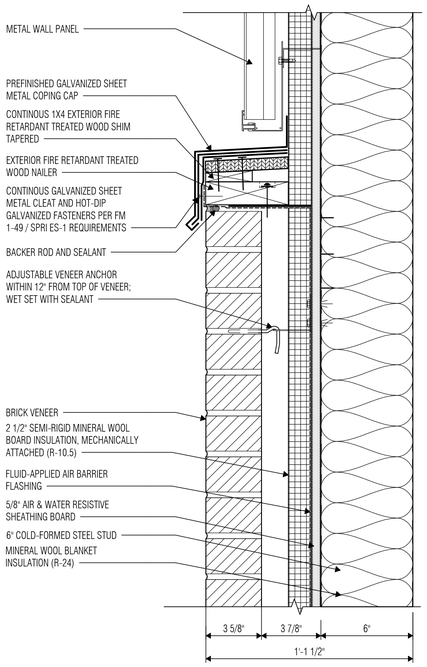
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

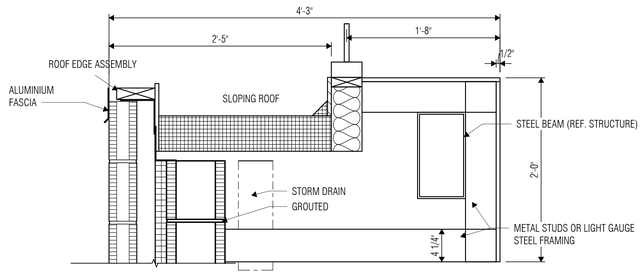
SHEET TITLE
WALL SECTIONS

SHEET NO.
A4.22

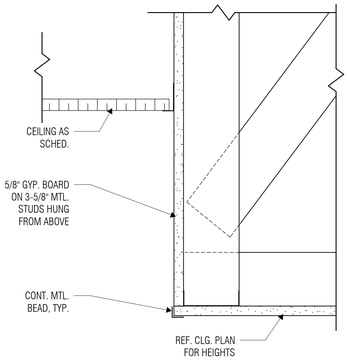
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



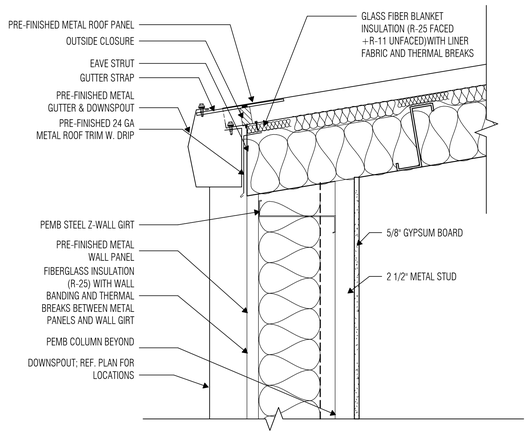
1 METAL WALL PANEL - BRICK TRANSITION DETAIL
SCALE: 3" = 1'-0"



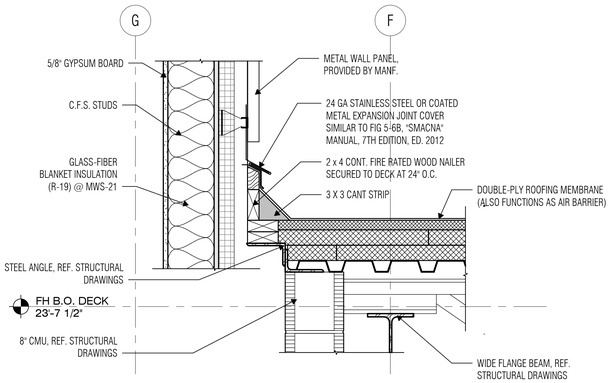
2 SECTION DETAIL - LOBBY LOW ROOF
SCALE: 1 1/2" = 1'-0"



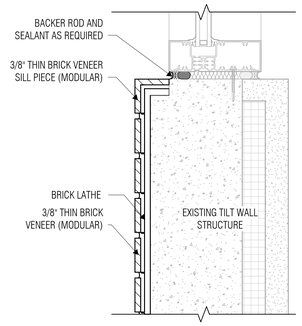
3 C508 - DETAIL AT FURR DOWN
SCALE: 3" = 1'-0"



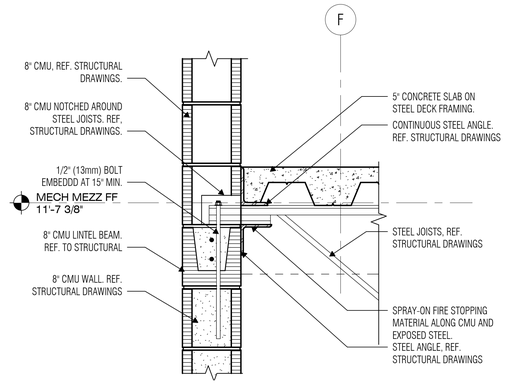
4 ROOF GUTTER DETAIL - PEMB
SCALE: 1 1/2" = 1'-0"



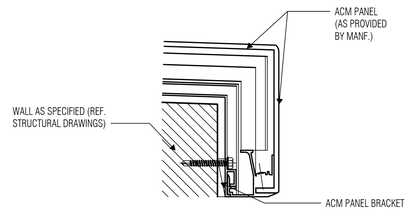
5 SECTION DETAIL @ PEMB WALL - STUD ROOF EXPAN. JOINT
SCALE: 1 1/2" = 1'-0"



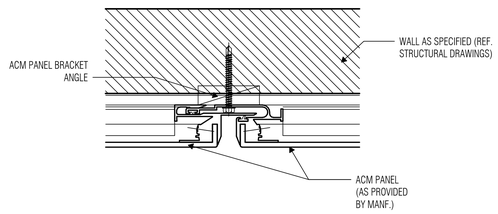
6 THIN BRICK MASONRY DETAIL (ALTERNATE)
SCALE: 3" = 1'-0"



7 SECTION DETAIL @ MEZZ FOOR - CMU WALL
SCALE: 1 1/2" = 1'-0"



8 ACM PANEL DETAIL - TYPICAL END CONDITION
SCALE: 6" = 1'-0"



9 ACM PANEL DETAIL - TYPICAL SEAM
SCALE: 6" = 1'-0"

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

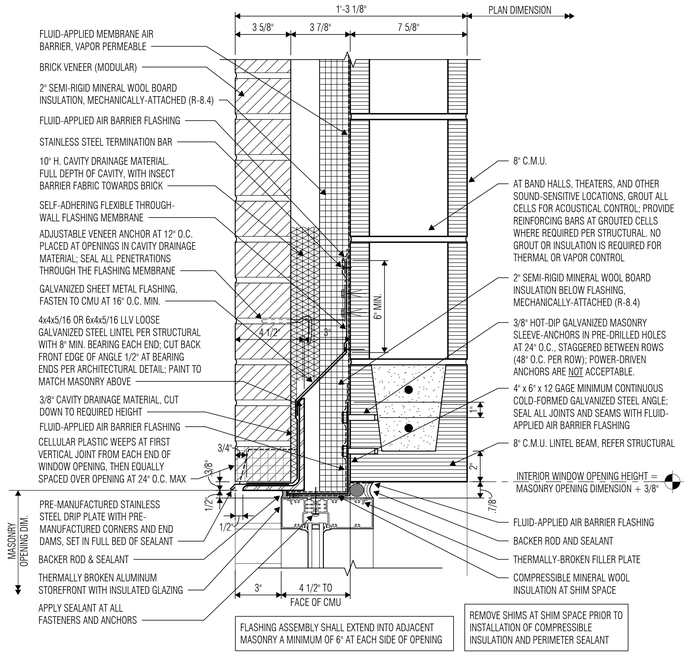
PROJECT NO.
25-0056.00

SHEET TITLE
WALL ASSEMBLY DETAILS

SHEET NO.
A4.31

North Shore Multi-Use Indoor Facility

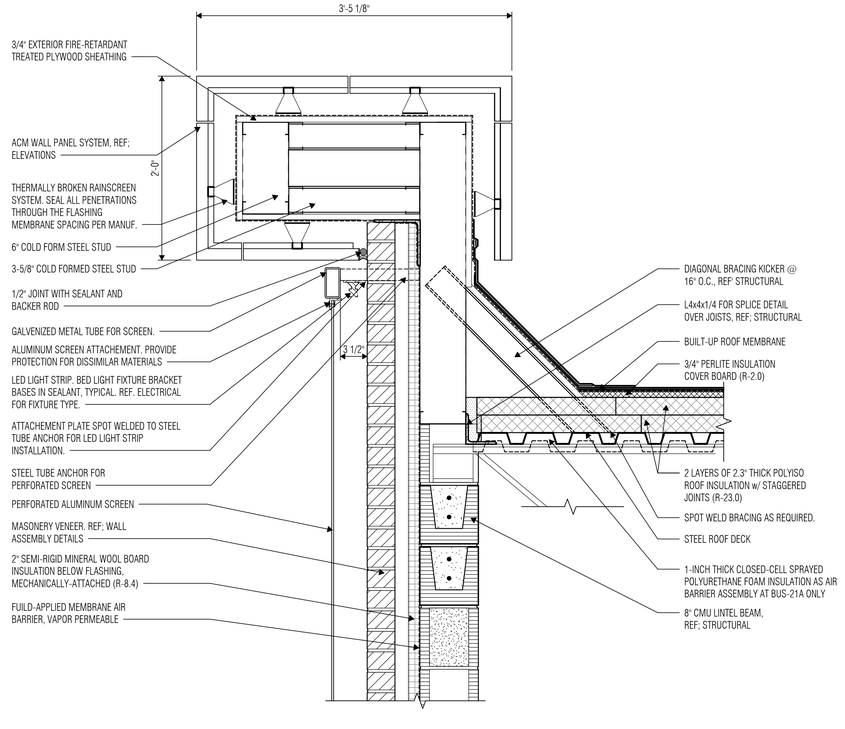
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



*BMC-31.H.60SF.LL

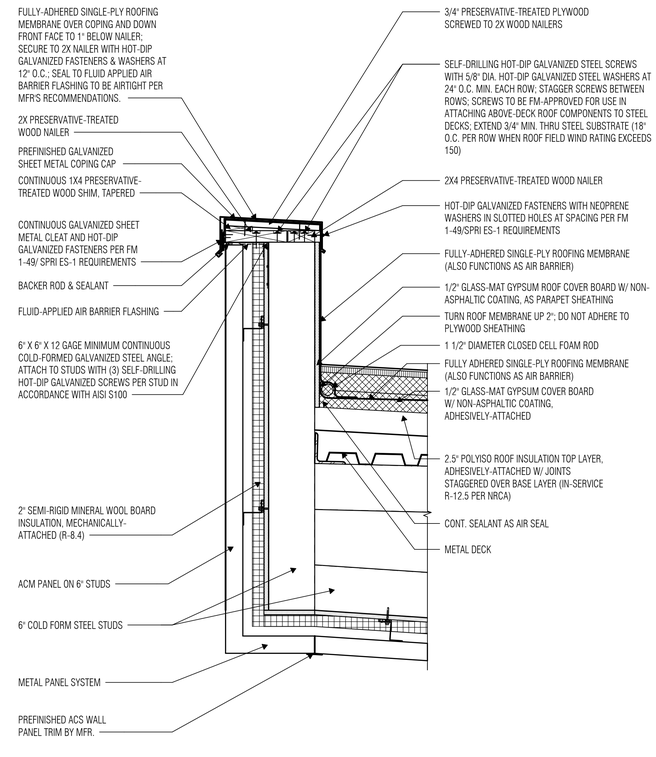
1 MODULAR BRICK/ CMU WALL AT STOREFRONT HEAD - LOOSE LINTEL

SCALE: 3" = 1'-0"



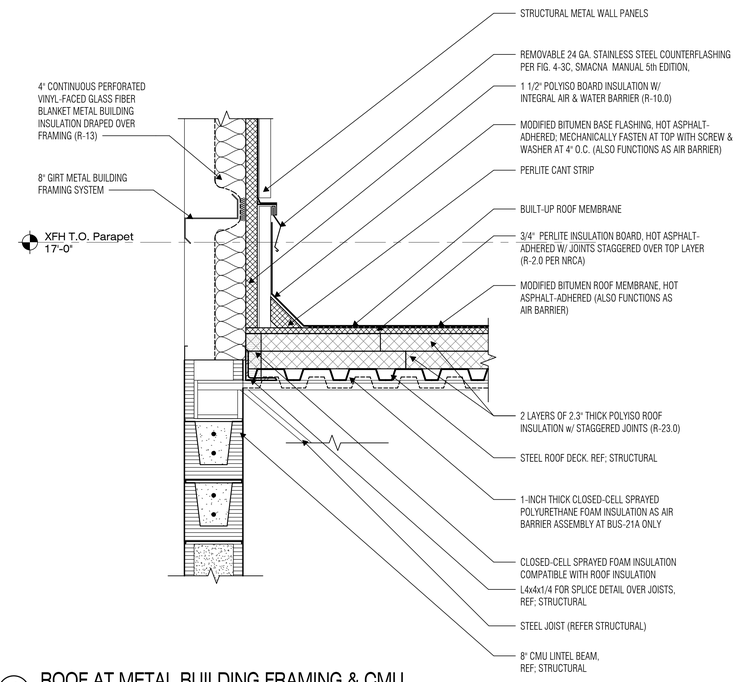
2 SCREEN HEAD AT ACM WALL

SCALE: 1 1/2" = 1'-0"



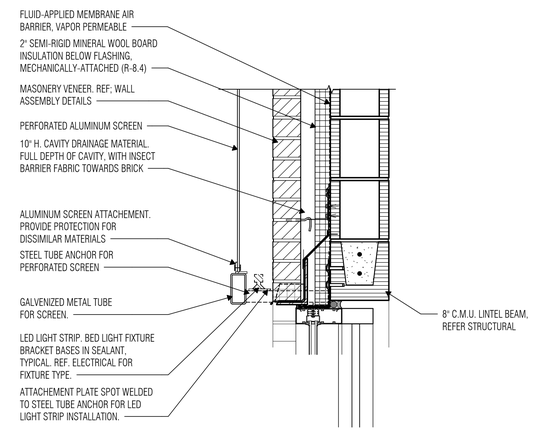
3 SOFFIT AT ACM PARAPET

SCALE: 1 1/2" = 1'-0"



4 ROOF AT METAL BUILDING FRAMING & CMU

SCALE: 1 1/2" = 1'-0"



5 SCREEN SILL AT MASONERY WALL

SCALE: 1 1/2" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

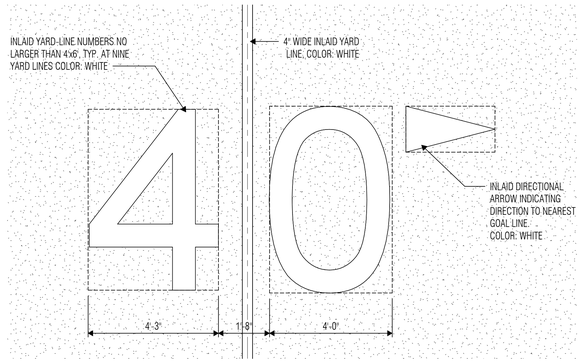
SHEET TITLE

WALL ASSEMBLY DETAILS

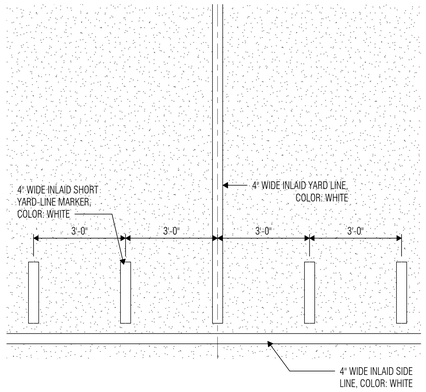
SHEET NO.

A4.32

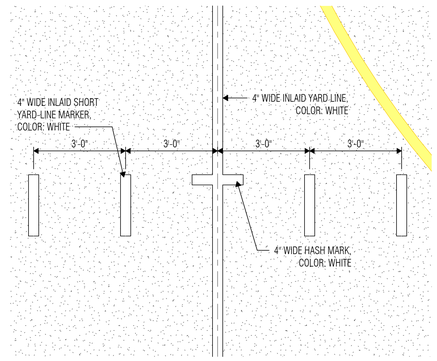
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



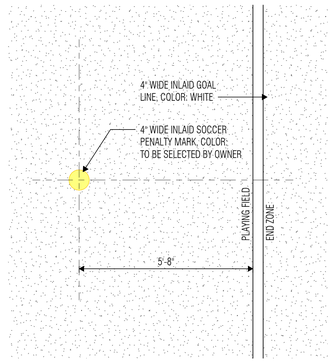
1 DETAIL AT YARD-LINE NUMBERS
SCALE: 1/2" = 1'-0"



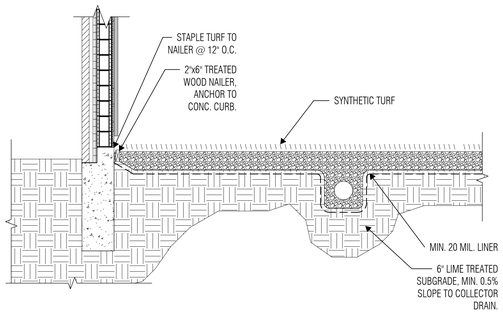
2 DETAIL AT SIDE LINE
SCALE: 1/2" = 1'-0"

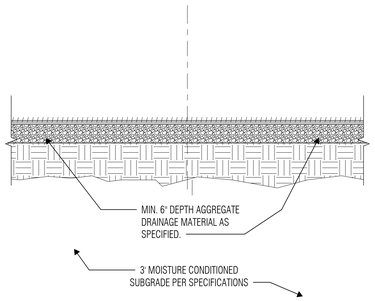


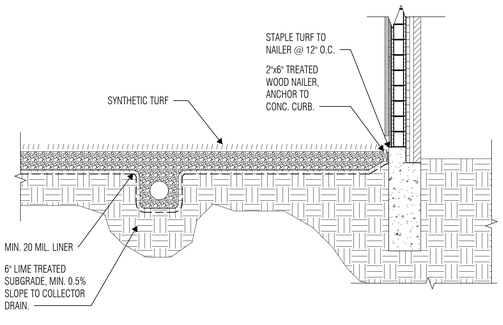
3 DETAIL AT INBOUND LINES
SCALE: 1/2" = 1'-0"



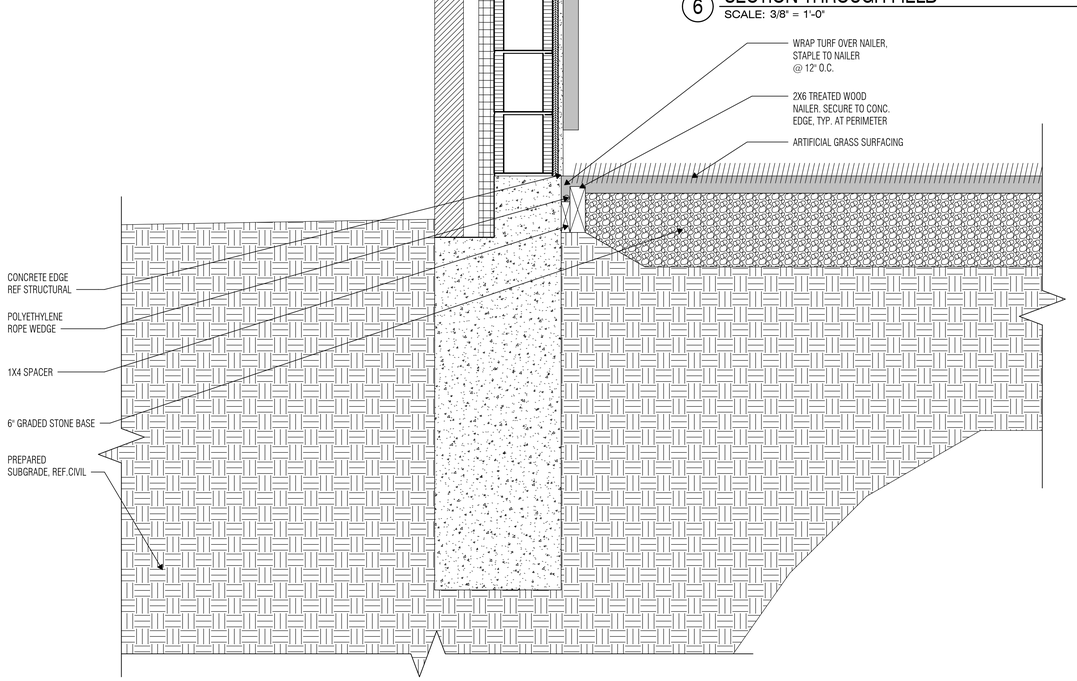
4 DETAIL AT PENALTY MARK
SCALE: 1/2" = 1'-0"



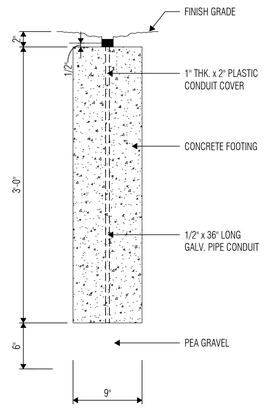




6 SECTION THROUGH FIELD
SCALE: 3/8" = 1'-0"



5 DETAIL @ EDGE OF TURF1
SCALE: 1 1/2" = 1'-0"



7 FIELD CORNER/RADIUS MARKER
SCALE: 1 1/2" = 1'-0"

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

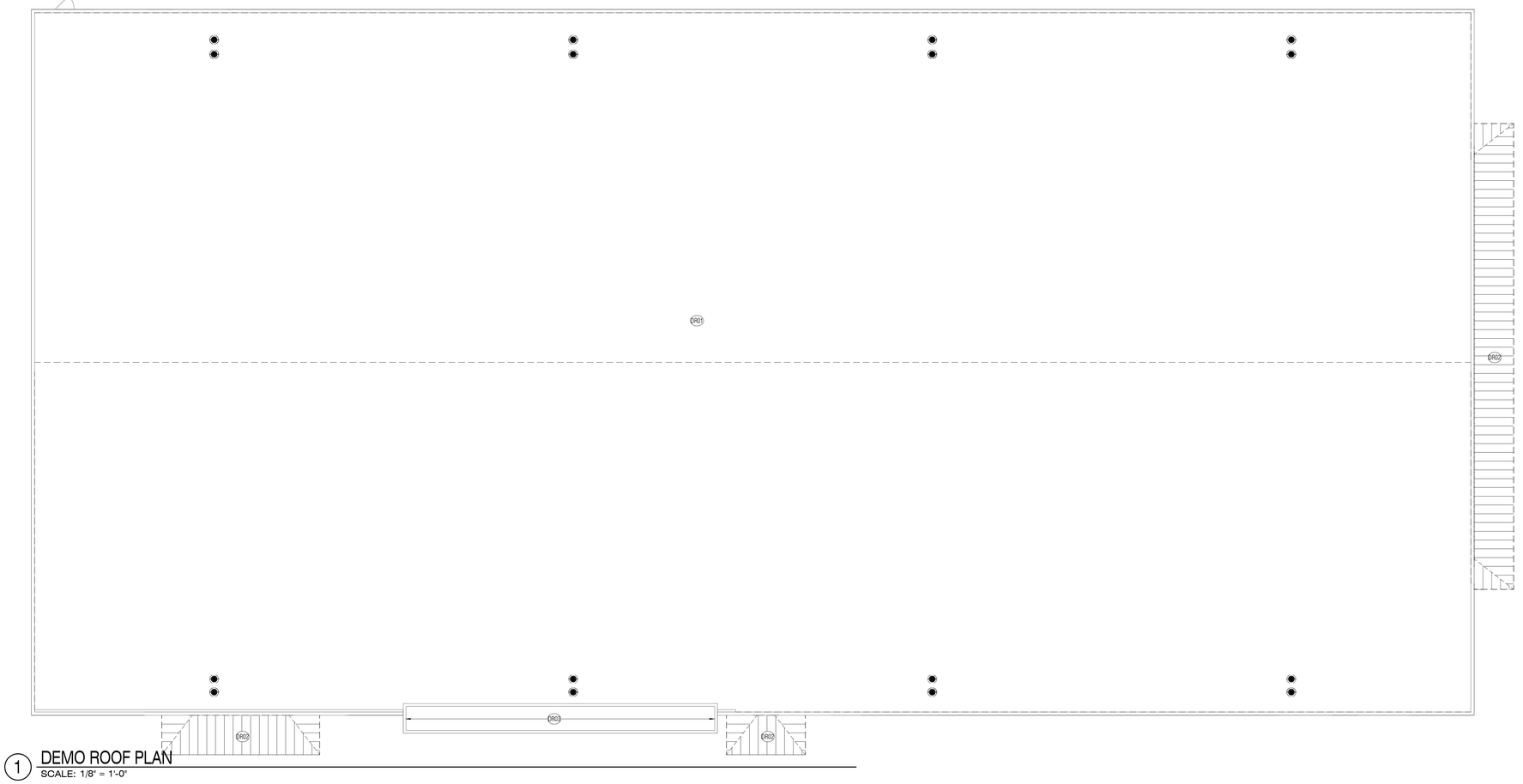
SHEET TITLE
FIELD DETAILS

SHEET NO.
A4.41

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
DR01	REMOVE EXISTING ROOF DOWN TO DECK. REMOVE ALL ROOF DRAINS, FLASHING, METAL COPING, AND ASSOCCIATED ITEMS.
DR02	REMOVE EXISTING CANOPY AND RELATED STRUCTURE. PATCH AND REPAIR WALL FOR NEW CONSTRUCTION.
DR03	EXISTING SCOREBOARD TO REMAIN. PROTECT THROUGHOUT CONSTRUCTION.



1 DEMO ROOF PLAN
SCALE: 1/8" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

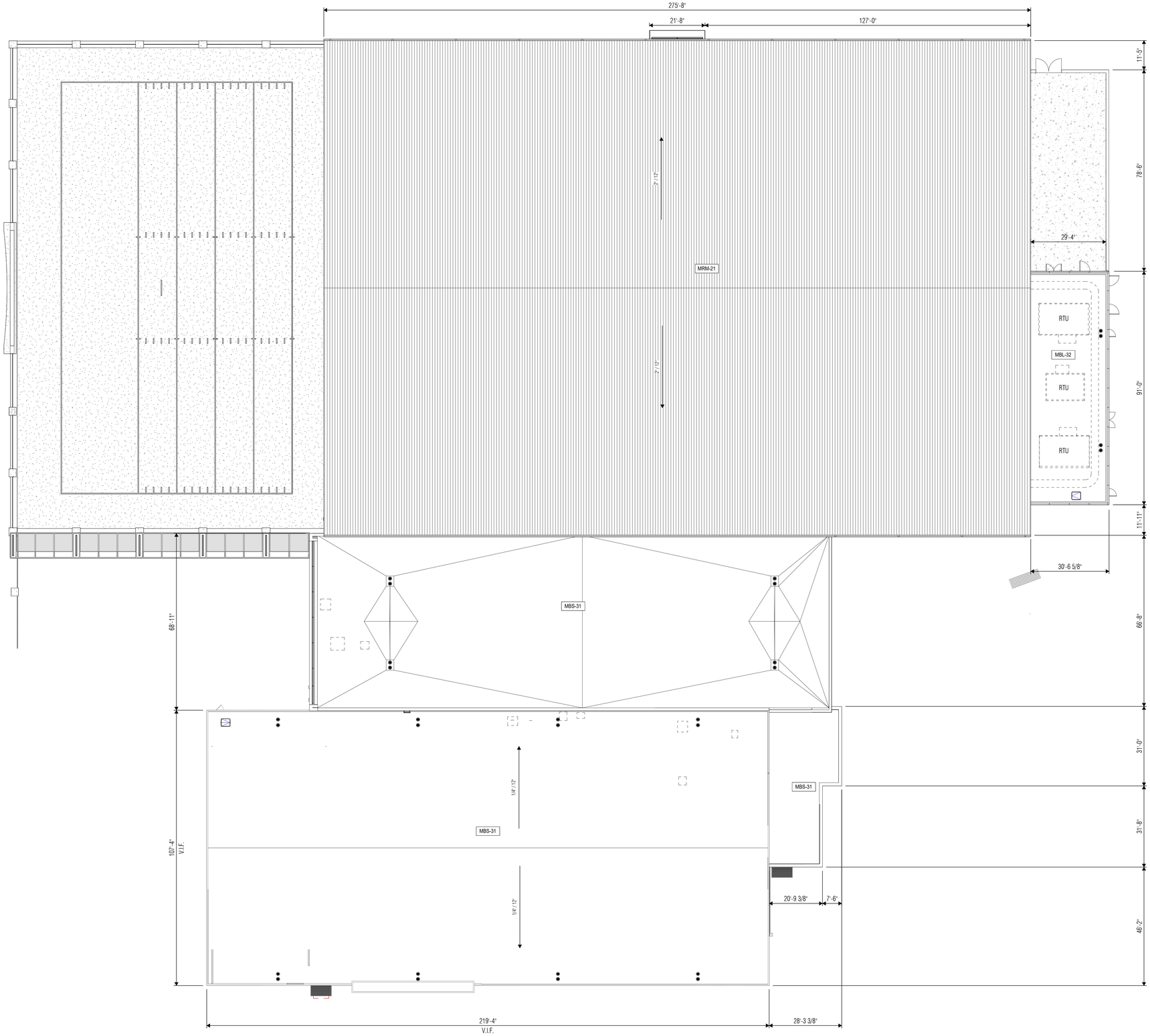
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
DEMO ROOF PLAN

SHEET NO.
A5.10

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 OVERALL ROOF PLAN
SCALE: 1/16" = 1'-0"

ROOF PLAN NOTES

1. Provide tapered insulation crickets at the high side of all rooftop curbs, mounting rails, and other miscellaneous roof penetrations as required to shed water around them and to ensure positive roof drainage, whether indicated on the drawings or not.
2. Crickets shall slope 1/2" per foot, unless noted otherwise.
3. Locate overflow scuppers per Building Elevations. If conflicts occur, contact Architect prior to construction.
4. Provide roof walkway protection at base of all roof ladders, around all sides of roof hatches, on all sides of rooftop units and condensing units, and on paths leading from roof access points to rooftop units and condensing units, whether indicated on drawings or not.
5. Provide layer of roof walkway protection under all pipe and conduit supports, fully-adhered to roof membrane.
6. Provide additional layer of single-ply roof membrane at the discharge point of downspouts, where splash pans are not provided.
7. Provide metal end closure at the ends of expansion joints, flashings and counterflashings.
8. Paint all exposed galvanized metal flashings, miscellaneous steel, piping, conduits, etc. that are not prefinished.

ROOF PLAN LEGEND

T.O.M.	TOP OF MASONRY ELEVATION
T.O.D.	TOP OF DECK ELEVATION
T.O.S.	TOP OF STEEL ELEVATION
RD	ROOF DRAIN, REF. 2 / A5.31
OD	OVERFLOW DRAIN WITH DOWNSPOUT NOZZLE, REF. 3 / A5.31
DS	DOWNSPOUT, REF. 5 / A5.31
SB	SPLASH BLOCK, CONCRETE, REF. - / ---
SP	SPLASH PAN, REF. 10 / A5.31
MC	MANUFACTURED COPING, REF. 12 / A5.31
RH	ROOF HATCH, REF. 1 / A5.31
RL	ROOF LADDER, REF. 1 / A5.31
RTU	ROOFTOP UNIT, REF. MECHANICAL
CU	CONDENSING UNIT, REF. M.E.P.
GP	GAS PIPE PENETRATION, REF. M.E.P. & 7 / A5.31
RV	RELIEF VENT, REF. M.E.P.
EF	EXHAUST FAN, REF. M.E.P.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
OVERALL ROOF PLAN

SHEET NO.
A5.11

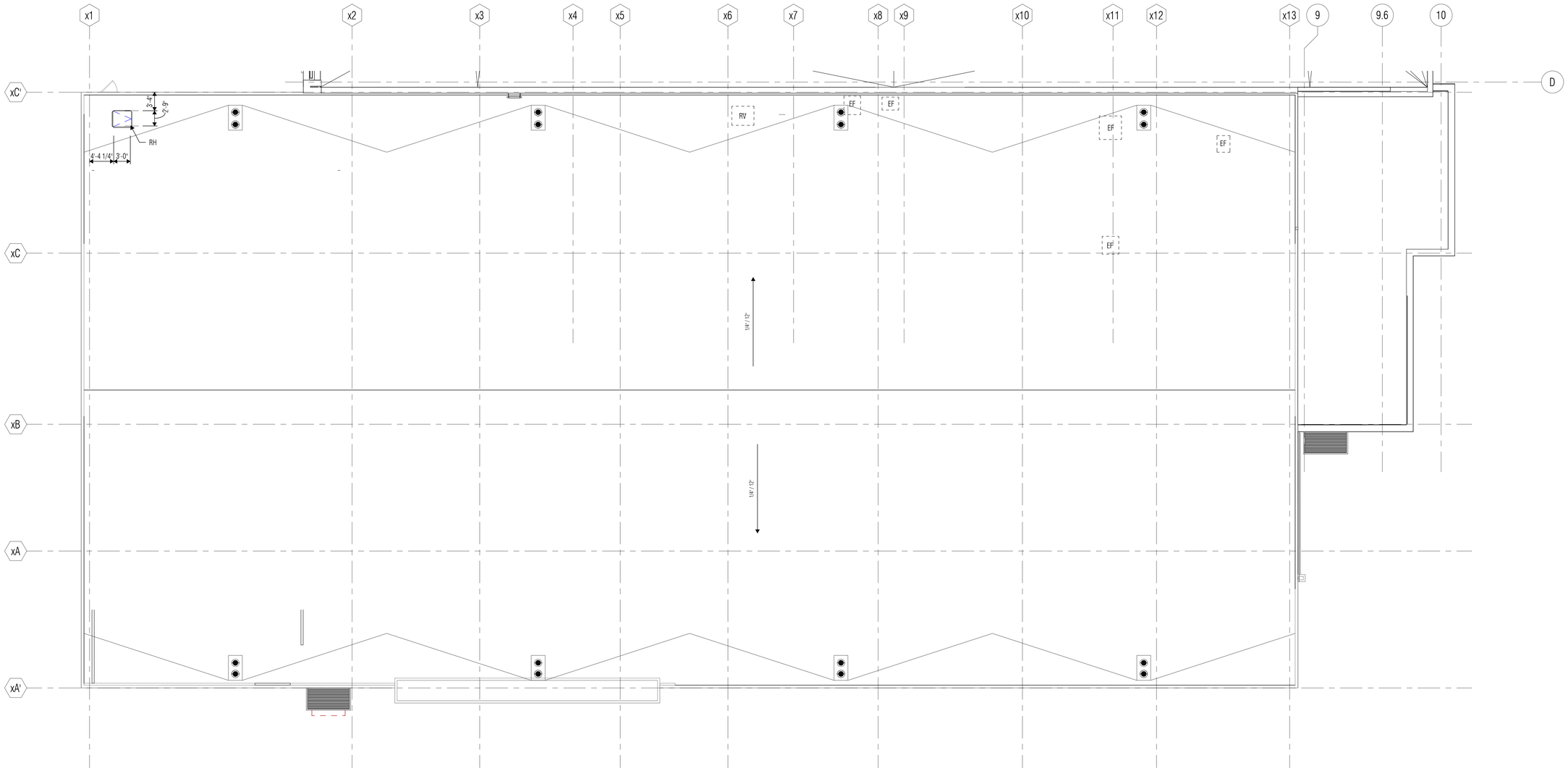
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

ROOF PLAN NOTES

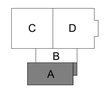
1. Provide tapered insulation crickets at the high side of all rooftop curbs, mounting rails, and other miscellaneous roof penetrations as required to shed water around them and to ensure positive roof drainage, whether indicated on the drawings or not.
2. Crickets shall slope 1/2" per foot, unless noted otherwise.
3. Locate overflow scuppers per Building Elevations. If conflicts occur, contact Architect prior to construction.
4. Provide roof walkway protection at base of all roof ladders, around all sides of roof hatches, on all sides of rooftop units and condensing units, and on paths leading from roof access points to rooftop units and condensing units, whether indicated on drawings or not.
5. Provide layer of roof walkway protection under all pipe and conduit supports, fully-adhered to roof membrane.
6. Provide additional layer of single-ply roof membrane at the discharge point of downspouts, where splash pans are not provided.
7. Provide metal end closure at the ends of expansion joints, flashings and counterflashings.
8. Paint all exposed galvanized metal flashings, miscellaneous steel, piping, conduits, etc. that are not prefinished.

ROOF PLAN LEGEND

T.O.M.	TOP OF MASONRY ELEVATION
T.O.D.	TOP OF DECK ELEVATION
T.O.S.	TOP OF STEEL ELEVATION
RD	ROOF DRAIN, REF. 2 / A5.31
OD	OVERFLOW DRAIN WITH DOWNSPOUT NOZZLE, REF. 3 / A5.31
DS	DOWNSPOUT, REF. 5 / A5.31
SB	SPLASH BLOCK, CONCRETE, REF. - / ---
SP	SPLASH PAN, REF. 10 / A5.31
MC	MANUFACTURED COPING, REF. 12 / A5.31
RH	ROOF HATCH, REF. 1 / A5.31
RL	ROOF LADDER, REF. 1 / A5.31
RTU	ROOFTOP UNIT, REF. MECHANICAL
CU	CONDENSING UNIT, REF. M.E.P.
GP	GAS PIPE PENETRATION, REF. M.E.P. & 7 / A5.31
RV	RELIEF VENT, REF. M.E.P.
EF	EXHAUST FAN, REF. M.E.P.



1 ROOF PLAN UNIT A
SCALE: 1/8" = 1'-0"



KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility



10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ROOF PLAN - UNIT A

SHEET NO.
A5.21

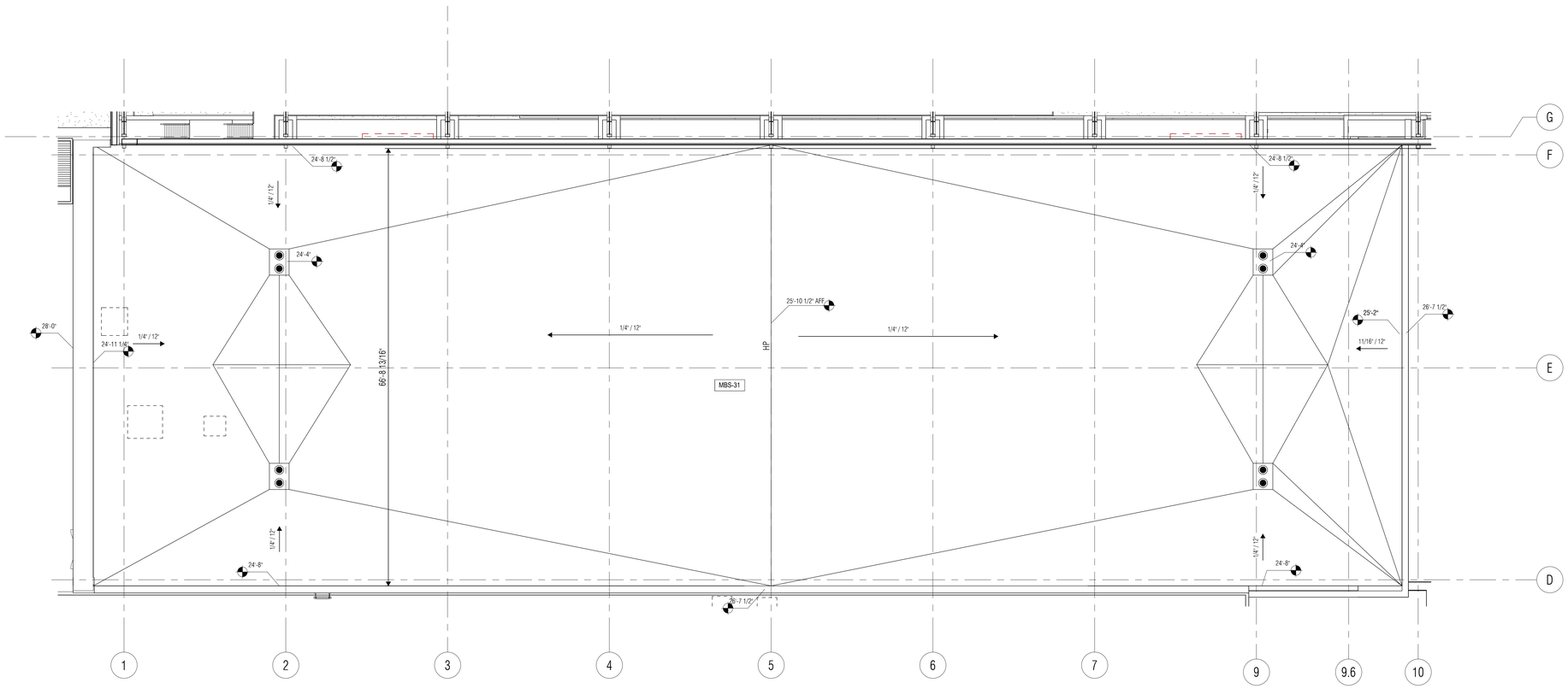
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

ROOF PLAN NOTES

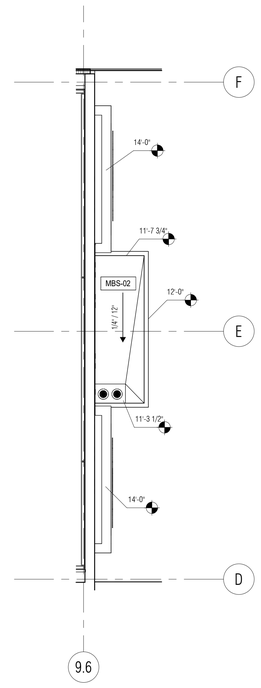
1. Provide tapered insulation crickets at the high side of all rooftop curbs, mounting rails, and other miscellaneous roof penetrations as required to shed water around them and to ensure positive roof drainage, whether indicated on the drawings or not.
2. Crickets shall slope 1/2" per foot, unless noted otherwise.
3. Locate overflow scuppers per Building Elevations. If conflicts occur, contact Architect prior to construction.
4. Provide roof walkway protection at base of all roof ladders, around all sides of roof hatches, on all sides of rooftop units and condensing units, and on paths leading from roof access points to rooftop units and condensing units, whether indicated on drawings or not.
5. Provide layer of roof walkway protection under all pipe and conduit supports, fully-adhered to roof membrane.
6. Provide additional layer of single-ply roof membrane at the discharge point of downspouts, where splash pans are not provided.
7. Provide metal end closure at the ends of expansion joints, flashings and counterflashings.
8. Paint all exposed galvanized metal flashings, miscellaneous steel, piping, conduits, etc. that are not prefinished.

ROOF PLAN LEGEND

T.O.M.	TOP OF MASONRY ELEVATION
T.O.D.	TOP OF DECK ELEVATION
T.O.S.	TOP OF STEEL ELEVATION
RD	ROOF DRAIN, REF. 2 / A5.31
OD	OVERFLOW DRAIN WITH DOWNSPOUT NOZZLE, REF. 3 / A5.31
DS	DOWNSPOUT, REF. 5 / A5.31
SB	SPLASH BLOCK, CONCRETE, REF. - / ---
SP	SPLASH PAN, REF. 10 / A5.31
MC	MANUFACTURED COPING, REF. 12 / A5.31
RH	ROOF HATCH, REF. 1 / A5.31
RL	ROOF LADDER, REF. 1 / A5.31
RTU	ROOFTOP UNIT, REF. MECHANICAL
CU	CONDENSING UNIT, REF. M.E.P.
GP	GAS PIPE PENETRATION, REF. M.E.P. & 7 / A5.31
RV	RELIEF VENT, REF. M.E.P.
EF	EXHAUST FAN, REF. M.E.P.



1 ROOF PLAN UNIT B
SCALE: 1/8" = 1'-0"



2 ROOF PLAN UNIT B LOWER ROOF
SCALE: 1/8" = 1'-0"



KEY PLAN

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

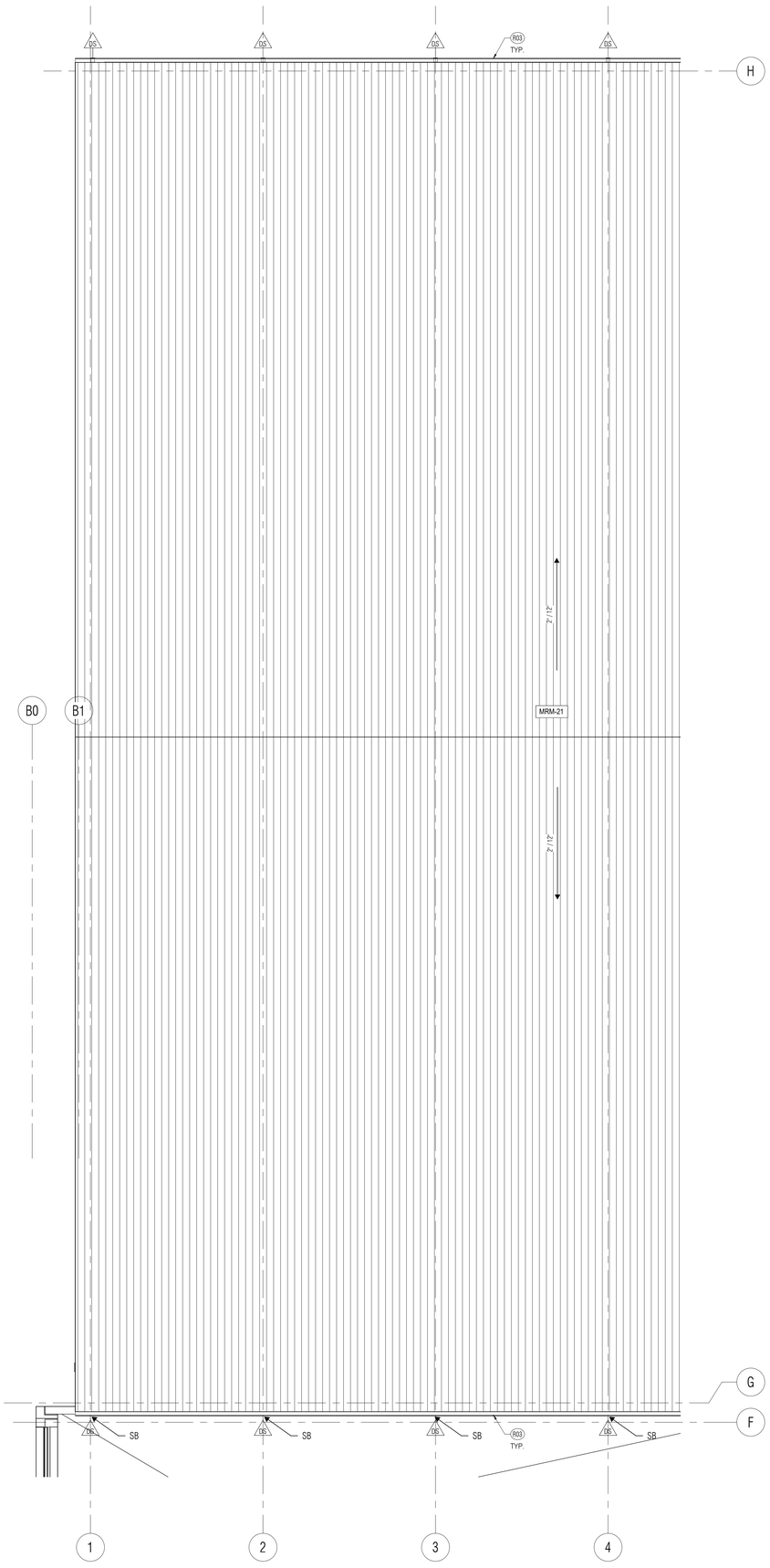
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Todd Hanger
Drawn By	VLK

PROJECT NO.
25-0056.00

SHEET TITLE
ROOF PLAN - UNIT B

SHEET NO.
A5.22

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ROOF PLAN UNIT C
SCALE: 1/8" = 1'-0"

ROOF PLAN NOTES

1. Provide tapered insulation crickets at the high side of all rooftop curbs, mounting rails, and other miscellaneous roof penetrations as required to shed water around them and to ensure positive roof drainage, whether indicated on the drawings or not.
2. Crickets shall slope 1/2" per foot, unless noted otherwise.
3. Locate overflow scuppers per Building Elevations. If conflicts occur, contact Architect prior to construction.
4. Provide roof walkway protection at base of all roof ladders, around all sides of roof hatches, on all sides of rooftop units and condensing units, and on paths leading from roof access points to rooftop units and condensing units, whether indicated on drawings or not.
5. Provide layer of roof walkway protection under all pipe and conduit supports, fully-adhered to roof membrane.
6. Provide additional layer of single-ply roof membrane at the discharge point of downspouts, where splash pans are not provided.
7. Provide metal end closure at the ends of expansion joints, flashings and counterflashings.
8. Paint all exposed galvanized metal flashings, miscellaneous steel, piping, conduits, etc. that are not prefinished.

ROOF PLAN LEGEND

T.O.M.	TOP OF MASONRY ELEVATION
T.O.D.	TOP OF DECK ELEVATION
T.O.S.	TOP OF STEEL ELEVATION
RD	ROOF DRAIN, REF. 2 / A5.31
OD	OVERFLOW DRAIN WITH DOWNSPOUT NOZZLE, REF. 3 / A5.31
DS	DOWNSPOUT, REF. 5 / A5.31
SB	SPLASH BLOCK, CONCRETE, REF. - / ---
SP	SPLASH PAN, REF. 10 / A5.31
MC	MANUFACTURED COPING, REF. 12 / A5.31
RH	ROOF HATCH, REF. 1 / A5.31
RL	ROOF LADDER, REF. 1 / A5.31
RTU	ROOFTOP UNIT, REF. MECHANICAL
CU	CONDENSING UNIT, REF. M.E.P.
GP	GAS PIPE PENETRATION, REF. M.E.P. & 7 / A5.31
RV	RELIEF VENT, REF. M.E.P.
EF	EXHAUST FAN, REF. M.E.P.

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
R03	GUTTER AND DOWNSPOUTS. TYP.

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

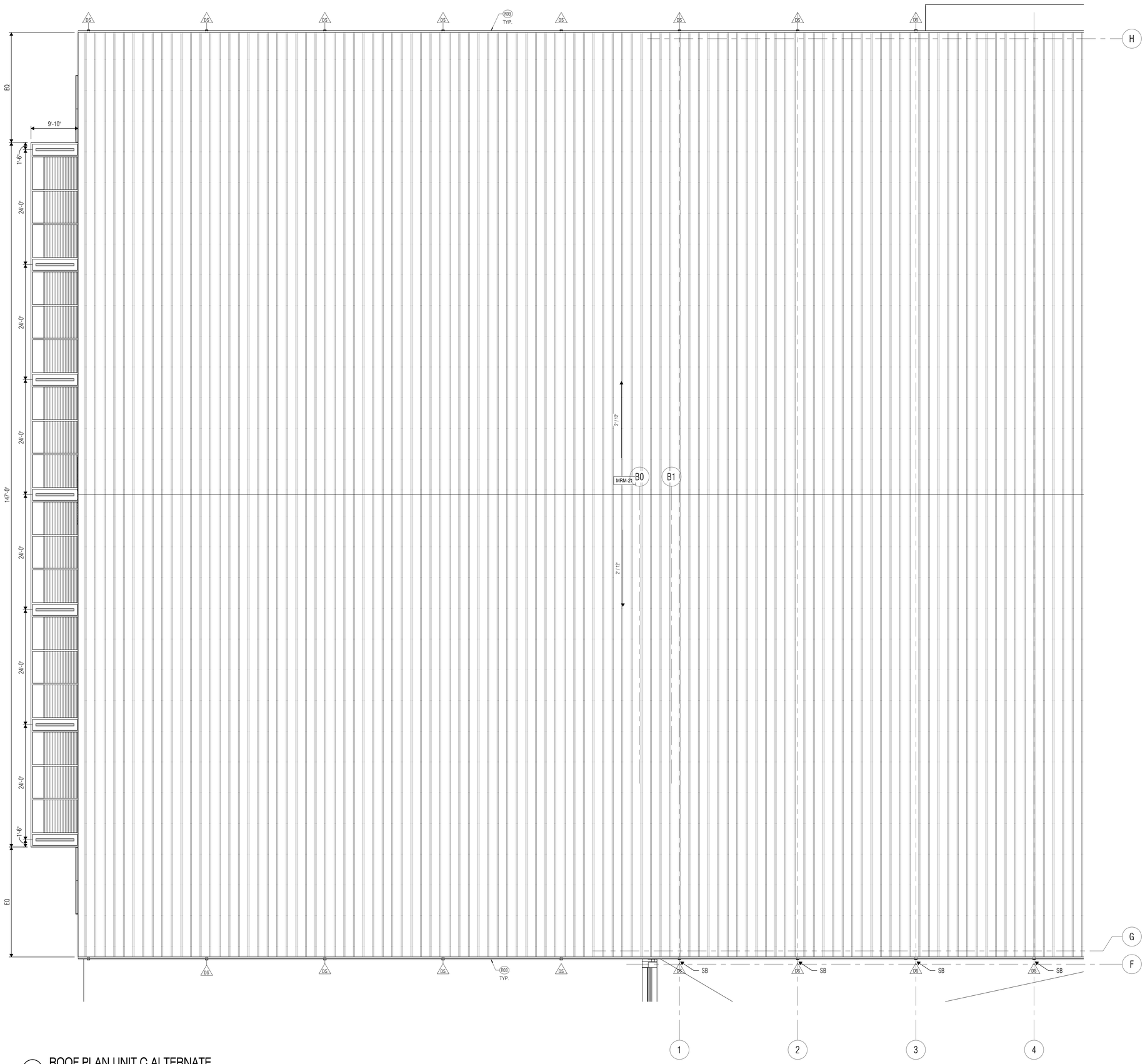
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ROOF PLAN - UNIT C

SHEET NO.
A5.23

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ROOF PLAN UNIT C ALTERNATE
SCALE: 1/8" = 1'-0"

ROOF PLAN NOTES

1. Provide tapered insulation crickets at the high side of all rooftop curbs, mounting rails, and other miscellaneous roof penetrations as required to shed water around them and to ensure positive roof drainage, whether indicated on the drawings or not.
2. Crickets shall slope 1/2" per foot, unless noted otherwise.
3. Locate overflow scuppers per Building Elevations. If conflicts occur, contact Architect prior to construction.
4. Provide roof walkway protection at base of all roof ladders, around all sides of roof hatches, on all sides of rooftop units and condensing units, and on paths leading from roof access points to rooftop units and condensing units, whether indicated on drawings or not.
5. Provide layer of roof walkway protection under all pipe and conduit supports, fully-adhered to roof membrane.
6. Provide additional layer of single-ply roof membrane at the discharge point of downspouts, where splash pans are not provided.
7. Provide metal end closure at the ends of expansion joints, flashings and counterflashings.
8. Paint all exposed galvanized metal flashings, miscellaneous steel, piping, conduits, etc. that are not prefinished.

ROOF PLAN LEGEND

T.O.M.	TOP OF MASONRY ELEVATION
T.O.D.	TOP OF DECK ELEVATION
T.O.S.	TOP OF STEEL ELEVATION
RD	ROOF DRAIN, REF. 2 / A5.31
OD	OVERFLOW DRAIN WITH DOWNSPOUT NOZZLE, REF. 3 / A5.31
DS	DOWNSPOUT, REF. 5 / A5.31
SB	SPLASH BLOCK, CONCRETE, REF. - / ---
SP	SPLASH PAN, REF. 10 / A5.31
MC	MANUFACTURED COPING, REF. 12 / A5.31
RH	ROOF HATCH, REF. 1 / A5.31
RL	ROOF LADDER, REF. 1 / A5.31
RTU	ROOFTOP UNIT, REF. MECHANICAL
CU	CONDENSING UNIT, REF. M.E.P.
GP	GAS PIPE PENETRATION, REF. M.E.P. & 7 / A5.31
RV	RELIEF VENT, REF. M.E.P.
EF	EXHAUST FAN, REF. M.E.P.

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
R03	GUTTER AND DOWNSPOUTS. TYP.

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

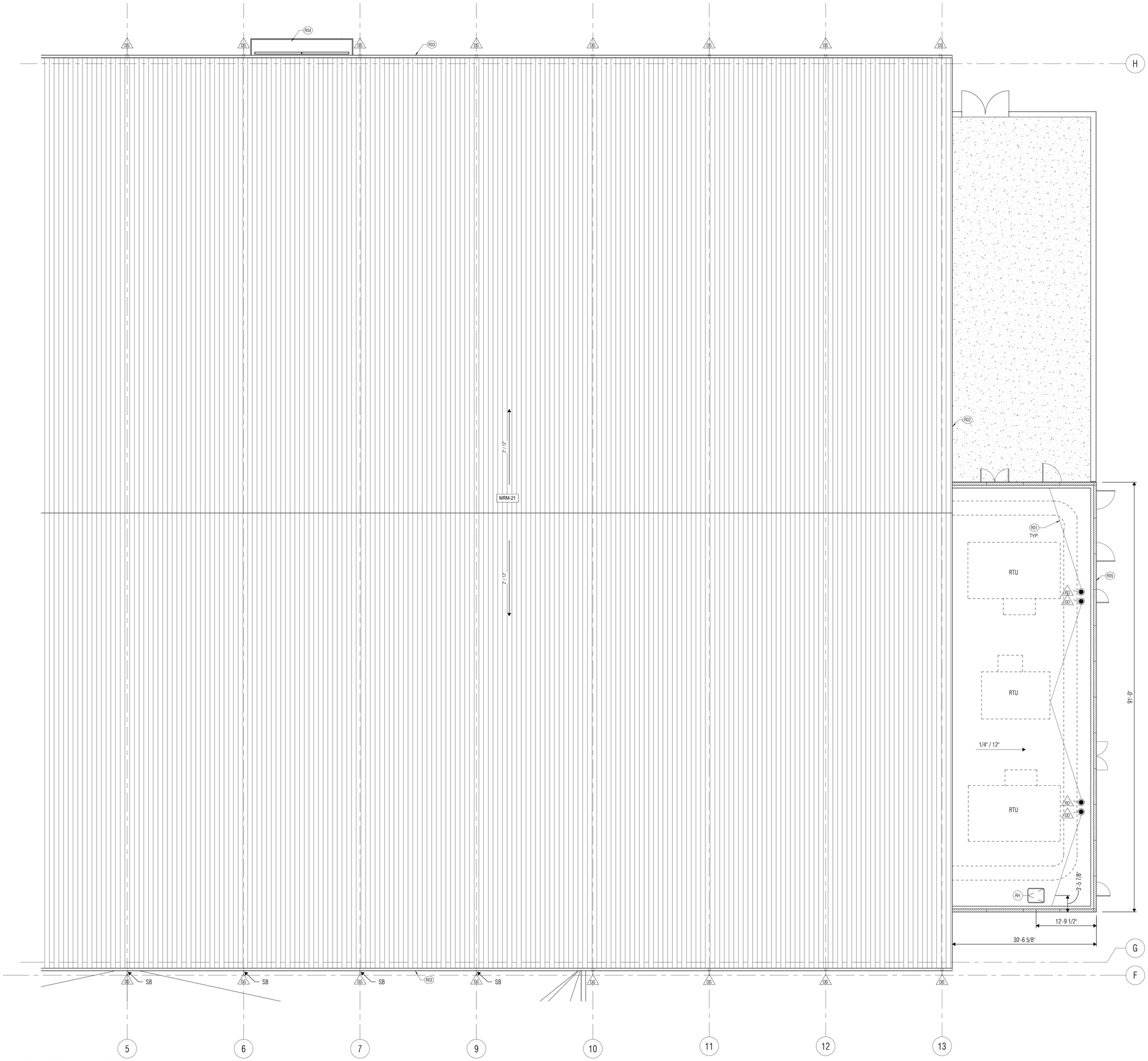
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ROOF PLAN - UNIT C - ALTERNATE

SHEET NO.
A5.23.1

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ROOF PLAN UNIT D
SCALE: 1/8" = 1'-0"

ROOF PLAN NOTES

1. Provide tapered insulation crickets at the high side of all rooftop curbs, mounting rails, and other miscellaneous roof penetrations as required to shed water around them and to ensure positive roof drainage, whether indicated on the drawings or not.
2. Crickets shall slope 1/2" per foot, unless noted otherwise.
3. Locate overflow scuppers per Building Elevations. If conflicts occur, contact Architect prior to construction.
4. Provide roof walkway protection at base of all roof ladders, around all sides of roof hatches, on all sides of rooftop units and condensing units, and on paths leading from roof access points to rooftop units and condensing units, whether indicated on drawings or not.
5. Provide layer of roof walkway protection under all pipe and conduit supports, fully-adhered to roof membrane.
6. Provide additional layer of single-ply roof membrane at the discharge point of downspouts, where splash pans are not provided.
7. Provide metal end closure at the ends of expansion joints, flashings and counterflashings.
8. Paint all exposed galvanized metal flashings, miscellaneous steel, piping, conduits, etc. that are not prefinished.

ROOF PLAN LEGEND

T.O.M.	TOP OF MASONRY ELEVATION
T.O.D.	TOP OF DECK ELEVATION
T.O.S.	TOP OF STEEL ELEVATION
RD	ROOF DRAIN, REF. 2 / A5.31
OD	OVERFLOW DRAIN WITH DOWNSPOUT NOZZLE, REF. 3 / A5.31
DS	DOWNSPOUT, REF. 5 / A5.31
SB	SPLASH BLOCK, CONCRETE, REF. - / ---
SP	SPLASH PAN, REF. 10 / A5.31
MC	MANUFACTURED COPING, REF. 12 / A5.31
RH	ROOF HATCH, REF. 1 / A5.31
RL	ROOF LADDER, REF. 1 / A5.31
RTU	ROOFTOP UNIT, REF. MECHANICAL
CU	CONDENSING UNIT, REF. M.E.P.
GP	GAS PIPE PENETRATION, REF. M.E.P. & 7 / A5.31
RV	RELIEF VENT, REF. M.E.P.
EF	EXHAUST FAN, REF. M.E.P.

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
R01	ROOF CRICKET. PROVIDE POSITIVE DRAINAGE TO ROOF DRAINS.
R02	RAKE TRIM
R03	GUTTER AND DOWNSPOUTS. TYP.
R04	CANOPY BELOW
R05	ROOF MOUNTED LOUVER SCREENS.

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

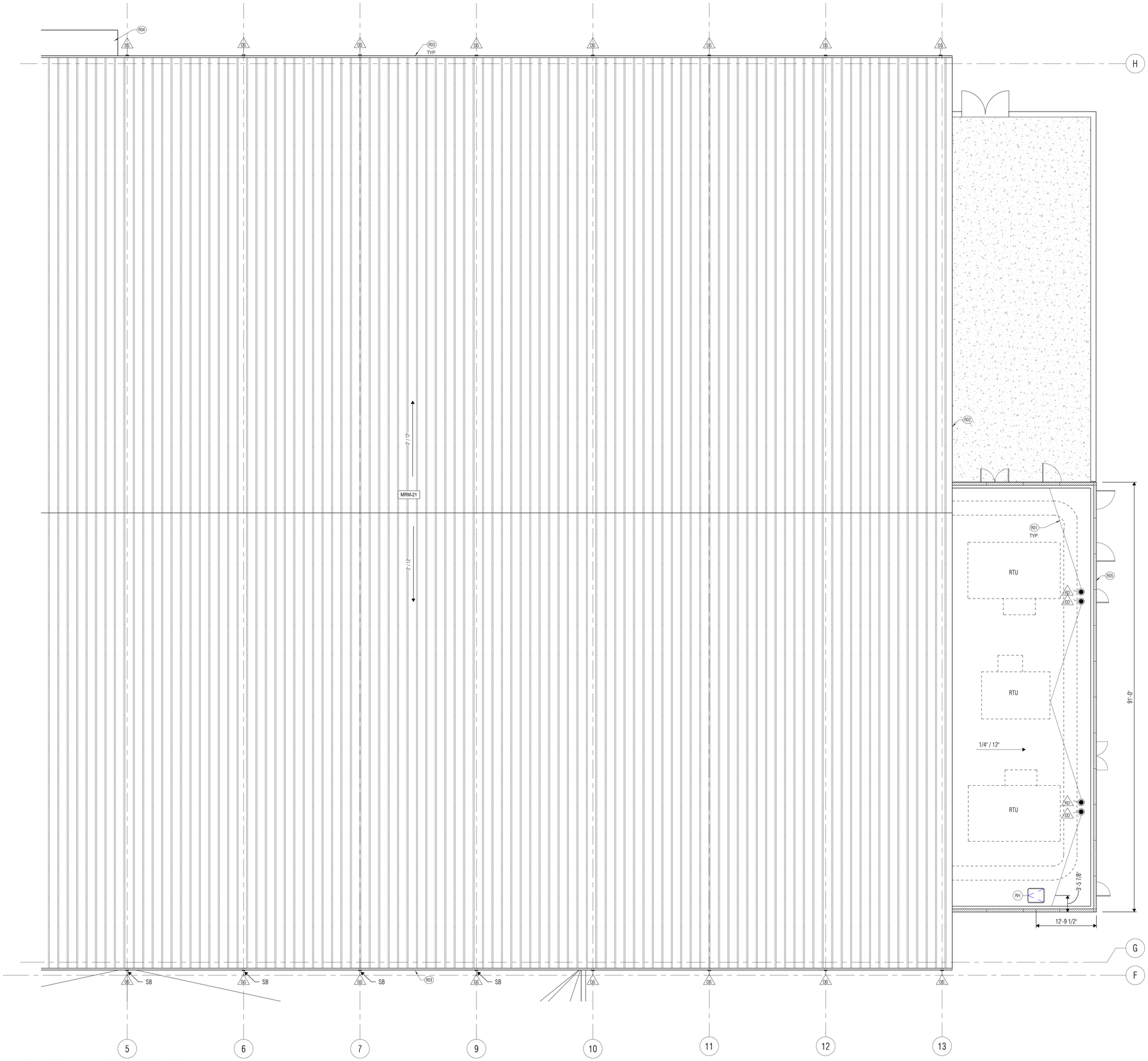
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ROOF PLAN - UNIT D

SHEET NO.
A5.24

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ROOF PLAN UNIT D ALTERNATE
SCALE: 1/8" = 1'-0"

ROOF PLAN NOTES

1. Provide tapered insulation crickets at the high side of all rooftop curbs, mounting rails, and other miscellaneous roof penetrations as required to shed water around them and to ensure positive roof drainage, whether indicated on the drawings or not.
2. Crickets shall slope 1/2" per foot, unless noted otherwise.
3. Locate overflow scuppers per Building Elevations. If conflicts occur, contact Architect prior to construction.
4. Provide roof walkway protection at base of all roof ladders, around all sides of roof hatches, on all sides of rooftop units and condensing units, and on paths leading from roof access points to rooftop units and condensing units, whether indicated on drawings or not.
5. Provide layer of roof walkway protection under all pipe and conduit supports, fully-adhered to roof membrane.
6. Provide additional layer of single-ply roof membrane at the discharge point of downspouts, where splash pans are not provided.
7. Provide metal end closure at the ends of expansion joints, flashings and counterflashings.
8. Paint all exposed galvanized metal flashings, miscellaneous steel, piping, conduits, etc. that are not prefinished.

ROOF PLAN LEGEND

T.O.M.	TOP OF MASONRY ELEVATION
T.O.D.	TOP OF DECK ELEVATION
T.O.S.	TOP OF STEEL ELEVATION
RD	ROOF DRAIN, REF. 2 / A5.31
OD	OVERFLOW DRAIN WITH DOWNSPOUT NOZZLE, REF. 3 / A5.31
DS	DOWNSPOUT, REF. 5 / A5.31
SB	SPLASH BLOCK, CONCRETE, REF. - / ---
SP	SPLASH PAN, REF. 10 / A5.31
MC	MANUFACTURED COPING, REF. 12 / A5.31
RH	ROOF HATCH, REF. 1 / A5.31
RL	ROOF LADDER, REF. 1 / A5.31
RTU	ROOFTOP UNIT, REF. MECHANICAL
CU	CONDENSING UNIT, REF. M.E.P.
GP	GAS PIPE PENETRATION, REF. M.E.P. & 7 / A5.31
RV	RELIEF VENT, REF. M.E.P.
EF	EXHAUST FAN, REF. M.E.P.

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
R01	ROOF CRICKET. PROVIDE POSITIVE DRAINAGE TO ROOF DRAINS.
R02	RAKE TRIM
R03	GUTTER AND DOWNSPOUTS. TYP.
R04	CANOPY BELOW
R05	ROOF MOUNTED LOUVER SCREENS.

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

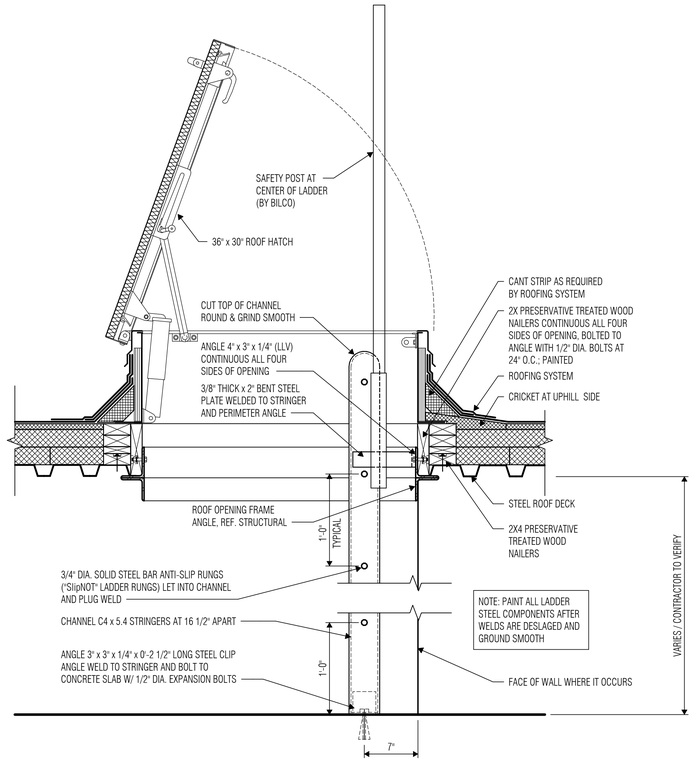
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

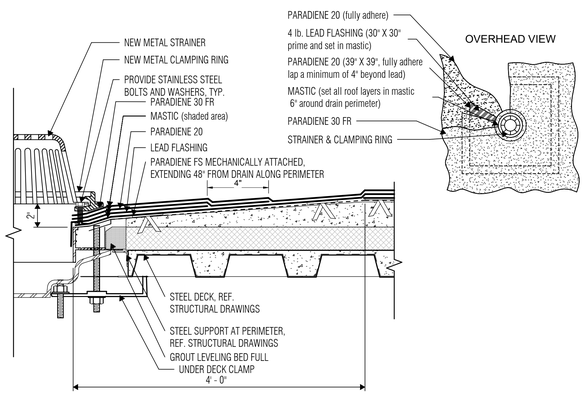
SHEET TITLE
ROOF PLAN - UNIT D - ALTERNATE

SHEET NO.
A5.24.1

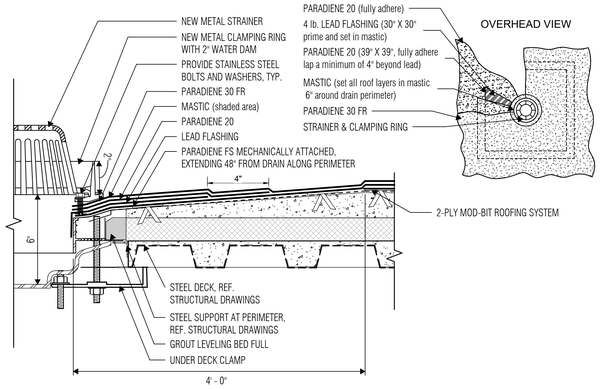
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



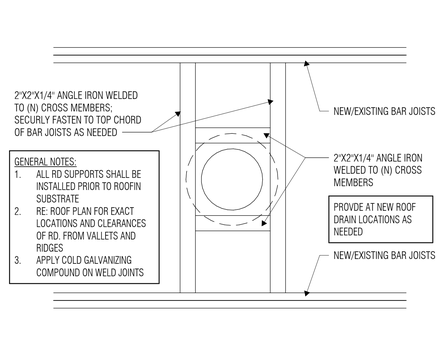
1 R600 - ROOF ACCESS LADDER & ROOF HATCH
SCALE: 1 1/2" = 1'-0"



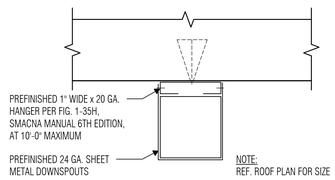
2 TYP ROOF DRAIN DETAIL
SCALE: 3" = 1'-0"



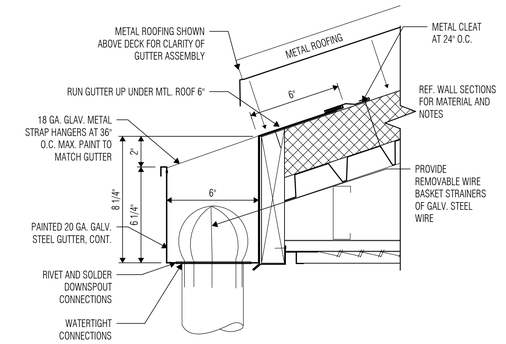
3 TYP OVERFLOW ROOF DRAIN DETAIL
SCALE: 3" = 1'-0"



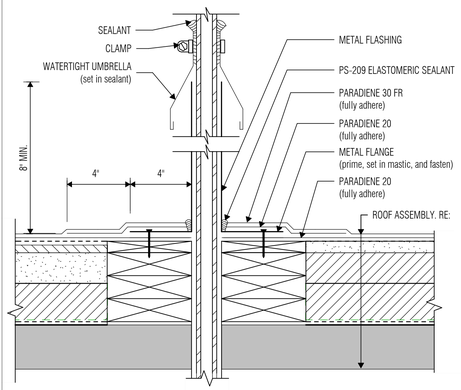
4 ROOF DRAIN SUPPORT DETAIL
SCALE: 1 1/2" = 1'-0"



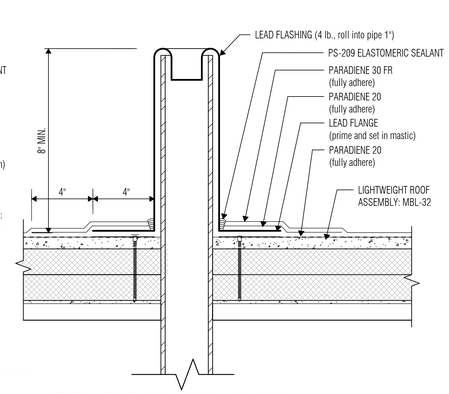
5 R711 - RECT DOWNSPOUT PLAN
SCALE: 3" = 1'-0"



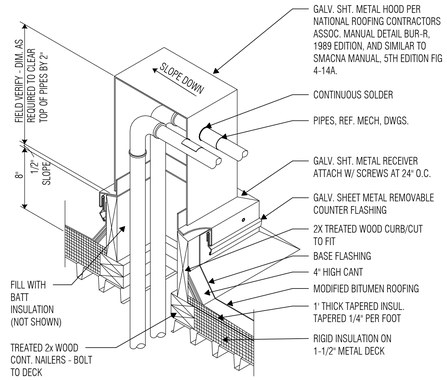
6 R503 - GUTTER, PREFINISHED METAL ROOF
SCALE: 3" = 1'-0"



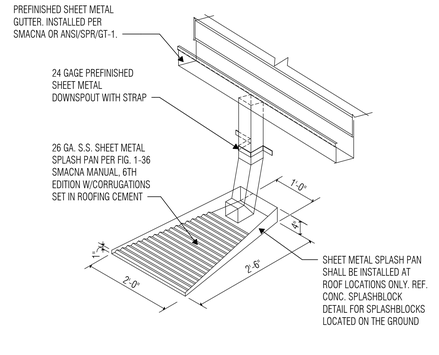
7 TYP PIPE FLASHING AT ROOF
SCALE: 3" = 1'-0"



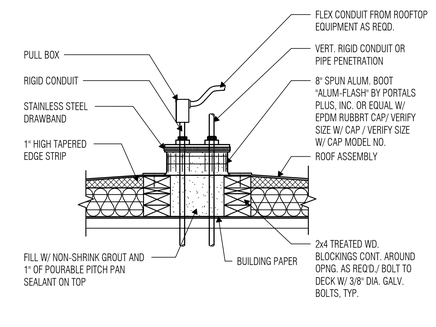
8 TYP. VENT STACK FLASHING
SCALE: 3" = 1'-0"



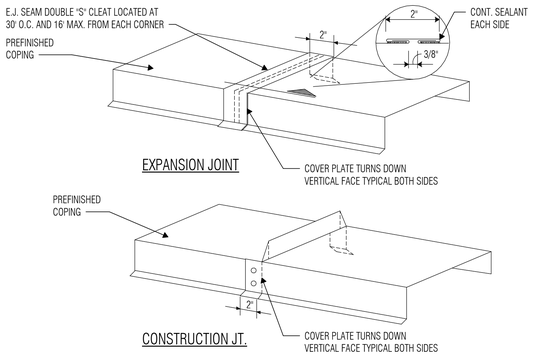
9 PIPE PENETRATION HOOD
SCALE: NOT TO SCALE

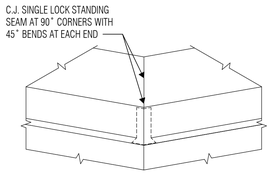


10 DOWNSPOUT & SPLASH PAN at ROOF
SCALE: 1 1/2" = 1'-0"



11 TYP. CONDUIT PENETRATION DETAILS
SCALE: 1 1/2" = 1'-0"





12 TYP. COPING JOINT DETAILS
SCALE: 1 1/2" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ROOF DETAILS

SHEET NO.

A5.31

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

DEMOLTION REFLECTED CEILING PLAN LEGEND

ITEMS TO BE DEMOLISHED (RE: DEMOLITION PLANS FOR MORE INFORMATION)

AREAS EXISTING TO REMAIN WITH LIMITED OR NO ARCHITECTURAL WORK REQUIRED IN THIS AREA. REFER TO CIVIL, MEPT AND STRUCTURAL DRAWINGS FOR ANY ADDITIONAL WORK IN AREA.

CEILINGS:

EXISTING ACOUSTIC LAY-IN CEILING TILE TO BE DEMOLISHED

EXISTING ACOUSTIC LAY-IN CEILING TILE TO REMAIN

CARFULLY REMOVE EXISTING CEILING TILES. PROTECT EXISTING GRID IN PLACE AND PREPARE TO RECIEVE NEW TILES. REFER TO RCPS FOR MORE INFORMATION

DEMOLITION NOTES

1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
6. Refer to electrical and mechanical demolition plan for additional information.
7. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT



1 DEMO REFLECTED CEILING PLAN - LEVEL ONE - UNIT A
SCALE: 1/8" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

MONIKA C. CASTILLO 26558 REGISTERED ARCHITECT STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

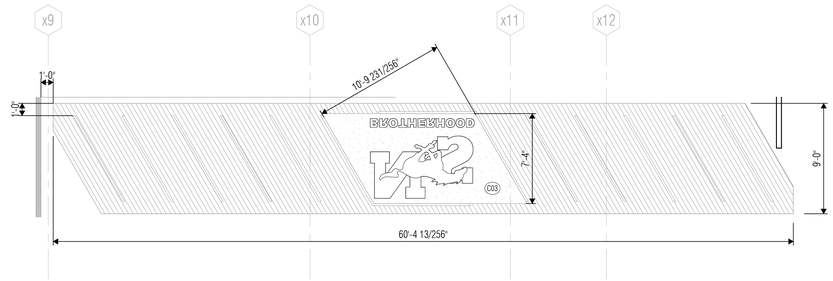
PROJECT NO.
25-0056.00

SHEET TITLE
DEMO REFLECTED CEILING PLAN - LEVEL ONE - UNIT A

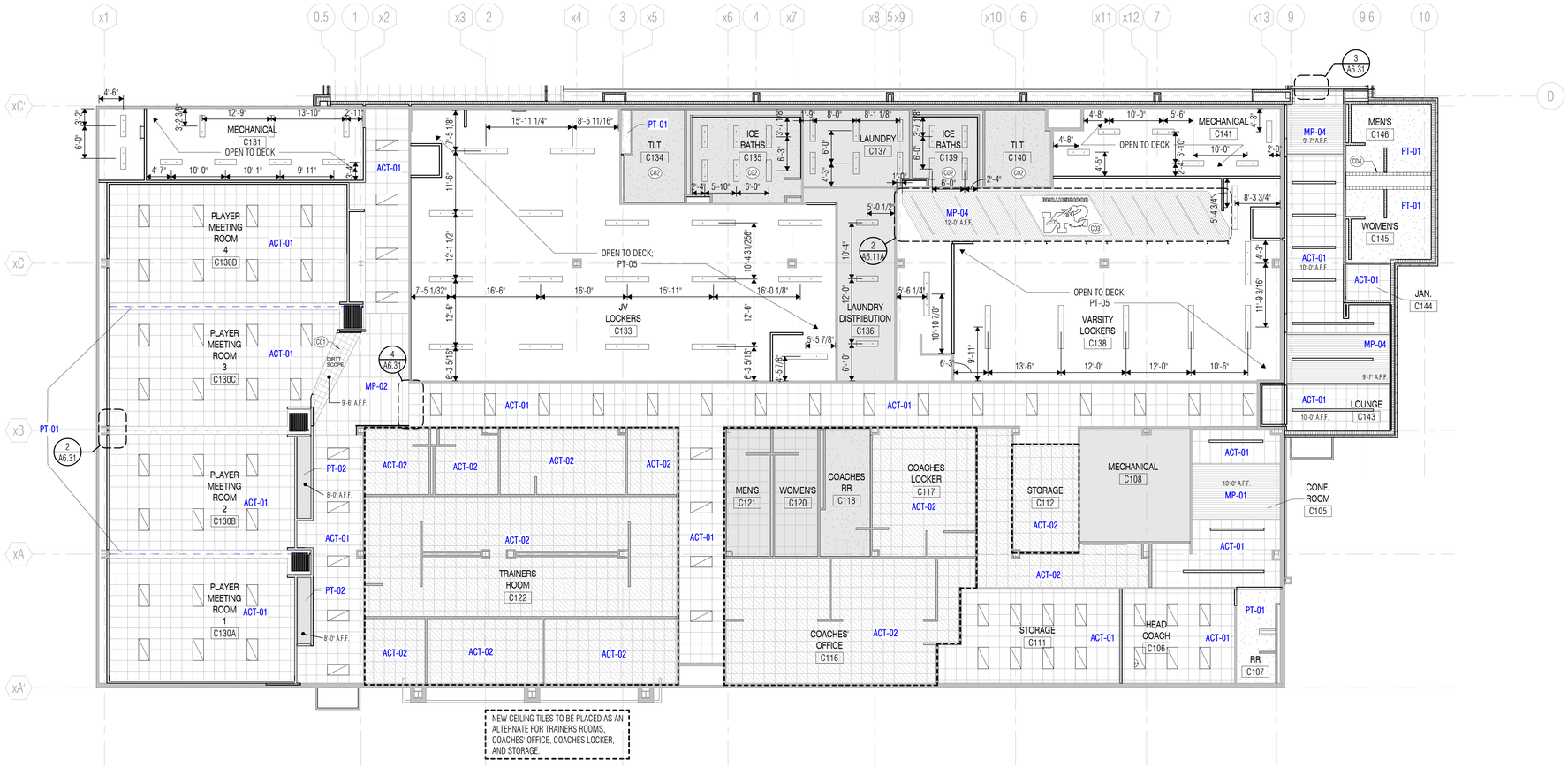
SHEET NO.
A6.01A

KEY PLAN

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



2 ENLARGED CEILING PLAN
SCALE: 1 : 60



NEW CEILING TILES TO BE PLACED AS AN ALTERNATE FOR TRAINERS ROOMS, COACHES' OFFICE, COACHES LOCKER, AND STORAGE.

1 REFLECTED CEILING PLAN - LEVEL ONE - UNIT A
SCALE: 1" = 10'-0"

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
C01	EXTEND CEILING GRID IN THIS AREA WITHOUT CEILING TILES.
C02	PAINT EXISTING GYPSUM BOARD CEILING PT-01
C03	ACRYLIC SIGN WITH INTEGRAL LIGHTING. COORDINATE WITH LIGHTING.
C04	18" X 18" ACCESS PANEL ON WALL.

REFLECTED CEILING PLAN NOTES

1. All ceiling heights shall be [10'-00"] A.F.F. unless noted otherwise.
2. Refer to Detail 1 / A6.31 for Typical Gypsum Board Ceiling Control Joint Detail.
3. Refer to Detail - / --- for Typical Plaster Ceiling Control Joint Detail.
4. Provide vented reveals at perimeter of all non-insulated exterior plaster soffits. Provide venting strips or perforated panels at perimeter of all non-insulated metal panel soffits (refer to Detail - / ---). Venting at non-insulated soffits shall be provided whether specifically indicated on the drawings or not.
5. Provide partition to deck (PTD) at walls surrounding spaces with exposed structure. Refer to Reflected Ceiling Plan Legend for PTD requirements.
6. Provide hold-down clips for all acoustic lay-in ceiling panels at vestibules, at sloped ceilings, at fire-rated ceilings, and within 6 feet of exterior doors without vestibules.
7. At ceiling furring details, the suspended assemblies, bracing, blocking, etc. shown on the details are for schematic representation only. Provide stable, secure and permanent assemblies at these locations in accordance with recommended light-gage steel framing installation practices.
8. At partitions that do not extend to deck above, extend partition 4" minimum above highest adjacent ceiling and brace per Floor Plan Legend and Floor Plan Notes.

REFLECTED CEILING PLAN LEGEND

EXISTING TO REMAIN WITH LIMITED OR NO ARCHITECTURAL WORK REQUIRED IN THIS AREA. REFER TO CIVIL, MEPT AND STRUCTURAL DRAWINGS FOR ANY ADDITIONAL WORK IN AREA.

CEILINGS:

- ACT-01 — ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- ACT-02 — EXISTING GRID TO REMAIN, NEW ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- EXISTING ACOUSTIC LAY-IN CEILING TILE TO REMAIN
- MP-01 — METAL PANEL
- MP-02 — VAPOR FREQUENCY PANELS WITH RED LIGHTING 48" X 24"
- MP-03 — VAPOR TRAIL PANELS; CUSTOM; WITH WHITE LIGHTING 48" X 24"
- MP-04 — LINEAR METAL- WOOD LOOK
- EXISTING GYPSUM BOARD CEILING TO REMAIN
- PT-01 — 5/8" GYPSUM BOARD CEILING PAINTED PT-01, U.N.O.
- HVAC SUPPLY AND RETURN GRILLES Shown for location purposes only. Refer to Mechanical Drawings.
- 1 Hour Fire Barrier Partition
- 2 Hour Fire Barrier Partition
- Smoke Partition
- Sound Partition
- Non-rated Partition to Deck

1-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'1-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'2-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

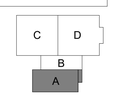
SMOKE PARTITION. Extend partition to deck above and seal with sealant as required to resist the passage of smoke. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: 'SMOKE BARRIER - PROTECT ALL OPENINGS'. Seal all joints and penetrations. Brace partitions per Floor Plan General Notes.

ACOUSTICAL DRYWALL PARTITION / SOUND-CONDITIONED CMU PARTITION. Extend partition to deck above and seal with acoustical sealant. Seal all joints and penetrations with acoustical sealant. Brace partitions per Floor Plan General Notes.

NON-RATED PARTITION TO DECK. Extend partition to deck above. Brace partitions per Floor Plan General Notes.

CEILING SCHEDULE

TYPE MARK	TYPE
	Generic
ACT-01	2' x 2' ACT System
ACT-02	2' x 2' ACT (NEW TILES ONLY)
LMC-01	<varies>
PT-01	<varies>



KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT — MONIKA C. CASTILLO — 26558 — STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

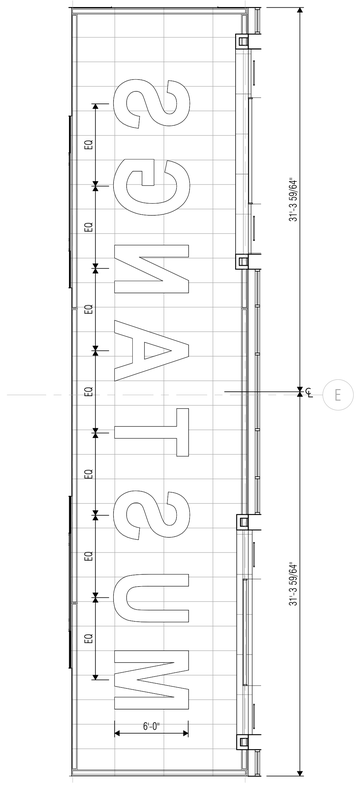
SHEET TITLE

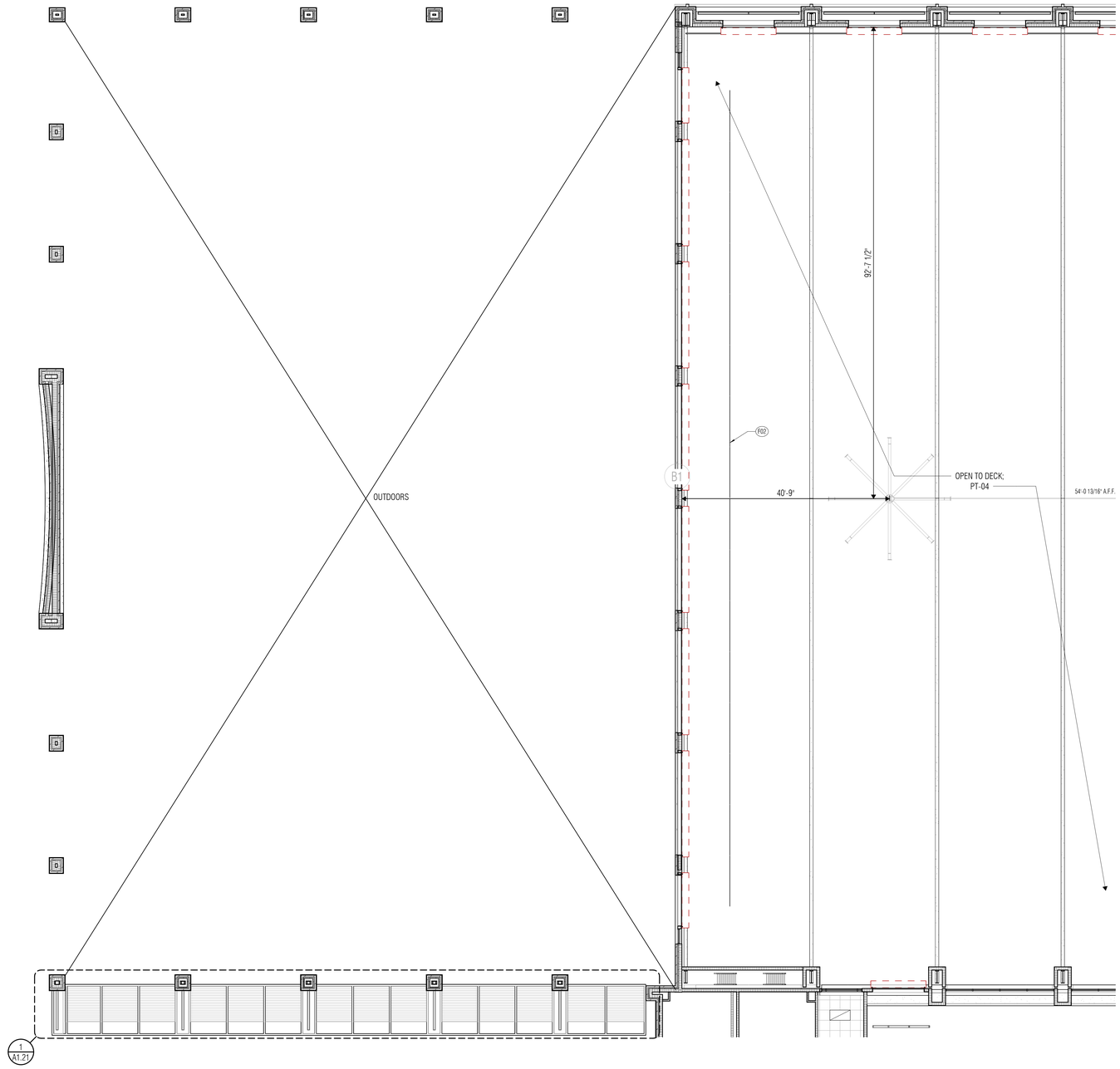
REFLECTED CEILING PLAN - LEVEL ONE - UNIT A

SHEET NO.

A6.11A

COPYRIGHT © 2025 VLK ARCHITECTS, LLC


9
9.6
6'-0"
31'-3 59/64"
31'-3 59/64"
E
C
EQ
EQ
EQ



1 REFLECTED CEILING PLAN - LEVEL ONE - UNIT C
SCALE: 1" = 10'-0"

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F02	MOTORIZED DROP DOWN NETTING

REFLECTED CEILING PLAN NOTES

1. All ceiling heights shall be [10'-00"] A.F.F. unless noted otherwise.
2. Refer to Detail 1 / A6.31 for Typical Gypsum Board Ceiling Control Joint Detail.
3. Refer to Detail - / --- for Typical Plaster Ceiling Control Joint Detail.
4. Provide vented reveals at perimeter of all non-insulated exterior plaster soffits. Provide venting strips or perforated panels at perimeter of all non-insulated metal panel soffits (refer to Detail - / ---). Venting at non-insulated soffits shall be provided whether specifically indicated on the drawings or not.
5. Provide partition to deck (PTD) at walls surrounding spaces with exposed structure. Refer to Reflected Ceiling Plan Legend for PTD requirements.
6. Provide hold-down clips for all acoustic lay-in ceiling panels at vestibules, at sloped ceilings, at fire-rated ceilings, and within 6 feet of exterior doors without vestibules.
7. At ceiling furring details, the suspended assemblies, bracing, blocking, etc. shown on the details are for schematic representation only. Provide stable, secure and permanent assemblies at these locations in accordance with recommended light-gage steel framing installation practices.
8. At partitions that do not extend to deck above, extend partition 4" minimum above highest adjacent ceiling and brace per Floor Plan Legend and Floor Plan Notes.

REFLECTED CEILING PLAN LEGEND

EXISTING TO REMAIN WITH LIMITED OR NO ARCHITECTURAL WORK REQUIRED IN THIS AREA. REFER TO CIVIL, MEPT AND STRUCTURAL DRAWINGS FOR ANY ADDITIONAL WORK IN AREA.

CEILINGS:

- ACT-01 — ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- ACT-02 — EXISTING GRID TO REMAIN, NEW ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- EXISTING ACOUSTIC LAY-IN CEILING TILE TO REMAIN
- MP-01 — METAL PANEL
- MP-02 — VAPOR FREQUENCY PANELS WITH RED LIGHTING 48" X 24"
- MP-03 — VAPOR TRAIL PANELS; CUSTOM; WITH WHITE LIGHTING 48" X 24"
- MP-04 — LINEAR METAL- WOOD LOOK
- EXISTING GYPSUM BOARD CEILING TO REMAIN
- PT-01 — 5/8" GYPSUM BOARD CEILING PAINTED PT-01, U.N.O.
- HVAC SUPPLY AND RETURN GRILLES Shown for location purposes only. Refer to Mechanical Drawings.
- 1 Hour Fire Barrier Partition
- 2 Hour Fire Barrier Partition
- Smoke Partition
- Sound Partition
- Non-rated Partition to Deck

1-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'1-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'2-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

SMOKE PARTITION. Extend partition to deck above and seal with sealant as required to resist the passage of smoke. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: 'SMOKE BARRIER - PROTECT ALL OPENINGS'. Seal all joints and penetrations. Brace partitions per Floor Plan General Notes.

ACOUSTICAL DRYWALL PARTITION / SOUND-CONDITIONED CMU PARTITION. Extend partition to deck above and seal with acoustical sealant. Seal all joints and penetrations with acoustical sealant. Brace partitions per Floor Plan General Notes.

NON-RATED PARTITION TO DECK. Extend partition to deck above. Brace partitions per Floor Plan General Notes.

CEILING SCHEDULE

TYPE MARK	TYPE
	Generic
ACT-01	2' x 2' ACT System
ACT-02	2' x 2' ACT (NEW TILES ONLY)
LMC-01	<varies>
PT-01	<varies>

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

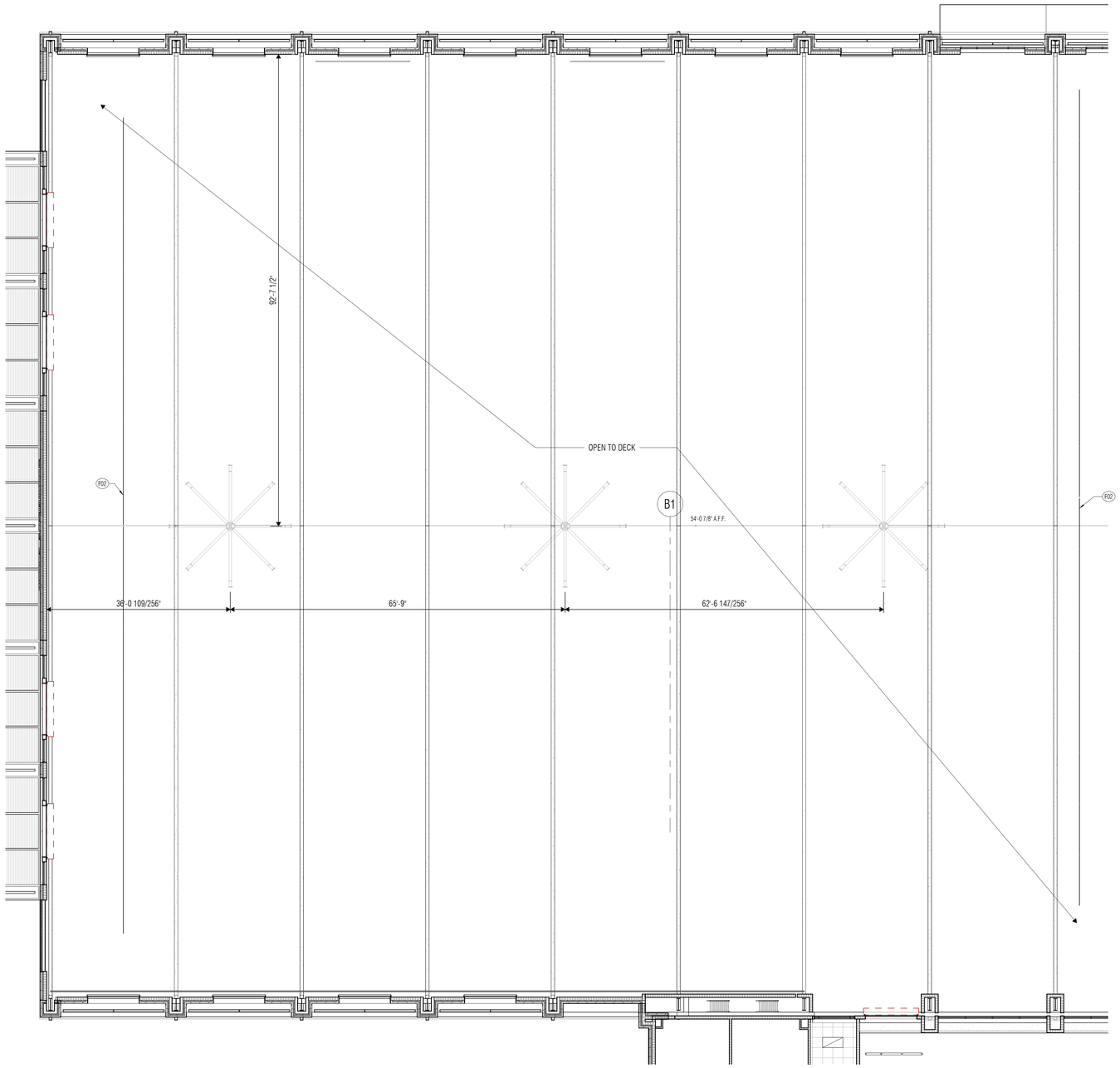
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
REFLECTED CEILING PLAN - LEVEL ONE - UNIT C

SHEET NO.
A6.11C

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 REFLECTED CEILING PLAN - LEVEL ONE - UNIT C - ALTERNATE
SCALE: 1" = 10'-0"

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
F02	MOTORIZED DROP DOWN NETTING

REFLECTED CEILING PLAN NOTES

1. All ceiling heights shall be [10'-00"] A.F.F. unless noted otherwise.
2. Refer to Detail 1 / A6.31 for Typical Gypsum Board Ceiling Control Joint Detail.
3. Refer to Detail - / --- for Typical Plaster Ceiling Control Joint Detail.
4. Provide vented reveals at perimeter of all non-insulated exterior plaster soffits. Provide venting strips or perforated panels at perimeter of all non-insulated metal panel soffits (refer to Detail - / ---). Venting at non-insulated soffits shall be provided whether specifically indicated on the drawings or not.
5. Provide partition to deck (PTD) at walls surrounding spaces with exposed structure. Refer to Reflected Ceiling Plan Legend for PTD requirements.
6. Provide hold-down clips for all acoustic lay-in ceiling panels at vestibules, at sloped ceilings, at fire-rated ceilings, and within 6 feet of exterior doors without vestibules.
7. At ceiling furring details, the suspended assemblies, bracing, blocking, etc. shown on the details are for schematic representation only. Provide stable, secure and permanent assemblies at these locations in accordance with recommended light-gage steel framing installation practices.
8. At partitions that do not extend to deck above, extend partition 4" minimum above highest adjacent ceiling and brace per Floor Plan Legend and Floor Plan Notes.

REFLECTED CEILING PLAN LEGEND

EXISTING TO REMAIN WITH LIMITED OR NO ARCHITECTURAL WORK REQUIRED IN THIS AREA. REFER TO CIVIL, MEPT AND STRUCTURAL DRAWINGS FOR ANY ADDITIONAL WORK IN AREA.

CEILINGS:

- ACT-01 — ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- ACT-02 — EXISTING GRID TO REMAIN, NEW ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- EXISTING ACOUSTIC LAY-IN CEILING TILE TO REMAIN
- MP-01 — METAL PANEL
- MP-02 — VAPOR FREQUENCY PANELS WITH RED LIGHTING 48" X 24"
- MP-03 — VAPOR TRAIL PANELS; CUSTOM; WITH WHITE LIGHTING 48" X 24"
- MP-04 — LINEAR METAL- WOOD LOOK
- EXISTING GYPSUM BOARD CEILING TO REMAIN
- PT-01 — 5/8" GYPSUM BOARD CEILING PAINTED PT-01, U.N.O.
- HVAC SUPPLY AND RETURN GRILLES Shown for location purposes only. Refer to Mechanical Drawings.
- 1 Hour Fire Barrier Partition
- 2 Hour Fire Barrier Partition
- Smoke Partition
- Sound Partition
- Non-rated Partition to Deck

1-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'1-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'2-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

SMOKE PARTITION. Extend partition to deck above and seal with sealant as required to resist the passage of smoke. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: 'SMOKE BARRIER - PROTECT ALL OPENINGS'. Seal all joints and penetrations. Brace partitions per Floor Plan General Notes.

ACOUSTICAL DRYWALL PARTITION / SOUND-CONDITIONED CMU PARTITION. Extend partition to deck above and seal with acoustical sealant. Seal all joints and penetrations with acoustical sealant. Brace partitions per Floor Plan General Notes.

NON-RATED PARTITION TO DECK. Extend partition to deck above. Brace partitions per Floor Plan General Notes.

CEILING SCHEDULE

TYPE MARK	TYPE
	Generic
ACT-01	2' x 2' ACT System
ACT-02	2' x 2' ACT (NEW TILES ONLY)
LMC-01	<varies>
PT-01	<varies>

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

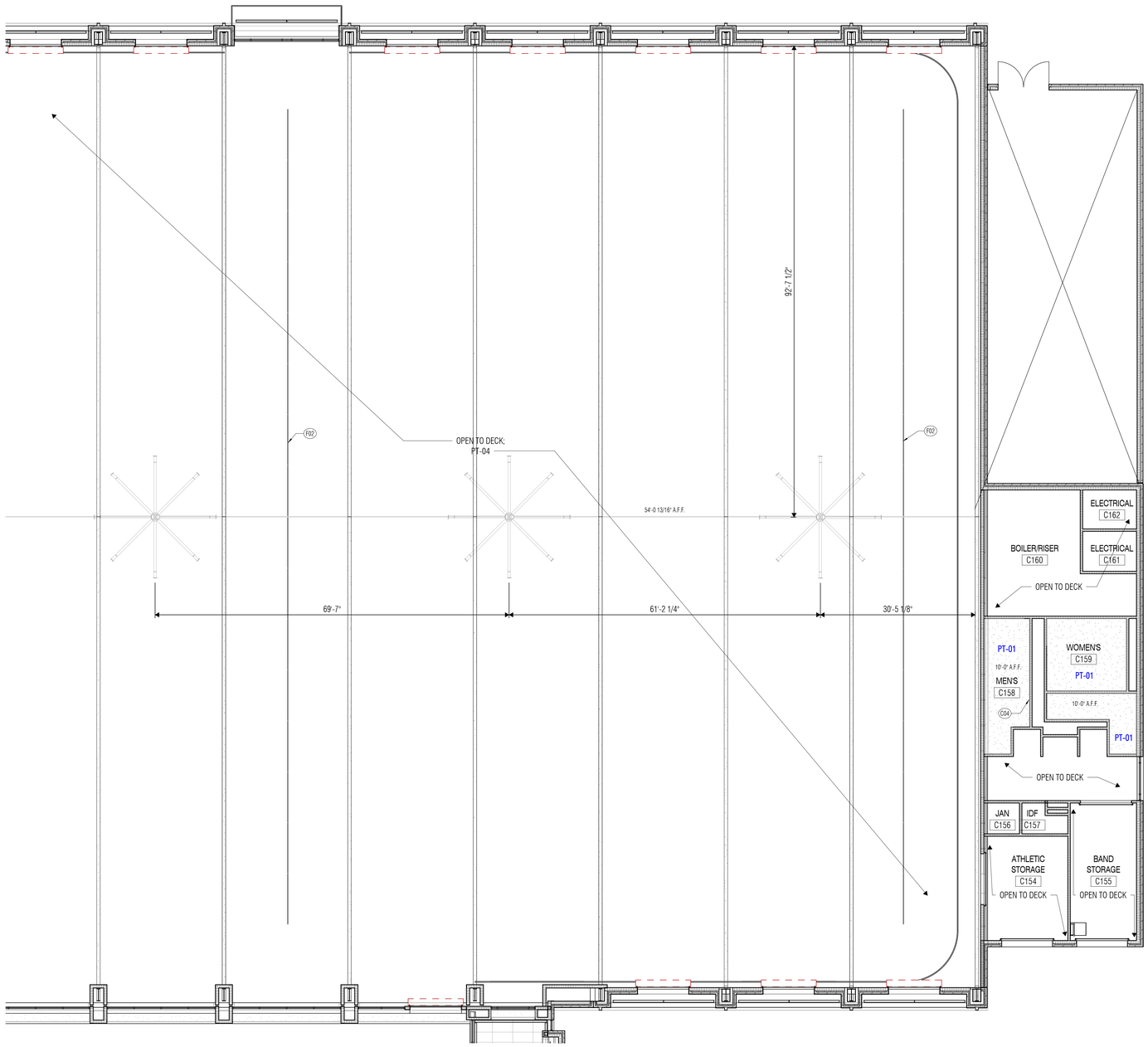
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
REFLECTED CEILING PLAN - LEVEL ONE - UNIT C - ALTERNATE

SHEET NO.
A6.11C.1

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 REFLECTED CEILING PLAN - LEVEL ONE - UNIT D
SCALE: 1" = 10'-0"

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
C04	18" X 18" ACCESS PANEL ON WALL.
F02	MOTORIZED DROP DOWN NETTING

REFLECTED CEILING PLAN NOTES

1. All ceiling heights shall be [10'-00"] A.F.F. unless noted otherwise.
2. Refer to Detail 1 / A6.31 for Typical Gypsum Board Ceiling Control Joint Detail.
3. Refer to Detail - / --- for Typical Plaster Ceiling Control Joint Detail.
4. Provide vented reveals at perimeter of all non-insulated exterior plaster soffits. Provide venting strips or perforated panels at perimeter of all non-insulated metal panel soffits (refer to Detail - / ---). Venting at non-insulated soffits shall be provided whether specifically indicated on the drawings or not.
5. Provide partition to deck (PTD) at walls surrounding spaces with exposed structure. Refer to Reflected Ceiling Plan Legend for PTD requirements.
6. Provide hold-down clips for all acoustic lay-in ceiling panels at vestibules, at sloped ceilings, at fire-rated ceilings, and within 6 feet of exterior doors without vestibules.
7. At ceiling furring details, the suspended assemblies, bracing, blocking, etc. shown on the details are for schematic representation only. Provide stable, secure and permanent assemblies at these locations in accordance with recommended light-gage steel framing installation practices.
8. At partitions that do not extend to deck above, extend partition 4" minimum above highest adjacent ceiling and brace per Floor Plan Legend and Floor Plan Notes.

REFLECTED CEILING PLAN LEGEND

EXISTING TO REMAIN WITH LIMITED OR NO ARCHITECTURAL WORK REQUIRED IN THIS AREA. REFER TO CIVIL, MEPT AND STRUCTURAL DRAWINGS FOR ANY ADDITIONAL WORK IN AREA.

CEILINGS:

- ACT-01 — ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- ACT-02 — EXISTING GRID TO REMAIN, NEW ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- EXISTING ACOUSTIC LAY-IN CEILING TILE TO REMAIN
- MP-01 — METAL PANEL
- MP-02 — VAPOR FREQUENCY PANELS WITH RED LIGHTING 48" X 24"
- MP-03 — VAPOR TRAIL PANELS; CUSTOM; WITH WHITE LIGHTING 48" X 24"
- MP-04 — LINEAR METAL- WOOD LOOK
- EXISTING GYPSUM BOARD CEILING TO REMAIN
- PT-01 — 5/8" GYPSUM BOARD CEILING PAINTED PT-01, U.N.O.
- HVAC SUPPLY AND RETURN GRILLES Shown for location purposes only. Refer to Mechanical Drawings.
- 1 Hour Fire Barrier Partition
- 2 Hour Fire Barrier Partition
- Smoke Partition
- Sound Partition
- Non-rated Partition to Deck

1-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'1-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'2-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

SMOKE PARTITION. Extend partition to deck above and seal with sealant as required to resist the passage of smoke. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: 'SMOKE BARRIER - PROTECT ALL OPENINGS'. Seal all joints and penetrations. Brace partitions per Floor Plan General Notes.

ACOUSTICAL DRYWALL PARTITION / SOUND-CONDITIONED CMU PARTITION. Extend partition to deck above and seal with acoustical sealant. Seal all joints and penetrations with acoustical sealant. Brace partitions per Floor Plan General Notes.

NON-RATED PARTITION TO DECK. Extend partition to deck above. Brace partitions per Floor Plan General Notes.

CEILING SCHEDULE

TYPE MARK	TYPE
	Generic
ACT-01	2' x 2' ACT System
ACT-02	2' x 2' ACT (NEW TILES ONLY)
LMC-01	<varies>
PT-01	<varies>

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT · MONIKA C. CASTILLO · 26058 · STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

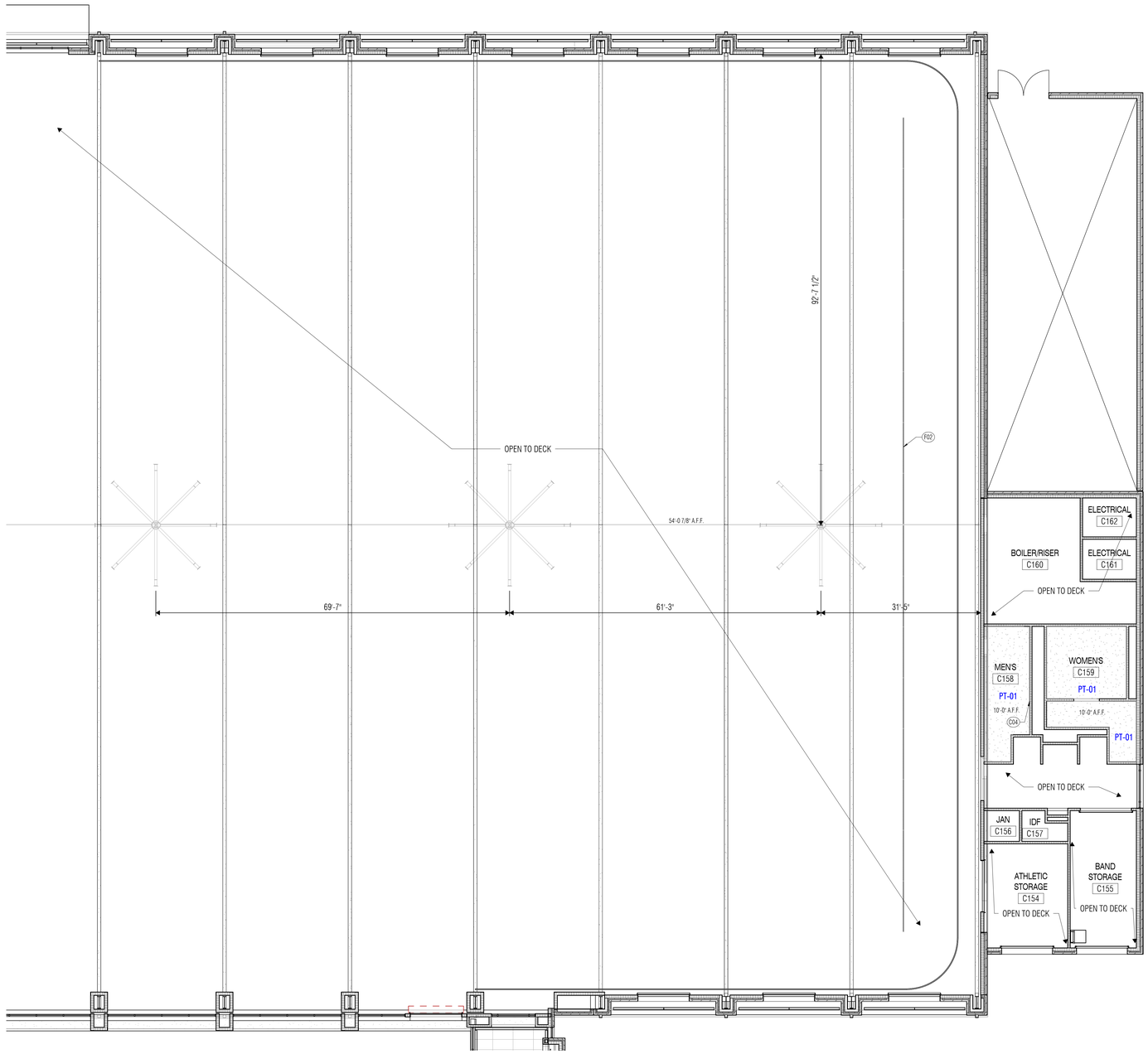
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
REFLECTED CEILING PLAN - LEVEL ONE - UNIT D

SHEET NO.
A6.11D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 REFLECTED CEILING PLAN - LEVEL ONE - UNIT D - ALTERNATE

SCALE: 1" = 10'-0"

KEY NOTE SCHEDULE

NUMBER	NOTE TEXT
C04	18" X 18" ACCESS PANEL ON WALL.
F02	MOTORIZED DROP DOWN NETTING

REFLECTED CEILING PLAN NOTES

1. All ceiling heights shall be [10'-00"] A.F.F. unless noted otherwise.
2. Refer to Detail 1 / A6.31 for Typical Gypsum Board Ceiling Control Joint Detail.
3. Refer to Detail - / --- for Typical Plaster Ceiling Control Joint Detail.
4. Provide vented reveals at perimeter of all non-insulated exterior plaster soffits. Provide venting strips or perforated panels at perimeter of all non-insulated metal panel soffits (refer to Detail - / ---). Venting at non-insulated soffits shall be provided whether specifically indicated on the drawings or not.
5. Provide partition to deck (PTD) at walls surrounding spaces with exposed structure. Refer to Reflected Ceiling Plan Legend for PTD requirements.
6. Provide hold-down clips for all acoustic lay-in ceiling panels at vestibules, at sloped ceilings, at fire-rated ceilings, and within 6 feet of exterior doors without vestibules.
7. At ceiling furring details, the suspended assemblies, bracing, blocking, etc. shown on the details are for schematic representation only. Provide stable, secure and permanent assemblies at these locations in accordance with recommended light-gage steel framing installation practices.
8. At partitions that do not extend to deck above, extend partition 4" minimum above highest adjacent ceiling and brace per Floor Plan Legend and Floor Plan Notes.

REFLECTED CEILING PLAN LEGEND

EXISTING TO REMAIN WITH LIMITED OR NO ARCHITECTURAL WORK REQUIRED IN THIS AREA. REFER TO CIVIL, MEPT AND STRUCTURAL DRAWINGS FOR ANY ADDITIONAL WORK IN AREA.

CEILINGS:

- ACT-01 — ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- ACT-02 — EXISTING GRID TO REMAIN, NEW ACOUSTIC LAY-IN CEILING TILE 24" X 24"
- EXISTING ACOUSTIC LAY-IN CEILING TILE TO REMAIN
- MP-01 — METAL PANEL
- MP-02 — VAPOR FREQUENCY PANELS WITH RED LIGHTING 48" X 24"
- MP-03 — VAPOR TRAIL PANELS; CUSTOM; WITH WHITE LIGHTING 48" X 24"
- MP-04 — LINEAR METAL- WOOD LOOK
- EXISTING GYPSUM BOARD CEILING TO REMAIN
- PT-01 — 5/8" GYPSUM BOARD CEILING PAINTED PT-01, U.N.O.
- HVAC SUPPLY AND RETURN GRILLES Shown for location purposes only. Refer to Mechanical Drawings.
- 1 Hour Fire Barrier Partition
- 2 Hour Fire Barrier Partition
- Smoke Partition
- Sound Partition
- Non-rated Partition to Deck

1-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'1-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'2-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

SMOKE PARTITION. Extend partition to deck above and seal with sealant as required to resist the passage of smoke. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: 'SMOKE BARRIER - PROTECT ALL OPENINGS'. Seal all joints and penetrations. Brace partitions per Floor Plan General Notes.

ACOUSTICAL DRYWALL PARTITION / SOUND-CONDITIONED CMU PARTITION. Extend partition to deck above and seal with acoustical sealant. Seal all joints and penetrations with acoustical sealant. Brace partitions per Floor Plan General Notes.

NON-RATED PARTITION TO DECK. Extend partition to deck above. Brace partitions per Floor Plan General Notes.

CEILING SCHEDULE

TYPE MARK	TYPE
	Generic
ACT-01	2' x 2' ACT System
ACT-02	2' x 2' ACT (NEW TILES ONLY)
LMC-01	<varies>
PT-01	<varies>

KEY PLAN

C D B A

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

MONIKA C. CASTILLO — 31668 — REGISTERED ARCHITECT — STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

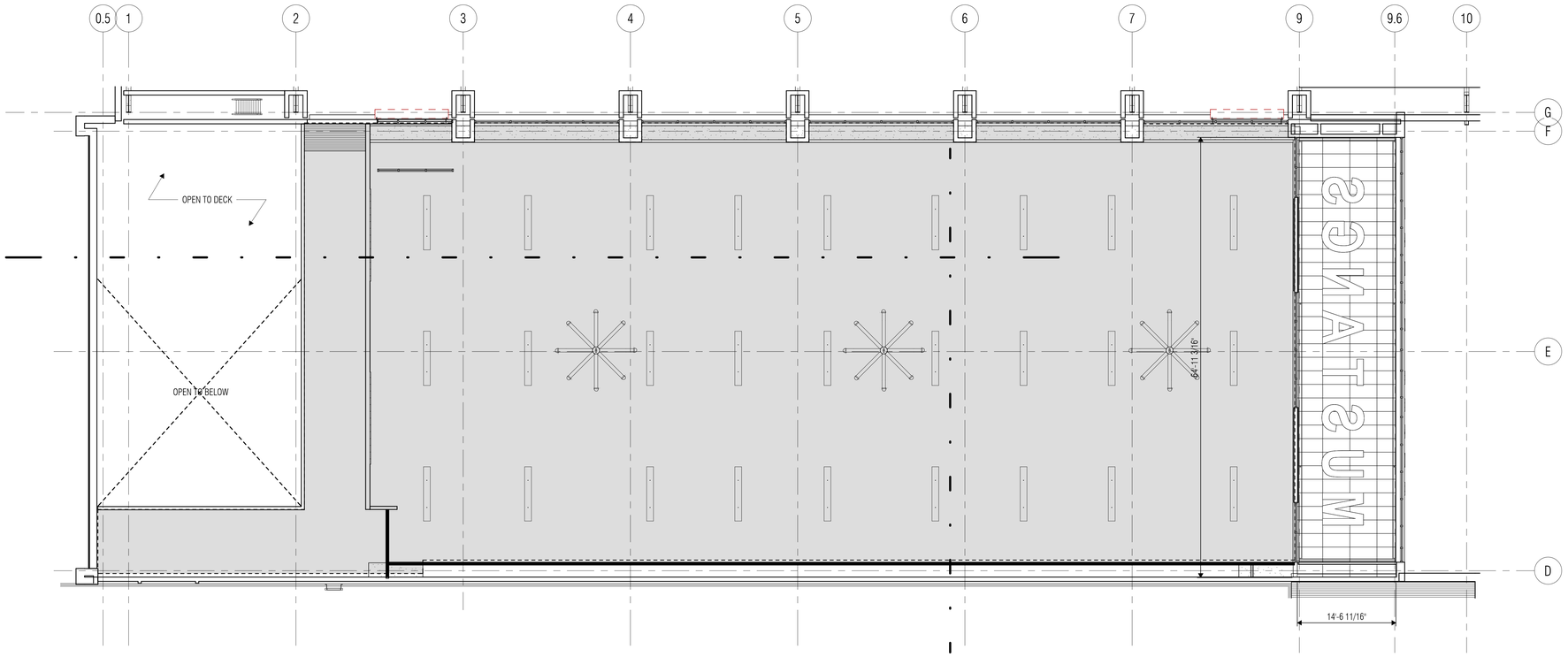
REFLECTED CEILING PLAN - LEVEL ONE - UNIT D - ALTERNATE

SHEET NO.

A6.11D.1

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 REFLECTED CIELING PLAN - LEVEL TWO- UNIT B
SCALE: 1/8" = 1'-0"

REFLECTED CEILING PLAN NOTES

1. All ceiling heights shall be [10'-00"] A.F.F. unless noted otherwise.
2. Refer to Detail 1 / A6.31 for Typical Gypsum Board Ceiling Control Joint Detail.
3. Refer to Detail - / --- for Typical Plaster Ceiling Control Joint Detail.
4. Provide vented reveals at perimeter of all non-insulated exterior plaster soffits. Provide venting strips or perforated panels at perimeter of all non-insulated metal panel soffits (refer to Detail - / ---). Venting at non-insulated soffits shall be provided whether specifically indicated on the drawings or not.
5. Provide partition to deck (PTD) at walls surrounding spaces with exposed structure. Refer to Reflected Ceiling Plan Legend for PTD requirements.
6. Provide hold-down clips for all acoustic lay-in ceiling panels at vestibules, at sloped ceilings, at fire-rated ceilings, and within 6 feet of exterior doors without vestibules.
7. At ceiling furring details, the suspended assemblies, bracing, blocking, etc. shown on the details are for schematic representation only. Provide stable, secure and permanent assemblies at these locations in accordance with recommended light-gage steel framing installation practices.
8. At partitions that do not extend to deck above, extend partition 4" minimum above highest adjacent ceiling and brace per Floor Plan Legend and Floor Plan Notes.

REFLECTED CEILING PLAN LEGEND

EXISTING TO REMAIN WITH LIMITED OR NO ARCHITECTURAL WORK REQUIRED IN THIS AREA. REFER TO CIVIL, MEPT AND STRUCTURAL DRAWINGS FOR ANY ADDITIONAL WORK IN AREA.

CEILINGS:

ACT-01	ACOUSTIC LAY-IN CEILING TILE 24" X 24"
ACT-02	EXISTING GRID TO REMAIN, NEW ACOUSTIC LAY-IN CEILING TILE 24" X 24"
	EXISTING ACOUSTIC LAY-IN CEILING TILE TO REMAIN
MP-01	METAL PANEL
MP-02	VAPOR FREQUENCY PANELS WITH RED LIGHTING 48" X 24"
MP-03	VAPOR TRAIL PANELS; CUSTOM; WITH WHITE LIGHTING 48" X 24"
MP-04	LINEAR METAL- WOOD LOOK
	EXISTING GYPSUM BOARD CEILING TO REMAIN
PT-01	5/8" GYPSUM BOARD CEILING PAINTED PT-01, U.N.O.

HVAC SUPPLY AND RETURN GRILLES Shown for location purposes only. Refer to Mechanical Drawings.

1 Hour Fire Barrier Partition

2 Hour Fire Barrier Partition

Smoke Partition

Sound Partition

Non-rated Partition to Deck

1-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'1-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: *'2-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'*. Brace partitions per Floor Plan General Notes.

SMOKE PARTITION. Extend partition to deck above and seal with sealant as required to resist the passage of smoke. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: 'SMOKE BARRIER - PROTECT ALL OPENINGS'. Seal all joints and penetrations. Brace partitions per Floor Plan General Notes.

ACOUSTICAL DRYWALL PARTITION / SOUND-CONDITIONED CMU PARTITION. Extend partition to deck above and seal with acoustical sealant. Seal all joints and penetrations with acoustical sealant. Brace partitions per Floor Plan General Notes.

NON-RATED PARTITION TO DECK. Extend partition to deck above. Brace partitions per Floor Plan General Notes.

CEILING SCHEDULE

TYPE MARK	TYPE
	Generic
ACT-01	2' x 2' ACT System
ACT-02	2' x 2' ACT (NEW TILES ONLY)
LMC-01	<varies>
PT-01	<varies>

KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

MONIKA C. CASTILLO 26558 REGISTERED ARCHITECT STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

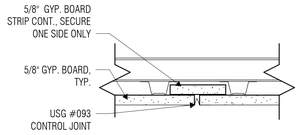
REFLECTED CEILING PLAN - LEVEL TWO - UNIT B

SHEET NO.

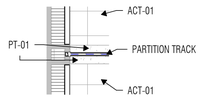
A6.12B

North Shore Multi-Use Indoor Facility

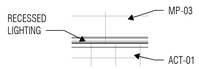
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



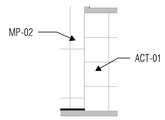
1 TYP. GYP. BD CONTROL JOINT DETAIL
SCALE: NTS



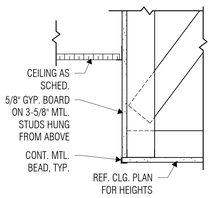
2 CEILING DETAIL
SCALE: 1 : 60



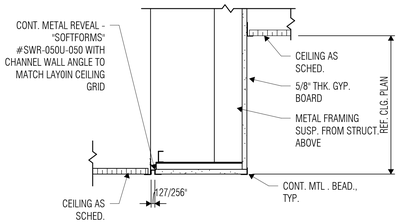
3 CEILING DETAIL
SCALE: 1 : 60



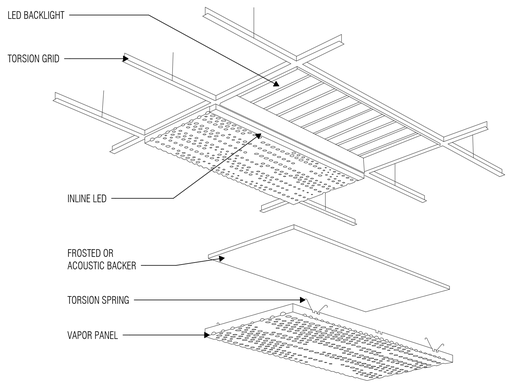
4 CEILING DETAIL
SCALE: 1 : 60



6 C508 - DETAIL AT FURR DOWN
SCALE: 1 1/2" = 1'-0"



7 C511 - DETAIL AT FURR DOWN
SCALE: 1 1/2" = 1'-0"



5 VAPOR METAL PANEL DETAIL
SCALE: NTS

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
CEILING DETAILS

SHEET NO.
A6.31

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

DOOR SCHEDULE

DOOR	DOOR TYPE	PANEL MATERIAL	FRAME TYPE	DOOR OPENING WIDTH	DOOR OPENING HEIGHT	FIRE RATING	HARDWARE SET	KEYED NOTES	REMARKS	PHASE
C101	F	4		6'-0"	7'-0"		102			Existing
C104	F	4		6'-0"	7'-0"		101	9		Existing
C108	K	4	1	6'-0"	7'-0"		102			Existing
C109	A	4	1	3'-0"	7'-0"		110			Existing
C112	A	1	1	3'-0"	7'-0"		108			Existing
C115	A	1	1	3'-0"	7'-0"		117			Existing
C116	A	1	1	3'-0"	7'-0"		117			Existing
C117	A	1	1	3'-0"	7'-0"		117			Existing
C118	A	1	1	3'-0"	7'-0"		113			Existing
C119	A	1	1	3'-0"	7'-0"		107			Existing
C120	A	1	1	3'-0"	7'-0"		113			Existing
C121	A	1	1	3'-0"	7'-0"		113			Existing
C122A	C	1		3'-0"	7'-0"		107			Existing
C122B	C	4		3'-0"	7'-0"		108			Existing
C123	A	1	1	3'-0"	7'-0"		117			Existing
C124	A	1	1	3'-0"	7'-0"		117			Existing
C125	A	1	1	3'-0"	7'-0"		108			Existing
C126	A	1	1	3'-0"	7'-0"		114			Existing
C127	A	1	1	3'-0"	7'-0"		114			Existing
C128	A	1	1	3'-0"	7'-0"		116			Existing
C129	A	1	1	3'-0"	7'-0"		116			Existing
C133	A	1	1	3'-0"	7'-0"		112			Existing
C136	K	4	1	6'-0"	7'-0"		104			Existing
C137	A	4	1	3'-0"	7'-0"					Existing
C138	A	1	1	3'-0"	7'-0"		113			Existing
C141A	A	4	1	3'-0"	7'-0"		108			Existing
C147	A	4	1	3'-0"	7'-0"		102			Existing

EXISTING DOORS TO REMAIN. PROVIDE NEW HARDWARE AS SCHEDULED.

DOOR SCHEDULE

DOOR	DOOR TYPE	PANEL MATERIAL	FRAME TYPE	DOOR OPENING WIDTH	DOOR OPENING HEIGHT	FIRE RATING	HARDWARE SET	KEYED NOTES	REMARKS	PHASE
C105	SFD-G	8		3'-0"	6'-10"		107			New Construction
C105A	A	1	1	3'-0"	7'-0"		115			New Construction
C106	A	1	1	3'-0"	7'-0"		117			New Construction
C107	A	1	1	3'-0"	7'-0"		114			New Construction
C111	B	1	1	6'-0"	7'-0"		105			New Construction
C125C	SFD-K	9		6'-0"	7'-0"		101			New Construction
C125D	SFD-K	9		6'-0"	7'-0"		101	9		New Construction
C130	F	4		6'-0"	7'-0"		102		COORDINATE WITH PREFAB WALL MNFR.	New Construction
C130A	C	4		3'-0"	7'-0"		111		COORDINATE WITH PREFAB WALL MNFR.	New Construction
C130B	SFD-K	9		6'-0"	7'-0"		102		COORDINATE WITH PREFAB WALL MNFR.	New Construction
C130C	C	4		3'-0"	7'-0"		111		COORDINATE WITH PREFAB WALL MNFR.	New Construction
C131	B	4		6'-0"	7'-0"		106			New Construction
C132	B	4	1	6'-0"	7'-0"		101	9		New Construction
C133A	A	4	1	3'-0"	7'-0"		112			New Construction
C138A	A	4	1	3'-0"	7'-0"		113			New Construction
C141	A	4	1	3'-0"	7'-0"		108			New Construction
C143	SFD-T	9		6'-0"	7'-0"		101	9		New Construction
C144	J	1	1	3'-0"	7'-0"		108			New Construction
C145	J	1	1	3'-0"	7'-0"		114			New Construction
C146	J	1	1	3'-0"	7'-0"		114			New Construction
C147	SFD-K	9		6'-0"	7'-0"		102			New Construction
C147A	SFD-K	9		6'-0"	7'-0"		101	9		New Construction
C148	SFD-K	9		6'-0"	7'-0"		101			New Construction
C148A	SFD-K	9		6'-0"	7'-0"		101			New Construction
C148B	SFD-K	9		6'-0"	7'-0"		102			New Construction
C148C	Y	19		10'-0"	10'-0"					New Construction
C148D	Y	19		10'-0"	10'-0"					New Construction
C149	SFD-K	9		6'-0"	7'-0"		101	9		New Construction
C150	B	4	1	6'-0"	7'-0"		106			New Construction
C150A	X	10	10	5'-0"	4'-0"					New Construction
C151	A	4	1	3'-0"	7'-0"		107	9		New Construction
C152A	SFD-K	9		6'-0"	7'-0"		102			New Construction
C152B	SFD-K	9		6'-0"	7'-0"		101	9		New Construction
C152E	Y	19		10'-0"	10'-0"					New Construction
C152F	Y	19		20'-0"	10'-0"					New Construction
C152G	Y	19		20'-0"	10'-0"					New Construction
C152H	Y	19		20'-0"	10'-0"					New Construction
C152I	Y	19		20'-0"	10'-0"					New Construction
C152J	Y	19		20'-0"	10'-0"					New Construction
C152K	Y	19		20'-0"	10'-0"					New Construction
C152L	Y	19		10'-0"	10'-0"					New Construction
C152M	W	15		10'-0"	10'-0"					New Construction
C152N	W	15		10'-0"	10'-0"					New Construction
C152O	W	15		10'-0"	10'-0"					New Construction
C152P	W	15		10'-0"	10'-0"					New Construction
C152Q	W	15		10'-0"	10'-0"					New Construction
C152R	W	15		10'-0"	10'-0"					New Construction
C152S	W	15		10'-0"	10'-0"					New Construction
C152T	W	15		10'-0"	10'-0"					New Construction
C152U	W	15		10'-0"	10'-0"					New Construction
C152V	W	15		10'-0"	10'-0"					New Construction
C152W	W	15		10'-0"	10'-0"					New Construction
C152X	W	15		10'-0"	10'-0"					New Construction
C152Y	W	15		10'-0"	10'-0"					New Construction
C153	A	4	1	3'-0"	7'-0"		108			New Construction
C154	A	4	1	3'-0"	7'-0"		108			New Construction
C154A	W	17		10'-0"	10'-0"					New Construction
C154B	W	17		10'-0"	10'-0"					New Construction
C155	A	4	1	3'-0"	7'-0"		102			New Construction
C155A	W	17		10'-0"	10'-0"					New Construction
C155B	W	17		10'-0"	10'-0"					New Construction
C156	A	4	1	3'-0"	7'-0"		108			New Construction
C157	A	4	1	3'-0"	7'-0"		107			New Construction
C158	A	4	1	3'-0"	7'-0"		114			New Construction
C159	A	4	1	3'-0"	7'-0"		114			New Construction
C160A	A	6		3'-0"	7'-0"		102			New Construction
C160B	B	6		6'-0"	7'-0"		102			New Construction
C161	A	6		4'-0"	7'-0"		102			New Construction
C162A	A	6		4'-0"	7'-0"		102			New Construction
C162B	A	6		4'-0"	7'-0"		102			New Construction
C164	B	4	1	6'-0"	7'-0"	60	106			New Construction
C165	S	18		10'-0"	10'-0"				PROVIDE CHAIN AND PADLOCK	New Construction

DOOR SCHEDULE NOTES

1. At Doors marked 'SMK', provide smoke seals at frame and door bottom to resist the passage of smoke. Provide threshold if required by code or if necessary for proper function of door bottom seal.
2. At Doors marked 'SND', frames to be stuffed with mineral fiber insulation prior to installation and the perimeter of the frame sealed to the surrounding wall with non-hardening acoustical sealant on both sides of the partition. Threshold, where used, shall be sealed to the floor with acoustical sealant.
3. At Doors without a Frame Type designation, the door frame is part of a Glazing System, Sound-Control Door Assembly, Tornado-Resistant Door Assembly, etc.
4. At Doors with a Frame Type designation "AL", the door frame is an interior aluminum frame that is not part of a glazing system
5. At Doors with a Frame Type designation "N/A", there is no door frame required (e.g. all-glass doors, gates, etc.).
6. At Doors with a Frame Type designation "REF DET", refer to the referenced Head and Jamb detail for frame information.
7. At Doors with a Door Type or Frame Type designation "EX", the door or door frame is existing to remain.
8. Refer to Hardware Schedule for additional information regarding hardware.
9. Vision panels at non-rated interior doors shall be 1/4" clear tempered glass (CT4) U.N.O. Vision panels at interior fire-rated glass (CC4) U.N.O. Vision panels at exterior doors shall be 1" tinted tempered insulating glass (TT1) U.N.O.
10. Refer to Glazing System Elevation Sheets for Glass Types.

DOOR KEYED NOTES

KEY NUMBER	KEYED NOTES
1	Cased Opening
2	Double Egress Doors
3	Fire-Rated Wired Glass
4	Fire-Rated Ceramic Glass
5	Keyed Removable Mullion
6	Electromagnetic Hold-Open
7	Manual Hold-Open, Floor Mounted
8	Manual Hold-Open Overhead
9	Access Control / Card Reader
10	Door Position Switch
11	Applied Sound Seals Threshold

PANEL MATERIAL NOTES

TYPE MARK	PANEL MATERIAL
1	Plastic Laminate
2	Stained Wood
3	Painted Wood
4	Painted Hollow Metal
5	Painted Metal Sound Control Door and Frame
6	Painted Metal Tornado Resistance Door and Frame
7	Solid Storefront Panel
8	Wide Stile Storefront Panel
9	Narrow Stile Storefront Panel
10	Manual Non Insulated Stainless Steel
11	Motorized Non Insulated Stainless Steel
12	Manual Non Insulated Painted Steel
13	Motorized Non Insulated Painted Steel
14	Manual Insulated Painted Steel
15	Motorized Insulated Painted Steel
16	Motorized Insulated Painted Steel Storm
17	Motorized Non Insulated Painted Steel Storm
18	Wire Mesh
19	Motorized Insulated Glass and Steel

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
36558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

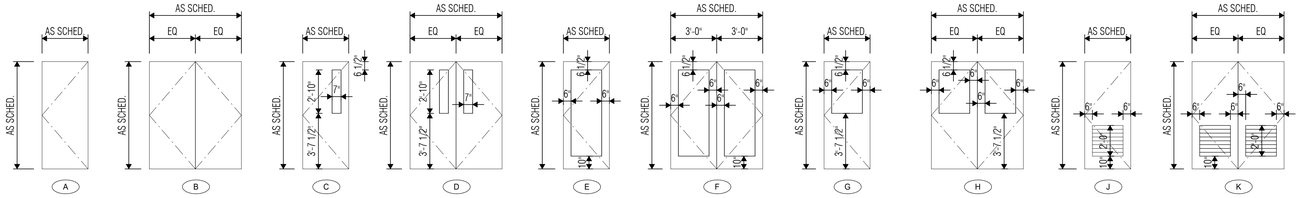
SHEET TITLE

DOOR SCHEDULE

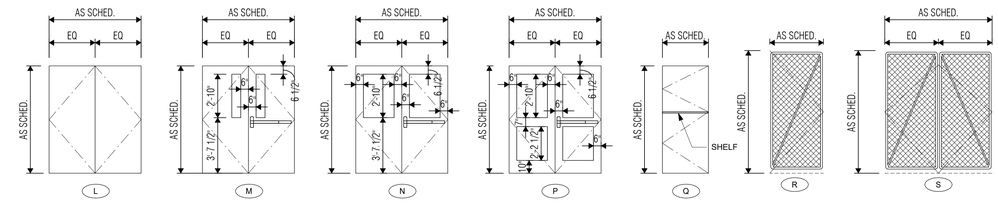
SHEET NO.

A7.01

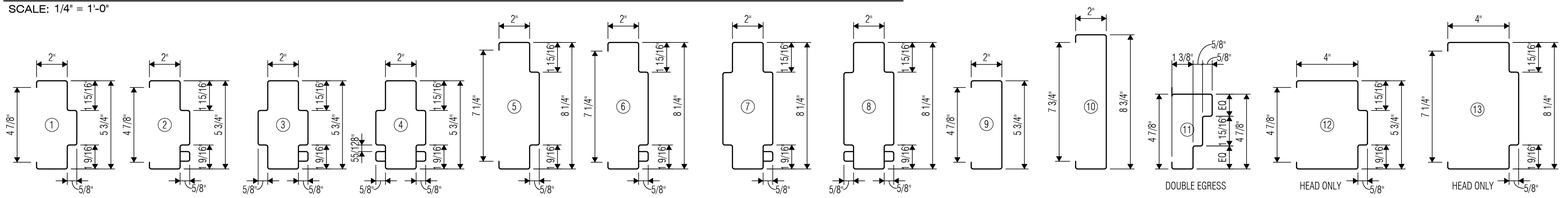
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



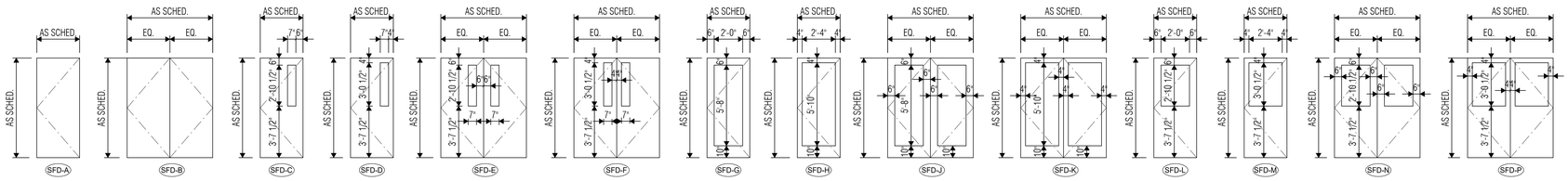
1 DOOR TYPES
SCALE: 1/4" = 1'-0"



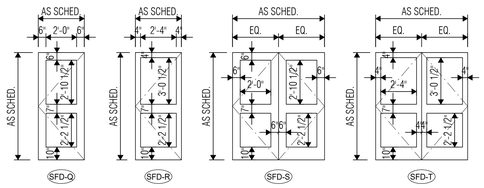
6 DOOR TYPES CONTINUED
SCALE: 1/4" = 1'-0"



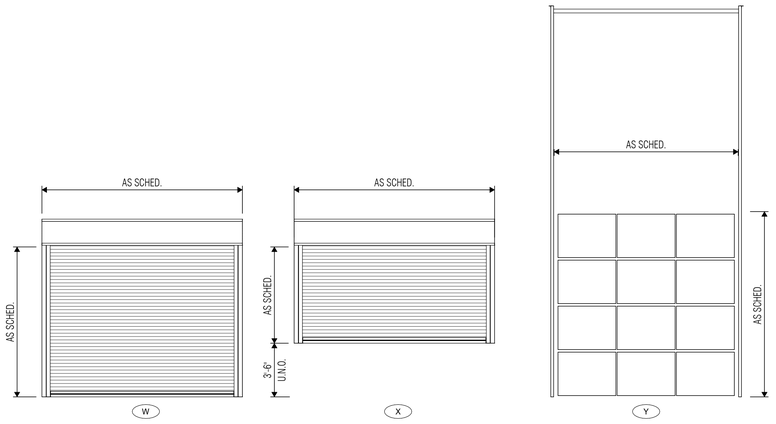
2 HOLLOW METAL FRAME TYPES
SCALE: 3" = 1'-0"



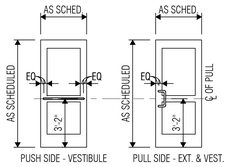
3 STOREFRONT DOOR TYPES
SCALE: 1/4" = 1'-0"



7 STOREFRONT DOOR TYPES
SCALE: 1/4" = 1'-0"



4 OVERHEAD COILING DOOR TYPES
SCALE: 1/4" = 1'-0"



5 PUSH/ PULL HEIGHTS
SCALE: 1/4" = 1'-0"

DOOR SCHEDULE NOTES

1. At Doors marked 'SMK', provide smoke seals at frame and door bottom to resist the passage of smoke. Provide threshold if required by code or if necessary for proper function of door bottom seal.
2. At Doors marked 'SND', frames to be stuffed with mineral fiber insulation prior to installation and the perimeter of the frame sealed to the surrounding wall with non-hardening acoustical sealant on both sides of the partition. Threshold, where used, shall be sealed to the floor with acoustical sealant.
3. At Doors without a Frame Type designation, the door frame is part of a Glazing System, Sound-Control Door Assembly, Tornado-Resistant Door Assembly, etc.
4. At Doors with a Frame Type designation "AL", the door frame is an interior aluminum frame that is not part of a glazing system
5. At Doors with a Frame Type designation "N/A", there is no door frame required (e.g. all-glass doors, gates, etc.).
6. At Doors with a Frame Type designation "REF DET", refer to the referenced Head and Jamb detail for frame information.
7. At Doors with a Door Type or Frame Type designation "EX", the door or door frame is existing to remain.
8. Refer to Hardware Schedule for additional information regarding hardware.
9. Vision panels at non-rated interior doors shall be 1/4" clear tempered glass (CT4) U.N.O. Vision panels at interior fire-rated glass (CC4) U.N.O. Vision panels at exterior doors shall be 1" tinted tempered insulating glass (TT1) U.N.O.
10. Refer to Glazing System Elevation Sheets for Glass Types.

DOOR KEYED NOTES

KEY NUMBER	KEYED NOTES
1	Cased Opening
2	Double Egress Doors
3	Fire-Rated Wired Glass
4	Fire-Rated Ceramic Glass
5	Keyed Removable Mullion
6	Electromagnetic Hold-Open
7	Manual Hold-Open, Floor Mounted
8	Manual Hold-Open Overhead
9	Access Control / Card Reader
10	Door Position Switch
11	Applied Sound Seals Threshold

PANEL MATERIAL NOTES

TYPE MARK	PANEL MATERIAL
1	Plastic Laminate
2	Stained Wood
3	Painted Wood
4	Painted Hollow Metal
5	Painted Metal Sound Control Door and Frame
6	Painted Metal Tornado Resistance Door and Frame
7	Solid Storefront Panel
8	Wide Stile Storefront Panel
9	Narrow Stile Storefront Panel
10	Manual Non Insulated Stainless Steel
11	Motorized Non Insulated Stainless Steel
12	Manual Non Insulated Painted Steel
13	Motorized Non Insulated Painted Steel
14	Manual Insulated Painted Steel
15	Motorized Insulated Painted Steel
16	Motorized Insulated Painted Steel Storm
17	Motorized Non Insulated Painted Steel Storm
18	Wire Mesh
19	Motorized Insulated Glass and Steel

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

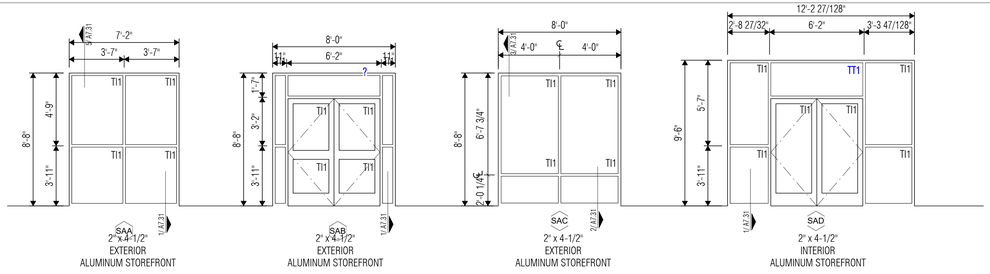
SHEET TITLE

DOOR TYPE ELEVATIONS

SHEET NO.

A7.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



GLAZING SYSTEM LEGEND

STOREFRONT FRAMING WITH 3/16" THICK 'HEAVY WALL' MATERIAL. TYPICAL AT ALL DOOR FRAME MEMBERS IN STOREFRONT GLAZING SYSTEMS.

CURTAIN WALL FRAMING WITH STEEL REINFORCING PROVIDED BY MANUFACTURER.

GLAZING SYSTEM NOTES

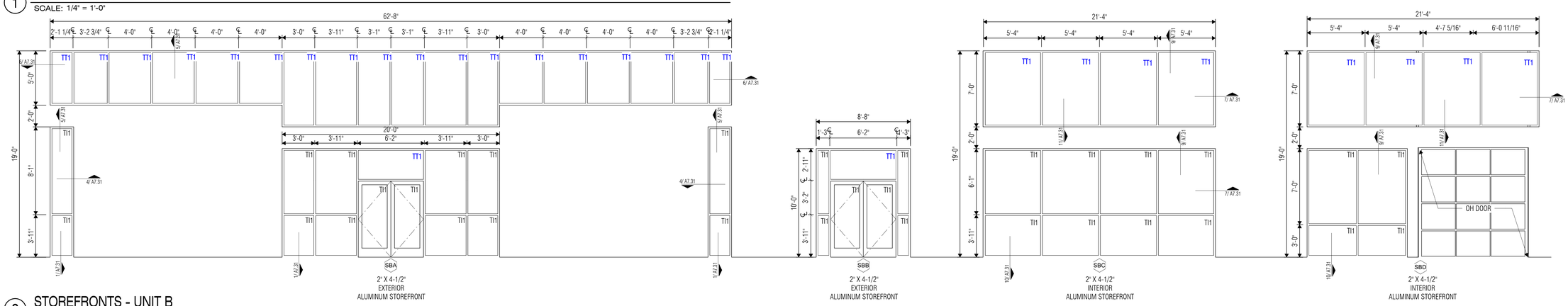
1. Overall dimensions of glazing system elevations reflect rough opening dimensions, inclusive of perimeter joints.
2. Provide 3/16" thick heavy wall framing members at all door frames in exterior and interior aluminum Storefront systems.
3. Provide 3/16" thick heavy wall door adapters at all door frame members in exterior and interior aluminum Curtain Wall systems.
4. Door opening dimensions in Curtain Wall systems reflect 1" door adapters at jamb conditions, and 1-3/4" door adapters at head conditions. Adjust dimensions between mullions at door openings in curtain wall systems as required for actual size of door adapters provided. Door sizes as identified in Door Schedule shall be maintained.
5. Refer to - / --- for Typical Push/Pull Mounting Heights Detail for aluminum/glass doors.

GLAZING TYPE LEGEND

Material: Description	Material: Name
CT4	Glazing - Clear
TT1	Glazing - Insulated, Tinted
TI1	Glazing - Insulated, Tinted, Impact Resistant
MP	Metal - Perforated
EXTERIOR FINISH	Metal - Wall Panel-02
TWP	Plastic - Cooper Industries - Frosted Kalwall 8x10
Stainless Steel 18/8, polished finish	Shiny Red

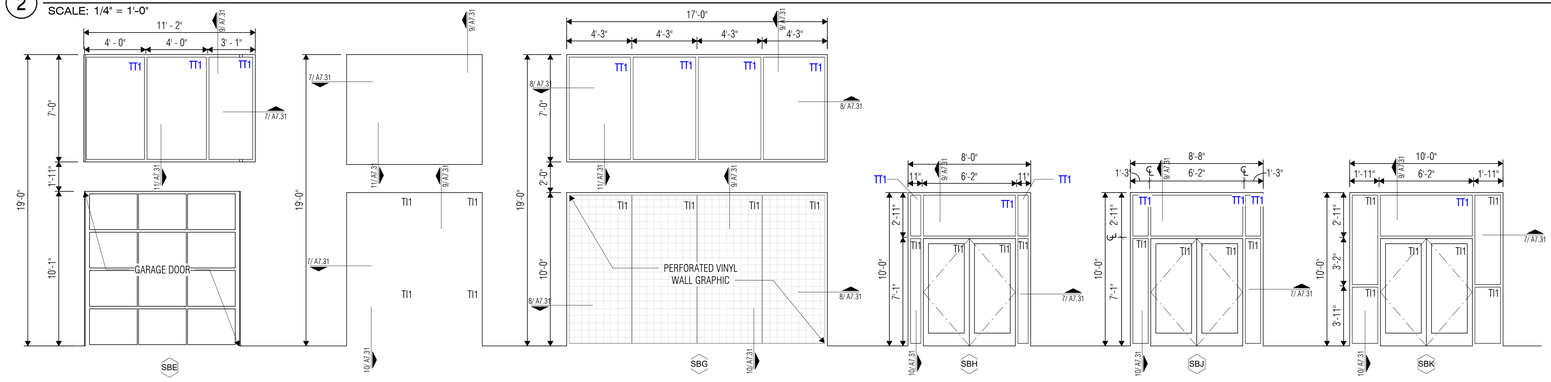
1 STOREFRONTS - UNIT A

SCALE: 1/4" = 1'-0"



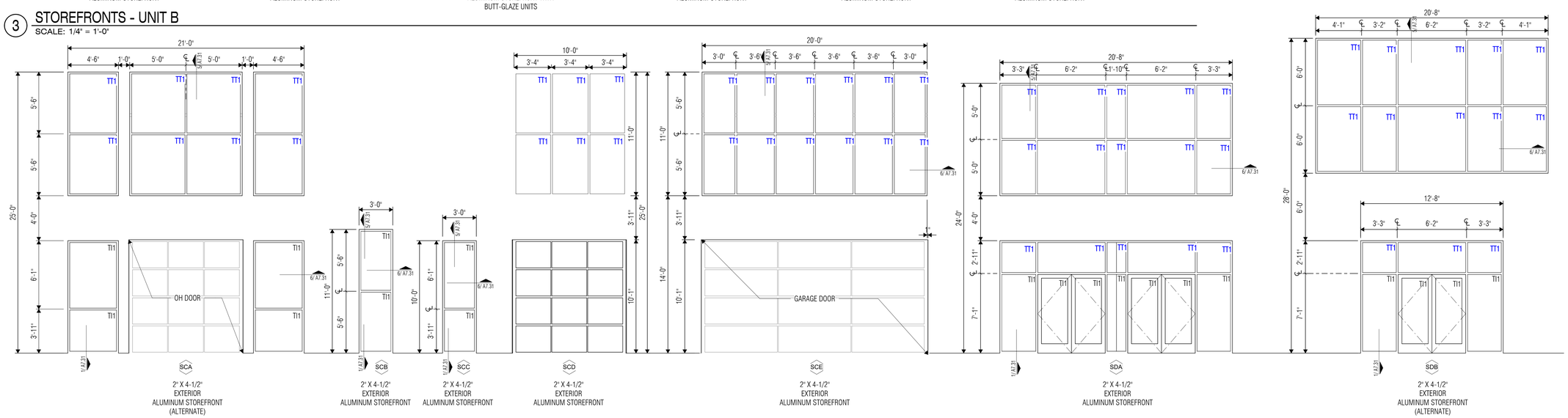
2 STOREFRONTS - UNIT B

SCALE: 1/4" = 1'-0"



3 STOREFRONTS - UNIT B

SCALE: 1/4" = 1'-0"



4 STOREFRONTS - UNITS C & D

SCALE: 1/4" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
29668
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

GLAZING ASSEMBLY ELEVATIONS

SHEET NO.

A7.21

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

GLAZING SYSTEM LEGEND

STOREFRONT FRAMING WITH 3/16" THICK 'HEAVY WALL' MATERIAL. TYPICAL AT ALL DOOR FRAME MEMBERS IN STOREFRONT GLAZING SYSTEMS.

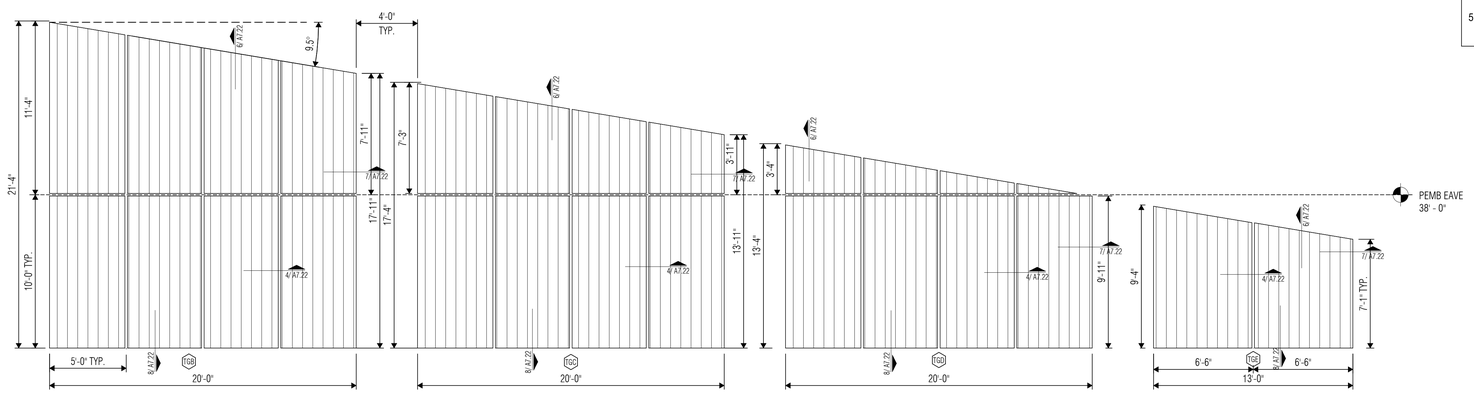
CURTAIN WALL FRAMING WITH STEEL REINFORCING PROVIDED BY MANUFACTURER.

GLAZING SYSTEM NOTES

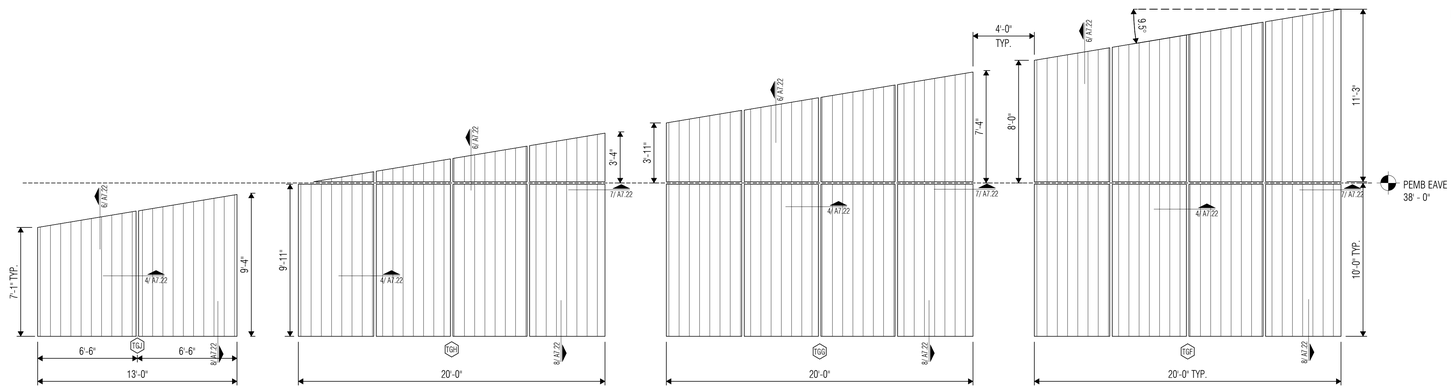
1. Overall dimensions of glazing system elevations reflect rough opening dimensions, inclusive of perimeter joints.
2. Provide 3/16" thick heavy wall framing members at all door frames in exterior and interior aluminum Storefront systems.
3. Provide 3/16" thick heavy wall door adapters at all door frame members in exterior and interior aluminum Curtain Wall systems.
4. Door opening dimensions in Curtain Wall systems reflect 1" door adapters at jamb conditions, and 1-3/4" door adapters at head conditions. Adjust dimensions between mullions at door openings in curtain wall systems as required for actual size of door adapters provided. Door sizes as identified in Door Schedule shall be maintained.
5. Refer to - / --- for Typical Push/Pull Mounting Heights Detail for aluminum/glass doors.

GLAZING TYPE LEGEND

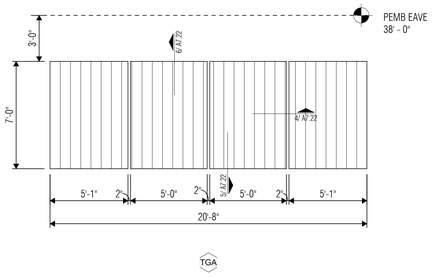
Material: Description	Material: Name
CT4	Glazing - Clear
TT1	Glazing - Insulated, Tinted
TI1	Glazing - Insulated, Tinted, Impact Resistant
MP	Metal - Perforated
EXTERIOR FINISH	Metal - Wall Panel-02
TWP	Plastic - Cooper Industries - Frosted Kalwall 8x10
Stainless Steel 18/8, polished finish	Shiny Red



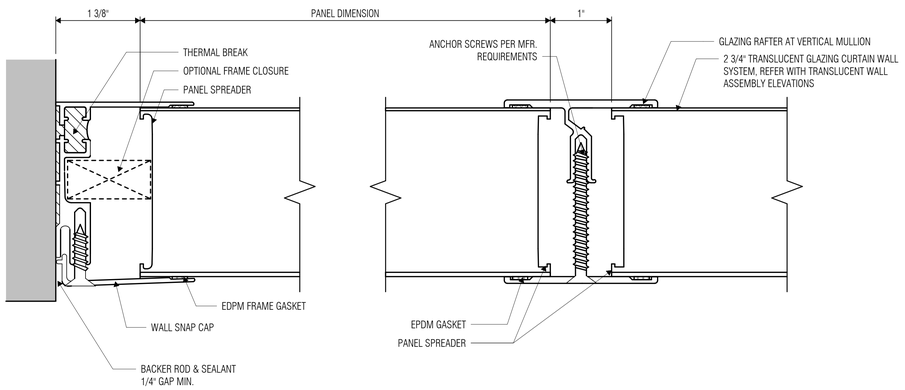
1 TRANSLUSCENT WALL PANEL ELEVATIONS
SCALE: 1/4" = 1'-0"



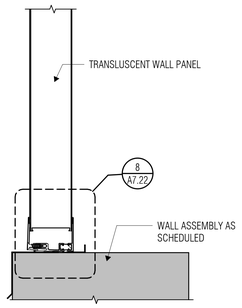
2 TRANSLUSCENT WALL PANEL ELEVATIONS
SCALE: 1/4" = 1'-0"



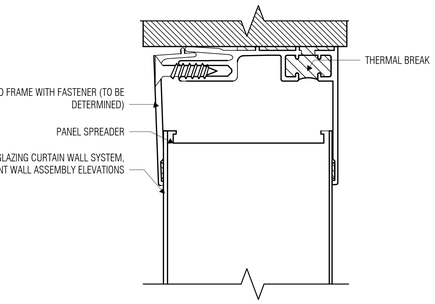
3 TRANSLUSCENT WALL PANEL ELEVATIONS
SCALE: 1/4" = 1'-0"



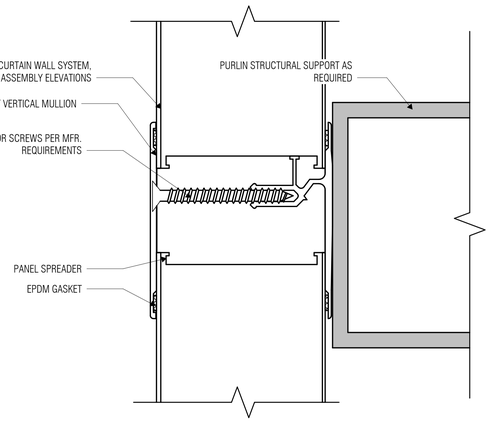
4 TWP CURTAIN WALL - PLAN VIEW
SCALE: 12" = 1'-0"



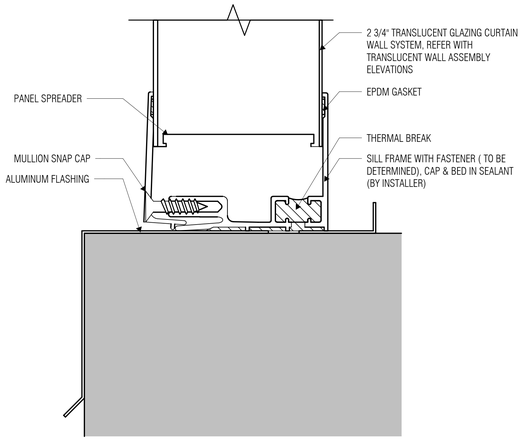
5 TWP CURTAIN WALL - SILL
SCALE: 3" = 1'-0"



6 TWP CURTAIN WALL - HEAD
SCALE: 12" = 1'-0"



7 TWP CURTAIN WALL - GIRT
SCALE: 12" = 1'-0"



8 TWP CURTAIN WALL - SILL DETAIL
SCALE: 12" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT — MONIKA C. CASTILLO — 26558 — STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

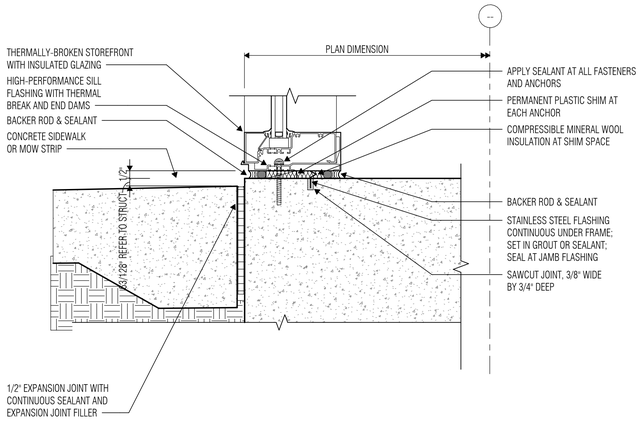
TRANSLUCENT PANEL ASSEMBLY ELEVATIONS

SHEET NO.

A7.22

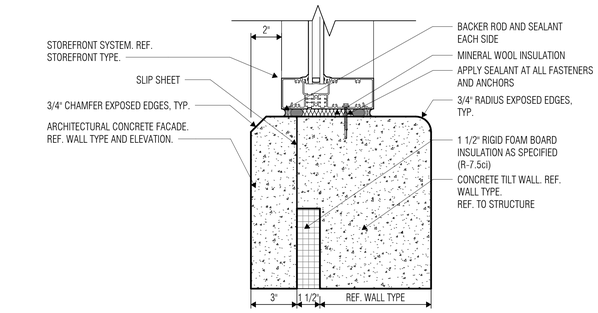
North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

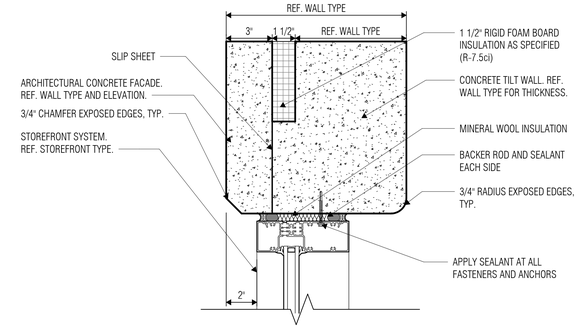


*SILL.60SF.SLAB.SS
WITHOUT BRICK LEDGE ON EITHER SIDE OF WINDOW

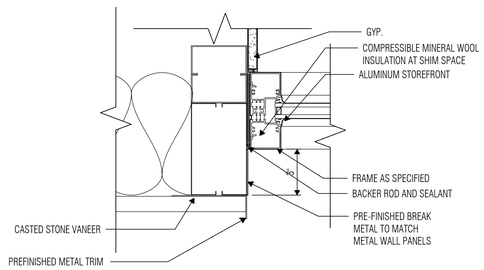
1 STOREFRONT SILL AT SLAB
SCALE: 3" = 1'-0"



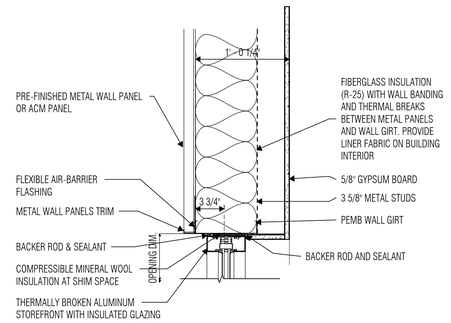
2 TILT WALL STOREFRONT AT SILL
SCALE: 3" = 1'-0"



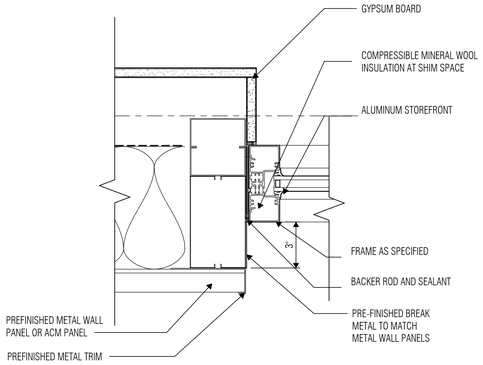
3 TILT WALL STOREFRONT AT HEAD
SCALE: 3" = 1'-0"



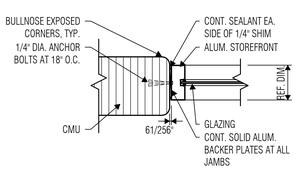
4 CMU - TILE STOREFRONT JAMB DETAIL
SCALE: 3" = 1'-0"



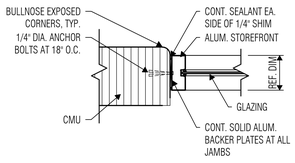
5 PEMB STOREFRONT AT HEAD
SCALE: 1 1/2" = 1'-0"



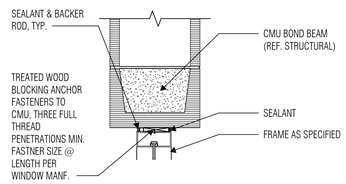
6 PEMB STOREFRONT JAMB DETAIL
SCALE: 3" = 1'-0"



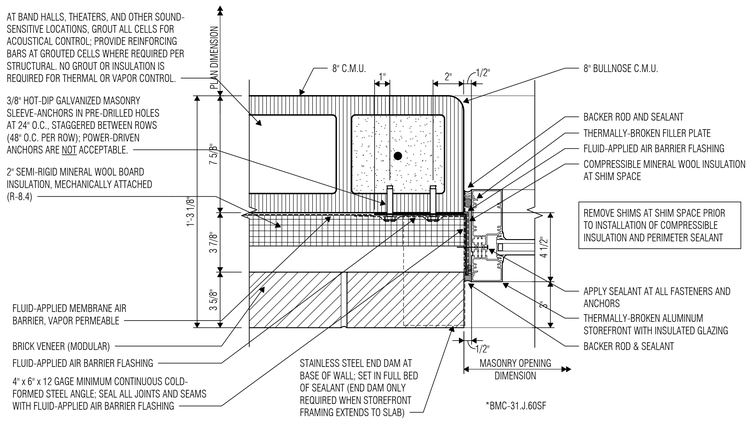
7 STOREFRONT ON CMU - INTERIOR JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



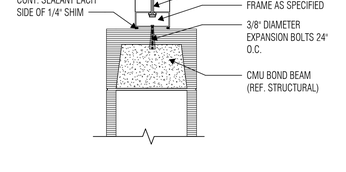
8 STOREFRONT ON CMU - INTERIOR JAMB DETAIL - NON BULLNOSED
SCALE: 1 1/2" = 1'-0"



9 STOREFRONT ON CMU - HEAD
SCALE: 1 1/2" = 1'-0"



10 STOREFRONT SILL DETAIL AT FINISHED FLOOR
SCALE: 1 1/2" = 1'-0"



11 STOREFRONT ON CMU - SILL
SCALE: 1 1/2" = 1'-0"

12 MODULAR BRICK/ CMU WALL AT STOREFRONT JAMB
SCALE: 3" = 1'-0"

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT — MONA C. CASTILLO — 26558 — STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
GLAZING ASSEMBLY DETAILS

SHEET NO.
A7.31

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

FINISH ACCESSORY, FURNITURE AND EQUIPMENT SCHEDULE

NOTE: ALL MATERIALS, PRODUCTS, SIZES, COLORS AND PATTERNS ARE THE BASIS OF DESIGN. REFERENCE PROJECT MANUAL FOR ADDITIONAL APPROVED MANUFACTURERS MEETING THE DESIGN INTENT. SUBSTITUTIONS WILL BE CONSIDERED WHEN SUBMITTED IN COMPLIANCE WITH SECTION 01 62 00 – PRODUCT OPTIONS.

MARK	DESCRIPTION	SPEC SECTION	MANUFACTURER INFO			SIZE	COMMENTS
			MANUFACTURER	SERIES/STYLE	COLOR/FINISH		
FLOOR FINISH ACCESSORY							
FFA-01	Floor Transition	09 68 00	Schluter	Reno-TK	Anodized Aluminum	--	Tile to Carpet, Carpet to Terrazzo, Tile to Resilient
G-01	Grout - Color A	09 30 13	Mapei	--	5010 Black	--	To be used with T-08
G-02	Grout - Color B	09 30 13	Mapei	--	5103 Cobblestone	--	To be used with T-09
MILLWORK FINISH ACCESSORY							
MFA-01	Millwork Reveal	06 40 00	TBD	--	TBD	1" WIDE	
SPECIALTY EQUIPMENT							
ATH	Athletic Equipment - Wall Pads	11 66 00	TBD	--	Red	4'-0" x 8'-0"	
DC	Display Case (Manufactured/Millwork)	10 12 00 or 06 40 00	TBD	--	TBD		
FEC	Fire Extinquisher Cabinet	10 44 13	--	--	--	-	
HB	Horizontal Blinds	12 21 13	SWF Contract	S4000 Micro	TBD	1" WIDE	
ID	Identifying Devices	10 14 00	Wilsonart	TBD	TBD	Ref. ADA Signgage Details	
LK-01	Lockers - Metal	10 51 13	TBD	--	Red	Ref. Locker Elevations	
MB	Markerboard - Premanufactured	10 11 16	Claridge	--	White		
PC-01	Privacy Curtain - Showers	10 21 23	TBD	--	TBD		
RS	Roller Shades	12 24 13	MechoShades		TBD	AS SPECIFIED	
TC	Toilet Compartment	10 21 13	TBD	Solid Black-Core Phenolic	TBD	-	
WALL FINISH ACCESSORY							
CG-01	Corner Guard	10 26 13	Construction Specialties	TBD	TBD	Full Height	
G-03	Grout	09 30 00	Mapei	--	5010 Black	-	To be used with T-01, T-02, T-03 (WTP-01)
G-04	Grout	09 30 00	Mapei	--	5103 Cobblestone	-	To be used with T-04, T-05, T-06 (WTP-02)
G-05	Grout	09 30 00	Mapei	--	5093 Warm Gray	-	To be used with T-07
WFA-01	Tile Edge/Corner Trim - Metal	09 30 00	Schluter	Quadec	Anodized Aluminum	-	Exposed Side Edges
WFA-02	Tile Edge/Corner Trim - Metal	09 30 00	Schluter	Jolly	Anodized Aluminum	-	Exposed Bottom Edges

MATERIAL FINISH SCHEDULE

NOTE: ALL MATERIALS, PRODUCTS, SIZES, COLORS AND PATTERNS ARE THE BASIS OF DESIGN. REFERENCE PROJECT MANUAL FOR ADDITIONAL APPROVED MANUFACTURERS MEETING THE DESIGN INTENT. SUBSTITUTIONS WILL BE CONSIDERED WHEN SUBMITTED IN COMPLIANCE WITH SECTION 01 62 00 – PRODUCT OPTIONS.

MATERIAL: MARK	DESCRIPTION	SPEC SECTION	MANUFACTURER INFO				COMMENTS
			MANUFACTURER	SERIES/STYLE	COLOR/FINISH	SIZE	
CEILING FINISH							
ACT-01	Acoustic Ceiling Tile (24X24)	09 51 00	Armstrong		White		
ACT-02	Acoustic Ceiling Tile (24X24)(NEW TILES ONLY)	09 51 00	Armstrong				
MP-01	Linear Wood Ceiling	09 54 26	Armstrong	Metalworks Linear - Classic			
MP-02	Ceiling-Decorative Metal A	09 54 23	Arktura	Vapor Frequency	Jet Black		
MP-03	Ceiling-Decorative Metal A.3	09 54 23	Arktura	Vapor Trail; CUSTOM	Jet Black		
MP-04	Linear Ceiling - Black	09 54 26	Armstrong	Metalworks Linear - Classic	Custom Black		
PT-04	Paint - Exposed Structure - White	09 91 00	Sherwin Williams	--	SW 7757 High Reflective White		
PT-05	Paint - Exposed Structure - Black	09 91 00	Sherwin Williams	--	SW 6258 Tricorn Black		
EXTERIOR FINISH							
ACM-01	Metal - Aluminum Composite Wall Panel-01	07 46 50	ALUCOBOND	--	Platinum Mica		
ACM-02	Metal - Aluminum Composite Wall Panel-02	07 46 50	ALUCOBOND	--	Greyhound		
ACM-03	Metal - Aluminum Composite Wall Panel-03	07 46 50	ALUCOBOND	--	Platinum Mica		
BR-01	Masonry - Modular Brick Veneer-01	04 20 00	ACME BRICK	--	Crimson /Velour	Modular	Running Bond
BR-02	Masonry - Modular Brick Veneer-02	04 20 00	ACME BRICK	--	Crimson /Velour	Modular	Soldier Coursing
BRT-01	Masonry - Modular Thin Brick Veneer-01	04 21 00	ACME BRICK	--	Crimson /Velour	Modular-Thin	Running Bond
BRT-02	Masonry - Modular Thin Brick Veneer-02	04 21 00	ACME BRICK	--	Crimson /Velour	Modular-Thin	Soldier Coursing
CS-01	Masonry - CAST STONE-01	04 72 00	Echelon	Cordova Stone	Graphite - Ground	12" x 24"	Running Bond Pattern - Matching Mortar
CS-02	Masonry - CAST STONE-02	04 72 00	Echelon	Cordova Stone	Midnight - Ground	12" x 24"	Running Bond Pattern - Matching Mortar
CS-03	Masonry - CAST STONE-03	04 72 00	Siteworks	--	Natural /Smooth		
MRP-01	Metal - Roof Panel-01	07 41 20	MBCI	SUPERLOK	Tundra	16" Wide Panel	
MSP-01	Metal - Soffit Panel-01	07 42 13	MBCI	FW-120-1	Tundra		Metal Soffit Panel with 1 Bead
MSP-02	Metal - Soffit Panel-02	07 42 13	MBCI	FW-120-1	Storm Gray		Metal Soffit Panel with 1 Bead
MSP-03	Metal - Soffit Panel-03	07 42 13	MBCI	FW-120-1	Brite Red		Metal Soffit Panel with 1 Bead
MWP-01	Metal - Wall Panel-01	07 42 13	MBCI	FW-120-1	Tundra		Metal Panel with 1 Bead/Vertical Orientation
MWP-02	Metal - Wall Panel-02	07 42 13	MBCI	FW-120-1	Storm Gray		Metal Panel with 1 Bead/Vertical Orientation
MWP-03	Metal - Wall Panel-03	07 42 13	MBCI	FW-120-1	Brite Red		Metal Panel with 1 Bead/Vertical Orientation
TF-03	Turf - Artificial-03	32 18 13	TBD	TBD	TBD		
FLOOR FINISH							
CO-01	Concrete - Sealed	03 30 00	As Specified	--	--	--	
CPT-01	Carpet - Field	09 68 16	Tarkett	Custom	115965046-10	Powerbond	
CPT-02	Carpet - Walk-Off	09 68 16	Tarkett	Assertive Action II	Chromium	Powerbond	
RF-02	Rubber - Sports Floor - Accent	09 65 00	Tarkett Sports	Dropzone Power	Grey	--	
RF-03	Rubber - Sports Floor - Dropzone Accent	09 65 00	Tarkett Sports	Dropzone Power	TBD	--	
RF-04	Rubber - Sports Floor - Dropzone Black	09 65 00	Tarkett Sports	Dropzone Power	Black	--	
RF-05	Resilient Floor - Field	09 65 19	Tarkett	IQ Optima	729 Light Black B	Roll	
T-08	Tile - Restrooms	09 30 00	Crossville	Nest	Meditative Oak AV357	8" x 36"	
T-09	Tile - Showers	09 30 00	Crossville	Shades 2.0	Mist SHD44; Unpolished	2" x 2" Mosaics	
TF-01	Turf - Artificial-01	32 18 13	Tarkett Sports	TBD	TBD	--	
TF-02	Turf - Artificial-02	32 18 13	Tarkett Sports	TBD	TBD	--	
TZ-01	Terrazzo - Field	09 66 23	Terrazzo & Marble	Terroxy	25GG-841	--	
TZ-02	Terrazzo - Accent Red	09 66 23	Terrazzo & Marble	Terroxy	25GG-844	--	
MILLWORK & ARCHITECTURAL FINISH							
PL-01	Plastic Laminate - Cabinets	12 32 00	Wilsonart	Virtual Design Library	Straight Cut Oak Charcoal YS009K-05	--	Run Wood Grain Vertical
PL-02	Plastic Laminate - Countertop	12 32 00	Wilsonart	Matte Finish	Panna Tessere 5049-60	--	
PL-03	Plastic Laminate - Existing Doors	12 32 16	Wilsonart	38 Fine Velvet Texture	Mission Maple 7990	--	Run Wood Grain Vertical
PT-06	Paint - H.M Doors & Frames	09 91 00	Sherwin Williams	--	SW 7068 Grizzle Gray	--	
SS-01	Solid Surface - Countertops	12 32 00	Wilsonart	--	Carbone Marmo 9914SS	--	
WALL FINISH							
PT-01	Paint - Field	09 91 00	Sherwin Williams	--	SW 7631 City Loftt	--	**REF. INT Elev, INT Finish Plans & RCPs
PT-02	Paint - Accent Dark Gray	09 91 00	Sherwin Williams	--	SW 7674 Peppercorn	--	**REF. INT Elev, INT Finish Plans & RCPs
PT-03	Paint - Accent Red	09 91 00	Sherwin Williams	--	SW 6871 Positive Red	--	**REF. INT Elev, INT Finish Plans & RCPs
RB-01	Rubber Base	09 65 00	Johnsonite	Traditional Vinyl	63 Burnt Umber	4"	
T-01	Tile - Large Format Panels	09 30 00	Crossville	Ossido	Nero L7032	40" x 118" Panels	
T-02	Tile - Wainscot Field	09 30 00	Crossville	Shades 2.0	Ink SHD49; Semi-Polished	12" x 24:	
T-03	Tile - Wainscot Bullnose	09 30 00	Crossville	Shades 2.0	Ink SHD49; Semi-Polished	4" x 24"	
T-04	Tile - Restroom Field	09 30 00	Crossville	Shades 2.0	Mist SHD44; Unpolished	12" x 24"	
T-05	Tile - Restroom Accent	09 30 00	Crossville	Shades 2.0	Mist SHD44; Semi-Polished	6" x 24"	
T-06	Tile - Restroom Cove Base	09 30 00	Crossville	Shades 2.0	Mist SHD44; Semi-Polished	6" x 12" Cove Base	
T-07	Tile - Backsplash	09 30 00	Crossville	Snippet	Lipstick SNP23; Gloss	3" x 12"	
T-10	Tile - Base	09 30 00	Crossville	Shades 2.0	Ink SHD49; Semi-Polished	6" x 12" Cove Base	**REF. 13/A3.21
VWC-01	Vinyl Wallcovering - Accent	09 72 16	Koroseal	Kimono II	Onyx K722-15	--	

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
36558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

MATERIAL FINISH SCHEDULES

SHEET NO.

A9.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

INTERIOR FLOOR FINISH LEGEND

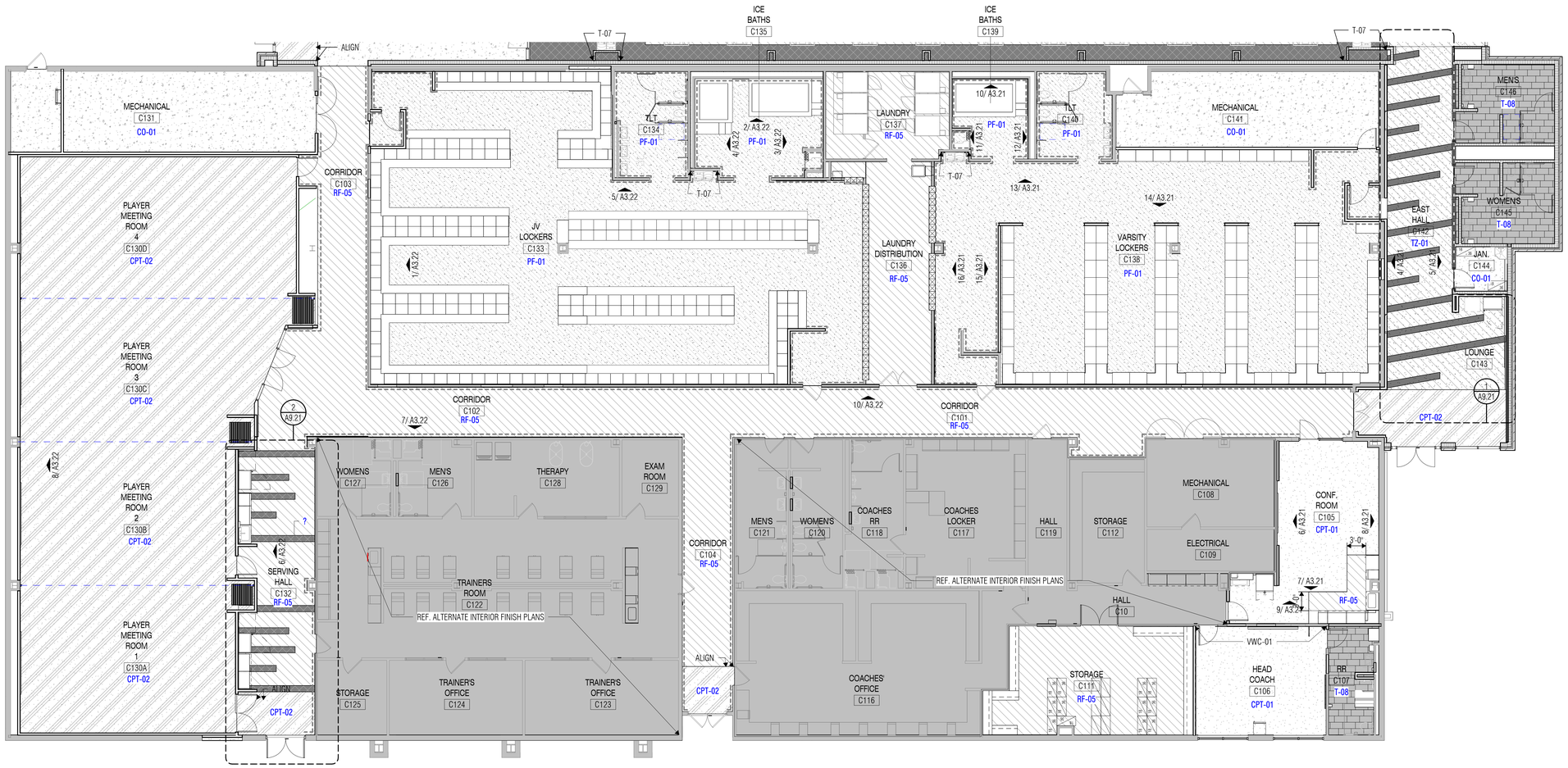
TYPE MARK	TYPE
	PLACEHOLDER - FLOORING
CO-01	Finish Floor - Concrete Sealed/Topping/Polished
CPT-01	Finish Floor - Carpet Field
CPT-03	Finish Floor - Carpet Walk Off
CSG-01	CSG-01_Concrete Slab on Grade
CSS-01	<varies>
RF-01	Finish Floor - Resilient Floor - Field
RF-02	Finish Floor - Rubber - Sports Floor - Accent
RF-03	Finish Floor - Rubber - Sports Floor - Dropzone Accent
RF-04	Finish Floor - Rubber - Sports Floor - Dropzone Black
SF	Finish Floor - Turf - White
SW-1	Site - Sidewalk - 5"
T-01	Finish Floor - Porcelain Tile Field
TF-01	Finish Floor - Indoor Turf - Red
TF-03	Turf - Green - Practice
TZ-01	Finish - Terrazzo - Field
TZ-02	Finish Floor - Terrazzo - Accent Red

WALL FINISH LEGEND

WTP-01 WALL TILE PATTERN - WAINSCOT 12" x 24"
CG CORNER GUARD
PT PAINT

INTERIOR FINISH SCHEDULE NOTES

1. **General Finish Notes**
   - A. Any finish conflict between finish schedules and finish floor plans to be brought to the Architect's attention for resolution.
2. **Floor Finishes**
   - A. Refer to Interior Finish Plans for floor finish patterns.
   - B. Refer to Interior Finish Plans for tile origin in each room. If origin point is not indicated, center in middle of the room or corridor.
   - C. All changes in floor material between rooms shall occur at centerline of doorway, U.N.O.
   - D. Level and float flooring at public corridor walls.
   - E. All toilets and other areas capable of water incursion shall have a 2" x ½" wide marble threshold with ¼" beveled edges centered under each door.
   - F. Sealant color shall match adjacent material.
   - G. Typical flooring application at brick walls:
     1. Resilient Tile/ Sheet Flooring: Rake brick joint at floor level and install sealant between LVT and brick.
     2. Carpet: Rake brick joint at floor level and tuck carpet tight into raked brick joint.
3. **Wall Finishes**
   - A. Finishes shall continue to inside corner, U.N.O.
   - B. Provide Corner Guard CG-01 (to ceiling) at all vinyl wall covering outside corners at public areas, whether indicated on finish plans or not.
   - C. **Vinyl Wallcovering Information**:
     1. No vinyl wallcovering should be terminated at an outside corner. All vinyl wallcovering to wrap to inside corner,U.N.O.
     2. Provide Corner Guard at any vinyl wall covering outside corner when the color changes at the corner.
     3. Provide Corner Guard CG-01 (to ceiling) at all vinyl wall covering outside corners at public areas, whether indicated on finish plans or not.
   - D. **Paint Information:**
     1. **Walls:**
        - a. All exterior walls with gypsum board interior shall be painted PT-01, U.N.O.
        - b. All interior sealants shall be painted to match adjacent wall.
     2. **Hollow Metal Doors and Windows:**
        - a. Hollow metal doors shall be painted PT-06, U.N.O.
        - b. Hollow metal door frames and vision panel frames shall be painted PT-06, U.N.O.
        - c. At door frames with 2 different colors, transition color at inside corner of door stop, on the door side of the stop.
        - d. Hollow metal glazed opening frames shall be painted PT-06, U.NO.
     3. At painted CMU base, color shall match the wall above.
4. **Ceiling Finishes**
   - A. Refer to Reflected Ceiling Plans for scheduled finish.
   - B. At ceilings with exposed structure, all exposed elements shall be painted the scheduled color, including mechanical ductwork, electrical, piping, conduit, j-boxes, etc.
   - C. All interior gypsum board ceilings to be painted PT-01, U.N.O.
   - D. All interior gypsum board furr-downs to be painted PT-01, U.N.O.
5. **Tiling**
   - A. Refer to Detail 2/A3.31 for typical tile wainscot wall pattern.
   - B. Refer to Detail 3/A3.31 for typical toilet room wall pattern.
   - C. Refer to Detail 1/A3.31 for typical drinking fountain wall pattern.
   - D. At outside corners and exposed edges of ceramic or porcelain tile, provide anodized aluminum trim, unless otherwise detailed.
   - E. Provide Metal Trim WFA-01 at all outside and/or exposed tile locations (top, bottom, and corners) in corridors, whether indicated on finish plans or not.
6. **Casework/ Architectural Woodwork**
   1. Typical Casework/Millwork cabinet body, doors, and drawer fronts shall be PL-01, U.N.O.
   2. Countertops shall be PL-02, or SS-01 U.N.O
   3. Interior Plastic Laminate clad wood doors to be PL-01.
   4. Window Sills shall be PL-02, U.N.O.
   5. Manufacturer to match specified finishes.



1 INTERIOR PLAN - LEVEL ONE - UNIT A
SCALE: 1/8" = 1'-0"

KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

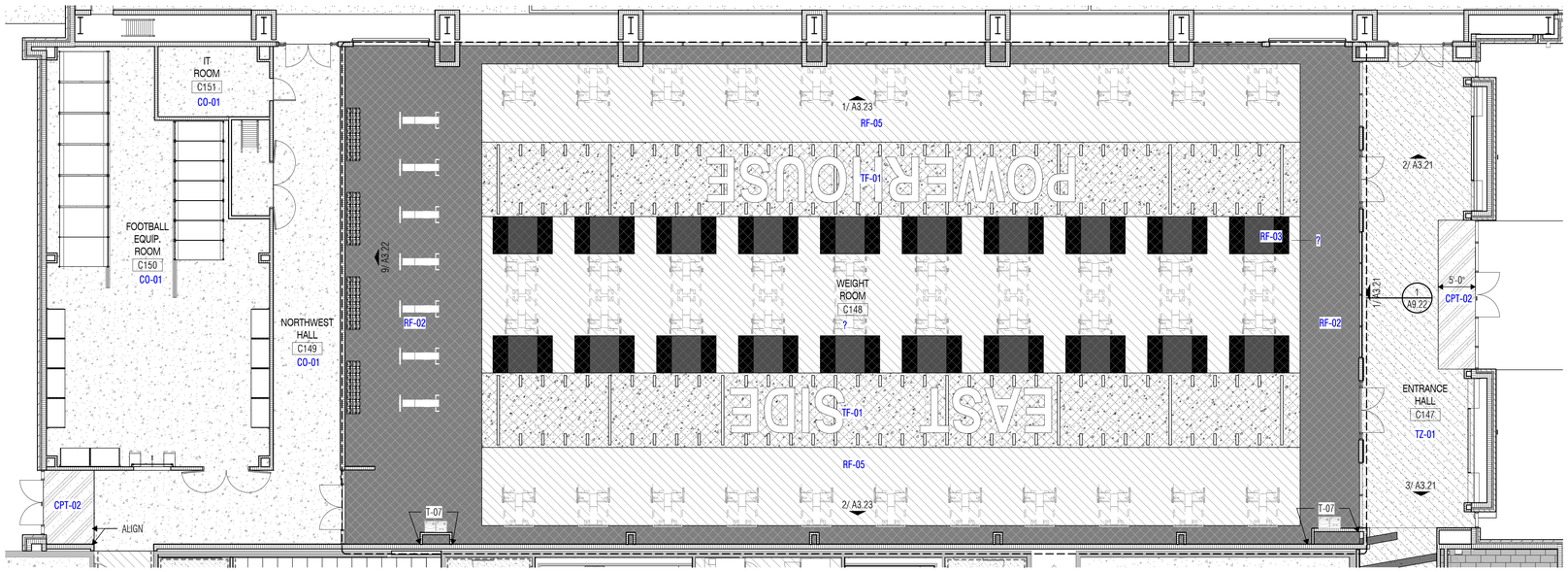
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
INTERIOR FINISH PLAN - LEVEL ONE - UNIT A

SHEET NO.
A9.11A

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 INTERIOR PLAN - LEVEL ONE - UNIT B
SCALE: 1/8" = 1'-0"

INTERIOR FINISH SCHEDULE NOTES

1. **General Finish Notes**
   - A. Any finish conflict between finish schedules and finish floor plans to be brought to the Architect's attention for resolution.
2. **Floor Finishes**
   - A. Refer to Interior Finish Plans for floor finish patterns.
   - B. Refer to Interior Finish Plans for tile origin in each room. If origin point is not indicated, center in middle of the room or corridor.
   - C. All changes in floor material between rooms shall occur at centerline of doorway, U.N.O.
   - D. Level and float flooring at public corridor walls.
   - E. All toilets and other areas capable of water incursion shall have a 2" x ½" wide marble threshold with ¼" beveled edges centered under each door.
   - F. Sealant color shall match adjacent material.
   - G. Typical flooring application at brick walls:
     1. Resilient Tile/ Sheet Flooring: Rake brick joint at floor level and install sealant between LVT and brick.
     2. Carpet: Rake brick joint at floor level and tuck carpet tight into raked brick joint.
3. **Wall Finishes**
   - A. Finishes shall continue to inside corner, U.N.O.
   - B. Provide Corner Guard CG-01 (to ceiling) at all vinyl wall covering outside corners at public areas, whether indicated on finish plans or not.
   - C. **Vinyl Wallcovering Information**:
     1. No vinyl wallcovering should be terminated at an outside corner. All vinyl wallcovering to wrap to inside corner,U.N.O.
     2. Provide Corner Guard at any vinyl wall covering outside corner when the color changes at the corner.
     3. Provide Corner Guard CG-01 (to ceiling) at all vinyl wall covering outside corners at public areas, whether indicated on finish plans or not.
   - D. **Paint Information:**
     1. **Walls:**
        - a. All exterior walls with gypsum board interior shall be painted PT-01, U.N.O.
        - b. All interior sealants shall be painted to match adjacent wall.
     2. **Hollow Metal Doors and Windows:**
        - a. Hollow metal doors shall be painted PT-06, U.N.O.
        - b. Hollow metal door frames and vision panel frames shall be painted PT-06, U.N.O.
        - c. At door frames with 2 different colors, transition color at inside corner of door stop, on the door side of the stop.
        - d. Hollow metal glazed opening frames shall be painted PT-06, U.NO.
     3. At painted CMU base, color shall match the wall above.
4. **Ceiling Finishes**
   - A. Refer to Reflected Ceiling Plans for scheduled finish.
   - B. At ceilings with exposed structure, all exposed elements shall be painted the scheduled color, including mechanical ductwork, electrical, piping, conduit, j-boxes, etc.
   - C. All interior gypsum board ceilings to be painted PT-01, U.N.O.
   - D. All interior gypsum board furr-downs to be painted PT-01, U.N.O.
5. **Tiling**
   - A. Refer to Detail 2/A3.31 for typical tile wainscot wall pattern.
   - B. Refer to Detail 3/A3.31 for typical toilet room wall pattern.
   - C. Refer to Detail 1/A3.31 for typical drinking fountain wall pattern.
   - D. At outside corners and exposed edges of ceramic or porcelain tile, provide anodized aluminum trim, unless otherwise detailed.
   - E. Provide Metal Trim WFA-01 at all outside and/or exposed tile locations (top, bottom, and corners) in corridors, whether indicated on finish plans or not.
6. **Casework/ Architectural Woodwork**
   1. Typical Casework/Millwork cabinet body, doors, and drawer fronts shall be PL-01, U.N.O.
   2. Countertops shall be PL-02, or SS-01 U.N.O
   3. Interior Plastic Laminate clad wood doors to be PL-01.
   4. Window Sills shall be PL-02, U.N.O.
   5. Manufacturer to match specified finishes.

WALL FINISH LEGEND

WTP-01	WALL TILE PATTERN - WAINSCOT 12" x 24"
CG	CORNER GUARD
PT	PAINT

INTERIOR FLOOR FINISH LEGEND

TYPE MARK	TYPE
	PLACEHOLDER - FLOORING
CO-01	Finish Floor - Concrete Sealed/Topping/Polished
CPT-01	Finish Floor - Carpet Field
CPT-03	Finish Floor - Carpet Walk Off
CSG-01	CSG-01_Concrete Slab on Grade
CSS-01	<varies>
RF-01	Finish Floor - Resilient Floor - Field
RF-02	Finish Floor - Rubber - Sports Floor - Accent
RF-03	Finish Floor - Rubber - Sports Floor - Dropzone Accent
RF-04	Finish Floor - Rubber - Sports Floor - Dropzone Black
SF	Finish Floor - Turf - White
SW-1	Site - Sidewalk - 5"
T-01	Finish Floor - Porcelain Tile Field
TF-01	Finish Floor - Indoor Turf - Red
TF-03	Turf - Green - Practice
TZ-01	Finish - Terrazzo - Field
TZ-02	Finish Floor - Terrazzo - Accent Red

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

T-07

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26556 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

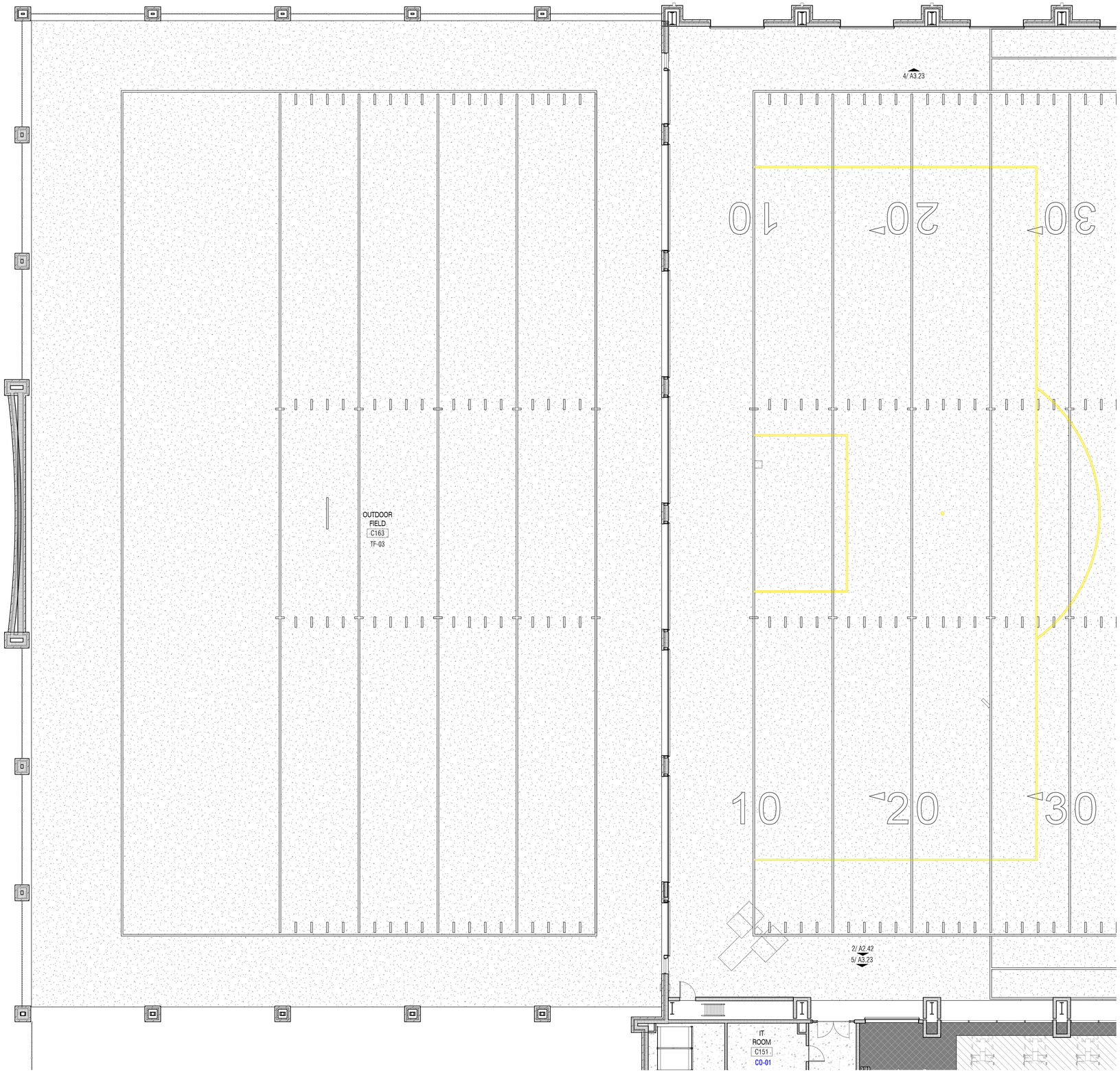
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
INTERIOR FINISH PLAN - LEVEL ONE - UNIT B

SHEET NO.
A9.11B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 INTERIOR PLAN - LEVEL ONE - UNIT C
SCALE: 1/8" = 1'-0"

INTERIOR FINISH SCHEDULE NOTES

1. **General Finish Notes**
   - A. Any finish conflict between finish schedules and finish floor plans to be brought to the Architect's attention for resolution.
2. **Floor Finishes**
   - A. Refer to Interior Finish Plans for floor finish patterns.
   - B. Refer to Interior Finish Plans for tile origin in each room. If origin point is not indicated, center in middle of the room or corridor.
   - C. All changes in floor material between rooms shall occur at centerline of doorway, U.N.O.
   - D. Level and float flooring at public corridor walls.
   - E. All toilets and other areas capable of water incursion shall have a 2" x ½" wide marble threshold with ¼" beveled edges centered under each door.
   - F. Sealant color shall match adjacent material.
   - G. Typical flooring application at brick walls:
     1. Resilient Tile/ Sheet Flooring: Rake brick joint at floor level and install sealant between LVT and brick.
     2. Carpet: Rake brick joint at floor level and tuck carpet tight into raked brick joint.
3. **Wall Finishes**
   - A. Finishes shall continue to inside corner, U.N.O.
   - B. Provide Corner Guard CG-01 (to ceiling) at all vinyl wall covering outside corners at public areas, whether indicated on finish plans or not.
   - C. **Vinyl Wallcovering Information**:
     1. No vinyl wallcovering should be terminated at an outside corner. All vinyl wallcovering to wrap to inside corner,U.N.O.
     2. Provide Corner Guard at any vinyl wall covering outside corner when the color changes at the corner.
     3. Provide Corner Guard CG-01 (to ceiling) at all vinyl wall covering outside corners at public areas, whether indicated on finish plans or not.
   - D. **Paint Information:**
     1. **Walls:**
        - a. All exterior walls with gypsum board interior shall be painted PT-01, U.N.O.
        - b. All interior sealants shall be painted to match adjacent wall.
     2. **Hollow Metal Doors and Windows:**
        - a. Hollow metal doors shall be painted PT-06, U.N.O.
        - b. Hollow metal door frames and vision panel frames shall be painted PT-06, U.N.O.
        - c. At door frames with 2 different colors, transition color at inside corner of door stop, on the door side of the stop.
        - d. Hollow metal glazed opening frames shall be painted PT-06, U.NO.
     3. At painted CMU base, color shall match the wall above.
4. **Ceiling Finishes**
   - A. Refer to Reflected Ceiling Plans for scheduled finish.
   - B. At ceilings with exposed structure, all exposed elements shall be painted the scheduled color, including mechanical ductwork, electrical, piping, conduit, j-boxes, etc.
   - C. All interior gypsum board ceilings to be painted PT-01, U.N.O.
   - D. All interior gypsum board furr-downs to be painted PT-01, U.N.O.
5. **Tiling**
   - A. Refer to Detail 2/A3.31 for typical tile wainscot wall pattern.
   - B. Refer to Detail 3/A3.31 for typical toilet room wall pattern.
   - C. Refer to Detail 1/A3.31 for typical drinking fountain wall pattern.
   - D. At outside corners and exposed edges of ceramic or porcelain tile, provide anodized aluminum trim, unless otherwise detailed.
   - E. Provide Metal Trim WFA-01 at all outside and/or exposed tile locations (top, bottom, and corners) in corridors, whether indicated on finish plans or not.
6. **Casework/ Architectural Woodwork**
   1. Typical Casework/Millwork cabinet body, doors, and drawer fronts shall be PL-01, U.N.O.
   2. Countertops shall be PL-02, or SS-01 U.N.O
   3. Interior Plastic Laminate clad wood doors to be PL-01.
   4. Window Sills shall be PL-02, U.N.O.
   5. Manufacturer to match specified finishes.

WALL FINISH LEGEND

	WTP-01	WALL TILE PATTERN - WAINSCOT 12" x 24"
	CG	CORNER GUARD
	PT	PAINT

INTERIOR FLOOR FINISH LEGEND

TYPE MARK	TYPE
	PLACEHOLDER - FLOORING
CO-01	Finish Floor - Concrete Sealed/Topping/Polished
CPT-01	Finish Floor - Carpet Field
CPT-03	Finish Floor - Carpet Walk Off
CSG-01	CSG-01_Concrete Slab on Grade
CSS-01	<varies>
RF-01	Finish Floor - Resilient Floor - Field
RF-02	Finish Floor - Rubber - Sports Floor - Accent
RF-03	Finish Floor - Rubber - Sports Floor - Dropzone Accent
RF-04	Finish Floor - Rubber - Sports Floor - Dropzone Black
SF	Finish Floor - Turf - White
SW-1	Site - Sidewalk - 5"
T-01	Finish Floor - Porcelain Tile Field
TF-01	Finish Floor - Indoor Turf - Red
TF-03	Turf - Green - Practice
TZ-01	Finish - Terrazzo - Field
TZ-02	Finish Floor - Terrazzo - Accent Red

KEY PLAN
C D B A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

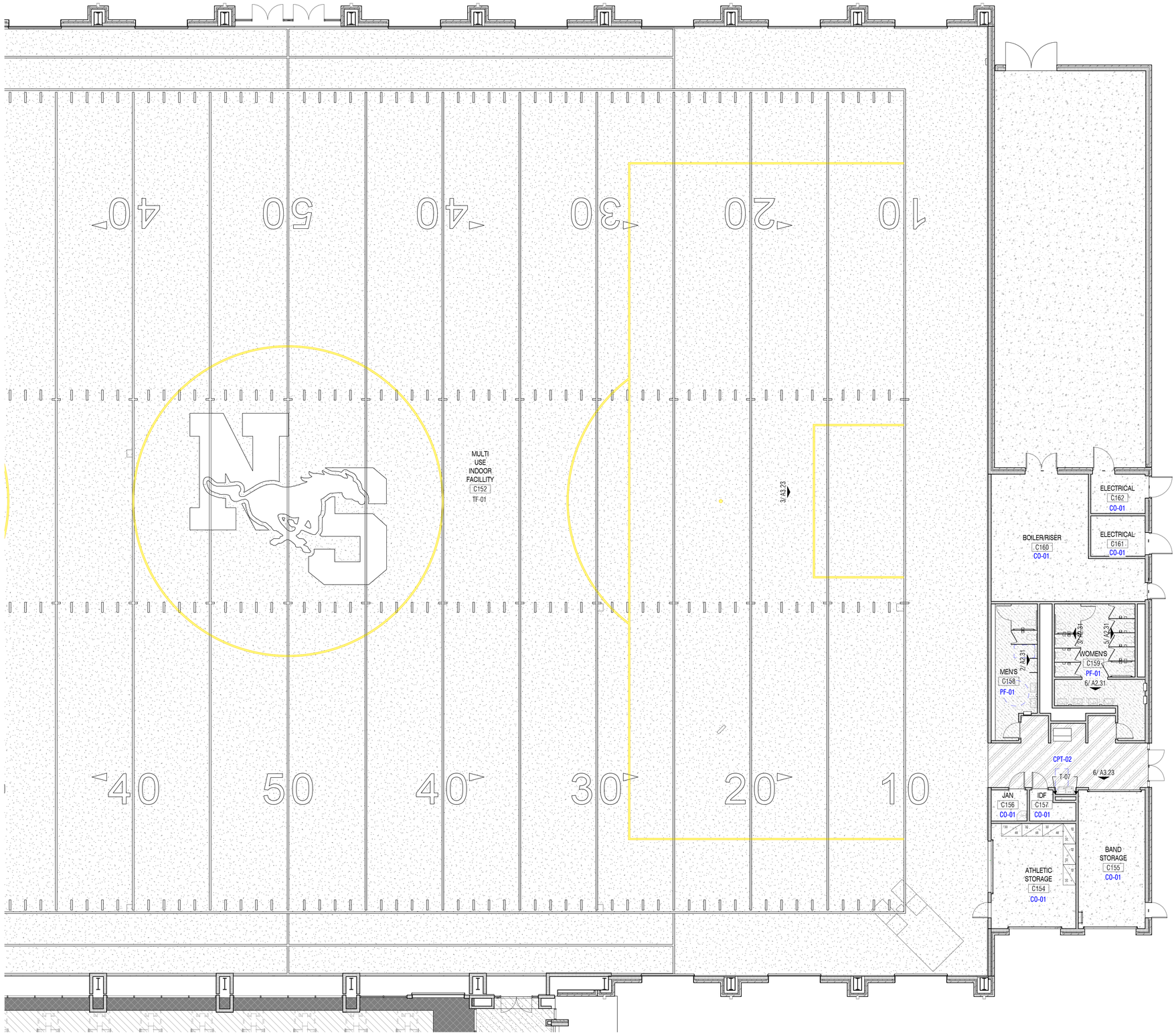
PROJECT NO.
25-0056.00

SHEET TITLE
INTERIOR FINISH PLAN - LEVEL ONE - UNIT C

SHEET NO.
A9.11C

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 INTERIOR PLAN - LEVEL ONE - UNIT D
SCALE: 1/8" = 1'-0"

INTERIOR FINISH SCHEDULE NOTES

1. **General Finish Notes**
   - A. Any finish conflict between finish schedules and finish floor plans to be brought to the Architect's attention for resolution.
2. **Floor Finishes**
   - A. Refer to Interior Finish Plans for floor finish patterns.
   - B. Refer to Interior Finish Plans for tile origin in each room. If origin point is not indicated, center in middle of the room or corridor.
   - C. All changes in floor material between rooms shall occur at centerline of doorway, U.N.O.
   - D. Level and float flooring at public corridor walls.
   - E. All toilets and other areas capable of water incursion shall have a 2" x ½" wide marble threshold with ¼" beveled edges centered under each door.
   - F. Sealant color shall match adjacent material.
   - G. Typical flooring application at brick walls:
     1. Resilient Tile/ Sheet Flooring: Rake brick joint at floor level and install sealant between LVT and brick.
     2. Carpet: Rake brick joint at floor level and tuck carpet tight into raked brick joint.
3. **Wall Finishes**
   - A. Finishes shall continue to inside corner, U.N.O.
   - B. Provide Corner Guard CG-01 (to ceiling) at all vinyl wall covering outside corners at public areas, whether indicated on finish plans or not.
   - C. **Vinyl Wallcovering Information**:
     1. No vinyl wallcovering should be terminated at an outside corner. All vinyl wallcovering to wrap to inside corner,U.N.O.
     2. Provide Corner Guard at any vinyl wall covering outside corner when the color changes at the corner.
     3. Provide Corner Guard CG-01 (to ceiling) at all vinyl wall covering outside corners at public areas, whether indicated on finish plans or not.
   - D. **Paint Information:**
     1. **Walls:**
        - a. All exterior walls with gypsum board interior shall be painted PT-01, U.N.O.
        - b. All interior sealants shall be painted to match adjacent wall.
     2. **Hollow Metal Doors and Windows:**
        - a. Hollow metal doors shall be painted PT-06, U.N.O.
        - b. Hollow metal door frames and vision panel frames shall be painted PT-06, U.N.O.
        - c. At door frames with 2 different colors, transition color at inside corner of door stop, on the door side of the stop.
        - d. Hollow metal glazed opening frames shall be painted PT-06, U.NO.
     3. At painted CMU base, color shall match the wall above.
4. **Ceiling Finishes**
   - A. Refer to Reflected Ceiling Plans for scheduled finish.
   - B. At ceilings with exposed structure, all exposed elements shall be painted the scheduled color, including mechanical ductwork, electrical, piping, conduit, j-boxes, etc.
   - C. All interior gypsum board ceilings to be painted PT-01, U.N.O.
   - D. All interior gypsum board furr-downs to be painted PT-01, U.N.O.
5. **Tiling**
   - A. Refer to Detail 2/A3.31 for typical tile wainscot wall pattern.
   - B. Refer to Detail 3/A3.31 for typical toilet room wall pattern.
   - C. Refer to Detail 1/A3.31 for typical drinking fountain wall pattern.
   - D. At outside corners and exposed edges of ceramic or porcelain tile, provide anodized aluminum trim, unless otherwise detailed.
   - E. Provide Metal Trim WFA-01 at all outside and/or exposed tile locations (top, bottom, and corners) in corridors, whether indicated on finish plans or not.
6. **Casework/ Architectural Woodwork**
   1. Typical Casework/Millwork cabinet body, doors, and drawer fronts shall be PL-01, U.N.O.
   2. Countertops shall be PL-02, or SS-01 U.N.O
   3. Interior Plastic Laminate clad wood doors to be PL-01.
   4. Window Sills shall be PL-02, U.N.O.
   5. Manufacturer to match specified finishes.

WALL FINISH LEGEND

WTP-01 WALL TILE PATTERN - WAINSCOT 12" x 24"
CG CORNER GUARD
PT PAINT

INTERIOR FLOOR FINISH LEGEND

TYPE MARK	TYPE
	PLACEHOLDER - FLOORING
CO-01	Finish Floor - Concrete Sealed/Topping/Polished
CPT-01	Finish Floor - Carpet Field
CPT-03	Finish Floor - Carpet Walk Off
CSG-01	CSG-01_Concrete Slab on Grade
CSS-01	<varies>
RF-01	Finish Floor - Resilient Floor - Field
RF-02	Finish Floor - Rubber - Sports Floor - Accent
RF-03	Finish Floor - Rubber - Sports Floor - Dropzone Accent
RF-04	Finish Floor - Rubber - Sports Floor - Dropzone Black
SF	Finish Floor - Turf - White
SW-1	Site - Sidewalk - 5"
T-01	Finish Floor - Porcelain Tile Field
TF-01	Finish Floor - Indoor Turf - Red
TF-03	Turf - Green - Practice
TZ-01	Finish - Terrazzo - Field
TZ-02	Finish Floor - Terrazzo - Accent Red

KEY PLAN
C D
B
A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

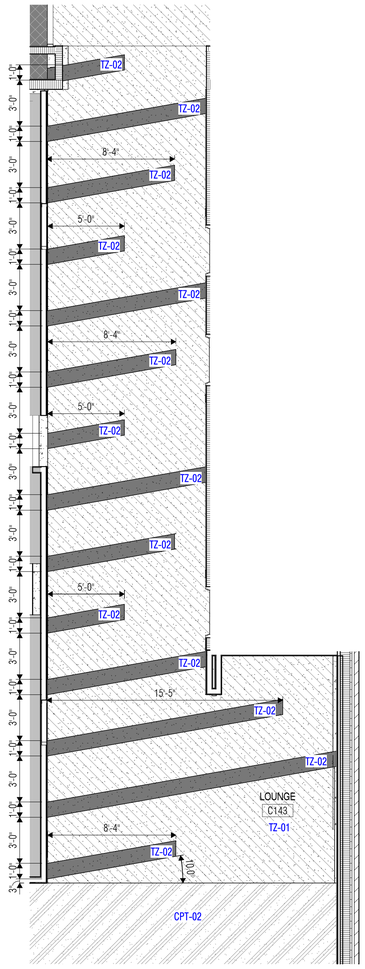
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

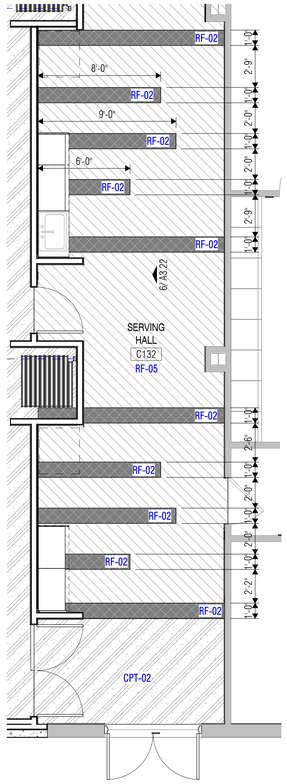
SHEET TITLE
INTERIOR FINISH PLAN - LEVEL ONE - UNIT D

SHEET NO.
A9.11D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ENLARGED TERRAZZO FLOOR PATTERN - LOUNGE
SCALE: 1/4" = 1'-0"



2 ENLARGED RESILIENT FLOOR PATTERN - SERVING HALL
SCALE: 1/4" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

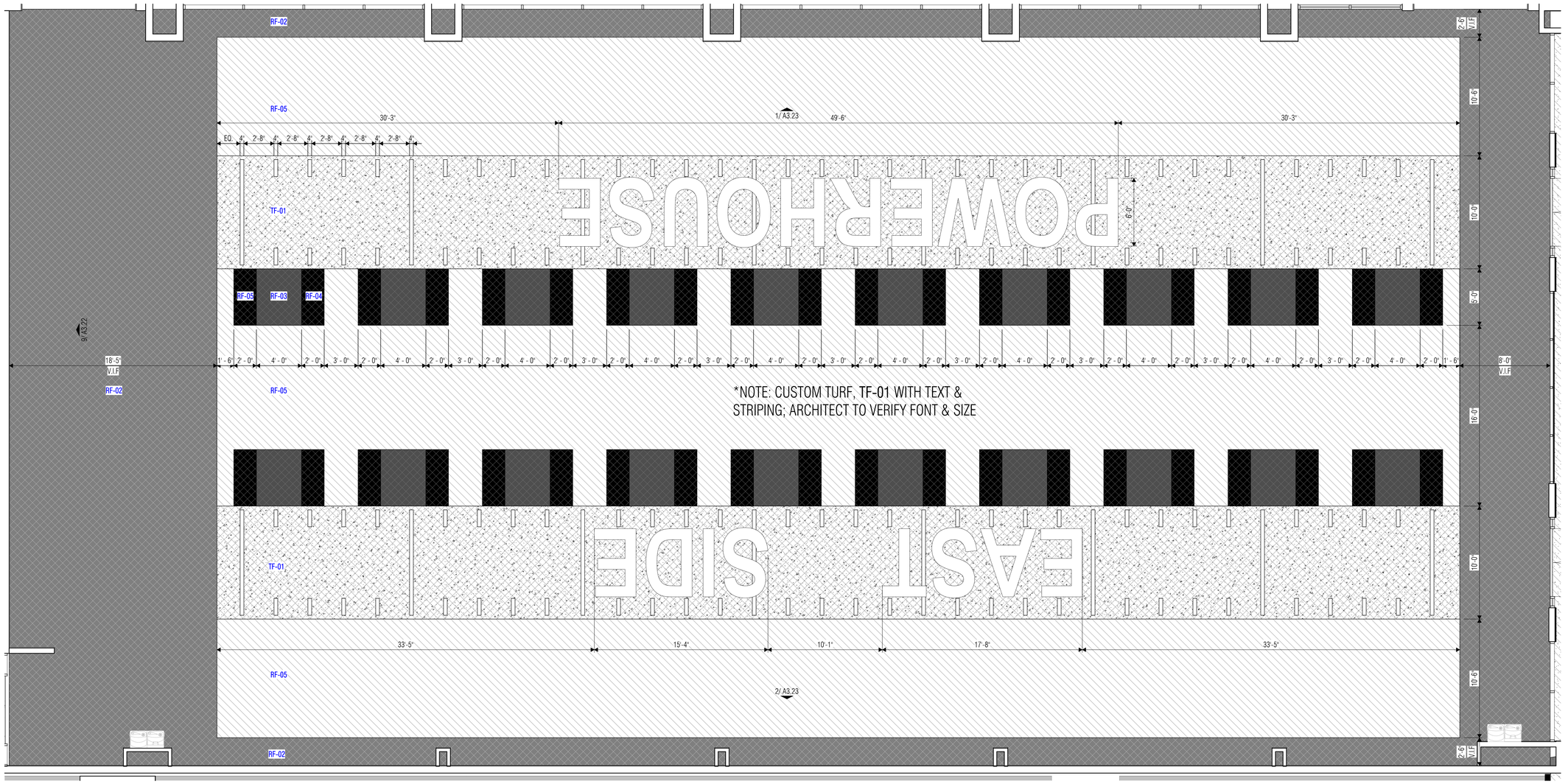
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ENLARGED INTERIOR FINISH PLANS

SHEET NO.
A9.21

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ENLARGED RUBBER FLOOR PATTERNS - WEIGHT ROOM
SCALE: 1/4" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
36598
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ENLARGED INTERIOR
FINISH PLANS

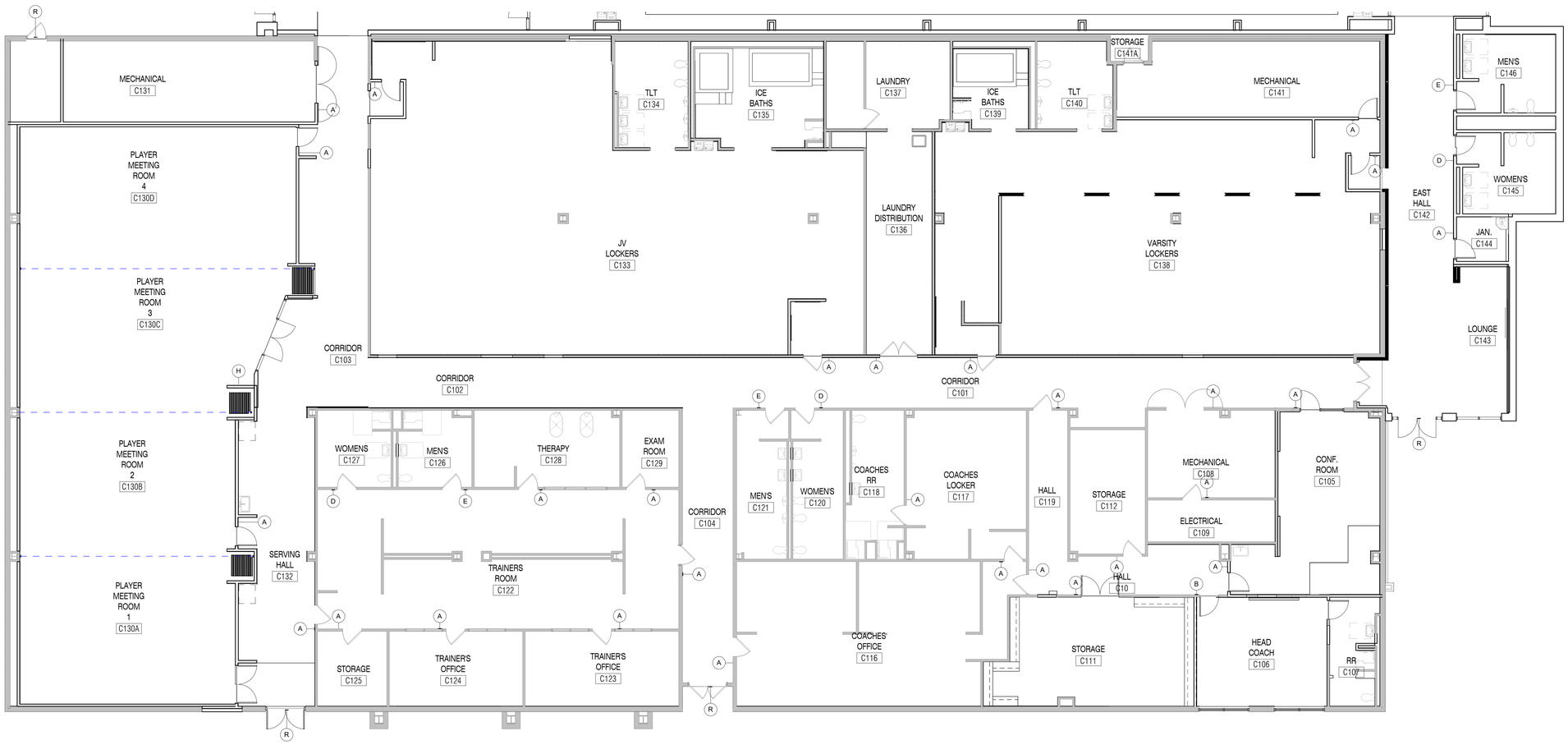
SHEET NO.

A9.22

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SIGNAGE SCHEDULE

TYPE MARK	TYPE	ROOM: NAME	ROOM: NUMBER
A	Room Sign	JV LOCKERS	C133
A	Room Sign	VARSITY LOCKERS	C138
A	Room Sign	HALL	C119
A	Room Sign	MECHANICAL	C108
A	Room Sign	CONF. ROOM	C105
A	Room Sign	STORAGE	C112
A	Room Sign	STORAGE	C111
A	Room Sign	COACHES' OFFICE	C116
A	Room Sign	CONF. ROOM	C105
B	Room Sign with Insert	HEAD COACH	C106
A	Room Sign	COACHES LOCKER	C117
A	Room Sign	COACHES RR	C118
A	Room Sign	COACHES' OFFICE	C116
A	Room Sign	TRAINERS ROOM	C122
A	Room Sign	EXAM ROOM	C129
A	Room Sign	THERAPY	C128
E	Boys	MEN'S	C126
D	Girls	WOMENS	C127
A	Room Sign	TRAINERS ROOM	C122
A	Room Sign	STORAGE	C125
A	Room Sign	TRAINER'S OFFICE	C124
A	Room Sign	TRAINER'S OFFICE	C123
A	Room Sign	PLAYER MEETING ROOM 2	C130B
A	Room Sign	PLAYER MEETING ROOM 4	C130D
A	Room Sign	MECHANICAL	C131
A	Room Sign	JV LOCKERS	C133
E	Boys	MEN'S	C121
D	Girls	WOMEN'S	C120
A	Room Sign	MECHANICAL	C141
A	Room Sign	ELECTRICAL	C109
E	Boys	MEN'S	C146
D	Girls	WOMEN'S	C145
A	Room Sign	JAN.	C144
A	Room Sign	LAUNDRY DISTRIBUTION	C136
R	Exterior Door Number		
R	Exterior Door Number		
R	Exterior Door Number	SERVING HALL	C132
R	Exterior Door Number		
H	Max Occupancy	PLAYER MEETING ROOM 3	C130C
A	Room Sign		



1 WAYFINDING PLAN - LEVEL ONE - UNIT A
SCALE: 1/8" = 1'-0"

KEY PLAN

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
WAYFINDING PLAN - LEVEL ONE - UNIT A

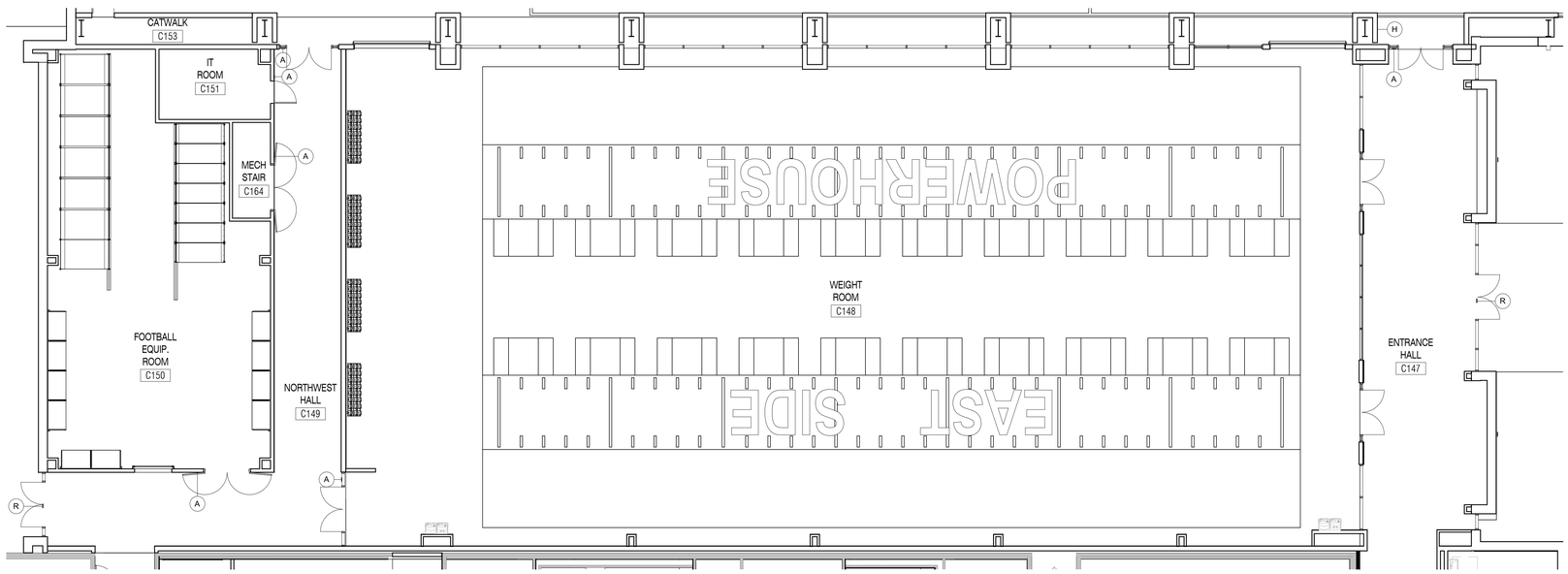
SHEET NO.
A9.41A

North Shore Multi-Use Indoor Facility

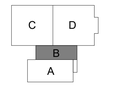
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SIGNAGE SCHEDULE

TYPE MARK	TYPE	ROOM: NAME	ROOM: NUMBER
A	Signage 1		
	Signage 1		
R	Exterior Door Number		
R	Exterior Door Number	ENTRANCE HALL	C147
A	Room Sign	MECH STAIR	C164
A	Room Sign	IT ROOM	C151
A	Room Sign	WEIGHT ROOM	C148
A	Room Sign	FOOTBALL EQUIP. ROOM	C150
A	Room Sign	MULTI USE INDOOR FACILLITY	C152
A	Room Sign	MULTI USE INDOOR FACILLITY	C152
A	Room Sign	CATWALK	C153
H	Max Occupancy	MULTI USE INDOOR FACILLITY	C152



1 WAYFINDING PLAN - LEVEL ONE - UNIT B
SCALE: 1/8" = 1'-0"



KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

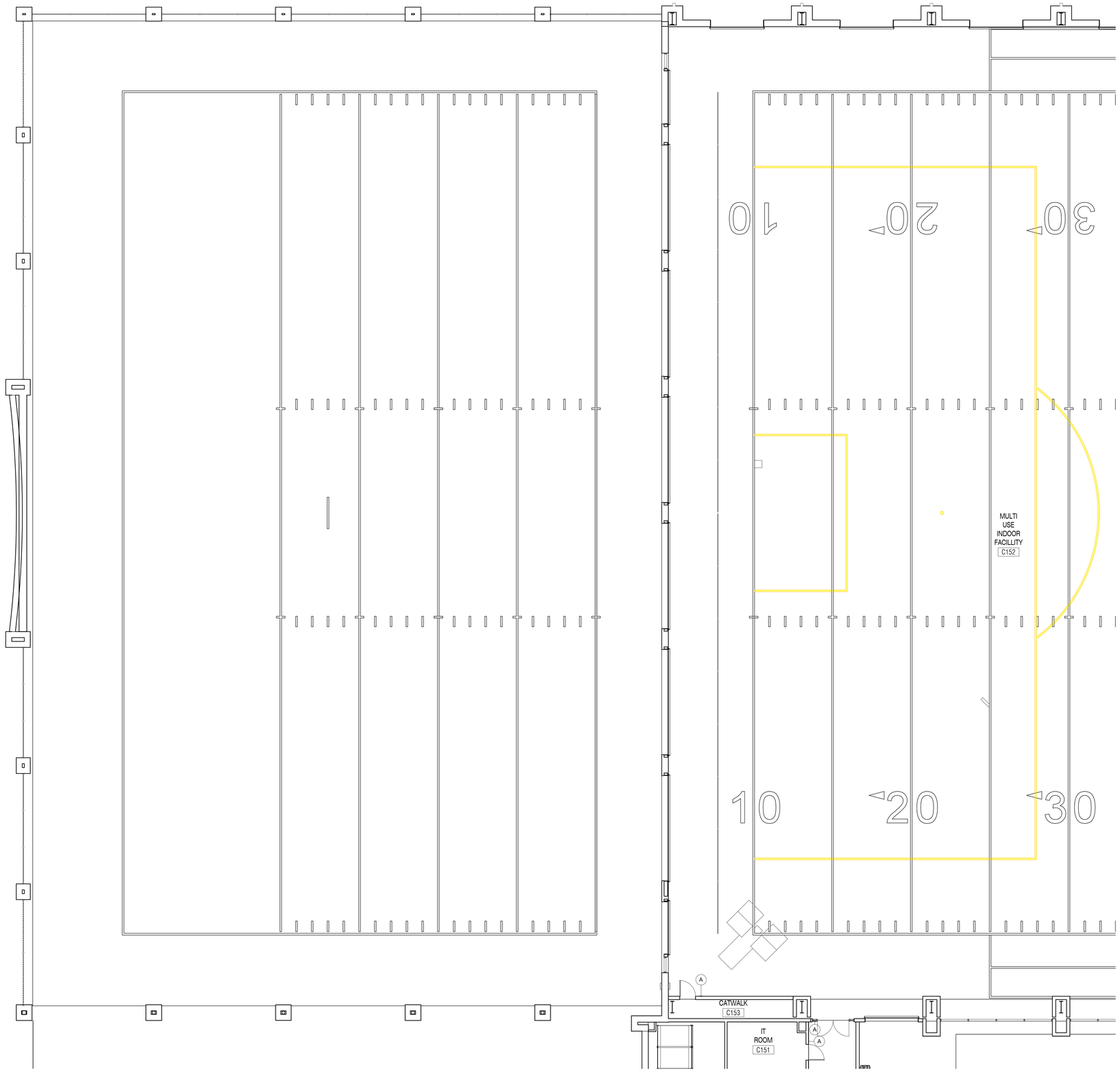
SHEET TITLE
WAYFINDING PLAN - LEVEL ONE - UNIT B

SHEET NO.
A9.41B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SIGNAGE SCHEDULE

TYPE MARK	TYPE	ROOM: NAME	ROOM: NUMBER
A	Room Sign	IT ROOM	C151
A	Room Sign	MULTI USE INDOOR FACILLITY	C152
A	Room Sign	CATWALK	C153



1 WAYFINDING PLAN - LEVEL ONE - UNIT C
SCALE: 1/8" = 1'-0"

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT
MONIKA C. CASTILLO
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

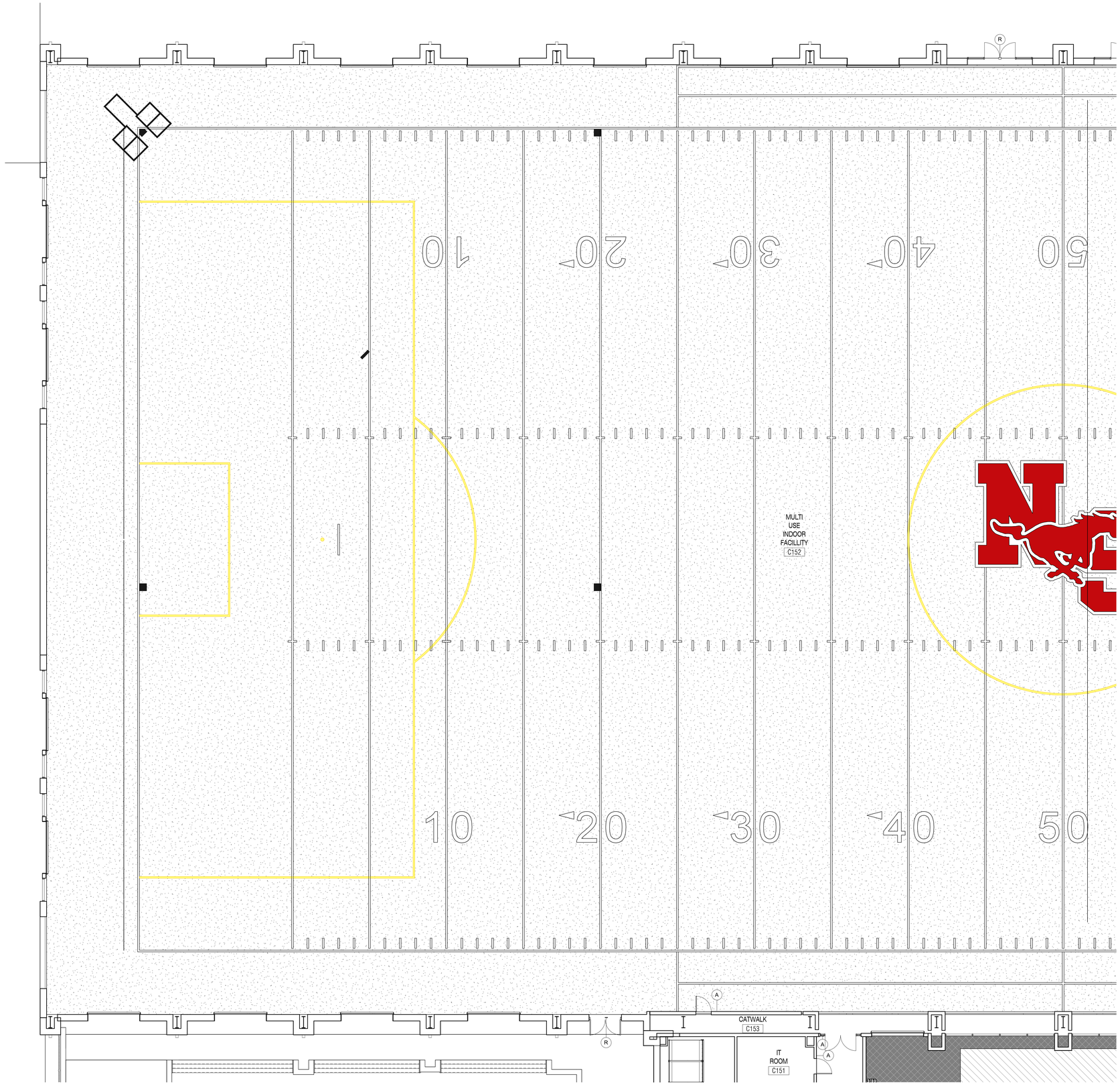
PROJECT NO.
25-0056.00

SHEET TITLE
WAYFINDING PLAN - LEVEL ONE - UNIT C

SHEET NO.
A9.41C

KEY PLAN
C D
B
A

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 WAYFINDING PLAN - LEVEL ONE - UNIT C - ALTERNATE
SCALE: 1/8" = 1'-0"

SIGNAGE SCHEDULE

TYPE MARK	TYPE	ROOM: NAME	ROOM: NUMBER
A	Room Sign	IT ROOM	C151
A	Room Sign	MULTI USE INDOOR FACILLITY	C152

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

MONIKA C. CASTILLO
REGISTERED ARCHITECT
26558
STATE OF TEXAS

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

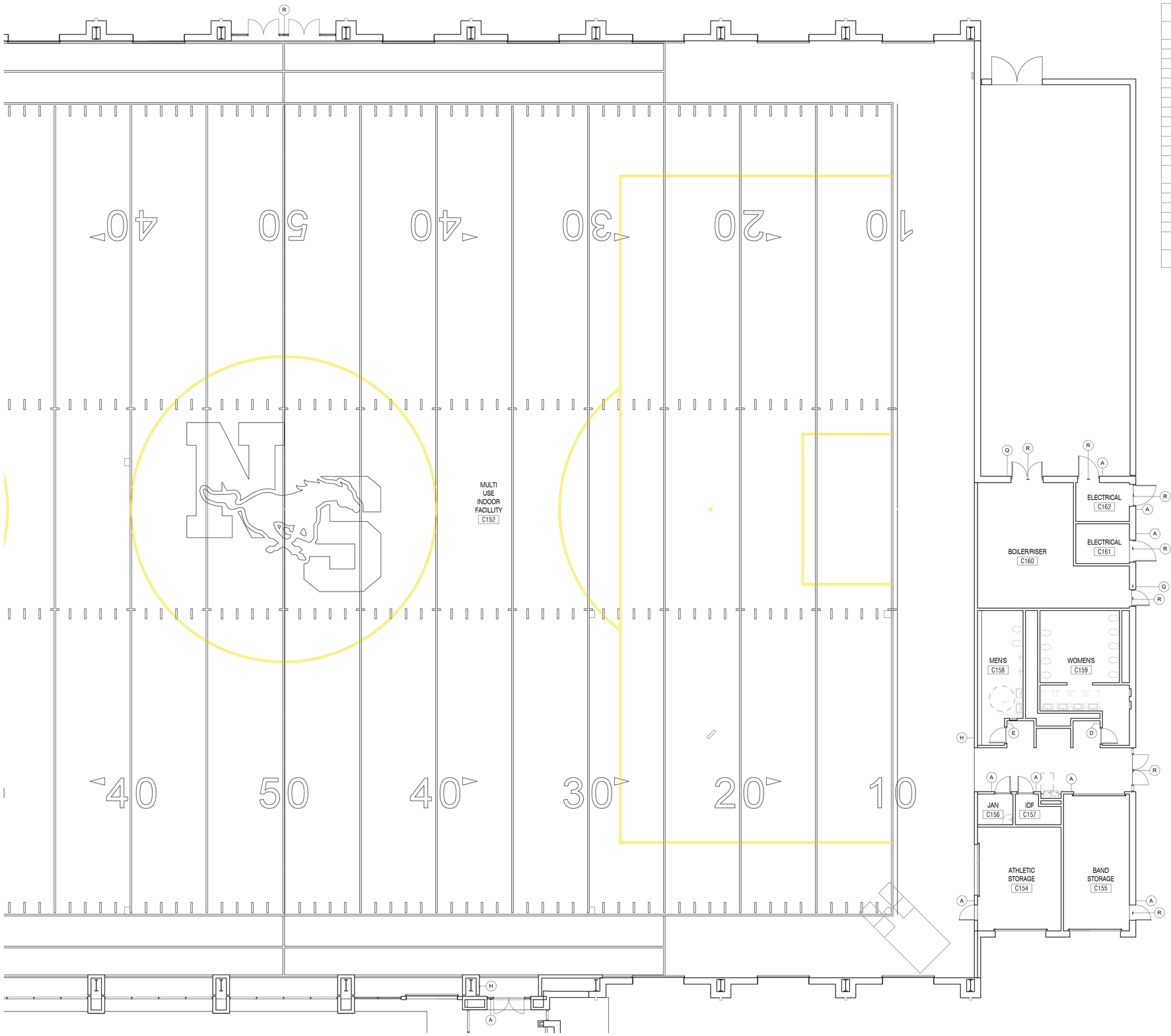
PROJECT NO.
25-0056.00

SHEET TITLE
WAYFINDING PLAN - LEVEL ONE - UNIT C - ALTERNATE

SHEET NO.
A9.41C.1

KEY PLAN
C D
B
A

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 WAYFINDING PLAN - LEVEL ONE - UNIT D
SCALE: 1/8" = 1'-0"

SIGNAGE SCHEDULE

TYPE MARK	TYPE	ROOM: NAME	ROOM: NUMBER
A	Room Sign	MULTI USE INDOOR FACILLITY	C152
H	Max Occupancy	MULTI USE INDOOR FACILLITY	C152
E	Boys	MEN'S	C158
D	Girls	WOMEN'S	C159
A	Room Sign	JAN	C156
A	Room Sign	IDF	C157
A	Room Sign	ATHLETIC STORAGE	C154
A	Room Sign	BAND STORAGE	C155
A	Room Sign	ELECTRICAL	C161
A	Room Sign	ELECTRICAL	C162
A	Room Sign	ELECTRICAL	C162
Q	Riser Room Q		
Q	Riser Room Q		
A	Room Sign	BAND STORAGE	C155
R	Exterior Door Number		
R	Exterior Door Number	MULTI USE INDOOR FACILLITY	C152
R	Exterior Door Number		
R	Exterior Door Number		
R	Exterior Door Number		
R	Exterior Door Number		
R	Exterior Door Number		
R	Exterior Door Number	MULTI USE INDOOR FACILLITY	C152
H	Max Occupancy	MULTI USE INDOOR FACILLITY	C152

KEY PLAN

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

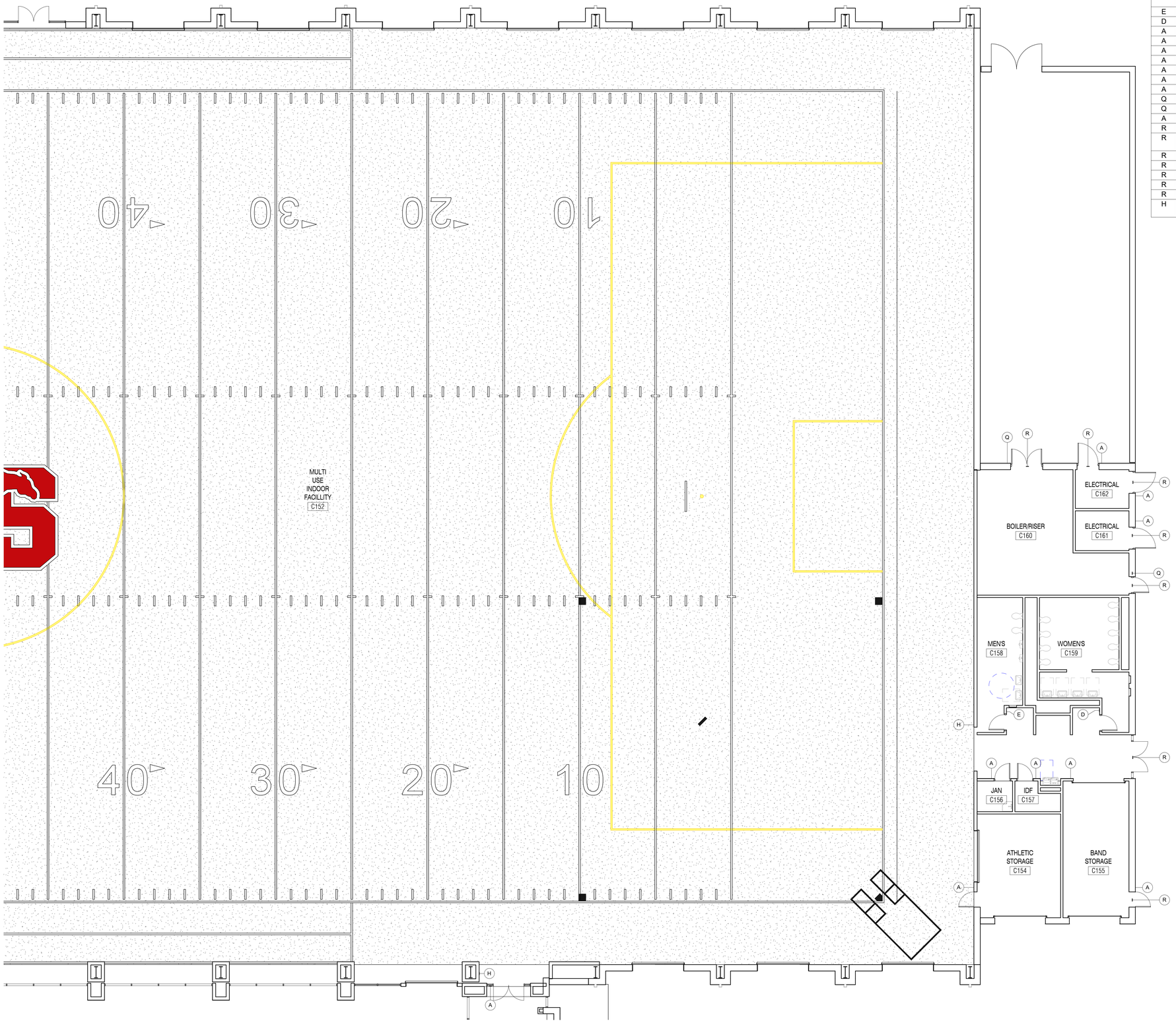
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
WAYFINDING PLAN - LEVEL ONE - UNIT D

SHEET NO.
A9.41D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 WAYFINDING PLAN - LEVEL ONE - UNIT D - ALTERNATE
SCALE: 1/8" = 1'-0"

SIGNAGE SCHEDULE

TYPE MARK	TYPE	ROOM: NAME	ROOM: NUMBER
A	Room Sign	MULTI USE INDOOR FACILLITY	C152
H	Max Occupancy	MULTI USE INDOOR FACILLITY	C152
E	Boys	MEN'S	C158
D	Girls	WOMEN'S	C159
A	Room Sign	JAN	C156
A	Room Sign	IDF	C157
A	Room Sign	ATHLETIC STORAGE	C154
A	Room Sign	BAND STORAGE	C155
A	Room Sign	ELECTRICAL	C161
A	Room Sign	ELECTRICAL	C162
A	Room Sign	ELECTRICAL	C162
Q	Riser Room Q		
Q	Riser Room Q		
A	Room Sign	BAND STORAGE	C155
R	Exterior Door Number		
R	Exterior Door Number	MULTI USE INDOOR FACILLITY	C152
R	Exterior Door Number		
R	Exterior Door Number		
R	Exterior Door Number		
R	Exterior Door Number		
R	Exterior Door Number		
H	Max Occupancy	MULTI USE INDOOR FACILLITY	C152

KEY PLAN
C D
B
A

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

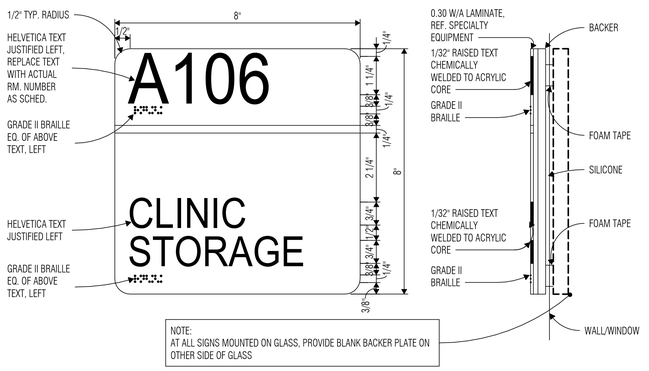
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

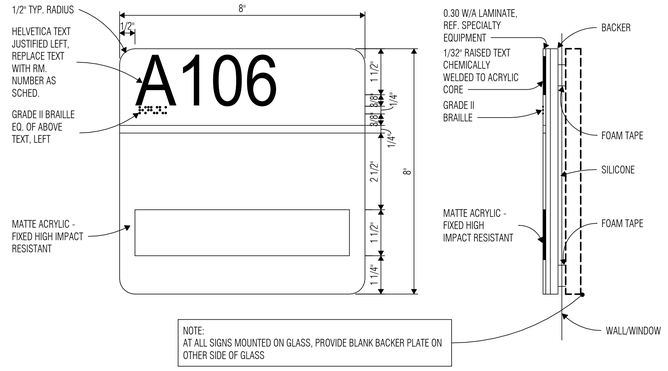
SHEET TITLE
WAYFINDING PLAN - LEVEL ONE - UNIT D - ALTERNATE

SHEET NO.
A9.41D.1

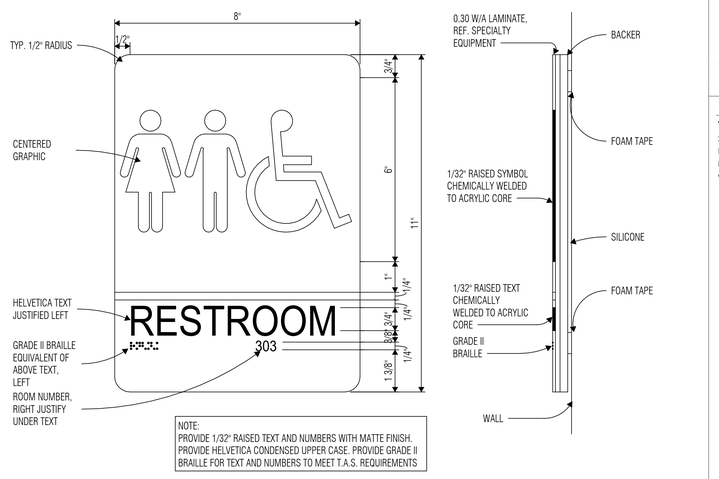
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



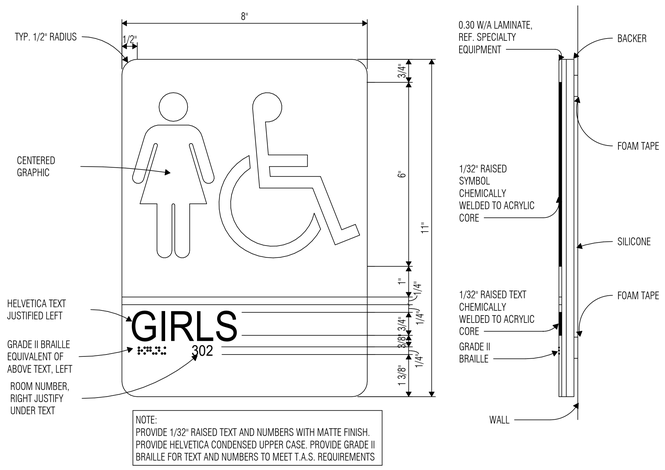
1 Sign Type A
SCALE: 6" = 1'-0"



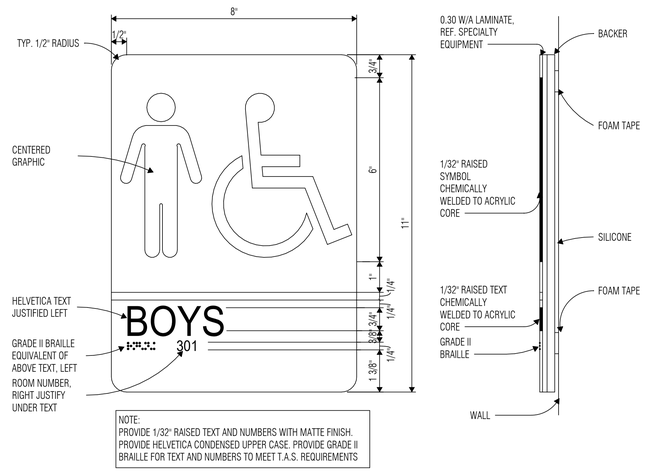
2 Sign Type B
SCALE: 6" = 1'-0"



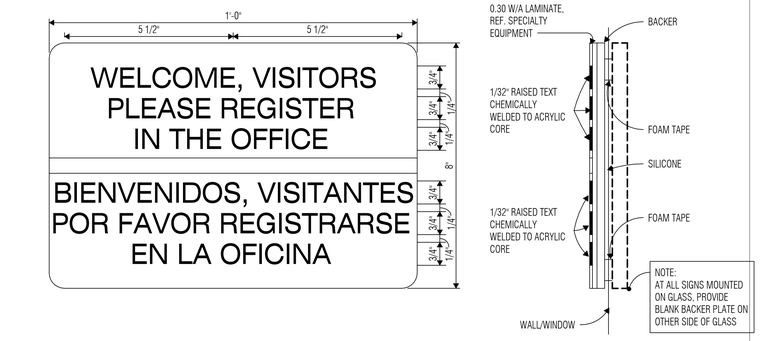
3 Sign Type C
SCALE: 6" = 1'-0"



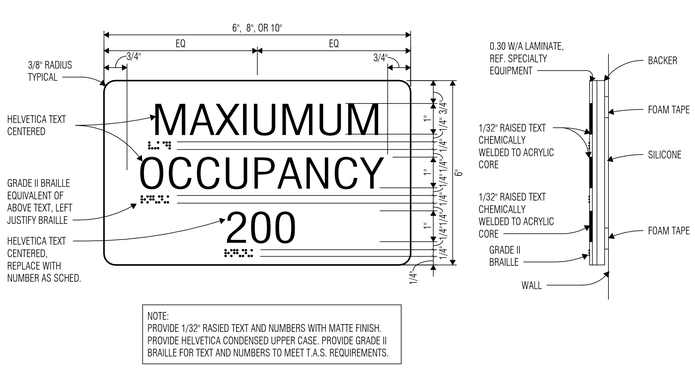
4 Sign Type D
SCALE: 6" = 1'-0"



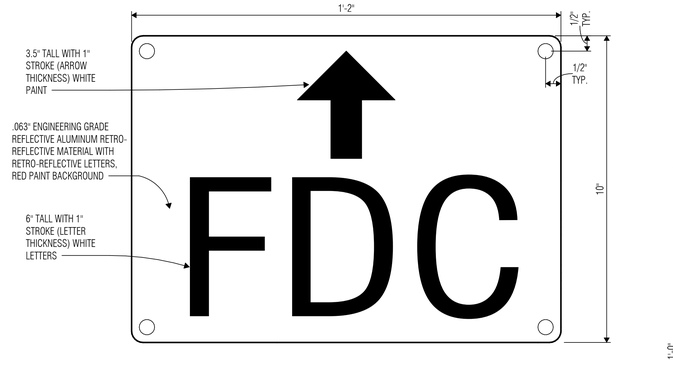
5 Sign Type E
SCALE: 6" = 1'-0"



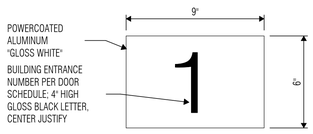
6 Sign Type F
SCALE: 6" = 1'-0"



8 Sign Type H
SCALE: 6" = 1'-0"

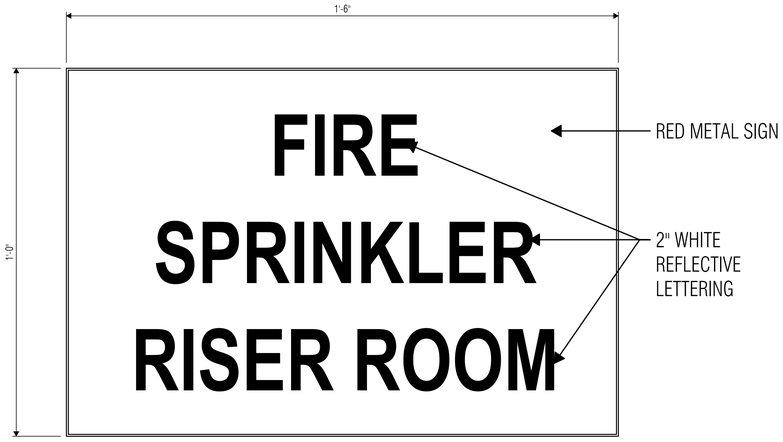


9 Sign Type J
SCALE: 6" = 1'-0"



NOTE:
PROVIDE (2) SIGNS AT EACH ENTRANCE AS NOTED. ONE ON THE INTERIOR AND ONE ON THE EXTERIOR. BUILDING ENTRANCE SIGNS SHALL BE MOUNTED ABOVE AND CENTERED ON THE DOOR(S), WITH MECHANICAL FASTENERS (ON WALL) OR CLEAR DOUBLE SIDED VHB TAPE (ON GLAZING).

14 SIGN TYPE R
SCALE: 3" = 1'-0"



SIGN SHALL BE MOUNTED AT THE CENTERPOINT OF THE DOOR

TOP OF SIGN SHALL BE MOUNTED 6' FROM BOTTOM OF THE DOOR

13 Sign Type Q
SCALE: 6" = 1'-0"

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

GALENA PARK ISD
HOUSTON, TEXAS

REGISTERED ARCHITECT MONIKA C. CASTILLO 26558 STATE OF TEXAS
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
WAYFINDING DETAILS

SHEET NO.
A9.48

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

GENERAL

1. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES. THE CODES LISTED SHALL INCLUDE ALL AMENDMENTS AND ADDENDA IN FORCE AT THE DATE OF THE CONTRACT DOCUMENTS.

   2021 EDITION OF THE INTERNATIONAL BUILDING CODE

2. WHERE CONFLICT EXISTS AMONG THE VARIOUS PARTS OF THE STRUCTURAL AND ARCHITECTURAL CONTRACT DOCUMENTS THE STRICTEST REQUIREMENTS SHALL GOVERN.

3. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE JOB SITE AND REPORT ANY DISCREPANCIES OR INCONSISTENCIES FROM ASSUMED CONDITIONS TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.

4. DETAILS LABELED "TYPICAL DETAILS" ON THE DRAWINGS SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT THEY ARE CUT AT EACH LOCATION. QUESTIONS REGARDING APPLICABILITY OF TYPICAL DETAILS SHALL BE DETERMINED BY THE ENGINEER.

5. DO NOT SCALE THE DRAWINGS.

6. THE GENERAL CONTRACTOR SHALL COMPARE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND REPORT ANY DISCREPANCY BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS TO THE ARCHITECT AND ENGINEER PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.

7. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD.

8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, BRACING AND SHORING FOR LOADS DUE TO HYDROSTATIC EARTH, WIND OR SEISMIC FORCES, AND CONSTRUCTION EQUIPMENT. OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

9. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE.

10. IT IS THE DESIGN INTENT FOR ALL CONCRETE POURS TO HAPPEN IN SEQUENTIAL ORDER FROM FOUNDATIONS THROUGH ROOF. THE GENERAL CONTRACTOR SHALL DISCUSS WITH THE A/E TEAM THE FEASIBILITY OF NON-SEQUENTIAL POURING OF CONCRETE AND ITS IMPACT ON THE DESIGN INTENT AND ALLOW SUFFICIENT TIME FOR SUCH SCHEME TO BE INVESTIGATED OR REVIEWED.

11. PERIODIC SITE OBSERVATION BY THE ENGINEER IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

12. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN THE STRUCTURAL MEMBERS.

13. DO NOT PENETRATE ANY STRUCTURAL ELEMENTS (BEAMS, COLUMNS, WALLS, SLABS, ETC.) WITHOUT PRIOR WRITTEN APPROVAL OF STRUCTURAL ENGINEER.

14. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

15. SEE THE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:

    SIZE AND LOCATION OF DOOR AND WINDOW OPENINGS,
    SIZE AND LOCATION OF INTERIOR AND EXTERIOR NON-LOAD BEARING PARTITIONS, SIZE AND LOCATION OF CONCRETE CURBS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHAMFERS, GROOVES, INSERTS, ETC., SIZE AND LOCATION OF FLOOR AND ROOF OPENINGS, FLOOR AND ROOF FINISHES,
    STAIR FRAMING AND DETAILS, DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS, CEILING AND EXTERIOR WALL ASSEMBLIES.

16. SEE THE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:

    PIPES, SLEEVES, HANGERS, TRENCHES, WALL, FLOOR AND ROOF OPENINGS, DUCT PENETRATIONS, ETC., EXCEPT AS SHOWN OR NOTED OTHERWISE
    ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS, CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL, OR PLUMBING FIXTURES, SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES AND ANCHOR BOLTS FOR MOUNTS.

DESIGN CRITERIA

1. DEAD LOAD MATERIALS ASSUMED IN THE DESIGN ARE SHOWN ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.

2. AN ALLOWANCE OF 15 PSF HAS BEEN MADE FOR PARTITIONS AS A UNIFORMLY DISTRIBUTED LIVE LOAD, WHEREVER PARTITIONS ARE USED AND LOCATION SUBJECT TO CHANGE EXCLUDING PUBLIC LOBBIES, CORRIDORS, RESTROOMS, AND PLACES OF PUBLIC ASSEMBLY.

3. LIVE LOADS:

LOCATION	UNIFORM LOAD	CONCENTRATED LOAD
ROOF	20 PSF REDUCIBLE	300 LBS
BALCONIES	100 PSF REDUCIBLE	
TYPICAL FLOOR	40 PSF REDUCIBLE	
CORRIDORS	100 PSF REDUCIBLE	
STAIRS AND EXITS	100 PSF REDUCIBLE	300 LBS
GROUND FLR, COMMON AREAS	100 PSF REDUCIBLE	
HANDRAILS AND GUARDRAILS	50 PLF OR 200 LBS APPLIED AT TOP RAIL IN ANY DIRECTION. 50 LBS IN ANY DIRECTION APPLIED AT INTERMEDIATE RAILS.	
GRAB BARS		250 LBS ANY DIRECTION

4. WIND LOADS

ULTIMATE WIND SPEED	146 MPH (3-SEC GUST)
NOMINAL WIND SPEED	113 MPH (3-SEC GUST)
RISK CATEGORY	III
EXPOSURE CATEGORY	C
INTERNAL PRESSURE COEFF.	+/- 0.18
COMPONENTS & CLADDING	SEE DIAGRAM

5. HANDRAILS, GUARDRAILS AND GRAB BARS (INCLUDING ATTACHMENT TO STRUCTURE) SHALL BE DESIGNED BY THE FABRICATOR FOR THE LOADS INDICATED IN THE REFERENCED BUILDING CODE. SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF WHERE THE PROJECT IS LOCATED, REPRESENTING THE FABRICATOR.

6. STAIRS SHALL BE DESIGNED BY THE STEEL FABRICATOR FOR CODE REQUIRED LOADS. SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF WHERE THE PROJECT IS LOCATED, REPRESENTING THE FABRICATOR.

FOUNDATION

1. THE FOUNDATION DESIGN IS BASED ON THE FOLLOWING GEOTECHNICAL REPORT (AND ANY ADDENDA) PREPARED BY THE FOLLOWING COMPANY:

   COMPANY TERRACON
   REPORT NO. 92255219
   DATED JULY 22, 2025

   ALL RECOMMENDATIONS THEREIN THAT RELATE TO THE WORK SHOWN ON THESE DRAWINGS SHALL BE FOLLOWED.

2. THE FOUNDATION SYSTEM IS DESIGNED BASED ON THE FOLLOWING

   ALLOWABLE BEARING PRESSURE
   SUSTAINED LOADS 3000 PSF
   TOTAL LOADS 4500 PSF

3. THE GENERAL CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER OR OTHER AUTHORIZED INSPECTOR FOR REVIEW OF FOUNDATION BEARING SURFACE, INSPECTION OF FOUNDATION INSTALLATION, AND PLACEMENT OF REINFORCING STEEL. THE CONTRACTOR SHALL NOT PLACE CONCRETE WITHOUT INSPECTOR'S APPROVAL.

4. THE CONTRACTOR SHALL NOTIFY THE AUTHORIZED INSPECTOR 48 HOURS IN ADVANCE OF ANY MAJOR FOUNDATION POUR.

5. FORM EXPOSED FACES OF GRADE BEAMS.PROVIDE 1" CHAMFER ON ALL EXPOSED GRADE BEAM CORNERS.

6. BOTH SIDES OF ALL GRADE BEAMS SHALL BE FORMED FOR FULL BEAM DEPTH.

7. GRADE BEAM BOTTOM STEEL SHALL BE CHAIRED AT 5 FOOT MAXIMUM CENTERS USING BEAM BOLSTERS PROVIDING 3 INCH BOTTOM COVER TO REINFORCING STEEL. BEAM BOLSTERS USED SHALL BE INTENDED FOR SUPPORT ON SOIL.

8. BOTTOM BARS OF GRADE BEAM SHALL BE SPLICED (WHERE REQUIRED) AT THE PIERS ONLY. TOP BARS SHALL BE SPLICED (WHERE REQUIRED) AT THE MIDSPAN OF THE GRADE BEAMS. LAP LENGTH SHALL BE 44 TIMES BAR DIAMETER UNLESS SPECIFIED OTHERWISE. PROVIDE CORNER BARS TO MATCH TOP AND BOTTOM STEEL.

9. ALL REINFORCING STEEL FOR SLABS SHALL BE CHAIRED WITH SLAB BOLSTERS FOR SUPPORT ON SOIL AT 4'-0" MAXIMUM CENTERS EACH WAY FOR REINFORCING FOR SLABS. DEPTH OF CHAIRS SHALL PROVIDE COVER TO REINFORCING AS NOTED ON PLANS/DETAILS.

10. SLAB ON GRADE CONSTRUCTION SHALL FOLLOW THE RECOMMENDATIONS OF GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION ACI 302.1R. PROVIDE (3) #3 X 4'-0" TOP AND BOTTOM AT ALL SLAB ON GRADE RE-ENTRANT CORNERS.

11. SUBGRADE PREPARATION SHALL CONFORM TO THE SOILS REPORT NOTED ABOVE. IF REPORT DOES NOT SPECIFY THE AMOUNT OF SELECT FILL, PROVIDE FILL AS REQUIRED ABOVE TO REDUCE PVR TO 1 INCH.

12. VAPOR RETARDER SHALL HAVE NO MORE THAN 0.01 PERMS AS TESTED BEFORE AND AFTER MANDATORY CONDITIONING (ASTM E 1745 SECTION 7.1 AND SUB-PARAGRAPHS 7.1.2-5), MEET OR EXCEED THE REQUIREMENTS OF ASTM E 1745 CLASS A AND BE NO LESS THAN 15 MILS THICK.

13. ALL VAPOR RETARDER SEAMS SHALL BE OVERLAPPED A MINIMUM OF 6 INCHES AND TAPED WITH MANUFACTURER'S TAPE. ALL PENETRATIONS, BLOCK-OUTS, AND OPENINGS SHALL BE SEALED USING A COMBINATION OF THE VAPOR RETARDER, MASTIC AND MANUFACTURER'S TAPE. DO NOT PENETRATE VAPOR RETARDER WITH FORMWORK STAKES. USE STEGO BEAST FORM STAKES OR EQUIVALENT WHERE REQUIRED.

14. REMOVE ALL VEGETATION, TREE ROOTS, ORGANIC SOIL, EXISTING FOUNDATIONS, PAVED AREAS, AND ANY UNDESIRABLE MATERIALS FROM THE CONSTRUCTION AREA.

15. SCARIFY THE SUBGRADE TO A MINIMUM DEPTH OF 6 INCHS, ADD MOISTURE, OR DRY AS NECESSARY AND RECOMPACT TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR TEST).

16. THE SUBGRADE AREAS SHALL THEN BE PROOF-ROLLED WITH A 20 TON PNEUMATIC ROLLER OR EQUIVALENT EQUIPMENT. ANY SOILS DEFLECTING EXCESSIVELY UNDER MOVING LOADS SHALL BE UNDERCUT TO FIRM SOILS AND RECOMPACTED. THE MOISTURE CONTENT AT THE TIME OF COMPACTION OF SUBGRADE SOILS SHALL BE WITHIN –1 TO + 3% OF THE OPTIMUM PROCTOR VALUE.

17. STRUCTURAL FILL BENEATH THE BUILDING AREA SHALL CONSIST OF SANDY CLAYS WITH A LIQUID LIMIT LESS THAN 40 AND A PLASTICITY INDEX BETWEEN 7 AND 20. STRUCTURAL FILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING EIGHT INCHES IN THICKNESS AND COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. THE MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE BETWEEN OPTIMUM AND +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

18. PROVIDE MINIMUM 60 INCHES OF SELECT FILL UNDER BUILDING SLAB TO SEPARATE BUILDING SLAB FROM THE EXISTING GRADE. REMOVE EXISTING GRADE AS REQUIRED. CONTRACTOR SHALL RETAIN A TESTING LABORATORY FOR THE DETERMINATION OF SOIL COMPACTION AND CONCRETE TESTING. SUBMIT RESULTS TO ARCHITECT.THE SELECT FILL PAD SHOULD EXTEND A MINIMUM OF 5 FEET BEYOND THE EDGE OF THE BUILDING AREA. THIS OVERBUILD REQUIREMENT MAY BE OMITTED WHERE THE BUILDING ADDITION IS LOCATED IMMEDIATELY ADJACENT TO THE EXISTING BUILDING.

19. THE CONTRACTOR SHALL ENSURE THE SELECT FILL MATERIAL IS PROPERLY MIXED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER AND TESTING LAB AND SHALL MAKE PROVISIONS FOR SOIL PULVERIZATION OR OTHER MIXING METHODS AS REQUIRED.

20. THE BEARING STRATUM OF EACH DRILLED PIER SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OR OTHER AUTHORIZED INSPECTOR PRIOR TO POURING OF CONCRETE.

21. THE BOTTOM ELEVATION OF PIERS IS SHOWN ON THE DRAWINGS FOR BID PURPOSES. THE ACTUAL REQUIRED BEARING ELEVATION MAY VARY AS REQUIRED TO PROVIDE PROPER CAPACITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER. FOOTINGS SHALL BE POURED IMMEDIATELY AFTER EXCAVATION.

22. PROVIDE AND INSTALL 1/8 INCH STEEL TEMPLATES TO ACCURATELY SET VERTICAL PIER REINFORCING STEEL, AND ANCHOR BOLTS FOR STEEL COLUMNS.

23. THE PRESENCE OF SAND SEAMS AND SLICKENSIDES IN THE LAYERS MAY CAUSE SLOUGHING DURING PIER EXCAVATION. THIS MAY REQUIRE THE USE OF TEMPORARY STEEL CASING.

24. REDUCING THE POTENTIAL FOR CAVING OF THE BELL CAN BE ACHIEVED BY LIMITING THE BELL TO SHAFT DIAMETER RATIO TO 2:1 OR INSTALLING STRAIGHT SHAFT FOOTINGS.

25. THE GROUNDWATER LEVELS MAY FLUCTUATE SEASONALLY AND WITH CLIMATIC CHANGES. SEEPAGE OF GROUNDWATER INTO THE EXCAVATIONS IS POSSIBLE AND SEEPAGE FROM "PERCHED" WATER TRAPPED IN THE SOILS MAY ALSO OCCUR. THE CONTRACTOR SHALL MAKE PROVISIONS FOR DEWATERING THE FOOTING EXCAVATION IF GROUNDWATER IS ENCOUNTERED.

26. CONCRETE SHALL BE PLACED AS SOON AS POSSIBLE AFTER THE FOOTING EXCAVATIONS ARE COMPLETED TO REDUCE THE POTENTIAL FOR WATER SEEPAGE AND TO MINIMIZE THE DISTURBANCE TO THE BEARING AREA. IN NO CASE, SHOULD AN EXCAVATION BE LEFT OPEN OVERNIGHT.

CONCRETE

1. ALL ASPECTS OF WORK RELATING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES AND SPECIFICATIONS:

   CURRENT EDITION OF ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   CURRENT EDITION OF ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
   CRSI MANUAL OF STANDARD PRACTICE

2. STRUCTURAL CONCRETE 28-DAY COMPRESSIVE STRENGTHS AND TYPES ARE AS FOLLOWS:

LOCATION	STRENGTH	TYPE	AGGREGATE SIZE	EXPOSURE CLASS
FOUNDATIONS	3000 PSI	NORMAL WT	1 1/2"	F0, S0, W0, C0
GRADE BEAMS	3000 PSI	NORMAL WT	1 1/2"	F0, S0, W0, C0
SLAB-ON-GRADE	3000 PSI	NORMAL WT	1 1/2"	F0, S0, W0, C0
METAL DECK SLAB	3500 PSI	NORMAL WT	1"	F0, S0, W0, C0
TOPPING SLAB	3000 PSI	LIGHTWEIGHT	3/8"	F0, S0, W0, C0
STAIR LANDING & PANS	3000 PSI	NORMAL WT	3/8"	F0, S0, W0, C0

3. THERE SHALL BE NO HORIZONTAL COLD JOINT IN ANY CONCRETE POUR.

4. ADMIXTURES USED SHALL BE COMPATIBLE WITH FLOOR TREATMENTS. FINISH APPLICATOR SHALL APPROVE ADMIXTURES AND CURING COMPOUNDS PRIOR TO USE.

5. EXPOSURE CLASSES FOR FREEZING AND THAWING (F), SULFATE (S), WATER (W), AND CORROSION PROTECTION (C) HAVE BEEN PROVIDED. CONCRETE MIXES SHALL CONFORM TO ALL ACI 318 REQUIREMENTS BASED ON EXPSURE CLASS, INCLUDING, BUT NOT LIMITED TO WATER CEMENT RATIO, COMPRESSION STRENGTH, AIR CONTENT, CEMENTITIOUS MATERIALS, CALCIUM CLORIDE ADMIXTURES, AND WATER-SOLUABLE CHLORIDE ION CONTENT.

6. CONCRETE FOR SLAB-ON-GRADE SHALL HAVE A MAXIMUM WATER-CEMENT RATIO OF 0.45. ALL OTHER CONCRETE SHALL HAVE A MAXIMUM WATER-CEMENT RATIO OF 0.50. ADJUST CONCRETE STRENGTH BEYOND MINIMUM SPECIFIED ABOVE TO MAINTAIN MAXIMUM WATER-CEMENT RATIO.

7. CONCRETE FOR SLAB-ON-GRADE AND METAL DECK SHALL BE PROPORTIONED FOR A MAXIMUM ALLOWABLE UNIT SHRINKAGE OF 0.04% (400 MICROSTATIONS) AT 28 DAYS OF DRYING. LENGTH CHANGE SHALL BE MEASURED IN ACCORDANCE WITH ASTM C157.

8. FLY ASH CONFORMING TO ASTM C618, MAY BE USED UNLESS NOTED OTHERWISE. THE MAXIMUM AMOUNT OF FLY ASH SHALL BE 25% OF THE TOTAL CEMENTITIOUS MATERIAL BY WEIGHT.

9. AT POLISHED OR STAINED CONCRETE, THE FLY ASH ALLOWANCE IN NOTE 8 DOES NOT APPLY, NO FLY ASH IS PERMITTED IN THESE MIXES. ADDITIONALLY, NO AIR ENTRAINMENT IS ALLOWED EITHER. MAX WATER CEMENT RATIO SHALL BE 0.45. WET CURING IS REQUIRED AT POLISHED CONCRETE. USE ONE SOURCE FOR CEMENT, AGGREGATES, AND POZZOLANS THROUGHOUT THE PROJECT. DO NOT USE CALCIUM CHLORIDE-BASED ADMIXTURES. NON-CHLORIDE ADMIXTURES MAY BE USED. GENERAL CONTRACTOR SHALL PROTECT AREAS TO RECEIVE CONCRETE FINISH AT ALL TIMES DURING CONSTRUCTION TO PREVENT OILS, DIRT, METAL, EXCESSIVE WATER, AND OTHER POTENTIALLY DAMAGING MATERIALS FROM AFFECTING THE FINISHED CONCRETE SURFACE.

10. AT POLISHED OR STAINED CONCRETE THE FLOOR FLATNESS (FF) SHALL BE 40 OR BETTER AND THE FLOOR LEVELNESS (FL) SHALL BE 30 OR BETTER UNLESS MORE STRINGENT REQUIREMENTS ARE PROVIDED IN THE SPECIFICATIONS.

11. CONCRETE FORMS SHALL BE LAID OUT AND CONSTRUCTED TO PROVIDE THE SPECIFIED CAMBERS INDICATED ON THE STRUCTURAL DRAWINGS.

12. CONCRETE FOR SLABS TO RECEIVE A HARD-TROWELED FINISH SHALL NOT CONTAIN AIR-ENTRAINING ADMIXTURES OR HAVE A TOTAL AIR CONTENT GREATER THAN 3 PERCENT.

13. SUBMIT SHOP DRAWINGS TO ARCHITECT AND ENGINEER INDICATING LOCATIONS OF CONCRETE JOINTS TO REVIEW PRIOR TO PLACING CONCRETE. PLACE JOINTS AT LOCATIONS TO MINIMIZE THE EFFECTS OF SHRINKAGE AS WELL AS BEING PLACED AT POINTS OF LOW STRESS.

14. ROUGHEN CONCRETE SURFACES TO 1/4 INCH AMPLITUDE WHERE MASONRY WALLS INTERSECT CONCRETE OR WHERE NEW CONCRETE INTERFACES WITH EXISTING CONCRETE.

15. MECHANICAL PIPES AND ELECTRICAL CONDUITS WHICH PASS THROUGH SLAB-ON-GRADE, CONCRETE ON METAL DECK, FRAMED CONCRETE FLOORS, AND WALLS DO NOT REQUIRE SLEEVES UNLESS NOTED OTHERWISE ON THE PROJECT SPECIFICATIONS, MECHANICAL OR ELECTRICAL DRAWINGS. IF SLEEVES ARE REQUIRED, INSTALL SLEEVES BEFORE PLACING CONCRETE. DO NOT CUT ANY REINFORCING WHICH MAY INTERFERE WITH SLEEVE PLACEMENT. CORING OPENINGS IN CONCRETE IS NOT PERMITTED. NOTIFY THE ARCHITECT AND ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. NO PIPES OR ELECTRICAL CONDUIT SHALL PASS THROUGH CONCRETE BEAMS OR COLUMNS UNLESS SPECIFICALLY DETAILED.

16. WITH THE EXCEPTION OF SLABS ON GRADE AND CONCRETE ON METAL DECK, THE OUTSIDE DIAMETER OF MECHANICAL PIPES AND/OR ELECTRICAL CONDUITS (OTHER THAN THOSE PASSING THROUGH) SHALL NOT EXCEED 1/3 OF THE SLAB THICKNESS AND SHALL BE CENTERED BETWEEN THE TOP AND BOTTOM REINFORCING UNLESS SPECIFICALLY DETAILED OTHERWISE. CONCENTRATIONS OF MECHANICAL PIPES AND/OR ELECTRICAL CONDUITS SHALL BE AVOIDED EXCEPT WHERE DETAILED OPENINGS ARE PROVIDED. CONDUIT AND PIPE SHALL BE SPACED AT 3" OR 3 DIAMETERS ON CENTER, WHICHEVER IS GREATER.

17. FOR SLABS ON GRADE AND METAL DECK SLABS NO PIPES OR CONDUITS SHALL BE PLACED WITHIN THE INDICATED SLAB THICKNESS AND SHALL BE LOCATED BELOW THE SLAB UNLESS SPECIFICALLY DETAILED OTHERWISE.

REINFORCING STEEL

1. ALL ASPECTS OF WORK RELATING TO THE REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING CODES AND SPECIFICATIONS:

   CURRENT EDITION OF ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   CRSI MANUAL OF STANDARD PRACTICE

2. DEFORMED BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60.

3. WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ASTM A185, YIELD STRENGTH 65,000 PSI. WELDED DEFORMED WIRE FABRIC FOR ASTM A497, YIELD STRENGTH 70,000 PSI. ALL WELDED WIRE FABRIC SHALL BE FURNISHED IN FLAT SHEETS ONLY. WHEREVER WELDED WIRE FABRIC IS SPECIFIED AS REINFORCEMENT, IT SHALL BE CONTINUOUS ACROSS THE ENTIRE CONCRETE SURFACE AND NOT INTERRUPTED BY BEAMS OR GIRDERS AND PROPERLY LAPPED ONE CROSS WIRE SPACING PLUS 2 INCHES.

4. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH AND ONE HALF, WHICHEVER IS GREATER.

5. WELDING OF REINFORCING IS PERMITTED ONLY WHERE SHOWN ON THE DRAWINGS OR WHEN APPROVED BY THE ENGINEER OF RECORD. WELDING OF REINFORCING BARS SHALL BE WITH LOW HYDROGEN ELECTRODES IN ACCORDANCE WITH THE RECOMMENDED PRACTICES OF AWS D1.4.

6. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.

7. REINFORCING DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME NUMBER, SIZE, SPACING, AND GRADE AS THE SPECIFIED VERTICAL REINFORCING, UNO.

8. IN ADDITION TO ALL OF THE REINFORCING STEEL INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL PROVIDE FOR AN ALLOWANCE OF A NET 1 TON OF REINFORCING BARS TO BE FURNISHED, FABRICATED, AND PLACED DURING THE PROGRESSION OF WORK AS MAY BE DIRECTED BY THE ENGINEER OF RECORD.

9. CLEAR COVERAGE OF CONCRETE OVER REINFORCING BARS SHALL BE AS FOLLOWS:

LOCATION OF CONCRETE	MINIMUM COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER	
#6 THROUGH #18 BAR	2"
#5 BAR AND SMALLER	1 1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR IN CONTACT WITH GROUND	
SLABS, WALLS, JOISTS	3/4"
BEAMS, COLUMNS (INCLUDING TIES)	1 1/2"
SLAB ON GRADE	SEE DETAILS
PRESTRESSED CONCRETE	SEE IBC 1907.7.3

NON-SHRINK GROUT FOR BASE PLATES AND BEARING PLATES

1. GROUT FOR BASE PLATES AND BEARING PLATES SHALL BE A NON-METALLIC, SHRINKAGE RESISTANT, PREMIXED, NON-CORROSIVE, NON-STAINING PRODUCT CONTAINING PORTLAND CEMENT, SILICA SANDS, SHRINKAGE COMPENSATING AGENTS, AND FLUIDITY IMPROVING COMPOUNDS.

2. GROUT SHALL CONFORM TO CORPS OF ENGINEERS SPECIFICATION FOR NON-SHRINK GROUT, CE-CRD-C621. TWENTY-EIGHT DAY COMPRESSIVE STRENGTH AS DETERMINED BY GROUT CUBE TESTS, SHALL BE 5,000 PSI. MINIMUM THICKNESS OF GROUT UNDER ALL BASE PLATES AND BEARING PLATES SHALL BE 1 INCH, UNLESS SPECIFIED OTHERWISE ON THE DRAWINGS.

3. GROUT SHALL BE PLACED IN A FLUID FLOWABLE STATE UNDER BASE PLATES THAT HAVE A FORM BUILT AROUND THEM FOR GROUT CONFINEMENT. GROUT SHOULD BE CURED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

4. GROUT SHALL BE PLACED AND HARDENED PRIOR TO POURING ANY ELEVATED CONCRETE FLOORS SUPPORTED ON THE ASSOCIATED COLUMN.

5. BASE PLATES SHALL BE LOCATED USING LEVELING NUTS OR SHIMS. SHIMS SHALL BE STEEL OR A PLASTIC/COMPOSITE PRODUCT WITH COMPRESSIVE STRENGTH GREATER THAN OR EQUAL TO MINIMUM 28 DAY COMPRESSIVE STRENGTH OF THE GROUT.

6. LEVELING NUTS MAY NOT BE USED WHERE ANCHOR RODS ARE DIRECTLY EMBEDDED IN SPREAD FOOTINGS. LEVELING NUTS MAY BE USED WHEN ANCHOR RODS ARE EMBEDDED IN PLINTHS SUPPORTED BY SPREAD FOOTINGS OR PIERS.

7. G.C. TO COORDINATE REQUIRED GROUT THICKNESS WITH SUBCONTRACTORS. IF A DIFFERENT GROUT THICKNESS THAN SHOWN ON THE DETAILS IS DESIRED SUBMIT REQUEST FOR ALTERNATE THICKNESS TO EOR.

STRUCTURAL STEEL

1. ALL ASPECTS OF WORK RELATING TO THE DESIGN, FABRICATION, DETAILING, AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING CODES AND SPECIFICATIONS:

   CURRENT EDITION OF THE AISC STEEL CONSTRUCTION MANUAL LATEST EDITION OF THE ANSI/AWS D1.1

2. STRUCTURAL STEEL MATERIALS SHALL COMPLY WITH THE FOLLOWING SPECIFICATIONS:

WIDE FLANGE, CHANNELS	ASTM A992
ANGLES, PLATES, BARS	ASTM A572 GR 50
PIPES	ASTM A53 GR B
HSS (RECTANGULAR OR SQUARE)	ASTM A500 GR B (Fy = 46 KSI) OR GR C (Fy = 50 KSI)
HSS (ROUND)	ASTM A500 GR B (Fy = 42 KSI) OR GR C (Fy = 50 KSI)
ANCHOR RODS	ASTM F1554-36 U.N.O
HIGH STRENGTH BOLTS	ASTM F3125 GR A325 OR GR F1852 U.N.O.
HEADED STUD ANCHORS (HSA)	ASTM A108
DEFORMED BAR ANCHORS (DBA)	ASTM A496

3. THE DESIGN OF ALL STEEL CONNECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED, EMPLOYED BY THE FABRICATOR. CALCULATIONS SEALED BY THE FABRICATOR'S PROFESSIONAL ENGINEER MUST BE SUBMITTED IF REQUESTED.

4. SURFACES WHICH ARE TO BE FIREPROOFED WITH SPRAY-ON FIREPROOFING OR EMBEDDED IN CONCRETE SHALL NOT BE SHOP PAINTED. DO NOT PAINT TOP FLANGES OF COMPOSITE BEAMS NOR SURFACES OF MEMBERS WHERE WELDING OR HIGH STRENGTH FRICTION BOLTING WILL OCCUR. COORDINATE ALL SHOP PAINTING OF STRUCTURAL STEEL WITH ARCHITECT'S PAINTING REQUIREMENTS AS SPECIFIED ON THE ARCHITECTURAL DRAWINGS AND IN THE SPECIFICATIONS.

5. IT IS THE INTENTION OF THE PLANS AND SPECIFICATIONS THAT SHOP CONNECTIONS BE WELDED OR BOLTED AND THAT FIELD CONNECTIONS BE BOLTED, UNLESS DETAILED OTHERWISE ON THE DRAWINGS.

6. ALL TYPICAL BEAM SIMPLE CONNECTIONS SHALL BE STANDARD DOUBLE ANGLE OR SINGLE ANGLE FRAMED BEAM CONNECTIONS UNLESS NOTED OTHERWISE, SHEAR TAB CONNECTIONS MAY BE USED AT LOCATIONS WHERE DOUBLE ANGLE CONNECTIONS ARE NOT POSSIBLE. SEATED BEAM CONNECTIONS SHALL NOT BE USED UNLESS INDICATED ON THE DRAWINGS. PROVIDE FULL DEPTH SHEAR TAB IF BEAM FRAMES ON ONLY ONE SIDE OF A GIRDER.

7. DESIGN CONNECTIONS OF NON-COMPOSITE BEAMS TO SUPPORT A REACTION R (UNLESS SPECIFIED OTHERWISE) EQUAL TO ONE HALF THE TOTAL UNIFORM LOAD CAPACITY FROM THE TABLE OF UNIFORM LOAD CONSTANTS IN THE AISC MANUAL.

8. BEAM CONNECTIONS FOR COMPOSITE BEAMS SHALL BE DESIGNED FOR REACTIONS LISTED IN THE TABLE BELOW. ALL VALUES LISTED IN THE TABLE ARE LOAD RESISTANCE FACTOR DESIGN (LRFD).

BEAM SIZE	REACTION	BEAM SIZE	REACTION
W8	30 KIPS	W21	120 KIPS
W10	30 KIPS	W24	140 KIPS
W12	40 KIPS	W27	160 KIPS
W14	50 KIPS	W30	180 KIPS
W16	80 KIPS	W33	200 KIPS
W18	100 KIPS	W36	220 KIPS

9. ADD TO THE REACTION LISTED ABOVE, ANY LOADS OR REACTIONS OF MEMBERS SUPPORTED BY THE BEAM WITHIN THREE FEET OF BEAM END AND THE VERTICAL COMPONENTS OF FORCES IN BRACE MEMBERS FRAMING INTO THE BEAMS.

10. ALL WELDING SHALL COMPLY TO THE AMERICAN WELDING SOCIETY STANDARD (AWS D1.1). ALL W

PRE-ENGINEERED METAL BUILDING (PEMB)

1. ALL ROOF COMPONENTS INCLUDING PURLINS AND BUILDING FRAME SHALL BE DESIGNED BY METAL FRAME SUPPLIER. ALL OTHER STEEL MEMBERS SHALL BE DESIGNED BY THE METAL BUILDING SUPPLIER.
2. ALL DESIGNS SHALL CONFORM TO AISC, AISI AND MBMA STANDARDS (LATEST EDITION).
3. ALL ROOF DECK SYSTEMS SHALL CONFORM TO THE UL WIND-UPLIFT RATING OF CLASS 90.
4. ALL BUILDING FRAMES SHALL BE DESIGNED FOR A MAXIMUM HORIZONTAL DEFLECTION OF H/240 UNDER LATERAL LOADS (H = HEIGHT OF BUILDING FRAME).
5. GIRTS SUPPORTING BRICK/CMU SHALL BE DESIGNED FOR A MAXIMUM HORIZONTAL DEFLECTION OF L/600 (L = SPAN OF GIRT). MEMBERS SUPPORTING BRICK/CMU SHALL HAVE A VERTICAL DEFLECTION OF L/600.
6. ALL PURLINS SHALL BE DESIGNED FOR DEAD LOADS SHOWN ON ARCHITECTURAL DRAWINGS, INCLUDING MISCELLANEOUS FRAMING TO CARRY SUPERIMPOSED DEAD LOADS.
7. BUILDING FRAMES SHALL BE DESIGNED FOR THE LATERAL STABILITY OF THE BUILDING IN BOTH DIRECTIONS. EXAMINE THE CONSTRUCTION DOCUMENTS TO DETERMINE THE PREFERRED LOCATIONS OF LATERAL FRAMES. NO X-BRACES OR ROD BRACES ARE ALLOWED IN THE VERTICAL PLANE AT ANY LOCATIONS IN THESE DOCUMENTS.
8. FOUNDATION DESIGN IS BASED ON THE ROOF LOADINGS SPECIFIED BY THE MBMA AND ANY OTHER ADDITIONAL LOADS IMPOSED BY THE BUILDING USE. SUBMIT REACTIONS FROM METAL BUILDING FRAME (AT LEAST 6 WEEKS PRIOR TO THE POURING OF THE FOUNDATION) TO CONFIRM THE DESIGN OF FOOTINGS. GENERAL CONTRACTOR SHALL CONFIRM FOOTING SIZES WITH THE STRUCTURAL ENGINEER AFTER ACTUAL REACTIONS ARE RECEIVED FROM THE METAL BUILDING FRAME SUPPLIER. MODIFICATIONS TO FOUNDATION AND/OR DETAILS RESULTING FROM SUCH REVIEW SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND HIS METAL BUILDING SUPPLIERS. NO ADDITIONAL COST PROPOSALS WILL BE ENTERTAINED.
9. SUBMIT SHOP DRAWINGS FOR BUILDING METAL BUILDING FRAMES, INCLUDING ALL CONNECTIONS. ALL SHOP DRAWINGS SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
10. ALL WELDING SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF AWS.
11. THE FOUNDATION HAS BEEN DESIGNED ASSUMING THAT RIGID FRAMES ARE PINNED AT THE BASE. THE FOOTINGS HAVE NOT BEEN DESIGNED FOR MOMENTS DUE TO FIXITY AT THE BASE.
12. THE METAL BUILDING MANUFACTURER SHALL TAKE INTO ACCOUNT LATERAL LOADS FOR BRACING PERIMETER/INTERIOR WALLS. THE TOP OF ALL WALLS SHALL BE BRACED BY THE METAL BUILDING STRUCTURE. PROVIDE STEEL MEMBERS AS REQUIRED.
13. THE METAL BUILDING MANUFACTURER SHALL REVIEW ALL PLANS (ARCHITECTURAL, STRUCTURAL, MEP, ETC.) DETAILS AND SPECIFICATIONS AND MAKE PROVISIONS FOR THE SUPPORT OF ALL ELEMENTS DESIGNATED TO BE SUPPORTED OR BRACED BY THE STRUCTURE, INCLUDING ANY HANGING ELEMENTS FROM THE ROOF, PIPING, DUCTS, CLADDING/WALL SUPPORT, MEP ELEMENTS SUPPORT, ETC. SUCH WORK IS NOT IN MSE'S SCOPE OF WORK. ANY SUCH MISSING ELEMENTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND HIS METAL FRAMING SUPPLIER.
14. MATRIX STRUCTURAL ENGINEER'S SCOPE OF WORK IS STRICTLY FOR FOUNDATION DESIGN ONLY. ANY FRAMING SHOWN ON THESE PLANS ARE SCHEMATIC IN NATURE AND IS PROVIDED FOR THE CONVENIENCE OF THE METAL BUILDING MANUFACTURER. IF ADDITIONAL MOMENT FRAMES AND/OR BRACED BAYS ARE REQUIRED, PLEASE COORDINATE SUCH LOCATIONS WITH ARCHITECT. ANY WORK RELATED TO STRUCTURAL FRAMING (INCLUDING MEZZANINES, SECOND FLOOR, STAIRS, HANDRAILS, ETC., LATERAL BRACING OF WALLS AND OTHER COMPONENTS) IS IN THE SCOPE OF THE GENERAL CONTRACTOR AND THE METAL BUILDING SUPPLIER.
15. ALL ANCHOR BOLTS SHALL BE SUPPLIED BY THE BUILDING MANUFACTURER. THE MINIMUM EMBEDMENT DEPTH INTO CONCRETE SHALL BE 1' - 6" U.N.O.
16. PROVIDE (2) - #5 (WITH 4' - 0" LEGS) V SHAPED HAIRPIN BARS AT THE BASE OF ALL EXTERIOR COLUMNS, U.N.O.
17. ALL EXPOSED STEEL MEMBERS (INCLUDING CONNECTIONS AND ASSOCIATED ACCESSORIES) SHALL BE GALVANIZED.
18. NO EXCLUSIONS FROM PROVIDING A TOTAL AND COMPLETE BUILDING FRAMING PACKAGE WILL BE ENTERTAINED.

CONCRETE MASONRY

1. ALL MASONRY MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE RECOMMENDATIONS OF THE NATIONAL CONCRETE MASONRY ASSOCIATION AND THE FOLLOWING CODES AND SPECIFICATIONS:

   CURRENT EDITION OF TMS-402 CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES
2. ALL CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C90. UNLESS SPECIFIED OTHERWISE, CMU SHALL BE LIGHTWEIGHT (LESS THAN 110 PCF, OVEN DRY UNIT WEIGHT). THE MINIMUM COMPRESSIVE STRENGTH OF MASONRY (F'M) SHALL BE 2000 PSI AS DETERMINED BY THE UNIT STRENGTH METHOD OR BY THE PRISM TEST METHOD.
3. UNLESS SPECIFIED OTHERWISE, ALL MORTARS AND THE MATERIALS THEREIN SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF MASONRY UNITS, ASTM C270, TYPE S EXCEPT FOR MASONRY IN CONTACT WITH THE EARTH SHALL BE TYPE M.
4. ALL GROUT SHALL BE FINE GROUT CONTAINING SAND, PORTLAND CEMENT, AND LIME (OPTIONAL) FOR GROUT SPACES LESS THAN 2 INCHES IN ANY HORIZONTAL DIRECTION, UNLESS SPECIFIED OTHERWISE. GROUT SHALL ATTAIN A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 2500 PSI TESTED ACCORDING TO ASTM C476.
5. CONTROL JOINTS SHALL BE LOCATED PER ARCHITECTURAL DRAWINGS AND SPECIFICATIONS OR AT A MAXIMUM SPACING OF 24 FEET ON CENTERS OR 3 TIMES THE WALL HEIGHT, WHICHEVER IS LESS. ALL MASONRY UNITS SHALL BE PLACED IN RUNNING BOND.
6. PROVIDE HORIZONTAL JOINT REINFORCING (TRUSS OR LADDER TYPE, 9 GAUGE) AT 16 INCHES ON CENTER FOR ALL CMU WALLS LAID IN A RUNNING BOND AND AT 8 INCHES ON CENTER FOR ALL CMU WALLS NOT LAID IN A RUNNING BOND. HORIZONTAL JOINT REINFORCING SHALL BE LAPPED A MINIMUM OF 6". REINFORCEMENT SHALL CONFORM TO ASTM A951 AND SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.
7. ALL HORIZONTAL REINFORCING STEEL IN BOND BEAMS AND LINTEL BLOCK UNITS SHALL BE CONTINUOUS AND UNITS SHALL BE SOLID GROUTED. PROVIDE 48 TIMES BAR DIAMETER LAP FOR HORIZONTAL REINFORCING IN BOND BEAMS. NO SPLICES SHALL BE PROVIDED FOR HORIZONTAL REINFORCING IN BLOCK LINTELS.
8. GROUT CELLS SOLID WHERE VERTICAL BARS ARE SHOWN ON THE DRAWINGS. VERTICAL BARS SHALL EXTEND FROM BOTTOM TO THE TOP OF THE WALL. AT EACH VERTICAL BAR, PROVIDE MATCHING BAR SIZE DOWEL INTO FOUNDATIONS. PROVIDE MINIMUM 48 TIMES BAR DIAMETER SPLICE FOR VERTICAL BARS WHERE REQUIRED AND/OR SHOWN ON THE DRAWINGS UNLESS NOTED OTHERWISE.
9. GROUT LIFTS SHALL TERMINATE TO FORM A GROUT KEY A MINIMUM OF 1 1/2" BELOW MORTAR JOINTS WHEN SUBSEQUENT GROUT LIFTS WILL HAPPEN AFTER PREVIOUS GROUT LIFTS HAVE SET. GROUT KEYS IN BOND BEAMS OR LINTELS SHALL NOT BE PERMITTED.
10. MAXIMUM GROUT POUR HEIGHT SHALL BE 5' - 4" (8 BLOCK COURSES).
11. PROVIDE A BOND BEAM AT THE TOP OF ALL CMU WALLS AND REINFORCE WITH (2) - #5 CONTINUOUS UNLESS NOTED OTHERWISE. UNLESS NOTED OTHERWISE, ALL EXTERIOR BOND BEAMS SHALL BE REINFORCED WITH (2) - #5 CONTINUOUS AND ALL INTERIOR BOND BEAMS SHALL BE REINFORCED WITH (2) - #4 CONTINUOUS. BOND BEAM REINFORCING SHALL NOT BE CONTINUED THROUGH CONTROL JOINT LOCATIONS.
12. PROVIDE BOND BEAMS AT A MAXIMUM OF 48 INCHES ON CENTER IN ALL EXTERIOR AND LOAD BEARING CMU WALLS NOT LAID IN A RUNNING BOND (E.G. STACK BOND). REINFORCED WITH (2) - #5 CONTINUOUS UNLESS NOTED OTHERWISE BOND BEAM REINFORCEMENT SHALL BE DISCONTINUED AT CONTROL JOINTS.
13. AT THE END OF EACH DAY AND DURING INCLEMENT WEATHER, ALL UNFINISHED MASONRY WORK SHALL BE COVERED AT THE TOP OF WALL AND EXTEND DOWN ALL SIDES A MINIMUM OF 24".
14. SEE TYPICAL DETAILS FOR INTERIOR WALL HEIGHT, BRACING AND REINFORCING REQUIREMENTS.
15. MECHANICAL PIPES AND ELECTRICAL CONDUITS WHICH PASS THROUGH MASONRY WALLS DO NOT REQUIRE SLEEVES. UNLESS NOTED OTHERWISE IN THE PROJECT SPECIFICATIONS, MECHANICAL OR ELECTRICAL DRAWINGS. IF SLEEVES ARE REQUIRED, INSTALL SLEEVES BEFORE GROUTING. DO NOT CUT ANY REINFORCING WHICH MAY INTERFERE WITH SLEEVE PLACEMENT. CORING OPENINGS IN GROUTED MASONRY IS NOT PERMITTED. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. NO PIPES OR ELECTRICAL CONDUIT SHALL PASS THROUGH MASONRY LINTELS UNLESS SPECIFICALLY DETAILED.
16. ALL REINFORCED MASONRY WALLS WITH OPENINGS UP TO THREE (3) FEET WIDE, SHALL HAVE ONE VERTICAL BAR MINIMUM AT EACH SIDE OF OPENINGS. FOR OPENINGS LARGER THAN 3 FEET WIDE, PROVIDE TWO (2) VERTICAL BARS AT EACH SIDE OF OPENINGS UNLESS NOTED OTHERWISE. REINFORCING AT EDGES OF OPENING SHALL MATCH TYPICAL VERTICAL WALL REINFORCING (UNLESS NOTED OTHERWISE) AND SHALL EXTEND TO THE TOP OF WALL.
17. ALL REINFORCED MASONRY WALL CORNERS AND INTERSECTIONS SHALL HAVE ONE VERTICAL BAR (MINIMUM) IN GROUTED CELL. REINFORCING SHALL MATCH TYPICAL WALL VERTICAL REINFORCEMENT.
18. PROVIDE ONE VERTICAL BAR (MINIMUM) IN THE FIRST CELL EACH SIDE OF CONTROL JOINTS. REINFORCING SHALL MATCH TYPICAL VERTICAL WALL REINFORCING (UNLESS NOTED OTHERWISE) AND SHALL EXTEND TO THE TOP OF WALL.
19. FOR ANCHORED MASONRY VENEER, THE DISTANCE BETWEEN THE INSIDE FACE OF THE VENEER AND THE COLD-FORMED STEEL, MASONRY, WOOD, OR CONCRETE BACKUP SHALL BE AS SPECIFIED BY THE ARCHITECT, BUT NOT GREATER THAN 4 1/2". A MINIMUM 1 INCH AIR SPACE SHALL BE PROVIDED.
20. ANCHORED MASONRY VENEER NOT LAID IN A RUNNING BOND SHALL HAVE A JOINT REINFORCEMENT OF AT LEAST ONE WIRE, OF SIZE W1.7, SPACED AT A MAXIMUM OF 18 INCHES ON CENTER VERTICALLY.
21. ALL CONCRETE MASONRY AND MASONRY VENEER SHALL HAVE A MINIMUM BEARING WIDTH OF 2/3 THE WIDTH OF THE MASONRY UNIT.
22. SPECIAL INSPECTION, IN ACCORDANCE WITH THE BUILDING CODE REFERENCED ABOVE, SHALL BE PROVIDED FOR ALL CMU WALLS.

SUBMITTALS

1. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS:

   CONCRETE MIX DESIGNS AND ACCESSORIES
   REINFORCING STEEL
   STRUCTURAL STEEL (*,^)
   METAL DECK
   BAR JOISTS (^)
   MISCELLANEOUS STEEL
   STEEL STAIR (*,^)
   PRE-ENGINEERED METAL BUILDING (*,#)
   CURTAIN WALL (*,#)
   LIGHT-GAGE FRAMING (*,^)
   CONCRETE MASONRY (MATERIAL AND REBAR PLACEMENT PLANS)
   SLAB CONTRACTION JOINT LAYOUT

   ITEMS MARKED (*) SHALL HAVE SHOP DRAWINGS SEALED BY A REGISTERED ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED. ITEMS MARKED (#) SHALL BE SUBMITTED TO ENGINEER FOR OWNER'S RECORD ONLY AND WILL NOT HAVE ENGINEER'S SHOP DRAWING STAMP. ITEMS MARKED (^) SHALL HAVE SEALED STRUCTURAL CALCULATIONS SUBMITTED TO ENGINEER FOR OWNER'S RECORD.
2. ALL SHOP DRAWINGS MUST BE REVIEWED AND SEALED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL.
3. CONTRACTOR SHALL SUBMIT ELECTRONIC COPIES (E.G. PDFS) OF ALL SHOP DRAWINGS SPECIFIED TO BE RETURNED BY THE ENGINEER.
4. THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIAL REQUIRED BY THE CONTRACT DOCUMENTS TO BE FURNISHED SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED.
5. SUBMIT TWO COPIES OF MANUFACTURER'S LITERATURE FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION ON THE PROJECT.
6. THE USE OF REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREIN AS CORRECT, AND OBLIGATES HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREIN.

SPECIAL INSPECTION

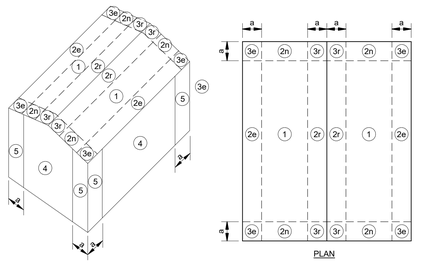
1. ALL ASPECTS OF WORK RELATING TO SPECIAL INSPECTION SHALL CONFORM TO THE FOLLOWING CODES AND SPECIFICATIONS:

   2021 INTERNATIONAL BUILDING CODE (CHAPTER 17).
2. THE OWNER'S SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
3. PRIOR TO THE BEGINNING OF CONSTRUCTION, THE ARCHITECT (OR ENGINEER) SHALL CALL A PRE-CONSTRUCTION MEETING WITH THE ARCHITECT, ENGINEER, BUILDING OFFICIAL, CONTRACTOR AND SPECIAL INSPECTORS TO REVIEW THE SPECIAL INSPECTION REQUIREMENTS.
4. DUTIES OF THE OWNER'S SPECIAL INSPECTOR INCLUDE (BUT ARE NOT LIMITED TO):
   A. ACKNOWLEDGE THE SPECIAL INSPECTION AND TESTING AGREEMENT PROVIDED BY THE LOCAL JURISDICTION.
   B. THE OWNER'S SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND TO THE BUILDING OFFICIAL.
   C. THE OWNER'S SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, ARCHITECT, REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, CONTRACTOR AND (OTHER DESIGNATED PARTIES), IN A TIMELY MANNER, AS ESTABLISHED AT THE PRE-CONSTRUCTION MEETING.
   D. THE OWNER'S SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.
5. DUTIES OF THE CONTRACTOR INCLUDE (BUT ARE NOT LIMITED TO):
   A. NOTIFY THE SPECIAL INSPECTOR THAT THE WORK IS READY FOR INSPECTION AT LEAST 24 HOURS BEFORE SUCH INSPECTION.
   B. ALL WORK REQUIRING SPECIAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT HAS BEEN OBSERVED AND INDICATED TO BE IN CONFORMANCE BY THE SPECIAL INSPECTOR AND APPROVED BY THE BUILDING OFFICIAL.
   C. PROVIDE THE SPECIAL INSPECTOR WITH ACCESS TO APPROVED CONSTRUCTION DOCUMENTS AT JOBSITE.
   D. MAINTAIN AT THE JOBSITE COPIES OF ALL REPORTS SUBMITTED BY THE SPECIAL INSPECTOR.
6. CONTINUOUS SPECIAL INSPECTION REFERS TO INSPECTIONS BY THE SPECIAL INSPECTOR WHO IS CONTINUOUSLY PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED.
7. PERIODIC SPECIAL INSPECTION REFERS TO INSPECTIONS BY THE SPECIAL INSPECTOR WHO IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED.
8. SPECIAL INSPECTIONS AND TESTING SHALL BE REQUIRED FOR THE FOLLOWING TYPES OF WORK LISTED BELOW. SPECIAL INSPECTIONS AND TESTING SHALL FOLLOW THE REQUIREMENTS OF THE BUILDING AND MATERIAL CODE REFERENCES AND TABLES. IN THE EVENT OF A CONFLICT BETWEEN REFERENCES, THE OWNER'S SPECIAL INSPECTOR SHALL FOLLOW THE MORE STRINGENT REQUIREMENT.

SOILS	IBC 1705.6 AND TABLE 1705.6, APPROVED GEOTECHNICAL REPORT AND CONSTRUCTION DOCUMENTS
CAST-IN-PLACE DEEP FOUNDATIONS	IBC 1705.8 AND TABLE 1705.8 APPROVED GEOTECHNICAL REPORT AND CONSTRUCTION DOCUMENTS
CONCRETE	IBC 1705.3 AND TABLE 1705.3
STEEL	IBC 1705.2 AND TABLE 1705.2.3 AND AISC 360 CHAPTER N AND SDI QA/QC DOCUMENT
SHOP FABRICATION	IBC 1704.2.5 (NOT REQUIRED IF FABRICATOR IS APPROVED IN ACCORDANCE WITH IBC 1704.2.5.1.
MASONRY	IBC 1705.4, TMS 402/ACI 530/ASCE 5 SECTION 3.1 AND TABLE 3.1.2, TMS 602/ACI 530.1/ASCE 6 SECTION 1.6 AND TABLE 4
SPRAYED FIRE-RESISTANT MATERIALS	IBC 1705.14 AND CONSTRUCTION DOCUMENTS
EXPANSION/EPOXY ANCHORS	MANUFACTURER'S ICC REPORT

ROOF PRESSURE						
ZONE	0-10 SQ. FT.	20 SQ. FT.	50 SQ. FT.	>100 SQ. FT.	>500 SQ. FT.	>1000 SQ. FT.
1	+33,-77	+31,-77	+28,-51	+26,-32	+26,-32	+26,-32
2n	+33,-107	+31,-94	+28,-77	+26,-64	+26,-47	+26,-47
2r	+33,-107	+31,-94	+28,-77	+26,-64	+26,-47	+26,-47
2e	+33,-77	+31,-77	+28,-51	+26,-32	+26,-32	+26,-32
3r	+33,-126	+31,-109	+28,-87	+26,-71	+26,-71	+26,-71
3e	+33,-107	+31,-94	+28,-77	+26,-64	+26,-47	+26,-47

WALL PRESSURE						
ZONE	0-10 SQ. FT.	20 SQ. FT.	50 SQ. FT.	>100 SQ. FT.	>500 SQ. FT.	>1000 SQ. FT.
4	+44,-47	+42,-45	+41,-43	+39,-42	+36,-38	+36,-38
5	+44,-55	+42,-52	+41,-48	+39,-45	+36,-38	+36,-38



GABLE ROOF

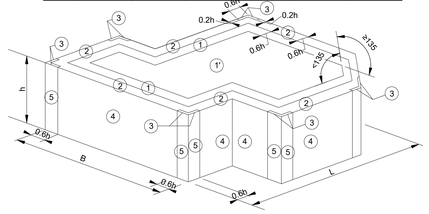
NOTES:
1. (0-10 SQ. FT.) EXAMPLE DENOTES EFFECTIVE WIND AREA.
2. + AND - SIGNS SIGNIFY PRESSURES ACTING TOWARD OR AWAY FROM THE SURFACES, RESPECTIVELY. ALL VALUES SHOWN ARE IN PSF.
3. WIND PRESSURE FOR EFFECTIVE WIND AREAS BETWEEN THE SPECIFIED RANGES MAY BE DETERMINED BY INTERPOLATION, OTHERWISE, USE THE VALUE ASSOCIATED WITH THE LOWER EFFECTIVE AREA.
4. a = WIDTH OF EDGE STRIP EQUAL TO 10% OF THE LEAST HORIZONTAL DIMENSION (L or B) or 40% OF THE ROOF HEIGHT (h), WHICHEVER IS SMALLER, BUT NOT LESS THAN 4% OF THE LEAST HORIZONTAL DIMENSION OR 3 FT.
5. ELEMENTS WITH TRIBUTARY AREAS GREATER THAN 700 SQ. FEET MAY BE DESIGNED USING MWFRS PROVISIONS.
6. VALUES SHOWN ARE BASED ON IBC 2021 / ASCE 7-22 WIND CALCULATIONS FOR COMPONENTS AND CLADDING AND ARE ULTIMATE VALUES (LRFD). VALUES SHOWN ARE FOR USE IN ASCE 7-10 LOAD COMBINATIONS SHOWN IN SECTION 2.32 (1.0W).
7. THE BUILDING LAYOUT SHOWN IS INTENDED TO BE SCHEMATIC, APPLY WIND PRESSURE PROVIDED SIMILARLY TO THE BUILDING(S) AT THIS PROJECT.
8. UNLESS OTHERWISE SPECIFIED, ROOF DEAD LOAD TO BE USED FOR NET UPLIFT CALCULATIONS SHALL NOT EXCEED 8 PSF. NET UPLIFT PRESSURE SHALL NOT BE LESS THAN 16 PSF.

COMPONENTS & CLADDING PRESSURES

ROOF PRESSURE (GROSS)						
ZONE	0-10 SQ. FT.	20 SQ. FT.	50 SQ. FT.	100 SQ. FT.	500 SQ. FT.	>1000 SQ. FT.
1'	+13,-30	+12,-30	+11,-30	+10,-30	+10,-20	+10,-16
1	+13,-52	+12,-48	+11,-40	+10,-40	+10,-32	+10,-32
2	+13,-68	+12,-64	+11,-58	+10,-53	+10,-43	+10,-43
3	+13,-93	+12,-84	+11,-72	+10,-64	+10,-43	+10,-43

WALL PRESSURE						
ZONE	0-10 SQ. FT.	20 SQ. FT.	50 SQ. FT.	100 SQ. FT.	500 SQ. FT.	>1000 SQ. FT.
4	+30,-32	+28,-31	+27,-29	+25,-28	+22,-25	+22,-25
5	+30,-39	+28,-37	+27,-33	+25,-31	+22,-25	+22,-25

ROOF OVERHANG PRESSURE						
ZONE	0-10 SQ. FT.	20 SQ. FT.	50 SQ. FT.	100 SQ. FT.	500 SQ. FT.	>1000 SQ. FT.
1	-47	-46	-45	-44	-27	-27
2	-63	-57	-49	-44	-30	-30
3	-88	-77	-64	-54	-30	-30

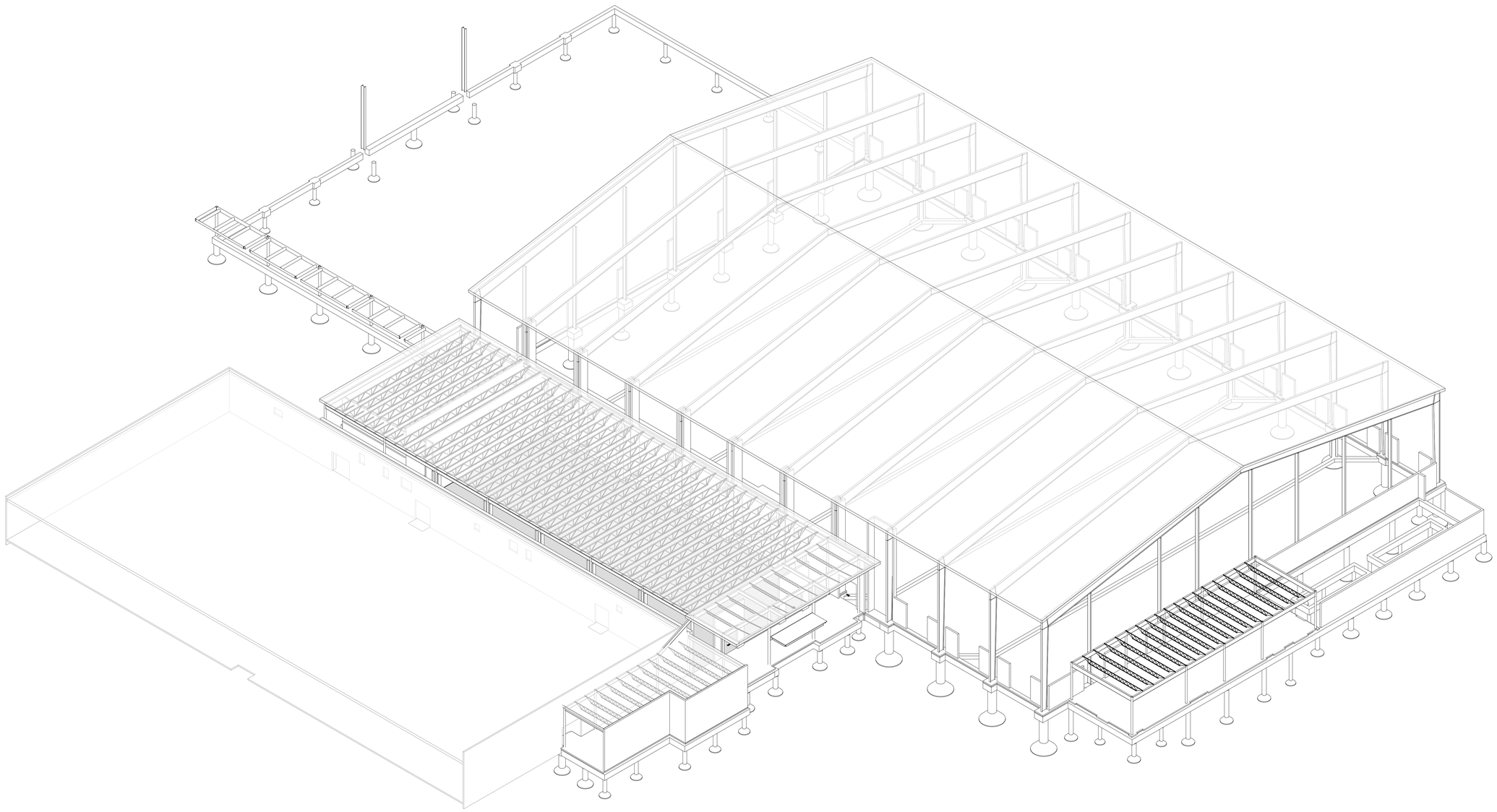


NOTES:
1. (0-10 SQ. FT.) EXAMPLE DENOTES EFFECTIVE WIND AREA.
2. + AND - SIGNS SIGNIFY PRESSURES ACTING TOWARD OR AWAY FROM THE SURFACES, RESPECTIVELY. ALL VALUES SHOWN ARE IN PSF.
3. WIND PRESSURE FOR EFFECTIVE WIND AREAS BETWEEN THE SPECIFIED RANGES MAY BE DETERMINED BY INTERPOLATION, OTHERWISE, USE THE VALUE ASSOCIATED WITH THE LOWER EFFECTIVE AREA.
4. h = EAVE HEIGHT.
5. ELEMENTS WITH TRIBUTARY AREAS GREATER THAN 700 SQ. FEET MAY BE DESIGNED USING MWFRS PROVISIONS.
6. VALUES SHOWN ARE BASED ON IBC 2021 / ASCE 7-22 WIND CALCULATIONS FOR COMPONENTS AND CLADDING AND ARE ULTIMATE VALUES (LRFD). VALUES SHOWN ARE FOR USE IN ASCE 7-16 LOAD COMBINATIONS SHOWN IN SECTION 2.3.1 (1.0W).
7. THE BUILDING LAYOUT SHOWN IS INTENDED TO BE SCHEMATIC, APPLY WIND PRESSURE PROVIDED SIMILARLY TO THE BUILDING(S) AT THIS PROJECT.
8. UNLESS OTHERWISE SPECIFIED, ROOF DEAD LOAD TO BE USED FOR NET UPLIFT CALCULATIONS SHALL NOT EXCEED 10 PSF. NET UPLIFT PRESSURE SHALL NOT BE LESS THAN 16 PSF.
9. ROOF ZONE 1' = INTERIOR
   ROOF ZONE 1 = FIELD
   ROOF ZONE 2 = PERIMETER
   ROOF ZONE 3 = CORNER

COMPONENTS & CLADDING PRESSURES

ABBREVIATIONS

ABBR.	ABBREVIATION
A.F.F.	ABOVE FINISH FLOOR
ADDN'L	ADDITIONAL
AHU	AIR HANDLING UNIT
ALT.	ALTERNATE
ANCH.	ANCHOR
A.B.	ANCHOR BOLT
A.R.	ANCHOR ROD
APPROX.	APPROXIMATELY
ARCH.	ARCHITECT(URAL)
BM.	BEAM
BRG.	BEARING
BTW	BETWEEN
BOT.	BOTTOM
B.F.B.	BOTTOM FLANGE BRACE
B.O.	BOTTOM OF
BRDG.	BRIDGING
BLDG	BUILDING
C	CAMBER
CANT.	CANTILEVER
C.I.P.	CAST IN PLACE
C/C	CENTER TO CENTER
CL	CENTERLINE
CH	CHANNEL
CLR.	CLEAR(ANCE)
CFMF	COLD FORMED METAL FRAMING
COL.	COLUMN
CJP	COMPLETE JOINT PENETRATION
CONC.	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONN.	CONNECTION
CONST.	CONSTRUCTION
C.J.	CONSTRUCTION / CONTRACTION JOINT
CONT.	CONTINUOUS
COORD.	COORDINATE
DL	DEAD LOAD
DBA	DEFORM BAR ANCHOR
D	DEPTH
DET.	DETAIL
DIA. or Ø	DIAMETER
DIM.	DIMENSION
DWL.	DOWEL
D.N.	DOWN
DWG.	DRAWING
EA.	EACH
E.F.	EACH FACE
E.W.	EACH WAY
EL.	ELEVATION
ELEV.	ELEVATOR
EMBED.	EMBEDMENT
ENGR.	ENGINEER
EOR	ENGINEER OF RECORD
EQ.	EQUAL
EQUIP.	EQUIPMENT
EQUIV.	EQUIVALENT
EXIST.	EXISTING
E.J.	EXPANSION JOINT
EXT.	EXTERIOR
f'c=	28 DAY CONCRETE STRENGTH
FAB.	FABRICATE
F.S.	FAR SIDE
FIN	FINISH/FINISHED
FLR	FLOOR
F.D.	FLOOR DRAIN
FTG.	FOOTING
Fy=	YIELD STRENGTH
GALV.	GALVANIZED
GA.	GAUGE
GEN	GENERAL
G.C.	GENERAL CONTRACTOR
GFRC	GLASS FIBER REINFORCED CONCRETE
GR.	GRADE/GRADING
HGR.	HANGER
HSA.	HEADED STUD ANCHOR
HI	HIGH
HSS	HOLLOW STRUCTURAL SECTION
HORIZ. OR (H)	HORIZONTAL
H	HORIZONTAL REACTION
IN	INCH
INFO.	INFORMATION
ID	INSIDE DIAMETER
I.F.	INSIDE FACE
INT.	INTERIOR
JT.	JOINT
JST.	JOIST
K	KIPS (1000 LBS)
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L	ANGLE
Ld	DEVELOPMENT LENGTH
LWC	LIGHTWEIGHT CONCRETE
LL	LIVE LOAD
LLBB	LONG LEG BACK TO BACK
LLV	LONG LEG VERTICAL
LLH	LONG LGE HORIZONTAL
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
LONG	LONGITUDINAL
LO	LOW
LBS	POUNDS
MFR. / MNFR.	MANUFACTURER
MAS.	MASONRY
MAX.	MAXIMUM
MECH.	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MTL.	METAL
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M	MOMENT
M.C.	MOMENT CONNECTION
N.S.	NEAR SIDE
NWC	NORMAL WEIGHT CONCRETE
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
NO.	NUMBER
O.C.	ON CENTER(S)
OPNG.	OPENING
OPP.	OPPOSITE
OPH.	OPPOSITE HAND
OD	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OA	OVERALL
O.H.	OVERHEAD
OVS.	OVERSIZED HOLE
P	AXIAL LOAD
P.J.	PANEL JOINT
PAR.	PARALLEL
PRKG.	PARKING
PJP	PARTIAL JOINT PENETRATION
PVMT	PAVEMENT
PVG	PAVING
PERP.	PERPENDICULAR
PL.	PLATE
PLBG	PLUMBING
PT	POST-TENSION(ED)
PCF	POUNDS PER CUBIC FOOT/FEET
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT/FEET
PSI	POUNDS PER SQUARE INCH
P/C	PRECAST CONCRETE
PRELIM.	PRELIMINARY
P.L.	PROPERTY LINE
QTY	QUANTITY
R	RADIUS, REACTION, REMAINDER
REC.	RECESSED
RE:	REFER TO
REF.	REFERENCE
REINF.	REINFORCED / REINFORCING
REBAR	REINFORCING BAR
REQ'D	REQUIRED
REV.	REVISION
R.D.	ROOF DRAIN
RTU	ROOF TOP UNIT
SCHED.	SCHEDULE
SECT.	SECTION
SHT.	SHEET
SLBB	SHORT LEG BACK TO BACK
SIM.	SIMILAR
SC	SLIP CRITICAL, SHEAR CONNECTOR
SPA.	SPACING
SPEC.	SPECIFICATION
SQ.	SQUARE



1 3D 80 yard
SCALE:

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
127127
LICENSED
PROFESSIONAL ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

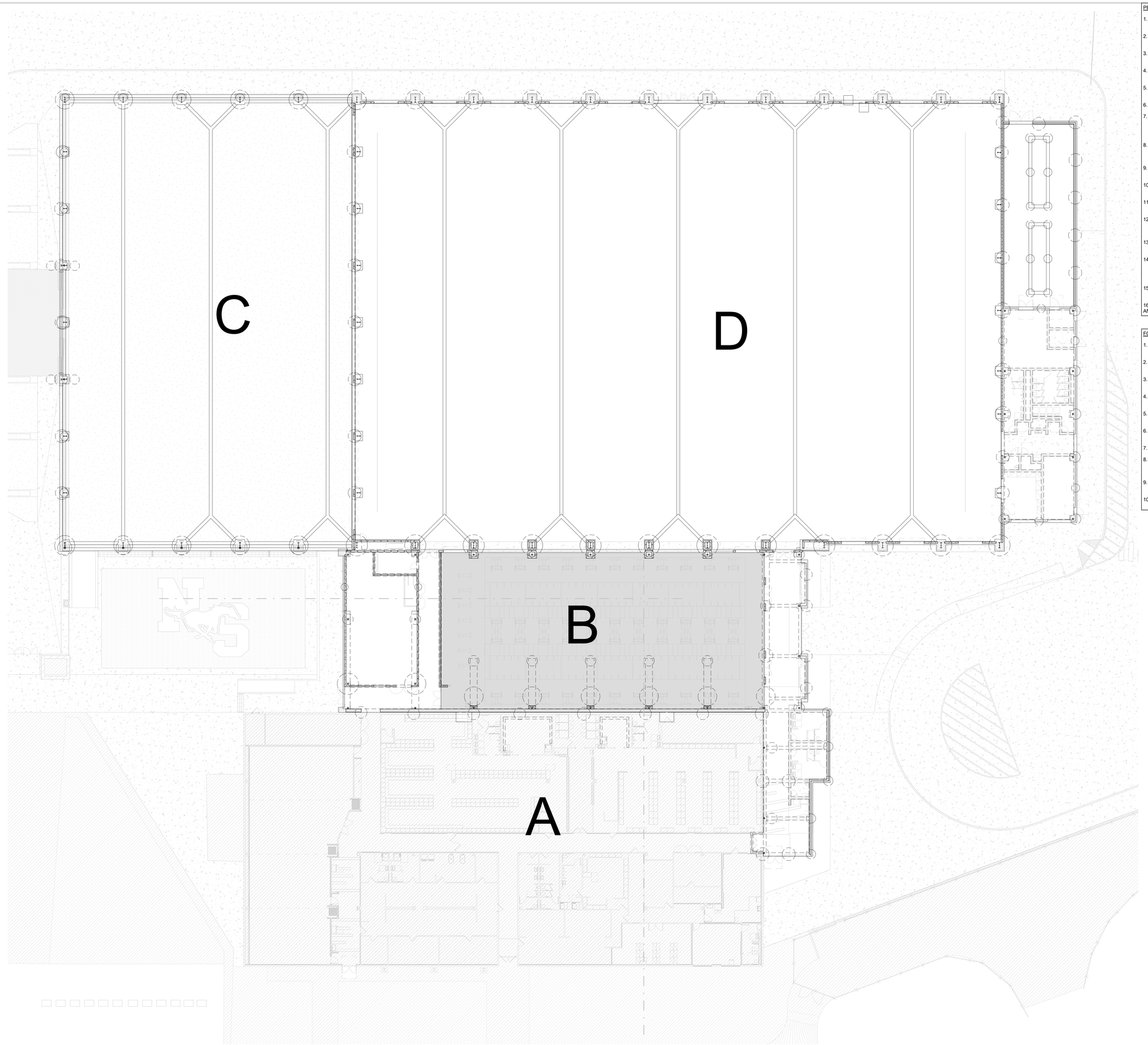
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
3D VIEW

SHEET NO.
S1.03

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 FOUNDATION PLAN - OVERALL
SCALE: 1/16" = 1'-0"

PEMB FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAM (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. SEE PEMB FOR BASE PLATE INFORMATION.
7. REFER TO PEMB FOR SIZE, LOCATION AND ORIENTATION OF ALL COLUMNS, ANCHOR BOLTS. NOTIFY ARCH. OF ANY DISCREPANCIES BETWEEN PLANS FOR RESOLUTION PRIOR TO FABRICATION AND INSTALLATION.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. REFER TO MEP FOR SLOPE - INVERT ELEVATION (I.E.) AT DRAINS.
11. TYPICAL SLOPE AT FLOOR IS 1/8" PER FOOT, U.N.O. ON ARCH.
12. PROVIDE (2)#4X4'-0" TOP & BOT. AT ALL RE-ENTRANT CORNERS AT SLAB ON GRADE. TOP REINFORCING SHALL BE PLACED AT 1 1/4" CLEAR FROM THE TOP OF THE SLAB.
13. ———► WHERE SHOWN ON PLAN INDICATES SLOPE DIRECTION. SEE ARCH. FOR INFORMATION.
14. ALL COLUMN LOCATIONS SHOWN AND ASSOCIATED FOUNDATIONS ARE PLACEHOLDERS IN THE ABSENCE OF A COMPLETE METAL BUILDING DESIGN SUBMITTAL. SEE GENERAL NOTES FOR SUBMITTAL REQUIREMENTS.
15. 1" EXPNSION JOINT SHALL BE PROVIDED BETWEEN PEMB BUILDING AND THE ADJACENT STEEL BUILDING (UNIT B)
16. PEMB ENGINEER TO BRACE THE TOP OF CMU WALLS FOR ANY LATERAL LOAD

FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAMS (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. REF. ELEVATION = 0' - 0" CORRESPONDS TO CIVIL ELEVATION 33.50'. VERIFY WITH CIVIL.
7. SEE DETAIL 13/S3.03 FOR BASE PLATES.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.

KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
87127
LICENSED
PROFESSIONAL ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

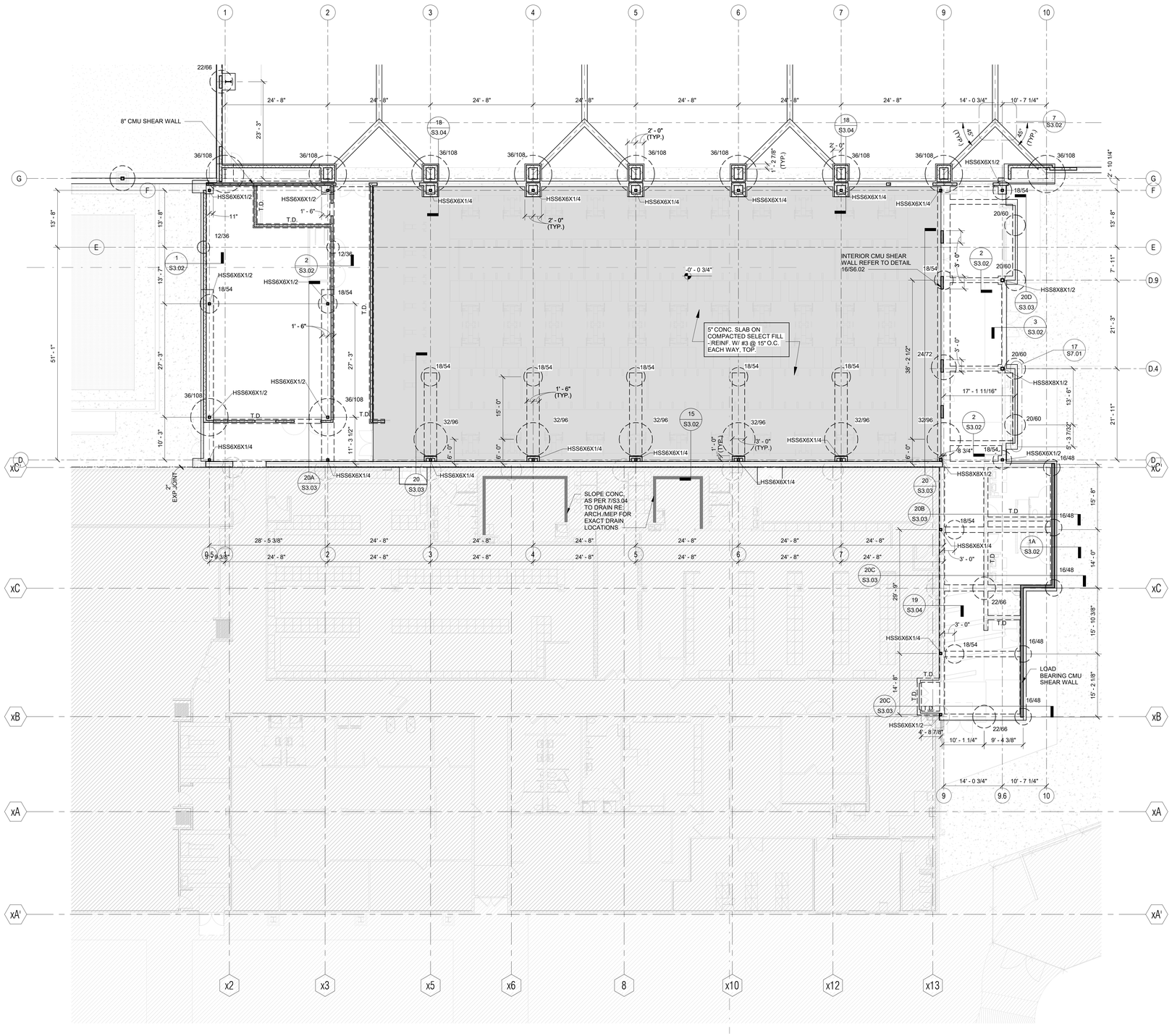
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
FOUNDATION PLAN - OVERALL

SHEET NO.
S2.00

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 FOUNDATION PLAN - UNIT B
SCALE: 3/32" = 1'-0"

PEMB FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAM (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. SEE PEMB FOR BASE PLATE INFORMATION.
7. REFER TO PEMB FOR SIZE, LOCATION AND ORIENTATION OF ALL COLUMNS, ANCHOR BOLTS. NOTIFY ARCH. OF ANY DISCREPANCIES BETWEEN PLANS FOR RESOLUTION PRIOR TO FABRICATION AND INSTALLATION.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. REFER TO MEP FOR SLOPE - INVERT ELEVATION (I.E.) AT DRAINS.
11. TYPICAL SLOPE AT FLOOR IS 1/8" PER FOOT, U.N.O. ON ARCH.
12. PROVIDE (2)#4X4'-0" TOP & BOT. AT ALL RE-ENTRANT CORNERS AT SLAB ON GRADE. TOP REINFORCING SHALL BE PLACED AT 1 1/4" CLEAR FROM THE TOP OF THE SLAB.
13. ——► WHERE SHOWN ON PLAN INDICATES SLOPE DIRECTION. SEE ARCH. FOR INFORMATION.
14. ALL COLUMN LOCATIONS SHOWN AND ASSOCIATED FOUNDATIONS ARE PLACEHOLDERS IN THE ABSENCE OF A COMPLETE METAL BUILDING DESIGN SUBMITTAL. SEE GENERAL NOTES FOR SUBMITTAL REQUIREMENTS.
15. 1" EXPNSION JOINT SHALL BE PROVIDED BETWEEN PEMB BUILDING AND THE ADJACENT STEEL BUILDING (UNIT B)
16. PEMB ENGINEER TO BRACE THE TOP OF CMU WALLS FOR ANY LATERAL LOAD

FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAMS (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. REF. ELEVATION = 0' - 0" CORRESPONDS TO CIVIL ELEVATION 33.50'. VERIFY WITH CIVIL.
7. SEE DETAIL 13/S3.03 FOR BASE PLATES.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.

KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137126
LICENSED
PROFESSIONAL
ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

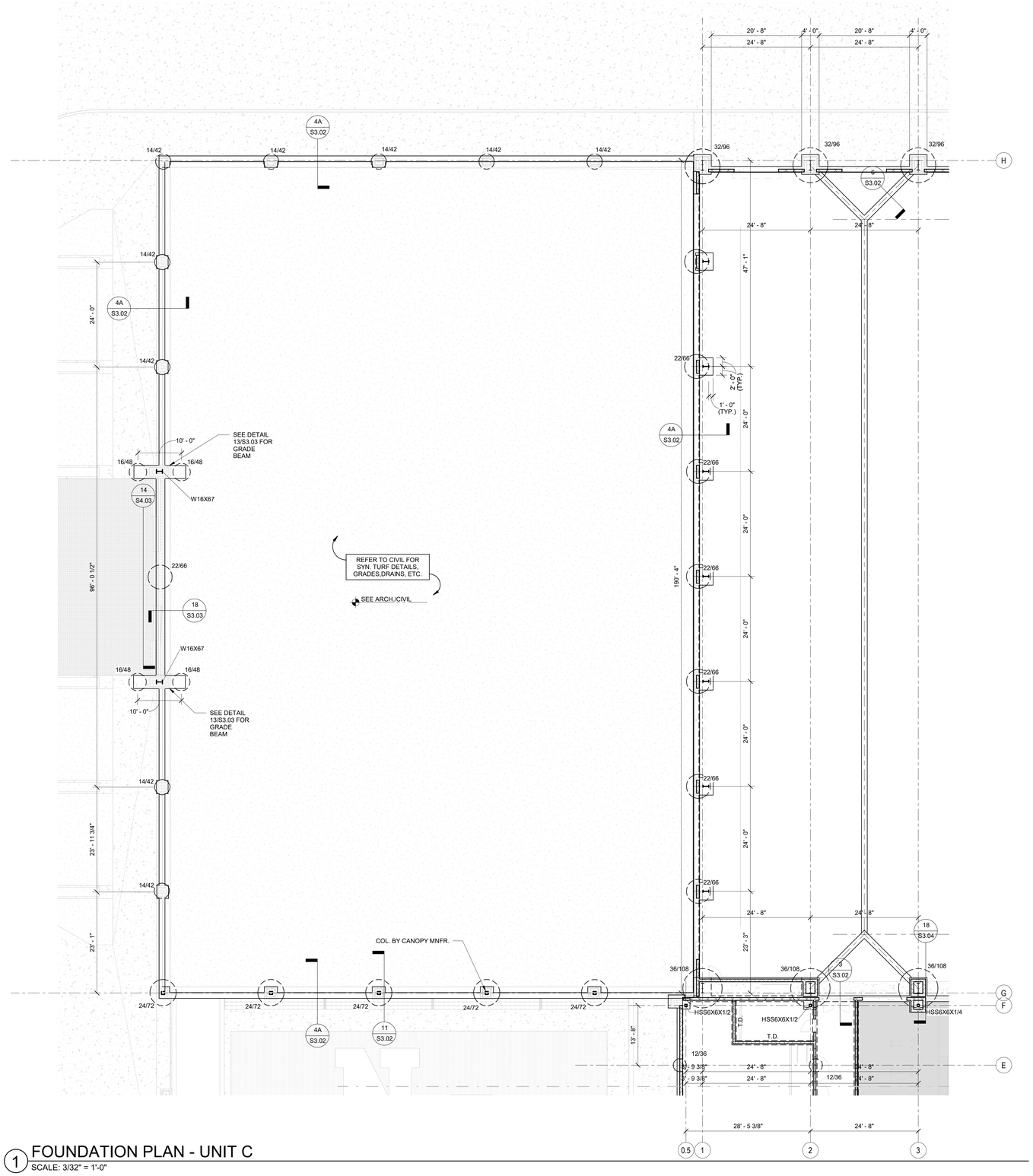
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
FOUNDATION PLAN - UNIT B

SHEET NO.
S2.01B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 FOUNDATION PLAN - UNIT C

SCALE: 3/32" = 1'-0"

PEMB FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAM (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. SEE PEMB FOR BASE PLATE INFORMATION.
7. REFER TO PEMB FOR SIZE, LOCATION AND ORIENTATION OF ALL COLUMNS, ANCHOR BOLTS. NOTIFY ARCH. OF ANY DISCREPANCIES BETWEEN PLANS FOR RESOLUTION PRIOR TO FABRICATION AND INSTALLATION.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. REFER TO MEP FOR SLOPE - INVERT ELEVATION (I.E.) AT DRAINS.
11. TYPICAL SLOPE AT FLOOR IS 1/8" PER FOOT, U.N.O. ON ARCH.
12. PROVIDE (2)#4X4'-0" TOP & BOT. AT ALL RE-ENTRANT CORNERS AT SLAB ON GRADE. TOP REINFORCING SHALL BE PLACED AT 1 1/4" CLEAR FROM THE TOP OF THE SLAB.
13. ——► WHERE SHOWN ON PLAN INDICATES SLOPE DIRECTION. SEE ARCH. FOR INFORMATION.
14. ALL COLUMN LOCATIONS SHOWN AND ASSOCIATED FOUNDATIONS ARE PLACEHOLDERS IN THE ABSENCE OF A COMPLETE METAL BUILDING DESIGN SUBMITTAL. SEE GENERAL NOTES FOR SUBMITTAL REQUIREMENTS.
15. 1" EXPNSION JOINT SHALL BE PROVIDED BETWEEN PEMB BUILDING AND THE ADJACENT STEEL BUILDING (UNIT B)
16. PEMB ENGINEER TO BRACE THE TOP OF CMU WALLS FOR ANY LATERAL LOAD

FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAMS (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. REF. ELEVATION = 0' - 0" CORRESPONDS TO CIVIL ELEVATION 33.50'. VERIFY WITH CIVIL.
7. SEE DETAIL 13/S3.03 FOR BASE PLATES.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.

KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137127
LICENSED
PROFESSIONAL
ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

25-0056.00

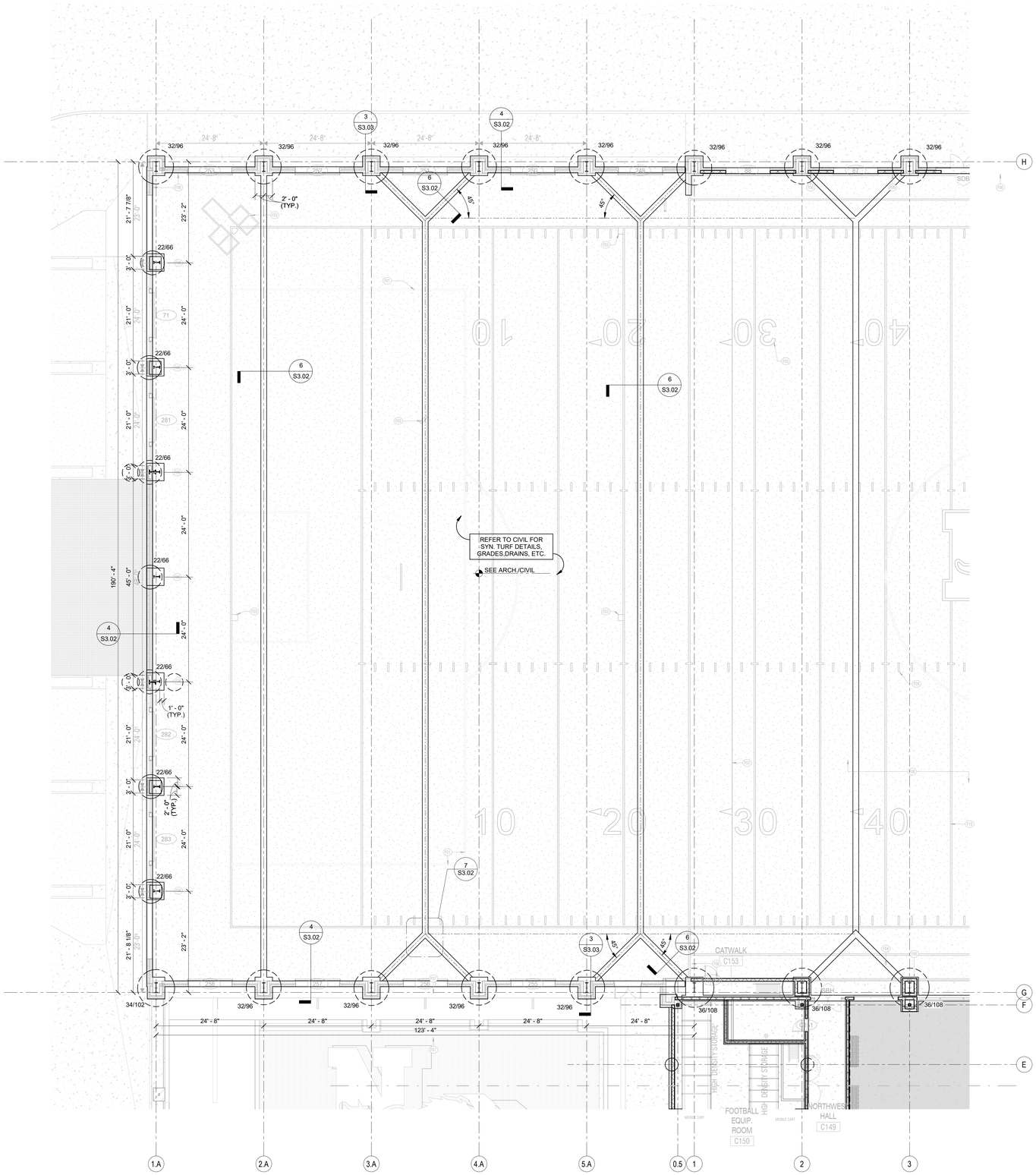
SHEET TITLE

FOUNDATION PLAN - UNIT C

SHEET NO.

S2.02C

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 FOUNDATION PLAN - UNIT C - ALTERNATE BID
SCALE: 3/32" = 1'-0"

PEMB FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAM (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. SEE PEMB FOR BASE PLATE INFORMATION.
7. REFER TO PEMB FOR SIZE, LOCATION AND ORIENTATION OF ALL COLUMNS, ANCHOR BOLTS. NOTIFY ARCH. OF ANY DISCREPANCIES BETWEEN PLANS FOR RESOLUTION PRIOR TO FABRICATION AND INSTALLATION.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. REFER TO MEP FOR SLOPE - INVERT ELEVATION (I.E.) AT DRAINS.
11. TYPICAL SLOPE AT FLOOR IS 1/8" PER FOOT, U.N.O. ON ARCH.
12. PROVIDE (2)#4X4'-0" TOP & BOT. AT ALL RE-ENTRANT CORNERS AT SLAB ON GRADE. TOP REINFORCING SHALL BE PLACED AT 1 1/4" CLEAR FROM THE TOP OF THE SLAB.
13. ——► WHERE SHOWN ON PLAN INDICATES SLOPE DIRECTION. SEE ARCH. FOR INFORMATION.
14. ALL COLUMN LOCATIONS SHOWN AND ASSOCIATED FOUNDATIONS ARE PLACEHOLDERS IN THE ABSENCE OF A COMPLETE METAL BUILDING DESIGN SUBMITTAL. SEE GENERAL NOTES FOR SUBMITTAL REQUIREMENTS.
15. 1" EXPNSION JOINT SHALL BE PROVIDED BETWEEN PEMB BUILDING AND THE ADJACENT STEEL BUILDING (UNIT B)
16. PEMB ENGINEER TO BRACE THE TOP OF CMU WALLS FOR ANY LATERAL LOAD

FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAMS (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. REF. ELEVATION = 0' - 0" CORRESPONDS TO CIVIL ELEVATION 33.50'. VERIFY WITH CIVIL.
7. SEE DETAIL 13/S3.03 FOR BASE PLATES.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.

KEY PLAN

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Matrix Structural Engineers
TBPE Firm Registration No. F-2640
STATE OF TEXAS
KHALIL TABAJA
137127
LICENSED PROFESSIONAL ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

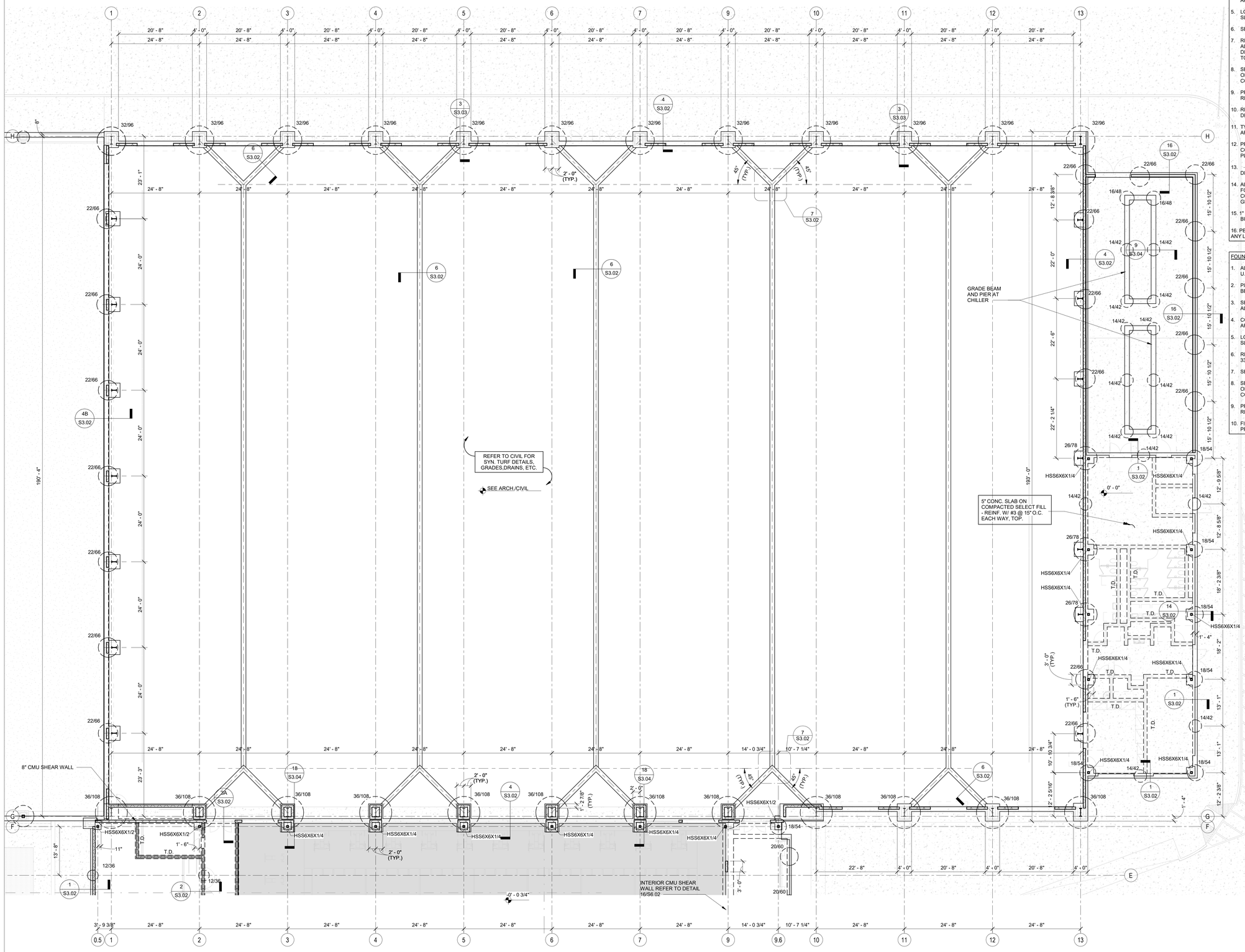
SHEET TITLE
FOUNDATION PLAN - UNIT C - ALTERNATE BID

SHEET NO.
S2.02C.1

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 FOUNDATION PLAN - UNIT D
SCALE: 3/32" = 1'-0"

PEMB FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAM (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. SEE PEMB FOR BASE PLATE INFORMATION.
7. REFER TO PEMB FOR SIZE, LOCATION AND ORIENTATION OF ALL COLUMNS, ANCHOR BOLTS. NOTIFY ARCH. OF ANY DISCREPANCIES BETWEEN PLANS FOR RESOLUTION PRIOR TO FABRICATION AND INSTALLATION.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. REFER TO MEP FOR SLOPE - INVERT ELEVATION (I.E.) AT DRAINS.
11. TYPICAL SLOPE AT FLOOR IS 1/8" PER FOOT, U.N.O. ON ARCH.
12. PROVIDE (2)#4X4'-0" TOP & BOT. AT ALL RE-ENTRANT CORNERS AT SLAB ON GRADE. TOP REINFORCING SHALL BE PLACED AT 1 1/4" CLEAR FROM THE TOP OF THE SLAB.
13. ——► WHERE SHOWN ON PLAN INDICATES SLOPE DIRECTION. SEE ARCH. FOR INFORMATION.
14. ALL COLUMN LOCATIONS SHOWN AND ASSOCIATED FOUNDATIONS ARE PLACEHOLDERS IN THE ABSENCE OF A COMPLETE METAL BUILDING DESIGN SUBMITTAL. SEE GENERAL NOTES FOR SUBMITTAL REQUIREMENTS.
15. 1" EXPNSION JOINT SHALL BE PROVIDED BETWEEN PEMB BUILDING AND THE ADJACENT STEEL BUILDING (UNIT B)
16. PEMB ENGINEER TO BRACE THE TOP OF CMU WALLS FOR ANY LATERAL LOAD

FOUNDATION PLAN NOTES:

1. ALL PIERS ARE CENTERED UNDER COLUMN CENTERLINES, U.N.O.
2. PIERS UNDER GRADE BEAMS (WITHOUT COLUMNS) SHALL BE CENTERED UNDER GRADE BEAMS, U.N.O.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FLOOR SLOPES, DEPRESSIONS, ETC.
4. COORDINATE ALL BRICK LEDGES AND DEPTH WITH ARCHITECTURAL DRAWINGS.
5. LOCATIONS NOTED THUS: 0' - 0" INDICATES TOP OF SLAB ELEVATION.
6. REF. ELEVATION = 0' - 0" CORRESPONDS TO CIVIL ELEVATION 33.50'. VERIFY WITH CIVIL.
7. SEE DETAIL 13/S3.03 FOR BASE PLATES.
8. SEE 5/S3.01, 7/S3.01 & 10/S3.01 FOR ADDITIONAL REBAR AT OPENINGS, DISCONTINUOUS JOINTS, AND RE-ENTRANT CORNERS IN SLAB-ON-GRADE.
9. PROVIDE CONTRACTION JOINTS AND DISCONTINUOUS SLAB REINFORCING AS SHOWN IN DETAIL 6/S3.01.
10. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.

KEY PLAN

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Matrix Structural Engineers
TBPE Firm Registration No. F-2640
STATE OF TEXAS
KHALIL TABAJA
117127
LICENSED PROFESSIONAL ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

25-0056.00

SHEET TITLE

FOUNDATION PLAN - UNIT D

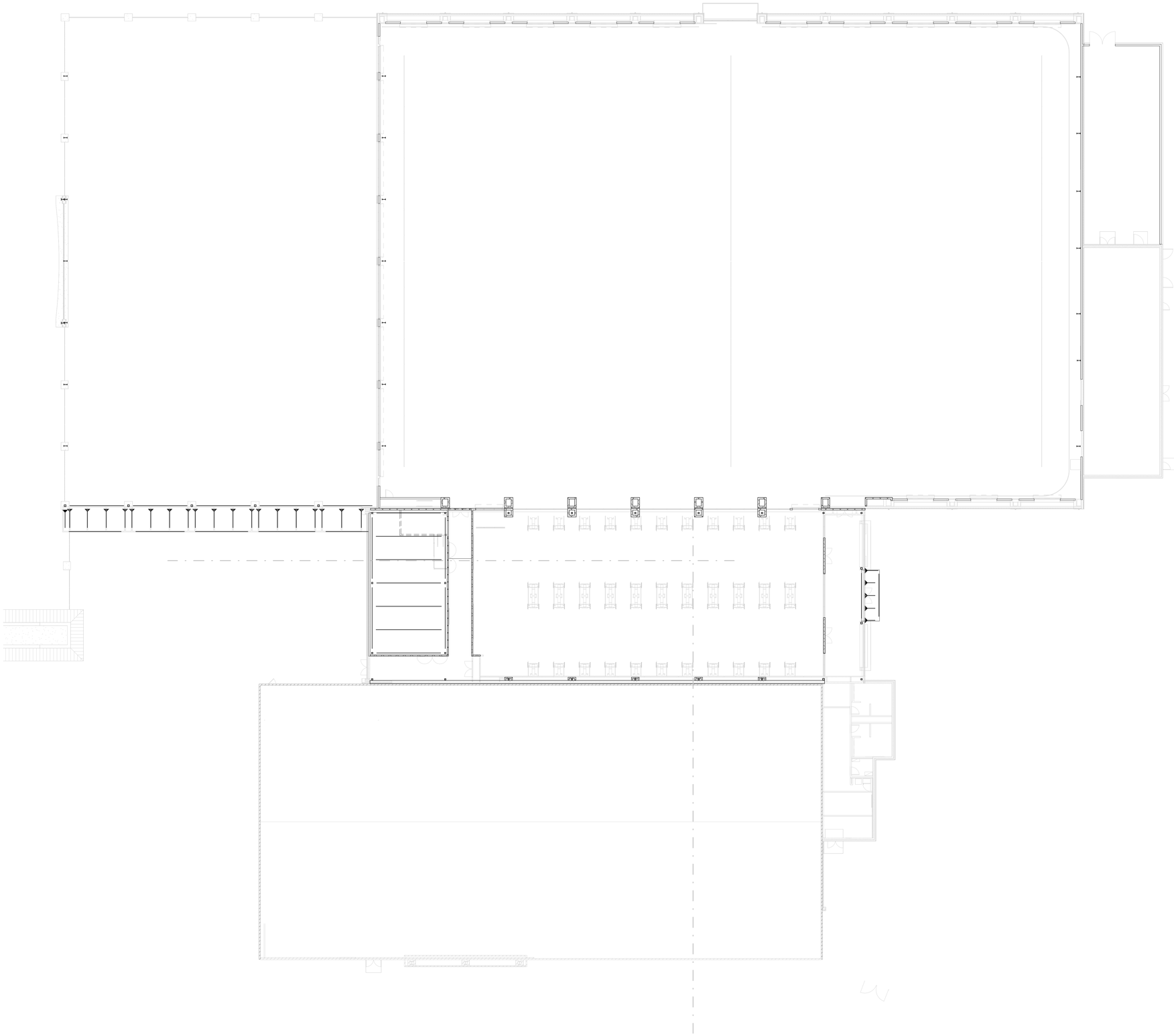
SHEET NO.

S2.03D

North Shore Multi-use Indoor Facility

Galena Park ISD
HOUSTON, TEXAS

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 MEZZANINE FRAMING PLAN - OVERALL
SCALE: 1/16" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. LOCATIONS SHOWN THUS: ( ) INDICATES TOP OF STEEL (T.O.S.) ELEVATION (TOP OF STEEL = TOP OF JOIST OR BOTTOM OF DECK).
2. LOCATIONS SHOWN THUS: C=3/4" INDICATES UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
4. JOISTS SHALL BE DESIGNED FOR ADDITIONAL LOADS RESULTING FROM RTU'S AND OTHER MECHANICAL EQUIPMENT ON THE ROOF OR SUSPENDED FROM THE ROOF STRUCTURE. SEE ARCHITECTURAL AND MEP DRAWINGS FOR LOCATIONS.
5. SHADED AREA IS DESIGNATED TO RECEIVE MECHANICAL EQUIPMENT - ASSUME 2000# UNIT (TO BE SUPPORTED BY 2 JOISTS, 1000# DL PER JOIST W/ 400# REVERSIBLE WIND LOAD PER JOIST). EACH JOIST SHALL BE DESIGNED FOR ADDITIONAL LOAD OF ONE SUCH UNIT PLACED ANYWHERE ALONG THE SPAN (IN SHADED AREA), A MAX. OF (2) UNITS SHALL BE LOCATED PER BAY. GIRDERS SHALL BE DESIGNED FOR (2) UNITS LOCATED ANYWHERE WITHIN THE SHADED AREA.
6. SPACE JOISTS EQUALLY, U.N.O.
7. PROVIDE 3/16" CLOSURE PLATES AT ALL TUBE BEAMS.
8. REFER TO ARCHITECTURAL DRAWINGS / MEP FOR LOCATIONS OF ROOF DRAINS, OVERFLOW DRAINS AND TAPERED INSULATION.
9. ROOF SHALL BE 1.5B, 22GA DECK AS MANUFACTURED BY VULCRAFT OR EQUIVALENT. SEE ARCHITECTURAL DRAWINGS FOR INSULATION, ROOFING, ETC. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING: 36/7 PATTERN.
   b. PARALLEL BEARINGS AND EDGE: AT 6"O.C.
   c. SIDE SEAMS: #10 TEK SCREWS AT 12"O.C.
10. IN LIEU OF THE DECK ATTACHMENT SHOWN ABOVE, ALTERNATE DECK ATTACHMENT SHALL BE AS FOLLOWS:
    a. REPLACE EACH 5/8"Ø WELD WITH ONE HILTI X-HSN 24 FASTENER FOR BASE STEEL FLANGE THICKNESS (tf) ≤ 3/8" AT THICKER BASE STEEL USE ONE HILTI X-ENP-19-L15 TYPE FASTENER.
    b. REPLACE EACH SIDE SEAM #10 SCREW WITH ONE HILTI S-SLC 01 M HWH FASTENER FOR DECK THICKNESS LESS THAN OR EQUAL TO 20 GAGE.
    c. ATTACHMENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
11. ⟝ = MOMENT CONNECTION
12. B.F.B. INDICATES BOTTOM FLANGE BRACE, SEE 1/S5.01 FOR DETAIL.
13. V = 'x' K INDICATES ULTIMATE STRENGTH BEAM SHEAR REACTIONS IN KIPS (LRFD) AT THE END OF THE BEAM SHOWN. WHERE INDICATED, THIS VALUE SHALL SUPERCEDE THE CRITERIA IN THE CHART ABOVE.
14. M = 'x' K-FT INDICATES ULTIMATE STRENGTH BEAM MOMENT REACTIONS IN KIP-FEET (LRFD) AT THE END OF THE BEAM SHOWN.
15. JOIST SUPPORTING RTU TO BE DESIGNED FOR ADDITION LOADS.
16. (SC) INDICATES SLIP CRITICAL CONNECTION. →20K← DESIGN CONNECTION FOR AXIAL TENSION/COMPRESSION ULTIMATE FORCE (LRFD) AS SHOWN IN THE PLAN. SEE 14/S4.01 FOR CONNECTION DETAILS.

MEZZANINE FRAMING PLAN NOTES:

1. TOP OF CONCRETE ELEVATION = SEE PLAN
2. LOCATIONS SHOWN THUS: (12) C=3/4" INDICATES NUMBER OF SHEAR CONNECTORS AS 12 AND UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. SPACE JOISTS EQUALLY U.N.O.
4. PROVIDE END PLATES AT ALL TUBE BEAMS.
5. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
6. HSS 6X6X5/8 FOR ALL COLUMN SIZES NOT SHOWN.
7. ⟝ = MOMENT CONNECTION
8. ALL LOWER TUBE BEAM ELEVATIONS TO BE VERIFIED WITH ARCHITECT DRAWINGS.
9. FLOOR SHALL BE 3 1/2" NORMAL WEIGHT CONCRETE OVER THE FLUTES OF 2" x 18 GA TYPE VLI STEEL DECK AS MANUFACTURED BY VULCRAFT OR APPROVED EQUIVALENT TO TOTAL THICKNESS = 5 1/2". REINFORCE CONCRETE WITH #3 AT 18" O.C. EACH WAY. PLACE REBAR PERPENDICULAR TO BEAMS (PARALLEL TO DECK) IN THE OUTSIDE LAYER. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING : 36/4 PATTERN.
   b. PARALLEL BEARING AND EDGE : AT 12" O.C.
   c. SIDE SEAMS : SEAM WELDS AT 12" O.C.
10. SEE 19/S5.01 FOR ADDITIONAL SLAB REINFORCING AT ALL BEAMS & GIRDERS.
11. SEE 13/S5.01 & 20/S5.01 FOR ADDITIONAL SLAB REINFORCING AT OPENINGS AND EDGES.
12. SEE 11/S5.01 & 15/S5.01 FOR ADDITIONAL STEEL ANGLES AND REINFORCING AT STEEL COLUMNS.
13. AT SLOPED FLOOR LOCATIONS ON ELEVATED FLOORS WHERE OVERALL SLAB THICKNESS IS LESS THAN 5 1/2", SPRAY FIREPROOFING SHALL BE APPLIED TO THE UNDERSIDE OF THE DECK IN SLOPED AREA TO MEET REQUIRED FIRE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE RATING.

KEY PLAN

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137127
LICENSED
PROFESSIONAL
ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

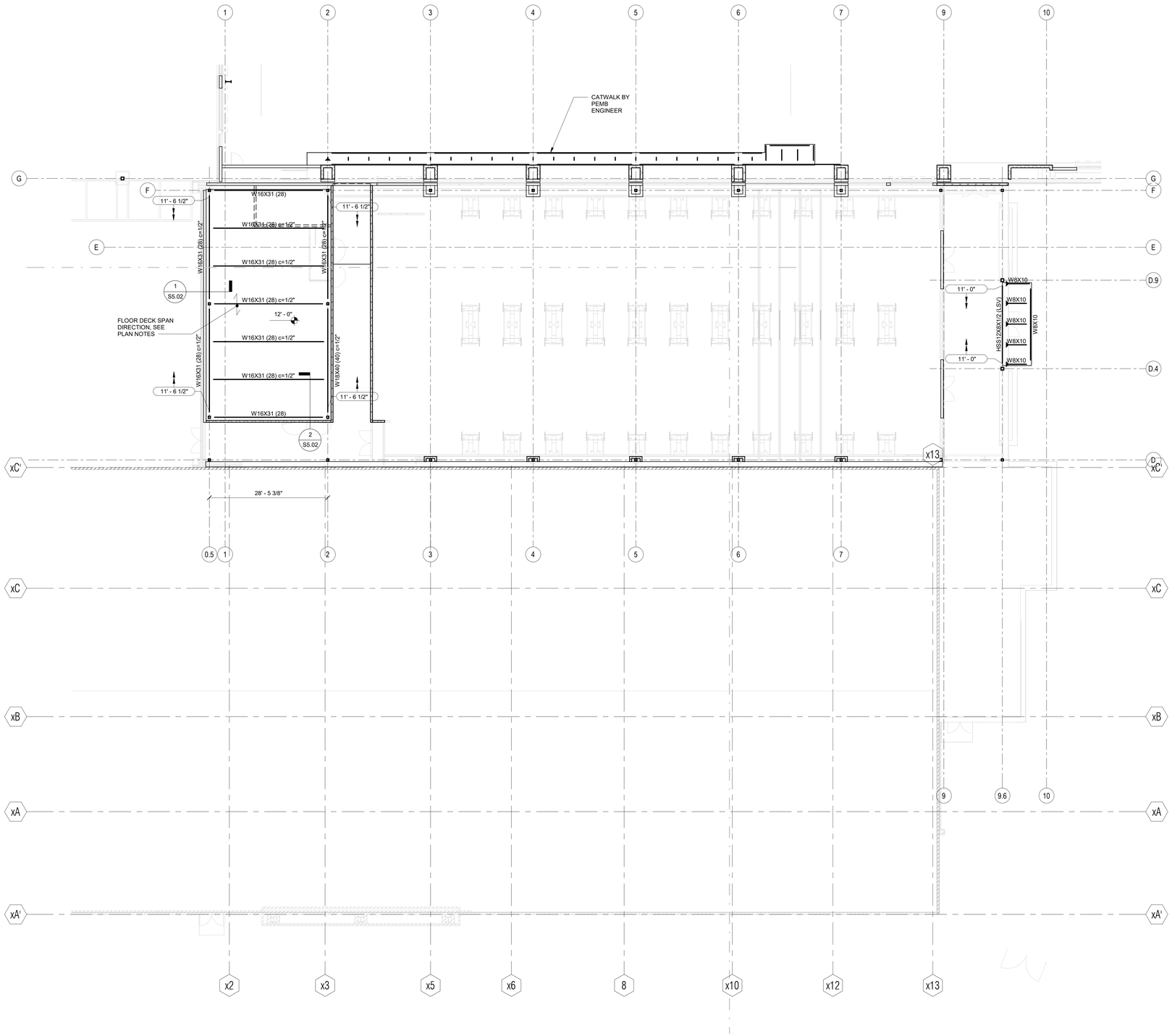
PROJECT NO.
25-0056.00

SHEET TITLE
MEZZANINE FRAMING PLAN - OVERALL

SHEET NO.
S2.10

North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 MEZZANINE FRAMING PLAN - UNIT B

SCALE: 3/32" = 1'-0"

MEZZANINE FRAMING PLAN NOTES:

1. TOP OF CONCRETE ELEVATION = SEE PLAN
2. LOCATIONS SHOWN THUS: (12) C=3/4" INDICATES NUMBER OF SHEAR CONNECTORS AS 12 AND UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. SPACE JOISTS EQUALLY U.N.O.
4. PROVIDE END PLATES AT ALL TUBE BEAMS.
5. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
6. HSS 6X6X5/8 FOR ALL COLUMN SIZES NOT SHOWN.
7. ⟝ = MOMENT CONNECTION
8. ALL LOWER TUBE BEAM ELEVATIONS TO BE VERIFIED WITH ARCHITECT DRAWINGS.
9. FLOOR SHALL BE 3 1/2" NORMAL WEIGHT CONCRETE OVER THE FLUTES OF 2" x 18 GA TYPE VLI STEEL DECK AS MANUFACTURED BY VULCRAFT OR APPROVED EQUIVALENT TO TOTAL THICKNESS = 5 1/2". REINFORCE CONCRETE WITH #3 AT 18" O.C. EACH WAY. PLACE REBAR PERPENDICULAR TO BEAMS (PARALLEL TO DECK) IN THE OUTSIDE LAYER. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING : 36/4 PATTERN.
   b. PARALLEL BEARING AND EDGE : AT 12" O.C.
   c. SIDE SEAMS : SEAM WELDS AT 12" O.C.
10. SEE 19/S5.01 FOR ADDITIONAL SLAB REINFORCING AT ALL BEAMS & GIRDERS.
11. SEE 13/S5.01 & 20/S5.01 FOR ADDITIONAL SLAB REINFORCING AT OPENINGS AND EDGES.
12. SEE 11/S5.01 & 15/S5.01 FOR ADDITIONAL STEEL ANGLES AND REINFORCING AT STEEL COLUMNS.
13. AT SLOPED FLOOR LOCATIONS ON ELEVATED FLOORS WHERE OVERALL SLAB THICKNESS IS LESS THAN 5 1/2", SPRAY FIREPROOFING SHALL BE APPLIED TO THE UNDERSIDE OF THE DECK IN SLOPED AREA TO MEET REQUIRED FIRE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE RATING.

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137172
LICENSED
PROFESSIONAL
ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

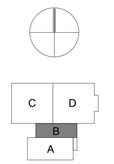
25-0056.00

SHEET TITLE

MEZZANINE FRAMING PLAN - UNIT B

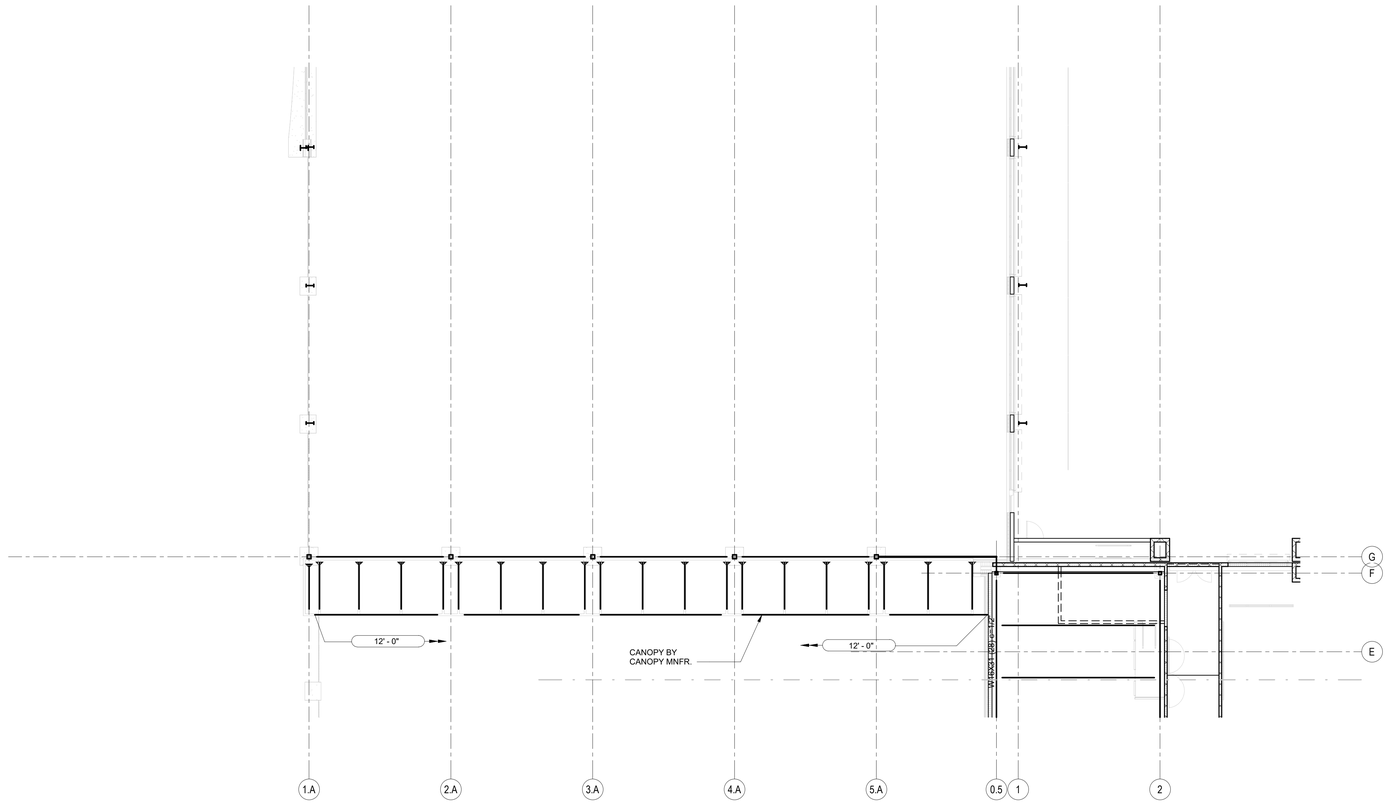
SHEET NO.

S2.11B



KEY PLAN

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 MEZZANINE/ROOF FRAMING PLAN - UNIT C
SCALE: 3/32" = 1'-0"

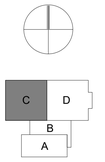
ROOF FRAMING PLAN NOTES:

1. LOCATIONS SHOWN THUS: ( ) INDICATES TOP OF STEEL (T.O.S.) ELEVATION (TOP OF STEEL = TOP OF JOIST OR BOTTOM OF DECK).
2. LOCATIONS SHOWN THUS: C=3/4" INDICATES UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
4. JOISTS SHALL BE DESIGNED FOR ADDITIONAL LOADS RESULTING FROM RTU'S AND OTHER MECHANICAL EQUIPMENT ON THE ROOF OR SUSPENDED FROM THE ROOF STRUCTURE. SEE ARCHITECTURAL AND MEP DRAWINGS FOR LOCATIONS.
5. SHADED AREA IS DESIGNATED TO RECEIVE MECHANICAL EQUIPMENT - ASSUME 2000# UNIT (TO BE SUPPORTED BY 2 JOISTS, 1000# DL PER JOIST W/ 400# REVERSIBLE WIND LOAD PER JOIST). EACH JOIST SHALL BE DESIGNED FOR ADDITIONAL LOAD OF ONE SUCH UNIT PLACED ANYWHERE ALONG THE SPAN (IN SHADED AREA), A MAX. OF (2) UNITS SHALL BE LOCATED PER BAY. GIRDERS SHALL BE DESIGNED FOR (2) UNITS LOCATED ANYWHERE WITHIN THE SHADED AREA.
6. SPACE JOISTS EQUALLY, U.N.O.
7. PROVIDE 3/16" CLOSURE PLATES AT ALL TUBE BEAMS.
8. REFER TO ARCHITECTURAL DRAWINGS / MEP FOR LOCATIONS OF ROOF DRAINS, OVERFLOW DRAINS AND TAPERED INSULATION.
9. ROOF SHALL BE 1.5B, 22GA DECK AS MANUFACTURED BY VULCRAFT OR EQUIVALENT. SEE ARCHITECTURAL DRAWINGS FOR INSULATION, ROOFING, ETC. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING: 36/7 PATTERN.
   b. PARALLEL BEARINGS AND EDGE: AT 6"O.C.
   c. SIDE SEAMS: #10 TEK SCREWS AT 12"O.C.
10. IN LIEU OF THE DECK ATTACHMENT SHOWN ABOVE, ALTERNATE DECK ATTACHMENT SHALL BE AS FOLLOWS:
    a. REPLACE EACH 5/8"Ø WELD WITH ONE HILTI X-HSN 24 FASTENER FOR BASE STEEL FLANGE THICKNESS (tf) ≤ 3/8" AT THICKER BASE STEEL USE ONE HILTI X-ENP-19-L15 TYPE FASTENER.
    b. REPLACE EACH SIDE SEAM #10 SCREW WITH ONE HILTI S-SLC 01 M HWH FASTENER FOR DECK THICKNESS LESS THAN OR EQUAL TO 20 GAGE.
    c. ATTACHMENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
11. ⟝ = MOMENT CONNECTION
12. B.F.B. INDICATES BOTTOM FLANGE BRACE, SEE 1/S5.01 FOR DETAIL.
13. V = 'x' K INDICATES ULTIMATE STRENGTH BEAM SHEAR REACTIONS IN KIPS (LRFD) AT THE END OF THE BEAM SHOWN. WHERE INDICATED, THIS VALUE SHALL SUPERCEDE THE CRITERIA IN THE CHART ABOVE.
14. M = 'x' K-FT INDICATES ULTIMATE STRENGTH BEAM MOMENT REACTIONS IN KIP-FEET (LRFD) AT THE END OF THE BEAM SHOWN.
15. JOIST SUPPORTING RTU TO BE DESIGNED FOR ADDITION LOADS.
16. (SC) INDICATES SLIP CRITICAL CONNECTION. →20K← DESIGN CONNECTION FOR AXIAL TENSION/COMPRESSION ULTIMATE FORCE (LRFD) AS SHOWN IN THE PLAN. SEE 14/S4.01 FOR CONNECTION DETAILS.

MEZZANINE FRAMING PLAN NOTES:

1. TOP OF CONCRETE ELEVATION = SEE PLAN
2. LOCATIONS SHOWN THUS: (12) C=3/4" INDICATES NUMBER OF SHEAR CONNECTORS AS 12 AND UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. SPACE JOISTS EQUALLY U.N.O.
4. PROVIDE END PLATES AT ALL TUBE BEAMS.
5. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
6. HSS 6X6X5/8 FOR ALL COLUMN SIZES NOT SHOWN.
7. ⟝ = MOMENT CONNECTION
8. ALL LOWER TUBE BEAM ELEVATIONS TO BE VERIFIED WITH ARCHITECT DRAWINGS.
9. FLOOR SHALL BE 3 1/2" NORMAL WEIGHT CONCRETE OVER THE FLUTES OF 2" x 18 GA TYPE VLI STEEL DECK AS MANUFACTURED BY VULCRAFT OR APPROVED EQUIVALENT TO TOTAL THICKNESS = 5 1/2". REINFORCE CONCRETE WITH #3 AT 18" O.C. EACH WAY. PLACE REBAR PERPENDICULAR TO BEAMS (PARALLEL TO DECK) IN THE OUTSIDE LAYER. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING : 36/4 PATTERN.
   b. PARALLEL BEARING AND EDGE : AT 12" O.C.
   c. SIDE SEAMS : SEAM WELDS AT 12" O.C.
10. SEE 19/S5.01 FOR ADDITIONAL SLAB REINFORCING AT ALL BEAMS & GIRDERS.
11. SEE 13/S5.01 & 20/S5.01 FOR ADDITIONAL SLAB REINFORCING AT OPENINGS AND EDGES.
12. SEE 11/S5.01 & 15/S5.01 FOR ADDITIONAL STEEL ANGLES AND REINFORCING AT STEEL COLUMNS.
13. AT SLOPED FLOOR LOCATIONS ON ELEVATED FLOORS WHERE OVERALL SLAB THICKNESS IS LESS THAN 5 1/2", SPRAY FIREPROOFING SHALL BE APPLIED TO THE UNDERSIDE OF THE DECK IN SLOPED AREA TO MEET REQUIRED FIRE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE RATING.

KEY PLAN



ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

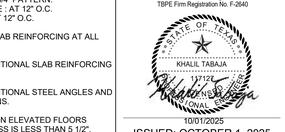
STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640



10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

25-0056.00

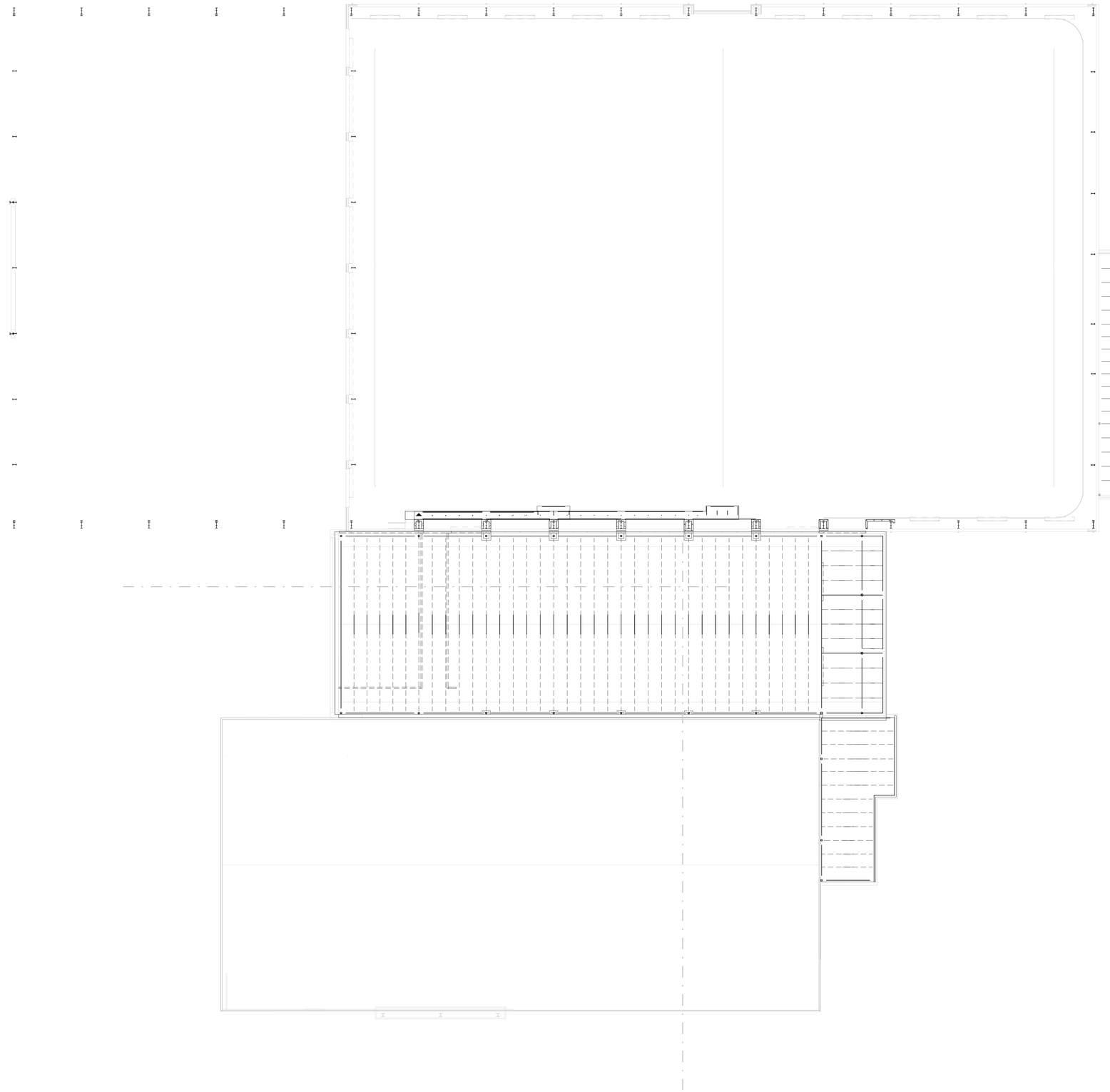
SHEET TITLE

MEZZANINE FRAMING PLAN - UNIT C

SHEET NO.

S2.12C

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ROOF FRAMING PLAN - OVERALL
SCALE: 1/16" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. LOCATIONS SHOWN THUS: ( ) INDICATES TOP OF STEEL (T.O.S.) ELEVATION (TOP OF STEEL = TOP OF JOIST OR BOTTOM OF DECK).
2. LOCATIONS SHOWN THUS: C=3/4" INDICATES UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
4. JOISTS SHALL BE DESIGNED FOR ADDITIONAL LOADS RESULTING FROM RTU'S AND OTHER MECHANICAL EQUIPMENT ON THE ROOF OR SUSPENDED FROM THE ROOF STRUCTURE. SEE ARCHITECTURAL AND MEP DRAWINGS FOR LOCATIONS.
5. SHADED AREA IS DESIGNATED TO RECEIVE MECHANICAL EQUIPMENT - ASSUME 2000# UNIT (TO BE SUPPORTED BY 2 JOISTS, 1000# DL PER JOIST W/ 400# REVERSIBLE WIND LOAD PER JOIST). EACH JOIST SHALL BE DESIGNED FOR ADDITIONAL LOAD OF ONE SUCH UNIT PLACED ANYWHERE ALONG THE SPAN (IN SHADED AREA), A MAX. OF (2) UNITS SHALL BE LOCATED PER BAY. GIRDERS SHALL BE DESIGNED FOR (2) UNITS LOCATED ANYWHERE WITHIN THE SHADED AREA.
6. SPACE JOISTS EQUALLY, U.N.O.
7. PROVIDE 3/16" CLOSURE PLATES AT ALL TUBE BEAMS.
8. REFER TO ARCHITECTURAL DRAWINGS / MEP FOR LOCATIONS OF ROOF DRAINS, OVERFLOW DRAINS AND TAPERED INSULATION.
9. ROOF SHALL BE 1.5B, 22GA DECK AS MANUFACTURED BY VULCRAFT OR EQUIVALENT. SEE ARCHITECTURAL DRAWINGS FOR INSULATION, ROOFING, ETC. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING: 36/7 PATTERN.
   b. PARALLEL BEARINGS AND EDGE: AT 6"O.C.
   c. SIDE SEAMS: #10 TEK SCREWS AT 12"O.C.
10. IN LIEU OF THE DECK ATTACHMENT SHOWN ABOVE, ALTERNATE DECK ATTACHMENT SHALL BE AS FOLLOWS:
    a. REPLACE EACH 5/8"Ø WELD WITH ONE HILTI X-HSN 24 FASTENER FOR BASE STEEL FLANGE THICKNESS (tf) ≤ 3/8" AT THICKER BASE STEEL USE ONE HILTI X-ENP-19-L15 TYPE FASTENER.
    b. REPLACE EACH SIDE SEAM #10 SCREW WITH ONE HILTI S-SLC 01 M HWH FASTENER FOR DECK THICKNESS LESS THAN OR EQUAL TO 20 GAGE.
    c. ATTACHMENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
11. ⟝ = MOMENT CONNECTION
12. B.F.B. INDICATES BOTTOM FLANGE BRACE, SEE 1/S5.01 FOR DETAIL.
13. V = 'x' K INDICATES ULTIMATE STRENGTH BEAM SHEAR REACTIONS IN KIPS (LRFD) AT THE END OF THE BEAM SHOWN. WHERE INDICATED, THIS VALUE SHALL SUPERCEDE THE CRITERIA IN THE CHART ABOVE.
14. M = 'x' K-FT INDICATES ULTIMATE STRENGTH BEAM MOMENT REACTIONS IN KIP-FEET (LRFD) AT THE END OF THE BEAM SHOWN.
15. JOIST SUPPORTING RTU TO BE DESIGNED FOR ADDITION LOADS.
16. (SC) INDICATES SLIP CRITICAL CONNECTION. →20K← DESIGN CONNECTION FOR AXIAL TENSION/COMPRESSION ULTIMATE FORCE (LRFD) AS SHOWN IN THE PLAN. SEE 14/S4.01 FOR CONNECTION DETAILS.

KEY PLAN

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137126
LICENSED
PROFESSIONAL ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

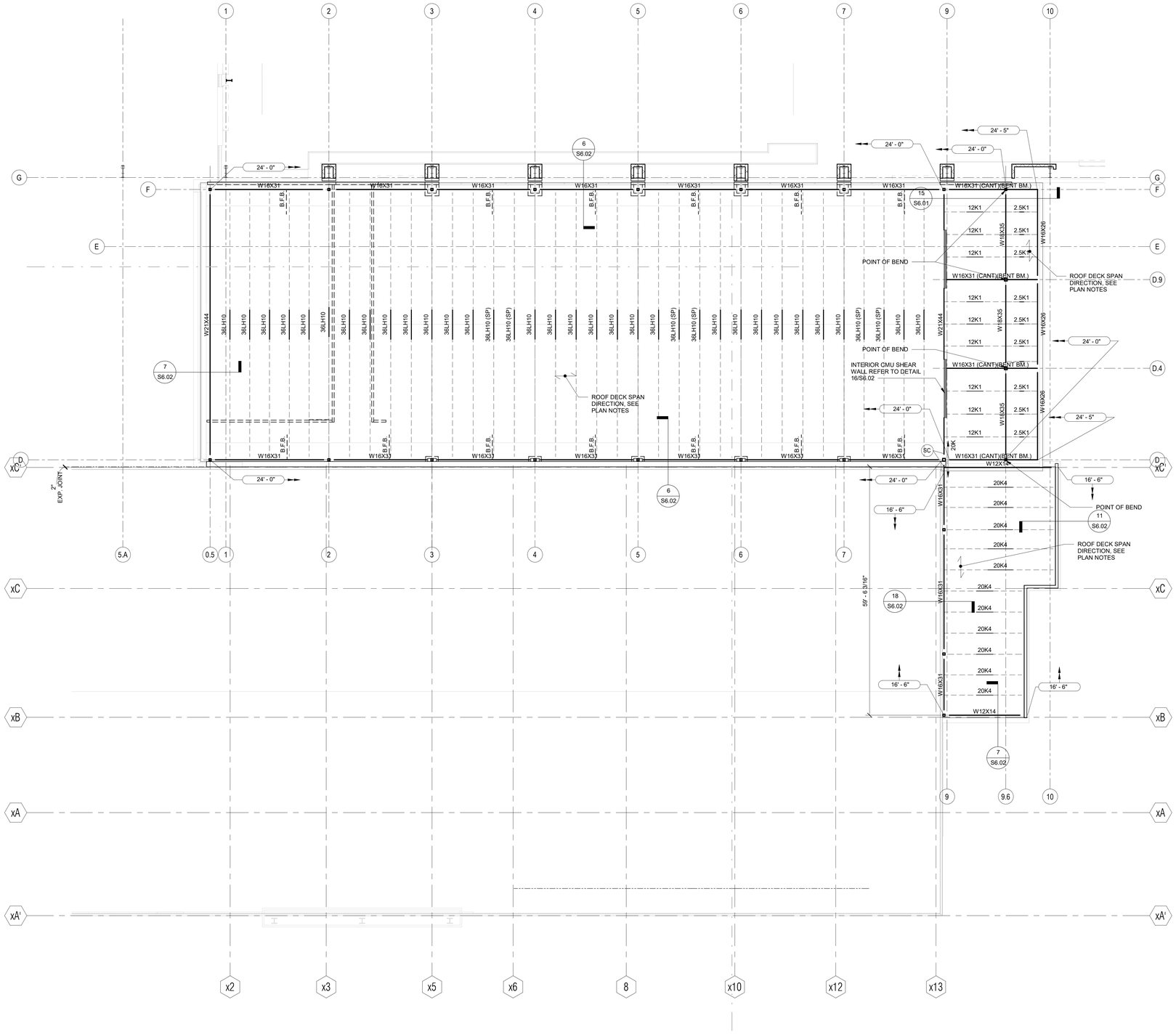
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
ROOF FRAMING PLAN - OVERALL

SHEET NO.
S2.20

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ROOF FRAMING PLAN - UNIT B
SCALE: 3/32" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. LOCATIONS SHOWN THUS: ( ) INDICATES TOP OF STEEL (T.O.S.) ELEVATION (TOP OF STEEL = TOP OF JOIST OR BOTTOM OF DECK).
2. LOCATIONS SHOWN THUS: C=3/4" INDICATES UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
4. JOISTS SHALL BE DESIGNED FOR ADDITIONAL LOADS RESULTING FROM RTU'S AND OTHER MECHANICAL EQUIPMENT ON THE ROOF OR SUSPENDED FROM THE ROOF STRUCTURE. SEE ARCHITECTURAL AND MEP DRAWINGS FOR LOCATIONS.
5. SHADED AREA IS DESIGNATED TO RECEIVE MECHANICAL EQUIPMENT - ASSUME 2000# UNIT (TO BE SUPPORTED BY 2 JOISTS, 1000# DL PER JOIST W/ 400# REVERSIBLE WIND LOAD PER JOIST). EACH JOIST SHALL BE DESIGNED FOR ADDITIONAL LOAD OF ONE SUCH UNIT PLACED ANYWHERE ALONG THE SPAN (IN SHADED AREA), A MAX. OF (2) UNITS SHALL BE LOCATED PER BAY. GIRDERS SHALL BE DESIGNED FOR (2) UNITS LOCATED ANYWHERE WITHIN THE SHADED AREA.
6. SPACE JOISTS EQUALLY, U.N.O.
7. PROVIDE 3/16" CLOSURE PLATES AT ALL TUBE BEAMS.
8. REFER TO ARCHITECTURAL DRAWINGS / MEP FOR LOCATIONS OF ROOF DRAINS, OVERFLOW DRAINS AND TAPERED INSULATION.
9. ROOF SHALL BE 1.5B, 22GA DECK AS MANUFACTURED BY VULCRAFT OR EQUIVALENT. SEE ARCHITECTURAL DRAWINGS FOR INSULATION, ROOFING, ETC. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING: 36/7 PATTERN.
   b. PARALLEL BEARINGS AND EDGE: AT 6"O.C.
   c. SIDE SEAMS: #10 TEK SCREWS AT 12"O.C.
10. IN LIEU OF THE DECK ATTACHMENT SHOWN ABOVE, ALTERNATE DECK ATTACHMENT SHALL BE AS FOLLOWS:
    a. REPLACE EACH 5/8"Ø WELD WITH ONE HILTI X-HSN 24 FASTENER FOR BASE STEEL FLANGE THICKNESS (tf) ≤ 3/8" AT THICKER BASE STEEL USE ONE HILTI X-ENP-19-L15 TYPE FASTENER.
    b. REPLACE EACH SIDE SEAM #10 SCREW WITH ONE HILTI S-SLC 01 M HWH FASTENER FOR DECK THICKNESS LESS THAN OR EQUAL TO 20 GAGE.
    c. ATTACHMENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
11. ⟝ = MOMENT CONNECTION
12. B.F.B. INDICATES BOTTOM FLANGE BRACE, SEE 1/S5.01 FOR DETAIL.
13. V = 'x' K INDICATES ULTIMATE STRENGTH BEAM SHEAR REACTIONS IN KIPS (LRFD) AT THE END OF THE BEAM SHOWN. WHERE INDICATED, THIS VALUE SHALL SUPERCEDE THE CRITERIA IN THE CHART ABOVE.
14. M = 'x' K-FT INDICATES ULTIMATE STRENGTH BEAM MOMENT REACTIONS IN KIP-FEET (LRFD) AT THE END OF THE BEAM SHOWN.
15. JOIST SUPPORTING RTU TO BE DESIGNED FOR ADDITION LOADS.
16. (SC) INDICATES SLIP CRITICAL CONNECTION. →20K DESIGN CONNECTION FOR AXIAL TENSION/COMPRESSION ULTIMATE FORCE (LRFD) AS SHOWN IN THE PLAN. SEE 14/S4.01 FOR CONNECTION DETAILS.

KEY PLAN

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137127
LICENSED
PROFESSIONAL
ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

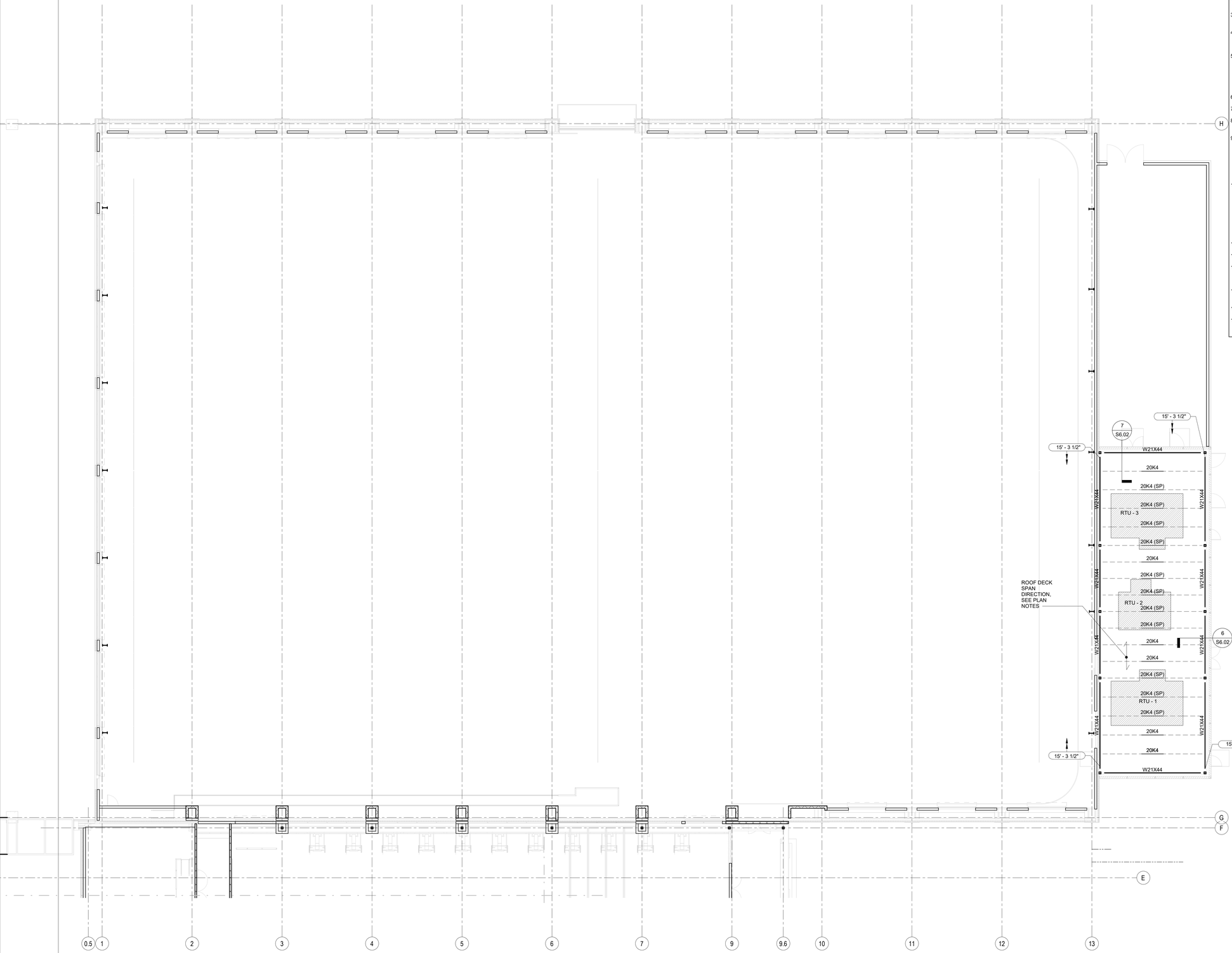
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
ROOF FRAMING PLAN - UNIT B

SHEET NO.
S2.21B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ROOF FRAMING PLAN - UNIT D
SCALE: 3/32" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. LOCATIONS SHOWN THUS: ( ) INDICATES TOP OF STEEL (T.O.S.) ELEVATION (TOP OF STEEL = TOP OF JOIST OR BOTTOM OF DECK).
2. LOCATIONS SHOWN THUS: C=3/4" INDICATES UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
4. JOISTS SHALL BE DESIGNED FOR ADDITIONAL LOADS RESULTING FROM RTU'S AND OTHER MECHANICAL EQUIPMENT ON THE ROOF OR SUSPENDED FROM THE ROOF STRUCTURE. SEE ARCHITECTURAL AND MEP DRAWINGS FOR LOCATIONS.
5. SHADED AREA IS DESIGNATED TO RECEIVE MECHANICAL EQUIPMENT - ASSUME 2000# UNIT (TO BE SUPPORTED BY 2 JOISTS, 1000# DL PER JOIST W/ 400# REVERSIBLE WIND LOAD PER JOIST). EACH JOIST SHALL BE DESIGNED FOR ADDITIONAL LOAD OF ONE SUCH UNIT PLACED ANYWHERE ALONG THE SPAN (IN SHADED AREA), A MAX. OF (2) UNITS SHALL BE LOCATED PER BAY. GIRDERS SHALL BE DESIGNED FOR (2) UNITS LOCATED ANYWHERE WITHIN THE SHADED AREA.
6. SPACE JOISTS EQUALLY, U.N.O.
7. PROVIDE 3/16" CLOSURE PLATES AT ALL TUBE BEAMS.
8. REFER TO ARCHITECTURAL DRAWINGS / MEP FOR LOCATIONS OF ROOF DRAINS, OVERFLOW DRAINS AND TAPERED INSULATION.
9. ROOF SHALL BE 1.5B, 22GA DECK AS MANUFACTURED BY VULCRAFT OR EQUIVALENT. SEE ARCHITECTURAL DRAWINGS FOR INSULATION, ROOFING, ETC. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING: 36/7 PATTERN.
   b. PARALLEL BEARINGS AND EDGE: AT 6"O.C.
   c. SIDE SEAMS: #10 TEK SCREWS AT 12"O.C.
10. IN LIEU OF THE DECK ATTACHMENT SHOWN ABOVE, ALTERNATE DECK ATTACHMENT SHALL BE AS FOLLOWS:
    a. REPLACE EACH 5/8"Ø WELD WITH ONE HILTI X-HSN 24 FASTENER FOR BASE STEEL FLANGE THICKNESS (tf) ≤ 3/8" AT THICKER BASE STEEL USE ONE HILTI X-ENP-19-L15 TYPE FASTENER.
    b. REPLACE EACH SIDE SEAM #10 SCREW WITH ONE HILTI S-SLC 01 M HWH FASTENER FOR DECK THICKNESS LESS THAN OR EQUAL TO 20 GAGE.
    c. ATTACHMENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
11. ⟝ = MOMENT CONNECTION
12. B.F.B. INDICATES BOTTOM FLANGE BRACE, SEE 1/S5.01 FOR DETAIL.
13. V = 'x' K INDICATES ULTIMATE STRENGTH BEAM SHEAR REACTIONS IN KIPS (LRFD) AT THE END OF THE BEAM SHOWN. WHERE INDICATED, THIS VALUE SHALL SUPERCEDE THE CRITERIA IN THE CHART ABOVE.
14. M = 'x' K-FT INDICATES ULTIMATE STRENGTH BEAM MOMENT REACTIONS IN KIP-FEET (LRFD) AT THE END OF THE BEAM SHOWN.
15. JOIST SUPPORTING RTU TO BE DESIGNED FOR ADDITION LOADS.
16. (SC) INDICATES SLIP CRITICAL CONNECTION. →20K← DESIGN CONNECTION FOR AXIAL TENSION/COMPRESSION ULTIMATE FORCE (LRFD) AS SHOWN IN THE PLAN. SEE 14/S4.01 FOR CONNECTION DETAILS.

MEZZANINE FRAMING PLAN NOTES:

1. TOP OF CONCRETE ELEVATION = SEE PLAN
2. LOCATIONS SHOWN THUS: (12) C=3/4" INDICATES NUMBER OF SHEAR CONNECTORS AS 12 AND UPWARD CAMBER AT MID SPAN OF BEAM AS 3/4".
3. SPACE JOISTS EQUALLY U.N.O.
4. PROVIDE END PLATES AT ALL TUBE BEAMS.
5. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION / CONSTRUCTION.
6. HSS 6X6X5/8 FOR ALL COLUMN SIZES NOT SHOWN.
7. ⟝ = MOMENT CONNECTION
8. ALL LOWER TUBE BEAM ELEVATIONS TO BE VERIFIED WITH ARCHITECT DRAWINGS.
9. FLOOR SHALL BE 3 1/2" NORMAL WEIGHT CONCRETE OVER THE FLUTES OF 2" x 18 GA TYPE VLI STEEL DECK AS MANUFACTURED BY VULCRAFT OR APPROVED EQUIVALENT TO TOTAL THICKNESS = 5 1/2". REINFORCE CONCRETE WITH #3 AT 18" O.C. EACH WAY. PLACE REBAR PERPENDICULAR TO BEAMS (PARALLEL TO DECK) IN THE OUTSIDE LAYER. WELD DECK USING 5/8"Ø NET EFFECTIVE PUDDLE WELDS:
   a. PERPENDICULAR BEARING : 36/4 PATTERN.
   b. PARALLEL BEARING AND EDGE : AT 12" O.C.
   c. SIDE SEAMS : SEAM WELDS AT 12" O.C.
10. SEE 19/S5.01 FOR ADDITIONAL SLAB REINFORCING AT ALL BEAMS & GIRDERS.
11. SEE 13/S5.01 & 20/S5.01 FOR ADDITIONAL SLAB REINFORCING AT OPENINGS AND EDGES.
12. SEE 11/S5.01 & 15/S5.01 FOR ADDITIONAL STEEL ANGLES AND REINFORCING AT STEEL COLUMNS.
13. AT SLOPED FLOOR LOCATIONS ON ELEVATED FLOORS WHERE OVERALL SLAB THICKNESS IS LESS THAN 5 1/2", SPRAY FIREPROOFING SHALL BE APPLIED TO THE UNDERSIDE OF THE DECK IN SLOPED AREA TO MEET REQUIRED FIRE RATING. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE RATING.

KEY PLAN
C D
B
A

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137172
LICENSED
PROFESSIONAL ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

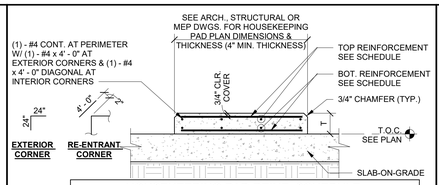
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
ROOF FRAMING PLAN - UNIT D

SHEET NO.
S2.22D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

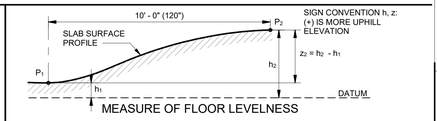


HOUSEKEEPING PAD REINF. SCHEDULE		
PAD THICKNESS	TOP REINFORCEMENT	BOTTOM REINF.
T ≤ 4"	WWR 4x4-W2.9xW2.9 OR #3 @12" E.W.	NONE
4" < T ≤ 6"	WWR 4x4-W4xW4 OR #4 @18" E.W.	NONE
6" < T ≤ 8"	WWR 4x4-W6xW6 OR #4 @12" E.W.	NONE
8" < T ≤ 12"	#4 @ 18" E.W.	#4 @ 18" E.W.
12" < T ≤ 16"	#4 @ 12" E.W.	#4 @ 12" E.W.

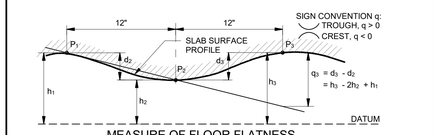
NOTES:
1. GENERAL CONTRACTOR TO COORDINATE WITH MECHANICAL DRAWINGS AND SPECIFICATIONS TO DETERMINE REQUIREMENTS FOR HOUSEKEEPING PADS OVER SLAB-ON-GRADE AND PROVIDE WHERE REQUIRED WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT. COORDINATE DIMENSIONS AND OTHER SPECIAL REQUIREMENTS WITH EQUIPMENT MANUFACTURERS AS REQUIRED.
2. PAD SHALL NOT BE POURED UNTIL AFTER SLAB HAS REACHED ITS SPECIFIED 28 DAYS STRENGTH.
3. CONCRETE FOR HOUSEKEEPING PAD SHALL BE NORMAL WEIGHT CONCRETE WITH f'c = 3,000 PSI.

TYPICAL DETAIL
CONCRETE ISLAND OR HOUSEKEEPING PAD SLAB-ON-GRADE

8 SCALE: N.T.S.



MEASURE OF FLOOR LEVELNESS

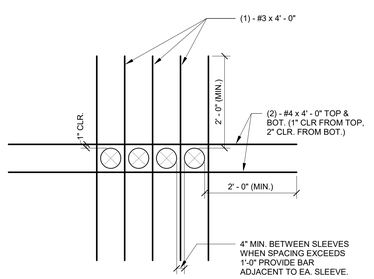


MEASURE OF FLOOR FLATNESS

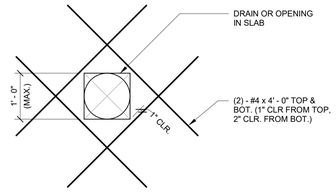
NOTES:
1. F_L = LEVELNESS F-NUMBER
   $F_L = \frac{12.5}{(3 \times S_Z) + z}$ WHERE z = MEAN VALUE OF ALL z FLOOR READINGS. S_Z = STANDARD DEVIATION OF ALL z FLOOR READINGS.
2. F_F = LEVELNESS F-NUMBER
   $F_F = \frac{4.57}{(3 \times S_Q) + q}$ WHERE q = MEAN VALUE OF ALL z FLOOR READINGS. S_Z = STANDARD DEVIATION OF ALL q FLOOR READINGS
3. F_L AND F_F SHALL BE STATISTICALLY DETERMINED ACCORDING TO ASTM E 1155 "STANDARD TEST METHOD FOR DETERMINING FLOOR FLATNESS AND LEVELNESS USING THE F-NUMBER SYSTEM."
4. REFER TO CONCRETE SPECIFICATIONS FOR REQUIRED F_F AND F_L VALUES.

TYPICAL DETAIL
SLAB SURFACE TOLERANCE

4 SCALE: N.T.S.



MULTIPLE OPENINGS (PIPE SLEEVES)

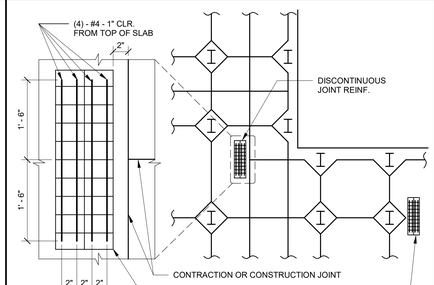


SINGLE DRAIN OR OPENING

NOTES:
1. COORDINATE OPENING SIZE AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. CONDUIT & PIPES OF ALUMINUM SHALL NOT BE PLACED IN CONCRETE UNLESS EFFECTIVELY COATED W/ PROTECTIVE MATERIAL TO PREVENT CHEMICAL REACTION.

TYPICAL DETAIL
ADDITIONAL REINFORCEMENT AT OPENINGS AT SLAB-ON-GRADE

10 SCALE: N.T.S.

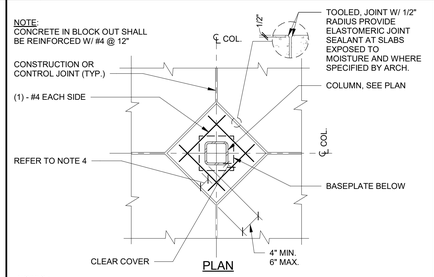


NOTE:
DISCONTINUOUS CONTRACTION OR CONSTRUCTION JOINTS SHOULD BE AVOIDED WHERE POSSIBLE.

PROVIDE AT DISCONTIUOUS JOINT REINF. AT ALL BLOCKOUT CORNERS THAT DO NOT INTERSECT CONTRACTION JOINTS

TYPICAL DETAIL
ADDITIONAL REINFORCEMENT AT DISCONTINUOUS JOINT IN SLAB-ON-GRADE

7 SCALE: N.T.S.



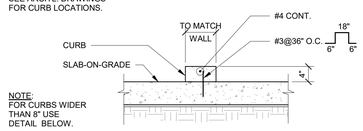
PLAN

NOTES :
1. GENERAL CONTRACTOR TO COORDINATE REQUIRED SIZE OF BLOCK OUT FOR COLUMNS. SUBMIT THE DESIRED BLOCK-OUT SIZE TO ARCHITECT FOR APPROVAL.
2. PROVIDE 3" MINIMUM CONCRETE COVER ALL AROUND COLUMN.
3. BLOCKOUT SHALL BE SIZED TO PROVIDE 3" MINIMUM CONCRETE COVER ALL AROUND COLUMN AND BASE PLATE.
4. GENERAL CONTRACTOR TO INCREASE COLUMN BLOCK-OUT DIMENSIONS AS REQUIRED TO ACCOMMODATE GUSSET PLATES AT BRACE FRAMES.

TYPICAL DETAIL
BLOCK-OUT AROUND COLUMN (SLAB-ON-GRADE)

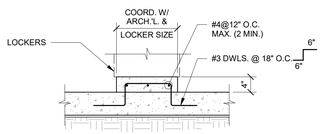
3 SCALE: N.T.S.

NOTE:
SEE ARCH'L. DRAWINGS FOR CURB LOCATIONS.



NOTE:
FOR CURBS WIDER THAN 8" USE DETAIL BELOW.

CURB AT MECHANICAL ROOMS



NOTE:
COORDINATE CURB SIZES AND LOCATIONS W/ ARCH'L.

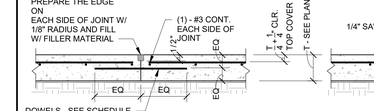
CURB AT LOCKERS

TYPICAL DETAIL
CURB AT MECH. ROOMS AND LOCKERS

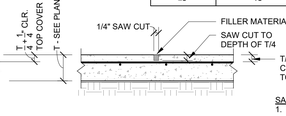
14 SCALE: N.T.S.

DOWEL SCHEDULE			
SLAB DEPTH (IN.)	DOWEL DIAMETER (IN.)	TOTAL DOWEL LENGTH (IN.)	DOWEL SPACING CENTER TO CENTER (IN.)
5-6	3/4	16	12
7-8	1	18	12
9-11	1 1/4	18	12

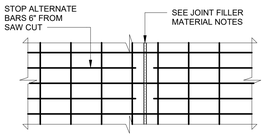
CONTRACTION JOINT SPACING	
SLAB THK. (IN.)	JOINT SPACING (FT)
4	11
5	13
6	14
7	16
8	17
≥9	18



CONSTRUCTION JOINT



CONTRACTION JOINT



CONTRACTION JOINT (PLAN VIEW)

CONSTRUCTION JOINT NOTES:
1. SLAB REINFORCEMENT SHALL BE CHAIRED BY SOIL SUPPORTED SLAB BOLSTERS.
2. BREAK BOND BETWEEN NEW AND PREVIOUSLY PLACED SLAB BY SPRAYING OR PAINTING EXPOSED SIDE WITH FORM OIL.
3. SUBGRADE SHALL BE FREE OF STANDING WATER AT THE TIME OF CONCRETE PLACEMENT.
4. ALL DOWELS IN THIS DETAIL SHALL BE SMOOTH BAR DOWELS.

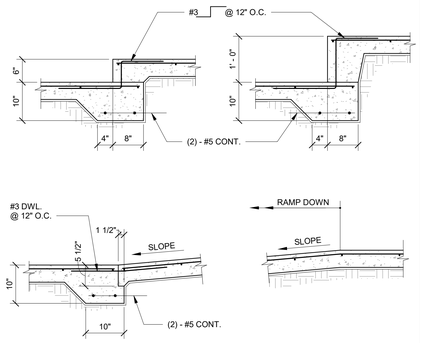
JOINT SPACING NOTE:
1. PROVIDE CONTRACTION AND/OR CONSTRUCTION JOINTS AT EVERY COLUMN CENTERLINE AND AT A MAXIMUM SPACING AS SCHEDULED. ASPECT RATIOS OF SLAB PANELS ENCLOSED BY CONTROL JOINTS SHALL NOT EXCEED 1.5 TO 1.

SAW CONTRACTION JOINT NOTES:
1. MAKE SAW CUT AS SOON AS SLAB IS ABLE TO SUPPORT WEIGHT OF WORKERS AND SAWING EQUIPMENT WITHOUT DAMAGE TO FINISH SURFACE OF SLAB.
2. ALL JOINTS SHALL BE CONTINUOUS. DO NOT OFFSET OR STAGGER JOINTS.
3. CLEAN JOINT PRIOR TO FILLING THE JOINT.

JOINT FILLER MATERIAL NOTES:
1. FILLER MATERIAL USED SHALL BE EPOXY RESINS WITH A MINIMUM SHORE "A" HARDNESS OF 80 AND SHALL CONFORM TO ASTM D2240. JOINT FILLER SHALL BE APPROVED BY ENGINEER PRIOR TO APPLICATION. INSTALL JOINT FILLER PER MANUFACTURER'S SPECIFICATIONS.
2. WHERE POSSIBLE, FILLER MATERIAL SHALL BE APPLIED WHEN BUILDING IS UNDER PERMANENT TEMPERATURE CONTROL. THIS SHALL BE EITHER AT THE END OF CONSTRUCTION OF THE COMPLETE BUILDING SHELL, OR A MINIMUM OF 90 DAYS AFTER SLAB CONSTRUCTION.
3. ALL EXPOSED SLAB JOINTS SHALL BE FILLED WITH FILLER MATERIAL.

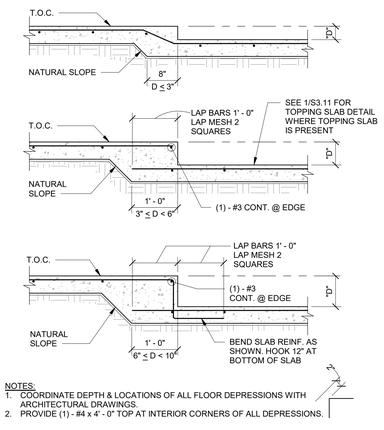
TYPICAL DETAIL
CONSTRUCTION AND CONTRACTION JOINTS SLAB-ON-GRADE

6 SCALE: N.T.S.



TYPICAL DETAIL
AT RAMP

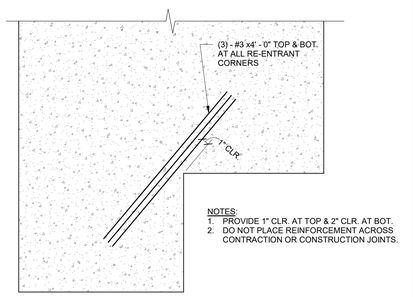
13 SCALE: 3/4" = 1'-0"



NOTES:
1. COORDINATE DEPTH & LOCATIONS OF ALL FLOOR DEPRESSIONS WITH ARCHITECTURAL DRAWINGS.
2. PROVIDE (1) - #4 x 4' - 0" TOP AT INTERIOR CORNERS OF ALL DEPRESSIONS.

TYPICAL DETAIL
AT FLOOR DEPRESSIONS

9 SCALE: N.T.S.

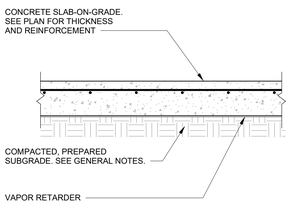


NOTES:
1. PROVIDE 1" CLR. AT TOP & 2" CLR. AT BOT.
2. DO NOT PLACE REINFORCEMENT ACROSS CONTRACTION OR CONSTRUCTION JOINTS.

SCHEMATIC SLAB-ON-GRADE

TYPICAL DETAIL
RE-ENTRANT CORNER BARS AT SLAB-ON-GRADE

5 SCALE: N.T.S.



NOTE:
1. UNLESS SPECIFIED ELSEWHERE, VAPOR RETARDER SHALL BE A MINIMUM OF 15 MILS THICK (UNLESS THICKER SPECIFIED IN SPECS/ARCH. DRAWINGS) MEETING OR EXCEEDING ASTM E-1745, CLASS C, AND HAVE NO MORE THAN 0.01 PERMS WHEN TESTED IN ACCORDANCE WITH ASTM E-96.

TYPICAL DETAIL
SLAB-ON-GRADE CONSTRUCTION SUBGRADE PREPARATION

1 SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
103724
LICENSED
PROFESSIONAL ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

25-0056.00

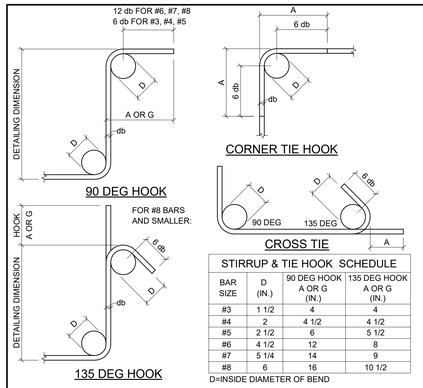
SHEET TITLE

FOUNDATION DETAILS

SHEET NO.

S3.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

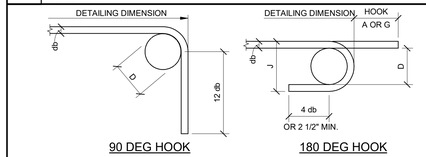


STIRRUP & TIE HOOK SCHEDULE			
BAR SIZE	D (IN.)	90 DEG HOOK A OR G (IN.)	135 DEG HOOK A OR G (IN.)
#3	1 1/2	4	4
#4	2	4 1/2	4 1/2
#5	2 1/2	6	5 1/2
#6	4 1/2	12	8
#7	5 1/4	14	9
#8	6	16	10 1/2

D=INSIDE DIAMETER OF BEND

20 STIRRUP AND TIE HOOK TYPES

SCALE: N.T.S.

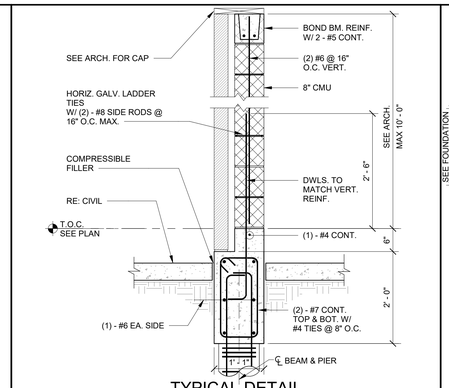


RECOMMENDED END HOOKS, ALL GRADES					
BAR SIZE	FINISHED BEND DIAMETER D, (IN.)	180 DEG HOOKS		90 DEG HOOKS	
		A OR G, (IN.)	J, (IN.)	A OR G, (IN.)	
#3	2 1/4	5	3	6	
#4	3	6	4	8	
#5	3 3/4	7	5	10	
#6	4 1/2	8	6	12	
#7	5 1/4	10	7	14	
#8	6	11	8	16	
#9	9 1/2	15	11 3/4	19	
#10	10 3/4	17	13 1/4	22	
#11	12	19	14 3/4	24	
#14	18 1/4	27	21 3/4	31	
#18	24	36	28 1/2	41	

D = INSIDE DIAMETER OF BEND

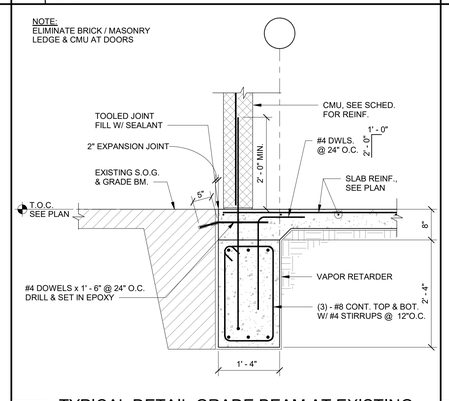
19 END HOOK TYPES

SCALE: N.T.S.



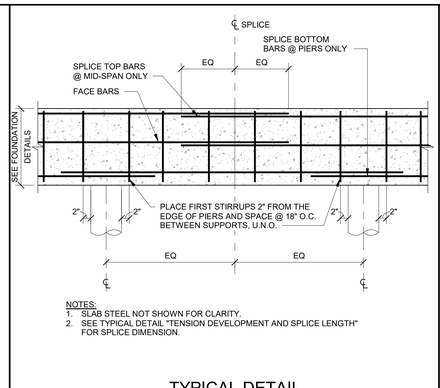
TYPICAL DETAIL
GRADE BEAM AT FREESTANDING WALL

16 SCALE: 3/4" = 1'-0"



TYPICAL DETAIL DEVELOPMENT AT EXISTING

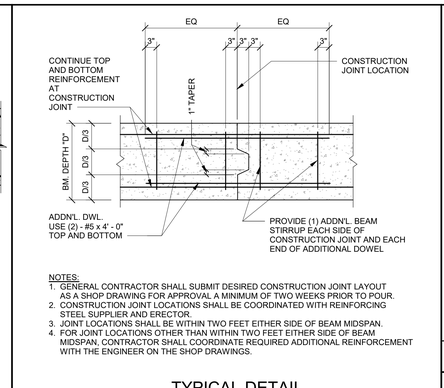
15 SCALE: 3/4" = 1'-0"



NOTES:
1. SLAB STEEL NOT SHOWN FOR CLARITY.
2. SEE TYPICAL DETAIL "TENSION DEVELOPMENT AND SPLICE LENGTH" FOR SPLICE DIMENSION.

TYPICAL DETAIL
BEAM REINFORCING SPLICE DETAIL

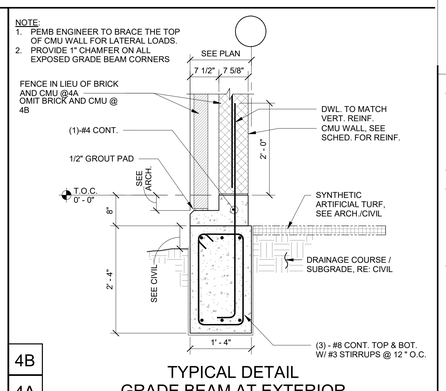
12 SCALE:N.T.S.



NOTES:
1. GENERAL CONTRACTOR SHALL SUBMIT DESIRED CONSTRUCTION JOINT LAYOUT AS A SHOP DRAWING FOR APPROVAL A MINIMUM OF TWO WEEKS PRIOR TO POUR.
2. CONSTRUCTION JOINT LOCATIONS SHALL BE COORDINATED WITH REINFORCING STEEL SUPPLIER AND ERECTOR.
3. JOINT LOCATIONS SHALL BE WITHIN TWO FEET EITHER SIDE OF BEAM MIDSPAN.
4. FOR JOINT LOCATIONS OTHER THAN WITHIN TWO FEET EITHER SIDE OF BEAM MIDSPAN, CONTRACTOR SHALL COORDINATE REQUIRED ADDITIONAL REINFORCEMENT WITH THE ENGINEER ON THE SHOP DRAWINGS.

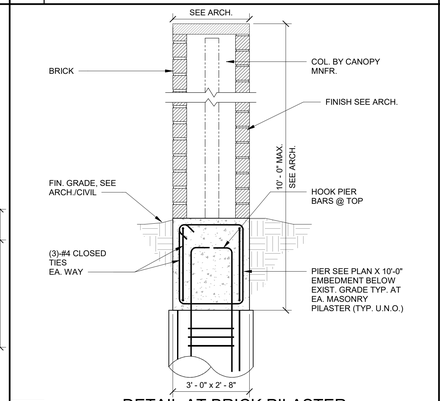
TYPICAL DETAIL
GRADE BEAM CONSTRUCTION JOINT

8 SCALE: N.T.S.



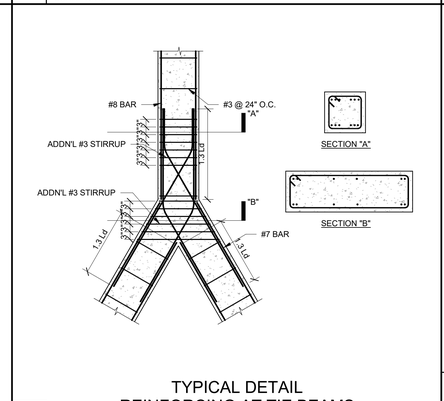
4B
4A
4 TYPICAL DETAIL
GRADE BEAM AT EXTERIOR
PRE-ENGINEERED METAL BUILDING

SCALE: 3/4" = 1'-0"



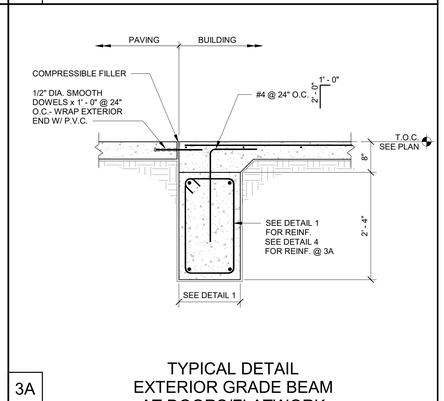
DETAIL AT BRICK PILASTER

11 SCALE: 3/4" = 1'-0"



TYPICAL DETAIL
REINFORCING AT TIE BEAMS

7 SCALE: N.T.S.



3A
3 TYPICAL DETAIL
EXTERIOR GRADE BEAM
AT DOORS/FLATWORK

SCALE: 3/4" = 1'-0"

DEVELOPMENT LENGTHS OF STANDARD HOOKS IN TENSION
GRADE 60 (UNCOATED) REINFORCEMENT
(NORMAL WEIGHT CONCRETE)

BAR SIZE	F'c = 3000		F'c = 4000		F'c = 5000		F'c = 6000		F'c = 7000		F'c = 8000		F'c = 9000		F'c = 10000	
	Lhb	0.7Lhb	Lhb	0.7Lhb	Lhb	0.7Lhb	Lhb	0.7Lhb	Lhb	0.7Lhb	Lhb	0.7Lhb	Lhb	0.7Lhb	Lhb	0.7Lhb
#3	9	6	8	6	7	6	6	6	6	6	6	6	6	6	6	6
#4	11	8	10	7	9	6	8	6	8	6	7	6	7	6	6	6
#5	14	10	12	9	11	8	10	7	9	7	9	6	8	6	8	6
#6	17	12	15	10	13	9	12	9	11	8	11	8	10	7	9	7
#7	20	14	17	12	15	11	14	10	13	9	12	9	12	8	11	8
#8	22	16	19	14	17	12	16	11	15	11	14	10	13	9	12	9
#9	25	18	22	15	20	14	18	13	17	12	16	11	15	10	14	10
#10	28	20	25	17	22	16	20	14	19	13	18	12	17	12	16	11
#11	31	22	27	19	24	17	22	16	21	15	19	14	18	13	17	12

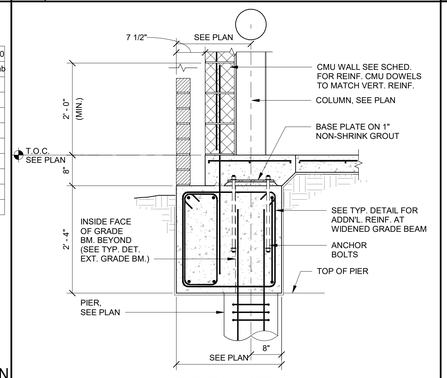
90° HOOKS 180° HOOKS

Ldh Ldh

NOTES:
1. ALL LENGTHS SHOWN IN THE TABLE ARE IN INCHES.
2. Lhb = TENSION DEVELOPMENT LENGTH.
3. Ldh = Lhb, UNLESS CONDITIONS OF ITEM 4 ARE SATISFIED.
4. Ldh = 0.7 Lhb, WHEN SIDE COVER NORMAL TO PLANE OF HOOK IS NOT LESS THAN 2 1/2 INCHES AND FOR 90° HOOK, COVER ON BAR EXTENSION BEYOND HOOK SHALL NOT BE LESS THAN 2 INCHES.
5. HOOKS SHALL NOT BE CONSIDERED EFFECTIVE IN DEVELOPING BARS IN COMPRESSION.

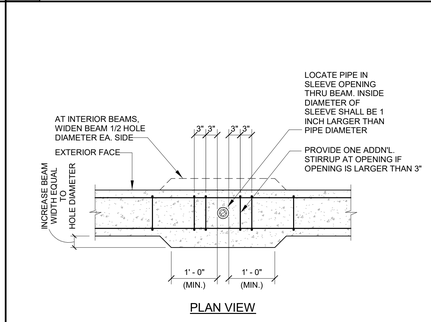
TYPICAL DETAIL
DEVELOPMENT LENGTH OF STANDARD HOOKS IN TENSION
(NORMAL WEIGHT CONCRETE)

18 SCALE: N.T.S.



TYPICAL DETAIL
PERIMETER GRADE BEAM AT COLUMN

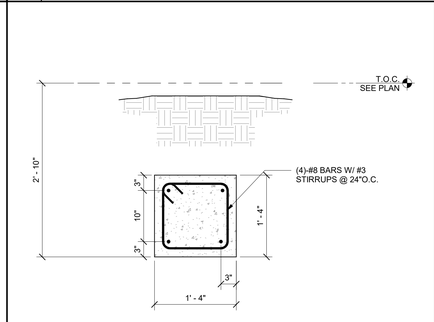
14 SCALE: 3/4" = 1'-0"



PLAN VIEW

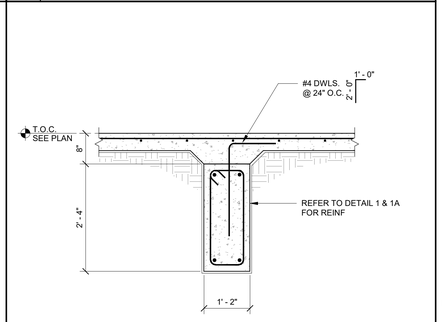
TYPICAL DETAIL
VERTICAL HOLE THRU GRADE BEAM
LARGER THAN 3" DIAMETER

10 SCALE: N.T.S.



TIE BEAM AT PEMB BUILDING

6 SCALE: 1" = 1'-0"



TYPICAL DETAIL
INTERIOR GRADE BEAM

2 SCALE: 3/4" = 1'-0"

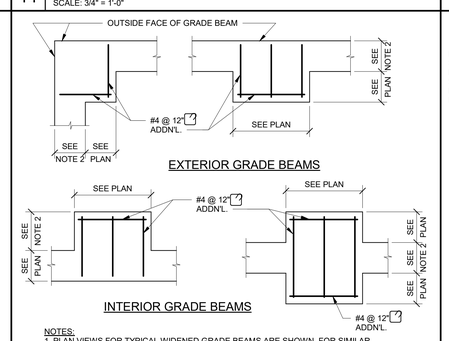
TENSION DEVELOPMENT LENGTHS AND TENSION LAP SPLICE LENGTHS
GRADE 60 (UNCOATED) REINFORCEMENT
(NORMAL WEIGHT CONCRETE)

BAR SIZE	F'c = 3000		F'c = 4000		F'c = 5000		F'c = 6000		F'c = 7000		F'c = 8000		F'c = 9000		F'c = 10000	
	CLASS A 1.0Ld	CLASS B 1.3Ld	CLASS A 1.0Ld	CLASS B 1.3Ld	CLASS A 1.0Ld	CLASS B 1.3Ld	CLASS A 1.0Ld	CLASS B 1.3Ld	CLASS A 1.0Ld	CLASS B 1.3Ld	CLASS A 1.0Ld	CLASS B 1.3Ld	CLASS A 1.0Ld	CLASS B 1.3Ld	CLASS A 1.0Ld	CLASS B 1.3Ld
#3	17	22	15	19	13	17	12	16	12	16	12	16	12	16	12	16
#4	22	29	19	25	17	23	16	21	15	19	14	18	13	17	12	16
#5	28	36	24	31	22	28	20	26	18	24	17	22	16	21	15	20
#6	33	43	29	37	26	34	24	31	22	28	21	27	19	25	18	24
#7	48	63	42	54	38	49	34	45	32	41	30	39	28	36	27	35
#8	55	72	48	62	43	56	39	51	36	47	34	44	32	42	30	39
#9	62	81	54	70	48	63	44	57	41	53	38	50	36	47	34	44
#10	70	91	61	79	54	71	50	64	46	60	43	56	41	53	39	50
#11	78	101	67	87	60	78	55	71	51	66	48	62	45	58	43	55

NOTES:
1. ALL LENGTHS SHOWN IN THE TABLE ARE IN INCHES.
2. Ld = TENSION DEVELOPMENT LENGTH.
3. THE ABOVE TABLE IS VALID FOR
   a. BEAMS AND COLUMNS WHERE CONCRETE COVER > = db, c/c BAR SPACING > = 2db AND WITH STIRRUPS OR TIES THROUGHOUT Ld NOT LESS THAN THE CODE MINIMUM.
   b. OTHER ELEMENTS SUCH AS SLABS, WALLS, ETC. WHERE CONCRETE COVER > = db, c/c BAR SPACING > = 3db.
4. FOR TOP BARS, MULTIPLY THE SPLICE LENGTHS BY 1.30. TOP BARS REQUIRE A MINIMUM OF 12" OF FRESH CONCRETE BELOW BAR.
5. WHEN BARS OF A DIFFERENT SIZE ARE LAP SPLICED IN TENSION, SPLICE LENGTH SHALL BE THE LARGER OF Ld OF THE LARGER BAR AND COMPRESSION LAP SPLICE LENGTH OF SMALLER BAR.
6. BARS SPLICED BY NON-CONTACT LAP SPLICES SHALL NOT BE SPACED TRANSVERSELY FARTHER APART THAN THE SMALLER OF ONE-FIFTH THE REQUIRED LAP SPLICE LENGTH AND 6

TYPICAL DETAIL
TENSION DEVELOPMENT AND SPLICE LENGTHS
(NORMAL WEIGHT CONCRETE)

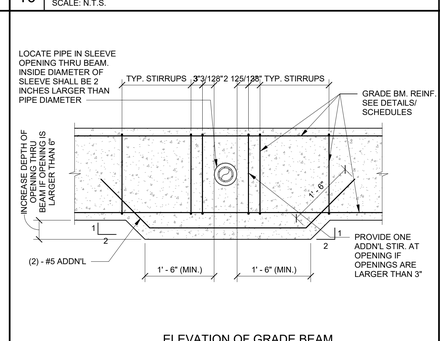
17 SCALE: N.T.S.



NOTES:
1. PLAN VIEWS FOR TYPICAL WIDENED GRADE BEAMS ARE SHOWN. FOR SIMILAR CONDITION NOT SHOWN, PROVIDE #4 ADDN'L. @ 12" O.C. MAX. IN WIDENED SECTION.
2. SEE DETAIL SHEETS FOR GRADE BEAM WIDTH.

TYPICAL DETAIL
ADDITIONAL BARS AT
WIDENED GRADE BEAM (PLAN VIEW)

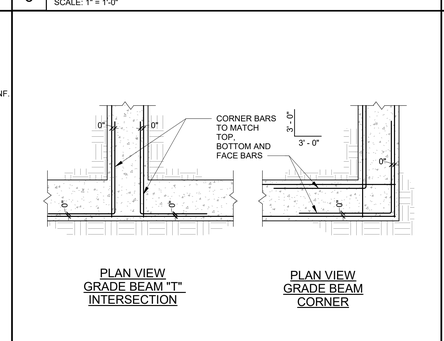
13 SCALE: N.T.S.



ELEVATION OF GRADE BEAM

TYPICAL DETAIL
OPENING THRU GRADE BEAM

9 SCALE: N.T.S.

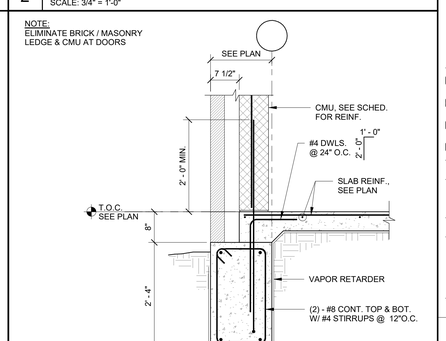


PLAN VIEW
GRADE BEAM "T" INTERSECTION

PLAN VIEW
GRADE BEAM CORNER

TYPICAL DETAIL
GRADE BEAM REINF. STEEL
CORNER BARS

5 SCALE: N.T.S.



1A
1 TYPICAL DETAIL
EXTERIOR GRADE BEAM

SCALE: 3/4" = 1'-0"

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137126
LICENSED
PROFESSIONAL ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

25-0056.00

SHEET TITLE

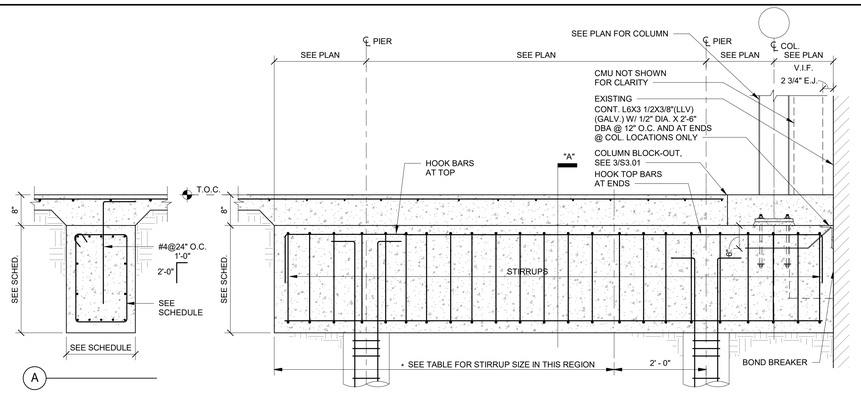
FOUNDATION DETAILS

SHEET NO.

S3.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

	GRADE BEAM SCHEDULE				
	GR. BEAM DEPTH	GR. BEAM WIDTH	TOP & BOTT. REINF.	STIRRUPS	EACH FACE REINF.
20	3' - 6"	3' - 0"	(6)-#9 (TOP) (6)-#6 (BOT)	#4 @ 12" O.C. (2 LEGS)	N.A
20A	3' - 6"	3' - 0"	(10)-#9 (TOP) (6)-#6 (BOT)	#4 @ 12" O.C. (2 LEGS)	(4)-#4
20B	2' - 4"	1' - 4"	(2)-#8 (TOP & BOT)	#4 @ 12" O.C. (2 LEGS)	N.A
20C	3' - 0"	1' - 6"	(4)-#9 (TOP) (4)-#6 (BOT)	#4 @ 12" O.C. (2 LEGS)	N.A
20D	2' - 4"	1' - 6"	(3)-#9 (TOP & BOT)	#3 @ 10" O.C. (2 LEGS)	N.A

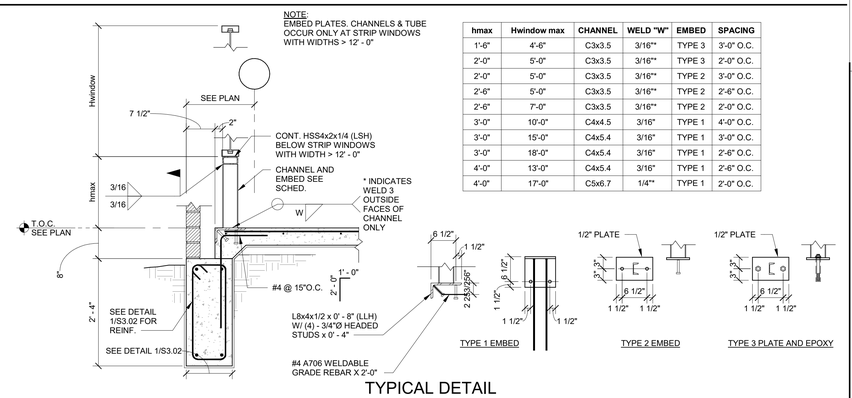


TYPICAL DETAIL CANTILEVER GRADE BEAM

20 SCALE: 3/4" = 1'-0"

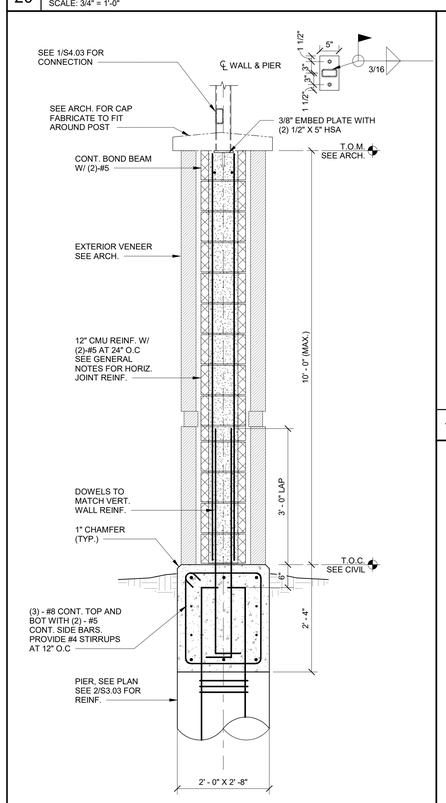
NOTE:
EMBED PLATES, CHANNELS & TUBE OCCUR ONLY AT STRIP WINDOWS WITH WIDTHS > 12' - 0"

hmax	Hwindow max	CHANNEL	WELD "W"	EMBED	SPACING
1'-6"	4'-6"	C3x3.5	3/16"*	TYPE 3	3'-0" O.C.
2'-0"	5'-0"	C3x3.5	3/16"*	TYPE 3	2'-0" O.C.
2'-0"	5'-0"	C3x3.5	3/16"*	TYPE 2	3'-0" O.C.
2'-6"	5'-0"	C3x3.5	3/16"*	TYPE 2	2'-6" O.C.
2'-6"	7'-0"	C3x3.5	3/16"*	TYPE 2	2'-0" O.C.
3'-0"	10'-0"	C4x4.5	3/16"	TYPE 1	4'-0" O.C.
3'-0"	15'-0"	C4x5.4	3/16"	TYPE 1	3'-0" O.C.
3'-0"	18'-0"	C4x5.4	3/16"	TYPE 1	2'-6" O.C.
4'-0"	13'-0"	C4x5.4	3/16"	TYPE 1	2'-6" O.C.
4'-0"	17'-0"	C5x6.7	1/4"*	TYPE 1	2'-0" O.C.



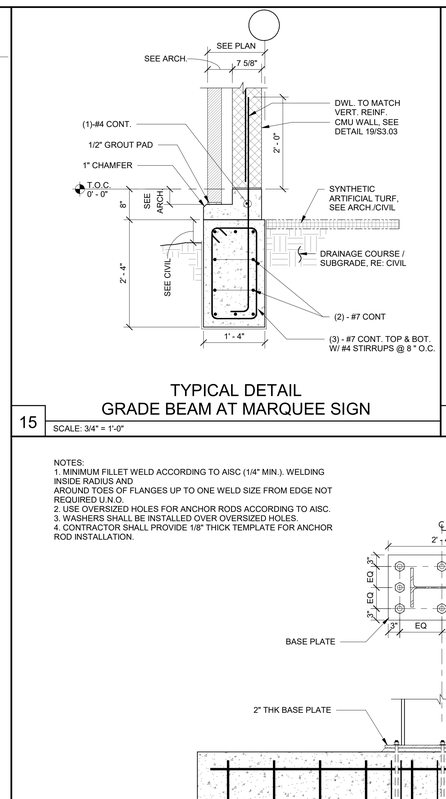
TYPICAL DETAIL STEEL SCHEDULE AT STRIP WINDOWS

8 SCALE: 3/4" = 1'-0"



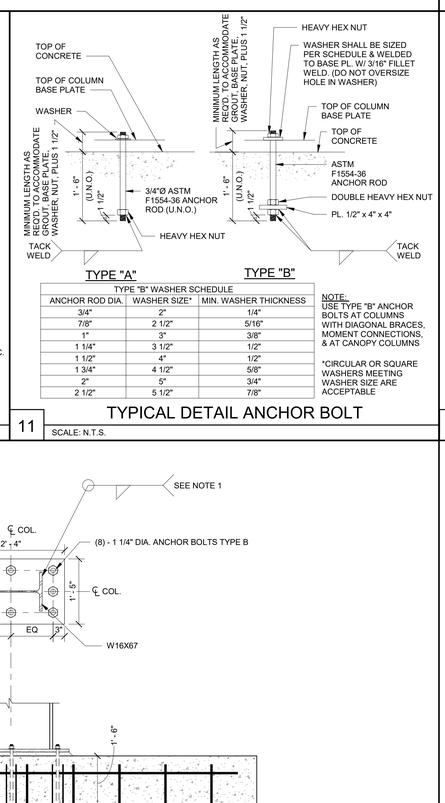
DETAIL AT MARQUEE SIGN

18 SCALE: 3/4" = 1'-0"



TYPICAL DETAIL GRADE BEAM AT MARQUEE SIGN

15 SCALE: 3/4" = 1'-0"



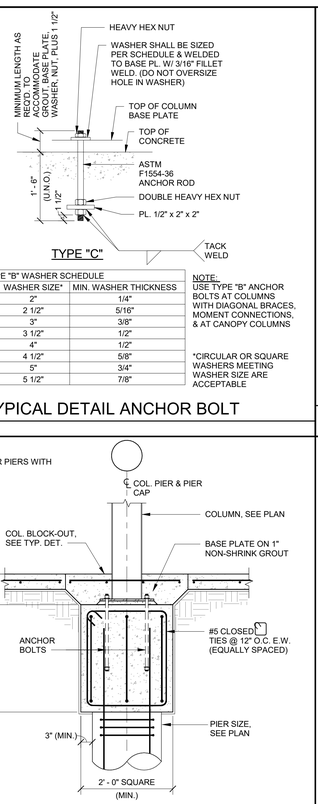
TYPE "B" WASHER SCHEDULE		
ANCHOR ROD DIA.	WASHER SIZE*	MIN. WASHER THICKNESS
3/4"	2"	1/4"
7/8"	2 1/2"	5/16"
1"	3"	3/8"
1 1/4"	3 1/2"	1/2"
1 1/2"	4"	1/2"
1 3/4"	4 1/2"	5/8"
2"	5"	3/4"
2 1/2"	5 1/2"	7/8"

NOTE:
USE TYPE "B" ANCHOR BOLTS AT COLUMNS WITH DIAGONAL BRACES, MOMENT CONNECTIONS, & AT CANOPY COLUMNS

*CIRCULAR OR SQUARE WASHERS MEETING WASHER SIZE ARE ACCEPTABLE

TYPICAL DETAIL ANCHOR BOLT

11 SCALE: N.T.S.



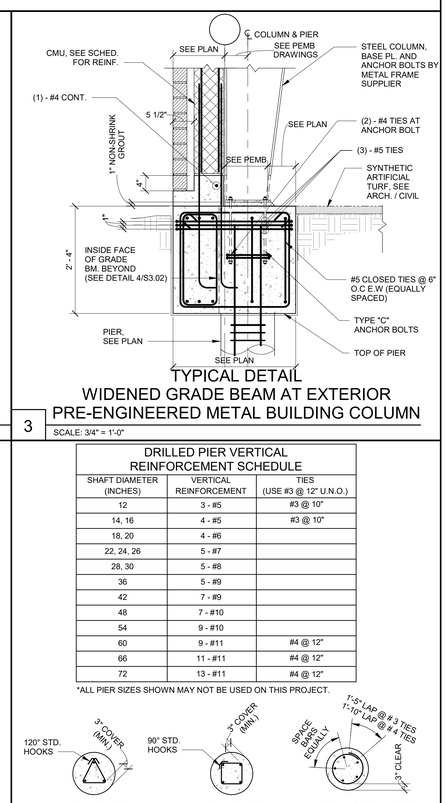
TYPE "B" WASHER SCHEDULE		
ANCHOR ROD DIA.	WASHER SIZE*	MIN. WASHER THICKNESS
3/4"	2"	1/4"
7/8"	2 1/2"	5/16"
1"	3"	3/8"
1 1/4"	3 1/2"	1/2"
1 1/2"	4"	1/2"
1 3/4"	4 1/2"	5/8"
2"	5"	3/4"
2 1/2"	5 1/2"	7/8"

NOTE:
USE TYPE "B" ANCHOR BOLTS AT COLUMNS WITH DIAGONAL BRACES, MOMENT CONNECTIONS, & AT CANOPY COLUMNS

*CIRCULAR OR SQUARE WASHERS MEETING WASHER SIZE ARE ACCEPTABLE

TYPICAL DETAIL ANCHOR BOLT

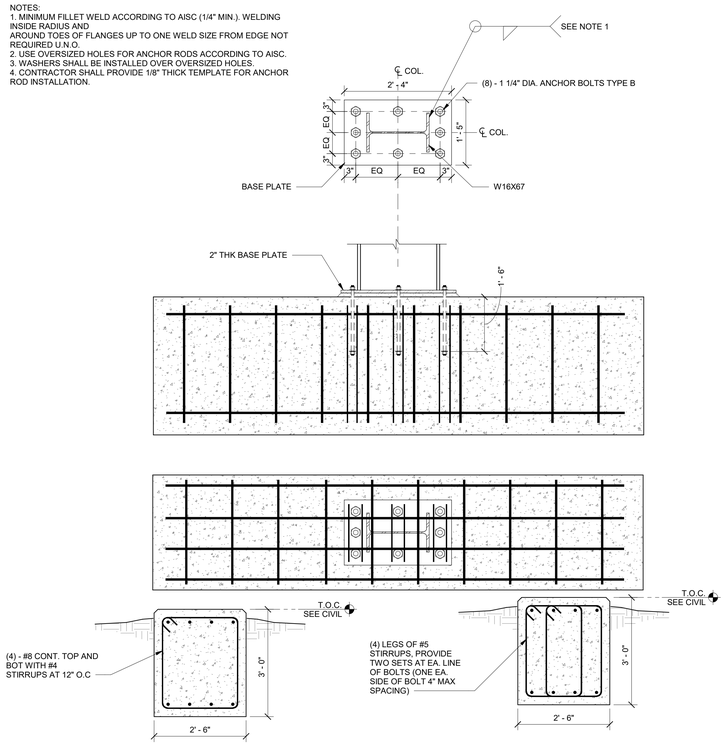
7 SCALE: N.T.S.



TYPICAL DETAIL WIDENED GRADE BEAM AT EXTERIOR PRE-ENGINEERED METAL BUILDING COLUMN

3 SCALE: 3/4" = 1'-0"

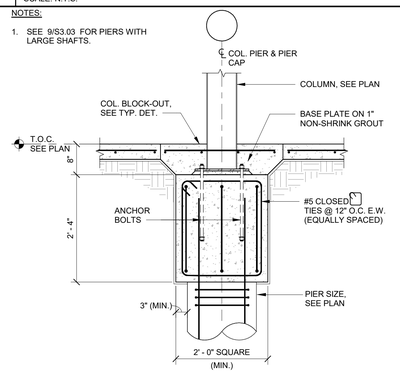
NOTES:
1. MINIMUM FILLET WELD ACCORDING TO AISC (1/4" MIN.). WELDING INSIDE RADIUS AND AROUND TOES OF FLANGES UP TO ONE WELD SIZE FROM EDGE NOT REQUIRED U.N.O.
2. USE OVERSIZED HOLES FOR ANCHOR RODS ACCORDING TO AISC.
3. WASHERS SHALL BE INSTALLED OVER OVERSIZED HOLES.
4. CONTRACTOR SHALL PROVIDE 1/8" THICK TEMPLATE FOR ANCHOR ROD INSTALLATION.



GRADE BEAM AND BASE PLATE DETAIL AT MARQUEE SIGN

13 SCALE: 3/4" = 1'-0"

NOTES:
1. SEE 9/S3.03 FOR PIERS WITH LARGE SHAFTS.

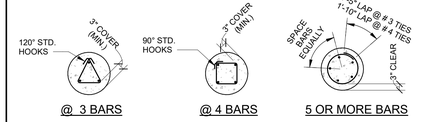


TYPICAL DETAIL INTERIOR COLUMN WITH PIER CAP

6 SCALE: 3/4" = 1'-0"

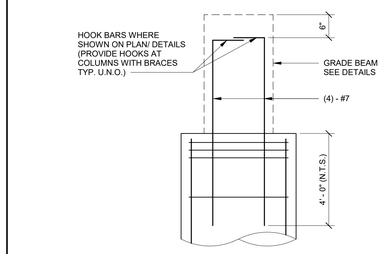
DRILLED PIER VERTICAL REINFORCEMENT SCHEDULE		
SHAFT DIAMETER (INCHES)	VERTICAL REINFORCEMENT	TIES (USE #3 @ 12" U.N.O.)
12	3 - #5	#3 @ 10"
14, 16	4 - #5	#3 @ 10"
18, 20	4 - #6	
22, 24, 26	5 - #7	
28, 30	5 - #8	
36	5 - #9	
42	7 - #9	
48	7 - #10	
54	9 - #10	
60	9 - #11	#4 @ 12"
66	11 - #11	#4 @ 12"
72	13 - #11	#4 @ 12"

*ALL PIER SIZES SHOWN MAY NOT BE USED ON THIS PROJECT.



SHAFT BAR PLACEMENT PLANS

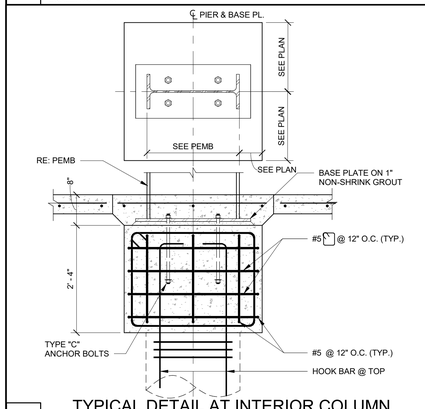
2 SCALE: N.T.S.



NOTES:
1. THIS DETAIL SHALL BE USED WHERE PIER REINFORCING STEEL CAN NOT BE ACCOMMODATED WITHIN WIDTH OF GRADE BEAMS.
2. SEE TYPICAL DRILLED PIER DETAIL FOR ADDITIONAL INFORMATION.

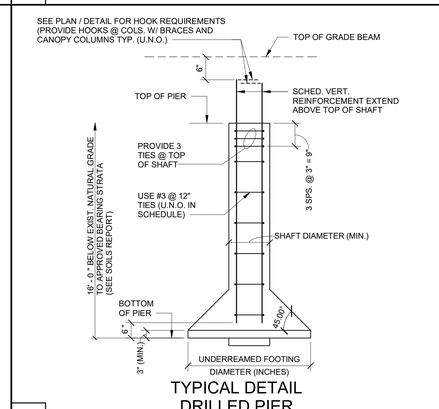
TYPICAL DETAIL SHAFT SIZE LARGER THAN GRADE BM. WIDTH

17 SCALE: N.T.S.



TYPICAL DETAIL AT INTERIOR COLUMN

5 SCALE: 3/4" = 1'-0"



TYPICAL DETAIL DRILLED PIER

1 SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137126
LICENSED
PROFESSIONAL ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

25-0056.00

SHEET TITLE

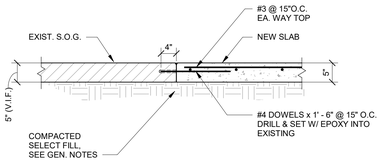
FOUNDATION DETAILS

SHEET NO.

S3.03

North Shore Multi-use Indoor Facility

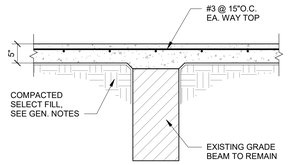
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



NOTE:
1. SAWCUT TOP 1" OF EXISTING SLAB PRIOR TO REMOVING EXISTING CONCRETE.
2. EXTENT OF SLAB DEMOLITION TO BE DETERMINED BY CONTRACTOR.

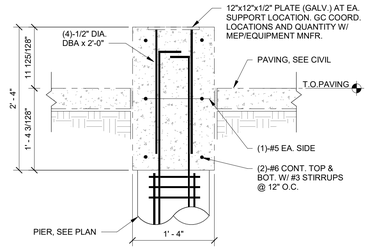
16 SCALE: 3/4" = 1'-0"

TYPICAL DETAIL
AT EXISTING SLAB-ON-GRADE



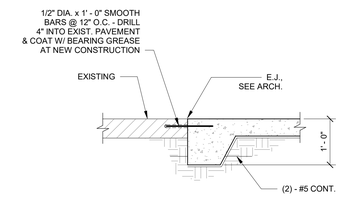
12 SCALE: 3/4" = 1'-0"

TYPICAL DETAIL
SLAB REPAIR OVER EXISTING BEAM



9 SCALE: 1" = 1'-0"

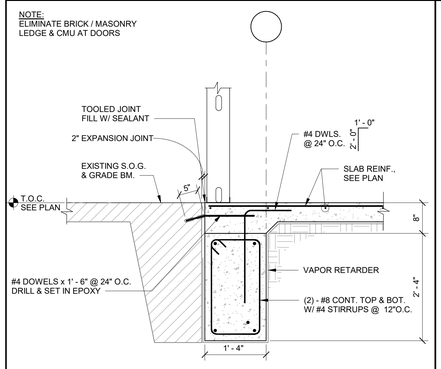
TYPICAL DETAIL
GRADE BEAM AT CHILLER



4 SCALE: 3/4" = 1'-0"

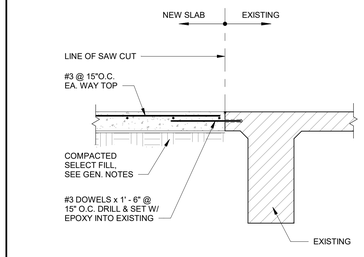
TYPICAL DETAIL
NEW SLAB-ON-GRADE AT EXISTING SLAB

NOTE:
ELIMINATE BRICK / MASONRY
LEDGE & CMU AT DOORS



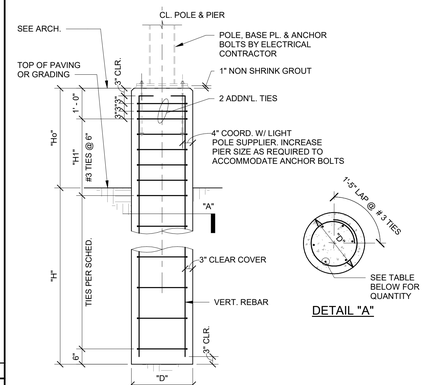
19 SCALE: 3/4" = 1'-0"

GRADE BEAM AT EXISTING



15 SCALE: 3/4" = 1'-0"

TYPICAL DETAIL
SLAB REPAIR NEAR BEAM

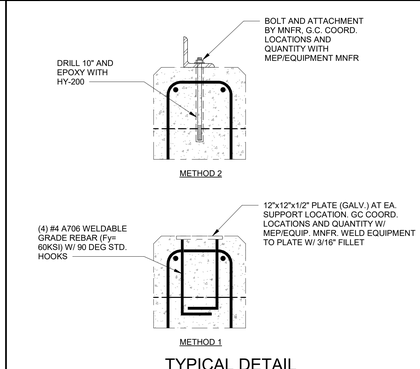


POLE MARK	NOM. POLE HEIGHT	ASSUMED EPA (sf)	"H" DEPTH OF PIER	"Ho" ABOVE GRADE	"H1"	"D" DIAMETER OF PIER	VERTICAL REINF	TIES	REMARKS
LP1	15' - 0"	5.0	5' - 0"	RE: ARCH.	1' - 6"	24"	6 - #6	#3 @ 12"	TYPICAL PARKING
LP2	25' - 0"	10.0	8' - 0"	RE: ARCH.	1' - 6"	24"	6 - #6	#3 @ 12"	TYPICAL PARKING
LP3	35' - 0"	10.0	10' - 0"	RE: ARCH.	1' - 6"	24"	6 - #7	#3 @ 12"	

NOTES:
1. WIND LOAD CRITERIA IS PER IBC 2021. Vult = 146 MPH.
2. CONCRETE COMPRESSIVE STRENGTH, F'C = 3,000 PSI (NWC), WITH A MAX WATER/CEMENT RATIO OF 0.54.
3. STEEL REINFORCEMENT SHALL BE ASTM A615, GR. 60.
4. REFER TO ARCH DRAWINGS/CIVIL DRAWINGS FOR LOCATIONS OF LIGHT POLES.
5. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION (AND SPECIFICATIONS FOR LIGHT STANDARDS).
6. VERIFY PROJECTION OF CONCRETE ABOVE GROUND WITH ARCHITECT.
7. EPA INDICATES MAXIMUM EXPOSED PROJECTED AREA AT THE TOP OF THE POLE IN ANY DIRECTION.
8. FOR A STATED POLE HEIGHT SHOWN ON THE TABLE, THE DEPTH OF PIER IS DEEMED ADEQUATE IF EPA IS LESS THAN SHOWN ON TABLE ABOVE.
9. THE PRESENCE OF SAND SEAMS AND SLICKENSIDES IN THE LAYERS MAY CAUSE SLOUGHING DURING PIER EXCAVATION. THIS MAY REQUIRE THE USE OF TEMPORARY STEEL CASING.
10. CONCRETE SHALL BE POURED IMMEDIATELY AFTER EXCAVATION.

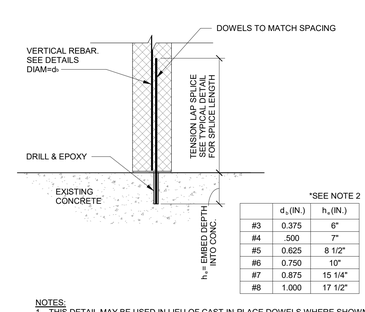
11 SCALE: N.T.S.

TYPICAL DETAIL
LIGHT POLE FOUNDATION



8 SCALE: 1 1/2" = 1'-0"

TYPICAL DETAIL
COOLING TOWER TO
CONCRETE ATTACHMENT



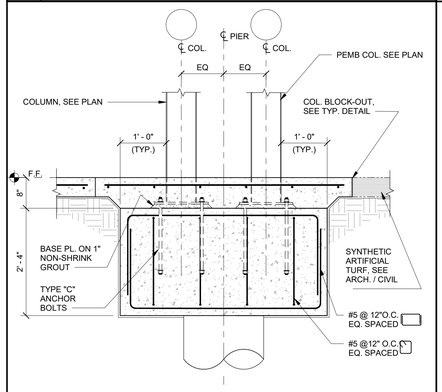
*SEE NOTE 2

	d_b (IN.)	h_e (IN.)
#3	0.375	6"
#4	.500	7"
#5	0.625	8 1/2"
#6	0.750	10"
#7	0.875	15 1/4"
#8	1.000	17 1/2"

NOTES:
1. THIS DETAIL MAY BE USED IN LIEU OF CAST-IN-PLACE DOWELS WHERE SHOWN ON STRUCTURAL DETAILS EXCEPT WHERE PROHIBITED BY NOTE 2.
2. THIS DETAIL IS NOT APPLICABLE AT CANTILEVER WALLS OR WALLS SUBJECTED TO MOMENT AT THE BASE.
3. USE HILTI HIT-HY200 ADHESIVE SYSTEM OR APPROVED EQUIVALENT.

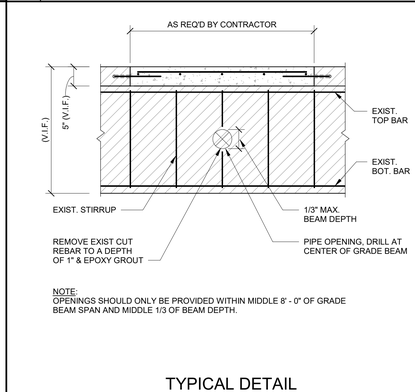
3 SCALE: 1" = 1'-0"

ALTERNATE DETAIL
EPOXY DOWELS AT CMU WALLS



18 SCALE: 3/4" = 1'-0"

SHARED PIER CAP



NOTE:
OPENINGS SHOULD ONLY BE PROVIDED WITHIN MIDDLE 8' - 0" OF GRADE BEAM SPAN AND MIDDLE 1/3 OF BEAM DEPTH.

14 SCALE: 3/4" = 1'-0"

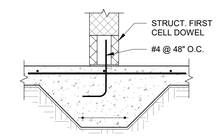
TYPICAL DETAIL
PIPE OPENING THROUGH EXIST GRADE BEAM

NOTE:
SEE ARCH. FOR LOCATIONS AND EXTENTS.

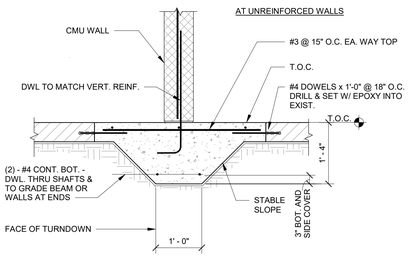
7 SCALE: 3/4" = 1'-0"

TYPICAL DETAIL
SHOWER SLAB DEPRESSION AT EXISTING

FOUNDATION TYPE							
	4" CMU	6" CMU			8" CMU		
GROUT	NONE	NONE	AT 48"	AT 24"	NONE	AT 48"	AT 24"
WALL HEIGHT (FT)							
0-10	1	1	1	1	1	1	1
12	1	1	1	1	1	1	2
14	1	1	1	2	1	2	2
16	1	1	2	2	2	2	2
18	1	2	2	2	2	2	2
20	2	2	2	2	2	2	2

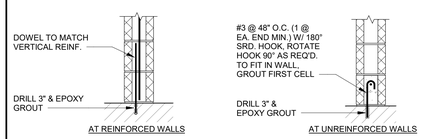


NOTE :
THIS DETAIL APPLIES AT ALL CMU WALL LOCATIONS WITHOUT GRADE BEAMS.



NOTE:
SEE PLAN FOR LOCATIONS MARKED "TURNDOWN", T.D. OR OTHERWISE NOTED.

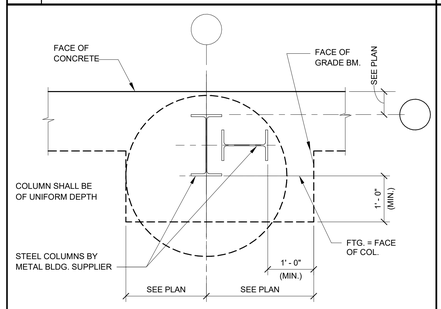
TYPE 2 DETAIL



TYPE 1 DETAIL

1 SCALE: 3/4" = 1'-0"

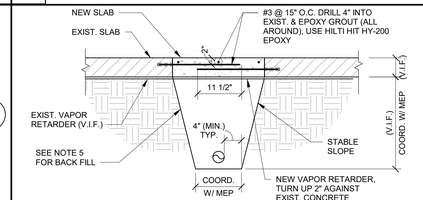
TYPICAL DETAIL
EXISTING FOUNDATION AT NON-LOAD
BEARING CMU WALL



NOTE:
1. LOCATIONS OF PORTAL FRAMES ARE UNKNOWN UNTIL PEMB SHOP DRAWINGS ARE RECEIVED, G.C. TO COORDINATE LOCATIONS AND ADJUST PLINTH SIZES ACCORDINGLY

17 SCALE: 3/4" = 1'-0"

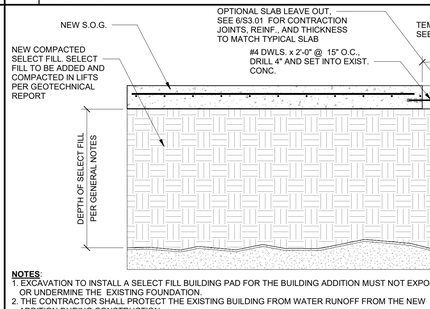
TYPICAL DETAIL
PLAN AT PORTAL FRAME



GENERAL NOTES:
1. COORDINATE LOCATION AND SIZE OF ALL TRENCHES WITH ARCH./MEP DRAWINGS.
2. CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL HAVE 28 DAYS COMPRESSION STRENGTH OF MINIMUM 3,000 PSI (MAXIMUM AGGREGATE SIZE = 1 1/2"). MIX DESIGN SHALL CONFORM TO THE STANDARDS OF ACI 318 AND ACI 301.
3. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
4. VAPOR RETARDER UNDER THE NEW SLAB SHALL BE 15 MIL STEGO VAPOR BARRIERS AS MANUFACTURED BY STEGO OR EQUIVALENT. ALL SEAMS SHALL BE OVERLAPPED MINIMUM 6 INCHES AND TAPED WITH MANUFACTURER'S TAPE.
5. FILL UNDER THE NEW SLAB SHALL BE STRUCTURAL FILL (SANDY CLAY OR CLAYEY SAND) HAVING PLASTICITY INDEX BETWEEN 10 AND 20 AND LIQUID LIMIT NOT EXCEEDING 40. FILL MATERIAL SHALL BE PLACED IN 6 INCH LOOSE LIFTS AND COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (ASTM D698). THE SELECT FILL SHALL BE MOISTURE ADJUSTED TO WITHIN 2% OF OPTIMUM MOISTURE CONTENT. AS AN ALTERNATE TO SELECT FILL, CONTRACTOR MAY UTILIZE CEMENT STABILIZED SAND FOR BACKFILLING TRENCHES. SAND SHALL BE CLEAN AND SHALL CONFORM TO ASTM C33 AND CEMENT SHALL CONFORM TO ASTM C150. SAND-CEMENT MIXTURE SHALL PROVIDE COMPRESSIVE STRENGTH OF MINIMUM 100 PSI WHEN COMPACTED TO MINIMUM 95% (ASTM D558). PLACE MATERIAL IN 8 INCH LOOSE LIFTS AND COMPACT TO MINIMUM 95% WITH MOISTURE CONTENT AT OPTIMUM OR BELOW OPTIMUM MOISTURE CONTENT.
6. V.I.F. - VERIFY IN FIELD.

13 SCALE: 3/4" = 1'-0"

TYPICAL DETAIL AT PLUMBING TRENCHES



NOTES:
1. EXCAVATION TO INSTALL A SELECT FILL BUILDING PAD FOR THE BUILDING ADDITION MUST NOT EXPOSE OR UNDERMINE THE EXISTING FOUNDATION.
2. THE CONTRACTOR SHALL PROTECT THE EXISTING BUILDING FROM WATER RUNOFF FROM THE NEW ADDITION DURING CONSTRUCTION.
3. AT CONTRACTOR OPTION, A SLAB LEAVE-OUT MAY BE PROVIDED ADJACENT TO THE EXISTING BUILDING TO PROVIDE TEMPORARY DRAINAGE.
4. IF CONTRACTOR CHOOSES TO POUR SLAB MONOLITICALLY, A CONTINUOUS WATERSTOP AND FLASHING SHALL BE PROVIDED ADJACENT TO THE EXISTING BUILDING TO PREVENT WATER DAMAGE. FLASHING DETAIL SHALL BE SUMBITTED TO ARCH. FOR APPROVAL.
5. CONTRACTOR SHALL HAVE TESTING LAB PERFORM OBSERVATIONS AND COMPACTION TESTS AT LEAVE OUTS PRIOR TO POURING LEAVE OUT CONCRETE BUT AFTER THE REMAINING SLAB HAS BEEN POURED.

10 SCALE: 3/4" = 1'-0"

TYPICAL DETAIL NEW SLAB AND SELECT FILL NEAR EXISTING BUILDING

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137126
LICENSED
PROFESSIONAL
ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

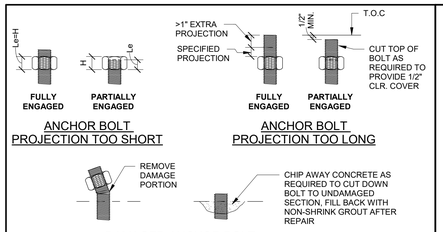
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
FOUNDATION DETAILS

SHEET NO.
S3.04

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



ANCHOR BOLT PROJECTION TOO SHORT

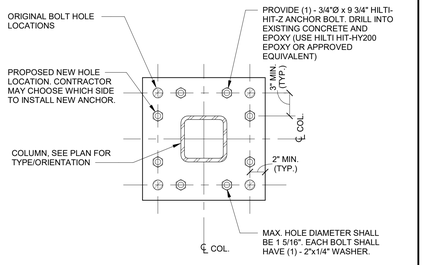
ANCHOR BOLT PROJECTION TOO LONG

DAMAGED ANCHOR BOLT

NOTES:
1. WHERE ANCHOR BOLT PROJECTION IS TOO LONG, SUBMIT RFI TO EOR FOR APPROVAL AS THE BOTTOM OF ANCHOR BOLT ELEVATION MAY NOT BE ADEQUATE, CUT TOP OF BOLT DOWN AS REQUIRED TO PROVIDE COVER. FOR GRAVITY BASE PLATES CONTRACTOR MAY REPLACE OUT OF PLACE ANCHOR WITH EPOXY ANCHOR AS SHOWN IN DETAIL 18/S4.01 & 19/S4.01
2. WHERE ANCHOR BOLT PROJECTION IS LOWER THAN SPECIFIED BUT FULL THREAD ENGAGEMENT WAS ACHIEVED THE BOLT IS ACCEPTABLE. WHERE PROJECTION IS SUCH THAT THE NUT IS PARTIALLY ENGAGED, SUBMIT RFI TO EOR WITH Le AND H DIMENSIONS AS WELL AS THE COLUMN LOCATION.
3. AT DAMAGED ANCHOR BOLTS OR PARTIALLY THREADED FASTENERS DEEMED UNACCEPTABLE BY THE EOR, CONTRACTOR MAY REPAIR BOLT PER DETAIL 20/S4.02 IN LIEU OF REPAIR, AT GRAVITY BASE PLATE CONTRACTOR MAY REPLACE BOLT WITH DRILLED AND EPOXIED ANCHOR PER DETAIL 18/S4.01 & 19/S4.01

TYPICAL DETAIL
REPAIR AT ANCHOR BOLT

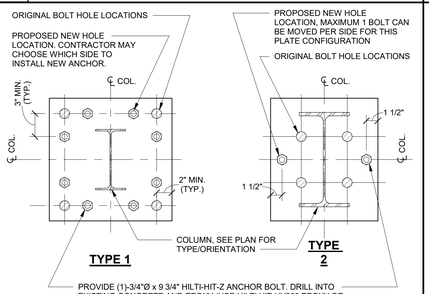
20 SCALE:N.T.S.



NOTES:
1. THIS DETAIL SHALL NOT BE USED AT BRACE FRAMES OR MOMENT FRAMES. ENGINEER APPROVAL IS REQUIRED PRIOR TO INSTALLATION FOR EA. LOCATION WITH DAMAGED ANCHOR BOLTS.
2. CUT AWAY DAMAGED ANCHOR BOLTS AND PROVIDE NEW HOLES FOR EPOXY ANCHOR.
3. HIT-Z-R ANCHORS SHALL BE USED IN LIEU OF HIT-Z ANCHORS AT COLUMNS EXPOSED TO WEATHER.

TYPICAL DETAIL
REPAIR AT GRAVITY BASE PLATE

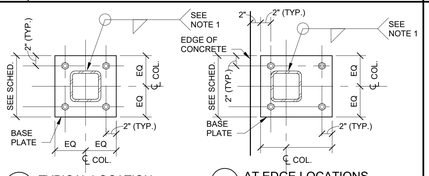
19 SCALE: N.T.S.



NOTES:
1. THIS DETAIL SHALL NOT BE USED AT BRACE FRAMES OR MOMENT FRAMES. ENGINEER APPROVAL IS REQUIRED PRIOR TO INSTALLATION FOR EA. LOCATION WITH DAMAGED ANCHOR BOLTS.
2. CUT AWAY DAMAGED ANCHOR BOLTS AND PROVIDE NEW HOLES FOR EPOXY ANCHOR.
3. HIT-Z-R ANCHORS SHALL BE USED IN LIEU OF HIT-Z ANCHORS AT COLUMNS EXPOSED TO WEATHER.

TYPICAL DETAIL
REPAIR AT GRAVITY BASE PLATE

18 SCALE: N.T.S.

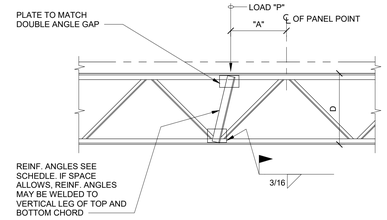


BASE PLATE SCHEDULE		
COLUMN	BASE PLATE	ANCHOR BOLTS
HSS 6 x 6	12" x 12" x 1"	(4)-3/4"Ø TYPE A
HSS 8 x 8	14" x 14" x 1"	(4)-3/4"Ø TYPE A

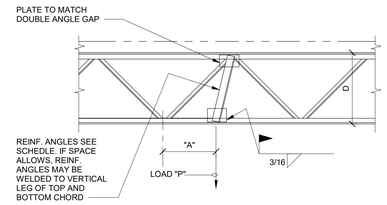
NOTES:
1. MINIMUM FILLET WELD ACCORDING TO AISC (1/4" MIN.). WELDING AROUND CORNER RADIUS IS NOT REQUIRED U.N.O.
2. USE OVERSIZED HOLES FOR ANCHOR RODS ACCORDING TO AISC.
3. WASHERS SHALL BE INSTALLED OVER OVERSIZED HOLES.
4. CONTRACTOR SHALL PROVIDE 1/8" THICK TEMPLATE FOR ANCHOR ROD INSTALLATION.

TYPICAL DETAIL
BASE PLATE AT HSS COLUMNS

17 SCALE: N.T.S.



LOAD ON TOP CHORD



LOAD ON BOTTOM CHORD

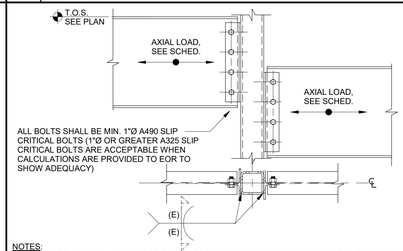
D	REINFORCING ANGLES	END WELD	MAX LOAD (LRFD)*
<= 4'-0"	(2)-L2X2X1/4	3/16 X 1 1/2	20 KIPS
<= 5'-0"	(2)-L2X2X1/4	3/16 X 1 1/2	18 KIPS
<= 6'-0"	(2)-L2 1/2X2 1/2X1/4	3/16 X 1 1/2	20 KIPS
<= 8'-0"	(2)-L3X3X1/4	3/16 X 2	20 KIPS
<= 10'-0"	(2)-L3X3X3/8	3/16 X 2	20 KIPS

*ANGLES DESIGNED FOR A TOTAL LENGTH OF D+6"

NOTES:
1. DIAGONAL BRACE IS NOT REQUIRED FOR "A" LESS THAN 3".
2. PROVIDE DIAGONAL BRACE AT LOCATION OF CONCENTRATED LOADS SUCH AS HEAVY PIPES, MECHANICAL UNITS, HEAVY LIGHTS AND ANY OTHER CONCENTRATED LOADS AS DIRECTED BY EOR.
3. P = CONCENTRATED LOAD.

TYPICAL DETAIL
STIFFENING OF STEEL LH & DLH JOISTS FOR CONCENTRATED LOADS

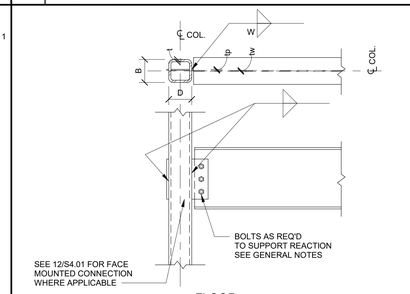
15 SCALE: N.T.S.



NOTES:
1. REFER TO GENERAL NOTES FOR BEAM REACTION DESIGN CRITERIA, WELDS/BOLTS SHALL BE DESIGNED TO WITHSTAND AN ADDITIONAL AXIAL LOAD (LRFD), ACTING SIMULTANEOUS TO THE END REACTION, SEE SCHEDULE.
2. APPLY THIS DETAIL AT ALL CONNECTIONS MARKED (SC) ON PLAN.
3. ALLOWABLE STRENGTH OF BOLTS SHALL BE BASED ON A CLASS A FAYING SURFACE, DO NOT PAINT STEEL AT SLIP CRITICAL CONNECTIONS.
4. WELD SIZES W & E SHALL MEET AISC MIN. SIZE TO ENSURE ROTATIONAL DUCTILITY.
5. WT WEB THICKNESS SHALL NOT EXCEED 7/16".
6. EITHER WELDED/BOLTED OR WELDED/WELDED CONNECTIONS ARE ACCEPTABLE.
7. THE FLANGES SHALL BE DESIGNED FOR OUT OF PLANE BENDING DUE TO AXIAL LOAD.
8. ALL CONNECTIONS SHALL MEET THE ROTATIONAL DUCTILITY AND STABILITY REQUIREMENTS PROVIDED BY AISC.
9. WHERE CALCULATIONS PROVIDED SHOW SINGLE PLATE CONNECTIONS HAVE ADEQUATE STRENGTH (INCLUDING LOCAL FAILURES AT COLUMN FACE), SINGLE PLATES ARE ACCEPTABLE.

ALTERNATE DETAIL
STEEL BEAM TO HSS COLUMN CONNECTION

14 SCALE: N.T.S.

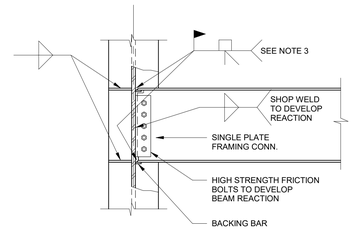


FLOOR

NOTES:
1. tp AND/OR tw SHALL BE LESS THAN OR EQUAL TO 1/4" AT 3/16" THICK HSS TUBES. AT THICKER TUBES tp AND/OR tw SHALL BE LESS THAN OR EQUAL TO 7/16" FOR CONNECTIONS WITH 2 TO 5 BOLTS, AND SHALL BE LESS THAN OR EQUAL TO 5/16" FOR CONNECTIONS WITH 6 OR MORE BOLTS.
2. PLATE DEPTH "L" SHALL NOT BE LESS THAN 1/2 THE "T" DIMENSION OF THE SUPPORTED BEAM.

TYPICAL DETAIL
STEEL BEAM TO HSS COLUMN CONNECTION AT FLOOR

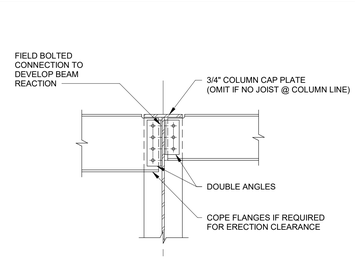
13 SCALE: N.T.S.



NOTE:
1. BOLTS IN WEB CONNECTION SHALL BE TIGHTENED PRIOR TO WELDING OF FLANGES.
2. U.N.O. FLANGE PLATES, BOLTS, AND WELDS SHOWN SHALL BE DESIGNED FOR AN AXIAL TENSION/COMPRESSION EQUAL TO 90% OF THE BEAM PLASTIC MOMENT CAPACITY DIVIDED BY THE DISTANCE BETWEEN FLANGE CENTROIDS. T=C=0.90Mp/(D-tf), WHERE DESIGN MOMENTS ARE PROVIDED THEY MAY BE USED IN LIEU OF THE AFOREMENTIONED CRITERIA. T=C=Mu/(D-tf)
3. WHERE MOMENTS ARE PROVIDED PJP WELDS MAY BE USED IN LIEU OF CJP WELDS. SEE NOTE 2 FOR DESIGN CRITERIA.

TYPICAL DETAIL
STEEL BEAM TO WIDE FLANGE COLUMN WEB MOMENT CONNECTION

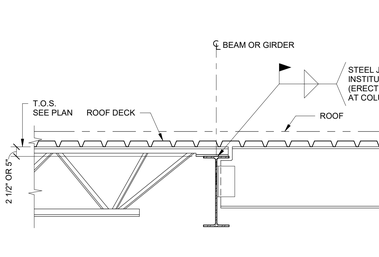
12 SCALE: N.T.S.



NOTES :
1. REFER TO GENERAL NOTES FOR BEAM REACTION DESIGN CRITERIA.
2. PROVIDE PRE-DESIGNED CONNECTIONS AS SHOWN IN AISC MANUAL WHERE APPLICABLE.
3. REFER TO GENERAL NOTES FOR BOLT TYPE.

TYPICAL DETAIL
STEEL BEAM TO WF COLUMN DOUBLE ANGLE SHEAR CONNECTION

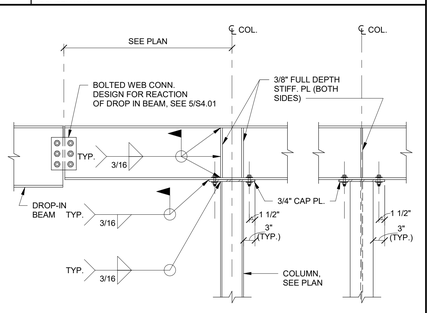
10 SCALE: N.T.S.



NOTE:
COORDINATE JOIST SEATS WITH JOIST SUPPLIER.

TYPICAL DETAIL
STEEL JOIST/STEEL BEAM AT INTERIOR STEEL BEAM, ROOF

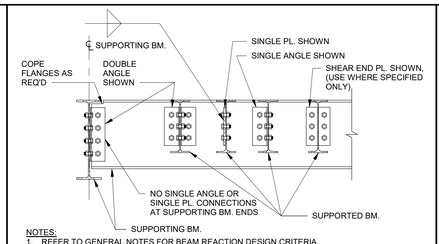
11 SCALE: N.T.S.



NOTE:
1. JOISTS, METAL DECK AND BRACES NOT SHOWN FOR CLARITY. SEE PLAN FOR BRACE LOCATIONS.

TYPICAL DETAIL
CANTILEVER BEAM OVER WIDE FLANGE COLUMN CONNECTION

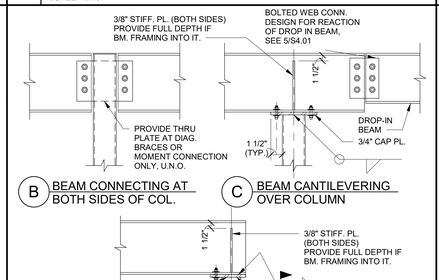
9 SCALE: N.T.S.



NOTES:
1. REFER TO GENERAL NOTES FOR BEAM REACTION DESIGN CRITERIA.
2. PROVIDE PRE-DESIGNED CONNECTIONS AS SHOWN IN AISC MANUAL WHERE APPLICABLE.
3. REFER TO GENERAL NOTES FOR BOLT TYPE.
4. SUPPORTED BEAMS PRIMARILY SUPPORT DISTRIBUTED LOADS FROM SLABS OR DECKING.
5. SUPPORTING BEAMS SUPPORT SIGNIFICANT POINT LOADS FROM ONE OR MORE SUPPORTED BEAMS OR FROM COLUMNS BEING TRANSFERRED. SUPPORTING BEAMS MAY BE SUPPORTED BY COLUMNS OR BY OTHER SUPPORTING BEAMS.
6. FOR AISC SIMPLE SHEAR CONNECTIONS AT SUPPORTED BEAM ENDS, USE DOUBLE ANGLE, SINGLE PLATE, OR SINGLE ANGLE U.N.O.
7. WELDED/BOLTED, WELDED/WELDED OR BOLTED/BOLTED CONNECTIONS PER AISC ARE PERMITTED.
8. ALL CONNECTIONS SHALL MEET THE ROTATIONAL DUCTILITY AND STABILITY REQUIREMENTS
9. BEAMS WITH SHEAR END PLATES REQUIRE CLOSE CONTROL IN FABRICATION TO ENSURE PROPER LENGTH AND SQUARE BEAM ENDS, PARTICULARLY WHEN CAMBER IS SPECIFIED.

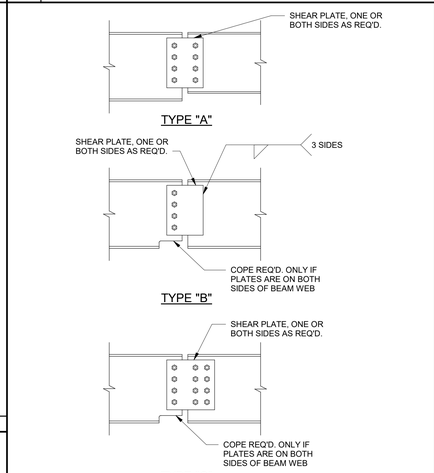
TYPICAL DETAIL BEAM TO BEAM SHEAR CONNECTION (4 TYPES)

8 SCALE: N.T.S.



TYPICAL DETAIL
CANTILEVER BEAM OVER HSS COLUMN CONNECTION

7 SCALE: N.T.S.

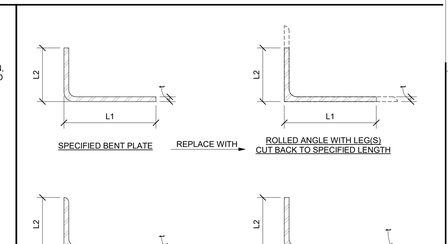


NOTES:
1. REFER TO GENERAL NOTES FOR BEAM REACTION DESIGN CRITERIA.
2. REFER TO GENERAL NOTES FOR BOLT TYPE.
3. ALL CONNECTIONS SHALL MEET THE ROTATIONAL DUCTILITY AND STABILITY REQUIREMENTS PROVIDED BY AISC.

OPTION 2: ANGLE TYPE SHEAR SPLICE

TYPICAL DETAIL
SHEAR SPLICE AT BEAM

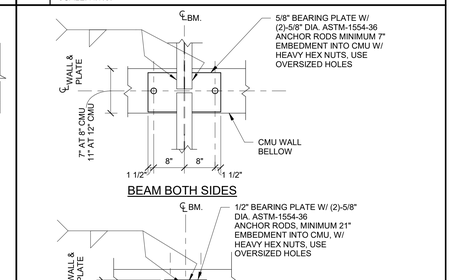
5 SCALE: N.T.S.



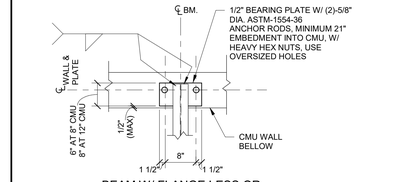
NOTE:
1. AT CONTRACTOR/FABRICATOR PREFERENCE ANGLE AND 90° BENT PLATES MAY BE SUBSTITUTED AS SHOWN U.N.O. BY EOR/ARCH.

TYPICAL DETAIL
ANGLE OR BENT PLATE SUBSTITUTION

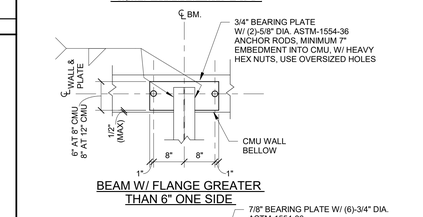
4 SCALE: N.T.S.



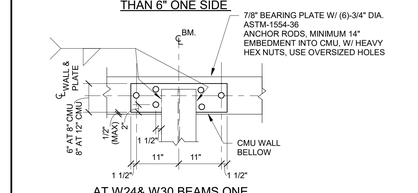
BEAM BOTH SIDES



BEAM W/ FLANGE LESS OR EQUAL THAN 6" ONE SIDE



BEAM W/ FLANGE GREATER THAN 6" ONE SIDE

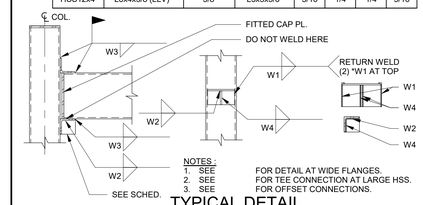


AT W24& W30 BEAMS ONE SIDE

TYPICAL DETAIL
BEAM BEARING PLATE SCHEDULE

2 SCALE: 3/4" = 1'-0"

CONNECTION SCHEDULE							
GIRT SIZE	BOTTOM CONN.	STIFF. PL.	TOP ANGLE	W1	W2	W3	W4
HSS5x5	L4x4x3/8	NONE	L3x3x3/16	3/16	3/16	3/16	3/16
HSS6x6	L4x4x3/8	5/16	L3x3x3/16	3/16	3/16	3/16	3/16
HSS8x8	L4x4x3/8	3/8	L3x3x1/4	3/16	3/16	3/16	3/16
HSS12x4	L4x4x3/8	3/8	L3x3x1/4	1/4	3/16	3/16	1/4
HSS12x6	L4x4x3/8	3/8	L3x3x1/4	1/4	3/16	3/16	1/4
HSS14x6	L4x4x3/8	3/8	L3x3x1/4	1/4	3/16	3/16	1/4
HSS16x8	L6x4x3/8 (LLV)	3/8	L3x3x5/16	1/4	3/16	3/16	1/4
HSS10x8	L6x4x3/8 (LLV)	3/8	L3x3x5/6	5/16	1/4	1/4	5/16
HSS12x4	L6x4x3/8 (LLV)	3/8	L3x3x5/6	5/16	1/4	1/4	5/16



NOTES :
1. SEE FOR DETAIL AT WIDE FLANGES.
2. SEE FOR TEE CONNECTION AT LARGE HSS.
3. SEE FOR OFFSET CONNECTIONS.

TYPICAL DETAIL
TUBE BEAM TO COLUMN

1 SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
117172
LICENSED
PROFESSIONAL ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

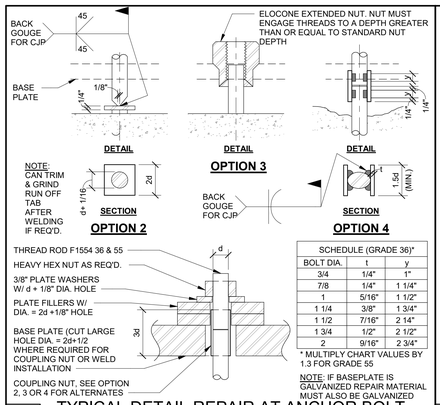
PROJECT NO.
25-0056.00

SHEET TITLE
STEEL DETAILS

SHEET NO.
S4.01

North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



SCHEDULE (GRADE 36)*		
BOLT DIA.	t	y
3/4	1/4"	1"
7/8	1/4"	1 1/4"
1	5/16"	1 1/2"
1 1/4	3/8"	1 3/4"
1 1/2	7/16"	2 1/4"
1 3/4	1/2"	2 1/2"
2	9/16"	2 3/4"

* MULTIPLY CHART VALUES BY 1.3 FOR GRADE 55

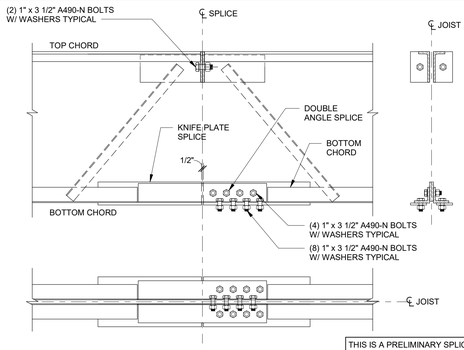
NOTE: IF BASEPLATE IS GALVANIZED REPAIR MATERIAL MUST ALSO BE GALVANIZED

20 TYPICAL DETAIL REPAIR AT ANCHOR BOLT

SCALE:N.T.S.

1. THIS IS A PRELIMINARY DETAIL. THE ACTUAL DESIGN WILL VARY BASED ON JOIST TYPE AND LOAING CONDITIONS. THE JOIST MANUFACTURER IS RESPONSIBLE TO DESIGN SPLICES. THE TOP SPLICE CONNECTION SHALL BE SIZED FOR TENSION LOADS CAUSED BY NET UPLIFT AND ASSOCIATED ECCENTRIC BENDING IN THE PLATE ELEMENTS.
2. USE ONLY A 490 BOLTS TO ASSEMBLE JOISTS.
3. ASTM F436 HARDENED WASHERS MUST BE USED UNDER THE TURNED ELEMENT (NORMALLY UNDER THE NUT)
4. FIELD -SPLICE BOLTS MUST BE PRETENSIONED USING ONE OF THE FOLLOWING METHODS:

   TURN OF NUT
   CALIBRATED WRENCH PRETENSIONING.
5. WHEN HOISTING FIELD SPLICED JOISTS, ATTACH THE HOISTING CABLES TO JOISTS AT TOP CHORD PANEL POINTS, APPROXIMATELY AT THIRD POINTS OF THE JOISTS. HANDLE FIELD-SPLICED JOISTS WITH EXTREME CARE TO ENSURE THE LOAD IS BALANCED AND JOISTS DO NOT BUCKLE LATERALLY. SEE MANUFACTERER FOR ADDITIONAL CRITERIA.
6. FOLLOW ALL OSHA RULES AND REGULATIONS DURING THE ERECTION OF STEEL JOISTS.
7. JOIST SPLICES MAY BE USED UNLESS NOTED OTHERWISE ON PLAN.

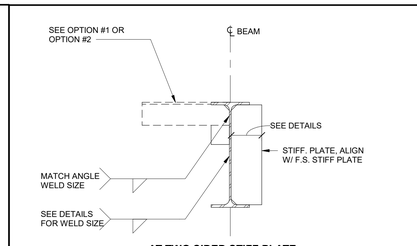


TOP VIEW AT JOIST BOTTOM CHORD

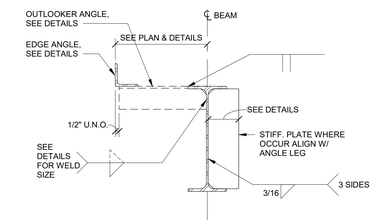
THIS IS A PRELIMINARY SPLICE DETAIL. THE NUMBER OF BOLTS MAY VARY BASED ON JOIST & GIRDER DESIGN. THE FIELD USE DRAWINGS SHALL HAVE THE FINAL INFORMATION SHOWN

16 TYPICAL JOIST FIELD SPLICE PRELIMINARY DETAIL

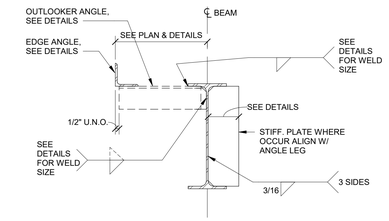
SCALE:N.T.S.



AT TWO SIDED STIFF PLATE



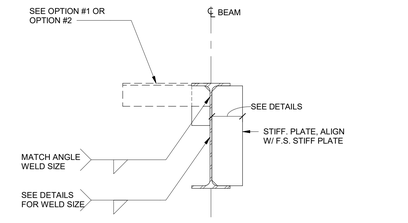
OPTION #1



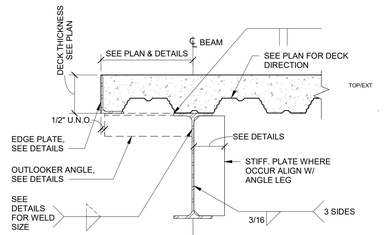
OPTION #2

7 TYPICAL DETAIL OUTLOOKER ANGLE AT BEAM

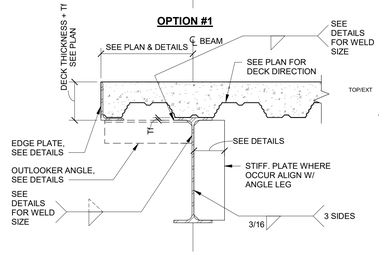
SCALE: N.T.S.



AT TWO SIDED STIFF PLATE



OPTION #1



OPTION #2

3 TYPICAL DETAIL OUTLOOKER ANGLE AT BEAM AT FLOOR

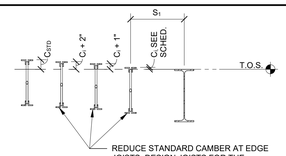
SCALE: N.T.S.

PIPE SIZE	TOTAL WT. (LB/FT)	HANGER POINT LOAD (LB)
2.5 STD	7.9	47
3 STD	10.8	65
3.5 STD	13.4	80
4 STD	16.3	98
5 STD	23.3	140
6 STD	31.5	189
8 STD	50.3	302
10 STD	74.5	447
12 STD	98.6	592
14 STD	114.8	689
16 STD	142.3	854

NOTE:
1. HANGER POINT LOAD BASED ON A 6'-0" HANGER SPACING
2. LOADS ARE BASED ON STANDARD PIPE FILLED WITH WATER

15 TYPICAL DETAIL PIPE WEIGHT AND HANGER LOADS

SCALE: 1" = 1'-0"



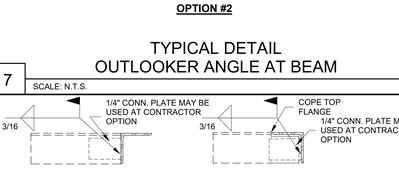
REDUCE STANDARD CAMBER AT EDGE JOISTS. DESIGN JOISTS FOR THE FOLLOWING ROOF LOAD:
DL = 20 PSF (ASD) LL = 20 PSF (ASD)

NOTES:
1. TO FACILITATE DECK INSTALLATION THE MAX. CAMBER OF THE NEAREST JOIST TO THE WALL SHALL BE AS SCHEDULED. ALL LOADING AND DEFLECTION CRITERIA REMAIN THE SAME U.N.O.
2. AT EACH SUBSEQUENT JOIST, CAMBER MAY BE INCREASED 1" UNTIL STANDARD CAMBER IS ACHIEVED.

	MAX. OUTSIDE JOIST CAMBER C, (INCHES)		
JOIST SPAN (FT.)	$S_1 \le$ 2' - 0"	2' - 0" < $S_1 \le$ 4' - 6"	4' - 6" < $S_1 \le$ 6' - 0"
0 - 59	0"	1/2"	3/4"
60 - 69	1/2"	3/4"	1"
70 - 79	3/4"	1"	1 1/4"
80 - 89	1"	1 1/4"	1 1/2"
90 - 99	1 1/4"	1 1/2"	1 3/4"
100 - 109	1 1/2"	1 3/4"	2"
110+	1.5 + 2.5 (SPAN - 110)/100	1.75 + 2.5 (SPAN - 110)/100	2 + 2.5 (SPAN - 110)/100

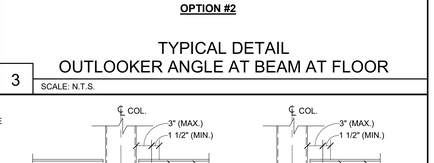
11 TYPICAL DETAIL EXTERIOR JOIST CAMBER

SCALE: 3/4" = 1'-0"



7 TYPICAL DETAIL ANGLE CONNECTIONS

SCALE: 1 1/2" = 1'-0"



MAX. COLUMN WIDTH	
t	B OR D MAX.
3/16"	6"
1/4"	8"
5/16"	10"
3/8"	12"
1/2"	16"
5/8"	18"

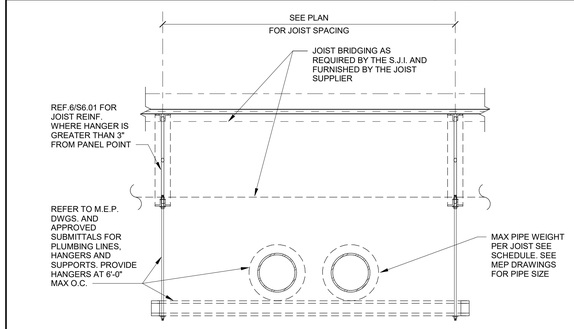
MAX. DESIGN END REACTION Ru (KIPS)*						
L (IN.)	t = 3/16"	t = 1/4"	t = 5/16"	t = 3/8"	t = 1/2"	t = 5/8"
5.5	15	20	25	30	40	50
8.5	36	48	60	73	97	121
11.5	66	89	111	133	178	222
14.5	106	142	177	212	283	354
17.5	154	206	258	309	412	516
20.5	212	283	354	425	566	708
23.5	278	373	466	558	744	930
26.5	354	474	592	710	946	1183

* - VALUES SHOWN FOR ASTM A500 GR, B STEEL. FOR ASTM A500 GR. C, MULTIPLY VALUES BY 1.07.

NOTES:
1. REFER TO GENERAL NOTES FOR BEAM REACTION DESIGN CRITERIA, REACTIONS SHOWN ARE FACTORED LOADS (LRFD).
2. PROVIDE PRE-DESIGNED CONNECTIONS AS SHOWN IN AISC MANUAL WHERE APPLICABLE.
3. REFER TO GENERAL NOTES FOR BOLT TYPE.
4. THIS CONNECTION MAY ONLY BE USED WITH THE GEOMETRY SHOWN ABOVE AND WHERE THE BEAM DESIGN REACTION IS LESS THAN THE VALUE SHOWN IN THE SCHEDULE. ALL VALUES SHOWN ARE ULTIMATE DESIGN (LRFD) VALUES.
5. tp SHALL BE LESS THAN OR EQUAL TO 1/4" AT 3/16" THICK HSS, AND LESS THAN OR EQUAL TO 3/8" AT 1/4" THICK HSS.
6. AT ALL PLATE CONNECTIONS WITH STANDARD HOLES, tp AND/OR tw SHALL BE LESS THAN OR EQUAL TO 7/16" FOR CONNECTIONS WITH 2 TO 5 BOLTS, AND SHALL BE LESS THAN OR EQUAL TO 5/16" FOR CONNECTIONS WITH 6 OR MORE BOLTS. AT ALL PLATE CONNECTIONS WITH HORIZONTAL SHORT SLOTTED HOLES, tp AND/OR tw SHALL BE LESS THAN OR EQUAL TO 7/16 FOR CONNECTIONS WITH 6 OR MORE BOLTS.
7. COLUMN WIDTH B OR D SHALL BE LESS THAN OR EQUAL TO THE MAXIMUM WIDTH SHOWN IN THE SCHEDULE.
8. W SHALL BE 5/8 (tp).
9. FOR TWO SIDED CONNECTIONS, ALL CRITERIA MUST BE MET AT BOTH SIDES. WHERE ONLY ONE SIDE FAILS THE CRITERIA A WT CONNECTION MAY BE PROVIDED AT THAT SIDE.
10. THIS DETAIL IS NOT ALLOWED AT BRACED FRAMES OR OTHER AXIALLY LOADED CONNECTIONS.
11. SEE 7/S4.01 FOR THRU PLATE AND END BEARING CONNECTIONS OR SEE 5/S4.02 FOR WT CONNECTIONS WHERE THIS DETAIL DOES NOT APPLY.
12. PLATE DEPTH "L" SHALL NOT BE LESS THAN 1/2 THE "T" DIMENSION OF THE SUPPORTED BEAM.

1 TYPICAL DETAIL SINGLE PLATE TO RECTANGULAR HSS WALL CONNECTION

SCALE: N.T.S.

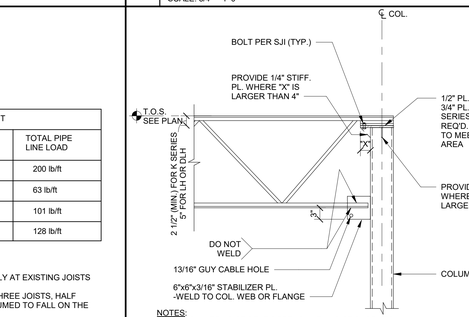


MAX PIPE WEIGHT		
JOIST LENGTH	PER HANGER	TOTAL PIPE LINE LOAD
10-15	100 lb/ft	200 lb/ft
16-59	31.5 lb/ft	63 lb/ft
60-75	51 lb/ft	101 lb/ft
>76	64 lb/ft	128 lb/ft

NOTE:
1. THIS DETAIL DOES NOT APPLY AT EXISTING JOISTS U.N.O.
2. IF PIPES ARE HUNG FROM THREE JOISTS, HALF THE WEIGHT SHALL BE ASSUMED TO FALL ON THE MIDDLE JOIST
3. THIS DETAIL APPLIES TO JOIST AT 6'-0" MAX SPACING ONLY
4. SEE DETAIL 3/STL-JOIST-5 FOR PIPE WEIGHT SCHEDULE

18 TYPICAL DETAIL PIPE HANGERS AT NEW JOIST CONSTRUCTION (PARALLEL)

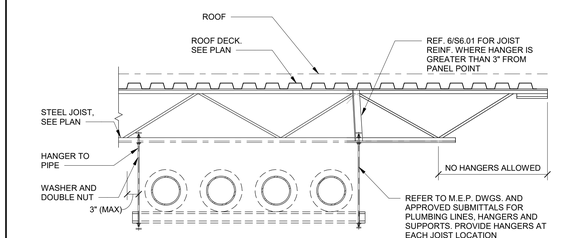
SCALE: 1" = 1'-0"



NOTES:
1. COORDINATE JOIST SEAT DEPTHS WITH JOIST SUPPLIER.
2. PER OSHA STANDARDS WHERE STEEL JOISTS ARE USED & COLUMNS ARE NOT FRAMED IN AT LEAST TWO DIRECTIONS WITH SOLID WEB STRUCTURAL STEEL MEMBERS, STEEL JOIST SHALL BE FIELD BOLTED TO COLUMN.
3. DIMENSION "X" SHALL BE DETERMINED BY JOIST MANUFACTURER.

10 TYPICAL DETAIL JOIST SEAT AT HSS COLUMN

SCALE: N.T.S.

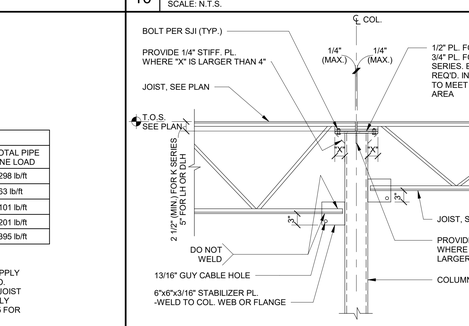


MAX PIPE WEIGHT		
JOIST LENGTH	PER HANGER	TOTAL PIPE LINE LOAD
10-15	894 lb	298 lb/ft
16-40	189 lb	63 lb/ft
41-60	302 lb	101 lb/ft
60-75	604 lb	201 lb/ft
>76	1184 lb/ft	395 lb/ft

NOTES:
1. THIS DETAIL DOES NOT APPLY AT EXISTING JOISTS U.N.O.
2. THIS DETAIL APPLIES TO JOIST AT 6'-0" MAX SPACING ONLY
3. SEE DETAIL 3/STL-JOIST-5 FOR PIPE WEIGHT SCHEDULE

17 TYPICAL DETAIL PIPE HANGERS AT NEW JOIST CONSTRUCTION (PERPENDICULAR)

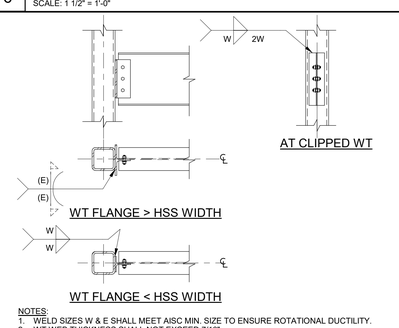
SCALE: 3/4" = 1'-0"



NOTES:
1. COORDINATE JOIST SEAT DEPTHS WITH JOIST SUPPLIER.
2. PER OSHA STANDARDS WHERE STEEL JOISTS ARE USED & COLUMNS ARE NOT FRAMED IN AT LEAST TWO DIRECTIONS WITH SOLID WEB STRUCTURAL STEEL MEMBERS, STEEL JOIST SHALL BE FIELD BOLTED TO COLUMN.
3. DIMENSION "X" SHALL BE DETERMINED BY JOIST MANUFACTURER.

9 TYPICAL DETAIL JOIST SEAT AT HSS COLUMN

SCALE: N.T.S.



NOTES:
1. WELD SIZES W & E SHALL MEET AISC MIN. SIZE TO ENSURE ROTATIONAL DUCTILITY.
2. WT WEB THICKNESS SHALL NOT EXCEED 7/16".
3. THIS DETAIL MAY BE USED IN LIEU OF THE TYPICAL CONN. DETAIL AT CONTRACTOR PREFERENCE.
4. REFER TO GENERAL NOTES FOR BEAM REACTION DESIGN CRITERIA.
5. REFER TO GENERAL NOTES FOR BOLT TYPE.
6. EITHER WELDED/BOLTED OR WELDED/WELDED CONNECTIONS ARE ACCEPTABLE.

5 ALTERNATE DETAIL STEEL BEAM TO HSS COLUMN CONNECTION

SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
117172
LICENSED
PROFESSIONAL
ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

25-0056.00

SHEET TITLE

STEEL DETAILS

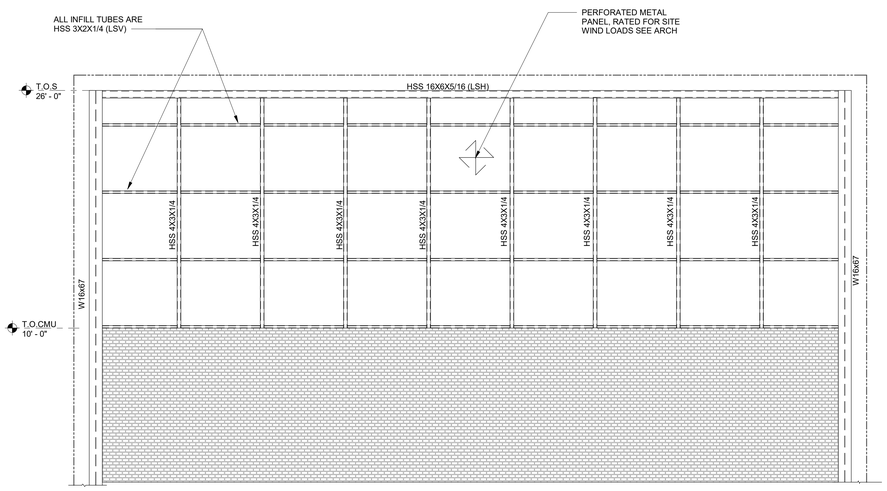
SHEET NO.

S4.02

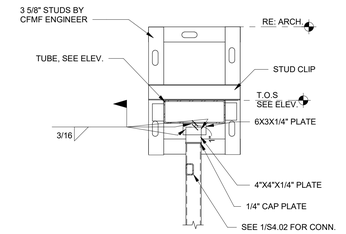
North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

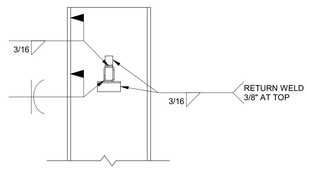
NOTE:
REFER TO 13 & 18 / S3.03 FOR
FOUNDATION AND CMU INFORMATION



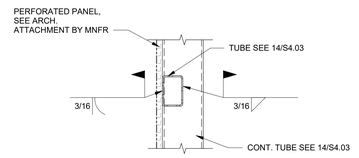
14 MARQUEE ELEVATION
SCALE: 1/4" = 1'-0"



2 TYPICAL DETAIL TUBE TO GIRT DETAIL
SCALE: 3/4" = 1'-0"



5 TYPICAL DETAIL TUBE TO COLUMN DETAIL
SCALE: N.T.S.



1 TYPICAL DETAIL TUBE TO TUBE CONNECTION AT PERFORATED PANEL
SCALE: N.T.S.

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
127127
LICENSED
PROFESSIONAL
ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

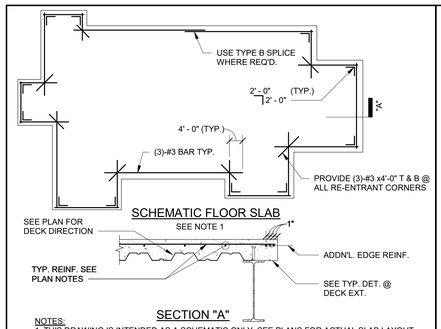
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
STEEL DETAILS

SHEET NO.
S4.03

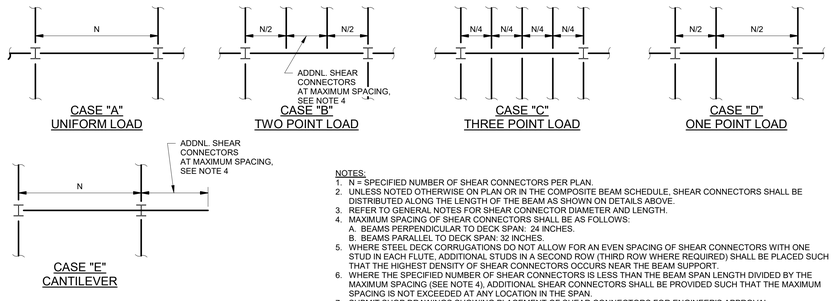
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



NOTES:
1. THIS DRAWING IS INTENDED AS A SCHEMATIC ONLY. SEE PLANS FOR ACTUAL SLAB LAYOUT.
2. TYPICAL REINFORCING PARALLEL TO EDGE REINF. SHALL START 6" FROM EDGE REBAR.
3. ADDITIONAL BARS NEED ONLY BE PROVIDED AT OPENINGS LARGER THAN 4' - 0" WIDE.

TYPICAL DETAIL
REINFORCING AT SLAB EDGE

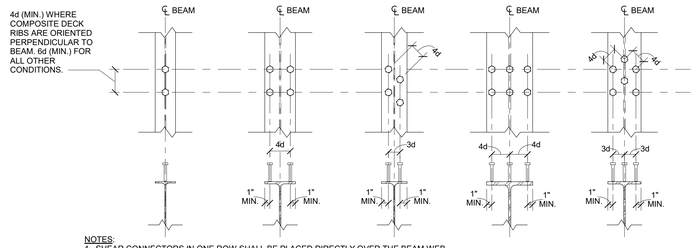
20 SCALE: N.T.S.



NOTES:
1. N = SPECIFIED NUMBER OF SHEAR CONNECTORS PER PLAN.
2. UNLESS NOTED OTHERWISE ON PLAN OR IN THE COMPOSITE BEAM SCHEDULE, SHEAR CONNECTORS SHALL BE DISTRIBUTED ALONG THE LENGTH OF THE BEAM AS SHOWN ON DETAILS ABOVE.
3. REFER TO GENERAL NOTES FOR SHEAR CONNECTOR DIAMETER AND LENGTH.
4. MAXIMUM SPACING OF SHEAR CONNECTORS SHALL BE AS FOLLOWS:
   A. BEAMS PERPENDICULAR TO DECK SPAN: 24 INCHES.
   B. BEAMS PARALLEL TO DECK SPAN: 32 INCHES.
5. WHERE STEEL DECK CORRUGATIONS DO NOT ALLOW FOR AN EVEN SPACING OF SHEAR CONNECTORS WITH ONE STUD IN EACH FLUTE, ADDITIONAL STUDS IN A SECOND ROW (THIRD ROW WHERE REQUIRED) SHALL BE PLACED SUCH THAT THE HIGHEST DENSITY OF SHEAR CONNECTORS OCCURS NEAR THE BEAM SUPPORT.
6. WHERE THE SPECIFIED NUMBER OF SHEAR CONNECTORS IS LESS THAN THE BEAM SPAN LENGTH DIVIDED BY THE MAXIMUM SPACING (SEE NOTE 4), ADDITIONAL SHEAR CONNECTORS SHALL BE PROVIDED SUCH THAT THE MAXIMUM SPACING IS NOT EXCEEDED AT ANY LOCATION IN THE SPAN.
7. SUBMIT SHOP DRAWINGS SHOWING PLACEMENT OF SHEAR CONNECTORS FOR ENGINEER'S APPROVAL.

TYPICAL DETAIL
SHEAR CONNECTOR PLACEMENT DIAGRAMS COMPOSITE METAL DECK

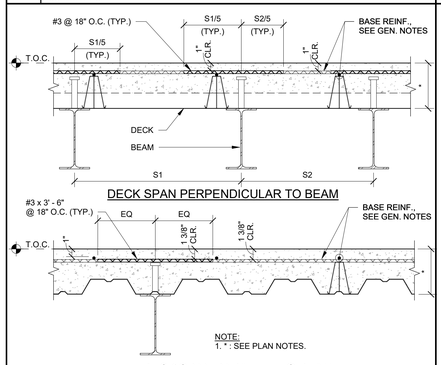
16 SCALE: N.T.S.



NOTES:
1. SHEAR CONNECTORS IN ONE ROW SHALL BE PLACED DIRECTLY OVER THE BEAM WEB.
2. PLACE STUDS IN A SINGLE ROW WHERE SPACING REQUIREMENTS PERMIT. STUDS SHALL BE PLACED IN TWO ROWS OR THREE ROWS ONLY WHERE REQUIRED IN ORDER TO PLACE THE TOTAL NUMBER OF STUDS. SEE TYPICAL DETAIL, "SHEAR CONNECTOR PLACEMENT DIAGRAMS COMPOSITE METAL DECK"
3. PROVIDE MINIMUM 1" SPACING FROM EDGE OF FLANGE TO CENTERLINE OF STUD.
4. SUBMIT SHOP DRAWINGS SHOWING PLACEMENT OF SHEAR CONNECTORS FOR ENGINEER'S APPROVAL.
5. D - INDICATES STUD SHAFT DIAMETER.
6. IF THE STEEL BEAM FLANGE IS NARROW. SPACING REQUIREMENTS MAYBE MET BY STAGGERING STUDS AS SHOWN.
7. SPACINGS SHOWN ARE MINIMUM AND MAY BE EXCEEDED WHERE SPACE IS AVAILABLE. SEE TYPICAL DETAIL "SHEAR CONNECTOR PLACEMENT DIAGRAMS ON COMPOSITE METAL DECK" FOR ADDITIONAL INFO.

TYPICAL DETAIL
SHEAR CONNECTOR SPACING CRITERIA

8 SCALE: N.T.S.



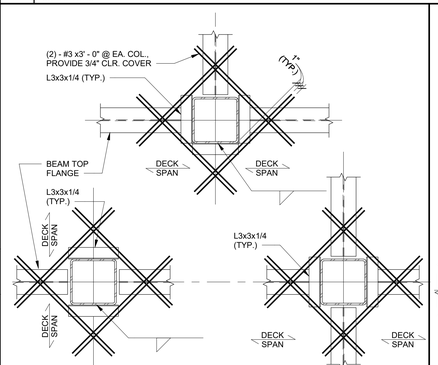
DECK SPAN PERPENDICULAR TO BEAM

NOTE:
1. * : SEE PLAN NOTES.

DECK SPAN PARALLEL TO BEAM

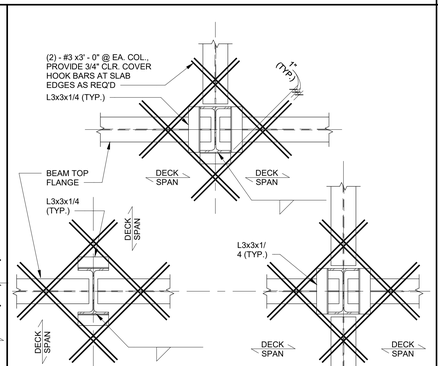
TYPICAL DETAIL
ADDITIONAL REBAR FOR CONCRETE ON STEEL DECK

19 SCALE: N.T.S.



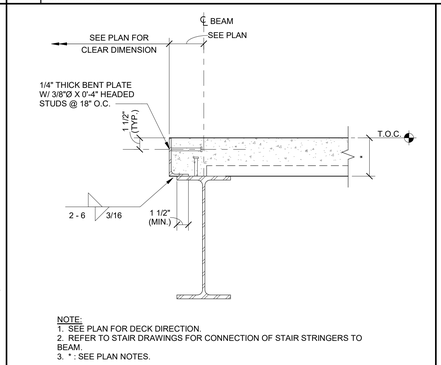
TYPICAL DETAIL
METAL DECK SUPPORT AT STEEL COLUMNS

15 SCALE: N.T.S.



TYPICAL DETAIL
METAL DECK SUPPORT AT STEEL COLUMNS

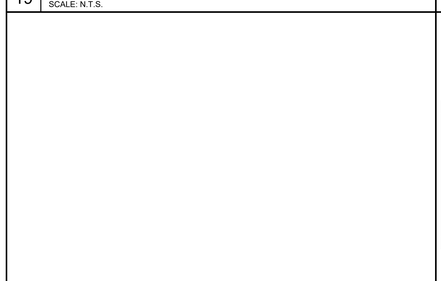
11 SCALE: N.T.S.



NOTE:
1. SEE PLAN FOR DECK DIRECTION.
2. REFER TO STAIR DRAWINGS FOR CONNECTION OF STAIR STRINGERS TO BEAM.
3. * : SEE PLAN NOTES.

TYPICAL DETAIL
STEEL STAIR FLOOR LANDING COMPOSITE METAL DECK

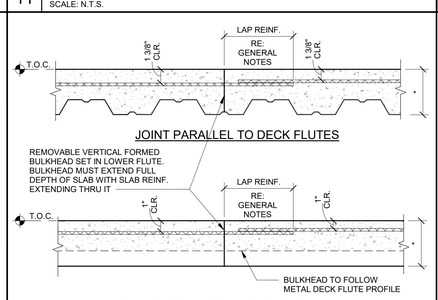
7 SCALE: N.T.S.



NOTES:
1. COORDINATE OPENING SIZE AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. THIS DETAIL SHOWS TYPICAL CONFIGURATIONS. VERIFY WITH STRUCTURE ENGINEER FOR SPECIAL CASES.
3. REFER TO STRUCTURAL ENGINEER FOR FRAMING IF DIMENSION "A" EXCEEDS 8'-0".
4. DECK MANUFACTURER TO PROVIDE 14 GAGE METAL EDGE CLOSURE AROUND EACH OPENING UNLESS DETAILED OTHERWISE.

TYPICAL DETAIL
FRAMED OPENINGS IN COMPOSITE METAL DECK SLAB FLOOR OR ROOF

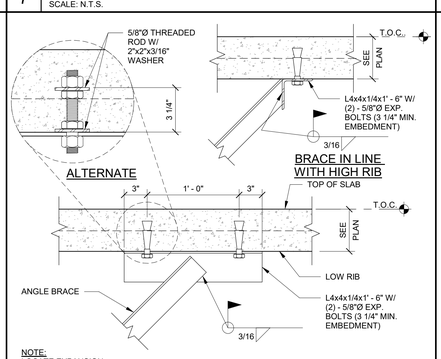
14 SCALE: N.T.S.



NOTES:
1. CONSTRUCTION JOINTS PARALLEL TO DECK FLUTES SHALL BE LOCATED NO CLOSER THAN 5' - 0" FROM THE CENTERLINE OF THE NEAREST GIRDER.
2. CONSTRUCTION JOINTS PERPENDICULAR TO DECK FLUTES SHALL BE LOCATED AT THE CENTER OF THE METAL DECK SPAN.
3. * : SEE PLAN NOTES.

TYPICAL DETAIL
CONSTRUCTION JOINT CONCRETE SLAB ON METAL DECK

10 SCALE: N.T.S.

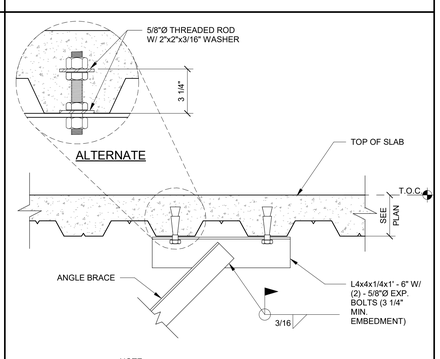


NOTE:
LOCATE EXPANSION BOLTS IN CENTER OF DECK FLUTE

BRACE IN LINE WITH LOW RIB

TYPICAL DETAIL
BRACE CONNECTION TO SLAB

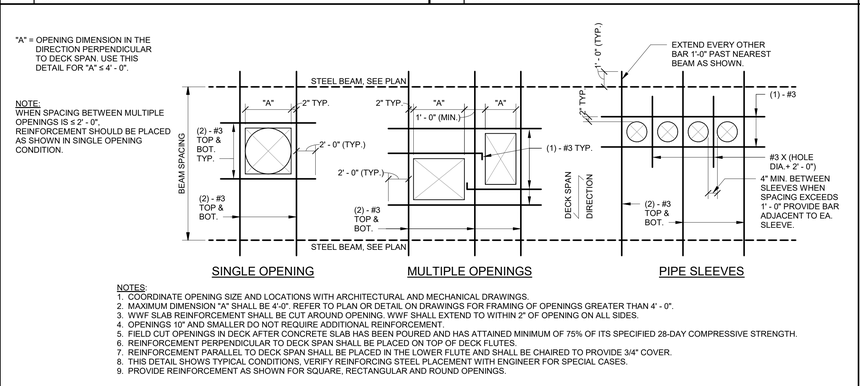
6 SCALE: N.T.S.



NOTE:
LOCATE EXPANSION BOLTS IN CENTER OF DECK FLUTE

TYPICAL DETAIL
BRACE CONNECTION TO SLAB

2 SCALE: N.T.S.



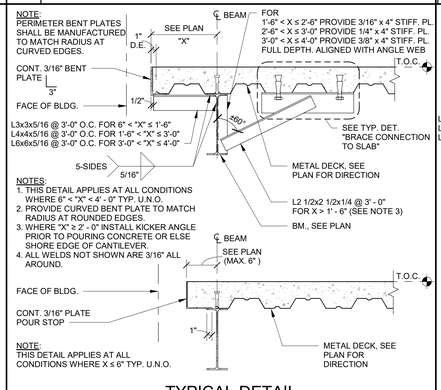
NOTE:
WHEN SPACING BETWEEN MULTIPLE OPENINGS IS ≤ 2' - 0", REINFORCEMENT SHOULD BE PLACED AS SHOWN IN SINGLE OPENING CONDITION.

SINGLE OPENING MULTIPLE OPENINGS PIPE SLEEVES

NOTES:
1. COORDINATE OPENING SIZE AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. MAXIMUM DIMENSION "A" SHALL BE 4'-0". REFER TO PLAN OR DETAIL ON DRAWINGS FOR FRAMING OF OPENINGS GREATER THAN 4' - 0".
3. WWF SLAB REINFORCEMENT SHALL BE CUT AROUND OPENING. WWF SHALL EXTEND TO WITHIN 2" OF OPENING ON ALL SIDES.
4. OPENINGS 10" AND SMALLER DO NOT REQUIRE ADDITIONAL REINFORCEMENT.
5. FIELD CUT OPENINGS IN DECK AFTER CONCRETE SLAB HAS BEEN POURED AND HAS ATTAINED MINIMUM OF 75% OF ITS SPECIFIED 28-DAY COMPRESSIVE STRENGTH.
6. REINFORCEMENT PERPENDICULAR TO DECK SPAN SHALL BE PLACED ON TOP OF DECK FLUTES.
7. REINFORCEMENT PARALLEL TO DECK SPAN SHALL BE PLACED IN THE LOWER FLUTE AND SHALL BE CHAIRED TO PROVIDE 3/4" COVER.
8. THIS DETAIL SHOWS TYPICAL CONDITIONS, VERIFY REINFORCING STEEL PLACEMENT WITH ENGINEER FOR SPECIAL CASES.
9. PROVIDE REINFORCEMENT AS SHOWN FOR SQUARE, RECTANGULAR AND ROUND OPENINGS.

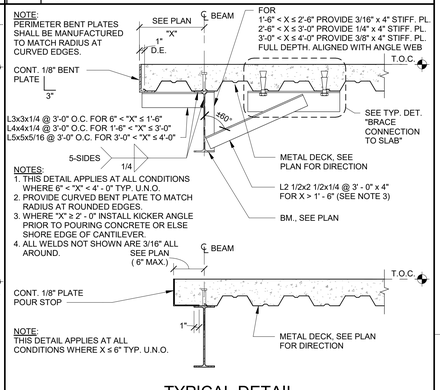
TYPICAL DETAIL
OPENINGS IN COMPOSITE METAL DECK SLAB, FLOOR OR ROOF

13 SCALE: N.T.S.



TYPICAL DETAIL
EDGE DETAIL - EXTERIOR COMPOSITE METAL DECK

5 SCALE: N.T.S.



TYPICAL DETAIL
EDGE DETAIL - INTERIOR COMPOSITE METAL DECK

1 SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137127
LICENSED
PROFESSIONAL
ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

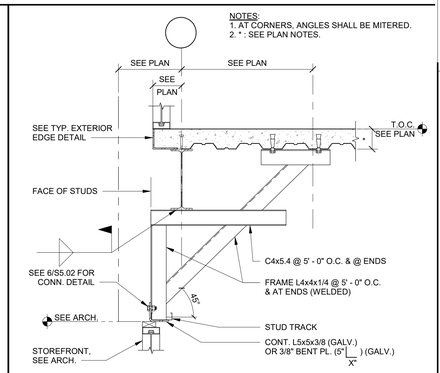
PROJECT NO.
25-0056.00

SHEET TITLE
FLOOR DETAILS

SHEET NO.
S5.01

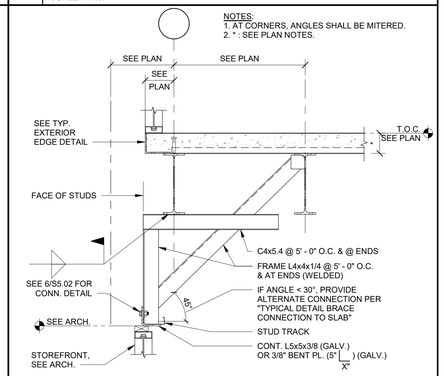
North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



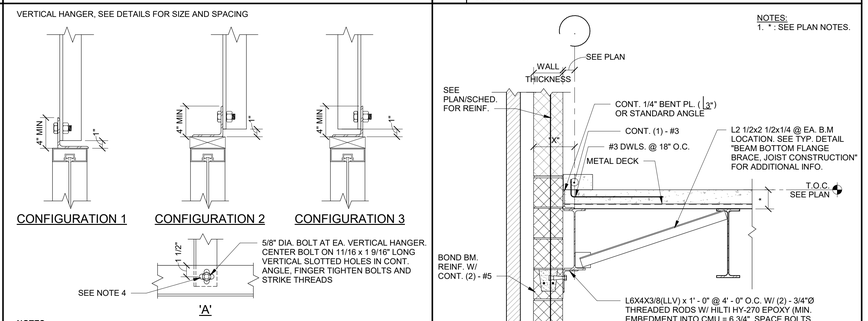
TYPICAL DETAIL
WALL SUPPORT

4 SCALE: N.T.S.



TYPICAL DETAIL
WALL SUPPORT

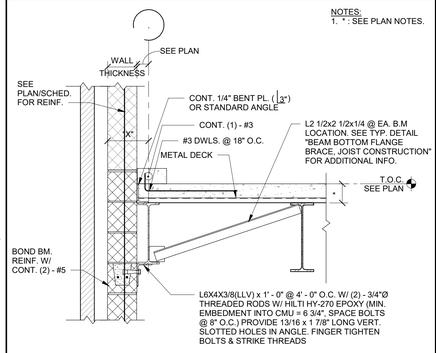
3 SCALE: N.T.S.



NOTES:
1. SEE DETAILS FOR SIZE AND ORIENTATION OF CONTINUOUS ANGLE
2. REFER TO ARCH. DETAILS FOR THE PRESENCE OF BLOCKING
3. DO NOT WELD CONTINUOUS ANGLE TO VERTICAL HANGERS
4. AT CONTRACTOR OPTION PROVIDE HORIZONTAL SHORT SLOTTED OR LONG SLOTTED HOLES IN VERTICAL ANGLE FOR FIELD ADJUSTMENT

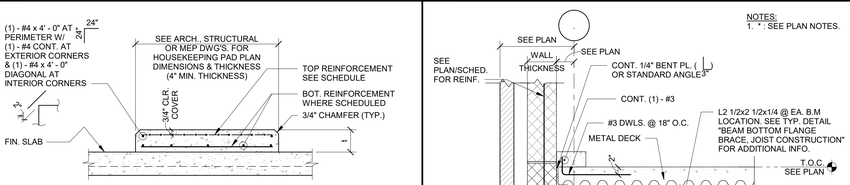
TYPICAL DETAIL
STEEL HEADER ANGLE AT GLAZING

6 SCALE: 1 1/2" = 1'-0"



TYPICAL DETAIL
PERIMETER CMU WALL BRACING AT FLOOR LINE (B.M PARALLEL)

2 SCALE: N.T.S.



HOUSEKEEPING PAD REINF. SCHEDULE		
PAD THICKNESS	TOP REINFORCEMENT	BOTTOM REINF.
4" (MAX.)	4"x4" - W4.0 x W4.0	NONE

NOTE:
1. GENERAL CONTRACTOR TO DETERMINE REQUIREMENTS FOR HOUSEKEEPING PADS OVER STRUCTURAL SLAB AND PROVIDE WHERE REQUIRED WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT. COORDINATE DIMENSIONS AND OTHER SPECIAL REQUIREMENTS WITH EQUIPMENT MANUFACTURERS AS REQUIRED.
2. PAD SHALL NOT BE POURED UNTIL AFTER SLAB HAS REACHED ITS SPECIFIED 28 DAYS STRENGTH.
3. CONCRETE FOR HOUSEKEEPING PAD SHALL BE LIGHTWEIGHT CONCRETE WITH f'c = 3,000 psi

TYPICAL DETAIL
CONCRETE ISLAND OR HOUSEKEEPING PAD
SECOND FLOOR

5 SCALE: N.T.S.

TYPICAL DETAIL
PERIMETER CMU WALL BRACING AT FLOOR LINE (B.M PERPENDICULAR)

1 SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
97172
LICENSED
PROFESSIONAL
ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.

25-0056.00

SHEET TITLE

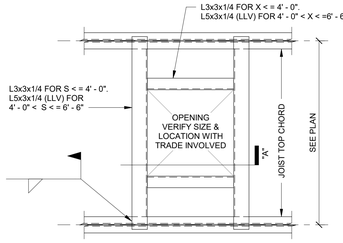
FLOOR DETAILS

SHEET NO.

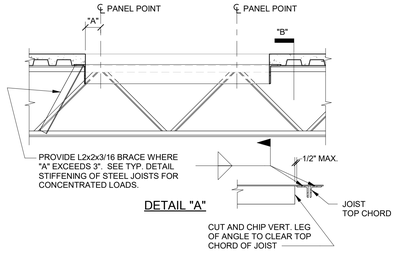
S5.02

North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



PLAN

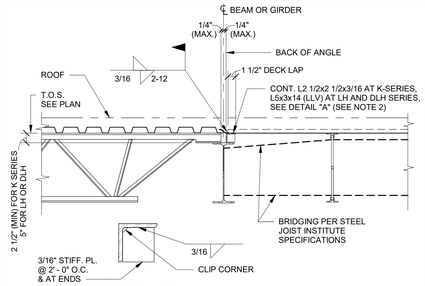


DETAIL "A"

DETAIL "B"

TYPICAL DETAIL OPEN WEB STEEL JOIST ROOF OPENING

8 SCALE: N.T.S.

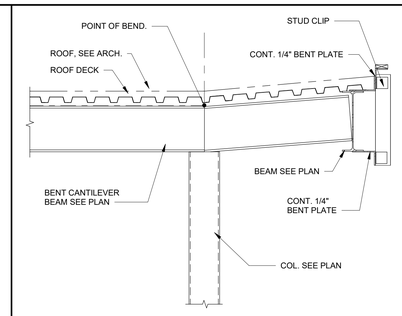


DETAIL "A"

NOTES:
1. PROVIDE JOIST BRIDGING AS REQUIRED BY STEEL JOIST INSTITUTE SPECIFICATIONS.
2. WHERE JOIST SEAT REQUIRES MORE THAN 1/2 THE FLANGE WIDTH FOR BEARINGS EXTEND JOIST SEATS TO THE EDGE OF FLANGE AND PROVIDE ANGLES BETWEEN JOISTS. WHERE JOIST SEAT DEPTH DIFFERS FROM ANGLE LENGTH SHOWN USE CONT. 1/4" BENT PLATE OF EQUAL DEPTH TO JOIST SEAT WITH 3" FLANGE.

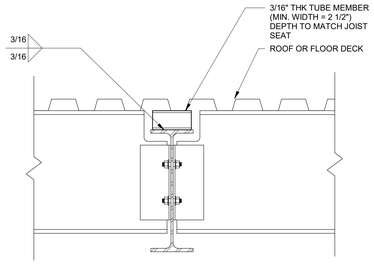
TYPICAL DETAIL OPEN WEB STEEL JOIST INTERIOR STEEL BEAM AT CHANGE IN METAL DECK DIRECTION, ROOF

4 SCALE: N.T.S.



DETAIL AT CANTILEVER BENT BEAM

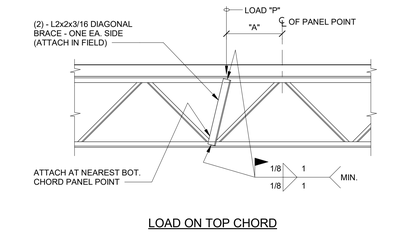
15 SCALE: N.T.S.



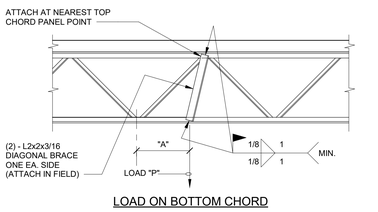
NOTE:
AT LOCATIONS WITH A JOIST ON ONE SIDE AND A BEAM ON THE OTHER SIDE, PROVIDE FILLER TS MEMBER ON HALF THE FLANGE. ALTERNATIVELY, THE TOP CHORD OF THE JOIST CAN BE EXTENDED TO THE EDGE OF THE MAIN BEAM FLANGE.

TYPICAL DETAIL FILLER MEMBER FOR DECK AND SUPPORT AT SECONDARY BEAMS PARALLEL TO JOISTS

11 SCALE: N.T.S.



LOAD ON TOP CHORD

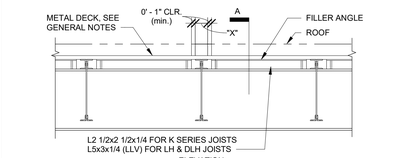


LOAD ON BOTTOM CHORD

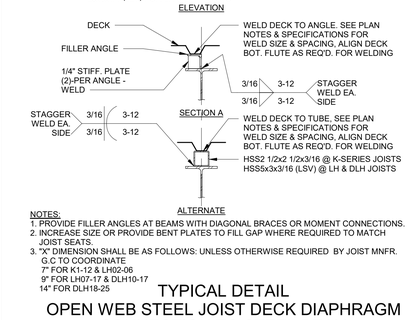
NOTES:
1. DIAGONAL BRACE IS NOT REQUIRED FOR "A" LESS THAN 3".
2. PROVIDE DIAGONAL BRACE AT LOCATION OF CONCENTRATED LOADS SUCH AS HEAVY PIPES, MECHANICAL UNITS, HEAVY LIGHTS AND ANY OTHER CONCENTRATED LOADS AS DIRECTED BY EOR.
3. P = CONCENTRATED LOAD.

TYPICAL DETAIL STIFFENING OF STEEL JOIST FOR CONCENTRATED LOADS

6 SCALE: N.T.S.



ELEVATION

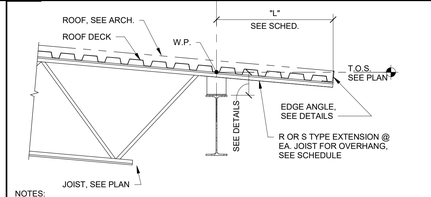


ALTERNATE

NOTES:
1. PROVIDE FILLER ANGLES AT BEAMS WITH DIAGONAL BRACES OR MOMENT CONNECTIONS.
2. INCREASE SIZE OR PROVIDE BENT PLATES TO FILL GAP WHERE REQUIRED TO MATCH JOIST SEATS.
3. "X" DIMENSION SHALL BE AS FOLLOWS: UNLESS OTHERWISE REQUIRED BY JOIST MNFR.
   G.C TO COORDINATE
   7" FOR K1-12 & LH02-06
   9" FOR LH07-17 & DLH10-17
   14" FOR DLH18-25

TYPICAL DETAIL OPEN WEB STEEL JOIST DECK DIAPHRAGM CONNECTION TO STEEL BEAM

3 SCALE: N.T.S.



NOTES:
1. CONTRACTOR/JOIST MNFR. MAY CHOOSE EITHER TYPE JOIST EXTENSION SHOWN (OR LARGER) FOR "L" ≤ MAX. "L" SHOWN.
2. FOR ANY "L" JOIST, MNFR. MAY DESIGN JOIST EXTENSION FOR THE FOLLOWING CRITERIA IN LIEU OF SIZE SHOWN, U.N.O.:
   TL = 240 PLF
   TOTAL DEFLECTION ≤ 2 x "L" / 240
   LL = 120 PLF
   LIVE LOAD DEFLECTION < 2 x "L" / 360
   MNFR. SHALL ACCOUNT FOR SKIP LOADING OF LIVE LOADS.
3. LOADS ON JOIST EXTENSIONS SHOWN ON PLAN OR IN DETAILS SHALL BE IN ADDITION TO THOSE SHOWN HERE. DEFLECTION CRITERIA SHALL REMAIN THE SAME AS SHOWN ABOVE. THE SCHEDULE SHOWN HERE DOES NOT APPLY WHERE ADDITIONAL LOADS ARE SHOWN.

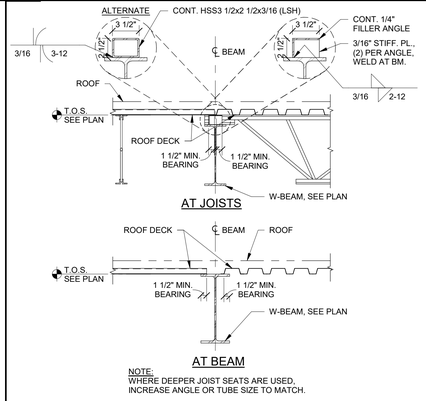
TOP CHORD JOIST EXTENSION SCHEDULE*

MAX "L"	R-TYPE	S-TYPE
≤ 1' - 6"	R1	S3
2' - 0"	R1	S7
2' - 6"	R1	S10
3' - 0"	R1	S12
3' - 6"	R1	N/A
4' - 0"	R3	N/A
4' - 6"	R8	N/A
5' - 0"	R11	N/A
≥ 5' - 6"	DESIGN SPECIAL EXTENSION	

*CONTRACTOR/FABRICATOR MAY CHOOSE EITHER TYPE JOIST EXTENSION FOR "L" ≤ MAX "L" SHOWN

TYPICAL DETAIL K-JOIST EXTENSION SCHEDULE

14 SCALE: N.T.S.



AT JOISTS

AT BEAM

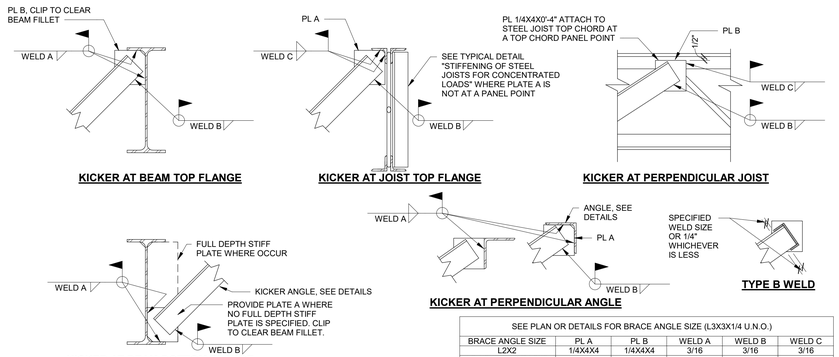
NOTE:
WHERE DEEPER JOIST SEATS ARE USED, INCREASE ANGLE OR TUBE SIZE TO MATCH.

TYPICAL DETAIL CHANGE IN ROOF DECK DIRECTION

10 SCALE: N.T.S.

TYPICAL DETAIL OPEN WEB STEEL JOIST AT INTERIOR TIE BEAM, ROOF

2 SCALE: N.T.S.

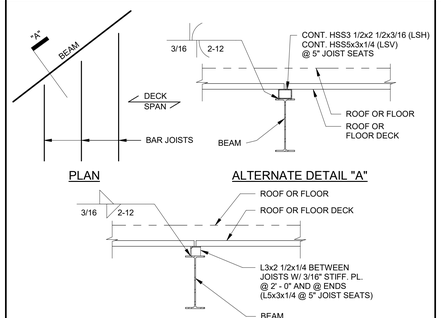


SEE PLAN OR DETAILS FOR BRACE ANGLE SIZE (L3X3X1/4 U.N.O.)

BRACE ANGLE SIZE	PL A	PL B	WELD A	WELD B	WELD C
L2X2	1/4X4X4	1/4X4X4	3/16	3/16	3/16
L2 1/2X2 1/2 OR L3X3	1/4X4X4	1/4X4X4	3/16	3/16	1/4
L4X4	1/4X5X5	1/4X5X5	5/16	1/4	3/8
L5X5	3/8X6X6	3/8X6X6	3/8	5/16	7/16

TYPICAL DETAIL KICKER ANGLE CONNECTIONS

17 SCALE: 1 1/2" = 1'-0"

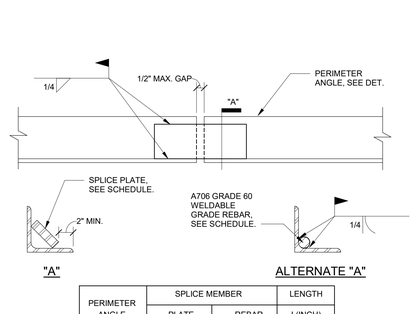


DETAIL "A"

NOTE:
WHERE DEEPER JOIST SEATS ARE USED, INCREASE ANGLE OR TUBE SIZE TO MATCH.

TYPICAL DETAIL DECK SUPPORT AT SKEWED BEAM

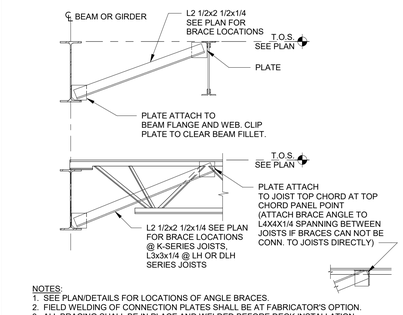
9 SCALE: N.T.S



PERIMETER ANGLE	SPLICE MEMBER		LENGTH
	PLATE	REBAR	L(INCH)
L3x3x1/4	1/2x2 3/4	#7 BAR	9"
L4x4x1/4	1/2x4	#9 BAR	12"

TYPICAL DETAIL SPLICE AT PERIMETER ROOF ANGLE

5 SCALE: N.T.S.



NOTES:
1. SEE PLAN/DETAILS FOR LOCATIONS OF ANGLE BRACES.
2. FIELD WELDING OF CONNECTION PLATES SHALL BE AT FABRICATOR'S OPTION.
3. ALL BRACING SHALL BE IN PLACE AND WELDED BEFORE DECK INSTALLATION.
4. BRACE SIZES SHOWN ARE TYPICAL UNLESS NOTED OTHERWISE ON PLAN.
5. SEE GENERAL NOTES FOR DECK CONSTRUCTION.
6. SEE TYPICAL DETAIL "KICKER ANGLE CONNECTIONS FOR ALL PLATES AND WELD SIZES

TYPICAL DETAIL BEAM BOTTOM FLANGE BRACE JOIST CONSTRUCTION

1 SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
127127
LICENSED
PROFESSIONAL
ENGINEER

10/01/2025
ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

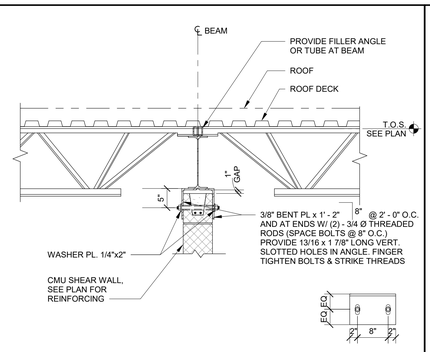
SHEET TITLE
ROOF DETAILS

SHEET NO.
S6.01

Galena Park ISD
HOUSTON, TEXAS

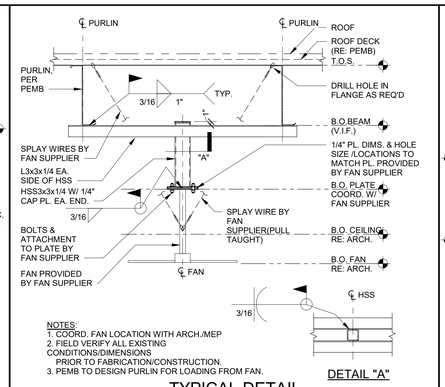
North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



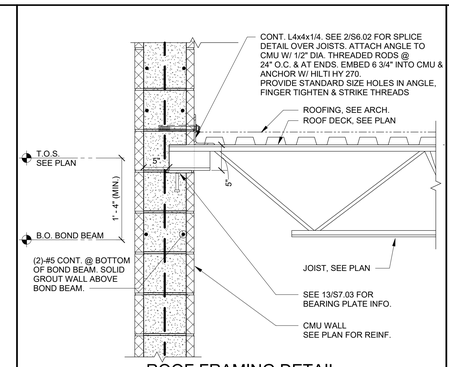
ROOF DETAIL AT INTERIOR SHEAR WALL (JOIST PARALLEL)

16 SCALE: 3/4" = 1'-0"



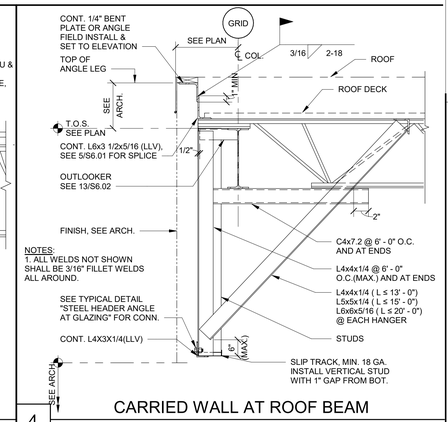
TYPICAL DETAIL BIG ASS FAN AT PURLINS

5 SCALE: N.T.S.



ROOF FRAMING DETAIL AT CARRIED BRICK AT LOAD BEARING CMU WALLS

8 SCALE: 1" = 1'-0"

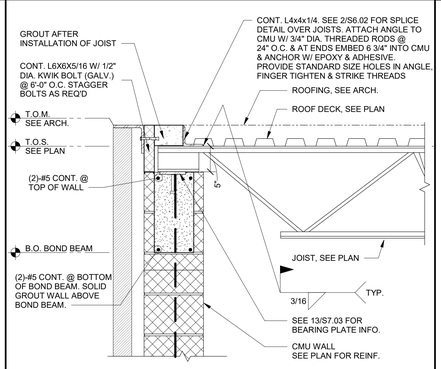


CARRIED WALL AT ROOF BEAM

4 SCALE: 3/4" = 1'-0"

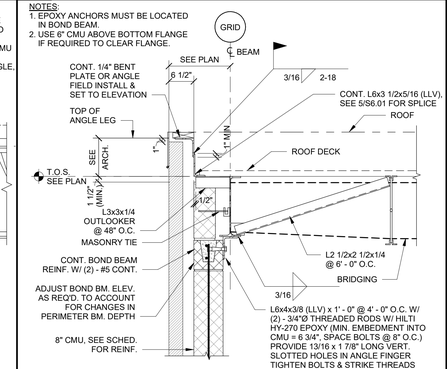
TYPICAL DETAIL STEEL BEAM AT CMU WALL

15 SCALE: N.T.S.



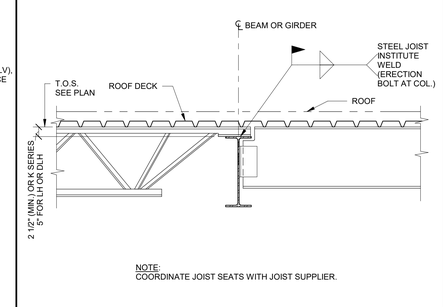
ROOF FRAMING DETAIL AT LOAD BEARING CMU WALLS

11 SCALE: 1" = 1'-0"



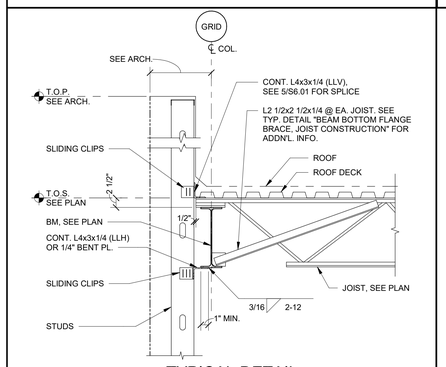
TYPICAL DETAIL EXTERIOR EDGE AT CMU

7 SCALE: 3/4" = 1'-0"



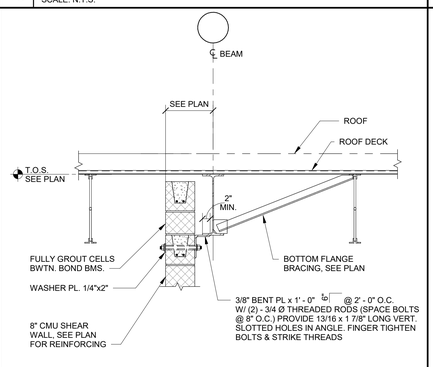
TYPICAL DETAIL STEEL JOIST/STEEL BEAM AT INTERIOR STEEL BEAM, ROOF

3 SCALE: N.T.S.



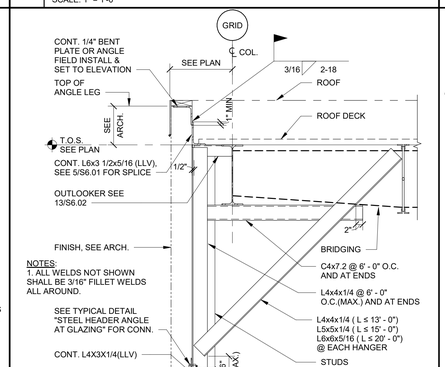
TYPICAL DETAIL EXTERIOR EDGE AT STUDS (JOIST PERPENDICULAR TO BEAMS)

18 SCALE: 3/4" = 1'-0"



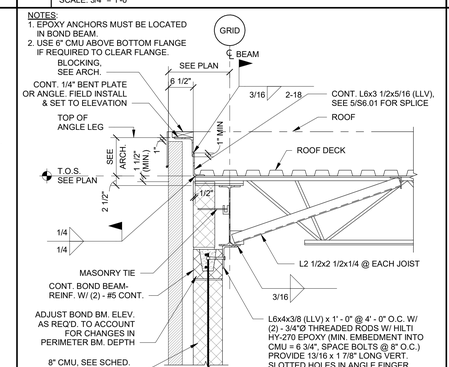
ROOF DETAIL AT INTERIOR SHEAR WALL (JOIST PARALLEL)

14 SCALE: 3/4" = 1'-0"



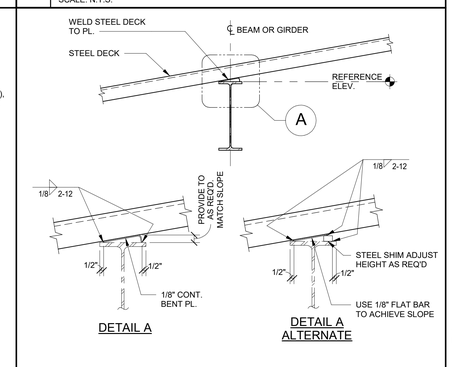
CARRIED WALL AT ROOF BEAM

10 SCALE: 3/4" = 1'-0"



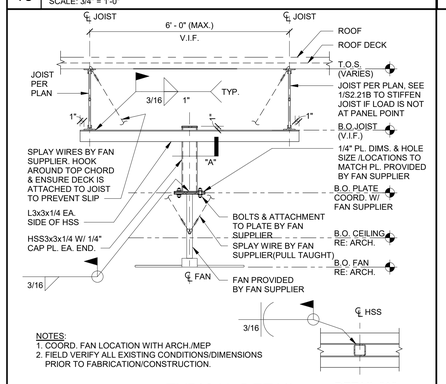
TYPICAL DETAIL EXTERIOR EDGE AT CMU

6 SCALE: 3/4" = 1'-0"



TYPICAL SLOPING STEEL DECK SUPPORT ON BEAM WITH VERTICAL WEB

2 SCALE: N.T.S.

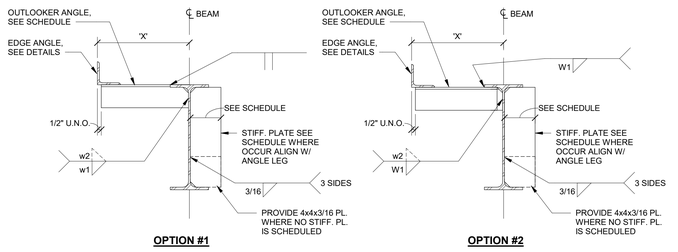


TYPICAL DETAIL BIG ASS FAN AT JOISTS

17 SCALE: N.T.S.

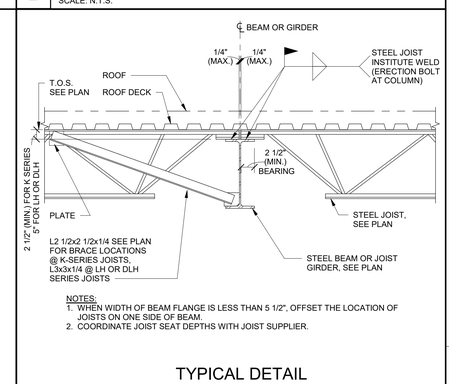
OUTLOOKER AND STIFFENER SCHEDULE				
MAX 'X'	OUTLOOKER	w1	w2	STIFFENER
< 6"	L3X3X3/16 @ 5' - 0" O.C.	3/16	NA	NA
1' - 6"	L3X3X3/16 @ 5' - 0" O.C.	3/16	NA	1/4"X2" FULL DEPTH
2' - 0"	L3X3X1/4 @ 5' - 0" O.C.	3/16	NA	1/4"X3" FULL DEPTH
2' - 6"	L4X3X1/4(LLV) @ 5' - 0" O.C.	3/16	3/16	1/4"X3" FULL DEPTH
3' - 0"	L4X3X5/16(LLV) @ 5' - 0" O.C.	3/16	3/16	1/4"X4" FULL DEPTH
3' - 6"	L4X3X3/8(LLV) @ 5' - 0" O.C.	1/4	1/4	5/16"X4" FULL DEPTH
4' - 0"	L4X4X3/8 @ 5' - 0" O.C.	1/4	1/4	5/16"X4" FULL DEPTH
4' - 6"	L5X5X5/16 @ 5' - 0" O.C.	1/4	1/4	3/8"X4" FULL DEPTH

SEE DETAIL FOR 'X' DIMENSION



TYPICAL DETAIL OUTLOOKER ANGLE AT BEAM

13 SCALE: N.T.S.



TYPICAL DETAIL OPEN WEB STEEL JOIST AT INTERIOR STEEL BEAM, ROOF

1 SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137127
LICENSED
PROFESSIONAL ENGINEER

10/01/2025
ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

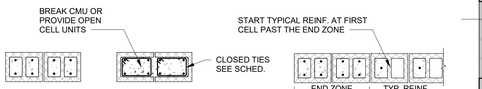
SHEET TITLE
ROOF DETAILS

SHEET NO.
S6.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

NOTE:
THIS DETAIL APPLIES TO ALL SHEAR WALLS SCHEDULED ON PLAN U.N.O.

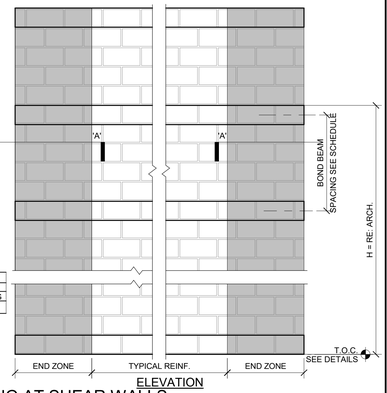
NOTES:
1. SHEAR WALL SHALL BE RUNNING BOND U.N.O. LAP BLOCKS AT CORNERS AND INTERSECTIONS.
2. BOND BEAM SHALL LAP AT CORNERS AND INTERSECITONS SEE 5/S5.01.
3. DOWELS SHALL MATCH VERTICAL REINFORCMENT. DOWELS MAY NOT BE EPOXY GROUTED AND MUST BE CAST IN PLACE.
4. REINFORCING AT OPENINGS SHALL FOLLOW TYPICAL LINTEL AND JAMB REINFORCING DETAILS UNLESS NOTED OTHERWISE.



TYPE 1 END ZONE

TYPE 2 END ZONE

SECTION 'A'



ELEVATION

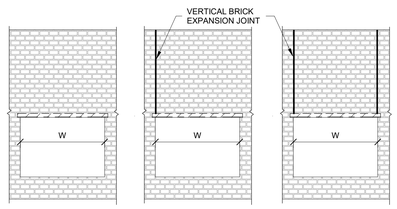
SHEAR WALL SCHEDULE

WALL TYPE	WALL THICKNESS	TYPICAL REINF.	END ZONE REINF.	END ZONE WIDTH	END ZONE TYPE	BOND BEAM DEPTH	BOND BEAM REINF.	BOND BEAM SPACING
S-1	8"	#5 @ 24" O.C.	(1) - #6 @ 8" *	3'-0"	1	8"	(2)-#4	4'-0"

*PROVIDE 1 BAR AT EA. FACE

TYPICAL DETAIL REINFORCING AT SHEAR WALLS

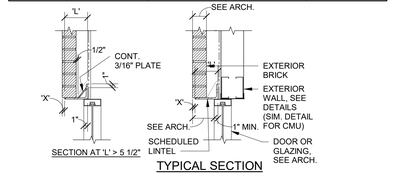
20 SCALE: 3/4" = 1'-0"



NO JOINTS | JOINT ON ONE SIDE | JOINT ON BOTH SIDES

MINIMUM ANGLE SIZE

CLEAR OPENING	EXPANSION JOINT AT RUNNING BOND			
	NONE	ONE SIDE	BOTH SIDES	STACK BOND
≤6'-0"	L3 1/2 x 'L' x 5/16	L5 x 'L' x 1/4	L5 x 'L' x 5/16	L7 x 'L' x 3/8
6'-8"	L4 x 'L' x 5/16	L5 x 'L' x 5/16	L6 x 'L' x 5/16	L7 x 'L' x 3/8
7'-4"	L5 x 'L' x 1/4	L6 x 'L' x 5/16	L6 x 'L' x 3/8	L8 x 'L' x 7/16
8'-0"	L6 x 'L' x 5/16	L6 x 'L' x 3/8	L7 x 'L' x 3/8	L8 x 'L' x 7/16
10'-0"	L7 x 'L' x 3/8	L8 x 'L' x 7/16	L8 x 'L' x 7/16	NA
12'-0"	L8 x 'L' x 7/16	NA	NA	NA

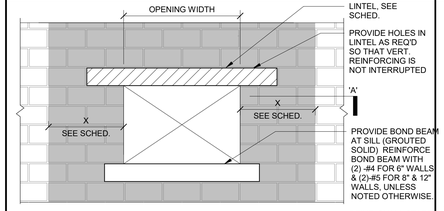


TYPICAL SECTION

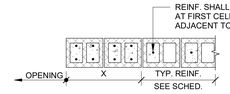
NOTES:
1. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS.
2. PROVIDE 1" OF BEARING AT EACH JAMB FOR EACH FOOT OF CLEAR SPAN BUT NOT LESS THAN 8".
3. WHERE MINIMUM BEARING CANNOT BE ACHIEVED, PROVIDE ADEQUATE CONNECTION TO ADJACENT STRUCTURAL MEMBERS OR PROVIDE SEPARATE VERTICAL SUPPORTS. SUBMIT SUCH DETAILS FOR THE ENGINEER'S APPROVAL.
4. ALL LINTELS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
5. FOR MASONRY OPENINGS GREATER THAN 10'-0", SEE DETAILS ON THE DRAWINGS OR REFER TO ENGINEER.
6. BRICK HEIGHTS OVER OPENINGS GREATER THAN ONE HALF THE LINTEL SPAN SHALL BE SHORED UNTIL MORTAR HAS SET AND CURED.
7. 'L' DIMENSION SHALL NOT BE LESS THAN 4". FOR 'L' DIMENSION GREATER THAN 5 1/2". PROVIDE 3/16" PLATE STIFFENER.
8. UNLESS NOTED OTHERWISE BY ARCHITECT, 'X' DIMENSION SHALL BE 5/8" AT NOMINAL BRICK OR 4" CMU, AT KING BRICK 'X' SHALL BE 1/2".
9. WHERE MINIMUM ANGLE THICKNESS EXCEEDS GROUT BED THICKNESS, BOOT CUT BRICK AS REQ'D IN ORDER TO MAINTAIN LEVEL COURSING.
10. WHERE NO BRICK JOINTS OCCUR, LINTEL SCHEDULE IS VALID FOR ALL BRICK WALL HEIGHTS. WHERE EXPANSION JOINTS ARE PROVIDED AT ONE OR BOTH SIDES OF OPENINGS,OR WHERE STACK BONDED BRICK IS USED, LINTEL SCHEDULE IS VALID FOR A CARRIED BRICK HEIGHT UP TO 26 FT. SEE EOR IF THIS VALUE IS EXCEEDED.

TYPICAL DETAIL STEEL LOOSE LINTEL SCHEDULE EXTERIOR BRICK

11 SCALE: N.T.S.



NOTE:
NO CONTROL JOINTS ALLOWED WITHIN SHADED AREA.



SECTION 'A'

OPENING SIZE	JAMB WIDTH 'X'	JAMB REINF.
≤ 5' - 4"	2' - 0"	(2) - #5 @ 8" O.C.
>5'-4"& ≤ 8' - 0"	3' - 0"	(2) - #5 @ 8" O.C.
>8' - 0" & ≤ 12' - 0"	4' - 0"	(2) - #7 @ 8" O.C.

CMU JAMB REINFORCING SCHEDULE

7 SCALE: N.T.S.

BAR SIZE	MINIMUM LAP SPLICE LENGTH: REINFORCEMENT AT CENTER OF WALL: 6" CMU	8" CMU	10" CMU	12" CMU	REINFORCEMENT OFF CENTER: ANY	HOOKED BAR DEVELOPMENT LENGTH: ANY
3	12	12	12	12	17	5
4	18	13	12	12	29	7
5	28[4]	20	16	13	45	9
6	51[4]	37	29	24	54	10
7	NA[5]	50	39	32	63	12
8	NA[5]	72	58	48	72	13

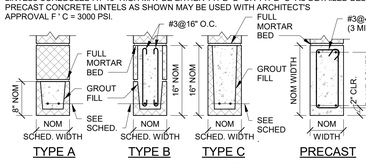
NOTES:
1. TABLE FOR USE WITH GRADE 60 UNCOATED REINF. BARS IN CMU (f'm = 2000 psi)
2. BARS SPLICED BY NON-CONTACT LAP SPLICE SHALL NOT BE SPACED FARTHER APART THAN, ONE-FIFTH THE REQUIRED LAP LENGTH, OR 8".
3. LAP LENGTHS PER IBC 2021.
4. PERMITTED ONLY IF ALL MORTAR FINS ARE REMOVED ROM THE CELL TO BE GROUTED.
5. BAR EXCEEDS MAX. ALLOWABLE SIZE.
6. DEVELOPMENT LENGTH OF EPOXY COATED BARS SHALL BE TAKEN AS 1.5 TIMES THE VALUES IN THE CHART.

TYPICAL DETAIL MASONRY TENSION LAP SPLICE (INCHES)

4 SCALE: N.T.S.

CLEAR SPAN	REINFORCING REQUIREMENTS IN NOMINAL LINTEL SECTION: 4x8	6x8	6x16	8x8	8x16	10x8	10x16	12x8	12x16
3-4	1-#3	1-#3	——	1-#3	——	2-#3	——	2-#3	——
4-0	1-#3	1-#4	——	2-#3	——	2-#3	——	2-#4	——
4-8	1-#4	1-#4	——	2-#4	——	2-#4	——	2-#4	——
5-4	1-#4	2-#4	——	2-#4	——	2-#4	2-#3	2-#5	——
6-0	1-#5	2-#4	1-#4	2-#4	2-#3	2-#5	2-#4	2-#5	2-#4
6-8	N/A	N/A	1-#5	N/A	2-#4	N/A	2-#4	2-#6	2-#4
7-4	↑	↑	1-#5	↑	2-#4	↑	2-#4	N/A	2-#5
8-0	↓	↓	1-#6	↓	2-#4	↓	2-#5	↑	2-#5
8-8	↓	↓	1-#6	↓	2-#5	↓	2-#5	↓	2-#6
9-4	N/A	N/A	1-#7	N/A	2-#5	N/A	2-#6	N/A	2-#6

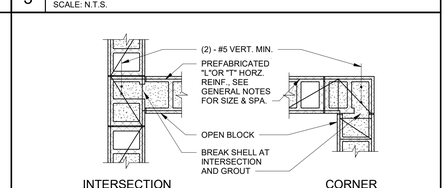
NOTES:
1. SEE ARCHITECTURAL DRAWINGS FOR SIZE & LOCATION OF OPENINGS.
2. PROVIDE 1" OF BEARING AT EACH JAMB FOR EACH FOOT OF CLEAR SPAN BUT NOT LESS THAN 8". REINFORCEMENT SHALL PROJECT A MINIMUM OF 6" ONTO THE BEARING.
3. MINIMUM MASONRY COMPRESSIVE STRENGTH OF GROUTED PRISM F' M = 2000 PSI.
4. LINTELS SCHEDULED AT 16" HIGH MAY BE EITHER TYPE "B" OR TYPE "C" AS DETAILED BELOW.
5. PRECAST CONCRETE LINTELS AS SHOWN MAY BE USED WITH ARCHITECT'S APPROVAL F ' C = 3000 PSI.

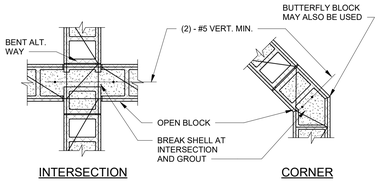


TYPE A | TYPE B | TYPE C | PRECAST

NON-LOAD BEARING BLOCK LINTEL SCHEDULE

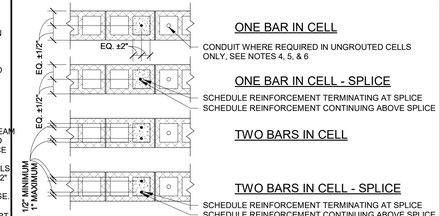
15 SCALE: N.T.S.





CMU WALL INTERSECTIONS

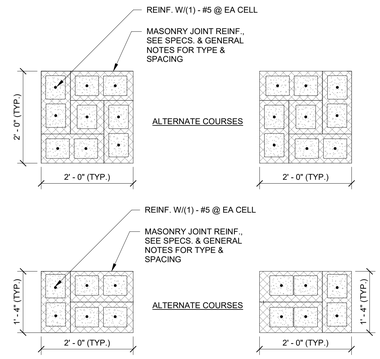
2 SCALE: N.T.S.



NOTES:
1. REINFORCEMENT MUST BE PLACED USING REINFORCING BAR POSITIONERS THAT LOCATE THE BAR AS SPECIFIED AND PREVENT MOVEMENT OF THE BAR DURING CONSTRUCTION.
2. SPLICED REINFORCEMENT MUST BE A CONTACT LAP SPLICE WITH SPLICED BARS ALIGNED PARALLEL TO THE WALL AS SHOWN.
3. THE ENGINEER MUST BE NOTIFIED PRIOR TO PLACEMENT OF REINFORCEMENT THAT IS REQUIRED TO BE PLACED OUTSIDE OF THE TOLERANCES OF THIS DETAIL SUCH AS TO AVOID INTERFERENCE WITH OTHER REINFORCEMENT, CONDUITS, OR EMBEDDED ITEMS.
4. CONDUIT, PIPES AND SLEEVES SHALL BE NO CLOSER THAN 3 DIAMETERS ON CENTER (USE LARGER DIAMETER WHERE MULTIPLE SIZES ARE USED).
5. ALUMINUM PIPES MAY NOT BE USED UNLESS EFFECTIVELY COATED TO PREVENT CHEMICAL REACTION.
6. PIPES SHALL NOT BE EMBEDDED IN MASONRY WHEN:
   (a) CONTAINING LIQUIDS, GAS, OR VAPORS AT A TEMPERATURE HIGHER THAN 150°F (66°C).
   (b) UNDER PRESSURE IN EXCESS OF 55 PSI (379 KPA).
   (c) CONTAINING WATER OR OTHER LIQUIDS SUBJECT TO FREEZING.

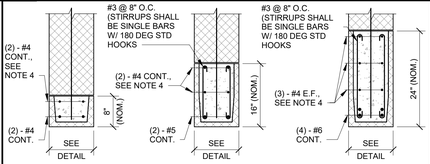
TYPICAL DETAIL CMU VERTICAL BAR PLACEMENT

3 SCALE: N.T.S.

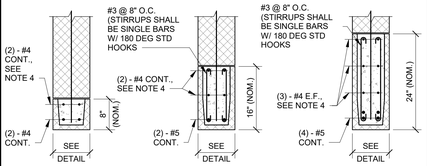


TYPICAL DETAIL MASONRY COLUMNS

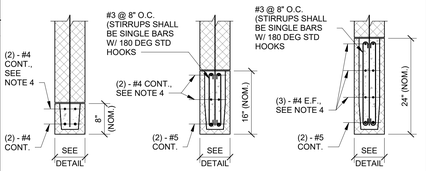
18 SCALE: 3/4" = 1'-0"



TYPE 1 AT 12" CMU | TYPE 2 AT 12" CMU | TYPE 3 AT 12" CMU



TYPE 1 AT 10" CMU | TYPE 2 AT 10" CMU | TYPE 3 AT 10" CMU



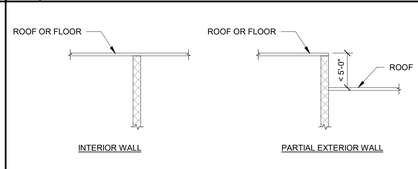
TYPE 1 AT 8" CMU | TYPE 2 AT 8" CMU | TYPE 3 AT 8" CMU

CMU	WALL GROUT SPACING	BOND BEAM MAX CLEAR SPAN SCHEDULE: TYPE 1 RUNNING BOND	TYPE 1 STACK BOND	TYPE 2 RUNNING BOND	TYPE 2 STACK BOND	TYPE 3 RUNNING BOND	TYPE 3 STACK BOND
8"	16" O.C.	6'-4"	5'-0"	9'-4"	7'-8"	13'-4"	11'-8"
	>32" O.C.	7'-0"	5'-8"	10'-4"	8'-8"	14'-0"	12'-4"
10"	16" O.C.	6'-4"	5'-0"	9'-4"	7'-8"	15'-8"	13'-4"
	>32" O.C.	7'-0"	5'-8"	10'-4"	8'-8"	17'-0"	14'-8"
12"	16" O.C.	6'-4"	5'-4"	9'-8"	8'-0"	16'-4"	13'-4"
	>32" O.C.	7'-0"	6'-0"	11'-0"	9'-0"	18'-0"	15'-4"

NOTES:
1. SEE ARCH. DRAWINGS FOR SIZE AND LOCATION OF OPENINGS.
2. PROVIDE 1" OF BEARING @ EACH JAMB FOR EACH FOOT OF CLEARSPAN BUT NOT LESS THAN 8" REINF. SHALL PROJECT A MIN. OF 6" ONTO THE BEARING CMU.
3. BOND BEAMS SHALL BE FULLY GROUTED (2500 PSI @ 28 DAYS).
4. THE #4 FACE BARS ARE ONLY REQUIRED AT EXTERIOR CMU WALLS.

TYPICAL DETAIL BLOCK LINTEL AT EXTERIOR OR LOAD BEARING WALLS

13 SCALE: N.T.S.

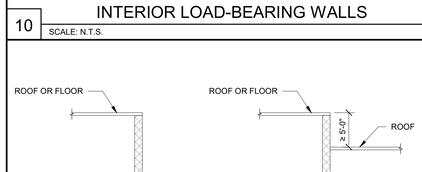


WALL THICKNESS	VERTICAL REINFORCING
6"	#5 @ 24" O.C.
8"	#6 @ 24" O.C.

NOTES:
1. LOAD BEARING WALL IS DEFINED AS A WALL SUPPORTING MEZZANINE FLOOR OR ROOF.
2. ALL REINFORCING SHALL BE CONTINUOUS BETWEEN FOUNDATION AND TOP OF WALL. ALL REINFORCED CELLS SHALL BE GROUTED SOLID.
3. AT FOUNDATION, PROVIDE DOWELS TO MATCH VERTICAL REINFORCING BARS.
4. PROVIDE CONTINUOUS BOND BEAMS AT TOP OF WALLS. REINFORCE BOND BEAMS WITH (2) - #5 UNLESS NOTED OTHERWISE.
5. IF A WALL IS AN EXTERIOR WALL, THEN USE LARGER REINF. FOR EXTERIOR WALL AND SHOWN ABOVE.

TYPICAL DETAIL INTERIOR LOAD-BEARING WALLS

10 SCALE: N.T.S.



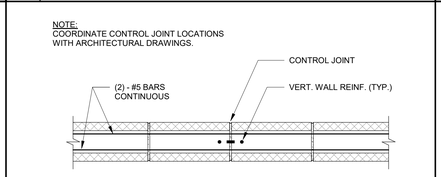
WALL THICKNESS	UNBRACED HEIGHT	VERTICAL REINFORCING
8"	18' - 0" MAX	(2) - #5 @ 32"
8"	24' - 0" MAX	(2) - #5 @ 32"

NOTES:
1. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. ALL REINFORCING STEEL SHALL BE CONTINUOUS BETWEEN FOUNDATION AND TOP OF CMU. SPLICE REINFORCING PER GENERAL NOTES. ALL REINFORCED CELLS SHALL BE GROUTED SOLID.
3. AT FOUNDATION, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF VERTICAL BARS.
4. CONSULT WITH ARCH./EOR WHEN HEIGHT OF WALL EXCEEDS THE HEIGHT SHOWN HERE.
5. PROVIDE CONTINUOUS BOND BEAMS AT THE TOP OF WALLS. REINFORCE BOND BEAMS WITH (2) - #5, UNLESS NOTED OTHERWISE.

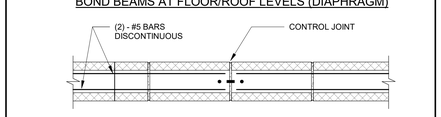
TYPICAL DETAIL - EXTERIOR CMU WALL

9 SCALE: N.T.S.

NOTE:
COORDINATE CONTROL JOINT LOCATIONS WITH ARCHITECTURAL DRAWINGS.



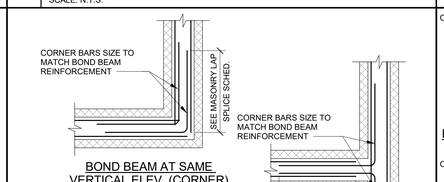
BOND BEAMS AT FLOOR/ROOF LEVELS (DIAPHRAGM)



BOND BEAMS AT INTERMEDIATE LEVELS

TYPICAL BOND BEAM AT CONTROL JOINTS

6 SCALE: N.T.S.



BOND BEAM AT DIFFERENT VERTICAL ELEV.

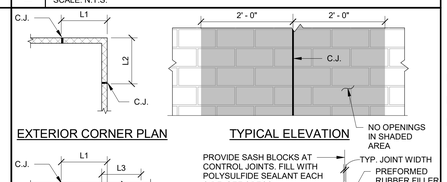
BOND BEAM AT SAME VERTICAL ELEV. (CORNER)

BOND BEAM AT SAME VERTICAL ELEV. (INTERSECTION)

NOTE:
OMIT CORNER BARS AT CONTROL JOINT LOCATIONS AS INDICATED ON TYPICAL CMU ELEVATION.

TYPICAL CMU BOND BEAM REINFORCEMENT

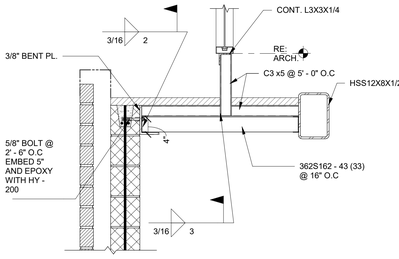
5 SCALE: N.T.S.



NOTES:
1. CONTRACTOR SHALL OBTAIN ARCHITECT'S APPROVAL OF JOINT LOCATIONS, WHICH SHALL NOT EXCEED THE MINIMUM OF 1.5 TIMES THE WALL HEIGHT OR 20'-0".
2. HORIZONTAL REINFORCING AT FLOOR AND ROOF LINES SHALL BE CONTINUOUS THRU JOINT.
3. CONCRETE BLOCK SHOWN - BRICK SIMILAR.
4. SAWCUT BLOCK OR BRICK AS REQUIRED.
5. AT EXTERIOR CORNERS, LOCATE JOINTS SUCH THAT: L1 + L2 ≤ 20' - 0".
6. AT EXTERIOR "T" INTERSECTIONS, LOCATE JOINTS SUCH THAT: L1 + L2 ≤ 20' - 0", L2 + L3 ≤ 20' - 0" AND L1 + L3 - WALL THICKNESS ≤ 20' - 0"

MASONRY WALL CONTROL JOINT

1 SCALE: N.T.S.



CMU DETAIL AT ENTRANCE

17 SCALE: N.T.S.

VLK

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137126
LICENSED
PROFESSIONAL ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

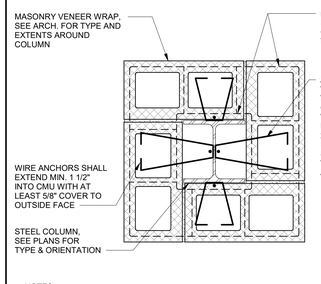
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
CMU DETAILS

SHEET NO.
S7.01

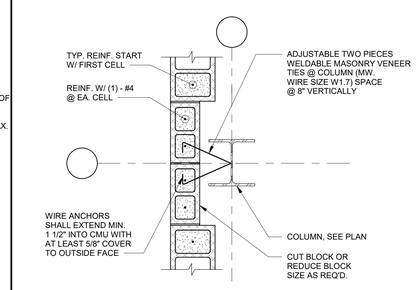
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



NOTES:
1. REDUCE ANCHOR SPACING OR PROVIDE DOUBLE ANCHORS AT EA. LOCATION AS REQ'D SO THAT THERE IS AT LEAST ONE ANCHOR FOR EACH 2.67 SQUARE FEET OF WALL AREA AT INTERIOR LOCATIONS & ONE ANCHOR FOR EACH 1.87 SQUARE FEET OF WALL AREA AT EXTERIOR LOCATIONS.
2. WHERE STUDS & SHEATHING ARE PROVIDED AROUND COLUMN, THIS DETAIL DOES NOT APPLY REFER TO ARCH. FOR DETAIL.
3. THIS DETAIL APPLIES AT BRICK CONCRETE & STONE MASONRY.

TYPICAL DETAIL
MASONRY WRAP AT STEEL COLUMN

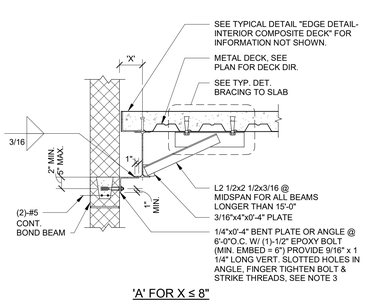
18 SCALE: N.T.S.



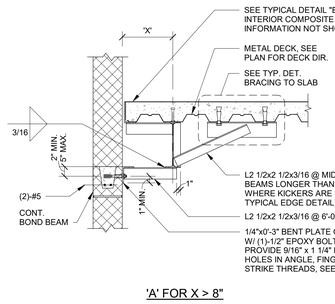
PLAN VIEW

TYPICAL DETAIL
STEEL COLUMN AT CMU WALL

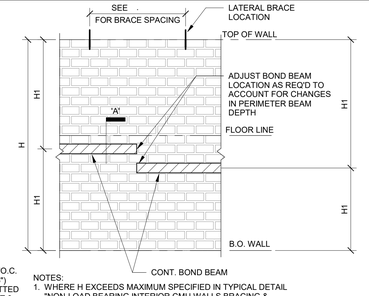
14 SCALE: N.T.S.



'A' FOR X ≤ 8"



'A' FOR X > 8"



NOTES:
1. WHERE H EXCEEDS MAXIMUM SPECIFIED IN TYPICAL DETAIL "NON-LOAD BEARING INTERIOR CMU WALLS BRACING & REINFORCING STEEL" PROVIDE CONT. BOND BEAM AND ATTACH WALL AT FLOOR LINE AS SHOWN.
2. WHERE CONT. BOND BEAMS & FLOOR ATTACHMENTS ARE USED. WALLS SHALL BE REINFORCED FOR HEIGHT = H1, OTHERWISE REINFORCE WALLS FOR HEIGHT = H.
3. REDUCE BOLT EMBEDMENT TO 4" AT 6" THICK WALLS. USE HILTI HY70 EPOXY OR APPROVED EQUAL.
4. ALL WELDS ARE 3/16" FILLET ALL AROUND, U.N.O.

TYPICAL DETAIL
TALL INTERIOR NON-LOAD BEARING CMU WALL BRACING AT FLOOR LINE

10 SCALE: N.T.S.

PLAN VIEW

TYPICAL DETAIL
STEEL COLUMN AT CMU WALL

17 SCALE: N.T.S.

INTERIOR NON-LOAD BEARING CMU WALL JAMB SCHEDULE							
WALL THICKNESS	SPANNING CMU HEIGHT	OPENING WIDTH					
		< 3' - 0"		< 6' - 0"		< 10' - 0"	
		# OF CELLS	REINF.	# OF CELLS	REINF.	# OF CELLS	REINF.
6"	14' - 0"	1	#4	1	#4	1	#4
6"	22' - 0"	1	#4	2	#4	2	#4
6"	33' - 0"	3	#5	4	#5	7	#5
6"	38' - 0"	5	#5	10	#5	NA	NA
8"	20' - 0"	1	#5	1	#5	1	#5
8"	37' - 6"	2	#5	2	(2)-#5	2	(2)-#5
8"	50' - 0"	3	(2)-#5	4	(2)-#6	5	(2)-#6
10"	24' - 0"	1	#5	1	#5	1	#5
10"	48' - 0"	1	(2)-#5	2	(2)-#5	2	(2)-#6
10"	58' - 0"	2	(2)-#5	3	(2)-#6	4	(2)-#6
12"	27' - 0"	1	#5	1	#5	1	#5
12"	52' - 0"	1	(2)-#5	2	(2)-#5	2	(2)-#6
12"	63' - 0"	2	(2)-#6	4	(2)-#6	6	(2)-#6

6" WALL SCHEDULE	
MAX HEIGHT	VERTICAL REINFORCING
14' - 0"	NONE
15' - 6"	GROUT @ 48"
20' - 0"	(1)-#4 @ 56"
22' - 0"	(1)-#4 @ 48"
29' - 6"	(1)-#4 @ 24"
33' - 0"	(1)-#4 @ 16"
38' - 0"***	(1)-#4 @ 8"

8" WALL SCHEDULE	
MAX HEIGHT	VERTICAL REINFORCING
20' - 0"	NONE
22' - 0"	GROUT @ 48"
27' - 0"	(1)-#5 @ 64"
33' - 6"	(1)-#5 @ 48"
37' - 6"	(1)-#5 @ 32"
43' - 0"	(2)-#5 @ 40"
50' - 0"	(2)-#5 @ 16"

10" WALL SCHEDULE	
MAX HEIGHT	VERTICAL REINFORCING
24' - 0"	NONE
26' - 6"	GROUT @ 48"
31' - 6"	(1)-#5 @ 64"
34' - 6"	(1)-#5 @ 48"
48' - 0"	(2)-#5 @ 48"
51' - 6"	(2)-#5 @ 40"
58' - 0"	(2)-#5 @ 24"

12" WALL SCHEDULE	
MAX HEIGHT	VERTICAL REINFORCING
27' - 0"	NONE
31' - 0"	GROUT @ 48"
37' - 6"	(1)-#5 @ 56"
52' - 0"	(2)-#5 @ 56"
59' - 0"	(2)-#5 @ 40"
63' - 0"	(2)-#5 @ 32"

** ONLY ALLOWED IF MAX OPENING IN WALL IS LESS THAN 6'-0" WITH 7'-0" JAMBS TO THE SIDE OF OPENING

NOTE:
NO CONTROL JOINTS ALLOWED WITHIN SHADED AREA OR ABOVE OR BELOW OPENING

PLAN VIEW

NOTES:
1. ALL INTERIOR CMU WALLS SHALL BE BRACED AT TOP IF DISTANCE BETWEEN INTERSECTING WALLS (DIMENSION- A) IS MORE THAN 26 TIMES THE WALL NOMINAL THICKNESS. THERE SHALL BE NO JOINT BETWEEN WALLS AT THE INTERSECTIONS OR IN BETWEEN THE INTERSECTING WALLS. THERE SHALL BE NO DOORS OR ANY OTHER OPENINGS LARGER THAN 24 INCHES WITHOUT JAMB REINFORCING, SEE SCHEDULE FOR LARGER OPENINGS. MINIMUM LENGTH OF INTERSECTING WALLS SHALL BE 4 FEET.
2. REINFORCE VERTICALLY SPANNING CMU WALLS AS FOLLOWS:
3. AT FOUNDATION, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF VERTICAL BARS.
4. SEE TYPICAL DETAILS ON STRUCTURAL/ARCHITECTURAL DRAWINGS FOR BRACING REQUIREMENTS AT THE TOP OF CMU WALLS. THIS DETAIL SHALL APPLY IF SPECIFIC REINFORCING AND BRACING DETAILS ARE NOT SHOWN ON ARCHITECTURAL/STRUCTURAL DRAWINGS.
5. CONSULT WITH ARCHITECT/ENGINEER WHEN HEIGHT OF WALL EXCEEDS THE HEIGHT SHOWN ABOVE.
6. PROVIDE CONTINUOUS BOND BEAM AT THE TOP OF WALLS. REINFORCE BOND BEAMS WITH (2) - #4 FOR 6" WALLS & (2)-#5 FOR 8" & 12" WALLS, UNLESS NOTED OTHERWISE.
7. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
8. CONTACT E.O.R. FOR CONDITIONS NOT LISTED ON SCHEDULE.

TYPICAL DETAIL - NON-LOAD BEARING INTERIOR/CMU WALLS BRACING AND REINFORCING STEEL

13 SCALE: N.T.S.

ARCHITECT

VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER

MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

North Shore Multi-use Indoor Facility

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137126
LICENSED
PROFESSIONAL ENGINEER

10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

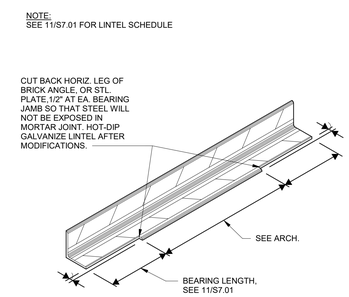
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
CMU DETAILS

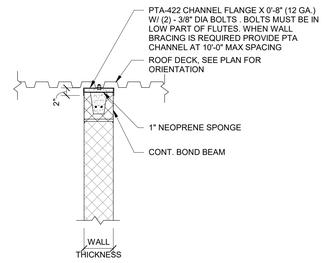
SHEET NO.
S7.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



TYPICAL DETAIL
LOOSE LINTEL CUT BACK AND BEARING

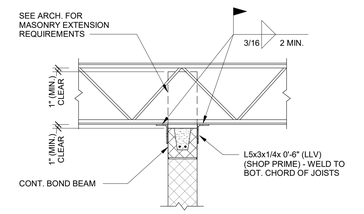
12 SCALE: N.T.S.



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION TO STEEL BEAM

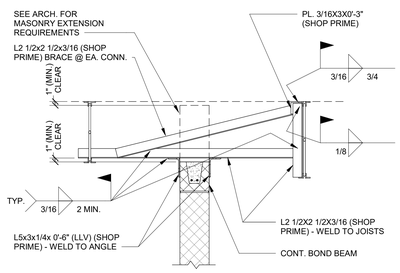
8 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION PERPENDICULAR
TO BAR JOISTS

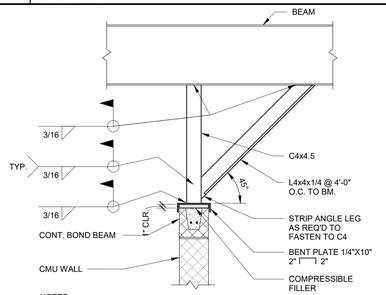
4 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION PARALLEL TO UNEQUAL
DEPTH BAR JOISTS

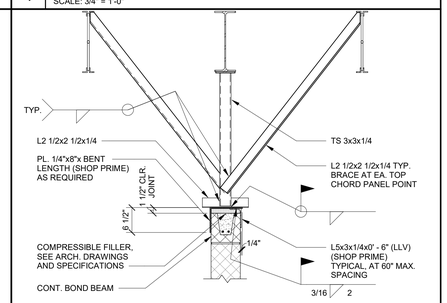
11 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION TO STEEL BEAM

7 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

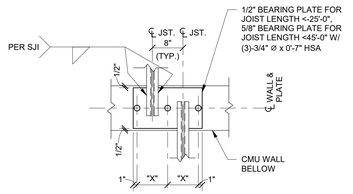
TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION TO STEEL BEAM

3 SCALE: 3/4" = 1'-0"

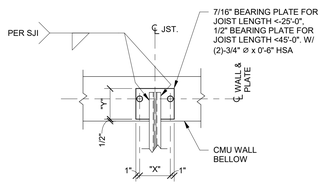
NOTES:

"X" DIMENSION SHALL BE AS FOLLOWS:
8" FOR K1-12 AND LH02-08
9" FOR LH07-17 & DLH10-17
14" FOR DLH15-25

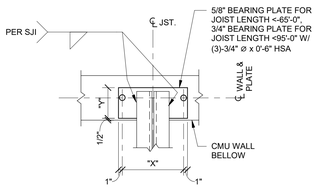
"Y" DIMENSION SHALL BE AS FOLLOWS:
6" FOR 8" CMU
7" FOR 10" CMU
8" FOR 12" CMU



JOIST BOTH SIDES



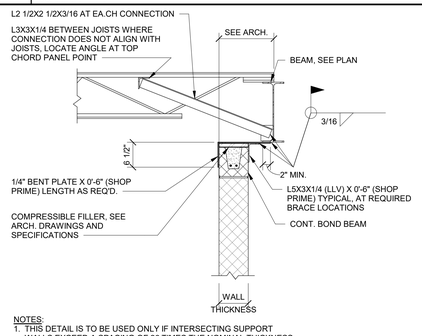
JOIST ONE SIDES



LH JOIST ONE SIDE

TYPICAL DETAIL JOIST BEARING PLATE

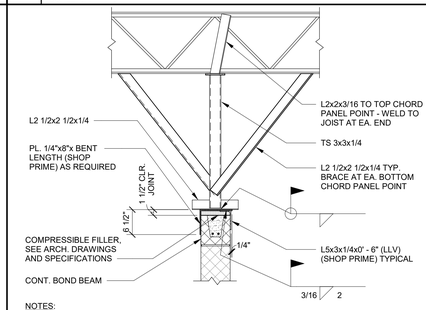
13 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION TO STEEL BEAM

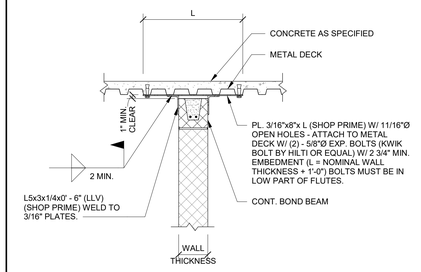
10 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING
CMU WALL TOP CONNECTION
PERPENDICULAR TO JOISTS

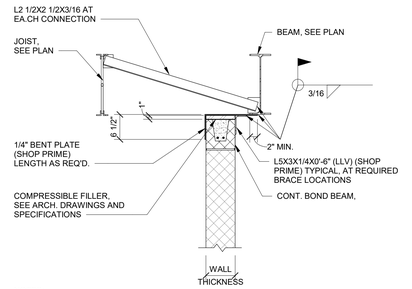
6 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION TO METAL DECK

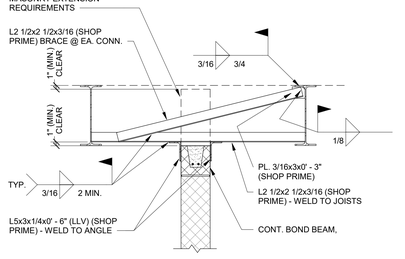
2 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION TO STEEL BEAM

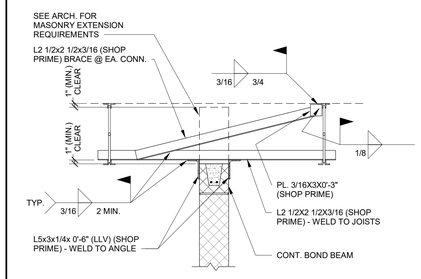
9 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING
CMU WALL TOP CONNECTION
PARALLEL TO STEEL BEAMS

5 SCALE: 3/4" = 1'-0"



NOTES:
1. THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 26 TIMES THE NOMINAL THICKNESS.
2. SEE 13/S7.02 FOR BRACE LOCATION REQUIREMENTS.

TYPICAL DETAIL
INTERIOR NON-LOAD BEARING CMU WALL
TOP CONNECTION PARALLEL TO BAR JOISTS

1 SCALE: 3/4" = 1'-0"

VLK

ARCHITECT
VLK
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

STRUCTURAL ENGINEER
MATRIX STRUCTURAL
5177 Richmond Ave. #670,
Houston, Texas 77056
Main Phone: 713.664.0130
www.matrixstructural.com

Galena Park ISD
HOUSTON, TEXAS

Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
117172
LICENSED
PROFESSIONAL
ENGINEER
10/01/2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	HR
Drawn By	RJC

PROJECT NO.
25-0056.00

SHEET TITLE
CMU DETAILS

SHEET NO.
S7.03

North Shore Multi-use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

CONTRACTOR SHALL PROVIDE DEHUMIDIFICATION DURING THE ENTIRE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING. THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVELS THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS, AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

MECHANICAL GENERAL NOTES

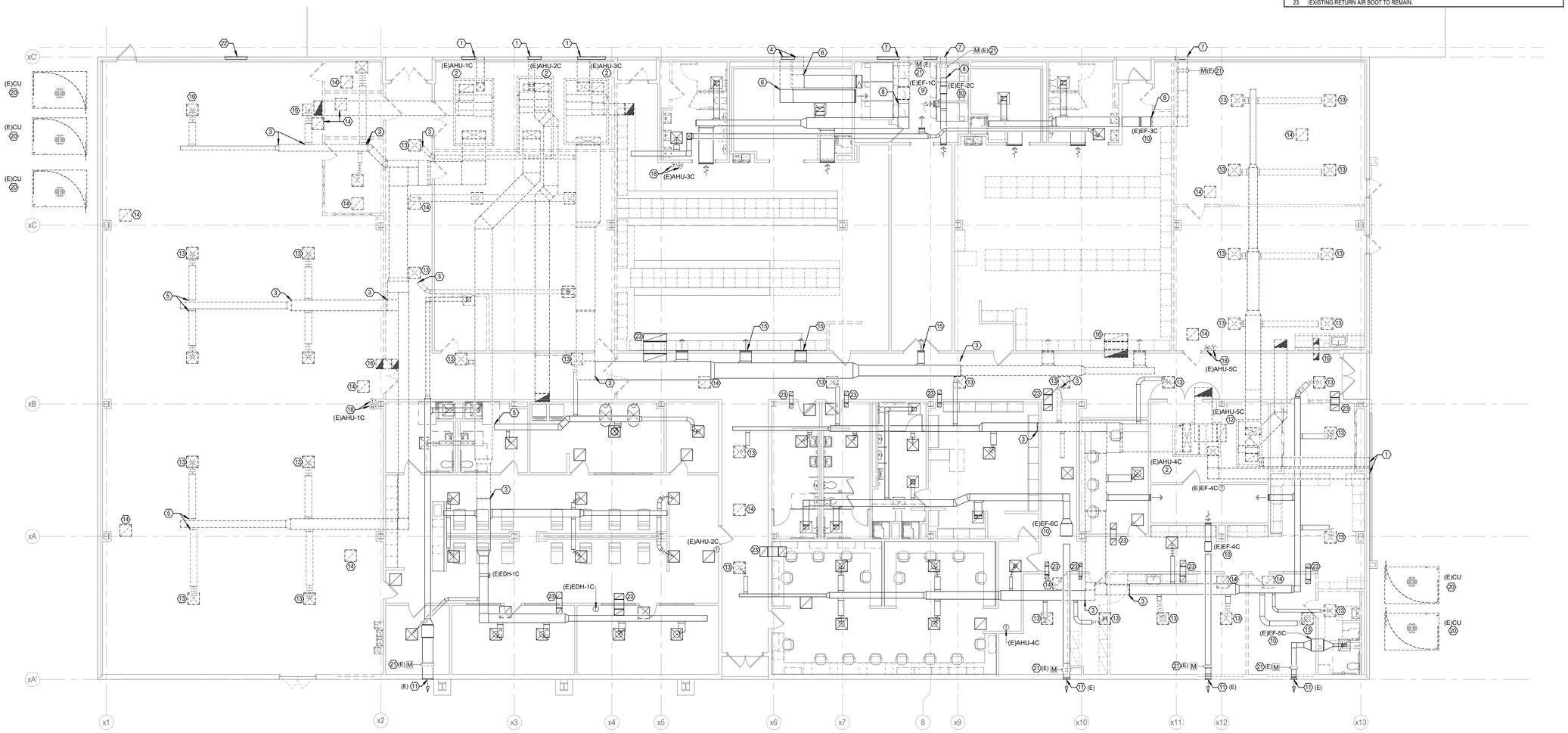
1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR, INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL DEMOLITION GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS REPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
3	OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL HVAC EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT NOT LIMITED TO EVAPORATIVE FLUID COOLER, PIPE STANDS, VALVES, AND BOILERS.

MECHANICAL DEMOLITION KEYED NOTES

1	EXISTING OUTSIDE AIR DUCTWORK SHALL BE REMOVED. EXISTING OUTSIDE AIR INTAKE LOUVER/GRILLE SHALL REMAIN AND BE BLANKED OFF (AIRTIGHT) AND INSULATED ON THE INSIDE SURFACE.
2	REMOVE EXISTING AIR HANDLING UNIT, RETURN AND OUTSIDE AIR DUCTWORK, ASSOCIATED CHILLED AND HOT WATER PIPING, CONDENSATE PIPING AND PNEUMATIC CONTROLS.
3	REMOVE EXISTING SUPPLY DUCTWORK WITH ALL ASSOCIATED APPURTENANCES BACK TO POINT INDICATED.
4	EXISTING COMBUSTION AIR INTAKE LOUVER/GRILLE SHALL REMAIN AND BE BLANKED OFF (AIRTIGHT) AND INSULATED ON THE INSIDE SURFACE.
5	REMOVE EXISTING DUCT TAKEOFF.
6	REMOVE EXISTING COMBUSTION AIR DUCTWORK WITH ALL ASSOCIATED APPURTENANCES BACK TO POINT INDICATED.
7	EXISTING EXHAUST AIR LOUVER/GRILLE SHALL REMAIN AND BE BLANKED OFF (AIRTIGHT) AND INSULATED ON THE INSIDE SURFACE.
8	REMOVE EXISTING EXHAUST AIR DUCTWORK WITH ALL ASSOCIATED APPURTENANCES BACK TO POINT INDICATED.
9	EXISTING INLINE EXHAUST FAN ABOVE CEILING SHALL BE REMOVED. EXISTING EXHAUST DUCTWORK AND GRILLES SHALL REMAIN AND BE REUSED.
10	EXISTING INLINE EXHAUST FAN ABOVE CEILING SHALL REMAIN AND BE REUSED. EXISTING EXHAUST DUCTWORK AND GRILLES SHALL REMAIN AND BE REUSED.
11	EXISTING EXHAUST AIR LOUVER GRILLE SHALL REMAIN AND BE REUSED.
12	REMOVE EXISTING AIR HANDLING UNIT, ASSOCIATED DUCTWORK, CHILLED AND HOT WATER PIPING, CONDENSATE PIPING AND PNEUMATIC CONTROLS.
13	REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.
14	REMOVE EXISTING RETURN DIFFUSER INDICATED.
15	EXISTING SUPPLY GRILLES TO REMAIN AND BE REUSED.
16	REMOVE EXISTING RETURN AIR BOOT.
18	REMOVE EXISTING TEMPERATURE SENSORS AND ALL ASSOCIATED CONTROL WIRING.
19	EXISTING SUPPLY DIFFUSERS TO BE RELOCATED. RE:1/M2.03A FOR NEW DIFFUSER LOCATION.
20	REMOVE EXISTING CONDENSING UNIT AND ALL ASSOCIATED APPURTENANCES.
21	REMOVE EXISTING MOTORIZED DAMPER.
22	EXISTING RETURN AIR DUCTWORK SHALL BE REMOVED. EXISTING RETURN AIR RELIEF LOUVER/GRILLE SHALL REMAIN AND BE BLANKED OFF (AIRTIGHT) AND INSULATED ON THE INSIDE SURFACE.
23	EXISTING RETURN AIR BOOT TO REMAIN.



N

1 **MECHANICAL DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A**
Scale: 1/8" = 1'-0"

C D B A

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

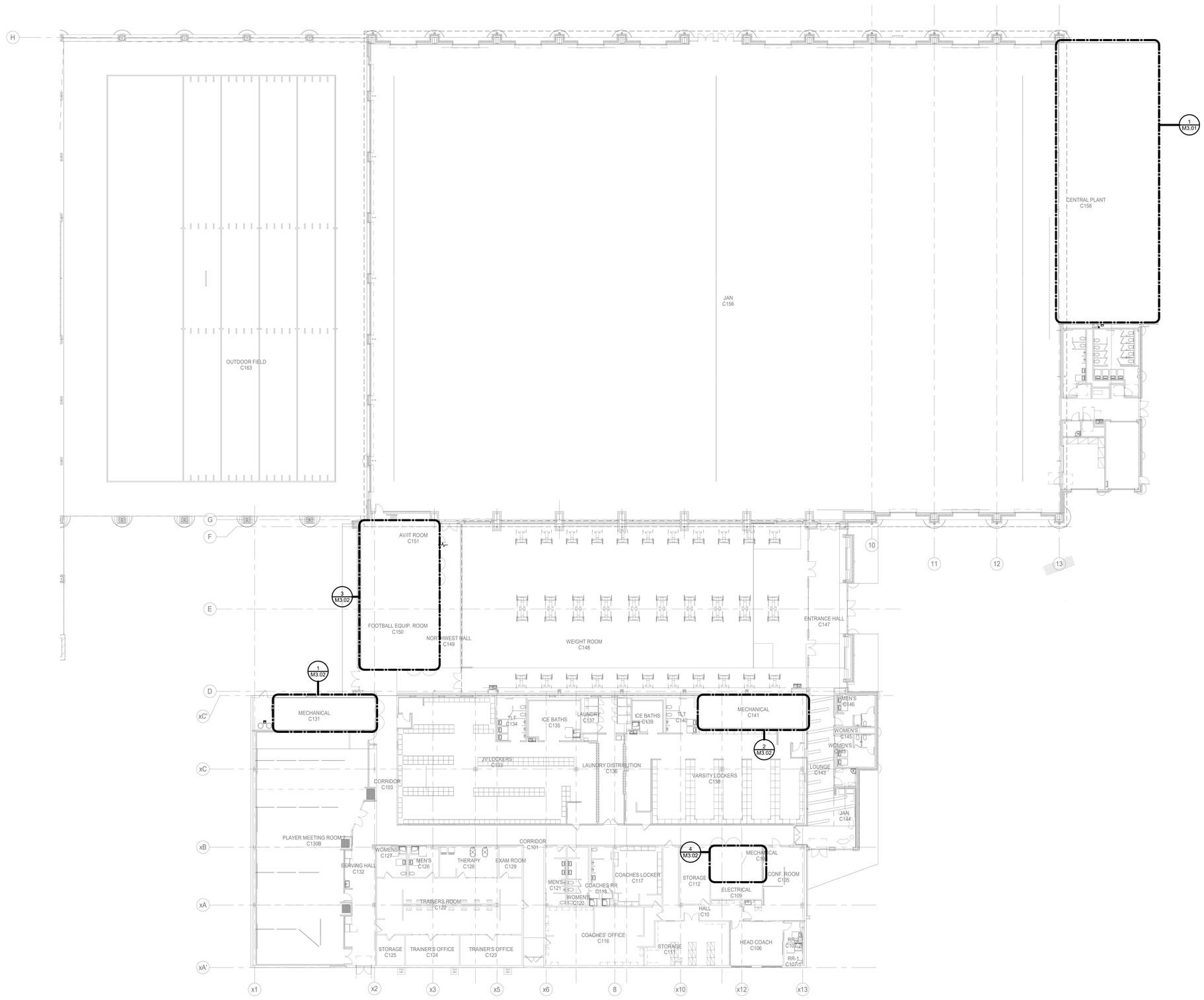
SHEET TITLE
MECHANICAL DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A

SHEET NO.
M1.01A

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

MECHANICAL GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR. INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.



N

1 MECHANICAL PLAN - LEVEL ONE - OVERALL
Scale: 1/16" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

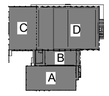
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
MECHANICAL FLOOR PLAN - LEVEL ONE - OVERALL

SHEET NO.
M2.01



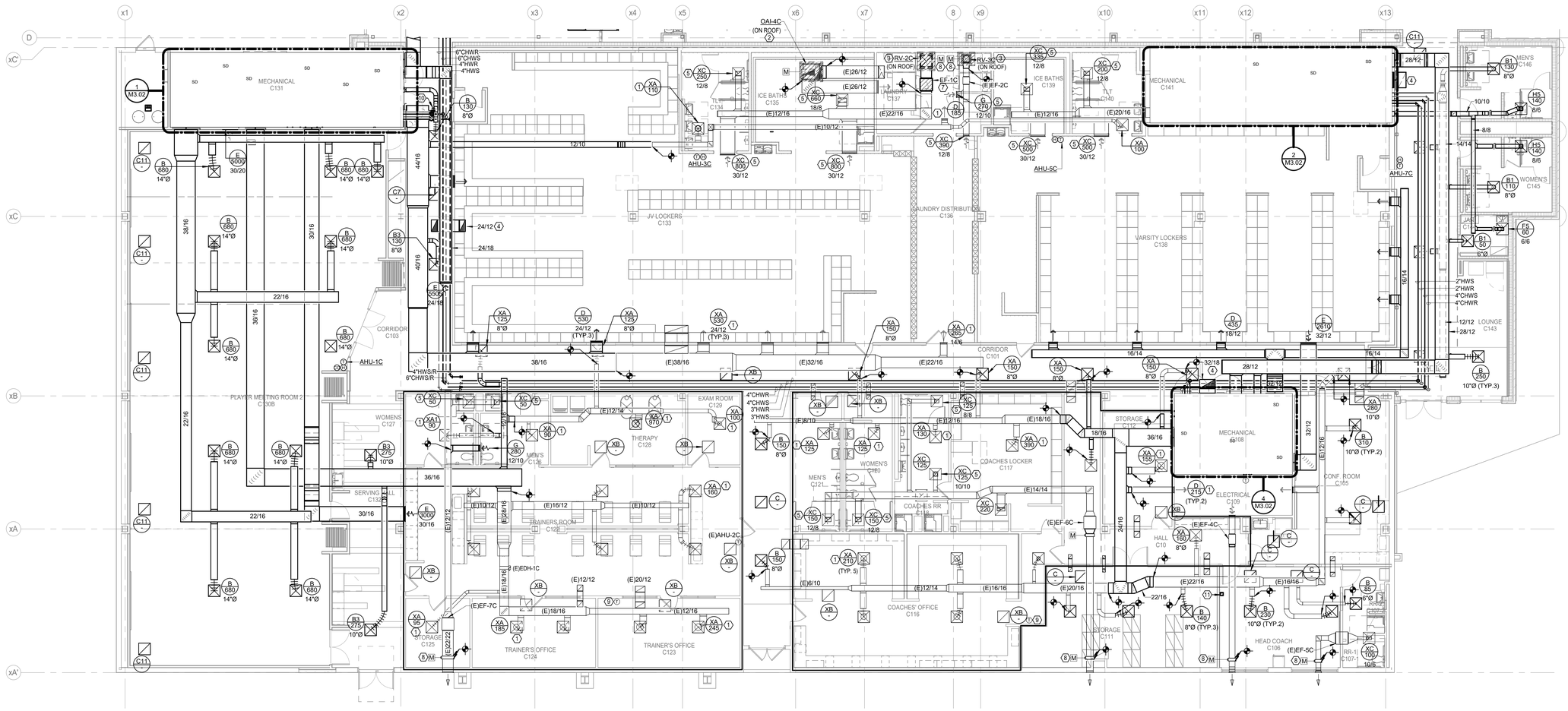
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

MECHANICAL GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR. INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL KEYED NOTES

1	EXISTING SUPPLY DIFFUSER TO REMAIN. RE-BALANCE TO AIRFLOW INDICATED.
2	ROUTE COMBUSTION AIR DUCTWORK DOWN FROM INTAKE ON ROOF AVBOVE. RE: 1/M2.10 FOR CONTINUATION.
3	ROUTE EXHAUST AIR DUCT UP TO RELIEF VENT ON ROOF ABOVE. RE: 1/M2.10 FOR CONTINUATION.
4	PROVIDE ACOUSTICALLY LINED RETURN AIR TRANSFER DUCT ABOVE CEILING.
5	EXISTING EXHAUST DIFFUSER TO REMAIN. RE-BALANCE TO AIRFFLOW INDICATED.
6	RE: M2.04B FOR CONTINUATION.
7	UNIT SHALL BE SUSPENDED WITH UNISTRUT RUNNERS AND PLATFORM SECURED TO STRUCTURE WITH THREADED HANGER RODS. INSTALL PER MANUFACTURER. COORDINATE WITH ALL OTHER TRADES NOT TO OBSTRUCT.
8	PROVIDE NEW MOTORIZED DAMPER AT POINT INDICATED.
9	EXISTING THERMOSTAT TO REMAIN.
10	PROVIDE ISOLATION VALVE AT LOCATION SHOWN.
11	PROVIDE HVAC SHUTDOWN STATION, EXTERIOR LIGHTING OVERRIDE STATION, AND INTERIOR LIGHTING OVERRIDE STATION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE FINAL LOCATION WITH OWNER/ARCHITEC



N

1 MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT A
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — STATE OF TEXAS — 80219 — LICENSED — PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT A

SHEET NO.
M2.03A

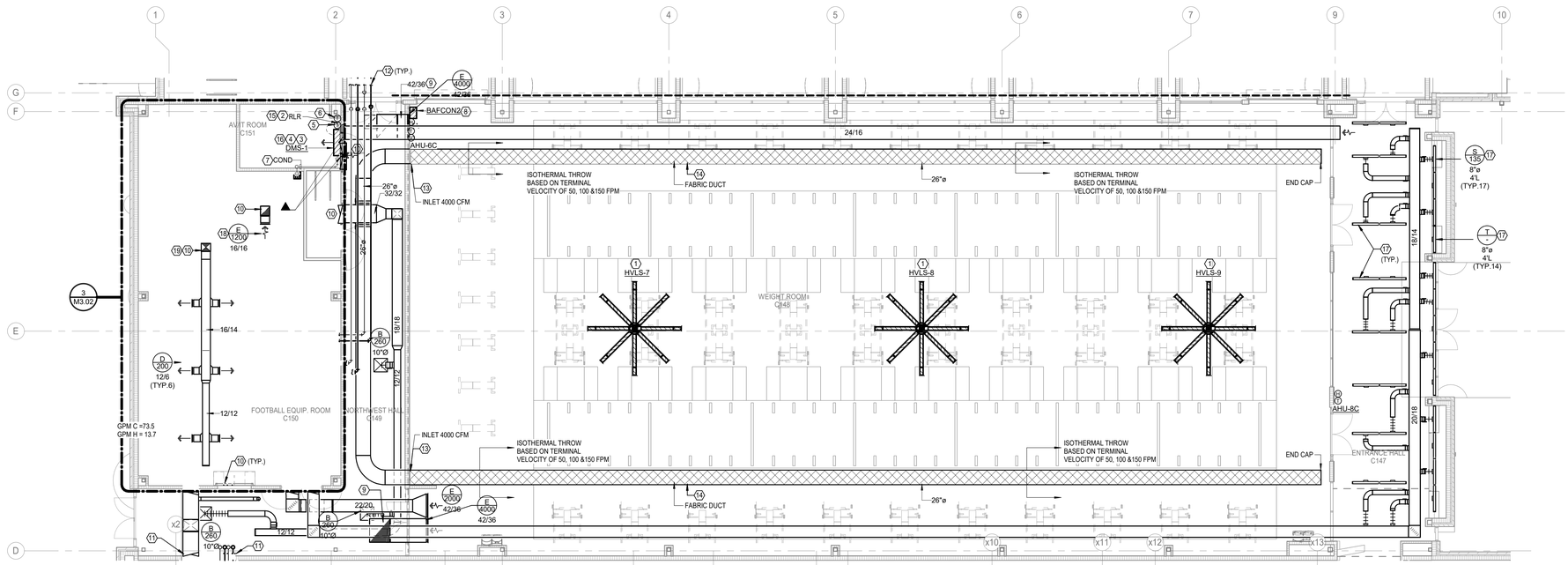
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

MECHANICAL GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR, INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL KEYED NOTES

1	VERIFY SERVICE CLEARANCE AND COORDINATE WITH ALL TRADES NOT TO OBSTRUCT. INSTALL PER MANUFACTURER GUIDLINES.
2	RE: 1/M2.10 FOR CONTINUATION.
3	VERIFY SERVICE CLEARANCE FOR AIR FILTER, FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER.
4	COORDINATE UNIT LOCATION WITH ALL TRADES NOT TO OBSTRUCT. BOTTOM OF HIGH WALL UNIT SHALL BE MOUNTED ABOVE 7'-3" A.F.F.
5	PROVIDE HARD WIRED THERMOSTAT.
6	PROVIDE THERMOSTAT FOR BMSC MONITOR.
7	ROUTE FULL SIZE CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND GRAVITY DRAIN TO FLOOR DRAIN AS INDICATED. INSTALL TRAP AND PIPE SIZING PER MANUFACTURER. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION.
8	PROVIDE LABELS ON SWITCHES AND CONTROLLERS TO ASSOCIATED EQUIPMENT.
9	PROVIDE ACOUSTICALLY LINED RETURN AIR DUCT.
10	RE: 3/M3.02 FOR CONTINUATION.
11	RE: 1/M2.03A FOR CONTINUATION.
12	RE: 1/M2.08D FOR CONTINUATION.
13	TRANSITION FROM METAL DUCT TO FABRIC DUCT AT WALL AS INDICATED.
14	PROVIDE FABRIC DUCT FOR HATCH DUCTWORK AND PER SPECIFICATIONS. PROVIDE FABRIC DUCT WITH SKELECORE TENSIONING SYSTEM.
15	ROUTE REFRIGERANT PIPING UP TO ASSOCIATED OUTDOOR UNIT ON ROOF. SIZE LINE AND INSTALL PER MANUFACTURER RECOMMENDATIONS. PIPING SHOWN SINGLE LINE FOR CLARITY. RE: M5.02 FOR DETAILS.
16	INSULATE ALL PIPING PER SPECIFICATIONS.
17	COORDINATE FINAL AIR DEVICE LOCATION AND FINISH COLOR WITH ARCHITECT.
18	ROUTE DUCTWORK FROM THE RETURN AIR GRILLE UP TO THE MEZZANINE TO CONNECT TO THE RETRUN AIR PLENUM BOX AT THE UNIT.
19	ROUTE DUCTWORK UP TO THE MEZZANINE TO CONNECT TO THE SUPPLY AIR MAIN DUCT.



N

1 MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT B
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

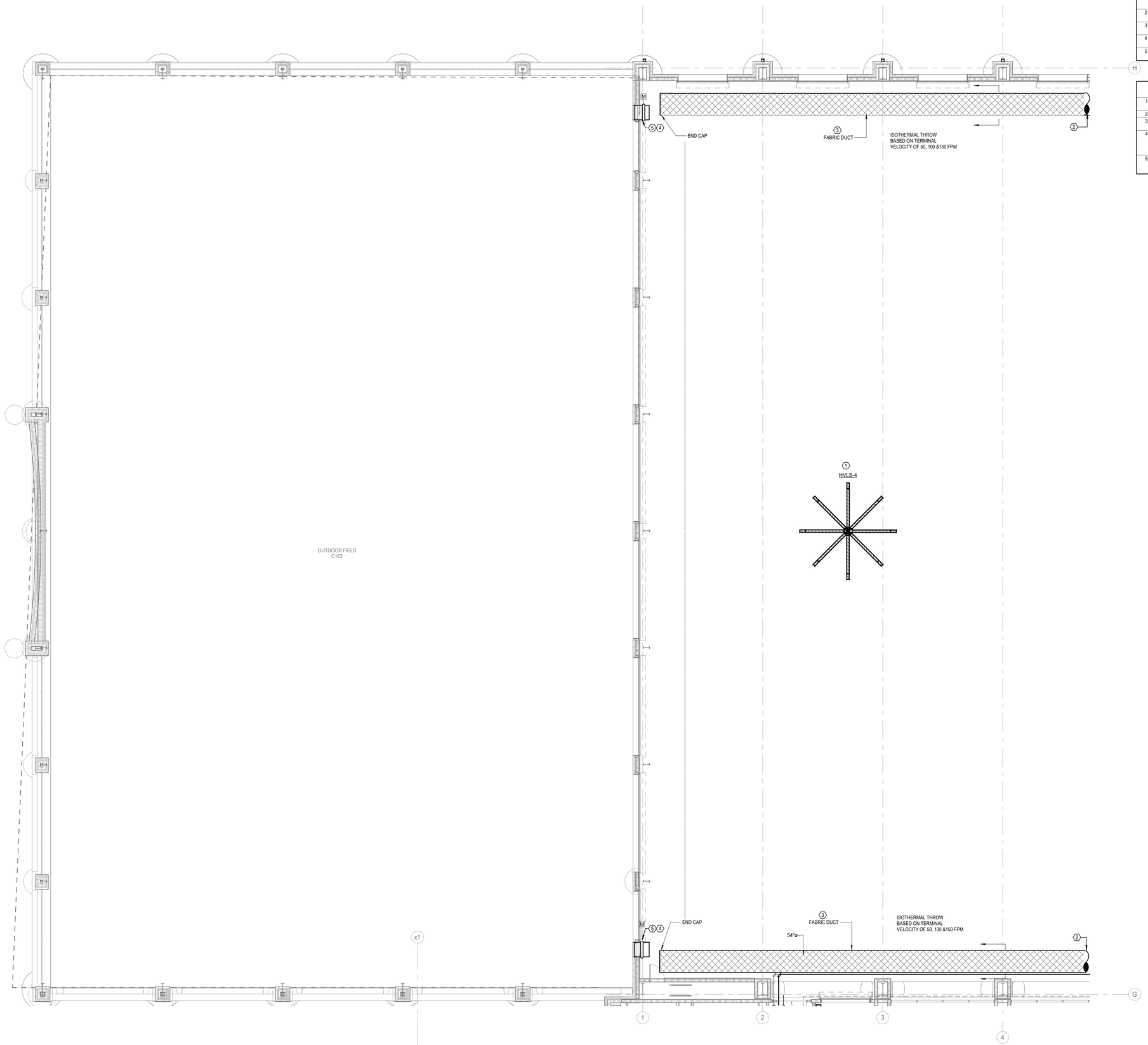
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT B

SHEET NO.
M2.04B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



MECHANICAL GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR. INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL KEYED NOTES

1	VERIFY SERVICE CLEARANCE AND COORDINATE WITH ALL TRADES NOT TO OBSTRUCT. INSTALL PER MANUFACTURER GUIDLINES.
2	RE: 1/M2.08D FOR CONTINUATION.
3	PROVIDE FABRIC DUCT FOR HATCH DUCTWORK AND PER SPECIFICATIONS. PROVIDE FABRIC DUCT WITH SKELECORE TENSIONING SYSTEM.
4	PROVIDE TWO RELIEF LOUVERS STACKED IN VERTICAL, 36" W X 60"H PER LOUVER, RUSKIN MODEL HZ700 OR APPROVED EQUAL WITH MINIMUM FREE AREA OF 7.95 SQ. FEET. PROVIDE WITH BIRD SCREEN AND PAINT TO MATCH WALL OR AS SPECIFIED BY ARCHITECT. COORDINATE FINAL LOCATION WITH ARCHITECT. RE: 5/M5.03 FOR DETAIL.
5	MOTORIZED DAMPER TO BE INTERLOCKED WITH OAU-4C. INTERLOCK SHALL OPERATE AS FOLLOWS: WHEN OAU-4C IS ENERGIZED, THE DAMPER SHALL OPEN.WHEN OAU-4C IS DE-ENERGIZED, THE DAMPER SHALL CLOSE.

1 MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT C
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

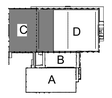
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

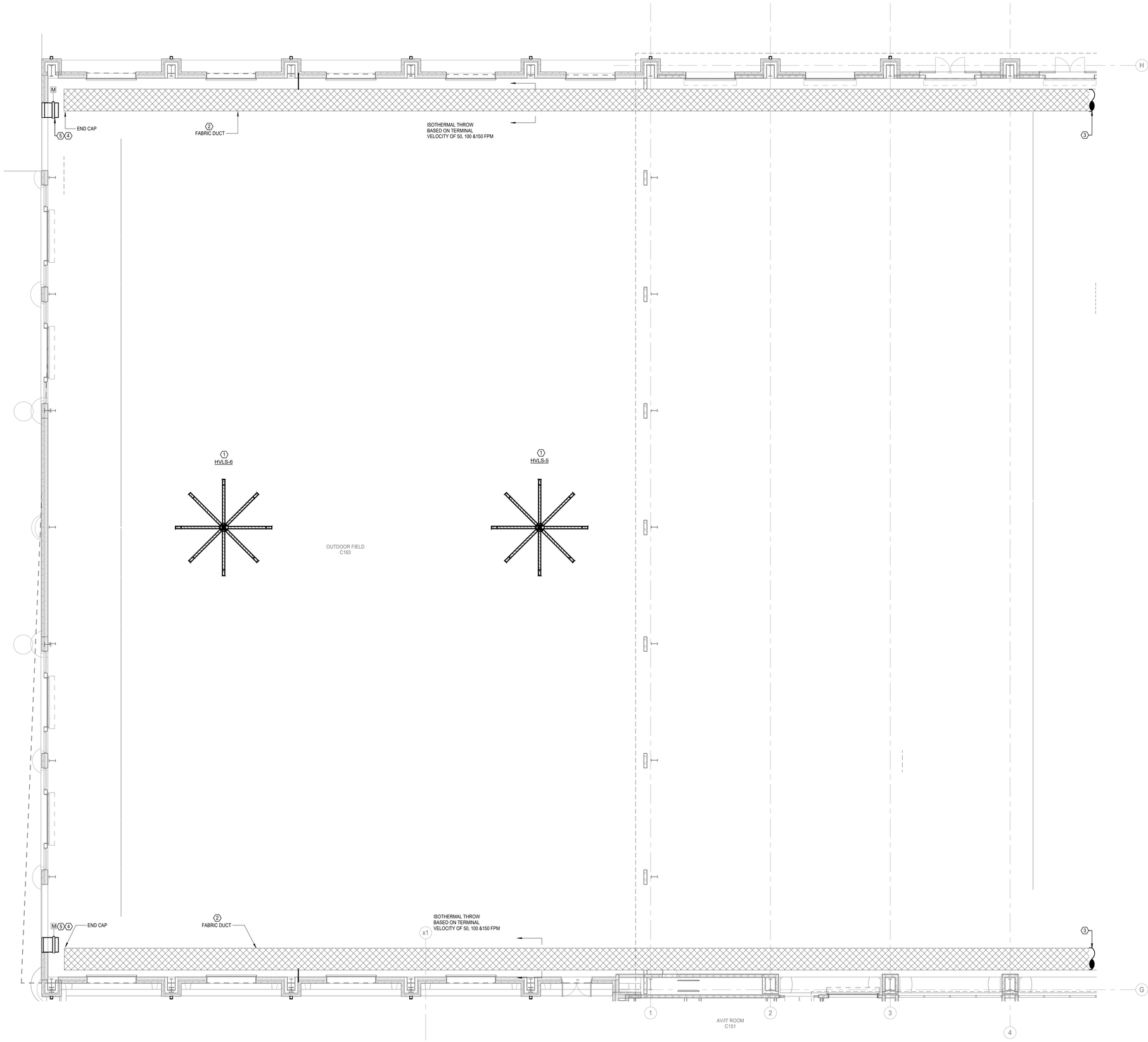
PROJECT NO.
25-0056.00

SHEET TITLE
MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT C

SHEET NO.
M2.06C



COPYRIGHT © 2025 VLK ARCHITECTS, LLC



N

1 MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE

Scale: 1/8" = 1'-0"

MECHANICAL GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR. INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL KEYED NOTES

1	VERIFY SERVICE CLEARANCE AND COORDINATE WITH ALL TRADES NOT TO OBSTRUCT. INSTALL PER MANUFACTURER GUIDLINES.
2	PROVIDE FABRIC DUCT FOR HATCH DUCTWORK AND PER SPECIFICATIONS. PROVIDE FABRIC DUCT WITH SKELECORE TENSIONING SYSTEM.
3	RE: 1/M2.08D FOR CONTINUATION.
4	PROVIDE TWO RELIEF LOUVERS STACKED IN VERTICAL, 36" W X 60"H PER LOUVER, RUSKIN MODEL HZ700 OR APPROVED EQUAL WITH MINIMUM FREE AREA OF 7.55 SQ. FEET. PROVIDE WITH BIRD SCREEN AND PAINT TO MATCH WALL OR AS SPECIFIED BY ARCHITECT. COORDINATE FINAL LOCATION WITH ARCHITECT. RE: 5/M5.03 FOR DETAIL.
5	MOTORIZED DAMPER TO BE INTERLOCKED WITH OAU-4C. INTERLOCK SHALL OPERATE AS FOLLOWS: WHEN OAU-4C IS ENERGIZED, THE DAMPER SHALL OPEN.WHEN OAU-4C IS DE-ENERGIZED, THE DAMPER SHALL CLOSE.

VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

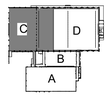
25-0056.00

SHEET TITLE

MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE

SHEET NO.

M2.06C.1



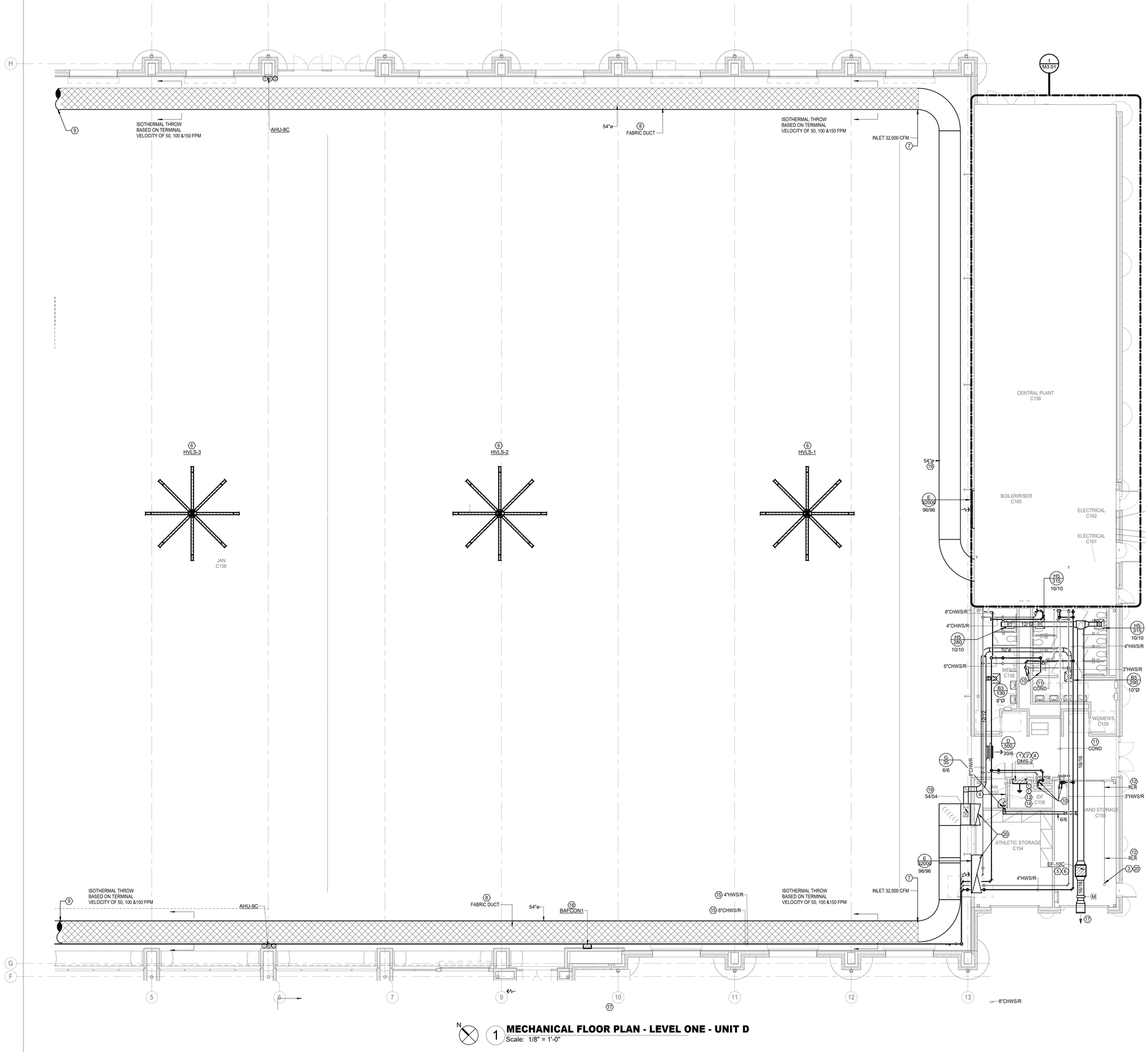
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

MECHANICAL GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR. INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL KEYED NOTES

1	VERIFY SERVICE CLEARANCE FOR AIR FILTER, FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER.
2	COORDINATE UNIT LOCATION WITH ALL TRADES NOT TO OBSTRUCT. BOTTOM OF HIGH WALL UNIT SHALL BE MOUNTED ABOVE 7'-3" A.F.F.
3	ROUTE REFRIGERANT PIPING UP TO ASSOCIATED OUTDOOR UNIT ON ROOF ABOVE. INSTALL PER MANUFACTURER RECOMMENDATIONS. PIPING SHOWN SINGLE LINE FOR CLARITY. RE: M5.02 FOR DETAILS.
4	ROUTE FULL SIZE CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND GRAVITY DRAIN TO MOP SINK. INSTALL TRAP AND PIPE SIZING PER MANUFACTURER. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION.
5	SUSPEND UNIT WITH THREADED HANGER RODS ATTACHED TO UNISTRUT RUNNERS SECURED TO STRUCTURE. PROVIDE SPRING ISOLATION. REFER TO MANUFACTURER FOR MORE DETAILS.
6	VERIFY SERVICE CLEARANCE AND COORDINATE WITH ALL TRADES NOT TO OBSTRUCT. INSTALL PER MANUFACTURER GUIDLINES.
7	TRANSITION FROM METAL DUCT TO FABRIC DUCT AS INDICATED.
8	PROVIDE FABRIC DUCT FOR HATCH DUCTWORK AND PER SPECIFICATIONS. PROVIDE FABRIC DUCT WITH SKELECORE TENSIONING SYSTEM.
9	RE: 1/M2.06C.1 FOR CONTINUATION.
10	ROUTE CHWS&R AND HWS&R UP TO UNITS THROUGH ROOF. RE:2/M3.01 FOR CONTINUATION AND M5.02 FOR DETAILS.
11	ROUTE FULL SIZE CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND GRAVITY DRAIN TO FLOOR DRAIN IN THE BOILER/RISER ROOM. INSTALL TRAP AND PIPE SIZING PER MANUFACTURER. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION.
12	INSULATE PIPING PER SPECIFICATION.
13	PROVIDE HARD WIRED THERMOSTAT.
14	PROVIDE THERMOSTAT FOR BMS/C MONITOR.
15	ROUTE CHWS&R AND HWS&R AS INDICATED. PROVIDE PIPE SUPPORTS. RE: M5.02 FOR DETAILS.
16	RE: M2.03A FOR CONTINUATION.
17	PROVIDE 24" W X 24"H EXHAUST LOUVER, RUSKIN MODEL HZ700 OR APPROVED EQUAL WITH MINIMUM FREE AREA OF 1.77 SQ. FEET. PROVIDE WITH BIRD SCREEN AND PAINT TO MATCH WALL OR AS SPECIFIED BY ARCHITECT. COORDINATE FINAL LOCATION WITH ARCHITECT. RE: 5/M5.03 FOR DETAIL.
18	PROVIDE LABELS ON SWITCHES AND CONTROLLERS TO ASSOCIATED EQUIPMENT.
19	PROVIDE DOUBLE WALL ACOUSTICALLY TREATED WITH ANNULAIR SPACE PACKED WITH 1.0 PCF, 1-INCH-THICK FIBERGLASS INSULATION. PAINTABLE GALVANIZED STEEL EXTERIOR CONSTRUCTION WITH A PERFORATED METAL LINER TO PROVIDE SPECIFIC ACOUSTIC IMPEDANCE. UNITED MCGILL ACOUSTIAK27 SPIRAL LOCKSEAM OR APPROVED EQUAL.
20	RE: 2/M3.01 FOR CONTINUATION.



N

1 MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT D
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

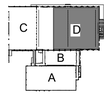
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
MECHANICAL FLOOR PLAN - LEVEL ONE - UNIT D

SHEET NO.
M2.08D



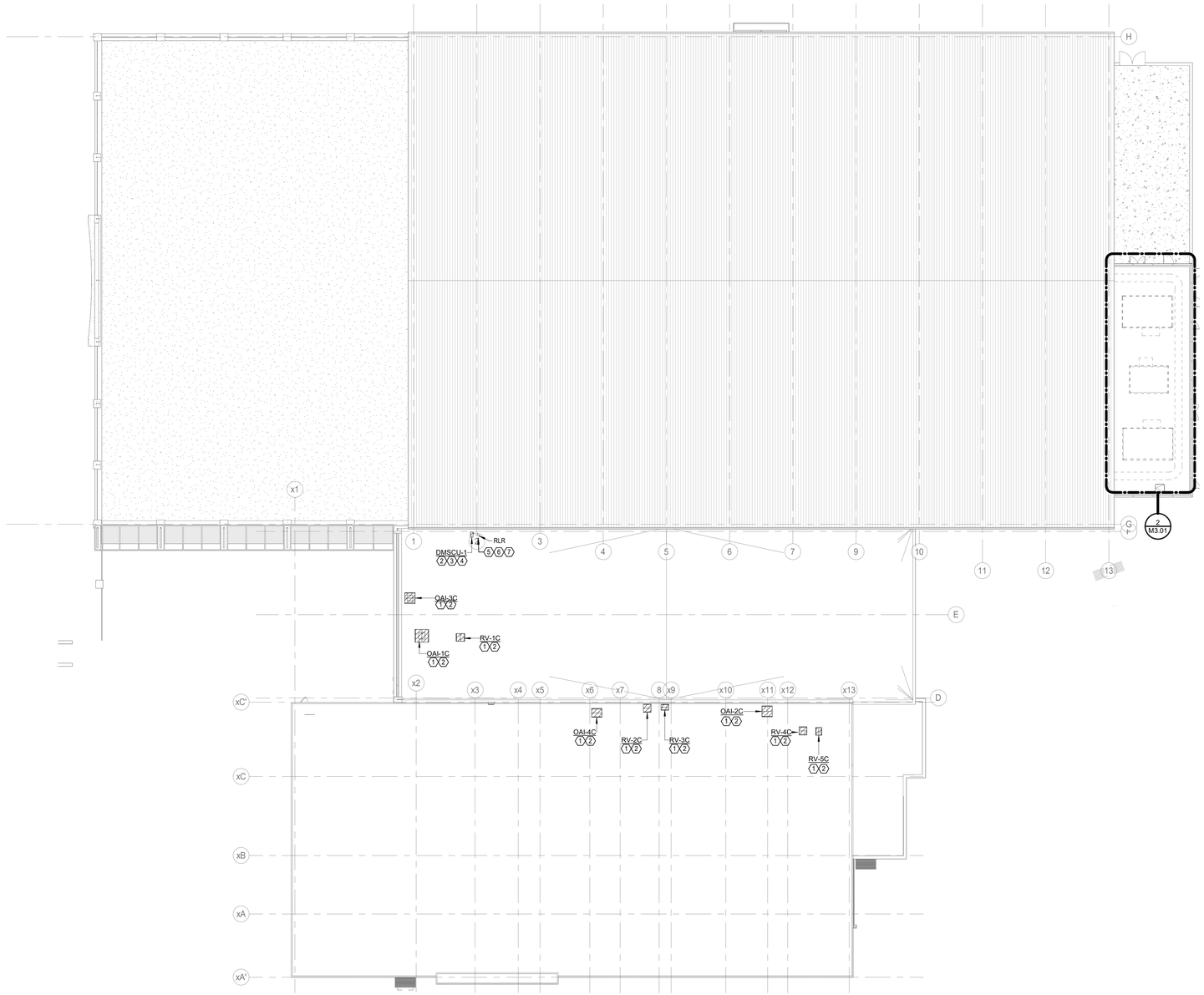
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

MECHANICAL GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR, INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL KEYED NOTES

1	ROOF MOUNTED EQUIPMENT SHALL BE MOUNTED ON ROOF CURB. RE: DETAIL 7/M5.03,TRANSITION DUCTWORK AS REQUIRED TO CONNECT TO EQUIPMENT ON ROOF.
2	VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3	CONDENSING UNIT SHALL BE MOUNTED ON ROOF SUPPORT. RE:8/M5.03 FOR DETAIL.
4	ROUTE REFRIGERANT PIPING FROM CONDENSING UNIT TO ASSOCIATED INDOOR UNIT THROUGH ROOF. PIPING SHOWN SINGLE LINE FOR CLARITY. PROVIDE PIPE SUPPORT AND INSTALL PER MANUFACTURER.RE: M5.03 FOR DETAILS.
5	INSULATE ALL PIPING PER SPECIFICATIONS.
6	RE:3/M3.02 FOR CONTINUATION.
7	PROVIDE PHP MODEL PP-10 ON ROOF WITH ROLLER AND FULLY ADJUSTABLE HEIGHT THROUGHOUT PIPE RUN EVERY 6'-0" ON CENTER AND EVERY CHANGE IN DIRECTION. RE:M5.02 FOR DETAILS.



N

1 **MECHANICAL ROOF PLAN**
Scale: 1" = 20'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

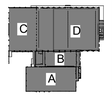
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

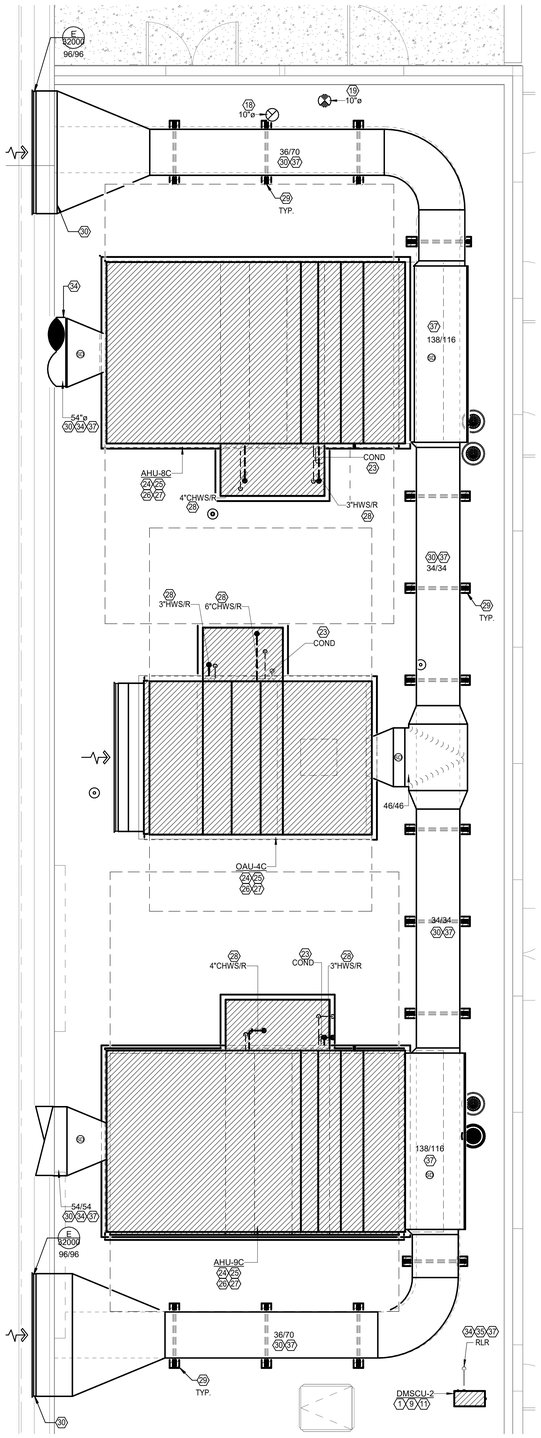
PROJECT NO.
25-0056.00

SHEET TITLE
MECHANICAL ROOF PLAN

SHEET NO.
M2.10



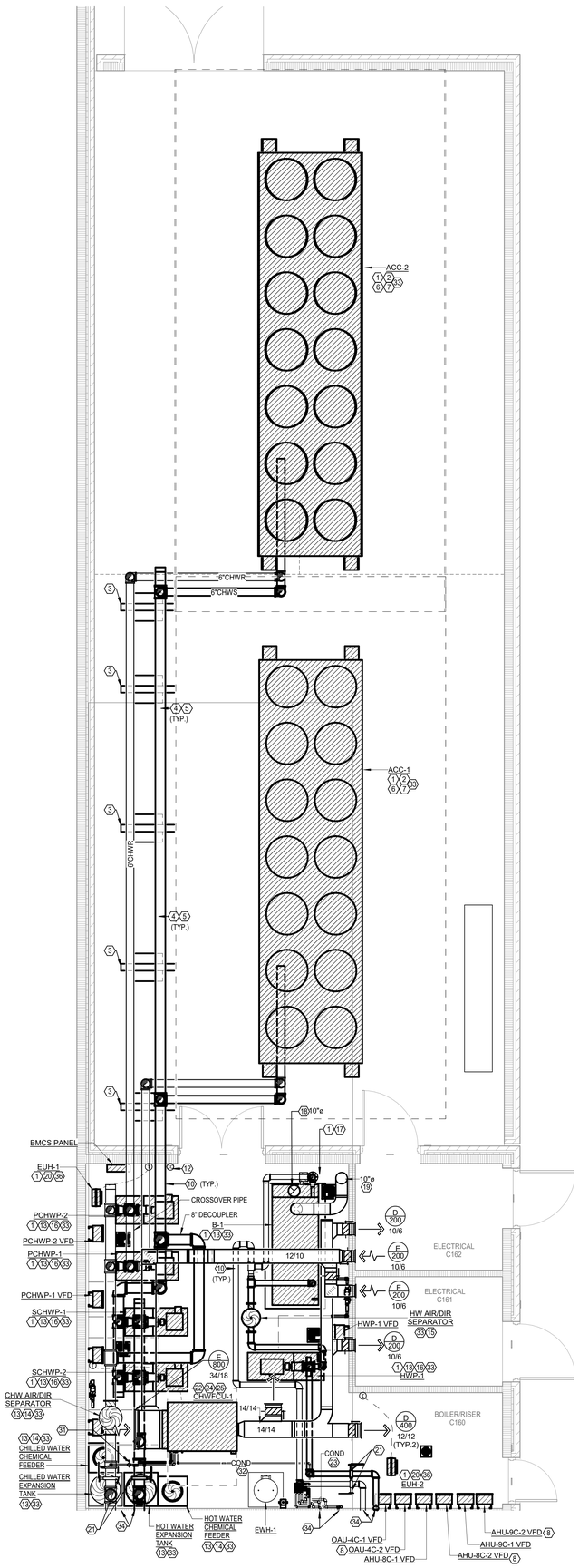
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



N

2 ENLARGED MECHANICAL ROOF PLAN - AREA D

Scale: 1/4" = 1'-0"



N

1 MECHANICAL PLAN - MECHANICAL YARD / BOILER ROOM - LEVEL ONE

Scale: 1/4" = 1'-0"

MECHANICAL GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR, INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL KEYED NOTES

1	VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2	PROVIDE TRASH SCREEN FOR CHILLER.
3	PROVIDE PIPE STAND AT LOCATION SHOWN. RE: 9/M-5.02 FOR DETAIL.
4	PAINT AND INSULATE OUTDOOR PIPING PER SPECIFICATIONS.
5	BOTTOM OF ALL PIPING IN THE CHILLER YARD TO BE MINIMUM 11'-6" ABOVE GRADE.
6	PROVIDE 12W"X24H" CONCRETE RUNNER TO SPAN LENGTH OF AIR-COOLED CHILLERS. TYPICAL (2) PER CHILLER. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
7	REFER TO M4.01 FOR MORE INFORMATION.
8	PROVIDE REDUNDANT VFD IN CASE #1 VFD FAILS.
9	CONDENSING UNIT SHALL BE MOUNTED ON ROOF SUPPORT. RE:8/M5.03 FOR DETAIL.
10	PROVIDE PIPE SUPPORT. RE:M5.02 FOR DETAILS.
11	ROUTE REFRIGERANT PIPING FROM CONDENSING UNIT TO ASSOCIATED INDOOR UNIT THROUGH ROOF. PIPING SHOWN SINGLE LINE FOR CLARITY. PROVIDE PIPE SUPPORT AND INSTALL PER MANUFACTURER.RE: M5.03 FOR DETAILS.
12	PROVIDE NEW CARBON MONOXIDE MONITOR SYSTEM. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION.
13	PROVIDE 4" CONCRETE HOUSEKEEPING PAD.
14	RE:1/M5.02 FOR CHEMICAL FEEDER SUPPORT DETAIL.
15	RE:2/M5.02 FOR AIR DIRT SEPARATOR SUPPORT DETAIL.
16	PROVIDE END SUCTION PUMP. RE:3/M5.02 FOR DETAIL.
17	INSTALL BOILER CIRCULATOR PUMP PROVIDED BY BOILER MANUFACTURER.
18	PROVIDE DOUBLE WALL BOILER FLUE UP THROUGH ROOF TO STAINLESS STEEL STACK CAP. PROVIDE CAT IV (SCHEBLER E-VENT) STACK SYSTEM CONSISTING OF AL-29-4C INNER LINER RATED FOR POSITIVE PRESSURE AND FLUE CONDENSATION. VERIFY FLUE DUCT SIZE WITH MANUFACTURER. RE: 7/M5.02 FOR DETAIL.
19	PROVIDE COMBUSTION AIR INTAKE. ROUTE THROUGH ROOF. VERIFY AIR INTAKE DUCT SIZE WITH MANUFACTURER. RE: 8/M5.02 FOR DETAIL.
20	UNIT SHALL ENERGIZE WHEN TEMPERATURE DROPS BELOW 40°F
21	PROVIDE ISOLATION VALVE AT LOCATION SHOWN.
22	UNIT SHALL BE SUSPENDED WITH UNISTRUT RUNNERS AND PLATFORM SECURED TO STRUCTURE WITH THREADED HANGER RODS. INSTALL PER MANUFACTURER. COORDINATE WITH ALL OTHER TRADES NOT TO OBSTRUCT.
23	ROUTE CONDENSATE DRAIN PIPE DOWN THROUGH ROOF ABOVE 1ST FLOOR CEILING, SIZE PER MANUFACTURER. TO FLOOR SINK IN THE BOILER ROOM. SLOPE PIPING TO ALLOW FOR GRAVITY DRAINAGE. INSTALL TRAP AS RECOMMENDED BY MANUFACTURER. REFER TO PLUMBING PLANS FOR EXACT LOCATION OF FLOOR SINK.
24	VERIFY SERVICE CLEARANCE FOR AIR FILTER, FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
25	PROVIDE SHEET METAL PLENUM, FULL SIZE OF RETURN AIR OPENING; LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS SHOWN.
26	PROVIDE DUCT MOUNTED SMOKE DETECTOR. REFER TO LOCAL CODES FOR MORE INFORMATION.
27	ROOF MOUNTED EQUIPMENT SHALL BE MOUNTED ON ROOF CURB. RE: DETAIL 7/M5.03.TRANSITION DUCTWORK AS REQUIRED TO CONNECT TO EQUIPMENT ON ROOF.
28	ROUTE FULL SIZE CHILLED AND HOT WATER PIPING DOWN TO FIRST FLOOR ABOVE CEILING TO CONNECT TO MAIN CHILLED AND HOT WATER PIPING. RE: M5.02 FOR DETAILS AND 1/M2.08D FOR CONTINUATION.
29	PROVIDE MODEL PHP-D DUCT SUPPORT FOR HIGH WIND APPLICATION. PROVIDE THREADED RODS AND ADHESIVE ANCHORS. WITH ROD EMBEDDED AT LEAST 1-3/4 INCHES (44 MM) INTO CONCRETE. REFER TO MANUFACTURER INSTALLATION INSTRUCTION FOR ADDITIONAL INFORMATION.
30	TRANSITION DUCTWORK AS REQUIRED TO CONNECT TO EQUIPMENT ON ROOF.
31	PROVIDE PRESSURE REDUCING VALVE ON CHILLED WATER RETURN PIPE SIDE.
32	ROUTE CONDENSATE DRAIN PIPE. SIZE AS INDICATED. TO FLOOR SINK. SLOPE PIPING TO ALLOW FOR GRAVITY DRAINAGE.INSTALL TRAP AS RECOMMENDED BY MANUFACTURER. REFER TO PLUMBING PLANS FOR EXACT LOCATION OF FLOOR SINK.
33	REFER TO PIPING DIAGRAM SHEET (M4.01) FOR PIPE SIZES.
34	RE: 1/M2.08D FOR CONTINUATION.
35	PROVIDE PHP MODEL PP-10 ON ROOF WITH ROLLER AND FULLY ADJUSTABLE HEIGHT THROUGHOUT PIPE RUN EVERY 6'-0" ON CENTER AND EVERY CHANGE IN DIRECTION. RE:M5.02 FOR DETAILS.
36	INSTALL PER MANUFACTURER'S GUIDELINES.
37	INSULATE PER SPECIFICATION.

VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

MECHANICAL ENLARGED PLAN

SHEET NO.

M3.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SYMBOL LEGEND	
	POINT OF CONNECTION TO EXISTING
	ITEM TO REMAIN
	ITEM TO BE REMOVED

MECHANICAL GENERAL NOTES

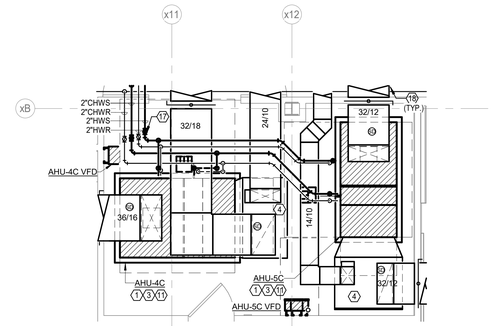
1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL DUCT SIZES ARE INSIDE CLEAR, INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
3	MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
4	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECT'S) REFLECTED CEILING PLAN.
5	THERMOSTATS SHALL BE MOUNTED AT +48" AFF (ABOVE FINISHED FLOOR), UNLESS OTHERWISE NOTED.

MECHANICAL DEMOLITION GENERAL NOTES

1	THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2	ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS REPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
3	OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL HVAC EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT NOT LIMITED TO EVAPORATIVE FLUID COOLER, PIPE STANDS, VALVES, AND BOILERS.

MECHANICAL KEYED NOTES

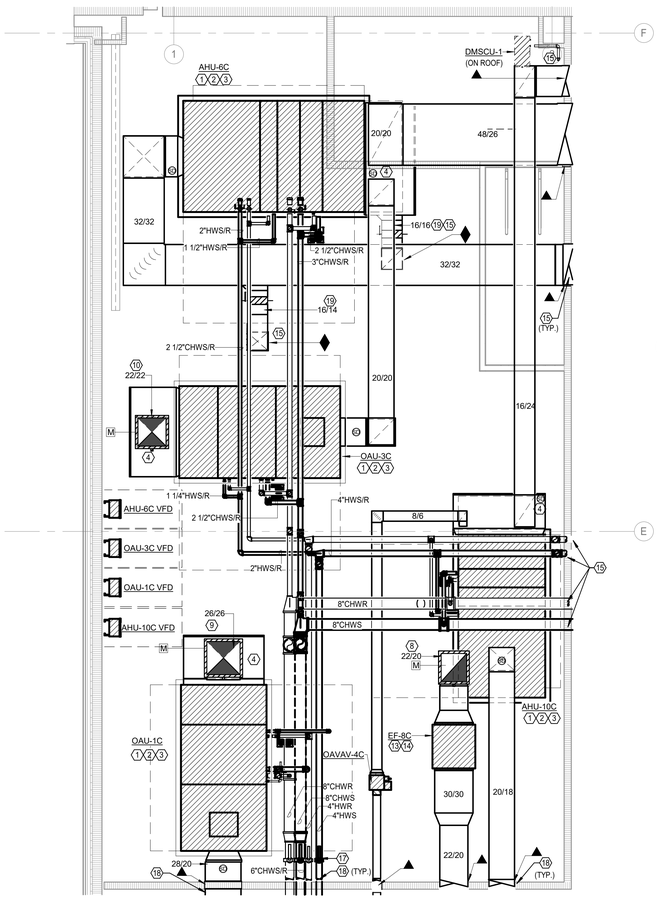
1	VERIFY SERVICE CLEARANCE FOR AIR FILTER, FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. PROVIDE REQUIRED CLEARANCES FOR PROPER MAINTENANCE AND OPERATION. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2	PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD.
3	ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION OF FLOOR DRAIN. INSTALL TRAP AS RECOMMENDED BY MANUFACTURER.
4	PROVIDE SHEET METAL PLENUM, FULL SIZE OF UNIT AIR OPENINGS; LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS AS SHOWN.
5	INTERNALLY LINED RETURN AIR BELOW.
6	ROUTE 10/10 EXHAUST AIR DUCTWORK UP TO RELIEF HOOD ABOVE ON ROOF. TRANSITION EXHAUST DUCT TO CONNECT RELIEF HOOD OPENING.
7	ROUTE 22/16 OUTSIDE AIR DUCTWORK DOWN FROM OUTSIDE AIR INTAKE ABOVE ON ROOF.
8	ROUTE 22/20 EXHAUST AIR DUCTWORK UP TO RELIEF HOOD ON ROOF ABOVE. TRANSITION EXHAUST DUCT TO CONNECT RELIEF HOOD OPENING.
9	ROUTE 26/26 OUTSIDE AIR DUCTWORK DOWN FROM OUTSIDE AIR INTAKE ABOVE ON ROOF.
10	ROUTE 22/22 OUTSIDE AIR DUCTWORK DOWN FROM OUTSIDE AIR INTAKE ABOVE ON ROOF.
11	AHU TO USE EXISTING HOUSEKEEPING PAD.
12	MODULATING CONTROL VALVE SHALL BE SIZED FOR MINIMUM FLOW OF ONE CHILLER. VERIFY WITH CHILLER MANUFACTURER.
13	VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
14	UNIT SHALL BE SUSPENDED WITH UNISTRUT RUNNERS AND PLATFORM SECURED TO STRUCTURE WITH THREADED HANGER RODS. INSTALL PER MANUFACTURER. COORDINATE WITH ALL OTHER TRADES NOT TO OBSTRUCT.
15	RE: 1/M2.04B FOR CONTINUATION.
16	ROUTE 22/16 EXHAUST AIR DUCTWORK UP TO RELIEF HOOD ABOVE ON ROOF. TRANSITION EXHAUST DUCT TO CONNECT RELIEF HOOD OPENING.
17	PROVIDE ISOLATION VALVE AT LOCATION SHOWN.
18	RE: 1/M2.03A FOR CONTINUATION.
19	ROUTE DUCTWORK DOWN TO FLOOR BELOW. PROVIDE WITH FIRE DAMPER.



N

4 MECHANICAL PLAN - MECHANICAL ROOM - C108 - LEVEL ONE

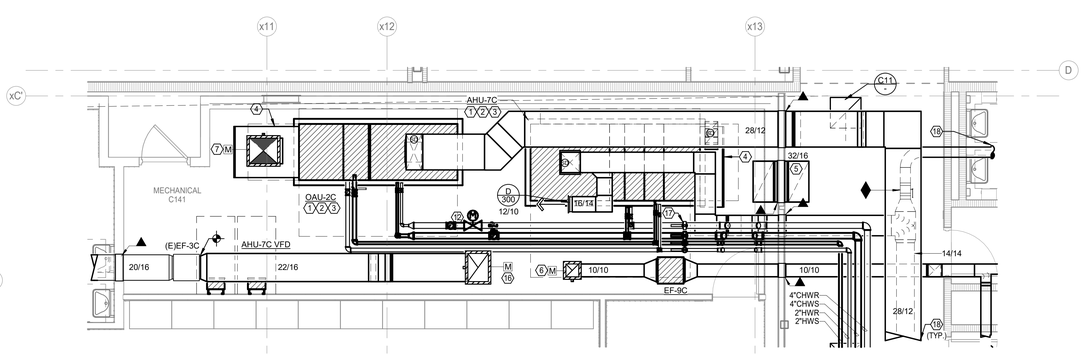
Scale: 1/4" = 1'-0"



N

3 MECHANICAL PLAN - MEZZANINE - M2.04B

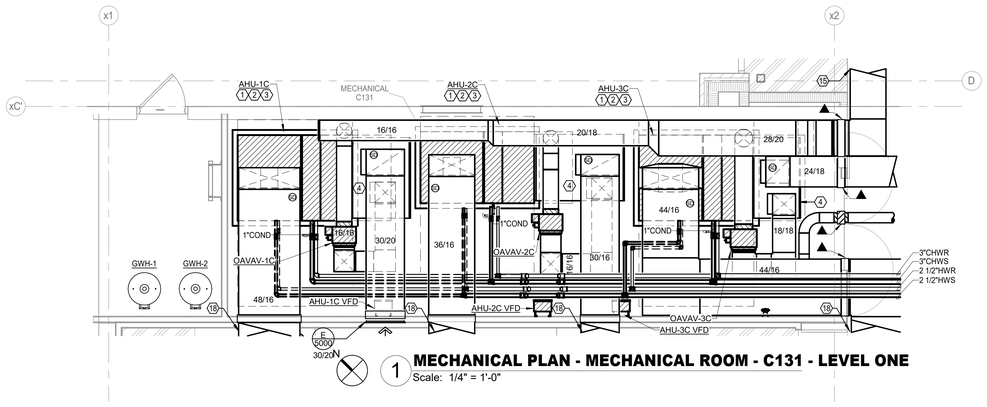
Scale: 1/4" = 1'-0"



N

2 MECHANICAL PLAN - MECHANICAL ROOM - C141 - LEVEL ONE

Scale: 1/4" = 1'-0"



N

1 MECHANICAL PLAN - MECHANICAL ROOM - C131 - LEVEL ONE

Scale: 1/4" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
STATE OF TEXAS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

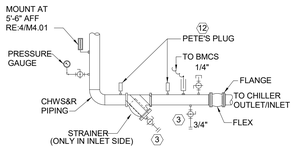
SHEET TITLE

MECHANICAL ENLARGED PLAN

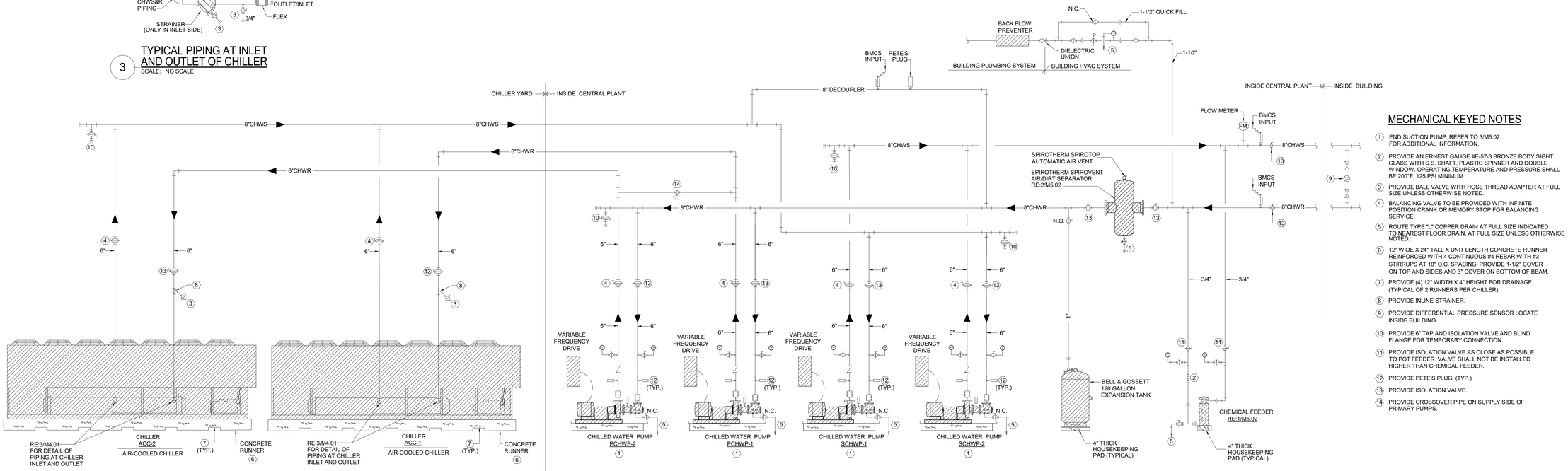
SHEET NO.

M3.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



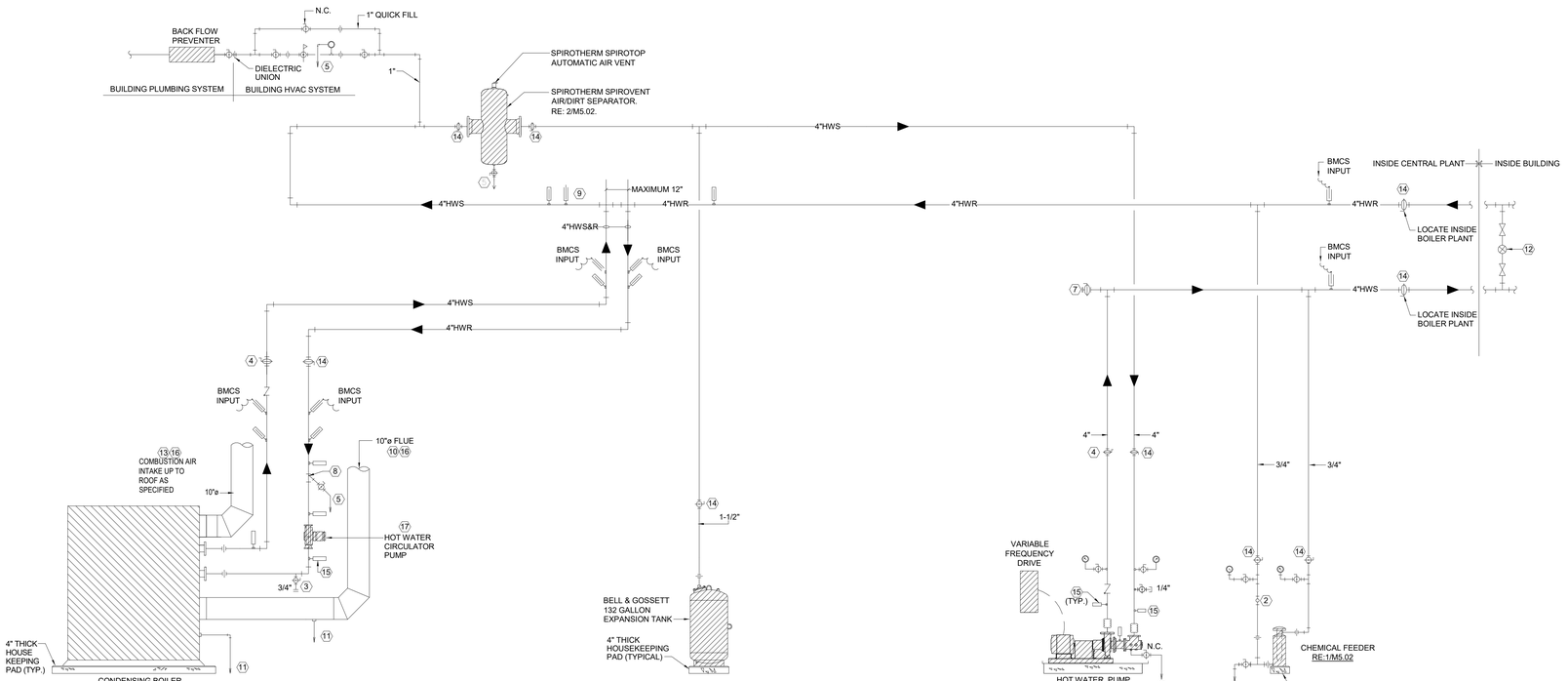
3 TYPICAL PIPING AT INLET AND OUTLET OF CHILLER
SCALE: NO SCALE



2 CHILLED WATER PIPING DIAGRAM
SCALE: NO SCALE

MECHANICAL KEYED NOTES

1. END SUCTION PUMP. REFER TO 3/M5.02 FOR ADDITIONAL INFORMATION.
2. PROVIDE AN ERNEST GAUGE #E-57-3 BRONZE BODY SIGHT GLASS WITH S.S. SHAFT, PLASTIC SPINNER AND DOUBLE WINDOW. OPERATING TEMPERATURE AND PRESSURE SHALL BE 200°F, 125 PSI MINIMUM.
3. PROVIDE BALL VALVE WITH HOSE THREAD ADAPTER AT FULL SIZE UNLESS OTHERWISE NOTED.
4. BALANCING VALVE TO BE PROVIDED WITH INFINITE POSITION CRANK OR MEMORY STOP FOR BALANCING SERVICE.
5. ROUTE TYPE "L" COPPER DRAIN AT FULL SIZE INDICATED TO NEAREST FLOOR DRAIN. AT FULL SIZE UNLESS OTHERWISE NOTED.
6. 12" WIDE X 24" TALL X UNIT LENGTH CONCRETE RUNNER REINFORCED WITH 4 CONTINUOUS #4 REBAR WITH #3 STIRRUPS AT 18" O.C. SPACING. PROVIDE 1-1/2" COVER ON TOP AND SIDES AND 3" COVER ON BOTTOM OF BEAM.
7. PROVIDE (4) 12" WIDTH X 4" HEIGHT FOR DRAINAGE. (TYPICAL OF 2 RUNNERS PER CHILLER).
8. PROVIDE INLINE STRAINER.
9. PROVIDE DIFFERENTIAL PRESSURE SENSOR LOCATE INSIDE BUILDING.
10. PROVIDE 6" TAP AND ISOLATION VALVE AND BLIND FLANGE FOR TEMPORARY CONNECTION.
11. PROVIDE ISOLATION VALVE AS CLOSE AS POSSIBLE TO POT FEEDER. VALVE SHALL NOT BE INSTALLED HIGHER THAN CHEMICAL FEEDER.
12. PROVIDE PETE'S PLUG. (TYP.)
13. PROVIDE ISOLATION VALVE.
14. PROVIDE CROSSOVER PIPE ON SUPPLY SIDE OF PRIMARY PUMPS.



1 HOT WATER PIPING DIAGRAM
SCALE: NO SCALE

MECHANICAL KEYED NOTES

1. END SUCTION PUMP. REFER TO 3/M5.02 FOR ADDITIONAL INFORMATION.
2. PROVIDE AN ERNEST GAUGE #E-57-3 BRONZE BODY SIGHT GLASS WITH S.S. SHAFT, PLASTIC SPINNER AND DOUBLE WINDOW. OPERATING TEMPERATURE AND PRESSURE SHALL BE 200°F, 125 PSI MINIMUM.
3. PROVIDE BALL VALVE WITH HOSE THREAD ADAPTER AT FULL SIZE OR AT SIZE INDICATED.
4. BALANCING VALVE TO BE PROVIDED WITH INFINITE POSITION CRANK OR MEMORY STOP FOR BALANCING SERVICE.
5. ROUTE FULL SIZE TYPE "L" COPPER DRAIN TO NEAREST FLOOR DRAIN.
6. PROVIDE 4" CONCRETE HOUSEKEEPING PAD.
7. PROVIDE ISOLATION VALVE AND BLIND FLANGE.
8. PROVIDE INLINE STRAINER.
9. HEADER TEMPERATURE SENSOR. PROVIDED BY BOILER MANUFACTURER.
10. REFER TO DETAIL 7/M5.02 FOR MORE INFORMATION ON POWER EXHAUSTED FLUE.
11. ROUTE FULL SIZE CPVC PIPING FROM BOILER TO ACID NEUTRALIZATION BASIN AND FROM BASIN TO FLOOR DRAIN.
12. PROVIDE DIFFERENTIAL PRESSURE SENSOR LOCATE INSIDE BUILDING.
13. REFER TO DETAIL 7/M5.02 FOR MORE INFORMATION POWER EXHAUSTED BOILER COMBUSTION AIR INTAKE.
14. PROVIDE ISOLATION VALVE.
15. PROVIDE PETE'S PLUG. (TYP.)
16. REFER TO MANUFACTURER GUIDELINES FOR SIZING, ROUTING AND INSTALLATIONS.
17. CIRCULATOR PUMP PROVIDED BY BOILER MANUFACTURER.

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS 80219 LICENSED PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

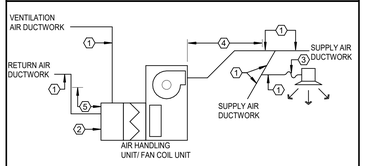
PROJECT NO.
25-0056.00

SHEET TITLE
MECHANICAL PIPING DIAGRAMS

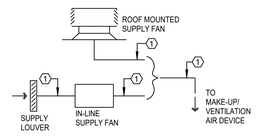
SHEET NO.
M4.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

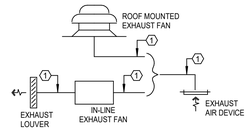
DUCT LINER AND INSULATION



AIR HANDLING UNITS AND FAN COIL UNITS



MAKE-UP/VENTILATION AIR SYSTEMS



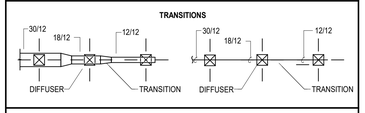
EXHAUST AIR SYSTEMS

KEYED NOTES:

1. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
2. SHEETMETAL DUCTWORK RETURN AIR PLENUM WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
3. FLEXIBLE DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
4. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED AND 1" THICK 1-1/2 LB LINER AS SPECIFIED FROM AIR HANDLING UNIT DISCHARGE TO 10'-0" DOWNSTREAM.
5. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED AND 1" THICK 1-1/2 LB LINER AS SPECIFIED FROM AIR HANDLING UNIT INLET TO 10'-0" UPSTREAM.
6. EXHAUST DUCTWORK AS SPECIFIED WITH FIREBOARD INSULATION AS SPECIFIED.
7. SHEETMETAL DUCTWORK ONLY. NO INSULATION REQUIRED.

DUCTWORK SYMBOLS LEGEND

TRANSITIONS



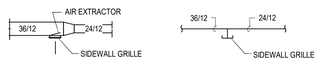
MAIN BRANCH TAKE-OFFS



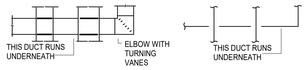
RISERS



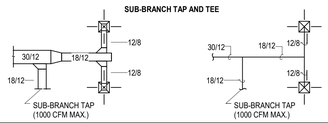
SIDEWALL REGISTERS

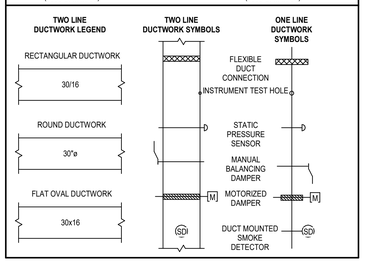


DUCT CROSSOVERS



SUB-BRANCH TAP AND TEE

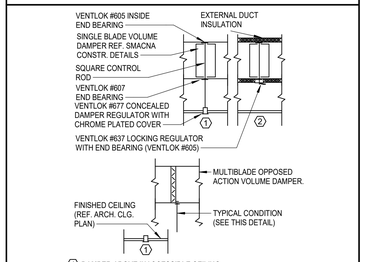




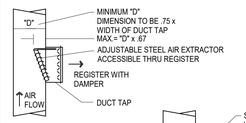
SYMBOL LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
SENSORS	
T	THERMOSTAT AND TEMPERATURE SENSOR
H	HUMIDISTAT
SD	SMOKE DETECTOR
HD	HEAT DETECTOR
E	HVAC EMERGENCY SHUTDOWN STATION
L	EXTERIOR LIGHTING OVERRIDE

DUCTWORK CONSTRUCTION DETAILS

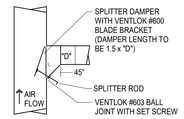


1. **DAMPER ABOVE INACCESSIBLE CEILING**
2. **DAMPER ABOVE LIFT-OUT CEILING**

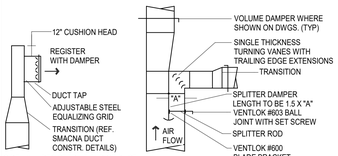


NOTES:
1. MAX. WIDTH OF DUCT TAP SHALL BE 48". PROVIDE BOTTOM BRACKET FOR SUPPORT WHERE EXTRACTOR EXCEEDS 16".
2. MAX. HEIGHT OF DUCT TAP SHALL BE 12" (MIN.= 4")

EXTRACTOR SIDEWALL REGISTER



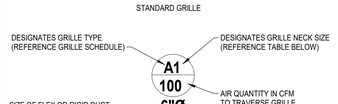
DUCT TAP



SIDEWALL REGISTER AT END OF DUCT **SPLITTER**

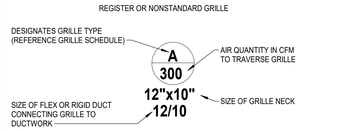
GRILLE SIZING SCHEDULE

STANDARD GRILLE



ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN.

REGISTER OR NONSTANDARD GRILLE



ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN. ALL REGISTERS SHALL HAVE A 45° HORIZONTAL DEFLECTION UNLESS OTHERWISE SHOWN.

GRILLE SIZE DESIGNATION	GRILLE NECK SIZE	GRILLE SIZE DESIGNATION	GRILLE NECK SIZE
1	6" x 6"	7	15" x 15"
2	8" x 8"	8	16" x 16"
3	9" x 9"	9	18" x 18"
4	10" x 10"	10	20" x 20"
5	12" x 12"	11	22" x 22"
6	14" x 14"	12	24" x 24"

SYMBOL LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
#	KEY NOTE TAG
A	REVISION TAG
	NEW EQUIPMENT
DUCTWORK	
	SUPPLY AIR DUCTWORK
	RETURN AIR AND OUTSIDE AIR DUCTWORK
	EXHAUST AIR DUCTWORK
	FLEXIBLE DUCTWORK
	SUPPLY AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	RETURN AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	EXHAUST AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	FIRE DAMPER (VERTICAL)
	FIRE DAMPER (HORIZONTAL)
S	SMOKE DAMPER (VERTICAL)
S	SMOKE DAMPER (HORIZONTAL)
FS	COMBINATION FIRE & SMOKE DAMPER (VERTICAL)
FS	COMBINATION FIRE & SMOKE DAMPER (HORIZONTAL)
	MANUAL BALANCING DAMPER (SEE DAMPER SCHEDULE)
M	MOTORIZED DAMPER (SEE DAMPER SCHEDULE)
AIR DEVICES	
	GRILLE SIZE TAG (REFER TO GRILLE SIZE LEGEND)
	SUPPLY AIR GRILLE WITH FOUR-WAY THROW
	SUPPLY AIR GRILLE WITH THREE-WAY THROW
	SUPPLY AIR GRILLE WITH TWO-WAY THROW
	SUPPLY AIR GRILLE WITH TWO-WAY CORNER THROW
	SUPPLY AIR GRILLE WITH ONE-WAY THROW
	RETURN AIR GRILLE
	RETURN AIR GRILLE WITH SOUND BOOT
	EXHAUST AIR GRILLE
	SUPPLY AIR SIDEWALL GRILLE
	RETURN AIR SIDEWALL GRILLE
20X12	RETURN AIR OPENING ABOVE CEILING
PIPING	
-CHWS&R-	CHILLED WATER SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
-CHWS-	CHILLED WATER SUPPLY
-CHWR-	CHILLED WATER RETURN
-HWS&R-	HOT WATER FOR HYDRONIC HEATING SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
-HWS-	HOT WATER FOR HYDRONIC HEATING SUPPLY
-HWR-	HOT WATER FOR HYDRONIC HEATING RETURN
-D-	CONDENSATE DRAIN LINE
-AD-	AUXILIARY CONDENSATE DRAIN LINE
-RLR-	REFRIGERANT LIQUID & GAS RECIRCULATION LINE (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
-RL-	REFRIGERANT LIQUID LINE
-HG-	REFRIGERANT HOT GAS LINE
-RS-	REFRIGERANT SUCTION LINE
	ELBOW UP
	ELBOW DOWN
	90° ELBOW
	45° ELBOW
	TEE
	TEE DOWN
	TEE UP
	TOP BRANCH CONNECTION
	BOTTOM BRANCH CONNECTION
	FLANGE
	CAP
	CONTINUATION
	FLOOR DRAIN (REFER TO PLUMBING DRAWINGS)
	GATE VALVE
	GLOBE VALVE
	CHECK VALVE
	BUTTERFLY VALVE
	BUTTERFLY VALVE WITH OPERATOR
	PLUG VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
PR	PRESSURE RELIEF VALVE
	BALL VALVE
	STRAINER
	UNION
	THERMOMETER WELL
	PETE'S PLUG
	PRESSURE GAUGE
	TEMPERATURE SENSOR IN PIPE
	VENTURI FLOW METER
	FLOW SWITCH
FM	FLOW MEASURING STATION
	EXPANSION JOINT
	FLEXIBLE CONNECTION
G.C.	GAUGE COCK
	SITE GLASS
	DIFFERENTIAL PRESSURE SENSOR
	TURBINE FLOW METER
	ANCHOR
	PIPE GUIDE
SUBSCRIPTS AND ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BBS	BELOW BOTTOM OF STRUCTURE
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
CA	COMBUSTION AIR
CFM	CUBIC FEET PER MINUTE
EA	EXHAUST AIR
FPM	FEET PER MINUTE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
RENOVATIONS	
	POINT OF CONNECTION FROM NEW TO EXISTING
	ITEM TO REMAIN
	ITEM TO BE REMOVED

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

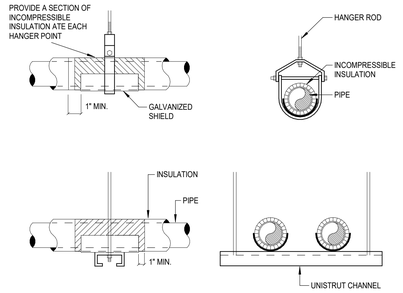
SHEET TITLE

MECHANICAL DETAILS AND LEGENDS

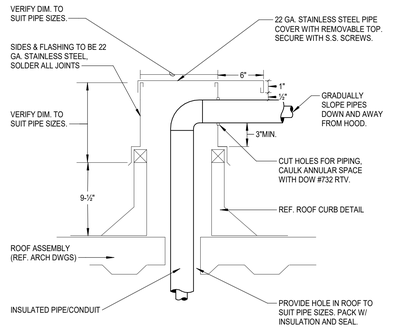
SHEET NO.

M5.01

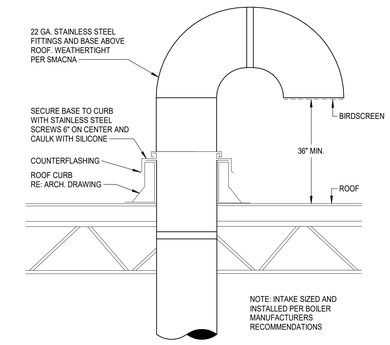
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



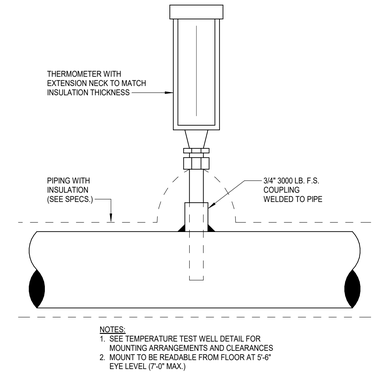
16 PIPE HANGERS
SCALE: NONE



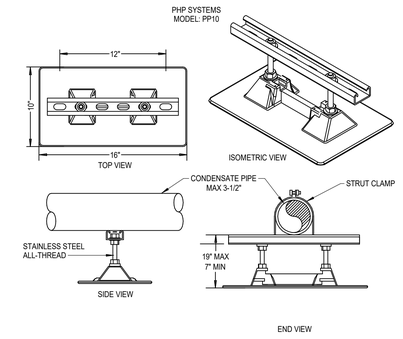
12 INSULATED PIPE THRU ROOF
SCALE: NONE



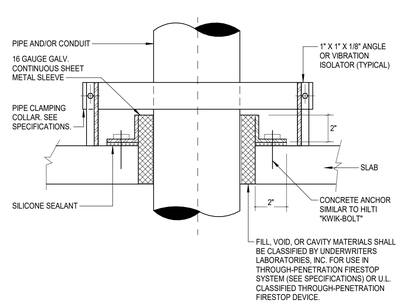
POWER EXHAUSTED BOILER COMBUSTION AIR INTAKE THRU ROOF
SCALE: NONE



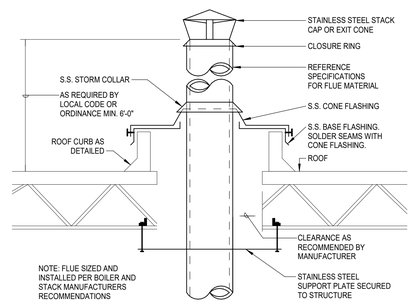
4 THERMOMETER INSTALLATION
SCALE: NONE



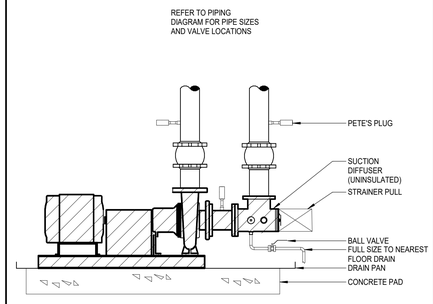
15 PIPE SUPPORT ON ROOF
SCALE: NONE



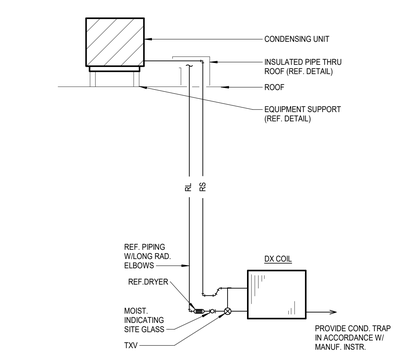
11 PIPE THRU FLOOR
SCALE: NONE



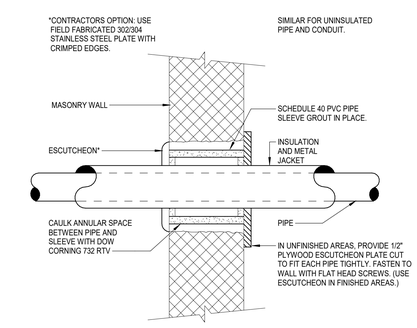
POWER EXHAUSTED BOILER FLUE THRU ROOF
SCALE: NONE



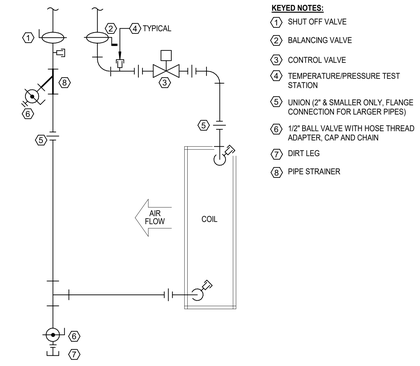
3 END SUCTION PUMP
SCALE: NONE



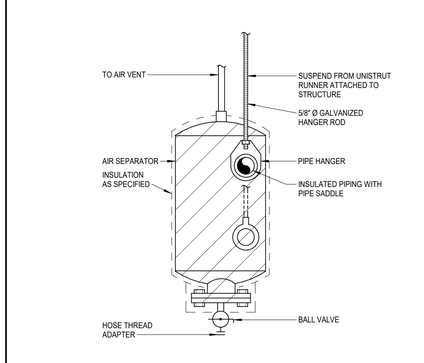
14 REFRIGERANT PIPING DIAGRAM
SCALE: NONE



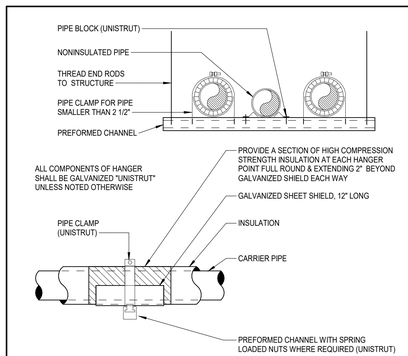
10 PIPE THROUGH EXTERIOR WALL
SCALE: NONE



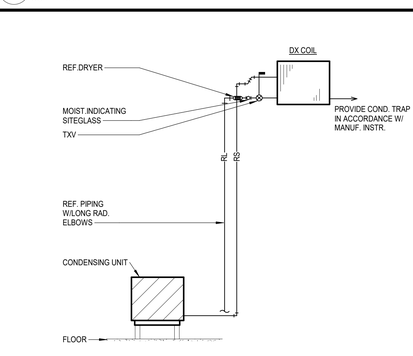
6 PIPING AT WATER COIL 2-WAY
SCALE: NONE



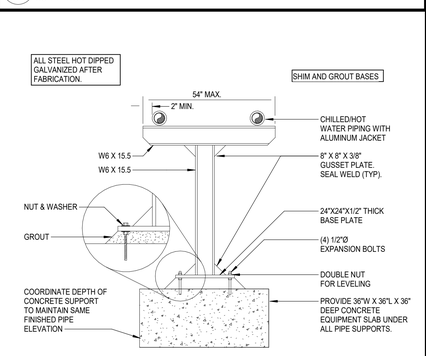
2 SUPPORT AT AIR/DIRT SEPARATOR
SCALE: NONE



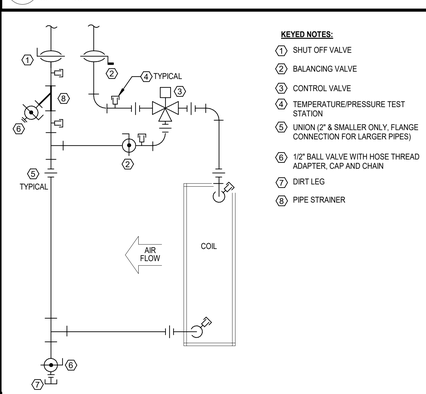
17 MULTI-PIPE TRAPEZE HANGER
SCALE: NONE



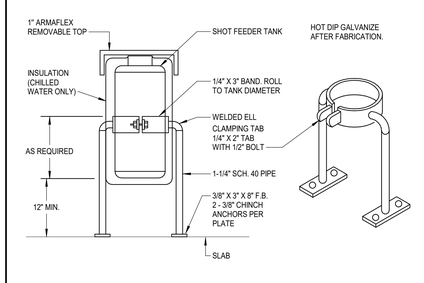
13 REFRIGERANT PIPING DIAGRAM
SCALE: NONE



9 PIPE STAND
SCALE: NONE



5 PIPING AT WATER COIL 3-WAY
SCALE: NONE



CHILLED AND HOT WATER CHEMICAL FEEDER TANK SUPPORT DETAIL
SCALE: NONE

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

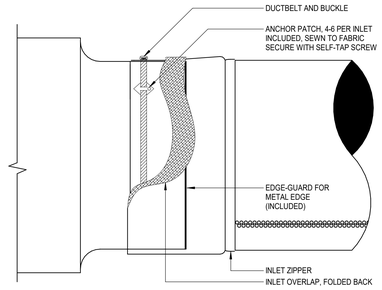
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

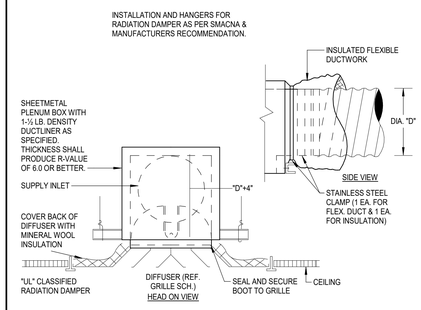
SHEET TITLE
MECHANICAL DETAILS

SHEET NO.
M5.02

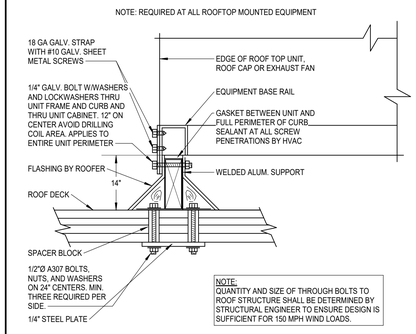
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



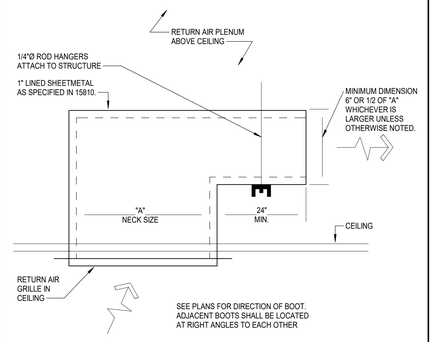
16 FABRIC DUCT INLET DETAIL
SCALE: NONE



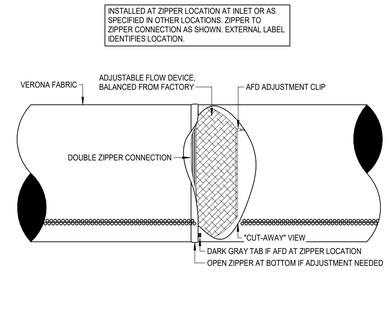
"UL" CLASSIFIED CEILING RADIATION DAMPER WITH ADAPTER FOR FLEXIBLE DUCT
12 SCALE: NONE



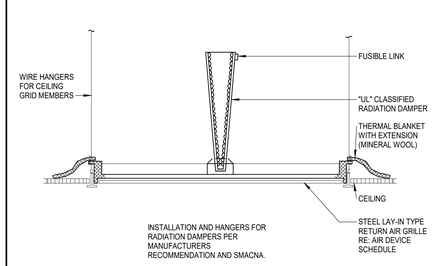
8 WIND RESISTANT EQUIPMENT SUPPORT
SCALE: NONE



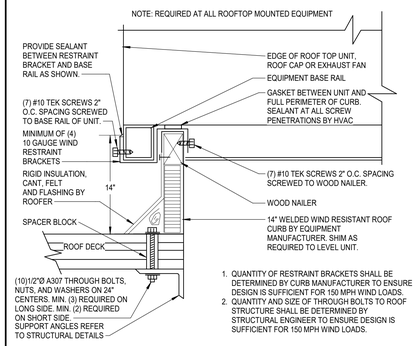
4 RETURN AIR GRILLE BOOT
SCALE: NONE



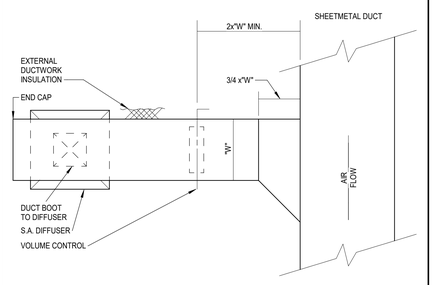
15 ADJUSTABLE FLOW DEVICE (AFD)
SCALE: NONE



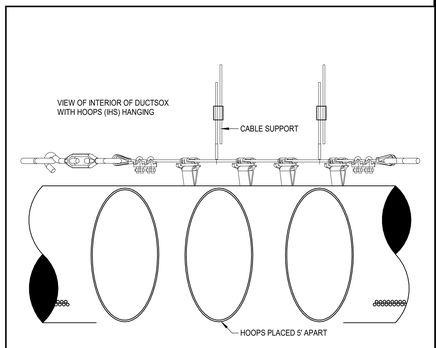
UL CLASSIFIED RADIATION DAMPER AT RETURN AIR GRILLE
11 SCALE: NONE



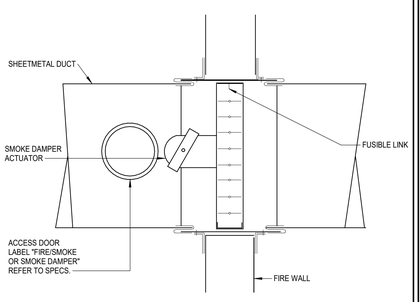
7 WIND RESISTANT ROOF CURB
SCALE: NONE



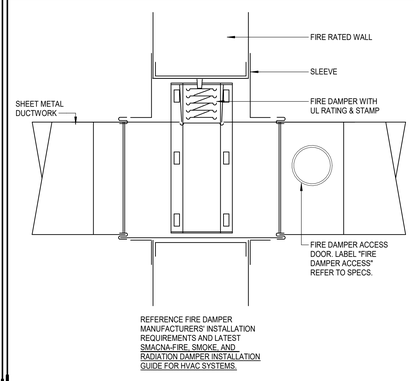
3 RIGID DUCT TAP TO SINGLE SUPPLY AIR DIFFUSER
SCALE: NONE



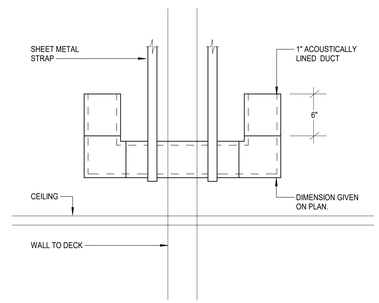
18 CUT AWAY VIEW OF HOOPS (IHS)
SCALE: NONE



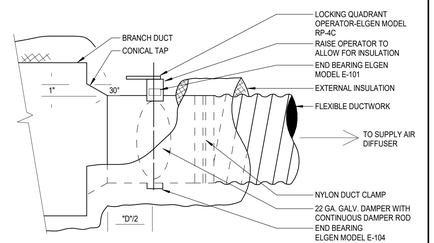
14 COMBINATION SMOKE / FIRE DAMPER
SCALE: NONE



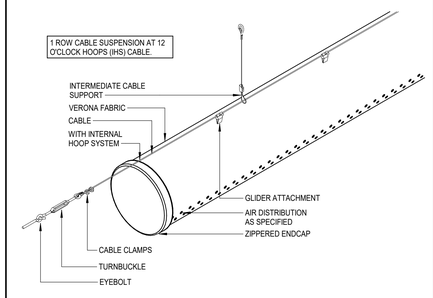
10 FIRE DAMPER
SCALE: NONE



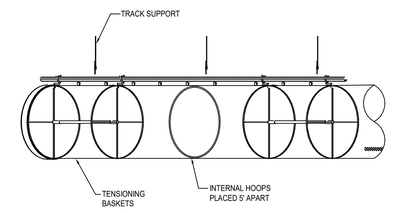
6 TRANSFER AIR DUCT
SCALE: NONE



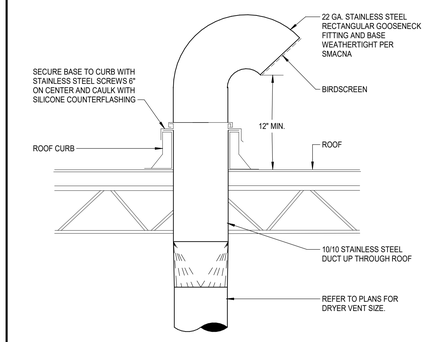
2 FLEXIBLE DUCT TAP - CONICAL
SCALE: NONE



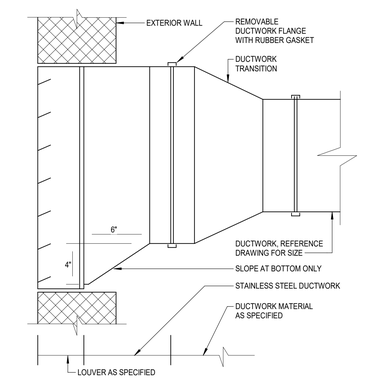
17 FABRIC DUCT SUSPENSION DETAIL
SCALE: NONE



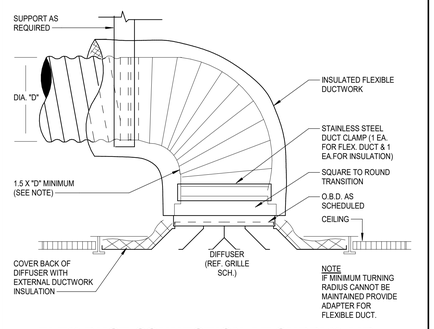
13 PULL-TIGHT WITH U-TRACK DETAIL
SCALE: NONE



9 VENT THROUGH ROOF
SCALE: NONE



5 DUCTWORK AT LOUVER
SCALE: NONE



FLEX DUCT CONNECTION AT SUPPLY AIR DIFFUSER
1 SCALE: NONE

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
MECHANICAL DETAILS

SHEET NO.
M5.03

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

DUCTLESS MINI-SPLIT - INDOOR UNIT

MARK	FAN						AIR TEMPERATURE (°F)		COOLING		HEATING		LOCATION	REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT.STATIC PRESSURE (IN. W.C.)	POWER CHARAC. V	P	F	ENTERING DRY BULB	ENTERING WET BULB	TOTAL CAPACITY (BTUH)	MIN. SENS. CAPACITY (BTUH)	MINIMUM EER/ SEER	ENTERING AIR TEMP.(°F)	MINIMUM CAPACITY (BTUH)		
DMS-1	850	-	0.25	208	1	60	78.0	65.0	36,000	13,200	12.0/20.3	-	-	AV/IT C151	1-7
DMS-2	375	-	0.25	208	1	60	78.0	65.0	18,000	4,300	11.0/19.5	-	-	IDF C158	1-7

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. UNIT TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. CONTROLLED BY PROGRAMMABLE WIRED THERMOSTAT.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT.
5. PROVIDE HIGH WALL UNIT.
6. PROVIDE WITH LITTLE GIANT CONDENSATE PUMP MODEL 554652 VCMA-20ULS-C-PRO, 1/30 HP, 115V/1PH/60HZ. INTALL PUMP OUTSIDE THE UNIT.
7. PROVIDE A VER LEVEL SENSING DEVICE IN THE PRIMARY DRAIN PAN. THIS DEVICE SHALL SHUT OFF THE APPLIANCE IN THE EVENT THE PRIMARY DRAIN LINE BECOMES RESTRICTED.

DUCTLESS MINI-SPLIT - COOLING ONLY - OUTDOOR UNIT

MARK	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP. (°F)	MINIMUM EER/ SEER	POWER CHARAC. V	PH	F	RELATED UNIT MARK	MCA	MOCP	REMARKS
DMSCU-1	36,000	98	12.0/20.3	208	1	60	DMS-1	34	56	1-7
DMSCU-2	18,000	98	11.0/19.5	208	1	60	DMS-2	16	27	1-7

GENERAL NOTES:
1. MINIMUM RECOMMENDED CLEARANCE AROUND ROOFTOP UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. PROVIDE LOW AMBIENT CONTROL DOWN TO 20°F.
2. UNIT TO BE INSTALLED PER MANUFACTURER.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. PROVIDE WITH DISCONNECT.
5. PROVIDE COOLING ONLY UNIT
6. PROVIDE EPOXY COATED COILS.
7. PROVIDE UNIT WITH ICM SURGE PROTECTION DEVICE. COORDINATE WITH ELECTRICAL FOR INSTALLATION.

PACKAGED AIR COOLED CHILLER - STANDARD EFFICIENCY- SCREW

MARK	ACTUAL CAPACITY (TONS)	LEAVING WATER TEMP.(°F)	GPM	PRESSURE DROP (FT.)	AMBIENT AIR TEMP. (°F)	ELECTRICAL CHARAC. V	P	F	MCA	MOCP	REMARKS
ACC-1	200	42	402	20.0	98 °F	480	3	60	455	600	1-7
ACC-2	200	42	402	20.0	98 °F	480	3	60	455	600	1-7

GENERAL NOTES:
1. MAXIMUM FOULING FACTOR FOR THE EVAPORATOR IS 0.0001
2. MAINTAIN MINIMUM CLEARANCES REQUIRED BY CHILLER MANUFACTURER FOR PROPER AIRFLOW TO FANS AND UNIT. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON EQUIPMENT FOR SERVICE, MAINTENANCE AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCES AS REQUIRED BY NEC.
3. CHILLER SHALL MEET OR EXCEED BOTH ABOVE SCHEDULED FULL-LOAD AND PART-LOAD EFFICIENCIES INDICATED IN IECC 2021. COMPLY BY PATH A OR BY PATH B AS REQUIRED BY IECC 2021.

REMARKS:
1. PROVIDE WITH LOW AMBIENT HEAD PRESSURE CONTROL.
2. PROVIDE WITH INTEGRAL MAIN ELECTRICAL DISCONNECT SWITCH.
3. PROVIDE WITH INSULATION ON ALL SUCTION LINES.
4. PROVIDE CHILLER WITH A MINIMUM FULL LOAD EFFICIENCY OF 9.7 EER AND A MINIMUM IPLV OF 15.8.
5. PROVIDE WITH POLYMER CONDENSER FANS AND COMPRESSOR BLANKETS.
6. PROVIE CHILLER RATED FOR 65KA SCCR.
7. PROVIDE EPOXY COATED COILS.

PACKAGED AIR COOLED CHILLER - HIGH EFFICIENCY- SCREW

MARK	ACTUAL CAPACITY (TONS)	LEAVING WATER TEMP.(°F)	GPM	PRESSURE DROP (FT.)	AMBIENT AIR TEMP. (°F)	ELECTRICAL CHARAC. V	P	F	MCA	MOCP	REMARKS
ACC-1	200	42	402	20.0	98 °F	480	3	60	455	600	1-7
ACC-2	200	42	402	20.0	98 °F	480	3	60	455	600	1-7

GENERAL NOTES:
1. MAXIMUM FOULING FACTOR FOR THE EVAPORATOR IS 0.0001
2. MAINTAIN MINIMUM CLEARANCES REQUIRED BY CHILLER MANUFACTURER FOR PROPER AIRFLOW TO FANS AND UNIT. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON EQUIPMENT FOR SERVICE, MAINTENANCE AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCES AS REQUIRED BY NEC.
3. CHILLER SHALL MEET OR EXCEED BOTH ABOVE SCHEDULED FULL-LOAD AND PART-LOAD EFFICIENCIES INDICATED IN IECC 2021. COMPLY BY PATH A OR BY PATH B AS REQUIRED BY IECC 2021.

REMARKS:
1. PROVIDE WITH LOW AMBIENT HEAD PRESSURE CONTROL.
2. PROVIDE WITH INTEGRAL MAIN ELECTRICAL DISCONNECT SWITCH.
3. PROVIDE WITH INSULATION ON ALL SUCTION LINES.
4. PROVIDE CHILLER WITH A MINIMUM FULL LOAD EFFICIENCY OF 10.600 EER AND A MINIMUM IPLV OF 19.2.
5. PROVIDE WITH POLYMER CONDENSER FANS AND COMPRESSOR BLANKETS.
6. PROVIE CHILLER RATED FOR 65KA SCCR.
7. PROVIDE EPOXY COATED COILS.

RELIEF VENT & O.A. INTAKE

MARK	CFM	MAX. S.P. (IN.WC.)	MIN. THROAT AREA	MODEL	SERVES	REMARKS
OAI-1C	4500	0.05 in-wg	7.5 SF	GI	OAU-1C	1,2,3,4,5
OAI-2C	2700	0.04 in-wg	5.0 SF	GI	OAU-2C	1,2,3,4,5
OAI-3C	3000	0.05 in-wg	5.0 SF	GI	OAU-3C	1,2,3,4,5
OAI-4C	2300	0.10 in-wg	3.0 SF	GI	DRYERS	1,2,3,4,5
RV-1C	2000	0.05 in-wg	4.0 SF	GR	EF-8C	1,2,3,4,5
RV-2C	2510	0.08 in-wg	2.7 SF	GR	EF-1C	1,2,3,4,5
RV-3C	390	0.01 in-wg	1.0 SF	GR	(E)EF-2C	1,2,3,4,5
RV-4C	1535	0.03 in-wg	2.7 SF	GR	(E)EF-3C	1,2,3,4,5
RV-5C	340	0.01 in-wg	1.6 SF	GR	EF-9C	1,2,3,4,5

REMARKS:
1. PROVIDE WITH ROOF CURB.
2. PROVIDE WITH BIRD SCREEN.
3. PROVIDE WITH MOTORIZED DAMPER.
4. HOOD SHALL BE RATED FOR 150MPH WIND LOADS.
5. PROVIDE EPOXY COATING.
6. PROVIDE WITH BAROMETRIC RELIEF DAMPER.

CHILLED & HOT WATER FAN/COIL UNIT

MARK	FAN				CURRENT V	P	F	AIR TEMPERATURE (°F)		COOLING		WATER			PIPE SIZE TO COIL (IN.)	REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT.STATIC PRESSURE (IN. W.C.)	HORSE POWER				ENTERING DRY BULB	ENTERING WET BULB	MIN. TOTAL CAPACITY (BTUH)	MIN. SENSIBLE CAPACITY (BTUH)	ENTERING TEMP(°F)	GPM	PRESSURE DROP (FT.)	CHILLED WATER	
CHWFCU-1	1,200	0	1.30	1.5	208	3	60	75.0	62.6	34,560	28,515	45	6	15.0	1"	1-7

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCES AS REQUIRED BY NEC.

REMARKS:
1. VELOCITY NOT TO EXCEED 500 FPM ON COOLING COIL.
2. PROVIDE HORIZONTAL UNIT.
3. PROVIDE CONSTANT VOLUME UNIT.
4. PROVIDE WITH LOW VELOCITY ANGLED FILTER SECTION.
5. PROVIDE WITH FLOAT SWITCH AUTOMATIC SHUT OFF.
6. SUSPEND UNIT WITH FOUR THREADED HANGER RODS ATTACHED TO TWO UNISTRUT RUNNERS SECURED TO STRUCTURE. PROVIDE SPRING ISOLATION REFER TO MANUFACTURER FOR MORE DETAILS.
7. PROVIDE 2-WAY COOLING CONTROL VALVES.

BOILER - FORCED AIR - INDOOR

MARK	TYPE	MINIMUM GAS INPUT (MBH)	MINIMUM HEAT OUTPUT (MBH)	PRESSURE DROP (FT.H20)	GPM	FLUE SIZE	ELECTRICAL CHARAC. V	P	F	REMARKS
B-1	CONDENSING	2500.0	2400.0	10.0	160.0	10	208	3	60	1,2

GENERAL NOTES:
1. PROVIDE 8 OUNCE GAS PRESSURE TO BOILER.
2. MAINTAIN MINIMUM CLEARANCE AROUND A BOILER OF 24 INCHES PER TEXAS BOILER LAW. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS FOR SERVICE, MAINTENANCE AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCES AS REQUIRED BY NEC.

REMARKS:
1. PROVIDE WITH CIRCULATING PUMP, SIZED BY BOILER MANUFACTURER TO ENSURE CONSTANT FLOW THROUGH BOILER. PUMP TO BE SHIPPED LOOSE. POWER BY ELECTRICAL CONTRACTOR BUT CONTROLLED BY BOILER. CONTRACTOR TO WIRE FROM BOILER PUMP CONTROL CIRCUIT TO PUMP STARTER RELAY.
2. PROVIDE SEALED COMBUSTION BOILER.

PUMP

TAG	SERVICE	TYPE	GPM	HEAD (FT.)	MOTOR HORSE POWER	MAX. RPM	ELECTRICAL CHARAC. V	P	F	MANUFACTURER	MODEL NUMBER	REMARKS
HWP-1	HOT WATER	HORIZONTAL END SUCTION	250	80.00	15	1800	480	3	60	ARMSTRONG	4030	1,2,3,4
HWP-2	HOT WATER	INLINE CIRCULATOR	160	25.00	2	1800	480	3	60	ARMSTRONG	4030	4,5
PCHWP-1	CHILLED WATER	HORIZONTAL END SUCTION	480	60.00	15	1800	480	3	60	ARMSTRONG	4030	1,2,3,4
PCHWP-2	CHILLED WATER	HORIZONTAL END SUCTION	480	60.00	15	1800	480	3	60	ARMSTRONG	4030	1,2,3,4
SCHWP-1	CHILLED WATER	HORIZONTAL END SUCTION	402	80.00	15	1800	480	3	60	ARMSTRONG	4030	1,2,3,4
SCHWP-2	CHILLED WATER	HORIZONTAL END SUCTION	402	80.00	15	1800	480	3	60	ARMSTRONG	4030	1,2,3,4

GENERAL NOTES:
1. PUMP IS TO HAVE A NON-OVERLOADING MOTOR.
2. MINIMUM RECOMMENDED CLEARANCE AROUND A PUMP IS 24 INCHES. MAINTAIN MINIMUM CLEARANCES AS REQUIRED FOR SERVICE, MAINTENANCE, AND INSPECTION.

REMARKS:
1. PROVIDE WITH VARIABLE FREQUENCY DRIVE.
2. PROVIDE SUCTION DIFFUSER AT PUMP INLET.
3. PROVIDE WITH BACK PULL OUT.
4. PROVIDE WITH GAUGE TAPPINGS.
5. PUMP SHALL BE SELECTED BY BOILER MANUFACTURER, WITH DISCONNECT AND STARTER BY ELECTRICAL CONTRACTOR AND CONTROLLED BY BOILER.

GRILLE

MARK	SERVICE	TYPE	DAMPER	CONSTRUCTION MATERIAL	FINISH COLOR	MANUFACTURER	MODEL NUMBER	DESCRIPTION
B	SUPPLY AIR	DIFFUSER	-	ALUMINUM	WHITE	TITUS	OMNI	EXPOSED T-BAR CEILING FRAME STYLE WITH A 24"X24" FACE. PERFORATED.
C	RETURN AIR	DIFFUSER	-	ALUMINUM	WHITE	TITUS	PAR	EXPOSED T-BAR CEILING FRAME STYLE WITH A 24"X24" FACE. PERFORATED.
D	SUPPLY AIR	GRILLE	-	ALUMINUM	WHITE	TITUS	300RL	DOUBLE DEFLECTION SIDEWALL GRILLE WITH HORIZONTAL FRONT BARS. SURFACE MOUNTED (1)
E	RETURN AIR	GRILLE	-	ALUMINUM	WHITE	TITUS	350 FL	DOUBLE DEFLECTION SIDEWALL GRILLE WITH HORIZONTAL FRONT BARS. SURFACE MOUNTED (1)
F	EXHAUST AIR	DIFFUSER	-	ALUMINUM	WHITE	TITUS	50F	EXPOSED T-BAR CEILING FRAME STYLE WITH A 24"X24" OR 12"X12" FACE. PERFORATED FACE.
G	EXHAUST AIR	DIFFUSER	-	ALUMINUM	WHITE	TITUS	350RL	DOUBLE DEFLECTION SIDEWALL GRILLE WITH HORIZONTAL FRONT BARS. SURFACE MOUNTED (1)
H	EXHAUST AIR	GRILLE	-	ALUMINUM	WHITE	TITUS	50F	SURFACE MOUNT CEILING FRAME STYLE WITH 18"X18" OR 12"X12" FACE. PERFERATED FACE.
S	SUPPLY AIR	SLOT	-	ALUMINUM	BLACK	TITUS	FL-20-JT	4' LONG FLOWBAR, JETTHROW WITH TITUS PLENUM, 1 SLOT 2" WIDTH AND 12' INLET. PROVIDE WITH BORDER 66 OR 111 FINISH WITH EXPOSED FLANGE.
T	RETURN AIR	SLOT	-	ALUMINUM	BLACK	TITUS	FL-20	SURFACE MOUNT PLENUM SLOT DIFFUSER WITH 1 SLOT 2" WIDTH. PROVIDE WITH BORDER 66 OR 111 FINISH WITH EXPOSED FLANGE.
XA	SUPPLY AIR	DIFFUSER / GRILLE	-	-	-	-	-	EXISTING AIR DEVICE SHALL REMAIN. BALANCE TO INDICATED CFM.
XB	RETURN AIR	DIFFUSER	-	-	-	-	-	EXISTING AIR DEVICE SHALL REMAIN. BALANCE TO INDICATED CFM.
XC	EXHAUST AIR	DIFFUSER / GRILLE	-	-	-	-	-	EXISTING AIR DEVICE SHALL REMAIN. BALANCE TO INDICATED CFM.

GENERAL NOTES:
1. DAMPERS NOTED AS U.L. SHALLBE A 'U.L.' CLASSIFIED CEILING RADIATION DAMPER WITH THERMAL BLANKET.
2. COORDINATE FINAL AIR DEVICE LOCATION AND FINISH COLOR WITH ARCHITECT.

REMARKS:
1. N/A

VARIABLE VOLUME TERMINAL BOX

MARK	MAXIMUM CFM	MINIMUM CFM	INLET DIAMETER SIZE (IN.)	HOT WATER COIL GPM	CONNECTING PIPE SIZE	REMARKS
OAVAV-1C	1,500	360	12	-	-	-
OAVAV-2C	900	0	10	-	-	-
OAVAV-3C	1,925	0	14	-	-	-
OAVAV-4C	175	0	6	-	-	-

GENERAL NOTES:
1. MAXIMUM STATIC PRESSURE DROP OF AIR THROUGH THE TERMINAL BOX SHALL BE 0.2" ESP.
2. MAXIMUM VELOCITY THROUGH DUCT INLET SHALL BE 2,000 FPM.
3. MAXIMUM STATIC PRESSURE DROP THROUGH HEATER COIL SHALL BE 0.25" ESP.
4. MAXIMUM STATIC PRESSURE DROP OF WATER THROUGH HEATER COIL SHALL BE 10' W.G.
5. BTUH REQUIRED FOR HOT WATER HEATING IS HEATING GPM MULTIPLIED BY 10,000.
6. SUSPEND UNIT WITH FOUR THREADED HANGER RODS ATTACHED TO TWO UNISTRUT RUNNERS SECURED TO STRUCTURE. REFER TO MANUFACTURER FOR MORE DETAILS.
7. UNITS TO BE MOUNTED BETWEEN BEAMS AND 18" MAXIMUM ABOVE CEILING. AVOID MOUNTING OVER LIGHTS WHEREVER POSSIBLE.
8. REFER TO PIPING AT HOT WATER COIL DETAILS. PROVIDE WITH 2-WAY CONTROL VALVE UNLESS OTHERWISE SCHEDULED.

REMARKS:
1. N/A

EXISTING FAN SCHEDULE

TAG	LOCATION	CFM	EXT. STATIC PRESSURE (IN.W.C.)	MAX RPM	HORSE POWER	ELECTRICAL CHARAC. V	P	F	LOCALLY SWITCHED	INTERLOCK WITH	FAN TYPE	DRIVE TYPE	MANUFACTURER	REMARKS
(E)EF-2C	LOCKERS/LAUNDRY	660	0.250	1300	0.25	120	1	60	-	OAU-1C	INLINE	BELT	GREENHECK	1,2
(E)EF-3C	TOILET/SHOWERS LAUNDRY	1535	0.375	889	0.5	120	1	60	-	OAU-1C	INLINE	BELT	GREENHECK	1,2
(E)EF-4C	ELECT.	350	0.250	1870	0.25	120	1	60	-	OAU-2C	INLINE	BELT	GREENHECK	1,2
(E)EF-5C	SHOWER	100	0.250	1363	0.25	120	1	60	-	OAU-2C	INLINE	BELT	GREENHECK	1,2
(E)EF-6C	TOILET	770	0.375	1142	0.33	120	1	60	-	OAU-2C	INLINE	BELT	GREENHECK	1,2
(E)EF-7C	LOCKERS/ JAN	580	0.375	1149	0.25	120	1	60	-	OAU-1C	INLINE	BELT	GREENHECK	1,2

GENERAL NOTES:
1. INTERLOCKS ARE SHOWN FOR ASSOCIATION PURPOSES ONLY SOFTWARE INTERLOCKS ARE ACCEPTTABLE..

REMARKS:
1. EXISTING UNITS SHALL BE MODIFIED TO SCHEDULED PERFORMANCE AS NOTED ABOVE.
2. EXISTING EXHAUST FANS EQUIPPED WITH MOTORIZED DAMPER SHALL HAVE THE MOTORIZED DAMPER REPLACED.

UNIT HEATER - ELECTRIC

MARK	MINIMUM CAPACITY (BTUH)	KW	NUMBER OF STAGES	ELECTRICAL CHAR. V	P	F	CFM	MANUFACTURER	SERIES	REMARKS
EUH-1	11,200	3	1	208	3	60	400	MERKEL	UHE	1,2
EUH-2	11,200	3	1	208	3	60	400	MERKEL	UHE	1,2

REMARKS:
1. PROVIDE WITH HARD WIRED WALL MOUNTED THERMOSTAT.
2. REFER TO MANUFACTURER MANUAL FOR ADDITIONAL INSTALLATION REQUIREMENTS.

AIR HANDLING UNIT - FIELD HOUSE

MARK	FAN				POWER V	PH	F	COOLING AIR TEMPERATURE (°F)				COOLING CAPACITY (BTUH)	WATER			ENTERING AIR TEMPERATURE (°F)	HEATING	HEATING	WATER			PIPE SIZE TO COIL (IN.)		REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER				ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB		ENTERING TEMP (°F)	GPM	PRESSURE DROP (FT.)		MIN. HEATING CAPACITY	ENTERING TEMP. (°F)	GPM	PRESSURE DROP (FT.)	CHILLED WATER	HOT WATER	
AHU-1C	5,000	1,500	2.00	8.0	480	3	60	75.0	62.6	53.0	52.5	145,400	45	24.2	15.0	65.0	135,000	130.0	13.6	10.0	2"	1 1/2"	1,3,4,5,7,8,10,11,12
AHU-2C	3,000	900	2.00	8.0	480	3	60	75.0	62.6	53.0	52.5	87,300	45	14.5	15.0	65.0	81,000	130.0	8.2	10.0	1 1/2"	1 1/4"	1,3,4,5,7,8,10,11,12
AHU-3C	5,505	1,925	2.00	8.0	480	3	60	75.0	62.6	53.0	52.5	160,100	45	26.7	15.0	65.0	148,635	130.0	15.0	10.0	2"	1 1/2"	1,3,4,5,7,8,10,11,12
AHU-4C	4,500	1,350	2.00	8.0	480	3	60	75.0	62.6	53.0	52.5	130,900	45	21.8	15.0	65.0	121,500	130.0	12.3	10.0	2"	1 1/4"	1,3,4,5,7,8,10,11,12
AHU-5C	2,610	750	2.00	4.0	480	3	60	75.0	62.6	53.0	52.5	75,900	45	12.6	15.0	65.0	70,470	130.0	7.1	10.0	1 1/4"	1 1/4"	1,3,4,5,7,8,10,11,12
OAU-1C	4,500	4,500	2.00	8.0	480	3	60	98.0	80.0	53.0	52.5	441,200	45	73.4	15.0	27.0	136,080	130.0	13.7	10.0	3"	1 1/2"	2,3,5,6,7,8,9
OAU-2C	2,700	2,700	2.00	4.0	480	3	60	98.0	80.0	53.0	52.5	264,000	45	43.9	15.0	27.0	81,648	130.0	8.2	10.0	2 1/2"	1 1/4"	3,5,6,7,8,9,10

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. VELOCITY NOT TO EXCEED 500 FPM ON COOLING COIL.
2. PROVIDE HORIZONTAL UNIT.
3. PROVIDE CONSTANT VOLUME UNIT WITH VARIABLE FREQUENCY DRIVE..
4. PROVIDE TOP DISCHARGE.
5. PROVIDE TWO-WAY COOLING CONTROL VALVES.
6. PROVIDE THREE-WAY HEATING CONTROL VALVES.
7. PROVIDE HOT WATER COIL IN REHEAT POSITION.
8. PROVIDE UNIT WITH FLAT FILTER SECTION.
9. VELOCITY NOT TO EXCEED 450 FPM ON COOLING COIL.
10. PROVIDE VERTICAL UNIT.
11. PROVIDE TWO-WAY HEATING CONTROL VALVES.
12. PROVIDE SINGLE-ZONE VAV CONTROLS, COMPLETE WITH SUPPLY FAN VFD, DISCHARGE AIR TEMPERATURE SENSOR AND PROGRAMMABLE ZONE TEMPERATURE AND RELATIVE HUMDITY SENSOR.

ROOF MOUNTED WEATHERPROOF AIR HANDLING UNIT

MARK	FAN				ELECTRICAL CHARAC. V	P	F	COOLING AIR TEMPERATURE (°F)				COOLING CAPACITY (BTUH)	WATER			ENTERING AIR TEMPERATURE (°F)	HEATING	HEATING	WATER			PIPE SIZE TO COIL (IN.)		REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER				ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB		ENTERING TEMP (°F)	GPM	PRESSURE DROP (FT.)		MIN. HEATING CAPACITY	ENTERING TEMP. (°F)	GPM	PRESSURE DROP (FT.)	CHILLED WATER	HOT WATER	
AHU-8C	32,000	12,000	3.00	50	480	3	60	75.0	62.6	53.0	52.5	925,600	45	154.1	15.0	65.0	864,000	130.0	87.3	10.0	4"	3"	1,2,3,4,5,6,7,9,10,12,13
AHU-9C	920	12,000	3.00	50	480	3	60	75.0	62.6	53.0	52.5	26,800	45	4.5	15.0	65.0	24,840	130.0	2.5	10.0	1"	3/4"	1,2,3,4,5,7,9,10,11,12,13
OAU-4C	24,000	24,000	2.00	33	480	3	60	98.0	80.0	53.0	52.5	2,353,100	45	391.7	15.0	27.0	725,760	130.0	73.3	10.0	6"	3"	1,2,3,4,5,6,8,9,10,13

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. VELOCITY NOT TO EXCEED 500 FPM ON COOLING COIL.
2. PROVIDE HORIZONTAL UNIT.
3. PROVIDE CONSTANT VOLUME UNIT WITH A VARIABLE FREQUENCY DRIVE AND ONE A REDUNDANT VFD . THIS UNIT HAS TWO VARIABLE FREQUENCY DRIVES.
4. PROVIDE FRONT DISCHARGE.
5. PROVIDE TWO-WAY COOLING CONTROL VALVES.
6. PROVIDE THREE-WAY HEATING CONTROL VALVES.
7. PROVIDE HOT WATER COIL IN REHEAT POSITION.
8. PROVIDE HOT WATER COIL IN PRE-HEAT POSITION.
9. PROVIDE UNIT WITH FLAT FILTER SECTION.
10. PROVIDE UV LIGHT PER SPECIFICATIONS. UV LIGHT SHALL HAVE SEPARATE ELECTRICAL CONNECTION FROM AIR HANDLING UNIT. REFER TO ELECTRICAL DRAWINGS.
11. PROVIDE TWO-WAY HEATING CONTROL VALVES.
12. PROVIDE SINGLE-ZONE VAV CONTROLS, COMPLETE WITH SUPPLY FAN VFD, DISCHARGE AIR TEMPERATURE SENSOR AND PROGRAMMABLE ZONE TEMPERATURE AND RELATIVE HUMDITY SENSOR.
13. PROVIDE ROOF CURB WITH SOLID BOTTOM TO MEET WITH 150 MPH WINDS, ACOUSTICAL TYPE, WITH A MINIMUM OF 2" FIBERGLASS INSULATION.

100% OUTSIDE AIR HANDLING UNIT - WEIGHT ROOM

MARK	FAN				ELECTRICAL CHARAC. V	PH	F	COOLING AIR TEMPERATURE (°F)				COOLING CAPACITY (BTUH)	WATER			ENTERING AIR TEMPERATURE (°F)	HEATING	HEATING	WATER			PIPE SIZE TO COIL (IN.)		REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER				ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB		ENTERING TEMP (°F)	GPM	PRESSURE DROP (FT.)		HEATING CAPACITY	ENTERING TEMP. (°F)	GPM	PRESSURE DROP (FT.)	CHILLED WATER	HOT WATER	
OAU-3C	3,000	3,000	2.00	5.0	480	3	60	98.0	80.0	53.0	52.5	294,100	45	49.0	15.0	27.0	90,720	130.0	9.2	10.0	2 1/2"	1 1/4"	1,2,3,5,6,7,8,9,10

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSUR

SYMBOL SCHEDULE

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
LIGHTING (LETTER DENOTES TYPE - SEE LIGHT FIXTURE SCHEDULE)	
	LIGHT FIXTURE
	FIXTURE ON EMERGENCY CIRCUIT
	DOWNLIGHT FIXTURE
	LIGHT FIXTURE - WALL MOUNTED
	DOWNLIGHT FIXTURE ON EMERGENCY CIRCUIT
	LIGHT FIXTURE - WALL MOUNTED ON EMERGENCY CIRCUIT
	EXIT LIGHT-CEILING MTD WITH DIRECTIONAL ARROWS AS REQUIRED
	EXIT LIGHT-WALL MTD WITH DIRECTIONAL ARROWS AS REQUIRED
SWITCHES	
$	LINE VOLTAGE SINGLE POLE SWITCH
$2	LINE VOLTAGE 2-POLE SWITCH
LIGHTING CONTROLS	
$R	LIGHTING CONTROLLER WALL SWITCH REFER TO ASSOCIATED ROOM TAG AND CONTROL SCHEDULE
P	CEILING MOUNTED PHOTO SENSOR
V	CEILING MOUNTED VACANCY SENSOR, MANUAL ON / AUTO OFF
O	CEILING MOUNTED OCCUPANCY SENSOR, AUTO ON / AUTO OFF
[RX]	ROOM CONTROL TAG - REFER TO 'X' ROW ON ELECTRICAL CONTROL SCHEDULE FOR ROOM CONTROL SCHEME
[ER]	PROVIDE UL924 DEVICE(S) AS NEEDED FOR FOR EMERGENCY CIRCUITS IN ROOM.
[ES]	PROVIDE UL1008/UL924 DEVICE(S) AS NEEDED FOR FOR EMERGENCY CIRCUITS IN ROOM.
RECEPTACLES AND OUTLETS	
	SIMPLEX RECEPTACLE
	DUPLEX RECEPTACLE
	POWER POLE
	125/250 VOLT, 1 PHASE, 3-WIRE, 20 AMPS UNLESS NOTED OTHERWISE
	CEILING MOUNTED RECEPTACLE
	DOUBLE DUPLEX IN 2-GANG BOX WITH SINGLE COVER PLATE
	DOUBLE DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE IN 2-GANG BOX WITH SINGLE COVER PLATE
	DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
	FLUSH FLOOR CONCEALED SERVICE DUPLEX RECEPTACLE OUTLET
	FLUSH FLOOR CONCEALED SERVICE DOUBLE DUPLEX RECEPTACLE OUTLET
	CONCEALED SERVICE MULTI-ACCESS FLOOR BOX WITH WIRING DEVICES AS INDICATED ON DRAWINGS. SIZE TO MATCH DEVICE QUANTITIES.
[R]	REMOTE BLANK FACE GFCI DEVICE.
SR	PROVIDE BLACK CONTROLLED DUPLEX RECEPTACLE (LEVITON 5362-2BP). INTERLOCK DUPLEX WITH LOCAL ROOM OCCUPANCY SENSOR MEETING 2021 IECC 405.11 REQUIREMENTS.
SR	PROVIDE 2 BLACK CONTROLLED DUPLEX RECEPTACLES (LEVITON 5362-2BP) IN 2-GANG BOX WITH SINGLE COVER PLATE. INTERLOCK POWER TO BOTH DUPLEXES WITH LOCAL ROOM OCCUPANCY SENSOR MEETING 2021 IECC 405.11 REQUIREMENTS.
[H]	DIVISION 26 TO MAKE FINAL CONNECTION TO A HAND DRYER.
[R]	REMOTE GFCI DEVICE

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
MISCELLANEOUS EQUIPMENT	
[FACP]	FIRE ALARM CONTROL PANEL
[ANNC]	FIRE ALARM REMOTE ANNUCIATOR
[T]	TRANSFORMER FOR DOOR BELL/BUZZER
	CHIME/BUZZER
MOTOR CONTROLLERS AND EQUIPMENT	
	MOTOR, MAKE FINAL MOTOR CONNECTION
	3-PHASE MOTOR, MAKE FINAL MOTOR CONNECTION
	DISCONNECT SWITCH AS REQUIRED
J	FUSED DISCONNECT SWITCH AS REQUIRED
J	COMBINATION MOTOR STARTER/DISCONNECT SWITCH AS REQUIRED
	MOTOR STARTER
M	MANUAL MOTOR SWITCH AS REQUIRED
	PREWIRED DEVICE, MAKE ELECTRICAL FINAL CONNECTIONS
	VARIABLE FREQUENCY DRIVE MOTOR CONTROLLER FURNISHED BY DIVISION 23 AND INSTALLED BY DIVISION 26
ELECTRICAL EQUIPMENT	
	ELECTRICAL DISTRIBUTION OR PANELBOARD
	DRY TYPE TRANSFORMER
CIRCUITING	
	CONDUIT
	CONDUIT BELOW FLOOR, SLAB, OR GRADE
SUBSCRIPTS AND ABBREVIATIONS	
WP	INDICATES WEATHERPROOF
WG	INDICATES WIREGUARD
H	INDICATES HORIZONTAL
TL	INDICATES TWIST LOCK
NL	LIGHT FIXTURE ON NIGHT LIGHT CIRCUIT
ERMS	ENERGY REDUCTION MAINTENANCE SWITCH
1-L	REFER TO ONE-LINE DIAGRAM
	INDICATES WALL MOUNTED DEVICE
•	NEXT TO ANY SYMBOL INDICATES FINAL ROUGH-IN FIELD COORDINATION BY CONTRACTOR WITH ARCHITECTURAL MILLWORK DRAWINGS AND OTHER TRADES
PP	POWER POLE
OHE	OVERHEAD ELECTRICAL LINE

GENERAL NOTES:

-ALL EXTERIOR BUILDING ELECTRICAL EQUIPMENT TO BE WEATHERPROOF NEMA-3R MINIMUM.

LIGHTING FIXTURE SCHEDULE

TYPE	CATALOG NUMBER MANUFACTURER	MODEL	MOUNTING	LAMP TYPE	CCT	CRI	VOLTAGE	LOAD	REMARKS	Count
A1	DAYBRITE	2FPZ-840-4-DS-UNV-DIM	RECESSED	4600L LED	4000 K	80	277 V	32 W	2'X4' LED CENTER BASKET TROFFER	74
B1					0	277 V	24 W	IMPACT RATED BOLLARD		10
C1-8			RECESSED	4600L LED	4000 K	80	277 V	120 W	EXTERIOR LINEAR UP/DOWN WALL WASH FOR CHAMPIONS WALL	6
C1-12			RECESSED	4600L LED	4000 K	80	277 V	160 W	EXTERIOR LINEAR UP/DOWN WALL WASH FOR CHAMPIONS WALL	3
D1	PRESCOLITE	LFR-6RD-30L40K8-MD-DM1 / LFR-6RD-T-SWT / LFR-6RD-H	RECESSED	3265L LED	4000 K	80	277 V	24 W	6-INCH MEDIUM BEAM OPEN DOWNLIGHT.	8
D2	PRESCOLITE	LFR-6RD-40L40K8-MD-DM1 / LFR-6RD-T-SWT / LFR-6RD-H	RECESSED	4245L LED	4000 K	80	277 V	33 W	6-INCH MEDIUM BEAM OPEN DOWNLIGHT.	8
F1	DAYBRITE	FSS4-40L-840-UNV-DIM	PENDANT		0	277 V	36 W	4' LINEAR UTILITY PENDANT		74
H1	PINNACLE	EV4DA-840HO-X'-MTG-U-FSD-1-FINISH	RECESSED	4000L LED	4000 K	80	277 V	48 W	LINEAR RECESSED ACCENT LIGHTING TO BE MOUNTED IN METAL CEILING PANELS	20
H2-8	PINNACLE	EV4DA-840HO-X'-G1-U-FSD-1-FINISH	RECESSED	4000L LED	4000 K	80	277 V	48 W	LINEAR RECESSED ACCENT LIGHTING TO BE MOUNTED IN METAL CEILING PANELS	7
H2-10	PINNACLE	EV4DA-840HO-X'-G1-U-FSD-1-FINISH	RECESSED	4000L LED	4000 K	80	277 V	60 W	LINEAR RECESSED ACCENT LIGHTING TO BE MOUNTED IN METAL CEILING PANELS	2
H2-15	PINNACLE	EV4DA-840HO-X'-G1-U-FSD-1-FINISH	RECESSED	4000L LED	4000 K	80	277 V	90 W	LINEAR RECESSED ACCENT LIGHTING TO BE MOUNTED IN METAL CEILING PANELS	3
H3-18	PINNACLE	EV3DPM-A-840HO-RI-LENGTHS-MTG-U-FSD-1-FINISH	RECESSED	4000L LED	4000 K	80	277 V	110 W	LINEAR RECESSED ACCENT LIGHTING TO BE MOUNTED IN METAL CEILING PANELS	1
H3-21	PINNACLE	EV3DPM-A-840HO-RI-LENGTHS-MTG-U-FSD-1-FINISH	RECESSED	4600L LED	4000 K	80	277 V	128 W	LINEAR RECESSED ACCENT LIGHTING TO BE MOUNTED IN METAL CEILING PANELS	1
P1	KENALL	MLHA3-96-R-FINISH-800LF-40K8-DIM1-DV-PM	PENDANT		0	277 V	48 W	HIGH ABUSE LINEAR PENDANTS IN LOCKER ROOM AREAS		25
P2	ALL	3S-8'-VHO-40-MTG-FINISH/C90-CB96	PENDANT		0	277 V	84 W	HIGH ABUSE LINEAR PENDANTS IN WEIGHT ROOM		27
R1-12	AXIS	2FPZ-840-4-DS-UNV-DIM	RECESSED	4600L LED	4000 K	80	277 V	197 W	EXTERIOR LINEAR RECESSED FIXTURE WITH RGBW CAPABILITIES	10
R1-20	AXIS	2FPZ-840-4-DS-UNV-DIM	RECESSED	4600L LED	4000 K	80	277 V	330 W	EXTERIOR LINEAR RECESSED FIXTURE WITH RGBW CAPABILITIES	43
SF1	DLC	DISC-LED-2.0-X-IC-CPL	PENDANT	9680L/9180L LED	4000 K	80	277 V	480 W	PENDANT MOUNT DIRECT/INDIRECT LED 48" ROUND DOME. FINISH AND PENDANT CABLE LENGTH BY ARCHITECT.	22
SFE	DLC	DISC-LED-2.0-X-IC-CPL	PENDANT	9680L/9180L LED	4000 K	80	277 V	480 W	PENDANT MOUNT DIRECT/INDIRECT LED 48" ROUND DOME. FINISH AND PENDANT CABLE LENGTH BY ARCHITECT.	12
W1	GARDCO	GWM-A08-840-T3M	WALL	3747L LED	4000 K	80	277 V	30 W	MOUNT FIXTURE AT +14'-0" AFF	5
W1E	GARDCO	GWM-A08-840-T3M	WALL	3747L LED	4000 K	80	277 V	30 W	MOUNT FIXTURE AT +14'-0" AFF	5
S1	GARDCO	OPF-M-A12-840-T3M-AR1	POLE MOUNT 1 @ 90	22,645L LED	4000 K	80	277 V	74 W	TYPE III AREA LUMINAIRE. 30' SQUARE STEEL POLE FACTORY CUT TO 27'-6".	5
S2	GARDCO	OPF-M-A12-840-T3M-AR1	POLE MOUNT 1 @ 90	22,645L LED	4000 K	80	277 V	300 W	TYPE III AREA LUMINAIRE. 30' SQUARE STEEL POLE FACTORY CUT TO 27'-6".	5
S4	GARDCO	OPF-M-A12-840-T3M-AR1	POLE MOUNT 1 @ 90	22,645L LED	4000 K	80	277 V	600 W	TYPE III AREA LUMINAIRE. 30' SQUARE STEEL POLE FACTORY CUT TO 27'-6".	1
X1	DUAL-LITE	EVE-U-R-W-E-I	SURFACE	LED	4000 K	80	277 V	11 W	UNIVERSAL LED EXIT SIGN WITH WHITE HOUSING, RED LETTERING AND EMERGENCY BATTERY BACK-UP.	16
X2	DUAL-LITE	EVE-U-R-W-E-I	SURFACE	LED	4000 K	80	277 V	11 W	UNIVERSAL LED EXIT SIGN WITH WHITE HOUSING, RED LETTERING AND EMERGENCY BATTERY BACK-UP.	12
X3	DUAL LITE	EVE-U-R-W-E-I			0	277 V	5 W	UNIVERSAL LED EXIT SIGN MOUNTED WITH WHITE HOUSING, RED LETTERING AND EMERGENCY BATTERY BACK-UP.		3
V1	PINNACLE	EV4DA-840HO-X'-MTG-U-FSD-1-FINISH	RECESSED	4000L LED	4000 K	80	277 V	48 W	LINEAR RECESSED ACCENT LIGHTING TO BE MOUNTED IN METAL CEILING PANELS	2

1	FIXTURES SHOWN ON THE FLOORPLAN HAVING A DESIGNATION OF "E" FOLLOWING THE BASE DESIGNATION (I.E. - A FIXTURE TYPE "AE, C2E, FE") AND/OR A HALF SHADED REGION SHALL BE THE BASE FIXTURE TYPE EQUIPPED WITH THE APPROPRIATE BATTERY BACK-UP. BATTERY BACK-UPS SHALL BE INTEGRAL TO THE FIXTURE AND REMOTE SHALL BE SELECTED ONLY IN INSTANCES WHERE IT IS SPECIFIED OR WHEN IT IS THE ONLY AVAILABLE EMERGENCY OPTION. THE LOCATION OF REMOTE BATTERY BACKUPS SHALL BE SELECTED BY THE OWNER/ARCHITECT PRIOR TO INSTALLATION BY THE CONTRACTOR.
2	ALL REQUIRED TEST SWITCHES FOR THE BATTERY BACK-UPS SHALL BE INTEGRAL TO THE FIXTURE.
3	REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT INDICATED IN THE LIGHTING FIXTURE SCHEDULE. WHERE THERE IS AN INCONSISTENCY BETWEEN THE LIGHTING FIXTURE SCHEDULE AND THE SPECIFICATIONS, THE GREATER QUANTITY OR HIGHER QUALITY OF WORK SHALL BE INCLUDED IN THE PROPOSAL.
4	UNLESS OTHERWISE INDICATED ON THE SCHEDULE ABOVE, THE ARCHITECT/OWNER SHALL SELECT ALL FINISHES, COLORS, AND TRIMS.
5	ALL LED FIXTURE BOARDS AND DRIVERS SHALL BE OF THE LATEST GENERATION, BASED UPON THE INDIVIDUAL MANUFACTURER'S STATED LITERATURE. IF A "GEN 5" IS AVAILABLE, "GEN 4" FIXTURES ARE NOT ACCEPTABLE.
6	EXIT SIGNS AND EMERGENCY BATTERY BACK-UPS SHALL BE CONNECTED TO THE NEAREST LIGHTING CIRCUIT AHEAD OF ALL SWITCHING AS REQUIRED TO MAINTAIN THE BATTERIES AT FULL CHARGE. THE CONTRACTOR SHALL PROVIDE ALL ADDITIONAL WIRING AS REQUIRED.
7	LIGHTING FIXTURE MANUFACTURERS OTHER THAN THOSE LISTED IN THE LIGHTING FIXTURE SCHEDULE AND DESIRING TO BID THIS PROJECT SHALL REQUEST PRIOR APPROVAL OF THE FIXTURES THEY WISH TO SUBSTITUTE. PRIOR APPROVAL REQUEST SHALL INCLUDE FIXTURE CUT SHEETS.
8	FOR PRIOR APPROVALS AND SUBMITTALS THAT DEVIATE FROM NOMINAL WATTAGE AND/OR DELIVERED LUMENS, IT SHALL BE UP THE ENGINEER'S SOLE DISCRETION TO APPROVE OR DECLINE THESE FIXTURES BASED ON ANY AND ALL FACTORS INCLUDING BUT NOT LIMITED TO INTENDED LIGHTING LEVELS FOR EACH SPACE AND IMPACT ON THE OVERALL ELECTRICAL POWER SYSTEM.
9	ALL LIGHTING SPECIFIED SHALL BE 4000K INTERIOR UNLESS NOTED OTHERWISE
10	THE CONTRACTOR SHALL PROVIDE ALL HARDWARE AND ACCESSORIES AS REQUIRED TO INSTALL FIXTURES IN LOCATIONS AS ILLUSTRATED WITH MOUNTING METHODS DESIRED.
11	WHEN A UNIVERSAL (120-277V) VOLTAGE OPTION IS AVAILABLE, IT SHALL BE PROVIDED. OTHERWISE PROVIDE AS INDICATED IN SCHEDULE.
12	FOR ALL SUSPENDED FIXTURES, COORDINATE THE EXACT MOUNTING ELEVATION ABOVE FINISHED FLOOR WITH ARCHITECT PRIOR TO INSTALLATION. PROVIDE SUSPENSION HARDWARE IN LENGTHS AS REQUIRED.
13	FIXTURES SHOWN ON THE FLOORPLAN HAVING A DESIGNATION OF "X" FOLLOWING THE BASE DESIGNATION (I.E. - A FIXTURE TYPE "AX, C2X, FX") SHALL BE THE BASE FIXTURE TYPE CONNECTED TO EMERGENCY LIGHTING INVERTER SYSTEM. REFER TO DETAIL 3 SHEET 10.42 FOR ADDITIONAL INFORMATION.
14	FIXTURES SHOWN ON THE FLOORPLAN HAVING A DESIGNATION OF "A" FOLLOWING THE BASE DESIGNATION (I.E. - A FIXTURE TYPE "A1A, C2A, FA") SHALL BE THE BASE FIXTURE TYPE EXCEPT SUITABLE FOR GYPSUM CEILING INSTALLATION AND EQUIPPED WITH THE APPROPRIATE BATTERY BACK-UP. BATTERY BACK-UPS SHALL BE INTEGRAL TO THE FIXTURE AND REMOTE SHALL BE SELECTED ONLY IN INSTANCES WHERE IT IS SPECIFIED OR WHEN IT IS THE ONLY AVAILABLE EMERGENCY OPTION. THE LOCATION OF REMOTE BATTERY BACKUPS SHALL BE SELECTED BY THE OWNER/ARCHITECT PRIOR TO INSTALLATION BY THE CONTRACTOR.
15	ALL EXTERIOR LIGHT FIXTURES RECESSED IN A CANOPY OR SURFACED MOUNTED DIRECTLY TO THE BOTTOM OF A CANOPY SHALL BE UL OR ETL LISTED AS WET LOCATION. WHERE SPECIFICALLY STATED IN THE LIGHTING FIXTURE SCHEDULE AS "DAMP LOCATION" FIXTURES AND PROTECTED BY THE BUILDING STRUCTURE FROM FALLING OR WIND DRIVEN RAIN OR SNOW, THEY MAY BE EITHER DAMP OR WET LOCATION LISTED.
16	ALL EXTERIOR LIGHT FIXTURES NOT RECESSED IN A CANOPY OR SURFACED MOUNTED DIRECTLY TO THE BOTTOM OF A CANOPY SHALL BE UL OR ETL LISTED AS WET FROM ABOVE LOCATION.

UTILITY CONTACT INFORMATION

NAME: FIRST LAST

PHONE: XXX-XXX-XXXX

EMAIL: EMAIL@EMAIL.COM

CONTRACTOR NOTES:

IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO NOTIFY THE ARCHITECT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF WORK.

CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF THE WORK. THE BASE PROPOSAL SHALL INCLUDE MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE AND LOCAL CODES WHETHER INDICATED OR NOT ON CONTRACT DOCUMENTS. THE SUBMISSIONS OF A PROPOSAL WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORSEEN HAD AN EXAMINATION AND CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE ACCEPTED.

FIRE DETECTION AND FIRE ALARM NOTE:

A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL III, IN THE SUB FIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLIGIES (NICET) SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, NFPA 72, LOCAL AND STATE CODE REQUIREMENTS. FURNISH AND INSTALL ALL REQUIRED FIRE ALARM DEVICES, AS REQUIRED BY CODE. VERIFY EXACT REQUIREMENTS IN THE FIELD. COORDINATE ALL LOCATIONS WITH DRAWINGS APPROVED BY AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION. ALL WORK SHALL BE INCLUDED WITHIN BASE BID.

INITIAL UTILITY ELECTRICAL SERVICE COORDINATION HAS BEEN COMPLETED BY SALAS O'BRIEN. DURING BID, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL THE REQUIRED LABOR & MATERIALS THAT ARE NOT INCLUDED IN THE ELECTRICAL UTILITY COMPANY'S SCOPE OF WORK. FINAL UTILITY ELECTRICAL COORDINATION WILL BE FULLY THE CONTRACTOR'S RESPONSIBILITY AND ANY UNCOORDINATED WORK WILL BE AT NO EXPENSE TO OWNER.

DAYLIGHT ZONE CONTROLS

ENTIRE BUILDING IS EXEMPT FROM DAYLIGHT ZONE CONTROLS IN ACCORDANCE WITH 2018 IECC 405.2.3 EXCEPTION #4.

TOTAL BUILDING SQ FOOTAGE (TBFA): 256000

BUILDING LIGHTING ALLOWANCE PER IECC 2018 405.3.2(1) (LPA_{comb}): 256000

TOTAL CONNECTED LIGHTING POWER: 22350

DAYLIGHT ZONES REQUIRED TOTAL SQ FOOTAGE (UDZFA): 1

ADJUSTED LIGHTING POWER ALLOWANCE (LPA_{adj}): 256000

22350 < 256000

DAYLIGHT ZONES WITHIN BUILDING ARE EXEMPT.

CONDUCTOR CONVERSION CHART - 75°C

FUSE	COPPER (THHN)	ALUMINUM (XHHW-2 AL) BRANCH FEEDERS	SERVICE ENT.
100A	4#3, 1#6GND, 1-1/4"C	4#1, 1#6GND, 1-1/2"C	#6 GND (CU)
125A	4#1, 1#6GND, 1-1/2"C	4#2/0, 1#4GND, 2"C	#6 GND (CU)
150A	4#1/0, 1#6GND, 2"C	4#3/0, 1#4GND, 2"C	#6 GND (CU)
175A	4#2/0, 1#6GND, 2"C	4#4/0, 1#4GND, 2-1/2"C	#6 GND (CU)
200A	4#3/0, 1#6GND, 2"C	4#250KCMIL, 1#4GND, 3"C	#6 GND (CU)
225A	4#4/0, 1#4GND, 2-1/2"C	4#300 KCMIL, 1#2GND, 3"C	#4 GND (CU)
400A	(2 SETS:) 4#3/0, 1#GND, 2"C	(2 SETS:) 4#250KCMIL, 1#1GND, 3"C	#2 GND (CU)
500A	(2 SETS:) 4#250KCMIL, 1#2GND, 3"C	(2 SETS:) 4#350KCMIL, 1#1/0GND, 3"C	#1/0 GND (CU)
600A	(2 SETS:) 4#350KCMIL, 1#1GND, 3"C	(2 SETS:) 4#500KCMIL, 1#2/0GND, 4"C	#1/0 GND (CU)
800A	(3 SETS:) 4#300KCMIL, 1#1/0GND, 3"C	(3 SETS:) 4#400KCMIL, 1#3/0GND, 4"C	#2/0 GND (CU)
1200A	(4 SETS:) 4#350KCMIL, 1#3/0GND, 4"C	(4 SETS:) 4#500KCMIL, 1#250KCMIL GND, 4"C	#2/0 GND (CU)
2000A	(6 SETS:) 4#400KCMIL, 1#250KCMIL GND, 4"C	(7 SETS:) 4#500KCMIL, 1#400KCMIL GND, 4"C	#3/0 GND (CU)
2500A	(7 SETS:) 4#500KCMIL, 1#350KCMIL GND, 4"C	(8 SETS:) 4#600KCMIL, 1#600KCMIL GND, 4"C	#3/0 GND (CU)
3000A	(8 SETS:) 4#500KCMIL, 1#500KCMIL GND, 4"C	(9 SETS:) 4#600KCMIL, 1#600KCMIL GND, 4"C	#3/0 GND (CU)

1. ALUMINUM CONDUCTOR TO HAVE COMPRESSSION LUGS.
2. THIS CHART IS A REPRESENTATION AND NOT INDICATIVE OF ALL APPROVED CONVERSION POSSIBILITIES.
3. CONTRACTOR SHALL FURNISH AND INSTALL ALL FEEDERS IN ACCORDANCE WITH NEC AND ALUMINUM WIRING MANUFACTURERS REQUIREMENTS.
4. ALL GROUND CONDUCTORS FOR SERVICE ENTRANCE TO BE COPPER.

1	CONDUIT SIZE AND QUANTITIES ARE BASED ON 3-PHASE 4-WIRE SYSTEMS. CONDUIT SIZE IS PERMITTED TO BE REDUCED BY THE CONTRACTOR AS PREMITTED BY THE NEC FOR THE REDUCED NUMBER OF CONDUCTORS THAT ARE TYPICAL FOR EQUIPMENT THAT IS SINGLE PHASE OR EQUIPMENT THAT DOES NOT REQUIRE A NEUTRAL CONDUCTOR.
2	CONDUCTOR SIZES BASED ON NEC TABLE 310.16 - COPPER 75°.
3	GROUND SIZES BASED ON NEC TABLE 250.122 – COPPER, UNLESS NOTED OTHERWISE. FEEDER TAGS WITH 'SE' REFERS TO SERVICE ENTRANCE CONDUCTORS AND GROUND SIZES BASED ON NEC TABLE 250.66 – COPPER
4	CONDUIT FILL BASED ON NEC ANNEX C.

MAXIMUM ALLOWABLE VOLTAGE DROP FOR FEEDERS AND BRANCH CIRCUITS (2018 IECC 405.9)

1.	Total voltage drop from the point of service to the last outlet or utilization equipment of the same voltage shall not exceed five-percent of rated voltage.
2.	Total voltage drop from the point of service to transformers with adjustable taps, buck-boost transformers, uninterruptable power supplies (UPS), or voltage regulators shall not exceed five-percent of rated voltage.
3.	Total voltage drop from a separately derived system, transformer with adjustable taps, buck-boost transformer, uninterruptable power supply (UPS), or voltage regulator to the last outlet or utilization equipment of the same voltage shall not exceed five-percent of rated voltage.
4.	Total voltage drop from the point of service to distribution equipment of the same voltage shall not exceed two-percent of rated voltage.
5.	Branch circuit voltage drop from distribution equipment to the last outlet or utilization equipment shall not exceed three-percent of rated voltage.
6.	Provide the same size branch circuit conductors to last outlet on circuit unless specifically noted or indicated otherwise on the drawings. For 20 amp branch circuits operating at 150-Volts or less, provide #10 AWG wire when the first outlet is over 75-feet from the panelboard. For branch circuits operating above 150-Volts to 600-Volts, provide #10 AWG wire when the first outlet is over 150-feet from the panelboard.

VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — STATE OF TEXAS — 80219 — LICENSED — PROFESSIONAL ENGINEER

10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ELECTRICAL ESSENTIALS

SHEET NO.

E0.00

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SYMBOL LEGEND	
⌖	POINT OF CONNECTION TO EXISTING
	ITEM TO REMAIN
[ ]	ITEM TO BE REMOVED

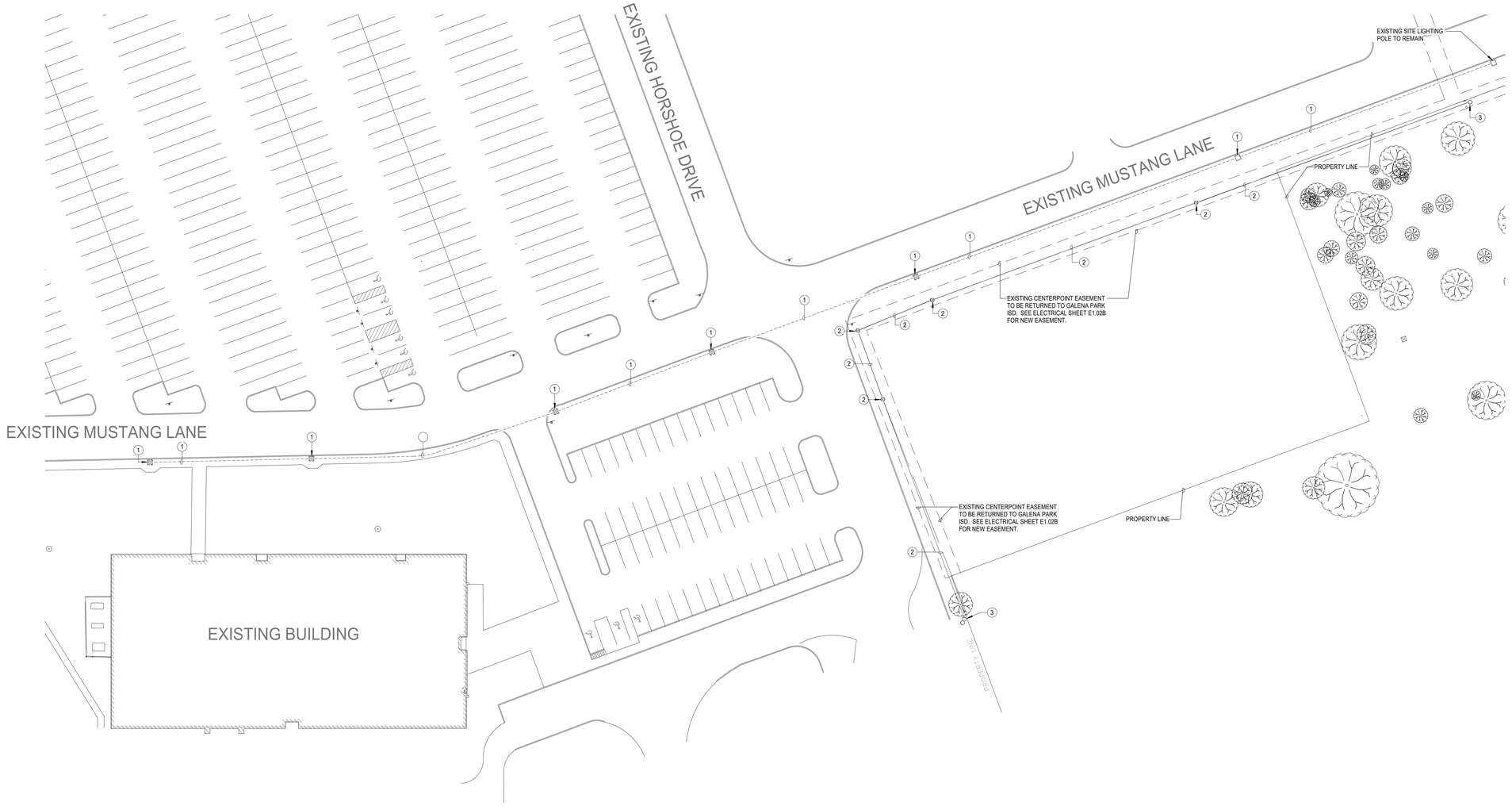
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	– – – – – –
NEW WORK	———

ELECTRICAL DEMOLITION GENERAL NOTES

1	VERIFY EXISTING CONDITIONS AND CONDUIT ROUTING. CONTRACTOR TO VERIFY THAT EXISTING CONDUITS ARE IN GOOD CONDITIONS TO PULL NEW CONDUCTORS IN PRIOR TO COMMENCMENT OF WORK AND TO NOTIFY ENGINEER IF CONDUITS NEED TO BE REPLACED. REFER TO SURVEY FOR MORE INFORMATION.
2	DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND, WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING ANY INSTALLATION AND IMMEDIATELY AFTER SUCHDISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK AS CALLED FORON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR SHALL NOTIFY CAREY RAMSEY WITH THE DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.
3	CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD FOR UNDERGROUND PIPING, CONDUIT/WIRING AND UTILITIES PRIOR TO BID. ANY DAMAGES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR
4	OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR TO NOTIFY REPRESENTIVE WITH DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.
5	CONTINUITY OF ALL EXISTING CIRCUITS SERVING ELECTRICAL EQUIPMENT NOT UNDER THIS SCOPE TO REMAIN IN TACT AFTER CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EQUIPMENT PRIOR TO CONSTRUCTION.
6	VERIFY ALL DEMOLITION WORK WITH ARCHITECT/OWNER PRIOR TO COMMENCEMENT OF WORK.
7	UNLESS NOTED OTHERWISE, ALL EXISTING ELECTRICAL SWITCHBOARDS, PANELBOARDS & TRANSFORMERS SHALL REMAIN.
8	ELECTRICAL WORK OR MATERIAL RENDERED OBSOLETE SHALL BE ABANDONED WHERE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE REMOVED FROM THE ABANDONED (CONCEALED) CONDUITS. OUTLETS SHALL BE PROVIDED WITH BLANK COVERS. ANY CONDUITS OUT OF MASONRY SURFACE SHALL BE CUT INTO SURFACE AND PATCHED.
9	DISCONNECT & REMOVE ALL ELECTRICAL POWER DEVICES FROM WALLS SCHEDULED TO BE DEMOLISHED. UNLESS INDICATED OTHERWISE, PULL EXISTING CONDUCTORS BACK TO CEILING AND LEAVE IN PLACE FOR RE-USE. REFER TO ARCHITECURAL DRAWINGS FOR EXISTING WALL DEMOLITION.
10	REMOVE AND STORE ALL EXISTING LIGHT SPEED CLASSROOM SOUND ENHANCEMENT SYSTEMS TO FACILITATE DEMOLITION OF EXISTING CEILING GRID AND RELOCATION OF CLASSROOMS.
11	RETURN ANY REMOVED LIGHTING CONTROL PANELS & RELAY PANELS TO THE OWNER.
12	PROVIDE COVER PLATE FOR ANY REMOVED ELECTRICAL EQUIPMENT SUCH AS BUT NOT LIMITED TO RECEPTACLES OR SWITCHES ON EXISTING TO REMAIN WALLS. PROVIDE COVER PLATE FOR ANY REMOVED ELECTRICAL EQUIPMENT SUCH AS BUT NOT LIMITED TO RECEPTACLES OR SWITCHES ON EXISTING TO REMAIN WALLS.
13	UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING INTERIOR AND EXTERIOR LIGHT FIXTURES AND EXIT SIGNS. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE. UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING INTERIOR AND EXTERIOR LIGHT FIXTURES AND EXIT SIGNS. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE.
14	UNLESS NOTED OTHERWISE, PULL CONDUCTORS FOR DEMOLISHED RECEPTACLES, FLOORBOXES, DROP CORDS AND CORD REELS BACK TO SOURCE.

ELECTRICAL KEYED NOTES

	EXISTING SITE LIGHTING POLE AND FIXTURES TO BE DEMOLISHED. EXISTING UNDERGROUND LIGHTING CONDUIT AND WIRING TO BE ABANDONED IN PLACE.
1	EXISTING SITE LIGHTING POLE AND FIXTURES TO BE DEMOLISHED. EXISTING UNDERGROUND LIGHTING CONDUIT AND WIRING TO BE ABANDONED IN PLACE.
2	EXISTING CENTERPOINT UTILITY POLES AND ASSOCIATED OVERHEAD CONDUCTORS TO BE DEMOLISHED AS INDICATED AND RELOCATED TO NEW PROPERTY LINE BOUNDARY AND ASSOCIATED EASEMENT. TO BE COORDINATED WITH CENTERPOINT MAJOR OVERHEAD POWER DIVISION. SEE ELECTRICAL SHEET E1.02B FOR NEW CENTERPOINT UTILITY POLE LOCATIONS.
3	EXISTING CENTERPOINT UTILITY POLES TO REMAIN.



VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ELECTRICAL DEMOLITION SITE PLAN

SHEET NO.

E0.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SYMBOL LEGEND	
⌖	POINT OF CONNECTION TO EXISTING
▭	ITEM TO REMAIN
[ ]	ITEM TO BE REMOVED

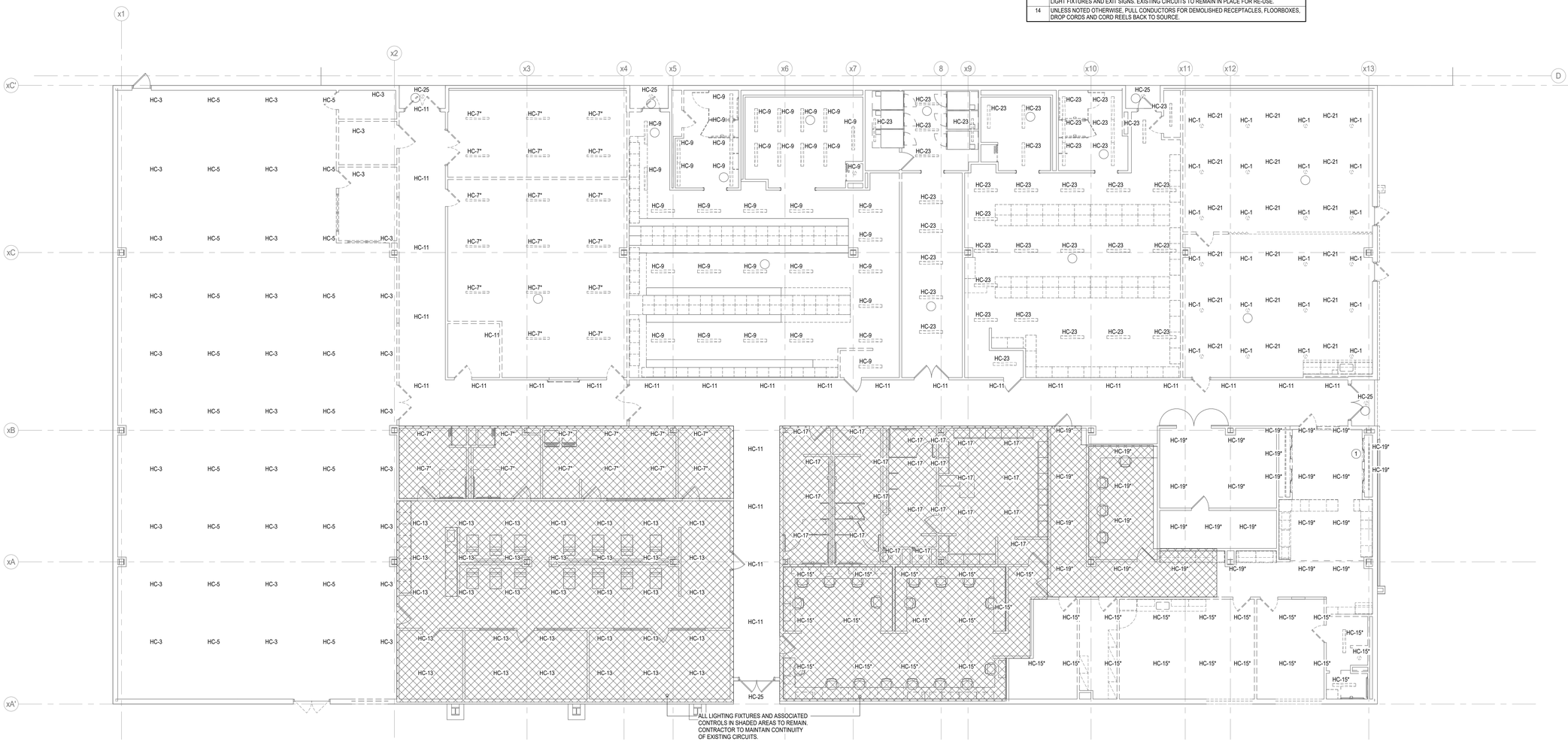
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	– – – – –
NEW WORK	———

ELECTRICAL DEMOLITION GENERAL NOTES

1	VERIFY EXISTING CONDITIONS AND CONDUIT ROUTING. CONTRACTOR TO VERIFY THAT EXISTING CONDUITS ARE IN GOOD CONDITIONS TO PULL NEW CONDUCTORS IN PRIOR TO COMMENCMENT OF WORK AND TO NOTIFY ENGINEER IF CONDUITS NEED TO BE REPLACED. REFER TO SURVEY FOR MORE INFORMATION.
2	DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND, WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING ANY INSTALLATION AND IMMEDIATELY AFTER SUCHDISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK AS CALLED FORON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR SHALL NOTIFY CAREY RAMSEY WITH THE DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.
3	CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD FOR UNDERGROUND PIPING, CONDUIT/WIRING AND UTILITIES PRIOR TO BID. ANY DAMAGES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR
4	OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR TO NOTIFY REPRESENTIVE WITH DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.
5	CONTINUITY OF ALL EXISTING CIRCUITS SERVING ELECTRICAL EQUIPMENT NOT UNDER THIS SCOPE TO REMAIN IN TACT AFTER CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EQUIPMENT PRIOR TO CONSTRUCTION.
6	VERIFY ALL DEMOLITION WORK WITH ARCHITECT/OWNER PRIOR TO COMMENCEMENT OF WORK.
7	UNLESS NOTED OTHERWISE, ALL EXISTING ELECTRICAL SWITCHBOARDS, PANELBOARDS & TRANSFORMERS SHALL REMAIN.
8	ELECTRICAL WORK OR MATERIAL RENDERED OBSOLETE SHALL BE ABANDONED WHERE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE REMOVED FROM THE ABANDONED (CONCEALED) CONDUITS. OUTLETS SHALL BE PROVIDED WITH BLANK COVERS. ANY CONDUITS OUT OF MASONRY SURFACE SHALL BE CUT INTO SURFACE AND PATCHED.
9	DISCONNECT & REMOVE ALL ELECTRICAL POWER DEVICES FROM WALLS SCHEDULED TO BE DEMOLISHED. UNLESS INDICATED OTHERWISE, PULL EXISTING CONDUCTORS BACK TO CEILING AND LEAVE IN PLACE FOR RE-USE. REFER TO ARCHITECURAL DRAWINGS FOR EXISTING WALL DEMOLITION.
10	REMOVE AND STORE ALL EXISTING LIGHT SPEED CLASSROOM SOUND ENHANCEMENT SYSTEMS TO FACILITATE DEMOLITION OF EXISTING CEILING GRID AND RELOCATION OF CLASSROOMS.
11	RETURN ANY REMOVED LIGHTING CONTROL PANELS & RELAY PANELS TO THE OWNER.
12	PROVIDE COVER PLATE FOR ANY REMOVED ELECTRICAL EQUIPMENT SUCH AS BUT NOT LIMITED TO RECEPTACLES OR SWITCHES ON EXISTING TO REMAIN WALLS. PROVIDE COVER PLATE FOR ANY REMOVED ELECTRICAL EQUIPMENT SUCH AS BUT NOT LIMITED TO RECEPTACLES OR SWITCHES ON EXISTING TO REMAIN WALLS.
13	UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING INTERIOR AND EXTERIOR LIGHT FIXTURES AND EXIT SIGNS. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE. UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING INTERIOR AND EXTERIOR LIGHT FIXTURES AND EXIT SIGNS. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE.
14	UNLESS NOTED OTHERWISE, PULL CONDUCTORS FOR DEMOLISHED RECEPTACLES, FLOORBOXES, DROP CORDS AND CORD REELS BACK TO SOURCE.

ELECTRICAL KEYED NOTES

	<varies>
1	EXISTING PARTIAL LIGHTING CIRCUIT CONDUIT AND WIRING TO BE DEMOLISHED BACK TO NEAREST UPSTREAM JUNCTION BOX COMPLETE FOR NEW LIGHTING ADDITION. CONTRACTOR TO INTERCEPT AND EXTEND EXISTING LIGHTING CIRCUIT TO NEW LIGHTING FIXTURES AND RECONNECT AS REQUIRED. IN AREAS NOT UNDER SCOPE, LIGHTING AND ASSOCIATED LIGHTING CONTROLS TO REMAIN OPERATIONAL. TYPICAL.



N

1 **ELECTRICAL DEMOLITION LIGHTING FLOOR PLAN - LEVEL ONE - UNIT A**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

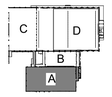
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL DEMOLTION LIGHTING PLAN - LEVEL ONE - UNIT A

SHEET NO.
E0.02A



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SYMBOL LEGEND	
	POINT OF CONNECTION TO EXISTING
	ITEM TO REMAIN
	ITEM TO BE REMOVED

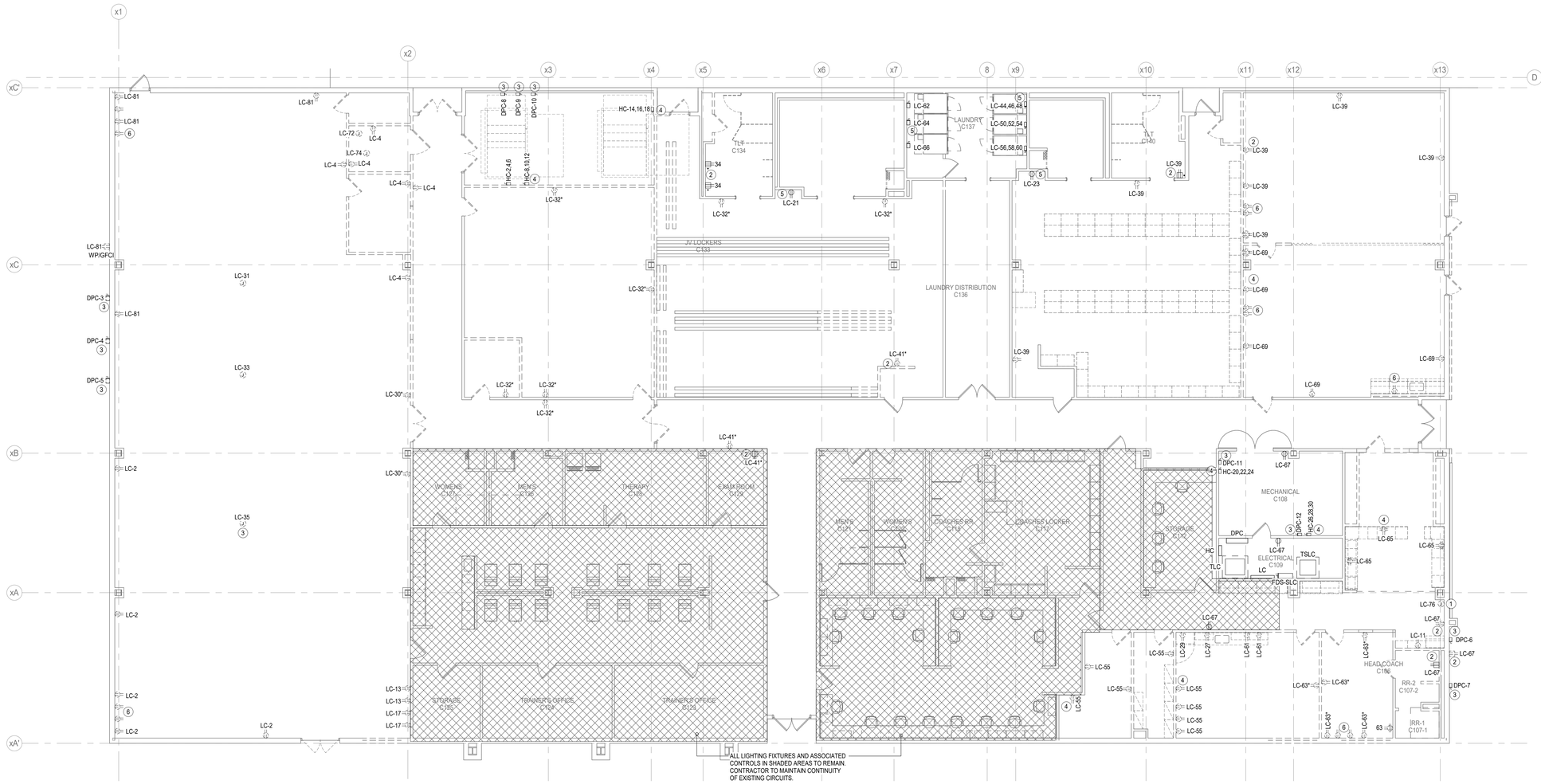
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - -
NEW WORK	———

ELECTRICAL DEMOLITION GENERAL NOTES

1	VERIFY EXISTING CONDITIONS AND CONDUIT ROUTING. CONTRACTOR TO VERIFY THAT EXISTING CONDUITS ARE IN GOOD CONDITIONS TO PULL NEW CONDUCTORS IN PRIOR TO COMMENCMENT OF WORK AND TO NOTIFY ENGINEER IF CONDUITS NEED TO BE REPLACED. REFER TO SURVEY FOR MORE INFORMATION.
2	DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND, WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING ANY INSTALLATION AND IMMEDIATELY AFTER SUCHDISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK AS CALLED FORON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR SHALL NOTIFY CAREY RAMSEY WITH THE DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.
3	CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD FOR UNDERGROUND PIPING, CONDUIT/WIRING AND UTILITIES PRIOR TO BID. ANY DAMAGES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR
4	OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR TO NOTIFY REPRESENTIVE WITH DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.
5	CONTINUITY OF ALL EXISTING CIRCUITS SERVING ELECTRICAL EQUIPMENT NOT UNDER THIS SCOPE TO REMAIN IN TACT AFTER CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EQUIPMENT PRIOR TO CONSTRUCTION.
6	VERIFY ALL DEMOLITION WORK WITH ARCHITECT/OWNER PRIOR TO COMMENCEMENT OF WORK.
7	UNLESS NOTED OTHERWISE, ALL EXISTING ELECTRICAL SWITCHBOARDS, PANELBOARDS & TRANSFORMERS SHALL REMAIN.
8	ELECTRICAL WORK OR MATERIAL RENDERED OBSOLETE SHALL BE ABANDONED WHERE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE REMOVED FROM THE ABANDONED (CONCEALED) CONDUITS. OUTLETS SHALL BE PROVIDED WITH BLANK COVERS. ANY CONDUITS OUT OF MASONRY SURFACE SHALL BE CUT INTO SURFACE AND PATCHED.
9	DISCONNECT & REMOVE ALL ELECTRICAL POWER DEVICES FROM WALLS SCHEDULED TO BE DEMOLISHED. UNLESS INDICATED OTHERWISE, PULL EXISTING CONDUCTORS BACK TO CEILING AND LEAVE IN PLACE FOR RE-USE. REFER TO ARCHITECURAL DRAWINGS FOR EXISTING WALL DEMOLITION.
10	REMOVE AND STORE ALL EXISTING LIGHT SPEED CLASSROOM SOUND ENHANCEMENT SYSTEMS TO FACILITATE DEMOLITION OF EXISTING CEILING GRID AND RELOCATION OF CLASSROOMS.
11	RETURN ANY REMOVED LIGHTING CONTROL PANELS & RELAY PANELS TO THE OWNER.
12	PROVIDE COVER PLATE FOR ANY REMOVED ELECTRICAL EQUIPMENT SUCH AS BUT NOT LIMITED TO RECEPTACLES OR SWITCHES ON EXISTING TO REMAIN WALLS. PROVIDE COVER PLATE FOR ANY REMOVED ELECTRICAL EQUIPMENT SUCH AS BUT NOT LIMITED TO RECEPTACLES OR SWITCHES ON EXISTING TO REMAIN WALLS.
13	UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING INTERIOR AND EXTERIOR LIGHT FIXTURES AND EXIT SIGNS. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE. UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING INTERIOR AND EXTERIOR LIGHT FIXTURES AND EXIT SIGNS. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE.
14	UNLESS NOTED OTHERWISE, PULL CONDUCTORS FOR DEMOLISHED RECEPTACLES, FLOORBOXES, DROP CORDS AND CORD REELS BACK TO SOURCE.

ELECTRICAL KEYED NOTES

1	FIRE ALARM CONTROL PANEL TO BE DEMOLISHED. CONTRACTOR TO DEMOLISH JUNCTION BOX AND ASSOCIATED CIRCUIT BACK TO SOURCE PANEL COMPLETE. FIRE ALARM CONTROL PANEL TO BE RELOCATED TO NEW IDF ROOM. CONTRACTOR TO VERIFY CIRCUIT NUMBER SHOWN, TURN BREAKER IN THE OFF POSITION AND LABELED AS SPARE.
2	EXISTING PARTIAL POWER CIRCUIT CONDUIT AND WIRING TO BE DEMOLISHED BACK TO NEAREST UPSTREAM JUNCTION BOX COMPLETE. CONTRACTOR TO VERIFY CIRCUIT NUMBER SHOWN. REMAINING ELECTRICAL DEVICES AND PARTIAL CIRCUIT TO REMAIN OPERABLE.
3	EXISTING POWER CIRCUIT CONDUIT AND WIRING TO BE DEMOLISHED BACK TO SOURCE PANEL COMPLETE. CONTRACTOR TO VERIFY CIRCUIT NUMBER SHOWN, TURN BREAKER IN THE OFF POSITION AND LABELED AS SPARE.
4	EXISTING POWER CIRCUIT CONDUIT AND WIRING TO BE DEMOLISHED BACK TO SOURCE PANEL COMPLETE. CONTRACTOR TO VERIFY EXISTING CIRCUIT NUMBER SHOWN. CIRCUIT TO BE USED IN NEW CONSTRUCTION, SEE ELECTRICAL POWER SHEETS.
5	EXISTING ELECTRICAL DEVICES AND ASSOCIATED CIRCUITS TO REMAIN. TYPICAL IN SHADED AREA.
6	CIRCUIT NUMBER WAS NOT IDENTIFIED IN EXISTING DRAWINGS. CONTRACTOR TO VERIFY THAT NO OTHER DEVICES ARE ON CIRCUIT. EXISTING RECEPTACLES AND ASSOCIATED CIRCUIT TO BE DEMOLISHED BACK TO SOURCE PANEL OR NEAREST UPSTREAM JUNCTION BOX COMPLETE. REMAINING DEVICES NOT UNDER DEMOLITION SCOPE TO REMAIN OPERATIONAL AFTER CONSTRUCTION. CONTRACTOR TO PROVIDE CIRCUIT NUMBER IN AS-BUILT DRAWINGS.



N

1 ELECTRICAL DEMOLITION PLAN - LEVEL ONE - UNIT A

Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
REGISTERED
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

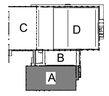
25-0056.00

SHEET TITLE

ELECTRICAL DEMOLTION POWER PLAN - LEVEL ONE - UNIT A

SHEET NO.

E0.03A



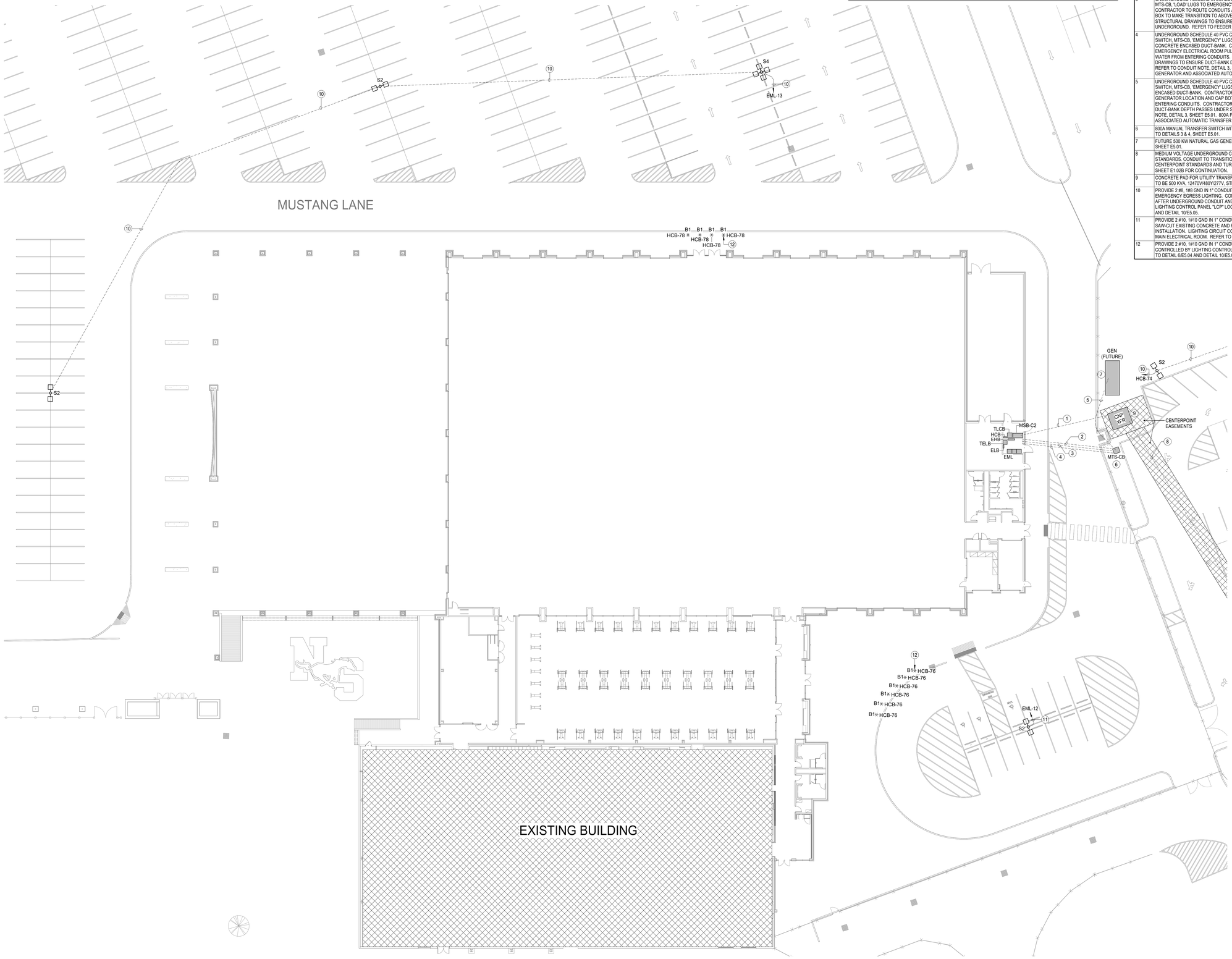
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SITE GENERAL NOTES

1	CONTRACTOR TO COORDINATE FINAL LOCATION OF ALL CONDUITS WITH ALL OTHER TRADES.
2	REFER TO CIVIL DRAWINGS FOR FINAL ROUTING AND DEPTH OF ALL UNDERGROUND UTILITIES.
3	PROVIDE PULL WIRES IN ALL EMPTY CONDUITS.
4	ALL FACILITIES INSTALLED TO SERVE THE UTILITY COMPANY SHALL BE MADE PER THE UTILITY COMPANY STANDARDS. A MINIMUM 1-FOOT VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE UTILITY COMPANY PRIMARY DUCTBANK AND ALL OTHER UTILITIES CROSSING THE DUCTBANK. A MINIMUM 5-FEET HORIZONTAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE UTILITY COMPANY PRIMARY DUCTBANK AND ALL OTHER UTILITIES RUNNING PARALLEL. A MINIMUM 4-FEET SHALL BE MAINTAINED BETWEEN PRIMARY DUCTBANK TOP OF CONCRETE AND FINAL GRADE.
5	DO NOT ROUTE CONDUITS THROUGH DETENTION PONDS.
6	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.

ELECTRICAL KEYED NOTES

1	UNDERGROUND SERVICE ENTRANCE FEEDERS IN SCHEDULE 40 PVC CONDUITS FROM SECONDARY TAPS OF UTILITY TRANSFORMER TO MAIN SWITCHBOARD MSB-CB IN MAIN ELECTRICAL ROOM VIA CONCRETE ENCASED DUCT-BANK. REFER TO FEEDER SCHEDULE, SHEET E5.01.
2	UNDERGROUND FEEDERS IN SCHEDULE 40 PVC CONDUITS FROM MAIN SWITCHBOARD MSB-CB TO MANUAL TRANSFER SWITCH, MTS-CB, 'NORMAL' LUGS VIA CONCRETE ENCASED DUCT-BANK. CONTRACTOR TO ROUTE CONDUITS AND FEEDERS VIA EMERGENCY ELECTRICAL ROOM IN PULL BOX TO MAKE TRANSITION TO UNDERGROUND DUCT-BANK. CONTRACTOR TO COORDINATE WITH STRUCTURAL DRAWINGS TO ENSURE DUCT-BANK DEPTH PASSES UNDER STRUCTURAL BEAMS UNDERGROUND. REFER TO FEEDER SCHEDULE, SHEET E5.01.
3	UNDERGROUND FEEDERS IN SCHEDULE 40 PVC CONDUITS FROM MANUAL TRANSFER SWITCH, MTS-CB, 'LOAD' LUGS TO EMERGENCY PANEL 'EHC' VIA CONCRETE ENCASED DUCT-BANK. CONTRACTOR TO ROUTE CONDUITS AND FEEDERS VIA EMERGENCY ELECTRICAL ROOM IN PULL BOX TO MAKE TRANSITION TO ABOVE GROUND. CONTRACTOR TO COORDINATE WITH STRUCTURAL DRAWINGS TO ENSURE DUCT-BANK DEPTH PASSES UNDER STRUCTURAL BEAMS UNDERGROUND. REFER TO FEEDER SCHEDULE, SHEET E5.01.
4	UNDERGROUND SCHEDULE 40 PVC CONDUITS EACH WITH PULL-WIRE FROM MANUAL TRANSFER SWITCH, MTS-CB, 'EMERGENCY' LUGS TO EMERGENCY ELECTRICAL ROOM PULL BOX VIA CONCRETE ENCASED DUCT-BANK. CONTRACTOR TO STUB UP 6" AFG AT MTS-CB AND 6" AFF IN EMERGENCY ELECTRICAL ROOM PULL BOX AND CAP BOTH ENDS TO PREVENT DEBRIS AND/OR WATER FROM ENTERING CONDUITS. CONTRACTOR TO COORDINATE WITH STRUCTURAL DRAWINGS TO ENSURE DUCT-BANK DEPTH PASSES UNDER STRUCTURAL BEAMS UNDERGROUND. REFER TO CONDUIT NOTE, DETAIL 3, SHEET E5.01. 800A FEEDERS TO BE INSTALLED WITH FUTURE GENERATOR AND ASSOCIATED AUTOMATIC TRANSFER SWITCH INSTALLATION.
5	UNDERGROUND SCHEDULE 40 PVC CONDUITS EACH WITH PULL-WIRE FROM MANUAL TRANSFER SWITCH, MTS-CB, 'EMERGENCY' LUGS TO FUTURE GENERATOR LOCATION VIA CONCRETE ENCASED DUCT-BANK. CONTRACTOR TO STUB UP 6" AFG AT MTS-CB AND 6" AFG AT FUTURE GENERATOR LOCATION AND CAP BOTH ENDS TO PREVENT DEBRIS AND/OR WATER FROM ENTERING CONDUITS. CONTRACTOR TO COORDINATE WITH STRUCTURAL DRAWINGS TO ENSURE DUCT-BANK DEPTH PASSES UNDER STRUCTURAL BEAMS UNDERGROUND. REFER TO CONDUIT NOTE, DETAIL 3, SHEET E5.01. 800A FEEDERS TO BE INSTALLED WITH FUTURE GENERATOR AND ASSOCIATED AUTOMATIC TRANSFER SWITCH INSTALLATION.
6	800A MANUAL TRANSFER SWITCH WITH CONNECTION BOX FOR TEMPORARY GENERATOR. REFER TO DETAILS 3 & 4, SHEET E5.01.
7	FUTURE 500 KW NATURAL GAS GENERATOR IN WEATHER ENCLOSURE. REFER TO DETAIL 4, SHEET E5.01.
8	MEDIUM VOLTAGE UNDERGROUND CONCRETE ENCASE DUCT-BANK PER CENTERPOINT STANDARDS. CONDUIT TO TRANSITION FROM POLE TO UNDERGROUND DUCT-BANK PER CENTERPOINT STANDARDS AND TURN UP UNDER NEW PAD MOUNTED TRANSFORMER. REFER TO SHEET E1.02B FOR CONTINUATION.
9	CONCRETE PAD FOR UTILITY TRANSFORMER PER CENTERPOINT REQUIREMENTS. TRANSFORMER TO BE 500 KVA, 12470V/480Y/277V, STEP-DOWN TRANSFORMER.
10	PROVIDE 2 #8, 1#8 GND IN 1" CONDUIT FOR SITE LIGHTING CIRCUITS TO ALSO BE USED FOR EMERGENCY EGRESS LIGHTING. CONTRACTOR TO SAW-CUT EXISTING CONCRETE AND REPAIR AFTER UNDERGROUND CONDUIT AND WIRING INSTALLATION. LIGHTING CIRCUIT CONTROLLED BY LIGHTING CONTROL PANEL "LCP" LOCATED IN MAIN ELECTRICAL ROOM. REFER TO DETAIL 6/E5.04 AND DETAIL 10/E5.05.
11	PROVIDE 2 #10, 1#10 GND IN 1" CONDUIT FOR SITE LIGHTING CIRCUITS. CONTRACTOR TO SAW-CUT EXISTING CONCRETE AND REPAIR AFTER UNDERGROUND CONDUIT AND WIRING INSTALLATION. LIGHTING CIRCUIT CONTROLLED BY LIGHTING CONTROL PANEL "LCP" LOCATED IN MAIN ELECTRICAL ROOM. REFER TO DETAIL 6/E5.04 AND DETAIL 10/E5.05.
12	PROVIDE 2 #10, 1#10 GND IN 1" CONDUIT FOR BOLLARD LIGHTING CIRCUITS. LIGHTING CIRCUIT CONTROLLED BY LIGHTING CONTROL PANEL "LCP" LOCATED IN MAIN ELECTRICAL ROOM. REFER TO DETAIL 6/E5.04 AND DETAIL 10/E5.05. (TYPICAL)



N

1 **ELECTRICAL SITE PLAN - NEW WORK - AREA A**
Scale: 1" = 20'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
ARCHITECT
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL SITE PLAN - AREA A

SHEET NO.
E1.01A

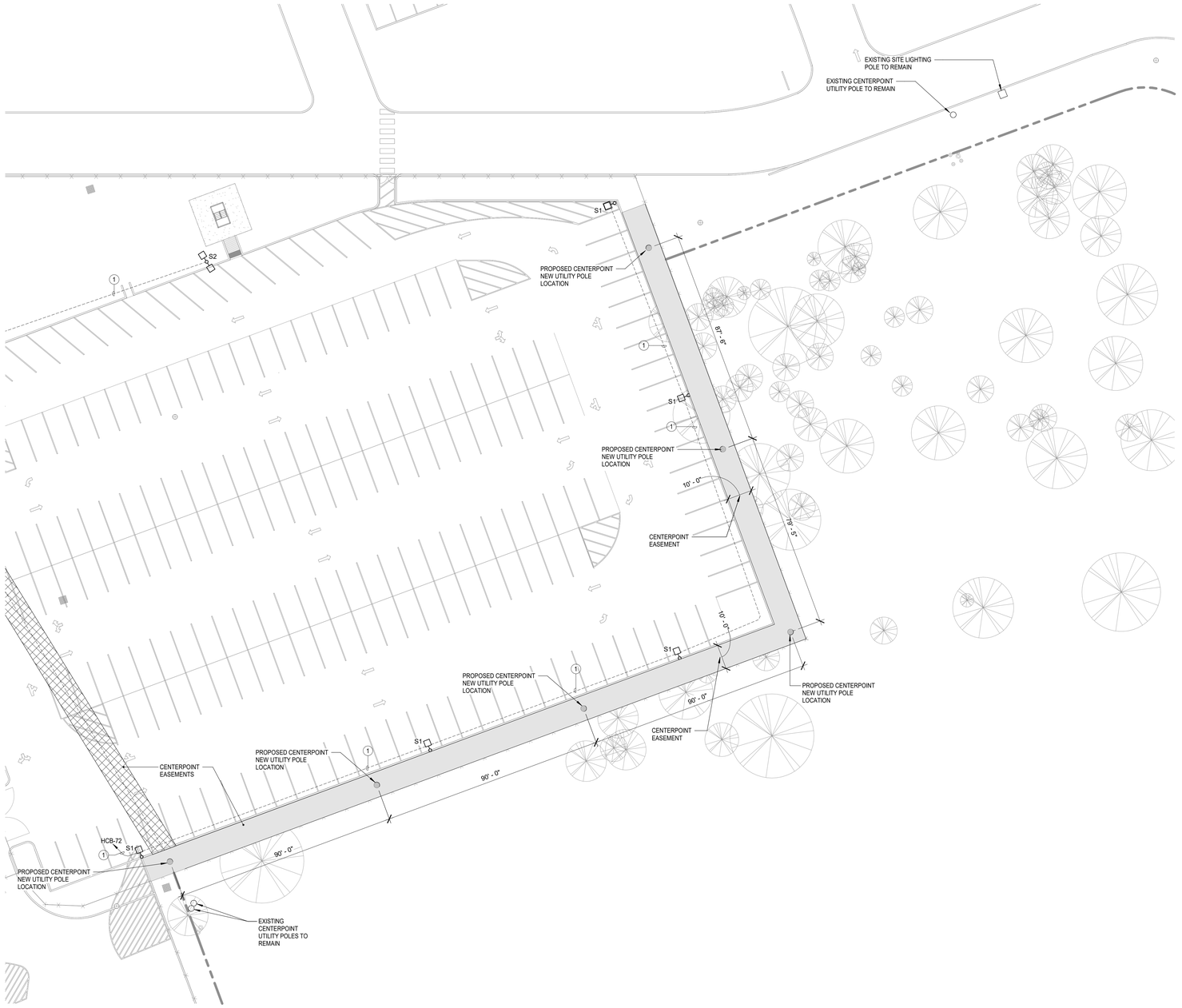
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

SITE GENERAL NOTES

1	CONTRACTOR TO COORDINATE FINAL LOCATION OF ALL CONDUITS WITH ALL OTHER TRADES.
2	REFER TO CIVIL DRAWINGS FOR FINAL ROUTING AND DEPTH OF ALL UNDERGROUND UTILITIES.
3	PROVIDE PULL WIRES IN ALL EMPTY CONDUITS.
4	ALL FACILITIES INSTALLED TO SERVE THE UTILITY COMPANY SHALL BE MADE PER THE UTILITY COMPANY STANDARDS. A MINIMUM 1-FOOT VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE UTILITY COMPANY PRIMARY DUCTBANK AND ALL OTHER UTILITIES CROSSING THE DUCTBANK. A MINIMUM 5-FEET HORIZONTAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE UTILITY COMPANY PRIMARY DUCTBANK AND ALL OTHER UTILITIES RUNNING PARALLEL. A MINIMUM 4-FEET SHALL BE MAINTAINED BETWEEN PRIMARY DUCTBANK TOP OF CONCRETE AND FINAL GRADE.
5	DO NOT ROUTE CONDUITS THROUGH DETENTION PONDS.
6	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.

ELECTRICAL KEYED NOTES

1	PROVIDE 2 #8, 1#6 GND IN 1" CONDUIT FOR SITE LIGHTING CIRCUITS TO ALSO BE USED FOR EMERGENCY EGRESS LIGHTING. CONTRACTOR TO SAW-CUT EXISTING CONCRETE AND REPAIR AFTER UNDERGROUND CONDUIT AND WIRING INSTALLATION. LIGHTING CIRCUIT CONTROLLED BY LIGHTING CONTROL PANEL "LCP" LOCATED IN MAIN ELECTRICAL ROOM. REFER TO DETAIL 6/ES.04 AND DETAIL 10/ES.05.



N

1 **ELECTRICAL SITE PLAN - NEW WORK - AREA B**
Scale: 1" = 20'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

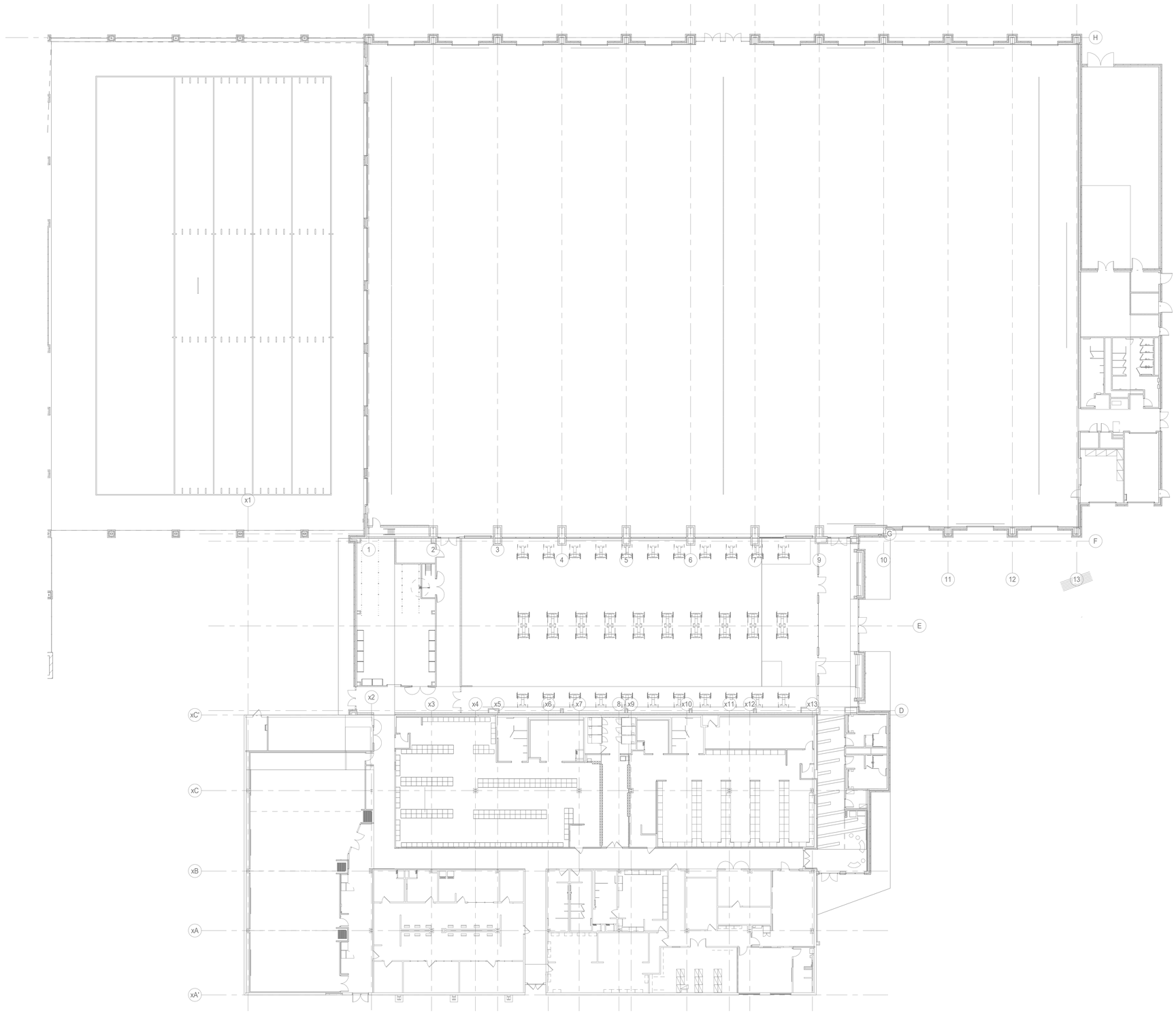
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL SITE PLAN - AREA B

SHEET NO.
E1.02B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



N

1 **ELECTRICAL LIGHTING FLOOR PLAN - LEVEL ONE - OVERALL**
Scale: 1/16" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
ARCHITECT
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

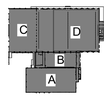
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL COMPOSITE PLAN - LEVEL ONE - OVERALL

SHEET NO.
E2.01



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

ELECTRICAL GENERAL NOTES

1. PROVIDE NEW LIGHTING CONTROLS, SENSORS AND ASSOCIATED DEVICES, AND 20A EMERGENCY LOAD CONTROL RELAYS. REFER TO SPECIFICATIONS AND CONTROLS SCHEDULE.
2. LOCATE DIGITAL LIGHTING CONTROLLER AND / OR EMERGENCY LOAD CONTROL RELAY ABOVE ACCESSIBLE CEILING 12-FEET AFF OR BELOW ADJACENT TO SWITCH CONTROLLING THE SPACE; IN NON-ACCESSIBLEAND / OR HIGH CEILING AREAS, LOCATE DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING; IN AREAS WITH NO CEILING AND / OR IN EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
3. LOCATE DIGITAL LIGHTING CONTROLLER FOR CORRIDORS, GYM AND HIGH CEILING AREAS WITH NO ADJACENT ANCILLARY AREA ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
4. OCCUPANCY / VACANCY SENSOR AND DAYLIGHTING SENSOR LOCATIONS INDICATE SPACE OR AREA CONTROLLED, CONTRACTOR TO PROVIDE ACTUAL QUANTITIES, TYPES, AND MOUNTING LOCATIONS AS RECOMMENDED BY MANUFACTURER AND IECC-2018 C405.
5. SPACES WITH MULTIPLE OCCUPANCY / VACANCY SENSORS OR WHERE LINE OF SIGHT MAY BE OBSCURED, SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.
6. CONTRACTOR SHALL MAINTAIN CONSTANT UNSWITCHED CIRCUITS FROM EXISTING SOURCE AND / OR NEW AS SHOWN FOR EMERGENCY FIXTURES, EMERGENCY LOAD RELAYS AND EXIT SIGNS.
7. COORDINATE LOCATION OF LIGHT FIXTURES IN ALL MECHANICAL AND ELECTRICAL ROOMS WITH MECHANICAL EQUIPMENT, PIPING, AND ALL OTHER TRADES.
8. FIELD COORDINATE LOCATION OF AV ZONE AND AV ZONE SWITCH WITH EXISTING TEACHING WALLS.

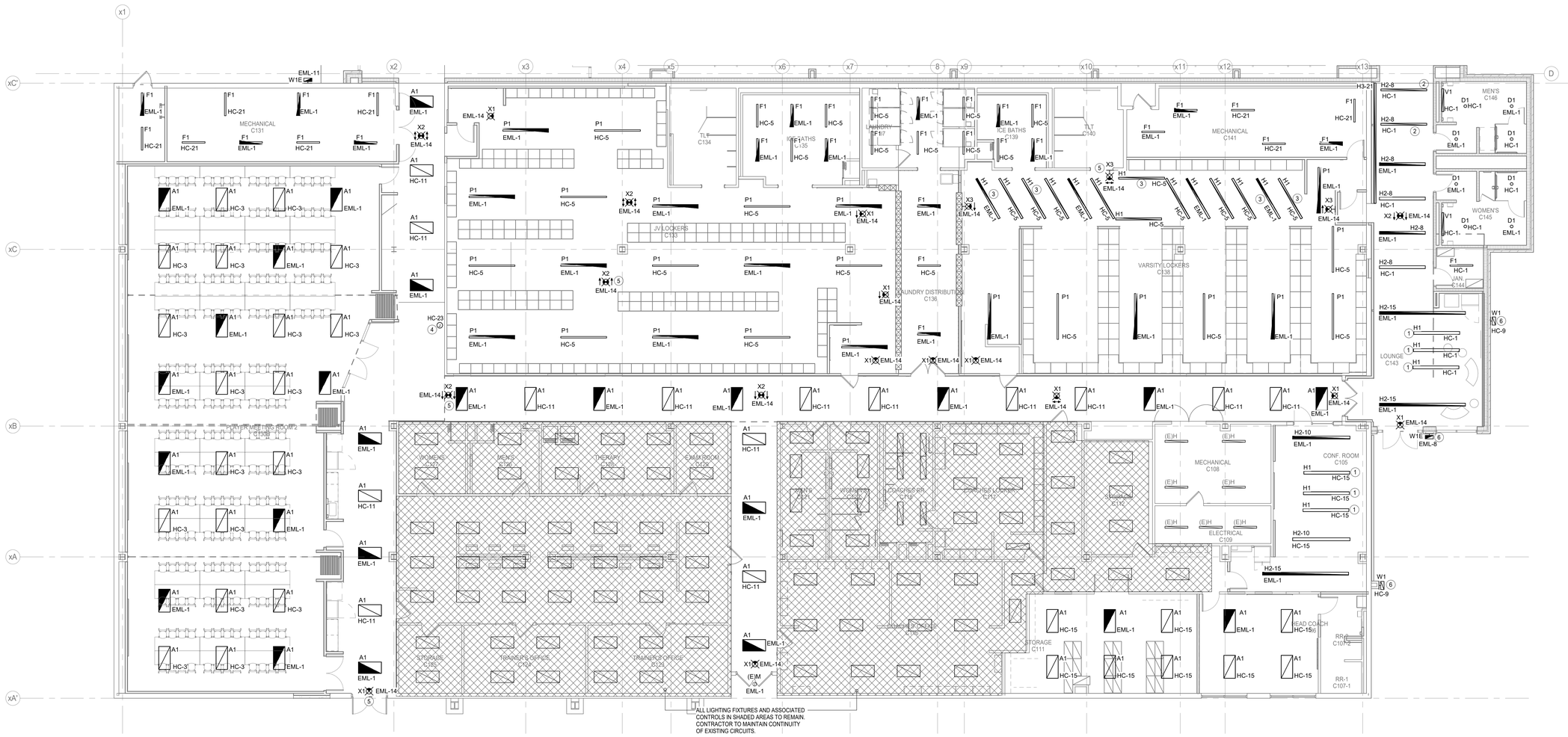
LIGHTING GENERAL NOTES

1	PROVIDE PULL STRINGS IN ALL EMPTY CONDUITS.
2	ALL JUNCTION BOXES, CONDUITS, AND WIRES SHALL BE SIZED PER NEC.
3	CONNECT ALL EXIT LIGHTS AHEAD OF ANY LOCAL OR AUTOMATIC SWITCHING DEVICE. PROVIDE POWER VIA NEAREST LIGHTING CIRCUIT NOT TO EXCEED 16A.
4	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES SHOWN ON THIS DRAWING.
5	REFER TO SHEETS 10.41 FOR LIGHTING FIXTURE SCHEDULE AND LIGHTING CONTACTOR SCHEDULE.
6	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
7	ELECTRICAL CONTRACTOR SHALL CONFIRM COMPATIBILITY OF ALL LIGHTING CONTROL SYSTEMS.
8	PROVIDE A CONSTANT HOT FROM PANEL BOARD DIRECTLY TO ALL EMERGENCY BATTERY PACKS IN EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS. EMERGENCY LIGHTING FIXTURES SHALL TURN ON TO FULL BRIGHTNESS IN CASE OF POWER LOSS.
9	ALL CLASSROOMS AND SPACES DO NOT REQUIRE DAYLIGHT HARVESTING CONTROLS, UNLESS NOTED ON PLAN. PER 2015 IECC C405.2.3 WATTAGE REQUIREMENT.
10	CORRIDOR LIGHTING DOES NOT REQUIRE OCCUPANCY SENSING DEVICES AND/OR DAYLIGHT HARVESTING CONTROLS PER 2015 IECC C405.2 REGARDING EXIT PASSAGEWAYS AND SAFETY/SECURITY REQUIREMENTS.
11	PROVIDE CONNECTION FROM INVERTER PANEL FOR EMERGENCY POWER FOR ALL EGRESS FIXTURES, PROVIDE ECM MODULE FOR CONNECTION OF EMERGENCY LOADS. CIRCUIT NORMAL AND EMERGENCY POWER AS INDICATED. REFER TO DETAIL #12 ON SHEET 10.42 AND ONE-LINE DIAGRAM ON SHEET 10.51.
12	LOWER CASE LETTER INDICATES SWITCHING SCHEME.
13	ALL ABOVE CEILING POWER PACKS TO BE MOUNTED ABOVE ROOM DOORS REGARDLESS OF SCHEMATIC DESIGN SHOWN ON FLOOR PLANS. E.C. SHALL ENSURE INSTALLATION OF ALL POWER PACKS OCCUR ABOVE ROOM DOORS.

LIGHTING CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY MAINTAIN LIGHTING LEVELS IN EGRESS PATHES PER NFPA 101 INCASE OF POWER LOSS AND WHENEVER FIRE ALARM SYSTEM IS ACTIVATED. CONTRACTOR TO MAKE ALL TIE-IN CONNECTIONS TO FIRE ALARM SYSTEM AND TO COORDINATE WITH FIRE ALARM CONTRACTOR PRIOR TO COMMENCMENT OF WORK.

ELECTRICAL KEYED NOTES

1	ARCHITECTURAL METAL SLOTTED CEILING PANEL. H1 FIXTURES TO BE INSTALLED IN SLOTS OF METAL CEILING PANELS. COORDINATE WITH ARCHITECTURAL DRAWINGS AND MANUFACTURER FOR MOUNTING REQUIREMENTS.
2	ARCHITECTURAL METAL SLOTTED CEILING PANEL. H2 FIXTURES TO BE INSTALLED IN SLOTS OF METAL CEILING PANELS. COORDINATE WITH ARCHITECTURAL DRAWINGS AND MANUFACTURER FOR MOUNTING REQUIREMENTS.
3	ARCHITECTURAL METAL SLOTTED CEILING PANEL WITH SCHOOL LOGO. H1 FIXTURES TO BE INSTALLED IN SLOTS OF METAL CEILING PANELS. COORDINATE WITH ARCHITECTURAL DRAWINGS AND MANUFACTURER FOR MOUNTING REQUIREMENTS.
4	ARKTURA CEILING PANELS WITH SINGLE POINT 277V CONNECTION AND CIRCUIT AS INDICATED.
5	EXIT SIGNS AND EMERGENCY EGRESS LIGHTING SHALL BE CIRCUITED TO LIGHTING INVERTER AND SHALL BE WIRED AHEAD OF ANY LOCAL SWITCHING PER NEC. CONTRACTOR SHALL VERIFY AND COORDINATE ALL CHEVRONS AND THEIR ASSOCIATED DIRECTIONS PRIOR TO PURCHASE OF EXIT SIGNS.
6	WALL PACK LIGHTING TO BE ROUTED VIA LIGHTING CONTROL PANEL 'LCP'.



N

1 **ELECTRICAL LIGHTING FLOOR PLAN - LEVEL ONE - UNIT A**

Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — STATE OF TEXAS — 80219 — LICENSED — PROFESSIONAL ENGINEER

10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT A

SHEET NO.

E2.02A

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

ELECTRICAL GENERAL NOTES

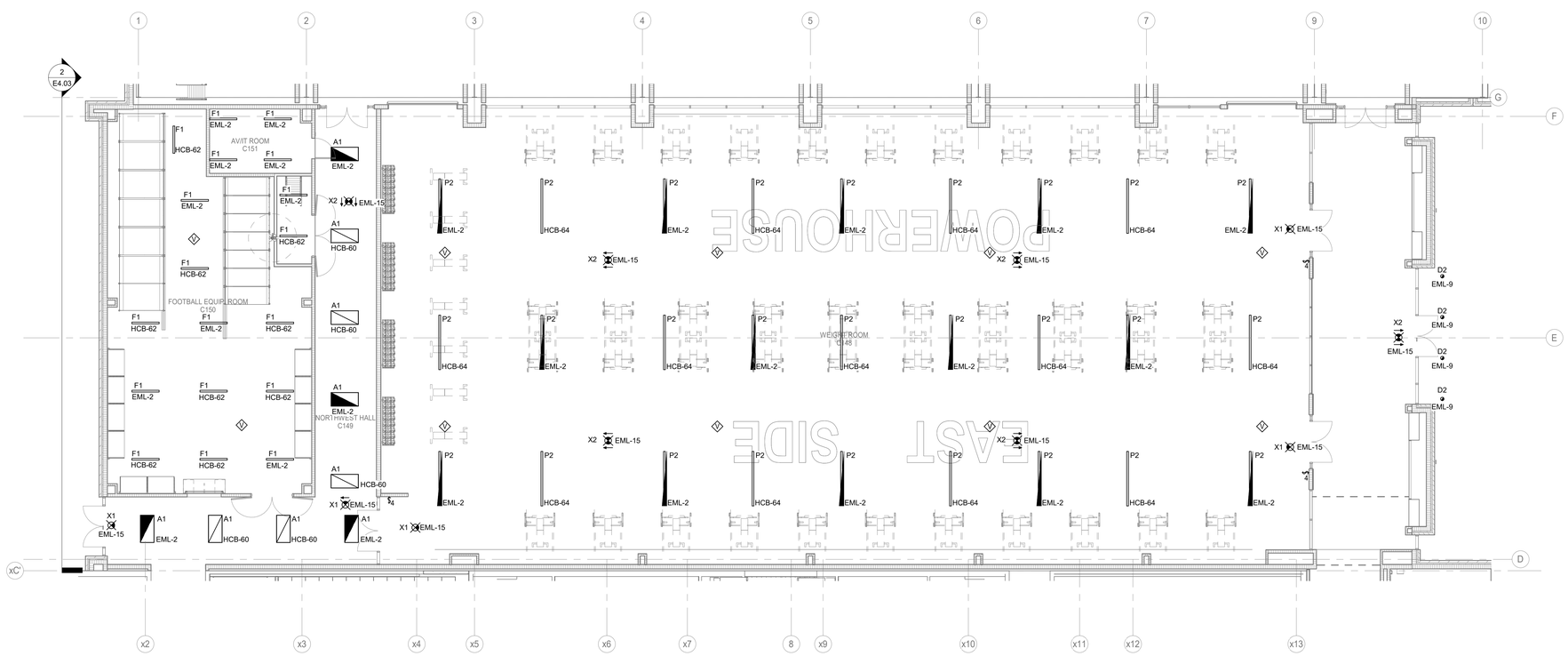
1. PROVIDE NEW LIGHTING CONTROLS, SENSORS AND ASSOCIATED DEVICES, AND 20A EMERGENCY LOAD CONTROL RELAYS. REFER TO SPECIFICATIONS AND CONTROLS SCHEDULE.
2. LOCATE DIGITAL LIGHTING CONTROLLER AND / OR EMERGENCY LOAD CONTROL RELAY ABOVE ACCESSIBLE CEILING 12-FEET AFF OR BELOW ADJACENT TO SWITCH CONTROLLING THE SPACE; IN NON-ACCESSIBLEAND / OR HIGH CEILING AREAS, LOCATE DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING; IN AREAS WITH NO CEILING AND / OR IN EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
3. LOCATE DIGITAL LIGHTING CONTROLLER FOR CORRIDORS, GYM AND HIGH CEILING AREAS WITH NO ADJACENT ANCILLARY AREA ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
4. OCCUPANCY / VACANCY SENSOR AND DAYLIGHTING SENSOR LOCATIONS INDICATE SPACE OR AREA CONTROLLED, CONTRACTOR TO PROVIDE ACTUAL QUANTITIES, TYPES, AND MOUNTING LOCATIONS AS RECOMMENDED BY MANUFACTURER AND IECC-2018 C405.
5. SPACES WITH MULTIPLE OCCUPANCY / VACANCY SENSORS OR WHERE LINE OF SIGHT MAY BE OBSCURED, SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.
6. CONTRACTOR SHALL MAINTAIN CONSTANT UNSWITCHED CIRCUITS FROM EXISTING SOURCE AND / OR NEW AS SHOWN FOR EMERGENCY FIXTURES, EMERGENCY LOAD RELAYS AND EXIT SIGNS.
7. COORDINATE LOCATION OF LIGHT FIXTURES IN ALL MECHANICAL AND ELECTRICAL ROOMS WITH MECHANICAL EQUIPMENT, PIPING, AND ALL OTHER TRADES.
8. FIELD COORDINATE LOCATION OF AV ZONE AND AV ZONE SWITCH WITH EXISTING TEACHING WALLS.

LIGHTING GENERAL NOTES

1	PROVIDE PULL STRINGS IN ALL EMPTY CONDUITS.
2	ALL JUNCTION BOXES, CONDUITS, AND WIRES SHALL BE SIZED PER NEC.
3	CONNECT ALL EXIT LIGHTS AHEAD OF ANY LOCAL OR AUTOMATIC SWITCHING DEVICE. PROVIDE POWER VIA NEAREST LIGHTING CIRCUIT NOT TO EXCEED 16A.
4	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES SHOWN ON THIS DRAWING.
5	REFER TO SHEETS 10.41 FOR LIGHTING FIXTURE SCHEDULE AND LIGHTING CONTACTOR SCHEDULE.
6	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
7	ELECTRICAL CONTRACTOR SHALL CONFIRM COMPATIBILITY OF ALL LIGHTING CONTROL SYSTEMS.
8	PROVIDE A CONSTANT HOT FROM PANEL BOARD DIRECTLY TO ALL EMERGENCY BATTERY PACKS IN EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS. EMERGENCY LIGHTING FIXTURES SHALL TURN ON TO FULL BRIGHTNESS IN CASE OF POWER LOSS.
9	ALL CLASSROOMS AND SPACES DO NOT REQUIRE DAYLIGHT HARVESTING CONTROLS, UNLESS NOTED ON PLAN. PER 2015 IECC C405.2.3 WATTAGE REQUIREMENT.
10	CORRIDOR LIGHTING DOES NOT REQUIRE OCCUPANCY SENSING DEVICES AND/OR DAYLIGHT HARVESTING CONTROLS PER 2015 IECC C405.2 REGARDING EXIT PASSAGEWAYS AND SAFETY/SECURITY REQUIREMENTS.
11	PROVIDE CONNECTION FROM INVERTER PANEL FOR EMERGENCY POWER FOR ALL EGRESS FIXTURES, PROVIDE ECM MODULE FOR CONNECTION OF EMERGENCY LOADS. CIRCUIT NORMAL AND EMERGENCY POWER AS INDICATED. REFER TO DETAIL #12 ON SHEET 10.42 AND ONE-LINE DIAGRAM ON SHEET 10.51.
12	LOWER CASE LETTER INDICATES SWITCHING SCHEME.
13	ALL ABOVE CEILING POWER PACKS TO BE MOUNTED ABOVE ROOM DOORS REGARDLESS OF SCHEMATIC DESIGN SHOWN ON FLOOR PLANS. E.C. SHALL ENSURE INSTALLATION OF ALL POWER PACKS OCCUR ABOVE ROOM DOORS.

LIGHTING CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY MAINTAIN LIGHTING LEVELS IN EGRESS PATHES PER NFPA 101 INCASE OF POWER LOSS AND WHENEVER FIRE ALARM SYSTEM IS ACTIVATED. CONTRACTOR TO MAKE ALL TIE-IN CONNECTIONS TO FIRE ALARM SYSTEM AND TO COORDINATE WITH FIRE ALARM CONTRACTOR PRIOR TO COMMENCMENT OF WORK.

ELECTRICAL KEYED NOTES



N

1 **ELECTRICAL LIGHTING FLOOR PLAN - LEVEL ONE - UNIT B**
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS 80219 LICENSED PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT B

SHEET NO.
E2.03B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

LIGHTING CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY MAINTAIN LIGHTING LEVELS IN EGRESS PATHES PER NFPA 101 INCASE OF POWER LOSS AND WHENEVER FIRE ALARM SYSTEM IS ACTIVATED. CONTRACTOR TO MAKE ALL TIE-IN CONNECTIONS TO FIRE ALARM SYSTEM AND TO COORDINATE WITH FIRE ALARM CONTRACTOR PRIOR TO COMMENCMENT OF WORK.

ELECTRICAL GENERAL NOTES

1. PROVIDE NEW LIGHTING CONTROLS, SENSORS AND ASSOCIATED DEVICES, AND 20A EMERGENCY LOAD CONTROL RELAYS. REFER TO SPECIFICATIONS AND CONTROLS SCHEDULE.
2. LOCATE DIGITAL LIGHTING CONTROLLER AND / OR EMERGENCY LOAD CONTROL RELAY ABOVE ACCESSIBLE CEILING 12-FEET AFF OR BELOW ADJACENT TO SWITCH CONTROLLING THE SPACE; IN NON-ACCESSIBLEAND / OR HIGH CEILING AREAS, LOCATE DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING; IN AREAS WITH NO CEILING AND / OR IN EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
3. LOCATE DIGITAL LIGHTING CONTROLLER FOR CORRIDORS, GYM AND HIGH CEILING AREAS WITH NO ADJACENT ANCILLARY AREA ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
4. OCCUPANCY / VACANCY SENSOR AND DAYLIGHTING SENSOR LOCATIONS INDICATE SPACE OR AREA CONTROLLED, CONTRACTOR TO PROVIDE ACTUAL QUANTITIES, TYPES, AND MOUNTING LOCATIONS AS RECOMMENDED BY MANUFACTURER AND IECC-2018 C405.
5. SPACES WITH MULTIPLE OCCUPANCY / VACANCY SENSORS OR WHERE LINE OF SIGHT MAY BE OBSCURED, SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.
6. CONTRACTOR SHALL MAINTAIN CONSTANT UNSWITCHED CIRCUITS FROM EXISTING SOURCE AND / OR NEW AS SHOWN FOR EMERGENCY FIXTURES, EMERGENCY LOAD RELAYS AND EXIT SIGNS.
7. COORDINATE LOCATION OF LIGHT FIXTURES IN ALL MECHANICAL AND ELECTRICAL ROOMS WITH MECHANICAL EQUIPMENT, PIPING, AND ALL OTHER TRADES.
8. FIELD COORDINATE LOCATION OF AV ZONE AND AV ZONE SWITCH WITH EXISTING TEACHING WALLS.

ELECTRICAL KEYED NOTES

R1-20 HCB-42 R1-20 HCB-44

R1-20 HCB-42 R1-20 HCB-44

R1-20 HCB-42 R1-20 HCB-44

R1-20 HCB-42 R1-20 HCB-44

SF1E
EML-5

SF1
HCB-38

1
E4.03

AV/IT ROOM
C151

HCB-70

1 **ELECTRICAL LIGHTING FLOOR PLAN - LEVEL ONE - UNIT C**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT C

SHEET NO.
E2.04C

C D B A

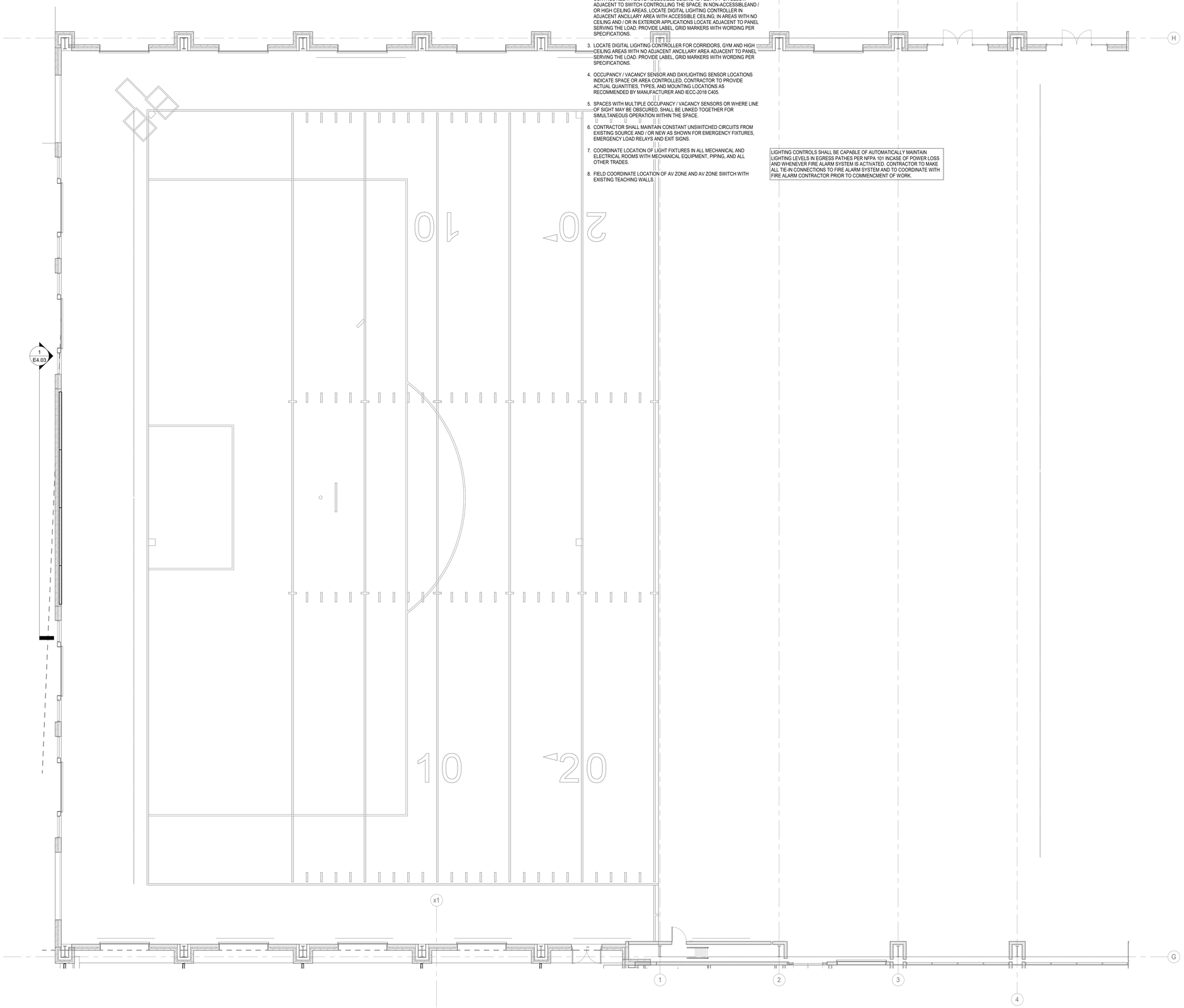
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

ELECTRICAL GENERAL NOTES

1. PROVIDE NEW LIGHTING CONTROLS, SENSORS AND ASSOCIATED DEVICES, AND 20A EMERGENCY LOAD CONTROL RELAYS. REFER TO SPECIFICATIONS AND CONTROLS SCHEDULE.
2. LOCATE DIGITAL LIGHTING CONTROLLER AND / OR EMERGENCY LOAD CONTROL RELAY ABOVE ACCESSIBLE CEILING 12-FEET AFF OR BELOW ADJACENT TO SWITCH CONTROLLING THE SPACE. IN NON-ACCESSIBLEAND / OR HIGH CEILING AREAS, LOCATE DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING; IN AREAS WITH NO CEILING AND / OR IN EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
3. LOCATE DIGITAL LIGHTING CONTROLLER FOR CORRIDORS, GYM AND HIGH CEILING AREAS WITH NO ADJACENT ANCILLARY AREA ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
4. OCCUPANCY / VACANCY SENSOR AND DAYLIGHTING SENSOR LOCATIONS INDICATE SPACE OR AREA CONTROLLED, CONTRACTOR TO PROVIDE ACTUAL QUANTITIES, TYPES, AND MOUNTING LOCATIONS AS RECOMMENDED BY MANUFACTURER AND IECC-2018 C405.
5. SPACES WITH MULTIPLE OCCUPANCY / VACANCY SENSORS OR WHERE LINE OF SIGHT MAY BE OBSCURED, SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.
6. CONTRACTOR SHALL MAINTAIN CONSTANT UNSWITCHED CIRCUITS FROM EXISTING SOURCE AND / OR NEW AS SHOWN FOR EMERGENCY FIXTURES, EMERGENCY LOAD RELAYS AND EXIT SIGNS.
7. COORDINATE LOCATION OF LIGHT FIXTURES IN ALL MECHANICAL AND ELECTRICAL ROOMS WITH MECHANICAL EQUIPMENT, PIPING, AND ALL OTHER TRADES.
8. FIELD COORDINATE LOCATION OF AV ZONE AND AV ZONE SWITCH WITH EXISTING TEACHING WALLS.

LIGHTING CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY MAINTAIN LIGHTING LEVELS IN EGRESS PATHES PER NFPA 101 INCASE OF POWER LOSS AND WHENEVER FIRE ALARM SYSTEM IS ACTIVATED. CONTRACTOR TO MAKE ALL TIE-IN CONNECTIONS TO FIRE ALARM SYSTEM AND TO COORDINATE WITH FIRE ALARM CONTRACTOR PRIOR TO COMMENCMENT OF WORK.

ELECTRICAL KEYED NOTES



N

1 **ELECTRICAL LIGHTING FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

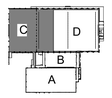
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT C - ALTERNATE

SHEET NO.
E2.04C.1



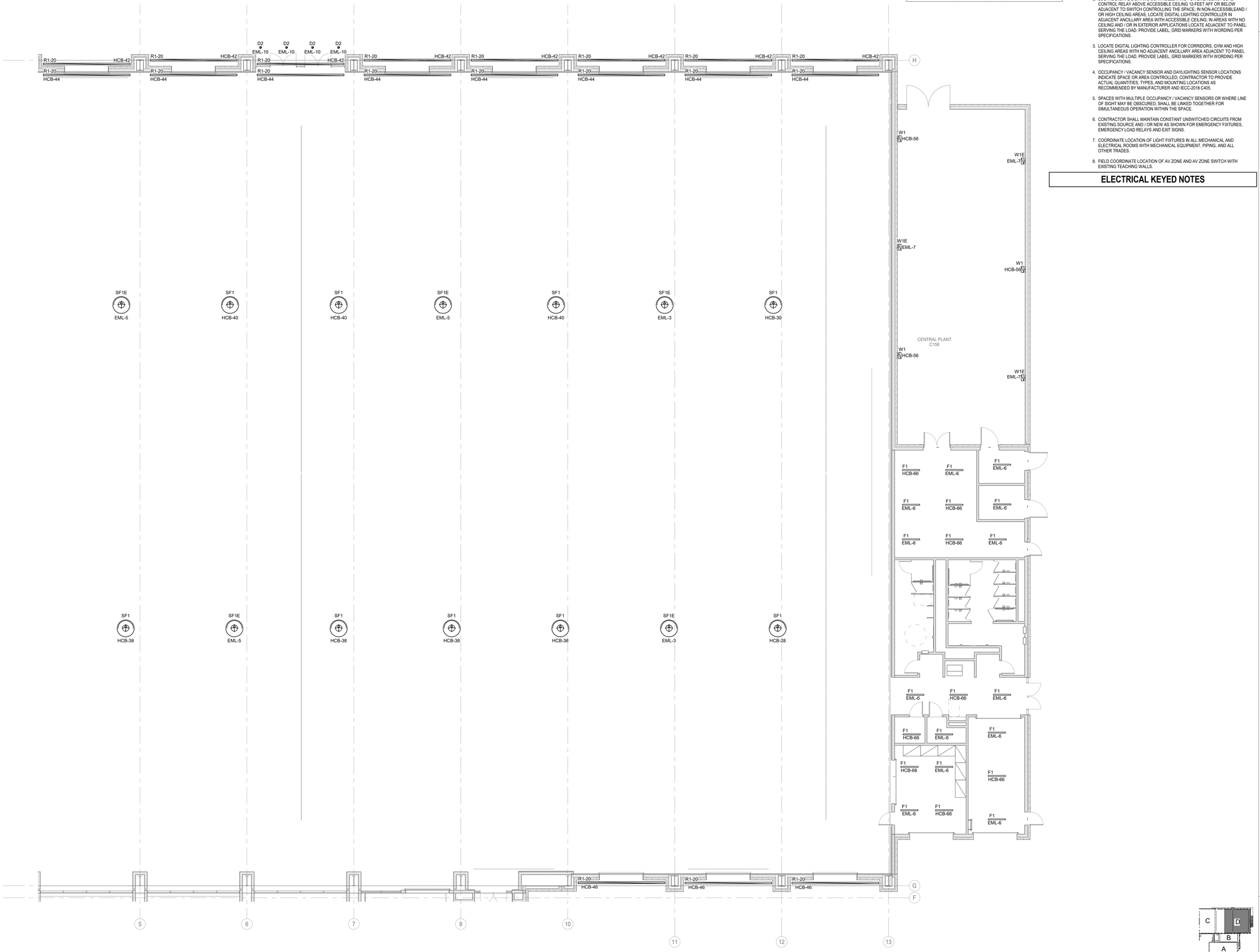
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

LIGHTING CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY MAINTAIN LIGHTING LEVELS IN EGRESS PATHES PER NFPA 101 INCASE OF POWER LOSS AND WHENEVER FIRE ALARM SYSTEM IS ACTIVATED. CONTRACTOR TO MAKE ALL TIE-IN CONNECTIONS TO FIRE ALARM SYSTEM AND TO COORDINATE WITH FIRE ALARM CONTRACTOR PRIOR TO COMMENCMENT OF WORK.

ELECTRICAL GENERAL NOTES

1. PROVIDE NEW LIGHTING CONTROLS, SENSORS AND ASSOCIATED DEVICES, AND 20A EMERGENCY LOAD CONTROL RELAYS. REFER TO SPECIFICATIONS AND CONTROLS SCHEDULE.
2. LOCATE DIGITAL LIGHTING CONTROLLER AND / OR EMERGENCY LOAD CONTROL RELAY ABOVE ACCESSIBLE CEILING 12-FEET AFF OR BELOW ADJACENT TO SWITCH CONTROLLING THE SPACE; IN NON-ACCESSIBLEAND / OR HIGH CEILING AREAS, LOCATE DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING; IN AREAS WITH NO CEILING AND / OR IN EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
3. LOCATE DIGITAL LIGHTING CONTROLLER FOR CORRIDORS, GYM AND HIGH CEILING AREAS WITH NO ADJACENT ANCILLARY AREA ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL, GRID MARKERS WITH WORDING PER SPECIFICATIONS.
4. OCCUPANCY / VACANCY SENSOR AND DAYLIGHTING SENSOR LOCATIONS INDICATE SPACE OR AREA CONTROLLED. CONTRACTOR TO PROVIDE ACTUAL QUANTITIES, TYPES, AND MOUNTING LOCATIONS AS RECOMMENDED BY MANUFACTURER AND IECC-2018 C405.
5. SPACES WITH MULTIPLE OCCUPANCY / VACANCY SENSORS OR WHERE LINE OF SIGHT MAY BE OBSCURED, SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.
6. CONTRACTOR SHALL MAINTAIN CONSTANT UNSWITCHED CIRCUITS FROM EXISTING SOURCE AND / OR NEW AS SHOWN FOR EMERGENCY FIXTURES, EMERGENCY LOAD RELAYS AND EXIT SIGNS.
7. COORDINATE LOCATION OF LIGHT FIXTURES IN ALL MECHANICAL AND ELECTRICAL ROOMS WITH MECHANICAL EQUIPMENT, PIPING, AND ALL OTHER TRADES.
8. FIELD COORDINATE LOCATION OF AV ZONE AND AV ZONE SWITCH WITH EXISTING TEACHING WALLS.

ELECTRICAL KEYED NOTES



N

1 **ELECTRICAL LIGHTING FLOOR PLAN - LEVEL ONE - UNIT D**
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien | Houston | 10930 W. Sam Houston Pkwy North, Suite 900 | Houston, TX 77064 | Salas O'Brien Registration: F-4111 | Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS 80219 LICENSED PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

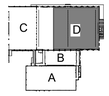
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL LIGHTING PLAN - LEVEL ONE - UNIT D

SHEET NO.
E2.05D



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

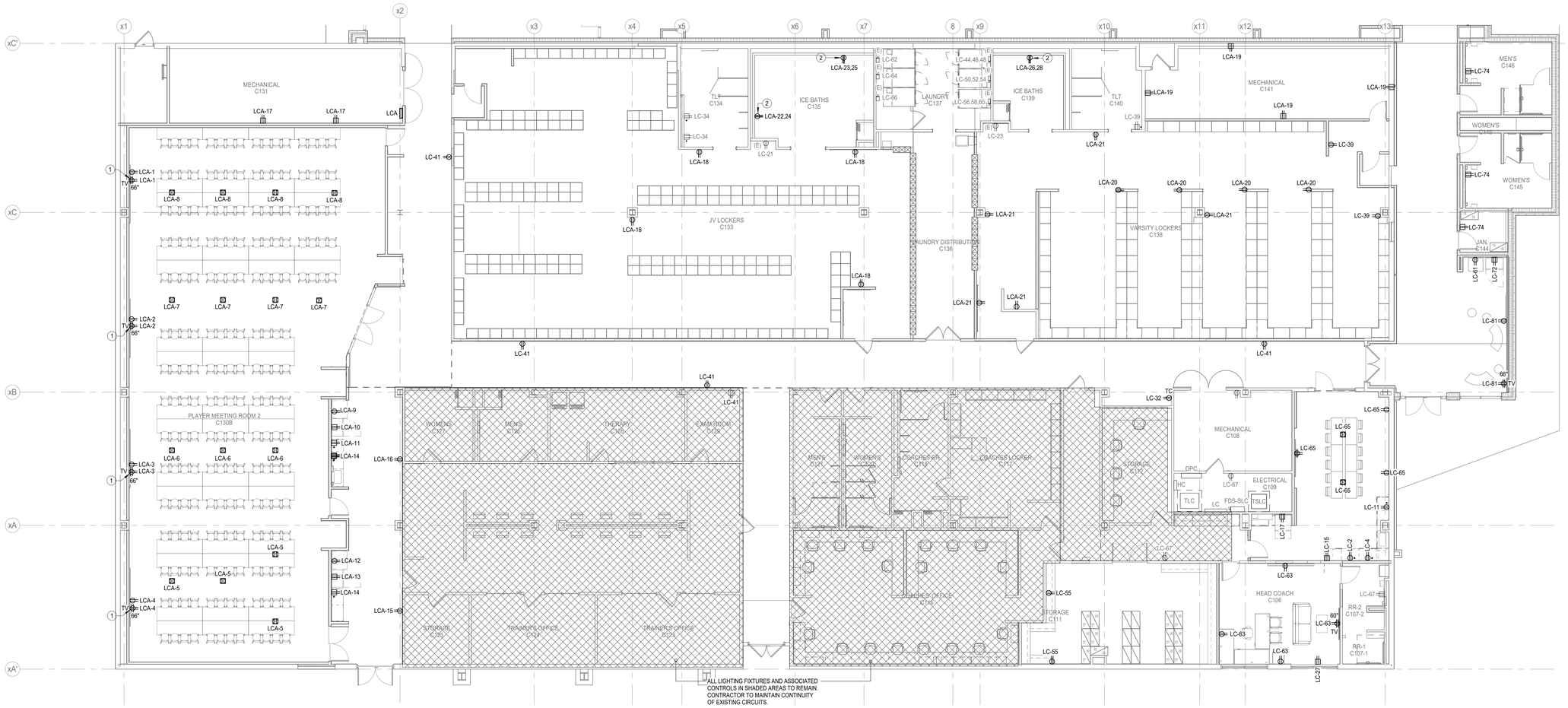
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - - - -
NEW WORK	———

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

1	DUPLEX RECEPTACLE FOR MONITOR AND CIRCUIT AS INDICATED. COORDINATE WITH ARCHITECTURAL ELEVATIONS AND PRE-MANUFACTURED WALL PANELS FOR EXACT MOUNTING HEIGHT AND LOCATIONS PRIOR TO ROUGH-IN AND INSTALLATION. REFER TO T-SERIES DRAWINGS FOR DATA DROPS ASSOCIATED WITH MONITORS.
2	NEMA-14-30L 250V RECEPTACLE FOR THERAPY TUB. PROVIDE 3-#10, #10G IN 3/4"C AND CIRCUIT AS INDICATED. VERIFY RECEPTACLE NEMA RATING WITH MANUFACTURER'S REQUIREMENTS PRIOR TO PURCHASE. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN AND INSTALLATION.



N

1 **ELECTRICAL POWER FLOOR PLAN - LEVEL ONE - UNIT A**
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL POWER PLAN - LEVEL ONE - UNIT A

SHEET NO.
E3.02A

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

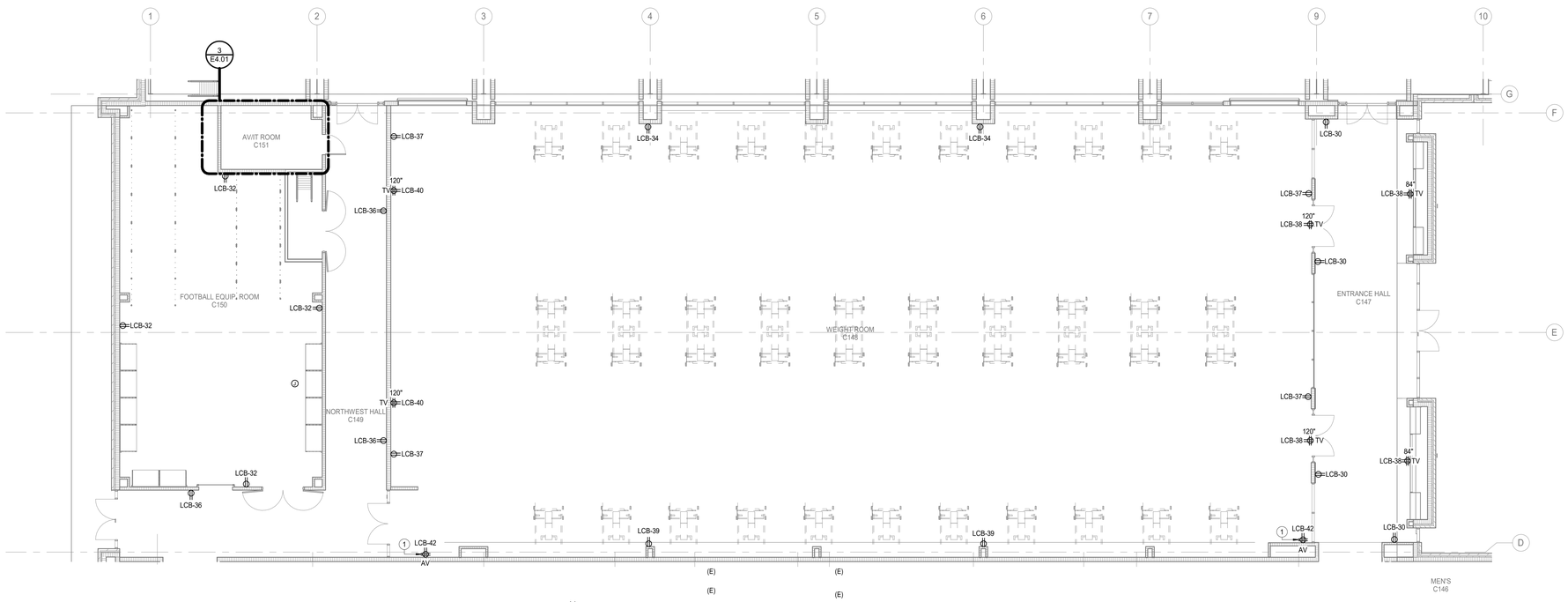
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - - - -
NEW WORK	———

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

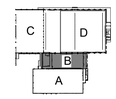
1	DUPLEX RECEPTACLE TO AUDIO/VISUAL EQUIPMENT RACK AND CIRCUIT AS INDICATED. REFERENCE T-SERIES DRAWINGS FOR ALL AUDIO/VISUAL SYSTEM POWER REQUIREMENTS. COORDINATE ALL POWER REQUIREMENTS WITH AUDIO/VISUAL CONSULTANT PRIOR TO ROUGH-IN AND INSTALLATION.



N

1 **ELECTRICAL POWER FLOOR PLAN - LEVEL ONE - UNIT B**

Scale: 1/8" = 1'-0"



VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ELECTRICAL POWER PLAN - LEVEL ONE - UNIT B

SHEET NO.

E3.03B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

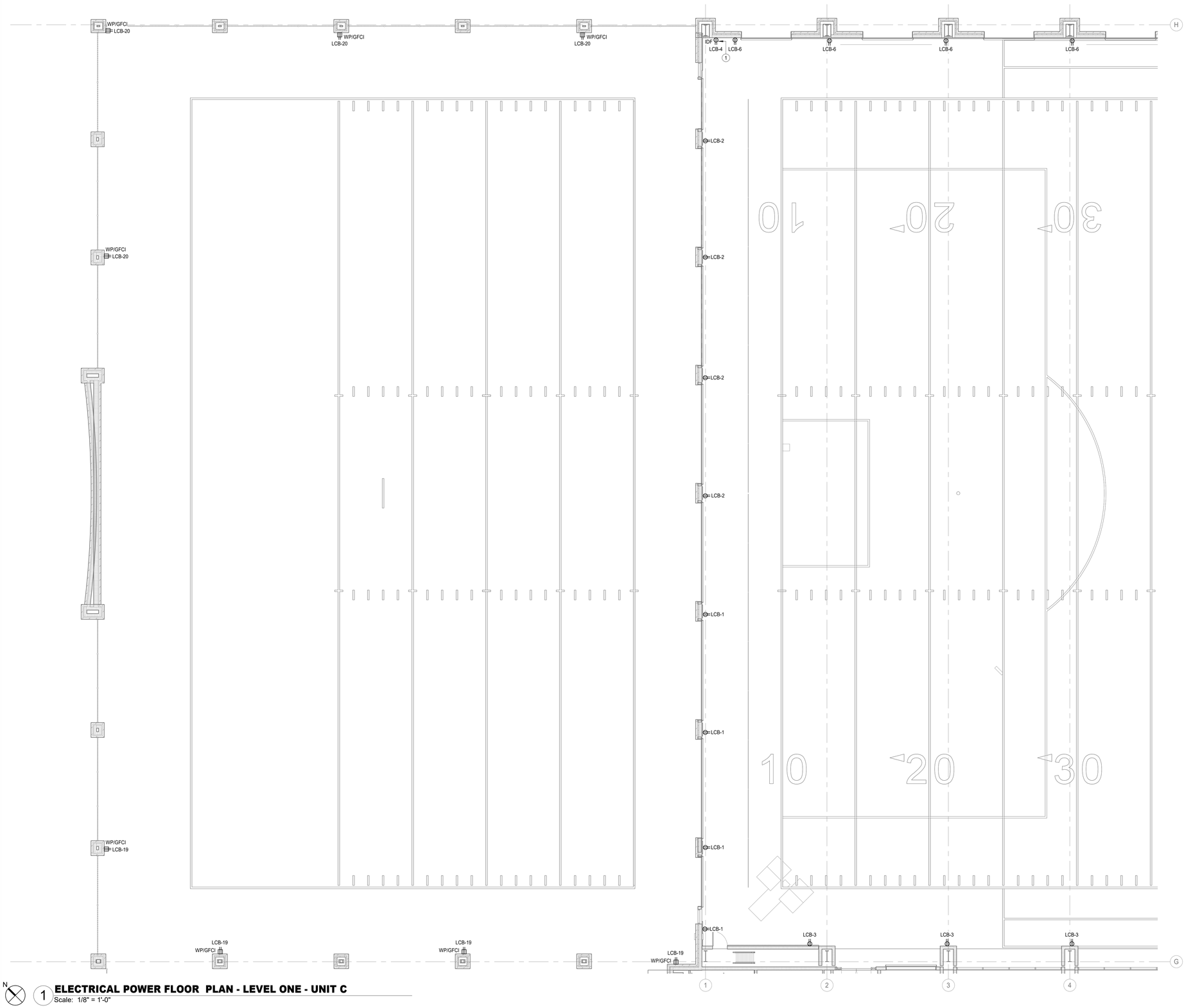
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - - - - - -
NEW WORK	———

POWER GENERAL NOTES

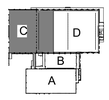
1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

1	DUPLEX RECEPTACLE TO IDF EQUIPMENT RACK AND CIRCUIT AS INDICATED. REFERENCE T-SERIES DRAWINGS FOR ALL AUDIO/VISUAL SYSTEM POWER REQUIREMENTS. COORDINATE ALL POWER REQUIREMENTS WITH AUDIO/VISUAL CONSULTANT PRIOR TO ROUGH-IN AND INSTALLATION.



1 **ELECTRICAL POWER FLOOR PLAN - LEVEL ONE - UNIT C**
Scale: 1/8" = 1'-0"



VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL POWER PLAN - LEVEL ONE - UNIT C

SHEET NO.
E3.04C

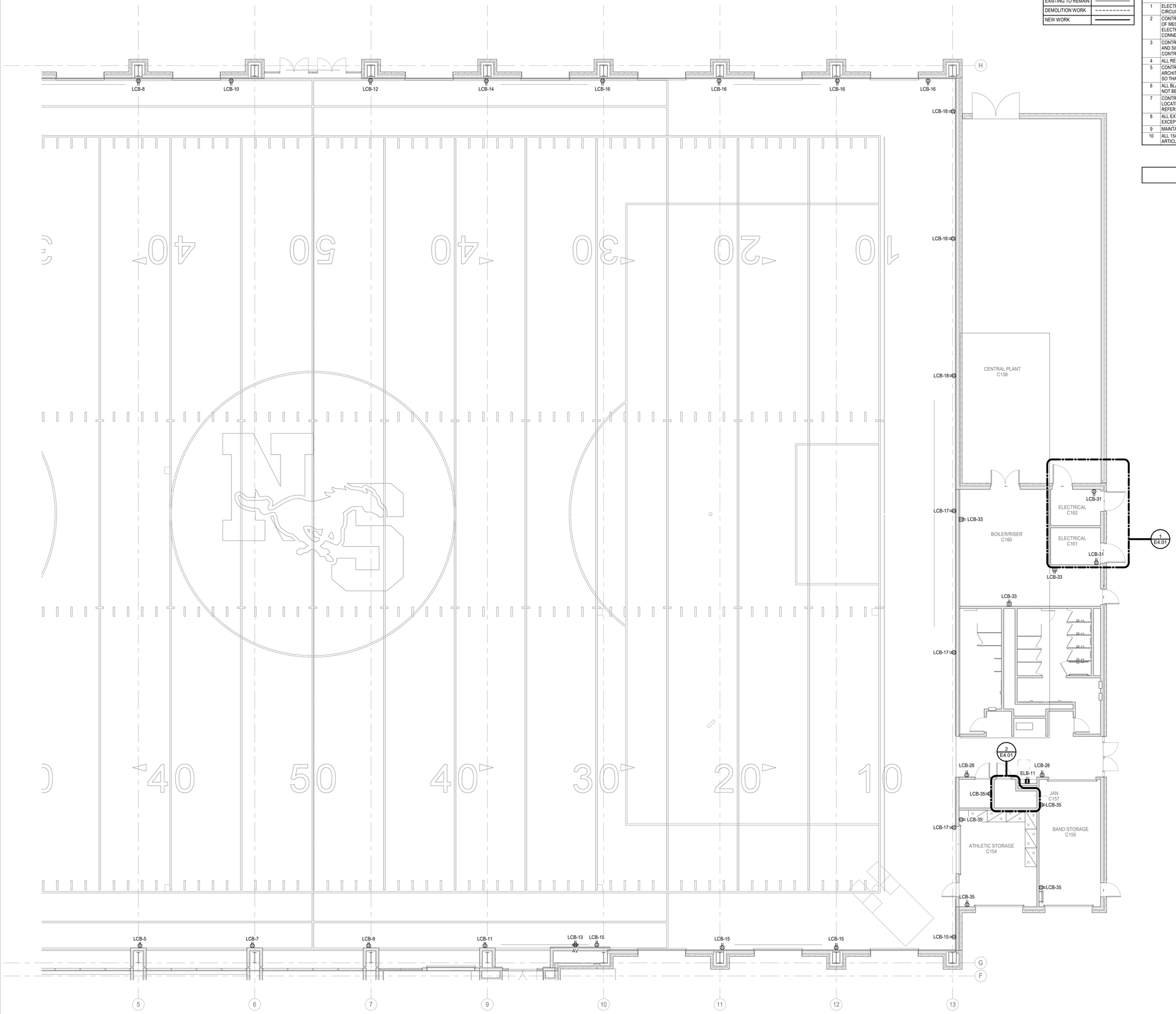
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - -
NEW WORK	———

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

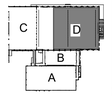
ELECTRICAL KEYED NOTES



N

1 **ELECTRICAL POWER FLOOR PLAN - LEVEL ONE - UNIT D**

Scale: 1/8" = 1'-0"



VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ELECTRICAL POWER PLAN - LEVEL ONE - UNIT D

SHEET NO.

E3.05D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

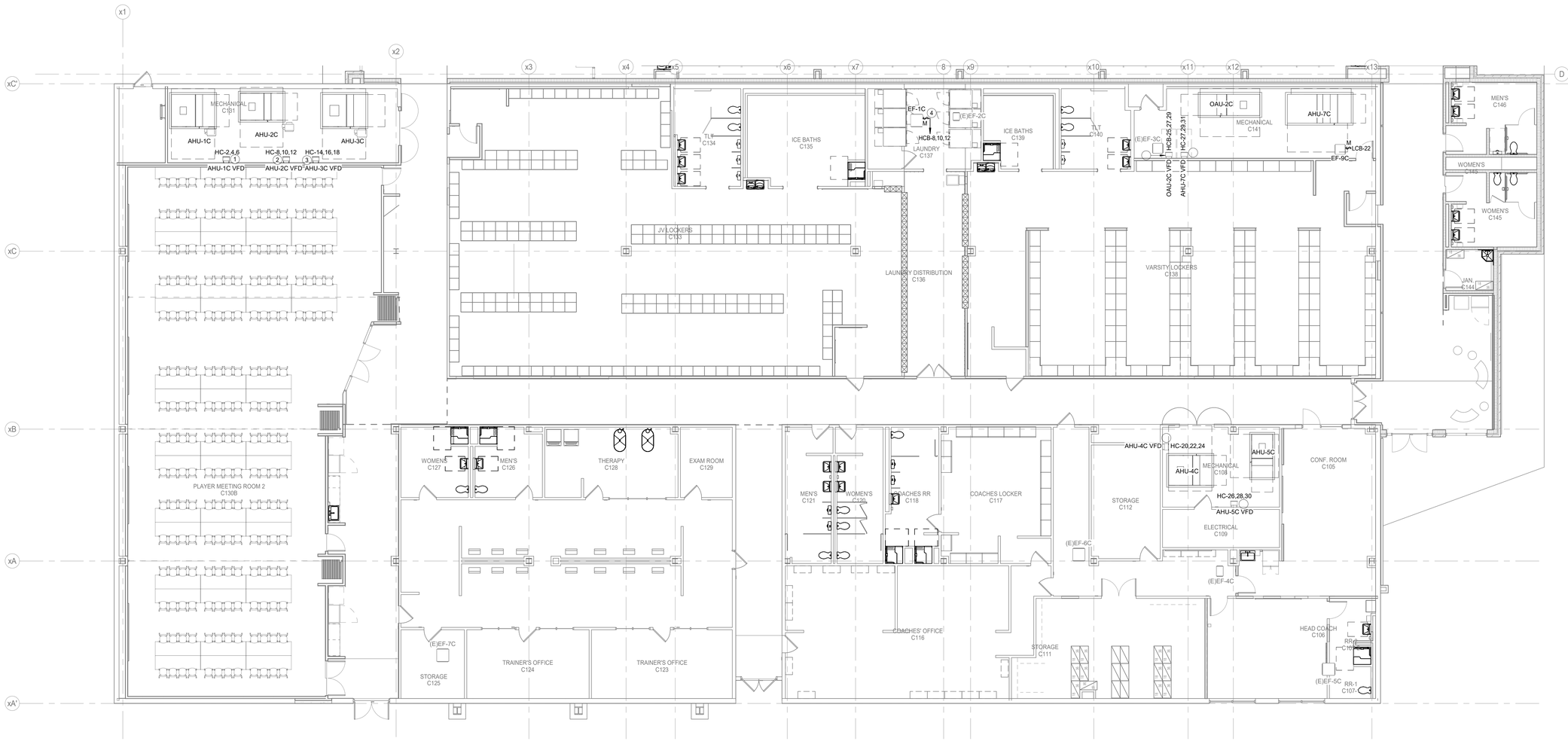
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - - - -
NEW WORK	———

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

	<varies>
1	CONNECTION TO AIR HANDLER UNIT, AHU-1C, VIA VARIABLE FREQUENCY DRIVE , AHU-1C-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
2	CONNECTION TO AIR HANDLER UNIT, AHU-2C, VIA VARIABLE FREQUENCY DRIVE , AHU-2C-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
3	CONNECTION TO AIR HANDLER UNIT, AHU-3C, VIA VARIABLE FREQUENCY DRIVE , AHU-3C-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
4	CONNECTION TO EXHAUST FAN, EF-1C, AND CIRCUIT AS SHOWN. PROVIDE 600V, 3-POLE 20A MOTOR-RATED SWITCH IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCH . DIV.26 TO FURNISH AND INSTALL DISCONNECT SWITCH. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS.



N

1 **ELECTRICAL EQUIPMENT FLOOR PLAN - LEVEL ONE - UNIT A**
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — 80219 — LICENSED — PROFESSIONAL ENGINEER — STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

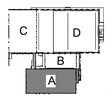
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT A

SHEET NO.
E3.07A



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

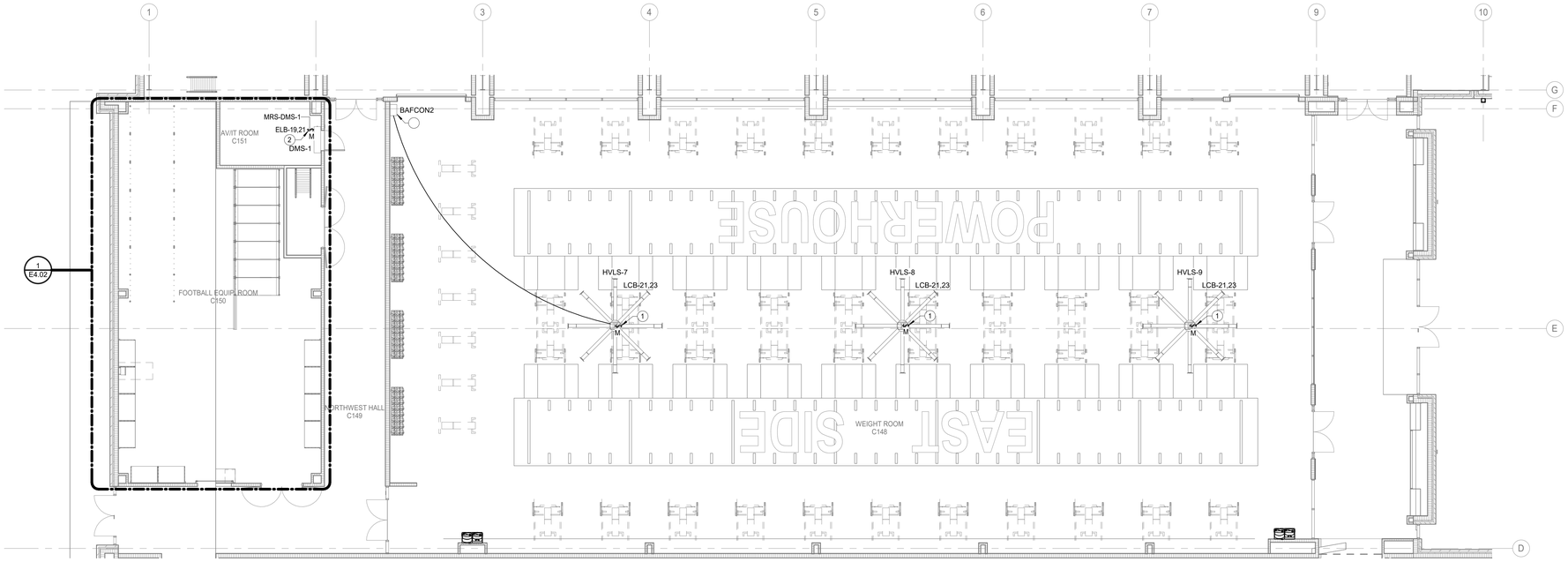
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - - - -
NEW WORK	———

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

	CONNECTION TO HIGH VELOCITY LOW SPEED FANS, HVLS-7, HVLS-8, AND HVLS-9, AND CIRCUIT AS SHOWN. PROVIDE 208V, 2-POLE 20A MOTOR-RATED SWITCHES IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCHES AT EACH FAN. FURNISH AND INSTALL DISCONNECT SWITCH BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS TO BAFCON CONTROLLER.
1	CONNECTION TO HIGH VELOCITY LOW SPEED FANS, HVLS-7, HVLS-8, AND HVLS-9, AND CIRCUIT AS SHOWN. PROVIDE 208V, 2-POLE 20A MOTOR-RATED SWITCHES IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCHES AT EACH FAN. FURNISH AND INSTALL DISCONNECT SWITCH BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS TO BAFCON CONTROLLER.
2	CONNECTION TO MIN-SPLIT FAN COIL UNIT, DMS-1, AND CIRCUIT AS SHOWN. PROVIDE 208V, 2-POLE, 20A MOTOR-RATED SWITCH IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCH. DIV. 26 TO FURNISH AND INSTALL DISCONNECT SWITCH. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS WITH REMOTE CONDENSING UNIT.



N

1 ELECTRICAL EQUIPMENT FLOOR PLAN - LEVEL ONE - UNIT B

Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

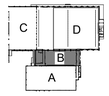
25-0056.00

SHEET TITLE

ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT B

SHEET NO.

E3.08B



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

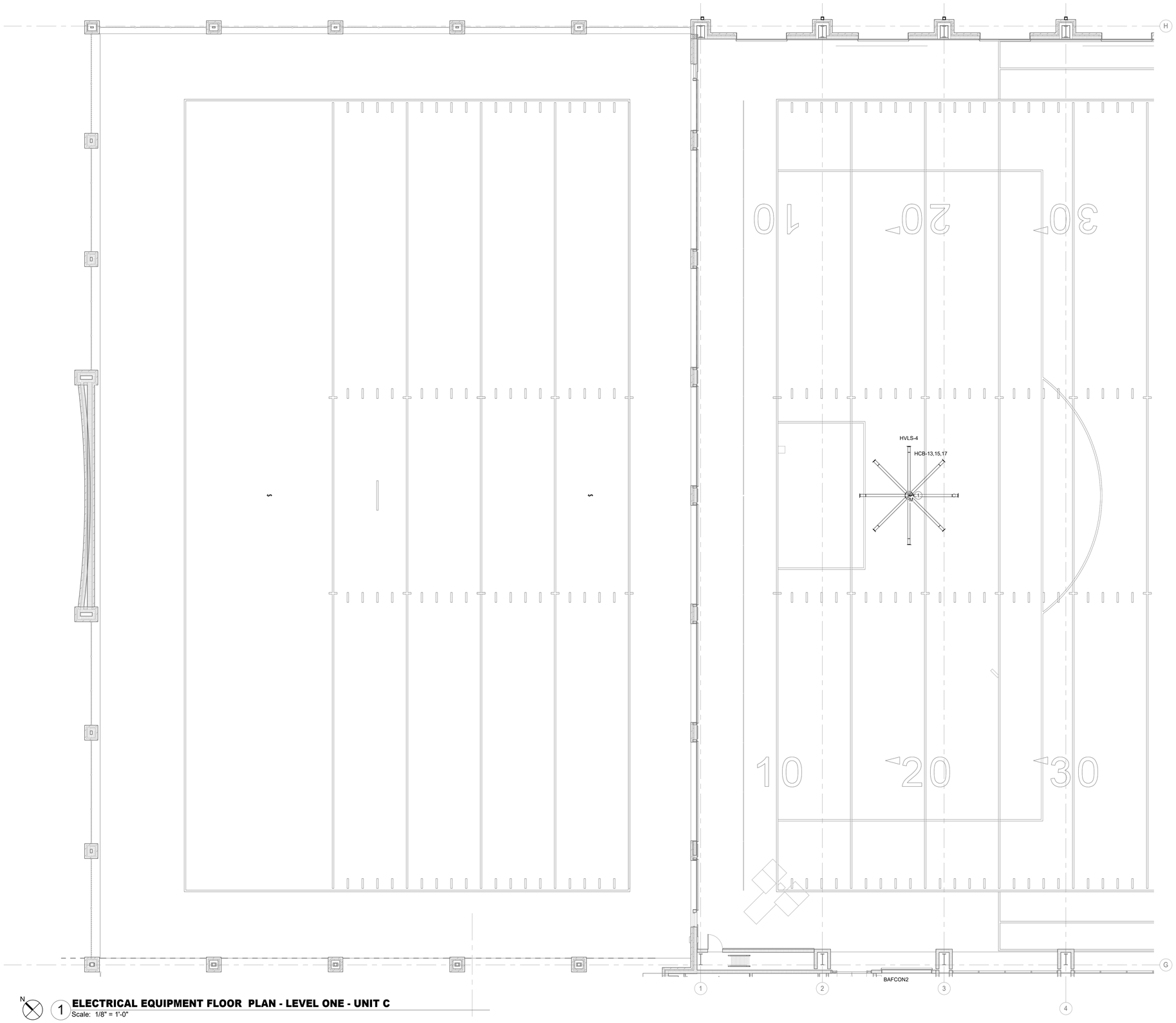
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - - - -
NEW WORK	———

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

1	CONNECTION TO HIGH VELOCITY LOW SPEED FANS, HVLS-1, HVLS-2, HVLS-3, AND HVLS-4, AND CIRCUIT AS SHOWN. PROVIDE 600V, 3-POLE 20A MOTOR-RATED SWITCHES IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCHES AT EACH FAN. FURNISH AND INSTALL DISCONNECT SWITCH BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS TO BAFCON1 CONTROLLER.



N

1 **ELECTRICAL EQUIPMENT FLOOR PLAN - LEVEL ONE - UNIT C**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

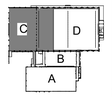
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT C

SHEET NO.
E3.09C



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

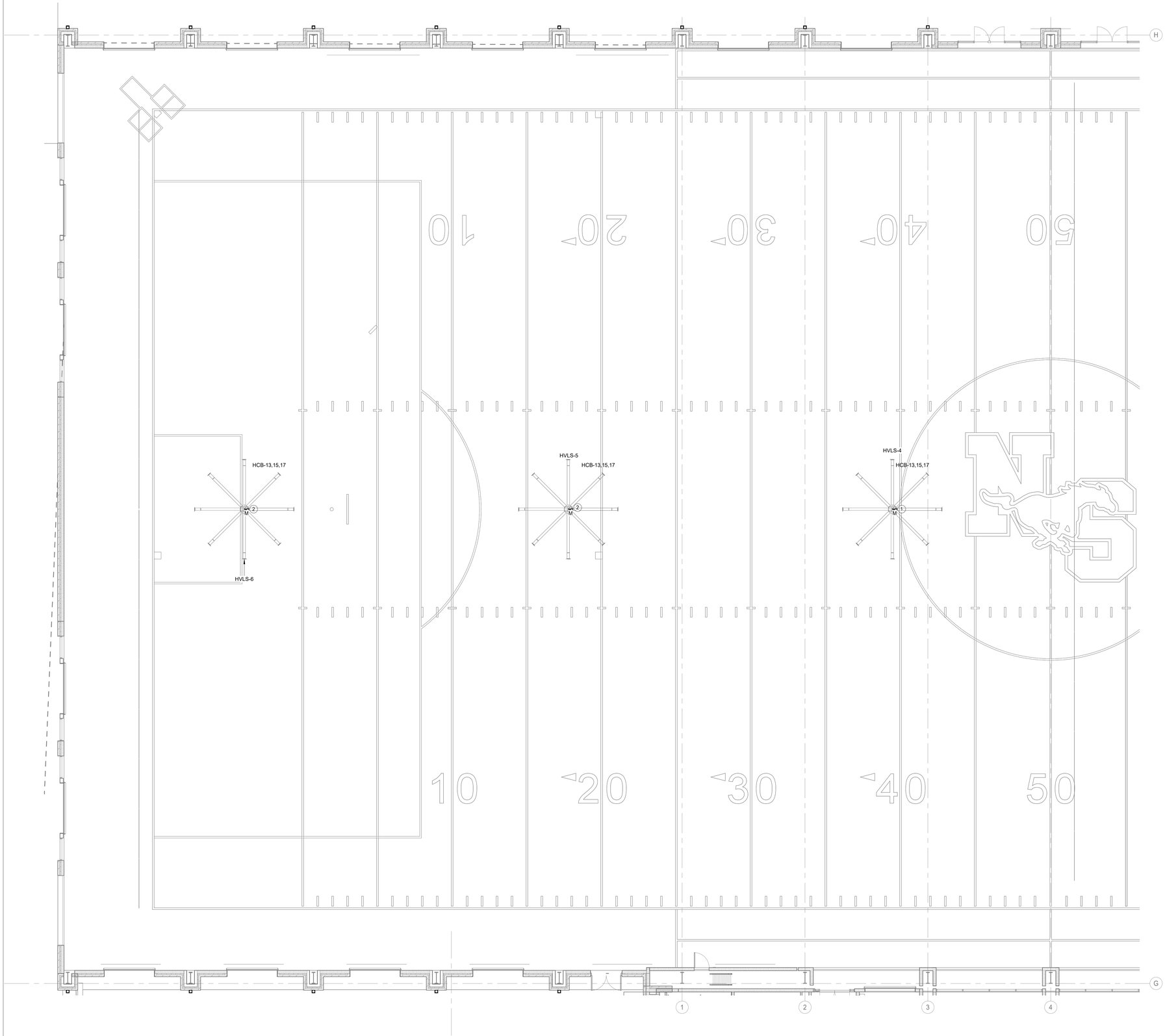
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - -
NEW WORK	———

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

1	CONNECTION TO HIGH VELOCITY LOW SPEED FANS, HVLS-1, HVLS-2, HVLS-3, AND HVLS-4, AND CIRCUIT AS SHOWN. PROVIDE 600V, 3-POLE 20A MOTOR-RATED SWITCHES IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCHES AT EACH FAN. FURNISH AND INSTALL DISCONNECT SWITCH BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS TO BAFCON1 CONTROLLER.
2	CONNECTION TO HIGH VELOCITY LOW SPEED FANS, HVLS-5 AND HVLS-6, AND CIRCUIT AS SHOWN. PROVIDE 600V, 3-POLE 20A MOTOR-RATED SWITCHES IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCHES AT EACH FAN. FURNISH AND INSTALL DISCONNECT SWITCH BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS TO BAFCON1 CONTROLLER. HVLS-5 & 6 ARE TO BE INSTALLED ONLY IF BUILDING IS EXTENDED TO INCLUDE ENTIRE FIELD.



N

1 **ELECTRICAL EQUIPMENT FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

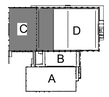
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT C - ALTERNATE

SHEET NO.
E3.09D



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

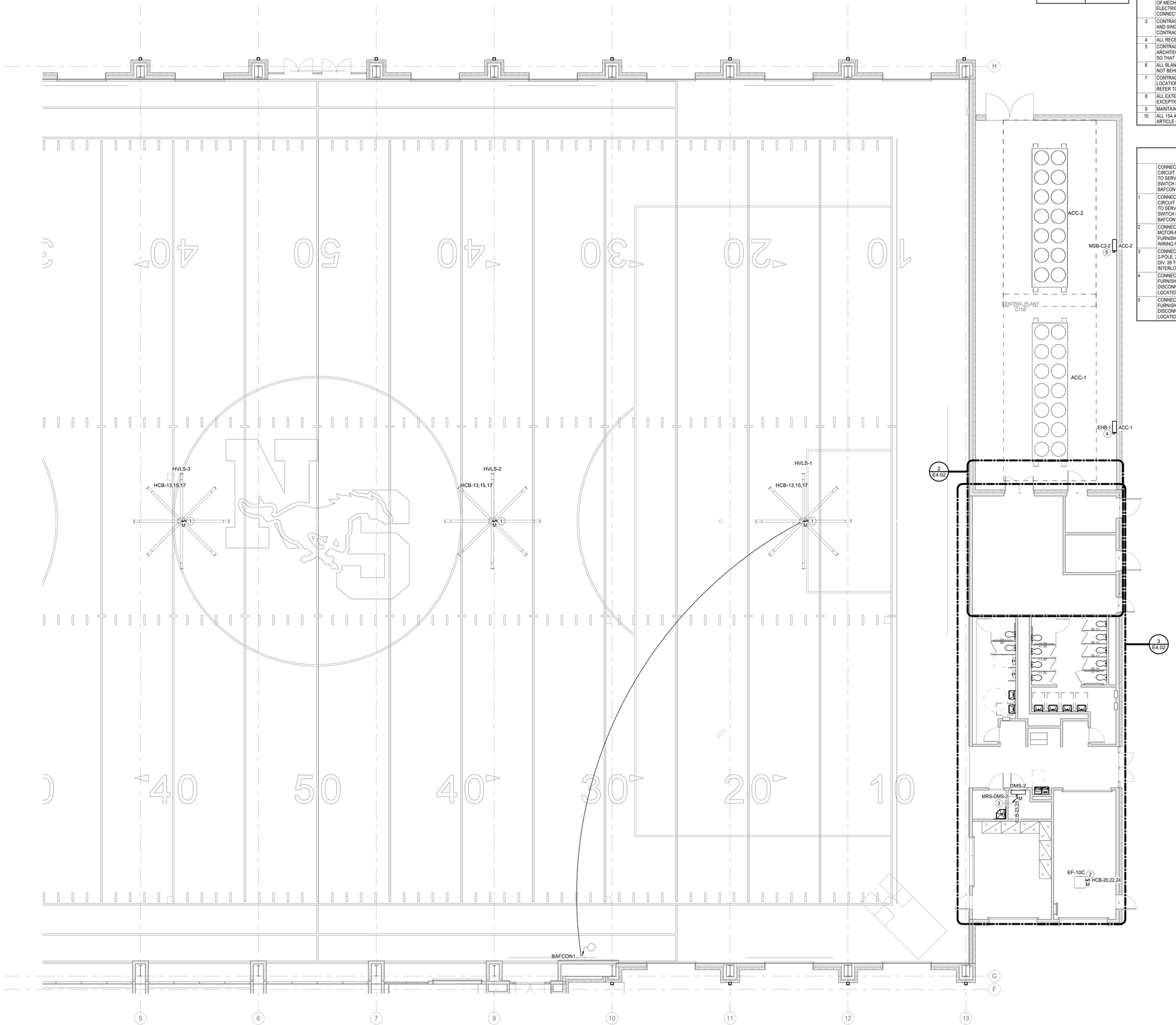
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - -
NEW WORK	———

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

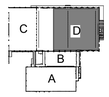
ELECTRICAL KEYED NOTES

	CONNECTION TO HIGH VELOCITY LOW SPEED FANS, HVLS-1, HVLS-2, HVLS-3, AND HVLS-4, AND CIRCUIT AS SHOWN. PROVIDE 600V, 3-POLE 20A MOTOR-RATED SWITCHES IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCHES AT EACH FAN. FURNISH AND INSTALL DISCONNECT SWITCH BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS TO BAFCON1 CONTROLLER.
1	CONNECTION TO HIGH VELOCITY LOW SPEED FANS, HVLS-1, HVLS-2, HVLS-3, AND HVLS-4, AND CIRCUIT AS SHOWN. PROVIDE 600V, 3-POLE 20A MOTOR-RATED SWITCHES IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCHES AT EACH FAN. FURNISH AND INSTALL DISCONNECT SWITCH BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS TO BAFCON1 CONTROLLER.
2	CONNECTION TO EXHAUST FAN, EF-10C, AND CIRCUIT AS SHOWN. PROVIDE 600V, 3-POLE 20A MOTOR-RATED SWITCH IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCH. DIV.26 TO FURNISH AND INSTALL DISCONNECT SWITCH. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS.
3	CONNECTION TO MIN-SPLIT FAN COIL UNIT, DMS-2, AND CIRCUIT AS SHOWN. PROVIDE 208V., 2-POLE, 20A MOTOR-RATED SWITCH IN NEMA-1 ENCLOSURE TO SERVE AS DISCONNECT SWITCH. DIV. 26 TO FURNISH AND INSTALL DISCONNECT SWITCH. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS WITH REMOTE CONDENSING UNIT.
4	CONNECTION TO AIR-COOLED CHILLER, ACC-1, AND CIRCUIT AS SHOWN. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. PROVIDE 600V, 800A, 3P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 1500A RF<<1 OR 5>> FUSES. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
5	CONNECTION TO AIR-COOLED CHILLER, ACC-2, AND CIRCUIT AS SHOWN. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. PROVIDE 600V, 800A, 3P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 1500A RF<<1 OR 5>> FUSES. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.



N

1 **ELECTRICAL EQUIPMENT FLOOR PLAN - LEVEL ONE - UNIT D**
Scale: 1/8" = 1'-0"



VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL EQUIPMENT PLAN - LEVEL ONE - UNIT D

SHEET NO.
E3.10D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

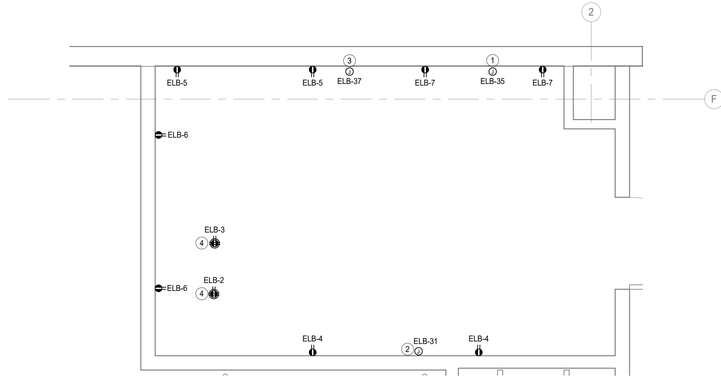
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	– – – – – –
NEW WORK	———

POWER GENERAL NOTES

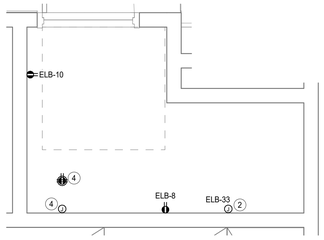
1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

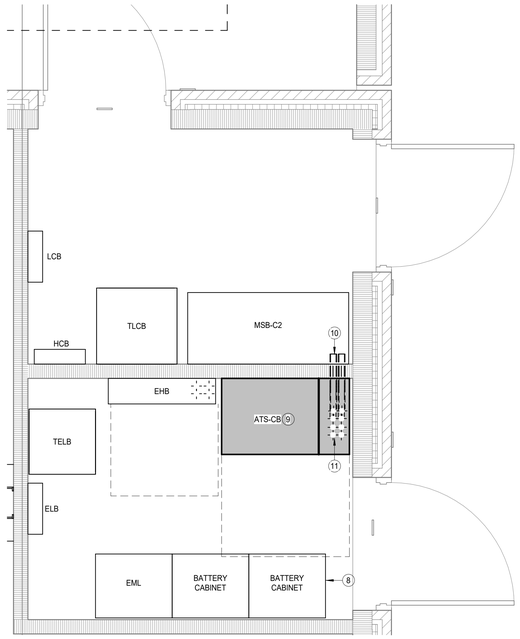
1	JUNCTION BOX FOR FIRE ALARM CONTROL PANEL, FACP, AND CIRCUIT AS INDICATED. REFERENCE T-SERIES DRAWINGS FOR COORDINATION OF MOUNTING LOCATION PRIOR TO ROUGH-IN AND INSTALLATION.
2	JUNCTION BOX FOR IDP/ACP PANEL AND CIRCUIT AS INDICATED. REFERENCE T-SERIES DRAWINGS FOR COORDINATION OF MOUNTING LOCATION PRIOR TO ROUGH-IN AND INSTALLATION.
3	JUNCTION BOX FOR FUTURE ERRCS PANEL AND CIRCUIT AS INDICATED. REFERENCE T-SERIES DRAWINGS FOR COORDINATION OF MOUNTING LOCATION PRIOR TO ROUGH-IN AND INSTALLATION.
4	QUAD RECEPTACLES FOR IT RACKS AND CIRCUIT AS SHOWN. ONE CONDUIT PER OUTLET BOX. COORDINATE WITH IT CONSULTANT AND T-SERIES DRAWINGS FOR EXACT MOUNTING LOCATION ON RACK PRIOR TO ROUGH-IN AND INSTALLATION.
5	UNDERGROUND FEEDERS IN SCHEDULE 40 PVC CONDUITS FROM MAIN SWITCHBOARD MSB-CB TO MANUAL TRANSFER SWITCH, MTS-CB, 'NORMAL' LUGS VIA CONCRETE ENCASED DUCT-BANK. CONTRACTOR TO ROUTE CONDUITS AND FEEDERS VIA EMERGENCY ELECTRICAL ROOM IN PULL BOX TO MAKE TRANSITION TO UNDERGROUND DUCT-BANK. CONTRACTOR TO COORDINATE WITH STRUCTURAL DRAWINGS TO ENSURE DUCT-BANK DEPTH PASSES UNDER STRUCTURAL BEAMS UNDERGROUND. REFER TO FEEDER SCHEDULE, SHEET E5.01.
6	
7	
8	FUTURE 500 KW NATURAL GAS GENERATOR IN WEATHER ENCLOSURE. REFER TO DETAIL 4, SHEET E5.01.
9	PROVIDE NEW 800A AUTOMATIC TRANSFER SWITCH, ATS-CB, WITH MAINTENANCE BY-PASS. TRANSFER SWITCH TO BE PROVIDED WITH MANUFACTURER INSTALLED 12" PULL-BOX FOR WIRE ACCESS.
10	PROVIDE 4-#3/0 AWG, 1-#2/0 AWG GROUND IN EACH OF FOUR (4) 2" SCHEDULE 40 PVC CONDUITS FROM MAIN SWITCHBOARD MSB-CB TO AUTOMATIC TRANSFER SWITCH, ATS-CB'S, 'NORMAL' LUGS AND CONNECT AS REQUIRED. RE-USE EXISTING CONDUITS OUT OF TOP OF MSB-CB THROUGH WALL TO EMERGENCY ELECTRICAL ROOM. REFER TO ONE-LINE DIAGRAM, SHEET E5.01 AND ELEVATIONS 5 & 6, SHEET E4.01.
11	PROVIDE 4-#3/0 AWG, 1-#2/0 AWG GROUND IN EACH OF FOUR (4) EXISTING 2" SCHEDULE 40 PVC CONDUITS FROM 500 KW GENERATOR TO ATS-CB'S 'EMERGENCY' LUGS VIA EXISTING UNDERGROUND CONCRETE ENCASED DUCT-BANK AND CONNECT AS REQUIRED. REFER TO REFER TO ONE-LINE DIAGRAM, SHEET E5.01 AND ELEVATIONS 5 & 6, SHEET E4.01.



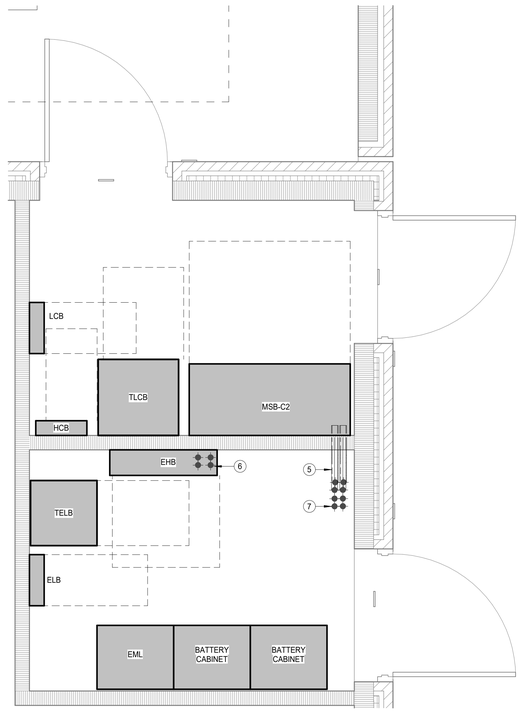
N 3 **ENLARGED POWER PLAN - AV/IT ROOM - AREA B**
Scale: 1/2" = 1'-0"



N 2 **ENLARGED POWER FLOOR PLAN - IDF ROOM C158**
Scale: 1/2" = 1'-0"



N 4 **ENLARGED POWER PLAN - ELECTRICAL ROOM - LEVEL ONE - UNIT D - ALTERNATE**
Scale: 1/2" = 1'-0"



N 1 **ENLARGED POWER PLAN - ELECTRICAL ROOM - LEVEL ONE - UNIT D**
Scale: 1/2" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

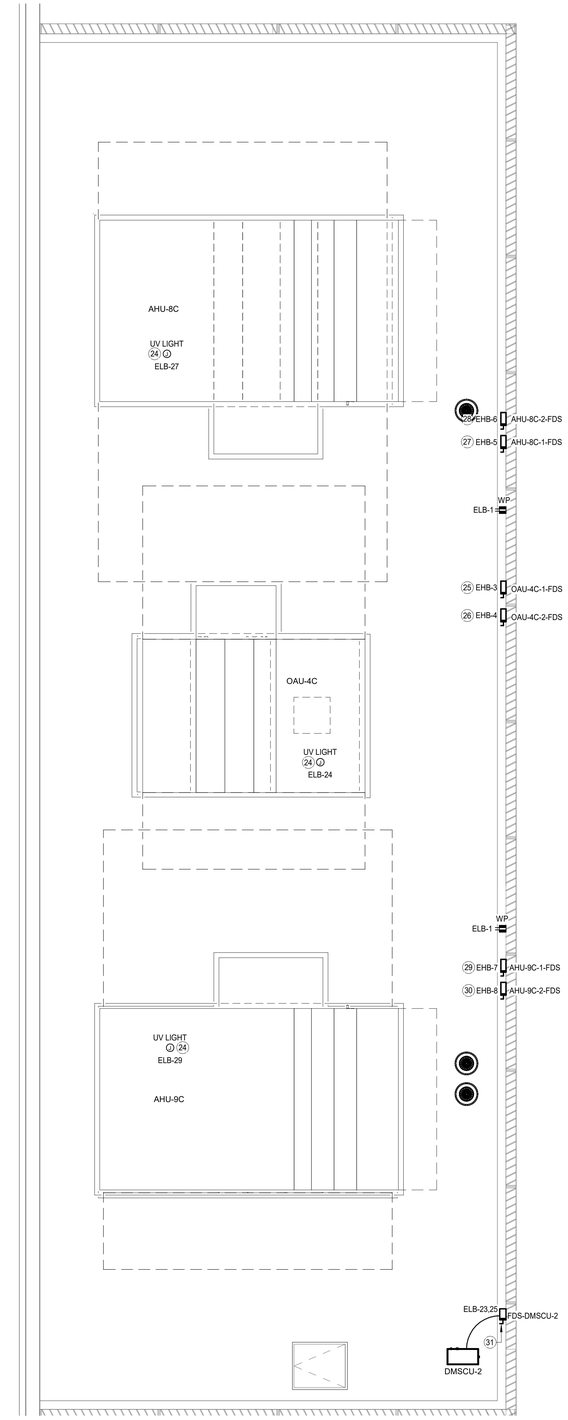
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL ENLARGED PLANS

SHEET NO.
E4.01

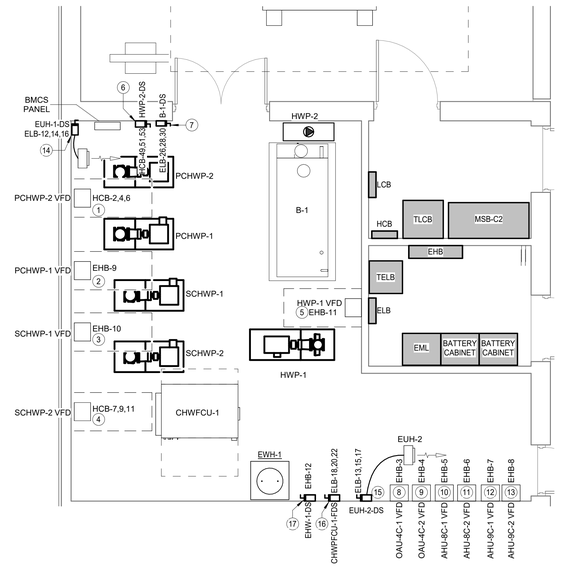
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



N

3 ENLARGED EQUIPMENT PLAN - MECHANICAL MEZZANINE - UNIT D

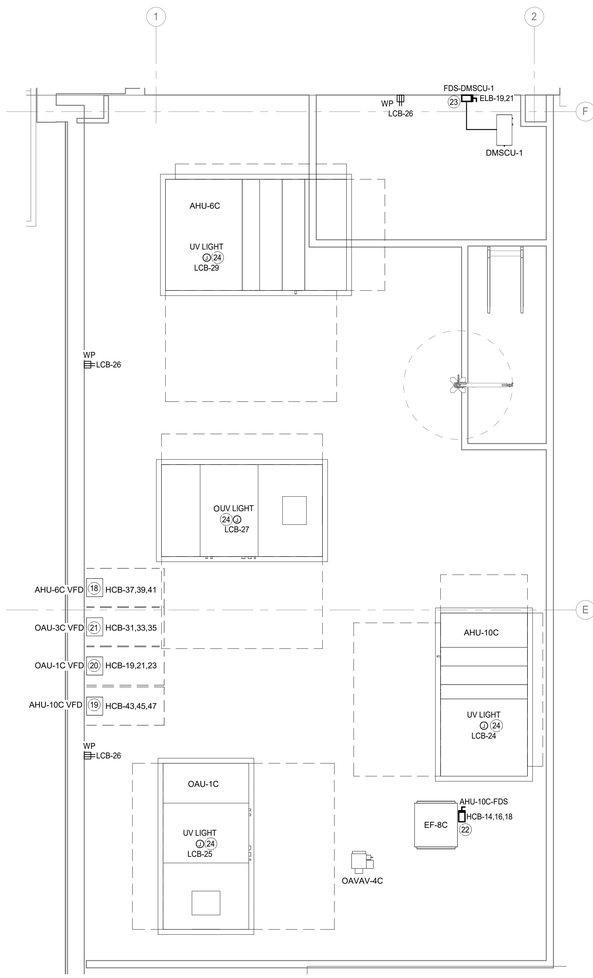
Scale: 1/4" = 1'-0"



N

2 ENLARGED EQUIPMENT PLAN - BOILER/RISER RM C164 - UNIT D

Scale: 1/4" = 1'-0"



N

1 ENLARGED EQUIPMENT PLAN - MECHANICAL MEZZANINE - UNIT B

Scale: 1/4" = 1'-0"

POWER GENERAL NOTES

1	ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3	CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4	ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5	CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6	ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7	CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8	ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9	MAINTAIN THE CONTINUITY OF CIRCUITS TO ALL EXISTING LOADS TO REMAIN.
10	ALL 15A AND 20A, 120V AND 208V NON-LOCKING TYPE RECEPTACLES IN AREAS SPECIFIED IN NEC ARTICLE 406.12 SHALL BE LISTED AS TAMPER-RESISTANT.

ELECTRICAL KEYED NOTES

1	CONNECTION TO CHILLED WATER PRIMARY PUMP, PCHWP-1, VIA VARIABLE FREQUENCY DRIVE , PCHWP-1-VFD, AND CIRCUIT AS SHOWN. PROVIDE VFD WITH INTEGRAL DISCONNECT TO BE FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
2	CONNECTION TO CHILLED WATER PRIMARY PUMP, PCHWP-2, VIA VARIABLE FREQUENCY DRIVE , PCHWP-2-VFD, AND CIRCUIT AS SHOWN. PROVIDE VFD WITH INTEGRAL DISCONNECT TO BE FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
3	CONNECTION TO CHILLED WATER SECONDARY PUMP, SCHWP-1, VIA VARIABLE FREQUENCY DRIVE , SCHWP-1-VFD, AND CIRCUIT AS SHOWN. PROVIDE VFD WITH INTEGRAL DISCONNECT TO BE FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
4	CONNECTION TO CHILLED WATER SECONDARY PUMP, SCHWP-2, VIA VARIABLE FREQUENCY DRIVE , SCHWP-2-VFD, AND CIRCUIT AS SHOWN. PROVIDE VFD WITH INTEGRAL DISCONNECT TO BE FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
5	CONNECTION TO HOT WATER PUMP, HWP-1, VIA VARIABLE FREQUENCY DRIVE , HWP-1-VFD, AND CIRCUIT AS SHOWN. PROVIDE VFD WITH INTEGRAL DISCONNECT TO BE FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
6	CONNECTION TO HOT WATER PUMP, HWP-2 AND CIRCUIT AS SHOWN. PROVIDE 250V, 30A, 3P, NEMA-1 NON-FUSIBLE DISCONNECT SWITCH. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS.
7	CONNECTION TO BOILER, B-1 AND CIRCUIT AS SHOWN. PROVIDE 600V, 30A, 3P, NEMA-1 NON-FUSIBLE DISCONNECT SWITCH. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS.
8	CONNECTION TO OUTSIDE AIR HANDLER UNIT, OAU-4C-1, VIA VARIABLE FREQUENCY DRIVE , OAU-4C-1-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
9	CONNECTION TO OUTSIDE AIR HANDLER UNIT, OAU-4C-2, VIA VARIABLE FREQUENCY DRIVE , OAU-4C-2-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
10	CONNECTION TO AIR HANDLER UNIT, AHU-8C-1, VIA VARIABLE FREQUENCY DRIVE , AHU-8C-1-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
11	CONNECTION TO AIR HANDLER UNIT, AHU-8C-2, VIA VARIABLE FREQUENCY DRIVE , AHU-8C-2-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
12	CONNECTION TO AIR HANDLER UNIT, AHU-9C-1, VIA VARIABLE FREQUENCY DRIVE , AHU-9C-1-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
13	CONNECTION TO AIR HANDLER UNIT, AHU-9C-2, VIA VARIABLE FREQUENCY DRIVE , AHU-9C-2-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
14	CONNECTION TO ELECTRIC UNIT HEATER, EUH-1, AND CIRCUIT AS SHOWN. PROVIDE 600V, 100A, 3P, 3F, NEMA 3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 20A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26.
15	CONNECTION TO ELECTRIC UNIT HEATER, EUH-2, AND CIRCUIT AS SHOWN. PROVIDE 600V, 100A, 3P, 3F, NEMA 3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 20A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26.
16	CONNECTION TO CHILLED WATER FAN COIL UNIT, CWHFCU-1, AND CIRCUIT AS SHOWN. PROVIDE 250V, 30A, 3P, 3F, NEMA 1 FUSIBLE DISCONNECT SWITCH WITH THREE (3) 20A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26.
17	CONNECTION TO ELECTRIC WATER HEATER, EWH-1, AND CIRCUIT AS SHOWN. PROVIDE 600V, 30A, 3P, NEMA 1, NON-FUSIBLE DISCONNECT SWITCH. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26.
18	CONNECTION TO AIR HANDLER UNIT, AHU-6C, VIA VARIABLE FREQUENCY DRIVE , AHU-6C-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
19	CONNECTION TO AIR HANDLER UNIT, AHU-10C, VIA VARIABLE FREQUENCY DRIVE , AHU-10C-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
20	CONNECTION TO OUTSIDE AIR HANDLER UNIT, OAU-1C, VIA VARIABLE FREQUENCY DRIVE , OAU-1C-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
21	CONNECTION TO OUTSIDE AIR HANDLER UNIT, OAU-3C, VIA VARIABLE FREQUENCY DRIVE , OAU-3C-VFD, WITH INTEGRAL DISCONNECT AND CIRCUIT AS SHOWN. VFD FURNISHED BY DIV. 23 AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION.
22	CONNECTION TO EXHAUST FAN, EF-8C, AND CIRCUIT AS SHOWN. PROVIDE 600V, 30A, 3P, 3F, NEMA-1 FUSIBLE DISCONNECT SWITCH WITH THREE (3) 20A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE WITH DIV.23 FOR INTERLOCKING WIRING REQUIREMENTS.
23	CONNECTION TO MINI-SPLIT CONDENSING UNITS, DMSCU-1, AND CIRCUIT AS SHOWN. PROVIDE 250V, 60A, 2P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 60A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26.
24	120V CONTROL POWER CONNECTION TO UV LIGHTING IN HVAC UNIT AND CIRCUIT AS INDICATED. COORDINATE WITH DIV. 23 FOR EXACT LOCATION AND CONNECTION REQUIREMENTS.
25	CONNECTION TO OUTSIDE AIR HANDLER UNIT, OAHU-4C-1, AND CIRCUIT AS SHOWN. PROVIDE 600V, 60A, 3P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 60A RK1 FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
26	CONNECTION TO OUTSIDE AIR HANDLER UNIT, OAHU-4C-2, AND CIRCUIT AS SHOWN. PROVIDE 600V, 60A, 3P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 60A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
27	CONNECTION TO AIR HANDLER UNIT, AHU-8C-1, AND CIRCUIT AS SHOWN. PROVIDE 600V, 100A, 3P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 70A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
28	CONNECTION TO AIR HANDLER UNIT, AHU-8C-2, AND CIRCUIT AS SHOWN. PROVIDE 600V, 100A, 3P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 70A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
29	CONNECTION TO AIR HANDLER UNIT, AHU-9C-1, AND CIRCUIT AS SHOWN. PROVIDE 600V, 100A, 3P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 70A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
30	CONNECTION TO AIR HANDLER UNIT, AHU-9C-2, AND CIRCUIT AS SHOWN. PROVIDE 600V, 100A, 3P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 70A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26. COORDINATE EXACT LOCATION WITH DIV. 23 PRIOR TO ROUGH-IN AND INSTALLATION. CONTRACTOR TO PROVIDE LOCAL DISCONNECT AT UNIT AND INTERLOCK DISCONNECT TO VFD TO ENSURE POWER IS ALWAYS TURNED OFF AT THE VFD.
31	CONNECTION TO MINI-SPLIT CONDENSING UNITS, DMSCU-2, AND CIRCUIT AS SHOWN. PROVIDE 250V, 30A, 2P, 3F, NEMA-3R FUSIBLE DISCONNECT SWITCH WITH THREE (3) 25A FUSES. DISCONNECT TO BE FURNISHED AND INSTALLED BY DIV. 26.

LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	– – – – – –
NEW WORK	———

VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien — Houston, 10930 W. Sam Houston Pkwy North, Suite 900, Houston, TX 77064 — Salas O'Brien Registration: F-4111 — Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — STATE OF TEXAS — 80219 — LICENSED — PROFESSIONAL ENGINEER

10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

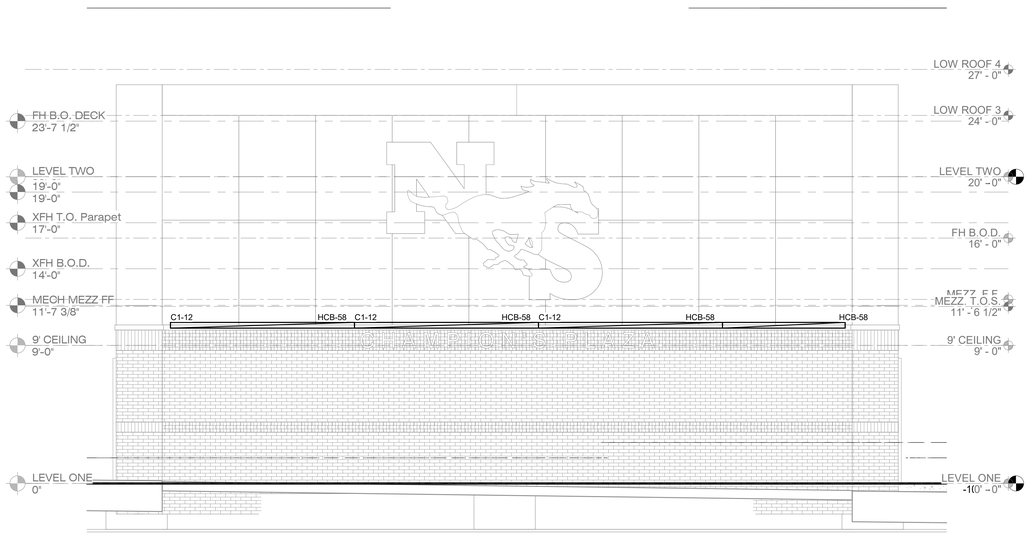
SHEET TITLE

ELECTRICAL ENLARGED PLANS

SHEET NO.

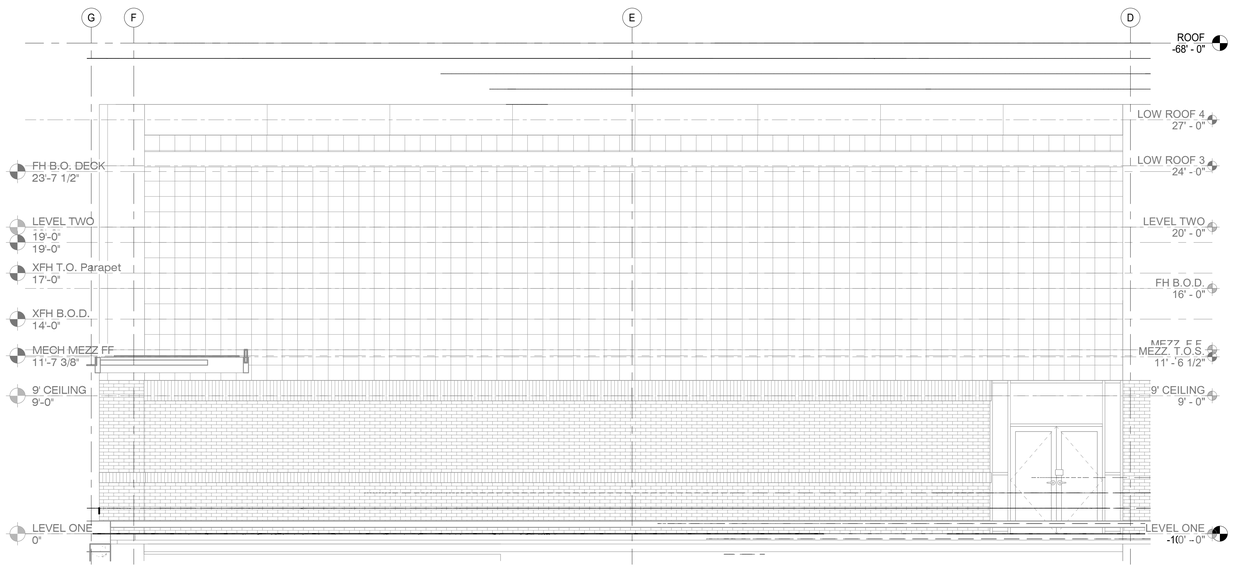
E4.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



N

1 **CHAMPIONS WALL**
Scale: 1/4" = 1'-0"



N

2 **UNIT B WEST WALL**
Scale: 1/4" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

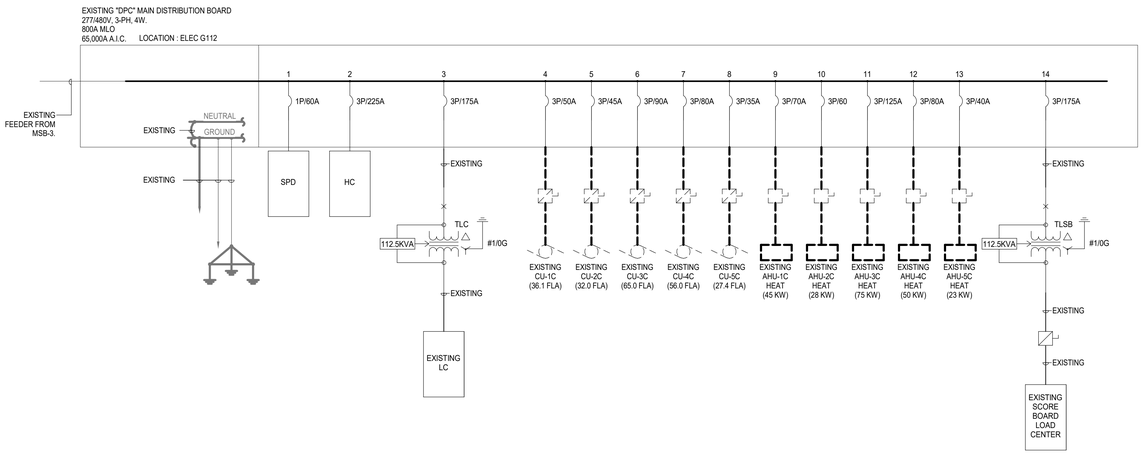
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL ENLARGED PLANS

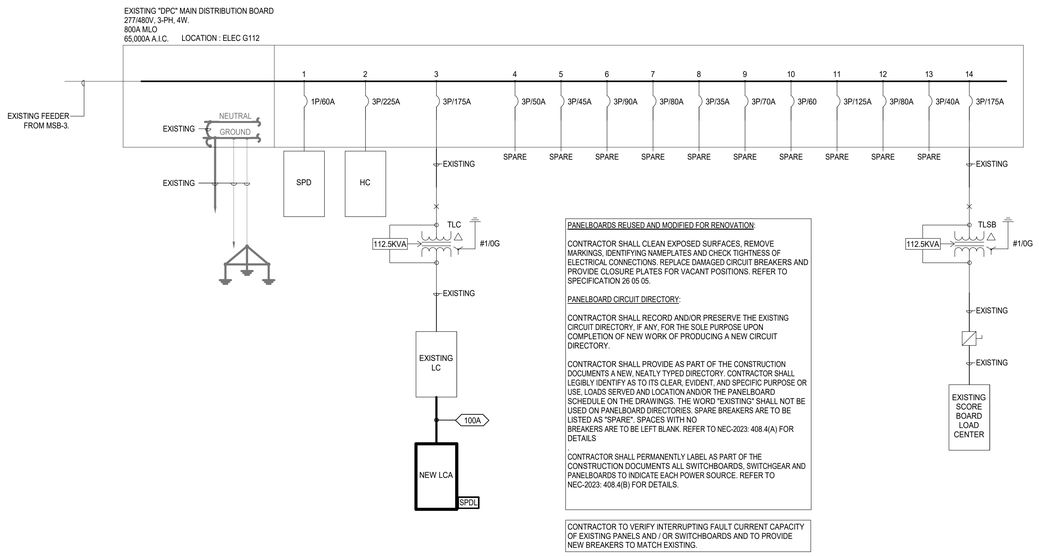
SHEET NO.
E4.03

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 ONE LINE DIAGRAM - DEMOLITION - EXISTING SERVICE ENTRANCE

Scale: **N.T.S.**



PANELBOARDS REUSED AND MODIFIED FOR RENOVATION:

CONTRACTOR SHALL CLEAN EXPOSED SURFACES, REMOVE MARKINGS, IDENTIFYING NAMEPLATES AND CHECK TIGHTNESS OF ELECTRICAL CONNECTIONS. REPLACE DAMAGED CIRCUIT BREAKERS AND PROVIDE CLOSURE PLATES FOR VACANT POSITIONS. REFER TO SPECIFICATION 26 05 05.

PANELBOARD CIRCUIT DIRECTORY:

CONTRACTOR SHALL RECORD AND/OR PRESERVE THE EXISTING CIRCUIT DIRECTORY, IF ANY, FOR THE SOLE PURPOSE UPON COMPLETION OF NEW WORK OF PRODUCING A NEW CIRCUIT DIRECTORY.

CONTRACTOR SHALL PROVIDE AS PART OF THE CONSTRUCTION DOCUMENTS A NEW, NEATLY TYPED DIRECTORY. CONTRACTOR SHALL LEGIBLY IDENTIFY AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. LOADS SERVED AND LOCATION AND/OR THE PANELBOARD SCHEDULE ON THE DRAWINGS. THE WORD "EXISTING" SHALL NOT BE USED ON PANELBOARD DIRECTORIES. SPARE BREAKERS ARE TO BE LISTED AS "SPARE". SPACES WITH NO BREAKERS ARE TO BE LEFT BLANK. REFER TO NEC-2023: 408.4(A) FOR DETAILS

CONTRACTOR SHALL PERMANENTLY LABEL AS PART OF THE CONSTRUCTION DOCUMENTS ALL SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS TO INDICATE EACH POWER SOURCE. REFER TO NEC-2023: 408.4(B) FOR DETAILS.

CONTRACTOR TO VERIFY INTERRUPTING FAULT CURRENT CAPACITY OF EXISTING PANELS AND / OR SWITCHBOARDS AND TO PROVIDE NEW BREAKERS TO MATCH EXISTING.

2 ONE LINE DIAGRAM - NEW WORK - EXISTING SERVICE ENTRANCE

Scale: **N.T.S.**

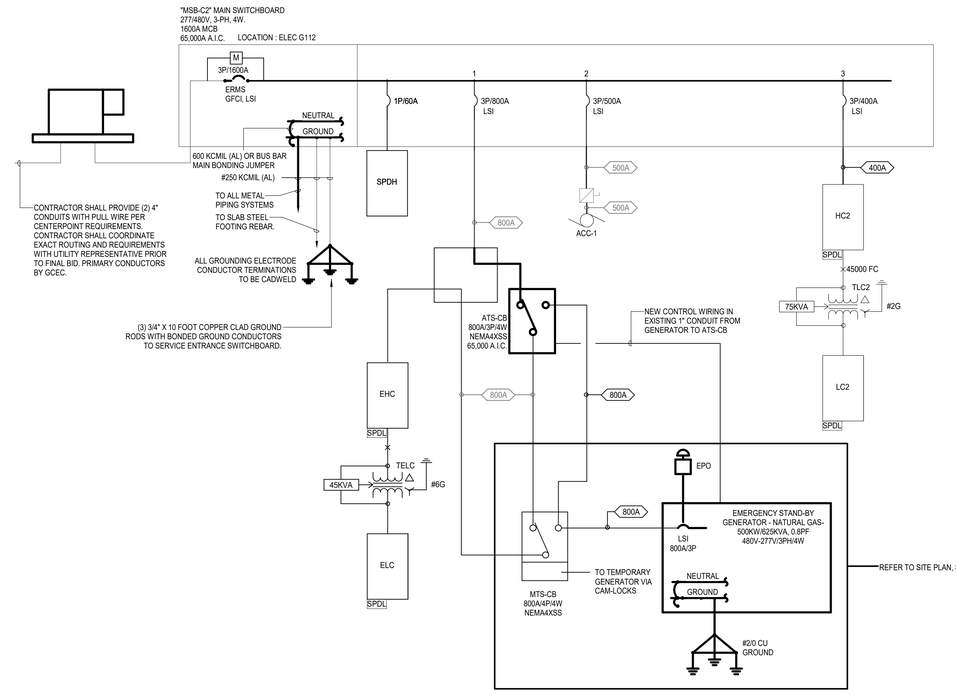
LINETYPE LEGEND	
EXISTING TO REMAIN	———
DEMOLITION WORK	- - - - - -
NEW WORK	———

TRANSFORMER SCHEDULE

PRIMARY (480V 3PH 3W +GND)			SECONDARY (120/208V 3PH 4W +GND)		
KVA	WIRE & CONDUIT	CIRCUIT BREAKER	WIRE & CONDUIT	CIRCUIT BREAKER	GROUNDING ELECTRODE CONDUCTOR
45KVA	3#4, 1#8G,1-1/4"C	3P-70A	4#1/0, 1#6G,2"C	3P-150A	#6
75KVA	3#2, 1#6G,1-1/4"C	3P-125A	4#250KCMIL, 1#2G,3"C	3P-250A	#2

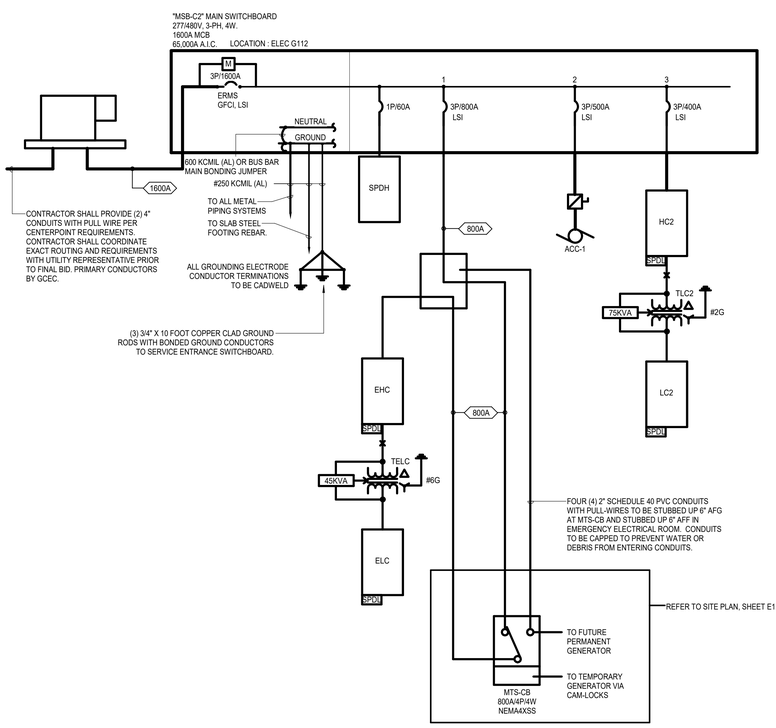
FEEDER SCHEDULE

AMPERAGE	# SETS	CONDUCTOR (QTY.)SIZE	GROUND (QTY.)SIZE	CONDUIT
800A	4	(4) #3/0	#1/0	2"C
500A	2	(4) #250KCMIL	#2	3"C
500A	2	(4) #250KCMIL	#2	3"C
100A	1	(4) #3	#8	1-1/4"C
800A	4	(4) #3/0	#1/0	2"C
800A	4	(4) #3/0	#1/0	2"C
800A	4	(4) #3/0	#1/0	2"C
800A	4	(4) #3/0	#1/0	2"C
800A	4	(4) #3/0	#1/0	2"C
1600A	5	(4) #400KCMIL	#4/0	3"C
400A	2	(4) #3/0	#2	2"C



4 ONE LINE DIAGRAM - NEW SERVICE ENTRANCE (ALETERNATE 1)

Scale: **N.T.S.**



3 ONE LINE DIAGRAM - NEW SERVICE ENTRANCE

Scale: **N.T.S.**

ALL ELECTRICAL EQUIPMENT/WIREWAYS AND UTILITY TRANSFORMERS SHALL BE INSTALLED ABOVE FLOODPLAIN AS REQUIRED BY AUTHORITY HAVING JURISDICTION.

CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND THE ONE-LINE DIAGRAM SHOWN PRIOR TO COMMENCEMENT OF WORK.

VERIFY EXISTING CONDITIONS AND CONDUIT ROUTING. CONTRACTOR TO VERIFY THAT EXISTING CONDUITS ARE IN GOOD CONDITIONS TO PULL NEW CONDUCTORS IN PRIOR TO COMMENCEMENT OF WORK AND TO NOTIFY ENGINEER IF CONDUITS NEED TO BE REPLACED. REFER TO SURVEY FOR MORE INFORMATION.

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND, WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING ANY INSTALLATION AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR SHALL NOTIFY CAREY RAMSEY WITH THE DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR TO NOTIFY REPRESENTATIVE WITH DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

COORDINATE EMERGENCY SYSTEM ELECTRICAL PANELBOARDS, CIRCUIT BREAKERS, AND DISCONNECT FUSES WITH MANUFACTURER TO COMPLY WITH COORDINATION STUDY REQUIREMENTS FOR NEC PRIOR TO SUBMITTAL.

CONTRACTOR SHALL PROVIDE A COORDINATION STUDY, FAULT CURRENT ANALYSIS, AND ARC-FLASH STUDY REPORT FOR NEW ELECTRICAL DISTRIBUTION EQUIPMENT DOWNSTREAM TO THE LAST NEW OVERCURRENT DEVICE IN EACH FEEDER OR BRANCH CIRCUIT. CONDUCTED AND PREPARED BY THE SWITCHGEAR MANUFACTURER. THE COORDINATION STUDY AND FAULT CURRENT ANALYSIS SHALL INCLUDE THE MANUFACTURER'S RECOMMENDATIONS FOR ALL ADJUSTABLE OVERCURRENT DEVICES SPECIFIED OR PROVIDED. STUDY DOES NOT REQUIRE INCLUSION OF EXISTING SWITCHGEAR, EXCEPT IT SHALL INCLUDE EXISTING OR NEW OVERCURRENT DEVICES IN EXISTING SWITCHGEAR SERVING NEW DISTRIBUTION EQUIPMENT. CONTRACTOR SHALL SUBMIT THE REPORT RESULTS PRIOR TO SUBMITTING SWITCHGEAR SUBMITTALS TO ALLOW CHANGES OR MODIFICATIONS TO EQUIPMENT SELECTION.

PROVIDE TESTING BY NETA CERTIFIED COMPANY, CLEANING AND MAINTENANCE FOR EXISTING SWITCHBOARDS, WHICH SHALL INCLUDE: CHECKING FOR SHORT CIRCUITS AND CONTINUITY OF CIRCUITS, INSULATION RESISTANCE TESTING, CHECKING CIRCUIT BREAKERS OPERATION, GROUND FAULT INTERRUPTER TESTING, THERMAL INFRARED SCAN OF SWITCHBOARD UNDER FULL LOAD, CHECKING ALL BOLTED CONNECTIONS FOR HIGH RESISTANCE, PERFORMING GROUND RESISTANCE TESTING, AND CHECKING LOW VOLTAGE CONTROLS WIRING/DEVICES AND INSTRUMENT TRANSFORMERS FOR PROPER OPERATION. CONTRACTOR SHALL PROVIDE A COMPLETE WRITTEN REPORT INDICATING ANY DEFICIENCIES IN RELATION TO EACH COMPONENT'S INTENDED FUNCTION AND RECOMMENDATIONS FOR RESOLVING ANY DEFICIENCY.

INSULATION FOR 2-HOUR FIRE RATED POWER CABLES: INSULATION SHALL MEET OR EXCEED THE REQUIREMENTS OF UL 2196 FIRE TEST FOR ELECTRICAL CIRCUIT PROTECTION SYSTEMS, AND UL 44, STANDARDS FOR FIRE RESISTIVE CABLE. CONDUCTOR AMPACITY SHALL BE BASED ON 75C. COMBINATION UL TYPE INSULATION TYPES ARE PERMISSIBLE WHERE THE REQUIRED UL TYPE IS PART OF THE COMBINATION UL LISTING.
1 CONDUCTORS INSTALLED UNDERGROUND: INSULATION FOR UNDERGROUND FIRE RATED CONDUCTORS SHALL BE WET LOCATION, UL TYPE RHW 75 DEGREES C, OR UL RHW-2 90 DEGREES C.
2 CONDUCTORS INSTALLED ABOVE GROUND: INSULATION FOR ABOVE GROUND FIRE RATED CONDUCTORS SHALL BE UL TYPE RHH 90C OR RHW 75C OR UL RHW-2 90C.
3 ELECTRICAL CIRCUIT PROTECTIVE SYSTEMS (FHIT) – SYSTEM 27 OF THE UL FIRE RESISTANCE DIRECTORY

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ELECTRICAL ONE-LINE DIAGRAM

SHEET NO.

E5.01

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

Branch Panel: HC

EXISTING

Location: STORAGE C112 | **Volts:** 277/480 Wye | **A.I.C. Rating:** 18,000
Supply From: DPC | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Recessed | **Wires:** 4 | **Mains:** 400A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1	**LTG LOUNGE C143**		20 1	0.8 / 3.8						2	
	3	**LTG MEETING RM**	**12**	20 1		0.6 / 3.8		3 25	**12**	**AHU-1C (10.0 HP) MECHANICAL C131**	4	
	5	**LTG VARISTY/JV LOCKERS C133/C138**	**12**	20 1			1.5 / 3.8				6	
	7	*Lighting*	E	20 1	1.2 / 3.8						8	
	9	**WALL PACK EXTERIOR LTG**	10	20 1		0.1 / 3.8		3 25	**12**	**AHU-2C (10.0 HP) MECHANICAL C131**	10	
	11	**CORRIDOR LTG**	**12**	20 1			0.4 / 3.8				12	
	13	Lighting	E	20 1	2.8 / 3.8						14	
	15	**Existing LTG, NEW OFFICE LTG**	**12**	20 1		1.8 / 3.8		3 25	**12**	**AHU-3C (10.0 HP) MECHANICAL C131**	16	
	17	*Lighting*	E	20 1			1.8 / 3.8				18	
	19	***Lighting***	**12**	20 1	1.4 / 3.0						20	
	21	**LTG MECHANICAL C141**	**12**	20 1		0.3 / 3.0		3 25	**12**	**AHU-4C (10.0 HP) MECHANICAL C108**	22	
	23	**CEILING PANEL LTG**	12	20 1			0.5 / 3.0				24	
	25	Lighting	E	20 1	1.0 / 2.1						26	
	27					2.1 / 2.1		3 20	**12**	**AHU-5C (5.0 HP) MECHANICAL C108**	28	
	29	**AHU-7C (5.0 HP) MECHANICAL C141**	**12**	20 3			2.1 / 2.1				30	
	31				2.1 / 3.0						32	
	33	TRANSFORMER TLG	E	40 2		5.0 / 3.0		3 20	E	WASHER	34	
	35						5.0 / 3.0				36	
	37				3.0 / 3.0						38	
	39	WASHER	E	20 3		3.0 / 3.0		3 20	E	WASHER	40	
	41						3.0 / 3.0				42	
		Total Load:			34.9 kVA	35.5 kVA	37.0 kVA					
		Total Amps:			126 A	128 A	134 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	56.3 kVA	100.00%	56.3 kVA		
Lighting	14.1 kVA	125.00%	17.6 kVA	**Total Conn. Load:**	107.3 kVA
Miscellaneous	27.0 kVA	100.00%	27.0 kVA	**Total Est. Demand:**	110.9 kVA
Other	10.0 kVA	100.00%	10.0 kVA	**Total Conn. Current:**	129 A
				Total Est. Demand Current:	133 A

Notes:
BOLD - NEW; ITALIC - PARTIAL EXISITNG LIGHTING CIRCUIT TO REMAIN;
BOLD/ITALIC - PARTIAL NEW LIGHTING TIED INTO EXISITNG LIGHTING CIRCUIT

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: LC

EXISTING

Location: ELECTRICAL C109 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10,000
Supply From: TLC | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Surface | **Wires:** 4 | **Mains:** 400A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1	EF-1C JV LOCKER RM C136	E	20 1	0.5 / 0.2			1 20	**12**	**GFCI RECEPT**	2	
	3	EF-2C LAUNDRY C140	E	20 1		0.5 / 0.2		1 20	**12**	**GFCI RECEPT**	4	
	5	EF-3C VARSITY LOCKER RM C140	E	20 1			0.5 / 0.5	1 20	E	Receptacles OFFICE C124	6	
	7	EF-4C,EF-5C HALL C110, HC C106	E	20 1	0.5 / 0.5			1 20	E	Receptacles EXAM RM C129	8	
	9	EF-6C HALL C119	E	20 1		0.5 / 0.5		1 20	E	Receptacles TRAINING C122	10	
	11	**GFCI RECEPT**	**12**	20 1			0.2 / 0.5	1 20	E	Receptacles TRAINING C122	12	
	13	Receptacle STORAGE C125	E	20 1	0.5 / 0.5			1 20	E	Receptacles OFFICE C124	14	
	15	**ICE MAKER CONF RM C106**	**#12**	20 1		1.8 / 0.5		1 20	E	Receptacles CLASSROOM C123	16	
	17	**REFIRGERATOR CONF RM C106**	**#12**	20 1			0.2 / 0.5	1 20	E	Receptacles CLASSROOM C123, WP/GFCI	18	
	19	ICE MACHINE THERAPY C128	E	20 1	0.5 / 0.5			1 20	E	Receptacles THERAPY C128	20	
G	21	Water Fountain Rec JV LOCKERS 4	E	20 1		0.2 / 0.5		1 20	E	Receptacles THERAPY C128	22	
G	23	Water Fountain Rec VARSITY LOCKERS 5	E	20 1			0.2 / 0.5	1 20	E	WHIRLPOOL THERAPY C128	24	
	25	Receptacles		20 1	0.5 / 0.5			1 20	E	WHIRLPOOL THERAPY C128	26	
	27	**MINI-FRIDGE HEAD COACH C106**	**12**	20 1		0.2 / 0.5		1 20	E	WHIRLPOOL THERAPY C128	28	
	29						8.5 / 0.5	1 20	E	Receptacles C122, C126, C127	30	
	31	**NEW PANEL 'LC-1'**	**#3**	**125** **3**	8.9 / 0.2			1 20	**#12**	**TIMECLOCK CORRIDOR C101**	32	
	33					7.0 / 0.4		1 20	E	Receptacles TOILETS C137	34	
--	35	**SPARE**	**--**	20 1			0.0 / 0.3				36	
	37	EF-7C STORAGE C125	E	20 1	0.5 / 0.3			2 20		Receptacles	38	
	39	***GP REC's VARSITY LOCKERS C138***	***12***	20 1		0.5 / 0.5		1 20		Receptacles	40	
	41	**CORRIDOR RECEPTACLES**	**#12**	20 1			0.9 / 0.5	1 20		Receptacles	42	
	43	Receptacle EXAM RM C129	E	20 1	0.5 / 0.0						44	
	45	Receptacles C118,C120, C121	E	20 1		0.5 / 0.0		3 30	E	WASHER LAUNDRY C140	46	
	47	Receptacles COACHING STAFF C116	E	20 1			0.5 / 0.0				48	
	49	Receptacles COACHING STAFF C116	E	20 1	0.5 / 0.0						50	
	51	Rec's COACHING STAFF C116/LOCKER C117	E	20 1		0.5 / 0.0		3 30	E	WASHER LAUNDRY C140	52	
	53	Receptacles COACHING STAFF C116	E	20 1			0.5 / 0.0				54	
	55	**GP REC's STORAGE C111**	**12**	20 1	0.4 / 0.0						56	
	57	Receptacles	E	20 1		0.5 / 0.0		3 30	E	WASHER LAUNDRY C140	58	
	59	Receptacles	E	20 1			0.5 / 0.0				60	
	61	**WARMING CABINET LOUNGE C143**	**#12**	20 1	0.2 / 0.0			1 25	E	DRYER LAUNDRY C140	62	
	63	**GP REC's HEAD COACH 38**	**12**	20 1		0.9 / 0.0		1 25	E	DRYER LAUNDRY C140	64	
	65	**GP REC's CONF. ROOM C105**	**12**	20 1			1.1 / 0.0	1 25	E	DRYER LAUNDRY C140	66	
	67	Receptacles MECH C108, ELEC/TELE C109	E	20 1	0.7 / 0.5			1 20	E	TTB ELEC/TELE C109	68	
	69	Receptacles		20 1		0.5 / 0.5		1 20	E	TTB ELEC/TELE C109	70	
	71	VENDING MACHINES CORRIDOR C101	E	20 1			0.5 / 0.2	1 20	**#12**	**GLASS DOOR REF LOUNGE C143**	72	
	73	VENDING MACHINES CORRIDOR C101	E	20 1	0.5 / 0.5			1 20	**#12**	**GP GFCI JAN. C144**	74	
	75	VENDING MACHINES CORRIDOR C101	E	20 1		0.5 / 0.0		1 20	--	**SPARE**	76	--
	77	DAMPERS	E	20 1			0.5 / 0.5	1 20		EXSITING	78	
	79	FIRE SMOKE DAMPERS	E	20 1	0.5 / 0.5			1 20		EXISTING	80	
	81	**GP REC's LOUNGE C143**	**#12**	20 1		0.6 / 0.5		1 20		EXISTING	82	
	83	EXISTING		20 1			0.5 / 0.5	1 20		EXISTING	84	
		Total Load:			19.4 kVA	18.8 kVA	19.0 kVA					
		Total Amps:			161 A	157 A	158 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	3.5 kVA	100.00%	3.5 kVA		
Kitchen Equipment	5.0 kVA	70.00%	3.5 kVA	**Total Conn. Load:**	57.1 kVA
Miscellaneous	0.5 kVA	100.00%	0.5 kVA	**Total Est. Demand:**	39.2 kVA
Motor	1.5 kVA	100.00%	1.5 kVA	**Total Conn. Current:**	159 A
Receptacles	44.2 kVA	61.32%	27.1 kVA	**Total Est. Demand Current:**	109 A
Existing	2.5 kVA	125.00%	3.1 kVA		

Notes:

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: LCA

Location: MECHANICAL C131 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10,000
Supply From: LC | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Surface | **Wires:** 4 | **Mains:** 100A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1	TV, GP REC'S PLAYER MTG RM C130B	#12	20 1	0.6 / 0.4			1 20	#12	TV, GP REC'S PLAYER MTG RM C130B	2	
	3	TV, GP REC'S PLAYER MTG RM C130B	#12	20 1		0.4 / 0.4		1 20	#12	TV, GP REC'S PLAYER MTG RM C130B	4	
	5	FLR REC's PLAYER MTG RM C130B	#12	20 1			0.7 / 0.5	1 20	#12	FLR REC's PLAYER MTG RM C130B	6	
	7	FLR REC's PLAYER MTG RM C130B	#12	20 1	0.7 / 0.7			1 20	#12	FLR REC's PLAYER MTG RM C130B	8	
	9	Receptacles SERVING HALL C132	#12	20 1		1.8 / 1.0		1 20	#12	Receptacles SERVING HALL C132	10	
	11	Receptacles SERVING HALL C132	#12	20 1			0.4 / 0.2	1 20	#12	Receptacles SERVING HALL C132	12	
	13	Receptacles SERVING HALL C132	#12	20 1	0.2 / 0.4			1 20	#12	Receptacles SERVING HALL C132	14	
	15	Receptacles SERVING HALL C132	#12	20 1		0.2 / 0.2		1 20	#12	Receptacles SERVING HALL C132	16	
	17	GFCI SVC REC's MECHANICAL C131	#12	20 1			0.4 / 0.7	1 20	#12	GP REC's JV LOCKERS C133	18	
	19	HVAC SVC REC's MECHANICAL C141	#12	20 1	0.7 / 0.7			1 20	#12	GP REC's VARSITY LOCKERS C138	20	
	21	GP REC's VARSITY LOCKERS C138	#12	20 1			0.9 / 2.1				22	
	23							2 20	#10	THERAPY TUB ICE BATHS C135	24	
	25	THERAPY TUB ICE BATHS C135	#10	30 2	2.1 / 2.1						26	
	27					0.0 / 2.1		2 20	#10	THERAPY TUB ICE BATHS C139	28	
	29										30	
	31										32	
	33										34	
	35										36	
	37										38	
	39										40	
	41										42	
		Total Load:			8.5 kVA	8.9 kVA	7.0 kVA					
		Total Amps:			73 A	76 A	59 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Kitchen Equipment	3.2 kVA	80.00%	2.5 kVA		
Receptacles	21.3 kVA	73.43%	15.7 kVA	**Total Conn. Load:**	24.5 kVA
				Total Est. Demand:	18.2 kVA
				Total Conn. Current:	68 A
				Total Est. Demand Current:	51 A

Notes:

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Switchboard: DPC

Location: ELECTRICAL C109 | **Volts:** 277/480 Wye | **A.I.C. Rating:** 18,000
Supply From: Utility | **Phases:** 3
Mounting: Surface | **Wires:** 4 | **Mains Rating:** 1200
Enclosure: Type 1

CKT	Circuit Description	Trip Rating	# of Poles	Load	Wire	Remarks
1	(E)HC	225	3	107.3 kVA		
2	(E)TLC (112.5 kVA XFR)	175	3	57.1 kVA		
3	SPARE	50	3	0.0 kVA		FORMER CU-1C BREAKER
4	SPARE	45	3	0.0 kVA		FORMER CU-2C BREAKER
5	SPARE	90	3	0.0 kVA		FORMER CU-3C BREAKER
6	SPARE	80	3	0.0 kVA		FORMER CU-4C BREAKER
7	SPARE	35	3	0.0 kVA		FORMER CU-5C BREAKER
8	SPARE	70	3	0.0 kVA		FORMER STRIP HTR -...
9	SPARE	60	3	0.0 kVA		FORMER STRIP HTR -...
10	SPARE	125	3	0.0 kVA		FORMER STRIP HTR -...
11	SPARE	80	3	0.0 kVA		FORMER STRIP HTR -...
12	SPARE	40	3	0.0 kVA		FORMER STRIP HTR -...
13	(E)TSLC	100	3	0.0 kVA		EXISTING STADIUM LTG
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
			Total Conn...	164.5 kVA		
			Total Amps:	198		

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	59.8 kVA	100.00%	59.8 kVA		
Lighting	14.1 kVA	125.00%	17.6 kVA	**Total Conn. Load:**	164.5 kVA
Motor	1.5 kVA	100.00%	1.5 kVA	**Total Est. Demand:**	150.0 kVA
Other	10.0 kVA	100.00%	10.0 kVA	**Total Conn. Current:**	198
Miscellaneous	27.5 kVA	100.00%	27.5 kVA	**Total Est. Demand...**	180
Kitchen Equipment	5.0 kVA	70.00%	3.5 kVA		
Receptacles	44.2 kVA	61.32%	27.1 kVA		
Existing	2.5 kVA	125.00%	3.1 kVA		

Notes:

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

ELECTRICAL PANEL SCHEDULES

SHEET NO.

E5.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

Lighting Inverter Schedule: EML

Location: ELECTRICAL C161 | **Input Voltage:** 277/480 Wye | **Output Voltage:** 277/480 Wye
Supply From: HCB | **Phases:** 3 | **Battery Run Time (Minutes):** 90
Mounting: SURFACE | **Wires:** 4 | **kVA Rating:**
Enclosure: NEMA-1

Notes:

CKT	Circuit Description	# of Poles	Trip Rating	Load	Remarks
1	UNIT A EGRESS LTG	1	20	2.7 kVA	
2	UNIT B EGRESS LTG C150, C148, C151	1	20	1.6 kVA	
3	UNIT C PRACTICE FIELD EGRESS LTG C156	1	20	1.0 kVA	
4	UNIT C PRACTICE FIELD EGRESS LTG C156 (FUTURE)	1	20	3.4 kVA	
5	UNIT D PRACTICE FIELD EGRESS LTG C156	1	20	1.4 kVA	
6	UNIT D EGRESS LIGHTING RMS C157, C154, C155	1	20	0.5 kVA	
7	EXTERIOR WALL PACK LTG CENTRAL PLANT C158	1	20	0.1 kVA	
8	EXTERIOR WALL PACK EGRESS LIGHTING	1	20	0.0 kVA	
9	EXTERIOR EGRESS CANOPY DOWN LIGHTING	1	20	0.1 kVA	
10	EXTERIOR EGRESS CANOPY DOWN LIGHTING	1	20	0.1 kVA	
11	EXTERIOR WALL PACK EGRESS LIGHTING	1	20	0.0 kVA	
12	SITE PARKING LIGHTING	1	20	0.3 kVA	
13	SITE PARKING LIGHTING	1	20	1.2 kVA	
14	EXIT SIGNS C132, C143, C101, C138	1	20	0.2 kVA	
15	EXIT SIGNS C149, C148, C147	1	20	0.1 kVA	
				12.8 kVA	
				15	

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	12.8 kVA	125.00%	16.0 kVA		
				Total Conn. Load:	12.8 kVA
				Total Est. Demand:	16.0 kVA
				Total Conn. Current:	15
				Total Est. Demand Current:	19

Branch Panel: HCB

Location: ELECTRICAL C162 | **Volts:** 277/480 Wye | **A.I.C. Rating:** 35,000
Supply From: MSB-C2 | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Surface | **Wires:** 4 | **Mains:** 400A
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				18.4 / 3.6						2	
	3	TLC2 (75 KVA TRANSFORMER)	1/0	150 3		11.4 / 3.6		3	40 8	PCHWP-2 (15.0 HP)	4	
	5						13.4 / 3.6				6	
	7				3.6 / 0.7						8	
	9	SCHWP-2 (15.0 HP) BOILER/RISER C160	8	40 3		3.6 / 0.7		3	20 10	EF-1C (1.0 HP) LAUNDRY C137	10	
	11						3.6 / 0.7				12	
	13				3.0 / 1.4						14	
	15	HVLS-1 THRU HVLS-6 (2.0 HP EA)	10	20 3		3.0 / 1.4		3	20 12	EF-8C (3.0 HP) MEZZANINE	16	
	17						3.0 / 1.4				18	
	19				3.0 / 0.8						20	
	21	OAU-1C (7.5 HP)	12	20 3		3.0 / 0.8		3	20 12	EF-10C (1.5 HP) BAND STORAGE C155	22	
	23						3.0 / 0.8				24	
	25				3.8 / 1.9			1	20 10	PRACTICE FIELD LTG C156	26	
	27	OAU-2C (5.0 HP) MECHANICAL C141	10	20 3		3.8 / 1.9		1	20 10	PRACTICE FIELD LTG C156	28	
	29						3.8 / 1.9	1	20 10	PRACTICE FIELD LTG C156	30	
	31				2.1 / 0.0						32	
	33	OAU-3C (5.0 HP)	12	20 3		2.1 / 1.4		1	20 10	PRACTICE FIELD LTG C156	34	
	35						2.1 / 0.0				36	
	37				3.6 / 1.9			1	20 10	PRACTICE FIELD LTG C156	38	
	39	AHU-6C (15.0 HP)	8	40 3		3.6 / 1.4		1	20 10	PRACTICE FIELD LTG C156	40	
	41						3.6 / 3.6	1	20 10	EXTERIOR ACCENT LTG	42	
	43				1.3 / 3.6			1	20 10	INTERIOR SCREEN WALL LTG	44	
	45	AHU-10C (3.0 HP)	12	20 3		1.3 / 1.0		1	20 10	EXTERIOR ACCENT LTG	46	
	47						1.3 / 1.7	1	20 10	EXTERIOR ACCENT LTG (FUTURE)	48	
	49				1.1 / 1.7			1	20 10	INTERIOR SCREEN WALL LTG (FUTURE)	50	
	51	HWP-2 (2.0 HP) BOILER/RISER C160	12	20 3		1.1 / 1.3		1	20 10	EXTERIOR ACCENT LTG (FUTURE)	52	
	53						1.1 / 1.3	1	20 10	INTERIOR SCREEN WALL LTG (FUTURE)	54	
	55				0.0 / 0.1			1	20 12	WALL PACK LTG CENTRAL PLANT C158	56	
	57					0.0 / 0.6		1	20 10	CHAMPIONS WALL ACCENT LTG	58	
	59						0.0 / 0.2	1	20 10	CORRIDOR LTG	60	
	61				0.0 / 0.3			1	20 10	FOOTBALL EQUIP. ROOM LTG C150	62	
	63					0.0 / 1.1		1	20 10	WEIGHT ROOM LTG C148	64	
	65						0.0 / 0.3	1	20 12	LIGHTING RMS C156, C154, C155	66	
	67				0.0 / 0.6			1	20 10	EXTERIOR CANOPY LTG	68	
	69					0.0 / 2.0		1	20 10	EXTERIOR WALL PACK LIGHTING	70	
	71						0.0 / 0.4	1	20 8	SITE PARKING LIGHTING	72	
	73				0.0 / 0.6			1	20 10	SITE PARKING LIGHTING	74	
	75					0.0 / 0.1		1	20 10	BOLLARD LIGHTING	76	
	77						0.0 / 0.1	1	20 10	BOLLARD LIGHTING	78	
	79				0.0 / 8.4						80	
	81					0.0 / 1.7		3	30 10	EML LIGHTING INVERTER	82	
	83						0.0 / 2.7				84	
		Total Load:			65.5 kVA	52.1 kVA	53.5 kVA					
		Total Amps:			237 A	188 A	194 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	85.2 kVA	100.00%	85.2 kVA		
Lighting	43.9 kVA	125.00%	54.8 kVA	**Total Conn. Load:**	171.2 kVA
Miscellaneous	2.0 kVA	100.00%	2.0 kVA	**Total Est. Demand:**	167.1 kVA
Receptacles	40.1 kVA	62.48%	25.0 kVA	**Total Conn. Current:**	206 A
				Total Est. Demand Current:	201 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: LCB

Location: ELECTRICAL C162 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10,000
Supply From: TLCB | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Surface | **Wires:** 4 | **Mains:** 400A
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1	GP DED REC INDOOR FIELD C156-1	#10	20 1	0.7 / 0.7			1	20	#10 GP DED REC INDOOR FIELD C156-1	2	
	3	GP DED REC INDOOR FIELD C156-1	#10	20 1		3.0 / 1.5		1	20	#12 IT RACK PRACTICE FIELD C156	4	
	5	GP DED REC INDOOR FIELD C156-1	#10	20 1			1.0 / 0.7	1	20	#10 GP DED REC INDOOR FIELD C156-1	6	
	7	GP DED REC INDOOR FIELD C156-1	#10	20 1	1.0 / 1.0			1	20	#10 GP DED REC INDOOR FIELD C156-1	8	
	9	GP DED REC INDOOR FIELD C156-1	#10	20 1		1.0 / 1.0		1	20	#10 GP DED REC INDOOR FIELD C156-1	10	
	11	GP DED REC INDOOR FIELD C156-1	#10	20 1			1.0 / 1.0	1	20	#10 GP DED REC INDOOR FIELD C156-1	12	
	13	AV QUAD INDOOR FIELD C156	#12	20 1	1.5 / 1.0			1	20	#10 GP DED REC INDOOR FIELD C156-1	14	
	15	GP DED REC INDOOR FIELD C156-1	#10	20 1		0.7 / 0.7		1	20	#10 GP DED REC INDOOR FIELD C156-1	16	
	17	GP DED REC INDOOR FIELD C156-1	#10	20 1			0.5 / 3.0	1	20	#10 GP DED REC INDOOR FIELD C156-1	18	
	19	GP DED REC OUTDOOR FIELD C163	#10	20 1	4.0 / 4.0			1	20	#10 GP DED REC OUTDOOR FIELD C163	20	
	21	HVLS-7 (0.5 HP),HVLS-8 (0.5 HP),HVLS-9 (0.5 HP)	#12	20 2		0.6 / 0.0		1	20	#12 EF-9C (1/3 HP) MECHANICAL C141	22	
	23						0.6 / 0.5	1	20	#12 AHU-10C UV LIGHT MEZZANINE C201	24	
	25	OAU-1C UV LIGHT MEZZANINE C201	#12	20 1	0.5 / 0.5			1	20	#10 GFCI HVAC SVC REC's MEZZANINE	26	
	27	OAU-3C UV LIGHT MEZZANINE C201	#12	20 1		0.5 / 0.4		1	20	#12 GP REC'S CORRIDOR C156-1	28	
	29	AHU-6C UV LIGHT MEZZANINE C201	#12	20 1			0.5 / 0.7	1	20	#12 GP REC's ENTRANCE HALL C147	30	
	31	SVC REC's ELECTRICAL RM's C162, C161	#12	20 1	0.4 / 0.7			1	20	#12 GP REC's FOOTBALL EQUIP. ROOM C150	32	
	33	GP GFCI REC's BOILER/RISER C164	#12	20 1		0.5 / 0.4		1	20	#12 GP REC's WEIGHT ROOM C148	34	
	35	GP REC's ATHLETIC STORAGE C159	#12	20 1			0.9 / 0.5	1	20	#12 GP REC's NORTHWEST HALL C149	36	
	37	GP REC's WEIGHT ROOM C148	#12	20 1	0.7 / 1.6			1	20	#12 TV REC's Room C147, C148	38	
	39	GP REC's WEIGHT ROOM C148	#12	20 1		0.4 / 0.8		1	20	#12 TV REC's WEIGHT ROOM C148	40	
	41						0.0 / 2.4	1	20	#12 TV REC'sWEIGHT ROOM C148	42	
	43										44	
	45										46	
	47										48	
	49										50	
	51										52	
	53										54	
	55										56	
	57										58	
	59										60	
	61										62	
	63										64	
	65										66	
	67										68	
	69										70	
	71										72	
	73										74	
	75										76	
	77										78	
	79										80	
	81										82	
	83										84	
		Total Load:			18.4 kVA	11.4 kVA	13.4 kVA					
		Total Amps:			156 A	95 A	114 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	1.1 kVA	100.00%	1.1 kVA		
Miscellaneous	2.0 kVA	100.00%	2.0 kVA	**Total Conn. Load:**	43.2 kVA
Receptacles	40.1 kVA	62.48%	25.0 kVA	**Total Est. Demand:**	28.1 kVA
				Total Conn. Current:	120 A
				Total Est. Demand Current:	78 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Switchboard: MSB-C2

Location: ELECTRICAL C162 | **Volts:** 277/480 Wye | **A.I.C. Rating:**
Supply From: CNP XFR | **Phases:** 3
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 1600
Enclosure: NEMA-1

CKT	Circuit Description	Trip Rating	# of Poles	Load	Wire	Remarks
1	ATS-C2	800	3	634.2 kVA		
2	ACC-2	500	3	387.3 kVA		
3	HC2	400	3	171.2 kVA		
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
			Total Conn...	1192.6 kVA		
			Total Amps:	1434		

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	1052.1 kVA	100.00%	1052.1 kVA		
Lighting	43.9 kVA	125.00%	54.8 kVA	**Total Conn. Load:**	1192.6 kVA
Miscellaneous	29.5 kVA	100.00%	29.5 kVA	**Total Est. Demand:**	1178.0 kVA
Receptacles	61.1 kVA	58.18%	35.6 kVA	**Total Conn. Current:**	1434
Heating	6.0 kVA	100.00%	6.0 kVA	**Total Est. Demand...**	1417

Notes:

Switchboard: EHB

Location: ELECTRICAL C161 | **Volts:** 277/480 Wye | **A.I.C. Rating:** 18,000
Supply From: MSB-C2 | **Phases:** 3
Mounting: Surface | **Wires:** 4 | **Mains Rating:** 800
Enclosure: Type 1

CKT	Circuit Description	Trip Rating	# of Poles	Load	Wire	Remarks
1	ACC-1 EXTERIOR CHILLER YARD	500	3	387.3 kVA		
2	TELC	70	3	44.4 kVA		
3	OAU-4C-1 (20.0 HP) ROOF UNIT D	60	3	22.4 kVA		
4	OAU-4C-2 (20.0 HP) ROOF UNIT D	60	3	22.4 kVA		
5	AHU-8C-1 (25.0 HP) ROOF UNIT D	70	3	28.3 kVA		
6	AHU-8C-2 (25.0 HP) ROOF UNIT D	70	3	28.3 kVA		
7	AHU-9C-1 (25.0 HP) ROOF UNIT D	70	3	28.3 kVA		
8	AHU-9C-2 (25.0 HP) ROOF UNIT D	70	3	28.3 kVA		
9	PCHWP-1 (15.0 HP) MECH RM C164	40	3	10.8 kVA		
10	SCHWP-1 (15.0 HP) BOILER/RISER C160	40	3	10.8 kVA		
11	HWP-1 (15.0 HP) MECH RM C164	40	3	10.8 kVA		
12	EWH-1 (12.3 KW) BOILER/RISER C164	20	3	12.3 kVA		
13						
14						
15						
16						
17						
18						
19						
20						
			Total Conn...	634.2 kVA		
			Total Amps:	763		

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	579.6 kVA	100.00%	579.6 kVA		
Miscellaneous	27.5 kVA	100.00%	27.5 kVA	**Total Conn. Load:**	634.2 kVA
Receptacles	21.1 kVA	73.74%	15.5 kVA	**Total Est. Demand:**	628.7 kVA
Heating	6.0 kVA	100.00%	6.0 kVA	**Total Conn. Current:**	763
				Total Est. Demand...	756

Notes:
1. PROVIDE 100% RATED MAIN CIRCUIT BREAKER

Branch Panel: ELB

Location: BOILER/RISER C160 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10,000
Supply From: TELB | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Surface | **Wires:** 4 | **Mains:** 200A MCB
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1	GFCI SERVICE REC's MECH YARD	#12	20 1	0.4 / 0.4			1	20	#12 GP REC AV/IT ROOM C151	2	
	3	GP REC AV/IT ROOM C151	#12	20 1		0.4 / 3.6		1	20	#12 GP REC AV/IT ROOM C151	4	
	5	GP REC AV/IT ROOM C151	#12	20 1			3.6 / 3.6	1	20	#12 GP REC AV/IT ROOM C151	6	
	7	GP REC AV/IT ROOM C151	#12	20 1	3.6 / 1.8			1	20	#12 GP RECEPT IDF C158	8	
	9	GP RECEPT IDF C158	#12	20 1		1.8 / 1.8		1	20	#12 GP RECEPT IDF C158	10	
	11	ICE MACHINE RECEPT JAN-1 C156-1	#12	20 1			0.2 / 1.0				12	
	13				1.0 / 1.0			3	20	#12 EUH-2 (5.0 KW) BOILER/RISER C164	14	
	15	EUH-1 (5.0 KW) BOILER/RISER C164	#12	20 3		1.0 / 1.0					16	
	17						1.0 / 0.0				18	
	19	DMSCU-1 MECH MEZZANINE C201	#8	50 2	3.5 / 0.0			3	20	#12 CHWPFCU-1 (1.5 HP) BOILER/RISER C164	20	
	21					3.5 / 0.0					22	
	23	DMSCU-2 UNIT D ROOF	#10	25 2			2.0 / 0.5	1	20	#12 OAU-4C UV LIGHT	24	
	25				2.0 / 0.7						26	
	27	AHU-8C UV LIGHT	#12	20 1		0.5 / 0.7		3	20	#12 B-1 (BOILER) BOILER/RISER C160	28	
	29	AHU-9C UV LIGHT	#12	20 1			0.5 / 0.7				30	
	31	IDP/ACP POWER AV/IT ROOM C151	#12	20 1	0.5 / 0.0						32	
	33	IDP/ACP POWER JAN C157	#12	20 1		1.2 / 0.0					34	
	35	FACP PWR AV/IT ROOM C151	#12	20 1			0.5 / 0.0				36	
	37	FUTURE ERRCS PWR AV/IT ROOM C151	#12	20 1	0.5 / 0.0						38	
	39										40	
	41										42	
		Total Load:			15.3 kVA	15.5 kVA	13.6 kVA					
		Total Amps:			130 A	131 A	113 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	2.1 kVA	100.00%	2.1 kVA		
Heating	6.0 kVA	100.00%	6.0 kVA	**Total Conn. Load:**	44.4 kVA
Miscellaneous	15.2 kVA	100.00%	15.2 kVA	**Total Est. Demand:**	38.8 kVA
Receptacles	21.1 kVA	73.74%	15.5 kVA	**Total Conn. Current:**	123 A
				Total Est. Demand Current:	108 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

VLK

M.E.P. ENGINEER
Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — STATE OF TEXAS — 80219 — LICENSED — PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

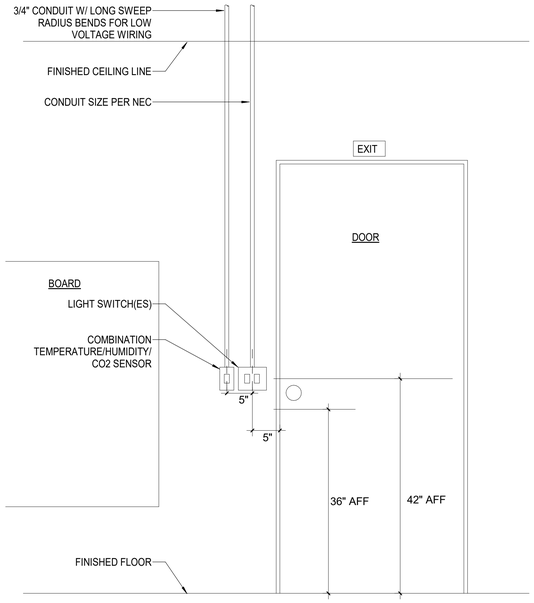
SHEET TITLE
ELECTRICAL PANEL SCHEDULES

SHEET NO.
E5.03

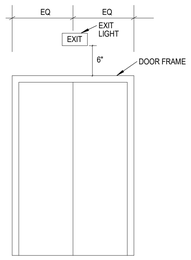
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

NOTES:

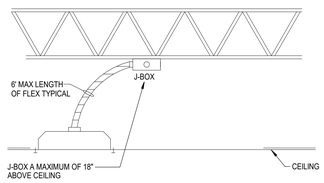
1. ELECTRICAL, MECHANICAL, AND BMCS CONTRACTORS MUST COORDINATE ALL DIVISION 26 REQUIREMENTS.
2. REFER TO MECHANICAL DRAWINGS FOR ALL BMCS SENSOR LOCATIONS.
3. ALL CONDUIT SYSTEMS AND BACK-BOXES SHALL BE PROVIDED BY DIVISION 26.
4. ALL BMCS SENSORS AND ASSOCIATED WIRING SHALL BE PROVIDED BY BMCS CONTRACTOR.



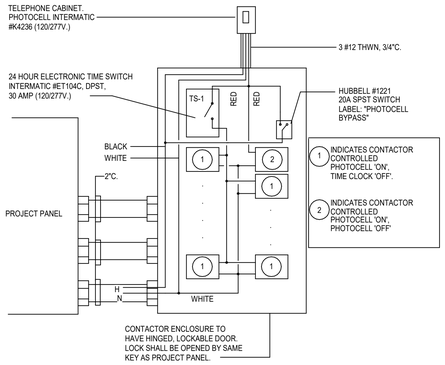
16 TYPICAL DOOR ROUGH-IN DETAIL
Scale: N.T.S.



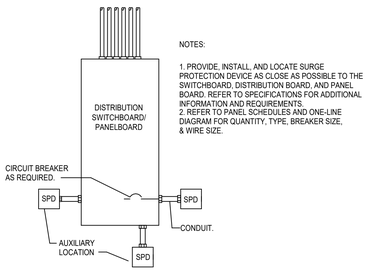
15 TYPICAL EXIT SIGN LOCATION
Scale: NOT TO SCALE



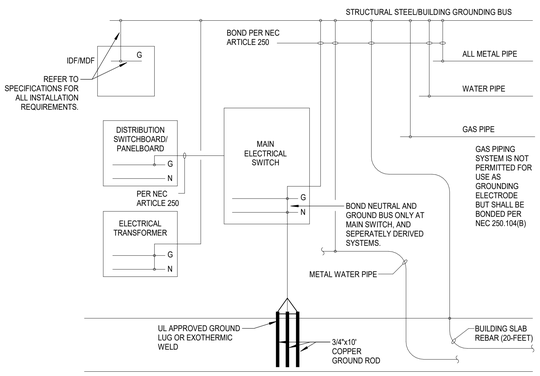
14 TYPICAL LIGHTING FIXTURE WIRING DETAIL
Scale: NOT TO SCALE



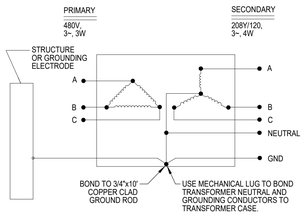
13 TC PHOTOCELL
Scale: N.T.S.



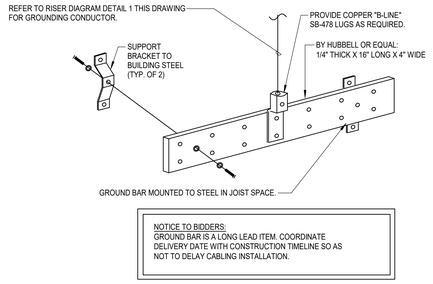
12 SURGE PROTECTION DEVICE DETAIL
Scale: NOT TO SCALE



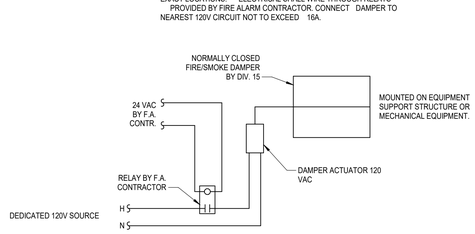
11 GROUNDING/BONDING DETAIL
Scale: NOT TO SCALE



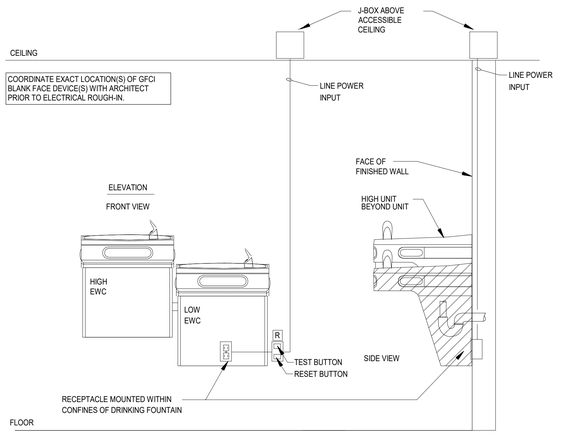
10 GROUNDING FOR TRANSFORMERS
Scale: NOT TO SCALE



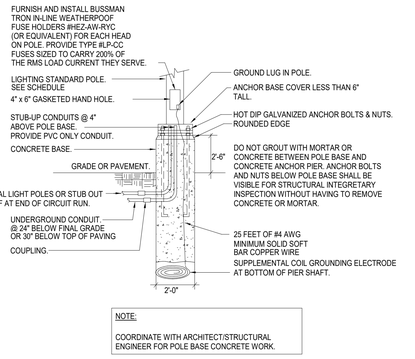
9 GROUND BAR DETAIL
Scale: N.T.S.



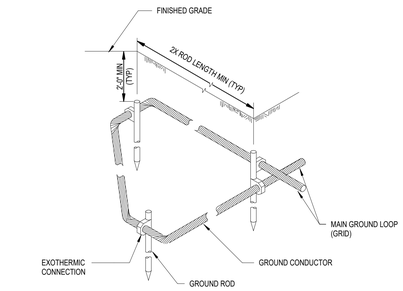
8 FIRE / SMOKE DAMPER DETAIL
Scale: N.T.S." = 1'-0"



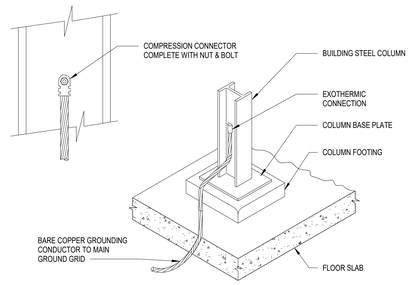
7 ELECTRICAL REQUIREMENTS AT WATER FOUNTAIN
Scale: NOT TO SCALE



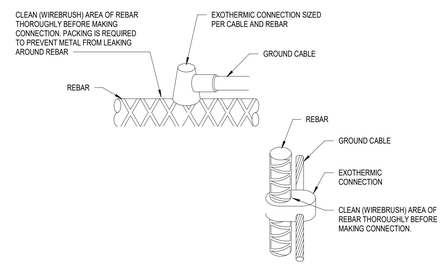
6 ELECTRICAL REQUIREMENTS AT POLE BASE
Scale: NOT TO SCALE



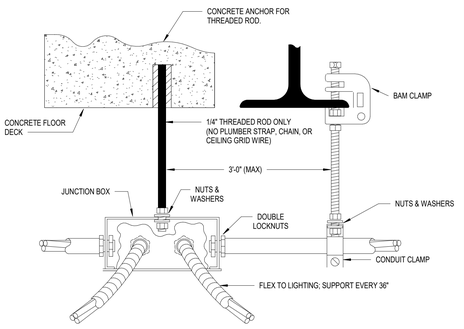
5 GROUNDING COUNTERPOISE
Scale: NONE



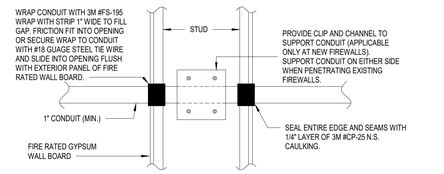
4 GROUNDING STRUCTURAL MEMBERS DETAIL
Scale: NONE



3 GROUNDING RE-BAR CONNECTION
Scale: NONE



2 CONDUIT/JUNCTION BOX MOUNTING DETAIL
Scale: NONE



1 CONDUIT PENETRATION THROUGH FIRE WALL
Scale: NONE

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
STATE OF TEXAS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

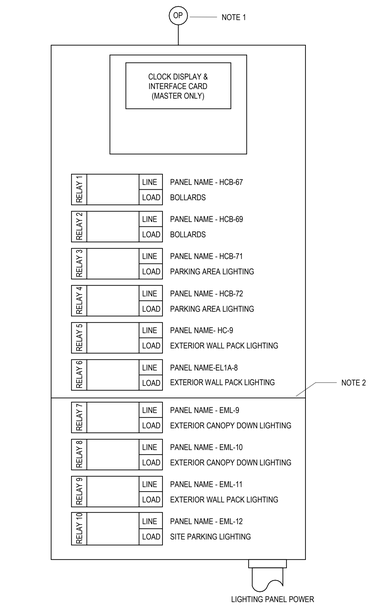
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL DETAILS, AND SCHEDULES

SHEET NO.
E5.04

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



NOTE:

1. PANEL LCP SHALL OPERATE "PHOTOCELL ON" FOR ALL EXTERIOR CIRCUITS AND "TIMECLOCK OFF" FOR EACH INDIVIDUAL CIRCUIT. TIMECLOCK SETTINGS AS DIRECTED BY THE OWNER.
2. PROVIDE METAL BARRIER IN PANEL LCP TO ISOLATE NORMAL POWER CIRCUITS FROM THE EMERGENCY CIRCUITS.
3. BASIS OF DESIGN IS THE ACUITY LCD BLUEBOX MODEL #GR1408 LT ENC

10 **PANEL LCP WIRING DIAGRAM**
Scale: NONE

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
ELECTRICAL DETAILS, AND SCHEDULES

SHEET NO.
E5.05

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

FIRE PUMP SIZING

STANDPIPE SYSTEM
N/A

SPRINKLER SYSTEM
ORDINARY HAZARD = 0.20 GPM/SF X 1,500 SF = 300 GPM PLUS
OVERAGE OF 20% = 360 GALLON DEMAND

MINIMUM 100 GPM HOSE DEMAND

500 GPM FIRE PUMP IS SUFFICIENT (AS LONG AS NO CEILING HEIGHTS ARE ABOVE 20FT.)

FIRE SURGE TANK SIZING

500 GPM FIRE PUMP X 150% = 750 GPM
15 MINUTE RUN TIME X 750 GPM = 11,250 GALLON
FLOW TEST REPORT:
993 GPM @ 20 PSI X 15 MINUTE RUN TIME = 14,865 GALLON

14,895 (INCOMING SUPPLY) - 11,250 (BLDG. DEMAND) = SURPLUS OF 3,645 GPM

*MINIMUM CODE REQUIRED 2,500 GALLON STORAGE TANK IS ACCEPTABLE
FIRE TANK STORAGE SHALL BE 2,500 GALLON

**FILL VALVES MUST BE SIZED PER FIRE PUMP (150% OF LOAD, SAME AS FIRE PUMP SIZING) REQUIRED BY NFPA

FIRE PUMP DYNAMIC HEAD SIZING

1.	TOTAL BLDG HT.(FT): (pumps to highest point in system)	50	FT
2.	ADD - PIPE PRESSURE LOSS (FT): (10% of static head) 8' minimum	8	FT
3.	ADD - MIN. PRESS. AT TOP OF SYSTEM (FT): (7 psi at furthest head, allow 25 psi hydraulic calc loss 4" Mains, 32 PSI x 2.31 = feet of head)	74	FT
4.	EQUALS - SYSTEM PRESSURE (FT.) Discharge (sum of 1 - 3) Divide by 2.31 = PSIG	132	FT (57 PISG)
5.	ADD - PACKAGED PUMPING LOSS (usually 10 PSI or 23 ft) total package loss	23	FT (155 ft)
6.	MINUS SUCTION PRESSURE (FT) (from Break Tank Height or 8' minimum)	- 8	FT
	FIRE PUMP TOTAL DYNAMIC HEAD REQUIRED:		
	of 4 + 5, minus 6 equals **TDH (FT)**	**147**	**TDH (FT)**
	Divide by 2.31 equals **TDH (PSIG)**	**64**	**in (PSIG)**

DOMESTIC BOOSTER PUMP SIZING

1.	TOTAL BLDG HT.(FT): (pumps to highest point in system)	25	FT
2.	ADD - PIPE PRESSURE LOSS (FT): (10% of static head or 8' minimum)	8	FT
3.	ADD - MIN. PRESS. AT TOP OF SYSTEM (FT): (use 35 psi, 25 psi required for flush valves + 10 PSI safety factor PSI x 2.31 = feet of head)	81	FT
4.	EQUALS - SYSTEM PRESSURE (FT.) Discharge (sum of 1 - 3) Divide by 2.31 = PSIG	114	FT (74 PSI)
5.	ADD - PACKAGED PUMPING LOSS (usually 10 PSI or 23 ft) total package loss	23	FT (137 ft)
6.	MINUS SUCTION PRESSURE (FT) (from Height Break Tank) or 8' minimum	- 8	FT (56 psi)
	DOMESTIC BOOSTER PUMP TDH REQUIRED:		
	TOTAL DEMAND:	**105**	**GPM**
	of 4 + 5, minus 6 equals **TDH (FT)**	**129**	**(FT)**
	Divide by 2.31 equals **TDH (PSIG)**	**56**	**in (PSIG)**

PLUMBING GENERAL NOTES:

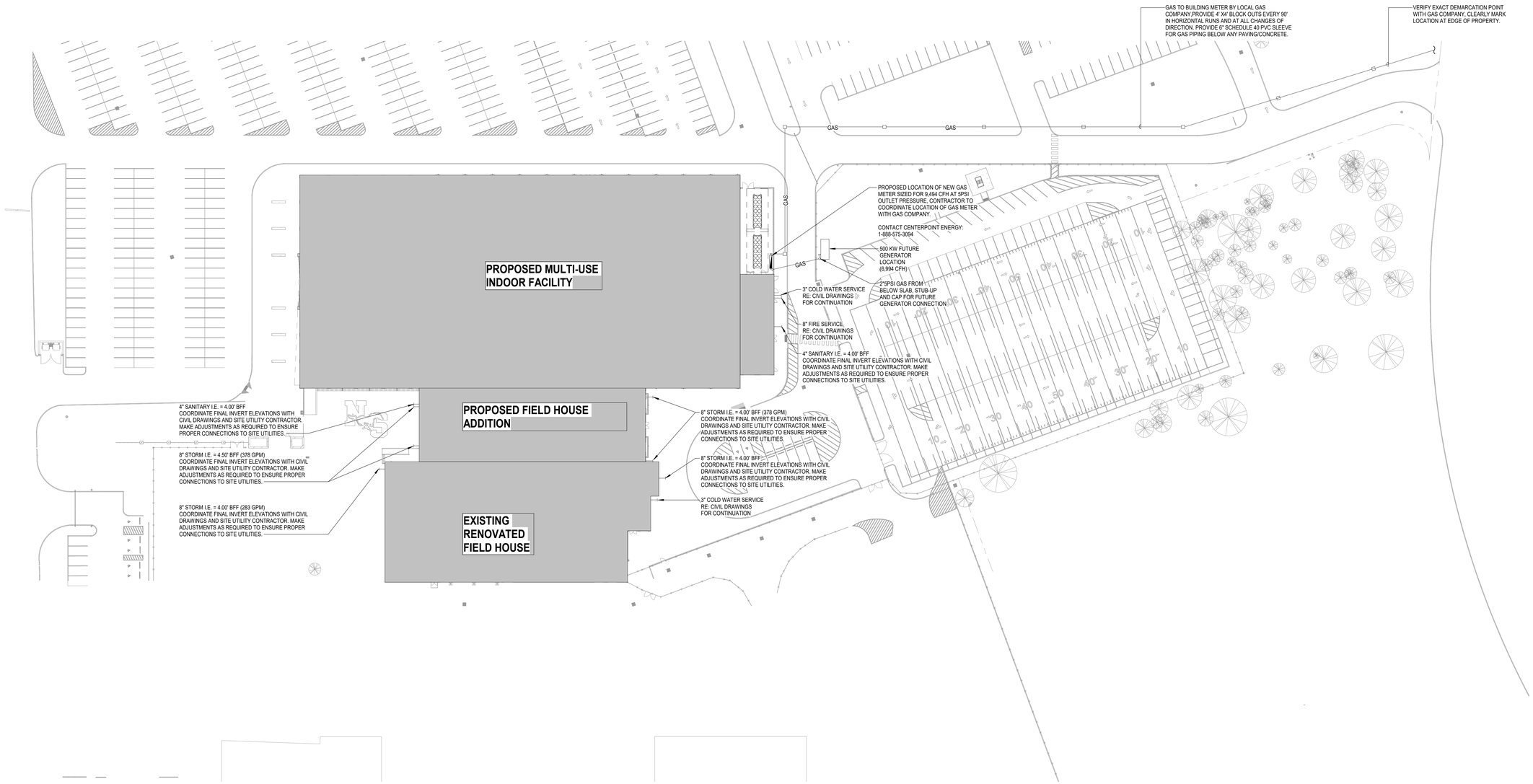
1. IT IS IMPRACTICAL DUE TO THE STREET SEWER, STRUCTURAL FEATURES AND ARRANGEMENT OF BUILDING TO OBTAIN A SLOPE OF 1/4" PER FOOT PIPING 4" THRU 6" SHALL HAVE A SLOPE OF 1/8" PER FOOT BELOW BUILDING TO 5'-0" OUTSIDE OF BUILDING.

2. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.

3. REFER TO CIVIL DRAWINGS FOR UTILITY STUB CONTINUATIONS. THIS CONTRACTOR TO MAKE CONNECTIONS AS REQUIRED FROM STUB LOCATIONS TO SITE UTILITIES.

4. INVERT ELEVATIONS LISTED ARE APPROXIMATE. PRIOR TO CONSTRUCTION, COORDINATE FINAL INVERT ELEVATIONS OF BUILDING SANITARY AND STORM OUTFALLS WITH SITE UTILITY CONTRACTOR. MAKE ADJUSTMENTS AS REQUIRED TO ENSURE PROPER CONNECTIONS TO SITE UTILITIES.

5. REFER TO LATEST CIVIL DRAWINGS FOR BUILDING FINISHED FLOOR ELEVATIONS



1 **PLUMBING SITE PLAN**
Scale: 1" = 40'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING SITE PLAN

SHEET NO.
P1.00

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

PLUMBING GENERAL NOTES:

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ARCHITECT AND ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. ANY OTHER ITEMS NOT REFERENCED WHICH ARE LOCATED IN THE DEMOLISHED SPACE (VENT, WASTE, WATER, PLUMBING FIXTURE, ETC.) THAT ARE IDENTIFIED OR DISCOVERED DURING DEMOLITION WHICH WILL NOT BE USED FOR THIS PROJECT, SHALL BE DEMOLISHED BACK TO THE MAIN SOURCE OR RISER, AND DEVICES SHALL BE RETAINED TO THE OWNER STORAGE AS DIRECTED BY THE ARCHITECT/OWNER.
4. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.

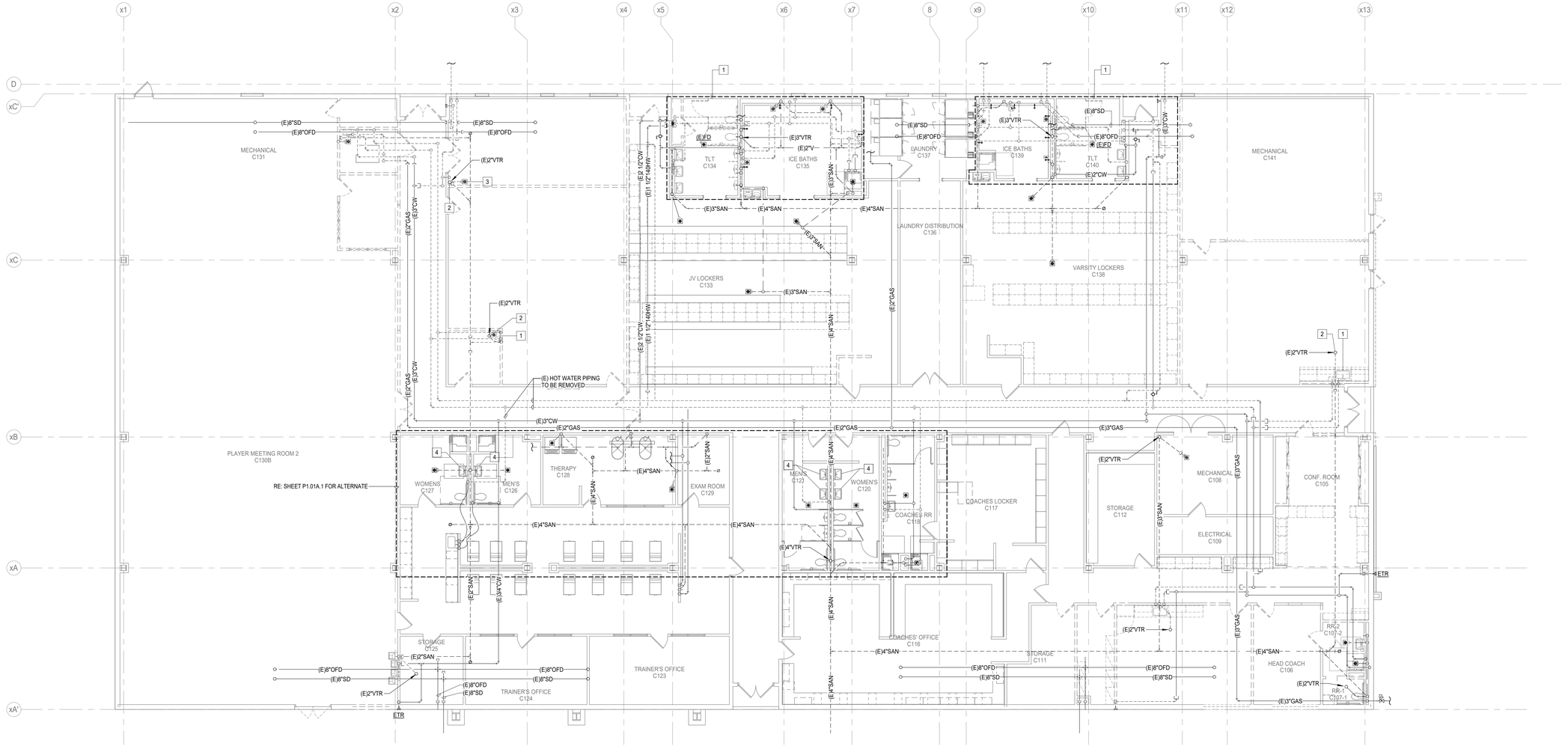
PLUMBING KEYED NOTES "⊠"

1 REMOVE EXISTING PLUMBING FIXTURES, EQUIPMENT AND ALL ASSOCIATED APPURTENANCES. REMOVE SERVICES SUCH AS WATER, WASTE, AND VENT PIPING IN THIS AREA SERVING CONNECTIONS TO EQUIPMENT/FIXTURES, WHICH ARE EXISTING AND ARE TO BE REMOVED. REMOVE WATER PIPING BACK TO MAIN AND CAP. REMOVE WASTE PIPING SERVING FIXTURES TO BE REMOVED TO BELOW FLOOR AND CAP. REMOVE VENT PIPING TO ABOVE CEILING AND CAP. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOED FIXTURES. COORDINATE ALL WORK WITH EXISTING CONDITIONS AND FIELD VERIFY EXACT LOCATIONS.

2 EXISTING VENT THRU ROOF TO REMAIN, CAP PIPING BELOW ROOF FOR RECONNECTION DURING NEW CONSTRUCTION.

3 REMOVE EXISTING FLOOR DRAIN/HUB DRAIN/TRENCH DRAIN. CAP PIPING BELOW FLOOR.

4 REMOVE EXISTING PLUMBING FIXTURES AND ALL ASSOCIATED APPURTENANCES. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOED FIXTURES. CAP EXISTING WASTE AND WATER ROUGH-INS FOR RECONNECTION DURING NEW CONSTRUCTION. COORDINATE ALL WORK WITH EXISTING CONDITIONS AND FIELD VERIFY EXACT LOCATIONS.



N

1 **PLUMBING DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

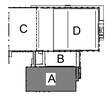
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A

SHEET NO.
P1.01A



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

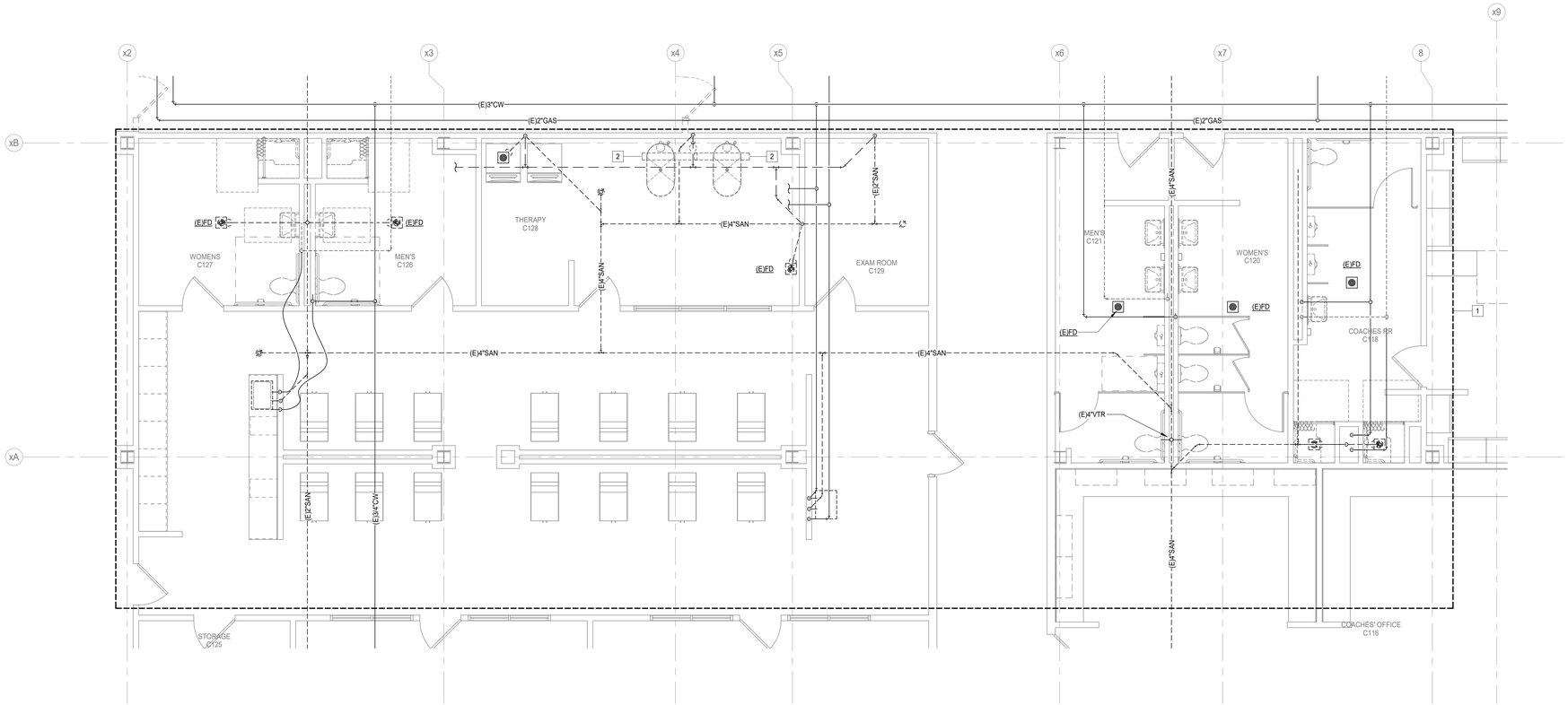
PLUMBING GENERAL NOTES:

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ARCHITECT AND ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. ANY OTHER ITEMS NOT REFERENCED WHICH ARE LOCATED IN THE DEMOLISHED SPACE (VENT, WASTE, WATER, PLUMBING FIXTURE, ETC.) THAT ARE IDENTIFIED OR DISCOVERED DURING DEMOLITION WHICH WILL NOT BE USED FOR THIS PROJECT, SHALL BE DEMOLISHED BACK TO THE MAIN SOURCE OR RISER, AND DEVICES SHALL BE RETAINED TO THE OWNER STORAGE AS DIRECTED BY THE ARCHITECT/OWNER.
4. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.

PLUMBING KEYED NOTES "☒"

1 REMOVE AND REPLACE EXISTING PLUMBING FIXTURES AND ALL ASSOCIATED APPURTENANCES. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOED FIXTURES. CAP EXISTING ROUGH-INS AT WALL FOR RE-CONNECTION DURING NEW CONSTRUCTION. COORDINATE ALL WORK WITH EXISTING CONDITIONS AND FIELD VERIFY EXACT LOCATIONS.

2 REMOVE EXISTING FLOOR DRAIN/HUB DRAIN/TRENCH DRAIN. CAP PIPING BELOW FLOOR.



N

1 **PLUMBING DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A - ALTERNATE**
Scale: 1/4" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

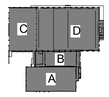
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A - ALTERNATE

SHEET NO.
P1.01A.1



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

PLUMBING GENERAL NOTES:

1. IT IS IMPRACTICAL DUE TO THE STREET SEWER, STRUCTURAL FEATURES AND ARRANGEMENT OF BUILDING TO OBTAIN A SLOPE OF 1/4" PER FOOT PIPING 3" THRU 6" SHALL HAVE A SLOPE OF 1/8" PER FOOT BELOW BUILDING TO 5'-0" OUTSIDE OF BUILDING.

2. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.

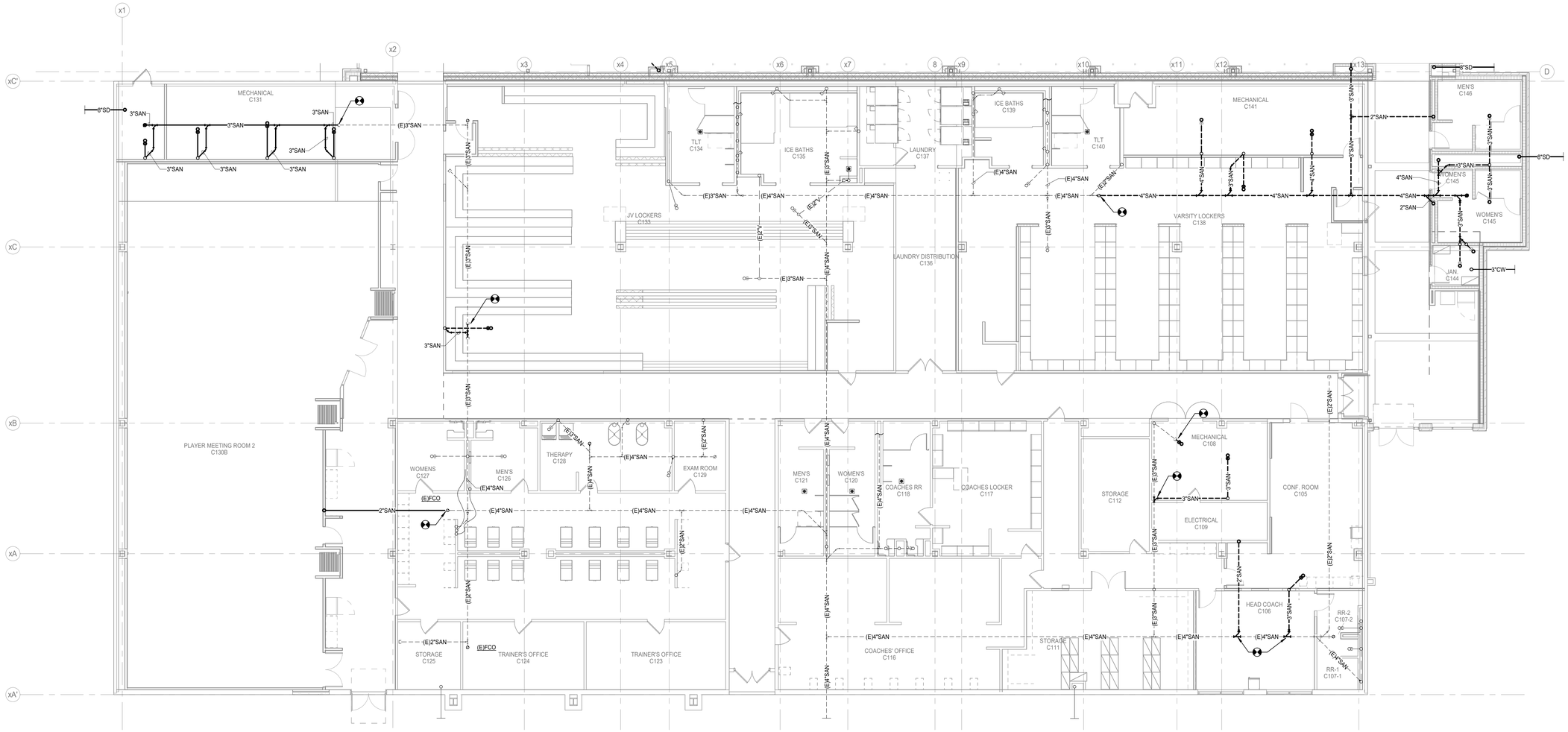
3. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAILS AND SHEET P6.01 FOR SCHEDULES

4. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.

5. REFER TO SHEETS P5.01, FOR DETAILS AND SHEETS P6.01 FOR PLUMBING SCHEDULES.

6. SAWCUT EXISTING SLAB AS REQUIRED TO INSTALL NEW PIPING BELOW FLOOR. SEAL AND PATCH FLOOR TO MATCH EXISTING UPON COMPLETION. AVOID STRUCTURAL BEAMS.

PLUMBING KEYED NOTES "⊠"



N

1 **PLUMBING UNDERFLOOR PLAN - UNIT A**
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — 80219 — LICENSED — PROFESSIONAL ENGINEER — STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

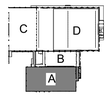
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING UNDERFLOOR PLAN - UNIT A

SHEET NO.
P2.02A



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

PLUMBING GENERAL NOTES:

1. IT IS IMPRACTICAL DUE TO THE STREET SEWER, STRUCTURAL FEATURES AND ARRANGEMENT OF BUILDING TO OBTAIN A SLOPE OF 1/4" PER FOOT PIPING 3" THRU 6" SHALL HAVE A SLOPE OF 1/8" PER FOOT BELOW BUILDING TO 5'-0" OUTSIDE OF BUILDING.

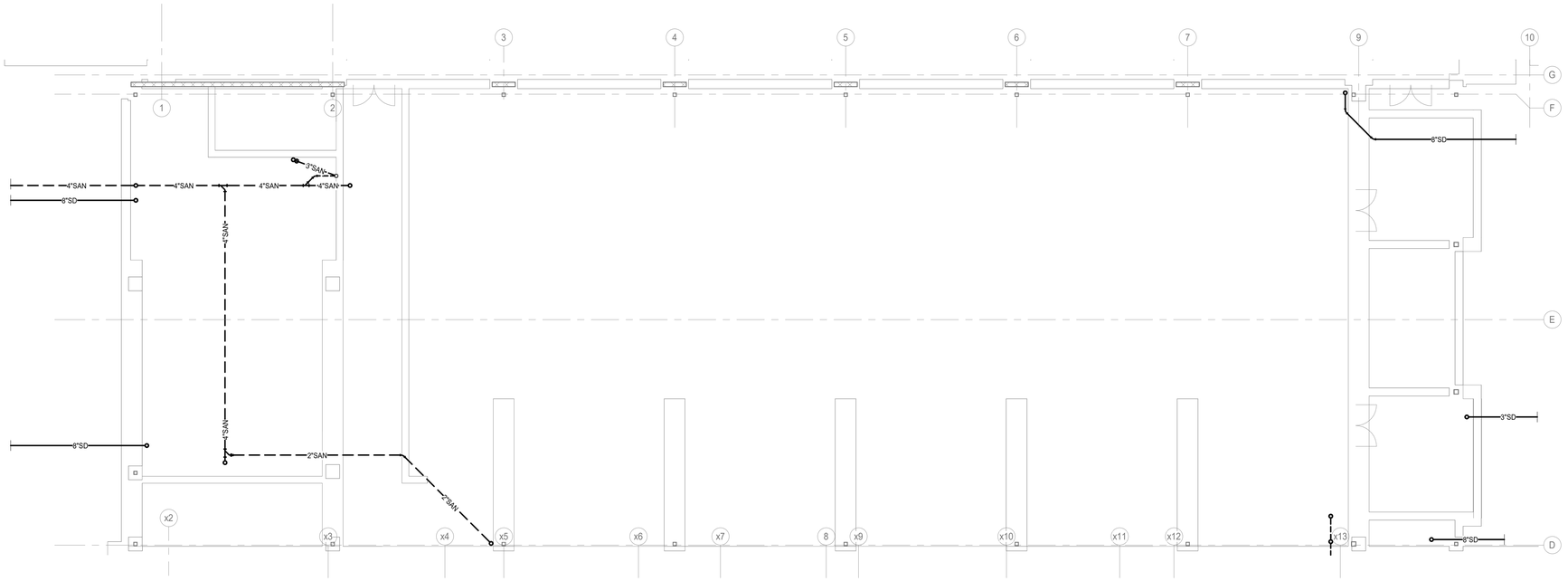
2. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.

3. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAILS AND SHEET P6.01 FOR SCHEDULES

4. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.

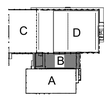
5. REFER TO SHEETS P5.01, FOR DETAILS AND SHEETS P6.01 FOR PLUMBING SCHEDULES.

6. SAWCUT EXISTING SLAB AS REQUIRED TO INSTALL NEW PIPING BELOW FLOOR. SEAL AND PATCH FLOOR TO MATCH EXISTING UPON COMPLETION. AVOID STRUCTURAL BEAMS.



N

1 **PLUMBING UNDERFLOOR PLAN - UNIT B**
Scale: 1/8" = 1'-0"



VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING UNDERFLOOR PLAN - UNIT B

SHEET NO.
P2.03B

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

PLUMBING GENERAL NOTES:

1. IT IS IMPRACTICAL DUE TO THE STREET SEWER, STRUCTURAL FEATURES AND ARRANGEMENT OF BUILDING TO OBTAIN A SLOPE OF 1/4" PER FOOT PIPING 3" THRU 6" SHALL HAVE A SLOPE OF 1/8" PER FOOT BELOW BUILDING TO 5'-0" OUTSIDE OF BUILDING.

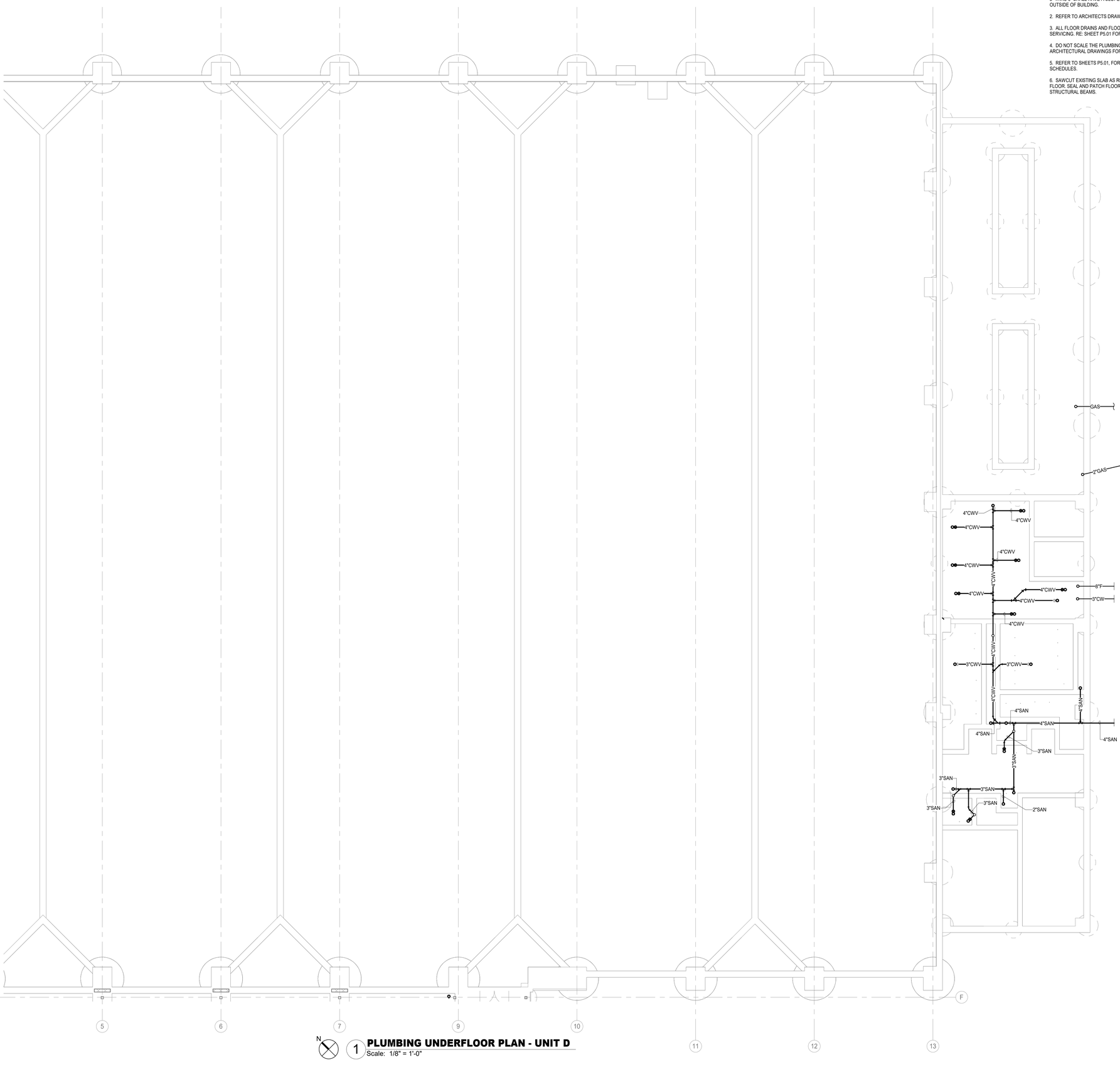
2. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.

3. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAILS AND SHEET P6.01 FOR SCHEDULES

4. DO NOT SCALE THE PLUMBING DRAWINGS. REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.

5. REFER TO SHEETS P5.01, FOR DETAILS AND SHEETS P6.01 FOR PLUMBING SCHEDULES.

6. SAWCUT EXISTING SLAB AS REQUIRED TO INSTALL NEW PIPING BELOW FLOOR. SEAL AND PATCH FLOOR TO MATCH EXISTING UPON COMPLETION. AVOID STRUCTURAL BEAMS.



N

1 **PLUMBING UNDERFLOOR PLAN - UNIT D**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

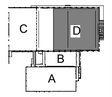
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING UNDERFLOOR PLAN - UNIT D

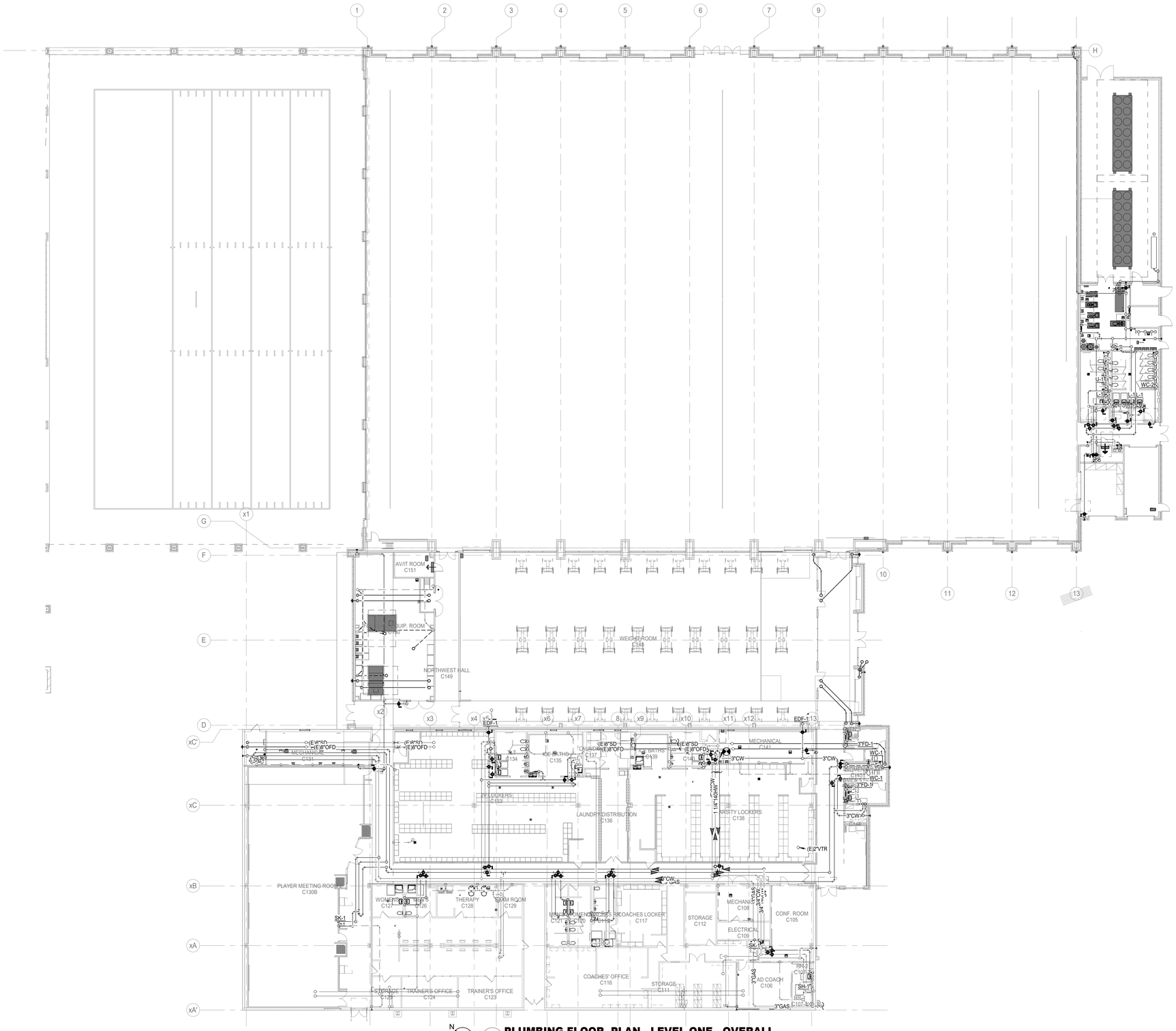
SHEET NO.
P2.05D



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

FIRE SPRINKLER NOTE:

LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR THIS BUILDING. TO COMPLY WITH SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.



N

1 **PLUMBING FLOOR PLAN - LEVEL ONE - OVERALL**

Scale: 1/16" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS

10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

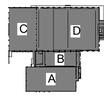
25-0056.00

SHEET TITLE

PLUMBING FLOOR PLAN - LEVEL ONE - OVERALL

SHEET NO.

P3.01



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

FIRE SPRINKLER NOTE:

LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR THIS BUILDING, TO COMPLY WITH SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING GENERAL NOTES:

1. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.

2. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAIL AND SHEET P6.01 FOR SCHEDULES

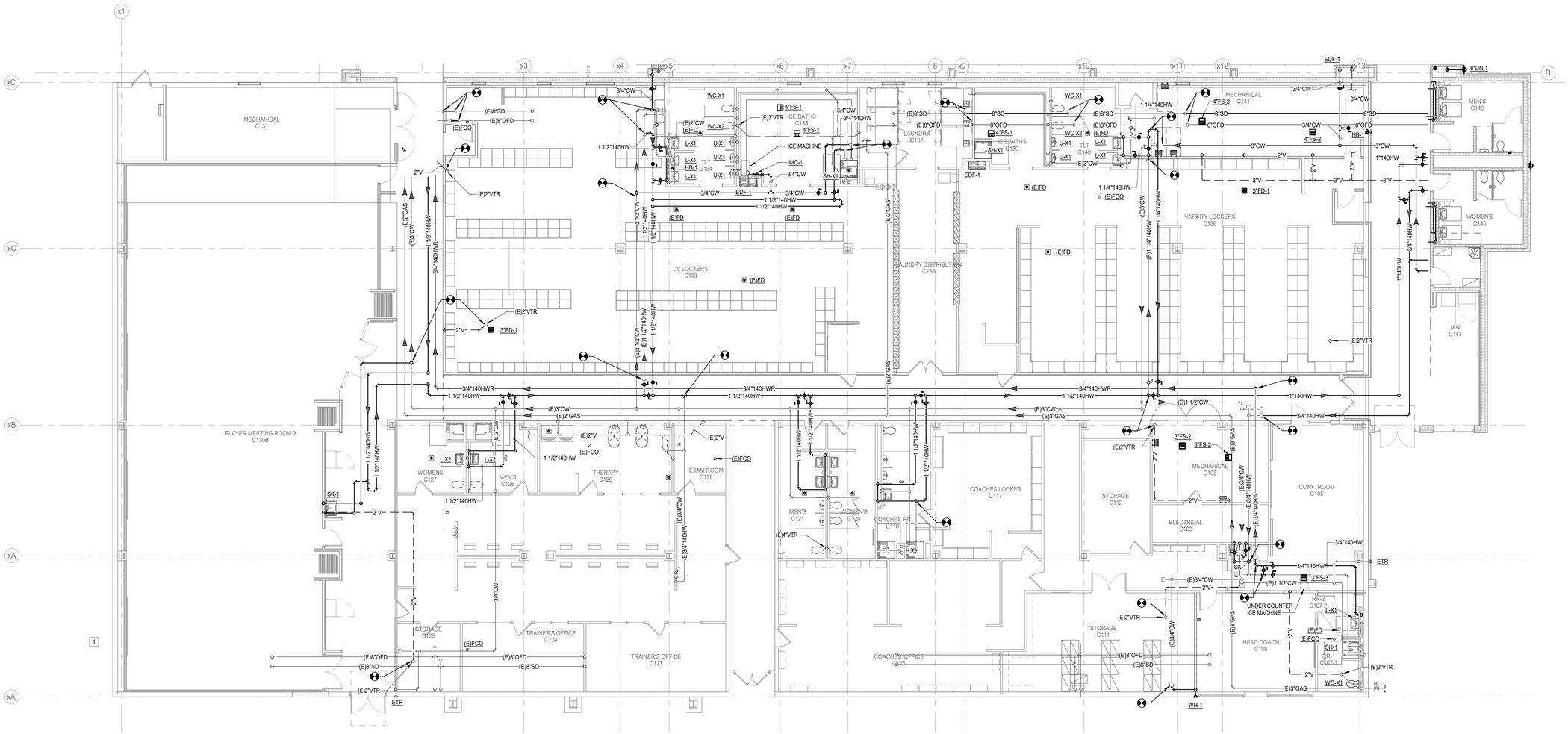
3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.

4. REFER TO SHEETS P5.01 FOR PLUMBING DETAILS AND SHEET P6.01 FOR PLUMBING SCHEDULES.

5. CONRACTOR SHALL REMOVE AND REPLACE CEILING WHERE REQUIRED TO COMPLETE INDICATED SCOPE OF WORK. EXISTING CEILING SHALL BE RE-INSTALLED IN THE EXACT CONDITION IT WAS REMOVED IN. DAMAGED CEILING AND/OR CEILING TILES SHALL BE REPLACED TO MATCH EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF A MATCH IS NOT POSSIBLE, CONTRACTOR SHALL REPLACE ALL CEILING FROM WALL TO WALL OR BOUNDARY SEPARATING IN ADJOINING ROOMS. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION.

PLUMBING KEYED NOTES "⊠"

1


MECHANICAL C131
PLAYER MEETING ROOM 2 C130B
JV LOCKERS C133
LAUNDRY C137
ICE BATHS C135
ICE BATHS C139
LAUNDRY DISTRIBUTION C136
MECHANICAL C141
VARSITY LOCKERS C138
MEN'S C146
WOMEN'S C145
JAN. C144
WOMENS C127
MEN'S C126
THERAPY C128
EXAM ROOM C129
STORAGE C125
TRAINER'S OFFICE C124
TRAINER'S OFFICE C123
MEN'S C121
WOMEN'S C120
COACHES RR C119
COACHES LOCKER C117
COACHES OFFICE C116
STORAGE C112
ELECTRICAL C109
MECHANICAL C108
CONF. ROOM C105
STORAGE C111
HEAD COACH C106
TLT C134
TLT C140
UNDER COUNTER ICE MACHINE
WH-1
ETR
SK-1
EDF-1
3"FD-1
3"FS-2
3"FS-3
4"FS-1
4"FS-2
HB-1
IMC-1
SH-X1
SH-1
WC-X1
WC-X2
L-X1
L-X2
U-X1
RR-1 C107-1
RR-2 C107-2
(E)FCO
(E)FD
(E)2"VTR
(E)3"VTR
(E)4"VTR
(E)2"CW
(E)3"CW
(E)3/4"CW
(E)1 1/2"CW
(E)2"V
(E)3"V
(E)2"GAS
(E)3"GAS
(E)8"SD
(E)8"OFD
(E)2"OAS
(E)3"OAS
(E)3/4"140HWR
(E)1 1/4"140HW
(E)3/4"140HW
1 1/2"140HW
1 1/4"140HW
3/4"140HW
1"140HW
8"DN-1
2"V
3"V
3/4"CW
1 1/2"140HWR
1 1/2"140HW
1 1/2"CW
1 1/4"140HW
3/4"140HWR
3/4"140HW
1"140HW
3/4"CW
1 1/2"140HW
2"V-
3"V-
3"CW
2"V
3"V
3/4"140HW
ETR
WH-1
1 1/2"140HW
3/4"CW
3/4"140HW
1 1/2"140HW
1 1/2"140HW
1 1/2

FIRE SPRINKLER NOTE:

LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR THIS BUILDING, TO COMPLY WITH SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING GENERAL NOTES:

1. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.

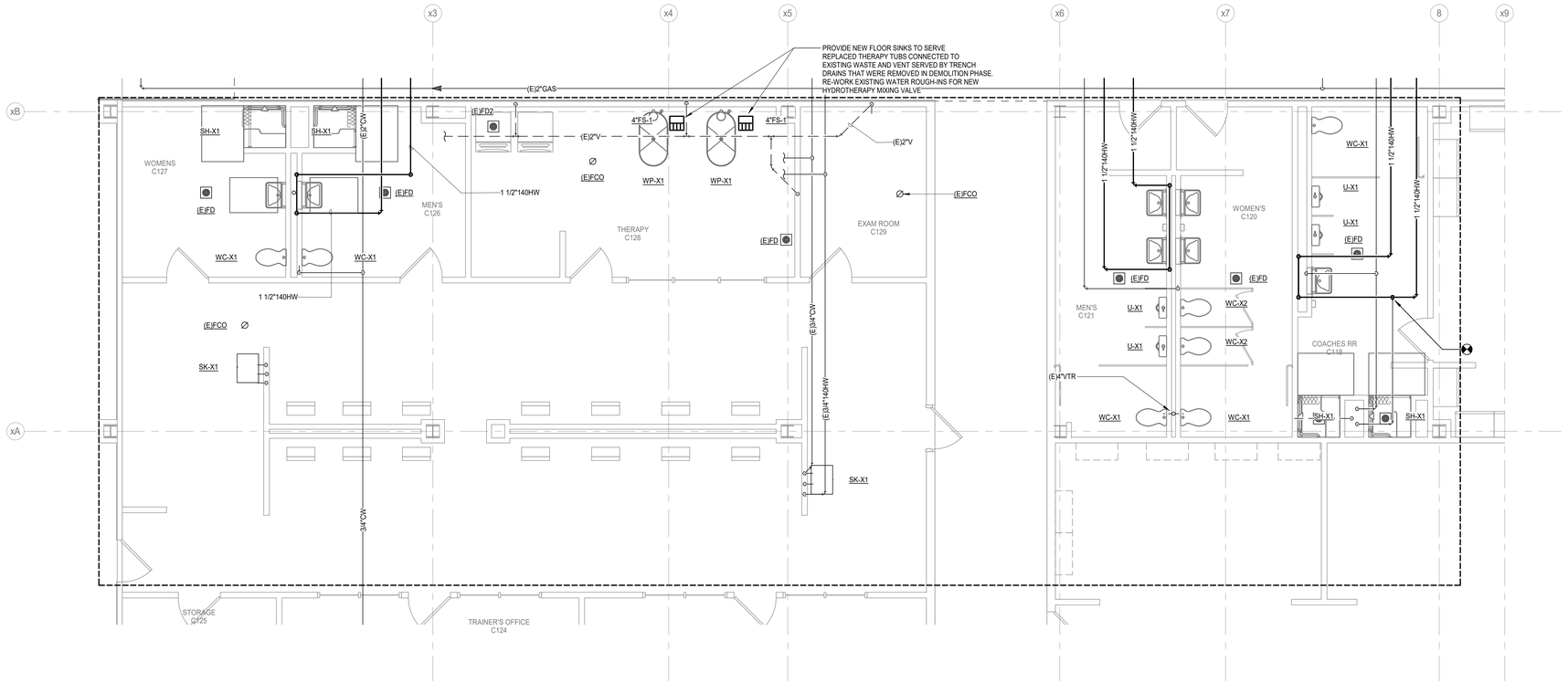
2. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAIL AND SHEET P6.01 FOR SCHEDULES

3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.

4. REFER TO SHEETS P5.01 FOR PLUMBING DETAILS AND SHEET P6.01 FOR PLUMBING SCHEDULES.

5. CONRACTOR SHALL REMOVE AND REPLACE CEILING WHERE REQUIRED TO COMPLETE INDICATED SCOPE OF WORK. EXISTING CEILING SHALL BE RE-INSTALLED IN THE EXACT CONDITION IT WAS REMOVED IN. DAMAGED CEILING AND/OR CEILING TILES SHALL BE REPLACED TO MATCH EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF A MATCH IS NOT POSSIBLE, CONTRACTOR SHALL REPLACE ALL CEILING FROM WALL TO WALL OR BOUNDARY SEPARATING IN ADJOINING ROOMS. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION.

PLUMBING KEYED NOTES "⊠"



N

1 PLUMBING FLOOR PLAN - LEVEL ONE - UNIT A - ALTERNATE

Scale: 1/4" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien | Houston | 10930 W. Sam Houston Pkwy North, Suite 900 Houston, TX 77064 | Salas O'Brien Registration: F-4111 | Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — STATE OF TEXAS — 80219 — LICENSED — ENGINEER

10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

PLUMBING FLOOR PLAN - LEVEL ONE - UNIT A - ALTERNATE

SHEET NO.

P3.02A.1

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

FIRE SPRINKLER NOTE:

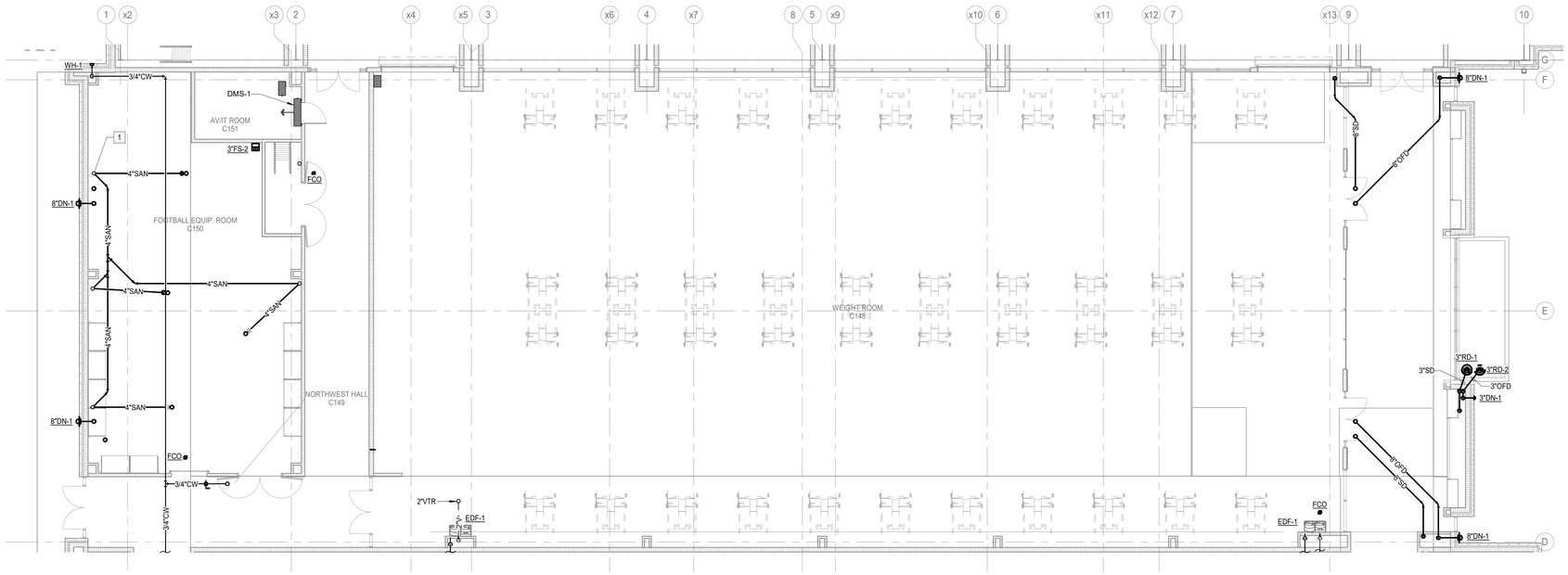
LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR THIS BUILDING, TO COMPLY WITH SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING GENERAL NOTES:

1. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
2. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAIL AND SHEET P6.01 FOR SCHEDULES
3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
4. REFER TO SHEETS P5.01 FOR PLUMBING DETAILS AND SHEET P6.01 FOR PLUMBING SCHEDULES.

PLUMBING KEYED NOTES "⊠"

1 4" WASTE DOWN BELOW SLAB, 3" VENT UP.



N

1 **PLUMBING FLOOR PLAN - LEVEL ONE - UNIT B**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

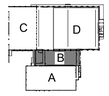
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING FLOOR PLAN - LEVEL ONE - UNIT B

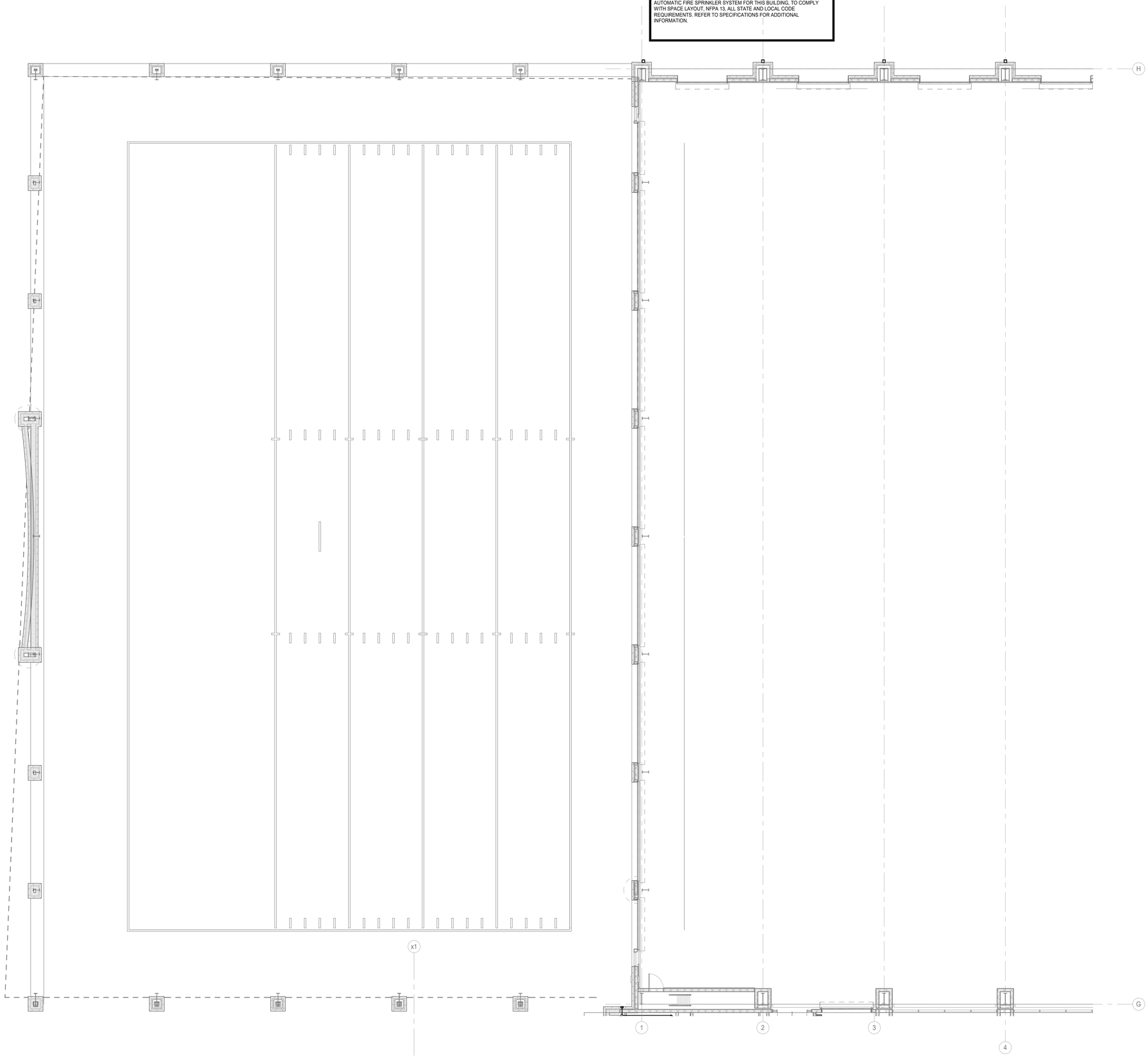
SHEET NO.
P3.03B



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

FIRE SPRINKLER NOTE:

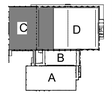
LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR THIS BUILDING, TO COMPLY WITH SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.



N

1 **PLUMBING FLOOR PLAN - LEVEL ONE - UNIT C**

Scale: 1/8" = 1'-0"



VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING FLOOR PLAN - LEVEL ONE - UNIT C

SHEET NO.
P3.04C

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

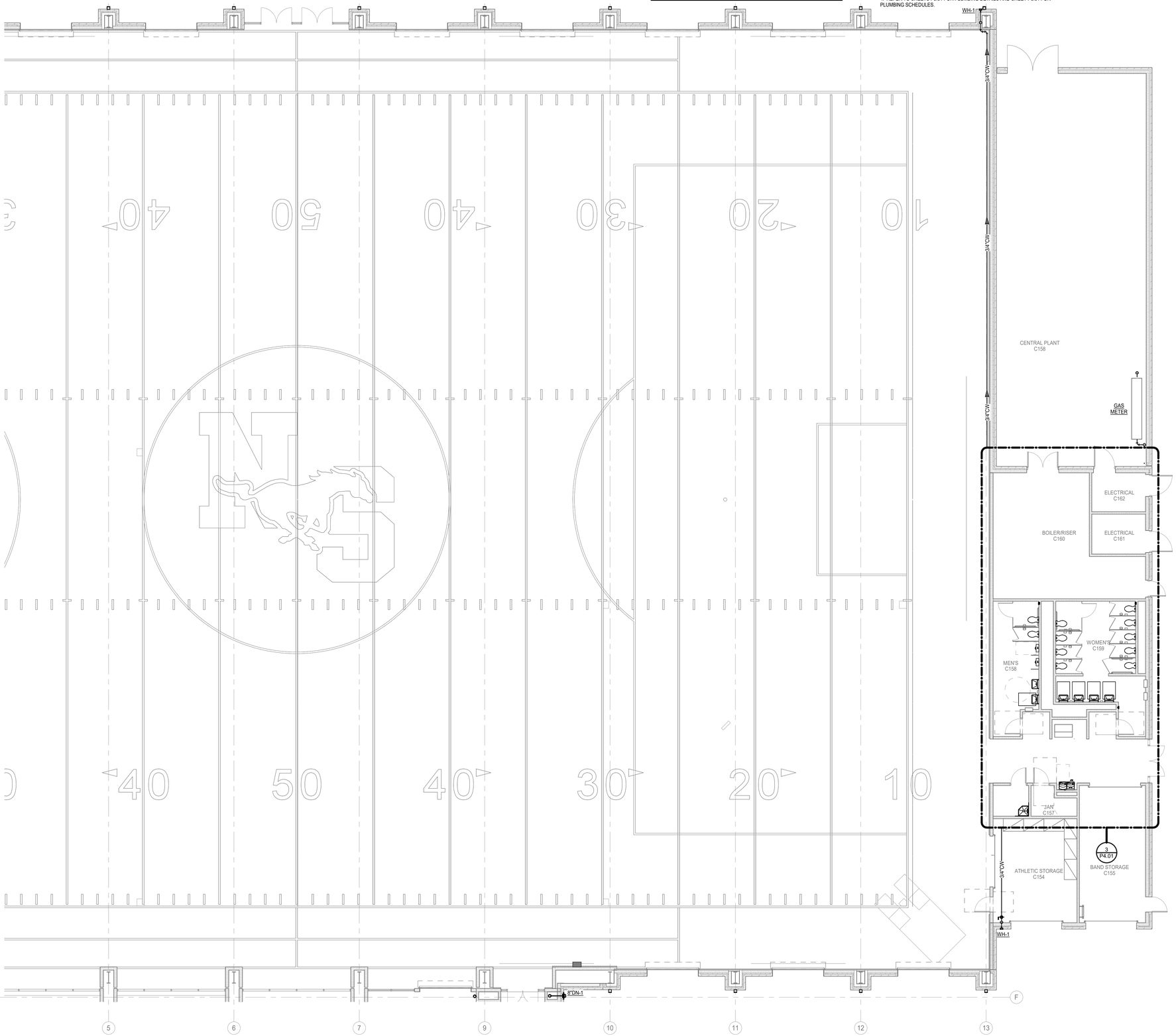
FIRE SPRINKLER NOTE:

LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR THIS BUILDING, TO COMPLY WITH SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING GENERAL NOTES:

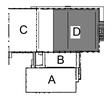
1. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
2. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAIL AND SHEET P6.01 FOR SCHEDULES
3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
4. REFER TO SHEETS P5.01 FOR PLUMBING DETAILS AND SHEET P6.01 FOR PLUMBING SCHEDULES.

PLUMBING KEYED NOTES "⊠"



N

1 **PLUMBING FLOOR PLAN - LEVEL ONE - UNIT D**
Scale: 1/8" = 1'-0"



VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING FLOOR PLAN - LEVEL ONE - UNIT D

SHEET NO.
P3.05D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

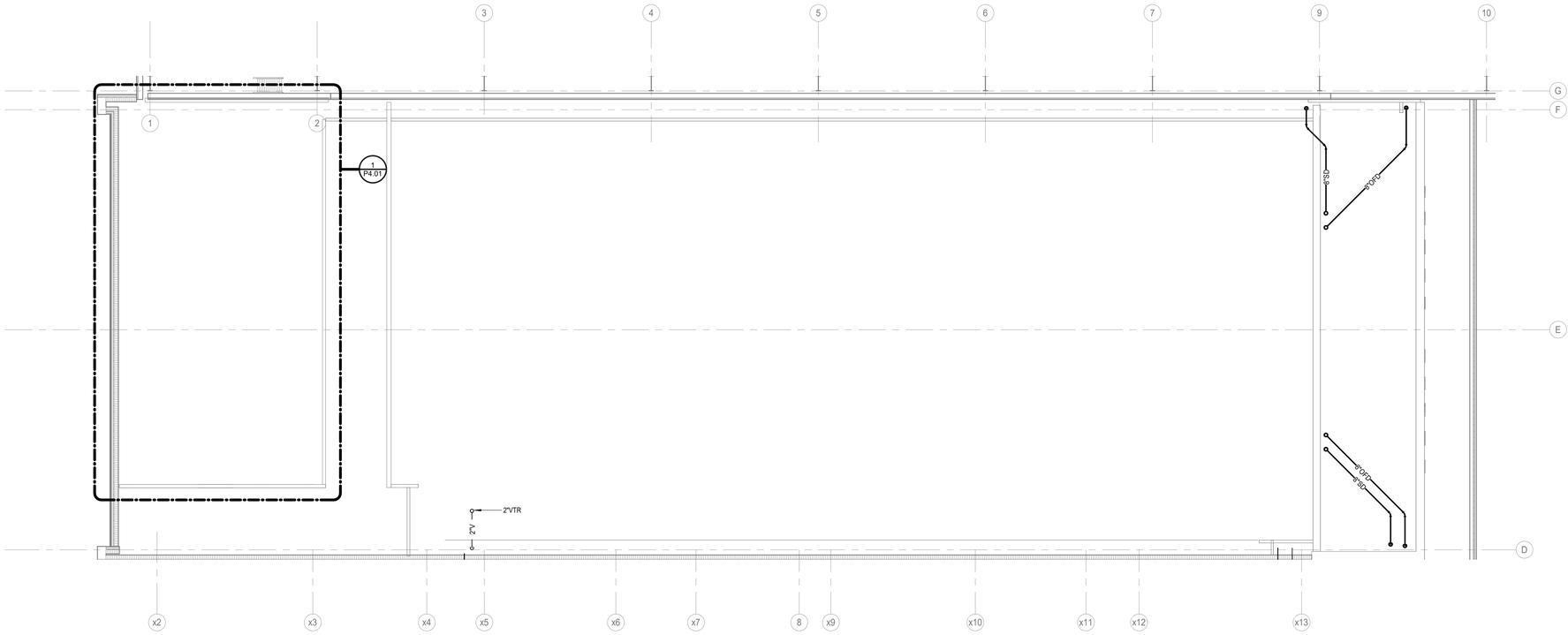
FIRE SPRINKLER NOTE:

LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR THIS BUILDING, TO COMPLY WITH SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING GENERAL NOTES:

1. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
2. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAIL AND SHEET P6.01 FOR SCHEDULES
3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
4. REFER TO SHEETS P5.01 FOR PLUMBING DETAILS AND SHEET P6.01 FOR PLUMBING SCHEDULES.

PLUMBING KEYED NOTES "⊠"



N

1 **PLUMBING FLOOR PLAN - LEVEL TWO - UNIT B**
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
STATE OF TEXAS
80219
LICENSED
ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

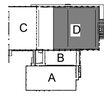
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING FLOOR PLAN - LEVEL TWO - UNIT B

SHEET NO.
P3.06B



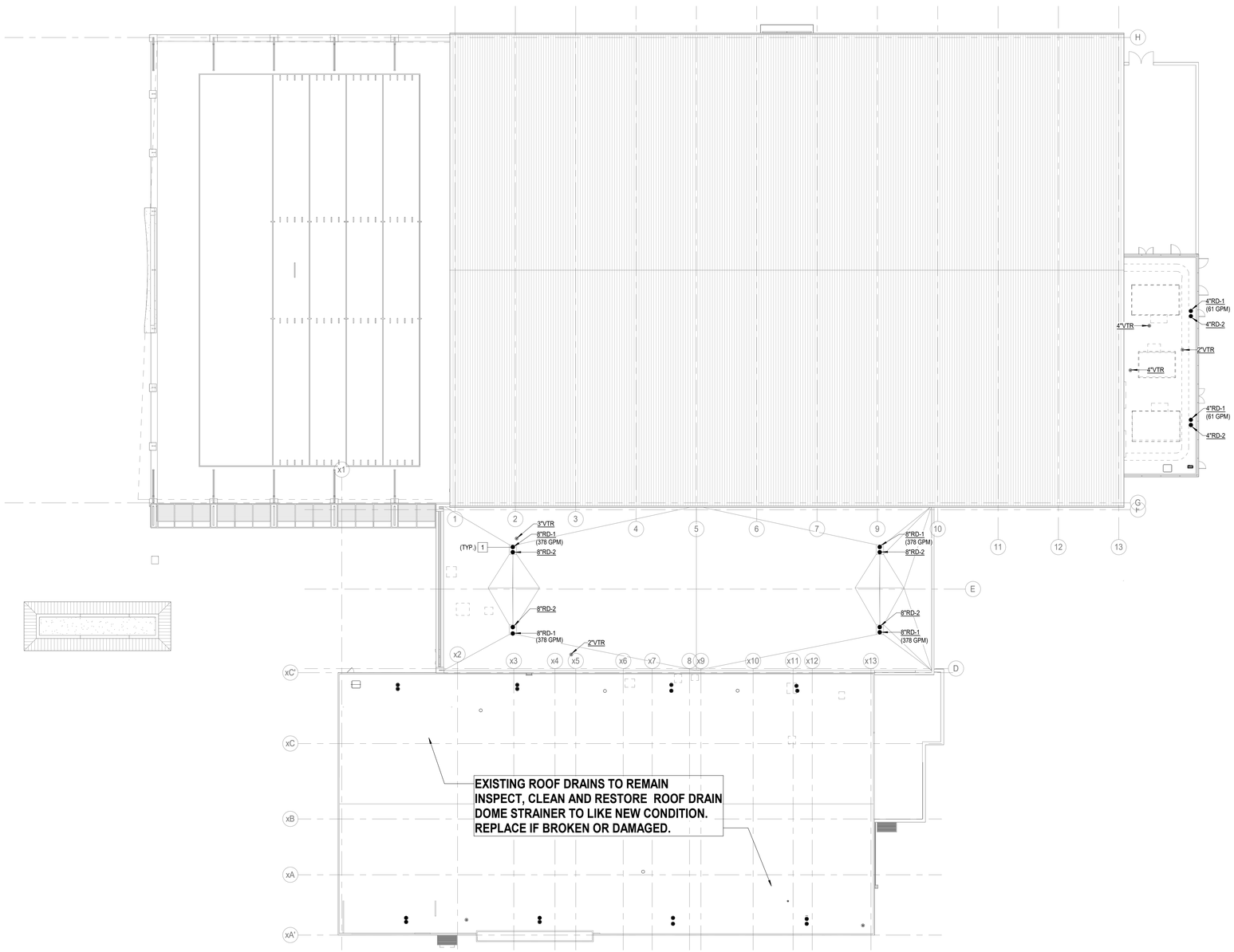
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

PLUMBING GENERAL NOTES:

1. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF DRAINS.
2. STORM SIZING IS BASED ON 4.6" PER HOUR RAINFALL.
3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
4. REFER TO SHEETS P5.01 AND P5.02 FOR PLUMBING DETAILS AND SHEET P6.01 FOR PLUMBING SCHEDULES.

PLUMBING KEYED NOTES "⊠"

1 RE: SHEET P5.01 FOR ROOF DRAIN DETAIL.



N

1 **PLUMBING ROOF PLAN**
Scale: 1" = 20'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

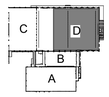
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

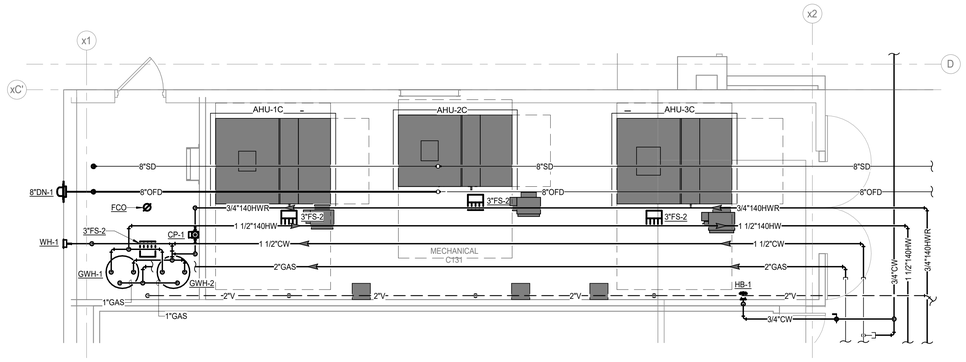
PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING ROOF PLAN

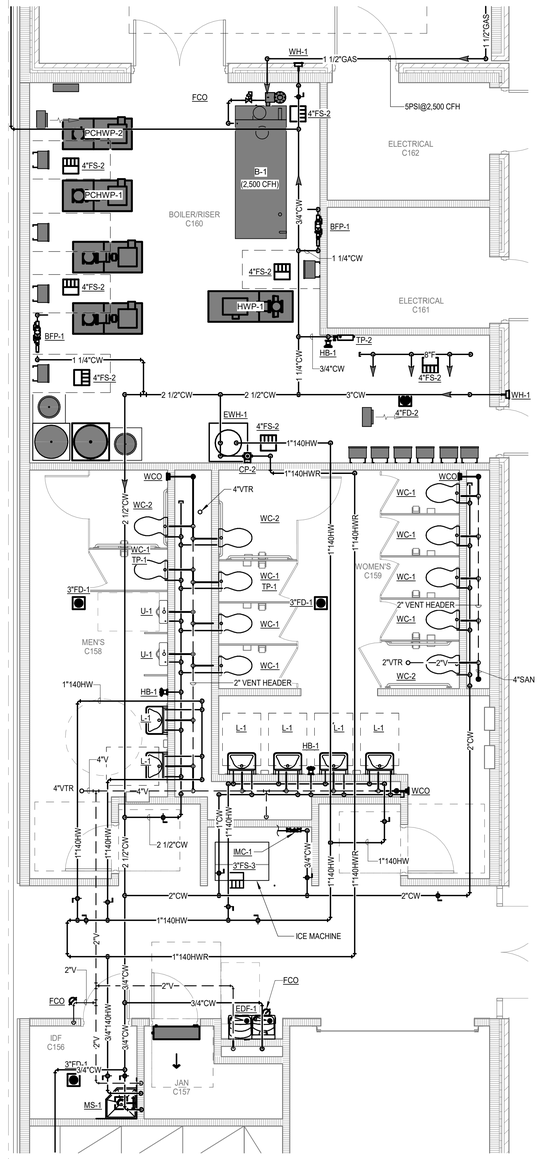
SHEET NO.
P3.07



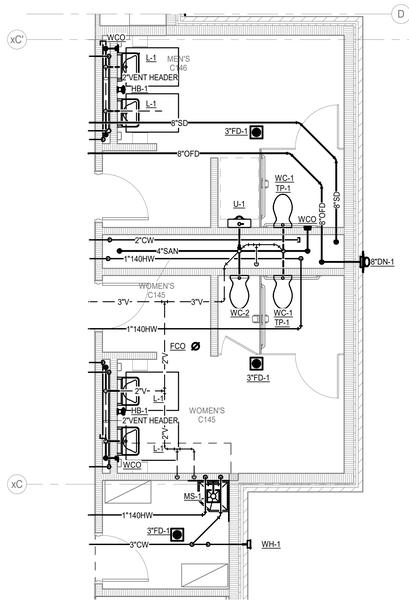
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



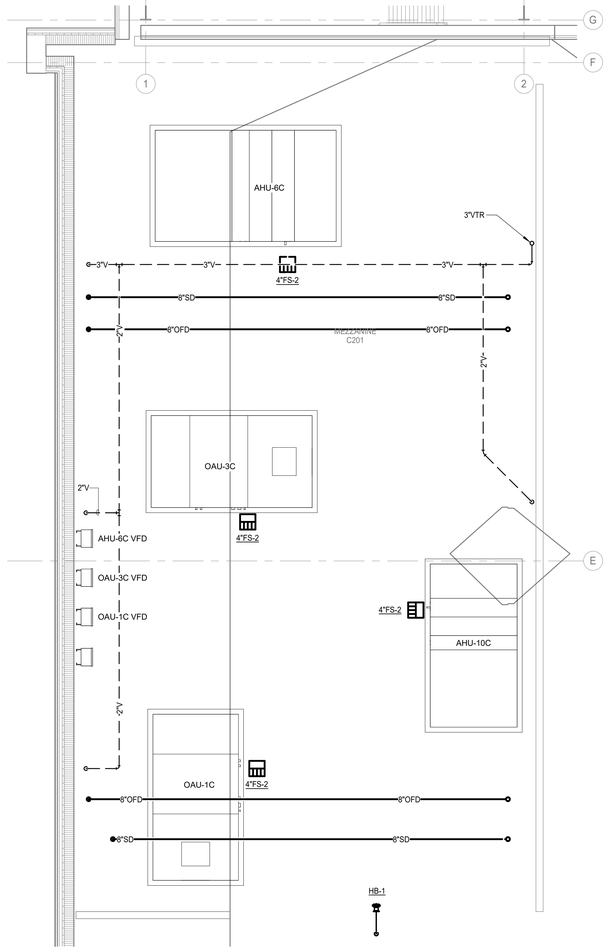
N 4 **PLUMBING ENLARGED PLAN - MECHANICAL C131 - LEVEL ONE**
Scale: 1/4" = 1'-0"



N 3 **PLUMBING ENLARGED PLAN - LEVEL ONE - UNIT D - MENS C153/WOMENS C154**
Scale: 1/4" = 1'-0"



N 2 **PLUMBING ENLARGED PLAN - LEVEL ONE - UNIT A - MENS C146/WOMENS C145**
Scale: 1/4" = 1'-0"



N 1 **PLUMBING ENLARGED PLAN - LEVEL ONE - UNIT B - MEZZANINE**
Scale: 1/4" = 1'-0"

FIRE SPRINKLER NOTE:

LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR THIS BUILDING, TO COMPLY WITH SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING GENERAL NOTES:

1. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
2. ALL FLOOR DRAINS AND FLOOR SINKS MUST BE EASILY ACCESSIBLE FOR SERVICING. RE: SHEET P5.01 FOR DETAIL AND SHEET P6.01 FOR SCHEDULES
3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
4. REFER TO SHEETS P5.01 FOR PLUMBING DETAILS AND SHEET P6.01 FOR PLUMBING SCHEDULES.

PLUMBING KEYED NOTES "⊠"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

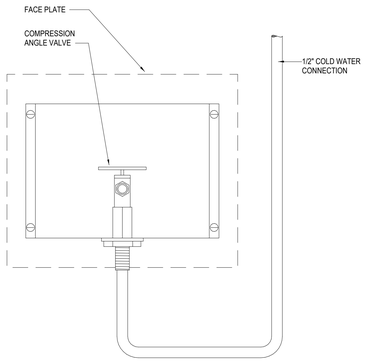
PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING ENLARGED FLOOR PLAN

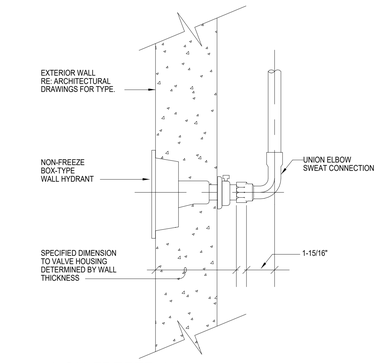
SHEET NO.
P4.01

North Shore Multi-Use Indoor Facility

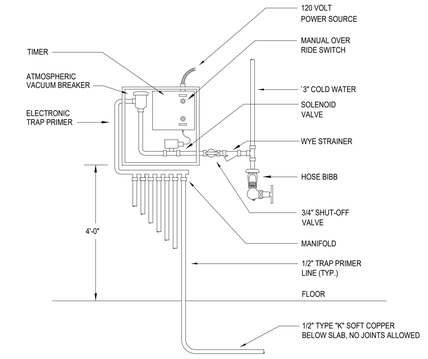
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



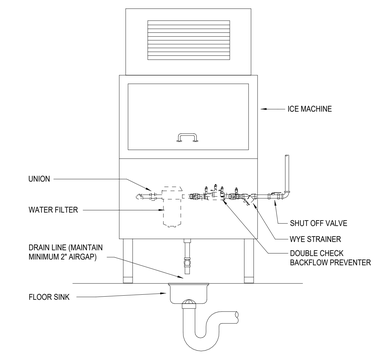
16 RECESSED VALVE BOX HOOK-UP - RVB-1
SCALE: NONE



12 NON-FREEZE WALL HYDRANT CONNECTION
SCALE: NONE

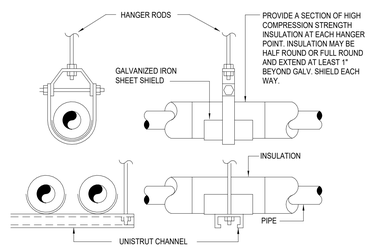


8 ELECTRONIC TRAP PRIMER

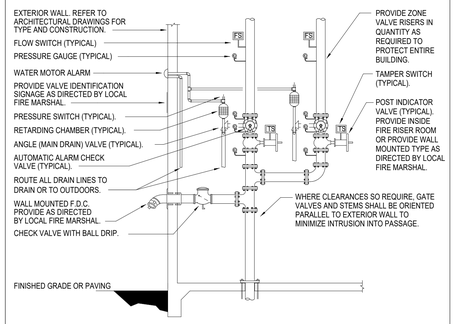


4 ICE MACHINE CONNECTION
SCALE: NONE

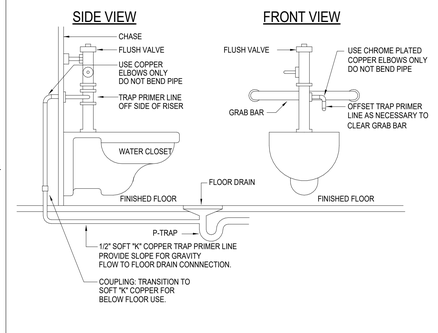
MINIMUM DIMENSIONS OF GALVANIZED SHEETMETAL PROTECTION SHIELDS AT PIPE HANGERS		
NOMINAL SIZE PIPE	SHIELD LENGTH (IN.)	GAUGE THICKNESS
1/2" & 3/4"	12	18
1" - 2-1/2"	12	18
3" - 4"	16	18
6"	18	16



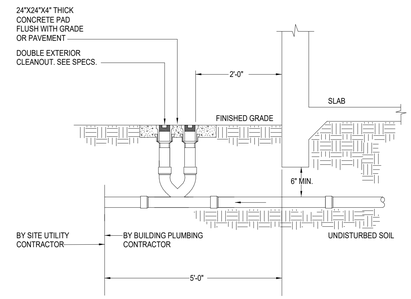
15 SHIELDS FOR INSULATED PIPING
SCALE: NONE



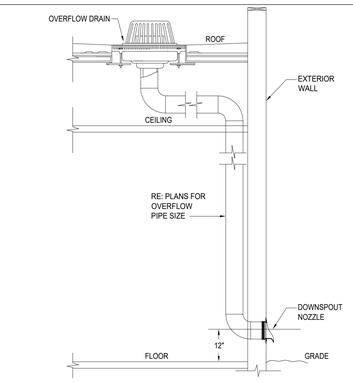
11 FIRE ENTRY PIPING DETAIL
SCALE: NONE



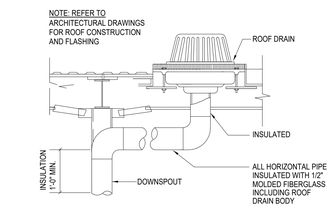
7 FLUSH VALVE TRAP PRIMER
SCALE: NONE



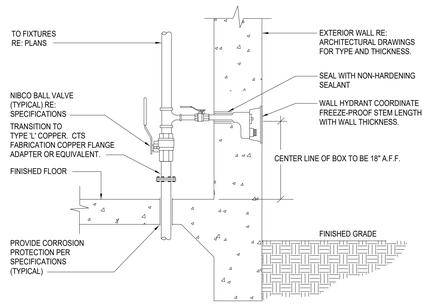
3 TWO-WAY CLEANOUT
SCALE: NONE



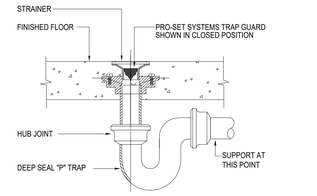
13 DOWNSPOUT NOZZLE
SCALE: NONE



14 ROOF DRAIN DOWNSPOUT
SCALE: NONE

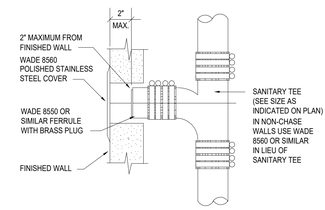


10 DOMESTIC WATER ENTRY
SCALE: NONE

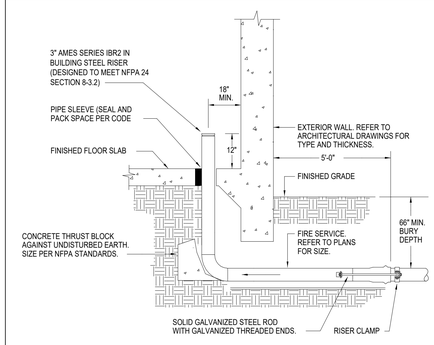


NOTES:
1. TRAP GUARD SHALL BE FACTORY FITTED TO MATCH EACH FLOOR DRAIN (AND FLOOR SINK) BY SIZE, MODEL, AND MANUFACTURER.
2. FLOOR SINK TRAP GUARD INSTALLATION IS SIMILAR.
3. INSTALLATION OF TRAP GUARD TO BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. INSERT TRAP GUARD ONLY AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS TITE SEAL. FOR DRAIN RODDING AFTER INSTALLATION, INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

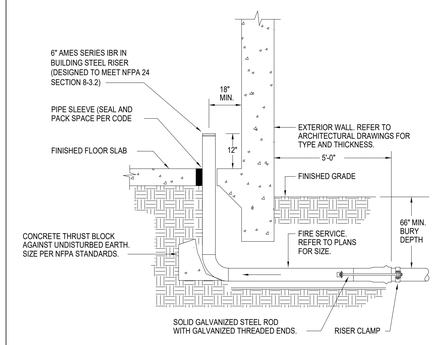
6 FLOOR DRAIN WITH TRAP SEAL PROTECTION
SCALE: NONE



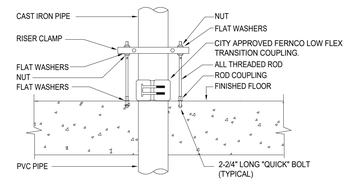
2 WALL CLEANOUT
SCALE: NONE



9 FIRE/WATER SERVICE ENTRY
SCALE: NONE



5 FIRE/WATER SERVICE ENTRY
SCALE: NONE



NOTE:
1. MAKE CONNECTION FROM PVC BELOW SLAB TO CAST IRON ABOVE SLAB WITH FERNCO TRANSITION COUPLING.
2. THERE IS TO BE NO EXPOSED PVC ABOVE SLAB.

1 CAST IRON TO PVC TRANSITION
SCALE: NONE

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

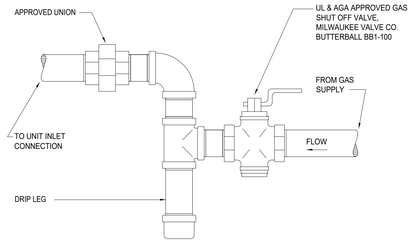
PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING DETAILS

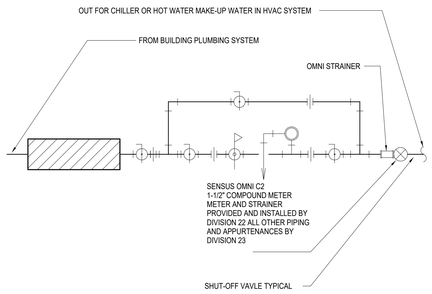
SHEET NO.
P5.01

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

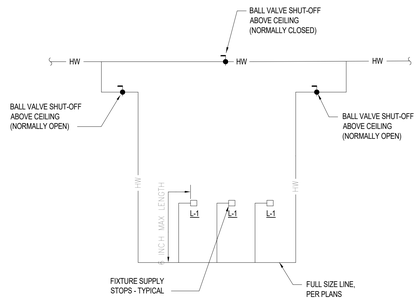


11 GAS CONNECTION
SCALE: NONE



NOTE: PROVIDE WATER SUB METER ON CHILLED AND HOT WATER MAKE-UP LINES.

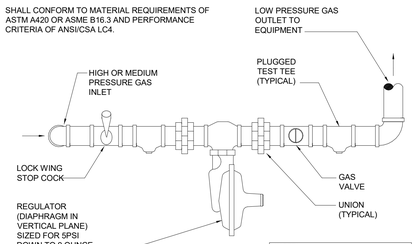
7 MAKE-UP WATER SUB-METER
SCALE: NONE



3 HW CIRCULATION FOR PUBLIC LAVATORIES
SCALE: NONE

PROVIDE AMERICAN METER COMPANY REGULATORS OR APPROVED EQUAL, SUITABLE FOR OUTDOOR INSTALLATION. REGULATORS OUTSIDE EXPOSED TO WEATHER SHALL BE INSTALLED WITH VENT IN VERTICAL DOWN POSITION.

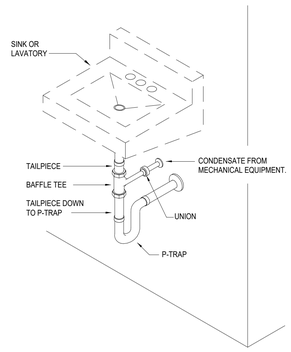
SHALL CONFORM TO MATERIAL REQUIREMENTS OF ASTM A420 OR ASME B16.3 AND PERFORMANCE CRITERIA OF ANSI/CSA LC4.



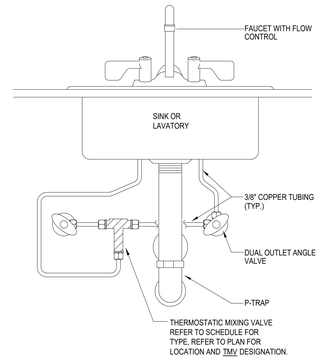
NOTE: REFERENCE DRAWINGS FOR PIPE SIZES.

NOTE:
ALL GAS PRESSURE REGULATOR LOCATED IN PLENUMS ARE TO BE ROUTED TO EXTERIOR

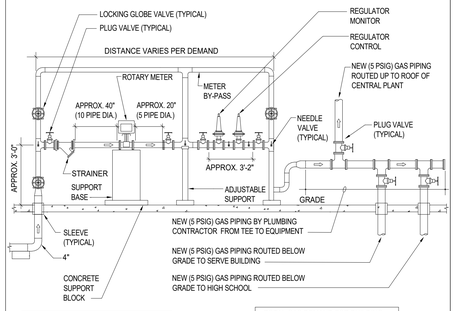
10 GAS PRESSURE REGULATOR INSTALLATION
SCALE: NONE



6 BAFFLE TEE CONNECTION
SCALE: NONE



2 POINT OF USE MIXING VALVE
SCALE: NONE

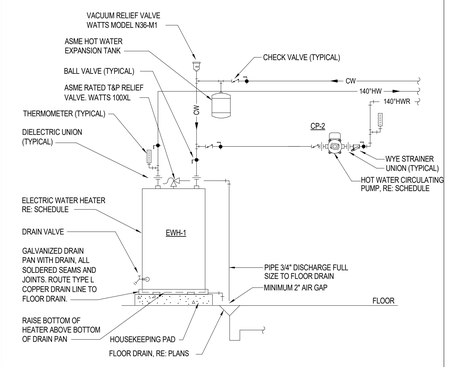


NOTE:
ALL SERVICE GAS PIPING FROM GAS MAIN TO METER OUTLET PROVIDED BY LOCAL GAS COMPANY.

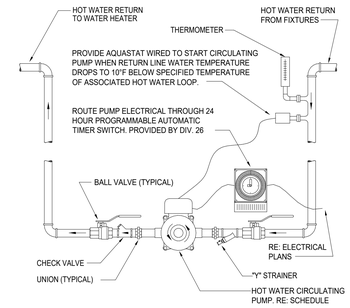
TOTAL GAS DEMAND FOR BUILDING:

0 - 4,000 CFH	12'-0"
4,001 - 6,000 CFH	14'-0"
6,001 - 8,000 CFH	16'-0"
8,001 - 10,000 CFH	18'-0"
10,000 + CFH	22'-0"

9 GAS METER PIPING
SCALE: NONE

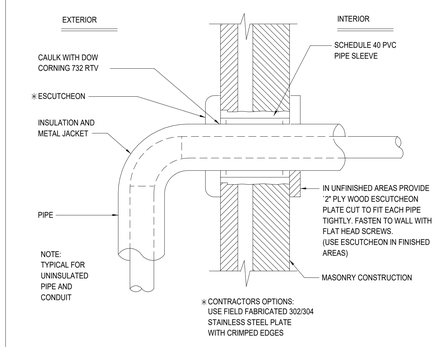


5 ELECTRIC WATER HEATER PIPING
SCALE: NONE



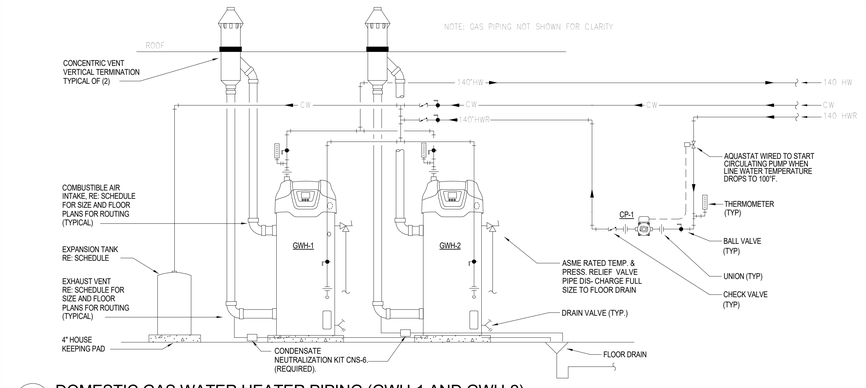
NOTE: MOUNT AT 54"-60" A.F.F. UNLESS NOTED OTHERWISE ON PLANS.

1 HOT WATER CIRCULATING PUMP
SCALE: NONE



CONTRACTORS OPTIONS:
USE FIELD FABRICATED 302/304 STAINLESS STEEL PLATE WITH CRIMPED EDGES

8 EXTERIOR WALL PENETRATION
SCALE: NONE



4 DOMESTIC GAS WATER HEATER PIPING (GWH-1 AND GWH-2)
SCALE: NONE

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
PLUMBING DETAILS

SHEET NO.
P5.02

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

GAS WATER HEATER SCHEDULE

MARK	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	STORAGE CAPACITY (GAL)	BTU/HR. INPUT	WH GALS. PER HR. RECOVERY RATE 100°F RISE	STORED WATER TEMP	ELECTRICAL CHAR. V	P	MCA	MOCP	REMARKS
GWH-1	AO SMITH	BTH-199A	100 GAL	199	256	140 °F	120	1	0	20	
GWH-2	AO SMITH	BTH-199A	100 GAL	199	256	140 °F	120	1	0	20	
1	INDIVIDUAL VERTICAL 4" CONCENTRIC FLUE VENT FOR EACH WATER HEATER. PROVIDE CONCENTRIC VENT KIT "0076144005". REFER TO DRAWINGS FOR FLUE ROUTING AND LOCATIONS THROUGH ROOF. CONTRACTOR SHALL COORDINATE FLUE LOCATION THROUGH ROOF AND PIPE ROUTING IN CEILING SPACES WITH ALL OTHER DISCIPLES PRIOR TO CONSTRUCTION.										
2	PROVIDE ACID NEUTRALIZING TANK KIT "0007060005"										

NOTE: PROVIDE HOT WATER EXPANSION TANK DOWNSTREAM OF CHECK VALVE ON COLD WATER SUPPLY.

ELECTRIC WATER HEATER SCHEDULE

MARK	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	STORAGE CAPACITY	KW	WH GALS. PER HR. RECOVERY RATE 100°F RISE	STORED WATER TEMP	ELECTRICAL CHAR. V	P	MCA	MOCP	REMARKS
EWH-1	AO SMITH	DSE-30A	30 GAL	12.3	50	140	480	3	0	20	

NOTE: PROVIDE HOT WATER EXPANSION TANK DOWNSTREAM OF CHECK VALVE ON COLD WATER SUPPLY.

CIRCULATION PUMP SCHEDULE

MARK	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	DESCRIPTION	TYPE	GPM	HEAD FEET	HP MIN	ELECTRICAL CHAR. V	P	F	MAX RPM
CP-1	GRUNDFOS	ALPHA HWR 15-55SF	CIRCULATION PUMP	INLINE BRONZE	5	12'-0"	1/25	120	1	60	1750
CP-2	GRUNDFOS	ALPHA HWR 15-55SF	CIRCULATION PUMP	INLINE BRONZE	5	4'-0"	1/25	120	1	60	1750

NOTE: FACTORY SET PUMP TO AUTO-ADAPT SETTING

SHOCK ARRESTORS

P.D.I SYMBOL	FIXTURE UNITS	CHAMBER LENGTH	THREADED CONNECTION
A	1-11	9 5/8"	1/2"
B	12-32	11 3/4"	3/4"
C	33-60	14 11/16"	1"
D	61-113	12 3/8"	1"
E	114-154	15 3/8"	1"
F	155-330	17 3/8"	1"

PLUMBING PIPING LEGEND

SYMBOLS	DESCRIPTION
SAN	SANITARY OR WASTE PIPING (SAN)
GW	GREASE WASTE PIPING (GW)
GW	GREASE WASTE PIPING BELOW GRADE (GW)
SD	STORM DRAIN PIPING (SD)
SSD	SUB-SOIL DRAIN OR FOOTING DRAIN (SSD)
AW	ACID WASTE PIPING (AW)
AW	ACID WASTE PIPING BELOW GRADE (AW)
PD	PUMPED DISCHARGE (PD)
CD	CONDENSTATE DRAIN PIPING (CD)
D	CONDENSTATE - INDIRECT DRAIN PIPING (D)
	VENT PIPING (V)
CW	COLD WATER PIPING (CW)
HW	HOT WATER PIPING (HW)
HWR	HOT WATER RETURN PIPING (HWR)
SCW	SOFT COLD WATER PIPING (SCW)
AIR	COMPRESSED AIR PIPING (A)
TP	TRAP PRIMER LINE (TP)
F	FIRE PROTECTION PIPING (F)
AS	AUTOMATIC SPRINKLER PIPING (AS)
GAS	NATURAL GAS PIPING (G)
DI	DEMINERALIZATION WATER(DI)
OWS	OIL WATER SEPARATOR
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
	BALANCING VALVE (BV)
	SOLENOID VALVE (SV)
	BALL VALVE (BV)
	BUTTERFLY VALVE
	LUBRICATED PACKED PLUG STOP STOP COCK (PC)
	HORIZONTAL SWING CHECK
	UNION
	HORIZONTAL SWING CHECK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
	FLOOR CLEANOUT (FCO)
	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	FIRE DEPARTMENT VALVE AT RISER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK
	GAS METER
	WALL HYDRANT
	VALVE IN RISE
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	OS&Y VALVE
	ROOF DRAIN
1	REFER TO KEYED NOTE
FS	FLOW SWITCH
FS	FLOOR SINK (FS)
FD	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
HD	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER OR SHOCK ABSORBER
AP	ACCESS PANEL LOCATION SYMBOL
S	SHOCK ABSORBER
(E)	EXISTING
ETR	EXISTING TO REMAIN
(N)	NEW
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
	NEW CONNECTION
S.F.	SQUARE FEET
TYP	TYPICAL
VTR	VENT THROUGH ROOF
VTA	VENT TO ATMOSPHERE
IE = 100.00	INVERT ELEVATION
1/4" per foot	QUARTER OF AN INCH SLOPE
1/8" per foot	1/8TH OF AN INCH SLOPE
1/16" per foot	1/16TH OF AN INCH SLOPE
	DELTA CHANGE SYMBOL

DISREGARD SYMBOLS AND ABBREVIATIONS NOT USED ON CONTRACT DRAWINGS

PLUMBING FIXTURE SCHEDULE

TYPE: WC-1 (T.A.S. COMPLIANT)
DESCRIPTION: WATER CLOSET, WALL HUNG, WHITE VITREOUS CHINA, 1.28 GALLON PER FLUSH SIPHON JET ACTION, ELONGATED CLOSET BOWL WITH 1-1/2" TOP SPUD AND BOLT COVERS. WITH EVERCLEAN. AMERICAN STANDARD "AFWALL" 3351.101.
SEAT: ELONGATED OPEN FRONT WHITE PLASTIC SEAT WITH SELF SUSTAINING CONCEALED CHECK HINGES. CHURCH 9500SSCT
FLUSH VALVE: 1.28 GALLON FLUSH CYCLE. EXPOSED, DIAPHRAGM TYPE, POLISHED CHROME CLOSET FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 1-1/2" TOP SPUD. SLOAN ROYAL 111-1.28
CARRIER: WADE 311 AND 330 SERIES -AM1.
ROUGH-IN: 4" WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: WC-X1 (T.A.S. COMPLIANT)
DESCRIPTION: WATER CLOSET, WALL HUNG, WHITE VITREOUS CHINA, 1.28 GALLON PER FLUSH SIPHON JET ACTION, ELONGATED CLOSET BOWL WITH 1-1/2" TOP SPUD AND BOLT COVERS. WITH EVERCLEAN. AMERICAN STANDARD "AFWALL" 3351.101.
SEAT: ELONGATED OPEN FRONT WHITE PLASTIC SEAT WITH SELF SUSTAINING CONCEALED CHECK HINGES. CHURCH 9500SSCT
FLUSH VALVE: 1.28 GALLON FLUSH CYCLE. EXPOSED, DIAPHRAGM TYPE, POLISHED CHROME CLOSET FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 1-1/2" TOP SPUD. SLOAN ROYAL 111-1.28
CARRIER: EXISTING TO REMAIN
ROUGH-IN: RE-USE EXISTING WASTE, WATER AND VENT ROUGH-INS

TYPE: WC-2 (STANDARD HEIGHT)
DESCRIPTION: WATER CLOSET, WALL HUNG, WHITE VITREOUS CHINA, 1.28 GALLON PER FLUSH SIPHON JET ACTION, ELONGATED CLOSET BOWL WITH 1-1/2" TOP SPUD AND BOLT COVERS. WITH EVERCLEAN. AMERICAN STANDARD "AFWALL" 3351.101.
SEAT: ELONGATED OPEN FRONT WHITE PLASTIC SEAT WITH SELF SUSTAINING CONCEALED CHECK HINGES. CHURCH 9500SSCT
FLUSH VALVE: 1.28 GALLON FLUSH CYCLE. EXPOSED, DIAPHRAGM TYPE, POLISHED CHROME CLOSET FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 1-1/2" TOP SPUD. SLOAN ROYAL 111-1.28
CARRIER: WADE 311 AND 330 SERIES -AM1.
ROUGH-IN: 4" WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: U-1 (T.A.S. COMPLIANT)
DESCRIPTION: URINAL, WALL HUNG, WHITE VITREOUS CHINA, 0.5 GALLON PER FLUSH, SIPHON JET ACTION, INTEGRAL TRAP. AMERICAN STANDARD ALLBROOK 6550.001
FLUSH VALVE: 0.5 GALLON FLUSH CYCLE. EXPOSED, DIAPHRAGM TYPE, CHROME PLATED URINAL FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 3/4" TOP SPUD. SLOAN ROYAL186-0.5-H-573-CP CAP.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 4" SQUARE BASE ANCHORED TO CONCRETE WITH (4) 1/2" BOLTS, ADJUSTABLE SLEEVE. UPPER AND LOWER BEARING PLATES WITH THREADED STUDS. WADE 401-AM11.
ROUGH-IN: 2" WASTE, 2" VENT, 3/4" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: U-X1 (T.A.S. COMPLIANT)
DESCRIPTION: URINAL, WALL HUNG, WHITE VITREOUS CHINA, 0.5 GALLON PER FLUSH, SIPHON JET ACTION, INTEGRAL TRAP. AMERICAN STANDARD ALLBROOK 6550.001
FLUSH VALVE: 0.5 GALLON FLUSH CYCLE. EXPOSED, DIAPHRAGM TYPE. CHROME PLATED URINAL FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 3/4" TOP SPUD. SLOAN ROYAL186-0.5-H-573-CP CAP.
CARRIER: EXISTING TO REMAIN
ROUGH-IN: RE-USE EXISTING WASTE, WATER AND VENT ROUGH-INS

TYPE: L-1 (T.A.S. COMPLIANT) - HOT AND COLD WATER
DESCRIPTION: LAVATORY, WALL HUNG, WHITE VITREOUS CHINA, 20-1/2" X 18-1/4" WITH FRONT OVERFLOW AND CONCEALED ARM SUPPORTS, FAUCET HOLES ON 4" CENTERS. AMERICAN STANDARD "LUCERNE" 0355.012.
FAUCET: CHROME PLATED BRASS DECK MOUNTED LAVATORY FAUCET WITH COVER PLATE, 4-1/8" SPOUT, AND PUSH BUTTON HANDLE INDEXED "PUSH". SELF-CLOSING METERING CARTRIDGE, VANDAL RESISTANT 0.5 GPM OUTLET. CHICAGO MODEL 857-E2805-765PSHAB.
MIXING VALVE: PROVIDE ASSE 1070 RATED LAWLER MODEL 570-38 POINT OF USE THERMOSTATIC MIXING VALVE AT LAVATORY TO TEMPER OUTLET WATER SUPPLY TO 105° WITH 0.5 GPM FLOW RATE
STRAINER: 1-1/4" 17 GAUGE CHROME PLATED BRASS GRID STRAINER WITH TAILPIECE. MCGUIRE #155A.
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE 8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165LK.
CARRIER: EXISTING TO REMAIN
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: L-X1 (T.A.S. COMPLIANT) - HOT AND COLD WATER
DESCRIPTION: LAVATORY, WALL HUNG, VITREOUS CHINA, 20-1/2" X 18-1/4" WITH FRONT OVERFLOW AND CONCEALED ARM SUPPORTS, FAUCET HOLES ON 4" CENTERS. AMERICAN STANDARD "LUCERNE" 0355.012. CHROME PLATED BRASS DECK MOUNTED LAVATORY FAUCET WITH COVER PLATE, 4-1/8" SPOUT, AND PUSH BUTTON HANDLE INDEXED "PUSH". SELF-CLOSING METERING CARTRIDGE, VANDAL RESISTANT 0.5 GPM OUTLET. CHICAGO MODEL 857-E2805-765PSHAB.
FAUCET:
MIXING VALVE: PROVIDE ASSE 1070 RATED LAWLER MODEL 570-38 POINT OF USE THERMOSTATIC MIXING VALVE AT LAVATORY TO TEMPER OUTLET WATER SUPPLY TO 105° WITH 0.5 GPM FLOW RATE
STRAINER: 1-1/4" 17 GAUGE CHROME PLATED BRASS GRID STRAINER WITH TAILPIECE. MCGUIRE #155A.
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE 8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165LK.
CARRIER: EXISTING TO REMAIN
ROUGH-IN: RE-USE EXISTING WASTE, WATER AND VENT ROUGH-INS

TYPE: L-X2 (T.A.S. COMPLIANT) - HOT AND COLD WATER
DESCRIPTION: LAVATORY, WALL HUNG, VITREOUS CHINA, 20-1/2" X 18-1/4" WITH FRONT OVERFLOW AND CONCEALED ARM SUPPORTS, FAUCET HOLES ON 4" CENTERS. AMERICAN STANDARD "LUCERNE" 0355.012.
FAUCET: 4" FIXED CENTERS, SINGLE LEVER HOT AND COLD WATER. THERMOSTATIC MIXING FAUCET. CERAMIC MIXING CARTRIDGE (ASSE 1070 CERTIFIED) INCLUDES SCALD PROTECTION AND INTEGRAL INLET CHECK VALVES, 0.5 GPM AERATOR. HOT WATER INLET TEMPERATURE 100° - 180°, MAXIMUM HOT WATER OUTLET TEMPERATURE OF 105° MINIMUM FLOW RATE FOR TEMPERATURE LIMITING OF 0.35 GPM. MAXIMUM EMERGENCY TEMPERATURE OUT AT COLD WATER FAILURE- 120°. CHICAGO MODEL 420-T41E2805ABCP
STRAINER: 1-1/4" 17 GAUGE CHROME PLATED BRASS GRID STRAINER WITH TAILPIECE. MCGUIRE #155A.
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE 8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165LK.
CARRIER: EXISTING TO REMAIN
ROUGH-IN: RE-USE EXISTING WASTE, WATER AND VENT ROUGH-INS

TYPE: SK-1 (T.A.S. COMPLIANT)
DESCRIPTION: SINK, COUNTER MOUNTED, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL, 29" X 18" X 6" DEEP. DOUBLE COMPARTMENT WITH FAUCET DECK. THREE FAUCET HOLES ON 4" CENTERS. ELKAY LRAD291860
FAUCET: 8" CENTERS, 4" CHROME PLATED WRIST BLADE HANDLES, CERAMIC DISC CARTRIDGES, 8" CHROME PLATED BRASS SWING SPOUT WITH 2.2 GPM AERATOR. CHICAGO 1100-317XKABCP.
STRAINER: (2) CHROME PLATED BRASS WIDE TOP SINK STRAINERS WITH PERFORATED STRAINERS, 1-1/2" CHROME PLATED BRASS OFFSET TAILPIECES WITH CAST BRASS ELBOW. MCGUIRE 1152WC.
P-TRAP: 1-1/2" END OUTLET 16" CENTERS 17 GAUGE CONTINUOUS WASTE WITH CAST BRASS TEE. MCGUIRE 111C16017. 1-1/2" 17 GAUGE CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE 8912C.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D. CHROME PLATED LOOSE KEY STOP VALVES WITH ESCUTCHEONS AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165LK.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: MS-1
DESCRIPTION: MOP SINK BASIN, 32" X 32" X 12" HIGH CORNER TYPE. PRECAST TERRAZZO WITH 6" DROPPED FRONT, STAINLESS STEEL THRESHOLD CAP, AND DOUBLE STAINLESS STEEL WALL GUARDS. STERN-WILLIAMS "CORLOW" SBC-1725 WITH BP SPLASH PANELS, #T-40 MOP HANGER, AND #T-35 HOSE.
FAUCET: CHROME PLATED BRASS WALL MOUNTED FITTING WITH CHECK IN STOPS, ADJUSTABLE SUPPLY ARMS. VACUUM BREAKER SPOUT WITH PAIL HOOK AND WALL BRACE, 2-1/2" INDEXED LEVER HANDLES ON 8" CENTERS. CERAMIC DISC CARTRIDGES, 3/4" MALE HOSE THREAD OUTLET. CHICAGO #445-897SRCXKCP.
ROUGH-IN: 3" WASTE, 2" VENT, 1/2" HOT AND COLD WATER.

TYPE: WP-1 - (T.A.S. COMPLIANT) WHIRLPOOL THERAPEUTIC TUB
DESCRIPTION: THERAPEUTIC TUB BY OWNER, CONTRACTOR TO COORDINATE WITH ARCHITECT FOR ROUGH-IN AND FINAL CONNECTIONS.
FAUCET: ADJUSTABLE THERMOSTATIC, ASSE 1070 RATED MIXING VALVE. INLET STOPS TO LIMIT HOT WATER TEMPERATURE, BOTTOM INLETS, SIDE OUTLET. OUTLET VOLUME CONTROL/SHUTOFF WITH VACUUM BREAKER. PROVIDE WITH WALL SUPPORT AND HOSE ATTACHMENT. LEONARD TM-504-2R4-LF
ROUGH-IN: 3/4" HOT AND COLD WATER

TYPE: SH-1 (T.A.S. COMPLIANT) - INDIVIDUAL SHOWER STATION
DESCRIPTION: SHOWER. JOB BUILT BASE INSTALLED PER ARCHITECTURAL DRAWINGS.
CONTROLS: PRESSURE BALANCING HOT AND COLD WATER SHOWER CONTROL VALVE WITH VANDAL RESISTANT LEVER HANDLE, INTEGRAL CHECKSTOPS, AND ADJUSTABLE TEMPERATURE LIMIT SCREW NOT TO EXCEED 120°. CAST BRASS VALVE BODY. ALL EXPOSED MATERIALS STAINLESS STEEL OR CHROME PLATED BRASS. 1.5 GPM HAND HELD SHOWER WITH 60" METAL CLAD FLEXIBLE HOSE. CHROME PLATED BRASS SUPPLY ARM. VACUUM BREAKER, MOUNTING BRACKET AND 24" METAL SLIDE BAR. BRADLEY 1C-HD-AKV-A24.
DRAIN: FLOOR DRAIN. CAST IRON BODY, ADJUSTABLE 5" DIAMETER NICKEL BRONZE STRAINER WITH VANDAL PROOF SCREWS. INTEGRAL CLAMPING DEVICE, BOTTOM OUTLET. WADE 1100-MR5.
TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR DRAIN BY SIZE, MODEL, AND MANUFACTURER.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: EDF-1 (T.A.S. COMPLIANT)
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED, SPLIT-LEVEL ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLING STATION & BI-LEVEL ADA COOLER REFRIGERATED ULTRA-CAPACITY LEAD REDUCTION. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50 □ F DRINKING WATER, BASED ON 80 □ F INLET WATER AND 90 □ F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE ANTIMICROBIAL*. AUTOMATIC FILTER STATUS RESET, ENERGY SAVINGS, FILTERED, GREEN TICKER™, HANDS FREE, LAMINAR FLOW, REAL DRAIN, VISUAL FILTER MONITOR, ALCOVE LIGHT, PRO FILTRATION SYSTEM, TOP MOUNT QUICK FILTER CHANGE, STAINLESS STEEL ALCOVE, AUTOMATIC FILTER FLUSH. FURNISHED WITH FLEXI-GUARD ® SAFETY BUBBLER, ELECTRONIC BOTTLE FILLER SENSOR WITH ELECTRONIC FRONT AND SIDE BUBBLER PUSHBAR ACTIVATION WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH. NOTE: UNIT SHOULD BE ABLE TO DISPENSE UNCHILLED WATER DURING A POWER OUTAGE. ELKAY LZSTL8WSBPRO WITH APRON 98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE 8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D. CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" CHROME PLATED FLEXIBLE RISER. MCGUIRE 2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE 403-BL-BFS
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: EDF-X1 (T.A.S. COMPLIANT)
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED, SPLIT-LEVEL ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLING STATION & BI-LEVEL ADA COOLER REFRIGERATED ULTRA-CAPACITY LEAD REDUCTION. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50 □ F DRINKING WATER, BASED ON 80 □ F INLET WATER AND 90 □ F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE ANTIMICROBIAL*. AUTOMATIC FILTER STATUS RESET, ENERGY SAVINGS, FILTERED, GREEN TICKER™, HANDS FREE, LAMINAR FLOW, REAL DRAIN, VISUAL FILTER MONITOR, ALCOVE LIGHT, PRO FILTRATION SYSTEM, TOP MOUNT QUICK FILTER CHANGE, STAINLESS STEEL ALCOVE, AUTOMATIC FILTER FLUSH. FURNISHED WITH FLEXI-GUARD ® SAFETY BUBBLER, ELECTRONIC BOTTLE FILLER SENSOR WITH ELECTRONIC FRONT AND SIDE BUBBLER PUSHBAR ACTIVATION WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH. NOTE: UNIT SHOULD BE ABLE TO DISPENSE UNCHILLED WATER DURING A POWER OUTAGE. ELKAY LZSTL8WSBPRO WITH APRON 98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE 8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D. CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" CHROME PLATED FLEXIBLE RISER. MCGUIRE 2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE 403-BL-BFS
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: HB-1 - COLD WATER.
DESCRIPTION: HOSE BIBB. EXPOSED TYPE, MILD CLIMATE, WALL-MOUNTED FAUCET WITH 3/4" F.P.T. INLET, 3/4" MALE HOSE THREAD OUTLET AND SELF-DRAINING ANTI-SIPHON VACUUM BREAKER. CHROME PLATED BRASS FINISH WITH REMOVABLE TEE HANDLE. CHICAGO 952-XKCP.
ROUGH-IN: 3/4" COLD WATER. INSTALL WITH OUTLET AT 18" A.F.F. OR AS DIRECTED BY ARCHITECT/OWNER.

TYPE: WH-1
DESCRIPTION: WALL HYDRANT, CONCEALED BOX TYPE, 3/4" NON-FREEZE. CHROME PLATED BRASS FINISH WITH ANTI-SIPHON VACUUM BREAKER AND LOOSE TEE KEY. INSTALL WITH BOTTOM OF BOX 18" AFF WOODFORD MODEL B65
ROUGH-IN: 3/4" HOT AND COLD WATER

TYPE: RVB-1
DESCRIPTION: REFRIGERATOR VALVE BOX, 10-3/4" X 9", 16 GAUGE STEEL WITH EPOXY FINISH, 5/8" O.D. SWEAT CONNECTION. PROVIDE FILTER WHEN MAKING FINAL CONNECTION. GUY GRAY BIM-875 WITH AQUA-PURE AP717 FILTER.
ROUGH-IN: 1/2" COLD WATER

TYPE: IMC-1
DESCRIPTION: ICE MACHINE CONNECTION, WATER SUPPLY VALVED AT WALL. PROVIDE DOUBLE CHECK VALVE TYPE BACKFLOW PREVENTER AND WATER FILTER. WATTS 007-QT BACKFLOW PREVENTER, AQUA-PURE APS10 FILTER. ROUTE BACKFLOW PREVENTER DISCHARGE TO FLOOR SINK SERVING ICE MACHINE.
ROUGH-IN: 3/4" COLD WATER. COORDINATE ROUGH-IN LOCATION/HEIGHT. FINAL CONNECTION WITH EQUIPMENT BEING INSTALLED AND WITH ARCHITECTURAL/CASEWORK DRAWINGS.

TYPE: TP-1
SERVICE: SERVES ONE FLOOR DRAIN TRAP.
DESCRIPTION: FLUSH VALVE TRAP PRIMER, 1-1/2" O.D. X 12" 17 GAUGE PRIMING TUBE WITH VACUUM BREAKER. PRECISION PLUMBING PRODUCTS FVP-1VB.

TYPE: TP-2
SERVICE: SERVES 1 TO 30 FLOOR DRAIN/FLOOR SINK TRAPS, REFER TO PLANS.
DESCRIPTION: ELECTRONIC TRAP PRIMER WITH DISTRIBUTION MANIFOLD AND CABINET. SURFACE MOUNT IN WHERE SHOWN. PRECISION PLUMBING PRODUCTS PRIME TIME MODEL PT SERIES OR MIFAB MI-100-32.
ROUGH-IN: 3/4" COLD WATER

TYPE: FD-1
SERVICE: TOILET ROOMS AND GENERAL USE
DESCRIPTION: FLOOR DRAIN, CAST IRON BODY, ADJUSTABLE 6" DIAMETER STAINLESS STRAINER WITH VANDAL PROOF SCREWS, INTEGRAL CLAMPING DEVICE, BOTTOM OUTLET WITH PLUGGED TRAP PRIMER CONNECTION. WADE 1100-MR6-B5.
TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR SINK BY SIZE, MODEL, AND MANUFACTURER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS / FLOOR CONSTRUCTION.

TYPE: FS-1
SERVICE: WHIRLPOOL THERAPEUTIC TUB
DESCRIPTION: A.R.C. COATED CAST IRON BODY 12" SQUARE FLOOR SINK WITH 8" DEEP SUMP, ALUMINUM DOME SECONDARY STRAINER, CLAMPING DEVICE WITH STAINLESS STEEL HALF TOP GRATE AND BOTTOM OUTLET WADE 9140-15-26-48-B5
TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR SINK BY SIZE, MODEL, AND MANUFACTURER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION WITH EQUIPMENT PLACEMENT.

TYPE: FS-2
SERVICE: MECHANICAL ROOM/EQUIPMENT INDIRECT
DESCRIPTION: A.R.C. COATED CAST IRON BODY 12" SQUARE FLOOR SINK WITH 8" DEEP SUMP, ALUMINUM DOME SECONDARY STRAINER, CLAMPING DEVICE WITH STAINLESS STEEL HALF TOP GRATE. BOTTOM OUTLET WITH 1/2" TRAP PRIMER CONNECTION. WADE 9140-6-15-26-48-B5.
TRAP SEAL: TRAP SERVED BY TRAP PRIMING DEVICE RE: ASSOCIATED PLAN FOR TYPE
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION WITH EQUIPMENT PLACEMENT.

TYPE: FS-3
SERVICE: ICE MACHINE DRAIN / BACKFLOW PREVENTER DISCHARGE
DESCRIPTION: CAST IRON 8" SQUARE FLOOR SINK WITH 6" DEEP SUMP, A.R.E. INTERIOR, ALUMINUM DOME BOTTOM STRAINER, 1/2 STAINLESS STEEL TOP, CLAMPING DEVICE. WADE 9110-15-26-27-SS.
TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR SINK BY SIZE, MODEL, AND MANUFACTURER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION WITH ARCHITECTURAL DRAWINGS / EQUIPMENT PLACEMENT.

TYPE: RD-1
DESCRIPTION: ROOF DRAIN. CAST IRON BODY WITH FLANGE, FLASHING RING WITH GRAVEL STOP, ALUMINUM DOME, UNDERDECK CLAMP AND ADJUSTABLE EXTENSION AS REQUIRED FOR ROOF CONSTRUCTION. PUSH ON CONNECTION ONLY. WADE 3000-46-52-53
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES.

TYPE: RD-2
DESCRIPTION: OVERFLOW ROOF DRAIN. CAST IRON BODY WITH FLANGE, FLASHING RING WITH GRAVEL STOP, ALUMINUM DOME, 2" HIGH WATER DAM, UNDERDECK CLAMP AND ADJUSTABLE EXTENSION AS REQUIRED FOR ROOF CONSTRUCTION. PUSH ON CONNECTION ONLY. WADE 3000-D-46-52-53.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES.

TYPE: DN-1
DESCRIPTION: OVERFLOW DOWNSPOUT NOZZLE. CAST BRONZE WITH THREADED OR NO HUB OUTLET AND FLANGE TO SECURE NOZZLE TO WALL. INSTALL AT 12" ABOVE FINISHED SLAB OR AS DIRECTED BY ARCHITECT. WADE 3940-RB. REFER TO FLOOR PLANS FOR SIZES.

TYPE: ECO
DESCRIPTION: EXTERIOR CLEANOUT TO GRADE. CAST IRON BODY WITH WITH GASKET SEAL, AND ROUND SCORIATED VANDAL RESISTANT DUCTILE IRON TOP. IF LOCATED IN ASPHALT OR DIRT PROVIDE 18"X18"X12" CONCRETE PAD. WADE 6000-12.

TYPE: FCO
DESCRIPTION: CAST IRON BODY WITH HEAVY DUTY ROUND ADJUSTABLE NICKEL

TECHNOLOGY LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
*# ▼	WALL MOUNTED NETWORK OUTLET D#: NUMBER OF DATA DROPS IN OUTLET AP: WIRELESS ACCESS POINT	+18" AFF, UNLESS OTHERWISE NOTED	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
V# ▽	COMMUNICATIONS OUTLET	FIELD COORDINATE	FIELD COORDINATE	
W ▼	WALL MOUNTED NETWORK OUTLET	+44" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
B ▽	WALL MOUNTED BOX FOR FUTURE USE.	+18" AFF UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
D# ▼/▽	FLOOR MOUNTED NETWORK OUTLET	N/A	COORDINATE WITH ELECTRICAL CONTRACTOR	FINISHED HARDWARE PROVIDED BY DIV 27
*#	CEILING MOUNTED NETWORK OUTLET AP: WIRELESS ACCESS POINT D#: NETWORK OUTLET	ABOVE CEILING	CEILING BRACKET WITH BISCUIT BLOCK	

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. CONDUIT STUB UP AND SLEEVES SHALL HAVE A SOLID UNCUT PLASTIC PROTECTIVE BUSHING.
5. NO CONDUITS SHALL EXCEED FOR 40% MAXIMUM FILL RATIO. CONTRACTOR TO PROVIDE ADDITIONAL CONDUITS REQUIRED.

ACCESS CONTROL LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
ACP	ACCESS CONTROL SYSTEM, CONTROL PANEL.	+60" AFF TO CENTER	AS REQUIRED	COORDINATE POWER. NOTE #4.
CR	ACCESS CONTROL CARD READER.	+42" A.F.F.	1-G, 3/4" C	
DS	2-WAY AUDIO/VIDEO INTERCOM DOOR STATION.	+42" AFF	*W: 1-G, 3/4" C *M: 3/4"C	COORDINATE POWER. NOTE #4.
MS	2-WAY AUDIO/VIDEO INTERCOM MASTER STATION.	DESK MOUNTED UNO		COORDINATE POWER. NOTE #4.
DR	DOOR RELEASE BUTTON	COORDINATE WITH GC	1-G, 3/4" C	
DC	DPDT MAGNETIC DOOR CONTACT/DOOR POSITION SENSOR.	FLUSH MOUNTED IN DOOR FRAME	N/A	PROVIDED BY ACS CONTRACTOR.

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

INTERCOM LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
ICS	INTERCOM COMMUNICATIONS SYSTEM HEAD END UNIT.	FLOOR MOUNTED	COORDINATE WITH EC	COORDINATE POWER WITH EC
S	CEILING MOUNTED INTERCOM SPEAKER, LAY-IN CEILING	CEILING	CONTRACTOR PROVIDED	
S2	CEILING MOUNTED INTERCOM SPEAKER, HARD CEILING.	CEILING	CONTRACTOR PROVIDED	
S3	WALL MOUNTED INTERIOR INTERCOM SPEAKER/HORN	+10' AFF UNO	CONTRACTOR PROVIDED	
S4	WALL MOUNTED EXTERIOR INTERCOM SPEAKER/HORN	+8' AFF UNO	CONTRACTOR PROVIDED	
VC	WALL MOUNTED VOLUME CONTROL	+48" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
CB	INTERCOM CALL BUTTON	+48" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
C	SINGLE FACE CLOCK	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
C2	DOUBLE FACE CLOCK	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
ACS	ADMINISTRATIVE CALL STATION.	DESK TOP	N/A	NOTE #5

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

VIDEO SURVEILLANCE LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
	WALL/CORNER MOUNT 4-SENSOR CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
	CEILING MOUNTED 4-SENSOR CAMERA	CEILING		NOTE #5
W W	2-SENSOR CAMERA W: INDICATES WALLMOUNTED CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
W	1-SENSOR CAMERA W: INDICATES WALLMOUNTED CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
VRS	VIDEO RECORDING SERVER			NOTE #5
#MU	VIDEO SURVEILLANCE MAIN UNIT	ABOVE CEILING		NOTE #5

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

AUDIO/VIDEO LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
AV-1 ▽	WALL MOUNTED AUDIO/VIDEO INPUT OUTLET	+18" AFF UNO	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	
FSD-1 ▽	WALL MOUNTED FLAT SCREEN DISPLAY AUDIO/VIDEO OUTPUT OUTLET	REFERENCE FLOOR PLAN	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #6
FSD-2 ▽	WALL MOUNTED FLAT SCREEN DISPLAY AUDIO/VIDEO OUTPUT OUTLET ASSOCIATED WITH AV-1 INPUT OUTLET	REFERENCE FLOOR PLAN	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	NOTE #6
IVD ▽	INTERACTIVE VIDEO DISPLAY AUDIO/VIDEO OUTPUT OUTLET	REFERENCE FLOOR PLAN	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	NOTE #6
CP ▽	AV CONTROL PANEL	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
PS	PARTITION SENSOR	CEILING	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	COORDINATE POWER WITH EC

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK
6. PROVIDE AND INSTALL TWO (2) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

LOCAL SOUND SYSTEM LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
LS	LOCAL SOUND SYSTEM SPEAKER	CEILING MOUNT UNO	CONTRACTOR PROVIDED BACK BOX OR 4"X4"X2 1/8" J BOX WITH COVER, 1"C	
LSC	LOCAL SOUND SYSTEM CONTROL PLATE	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
MI	MICROPHONE INPUT	+18" AFF UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
ABM	AUXILIARY INPUT AND BLUETOOTH MIXER	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
RACK	VENUE SPECIFIC LOCAL SOUND SYSTEM HEAD END RACK	WALL MOUNT UNO	N/A	
WA	WIRELESS ANTENNA	WALL MOUNT UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
ALA	ASSISTED LISTENING ANTENNA	WALL MOUNT UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

INTRUSION LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
IDP	INTRUSION DETECTION SYSTEM CONTROL PANEL	+60" AFF	TWO(2) - 1"C TO CONTRACTOR PROVIDED BACK BOX	COORDINATE POWER WITH EC. NOTE #5
KP	INTRUSION DETECTION SYSTEM KEYPAD.	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
M	CEILING MOUNTED MOTION DETECTOR	CEILING		
M	WALL MOUNTED MOTION DETECTOR LR: LONG RANGE	REFERENCE FLOOR PLAN	N/A	
GB	CEILING MOUNTED GLASS BREAK DETECTOR	CEILING	N/A	
DC	DPDT MAGNETIC DOOR CONTACT/DOOR POSITION SENSOR.	FLUSH MOUNTED IN DOOR FRAME	N/A	DEVICE PROVIDED BY ACS CONTRACTOR.
SDC	SURFACE MOUNT MAGNETIC DOOR CONTACT.	SURFACE MOUNTED ON DOOR FRAME	N/A	
ODC	OVERHEAD DOOR MOUNT MAGNETIC DOOR CONTACT.	SURFACE MOUNTED ON DOOR FRAME	N/A	
DB	DURESS PANIC BUTTON	UNDER DESK UNO	N/A	

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. REFERENCE DIVISION 28 SPECIFICATION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

FIRE ALARM

*EXISTING FIELD DEVICE LOCATIONS SHALL BE REUSED WHENEVER POSSIBLE.

LEGEND

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL
FAA	FIRE ALARM ANNUNCIATOR PANEL

NOTES:
1. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.
3. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.
4. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE TIME FIRE ALARM SYSTEM ISN'T OPERATIONAL.

SUBSCRIPTS AND ABBREVIATIONS

TEXT	DESCRIPTION
'WP'	DEVICE SHALL BE WEATHER PROOF AND RATED FOR EXTERIOR CONDITIONS
●	FIELD COORDINATE ELEVATION
AFF	ABOVE FINISHED FLOOR
'UC'	DEVICE IS TO BE MOUNTED ON THE UNDERSIDE OF THE ELEVATED CANOPY

SUBSCRIPTS LEGEND - EXISTING DEVICES

TEXT	DESCRIPTION
'E'	EXISTING TO REMAIN.
'D'	DEVICE IS EXISTING AND IS TO BE REMOVED. CONTRACTOR TO REMOVE THE DEVICE AND RETURN TO OWNER.
'RR'	REMOVE EXISTING DEVICE AND RELOCATE TO A LOCATION INDICATED ON THE DRAWINGS.

NOTES TO CONTRACTOR

1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS.
2. SYSTEM INSTALLERS SHALL COORDINATE LOCATIONS AND CONNECTIONS WITH THE PROJECT'S ELECTRICAL CONTRACTOR.
3. CONTRACTOR TO PROVIDE PROPERLY GROUNDED LIGHTING PROTECTION ON ALL CABLING ENTERING AND EXITING THE BUILDING.

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

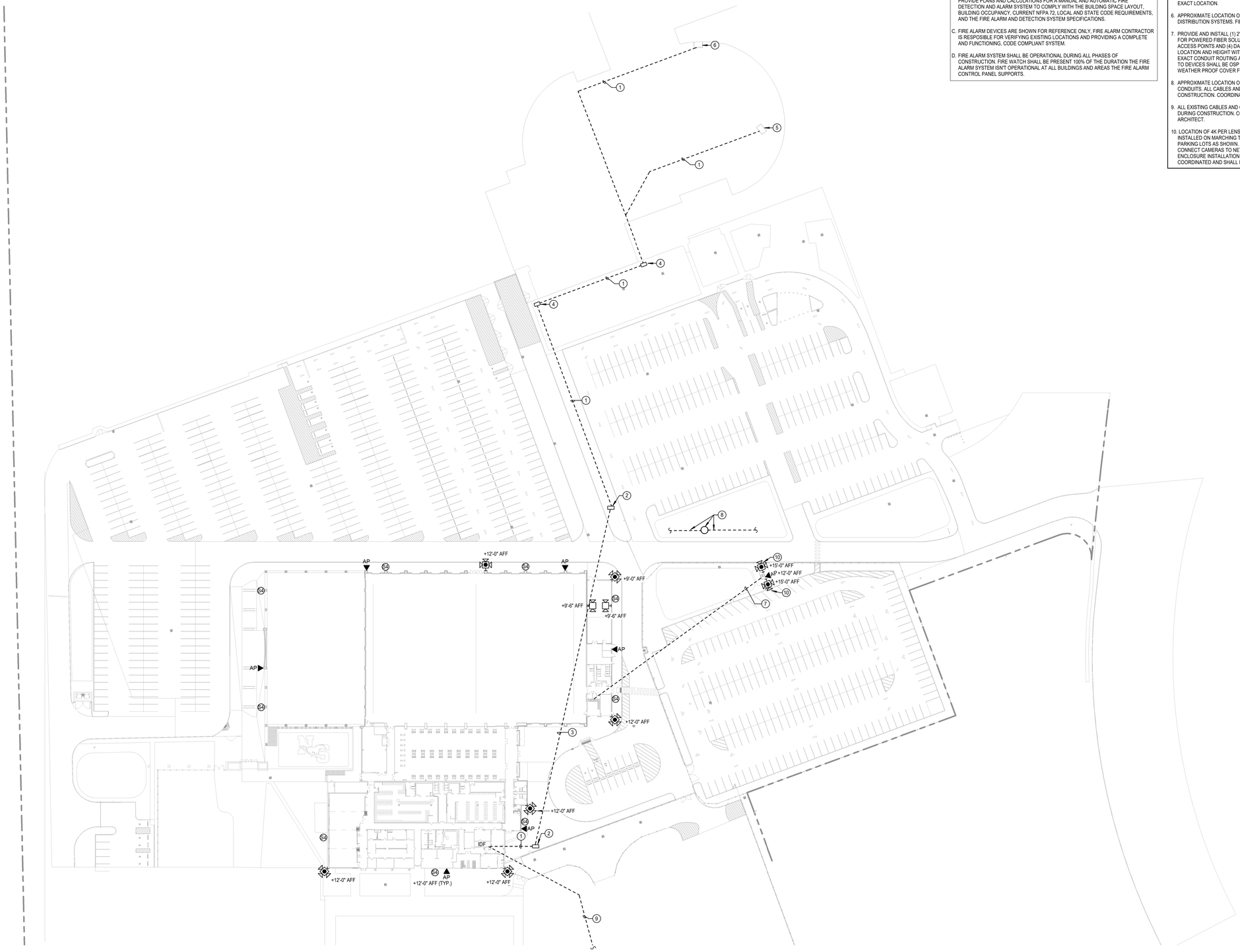
PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY NOTES AND LEGENDS

SHEET NO.
T0.00

North Shore Multi-Use Indoor Facility

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



N

1 **TECHNOLOGY SITE PLAN**
Scale: 1" = 50'-0"

NOTES TO GENERAL CONTRACTOR

A. PROTECT ALL COMMUNICATIONS CONDUITS, RACEWAYS, PULL BOXES THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL REMOVE AND REPLACE AT NO ADDITIONAL COST TO THE OWNER ANY ITEMS FOUND TO BE DAMAGED, BENT, DEFORMED. ALL EXISTING CONDUIT ROUTES AND PULL BOXES ARE BASED ON CASUAL SITE VISITS. VERIFY EXISTING CONDITIONS AND FIELD COORDINATE EXACT LOCATIONS AND CONDUIT ROUTING WITH ARCHITECT AND OWNER PRIOR TO COMMENCEMENT OF CONSTRUCTION.

B. GENERAL CONTRACTOR SHALL CONTACT ISP PRIOR TO THE DISTURBANCE OF EXISTING UNDERGROUND INCOMING FIBER OPTIC PATHWAYS FOR EXACT LOCATIONS. COORDINATE WITH OWNER AND ARCHITECT.

FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY, FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISNT OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.

(#) TECHNOLOGY SITE KEYED NOTES

1. LOCATION OF EXISTING COMMUNICATIONS CONDUITS THAT SHALL BE REUSED FOR RE-CABLING OF COMMUNICATION SYSTEMS FROM EXISTING IDF TO HIGH SCHOOLS TELECOM INDICATED BY KEYED NOTES #5, #6. EXISTING CABLING SHALL BE REUSED WHEREVER POSSIBLE, PROVIDE NEW CABLES AS NEEDED. FIELD VERIFY EXISTING CONDITIONS.
2. LOCATION OF NEW 24" X 36" PULL BOX THAT SHALL BE USED FOR COMMUNICATIONS CABLING. PULL BOX SHALL BE PROVIDED BY DIVISION 26, SHALL INTERCEPT EXISTING CONDUITS. COORDINATE EXACT LOCATION WITH ARCHITECT AND DIVISION 26.
3. PROVIDE AND INSTALL THE FOLLOWING CONDUITS FOR CABLING FROM EXISTING IDF TO HIGH SCHOOL BUILDING AS FOLLOWS:
   A. (1) 5" FOR FIBER OPTIC CABLE.
   B. (2) 3" CONDUITS FOR TV DISTRIBUTION/VIDEO NETWORK
   C. (1) 3" CONDUIT FOR INTERCOM SYSTEM AND COPPER CABLING
   D. (1) 2" CONDUITS FOR MASTER CLOCK SYSTEM CABLING.
4. APPROXIMATE LOCATION OF EXISTING COMMUNICATIONS PULL BOX. FIELD VERIFY EXISTING LOCATION.
5. APPROXIMATE LOCATION OF PA AND MASTER CLOCK SYSTEMS. FIELD VERIFY EXACT LOCATION.
6. APPROXIMATE LOCATION OF EXISTING SCHOOL MDF AND VIDEO DISTRIBUTION SYSTEMS. FIELD VERIFY EXACT LOCATION.
7. PROVIDE AND INSTALL (1) 2" CONDUIT TO MARCHING TOWER AS SHOWN FOR FOR POWERED FIBER SOLUTION THAT SHALL SUPPORT CAMERAS, WIRELESS ACCESS POINTS AND (4) DATA OUTLETS. COORDINATE EACH DEVICE LOCATION AND HEIGHT WITH OWNER PRIOR TO INSTALLATION. COORDINATE EXACT CONDUIT ROUTING AND GROUNDING WITH DIVISION 26. ALL CABLING TO DEVICES SHALL BE OSP RATED AND RUN IN COUNDUITS. PROVIDE WEATHER PROOF COVER FOR DATA OUTLETS
8. APPROXIMATE LOCATION OF EXISTING COMMUNICATIONS PEDESTAL AND CONDUITS. ALL CABLES AND CONDUITS SHALL BE PROTECTED DURING CONSTRUCTION. COORDINATE WITH DIVISION 26, ISP AND ARCHITECT.
9. ALL EXISTING CABLES AND CONDUITS TO PRESS BOX SHALL BE PROTECTED DURING CONSTRUCTION. COORDINATE WITH DIVISION 26, ISP AND ARCHITECT.
10. LOCATION OF 4K PER LENS, MULTISENSOR CAMERA THAT SHALL BE INSTALLED ON MARCHING TOWER. CAMERA SHALL BE USED TO MONITOR PARKING LOTS AS SHOWN. POWERED FIBER SOLUTION SHALL BE USED TO CONNECT CAMERAS TO NETWORK. COORDINATE EXACT POWERED FIBER ENCLOSURE INSTALLATION LOCATION. FINAL CAMERA HEIGHT SHALL BE FIELD COORDINATED AND SHALL BE BETWEEN 15' TO 20' AFF.

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
ARCHITECT
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

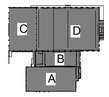
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY SITE PLAN

SHEET NO.
T1.00



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

TECHNOLOGY DEMO GENERAL NOTES

A. CONTRACTOR SHALL PROVIDE NEW CEILING TILES IN INSTANCES WHERE CEILING DEVICES ARE REMOVED, REPLACED OR ADDED. CONTRACTOR SHALL COORDINATE WITH ARCHITECT ON CORRECT MANUFACTURER AND MODEL PRIOR TO REMOVAL OF EXISTING TILE.

B. CONTRACTOR SHALL HAVE EACH LOW VOLTAGE SYSTEM TESTED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. SYSTEMS SHALL INCLUDE BUT NOT BE LIMITED TO:
1) FIRE ALARM
2) INTERCOM
3) STRUCTURED CABLING
4) INTRUSION DETECTION
5) ACCESS CONTROL
6) AUDIO VIDEO
7) VIDEO SURVEILLANCE

TESTING SHALL INCLUDE THE FUNCTIONALITY OF ALL FIELD DEVICES AND EQUIPMENT. ANY FAILURES OR ITEMS FOUND NOT TO BE FUNCTIONING TO SPECIFICATION, SHALL BE REPORTED PRIOR TO CONSTRUCTION. ANY ITEMS FOUND TO BE IMPROPERLY OR NON-FUNCTIONING UPON THE COMPLETION OF THE PROJECT, SHALL BE REPLACED AND/OR REPAIRED, BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE PROJECT OR THE OWNER.

C. CONTRACTOR SHALL REMOVE ANY DEVICES WHERE CONSTRUCTION OCCURS TO PREVENT POSSIBLE DAMAGE TO THE DEVICE. REMOVAL OF ANY DEVICES WHICH SUPPORT USER CONNECTION OR OTHER SYSTEMS, SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVAL AND/OR TAKING OFF LINE. REMOVAL SHALL CONSIST OF BUT NOT BE LIMITED TO THE FOLLOWING DEVICES AND ASSOCIATED SUPPORT INFRASTRUCTURE:
1) FIRE ALARM DEVICES
2) INTERCOM DEVICES
3) WIRELESS ACCESS POINTS
4) TELEPHONES
5) VIDEO SURVEILLANCE CAMERAS
6) INTRUSION DETECTION DEVICES
7) ACCESS CONTROL DEVICES
8) VIDEO PROJECTION DEVICES
9) VIDEO DISPLAY DEVICES

ANY DEVICES, NOT BEING REINSTALLED, SHALL BE RETURNED TO THE OWNER.

D. CONTRACTOR SHALL DOCUMENT THE LOCATION AND ANY ID TAG, MAC ADDRESS, IP ADDRESS, OR BAR CODE OF ANY EXISTING DEVICE THAT IS TO BE REMOVED FROM ITS CURRENT LOCATION. DEVICES THAT ARE TO REMAIN, SHALL BE REINSTALLED IN THE EXACT LOCATION THAT THEY RESIDE IN PRIOR TO CONSTRUCTION, UNLESS NOTED OTHERWISE.

E. ANY INDIVIDUAL THAT WILL BE REMOVING. RELOCATING, REINSTALLING, AND/OR TAMPERING WITH ANY EXISTING DEVICES; SHALL BE CERTIFIED BY THE MANUFACTURER OF THE SPECIFIC SYSTEM AND/OR LICENSED AS REQUIRED BY THE STATE TO PERFORM WORK ON THE SYSTEM. THE INDIVIDUAL SHALL BE A FULL-TIME EMPLOYEE OF THE FIRM CONTRACTED TO CONDUCT SUCH WORK ON THE PROJECT AND THAT FIRM SHALL ALSO HOLD ANY CERTIFICATIONS AND/OR LICENSES REQUIRED TO CONDUCT WORK ON THE SPECIFIC SYSTEM.

F. ANY INDIVIDUAL/FIRM THAT WILL BE REMOVING, RELOCATING, REINSTALLING, OR TAMPERING WITH IN ANY DEVICES: SHALL BE LICENSED BY THE STATE, AS APPLICABLE, AND CERTIFIED BY THE MANUFACTURER OF THE SYSTEM.

G. ALL CABLING ASSOCIATED WITH DEVICES THAT ARE TO BE DEMOLISHED, SHALL BE REMOVED FROM THE DEVICE LOCATION TO THE CABLES POINT OF ORIGIN. NO CABLE SHALL BE ABANDONED IN PLACE.

H. ALL EXISTING DEVICES SHOWN ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE. CONTRACTOR TO REMOVE EXISTING DEVICES DURING CONSTRUCTION AND REINSTALL THE DEVICE IN THE SAME LOCATION, UNLESS NOTED OTHERWISE.

I. REFERENCE EXISTING DEVICE SUBSCRIPT LEGEND ON THE NOTES AND LEGENDS SHEET.

J. CONTRACTOR TO COORDINATE WITH GPISD TECHNOLOGY DEPARTMENT PRIOR TO CONSTRUCTION ON WHICH DEVICES ARE TO BE REMOVED BY THE OWNER'S VENDOR IN ORDER TO PREVENT VOID OF WARRANTY.

K. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DEVICES LOCATIONS AND CONDITION.

L. ALL DEMO DEVICES WITH 'D' SUBSCRIPT SHALL DISCONNECT AND REMOVE EXISTING WIRING DEVICE BACK TO SWITCH OR PANEL. PATCH WALL TO MATCH EXISTING.

FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISN'T OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.



N

1 **TECHNOLOGY DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

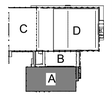
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY DEMOLITION FLOOR PLAN - LEVEL ONE - UNIT A

SHEET NO.
T1.01A



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

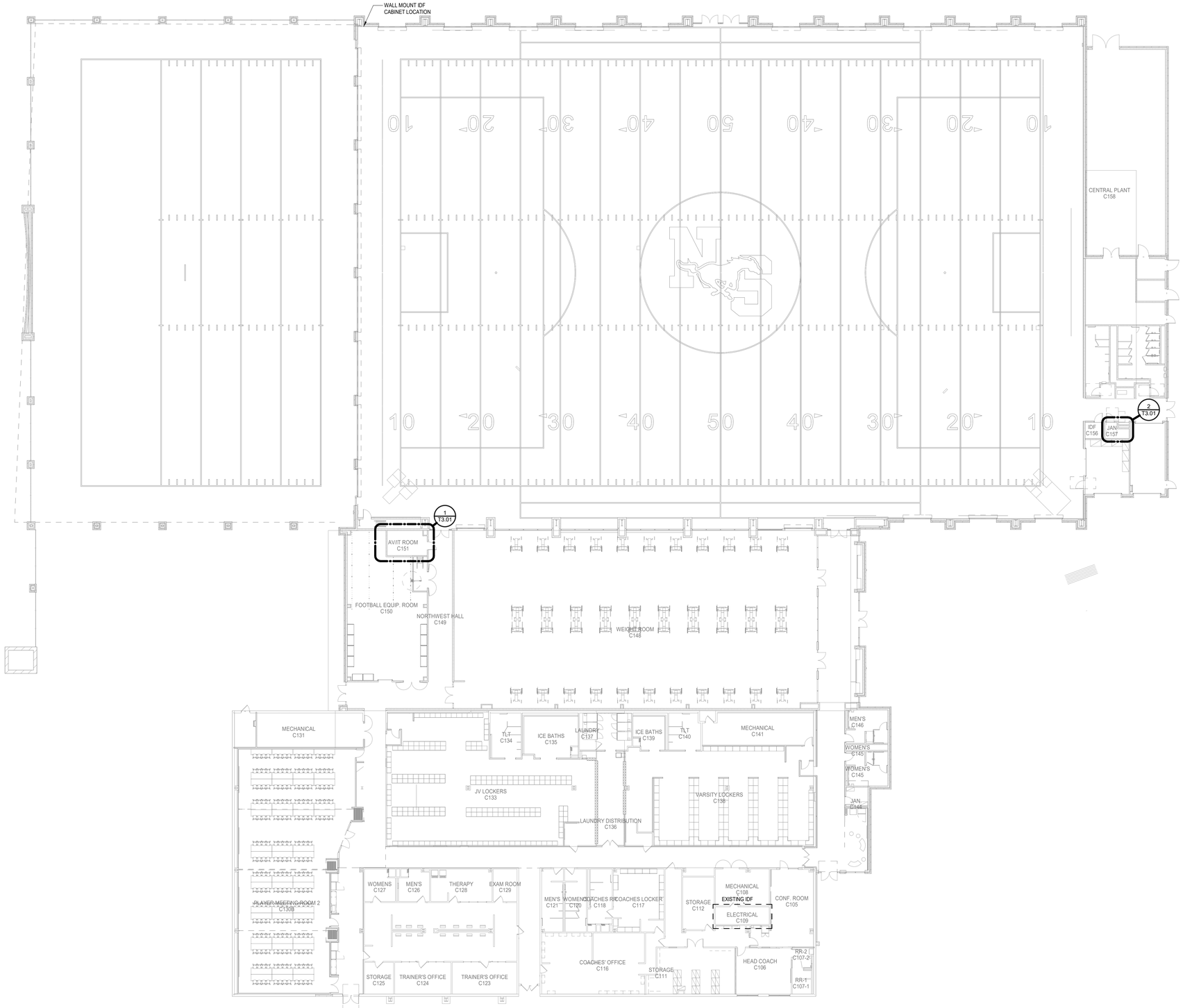
FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISN'T OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.



N

1 **TECHNOLOGY FLOOR PLAN - LEVEL ONE - OVERALL**
Scale: 1/16" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

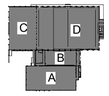
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY FLOOR PLAN - LEVEL ONE - OVERALL

SHEET NO.
T2.01



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

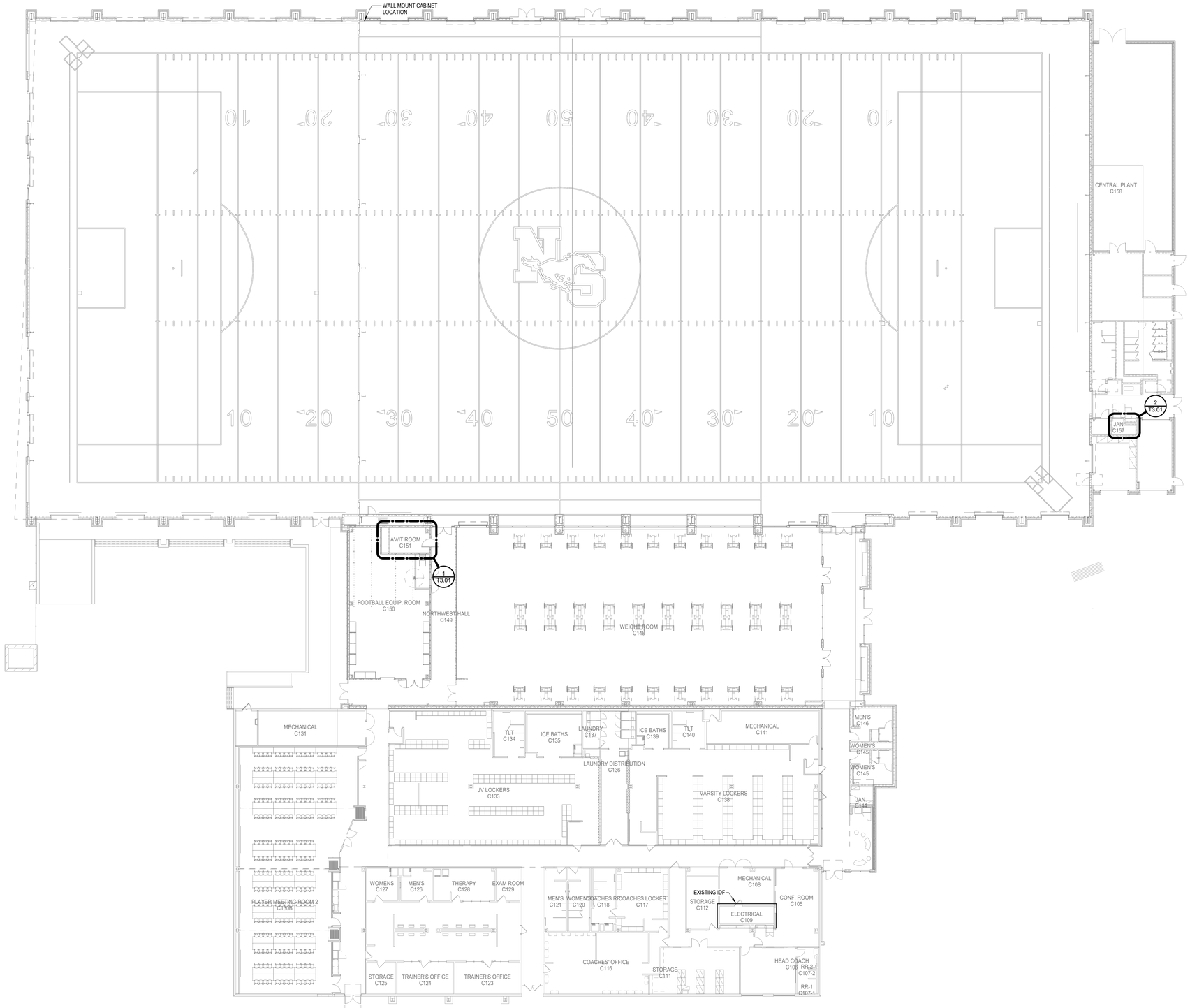
FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISN'T OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.



N

1 **TECHNOLOGY FLOOR PLAN - LEVEL ONE - OVERALL - ALTERNATE**
Scale: 1/16" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

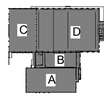
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY FLOOR PLAN - LEVEL ONE - OVERALL - ALTERNATE

SHEET NO.
T2.02



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

TECHNOLOGY KEYED NOTES

1. PROVIDE ONE (1) CATEGORY 6 DATA CIRCUIT FOR THE BUILDING MANAGEMENT CONTROL SYSTEM. COORDINATE WITH THE CONTRACTOR FOR EXACT LOCATION AND TERMINATION TYPE.
2. DOOR SHALL BE INTEGRATED WITH 2-WAY VIDEO INTERCOM SYSTEM TO BE RELEASED VIA INTERCOM MASTER STATION AT COACHES OFFICE OR HEAD COACH. PROVIDE ALL ACCESSORIES REQUIRED FOR A FULLY FUNCTIONAL SYSTEM. COORDINATE WITH DIVISION 08.
3. COORDINATE BACK BOX REQUIREMENTS FOR ALL DEVICES INSTALLED ON PRE-FABRICATED WALL WITH WALL VENDOR PRIOR TO CONSTRUCTION.

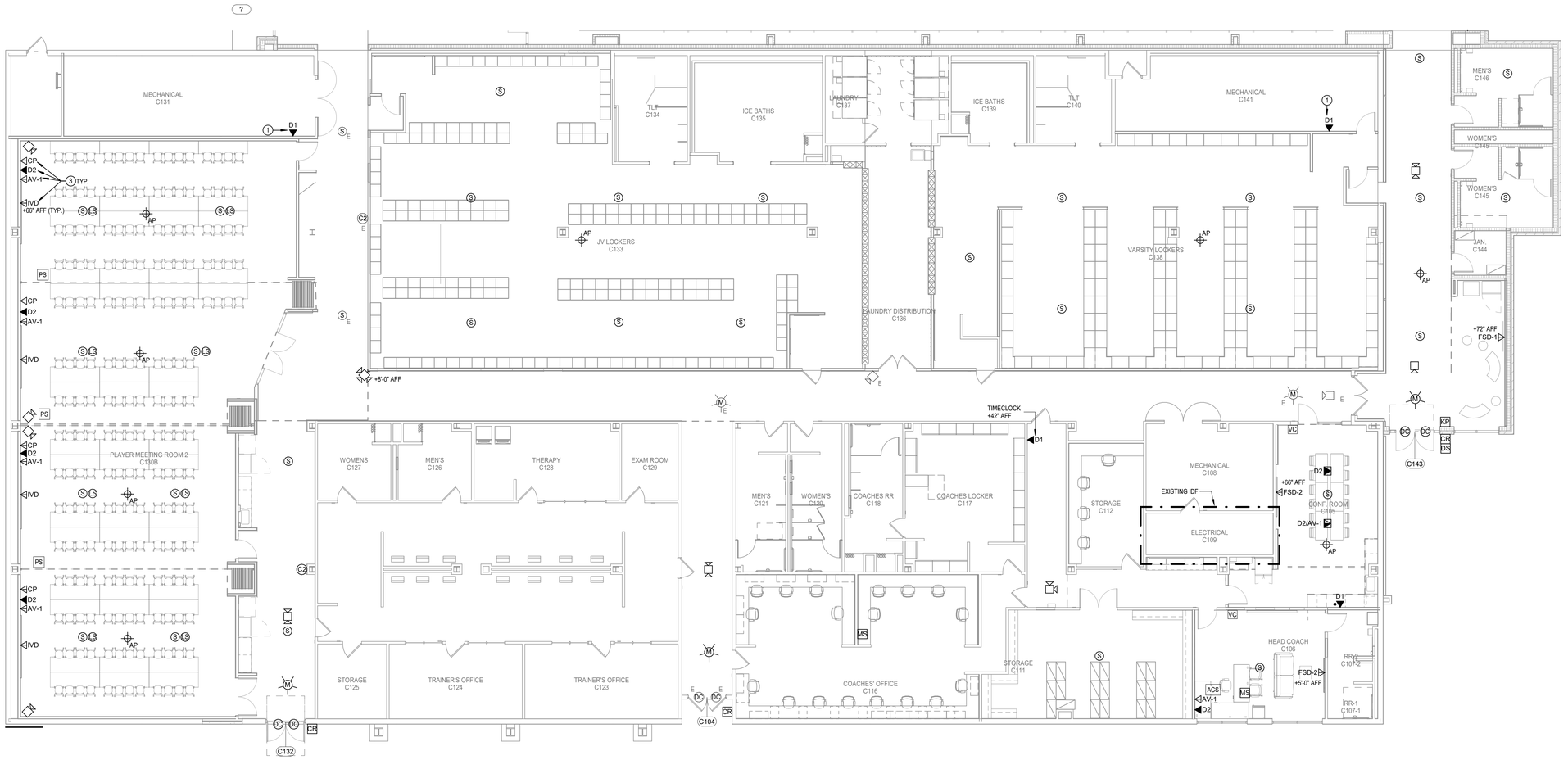
FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISN'T OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.



N

1 TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT A
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — 80219 — LICENSED — 10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

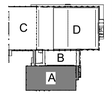
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT A

SHEET NO.
T2.02A



COPYRIGHT © 2025 VLK ARCHITECTS, LLC

TECHNOLOGY KEYED NOTES

1. PROVIDE ONE (1) CATEGORY 6 DATA CIRCUIT FOR THE BUILDING MANAGEMENT CONTROL SYSTEM. COORDINATE WITH THE CONTRACTOR FOR EXACT LOCATION AND TERMINATION TYPE.

2. CAMERA HOUSING AND MOUNT SHALL BE PAINTED BLACK. FOLLOW MANUFACTURER REPAINTING GUIDE TO ENSURE WARRANTY IS NOT VOIDED.

3. COORDINATE EXACT HEIGHT WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN TO CONCEAL OUTLET BEHIND DISPLAY.

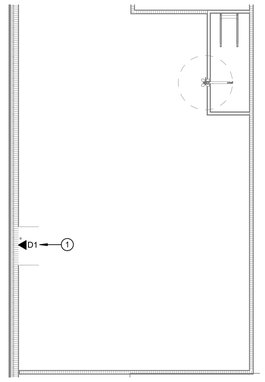
FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISNT OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.



N

2 TECHNOLOGY ENLARGED PLAN - MECHANICAL MEZZANINE - UNIT B

Scale: 1/8" = 1'-0"

N

1 TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT B

Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien

10930 W. Sam Houston Parkway North, Suite 900

Houston, Texas 77064

Main Phone: 281.664.0703

https://salasobrien.com/offices/houston-texas/

Salas O'Brien

Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111

Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

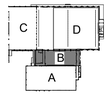
25-0056.00

SHEET TITLE

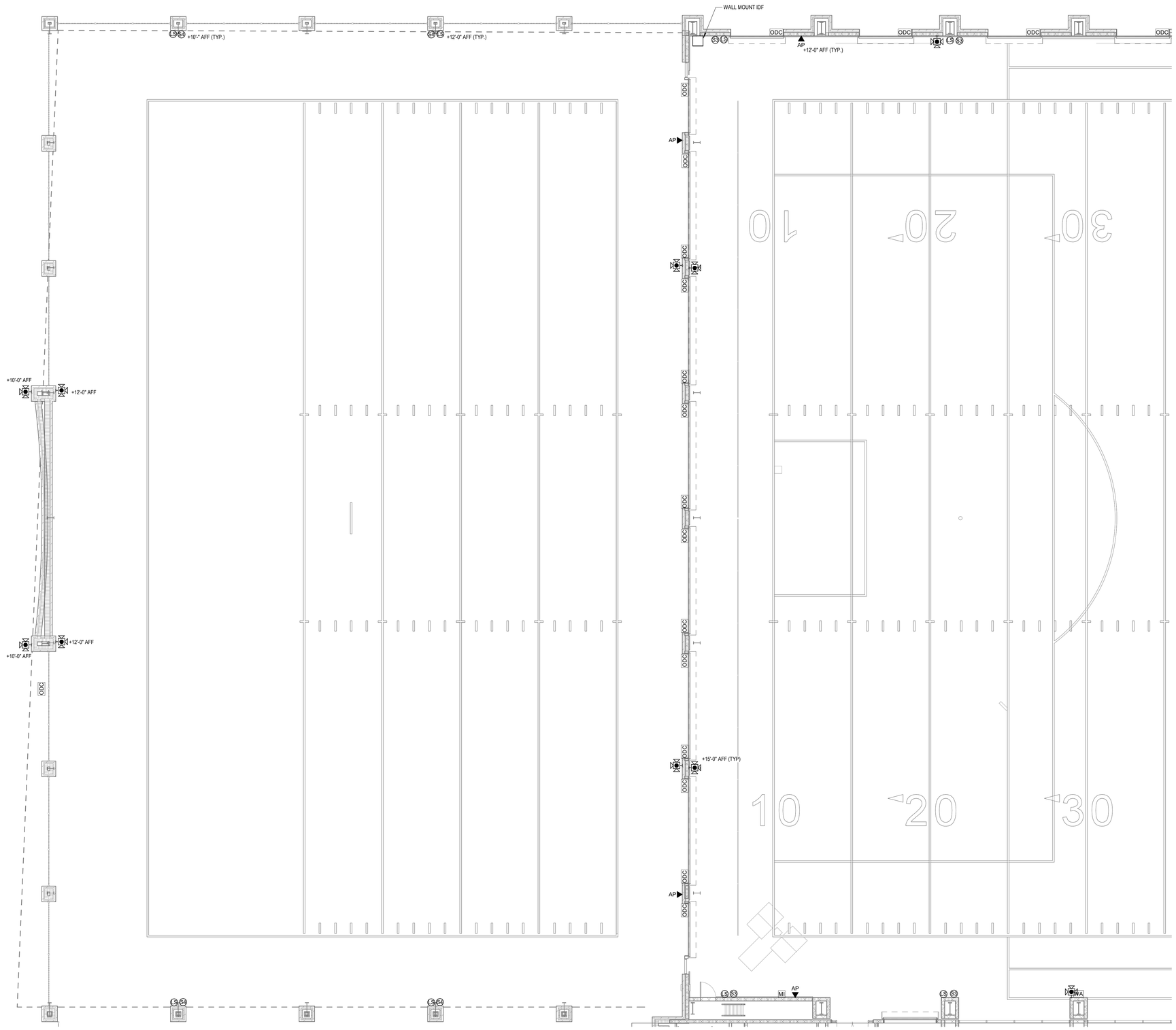
TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT B

SHEET NO.

T2.03B



COPYRIGHT © 2025 VLK ARCHITECTS, LLC



FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISN'T OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.

N

1 **TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT C**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

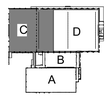
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

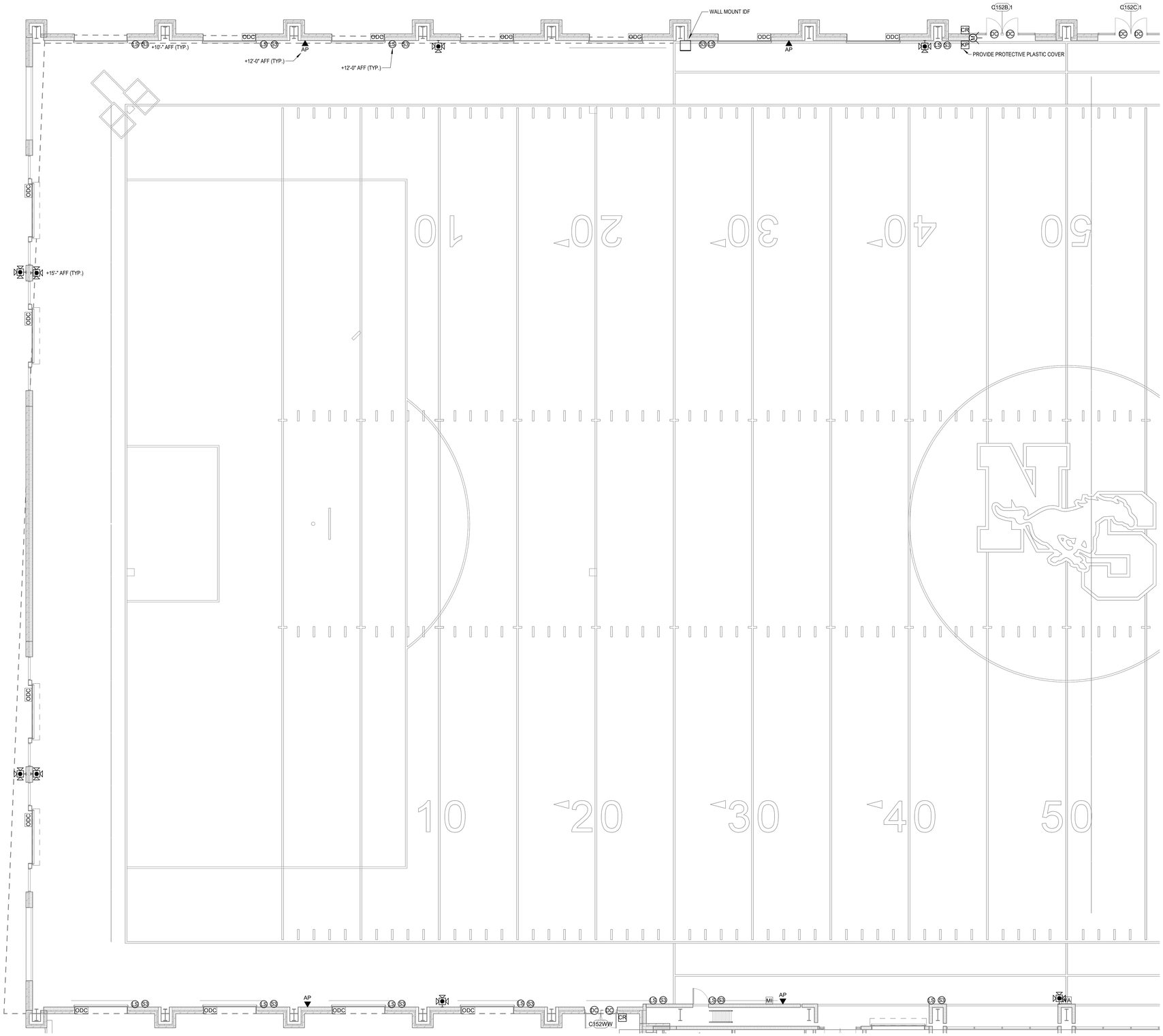
PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT C

SHEET NO.
T2.04C



COPYRIGHT © 2025 VLK ARCHITECTS, LLC



1 **TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE**
Scale: 1/8" = 1'-0"

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
ARCHITECT
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT C - ALTERNATE

SHEET NO.
T2.04C.1

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

TECHNOLOGY KEYED NOTES

1. PROVIDE ONE (1) CATEGORY 6 DATA CIRCUIT FOR THE BUILDING MANAGEMENT CONTROL SYSTEM. COORDINATE WITH THE CONTRACTOR FOR EXACT LOCATION AND TERMINATION TYPE.

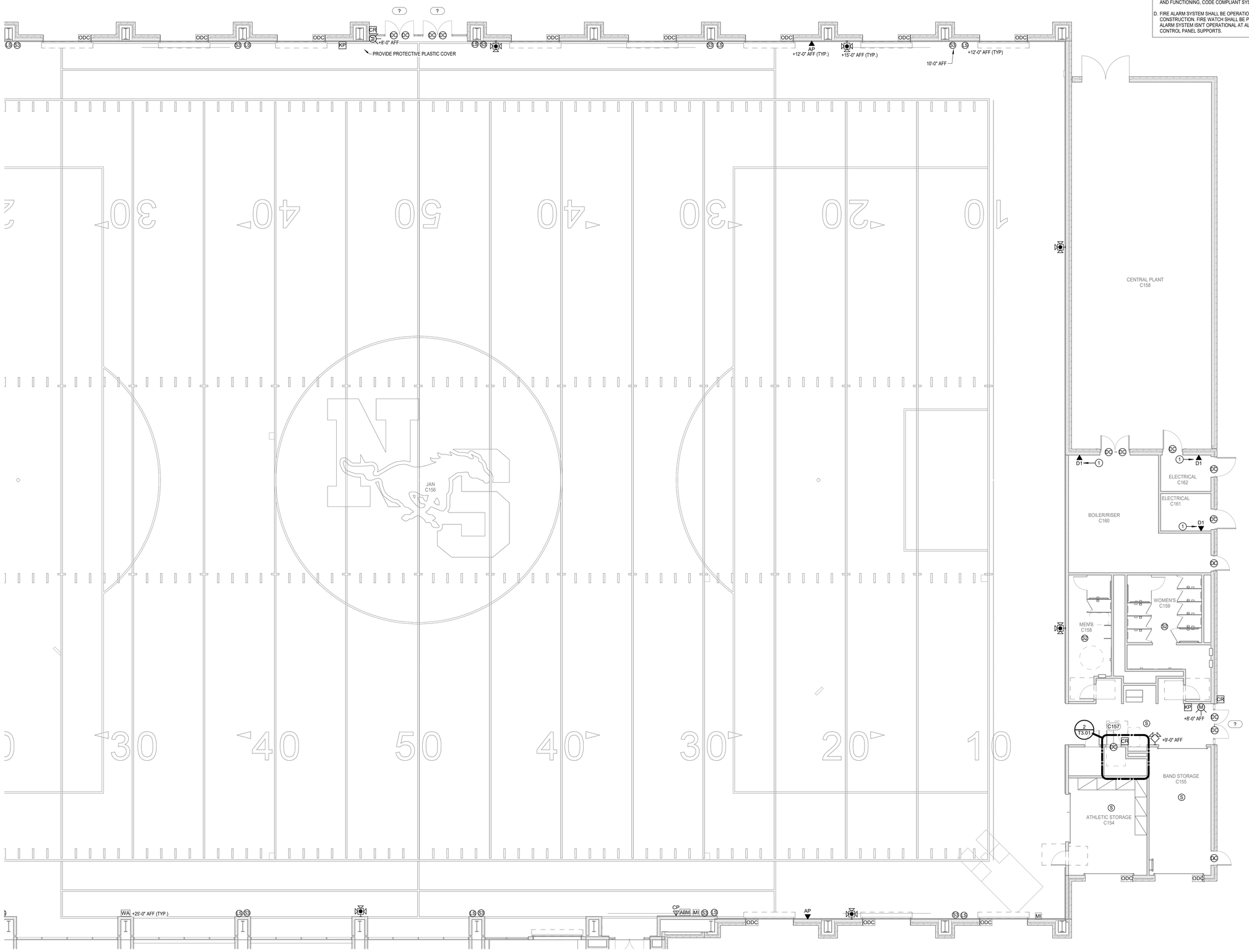
FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

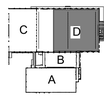
C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISN'T OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.



N

1 **TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT D**
Scale: 1/8" = 1'-0"



VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
ARCHITECT
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY FLOOR PLAN - LEVEL ONE - UNIT D

SHEET NO.
T2.05D

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

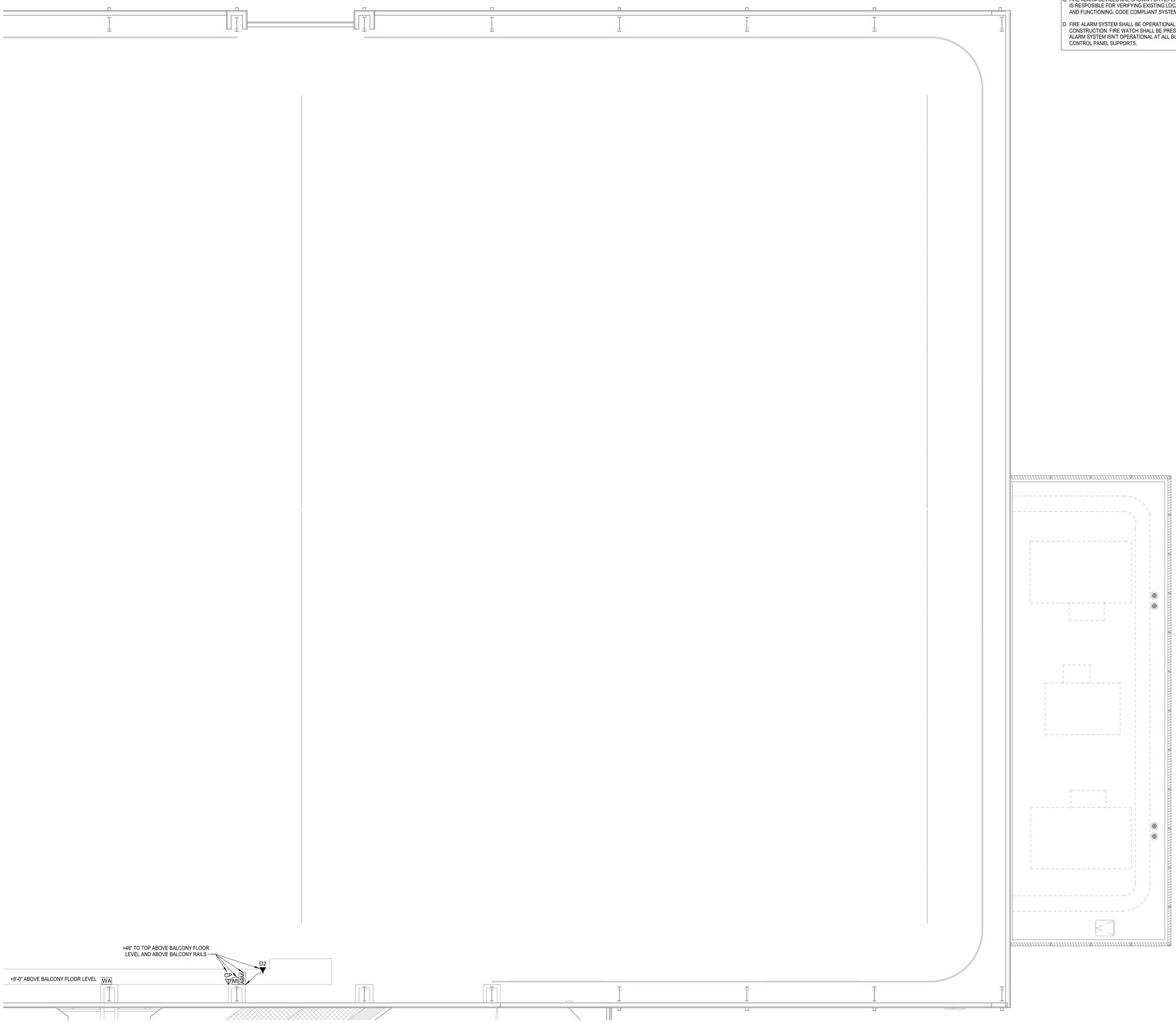
FIRE ALARM GENERAL NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

D. FIRE ALARM SYSTEM SHALL BE OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. FIRE WATCH SHALL BE PRESENT 100% OF THE DURATION THE FIRE ALARM SYSTEM ISN'T OPERATIONAL AT ALL BUILDINGS AND AREAS THE FIRE ALARM CONTROL PANEL SUPPORTS.



N

1 **TECHNOLOGY FLOOR PLAN - LEVEL TWO - UNIT D**
Scale: 1/8" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

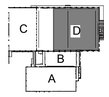
Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY FLOOR PLAN - LEVEL TWO - UNIT D

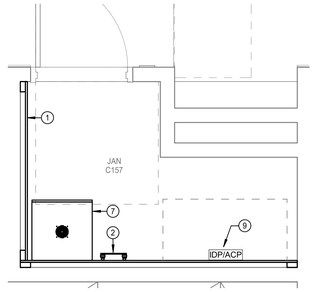
SHEET NO.
T2.06D



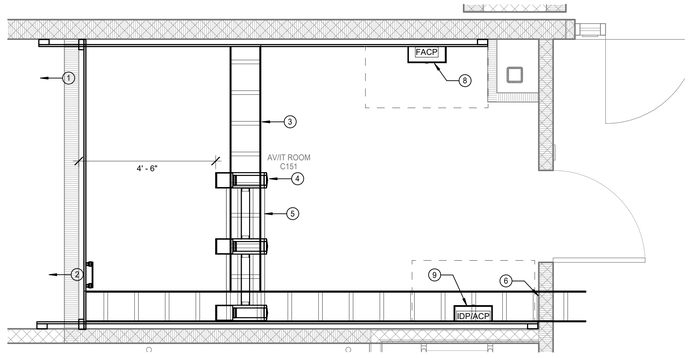
COPYRIGHT © 2025 VLK ARCHITECTS, LLC

TECHNOLOGY ENLARGED KEYED NOTES

1. INDICATES THE LOCATION OF A 8' TALL, 3/4" FIRE RATED PLYWOOD. CONTRACTOR TO PROVIDE AND INSTALL PLYWOOD AND ALL REQUIRED MOUNTING HARDWARE. PLYWOOD SHALL BE PAINTED WHITE WITH FIRE RATED PAINT. TYPICAL FOR ALL SHOWN ON DRAWING.
2. INDICATES THE LOCATION OF A NEW WALL MOUNTED TELECOMMUNICATION GROUND BUSBAR (TGBB). CABLING CONTRACTOR TO PROVIDE BUSBAR AND ALL REQUIRED MATERIAL TO MOUNT AT THE LOCATION SHOWN. TGBB TO BE MOUNTED AT +93" A.F.F.
3. PROVIDE AND INSTALL A 12" WIDE, UNIVERSAL LADDER TRAY AND ALL REQUIRED MOUNTING HARDWARE. LADDER TRAY SHALL BE BLACK IN COLOR. TYPICAL FOR ALL SHOWN ON ENTIRE PROJECT.
4. PROVIDE AND INSTALL ONE (1) 2-POST, FLOOR MOUNTED, 7' RELAY RACK (BLACK IN CONNECTED LOCATIONS OF THE RACK TO ENSURE THAT ALL PIECES OF THE RACK ARE COMPLETELY BONDED. SCRAPING PAINT FROM RACKS TO MAKE A BOND WILLNOT BE ACCEPTED.
5. PROVIDE AND INSTALL ONE (1) 7'X6", FRONT AND REAR MANAGED, VERTICAL CABLE MANAGER (BLACK IN COLOR).
6. PROVIDE AND INSTALL A MINIMUM OF THREE (3) EZ-PATH THRU-WALL PENETRATION SLEEVES WITH MULTI-GANG WALLPLATE BRACKET SYSTEM AT INDICATED LOCATION. PROVIDE ADDITIONAL AS REQUIRED TO MAINTAIN A MAXIMUM OF 40% FILL RATIO, PLUS ONE (1) ADDITIONAL FOR SPARE.
7. LOCATION OF WALL MOUNT CABINET. REFER TO SPECIFICATION FOR MORE INFORMATION.
8. LOCATION OF RELOCATED FIRE ALARM CONTROL PANEL AND ALL RELATED ACCESSORIES. PROVIDE (1) FIRE PULL STATION AT THIS LOCATION.
9. ALL EXISTING AND NEW INTRUSION DETECTION AND ACCESS CONTROL DEVICES AT THIS BUILDING SHALL BE CONNECTED TO NEW COMBINATION ACCESS CONTROL AND INTRUSION DETECTION PANELS.



N 2 **TECHNOLOGY ENLARGED PLAN - IDF C158 - LEVEL ONE**
Scale: 1/2" = 1'-0"



N 1 **TECHNOLOGY ENLARGED PLAN - AV/IT ROOM C151 - LEVEL ONE**
Scale: 1/2" = 1'-0"

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

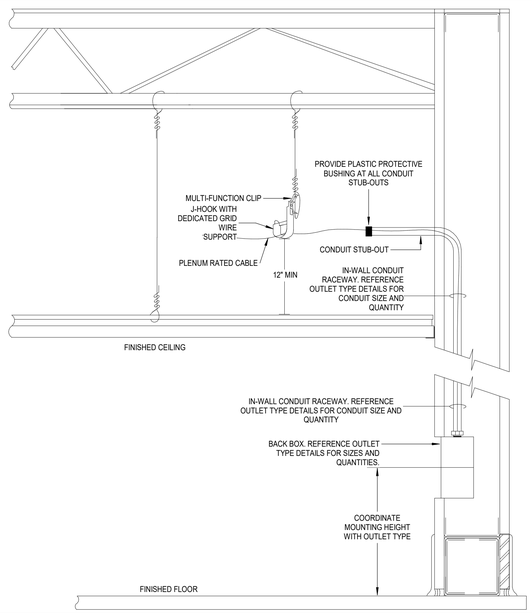
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

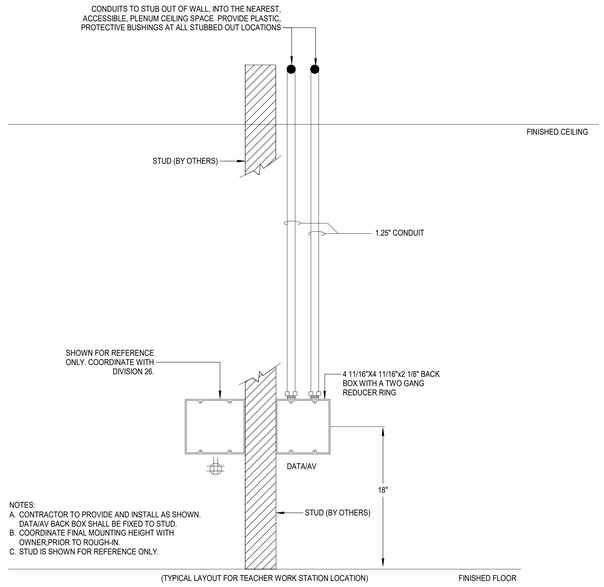
SHEET TITLE
TECHNOLOGY ENLARGED PLAN

SHEET NO.
T3.01

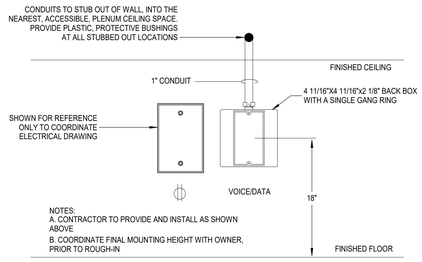
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



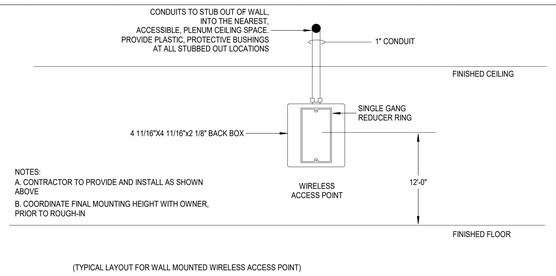
1 LOW VOLTAGE ELEVATION - IN-WALL RACEWAY NOT TO SCALE



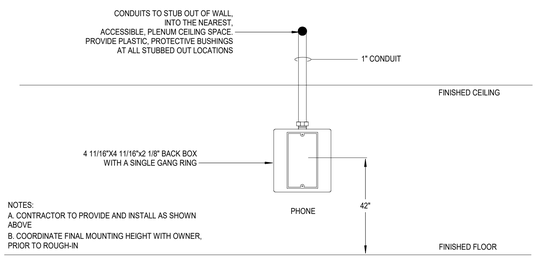
02 RACEWAY DETAIL - TYPICAL INSTRUCTORS OUTLET NOT TO SCALE



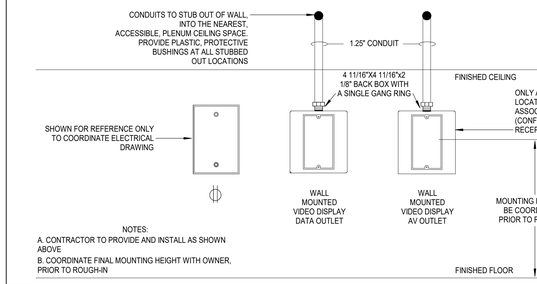
03 RACEWAY DETAIL - TYPICAL VOICE/DATA OUTLET NOT TO SCALE



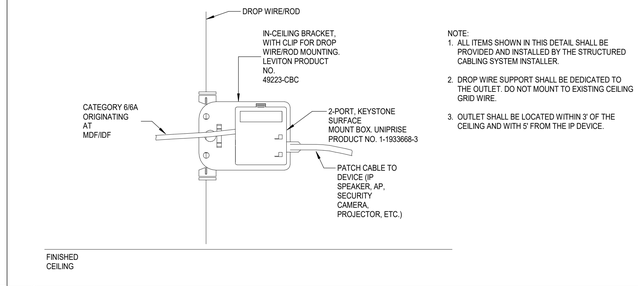
04 RACEWAY DETAIL - WALL MOUNTED WIRELESS AP NOT TO SCALE



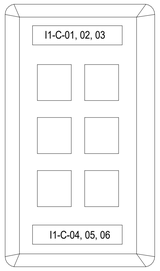
05 RACEWAY DETAIL - WALL MOUNTED TELEPHONE NOT TO SCALE



06 RACEWAY DETAIL - WALL MOUNTED DISPLAY NOT TO SCALE

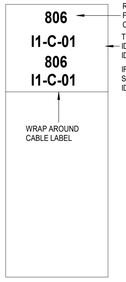


07 ABOVE CEILING STAND ALONE OUTLET NOT TO SCALE



1. FACEPLATE LABELING SHALL BE MACHINE GENERATED AND SHALL NOT BE LESS THEN 1/4" IN HEIGHT
2. PROVIDE BLANK INSERTS FOR ANY UNUSED PORTS
3. COORDINATE EXACT LABELING SCHEME WITH OWNER AND ENGINEER.

08 FACEPLATE LABEL DETAIL NOT TO SCALE



ROOM NUMBER. (COORDINATE WITH FINAL GRAPHICS PACKAGE, NOT CONSTRUCTION NUMBERS)
T.R. IDENTIFICATION-PANEL IDENTIFICATION-PORT IDENTIFICATION
IF CABLE SERVERS BUILDING INTERCOM SYSTEM PROVIDE AN "I" BETWEEN THE TR IDENTIFIER AND THE PANEL: EXAMPLE I1-I-C-01

1. WRAP AROUND CABLE LABEL TO BE INSTALLED AT BOTH THE WORK AREA OUTLET AND CLOSET ENDS OF ALL CABLES. INSTALL LABEL 1" FROM THE END OF THE CABLE JACKET AT BOTH ENDS.
2. CABLE LABELING SHALL BE MACHINE GENERATED AND SHALL NOT BE LESS THEN 1/8" IN HEIGHT.
3. COORDINAE EXACT LABELING SCHEME WITH OWNER AND ENGINEER.

09 CABLE LABEL DETAIL NOT TO SCALE

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien | Houston | 10930 W. Sam Houston Pkwy North, Suite 900 Houston, TX 77064 | Salas O'Brien Registration: F-4111 | Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

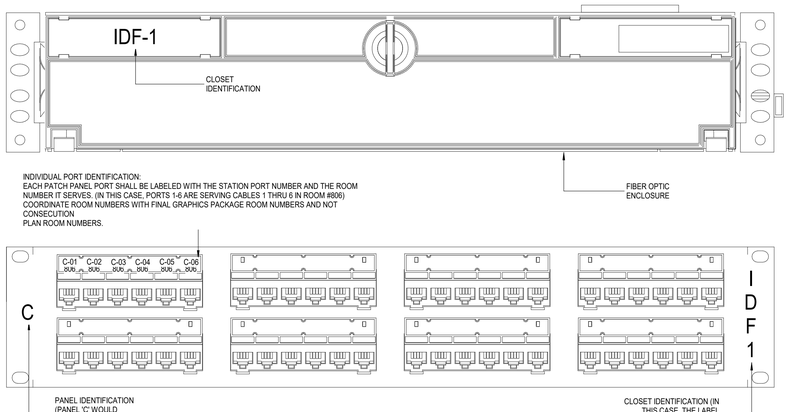
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

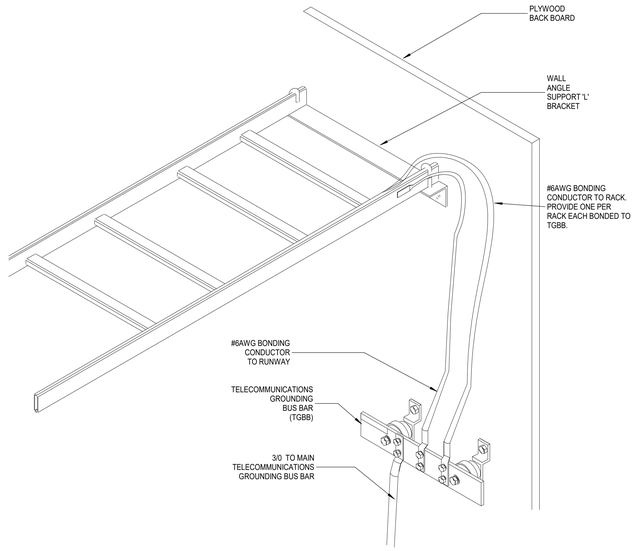
SHEET TITLE
TECHNOLOGY DETAILS

SHEET NO.
T5.01

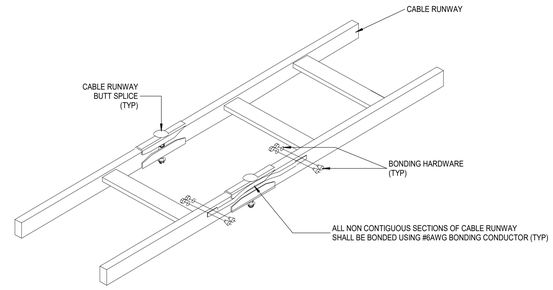
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



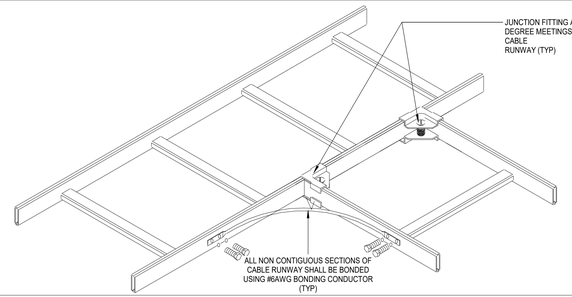
01 FIBER ENCLOSURE/ COPPER PATCH PANEL LABELING DETAIL NOT TO SCALE



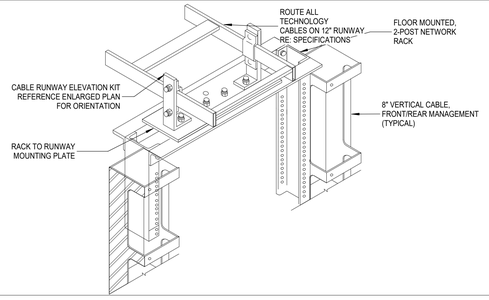
02 CABLE RUNWAY - GROUNDING AND BONDING NOT TO SCALE



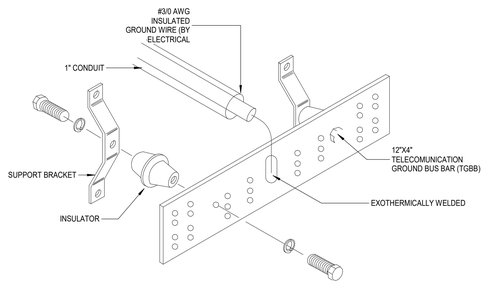
03 CABLE RUNWAY - BONDING AND BUTT SPLICE NOT TO SCALE



04 CABLE RUNWAY - JUNCTION AND BONDING NOT TO SCALE



05 RACK TO RUNWAY DETAIL NOT TO SCALE



07 TELECOMMUNICATION GROUNDING BUS DETAIL NOT TO SCALE

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

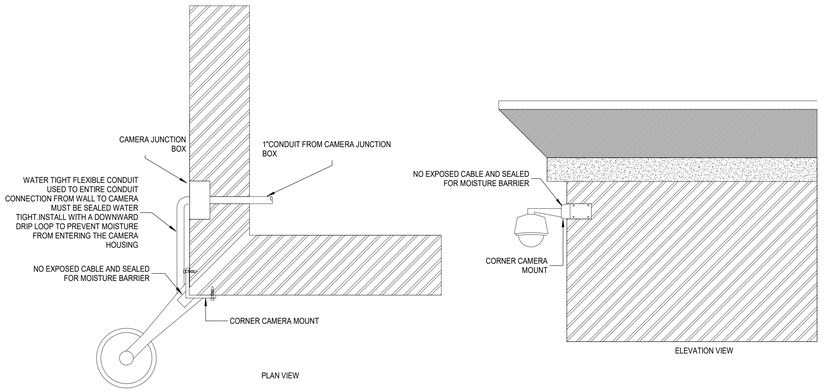
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY DETAILS

SHEET NO.
T5.02

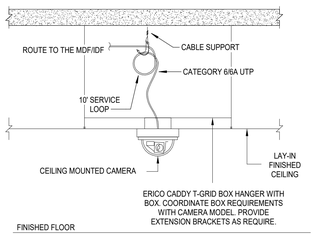
COPYRIGHT © 2025 VLK ARCHITECTS, LLC



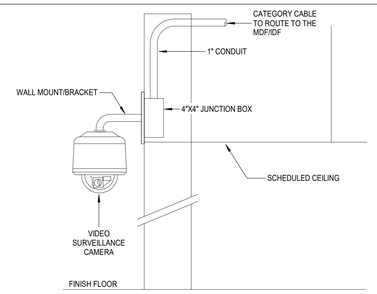
NOTE:

ELECTRICAL CONTRACTOR SHALL PROVIDE 1" CONDUIT WITH PULL STRING TO NEAREST AVAILABLE PLENUM SPACE. SECURITY CONTRACTORS SHALL PROVIDE CABLE FEED-THROUGH MOUNT FOR CAMERA. NO EXPOSED CABLE WILL BE ALLOWED. SECURITY CONTRACTOR TO COORDINATE MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

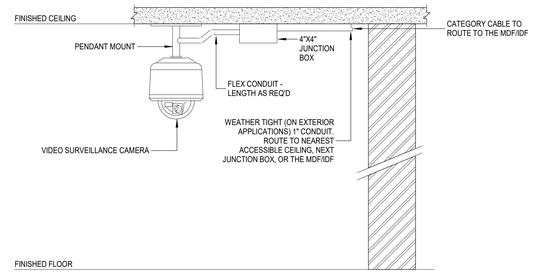
01 CORNER MOUNTING DETAIL — NOT TO SCALE



02 INTERIOR LAY-IN CEILING MOUNTED CAMERA — NOT TO SCALE



03 INTERIOR WALL MOUNTED DOME CAMERA — NOT TO SCALE



04 EXT./INT. PENDANT MOUNTED DOME CAMERA — NOT TO SCALE

05 EXTERIOR/INTERIOR SOLID CEILING MOUNT CAMERA — NOT TO SCALE

06 EXTERIOR WALL MOUNTED DOME CAMERA — NOT TO SCALE

GENERAL NOTES:

A. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUITS AND BACK BOXES. CONDUITS SHALL ROUTE TO THE NEAREST, ACCESSIBLE PLENUM SPACE.

B. ALL WALL, CORNER, PENDANT, AND UNDER CANOPY MOUNTING HEIGHTS SHALL BE COORDINATED WITH THE OWNER AND SECURITY CONSULTANT PRIOR TO ROUGH-IN.

C. SECURITY CONTRACTOR SHALL PROVIDE CAMERAS, MOUNTING HARDWARE, AND ANY OTHER COMPONENTS AND/OR HARDWARE REQUIRED FOR A COMPLETE INSTALLATION.

D. REFERENCE VIDEO SURVEILLANCE CAMERA SCHEDULES, FLOOR PLANS, AND SPECIFICATIONS FOR ADDITIONAL INSTRUCTIONS.

E. CABLE FEED-THROUGH MOUNT FOR CAMERA. NO EXPOSED CABLE WILL BE ALLOWED. SECURITY CONTRACTOR TO COORDINATE MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

07 NOTES — NOT TO SCALE

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS — STATE OF TEXAS — 80219 — LICENSED — PROFESSIONAL ENGINEER
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

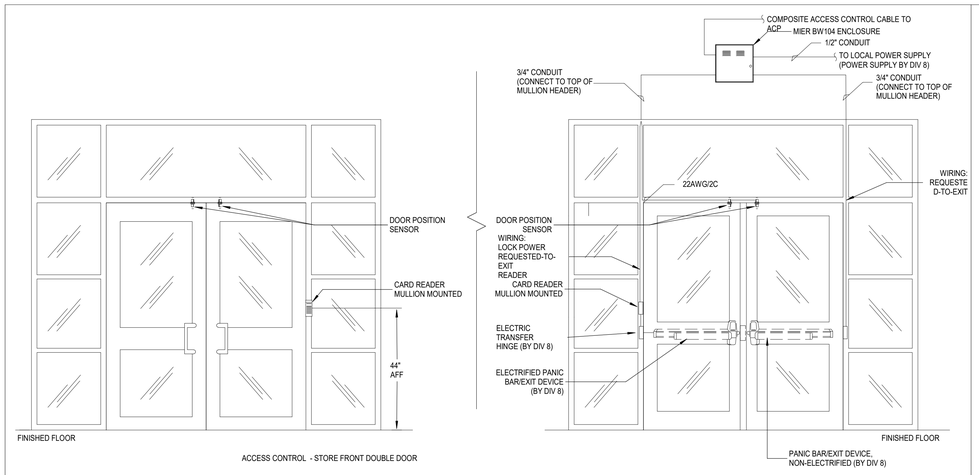
Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.
25-0056.00

SHEET TITLE
TECHNOLOGY DETAILS

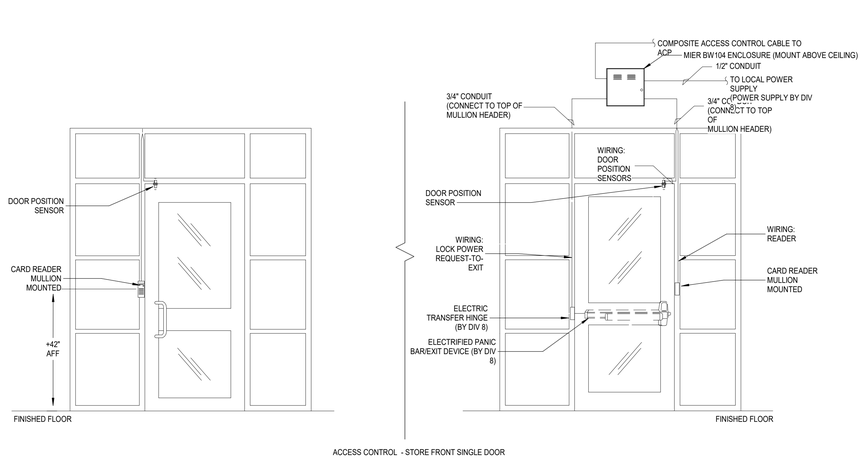
SHEET NO.
T5.03

COPYRIGHT © 2025 VLK ARCHITECTS, LLC



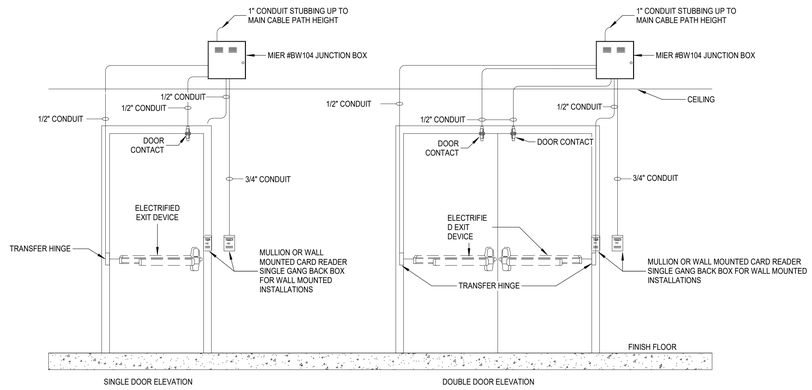
01 ACCESS CONTROL - STORE FRONT DOUBLE DOOR

NOT TO SCALE



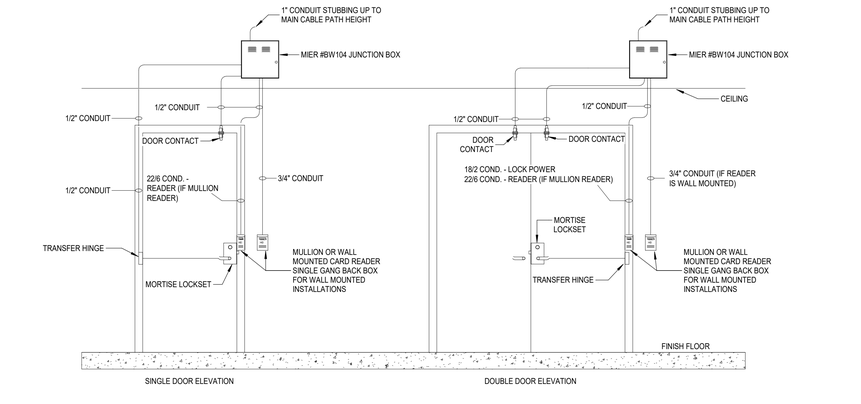
02 ACCESS CONTROL - STORE FRONT SINGLE DOOR

NOT TO SCALE



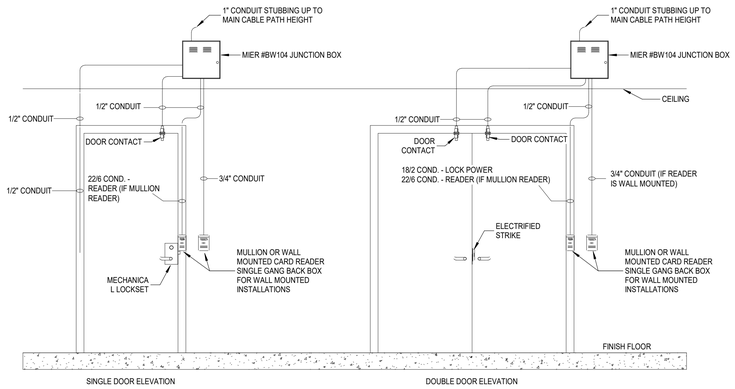
03 ACCESS CONTROL - EXIT DEVICE DOOR ELEVATION

NOT TO SCALE



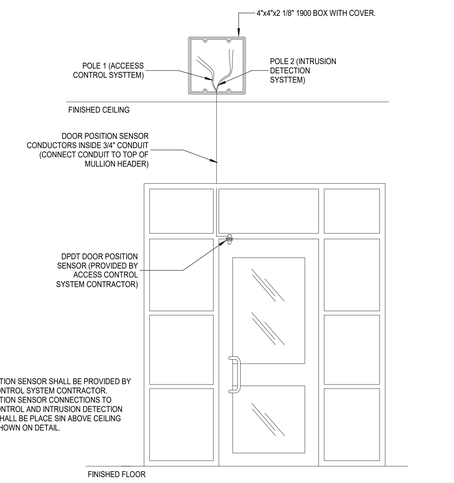
04 ACCESS CONTROL - MORTISE LOCK DOOR ELEVATION

NOT TO SCALE



05 ACCESS CONTROL - ELECTRIFIED STRIKE DOOR ELEVATION

NOT TO SCALE



NOTES:

1. DOOR POSITION SENSOR SHALL BE PROVIDED BY ACCESS CONTROL SYSTEM CONTRACTOR
2. DOOR POSITION SENSOR CONNECTIONS TO ACCESS CONTROL AND INTRUSION DETECTION SYSTEMS SHALL BE PLACE SIN ABOVE CEILING 1900 BOX SHOWN ON DETAIL.

06 DOOR POSITION SENSOR ELEVATION

NOT TO SCALE

VLK

M.E.P. ENGINEER

Salas O'Brien
10930 W. Sam Houston Parkway North, Suite 900
Houston, Texas 77064
Main Phone: 281.664.0703
https://salasobrien.com/offices/houston-texas/

Salas O'Brien
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Salas O'Brien Registration: F-4111
Salas O'Brien Project Number: 2550-01455-00

GALENA PARK ISD
HOUSTON, TEXAS

North Shore Multi-Use Indoor Facility

BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10.01.2025

ISSUED: OCTOBER 1, 2025

REVISIONS

Revision No.	Revision Date

Director	Monika Castillo
Proj. Arch.	Tam Quang
Designer	Designer
Drawn By	Author

PROJECT NO.

25-0056.00

SHEET TITLE

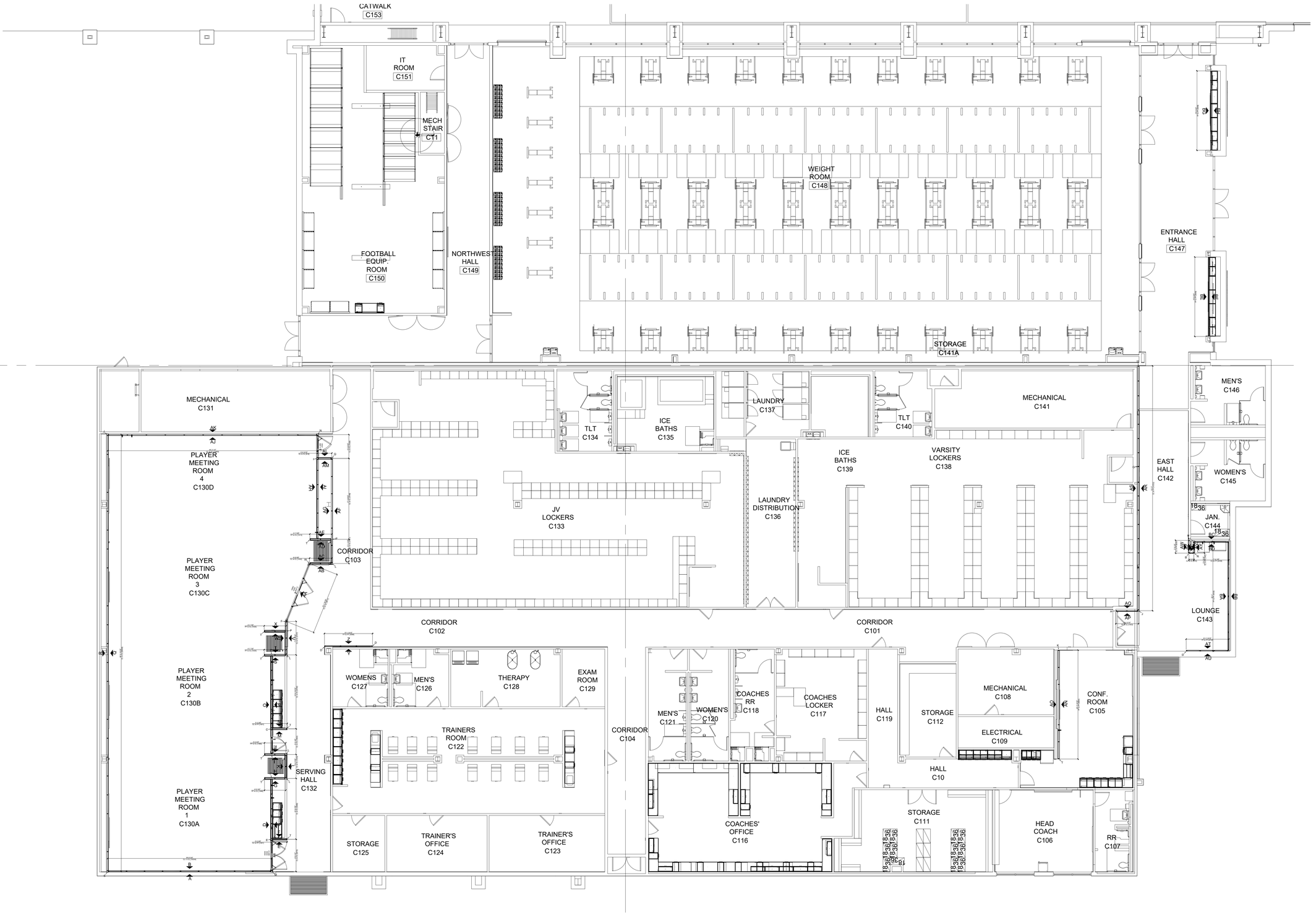
TECHNOLOGY DETAILS

SHEET NO.

T5.04

COPYRIGHT © 2025 VLK ARCHITECTS, LLC

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawing for scale purposes. All site dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.



1 DW-100.1 OVERALL FLOOR PLAN - LEVEL 1

SCALE : 1/8"= 1'-0"

A	B
C	D

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

DW-100.1-100.5	LEVEL 1 FLOOR PLANS
DW-100.6	HIGHLIGHTED DIRTT SCOPE
DW-200.1-200.3	ELEVATIONS WITH FINISH SCHEDULE
DW-300.1	INTERSECTION DETAILS DOOR SCHEDULE
DW-400.1	WALL DETAILS

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

-	30Sept25 Preliminary Shops	KA

Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

FLOOR PLAN - FIRST FLOOR

DW-100.1

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawings for scale purposes. All size dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.

MECHANICAL
C131

PLAYER
MEETING
ROOM
4
C130D

PLAYER
MEETING
ROOM
3
C130C

PLAYER
MEETING
ROOM
2
C130B

PLAYER
MEETING
ROOM
1
C130A

CORRIDOR
C103

TLT
C134

JV
LOCKERS
C133

CORRIDOR
C102

SERVING
HALL
C132

WOMENS
C127

MEN'S
C126

THERAPY
C128

EXAM
ROOM
C129

TRAINERS
ROOM
C122

COR
C

STORAGE
C125

TRAINER'S
OFFICE
C124

TRAINER'S
OFFICE
C123

1 OVERALL FLOOR PLAN - LEVEL 1 - QUADRANT C
DW-100.2

SCALE : 1/4"= 1'-0"

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

DW-100.1-100.5	LEVEL 1 FLOOR PLANS
DW-100.6	HIGHLIGHTED DIRTT SCOPE
DW-200.1-200.3	ELEVATIONS WITH FINISH SCHEDULE
DW-300.1	INTERSECTION DETAILS DOOR SCHEDULE
DW-400.1	WALL DETAILS

Project Name:
NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

-	30Sept25 Preliminary Shops	KA

Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

A B C D

FLOOR PLAN - FIRST FLOOR
AREA C

DW-100.2

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawing for scale purposes. All site dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.

ICE BATHS C135
LAUNDRY C137
TLT C140
MECHANICAL C141
ICE BATHS C139
VARSITY LOCKERS C138
EAST HALL C142
MEN'S C146
WOMEN'S C145
LAUNDRY DISTRIBUTION C136
JAN. C144
CORRIDOR C101
LOUNGE C143
MEN'S C121
WOMEN'S C120
COACHES RR C118
COACHES LOCKER C117
HALL C119
STORAGE C112
MECHANICAL C108
ELECTRICAL C109
CONF. ROOM C105
CORRIDOR C104
HALL C10
COACHES' OFFICE C116
STORAGE C111
HEAD COACH C106
RR C107

1 OVERALL FLOOR PLAN - LEVEL 1 - QUADRANT D
DW-100.3

SCALE : 1/4"= 1'-0"

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

DW-100.1-100.5	LEVEL 1 FLOOR PLANS
DW-100.6	HIGHLIGHTED DIRTT SCOPE
DW-200.1-200.3	ELEVATIONS WITH FINISH SCHEDULE
DW-300.1	INTERSECTION DETAILS DOOR SCHEDULE
DW-400.1	WALL DETAILS

Project Name:
NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

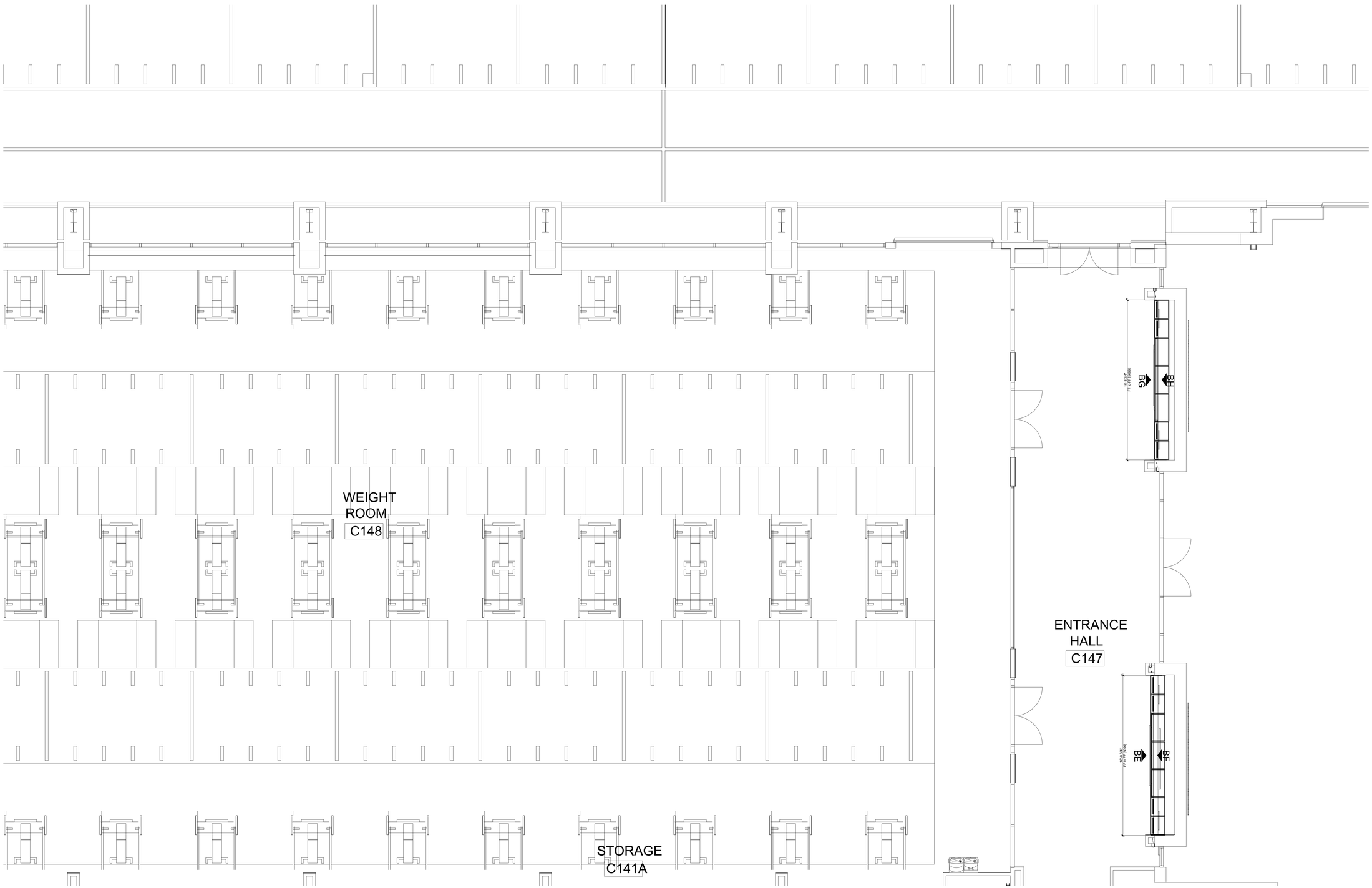
-	30Sept25 Preliminary Shops	KA

Project:	158938
Drawn by:	---
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

FLOOR PLAN - FIRST FLOOR
AREA D

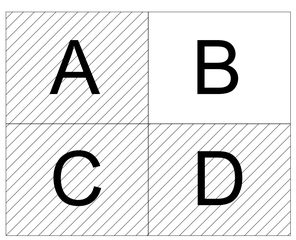
DW-100.3

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawing for scale purposes. All site dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.



1 OVERALL FLOOR PLAN - LEVEL 1 - QUADRANT B
DW-100.4

SCALE : 1/4"= 1'-0"



PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

DW-100.1-100.5	LEVEL 1 FLOOR PLANS
DW-100.6	HIGHLIGHTED DIRTT SCOPE
DW-200.1-200.3	ELEVATIONS WITH FINISH SCHEDULE
DW-300.1	INTERSECTION DETAILS DOOR SCHEDULE
DW-400.1	WALL DETAILS

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

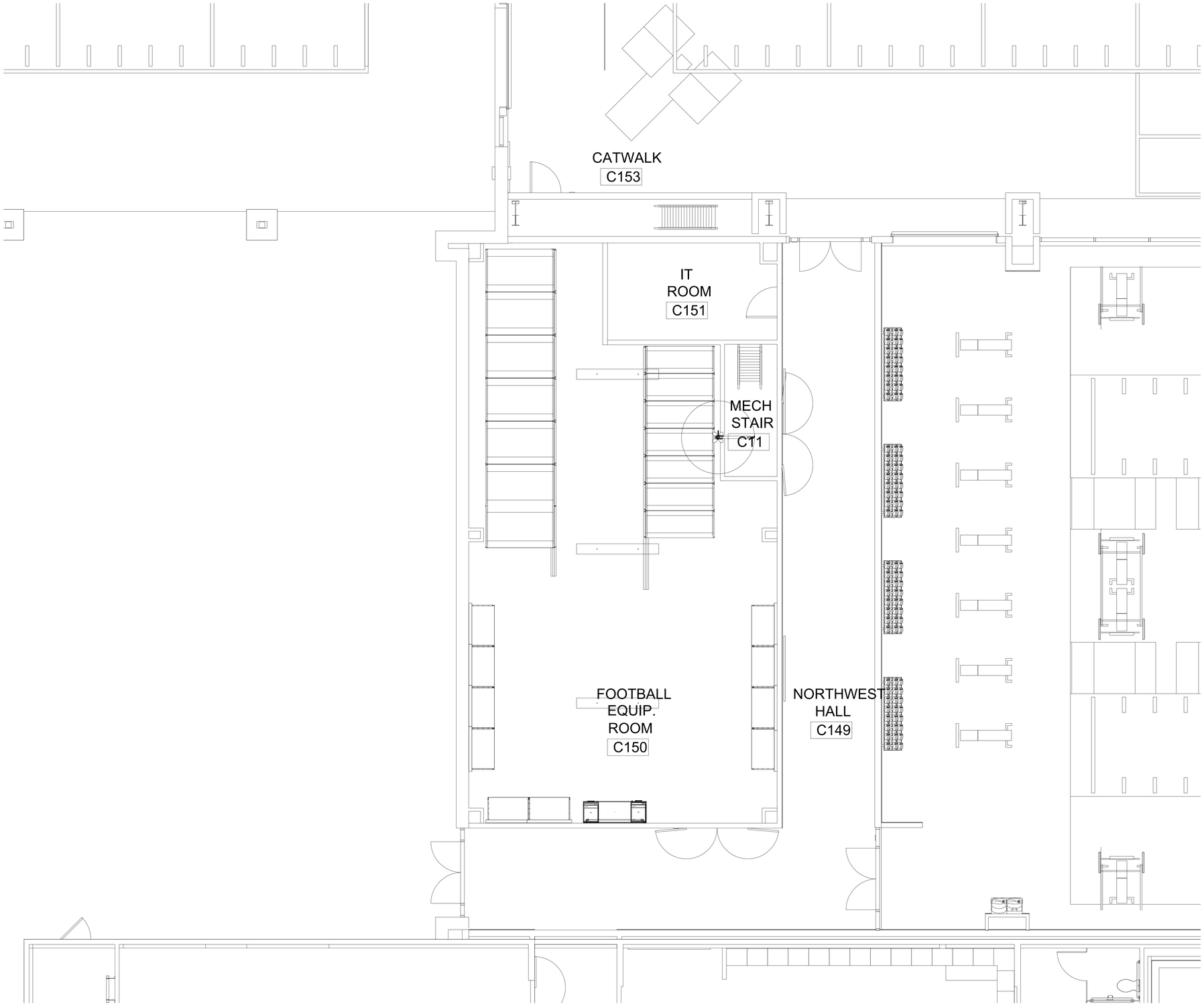
-	30Sept25	Preliminary Shops	KA

Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

FLOOR PLAN - FIRST FLOOR AREA B

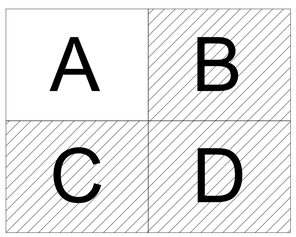
DW-100.4

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawing for scale purposes. All site dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.



1 OVERALL FLOOR PLAN - LEVEL 1 - QUADRANT A
DW-100.5

SCALE : 1/4"= 1'-0"



PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

DW-100.1-100.5	LEVEL 1 FLOOR PLANS
DW-100.6	HIGHLIGHTED DIRTT SCOPE
DW-200.1-200.3	ELEVATIONS WITH FINISH SCHEDULE
DW-300.1	INTERSECTION DETAILS DOOR SCHEDULE
DW-400.1	WALL DETAILS

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

-	30Sept25	Preliminary Shops	KA

Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

FLOOR PLAN - FIRST FLOOR AREA A

DW-100.5

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawing for scale purposes. All size dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.

C153
IT ROOM C151
MECH STAIR C11
FOOTBALL EQUIP. ROOM C150
NORTHWEST HALL C149
WEIGHT ROOM C148
STORAGE C141A
ENTRANCE HALL C147
MECHANICAL C131
PLAYER MEETING ROOM 4 C130D
PLAYER MEETING ROOM 3 C130C
PLAYER MEETING ROOM 2 C130B
PLAYER MEETING ROOM 1 C130A
CORRIDOR C103
SERVING HALL C132
TLT C134
ICE BATHS C135
LAUNDRY C137
TLT C140
MECHANICAL C141
JV LOCKERS C133
LAUNDRY DISTRIBUTION C136
ICE BATHS C139
VARSITY LOCKERS C138
EAST HALL C142
MEN'S C146
WOMEN'S C145
JAN. C144
LOUNGE C143
CORRIDOR C102
CORRIDOR C101
WOMENS C127
MEN'S C126
THERAPY C128
EXAM ROOM C129
TRAINERS ROOM C122
CORRIDOR C104
MEN'S C121
WOMEN'S C120
COACHES RR C118
COACHES LOCKER C117
HALL C119
STORAGE C112
MECHANICAL C108
ELECTRICAL C109
CONF. ROOM C105
HALL C10
STORAGE C125
TRAINER'S OFFICE C124
TRAINER'S OFFICE C123
COACHES' OFFICE C116
STORAGE C111
HEAD COACH C106
RR C107

1 DW-100.6 HIGHLIGHT FLOOR PLAN - LEVEL 1

SCALE : 1/4"= 1'-0"

COLOR LEGEND

- 2" GLASS WALL
- 4" GLASS WALL
- 4" SOLID WALL
- 2" FURRING WALL
- 4" FURRING WALL
- CASEWORK

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

DW-100.1-100.5	LEVEL 1 FLOOR PLANS
DW-100.6	HIGHLIGHTED DIRTT SCOPE
DW-200.1-200.3	ELEVATIONS WITH FINISH SCHEDULE
DW-300.1	INTERSECTION DETAILS DOOR SCHEDULE
DW-400.1	WALL DETAILS

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

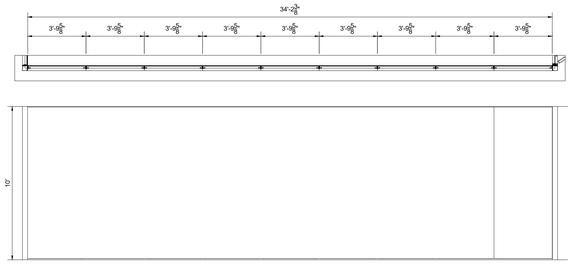
-	30Sept25 Preliminary Shops	KA

Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

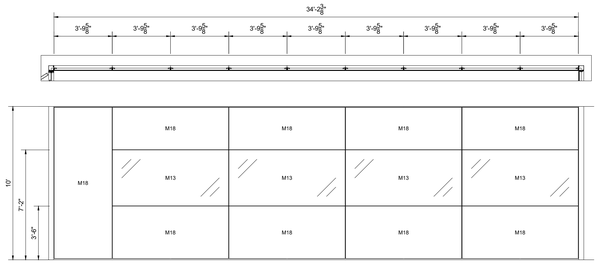
HIGHLIGHTED PLAN
LEVEL 1

DW-100.6

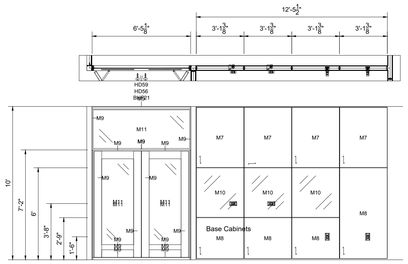
This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing either than in an agreed to by DIRTT is expressly prohibited. Do not use drawing for scale purposes. All size dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.



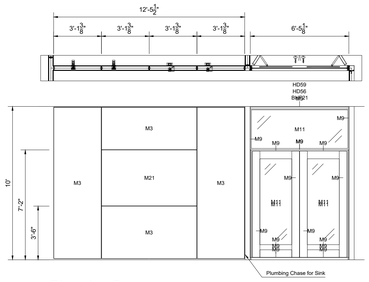
Elevation A



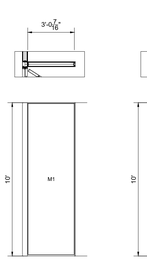
Elevation B



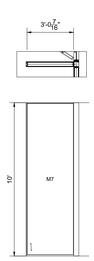
Elevation C



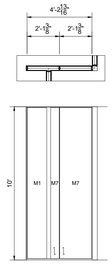
Elevation D



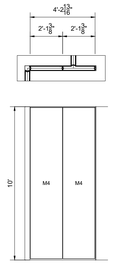
Elevation E



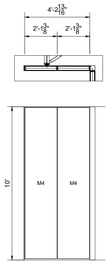
Elevation F



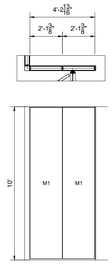
Elevation G



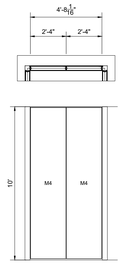
Elevation H



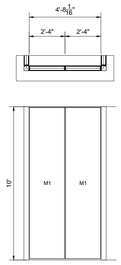
Elevation I



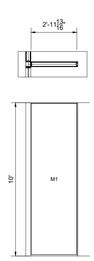
Elevation J



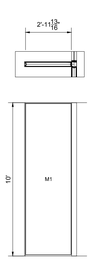
Elevation K



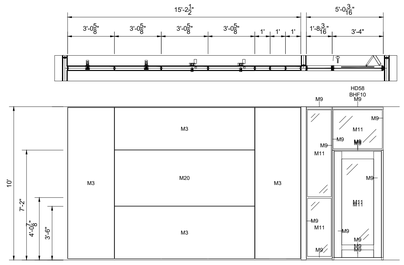
Elevation L



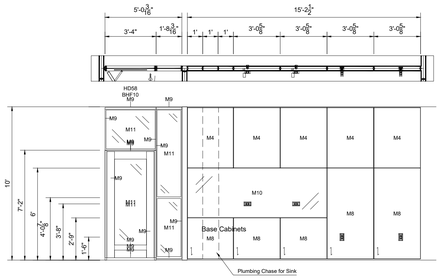
Elevation M



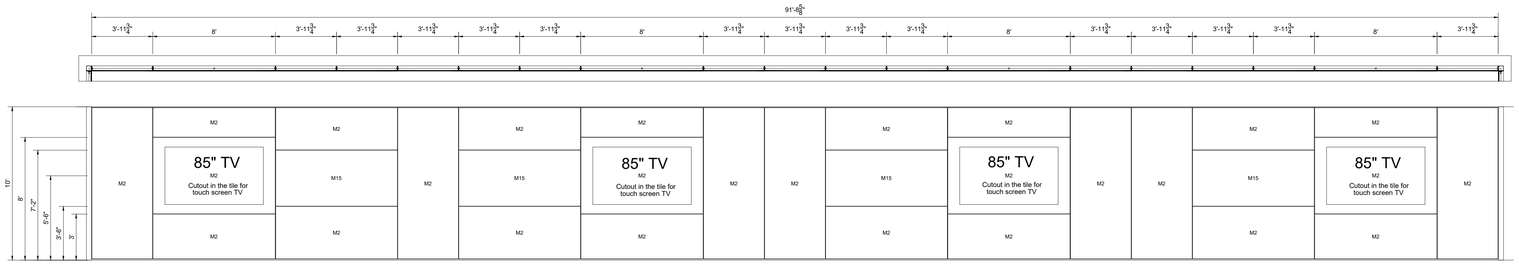
Elevation N



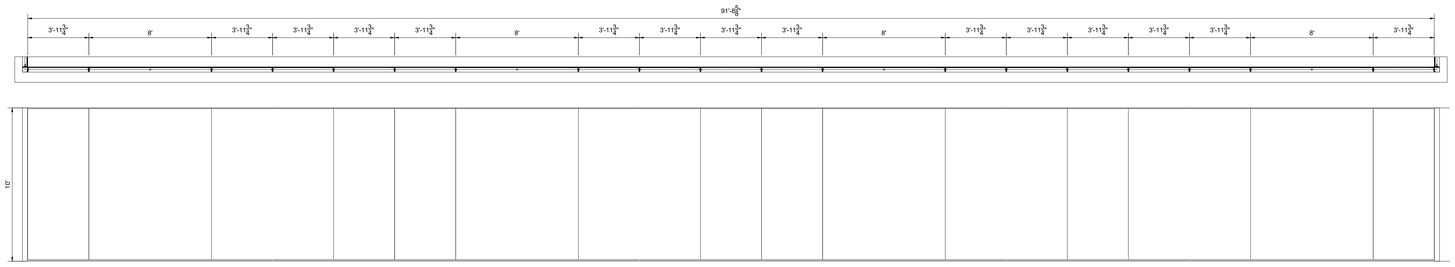
Elevation O



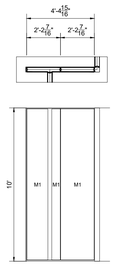
Elevation P



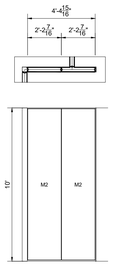
Elevation Q



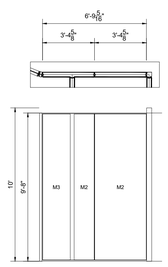
Elevation R



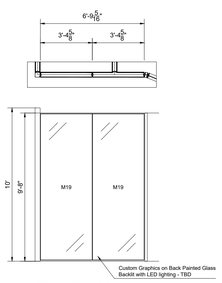
Elevation S



Elevation T



Elevation U



Elevation V

1 ELEVATIONS
DW-200.1

1/4" = 1'-0" / 1:48.000001

DIRTT Walls Finish Schedule			
Tag	Finish	Specification	Total
M1	PNT	PT-01 SW 7631 City Loft - Standard; Custom ChromacoatPlus	749.59 sq. ft.
M2	PNT	PT-2 SW 7674 Peppercorn - Standard; Custom ChromacoatPlus	1040.39 sq. ft.
M3	PNT	PT-3 SW 6871 Positive Red - Standard; Custom ChromacoatPlus	554.96 sq. ft.
M4	PNT	DIRTT ChromacoatPlus Grade 1; ChromacoatPlus - Black DC63; UC-50004	383.25 sq. ft.
M5	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Linear Black	373.96 sq. ft.
M6	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Linear Black (Horizontal)	288.38 sq. ft.
M7	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Black	103.94 sq. ft.
M8	THRM	Thermofoil Grade 2; DIRTT SSI Thermofoil Canadian Grey Super Matte	102.57 sq. ft.
M9	PWD	DIRTT Powder Coated Standard; Powder Coat - Black DP13 (Textured)	759.72 sq. ft.
M10	GLS	Custom Glass Material; Match PT-3 Positive Red SW; Custom Glass (Send to DIRTT for pricing); Flat Polish All Edges; 6.0; Flat Polish all edges; 6.0mm	203.56 sq. ft.
M11	GLS	Center Mounted Tempered Glass Tile; 6mm Tempered Glass - Clear; No Edge Polish; 6.0mm	215.06 sq. ft.
M12	GLS	Grade 1 (Non-metallic) Backpaint; Clear Glass: Rich Black DG56; Flat Polish all edges; 6.0mm	292.34 sq. ft.
M13	GLS	Grade 1 (Non-metallic) Backpaint; Starphire Glass: Snow White DG54; Flat Polish all edges; 6.0mm	259.12 sq. ft.
M15	MCF	WriteAway: Slate Grey Gloss	115.36 sq. ft.
M16	MCF_Graphic	Custom Image; Football Field - Gloss; Custom Image; .022mm CRS - Porcelain coated white laminate	43.42 sq. ft.
M17	MDF_Graphic	Custom Image; Tile Edge - Polar White DC60; LED LOGO; Custom Image	97.63 sq. ft.
M18	MDF_Graphic	Custom Image; Tile Edge - Polar White DC60	223.43 sq. ft.
M19	GLS_Graphic	Starphire Glass; Custom Image; player; Custom Image; Flat Polish all edges;6.0mm	63.91 sq. ft.
M20	MCF_Graphic	Custom Image; Football Field 2 - Gloss; Custom Image	33.18 sq. ft.
M21	MCF_Graphic	Custom Image; FF4 - Gloss; Custom Image; .022mm CRS - Porcelain coated white laminate	22.55 sq. ft.

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

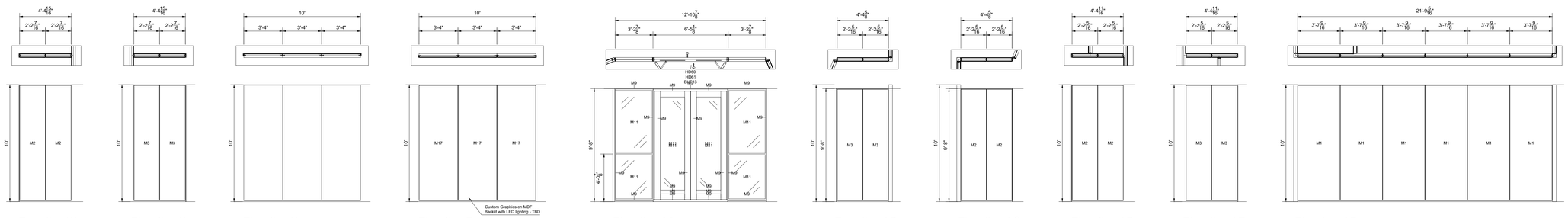
Rev	Date	Revision	Initial
-	30Sept25	Preliminary Shops	KA

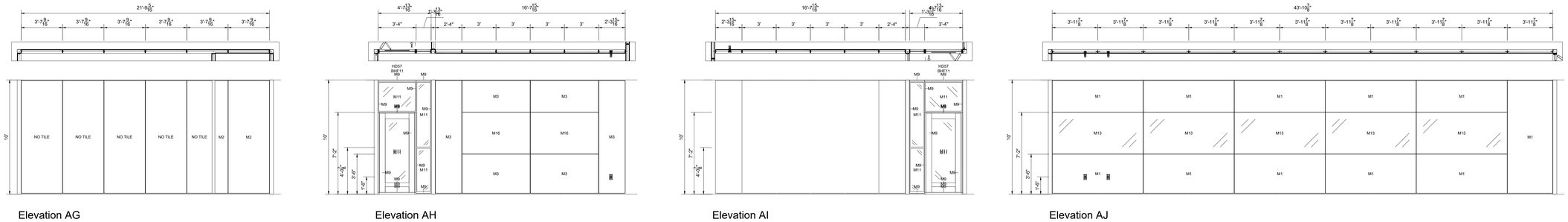
Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

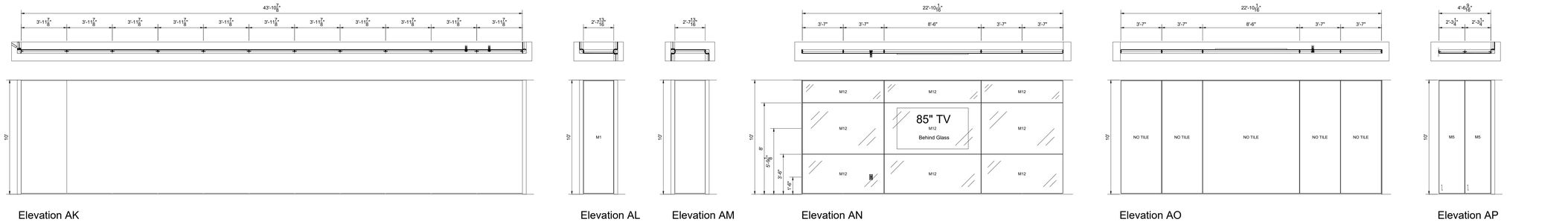
ELEVATIONS

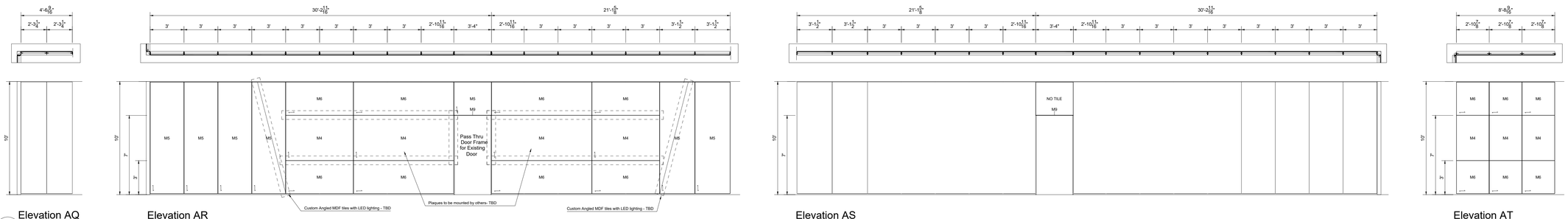
DW-200.1

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawing for scale purposes. All site dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.









1 ELEVATIONS
DW-200.2

1/4" = 1'-0" / 1:48.000002

DIRTT Walls Finish Schedule

Tag	Finish	Specification	Total
M1	PNT	PT-01 SW 7631 City Loft - Standard; Custom ChromacoatPlus	749.59 sq. ft.
M2	PNT	PT-2 SW 7674 Peppercorn - Standard; Custom ChromacoatPlus	1040.39 sq. ft.
M3	PNT	PT-3 SW 6871 Positive Red - Standard; Custom ChromacoatPlus	554.96 sq. ft.
M4	PNT	DIRTT ChromacoatPlus Grade 1; ChromacoatPlus - Black DC63; UC-50004	383.25 sq. ft.
M5	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Linear Black	373.96 sq. ft.
M6	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Linear Black (Horizontal)	288.38 sq. ft.
M7	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Black	103.94 sq. ft.
M8	THRM	Thermofoil Grade 2; DIRTT SSI Thermofoil Canadian Grey Super Matte	102.57 sq. ft.
M9	PWD	DIRTT Powder Coated Standard; Powder Coat - Black DP13 (Textured)	759.72 sq. ft.
M10	GLS	Custom Glass Material; Match PT-3 Positive Red SW; Custom Glass (Send to DIRTT for pricing); Flat Polish All Edges; 6.0; Flat Polish all edges; 6.0mm	203.56 sq. ft.
M11	GLS	Center Mounted Tempered Glass Tile; 6mm Tempered Glass - Clear; No Edge Polish; 6.0mm	215.06 sq. ft.
M12	GLS	Grade 1 (Non-metallic) Backpaint; Clear Glass: Rich Black DG56; Flat Polish all edges; 6.0mm	292.34 sq. ft.
M13	GLS	Grade 1 (Non-metallic) Backpaint; Starphire Glass: Snow White DG54; Flat Polish all edges; 6.0mm	259.12 sq. ft.
M15	MCF	WriteAway: Slate Grey Gloss	115.36 sq. ft.
M16	MCF_Graphic	Custom Image; Football Field - Gloss; Custom Image; .022mm CRS - Porcelain coated white laminate	43.42 sq. ft.
M17	MDF_Graphic	Custom Image; Tile Edge - Polar White DC60; LED LOGO; Custom Image	97.63 sq. ft.
M18	MDF_Graphic	Custom Image; Tile Edge - Polar White DC60	223.43 sq. ft.
M19	GLS_Graphic	Starphire Glass; Custom Image; player; Custom Image; Flat Polish all edges;6.0mm	63.91 sq. ft.
M20	MCF_Graphic	Custom Image; Football Field 2 - Gloss; Custom Image	33.18 sq. ft.
M21	MCF_Graphic	Custom Image; FF4 - Gloss; Custom Image; .022mm CRS - Porcelain coated white laminate	22.55 sq. ft.

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

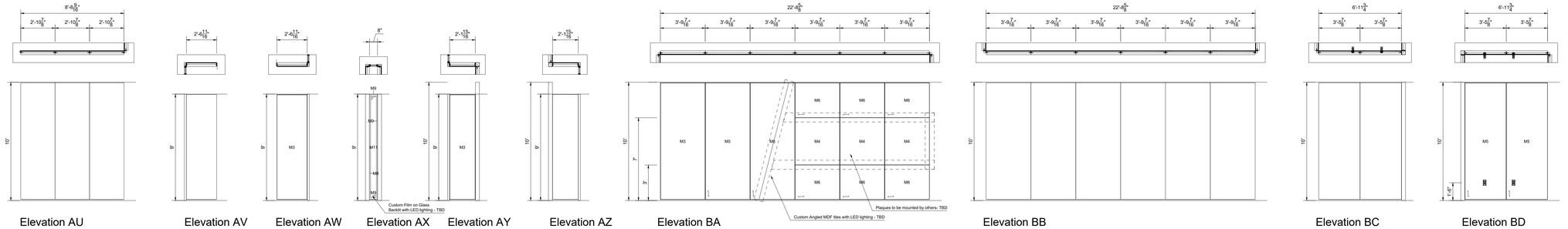
CONSULTANT SET

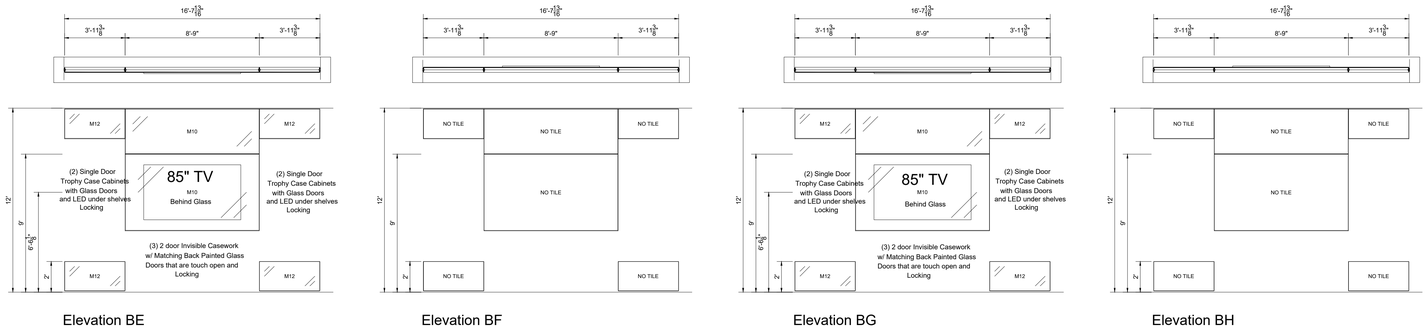
Rev	Date	Revision	Initial
-	30Sept25	Preliminary Shops	KA

Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

ELEVATIONS

DW-200.2





DIRTT Walls Finish Schedule			
Tag	Finish	Specification	Total
M1	PNT	PT-01 SW 7631 City Loft - Standard; Custom ChromacoatPlus	749.59 sq. ft.
M2	PNT	PT-2 SW 7674 Peppercorn - Standard; Custom ChromacoatPlus	1040.39 sq. ft.
M3	PNT	PT-3 SW 6871 Positive Red - Standard; Custom ChromacoatPlus	554.96 sq. ft.
M4	PNT	DIRTT ChromacoatPlus Grade 1; ChromacoatPlus - Black DC63; UC-50004	383.25 sq. ft.
M5	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Linear Black	373.96 sq. ft.
M6	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Linear Black (Horizontal)	288.38 sq. ft.
M7	THRM	Thermofoil Grade 1; DIRTT SSI Thermofoil Black	103.94 sq. ft.
M8	THRM	Thermofoil Grade 2; DIRTT SSI Thermofoil Canadian Grey Super Matte	102.57 sq. ft.
M9	PWD	DIRTT Powder Coated Standard; Powder Coat - Black DP13 (Textured)	759.72 sq. ft.
M10	GLS	Custom Glass Material; Match PT-3 Positive Red SW; Custom Glass (Send to DIRTT for pricing); Flat Polish All Edges; 6.0; Flat Polish all edges; 6.0mm	203.56 sq. ft.
M11	GLS	Center Mounted Tempered Glass Tile; 6mm Tempered Glass - Clear; No Edge Polish; 6.0mm	215.06 sq. ft.
M12	GLS	Grade 1 (Non-metallic) Backpaint; Clear Glass: Rich Black DG56; Flat Polish all edges; 6.0mm	292.34 sq. ft.
M13	GLS	Grade 1 (Non-metallic) Backpaint; Starphire Glass: Snow White DG54; Flat Polish all edges; 6.0mm	259.12 sq. ft.
M15	MCF	WriteAway: Slate Grey Gloss	115.36 sq. ft.
M16	MCF_Graphic	Custom Image; Football Field - Gloss; Custom Image; .022mm CRS - Porcelain coated white laminate	43.42 sq. ft.
M17	MDF_Graphic	Custom Image; Tile Edge - Polar White DC60; LED LOGO; Custom Image	97.63 sq. ft.
M18	MDF_Graphic	Custom Image; Tile Edge - Polar White DC60	223.43 sq. ft.
M19	GLS_Graphic	Starphire Glass; Custom Image; player; Custom Image; Flat Polish all edges;6.0mm	63.91 sq. ft.
M20	MCF_Graphic	Custom Image; Football Field 2 - Gloss; Custom Image	33.18 sq. ft.
M21	MCF_Graphic	Custom Image; FF4 - Gloss; Custom Image; .022mm CRS - Porcelain coated white laminate	22.55 sq. ft.

1 ELEVATIONS
DW-200.3

1/4" = 1'-0" / 1:48.000004

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

Rev	Date	Revision	Initial
-	30Sept25	Preliminary Shops	KA

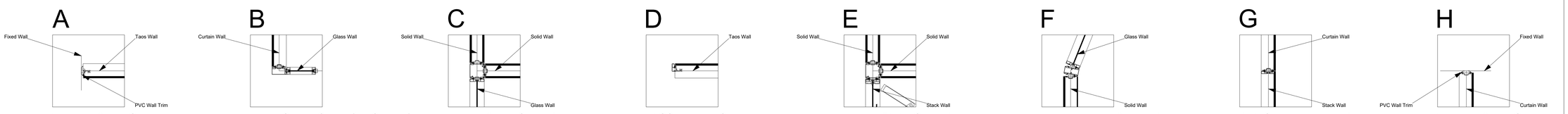
Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

ELEVATIONS

DW-200.3

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, retention, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawings for scale purposes. All size dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawing for scale purposes. All size dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.



1 INTERSECTION DETAILS
DW-300.1

SCALE : 1" = 1'-0"

DIRTT Door Schedule

Tag	Style Name	Size	Handedness	Hardware Type	Closer Type	Stopper	Door Base Style	Finish Tag	Hardware Description	Center Location AFF	Door Track Type
HD56	DR-DBLstackBH	Height 6' - 11 3/16" X Width 3' - 1"	LHR	COM	Concealed	None	ADA	M9, M11	COM Door Hardware(COM; Dorma Kaba)		N/A
HD57	DR-BHstack	Height 6' - 11 3/16" X Width 3' - 1"	RHR	COM	Concealed	None	ADA	M9, M11	COM Door Hardware(COM; Dorma Kaba)		N/A
HD58	DR-BHstack	Height 6' - 11 3/16" X Width 3' - 1"	LHR	COM	Concealed	None	ADA	M9, M11	COM Door Hardware(COM; Dorma Kaba)		N/A
HD59	DR-DBLstackBH	Height 6' - 11 3/16" X Width 3' - 1"	RHR	COM	Concealed	None	ADA	M9, M11	COM Door Hardware(COM; Dorma Kaba)		N/A
HD60	Butt_Hinge_Door-Double	Height 9' - 3 7/16" X Width 3' - 1"	LH	COM	Concealed	None	ADA	M9, M11	COM Door Hardware(COM; Dorma Kaba)		N/A
HD61	Butt_Hinge_Door-Double	Height 9' - 3 7/16" X Width 3' - 1"	RH	COM	Concealed	None	ADA	M9, M11	COM Door Hardware(COM; Dorma Kaba)		N/A

2 DOOR SCHEDULE
DW-300.1

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

Rev	Date	Revision	Initial
-	30Sept25	Preliminary Shops	KA

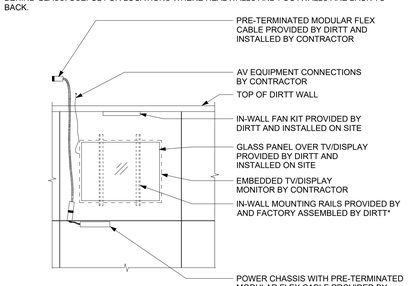
Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

INTERSECTION DETAILS AND DOOR SCHEDULE

DW-300.1

RECESSED TV/DISPLAY MONITOR AT DIRTT WALL - POWER CHASSIS MODULAR

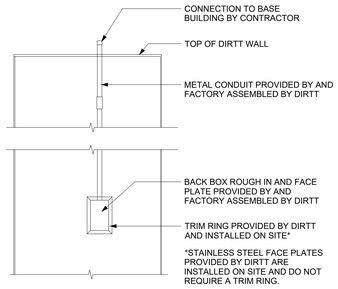
TYPICALLY PROVIDED FOR ITEMS SUCH AS: TELEVISIONS OR MONITORS THAT ARE TO BE LOCATED BEHIND GLASS. USEFUL FOR LOCATIONS WHERE HEADWALLS AND FOOTWALLS ARE BACK TO BACK.



*TV/DISPLAY MONITOR MOUNTING HARDWARE BY CONTRACTOR.

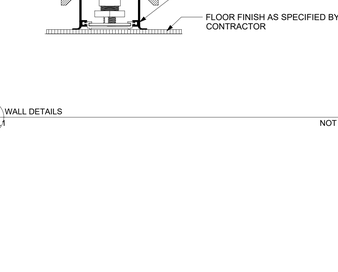
DIRTT BACK BOXES AND CONDUIT

TYPICALLY PROVIDED FOR ITEMS SUCH AS: LIGHT SWITCHES, WALL MOUNTED LUMINARIES, ETC.



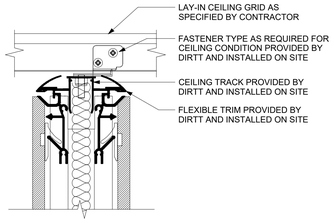
1 POWER DETAILS
DW-400.1

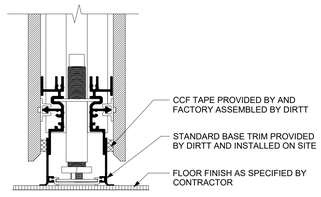
NOT TO SCALE



2 PLUMBING DETAILS
DW-400.1

NOT TO SCALE





3 WALL DETAILS
DW-400.1

NOT TO SCALE

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☐ ANODIZED ALUMINUM
- ☑ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☐ SILVER
- ☑ BLACK

PVC/GLASS WIPE COLOR:
- ☐ SILVER
- ☑ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☐ CARPET
- ☑ HARD SURFACE

WALL HEIGHT: 10'0" AND 12'0"

CEILING TYPE:
- ☑ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

Project Name:

NORTH SHORE
MULTI-USE INDOOR FACILITY
GALENA PARK ISD

Project Address:

GALENA PARK, TX

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CONSULTANT SET

Rev	Date	Revision	Initial
-	30Sept25	Preliminary Shops	KA

Project:	158938
Drawn by:	----
Scale:	AS NOTED
Plot Date:	2025/09/30
Contact:	----
Contact Number:	----

WALL DETAILS

DW-400.1

This drawing is the confidential and proprietary information of DIRTT Environmental Solutions Ltd. (DIRTT). Any reproduction, alteration, disclosure or use of this drawing other than as agreed to by DIRTT is expressly prohibited. Do not use drawing for sale purposes. All size dimensions, drawings, details, and specifications contained herein must be verified by sub-contractors and any discrepancies must be reported to DIRTT in writing before proceeding with work. See cover page of drawing package for full disclaimer.