New Fire Station Building

FOR

Kerens Volunteer Fire Department

805 Northeast 2nd Street, Kerens Texas 75144

ABBREVIATIONS

A/C	AIR CONDITIONING
A/V	AUDIO/VISUAL
ACOUST	ACOUSTICAL
ACP	ACOUSTICAL CEILING PANEL
ACT	ACOUSTICAL CEILING TILE
A.D.	AREA DRAIN
ADD	ADDENDUM
ADJ	ADJUSTABLE/ADJACENT
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
ALT	ALTERNATE
ANOD	ANODIZED
AP	ACCESS PANEL
APC	ARCH PRECAST CONCRETE
APPROX.	APPROXIMATE
ARCH	ARCHITECT/ARCHITECTURAL
ATTEN	ATTENUATION
AUTO	AUTOMATIC
AVG	AVERAGE
AWP	ACOUSTICAL WALL PANEL
ASPH	ASPHALT
BD	BOARD
BITUM	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BENCH MARK/BEAM
BOC	BACK OF CURB
B.O.	BOTTOM OF
BOT	BOTTOM
BRG	BEARING
BRK	BRICK
BRKT	BRACKET
BSMT	BASEMENT
BTWN	BETWEEN
BLV	BEVELED
BW	BOTH WAYS
C	COURSE
CAB	CABINET
CAP	CAPACITY
C.B.	CATCH BASIN
CCTV	CLOSED CIRCUIT TV
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE CG
CORNER GUARD	
CI	CAST IRON
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR/CLEARANCE
CM	CENTIMETER
CMP	CORRUGATED METAL PIPE
CMT	CERAMIC MOSAIC TILE
C.M.U.	CONCRETE MASONRY UNIT (S)
C.O.	CLEAN-OUT
COL	COLUMN COMB COMBINATION
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCT/CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CORR	CORRIDOR/CORRUGATED
CP	CONCRETE PIPE
CPT	CARPET
CS	COUNTERSINK
CSMT	CASEMENT
CT	CERAMIC TILE
CTR	COUNTER
CU.A.A.	CUBIC C.W. COLD WATER
DBL	DOUBLE
DEMO	DEMOLISH/DEMOLITION
DEPT	DEPARTMENT
D.F.	DRINKING FOUNTAIN
DH	DOUBLE HUNG
DIAG	DIAGONAL
DIA.	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DMT	DEMOUNTABLE
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DTL	DETAIL
DWG	DRAWING
E	EAST
EA	EACH
EF	EXHAUST FAN
E.J.	EXPANSION JOINT
EL	ELEVATION
ELAST	ELASTOMERIC
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMERG	EMERGENCY
E.P.D.	ELECTRICAL PANELBOARD
EQ	EQUAL
EQUIP	EQUIPMENT
ESC	ESCALATOR
EST	ESTIMATE
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST EXIST EXISTING
EXP	EXPANSION / EXPANDED
EXT	EXTERIOR
F.A.	FIRE ALARM
FAB	FABRICATE
FB	FACE BRICK
FBO	FURNISHED BY OWNER
FD	FLOOR DRAIN
FDN	FOUNDATION
FDV	FIRE DEPARTMENT VALVE
FE	FIRE EXTINGUISHER & BRACKET
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FF&E	FIXTURES/FURNITURE/EQUIPMENT
FFE	FINISH FLOOR ELEVATION
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH/FINISHED
FIXT	FIXTURE
FLG	FLASHING
FLR	FLOOR
FLUOR	FLUORESCENT
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.G.	FACE OF GYPSUM BOARD/WALL
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUDS
FR(FRM)	FRAME (D),(ING)
FS	FLOOR SINK FT FOOT / FEET
FTG	FOOTING
FURR	FURRING
FUT	FUTURE
FVC	FIRE VALVE CABINET
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GFRC	GLASS FIBER REINFORCED CONCRETE
GL	GLASS/GLAZING
GOVT	GOVERNMENT
GPM	GALLON PER MINUTE GYP GYPSUM
H.B.	HOSE BIBB
H.C.	HOLLOW CORE
HD	HEAD
HDBD	HEADBOARD
HDR	HEADER
HDW	HARDWARE
HDWD	HARDWOOD
HK	HOOK
H.M.	HOLLOW METAL
HORIZ	HORIZONTAL
HPT	HIGH POINT
HR	HOUR
HS	HIGH STRENGTH
HT	HEIGHT
HTG	HEATING
HTR	HEATER
HVAC	HEATING/VENTILATING/ AIR CONDITIONING
HW	HOT WATER
H.W.H.	HOT WATER HEATER
I.D.	INSIDE DIAMETER
IN	INCH
INCAND	INCANDESCENT
INCL	INCLUDE (D), (ING)
INFO	INFORMATION
INST	INSTALL/INSTALLATION
INSUL	INSULATE/INSULATION
INT	INTERIOR INV INVERT
JAN	JANITOR
JB	JUNCTION BOX
JC	JANITOR CLOSET
JST	JOIST
JT	JOINT
KIT	KITCHEN
KP	KICK PLATE
L	LONG/LENGTH
LAB	LABORATORY
LAM	LAMINATE (D)
LAV	LAVATORY
LB	POUNDS
LF	LINEAR FOOT (FEET)
LH	LEFT HAND
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LPT	LOW POINT
LRG	LARGE
LTG)	LIGHT/LIGHTING
LVR	LOUVER
LWC	LIGHTWEIGHT CONCRETE
M	METER (S)
MAS	MASONRY
MAX	MAXIMUM
MBR	MEMBER
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBRANE
MFG	MANUFACTURING
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MM	MILLIMETER
MO	MASONRY OPENING
MOD	MODULAR
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MUL	MULLION
N	NORTH
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NO or #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OH	OVERHEAD/OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
OZ	OUNCE
PA	PUBLIC ADDRESS
PB	PANEL BOARD
PC	PRECAST CONCRETE
PERF	PERFORATE (D)
PERM	PERMANENT
PERP	PERPENDICULAR
PL	PLATE/PROPERTY LINE
P LAM	PLASTIC LAMINATE
PLAS	PLASTER
PLUMB	PLUMBING
PLYWD	PLYWOOD
PNL	PANEL
POLY	POLYETHYLENE
PREFAB	PREFABRICATE (D)
PREFIN	PREFINISHED
PRELIM	PRELIMINARY
PREP	PREPARE (D)
PROJ	PROJECT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PTD	PAINTED
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
QT	QUARRY TILE
QTY	QUANTITY
R	RISER/RADIUS/REVERSED
RA	RETURN AIR
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RE:	REFERENCE/REFER TO
REC (D)	RECEIVE (D)
REF/FRG.	REFRIGERATOR
REINF	REINFORCE(D),(ING)
REQD	REQUIRED
REQMT	REQUIREMENT
REV	REVISED/REVISION
RFG	ROOFING
RH	RIGHT HAND
RM	ROOM
R.O.	ROUGH OPENING
RTU	ROOF TOP UNIT
R/W	RIGHT OF WAY
S	SOUTH
SAN	SANITARY SEWER
S.C.	SOLID CORE
SCH	SCHEDULE
SCN	SCREEN
SECT	SECTION
SF	SQUARE FOOT (SQ. FT.)
SHM	SECURITY HOLLOW METAL
SHT	SHEET
SIM	SIMILAR
SOF	SPRAY-ON FIREPROOFING
SOG	SLAB ON GRADE
SPEC	SPECIFICATION (S)
SPKR	SPEAKER
SP.HD.	SPRINKLER HEAD
SQ	SQUARE
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STG	SEATING
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURE/STRUCTURAL
SUBFLR	SUBFLOOR
SUSP	SUSPENDED
SWGR	SWITCH GEAR
S.Y.	SQUARE YARD (SQ.YD.)
SYM	SYMMETRICAL
SYS	SYSTEM
T	TREAD
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
TEL	TELEPHONE
TEMP	TEMPORARY/TEMPERED
THK	THICKNESS)
THRU	THROUGH
TKBD	TACK BOARD
T.O.C.	TOP OF CURB/CONCRETE
T.O.D.	TOP OF DECK
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PARAPET
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TRANSF	TRANSFORMER
TRANSM	TRANSMISSION
TV	TELEVISION
TYP	TYPICAL
TZ	TERRAZZO
UH	UNIT HEATER
UNFIN	UNFINISHED
U.O.N.	UNLESS OTHERWISE NOTED
VB	VAPOR BARRIER
(VPR.BR.)	VCT VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VT	VINYL TILE
VTR	VENT THROUGH ROOF
VWC	VINYL WALLCOVERING
W	WEST, WIDE, WATER W/ WITH
W/IN	WITHIN W/O WITHOUT
WB	WOOD BASE
WC	WATER CLOSET
WD	WOOD
WH	WALL HYDRANT
WNDW	WINDOW
W.P.	WATERPROOFING
WR	WATER RESISTANT
WT	WEIGHT
YD	YARD
@	AT & AND

SYMBOL LEGEND

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

1/A1 SECTION / DETAIL CALL OUT

1/A1 ELEVATION TAG

101 DOOR TAG

0 ARCHITECTURAL GRID LINE

SPOT ELEVATION

INSULATION


PROJECT LOCATION
805 NE 2nd St
Pony's Firestop
Temple of Praise Church
Kerens
Mario's Pizza
The Stockton Hall
O2M Baptista
NE 2nd St
SW 1st St
SE 1st St
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SW 3rd St
SE 3rd St
SW 4th St
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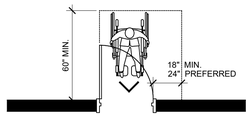
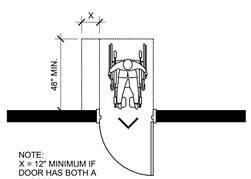
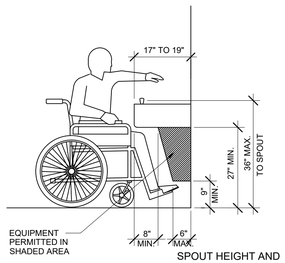
FRONT APPROACH



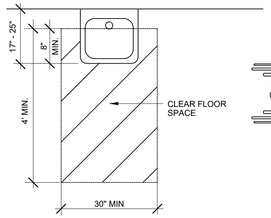
FRONT APPROACH



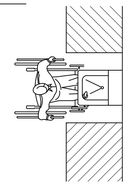
NOTE:
X = 12" MINIMUM IF DOOR HAS BOTH A CLOSER AND A LATCH



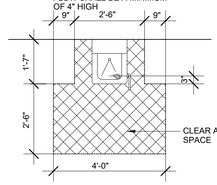
SPOUT HEIGHT AND KNEE CLEARANCE



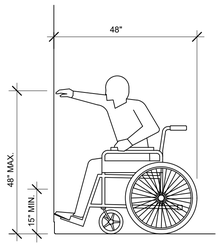
CLEAR FLOOR SPACE



NOTE:
SPOUT SHALL BE WITHIN 3" OF FRONT AND SHALL DIRECT FLOW PARALLEL TO FRONT FLOW SHALL BE A MINIMUM OF 4" HIGH

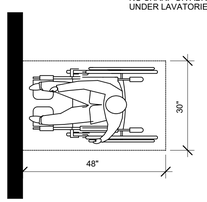


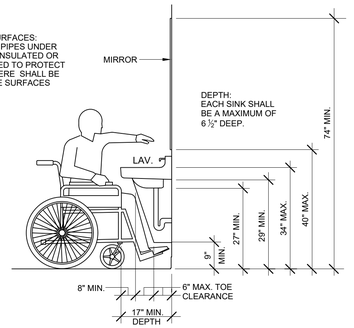
PLAN AT DRINKING FOUNTAIN



HIGH FORWARD REACH LIMIT

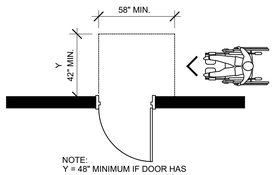
EXPOSED PIPES AND SURFACES:
HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.





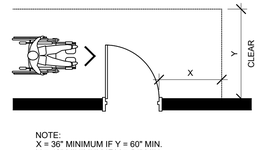
LAVATORY LIMITS

HINGE SIDE APPROACH

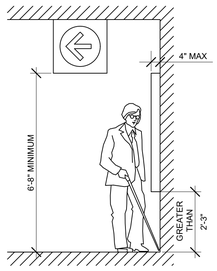


NOTE:
Y = 48" MINIMUM IF DOOR HAS BOTH A LATCH AND A CLOSER.

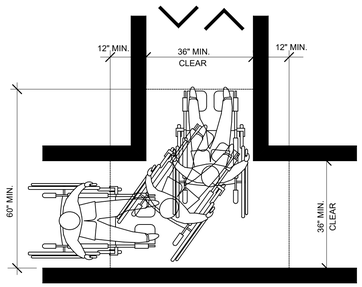
HINGE SIDE APPROACH

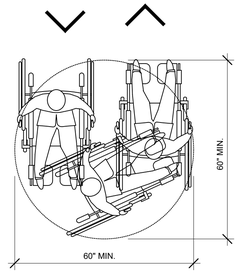


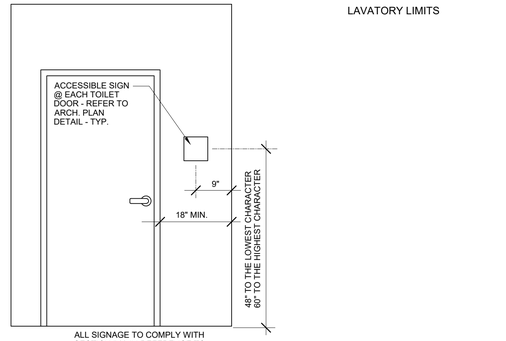
NOTE:
X = 36" MINIMUM IF Y = 60" MIN.
X = 42" MINIMUM IF Y = 54" MIN.



PROTRUDING OBJECTS
NO SCALE

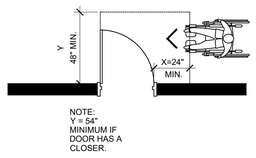






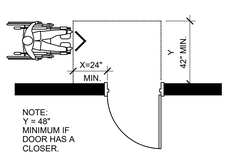
ALL SIGNAGE TO COMPLY WITH SECTION 703 IN REFERENCE TO BRAILLE, RAISED LETTERING AND SIZE

LATCH SIDE APPROACH

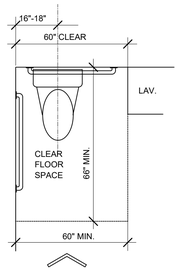


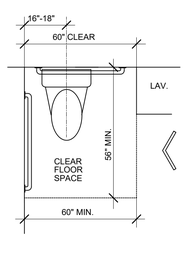
NOTE:
Y = 54" MINIMUM IF DOOR HAS A CLOSER.

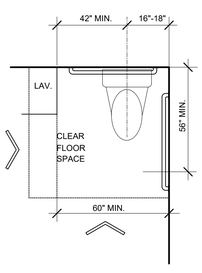
LATCH SIDE APPROACH

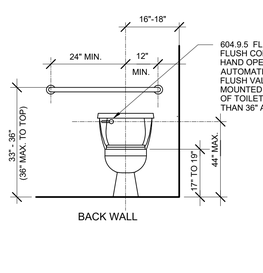


NOTE:
Y = 48" MINIMUM IF DOOR HAS A CLOSER.





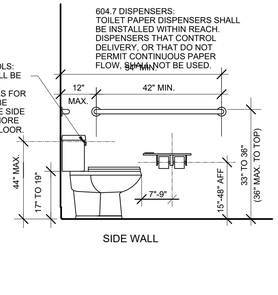




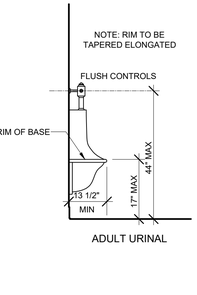
604.9.5 FLUSH CONTROLS:
FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. CONTROLS FOR FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET AREAS NO MORE THAN 36" ABOVE THE FLOOR.

BACK WALL

604.7 DISPENSERS:
TOILET PAPER DISPENSERS SHALL BE INSTALLED WITHIN REACH. DISPENSERS THAT CONTROL DELIVERY, OR THAT DO NOT PERMIT CONTINUOUS PAPER FLOW, SHALL NOT BE USED.



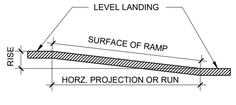
SIDE WALL



ADULT URINAL

SWITCHES/RECEPTACLES (TOP)	48" MAX
SWITCHES/RECEPTACLES (BOTTOM)	15" MIN
CHALKBOARD/TACKBOARD (TOP)	76" MAX
CHALKBOARD/TACKBOARD (BOTTOM)	28" MIN
FIRE EXT. CABINET (TO HANDLE ON DOOR)	48" MAX
HANDRAIL (TOP)	34" MAX
PANIC BAR	48" MAX
TELEPHONE (TO HIGHEST OPERABLE PARTS)	48" MAX
SOAP DISPENSER (TO CONTROL)	48" MAX
TOWEL DISPENSER (TO CONTROL)	48" MAX
HAND DRYER (TO CONTROL)	48" MAX
URINAL (RIM OF BASIN FOR HANDICAPPED)	17" MAX

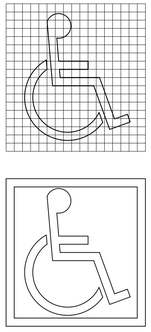
ADA MOUNTING HEIGHTS
NO SCALE



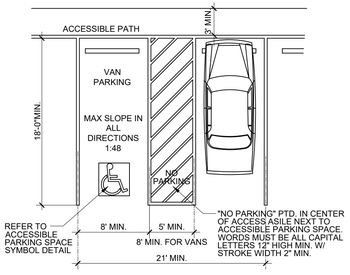
SLOPE	MAX RISE IN	MAX HORZ. PROJ. FT
1:12 TO 1:16	30	30
1:16 TO 1:20	30	40

NOTE:
1. MAX CROSS SLOPE OF SURFACE 1:50
2. TO BE PAINTED IN CONTRASTING COLOR.
3. BROOM FINISH TEXTURE.

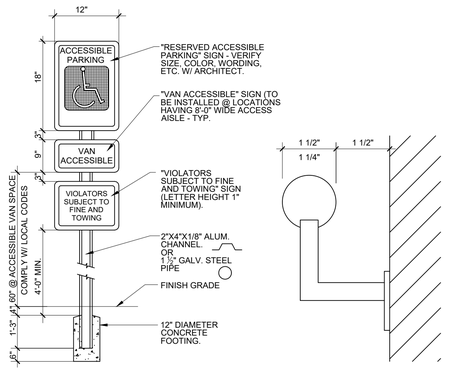
GENERAL NOTES:
1. 1/2" MAX THRESHOLD AT DOOR
2. DOOR HARDWARE TO BE LEVER TYPE
3. DOOR OPENING FORCE TO BE 5 LBF MAX ON INTERIOR DOORS
4. DOOR TO HAVE 18" MIN CLEAR ON PULL SIDE
5. DOOR TO HAVE 12" MIN CLEAR ON PUSH SIDE IF DOOR HAS BOTH CLOSER AND LATCH.
6. MOUNT FLUSH CONTROLS ON WIDE SIDE OF TOILET
7. SIGNAGE TO HAVE LETTERS WITH A WIDTH -TO-HEIGHT RATIO BETWEEN 3:5 & 1:1, STROKE-TO-HEIGHT RATIO BETWEEN 1:5 & 1:10, LETTERS TO BE UPPER CASE, SANS SERIF W/GRADE 2 BRAILLE, RAISED CHARACTERS SHALL BE 5/8" MIN & 2" MAX. CHARACTERS SHALL BE ON A NON-GLARE FINISH BACKGROUND AND SHALL CONTRAST WITH BACKGROUND.



PROPORTIONS
INTERNATIONAL SYMBOL OF ACCESSIBILLITY

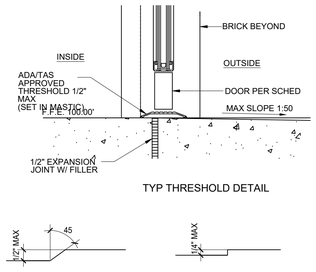


DIMENSIONS OF H.C. PARKING SPACES



SIZE AND SPACING OF HANDRAILS AND GRAB BARS

NOTE:
NOT ALL TAS & ADA REQUIREMENTS ARE INDICATED HERE. REFER TO THE CURRENT VERSION OF BOTH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICANS WITH DISABILITIES ACT



TYP THRESHOLD DETAIL

CHANGE IN FLOOR LEVEL

1 ADDENDUM No.1 - 02/22/2026

REGISTERED ARCHITECT
KYLE DALE PAYNE
14372
STATE OF TEXAS
Kyle D. Payne
SEAL DATE: 08.01.2025
EXPIRATION DATE: 09.15.2026

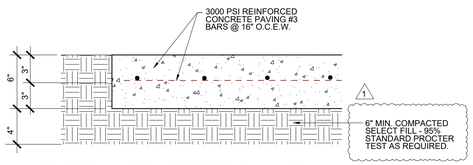
PAYNE & ASSOCIATES
ARCHITECT & CONSTRUCTION SERVICES
PO BOX 131449 TYLER,TEXAS 75713
(903)714-1841 CELL
kyledpayne83@gmail.com

KERENS VOLUNTEER FIRE DEPARTMENT
805 Northeast 2nd Street
Kerens, Texas 75144

ISSUED FOR:
- PRELIMINARY
- REVIEW
- PERMIT
- BIDDING
- CONSTRUCTION

PROJECT: NEW FIRE STATION	
DRAWN BY:	KDP
JOB NO.:	2025.11
DATE:	08/01/25
REVISION:	02/22/26
SHEET: ACCESSIBILITY	

A2



2 TYPICAL CONCRETE PAVING
SCALE: 1 ½" = 1'-0"

GENERAL NOTES

1. FIELD VERIFY ALL ELEVATIONS, GRADES, DIMENSIONS, CONDITIONS & LOCATIONS PRIOR TO BIDDING & CONSTRUCTION.
2. VERIFY ALL UNDERGROUND AND OVERHEAD UTILITIES INFORMATION PRIOR TO CONSTRUCTION.
3. THE INFORMATION CONTAINED WITHIN THESE DRAWINGS ARE BASED ON AN ORIGINAL FIELD SURVEY CONDUCTED ON THE GROUND OF THIS SITE. ALL INFORMATION SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
4. NOTIFY THE ARCHITECT AS SOON AS POSSIBLE IN WRITING OR VIA FAX OF ANY DISCREPANCIES.
5. DAMAGE TO ANY MATERIALS OR ITEMS SCHEDULED TO REMAIN DURING DEMOLITION AND/ OR CONSTRUCTION WILL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER
6. MEET ALL LOCAL BUILDING AUTHORITY REQUIREMENTS. VERIFY PRIOR TO BIDDING & CONSTRUCTION ANY CITY REQUIREMENTS INCLUDING SILT FENCING LOCATIONS.
7. CONTRACTOR IS RESPONSIBLE FOR FULLY COMPLYING WITH ALL TECQ EROSION AND STORM WATER POLLUTION PREVENTION PLAN REGULATIONS AND REQUIREMENTS.
8. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES UNTIL THE SITE HAS STABILIZED.
9. CONTRACTOR SHALL ASSUME LIABILITY FOR ANY DAMAGE TO ADJACENT PROPERTIES AND/OR PUBLIC RIGHT-OF-WAY RESULTING FROM FAILURE TO TO FULLY IMPLEMENT AND EXECUTE ALL REQUIRED EROSION CONTROL MEASURES.
10. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF 30 DAYS AFTER STABILIZATION OF ALL SURFACES.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF EXCESS SLIT ACCUMULATION IN THE STORM WATER SYSTEM AND ALONG SLIT FENCES.
12. ANY ADDITIONAL EROSION CONTROL MEASURES REQUIRED TO ENSURE COMPLIANCE WITH TECQ STORM WATER POLLUTION REGULATIONS SHALL BE IMPLEMENTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
13. SLIT FENCING IS REQUIRED AROUND ALL STOCK PILES USED DURING CONSTRUCTION.
14. ANY SLIT, MUD, DIRT, DEBRIS SHALL BE REMOVED FORM ROADWAYS, SIDEWALKS AND PUBLIC AREAS AND THESE AREAS SHALL BE KEPT CLEAN AT ALL TIMES.
15. DISTURBED AREAS SHALL BE SEEDED OR FULLY SOLED PRIOR TO CONSTRUCTION.
16. CONTRACTOR SHALL REMOVE ANY PAVING ACCORDING TO TXDOT STANDARDS.
17. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE GENERAL PUBLIC DURING CONSTRUCTION.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS REGARDING THE REMOVAL OF EXISTING BUILDINGS OR STRUCTURES, CONTENTS AND ASSOCIATED APPURTENANCES.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION AND TERMINATION OF ALL UTILITIES PRIOR TO DEMOLITION AND CONSTRUCTION ACTIVITIES.
21. CONTRACTOR SHALL NOT INTERFERE WITH OR IMPEDE NORMAL OPERATIONS OF THE SCHOOL DISTRICT.
22. THE LIMITS OF CONSTRUCTION SHOWN ON THESE PLANS ARE FOR REFERENCE PURPOSES ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION STAKING.
23. THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF QUESTIONABLE MATERIALS WITH THE APPROPRIATE PARTIES PRIOR TO DEMOLITION.
24. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS.
25. ALL CURB RADII SHOWN ARE TO BACK OR CURB.
26. ALL PAVING DIMENSIONS ARE TO BACK OR CURB, WHERE APPLICABLE, OR TO THE EDGE OF PAVEMENT WHEN NO CURB IS INDICATED, UNLESS NOTED OTHERWISE.
27. CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT. FLUSH AT ALL POINTS OF CONTACT.
28. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
29. ADJUST PAVEMENT AND/OR CURB ELEVATIONS AS NECESSARY TO ASSURE A SMOOTH FIT & CONTINUOUS GRADE WITH THE EXISTING.
30. ALL NEW SEWER UTILITY LINES TO BE UNDERGROUND W/ TRENCH BACKFILLED & COMPACTED TO 95" STANDARD PROCTOR - TYP.
31. BUILD UP NEW BUILDING PAD AS REQUIRED. GRADE AROUND BUILDING MUST BE WITHIN 6" OF FINISHED FLOOR AND SLOPE AWAY FROM BUILDING TO DRAIN. SLOPE MUST BE GRADUAL TO ALLOW FOR LANDSCAPING AND MOWING.
32. HYDRO-SEED OR HYDRO MULCH DISTURBED AREAS AROUND BUILDING AS REQUIRED TO COVER DISTURBED & NEW SOIL - TYP.

1 ALTERNATE BIDS:
1. BASE BID - NORTH DRIVEWAY - 6" - 60'-3"x20'-0" REINFORCED CONCRETE DRIVE APRON.
2. ALTERNATE BID No. 1 - ADD TO BASE BID APRON WITH AN ADDITIONAL 6'x60'-3"x10'-0" REINFORCED CONCRETE PAVING APRON.
3. ALTERNATE BID No. 2 - ADD TO BASE BID & ALT. No. 2 WITH 6"x60'-3"x10'-0" REINFORCED CONCRETE PAVING APRON.

BUILD UP EXIST. GRADE AROUND BUILDING AS REQ'D TO BRING NEW GRADE TO WITHIN 6" OF FINISHED FLOOR - SLOPE ALL AREAS TO DRAIN AWAY FROM NEW BUILDING - TYP. SEED, SOD OR HYDRO-MULCH ALL DISTURBED AREAS - TYP.

INDICATIONS

- EXISTING BUILDING
- NEW BUILDING
- NEW CONCRETE PAVING
- NEW GRAVEL PAVING
- E — EXISTING OVERHEAD ELECTRICAL
- NUE — NEW UNDERGROUND ELECTRICAL SERVICE LINE
- PROPERTY LINE
- OLD LOT LINE
- W — NEW WATER SERVICE LINE
- S — NEW SANITARY SEWER SERVICE LINE
- EROSION CONTROL FENCING PER CITY REQUIREMENTS

NEW GRAVEL PAVING
NEW GRAVEL PAVING
EXIST. GRAVEL PAVING
157'-0" FIELD VERIFY
60'-0"
TEL
CATV
TEL
BUILD UP EXIST. GRADE AROUND BUILDING AS REQ'D TO BRING NEW GRADE TO WITHIN 6" OF FINISHED FLOOR - SLOPE ALL AREAS TO DRAIN AWAY FROM NEW BUILDING - TYP. SEED, SOD OR HYDRO-MULCH ALL DISTURBED AREAS - TYP.
NEW CONCRETE PAVING - PROVIDE ALTERNATE BIDS FOR EACH SECTION IN LIEU OF THE COMPACTED GRAVEL
EXTEND TO EXIST. CITY CONNECTION VERIFY W/ OWNER - TYP.
PRECAST SEPARATOR VAULT VERIFY SIZE & CAPACITY W/ LOCAL AUTHORITY HAVING JURISDICTION
NEW 6'-0" WIDE CONCRETE SIDEWALK - MAX SLOPE 1:48 IN ANY DIRECTION - TO BE INSTALLED BY OWNER (NOT IN THIS CONTRACT)
NEW PREFINISHED ALUM CANOPY OVER WALK BETWEEN BUILDINGS TO BE INSTALLED BY OWNER - (NIC)
EXISTING BUILDING
FINISHED FLOOR ELEVATION = 365.77'
NEW BUILDING
FINISHED FLOOR ELEVATION = 365.77'
10'-0"
20'-0"
18'-6"+/-
CONT. DRAIN W/ HEAVY DUTY GRATE - TYP.
6'x6' CONCRETE LANDING - TYP.
86'-3"
N 31°51'14" E 693.61'
CONT. DRAIN W/ HEAVY DUTY GRATE - TYP.
47'-8"+/-
60'-3"
19'-2"
BUILD UP EXIST. GRADE AROUND BUILDING AS REQ'D TO BRING NEW GRADE TO WITHIN 6" OF FINISHED FLOOR - SLOPE ALL AREAS TO DRAIN AWAY FROM NEW BUILDING - TYP. SEED, SOD OR HYDRO-MULCH ALL DISTURBED AREAS - TYP.
NEW CONCRETE PAVING
EXIST. CONCRETE SIDEWALK
REMOVE EXIST. SIDEWALK
11'-0"+/-
SLOPE AREA TO DRAIN - FIELD VERIFY EXISTING GRADES - TYP.
EXIST. CONCRETE SIDEWALK
EXIST. PARKING AREA - UNMARKED SPACES - TYP.
EXIST. PAVING
EXIST. PAVING
EXIST. PARKING AREA - UNMARKED SPACES - TYP.
N 31°22'22" W 519.20'
S 79°39'04" W 237.46'
1/2"IRF
FO
1/2"IRF
CATV
FO
TEL
1/2"IRF
MARGARET DRIVE
LELIA AVENUE
STATE HIGHWAY NO. 31
PLAN NORTH

1 ARCHITECTURAL SITE PLAN
SCALE: 1/16" = 1'-0"

1 ADDENDUM No. 1 - 02/22/2026

Kyle D. Payne
REGISTERED ARCHITECT
STATE OF TEXAS
14372

SEAL DATE: 08.01.2025
EXPIRATION DATE: 09.15.2026

PAYNE & ASSOCIATES
ARCHITECT & CONSTRUCTION SERVICES
PO BOX 131448 TYLER,TEXAS 75713
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STATEMENT OF JURISDICTION
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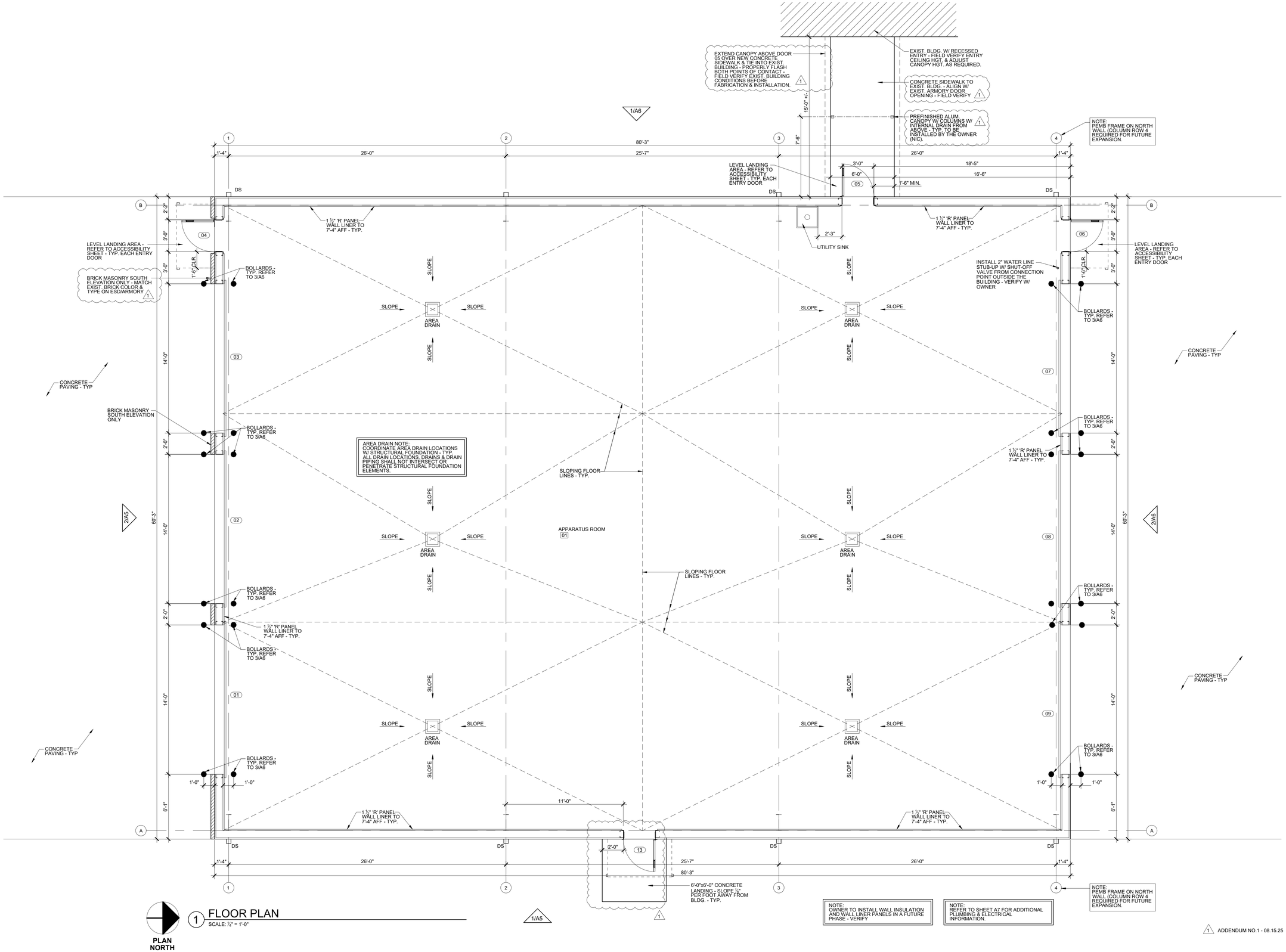
KERENS VOLUNTEER FIRE DEPARTMENT

805 Southeast 3rd Street
Kerens, Texas 75144

ISSUED FOR:
☐ PRELIMINARY
☐ REVIEW
■ PERMIT
■ BIDDING
☐ CONSTRUCTION

PROJECT: NEW FIRE STATION	
DRAWN BY:	KDP
JOB NO.:	2025.11
DATE:	08/01/25
REVISION: 1	02/22/26
SHEET: SITE PLAN	

A3



1 FLOOR PLAN
SCALE: ¼" = 1'-0"

1 ADDENDUM NO.1 - 08.15.25

kyle D. Payne
14372
REGISTERED ARCHITECT
STATE OF TEXAS

SEAL DATE: 08.01.2025
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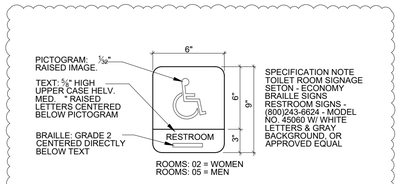
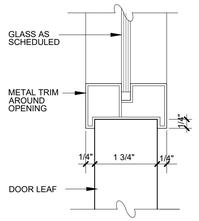
DATE:	08/01/25
REVISION:	1 08/15/25
SHEET: FLOOR PLAN	

A4



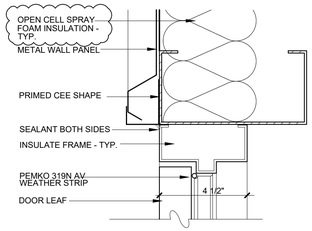
10 ACCESSIBLE SIGNAGE NOT USED

SCALE: 1 ½" = 1'-0"



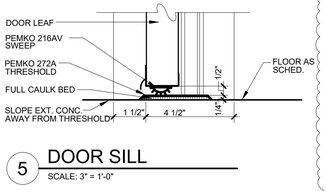
9 VIEW PANEL

SCALE: 3" = 1'-0"



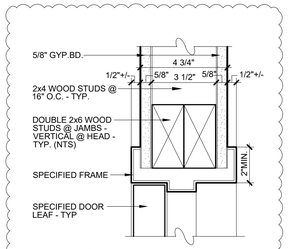
7 DOOR HEAD / SILL

SCALE: 3" = 1'-0"



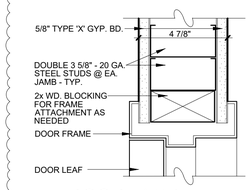
5 DOOR SILL

SCALE: 3" = 1'-0"



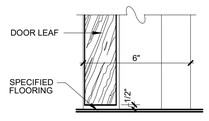
8 DOOR HEAD NOT USED

SCALE: 3" = 1'-0"



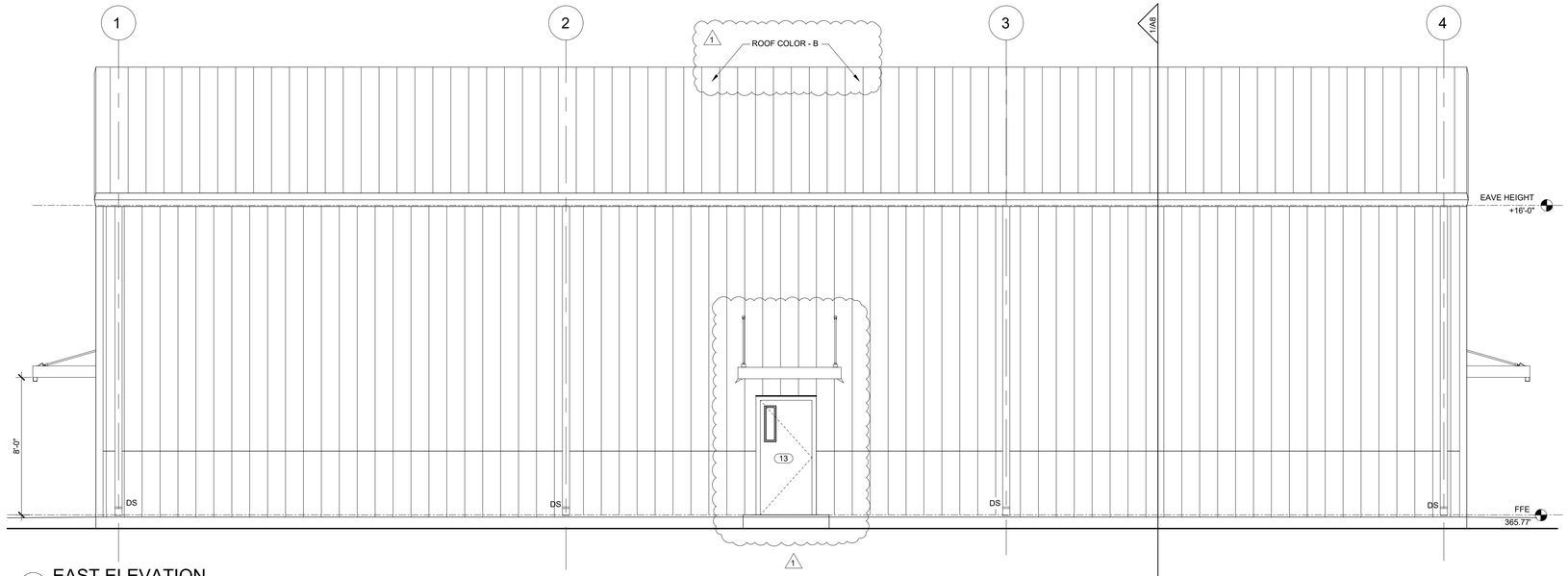
6 DOOR JAMB NOT USED

SCALE: 3" = 1'-0"



4 DOOR SILL NOT USED

SCALE: 3" = 1'-0"

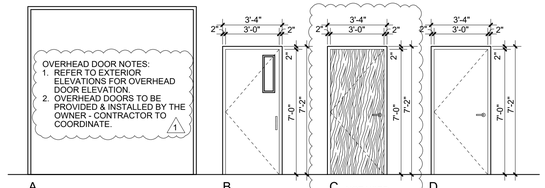


1 EAST ELEVATION

SCALE: ¼" = 1'-0"

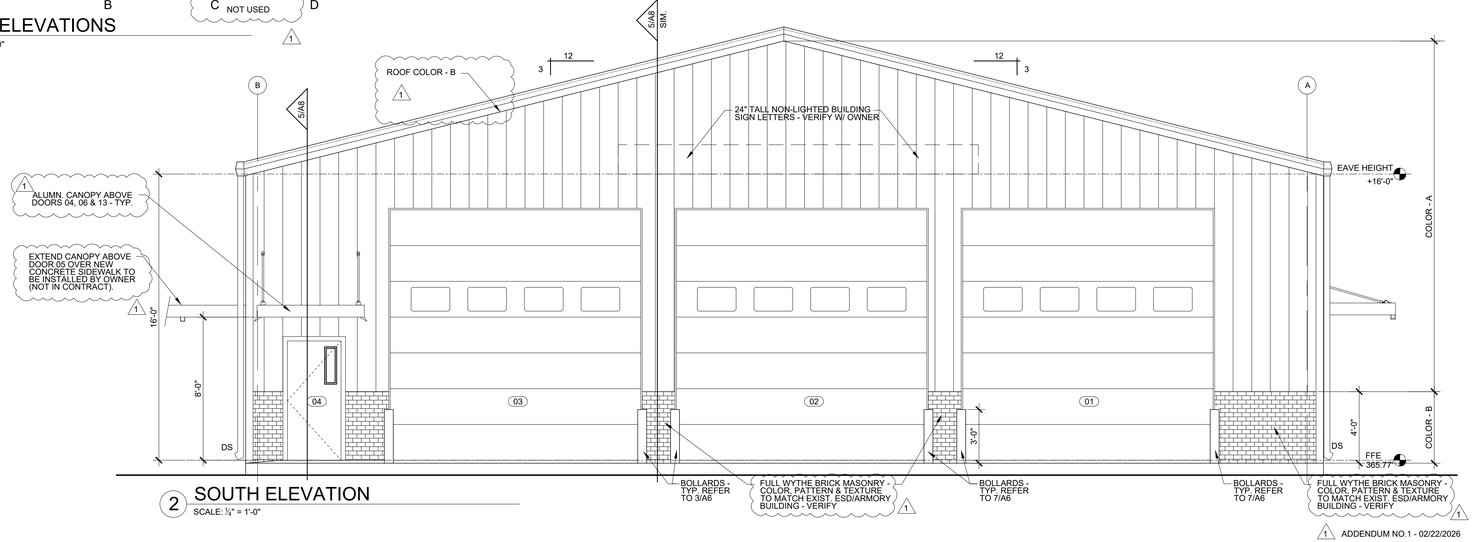
PEMB COLOR NOTES:
1. COLOR - A = MAIN BUILDING WALL COLOR ALL SIDES.
2. COLOR - B = TRIM (RAKE, EAVE, CORNER, "J" TRIM ON ALL DOORS, PERSONNEL DOORS & FRAMES & SECTIONAL OVERHEAD DOORS & FRAMES.
3. COLOR - B = 36" HIGH WAINSCOT ON ALL SIDES.
4. VERIFY COLOR SELECTIONS W/ OWNER FROM MFR. STANDARD COLOR SELECTIONS.
5. INTERIOR WALL LINER PANELS - WHITE.

1



3 DOOR ELEVATIONS

SCALE: ¼" = 1'-0"



2 SOUTH ELEVATION

SCALE: ¼" = 1'-0"

DOOR SCHEDULE

MK.	TYPE	SIZE	THK.	MATERIAL	GLAZE	FRAME	DETAILS				REMARKS
							HEAD	JAMB	SILL	LITE	
01	A	14'-0"x14'-0"	2"	SECTIONAL OVERHEAD		METAL					4,6,10,11,12
02	A	14'-0"x14'-0"	2"	SECTIONAL OVERHEAD		METAL					4,6,10,11,12
03	A	14'-0"x14'-0"	2"	SECTIONAL OVERHEAD		METAL					4,6,10,11,12
04	B	3'-0"x7'-0"	1 1/2"	HOLLOW METAL		HOLLOW METAL	7/A5	7/A5	5/A5	9/A5	1,2,3,4,5,6,10,11
05	B	3'-0"x7'-0"	1 1/2"	HOLLOW METAL		HOLLOW METAL	7/A5	7/A5	5/A5	9/A5	1,2,3,4,5,6,10,11
06	B	3'-0"x7'-0"	1 1/2"	HOLLOW METAL		HOLLOW METAL	7/A5	7/A5	5/A5	9/A5	1,2,3,4,5,6,10,11
07	A	14'-0"x14'-0"	2"	SECTIONAL OVERHEAD		METAL					4,6,10,11,12
08	A	14'-0"x14'-0"	2"	SECTIONAL OVERHEAD		METAL					4,6,10,11,12
09	A	14'-0"x14'-0"	2"	SECTIONAL OVERHEAD		METAL					4,6,10,11,12
10	C	3'-0"x7'-0"	1 1/2"	S.C. WOOD		HOLLOW METAL	8/A5	6/A5	4/A5		1,7,9
11	C	3'-0"x7'-0"	1 1/2"	S.C. WOOD		HOLLOW METAL	8/A5	6/A5	4/A5		1,8,9
12	C	3'-0"x7'-0"	1 1/2"	S.C. WOOD		HOLLOW METAL	8/A5	6/A5	4/A5		1,8,9
13	B	3'-0"x7'-0"	1 1/2"	HOLLOW METAL		HOLLOW METAL	7/A5	7/A5	5/A5	9/A5	1,2,3,4,5,6,10,11

DOOR SCHEDULE NOTES:
1. PROVIDE & INSTALL DOOR CLOSER.
2. PROVIDE & INSTALL PANIC DEVICE.
3. PROVIDE & INSTALL ACCESSIBLE THRESHOLD.
4. PROVIDE & INSTALL WEATHERSTRIPPING.
5. PROVIDE & INSTALL LEVER HANDLE LOCKSET.
6. PROVIDE & INSTALL GLASS VIEW PANEL.
7. PROVIDE & INSTALL PUSH / PULL HANDLES.
8. PROVIDE & INSTALL LEVER HANDEL PRIVACY LOCKSET.
9. PROVIDE WALL STOP / BUMPER.
10. OWNER WILL PROVIDE & INSTALL ALL FINAL DOOR CYLINDERS AS PART OF THE BUILDING FINAL. CONTRACTOR SHALL PROVIDE CONSTRUCTION LOCK CYLINDERS AS INDICATED DURING CONSTRUCTION.
11. SECTIONAL OVERHEAD DOORS TO HAVE ELECTRIC OPERATOR W/ PUSH BUTTON CONTROLS - OWNER WILL PROVIDE & INSTALL.
12. ALL DOOR HARDWARE MUST BE PROVIDED WITH INTERCHANGEABLE LOCK CYLINDERS - VERIFY TYPE W/ OWNER.

1

1 ADDENDUM NO.1 - 02/22/2026

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STATE OF TEXAS
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PROJECT: NEW FIRE STATION	
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JOB NO.:	2025.11
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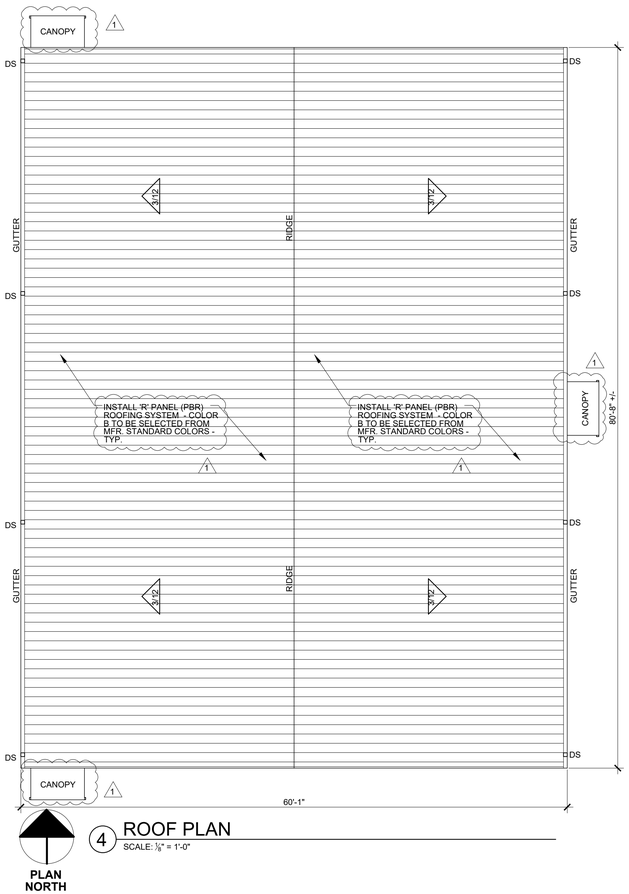
REVISION:	1 02/22/26
SHEET: ELEVATIONS	

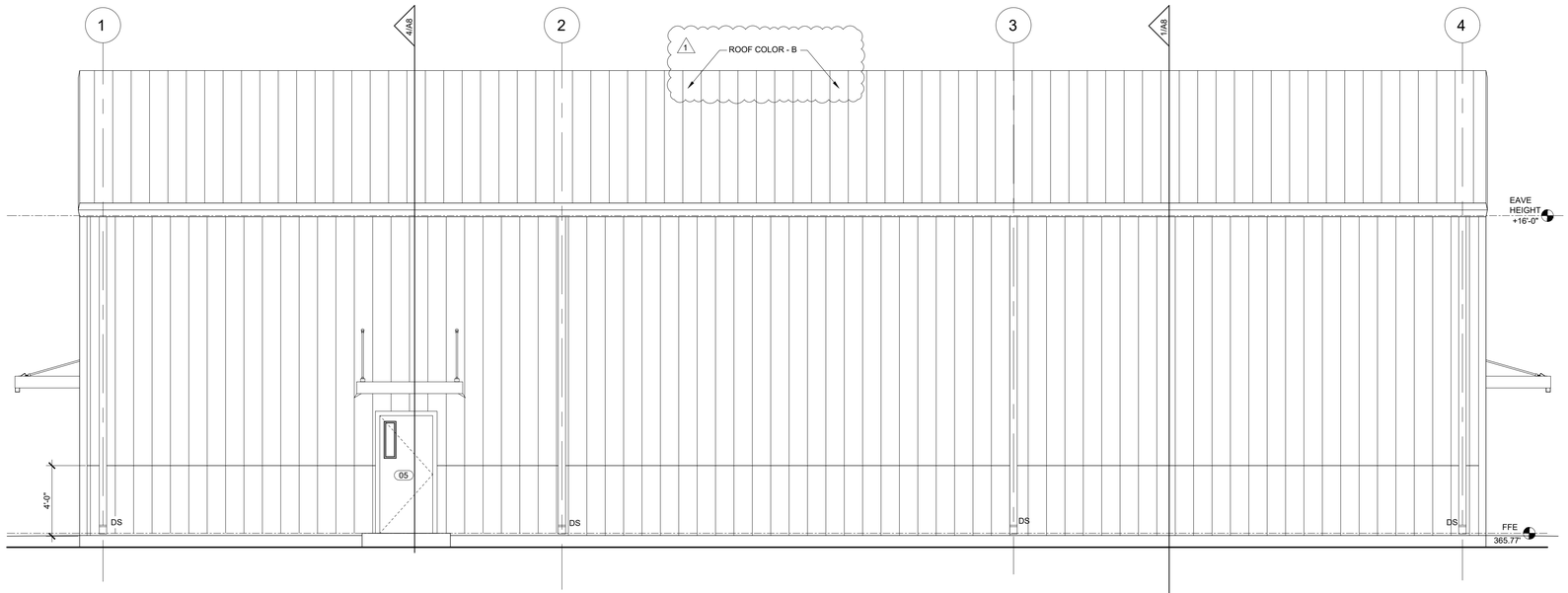
A5



4 ROOF PLAN

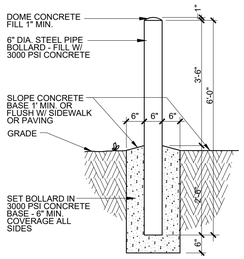
SCALE: ⅛" = 1'-0"

PLAN NORTH



1 WEST ELEVATION

SCALE: ¼" = 1'-0"

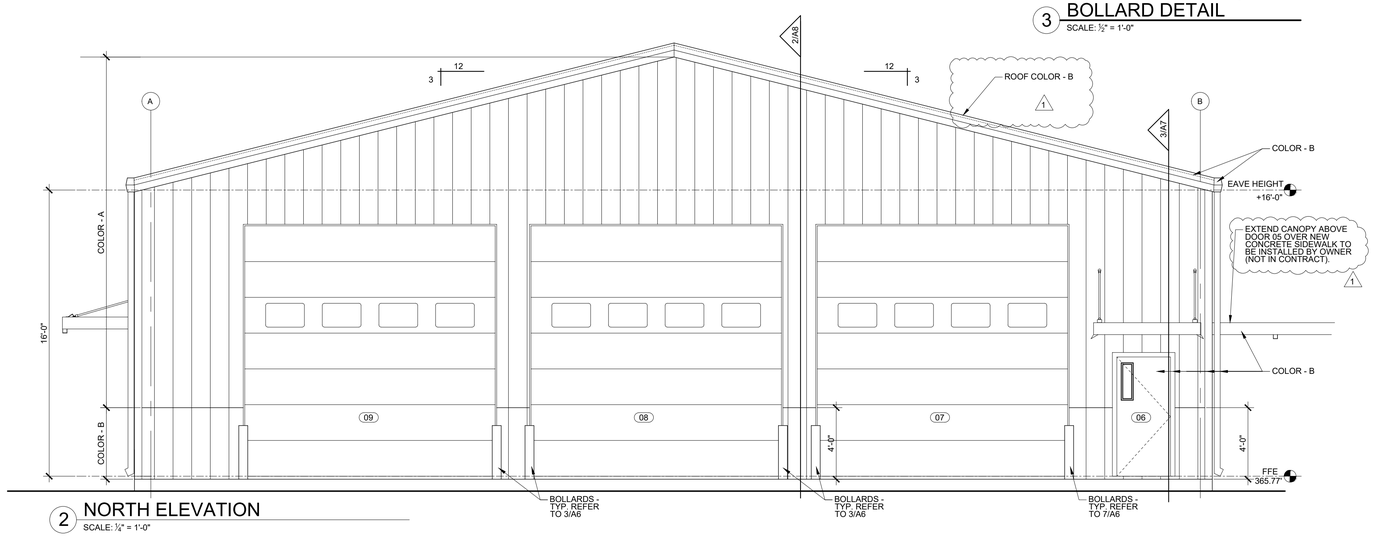


3 BOLLARD DETAIL

SCALE: ½" = 1'-0"

PEMB COLOR NOTES:
1. COLOR - A = MAIN BUILDING WALL COLOR ALL SIDES.
2. COLOR - B = TRIM (RAKE, EAVE, CORNER, "J" TRIM ON ALL DOORS, PERSONNEL DOORS & FRAMES & SECTIONAL OVERHEAD DOORS & FRAMES)
3. COLOR - B = 36" HIGH WAINSCOT ON ALL SIDES.
4. VERIFY COLOR SELECTIONS W/ OWNER FROM MFR. STANDARD COLORS.
5. INTERIOR WALL LINER PANELS - WHITE.

1



2 NORTH ELEVATION

SCALE: ¼" = 1'-0"

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR	BASE	WALLS	TRIM	CEILING	CLG. HT.	REMARKS
		EXPOSED CONCRETE - SEALED	NO BASE / 4" VINYL BASE	EXPOSED METAL BUILDING STRUCTURE / 1 ½" 'R' PANEL WALL LINER TO 7'-4" / ⅝" TYPE 'X' GYP. BD. ON STUDS - T, B, T & P.		EXPOSED METAL BUILDING STRUCTURE / ⅝" TYPE 'X' GYP. BD. ON STUDS - T, B, T & P.		
01	APPARATUS ROOM	●	●	● ●		●	VARIES	1
02	~~WOMEN~~	●	●	●		●	~~9'-0"~~	~~1, 2, 3~~
03	~~ACCESSIBLE SHOWER~~	●	●	●		●	~~9'-0"~~	~~1, 2, 3~~
04	~~MEN~~	●	●	●		●	~~9'-0"~~	~~1, 2, 3~~
05	~~ACCESSIBLE SHOWER~~	●	●	●		●	~~9'-0"~~	~~1, 2, 3~~
06	~~EXTRACTOR~~	●	●	●		●	~~9'-0"~~	~~1, 2, 3~~
1	~~NOT USED~~						NOT USED	1

GENERAL FINISH NOTES

1. COLOR, TEXTURE & TYPE FINISHES - TO BE SELECTED.
2. ~~ALL RESTROOM & SHOWER WALLS TO HAVE 4" MIN. SOUND BATT INSULATION BETWEEN STUDS - TYP.~~
3. ~~⅝" MOISTURE RESISTANT TYPE 'X' GYP. IN WET AREAS - TYP.~~

1 ADDENDUM NO.1 - 02/22/2026

KYLE D. PAYNE #14372 REGISTERED ARCHITECT STATE OF TEXAS

SEAL DATE: 08.01.2025
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PROJECT: NEW FIRE STATION	
DRAWN BY:	KDP
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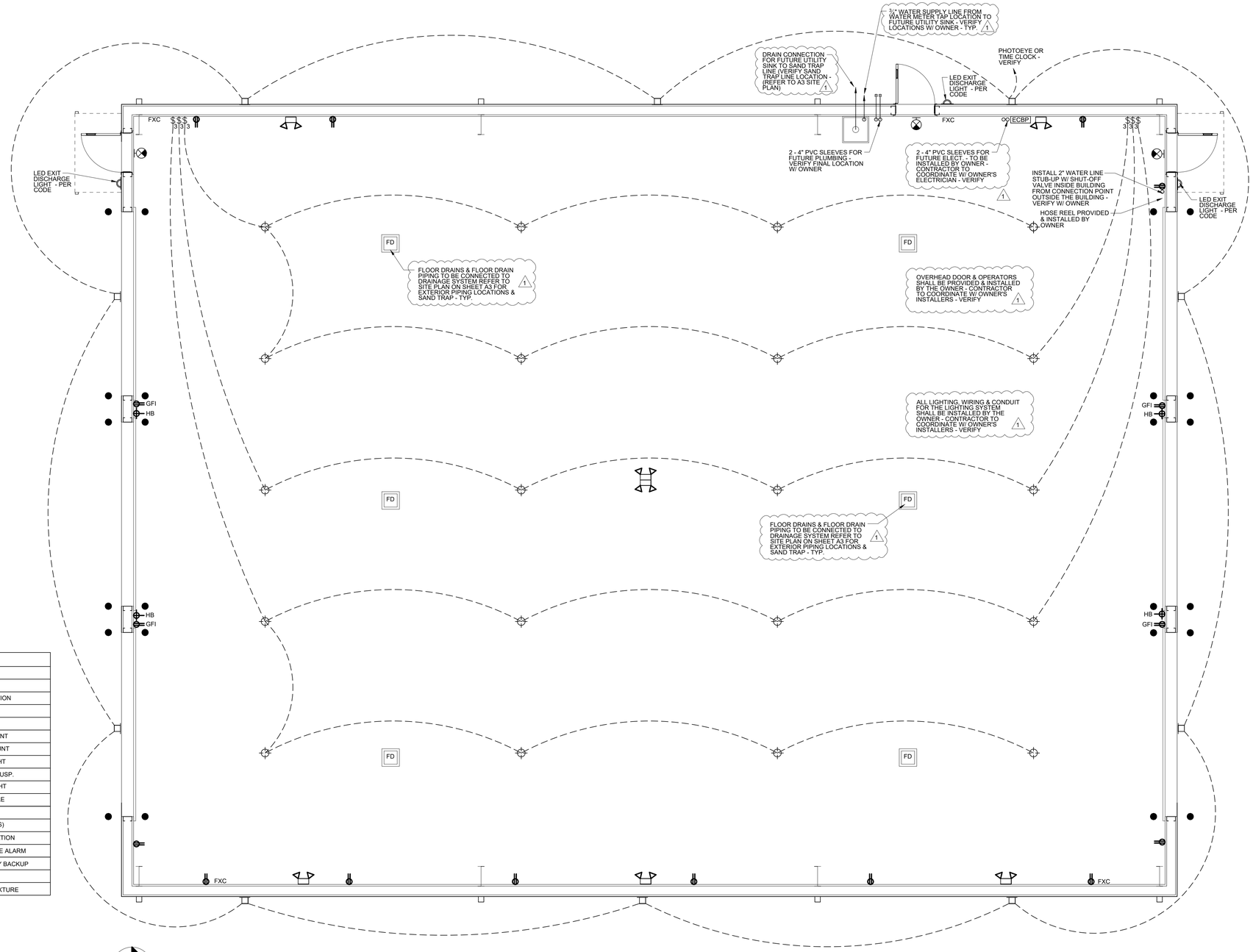
REVISION:	1 02/22/26
SHEET: ELEVATIONS	

A6



DEVICE SYMBOLS

———	SWITCH WIRING	FACP	FIRE ALARM CONTROL PANEL
ECBP	ELECTRIC CIRCUIT BREAKER PANEL	S	FIRE ALARM STROBE / HORN
J	JUNCTION BOX WITH CONDUIT TO ATTIC	FD	FIRE ALARM EMERGENCY PULL STATION
	120 V WALL DUPLEX RECEPTACLE	HB	FIRE ALARM EXTERIOR HORN
GFI	GROUND FAULT INTERRUPTER RECEPT.		HEAT/SMOKE/RADON DETECTOR
+42"	120 V DUPLEX RECEPT. W/ HGT. A.F.F.		MECHANICAL SUPPLY - CEILING MOUNT
WP	WATERPROOF RECEPTACLE		MECHANICAL RETURN - CEILING MOUNT
	240 V WALL DUPLEX RECEPTACLE		EMERGENCY BATTERY BACK UP LIGHT
	120 V FOURPLEX RECEPTACLE		LIGHT FIXTURE (LED) SURFACE OR SUSP.
IG	ISOLATED GROUND		EMERGENCY BATTERY BACK-UP LIGHT
DH	ELECTRICAL DISCONNECT		LED CAN LIGHT FIXTURE - DIMMMABLE
HB	HOSE BIBB - WASHER CONNECTIONS		SUSPENDED DECORATIVE FIXTURE
HEAT	WALL MTD. ELECT. HEATER W/ T-STAT		LED LIGHT FIXTURE - WALL MTD. (TBS)
FXC	FIRE EXTINGUISHER IN WALL MTD. W/ CABINET		SINGLE POLE SWITCH - VERIFY LOCATION
DV	DRYER VENT W/ EXT. OUTLET & SCREEN	CO	CO2 DETECTOR W/ AUDIBLE / STROBE ALARM
	DATA / COMMUNICATION / NETWORK		EMERGENCY EXIT LIGHT W/ BATTERY BACKUP
	LED SECURITY LIGHT - MTD. 10'-0" AFF MIN. ON PHOTOEYE		EXHAUST FAN / ELECTRIC MOTOR
			HIGH BAY SUSPENDED LED LIGHT FIXTURE

NOTE:
NOT ALL SYMBOLS ARE USED.

PLAN NORTH

1 DEVICE PLAN
SCALE: ¼" = 1'-0"

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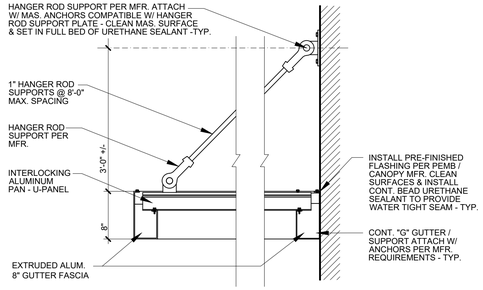
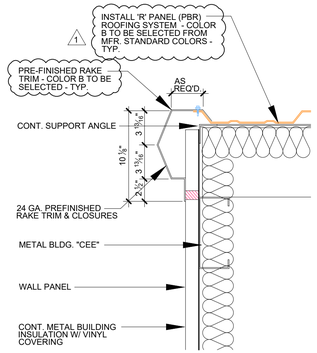
SHEET: DEVICE PLAN	

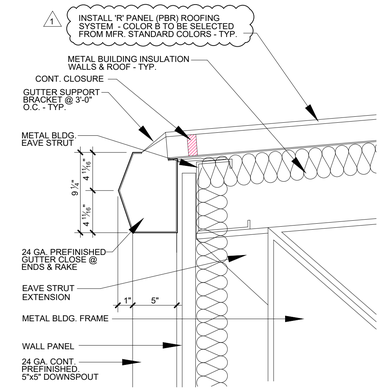
A7



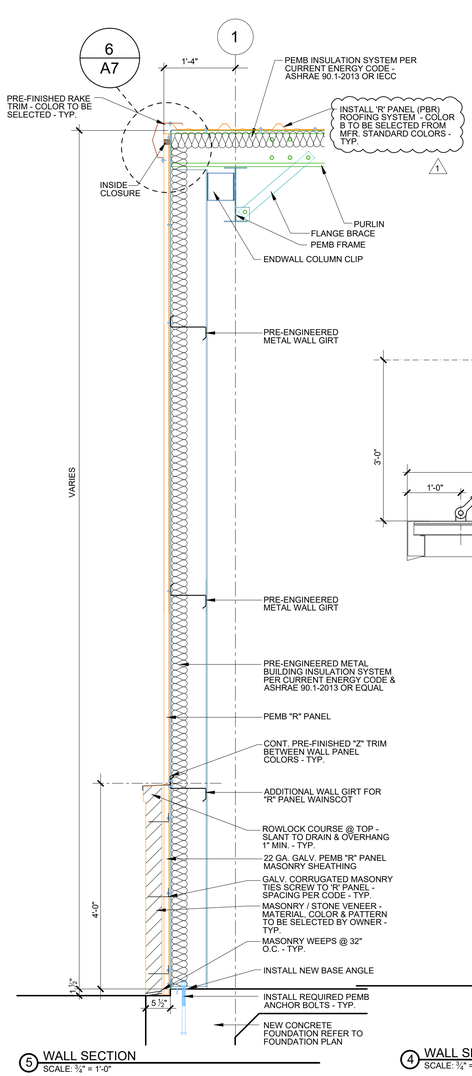
7 CANOPY SECTION
SCALE: 1" = 1'-0"



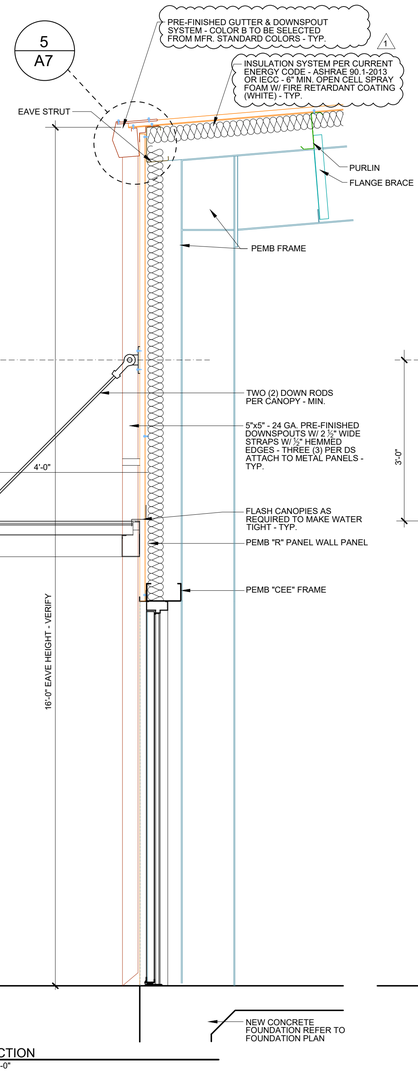
6 RAKE DETAIL
SCALE: 1 ½" = 1'-0"



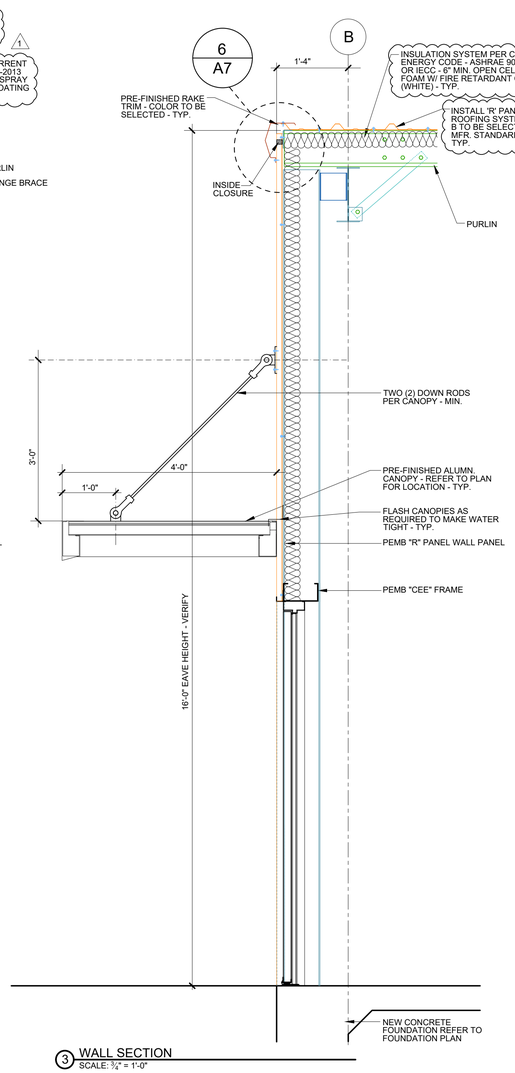
5 EAVE DETAIL
SCALE: 1 ½" = 1'-0"



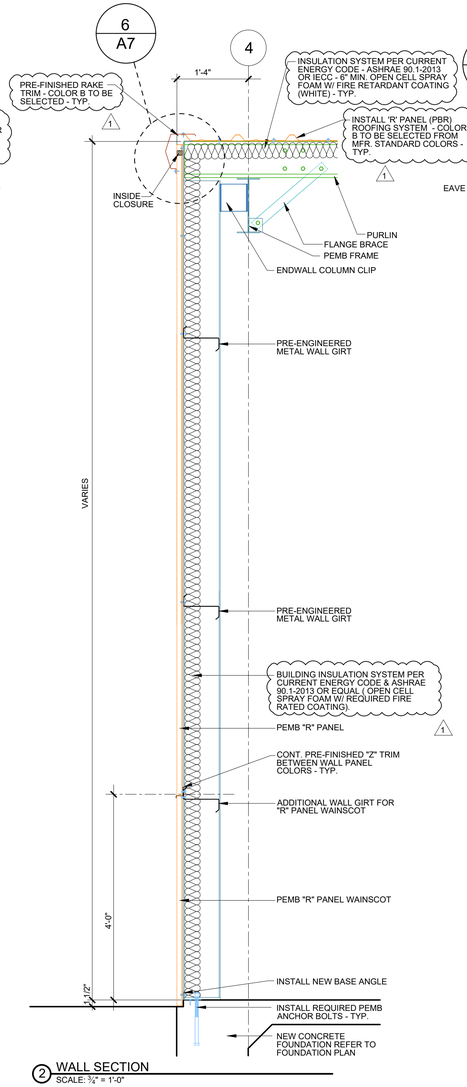
5 WALL SECTION
SCALE: ¾" = 1'-0"



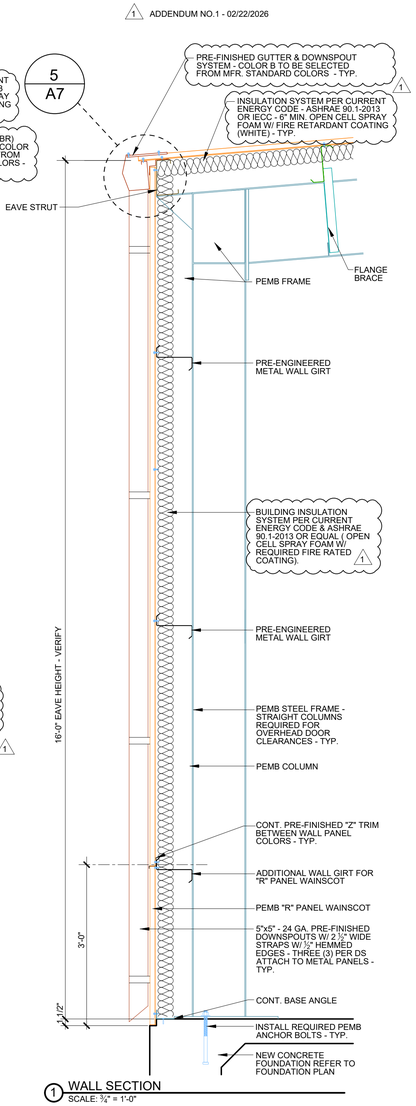
4 WALL SECTION
SCALE: ¾" = 1'-0"



3 WALL SECTION
SCALE: ¾" = 1'-0"



2 WALL SECTION
SCALE: ¾" = 1'-0"



1 WALL SECTION
SCALE: ¾" = 1'-0"

Kyle D. Payne
REGISTERED ARCHITECT
STATE OF TEXAS
14372
SEAL DATE: 08.01.2025
EXPIRATION DATE: 09.15.2026

PAYNE & ASSOCIATES
ARCHITECT & CONSTRUCTION SERVICES
PO BOX 131449 TYLER,TEXAS 75713
(903)714-1841 CELL
kyledpayne83@gmail.com

STATEMENT OF JURISDICTION

THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS P.O. BOX 12337 AUSTIN, TEXAS 78711-2337 (512)305-9000 HAS JURISDICTION OVER COMPLAINTS REGARDING THE PROFESSIONAL PRACTICES OF PERSONS REGISTERED AS ARCHITECTS IN TEXAS.

STATEMENT OF OWNERSHIP

THIS ELECTRONIC FILE IS RELEASED UNDER THE AUTHORITY OF TEXAS REGISTERED ARCHITECT KYLE D. PAYNE # 14372. THE SEAL AFFIXED TO THIS DOCUMENT IS PLACED PURSUANT TO SUB-CHAPTER F -RULE 1.103 OF THE RULES & REGULATIONS OF THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS. THE USER OF THIS ELECTRONIC FILE AGREES TO ASSUME ALL RESPONSIBILITY FOR ANY MODIFICATION TO OR USE OF THIS DRAWING THAT IS NOT CONSISTENT WITH THE REQUIREMENTS OF THE RULES & REGULATIONS OF THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS. NO PERSON MAY MODIFY THESE DRAWINGS WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ARCHITECT

KERENS VOLUNTEER FIRE DEPARTMENT

805 Northeast 2nd Street
Kerens, Texas 75144

ISSUED FOR:

- ☐ PRELIMINARY
- ☐ REVIEW
- ■ PERMIT
- ■ BIDDING
- ☐ CONSTRUCTION

PROJECT: NEW FIRE STATION	
DRAWN BY:	KDP
JOB NO.:	2025.11
DATE:	08/01/25
REVISION:	1 02/22/26
SHEET: WALL SECTIONS	

A8

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00.21.13 – INSTRUCTIONS TO BIDDERS

A. AIA Document A105 – 2017, Standard Form of Agreement Between Owner and Contractor will be required of the successful bidder for this project.

SECTION 00.50.00 – CONTRACTING FORMS AND SUPPLEMENTS

A. Conditions: American Institute of Architect (AIA) Document A201, "General Conditions of the Contract for Construction", 2017 Edition, Articles 1 through 15 inclusive is made a part of this Contract.

1. Referenced Conditions maintain force and effect as though set forth in full and shall apply to all portions of Work.

B. Contractor is hereby specifically directed as condition of Contract, to obtain necessary number of copies of AIA Document A201 and to become fully acquainted with Articles contained therein.

1. Notify and apprise subcontractors and other parties to Contract and individuals and agencies engaged on Work as to contents.

C. The term "Contractor" under this Contract shall refer to subcontractors as well as General Contractor.

SECTION 00.70.00 – CONDITIONS OF THE CONTRACT

A. Where provisions of General Conditions relate to Project administration and work-related requirements of the Contract, those paragraphs are expanded in Division 1 – General Requirements.

B. General Conditions, Supplementary Conditions and Division 1 – General Requirements contain information necessary for completion of every part of Project.

C. Term "Furnish" means supply and deliver to Project, unless otherwise defined in greater detail.

D. Term "Install" describes operations at Project, from inspecting and unloading to completion in place, ready for intended use.

E. Term "Provide" means furnish and install, complete and ready for intended use, unless otherwise defined in greater detail.

F. Terms approved, selected, directed, required, accepted, acceptable and satisfactory shall require written action by Architect.

G. Insurance: Contractor and the Owner's representative shall review Article 11 – Insurance with their insurance agents and legal counsel and provide coverages as agreed upon, but not for less than that required by law.

1. Submit Insurance Certificate indicating the following:
   a. General Liability: $1,000,000.00 Each Occurrence; $1,000,000.00 Personal Injury; $2,000,000.00 General Aggregate Products / Completed – Employee; $1,000,000.00 Employers Liability Disease – Policy Limit.
   b. Business Group Auto Liability - $1,000,000.00 Combined Single Limit.
   c. Worker's Compensation – Current policy with the following limits: Workers Compensation Statutory Limits $1,000,000.00 Employers Liability – Each Accident; $1,000,000.00 Employers Liability Disease – Each Employee Operations Aggregate.
   d. Certificate Holder: (To be identified in the construction contract) Shall be named as additional insured in regard to General Liability, Business Auto and Workers Compensation.

DIVISION 01 – GENERAL REQUIREMENTS

SECTION 01.10.00 – SUMMARY OF WORK

A. Work of Contract comprises construction of a new facility as indicated in Contract Documents.

B. Contract documents are intended to encompass everything necessary to perform Work properly, however, every item necessarily required may not be specifically mentioned or shown.

C. Titles and heading in Contract documents are for convenience and are not to be taken as a segregation of units of materials and labor.

D. Contractor Use of Premises: Conduct operations to ensure least inconvenience to general public and other businesses.
   1. Limit use of premises for construction and storage to areas designated in writing by Owner's representative: Allow for work by other contractors and public access.
   2. Assume full responsibility for protection and safekeeping of products under Contract, including those stored on site.
   3. Coordinate access to Work with Owner's representative and provide for building security as required.

E. Coordination: Coordinate Work to assure efficient and orderly sequence of installation of construction elements.
   1. Make provisions for accommodating items installed by Owner or under separate Contract.
   2. Verify characteristics of interrelated operating equipment are compatible: Coordinate work having interdependent responsibilities for installing, connection to and placing equipment in service.
   3. Coordinate space requirements and installation of mechanical and electrical work; conceal pipes, ducts and wiring in finished areas: Coordinate locations of fixtures and outlets with finishes.

F. Establish grades, lines, and levels by use of recognized practices.

G. Regulatory Requirements: Contractor shall be responsible for contacting governing authorities directly for necessary information and decisions bearing upon performance of Work.

H. Reference Standards: For Products specified by association or trade standards, comply with requirements of referenced standard, except when more rigid requirements are specified or required by applicable codes.
   1. Applicable date of each standard is that in effect as of Proposal date, except when a specific date is specified.

I. Cutting and Patching: Cut, fit and patch as required to complete Work to match adjacent undisturbed materials and finished and to:
   1. Make parts fit together properly.
   2. Uncover work to provide for installation of ill-timed work.
   3. Remove and replace defective work.
   4. Remove and replace work not conforming to Contract Documents.
   5. Remove samples of installed work as required for testing.
   6. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.
   7. Should existing finish to be matched be of a now out-of-production or otherwise unavailable material, obtain Owner's representative's specific approval of substitutions.
   8. Provide primers, sealers, underlayments, supports, backing blocking, furring, suspension systems and accessories as required for any purpose in patching existing work.
   9. Patch former openings to math adjacent undisturbed work.
   10. Patch concrete slab surface (if required) using epoxy/sand mortar: Adhesive Engineering Company "Concressive 1064;" Sta-Crete #7 epoxy resin/hardener.
      a. Mix fine sand/epoxy using sand/binder ratios recommended by resin manufacturer; finish patches to match adjacent surfaces.

SECTION 01.21.00 - PRICE AND PAYMENT PROCEDURE

ALLOWANCES

A. Allowances: Lump sum allowances and unit cost allowances are listed below and as indicated on the Drawings. Amounts shall include all costs including overhead and profit except as specifically noted. Coordinate allowances with requirements for related and adjacent work.
B. Notification of Owner: Notify Owner of date when final decision on allowance items is required to avoid delays in the work.
C. Certification of Quantities: Furnish certification that quantities of products purchased are the actual quantities needed with reasonable allowance for cutting or installation losses, tolerances, mixing, waste, and similar margins.
D. Invoices and Delivery Slips: Submit invoices or delivery slips to indicate actual quantities of materials delivered and costs. Indicate amounts of applicable trade discounts.

ALL other costs are to be included in the base bid. Refer to the Drawings to determine quantities required and include total within base bid.

E. Owner Supplied Items:
   1. Building Power System - Electrical Service, conduit, wiring, mounting of electrical equipment, lighting system, all fixtures, switch gear, cover plates, etc.Security Alarm and CCTV System - General Contractor to coordinate w/ Owners vendor.
   2. Overhead doors, overhead door hardware, electric operators, conduit, wire, keypads, controlers all equipment & materials for a complete and fully functioning system - General Contractor to coordinate w/ Owners vendor.
   2. Telephone System - General Contractor to install power & boxes indicated & coordinate w/ Owners vendor.
   3. Computer Network System - General Contractor to install power & coordinate w/ Owners vendor.

SECTION 01.25.00 – SUBSTITUTION PROCEDURES

A. Products: Provide materials, systems and equipment specified:
   For products specified by reference standard, provide product meeting standard: Submit request for substitutions for products not specified.
B. Requests for Substitutions: Submit requests for substitutions to the Architect with manufacturers "cut sheet" in writing. Architect will signify acceptance either by submitting AIA form G709 Proposal Request or in writing.
C. Contractor: Investigate proposed substitutions prior to submittal to the Architect - Include cost and schedule changes caused by substitutions - Submit separate request for each product.
   1. Requests indicate Contractor has investigated product and that it meets or exceeds specified products; will provide same warranty and waives claims for additional costs which subsequently become apparent.
   2. Substitute products shall not be ordered without written acceptance of the Architect.
   3. Environmental Concerns: Proposed substitutions shall be at least as environmentally sound as specified products. Manufacturer's cut sheets product composition information, fire rating, smoke density and other information may be required by the Architect for environmental considerations.
   4. The Architect and Owner will be final judges of acceptability and reserve right to reject proposals due to insufficient information.

SECTION 01.40.00 – QUALITY REQUIREMENTS

A. General Quality Control: Maintain quality control over suppliers, manufacturers, products, services, site conditions and workmanship to produce Work of specified quality.
B. Manufacturer's Field Services: When specified in respective Specification Sections, require manufacturer or supplier to have qualified personnel provide on-site observations and recommendations.
   1. Representative shall:
      a. Observe field conditions, including conditions of surfaces.
      b. Observe quality of workmanship and methods of installation.
      c. Provide recommendations for installation and workmanship.
      d. Where required, start, test, and adjust equipment as applicable.
      e. Submit written report to Owner's representative of observations.
C. Testing Laboratory Services: Provide testing laboratory services required by local authorities for conformance to applicable codes, if required.
   1. Services shall be performed in accordance with requirements of governing authorities.
   2. Where tests are required, testing laboratory shall submit copy of test results directly to enforcing agency.
   3. Required Tests: Mechanical system test and balance report by certified independent company, concrete slump and cylinder tests as required by structural notes, sub-grade compaction testing as required by structural notes.

SECTION 01.50.00 – TEMPORARY FACILITIES AND CONTROLS

A. Temporary Power: Contractor can establish a service power pole onsite - connect to existing exterior electrical box on east side of ESD/Armory building. Provide power service and lighting required for operations with branch wiring and distribution boxes located to allow service and lighting by means of construction-type power cords. Contractor must notify NECSD#1 of all electrical power requirements prior to the start of construction.
   1. Connect to existing service, provide branch wiring and distribution boxes located to allow service and lighting by means of construction-type cords.
   2. Maintain energy management controls to conserve power.
B. Temporary Water: Contractor can connect to an existing 2" water supply point on existing water meter located on the north side of the ESD/Armory building. Contractor must notify NECSD#1 or all water requirements prior to the start of construction.
C. Temporary Toilets: Contractor must provide all required temporary toilet service required for and during the construction. Verify location of portable toilers with Owner's representative prior to the start of construction.
D. Noise, dust, and Pollution Control: Provide materials and equipment necessary to comply with Owner's representative and local requirements for noise, dust, and pollution control.
E. Barriers and Enclosures:
   1. Provide environmentally safe barriers as may be required to protect adjacent properties from damage from operations and as required by governing authorities.
   2. Provide, as specified, environmentally safe temporary enclosures where construction penetrates exterior components.
   3. Materials: Provide, as specified, environmentally safe materials which are nontoxic, recyclable or reusable.
E. Cleaning: Control accumulation of waste materials and rubbish: Recycle or dispose of off-site at intervals approved by Owner's representative as required to maintain a clean ad safe Job Site.
F. Signs: Subject to approval of Owner and Owner's representative.
G. Removal and Cleaning: Remove construction facilities, clean and repair damage, in excess of Contract requirements, caused by operations or use of temporary facilities.

SECTION 01.60.00 – PRODUCT REQUIREMENTS

A. Products:
   1. Components supplied in quantity shall be interchangeable: Provide materials and systems by one manufacturer to extent possible: Provide new materials unless otherwise directed in Contract Documents.
   2. Provide or install no asbestos containing materials.

B. Installation: Install items plumb, level and secure and in correct relation to adjacent products.
   1. Secure products in place and positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

C. Transportation: Transport products by methods to avoid damage, deliver undamaged in manufacturer's unopened containers or packaging. Manufacturers are encouraged to use recyclable or reusable packaging materials.

D. Handling: Provide equipment and personnel to handle products by methods to prevent soiling and damage.
   1. Promptly inspect shipments to assure products comply with requirements, quantities are correct, and products are undamaged.

E. Storage: Store products in accordance with manufacturer's instructions with seals and label intact and legible.
   1. Periodically inspect to assure products are undamaged and are maintained under required conditions.

F. Protection: After installation, provide coverings to protect products from damage from traffic and construction operations, remove when no longer needed.

SECTION 01.70.00 – EXECUTION AND CLOSEOUT REQUIREMENTS

A. Completion: At completion, submit Certification Work has been inspected and has been completed in accordance with Contract Documents and deficiencies noted by the Architect and Owner have been corrected.

B. Final Cleaning: Clean interior and exterior surfaces exposed to view: Remove temporary labels, stains, and foreign substances. Polish transparent and glossy surfaces, vacuum carpeted and soft surfaces. Use only non-toxic cleaning materials. Vinegar and water shall be used for cleaning glass, no other cleaning materials shall be permitted for glass.
   1. Dust light fixtures
   2. Touch-up marred surfaces, dents, and scratches completely.
   3. Repair or replace damaged finishes as required by Owner's representative.
   4. Clean equipment and fixtures to a sanitary condition, clean or replace filters of mechanical equipment.
   5. Remove waste, surplus materials and rubbish from Project and Site.

C. Project Record Documents: Keep Documents current, do not permanently conceal work until required information has been recorded.
   1. Indicate actual work on Drawings: Indicate actual products used in Project Manual, including manufacturer, model number and options.

D. Data: Provide material, finish, maintenance data submitted by manufacturers bound in three ring binders, organized in format similar to Specifications.
   1. Provide written operating instructions and maintenance procedure for equipment installed under equipment, electrical, plumbing, air conditions, heating, and ventilating subcontract.

E. Warranties: Assemble warranties as required by Contract Documents and were provided by manufacturer for products specified.
   1. Provide duplicate copies on Contractor letterhead, countersigned by manufacturer and where specified, countersigned by subcontractor and installer.
   2. Rejection of Warranties: Owner reserves right to reject unsolicited and coincidental product warranties which detract from or confuse interpretations of Contract Documents.

F. Demonstrations: Prior to final inspection, demonstrate operation of each system to Owner.

DIVISION 02 – EXISTING CONDITIONS

SECTION 02.41.00 – DEMOLITION

A. Intent of Demolition Drawings, were included, is to show general scope of demolition required to complete space in accordance with Contract Documents: demolition is not limited to items specifically shown.
   1. Notify Architect of existing conditions not consistent with Contract Documents.

B. Comply with applicable local, state, and federal codes and regulations pertaining to safety of persons, property, and environmental protection.

C. Prevent movement and settlement: provide and place bracing or shoring and be responsible for safety and supervision of structures: assume liability for such movement, settlement, damage, and injury.

D. Cease operations if safety of structure appears to be endangered. Do not resume operations until safety is restored.

E. Arrange and pay for disconnecting, removing and capping utility services within areas of demolition. Disconnect and stub-off.
   1. Notify Owner and affected utility company in advance and obtain necessary approvals before starting work.

F. Place markers to indicate location of disconnected services. Identify service lines and capping locations on Project Record Documents.

G. Cap off existing plumbing, electrical and mechanical not utilized in new scheme per code and clear of new work: cap abandoned floor penetrations below finish flooring.
   1. Reuse existing circuits and plumbing lines where possible.

H. Repair damage to adjacent construction caused by demolition.

DIVISION 03 – CONCRETE

SECTION 03.30.00 – CAST – IN – PLACE CONCRETE - Paving & Sidewalks

A. Conform to ACI 318 Building Code and ACI 301 Specifications for Structural Concrete Buildings.

B. Concrete:
   1. Ready – mixed concrete, ASTM C-94.
   2. Strengths as indicated, 3,000 PSI minimum if not indicated, obtain work to exceed 3 inches for slabs. Review Structural requirements.

C. Curing Material:
   Liquid membrane – forming compound conforming to ASTM C-309, Type 1.

D. Exterior slab finishes:
   Screed to true level or slopes, tolerance 1/8 inch to 10 feet. Tool all salient edges of concrete.
   1. (Interior) Two-pass steel trowel all surfaces to hard, dense surface free from marks.
   2. (Exterior) Brush broom surfaces that will remain exposed or that will receive other finish surfaces.

E. Curing:
   Coat with liquid membrane – forming compound per manufacturer's recommendation.

F. Testing: Concrete Slump tests and Compression Tests – Refer to Structural requirements.

G. Refer to Structural drawings where applicable – Structural Documents w/ Professional Engineers seal affixed to the drawing shall take precedence over this section when applicable.

DIVISION 05 – METALS

SECTION 05.50.00 – METAL FABRICATIONS

A. Provide stock and custom fabricated metal items which are not part of systems specified elsewhere, complete in respect to intended functions.

B. Shop Drawings: Submit for fabrication and erection of metal fabrications; indicated profiles, sizes, connection, reinforcing and anchorage. Provide templates for anchor installation by others.

C. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication, where possible; do not delay job progress; allow for trimming and fitting where necessary.

D. Materials:
   1. Steel Shapes, Plates and Bars: ASTM A36.
   2. Steel Tubing: Cold formed ASTM A500; or hot rolled, ASTM A501; minimum Grade B; stainless where exposed.
   3. Galvanized metal wainscoting, edges and reveals.
   4. Fasteners and Rough Hardware: Type required for specific usage: Provide zinc-coated fasteners for exterior use or were built into exterior walls.
   5. Paint: Prime paint metal fabrications; provide primers as recommended by paint manufacturers for substrates and paints specified in Section 09900 – Painting.

E. Fabrication: Fabricate items with joints neatly fitted and properly secured; grind exposed welds continuous. Smooth and flush with adjacent finished surfaces and ease exposed edges.

F. Installation: Install square and level, accurately fitted and free of distortion and defects detrimental to appearance and performance.

G. Cooperate with other trades to recycle and dispose of refuse.

DIVISION 07 – ROOFING, WATERPROOFING AND INSULATION

SECTION 07.80.00 – FIRE AND SMOKE PROTECTION

Where structural members do not have a fire resistance rating as required by Code, Owner, or insurance requirements, provide a U.L. approved fireproofing material or system installed in accordance with a U.L. design listed assembly.

SECTION 07.84.00 – FIRE STOPPING

Where penetrations occur in a rated fire-resistant assembly, install fire stopping in a manner that maintains the required fire separation. Use fire stop system as manufactured by United States Gypsum or approved equal.

SECTION 07.90.00 – JOINT PROTECTION

A. Seal Interior and Exterior:
   1. Joint between gypsum wall board and all the following: Trim: Base: Frames: window, Door; Mirrors; Coat Bars; Sealant "A".
   2. Plumbing fixture wall / floor interface: Sealant "B".
   3. Horizontal floor / deck joints: Sealant "C".

B. Back-Up Material:
   Fiberglass, polyurethane foam, or polyethylene foam as recommended by sealant manufacturer.

C. Materials:
   1. Sealant "A": Paintable general-purpose GE all-purpose acrylic latex sealant or. Install or prime per manufacturer's guidelines.

   2. Sealant "B": Silicone rubber, mildew resistant, conforming to ASTM C920. Approved: GE 1700 Sanitary Sealant.
   3. Sealant "C": Polyurethane, one component, conforming to Fed. Spec. TT-S-00-230C. Type 1, Class A and ASTM C920. Approved: Sonneborn NP.1.
   4. Sealant "E": Non-hardening, highly elastic, water-based sealant meeting ASTM C557 and complying with ASTM C919. Approved USG Acoustical Sealant.

D. Color to approximate adjacent surfaces, unless directed or indicated otherwise. Submit sample to Owner's representative for approval prior to application.

DIVISION 08 – OPENINGS

SECTION 08.11.00 – METAL DOORS AND FRAMES

A. Provide pressed steel frames, including anchors and silencers.

B. References:
   1. National Association of Architectural Metal Manufacturers (NAAMM): Hollow Metal Manual

C. Product Data: Submit manufacturer's literature.

D. Doors and Frames: Curries, Amweld or Ceco: Factory prime painted
   1. Frames: Minimum 16-gauge steel frames in conformance with SDI-100 and NAAMM Hollow Metal Manual.
      a. Knockdown Type: Knockdown (field-assembled) type, provide security anchors.
      b. Welded type: Welded (preassembled) type: Weld floor jamb anchors in place.
   2. Provide for rated units where applicable, in accordance with Underwriters Laboratories, Inc., (UL) standards. Refer to Drawings for rating requirements.
   3. Door Silencers: Resilient type: Removable for replacement.
   4. Doors: Complying with SDI A250.8 for level and model and SDI A250.4 for physical endurance level indicated, 1 ¾" thickness unless otherwise noted.
      a. Interior Doors: Level 1 and Physical Performance Level C (Standard Duty) and
      b. Exterior doors: Level 2 and Physical Performance Level B (Heavy Duty), metallic-coated steel sheet faces. Exterior Doors shall be insulated with a thermal resistance value (R-value) of not less than 2.1 degrees F x h x SF/BTU, 6.3 R-value when tested according to ASTM C 1363.
   5. Glass: Safety Glass:
      a. Safety Glass – Clear, fully tempered.
      b. Wired Glass – Clear, Baroque Pattern

E. Fabrication: Accurately form and mitered corners: Prepare doors and frames to receive hardware.
   1. Provide jamb anchors in accordance with referenced standards.
   2. Knockdown Frames: Maintain hairline alignment at interlocking joints of knockdown frames.
   3. Welded Frames: Weld on inside and grind to smooth, uniform finish.

F. Installation: Install doors and frames in accordance with SDI-100. 105. And NAAMM, plumb and square, maximum diagonal distortion of 1/16".
   1. Ensure frame anchors are securely and rigidly attached to adjacent construction.
   2. Door Silencers: Resilient type: Removable for replacement.
   3. Doors: Complying with SDI A250.8 for level and model and SDI A250.4 for physical endurance level indicated, 1 ¾" thickness unless otherwise noted.
      a. Interior Doors: Level 1 and Physical Performance Level C (Standard Duty) and
      b. Exterior doors: Level 2 and Physical Performance Level B (Heavy Duty), metallic-coated steel sheet faces. Exterior Doors shall be insulated with a thermal resistance value (R-value) of not less than 2.1 degrees F x h x SF/BTU, 6.3 R-value when tested according to ASTM C 1363.
   4. Glass: Safety Glass:
      a. Safety Glass – Clear, fully tempered
      b. Wired Glass – Clear, Baroque Pattern

E. Fabrication: Accurately form and mitered corners: Prepare doors and frames to receive hardware.
   1. Provide jamb anchors in accordance with referenced standards.
   2. Knockdown Frames: Maintain hairline alignment at interlocking joints of knockdown frames.
   3. Welded Frames: Weld on inside and grind to smooth, uniform finish.

F. Installation: Install doors and frames in accordance with SDI-100. 105. And NAAMM, plumb and square, maximum diagonal distortion of 1/16".
   1. Ensure frame anchors are securely and rigidly attached to adjacent construction.

SECTION 08.70.00 – HARDWARE

A. Provide complete, code conforming finish hardware by Best, Corbin Russwin, Sargent or approved equal and installation as required for fully operational facilities, including work required for proper completion of Project, though not definitely specified herein.
   1. Cabinet Hardware: Provided in Section 06400 – Architectural Woodwork.

B. Templates: Furnish templates or physical hardware items to door and frame manufacturers as required to ensure proper preparation for hardware.

C. Hardware: Securely anchor with appropriate fastening devices, finish exposed fasteners to match hardware.
   1. Keying: Key doors alike according to the Owner's master keying system, if applicable.
      a. Provide one (1) set of construction cores and two (2) construction control keys.
   2. Door Closures: Door mounted: Provide tools for door closer adjustment and operating instructions to Owner's representative at conclusion of job.
   3. Sex bolts and grommet nuts shall not be permitted: Coordinate templates and reinforcing with door and frame manufacturers.

D. Installation: Install hardware in accordance with manufacturer instructions and recommendations.
   1. Heights of items shall conform with applicable codes; Install items not shown on Drawings in accordance with recommendations of Building Hardware Manufacturers Association.
   2. Mounting positions subject to approval by the Architect.
   3. Fit hardware prior to painting, then remove for painting of frames.

SECTION 09.90.00 – PAINTING AND COATING

A. Provide paint as specified and as indicated on Drawings, including painting of millwork supplied by others.
   1. Work included: Paint items not specifically excluded under following paragraph.
   2. Items not to be painted:
      a. Drywall surfaces concealed from view.
      b. Factory finished equipment and other materials with complete factory finish, including merchandising shelving and wrap counter.
      c. Finish hardware except where primed for paint finish.
      d. Acoustical tile and suspension systems.
      e. Lighting fixtures.
      f. Plumbing fixtures.

B. Product Handling and Storage: Deliver materials to jobsite in manufacturer's sealed containers, legends, and labels intact.
   1. Do not remove empty containers from jobsite until completion or directed by the Owner.

C. Manufacturer: Provide top commercial top line products by Sherwin William, Benjamin Moore or equal
   1. Color Pigments: Pure, non-fading, types to suit substrates and service indicated, no lead content.
   1. Quality: Provide finish coats capable of being washed with mild detergent without loss of color, sheen, or pigments.
   2. Volatile Organic Compounds (VOC): Provide materials with maximum VOC content of 250 grams/liter. (VOC to be eliminated from product by 1995)

D. Preparation: Comply with paint manufacturer recommendations.
   1. Protect items not to be painted or removed prior to painting. If required to be removed, reposition, and reinstall after painting.
   2. Clean surface to be painted free of anything which may interfere with proper functioning of painting finish.
      a. Fill and sand patches, repairs, and other surface blemishes to conform to adjacent surfaces.
      b. Seal patched areas to receive paint with Fuller O'Brien's "Spaze" High Build Flat Latex, 302-39 or Glidden Spread Patch.
      c. Application of paint or primer indicates Painting Contractor acceptance of responsibility for surface condition and appearance of finished product resultant from surface condition.

E. Application: Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.
   1. Finish: Free of runs, sags, wrinkles, streaks, and brush marks.
   2. Texture: Provide "orange peel" with add sand (refer to Room Finish Schedule) texture matching approved sample: Texture may be produced by use of tight nap roller such as a 3/8" roller nap.
   3. Spray painting is not acceptable.
   4. Roller apply PVA sealer/primer to gypsum wallboard. Spray application is not acceptable.

F. Finish Coats: Apply to items not previously primed. Recoat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat.

G. Finish Coats: Provide smooth even texture and coverage. Leave no laps, irregularity in texture, skid marks, sags, runs or surface imperfections.

H. Painting Systems: Specifications establish minimum procedure, quality, and number of coats. Provide following paint finish systems, manufacturers and colors as scheduled.
   1. Gypsum Wallboard:
      a. 1st Coat: Flat Latex or PVA Sealer.
      b. 2nd and 3rd Coat: Latex Semi-Gloss Enamel.
   2. Transparent Finished Wood/MDF:
      a. 1st & 2nd full Coats: PrepRite ProBlock Interior / Exterior Latex Primer / Sealer.
      b. 3rd & 4th full Coats: SuperPaint Interior Satin Latex Paint, A87W01351.
   3. Opaque Finished Wood/MDF:
      a. 1st Coat: Enamel Undercoat.
      b. 2nd and 3rd Coat: Semi-Gloss 100% Acrylic Latex Enamel.
   4. Ferrous Metal
      a. 1st Coat: Rust Inhibitive Metal Primer.
      b. 2nd and 3rd Coat: Semi-Gloss 100% Acrylic Latex Enamel.
   5. Aluminum:
      a. 1st Coat: Chromate Primer.
      b. 2nd and 3rd Coat: Semi-Gloss 100% Acrylic Latex Enamel.
   6. Concrete Masonry Units (CMU):
      a. 1st Coat: PrepRite –Block Filler, Interior/Exterior Latex.
      b. 2nd & 3rd Coat: Gloss Water based catalyzed epoxy.

I. Where coverage is incomplete or not uniform, provide and additional coat or coasts as required.
   1. Patched Areas: Match adjacent surfaces.
   2. Leave areas in clean and orderly condition.
   3. Correct Work which does not meet approval of the Owner's representative.

J. Clean-up: During progress of work, remove from site discarded paint materials, rubbish, cans, and rags at end of each workday.
   1. Upon completion of painting work, clean paint-spattered surfaces. Remove spattered paint by proper method of washing and scraping, using care not to scratch or otherwise damage finish surfaces.

K. Protection: Protect work of other trades, whether to be painted or not, against damage and finishing work.
   1. Correct damage by cleaning, repairing, or replacing and repainting as acceptable to the Owner's representative.
   2. Provide "Wet Paint" signs as required to protect newly painted finishes.

L. Maintenance Stock:
   1. Provide one unopened gallon of each color of paint for touch-up.

DIVISION 10 – SPECIALTIES

SECTION 10.44.00 – FIRE PROTECTION SPECIALTIES

A. Furnish and install fire extinguisher and fire extinguisher cabinet.
   1. Meet NFPA 10 – Standard for Portable Fire Extinguishers, National Fire Protection Association, 1998 and UL (FPED) – Fire Protection Equipment Directory, Underwriters Laboratories, Inc., current edition.
   2. Conform to NFPA 10 and provide extinguishers classified and labeled by Underwriters Laboratories, Inc., for the purpose specified and indicted.

B. Manufacturers Fire Extinguishers, Cabinets and Accessories: Larsen's Manufacturing Co., Product Model 2409 – 6R Architectural Series semi-recessed w/ clear DSA glass – or approved equal.

C. Fire Extinguishers: 1 Dry Chemical type: Standard tank with pressure gage – Size MP – 10

D. Fire Extinguisher Cabinets:
   1. Cabinet Configuration: Surface mounted type on solid walls; semi-recessed type on cavity walls – Sized to accommodate accessories; Door with 1/8" clear glass, cabinet – white enamel.
   2. Verify rough openings for cabinet are correctly sized and located.

SECTION 10.53.00 - METAL AWNINGS AND CANOPIES

B. Provide and install standard prefinished aluminum canopy system including but not limited to all supports, panels, trim, gutters, scuppers, attachments, etc. to provide a complete waterproof system.

C. Submit: Product data with manufacturer's data sheets, preparation instructions and recommendations, storage and handling requirements and recommendations and typical installation methods. Shop Drawings include details of materials, construction and finish include relationship with adjacent construction.

D. QUALITY ASSURANCE:
   1. Manufacturer Qualifications - company specializing in manufacturing products specified in this section with a minimum ten years documented experience.
   2. Installer Qualifications: Company specializing in performing Work of this section with minimum five years documented experience with projects of similar scope and complexity and approved by Manufacturer.
   3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

E. DELIVERY, STORAGE, AND HANDLING: Store and handle in strict compliance with manufacturer's written instructions and recommendations. Protect from damage due to weather, excessive temperature, and construction operations.

F. PROJECT CONDITIONS: Maintain environmental conditions i.e., temperature, humidity, and ventilation within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

G. WARRANTY: Manufacturer's Warranty: Aluminum frames are warranted against defects in workmanship for five years from date of installation.

H. MANUFACTURERS: Extrudeck Series by MASA Architectural Canopies, Aluminum Techniques, Inc.; Lawrence Fabric & Metal Structures or approved equal.

I. Performance and Design Requirements:
   1. Material: Extruded aluminum, alloy 6063-T6.
   2. Fabrication Method: Fully welded frame with mechanically fastened supports.
   3. Decking: Aluminum interlocking pan.
      a. Profile: 3 x 6-inch interlocking pan.
      b. Corrugated Sheet Metal: U-Panel.
   4. Fascia: G-style gutter fascia.
      a. Welded as one piece or in sections as required for width of canopy.
      b. Profile: 6 inches
      c. Water Dispersal: Scuppers.
   5. Width: As detailed on the Drawings.
   6. Frame Section: As detailed on the Drawings.
      a. Frame Section Range: 24 to 30 ft.
   7. Support:
      a. Hanger Rods: 0.750-inch diameter.
      b. Hanger Rods: 1 inch diameter.
      c. Escutcheon Plate: 6 x 6 inch; aluminum.
      d. Spacing: 10 ft maximum.
   8. Projection Without Hanger Rods: 2 ft
   9. Projection With Hanger Rods: 10 ft.
   10. Finish: AAMA 2605 compliant finish; 10-year warranty.
   11. Finish: 2-part Polyurethane factory applied finish.
   12. Finish: Kynar

J. EXAMINATION: Do not begin installation until substrates have been properly constructed and prepared. Confirm dimensions and elevations. Verify that wall structure can support canopy loads. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.

K. PREPARATION: Clean surfaces thoroughly prior to installation. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

L. INSTALLATION: Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.

M. CLEANING AND PROTECTION: Clean products in accordance with the manufacturer's recommendations. Touch-up, repair or replace damaged products before Substantial Completion.

SECTION 13.91.00 – BASIC MECHANICAL MATERIALS AND METHODS FOR FIRE PROTECTION

A. Provide and install a complete fire sprinkler system as required by local building authority and/or fire marshal. System shall include but is not limited to the following: Test and drain valves; Auxiliary drains; Corrosion monitor; Floor control risers; Inspector's test and drain valves; Gauges, Alarms, Monitoring equipment, Test water containment system; Air venting valves; Accessories, Etc.

B. REFERENCES:
   1. National Fire Protection Association:
      a. NFPA 24 - Standard for the Installation of Private Fire Service Mains and Their Appurtenances.
   2. American Society of Mechanical Engineers (ASME):
      a. ASME B1.20.1 for threads for threaded-end valves.
      b. ASME B16.1 for flanges on iron valves.
   3. FM Global:
      a. Class Number 1045 Approval Standard for Waterflow Detector Check Valves.
      b. Class Number 1112 Indicating Valves.
      c. Class Number 1120 and 1130 Fire Service Water Control Valves.
   4. UL Listed:
      a. UL 262 - Gate Valves for Fire-Protection Service.
      b. UL 312 - Check Valves for Fire-Protection Service.
      c. UL 1091 - Butterfly Valves for Fire-Protection Service.

C. Submit complete Product Data; stump not to exceed 3 sheets on each product to be used; Preparation instructions and recommendations; Storage and handling requirements and recommendations; Typical installation methods; Shop Drawings include details of materials, construction, and finish. Include relationship with adjacent construction.

D. Quality Assurance: Manufacturer / Company specializing in the manufacturing of products required and specified in this section with a minimum five years documented experience. Installer Qualifications: Company specializing in performing Work of this section with minimum five years documented experience with projects of similar scope and complexity.

E. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity. Store and handle in strict compliance with manufacturer's written instructions and recommendations. Protect from damage due to weather, excessive temperature, and construction operations.

F. PROJECT CONDITIONS: Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

G. SEQUENCING: Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

H. WARRANTY: Manufacturer's Warranty: Provide manufacturer's standard limited warranty.

I. MANUFACTURERS: AGF Manufacturing, Inc., Zurn Industries, LLC. or approved equal.

J. EXAMINATION: Do not begin installation until substrates have been properly constructed and prepared. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.

K. PREPARATION: Clean surfaces thoroughly prior to installation. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

L. INSTALLATION: Install in accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction. Test for proper operation and adjust until satisfactory results are obtained.

M. FIELD QUALITY CONTROL: Field Inspection: Coordinate field inspections as required and accordance with local building authority and/or fire marshal.

N. CLEANING AND PROTECTION: Clean products in accordance with the manufacturer's recommendations. Touch-up, repair or replace damaged products before Substantial Completion.

DIVISION THIRTEEN – SPECIAL CONSTRUCTION

SECTION 13.34.19 – PRE-ENGINEERED BUILDINGS

SECTION INCLUDES
A. The extent of the pre-engineered building work indicated on the drawings. The Pre-Engineered Building System is to include the following that is all to be designed and sealed by a registered professional engineer licensed in the state of Texas and experienced in structural design:

DESIGN REQUIREMENTS
A. Design members to withstand dead load and design loads due to pressure and suction of wind calculated in accordance with applicable code. Dead load plus live load.
B. Design members to withstand 20 psf live load and 15 psf positive and negative wind loads applied to primary and secondary members and covering per "Recommended Design Practices Manual" of the MBMA.
C. Design members to withstand UL 580 Uplift Class 90.
D. Exterior wall and roof system shall withstanding posed loads with maximum allowable deflection of 1/90 of span.
E. Size and fabricate wall and roof systems free of distortion or defects detrimental to appearance or performance.

SUBMITTALS
A. Product Data: Provide data on profiles, component dimensions and fasteners.
B. Shop Drawings: Indicate assembly dimensions, locations of structural members, connections, wall and roof system dimensions, panel layout, general construction details, anchorages and method of anchorage, installation, framing anchor bolt settings, sizes and locations from datum. Indicate welded connections with AWS A2.4 welding symbols, indicated net weld lengths, provide professional seal and signature.
C. Samples: Submit two (2) samples of precoated metal panels for each color selected, 3x3 inch in size illustrating color and texture of finish.
D. Manufacturer's Instructions: Indicate preparation requirements, anchor bolt placement.
E. Erection Drawings: Indicate members by label, assembly sequence and temporary erection bracing.
F. Project Record Documents: Record actual locations of concealed components and utilities.

QUALITY ASSURANCE
A. Design structural components, develop shop drawings, perform shop and site work under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed at the place where the Project is located.
   1. Conform to applicable code for submission of design; calculations are required for acquiring permits.
   2. Cooperate with regulatory agency or authority and provide data as requested.
B. Perform work in accordance with AISC S33F.
   1. Maintain One (1) copy on site.
C. Perform welding in accordance with AWS D1.1.
D. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section has a minimum of three (3) years documented experience.
E. Erector Qualifications: Company specializing in performing the work of this section with minimum five (5) years experience.

PRE-INSTALLATION MEETING
A. Convene one (1) week before starting work in this section, if required.

WARRANTY
A. Correct defective Work within a one (1) year period after the Date of Substantial Completion.
B. Provide five (5) year manufacturer warranty for the system.
   1. Include coverage of exterior pre-finished surfaces to cover pre-finished color coat

STRUCTURAL ABBREVIATIONS

ABOVE FINISH FLOOR	A.F.F.
ADDITIONAL	ADD'L.
ALTERNATE	ALT.
ANCHOR ROD	A.R.
AND	&
ANGLE	L
APPROXIMATE	=/-APPROX.
ARCHITECTURAL	ARCH'L.
AT	@
AIR CONDITIONER	A/C
AIR HANDLING UNIT	AHU
BASE PLATE	BP
BEAM	BM.
BEARING	BRNG.
BETWEEN	BTWN.
BLOCKING	BLK'G.
BOTH WAYS	B.W.
BOTTOM	BOTT.
BOTTOM CHORD EXTENSION	BCX
BOTTOM OF	B.O.
BOTTOM OF DECK	B.O.D.
BOTTOM OF STEEL	B.O.S.
BRIDGING	BRDG.
BUILDING	BLDG.
BUILDING LINE	B.L.
CEILING	CLG.
CENTER TO CENTER	C/C
CENTER LINE	℄
CENTERED	CNTRD.
CHANNEL	C
CLEAR	CLR.
COLUMN	COL.
COMPRESSION	(C)
CONCRETE	CONC.
CONCRETE MASONRY UNIT	CMU
CONDENSING UNIT	CU
CONDITION	COND'N.
CONNECTION(S)	CONN.
CONTINUOUS	CONT.
CONSTRUCTION JOINT	C.J.
COORDINATE	COORD.
DETAIL	DTL.
DEAD LOAD	DL
DIAGONAL	DIAG.
DIAGONAL BRACE	D.B.
DIAMETER	DIA. OR Ø
DIMENSION	DIM.
DOUBLE	DBL.
DOWEL	DWL
DOWN	DN.
DRAWING	DWG.
EACH	EA.
EACH FACE	E.F.
EACH WAY	E.W.
ELECTRICAL	ELEC'L.
ELEVATION	EL.
ELEVATOR	ELEV.
ENGINEER	ENGR.
EQUAL (EQUALLY)	EQ.
EXPANSION	EXP.
EXPANSION JOINT	E.J.
EXISTING	EX.
EXTERIOR	EXT.
FACE TO FACE	F/F
FACE OF	F.O.
FAR SIDE	F.S.
FINISH(ED)	FIN.
FINISHED FLOOR	FIN. FLR.
FLANGE BRACE	F.B.
FLOOR DRAIN	F.D.
FOOTING	FTG.
FOUNDATION	FDN.
GAGE OR GAUGE	GA.
GALVANIZED	GALV.
GENERAL	GEN.
GLUE-LAMINATED BEAM	G.L.B.
GRADE	GR.
GRADE BEAM	GR.BM.
GYPSUM BOARD	GYP.BD.
HEADED STUD	H.S.
HEIGHT	HT.
HIGH POINT	H.P.
HORIZONTAL	HORIZ.
INFORMATION	INFO.
INSIDE DIAMETER	I.D.
INSIDE FACE	I.F.
INTERIOR	INT.
INTERMEDIATE	INTERM.
JOINT	JT.
JOIST(S)	JST
JOIST BEARING	JST. BRNG.
KIPS	K
KNEE BRACE	K.B.
KIPS PER SQUARE INCH	KSI
LARGER THAN OR EQUAL TO	>=
LEAN-TO FRAME	LTF
LESS THAN OR EQUAL TO	<=

STRUCTURAL ABBREVIATIONS

LINTEL	LNTL
LIVE LOAD	LL
LONGITUDINAL	LONG.
LONG LEG HORIZONTAL	LLH
LONG LEG VERTICAL	LLV
LOW POINT	L.P.
MANUFACTURER	MANUF.
MASONRY JOINT	M.J
MATERIAL	MAT'L.
MAXIMUM	MAX.
MECHANICAL	MECH'L.
MECHANICAL, ELECTRICAL, PLUMBING	M.E.P.
METAL	MTL.
MEZZANINE	MEZZ.
MINIMUM	MIN.
MISCELLANEOUS	MISC.
MOMENT	M.
MOMENT CONNECTIONS	M.C.
NEAR SIDE	N.S.
NOT TO SCALE	N.T.S.
NUMBER	NO. OR #
ON CENTER	O.C.
OPENING(S)	OPNG.
OPPOSITE	OPP.
OPPOSITE HAND	O.H.
OUTSIDE DIAMETER	O.D.
OUTSIDE FACE	O.F.
OUT-TO-OUT	O-O
PANEL	PNL.
PERIMETER	PERIM.
PERPENDICULAR	PERP.
PLATE	℄
POUNDS	LBS.
POUNDS PER LINEAR FOOT	PLF
POUNDS PER SQUARE FOOT	PSF
POINT	PT.
POWDER ACTUATED FASTENER	P.A.F.
PRECAST CONCRETE	P/C
PRE-ENGINEERED METAL BUILDING	PEMB
PROJECTION	PROJ.
RADIUS	RAD.
REFER	REF. OR RE:
REINFORCING	REINF.
REQUIRED	REQ'D.
REQUIREMENTS	REQ'MTS.
RIGID FRAME	R.F.
ROOF TOP UNIT	RTU
ROOF DRAIN	R.D.
SAW CUT JOINT	S.J.
SCHEDULE	SCHED.
SECTION	SECT.
SHEAR	(V)
SHEAR CONNECTOR	S.C.
SHEET	SHT.
SIMILAR	SIM.
SPACE	SP.
SPECIFICATIONS	SPEC.
STAINLESS STEEL	SS
STANDARD	STD.
STEEL	STL.
STIFFENER	STIFF.
STIRRUPS	STIR.
STRUCTURE	STRUCT.
STRUCTURAL	STRUCT'L.
SYMMETRICAL	SYM.
TOP CHORD EXTENSION	TCX
TEMPERATURE	TEMP.
TENSION	(T)
THICK	THK.
THROUGH	THRU
TONGUE & GROOVE	T&G.
TOP & BOTTOM	T&B.
TOP OF	T.O.
TOP OF BEAM	T.O.B.
TOP OF FOOTING	T.O.F.
TOP OF JOIST	T.O.J.
TOP OF METAL DECK	T.O.D.
TOP OF PIER	T.O.P.
TOP OF PIER CAP	T.O.P.C.
TOP OF STEEL	T.O.S.
TOP OF STRUCTURAL STEEL	T.O.S.S.
TOP OF STRUCT'L. CONC.	T.O.S.C.
TOP OF WALL	T.O.W.
TOTAL LOAD	TL
TRANSVERSE	TRAN.
TYPICAL	TYP.
UNLESS NOTED OTHERWISE	U.N.O.
VERTICAL	VERT.
WATERSTOP	W.S.
WEIGHT	WT.
WELDED WIRE MESH (FABRIC)	W.W.F.
WIND BRACE	W.B.
WIND LOAD	WL
WITH	W/
WOOD	WD.
WORK POINT	W.P.
X-BRACING	X.B.

GENERAL NOTES

DESIGN CODES AND LOADS

1. BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE
2. STRUCTURAL CONCRETE: BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AMERICAN CONCRETE INSTITUTE, ACI 318.
3. CONCRETE MASONRY: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, ACI 530, ASCE 5, TMS 402.
4. STRUCTURAL STEEL: MANUAL OF STEEL CONSTRUCTION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
5. WOOD: NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, ALLOWABLE STRESS DESIGN.
6. DESIGN WIND LOAD CRITERIA:
   - V-ULTIMATE ---------- 120 MPH
   - V-ASD ---------- 93 MPH
   - RISK CATEGORY ---------- IV
   - EXPOSURE ---------- C
   - INTERNAL PRESS. COEFF. ---------- ±0.18
7. DESIGN LIVE LOADS:
   - ROOF ---------- 20 PSF
   - MECHANICAL ---------- AS REQ'D.
   - RETAIL ---------- 100 PSF
8. DESIGN SNOW LOAD:
   - GROUND SNOW ---------- 5.0 PSF
   - Pf ---------- 4.2 PSF
   - Ce ---------- 1.0
   - IMPORTANCE FACTOR ---------- 1.2
   - Ct ---------- 1.0
9. DESIGN SEISMIC LOAD:
   - RISK CATEGORY ---------- IV
   - IMPORTANCE FACTOR ---------- 1.50
   - Ss ---------- 0.090g
   - S1 ---------- 0.050g
   - SITE CLASS ---------- D
   - SDs ---------- 0.096g
   - SD1 ---------- 0.080g
   - SEISMIC DESIGN CATEGORY ---------- C
   - SLRS ---------- STRUCTURAL STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
   - V ---------- 0.048 W
   - Cs ---------- 0.048
   - R ---------- 3
   - ANALYSIS METHOD ---------- EQUIVALENT LAT. FORCE

MISCELLANEOUS

1. SCALES INDICATED ON THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED BY DIRECT SCALING OF THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE STRUCTURAL ENGINEER OF RECORD.
2. CONTRACTOR SHALL VERIFY ALL CONDITIONS AT THE JOBSITE AND REPORT ANY DISCREPANCIES TO THE STRUCTURAL ENGINEER OF RECORD.
3. ALL METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE AND MAINTAIN THE INTEGRITY OF THE STRUCTURE DURING ALL STAGES OF CONSTRUCTION.
4. THE STRUCTURE HAS BEEN DESIGNED FOR THE IN-SERVICE LOADING CONDITIONS ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL FORM WORK AND SHORING OPERATIONS. THE CONTRACTOR SHALL MAINTAIN STRUCTURE STABILITY AND SAFETY DURING ALL PHASES OF CONSTRUCTION, IN ACCORDANCE WITH SEI/ASCE 37-01 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION."
5. CONSTRUCTION MATERIALS AND EQUIPMENT LOADS ON FRAME FLOORS OR ROOFS SHALL BE SPREAD OUT AND SHALL NOT EXCEED THE DESIGN LIVE LOADS PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH. CONSTRUCTION EQUIPMENT WITH WHEEL LOADS GREATER THAN 2000 POUNDS ARE NOT PERMITTED ON THE SLAB WITHOUT PRIOR WRITTEN AGREEMENT OF THE STRUCTURAL ENGINEER OF RECORD.
6. STRUCTURAL MEMBERS HAVE BEEN LOCATED AND DESIGNED TO ACCOMMODATE THE MECHANICAL EQUIPMENT AND OPENINGS AS SPECIFIED BY THE MECHANICAL CONSULTANT. THE CONTRACTOR SHALL COORDINATE ANY SUBSTITUTIONS REQUIRING REVISIONS TO THE STRUCTURAL FRAMING WITH THE STRUCTURAL ENGINEER OF RECORD.
7. THERE SHALL BE NO DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS UNLESS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD. ANY PROPOSED ADDITIONS, SUBSTITUTIONS, OR MODIFICATIONS SHALL BE SUBMITTED IN WRITING WELL IN ADVANCE OF NEED FOR MATERIAL ON SITE. SHOP DRAWINGS DO NOT CONSTITUTE "IN-WRITING" UNLESS THE PROPOSED CHANGES ARE CLEARLY AND SPECIFICALLY IDENTIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REVISIONS TO THE STRUCTURAL FRAMING SYSTEM RESULTING FROM ACCEPTANCE OF ALTERNATES OR SUBSTITUTIONS FROM OTHER DISCIPLINES.
8. REPRODUCTIVE USE OF THE STRUCTURAL DRAWINGS IN PART OR IN WHOLE FOR SHOP DRAWINGS, ERECTION DRAWINGS, OR ANY OTHER SUBMITTAL PURPOSES SHALL NOT BE ALLOWED.
9. REQUESTS FOR CAD FILES SHALL BE SUBMITTED IN WRITING TO STRUCTURAL ENGINEER OF RECORD AND WILL BE CONSIDERED ON A CASE BY CASE BASIS. CAD FILES WILL NOT BE RELEASED TO CONTRACTORS OR SUBCONTRACTORS WITHOUT AN EXECUTED CAD RELEASE WAIVER AND PAYMENT OF RELATED SERVICE FEES.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR FITTING NEW WORK WITH EXISTING CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO PROTECT EXISTING BUILDINGS, PAVING, AND PARKING SURFACES DURING CONSTRUCTION. WHERE ANY EXISTING CONSTRUCTION IS DAMAGED DURING CONSTRUCTION, IT SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
11. CONTRACTOR SHALL COORDINATE ALL MISCELLANEOUS STEEL REQUIREMENTS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
12. ALL DETAILS NOTED OR LABELED AS TYPICAL (TYP.) APPLY IN A GENERAL SENSE TO THE DRAWINGS WHERE CONDITIONS ARE APPLICABLE OR SIMILAR.

SUBGRADE PREPARATION

1. ALL SUBGRADE PREPARATION, EXCAVATIONS, SITEWORK, AND SELECT FILL OPERATIONS SHALL BE IN ACCORDANCE WITH THE REFERENCED GEOTECHNICAL INVESTIGATION REPORT.
2. CONTRACTOR SHALL PROVIDE COPIES OF ALL COMPACTION TESTS FOR EACH LIFT OF FILL PLACED TO HOLLAND ENGINEERING, LLC. NO LIABILITY, EITHER EXPRESSED OR IMPLIED, SHALL BE ASSUMED BY HOLLAND ENGINEERING, LLC FOR THE BEHAVIOR OF THE FOUNDATION SYSTEM CONSTRUCTED ON UNCONTROLLED OR UNTESTED FILL.
3. ALL SITE PREPARATION, INCLUDING BUT NOT LIMITED TO SURFACE AND SUBSURFACE GROUNDWATER DRAINAGE, SHALL BE AS DESIGNED AND SPECIFIED BY THE GEOTECHNICAL ENGINEER AND/OR CIVIL ENGINEER.
4. CONTRACTOR AND/OR OWNER SHALL PROVIDE FOR DRAINAGE ASSESSMENTS AND OBTAIN SITE GRADING RECOMMENDATIONS FROM A LICENSED PROFESSIONAL CIVIL ENGINEER. HOLLAND ENGINEERING, LLC SHALL NOT BE HELD LIABLE FOR THE SITE GRADING AND DRAINAGE.
5. WATER SHALL NOT BE ALLOWED TO COLLECT IN OR NEAR FOOTING EXCAVATIONS.
6. PROPER DRAINAGE SHALL BE COORDINATED WITH THE CIVIL AND/OR GEOTECHNICAL ENGINEER DURING SUBGRADE PREPARATION.

FOUNDATIONS AND SLABS ON GRADE

1. FOUNDATION DESIGN IS BASED ON A GEOTECHNICAL INVESTIGATION PERFORMED BY EYNCON ENGINEERING & SURVEYING, LLC, ENNIS, TEXAS, PROJECT NO. 10424075, DATED MAY 15, 2024, AND ALL SUPPLEMENTAL ADDENDA.
2. FOUNDATION DESIGN IS BASED ON THE FOLLOWING ALLOWABLE BEARING CAPACITIES:
   - TOTAL LOAD ---------- 7500 PSF
   - SKIN FRICTION ---------- 500 PSF

   FOR DRILLED AND UNDEREAMED PIERS AT A DEPTH OF 13 FEET BELOW EXISTING GRADE.
3. DRILLED PIERS SHALL BE EXCAVATED, CLEANED, AND REINFORCED, AND CONCRETE SHALL BE PLACED ON THE SAME DAY. IF BELLS OR UNDERREAMS CANNOT BE FORMED WITHOUT CAVING OF THE SOIL, THE STRUCTURAL AND GEOTECHNICAL ENGINEERS SHALL BE NOTIFIED BEFORE FURTHER CONSTRUCTION IS ATTEMPTED.
4. TEMPORARY STEEL CASINGS MAY BE REQUIRED DURING THE INSTALLATION OF DRILLED PIERS (REFER TO GEOTECHNICAL REPORT). THE CONTRACTOR SHALL PROVIDE A UNIT PRICE FOR THE USE OF STEEL CASING AS A SEPARATE ITEM IN THE CONTRACT.
5. IF FOUNDATION CONDITIONS ARE NOTED DURING CONSTRUCTION THAT DIFFER FROM THE REFERENCED GEOTECHNICAL INVESTIGATION, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT, STRUCTURAL ENGINEER, AND GEOTECHNICAL ENGINEER BEFORE ANY FURTHER FOUNDATION CONSTRUCTION IS ATTEMPTED.
6. CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER 48 HOURS PRIOR TO PLACEMENT OF CONCRETE.
7. HOLLAND ENGINEERING, LLC, STRUCTURAL ENGINEER OF RECORD, STRONGLY RECOMMENDS CONTRACTOR ENGAGE SERVICES OF SER FOR SITE OBSERVATION OF REINFORCING STEEL FOR PIERS, FOOTINGS, GRADE BEAMS, AND SLAB PRIOR TO CONCRETE PLACEMENT.
8. WHERE CONCRETE SLAB ON GRADE IS TO RECEIVE SENSITIVE ARCHITECTURAL FINISHES, OR TO BE EXPOSED, CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL JOINTS TO ALIGN WITH JOINTS IN THE FINISHED SURFACE. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT SURFACES THAT WILL REMAIN EXPOSED AFTER CONSTRUCTION.

CAST-IN-PLACE CONCRETE

1. CAST-IN-PLACE CONCRETE SHALL HAVE NORMAL WEIGHT COARSE AGGREGATES CONFORMING TO ASTM C33, NATURAL SAND FINE AGGREGATES, TYPE I PORTLAND CEMENT CONFORMING TO ASTM C150.
2. FLY ASH MAY BE USED TO REPLACE A MAXIMUM OF 25% OF THE TOTAL CEMENTITIOUS CONTENT. FLY ASH SHALL CONFORM TO ASTM C618, CLASS C OR F.
3. CAST-IN-PLACE CONCRETE SHALL STRICTLY ADHERE TO THE PROPORTIONS ESTABLISHED IN DESIGN MIXES, CONSISTING OF THE ACTUAL MATERIALS TO BE USED DURING CONSTRUCTION. DESIGN MIXES SHALL BE PREPARED AND SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW PRIOR TO USE. MIX DESIGN PROPORTIONS SHALL BE IN ACCORDANCE WITH ACI 211/301/318. CONCRETE MIX DESIGNS SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE:

CONCRETE MIX DESIGN SCHEDULE

TYPE OF CONSTRUCTION	CONCRETE CLASS	MIN. COMP. STRENGTH AT 28 DAYS (psi)	TOTAL AIR	MAXIMUM W/C RATIO	SLUMP (in.)	MAXIMUM AGGREGATE SIZE (in.)
GRADE BEAMS, PLINTHS, & WALLS	NWC	3000	4.5%±1.5%	0.55	3-5	1
FOOTINGS & INTERIOR SLAB-ON-GRADE	NWC	3000	3% MAX. (ENTRAPPED)	0.50	3-5	1
DRILLED PIERS	NWC	4000	3% MAX. (ENTRAPPED)	0.50	4-6	1

   A. MIN. CEMENTITIOUS CONTENT = 5 SACKS PER CUBIC YARD (MAX. OF WHICH MAY BE 25% FLY ASH).
   B. **USE OF CALCIUM CHLORIDE IS NOT PERMITTED.**
4. MIXING, TRANSPORTATION, AND PLACEMENT OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301.
5. CONCRETE SHALL NOT BE PLACED WHEN AMBIENT AIR TEMPERATURE IS 40° OR LESS AND FALLING.
6. FRESH CONCRETE SHALL BE PROTECTED FROM FREEZING WHEN CONCRETE WILL BE EXPOSED TO AMBIENT AIR TEMPERATURES LESS THAN 32° FOR MORE THAN 8 HOURS WITHIN THE FIRST 72 HOURS OF PLACEMENT.
7. CONTRACTOR SHALL COORDINATE THE COMPATIBILITY OF ALL CURING COMPOUNDS WITH ARCHITECTURAL FLOOR FINISHES.
8. REINFORCING BARS SHALL CONFORM TO ASTM A 615, GRADE 60.
9. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. FABRIC SHALL BE SUPPLIED IN FLAT SHEETS AND SHALL BE LAPPED 2 MESHES AT SPLICES.
10. DETAILING OF CONCRETE REINFORCING BARS AND ACCESSORIES SHALL CONFORM TO THE RECOMMENDATIONS OF ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI SP-66 "DETAILING MANUAL."
11. TIE OR STIRRUP SPACINGS SHALL BE AS INDICATED IN THE DRAWINGS, STARTING FROM THE FACE OF EACH SUPPORT. THE FIRST STIRRUP SHALL BE PLACED AT A SPACING OF S/2 FROM THE FACE OF EACH SUPPORT, WHERE "S" IS THE TYPICAL SPACING.
12. PROVIDE CORNER BARS IN CONCRETE STEM WALLS OR GRADE BEAMS AS DETAILED.
13. CONCRETE PROTECTION FOR REINFORCING BARS:
   - GRADE BEAM TOP BARS ---------- 1½"
   - GRADE BEAM SIDE BARS ---------- 3"
   - GRADE BEAM BOTTOM BARS ---------- 3"
   - WALLS ---------- 1½"
   - SLABS ---------- AS DETAILED
   - FOOTING - BOTT. & SIDES ---------- 3"
   - FOOTING - TOP ---------- 2"
   - DRILLED PIERS ---------- 3"
14. REINFORCEMENT DESIGNATED AS "CONTINUOUS" IN THE DRAWINGS SHALL BE LAP-SPLICED IN ACCORDANCE WITH THE REINFORCING STEEL DEVELOPMENT SCHEDULE. SPLICE TOP BARS OF GRADE BEAMS AS REQUIRED AT MIDSPAN BETWEEN SUPPORTS. SPLICE BOTTOM BARS OF GRADE BEAMS AS REQUIRED AT CENTERLINE OF SUPPORTS. PROVIDE STANDARD ACI HOOKS AT ALL DISCONTINUOUS ENDS.
15. HORIZONTAL JOINTS SHALL NOT BE PERMITTED UNLESS DETAILED OTHERWISE. WHERE ALLOWED, HORIZONTAL JOINTS SHALL BE ROUGHENED TO ¼" AMPLITUDE PRIOR TO SUBSEQUENT CONCRETE PLACEMENT OPERATIONS. VERTICAL JOINTS IN CONCRETE BEAMS SHALL OCCUR AT MIDSPAN BETWEEN SUPPORTS.
16. CONTRACTOR SHALL VERIFY THE PRESENCE, LOCATION, AND SIZES OF ALL OPENINGS, DEPRESSIONS, AND EMBEDMENTS PRIOR TO PLACING CONCRETE. NO OPENINGS SHALL BE PERMITTED THROUGH CONCRETE, UNLESS DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. CONDUIT FOR ELECTRICAL OR PLUMBING LINES SHALL BE SLEEVED THROUGH GRADE BEAMS.
17. ALL DRILLED/EPOXY SET ANCHORS OR DOWELS SHALL BE AS MANUFACTURED BY HILTI. (NO SUBSTITUTIONS ALLOWED W/OUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER.) REFER TO POST-INSTALLED ANCHORS NOTE.
18. CONTRACTOR SHALL MAKE PROVISIONS FOR FINISHING EXPOSED CONCRETE. AS SOON AS FORMS ARE REMOVED, UNDESIRABLE FINS AND PROJECTIONS SHALL BE REMOVED, OFFSETS SHALL BE LEVELED, AND VOID OR DAMAGED PLACES SHALL BE IMMEDIATELY SATURATED WITH WATER AND FINISHED WITH CEMENTITIOUS PASTE OR MORTAR OF THE SAME COMPOSITION AS USED IN THE MIX. EXPOSED SURFACES SHALL BE RUBBED WITH CARBORUNDUM STONE TO A SMOOTH FINISH, FREE FROM FORM MARKS OR HONEYCOMBS.
19. OWNER SHALL PROVIDE FOR QUALITY CONTROL OF CAST-IN-PLACE CONCRETE BY EMPLOYING A QUALIFIED TESTING LABORATORY SERVICE TO PREPARE AND TEST CONCRETE COMPRESSION CYLINDERS, SLUMP, AIR CONTENT, TEMPERATURE, ETC., IN ACCORDANCE WITH PROJECT SPECIFICATIONS, OR AS FOLLOWS:
   - 19.1. TESTING FREQUENCY: OBTAIN ONE COMPOSITE SAMPLE OF (5) CYLINDERS FOR EACH DAY'S POUR FOR EVERY 50 CU. YD. OR FRACTION THEREOF.
   - 19.2. SLUMP TEST: ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR.
   - 19.3. AIR CONTENT: PRESSURE METHOD, ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR.
   - 19.4. CONCRETE TEMPERATURE: ONE TEST HOURLY WHEN AIR TEMPERATURE IS 40 DEGREES AND BELOW AND WHEN 80 DEGREES AND ABOVE, AND ONE TEST FOR EACH COMPOSITE SAMPLE.
   - 19.5. COMPRESSIVE STRENGTH TESTS: TEST ONE SET OF TWO (2) CYLINDERS AT 7 DAYS AND ONE SET OF TWO (2) CYLINDERS AT 28 DAYS AND HOLD ONE (1) CYLINDER FOR TESTING WHEN REQUIRED BY ARCHITECT/ENGINEER. RESULTS SHALL INDICATE THE AVERAGE COMPRESSIVE STRENGTH FOR EACH SET OBTAINED FROM THE SAME COMPOSITE SAMPLE AND TESTING AT THE AGE INDICATED.
   - 19.6. ALL TEST REPORTS SHALL BE SUBMITTED TO THE PROJECT ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW.
20. CONCRETE SHALL BE PLACED CONTINUOUSLY, WITHOUT INTERRUPTION, IN SUCH A MANNER AS NOT TO CAUSE SEGREGATION. EACH LIFT SHALL BE VIBRATED. WHERE CONCRETE DROPS ARE MORE THAN 5 FEET, CONCRETE SHALL BE PLACED USING A CHUTE, TREMIE, OR PUMP HOSE.
21. PROPER ACCESSORIES (CHAIRS, BOLSTERS, DOBIES, STANDEES OR OTHER SUPPORTS) ARE TO BE USED AND SHALL BE NOTED ON THE SHOP DRAWINGS FOR APPROVAL. DRIVING REINFORCING STEEL BARS INTO THE GROUND SHALL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED. CLAY BRICK PRODUCTS ARE NOT ACCEPTABLE FOR CHAIRING REINFORCING. ALL REINFORCING SHALL BE SECURELY AND ACCURATELY HELD IN LOCATIONS SHOWN IN THE DRAWINGS.
22. CAST-IN-PLACE CONCRETE ON THE GROUND SHALL HAVE A THICKNESS TOLERANCE OF (-) 0 " TO (+) 1".
23. REINFORCING STEEL SUBMITTALS SHALL SPECIFICALLY INCLUDE PLAN LAYOUT AND ELEVATION VIEWS OF EACH GRADE BEAM OR WALL ASSEMBLY ALONG WITH SECTION DETAILS FOR GRADE BEAMS, PLINTHS, AND FOOTINGS.
24. CONCRETE MIX DESIGN SUBMITTALS SHALL CLEARLY INDICATE THE INTENDED USE OF EACH PROPOSED MIX.
25. AGGREGATE AND MATERIAL TEST DATA SHALL BE CURRENT (WITHIN THE PAST 6 MONTHS).
26. CONCRETE MIX DESIGN AND REINFORCING STEEL SUBMITTALS FOR ITEMS DETAILED ON THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED SEPARATE FROM ITEMS DETAILED ON ARCH'L. OR CIVIL DRAWINGS.

PRE-ENGINEERED METAL BUILDING

1. THE PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN AND DETAILS OF THE SUPERSTRUCTURE AND ANCHORAGE TO THE FOUNDATION. THE METAL BUILDING MANUFACTURER SHALL PROVIDE THE COMPLETE SUPERSTRUCTURE BUILDING ENVELOPE, INCLUDING BUT NOT LIMITED TO FRAMES, PURLINS, GIRTS, SHEATHING, AND OTHER MISCELLANEOUS STRUCTURAL STEEL FRAMING RELATED TO THE BUILDING SUPERSTRUCTURE. HOLLAND ENGINEERING, LLC IS RESPONSIBLE FOR THE STRUCTURAL DESIGN OF THE FOUNDATION ONLY.
2. THE METAL BUILDING MANUFACTURER SHALL DESIGN THE SUPERSTRUCTURE, ASSUMING PINNED BASE CONNECTIONS TO THE FOUNDATION.
3. THE CONTRACTOR SHALL REFER TO THE PRE-ENGINEERED METAL BUILDING DRAWINGS AND SPECIFICATIONS FOR FRAMING OF THE SUPERSTRUCTURE. THE ANCHOR RODS SHALL BE INSTALLED IN ACCORDANCE WITH THE ANCHOR BOLT SETTING PLAN DOCUMENTS PREPARED BY THE METAL BUILDING MANUFACTURER.
4. METAL BUILDING SHALL BE DESIGNED TO CONFORM TO THE FOLLOWING LOADS, OR LATEST MBMA SPECIFICATIONS, WHICHEVER ARE MORE CRITICAL:
   - DEAD LOAD ---------- ACTUAL WEIGHT
   - COLLATERAL LOAD ---------- 5 PSF
   - SPRINKLERS ---------- AS REQ'D. - COORD. W/ ARCH'L.
   - ROOF LIVE LOAD ---------- 20 PSF (REDUCIBLE)
   - WIND LOAD ---------- REF. CODES & LOADS
5. METAL BUILDING SHALL BE DESIGNED TO CONFORM TO THE FOLLOWING DRIFT AND DEFLECTION CRITERIA:
   - BUILDING BARE FRAME DRIFT: H/180 (METAL PANEL FINISH)
   - BUILDING BARE FRAME DRIFT: H/240 (EIFS FINISH)
   - BUILDING BARE FRAME DRIFT: H/360 (MASONRY FINISH)
   - ROOF PURLINS AND GIRDERS: L/240 (TOTAL) & L/360 (LIVE)
   - WALL GIRTS: L/180 (METAL PANEL FINISH)
   - WALL GIRTS: L/240 (EIFS FINISH)
   - WALL GIRTS: L/600 (MASONRY FINISH)
   - WALL PANELS: L/120 (METAL PANEL FINISH)
6. ADDITIONAL UNIFORM AND/OR CONCENTRATED LOADS, WHERE INDICATED ON THE ARCHITECTURAL, STRUCTURAL, AND/OR MEP DRAWINGS, SHALL BE INCLUDED IN THE DESIGN.
7. THE PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL ALLOW FOR THE CONNECTION OF INTERIOR AND EXTERIOR METAL STUD WALLS AND FLOOR JOISTS TO THE PRE-ENGINEERED METAL BUILDING SYSTEM AND COMPONENTS (WHERE INDICATED). SPANDREL BEAMS/GIRTS SHALL BE PROVIDED WHERE NECESSARY FOR SUPPORT OF WALL STUDS AND FINISH. COORDINATE ELEVATIONS OF SPANDREL BEAMS, EAVES, FRAMES, ETC. WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS.
8. THE PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL SUBMIT COMPLETE SHOP DRAWINGS, DESIGN CALCULATIONS, DETAILS, AND SPECIFICATIONS FOR ALL METAL BUILDING ELEMENTS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION OR ERECTION. THESE SUBMITTALS SHALL BE SEALED BY THE LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS RESPONSIBLE FOR THE SUPERSTRUCTURE DESIGN. SUBMITTAL SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   - A. BUILDING ANCHOR ROD AND FRAMING LAYOUT PLANS.
   - B. DESIGN LOADS ON THE OVERALL BUILDING AND INDIVIDUAL MEMBERS.
   - C. DRIFT AND DEFLECTION CRITERIA USED FOR THE OVERALL BUILDING AND INDIVIDUAL MEMBERS FOR GRAVITY LOADING AND WIND LOADING.
   - D. DIMENSIONAL, SECTION, AND MATERIAL PROPERTIES OF ALL MEMBERS.
   - E. ALLOWABLE AND ACTUAL DESIGN STRESSES FOR EACH MEMBER.
   - F. LOCATION AND TYPE OF BRACING FOR OVERALL BUILDING AND INDIVIDUAL MEMBERS (WIND BENTS, X-BRACING, SAG RODS, PURLIN FLANGE BRACING, ETC.)
   - G. ANCHOR RODS, DIAMETER, AND PROJECTION REQUIREMENTS.
   - H. TABULATION OF THE HORIZONTAL AND VERTICAL REACTIONS TO BE TRANSMITTED TO THE FOUNDATION. TABULATION OF REACTIONS SHALL INCLUDE INDIVIDUAL LOAD CASES (DEAD, LIVE, WIND, ETC.), AS WELL AS MAXIMUM & MINIMUM REACTIONS BASED ON CODE-PRESCRIBED LOAD COMBINATIONS (WITH CONTROLLING LOAD COMBINATION IDENTIFIED).
   - I. ALL NECESSARY CONNECTION DETAILS. SUBMITTAL WILL BE REVIEWED BY HOLLAND ENGINEERING, LLC FOR GENERAL COMPLIANCE WITH THE PROJECT SPECIFICATIONS AND REQUIREMENTS. THIS REVIEW WILL NOT RELIEVE THE MANUFACTURER AND LICENSED DESIGN ENGINEER OF RESPONSIBILITY FOR PERFORMANCE OF THE SUPERSTRUCTURE.
9. THE PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL SUBMIT A LETTER OF CERTIFICATION WITH THE SHOP DRAWING SUBMITTAL INDICATING THE FOLLOWING:
   - A. ACKNOWLEDGE RECEIPT OF FOUNDATION CONSTRUCTION DOCUMENTS.
   - B. DESIGN CODES AND LOADS.
   - C. DESIGN DRIFT CRITERIA FOR FRAMES.
   - D. DESIGN DEFLECTION CRITERIA

IBC SPECIAL INSPECTION REQUIREMENTS

1. IN ACCORDANCE WITH SECTION 1704, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (RDPIRC) ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER SECTION 1705. SPECIAL INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS IDENTIFIED IN SECTION 110.
2. SPECIAL INSPECTION WORK AND THE FINAL LETTER OF COMPLIANCE HAVE NOT BEEN INCLUDED IN THE STRUCTURAL ENGINEER OF RECORD'S (SER) SCOPE OF SERVICES. PERIODIC SITE OBSERVATIONS PERFORMED BY SER ARE MADE FOR GENERAL CONFORMANCE PURPOSES AND SHALL NOT BE CONSIDERED SPECIAL INSPECTIONS.
3. SPECIAL INSPECTORS AND TESTING TECHNICIANS SHALL NOT BE EMPLOYED BY THE GENERAL CONTRACTOR, SUBCONTRACTORS, OR MATERIAL SUPPLIERS. SPECIAL INSPECTOR QUALIFICATIONS SHALL BE SUBMITTED TO AND APPROVED BY THE LOCAL BUILDING OFFICIAL.
4. ARRANGEMENTS FOR SPECIAL INSPECTIONS SHALL BE MADE PRIOR TO COMMENCEMENT OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING SPECIAL INSPECTOR IN A TIMELY MANNER BEFORE CONSTRUCTION ACTIVITIES CONTINUE. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK REQUIRING INSPECTIONS WITHOUT THE PRESENCE OF A SPECIAL INSPECTOR.
5. SPECIAL INSPECTORS SHALL MAINTAIN RECORDS OF INSPECTIONS. REPORTS SHALL INDICATE WHETHER WORK WAS OR WAS NOT COMPLETED IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES THAT REQUIRE CORRECTION. DISCREPANCIES NOT CORRECTED SHALL BE BROUGHT TO THE ATTENTION OF THE LOCAL BUILDING OFFICIAL AND THE RDPIRC PRIOR TO COMPLETION OF THAT PHASE OF WORK.
6. ALL SPECIAL INSPECTION REPORTS SHALL BE SUBMITTED TO THE LOCAL BUILDING OFFICIAL, RDPIRC, ARCHITECT, AND ENGINEER OF RECORD FOR EACH DISCIPLINE OF WORK INSPECTED.
7. CONTINUOUS SPECIAL INSPECTION SHALL BE DEFINED AS THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.
8. PERIODIC SPECIAL INSPECTION SHALL BE DEFINED AS THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN, OR IS BEING, PERFORMED AND AT THE COMPLETION OF THE WORK.
9. REFER TO IBC SECTIONS 1704 AND 1705 AND ANY LOCAL JURISDICTION AMENDMENTS FOR ALL SPECIAL INSPECTION REQUIREMENTS.

THE FOLLOWING SPECIAL INSPECTIONS IN TABLE FORM ARE REQUIRED ONLY IF MARKED WITH "X", "C", OR "P".
X - INSPECTION IS REQUIRED, ONE TIME OCCURRENCE
C - INSPECTION IS REQUIRED AND SHALL BE CONTINUOUS
P - INSPECTION IS REQUIRED AND SHALL BE PERIODIC
INSPECTION MARK FIELDS LEFT BLANK ARE NOT REQUIRED FOR THIS PROJECT.

VERIFICATION AND INSPECTION OF STRUCTURAL STEEL CONSTRUCTION (IBC 1705.2.1)

INSPECTION MARK	INSPECTION OR TEST TYPE	COMMENTS	REFERENCE
X	REVIEW FABRICATOR'S FABRICATION AND QUALITY CONTROL PROCEDURES		IBC 1704.2.5
P	VERIFY IDENTIFICATION MARKINGS FOR HIGH-STRENGTH BOLTS, NUTS, & WASHERS CONFORM TO ASTM STANDARDS SPECIFIED ON APPROVED CONSTRUCTION DOCUMENTS		APPLICABLE ASTM STD. & AISC 360
P	REVIEW MANUFACTURER'S CERTIFICATE OF COMPLIANCE FOR HIGH-STRENGTH BOLTS, NUTS, AND WASHERS		ASTM
P	INSPECTION OF HIGH-STRENGTH, SNUG-TIGHTENED, BEARING-TYPE BOLTED CONNECTIONS	VERIFY CONNECTED MATERIALS ARE SNUG AND DRAWN TOGETHER AND VERIFY ALL BOLTS ARE INSTALLED	AISC 360
X	VERIFY IDENTIFICATION MARKINGS FOR STRUCTURAL STEEL CONFORM TO ASTM STANDARDS SPECIFIED ON APPROVED CONSTRUCTION DOCUMENTS		APPLICABLE ASTM STD. & AISC 360
X	REVIEW STRUCTURAL STEEL MILL CERTIFICATES AND TEST REPORTS		ASTM A6
X	VERIFY IDENTIFICATION MARKINGS FOR WELD FILLER MATERIAL CONFORM TO AWS STANDARDS SPECIFIED ON APPROVED CONSTRUCTION DOCUMENTS		AWS / AISC 360
X	REVIEW MANUFACTURER'S CERTIFICATE OF COMPLIANCE FOR WELD FILLER MATERIAL		AWS / AISC 360
C	INSPECTION OF COMPLETE AND PARTIAL PENETRATION GROOVE WELDS	NONDESTRUCTIVE TESTING	AWS D1.1/AISC 360
C	INSPECTION OF MULTIPASS FILLET WELDS	NONDESTRUCTIVE TESTING	AWS D1.1/AISC 360
C	INSPECTION OF SINGLE-PASS FILLET WELDS > 5/16"	NONDESTRUCTIVE TESTING	AWS D1.1/AISC 360
P	INSPECTION OF SINGLE-PASS FILLET WELDS < 5/16"		AWS D1.1/AISC 360
P	INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS: A. DETAILS SUCH AS BRACING AND STIFFENING B. MEMBER LOCATIONS C. APPLICATION OF JOINT DETAILS FOR EACH CONN.		

VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

INSPECTION MARK	INSPECTION OR TEST TYPE	COMMENTS	REFERENCE
P	VERIFY IDENTIFICATION MARKINGS FOR COLD-FORMED STEEL DECKING CONFORM TO ASTM STANDARDS SPECIFIED ON APPROVED CONSTRUCTION DOCUMENTS		APPLICABLE ASTM STD. & SDI QA/QC
P	REVIEW MANUFACTURER'S CERTIFIED TEST REPORTS		
P	INSPECTION OF FLOOR AND ROOF DECK WELDS		AWS D1.3/AISC 360
P	INSPECTION OF FLOOR AND ROOF DECK MECHANICAL FASTENERS	COORDINATE W/ MANUFACTURER'S PUBLISHED LITERATURE AND ICC-ES REPORTS	ANSI/SDI QA/QC-2011
P	VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706		AWS D1.4/ACI 318

VERIFICATION AND INSPECTION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS (IBC 1705.2.3)

INSPECTION MARK	INSPECTION OR TEST TYPE	COMMENTS	REFERENCE
P	VERIFY AND INSPECT END CONNECTIONS - BOLTED OR WELDED		SJI SPECS. LISTED IN SECTION 2207.1
	BRIDGING - HORIZONTAL OR DIAGONAL		
P	1. STANDARD BRIDGING		SJI SPECS. LISTED IN SECTION 2207.1
P	2. BRIDGING THAT DIFFERS FROM THE SJI SPECIFICATIONS LISTED IN SECTION 2207.1		

VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION (IBC 1705.3)

INSPECTION MARK	INSPECTION OR TEST TYPE	COMMENTS	REFERENCE
P	INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT	ONCE BEFORE PLACMENT OF CONCRETE FOR EACH POUR	ACI 318: Ch. 20, 25.2, 25.3, 26.5.1-26.5.3
P	INSPECTION OF ANCHORS CAST IN CONCRETE	ONCE BEFORE PLACMENT OF CONCRETE FOR EACH POUR	ACI 318: 17.8.2
C	INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS		ACI 318: 17.8.2.4
P	B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN "A" ABOVE		ACI 318: 17.8.2
P	VERIFYING USE OF REQUIRED DESIGN MIX	EACH BATCH, EACH POUR	ACI 318: Ch. 19, 26.4.3, 26.4.4
C	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE		ASTM C172 & C31 ACI 318: 26.4.5, 26.12
C	INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES		ACI 318: 26.4.5
P	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		ACI 318: 26.4.7-26.4.9
P	INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		ACI 318: 26.10.1b

VERIFICATION AND INSPECTION OF MASONRY CONSTRUCTION (IBC 1705.4)

INSPECTION MARK	INSPECTION OR TEST TYPE	COMMENTS	REFERENCE TMS 602/ACI 530.1/ASCE 6
	VERIFY SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE FOR SELF-CONSOLIDATING GROUT		ART. 1.5B.1.b.3
	VERIFY f'm COMPLIANCE WITH CONSTRUCTION DOCUMENTS	TEST EACH TYPE OF MASONRY	ART. 1.4B
P	VERIFY COMPLIANCE WITH APPROVED SUBMITTALS	WEEKLY DURING MASONRY CONSTRUCTION	ART. 1.5
P	VERIFY PROPORTIONS OF SITE PREPARED MORTAR	PRIOR TO START OF EACH LIFT	ART. 2.1 & 2.6A
P	VERIFY CONSTRUCTION OF MORTAR JOINTS	PRIOR TO START OF EACH LIFT	ART. 3.3B
P	VERIFY SIZE AND LOCATION OF STRUCTURAL ELEMENTS	PRIOR TO START OF EACH LIFT	ART. 3.3F
P	VERIFY PROPER PLACEMENT, SIZE, GRADE, TYPE, AND LOCATION OF REINFORCEMENT, CONNECTORS, AND ANCHORAGES	PRIOR TO START OF EACH LIFT	ART. 2.4, 3.2E, 3.4 & 3.6A
P	VERIFY PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F)	ONE EACH OCCURRENCE	ART. 1.8C & 1.8D
P	VERIFY PROPORTIONS OF SITE-PREPARED GROUT	PRIOR TO START OF EACH LIFT	ART. 2.6B & 2.4G.1.b
P	VERIFY PROPER GROUT SPACING AND CLEANLINESS OF CELL PRIOR TO GROUTING	PRIOR TO START OF EACH LIFT	ART. 3.2D & 3.2F
C	OBSERVE AND VERIFY GROUT PLACEMENT IS IN COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS		ART. 3.5 & 3.6C
P	OBSERVE PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS, OR PRISMS		ART. 1.4B.2.a.3, 1.4B.2.b.3, 1.4B.2.c.3, 1.4B.3, 1.4B.4

VERIFICATION AND INSPECTION OF SOILS (IBC 1705.6)

INSPECTION MARK	INSPECTION OR TEST TYPE	COMMENTS	REFERENCE
P	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	REFER TO PROJECT GEOTECHNICAL REPORT	
P	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	REFER TO PROJECT GEOTECHNICAL REPORT	
P	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	REFER TO PROJECT GEOTECHNICAL REPORT	
C	VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF FILL	REFER TO PROJECT GEOTECHNICAL REPORT	
P	PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	REFER TO PROJECT GEOTECHNICAL REPORT	

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ISSUED FOR:
- ☐ PRELIMINARY
- ☐ REVIEW
- ■ PERMIT
- ■ BIDDING
- ☐ CONSTRUCTION

PROJECT: NEW FIRE STATION	
DRAWN BY:	DES/CBE
JOB NO.:	2025.11
DATE:	08/01/25
REVISION:	
SHEET: GENERAL NOTES	

S1

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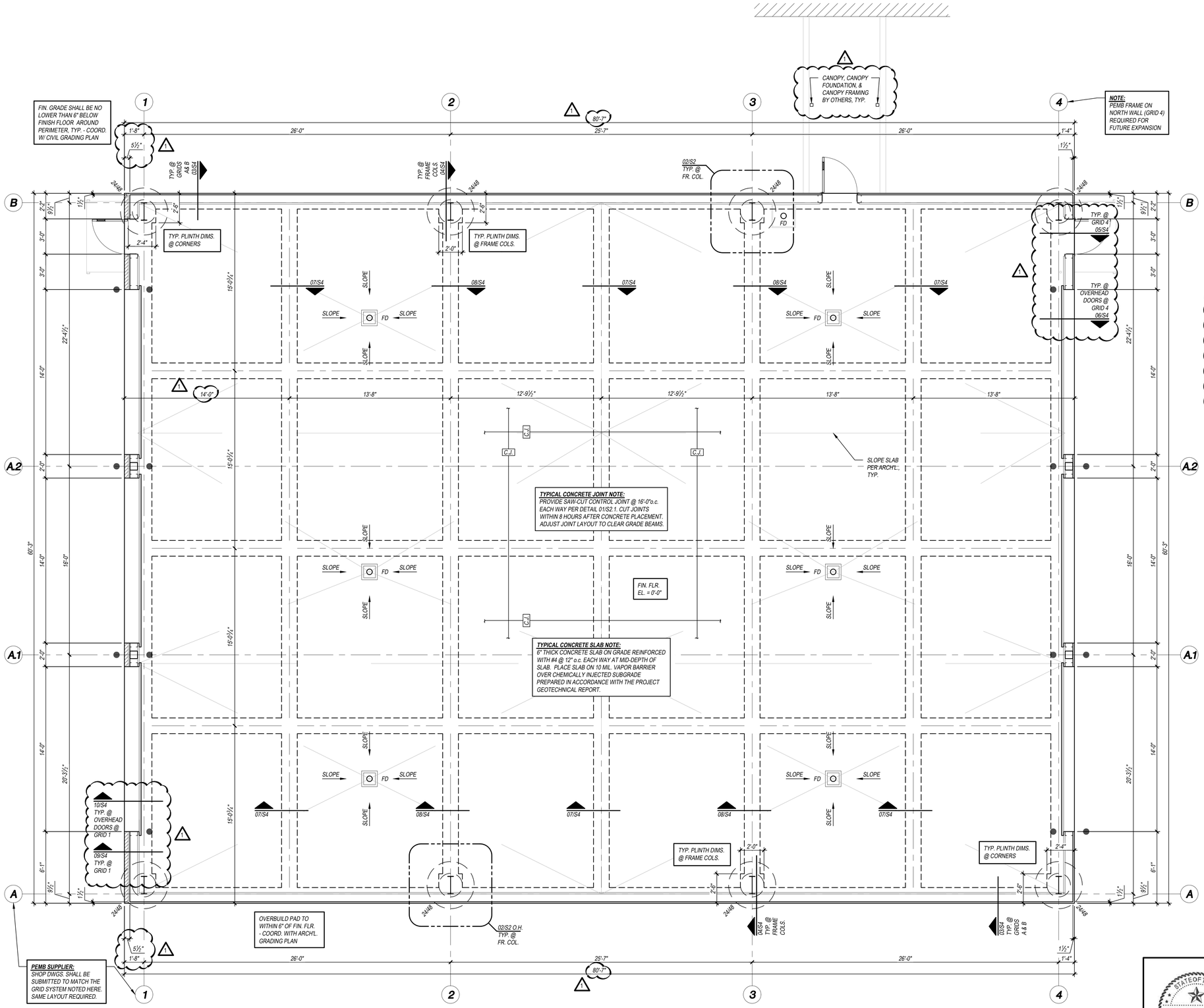


01 FOUNDATION PLAN

SCALE: ¼" = 1'-0"

PLAN NORTH

FOUNDATION PLAN NOTES:

1. REFER TO SHEET S0 FOR GENERAL NOTES.
2. REFERENCE FINISH FLOOR ELEVATION = 0'-0"
   ACTUAL FINISH FLOOR ELEVATION = 365.77' (FIELD VERIFY).
3. 24/48, EXAMPLE, DENOTES DRILLED PIER SIZE. (REFER TO SHEET S4 SCHEDULE & DETAILS.)
4. REFER TO SHEET S2.1 FOR TYPICAL DETAILS NOT SPECIFICALLY SHOWN ON PLAN.
5. FD, EXAMPLE, DENOTES FLOOR DRAIN. COORD. LOCATION AND ELEVATION WITH ARCH'L. DRAWINGS.
6. COORDINATE ALL WALL LOCATIONS WITH ARCH'L. WALL LAYOUT PLANS.

VAPOR BARRIER NOTE:
FURNISH AND INSTALL 10 MIL. POLYETHYLENE MEMBRANE VAPOR BARRIER UNDER ALL INTERIOR SLABS ON GRADE. VAPOR BARRIER SHEETS SHALL BE INSTALLED OVER LEVEL, COMPACTED, SUBGRADE WITH MINIMUM 6" JOINT LAPS. JOINT LAPS SHALL BE SEALED CONTINUOUSLY WITH MANUFACTURER'S TAPE. SEAL CAREFULLY AROUND ALL PIPES, CONDUITS, ETC., WHICH PENETRATE THE SLAB. SEAL ALL TEARS AND PUNCTURES PRIOR TO PLACING CONCRETE.

SITE PREPARATION NOTE:
ALL SITE PREPARATION, INCLUDING BUT NOT LIMITED TO SURFACE AND SUBSURFACE GROUNDWATER DRAINAGE AND SITE RETAINING WALLS, SHALL BE AS DESIGNED AND SPECIFIED BY THE GEOTECHNICAL ENGINEER, CIVIL ENGINEER, AND/OR RETAINING WALL ENGINEER.

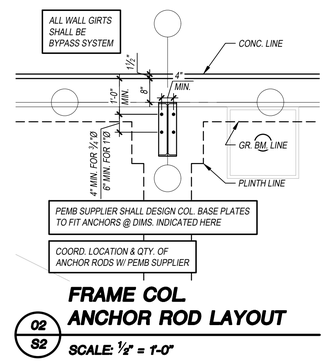
CONTRACTOR AND/OR OWNER SHALL PROVIDE FOR DRAINAGE ASSESSMENTS AND OBTAIN SITE GRADING RECOMMENDATIONS FROM A LICENSED PROFESSIONAL CIVIL ENGINEER. HOLLAND ENGINEERING, LLC SHALL NOT BE HELD LIABLE FOR THE SITE GRADING AND DRAINAGE.

CONTRACTOR NOTE:
CONCRETE PLINTH AND DRILLED PIER SIZES INDICATED HERE ARE PRELIMINARY BASED ON ASSUMED COLUMN SIZES AND REACTIONS IN LIEU OF ACTUAL PROJECT SPECIFIC INFORMATION FROM THE PEMB SUPPLIER. PLINTH AND DRILLED PIER SIZES ARE SUBJECT TO CHANGE WITH THE FINAL BUILDING DESIGN. THEREFORE, CONCRETE SHALL NOT BE PLACED UNTIL FINAL REACTIONS HAVE BEEN PROVIDED BY THE PEMB SUPPLIER AND FOUNDATION DESIGN HAS BEEN APPROVED AND/OR REVISED BY HOLLAND ENGINEERING, LLC.

CONCRETE SUBCONTRACTOR SHALL PROVIDE A LINE ITEM UNIT COST IN BASE BID TO ACCOMMODATE ANY NECESSARY FOOTING SIZE INCREASES. IF FOOTING SIZES ARE REDUCED, OWNER SHALL BE GIVEN A CREDIT BASED ON THE SAME UNIT COST.

SPECIAL NOTE:
DETAILS AND DRAWINGS IN THIS SET OF CONSTRUCTION DOCUMENTS REPRESENT CONSTRUCTION REQUIREMENTS FOR THE FLOOR SLAB AND FOUNDATION SYSTEM ONLY. NO LIABILITY, WHETHER EXPRESS OR IMPLIED, FOR DESIGN OF ROOF OR FLOOR FRAMING, WIND BRACING, WALL FRAMING, COLUMNS, OR ANY OTHER SUPERSTRUCTURE FRAMING, SHALL BE ASSUMED BY HOLLAND ENGINEERING, LLC.

SPECIAL NOTE:
UNLESS NOTED OR SPECIFICALLY DETAILED OTHERWISE, ALL BEAM/GIRTS, RIGID FRAMES, COLUMNS, ANCHOR BOLTS, PURLINS, BRACING, ETC. SHALL BE DESIGNED, DETAILED, AND PROVIDED BY THE METAL BUILDING MANUFACTURER.



02/S2 FRAME COL ANCHOR ROD LAYOUT

SCALE: ½" = 1'-0"

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STATEMENT OF JURISDICTION
THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS P.O. BOX 12337 AUSTIN, TEXAS 78711-2337 (512)305-9000 HAS JURISDICTION OVER COMPLAINTS REGARDING THE PROFESSIONAL PRACTICES OF PERSONS REGISTERED AS ARCHITECTS IN TEXAS.

STATEMENT OF OWNERSHIP
THIS ELECTRONIC FILE IS RELEASED UNDER THE AUTHORITY OF TEXAS REGISTERED ARCHITECT KYLE D. PAYNE - #14372. THE SEAL AFFIXED TO THIS DOCUMENT IS PLACED PURSUANT TO SUB-CHAPTER F -RULE 1.103 OF THE RULES & REGULATIONS OF THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS. THE USER OF THIS ELECTRONIC FILE AGREES TO ASSUME ALL RESPONSIBILITY FOR ANY MODIFICATION TO OR USE OF THIS DRAWING THAT IS NOT CONSISTENT WITH THE REQUIREMENTS OF THE RULES & REGULATIONS OF THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS. NO PERSON MAY MODIFY THESE DRAWINGS WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ARCHITECT

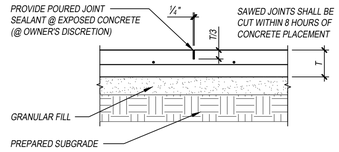
KERENS VOLUNTEER FIRE DEPARTMENT
805 Southeast 3rd Street
Kerens, Texas 75144

ISSUED FOR:
- ☐ PRELIMINARY
- ☐ REVIEW
- ■ PERMIT
- ■ BIDDING
- ☐ CONSTRUCTION

PROJECT: NEW FIRE STATION	
DRAWN BY:	DES/CBE
JOB NO.:	2025.11
DATE:	08/01/25
REVISION:	ADD. #1 08/15/25
SHEET: FOUNDATION PLAN	

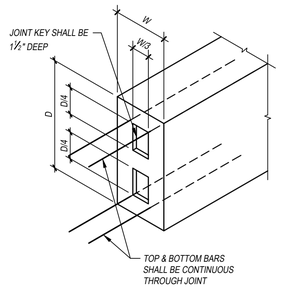
S2

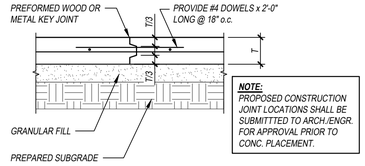
STATE OF TEXAS
JOHN M. HOLLAND
86281
LICENSED PROFESSIONAL ENGINEER
HE #25-029 | TX FIRM #F-8474 (01/31/26)
Holland ENGINEERING
PHYSICAL ADDRESS: 16291 FM 849 • LINDALE, TX
MAILING ADDRESS: P.O. BOX 2428 • LINDALE, TX 75771
903-882-8503 / WWW.HOLLANDENGR.COM



01 S3 TYPICAL SLAB SAWCUT CONTROL JOINT DETAIL

SCALE: NONE





NOTE: PROPOSED CONSTRUCTION JOINT LOCATIONS SHALL BE SUBMITTED TO ARCH./ENGR. FOR APPROVAL PRIOR TO CONC. PLACEMENT.

02 S3 TYPICAL SLAB KEYED CONSTRUCTION JOINT DETAIL

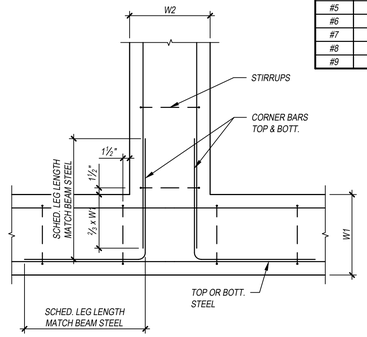
SCALE: NONE

NOTES:
1. CONSTRUCTION JOINTS SHALL BE LOCATED WITHIN 1'-0" OF THE MIDSPAN BETWEEN INTERIOR SUPPORTS.
2. JOINT SHALL NOT BE PLACED IN A SPAN CONTAINING A TOP BAR SPLICE.
3. JOINT SHALL NOT BE PLACED IN THE FIRST SPAN FROM A CORNER OR INTERSECTION.
4. JOINT SHALL NOT BE PLACED IN A CLEAR SPAN OF 10'-0" OR LESS.

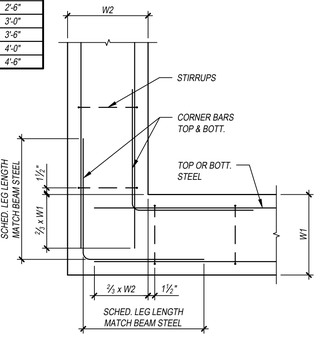
03 S3 TYPICAL GRADE BEAM KEYED CONSTRUCTION JOINT DETAIL

SCALE: NONE

BAR SIZE	LEG LENGTH
#4	2'-0"
#5	2'-6"
#6	3'-0"
#7	3'-6"
#8	4'-0"
#9	4'-6"



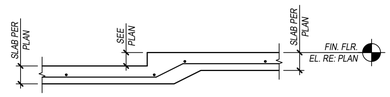
PLAN AT INTERSECTION



PLAN AT CORNER

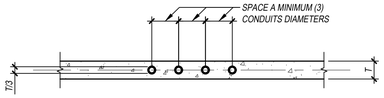
04 S3 TYPICAL GRADE BEAM CORNER BAR DETAIL

SCALE: NONE



05 S3 TYPICAL SLAB DEPRESSION < 3"

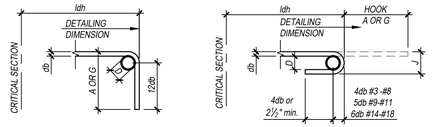
SCALE: NONE



NOTES:
1. CONDUITS SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN ⅓ THE OVERALL THICKNESS OF THE SLAB IN WHICH THEY ARE EMBEDDED.
2. CONDUITS SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS OR WIDTHS ON CENTER.
3. CONDUITS AND PIPES OF ALUMINUM SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE.
4. CONDUITS SHALL BE PLACED BETWEEN TOP AND BOTTOM REINFORCEMENT AND SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE MID-DEPTH OF SLAB.
5. MINIMUM CONCRETE COVER FOR CONDUITS SHALL BE THE SAME AS THAT OF THE SLAB MAIN REINFORCEMENT.
6. LIMIT CONDUIT CROSSING.

06 S3 TYPICAL EMBEDDED CONDUITS DETAIL

SCALE: NONE

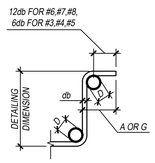


RECOMMENDED END HOOKS, ALL GRADES

BAR SIZE	FINISHED BEND DIAMETER D. (IN.)	180° HOOK		90° HOOK	HOOK DEVELOPMENT LENGTH
		A OR G (IN.)	J. (IN.)	A OR G (IN.)	ldh (IN)
#3	2¼	5	3	6	9
#4	3	6	4	8	11
#5	3¾	7	5	10	14
#6	4½	8	6	12	17
#7	5¼	10	7	14	19
#8	6	11	8	16	22
#9	9½	15	11¾	19	25
#10	10¾	17	13¾	22	28
#11	12	19	14¾	24	31
#14	18¼	27	21¼	31	37
#18	24	36	28½	41	50

07 S3 TYPICAL DETAIL END HOOK TYPES

SCALE: NONE



STIRRUP AND TIE HOOKS, ALL GRADES

BAR SIZE	D (IN.)	90° HOOK A OR G (IN.)	135° HOOK A OR G (IN.)	H
#3	1½	4	4	2½
#4	2	4½	4½	3
#5	2½	6	5½	3¼
#6	4½	12	8	4½
#7	5¼	14	9	5¼
#8	6	16	10½	6

08 S3 TYPICAL DETAIL STIRRUP AND TIE HOOK TYPES

SCALE: NONE

REINFORCEMENT DEVELOPMENT SCHEDULE

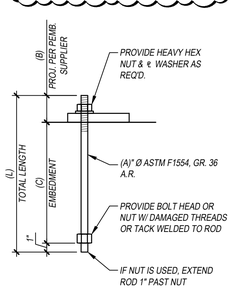
f'_c = 3000 psi, LAP CLASS B

BAR SIZE	DEVELOPMENT LENGTH COMPRESSION	DEVELOPMENT LENGTH TENSION	LAP SPLICE LENGTH COMPRESSION	LAP SPLICE LENGTH TENSION	
				TOP BARS	OTHER BARS
#3	0'-9"	1'-5"	1'-0"	2'-4"	1'-10"
#4	0'-11"	1'-10"	1'-3"	3'-1"	2'-5"
#5	1'-2"	2'-4"	1'-7"	3'-11"	3'-0"
#6	1'-5"	2'-9"	1'-11"	4'-8"	3'-7"
#7	1'-7"	4'-0"	2'-3"	6'-9"	5'-3"
#8	1'-10"	4'-7"	2'-6"	7'-9"	6'-0"
#9	2'-1"	5'-2"	2'-10"	8'-9"	6'-9"
#10	2'-4"	5'-10"	3'-2"	11'-10"	7'-7"

09 S3 REINFORCEMENT DEVELOPMENT SCHEDULE

SCALE: NONE

NOTE: METAL BUILDING ANCHOR ROD SIZES SHOWN HERE ARE PRELIMINARY FOR BIDDING PURPOSES ONLY. ANCHOR RODS SHALL BE ADJUSTED WHEN FINAL COLUMN REACTIONS ARE MADE AVAILABLE.



ANCHOR ROD SCHEDULE

A	B	C	L	WASHER
¾"Ø				
1"Ø				
1"Ø				

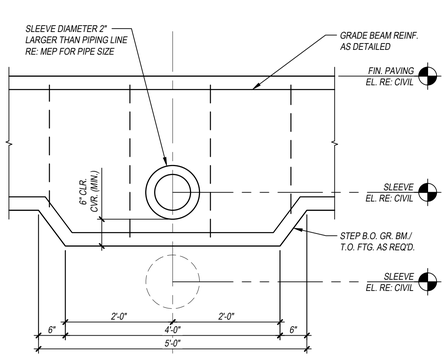
NOTES:
1. ALL ANCHOR RODS SHALL BE ASTM F1554, GRADE 36.
2. THREAD LENGTH SHALL MATCH PROJECTION HEIGHT.
3. ALL NUTS SHALL BE HEAVY HEX.
4. COORDINATE QUANTITY AND LAYOUT W/ PEMB SUPPLIER.
5. COORDINATE PROJECTION REQUIREMENTS W/ PEMB SUPPLIER.
6. SHEAR WASHERS ARE REQUIRED WHERE LISTED BECAUSE OF PEMB THRUST REACTIONS.
7. ALL BOLTS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION PER AISC AFTER CONC. HAS CURED 14 DAYS.

10 S3 ANCHOR ROD DETAILS AND SCHEDULE FOR PEMB COLUMNS

SCALE: NONE

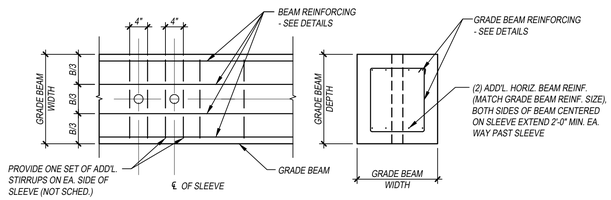
PEMB SUPPLIER NOTE: PLATE WASHERS SHALL BE INSTALLED AT EACH BASE PLATE/ANCHOR ROD WHEN OVERSIZED HOLES ARE USED.

PLAN VIEW @ SHEAR WASHERS



11 S3 TYPICAL SLEEVE THRU GRADE BEAM DETAIL

SCALE: NONE

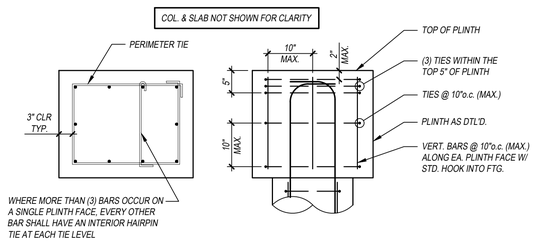


PLAN **SECTION**

NOTES:
1. REQUIRED BEAM SLEEVES ARE TO BE COORDINATED WITH MEP CONTRACTORS. REQUIRED SLEEVES MAY OR MAY NOT BE SHOWN ON THE STRUCTURAL DWGS. GENERAL CONTRACTOR SHALL SUBMIT PLAN SHOWING LAYOUT OF ALL SLEEVES.
2. SLEEVES SHALL BE LOCATED ON THE BEAM CENTERLINE, OR AT LEAST WITHIN THE MIDDLE THIRD OF THE GRADE BEAM WIDTH.
3. CONTINUOUS BEAM REINFORCING MAY BE SLIGHTLY DISPLAYED (3" MAXIMUM) OR ADJACENT BARS BUNDLED (2 BAR BUNDLE MAX.) TO FACILITATE SLEEVE INSTALLATION. DO NOT CUT, OFFSET, OR BEND REINFORCING.
4. SLEEVES OCCURRING ON OPPOSITE SIDES OF A PIER MUST BE IN LINE.
5. THE OUTSIDE DIAMETER OF A SLEEVE MAY NOT EXCEED 15% OF THE WIDTH OF THE GRADE BEAM THROUGH WHICH IT MUST PASS. THE CONTRACTOR SHALL CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR DIRECTIONS WHEN A SLEEVE SIZE OR LOCATION DOES NOT MEET THE CONDITIONS ESTABLISHED ABOVE.

12 S3 TYPICAL DETAIL VERTICAL PENETRATION, CONCRETE GRADE BEAM

SCALE: NONE



PLAN VIEW **SECTION VIEW**

NOTES:
1. PLINTH TIES SHOWN HERE **MUST** BE INSTALLED ABOVE THE FTG.
2. PROVIDE A MINIMUM OF (4) SETS OF TIES AT ALL PLINTHS.

13 S3 TYPICAL PLINTH REINF. DETAIL

SCALE: NONE

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PROJECT: NEW FIRE STATION	
DRAWN BY:	DES/CBE
JOB NO.:	2025.11
DATE:	08/01/25
REVISION:	

SHEET: FOUNDATION DETAILS

S3

HE #25-029 TX FIRM #F-8474 (01/31/26)
Holland ENGINEERING
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MAILING ADDRESS: P.O. BOX 2428 • LINDALE, TX 75771
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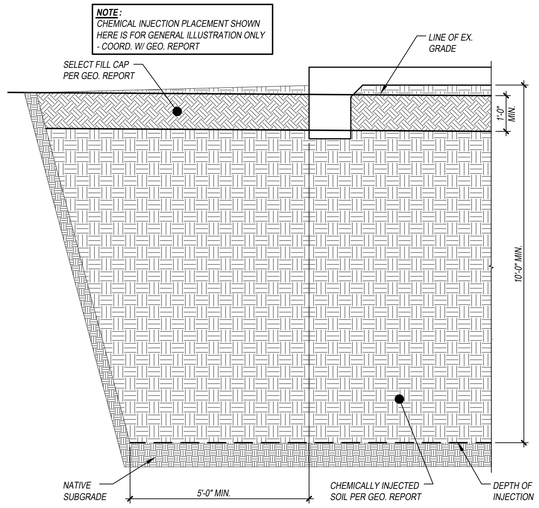


01 S4 SUBGRADE PREPARATION DETAIL

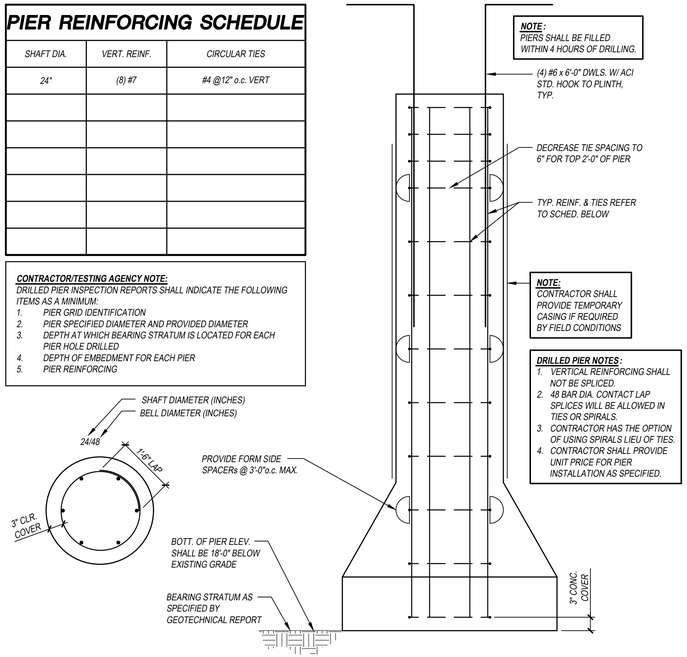
SCALE: NONE

PIER REINFORCING SCHEDULE

SHAFT DIA.	VERT. REINF.	CIRCULAR TIES
24"	(8) #7	#4 @12" o.c. VERT

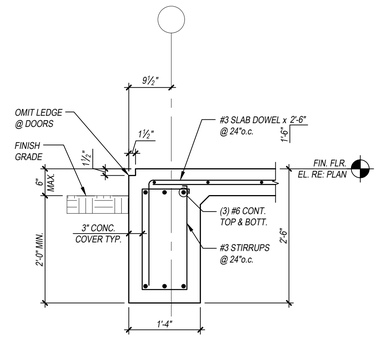
CONTRACTOR/TESTING AGENCY NOTE:
DRILLED PIER INSPECTION REPORTS SHALL INDICATE THE FOLLOWING ITEMS AS A MINIMUM:

1. PIER GRID IDENTIFICATION
2. PIER SPECIFIED DIAMETER AND PROVIDED DIAMETER
3. DEPTH AT WHICH BEARING STRATUM IS LOCATED FOR EACH PIER HOLE DRILLED
4. DEPTH OF EMBEDMENT FOR EACH PIER
5. PIER REINFORCING



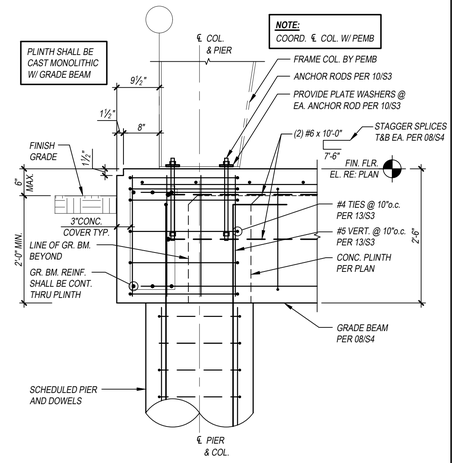
02 S4 TYPICAL DRILLED AND UNDERREAMED PIER DETAIL

SCALE: NONE



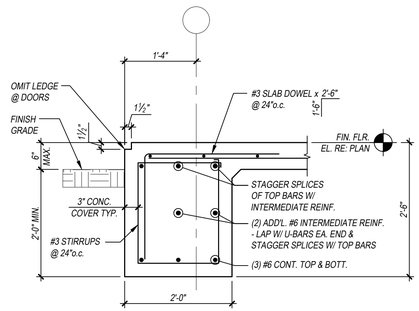
03 S4 SECTION

SCALE: ¾" = 1'-0"



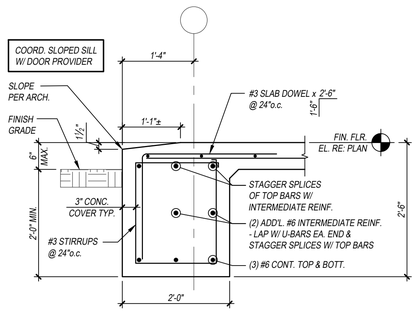
04 S4 SECTION

SCALE: ¾" = 1'-0"



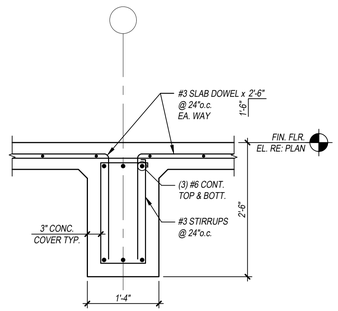
05 S4 SECTION

SCALE: ¾" = 1'-0"



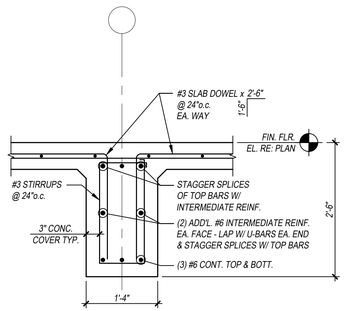
06 S4 SECTION

SCALE: ¾" = 1'-0"



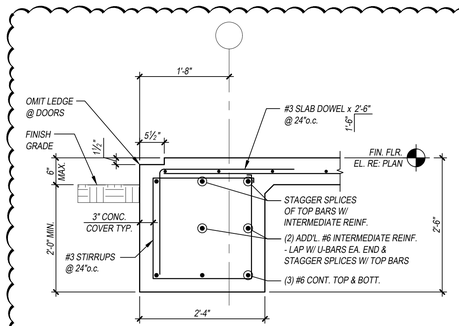
07 S4 SECTION

SCALE: ¾" = 1'-0"



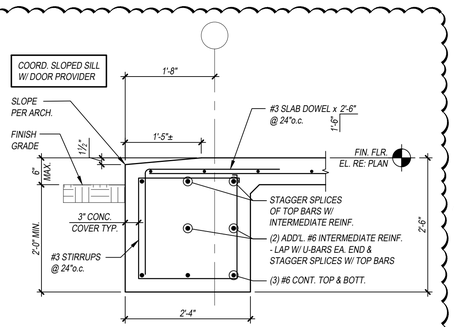
08 S4 SECTION

SCALE: ¾" = 1'-0"



09 S4 SECTION

SCALE: ¾" = 1'-0"



1

10 S4 SECTION

SCALE: ¾" = 1'-0"

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S4

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JOHN M. HOLLAND
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