CONSTRUCTION DOCUMENTS

OWNER
Slidell Independent School District
940-535-5260
www.slidellisd.net

ARCHITECT
WRA Architects, Inc.
214-750-0077
www.wraarchitects.com

CIVIL ENGINEER
RLK Engineering, Inc.
972-359-1733
www.rlkengineering.com

STRUCTURAL ENGINEER
Ponce Fuess Engineering. LLC
469-310-2850
www.ponce-fuess.com

MPE ENGINEER
Salas O'Brien
972-812-1270
www.salasobrien.com

TECHNOLOGY CONSULTANT
Salas O'Brien
972-812-1270
www.salasobrien.com

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, TX 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
STATE OF TEXAS
01/17/2024

PROJECT NAME:
Slidell ISD Vo-Ag Facility

PROJECT ADDRESS:
1 Greyhound Lane Slidell, TX 76267

VOLUME
1

CIVIL
STRUCTURE
ARCHITECTURE
MECHANICAL
PLUMBING
ELECTRICAL
TECHNOLOGY

JOB NO. 2338 A
DATE: 01/17/2024

Cover Sheet

G001

GENERAL NOTES

1. MULTIPLE BID PACKAGE
THE WORK SHOWN ON THESE DRAWINGS IS OF MULTIPLE BID PACKAGES BEING COORDINATED BY A CONSTRUCTION MANAGER.

2. CONSTRUCTION DOCUMENT COORDINATION:
A.) REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR COMPLETE REQUIREMENTS AS COORDINATION IS REQUIRED BETWEEN VARIOUS PORTIONS OF THE WORK. (EXAMPLE: REFER ARCHITECTURAL DRAWINGS FOR LOCATING MECHANICAL, PLUMBING, & ELECTRICAL.)
B.) ANY WORK NOTED AS BY THE GENERAL CONTRACTOR OR BY OTHERS WILL BE ASSIGNED BY THE CONSTRUCTION MANAGER TO THE WORK OF THE TRADE CONTRACTOR GENERALLY PROVIDING THAT TYPE WORK.

3. ALLOWANCES:
A.) REFER TO SPECIFICATIONS, SECTION 01 2100 FOR RULE DESCRIPTION:
B.) PORTIONS OF THE WORK MAY BE BID AT A LATER TIME AND PAID FOR BY FUNDS ASSIGNED TO CASH ALLOWANCES.

4. ITEMS NOT INCLUDED:
A.) REFER TO FLOOR LEGEND FOR INDICATIONS ON DRAWINGS.
B.) ITEMS TYPICALLY PROVIDED BY OWNER:
I) LOOSE FURNITURE
II) INSTRUCTIONAL AND NON-INSTRUCTIONAL COMPUTER SYSTEMS.

5. SITE:
A.) REFER TO CIVIL PLANS FOR SITE GRADING INFORMATION. SLOPE OF SIDEWALKS IS NOT TO EXCEED 5% IN DIRECTION OF TRAVEL AND A 2% CROSS SLOPE. PROVIDE LEVEL SURFACE WITHIN 6'-0" OF EXTERIOR DOORS.
B.) REFER TO ARCHITECTURAL & STRUCTURAL PLANS FOR HORIZONTAL DIMENSIONAL CONTROL OF BUILDINGS. REFER TO ARCHITECTURAL PLAN A100 FOR SIDEWALKS AND SITE CONCRETE. REFER TO CIVIL DWG'S FOR PAVEMENT DIMENSION CONTROL.
C.) SIDEWALKS WITHIN PROPERTY BOUNDARIES SHALL BE CONSTRUCTED ACCORDING TO ARCHITECTURAL PLANS, DETAILS, AND SPECIFICATIONS.
D.) SEAL ALL JOINTS BETWEEN BUILDING AND SIDEWALK ADJACENT TO BUILDING.
E.) CONTRACTORS COORDINATE ACTUAL ADJACENT LANDSCAPE GRASS AND IRRIGATION SYSTEMS TO BE REPAIRED WITH ALL NEW WORK (NEW TO ALIGN WITH AND MATCH EXISTING = TYPICAL)

6. DIMENSIONS:
A.) DO NOT SCALE DRAWINGS UNLESS AUTHORIZED BY ARCHITECT FOR SPECIFIC ITEMS.
B.) DIMENSIONS ARE TYPICALLY SHOWN TO CENTERLINE OF COLUMN, FACE OF METAL STUD (NOT FACE OF DRYWALL), OR FACE OF MASONRY UNLESS SPECIFICALLY NOTED OTHERWISE. PLAN DIMENSIONS AND OTHER DIMENSIONS TO FACE OF BRICK VENEER TYPICALLY REFER TO FACE OF NON-PROJECTED BRICK.
C.) DIMENSIONS OF MASONRY COLUMN SURROUNDS ARE MODULAR. MAINTAIN 3/8" VERTICAL MORTAR JOINTS (REFER TO DETAILS).
D.) DIMENSIONS ARE TO BE CAREFULLY REVIEWED BY CONTRACTORS AND DISCREPANCIES REPORTED TO ARCHITECT FOR CORRECTION BEFORE PROCEEDING WITH THE AFFECTED AREA OF THE WORK.
E.) COORDINATE OPENINGS REQUIRED FOR ITEMS SUCH AS DOORS, WINDOWS, LOUVERS, LOCKERS, ETC. WITH SCHEDULED SIZE.

7. SCHEDULED ITEMS:
A.) FOR ITEMS ON THE SYMBOL LEGEND OR TREATMENT OF THE FOLLOWING TYPICAL ITEMS, REFERENCE THE FOLLOWING INFORMATION:

DOORS/ WINDOWS	REFER TO A300'S
MARKERBOARDS/TACKBOARD	REFER TO A300'S
PARTITION TYPE	REFER TO A300'S
HANDICAP MOUNTING HEIGHTS	REFER TO G202
LINTELS (CMU & STEEL)	REFER TO STRUCTURAL
CASEWORK/ MILLWORK ELEVATIONS	REFER TO A700'S

B.) KEY BOX TO BE RECESSED (5'-0" AFF) INTO BRICK VENEER AT FRONT ENTRIES OF MAIN BUILDING. CONTACT FIRE MARSHAL FOR PURCHASE REQUIREMENTS AND INSTALLATION HEIGHT. REFER TO FLOOR PLANS FOR ADDITIONAL KEY BOX LOCATIONS.

8. MOISTURE PROTECTION:
A.) MASONRY CONTRACTOR IS TO CAREFULLY REVIEW ROOFING DRAWINGS AND ARCHITECTURAL DRAWINGS BEFORE STARTING WORK TO COORDINATE EXACT LOCATIONS OF THRU-WALL FLASHING AND STEPPED FLASHING.
B.) FLEXIBLE FLASHING AT LINTELS ABOVE OPENINGS AND ABOVE STEPPED FLASHING IS TO BE END DAMMED TO STOP LATERAL DRAINAGE AND DIRECT DRAINAGE TO WEEP OPENINGS.
C.) INSTALL FLEXIBLE FLASHING OVER ALL STEEL PENETRATIONS IN SHEATHING.

9. DRYWALL:
A.) PROVIDE MOLD RESISTANT GYPSUM BOARD AT PARTITIONS AT ALL TOILET AREAS AND CEMENTITIOUS OR GLASS-MAT OR TILE BACKER AT SHOWER AREAS.
B.) ALL GYPSUM BOARD SHALL BE TYPE 'X' EXCEPT AS OTHERWISE REQ'D FOR TESTED ASSEMBLY RATING.
C.) PROVIDE FIRE TREATED WOOD BLOCKING OR WHERE SPECIFICALLY INDICATED STEEL BACKING PLATES AND HORIZONTAL REINFORCING IN THE WALL FOR ANCHORAGE OF TOILET PARTITIONS, GRAB BARS, WALL CABINETS, AND MARKER OR TACK BOARDS.
D.) GYPSUM BOARD AS PART OF A FIRE RATED ASSEMBLY IS TO BE EXTENDED AS NECESSARY TO PROVIDE FIRE RATED PROTECTION. CUT GYPSUM BOARD TO A CLOSE FIT TO IRREGULARITIES SUCH AS BAR JOISTS AND SEAL AS REQUIRED FOR FIRE RATINGS.

10. PENETRATIONS / EXPANSION JOINTS:
A.) MECHANICAL PENETRATIONS THRU FIRE RATED PARTITIONS OR FLOORS ARE TO BE PROVIDED WITH FIRE DAMPERS. (REFER TO MECHANICAL DRAWINGS.)
B.) ROOF PENETRATIONS - LOCATE INDIVIDUAL PENETRATIONS WITH 12 INCH MINIMUM CLEARANCE FROM EACH OTHER AND ALL WALLS AND CURBS.
C.) PENETRATIONS THRU WALLS FLOOR CEILING/ROOF WHICH ARE FIRE RATED (AS NOTED OR SCHEDULED) ARE TO BE SEALED AIR TIGHT WITH FIRE RATED SEALANT PER SPECIFICATION.
D.) EXPANSION JOINTS - REFER TO SCHEDULED PENETRATIONS PROTECTION IN RATED WALLS, FLOORS - DRAWING A520'S AND AS SPECIFIED/DETAILED FOR EXPOSED LOCATIONS.
E.) 3/8" CONTROL JOINT IN GYPSUM BOARD IS TO BE USG #093. PROVIDE GYPSUM BOARD CONTROL JOINTS ABOVE AND BELOW EACH EDGE OF DOORS/WINDOWS AND AT OTHER LOCATIONS AS INDICATED ON ELEVATIONS AND AS SPECIFIED.
F.) 3/8" EXPANSION JOINTS IN BRICK SHALL BE SEALED WITH SEALANT AS SPECIFIED OVER BACKER ROD AND COMPRESSIBLE FILLER.
G.) 1" EXPANSION JOINT IN EXTERIOR BRICK SHALL BE SEALED WITH SEALANT AS SPECIFIED OVER BACKER ROD AND PREFORMED COMPRESSIBLE FILLER.

11. DOORS, WINDOWS, AND GLAZING: - REFER TO A301
A.) HARDWARE: ALL DOOR LOCKSETS SHALL COMPLY WITH T.A.S. (ADA) STANDARDS 4.13.9 AND HAVE A MAXIMUM OPERATING FORCE OF 5 LBS. MAXIMUM. DOOR CLOSER OPENING FORCE SHALL NOT EXCEED 5 LBS. FOR INTERIOR DOORS WHEN MEASURED 30" FROM THE HINGE SIDE OF THE DOOR. SET DOORS AT 8 LBS. FOR EXTERIOR DOORS.
B.) ALL GLASS IN A RATED DOOR OR PARTITION SHALL BE RATED TO MATCH OPENING RATING. (REFER TO DOOR AND WINDOW SCHEDULE)
C.) ALL EXTERIOR WINDOW GLASS (INCLUDING ENTRY DOORS) IS TO BE 1" DOUBLE GLAZED INSULATED UNITS (TINTED)
D.) PROVIDE WINDOW COVERINGS AT ALL INTERIOR OF EXTERIOR WINDOWS OF BUILDINGS, WHERE SHOWN ON PLANS.

12. FINISHES:
A.) CONCRETE MASONRY UNITS
I.) EXPOSED CORNERS OF INTERIOR CMU ARE TO BE BULLNOSED EXCEPT THE FIRST COURSE ABOVE THE FLOOR BE SQUARED WHERE SCHEDULED TO RECEIVE BASE.
B.) METAL FLASHING AND EXPOSED STRUCTURE - REFER TO ELEVATIONS AND SECTIONS FOR LOCATIONS. EXPOSED STEEL STRUCTURE SHALL BE FINISH PAINTED IN FIELD. EXPOSED METAL FLASHINGS NOT INDICATED TO BE PRE-FINISHED SHALL BE FIELD PAINTED.
C.) INTERIOR FINISHES:
I.) REFER TO "FINISH CODE" ON A900'S FOR FINISHES.
II.) EXTEND FLOORING OF ROOM INTO CASEWORK KNEESPACE AND TOE SPACES. FINISH REAR WALL OF KNEESPACE TO MATCH WALL FINISH OF ROOM.
III.) PROVIDE RESILIENT TRANSITION STRIP AT ALL CHANGES OF FLOORING TYPE. TRANSITION BETWEEN ROOMS IS TO OCCUR AT THE CLOSED DOOR LOCATION.
IV.) ALL CONCRETE STRUCTURE TO BE LEFT EXPOSED ON THE INTERIOR OR EXTERIOR IS TO BE HAND RUBBED SMOOTH BEFORE FINISHING.

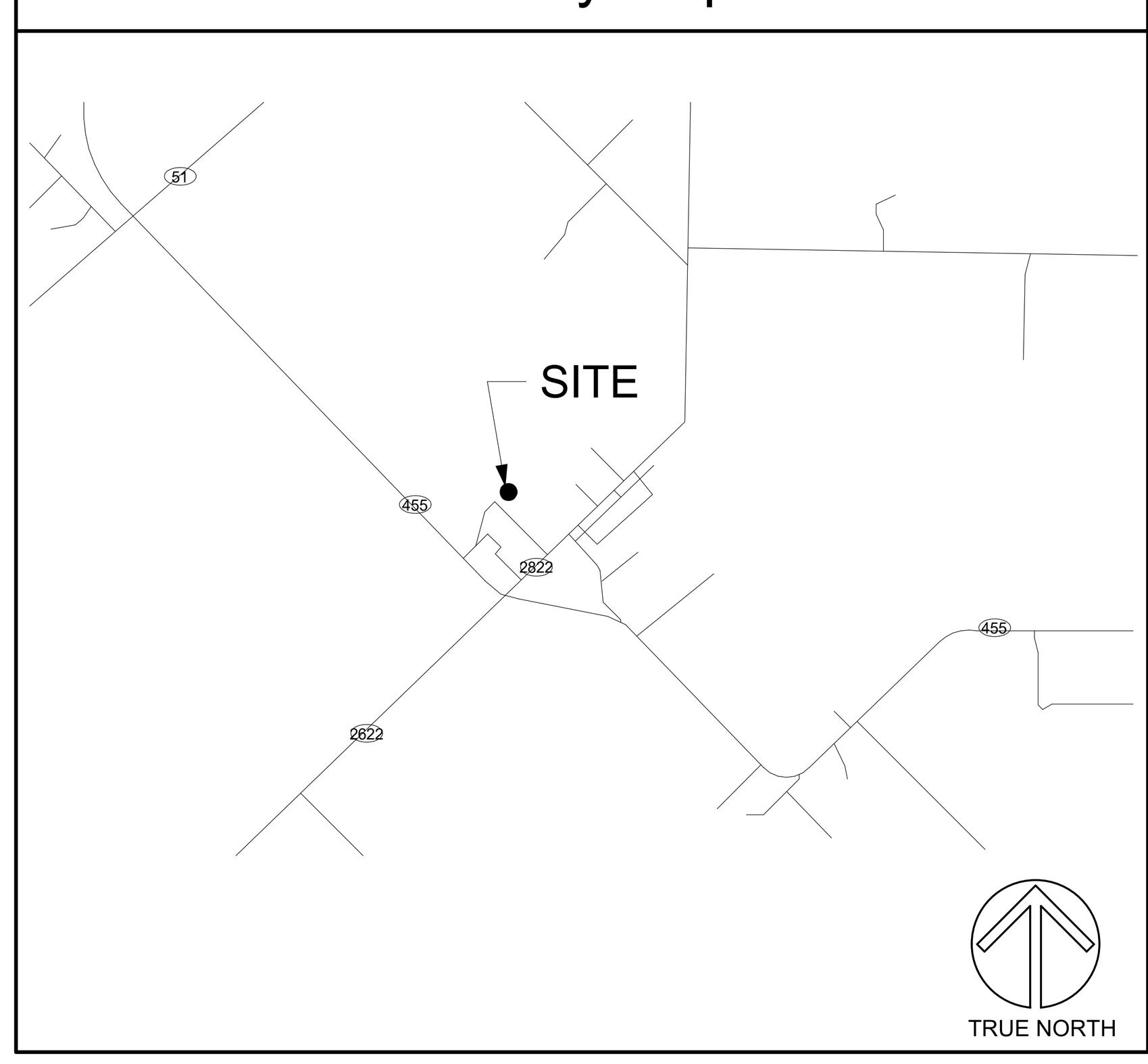
ALTERNATE BIDS:

ADD ALTERNATE #1
Base Bid: Main entry canopy at West wall to be installed in its entirety per documentation.

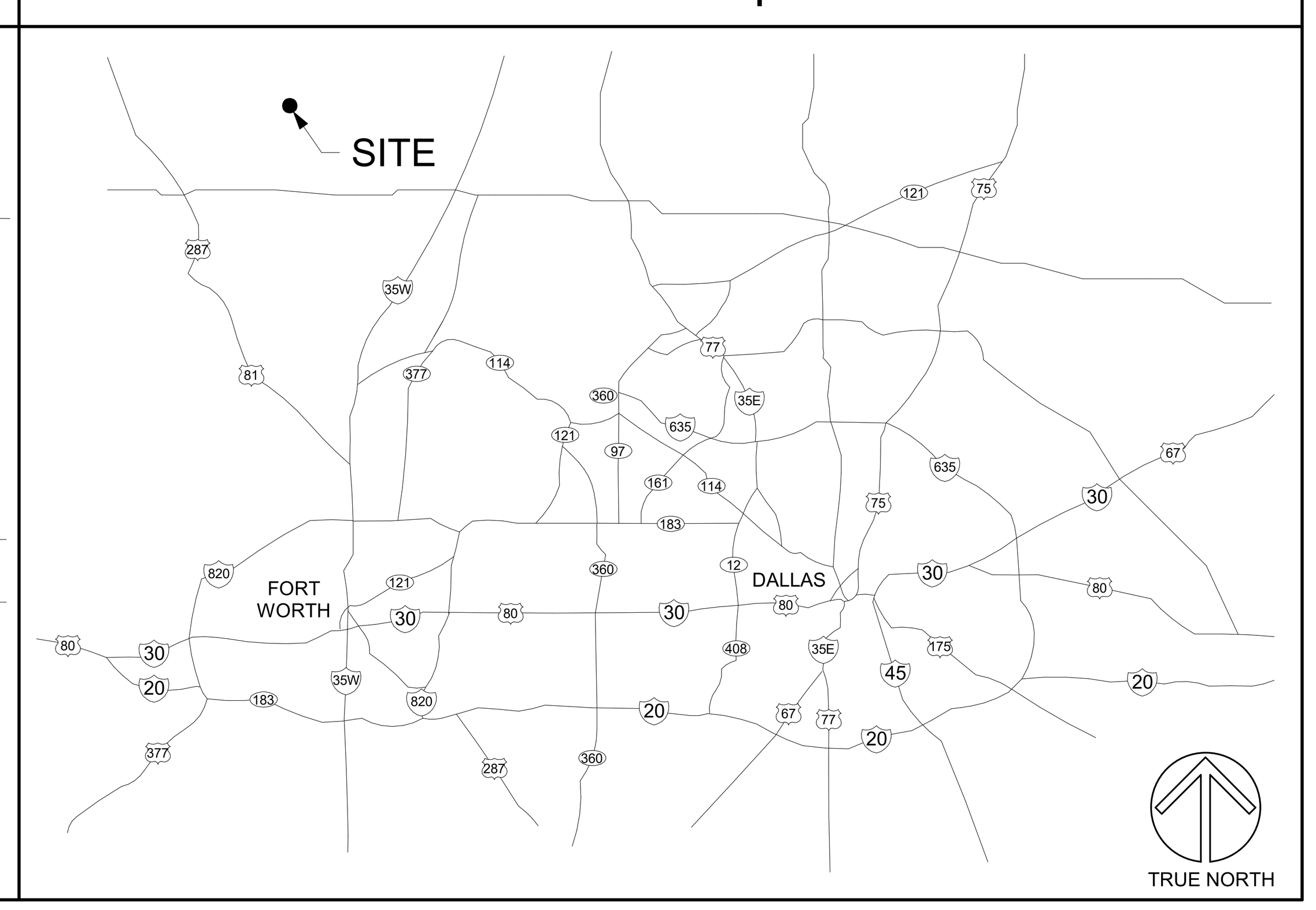
Alternate Bid 1: All additional canopies at the East and West walls to be installed per alternate bid documentation.

ALTERNATE BID NOTES:
1. DISTRICT MAY ACCEPT NONE OR ANY ORDER OF ALTERNATES
2. CONTRACTOR IS RESONSIBLE FOR BIDDING FULLY FUNCTIONAL AND COMPLETE ALTERNATE BID REGARDLESS IF ALL ITEMS RELATED TO THE ALTERNATE ARE DETAILED.
3. NO ADDITIONAL PROJECT TIME IS ALLOTED FOR ALTERNATES.

Vicinity Map



Area Map



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GENERAL

G001	Cover Sheet
G101	Index
G201	ACS Sheet 1
G202	ACS Sheet 2
G401	Axonometric Views

CIVIL

C1	Demolition Plan
C2	Paving Plan
C3	Grading Plan
C4	Water & Sanitary Sewer Plan
C5	Erosion Control Plan
C6	Erosion Control Notes
C7	Erosion Control Details
C8	Site Details

STRUCTURAL

S101	General Notes
S102	Statement of Special Inspections
S201	Foundation Plan
S202	Mezzanine and Canopy Roof Framing Plans
S301	Typical Concrete Details
S302	Concrete Details
S501	Typical Steel Details

ARCHITECTURAL

AD100	Demolition Site Plan
A100	Overall Site Plan
A101	Site Plan
A112	Site Plan Details
A120	Roof Plan
A201	Floor Plan
A221	Enlarged Plans & Details
A301	Door Schedule & Details
A302	Frame Types & Partition Details
A311	Interior Door/Window Details
A312	Exterior Door/Window Details
A401	Exterior Elevations & Exterior Details
A402	Exterior Elevations
A421	Building Sections
A501	Wall Sections
A502	Wall Sections
A503	Wall Sections
A601	Vertical Circulation Drawings
A701	Standard Casework Sections & Elevations
A801	Reflected Ceiling Plan
A901	Finish Floor Plan
A911	Interior Elevations & Finish Details
A921	Sign Types

MECHANICAL

M201	Level 1 - Mechanical Plan
M203	Roof - Mechanical Plan
M231	Mechanical Details
M241	Mechanical Legends
M241.1	Mechanical Schedules

PLUMBING

P100	Plumbing Site Plan
P200	Underfloor - Plumbing Plan
P201	Level 1 - Plumbing Plan
P241	Plumbing Riser Diagram
P242	Plumbing Riser Diagram
P243	Plumbing Riser Diagram
P251	Plumbing Schedules

ELECTRICAL

E100	Electrical Site Plan
E201	Level 1 - Lighting Plan
E201.1	Level 1 - Power Plan
E241	Electrical One Line Diagram
E241.1	Electrical Schedules
E241.2	Electrical Details
E251	Electrical Panel Schedules

TECHNOLOGY

T200	Technology Schedules and Legends
T201	Level 1 - Technology Plan
T251	Technology Details
T252	Technology Details
T253	Technology Details
T254	Technology Details

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
MARY E. O'BRIEN
24365
STATE OF TEXAS
01/17/2024

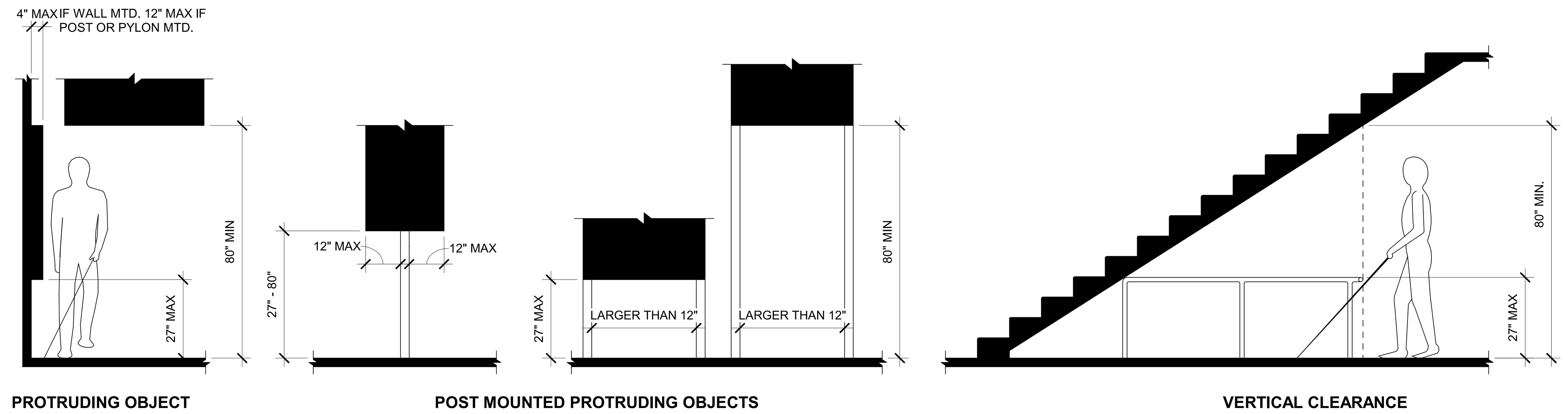
Slidell ISD Vo-Ag Facility
1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

Index

G101

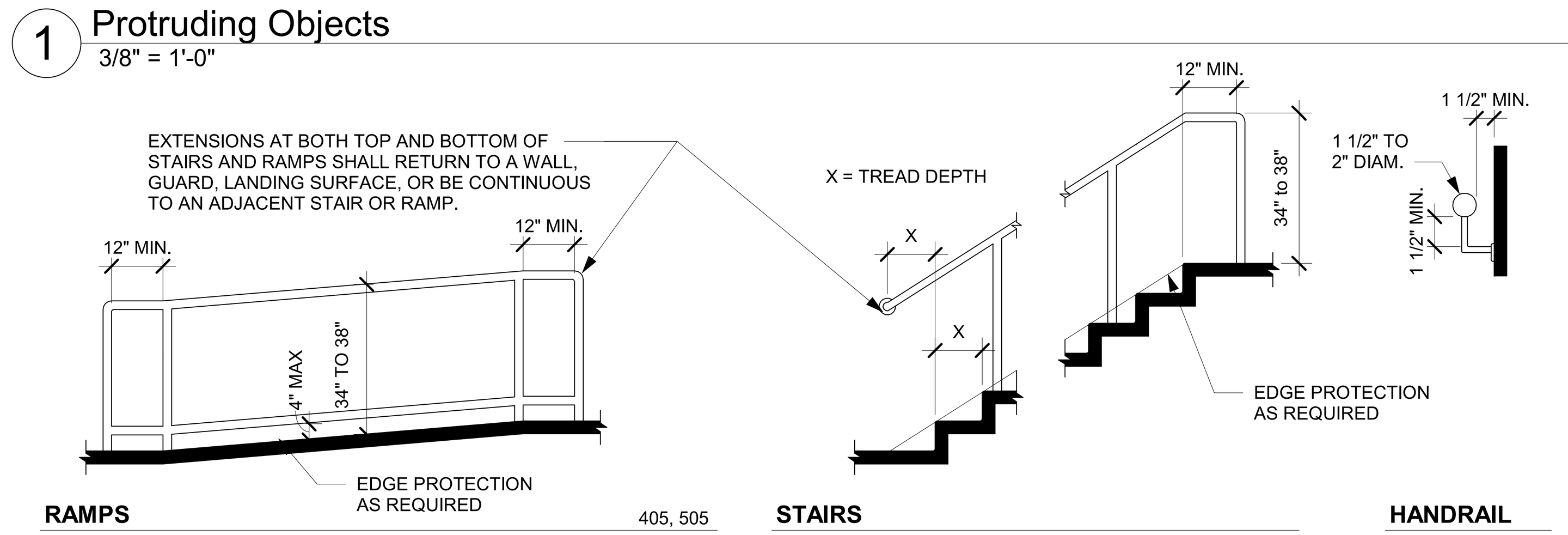


NOTE: IF BOTTOM OF PROTRUDING OBJECT IS GREATER THAN 27" AFF THEN OBJECT MAY NOT PROTRUDE MORE THAN 4" MAXIMUM. IF MOUNTED ON POST OR PYLON, OBJECTS MAY PROTRUDE 12" MAXIMUM FROM 27" - 80" ABOVE GROUND OR FINISHED FLOOR. NO PROTRUDING OBJECT SHALL REDUCE THE CLEAR WIDTH REQUIRED FOR ACCESSIBLE ROUTES. DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78" MINIMUM ABOVE THE FINISH FLOOR.

1 Protruding Objects

3/8" = 1'-0"

307



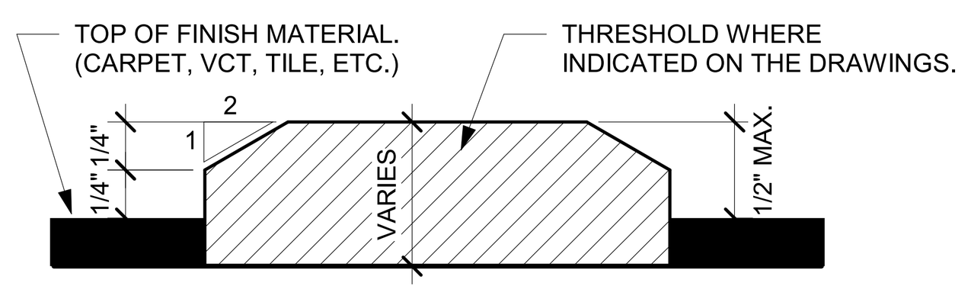
405, 505

RAMP GENERAL NOTES:
1. RUNNING SLOPE CANNOT BE STEEPER THAN 1:12
2. AT EXISTING CONDITIONS:
STEEPER THAN 1:10 BUT NOT STEEPER THAN 1:8 - MAX RISE IS 3"
STEEPER THAN 1:12 BUT NOT STEEPER THAN 1:10 - MAX RISE IS 6"
3. MAX RISE OF ANY RAMP IS 30"
4. EDGE PROTECTION CAN BE CURB/ BARRIER (AS SHOWN ABOVE) OR EXTEND FLOOR /GROUND SURFACE 12" FROM EACH HANDRAIL.
5. EDGE PROTECTION NOT REQUIRED ON RAMP LANDINGS SERVING AN ADJOINING RAMP RUN OR STAIRWAY

STAIR GENERAL NOTES:
1.EXTENSIONS SHALL NOT BE REQUIRED FOR CONTINUOUS HANDRAILS AT THE INSIDE TURN OF SWITCHBACK OR DOGLEG STAIRS AND RAMPS. (505.10)
2. TREAD AND RISERS TO BE UNIFORM AND HAVE A RISE BETWEEN 4"-7" AND TREAD OF 11" DEEP MIN.

2 Handrails at Stairs & Ramps

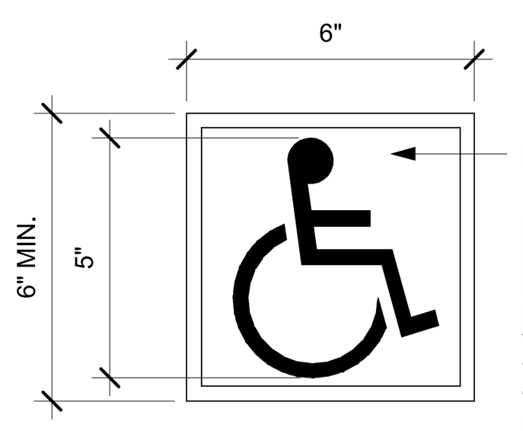
3/8" = 1'-0"



MAXIMUM VERTICAL CHANGE IN LEVEL IS 1/4".
CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" HIGH (MAX) CAN BE BEVELED WITH A SLOPE NO STEEPER THAN 1:2.

3 Threshold

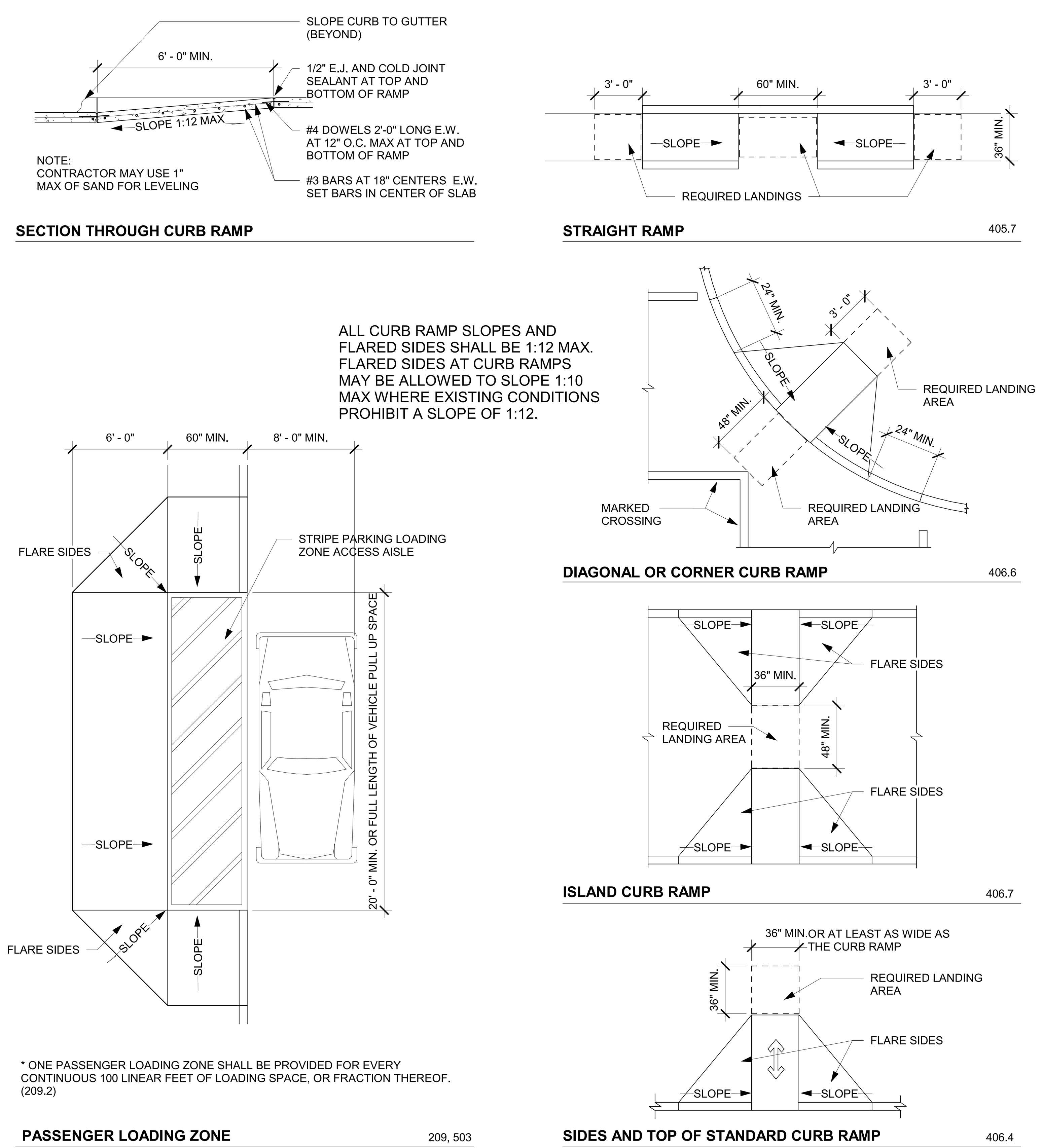
12" = 1'-0"



NOTES:
RAISED CHARACTERS SHALL BE AT LEAST 5/8" HIGH BUT NO HIGHER THAN 2". PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6" MINIMUM IN HEIGHT. ADD BRAILLE WHERE REQUIRED.

4 INTERNATIONAL SYMBOL OF ACCESSIBILITY

3" = 1'-0"



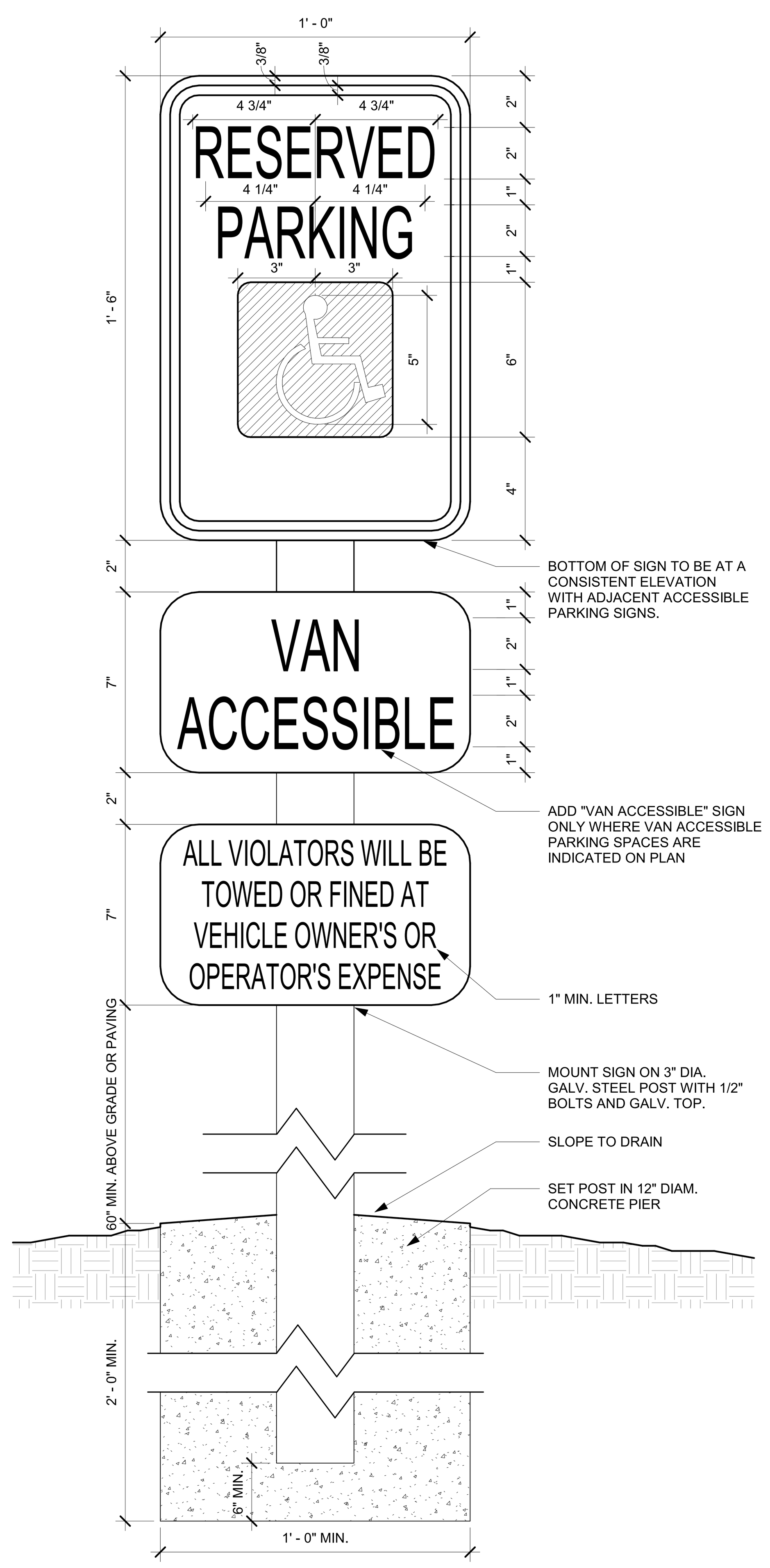
* ONE PASSENGER LOADING ZONE SHALL BE PROVIDED FOR EVERY CONTINUOUS 100 LINEAR FEET OF LOADING SPACE, OR FRACTION THEREOF. (209.2)

PASSENGER LOADING ZONE 209, 503

GENERAL CURB RAMP NOTES:
1. ADJACENT SURFACES TO RAMP MUST BE NO STEEPER THAN 1:20, REQUIRED LANDING AREAS SHALL BE NO STEEPER THAN 1:48.
2. ALL CURB RAMPS OUTSIDE OF PROPERTY (IN RIGHT OF WAY) ARE TO BE DESIGNED BASED ON THE LOCAL JURISDICTION.
3. CURB RAMPS ARE NOT TO BE PROJECTED INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES.
4. RAMPS THAT ARE IN MARKED CROSSINGS SHALL BE CONTAINED WITHIN THAT MARKING.

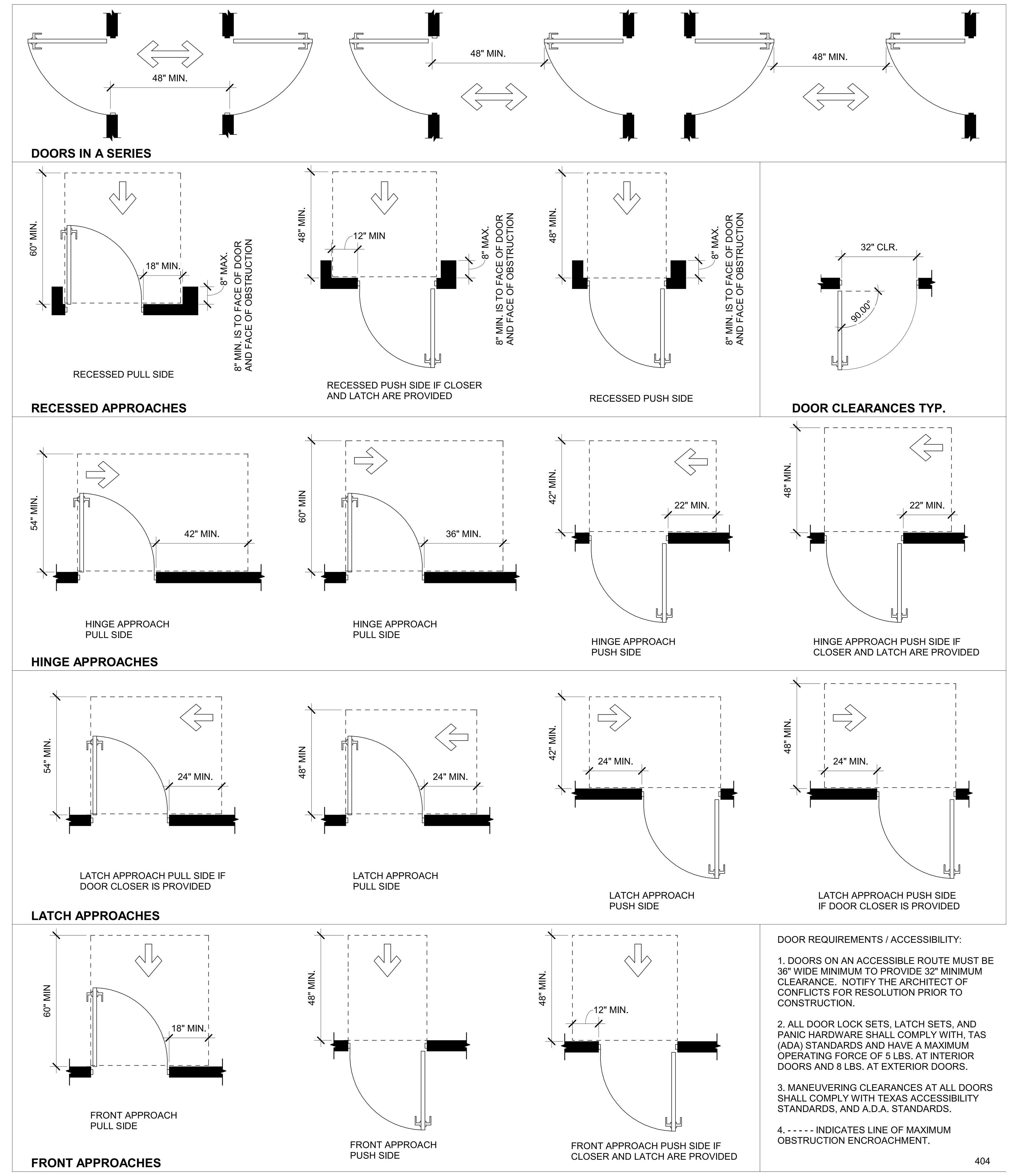
6 Typical Curb Ramp Details

3/16" = 1'-0"



7 Accessible Parking Sign

3" = 1'-0"



DOOR REQUIREMENTS / ACCESSIBILITY:

1. DOORS ON AN ACCESSIBLE ROUTE MUST BE 36" WIDE MINIMUM TO PROVIDE 32" MINIMUM CLEARANCE. NOTIFY THE ARCHITECT OF CONFLICTS FOR RESOLUTION PRIOR TO CONSTRUCTION.

2. ALL DOOR LOCK SETS, LATCH SETS, AND PANIC HARDWARE SHALL COMPLY WITH, TAS (ADA) STANDARDS AND HAVE A MAXIMUM OPERATING FORCE OF 5 LBS. AT INTERIOR DOORS AND 8 LBS. AT EXTERIOR DOORS.

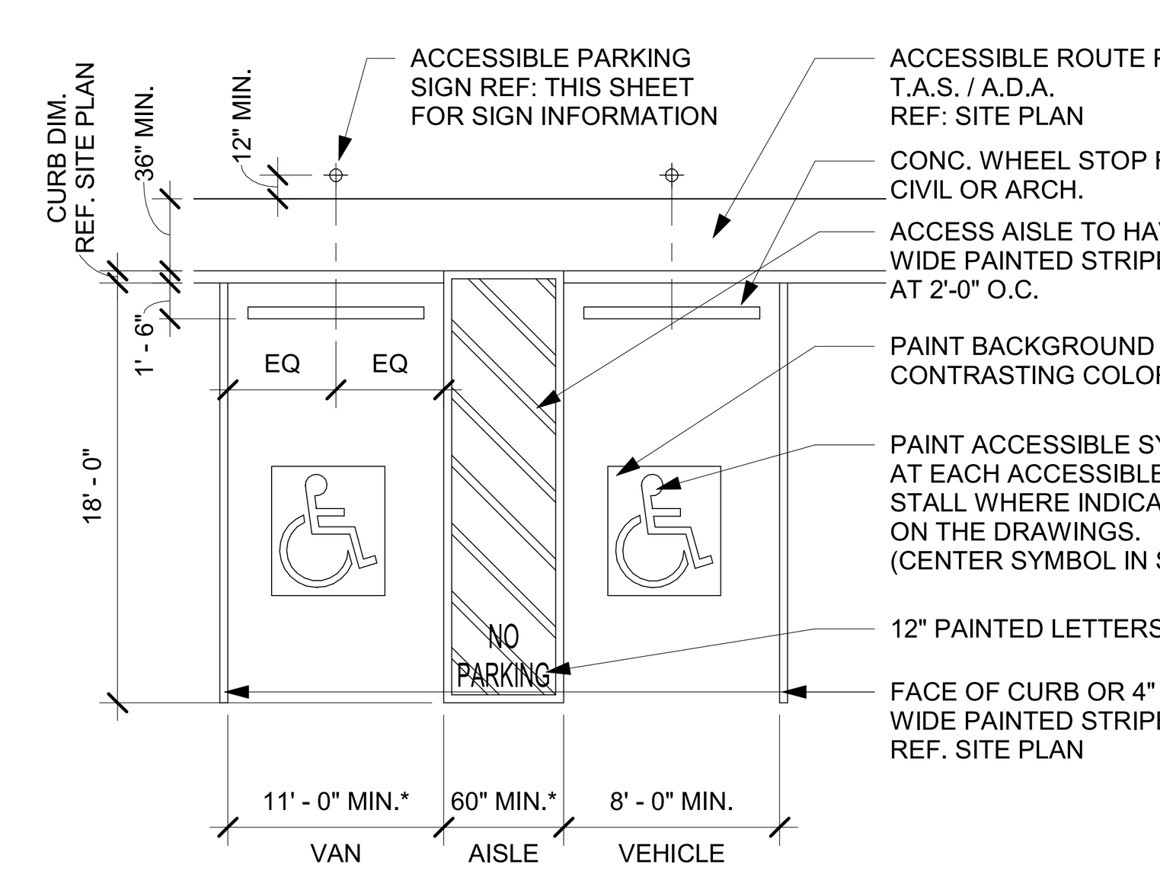
3. MANEUVERING CLEARANCES AT ALL DOORS SHALL COMPLY WITH TEXAS ACCESSIBILITY STANDARDS, AND A.D.A. STANDARDS.

4. - - - - - INDICATES LINE OF MAXIMUM OBSTRUCTION ENCROACHMENT.

404

5 Accessible Door Diagram

3/8" = 1'-0"



* VAN PARKING SPACE CAN BE 8'-0" WIDE IF ACCESS AISLE IS 8'-0" WIDE

REQUIRED PARKING SPACES

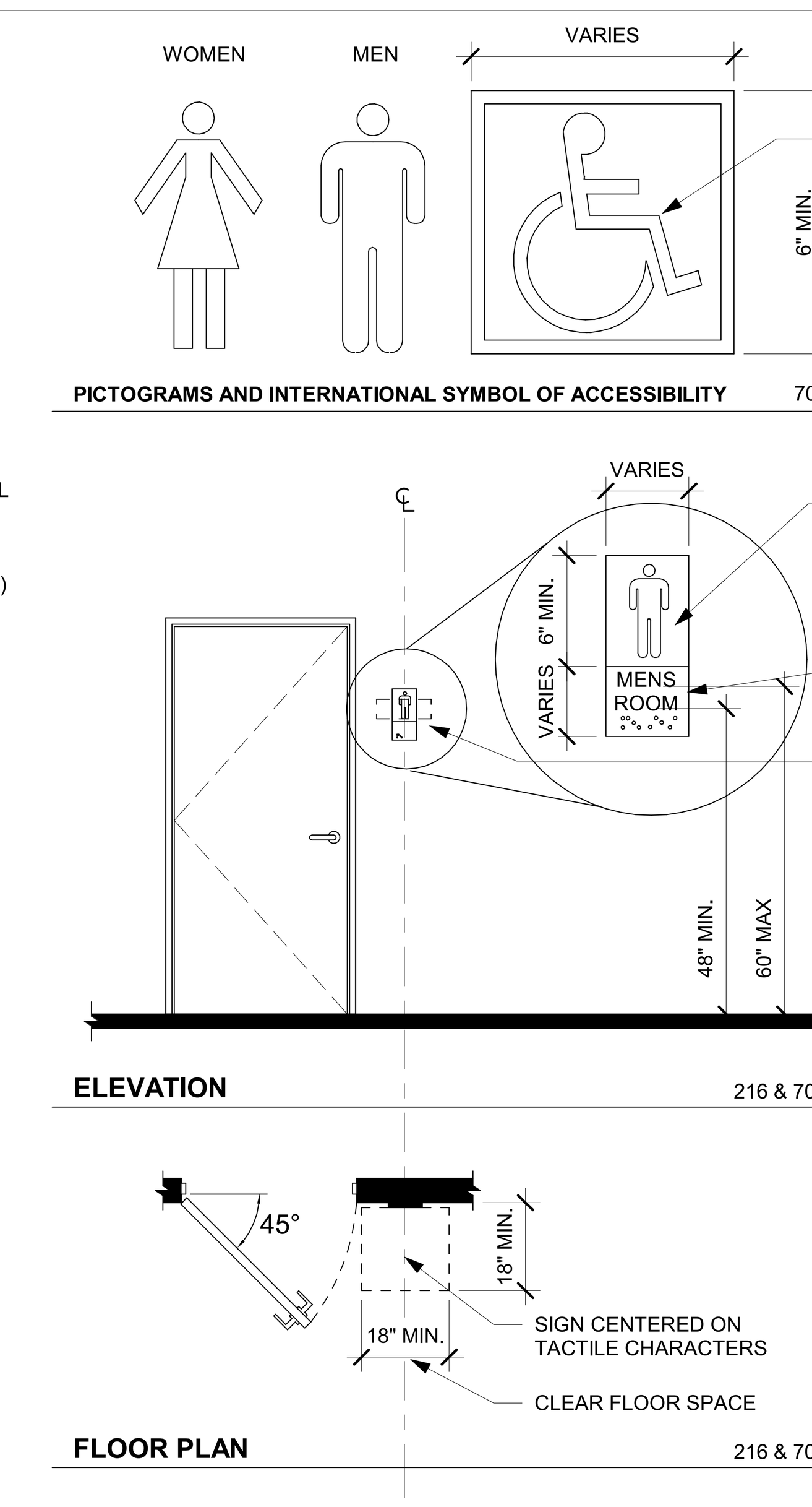
# SPACES PROVIDED IN PARKING FACILITY	MIN. # REQUIRED HC PARKING SPACES
001 TO 025	1
026 TO 050	2
051 TO 075	3
076 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2% OF TOTAL
OVER 1001	20 + 1 FOR EACH 100 OVER 1000

* PROVIDE ONE VAN PARKING SPACE FOR EVERY 6 REQUIRED HC PARKING SPACES.

GENERAL PARKING NOTES:
1. REFER TO LOCAL CODES FOR ADJUSTMENTS TO THESE STANDARDS.
2. ACCESS AISLES SHALL NOT OVERLAP THE VEHICULAR WAY AND CAN BE PLACED ON EITHER SIDE OF THE PARKING SPACE EXCEPT FOR ANGLED VAN PARKING. WHICH SHALL HAVE ACCESS AISLES LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACES.
3. IT IS RECOMMENDED TO HAVE THE VAN ACCESS AISLE ON THE PASSENGER SIDE OF THE VAN PARKING SPACE.
4. ACCESSIBLE ROUTE REQUIRED FOR VAN PARKING SPACE SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 98".

8 Typical Accessible Parking Spaces

1/8" = 1'-0"



STANDARD PICTOGRAMS AND ACCESSIBILITY SIGNS SHALL HAVE NON-GLARE FINISH AND SHALL CONTRAST WITH THEIR FIELD.

INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGN AND/OR PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6" MINIMUM IN HEIGHT.

TEXT AND BRAILLE CANNOT BE IN PICTOGRAM FIELD

ROOM NUMBER AND NAME IDENTIFICATION SIGN:
-LETTERS & NUMERALS SHALL BE RAISED 1/32",
-TEXT TO BE UPPERCASE SANS SERIF TYPE
-TEXT TO BE ACCOMPANIED WITH GRADE 2 BRAILLE.

CHARACTER PROPORTIONS:
-UPPERCASE LETTER "O" IS 55% MIN. & 110% MAX. OF THE HEIGHT OF THE UPPERCASE LETTER "I".

CHARACTER HEIGHT:
-MEASURED VERTICALLY FROM BASELINE, HEIGHT SHALL BE 5/8" MIN. AND 2" MAX. BASED ON UPPERCASE LETTER "I".

LOCATION AT DOORS:
-SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE
-AT DOUBLE DOORS WITH ONE ACTIVE LEAF, SIGN TO BE LOCATED AT INACTIVE LEAF
-AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, SIGN TO BE LOCATED AT THE RIGHT OF THE RIGHT HAND DOOR
-WHERE NO WALL SPACE IS AVAILABLE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGN TO BE LOCATED ON THE NEAREST ADJACENT WALL.

SPECIAL LOCATIONS:
-DOORS AT EXIT PASSAGEWAYS, EXIT DISCHARGE AND EXIT STAIRWAYS SHALL BE IDENTIFIED WITH TEXTILE SIGNS.
-IF ONE ENTRANCE IS NOT ACCESSIBLE THEN ALL ACCESSIBLE ENTRANCES MUST BE MARKED WITH INTERNATIONAL SIGN OF ACCESSIBILITY
-IF EXISTING RESTROOMS ARE NOT ACCESSIBLE, THEN PROVIDE A SIGN WITH INTERNATIONAL SIGN OF ACCESSIBILITY TO INDICATED CLOSEST ACCESSIBLE RESTROOM.

GENERAL SIGNAGE NOTES:
1. REFER TO PLANS AND SPECS FOR SIGNAGE SCHEDULE
2. REFER TO THIS SHEET FOR INTERNATIONAL SYMBOL OF ACCESSIBILITY

9 Typical Signage

3/8" = 1'-0"

THIS SHEET REPRESENTS WRA'S INTERPRETATION OF THE 2010 ADA & 2012 TEXAS ACCESSIBILITY STANDARDS AND SHOULD BE USED FOR GUIDANCE ON THE PROJECT. THE CONTRACTOR IS STILL RESPONSIBLE FOR ADHERING TO ALL ADA, TAS AND TDLR REQUIREMENTS

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No. Date

JOB NO. 2338 A
DATE: 01/17/2024

ACS Sheet 1

G201

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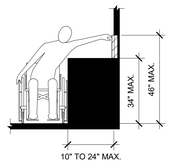
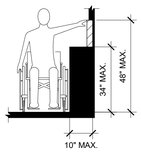
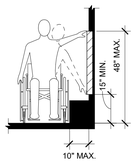
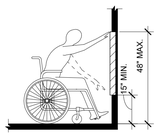
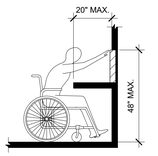


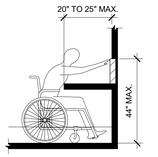




SIDE REACH 308.3



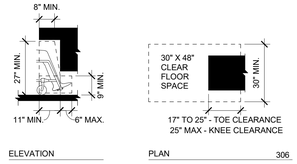




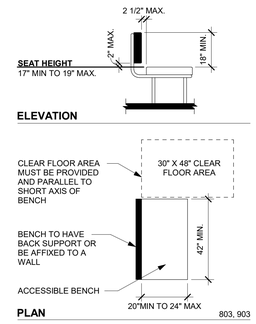
FORWARD REACH 308.2

*** FOR CHILDREN'S REACHES SEE CHART THIS SHEET.**

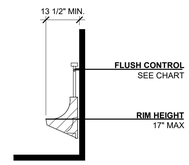
5 Accessible Reach Ranges
3/8" = 1'-0"

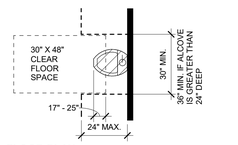


1 Accessible Toe & Knee Clearance
3/8" = 1'-0"

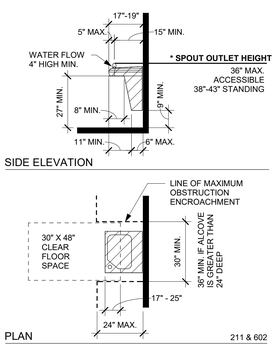


2 Accessible Bench
3/8" = 1'-0"





3 Accessible Urinal 1
3/8" = 1'-0"

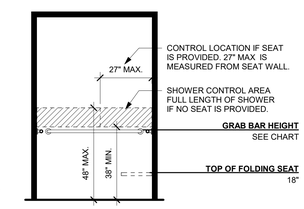


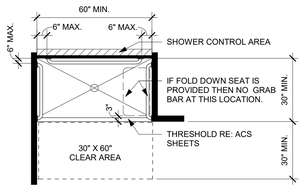
*** PROVIDE A MIN. OF ONE ACCESSIBLE & ONE STANDING DRINKING FOUNTAIN PER PROJECT**

GENERAL DRINKING FOUNTAIN NOTES
1. A PARALLEL APPROACH SHALL BE PERMITTED AT UNITS FOR CHILDREN'S USE WHERE THE SPOUT IS 30" MAX A.F.F. AND IS 3 1/2" MAX FROM THE FRONT EDGE OF THE UNIT.
2. WHERE MORE THAN 2 DRINKING FOUNTAINS ARE PROVIDED 50% MUST COMPLY WITH 602.1-602.6 (ACCESSIBLE) AND 50% COMPLY WITH 602.7 (STANDING) HEIGHTS. 211.3

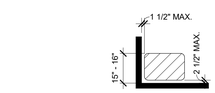
4 Accessible Drinking Fountain
3/8" = 1'-0"

GENERAL SHOWER NOTES:
1. A FIXED SHOWER HEAD LOCATED AT 48" MAX. ABOVE SHOWER FINISH FLOOR SHALL BE PERMITTED INSTEAD OF A HAND-HELD SPRAY UNIT.
2. FLOOR FOR SHOWER SHALL NOT SLOPE IN EXCESS OF 1:48 IN ANY DIRECTION.
3. FOLD DOWN SEATS ARE NOT REQUIRED IN ROLL-IN TYPE SHOWER COMPARTMENTS.
4. "L" SHAPED SEAT IS NOT REQUIRED AT TRANSFER TYPE STALL. (610.3.1 OR 610.3.2)
5. PROVIDE ONE TOWEL HOOK @ 48" ABOVE F.F. ADJACENT TO ACCESSIBLE SHOWER.

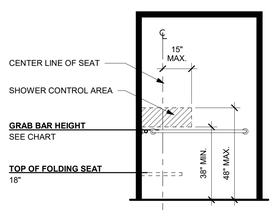


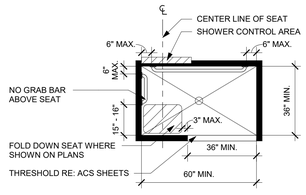


STANDARD ROLL-IN TYPE SHOWER COMPARTMENT

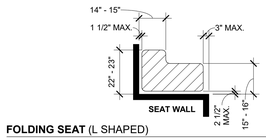


FOLDING SEAT (RECTANGULAR) 610

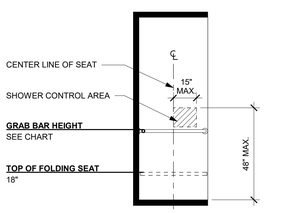


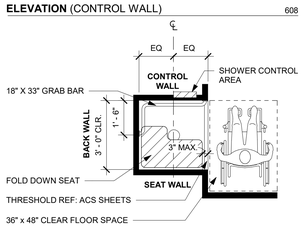


ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENT



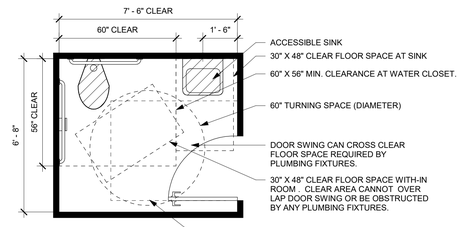
FOLDING SEAT (L SHAPED) 610

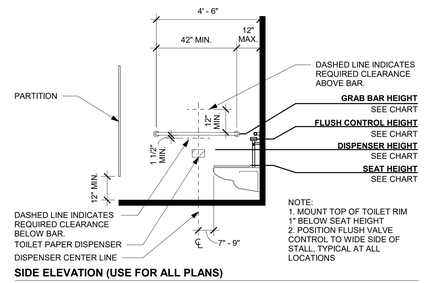


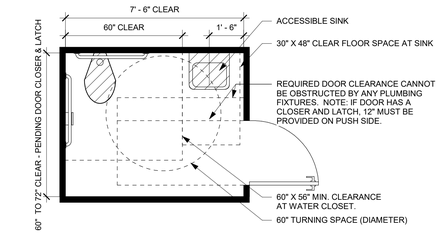


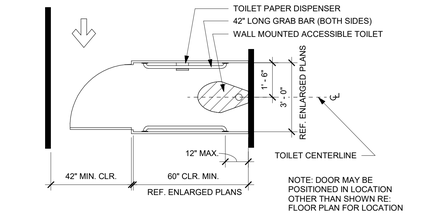
TRANSFER TYPE SHOWER COMPARTMENT

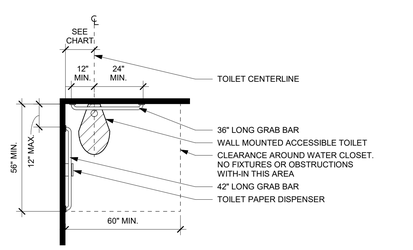
6 Accessible Shower Types
3/8" = 1'-0"

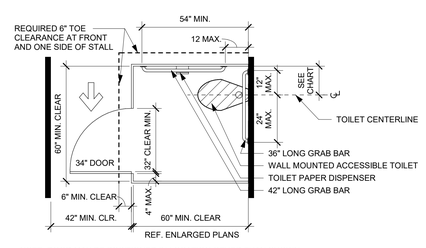


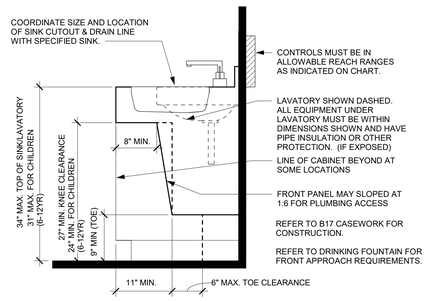












GENERAL NOTES:
1. A PARALLEL APPROACH CAN BE PROVIDED TO LAVATORIES AND SINKS USED PRIMARILY BY CHILDREN 5 YEARS AND YOUNGER.
2. DIP OF THE OVERFLOW SHALL NOT BE CONSIDERED IN DETERMINING KNEE AND TOE CLEARANCES.
3. METERED FAUCETS SHALL REMAIN OPEN FOR 10 SECONDS MINIMUM.

8 Accessible Sink and Lavatory
1" = 1'-0" 306.1, 606.2

GENERAL WATER CLOSET NOTES:
1. REQUIRED CLEAR FLOOR SPACES, CLEARANCE AT FIXTURES, AND TURNING SPACE SHALL BE PERMITTED TO OVERLAP
2. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE EXCEPT IN A TOILET ROOM FOR INDIVIDUAL USE WHERE THE 30"X48" CLEAR FLOOR SPACE IS PROVIDED BEYOND THE ARC OF THE DOOR SWING.
3. DOORS SHALL BE PERMITTED TO SWING INTO THE REQUIRED TURNING SPACE.
4. ALL DOORS MUST COMPLY WITH THEIR CLEAR FLOOR SPACE REQUIREMENTS.
5. IF THE TOTAL NUMBER OF TOILET FIXTURES (INCLUDING URINALS) IN A RESTROOM IS EQUAL TO 6 OR MORE, THEN AN AMBULATORY STALL IS REQUIRED.
6. DIMENSIONS SHOWN FROM WALL ARE ASSUMED TO BE CLEAR DIMENSIONS. CONTRACTOR TO ALLOW FOR FINISH MATERIAL.

7 Accessible Water Closets
3/8" = 1'-0"

MOUNTING CHART

DESCRIPTION & LOCATION	ACCESSIBLE DIMENSIONS: CHILDREN (AGES 6 TO 12)	ACCESSIBLE DIMENSIONS: ADULT	STANDARD (NON ADA)
FORWARD AND SIDE REACH RANGES	18" TO 40"	15" TO 48"	-------
WATER CLOSET CENTERLINE TO WALL	15"	17"	PER PLAN
TOILET SEAT HEIGHT	15"	18"	16"
TOILET & SHOWER STALL GRAB BAR HEIGHTS	25"	34"	-------
TOP OF TOILET PAPER DISPENSER HEIGHT	2" BELOW GRAB BAR IF MTD BELOW. 12" TO BOTTOM IF MTD ABOVE	2" BELOW GRAB BAR IF MTD BELOW. 12" TO BOTTOM IF MTD ABOVE	18"
FLUSH CONTROL HEIGHT FOR WATER CLOSET POSITION FLUSH VALVE TO WIDE SIDE OF STALL OR ROOM	2" MIN. BELOW GRAB BAR	2" MIN. BELOW GRAB BAR	48"
DRINKING FOUNTAIN & WATER COOLER SPOUT HEIGHT	36" MAX ACCESSIBLE AND 42" STANDING	36" MAX ACCESSIBLE AND 42" STANDING	42"
FLUSH CONTROL HEIGHT FOR URINAL POSITION FLUSH VALVE TO WIDE SIDE OF STALL OR ROOM	38"	44"	46"
FEMININE NAPKIN DISPENSER CONTROL LOCATION	42"	46"	46"
MIRRORS MOUNTED ABOVE COUNTER TOPS OR SINKS HEIGHTS ARE TO REFLECTING SURFACE	76" AFF TO TOP EDGE 40" MAX BOTTOM EDGE	76" AFF TO TOP EDGE 40" MAX BOTTOM EDGE	76" AFF TO TOP EDGE 40" BOTTOM EDGE
FREE STANDING MIRRORS HEIGHTS ARE TO REFLECTING SURFACE	76" AFF TO TOP EDGE 35" MAX BOTTOM EDGE	76" AFF TO TOP EDGE 35" MAX BOTTOM EDGE	76" AFF TO TOP EDGE 35" BOTTOM EDGE
LAVATORY AND SINK RIM HEIGHT	31" MAX	34" MAX	36"
PAPER TOWEL DISPENSER CONTROL HEIGHT	38"	46"	48"
SOAP DISPENSER CONTROL HEIGHT	38"	46"	48"
SOAP DISH	38"	46"	48"
FEMININE NAPKIN DISPOSAL MTD. ON "BACK" HEIGHT TO TOP OF DISPOSAL UNIT	2" MIN. BELOW GRAB BAR	2" MIN. BELOW GRAB BAR	32"
TOWEL BAR	25"	34"	48"
LIGHT SWITCHES, THERMOSTATS, WALL MOUNTED COMMUNICATION AND FIRE ALARM PULL DEVICES. HEIGHT TO CENTER OF CONTROL.	38"	46"	48"
ELECTRICAL OUTLETS, TELEPHONE OUTLETS, & DATA RECEPTACLES. HEIGHT TO CENTER OF OUTLET OR RECEPTACLE.	18"	18"	18"
TOP OF STAIR AND RAMP HANDRAILS HEIGHT IS ABOVE STAIR NOSING OR RAMP SURFACE	-------	36"	36"
CENTER OF DEDICATION PLAQUE	-------	-------	60"
FIRE EXTINGUISHER CABINET. HEIGHT TO DOOR HANDLE	-------	42"	42"
AUTOMATED EXTERNAL DEFIBRILATOR CABINET	-------	-------	48"
DOOR HARDWARE — DOOR LEVER	39"	41"	41"
DOOR HARDWARE — DOOR PULL	39"	41"	41"
DOOR HARDWARE — PANIC BAR	39"	41"	41"
TOP OF TRAY SLIDES	28" MIN.	34" MAX	36"
TRAY RETURN COUNTER	30"	34" MAX	36"
HEIGHT OF WORK SURFACES	-------	34" MAX	30"
HEIGHT OF TABLES AND COUNTERS	-------	30" MAX	30"

CENTER LINE — 43" MAX — 10" MIN

THE CENTER LINE OF DOOR HARDWARE MAY VARY BETWEEN WOOD DOOR WITH SIDE LIGHT AND ALUMINUM STORE FRONT DOORS. COORDINATE WITH PLANS AND HARDWARE MANUFACTURER

1. ON PLUMBING FIXTURES THERE IS A RANGE OF +/- 1".
2. CHILDREN AGES 5 THRU 12 REPRESENTS PRIMARY USER GROUP AS ELEMENTARY STUDENTS. MIDDLE SCHOOL IS CONSIDERED ADULT.

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT — KEITH E. GIBSON — 24165 — STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

ACS Sheet 2

G202

1/17/2024 1:10:16 PM

THIS SHEET REPRESENTS WRA'S INTERPRETATION OF THE 2010 ADA & 2012 TEXAS ACCESSIBILITY STANDARDS AND SHOULD BE USED FOR GUIDANCE ON THE PROJECT. THE CONTRACTOR IS STILL RESPONSIBLE FOR ADHERING TO ALL ADA, TAS AND TDLR REQUIREMENTS

CODE ANALYSIS:

APPLICABLE CODES AND STANDARDS

2018 International Building Code with Amendments
2017 National Electric Code with Amendments
2018 International Energy Conservation Code with Amendments
2018 International Mechanical Code with Amendments
2018 International Plumbing Code with Amendments
2018 International Fire Code with Amendments
2018 Energy Conservation Code with Amendments
2010 Americans with Disabilities Act
2012 Texas Accessibility Standards
2014 ICC-500 Design and Construction of Storm Shelters

BUILDING INFORMATION

The project consists of a 1-story Type III-B school building in Slidell TX, consisting of an overall building of approximately 12,386 square feet.

BUILDING CONSTRUCTION
Slab on Grade
Pre-engineered metal building
Standing seam
Refer to drawings and project manual

CONSTRUCTION TYPE
-New Construction
-Type III-B Building Elements not required to be rated
-Group E Educational Occupancy

ZONING

CURRENT LAND IS ZONED: Unincorporated

2018 International Building Code

CHAPTER 3
OCCUPANCY CLASSIFICATION AND USE

Section 302: Occupancy Classification and Use Designation

Section 302.1: Occupancy Classification
Occupancy classification is the formal designation of the primary purpose of the building, structure or portion thereof. Structures shall be classified into one or more of the occupancy groups listed in this section based on the nature of the hazards and risks to building occupants generally associated with the intended purpose of the building or structure. An area, room or space that is intended to be occupied at different times for different purposes shall comply with all applicable requirements associated with such potential multipurpose. Structures containing multiple occupancy groups shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically listed in this section, such structure shall be classified in the occupancy it most nearly resembles based on the fire safety and relative hazard. Occupied roofs shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard, and shall comply with Section 503.1.4.
Educational (see Section 305): Group E

Section 305: Educational Group E
Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade.

CHAPTER 5
GENERAL BUILDING HEIGHTS AND AREAS

TYPE "II-B" HEIGHT: 3 Story / 75 Feet (Maximum)
TYPE "II-B" AREA: 43,500 Square feet (Maximum)

Section 504: Building Height and Number of Stories

Section 504.1: General
The height, in feet, and the number of stories of a building shall be determined based on the type of construction, occupancy classification and whether there is an *automatic sprinkler system* installed throughout the building.

Section 504.3 Height in Feet
The maximum height, in feet, of a building shall not exceed the limits specified in Table 504.3.

Section 504.4: Number of Stories
The maximum number of stories of a building shall not exceed the limits specified in Table 504.4.

Section 506 Building Area

Section 506.1: General
The floor area of a building shall be determined based on the type of construction, occupancy classification, whether there is an automatic sprinkler system installed throughout the building and the amount of building frontage on public way or open space.

Section 506.2.1 Single-Occupancy, One-Story Buildings
The allowable area of a single-occupancy building with no more than one story above grade plane shall be determined in accordance with Equation 5-1: $A_a = A_t + (NS \times I_f)$

Section 506.3 Frontage Increase
Every building shall adjoin or have access to a public way to receive an area factor increase based on frontage. Area factor increase shall be determined in accordance with Sections 506.3.1 through 506.3.3.

Section 509: Incidental Uses

Table 509 Incidental Uses	
Furnace room where any piece of equipment is over 400.000 Btu per hour input	1 hour or provide automatic sprinkler system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	
In Group E occupancies, laboratories and vocational shops not classified as Group H.	
Laundry rooms over 100 square feet	
Waste and linen collection rooms over 100 square feet	
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic sprinkler system
Electrical installations and transformers	See Sections 110.26 through 110.34 and Sections 450.8 through 450.48 of NFPA 70 for protection and separation requirements.

Section 509.1 General
Incidental uses located within single occupancy or mixed occupancy buildings shall comply with the provisions of this section. Incidental uses are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses listed in Table 509.

Section 509.3: Area Limitations
Incidental uses shall not occupy more than 10 percent of the *building area* of the story in which they are located.

Allowable Area				
	Actual Area	Allowable Area	Total Perimeter	Perimeter >30'
Area 1	12,348 sf	25,375 sf	444'	444'

ALLOWABLE AREA CALCULATIONS (IBC 2015 CH. 5 FORMULA)
506.2.3 SINGLE-OCCUPANCY, MULTISTORY BUILDINGS

$I_f = [F/P - 0.25] W/30$

$A_a = [A_t + (NS \times I_f)] \times S_a$

I_f = Area factor increase due to frontage.
F = Building perimeter that fronts on a *public way* or open space (20' min.)
P = Perimeter of entire building (feet).
W = Width of *public way* or open space. Min. of 20' but not greater than 30'
A_t = Tabular allowable area factor
NS = Tabular allowable area factor in accordance for a nonsprinklered building
S_a = Actual number of building stories above grade plane, not to exceed three. For buildings with an automatic sprinkler system, not to exceed four.

AREA 1 ALLOWABLE AREA

I_f = 0.75
F = 444'
P = 444'
W = 30'
A_t = 14,500 sf
NS = 14,500sf
S_a = 1
A_a = 25,375 sf

CHAPTER 6
TYPES OF CONSTRUCTION

Table 601
Fire Resistance Rating Requirements for Building Elements(hours)

Building Element	Type III-B
Primary Structural Frame[f] (see Section 202)	0
Bearing Walls Exterior[e,f] Interior	 2 0
Nonbearing walls and partitions Exterior	See Table 602
Nonbearing walls and partitions Interior[d]	0
Floor Construction and associated secondary members (see Section 202)	0
Roof Construction and associated secondary members (see Section 202)	0

*a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
*b. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
*c. In all occupancies, heavy timber complying with Section 2304.1 shall be allowed where a 1-hour or less fire-resistance rating is required.
d. Not less than the fire-resistance rating required by other sections of this code.
e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).
f. Not less than the fire-resistance rating as referenced in Section 704.10.

Table 602
Fire Resistance Rating Requirements for Exterior Walls based on Fire Separation Distance[a,d,g]

Fire Separation Distance = X (feet)	Type of Constuction	Group E
X < 5[b]	Type III-B	1
5c ≤ X < 10	Type III-B	1
10 ≤ X < 30	Type III-B	1
X ≥ 30	Type III-B	0

a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
d. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
g. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.

Section 602.1: General
Buildings and structures erected or to be erected, altered or extended in height or area shall be classified in one of the five construction types defined in Sections 602.2 throught 602.5. The building elements shall have a *fire-resistance rating* not less than that specified in Table 601 and exterior walls shall have a *fire-resistance rating* not less than that specified in Table 602. Where required to have a fire-resistance rating by Table 601, building elements shall comply with the applicable provisions of Section 703.2. The protection of openings, ducts and air transfer openings in building elements shall not be required unless required by other provisions of this code.

CHAPTER 7
FIRE AND SMOKE PROTECTION

Section 706: Fire Walls

Section 706.1: General
Fire walls shall be constructed in accordance with Sections 706.2 throught 706.11. The extent and location of such *fire walls* shall provide a complete separation. Where a *fire wall* separates occupancies that are required to be separated by a *fire barrier wall*, the most restrictive requirements of each separation shall apply.

Section 706.2: Structural Stability
Fire walls shall be designed and constructed to allow collapse of the structure on either side without collapse of the wall under fire conditions. *Fire walls* designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section.

706.4 Fire-Resistance Rating
Fire walls shall have a *fire-resistance rating* of not less than that required by Table 706.4.

Table 706.4
Fire Wall Fire-Resistance Ratings

Group	Type III-B
A, B, E, H-4, I, R-1, R-2, U	3

1. In Type II or V construction, walls shall be permitted to have a 2-hour *fire-resistance rating*.

Section 706.5: Horizontal Continuity
Fire walls shall be continuous from *exterior wall* to *exterior wall* and shall extend not less than 18 inches (457 mm) beyond the exterior surface of *exterior walls*.

Exceptions:
1. *Fire* walls shall be permitted to terminate at the interior surface of combustible exterior sheathing or siding provided that the exterior wall has a *fire-resistance rating* of not less than 1 hour for a horizontal distance of not less than 4 feet (1220 mm) on both sides of the *fire wall*. Openings within such *exterior walls* shall be protected by opening protectives having a *fire protection rating* of not less than 3/4 hour.

2. *Fire walls* shall be permitted to terminate at the interior surface of noncombustible exterior sheathing, exterior siding or other noncombustible exterior finishes provided that the sheathing, siding or other exterior noncombustible finish extends a horizontal distance of not less than 4 feet (1220 mm) on both sides of the *fire wall*.

3. *Fire walls* shall be permitted to terminate at the interior surface of noncombustible exterior sheathing where the building on each side of the *fire wall* is protected by an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2.

CHAPTER 7
FIRE AND SMOKE PROTECTION (cont.)

Section 706.5.1: Exterior Walls
Where the *fire wall* intersects *exterior walls*, the *fire-resistance rating* and opening protection of the *exterior walls* shall comply with one of the following:

1. The *exterior walls* on both sides of the *fire wall* shall have a 1-hour *fire-resistance rating* with 3/4-hour protection where opening protection is required by Section 705.8. The *fire-resistance rating* of the *exterior wall* shall extend not less than 4 feet (1220 mm) on each side of the intersection of the *fire wall* to *exterior wall*. *Exterior wall* intersections at *fire walls* that form an angle equal to or greater than 180 degrees (3.14 rad) do not need *exterior wall* protection.

2. Buildings or spaces on both sides of the intersecting *fire wall* shall assume to have an imaginary *lot line* at the *fire wall* and extending beyond the exterior of the *fire wall*. The location of the assumed line in relation to the *exterior walls* and the *fire wall* shall be such that the *exterior wall* and opening protection meet the requirements set forth in Sections 705.5 and 705.8. Such protection is not required for *exterior walls* terminating at *fire walls* that form an angle equal to or greater than 180 degrees (3.14 rad).

Section 706.5.2: Horizontal Projecting Elements
Fire walls shall extend to the outer edge of horizontal projecting elements such as balconies, roof overhangs, canopies, marquees and similar projections that are within 4 feet (1220 mm) of the *fire wall*.

Exceptions:

1. Horizontal projecting elements without concealed spaces, provided that the *exterior wall* behind and below the projecting element has not less than 1-hour fire-resistance-rated construction for a distance not less than the depth of the projecting element on both sides of the *fire wall*. Openings within such *exterior walls* shall be protected by opening protectives having a *fire protection rating* of not less than 3/4 hour.

2. Noncombustible horizontal projecting elements with concealed spaces, provided that a minimum 1-hour fire-resistance-rated wall extends through the concealed space. The projecting element shall be separated from the building by not less than 1-hour fire-resistance-rated construction for a distance on each side of the *fire wall* equal to the depth of the projecting element. The wall is not required to extend under the projecting element where the building *exterior wall* is not less than 1-hour fire-resistance-rated for a distance on each side of the fire wall equal to the depth of the projecting element. Openings within such exterior walls shall be protected by opening protectives having a *fire protection rating* of not less than 3/4 hour.

3. For combustible horizontal projecting elements with concealed spaces, the *fire wall* need only extend through the concealed space to the outer edges of the projecting elements. The *exterior wall* behind and below the projecting element shall be of not less than 1-hour fire-resistance rated construction for a distance not less than the depth of the projecting elements on both sides of the *fire wall*. Openings within such *exterior walls* shall be protected by opening protectives having a fire-protection rating of not less than 3/4 hour.

Section 706.6 Vertical Continuity
Fire walls shall extend from the foundation to a termination point not less than 30 inches (762 mm) above both adjacent roofs.

Exceptions:
1. Stepped buildings in accordance with Section 706.6.1.

2. Two-hour fire-resistance-rated walls shall be permitted to terminate at the underside of the roof sheathing, deck or slab, provided that:

2.1. The lower roof assembly within 4 feet (1220 mm) of the wall has not less than a 1-hour *fire-resistance rating* and the entire length and span of supporting elements for the rated roof assembly has a *fire-resistance rating* of not less than 1 hour.

2.2. Openings in the roof shall not be located within 4 feet (1220 mm) of the *fire wall*.

2.3. Each building shall be provided with not less than a Class B roof covering.

3. Walls shall be permitted to terminate at the underside of noncombustible roof sheathing, deck or slabs where both buildings are provided with not less than a Class B roof covering. Openings in the roof shall not be located within 4 feet (1220 mm) of the *fire wall*.

4. *In buildings of Type III, IV and V construction, walls shall be permitted to terminate at the underside of combustible roof sheathing or decks, provided that all of the following requirements are met:

4.1 Roof openings are not less than 4 feet (1220 mm) from the *fire wall*.

4.2 The roof is covered with a minimum Class B roof covering.

4.3 The roof sheathing or deck is constructed of *fire-retardant-treated wood* for a distance of 4 feet (1220 mm) on both sides of the wall or the roof is protected with 5/8-inch (15.9 mm) Type X gypsum board directly beneath the underside of the roof sheathing or deck, supported by not less than 2-inch (51 mm) nominal ledgers attached to the sides of the roof framing members for a distance of not less than 4 feet (1220 mm) on both sides of the *fire wall*.

5. In buildings designed in accordance with Section 510.2, *fire walls* located above the 3-hour *horizontal assembly* required by Section 510.2, Item 1 shall be permitted to extend from the top of this *horizontal assembly*.

6. Buildings with sloped roofs in accordance with Section 706.6.2.

Section 716: Opening Protectives

Section 716.1: General
Opening protectives required by other sections of this code shall comply with the provision of this section and shall be installed in accordance with NFPA 80.

Section 716.2: Fire Door Assemblies
Fire door assemblies required by other sections of this code shall comply with the provisions of this section. Fire door frames with transom lights, sidelights or both shall be permitted in accordance with Section 716.2.5.4.

Section 716.2.1: Testing Requirements
Approved *fire door* and fire shutter assemblies shall be constructed of any material or assembly of component materials that conforms to the test requirements of Section 716.2.1.1 through 716.2.1.4 and the *fire protection rating* indicated in Table 716.1(2).

CHAPTER 10
MEANS OF EGRESS

Section 1005: Means of Egress Sizing

Section 1005.1: General
All portions of the *means of egress* system shall be sized in accordance with this section.
Exception: *Aisles* and aisle *accessways* in rooms or spaces used for assembly purposes complying with Section 1029.

Section 1005.2: Minimum Width Based on Component
The minimum width, in inches (mm), of any *means of egress* components shall be not less than that specified for such component, elsewhere in this code.

Section 1005.3: Required Capacity Based on Occupant Load
The required capacity, in inches (mm), of the *means of egress* for any room, area, space or story shall be not less than that determined in accordance with Sections 1005.3.1 and 1005.3.2:

Section 1005.3.1: Stairways
The capacity, in inches, of *means of egress stairways* shall be calculated by multiplying the *occupant load* served by such *stairways* by a means of egress capacity factor of 0.3 inch (7.6 mm) per occupant. Where *stairways* serve more than one story, only the occupant load of each story considered individually shall be used in calculating the required capacity of the stairways serving that story.

Exceptions:

1. For other than Group H and I-2 occupancies, the capacity, in inches, of *means of egress stairways* shall be calculated by multiplying the *occupant load* served by such *stairways* by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and *an emergency voice/alarm communication* system in accordance with Section *907.5.2.2*.

Section 1005.3.2 Other Egress Components
The capacity, in inches, of *means of egress* components other than *stairways* shall be calculated by multiplying the *occupant load* served by such component by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant.

Exceptions:

1. For other than Group H and I-2 occupancies, the capacity, in inches, of *means of egress* components other than *stairways* shall be calculated by multiplying the *occupant load* served by such component by a means of egress capacity factor of 0.15 inch (3.8 mm) per occupant in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and an *emergency voice/ alarm communication* system in accordance with Section 907.5.2.2..

Section 1005.4: Continuity
The minimum width or required capacity of the *means of egress* required from any story of a building shall not be reduced along the path of egress travel until arrival at the public way.

Section 1005.6 Convergence
Where the means of egress from stories above and below converge at an intermediate level, the capacity of the *means of egress* from the point of convergence shall be not less than the largest minimum width or the sum of the required capacities for the *stairways* or ramps serving the two adjacent stories, whichever is larger.

Section 1017: Exit Access Travel Distance

Section 1017.1: General
Travel distance within the *exit access* portion of the *means of egress* system shall be in accordance with this section.

Section 1017.2: Limitations
Exit access travel distance shall not exceed the values given in Table 1017.2.

Table 1017.2 Exit Access Travel Distance[a]

Occupancy	Without Sprinkler System (feet)	With Sprinkler System (feet)
A,E	200	250[b]
B	200	300[c]

a. See the following sections for modifications to exit access travel distance requirements:
·Section 402.8: For the distance limitation in malls.
·Section 404.9: For the distance limitation through an atrium space.
·Section 407.4: For the distance limitation in Group I-2.
·Sections 408.6.1 and 408.8.1: For the distance limitations in Group I-3.
·Section 411.4: For the distance limitation in special amusement buildings.
·Section 412.7: For the distance limitations in aircraft manufacturing facilities.
·Section 1006.2.2.2: For the distance limitation in refrigeration machinery rooms.
·Section 1006.2.2.3: For the distance limitation in refrigerated rooms and spaces.
·Section 1006.3.2: For buildings with one exit.
·Section 1017.2.2: For increased distance limitation in Groups F-1 and S-1.
·Section 1029.7: For increased limitation in assembly seating.
·Section 3103.4: For temporary structures.
·Section 3104.9: For pedestrian walkways.

b. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where *automatic sprinkler systems* are permitted in accordance with Section 903.3.1.2.

c. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1

CHAPTER 10
MEANS OF EGRESS (cont.)

Section 1017.3: Measurement
Exit access travel distance shall be measured from the most remote point of each room, area or space along the natural and unobstructed path of horizontal and vertical egress travel to the entrance to an *exit*.

Section 1017.3.1: Exit Access Stairways and Ramps
Travel distance on *exit access stairways* or *ramps* shall be included in the *exit access* travel distance measurement. The measurement along *stairways* shall be made on a plane parallel and tangent to the *stair* tread *nosings* in the center of the *stair* and landings. The measurement along *ramps* shall be made on the walking surface in the center of the *ramp* and landings.

Section 1020: Corridors

Section 1020.1: Construction
Corridors shall be fire-resistance-rated in accordance with Table 1020.1. The *corridor* walls required to be fire-resistance-rated shall comply with Section 708 for *fire partitions*.

Exceptions:
1. A *fire-resistance* rating is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has not less than one door opening directly to the exterior and rooms for assembly purposes have not less than one-half of the required *means of egress* doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.

4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B that is a space requiring only a single *means of egress* complying with Section 1006.2.

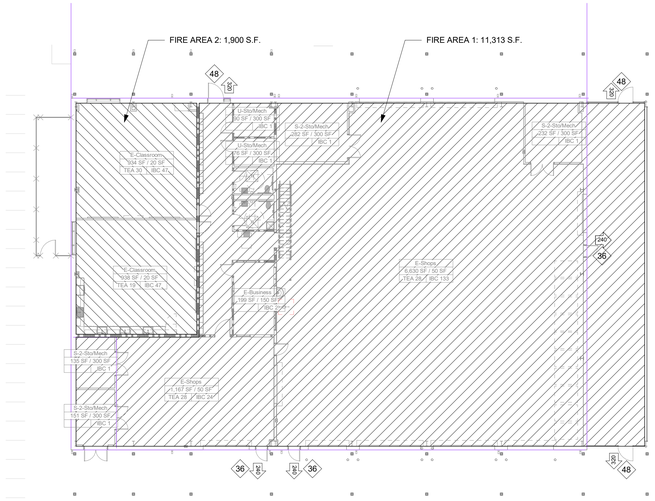
5. *Corridors* adjacent to the *exterior walls* of buildings shall be permitted to have unprotected openings on unrated *exterior* walls where unrated walls are permitted by Table 602 and unprotected openings are permitted by Table 705.8.

Table 1020.1
Corridor Fire-Resistance Rating

Occupancy	Occupant Load Served by Corridor	Required Fire-Resistance Rating With Sprinkler System
E	Greater than 30	0

PLUMBING FIXTURE CALCULATION

Total Occupants:	80	Students:	75 (Per TEA Requirements)
Female Students:	37.5		
Waterclosets Required:	1	Lavatories Required:	1
Waterclosets Provided:	1	Lavatories Provided:	1
Male Students:	37.5		
Waterclosets/Urinals Required:	1	Lavatories Required:	1
Waterclosets/Urinals Provided:	1	Lavatories Provided:	1
Staff:	5		
Waterclosets Required:	1	Lavatories Required:	1
Waterclosets Provided:	2	Lavatories Provided:	1
Total Occupants:	80		
Drinking Fountains Required:	1	Service Sinks Required:	1
Drinking Fountains Provided:	2	Service Sinks Provided:	1



Code Symbols Legend

A1-Assembly Area / IBC OLF / TEA Occ / IBC Occ	Egress Occupant Capacity		Travel Distance
###	Occupant Load Designation	##	Egress Width
	1-Hour Fire Resistance Rating		2-Hour Fire Resistance Rating

Wall Partition Rating Legend

	UNRATED PARTITION ASSEMBLY
	1 HOUR RATED PARTITION ASSEMBLY
	2 HOUR RATED FIRE BARRIER

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT — JOHN E. O'BRIEN — 24183 — STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

Code Sheet 2018

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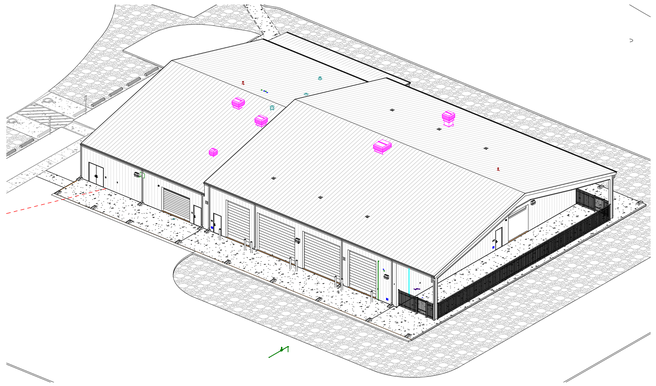
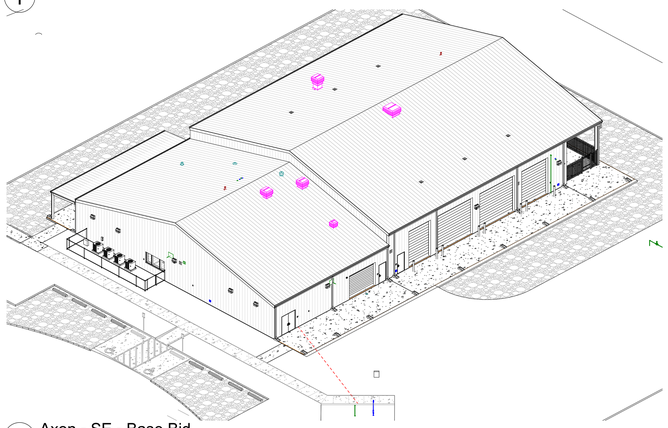


1 Axon - NE - Base Bid



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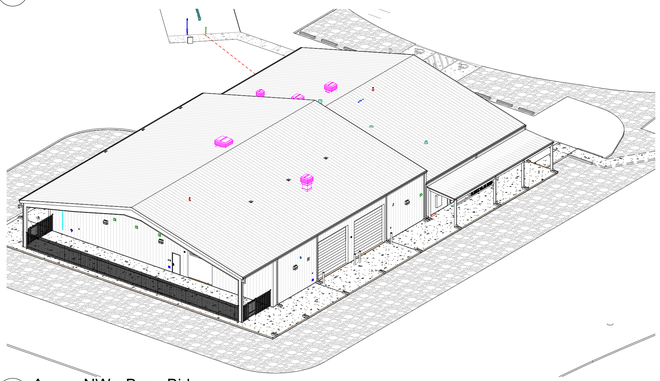

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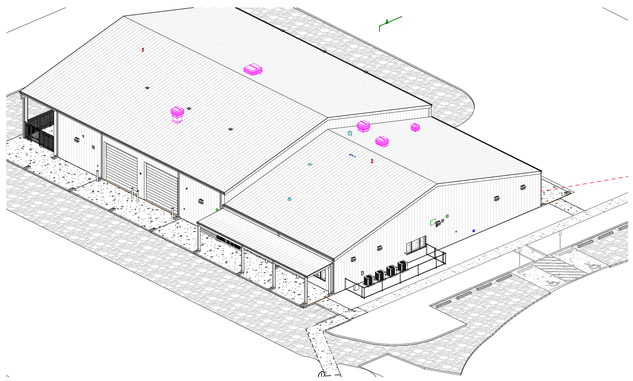
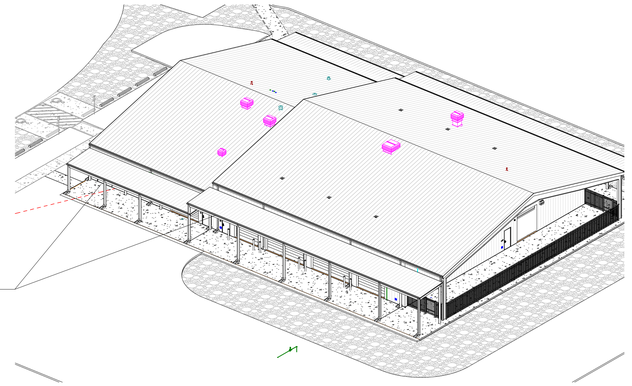


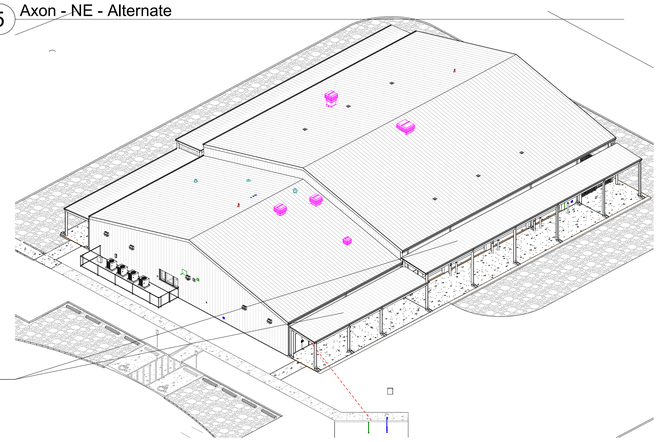
4 Axon - SW - Base Bid



ADD ALTERNATE #1
Base Bid: Main entry canopy at West wall to be installed in its entirety per documentation.

Alternate Bid 1: All additional canopies at the East and West walls to be installed per alternate bid documentation.

5 Axon - NE - Alternate



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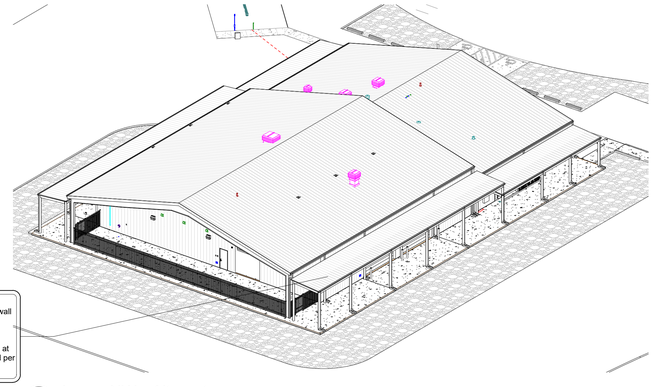
Alternate Bid 1: All additional canopies at the East and West walls to be installed per alternate bid documentation.

6 Axon - SE - Alternate



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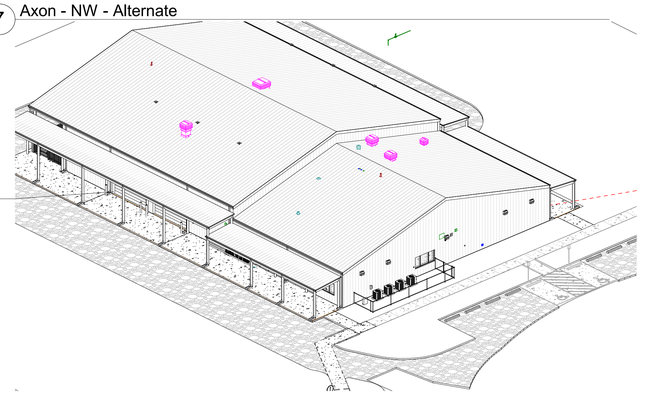
7 Axon - NW - Alternate



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8 Axon - SW - Alternate

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO.	2338 A
DATE:	01/17/2024

Axonometric Views

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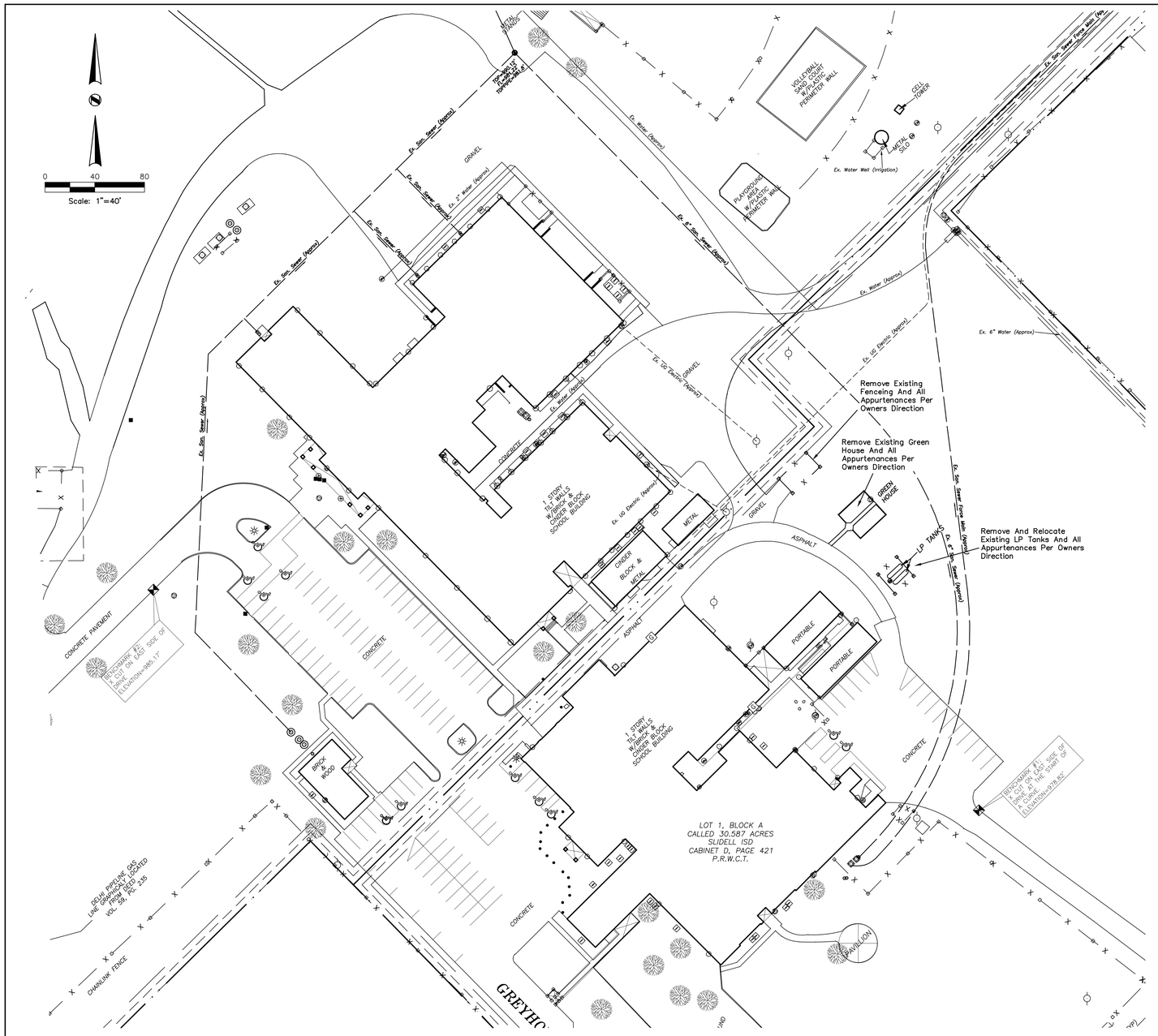

CAUTION EXISTING UTILITIES !!!!

All existing utilities and underground facilities that are indicated and shown on these plans are approximate, and are based on as-built plans and/or from reference information. Actual utility locations may differ from the as-built plans based on field observations. All utilities shall be field verified and located prior to any excavation or boring. It shall be the responsibility of the Contractor to verify both horizontally and vertically the location of such existing utilities prior to any construction.

!!! CAUTION !!!
Existing Utility Lines In Area
Contractor To Verify Existing Utility Locations
Contact Appropriate Utility Companies
48 Hrs. Prior To Any Construction

!!! CAUTION !!!
Existing Private Utility Lines On Site
Contractor To Verify Existing Utility Locations
Field Verify Both Location & Depth
Visibly Mark All Existing Utilities
Prior To Any Construction
These Markings Are To Be Maintained
And Remain During The Entire
Construction Process

!!! CAUTION !!!
Existing Landscape To Be Protected At All Times. Coordinate Any Valves Or Controller Relocations With Existing Landscape And Maintenance Personnel.

IRRIGATION SYSTEM TO BE REMOVED AND/OR RELOCATED, REPAIRED, OR REPLACED AS NECESSARY IN AREAS OF NEW CONSTRUCTION ONLY.

All utility services to and under proposed building additions shall be disconnected, removed and/or filled with grout per the direction of the Owner and/or the appropriate utility company.

Prior to removal of any existing utility improvments, Contractor shall verify that lines are no longer in use, or connected to any other lines that are in use, so as to not adversely impact any current or future campus operations. Owner's representative shall be notified immediately if any utility to be removed needs to remain in service, either temporarily or permanently.

MISC. INFORMATION	REVISION	DATE	DESCRIPTION
NOTE: Prior to beginning any construction or construction staking, it shall be the Contractor's responsibility to contact the civil engineer to insure that all parties are in possession of the most current set of construction documents.			

RLK ENGINEERING, INC.
111 West Main
Allen, Texas 75013
(972) 359-1733 Off
(972) 359-1833 Fax
Texas Registration No. 579

SETH KELLY — 1-17-24

DEMOLITION PLAN

SLIDELL ISD VO-AG FACILITY

1 GREYHOUND LANE
SLIDELL, TEXAS

DESIGNED BY:	TECH REVIEW:	DRAWING FILE:	DRAWING SCALE:	SHEET:
RLK Engineering	RLK	23018 DEMO 2.dwg	1" = 40'	C 1
DRAWN BY:	PEER REVIEW:	DRAWING DATE:	PROJECT NUMBER:	
RLK Engineering	RLK	1-17-24	RLK: 23018	

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

CONSTRUCTION DOCUMENTS

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

DEMOLITION PLAN

C1

Jan 12, 2024 - 1:05pm Marc sehnk

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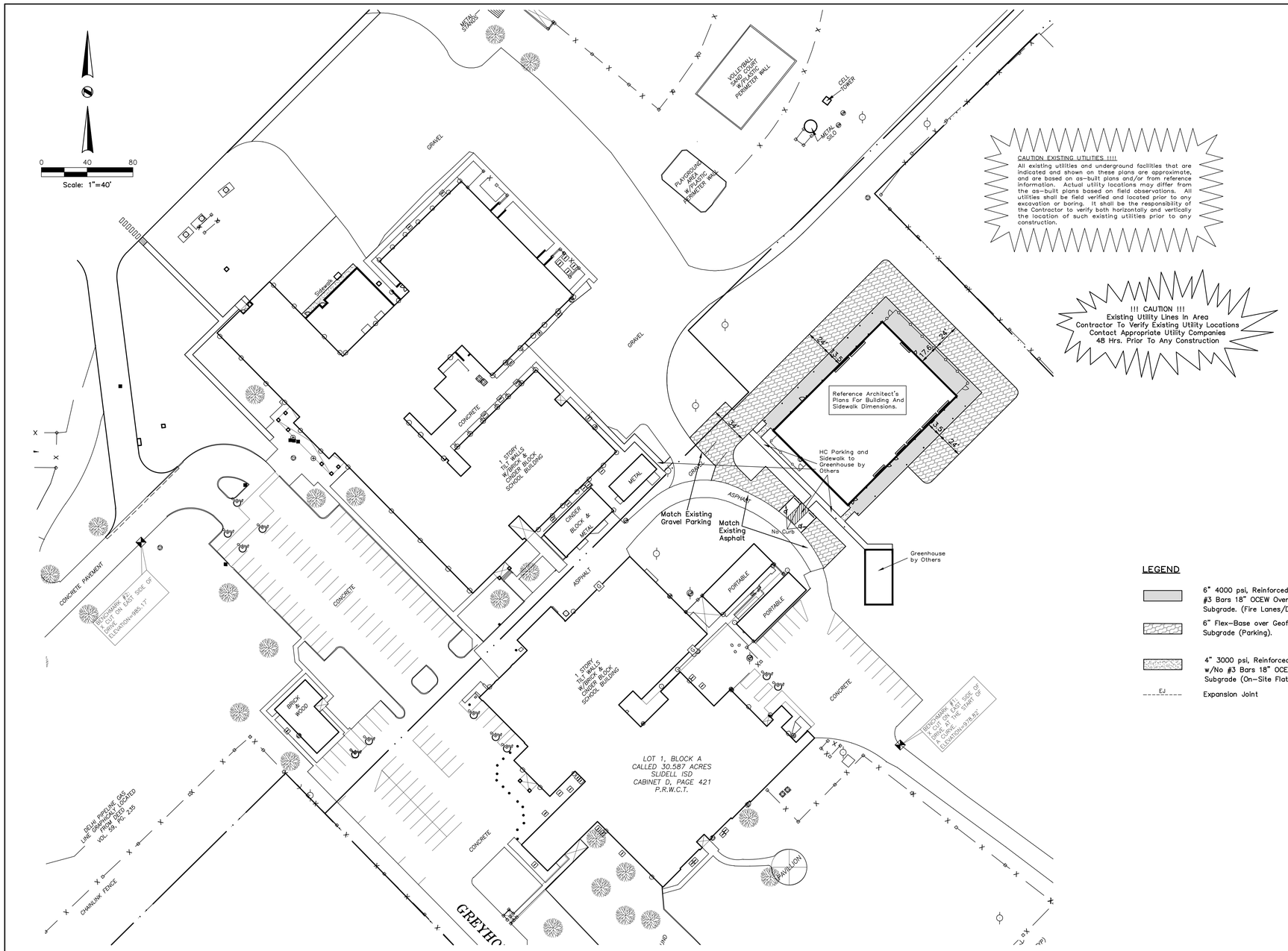

PAVING NOTES

1. All materials and construction shall conform to the City of Slidell Standards and Specifications.
2. It shall be the responsibility of the Contractor to protect all public utilities in the construction of this project. All manholes, cleanouts, valve boxes, fire hydrants, etc. must be adjusted to proper line and grade by the Contractor prior to and after the placing of permanent paving. Utilities must be maintained to proper line and grade during construction of this project.
3. The Contractor shall be responsible for coordinating with all the appropriate utility companies for the location of all utilities within the construction area.
4. The Paving Contractor shall not place permanent pavement until all sleeving for irrigation, electric, gas, telephone, cable TV, site lighting, etc. has been installed. It shall be the Paving Contractor's responsibility to insure that all sleeving is in place prior to placing permanent paving.
5. All paving and earthwork operations shall conform to the recommendations in the Geotechnical Exploration Report.
6. All dimensions are to face of curb unless otherwise noted.
7. Refer to Architectural Plans for exact building and related sidewalk dimensions.
8. Fire lanes shall be striped in accordance with the City of Slidell requirements. Refer to Site Plan/Plat for locations.
9. Construct barrier free ramps at all driveway and street intersections, per City standards.
10. Third party inspection is required for all fire lanes. Prior to final acceptance, a letter shall be provided by the design engineer or the testing laboratory that certifies the fire lane has been constructed in accordance with City of Slidell design standards and the construction plans. The letter The letter shall be specific to depth, strength and rebar placement.

LEGEND

- 6" 4000 psi, Reinforced Concrete Pavement w/No. #3 Bars 18" OCEW Over 6" Lime Stabilized Subgrade. (Fire Lanes/Drives)
- 6" Flex-Base over Geofabric and Compacted Subgrade (Parking).
- 4" 3000 psi, Reinforced Sidewalk Pavement w/No #3 Bars 18" OCEW Over Compacted Subgrade (On-Site Flatwork).
- EJ — Expansion Joint

MISC. INFORMATION	REVISION	DATE	DESCRIPTION
NOTE: Prior to beginning any construction or construction staking, it shall be the Contractor's responsibility to contact the civil engineer to insure that all parties are in possession of the most current set of construction documents.			

RLK ENGINEERING, INC.
111 West Main
Allen, Texas 75013
(972) 359-1733 Off
(972) 359-1833 Fax
Texas Registration No. 579

SETH KELLY — 1-17-24

PAVING PLAN

SLIDELL ISD VO-AG FACILITY

1 GREYHOUND LANE
SLIDELL, TEXAS

DESIGNED BY:	TECH REVIEW:	DRAWING FILE:	DRAWING SCALE:	SHEET:
RLK Engineering	RLK	23018 PAV 2.dwg	1" = 40'	C 2
DRAWN BY:	PEER REVIEW:	DRAWING DATE:	PROJECT NUMBER:	
RLK Engineering	RLK	1-17-24	RLK 23018	

WRA Architects, Inc.
12377 Merit Dr. #1800
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214-750-0077
www.wraarchitects.com

CONSTRUCTION DOCUMENTS

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

PAVING PLAN

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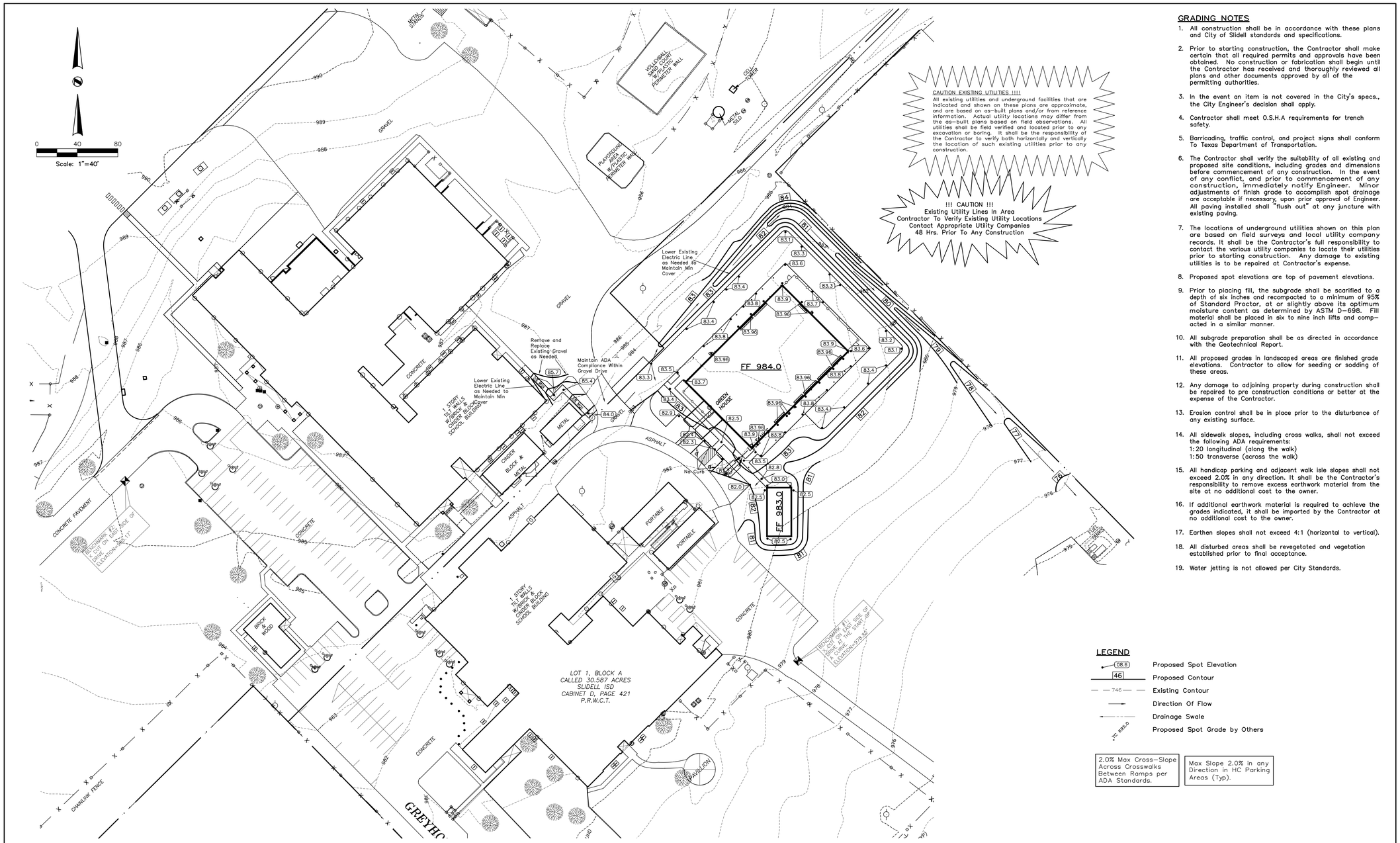

GRADING NOTES

1. All construction shall be in accordance with these plans and City of Slidell standards and specifications.
2. Prior to starting construction, the Contractor shall make certain that all required permits and approvals have been obtained. No construction or fabrication shall begin until the Contractor has received and thoroughly reviewed all plans and other documents approved by all of the permitting authorities.
3. In the event an item is not covered in the City's specs., the City Engineer's decision shall apply.
4. Contractor shall meet O.S.H.A requirements for trench safety.
5. Barricading, traffic control, and project signs shall conform To Texas Department of Transportation.
6. The Contractor shall verify the suitability of all existing and proposed site conditions, including grades and dimensions before commencement of any construction. In the event of any conflict, and prior to commencement of any construction, immediately notify Engineer. Minor adjustments of finish grade to accomplish spot drainage are acceptable if necessary, upon prior approval of Engineer. All paving installed shall "flush out" at any juncture with existing paving.
7. The locations of underground utilities shown on this plan are based on field surveys and local utility company records. It shall be the Contractor's full responsibility to contact the various utility companies to locate their utilities prior to starting construction. Any damage to existing utilities is to be repaired at Contractor's expense.
8. Proposed spot elevations are top of pavement elevations.
9. Prior to placing fill, the subgrade shall be scarified to a depth of six inches and recompacted to a minimum of 95% of Standard Proctor, at or slightly above its optimum moisture content as determined by ASTM D-698. Fill material shall be placed in six to nine inch lifts and compacted in a similar manner.
10. All subgrade preparation shall be as directed in accordance with the Geotechnical Report.
11. All proposed grades in landscaped areas are finished grade elevations. Contractor to allow for seeding or sodding of these areas.
12. Any damage to adjoining property during construction shall be repaired to pre construction conditions or better at the expense of the Contractor.
13. Erosion control shall be in place prior to the disturbance of any existing surface.
14. All sidewalk slopes, including cross walks, shall not exceed the following ADA requirements:
    1:20 longitudinal (along the walk)
    1:50 transverse (across the walk)
15. All handicap parking and adjacent walk isle slopes shall not exceed 2.0% in any direction. It shall be the Contractor's responsibility to remove excess earthwork material from the site at no additional cost to the owner.
16. If additional earthwork material is required to achieve the grades indicated, it shall be imported by the Contractor at no additional cost to the owner.
17. Earthen slopes shall not exceed 4:1 (horizontal to vertical).
18. All disturbed areas shall be revegetated and vegetation established prior to final acceptance.
19. Water jetting is not allowed per City Standards.

MISC. INFORMATION	REVISION	DATE	DESCRIPTION
NOTE: Prior to beginning any construction or construction staking, it shall be the Contractor's responsibility to contact the civil engineer to insure that all parties are in possession of the most current set of construction documents.			

RLK ENGINEERING, INC.
111 West Main
Allen, Texas 75013
(972) 359-1733 Off
(972) 359-1833 Fax
Texas Registration No. 579

SETH KELLY — 1-17-24

GRADING PLAN

SLIDELL ISD VO-AG FACILITY

1 GREYHOUND LANE
SLIDELL, TEXAS

DESIGNED BY:	TECH REVIEW:	DRAWING FILE:	DRAWING SCALE:	SHEET:
RLK Engineering	RLK	23018 GRAD 2.dwg	1" = 40'	C 3
DRAWN BY:	PEER REVIEW:	DRAWING DATE:	PROJECT NUMBER:	
RLK Engineering	RLK	1-17-24	RLK: 23018	

Jan 12, 2024 - 1:06pm Marc sethk

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WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

CONSTRUCTION DOCUMENTS

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

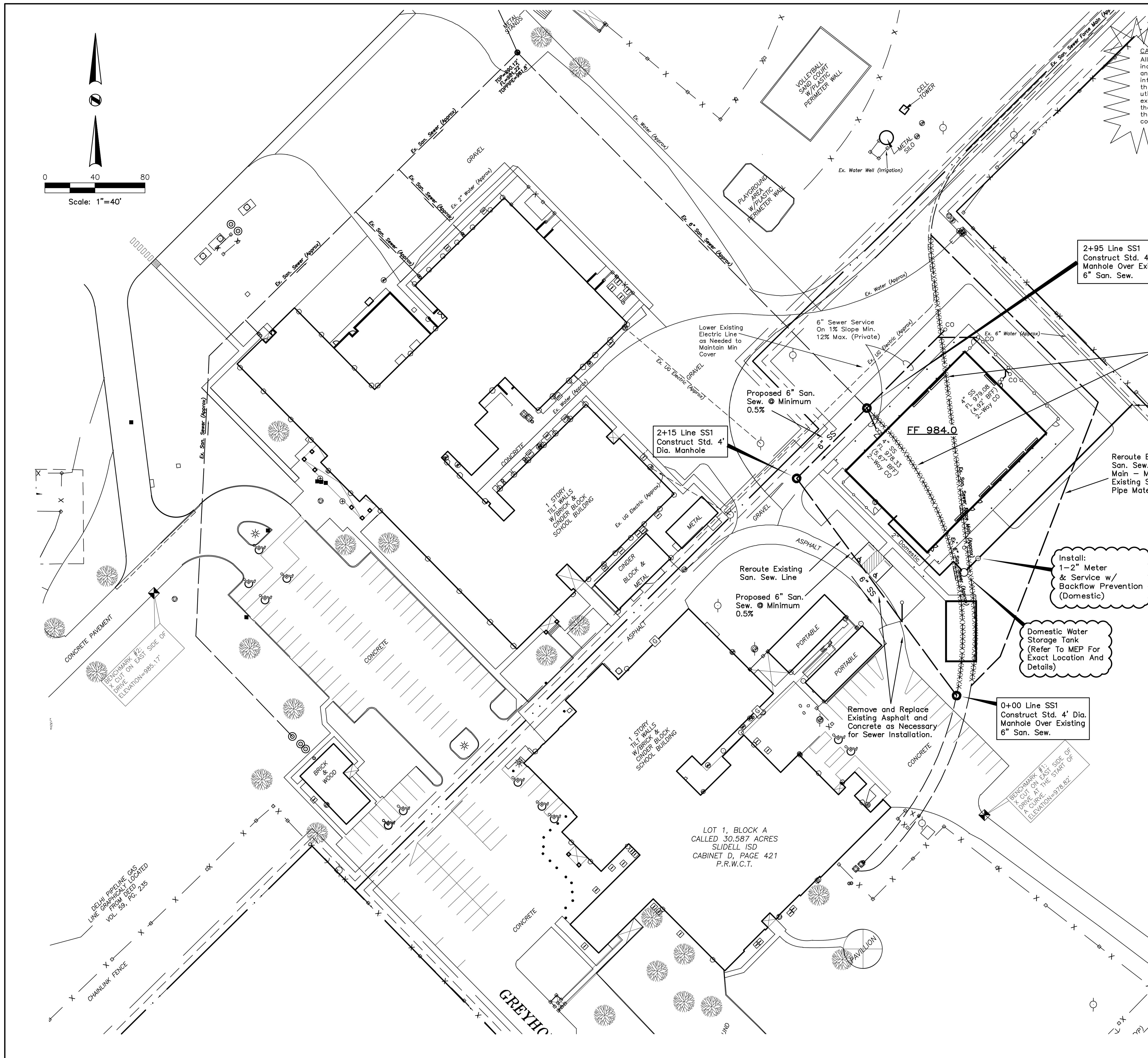
No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

GRADING PLAN

C3

WRA
WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com



CAUTION EXISTING UTILITIES !!!!
All existing utilities and underground facilities that are indicated and shown on these plans are approximate, and are based on as-built plans and/or from reference information. Actual utility locations may differ from the as-built plans based on field observations. All utilities shall be field verified and located prior to any excavation or boring. It shall be the responsibility of the Contractor to verify both horizontally and vertically the location of such existing utilities prior to any construction.

!!! CAUTION !!!
Existing Utility Lines In Area
Contractor To Verify Existing Utility Locations
Contact Appropriate Utility Companies
48 Hrs. Prior To Any Construction

WATER & SANITARY SEWER NOTES

1. All materials and construction shall conform to the City of Slidell Standards and Specifications.
2. Contractor shall notify all utility companies and others who may have buried equipment or pipelines in the vicinity of construction prior to commencing construction. Damage to existing utilities existing sewer system. Conflicts, contractor shall notify the engineer shall be repaired at the contractor's expense.
3. Contractor shall verify the location and depth of tie-in to prior to laying pipe.
4. Unless otherwise required, all sanitary sewer pipe, manholes, and related appurtenances shall conform to the material and construction specifications as set forth in the City of Slidell Standard Specifications.
5. Backfill for utility lines shall be carefully placed so that the utility will be stable. Where utility lines cross paved surfaces, the top 6" of trench backfill shall be compacted as directed for the subgrade in the surrounding area. Utility ditches shall be visually inspected during construction to ensure no undesirable fill material is used.
6. Special care shall be taken in adhering to those specifications regarding pipe joints, pipe embedment and testing of installed water and sanitary sewer pipes.
7. Sewer pipe shall be PVC SDR 35, unless otherwise noted.
8. Sewer services shall be 6" PVC, SDR 35, and shall be located as shown.
9. Contractor shall meet all O.S.H.A. Requirements regarding trench safety in the construction of this sewer main.
10. Water distribution system material and construction shall conform to the City of Slidell standards and specifications.
11. Concrete blocking shall be installed at all bends, valves, and fire hydrants.
12. All mains shall be buried a minimum depth of 48" below top of adjacent curb or as directed by the engineer.
13. Water pipe shall be PVC Class 150 (C-900).
14. Contractor shall extend service as shown, provide curb stops as Required and meter box set in place.
15. Contractor shall notify all utility companies prior to commencing construction. Damage to existing utilities shall be repaired at Contractor's expense.
16. Any damage to adjoining property during construction shall be repaired, to preconstruction conditions or better, at the expense of the contractor.
17. All fire hydrants shall be marked with Blue Stimsonite hydrant marker per City standards.

Contractor to Field Verify Exact Depth and Location of Exist San Sewer Prior to Construction to Assure Adequate Size and Depth for Min. Slope on Proposed Sanitary Sewer Pipe. Immediately notify engineer of findings to determine if design changes are necessary.

Fire Sprinkler Lines & Fire Department Connections Shall Be Sized, Designed, Routed And Installed By State Licensed Fire Sprinkler Contractor. Size And Routing Shown Is For Estimating Purposes Only.

Ref. MEP Plans For Exact Size, Location, And Elevations Of Utilities At Building.

Backflow Prevention For Domestic and Fire Services Shall Be Located Inside The Building. Reference MEP

Contractor to field verify exact depth and location of existing sanitary sewer prior to construction and immediately notify engineer of any discrepancies.

Contractor to field verify exact depth and location of existing water line prior to construction and immediately notify engineer of any discrepancies.

MISC. INFORMATION	REVISION	DATE	DESCRIPTION
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RLK ENGINEERING
RLK ENGINEERING, INC.
111 West Main
Allen, Texas 75013
(972) 359-1733 Off
(972) 359-1833 Fax
Texas Registration No. 579

STATE OF TEXAS SETH KELLY 91858 LICENSED PROFESSIONAL ENGINEER 1-17-24

WATER & SANITARY SEWER PLAN

SLIDELL ISD VO-AG FACILITY
1 GREYHOUND LANE
SLIDELL, TEXAS

DESIGNED BY:	TECH REVIEW:	DRAWING FILE:	DRAWING SCALE:	SHEET:
RLK Engineering	RLK	23018 WS 2.dwg	1" = 40'	C 4
DRAWN BY:	PEER REVIEW:	DRAWING DATE:	PROJECT NUMBER:	
RLK Engineering	RLK	1-17-24	RLK: 23018	

CONSTRUCTION DOCUMENTS
Slidell ISD Vo-Ag Facility
1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO.	2338 A
DATE:	01/17/2024

WATER & SANITARY SEWER PLAN
C4

Jan 12, 2024 - 1:07pm User: sethk
11/29/2023 1:40:33 PM

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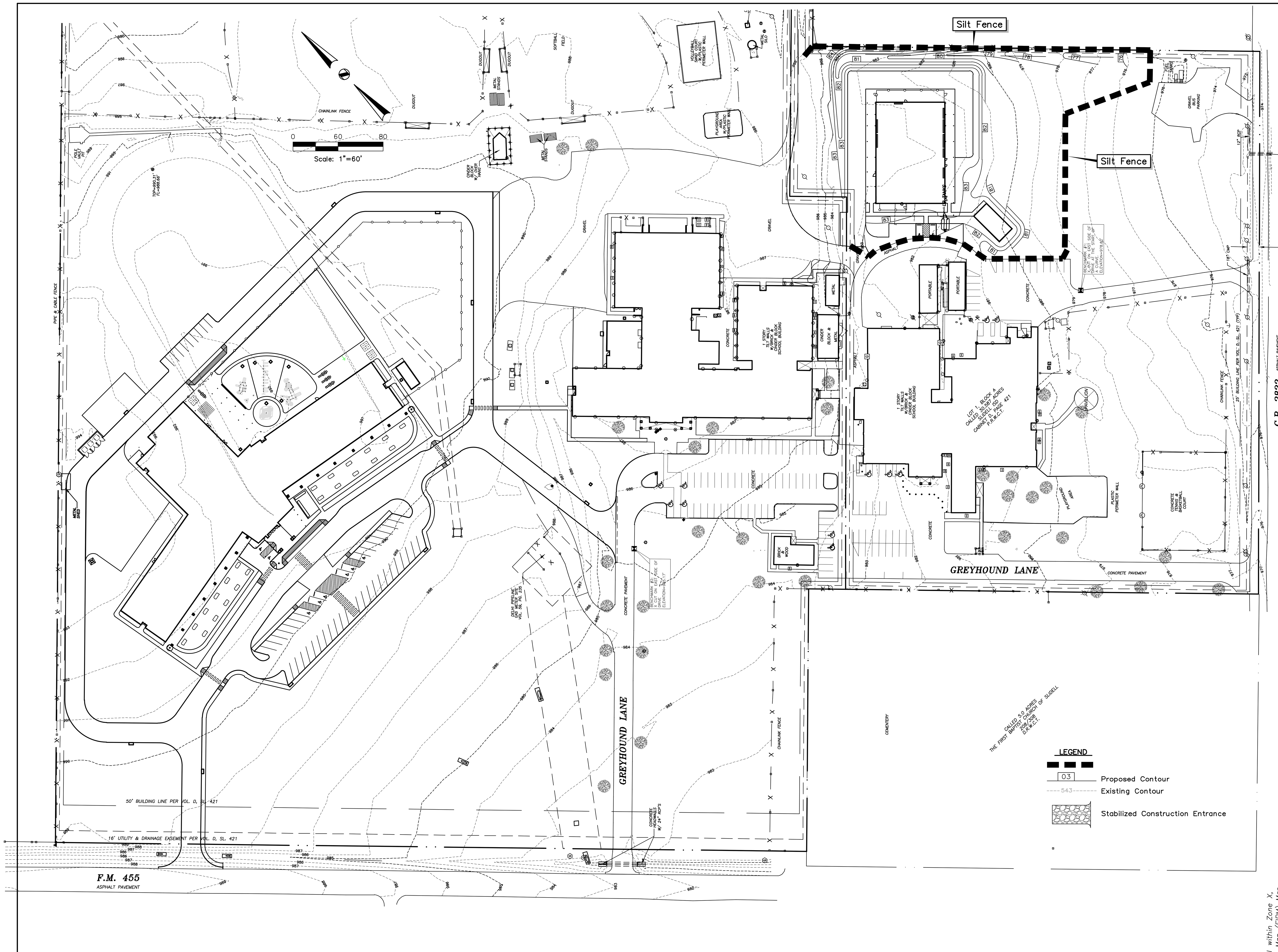
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com



EROSION CONTROL NOTES

1. Erosion control devices shown on this plan shall be installed prior to the start of land disturbing activities on the project.
2. All erosion control devices are to be installed in accordance with the approved plans and specifications for this project. Changes are to be approved before construction by the design Engineer and the City of Slidell.
3. If the Erosion Control Plan as approved cannot control erosion and off-site sedimentation from the project, the Erosion Control Plan will be required to be revised and/or additional erosion control devices will be required on site.
4. Off-site soil borrow and spoil areas are considered as part of the project site, and must also comply with the erosion control requirements for this project. This includes the installation of BMPs to control offsite sedimentation and the establishment of permanent ground cover on disturbed areas prior to final approval of the project.
5. Inspections shall be made weekly and after rain storm events to insure that the devices are functioning properly. When sediment or mud has clogged the void spaces between stones or mud is being tracked onto a public roadway the aggregate pad must be washed down or replaced. Runoff from the wash down operation shall not be allowed to drain directly off site without first lowing through another BMP to control off site sedimentation. Periodic re-grading or the addition of new stone may be required to maintain the efficiency of the installation.
6. Contractor shall be responsible for submittal of N.O.I., N.O.T. and any additional information required by the E.P.A. Contractor shall comply with all E.P.A. storm water pollution prevention requirements.
7. Contractor shall control mud accumulation on all streets surrounding the project. No mud accumulation will be allowed in public streets.
8. No steel posts allowed in right of way.

NOTE:
Owner and Contractor to be responsible for submitting N.O.I. (Notice Of Intent) prior to beginning any construction. Owner and Contractor also to submit N.O.T. (Notice Of Termination).

fall within Zone X,
te Map (FIRM) Map
16, 2011, prepared
Agency (FFMA) for

MISC. INFORMATION	REVISION	DATE	DESCRIPTION
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111 West Main
Allen, Texas 75013
(972) 359-1733 Off
(972) 359-1833 Fax
Texas Registration No. 579

STATE OF TEXAS · SETH KELLY · 91856 · LICENSED · PROFESSIONAL ENGINEER · 1-17-24

EROSION CONTROL PLAN
SLIDELL ISD VO-AG FACILITY
1 GREYHOUND LANE
SLIDELL, TEXAS

DESIGNED BY: RLK Engineering	TECH REVIEW: RLK	DRAWING FILE: 23018 ERO2.dwg	DRAWING SCALE: 1" = 60'	SHEET: C 5
DRAWN BY: RLK Engineering	PEER REVIEW: RLK	DRAWING DATE: 1-17-24	PROJECT NUMBER: RLK: 23018	

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CONSTRUCTION DOCUMENTS
Slidell ISD Vo-Ag Facility
1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

EROSION CONTROL PLAN
C5

SANDBLASTING WASTE MANAGEMENT

DESCRIPTION

The objective of the management program is to minimize the potential of storm water quality degradation from sandblasting activities at construction sites. The key issues in this program are prudent handling and storage of sandblast media, dust suppression, and proper collection and disposal of spent media. It is not the intent of this program to outline all of the worker safety issues pertinent to this practice. Safety issues should be addressed by construction safety programs as well as local, state, and and federal regulations utilized at sites in which Sandblasting waste is present.

INSTALLATION/APPLICATION CRITERIA

Since the media consists of fine abrasive granules, it can be easily transported by running water. Sandblasting activities typically create a significant dust problem which must be contained and collected to prevent off–site migration problem which must be contained and collected to to prevent off–site migration or fines.

Operational Procedures

Use only inert, non–degradable sandblast media.
Use appropriate equipment for the job, do not over–blast.
Wherever possible, blast in a downward direction.
Install a wind sock or other wind direction instrument.
Cease blasting activities in high winds or if wind direction could transport grit to drainage facilities.
Install dust shielding around sandblasting areas.
Collect and dispose of all spent sandblast grit, use dust containment fabrics and dust collection hoppers and barrels.
Non–hazardous sandblast grit may be disposed in permitted construction debris landfills or permitted sanitary landfills.
If sandblast media cannot be fully contained, construct sediment traps downstream from blasting area where appropriate.
Use sand fencing where appropriate in areas where blast media cannot be fully contained.
If necessary, install misting equipment to remove sandblast grit from the air – prevent runoff from misting operations from entering drainage systems.
Use vacuum grit collection systems where possible.
Keep records of sandblasting materials, procedures, and weather conditions on a daily basis.
Take all reasonable precautions to ensure that sandblasting grit is contained and kept away from drainage structures.

Educational Issues

Educate all on–site employees of potential dangers to humans and the environment from sandblast grit.
Instruct all on–site employees of the potential hazardous nature of sandblast grit and possible symptoms of overexposure to sandblast grit.
Instruct operators of sandblasting equipment on safety procedures and personal protection equipment.
Instruct operators on proper procedures regarding storage, handling, and containment of sandblast grit.
Instruct operators to recognize unfavorable weather conditions regarding sandblasting activities.
Instruct operators and supervisors on current local, state, and federal regulations regarding fugitive dust and hazardous waste from sandblast grit.
Have weekly meetings with operators to discuss and reinforce proper operational procedures.
Establish a continuing education program to indoctrinate new employees.

Material Handling Recommendations

Sandblast media should always be stored under cover away from drainage structures.
Ensure that stored media or grit is not subject to transport by wind.
Ensure that all sandblasting equipment as well as storage containers comply with local, state, and federal regulations.
Refer to Hazardous Waste BMP fact sheet if sandblast grit is known or or suspected to contain hazardous components.
Capture and treat runoff which comes into contact with sandblasting material or waste.
Foreman and/or construction supervisor should monitor all sandblasting activities and safety procedures.

Quality Assurance

Educate, and if necessary, discipline workers who violate procedures.
Take all reasonable precautions to ensure that sandblast grit is not transported off–site or into drainage facilities.

Requirements

Education and awareness program for all employees regarding control of sandblasting and potential dangers to humans and the environment.
Operator and supervisor education program for those directly involved in sandblasting activities – instructions on material handling, proper equipment operation, personal protective equipment, fugitive dust control, record keeping and reporting.
Proper sandblast equipment for the job.
Site–specific fugitive dust control and containment equipment.
Site–specific fugitive dust control procedure.
Compliance by supervisors and workers.

Costs

Minimal cost for training and monitoring.
Potential for significant cost for containment procedures on large jobs.
Potential for significant costs associated with cleanup, correction and remediation if containment occurs.

LIMITATIONS

Site specific solutions to sandblasting problems may be required.
Sandblasting operations on structures known to contain hazardous materials require special procedures not specifically outlined above including professional hazardous waste specialists.
Where hazardous materials are known or suspected, a site assessment and remediation plan may be necessary.

HAZARDOUS WASTE MANAGEMENT

DESCRIPTION

The hazardous waste management BMP addresses the problem of storm water polluted with hazardous waste through spills or other forms of contact. The objective of the Management Program is to minimize the potential of storm water contamination from common construction site hazardous wastes through appropriate recognition, handling, storage, and disposal practices.

It is not the intent of this Management Program to supersede or replace normal site assessment and remediation procedures. Significant spills and/or contamination warrant immediate response by trained professionals. Suspected job–site contamination should be immediately reported to regulatory authorities and protective actions taken. The General Permit requires reporting of significant spills to the National Response Center (NRC) at (800)424–8802.

PRIMARY USE

These management practices along with applicable OSHA and EPA guidelines should be incorporated at all construction sites which use or generate hazardous wastes. Many wastes such as fuel, oil, grease, fertilizer, and pesticide are present at most construction sites.

INSTALLATION, APPLICATION AND DISPOSAL CRITERIA

The hazardous waste management techniques presented here are based on proper recognition, handling, and disposal practices by construction workers and supervisors. Key elements of the management program are education, proper disposal practices, as well as provisions for safe storage and disposal. Following are lists describing the targeted materials and recommended procedures:

Targeted Hazardous Waste Materials

Paints
Solvents
Stains
Wood preservatives
Cutting oils
Greases
Roofing tar
Pesticides
Fuel and lube oils
Lead based paints (Demolition)

Storage Procedures

Wherever possible, minimize use of hazardous materials.
Minimize generation of hazardous wastes on the job–site.
Segregate potentially hazardous waste from non–hazardous construction site debris.
Designate a foreman or supervisor to oversee hazardous materials handling procedures.
Keep liquid or semi–liquid hazardous waste in appropriate containers (closed drums or similar) and under cover.
Store waste materials away from drainage ditches, swales, and catch basins.
Use containment berms in fueling and maintenance areas and where the potential for spills is high.
Ensure that adequate hazardous waste storage volume is available.
Ensure that hazardous waste collection containers are conveniently located.
Do not allow potentially hazardous waste materials to accumulate on the ground.
Enforce hazardous waste handling and storage procedures.
Clearly mark on all hazardous waste containers which materials are acceptable for the container.

Disposal Procedures

Regularly schedule hazardous waste removal to minimize on–site storage.
Use only reputable, licensed hazardous waste haulers.

Education

Instruct workers in identification of hazardous waste.
Educate workers of potential dangers to humans and the environment from hazardous wastes.
Instruct workers on safety procedures for common construction site hazardous wastes.
Educate all workers on hazardous waste storage and disposal procedures.
Have regular meetings to discuss and reinforce identification, handling and disposal procedures (incorporate in regular safety seminars).
Establish a continuing education program to indoctrinate new employees.

Quality Assurance

Foreman and/or construction supervisor shall monitor on–site hazardous waste storage and disposal procedures.
Educate, and if necessary, discipline workers who violate procedures.
Ensure that the hazardous waste disposal contractor is reputable and licensed.

Requirements

Job–site waste handling and disposal education and awareness program.
Commitment by management to implement hazardous waste management practices.
Compliance by workers.
Sufficient and appropriate hazardous waste storage containers.
Timely removal of stored hazardous waste materials.

Costs

Possible modest cost impact for additional hazardous storage containers.
Small cost impact for training and monitoring.
Potential cost impact for hazardous waste collection and disposal by licensed hauler – actual cost depends on type of material and volume.

LIMITATIONS

This practice is not intended to address site–assessments and pre–existing contamination.
Major contamination, large spills and other serious hazardous waste incidents require immediate response from specialists.
Demolition activities and potential pre–existing materials, such as asbestos, are not addressed by this program. Site specific information on plans is necessary.
Contaminated soils are not addressed.
One part of a comprehensive construction site waste management program.

SOLID WASTE MANAGEMENT

DESCRIPTION

Large volumes of solid waste are often generated at construction sites including: packaging, pallets, wood waste, concrete waste, soil, electrical wiring, cuttings, and a variety of other materials. The solid waste management practice lists techniques to minimize the potential of storm water contamination from solid waste through appropriate storage and disposal practices.

PRIMARY USE

These practices should be a part of all construction practices. By limiting the trash and debris on site, storm water quality is improved along with reduced clean up requirements at the completion of the project.

APPLICATIONS

The solid waste management practice for construction sites is based on proper storage and disposal practices by construction workers and supervisors. Key elements of the program are education and modification of improper disposal habits. Cooperation and vigilance is required on the part of supervisors and workers to ensure that the recommendations and procedures are followed. Following are lists describing the targeted materials and recommended procedures:

Targeted Solid Waste Materials

Paper and cardboard containers
Plastic packaging
Styrofoam packing and forms
Insulation materials (non–hazardous)
Wood pallets
Wood cuttings
Pipe and electrical cuttings
Concrete, brick, and mortar waste
Shingle cuttings and waste
Roofing tar
Steel (cuttings, nails, rust residue)
Gypsum board cuttings and waste
Sheathing cuttings and waste
Miscellaneous cutting and waste
Food waste
Demolition waste

Storage Procedures

Wherever possible, minimize production of solid waste materials.
Designate a foreman or supervisor to oversee and enforce proper solid waste procedures.
Instruct construction workers in proper solid waste procedures.
Segregate potentially hazardous waste from non–hazardous construction site debris.
Keep solid waste materials under cover in either a closed dumpster or other enclosed trash container that limits contact with rain and runoff.
Store waste materials away from drainage ditches, swales and catch basins.
Do not allow trash containers to overflow.
Do not allow waste materials to accumulate on the ground.
Prohibit littering by workers and visitors.
Police site daily for litter and debris.
Enforce solid waste handling and storage procedures.

Disposal Procedures

If feasible, segregate recyclable wastes from non–recyclable waste materials and dispose of properly.
General construction debris may be hauled to a licensed construction debris landfill (typically less expensive than a sanitary landfill).
Use waste facilities approved by local jurisdiction.
Runoff which comes into contact with unprotected waste shall be directed into structural treatment such as silt fence to remove debris.

Education

Educate all workers on solid waste storage and disposal procedures.
Instruct workers in identification of solid waste and hazardous waste.
Have regular meetings to discuss and reinforce disposal procedures (incorporate in regular safety seminars).
Clearly mark on all solid waste containers which materials are acceptable.

Quality Control

Foreman and/or construction supervisor shall monitor on–site solid waste storage and disposal procedures.
Discipline workers who repeatedly violate procedures.

Requirements

Jobsite waste handling and disposal education and awareness program.
Commitment by management to implement and enforce Solid Waste Management Program.
Compliance by workers.
Sufficient and appropriate waste storage containers.
Timely removal of stored solid waste materials.
Possible modest cost impact for additional waste storage containers.
Small cost impact for training and monitoring.
Minimal overall cost impact.

LIMITATIONS

Only addresses non–hazardous solid waste.
One part of a comprehensive construction site management program.

CONCRETE WASTE MANAGEMENT

DESCRIPTION

Concrete waste at construction sites comes in two forms; 1) excess fresh concrete mix including truck and equipment washing, and 2) concrete dust and concrete debris resulting from demolition and sawing. Both forms have the potential to impact water quality through storm water runoff contact with the waste.

PRIMARY USE

Concrete waste is present at most construction sites. This BMP should be utilized at sites in which concrete waste is present.

APPLICATIONS

A number of water quality parameters can be affected by introduction of concrete – especially fresh concrete. Concrete affects the pH of runoff, causing significant chemical changes in water bodies and harming aquatic life. Suspended solids in the form of both cement and aggregate dust are also Generated from both fresh and demolished concrete waste:

Current Unacceptable Waste Concrete Disposal Practices

Dumping in vacant areas on the job–site.
Illicit dumping off–jobsite.
Dumping into ditches or drainage facilities.

Recommended Disposal Practices

Avoid unacceptable dumping practices listed above.
Develop predetermined, safe concrete disposal areas.
Provide a washout area with a minimum of 6 cubic feet of containment area volume for every 10 cubic yards of concrete poured.
Never dump waste concrete illicitly or without property owners knowledge and consent.
Treat runoff from storage area through the use of structural controls as required.

Education

Drivers and equipment operators should be instructed on proper disposal and equipment washing practices (see above).
Supervisors must be made aware of the potential environmental consequences of improperly handling concrete waste.

Enforcement

The construction site manager or foreman must ensure that employees and pre–mix companies follow proper procedures for concrete disposal and equipment washing.
Employees violating disposal or equipment cleaning directives must be reeducated or disciplined if necessary.

Demolition Practices

Monitor weather and wind direction to ensure concrete dust is not entering drainage structures and surface waters.
Where appropriate, construct sediment traps or other types of sediment detention devices downstream of demolition activities.

Requirements

Use predetermined disposal for waste concrete.
Prohibit dumping waste concrete anywhere but predetermined areas.
Assign predetermined truck and equipment washing areas.
Educate drivers and operators on proper disposal and equipment cleaning procedures.

Costs

Minimal cost impact for training and monitoring.
Concrete disposal cost depends on availability and distance to suitable disposal areas.
Additional costs involved in equipment washing could be significant.

LIMITATIONS

This concrete waste management program is one part of a comprehensive construction site management program.

NOTE:
Owner and Contractor to be responsible for submitting N.O.I. (Notice Of Intent) prior to beginning any construction or release of Grading Permit. Owner and Contractor also to submit N.O.T. (Notice Of Termination).

MISC. INFORMATION	REVISION	DATE	DESCRIPTION
NOTE: Prior to beginning any construction or construction staking, it shall be the Contractor's responsibility to contact the civil engineer to insure that all parties are in possession of the most current set of construction documents.			

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111 West Main
Allen, Texas 75013
(972) 359-1733 Off
(972) 359-1833 Fax
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STATE OF TEXAS — SETH KELLY — 91858 — LICENSED PROFESSIONAL ENGINEER — 1-17-24

EROSION CONTROL NOTES

SLIDELL ISD VO-AG FACILITY
1 GREYHOUND LANE
SLIDELL, TEXAS

DESIGNED BY:	TECH REVIEW:	DRAWING FILE:	DRAWING SCALE:	SHEET:
RLK Engineering	RLK	23018 ERO NOTES2.dwg	1" = 40'	C 6
DRAWN BY: RLK Engineering	PEER REVIEW: RLK	DRAWING DATE: 1-17-24	PROJECT NUMBER: RLK: 23018	

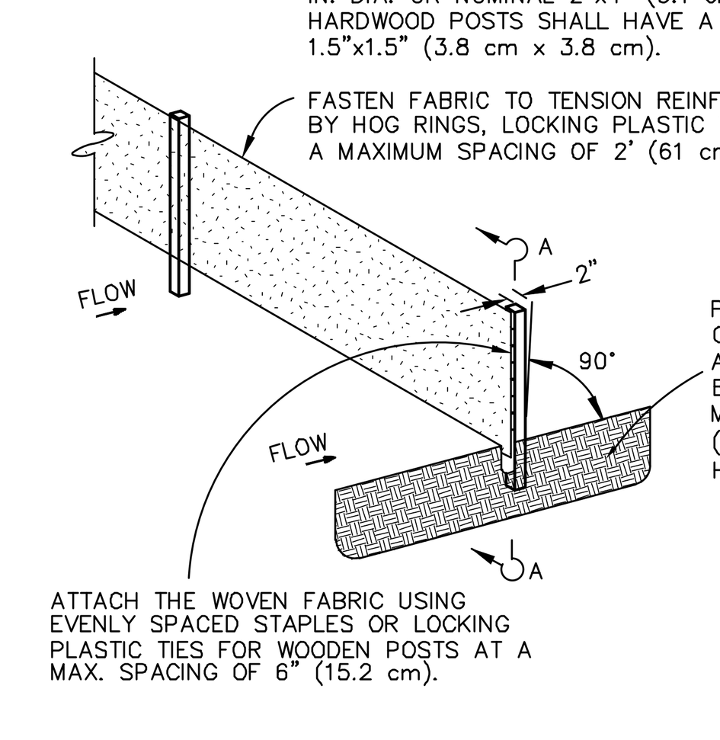
WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

CONSTRUCTION DOCUMENTS
Slidell ISD Vo-Ag Facility
1 Greyhound Lane Slidell, TX 76267

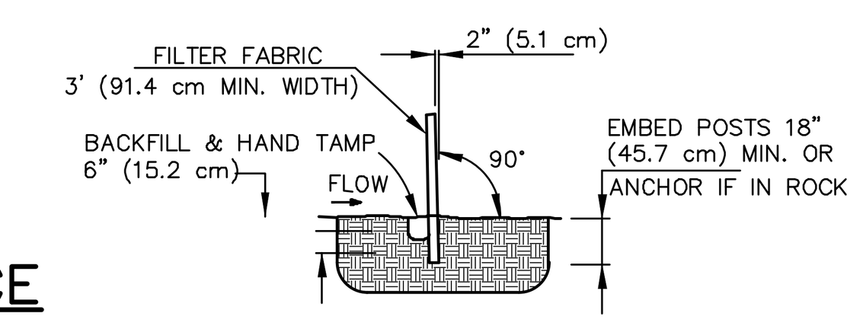
REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

EROSION CONTROL NOTES
C6



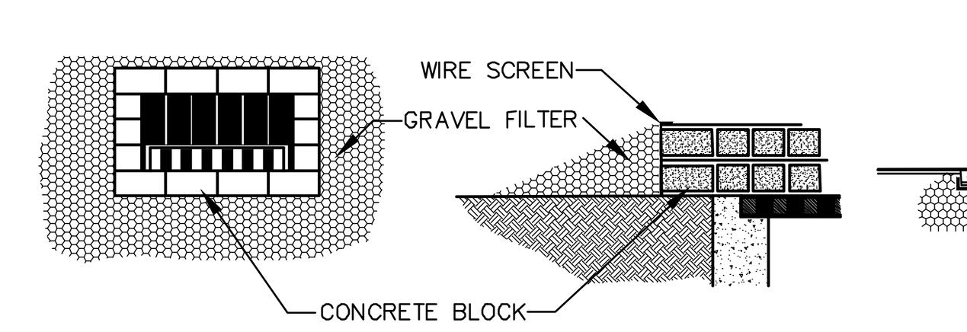
SILT FENCE



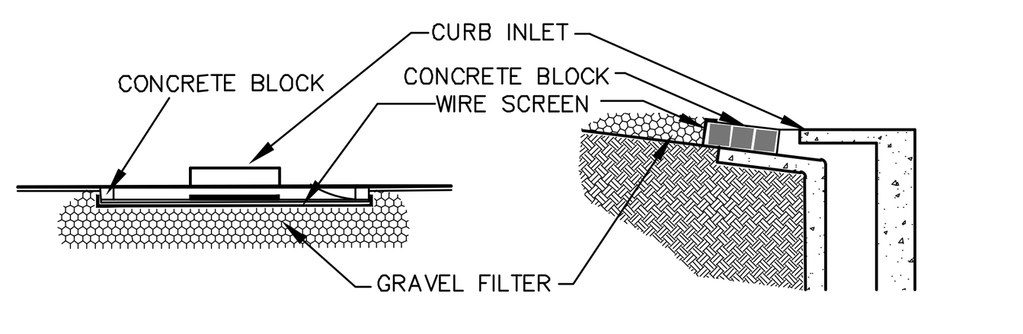
SECTION A–A

SILT FENCE

1. WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1 FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH WOOD SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE WOOD FENCE POST. THERE SHALL BE A 6 INCH DOUBLE OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.



DROP INLET PROTECTION



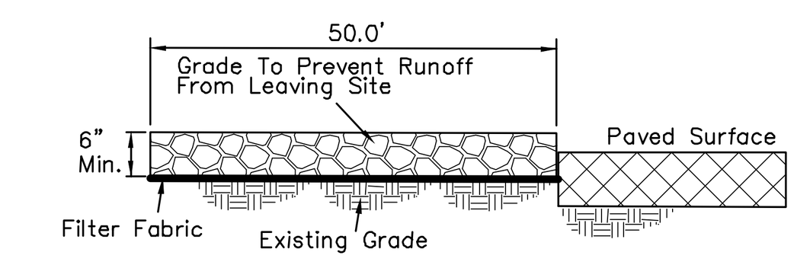
CURB INLET PROTECTION

BLOCK AND GRAVEL PROTECTION

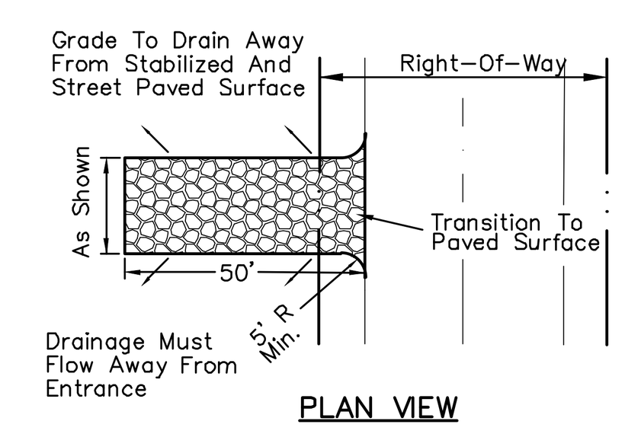
Concrete blocks are to be placed on their sides in a single row around the perimeter of the inlet, with ends abutting. Opening in the blocks should face outward, not upward. Wire mesh shall then be placed over the outside face of the blocks covering the holes. Filter stone shall then be piled against the wire mesh to the top of the blocks with the base of the stone being a minimum of 18 inches from the blocks. Periodically, when the stone filter becomes clogged, the stone must be removed and cleaned in a proper manner or replaced with new stone and piled back against the wire mesh.

NOTES

1. Stone shall be 3 to 5 inch diameter crushed rock or acceptable crushed Portland Cement Concrete.
2. When necessary, vehicles shall be cleaned to remove sediment prior to entrance onto a public roadway. When washing is required, it shall be done on an area stabilized with crushed stone, with drainage flowing away from both the street and the stabilized entrance. All sediment shall be prevented from entering any storm drain, ditch, or watercourse using approved methods.
3. The entrance shall maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. This may require periodic top dressing with additional stone as conditions demand. All sediment spilled, dropped, washed, or tracked onto paved surfaces must be removed immediately.
4. The entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.
5. Exact location of stabilized construction entrance shall be determined by contractor at time of construction.



PROFILE VIEW



PLAN VIEW

STABILIZED CONSTRUCTION ENTRANCE

MISC. INFORMATION	REVISION	DATE	DESCRIPTION
NOTE: Prior to beginning any construction or construction staking, it shall be the Contractor's responsibility to contact the civil engineer to insure that all parties are in possession of the most current set of construction documents.			

RLK ENGINEERING, INC.
111 West Main
Allen, Texas 75013
(972) 359-1733 Off
(972) 359-1833 Fax
Texas Registration No. 579

STATE OF TEXAS
SETH KELLY
91858
LICENSED
PROFESSIONAL ENGINEER
1-17-24

EROSION CONTROL DETAILS

SLIDELL ISD VO-AG FACILITY
1 GREYHOUND LANE
SLIDELL, TEXAS

DESIGNED BY: RLK Engineering	TECH REVIEW: RLK	DRAWING FILE: 23018 ERO DETAILS2.dwg	DRAWING SCALE: 1" = 40'	SHEET: C 7
DRAWN BY: RLK Engineering	PEER REVIEW: RLK	DRAWING DATE: 1-17-24	PROJECT NUMBER: RLK: 23018	

Jan 12, 2024 - 1:08pm User: sethk

11/29/2023 1:40:33 PM

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

CONSTRUCTION DOCUMENTS

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No. Date

JOB NO.	2338 A
DATE:	01/17/2024

EROSION CONTROL DETAILS

C7

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12377 Merit Dr. #1800
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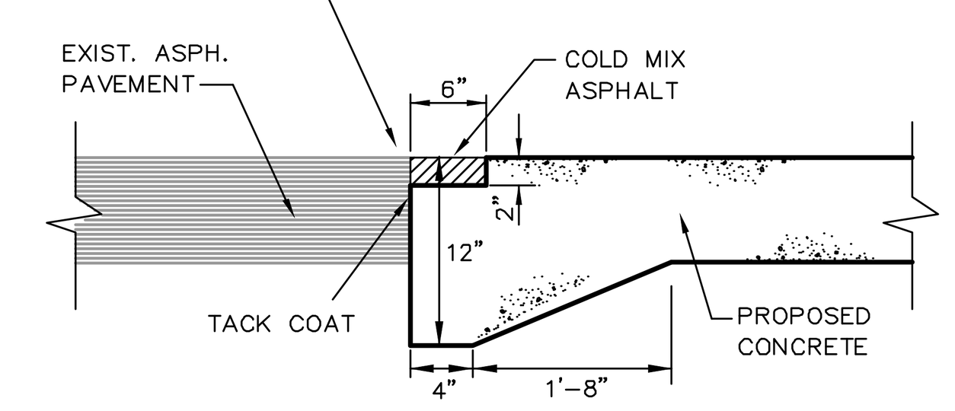
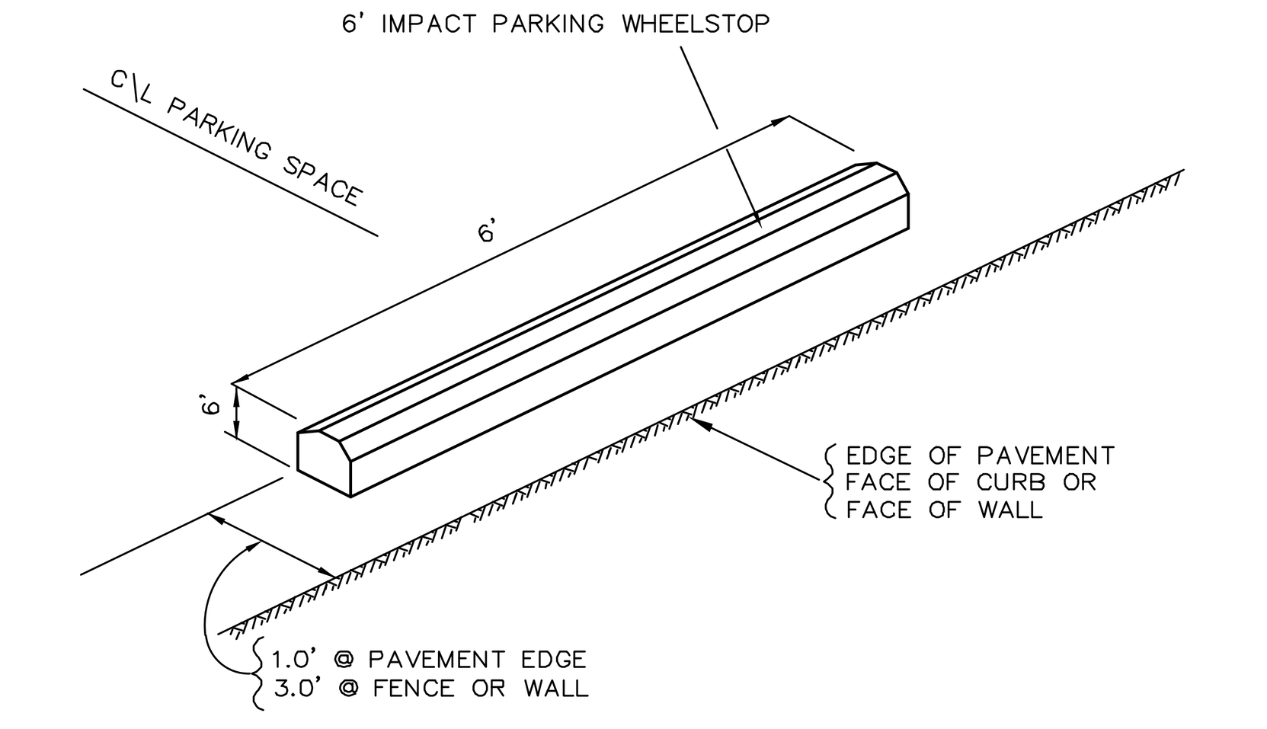
www.wraarchitects.com



CONCRETE/ASPHALT CONNECTION

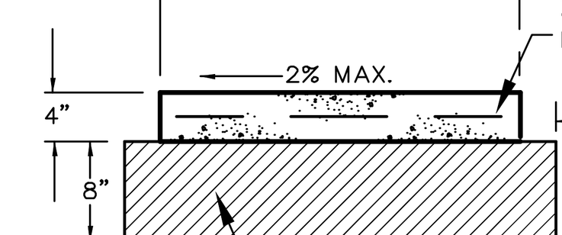
N.T.S.



1. PROVIDE ONE 6' IMPACT PARKING WHEELSTOP PER PARKING SPACE 1 FEET FROM EDGE OF PAVEMENT AT LOCATIONS INDICATED ON THE PAVING PLAN.
2. THE PRECAST CONCRETE SAFETY CURB SHALL BE ATTACHED SECURELY TO THE CONCRETE PAVEMENT WITH EPOXY ADHESIVE AND #4 REBAR ANCHORED INTO THICKENED CONCRETE EDGE.

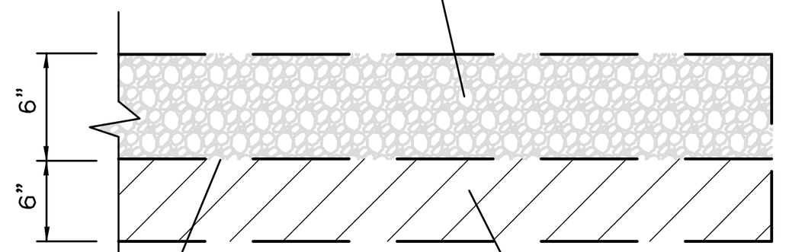
PRECAST CONCRETE WHEELSTOP

N.T.S.



SITE SIDEWALK DETAIL

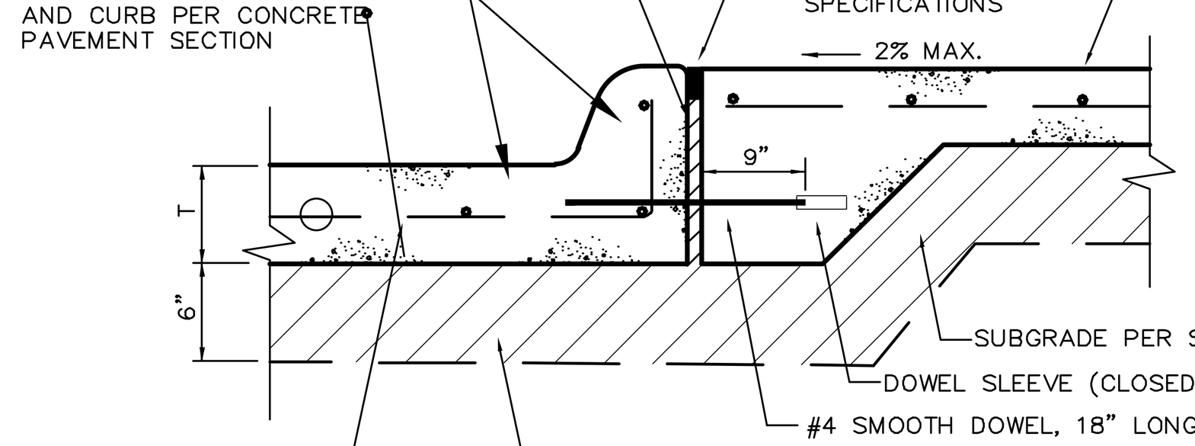
N.T.S.



REFER TO GEOTECHNICAL EXPLORATION FOR FILL COMPACTION REQUIREMENTS, PAVEMENT INSTALLATION, AND ALL EARTHWORK OPERATIONS.

FLEX BASE PAVEMENT SECTION

N.T.S.



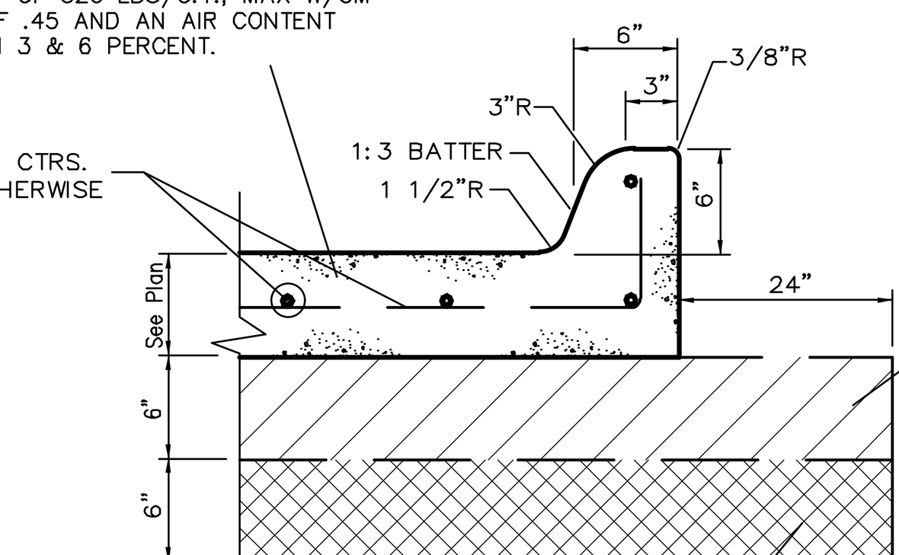
NOTE

REFER TO GEOTECHNICAL EXPLORATION FOR FILL COMPACTION REQUIREMENTS, PAVEMENT INSTALLATION, AND ALL EARTHWORK OPERATIONS.

PRIVATE CURB/SIDEWALK CONNECTION DETAIL

N.T.S.

ONSITE PAVEMENT ONLY – NOT FOR PAVEMENT IN PUBLIC R.O.W.



NOTE

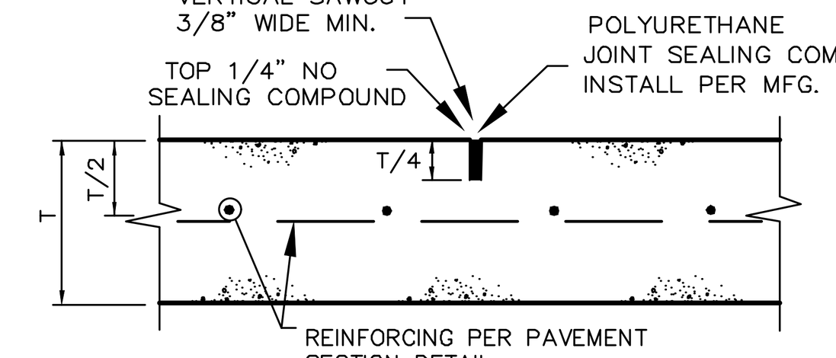
REFER TO GEOTECHNICAL EXPLORATION FOR FILL COMPACTION REQUIREMENTS, PAVEMENT INSTALLATION, AND ALL EARTHWORK OPERATIONS.

NOTE

SOLUBLE SULFATE TESTING SHALL BE PERFORMED PER THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. SULFATE RESISTANT CONCRETE MIX DESIGNS SHALL BE PROVIDED PER THAT REPORT SHOULD EXCESSIVE SULFATES BE PRESENT.

CONCRETE PAVEMENT SECTION

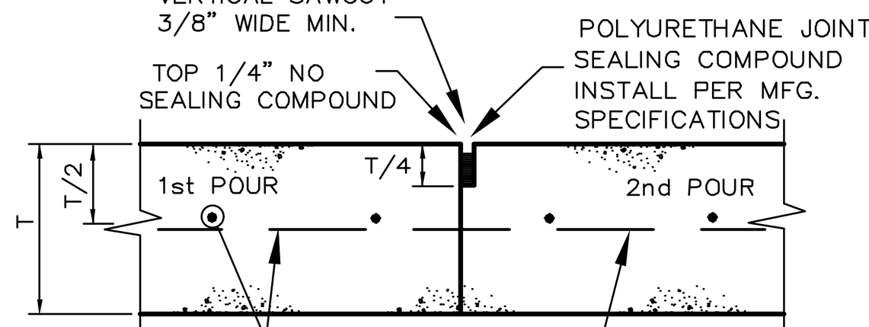
N.T.S.



SAWED DUMMY (CONTROL) JOINT

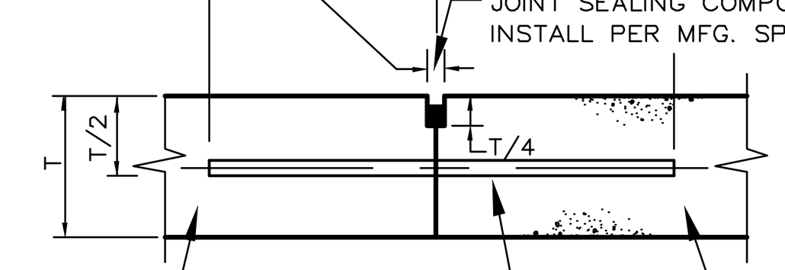
N.T.S.

MAXIMUM SPACING IS 15' CTRS. (TYP.)



CONSTRUCTION JOINT

N.T.S.



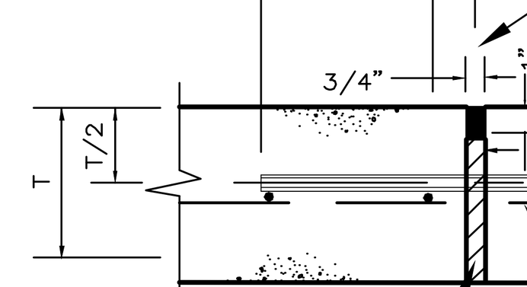
NOTE:
DOWELS AND REINFORCING BARS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

NOTES:
1. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG.
2. DRILLED BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO GREEN CONCRETE NOT ACCEPTABLE.

LONGITUDINAL BUTT JOINT

N.T.S.

NOTE:
DOWELS AND REINFORCING BARS SHALL BE SUPPORTED BY AN APPROVED DEVICE.



EXPANSION JOINT

N.T.S.

NOTE:
CITY DETAILS TAKE PRECEDENCE IN CITY R.O.W.

MISC. INFORMATION	REVISION	DATE	DESCRIPTION
NOTE: Prior to beginning any construction or construction staking, it shall be the Contractor's responsibility to contact the civil engineer to insure that all parties are in possession of the most current set of construction documents.			

RLK ENGINEERING
RLK ENGINEERING, INC.
111 West Main
Allen, Texas 75013
(972) 359-1733 Off
(972) 359-1833 Fax
Texas Registration No. 579

STATE OF TEXAS — SETH KELLY — 1-17-24

SITE DETAILS

SLIDELL ISD VO-AG FACILITY
1 GREYHOUND LANE
SLIDELL, TEXAS

DESIGNED BY: RLK Engineering	TECH REVIEW: RLK	DRAWING FILE: 23018 DETAILS2.dwg	DRAWING SCALE: 1" = 40'	SHEET: C 8
DRAWN BY: RLK Engineering	PEER REVIEW: RLK	DRAWING DATE: 1-11-24	PROJECT NUMBER: RLK 23018	

Jan 12, 2024 - 1:08pm User: sethk

11/29/2023 1:40:33 PM

CONSTRUCTION DOCUMENTS

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO.	2338 A
DATE:	01/17/2024

SITE DETAILS

C8

GENERAL NOTES

SECTION 1 - GENERAL INFORMATION AND DESIGN CRITERIA

SECTION 1.1 - DOCUMENTS

1.1.1 Structural Drawings are not stand-alone documents. They are augmented by technical specifications and must be coordinated with Architectural, Civil and Mechanical/Electrical/Plumbing/HVAC documents.

1.1.2 General Notes and Typical Details apply generally throughout the project wherever conditions similar to those depicted exist and are not necessarily referenced specifically in the documents.

1.1.3 Structural documents are protected by U.S.A. Copyright Laws, and shall not be used for any purpose other than construction of the building described in the Architectural documents and at the geographic location shown. The structural design described in these documents is not valid for any other purpose, use or location.

1.1.4 The Geotechnical Report referenced herein is not part of the Structural Documents. However, a copy should be obtained for reference during installation of foundations and subgrade preparation.

COORDINATION

1.1.5 Contractor is responsible for coordinating Structural Documents with other trades and disciplines including architectural, civil, mechanical, electrical, HVAC and fire protection. Some requirements are not known prior to issue and may change as layout and fabrication drawings are developed. Promptly report deviations and interferences with structural components for resolution by the Engineer.

1.1.6 Contractor shall verify dimensional location and depth of slab recesses and offsets with Architectural Drawings.

1.1.7 Contractor shall verify weights, location and details of structurally supported mechanical equipment prior to construction of the supporting structure. Report deviations from assumed conditions to the Engineer prior to fabricating materials.

1.1.8 Contractor shall verify size, location and detail of roof openings and curbs for mechanical equipment prior to fabricating materials. Report deviations from assumed conditions to the Engineer before proceeding with work.

1.1.9 Contractor shall verify size and location of floor and roof penetrations shown on structural drawings with other disciplines. Submit for approval a composite drawing showing proposed openings and sleeves through structural members for engineering review prior to or simultaneous with shop drawings for affected framing.

1.1.10 Do not scale plans, details and sections for quantity, length or fit of materials.

REFERENCE ELEVATIONS

1.1.11 Heights of floor and roof decks and various framing components are given on the drawings relative to a reference elevation of 100'-0". This reference elevation is equivalent to the elevation 986.50'.

TEMPORARY BRACING

1.1.12 Structural systems are designed for in-place conditions only. Contractor shall provide temporary bracing of structural components (including but not limited to beams, purlins, joists, columns, trusses, walls, and structural frame) for conditions that will exist during construction and to meet regulatory requirements for safety of workmen.

1.1.13 Temporary frame bracing shall remain until installation of permanent structural bracing elements, member connections and floor or roof diaphragms are complete.

SECTION 1.2 - CODES AND STANDARDS

1.2.1 Building Code of jurisdiction : 2018 International Building Code with local Amendments

1.2.2 Structural Concrete Code - American Concrete Institute (ACI) 318

1.2.3 Structural Steel Code - American Institute of Steel Construction (AISC) 360

SPECIAL INSPECTIONS

1.2.4 See Statement of Special Inspections for minimum special inspections and testing per the Building Code.

1.2.5 See Technical Specifications for other materials testing and inspection requirements.

SECTION 1.3 - DESIGN CRITERIA

1.3.1 Live Loads

Ground floor, UNO	100	psf
Mezzanine Floor	150	psf
Roof	20	psf

LIVE LOAD REDUCTION

1.3.2 Live loads have been reduced in accordance with provisions of the Building Code.

1.3.3 Roof Snow Loads

Ground Snow Load	5	psf
Flat Roof Snow Load	6	psf
Snow Exposure Factor (Ce)	1.0	
Snow Importance Factor (I)	1.1	

1.3.4 Dead Loads

Ceilings	3	psf
Floor Collateral	5	psf (1)
Roof Collateral	5	psf (1)
Roofing System	8	psf (2)

Notes:
(1) Collateral loads include: lighting, ductwork, miscellaneous framing.
(2) Roofing system weight is the maximum unit weight of roofing materials for which the roof structure is designed.
(3) Sprinkler loads are for distribution lines and heads, exclusive of mains, which are included separately as concentrated dead loads.

1.3.5 Wind Loads (Classroom addition)

Ultimate Design Wind Speed	112 mph
Wind Exposure Classification	'C'
Internal Pressure Coefficient	+/- 0.18

1.3.6 Seismic Loads

Seismic Risk Category	III
Seismic Importance Factor	1.25
Site Class	C

1.3.7 Concentrated Loads

Location	Load-pounds	Area	Note
Steel Roof Deck	250	1 sq.ft.	
Roof Joists	250		(3)
Roof Opng Support Frames	500	6.25 sq.ft.	

Notes:
(1) Concentrated loads apply to any location on supporting structure, separately from (not in addition to) uniform live loads, except as noted otherwise.
(2) Applies to each structural component individually.
(3) Load applied at any panel point along top or bottom chord.

1.3.8 Mechanical Units - Assumed weights and locations of roof-supported mechanical equipment are indicated on Roof Framing Plan. Notify Engineer of deviations in weight, location or detail prior to fabrication of materials.

1.3.9 Pedestrian Guardrail - 50 lb/ft horizontal and vertical, or 200 lb concentrated at top, any direction.

SECTION 2 - FOUNDATIONS AND RELATED EARTHWORK

GEOTECHNICAL REPORT

2.1 Design of foundations and structural components in contact with soil is based on the recommendations given in the following:

Recommendations Report by :
Alpha Testing, LLC
Date of Report : October 3, 2023
Report Number : W231340 - Rev1

2.2 Refer to the soil report for subsoil conditions that may be encountered in the installation of foundations, and other information relevant to foundations and site preparation.

SOIL IMPROVEMENT UNDER BUILDING SLABS

2.3 Design of soil-supported building slabs is based on a range of soil movement in the order of 1 inch, based on the recommendations of Geotechnical Report.

2.4 Refer to the geotechnical report and project specifications for soil stabilization under soil-supported building slabs.

STRAIGHT SHAFT PIERS

2.5 Design Criteria:

Bearing Stratum	:	Gary Limestone
Top of Stratum Elevation (Preliminary, for Bidding Purposes Only)	:	16'-0" below existing grade
Allowable End Bearing	:	35,000 psf
Positive Side Friction	:	6,000 psf
Negative Side Friction	:	5,000 psf
Upheaval Side Friction	:	1,000 psf
Upheaval Design Depth	:	12 ft

2.6 Piers shall extend to minimum embedment depth below top of bearing stratum as defined by Geotechnical Report or bottom of temporary casing (whichever is deeper) as noted in the pier schedule.

2.7 Pier depths indicated are for bidding purposes only. Actual pier depths may vary depending on depth to bearing stratum.

2.8 Steel dowels at tops of piers or footings shall extend 30 bar diameters above and below top of pier unless noted otherwise (noted as "LAP" on Typical Details).

2.9 Top of pier elevations given are relative to reference elevation 100'-0".

2.10 Overpour at tops of piers ("mushrooms") shall be removed to the required pier diameter.

SECTION 3 - STRUCTURAL CONCRETE

SECTION 3.1 - CONCRETE FORMS

3.1.1 Formed Voids - Provide retained void spaces between bottom of structural members and subgrade as follows:

Grade Beams	6 inches

3.1.2 Grade Beams shall be formed both sides unless specifically shown or noted otherwise in the details.

STEEL REINFORCING

3.2.1 Bars shall be deformed in accordance with ASTM A615. Reinforcing indicated to be welded shall conform to ASTM A706.

3.2.2 Strength of all bars shall be Grade 60

SPLICING OF REINFORCING BARS

3.2.3 Top bars in beams and slabs shall be spliced at midspan between supports, unless noted otherwise.

3.2.4 Bottom bars in beams and slabs shall be spliced at supports, unless noted otherwise.

3.2.5 Vertical bars in walls shall be spliced at top of concrete above floors, unless noted otherwise.

LAPPED SPLICE LENGTHS

3.2.6 Lap reinforcing 48 bar diameters at splices unless noted or detailed otherwise.

3.2.7 Tension splice lengths shall be calculated in accordance with ACI 318. Use Class "B" splices unless noted otherwise

3.2.8 Welded wire fabric splice length (overlap), measured between outermost cross wires of each fabric sheet, shall be at least one spacing of cross wires plus 2 inches, but in no case less than 6 inches.

CONCRETE COVER TO REINFORCING

3.2.9 Clearance from face of concrete to face of reinforcing:

Piers	3"
Formed Grade Beams	1 1/2" top, 2" sides, 3" bottom
Slab-on-Grade	See Typical details

PLACEMENT OF REINFORCING

3.2.10 Offsets in reinforcing bars shall be bent at a ratio of 1 (normal to bar axis) to 6 (parallel to bar axis).

3.2.11 Provide corner bars at intersections of beams and walls in accordance with Typical Details.

3.2.12 Provide dowels from grade beams or foundation equal in size and spacing to vertical bars in walls or pilasters and extend one splice length above and below joint line, unless noted otherwise.

3.2.13 Start stirrup spacing in beams 2" outside of face of supports.

3.2.14 Place first bar of slab reinforcing parallel to side 2" from a free edge or half of required bar spacing from face of edge beam.

3.2.15 Single layer reinforcing in walls shall be placed at center of walls unless noted otherwise.

3.2.16 Place welded wire reinforcing in slabs on concrete joists, in toppings, or in slabs poured on steel deck at center of slab unless noted otherwise.

SECTION 3.3 - CONCRETE MIX DESIGNS

3.3.1 Concrete Mix Schedule:
a) "HRC" refers to hardrock concrete having air dry unit weight of approximately 145 PCF.
b) Where w/c ratio is not indicated in the Concrete Mix Schedule, it shall be as necessary to meet strength requirements.
c) Where the w/c ratio is shown, it shall be adhered to regardless of strength requirements.
d) "Strength" is required compressive cylinder strength at an age of 28 days.

Conc Class	Strength psi	Type	Agg Size	Slump Inches	Max w/c	Notes
A	4000	HRC	1 1/2"	5-7	0.50	
B	4000	HRC	1"	3-5	0.48	
C	4500	HRC	1"	3-5	0.45	
D	3500	HRC	1"	3-5	0.48	

3.3.2 Mix Usage Schedule:

Description of Use	Concrete Class	Air Content
Drilled Piers	A	------
Grade Beams	B	3-6%
Housekeeping Pads	D	------
Interior Slab-on-Grade	D	------
Exterior Slab-on-Grade	C	3-6%

SECTION 3.4 - CONCRETE SLABS

3.4.1 Slabs Placed on Grade

Location	Thickness	Reinforcing
All	5 inches	#4 @ 18 EW

a) Reinforcement shall be placed 2 inches from top of slab, unless detailed otherwise.
b) Provide construction joints in slabs where indicated on Plans. Allow minimum of 4 days interval between placing adjacent sections of slab.

3.4.2 SLABS ON STEEL FORM DECK
Slab Thickness: 5" (overall)
Slab Reinforcing: WWF 4x4-W2.9xW2.9
Reinforcing over girders: #4(8-0) @ 12 (top perp to girders)

Note: "Girders" refers top interior beams oriented parallel to deck (provide 1" top cover)

3.4.3 HOUSEKEEPING PADS
Pad Thickness: 4.0 inches max
Pad Reinforcing: #3@12" on center maximum each way centered in pad
Refer to mechanical drawings for pad locations and pad dimensions.

3.4.4 SLABS OVER GEOFOAM
4" thick with #3 @ 12" EW unless noted otherwise in details.

SECTION 3.5 - DRILLED IN ANCHORS

3.5.1 Drill holes with rotary impact hammer drill using carbide tipped bits. Drill bits shall be of the diameter as specified by the anchor manufacturer. Holes shall be drilled perpendicular to the concrete or masonry surface.

3.5.2 Embedded items: Identify position of reinforcing steel and other embedded items prior to drilling holes for anchors. Exercise care in drilling to avoid damaging existing reinforcing or embedded items. Notify the Engineer if reinforcing steel or other embedded items are encountered during drilling. Take precautions as necessary to avoid damaging electrical and telecommunications conduit, and gas lines.

3.5.3 Base Material Strength: Unless otherwise specified, do not drill holes in concrete or masonry until concrete, mortar, or grout has achieved full design strength.

TESTING

3.5.4 Continuous special inspection is required for adhesive anchors. Remove and replace mis-placed or malfunctioning anchors. Clean and fill empty anchor holes and patch failed anchor locations with high-strength nonshrink, nonmetallic grout. Anchors that fail to meet proof load or installation torque requirements shall be regarded as malfunctioning.

EXPANSION,AND ADHESIVE ANCHORS

3.5.5 Concrete base material: provide anchors of size and type shown with ICC-ES or IAPMO-UES compliance required

Expansion Anchors: Hilti Kwik Bolt TZ (ICC-ES ESR-1917)
Simpson Strong-Bolt 2 (ICC-ES ESR-3037)
Dewalt Power-Stud+SD1 (ICC-ES ESR-2818)
Dewalt Power-Stud+SD4,SD6 SS(ICC-ES ESR-2502)
Powers Power-Bolt+ (ICC-ES ESR-3260)
ITW Red Head Trubolt+ (ICC-ES ESR-2427)

Adhesive Anchors: Hilti HIT-HY 200 Safe Set System (ICC-ES ESR-3187) for use with Hilti HIT-Z Rod, HAS-E Rod, & Hollow Drill Bit
Hilti HIT-RE 500-V3 Safe Set System (ICC-ES ESR-3814) for use with Hilti HAS-E Rod, Hollow Drill Bit & Hilti Roughening Tool
Hilti HIT HY-200 (ICC-ES ESR 3187)
Simpson SET-XP (ICC-ES ESR-2508)
Simpson AT-XP (IAPMO-UES ER-263)
Dewalt AC100+ Gold (ICC-ES ESR-2582)
Dewalt PE1000+ (ICC-ES ESR-2583)
Dewalt Pure 110+ (ICC-ES ESR-1995)
ITW RedHead Epcon S7 (IC-ES ESR-2308)
ITW RedHead Epcon C6+(ICC-ES ESR-3577)
ITW RedHead Epcon G5 (ICC-ES ESR-1137)

3.5.6 Grout filled CMU (Concrete Masonry Unit) base material: provide anchors of size and type shown with ICC-ES or IAPMO-UES compliance required

Adhesive Anchors: Hilti HIT-HY 70 (ICC-ES ESR-2682)
Simpson SET-XP (IAPMO-UES ER 265)
Simpson AT-XP (IAPMO-UES ER281)
Dewalts AC100+Gold(ICC-ES ESR-3200)
ITW RedHead Epcon A7 (ICC-ES ESR-5560)

INSTALLATION

3.5.7 Perform anchor installation in accordance with manufacturer's printed installation instructions (MMPII).

3.5.8 Protect threads from damage during anchor installation.

3.5.9 IBC 2018 requires ACI/CRSI certification for adhesive anchor installers (AAI) when installing adhesive anchors of horizontally or upwardly inclined conditions. Installers of adhesive anchors shall hold a current AAI certification as accredited by ACI/CSRI in accordance with (ACI 318-14 17.8.2.2). Anchor Manufacturer Installation Training is acceptable as a supplement to ACI\CRSI AAI certification. Installers shall submit their certifications to the inspector (testing lab) for each installation.

SECTION 5 - STRUCTURAL STEEL

SECTION 5.1 - STRUCTURAL FRAME

5.1.1 Structural Steel Properties:

High Strength Steel Use High Strength Steel for W Shapes and WT's, uno	ASTM A992 Grade 50
Structural Steel (Normal Strength) Use for Angles, Channels, and Plates, uno	ASTM A36
Steel Pipes	ASTM A53, Grade B
Hollow Structural Sections (HSS)	ASTM A500, Grade C
Erection Bolts	ASTM A307
High Strength Bolts	ASTM A325N
Anchor Rods	ASTM F1554 Grade 55 w/ S1 welding supplement

5.1.2 Continuity Plates (Full Depth column stiffeners aligned with beam flanges, or Full Depth beam stiffeners aligned with column flanges) shall match the steel grade of the base member.

WELDING

5.1.3 Unless otherwise noted, angles, plates, rods, and miscellaneous framing shall be welded at contact joints and supports. Weld sizes shall conform to AWS D1.1 minimums, except where noted otherwise.

5.1.4 Where fillet weld sizes are not indicated on weld symbols, fillet size shall be 1/16th-inch smaller than thickness of thinner of materials being joined.

5.1.5 Complete penetration welds are indicated by notation "CJP" on weld symbols, partial penetration by "PJP".

STRUCTURAL BOLTS

5.1.6 Bolts indicated on details shall be 3/4" diameter, unless noted otherwise.

5.1.7 Bolts shall be tightened by the AISC "Snug Tight" method unless noted otherwise.

MISCELLANEOUS

5.1.8 Shelf angles supporting masonry shall have 1/4" wide expansion joints spaced not more than 40 feet apart.

5.1.9 Edge angles at perimeters of floors and roofs noted as "CHORD MEMBERS" or "CONTINUOUS" on details shall be butt welded at splices to develop full allowable tensile strength of member.

5.1.10 Edge angles supporting floor or roof deck shall be spliced only over supports.

5.1.11 Steel members shown to be curved shall be rolled in a manner that will not cause distortion or buckling. Should alterations to the member size, such as a thicker flange or web, be required to ensure this outcome, the additional steel shall be provided at no additional cost to the contract.

SECTION 5.3 - STEEL ROOF DECK

5.3.1 Steel Deck Schedule:

Deck Gauge	Deck Type	SDI Depth (In)	Sheet Width (In)	Min Ix (In^4)	Min Sx(top) (In^3)	Min Sx(bot) (In^3)	Finish
20	N	3	24	0.659	0.385	0.433	Galv - G90

5.3.2 Steel Deck Connection Schedule:

Inst Mark	Conn @ Supports (W/N)	Conn @ Parallel Edges (In)	Sidelap Conn No/Span	Reqd Shear Capacity (PLF)
I	24/4	6	5	252

5.3.3 Support and parallel edge connections shall be 5/8" diameter puddle welds. Sidelap connections shall be no. 10 hex head screws.

5.3.4 W/N = sheet width/no connections each sheet.

5.3.5 Deck Connections shall be as follows:
At 3" deep deck, deck connection shall be as Mark I, TYP UNO.

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

STATE OF TEXAS
R. RENE AVILA
92630
LICENSED
PROFESSIONAL ENGINEER
01.17.24

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

GENERAL NOTES

S101

PONCE-FUESS ENGINEERING
Structural Engineers
3333 Lee Parkway, Suite 350 • Dallas, TX 75219
469.310.2850 • ponce-fuess.com
PFE PROJECT NO. 23114 FIRM REG. NO. F-12125

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STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS
2018 INTERNATIONAL BUILDING CODE

SCHEDULE OF STRUCTURAL SPECIAL INSPECTION SERVICES TABLE NOTES

1. **Registered Design Professional In Responsible Charge**
   a. This Statement of Special Inspections is submitted in accordance with Section 1704 of the 2018 International Building Code. It includes a *Schedule of Structural Special Inspection Services* applicable to the Project. If applicable, it includes *Requirements for Seismic Resistance* and/or *Requirements for Wind Resistance*.
2. **The Owner**
   a. Shall Employ one or more approved agencies to provide special inspections and test during construction on the types of work specified in Section 1705 and in accordance with the building code.
3. **The Special Inspector(s)**
   a. Shall provide written documentation to the Building Official demonstrating the competence and relevant experience or training of the Special Inspector(s) who will perform the Special Inspections and tests during construction.
   b. Shall keep records of Special Inspections and tests. The Special Inspector(s) shall submit reports of Special inspection and tests to the Building Official and to the Registered Design Professional in Responsible Charge. Reports shall indicate that work inspected or tested was or was not completed in conformance to approved Construction Documents.
   c. Discrepancies shall be brought to the immediate attention of the Contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Design Professional in Responsible Charge prior to completion of that phase of work.
   d. Shall prepare a final report documenting required special inspections and tests, and corrections of any discrepancies noted in the inspections or tests, shall be submitted at a point in time agreed upon prior to the start of work by the Owner or the or the Owner's authorized agent to the Building Official.
4. **The Contractor(s)**
   a. Shall be solely responsible to ensure tests and inspections are performed. The construction or work for which Special Inspection or testing is required shall remain accessible and exposed for Special Inspection or testing purposes until completion of the required Special Inspections or test.
   b. The Special Inspection program does not relieve the Contractor of responsibility to comply with the Contract Documents. Jobsite saftey and means and methods of construction are solely the responsibility of the Contractor.
5. See specifications for additional testing requirements. Where conflicts occur, the most stringent requirement shall control.
6. LEGEND:
   Continuous: Inspections by the special inspector who is present when and where the work to be inspected is being performed.
   Periodic: Inspections by the special inspector who is intermittently present where the work to be inspected has been or is being performed. Periodic Inspections need not interrupt construction activities.
   Perform: Continuous inspections by the special inspector for specific task to be completed prior to acceptance of the designated item, and need be performed at that time on a continuous basis.
   Observe: Periodic inspections by the special inspector conducted on a daily basis as a minimum and need not interrupt construction activities.
   Document: The special inspector shall prepare reports indicating that the work has been performed in accordance with the contract documents.

SCHEDULE OF SPECIAL INSPECTION SERVICES 1705.2: STEEL CONSTRUCTION			
Special Inspections and nondestructive testing of structural steel elements in buildings, structures and portions thereof shall be in accordance with the quality assurance inspection requirements of AISC 360.			
CHECK IF REQD	MINIMUM VERIFICATIONS AND INSPECTIONS	FREQUENCY	REFERENCED STANDARD
☒	1. Fabricator and Erector documents per AISC 360, chapter N, paragraph 3.2 for compliance with construction documents.	PERIODIC	AISC 360 - Chapter N 3.2
☒	2. Verify Structural Steel identification markings and certified mill test	PERIODIC	AISC 360
☒	3. Verify embedment member diameter, grade, type, and embedment length	PERIODIC	AISC 360
☒	4. Verify member locations, braces, stiffeners, embedment and application of joint detail at each connection	PERIODIC	AISC 360
☒	5. Structural steel welding		
	a. Inspect task prior to welding: 1. Welding procedure specifications and consumable certificates	PERFORM	AISC 360 - Table N5.4-1, AWS D1.1 AWS D1.1/D1.1M 6.3, 6.2
	2. Material identification type and grade 3. Welder identification system 4. Fit-up groove welds joint preparation, alignment, root opening, root face, bevel condition of steel surfaces, tack weld quality and location, backing type and fit 5. Access holes configuration and finish 6. Fit-up of fillet welds alignment, gaps at root, condition of steel surfaces, tack weld quality and location.	OBSERVE	AWS D1.1/D1.1M 6.2 AWS D1.1/D1.1M 6.4 AWS D1.1/D1.1M 6.5.2, 5.22, 5.15, 5.18, 5.10 AWS D1.1/D1.1M 6.5.2, 5.17 AWS D1.1/D1.1M 5.22.1, 5.15, 5.18 6.2, 5.11
	b. Inspect task during welding: 1. Qualified welders 2. Control and handling of welding consumables 3. No welding over cracked tack welds 4. Environmental conditions, wind speed, precipitation, and temperature 5. Welding procedure specification followed 6. Welding techniques, interpass and final cleaning, each pass within profile limitations, and each pass meets quality requirements	OBSERVE	AISC 360 - Table N5.4-2, AWS D1.1 AWS D1.1/D1.1M 6.4 AWS D1.1/D1.1M 6.2, 5.3 AWS D1.1/D1.1M 5.18 AWS D1.1/D1.1M 5.12.1, 5.12.2 AWS D1.1/D1.1M 6.3.3, 6.5.2, 5.5, 5.21, 5.6, 5.7 AWS D1.1/D1.1M 6.5.2, 6.5.3, 5.24, 5.30.1
	c. Inspect task after welding: 1. Welds cleaned	OBSERVE	AISC 360 - Table N5.4-3, AWS D1.1 AWS D1.1/D1.1M 5.30.1 AWS D1.1/D1.1M 6.5.1
	2. Weld proportions (size, length, location) 3. Weld meet visual acceptance criteria 4. Arc strikes, 5. k-area 6. Backing removed and weld tabs removed 7. Repair activities 8. Document acceptance or rejection of weld	PERFORM	AWS D1.1/D1.1M 6.5.3, 6.1 AWS D1.1/D1.1M 5.29 AWS D1.1/D1.1M 5.10, 5.31 AWS D1.1/D1.1M 6.5.3, 5.26 AWS D1.1/D1.1M 6.5.4, 6.5.5
	d. Nondestructive testing (NDT) of welded joints 1. CJP welds : Testing shall be performed on 100% of shop and field complete-penetration welds 2. Access holes (Flanges > 2") 3. Welded joints subject to fatigue	PERFORM	AISC 360 - Section N5b
☒	6. Structural Steel Bolting		
	a. Inspection task prior to bolting: 1. Manufacturer's certification for fastener materials	PERFORM	AISC 360 - Table N5.6-1, RCSC RCSC 2.1, 9.1 RCSC C-2-1, 9.1
	2. Fasteners mark in accordance with ASTM requirements 3. Proper fasteners selected (grade, type, bolt length) 4. Proper bolting procedure 5. Connecting elements including, faying surface and hole preparation 6. Pre-installation verification testing by installation personnel 7. Proper storage provided for bolts, nuts, washers, and other fastener components	OBSERVE	RCSC 2.3.2, 2.7.2, 9.1 RCSC 4, 8 RCSC 3, 9.3 RCSC 7, 9.2 RCSC 2.2, 8, 9.1
	b. Inspection task during bolting: 1. Fastener assemblies, of suitable condition, placed in all holes and washers are positioned as required 2. Joint brought to the snug-tight condition prior to pretensioning operation 3. Fastener not turned by the wrench prevented from rotating 4. Fasteners are pretensioned in accordance with the RCSC Specification progressing systematically from the most rigid point towards the free edges.	OBSERVE	AISC 360 - Table N5.6-2, RCSC RCSC 8.1, 9.1 RCSC 8.1, 9.1 RCSC 8.2, 9.2 RCSC 8.2, 9.2
	c. Inspection task after bolting: 1. Document acceptance or rejection of bolted connections	PERFORM	AISC 360 - Table N5.6-3
	7. Composite Steel Construction		
☒	a. Verify placement and installation of steel headed studs	PERFORM	AWS D1.1/D1.1M 7.8
☒	b. For steel deck elements, perform test and additional Special Inspections in accordance with Steel Deck Construction		
☒	c. For concrete elements, perform test and additional Special Inspections in accordance with Concrete Construction		

SCHEDULE OF SPECIAL INSPECTION SERVICES 1705.2.2: STEEL DECK CONSTRUCTION			
CHECK IF REQD	MINIMUM VERIFICATIONS AND INSPECTIONS	FREQUENCY	REFERENCED STANDARD
	1. Material verification of Cold-Formed Steel Deck		
☒	a. Verify type, size, and support spacing	PERIODIC	AISC 360, ANSI SDI QA/QC
☒	b. Manufacturer's certified test reports	CONTINUOUS	
	2. Connection of cold formed steel deck to support structure		
☒	a. Verify welding	PERIODIC	AISC 360, ANSI SDI QA/QC
☒	b. Verify fasteners and fastener installation	PERIODIC	

SCHEDULE OF SPECIAL INSPECTION SERVICES 1705.3: CONCRETE CONSTRUCTION			
CHECK IF REQD	MINIMUM VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
☒	1. Inspect reinforcement, including prestressing tendons, and verify placement.	PERIODIC	ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3
☐	2. Reinforcing bar welding:		AWS D1.4, ACI 318: 26.6.4
	a. Verify weldability of reinforcing bars other than ASTM A706.	PERIODIC	
	b. Inspect single-pass fillet welds, maximum 5/16" ; and	PERIODIC	
	c. Inspect all other welds.	CONTINUOUS	
☒	3. Inspect anchors and anchor reinforcement cast in concrete	PERIODIC	ACI 318: 17.8.2, 26.13.3.3
☒	4. Inspect anchors post-installed in hardened concrete members.		
	a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads.	CONTINUOUS	ACI 318: 17.8.2.4
	b. Mechanical anchors and adhesive anchors not defined in 4.a.	CONTINUOUS	ACI 318: 17.8.2
☒	5. Verifying use of required design mix for intended location.	CONTINUOUS	ACI 318: Ch. 19, 26.4.3, 26.4.4
☒	6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	CONTINUOUS	ACI 318: 26.5, 26.12 ASTM C172, ASTM C31
☒	7. Inspect concrete and shotcrete placement for proper application techniques.	CONTINUOUS	ACI 318: 26.5
☒	8. Verify maintenance of specified curing temperature and techniques.	PERIODIC	ACI 318: 26.5.3, 26.5.5
☐	9. Inspect prestressed concrete for:		ACI 318: 26.10
	a. Application of prestressing forces; and	CONTINUOUS	
	b. Grouting of bonded prestressing tendons.	CONTINUOUS	
☐	10. Inspect erection and connection of precast concrete members.	PERIODIC	ACI 318: 26.9, 26.13.3.3
☐	11. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	PERIODIC	ACI 318: 26.11.2
☒	12. Inspect formwork for shape, location, and dimensions of the concrete member being formed.	PERIODIC	ACI 318: 26.11.1.2(b)
☐	13. Placement of reinforcement for special moment frames, boundary elements of special structural walls and coupling beams.	CONTINUOUS	ACI 318: 26.13.3.2
☐	14. Welding of reinforcement for special moment frames, boundary elements of special structural walls, and coupling beams.	CONTINUOUS	ACI 318: 26.13.3.2

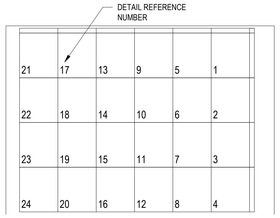
SCHEDULE OF SPECIAL INSPECTION SERVICES TABLE 1705.6: SOILS			
CHECK IF REQD	MINIMUM VERIFICATIONS AND INSPECTIONS	FREQUENCY	REFERENCED STANDARD
☐	1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	PERIODIC	IBC Table 1705.6
☒	2. Verify excavations are extended to proper depth and have reached proper material.	PERIODIC	IBC Table 1705.6
☒	3. Perform classification and testing of compacted fill materials.	PERIODIC	IBC Table 1705.6
☒	4. Verify use of proper materials, densities, and lift thickness during placement and compaction of compacted fill.	CONTINUOUS	IBC Table 1705.6
☒	5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	PERIODIC	IBC Table 1705.6

SCHEDULE OF SPECIAL INSPECTION SERVICES TABLE 1705.8: CAST-IN-PLACE DEEP FOUNDATIONS			
CHECK IF REQD	MINIMUM VERIFICATIONS AND INSPECTIONS	FREQUENCY	REFERENCED STANDARD
☒	1. Inspect drilling operations and maintain complete and accurate records for each element.	CONTINUOUS	IBC Table 1705.8
☒	2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable), and adequate end-bearing strata capacity. Record concrete or grout volumes.	CONTINUOUS	IBC Table 1705.8
☒	3. For concrete elements, perform tests and additional Special Inspection in accordance with Concrete Construction.		IBC Table 1705.8

SCHEDULE OF SPECIAL INSPECTION SERVICES TABLE 1705.10: FABRICATED ITEMS			
CHECK IF REQD	MINIMUM VERIFICATIONS AND INSPECTIONS	FREQUENCY	REFERENCED STANDARD
☒	1. Where fabrication of structural load-bearing or lateral load-resisting member or assemblies is being conducted on the premises of a fabricator's shop, Special Inspection of the fabricated items shall be required during fabrication. (1)		IBC 1704.2

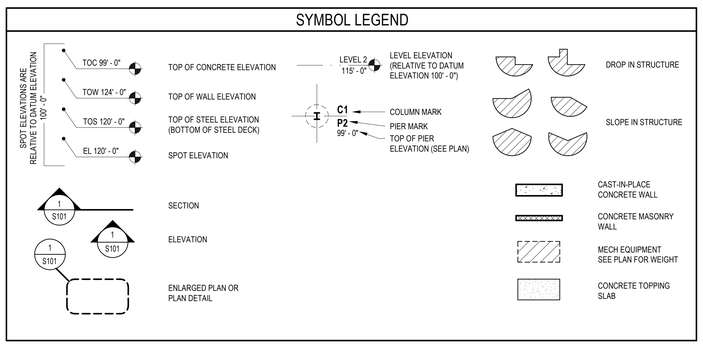
(1) Special inspections during fabrication are not required where the work is done on the premises of a fabricator approved to perform such work without special inspection. Approval shall be based on review of fabricator's written fabrication procedures and quality control manuals that provide a basis for control of materials and workmanship, with periodic auditing of fabrication and quality control practices by an approved agency or the building official.

SPECIAL INSPECTIONS REQUIREMENTS FOR WIND RESISTANCE SERVICES TABLE NOTES			
Special Inspections for wind resistance is required in accordance with Section 1705.11 of the Code and the Schedule of Inspection Services table below.			
Basic Wind Speed (3 second gust):	112 mph	Wind Exposure Category:	C
Description of main wind force-resisting system subject to special inspection for wind resistance:	PEMB moment frames and braces		
Description of wind force-resisting components subject to special inspection for wind resistance:	Fastening of steel roof deck and steel cable/rod bracing		
Statement of Responsibility: Each contractor responsible for the construction or fabrication of a system or component described above must submit a Statement of Responsibility to the Building Official and the Owner or the Owner's authorized agent prior to the commencement of work on the system or component. The contractor's Statement of Responsibility shall contain acknowledgement of awareness of the special requirements contained in the Statement of Special Inspections.			



DETAIL SHEET LAYOUT

SYMBOL LEGEND



AB	Anchor Bolt	JST	Joist
ADDL	Additional	JT	Joint
ADJ	Adjacent	K	Kip (1,000 pounds)
AESS	Architectural Exposed Structural Steel	KSI	Kips per Square Inch
		K-FT	Kip-Feet (Moment)
AFF	Above Finished Floor	K/FT	Kips per Foot
AGGR	Aggregate	LBF	Pound-Force
ALT	Alternate	LLBB	Long Leg Back-to-Back
AR	Anchor Rod	LLH	Long Leg Horizontal
ARCH	Architect(ural)	LLV	Long Leg Vertical
ASD	Allowable Strength Design	LRFD	Load and Resistance Factor Design
BB	Bond Beam	LSH	Long Side Horizontal or Long-Slotted Hole(s)
BCX	Bottom Chord Extension		
BL	Building Line or Brick Ledge	LSV	Long Side Vertical
		LT	Left
BLDG	Building	M	Moment
BLK	Block	MATL	Material
BLKG	Blocking	MAX	Maximum
BM	Beam	MECH	Mechanical
BOT, B	Bottom	MEP	Mech/Elec/Plumbing
BRG	Bearing	MFR	Manufacturer
BTWN	Between	MIN	Minimum
C	Channel	MK	Mark
CFMF	Cold-Formed Metal Framing	MTL	Metal
CGS	Center of Gravity of Steel	NIC	Not in Contract
CIP	Cast-in-Place	NO	Number
CJ	Construction Joint or Control Joint	NS	Near Side
		NSG	Non-Shrink Grout
CJP	Complete Joint Penetration	NTS	Not to Scale
CL	Center Line	OF	Outside Face
CMU	Concrete Masonry	OP.HD	Opposite Hand
COL	Column	OPNG	Opening
COMP	Compression	P	Pan (form)
CONC	Concrete	P-T	Post-Tensioning
CONN	Connect(ion)	PCC	Precast Concrete
CONSTR	Construction	PEN	Penetration
CONT	Continuous	PJP	Partial Joint Penetration
COORD	Coordinate	PI	Plasticity Index
CTR	Center	PIL	Pilaster
CW	Curtain Wall	PL	Plate
db	Bar Diameter(s)	PNL	Panel
DBA	Deformed Bar Anchor	PSF	Pounds Per Square Foot
DBL	Double	PSI	Pounds Per Square Inch
DEG	Degree(s)	PT	Point or Pressure Treated
DET	Detail		
DIA	Diameter	R	Radius
DIM	Dimension	RECT	Rectangle(ular)
DWG	Drawing	REF	Refer (to)
DWL	Dowel	REINF	Reinforcing
EA	Each	REQD	Required
EF	Each Face	RT	Right
EJ	Expansion Joint	RTU	Rooftop Unit
EL	Elevation	SC	Slip-Critical
ELEV	Elevator	SCHED	Schedule
ENGR	Engineer	SECT	Section
EOD	Edge of Deck	SHT	Sheet
EOS	Edge of Slab	SIM	Similar
EQ	Equal	SOG	Slab on Grade
EQUIP	Equipment	SOV	Slab on Void Cartons
EW	Each Way	SPA	Space(ing)
EXP BT	Expansion Bolt	SPEC	Specifications
EXIST	Existing	SQ	Square
EXT	Exterior	SSH	Short-Slotted Hole(s)
F	Force (Axial)	ST	Stirrup(s)
FABR	Fabricator	STD	Standard
FDN	Foundation	STIF	Stiffener
Fe	Force (Effective)	STL	Steel
FIN	Finish	STRUCT	Structure(al)
FIN FLR, FF	Finish Floor	SUPPT	Support
FLR	Floor	SYM	Symmetrical
FRT	Fire Retardant Treated	T	Tension
FS	Far Side	T&B	Top and Bottom
FTG	Footing	TCX	Top Chord Extension
FV	Field Verify	TEMP	Temperature
GA	Gauge, Gage	TOC	Top of Concrete
GALV	Galvanize(ing)	TOF	Top of Footing
GC	General Contractor	TOJ	Top of Joist
GN	General Notes	TOP	Top of Pier
GR	Grade	TOPCC	Top of Precast Concrete
GR BM	Grade Beam	TOS	Top of Steel
HORIZ, H	Horizontal	TOW	Top of Wall
HSA	Headed Stud Anchor	TYP	Typical
HSS	Hollow Structural Section	ULT	Ultimate (force)
HT	Height	UNO	Unless Noted Otherwise
ICF	Insulating Concrete Form	V	Shear
IF	Inside Face	VERT, V	Vertical
INFO	Information	WD	Wood
INT	Interior	WF	Wide Flange
INTERM	Intermediate	WP	Working or Work Point

STANDARD ABBREVIATIONS

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

STATE OF TEXAS — R. RENE AVILA — 92630 — LICENSED PROFESSIONAL ENGINEER — 01.17.24

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

STATEMENT OF SPECIAL INSPECTIONS

S102

PONCE-FUESS ENGINEERING
Structural Engineers
3333 Lee Parkway, Suite 350 • Dallas, TX 75219
469.330.2850 • ponce-fuess.com
PFE PROJECT NO. 23114 FIRM REG. NO. F-12125

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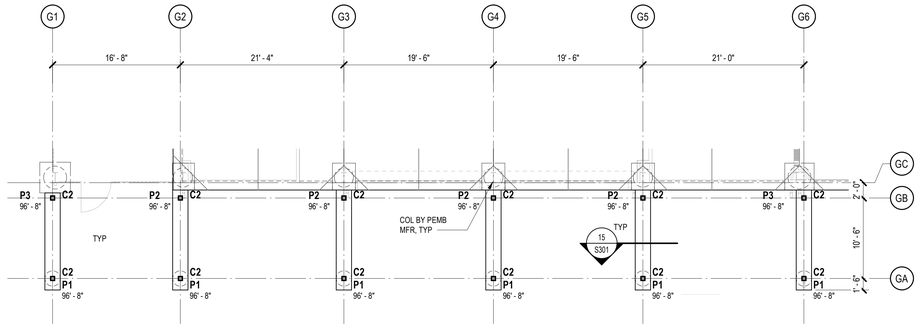
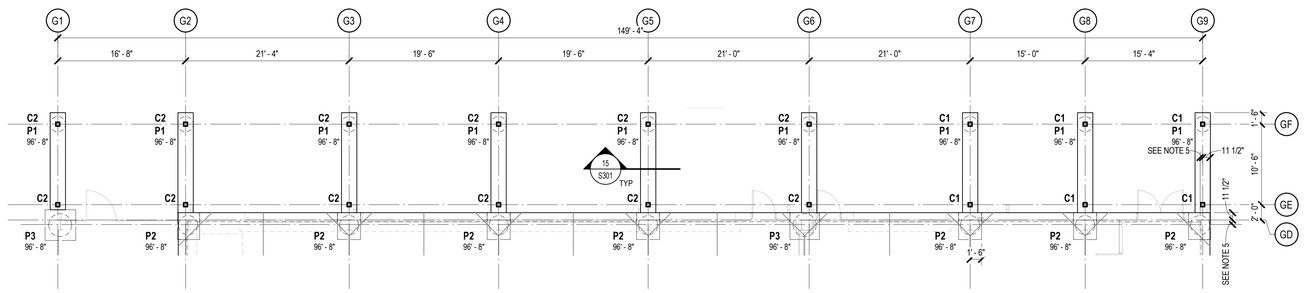


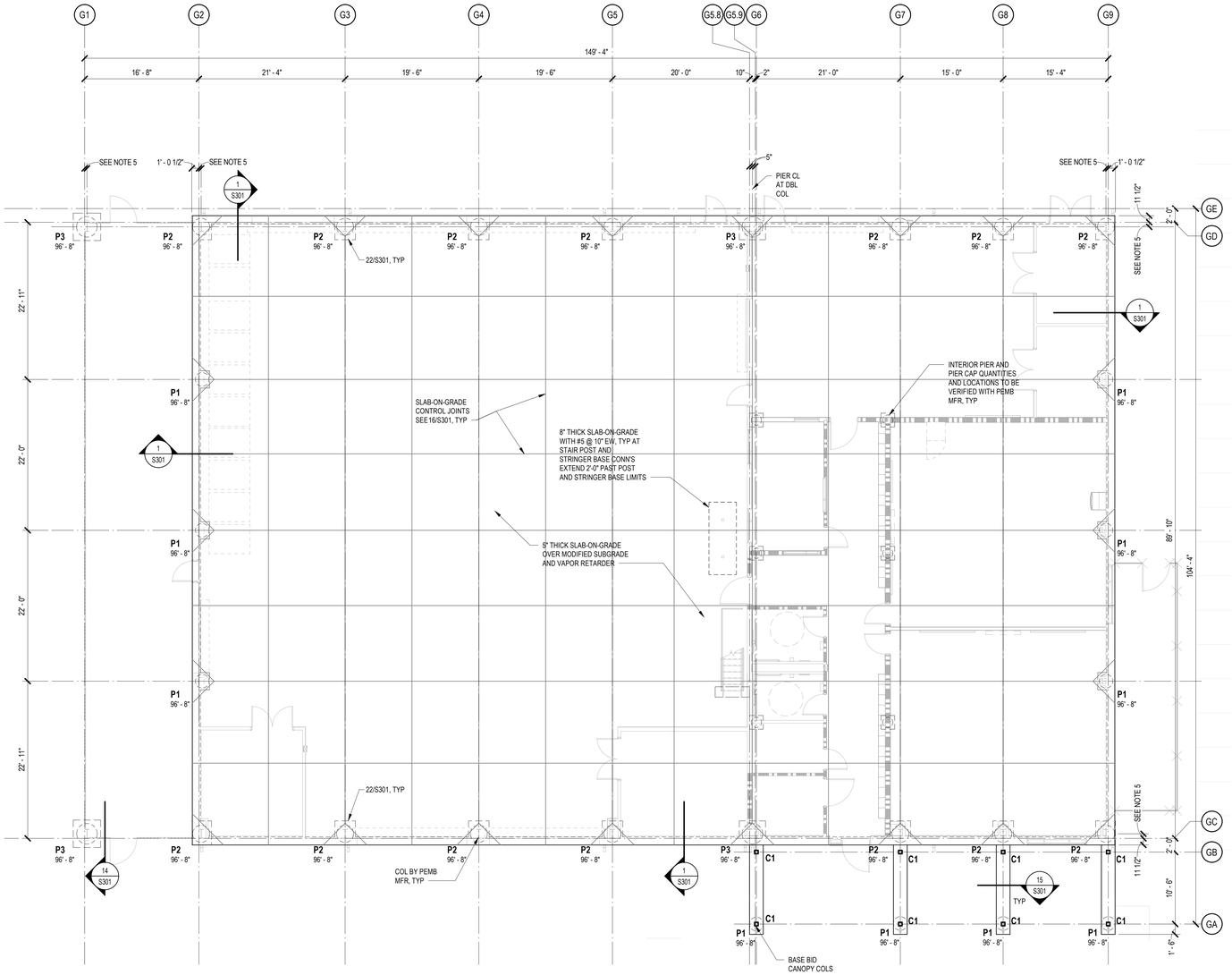
3 SOUTH CANOPY FOUNDATION PLAN - ALTERNATE

1/8" = 1'-0"



2 NORTH CANOPY FOUNDATION PLAN - ALTERNATE

1/8" = 1'-0"



1 FOUNDATION PLAN

1/8" = 1'-0"

NORTH

FOUNDATION LEVEL PLAN NOTES

1. FINISH FLOOR ELEVATION IS 100'-0" (RELATIVE TO STRUCTURAL DATUM 100-0) UNLESS NOTED OTHERWISE.
2. TOP OF CONCRETE SLAB IS FINISH FLOOR UNLESS SHOWN OTHERWISE.
3. TOP OF PIER ELEVATION IS RELATIVE TO DATUM 100-0.
4. SHEET INDEX:
   GENERAL NOTES - S101
   TYPICAL CONCRETE DETAILS - S301
   DRILLED PIER SCHEDULE - S301
5. FOUNDATION DESIGN TO BE VERIFIED AFTER PEMB SHOP DRAWINGS AND CALCULATIONS SUBMITTAL HAVE BEEN RECEIVED, REVIEWED AND APPROVED BY A/E. DRILLED PIERS SHALL BE CENTERED WITH THE CENTER OF PEMB COLS, TYP. DIMESIONS NOTED ON PLAN SHALL BE VERIFIED WITH APPROVED PEMB SHOP DRAWINGS PRIOR TO CONSTRUCTION.

PONCE-FUESS ENGINEERING
Structural Engineers
3333 Lee Parkway, Suite 350 • Dallas, TX 75219
469.330.2850 • ponce-fuess.com
PFE PROJECT NO. 23114 FIRM REG. NO. F-12125

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

STATE OF TEXAS
R. RENE AVILA
92630
LICENSED
PROFESSIONAL ENGINEER
01.17.24

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

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FOUNDATION PLAN

S201

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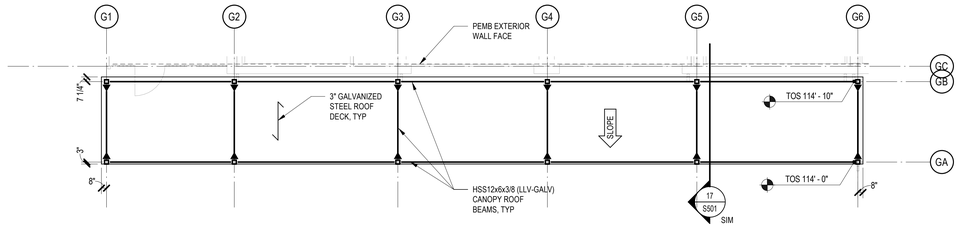
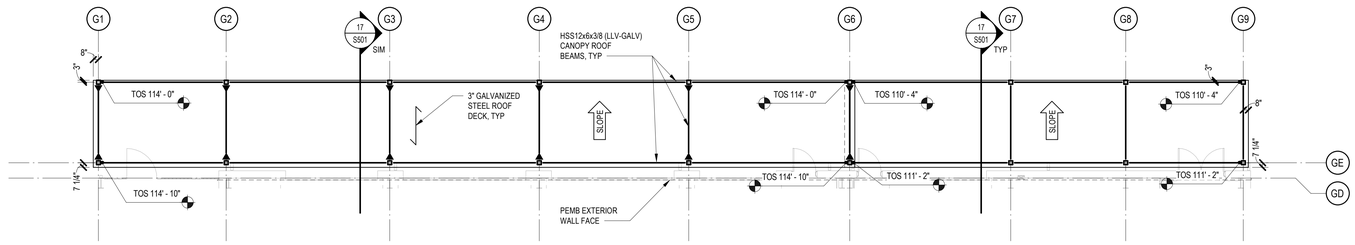


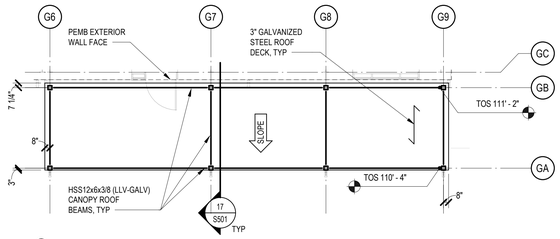
1 SOUTH CANOPY ROOF PLAN - ALTERNATE

1/8" = 1'-0"



2 NORTH CANOPY ROOF PLAN - ALTERNATE

1/8" = 1'-0"



3 SOUTH CANOPY ROOF PLAN - BASE BID

1/8" = 1'-0"

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

STATE OF TEXAS
R. RENE AVILA
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LICENSED
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01.17.24

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1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

MEZZANINE AND CANOPY ROOF RAMING PLANS
S202

PONCE-FUESS ENGINEERING
Structural Engineers
3333 Lee Parkway, Suite 350 • Dallas, TX 75219
469.310.2850 • ponce-fuess.com
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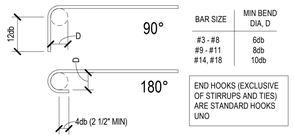
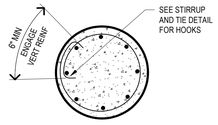
OFFSET BARS

STIRRUPS AND TIES



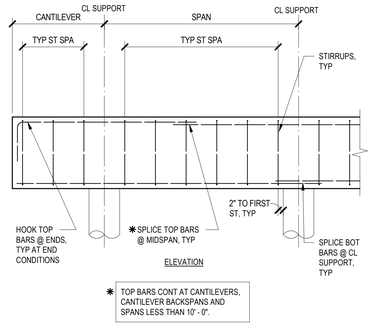
STANDARD END HOOKS



ROUND STIRRUPS AND TIES

21 REBAR BENDS AND HOOKS TYPICAL DETAIL

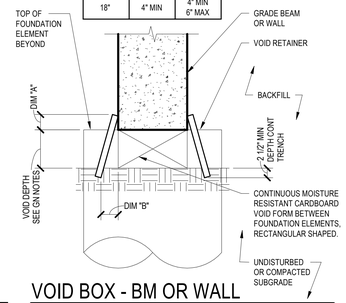
NO SCALE



9 GRADE BEAM REINF TYPICAL DETAIL

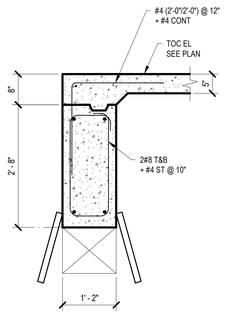
NO SCALE

VOID DEPTH	DIM "A"	DIM "B"
6" - 8"	3" MIN	3" MIN 5" MAX
10" - 12"	4" MIN	4" MIN 6" MAX
18"	4" MIN	4" MIN 6" MAX



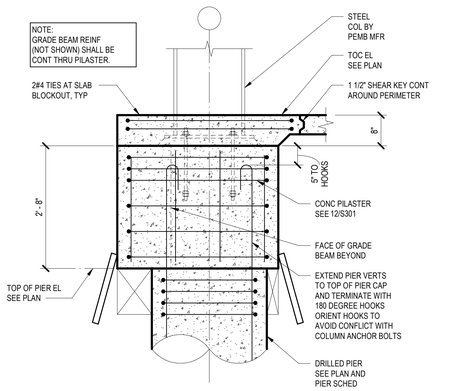
5 VOID BOX - BM OR WALL TYPICAL DETAIL

NO SCALE



1

3/4" = 1'-0"



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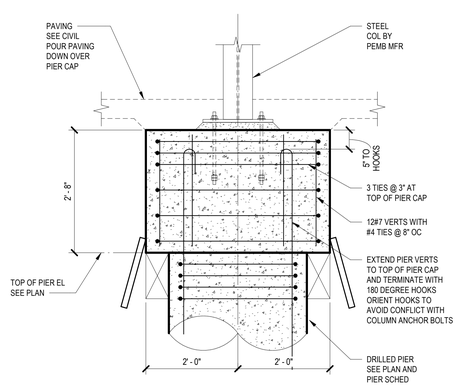
3/4" = 1'-0"



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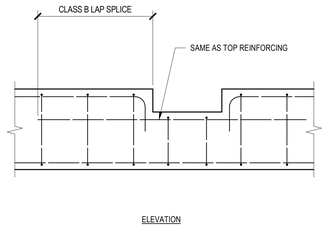
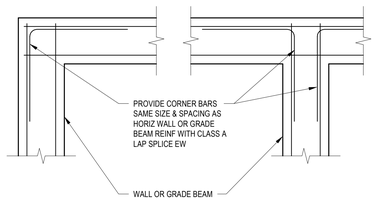
3/4" = 1'-0"



10 DROP IN GRADE BEAM TYPICAL DETAIL

NO SCALE



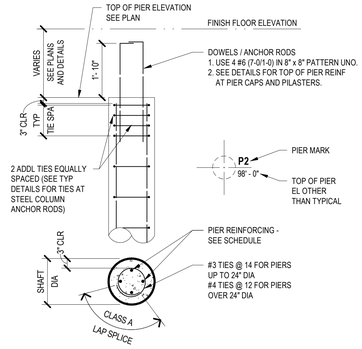
6 CORNER BARS TYPICAL DETAIL

NO SCALE

STRAIGHT SHAFT DRILLED PIER SCHEDULE

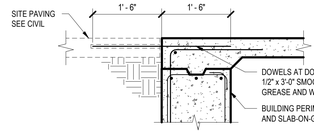
PIER MARK	SHAFT DIAMETER	VERTICAL REIN	PENETRATION
P1	24"	6#7	10' - 0"
P2	30"	9#7	10' - 0"
P3	36"	11#9	10' - 0"

NOTE: PIER DESIGNS TO BE CONFIRMED AFTER RECIEPT OF PEMB SHOP DRAWINGS AND CALCULATIONS.



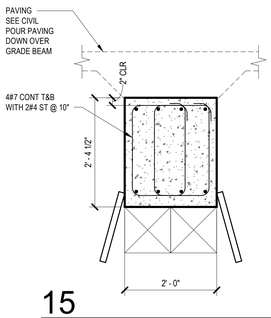
3 STRAIGHT SHAFT PIER TYPICAL DETAIL

NO SCALE



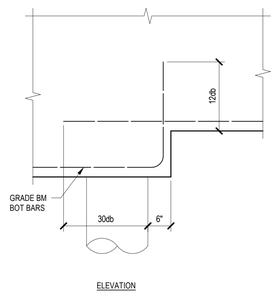
19 DOWELS AT DOORWAY TYPICAL DETAIL

NO SCALE



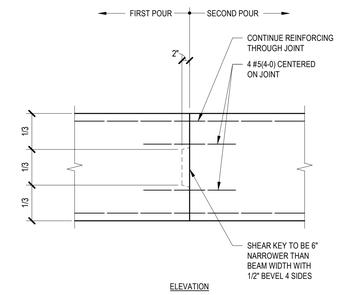
15

3/4" = 1'-0"



11 STEP IN GRADE BEAM TYPICAL DETAIL

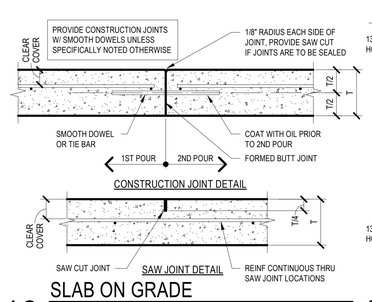
NO SCALE



7 GRADE BEAM CONSTR JOINT TYPICAL DETAIL

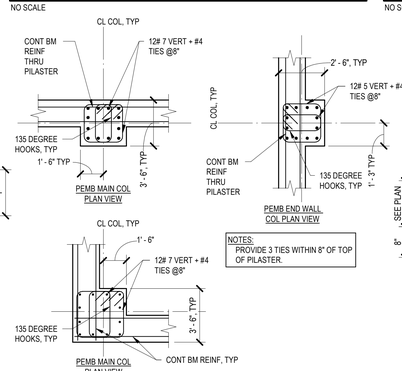
NO SCALE

SLAB-ON-GRADE SCHEDULE				
SLAB THICKNESS (T)	CLEAR COVER	SLAB REINFORCING	CONSTRUCTION JOINTS	
			SMOOTH DOWELS	TIE BARS
5"	1 3/4"	#4 @ 18 EW	3/4" DIA X 1'- 2" @ 12	#6(3-9) @ 12
6"	2"	#4 @ 16 EW	3/4" DIA X 1'- 2" @ 12	#6(3-9) @ 12



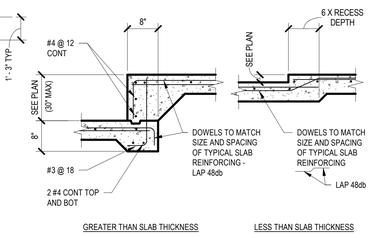
16 SLAB ON GRADE TYPICAL DETAIL

NO SCALE



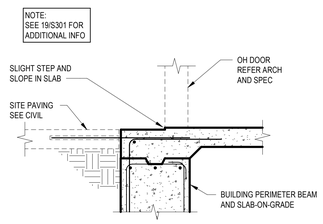
12 PILASTER REINF TYPICAL DETAIL

NO SCALE



8 SLAB ON GRADE RECESSES TYPICAL DETAIL

NO SCALE



20 DOWELS AT OH DOOR TYPICAL DETAIL

3/4" = 1'-0"

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214-750-0077
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STATE OF TEXAS
R. RENE AVILA
92630
LICENSED PROFESSIONAL ENGINEER
01.17.24

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A

DATE: 01/17/2024

TYPICAL CONCRETE DETAILS

S301

PONCE-FUESS ENGINEERING
Structural Engineers
3333 Lee Parkway, Suite 350 • Dallas, TX 75219
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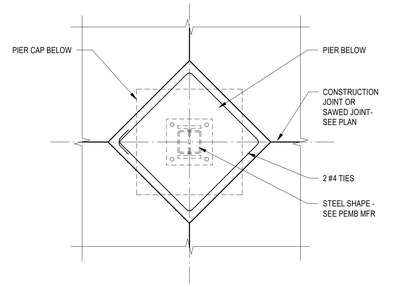
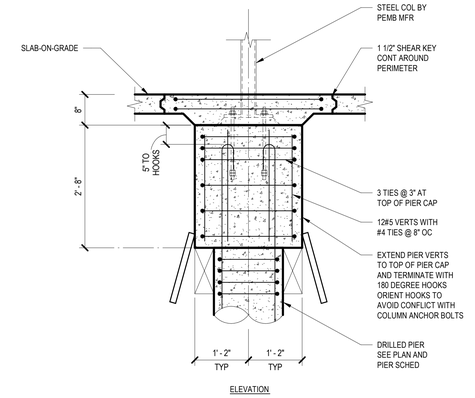


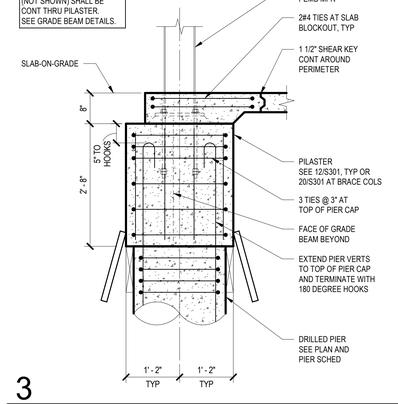


ELEVATION

2 TYPICAL DETAIL

3/4" = 1'-0"

NOTE:
GRADE BEAM REINF (NOT SHOWN) SHALL BE CONT THRU PILASTER. SEE GRADE BEAM DETAILS.



3

3/4" = 1'-0"

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12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
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STATE OF TEXAS
R. RENE AVILA
92630
LICENSED
PROFESSIONAL ENGINEER
01.17.24

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO.	2338 A
DATE:	01/17/2024

CONCRETE DETAILS

S302

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Structural Engineers
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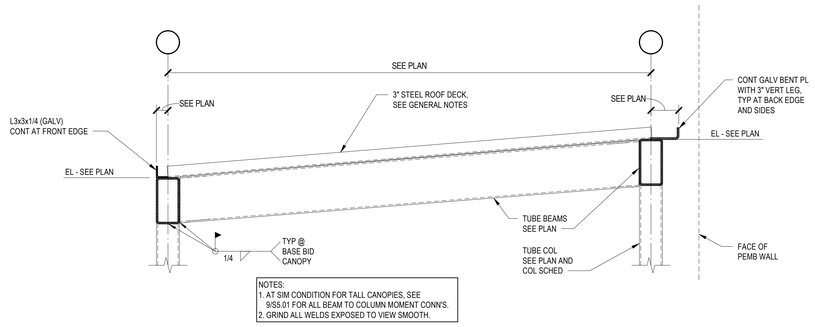
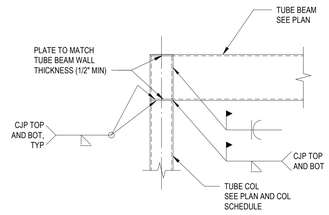


17 CANOPY SECTION

3/4" = 1'-0"



9 HSS BEAM TO COL MOMENT CONN TYPICAL DETAIL

3/4" = 1'-0"

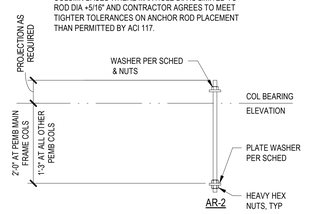
STEEL COLUMN SCHEDULE

		BASE PLATE DIMENSIONS						ANCHOR BOLTS			
COL MARK	COL SIZE	DIM "A"	DIM "B"	t	DIM "C"	DIM "D"	DETAIL	NUMBER	TYPE	DIA	EMBED LENGTH
C1	C1 - HSS6 x 6 x 3/8	1' - 2"	1' - 2"	1"	5"	5"	3&6/S501	8	AR-2	3/4"	1' - 6"
C2	C2 - HSS6 x 6 x 5/16	1' - 2"	1' - 2"	1"	5"	5"	3&6/S501	8	AR-2	3/4"	1' - 6"

NOTE: ALL COLUMNS SHALL BE HOT DIP GALVAINZED

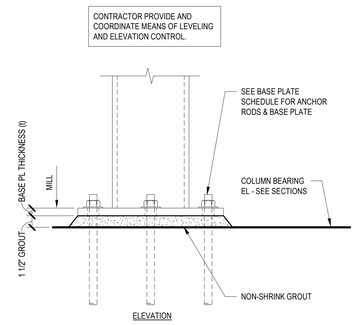
ROD DIA		MAX HOLE DIA IN BASE PL	PLATE WASHER THICKNESS	PLATE WASHER SIZE OR DIA
3/4"	*	1 5/16"	1/4"	2"
7/8"	*	1 9/16"	5/16"	2 1/2"
1"	*	1 7/8"	3/8"	3"
1 1/4"		2 1/8"	1/2"	3 1/2"
1 1/2"		2 3/8"	1/2"	4"
1 3/4"		2 7/8"	5/8"	4 1/2"
2"		3 1/4"	3/4"	5"
2 1/2"		3 3/4"	7/8"	5 1/2"

* ASTM F844 WASHERS MAY BE USED ON GRAVITY COLUMN BASES WHERE MAX HOLE DIA IS LIMITED TO ROD DIA +5/16" AND CONTRACTOR AGREES TO MEET TIGHTER TOLERANCES ON ANCHOR ROD PLACEMENT THAN PERMITTED BY ACI 117.



10 PEMB COL ANCHOR ROD TYPICAL DETAIL

3/4" = 1'-0"

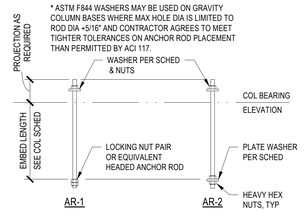


6 COLUMN BASE PLATE TYPICAL DETAIL

NO SCALE

ROD DIA		MAX HOLE DIA IN BASE PL	PLATE WASHER THICKNESS	PLATE WASHER SIZE OR DIA
3/4"	*	1 5/16"	1/4"	2"
7/8"	*	1 9/16"	5/16"	2 1/2"
1"	*	1 7/8"	3/8"	3"
1 1/4"		2 1/8"	1/2"	3 1/2"
1 1/2"		2 3/8"	1/2"	4"
1 3/4"		2 7/8"	5/8"	4 1/2"
2"		3 1/4"	3/4"	5"
2 1/2"		3 3/4"	7/8"	5 1/2"

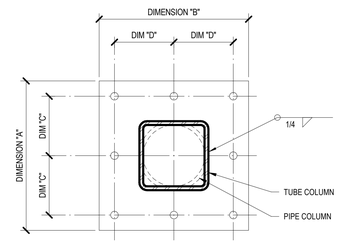
* ASTM F844 WASHERS MAY BE USED ON GRAVITY COLUMN BASES WHERE MAX HOLE DIA IS LIMITED TO ROD DIA +5/16" AND CONTRACTOR AGREES TO MEET TIGHTER TOLERANCES ON ANCHOR ROD PLACEMENT THAN PERMITTED BY ACI 117.



2 ANCHOR ROD TYPES TYPICAL DETAIL

NO SCALE

SEE BASE PLATE SCHEDULE FOR DIMENSIONS.
DIMENSIONS C & D APPLY ONLY IF SCHEDULED.



PLAN VIEW

3 COLUMN BASE PLATE TYPICAL DETAIL

NO SCALE

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R. RENE AVILA
92630
LICENSED
PROFESSIONAL ENGINEER
01.17.24

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1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

TYPICAL STEEL DETAILS

S501

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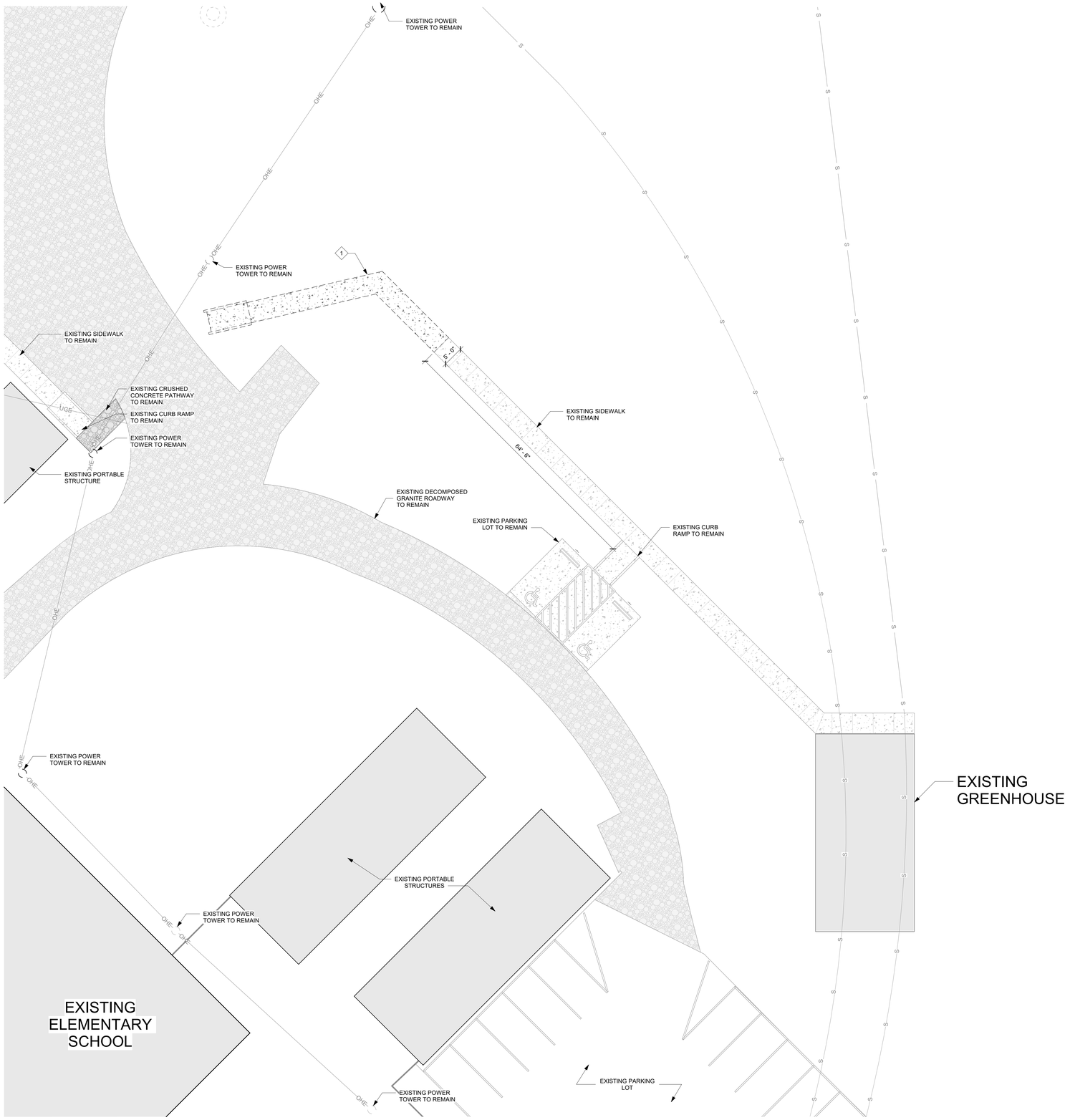

TRUE NORTH

1 Site Demolition Plan
3/32" = 1'-0"

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GENERAL SITE DEMOLITION NOTES

A. REMOVE ALL EXISTING PAVEMENT AND STRUCTURES WITHIN THE LIMITS OF DEMOLITION UNLESS OTHERWISE NOTED.

B. SAW CUT AND REMOVE ALL EXISTING DRIVE APPROACHES THAT ARE WITHIN THE LIMITS OF DEMOLITION 2 FEET FROM THE BACK OF CURB.

C. COORDINATE WITH TXU, SOUTHWESTERN BELL TELEPHONE AND THE LOCAL CABLE COMPANY PRIOR TO THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES.

D. ALL UTILITIES SHOULD BE CUT AND PLUGGED IN COORDINATION WITH THEIR RESPECTIVE UTILITY COMPANIES AND PRIOR TO THE DEMOLITION OF EXISTING UTILITIES.

E. CONTRACTOR TO PLUG ALL EXPOSED ENDS AND ABANDONED UTILITIES.

F. CONTRACTOR TO DETERMINE SOURCE OF ALL EXPOSED UTILITIES AND, IF REQUIRED, RECONNECT TO PROPOSED UTILITIES.

G. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL DEBRIS AND DEMOLITION MATERIALS.

H. ALL TREES ON THE PROPERTY, SHALL BE PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS BY FENCING AS SHOWN; THE TREE PROTECTION SHALL BE PLACED BEFORE ANY EXCAVATING OR GRADING IS BEGUN AND MAINTAINED IN REPAIR FOR THE DURATION OF THE CONSTRUCTION WORK UNLESS OTHERWISE DIRECTED. NO MATERIAL SHALL BE STORED OR CONSTRUCTION OPERATION SHALL BE CARRIED ON WITHIN A DISTANCE AS SHOWN OF ANY TREE TO BE SAVED OR WITHIN THE TREE PROTECTION FENCING. TREE PROTECTION SHALL REMAIN UNTIL ALL WORK IS COMPLETED.

J. ANY DAMAGE DONE TO EXISTING PROTECTED TREES, CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY BY AN APPROVED TREE SURGEON AT THE OWNER'S DIRECTION. ROOTS EXPOSED AND/OR DAMAGED DURING DEMOLITION AND/OR GRADING OPERATIONS SHALL BE CUT OFF, CLEANING INSIDE THE EXPOSED OR DAMAGED AREA, PAINT THE CUT SURFACES WITH AN APPROVED TREE PAINT AND PLACE TOPSOIL AND MULCH OVER THE EXPOSED ROOT AREA IMMEDIATELY.

K. IN CLOSE QUARTERS, A SINGLE TREE SHALL BE PROTECTED BY STRAPPING (NOT NAILING) A CONTINUOUS SHIELD OF WOOD TWO (2") INCHES X FOUR (4") INCHES X FIVE (5') FEET AROUND THE TRUNK.

L. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING EROSION CONTROL MEASURES ON THE SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS UNTIL THE SITE HAS BEEN STABILIZED.

M. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL DISTURBED AREAS TO ALLOW FOR POSITIVE DRAINAGE.

N. AREAS EXCAVATED FOR FOUNDATION OR UNDERGROUND STRUCTURES REMOVAL SHALL BE BACK-FILLED AND COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.

P. CONTRACTOR IS RESPONSIBLE FOR SECURITY OF EACH SITE DURING DEMOLITION ACTIVITIES.

Q. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENT, AND CITY OF FORT WORTH STANDARD CONSTRUCTION SPECIFICATIONS.

R. PRIOR TO ANY WORK, THE CONTRACTOR SHALL BE FAMILIAR WITH THE PLANS INCLUDING ALL NOTES, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS AND THE CITY STANDARDS FOR CONSTRUCTION AND ANY OTHER APPLICABLE STANDARD AND SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO BE FAMILIAR WITH ALL STANDARDS AND SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.

S. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL UTILITIES MAINS, MANHOLES, CLEAN OUTS, VALVE BOXES, FIRE HYDRANTS, ETC., IN THE LIMITS OF DEMOLITION.

T. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.

U. BARRICADING AND PROJECT SIGNS SHALL CONFORM TO TEXAS DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND LATEST UPDATES.

V. CONTRACTOR SHALL MAINTAIN EXISTING PAVEMENT/ROADWAYS AND ACCESS TO FIRE HYDRANTS ON SITE UNTIL BUILDINGS AND STRUCTURES ABOVE THE FOUNDATION HAVE BEEN DEMOLISHED AND REMOVED IN THAT DISTURBED AREA.

W. THE DEMOLITION CONTRACTOR IS TO COORDINATE DEMOLITION ACTIVITIES WITH THE HAZARDOUS MATERIAL ABATEMENT CONTRACTOR'S ACTIVITIES.

X. DEMOLITION CONTRACTOR MUST PROVIDE ALL CONSTRUCTION WORKERS WITH IDENTIFICATION BADGES, WITH PHOTOGRAPH, THAT SHALL BE WORN VISIBLY AT ALL TIMES WHILE WORKERS ARE PRESENT ON THE CONSTRUCTION SITE.

Y. UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROVIDE AND PAY FOR LABOR, MATERIALS, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT AND MACHINERY, HEAT,UTILITIES, TRANSPORTATION AND OTHER FACILITIES AND SERVICES NECESSARY FOR PROPER EXECUTION AND COMPLETION OF THE WORK, WHETHER TEMPORARY OR PERMANENT AND WHETHER OR NOT INCORPORATED OR TO BE INCORPORATED IN THE WORK.

Z. THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING ADEQUATE DUST CONTROL MEASURES DURING DEMOLITION ACTIVITIES.

AA. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL TEMPORARY UTILITY SERVICES REQUIRED TO COMPLETE THE PROJECT.

BB. CONTRACTOR IS TO PROVIDE A MARKED UP RECORD DRAWING TO THE OWNER UPON COMPLETION OF THE PROJECT. LEGIBLY MARK EACH ITEM TO RECORD ACTUAL CONSTRUCTION, INCLUDING:

A. MEASURED HORIZONTAL AND VERTICAL LOCATIONS OF UNDERGROUND UTILITIES AND APPURTENANCES, REFERENCED TO PERMANENT SURFACE IMPROVEMENTS.

B. MEASURED LOCATIONS OF INTERNAL UTILITIES AND APPURTENANCES CONCEALED IN CONSTRUCTION, REFERENCED TO VISIBLE AND ACCESSIBLE FEATURES OF CONSTRUCTION.

C. CHANGES MADE BY MODIFICATIONS.

CC. CAREFULLY REMOVE AND SALVAGE EACH ITEM INDICATED TO REMAIN THE OWNER'S PROPERTY, AND DELIVER PROMPTLY TO THE OWNER. ALL OTHER DEMOLISHED MATERIALS SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM THE SITE WITH FURTHER DISPOSITION AT THE CONTRACTOR'S OPTION. STORAGE OR SALE OF THE MATERIALS IS NOT PERMITTED ON THE SITE.

DD. REMOVE DEBRIS ON A DAILY BASIS, DO NOT STORE OR BURN MATERIALS ON SITE.

SITE DEMO NOTES

1. SAWCUT AND REMOVE EXISTING PAVING
2. REMOVE EXISTING CRUSHED CONCRETE PATHWAY

DEMO SITE PLAN LEGEND

- S — SANITARY SEWER LINE
- UGE — UNDERGROUND ELEC.
- OHE — OVERHEAD ELEC.
- EXISTING PAVEMENT
- EXISTING GRAVEL

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
BRIAN E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

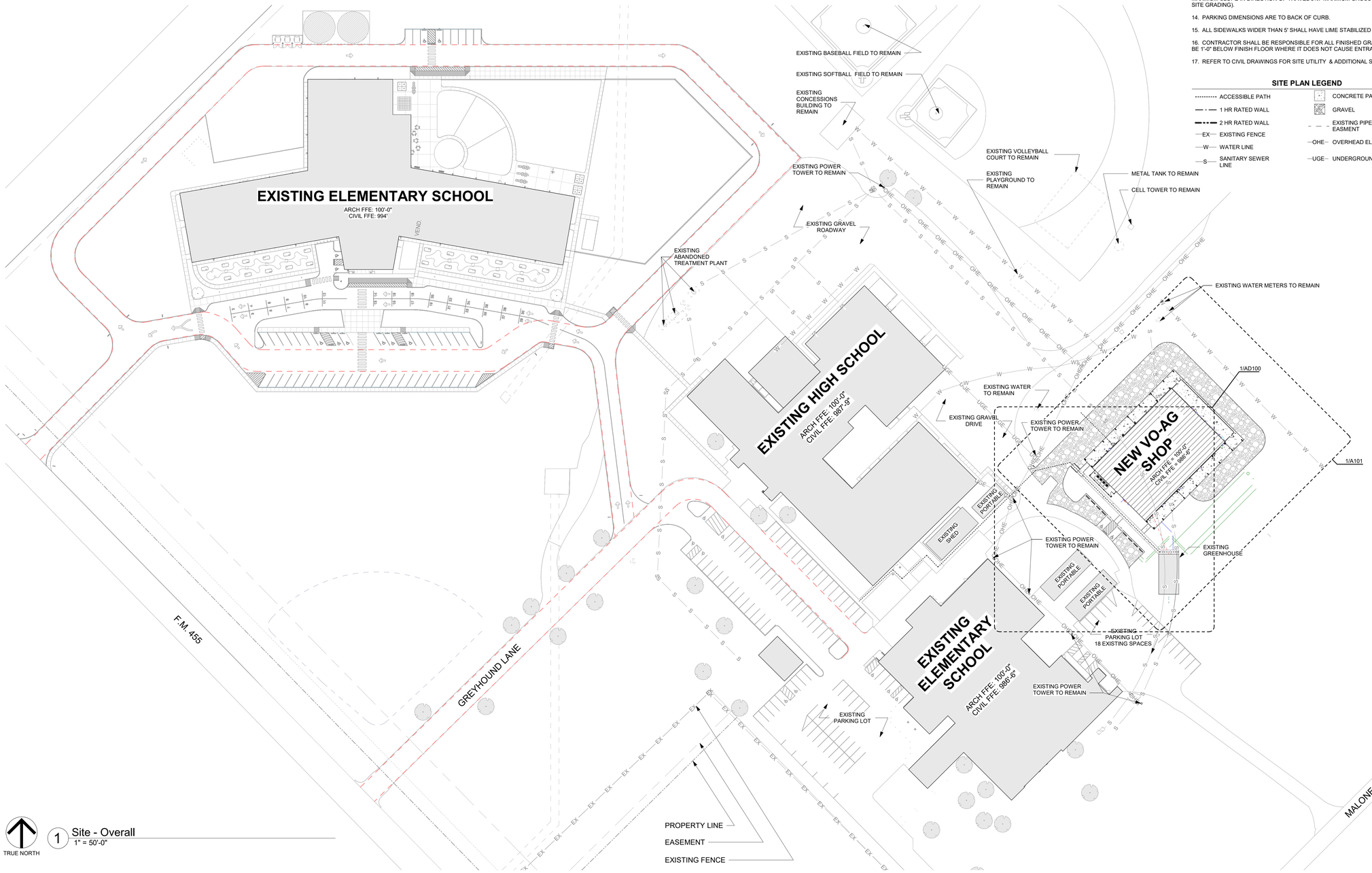
No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

Demolition Site Plan

AD100

SLIDELL ISD VO-AG FACILITY							
BUILDING/SITE SPECIFICATIONS							
ZONING CLASSIFICATION:		UNINCORPORATED					
OCCUPANCY USE:		EDUCATION GROUP-E					
APPRAISAL DISTRICT ACCOUNT #:		775242					
STORIES (PERMITTED):	4	HEIGHT (PERMITTED):	75'	FRONT'SIDE SETBACK:		N/A'	
STORIES (PROPOSED):	1.5	HEIGHT (PROPOSED):	29'	REAR SETBACK:		50'	
HAZARDOUS MATERIAL:	NO	OVERLAY DISTRICT:	N/A				
BUILDING AREA - GROUND FLOOR:	11,601 SF	ACRAGE OF SITE:	50.8 ACRES				
BUILDING AREA - MEZANINE:	752 SF	SQUARE FOOTAGE OF SITE:	2,212,100 SF				
TOTAL BUILDING AREA:	12,353 SF	LOT COVERAGE:	1.3%				
FLOOR TO AREA RATIO:	.006	OPEN SPACE:	98.7%				
IMPERVIOUS AREA:	18,080 SF	PERVIOUS AREA:	10,992 SF				
SCHOOL CLASSROOM COUNT:	4	SCHOOL MAXIMUM CAPACITY:	105				
PARKING SPACES REQUIRED:	8	PARKING SPACES (STANDARD):	8				
PARKING SPACES PROVIDED:	8	PARKING SPACES (ACCESSIBLE):	0				



1 Site - Overall
1" = 50'-0"

TRUE NORTH

1/17/2024 1:13:51 PM

SITE PLAN NOTES

1. REFER TO CIVIL ENGINEER DRAWINGS FOR DIMENSION CONTROL PLAN OF BUILDING, VEHICULAR PAVING, AND ADDITIONAL SITE DEMO INFORMATION.

2. REFER TO CIVIL ENGINEER DRAWINGS FOR SITE GRADING AND SITE UTILITIES INFORMATION (ADDITIONAL SITE UTILITY INFORMATION IS AS SHOWN ON M.P.E. ENGINEER DRAWINGS).

3. CONTRACTOR SHALL COORDINATE LOCATION OF ALL SLEEVES UNDER SIDEWALKS AS NEEDED FOR LANDSCAPE IRRIGATION AND ALL SITE UTILITIES.

4. SIDEWALKS SHALL BE 5'-0"W, U.N.O. AND CONSTRUCTED ACCORDING TO DETAILS ON ARCHITECTURAL SHEET A111. ALL SIDEWALKS PARALLEL TO BLDG. SHALL HAVE A MAX. SLOPE OF 1/4" /FT. CROSS SLOPE.

5. TYPICAL PARKING SPACES ARE 9'-0" WIDE, TYP. HANDICAP PARKING SPACES ARE 9'-0" WIDE W/ 5'-0"W AISLE ADJACENT TO HANDICAP PARKING. "VAN ACCESSIBLE" HANDICAP PARKING SPACE SHALL BE 132" (11'-0") MINIMUM WITH ACCESS AISLES ONLY REQUIRED TO BE 60" (5'-0") MINIMUM. EXCEPTION ALLOWS FOR 96" (8'-0") SPACE WITH 96" (8'-0") AISLE MINIMUM. ALL H.C. SPACES SHALL HAVE SIGN PER SHEET G201. PAINT EACH H.C. SPACE WITH UNIVERSAL SYMBOL OF ACCESSIBILITY TO FIT WITHIN A 6'-0" SQUARE.

6. PARKING SPACE STRIPING SHALL HAVE 4" WIDTH. STRIPING COLORS AS FOLLOWS:
   A. WHITE, GENERAL PARKING
   B. YELLOW, NO PARKING AND LOADING
   C. CROSSWALK STRIPING AND H.C. AISLES SHALL BE PAINTED 4" WIDE AT 45 DEGREES AT 12" O.C. IN YELLOW.

7. FIRE LANES SHALL BE CLEARLY MARKED ON THE PAVEMENT PER CITY OF SLIDELL REQUIREMENTS.

8. CONCRETE SPLASH BLOCKS, PER DETAIL 15/A112 AT ALL DOWNSPOUTS, PRIMARY AND OVERFLOW ROOF DRAIN DISCHARGE LOCATED AT GRADE OR ON THE ROOF.

9. EXPANSION JOINT FILLER AND SEALANT SHALL BE INSTALLED AT ALL LOCATIONS WHERE CONCRETE SIDEWALKS MEET THE BUILDING.

10. ACCESSIBLE ROUTE TO BUILDING ENTRANCES SHALL COMPLY WITH ALL REQUIREMENTS FOR CHANGES IN LEVELS PER T.A.S. (A.D.A. STANDARDS) REQUIREMENTS.

11. REFER TO 12/A112 FOR PRECAST CONCRETE WHEEL STOP DETAIL. REFER TO SITE PLAN FOR LOCATIONS. PROVIDE AT ALL HANDICAP PARKING SPACES WHERE MORE THAN 2 SUCH SPACES WITH ACCESS AISLES ARE GROUPED TOGETHER.

12. AT ALL CONDITIONS WHERE SIDEWALKS MEET BUILDING ENTRANCE OR EXTERIOR DOOR, PROVIDE # 4 DOWELS AT 12" O.C., DOWELED INTO BUILDING GRADE BEAM.

13. ALL SITE SIDEWALKS SHALL BE INSTALLED 1" ABOVE GRADE AND SLOPE WITH EXISTING GRADES. MAXIMUM SLOPE IN DIRECTION OF TRAVEL 5%. MAXIMUM CROSS SLOPE IS 1/4" PER FOOT (SLOPE WITH SITE GRADING).

14. PARKING DIMENSIONS ARE TO BACK OF CURB.

15. ALL SIDEWALKS WIDER THAN 5' SHALL HAVE LIME STABILIZED SUBGRADE PER SPEC.

16. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINISHED GRADES AROUND EDGE OF BUILDING TO BE 1'-0" BELOW FINISH FLOOR WHERE IT DOES NOT CAUSE ENTRANCE PROBLEMS.

17. REFER TO CIVIL DRAWINGS FOR SITE UTILITY & ADDITIONAL SITE DEMO.

SITE PLAN LEGEND

- ACCESSIBLE PATH
- 1 HR RATED WALL
- 2 HR RATED WALL
- EX EXISTING FENCE
- W WATER LINE
- S SANITARY SEWER LINE
- CONCRETE PAVING
- GRAVEL
- EXISTING PIPELINE EASMENT
- OHE OVERHEAD ELEC.
- UGE UNDERGROUND ELEC.

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REGISTERED ARCHITECT
JOHN E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

Overall Site Plan

A100

PROPERTY LINE

EXISTING WATER METERS TO REMAIN

ADD ALTERNATE #1
Base Bid: Main entry canopy at West wall to be installed in its entirety per documentation.

Alternate Bid 1: All additional canopies at the East and West walls to be installed per alternate bid documentation.

R 20' - 0"
13' - 5 1/2"
91' - 11"
24' - 0"
10/A112
HIGHER OVERHEAD ALTERNATE CANOPY REF. 2/A401
NEW CONCRETE SIDEWALK
G110A
6' HIGH ORNAMENTAL FENCING, REF. 16/A112
OVERHEAD PEMB OVERHANG SHOWN DASHED REF. 3/A401
G110B
HIGHER OVERHEAD ALTERNATE CANOPY REF. 2/A402
NEW CONCRETE SIDEWALK
SPLASHBLOCK, REF. 15/A112, TYP.
NEW CONCRETE DRIVEWALK
CONCRETE BOLLARDS AT OVERHEAD DOORS, REF. 19/A112
NEW CONCRETE DRIVEWALK
CONCRETE BOLLARDS AT OVERHEAD DOORS, REF. 19/A112
NEW CONCRETE SIDEWALK
OVERHEAD ENTRANCE CANOPY, REF. 1/A401
NEW CRUSHED CONCRETE ROADWAY, GRADED AND COMPACTED PER CIVIL REQUIRMENTS
4' HIGH CHAIN LINK FENCING WITH 48" WIDE GATE REF. 3/A402
EXISTING ACCESSIBLE SIDEWALK TO REMAIN
EXISTING GREENHOUSE
WHEEL STOP, TYP. REF. 12/A112
4 PARKING SPACES
NO PARKING
NEW CRUSHED CONCRETE PATHWAY, GRADED AND COMPACTED PER CIVIL REQUIRMENTS
EXISTING ADA PARKING LOT TO REMAIN
EXISTING ACCESSIBLE CRUSHED CONCRETE DRIVEWAY, GRADED AND COMPACTED PER CIVIL REQUIRMENTS
EXISTING POWER TOWER TO REMAIN
SIGN TYPE 'E' REF. 11/A112
EXISTING CRUSHED CONCRETE PATHWAY TO REMAIN
EXISTING GRAVEL DRIVEWAY TO REMAIN
EXISTING PORTABLE STRUCTURES
EXISTING PARKING LOT
LOWER OVERHEAD ALTERNATE CANOPY REF. 2/A402
OVERHEAD ELEC.
UNDERGROUND ELEC.
WATER LINE
SANITARY SEWER LINE

NEW VO-AG SHOP
ARCH FFE: 100'-0"
CIVIL FFE: 986'-6"

PLAN NORTH TRUE NORTH

1 Site Plan
3/32" = 1'-0"

2 Site Plan - SW Curb Ramp
3/16" = 1'-0"

CONCRETE SIDEWALK, REF. CIVIL
CURB RAMP REF. G201
1 : 20 MAX
10' - 0"
EXISTING SIDEWALK

SITE PLAN NOTES

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WRA Architects, Inc.
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REGISTERED ARCHITECT JOHN E. O'BRIEN 24183 STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

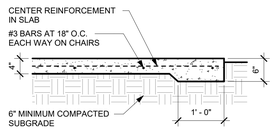
No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

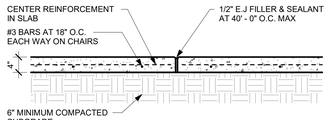
Site Plan

A101

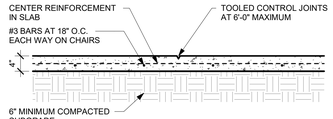
1/17/2024 1:14:09 PM



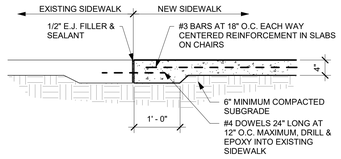
1 Sidewalk Edge
3/4" = 1'-0"



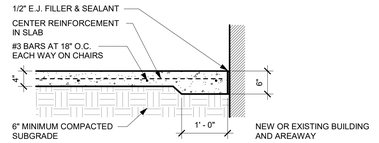
2 Sidewalk E.J.
3/4" = 1'-0"



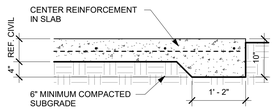
3 Sidewalk C.J.
3/4" = 1'-0"



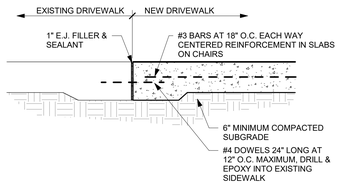
4 New Sidewalk to Existing
3/4" = 1'-0"



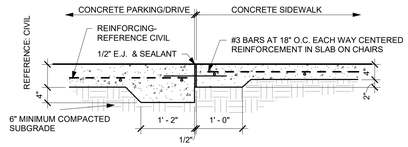
5 Sidewalk-to-Building
3/4" = 1'-0"



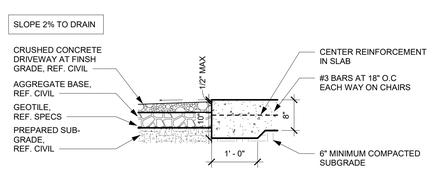
6 Drivewalk Edge
3/4" = 1'-0"



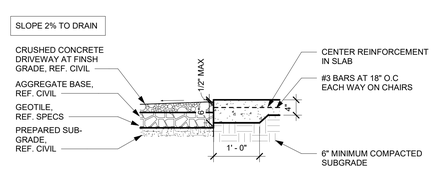
7 New Drivewalk to Existing
3/4" = 1'-0"



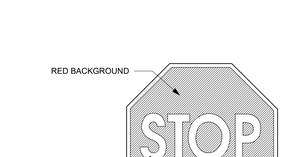
8 Sidewalk - Drivewalk
3/4" = 1'-0"



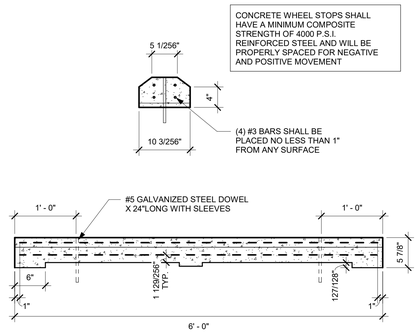
9 Crushed Concrete to Drivewalk
3/4" = 1'-0"



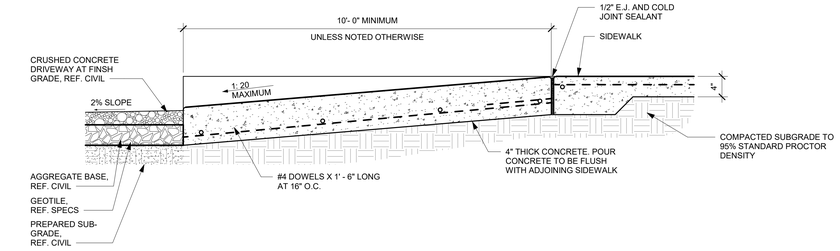
10 Crushed Concrete to Sidewalk
3/4" = 1'-0"



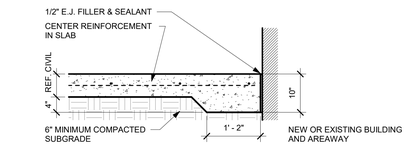
11 Signage Details
3/4" = 1'-0"



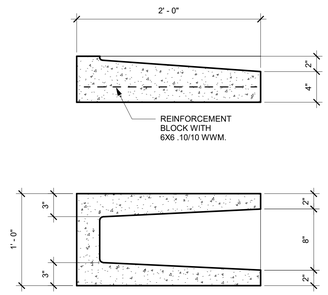
12 Wheel Stop
1" = 1'-0"



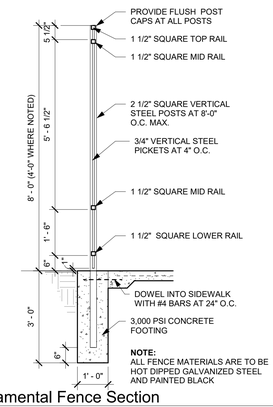
Sidewalk - Sloping Section - ADA Curb Ramps to Crushed Concrete
1" = 1'-0"



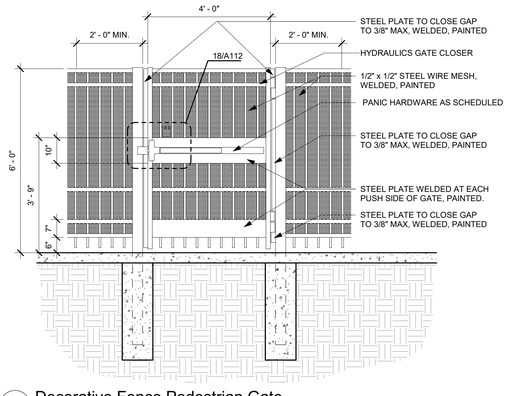
14 Drivewalk-to-Building
3/4" = 1'-0"



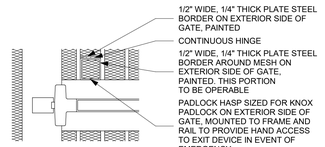
15 Concrete Splashblock
1 1/2" = 1'-0"



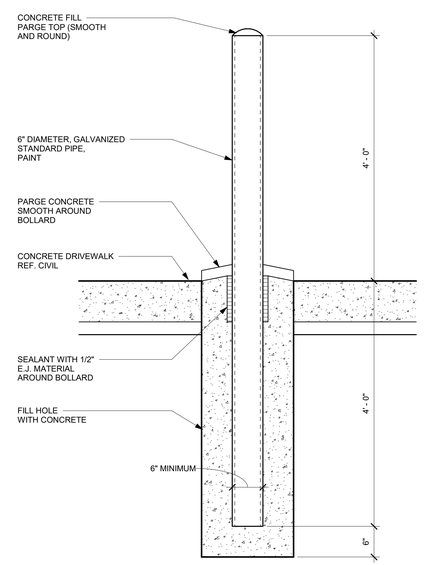
16 Ornamental Fence Section
1/2" = 1'-0"



17 Decorative Fence Pedestrian Gate
1/2" = 1'-0"



18 Padlock Detail
1" = 1'-0"



19 Pipe Bollard
1" = 1'-0"

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12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
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REGISTERED ARCHITECT
KEVIN E. O'BRIEN
24193
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

Site Plan Details

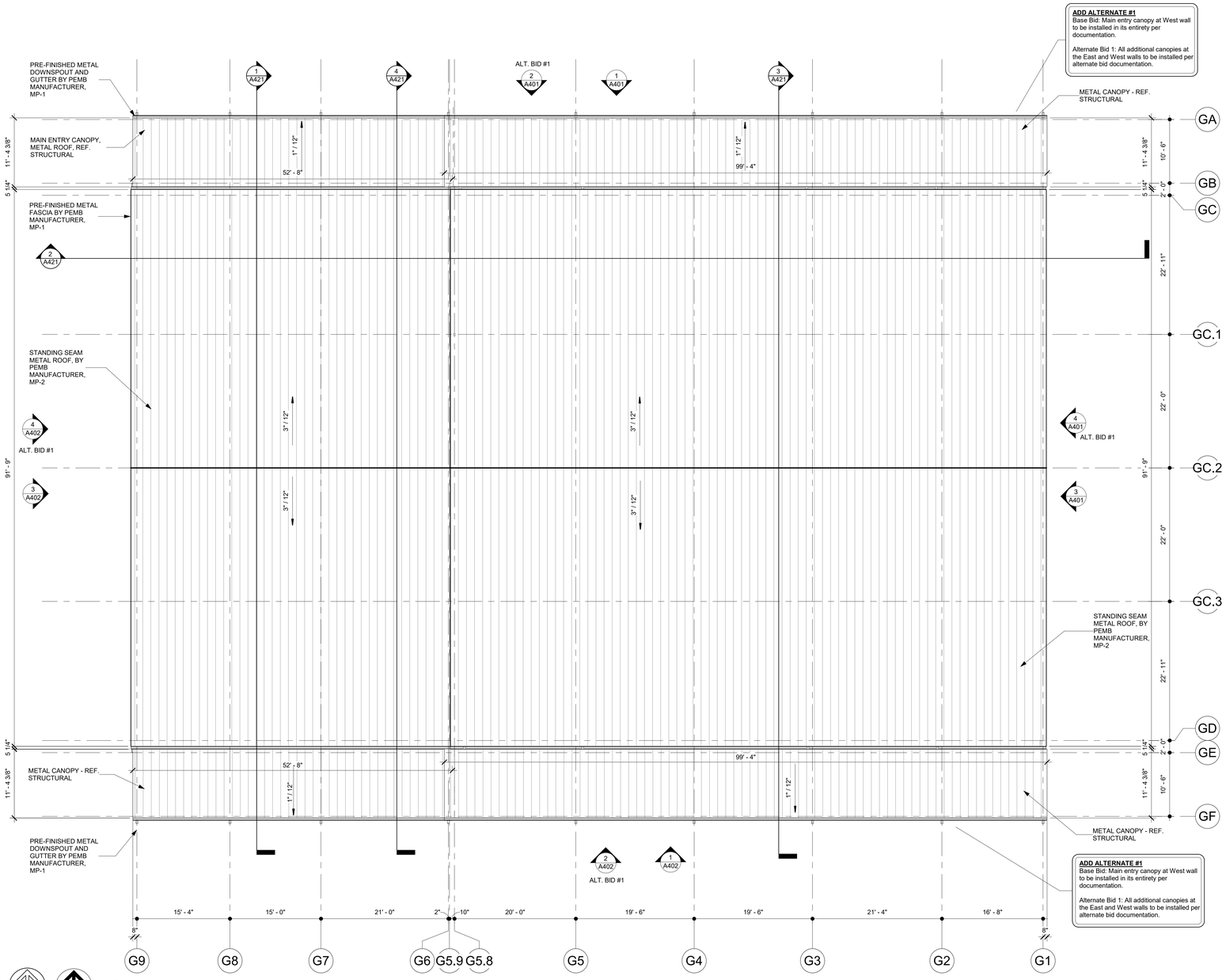
A112

1/17/2024 1:14:14 PM

EXTERIOR MATERIAL LEGEND	
METAL PANEL TYPE 1 (CHARCOAL GRAY)	
METAL PANEL TYPE 2 (SILVER METALLIC)	

NOTE:

1.) ALL BUILDING E.J. TO BE 1" UNLESS OTHERWISE NOTED
2.) EXPANSION JOINT IN MASONRY VENEER TO BE 3/8" TYPICAL UNLESS OTHERWISE NOTED
3.) 1/2" EXPANSION JOINT FILLER ON BOTH ENDS OF ALL STEEL LINTEL ANGLES



1 Roof Plan
1/8" = 1'-0"

1/17/2024 1:30:46 PM

WRA Architects, Inc.
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REGISTERED ARCHITECT
KEVIN E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

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DATE: 01/17/2024

Roof Plan

A120

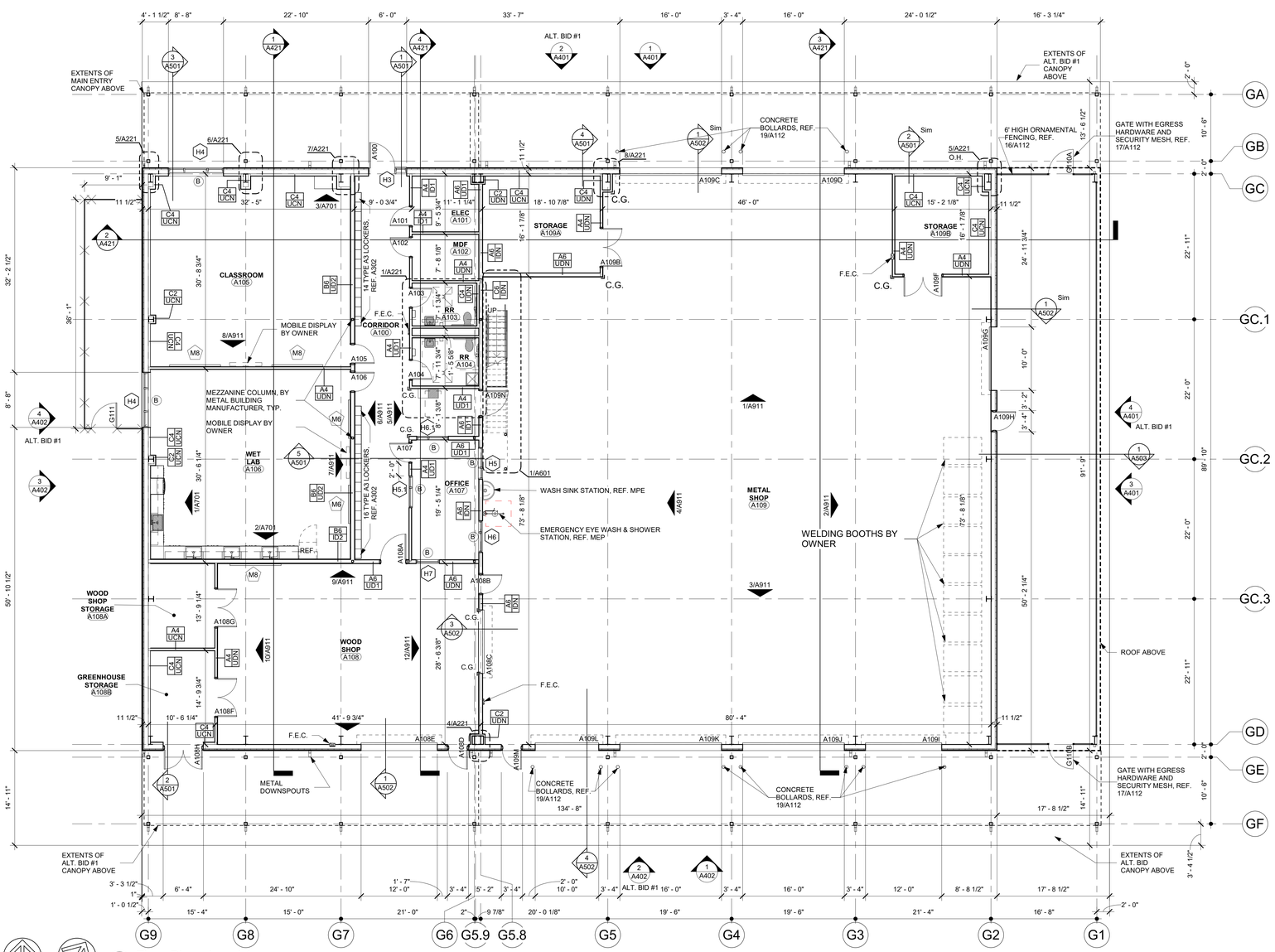
FLOOR PLAN SYMBOLS LEGEND

1	Column Grid Bubble	X / A42X	Building Section Tag
1/A101 / SIM	Callout Tag	X / A50X	Wall Section Tag
A101B	Door Tag	X'-X"	Spot Elevation Tag
W1	Frame Types Ref. A302		Centerline
X/AXXX	Interior/Casework Elevation	ROOM NAME / A101	Room Tag and Number
X / A40X	Exterior Elevation		Furniture and Equipment, By Owner
	Floor Drain	C.G.	Corner Guard
B	Window Blinds	F.E.C.	Fire Extinguisher Cabinet
M	Window Shades	A.E.D.	Automated External Defibrillator
M12	Displayboard Type Ref. A302		

PARTITION SYMBOL LEGEND

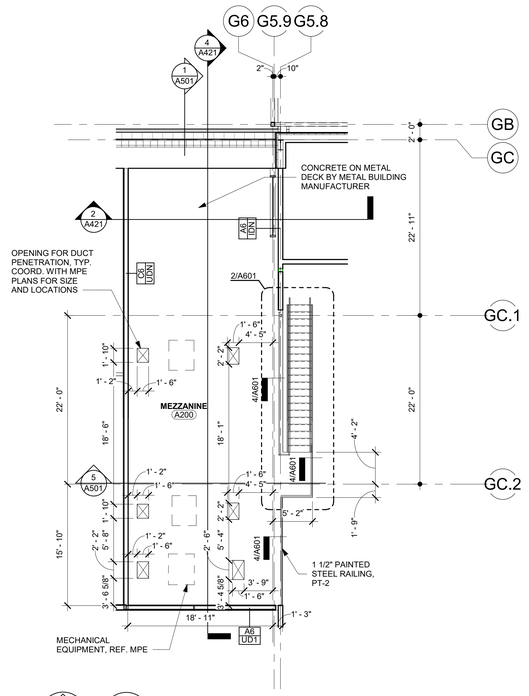
A4 / UDN — Partition Type - See schedule sheet A302

- N - Non-rated partition
- S - Construction capable of resisting the passage of smoke, run drywall on room side continuous to deck and fire seal.
- 1 - 1 Hour partition
- 2 - 2 Hour partition
- 3 - 3 Hour partition
- 4 - 4 Hour partition
- D - Extend wall to underside of structural deck
- C - Top of wall to extend to 12" above finished ceiling height
- H - Half wall, refer to floor plan for wall height.
- U - Uninsulated
- I - Insulated with 3" Sound Attenuation Batt Insulation Regardless of Cavity Size
- S - Sound partition insulated with Sound Attenuation Batt Insulation same thickness as cavity size. Provide acoustical sealant bead between top of stud runner and structure and between bottom stud track and floor. Provide acoustical sealant bead around all wall penetrations. Offset back to back outlets by one stud cavity. Refer to STC Rating on Partition Schedule for required STC value.



PLAN NORTH TRUE NORTH

1 Floor Plan - Level 1
1/8" = 1'-0"



PLAN NORTH TRUE NORTH

2 Floor Plan - Mezzanine
1/8" = 1'-0"

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REGISTERED ARCHITECT — JOHN E. O'BRIEN — 24165 — STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
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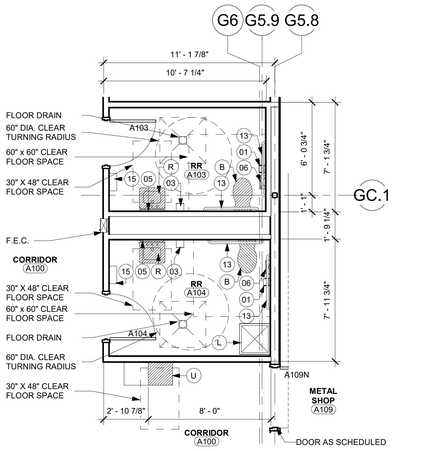
Floor Plan

A201

1/17/2024 1:14:21 PM



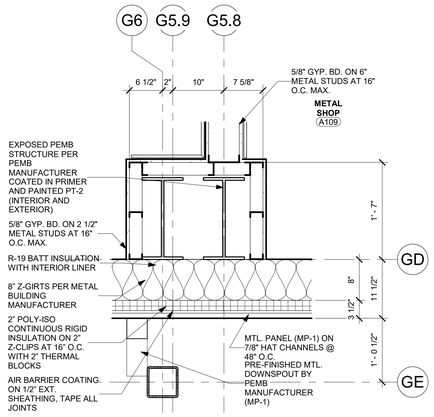
1 Englarged Toilet Plan - Restrooms A103 & A104
1/4" = 1'-0"

Toilet Fixtures Schedule

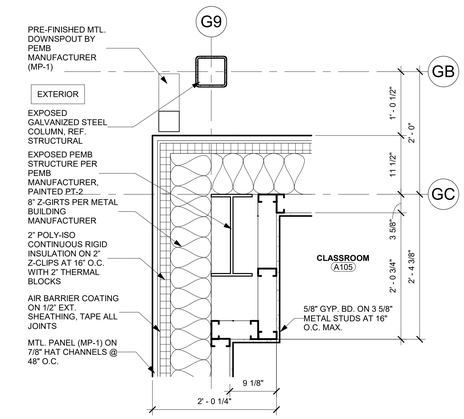
B	ACCESSIBLE WATER CLOSET (SHOWN SHADED) REF. G202
L	MOP SINK
R	ACCESSIBLE SINK (SHADED) REF. G202
U	BI-LEVEL DRINKING FOUNTAIN

Toilet Accessories Schedule

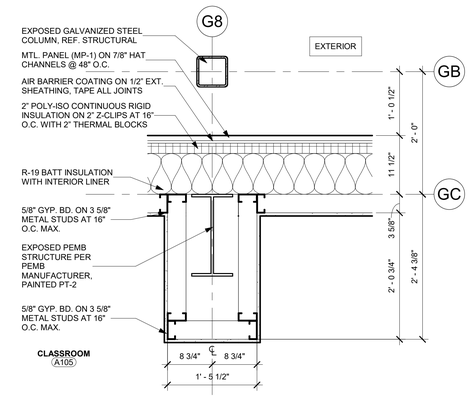
01	TOILET PAPER DISPENSER
03	SOAP DISPENSER, OFOI
05	ACCESSIBLE MIRROR 18" W X 42" H
06	COMBINATION SANITARY NAPKIN/TAMPON TRASH RECEPTACLE
13	GRAB BARS REF. G202
15	ELECTRIC HAND DRYER



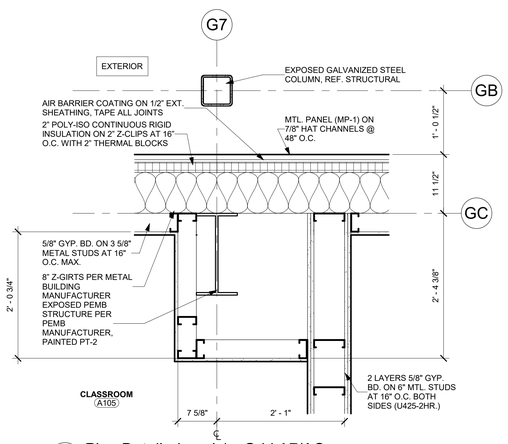
4 Plan Detail - Level 1 - Grid A6/AD
1" = 1'-0"



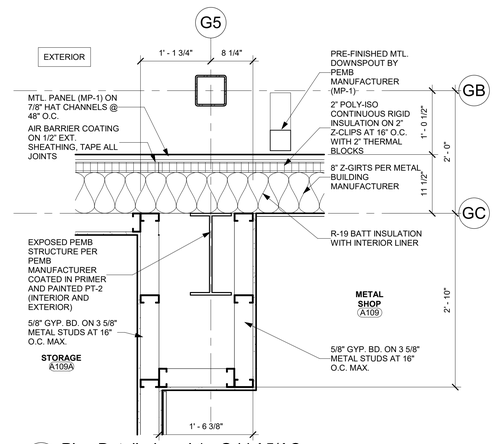
5 Plan Detail - Level 1 - Grid A9/AC
1" = 1'-0"



6 Plan Detail - Level 1 - Grid A8/AC
1" = 1'-0"



7 Plan Detail - Level 1 - Grid A7/AC
1" = 1'-0"



8 Plan Detail - Level 1 - Grid A5/AC
1" = 1'-0"

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12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
KEVIN E. O'BRIEN
24193
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

Enlarged Plans & Details

A221

1/17/2024 1:14:27 PM

Door Schedule

Arch No.	Ext.	S/ PR./ Bifold/ O.H.	Fire Label	Opn'g Width	Opn'g Height	Frame Mat.	Frame Type	Jamb Depth	Frame Head Width	Head	Jamb	Door Thickness	Door Mat.	Door Type	Hardware Set	Notes
A100	X	S		4' - 0"	7' - 0"	HM	H3	8 1/4"	2"	3/A312	4/A312	1 3/4"	HM	FG2A	3.0	3,4
A101		S	20 MIN.	3' - 0"	7' - 0"	HM	H1	5 7/8"	2"	3/A311	5/A311	1 3/4"	HM	F	6.0	
A102		S	20 MIN.	3' - 0"	7' - 0"	HM	H1	5 7/8"	2"	3/A311	5/A311	1 3/4"	HM	F	9.0	
A103		S	20 MIN.	3' - 0"	7' - 0"	HM	H1	5 7/8"	2"	3/A311	5/A311	1 3/4"	HM	F	11.0	
A104		S	20 MIN.	3' - 0"	7' - 0"	HM	H1	5 7/8"	2"	3/A311	5/A311	1 3/4"	HM	F	11.0	
A105		S	90 MIN.	3' - 0"	7' - 0"	HM	H1	9 1/2"	2"	4/A311	12/A311	1 3/4"	WD	N6	9.0	
A106		S	90 MIN.	3' - 0"	7' - 0"	HM	H1	9 1/2"	2"	4/A311	12/A311	1 3/4"	WD	N6	9.0	
A107		S	20 MIN.	3' - 0"	7' - 0"	HM	H1	5 7/8"	2"	3/A311	5/A311	1 3/4"	WD	N6	5.0	
A108A		S	20 MIN.	4' - 0"	7' - 0"	HM	H1	8 1/4"	2"	3/A311	5/A311	1 3/4"	WD	N6	7.0	
A108B		S		3' - 0"	7' - 0"	HM	H1	8 1/4"	2"	3/A311	5/A311	1 3/4"	WD	N6	13.0	
A108C		OH		10' - 0"	10' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A311	2/A311	PER MANUF.	STL.	OH	12.0	
A108D	X	S		3' - 0"	7' - 0"	HM	H1	8 1/4"	2"	3/A312	4/A312	1 3/4"	HM	F	1.0	3
A108E	X	OH		12' - 0"	9' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A312	2/A312	PER MANUF.	STL.	OH	12.0	6
A108F		PR		6' - 0"	7' - 0"	HM	H2	5 7/8"	2"	3/A311	5/A311	1 3/4"	WD	F	10.0	
A108G		PR		6' - 0"	7' - 0"	HM	H2	5 7/8"	2"	3/A311	5/A311	1 3/4"	WD	F	10.0	
A108H	X	PR		6' - 0"	7' - 0"	HM	H2	8 1/4"	2"	3/A312	4/A312	1 3/4"	HM	F	2.0	1,3
A109B		PR		6' - 0"	7' - 0"	HM	H2	5 7/8"	2"	3/A311	5/A311	1 3/4"	WD	F	10.0	
A109C	X	OH		16' - 0"	14' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A312	2/A312	PER MANUF.	STL.	OH	12.0	6,7
A109D	X	OH		16' - 0"	14' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A312	2/A312	PER MANUF.	STL.	OH	12.0	6,7
A109F		PR		6' - 0"	7' - 0"	HM	H2	5 7/8"	2"	3/A311	5/A311	1 3/4"	WD	F	10.0	
A109G	X	OH		10' - 0"	10' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A312	2/A312	PER MANUF.	STL.	OH	12.0	6
A109H	X	S		3' - 0"	7' - 0"	HM	H1	8 1/4"	2"	3/A312	4/A312	1 3/4"	HM	F	4.0	3
A109I	X	OH		12' - 0"	14' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A312	2/A312	PER MANUF.	STL.	OH	12.0	6
A109J	X	OH		16' - 0"	14' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A312	2/A312	PER MANUF.	STL.	OH	12.0	6,7
A109K	X	OH		16' - 0"	14' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A312	2/A312	PER MANUF.	STL.	OH	12.0	6,7
A109L	X	OH		10' - 0"	14' - 0"	STL.	OH	PER MANUF.	PER MANUF.	1/A312	2/A312	PER MANUF.	STL.	OH	12.0	6
A109M	X	S		3' - 0"	7' - 0"	HM	H1	8 1/4"	2"	3/A312	4/A312	1 3/4"	HM	F	1.0	3
A109N		S	20 MIN.	4' - 0"	7' - 0"	HM	H1	8"	2"	3/A311	5/A311	1 3/4"	WD	N6	8.0	
G110A	X	S		4' - 0"	6' - 0"	-	-	-	-	-	-	-	GATE	-	14.0	5
G110B	X	S		4' - 0"	6' - 0"	-	-	-	-	-	-	-	GATE	-	14.0	5
G111	X	S		4' - 0"	4' - 0"	-	-	-	-	-	-	-	GATE	-	14.0	

Door Schedule Notes	
1	REMOVABLE MULLION PER HARDWARE SCHEDULE
2	MAGNETIC HOLD OPENS
3	PROVIDE CARD ACCESS
4	ATTACK RESISTANT FILM
5	EXTERIOR ORNAMENTAL METAL FENCE GATE WITH EGRESS HARDWARE AND SECURITY MESH
6	EXTERIOR OVERHEAD DOOR TO BE INSULATED
7	EXTERIOR OVERHEAD DOOR TO BE MOTORIZED
8	EXTERIOR CHAIN LINK FENCE GATE

WRA Architects, Inc.
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24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

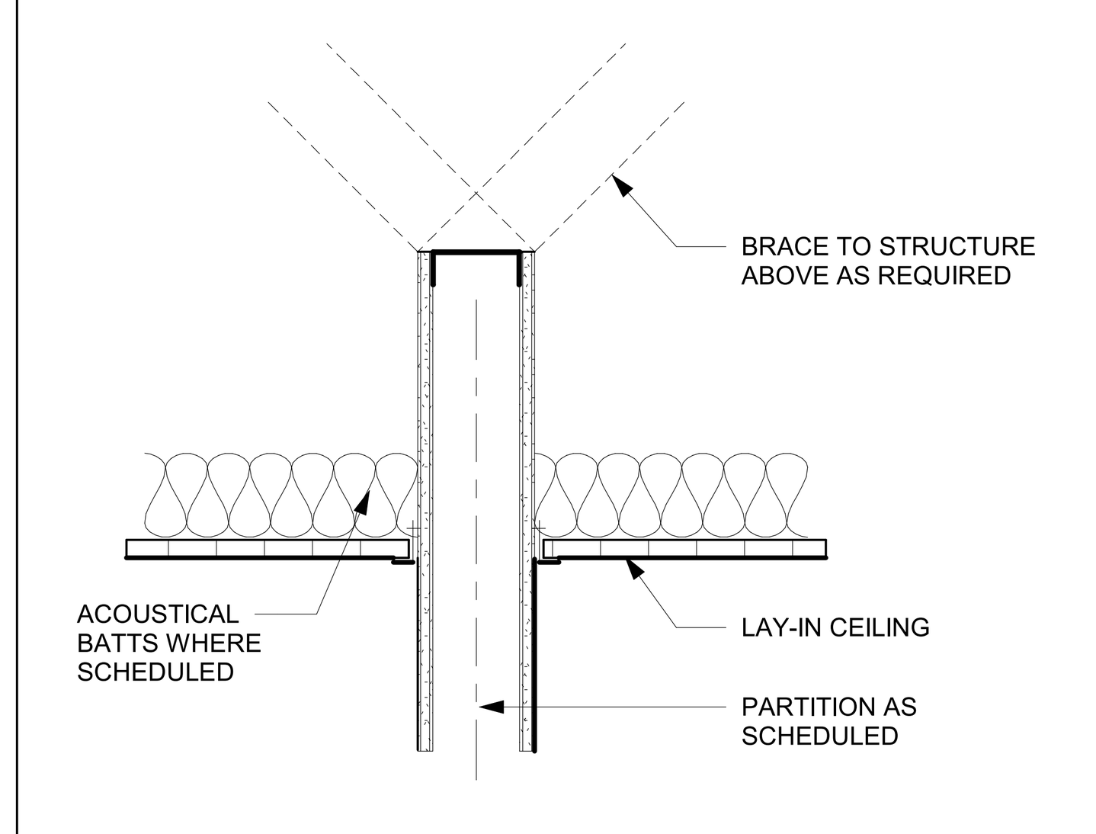
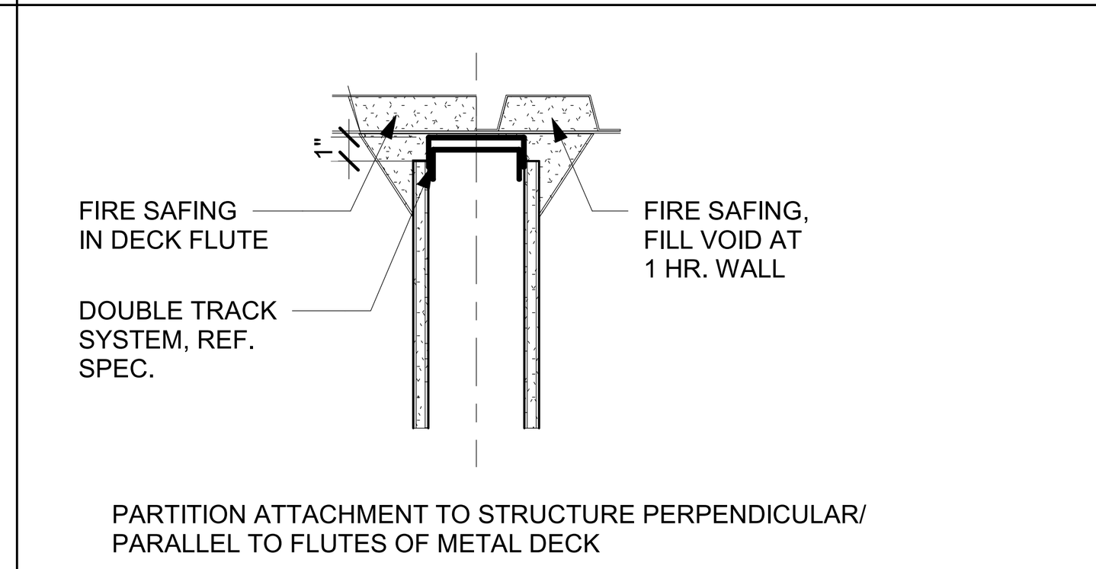
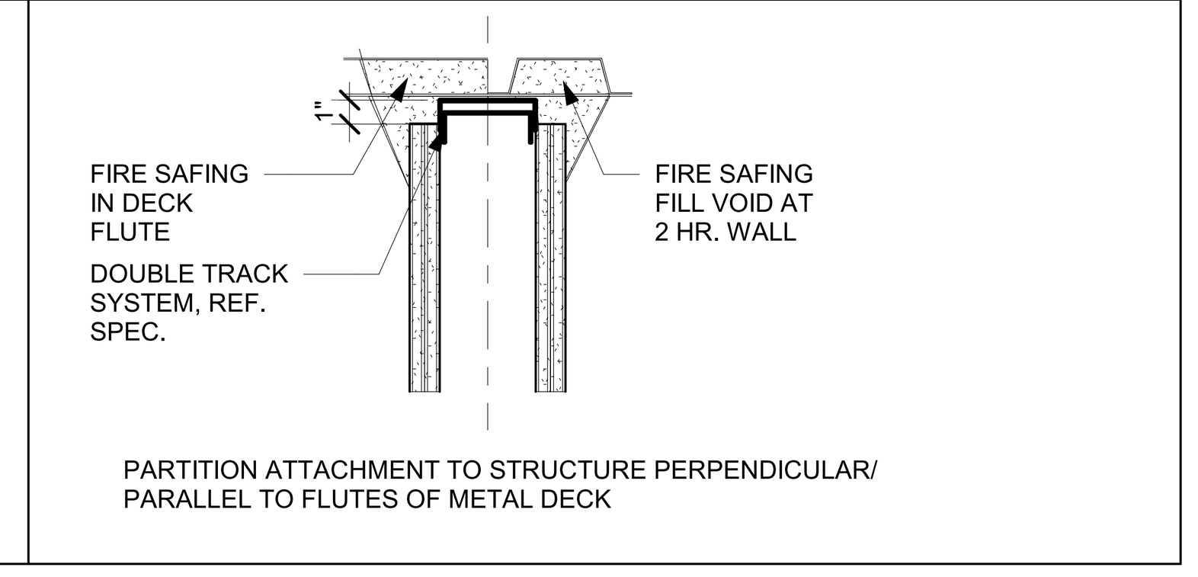
JOB NO. 2338 A
DATE: 01/17/2024

Door Schedule & Details

A301

1/17/2024 1:14:31 PM

PARTITION HEAD DETAIL SCHEDULE

TYPE	DESCRIPTION
CN	
D1 1 HOUR RATED	 PARTITION ATTACHMENT TO STRUCTURE PERPENDICULAR/ PARALLEL TO FLUTES OF METAL DECK
D2 2 HOUR RATED	 PARTITION ATTACHMENT TO STRUCTURE PERPENDICULAR/ PARALLEL TO FLUTES OF METAL DECK

PARTITION SCHEDULE

TYPE	WALL THICKNESS	DESCRIPTION	U.L. DESIGN NUMBER WHERE SCHEDULED	STC RATING WITHOUT/WITH INSULATION
A4 3 5/8" STUDS	4 7/8"	1 LAYER OF 5/8" GYPSUM BOARD METAL STUDS AT 16" O.C. 1 LAYER OF 5/8" GYPSUM BOARD	U465 - 1HR	N/A / 45
A6 6" STUDS	7 1/4"			N/A / 45
B4 3 5/8" STUDS	6 1/8"	2 LAYERS OF 5/8" GYPSUM BOARD METAL STUDS AT 16" O.C. 2 LAYERS OF 5/8" GYPSUM BOARD	U425 - 2HR	N/A / 53
B6 6" STUDS	8 1/2"			N/A / 53
C2 2 1/2" STUDS	3 1/8"	METAL STUDS AT 16" O.C. 1 LAYER OF 5/8" GYPSUM BOARD		N/A / ?
C4 3 5/8" STUDS	4 1/4"			N/A / 22
C6 6" STUDS	6 5/8"			N/A / ?

GENERAL PARTITION NOTES:

1. PLAN DIMENSIONS ARE TO FACE OF STUD, FACE OF FURRING CHANNEL, OR FACE OF MASONRY; IN THAT ORDER.
2. ADHERE TO MANUFACTURER'S INFORMATION FOR MINIMUM METAL STUD GAUGE TO BE USED FOR THE UNBRACED LENGTH OF THE WALL (MINIMUM GAUGE TO BE 25 GA; IF WELDED).
3. ALL GYPSUM BOARD AT RATED WALLS SHALL BE TYPE 'X'.
4. STUD WALLS RECEIVING CERAMIC WALL TILE SHALL BE CONSTRUCTED WITH 20 GAUGE STUDS.
5. FIRE RATED PARTITION IS TO BE CONTINUOUS IN CONDITIONS WHERE ADDITIONAL WALL FURROUT OCCURS.
6. SMOKE SEAL FIRE CAULKING REQUIRED AT ALL FIRE RATED PARTITIONS (1HR - 4HR) AND AT "S" PARTITION THAT ARE OTHERWISE NON - RATED PARTITIONS.
7. UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS, THE MINIMUM VERTICAL REINFORCEMENT AT CONCRETE MASONRY UNIT WALL SHALL BE #4 BARS AT 32" O.C. WITH #4 BY 48" DOWELS AT 32" O.C. ALIGNED WITH GROUTED CELLS.

PARTITION SYMBOL LEGEND

A4
UDN

Partition Type - See schedule sheet A302

N - Non-rated partition
S - Construction capable of resisting the passage of smoke, run drywall on room side continuous to deck and fire seal.
1 - 1 Hour partition
2 - 2 Hour partition
3 - 3 Hour partition
4 - 4 Hour partition

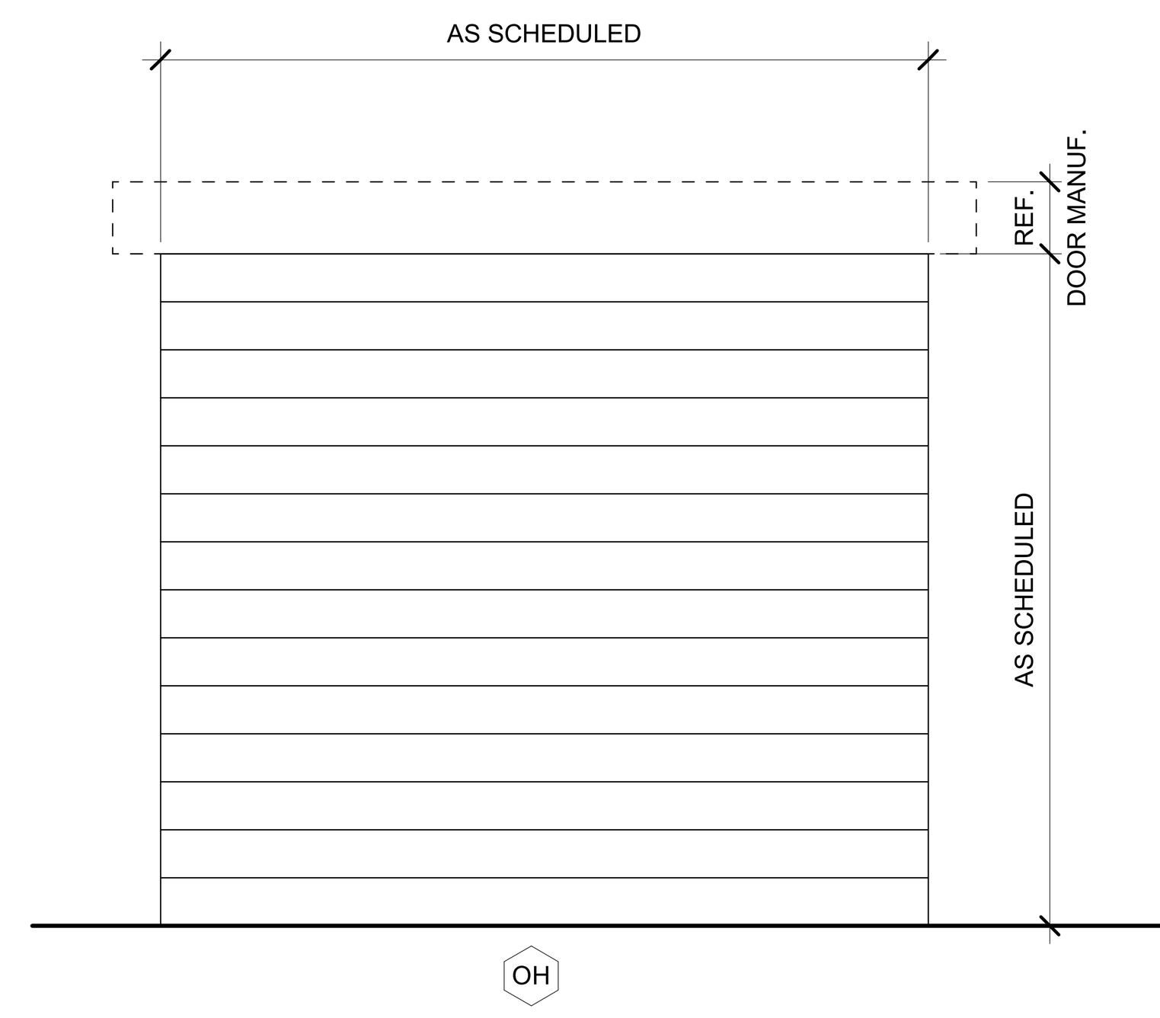
D - Extend wall to underside of structural deck
C - Top of wall to extend to 12" above finished ceiling height
H - Half wall, refer to floor plan for wall height.

U - Uninsulated
I - Insulated with 3" Sound Attenuation Batt Insulation Regardless of Cavity Size
S - Sound partition insulated with Sound Attenuation Batt Insulation same thickness as cavity size. Provide acoustical sealant bead between top of stud runner and structure and between bottom stud track and floor. Provide acoustical sealant bead around all wall penetrations. Offset back to back outlets by one stud cavity. Refer to STC Rating on Partition Schedule for required STC value.

GLAZING GENERAL NOTES

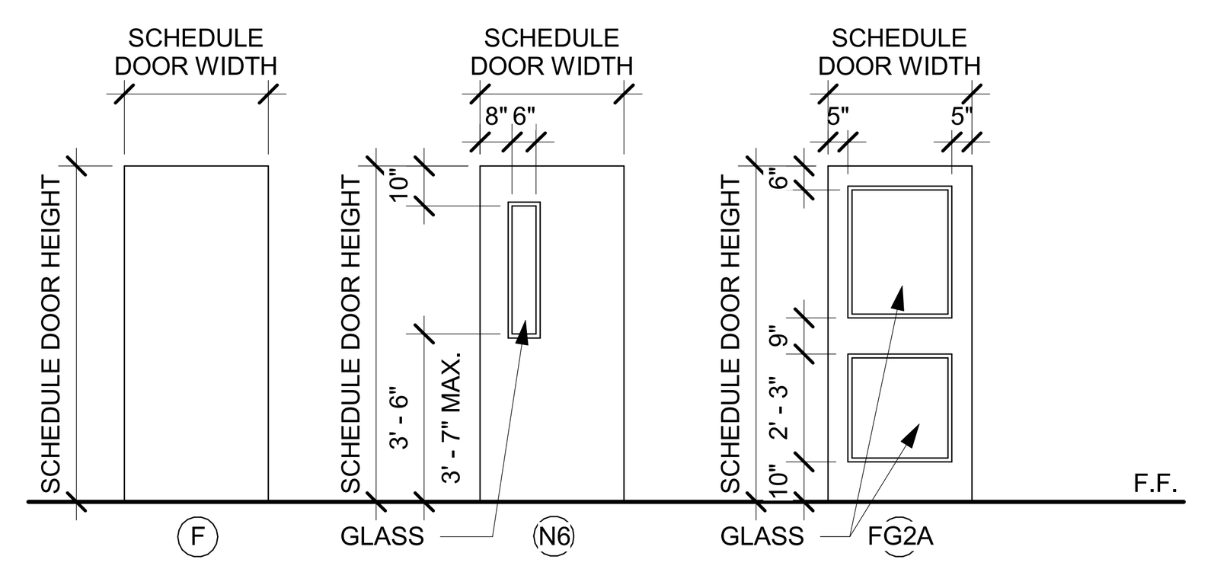
1. ALL EXTERIOR GLAZING SHALL BE 1" INSULATING GLASS, TINTED AND TEMPERED.
2. ALL INTERIOR GLAZING SHALL BE 1/4" POLISHED PLATE TEMPERED OR FIRE GLASS, REFER TO FRAME SCHEDULE AND DOOR SCHEDULE FOR SPECIFIC CONDITIONS

ATTACK RESISTANT FILM



Overhead Door Types

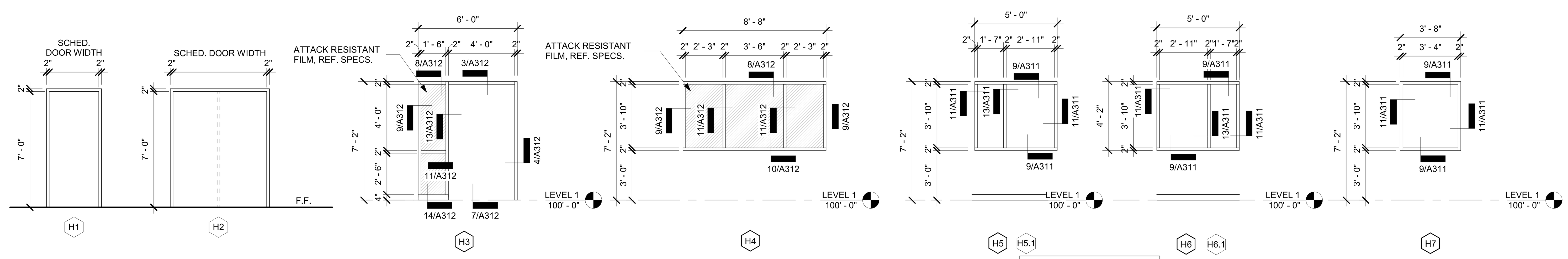
1/4" = 1'-0"



Door Types

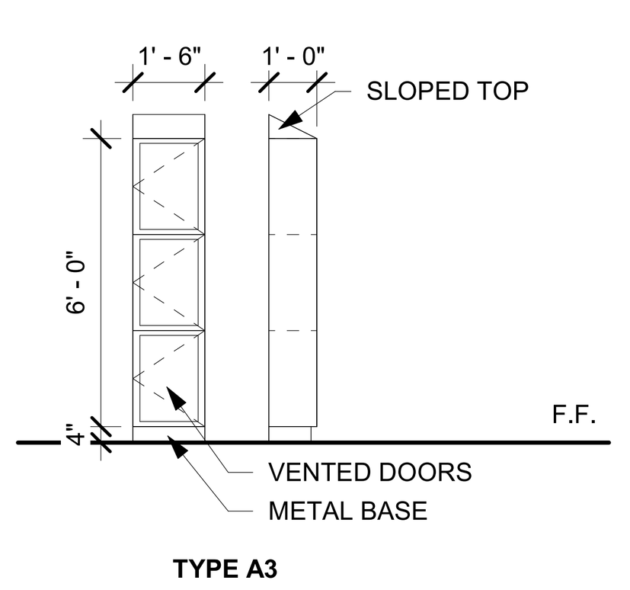
1/4" = 1'-0"

FRAMES 'H5.1' AND 'H6.1' TO BE 45 MINUTE FIRE WINDOWS. FIRE RATED GLAZING MARKING OH-45 OR W-60



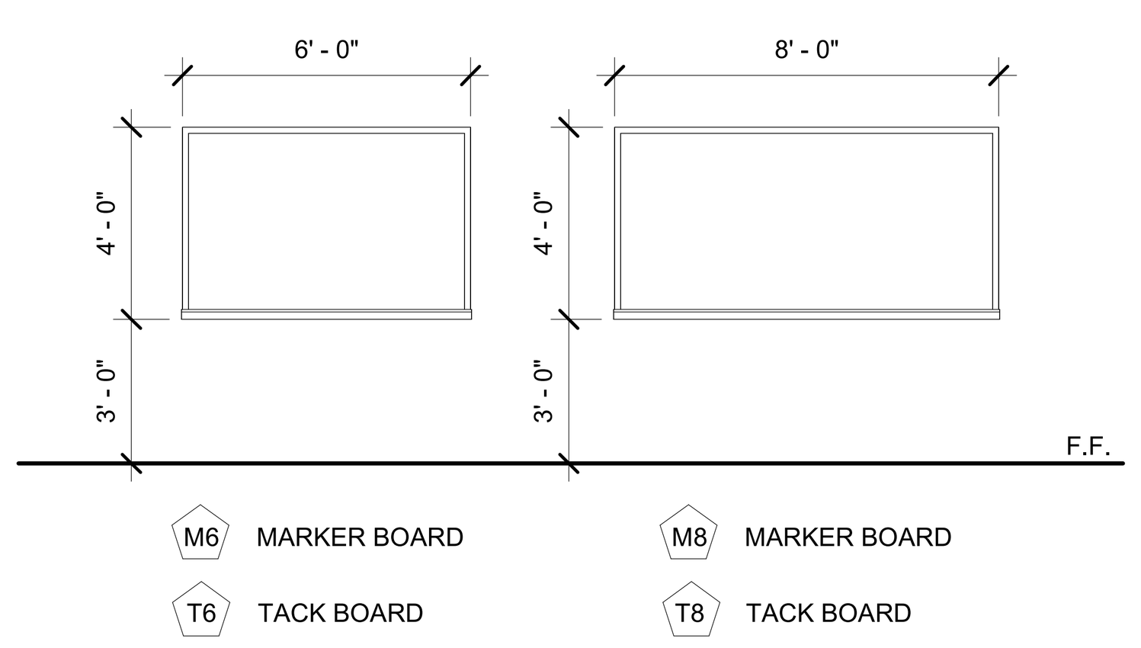
Hollow Metal Frame Types

1/4" = 1'-0"



Metal Locker Types

1/4" = 1'-0"



Marker Board Types

1/4" = 1'-0"

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12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
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REGISTERED ARCHITECT STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

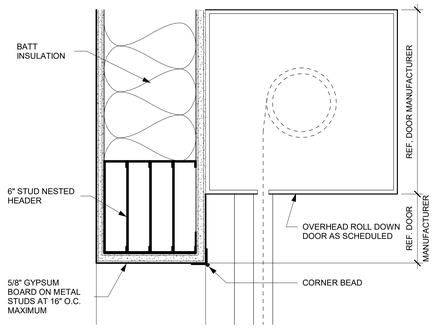
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

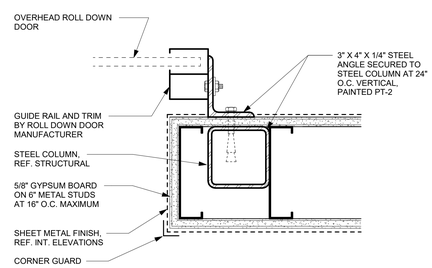
Frame Types & Partition Details

A302

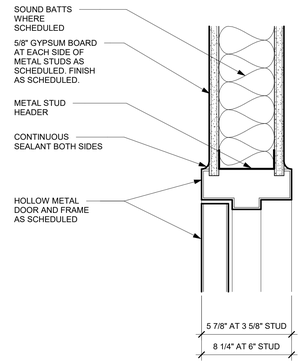
1/17/2024 1:14:35 PM



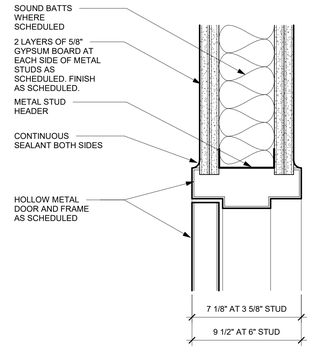
1 Int. Metal Stud - Overhead Door - Door Head
3" = 1'-0"



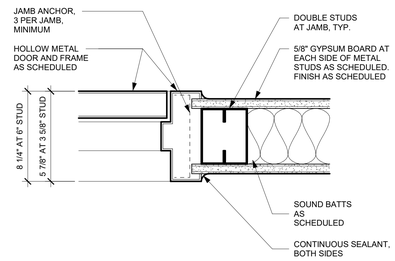
2 Int. Metal Stud - Overhead Door - Door Jamb
3" = 1'-0"



3 Int. Metal Stud - HM - Door Head
3" = 1'-0"



4 Int. Metal Stud - HM - Door Head (2HR)
3" = 1'-0"



5 Int. Metal Stud - HM - Door Jamb
3" = 1'-0"

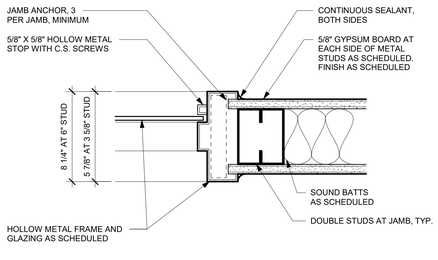
6 Int. Metal Stud - HM - Door Jamb (2HR)
3" = 1'-0"

7 Int. Metal Stud - HM - Door Sill
3" = 1'-0"

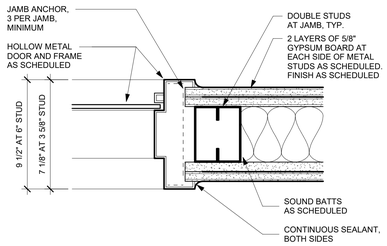
8 Int. Metal Stud - HM - Door Sill (2HR)
3" = 1'-0"

9 Int. Metal Stud - HM - Window Head (Sill Sim)
3" = 1'-0"

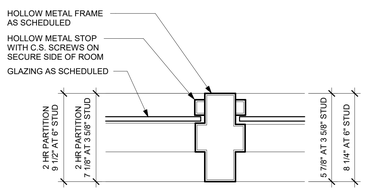
10 Int. Metal Stud - HM - Window Head (Sill Sim) (2HR)
3" = 1'-0"



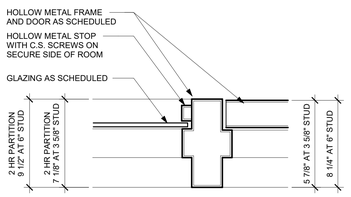
11 Int. Metal Stud - HM - Window Jamb
3" = 1'-0"



12 Int. Metal Stud - HM - Window Jamb (2HR)
3" = 1'-0"



13 Int. Metal Stud - HM - Window Mullion Jamb
3" = 1'-0"



14 Int. Metal Stud - HM - Door to Window
3" = 1'-0"

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
KEITH E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

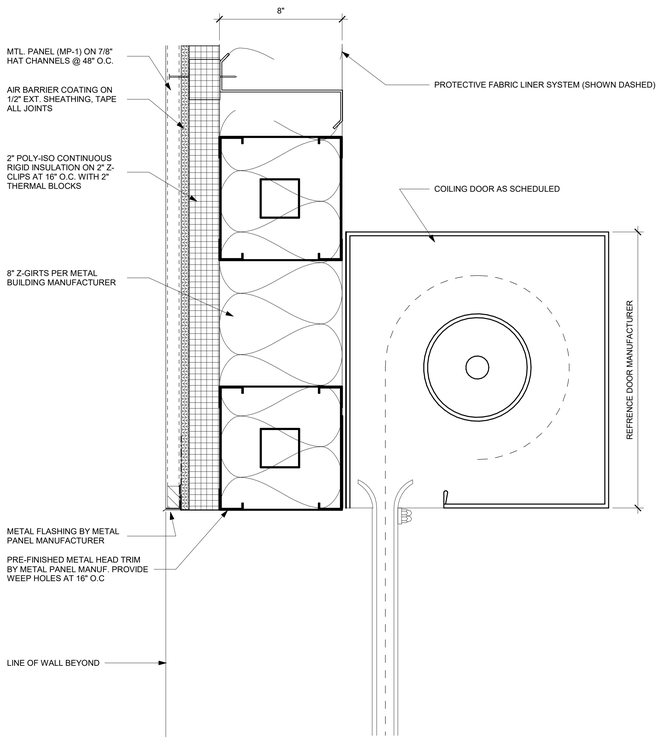
No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

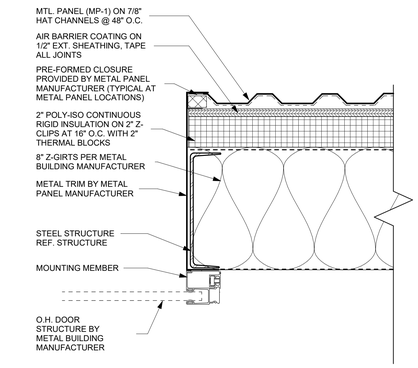
Interior Door/Window Details

A311

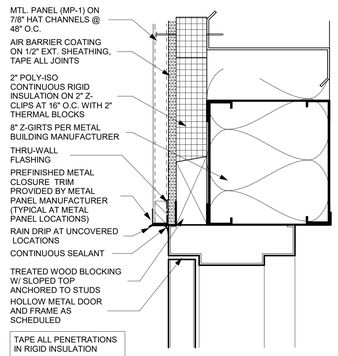
1/17/2024 1:14:39 PM



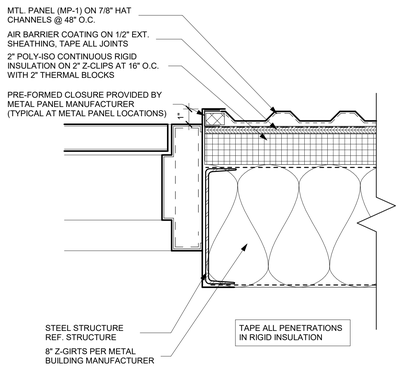
1 Ext. Metal Panel on 8" Z Girt - Rolling Door Head
3" = 1'-0"



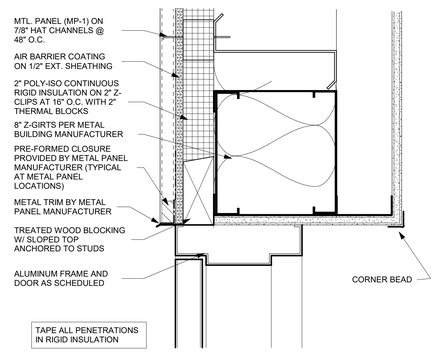
2 Ext. Mtl Panel on 8" Metal Z-Girt - Overhead Door - Jamb
3" = 1'-0"



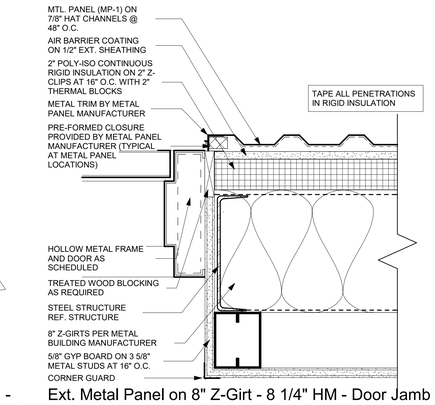
3 Ext. Metal Panel on 8" Z-Girt - 8 1/4" HM - Door Head
3" = 1'-0"



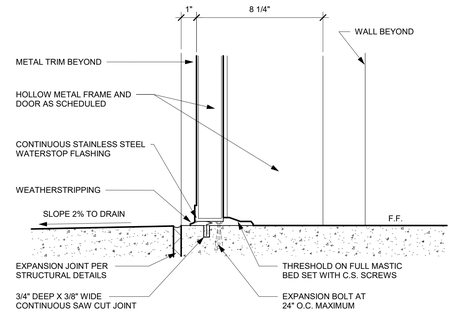
4 Ext. Metal Panel on 8" Z Girt - 8 1/4" HM - Door Jamb
3" = 1'-0"



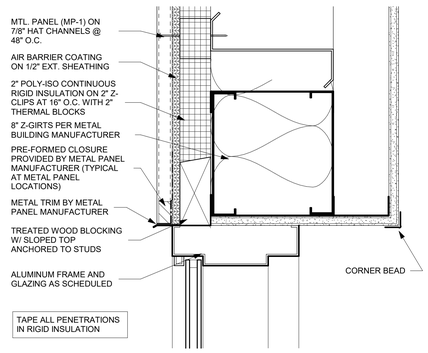
5 Ext. Metal Panel on 8" Z-Girt - 8 1/4" HM - Door Head - 5/8" Stud Wall Interior
3" = 1'-0"



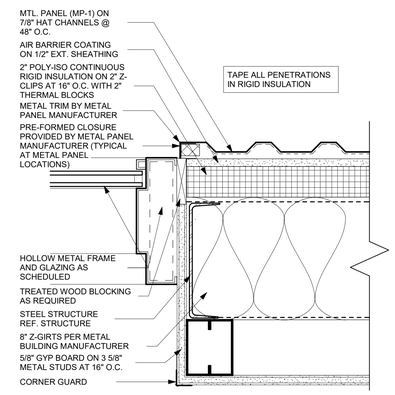
6 Ext. Metal Panel on 8" Z-Girt - 8 1/4" HM - Door Jamb - 5/8" Stud Wall Interior
3" = 1'-0"



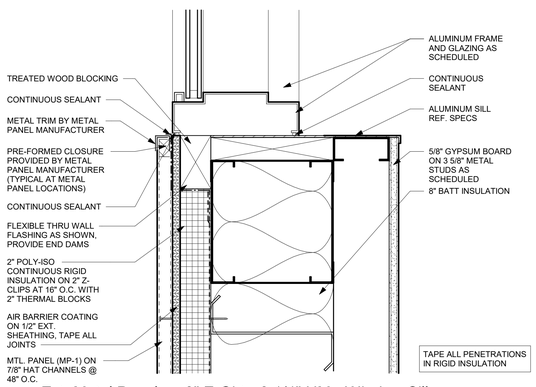
7 Ext. Metal Panel on 8" Z-Girt - 8 1/4" HM - Door Sill
3" = 1'-0"



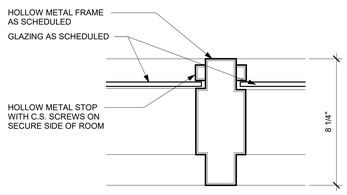
8 Ext. Metal Panel on 8" Z-Girt - 8 1/4" HM - Window Head - 5/8" Stud Wall Interior
3" = 1'-0"



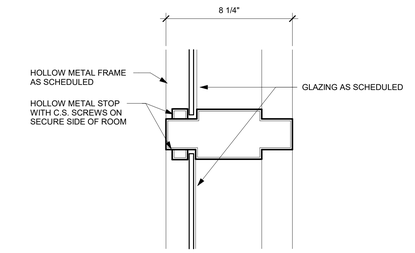
9 Ext. Metal Panel on 8" Z-Girt - 8 1/4" HM - Window Jamb - 5/8" Stud Wall Interior
3" = 1'-0"



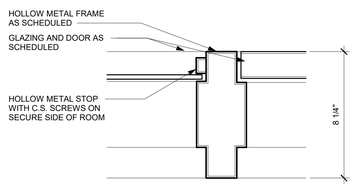
10 Ext. Metal Panel on 8" Z-Girt - 8 1/4" HM - Window Sill - 5/8" Stud Wall Interior
3" = 1'-0"



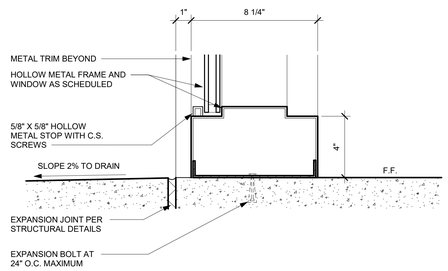
11 Ext. HM Horizontal Window Mullion Jamb
3" = 1'-0"



12 Ext. HM Vertical Window Mullion Jamb
3" = 1'-0"



13 Ext. HM Window to Door Mullion Jamb
3" = 1'-0"



14 Ext. Metal Panel on 8" Z-Girt - 8 1/4" HM - Sidelite Sill
3" = 1'-0"

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REGISTERED ARCHITECT
JOHN E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

Exterior Door/Window Details

A312

1/17/2024 1:14:43 PM

EXTERIOR MATERIAL LEGEND

METAL PANEL TYPE 1 (CHARCOAL GRAY)	
METAL PANEL TYPE 2 (SILVER METALLIC)	

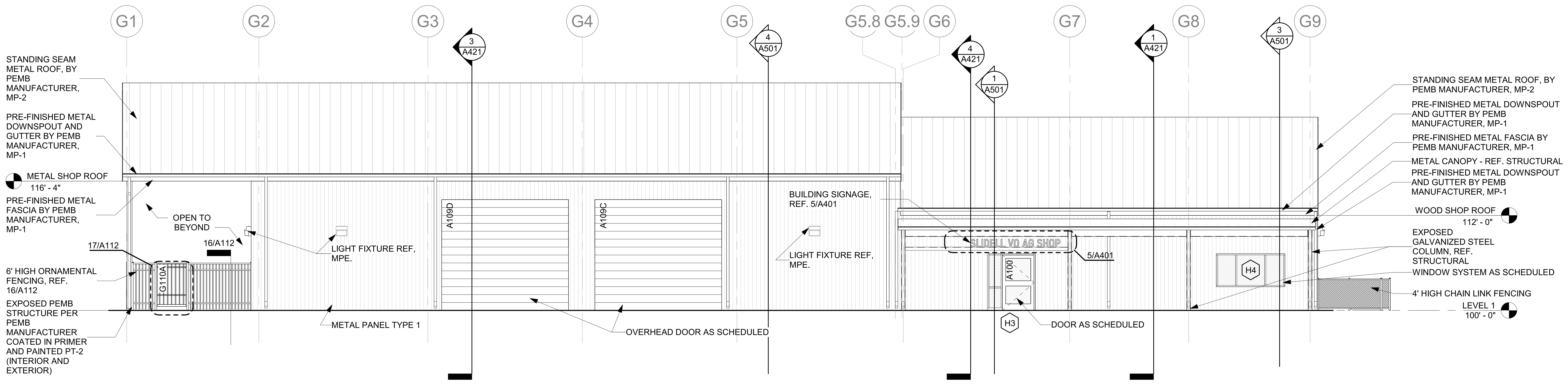
NOTE:

1.) ALL BUILDING E.J. TO BE 1" UNLESS OTHERWISE NOTED
2.) EXPANSION JOINT IN MASONRY VENEER TO BE 3/8" TYPICAL UNLESS OTHERWISE NOTED
3.) 1/2" EXPANSION JOINT FILLER ON BOTH ENDS OF ALL STEEL LINTEL ANGLES

GLAZING GENERAL NOTES

1. ALL EXTERIOR GLAZING SHALL BE 1" INSULATING GLASS, TINTED AND TEMPERED.
2. ALL INTERIOR GLAZING SHALL BE 1/4" POLISHED PLATE TEMPERED OR FIRE GLASS, REFER TO FRAME SCHEDULE AND DOOR SCHEDULE FOR SPECIFIC CONDITIONS

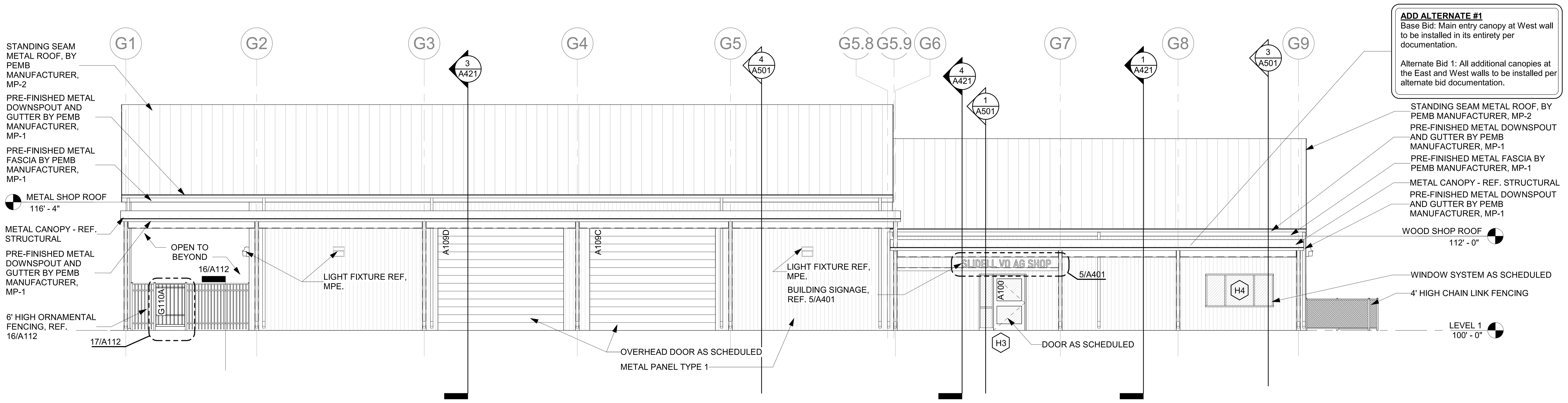
ATTACK RESISTANT FILM



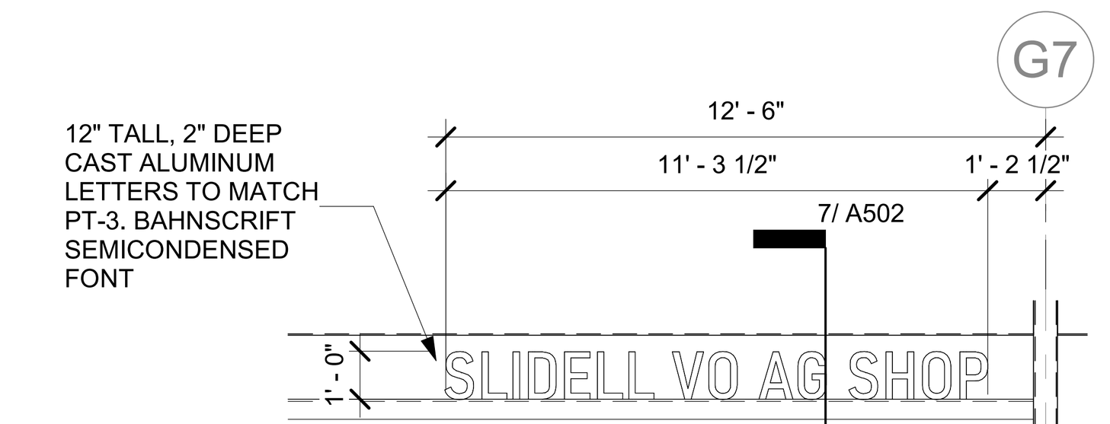
1 Exterior Elevation - North
1/8" = 1'-0"

ADD ALTERNATE #1
Base Bid: Main entry canopy at West wall to be installed in its entirety per documentation.

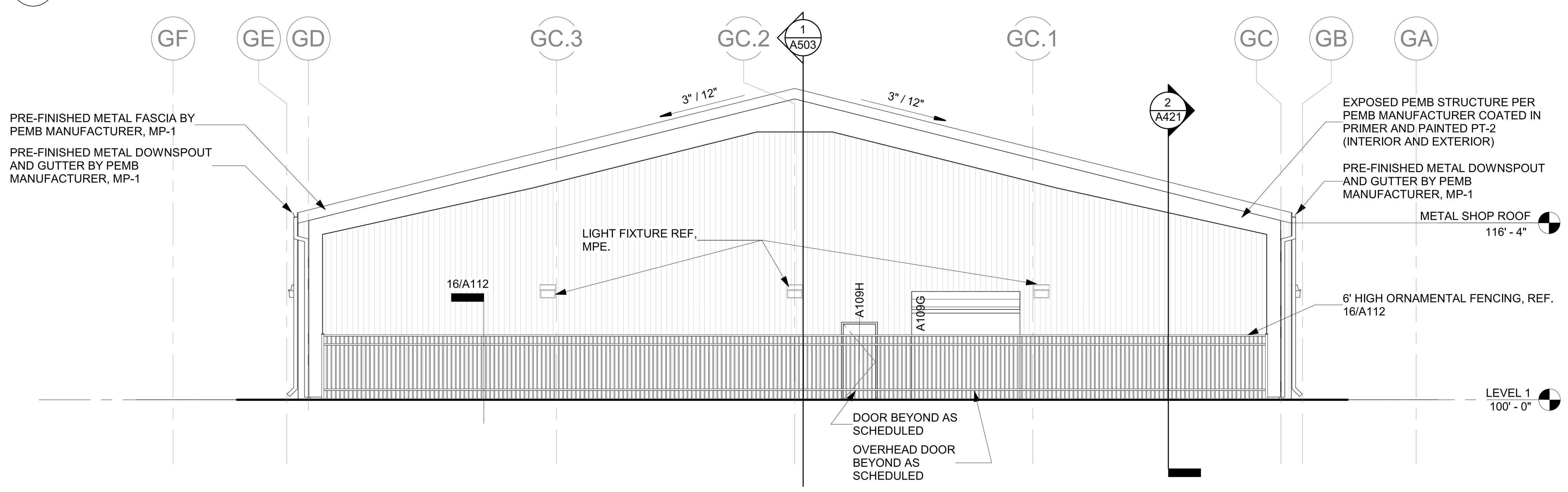
Alternate Bid 1: All additional canopies at the East and West walls to be installed per alternate bid documentation.



2 Exterior Elevation - North - (ALT. BID 1)
1/8" = 1'-0"



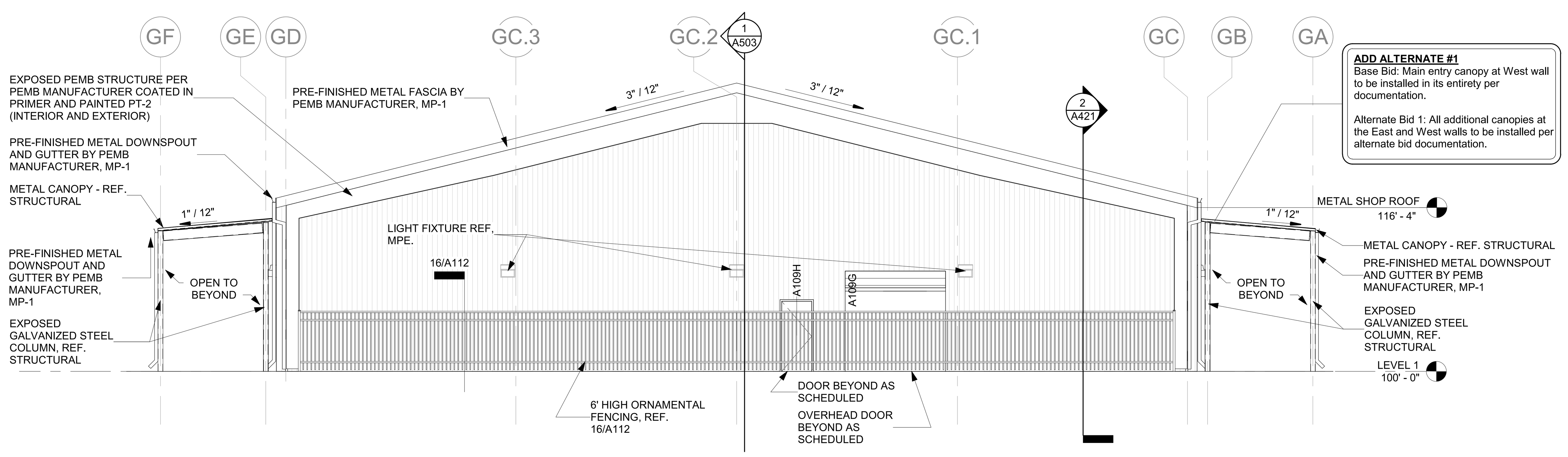
5 Building Signage - Enlarged
1/4" = 1'-0"



3 Exterior Elevation - East
1/8" = 1'-0"

ADD ALTERNATE #1
Base Bid: Main entry canopy at West wall to be installed in its entirety per documentation.

Alternate Bid 1: All additional canopies at the East and West walls to be installed per alternate bid documentation.



4 Exterior Elevation - East (ALT. BID 1)
1/8" = 1'-0"

1/17/2024 1:14:56 PM

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01/17/2024

Slidell ISD Vo-Ag Facility
1 Greyhound Lane Slidell, TX 76267

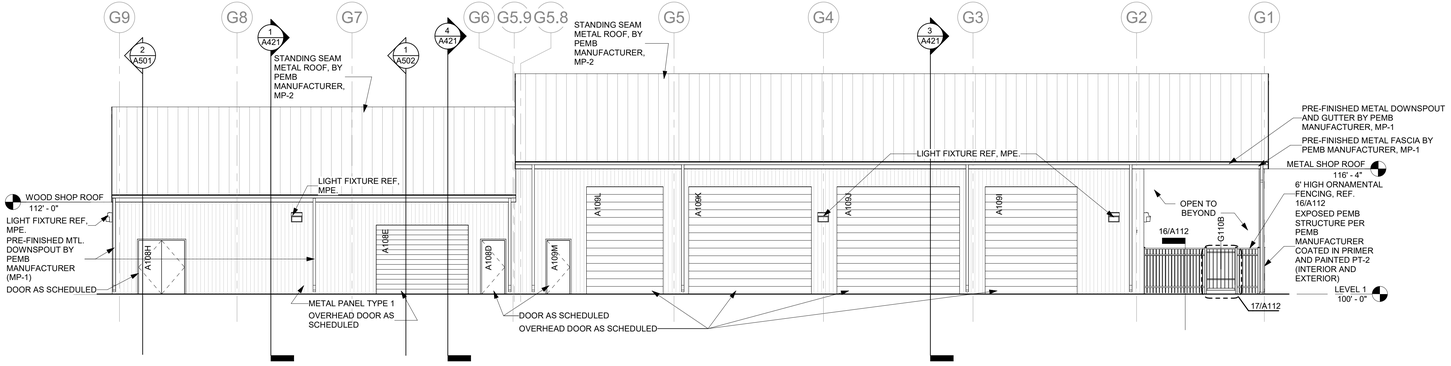
REVISIONS:

No.	Date

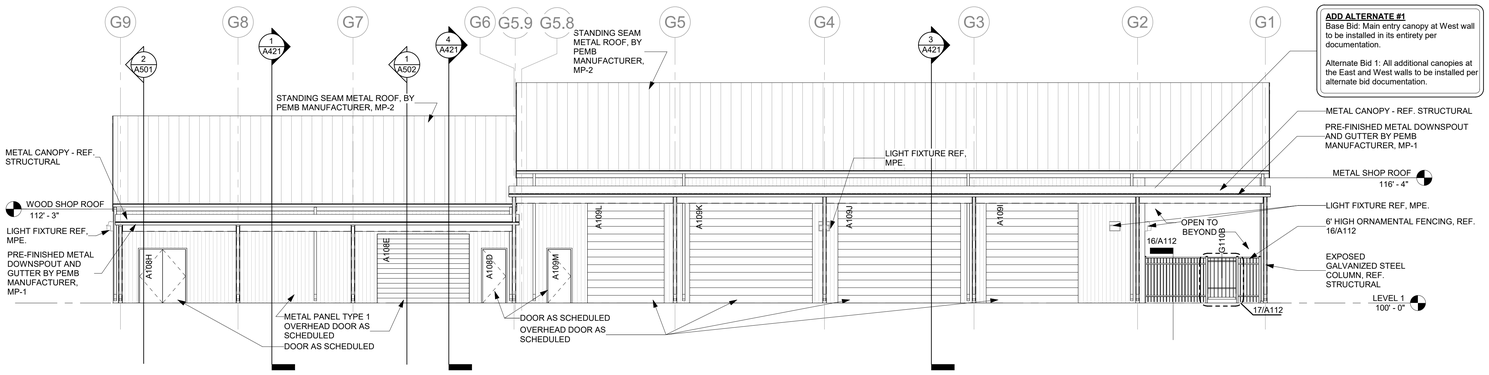
JOB NO.	2338 A
DATE:	01/17/2024

Exterior Elevations & Exterior Details

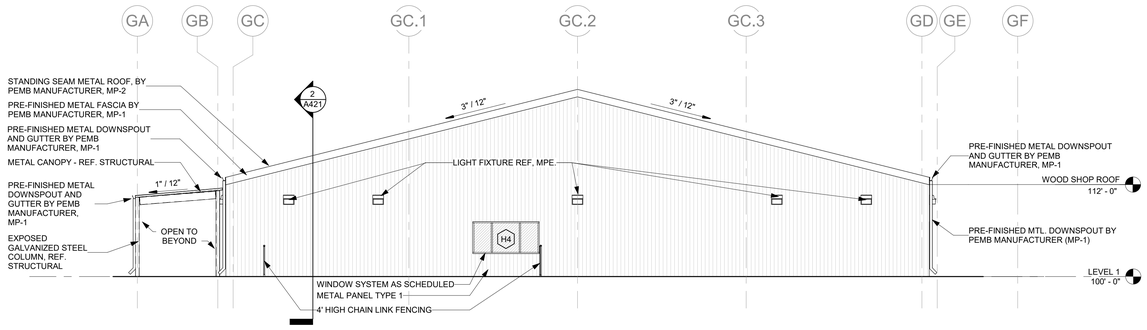
A401



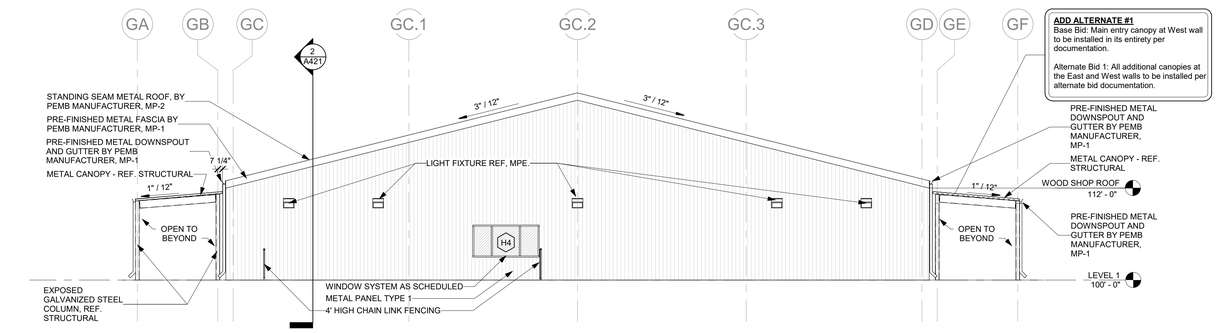
1 Exterior Elevation - South
1/8" = 1'-0"



2 Exterior Elevation - South - (ALT. BID 1)
1/8" = 1'-0"



3 Exterior Elevation - West
1/8" = 1'-0"



4 Exterior Elevation- West - (ALT. BID 1)
1/8" = 1'-0"

1/17/2024 1:15:01 PM

EXTERIOR MATERIAL LEGEND

METAL PANEL TYPE 1 (CHARCOAL GRAY)	
METAL PANEL TYPE 2 (SILVER METALLIC)	

NOTE:

1.) ALL BUILDING E.J. TO BE 1" UNLESS OTHERWISE NOTED
2.) EXPANSION JOINT IN MASONRY VENEER TO BE 3/8" TYPICAL UNLESS OTHERWISE NOTED
3.) 1/2" EXPANSION JOINT FILLER ON BOTH ENDS OF ALL STEEL LINTEL ANGLES

GLAZING GENERAL NOTES

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2. ALL INTERIOR GLAZING SHALL BE 1/4" POLISHED PLATE TEMPERED OR FIRE GLASS, REFER TO FRAME SCHEDULE AND DOOR SCHEDULE FOR SPECIFIC CONDITIONS

ATTACK RESISTANT FILM

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12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
KEITH E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

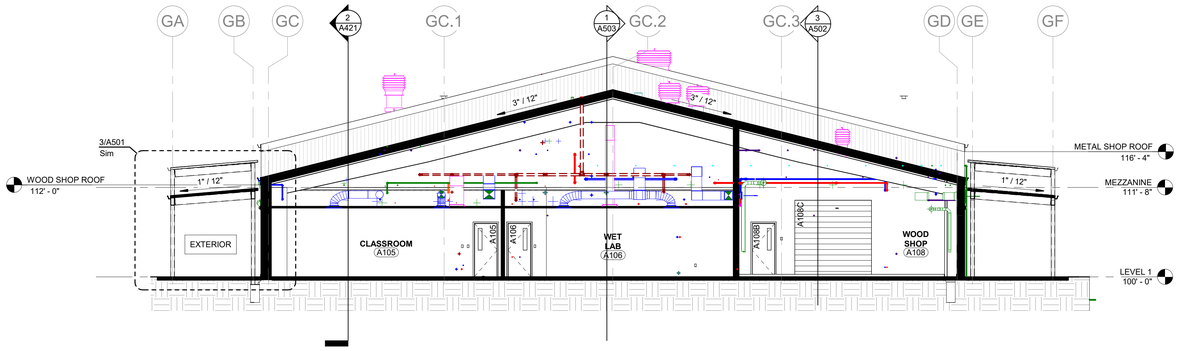
REVISIONS:

No.	Date

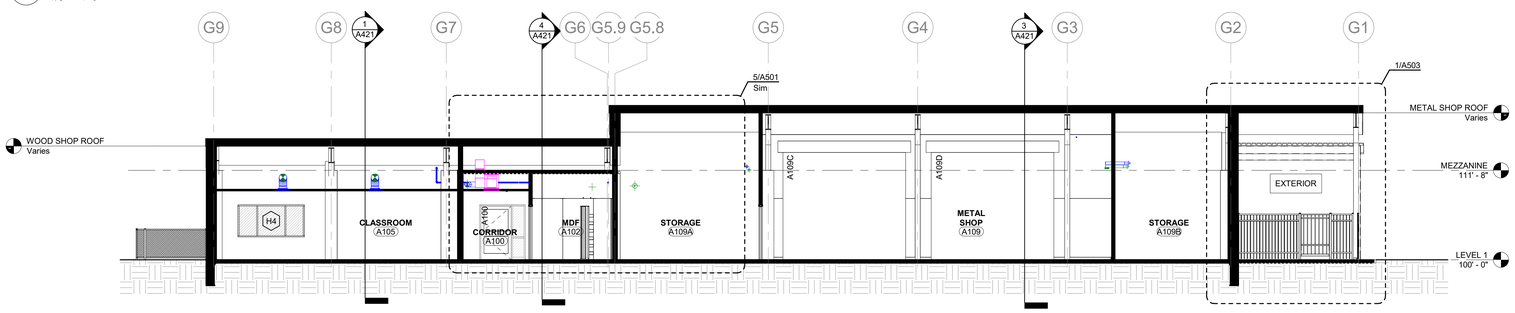
JOB NO. 2338 A
DATE: 01/17/2024

Exterior Elevations

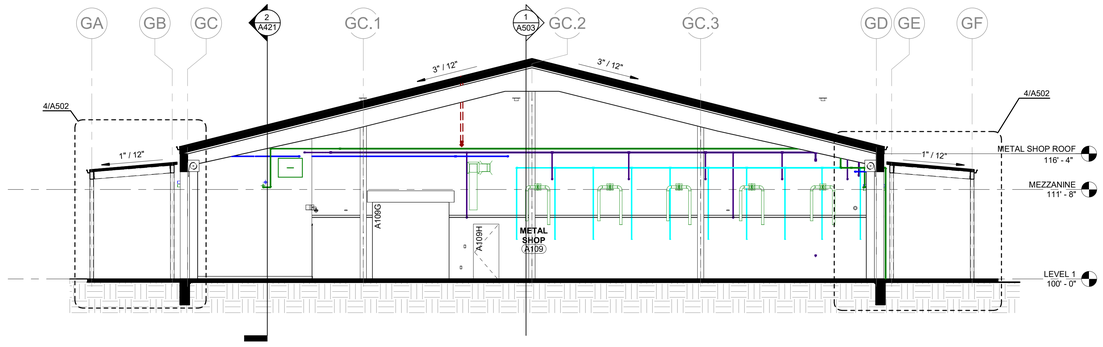
A402



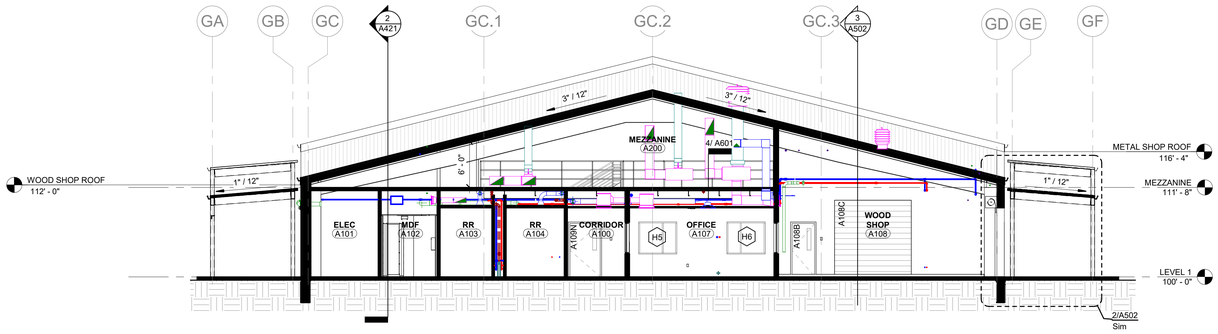
1 Building Section - East @ Classroom
1/8" = 1'-0"



2 Building Section - North - Unit G
1/8" = 1'-0"



3 Building Section - East @ Metal Shop
1/8" = 1'-0"



4 Building Section - East @ Mezzanine
1/8" = 1'-0"

1/17/2024 1:15:13 PM

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REGISTERED ARCHITECT
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24193
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

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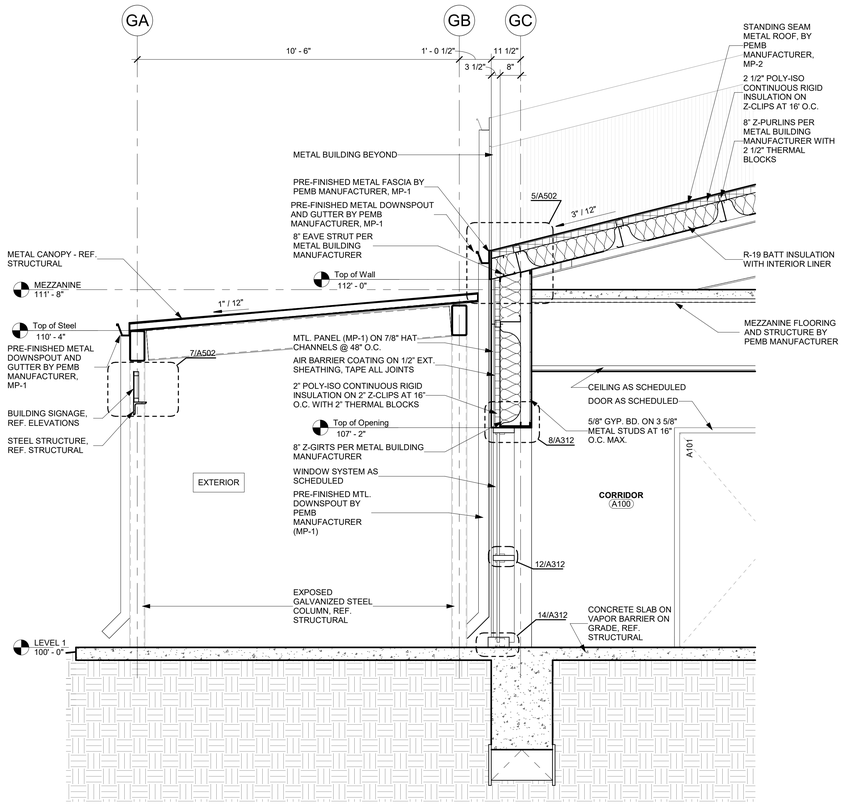
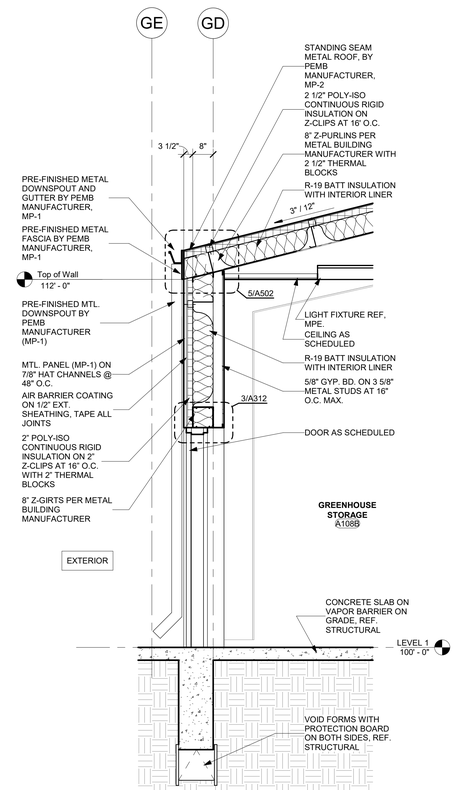
JOB NO. 2338 A
DATE: 01/17/2024

Building Sections

A421



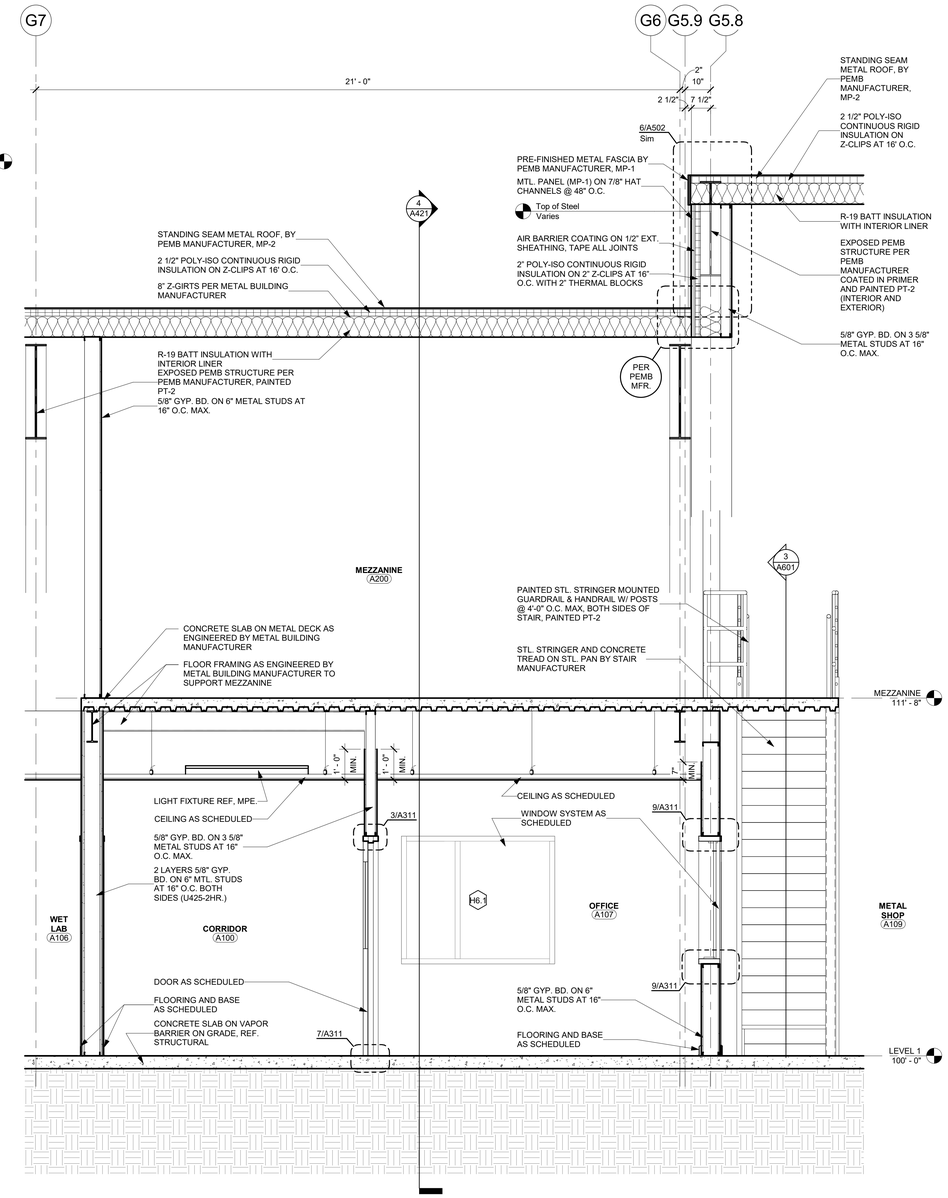
1 Section - Corridor A100 - North Wall
1/2" = 1'-0"



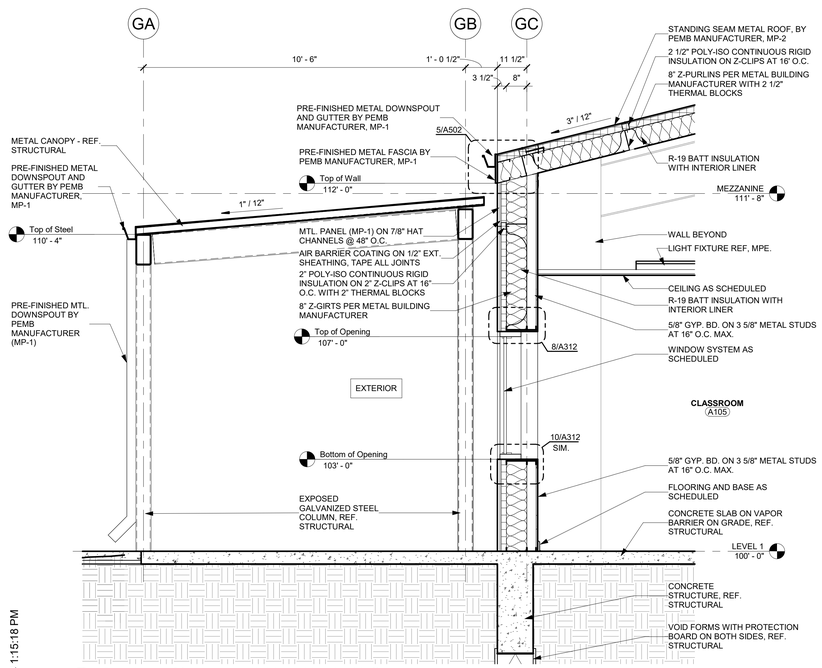
2 Section - Greenhouse Storage - A108B
1/2" = 1'-0"

WALL SECTION NOTES

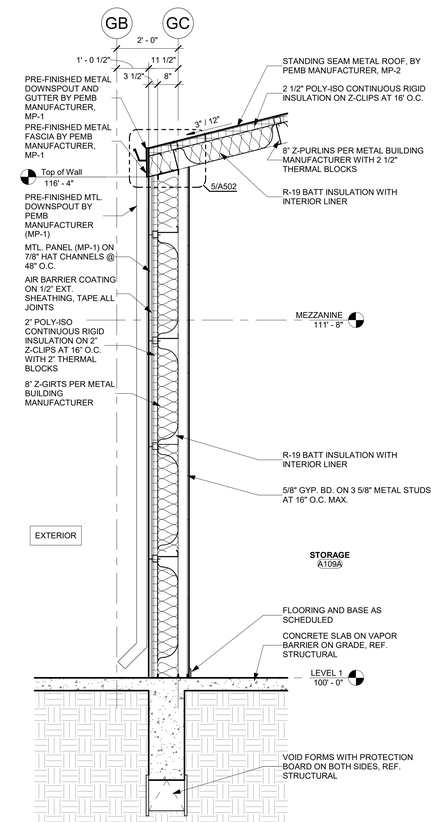
1. ALL STRUCTURAL MEMBERS SHOWN ON ARCHITECTURAL DRAWINGS ("A" SERIES) ARE FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR ACTUAL SIZE & LOCATIONS OF STEEL DECK, JOISTS, ANGLES, BOND BEAMS, ETC.
2. THRU-WALL FLASHING @ BRICK LEDGE SHALL BE LOCATED AT BOTTOM OF BRICK LEDGE AT ALL CONDITIONS. WEEP HOLES SHALL BE @ 16" O.C..
3. AT EXTERIOR MTL. STUDS BACKUP WALL, INFILL SPACES BETWEEN STL. JOISTS W/ BATT INSULATION. PROVIDE CONT. SEALANT AT ALL GAPS TO MAINTAIN SEPARATION BETWEEN INTERIOR & EXTERIOR.
4. FILL VOID AT ALL JOIST SEATS W/ BATT INSULATION.
5. INSTALL BACKER ROD AND SEALANT @ ALL EXPANSION JOINTS IN CONC. FLOOR SLAB.
6. ALL ROOF RELATED WOOD BLOCKING & PLYWD. SHALL BE TREATED. RE: ROOF DWGS. ('R' SERIES) FOR BLOCKING LAYOUT AT ROOF EDGES & E.J.
7. REFER TO A400 SERIES DRAWINGS FOR BRICK TYPE, PATTERN, COLOR, AND COURSING.
8. REFER TO SPEC. & SHEET A521 FOR E.J. COVER AND BRICK E.J. DETAILS.
9. REFER TO STRUCTURAL DWGS. FOR VERT. REINFORCING IN CMU WALL. REFER TO ARCHITECTURAL SPECIFICATION FOR HORIZONTAL REINFORCING. IN CMU WALL.
10. INSTALL MORTAR NET PER SPEC ABOVE THRU WALL FLASHING AT ALL STEEL LINTEL LOCATIONS AND AT ALL BRICK LEDGE LOCATIONS PER DETAIL ON A521.
11. APPLY WATER REPELLENT COATING TO MASONRY SURFACES FOLLOWING FINAL CLEANING PER SPEC.



5 Section - Metal Shop A109 - East
1/2" = 1'-0"



3 Section - Classroom A105 - North Wall
1/2" = 1'-0"



4 Section - Storage A109A - South
1/2" = 1'-0"

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REGISTERED ARCHITECT
KEVIN E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

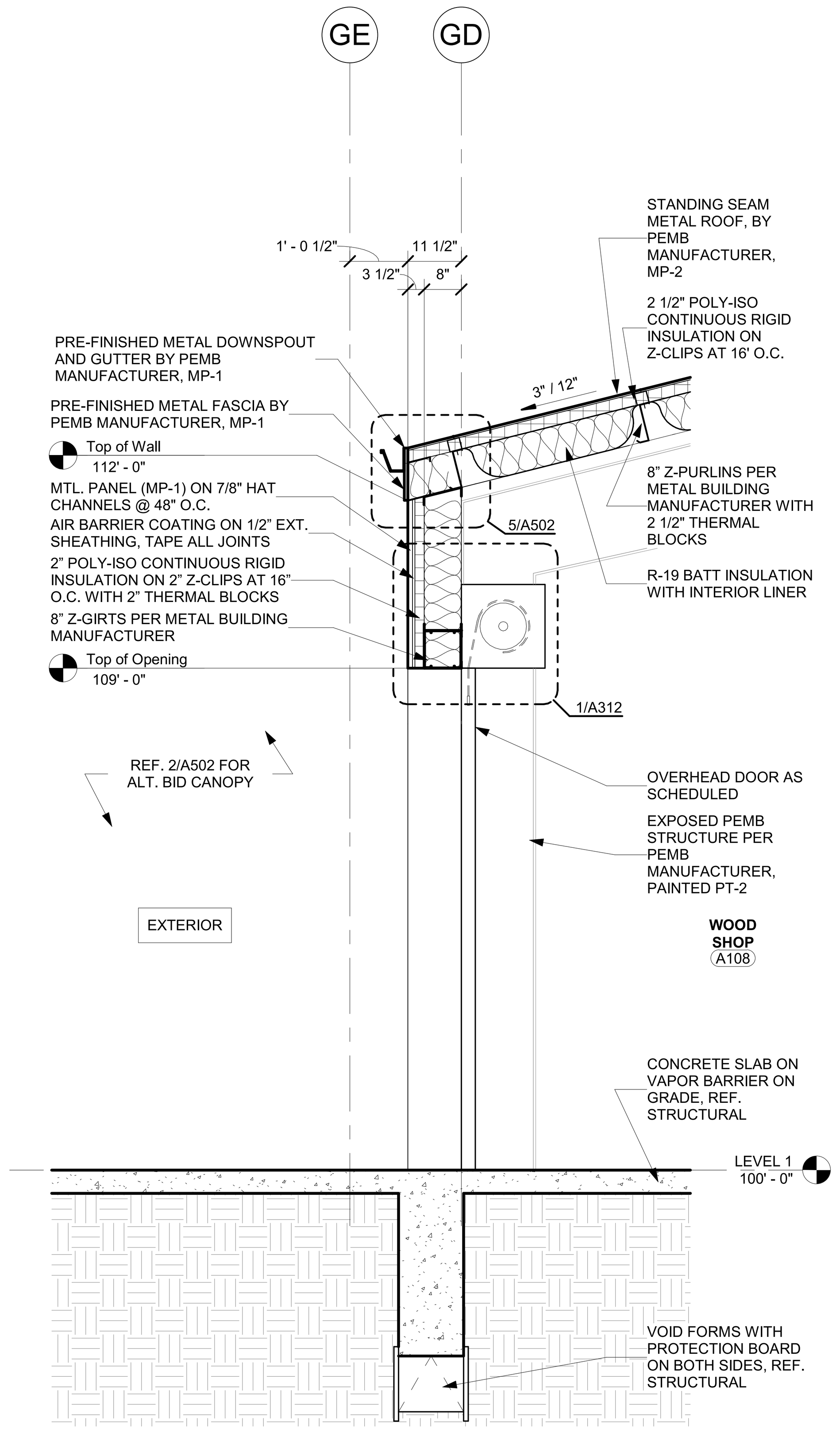
No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

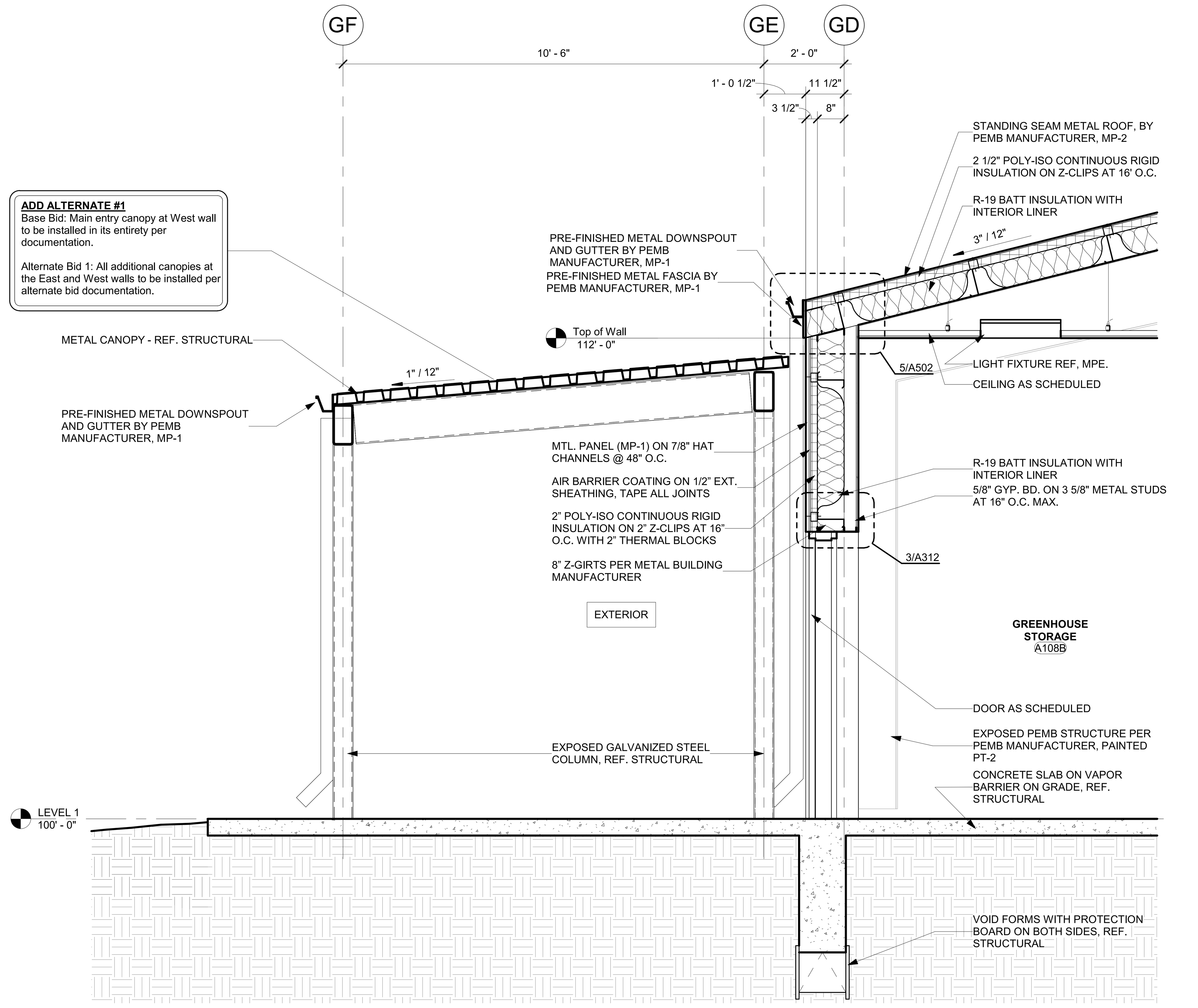
Wall Sections

A501

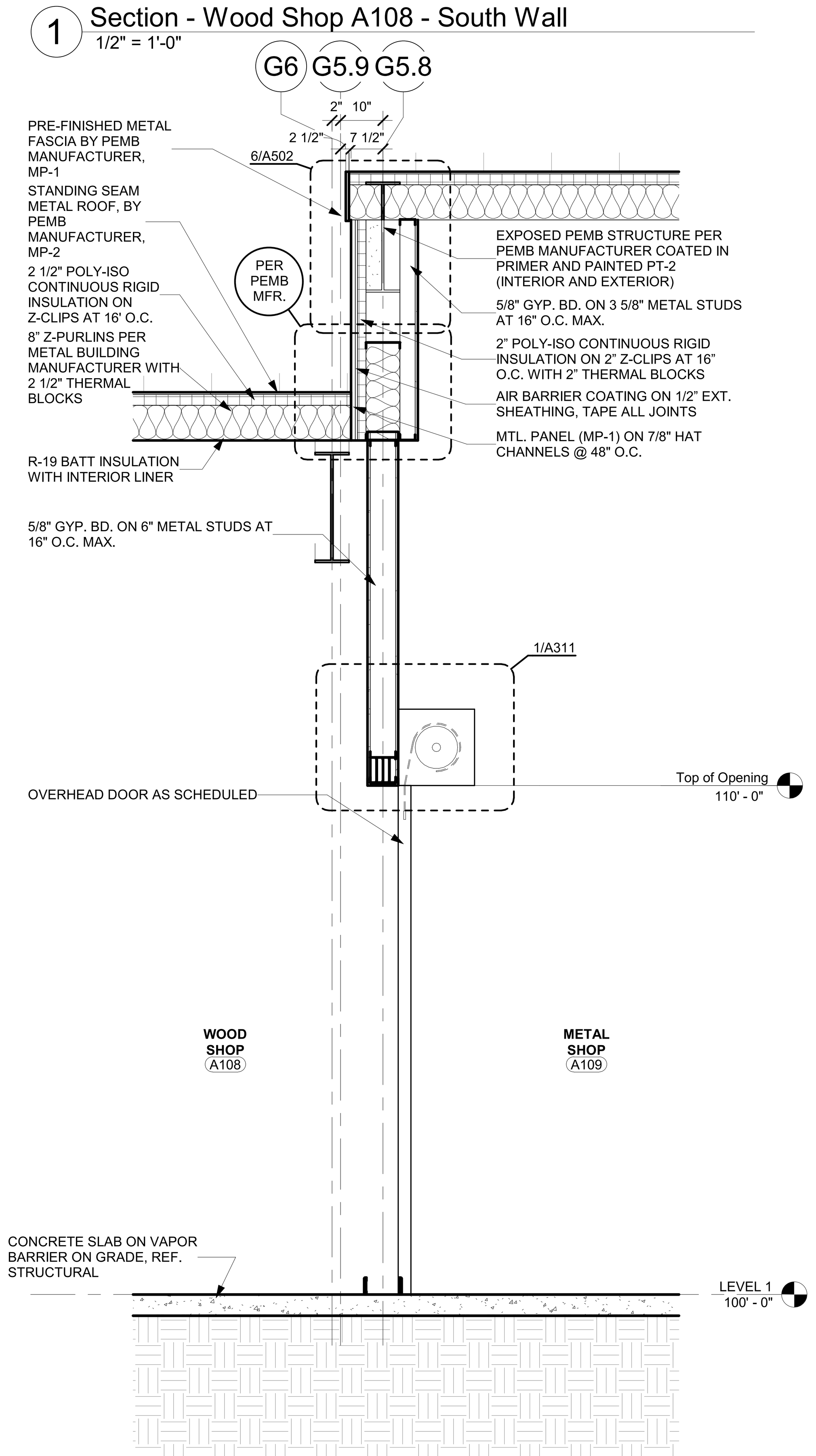
1/17/2024 1:15:18 PM



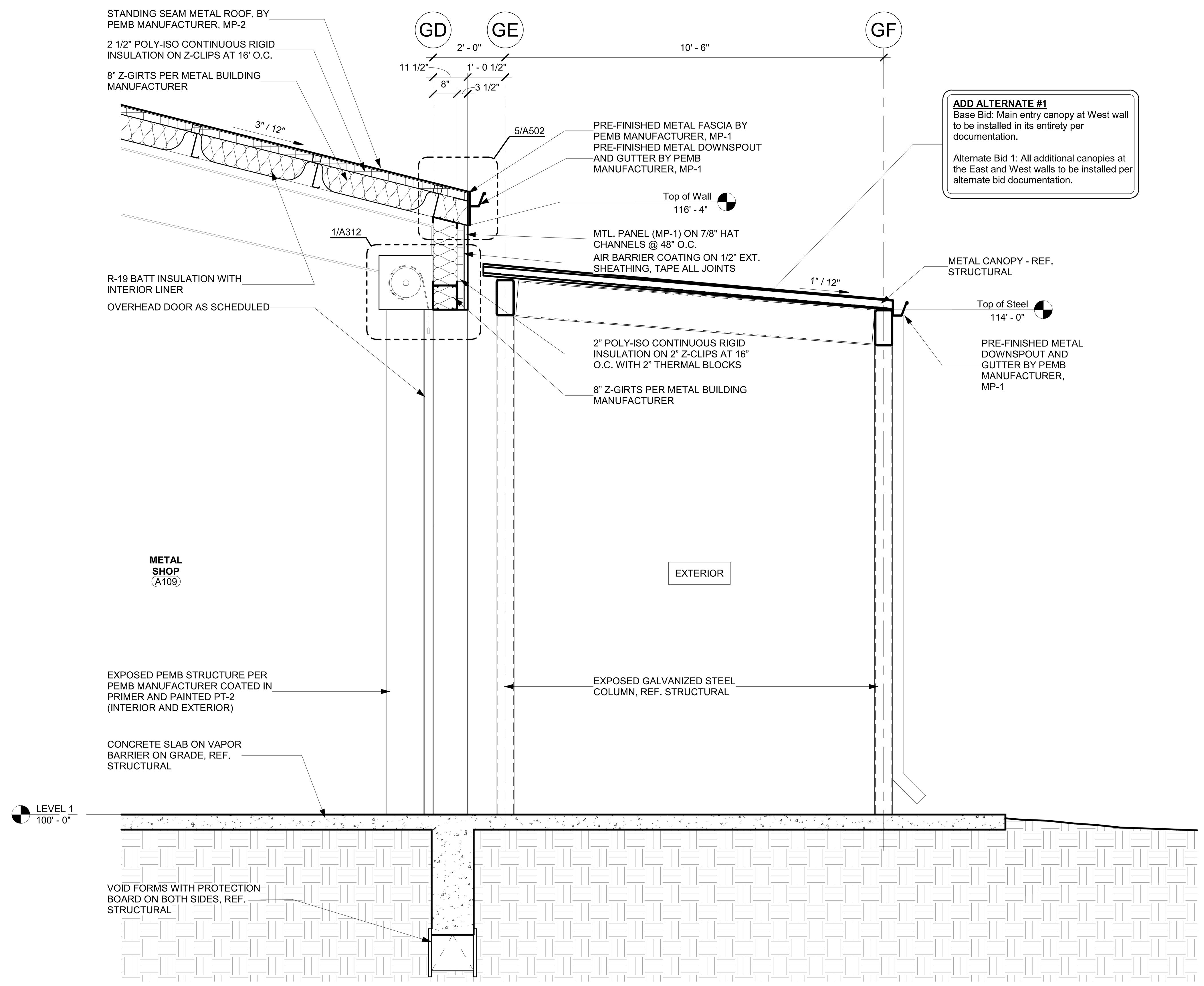
1 Section - Wood Shop A108 - South Wall
1/2" = 1'-0"



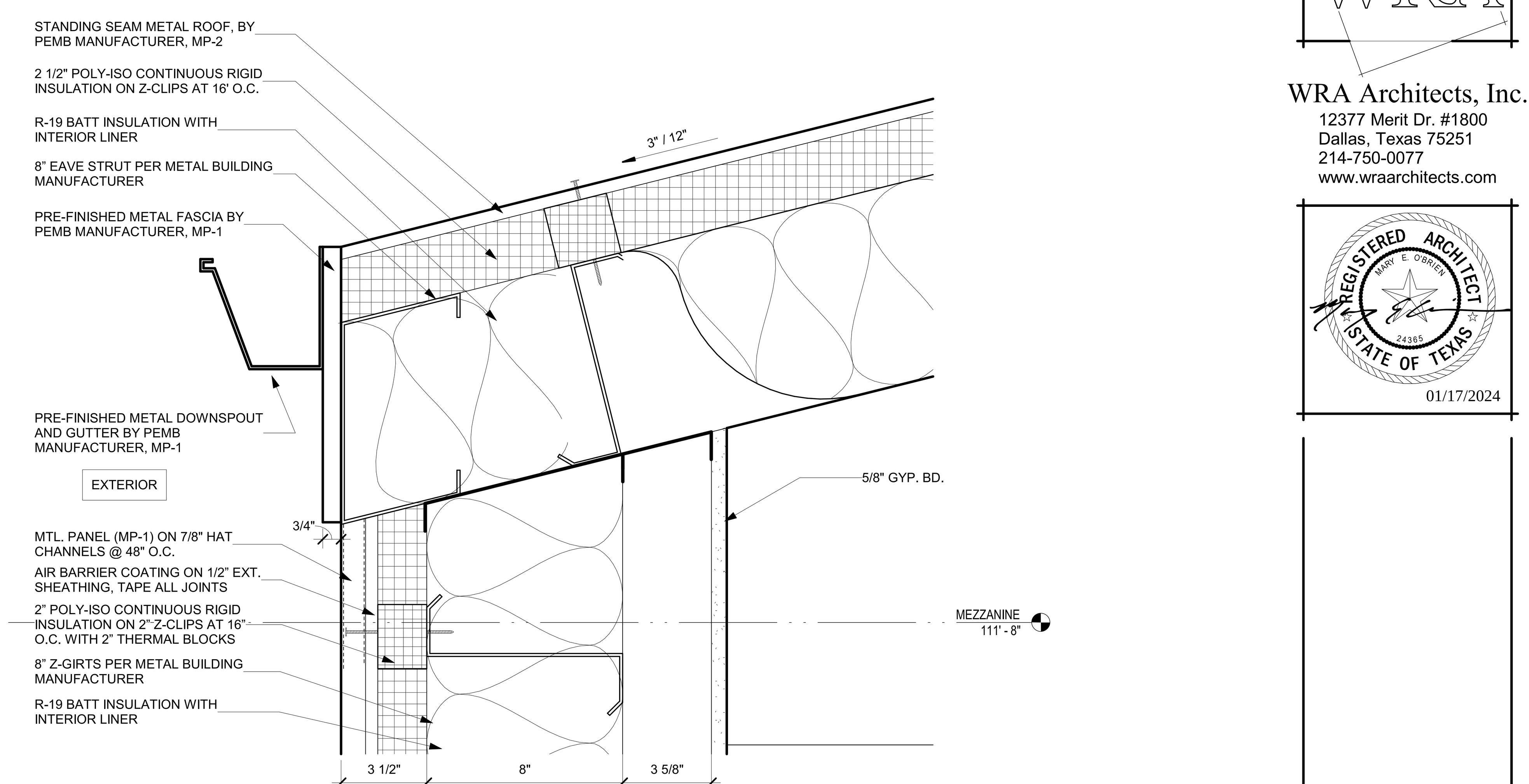
2 Section - Short Canopy (ALT. BID #1)
1/2" = 1'-0"



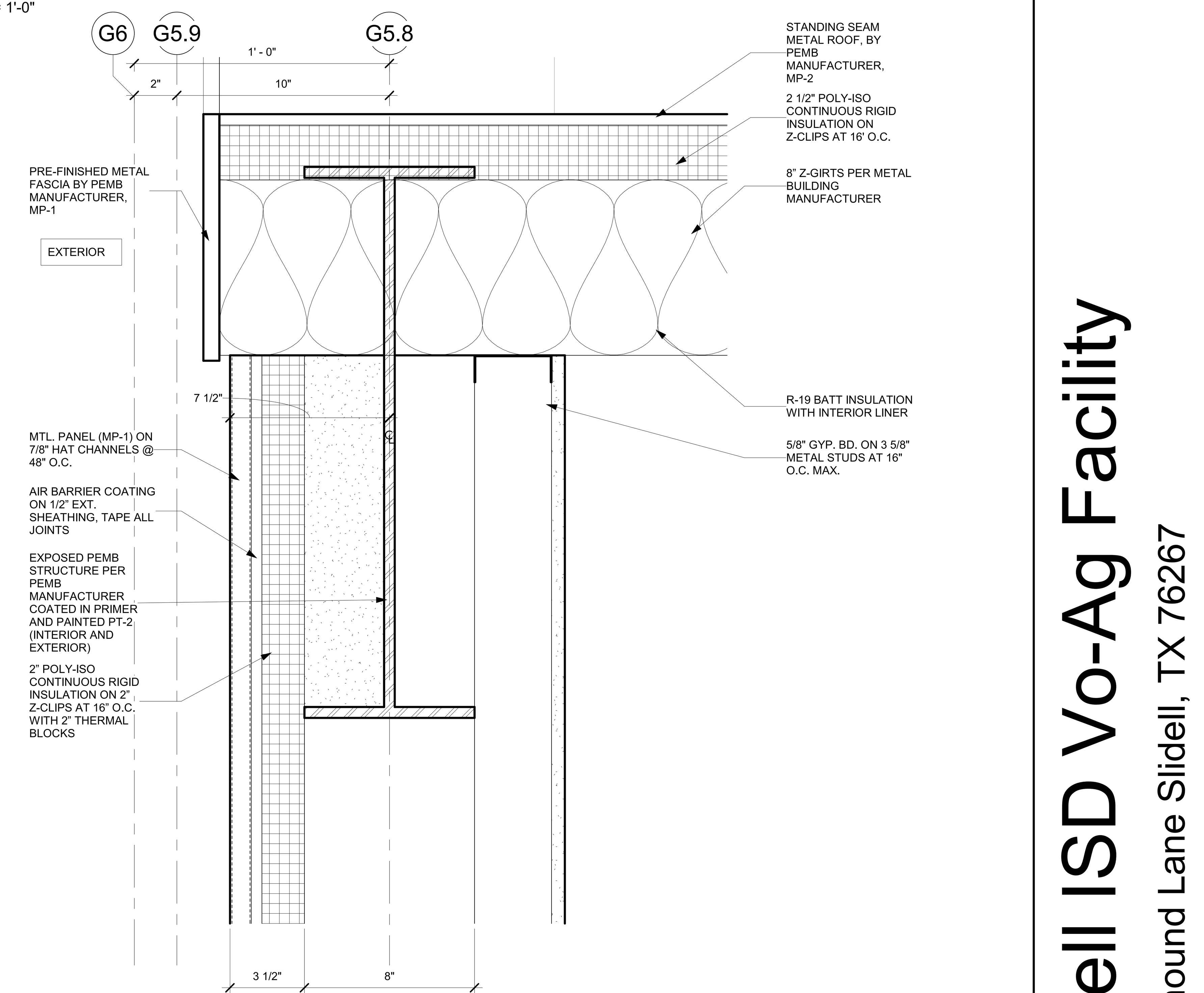
3 Section - Wood Shop A108 - East Wall
1/2" = 1'-0"



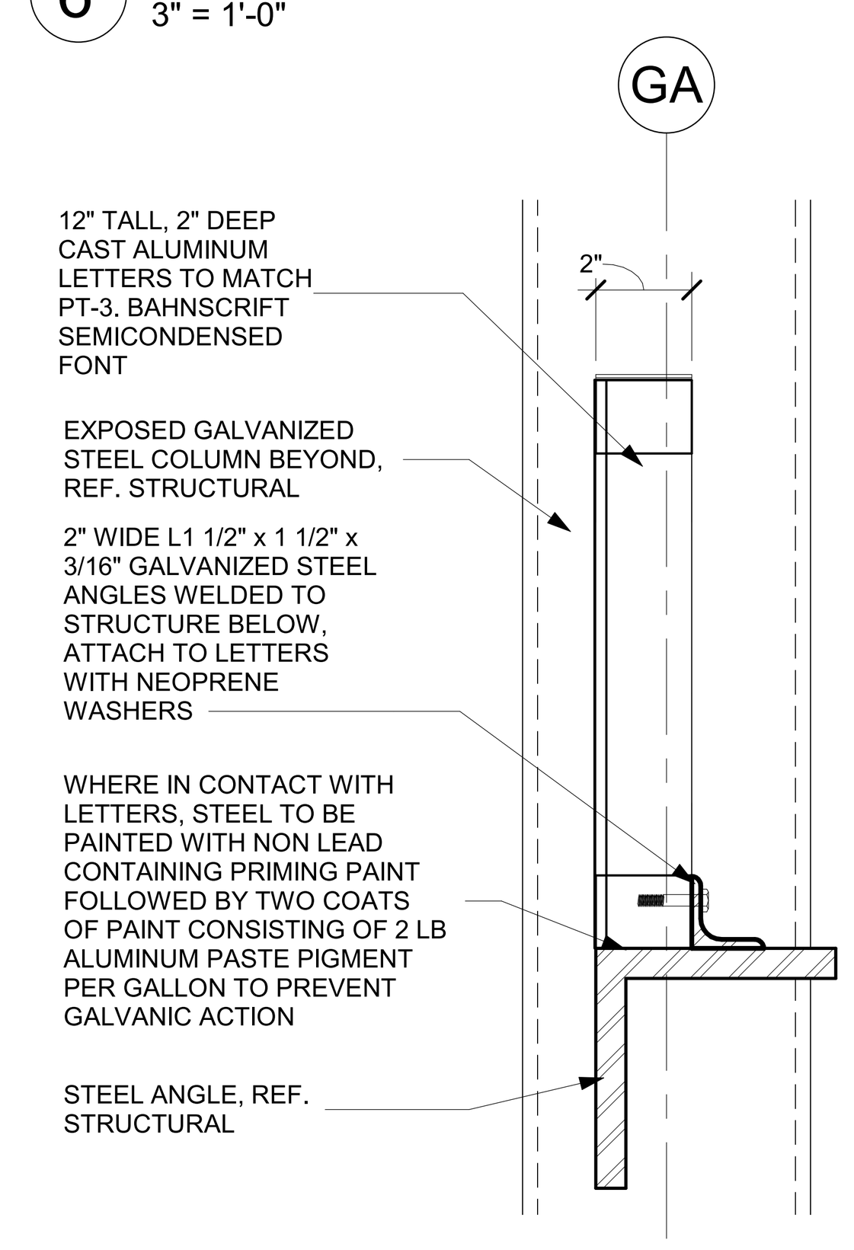
4 Section - Tall Canopy (ALT. BID #1)
1/2" = 1'-0"



5 Roofing Detail 1
3" = 1'-0"



6 Roofing Detail 2
3" = 1'-0"



7 Signage Section
3" = 1'-0"

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REGISTERED ARCHITECT STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility
1 Greyhound Lane Slidell, TX 76267

REVISIONS:

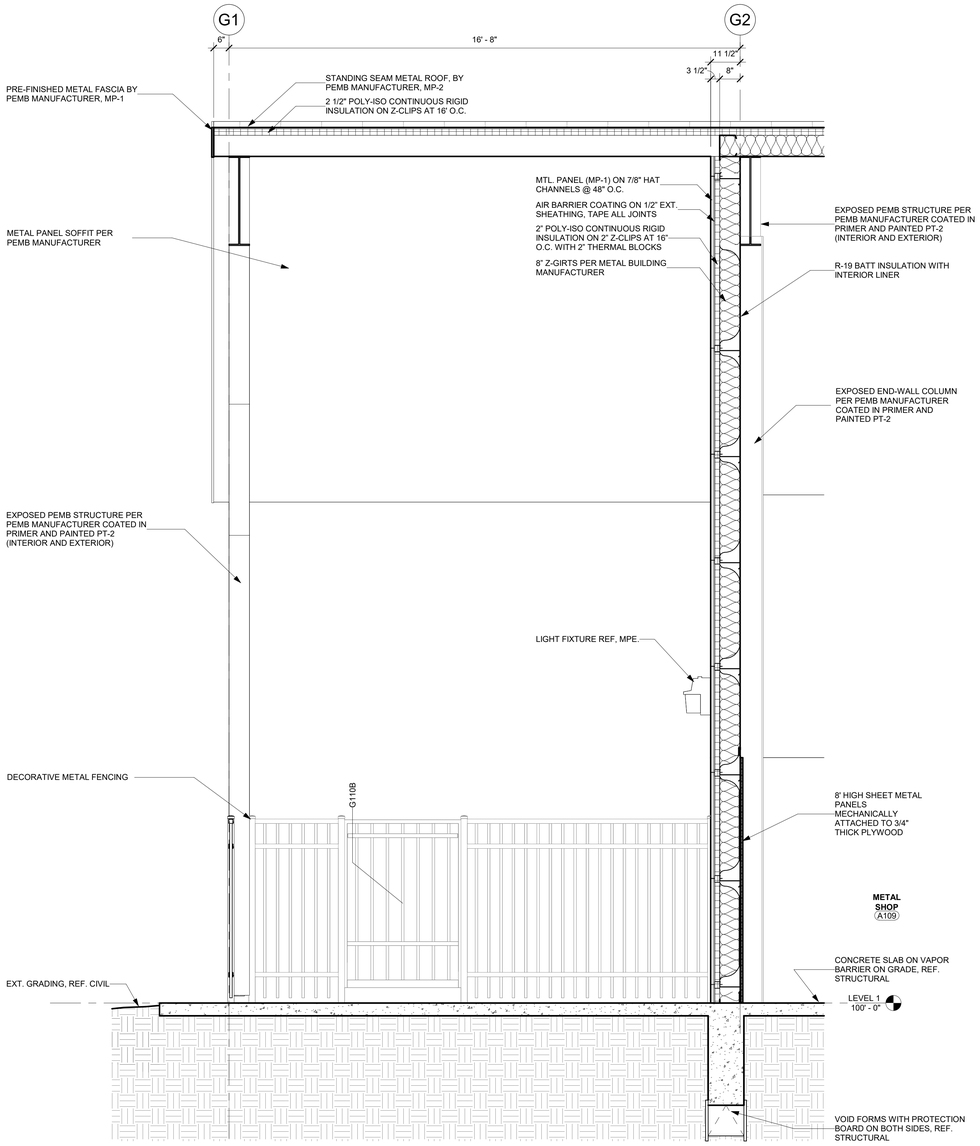
No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

Wall Sections

A502

1/17/2024 1:15:22 PM



1 Section - Metal Shop A109 - East Wall
1/2" = 1'-0"

1/17/2024 1:15:24 PM

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REGISTERED ARCHITECT
KEVIN E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

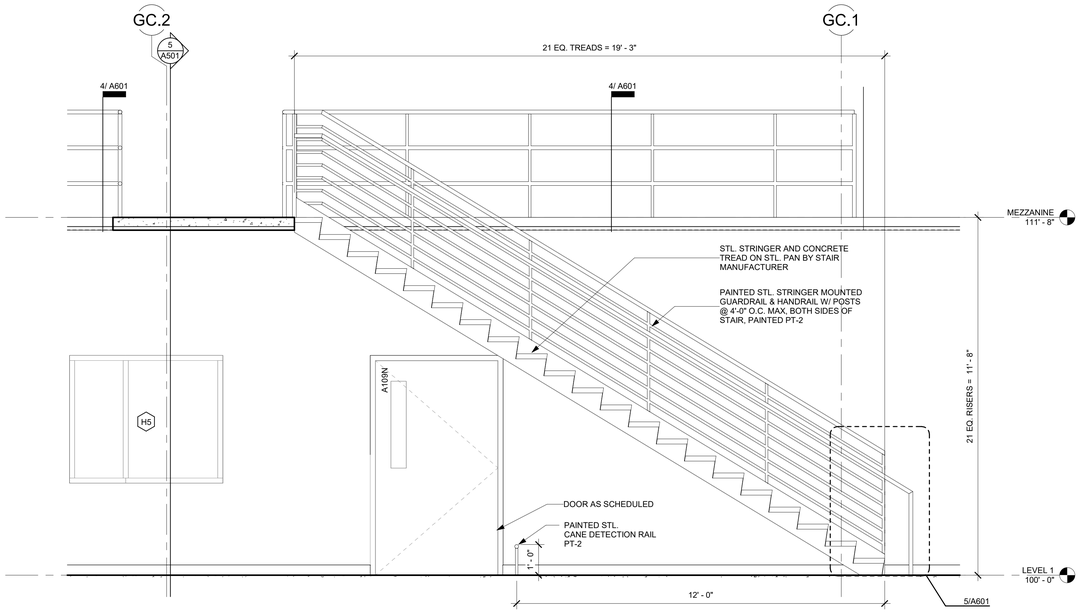
REVISIONS:

No.	Date

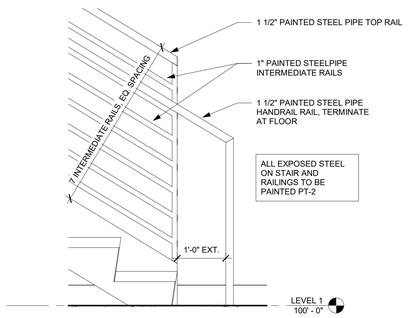
JOB NO. 2338 A
DATE: 01/17/2024

Wall Sections

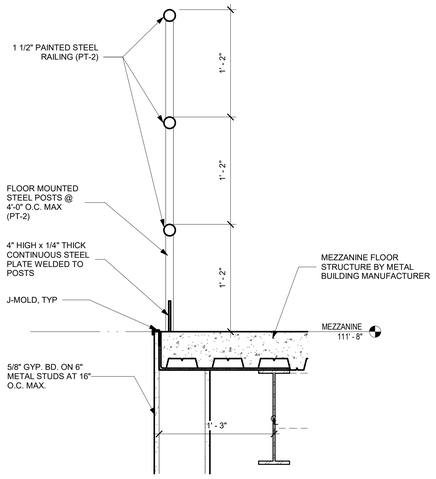
A503



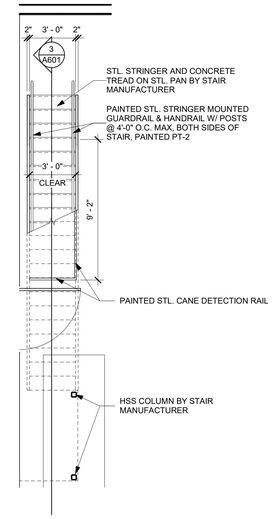
3 Section - Mezzanine Stair
1/2" = 1'-0"



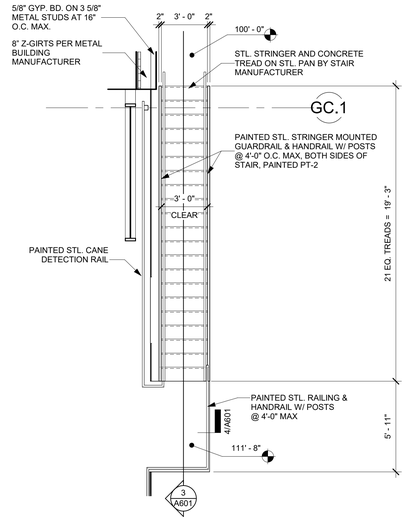
5 Guardrail Detail @ Stair
1" = 1'-0"



4 Section - Guardrail @ Mezzanine Edge
1 1/2" = 1'-0"



1 Floor Plan - Level 1 - Mezzanine Stair
1/4" = 1'-0"



2 Floor Plan - Mezzanine - Mezzanine Stair
1/4" = 1'-0"

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REGISTERED ARCHITECT
KEITH E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

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JOB NO. 2338 A
DATE: 01/17/2024

Vertical Circulation Drawings

A601

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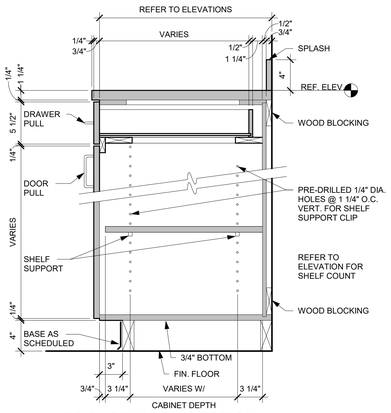
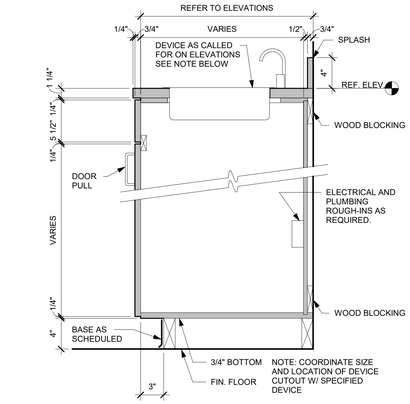
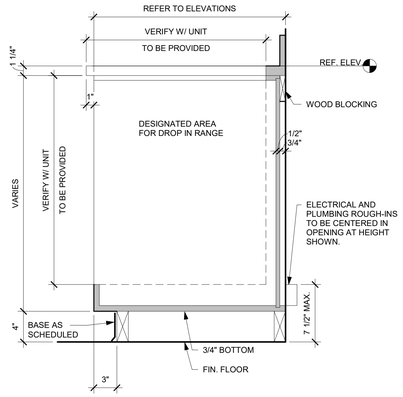


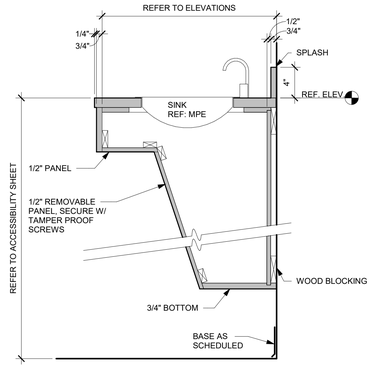
B2 B2 CASEWORK SECTION
1 1/2" = 1'-0"



B3 B3 CASEWORK SECTION
1 1/2" = 1'-0"



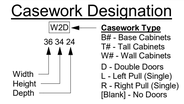
B15 B15 CASEWORK SECTION
1 1/2" = 1'-0"

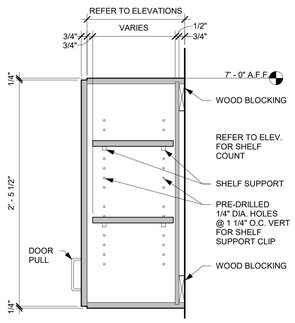


B17 B17 CASEWORK SECTION
1 1/2" = 1'-0"

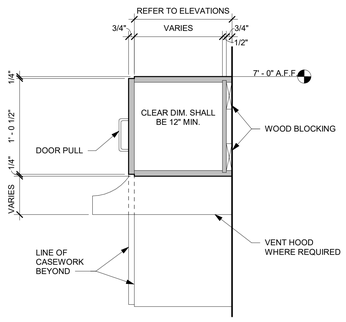
CASEWORK LEGEND	GENERAL NOTES
CASEWORK MATERIAL SOLID LUMBER	1. REFER TO SPECIFICATIONS FOR INFORMATION REGARDING MATERIALS AND CONSTRUCTION. 2. ALL EXPOSED EXTERIOR AND INTERIOR SURFACES SHALL BE FINISHED AS SPECIFIED. COLOR AS SCHEDULED OR AS SELECTED BY ARCHITECT. 3. ALL SEMI-EXPOSED INTERIOR SURFACES SHALL BE FINISHED AS SPECIFIED. COLOR AS SCHEDULED OR AS SELECTED BY ARCHITECT. 4. PROVIDE BACKSPLASH RETURNS WHERE COUNTERTOP ABUTS WALL. 5. ALL SHELVES SHALL BE 1 INCH THICK MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE. 6. CABINET BASE SHALL BE LUMBER UNLESS PROJECT IS TO MEET LEED OR CHPS REQUIREMENTS. NOTE: ALL SHELVES SHALL HAVE EDGE BANDING ON BOTH FRONT AND BACK IN ORDER TO ALLOW SHELVES TO HAVE A FINISHED APPEARANCE IN THE EVENT THAT THEY NEED TO BE REVERSED.

Casework Designation

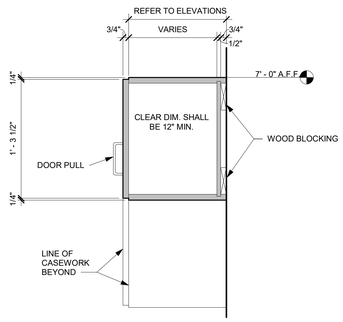




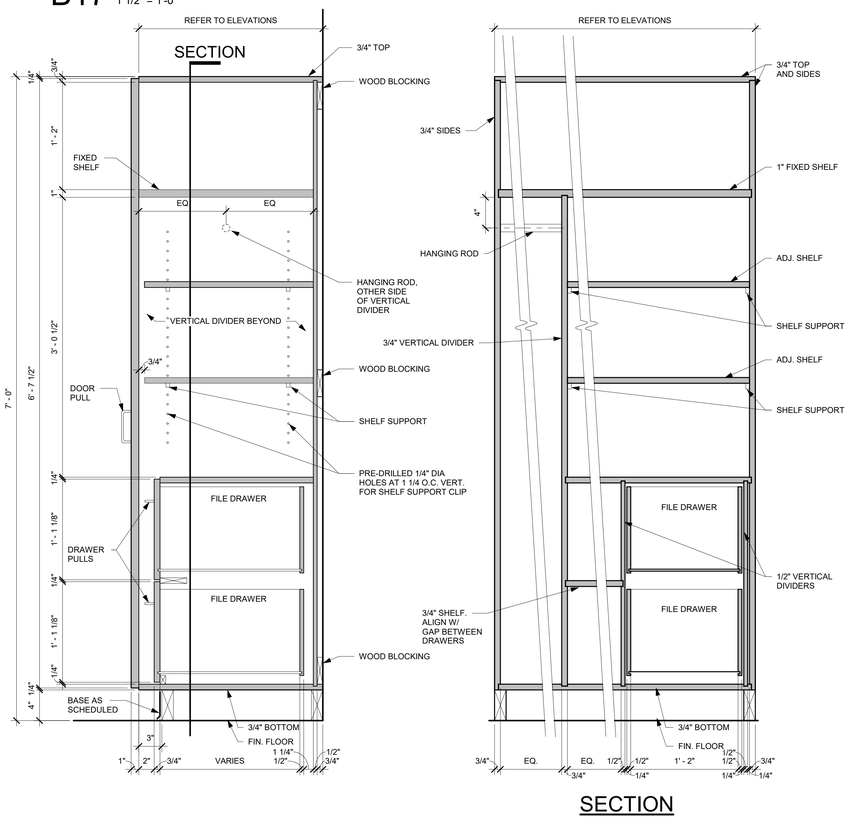
W1 W1 CASEWORK SECTION
1 1/2" = 1'-0"



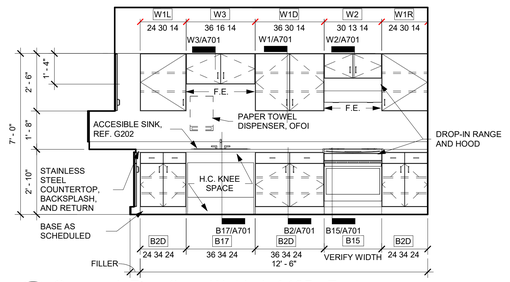
W2 W2 CASEWORK SECTION
1 1/2" = 1'-0"



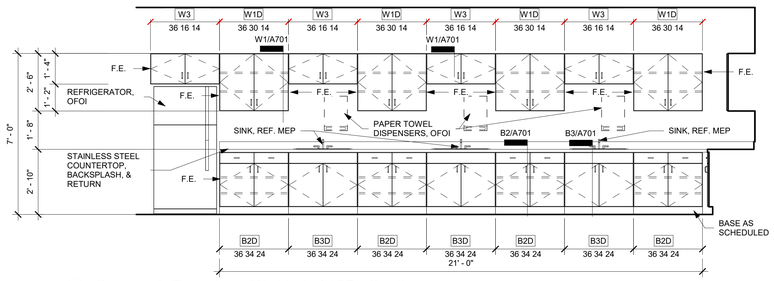
W3 W3 CASEWORK SECTION
1 1/2" = 1'-0"



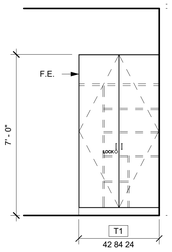
T1 T1 CASEWORK SECTION
1 1/2" = 1'-0"



1 Casework Elevation - Wet Lab A105 - East
3/8" = 1'-0"



2 Casework Elevation - Wet Lab A105 - South
3/8" = 1'-0"



3 Casework Elevation - Classroom A105 - North
3/8" = 1'-0"

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214-750-0077
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REGISTERED ARCHITECT
KEITH E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

THIS PAGE IS FOR TYPICAL CASEWORK SECTIONS
REFER TO FLOOR PLANS AND CASEWORK ELEVATIONS
FOR LOCATIONS OF SECTIONS IN THIS PROJECT

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

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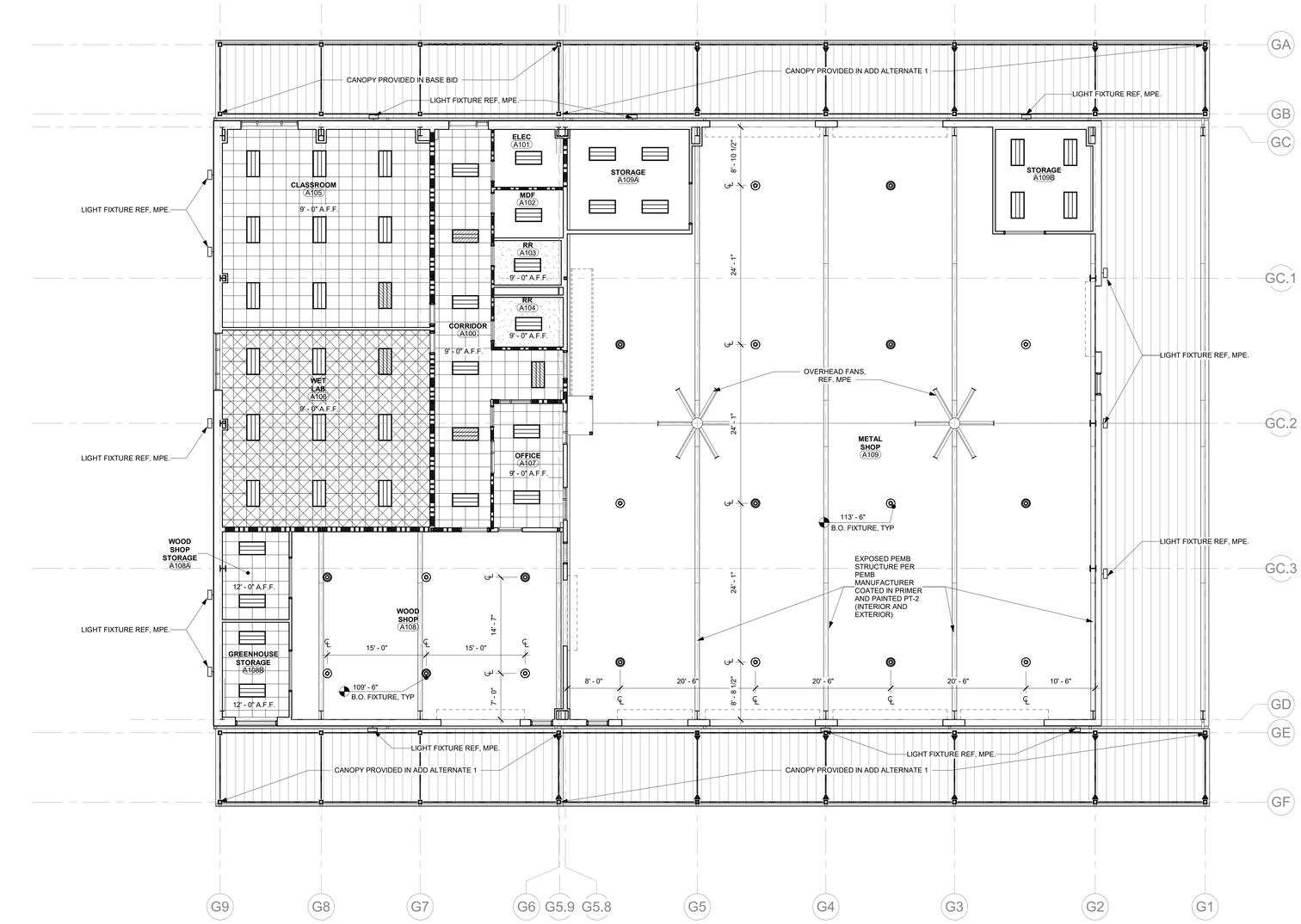
Standard Casework Sections & Elevations

A701



1 Reflected Ceiling Plan - Level 1
1/8" = 1'-0"

PLAN NORTH TRUE NORTH

Reflected Ceiling Plan Legend

- 1' X 4' RECESSED LIGHT FIXTURE - REF. ELEC.
- 1' X 4' SUSPENDED STRIP LIGHT FIXTURE - REF. ELEC.
- PENDANT LIGHT FIXTURE REF. ELEC.
- FLUSH LIGHT FIXTURE REF. ELEC.
- 2' X 4' RECESSED LIGHT FIXTURE - REF. ELEC.
- 2' X 4' RECESSED LIGHT FIXTURE EMERGENCY - REF. ELEC.
- SURFACE MOUNTED LIGHT FIXTURE - REF. ELEC.
- RECESSED DOWN LIGHT FIXTURE - REF. ELEC.
- CEILING MOUNTED EXIT LIGHT - REF. ELEC.
- SURFACE MOUNTED EXIT LIGHT - REF. ELEC.
- EMERGENCY LIGHT FIXTURE - REF. ELEC.
- ROOF ACCESS HATCH
- 2' X 2' LAY-IN CEILING AND GRID
- 2' X 2' VINYL FACED LAY-IN CEILING AND GRID
- GYP. BOARD CEILING, TAPE, BED, TEXTURE AND PAINT
- STUCCO/PLASTER,TEXTURE AND PAINT
- X'-XX" A.F.F. CEILING HEIGHT ABOVE FINISH FLOOR
- PROJECTOR, BY OWNER
- PROJECTOR SCREEN
- H.V.A.C. DIFFUSER - REF. MECH.
- H.V.A.C. RETURN AIR GRILLE - REF. MECH.

Wall Partition Rating Legend

- UNRATED PARTITION ASSEMBLY
- 1 HOUR RATED PARTITION ASSEMBLY
- 2 HOUR RATED FIRE BARRIER

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214-750-0077
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REGISTERED ARCHITECT
JOHN E. O'BRIEN
24183
STATE OF TEXAS
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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

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Reflected Ceiling Plan

A801

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Code	Type	Manufacturer	Line	Color Name	Color Number	Notes
SC-1	Sealed Concrete	-	-	-	-	-
RB-1	Rubber Base	Johnsonite	Baseworks Thermoset Rubber (Type TS)	Gray	48	Field
CT-1	4 x12 Tile	Daltile	Color Wheel Linear	Biscuit	-	Wall Tile, Vertical Stacked Bond Installation Pattern
CT-2	12 x 24Tile	Pantheon	MiMo	Fashion Grey	-	Floor Tile, Stacked Bond Installation Pattern
GT-1	Grout	Mapei	-	Iron	107	Floor Tile Grout
GT-2	Grout	Mapei	-	Frost	77	Wall Tile Grout
PT-1	Paint	Sherwin Williams	-	Passive Gray	SW7064	Field
PT-2	Paint	Sherwin Williams	-	Peppercorn	SW7674	Accent
PL-1	Plastic Laminate	Wilsonart	-	Handspun Pearl	5033	Countertops
PL-2	Plastic Laminate	Wilsonart	-	Landmark Wood	7981	Cabinets

GENERAL NOTES:

The following color selections shall be typical unless noted otherwise:
1. Interior Wood Doors = PL - 1
2. Interior & Exterior HM Doors and Door Frames = PT - 2
3. Rubber Base = RB - 1
4. All cabinets to be PL - 1
5. All countertops to be PL - 2
6. All interior window sills to aluminum, painted to match window frames
7. Paint exposed structural columns PT-2

General Notes:
1. Provide ceramic tile metal trim accessory at outside corners, at top of wainscot, and at exposed edge at ceramic tile transitions. Ref. A010
2. Control joints are required at the bottom and top of all wall penetrations and ocurring no more than 25'-0" apart on all walls, in both vertical and horizontal direction, unless noted in interior elevations.
3. Provide pre-formed inside and outside corner for rubber base.

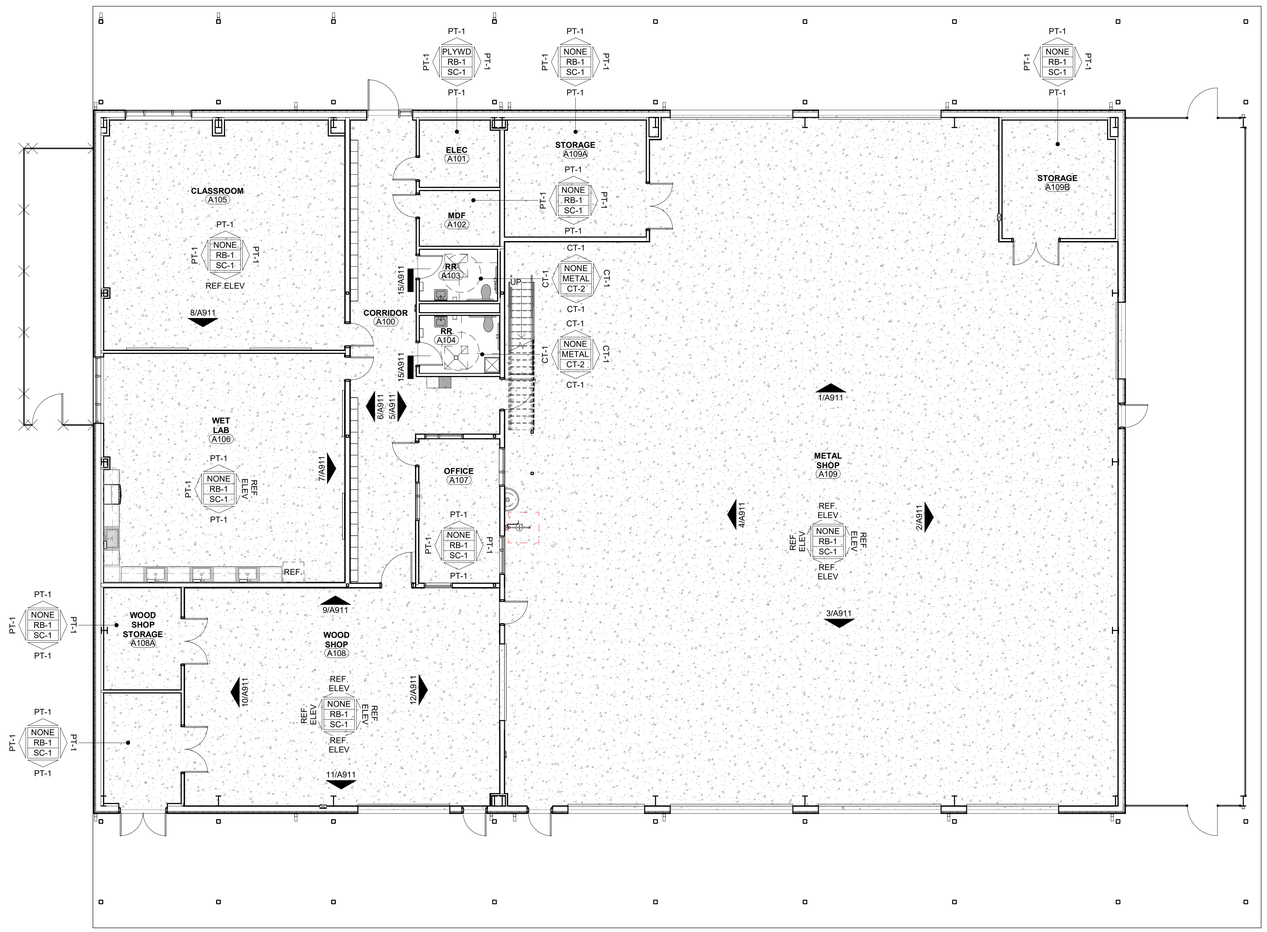
Schedule Remarks	
1	FIRE TREATED PLYWOOD PANEL BOARD WAINSCOT, DO NOT PAINT OVER LABEL

Finish Schedule

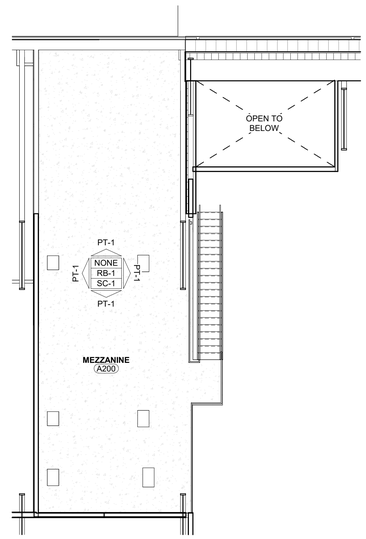
Room Num.	Room Name	Remarks
A100	CORRIDOR	
A101	ELEC	1
A102	MDF	1
A103	RR	
A104	RR	
A105	CLASSROOM	
A106	WET LAB	
A107	OFFICE	
A108	WOOD SHOP	
A108A	WOOD SHOP STORAGE	
A108B	GREENHOUSE STORAGE	
A109	METAL SHOP	
A109A	STORAGE	
A109B	STORAGE	
A200	MEZZANINE	

FLOORING

SC-1
CT-1 (FIELD)
CT-2
CT-3



1 Finish Floor Plan
1/8" = 1'-0"



2 Finish Floor Plan - Mezzanine
1/8" = 1'-0"

FINISH FLOOR PLAN SYMBOLS LEGEND

NORTH WALL FINISH
WEST WALL FINISH — WAINSCOT / BASE / FLOOR — EAST WALL FINISH
SOUTH WALL FINISH

1/A101 SIM	Callout Tag	ROOM NAME (A101) 21111	Room Tag and Number
XXXX	Interior/Casework Elevation		Furniture and Equipment, By Owner
	Floor Drain		Extents of CT-XXX
	Enlarged Detail View		Extents of CT-XXX
	Centerline		Extents of CT-XXX

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REGISTERED ARCHITECT — JOHN E. O'BRIEN — 24165 — STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

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Finish Floor Plan

A901

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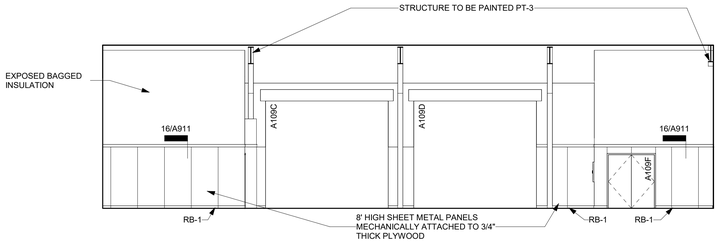
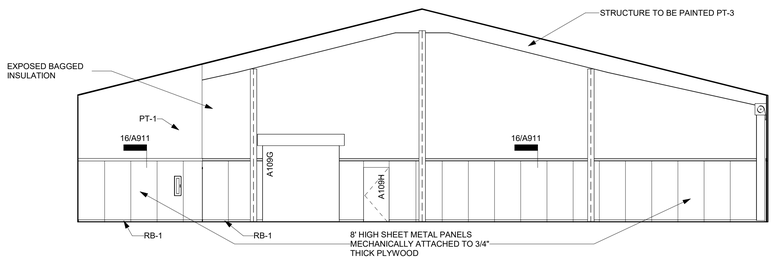
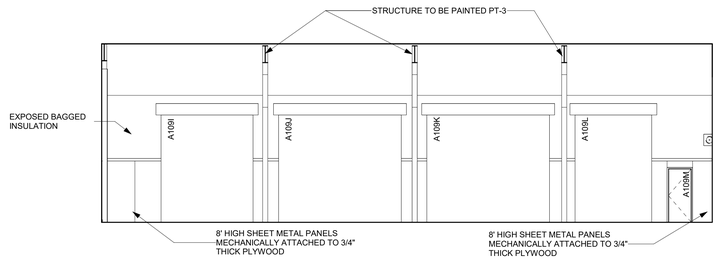


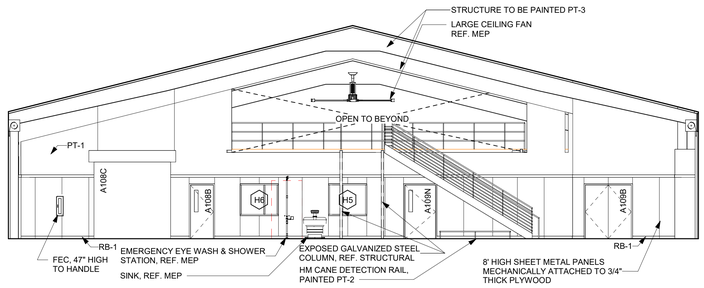
1 Elevation - Metal Shop - North
1/8" = 1'-0"



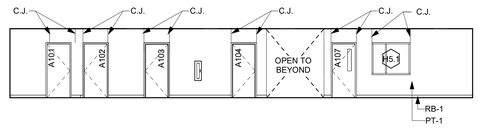
2 Elevation - Metal Shop - East
1/8" = 1'-0"



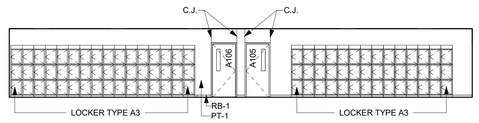
3 Elevation - Metal Shop - South
1/8" = 1'-0"



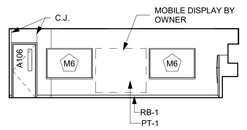
4 Elevation - Metal Shop 109 - West
1/8" = 1'-0"



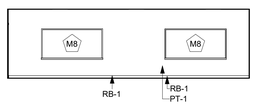
5 Elevation - Corridor 100 - West
1/8" = 1'-0"



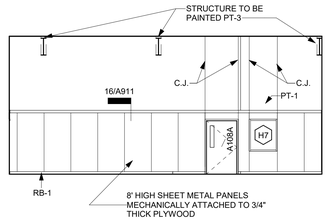
6 Elevation - Corridor - East
1/8" = 1'-0"



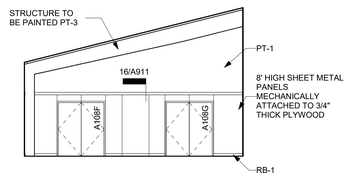
7 Elevation - Wet Lab - East
1/8" = 1'-0"



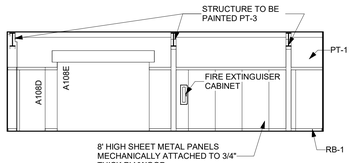
8 Elevation - Classroom - South
1/8" = 1'-0"



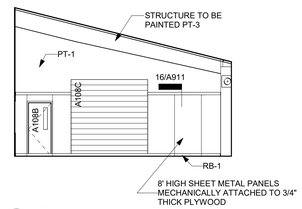
9 Elevation - Wood Shop - North
1/8" = 1'-0"



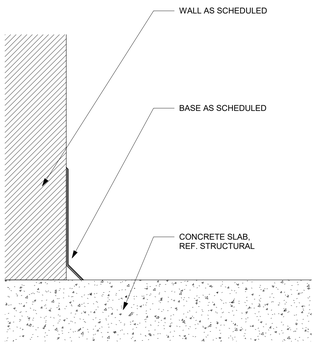
10 Elevation - Wood Shop - West
1/8" = 1'-0"



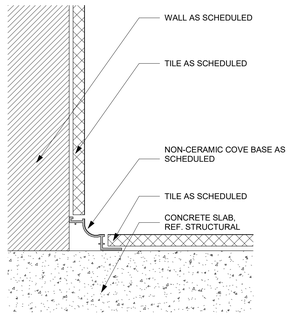
11 Elevation - Wood Shop - South
1/8" = 1'-0"



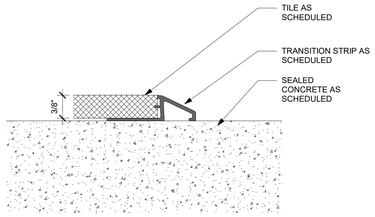
12 Elevation - Wood Shop - East
1/8" = 1'-0"



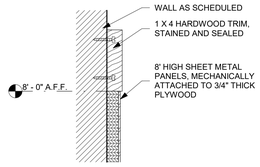
13 Wall Base Detail - Rubber Base
6" = 1'-0"



14 Wall Base Detail - Tile/Tile Transition
6" = 1'-0"



15 Floor Detail - Tile /Sealed Concrete Transition
12" = 1'-0"



16 Metal Panel Trim Detail
3" = 1'-0"

PAINT COLOR	CERAMIC TILE	PLASTIC LAMINATE
PT-1	CT-1	PL-1
PT-2	CT-2	PL-2
PT-3	CT-3	
PT-4	CT-4	
PT-5	CT-5	

FINISH TRIM SCHEDULE

DETAIL	TRANSITION TYPE	MANUFACTURER	PRODUCT	FINISH
13/A901.G	Wall Base Detail - Rubber Base	Tarkett	Baseworks Thermoset Rubber	Black
14/A901.G	Wall Base Detail - Tile/Tile Transition	Schluter	DILEX-AHK	Satin Anodized Aluminum
15/A901.G	Floor Detail - Tile /Sealed Concrete Transition	Schluter	Reno U	Satin Anodized Aluminum

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Dallas, Texas 75251
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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

Interior Elevations & Finish Details
A911

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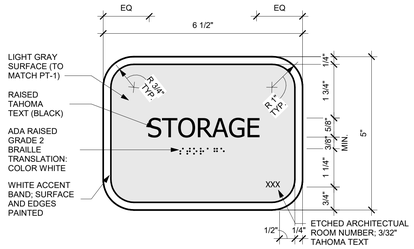
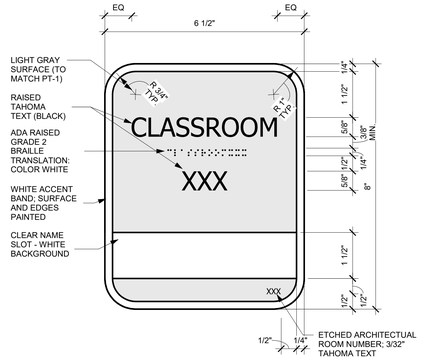
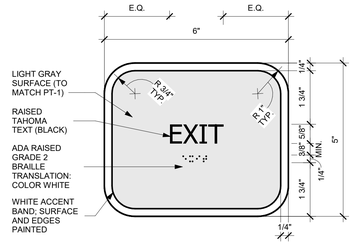


1 Signage Schedule Type A A
6" = 1'-0"



2 Signage Schedule Type B B
6" = 1'-0"

3 Signage Schedule Type C3 C3
6" = 1'-0"



4 Signage Schedule Type X X
6" = 1'-0"

Room Signage

Signage Schedule
Arch. Room Number → A101
Signage Room Number → 101

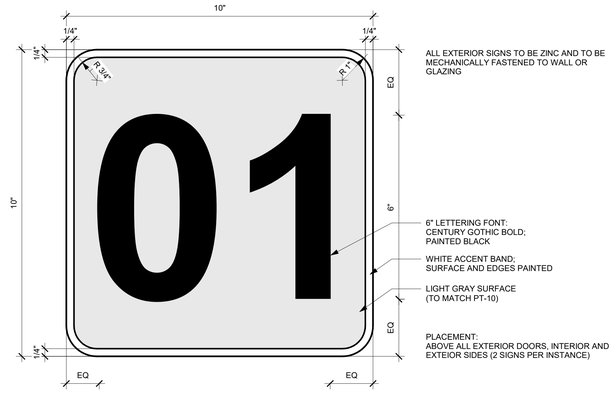
GENERAL NOTES:

1. WHERE SIGN IS MOUNTED ON GLASS, PROVIDE MATCHING BACKER PLATE ON REVERSE SIDE
2. REFER TO SIGNAGE SCHEDULE TO CORRELATE SIGN TO DOOR
3. ALL SIGNS WILL BE COLORED LIGHT GRAY TO MATCH PT-1
4. ALL SIGN TEXT WILL BE COLORED BLACK
5. ALL INTERIOR SIGNS ARE SAND BLASTED RIGID VINYL
6. REFER TO SHEET G201-ACS FOR SIGNAGE INSTRUCTIONS
7. ALL BRAILLE SHALL HAVE A 3/8" MIN. SEPARATION FROM ANY OTHER TACTILE CHARACTER, RAISED BORDER, OR DECORATIVE ELEMENT
8. ALL EXTERIOR SIGNS TO BE ZINC AND TO BE MECHANICALLY FASTENED TO WALL A, B, C3

SIGN TYPE: E, E2

SIGN TYPE E (EXTERIOR): A

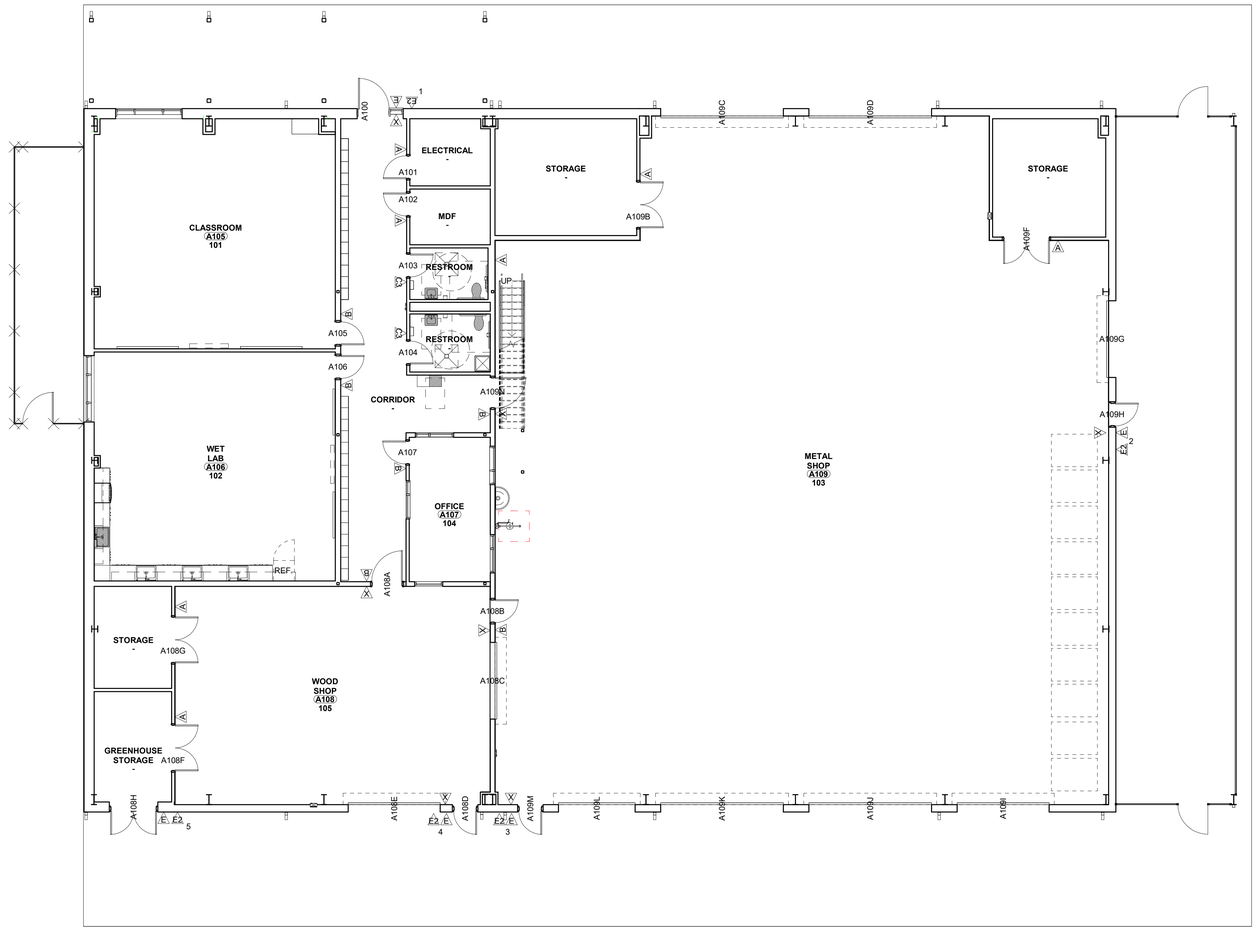
SIGN TYPE X (EXIT) :



5 Exterior Signage E2
6" = 1'-0"

Room Signage Schedule

Name	Number	Sign Type	Qty	Rm. Ltr. if req'd	Signage Schedule	Notes
CORRIDOR	A100	E,E2, X	3	-	CORRIDOR	
ELEC	A101	A	1	-	ELECTRICAL	
MDF	A102	A	1	-	MDF	
RR	A103	C3	1	-	RESTROOM	
RR	A104	C3	1	-	RESTROOM	
CLASSROOM	A105	B	1	101	CLASSROOM	
WET LAB	A106	B	1	102	WET LAB	
OFFICE	A107	B	1	104	OFFICE	
WOOD SHOP	A108	B,E,E2, X	7	105	WOOD SHOP	
WOOD SHOP STORAGE	A108A	A	1	-	STORAGE	
GREENHOUSE STORAGE	A108B	A,E,E2	3	-	GREENHOUSE STORAGE	
METAL SHOP	A109	B, E, E2, X	8	103	METAL SHOP	
STORAGE	A109A	A	1	-	STORAGE	
STORAGE	A109B	A	1	-	STORAGE	
MEZZANINE	A200	A	1	-	MEZZANINE	



6 Signage Plan - Level 1
1/8" = 1'-0"

WRA Architects, Inc.
12377 Merit Dr. #1800
Dallas, Texas 75251
214-750-0077
www.wraarchitects.com

REGISTERED ARCHITECT
KEVIN E. O'BRIEN
24183
STATE OF TEXAS
01/17/2024

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

Sign Types

A921

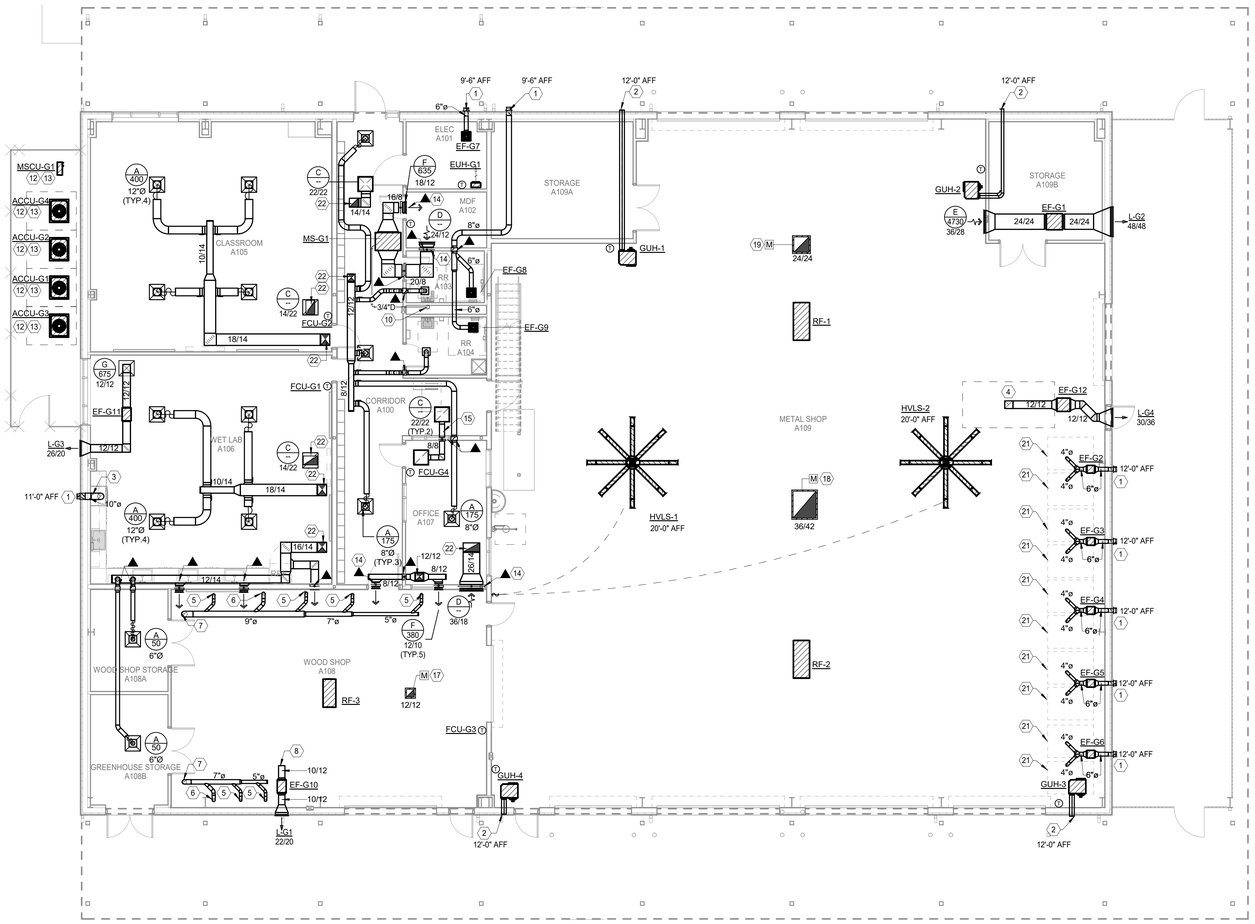
1/17/2024 1:15:54 PM

MECHANICAL KEYED NOTES

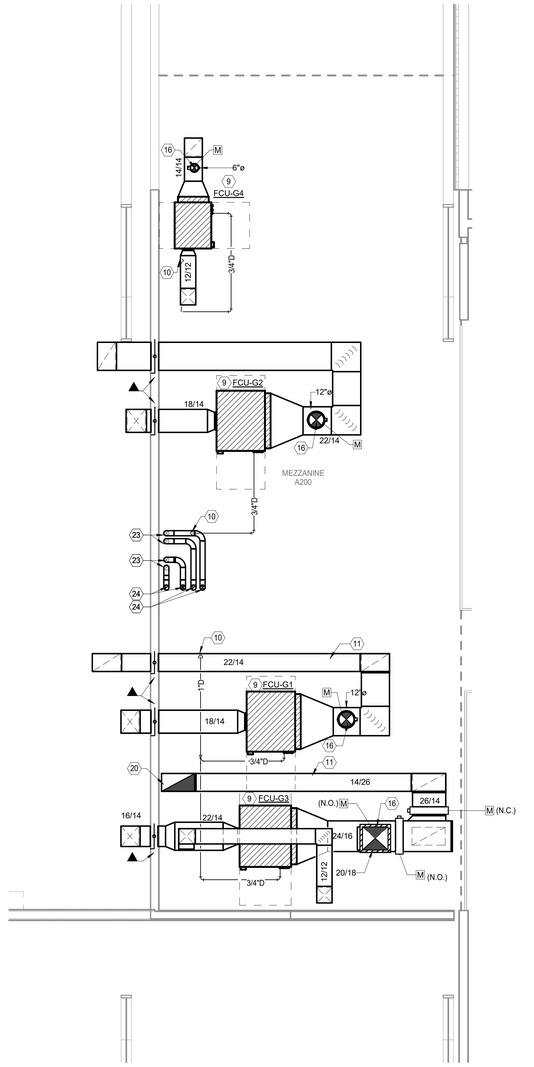
1	TERMINATE EXHAUST DUCT WITH MANUFACTURER'S WALL CAP. COORDINATE EXACT LOCATION AND FINISH WITH ARCHITECTURAL DRAWINGS.
2	ROUTE FLUE EXHAUST AND COMBUSTION INTAKE DUCTS THRU WALL. MANIFOLD TOGETHER WITH MANUFACTURER'S CONCENTRIC VENT KIT PRIOR TO WALL PENETRATION. MAINTAIN MINIMUM 10'-0" CLEARENCE FROM ANY OUTSIDE AIR INTAKES.
3	WALL-MOUNTED RANGE EXHAUST HOOD FURNISHED AND INSTALLED BY OWNER. VERIFY EXHAUST DUCT SIZE AND CONNECTION WITH HOOD MANUFACTURER.
4	PROVIDE EXHAUST HOOD OVER PLASMA CUTTER PER SPECIFICATIONS. CONNECT TO EXHAUST DUCT AS SHOWN.
5	4" DUST COLLECTION DUCT DOWN TO WOOD WORKING EQUIPMENT. COORDINATE FINAL DROP LOCATION WITH OWNER.
6	5" ROUND DUST COLLECTION DUCT DOWN TO FLOOR SWEEP. COORDINATE FINAL DROP LOCATION WITH OWNER.
7	DUCT TO CONNECT TO OWNER PROVIDED MOBILE DUST COLLECTOR.
8	COVER OPENING IN DUCT WITH WIRE MESH. SIZE AS NOTED.
9	PROVIDE UNIT WITH CONCRETE HOUSEKEEPING PAD. RE: SPECIFICATIONS FOR MORE INFORMATION.
10	CONDENSATE DRAIN PIPING DOWN TO APPROVED INDIRECT WASTE RECEPTOR OR LAVATORY TAIL-PIECE BELOW. RE: PLUMBING DRAWINGS FOR DRAIN LOCATION.
11	ROUTE DUCTWORK IN THIS AREA AS HIGH AS POSSIBLE TIGHT TO STRUCTURE. COORDINATE ROUTING WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
12	CONDENSING EQUIPMENT TO BE MOUNTED ON CONCRETE PAD. COORDINATE EXACT LOCATION WITH ARCHITECT.
13	REFRIGERANT PIPING FROM UNIT TO BE ROUTED LATERALLY AND PENETRATE LOW IN WALL. ROUTE ALONG INSIDE OF WALL TO FAN COIL UNIT. PROVIDE ACCESS PANELS WHERE REQUIRED. INSULATE EXTERIOR REFRIGERANT PIPING AS SPECIFIED.
14	PROVIDE OUT-OF-WALL DAMPER.
15	PROVIDE ACOUSTICALLY LINED DUCTWORK.
16	ROUTE OUTSIDE AIR DUCT UP THRU ROOF AND TERMINATE WITH OUTSIDE AIR INTAKE VALVE OR ROOF CAP.
17	OUTSIDE AIR MOTORIZED DAMPER TO BE INTERLOCKED WITH EF-G10.
18	OUTSIDE AIR MOTORIZED DAMPER TO BE INTERLOCKED WITH EF-G1.
19	OUTSIDE AIR MOTORIZED DAMPER TO BE INTERLOCKED WITH EF-G12.
20	ROUTE ECONOMIZER RELIEF DUCT UP THRU ROOF TO ROOF VENT.
21	EXHAUST DOWN TO WELDING EXHAUST HOOD.
22	ROUTE DUCT UP TO MEZZANINE ABOVE.
23	CONNECT FLUE EXHAUST AND COMBUSTION INTAKE DUCTS TO LIQUID PROPANE WATER HEATER. SIZE PER MANUFACTURER'S RECOMMENDATION.
24	ROUTE FLUE EXHAUST AND COMBUSTION INTAKE DUCTS UP THRU ROOF/WALL. MANIFOLD TOGETHER WITH MANUFACTURER'S CONCENTRIC VENT KIT PRIOR TO PENETRATION. MAINTAIN MINIMUM 10'-0" CLEARENCE FROM ANY OUTSIDE AIR INTAKES.

MECHANICAL GENERAL NOTES

1. REFER TO HEATING, VENTILATION, AND AIR CONDITIONING SPECIFICATIONS AND GENERAL CONDITIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL DIFFUSERS AND CEILING GRILLES SHALL BE COORDINATED WITH ARCHITECTURAL REFLECTED CEILING PLANS. RE: GRILLE SCHEDULE ON SCHEDULE SHEET.
3. PROVIDE TURNING VANES IN ALL RECTANGULAR 90 DEGREE MITRED ELBOWS.
4. ALL DUCT SIZES SHOWN ARE INSIDE CLEAR, INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
5. COORDINATE IN FIELD THE EXACT LOCATION OF ROOF MOUNTED EQUIPMENT WITH STRUCTURAL ENGINEER AND ROOFING CONTRACTOR.
6. SENSORS SHALL BE MOUNTED AT +48" A.F.F. (ABOVE FINISHED FLOOR) UNLESS OTHERWISE NOTED.
7. MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
8. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
9. MECHANICAL CONTRACTOR SHALL MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND ANY BUILDING EXHAUSTS OR VENTS ON THE ROOF.
10. MECHANICAL CONTRACTOR SHALL MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN MECHANICAL EQUIPMENT AND ROOF EDGES.



1 **LEVEL 1 - MECHANICAL PLAN**
Scale: 1/8" = 1'-0"



2 **MEZZANINE - MECHANICAL PLAN**
Scale: 1/4" = 1'-0"

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
PROFESSIONAL ENGINEER
01/17/2024

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

LEVEL 1 - MECHANICAL PLAN
M201

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

1/12/2024 2:03:32 PM

MECHANICAL KEYED NOTES

1	TERMINATE OUTSIDE AIR DUCT WITH ROOF CAP.
2	CONCENTRIC INTAKE/EXHAUST VENT FOR LIQUID PROPANE WATER HEATER. RE: SPECIFICATIONS FOR MORE INFORMATION.

MECHANICAL GENERAL NOTES

1. REFER TO HEATING, VENTILATION, AND AIR CONDITIONING SPECIFICATIONS AND GENERAL CONDITIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL DIFFUSERS AND CEILING GRILLES SHALL BE COORDINATED WITH ARCHITECTURAL REFLECTED CEILING PLANS. RE: GRILLE SCHEDULE ON SCHEDULE SHEET.
3. PROVIDE TURNING VANES IN ALL RECTANGULAR 90 DEGREE MITRED ELBOWS.
4. ALL DUCT SIZES SHOWN ARE INSIDE CLEAR, INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
5. COORDINATE IN FIELD THE EXACT LOCATION OF ROOF MOUNTED EQUIPMENT WITH STRUCTURAL ENGINEER AND ROOFING CONTRACTOR.
6. SENSORS SHALL BE MOUNTED AT +48" A.F.F. (ABOVE FINISHED FLOOR) UNLESS OTHERWISE NOTED.
7. MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
8. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
9. MECHANICAL CONTRACTOR SHALL MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND ANY BUILDING EXHAUSTS OR VENTS ON THE ROOF.
10. MECHANICAL CONTRACTOR SHALL MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN MECHANICAL EQUIPMENT AND ROOF EDGES.

1 **ROOF - MECHANICAL PLAN**
Scale: 1/8" = 1'-0"

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
ARCHITECT
01/17/2024

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

ROOF - MECHANICAL PLAN
M203

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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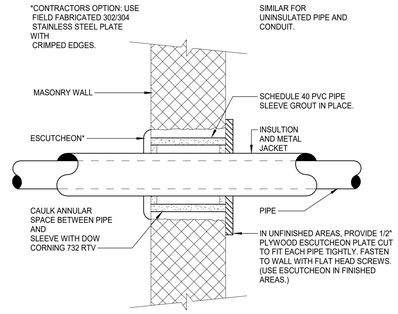
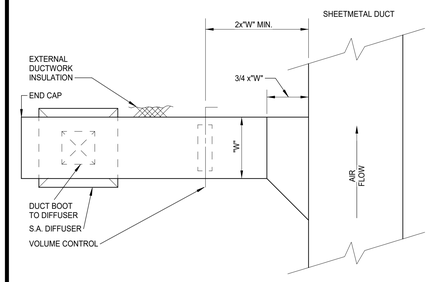
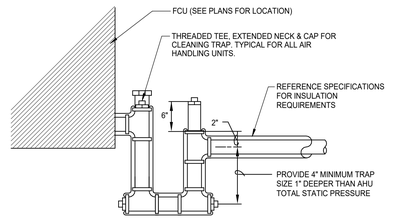


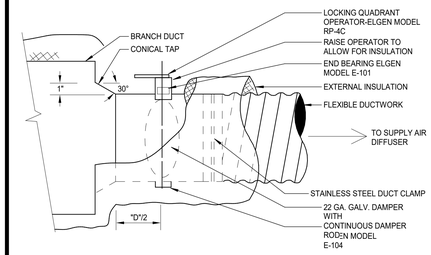
8 **PIPE THROUGH EXTERIOR WALL**
SCALE: NONE



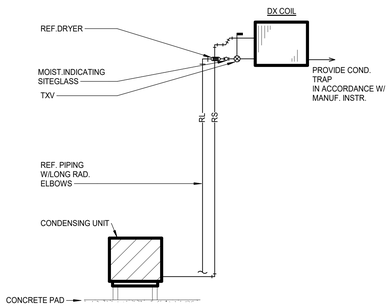
RIGID DUCT TAP TO SINGLE SUPPLY AIR DIFFUSER
4 SCALE: NONE



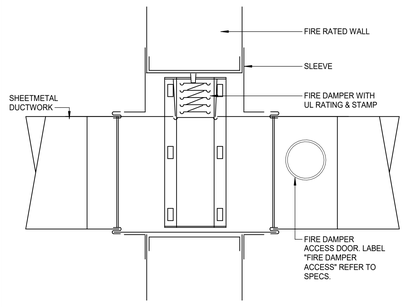
7 **CONDENSATE DRAIN PIPING AT FCU**
SCALE: NONE



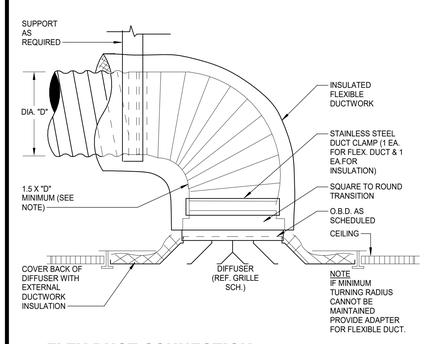
3 **FLEXIBLE DUCT TAP - CONICAL**
SCALE: NONE



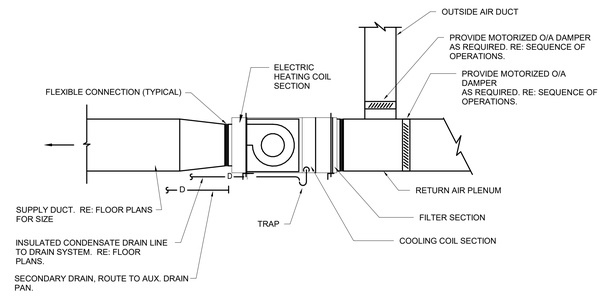
9 **REFRIGERANT PIPING DIAGRAM**
SCALE: NONE



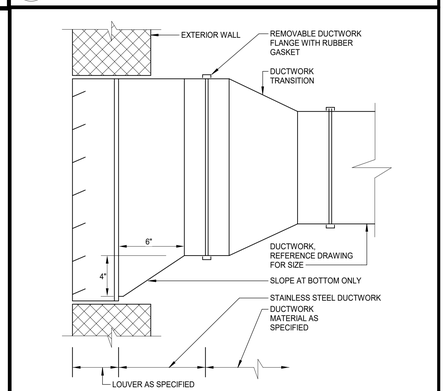
6 **FIRE DAMPER**
SCALE: NONE



FLEX DUCT CONNECTION AT SUPPLY AIR DIFFUSER
2 SCALE: NONE



5 **HORIZONTAL FAN COIL UNIT DETAIL - PAD MOUNTED**
SCALE: NONE



1 **DUCTWORK AT LOUVER**
SCALE: NONE

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
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REGISTERED
01/17/2024

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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

MECHANICAL DETAILS

M231

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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SYMBOL LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
(#)	KEY NOTE TAG
A	REVISION TAG
	NEW EQUIPMENT
DUCTWORK	
	SUPPLY AIR DUCTWORK
	RETURN AIR AND OUTSIDE AIR DUCTWORK
	EXHAUST AIR DUCTWORK
	FLEXIBLE DUCTWORK
	SUPPLY AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	RETURN AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	EXHAUST AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	FIRE DAMPER (VERTICAL)
	FIRE DAMPER (HORIZONTAL)
	SMOKE DAMPER (VERTICAL)
	SMOKE DAMPER (HORIZONTAL)
	COMBINATION FIRE & SMOKE DAMPER (VERTICAL)
	COMBINATION FIRE & SMOKE DAMPER (HORIZONTAL)
	MANUAL BALANCING DAMPER (SEE DAMPER SCHEDULE)
M	MOTORIZED DAMPER (SEE DAMPER SCHEDULE)
SENSORS	
T	THERMOSTAT AND TEMPERATURE SENSOR
H	HUMIDISTAT
SD	SMOKE DETECTOR
CO	CARBON DIOXIDE DETECTOR
AIR DEVICES	
(##)	GRILLE SIZE TAG (REFER TO GRILLE SIZE LEGEND)
	SUPPLY AIR GRILLE WITH FOUR-WAY THROW
	SUPPLY AIR GRILLE WITH THREE-WAY THROW
	SUPPLY AIR GRILLE WITH TWO-WAY THROW
	SUPPLY AIR GRILLE WITH TWO-WAY CORNER THROW
	SUPPLY AIR GRILLE WITH ONE-WAY THROW
	RETURN AIR GRILLE
	RETURN AIR GRILLE WITH SOUND BOOT
	EXHAUST AIR GRILLE
	SUPPLY AIR SIDEWALL GRILLE
	RETURN AIR SIDEWALL GRILLE
20X12	RETURN AIR OPENING ABOVE CEILING
PIPING	
–CWS&R–	CONDENSER WATER SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
–CWS–	CONDENSER WATER SUPPLY
–CWR–	CONDENSER WATER RETURN
–CHWS&R–	CHILLED WATER SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
–CHWS–	CHILLED WATER SUPPLY
–CHWR–	CHILLED WATER RETURN
–HWS&R–	HOT WATER FOR HYDRONIC HEATING SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
–HWS–	HOT WATER FOR HYDRONIC HEATING SUPPLY
–HWR–	HOT WATER FOR HYDRONIC HEATING RETURN
—D—	CONDENSATE DRAIN LINE
—AD—	AUXILLARY CONDENSATE DRAIN LINE
—RLR—	REFRIGERANT LIQUID & GAS RECIRCULATION LINE (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
—RL—	REFRIGERANT LIQUID LINE
—HG—	REFRIGERANT HOT GAS LINE
—RS—	REFRIGERANT SUCTION LINE
—IO	ELBOW UP

—IO	ELBOW UP
—ID	ELBOW DOWN
	90° ELBOW
	45° ELBOW
	TEE
—IOI—	TEE DOWN
—IOI—	TEE UP
	TOP BRANCH CONNECTION
	BOTTOM BRANCH CONNECTION
	FLANGE
	CAP
	CONTINUATION
	FLOOR DRAIN (REFER TO PLUMBING DRAWINGS)
	GATE VALVE
	GLOBE VALVE
	CHECK VALVE
	BUTTERFLY VALVE
	BUTTERFLY VALVE WITH OPERATOR
	PLUG VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
	PRESSURE RELIEF VALVE
	BALL VALVE
	STRAINER
	UNION
	THERMOMETER WELL
	PETE'S PLUG
	PRESSURE GAUGE
	TEMPERATURE SENSOR IN PIPE
	VENTURI FLOW METER
	FLOW SWITCH
FM	FLOW MEASURING STATION
	EXPANSION JOINT
	FLEXIBLE CONNECTION
	GAUGE COCK
	SITE GLASS
	DIFFERENTIAL PRESSURE SENSOR
	TURBINE FLOW METER
	ANCHOR
	PIPE GUIDE
SUBSCRIPTS AND ABREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BBS	BELOW BOTTOM OF STRUCTURE
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
CA	COMBUSTION AIR
CFM	CUBIC FEET PER MINUTE
EA	EXHAUST AIR
FPM	FEET PER MINUTE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
RENOVATIONS	
	POINT OF CONNECTION FROM NEW TO EXISTING
	ITEM TO REMAIN
	ITEM TO BE REMOVED

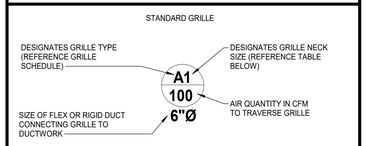
DAMPER

MARK	ACTUATOR	DUTY	BLADE ACTION	MANUFACTURER	MODEL NUMBER	REMARKS
D-1	MANUAL BALANCING	UNDER 9" WIDE	N/A	N/A	N/A	SEE SMACNA CONSTRUCTION DETAILS REFERENCED "TYPICAL CONSTRUCTION DETAILS FOR LOW VELOCITY DUCTS."
D-2	MANUAL BALANCING	OVER 9" WIDE	OPPOSED	RUSKIN	MD-35	MANUAL DAMPER WITH STANDARD CONSTRUCTION FEATURES AND VENTLOCK #639 LOCKING REGULATOR.
D-3	MOTORIZED	OVER 9" WIDE	OPPOSED	RUSKIN	CD-60	LOW LEAKAGE DAMPER WITH BLADE SEALS

NOTES:
N/A - NOT APPLICABLE

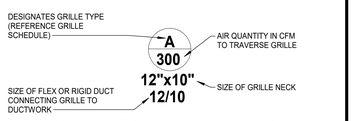
GRILLE SIZING SCHEDULE

STANDARD GRILLE



ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN.

REGISTER OR NONSTANDARD GRILLE

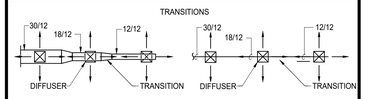


ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN. ALL REGISTERS SHALL HAVE A 45° HORIZONTAL DEFLECTION UNLESS OTHERWISE SHOWN.

GRILLE SIZE DESIGNATION	GRILLE NECK SIZE	GRILLE SIZE DESIGNATION	GRILLE NECK SIZE
1	6" x 6"	7	15" x 15"
2	8" x 8"	8	16" x 16"
3	9" x 9"	9	18" x 18"
4	10" x 10"	10	20" x 20"
5	12" x 12"	11	22" x 22"
6	14" x 14"	12	24" x 24"

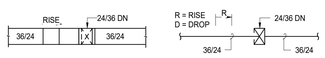
DUCTWORK SYMBOLS LEGEND

TRANSITIONS

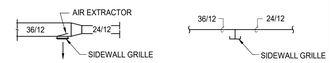


MAIN BRANCH TAKE-OFFS

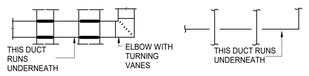
RISERS



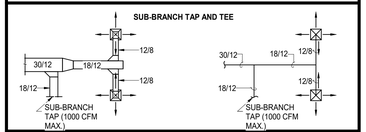
SIDEWALL REGISTERS



DUCT CROSSOVERS

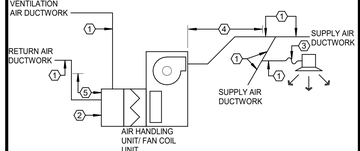


SUB-BRANCH TAP AND TEE

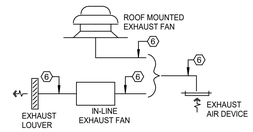


TWO LINE DUCTWORK LEGEND	TWO LINE DUCTWORK SYMBOLS	ONE LINE DUCTWORK SYMBOLS
RECTANGULAR DUCTWORK 30/16		FLEXIBLE DUCT CONNECTION
		INTRUMENT TEST HOLE
ROUND DUCTWORK 30"ø		STATIC PRESSURE SENSOR
		MANUAL BALANCING DAMPER
FLAT OVAL DUCTWORK 30x16	M	MOTORIZED DAMPER M
	SD	DUCT MOUNTED SMOKE DETECTOR SD

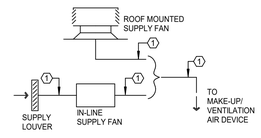
DUCT LINER AND INSULATION



FAN COIL UNITS



EXHAUST AIR SYSTEMS



MAKE-UP/VENTILATION AIR SYSTEMS

KEYED NOTES:

1. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
2. SHEETMETAL DUCTWORK RETURN AIR PLENUM WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
3. FLEXIBLE DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
4. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED AND 1" THICK 1-1/2 LB LINER AS SPECIFIED FROM AIR HANDLING UNIT DISCHARGE TO 10'-0" DOWNSTREAM.
5. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED AND 1" THICK 1-1/2 LB LINER AS SPECIFIED FROM AIR HANDLING UNIT INLET TO 10'-0" UPSTREAM.
6. SHEETMETAL DUCTWORK ONLY, NO INSULATION REQUIRED.

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
PROFESSIONAL
ENGINEER
01/17/2024

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

MECHANICAL LEGENDS

M241

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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MINI-SPLIT DX FAN COIL UNIT - INDOOR

MARK	FAN							COOLING						BASIS OF DESIGN		REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT.STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.			AIR TEMPERATURE (°F)		MIN. TOTAL CAPACITY (BTUH)	MIN. SENS. CAPACITY (BTUH)	MINIMUM EER0/ SEER2	NUMBER OF STAGES	MANUFACTUER	MODEL	
					V	PH	F	ENTERING DRY BULB	ENTERING WET BULB							
MS-G1	550	0	0.24	0.1	208	1	60	80.0	67.0	23,000	19,780	11.8/18.5	MOD	LG	LHN	ALL

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. REFERENCE SPECIFICATIONS FOR OPTIONS, CONTROLS, AND ACCESSORIES REQUIRED.
2. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
3. PROVIDE WITH LOCKING MOUNT KIT.
4. PROVIDE COOLING ONLY UNIT.
5. PROVIDE WITH WIRED WALL MOUNTED THERMOSTAT.
6. PROVIDE WITH BACNET INTERFACE FOR BMCS CONTROL.

MINI-SPLIT AIR COOLED CONDENSING UNIT - OUTDOOR

MARK	COOLING			CURRENT CHARAC.			RELATED UNIT MARK	BASIS OF DESIGN					REMARKS
	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP (°F)	MINIMUM EER2/ SEER2	V	PH	F		MANUFACTURER	MODEL	MCA	MOCP	WEIGHT (LBS)	
MSCU-G1	23,000	95	11.8/18.5	208	1	60	MS-G1	LG	LUU	20	30	140	ALL

GENERAL NOTES:
1. MINIMUM RECOMMENDED CLEARANCE AROUND CONDENSING UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. PROVIDE WITH HAIL GUARDS.
2. PROVIDE WITH LOW AMBIENT CONTROLLER, CRANKCASE HEATER AND WIND BAFFLES.
3. PROVIDE COOLING ONLY UNIT.

UNIT HEATER - ELECTRIC

MARK	MINIMUM CAPACITY (BTUH)	KW	CURRENT CHAR.			CFM	MANUFACTURER	MODEL	REMARKS
			V	P	F				
EUH-G1	10,236	3	208	1	60	125	REZNOR	EUH	ALL

REMARKS:
1. PROVIDE WITH WALL MOUNTED THERMOSTAT.
2. PROVIDE MANUFACTURER'S MOUNTING BRACKET.

LOUVER SCHEDULE

MARK	LOCATION	ELEVATION (FROM BOTTOM)	CFM	MIN. FREE AREA (FT²)	LOUVER DEPTH	MANUFACTURER	MODEL NO.	FRAME STYLE	LOUVER TYPE	LOUVER REMARKS
L-G1	G109 METAL SHOP	13'-0"	580	1.2	6"	GREENHECK	ESD635	ALUMINUM DRAINABLE	EXHAUST	ALL
L-G2	G109B STORAGE	14'-6"	4730	9.4	6"	GREENHECK	ESD635	ALUMINUM DRAINABLE	EXHAUST	ALL
L-G3	G106 WET LAB	11'-0"	675	1.5	6"	GREENHECK	ESD635	ALUMINUM DRAINABLE	EXHAUST	ALL
L-G4	G109 METAL SHOP	14'-6"	2000	4.1	6"	GREENHECK	ESD635	ALUMINUM DRAINABLE	EXHAUST	ALL

1 PROVIDE WITH BIRD SCREEN.
2 COORDINATE EXACT MOUNTING HEIGHT AND FINISH WITH ARCHITECT.

RELIEF VENT & O.A. INTAKE

MARK	CFM	MAX. S.P. (IN.WC.)	MIN. THROAT AREA (FT²)	MODEL	SERVES	REMARKS
OAI-G1	580	0.05	1.00	TRE	G108 WOOD SHOP	ALL
OAI-G2	4730	0.05	10.50	TRE	G109 METAL SHOP	ALL
OAI-G3	2000	0.05	4.00	TRE	G200 MEZZANINE	ALL
OAI-G4	2000	0.05	4.00	TRE	G109 METAL SHOP	ALL
RV-G1	2000	0.10	4.00	TRE	G200 MEZZANINE	ALL

REMARKS:
1. PROVIDE WITH ROOF CURB FOR SLOPED ROOF.
2. PROVIDE WITH BIRD SCREEN.

OUTSIDE AIR CALCULATIONS

ROOFTOP UNIT	AREA (SF)	AREA RATE (CFM/SF)	PEOPLE (P)	PEOPLE RATE (CFM/P)	MIN. OA (CFM)	PROVIDED. OA (CFM)
FCU-G1						
A106 WET LAB	940	0.18	25	10	**419**	
				FCU-G1	**419**	**440**
FCU-G2						
A105 CLASSROOM	935	0.12	25	10	**362**	
				FCU-G2	**362**	**365**
FCU-G3						
A108 WOOD SHOP	1170	0.18	25	10	**461**	
A108A WOOD SHOP STORAGE	135	0.12	0	0	**16**	
A108B GREENHOUSE STORAGE	150	0.12	0	0	**18**	
				FCU-G3	**495**	**500**
FCU-G4						
A100 CORRIDOR	605	0.06	0	0	**36**	
A103 RR	70	0	0	0	**0**	
A104 RR	80	0	0	0	**0**	
A107 OFFICE	200	0.06	2	5	**22**	
				FCU-G4	**58**	**60**

DX FAN/COIL UNIT

MARK	FAN							COOLING						ELECTRIC HEATING				BASIS OF DESIGN				REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT.STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHAR			AIR TEMPERATURE (°F)		MIN. TOTAL CAPACITY (BTUH)	MIN. SENS. CAPACITY (BTUH)	EER2/ SEER2	NUMBER OF STAGES	ENTERING AIR TEMP.(°F)	MINIMUM CAPACITY (BTUH)	KW	NUMBER OF STAGES	CURRENT CHARAC.			MANUFACTURER	MODEL	MCA	MOCP	
					V	P	F	ENTERING DRY BULB	ENTERING WET BULB									V	P	F					
FCU-G1	1,600	440	0.50	1.0	208	1	60	81.9	65.9	44,700	38,500	12/15.6	2	58	51,300	20	1	208	1	60	LENNOX	CBA	95	100	ALL
FCU-G2	1,600	365	0.50	1.0	208	1	60	80.6	65.3	44,700	38,500	12/15.6	2	60	51,300	20	1	208	1	60	LENNOX	CBA	95	100	ALL
FCU-G3	2,000	500	0.50	1.0	208	1	60	81.3	65.6	54,100	47,200	11.7/15.2	2	59	51,300	20	1	208	1	60	LENNOX	CBA	95	100	ALL
FCU-G4	800	60	0.50	0.5	208	1	60	76.9	63.4	21,200	17,900	13.5/16.8	2	67	20,500	8	1	208	1	60	LENNOX	CBA	41	45	ALL

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. UNIT TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. PROVIDE WITH MANUFACTURER CONTROLS REQUIRED TO OPERATE ALL SEQUENCES AND ACCESSORIES SPECIFIED.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. PROVIDE HORIZONTAL UNIT.
5. PROVIDE AUXILIARY DRAIN PAN WITH CONDENSATE OVERFLOW SWITCH.
6. PROVIDE WITH SINGLE-POINT ELECTRICAL CONNECTION.
7. PROVIDE WITH TWO-STAGE FAN INTERLOCKED WITH COMPRESSOR STAGING.

AIR COOLED CONDENSING UNIT

MARK	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP (°F)	MINIMUM EER/ SEER	CURRENT CHAR.			RELATED UNIT MARK	BASIS OF DESIGN				REMARKS
				V	P	F		MANUFACTURER	MODEL	MCA	MOCP	
ACCU-G1	44,700	102	12/15.6	208	1	60	FCU-G1	LENNOX	ML	26	45	ALL
ACCU-G2	44,700	102	12/15.6	208	1	60	FCU-G2	LENNOX	ML	26	45	ALL
ACCU-G3	54,100	102	11.7/15.2	208	1	60	FCU-G3	LENNOX	ML	32	50	ALL
ACCU-G4	21,200	102	13.5/16.8	208	1	60	FCU-G4	LENNOX	ML	15	25	ALL

GENERAL NOTES:
A. MINIMUM RECOMMENDEDLD CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.
B. CONTRACTOR SHALL COORDINATE INSTALLATION AND OBSERVE MANUFACTURER'S RECOMMENDATIONS FOR LONG LINE APPLICATIONS. REFRIGERATION LINE-SETS SHALL BE INSTALLED TO REDUCE SYSTEM TOTAL EQUIVALENT LENGTH AND MINIMIZE SYSTEM CAPACITY LOSSES DUE TO ELBOWS, FITTINGS, VALVES, ETC. THAT COMPRISETHE ENTIRE REFRIGERANT PIPING SYSTEM.

REMARKS:
1. PROVIDE WITH LOW AMBIENT CONTROL DOWN TO 20°F.
2. PROVIDE WITH DISCONNECT SWITCH.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.

FAN SCHEDULE

MARK	LOCATION	CFM	EXT. STATIC PRESSURE (IN.W.C.)	MAX RPM	HORSE POWER	CURRENT CHAR			LOCALLY SWITCHED	INTERLOCK WITH	FAN TYPE	DRIVE TYPE	MANUFACTURER	MODEL NUMBER	REMARKS
						V	P	F							
HVLS-1	G109 METAL SHOP	0	0.00	119	0.7	208	1	60	WALL SWITCH	BMCS	CEILING MOUNTED	DIRECT	GREENHECK	DS-6-12	1,6,8
HVLS-2	G109 METAL SHOP	0	0.00	119	0.7	208	1	60	WALL SWITCH	BMCS	CEILING MOUNTED	DIRECT	GREENHECK	DS-6-12	1,6,8
EF-G1	G109B STORAGE	4730	0.50	1176	2	208	3	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5,6,7
EF-G2	G109 METAL SHOP	600	0.50	988	0.25	120	1	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5,7
EF-G3	G109 METAL SHOP	600	0.50	988	0.25	120	1	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5,7
EF-G4	G109 METAL SHOP	600	0.50	988	0.25	120	1	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5,7
EF-G5	G109 METAL SHOP	600	0.50	988	0.25	120	1	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5,7
EF-G6	G109 METAL SHOP	600	0.50	988	0.25	120	1	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5,7
EF-G7	G101 ELEC	100	0.25	1100	0.03	120	1	60	THERMOSTAT	BMCS	CEILING	DIRECT	GREENHECK	SP	1,3,4,5
EF-G8	G103 RR	75	0.25	900	0.02	120	1	60	-	BMCS	CEILING	DIRECT	GREENHECK	SP	1,3,4,5
EF-G9	G104 RR	75	0.25	900	0.02	120	1	60	-	BMCS	CEILING	DIRECT	GREENHECK	SP	1,3,4,5
EF-G10	G108 WOOD SHOP	580	0.25	973	0.25	120	1	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5,7
EF-G11	G106 WET LAB	675	0.25	1049	0.25	120	1	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5
EF-G12	G109 METAL SHOP	2000	1.00	1507	1	208	3	60	TIMER SWITCH	BMCS	INLINE	DIRECT	GREENHECK	SQ	1,2,4,5,6,7
RF-1	G109 METAL SHOP	2500	0.00	0	0.75	120	1	60	TIMER SWITCH	-	INLINE	DIRECT	IAP	A-2500	1,7,9
RF-2	G109 METAL SHOP	2500	0.00	0	0.75	120	1	60	TIMER SWITCH	-	INLINE	DIRECT	IAP	A-2500	1,7,9
RF-3	G108 WOOD SHOP	1100	0.00	0	0.25	120	1	60	TIMER SWITCH	-	INLINE	DIRECT	IAP	A-1100	1,7,9

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. PROVIDE WITH DISCONNECT SWITCH.
2. PROVIDE WITH MOTORIZED DAMPER.
3. PROVIDE WITH GRAVITY BACKDRAFT DAMPER.
4. SUSPEND UNIT WITH FOUR THREADED HANGER RODS ATTACHED TO TWO UNISTRUT RUNNERS SECURED TO STRUCTURE. PROVIDE SPRING ISOLATION. REFER TO MANUFACTURER FOR MORE DETAILS.
5. PROVIDE WITH SPEED CONTROLLER.
6. PROVIDE WITH INTEGRAL VFD FOR MOTOR STARTUP.
7. PROVIDE LINE VOLTAGE 1-HOUR MARK TIMER SWITCH LOCATED IN ROOM TO CONTROL FAN.
8. PROVIDE WITH WALL MOUNTED SWITCH TO CONTROL FAN.
9. PROVIDE WITH MANUFACTURER'S MOUNTING EQUIPMENT.

GRILLE

MARK	SERVICE	TYPE	DAMPER	CONSTRUCTION MATERIAL	FINISH COLOR	MANUFACTURER	MODEL NUMBER	DESCRIPTION
A	SUPPLY AIR	DIFFUSER	-	STEEL	NOTE #5	TITUS	OMNI	EXPOSED T-BAR CEILING FRAME STYLE WITH 24"X24" PLAQUE FACE.
B	SUPPLY AIR	DIFFUSER	-	STEEL	NOTE #5	TITUS	OMNI	SURFACE MOUNT CEILING FRAME STYLE WITH 12"X12" PLAQUE FACE.
C	RETURN AIR	GRILLE	-	ALUMINUM	NOTE #5	TITUS	50F	EXPOSED T-BAR CEILING FRAME STYLE WITH A 24"X24" FACE. EGGCRATE.
D	RETURN AIR	GRILLE	-	STEEL	NOTE #5	TITUS	350RL	SURFACE MOUNT FRAME STYLE WITH FACE SIZE AS NOTED. FIXED 35 DEGREE LOUVERED.
E	EXHAUST AIR	GRILLE	-	STEEL	NOTE #5	TITUS	350RL	SURFACE MOUNT FRAME STYLE WITH FACE SIZE AS NOTED. FIXED 35 DEGREE LOUVERED.
F	SUPPLY AIR	GRILLE	OBD	STEEL	NOTE #5	TITUS	300RL	DOUBLE DEFLECTION SIDEWALL GRILLE WITH HORIZONTAL FRONT BARS. SURFACE MOUNTED (1)
G	EXHAUST AIR	GRILLE	OBD	STEEL	NOTE #5	TITUS	350RL	EXPOSED T-BAR CEILING FRAME STYLE WITH 24"X24" FACE. FIXED 35 DEGREE LOUVERED

GENERAL NOTES:
1. DIFFUSER MOUNTING STYLE SHALL BE CONFIRMED WITH ARCHITECTURAL DRAWINGS, REFLECTED CEILING PLAN.
2. COORDINATE DIFFUSER DISCHARGE PATTERN WITH DRAWINGS.
3. OMIT SCREW HOLES FOR LAY-IN STYLE CEILINGS.
4. PROVIDE SQUARE/RECTANGLE TO ROUND TRANSITIONS AS NEEDED.
5. COORDINATE FINISH WITH ARCHITECT.

UNIT HEATER - PROPANE

MARK	OUTPUT CAPACITY (BTUH)	AGA EFFICIENCY (%)	NUMBER OF STAGES	CURRENT			CFM	MANUFACTURER	MODEL	REMARKS
				V	PH	F				
GUH-1	49,800	83	1	120	1	60	770	REZNOR	UDZ	ALL
GUH-2	49,800	83	1	120	1	60	770	REZNOR	UDZ	ALL
GUH-3	49,800	83	1	120	1	60	770	REZNOR	UDZ	ALL
GUH-4	49,800	83	1	120	1	60	770	REZNOR	UDZ	ALL

REMARKS:
1. PROVIDE WITH PENDANT MOUNTED THERMOSTAT.
2. PROVIDE MANUFACTURER'S MOUNTING BRACKET.
3. PROVIDE PROPANE HEATING KIT WITH STAINLESS STEEL HEAT EXCHANGER.
4. PROVIDE MANUFACTURER'S HORIZONTAL CONCENTRIC VENTING KIT.

BASIS OF DESIGN
THE MANUFACTURER AND MODEL NUMBER LISTED IN THE DRAWINGS OR SPECIFICATIONS ARE THE BASIS OF DESIGN. WHEN PROVIDING EQUIPMENT BY AN ACCEPTABLE MANUFACTURER THAT IS NOT BASIS OF DESIGN, THE CONTRACTOR SHALL PROVIDE AS A PART OF THE SUBMITTAL AND/OR SHOP DRAWING AN ITEMIZED LIST OF ALL MODIFICATIONS REQUIRED TO INSTALL THE NON-BASIS OF DESIGN EQUIPMENT FROM THE INFORMATION DETAILED IN BOTH THE SPECIFICATION SECTION AND EQUIPMENT SCHEDULE. ADDITIONALLY, THE EQUIPMENT MUST ADDRESS THE PHYSICAL CONSTRAINTS OF SPACE INCLUDING COORDINATION WITH OTHER TRADES AND ALL EQUIPMENT CLEARANCES. FINALLY, THE CONTRACTOR SHALL PROVIDE AT NO ADDITIONAL COST TO THE PROJECT ANY SCOPE INCREASE BASED ON THE NON-BASIS OF DESIGN EQUIPMENT FOR THE FOLLOWING MINIMUM ITEMS:
- ELECTRICAL MODIFICATIONS, INCLUDING WIRING, CONDUIT, DISCONNECTS, OVERCURRENT PROTECTION, PANELS, MOTORS, ETC.
- PLUMBING MODIFICATIONS, INCLUDING DOMESTIC WATER, SANITARY, CONDENSATE, AND GAS PIPING, ETC.
- STRUCTURAL MODIFICATIONS
- CIVIL MODIFICATIONS
- DUCT AND PIPE CONNECTIONS OR ARRANGEMENTS
- SPACE HEATING AND COOLING REQUIREMENTS
- EXHAUST OR VENTILATION REQUIREMENTS
- VIBRATION ISOLATION REQUIREMENTS
- CONTROLS REQUIREMENTS TO MEET SPECIFICATIONS

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
ARCHITECT
02.20.24

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

MECHANICAL SCHEDULES
M241.1

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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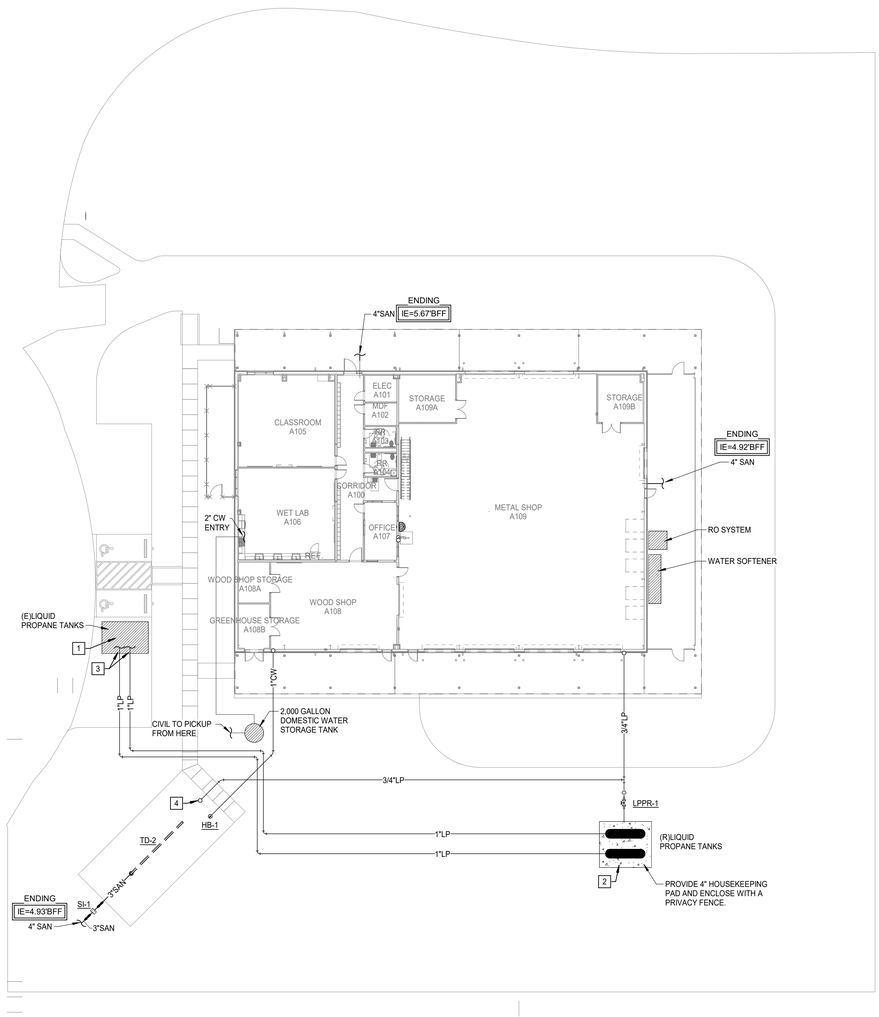

1 **PLUMBING SITE PLAN**
Scale: 1" = 20'-0"

PLUMBING KEYED NOTES

1	EXISTING LIQUID PROPANE TANKS TO BE RELOCATED. EXISTING HOUSEKEEPING PAD AND PRIVACY FENCE TO BE DEMOLISHED AND REMOVED.
2	NEW LOCATION FOR RELOCATED LIQUID PROPANE TANKS.
3	NEW LP GAS LINES TO BE RECONNECTED TO EXISITNG. FIELD VERIFY EXACT LOCATION AND MAKE CONNECTIONS AS REQUIRED.
4	3/4" LP GAS UP FROM BELOW TO SERVE UNIT HEATER.

PLUMBING SITE PLAN NOTES:

1. SLOPE ALL EXTERIOR SANITARY PIPING AT 1/8" PER FOOT.
2. INVERT ELEVATIONS LISTED ARE APPROXIMATE. PRIOR TO CONSTRUCTION, COORDINATE FINAL INVERT ELEVATIONS OF BUILDING SANITARY AND STORM OUTFALLS AND SITE PIPING WITH SITE UTILITY CONTRACTOR. MAKE ASJUSTMENTS AS REQUIRED TO ENSURE PROPER CONNECTIONS TO SITE UTILITIES. ADD SLEEVES IF REQUIRED, AND COORDINATE WITH STRUCTURAL ENGINEER FOR COMPLETE INSTALLATION.
3. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR BUILDING FINISHED FLOOR ELEVATION. PROVIDE 4" EXTERIOR CLEANOUTS TO GRADE AT EVERY 100'-0" AND AT EVERY CHANGE OF DIRECTION OF SANITARY PIPING OUTSIDE OF BUILDING.
4. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL, AND CONDITION OF EXISTING SANITARY PIPE PRIOR TO MAKING ANY NEW CONNECTIONS.
5. MAINTAIN A MINIMUM DISTANCE OF 6'-0" BETWEEN THE SEWER AND WATER LINE.

UTILITY COORDINATION NOTE

INITIAL UTILITY GAS SOURCE COORDINATION HAS BEEN COMPLETED BY SALAS O'BRIEN. DURING BID, CONTRACTIOR SHALL BE RESPONSIBLE FOR PROVIDING ALL THE REQUIRED LABOR & MATERIALS THAT ARE NOT INCLUDED IN THE GAS COMPANY'S SCOPE OF WORK. FINAL UTILITY GAS COORDINATION WILL BE FULLY THE CONTRACTOR'S RESPONSIBILITY AND ANY UNCOORDINATED WORK WILL BE AT NO EXPENSE TO THE OWNER.

DOMESTIC WATER TANK CALCULATIONS

VoAG:
2,000 GALLON DOMESTIC WATER TANK. SIZED BASED ON DAILY USAGE
TIME:
TIME (IN MINUTES) = 60
X
GALLONS/MINUTE = 30
=
TOTAL GALLONS = 2,000
CONTRACTOR TO CONFIRM WELL CAPACITY WITH WELL PROVIDER.

VOAG REVERSE OSMOSIS AND WATER SOFTENER

Water Softener:
CONTRACTOR TO PROVIDE WATER SOFTENER SYSTEM WATTS M4059TI-NH OR APPROVED EQUAL. PROVIDE WITH NEMA 3R ENCLOSURE. FINAL LOCATION TO BE VERIFIED WITH ARCHITECT AND OWNER.

Reverse Osmosis:
CONTRACTOR TO PROVIDE REVERSE OSMOSIS SYSTEM WATTS PWRR0243125 WHOLE BUILDING SYSTEM OR APPROVED EQUAL. PROVIDE WITH NEMA 3R ENCLOSURE. FINAL LOCATION TO BE VERIFIED WITH ARCHITECT AND OWNER.

LIQUID PROPANE EQUIPMENT SCHEDULE

EQUIPMENT NUMBER	DESCRIPTION	BTU PER HOUR LOAD	TOTAL BTU PER HOUR	TOTAL CFH
LPWH-1	LIQUID PROPANE WATER HEATER	199,000 BTUH	199,000 BTUH	199 CFH
LPWH-2	LIQUID PROPANE WATER HEATER	199,000 BTUH	199,000 BTUH	199 CFH
GUH	GAS (LIQUID PROPANE) UNIT HEATERS	60,000 BTUH	240,000 BTUH	240 CFH
TOTALS:			638,000 BTUH	638 CFH

LIQUID PROPANE PRESSURE REGULATOR SCHEDULE

ITEM NO.	DESCRIPTION	INLET PRESS./ OUTLET PRESS.	CFH	MANUFACTURER/ MODEL	SERVICES
LPPR-1	LIQUID PROPANE PRESSURE REGULATOR	2PSI/8OZ.	638	AMERICAN METER 1800C	VOAG BUILDING

NOTES:
1. ALL LIQUID PROPANE REGULATORS OVER 2 PSI SHALL HAVE AN OVER-PRESSURE PROTECTION DEVICE (OPD) PROVIDED WITHIN THAT REGULATOR OR HAVE AN OPD REGULATOR PROVIDED. ALL OPD REGULATORS SHALL BE VENTED TO THE EXTERIOR.

TABLE 402.4(27) SCHEDULE 40 METALLIC PIPE

Gas	Undiluted Propane
Inlet Pressure	2.0 psi
Pressure Drop	1.0 psi
Specific Gravity	1.50

Nominal	1/2	3/4
Actual ID	**0.622**	**0.824**
Length (ft)		
10	2,680	5,590
20	1,840	3,850
30	1,480	3,090
40	1,260	2,640
50	1,120	2,340
60	1,010	2,120
70	934	1,950
80	869	1,820
90	815	1,700
100	770	1,610
125	682	1,430
150	618	1,290
175	569	1,190
200	529	1,110
250	469	981
300	425	889
350	391	817

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
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ARCHITECT
01/17/2024

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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

PLUMBING SITE PLAN

P100

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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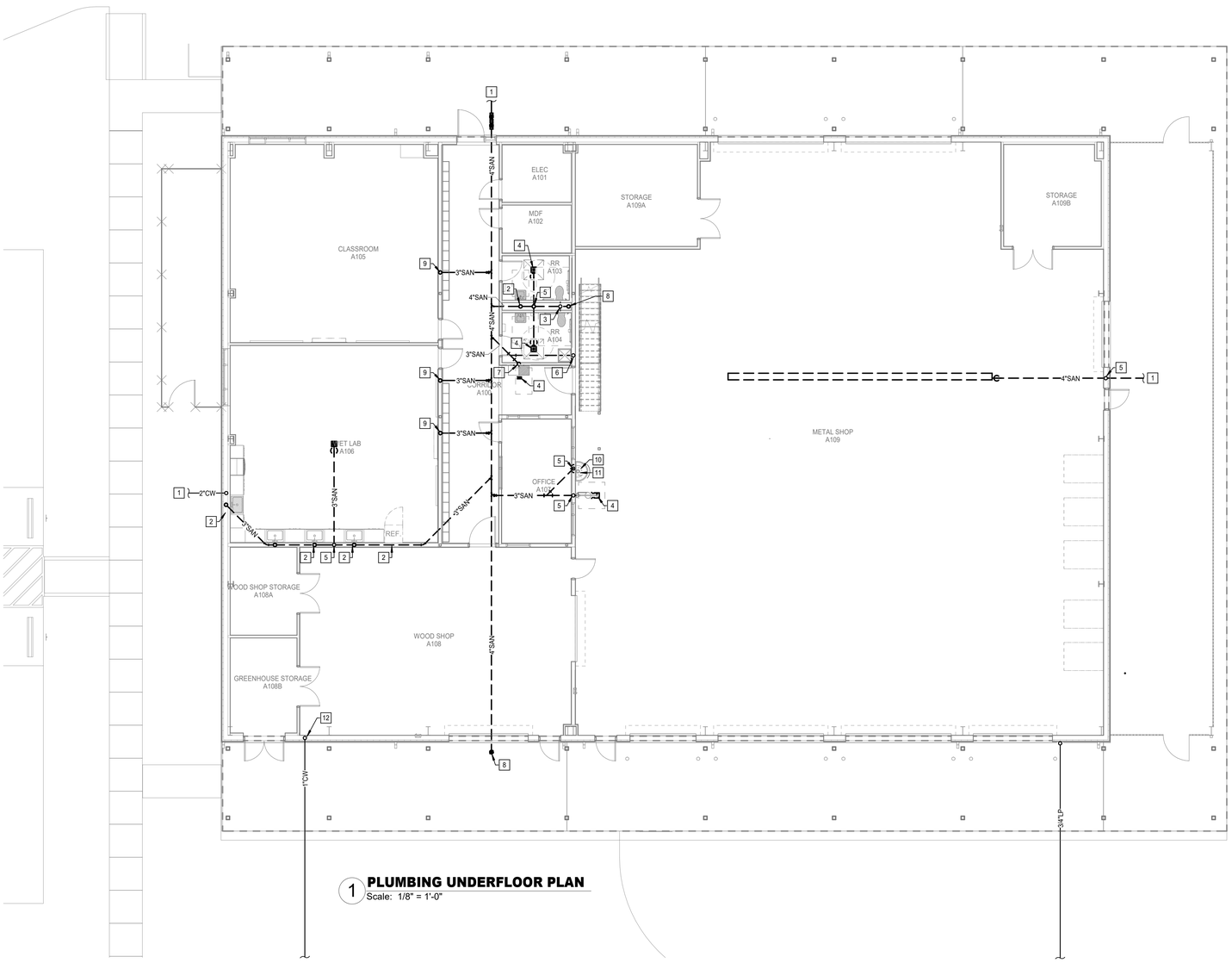

1 PLUMBING UNDERFLOOR PLAN
Scale: 1/8" = 1'-0"

PLUMBING KEYED NOTES

1	SEE PLUMBING OVERALL PLAN P100 FOR CONTINUATION.
2	2" SANITARY UP TO LAVATORY/SINK(S).
3	4" SANITARY UP TO WATER CLOSET.
4	3" SANITARY UP TO FLOOR DRAIN.
5	2" VENT UP.
6	3" SANITARY UP TO MOP SINK.
7	2" SANITARY UP TO ELECTRIC DRINKING FOUNTAIN.
8	FULL SIZE WASTE UP TO THE CLEANOUT.
9	3" SANITARY UP TO FLOOR SINK ABOVE.
10	2" SANITARY UP TO GROUP WASH STATION.
11	1/2" HOT AND COLD WATER ROUTED UNDERFLOOR TO SERVE GROUP WASH STATION.
12	1" COLD WATER DOWN BELOW SLAB TO SERVE GREENHOUSE.

LIQUID PROPANE EQUIPMENT SCHEDULE

EQUIPMENT NUMBER	DESCRIPTION	BTU PER HOUR LOAD	TOTAL BTU PER HOUR	TOTAL CFH
LPWH-1	LIQUID PROPANE WATER HEATER	199,000 BTUH	199,000 BTUH	199 CFH
LPWH-2	LIQUID PROPANE WATER HEATER	199,000 BTUH	199,000 BTUH	199 CFH
GUH	GAS (LIQUID PROPANE) UNIT HEATERS	60,000 BTUH	240,000 BTUH	240 CFH
TOTALS:			638,000 BTUH	638 CFH

LIQUID PROPANE PRESSURE REGULATOR SCHEDULE

ITEM NO.	DESCRIPTION	INLET PRESS./ OUTLET PRESS.	CFH	MANUFACTURER/ MODEL	SERVICES
LPPR-1	LIQUID PROPANE PRESSURE REGULATOR	2PSI/8OZ.	638	AMERICAN METER 1800C	VOAG BUILDING

NOTES:
1. ALL LIQUID PROPANE REGULATORS OVER 2 PSI SHALL HAVE AN OVER-PRESSURE PROTECTION DEVICE (OPD) PROVIDED WITHIN THAT REGULATOR OR HAVE AN OPD REGULATOR PROVIDED. ALL OPD REGULATORS SHALL BE VENTED TO THE EXTERIOR.

TABLE 402.4(27) SCHEDULE 40 METALLIC PIPE

Gas	Undiluted Propane
Inlet Pressure	2.0 psi
Pressure Drop	1.0 psi
Specific Gravity	1.50

Nominal	**1/2**	**3/4**
Actual ID	**0.622**	**0.824**
Length (ft)		
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30	1,480	3,090
40	1,260	2,640
50	1,120	2,340
60	1,010	2,120
70	934	1,950
80	869	1,820
90	815	1,700
100	770	1,610
125	682	1,430
150	618	1,290
175	569	1,190
200	529	1,110
250	469	981
300	425	889
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Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

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KEITH W. GASSMAN
89636
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UNDERFLOOR - PLUMBING PLAN
P200

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
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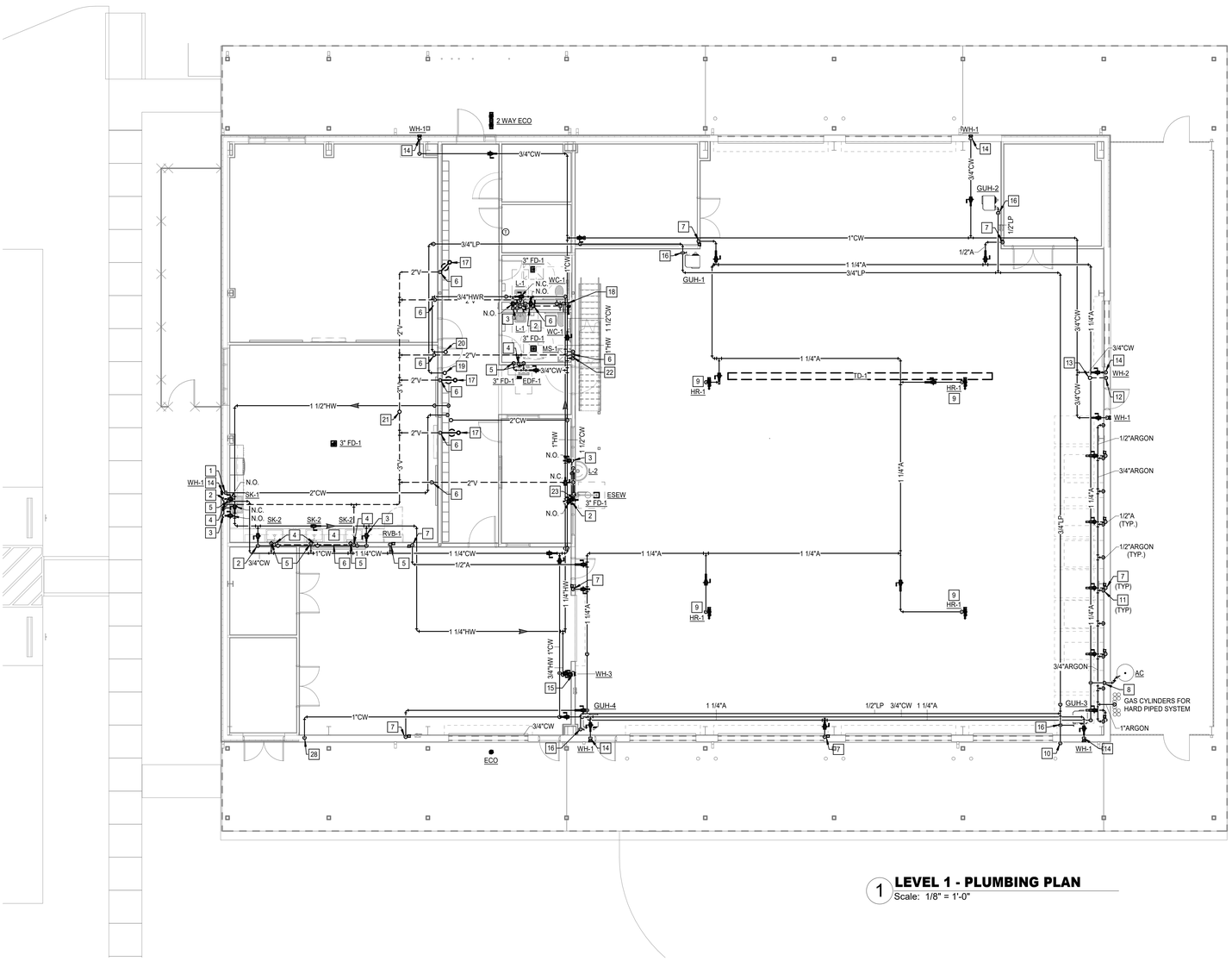
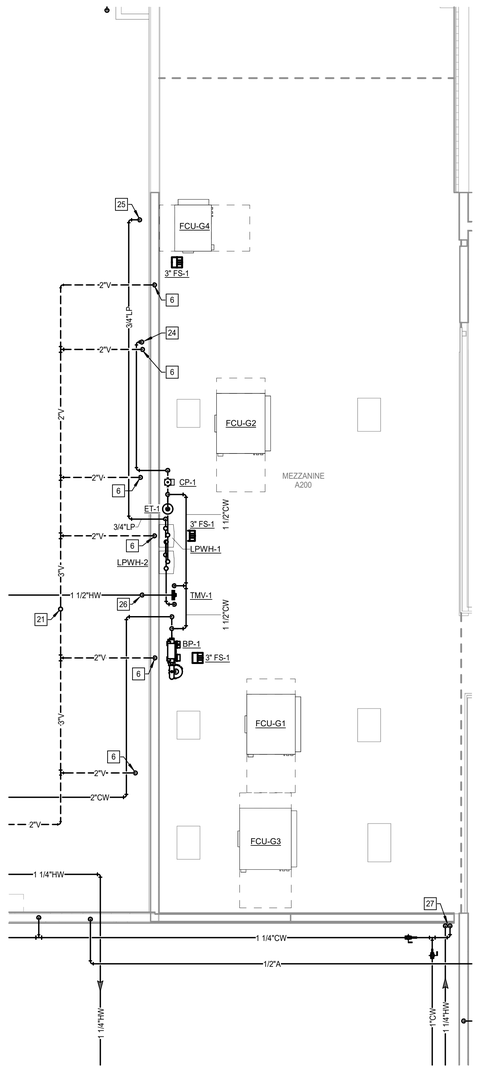


1 **LEVEL 1 - PLUMBING PLAN**
Scale: 1/8" = 1'-0"



2 **MEZZANINE - PLUMBING PLAN**
Scale: 1/4" = 1'-0"

TABLE 402.4(27) SCHEDULE 40 METALLIC PIPE

Gas	Undiluted Propane
Inlet Pressure	2.0 psi
Pressure Drop	1.0 psi
Specific Gravity	1.50

Nominal	1/2	3/4
Actual ID	**0.622**	**0.824**
Length (ft)		
10	2,680	5,590
20	1,840	3,850
30	1,480	3,090
40	1,260	2,640
50	1,120	2,340
60	1,010	2,120
70	934	1,950
80	869	1,820
90	815	1,700
100	770	1,610
125	682	1,430
150	616	1,290
175	569	1,190
200	529	1,110
250	469	981
300	425	889
350	391	817

LIQUID PROPANE EQUIPMENT SCHEDULE

EQUIPMENT NUMBER	DESCRIPTION	BTU PER HOUR LOAD	TOTAL BTU PER HOUR	TOTAL CFH
LPWH-1	LIQUID PROPANE WATER HEATER	199,000 BTUH	199,000 BTUH	199 CFH
LPWH-2	LIQUID PROPANE WATER HEATER	199,000 BTUH	199,000 BTUH	199 CFH
GUH	GAS (LIQUID PROPANE) UNIT HEATERS	60,000 BTUH	240,000 BTUH	240 CFH
TOTALS:			638,000 BTUH	638 CFH

LIQUID PROPANE PRESSURE REGULATOR SCHEDULE

ITEM NO.	DESCRIPTION	INLET PRESS./ OUTLET PRESS.	CFH	MANUFACTURER/ MODEL	SERVICES
LPPR-1	LIQUID PROPANE PRESSURE REGULATOR	2PSI/8OZ.	638	AMERICAN METER 1800C	VOAG BUILDING

NOTES:
1. ALL LIQUID PROPANE REGULATORS OVER 2 PSI SHALL HAVE AN OVER-PRESSURE PROTECTION DEVICE (OPD) PROVIDED WITHIN THAT REGULATOR OR HAVE AN OPD REGULATOR PROVIDED. ALL OPD REGULATORS SHALL BE VENTED TO THE EXTERIOR.

PLUMBING KEYED NOTES

1	2" COLD WATER UP FROM BELOW.
2	ROUTE HOT WATER BRANCH SUPPLY LINE DOWN IN WALL AND ACROSS TO SERVE PLUMBING FIXTURE(S).
3	ROUTE HOT WATER BRANCH RETURN LINE UP AND RECONNECT INTO HOT WATER CURCULATION TRUNK LINE IN CEILING SPACE.
4	2" VENT ROUTED UP TO CEILING SPACE.
5	1/2" COLD WATER DOWN IN WALL TO SERVE PLUMBING FIXTURE(S).
6	2" VENT UP FROM BELOW.
7	ROUTE 1/2" COMPRESSED AIR PIPING DOWN FROM HIGH CEILING AND CONNECT INTO AIR OUTLET. CONTRACTOR SHALL COORDINATE EXACT NUMBER AND LOCATION OF AIR OUTLETS IN VOAG SHOP WITH OWNER PRIOR TO CONSTRUCTION.
8	COMPRESSED AIR LINE ROUTED UP TO HIGH CEILING.
9	ROUTE 1/2" COMPRESSED AIR LINE DOWN FROM HIGH CEILING TO CONNECT INTO HOSE REEL. COORDINATE WITH HOSE REEL MANUFACTURER FOR CONNECTION REQUIREMENTS.
10	3/4" LP GAS MAIN UP FROM BELOW.
11	1/2" ARGON DROPS TO WELDING BOOTHS.
12	3" VENT PIPING UP FROM BELOW.
13	3" VENT THRU ROOF.
14	3/4" COLD WATER DOWN IN WALL TO SERVE WALL HYDRANT.
15	3/4" HOT AND COLD WATER DOWN IN WALL TO SERVE WALL HYDRANT.
16	1/2" LP GAS ROUTED DOWN TO SERVE UNIT HEATER.
17	3" SANITARY UP TO MEZZANINE TO SERVE FLOOR SINK.
18	ROUTE 1-1/2" COLD WATER DOWN IN WALL AND ACROSS TO SERVE PLUMBING FIXTURE(S)
19	3/4" LP GAS ROUTED UP TO MEZZANINE TO SERVE WATER HEATERS.
20	3/4" HOT WATER RETURN ROUTED UP TO MEZZANINE.
21	4" VENT THRU ROOF.
22	3/4" HOT AND COLD WATER DOWN IN WALL TO MOP SINK.
23	ROUTE 1-1/4" COLD WATER DOWN IN WALL AND ACROSS TO SERVE PLUMBING FIXTURE(S)
24	3/4" HOT WATER RETURN UP FROM BELOW.
25	3/4" LP GAS MAIN UP FROM BELOW.
26	1-1/2" HOT WATER DOWN TO FIRST FLOOR CEILING SPACE.
27	1-1/2" COLD WATER AND 1-1/4" HOT WATER DOWN TO FIRST FLOOR CEILING SPACE.
28	1" COLD WATER ROUTED DOWN BELOW SLAB TO SERVE GREENHOUSE.

PLUMBING GENERAL NOTES

ALL SINKS AND LAVATORIES THAT ARE ACCESSIBLE TO THE PUBLIC SHALL BE PROVIDED WITH TEMPERED WATER, THROUGH A POINT-OF-USE DEVICE THAT IS ASSE 1070/ASME A112.1070/CSA B125.70 COMPLIANT. REFER TO SHEET P251 FOR THERMOSTATIC MIXING VALVE INFORMATION FOR EACH QUALIFYING FIXTURE.

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
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ARCHITECT
02.20.24

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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

LEVEL 1 - PLUMBING PLAN

P201

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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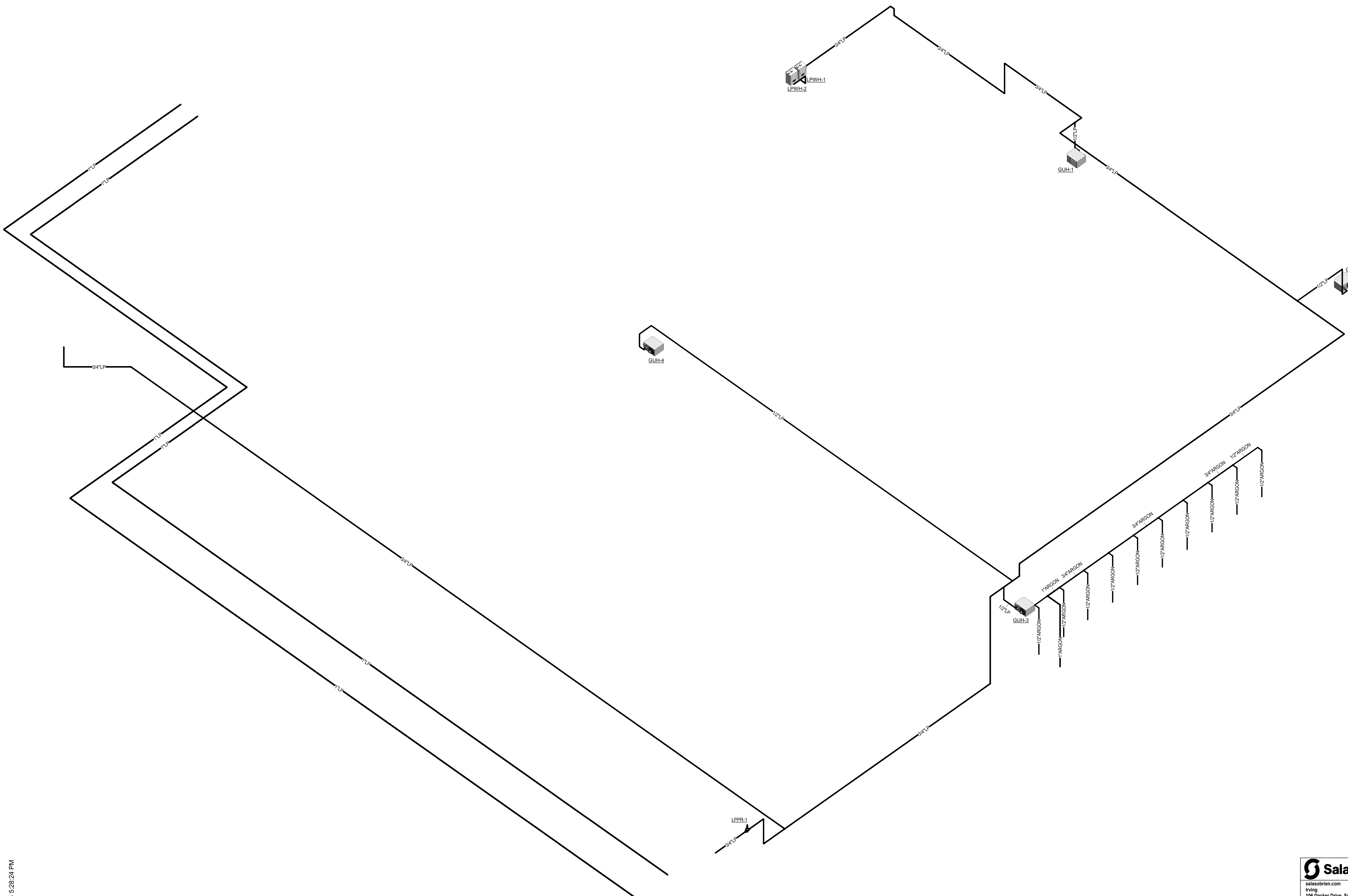

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
REGISTERED
PROFESSIONAL ENGINEER
01/17/2024

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DATE: 01/17/2024

PLUMBING RISER DIAGRAM

P241

Salas O'Brien
salasobrien.com 972-812-1270
Irving
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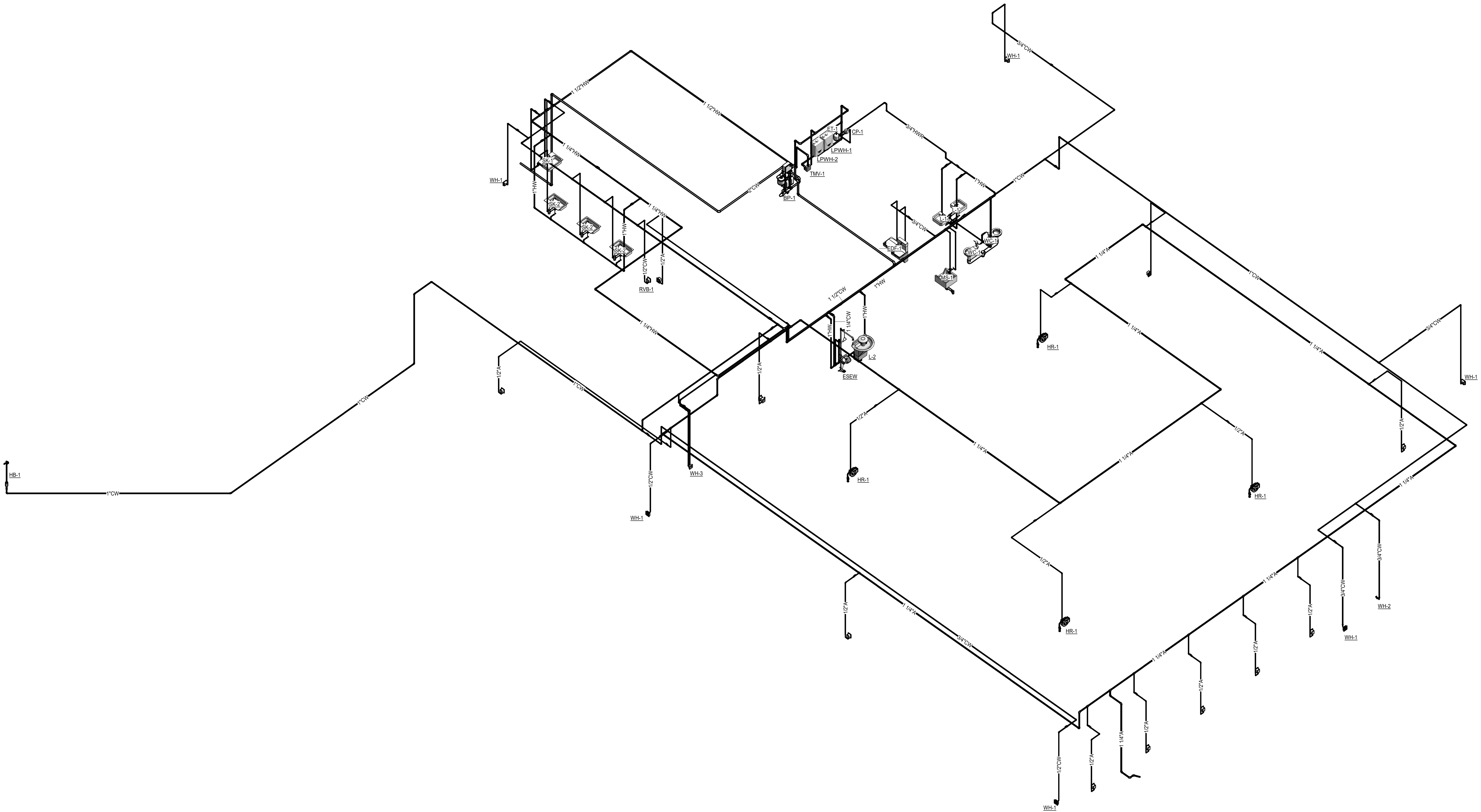

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111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
REGISTERED PROFESSIONAL ENGINEER
01/17/2024

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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

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No.	Date

JOB NO.	2338 A
DATE:	01/17/2024

PLUMBING RISER DIAGRAM

P242

Salas O'Brien
salasobrien.com 972-812-1270
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Irving, TX 75062
Registration: F-4111
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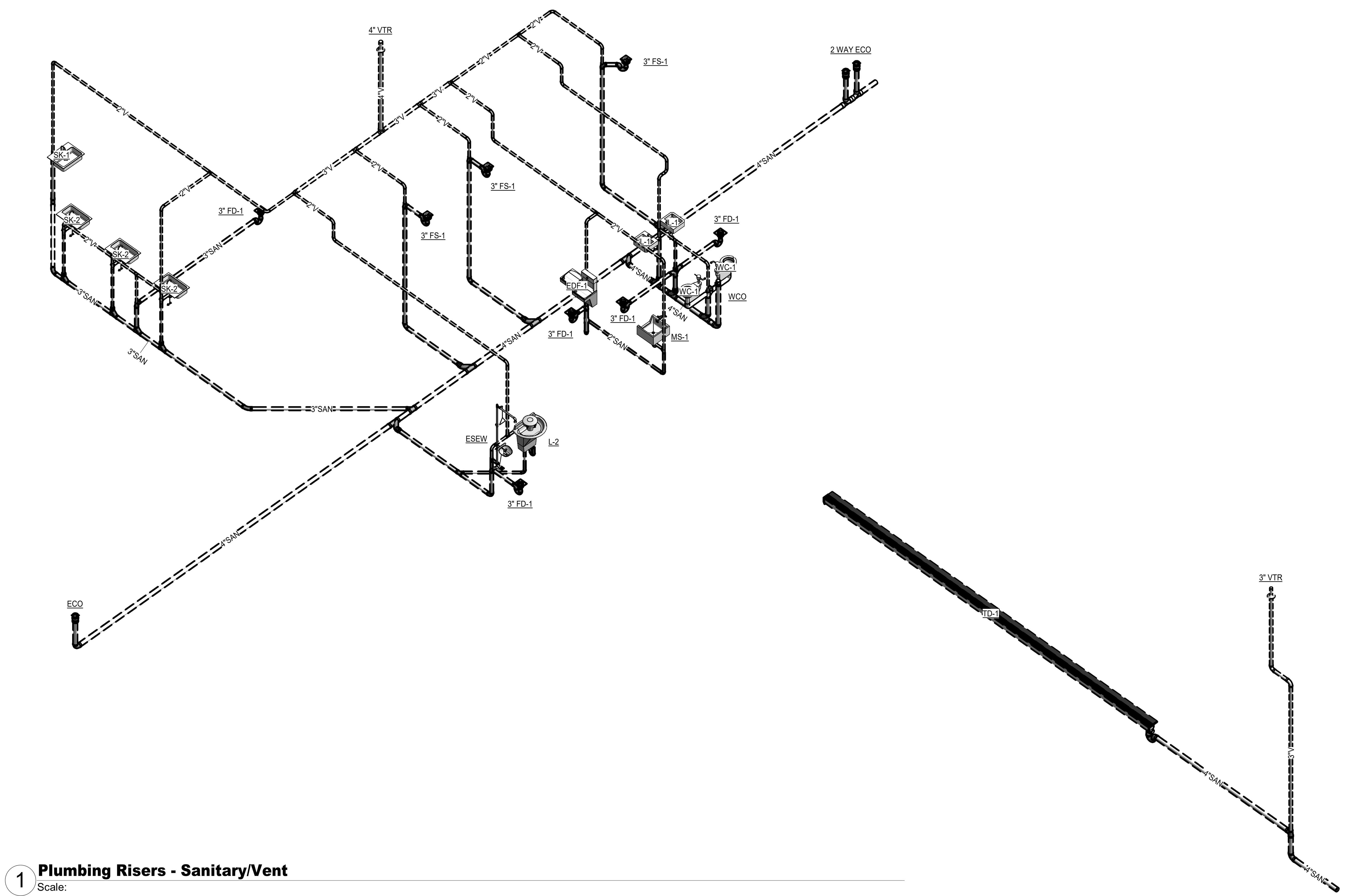

1 Plumbing Risers - Sanitary/Vent
Scale:

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111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
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KEITH W. GASSMAN
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PLUMBING RISER DIAGRAM

P243

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salasobrien.com 972-812-1270
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Irving, TX 75062

Registration: F-4111
Project No: 2023-02832

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TANKLESS LIQUID PROPANE WATER HEATER SCHEDULE

Mark	BASIS OF DESIGN MANUFACTURER	MODEL	STORAGE CAPACITY	BTU/HR. INPUT	WH GALS. PER HR. RECOVERY RATE 100°F RISE	OUTPUT WATER TEMP	ELECTRICAL CHAR. V	P	F	MCA	MOCP	REMARKS
LPWH-1	AO SMITH	ACT-199I-P	TANKLESS	199,000	3.8	140 °F	120	1	60	0.0	0.0	
LPWH-2	AO SMITH	ACT-199I-P	TANKLESS	199,000	3.8	140 °F	120	1	60	0.0	0.0	

1 INDIVIDUAL VERTICAL 4" CONCENTRIC FLUE VENT FOR EACH WATER HEATER. PROVIDE CONCENTRIC VENT KIT "9006144005". REFER TO DRAWINGS FOR FLUE ROUTING AND LOCATIONS THROUGH ROOF. CONTRACTOR SHALL COORDINATE FLUE LOCATION THROUGH ROOF AND PIPE ROUTING IN CEILING SPACES WITH ALL OTHER DISCIPLES PRIOR TO CONSTRUCTION.

CIRCULATION PUMP SCHEDULE

MARK	BASIS OF DESIGN MANUFACTURER	MODEL	DESCRIPTION	TYPE	GPM HP	HEAD FEET	HP MIN	ELECTRICAL CHAR. V	P	F	MAX RPM
CP-1	GRUNDFOS	UP 1542F	CIRCULATION PUMP	INLINE BRONZE	25	12-0"	1/25	120	1	60	1750

DOMESTIC HW EXPANSION TANK SCHEDULE

Type Mark	BASIS OF DESIGN MANUFACTURER	MODEL	DESCRIPTION	MAX WORK PRESSURE (PSI)	TANK VOLUME GALLONS	MAX. ACCEPT. GALLONS	DIAMETER (INCHES)
ET-1	WATTS	PLT-5	HOT WATER EXPANSION TANK	150	2.1	1.48	8"

1 PROVIDE ASME POTABLE WATER EXPANSION TANK ON THE COLD WATER SUPPLY LINE, DOWNSTREAM OF THE CHECK VALVE.
2 PROVIDE HOUSEKEEPING PAD.
3 PROVIDE UNION CONNECTION.

THERMOSTATIC MIXING VALVE SCHEDULE

MARK	BASIS OF DESIGN MANUFACTURER	MODEL	TEMP. IN (DEG. F)	TEMP. OUT (DEG. F)	MIN. FLOW GPM	DESIGN FLOW GPM	VALVE FINISH	THERMOMETER	UNION CONNECTION	PRESSURE DIFFERENTIAL
TMV-1	POWERS	LFG480	145	140	0.5	30	RB	YES	YES	5.0

1 MAKE WATER CONNECTIONS TO THERMOSTATIC MIXING VALVE(S) IN ACCRODANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
2 PROVIDE PIPE INCREASERS AND/OR VALVES AS REQUIRED.
3 PROVIDE UNION CONNECTIONS AND OUTLET THERMOMETER UNLESS INDICATED OTHERWISE.
4 REFER TO DETAIL FOR MORE INFORMATION.

BOOSTER PUMP SCHEDULE

MARK	BASIS OF DESIGN MANUFACTURER	MODEL	DESCRIPTION	TYPE	GPM	HEAD FEET	HP MIN	ELECTRICAL CHAR. V	P	F	MAX RPM
BP-1	GRUNDFOS	HYDRO MPC-E 2 CRE 5-6	BOOSTER PUMP	DUPLEX	60	108	2	460	3	60	3600

1 PROVIDE ALL REQUIRED APPURTENCANCES FOR A COMPLETE OPERATING SYSTEM.
2 ALL INSTALLATIONS TO BE AS PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

LIQUID PROPANE EQUIPMENT SCHEDULE

EQUIPMENT NUMBER	DESCRIPTION	BTU PER HOUR LOAD	TOTAL BTU PER HOUR	TOTAL CFH
LPWH-1	LIQUID PROPANE WATER HEATER	199,000 BTUH	199,000 BTUH	199 CFH
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GUH	GAS (LIQUID PROPANE) UNIT HEATERS	60,000 BTUH	240,000 BTUH	240 CFH
TOTALS:			638,000 BTUH	638 CFH

LIQUID PROPANE PRESSURE REGULATOR SCHEDULE

ITEM NO.	DESCRIPTION	INLET PRESS./ OUTLET PRESS.	CFH	MANUFACTURER/ MODEL	SERVICES
LPPR-1	LIQUID PROPANE PRESSURE REGULATOR	2PSI/8OZ.	638	AMERICAN METER 1800C	VOAG BUILDING

NOTES:
1. ALL LIQUID PROPANE REGULATORS OVER 2 PSI SHALL HAVE AN OVER-PRESSURE PROTECTION DEVICE (OPD) PROVIDED WITHIN THAT REGULATOR OR HAVE AN OPD REGULATOR PROVIDED. ALL OPD REGULATORS SHALL BE VENTED TO THE EXTERIOR.

PLUMBING FIXTURE SCHEDULE

TYPE	FIXTURE DESCRIPTION
L-2	DESCRIPTION: HANDWASH STATION, FLOOR MOUNTED, STAINLESS STEEL, INFRARED ACTIVATION, HARDWIRED FAUCETS. BRADLEY "SENTRY" WASHFOUNTAIN SN2003-A-STD-IRP-LSD-TMA-BS. FAUCET: INCLUDED WITH THE FIXTURE. PROVIDE WITH AMERICAN STANDARD PK01.HAC HARD WIRE POWER KIT. STRAINER: INCLUDED WITH THE FIXTURE. P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE 8872. SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165LK. TMV: THERMOSTATIC MIXING VALVE, 140 DEGREES IN, 110 DEGREES OUT, BRONZE FINISH, UNION CONNECTION, 5PSI PRESSURE DIFFERENTIAL, 0.5GPM MIN FLOW/4GPM MAX FLOW. SYMMONS "MAXLINE" 7-225-CK-MS-W. ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.
MOP SINK (MS)	
MS-1	DESCRIPTION: MOP SINK, FLOOR MOUNTED, 24" X 24" X 10" HIGH RECEPTOR TYPE, MUSTEE 67.2424 WALL GUARDS, MUSTEE 65.700 HOSE AND HOLDER, AND MUSTEE 65.600 MOP HOLDER. MUSTEE "DURASTONE" 63M. FAUCET: CHROME PLATED BRASS FAUCET WITH CHECK IN STOPS, VACUUM BREAKER SPOT WITH BUCKET HOOK AND 3/4" HOSE THREAD OUTLET. VANDAL RESISTANT HANDLES, ADJUSTABLE TOP BRACE. CHICAGO 445-897SRXKCP. ROUGH-IN: 3" WASTE, 2" VENT, 3/4" HOT AND COLD WATER.
SINK (HS, SK)	
SK-1	DESCRIPTION: SINK (ADA COMPLIANT), DROP-IN, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL, 31" X 22" X 6-1/2" DEEP, SINGLE COMPARTMENT WITH FAUCET DECK, FOUR FAUCET HOLES ON 4" CENTERS. DRAIN OUTLET OFF CENTER TO REAR OF BASIN. ELKAY "LUSTERTONE" LRAD2312265. FAUCET: CHROME PLATED FAUCET WITH SPRAY HANDLE, GOOSENECK WITH 8" SPOUT, WRIST BLADE HANDLES, VANDAL RESISTANT AERATOR WITH A MAX FLOW 1.5GPM, 4" CENTERS. MOEN 8244. STRAINER: HEAVY DUTY STEEL BASKET STRAINER WITH 1-1/2 TAILPIECE AND LOCK NUTS. MCGUIRE 151A. P-TRAP: 1-1/2" X 1-1/2" TRAP WITH CLEANOUT AND EXTENSION TO WALL W/ ESCUTCHEON PLATE. MCGUIRE C8912CECO. DISPOSER: WHIRLAWAY MODEL 291 1/2 H.P. WITH SOUND PROOFING INSTALLATION OR EQUAL. SUPPLIES: 1/2" I.P.S. X 3/8" O.D. WITH ESCUTCHEONS AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165. TMV: THERMOSTATIC MIXING VALVE, 120 DEGREES IN, 110 DEGREES OUT, BRONZE FINISH, UNION CONNECTION, 5PSI PRESSURE DIFFERENTIAL, 0.5GPM MIN FLOW/4GPM MAX FLOW. SYMMONS "MAXLINE" 7-225-CK-W. ROUGH-INS: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED HEIGHT.
SK-2	DESCRIPTION: SINK, DROP-IN, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL, 22" X 17" X 4" DEEP, SINGLE COMPARTMENT WITH FAUCET DECK. SINGLE FAUCET HOLE ON 4" CENTERS. ELKAY "LUSTERTONE" DRKAD221740. FAUCET: CHROME PLATED FAUCET, SINGLE HANDLE WITH 9" SPOUT, VANDAL RESISTANT AERATOR WITH A MAX FLOW 2.2GPM. MOEN 8701. STRAINER: HEAVY DUTY STEEL BASKET STRAINER WITH 1-1/2 TAILPIECE AND LOCK NUTS. MCGUIRE 151A. P-TRAP: 1-1/2" 17 GAUGE CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE 8912. SUPPLIES: 1/2" I.P.S. X 3/8" O.D. WITH ESCUTCHEONS AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165. TMV: THERMOSTATIC MIXING VALVE, 120 DEGREES IN, 110 DEGREES OUT, BRONZE FINISH, UNION CONNECTION, 5PSI PRESSURE DIFFERENTIAL, 0.5GPM MIN FLOW/4GPM MAX FLOW. SYMMONS "MAXLINE" 7-225-CK-W. ROUGH-INS: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED HEIGHT.
TRAPS AND INTERCEPTORS (SI-1)	
SI-1	DESCRIPTION: SOLIDS INTERCEPTOR, GASKETED EPOXY COATED STEEL SKID-PROOF COVER, REMOVABLE SEDIMENT BASKET, SIZE 400, 15 GPM, WATTS SI-770-SS ROUGH-INS: 3" WASTE.
WATER CLOSET (WC)	
WC-1	DESCRIPTION: WATER CLOSET, FLOOR MOUNTED, WHITE VITREOUS CHINA, 1.28 GALLON PER FLUSH SIPHON JET ACTION, ELONGATED CLOSET BOWL WITH 1-1/2" TOP SPUD AND BOLT COVERS. AMERICAN STANDARD "MADERA" #3043.001. SEAT: ELONGATED HEAVY DUTY BOWL OPEN FRONT SEAT LESS COVER WITH SELF-SUSTAINING HINGE AND EVERCLEAN SURFACE. REFER TO ARCHITECTURAL DRAWINGS FOR SEAT COLOR. AMERICAN STANDARD #5901.100SS. FLUSH VALVE: 1.28 GALLON FLUSH CYCLE. EXPOSED, HARD-WIRED SENSOR OPERATED, PISTON TYPE, CHROME PLATED CLOSET FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 1-1/2" TOP SPUD. AMERICAN STANDARD #6065121.002. PROVIDE WITH AMERICAN STANDARD PK01.MAC HARD WIRE POWER KIT. ROUGH-IN: 4" WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

PLUMBING FIXTURE SCHEDULE

TYPE	FIXTURE DESCRIPTION
DRAINAGE FIXTURE (CO, FD, FS, HD, TD)	
2 WAY ECO	DESCRIPTION: TWO (2) EXTERIOR CLEANOUTS INSTALLED AT CIVIL'S POINT OF CONNECTION. REFER TO ECO FOR FIXTURE INFORMATION. REFER TO DETAIL FOR INSTALLATION INFORMATION.
3" FS-1	DESCRIPTION: HALF GRATE CAST IRON 12" SQUARE FLOOR SINK WITH 8" DEEP SUMP, A.R.E. INTERIOR, ALUMINUM DOME BOTTOM STRAINER, STAINLESS STEEL TOP, AND CLAMPING DEVICE. MIFAB FS1730-FLC-3-P-150. TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR SINK BY SIZE, MODEL, AND MANUFACTURER. ROUGH-IN: REFERTO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION WITH ARCHITECTURAL / KITCHEN CONSULTANT DRAWINGS.
ECO	DESCRIPTION: EXTERIOR CLEANOUT TO GRADE, CAST IRON BODY WITH THREADED ADJUSTABLE HOUSING, FERRULE WITH TAPERED BRASS PLUG, AND ROUND SCORIATED CAST IRON TRACTOR TYPE COVER WITH SECURITY SCREWS. MI-FAB C-1100
FD-1	FLOOR DRAIN WITH TRAP GUARD, CAST IRON BODY, ADJUSTABLE 7" NICKEL BRONZE STRAINER, CLAMPING COLLAR MIFAB F-1100. TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH HUB DRAIN BY SIZE, MODEL, AND MANUFACTURER. ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS.
TD-1	DESCRIPTION: HIGH DENSITY POLYETHYLENE TRENCH DRAIN WITH MECHANICAL CONNECTIONS BETWEEN CHANNELS, REBAR CLIPS TO SECURE TRENCH DRAIN IN PLACE, 96" SECTIONS 4" DEEP TRENCH WITH 4" REBAR CLIPS. GALVANIZED DUCTILE SLOTTED GRATE, CLASS C, VANDAL PROOF LOCKDOWN, AND BOTTOM DOME STRAINER. ZURN Z882-HDG-GDC. TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR DRAIN BY SIZE, MODEL, AND MANUFACTURER. ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COODINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS/FLOOR CONSTRUCTION.
TD-2	DESCRIPTION: HIGH DENSITY POLYETHYLENE TRENCH DRAIN WITH MECHANICAL CONNECTIONS BETWEEN CHANNELS, REBAR CLIPS TO SECURE TRENCH DRAIN IN PLACE, 40" SECTIONS 3-1/2" DEEP TRENCH WITH 4" REBAR CLIPS, HEEL PROOF, STAINLESS STEEL, CLASS A, VANDAL PROOF LOCKDOWN, AND BOTTOM DOME STRAINER. ZURN Z883-HPS-VP-DB. TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR DRAIN BY SIZE, MODEL, AND MANUFACTURER. ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COODINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS/FLOOR CONSTRUCTION.
WCO	DESCRIPTION: WALL CLEANOUT. CAST IRON CLEANOUT FERRULE WITH DUCTILE IRON COMBINED COVER/PLUG AND ROUND STAINLESS COVER PLATE WITH CENTER SECURING SCREW. MIFAB C1450 WITH C1400-RD6. PROVIDE MIFAB C1460 CAST IRON CLEANOUT TEE IN LIEU OF FERRULE AS REQUIRED FOR WALL CONSTRUCTION.
DRINKING FOUNTAIN (EDF)	
EDF-1	DESCRIPTION: WALL HUNG, BARRIER FREE, BI-LEVEL ELECTRIC DRINK FOUNTAIN WITH ELECTRONIC BOTTLE FILLER SENSOR AND SHIELDED VANDEL-RESISTANT BUBBLER. 8 GPH OF 50 DEGREE WATER AT 90 DEGREE AMBIENT AND 80 DEGREE INLET WATER. ELKAY LZSTL8WSLP. PROVIDE CANE TOUCH SKIRT TO COMPLY WITH ADA GUIDELINES. P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE 8872. SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISER. MCGUIRE 2165. CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. MIFAB MC-33. ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.
FIXTURES	
AC	OWNER FURNISHED AND CONTRACTOR INSTALLED AIR COMPRESSOR.
ESEW	BARRIER FREE DRENCH SHOWER/EYE WASH UNIT WITH STAINLESS STEEL BOWL, STAINLESS STEEL SHOWER HEAD, HALO EYEWASH, STAINLESS STEEL HANDLE, STAINLESS STEEL FOOT PEDAL ACTIVATION FOR EYEWASH. BRADLEY S19-314BFSS. ROUGH-IN: 1-1/4" COLD WATER, 1" HOT WATER.
RVB-1	DESCRIPTION: REFRIGERATOR VALVE BOX, 4-3/8"X4-1/8"", 20 GAUGE STEEL WITH COATED FINISH AND 1/4 TURN VALVE. PROVIDE FILTER WHEN MAKING FINAL CONNECTION. GUY GRAY MIB1AB OR MIB3AB IF PEX WITH AQUA-PURE AP717 FILTER. ROUGH-INS: 3/4" COLD WATER. COORDINATE ROUGH-IN LOCATION/HEIGHT, FINAL CONNECTION WITH EQUIPMENT BEING INSTALLED AND WITH ARCHITECT/CASEWORK DRAWINGS.
HYDRANTS (WH, RH, HB, HR)	
HB-1	DESCRIPTION: HOSE BIBB, NON-FREEZE YARD HYDRANT, 3/4" MALE HOSE THREAD OUTLET, DUCTILE IRON, VANDAL PROOF, INSTALL WITH BOTTOM OF HYDRANT AT 24" A.F.F. WOODFORD MODEL R34. ROUGH-INS: 3/4" COLD WATER.
HR-1	DESCRIPTION: CEILING-MOUNTED DUAL HOSE REEL FOR AIR AND WATER, CORROSION RESISTANT STAINLESS STEEL, SPRING RETRACTABLE, WITH 50 FT HOSE LENGTH, GRAINGER "COXREELS" C-LP-350-350. COORDINATE WITH STRUCTURAL FOR INSTALLATION. ROUGH-IN: 1/2" AIR, 3/4" COLD WATER. REFER TO ARCHITECTURAL/ CASEWORK DRAWINGS FOR HEIGHT REQUIREMENTS.
WH-1	DESCRIPTION: WALL HYDRANT, CONCEALED BOX TYPE, NON-FREEZE, 3/4" MALE HOSE THREAD OUTLET, SELF-DRAINING WITH ANTI-SIPHON VACUUM BREAKER. CHROME PLATED BRONZE CONSTRUCTION WITH STAINLESS STEEL HYDRANT BOX. LOCKING HINGED COVER. LOOSE TEE OPERATING KEY. WADE 8700. ROUGH-INS: 3/4" COLD WATER.
WH-2	DESCRIPTION: HOSE BIBB, MILD CLIMATE, NO STEM FOR FREEZE PROTECTION, CHROME PLATED BRASS FINISH WITH ANTI-SIPHON VACUUM BREAKER. INSTALL WITH BOTTOM OF HYDRANT 24" A.F.F. WOODFORD MODEL 24. ROUGH-INS: 3/4" COLD WATER
WH-3	DESCRIPTION: WALL HYDRANT, CONCEALED BOX TYPE, NON-FREEZE, WALL-MOUNTED HOT AND COLD MIXING FAUCET WITH 3/4" F.P.T. INLETS, 3/4" MALE HOSE THREADED OUTLET AND SELF-DRAINING FIELD TESTABLE BACKFLOW PREVENTER. CHROME PLATED BRASS FINISH, LOOSE TEE KEY. PROVIDE LOCKING ACCESS PANEL AS REQUIRED TO ENSURE SERVICE ACCESS TO MIXER BODY AND INLETS. MIFAB MHY-45-49. ROUGH-INS: 3/4" COLD WATER AND HOT WATER.
LAVATORY (L)	
L-1	DESCRIPTION: LAVATORY, WALL HUNG, VITREOUS CHINA, 15" X 10" X 6-1/2" BOWL WITH FRONT OVERFLOW, FAUCET HOLES ON 4" CENTERS. AMERICAN STANDARD "LUCERNE" 0356.041. FAUCET: CHROME PLATED BRASS LAVATORY, HARDWIRED SENSOR FAUCET, VANDAL RESISTANT AERATOR. AMERICAN STANDARD "SELECTRONIC" 775B.105. PROVIDE WITH AMERICAN STANDARD PK01.HAC HARD WIRE POWER KIT. STRAINER: 1-1/4" 17 GAUGE OFFSET WHEELCHAIR STRAINER, CHROME PLATED BRASS GRID DRAIN WITH ELBOW AND 17 GAUGE OFFSET TAILPIECE. MCGUIRE 155WC. GRAVITY FED TRAP PRIMER TAILPIECE, 1/2" NOMINAL BRANCH CONNECTION. SIOUX CHIEF" 213-092. P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE 8872. SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165LK. TMV: THERMOSTATIC MIXING VALVE, 140 DEGREES IN, 110 DEGREES OUT, BRONZE FINISH, UNION CONNECTION, 5PSI PRESSURE DIFFERENTIAL, 0.5GPM MIN FLOW/4GPM MAX FLOW. SYMMONS "MAXLINE" 7-225-CK-MS-W. INSTALL PER EVERY TWO FIXTURES. CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 4" SQUARE BASE ANCHORED TO CONCRETE WITH (4) 1/2" BOLTS, ADJUSTABLE SLEEVE, THREADED CONCEALED ARMS, ALIGNMENT BAR, LOCKING DEVICE, AND LEVELING SCREWS. WADE WS20-M36. ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

PLUMBING PIPING LEGEND

SYMBOLS	DESCRIPTION
SAN	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
SAN	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
GW	GREASE WASTE PIPING (GW)
GW	GREASE WASTE PIPING BELOW GRADE (GW)
SD	STORM DRAIN PIPING (SD)
SD	STORM DRAIN PIPING BELOW GRADE (GW)
SSD	SUB-SOIL DRAIN OR FOOTING DRAIN (SSD)
AW	ACID WASTE PIPING (AW)
AW	ACID WASTE PIPING BELOW GRADE (AW)
PD	PUMPED DISCHARGE (PD)
CD	CONDENSTATE DRAIN PIPING (CD)
D	CONDENSTATE - INDIRECT DRAIN PIPING (D)
V	VENT PIPING (V)
CW	COLD WATER PIPING (CW)
HW	HOT WATER PIPING (HW)
HWR	HOT WATER RETURN PIPING (HWR)
SCW	SOFT COLD WATER PIPING (SCW)
CDW	CHILLED DRINKING WATER PIPING (CDW)
TP	TRAP PRIMER LINE (TP)
F	FIRE PROTECTION PIPING (F)
AS	AUTOMATIC SPRINKLER PIPING (AS)
GAS	NATURAL GAS PIPING (G)
GV	GAS VENT PIPING (GV)
AIR	COMPRESSED AIR PIPING (A)
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
	BALANCING VALVE (BV)
	SOLENOID VALVE (SV)
	BALL VALVE (BV)
	BUTTERFLY VALVE
	LUBRICATED PACKED PLUG STOP STOP COCK (PC)
	HORIZONTAL SWING CHECK
	UNION
	HORIZONTAL SWING CHECK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
	FLOOR CLEANOUT (FCO)
	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	FIRE DEPARTMENT VALVE AT RISER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
PRV	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK
	GAS METER
	WALL HYDRANT
	VALVE IN RISE
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	OS&Y VALVE
	ROOF DRAIN
1	REFER TO KEYED NOTE
FS	FLOW SWITCH
	FLOOR SINK (FS)
	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER OR SHOCK ABSORBER
AP	ACCESS PANEL LOCATION SYMBOL
A	SHOCK ABSORBER
	AIR CHAMBER
(E)	EXISTING
(N)	NEW
VTR	VENT THRU ROOF
B.F.F.	BELOW FINISHED FLOOR
A.F.F.	ABOVE FINISHED FLOOR
	NEW CONNECTION
IE=100.00"	INVERT ELEVATION
1	DELTA CHANGE SYMBOL
P 1	4" VTR RISER FLAG

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
ARCHITECT
01/17/2024

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

PLUMBING SCHEDULES
P251

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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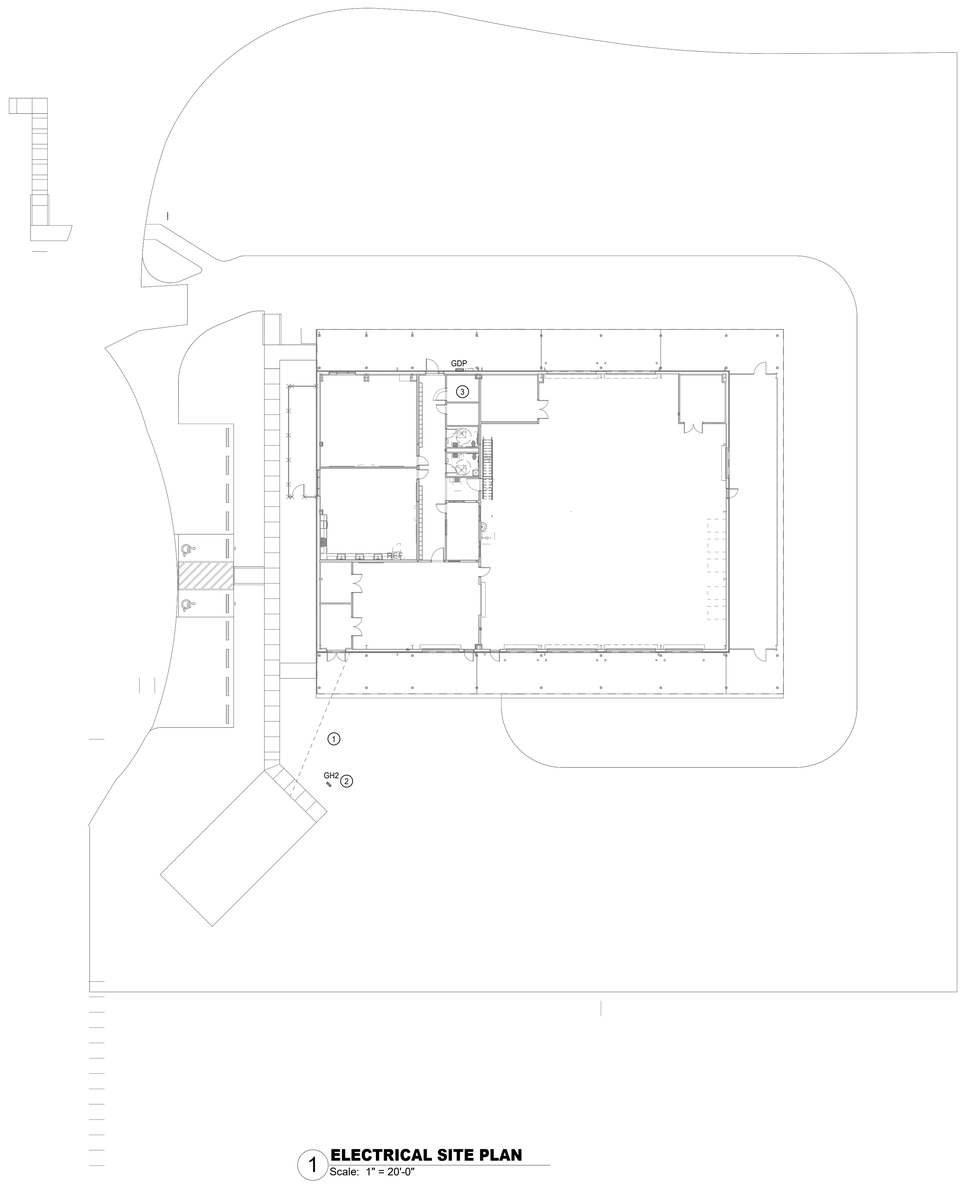

1 **ELECTRICAL SITE PLAN**
Scale: 1" = 20'-0"

POWER GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3. CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4. ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6. ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7. CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

ELECTRICAL KEYED NOTES

1	(2) 2" CONDUITS FOR DATA FROM MDG TO GREEN HOUSE.
2	PROPOSED LOCATION OF GH1. CONTRACTOR TO USE UNSTRUT RACK TO MOUNT PANEL WITHING 3 FEET OF FINAL GREEN HOUSE LOCATION. COORDINATE GREN HOUSE LOCATION WITH ARCHITECT PRIOR TO ELECTRICAL ROUGH-IN.
3	COORDINATE ALL FINAL CONNECTIONS TO POWER WITHIN GREENHOUSE WITH MANUFACTURER PRIOR TO ELECTRICAL ROUGH-IN

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
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LICENSED
ARCHITECT
01/17/2024

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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

ELECTRICAL SITE PLAN
E100

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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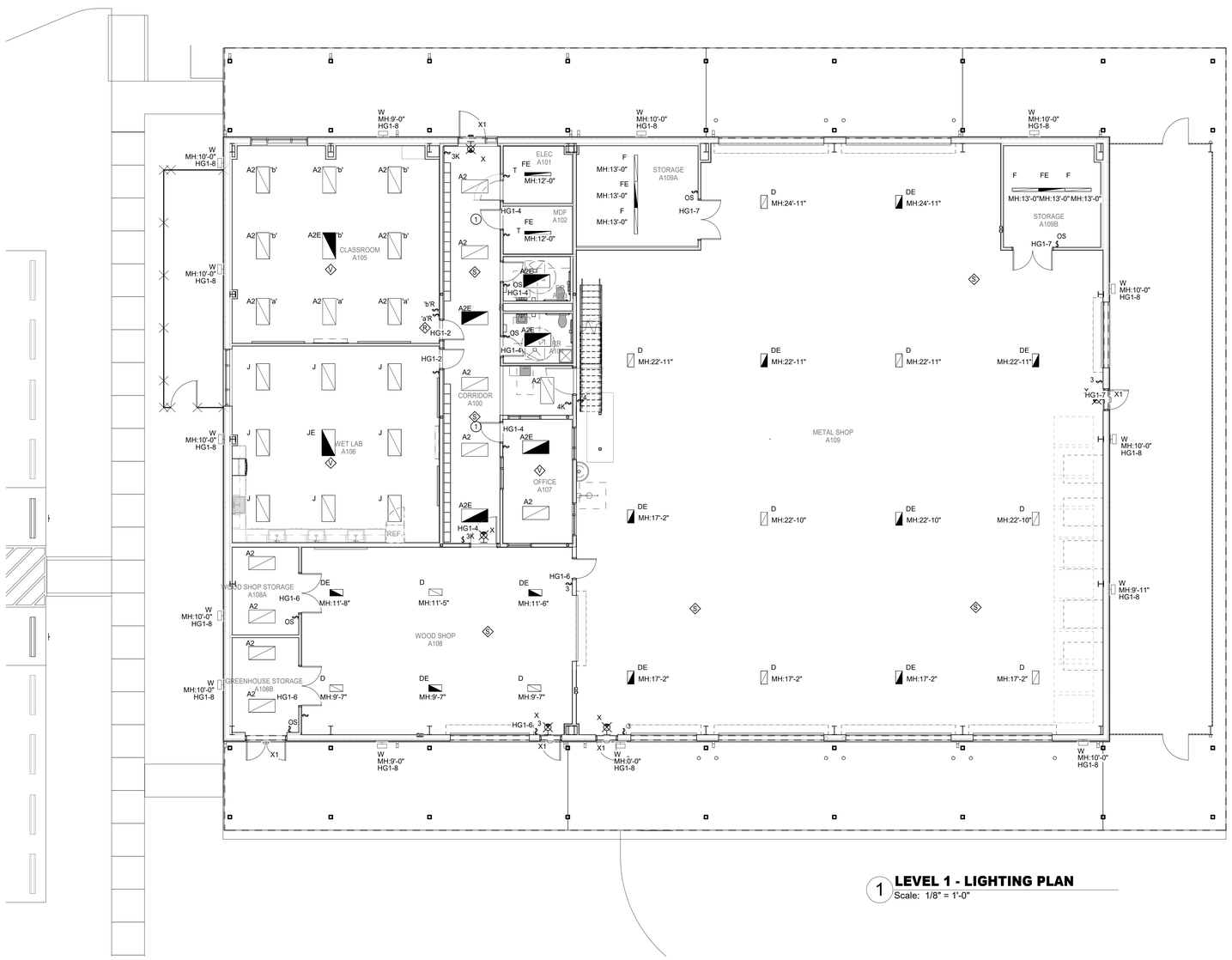
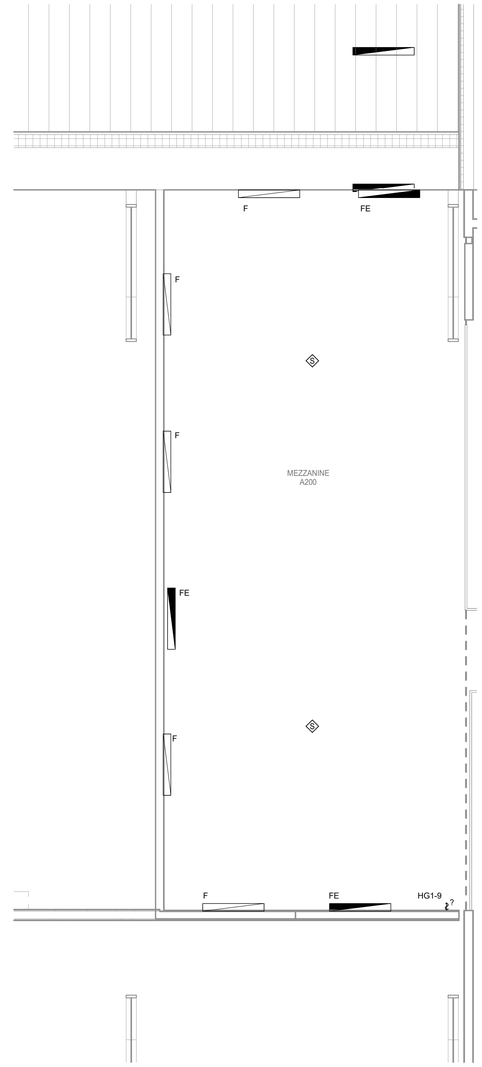
ELECTRICAL KEYED NOTES

1	LIGHTING CONTROLS IN THE AREA TO BE FULL AUTOMATIC ON PER IECC C405.2.1.1 EXCEPTION.



1 **LEVEL 1 - LIGHTING PLAN**
Scale: 1/8" = 1'-0"



2 **MEZZANINE - LIGHTING PLAN**
Scale: 1/4" = 1'-0"

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
REGISTERED
01/17/2024

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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

LEVEL 1 - LIGHTING PLAN
E201

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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MECHANICAL EQUIPMENT SCHEDULE

TAG	CIRCUIT	WIRE	BREAKER	DISCONNECT	REMARKS
ACCU-G1	LG3-54,56	#8	2P/45A	2P/60A/NF/WP	A
ACCU-G2	LG3-59,61	#8	2P/45A	2P/60A/NF/WP	A
ACCU-G3	LG3-50,52	#8	2P/50A	2P/60A/NF/WP	A
ACCU-G4	LG3-55,57	#10	2P/25A	2P/30A/NF/WP	A
EF-G1	LG3-44,46,48	#12	3P/20A	3P/20A/	B,C
EF-G2	LG3-81	#12	1P/20A	1P/20A/	B,C
EF-G3	LG3-76	#12	1P/20A	1P/20A/	B,C
EF-G4	LG3-79	#12	1P/20A	1P/20A/	B,C
EF-G5	LG3-72	#12	1P/20A	1P/20A/	B,C
EF-G6	LG3-77	#12	1P/20A	1P/20A/	B,C
EF-G7	LG3-42	#12	1P/0A	1P/20A/	B,C
EF-G8	LG3-10	#12	1P/0A	1P/20A/	B,C
EF-G9	LG3-10	#12	1P/0A	1P/20A/	B,C
EF-G10	LG5-20	#12	1P/20A	1P/20A/	B,C
EF-G11	LG3-49	#12	1P/0A	1P/20A/	B,C
EF-G12	LG3-31,33,35	#12	3P/20A	3P/20A/	B,C
EUH-G1	LG3-51,53	#12	2P/20A	2P/30A/NF	E
FCU-G1	LG3-71,73	#3	2P/100A	2P/100A/NF/WP	B
FCU-G2	LG3-66,68	#3	2P/100A	2P/100A/NF/WP	B
FCU-G3	LG3-62,64	#3	2P/100A	2P/100A/NF/WP	B
FCU-G4	LG3-58,60	#6	2P/45A	2P/60A/NF/WP	B
GUH-1	LG3-67	#12	1P/20A	1P/30A/NF	E
GUH-2	LG4-49	#12	1P/20A	1P/30A/NF	E
GUH-3	LG3-74	#12	1P/20A	1P/30A/NF	E
GUH-4	LG3-69	#12	1P/20A	1P/30A/NF	E
HVLS-1	LG3-43,45	#12	2P/	2P/20A/	A
HVLS-2	LG3-34,36	#12	2P/	2P/20A/	A
MS-G1	LG3-63,65	#10	2P/20A	2P/	D
MSCU-G1	LG3-63,65	#10	2P/30A	2P/30A/NF/WP	D
RF-1	LG4-48	#12	1P/20A	1P/20A/	A,C
RF-2	LG4-51	#12	1P/20A	1P/20A/	A,C
RF-3	LG5-19	#12	1P/20A	1P/20A/	A,C

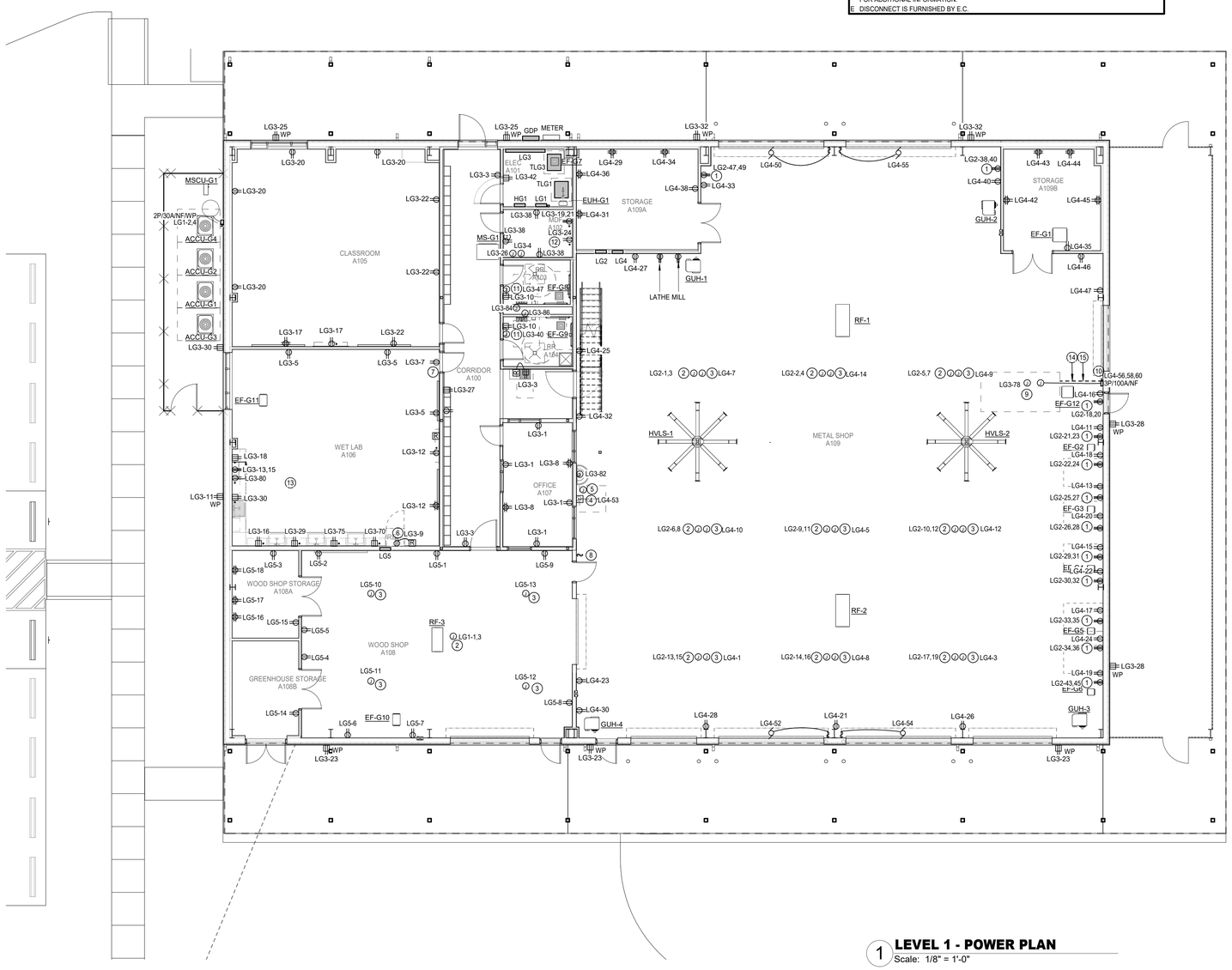
A DISCONNECT IS FURNISHED WITH UNIT.
B GFCI RECEPTACLE IS FURNISHED WITH UNIT AND POWERED AS SHOWN ON PLAN.
C DISCONNECT TO BE WEATHERPROOF MOTOR-RATED SWITCH.
D OUTDOOR UNIT OF MINI-SPLIT SYSTEM TO POWER INDOOR UNIT. REFER TO INDOOR FLOOR PLANS FOR ADDITIONAL INFORMATION.
E DISCONNECT IS FURNISHED BY E.C.

ELECTRICAL KEYED NOTES

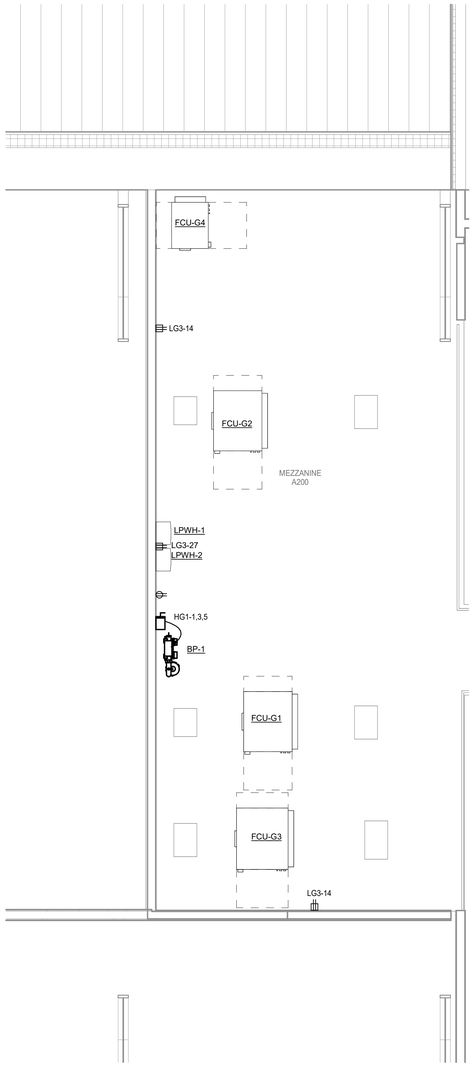
1. PROVIDE 50A/2P RECEPTACLE FOR WELDER POWER. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ELECTRICAL ROUGH-IN.
2. PROVIDE 50A/2P SO CORD RECEPTACLE. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ELECTRICAL ROUGH-IN.
3. PROVIDE 120V 20A SO CORD RECEPTACLE. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ELECTRICAL ROUGH-IN.
4. PROVIDE WHEELLOCK# RSSR-2475C-NW EMERGENCY SHOWER WATER FLOW INDICATOR LIGHT. COORDINATE CONNECTION TO FLOW SWITCH WITH DIVISION 22. COORDINATE LIGHT LOCATION WITH ARCHITECT PRIOR TO ELECTRICAL ROUGH-IN.
5. PROVIDE JUNCTION BOX HIGH ON WALL FOR CONNECTION OF EMERGENCY SHOWER WATER FLOW DETECTION EQUIPMENT. PROVIDE LOW VOLTAGE TRANSFORMER AS REQUIRED. COORDINATE INSTALLATION WITH DIVISION 22. COORDINATE WITH OWNER FOR INTERLOCKING WITH SECURITY SYSTEM.
6. PROVIDE POWER FOR REFRIGERATOR. PROVIDE REMOTE GFCI RESET BUTTON.
7. PROVIDE POWER FOR FLOWER COOLER. PROVIDE REMOTE GFCI RESET BUTTON.
8. CONTROLS FOR HVLS FANS COORDINATE WITH MECHANICAL.
9. PROVIDE POWER FOR CNC PLASMA TABLE. COORDINATE EXACT POWER REQUIREMENTS WITH MANUFACTURER AND LOCATION WITH OWNER PRIOR TO ELECTRICAL ROUGH-IN.
10. PROVIDE POWER FOR PLASMA CUTTER THROUGH DISCONNECT SHOWN. COORDINATE EXACT POWER REQUIREMENTS WITH MANUFACTURE AND FINAL LOCATION WITH OWNER PRIOR TO ELECTRICAL ROUGH-IN.
11. FIELD VERIFY EXACT LOCATION OF ELECTRIC HAND DRYER WITH ARCHITECT PRIOR TO ROUGH-IN. MAKE FINAL CONNECTIONS AS REQUIRED.
12. COORDINATE FACP,ACP EXACT LOCATIONS WITH DIVISION TECHNOLOGY.
13. COORDINATE EXACT MOUNTING LOCATION WITH MANUFACTURERS SPECIFICATION.
14. PROVIDE ISOLATED GROUN PER MANUFACTURER'S RECOMMENDATION FOR PLASMA CUTTER. E.C. SHALL ENSURE CONNECTION FOR FULLY FUNCTIONING SYSTEM.
15. PROVIDE (1) 3/4" DIAMETER 12' LONG COPPER CLAD GROUNDE ROD FOR ISOLATED GROUNDING SYSTEM WITHIN 10'-0" OF CNC MACHING TABLE AS REQUIRED BY MANUFACTURER.

POWER GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3. CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4. ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6. ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7. CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.



1 **LEVEL 1 - POWER PLAN**
Scale: 1/8" = 1'-0"



2 **MEZZANINE - POWER PLAN**
Scale: 1/4" = 1'-0"

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
REGISTERED
ARCHITECT
01/17/2024

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

LEVEL 1 - POWER PLAN
E201.1

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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TRANSFORMER SCHEDULE

PRIMARY (480V 3PH 3W)			SECONDARY (208V 3PH 4W)	
KVA	WIRE & CONDUIT	CIRCUIT BREAKER	WIRE & CONDUIT	CIRCUIT BREAKER
150KVA	3#4/0, 2"C, 1#6G	3P-225A	(2) SETS: 4#250KCMIL, 2-1/2"C, 1#1/0G	3P-500A
150KVA	3#4/0, 2"C, 1#6G	3P-225A	(2) SETS: 4#250KCMIL, 2-1/2"C, 1#1/0G	3P-500A

UTILITY CONTACT INFORMATION

NAME: CLAYTON TUBBS

PHONE: 817-470-7798

EMAIL: CLAYTON.TUBBS@ONCOR.COM

INITIAL UTILITY ELECTRICAL SERVICE COORDINATION HAS BEEN COMPLETED BY SALAS O'BRIEN. DURING BID, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL THE REQUIRED LABOR & MATERIALS THAT ARE NOT INCLUDED IN THE ELECTRICAL UTILITY COMPANY'S SCOPE OF WORK. FINAL UTILITY ELECTRICAL COORDINATION WILL BE FULLY THE CONTRACTOR'S RESPONSIBILITY AND ANY UNCOORDINATED WORK WILL BE AT NO EXPENSE TO OWNER.

FEEDER SCHEDULE

AMPERAGE	# SETS	CONDUCTOR (QTY.)/SIZE	GROUND (QTY.)/SIZE	CONDUIT
150A	1	(4) #1/0	#6	2"C
175A	1	(4) #2/0	#6	2"C
225A	1	(4) #4/0	#4	2-1/2"C
250A	1	(4) #250KCMIL	#4	3"C
400A	2	(4) #3/0	#3	2-1/2"C
800A	3	(4) #300KCMIL	#1/0	3"C
SPD	1	(5)#3	N/A	1-1/2"C

1 CONDUIT QUANTITIES BASED ON 3-PHASE, 4-WIRE SYSTEM; FOR EQUIPMENT THAT DOES NOT REQUIRE A NEUTRAL OR IS SINGLE PHASE, DEDUCT
2 CONDUCTOR SIZES BASED ON NEC TABLE 310.16 - COPPER 75°.
3 GROUND SIZES BASED ON NEC TABLE 250.122 - COPPER.
4 CONDUIT FILL BASED ON NEC ANNEX C - THW CONDUCTOR INSULATION.

CONDUCTOR CONVERSION CHART - 75°C

FUSE	COPPER (THHN)	ALUMINUM (XHHW-2 AL) BRANCH FEEDERS	SERVICE ENT.
100A	4#3, 1#8GND, 1-1/4"C	4#1, 1#6GND, 1-1/2"C	#8 GND (CU)
125A	4#1, 1#6GND, 1-1/2"C	4#2/0, 1#4GND, 2"C	#6 GND (CU)
150A	4#1/0, 1#6GND, 2"C	4#3/0, 1#4GND, 2"C	#6 GND (CU)
175A	4#2/0, 1#6GND, 2"C	4#4/0, 1#4GND, 2-1/2"C	#6 GND (CU)
200A	4#3/0, 1#6GND, 2"C	4#250KCMIL, 1#4GND, 3"C	#6 GND (CU)
225A	4#4/0, 1#4GND, 2-1/2"C	4#300 KCMIL, 1#2GND, 3"C	#4 GND (CU)
400A	(2 SETS.) 4#3/0,1#GND, 2"C	(2 SETS.) 4#250KCMIL, 1#1GND, 3"C	#2 GND (CU)
500A	(2 SETS.) 4#250KCMIL, 1#2GND, 3"C	(2 SETS.) 4#350KCMIL 1#1/0GND, 3"C	#1/0 GND (CU))
600A	(2 SETS.) 4#350KCMIL, 1#1GND, 3"C	(2 SETS.) 4#500KCMIL, 1#2/0GND, 4"C	#1/0 GND (CU)
800A	(3 SETS.) 4#300KCMIL, 1#1/0GND, 3"C	(3 SETS.) 4#400KCMIL, 1#3/0GND, 4"C	#2/0 GND (CU)
1200A	(4 SETS.) 4#350KCMIL, 1#3/0GND, 4"C	(4 SETS.) 4#500KCMIL, 1#250KCMIL GND, 4"C	#2/0 GND (CU)
2000A	(6 SETS.) 4#400KCMIL, 1#250KCMIL GND, 4"C	(7 SETS.) 4#500KCMIL, 1#400KCMIL GND, 4"C	#3/0 GND (CU)
2500A	(7 SETS.) 4#500KCMIL, 1#350KCMIL GND, 4"C	(8 SETS.) 4#600KCMIL, 1#600KCMIL GND, 4"C	#3/0 GND (CU)
3000A	(8 SETS.) 4#500KCMIL, 1#500KCMIL GND, 4"C	(9 SETS.) 4#600KCMIL, 1#600KCMIL GND, 4"C	#3/0 GND (CU)

1. ALUMINUM CONDUCTOR TO HAVE COMPRESSSION LUGS.
2. THIS CHART IS A REPRESENTATION AND NOT INDICATIVE OF ALL APPROVED CONVERSION POSSIBILITIES.
3. CONTRACTOR SHALL FURNISH AND INSTALL ALL FEEDERS IN ACCORDANCE WITH NEC AND ALUMINUM WIRING MANUFACTURERS REQUIREMENTS.
4. ALL GROUND CONDUCTORS FOR SERVICE ENTRANCE TO BE COPPER.

ELECTRICAL KEYED NOTES

1	REFER TO SPECIFICATIONS FOR THE REQUIRED SETTING AND PROTECTIONS OF THE PROTECTIVE DEVICES. GROUND FAULT PROTECTION SHALL BE PROVIDED FOR 1,000 AMP OVERCURRENT PROTECTIVE DEVICE AND MORE ON 277/480V SYSTEM.
2	TRANSFORMER SECONDARY RATED AT 240

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A

DATE: 01/17/2024

ELECTRICAL ONE LINE DIAGRAM

E241

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062

Registration: F-4111
Project No: 2023-02832

1/12/2024 1:10:33 PM

SYMBOL SCHEDULE

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
LIGHTING (LETTER DENOTES TYPE - SEE LIGHT FIXTURE SCHEDULE)	
	LIGHT FIXTURE
	FIXTURE ON EMERGENCY CIRCUIT
	DOWNLIGHT FIXTURE
	LIGHT FIXTURE - WALL MOUNTED
	DOWNLIGHT FIXTURE ON EMERGENCY CIRCUIT
	LIGHT FIXTURE - WALL MOUNTED ON EMERGENCY CIRCUIT
	EXIT LIGHT-CEILING MTD WITH DIRECTIONAL ARROWS AS REQUIRED
	EXIT LIGHT-WALL MTD WITH DIRECTIONAL ARROWS AS REQUIRED
SWITCHES	
$	LINE VOLTAGE SINGLE POLE SWITCH
$2	LINE VOLTAGE 2-POLE SWITCH
$3	LINE VOLTAGE 3-WAY SWITCH
$4	LINE VOLTAGE 4-WAY SWITCH
$K	LINE VOLTAGE KEYED SWITCH
$3K	LINE VOLTAGE KEYED 3-WAY SWITCH
$D	LINE VOLTAGE WALL DIMMER SWITCH, SIZE AND TYPE AS REQUIRED
$VD	LINE VOLTAGE WALL MOUNTED DIMMER SWITCH WITH VACANCY SENSOR. MANUAL ON / AUTO OFF.
$V	LINE VOLTAGE WALL MOUNTED SWITCH WITH VACANCY SENSOR. MANUAL ON / AUTO OFF.
$OC	LINE VOLTAGE WALL MOUNTED SWITCH WITH VACANCY SENSOR. AUTO ON / AUTO OFF.
$P	LINE VOLTAGE SWITCH WITH PILOT LIGHT
$MC	MOMENTARY CONTACT SWITCH
[B]	PUSH BUTTON
$TH	6-HOUR TIMER SWITCH WITH HOLD
$T	6-HOUR TIMER SWITCH WITH NO HOLD
	20 AMP GENERATOR TRANSFER DEVICE
LOW VOLTAGE LIGHTING CONTROLS	
$R	LOW VOLTAGE LIGHTING CONTROLLER WALL SWITCH
$B	BMCS TIMER LOCAL OVERRIDE SWITCH
	CEILING MOUNTED PHOTO SENSOR
	CEILING MOUNTED VACANCY SENSOR, MANUAL ON / AUTO OFF
	CEILING MOUNTED OCCUPANCY SENSOR, AUTO ON / AUTO OFF
	LIGHTING CONTROLLER WITH GTD. ZONES AS REQUIRED.
RECEPTACLES AND OUTLETS	
	SIMPLEX RECEPTACLE
	DUPLEX RECEPTACLE
	POWER POLE
	125/250 VOLT, 1 PHASE, 3-WIRE, 20 AMPS UNLESS NOTED OTHERWISE
	DOUBLE DUPLEX IN 2-GANG BOX WITH SINGLE COVER PLATE
	DOUBLE DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE IN 2-GANG BOX WITH SINGLE COVER PLATE
	DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
	FLUSH FLOOR DUPLEX RECEPTACLE OUTLET
	FLUSH FLOOR DOUBLE DUPLEX RECEPTACLE OUTLET
	CONCEALED SERVICE MULTI-ACCESS FLOOR BOX WITH WIRING DEVICES AS INDICATED ON DRAWINGS. SIZE TO MATCH DEVICE QUANTITIES.
[R]	REMOTE BLANK FACE GFCI DEVICE.
U	PROVIDE DUPLEX RECEPTACLE WITH (2) USB CHARGING PORTS.
CR	E.C. TO PROVIDE ROUGH-IN FOR CARD READER JUNCTION BOX. REFER TO TECHNOLOGY SHEETS FOR ADDITIONAL INFORMATION.
SR	SWITCH CONTROLLED RECEPTACLE WITH THE TOP RECEPTACLE LOAD CONTROLLED VIA PLUG LOAD SWITCH MEETING 2021 IECC 405.11 REQUIREMENTS. SPLIT LOAD-CONTROLLED RECEPTACLES SHALL BE PERMANENTLY FACTORY MARKED AS CONTROLLED.

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
MISCELLANEOUS EQUIPMENT	
FACP	FIRE ALARM CONTROL PANEL
ANNC	FIRE ALARM REMOTE ANNUCIATOR
T	TRANSFORMER FOR DOOR BELL/BUZZER
	CHIME/BUZZER
MOTOR CONTROLLERS AND EQUIPMENT	
	MOTOR, MAKE FINAL MOTOR CONNECTION
	3-PHASE MOTOR, MAKE FINAL MOTOR CONNECTION
J	DISCONNECT SWITCH AS REQUIRED
J	COMBINATION MOTOR STARTER/DISCONNECT SWITCH AS REQUIRED
	MOTOR STARTER
M	MANUAL MOTOR SWITCH AS REQUIRED
	PREWIRED DEVICE, MAKE ELECTRICAL FINAL CONNECTIONS
VFD	VARIABLE FREQUENCY DRIVE MOTOR CONTROLLER FURNISHED BY DIVISION 23 AND INSTALLED BY DIVISION 26
ELECTRICAL EQUIPMENT	
	ELECTRICAL DISTRIBUTION OR PANELBOARD
	DRY TYPE TRANSFORMER
CIRCUITING	
	CONDUIT
	CONDUIT BELOW FLOOR, SLAB, OR GRADE
SUBSCRIPTS AND ABBREVIATIONS	
WP	INDICATES WEATHERPROOF
WG	INDICATES WIREGUARD
H	INDICATES HORIZONTAL
TL	INDICATES TWIST LOCK
NL	LIGHT FIXTURE ON NIGHT LIGHT CIRCUIT
ERMS	ENERGY REDUCTION MAINTENANCE SWITCH
1-L	REFER TO ONE-LINE DIAGRAM
	INDICATES WALL MOUNTED DEVICE
•	NEXT TO ANY SYMBOL INDICATES FINAL ROUGH-IN FIELD COORDINATION BY CONTRACTOR WITH ARCHITECTURAL MILLWORK DRAWINGS AND OTHER TRADES

GENERAL NOTES:

-ALL EXTERIOR BUILDING ELECTRICAL EQUIPMENT TO BE WEATHERPROOF NEMA-3R MINIMUM.

DAYLIGHT ZONE CONTROLS

ENTIRE BUILDING IS EXEMPT FROM DAYLIGHT ZONE CONTROLS IN ACCORDANCE WITH 2018 IECC 405.2.3 EXCEPTION #4.

TOTAL BUILDING SQ FOOTAGE (TBFA): 256000

BUILDING LIGHTING ALLOWANCE PER IECC 2018 405.3.2(1) (LPA_{comb}): 256000

TOTAL CONNECTED LIGHTING POWER: 22350

DAYLIGHT ZONES REQUIRED TOTAL SQ FOOTAGE (UDZFA): 1

ADJUSTED LIGHTING POWER ALLOWANCE (LPA_{adj}): 256000

22350 < 256000

DAYLIGHT ZONES WITHIN BUILDING ARE EXEMPT.

LIGHTING FIXTURE SCHEDULE

Type Mark	CATALOG NUMBER MANUFACTURER	CATALOG NUMBER MODEL	MOUNTING	LAMP TYPE	CCT	CRI	VOLTAGE	LOAD	REMARKS
A2	LITHONIA	2BLT2 48L ADP GZ1 LP840	RECESSED	5785L LED	4000 K	80	277 V	43 W	2X4 RECESSED TROFFER, VOLUMETRIC LIGHT OUTPUT WITH CENTER FROSTED, PRSIMTAIC SPINE
A2E	LITHONIA	2BLT2 48L ADP GZ1 LP840 DGA22	RECESSED	5785L LED	4000 K	80	277 V	43 W	SAME AS A2 WITH BATTERY BACK UP.
D	LITHONIA	JCBL-24000LM-DALR-VOLTAGE-DRIVE-40K-80CRI-PM	PENDANT	21,000L LED	4000 K	80	277 V	160 W	ROUND LED HIGHBAY
DE	LITHONIA	JCBL-24000LM-DALR-VOLTAGE-DRIVE-40K-80CRI-PM	PENDANT	21,000L LED	4000 K	80	277 V	160 W	ROUND LED HIGHBAY
F	LITHONIA	CLX-L48-5000LM-SEF-FDL-VOLTAGE-40K-80CRI	SURFACE / PENDANT	6000L LED	4000 K	80	277 V	50 W	4' INDUSTRIAL STRIP, SURFACE OR CHAIN HUNG
FE	LITHONIA	CLX-L48-5000LM-SEF-FDL-VOLTAGE-40K-80CRI	SURFACE / PENDANT	6000L LED	4000 K	80	277 V	50 W	SAME AS F WITH BATTERY BACK UP.
J	LITHONIA	ENVX 2X4 HRG 4800LM 80CRI 40K MIN10 EZT MVOLT	RECESSED	3475L LED	4000 K	80	277 V	30 W	2'X4' LED CENTER BASKET TROFFER
JE	LITHONIA	ENVX 2X4 HRG 4800LM 80CRI 40K MIN10 EZT MVOLT	RECESSED	3475L LED	4000 K	80	277 V	30 W	SAME AS J WITH BATTERY BACK UP
W	LITHONIA	WDGE2 P2 40K 80CRI VW MVOLT E10WH [FINISH]	WALL	3747L LED	4000 K	80	277 V	15 W	ARHICTECTURAL, FULL CUT OFF WALL PACK, WISINGLE-PIECE DIE CAST ASUMINUM HOUSING
X	DUAL LITE	LX-U-R-W-E-1	WALL	405L LED	4000 K	80	277 V	5 W	UNIVERSAL LED EXIT SIGN MOUNTED WITH WHITE HOUSING, RED LETTERING AND EMERGENCY BATTERY BACK-UP.
X1	DUAL LITE	PG-(FINISH)	WALL	405L LED	4000 K	80	277 V	3 W	WALL MOUNTED LED LIGHT FIXTURE WITH 90-MINUTE EMERGENCY BATTERY PACK.

1 FIXTURES SHOWN ON THE FLOORPLAN HAVING A DESIGNATION OF "E" FOLLOWING THE BASE DESIGNATION (I.E. - A FIXTURE TYPE "AE, C2E, FE") AND/OR A HALF SHADED REGION SHALL BE THE BASE FIXTURE TYPE EQUIPPED WITH THE APPROPRIATE BATTERY BACK-UP. BATTERY BACK-UPS SHALL BE INTEGRAL TO THE FIXTURE AND REMOTE SHALL BE SELECTED ONLY IN INSTANCES WHERE IT IS SPECIFIED OR WHEN IT IS THE ONLY AVAILABLE EMERGENCY OPTION. THE LOCATION OF REMOTE BATTERY BACKUPS SHALL BE SELECTED BY THE OWNER/ARCHITECT PRIOR TO INSTALLATION BY THE CONTRACTOR.

2 ALL REQUIRED TEST SWITCHES FOR THE BATTERY BACK-UPS SHALL BE INTEGRAL TO THE FIXTURE.

3 REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT INDICATED IN THE LIGHTING FIXTURE SCHEDULE. WHERE THERE IS AN INCONSISTENCY BETWEEN THE LIGHTING FIXTURE SCHEDULE AND THE SPECIFICATIONS, THE GREATER QUANTITY OR HIGHER QUALITY OF WORK SHALL BE INCLUDED IN THE PROPOSAL.

4 UNLESS OTHERWISE INDICATED ON THE SCHEDULE ABOVE, THE ARCHITECT/OWNER SHALL SELECT ALL FINISHES, COLORS, AND TRIMS.

5 ALL LED FIXTURE BOARDS AND DRIVERS SHALL BE OF THE LATEST GENERATION, BASED UPON THE INDIVIDUAL MANUFACTURER'S STATED LITERATURE. IF A "GEN 5" IS AVAILABLE, "GEN 4" FIXTURES ARE NOT ACCEPTABLE.

6 EXIT SIGNS AND EMERGENCY BATTERY BACK-UPS SHALL BE CONNECTED TO THE NEAREST LIGHTING CIRCUIT AHEAD OF ALL SWITCHING AS REQUIRED TO MAINTAIN THE BATTERIES AT FULL CHARGE. THE CONTRACTOR SHALL PROVIDE ALL ADDITIONAL WIRING AS REQUIRED.

7 LIGHTING FIXTURE MANUFACTURERS OTHER THAN THOSE LISTED IN THE LIGHTING FIXTURE SCHEDULE AND DESIRING TO BID THIS PROJECT SHALL REQUEST PRIOR APPROVAL OF THE FIXTURES THEY WISH TO SUBSTITUTE. PRIOR APPROVAL REQUEST SHALL INCLUDE FIXTURE CUT SHEETS.

8 FOR PRIOR APPROVALS AND SUBMITTALS THAT DEVIATE FROM NOMINAL WATTAGE AND/OR DELIVERED LUMENS, IT SHALL BE UP THE ENGINEER'S SOLE DISCRETION TO APPROVE OR DECLINE THESE FIXTURES BASED ON ANY AND ALL FACTORS INCLUDING BUT NOT LIMITED TO INTENDED LIGHTING LEVELS FOR EACH SPACE AND IMPACT ON THE OVERALL ELECTRICAL POWER SYSTEM.

9 ALL LIGHTING SPECIFIED SHALL BE 4000K INTERIOR UNLESS NOTED OTHERWISE.

10 THE CONTRACTOR SHALL PROVIDE ALL HARDWARE AND ACCESSORIES AS REQUIRED TO INSTALL FIXTURES IN LOCATIONS AS ILLUSTRATED WITH MOUNTING METHODS DESIRED.

11 WHEN A UNIVERSAL (120-277V) VOLTAGE OPTION IS AVAILABLE, IT SHALL BE PROVIDED. OTHERWISE PROVIDE AS INDICATED IN SCHEDULE.

12 FOR ALL SUSPENDED FIXTURES, COORDINATE THE EXACT MOUNTING ELEVATION ABOVE FINISHED FLOOR WITH ARCHITECT PRIOR TO INSTALLATION. PROVIDE SUSPENSION HARDWARE IN LENGTHS AS REQUIRED.

13 FIXTURES SHOWN ON THE FLOORPLAN HAVING A DESIGNATION OF "X" FOLLOWING THE BASE DESIGNATION (I.E. - A FIXTURE TYPE "AX, C2X, FX") SHALL BE THE BASE FIXTURE TYPE CONNECTED TO EMERGENCY LIGHTING INVERTER SYSTEM. REFER TO DETAIL 3 SHEET 10.42 FOR ADDITIONAL INFORMATION.

14 FIXTURES SHOWN ON THE FLOORPLAN HAVING A DESIGNATION OF "A" FOLLOWING THE BASE DESIGNATION (I.E. - A FIXTURE T YPE "A1A, C2A, FA") SHALL BE THE BASE FIXTURE TYPE EXCEPT SUITABLE FOR GYPSUM CEILING INSTALLATION AND EQUIPPED WITH THE APPROPRIATE BATTERY BACK-UP. BATTERY BACK-UPS SHALL BE INTEGRAL TO THE FIXTURE AND REMOTE SHALL BE SELECTED ONLY IN INSTANCES WHERE IT IS SPECIFIED OR WHEN IT IS THE ONLY AVAILABLE EMERGENCY OPTION. THE LOCATION OF REMOTE BATTERY BACKUPS SHALL BE SELECTED BY THE OWNER/ARCHITECT PRIOR TO INSTALLATION BY THE CONTRACTOR.

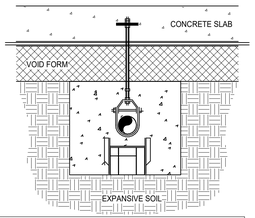
15 ALL EXTERIOR LIGHT FIXTURES RECESSED IN A CANOPY OR SURFACED MOUNTED DIRECTLY TO THE BOTTOM OF A CANOPY SHALL BE UL OR ETL LISTED AS WET LOCATION. WHERE SPECIFICALLY STATED IN THE LIGHTING FIXTURE SCHEDULE AS "DAMP LOCATION" FIXTURES AND PROTECTED BY THE BUILDING STRUCTURE FROM FALLING OR WIND DRIVEN RAIN OR SNOW, THEY MAY BE EITHER DAMP OR WET LOCATION LISTED.

16 ALL EXTERIOR LIGHT FIXTURES NOT RECESSED IN A CANOPY OR SURFACED MOUNTED DIRECTLY TO THE BOTTOM OF A CANOPY SHALL BE UL OR ETL LISTED AS WET FROM ABOVE LOCATION.

CONTACTOR SCHEDULE

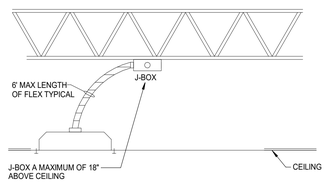
CONTACTOR ID	LOCATION	LOAD DESCRIPTION	CONTACTOR RATINGS VOLTS	AMPS	POLES	CIRCUITS	CONTROL CIRCUIT VOLTS	CIRCUIT	CONTROL TYPE
1	ELEC A101	LIGHTING	277	30	4	HG1-8	120	LG3-2	BUILDING MANAGEMENT

THIS IS FOR REFERENCE ONLY. GC MUST COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER PRIOR TO BID. REFER TO VOID SYSTEM PERFORMANCE SPECIFICATION FOR ADDITIONAL INFORMATION.

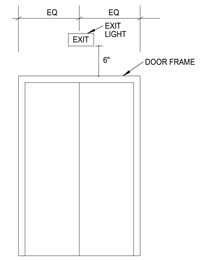


NOTES:
1. PROVIDE PIPE SUSPENSION SUPPORT FOR ALL UTILITY PIPING, SAFETY AND SECURITY CONDUIT, COMMUNICATIONS CONDUIT, AND ELECTRICAL CONDUIT INSTALLED BELOW BUILDING SLAB WITH VOID FORMS. COORDINATE EXACT LOCATION, SOIL CONDITIONS, AND ALL STRUCTURAL REQUIREMENTS WITH STRUCTURAL ENGINEER.
2. PROVIDE SACRIFICIAL PIPE VOID. SUPERVOID SYSTEMS, LLC OR PLUMBING VOID PIPE ISOLATION SYSTEM.
3. ALL PIPE HANGER,ROD, AND ALL PIPING SUPPORT HARDWARE SHALL BE STAINLESS STEEL.

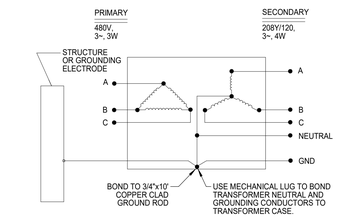
4 VOID FORM DETAIL
Scale: NOT TO SCALE



3 TYPICAL LIGHTING FIXTURE WIRING DETAIL
Scale: NOT TO SCALE



2 TYPICAL EXIT SIGN LOCATION
Scale: NOT TO SCALE



1 GROUNDING FOR TRANSFORMERS
Scale: NOT TO SCALE

CONTRACTOR NOTES:

IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO NOTIFY THE ARCHITECT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF WORK.

CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF THE WORK. THE BASE PROPOSAL SHALL INCLUDE MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE AND LOCAL CODES WHETHER INDICATED OR NOT ON CONTRACT DOCUMENTS. THE SUBMISSIONS OF A PROPOSAL WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORSEEN HAD AN EXAMINATION AND CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE ACCEPTED.

INITIAL UTILITY ELECTRICAL SERVICE COORDINATION HAS BEEN COMPLETED BY SALAS O'BRIEN. DURING BID, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL THE REQUIRED LABOR & MATERIALS THAT ARE NOT INCLUDED IN THE ELECTRICAL UTILITY COMPANY'S SCOPE OF WORK. FINAL UTILITY ELECTRICAL COORDINATION WILL BE FULLY THE CONTRACTOR'S RESPONSIBILITY AND ANY UNCOORDINATED WORK WILL BE AT NO EXPENSE TO OWNER.

FIRE DETECTION AND FIRE ALARM NOTE:

A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL III. IN THE SUB FIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLIGIES (NICET) SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, NFPA 72, LOCAL AND STATE CODE REQUIREMENTS. FURNISH AND INSTALL ALL REQUIRED FIRE ALARM DEVICES, AS REQUIRED BY CODE. VERIFY EXACT REQUIREMENTS IN THE FIELD. COORDINATE ALL LOCATIONS WITH DRAWINGS APPROVED BY AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION. ALL WORK SHALL BE INCLUDED WTIHIN BASE BID.

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
01/17/2024

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

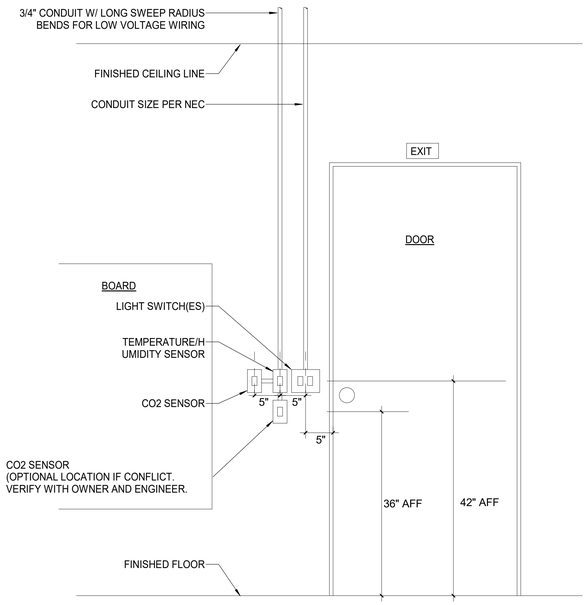
ELECTRICAL SCHEDULES
E241.1

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

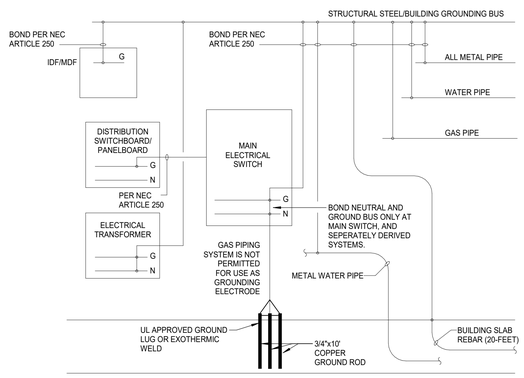
1/12/2024 1:10:41 PM

NOTES:

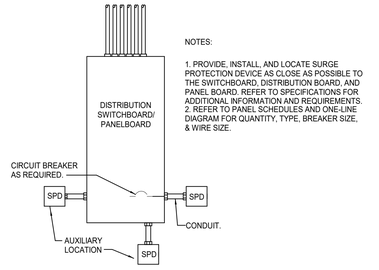
1. ELECTRICAL, MECHANICAL, AND BMCS CONTRACTORS MUST COORDINATE ALL DIVISION 26 REQUIREMENTS.
2. REFER TO MECHANICAL DRAWINGS FOR ALL BMCS SENSOR LOCATIONS.
3. ALL CONDUIT SYSTEMS AND BACK-BOXES SHALL BE PROVIDED BY DIVISION 26.
4. ALL BMCS SENSORS AND ASSOCIATED WIRING SHALL BE PROVIDED BY BMCS CONTRACTOR.



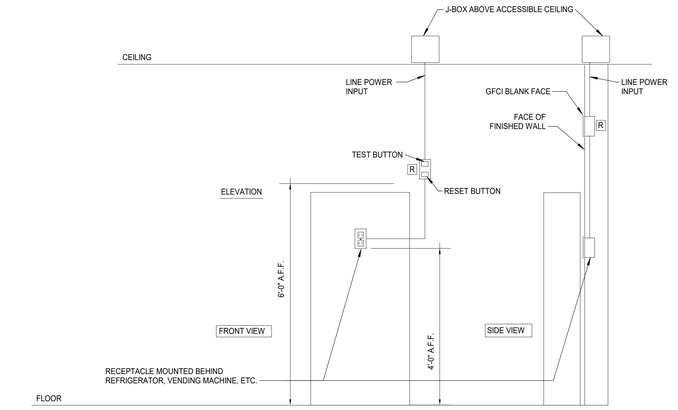
3 TYPICAL DOOR ROUGH-IN DETAIL
Scale: N.T.S.



6 SYSTEM GROUNDING DETAIL
Scale: NOT TO SCALE

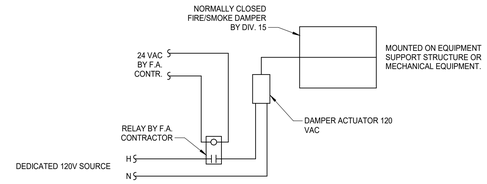


7 SURGE PROTECTION DEVICE DETAIL
Scale: NOT TO SCALE

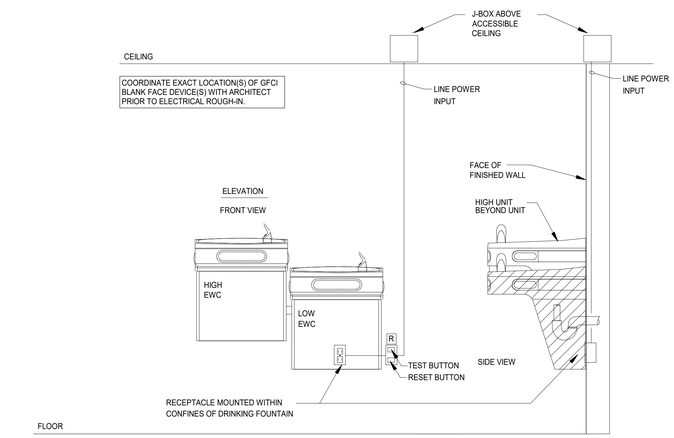


5 GFCI REQUIRED EQUIPMENT DETAIL
Scale: NOT TO SCALE

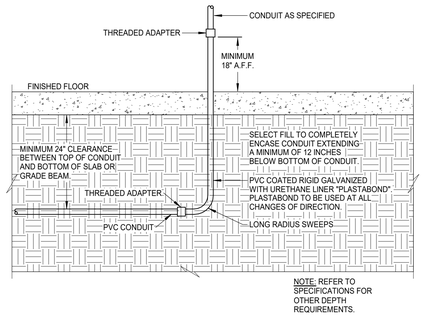
NOTE: PROVIDE A 120V CIRCUIT TO ALL FIRE/SMOKE DAMPERS PROVIDED BY MECHANICAL. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATIONS. ELECTRICAL SHALL WIRE THROUGH RELAYS PROVIDED BY FIRE ALARM CONTRACTOR. CONNECT DAMPER TO NEAREST 120V CIRCUIT NOT TO EXCEED 16A.



4 FIRE / SMOKE DAMPER DETAIL
Scale: 1 1/2" = 1'-0"



2 ELECTRICAL REQUIREMENTS AT WATER FOUNTAIN
Scale: NOT TO SCALE



1 CONDUIT BELOW BUILDING SLAB
Scale: NOT TO SCALE

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
ARCHITECT
01/17/2024

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

ELECTRICAL DETAILS

E241.2

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

1/12/2024 1:10:34 PM

Branch Panel: LG4

Location: METAL SHOP A109 **Supply From:** LG3 **Mounting:** Recessed
Volts: 120/208 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 10,000 **Enclosure:** Type 1 **Mains:** 150A MCB

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Cord Drop METAL SHOP G109	#12	20	1	0.5 / 0.0			1	20	#12	BMCS	2	
	3	Cord Drop METAL SHOP G109	#12	20	1		0.5 / 0.0		1	20	#12	FACP	4	
	5	Cord Drop METAL SHOP G109	#12	20	1			0.5 / 0.0	1	20	#12	Smoke Damper	6	
	7	Cord Drop METAL SHOP G109	#12	20	1	0.5 / 0.5			1	20	#12	Cord Drop METAL SHOP G109	8	
	9	Cord Drop METAL SHOP G109	#12	20	1		0.5 / 0.5		1	20	#12	Cord Drop METAL SHOP G109	10	
	11	Receptacles METAL SHOP G109	#12	20	1			0.2 / 0.5	1	20	#12	Cord Drop METAL SHOP G109	12	
	13	Receptacles METAL SHOP G109	#12	20	1	0.2 / 0.5			1	20	#12	Cord Drop METAL SHOP G109	14	
	15	Receptacles METAL SHOP G109	#12	20	1		0.2 / 0.2		1	20	#12	Receptacles METAL SHOP G109	16	
	17	Receptacles METAL SHOP G109	#12	20	1			0.2 / 0.2	1	20	#12	Receptacles METAL SHOP G109	18	
	19	Receptacles METAL SHOP G109	#12	20	1	0.2 / 0.2			1	20	#12	Receptacles METAL SHOP G109	20	
	21	Receptacles METAL SHOP G109	#12	20	1		0.2 / 0.2		1	20	#12	Receptacles METAL SHOP G109	22	
	23	Receptacles METAL SHOP G109	#12	20	1			0.2 / 0.2	1	20	#12	Receptacles METAL SHOP G109	24	
	25	Receptacles METAL SHOP G109	#12	20	1	0.2 / 0.2			1	20	#12	Receptacles METAL SHOP G109	26	
	27	Receptacles METAL SHOP G109	#12	20	1		0.2 / 0.2		1	20	#12	Receptacles METAL SHOP G109	28	
	29	Receptacles STORAGE G109A	#12	20	1			0.4 / 0.2	1	20	#12	Receptacles METAL SHOP G109	30	
	31	Receptacles STORAGE G109A	#12	20	1	0.4 / 0.2			1	20	#12	Receptacles METAL SHOP G109	32	
	33	Receptacles METAL SHOP G109	#12	20	1		0.2 / 0.4		1	20	#12	Receptacles STORAGE G109A	34	
	35	Receptacles STORAGE G109B	#12	20	1			0.2 / 0.4	1	20	#12	Receptacles STORAGE G109A	36	
	37					0.0 / 0.2			1	20	#12	Receptacles STORAGE G109A	38	
	39	SPD	#6	60	3		0.0 / 0.2		1	20	#12	Receptacles METAL SHOP G109	40	
	41							0.0 / 0.4	1	20	#12	Receptacles STORAGE G109B	42	
	43	Receptacles STORAGE G109B	#12	20	1	0.4 / 0.4			1	20	#12	Receptacles STORAGE G109B	44	
	45	Receptacles STORAGE G109B	#12	20	1		0.4 / 0.2		1	20	#12	Receptacles METAL SHOP G109	46	
	47	Receptacles METAL SHOP G109	#12	20	1			0.2 / 0.6	1	20	#12	RF-1	48	
	49	GUH-2	#12	20	1	0.1 / 0.5			1	20	#10	Overhead Door METAL SHOP G109	50	
	51	RF-2	#12	20	1		0.6 / 0.5		1	20	#10	Overhead Door METAL SHOP G109	52	
	53	Eye Wash/Shower Sensor METAL SHOP G109	#12	20	1			0.0 / 0.5	1	20	#10	Overhead Door METAL SHOP G109	54	
	55	Overhead Door METAL SHOP G109	#10	20	1	0.5 / 5.6			3	20		Plasma Cutter METAL SHOP G109	56	
--	57	SPARE	--	20	1		0.0 / 5.6						58	
--	59	SPARE	--	20	1			0.0 / 5.6					60	
--	61	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	62	--
--	63	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	64	--
--	65	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	66	--
--	67	SPACE	--	--	1	0.0 / 0.0			1	20	--	SPARE	68	--
--	69	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	70	--
--	71	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	72	--
		Total Load:				11.1 kVA	10.5 kVA	10.2 kVA						
		Total Amps:				93 A	88 A	85 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	1.2 kVA	100.00%	1.2 kVA		
Miscellaneous	6.5 kVA	100.00%	6.5 kVA	Total Conn. Load:	31.7 kVA
Other	0.0 kVA	0.00%	0.0 kVA	Total Est. Demand:	31.7 kVA
Power	16.8 kVA	100.00%	16.8 kVA	Total Conn. Current:	88 A
Receptacles	7.2 kVA	100.00%	7.2 kVA	Total Est. Demand Current:	88 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: LG5

Location: WOOD SHOP A108 **Supply From:** LG3 **Mounting:** Recessed
Volts: 120/208 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 10,000 **Enclosure:** Type 1 **Mains:** 150A MCB

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Receptacles WOOD SHOP G108	#12	20	1	0.2 / 0.2			1	20	#12	Receptacles WOOD SHOP G108	2	
	3	Receptacles WOOD SHOP G108	#12	20	1		0.2 / 0.2		1	20	#12	Receptacles WOOD SHOP G108	4	
	5	Receptacles WOOD SHOP G108	#12	20	1			0.2 / 0.2	1	20	#12	Receptacles WOOD SHOP G108	6	
	7	Receptacles WOOD SHOP G108	#12	20	1	0.2 / 0.2			1	20	#12	Receptacles WOOD SHOP G108	8	
	9	Receptacles WOOD SHOP G108	#12	20	1		0.2 / 0.5		1	20	#12	Cord Drop WOOD SHOP G108	10	
	11	Cord Drop WOOD SHOP G108	#12	20	1			0.5 / 0.5	1	20	#12	Cord Drop WOOD SHOP G108	12	
	13	Cord Drop WOOD SHOP G108	#12	20	1	0.5 / 0.2			1	20	#12	Receptacles GREENHOUSE STORAGE G108B	14	
	15	Receptacles SHOP STORAGE G108A	#12	20	1		0.2 / 0.4		1	20	#12	Receptacles SHOP STORAGE G108A	16	
	17	Receptacles SHOP STORAGE G108A	#12	20	1			0.4 / 0.4	1	20	#12	Receptacles SHOP STORAGE G108A	18	
	19	RF-3	#12	20	1	0.2 / 0.2			1	20	#12	EF-G10	20	
--	21	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	22	--
--	23	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	24	--
--	25	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	26	--
--	27	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	28	--
--	29	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	30	--
--	31	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	32	--
--	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	--
--	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	--
--	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	--
--	39	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	40	--
--	41	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	42	--
		Total Load:				1.8 kVA	1.6 kVA	2.1 kVA						
		Total Amps:				15 A	13 A	18 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.4 kVA	100.00%	0.4 kVA		
Miscellaneous	2.0 kVA	100.00%	2.0 kVA	Total Conn. Load:	5.4 kVA
Receptacles	3.1 kVA	100.00%	3.1 kVA	Total Est. Demand:	5.4 kVA
				Total Conn. Current:	15 A
				Total Est. Demand Current:	15 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: LG1

Location: ELEC A101 **Supply From:** TLG1 **Mounting:** Surface
Volts: 240 3Ph Delta **Phases:** 3 **Wires:** 3
A.I.C. Rating: 10,000 **Enclosure:** Type 1 **Mains:** 500A

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Cord Drop WOOD SHOP G108	#8	20	2	3.2 / 0.0			2	20	#8	Air Compressor	2	
	3						3.2 / 0.0						4	
	5							49.6 / 0.0	1	20	--	SPARE	6	--
	7	LG2	1L	20	3	46.4 / 0.0			1	20	--	SPARE	8	--
	9						44.7 / 0.0		1	20	--	SPARE	10	--
--	11	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	12	--
--	13	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	14	--
--	15	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	16	--
--	17	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	18	--
--	19	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	20	--
--	21	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	22	--
--	23	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	24	--
--	25	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	26	--
--	27	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	28	--
--	29	SPARE	--	20	1			0.0 / 0.0	1	--	--	SPACE	30	--
--	31	SPARE	--	20	1	0.0 / 0.0			1	--	--	SPACE	32	--
--	33	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	34	--
--	35	SPARE	--	20	1			0.0 / 0.0	1	--	--	SPACE	36	--
	37					0.0 / 0.0			1	--	--	SPACE	38	--
	39	SPD	#6	60	3		0.0 / 0.0		1	--	--	SPACE	40	--
	41							0.0 / 0.0	1	--	--	SPACE	42	--
		Total Load:				49.6 kVA	47.9 kVA	49.6 kVA						
		Total Amps:				359 A	346 A	359 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Miscellaneous	0.0 kVA	0.00%	0.0 kVA		
Power	12.6 kVA	100.00%	12.6 kVA	Total Conn. Load:	147.0 kVA
Welder	134.4 kVA	65.48%	88.0 kVA	Total Est. Demand:	100.6 kVA
				Total Conn. Current:	354 A
				Total Est. Demand Current:	242 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: LG2

Location: METAL SHOP A109 **Supply From:** LG1 **Mounting:** Surface
Volts: 240 3Ph Delta **Phases:** 3 **Wires:** 3
A.I.C. Rating: 10,000 **Enclosure:** Type 1 **Mains:** 400A MCB

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Welder Cord Drop METAL SHOP G109	#6	50	2	3.2 / 3.2			2	50	#6	Welder Cord Drop METAL SHOP G109	2	
	3						3.2 / 3.2						4	
	5	Welder Cord Drop METAL SHOP G109	#6	50	2			3.2 / 3.2	2	50	#6	Welder Cord Drop METAL SHOP G109	6	
	7					3.2 / 3.2							8	
	9	Welder Cord Drop METAL SHOP G109	#6	50	2		3.2 / 3.2		2	50	#6	Welder Cord Drop METAL SHOP G109	10	
	11							3.2 / 3.2					12	
	13	Welder Cord Drop METAL SHOP G109	#6	50	2	3.2 / 3.2			2	50	#6	Welder Cord Drop METAL SHOP G109	14	
	15						3.2 / 3.2						16	
	17	Welder Cord Drop METAL SHOP G109	#6	50	2			3.2 / 3.2	2	50	#6	Welder METAL SHOP G109	18	
	19					3.2 / 3.2							20	
	21	Welder METAL SHOP G109	#6	50	2		3.2 / 3.2		2	50	#6	Welder METAL SHOP G109	22	
	23							3.2 / 3.2					24	
	25	Welder METAL SHOP G109	#6	50	2	3.2 / 3.2			2	50	#6	Welder METAL SHOP G109	26	
	27						3.2 / 3.2						28	
	29	Welder METAL SHOP G109	#6	50	2			3.2 / 3.2	2	50	#6	Welder METAL SHOP G109	30	
	31					3.2 / 3.2							32	
	33	Welder METAL SHOP G109	#6	50	2		3.2 / 3.2		2	50	#6	Welder METAL SHOP G109	34	
	35							3.2 / 3.2					36	
	37					0.0 / 3.2			2	50	#6	Welder METAL SHOP G109	38	
	39	SPD	1L	60	3		0.0 / 3.2						40	
	41							0.0 / 1.6	2	20	#12	Lathe METAL SHOP G109	42	
	43	Welder METAL SHOP G109	#6	50	2	3.2 / 1.6							44	
	45						3.2 / 0.0		2	50	--	SPARE	46	--
	47	Welder METAL SHOP G109	#6	50	2			3.2 / 0.0					48	
	49					3.2 / 0.0			2	50	--	SPARE	50	--
	51	Mill METAL SHOP G109	#12	20	2		1.6 / 0.0						52	
	53							1.6 / 0.0	1	--	--	SPACE	54	--
		Total Load:				49.6 kVA	46.4 kVA	44.7 kVA						
		Total Amps:				359 A	336 A	323 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	6.2 kVA	100.00%	6.2 kVA		
Welder	134.4 kVA	65.48%	88.0 kVA	Total Conn. Load:	140.6 kVA
				Total Est. Demand:	94.2 kVA
				Total Conn. Current:	338 A
				Total Est. Demand Current:	227 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: LG3

Location: ELEC A101 **Supply From:** TLG3 **Mounting:** Surface
Volts: 120/208 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 10,000 **Enclosure:** Type 1 **Mains:** 500A MCB

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Receptacles OFFICE G107	#12	20	1	0.7 / 0.0			1	20	#12	BMCS	2	
	3	Receptacles CORRIDOR G100	#12	20	1		0.6 / 0.5		1	20	#12	FACP	4	
	5	Receptacles WET LAB G106	#12	20	1			0.5 / 0.0	1	20	#12	SMOKE DAMPER	6	
	7	Receptacles WET LAB G106	#12	20	1	0.3 / 0.7			1	20	#12	Receptacles OFFICE G107	8	
	9	Receptacles WET LAB G106	#12	20	1		0.3 / 0.4		1	20	#12	Receptacles Room G103, G104	10	
	11	Receptacles WET LAB G106	#12	20	1			0.2 / 0.5	1	20	#12	Receptacles WET LAB G106	12	
G	13	Electric Range	#6	50	2	1.6 / 0.4			1	20	#12	Receptacles MEZZANINE G200	14	
	15						1.6 / 0.2		1	20	#12	Receptacles WET LAB G106	16	
	17	Receptacles CLASSROOM G105	#12	20	1			0.5 / 0.2	1	20	#12	Receptacles WET LAB G106	18	
	19	UPS	#12	20	2	1.6 / 0.7			1	20	#12	Receptacles CLASSROOM G105	20	
	21						1.6 / 0.5		1	20	#12	Receptacles CLASSROOM G105	22	
	23	Receptacles CLASSROOM 105	#12	20	1			0.5 / 0.2	1	20	#12	RECEP- MDF	24	
	25	Receptacles CLASSROOM 105	#12	20	1	0.4 / 0.5			1	20	#12	ACP	26	
	27	LPWH	#12	20	1		0.2 / 0.4		1	20	#12	Receptacles EXTERIOR	28	
	29	Receptacles WET LAB G106	#12	20	1			0.2 / 0.4	1	20	#12	Receptacles EXTERIOR	30	
	31					0.2 / 0.4			1	20	#12	Receptacles EXTERIOR	32	
	33	EF-G12		20	3		0.2 / 0.3		2	20	#12	HVLS-2	34	
	35							0.2 / 0.3					36	
	37					0.0 / 0.5			1	20	#12	Receptacles MDF G102	38	
	39	SPD	1L	60	3		0.0 / 0.5		1	20	#12	Hand Dryer RR G104	40	
	41							0.0 / 0.2	1	20	#12	Receptacles ELEC G101	42	
	43	HVLS-1	#12	20	2	0.3 / 0.5			3	20	#12	EF-G1	44	
	45						0.3 / 0.5						46	
	47	Hand Dryer RR G103	#12	20	1			0.5 / 0.5					48	
	49	EF-G11	#12	20	1	0.2 / 3.3			2	20	#8	ACCU-G3	50	
	51	EUH-G1	#12	20	2		0.0 / 3.3						52	
	53							0.0 / 2.7	2	45	#10	ACCU-G1	54	
	55	ACCU-G4	#12	25	2	1.6 / 2.7							56	
	57						1.6 / 4.3		2	45	#12	FCU-G4	58	
	59	ACCU-G2	#10	45	2			2.7 / 4.3					60	
	61					2.7 / 9.9			2	100	#3	FCU-G3	62	
	63	MSCU-G1	#8	30	2		5.0 / 9.9						64	
	65							5.0 / 9.9	2	100	#6	FCU-G2	66	
	67	GUH-1	#12	20	1	0.1 / 9.9							68	
	69	GUH-4	#12	20	1		0.1 / 0.2		1	20	#12	Receptacles WET LAB G106	70	
	71	FCU-G1	#4	100	2			9.9 / 0.2	1	20	#12	EF-G5	72	
	73					9.9 / 0.1			1	20	#12	GUH-3	74	
	75	Receptacles WET LAB G106	#12	20	1		0.2 / 0.2		1	20	#12	EF-G3	76	
	77	EF-G6	#12	20	1			0.2 / 1.9	1	20		Power	78	
	79	EF-G4	#12	20	1	0.2 / 0.2			1	20	#12	RANGE HOOD	80	
	81	EF-G2	#12	20	1		0.2 / 0.5		1	20	#12	HAND WASH STATION	82	
	83	RECEPT-CONVENIENCE	#12	20	1			0.2 / 0.5	1	20	#12	FAUCET AND FLUSH VALVE	84	
--	85	SPARE	--	20	1	0.0 / 0.5			1	20	#12	FAUCET AND FLUSH VALVE	86	
--	87	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	88	--
--	89	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	90	--
--	91	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	92	--
--	93	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	94	--
--	95	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	96	--
--	97	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	98	--
--	99	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	100	--
--	101	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	102	--
--	103	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	104	--
--	105	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	106	--
--	107	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	108	--
--	109	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	110	--
--	111	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	112	--
--	113	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	114	--
	115					0.0 / 0.0			1	--	--	SPACE	116	--
	117	GH2		20	3		0.0 / 0.0		1	--	--	SPACE	118	--
	119							0.0 / 0.0	1	--	--	SPACE	120	--
	121					11.1 / 1.8			3	150	1L	LG5	122	
	123	LG4	1L	150	3		10.5 / 1.6						124	
	125							10.2 / 2.1					126	
		Total Load:				62.7 kVA	45.4 kVA	54.6 kVA						
		Total Amps:				535 A	378 A	467 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Cooling	6.7 kVA	100.00%	6.7 kVA		
HVAC	98.1 kVA	100.00%	98.1 kVA	Total Conn. Load:	162.8 kVA
Heating	0.0 kVA	100.00%	0.0 kVA	Total Est. Demand:	156.3 kVA
Kitchen Equipment	3.1 kVA	65.00%	2.0 kVA	Total Conn. Current:	452 A
Miscellaneous	15.1 kVA	100.00%	15.1 kVA	Total Est. Demand Current:	434 A
Other	0.0 kVA	0.00%	0.0 kVA		
Power	19.0 kVA	100.00%	19.0 kVA		
Receptacles	20.7 kVA	74.15%	15.4 kVA		

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: GDP

Location: **Supply From:** **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 65,000 **Enclosure:** Type 3R **Mains:** 800A MCB

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1					3.4 / 62.7			3	225	1L	TLG3	2	
	3	HG1	1L	250	3		1.0 / 45.4						4	
	5							1.1 / 54.6					6	
	7					0.0 / 49.6			3	225	1L	TLG1	8	
	9	SPD	1L	100	3		0.0 / 47.9						10	
	11							0.0 / 49.6					12	
	13					0.0 / 0.0			3	100	--	SPARE	14	--
--	15	SPARE	--	250	3		0.0 / 0.0						16	
	17							0.0 / 0.0					18	
--	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	--
--	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	--
--	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	--
--	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	--
--	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	--
--	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	--
--	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	--
--	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	--
--	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	--
--	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	--
--	39	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	40	--
--	41	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	42	--
		Total Load:				115.7 kVA	94.3 kVA	105.3 kVA						
		Total Amps:				424 A	340 A	386 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Cooling	6.7 kVA	100.00%	6.7 kVA		
HVAC	98.1 kVA	100.00%	98.1 kVA	Total Conn. Load:	315.3 kVA
Heating	0.0 kVA	100.00%	0.0 kVA	Total Est. Demand:	263.8 kVA
Kitchen Equipment	3.1 kVA	65.00%	2.0 kVA	Total Conn. Current:	379 A
Lighting	5.5 kVA	125.00%	6.9 kVA	Total Est. Demand Current:	317 A
Miscellaneous	15.1 kVA	100.00%	15.1 kVA		
Other	0.0 kVA	0.00%	0.0 kVA		
Power	31.7 kVA	100.00%	31.7 kVA		
Receptacles	20.7 kVA	74.15%	15.4 kVA		
Welder	134.4 kVA	65.48%	88.0 kVA		

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: HG1

Location: ELEC A101 **Supply From:** GDP **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 18,000 **Enclosure:** Type 1 **Mains:** 250A

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1					0.0 / 0.7			1	20		Lighting Room G105, G106	2	
	3	BP-1		20	3		0.0 / 0.6		1	20		Lighting Room G107, G100, G104, G103, G102	4	
	5							0.0 / 1.1	1	20		Lighting Room G108B, G108A	6	
	7	Lighting Room G109A, G109B		20	1	2.5 / 0.2			1	20		Lighting	8	
	9	Lighting		20	1		0.4 / 0.0		1	20	--	SPARE	10	--
--	11	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	12	--
--	13	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	14	--
--	15	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	16	--
--	17	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	18	--
--	19	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	20	--
--	21	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	22	--
--	23	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	24	--
--	25	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	26	--
--	27	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	28	--
--	29	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	30	--
--	31	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	32	--
--	33	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	34	--
--	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	--
	37					0.0 / 0.0			1	20	--	SPARE	38	--
	39	SPD	#6	60	3		0.0 / 0.0		1	20	--	SPARE	40	--
	41							0.0 / 0.0	1	20	--	SPARE	42	--
		Total Load:				3.4 kVA	1.0 kVA	1.1 kVA						
		Total Amps:				12 A	4 A	4 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	5.5 kVA	125.00%	6.9 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	5.5 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Est. Demand:	6.9 kVA
				Total Conn. Current:	7 A
				Total Est. Demand Current:	8 A

Notes:

Abbrevations:
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WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:
No. Date

JOB NO. 2338 A
DATE: 01/17/2024

ELECTRICAL PANEL SCHEDULES
E251

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

1/12/2024 1:10:36 PM

27.10.00 TECHNOLOGY LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
*#	WALL MOUNTED NETWORK OUTLET D#: NUMBER OF DATA DROPS IN OUTLET AP: WIRELESS ACCESS POINT	+18" AFF, UNLESS OTHERWISE NOTED	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
V#	COMMUNICATIONS OUTLET	FIELD COORDINATE	FIELD COORDINATE	
W	WALL MOUNTED NETWORK OUTLET	+44" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
B	WALL MOUNTED BOX FOR FUTURE USE.	+18" AFF UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
D#	FLOOR MOUNTED NETWORK OUTLET	N/A	COORDINATE WITH ELECTRICAL CONTRACTOR	FINISHED HARDWARE PROVIDED BY DIV 27
*#	CEILING MOUNTED NETWORK OUTLET AP: WIRELESS ACCESS POINT D#: NETWORK OUTLET	ABOVE CEILING	CEILING BRACKET WITH BISCUIT BLOCK	

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. CONDUIT STUB UP AND SLEEVES SHALL HAVE A SOLID UNCUT PLASTIC PROTECTIVE BUSHING.
5. NO CONDUITS SHALL EXCEED FOR 40% MAXIMUM FILL RATIO. CONTRACTOR TO PROVIDE ADDITIONAL CONDUITS REQUIRED.

27.41.16.10 AUDIO/VIDEO LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
WMP	WALL MOUNTED PROJECTOR AV OUTPUT OUTLET	REFERENCE FLOOR PLANS.	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	NOTE #5
CMP	CEILING MOUNTED PROJECTOR AV OUTPUT OUTLET	CEILING MOUNTED	N/A	NOTE #5
AV-1	WALL MOUNTED AUDIO/VIDEO INPUT OUTLET	+18" AFF UNO	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	
FSD-1	WALL MOUNTED FLAT SCREEN DISPLAY AUDIO/VIDEO OUTPUT OUTLET	REFERENCE FLOOR PLAN	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
FSD-2	WALL MOUNTED FLAT SCREEN DISPLAY AUDIO/VIDEO OUTPUT OUTLET ASSOCIATED WITH AV-1 INPUT OUTLET	REFERENCE FLOOR PLAN	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	NOTE #5
IVD	INTERACTIVE VIDEO DISPLAY AUDIO/VIDEO OUTPUT OUTLET	REFERENCE FLOOR PLAN	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	NOTE #5
CP	AV CONTROL PANEL	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C.	
PS	LOCAL INSTRUCTIONAL SPACE PRESENTATION SPEAKER	CEILING	CONTRACTOR PROVIDED CEILING BOX	COORDINATE POWER WITH EC

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

27.50.00.1 INTERCOM LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
ICS	INTERCOM COMMUNICATIONS SYSTEM HEAD END UNIT.	FLOOR MOUNTED	COORDINATE WITH EC	COORDINATE POWER WITH EC
S	CEILING MOUNTED INTERCOM SPEAKER, LAY-IN CEILING	CEILING	CONTRACTOR PROVIDED	
S2	CEILING MOUNTED INTERCOM SPEAKER, HARD CEILING	CEILING	CONTRACTOR PROVIDED	
S3	WALL MOUNTED INTERIOR INTERCOM SPEAKER	REFERENCE FLOOR PLANS	CONTRACTOR PROVIDED	
S4	WALL MOUNTED EXTERIOR INTERCOM SPEAKER	+10' AFF UNO	CONTRACTOR PROVIDED	
# IP	IP BASED SPEAKER. '#' TO BE REPLACED WITH S, S2, S3, S4 INDICATING THE SPECIFIC TYPE OF SPEAKER.	REFERENCE FLOOR PLANS	CONTRACTOR PROVIDED	NOTE #5
VC	WALL MOUNTED VOLUME CONTROL	+48" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
CB	INTERCOM CALL BUTTON	+48" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
C	SINGLE FACE CLOCK	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
C2	DOUBLE FACE CLOCK	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
RPS	REMOTE PROGRAM SOURCE	DESK TOP	COORDINATE WITH EC	NOTE #5
ACS	ADMINISTRATIVE CALL STATION.	DESK TOP	N/A	NOTE #5
LD	LOCKDOWN BUTTON	+48" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

28.10.00 ACCESS CONTROL LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
ACP	ACCESS CONTROL SYSTEM, CONTROL PANEL.	+60" AFF TO CENTER	AS REQUIRED	COORDINATE POWER. NOTE #4.
CR *#	ACCESS CONTROL PROXIMITY CARD READER. *W - INDICATES WALL MOUNTED READER *M - INDICATES MULLION MOUNTED READER	+42" A.F.F.	1-G, 3/4" C	
CR	DOOR MOUNTED ACCESS CONTROL PROXIMITY CARD READER THAT IS INTEGRATED INTO THE DOOR HARDWARE.	+42" AFF	N/A	
DS *#	2-WAY AUDIO/VIDEO INTERCOM DOOR STATION. *W - INDICATES WALL MOUNTED READER *M - INDICATES MULLION MOUNTED READER	+42" AFF	*W: 1-G, 3/4" C *M: 3/4"C	COORDINATE POWER. NOTE #4.
DS	DOOR MOUNTED, 2-WAY AUDIO/VIDEO INTERCOM DOOR STATION.	+42" AFF, FIELD COORDINATE		COORDINATE POWER. NOTE #4
MS	2-WAY AUDIO/VIDEO INTERCOM MASTER STATION.	DESK MOUNTED UNO		COORDINATE POWER. NOTE #4
DR	DOOR RELEASE BUTTON	COORDINATE WITH GC	1-G, 3/4" C	
REX	PIR MOTION REQUEST TO EXIT DEVICE			
DP	DOOR PROP. ALARM	CEILING MOUNTED UNO	N/A	N/A
DC	DPDT MAGNETIC DOOR CONTACT/DOOR POSITION SENSOR.	FLUSH MOUNTED IN DOOR FRAME	N/A	PROVIDED BY ACS CONTRACTOR.
RFID	VEHICLE RFID TAG READER.		FIELD COORDINATE RACEWAYS AND BACK BOXES	PROVIDE NECESSARY EQUIPMENT FOR A FULLY FUNCTIONAL VEHICLE ENTRY POINT

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

VIDEO SURVEILLANCE LEGEND

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
	WALL/CORNER MOUNT 4-SENSOR CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
	CEILING MOUNTED 4-SENSOR CAMERA	CEILING		NOTE #5
W W	2-SENSOR CAMERA W: INDICATES WALLMOUNTED CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
W	1-SENSOR CAMERA W: INDICATES WALLMOUNTED CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK
6. VIDEO SURVEILLANCE CAMERAS, SERVERS, MOUNTS, AND OTHER ASSOCIATED HARDWARE ARE OWNER FURNISHED, OWNER INSTALLED.

FIRE ALARM

*PROJECT SCOPE INCLUDES EXPANDING THE EXISTING FIRE ALARM SYSTEM IN THE EXISTING JUNIOR HIGH/HIGH SCHOOL CAMPUS TO THE NEW VOAG BUILDING. THE EXISTING FIRE ALARM SYSTEM SHALL REMAIN FULLY OPERATIONAL DURING ALL PHASES OF CONSTRUCTION.

LEGEND

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL
FAA	FIRE ALARM ANNUNCIATOR PANEL

NOTES:
1. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

SUBSCRIPTS AND ABBREVIATIONS

TEXT	DESCRIPTION
'WP'	DEVICE SHALL BE WEATHER PROOF AND RATED FOR EXTERIOR CONDITIONS.
●	FIELD COORDINATE ELEVATION.
AFF	ABOVE FINISHED FLOOR
'UC'	DEVICE IS TO BE MOUNTED ON THE UNDERSIDE OF THE ELEVATED CANOPY.

SUBSCRIPTS LEGEND - EXISTING DEVICES

TEXT	DESCRIPTION
'E'	EXISTING TO REMAIN.
'D'	DEVICE IS EXISTING AND IS TO BE REMOVED. CONTRACTOR TO REMOVE THE DEVICE AND RETURN TO OWNER.
'RR'	REMOVE EXISTING DEVICE AND RELOCATE TO A LOCATION INDICATED ON THE DRAWINGS.

INTERCOM GENERAL NOTES

1. CONTRACTOR TO TAP ALL EXTERIOR SPEAKERS AT 7 WATTS.
2. COORDINATE INTERCOM SYSTEM ZONING WITH EXISTING BUILDING INTERCOM SYSTEM.

NOTES TO CONTRACTOR

1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS.
2. SYSTEM INSTALLERS SHALL COORDINATE LOCATIONS AND CONNECTIONS WITH THE PROJECT'S ELECTRICAL CONTRACTOR.
3. CONTRACTOR TO PROVIDE PROPERLY GROUNDED LIGHTING PROTECTION ON ALL CABLING ENTERING AND EXITING THE BUILDING.

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
ARCHITECT
01/17/2024

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Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

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DATE: 01/17/2024

TECHNOLOGY SCHEDULES & LEGENDS
T200

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062

Registration: F-4111
Project No: 2023-02832

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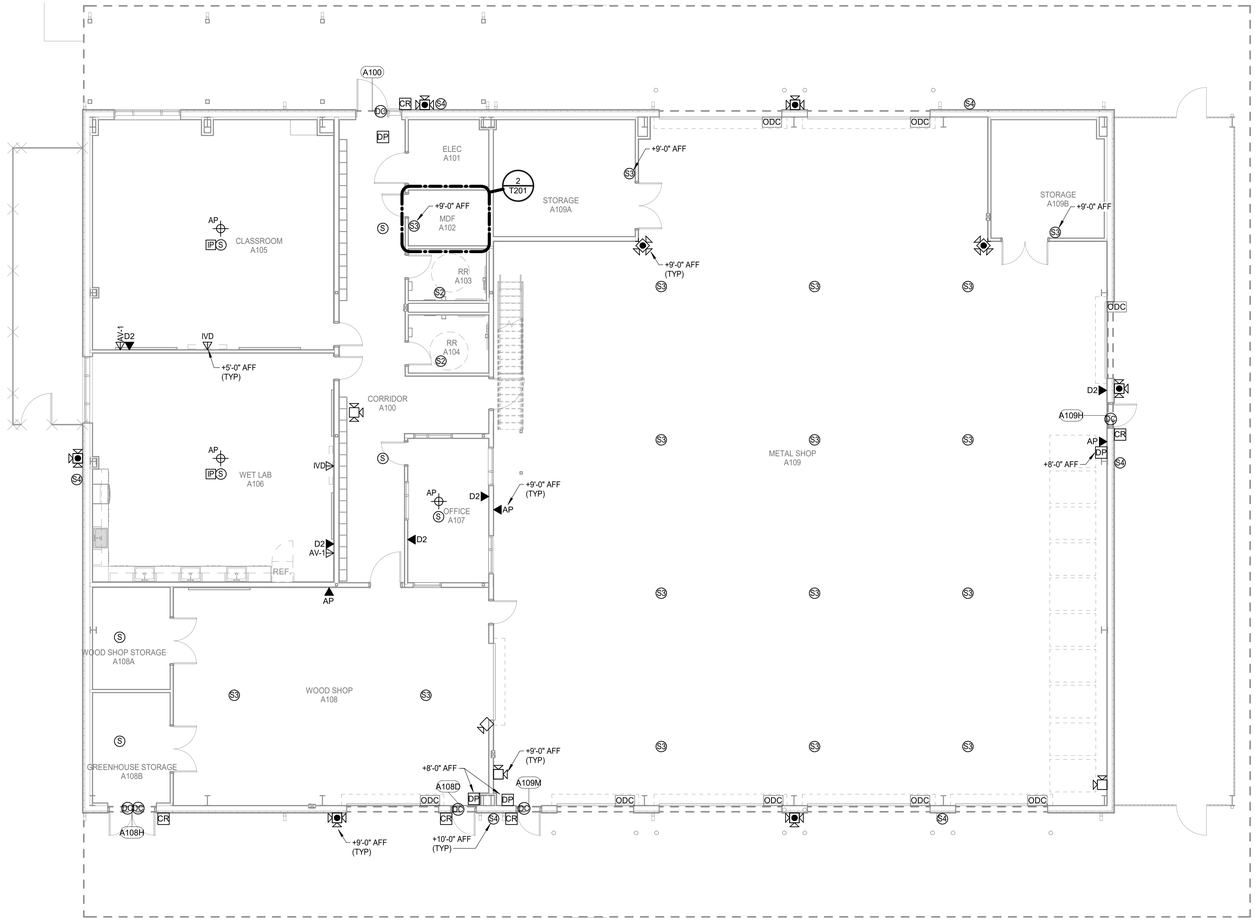
TECHNOLOGY ENLARGED PLAN GENERAL NOTES

1. ALL RACK LOCATIONS SHALL BE COORDINATED WITH THE PROJECT'S TECHNOLOGY CONSULTANT AND OWNER PRIOR TO INSTALLATION. NO RACKS AND/OR ASSOCIATED CABLE TRAY SYSTEM SHALL BE PERMANENTLY INSTALLED PRIOR TO DOCUMENTED ACCEPTANCE.
2. PATCH PANEL QUANTITY SHALL BE DETERMINED BY STATION CABLE DROP COUNTS SHOWN ON TS PLANS AND THE ASSOCIATED PROJECT MATRIX. ENSURE PATCH PANEL QUANTITY IS SUFFICIENT TO SUPPORT THE NUMBER OF PORTS REQUIRED BY TS PLANS PLUS AN ADDITIONAL 25% FOR FUTURE GROWTH.
3. CONTRACTOR SHALL NOT MOUNT OR EXCEED MORE THAN A 50% RACK FILL RATIO ON ANY RACK.
4. ALL RACKS, LADDER TRAYS, LIGHTNING PROTECTION ENCLOSURES AND ANY OTHER DEVICES, PART OF THE STRUCTURED CABLING SYSTEM, SHALL BE GROUNDED TO A GROUND BUS BAR LOCATED IN THE TELECOMMUNICATIONS ROOM WITH A #6AWG GROUND CABLE. DAISY CHAINING WILL NOT BE ACCEPTED. ALL ITEMS SHALL HAVE A DEDICATED GROUND CABLE TO BUS BAR. GROUND CABLE SHALL BE GREEN IN COLOR.
5. ALL COPPER AND FIBER OPTIC CABLING, ROUTING BETWEEN BUILDINGS, SHALL HAVE A 20' SERVICE LOOP LOCATED INSIDE EACH EXTERIOR PULL BOX. SIZED AS DESIGNATED AT SPECIFIC LOCATIONS ON THE DRAWINGS, AND AS REQUIRED PER THE PROJECT SPECIFICATIONS.

TECHNOLOGY KEYED NOTES

1	INDICATES THE LOCATION OF AN 8' TALL, 3/4" FIRE RATED PLYWOOD SHEET. CONTRACTOR TO PROVIDE AND INSTALL PLYWOOD AND ALL REQUIRED MOUNTING HARDWARE. PLYWOOD SHALL BE PAINTED WHITE WITH FIRE RATED PAINT. TYPICAL FOR ALL SHOWN ON DRAWING.
2	PROVIDE AND INSTALL A 12" WIDE UNIVERSAL LADDER TRAY AND ALL REQUIRED MOUNTING HARDWARE. LADDER TRAY SHALL BE BLACK IN COLOR. TYPICAL FOR ALL SHOWN ON ENTIRE PROJECT.
3	PROVIDE AND INSTALL ONE (1) 2-POST FLOOR MOUNTED 7' RELAY RACK, BLACK IN COLOR. PROVIDE BONDING WASHERS, BOLTS, AND NUTS AT ALL MECHANICALLY CONNECTED LOCATIONS OF THE RACK TO ENSURE THAT ALL PIECES OF THE RACK ARE COMPLETELY BONDED. SCRAPING PAINT FROM RACKS TO MAKE A BOND WILL NOT BE ACCEPTED. ALL RACK MOUNTED COMPONENTS SHALL BE MOUNTED WITH BONDING SCREWS AND THE CONTRACTOR SHALL PROVIDE THE OWNER WITH FIFTY (50) ADDITIONAL BONDING SCREWS FOR THE INSTALLATION OF OWNER EQUIPMENT. NO DAISY CHAINING GROUNDS FROM RACK TO CABLE TRAY OR TO OTHER RACKS WILL BE ACCEPTED. ALL GROUNDS SHALL BE HOME-RUN TO THE TELECOMMUNICATIONS GROUND BUS BAR (TGBB). TYPICAL FOR ALL SHOWN ON THE ENTIRE PROJECT.
4	PROVIDE AND INSTALL ONE (1) 7'X6" FRONT AND REAR MANAGED VERTICAL CABLE MANAGER, BLACK IN COLOR. CABLE MANAGERS SHALL BE INSTALLED ON EACH END OF THE RACK SYSTEM AND BETWEEN EACH RACK. CABLE MANAGERS SHALL HAVE A SINGLE, SOLID, FULL-HEIGHT HINGED DOOR IN THE FRONT AND WIDE SPACED CABLE RINGS WITH SPIN-OPEN LATCHES IN THE REAR. TYPICAL FOR ALL SHOWN IN THE ENTIRE PROJECT.
5	INDICATES THE LOCATION OF A NEW WALL MOUNTED TELECOMMUNICATION GROUND BUS BAR (TGBB). CABLING CONTRACTOR TO PROVIDE BUS BAR AND ALL REQUIRED MATERIAL TO MOUNT AT THE LOCATION SHOWN. TGBB TO BE MOUNTED +93" A.F.F.
6	THE SPACE INDICATED IS TO BE RESERVED FOR THE INSTALLATION OF ACCESS CONTROL PANEL AND POWER SUPPLIES, AS REQUIRED.
7	INDICATES THE LOCATION WHERE ENTRANCE CONDUITS SHALL STUB ABOVE THE FINISHED FLOOR. CONDUITS SHALL STUB EVENLY AT +8" AFF. PROVIDE PROTECTIVE BUSHINGS ON ALL CONDUITS AND SEAL ALL USED AND UNUSED UPON COMPLETION OF THE PROJECT. REFERENCE TECHNOLOGY AND ELECTRICAL SITE PLANS FOR ADDITIONAL INFORMATION.
8	PROVIDE AND INSTALL A MINIMUM OF THREE (3) STI EZPATH SERIES 44+ TRHU-WALL PENETRATION SLEEVES WITH MULTI-GANG WALLPLATE BRACKET SYSTEM AT INDICATED LOCATION. PROVIDE ADDITIONAL AS REQUIRED TO MAINTAIN A MAXIMUM OF 40% FILL RATION, PLUS ONE (1) ADDITIONAL FOR SPARE.
10	THE SPACE INDICATED IS TO BE RESERVED FOR THE INSTALLATION OF ACCESS CONTROL PANEL AND POWER SUPPLIES, AS REQUIRED.

2 **ENLARGED PLAN - MDF G102**
Scale: 1/2" = 1'-0"



1 **LEVEL 1 - TECHNOLOGY PLAN**
Scale: 1/8" = 1'-0"

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111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

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KEITH W. GASSMAN
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LEVEL 1 - TECHNOLOGY PLAN
T201

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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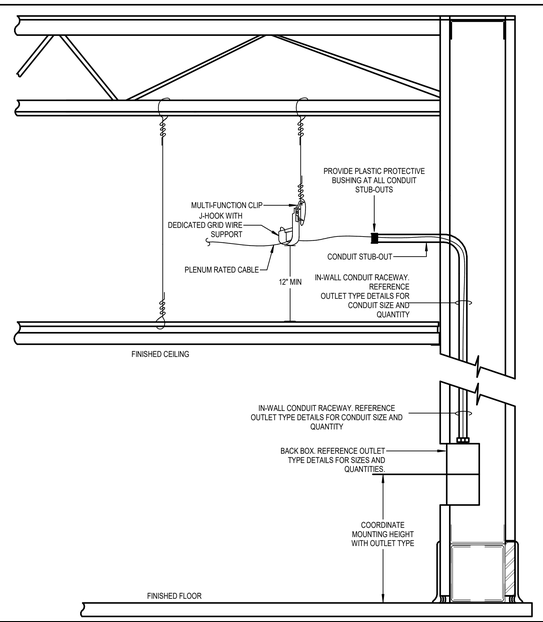
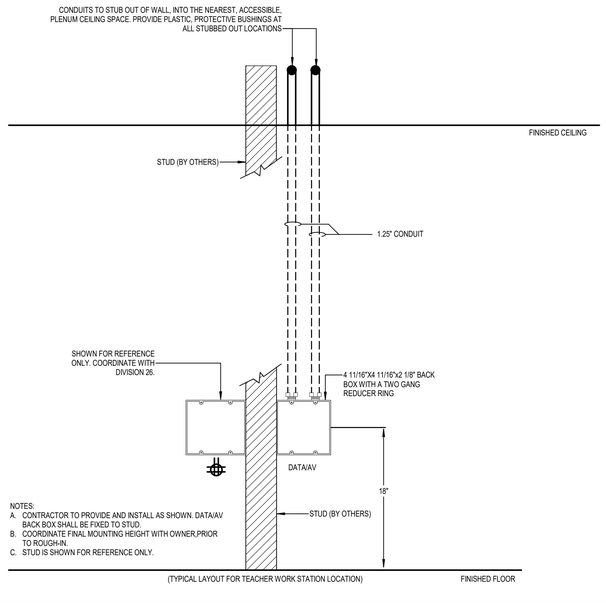
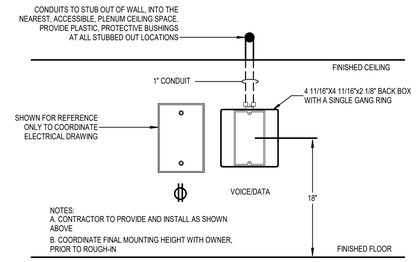


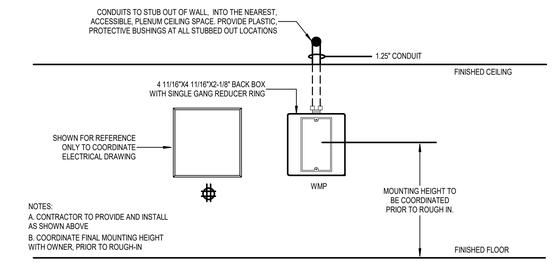
01 LOW VOLTAGE ELEVATION - IN-WALL RACEWAY NOT TO SCALE



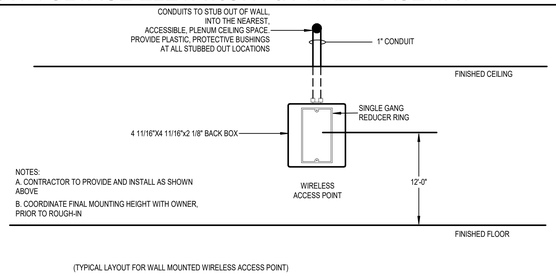
02 RACEWAY DETAIL - TYPICAL INSTRUCTORS OUTLET NOT TO SCALE



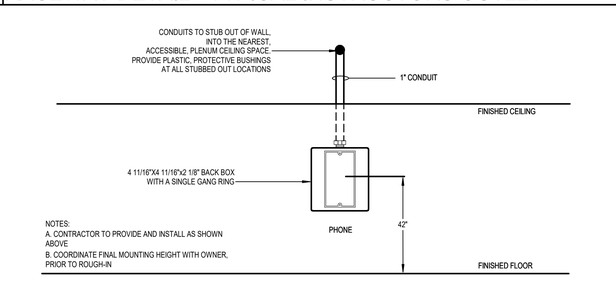
03 RACEWAY DETAIL - TYPICAL VOICE/DATA OUTLET NOT TO SCALE



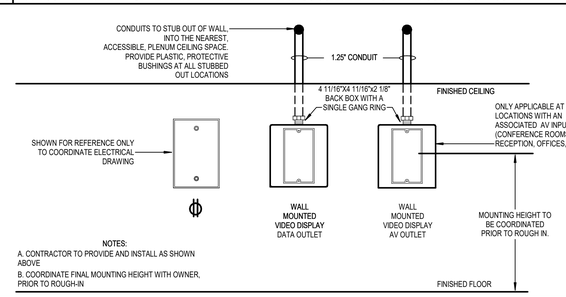
04 RACEWAY DETAIL - WALL MOUNTED PROJECTOR NOT TO SCALE



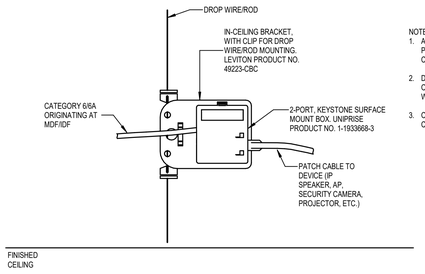
05 RACEWAY DETAIL - WALL MOUNTED WIRELESS AP NOT TO SCALE



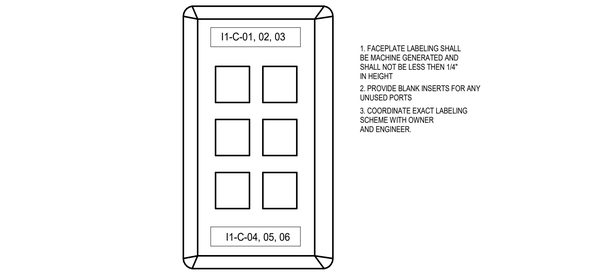
06 RACEWAY DETAIL - WALL MOUNTED TELEPHONE NOT TO SCALE



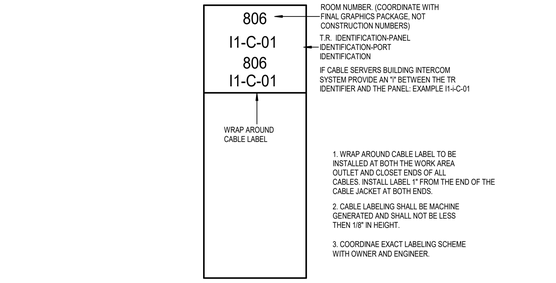
07 RACEWAY DETAIL - WALL MOUNTED DISPLAY NOT TO SCALE



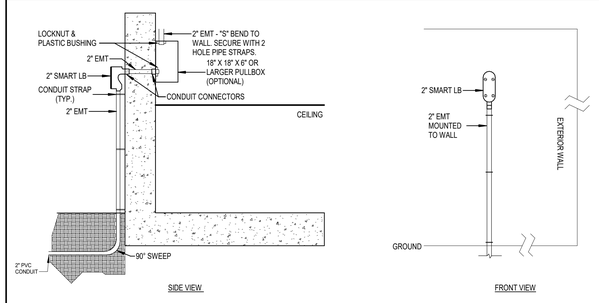
08 ABOVE CEILING STAND ALONE OUTLET NOT TO SCALE



09 FACEPLATE LABEL DETAIL NOT TO SCALE



10 CABLE LABEL DETAIL NOT TO SCALE



11 HIGH ENTRY POINT DETAIL

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Broken Arrow, OK 74012
918-796-0077
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KEITH W. GASSMAN
89636
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1 Greyhound Lane Slidell, TX 76267

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TECHNOLOGY DETAILS
T251

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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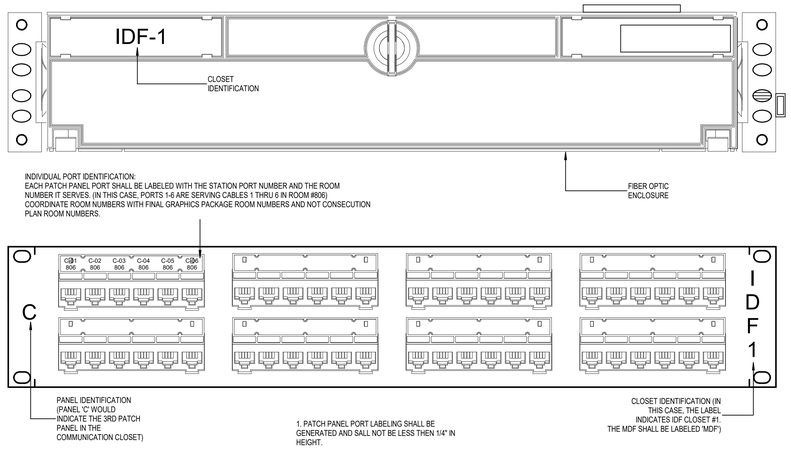
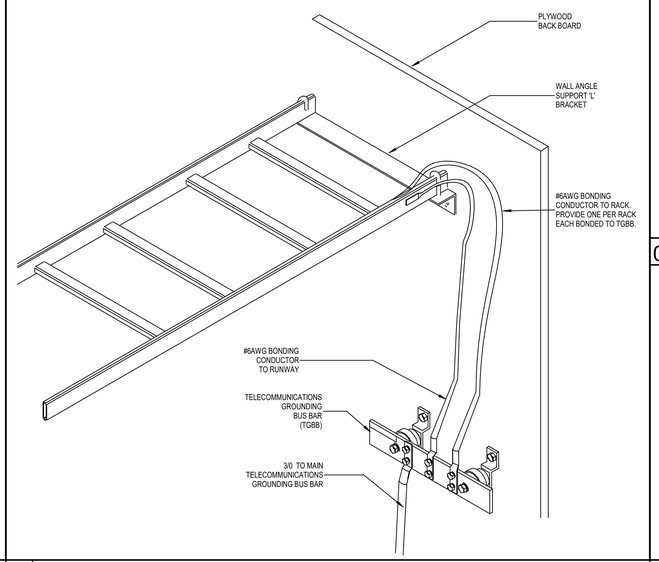
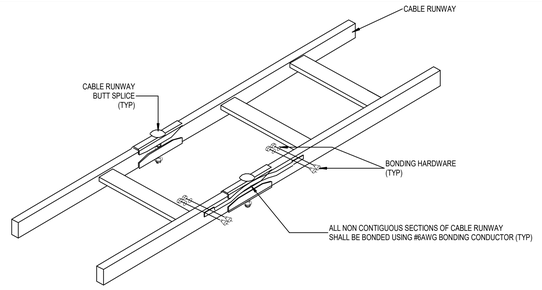


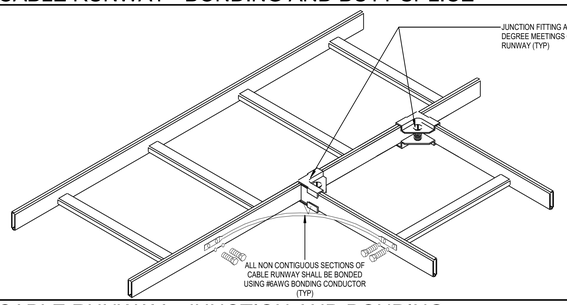
01 FIBER ENCLOSURE/ COPPER PATCH PANEL LABELING DETAIL — NOT TO SCALE



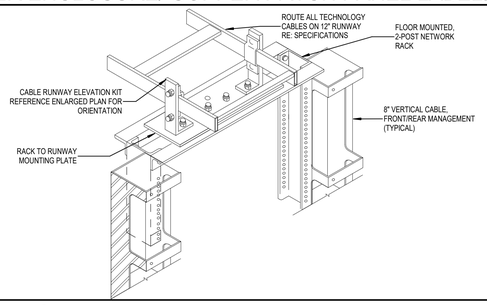
02 CABLE RUNWAY - GROUNDING AND BONDING — NOT TO SCALE



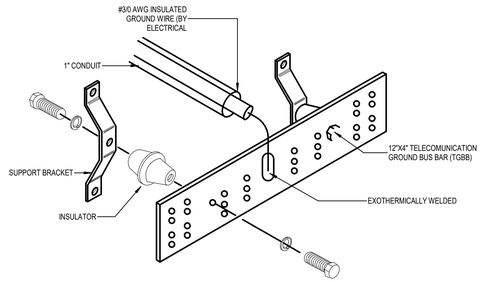
03 CABLE RUNWAY - BONDING AND BUTT SPLICE — NOT TO SCALE



04 CABLE RUNWAY - JUNCTION AND BONDING — NOT TO SCALE



05 RACK TO RUNWAY DETAIL — NOT TO SCALE



07 TELECOMMUNICATION GROUNDING BUS DETAIL — NOT TO SCALE

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111 N. Ash Ave. #200
Broken Arrow, OK 74012
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1 Greyhound Lane Slidell, TX 76267

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TECHNOLOGY DETAILS

T252

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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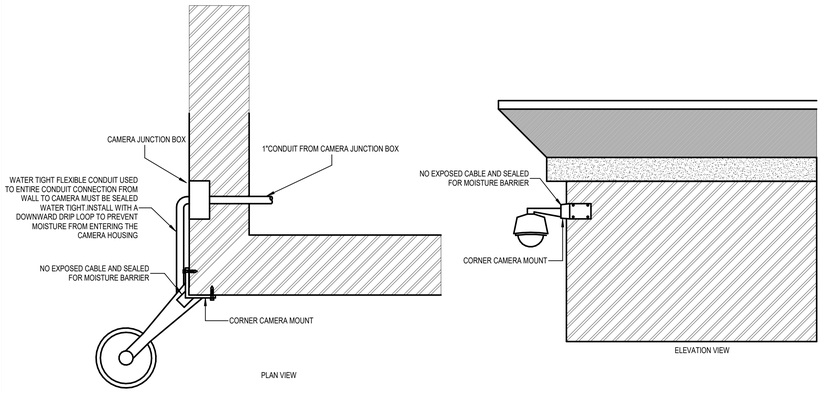
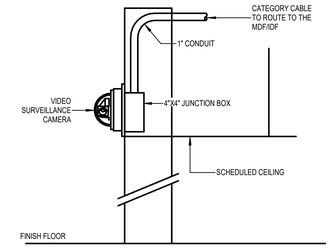


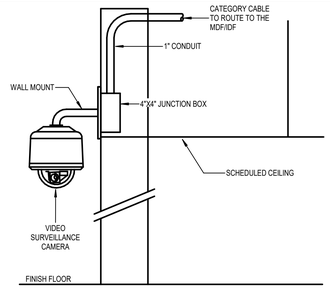
NOTE:

ELECTRICAL CONTRACTOR SHALL PROVIDE 1" CONDUIT WITH PULL STRING TO NEAREST AVAILABLE PLENUM SPACE. SECURITY CONTRACTORS SHALL PROVIDE CABLE FEED-THROUGH MOUNT FOR CAMERA. NO EXPOSED CABLE WILL BE ALLOWED. SECURITY CONTRACTOR TO COORDINATE MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

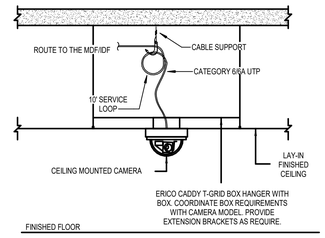
01 CORNER MOUNTING DETAIL NOT TO SCALE



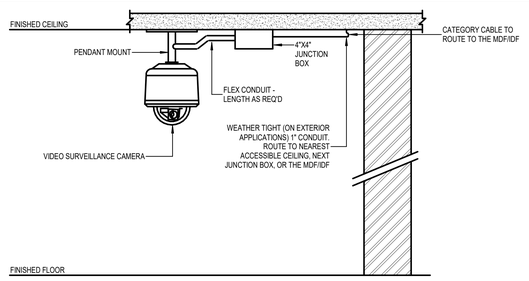
02 INTERIOR WALL MOUNT CAMERA-VERTICAL NOT TO SCALE



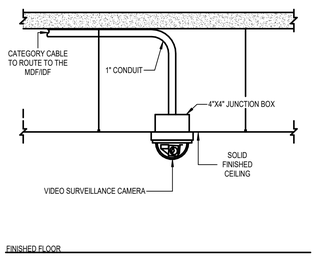
03 INTERIOR WALL MOUNTED DOME CAMERA NOT TO SCALE



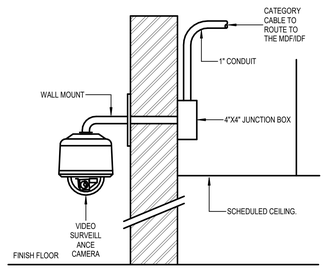
04 INTERIOR LAY-IN CEILING MOUNTED CAMERA NOT TO SCALE



05 EXT./INT. PENDANT MOUNTED DOME CAMERA NOT TO SCALE



06 EXTERIOR/INTERIOR SOLID CEILING MOUNT CAMERA NOT TO SCALE



07 EXTERIOR WALL MOUNTED DOME CAMERA NOT TO SCALE

GENERAL NOTES:

A. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUITS AND BACK BOXES. CONDUITS SHALL ROUTE TO THE NEAREST, ACCESSIBLE PLENUM SPACE.

B. ALL WALL, CORNER, PENDANT, AND UNDER CANOPY MOUNTING HEIGHTS SHALL BE COORDINATED WITH THE OWNER AND SECURITY CONSULTANT PRIOR TO ROUGH-IN.

C. SECURITY CONTRACTOR SHALL PROVIDE CAMERAS, MOUNTING HARDWARE, AND ANY OTHER COMPONENTS AND/OR HARDWARE REQUIRED FOR A COMPLETE INSTALLATION.

D. REFERENCE VIDEO SURVEILLANCE CAMERA SCHEDULES, FLOOR PLANS, AND SPECIFICATIONS FOR ADDITIONAL INSTRUCTIONS.

E. CABLE FEED-THROUGH MOUNT FOR CAMERA. NO EXPOSED CABLE WILL BE ALLOWED. SECURITY CONTRACTOR TO COORDINATE MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

08 NOTES NOT TO SCALE

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

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Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062

Registration: F-4111
Project No: 2023-02832

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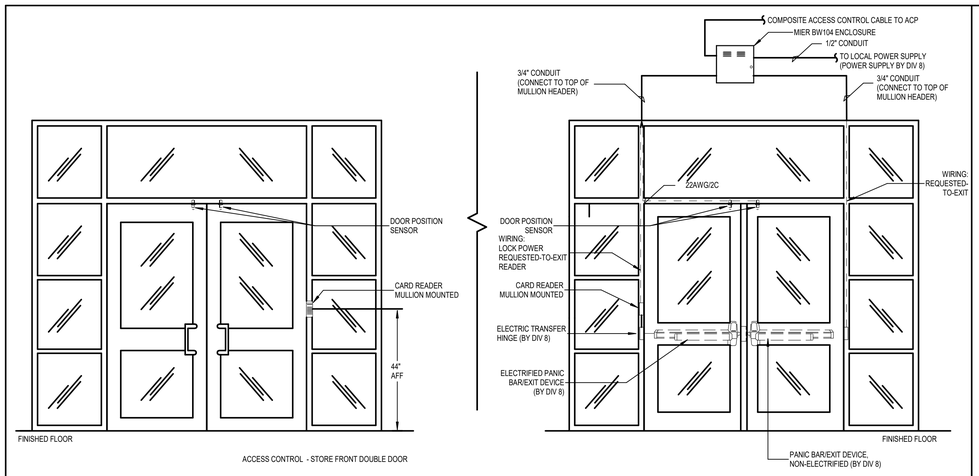
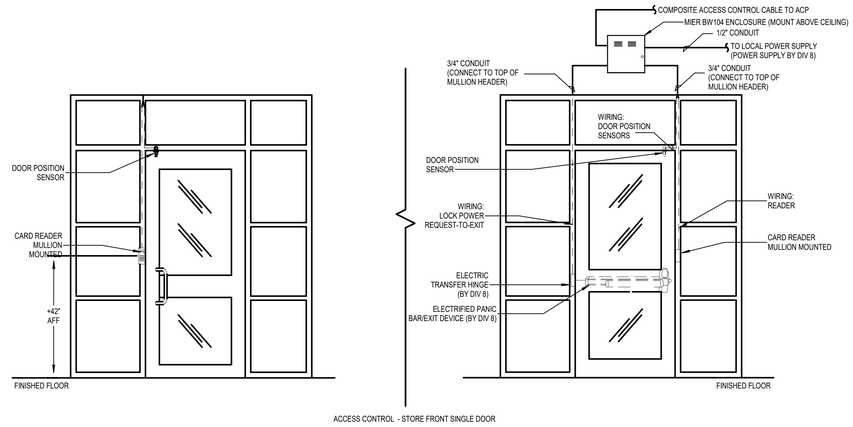
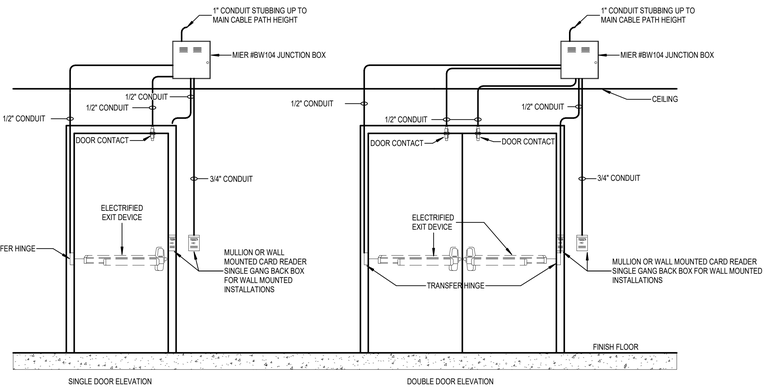


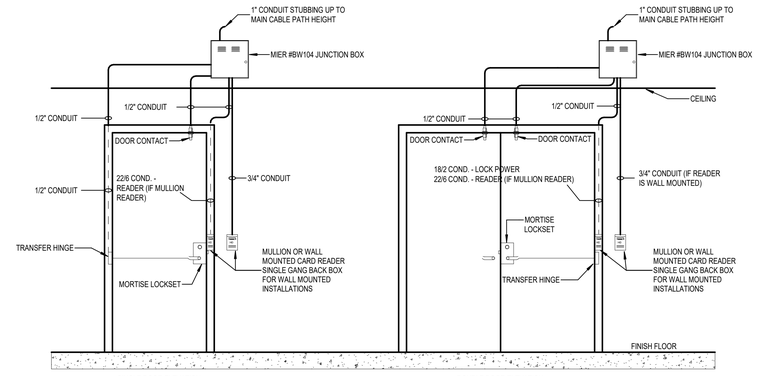
01 ACCESS CONTROL - STORE FRONT DOUBLE DOOR NOT TO SCALE



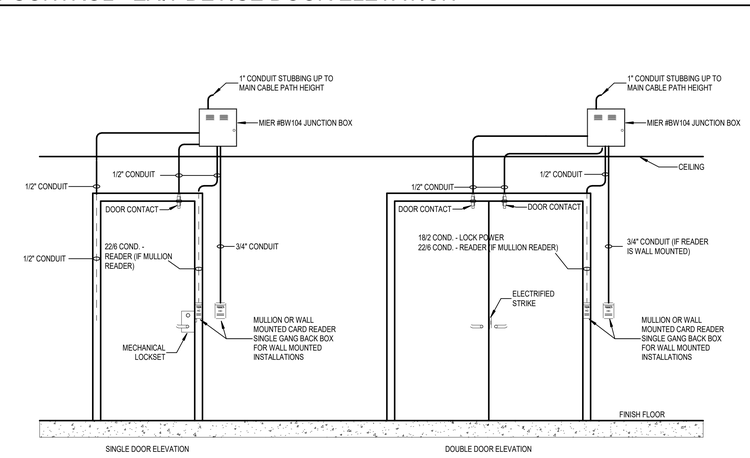
02 ACCESS CONTROL - STORE FRONT SINGLE DOOR NOT TO SCALE



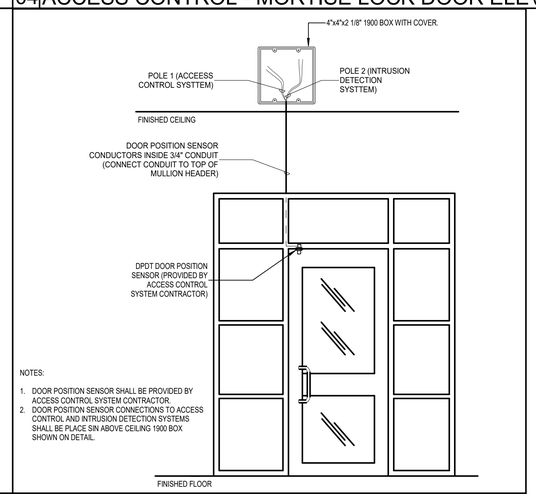
03 ACCESS CONTROL - EXIT DEVICE DOOR ELEVATION NOT TO SCALE



04 ACCESS CONTROL - MORTISE LOCK DOOR ELEVATION NOT TO SCALE



05 ACCESS CONTROL - ELECTRIFIED STRIKE DOOR ELEVATION NOT TO SCALE



NOTES:

1. DOOR POSITION SENSOR SHALL BE PROVIDED BY ACCESS CONTROL SYSTEM CONTRACTOR.
2. DOOR POSITION SENSOR CONNECTIONS TO ACCESS CONTROL AND INTRUSION DETECTION SYSTEMS SHALL BE PLACE SIN ABOVE CEILING 1900 BOX SHOWN ON DETAIL.

06 DOOR POSITION SENSOR ELEVATION NOT TO SCALE

WRA Architects, Inc.
111 N. Ash Ave. #200
Broken Arrow, OK 74012
918-796-0077
www.wraarchitects.com

STATE OF TEXAS
KEITH W. GASSMAN
89636
LICENSED
ARCHITECT
01/17/2024

100% BID ISSUE

Slidell ISD Vo-Ag Facility

1 Greyhound Lane Slidell, TX 76267

REVISIONS:

No.	Date

JOB NO. 2338 A
DATE: 01/17/2024

TECHNOLOGY DETAILS
T254

Salas O'Brien
salasobrien.com 972-812-1270
Irving
106 Decker Drive, Suite 200
Irving, TX 75062
Registration: F-4111
Project No: 2023-02832

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