

Addendum No. 3

Lake Charles Public Works New Facility Phase 2
4200 Broad Street
Lake Charles, LA

Project No.: DR002

City of Lake Charles
326 Pujoe Street
Lake Charles, LA

TO ALL CONTRACTORS:

This Addendum is hereby made a part of the Contract Documents dated December 20, 2025 and prepared by Brossett Architect, LLC.

The following items shall be considered part of the Contract Documents and shall be included in the same upon executions of the Contract. Changes made by Addenda take precedence over information published at an earlier date. Any changes, which may affect construction or proper installation of materials, equipment or structures, not specifically mentioned in this addendum, shall be brought to the attention of the Architect before submitting bid. Otherwise, such conditions, if found later to exist, must be worked out in an acceptable manner at no additional cost to the Owner.

It is understood and agreed that the following alterations, changes and/or omissions shall be made in the Plans and the Specifications, as now drawn and written, and that such alterations, changes and/or omissions shall be incorporated in the project during construction. Unless such an alteration, change and/or omission is specifically mentioned in this addendum, the plans and specifications as now drawn and written, shall govern in all respects.

Acknowledge receipt of this Addendum on the Bid Form.

Bidders are advised to call attention of all sub-bidders and suppliers to all information and changes which may affect their work.

This addendum consists of a total of 45 pages.

PART 1 – Drawing Modifications

1. T0.1-Abbreviations: MB refers to blinds as noted in specification 122113.
2. C1.1: Replace existing C1.1 with attached C1.1R
3. C2.0: Replace existing C2.0 with attached C2.0R
4. C2.3: Replace existing C2.3 with attached C2.3R
5. C3.0: Replace existing C3.0 with attached C3.0R
6. C4.3: Replace existing C4.3 with attached C4.3R
7. A1.2-6: Hose reels to be Hosetract LD-750 ¾" x 50 ft. Provide reel with hose and hose stop.
8. A1.4-1: Provide stairs and platform at generators as per electrical specs.
9. A1.4-2: Relocate propane dispenser from existing Public Works facility at 4331 Broad Street, Lake Charles, LA. Relocate and install during final 30 days of project or pay for propane as required by

- city beyond this timeframe. New propane tank to be Amerigas, above-ground, heavy carbon steel built to ASME safety standards with anti-corrosive coating.
10. A1.12-1: Air compressors to be provided with non-coin operated option.
 11. A2.3-1: Door canopies noted as A2.10-5 should be A2.11-4.
 12. A2.4-1: Bridge crane to be Hoosier Crane or Kundel Crane, EOT 10 ton, with bumpers, end trucks, inverter controlled travel, full motorized VFD controls, CMAA class "C" duty, with H4-rated hoist, single girder, top running with ASCE rail. Complete system to be as per one mfr. Hoist to be electric chain with all related accessories and controls.
 13. A2.4-1: Overhead Doors 219C, 219D, 220E and 220F to be overhead doors type 03
 14. A2.5-1: Interior wall liner panel heights to be as per wall details on A9.8.
 15. A2.8-1: Door canopies refer to detail A2.11-4 in lieu of A2.10-5 as noted.
 16. A2.8-1: 40 ft long canopy on East side of crew building to be 8 ft deep and as per Detail A2.11-7.
 17. A2.10-1: Door canopies refer to A2.11-4 in lieu of A2.10-5 as noted.
 18. A2.11-3: This detail is not vented and is a ridge cap only.
 19. A2.15-Overhead Door Types: Type 03 shall be 14 ft tall in lieu of as noted.
 20. A3.1-3: Detail A2.11-6 noted for the canopy system to be as per A2.11-7. Canopy to be 8 ft deep.
 21. A4.10-1: New sump pump to be Bell and Gossett ELKT2ECO311 with A1SEE1 Panel. Connect drain to 2" PVC noted on civil. Provide power and data and all related wiring as required for proper and fully operational system. Power to be GFI rated.
 22. A6.4-1: Reels for dispensing fluids other than air, water and electricity shall be MacNaught 50 ft (min) hose, slow retraction industrial safety reels rated for each fluid to be dispensed.
 23. A6.4-1: Provide connections from tanks to reels through hoses/piping as per NFPA 30 and 30A. Fluids shall be dispensed through GRACO Dispenser and Monitoring system including dispensers, pulse HUB, and software for a full and complete "pulse fluid management" system. System shall interface with Owner's existing controls and documentation system.
 24. A6.6-1: Sign "S7" to be speed limit sign.
 25. A9.3-3: (Addendum 2, Item 27)Attached sketch to be used in this project. The sketch was inadvertently omitted from Addendum 2.
 26. S0.0: Replace existing S0.0 with attached S0.0R
 27. S1.0: Replace existing S1.0 with attached S1.0R
 28. S3.0: Replace existing S3.0 with attached S3.0R
 29. S3.1: Replace existing S3.1 with attached S3.1R
 30. S7.0: Replace existing S7.0 with attached S7.0R
 31. S7.1: Replace existing S7.1 with attached S7.1R
 32. S7.2: Replace existing S7.2 with attached S7.2R
 33. FP2.1: In accordance with 2020 NFPA 664, 1.1.2, delete sprinkler connection to the dust collection system required by keynote 4.
 34. M2.2R1: Replace previously issued sheet M2.2 in its entirety with the attached M2.2R issued in this addendum. Changes include dust collector
 35. M2.5-Note 2: Provide door louvers by Contractor and not by Owner, Architect or others.
 36. M3.5: Add new sheet M3.5: Mechanical Dust Collector Details.
 37. P1.0: The sewer line from the Crew Bldg shown on sheet P2.1 shall connect directly to manhole MH-3. Verify invert prior to rough-in.
 38. P2.1: Plumbing contractor shall provide a 4" oil waste line on the north side of the building, connect all emergency shower floor drain drain lines in Vehicle Maintenance 217 and Fire Maint 219., and connect to the inlet at the oil/water separator shown on sheet C3.0. Coordinate with oil/water separator inlet invert. The two emergency shower floor drains at the east and south of

the Fire Maint shop heading south shall run north and west and connect to the trench drain drain lines shown on C3.0. Coordinate inverts prior to rough-in.

39. P2.1: The ¾" water line run above Conf Room 227 shall be changed to 2". This is the water line that continues on sheet P1.0 to the Ice House.
40. P2.1 & P2.2: The intent of the general note at the bottom right of these sheets is that all exposed piping listed shall be painted the colors listed and labels shall be applied after painting for identification. The insulated domestic cold and hot water lines shall be painted after insulation is applied. Sprinkler heads shall be covered and protected prior to painting. Thread oil shall be removed from piping prior to painting.
41. P2.3-Notes 8 and 11: Washer unit to be provided by contractor as per A2.1-1 and not by Owner.
42. P3.1: Delete reference to Ice Maker Trench Drain. None used on the project.
43. P3.2: Clarification that CASD-2 is a duplex unit. There are two 10 HP motors than can run simultaneously. Full load amps shown on the schedule are for each individual motor.
44. E1.1R1 (attached): Replace previously issued sheet E1.1 in its entirety with the attached E1.1R1.
45. E3.1R1 (attached): Replace previously issued sheet E3.1 in its entirety with the attached E3.1R1.
46. E4.3R1 (attached): Replace previously issued sheet E4.3 in its entirety with the attached E4.3R1.
47. E5.1R1 (attached): Replace previously issued sheet E5.1 in its entirety with the attached E5.1R1.
48. E5.2R1 (attached): Replace previously issued sheet E5.2 in its entirety with the attached E5.2R1.
49. E5.3R1 (attached): Replace previously issued sheet E5.3 in its entirety with the attached E5.3R1.
50. E6.1R1 (attached): Replace previously issued sheet E6.1 in its entirety with the attached E6.1R1.
51. Electrical clarifications:
 - a. Fixture A1 wattage value shall be 15.6W in lieu of 24.6W.
 - b. Fixture P catalog number shall be as follows in lieu of schedule: AR68 LILIO 40K MVOLT DMX SPG 361N *.
 - c. Contractor to note all conduit stub ups transitioning from below to above grade shall be RGC and not PVC. Refer to electrical specifications and detail #10 on sheet E6.1R1 attached. Contractor shall coordinate with Entergy for sectionalizer and transformer stub up requirements prior to rough-in.
 - d. Safety switch for dust collector shall be 240V 3p30A, NEMA 1, HD in lieu of scheduled.
 - e. Contractor shall provide and install chord reels (Hubbell WCA12345-BC or Reelcraft L45451233A) per electrical sheets.

PART 2- Project Manual Modifications

1. Addendum 2, Note 1: Provide "66" X 66" level landing" in lieu of "hard landing" as noted.
2. Addendum 2, Note 3: Curb/paving to be as per drawings.
3. Addendum 2, Note 7: provide required "power", not "paver".
4. 072119: Attached spec 072119 to be included as part of the bidding and contract documents.
5. 133419: Attached spec 133419 shall replace the existing 133419 in the project manual.
6. 133419-1.2.G.1: Contractor to follow Energy Star to the maximum extent allowed by law.
7. 220200: Oil Waste Piping and fittings (OW) shown on the plumbing plans shall be Sch 40 PVC. Refer to Civil plans for pipe materials shown on the "C" sheets and follow the civil engineer's direction for those plans. Grease Waste Piping and fittings (GW) shall be cast iron. Compressed air piping and fittings shall be Sch 40 galvanized steel. Paint all exposed piping.
8. 230500: All refrigerant piping shall have brazed connections. Press fit connections are not approved.
9. 263213-2.9.F: Provide foundation for generator as per structural dwgs.

PART 3-Prior Approvals *(Subject to compliance with the provisions of the Contract Documents, Specifications, the following manufacturers may be substituted. Contractor shall note that prior approval is by manufacturer's name only. Contractor shall ensure that the products used in preparation of his proposal and proposed to be used on this project, is equivalent to that specified in appearance, performance, size, installation type, and shape. Any material found to not be equivalent to that specified will be rejected. Prior approval of one manufacturer does not automatically prior approve any subsidiary company, parent company and/or sister company and their associated products.)*

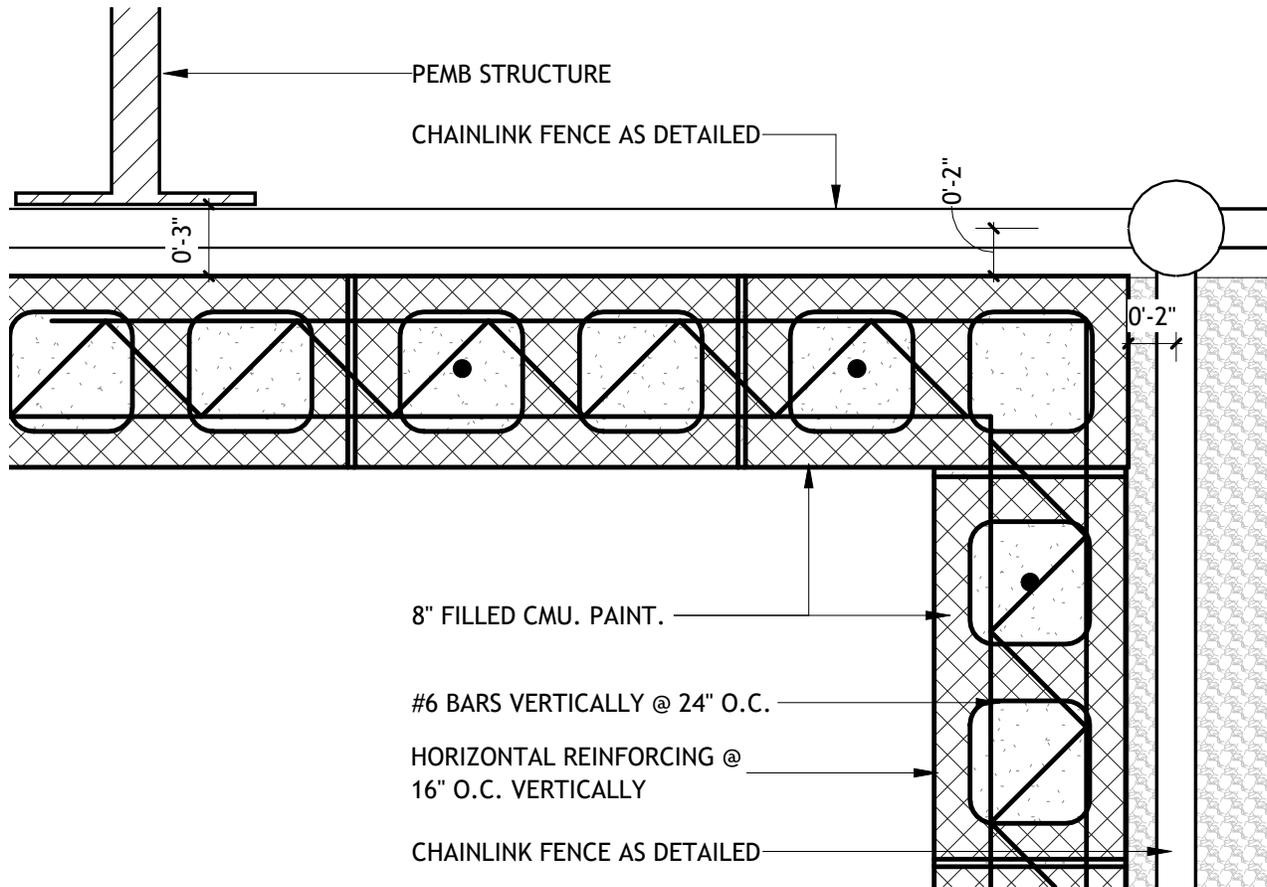
1. High Performance Floor Coating	Rio-Shop X1B
2. Lockers	Apex Hallways
3. Lockers	Lockers MFG
4. Air compressors and accessories	Ingersoll Rand
5. Vehicle Exhaust Systems	Nederman
6. Stainless steel sinks	Acorn
7. Shower valves	Acorn
8. Emergency showers and mixing valves	Acorn Safety
9. Hot water recirc pumps	Taco
10. Diesel Generator Set	Generac
11. Automatic Transfer Switch	Generac
12. Fire Alarm	Siemens
13. Light Fixture	New Star Lighting
14. Light Fixture	Lightolier
15. Light Fixture	Birchwood
16. Light Fixture	Day-Brite
17. Light Fixture	Ledalite
18. Light Fixture	Visionaire
19. Light Pole	Visionaire
20. Light Fixture	SSL
21. Light Fixture	Gardco
22. Light Fixture	Chloride

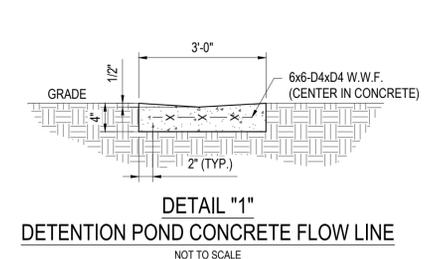
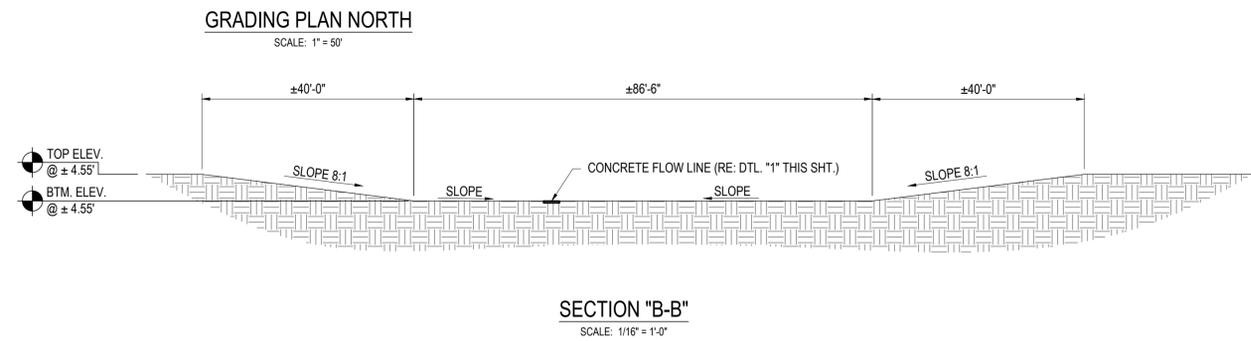
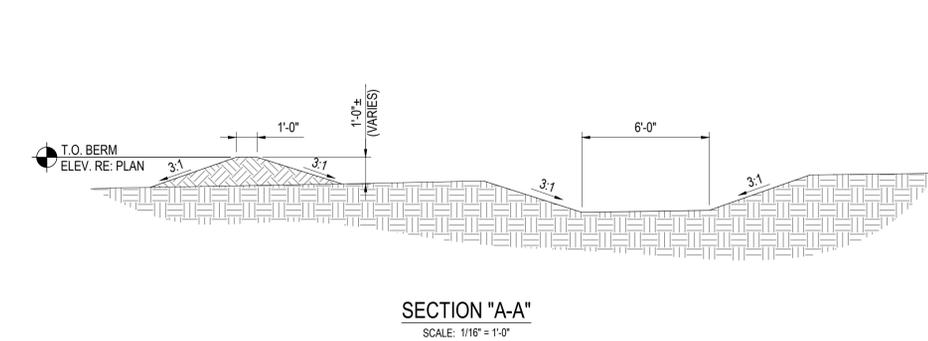
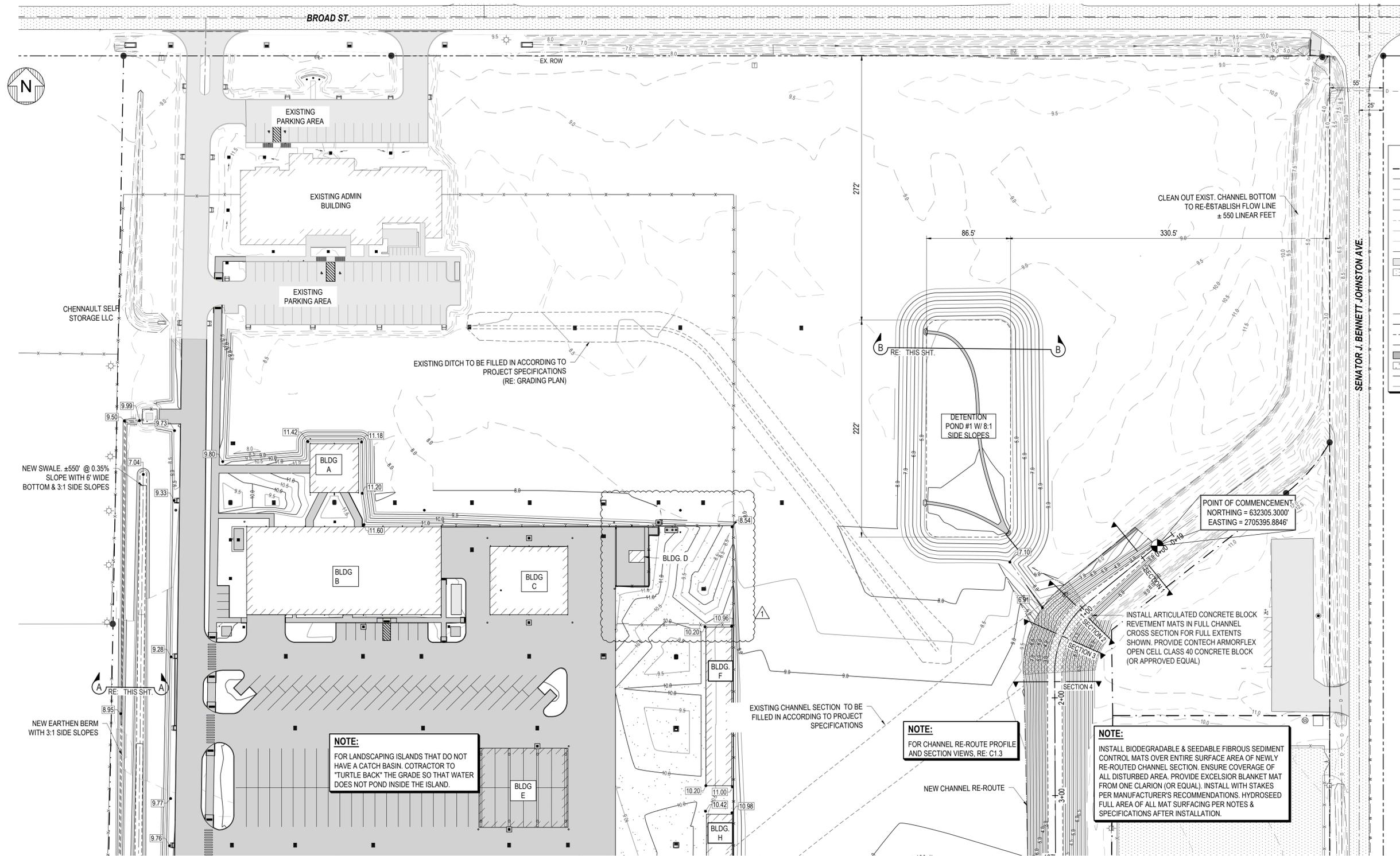
END OF ADDENDUM NO. 3

1 EXT WALL DETAIL-WASH (TYP)

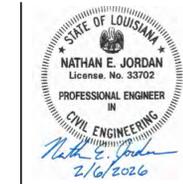


SCALE: 1 1/2" = 1'-0"





FOR CONSTRUCTION (REVISED)



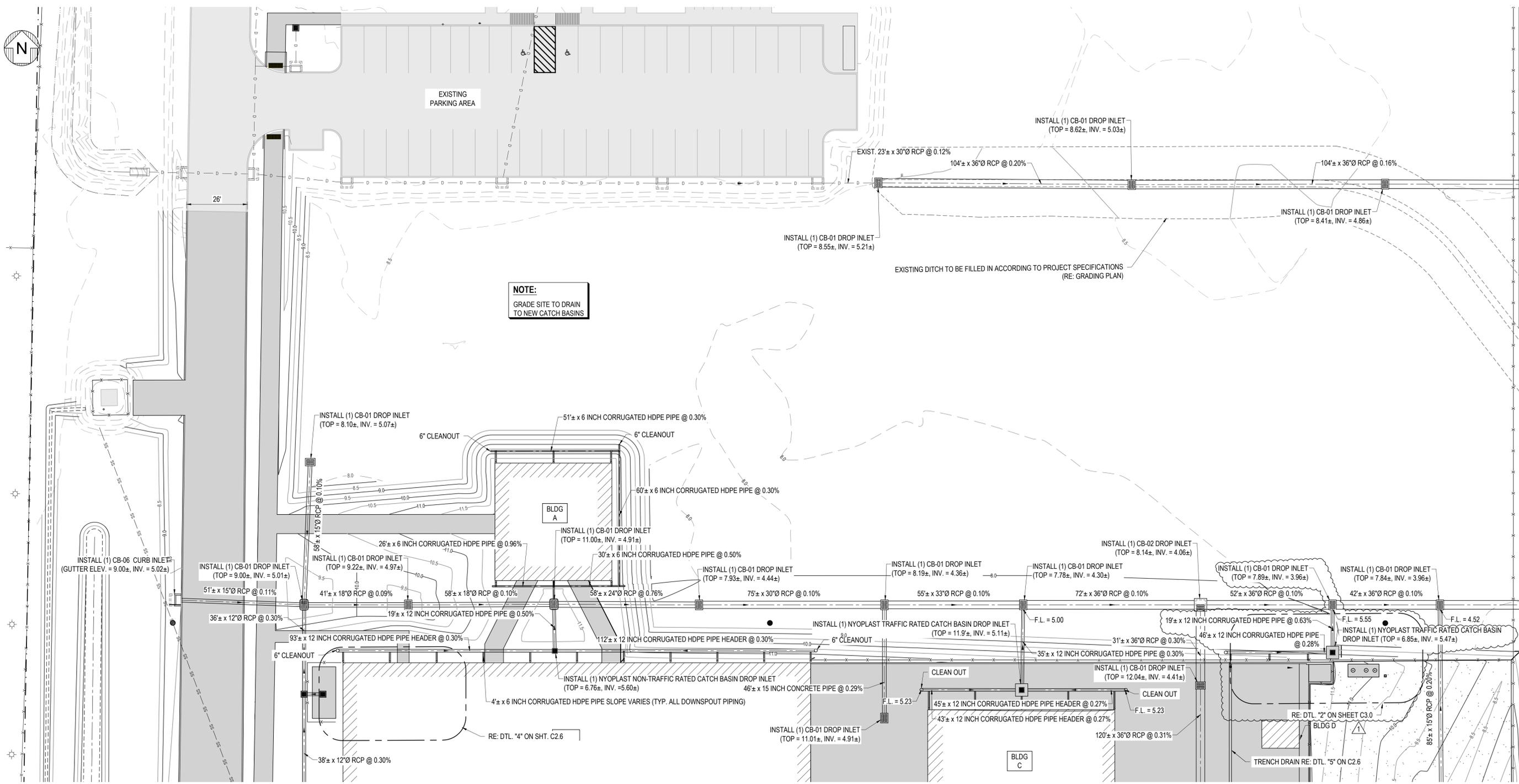
LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
ENLARGED GRADING PLAN (NORTH)

SHEET NO. **C1.1R**

VER.	DATE	DESCRIPTION
0	12/02/2025	CONSTRUCTION DOCUMENTS
1	02/06/2026	CONSTRUCTION DOCUMENTS (ADD. 1.)

ARCH # 240098A

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NOTE:
GRADE SITE TO DRAIN TO NEW CATCH BASINS

NOTE:
FOR CIVIL SANITARY SEWER PLANS AND DETAILS RE: SHT. C3.0

NOTE:
FOR ALL ADS PRODUCTS, CONTRACTOR MAY SUBMIT AN ALTERNATE PRODUCT OF EQUAL SPECIFICATIONS FOR APPROVAL BY ENGINEER OF RECORD.

LEGEND

	EXISTING PROPERTY LINE
	EXISTING OVERHEAD POWER
	EXISTING DRAINAGE PIPE
	EXISTING DITCH CENTERLINE
	EXISTING DITCH TOP
	EXISTING DITCH TOE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING FENCE
	EXISTING CONCRETE PAVING
	EXISTING ASPHALT PAVING
	EXISTING SANITARY SEWER CLEANOUT
	EXISTING SANITARY SEWER MANHOLE
	EXISTING POWER POLE
	NEW DRAINAGE PIPE
	NEW DITCH CENTERLINE / POND FLOW LINE
	NEW DITCH/POND TOP
	NEW DITCH/POND TOE
	NEW FENCE
	NEW CONCRETE PAVING
	NEW GRAVEL LAY DOWN

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND MUST NOTIFY LOUISIANA 811 BY CALLING 811 OR 1-800-272-3020 OR BY VISITING LOUISIANA811.COM AT LEAST TWO BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY WORK.

Louisiana 811
LOUISIANA811.COM

AREA "1" ENLARGED DRAINAGE PLAN
SCALE: 1" = 20'

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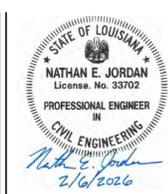
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LAKE CHARLES, LA 70601
PES PROJECT NO. 24044
PHONE: 337.622.8897 WWW.PESERVICES.US

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NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
AREA "1" ENLARGED DRAINAGE PLAN

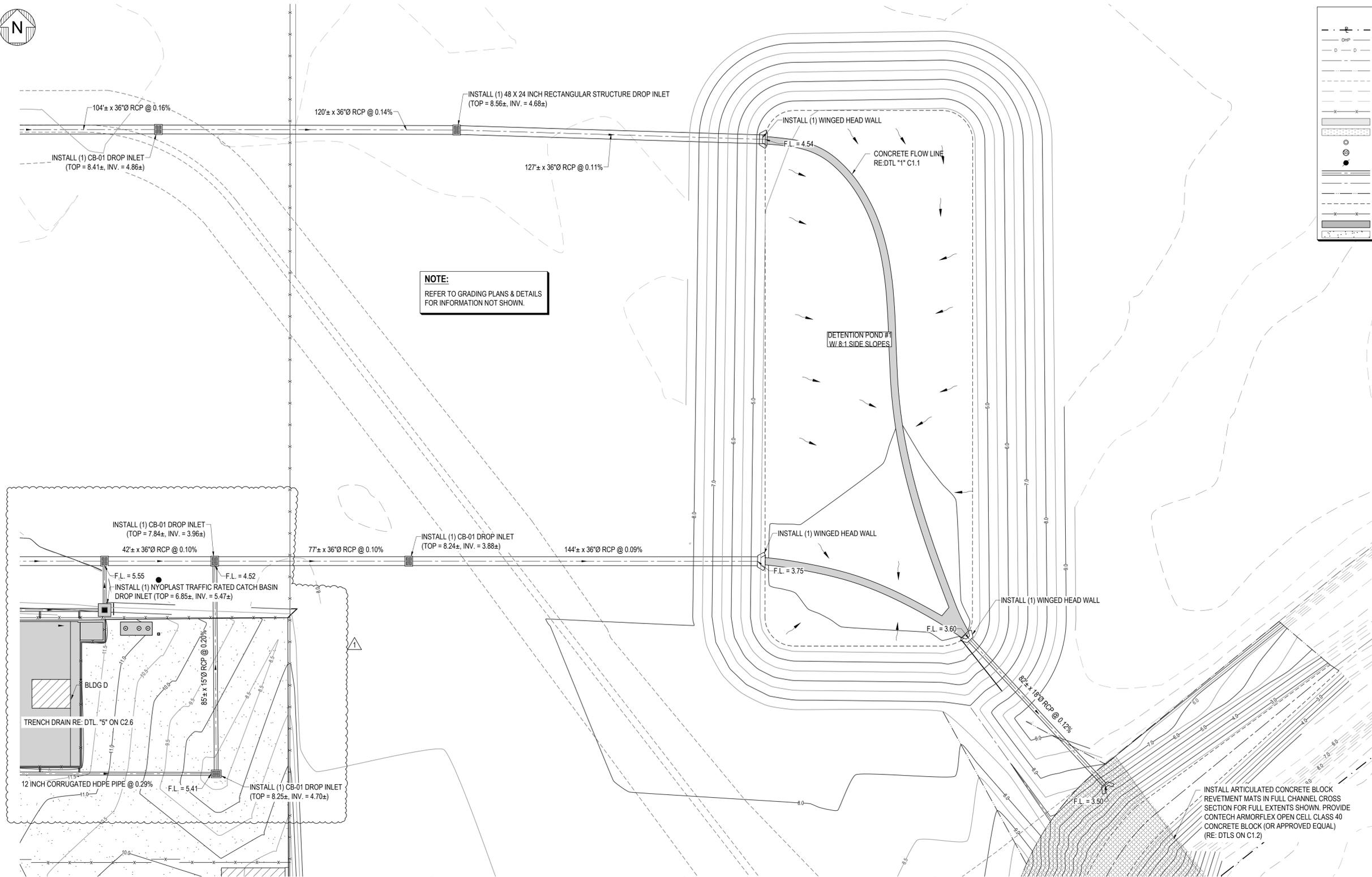
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ARCH # 240098A

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1	02/06/2026	CONSTRUCTION DOCUMENTS (ADD. 1.)

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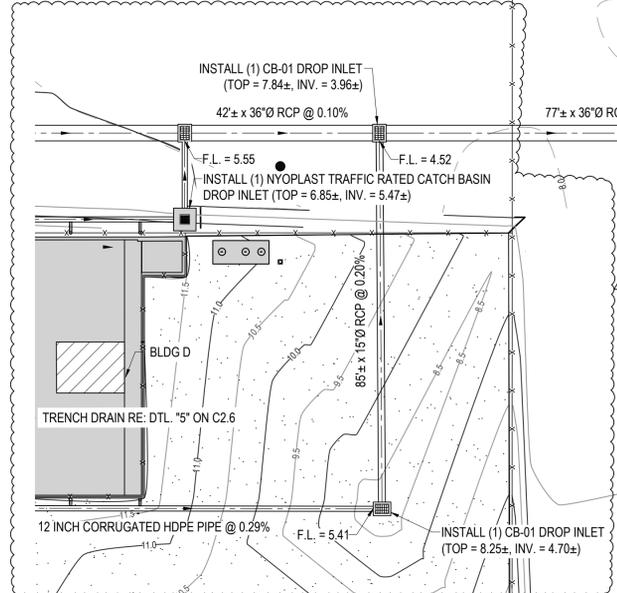
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NOTE:
REFER TO GRADING PLANS & DETAILS FOR INFORMATION NOT SHOWN.

LEGEND	
	EXISTING PROPERTY LINE
	EXISTING OVERHEAD PIPE
	EXISTING DRAINAGE PIPE
	EXISTING DITCH CENTERLINE
	EXISTING DITCH TOP
	EXISTING DITCH TOE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING FENCE
	EXISTING CONCRETE PAVING
	EXISTING ASPHALT PAVING
	EXISTING SANITARY SEWER CLEANOUT
	EXISTING SANITARY SEWER MANHOLE
	EXISTING POWER POLE
	NEW DRAINAGE PIPE
	NEW DITCH CENTERLINE
	NEW DITCH TOP
	NEW DITCH TOE
	NEW FENCE
	NEW CONCRETE PAVING
	NEW GRAVEL LAY DOWN

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND MUST NOTIFY LOUISIANA 811 BY CALLING 811 OR 1-800-272-3020 OR BY VISITING LOUISIANA811.COM AT LEAST TWO BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY WORK.



AREA "4" ENLARGED DRAINAGE PLAN
SCALE: 1" = 20'

NOTE:
FOR CIVIL SANITARY SEWER PLANS AND DETAILS RE: SHT. C3.0

NOTE:
FOR ALL ADS PRODUCTS, CONTRACTOR MAY SUBMIT AN ALTERNATE PRODUCT OF EQUAL SPECIFICATIONS FOR APPROVAL BY ENGINEER OF RECORD.

INSTALL ARTICULATED CONCRETE BLOCK RETEMENT MATS IN FULL CHANNEL CROSS SECTION FOR FULL EXTENTS SHOWN. PROVIDE CONTECH ARMORFLEX OPEN CELL CLASS 40 CONCRETE BLOCK (OR APPROVED EQUAL) (RE: DTLS ON C1.2)



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AREA "4" ENLARGED DRAINAGE PLAN

SHEET NO. **C2.3R**
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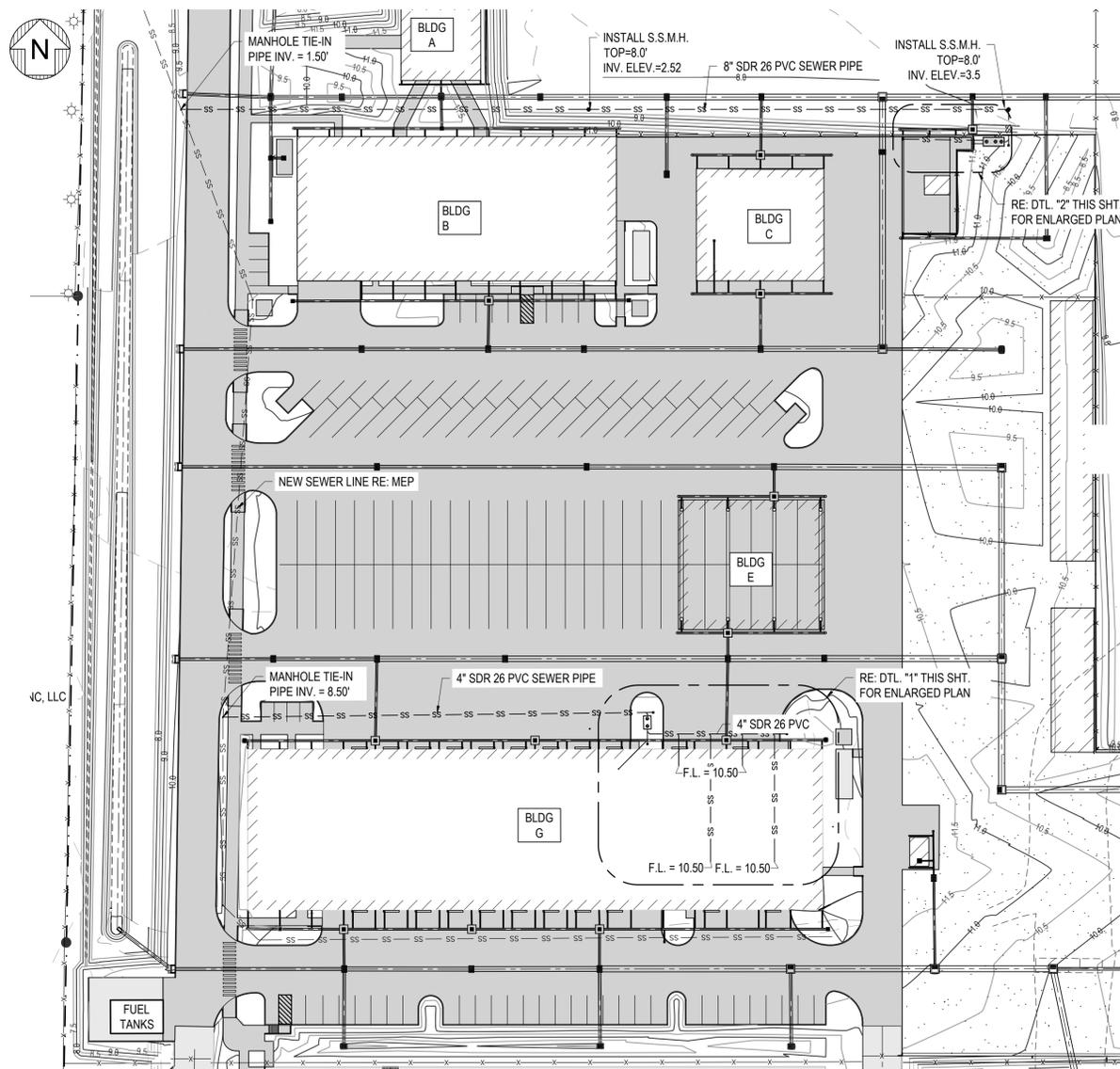
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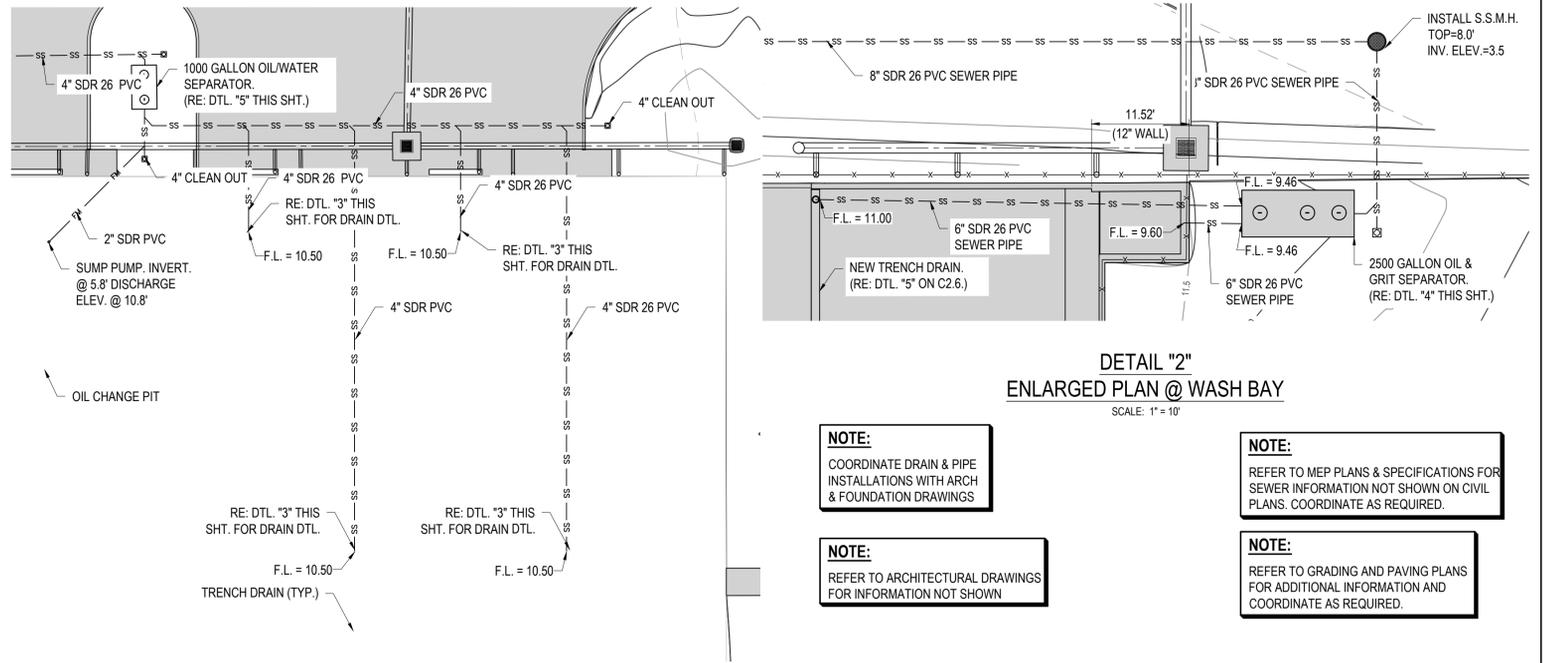


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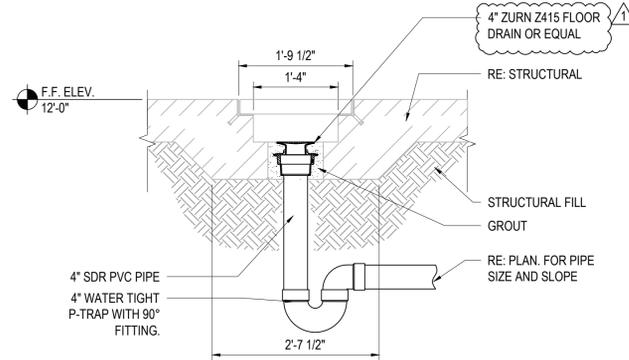
CIVIL SANITARY SEWER PLAN
SCALE: 1" = 50'



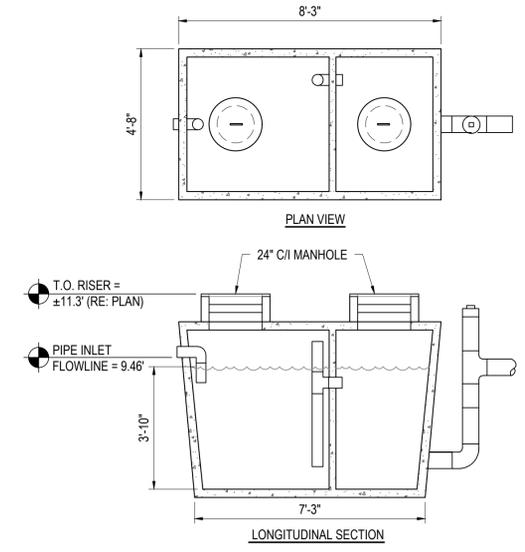
DETAIL "2"
ENLARGED PLAN @ WASH BAY
SCALE: 1" = 10'



DETAIL "1"
ENLARGED PLAN @ VEHICLE MAINTENANCE SHOP
SCALE: 1" = 16'



DETAIL "3"
TYPICAL TRENCH DRAIN TIE-IN @ VEHICLE MAINTENANCE BUILDING
SCALE: N.T.S.



DETAIL "5"
1000 GALLON OIL WATER SEPARATOR
SCALE: 3/8" = 1'-0"

OIL & GRIT SEPARATOR NOTES:

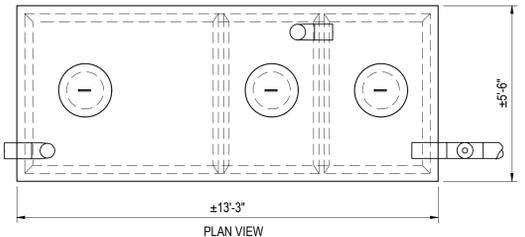
- SEPARATOR TO BE A 3 CHAMBER, 2500 GALLON OIL & GRIT SEPARATOR BY HOOT SYSTEMS (OR EQUAL)
- STRUCTURE TO BE CONSTRUCTED USING CLASS 1 CONCRETE WITH A 28 DAY DESIGN STRENGTH AT 5000 PSI
- REINFORCING TO BE #4 GRADE 60 BARS
- ALL BAFFLES TO BE POURED MONOLITHICALLY WITH THE STRUCTURE.
- RISERS TO BE 24" Ø ID WITH A CAST IRON MANHOLE COVER.
- PROVIDE A 6" Ø SAMPLE PORT USING SCH 40 PVC.

OIL/WATER SEPARATOR NOTES:

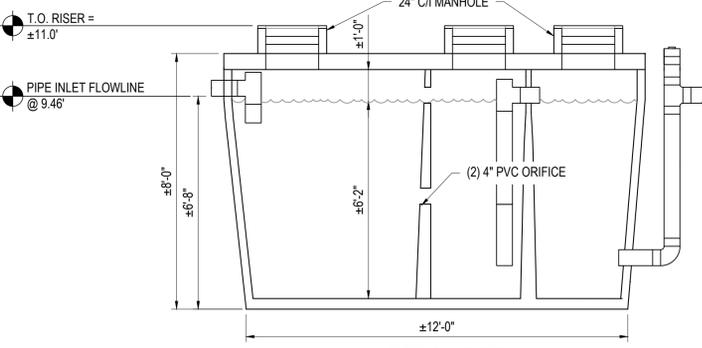
- SEPARATOR TO BE A 1000 GALLON OIL/WATER SEPARATOR BY HOOT SYSTEMS (OR EQUAL)
- STRUCTURE TO BE CONSTRUCTED USING CLASS 1 CONCRETE WITH A 28 DAY DESIGN STRENGTH AT 5000 PSI
- REINFORCING TO BE #4 GRADE 60 BARS
- ALL BAFFLES TO BE POURED MONOLITHICALLY WITH THE STRUCTURE.
- RISERS TO BE 24" Ø ID WITH A CAST IRON MANHOLE COVER.
- PROVIDE A 6" Ø SAMPLE PORT USING SCH 40 PVC.

GENERAL SEWER NOTES:

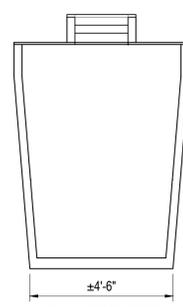
- MINIMUM SLOPE FOR 8" DIAMETER SANITARY SEWER MAINS SHALL BE 0.40%. MINIMUM SLOPE FOR 6" DIAMETER SANITARY SEWER LINES SHALL BE 0.60%.
- ALL SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 36" COVER.
- SANITARY SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. DISTANCE SHALL BE MEASURED EDGE TO EDGE.
- THE BOTTOM OF THE WATER MAIN SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER MAIN AT CROSSINGS, MEASURED EDGE TO EDGE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN.
- SERVICE CONNECTIONS TO THE SEWER MAIN SHALL BE WATER TIGHT AND NOT PROTRUDE INTO THE SEWER.
- ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE DEPARTMENT OF HEALTH & HOSPITALS, LA SANITARY CODE. ALL SEWER CONSTRUCTION SHALL BE COORDINATED WITH THE ENGINEER OF RECORD.
- SANITARY SEWER PIPE SHALL BE PVC CONFORMING TO THE REQUIREMENTS OF ASTM D3034. THE PIPE SHALL BE SDR 26. THE PIPE AND FITTINGS SHALL BE JOINED BY AN ELASTOMERIC GASKET SYSTEM MEETING THE REQUIREMENTS OF ASTM F477. ALL FITTINGS SHALL BE IN-LINE FITTINGS.
- UPON COMPLETION OF THE SANITARY SEWER SYSTEM, ALL SANITARY SEWER MAINS SHALL BE TESTED AS FOLLOWS:
 - LAMP TEST:** ALL SEWER LINES SHALL BE INSPECTED VISUALLY TO VERIFY ACCURACY OF ALIGNMENT AND FREEDOM OF DEBRIS AND OBSTRUCTIONS. THE FULL DIAMETER OF PIPE SHOULD BE VISIBLE WHEN VIEWED BETWEEN CONSECUTIVE MANHOLES.
 - LOW PRESSURE AIR TESTING:** AFTER THE LINE BETWEEN MANHOLES HAS BEEN PROPERLY CLEANED AND BACKFILLED, PLUGS SHALL BE PLACED IN EITHER END OF THE LINE AND INFLATED. LOW PRESSURE AIR SHALL BE INTRODUCED INTO THE SEALED LINE TO A PRESSURE OF 4 PSIG AND ALLOWED TO STABILIZE (A MINIMUM OF TWO (2) MINUTES) TO A MINIMUM PRESSURE OF 3.5 PSIG. IF THE TIME REQUIRED TO DROP THE AIR PRESSURE TO 2.5 PSIG IS LESS THAN THE TIME SCHEDULED AS FOLLOWS FOR THE VARIOUS DIAMETERS, THEN THE TEST HAS FAILED. THE TEST MAY BE CONCLUDED IF THE PRESSURE DOES NOT FALL TO 2.5 PSIG IN THE TIME SCHEDULED.
- MINIMUM HOLDING TIME REQUIRED FOR PRESSURE TO DROP FROM 3.5 PSIG TO 2.5 PSIG SHALL BE 10 MINUTES FOR 12" DIAMETER SEWER PIPE AND 4 MINUTES FOR 8" DIAMETER SEWER PIPE AND SMALLER.
- IF THE GROUND WATER TABLE IS ABOVE THE TOP OF THE SEWER PIPE, THE TEST PRESSURE SHALL BE ADJUSTED UPWARD TO GIVE A NET PRESSURE DIFFERENTIAL OF 3.5 PSIG.
- ANY OBVIOUS EXCESSIVE LEAKS IN THE SYSTEM SHALL BE REPAIRED IMMEDIATELY UPON DISCOVERY. COSTS FOR REPAIRING FAULTY WORK INCLUDING RE-EXCAVATING, RE-BACKFILLING, AND FOR MAKING TESTS, SHALL BE INCLUDED IN PRICE BID FOR INSTALLING SEWERS.
- CONTRACTOR SHALL INSTALL THE GRAVITY SANITARY SEWER SYSTEM BEFORE CONSTRUCTING GRAVITY STORMWATER SYSTEM AND POTABLE WATER SYSTEM.
- ALL MATERIALS, INSTALLATION, AND TESTING SHALL CONFORM TO THE THE CITY OF LAKE CHARLES STANDARDS AND REQUIREMENTS



PLAN VIEW



LONGITUDINAL SECTION



TRANSVERSE SECTION

DETAIL "4"
2500 GALLON OIL & GRIT SEPARATOR
SCALE: 3/8" = 1'-0"



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LAKE CHARLES, LA 70615

C3.0R

VER.	DATE	DESCRIPTION
0	12/02/2025	CONSTRUCTION DOCUMENTS
1	02/06/2026	CONSTRUCTION DOCUMENTS (ADD. 1.)

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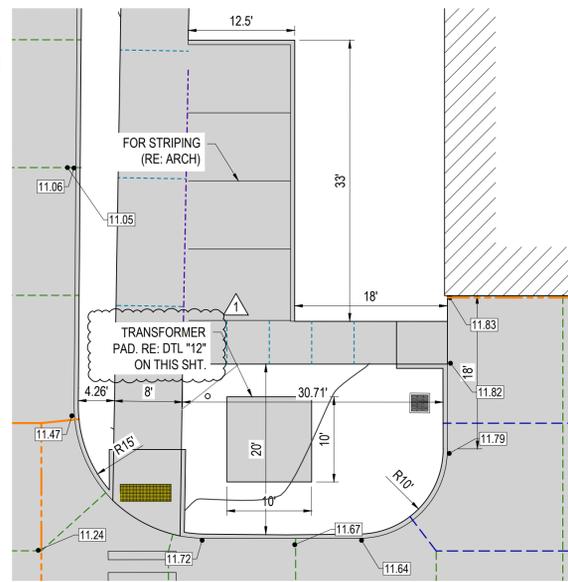
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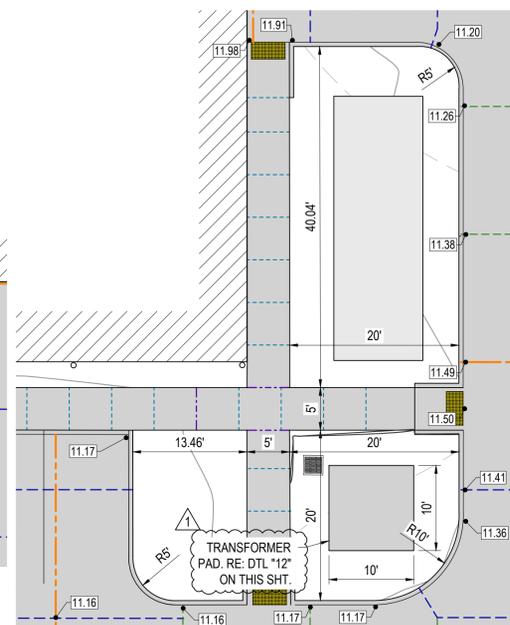
700 PUJOT ST. SUITE C
LAKE CHARLES, LA 70601
PES PROJECT NO. 24044
PHONE: 337.622.8991 WWW.PESERVICES.US



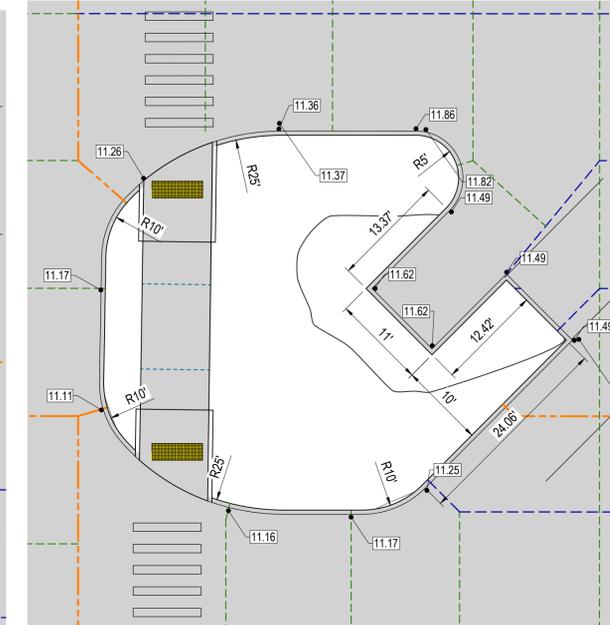
ALL PLANS THIS SHT.



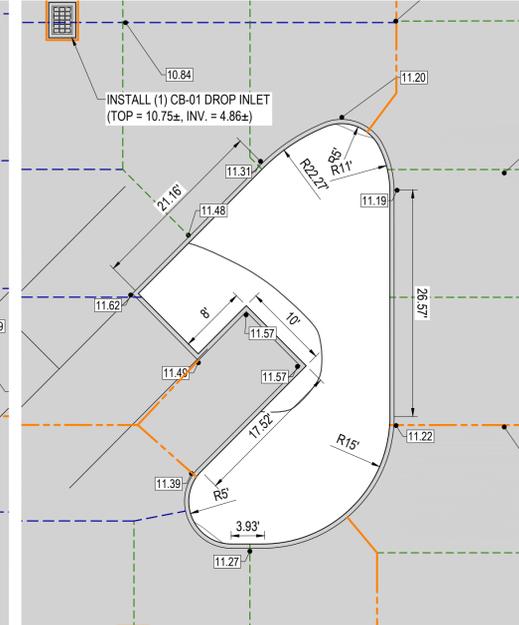
DETAIL "1"
ENLARGED PLAN
SCALE: 1" = 10'



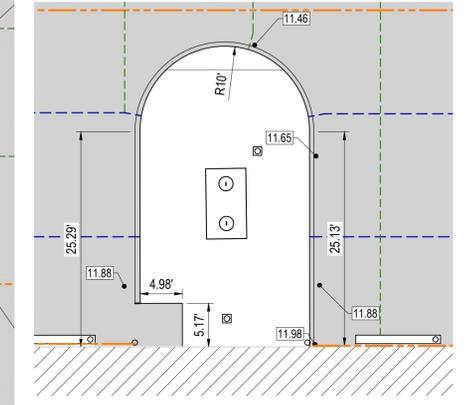
DETAIL "2"
ENLARGED PLAN
SCALE: 1" = 10'



DETAIL "3"
ENLARGED PLAN
SCALE: 1" = 10'

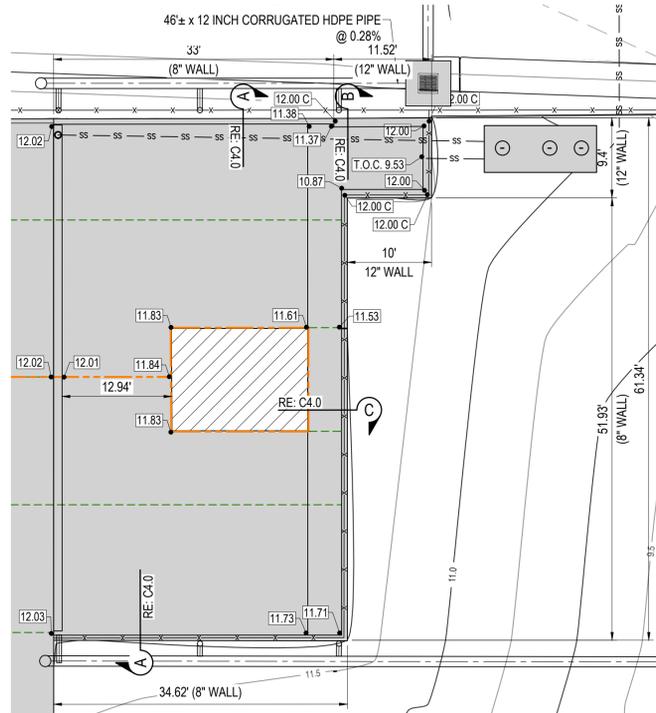


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ENLARGED PLAN
SCALE: 1" = 10'

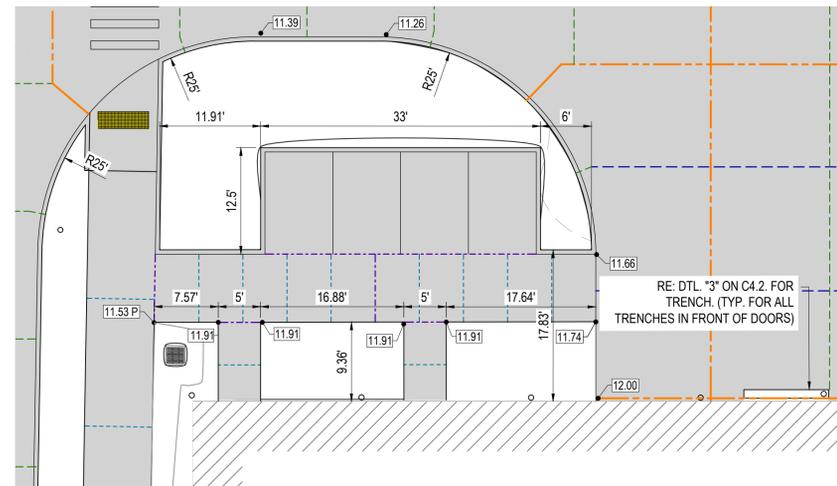


DETAIL "5"
ENLARGED PLAN
SCALE: 1" = 10'

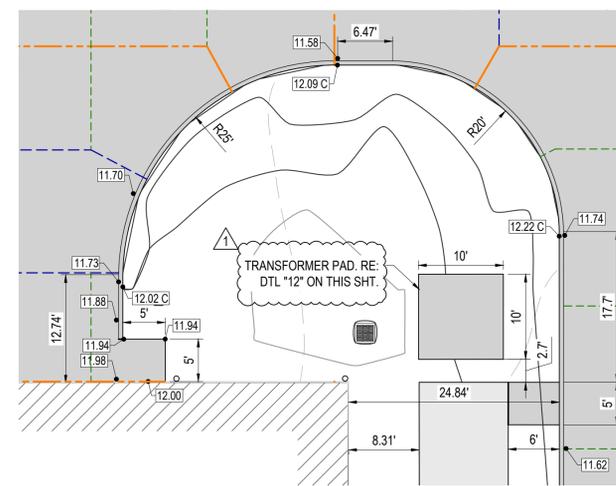
NOTE:
AVOID CONCRETE JOINTS THAT COME TO A POINT. IF A JOINT GETS WITHIN 2' OF A RADIUS, CONTRACTOR TO TERMINATE JOINTS PERPENDICULAR TO THE RADIUS AS SHOWN.



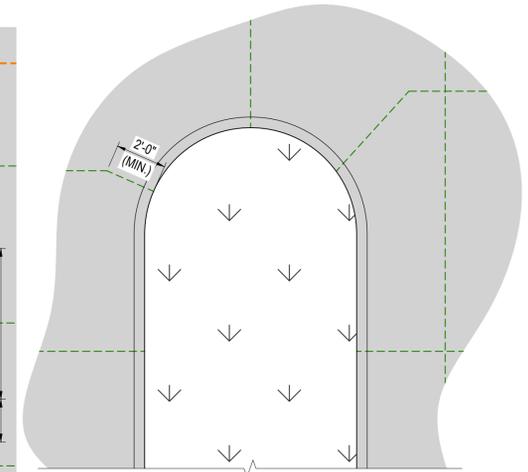
DETAIL "6"
ENLARGED PLAN @ WASH BAY
SCALE: 1" = 10'



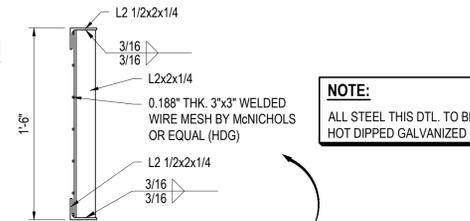
DETAIL "7"
ENLARGED PLAN
SCALE: 1" = 10'



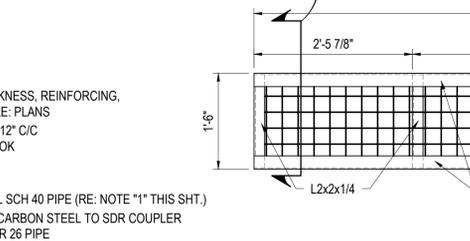
DETAIL "8"
ENLARGED PLAN
SCALE: 1" = 10'



DETAIL "9"
TYPICAL CONTROL JOINT
TERMINATION
SCALE: 1" = 10'

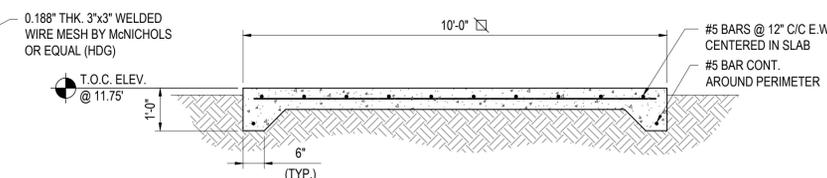


NOTE:
ALL STEEL THIS DTL. TO BE HOT DIPPED GALVANIZED



NOTE "11":
CONTRACTOR TO INSTALL A FLANGE AT END OF A 6" Ø CARBON STEEL SCH 40 PIPE TO ALLOW A SCREEN TO BE FASTENED TO FLANGE. SCREEN TO BE ATTACHED WITH FLUSH PAN HEAD SCREWS SO THAT NOTHING PROTRUDES INTO THE SUMP. SCREEN TO HAVE A MINIMUM OF 75% VOIDS TO ALLOW WATER TO FLOW THROUGH. HOLES TO NOT EXCEED 3/4" IN DIAMETER. HOT DIP GALVANIZE AFTER FABRICATION.

DETAIL "11"
COARSE SCREEN
SCALE: 3/4" = 1'-0"



DETAIL "12"
TRANSFORMER PAD
SCALE: 3/4" = 1'-0"

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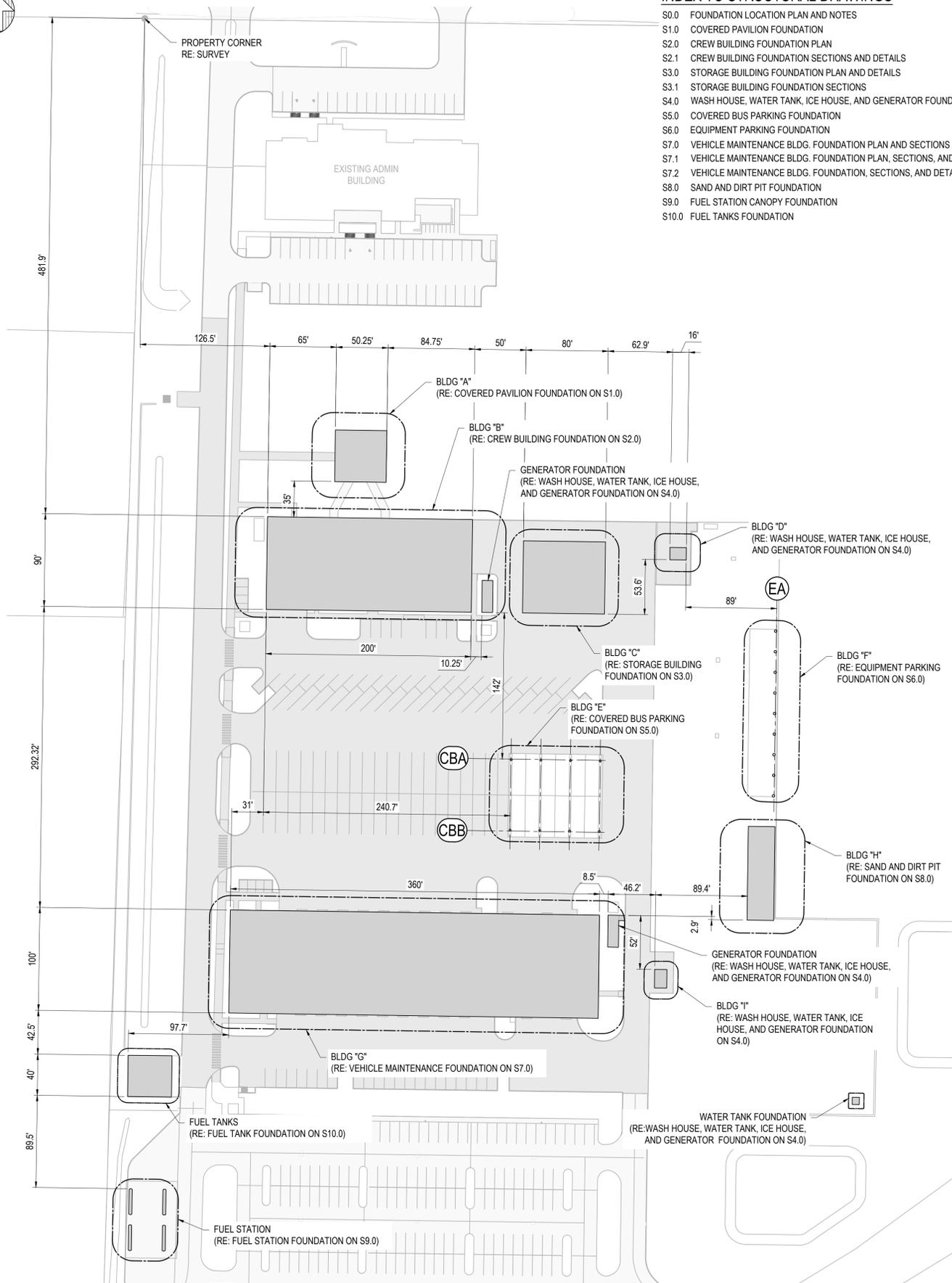
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LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
MISC. PAVING DETAILS

SHEET NO.
C4.3R
ARCH # 240098A

VER.	DATE	DESCRIPTION
0	12/02/2025	CONSTRUCTION DOCUMENTS (ADD. 1.)
1	02/06/2026	CONSTRUCTION DOCUMENTS (ADD. 1.)

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FOUNDATION LOCATION PLAN
SCALE: 1" = 60'

INDEX TO STRUCTURAL DRAWINGS

- S0.0 FOUNDATION LOCATION PLAN AND NOTES
- S1.0 COVERED PAVILION FOUNDATION
- S2.0 CREW BUILDING FOUNDATION PLAN
- S2.1 CREW BUILDING FOUNDATION SECTIONS AND DETAILS
- S3.0 STORAGE BUILDING FOUNDATION PLAN AND DETAILS
- S3.1 STORAGE BUILDING FOUNDATION SECTIONS
- S4.0 WASH HOUSE, WATER TANK, ICE HOUSE, AND GENERATOR FOUNDATIONS
- S5.0 COVERED BUS PARKING FOUNDATION
- S6.0 EQUIPMENT PARKING FOUNDATION
- S7.0 VEHICLE MAINTENANCE BLDG. FOUNDATION PLAN AND SECTIONS
- S7.1 VEHICLE MAINTENANCE BLDG. FOUNDATION PLAN, SECTIONS, AND DETAILS
- S7.2 VEHICLE MAINTENANCE BLDG. FOUNDATION, SECTIONS, AND DETAILS
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- S9.0 FUEL STATION CANOPY FOUNDATION
- S10.0 FUEL TANKS FOUNDATION

DRILLED SHAFT NOTES:

1. DRILLED SHAFT CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF ACI 336.1 (LATEST EDITION) "STANDARD SPECIFICATION FOR CONSTRUCTION OF DRILLED PIERS" AND AS INDICATED IN THE DRILLED SHAFT NOTES BELOW. REFER TO GEOTECHNICAL REPORT BY DANIEL J. HOLDER, P.E. INC. DATED 16 JANUARY, 2026 (FILE NO. 25-041). FOR GENERAL SOIL CONDITIONS.
2. CAST IN PLACE CONCRETE (NORMAL WEIGHT) SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH EQUAL TO 3,000 PSI MINIMUM. CONCRETE SHALL MEET REQUIREMENTS FOR EXPOSURE CLASS P1 AND C1.
3. THE REINFORCING STEEL CAGE SHALL BE SUFFICIENTLY STIFF TO MAINTAIN ITS PROPORTIONS AND BAR POSITIONS DURING HANDLING AND PLACING.
4. REMOVE DEBRIS FROM THE BOTTOM OF EACH DRILLED SHAFT PRIOR TO POURING CONCRETE. FOR SLURRY CONSTRUCTION THE BASE OF SHAFT SHALL BE CLEANED IN ACCORDANCE WITH ACI 336.1 SECTION 3.7.3.5.
5. FREE FALL CONCRETING METHOD SHALL NOT BE USED TO POUR CONCRETE FOR DRILLED SHAFTS UNLESS APPROVED BY ENGINEER OF RECORD. OTHERWISE, ALL CONCRETE SHALL BE PLACED USING A TREMIE OR PUMP PIPE PER ACI 336.1 SECTION 3.7.5.
6. FOR DRY DRILLED SHAFT INSTALLATION, LIMIT WATER IN THE BOTTOM OF THE DRILLED SHAFT TO 2" PRIOR TO POURING CONCRETE. IF WATER SEEPS INTO THE SHAFT HOLE AT A RATE GREATER THAN 1/4" RISE PER MINUTE, EITHER CASING OR SLURRY MUST BE USED TO RETAIN THE SIDES OF THE EXCAVATION DURING THE CONCRETING PROCESS.
7. WHEN CASINGS ARE USED, PROCEED WITH THE PLACEMENT OF CONCRETE UNTIL THE CONCRETE LEVEL IS ABOVE THE LEVEL OF THE COLLAPSIBLE SOIL BEFORE THE CASING IS COMPLETELY LIFTED.
8. CONCRETE SHALL BE PLACED IN ONE CONTINUOUS OPERATION.
9. EXPOSED REINFORCEMENT SHALL BE PROTECTED AS REQUIRED UNTIL THE FOUNDATION CONSTRUCTION IS COMPLETE. REINFORCEMENT SHALL BE PLACED AS A SINGLE LENGTH IF POSSIBLE.
10. DURING THE COURSE OF EXCAVATION / DRILLING ACTIVITIES, UNUSUAL CIRCUMSTANCES SHALL BE REPORTED TO THE ENGINEER OF RECORD FOR REVIEW BY DESIGNATED GEOTECHNICAL ENGINEER.
11. CONCRETING SHALL BE COMPLETED THE SAME DAY EXCAVATION IS COMPLETED - REFER TO ACI 336.1 SECTION 3.7.2 IF THIS IS NOT POSSIBLE. DRY HOLES SHALL NOT BE LEFT OPEN OVERNIGHT.
12. CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT EXISTING EQUIPMENT AND FACILITIES FROM EXCAVATED MATERIALS, DAMAGE, AND SLURRY. PROVIDE NECESSARY BARRIERS TO ENSURE EQUIPMENT STAYS PROTECTED.
13. SPOILS FROM DRILLED SHAFT EXCAVATIONS SHALL BE DISPOSED OF AS DIRECTED BY OWNER'S REPRESENTATIVE.

GENERAL STEEL NOTES:

1. ALL STRUCTURES SHALL BE SHOP FABRICATED UNLESS OTHERWISE SHOWN ON DRAWINGS.
2. DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
3. STRUCTURAL STEEL, PLATES, ETC. SHALL BE ASTM A36 (MIN. YIELD STRENGTH OF 36 KSI), EXCEPT HSS SHAPES, WHICH SHALL BE A500 GR. C (MIN. YIELD STRENGTH OF 46 KSI), AND W SHAPES, WHICH SHALL BE A992 (MIN. YIELD STRENGTH OF 50 KSI).
4. WELDING SHALL CONFORM TO AWS D1.1 USING AWS A5.2 OR AWS A5.5 E70XX LOW HYDROGEN ELECTRODES IN ACCORDANCE WITH THE LATEST AWS WELDING CODE AS MODIFIED BY AISC SPECIFICATION.
5. FIELD CONNECTIONS SHALL BE BOLTED, UNLESS NOTED OTHERWISE, AND CONNECTIONS SHALL DEVELOP FULL STRENGTH OF MEMBER.
6. BOLTED CONNECTIONS SHALL BE BOLTED WITH ASTM A325, 3/4" HS BOLTS (MIN.), UNLESS NOTED OTHERWISE. ALL BOLTS, NUTS, AND WASHERS TO BE GALVANIZED. (EXCEPT FOR ASTM A490 BOLTS).
7. ALL HOLES SHALL BE 13/16" Ø FOR 3/4" Ø BOLTS, UNLESS NOTED OTHERWISE.
8. ALL HIGH STRENGTH BOLTED CONNECTIONS SHALL BE BEARING TYPE WITH MINIMUM OF TWO 3/4" Ø BOLTS, THREADS INCLUDED IN SHEAR PLANE (ASTM A325N), UNLESS NOTED OTHERWISE. PROVIDE MAXIMUM NUMBER OF BOLTS THAT WILL FIT ON 3" CENTERS FOR STANDARD CONNECTIONS.
9. ALL BOLTS SHALL BE TIGHTENED BY THE TURN-OF-THE-NUT METHOD TO THE MINIMUM TENSION AS SPECIFIED IN THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, UNLESS NOTED OTHERWISE.
10. STEEL FABRICATOR TO FURNISH ALL BOLTS, NUTS, WASHERS, CLIPS, ETC. NECESSARY FOR ERECTION, PLUS FIVE (5) PERCENT EXTRA.
11. GUSSET PLATES SHALL BE 3/8" THICK MINIMUM.
12. WELDS SHALL BE 3/16" THICK FILLET MINIMUM UNLESS NOTED OTHERWISE.
13. REMOVE ALL BURRS AND SHARP EDGES AFTER FABRICATION, BUT PRIOR TO FINISHING.
14. ALL STRUCTURAL STEEL TO RECEIVE CORROSION PROTECTION. USE SHOP PRIMER UNLESS NOTED OTHERWISE.
15. STEEL FABRICATOR SHALL PROVIDE SHOP DRAWINGS (2 COPIES EACH) TO CONTRACTOR FOR APPROVAL BY ENGINEER, PRIOR TO FABRICATION. THIS SHALL INCLUDE A REPRODUCIBLE DRAWING OF ERECTION PLAN.
16. ERECTOR SHALL PROVIDE ALL TEMPORARY SHORING AND BRACING NEEDED FOR STABILITY UNTIL STRUCTURE IS COMPLETE.
17. HOLES REQUIRED FOR FIELD ERECTION SHALL BE DRILLED OR PUNCHED. NO BURNING WILL BE PERMITTED WITHOUT PRIOR APPROVAL FROM OWNER'S REPRESENTATIVE.
18. CONFIRM FINAL FRAME DIMENSIONS WITH OVERHEAD DOOR VENDOR PRIOR TO FABRICATION.
19. REFER TO ARCHITECTURAL DRAWINGS FOR ALL FINISHINGS, WEATHER-PROOFING DETAILS, ETC.
20. ALL EXTERIOR STRUCTURAL STEEL INCLUDING HANDRAILS, LADDERS, FASTENERS, ETC., SHALL BE CLEANED, PICKLED, AND HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 (OR EQUAL). ALL NECESSARY PRECAUTIONS SHALL BE EXERCISED DURING GALVANIZING TO PREVENT DEFORMATION AND ALL STEEL SHALL BE STRAIGHTENED IF NECESSARY BEFORE SHIPPING.
21. GALVANIZED MEMBERS FIELD CUT, DAMAGED, OR WELDED SHALL HAVE DAMAGED GALVANIZING REPAIRED WITH "ZRC COLD GALVANIZING COMPOUND" (AS MANUFACTURED BY ZRC CHEMICAL PRODUCTS INC., QUINCY, MASS.), OR AN APPROVED EQUAL, APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS BY ERECTOR. SPRAY GALVANIZING WILL NOT BE ACCEPTED. ALL REPAIRS SHALL COMPLY WITH ASTM A780.

NOTE:
REFER TO ARCHITECTURAL AND CIVIL PLANS FOR INFORMATION NOT SHOWN.

BENCHMARK NOTE:
A BENCHMARK HAS NOT BEEN SET FOR THIS PROJECT WITH THE PROVIDED SURVEY FROM D.W. JESSEN AND ASSOCIATES. THE WEST SIDE OF THE TOP OF CONCRETE HEADWALL AT THE SOUTHWEST CORNER OF BROAD ST. AND J. BENNETT JOHNSTON AT ELEVATION 10.52' (1953 BENCHMARK) MAY BE USED AS REFERENCE ONCE CONFIRMED WITH SURVEYOR.

THE CONTRACTOR IS RESPONSIBLE FOR HAVING PROJECT BENCHMARKS SET FOR CONSTRUCTION. COORDINATION WITH ORIGINAL SURVEYOR IS ENCOURAGED.

GENERAL CONCRETE NOTES:

1. ALL CONCRETE SHALL CONFORM TO ASTM C94, READY MIX CONCRETE HAVING A MAXIMUM AGGREGATE SIZE OF 1" AND A MAXIMUM SLUMP OF 5". PORTLAND CEMENT SHALL BE TYPE "1", "2", OR "1L". CONVEYANCE AND PLACEMENT OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH ACI 315 AND 318, LATEST EDITIONS. CONCRETE SHALL HAVE A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318, LATEST EDITION.
3. ALL CONCRETE NOT PLACED DIRECTLY AGAINST UNDISTURBED SOIL SHALL BE FORMED. ALL FORM MATERIALS SHALL BE OF GOOD QUALITY, ERECTED TO PROPER ELEVATIONS, AND ADEQUATELY BRACED. REFER TO PLANS FOR AREAS REQUIRING USE OF "FORM-PLY" OR OTHER SMOOTH-FACED FORM MATERIALS. ALL FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS AFTER CONCRETE HAS REACHED "FINAL" SET. ALL EXPOSED CONCRETE SHALL BE FINISHED WITH A 1", 45-DEGREE, CONTINUOUS CHAMFER.
4. ALL CONCRETE SHALL BE PROTECTED AND MAINTAINED IN A MOISTENED CONDITION FOR A MINIMUM OF SEVEN (7) DAYS OR TREATED WITH A CURING COMPOUND FREE FROM OILS AND PARAFFIN BASED MATERIALS.
5. ALL REINFORCEMENT STEEL SHALL BE INTERMEDIATE GRADE, NEW BILLET STEEL, DEFORMED BAR AND CONFORM TO ASTM A615, GRADE 60.
6. WELDED WIRE FABRIC REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM-185. LAP 12" MINIMUM.
7. ALL HORIZONTAL REINFORCING BARS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH INTERSECTIONS. ALL SPLICES SHALL HAVE A MINIMUM LAP OF 40 BAR DIAMETERS. ALL TERMINATING REBAR RUNS SHALL HAVE A FULLY DEVELOPED STANDARD HOOK AT THE TERMINATING END. BARS AT THICKENED EDGES AND JOINTS SHALL BE SUPPORTED BY CHAIRS SPACED NO GREATER THAN 4'-0" C/C.
8. ALL DETAILING, FABRICATION, AND PLACEMENT OF REINFORCEMENT STEEL SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315, LATEST EDITION.
9. REINFORCING STEEL COVERAGE UNLESS NOTED OTHERWISE:
 - a. FOOTINGS AND GRADE BEAMS: 3" BOTTOM, TOP, AND SIDES
 - b. PEDESTALS: 2" ALL SIDES AND TOP
10. ALL REINFORCEMENT BAR SPLICES SHALL BE BASIC CLASS "B" TENSION LAP SPLICES.
11. ALL PORTLAND CEMENT GROUT SHALL BE FIVE STAR PRODUCTS (TM) "FIVE STAR GROUT" (OR APPROVED EQUAL) PORTLAND CEMENT BASED GENERAL PURPOSE GROUT.
12. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, GRADE 36 MATERIAL, AND SHALL BE "HOT-DIP" GALVANIZED AFTER FABRICATION. EXPOSED PROJECTIONS OF ALL ANCHOR BOLTS SHALL BE GREASED AND PROTECTIVE WRAPPED PRIOR TO PLACEMENT OF CONCRETE.
13. PRIOR TO POURING NEW CONCRETE AGAINST EXISTING CONCRETE, EXISTING SHALL BE THOROUGHLY CLEANED, AND ROUGHENED, AND COATED WITH SIKADUR 32 HI-MOD LPL EPOXY BONDING AGENT (OR APPROVED EQUAL) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
14. EXTERIOR CONCRETE PAVEMENT TO RECEIVE BROOM FINISH PER SPECIFICATIONS. REFER TO SPECIFICATIONS FOR BUILDING INTERIOR FLOOR AREAS.
15. ALL CONCRETE PAVEMENT OR SLAB JOINTS NOT SHOWN OR LABELED SHALL BE CONTROL JOINTS. DOWELS SHALL BE SMOOTH BAR TYPE IN BOTH CONTRACTION AND EXPANSION JOINTS UNLESS NOTED OTHERWISE. ONE SIDE OF THE DOWELS SHALL BE EITHER GREASED OR HAVE PLASTIC CAPS INSTALLED OVER THE ENDS OF THE BARS. SECURE DOWELS TO MAINTAIN LEVEL DURING CONCRETE POUR.

SUBGRADE AND STRUCTURAL FILL NOTES:

1. ALL SUBGRADE PREPARATION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT BY DANIEL J. HOLDER, PE DATED 16 JANUARY, 2026 (FILE NO. 25-041).
2. CONTRACTOR SHALL REMOVE TOPSOIL AND VEGETATION FOR EACH BUILDING OR PAD AS INDICATED BELOW AND AS OUTLINED IN THE REPORT MENTIONED ABOVE. CONTRACTOR SHALL PROOF ROLL THE AREA TO CHECK FOR SOFT SPOTS. IF SOFT SPOTS ARE ENCOUNTERED, THEN THEY SHALL BE EXCAVATED AND REPLACED WITH STRUCTURAL FILL.
 - a. PAVILION ELEV. OF 6.0'
 - b. CREW BLDG. ELEV. OF 6.0'
 - c. STORAGE BLDG. ELEV. OF 5.5'
 - d. WASH HOUSE ELEV. OF 6.0'
 - e. VEHICLE MAINTENANCE ELEV. OF 5.0'
 - f. SAND & DIRT PIT ELEV. OF 6.0'
 - g. ICE HOUSE ELEV. OF 6.0'
 - h. FUEL TANKS ELEV. OF 5.5'
3. INSTALL SELECT STRUCTURAL FILL TO THE REQUIRED ELEVATION DIRECTLY UNDER, AND A MINIMUM OF 5 FEET OUTSIDE OF THE FOUNDATION PERIMETER. REMOVE ANY ABANDONED FOUNDATIONS, RUBBLE, OR STRUCTURES WHICH FALL IN NEW FOUNDATION FOOTPRINT. FINAL THICKNESS OF UNIFORM SELECT FILL BUILDING PAD SHOULD BE NO LESS THAN 4.0 FEET THICK AND NO MORE THAN 2.0 FT BELOW FOOTINGS.
4. SELECT STRUCTURAL FILL SHALL BE A SILTY OR SANDY CLAY WITH A LIQUID LIMIT OF 30 TO 42, A PLASTICITY INDEX OF 12 TO 22, AND A MAXIMUM PARTICLE SIZE OF 2 INCHES. PROPERTIES OF FILL MATERIALS ARE TO BE VERIFIED BY AN INDEPENDENT TESTING LABORATORY PRIOR TO INSTALLATION.
5. STRUCTURAL FILL SHALL BE PLACED IN 6 INCH THICK OR LESS LOOSE LIFTS AND COMPACTED TO 95% OF THE SOILS STANDARD PROCTOR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. MOISTURE CONTENT SHALL BE PLUS OR MINUS 2% OF THE OPTIMUM MOISTURE CONTENT. COMPACTION SHOULD BE ACCOMPLISHED WITH THE USE OF A SHEEPSFOOT ROLLER OR MECHANICAL COMPACTOR. EACH LIFT SHALL HAVE A MINIMUM OF ONE COMPACTION TEST PER 2500 SQUARE FEET PERFORMED BY AN INDEPENDENT LABORATORY. EACH LIFT MUSS PASS COMPACTION TESTS PRIOR TO INSTALLATION OF NEXT LIFT.
6. A DRAINAGE PATH AWAY FROM THE FOUNDATION SHOULD BE MAINTAINED UNTIL ALL FOUNDATION WORK IS COMPLETE. MINIMUM SLOPE AWAY FROM BUILDING SHOULD BE 10 HORIZONTAL TO 1 VERTICAL (10:1). MAXIMUM SLOPE AWAY FROM BUILDING SHOULD BE 3:1.
7. A 3" LAYER OF WASHED SAND SHALL BE INSTALLED AND COMPACTED TO 95% RELATIVE DENSITY IMMEDIATELY BELOW FLOOR SLAB.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND MUST NOTIFY LOUISIANA 811 BY CALLING 811 OR 1-800-272-3020 OR BY VISITING LOUISIANA811.COM AT LEAST TWO BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY WORK.

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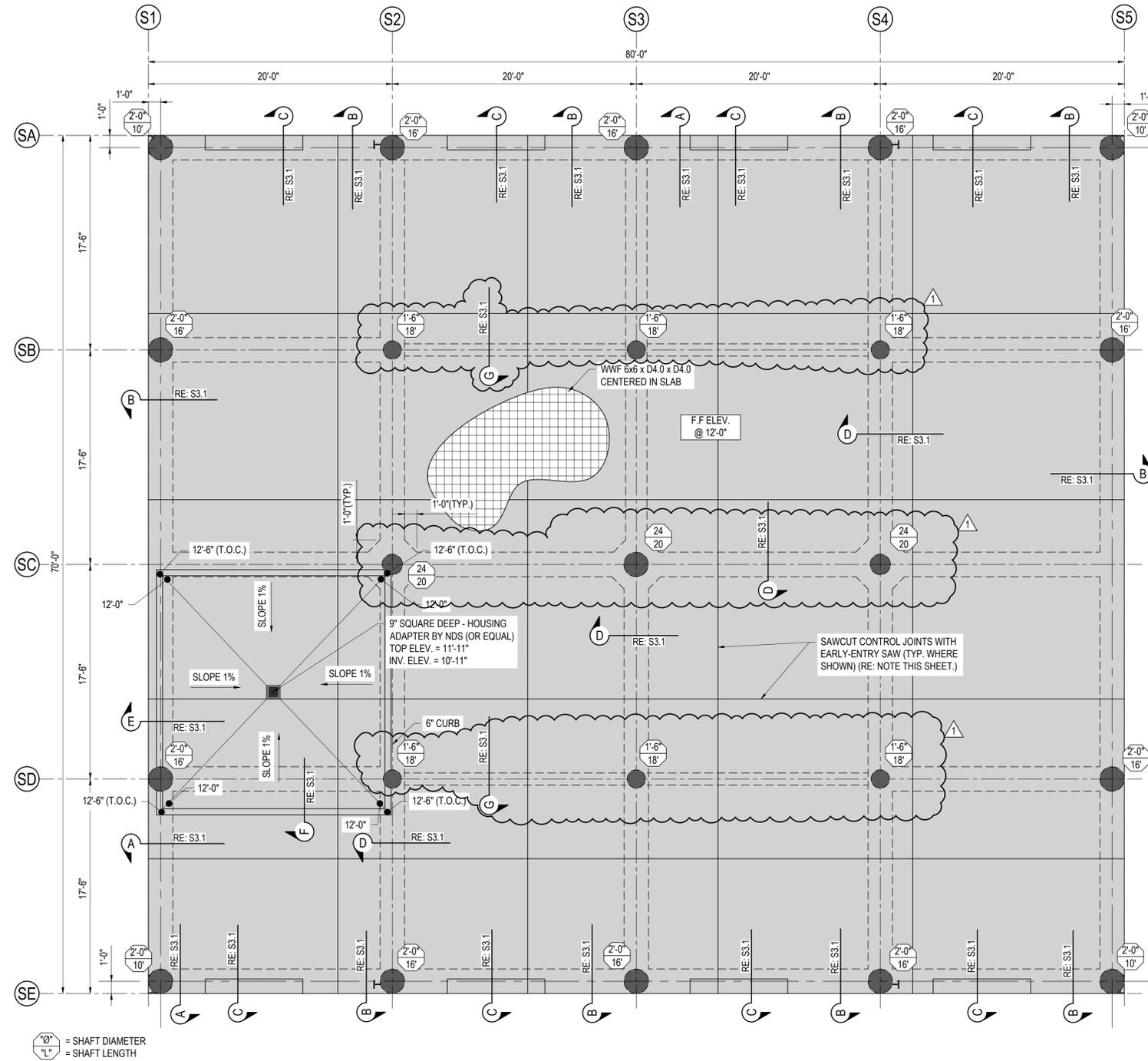
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LAKE CHARLES PUBLIC WORKS
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LAKE CHARLES, LA 70615
FOUNDATION LOCATION PLAN AND NOTES

SHEET NO. **SO.0R** ARCH # 24099A

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS
1	02/06/2026	CONSTRUCTION DOCUMENTS (ADD. 1)

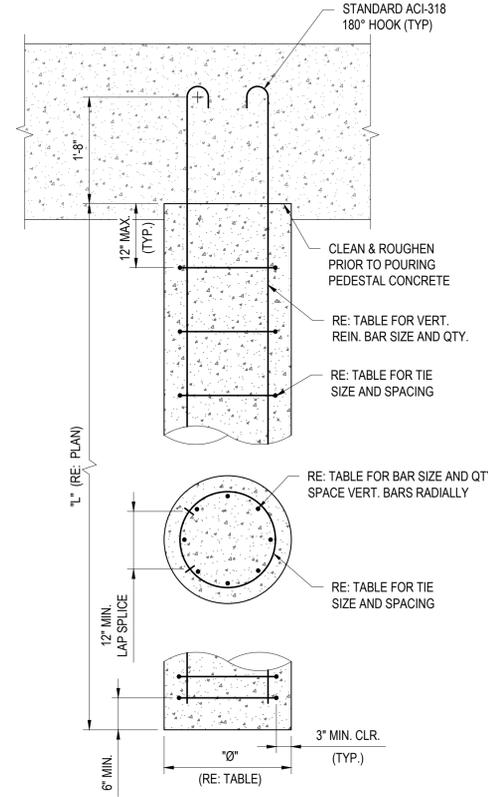
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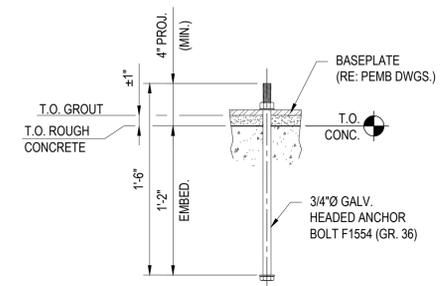
STORAGE BUILDING FOUNDATION PLAN
SCALE: 3/16" = 1'-0"

- NOTE:**
REFER TO FOUNDATION LOCATION PLAN FOR BUILDING LOCATION ON SITE.
- NOTE:**
CONTRACTOR TO FURNISH PEMB COLUMN REACTIONS TO ENGINEER FOR FINAL FOUNDATION DESIGN PRIOR TO CONSTRUCTION.
- NOTE:**
MAXIMUM BASEPLATE SIZE FOR PEMB FRAMING = 12' x 22'
- NOTE:**
REFER TO CIVIL SITE PLANS FOR PAVING SURFACING, DETAILS, & ELEVATIONS
- NOTE:**
SAWCUT USING AN EARLY ENTRY SAW ACHIEVING 1" DEEP BY 1/8" MIN. WIDTH MAKING CUT BETWEEN 4-8 HOURS AFTER FINISHING SLAB.

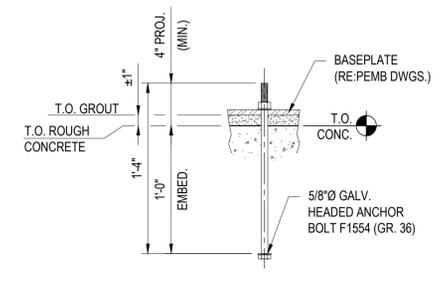
SHAFT DIAMETER	VERTICAL REINFORCEMENT	TIE SIZE & SPACING	MIN. # TO EXTEND VERT. BARS INTO GRADEBEAM
24"	(10) - #6	#4 BAR @ 12" MAX	6
30"	(12) - #6	#4 BAR @ 12" MAX	6



DETAIL "1"
TYPICAL DRILL SHAFT
SCALE: 3/4" = 1'-0"



DETAIL "2"
3/4" Ø ANCHOR BOLT
SCALE: 1 1/2" = 1'-0"



DETAIL "3"
5/8" Ø ANCHOR BOLT
SCALE: 1 1/2" = 1'-0"

**FOR CONSTRUCTION
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NEW FACILITY PHASE 2
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STORAGE BUILDING FOUNDATION PLAN AND DETAILS

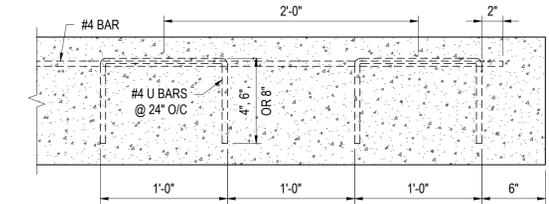
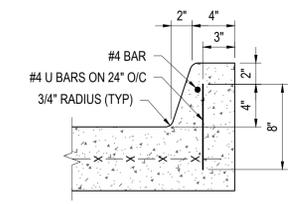
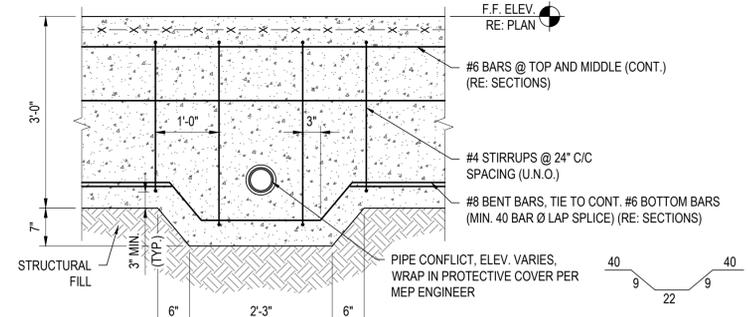
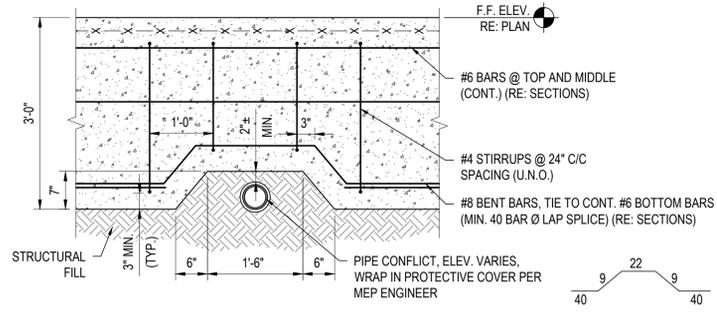
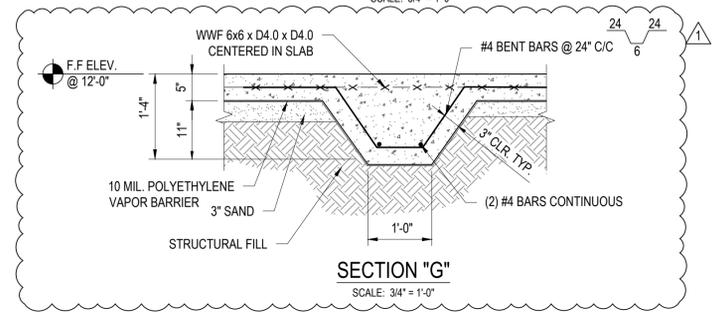
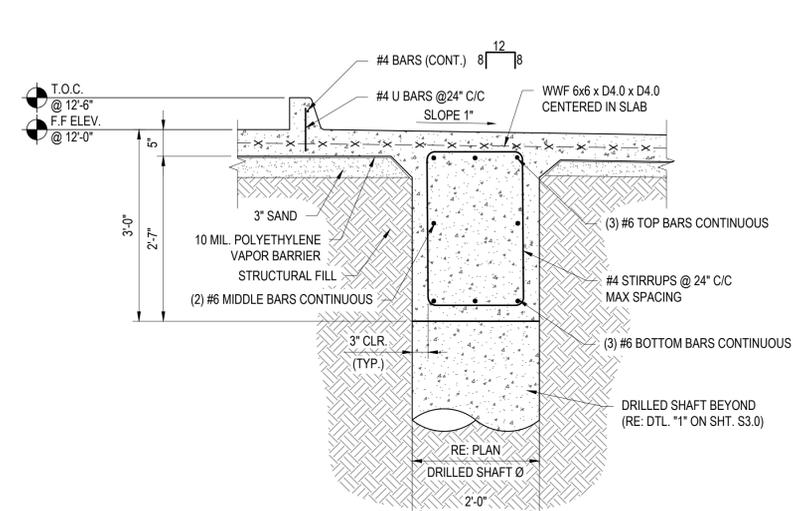
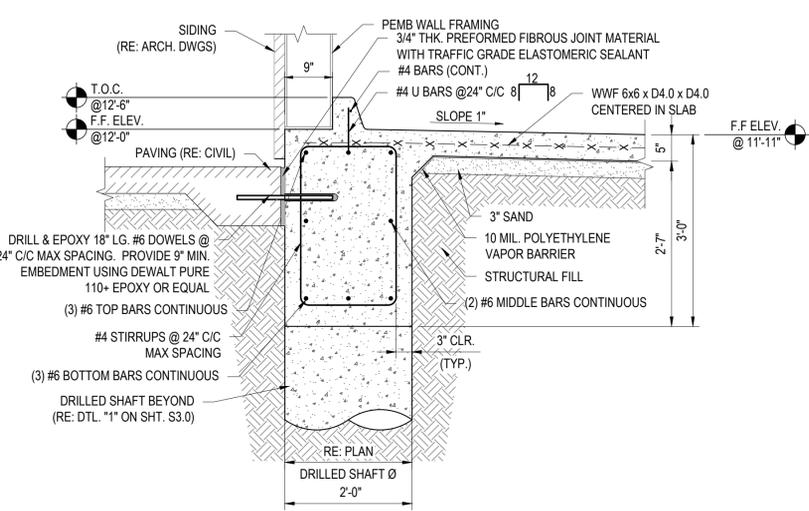
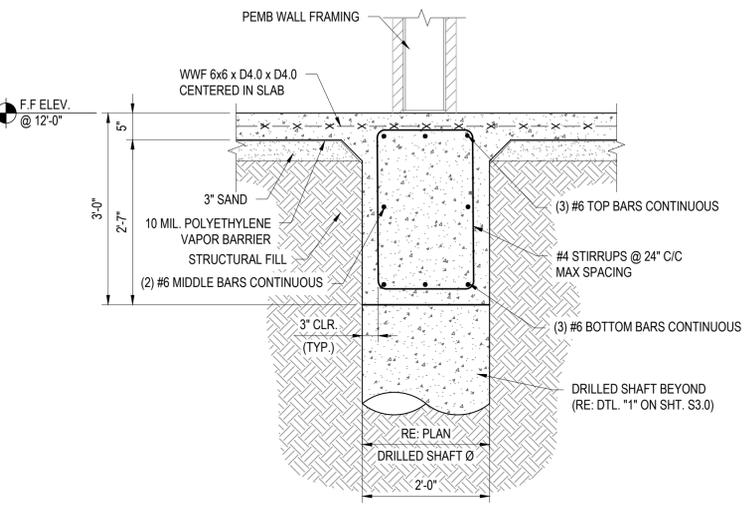
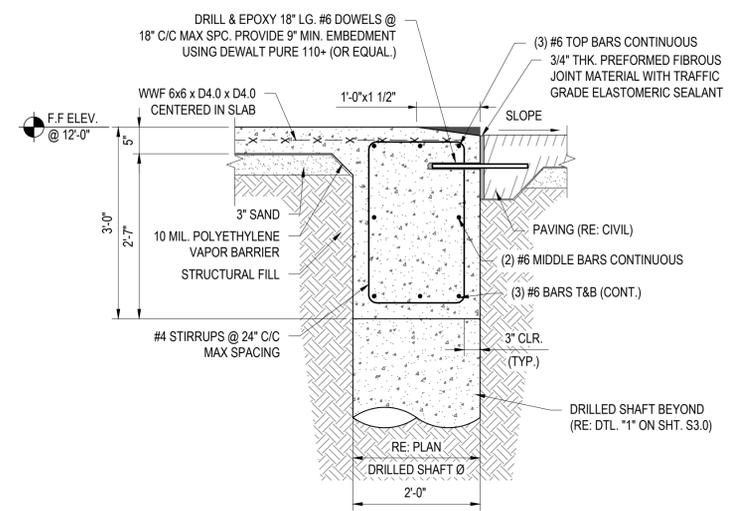
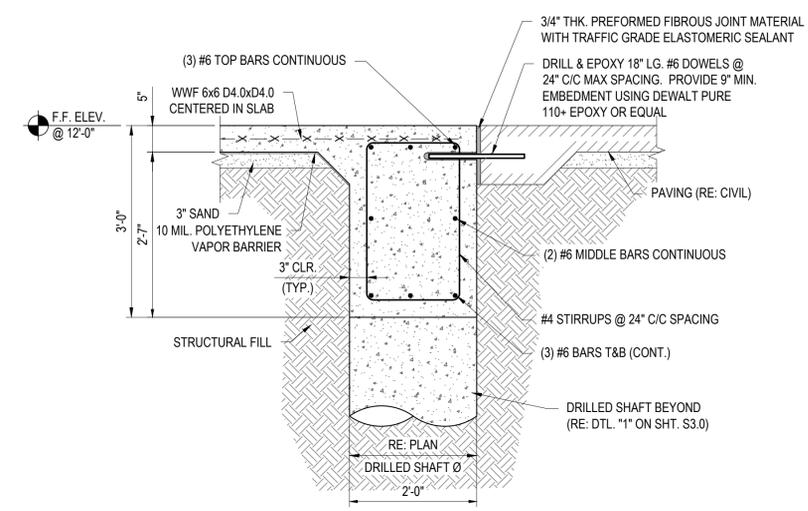
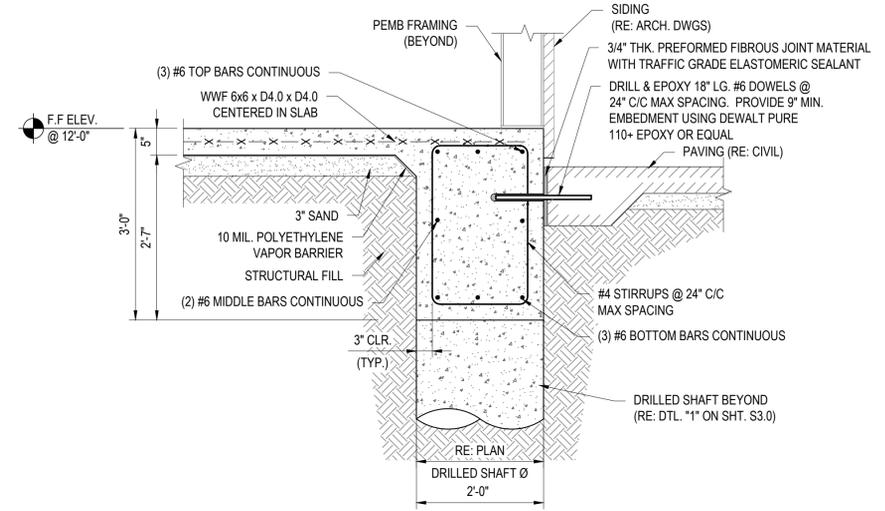
SHEET NO. **S3.0R**
ARCH # 240098A

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS
1	02/06/2026	CONSTRUCTION DOCUMENTS (ADD. 1.)

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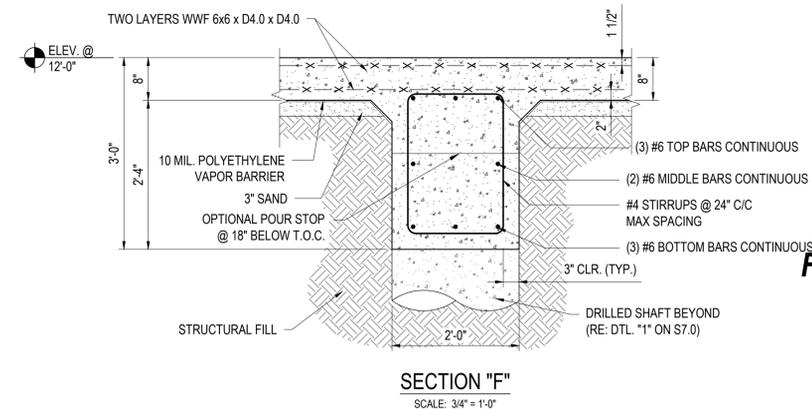
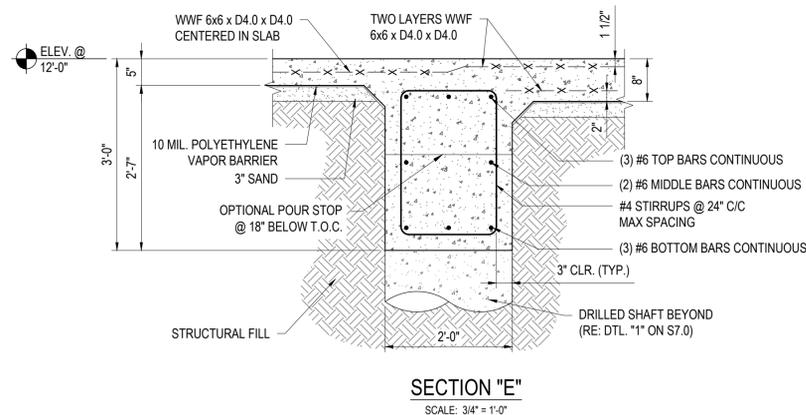
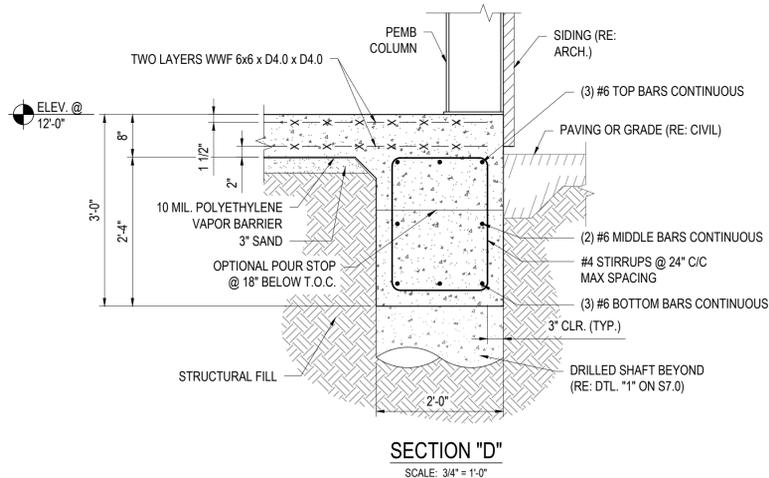
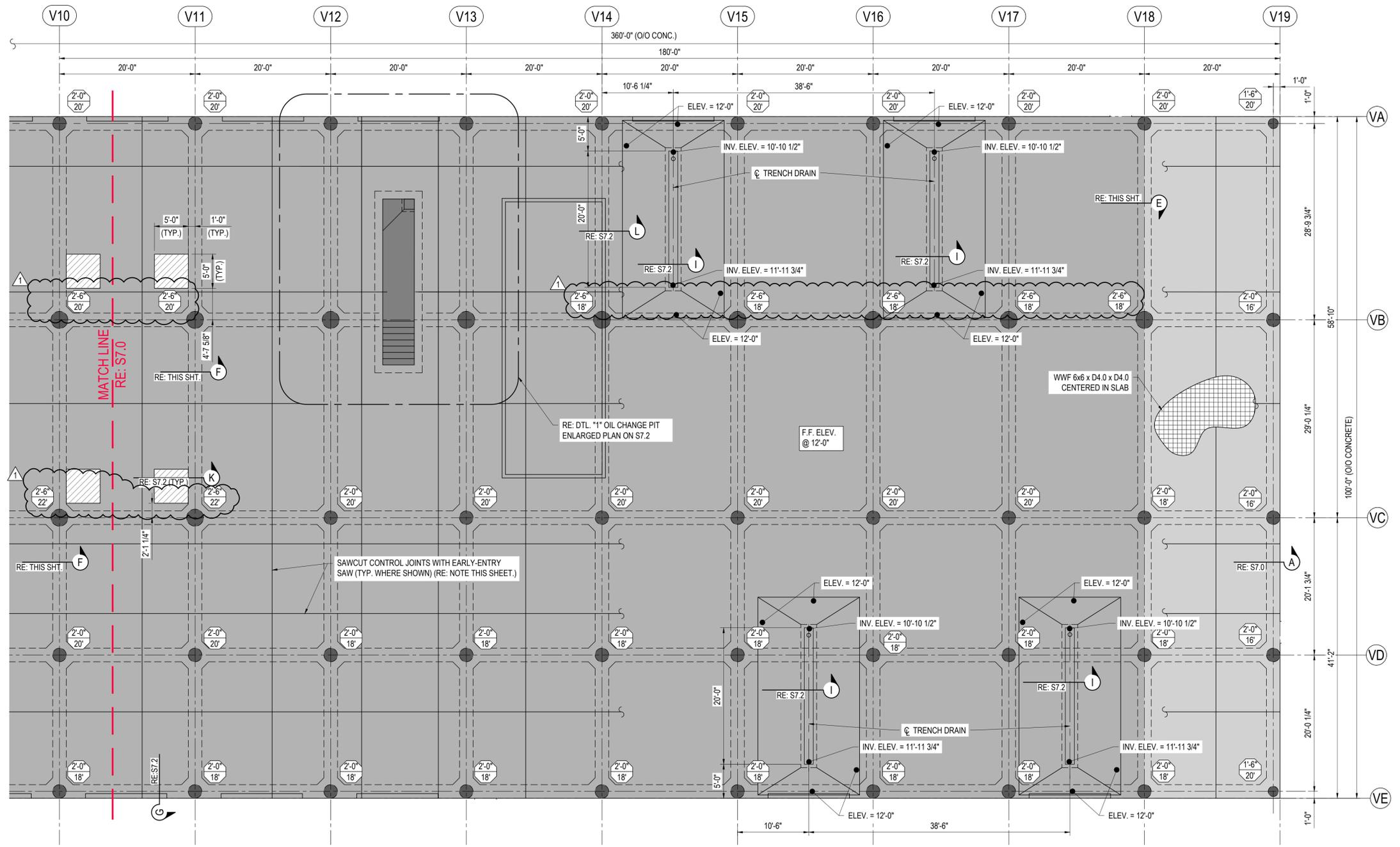
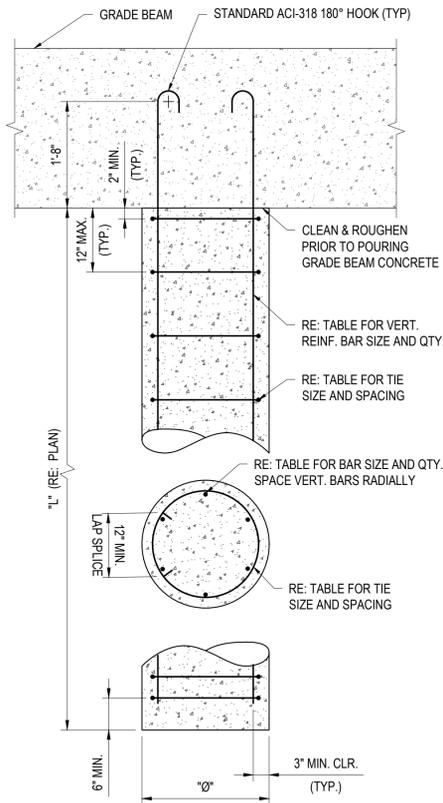
FOR CONSTRUCTION (REVISED)

LEGEND:

- 8" THK CONCRETE-
- 5" THK CONCRETE-
- RECESSED AREA-
- THICKENED AREA-

⊘ = SHAFT DIAMETER
 "L" = SHAFT LENGTH

SHAFT DIAMETER	VERTICAL REINFORCEMENT	TIE SIZE & SPACING	MIN. # TO EXTEND VERT BARS INTO GRADEBEAM
1'-6"	(6) - #6	#4 BAR @ 12" MAX	4
2'-0"	(10) - #6	#4 BAR @ 18" MAX	6
3'-0"	(14) - #6	#4 BAR @ 18" MAX	6



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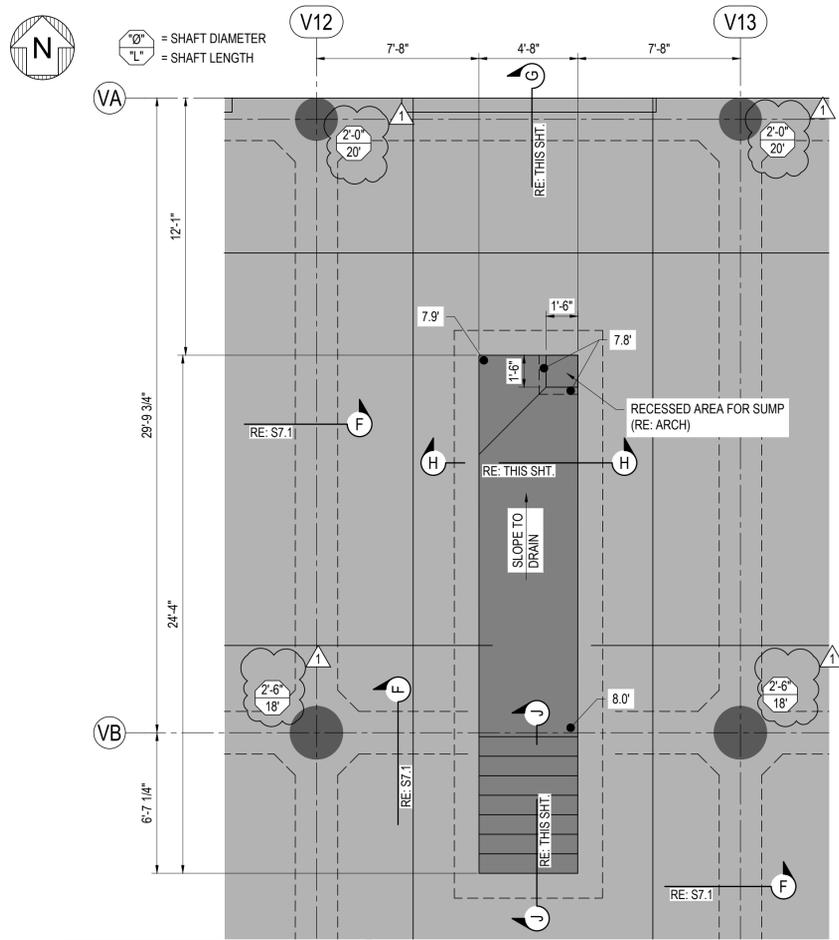
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 4200 BROAD STREET
 LAKE CHARLES, LA 70615

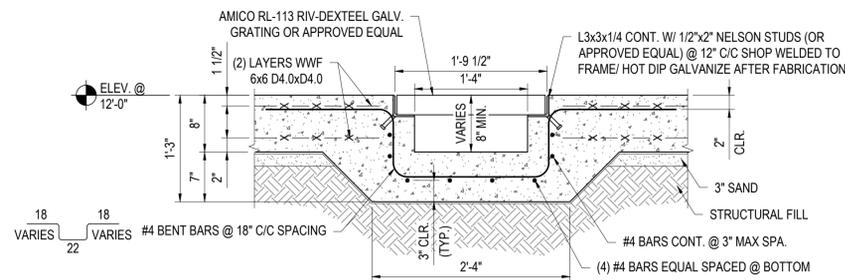
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S7.1R
 ARCH # 240098A

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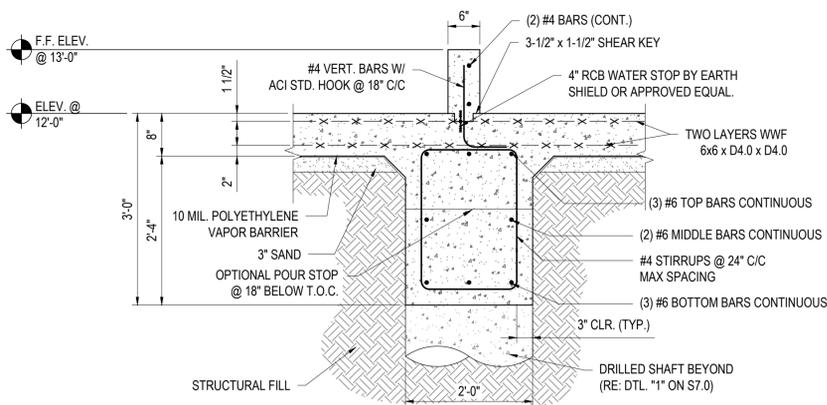
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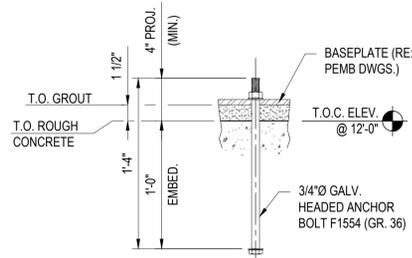
DETAIL "3"
OIL CHANGE PIT ENLARGED PLAN
SCALE: 1/4" = 1'-0"



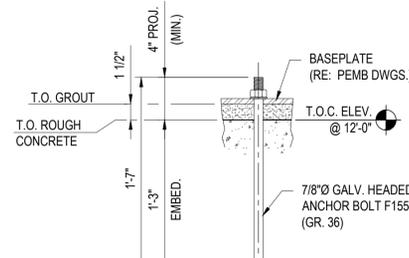
SECTION "I"
SCALE: 1" = 1'-0"



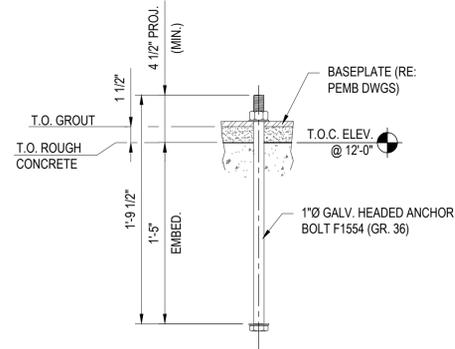
SECTION "L"
SCALE: 3/4" = 1'-0"



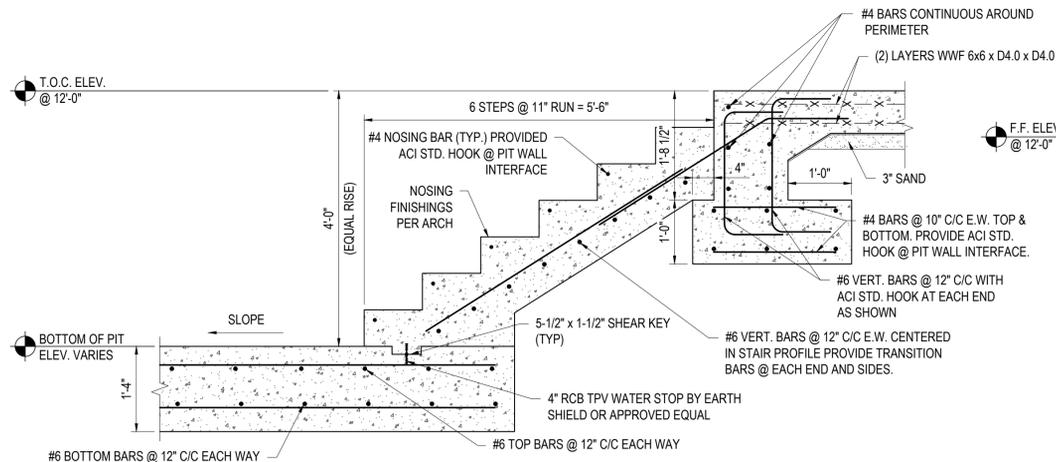
DETAIL "2"
3/4"Ø ANCHOR BOLT
SCALE: 1-1/2" = 1'-0"



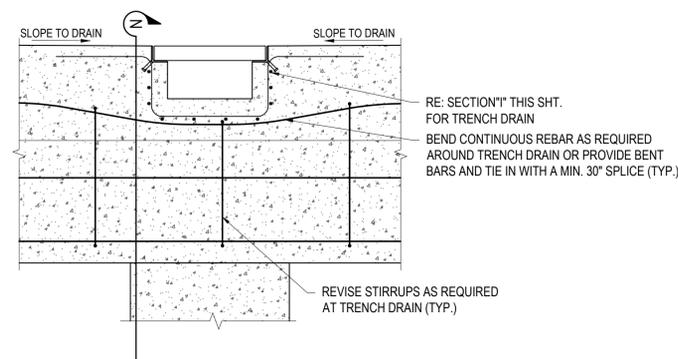
DETAIL "3"
7/8"Ø ANCHOR BOLT
SCALE: 1-1/2" = 1'-0"



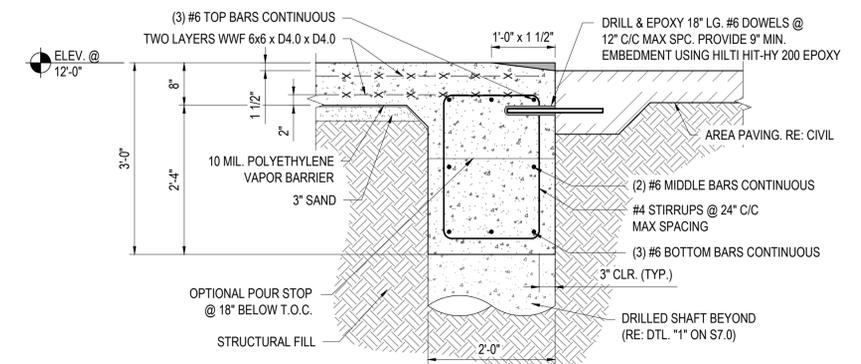
DETAIL "4"
1"Ø ANCHOR BOLT
SCALE: 1-1/2" = 1'-0"



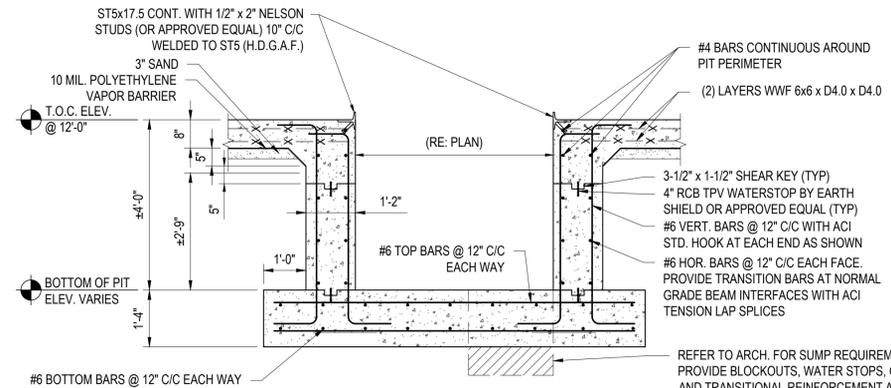
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SCALE: 3/4" = 1'-0"



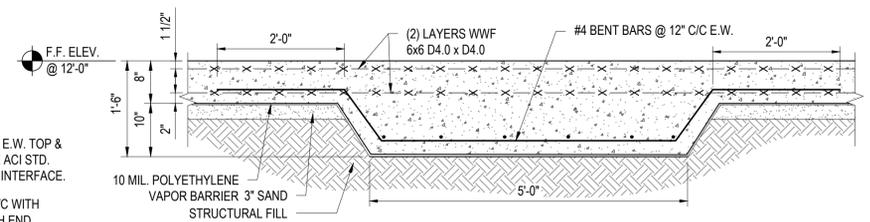
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SCALE: 3/4" = 1'-0"



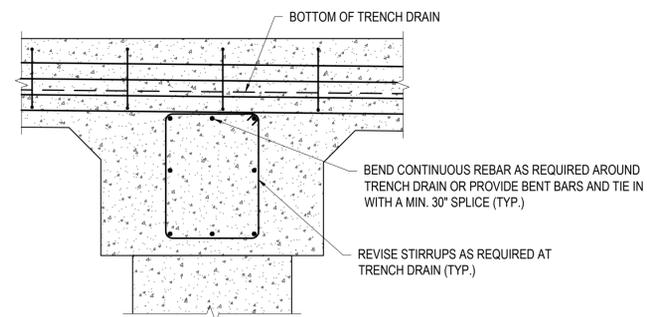
SECTION "G"
SCALE: 3/4" = 1'-0"



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



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



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



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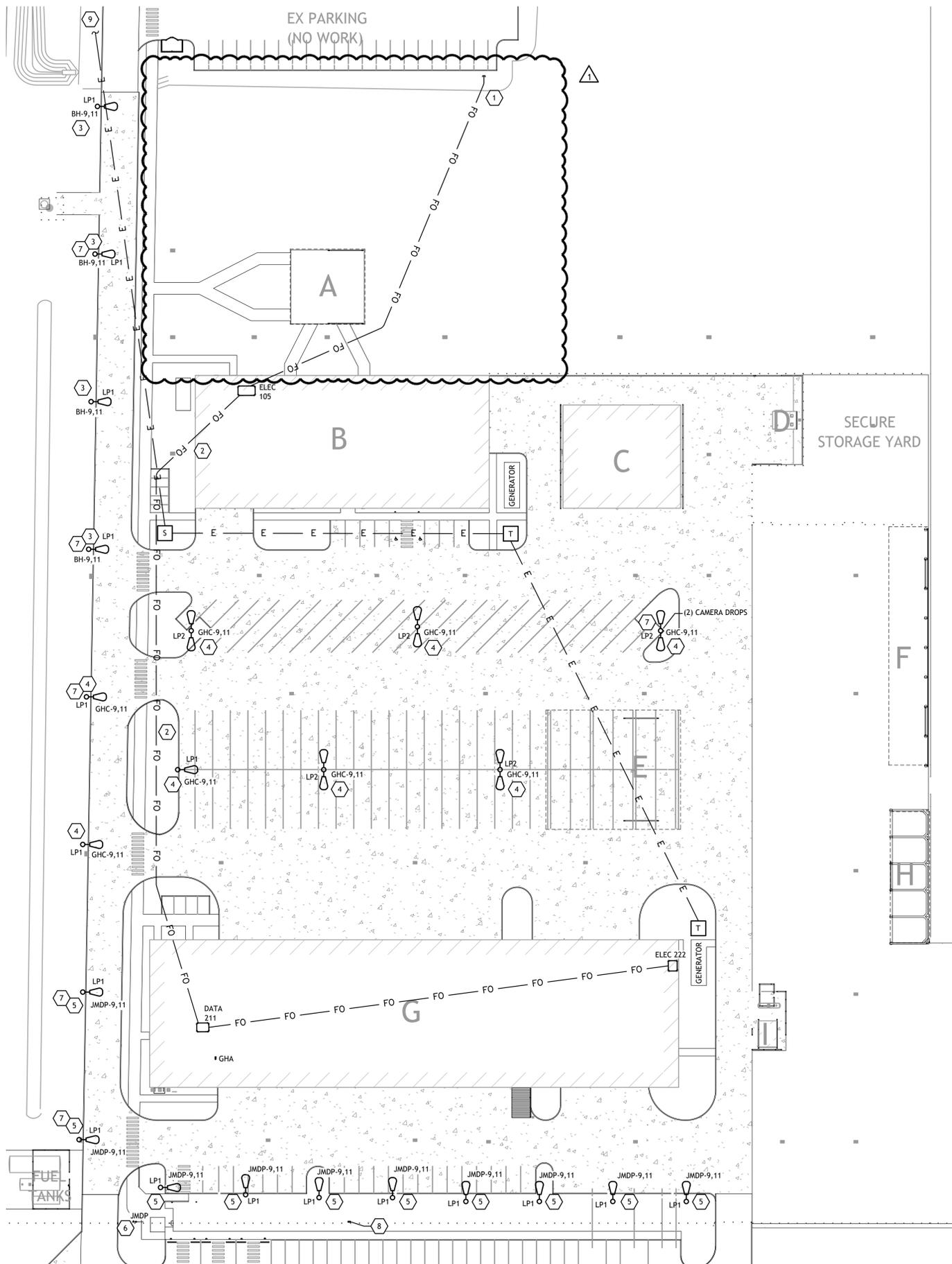
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700 PUJO ST. SUITE C
LAKE CHARLES, LA 70601
PES PROJECT NO. 24044
PHONE: 337.622.8997 WWW.PESERVICES.US

1 ENLARGED ELECTRICAL SITE PLAN

SCALE: 1" = 40'-0"



ELECTRICAL SITE GENERAL NOTES

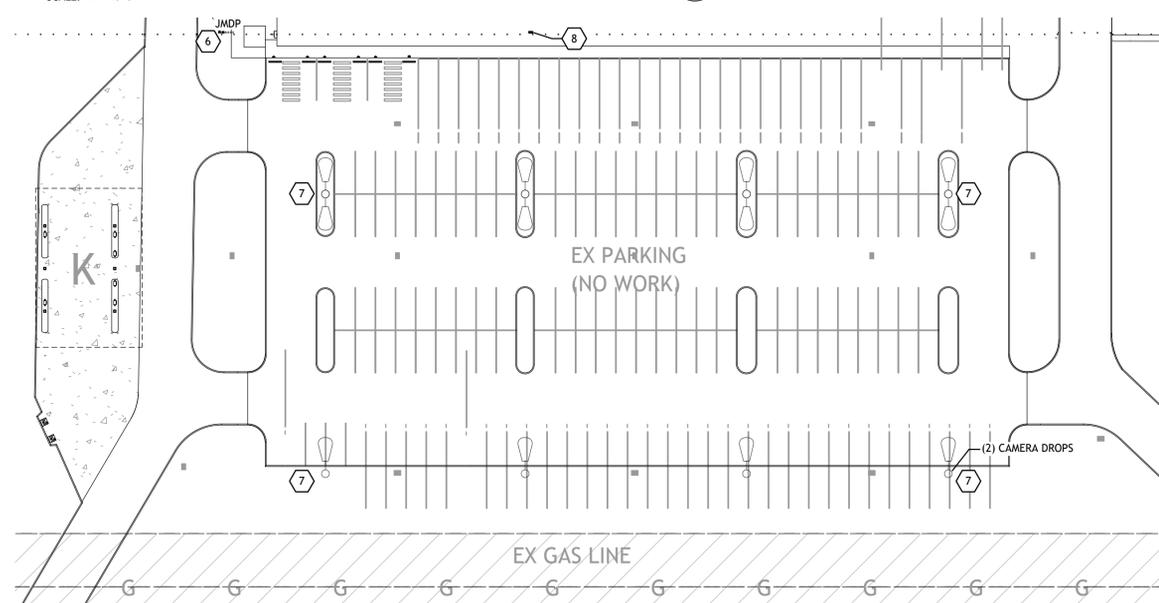
- CONTRACTOR SHALL REFER TO ALL OTHER PORTIONS OF THE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, ADDENDA, ARCHITECTURAL SUPPLEMENTAL INSTRUCTIONS AND ANY APPROVED CHANGE ORDERS) AND PROVIDE ALL LIGHT FIXTURES, OUTLETS, TELE/DATA OUTLETS, SPEAKERS, AND ASSOCIATED CIRCUITRY AS IF ORIGINALLY INCLUDED ON THE ELECTRICAL PLANS. IF THERE ARE ANY DISCREPANCIES, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IN WRITING PRIOR TO ORDERING EQUIPMENT, ROUGH-IN FOR EQUIPMENT AND/OR INSTALLATION OF EQUIPMENT. PRIOR TO ROUGH-IN OF EQUIPMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COPIES OF APPROVED SHOP DRAWINGS OF SUCH EQUIPMENT AND REVIEWING SAID SUBMITTALS TO ENSURE COMPATIBILITY WITH THE ELECTRICAL SYSTEM. CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE REQUIRED ROUGH-IN REQUIREMENTS AND THE ELECTRICAL SYSTEM.
- VERIFY EXACT MOUNTING HEIGHT OF ALL WALL MOUNTED FIXTURES W/ARCHITECT/OWNER PRIOR TO ROUGH-IN UNLESS SPECIFICALLY NOTED OTHERWISE.
- SHOULD IT BE NECESSARY TO RUN ANY ELECTRICAL SERVICES, CONDUITS, ETC. THROUGH THE BUILDING'S FOOTINGS CONTRACTOR SHALL REFER TO THE STRUCTURAL DRAWINGS FOR ADDITIONAL REINFORCEMENT REQUIREMENTS. WHERE ELECTRICAL SERVICES ARE RUN PARALLEL TO FOOTINGS, ALSO REFER TO STRUCTURAL DRAWINGS FOR THE MINIMUM CLEAR DISTANCE TO MAINTAIN BETWEEN FOOTING AND CONDUIT.
- CONTRACTOR SHALL PROPERLY SEAL PENETRATIONS TO RATED ASSEMBLIES AND ALL EXTERIOR WALLS TO PROPERLY MAINTAIN RATING & ASSEMBLIES AND BUILDING ENVELOPE.
- ALL 20 AMP 125 VOLT DUPLEX RECEPTACLES INSTALLED OUTDOORS SHOULD HAVE GFCI PROTECTION AND SHALL RECEIVE WEATHER PROOF WHILE IN USE COVER, AS SPECIFIED.
- AS A MINIMUM ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE.
- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- COORDINATE EXACT LOCATION OF ALL OUTLETS WITH ARCHITECT/OWNER PRIOR TO ROUGH IN. CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS TO ALL OWNER FURNISHED EQUIPMENT.
- CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING ANY WORK TO BE DONE.
- CIRCUITS SHALL HAVE DEDICATED NEUTRALS. NEUTRALS SHALL NOT BE SHARED.
- VERIFY REQUIREMENTS FOR ALL OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH-IN.
- EXTERIOR LIGHTING CONTROLLED VIA PHOTOCELL.
- REFER TO FIRE ALARM/FIRE PROTECTION PLAN FOR LOCATIONS OF PIV VALVES, FLOWS, AND TAMPERS.

ELECTRICAL SITE KEYNOTES

- CONTRACTOR TO EXTEND (1) EXISTING 4" CONDUIT, AT APPROXIMATE LOCATION, WITH INNERDUCTS TO DATA RACK IN BUILDING B. CONTRACTOR SHALL RUN FIBER OPTIC CABLE FROM ADMIN BUILDING NETWORK RACK TO NEW NETWORK RACK IN BUILDING B. CONDUIT SHALL STUB UP INTO WALL AND TERMINATE ABOVE ACCESSIBLE CEILING. PROVIDE AND INSTALL PULL BOXES AS NEEDED. PULL BOX COVERS SHALL BE LABELED AS "FIBER OPTIC".
- CONTRACTOR TO RUN (1) 4" CONDUIT WITH INNERDUCTS TO DATA RACK IN BUILDING G FROM BUILDING B. CONTRACTOR SHALL RUN FIBER OPTIC CABLE FROM BUILDING B NETWORK RACK TO NEW NETWORK RACK IN BUILDING G. CONDUIT SHALL STUB UP INTO WALL AND TERMINATE ABOVE ACCESSIBLE CEILING. PROVIDE AND INSTALL PULL BOXES AS NEEDED. PULL BOX COVERS SHALL BE LABELED AS "TELECOMMUNICATIONS".
- AREA LIGHTING TO BE CONTROLLED VIA PHOTOCELL ON BUILDING B.
- AREA LIGHTING TO BE CONTROLLED VIA PHOTOCELL ON BUILDING G.
- AREA LIGHTING TO BE CONTROLLED VIA PHOTOCELL AT JMDP GEAR RACK.
- CONTRACTOR SHALL INSTALL NEW FEEDERS FOR JMDP FROM PANEL GHA AS SCHEDULED. DISCONNECT EXISTING TEMPORARY SERVICE AT AVENUE J AND TERMINATE FEEDER FROM PANEL GHA TO JMDP. COORDINATE WITH ENTERGY FOR DISCONNECTING AVENUE J SERVICE PRIOR TO SWITCHING FEEDERS AND ROUGH-IN.
- CONTRACTOR TO PROVIDE AND INSTALL 3/4" CONDUIT WITHIN POLE FOUNDATION FOR ETHERNET CABLING TO CAMERA(S) MOUNTED ON LIGHT POLE. CAT6 NG SHALL BE RUN TO NEAREST NETWORK RACK. CAMERA MOUNTING SHALL BE COORDINATED WITH OWNER PROVIDED CAMERAS. CONTRACTOR SHALL VERIFY POLES COMPLY WITH 140MPH WIND RATING WITH CAMERA AND LIGHT FIXTURES MOUNTED ONTO POLES PRIOR TO PLACING ORDERS.
- CONTRACTOR SHALL PROVIDE P&E RANGE EXTENDER IN WEATHERPROOF ENCLOSURE AT APPROXIMATE LOCATION INDICATED. CONTRACTOR TO PROVIDE AND FABRICATE FREESTANDING RACK TO MOUNT ENCLOSURE. CONTRACTOR SHALL INSTALL CABLING FROM BUILDING G DATA ROOM 211 TO P&E EXTENDER RACK.
- CONTINUED ON SHEET E1.0.

2 ENLARGED ELECTRICAL SITE PLAN - AVENUE J PARKING LOT

SCALE: 1" = 40'-0"



ASSOCIATED DESIGN GROUP, INC.
3909 W Congress Street, Suite 201
Lafayette, Louisiana 70506
Phone: (337) 234-5710
Email: adginc@adginc.org

Project No. 25082

CONSTRUCTION DOCUMENTS

SHEET NO.

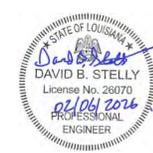
LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
E1.1R1

4200 BROAD STREET
LAKE CHARLES, LA 70615

ENLARGED ELECTRICAL SITE PLAN

VER.	DATE	DESCRIPTION
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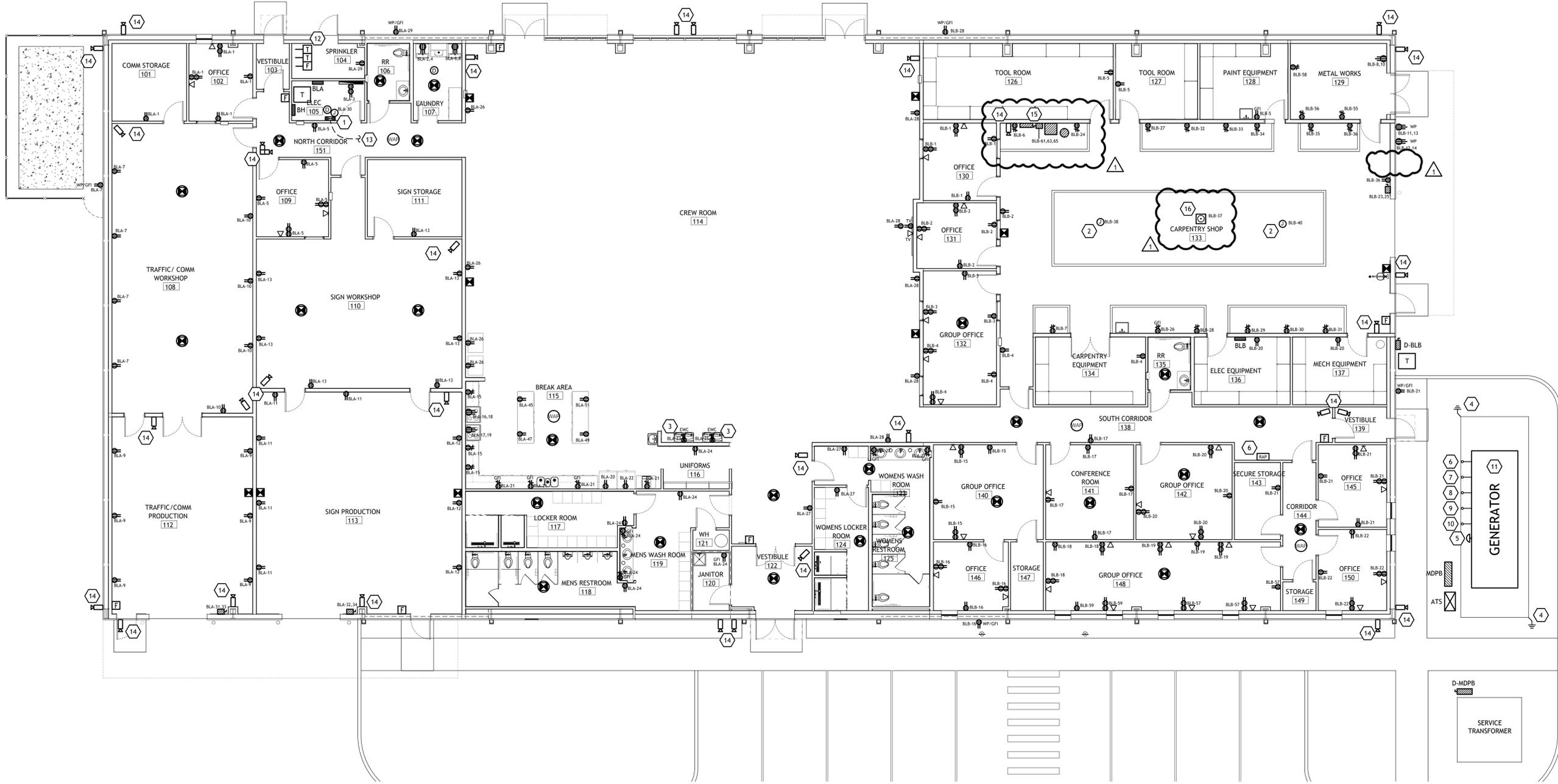


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ARCH #24009 BA



POWER & SPECIAL SYSTEMS GENERAL NOTES

- A. CONTRACTOR SHALL REFER TO ALL OTHER PORTIONS OF THE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, ADDENDA, ARCHITECTURAL SUPPLEMENTAL INSTRUCTIONS AND ANY APPROVED CHANGE ORDERS) AND PROVIDE ALL LIGHT FIXTURES, OUTLETS, TELE/DATA OUTLETS, SPEAKERS, AND ASSOCIATED CIRCUITRY AS IF ORIGINALLY INCLUDED ON THE ELECTRICAL PLANS. IF THERE ARE ANY DISCREPANCIES, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IN WRITING PRIOR TO ORDERING EQUIPMENT, ROUGH-IN FOR EQUIPMENT AND/OR INSTALLATION OF EQUIPMENT. PRIOR TO ROUGH-IN OF EQUIPMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COPIES OF APPROVED SHOP DRAWINGS OF SUCH EQUIPMENT AND REVIEWING SAID SUBMITTALS TO ENSURE COMPATIBILITY WITH THE ELECTRICAL SYSTEM. CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE REQUIRED ROUGH-IN REQUIREMENTS AND THE ELECTRICAL SYSTEM.
- B. COORDINATE INSTALLATION OF ALL CEILING MOUNTED DEVICES w/ARCHITECT PRIOR TO ROUGH-IN.
- C. COORDINATE EXACT PLACEMENT FOR ALL DEVICES WHERE MILLWORK IS PRESENT PRIOR TO ROUGH-IN. DO NOT ROUGH-IN BEHIND CABINETS, DRAWERS, ETC RENDERING DEVICE UNUSABLE.
- D. CONTRACTOR SHALL PROPERLY SEAL PENETRATIONS TO RATED ASSEMBLIES AND ALL EXTERIOR WALLS TO PROPERLY MAINTAIN RATING & ASSEMBLIES AND BUILDING ENVELOPE.
- E. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING ANY WORK TO BE DONE.
- F. AS A MINIMUM ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE.
- G. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- H. RECEPTACLES WITHIN 6' OF A SINK OR LAVATORY SHALL HAVE GFCI PROTECTION.
- I. ALL 120V 15A & 20 RECEPTACLES IN FOOD PREP AREAS SHALL BE GFCI PROTECTED AS REQUIRED BY NEC.
- J. ALL NEW CIRCUIT BREAKERS WITHIN EACH EXISTING PANELBOARD SHALL BE THE SAME MANUFACTURER TYPE, STYLE AND A.I.C. RATING OF EXISTING PANELBOARD.

POWER & SPECIAL SYSTEMS KEYNOTES

- 1 FIRE ALARM CONTROL PANEL TO HAVE VOICE EVACUATION.
- 2 RACK MOUNTED RECEPTACLE FOR INSTALLATION OF RETRACTABLE ELECTRICAL CORD REEL. (GLEASON #GCC16370 OR HUBBELL HBLI45123R220 USED AS BASIS OF DESIGN).
- 3 MOUNT RECEPTACLE IN WATER COOLER FRAME. COORDINATE FINAL LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. CIRCUIT BREAKER TO BE GFCI TYPE.
- 4 10' X 3/4" COPPER GROUND ROD W/ INSPECTION WALL.
- 5 EMERGENCY SHUT OFF SWITCH MOUNTED TO THE EXTERIOR WALL OF THE SOUND ENCLOSURE 48 INCHES ABOVE CONCRETE SLAB.
- 6 INSTALL 1" CONDUIT WITH CABLE BETWEEN GENERATOR AND REMOTE ANNUNCIATOR PANEL (RAP) INSIDE THE CLERKS OFFICE. VERIFY LOCATION OF RAP WITH OWNER PRIOR TO ROUGH-IN.
- 7 3/4" CONDUIT WITH 3-#10 THHN TO PANEL BLB FOR LIGHTS INSIDE GENERATOR ENCLOSURE. INSTALL A 1p20A CIRCUIT BREAKER IN PANEL BLB.
- 8 3/4" CONDUIT WITH 3 #10 THHN TO PANEL BLB FOR BATTERY CHARGER. INSTALL 2p30 AMP BREAKER IN PANEL.
- 9 3/4" CONDUIT WITH 3 #10 THHN TO PANEL BLB FOR BLOCK HEATER. INSTALL 2p30 AMP BREAKER IN PANEL.
- 10 3/4" CONDUIT WITH 3-#12 THHN TO PANEL BLB FOR ALTERNATOR HEATER. INSTALL 1p20A BREAKER IN PANEL.
- 11 NEW 3-POLE, 4 WIRE, 480V, 450KW DIESEL GENERATOR SET WITH ONE (1) 3-POLE 600 AMP CIRCUIT BREAKER AND SOUND ENCLOSURE. 48 HOUR, UL2085 FUEL TANK AND SERVICE SLAB. REFERENCE STRUCTURAL DRAWINGS FOR SLAB DETAILS.
- 12 CONTRACTOR SHALL INTEGRATE TAMPER AND FLOW SWITCHES TO BUILDING FIRE ALARM SYSTEM. REFER TO FIRE PROTECTION PLANS FOR ADDITIONAL SCOPE.
- 13 CONTRACTOR TO INSTALL CABLING AND 1" CONDUIT TO BUILDING C (STORAGE BUILDING) FIRE ALARM SUB PANEL. REFER TO SHEET E3.4 FOR ADDITIONAL SCOPE.

- 14 CONTRACTOR SHALL INSTALL BACK BOX AND CAT6 CABLE FOR CAMERA (OWNER PROVIDED). CABLING SHALL BE ROUTED FROM APPROXIMATE CAMERA LOCATION TO NETWORK RACK IN BUILDING ELECTRICAL ROOM. COORDINATE FINAL EXACT CAMERA LOCATION AND HEIGHT WITH ARCH/OWNER PRIOR TO ROUGH-IN.
- 15 DUST COLLECTOR. CONTRACTOR SHALL INSTALL AS REQUIRED BY COLLECTOR SYSTEM MANUFACTURER. REFER TO FINAL APPROVED SHOP DRAWINGS AND INSTALLATION GUIDES FOR REQUIRED MATERIALS AND POWER TERMINATIONS. INCLUDE ALL RACEWAYS FOR ALL REQUIRED EQUIPMENT CONNECTIONS FOR AUTO START. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL SCOPE.
- 16 FLOOR POWER FOR TABLE SAW. COORDINATE FINAL LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.



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POWER AND SPECIAL SYSTEMS PLAN - CREW BUILDING

SHEET NO.
E3.1R1

ARCH #24009 EA

CONSTRUCTION DOCUMENTS

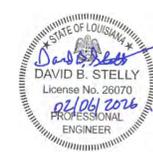
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Project No. 25082

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PANEL MDPB

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

AIC RATING 42K

FULLY RATED
SERIES RATED

FURNISH GROUND BAR KIT
FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
SERVICE ENTRANCE LABEL

600 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A	B	C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	400	4-600	3	4"	PANEL BH	--				--	PANEL CH	1-1/4"	8	4-3	100	2
3																4
5																6
7	150	3-1/0	6	2"	PANEL BLB VIA TRX	--				--	CAS-1	1/2"	12	4-12	20	8
9																10
11																12
13					SPACE	--				--	AIR CURTAIN	1/2"	12	4-12	20	14
15					SPACE	--				--						16
17					SPACE	--				--						18
19					SPACE	--				--						20
21					SPACE	--				--						22
23					SPACE	--				--						24
25					SPACE	--				--	SPD	1-1/4"	8	4-3	100	26
27					SPACE	--				--						28
29					SPACE	--				--						30

NOTES:
(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

TOTAL LOAD = 364.77 KVA
TOTAL AMPS = 438.75 AMPS

PANEL BH

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

AIC RATING 22K

FULLY RATED
SERIES RATED

FURNISH GROUND BAR KIT
FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
SERVICE ENTRANCE LABEL

400 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A	B	C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	150	3-1/0	6	2"	PANEL BLA VIA TRX	--				--	PAVILLION LIGHTS	1/2"	10	2-10	20	2
3										--	LIGHTS	1/2"	12	2-12	20	4
5										--	LIGHTS	1/2"	12	2-12	20	6
7	20	2-10	10	1/2"	EXTERIOR LIGHTING	--				--	LIGHTS	1/2"	12	2-12	20	8
9	20	2-8	8	3/4"	AREA LIGHTS	--				--	LIGHTS	1/2"	12	2-12	20	10
11										--	AIR CURTAIN	1/2"	12	4-12	20	12
13	30	4-10	10	1/2"	EW-H	--				--						14
15										--						16
17										--	CU-DOAS-1	1"	10	4-8	40	18
19	50	4-8	10	1"	CU-1	--				--						20
21										--						22
23										--	CU-DOAS-2	1"	10	4-8	40	24
25	50	4-8	10	1"	CU-1	--				--						26
27										--						28
29										--	SPACE					30
31	40	4-8	10	1"	CU-2	--				--	SPACE					32
33										--	SPACE					34
35										--	SPACE					36
37										--	SPD	1"	10	4-6	60	38
39										--	SPACE					40
41										--	SPACE					42

NOTES:
(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

TOTAL LOAD = 243.02 KVA
TOTAL AMPS = 292.31 AMPS

PANEL CH

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

AIC RATING 22K

FULLY RATED
SERIES RATED

FURNISH GROUND BAR KIT
FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
SERVICE ENTRANCE LABEL

100 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A	B	C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	60	3-6	10	1"	PANEL CL VIA TRX	--				--	STORAGE LIGHTS	1/2"	12	2-12	20	2
3										--	SPACE					4
5										--	SPACE					6
7										--	SPACE					8
9										--	SPACE					10
11										--	SPACE					12
13										--	SPACE					14
15										--	SPD	1"	10	4-6	60	16
17										--	SPACE					18

NOTES:
(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

TOTAL LOAD = 35.27 KVA
TOTAL AMPS = 42.42 AMPS

PANEL BLA

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

AIC RATING 14K

FULLY RATED
SERIES RATED

FURNISH GROUND BAR KIT
FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
SERVICE ENTRANCE LABEL

300 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A	B	C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	20	2-12	12	1/2"	OFFICE 102 RECEPT	--				--	DRYER	3/4"	10	3-10	30	2
3	20	2-12	12	1/2"	ELEC ROOM RECEPT	--				--	DRYER	3/4"	10	3-10	30	4
5	20	2-12	12	1/2"	OFFICE 109 RECEPT	--				--	DRYER	3/4"	10	3-10	30	6
7	20	2-12	12	1/2"	WKSHOP 108 RECEPT	--				--	WKSHOP 108 RECEPT	1/2"	12	2-12	20	8
9	20	2-12	12	1/2"	PROD. 112 RECEPT	--				--	SIGN PROD. RECEPT	1/2"	12	2-12	20	10
11	20	2-12	12	1/2"	SIGN PROD. RECEPT	--				--	SIGN WKSHOP	1/2"	12	2-12	20	12
13	20	2-12	12	1/2"	SIGN WKSHOP	--				--	BREAK RM RECEPT	1/2"	12	2-12	20	14
15	20	2-12	12	1/2"	BREAK RM RECEPT	--				--	BREAK RM OVEN	1"	10	3-8	50	16
17	50	3-8	10	1"	BREAK RM OVEN	***				--	BREAK RM REF	1/2"	12	2-12	20	18
19										--	BREAK RM REF	1/2"	12	2-12	20	20
21	20	2-12	12	1/2"	BREAK RM RECEPT	--				--	RESTROOM RECEPT	1/2"	12	2-12	20	22
23	20	2-12	12	1/2"	EWC	*				--	CREW ROOM RECEPT	1/2"	12	2-12	20	24
25	20	2-12	12	1/2"	EWC	*				--	CREW ROOM RECEPT	1/2"	12	2-12	20	26
27	20	2-12	12	1/2"	RESTROOM RECEPT	--				--	CREW ROOM RECEPT	1/2"	12	2-12	20	28
29	20	2-12	12	1/2"	SPRINKLER RECEPT	--				--	FACP	1/2"	12	2-12	20	30
31	20	3-12	12	1/2"	OH DOOR	--				--	OH DOOR	1/2"	12	3-12	20	32
33										--						34
35	20	2-12	12	1/2"	PAVILLION RECEPT	--				--	AC-1(1-11)	1/2"	12	3-12	20	36
37	20	2-10	10	1/2"	AC-1(12-21)	--				--						38
39										--	BCC-1/DOAS-2 UNITS	1/2"	12	3-12	20	40
41	20	3-12	12	1/2"	BCC/ DOAS-1 UNITS	--				--	SPARE					42
43										--	SPARE					44
45	20	2-12	12	1/2"	MICROWAVE	--				--	SPARE					46
47	20	2-12	12	1/2"	MICROWAVE	--				--	PAVILLION RECPT	1/2"	10	2-10	20	48
49	20	2-12	12	1/2"	MICROWAVE	--				--	EF-(2-6)	1/2"	12	2-12	20	50
51	20	2-12	12	1/2"	MICROWAVE	--				--	KEF-1	1/2"	12	3-12	20	52
53	20	2-12	12	1/2"	UTILITY CABINET	--				--						54
55	20	2-12	12	1/2"	EF-B(1,8)	--				***	MUA-1	1/2"	12	3-12	20	56
57	20	2-12	12	1/2"	CENTRAL CONTROL	--				--	SPARE					58
59	20	2-12	12	1/2"	WALL HEATER	--				--	SPARE					60
61										--	SPARE					62
63	20				SPACE	--				--	SPARE					64
65	20				SPACE	--				--	SPARE					66
67	20				SPACE	--				--	SPARE					68
69	20				SPACE	--				--	SPD	1"	10	4-6	60	70
71	20				SPACE	--				--						72

NOTES:
(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 75.39 KVA
TOTAL AMPS = 209.27 AMPS

PANEL BLB

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

AIC RATING 14K

FULLY RATED
SERIES RATED

FURNISH GROUND BAR KIT
FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
SERVICE ENTRANCE LABEL

300 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A	B	C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	20	2-12	12	1/2"	OFFICE 130 RECEPT	--				--	OFFICE 131 RECEPT	1/2"	12			



PANEL GHA

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

AIC RATING 22k
 FULLY RATED
 SERIES RATED

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

400 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

FURNISH GROUND BAR KIT
 FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
 SERVICE ENTRANCE LABEL

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	200	3-3/0	6	2"	PANEL GLA VIA TRX				PANEL JMDP	2"	8	4-3/0	100	2
3														4
5														6
7	20	2-8	8	1/2"	EXTERIOR LIGHTS				SHOP LIGHTS	3/4"	10	4-10	20	8
9	20	4-12	12	1/2"	HVLS-A									10
11									SPACE					12
13	20	3-12	12	1/2"	EW-H-G1				CU-G1	1/2"	12	4-12	20	14
15														16
17														18
19	20	4-12	12	1/2"	AIR CURTAIN				SPACE					20
21									SPACE					22
23									SPACE					24
25									SPACE	1"	10	4-6	60	26
27									SPACE					28
29									SPACE					30

NOTES:
 (1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 (2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 200.08 KVA
 TOTAL AMPS = 240.66 AMPS

PANEL GHB

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

AIC RATING 22k
 FULLY RATED
 SERIES RATED

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

200 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

FURNISH GROUND BAR KIT
 FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
 SERVICE ENTRANCE LABEL

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	90	3-3	8	1-1/4"	PANEL GLB VIA TRX				SHOP LIGHTS	1/2"	10	4-10	20	2
3									SPACE					4
5									HVLS-A	1/2"	12	4-12	20	8
7	20	4-12	12	1/2"	EF-G6									10
9														12
13	40	4-8	10	1"	CAS-2				HVLS-A	1/2"	12	4-12	20	14
15														16
17									SPACE					20
19									SPACE					22
21									SPACE					24
23									SPACE					26
25									SPD	1"	10	4-6	60	28
27									SPACE					30
29									SPACE					30

NOTES:
 (1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 (2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 99.01 KVA
 TOTAL AMPS = 133.09 AMPS

PANEL GHC

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

AIC RATING 22k
 FULLY RATED
 SERIES RATED

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

200 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

FURNISH GROUND BAR KIT
 FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
 SERVICE ENTRANCE LABEL

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	150	3-1/0	6	2"	PANEL GLC VIA TRX				FIRE MAINT LIGHTS	1/2"	10	4-10	20	2
3									SPACE					4
5									OFFICE LIGHTS	1/2"	12	2-12	20	8
7	150	3-1/0	6	2"	EXTERIOR LIGHTS				BUS CANOPY LIGHTS	1/2"	10	2-10	20	10
9	20	3-10	10	1/2"	EXTERIOR LIGHTS				EQUIP/SAND LIGHTS	1/2"	10	2-10	20	12
11									ICE HOUSE LIGHTS	1/2"	12	2-12	20	14
13	20	4-12	12	1/2"	HVLS-A				EW-H-G2	1/2"	12	2-12	20	16
15														18
17									SPACE					20
19	20	4-12	12	1/2"	EF-G8				SPACE					22
21									SPACE					24
23									SPACE					26
25									SPACE					28
27									SPACE					30
29									SPACE					30

NOTES:
 (1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 (2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 103.88 KVA
 TOTAL AMPS = 124.95 AMPS

PANEL GLA

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

AIC RATING 22k
 FULLY RATED
 SERIES RATED

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

400 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

FURNISH GROUND BAR KIT
 FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
 SERVICE ENTRANCE LABEL

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	30	3-10	10	1/2"	OH DOOR				OH DOOR	1/2"	10	3-10	30	2
3														4
5	30	3-10	10	1/2"	OH DOOR				OH DOOR	1/2"	10	3-10	30	6
7														8
9	30	3-10	10	1/2"	OH DOOR				OH DOOR	1/2"	10	3-10	30	10
11														12
13	30	3-10	10	1/2"	OH DOOR				OH DOOR	1/2"	10	3-10	30	14
15														16
17	20	2-12	12	1/2"	RECPT				OH DOOR	1/2"	10	3-10	30	18
19	20	2-12	12	1/2"	CORD REEL									20
21	20	2-12	12	1/2"	CORD REEL				CORD REEL	1/2"	12	2-12	20	22
23	20	2-12	12	1/2"	CORD REEL				CORD REEL	1/2"	12	2-12	20	24
25	20	2-12	12	1/2"	CORD REEL				CORD REEL	1/2"	12	2-12	20	26
27	20	2-12	12	1/2"	CORD REEL				CORD REEL	1/2"	12	2-12	20	28
29	20	2-12	12	1/2"	VEH MAINT. RECEPT				VEH MAINT. RECEPT	1/2"	12	2-12	20	30
31	20	2-12	12	1/2"	VEH MAINT. RECEPT				VEH MAINT. RECEPT	1/2"	12	2-12	20	32
33	20	2-12	12	1/2"	PARTS ROOM RECEPT				EW-C	1/2"	12	2-12	20	34
35	20	2-12	12	1/2"	ADMIN 209 RECEPT				DATA 211 RECEPT	1/2"	12	2-12	20	36
37	20	2-12	12	1/2"	RR RECEPTS				FOREMAN 207 RECEPT	1/2"	12	2-12	20	38
39	20	2-12	12	1/2"	OFFICE 205 RECEPT				OFFICE 204 RECEPT	1/2"	12	2-12	20	40
41	20	2-12	12	1/2"	SUPER 203 RECEPT				EW-C	1/2"	12	2-12	20	42
43	20	2-12	12	1/2"	ROOM 201 RECEPT				BREAK ROOM REF	1/2"	12	2-12	20	44
45	50	3-8	10	1"	BREAK ROOM OVEN				BREAK RM RECEPT	1/2"	12	2-12	20	46
47									BREAK RM RECEPT	1/2"	12	2-12	20	48
49	20	2-12	12	1/2"	PRINTER				RECEPT	1/2"	12	2-12	20	50
51	20	2-12	12	1/2"	PRINTER				RECEPT	1/2"	12	2-12	20	52
53	20	2-12	12	1/2"	MICROWAVE				GUI-A	1/2"	10	2-10	20	54
55	20	2-12	12	1/2"	MICROWAVE				GUI-A	1/2"	10	2-10	20	56
57	20	2-12	12	1/2"	HVLS CONTROLLER				CU-G2	1/2"	10	3-10	30	58
59	30	3-10	10	1/2"	CU-G3									60
61									EF-G(1-3,13,15)	1/2"	12	2-12	20	62
63	30	3-10	10	1/2"	MSCU-G1				AHU-G1	1-1/4"	8	3-3	100	64
65														66
67	60	3-6	10	3/4"	AHU-G3				AHU-G2	1"	10	3-6	60	68
69														70
71	20	2-12	12	1/2"	RANGE HOOD				TIRE 216	1/2"	12	2-12	20	72
73	20								TIRE 216	1/2"	12	2-12	20	74
75	20								SPACE					76
77	20								SPACE					78
79	20								SPACE					80
81	20								SPACE					82
83	20								SPACE					84

NOTES:
 (1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 (2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 121.60 KVA
 TOTAL AMPS = 337.54 AMPS

PANEL GLB

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

AIC RATING 22k
 FULLY RATED
 SERIES RATED

FEED TOP
 BOTTOM

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

NEUTRAL 100% 200%

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

300 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

FURNISH GROUND BAR KIT
 FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
 SERVICE ENTRANCE LABEL

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	30	3-10	10	1/2"	OH DOOR				OH DOOR	1/2"	12	3-12	20	2
3														4
5	30	3-10	10	1/2"	OH DOOR				OH DOOR	1/2"	10	3-10	30	6
7														8
9	30	3-10	10	1/2"	OH DOOR</									

PANEL MDPG

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø 'STINGER'

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

AIC RATING 42K
 FULLY RATED
 SERIES RATED
 FURNISH GROUND BAR KIT
 FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
 SERVICE ENTRANCE LABEL

600 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

FEED TOP
 BOTTOM

NEUTRAL 100% 200%

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	200	4-3/0	6	2"	PANEL GHA				PANEL GHC	2"	6	4-3/0	200	2
3														4
5														6
7	200	4-3/0	6	2"	PANEL GHB				SPACE					8
9									SPACE					10
11									SPACE					12
13					SPACE				SPD	1-1/4"	8	4-3	100	14
15					SPACE									16
17					SPACE									18

NOTES:
(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
(2) ALL SPARE CIRCUIT BREAKERS SHALL BE INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 423.09 KVA
TOTAL AMPS = 508.89 AMPS

PANEL FLP

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø 'STINGER'

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

AIC RATING 14K
 FULLY RATED
 SERIES RATED
 FURNISH GROUND BAR KIT
 FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
 SERVICE ENTRANCE LABEL

150 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

FEED TOP
 BOTTOM

NEUTRAL 100% 200%

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	30	3-10	10	3/4"	FUEL PUMP				FUEL PUMP	3/4"	10	3-10	30	2
3														4
5	30	3-10	10	3/4"	FUEL PUMP				FUEL PUMP	3/4"	10	3-10	30	6
7														8
9	30	3-10	10	3/4"	FUEL PUMP				FUEL PUMP	3/4"	10	3-10	30	10
11														12
13	30	3-10	10	3/4"	FUEL PUMP				HEATED ENCLOSURE	3/4"	6	2-6	20	14
15									AIR COMP					16
17	30	3-10	10	3/4"	AIR COMP									18
19									SPARE					20
21	20				SPARE				SPARE					22
23	20				SPARE				SPARE					24
25	20				SPARE				SPARE					26
27	20				SPARE				SPARE					28
29	20				SPARE				SPARE					30

NOTES:
(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
(2) ALL SPARE CIRCUIT BREAKERS SHALL BE INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 39.58 KVA
TOTAL AMPS = 109.86 AMPS

PANEL WLP

VOLTAGE 480/277V, 3Ø, 4W, WYE
 208/120V, 3Ø, 4W, WYE
 240/120V, 3Ø, 4W, DELTA W/ 3Ø 'STINGER'

ENCLOSURE NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
 NEMA 3R
 NEMA 4X 320 STAINLESS STEEL
 LOCKABLE COVER

AIC RATING 14K
 FULLY RATED
 SERIES RATED
 FURNISH GROUND BAR KIT
 FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
 SERVICE ENTRANCE LABEL

125 AMP FACTORY MAIN CIRCUIT BREAKER
 SHUNT TRIP MAIN CB
 MAIN LUGS ONLY
 UL LISTED FEED-THRU LUGS

FEED TOP
 BOTTOM

NEUTRAL 100% 200%

BRANCHES BOLT-ON, PANELBOARD CONSTR.
 FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
 PLUG-ON, LOADCENTER CONSTR.

MOUNTING SURFACE RECESSED
 FREE STANDING (FRONT ACCESS ONLY)
 FREE STANDING (FRONT AND REAR ACCESS)

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	20	2-12	12	1/2"	LIGHTS				EF-D1	1/2"	12	2-12	20	2
3	60	3-6	10	3/4"	WASHER				RECEPTACLE	1/2"	12	2-12	20	4
5									WALL HEATER	1/2"	10	2-10	30	6
7	60	3-6	10	3/4"	WASHER									8
9									SPACE					10
11					SPACE				SPACE					12
13					SPACE				SPACE					14
15					SPACE				SPACE					16
17					SPACE				SPACE					18

NOTES:
(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
(2) ALL SPARE CIRCUIT BREAKERS SHALL BE INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 23.42 KVA
TOTAL AMPS = 65.0 AMPS

BUILDING B

NOTE: This inquiry is NOT an application for service. It is a request for information only.
To Apply For Service: Call 1-800-368-3749

ELECTRIC SERVICE INQUIRY

RETURN TO: ENTERGY
CUSTOMER INFORMATION:
Name: CITY OF LAKE CHARLES
Address: _____
P.O. Box: _____
City: _____ State: _____ ZIP: _____
Contact: _____ Voice Phone (____) _____ FAX (____) _____

SERVICE LOCATION: (Attach applicable maps or prints such as site, utility plan, etc.)
Lot or Tract: _____
Street: BROAD STREET City: LAKE CHARLES State: LA ZIP: 70615

SERVICE DETAILS: (check one response for items 1 through 3):
1. New customer or Increased load w/Acct# _____ or Existing Building Turn-On _____
2. Requesting: Overhead Service Underground Service
3. Has point of service (metering location) been approved by ENTERGY? Yes No

REQUESTED IN-SERVICE DATES: temporary _____ permanent _____

PROPOSED BUILDING CLASSIFICATION:
SIC Code: _____ (or, check one of the following):
 residential office restaurant/bar retail grocery warehouse school university hospital hotel/motel
 mobile home nursing home misc. non-manufacturing building misc. non-manufacturing (no building) misc. manufacturing

LOAD SUMMARY:
Phase/Voltage: 1Ø-120/240 3Ø-120/240 3Ø-120/208 3Ø-277/480 ** Other _____
Service Entrance Ampacity: 600
Quantity & Size of Conductors Being Run by Electrician: Qty.: 2 SETS OF 4 Size: 350 KCMIL
All-electric facility? yes no Computer equipment? yes no

	Single Ø	Three Ø	Comments
Square Footage	26492 SQ/FT.		MULTIPLE ENCLOSED BUILDINGS AND OPEN STRUCTURES
Lights	17.69 KW		
Cooking			
Heating	11.66 KW		
A/C (heat pump)	11.69 KW	135.51 KW	VRF CASSETTES, CONDENSING UNITS
Refrigeration	2.0 KW		
Water Heating		18.0 KW	
Motors	38.34 KW	21.5 KW	OVERHEAD DOORS, EXHAUST FANS, AIR CURTAINS
Motors		HP	
Receptacles	104.0 KW		
Miscellaneous	4.4 KW		
Total Connected	189.78 KW	175.01 KW	
Existing Peak Load			
Total Diversified			
Largest Motor:	7.5	HP~ <input checked="" type="checkbox"/> 1Ø <input type="checkbox"/> 3Ø	Motor HP Code No. _____
Locked Rotor Current:		Amps. Motor Duty: _____ hrs./day~ <input type="checkbox"/> continuous <input type="checkbox"/> intermittent	

Submitted by: CONNOR J MARTIN Title: ELECTRICAL PROJECT MANAGER
Date: 2-6-26 Phone No.: 337-234-5710 Alt. No.: _____ Rev. 7/28/14

BUILDING G

NOTE: This inquiry is NOT an application for service. It is a request for information only.
To Apply For Service: Call 1-800-368-3749

ELECTRIC SERVICE INQUIRY

RETURN TO: ENTERGY
CUSTOMER INFORMATION:
Name: CITY OF LAKE CHARLES
Address: _____
P.O. Box: _____
City: _____ State: _____ ZIP: _____
Contact: _____ Voice Phone (____) _____ FAX (____) _____

SERVICE LOCATION: (Attach applicable maps or prints such as site, utility plan, etc.)
Lot or Tract: _____
Street: BROAD STREET City: LAKE CHARLES State: LA ZIP: 70615

SERVICE DETAILS: (check one response for items 1 through 3):
1. New customer or Increased load w/Acct# _____ or Existing Building Turn-On _____
2. Requesting: Overhead Service Underground Service
3. Has point of service (metering location) been approved by ENTERGY? Yes No

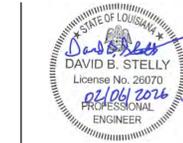
REQUESTED IN-SERVICE DATES: temporary _____ permanent _____

PROPOSED BUILDING CLASSIFICATION:
SIC Code: _____ (or, check one of the following):
 residential office restaurant/bar retail grocery warehouse school university hospital hotel/motel
 mobile home nursing home misc. non-manufacturing building misc. non-manufacturing (no building) misc. manufacturing

LOAD SUMMARY:
Phase/Voltage: 1Ø-120/240 3Ø-120/240 3Ø-120/208 3Ø-277/480 ** Other _____
Service Entrance Ampacity: 600
Quantity & Size of Conductors Being Run by Electrician: Qty.: 2 SETS OF 4 Size: 350 KCMIL
All-electric facility? yes no Computer equipment? yes no

	Single Ø	Three Ø	Comments
Square Footage	46907 SQ/FT.		MULTIPLE ENCLOSED BUILDINGS AND OPEN STRUCTURES
Lights	28.72 KW		
Cooking			
Heating	62.34 KW		AIR HANDLERS, WALL HEATERS
A/C (heat pump)	35.17 KW	8.5 KW	CONDENSING UNITS
Refrigeration	1.2 KW		
Water Heating	8.5 KW		
Motors	163.18 KW	43.56 KW	OVERHEAD DOORS, EX FANS, GAS UNIT HEATERS, FUEL PUMPS
Motors		HP	
Receptacles	68.32 KW		
Miscellaneous	3.6 KW		
Total Connected	371.03 KW	52.06 KW	
Existing Peak Load			
Total Diversified			
Largest Motor:	10.0	HP~ <input type="checkbox"/> 1Ø <input checked="" type="checkbox"/> 3Ø	Motor HP Code No. _____
Locked Rotor Current:		Amps. Motor Duty: _____ hrs./day~ <input type="checkbox"/> continuous <input checked="" type="checkbox"/> intermittent	

Submitted by: CONNOR J MARTIN Title: ELECTRICAL PROJECT MANAGER
Date: 11-26-25 Phone No.: 337-234-5710 Alt. No.: _____ Rev. 7/28/14



LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
E5.3R1
 4200 BROAD STREET
 LAKE CHARLES, LA 70615
ELECTRICAL PANEL SCHEDULES

SHEET NO. ARCH #24009 BA

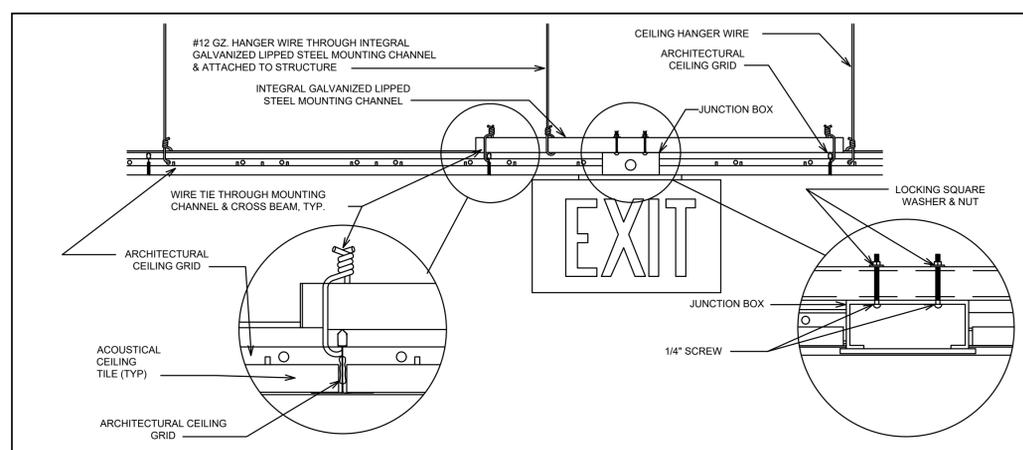
VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS

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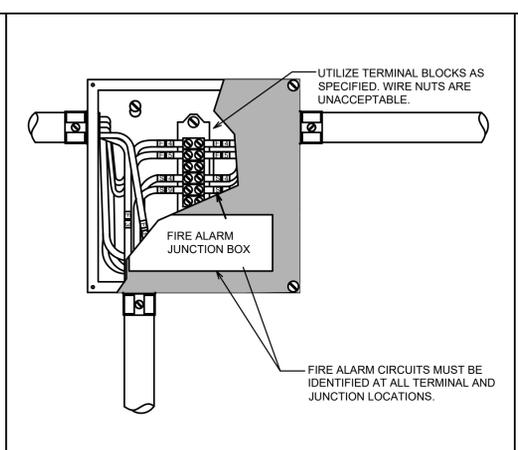
CONSTRUCTION DOCUMENTS

ASSOCIATED DESIGN GROUP, INC.
 3909 W Congress Street, Suite 201
 Lafayette, Louisiana 70506
 Phone: (337) 234-5710
 Email: adginc@adginc.org

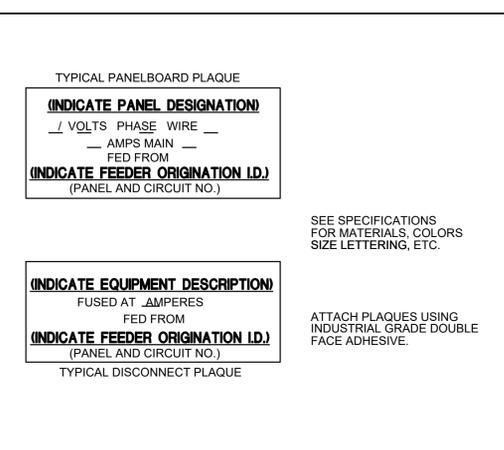
Project No. 25082



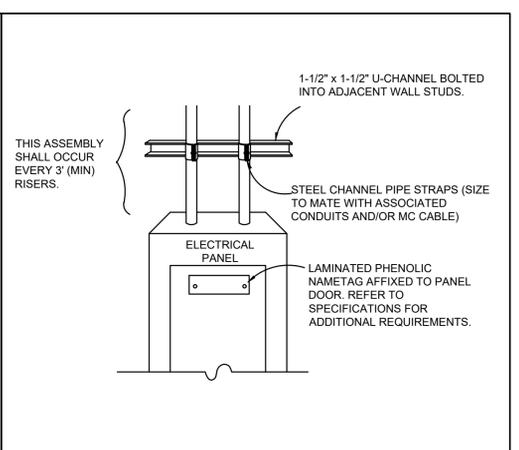
1 EXIT SIGN MOUNTING - LAY-IN CEILING
NO SCALE



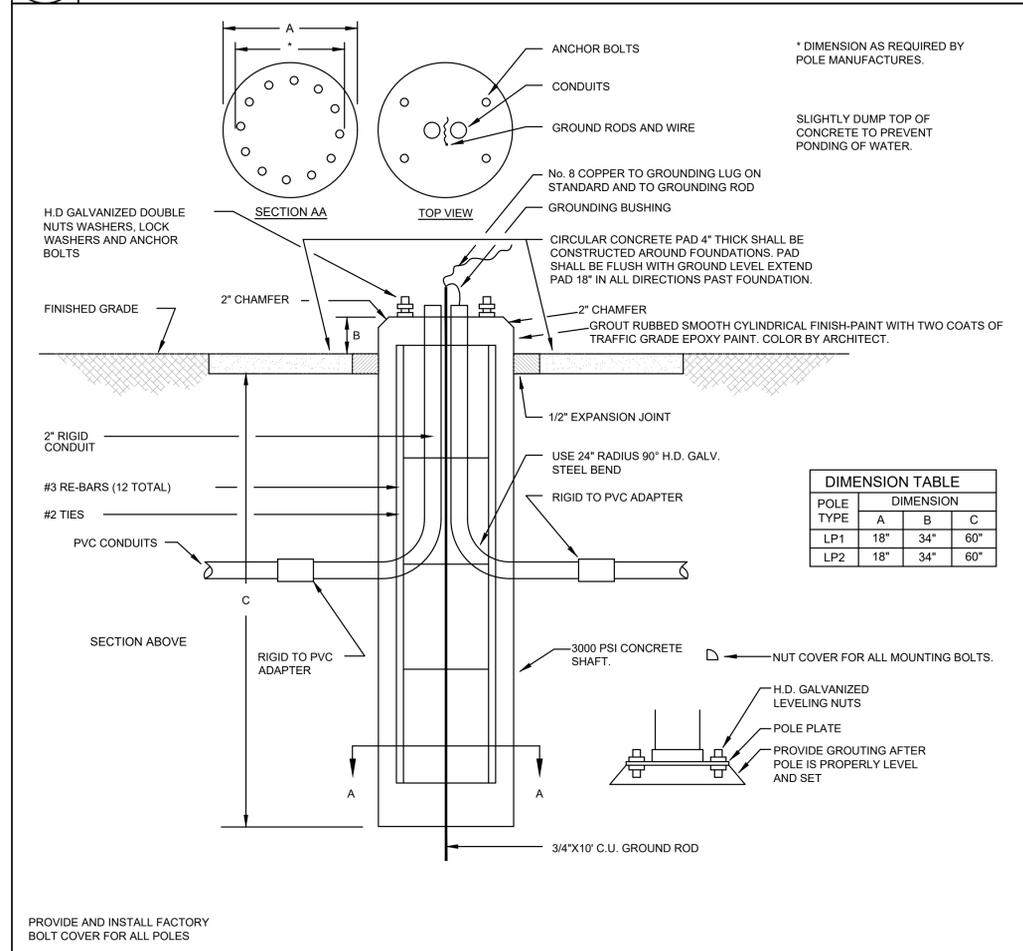
2 INSTALLATION & IDENTIFICATION OF FIRE ALARM CIRCUITS
NO SCALE



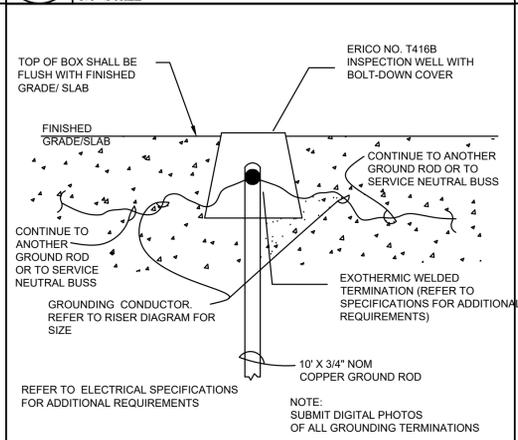
3 ELECTRICAL EQUIP. SIGNAGE DETAIL
NO SCALE



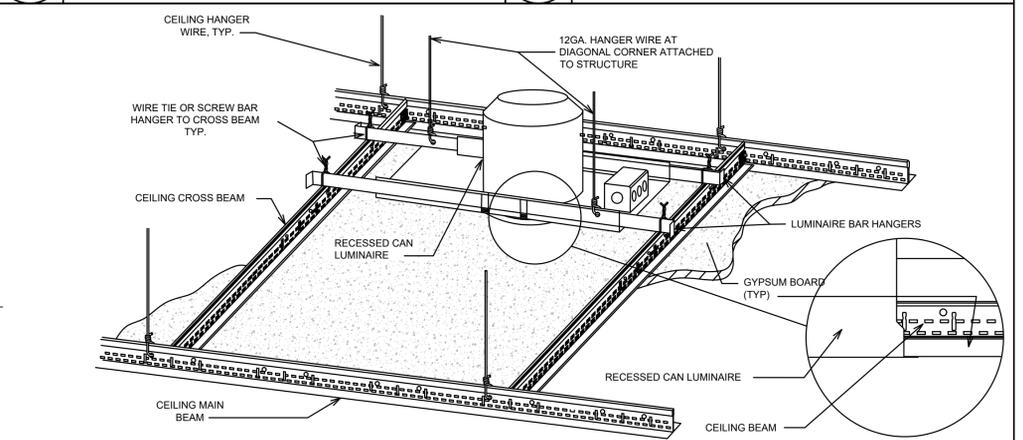
4 TYP. CONDUIT SUPPORT DETAIL
NO SCALE



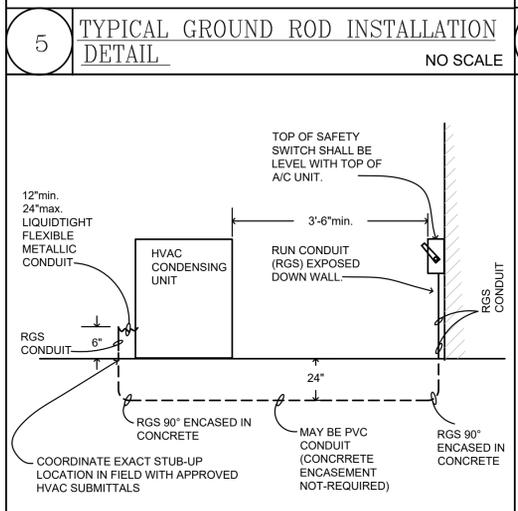
5 TYPICAL GROUND ROD INSTALLATION DETAIL
NO SCALE



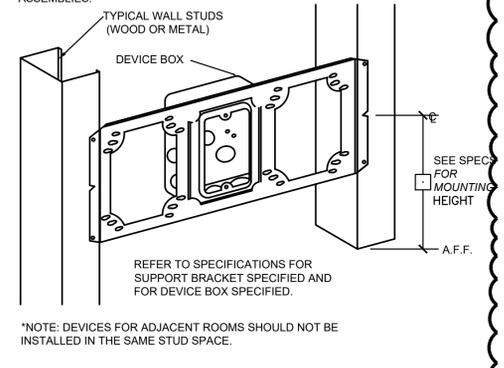
6 DOWNLIGHT MOUNTING - GYPBOARD CEILING
NO SCALE



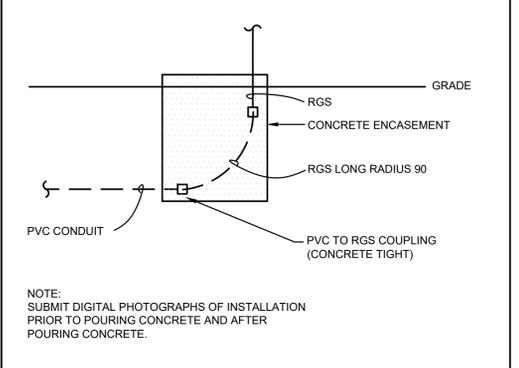
7 TYPICAL LIGHT STANDARD FOUNDATION DETAIL
NO SCALE



8 TYPICAL HVAC CONDENSING UNIT INSTALLATION DETAIL
NO SCALE



9 BOX MOUNTING BRACKET DETAIL
NO SCALE



10 TYPICAL UNDERGROUND STUB-UP DETAIL
NO SCALE

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS

SECTION 072119 – SPRAY FOAM INSULATION

PART 1 - GENERAL

1.1 General Design Considerations

- A. Comply with “National Fire Protection Association” standards:
 - 1. NFPA 275: Standard Method of Fire Tests for the Evaluation of Thermal Barriers
 - 2. NFPA 285: Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non- Load-Bearing Wall Assemblies Containing Combustible Components
 - 3. NFPA 286: Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth
- B. Where applicable, comply with the following:
 - 1. FM 4880, Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems
 - 2. Underwriters Laboratories, UL 1040 Fire Test of Insulated Wall Construction and or UL 1715: Fire Test of Interior Finish Material
 - 3. International Code Council Evaluation Services, AC-377 Acceptance Criteria for Spray-Applied Foam Plastic Insulation
- C. All closed-cell spray foam insulation products must meet the requirements of ICC-ES AC377 for use in attics and crawlspaces without the use of a prescriptive ignition barrier or intumescent coating when specific conditions are met. The applicable product Technical Data Sheets shall be submitted for applicable requirements.
- D. Moisture migration analysis must be performed and submitted by manufacturer especially for facilities located in cold climate regions or those with higher relative humidity levels.
- E. Ensure adequate air space and drainage plane is provided for condensation control between the exterior cladding and the spray-applied polyurethane foam insulation on the exterior walls.
- F. When an air barrier or a moisture control layer is specified, compatibility must be verified with the applicable spray foam product being used. Consult Spray Foam Insulation manufacturer to confirm insulation properties of exposed spray foam insulation. Short-term exposure (<6 months) to UV light may cause discoloration and negatively affect the adhesion of any coatings applied to the foam. Short-term exposure to UV light does not affect physical properties or thermal insulation performance. If a coating is required, the coating shall be applied immediately after the foam is installed to ensure proper coating adhesion. If a coating is not required, UV exposed foam should not be left exposed for longer than 6 months.

1.2 Quality Assurance

- A. The installation of the spray-applied polyurethane foam insulation shall be performed by a company that is accredited by SPFA (Spray Polyurethane Foam Alliance) or authorized by CSFI.
- B. The installing workers and the field supervisor shall both be certified as part of the SPFA/PCP (Professional Certification Program), CSFI applicator training program, or approved distributor training program.

1.3 Submittals

- A. Prior to installation, the contractor must submit the authorized applicator and the Manufacturer's product Technical Data Sheet, product Application Guide, and applicable evaluation reports and Certification
- B. Manufacturer's product Technical Data Sheet and Application Guide for each used, including:
 - 1. Preparation instructions and recommendations
 - 2. Storage and handling requirements
 - 3. Evidence of compliance for insulation products with specified requirements
 - 4. Installation methods (Indicating special procedures, substrate and conditions requiring special treatment.)
- C. Evaluation report from one or more of the following organizations acceptable to the code official or authority having jurisdiction:
 - 1. ICC-ES (International Code Council Evaluation Service)
 - 2. IAPMO-ES (International Association of Plumbing and Mechanical Officials)
 - 3. Intertek
 - 4. QAI (Quality Auditing Institute, Ltd.)
 - 5. UL (Underwriter's Laboratories, Inc.)
 - 6. Others
- D. Submit Certifications for all workers on the jobsite

1.4 Job Conditions

- A. Prior to the application of spray-applied polyurethane foam insulation, the temperature of the substrate shall be within the limits described in the respective product Application Guide. The service temperature of any surface to be sprayed shall not exceed 180°F (82°C).
- B. Moisture in the form of rain, fog, frost, dew, or relative humidity >85% may affect the physical properties of the installed insulation.
- C. When applying spray foam on the exterior of walls, wind speeds in excess of 10 mph

may adversely affect the development and physical properties of the installed spray foam insulation as well as overspray problems. When wind speed is greater than 3 mph, use windscreens to prevent overspray.

- D. All surfaces must be free of dirt, dust, and other debris. Apply the spray foam insulation to clean dry surfaces at the temperature ranges listed on the applicable Application Guide.
- E. Chemical compatibility with other wall components will depend on type of air and vapor barrier used. Refer to the Carlisle Spray Foam Insulation Material Compatibility Table for a list of commonly used building materials. Carlisle Spray Foam Insulation should be contacted for verification of compatibility of other products that may come in contact with other products.

1.5 Product Delivery, Storage and Handling

- A. Comply with all applicable code requirements. Deliver materials to the site in their original, tightly sealed containers, all clearly labeled with manufacturer's name, product identification and lot number.
- B. Safely store materials in their original containers out of the weather. Keep materials dry and within the temperature limits specified by the manufacturer. Storage temperatures for SealTite PRO closed-cell spray foam insulation products are between 50°- 80°F (10°-27°C) minimum for 48 hours before use. Open-cell products may be heated at the job site. Consult the applicable product Application Guide for additional information.
- C. All materials shall be stored in compliance with applicable fire and safety requirements.
- D. Protect materials from damage during transit, handling, storage, and installation.
- E. Proper storage is important before and during use, on the job site. Improper storage conditions can make the components unusable. Do not allow products to freeze.
- F. When storing materials at job site, the CSFI Authorized Applicator must comply with the requirements of the specifier / building owner to prevent disturbance to the building and site.

PART 2 - PRODUCTS

2.1 Closed-Cell Spray Foam Insulation Products

A. Closed Cell Spray Foam Insulation

1. Approved Product/Mfr:

- a. SealTite Pro Closed Cell, Carlisle (a two-component, medium density, one to one by volume spray-applied polyurethane foam.

B. Physical Properties of Closed Cell Foam

Physical Property	Test Method ASTM	SealTite Pro Closed Cell	SealTite™ Pro One Zero
R-Value, @ 1"	C 518	6.9	6.9
R-Value, @ 3.5"	C 518	24	24
Core Density, lb/c.ft.	D 1622	2.00	2.00
Closed-cell content, %, min.	D 2856	90	90
Water Vapor Transmission, Permeance @ 3.5"	E 96	0.23	0.23
Air Impermeable, max, (L/s-m ²) @ 1"	E 2178	0.02	0.02
Tensile Strength, psi, min.	D 1623	60	60
Dimensional Stability, 28 days, percent volume change, max.	D 2126	9	9
Flame Spread, max.	E-84	25	25
Smoke Development, max.	E-84	450	450
Compressive Strength, psi	D-1621	47	47

2.2 Thermal Barriers

- A. Spray-applied polyurethane foam insulation shall be separated from the building interior by a 15-minute thermal barrier (5/8" gypsum board). Materials equivalent to 5/8-inch gypsum wallboard can be used as thermal barriers provided, they have been tested in accordance with the IBC or IRC to limit temperature rise and remain in place for 15 minutes and are approved by Architect.

PART 3 - EXECUTION

- 3.1 Safety Data Sheets (SDS) must always be on location during transportation, storage, and application of SealTite PRO spray- applied polyurethane foam products.

- A. The applicator shall follow all safety regulations as recommended by OSHA, the Spray Polyurethane Foam Alliance (SPFA) and the Center for the Polyurethanes Industry (CPI) of the American Chemistry Council (ACC) and/or other agencies having jurisdiction. To ensure most current installation requirements are met and techniques are followed,

product Data Sheets and Application Guides should be available on site and consulted.

3.2 General

- A. Verify that substrates are clean, dry, and free of dust, debris, oil, solvents, and other materials that may adversely affect spray-applied polyurethane foam adhesion.
- B. Safety Data Sheets (SDS) must always be on location during transportation, storage, and application of spray-applied polyurethane foam products.
- C. The applicator shall follow all safety regulations as recommended by OSHA, the Spray Polyurethane Foam Alliance (SPFA) and the Center for the Polyurethanes Industry (CPI) of the American Chemistry Council (ACC) and/or other agencies having jurisdiction. To ensure most current installation requirements are met and techniques are followed, product Data Sheets and Application Guides should be available on site and consulted.
- D. Personal safety: Due to the reactive nature of these components, respiratory protection is mandatory. The vapors and liquid aerosols present during application and for a short period thereafter must be considered and appropriate protective measures taken to minimize potential risks from overexposure through inhalation, skin, or eye contact. These protective measures include OSHA approved:
 - 1. ventilation, safety training for installers and other workers
 - 2. The use of appropriate personal protective equipment.
 - 3. Medical surveillance program based on the American Chemistry Council (ACC) Guidelines.
 - 4. It is imperative that the applicator read and become familiar with all available information on proper use and handling of spray polyurethane foam.
- E. Clear building occupants and non-SPF personnel from building during installation. Utilize the best practices for the use of containment and ventilation techniques detailed in the U.S. Environmental Protection Agency's "Ventilation Guidance for Spray Polyurethane Foam Application": <http://www.epa.gov/dfe/pubs/projects/spf/ventilation-guidance.html>.
- F. Do not begin application of spray-applied polyurethane foam insulation until substrate and environmental conditions are satisfactory. Mask/Shield adjacent areas to protect against overspray.

3.3 Preparation

- A. Do not proceed with the foam application until all substrates have been properly prepared. Deviations from the CSFI specifications must be communicated to the Architect and accepted by manufacturer.
- B. Isolate the spray area, and post warning signs, as needed, to prevent entry by other persons not wearing appropriate Personal Protective Equipment (PPE).
- C. Ensure that the application of the foam insulation is coordinated with other affected

trades to prevent work interruption and construction progress.

- D. Maintain environmental and substrate conditions (temperature, humidity, and ventilation) within the limits recommended by the CSFI for optimum results. Do not apply products when conditions are beyond those listed by CSFI in the applicable product Technical Data Sheet and Application Guide.
- E. Prepare substrates following CSFI recommendations as listed below.
 - 1. Review the placement area to determine that the final location will not be within 3 inches (76 mm) of any heat source where the temperature may exceed 200 °F (93 °C) per ASTM C 411, or in accordance with authorities having jurisdiction.
 - 2. Mask and protect adjacent surfaces from overspray or damage.
 - 3. Remove foreign materials, dirt, dust, grease, oil, paint, laitance, efflorescence, and other substances that will adversely affect the foam application.
 - 4. Comply with CSFI written installation instructions and published details for preparing cavities to make sure they are free of any foreign material that may impede application.
 - 5. Verify that work by other trades is completed prior to proceeding with foam application.
- F. When certain preparations are the responsibility of another contractor, the building owner representative/specifier shall be notified in writing of deviations from mgfr. recommended installation tolerances and conditions. Manufacturer shall be consulted to determine suitability.
- G. Clear building occupants and non-SPF personnel from building. Consider utilizing the best practices for the use of containment and ventilation techniques detailed in the U.S. Environmental Protection Agency's "Ventilation Guidance for Spray Polyurethane Foam Application": <http://www.epa.gov/dfe/pubs/projects/spf/ventilation-guidance.html>

3.4 Spray-applied polyurethane foam Application

- A. Apply insulation to the specified thickness as indicated on the drawings or as designated by the Architect.
- B. When applying spray-applied polyurethane foam insulation to temperature sensitive materials such as low voltage wiring, chlorinated polyvinylchloride (CPVC), or PEX tubing consult the CSFI Material Compatibility Sheet for the recommended application procedure.
- C. Apply foam insulation over entire area to be insulated and fill voids around doors, windows and around accessible surfaces and penetrations.
- D. Trim excess foam and remove all debris and foam particles using proper disposable practices.

3.5 FIELD QUALITY CONTROL

- A. Inspect the sprayed foam insulation to verify the correct insulation thickness.
- B. An installation certificate documenting the foam type, manufacturer, and product name and lot/batch number, as well as any fire protective products must be completed by the contractor.
- C. The Insulation Certificate shall be signed and dated by the contractor representative and delivered to the building owner or general contractor and or posted in a conspicuous location on the job site.

3.6 PROTECTION

Do not permit subsequent work to disturb applied foam insulation.

- A. Protect installed foam insulation from damage due to harmful weather exposures, physical abuse, and other causes.
- B. Provide temporary coverings in places where insulation is subject to abuse.
- C. Touch-up, repair, or replace damaged foam before the substantial completion phase is reached.
- D. Install all required fire protective coatings or coverings over the foam as soon as possible and according to the manufacturer's guidelines.

3.7 CONSTRUCTION WASTE MANAGEMENT

- A. Plan and coordinate the insulation work to minimize the generation of offcuts and waste.
- B. Separate waste materials in accordance with the Waste Management Plan, and to the extent economically feasible.
- C. Clean work area and remove all waste and equipment from interior and exterior spaces, leaving the project site in an orderly fashion.

END OF SECTION 072119

**SECTION 133419 - METAL BUILDING SYSTEMS
(Buildings A, E, F, H, & Wash Canopy)**



PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Pre-engineered, shop fabricated structural steel building frame; insulated (and non-insulated) metal wall and sloped roof system including gutters and downspouts; exterior doors and overhead doors. This specification applies to Buildings A (Covered Pavilion), E (Bus Canopy), F (Equipment Shed), H (Sand and Dirt Pit), and Vehicle Wash Canopy. **All steel and fasteners shall be hot-dipped galvanized.**

1.2 REFERENCES

A. American Institute of Steel Construction:

1. AISC 360-16 - Specification for Structural Steel Buildings.
2. AISC S335 - Specification for Structural Steel Buildings Allowable Stress Design, and Plastic Design.

B. ASTM International:

1. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
2. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
3. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
4. ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.
5. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
6. ASTM A490 - Standard Specification for Heat-Treated Steel Structural Bolts, 150 ksi Minimum Tensile Strength.
7. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
8. ASTM A501 - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
9. ASTM A529/A529M - Standard Specification for High-Strength Carbon-Manganese Steel of Structural Quality.
10. ASTM A572/A572M - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel.
11. ASTM A992/A992M - Standard Specification for High-Strength Low-Alloy Structural Steel.

12. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
13. ASTM A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
14. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
15. ASTM C991 - Standard Specification for Flexible Glass Fiber Insulation for Pre-Engineered Metal Buildings.
16. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
17. ASTM C1371 - Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers.
18. ASTM C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
19. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
20. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials.
21. ASTM E408 - Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques.
22. ASTM E903 - Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.
23. ASTM E1918 - Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field.
24. ASTM E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.
25. ASTM E1996 - Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes.

C. American Welding Society:

1. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination.
2. AWS D1.1 - Structural Welding Code - Steel.

D. Metal Building Manufacturers Association:

1. MBMA - Low Rise Building Systems Manual.

E. SSPC: The Society for Protective Coatings:

1. SSPC - Steel Structures Painting Manual.
2. SSPC Paint 20 - Zinc-Rich Primers (Type I - Inorganic and Type II - Organic).

F. Underwriters Laboratories Inc.:

1. UL - Building Materials Directory.

G. U.S. Environmental Protection Agency:

1. ENERGY STAR - ENERGY STAR Voluntary Labeling Program.

1.3 SYSTEM DESCRIPTION

A. Building A (Outdoor Pavilion):

1. 50ft by 50ft prefabricated, pre-engineered metal framed primary building/canopy. Primary building consists of rigid frames spanning the 50-foot direction.
2. Primary Building Bay Spacing: 25 feet
3. Primary Framing: Rigid frame of rafter beams and columns, portal frames, and wind bracing. All framing to be hot-dipped galvanized after fabrication.
4. Columns: Straight (not tapered) legs.
5. Roof System: Preformed and prefinished standing seam metal roof panels of upslope profile, with sub-girt framing/anchorage assembly, and accessory components.
6. Building Color(s): As selected by Architect from any of the manufacturer's standard and premium colors, minimum of 15 options.
7. Maximum baseplate dimensions: 12"x22"

B. Building E (Bus Canopy):

1. 80ft (including roof overhangs) by 90ft prefabricated, pre-engineered metal framed primary building/canopy. Primary building consists of rigid frames spanning 70-feet with 5-foot overhangs on each end (80-foot direction).
2. Primary Building Bay Spacing: 29 feet
3. Primary Framing: Rigid frame of rafter beams and columns, portal frames, and wind bracing. All framing to be hot-dipped galvanized after fabrication.
4. Roof System: Preformed and prefinished standing seam metal roof panels of upslope profile, with sub-girt framing/anchorage assembly, and accessory components.
5. Building Color(s): As selected by Architect from any of the manufacturer's standard and premium colors, minimum of 15 options.
6. Maximum baseplate dimensions: 12"x22"

C. Building F (Covered Equipment Parking):

1. 25ft-6in by 161ft-6in prefabricated, pre-engineered metal framed primary building/canopy. Primary building consists of cantilevered rigid frames spanning the 25 foot - 6-inch direction.
2. Primary Building Bay Spacing: 20 feet
3. Primary Framing: Cantilevered rigid frame of rafter beams and columns, and wind bracing. All framing to be hot-dipped galvanized after fabrication.
4. Roof System: Preformed and prefinished standing seam metal roof panels of upslope profile, with sub-girt framing/anchorage assembly, and accessory components.
5. Building Color(s): As selected by Architect from any of the manufacturer's standard and premium colors, minimum of 15 options.
6. Maximum baseplate dimensions: 12"x22"

- D. Building H (Sand/Dirt Pits):
1. 26ft-6in by 91ft prefabricated, pre-engineered metal framed primary building. Primary building consists of rigid frames spanning the 26-foot, 6-inch direction.
 2. Primary Building Bay Spacing: 18 feet (standard) & 18-feet, 60-inches at end bays.
 3. Primary Framing: Rigid frame of rafter beams and columns, portal frames, and wind bracing. All framing to be hot-dipped galvanized after fabrication.
 4. Roof System: Preformed and prefinished standing seam metal roof panels of upslope profile, with sub-girt framing/anchorage assembly, and accessory components.
 5. Building Color(s): As selected by Architect from any of the manufacturer's standard and premium colors, minimum of 15 options.
 6. Maximum baseplate dimensions: 14"x18"
- E. Vehicle Wash Canopy
1. 35ft by 64ft-8in prefabricated, pre-engineered metal framed primary building/canopy. Primary building consists of rigid frames spanning the 64-foot 8-inch direction.
 2. Primary Building Bay Spacing: 17ft-6in
 3. Primary Framing: Rigid frame of rafter beams and columns, portal frames, and wind bracing. All framing to be hot-dipped galvanized after fabrication.
 4. Columns: Tapered legs.
 5. Roof System: Preformed and prefinished standing seam metal roof panels of upslope profile, with sub-girt framing/anchorage assembly, and accessory components.
 6. Building Color(s): As selected by Architect from any of the manufacturer's standard and premium colors, minimum of 15 options.
 7. Maximum baseplate dimensions: 12"x18"
- F. Secondary Framing (All): purlins, girts, eave struts, flange bracing, still supports, clips, and other items indicated on drawings.
- G. Wall System (All – where indicated): Preformed and prefinished metal panels of vertical profile, with sub-girt framing/anchorage assembly, insulation (where indicated), insulated panels (where indicated), liner sheets, and accessory components.
- H. Roof System (All): Preformed metal panels of upslope profile, with sub-girt framing/anchorage assembly, insulation (where indicated), and accessory components. Provide standing seam system where indicated. Provide insulated panels where indicated.
- I. Roof Slope (All): 1 on 12 roof slope for all sections

1.4 DESIGN REQUIREMENTS

- A. Building A (Outdoor Pavilion):
1. Thermal resistance of wall system: N/A
 2. Thermal resistance of roof system: N/A

3. Design members to withstand dead loads, live loads, applicable seismic loads, wind loads, and other design loads calculated in accordance with IBC 2021, ASCE 7-16, and the following minimum wind design criteria: Risk Category I, Exposure Category B, Ultimate Wind Speed of 140 mph.
- B. Building E (Bus Canopy):
1. Thermal resistance of wall system: N/A
 2. Thermal resistance of roof system: N/A
 3. Design members to withstand dead loads, live loads, applicable seismic loads, wind loads, and other design loads calculated in accordance with IBC 2021, ASCE 7-16, and the following minimum wind design criteria: Risk Category I, Exposure Category B, Ultimate Wind Speed of 140 mph.
- C. Building F (Covered Equipment Parking):
1. Thermal resistance of wall system: N/A
 2. Thermal resistance of roof system: N/A
 3. Design members to withstand dead loads, live loads, applicable seismic loads, wind loads, and other design loads calculated in accordance with IBC 2021, ASCE 7-16, and the following minimum wind design criteria: Risk Category I, Exposure Category B, Ultimate Wind Speed of 140 mph.
- D. Building H (Sand/Dirt Pits):
1. Thermal resistance of wall system: N/A
 2. Thermal resistance of roof system: N/A
 3. Design members to withstand dead loads, live loads, applicable seismic loads, wind loads, and other design loads calculated in accordance with IBC 2021, ASCE 7-16, and the following minimum wind design criteria: Risk Category I, Exposure Category B, Ultimate Wind Speed of 140 mph.
- E. Vehicle Wash Canopy:
1. Thermal resistance of wall system: N/A
 2. Thermal resistance of roof system: N/A
 3. Design members to withstand dead loads, live loads, applicable seismic loads, wind loads, and other design loads calculated in accordance with IBC 2021, ASCE 7-16, and the following minimum wind design criteria: Risk Category I, Exposure Category B, Ultimate Wind Speed of 140 mph.
- F. All: Design members to support mechanical and electrical equipment and fire sprinkler system piping (as required). Minimum collateral load shall be 5 psf.
- G. All: Maximum allowable deflection: As per IBC 2021, with no framing member exceeding 1/180 of span with imposed loads for exterior wall and roof system.
- H. All: Maximum allowable lateral drift: As per IBC 2021, with no primary framing member exceeding l/400.
- I. All: Metal panel assemblies shall withstand the effects of loads and stresses within limits and under conditions indicated according to ASTM E 1592.

- J. All: Provide drainage to exterior for water entering or condensation occurring within wall or roof system.
- K. All: Permit movement of components without buckling, failure of joint seals, undue stress on fasteners or other detrimental effects, when subject to temperature range of 0 to 120 degrees F.
- L. All: Size and fabricate wall and roof systems free of distortion or defects detrimental to appearance or performance.
- M. Delegated Design (All): Design and structural analysis data and calculations shall be signed and sealed by a Registered Professional Engineer, licensed in the State of Louisiana, responsible for their preparation, to certify conformance with project specific design loads and governing code requirements as described herein and as indicated on the drawings. Engineering calculations and data to define and include cladding and cladding attachment for all applicable zones (field, perimeter, corner, overhang, etc.).

1.5 PERFORMANCE REQUIREMENTS

- A. Conform to applicable IBC 2021 and City of Lake Charles, LA for submission of design calculations, reviewed Shop Drawings and erection drawings as required for acquiring permits.
- B. Cooperate with regulatory agency or authority and provide data as requested authority by having jurisdiction.
- C. Provide components of each type from one manufacturer compatible with adjacent materials.
- D. Vapor Retarder Permeance: Maximum 1 perm when tested according to ASTM E96/E96M.

1.6 SUBMITTALS

- A. Shop Drawings:
 - 1. Indicate assembly dimensions, locations of structural members, connections, attachments, openings, cambers, loads; wall and roof system dimensions, panel layout, general construction details, anchorages and method of anchorage, method of installation; framing anchor bolt settings, sizes, and locations from datum, and foundation loads; indicate welded connections with AWS A2.4 welding symbols; net weld lengths. Provide professional engineer (licensed in the State of Louisiana) seal and signature.
 - 2. Manufacturer's Instructions: Submit preparation requirements and anchor bolt placement.

3. Erection Drawings: Indicate members by label, assembly sequence, and temporary erection bracing.
- B. Product data sheets for each type of door and accessory (includes personnel and overhead doors).
1. Construction details, material descriptions, dimensions of individual components, profile door sections, and finishes
 2. Rated capacities, operating characteristics, electrical characteristics, and furnished accessories.

1.7 QUALITY ASSURANCE

- A. Perform Work in accordance with AISC S335, AISC 360-10 and MBMA Low Rise Building Systems Manual.
- B. Cold-Formed Steel: Comply with AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" for design requirements and allowable stresses.
- C. Perform Work in accordance with the State of Louisiana and City of Lake Charles standard.

1.8 QUALIFICATIONS

- A. Manufacturer Qualifications: A qualified manufacturer.
1. Company specializing in manufacturing products specified in this section with minimum three years documented experience.
 2. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified Professional Engineer.
- B. Erector: Company specializing in performing Work of this section with minimum three years' experience and approved by manufacturer.
- C. Design structural components, develop shop drawings, under direct supervision of a Professional Engineer experienced in design of this Work and licensed in the State of Louisiana.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components, sheets, panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.
- B. Unload, store, and erect metal panels in a manner to prevent bending, warping, twisting, and surface damage.

- C. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness, with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage.
- D. Protect foam-plastic insulation as follows:
 - 1. Do not expose to sunlight, except to extent necessary for period of installation and concealment.
- E. Protect against ignition at all times. Do not deliver foam-plastic insulation materials to Project site before installation time.

1.10 WARRANTY

- A. Furnish five-year manufacturer warranty for pre-engineered building systems and all components.

PART 2 - PRODUCTS

2.1 PRE-ENGINEERED BUILDINGS

- A. Furnish materials according to AISC 360-16, the State of Louisiana and City of Lake Charles standards.

2.2 COMPONENTS - FRAMING

- A. Structural Steel Members: ASTM A36/A36M, A572/A572M, Grade 50.
- B. Plate or Bar Stock: Minimum ASTM A36 (Match structural members).
- C. Headed Anchor Bolts: ASTM F1554 Grade 36, galvanized.
- D. Bolts, Nuts, and Washers: ASTM A325 (ASTM A325M) or ASTM A490 (ASTM A490M) galvanized.
- E. Welding Materials: AWS D1.1; type as required for materials being welded.
- F. Primer: SSPC Paint 20, Red Oxide.
- G. Non-Shrink Structural Grout: ASTM C1107/C1107M; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 2,000 psi in 48 hours and 7,000 psi in 28 days.

2.3 COMPONENTS - WALL AND ROOF SYSTEM

- A. Sheet Steel Stock: ASTM A792/A792M aluminum-zinc alloy Coating Designation AZ50.
- B. Joint Seal Gaskets: Manufacturer's standard.
- C. Fasteners: Manufacturer's standard type, high-performance organic coating, finish to match adjacent surfaces when exterior exposed.
- D. Insulation: Semi-rigid, batt, or roll glass fiber type, faced with reinforced white vinyl, friction fit.
- E. Bituminous Paint: Asphaltic type.
- F. Sealant: Manufacturer's standard type, non-staining, elastomeric, skinning.
- G. Trim, Closure Pieces, Caps, Flashings, Rain Water Diverter, Facias, Infills: Same material, thickness and finish as exterior sheets; brake formed to required profiles.

2.4 COMPONENTS - METAL DOORS AND FRAMES

A. MATERIALS

- 1. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- 2. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- 3. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum A40 metallic coating.
- 4. Frame Anchors: ASTM A 591/A 591M, Commercial Steel (CS), 40Z coating designation; mill phosphatized.
 - a. For anchors built into exterior walls, steel sheet complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.
- 5. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.
- 6. Powder-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow metal frames of type indicated.
- 7. Grout: ASTM C 476, except with a maximum slump of 4 inches, as measured according to ASTM C 143/C 143M.
- 8. Mineral-Fiber Insulation: ASTM C 665, Type I (blankets without membrane facing); consisting of fibers manufactured from slag or rock wool with 6- to 12-lb/cu. ft. density; with maximum flame-spread and smoke-development indexes of 25 and 50, respectively; passing ASTM E 136 for combustion characteristics.

B. FABRICATION

- 1. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's

plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.

2. Fabricate concealed stiffeners, edge channels, and hardware reinforcement from either cold- or hot-rolled steel sheet.

C. STEEL FINISHES

1. Prime Finish: Apply manufacturer's standard primer immediately after cleaning and pretreating.
 - a. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.
2. Factory-Applied Paint Finish: Manufacturer's standard, complying with ANSI/SDI A250.3 for performance and acceptance criteria.

2.5 FABRICATION - FRAMING

- A. Fabricate members according to AISC requirements for plate, bar, tube, or rolled structural shapes.
- B. Anchor Bolts: Formed with straight shank, assembled with template for casting into concrete.
- C. Provide framing for exterior penetrations including (but not limited to) door, window, louver, and ventilator openings.

2.6 FABRICATION - WALL AND ROOF SYSTEMS

- A. Siding: Designed to comply with code requirements. Minimum 24-gauge metal thickness, profile indicated on drawings. For R-Panel, provide 1.5-inch-deep minimum ribs at 12" on center with lapped edges.
- B. Roofing: Designed to comply with code requirements. Minimum 24-gauge metal thickness, profile indicated on drawings. For R-Panel, 1.5-inch-deep minimum ribs at 12" on center with lapped edges.
- C. Girts/Purlins: Rolled formed structural shape to receive siding, roofing sheet.
- D. Internal and External Corners: Same material thickness and finish as adjacent material, profile brake formed to required angles.
- E. Expansion Joints: Same material and finish as adjacent material manufacturer's standard brake formed.
- F. Flashings, Closure Pieces, Fascia, Infills and Caps. Same material and finish as adjacent material, profile to suit system.

- G. Fasteners: To maintain load requirements and weather tight installation, same finish as cladding, non-corrosive finish.

2.7 FABRICATION - GUTTERS AND DOWNSPOUTS

- A. Fabricate of same material and finish as roofing metal.
- B. Form gutters and downspouts of profile and size as indicated to collect and remove water. Minimum gutter and downspout size to be 6" square. Fabricate with connection pieces.
- C. Form sections in maximum possible lengths. Hem exposed edges. Allow for expansion at joints.
- D. Fabricate support straps of same material and finish as roofing metal, color as selected.

2.8 FACTORY FINISHING

- A. Interior Framing Members: Clean, prepare, and prime to SSPC Manual requirements.
- B. Exterior Framing Members: Clean, prepare, and galvanize to ASTM A123.
- C. Galvanizing for Nuts, Bolts and Washers: ASTM A153/A153M.
- D. Interior Surfaces of Wall and Roof Components and Accessories: Pre-coated enamel on steel as selected from manufacturer's standard range.
- E. Exterior Surfaces of Wall and Roof Components and Accessories: Pre-coated enamel on steel as selected from manufacturer's standard range.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify foundation, floor slab, mechanical and electrical utilities, and placed anchors are in correct position.

3.2 ERECTION

- A. Framing:
 - 1. Erect framing according to AISC requirements.
 - 2. Provide for erection and wind loads. Provide temporary bracing to maintain structure plumb and in alignment until completion of erection and installation of permanent bracing.

3. Set column base plates with non-shrink grout to achieve full plate bearing.
4. Do not field cut or alter structural members without approval of Architect/Engineer.
5. After erection, prime welds, abrasions, and surfaces not shop-primed. Repair galvanizing as required.

B. Wall and Roofing Systems:

1. Install Work according to MBMA standards.

C. Gutters and Downspouts:

1. Install Work according to MBMA standards.

D. Accessories:

1. Install Work according to MBMA standards.

3.3 ERECTION TOLERANCES

- A. Framing Members: 1/4 inch from level; 1/8 inch from plumb.
- B. Siding and Roofing: 1/8 inch from indicated position.

END OF SECTION 133419