

TERREBONNE PARISH CONSOLIDATED GOVERNMENT

RECREATIONAL DISTRICT 82921TPRD10
TPR DIST. 10 BALLFIELD IDA
625 BAYOU DULARGE ROAD
HOUMA, LA 70363



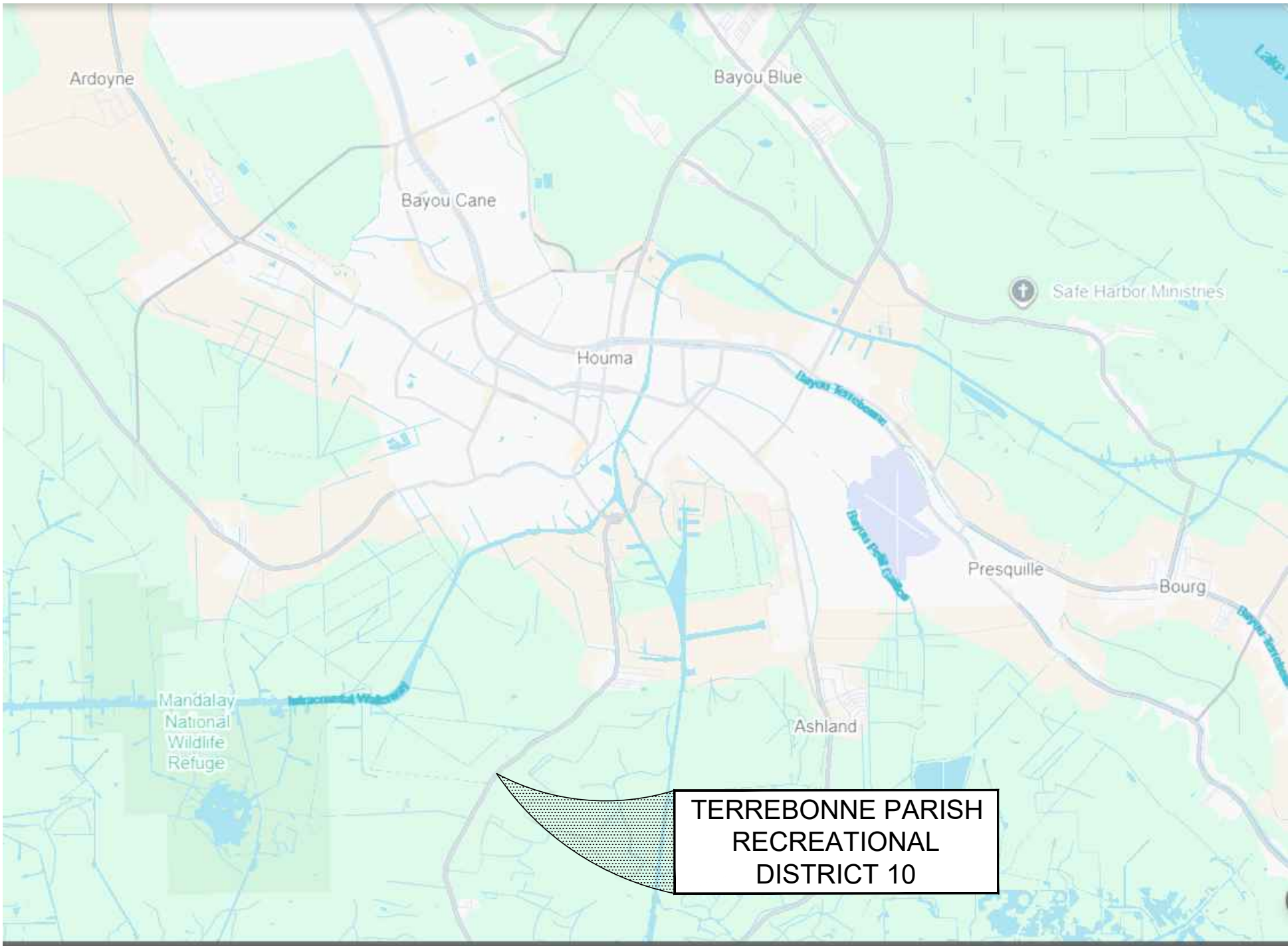
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ENGINEERS

ELECTRICAL
MARRERO, COUVILLON & ASSOCIATES, L.L.C.
3525 HESSMER AVENUE, SUITE 304
METAIRIE, LOUISIANA 70002

STRUCTURAL
MORPHY MAKOFSKY, INC.
336 N NORMAN C FRANCIS PKWY
NEW ORLEANS, LOUISIANA 70119

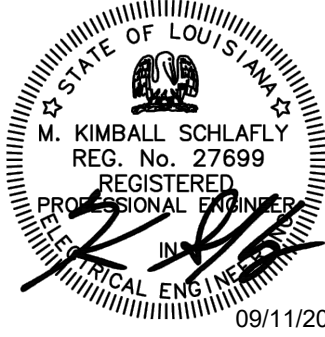
TPR-23002 BAYOU DULARGE IDA REPAIRS		
DWG NO.	SHEET TITLE	
1	T000	TITLE COVER SHEET
2	E000	ELECTRICAL SYMBOLS AND ABBREVIATIONS
3	E100	OVERALL SITE PLAN - ELECTRICAL (EXISTING & NEW)
4	E101	BALLFIELD NO.1 - ELECTRICAL
5	E102	BALLFIELD NO. 2 - ELECTRICAL
6	E103	BALLFIELD NO. 3 & 4 - ELECTRICAL
7	E104	BALLFIELD NO. 5 - ELECTRICAL
8	E201	ELECTRICAL FEEDER DIAGRAM
9	E202	BALLFIELD NO.1 - RISER DIAGRAM
10	E203	BALLFIELD NO. 2 - RISER DIAGRAM
11	E204	BALLFIELDS NO. 3 AND NO. 4 - RISER DIAGRAM
12	E205	BALLFIELD NO. 5 - RISER DIAGRAM
13	E301	PANELBOARD SCHEDULES
14	E401	LIGHTING CONTROLS AND DETAILS
15	S1	GENERAL NOTES AND PLATFORM DETAILS
16	S2	FOUNDATION DETAILS
17	S3	SPECIFICATIONS
18	S4	SPECIFICATIONS
19	S5	SPECIFICATIONS



1 VICINITY MAP
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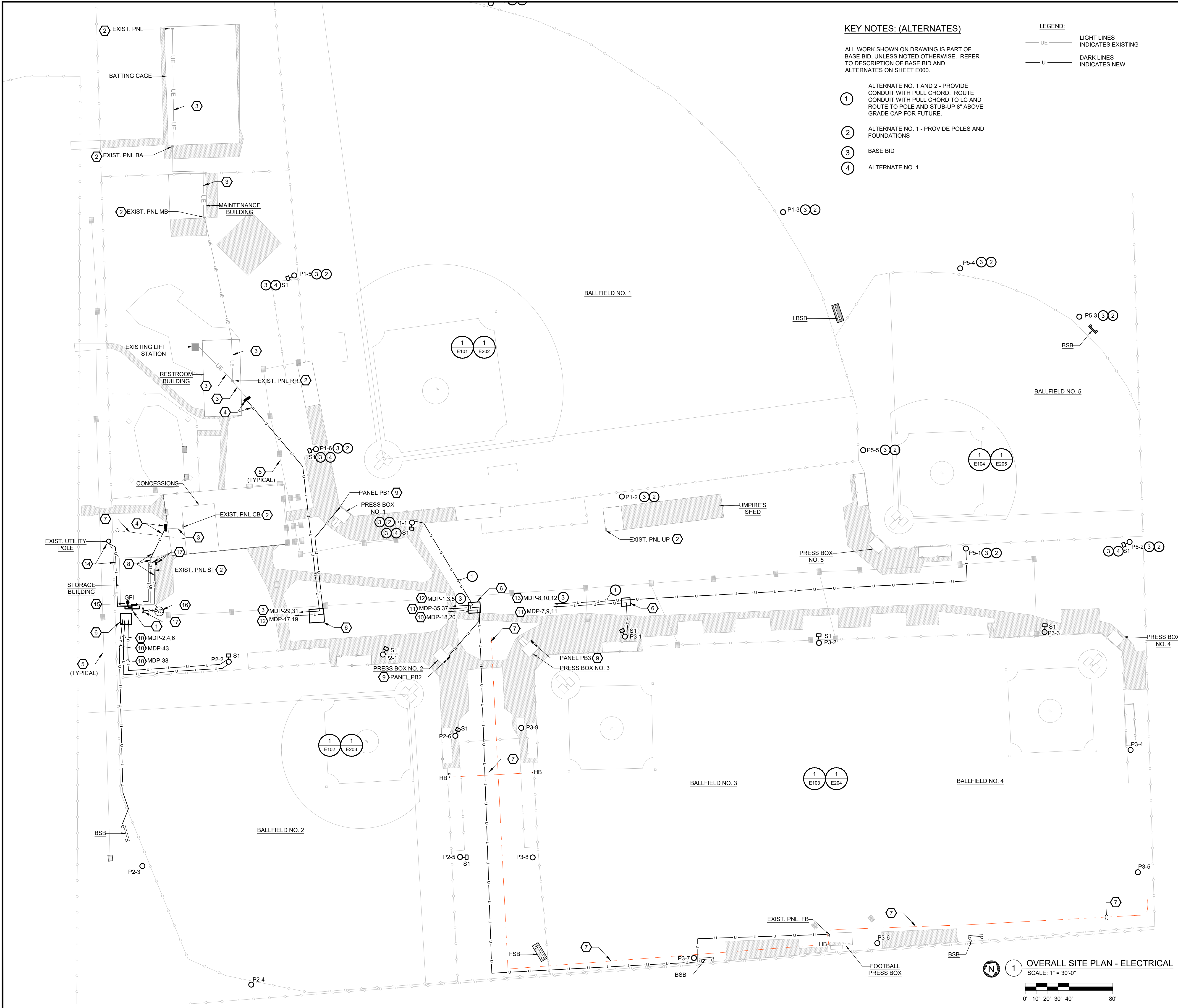
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DATE	09/11/2026				
DWG TITLE: OVERALL SITE PLAN EXISTING CONDITIONS					
G000					DWG No.

ELECTRICAL ABBREVIATIONS, SYMBOLS, AND NOTES									
ELECTRICAL LEGEND		ELECTRICAL LEGEND		ELECTRICAL ABBREVIATIONS		GENERAL SYMBOLS		GENERAL ELECTRICAL NOTES	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	ABBREVIATION	DESCRIPTION	SYMBOL	DESCRIPTION		
	DUPLEX RECEPTACLE, 20A, 125V, 3W, GROUNDING TYPE. VERTICAL MOUNT 18" AFF TO BOTTOM OF RECEPTACLE		LIGHT FIXTURE (XX -FIXTURE TYPE)	A	AMPERE		SECTION LETTER	1.	ALL WORK SHALL BE IN ACCORDANCE WITH THE ADOPTED VERSION NFPA 70, NATIONAL ELECTRIC CODE. WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY. ANY WORK JUDGED SUBSTANDARD BY THE OWNER OR THE ENGINEER SHALL BE REDONE AT THE CONTRACTORS EXPENSE. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS, INSPECTIONS, AND FEES.
	DUPLEX RECEPTACLE, 20A, 125V, 3W, WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER. VERTICAL MOUNT 18" AFF TO BOTTOM OF RECEPTACLE		LIGHT FIXTURE - STRIP WITH LENS (XX -FIXTURE TYPE)	ABC	ABOVE COUNTER		INDICATES DRAWING SHEET ON WHICH SECTION IS SHOWN	2.	ELECTRICAL PLANS SHOW GENERAL WORK TO BE PERFORMED BY CONTRACTOR AND HAVE BEEN PREPARED TO ASSIST THE CONTRACTOR IN PREPARING PROPOSED COST FOR THE TOTAL PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE JOB SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS WHICH MAY AFFECT HIS WORK AND FINAL BID PRICE.
	WEATHERPROOF DUPLEX RECEPTACLE, 20A, 125V, 3W, WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.		EXIT LIGHTING FIXTURE. SHADED ARE DENOTES FACE; ARROW DENOTES DIRECTIONAL CHEVRONS.	AC	ALTERNATING CURRENT		DRAWING NOTE	3.	CONTRACTOR SHALL FURNISH "AS-BUILT" DRAWINGS OF ALL VARIATIONS OF CONSTRUCTION DOCUMENTS TO OWNER, UPON COMPLETION OF PROJECT.
	4-PLEX RECEPTACLE 20A, 125V, 3W, GROUNDING		LED LIGHT	AF	AMPERE FUSE		COLUMN REFERENCE	4.	CONTRACTOR SHALL TEST ANY NEW INDIVIDUAL SYSTEMS, INCLUDING ALL FEEDERS, WITH A 500 VOLT DC INSULATION TESTER, (WITH A 0-200 MEGOHM FULL SCALE). ALL CONDUCTORS SHALL HAVE INSULATION TESTED WHEN WIRING SYSTEM IS COMPLETE AND A LOG KEPT OF THE CIRCUIT NAME, DATE AND MEGGER READINGS. RECORD FEEDER AND/OR BRANCH CIRCUIT NAME, READING IN OHMS, AND SUBMIT REPORT TO ENGINEER. CHECK FOR PROPER PHASE MATCH AND ROTATION ON ALL FEEDERS. ALL TEST REPORTS SHALL BE TYPED. PROVIDE ALL INSTRUMENTS, LABOR, ETC. REQUIRED FOR TESTING.
	DISCONNECT OR SAFETY SWITCH		LED AREA FLOODLIGHT	AFC	4' ABOVE FINISHED COUNTER		POINT OF CONNECTION	5.	UPON COMPLETION OF ALL TESTS AND ACCEPTANCE, FURNISH THE OWNER A WRITTEN GUARANTEE COVERING THE ELECTRICAL WORK DONE AND NEW EQUIPMENT INSTALLED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. DURING THE GUARANTEE PERIOD THE CONTRACTOR SHALL RECTIFY AND REPLACE ANY DEFECTIVE MATERIAL OR WORKMANSHIP AND REPAIR DAMAGE CAUSED THEREBY WITHOUT ANY ADDITIONAL COST TO THE OWNER.
	COMBINATION STARTER AND DISCONNECT		I/P SURVILLANCE CAMERA	AHU	AIR HANDLING UNIT		DRAWING REVISION NUMBER	6.	ALL PENETRATIONS THROUGH PARTITIONS, CEILINGS, FLOORS, ETC., SHALL BE PROPERLY FIRESTOPPED/SEALED TO MAINTAIN FIRE RATING.
	MOTOR		SINGLE-POLE TOGGLE SWITCH, 20A, VOLTAGE AS REQUIRED. SUBSCRIPT INDICATES DEVICE CONTROLLED.	AT	AMPERE TRIP		DRAWING REVISION CLOUD	7.	PROVIDE ALL REQUIRED AND NECESSARY UNISTRUT SUPPORTS FOR ALL ELECTRICAL EQUIPMENT.
	JUNCTION BOX		THREE-WAY TOGGLE SWITCH, 20A, VOLTAGE AS REQUIRED. SUBSCRIPT INDICATES DEVICE CONTROLLED.	ARCH	APPROXIMATE		DRAWING NUMBER DRAWING TITLE	8.	ALL ELECTRICAL EQUIPMENT SHALL BE MOUNTED TO BUILDING CONSTRUCTION, UTILIZING UNISTRUT RACKS, FOR MOUNTING EQUIPMENT THERETO, UNLESS OTHERWISE SPECIFIED. UNISTRUT INSTALLED IN DAMP OR WET LOCATIONS SHALL BE HOT DIPPED GALVANIZED. MOUNT EQUIPMENT SO THAT AN AIR SPACE OF 1" MIN., IS MAINTAINED FROM ANY SURFACES.
	GROUNDING PER 2000 NEC N.E.C. ARTICLE 250		FOUR-WAY TOGGLE SWITCH, 20A, VOLTAGE AS REQUIRED. SUBSCRIPT INDICATES DEVICE CONTROLLED.	ATS	AUTOMATIC TRANSFER SWITCH		SHEET ON WHICH DRAWING IS LOCATED	9.	ALL DISCONNECT SWITCHES SHALL BE FUSIBLE, HEAVY DUTY, WITH EXTERIOR OPERATING HANDLE WITH INTERLOCK TO ALLOW OPENING OF DOOR WITH SWITCH IN CLOSED POSITION. DISCONNECT SWITCHES SHALL BE RATED EITHER 250 OR 600 VOLTS AS REQUIRED FOR THE SYSTEM VOLTAGE. AMPERE RATINGS AND NUMBER OF POLES IS INDICATED ON THE DRAWINGS. FUSE PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.
	CONDUIT UP		DUAL TECHNOLOGY OCCUPANCY SENSOR WALL SWITCH WITH MANUAL ON/OFF SWITCH, 277V. ADDITIONAL SUBSCRIPT 'M' INDICATES SWITCH INSTALLED IN PRE-MANUFACTURED WALL PARTITION.	AWG	AMERICAN WIRE GAUGE		CONDUIT AND WIRE, MINIMUM 2#12 AWG AND 1#12 GND UNLESS NOTED OTHERWISE WITH KEYNOTE OR SCHEDULE. ARROW DENOTES HOMERUN TO PANEL. QUANTITY INDICATES NUMBER OF POLES.	10.	ALL CONNECTIONS OUTDOORS OR IN WET LOCATIONS SHALL BE MADE USING OXIDATION INHIBITING COMPOUND, PENETROX OR APPROVED EQUAL. THIS INCLUDES POWER AND GROUNDING CONNECTIONS INSIDE PANELS, WIREWAYS, BOXES, DISCONNECT SWITCHES ELECTRICAL AND MECHANICAL EQUIPMENT, ETC.
	NEW PANELBOARD SURFACE MOUNTED		WALL SWITCH WITH SLIDE DIMMER, 0-10V CONTROL. ADDITIONAL SUBSCRIPT 'M' INDICATES SWITCH INSTALLED IN PRE-MANUFACTURED WALL PARTITION. PROVIDE 0-10V CONTROL WIRES TO FIXTURES/DRIVERS.	BLDG	BUILDING		PORTION OF FEEDER CONDUIT TO BE REMOVED.	11.	LABEL ALL DEVICES WITH PANEL DESIGNATION, CIRCUIT NUMBER AND VOLTAGE INCLUDING JUNCTION/OUTLET BOXES WITH BLANK FACEPLATES. ELECTRICAL EQUIPMENT, DISCONNECT SWITCHES, MOTOR STARTERS, PANELS, ETC., SHALL BE LABELED WITH ENGRAVED FACEPLATES. SEE ELECTRICAL SPECIFICATIONS.
	NEW PANELBOARD RECESSED MOUNTED		EXISTING PANELBOARD SURFACE MOUNTED	BMT	BASEMENT			12.	EVERY RACEWAY ON THE PROJECT SHALL CONTAIN A GREEN INSULATED COPPER GROUND CONDUCTOR. PANELS, PANEL FEEDERS, AND WIREWAYS SHALL BE PROVIDED WITH INSULATED GROUNDING BUSHINGS WITH EQUIPMENT GROUNDING CONDUCTOR BONDED TO ELECTRICAL EQUIPMENT AND EQUIPMENT GROUND BUS.
	EXISTING PANELBOARD SURFACE MOUNTED		EXISTING PANELBOARD RECESSED MOUNTED	C	CONDUIT			13.	ALL CONDUIT AND BOXES SHALL BE SECURED TO, AND SUPPORTED FROM, THE BUILDING STRUCTURE. DO NOT WELD, DRILL OR CUT ANY STRUCTURAL MEMBERS. DO NOT USE WIRES, PIPES, CEILING GRID, DUCTWORK, ETC TO SECURE OR SUPPORT CONDUIT, SPECIAL SYSTEM CABLING, OR BOXES.
	EXISTING PANELBOARD RECESSED MOUNTED		METER	CAB	CABINET			14.	MAINTAIN NATIONAL ELECTRICAL CODE WORKING CLEARANCES AROUND ALL ELECTRICAL EQUIPMENT INSTALLED ON THIS PROJECT
	DATA RECEPTACLE, 4X4 BACKBOX WITH SINGLE GANG RING, 1" CONDUIT TO ACCESSIBLE CEILING. SUBSCRIPT INDICATES NUMBER OF PORTS WHEN OTHER THAN 2. RJ45 JACKS AND CAT6 WIRE TO PATCH PANEL. SUBSCRIPT 'F' INDICATES DEVICE INSTALLED IN FURNITURE SYSTEM. SUBSCRIPT 'M' INDICATES DEVICE INSTALLED IN INTEGRATED INTERIOR ASSEMBLIES REFERENCE NOTES ON DRAWING FOR FURTHER INFORMATION		MOMENTARY SWITCH	CLG	CEILING			15.	ALL CONDUIT, BOTH CONCEALED AND EXPOSED, SHALL BE RUN AT 90 DEGREE ANGLES, PARALLEL, AND PERPENDICULAR TO BUILDING LINES, EXCEPT FOR OFFSETS AND DOGLEGS AS REQUIRED. CONDUIT SIZE SHALL BE 3/4" UNLESS SHOWN OTHERWISE.
	FIRE RATED POKE-THRU FLOOR BOX WITH DUPLEX RECEPTACLE AND 2 DATA PORTS. SUBSCRIPT INDICATES NUMBER OF PORTS WHEN OTHER THAN 2.		DIGITAL LOW-VOLTAGE WALL SWITCH, PUSH BUTTONS AS REQUIRED FOR MANUAL ON/OFF CONTROL.	CL	CENTER LINE				
	SINGLE-POLE CIRCUIT DESIGNATION. CIRCUIT BREAKER NUMBER 1 IN PANEL BF SHOWN HERE.		PHOTOCELL	CO	COPIER				
	TWO-POLE CIRCUIT DESIGNATION. CIRCUIT BREAKER NUMBERS 2 AND 4 IN PANEL BF SHOWN HERE.		LOW VOLTAGE, CEILING-MOUNTED OCCUPANCY SENSOR	CT	COPPER				
	THREE-POLE CIRCUIT DESIGNATION. CIRCUIT BREAKER NUMBERS 1, 3 AND 5 IN PANEL BF SHOWN HERE.		ROOM LIGHTING CONTROLLER, 120V, 277V, MOUNTED ABOVE CEILING, SINGLE CHANNEL, WITH CAT5E DAISY CHAIN CONNECTIONS TO LOW-VOLTAGE WALL SWITCHES, AND CEILING-MOUNTED OCCUPANCY SENSORS.	CU	COPPER				
			ANTENNA	DISC	DISCONNECT				
				DN	DOWN				
				DW	DISHWASHER				
				DWG	DRAWING				
				EA	EACH				
				EC	EMPTY CONDUIT WITH PULL WIRE				
				EDF	ELECTRIC DRINKING FOUNTAIN				
				EF	EXHAUST FAN				
				ELEV	ELEVATOR				
				EMT	ELECTRICAL METAL TUBING				
				EP	EXPLOSION-PROOF EQUIPMENT				
				EQPT	EQUIPMENT				
				EXTG	EXISTING				
				FA	FIRE ALARM				
				FACP	FIRE ALARM CONTROL PANEL				
				FCU	FAN COIL UNIT				
				FLA	FULL LOAD AMPS				
				FLR	FLOOR				
				GFI	GROUND FAULT INTERRUPTER				
				GND	GROUND				
				GRS	GALVANIZED RIGID STEEL CONDUIT				
				HT	HEIGHT				
				HTR	HEATER				
				HP	HORSE POWER				
				HW	HOT WATER				
				HWC	HOT WATER CIRCULATING				
				INCAND	INCANDESCENT				
				JB	JUNCTION BOX				
				KV	KILOVOLT				
				KVA	KILOVOLT-AMPERE				
				KW	KILOWATT				
				LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT				
				LTG	LIGHTING				
				MAX	MAXIMUM				
				MCB	MAIN CIRCUIT BREAKER				
				MCC	MOTOR CONTROL CENTER				
				MCM	CIRCULAR MILS, THOUSANDS				
				MECH	MECHANICAL				
				MFR	MANUFACTURER				
				MGAP	MEDICAL GAS ALARM PANEL				
				MLO	MAIN LUGS ONLY				
				MTD	MOUNTED				
				MTG	MOUNTING				
				NEC	NATIONAL ELECTRICAL CODE				
				NTS	NOT TO SCALE				
				PNL	PANEL				
				PH	PHASE				
				P	POLE				
				PFB	PROVISIONS FOR BREAKER				
				PA	PUBLIC ADDRESS				
				RA	RANGE				
				RECP	RECEPTACLE				
				REFRIG OR R	REFRIGERATOR				
				REQD	REQUIRED				
				SN	SOLID NEUTRAL				
				SPKR	SPEAKER				
				SPEC	SPECIFICATION				
				SWBD	SWITCHBOARD				
				SWGR	SWITCHGEAR				
				TEL	TELEPHONE				
				TTB	TELEPHONE TERMINAL BOARD				
				TV	TELEVISION				
				TVSS	TRANSIENT VOLT. SURGE SUPPRESSOR				
				TYP	TYPICAL				
				UC	UNDER COUNTER				
				UON	UNLESS OTHERWISE NOTED				
				V	VOLT				
				VA	VOLT/AMPERE				
				W	WATT				
				WH	WATER HEATER				
				WP	WEATHER-PROOF				
				W/	WITH				
				W/O	WITHOUT				
				XFMR	TRANSFORMER				
				XFR	TRANSFER				
*NOTE: NOT ALL SYMBOLS ARE USED.		*NOTE: NOT ALL SYMBOLS ARE USED.		*NOTE: NOT ALL SYMBOLS ARE USED.		*NOTE: NOT ALL SYMBOLS ARE USED.			

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KEY NOTES: (ALTERNATES)

ALL WORK SHOWN ON DRAWING IS PART OF BASE BID, UNLESS NOTED OTHERWISE. REFER TO DESCRIPTION OF BASE BID AND ALTERNATES ON SHEET E000.

- 1 ALTERNATE NO. 1 AND 2 - PROVIDE CONDUIT WITH PULL CHORD. ROUTE CONDUIT WITH PULL CHORD TO LC AND ROUTE TO POLE AND STUB-UP 8" ABOVE GRADE CAP FOR FUTURE.
- 2 ALTERNATE NO. 1 - PROVIDE POLES AND FOUNDATIONS
- 3 BASE BID
- 4 ALTERNATE NO. 1

LEGEND:

- UE — LIGHT LINES INDICATES EXISTING
- U — DARK LINES INDICATES NEW

GENERAL NOTES:

- A. CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED WORK TO UNDERSTAND THE COMPLEXITY, RESTRICTIONS AND ALL THE REQUIREMENTS TO PERFORM WORK OF THESE DOCUMENTS IN SAID FACILITY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED TO THE SUCCESSFUL BIDDER FOR FAILURE TO BE SO INFORMED.
- B. THE DRAWINGS ARE DIAGRAMMATICAL, AND SCALING IS APPROXIMATE. ALL ELECTRICAL EQUIPMENT LOCATIONS ARE APPROXIMATE ONLY. FOR ALL MEASUREMENTS, UTILIZE FIELD SURVEYS AND MEASUREMENTS. COORDINATE WORK WITH OTHER DIVISIONS FOR THE PROJECT. THE WIRING, CONDUIT SYSTEMS, LIGHTING CONTROLS, ETC. ARE STRICTLY DIAGRAMMATIC, UNLESS OTHERWISE NOTED.
- C. CONTRACTOR SHALL COORDINATE INSTALLATION AND LOCATIONS OF ALL CONDUIT ROUTING, PULL BOXES, LIGHTING CONTROLS, ELECTRICAL EQUIPMENT, ETC WITH FACILITY'S EXISTING CONDITIONS. CONDUIT RUNS SHALL BE GROUPED TOGETHER AND CAREFULLY PLANNED PRIOR TO INSTALLATION. ALL UNDERGROUND FEEDERS SHALL BE A MINIMUM OF 18" BELOW GRADE.
- D. SAWING CUTTING REQUIRED FOR INSTALLATION OF FEEDERS/BRANCH CIRCUITS SHALL BE KEPT TO A MINIMUM. BORING FOR INSTALLATION OF FEEDERS UNDER SIDEWALKS, ETC. IS PREFERABLE IF IT CAN BE ACCOMPLISHED WITHOUT DAMAGE TO SAME. AREAS WHERE SAW CUTTING IS REQUIRED CONTRACTOR SHALL PATCH CONCRETE TO MATCH EXISTING SLAB AND MAINTAIN THE STRUCTURAL INTEGRITY WHICH INCLUDES REBAR. AFTER CONTRACTOR HAS ASCERTAINED THE AREAS WHICH REQUIRE SAW CUTTING, HE SHALL OBTAIN APPROVAL FROM THE ENGINEER/OWNER'S REPRESENTATIVE.
- E. SHEET E100 INDICATES ALL OF THE FEEDERS ROUTED TO MDP. REFER TO BALLFIELD ELECTRICAL PLANS E101 - E104 FOR BALLFIELD LIGHTING UNDERGROUND FEEDERS AND BRANCH CIRCUITS.
- F. ALL SECURITY LIGHTING, TYPE S1 FIXTURES, SHALL BE CONTROLLED BY PHOTOCELL (ON/OFF). ROUTE ALL CIRCUITS FOR S1 FIXTURES THROUGH PHOTOCELLS MOUNTED ON BUILDINGS.
- G. ALL ELECTRICAL EQUIPMENT SHALL BE ELEVATED ABOVE THE BASE FLOOD ELEVATION WHICH IS 10' IN COMPLIANCE WITH FEDERAL GUIDELINES. THIS INCLUDES PANELBOARDS (INCLUDING PANELBOARDS IN PRESSBOXES), DISCONNECT SWITCHES, LIGHT POLE TERMINAL CABINETS, ETC.

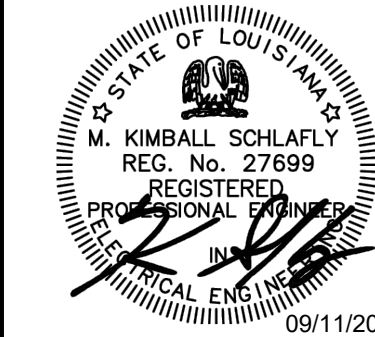
KEY NOTES:

- 1 ELECTRICAL SERVICE DISTRIBUTION EQUIPMENT. REFER TO ELECTRICAL FEEDER DIAGRAM SHEET E201 AND SHEET E102 FOR EQUIPMENT PLATFORMS
- 2 REFER TO SHEET E201.
- 3 UNDERGROUND FEEDER REFER TO SHEET E201.
- 4 CUT INTO EXISTING CONDUIT AND EXTEND AS REQUIRED. PROVIDE NEW FEEDER FROM EXISTING PANELBOARD TO MDP. REFER TO SHEET E201.
- 5 UNDERGROUND DRAINAGE (TYPICAL)
- 6 IN-GROUND PULL BOX. REFER TO SHEET E201 AND E401.
- 7 APPROXIMATE LOCATION OF KNOWN EXISTING UNDERGROUND WATERLINES. FIELD VERIFY WATER LINES FOR ENTIRE SITE.
- 8 NEW FEEDER TO EXISTING PANEL. REFER TO SHEET E201.
- 9 NEW PANEL. REFER TO SHEET E201, E301 AND BALLFIELD SHEETS.
- 10 UNDERGROUND FEEDERS. REFER TO SHEETS E102 AND E201.
- 11 UNDERGROUND FEEDERS. REFER TO SHEETS E103 AND E201.
- 12 UNDERGROUND FEEDERS. REFER TO SHEETS E101 AND E201.
- 13 UNDERGROUND FEEDERS. REFER TO SHEETS E104 AND E201.
- 14 NEW ELECTRICAL SERVICE. REFER TO SHEET E201.
- 15 PROVIDE 20A DUPLEX RECEPTACLE FOR WIRELESS LIGHTING CONTROLLER ON MEZZANINE. CONNECT RECEPTACLE TO CIRCUIT MDP-43. REFER TO SHEET E201. LOCATE RECEPTACLE BELOW LIGHTING CONTROLLER.
- 16 PROVIDE WEATHERTIGHT JUNCTION BOX ON EXTERIOR OF BUILDING AT ROOF LEVEL FOR PHOTOCELL INSTALLATION. PHOTOCELL TO FACE NORTH. S1 LIGHTING FIXTURES SHALL BE CONTROLLED BY PHOTOCELL.
- 17 PROVIDE (2) WIRELESS 2-BUTTON SWITCH. BASIS OF DESIGN: SYNAPSE WSW-02-1P WITH WALL-MOUNT ASSEMBLY. LOCATE IN AN ACCESSIBLE LOCATION CLOSE TO ENTRY DOOR. (PROGRAM SWITCH TO TURN ON/OFF LIGHTING AT EACH BALLFIELD SEPARATELY AND ONE SWITCH TO TURN ALL THE FIELDS ON/OFF AT ONCE). CONNECT TO ANTENNA. PROVIDE ANTENNA, BASIS OF DESIGN: SYNAPSE ANT-ORB-1.5-1 OUTDOOR FIXED RIGHT ANGLE ANTENNA. MOUNT ANTENNA ON EXTERIOR OF BUILDING AT ROOF LEVEL. EXACT LOCATION OF SWITCH AND ANTENNA TO BE DETERMINED IN THE FIELD AND APPROVED BY ENGINEER/OWNER'S REPRESENTATIVE.



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DESIGN	DAB	BY
DRAWN	GEM	DATE
CHECK	MKS	DESCRIPTION
SCALE	AS NOTED	REV
DATE	09/11/2026	
DWG TITLE:	OVERALL SITE PLAN - ELECTRICAL	
DWG No.	E100	



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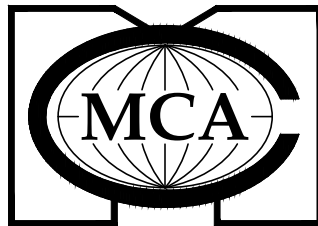
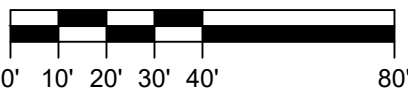
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- C. CONTRACTOR SHALL COORDINATE INSTALLATION AND LOCATIONS OF ALL CONDUIT ROUTING, PULL BOXES, LIGHTING CONTROLS, ELECTRICAL EQUIPMENT, ETC WITH FACILITY'S EXISTING CONDITIONS. CONDUIT RUNS SHALL BE GROUPED TOGETHER AND CAREFULLY PLANNED PRIOR TO INSTALLATION. ALL UNDERGROUND FEEDERS SHALL BE A MINIMUM OF 18" BELOW GRADE.
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KEY NOTES:

- 1 SEE SHEET E104 FOR CONTINUATION.
- 2 2 1/2" PVC; (3) 250 KCMIL AWG (AL) & 1 #2 GND (AL)
- 3 FEEDER FOR PANEL PB1. REFER TO SHEETS E100 AND E201.
- 4 3/4" PVC; 2#6 AWG & 1#8 GND.
- 5 REFER TO SHEET E201 AND E301
- 6 FEEDER FOR PANEL RR. REFER TO SHEETS E100 AND E201
- 7 1 1/4" PVC; 2#4s, 1 #8G AND 2 #8s, 1 #10 GND. PROVIDE (2) CIRCUITS, ONE FOR A/C UNIT (#4s) AND ONE FOR RECEPTACLES (#8s).
- 8 1 1/4" PVC; 3#3s AND 1 #8 GND. REFER TO SHEETS E201
- 9 PROVIDE 30A/1P, NEMA 3R, SIGHT DISCONNECTING MEANS FUSED AT 5 AMPS. CONNECT TO SCORE BOARD AS REQUIRED. REFER TO 3/102.
- 10 REFER TO SHEET E104 FOR CONNECTIONS TO P5-5 POLE LIGHTING.
- 11 REWORK WIRING IN PRESSBOX SO THAT AC UNIT IS ON ONE CIRCUIT AND RECEPTACLES/LIGHT ARE ON ONE CIRCUIT.
- 12 CONNECT AC UNIT TO CIRCUIT BREAKER PB1-3 AND RECEPTACLES/LIGHT TO CIRCUIT BREAKER PB1-1.
- 13 REFER TO SHEET E100 FOR CONTINUATION.
- 14 PROVIDE WEATHERTIGHT JUNCTION BOX ON EXTERIOR OF BUILDING AT ROOF LEVEL FOR PHOTOCELL INSTALLATION. PHOTOCELL TO FACE NORTH. S1 LIGHTING FIXTURES SHALL BE CONTROLLED BY PHOTOCELL.
- 15 PROVIDE WIRELESS 2-BUTTON SWITCH. BASIS OF DESIGN: SYNAPSE WSW-02-1P WITH WALL-MOUNT ASSEMBLY. LOCATE IN AN ACCESSIBLE LOCATION CLOSE TO ENTRY DOOR. (PROGRAM SWITCH TO TURN ON/OFF LIGHTING AT BALLFIELD. CONNECT TO ANTENNA. PROVIDE ANTENNA, BASIS OF DESIGN: SYNAPSE ANT-ORB-1.5-1 OUTDOOR FIXED RIGHT ANGLE ANTENNA. MOUNT ANTENNA ON EXTERIOR OF BUILDING AT ROOF LEVEL. EXACT LOCATION OF SWITCH AND ANTENNA TO BE DETERMINED IN THE FIELD AND APPROVED BY ENGINEER/OWNER'S REPRESENTATIVE.

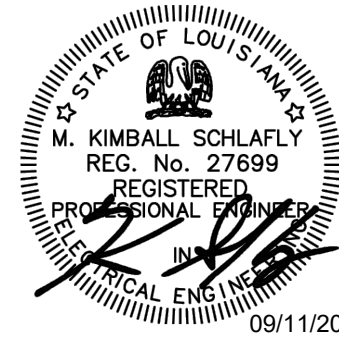
1 BALLFIELD NO. 1 - ELECTRICAL
SCALE: 1" = 20'-0"



JOB NO: TPR23002
BG: 801
PROJECT MANAGER: KIMBALL SCHLAFLY

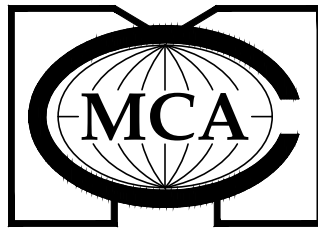
TERREBONNE PARISH DISTRICT 82921TPRD10
TPR DIST. 10 BALLFIELD IDA
625 BAYOU DULARGE ROAD
HOUMA, LA. 70363

STAMP:



DESIGN	DAB	BY
DRAWN	GEM	DATE
CHECK	MKS	DESCRIPTION
SCALE	AS NOTED	REV
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DWG TITLE: BALLFIELD NO. 1 - ELECTRICAL		
E101		
DWG No.		

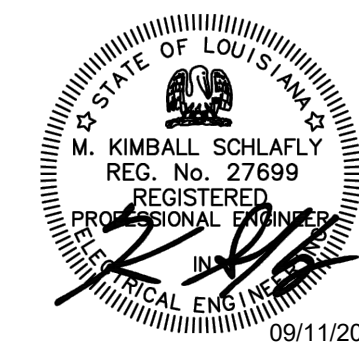
DWG No. **E 102**



Engineering & Construction
BATON ROUGE - NEW ORLEANS
JOB NO: TPR23002
BG: 801
PROJECT: KIMBALL
MANAGER: SCHLAFLY

TERREBONNE PARISH DISTRICT 82921TPRD10
TPR DIST. 10 BALLFIELD IDA
625 BAYOU DULARGE ROAD
HOUMA, LA. 70363

STAMP:



DESIGN	DAB	BY
DRAWN	GEM	
CHECK	MKS	
SCALE	AS NOTED	
DATE	09/11/2026	
DWG TITLE:	BALLFIELDS NO. 3 AND NO. 4 - ELECTRICAL	
REV	DESCRIPTION	DATE
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GENERAL NOTES:

- CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED WORK TO UNDERSTAND THE COMPLEXITY, RESTRICTIONS AND ALL THE REQUIREMENTS TO PERFORM WORK OF THESE DOCUMENTS IN SAID FACILITY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED TO THE SUCCESSFUL BIDDER FOR FAILURE TO BE SO INFORMED.
- THE DRAWINGS ARE DIAGRAMMATICAL AND SCALING IS APPROXIMATE. ALL ELECTRICAL EQUIPMENT LOCATIONS ARE APPROXIMATE ONLY. FOR ALL MEASUREMENTS, UTILIZE FIELD SURVEYS AND MEASUREMENTS. COORDINATE WORK WITH OTHER DIVISIONS FOR THE PROJECT. THE WIRING, CONDUIT SYSTEMS, LIGHTING CONTROLS, ETC. ARE STRICTLY DIAGRAMMATIC, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL COORDINATE INSTALLATION AND LOCATIONS OF ALL CONDUIT ROUTING, PULL BOXES, LIGHTING CONTROLS, ELECTRICAL EQUIPMENT, ETC WITH FACILITY'S EXISTING CONDITIONS. CONDUIT RUNS SHALL BE GROUPED TOGETHER AND CAREFULLY PLANNED PRIOR TO INSTALLATION. ALL UNDERGROUND FEEDERS SHALL BE A MINIMUM OF 18" BELOW GRADE.
- SAWING CUTTING REQUIRED FOR INSTALLATION OF FEEDERS/BRANCH CIRCUITS SHALL BE KEPT TO A MINIMUM. BORING FOR INSTALLATION OF FEEDERS UNDER SIDEWALKS, ETC. IS PREFERABLE IF IT CAN BE ACCOMPLISHED WITHOUT DAMAGE TO SAME. AREAS WHERE SAW CUTTING IS REQUIRED CONTRACTOR SHALL PATCH CONCRETE TO MATCH EXISTING SLAB AND MAINTAIN THE STRUCTURAL INTEGRITY WHICH INCLUDES REBAR. AFTER CONTRACTOR HAS ASCERTAINED THE AREAS WHICH REQUIRE SAW CUTTING, HE SHALL OBTAIN APPROVAL FROM THE ENGINEER/OWNER'S REPRESENTATIVE.
- SHEET E100 INDICATES ALL OF THE FEEDERS ROUTED TO MDP. REFER TO BALLFIELD ELECTRICAL PLANS E101 - E104 FOR BALLFIELD LIGHTING UNDERGROUND FEEDERS AND BRANCH CIRCUITS.
- ALL SECURITY LIGHTING, TYPE S1 FIXTURES, SHALL BE CONTROLLED BY PHOTOCELL (ON/OFF). ROUTE ALL CIRCUITS FOR S1 FIXTURES THROUGH PHOTOCELLS MOUNTED ON BUILDINGS.
- ALL ELECTRICAL EQUIPMENT SHALL BE ELEVATED ABOVE THE BASE FLOOD ELEVATION WHICH IS 10' IN COMPLIANCE WITH FEDERAL GUIDELINES. THIS INCLUDES PANELBOARDS (INCLUDING PANELBOARDS IN PRESSBOXES), DISCONNECT SWITCHES, LIGHT POLE TERMINAL CABINETS, ETC.

KEY NOTES:

- REFER TO SHEET E201 AND E301.
- 2 1/2" PVC; 3 - 350 Kcmil (AL), # 1 (AL) GND.
- 1" PVC; 2 #6s, 1 #8 GND, AND 2 #8s, 1 #10 GND. PROVIDE (2) CIRCUITS, ONE FOR A/C UNIT (#6s) AND ONE CIRCUIT FOR RECEPTACLES (#8s).
- 1" PVC; 2-#10s & 1-#10 GND. CONNECT TO SPARE 20A/1P CIRCUIT BREAKER IN PANEL UB. IF THERE IS NO SPARE BREAKER PROVIDE 20A/1P CIRCUIT BREAKER AND CONNECT THERETO.
- 1 1/4" PVC; 2 #6s, 1 #8 GND, AND 2 #8s, 1 #10 GND, AND 2 #12s, 1 #12 GND.
- 1 1/4" PVC; 3 - #3s AWG & 1#18 GND.
- PROVIDE 30A/1P, NEMA 3R, SIGHT DISCONNECT MEANS FUSED AT 10 AMPS. CONNECT TO SCORE BOARD AS REQUIRED. REFER TO 3/E102.
- PROVIDE 30A/1P, NEMA 3R, SIGHT DISCONNECT MEANS FUSED AT 5 AMPS. CONNECT TO SCORE BOARD AS REQUIRED. REFER TO E/102.
- CONNECT AC UNIT TO CIRCUIT BREAKER PB2-3 AND RECEPTACLES TO CIRCUIT BREAKER PB2-1.
- REFER TO SHEET E201.
- REWORK WIRING IN PRESSBOX SO THAT AC UNIT IS ON ONE CIRCUIT AND LIGHTS/RECEPTS/ETC ARE ON ONE CIRCUIT. REFER TO KEY NOTE #3.
- REFER TO SHEET E201 FOR FEEDER SIZES AND E100 FOR CONTINUATION
- 2" PVC; 3#3/0 AWG & #6 GND.
- REFER TO SHEET E104 FOR CONTINUATION.
- REFER TO SHEET E100 FOR CONTINUATION.
- PROVIDE WEATHERTIGHT JUNCTION BOX ON EXTERIOR OF BUILDING AT ROOF LEVEL FOR PHOTOCELL INSTALLATION. PHOTOCELL TO FACE NORTH. S1 LIGHTING FIXTURES SHALL BE CONTROLLED BY PHOTOCELL.
- PROVIDE WIRELESS 2-BUTTON SWITCH. BASIS OF DESIGN: SYNAPSE WSW-02-1P WITH WALL-MOUNT ASSEMBLY. LOCATE IN AN ACCESSIBLE LOCATION CLOSE TO ENTRY DOOR.. (PROGRAM SWITCH TO TURN ON/OFF LIGHTING AT BALLFIELD. CONNECT TO ANTENNA. PROVIDE ANTENNA, BASIS OF DESIGN: SYNAPSE ANT-ORB-1.5-1 OUTDOOR FIXED RIGHT ANGLE ANTENNA. MOUNT ANTENNA ON EXTERIOR OF BUILDING AT ROOF LEVEL. EXACT LOCATION OF SWITCH AND ANTENNA TO BE DETERMINED IN THE FIELD AND APPROVED BY ENGINEER/OWNER'S REPRESENTATIVE.
- IN-GROUND PULL BOX. REFER TO SHEET E201 AND E401.
- PROVIDE RECEPTACLE ON SECOND LEVEL FOR PA SYSTEM. CONNECT RECEPTACLE TO 20A/1P SPARE CIRCUIT BREAKER IN EXISTING PANEL FB. CONTACT SCOTT AT HOFMAN MUSIC #985-447-4050 FOR TURNKEY SYSTEM. INCLUDE COST FOR SYSTEM IN BID PRICE.

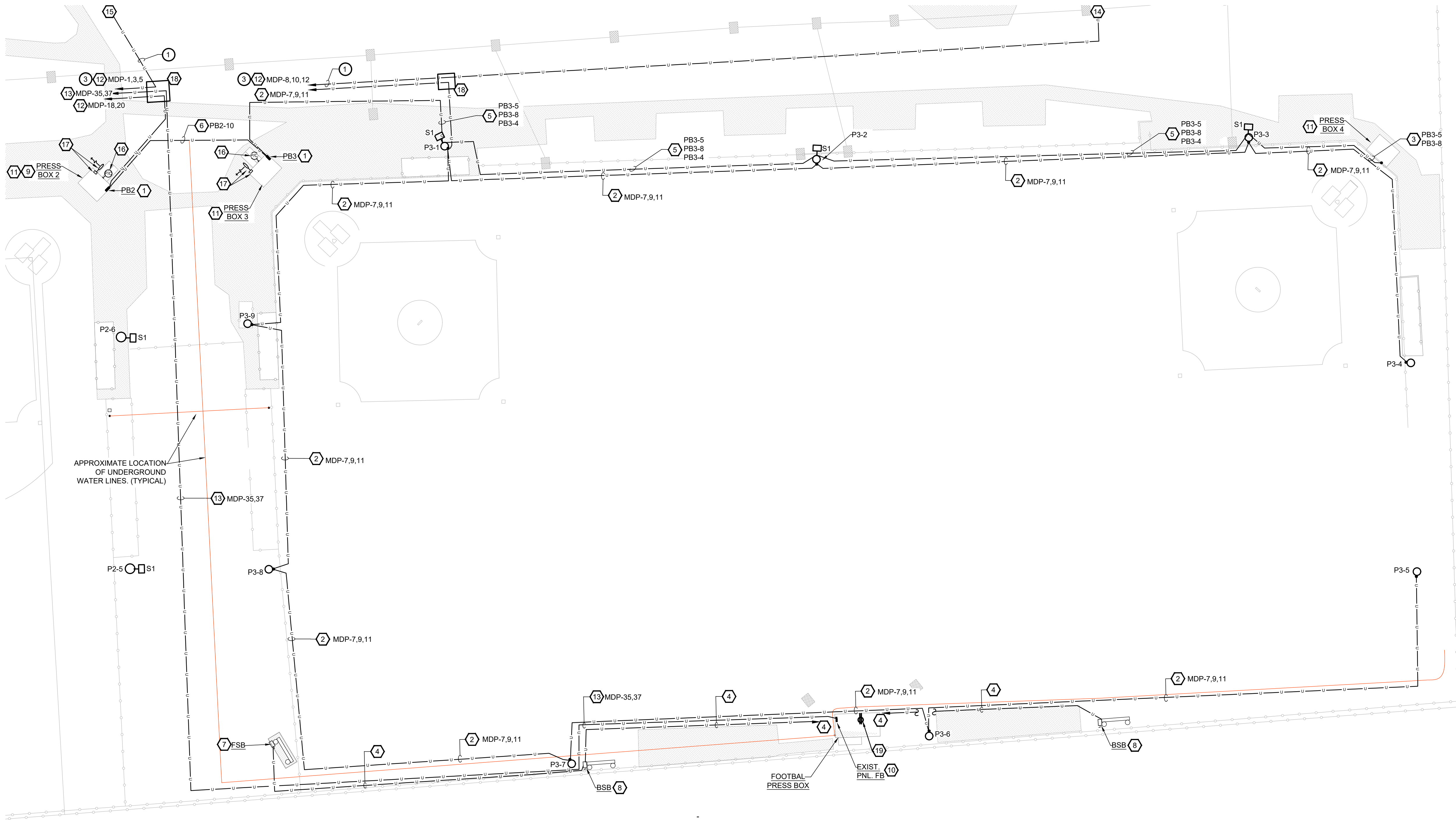
KEY NOTES: (ALTERNATES)

ALL WORK SHOWN ON DRAWING IS PART OF BASE BID, UNLESS NOTED OTHERWISE. REFER TO DESCRIPTION OF BASE BID AND ALTERNATES ON SHEET E000.

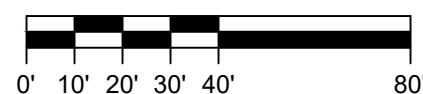
- ALTERNATE NO. 1 AND 2 - PROVIDE CONDUIT WITH PULL CHORD. ROUTE CONDUIT WITH PULL CHORD TO LC AND ROUTE TO POLE AND STUB-UP 8" ABOVE GRADE CAP FOR FUTURE.
- ALTERNATE NO. 1 - PROVIDE POLES AND FOUNDATIONS
- BASE BID
- ALTERNATE NO. 1

LEGEND:

- LIGHT LINES INDICATES EXISTING
DARK LINES INDICATES NEW



1 BALLFIELDS NO.3 AND NO. 4 - ELECTRICAL
SCALE: 1" = 20'-0"



[illegible]

SPORTS LIGHTING FIXTURE SCHEDULE							
FIXTURE TYPE	DESCRIPTION	VOLT	LAMP	WATTS	LUMENS	CCT	MOUNTING
POLE P1-1	1. KONLITE VEGA #KVG80057KDHV33 (a,b,c,d) 2. KONLITE VEGA #KVG80057KDHV44 (e) S1 - STONCO #SL1-T2-LPA-A08-740	240	LED	3200 800	502,400 125,600	5000K	YOKE MOUNTED
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10" 5 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.						
POLE P1-2	1. KONLITE VEGA #KVG80057KDHV33 (a,b,d,e,f) 2. KONLITE VEGA #KVG80057KDHV44 (g) 3. KONLITE VEGA #KVG80057KDHV55 (c) S1 - STONCO #SL1-T2-LPA-A08-740	240	LED	4000 1600 800	628,000 125,600 125,600	5000K	YOKE MOUNTED
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10" 7 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.						
POLE P1-3	1. KONLITE VEGA #KVG80057KDHV33 (a,c,d,e,g,h) 3. KONLITE VEGA #KVG80057KDHV55 (b,f) S1 - STONCO #SL1-T2-LPA-A08-740	240	LED	4800 1600	753,600 251,200	5000K	YOKE MOUNTED
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10" 8 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.						
POLE P1-4	1. KONLITE VEGA #KVG80057KDHV33 (a,b,d,e,f,h) 3. KONLITE VEGA #KVG80057KDHV55 (c,g) POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"	240	LED	4800 1600	753,600 251,200	5000K	YOKE MOUNTED
	8 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.						
POLE P1-5	1. KONLITE VEGA #KVG80057KDHV33 (b,c,d,f,g,h) 2. KONLITE VEGA #KVG80057KDHV44 (a) 3. KONLITE VEGA #KVG80057KDHV55 (e) POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"	240	LED	4800 800 800	753,600 125,600 125,600	5000K	YOKE MOUNTED
	8 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.						
POLE P1-6	1. KONLITE VEGA #KVG80057KDHV33 (b,c,d,e) 2. KONLITE VEGA #KVG80057KDHV44 (a) POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"	240	LED	3200 800	502,400 125,600	5000K	YOKE MOUNTED
	6 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.						
FIXTURES LISTED ARE BASIS OF DESIGN ONLY. SUBSTITUTIONS SHALL BE ALLOWED PROVIDED THEY ARE EQUIVALENT TO LISTED FIXTURES, AND PHOTOMETRICS PROVIDED TO DEMONSTRATE PERFORMANCE EQUIVALENCY. BALLFIELD SHALL BE ILLUMINATED PER IES RP-6-20, MINIMUM AVERAGE OF 50 FOOTCANDLES INFIELD AND 30 FT OUTFIELD, CALCULATED USING 0.8 LLF, MAX-TO-MIN RATIO OF 2 OR LESS.							

LIGHTING FIXTURE SCHEDULE						
FIXTURE TYPE	MANUFACTURER	VOLT	WATTS	LUMENS	CCT	MOUNTING
POLE LUMINAIRES	1. KONLITE VEGA #KVG80057KDHV33	240	800	125,600	5000K	YOLK MOUNTED
	2. KONLITE VEGA #KVG80057KDHV44	240	800	125,600	5000K	YOLK MOUNTED
	3. KONLITE VEGA #KVG80057KDHV55	240	800	125,600	5000K	YOLK MOUNTED
S1	STONCO #SL1-T2-LPA-A08-740 (MTG HT 20")	120	118	18072	4000K	POLE MTD

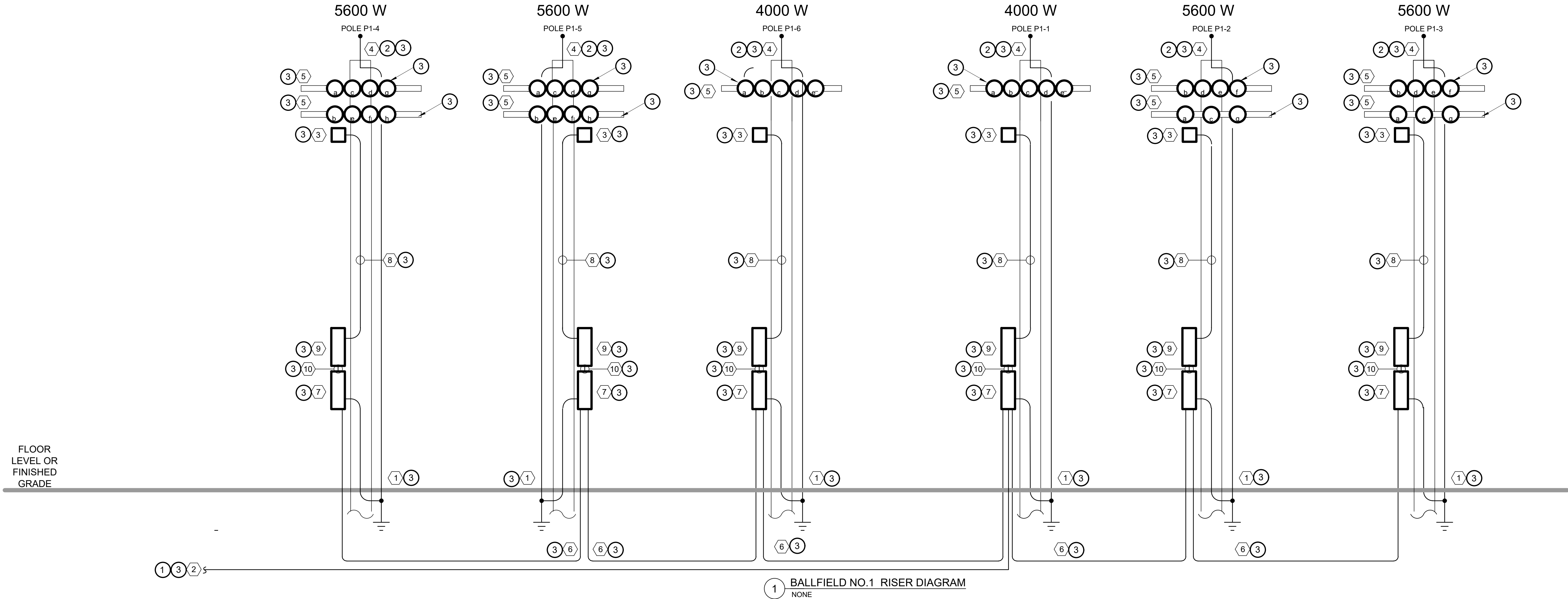
KEY NOTES: (ALTERNATES)

ALL WORK SHOWN ON DRAWING IS PART OF BASE BID. UNLESS NOTED OTHERWISE. REFER TO DESCRIPTION OF BASE BID AND ALTERNATES ON SHEET E000.

- 1
- ALTERNATE NO. 1 AND 2 - PROVIDE CONDUIT WITH PULL CHORD. ROUTE CONDUIT WITH PULL CHORD TO LC AND ROUTE TO POLE AND STUB-UP 8" ABOVE GRADE CAP FOR FUTURE.
- 2
- ALTERNATE NO. 1 - PROVIDE POLES AND FOUNDATIONS
- 3
- BASE BID
- 4
- ALTERNATE NO. 1

KEY NOTES:

- 1
- #4 AWG CU GND FROM LIGHTNING ARRESTOR, AND #6 AWG CU GND FROM TERMINAL CABINET TO 3/4 X 10 DRIVEN GROUND ROD.
- 2
- ROUTE THROUGH LIGHTING CONTACTOR. REFER TO SHEETS E101 AND E201.
- 3
- NEMA-4X 304 STAINLESS STEEL CABINET WITH SPLICES FROM RISER CABLE TO TYPE SO CORDS TO EACH FIXTURE. USE TERMINAL STRIPS OR MULTI CONDUCTOR CABLE CONNECTOR. PROVIDE GROUND BUS TO TERMINATE ALL GROUND WIRED. MOUNT ONTO POLE. ALL TYPE SO CORDS SHALL EXIT BOTTOM OF CABINET THROUGH CABLE GLANDS.
- 4
- SPORTSLIGHTING POLE. PROVIDE LIGHTNING ARRESTOR AT TOP OF POLE WITH #4 AWG CONDUCTOR ROUTED INSIDE POLE AND GROUNDED AT BASE OF POLE. BOND TO STEEL FIXTURE BRACKETS.
- 5
- GALVANIZED STEEL CROSS-ARM, THROUGH BOLTED TO CONCRETE POLE SIZED FOR 6 TOTAL FIXTURES AND RATED FOR 130 MPH WIND LOAD. MOUNT 7'0" ABOVE GRADE. LEAVE END LOCATIONS OPEN FOR FUTURE FIXTURES. MOUNT SPORTS LIGHT AND PROVIDE #14 AWG TYPE SO CORD TO TERMINATION CABINET. PROVIDE GALVANIZED CABLE SUPPORTS ON CROSS-ARMS. DO NOT USE WIRE TIES.
- 6
- FEEDER TO POLE TERMINATION CABINET. SEE SHEET E101 FOR CONDUIT AND CABLE SIZING.
- 7
- NEMA-4X 304 STAINLESS STEEL TERMINATION CABINET, MOUNTED TO POLE. FEEDERS AND RISER CABLE SHALL BE ROUTED TO POLE AND INTO TERMINATION CABINET. COORDINATE ALL DETAILS PRIOR TO SUBMITTING SHOP DRAWINGS FOR LIGHTING ASSEMBLY. CABINET SHALL BE MOUNTED ABOVE BFE OF 10'-0". SEE DETAIL #1, SHEET E401.
- 8
- ROUTE RISER CABLES THROUGH HANDHOLE OF COMPOSITE SPORTS LIGHTING POLES, MINIMUM #14 AWG. PROVIDE INDIVIDUAL CONDUCTOR WITH GROUND WIRE, OR MULTI CONDUCTOR CABLE WITH CONNECTORS.
- 9
- NEMA-4X STAINLESS CABINET FOR REMOTE DRIVERS. MOUNT TO POLE ABOVE TERMINAL CABINET. FEEDERS AND CABLES TO TERMINAL CABINET SHALL BE ROUTED EXTERIOR ON POLE. REFER TO KEYNOTE 10. COORDINATE ALL DETAILS PRIOR TO SUBMITTING SHOP DRAWINGS FOR LIGHTING ASSEMBLY. REFER TO SPECIFICATION SECTION 26 55 68 ATHLETIC FIELD LIGHTING. SEE DETAIL #7 ON SHEET E401.
- 10
- ROUTE RISER CABLES TO REMOTE DRIVERS FOR BALLFIELD LIGHTS IN CONDUIT SURFACE MOUNTED TO POLE.

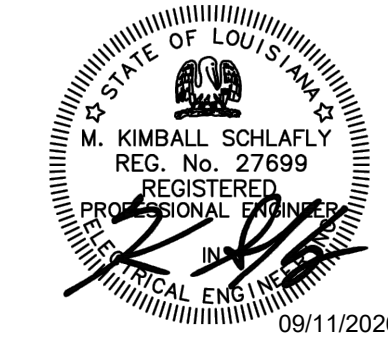


1 BALLFIELD NO.1 RISER DIAGRAM
NONE



TERREBONNE PARISH DISTRICT 82921TPRD10
TPR DIST. 10 BALLFIELD IDA
625 BAYOU DULARGE ROAD
HOUMA, LA. 70363

STAMP:



BY	DATE	DESCRIPTION	REV
DESIGN	DAB		
DRAWN	GEM		
CHECK	MKS		
SCALE	AS NOTED		
DATE	09/11/2026		
DWG TITLE: BALLFIELD NO. 1 RISER DIAGRAM			
E202			
DWG No. _____			

SPORTS LIGHTING FIXTURE SCHEDULE								
FIXTURE TYPE	DESCRIPTION	VOLT	LAMP	WATTS	LUMENS	CCT	MOUNTING	
POLE P3-1	2. KONLITE VEGA #KVG80057KDHV44 (b,c)	240	LED	1600	251,200	5000K	YOKE MOUNTED	
	3. KONLITE VEGA #KVG80057KDHV55 (a)			800	125,600			
	S1 - STONCO #SL1-T2-LPA-A08-740							
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"							
POLE P3-2	1. KONLITE VEGA #KVG80057KDHV33 (a,b,c,e,f,g,i)	240	LED	5600	879,200	5000K	YOKE MOUNTED	
	2. KONLITE VEGA #KVG80057KDHV44 (j)			800	125,600			
	3. KONLITE VEGA #KVG80057KDHV55 (d,h)			1600	251,200			
	S1 - STONCO #SL1-T2-LPA-A08-740							
POLE P3-3	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"		240	LED		5000K	YOKE MOUNTED	
	10 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.							
	1. KONLITE VEGA #KVG80057KDHV33 (c)	800			125,600			
	2. KONLITE VEGA #KVG80057KDHV44 (a,b)	1600			251,200			
POLE P3-4	3. KONLITE VEGA #KVG80057KDHV55 (d)	240	LED	800	125,600	5000K	YOKE MOUNTED	
	S1 - STONCO #SL1-T2-LPA-A08-740			800	125,600			
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"							
	4 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.							
POLE P3-5	1. KONLITE VEGA #KVG80057KDHV33 (b,c)	240	LED	1600	251,200	5000K	YOKE MOUNTED	
	2. KONLITE VEGA #KVG80057KDHV44 (d)			800	125,600			
	3. KONLITE VEGA #KVG80057KDHV55 (a)			800	125,600			
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"							
POLE P3-6	5 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.		240	LED		5000K	YOKE MOUNTED	
	1. KONLITE VEGA #KVG80057KDHV33 (a,d)				1600			251,200
	2. KONLITE VEGA #KVG80057KDHV44 (b)				800			125,600
	3. KONLITE VEGA #KVG80057KDHV55 (a,e)				1600			251,200
POLE P3-7	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"		240	LED		5000K	YOKE MOUNTED	
	5 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.							
	1. KONLITE VEGA #KVG80057KDHV33 (a,b,c,d,f,g)				4800			753,600
	2. KONLITE VEGA #KVG80057KDHV44 (h)				800			125,600
POLE P3-8	3. KONLITE VEGA #KVG80057KDHV55 (e)	240	LED	800	125,600	5000K	YOKE MOUNTED	
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"							
	8 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.							
	1. KONLITE VEGA #KVG80057KDHV33 (c,d)			1600	251,200			
POLE P3-9	2. KONLITE VEGA #KVG80057KDHV44 (a,b,e)	240	LED	2400	376,800	5000K	YOKE MOUNTED	
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"							
	5 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.							
	1. KONLITE VEGA #KVG80057KDHV33 (d)			800	125,600			
POLE P3-10	2. KONLITE VEGA #KVG80057KDHV44 (b)	240	LED	800	125,600	5000K	YOKE MOUNTED	
	3. KONLITE VEGA #KVG80057KDHV55 (c)			1600	251,200			
	POLE - MEYERS UTILITY STRUCTURES, LLC. - DODECAGONAL SHAPED TAPERED POLE, BUTTWIDTH 22.6"-TIPWIDTH 10"							
	3 LED SPORTS LIGHTS, LUMENS AND DISTRIBUTION PER PHOTOMETRIC CALCULATION, MOUNTING HARDWARE AS REQUIRED FOR NEW AIMING ON EXISTING POLES AND ARMS. PROVIDE NEW TERMINAL STRIPS/ ENCLOSURES WITH CORD CONNECTIONS TO FIXTURES.							
FIXTURES LISTED ARE BASIS OF DESIGN ONLY. SUBSTITUTIONS SHALL BE ALLOWED PROVIDED THEY ARE EQUIVALENT TO LISTED FIXTURES, AND PHOTOMETRICS PROVIDED TO DEMONSTRATE PERFORMANCE EQUIVALENCY. BALLFIELD SHALL BE ILLUMINATED PER IES RP-6-20, MINIMUM AVERAGE OF 50 FOOTCANDLES, CALCULATED USING 0.8 LLF, MAX-TO-MIN RATIO OF 2 OR LESS.								

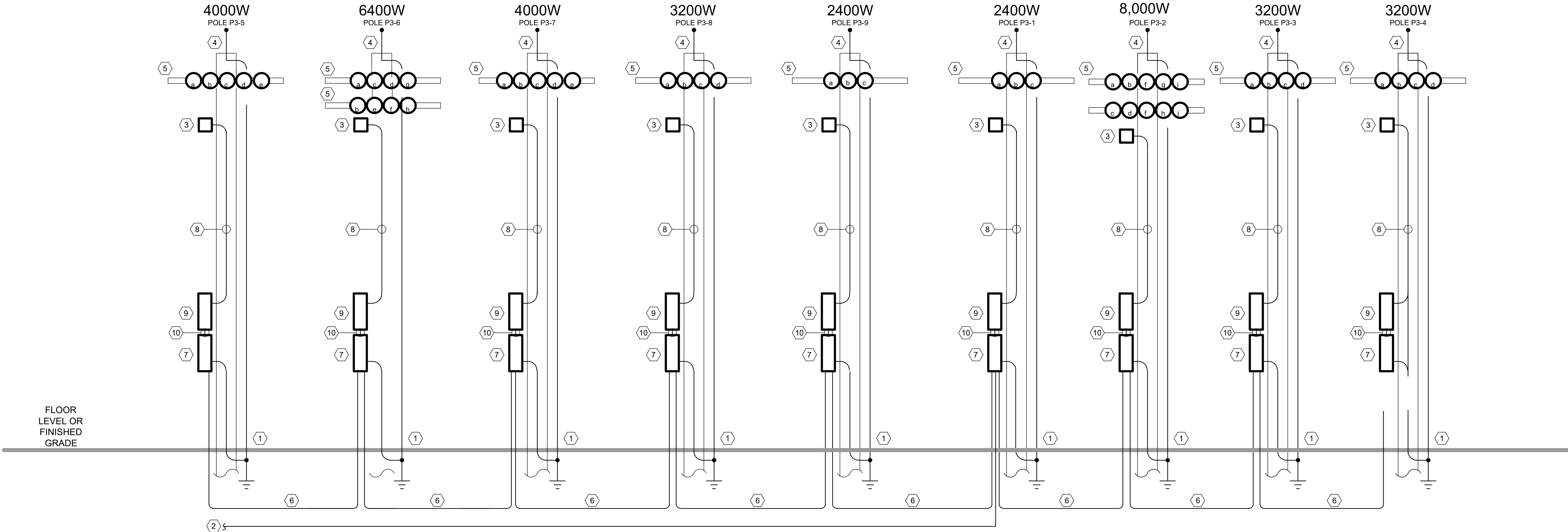
KEY NOTES:

- #4 AWG CU GND FROM LIGHTNING ARRESTOR, AND #6 AWG CU GND FROM TERMINAL CABINET TO 3/4 X 10 DRIVEN GROUND ROD.
- ROUTE THROUGH LIGHTING CONTACTOR. REFER TO SHEETS E101 AND E201.
- NEMA-4X 304 STAINLESS STEEL CABINET WITH SPLICES FROM RISER CABLE TO TYPE SO CORDS TO EACH FIXTURE. USE TERMINAL STRIPS OR MULTI CONDUCTOR CABLE CONNECTOR. PROVIDE GROUND BUS TO TERMINATE ALL GROUND WIRED. MOUNT ONTO POLE. ALL TYPE SO CORDS SHALL EXIT BOTTOM OF CABINET THROUGH CABLE GLANDS.
- SPORTSLIGHTING POLE. PROVIDE LIGHTNING ARRESTOR AT TOP OF POLE WITH #4 AWG CONDUCTOR ROUTED INSIDE POLE AND GROUNDED AT BASE OF POLE. BOND TO STEEL FIXTURE BRACKETS.
- GALVANIZED STEEL CROSS-ARM, THROUGH BOLTED TO CONCRETE POLE SIZED FOR 6 TOTAL FIXTURES AND RATED FOR 130 MPH WIND LOAD. MOUNT 60" ABOVE GRADE. LEAVE END LOCATIONS OPEN FOR FUTURE FIXTURES. MOUNT SPORTS LIGHT AND PROVIDE #14 AWG TYPE SO CORD TO TERMINATION CABINET. PROVIDE GALVANIZED CABLE SUPPORTS ON CROSS-ARMS. DO NOT USE WIRE TIES.
- FEEDER TO POLE TERMINATION CABINET. SEE SHEET E101 FOR CONDUIT AND CABLE SIZING.
- NEMA-4X 304 STAINLESS STEEL TERMINATION CABINET, MOUNTED TO POLE. FEEDERS AND RISER CABLE SHALL BE ROUTED TO POLE AND INTO TERMINATION CABINET. COORDINATE ALL DETAILS PRIOR TO SUBMITTING SHOP DRAWINGS FOR LIGHTING ASSEMBLY. CABINET SHALL BE MOUNTED ABOVE BFE OF 10'-0". SEE DETAIL #1, SHEET E401.
- ROUTE RISER CABLES THROUGH HANDHOLE OF COMPOSITE SPORTS LIGHTING POLES, MINIMUM #14 AWG. PROVIDE INDIVIDUAL CONDUCTOR WITH GROUND WIRE. OR MULTI CONDUCTOR CABLE WITH CONNECTORS.
- NEMA-4X STAINLESS CABINET FOR REMOTE DRIVERS. MOUNT TO POLE ABOVE TERMINAL CABINET. FEEDERS AND CABLES TO TERMINAL CABINET SHALL BE ROUTED EXTERIOR ON POLE. REFER TO KEYNOTE 10. COORDINATE ALL DETAILS PRIOR TO SUBMITTING SHOP DRAWINGS FOR LIGHTING ASSEMBLY. REFER TO SPECIFICATION SECTION 26 55 68 ATHLETIC FIELD LIGHTING. SEE DETAIL #7 ON SHEET E401.
- ROUTE RISER CABLES TO REMOTE DRIVERS FOR BALLFIELD LIGHTS IN CONDUIT SURFACE MOUNTED TO POLE.

KEY NOTES: (ALTERNATES)

ALL WORK SHOWN ON DRAWING IS PART OF BASE BID, UNLESS NOTED OTHERWISE. REFER TO DESCRIPTION OF BASE BID AND ALTERNATES ON SHEET E000.

- ALTERNATE NO. 1 AND 2 - PROVIDE CONDUIT WITH PULL CHORD. ROUTE CONDUIT WITH PULL CHORD TO LC AND ROUTE TO POLE AND STUB-UP 8" ABOVE GRADE CAP FOR FUTURE.
- ALTERNATE NO. 1 - PROVIDE POLES AND FOUNDATIONS
- BASE BID
- ALTERNATE NO. 1

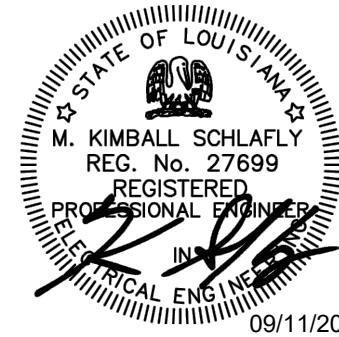


1 BALLFIELDS NO. 3 AND NO. 4 RISER DIAGRAM
NONE



TERREBONNE PARISH DISTRICT 82921TPRD10
TPR DIST. 10 BALLFIELD IDA
625 BAYOU DULARGE ROAD
HOUMA, LA. 70363

STAMP:



DESIGN	DAB	BY
DRAWN	GEM	DATE
CHECK	MKS	DESCRIPTION
SCALE	AS NOTED	REV
DATE	09/11/2026	
DWG TITLE: BALLFIELDS NO. 3 & NO. 4 RISER DIAGRAM		

E204

DWG No. _____

ALTERNATE NO. 1 & 2
FUTURE BALLFIELD 1

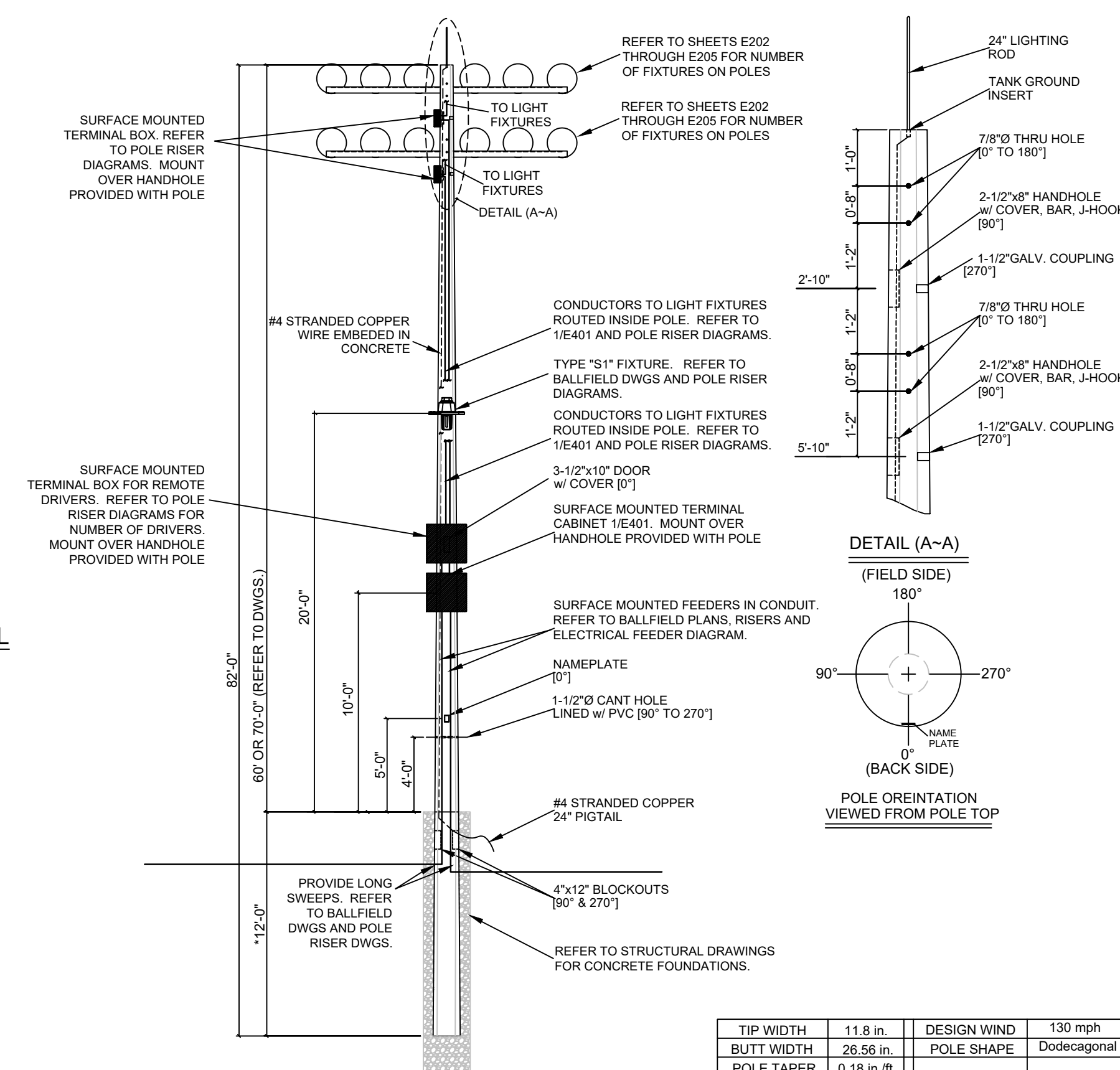
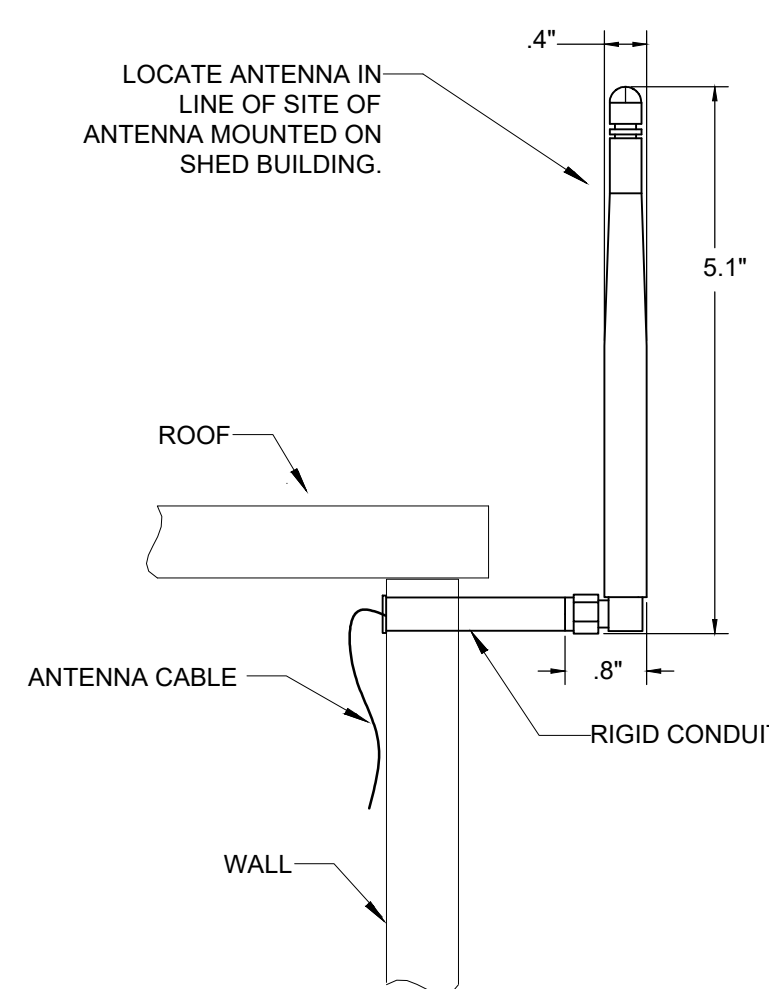
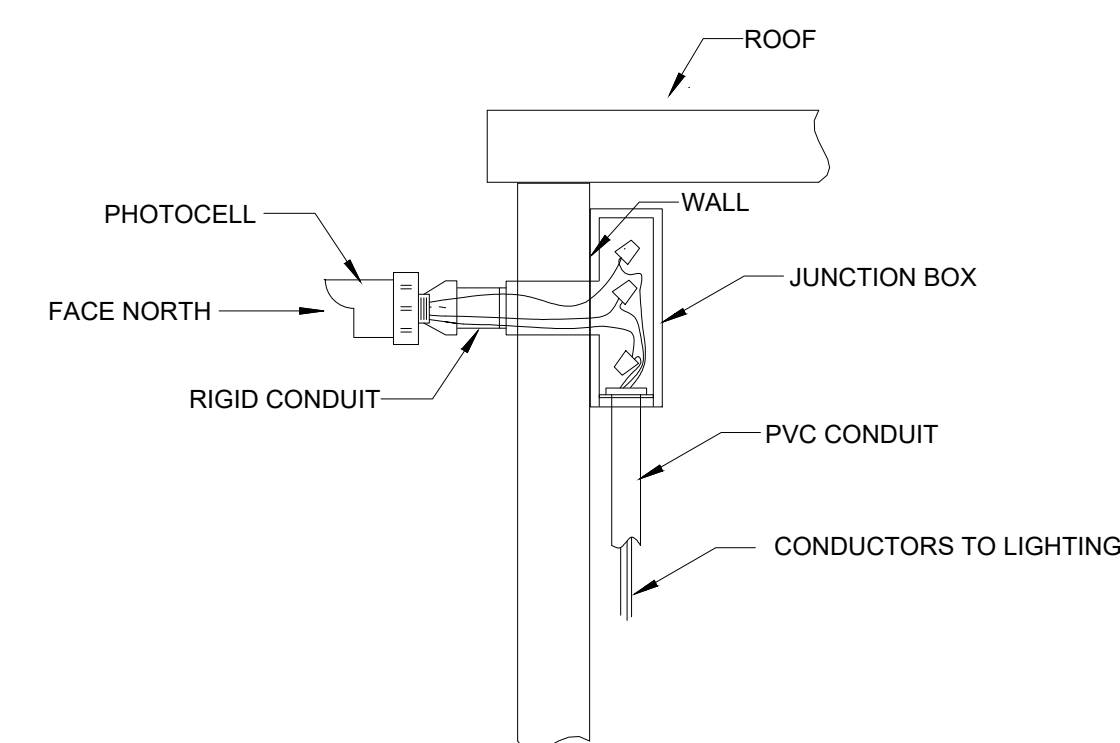
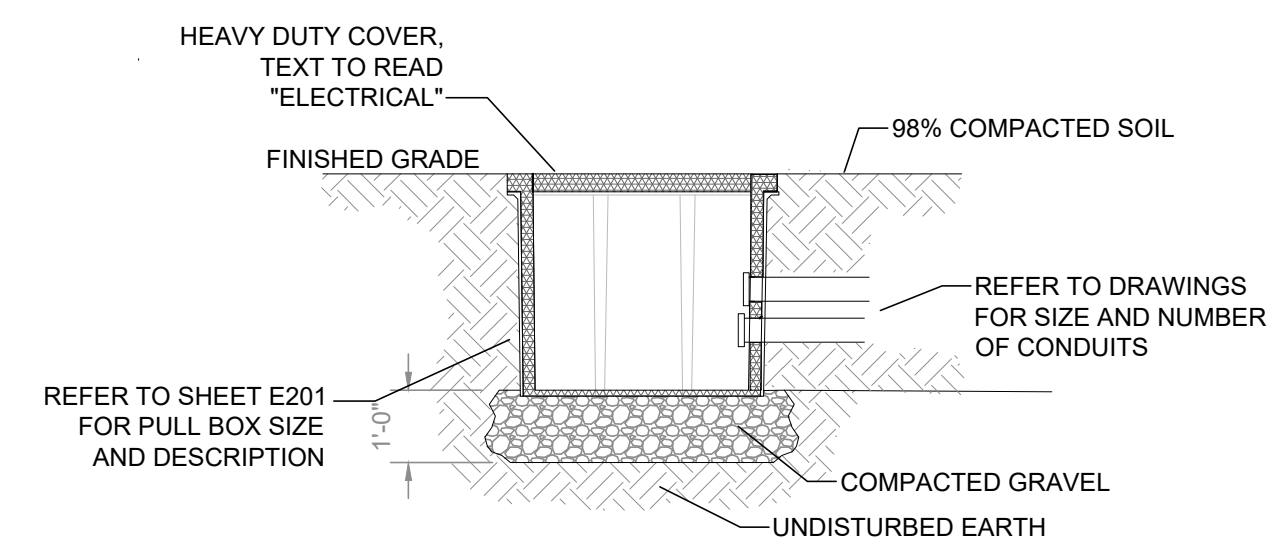
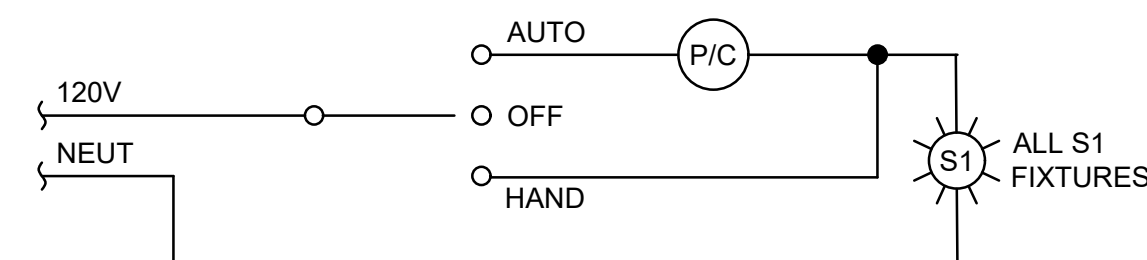
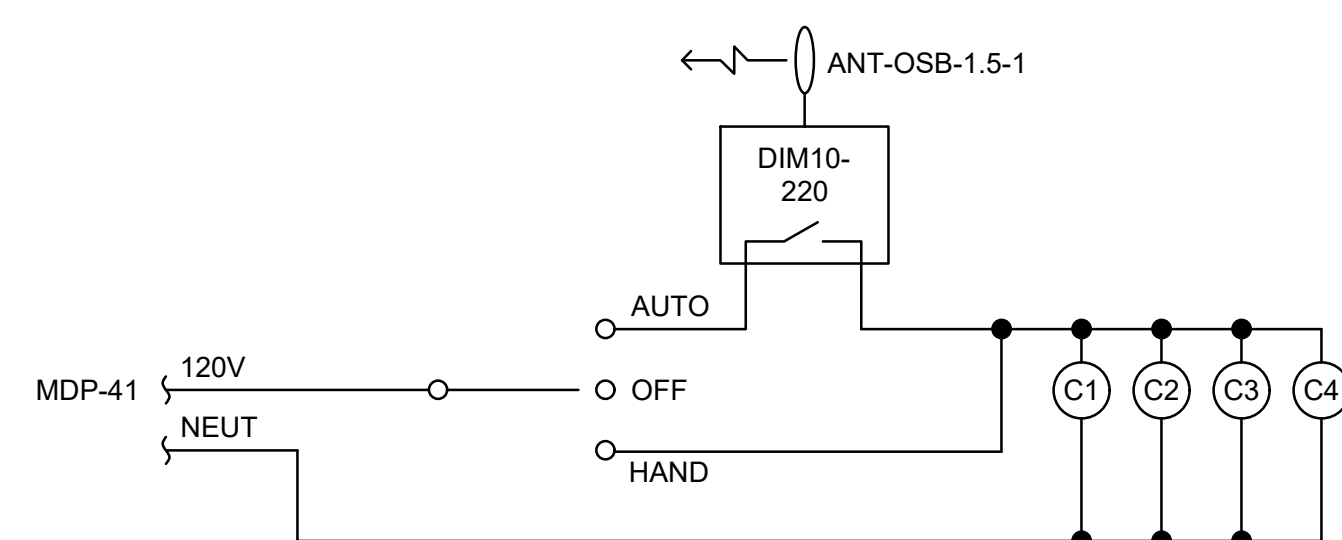
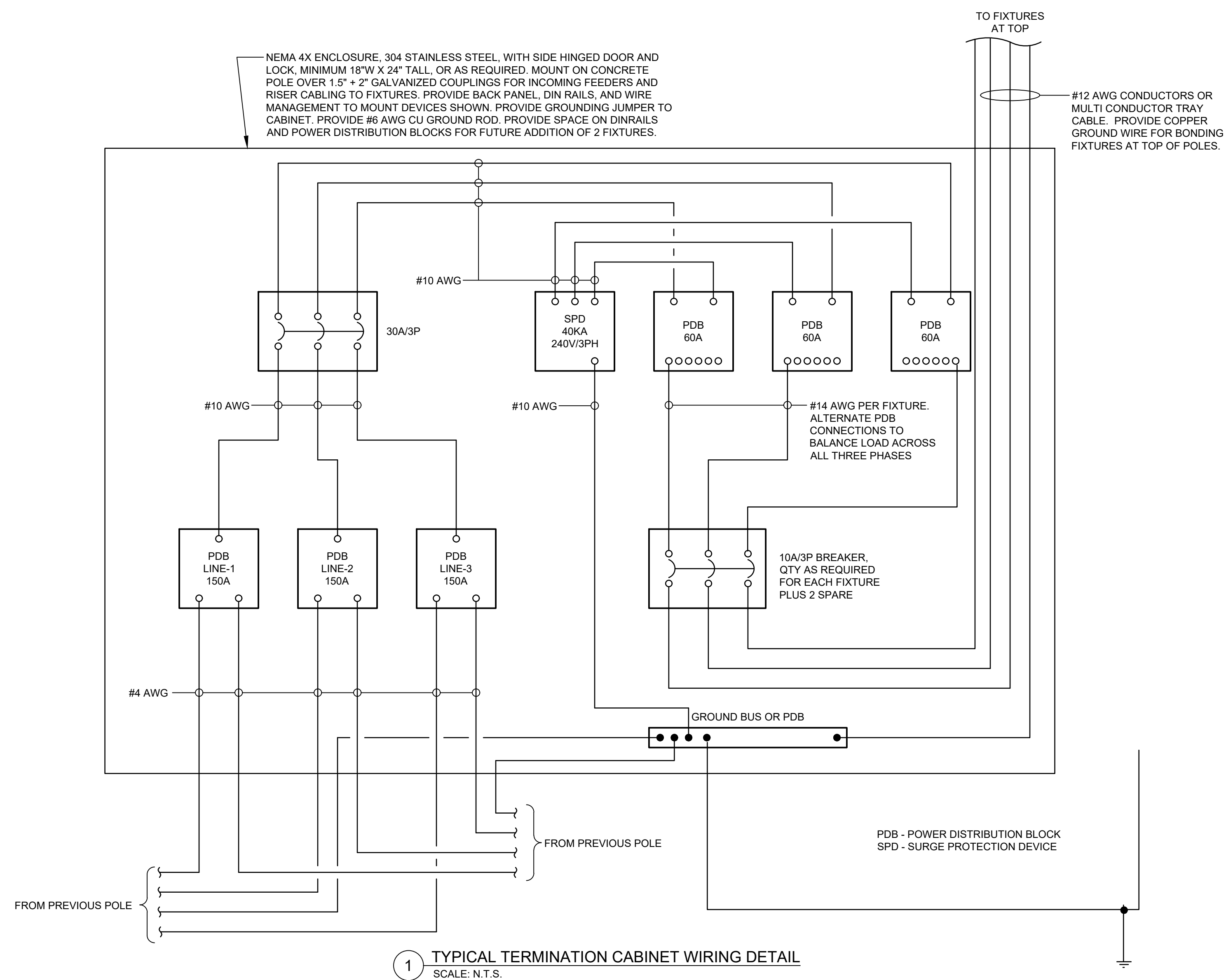
NAME: MDP										VOLTAGE (L-L): 240				BUS: 600			
LOCATION: MEZZ. SHED BLDG.										VOLTAGE (L-N): 120				MAIN: MLO			
										NUMBER OF PHASES: 3				KAIC: 22			
										NEUTRAL BUS: YES				NEMA 1 SURFACE			
										FEED-THRU LUGS: YES							
CKT	#	ITEM	AMP RATE	# POLE	LEFT LOADING (VA)			RIGHT LOADING (VA)			# POLE	AMP RATE	ITEM	CKT #			
1		BALLFIELD 1	125	3	11200			5334			3	60	BALLFIELD 2	2			
3		-				11200			5334				-	4			
5		-				11200			5334				-	6			
7		BALL FIELD 3 & 4	150	3	12667			4000			3	50	BALLFIELD 5	8			
9		-				12667		4000					-	10			
11		-					12667		4000				-	12			
13										4000				14			
15														16			
17		PB-1	70				6000			3122	2	50	PB-2	18			
19		-				5990		3055					-	20			
21														22			
23		EXISTING PANEL CB	200	2			19200			6000	2	50	EXISTING PANEL ST	24			
25		-				19200		6000					-	26			
27														28			
29		EXISTING PANEL RR	100				9600				2	50	SPARE	30			
31		-				9600							-	32			
33														34			
35		EXISTING FB-1	70	2			3600							36			
37		-	-	-	3400			236			1	20	S1s BALLFIELD 2	38			
39		SPACE	-	-							-	-	SPACE	40			
41		LIGHTING CONTROL CIRCUIT	-	-							-	-	SPACE	42			
43		SCOREBOARD BALLFIELD 2	20	1	200								-	44			
45		SPACE	-	-							-	-	SPACE	46			
47		SPACE	-	-							-	-	SPACE	48			
49		SPACE	-	-							3	60	TVSS	50			
51		SPACE	-	-									-	52			
53		SPACE	-	-									-	54			
					62257	23867	62267	18625	9334	18456							
(VA) (A)																	
					LOAD					DVRST		DMND		NOTES:			
TOTAL CONNECT LOAD: 194806					1 LIGHTS 99603					1.00		99603		* PROVIDE FINAL TYPEWRITTEN DIRECTORY INSIDE PANEL.			
PHASE A: 80882 584					2 RECEPT <10KVA 0					1.00		0					
PHASE B: 33201 240					RECEPT >10KVA 0					0.50		0		* PROVIDE ENGRAVED PLASTIC LABEL WITH PANEL DESIGNATION ON PANEL COVER.			
PHASE C: 80723 583					3 PB PNLS 25603					0.80		20482					
PEAK DEMAND LOAD: 154885					4 CONDENSER 0					1.00		0		* PROVIDE INTEGRAL TVSS - 120 KA			
					5 EXISTING PANELS 69600					0.50		34800					

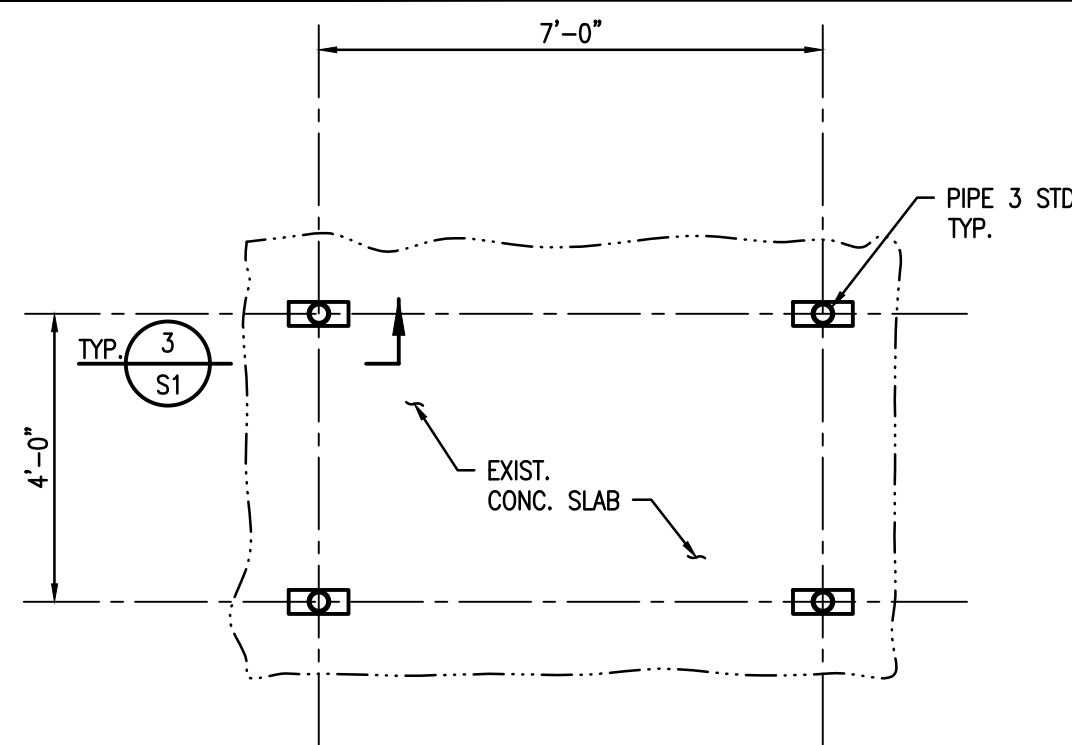
ALTERNATE NO. 1 & 2
FUTURE BALLFIELD 5

NAME: PB1				VOLTAGE (L-L): 240				BUS: 100				
LOCATION: PRESSBOX 1				VOLTAGE (L-N): 120				MAIN: 70				
				NUMBER OF PHASES: 1				KAIC: 10				
				NEUTRAL BUS: YES				NEMA 1 SURFACE				
				FEED-THRU LUGS: NO								
CKT #	ITEM	AMP RATE	# POLE	LEFT LOADING (VA)		RIGHT LOADING (VA)		# POLE	AMP RATE	ITEM	CKT #	
1	PRESS BOX #1 RECEPTACLES/LIGHT	20	1	600		590		1	20	S1s	2	
3	PRESS BOX #1 A/C	20	1		1200		1200	1	20	PRESS BOX #5 A/C	4	
5	PRESS BOX #5 RECEPTACLES/LIGHT	20	1	600		600		1	20	SCOREBOARDS BALLFIELDS 1 & 5	6	
7	SPARE	20	1					1	20	SPARE	8	
9	SPACE	-	-							SPACE	10	
11	SPACE	-	-							SPACE	12	
13	SPACE	-	-					-	-	SPACE	14	
15	PANEL UB	50	2		3600		3600	-	-	SPACE	16	
17					3600		3600	-	-	SPACE	18	
				4800	4800	1190	1200					
				(VA)	(A)	LOAD DVRSTY		NOTES:				
TOTAL CONNECTED LOAD:				11990		1 LIGHTS	2390	1.00	* PROVIDE FINAL TYPEWRITTEN DIRECTORY INSIDE			
PHASE A:				5990	49.9	2 RECEPT <=	1200	1.00	* PANFI			
						RECEPT >	0	0.50	* PROVIDE ENGRAVED PLASTIC LABEL WITH PANEL			
PHASE C:				6000	50.0	3 A/C	1200	1.00	* DESIGNATION ON PANFI COVER			
						4 CONDENSE	0	1.00				
						5 HEAT	0	0.00				
						6 HPU	0	1.00	*			
						7 WTR HTR	0	0.50				
						8 REFRIGER/	0	0.50				
						9 KITCHEN	0	0.50				
						10 ELEVATOR	0	0.50				
						11 MISC	0	0.50				
						12 SUBFEED I	0	1.00				

NAME: PB2				VOLTAGE (L-L): 240				BUS: 100			
LOCATION: PRESSBOX 2				VOLTAGE (L-N): 120				MAIN: 50			
				NUMBER OF PHASES: 1				KAIC: 10			
				NEUTRAL BUS: YES				NEMA 1 FLUSH			
				FEED-THRU LUGS: NO							
CKT #	ITEM	AMP RATE	# POLE	LEFT LOADING (VA)	RIGHT LOADING (VA)		# POLE	AMP RATE	ITEM	CKT #	
1	PRESS BOX #2 RECEPTACLES/LIGHT	20	1	600		472	1	20	S1s	2	
3	PRESS BOX #2 AC	20	1		1200		1	20	SPACE	4	
5	SPARE	20	1			240	1	20	SPACE	6	
7	SPACE	20	1				1	20	SPACE	8	
9	SPACE	-	-			1800	2	40	PANEL PB3	10	
11	SPACE	-	-				1854		PANEL PB3	12	
13		-	-				-	-		14	
15		-	-				-	-		16	
17		-	-				-	-		18	
				600	1200	2512	1854				
				(VA)	(A)	LOAD	DVRSTY	NOTES:			
TOTAL CONNECTED LOAD:		6166		1 LIGHTS	712	1.00	* PROVIDE FINAL TYPEWRITTEN DIRECTORY INSIDE				
PHASE A:		3112	25.9	2 RECEPT <=	600	1.00	* PANFI				
				RECEPT >	0	0.50	* PROVIDE ENGRAVED PLASTIC LABEL WITH PANEL				
PHASE C:		3054	25.5	3 A/C	1200	1.00	* DESIGNATION ON PANFI COVER				
				4 CONDENSE	0	1.00					
				5 HEAT	0	0.00					
				6 HPU	0	1.00	*				
				7 WATER HE	0	0.50					
				8 REFRIGER/	0	0.50					
				9 KITCHEN	0	0.50					
				10 ELEVATOR	0	0.50					
				11 MISC	0	0.50					
				12 SUBFEED I	3654	1.00					

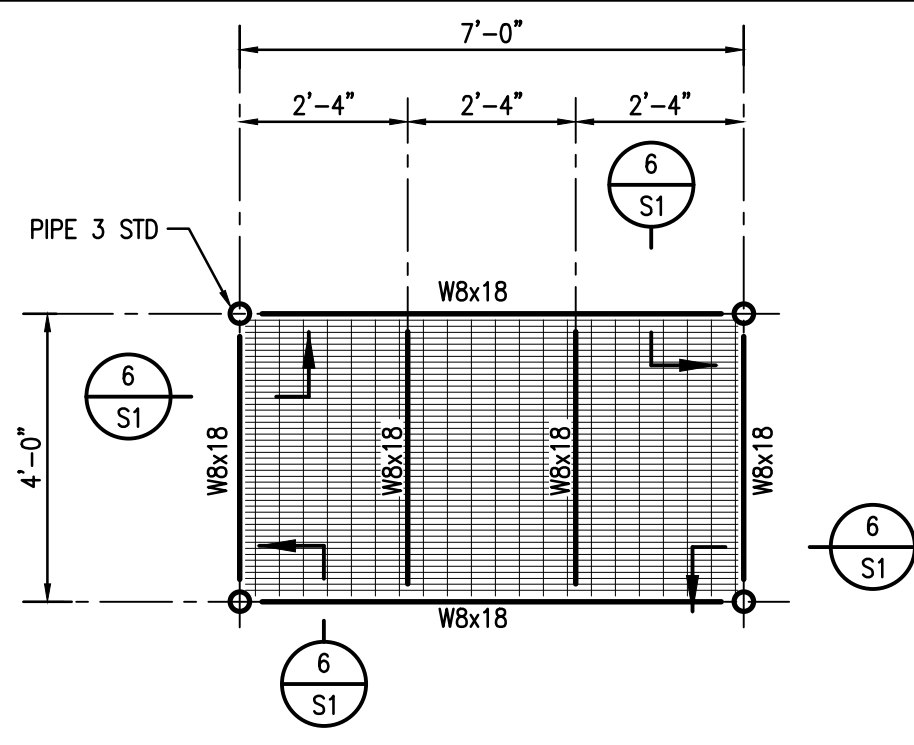
NAME: PB3										VOLTAGE (L-L): 240				BUS: 100A			
LOCATION: PRESSBOX 3										VOLTAGE (L-N): 120				MAIN: 40A			
										NUMBER OF PHASES: 1				KAIC: 10			
										NEUTRAL BUS: YES				NEMA 1 FLUSH			
										FEED-THRU LUGS: NO							
CKT #	ITEM	AMP RATE	# POLE	LEFT LOADING (VA)		RIGHT LOADING (VA)		# POLE	AMP RATE	ITEM	CKT #						
1	PRESS BOX #3 RECEPTACLES/LIGHT	20	1	600		A			1	20	SPARE	2					
3	PRESS BOX #3 A/C	20	1		1200			354	1	20	S1s	4					
5	PRESS BOX #4 A/C	20	1	1200					1	20	SPARE	6					
7	SPACE	20	1						1	20	PRESS BOX #4 RECEPTACLES/LIGHT	8					
9	SPACE	-	-								SPACE	10					
11	SPACE	-	-								SPACE	12					
13	SPACE	-	-						-	-	SPACE	14					
15	SPACE	-	-						-	-	SPACE	16					
17	SPACE	-	-						-	-	SPACE	18					
				1800	1200	0	354										
TOTAL CONNECTED LOAD: 3354 1.00												* NOTES:					
PHASE A:		3354	15.0	1 LIGHTS	354	1.00	* PROVIDE FINAL TYPEWRITTEN DIRECTORY INSIDE										
				2 RECEPT <=	1800	1.00	* PANEL										
				RECEPT >	0	0.50	* PROVIDE ENGRAVED PLASTIC LABEL WITH PANEL										
PHASE B:		1554	13.0	3 A/C	1200	1.00	* DESIGNATION ON PANEL COVER										
				4 CONDENSE	0	1.00											
				5 HEAT	0	0.00											
				6 HPU	0	1.00	*										
				7 WATER HE	0	0.50											
				8 REFRIGER/	0	0.50											
				9 KITCHEN	0	0.50											
				10 ELEVATOR	0	0.50											
				11 MISC	0	0.50											
				12 SUBFEED I	0	1.00											





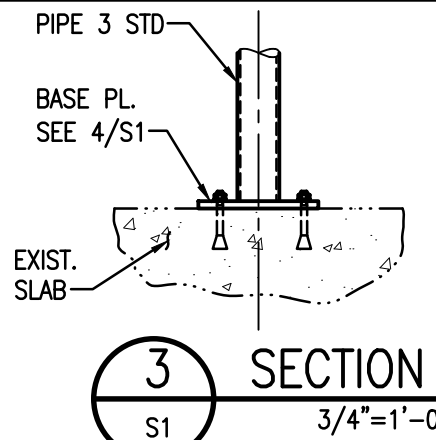
PLAN NOTES: UNLESS NOTED OTHERWISE:
1. LOCATION OF BASE PLATES AND PIPE COLUMNS TO BE VERIFIED IN EXISTING BUILDING.
2. CONTRACTOR TO VERIFY EXISTING GRADE ELEVATION PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO PROVIDE EQUIPMENT CUT SHEETS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

1 INTERIOR PIPE AND BASE PLATES
3/8"=1'-0"

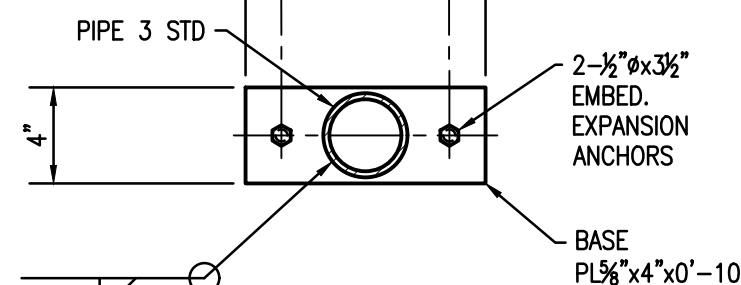


NOTE: UNLESS NOTED OTHERWISE:
1. TOP OF STEEL GRATING EL. 3'-5"
2. SEE 5/S1 FOR STEEL BEAM TO BEAM CONNECTIONS.
3. INDICATES GALVANIZED STEEL GRATING 1"x_x" BEARING BARS AT _ O.C.

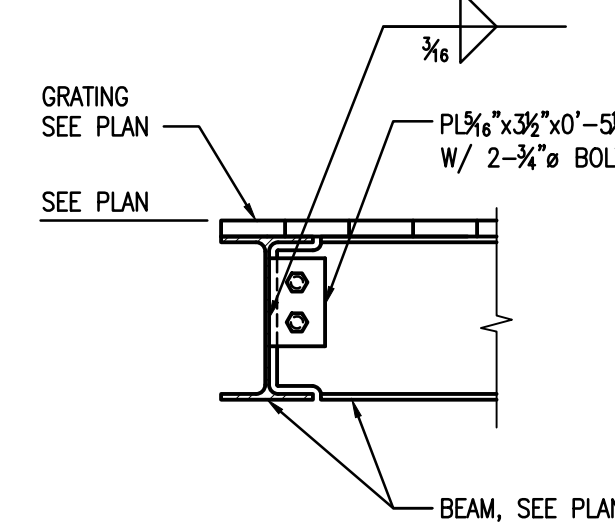
2 INTERIOR FRAMING PLAN
3/8"=1'-0"



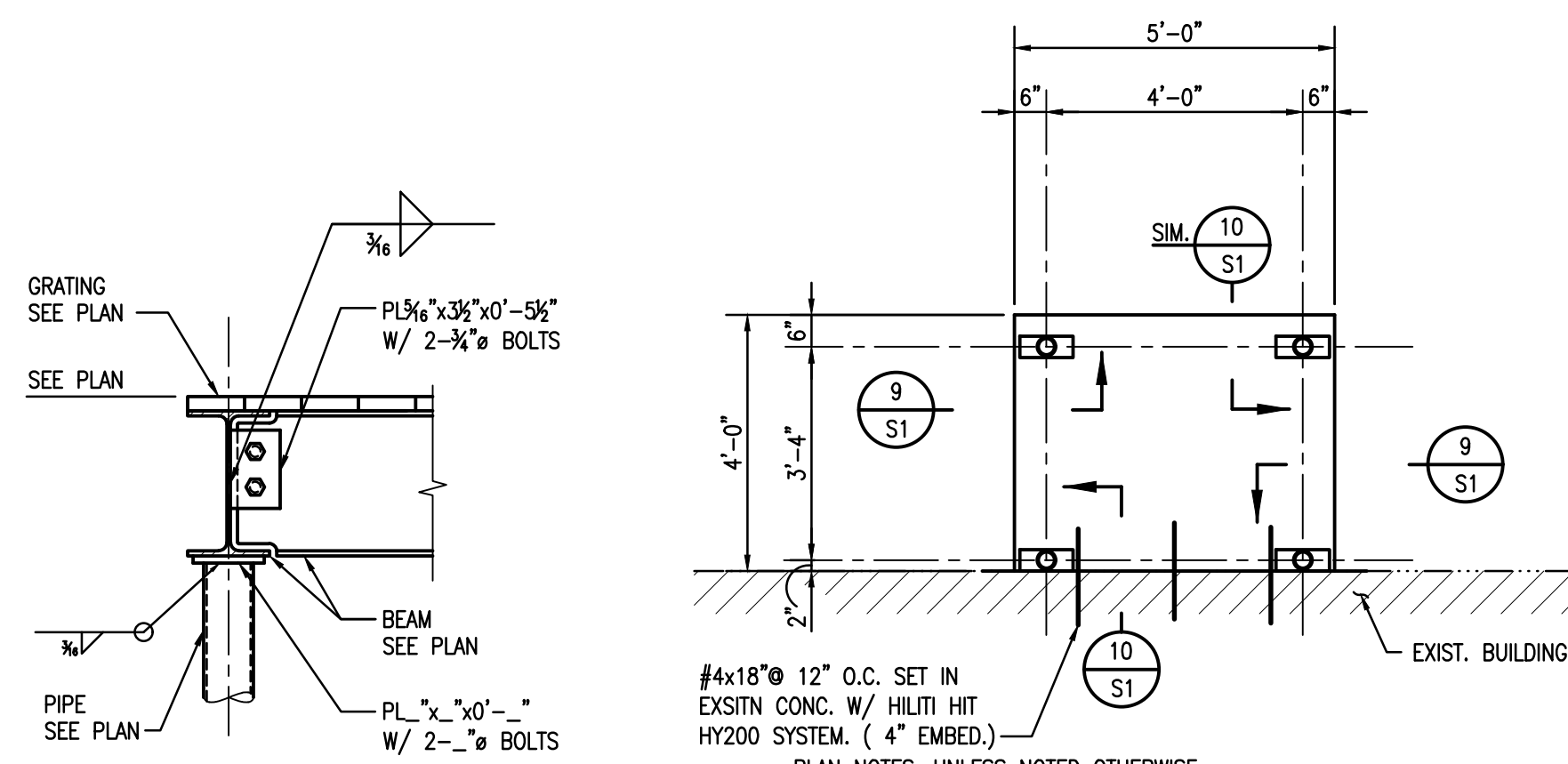
3 SECTION
3/4"=1'-0"



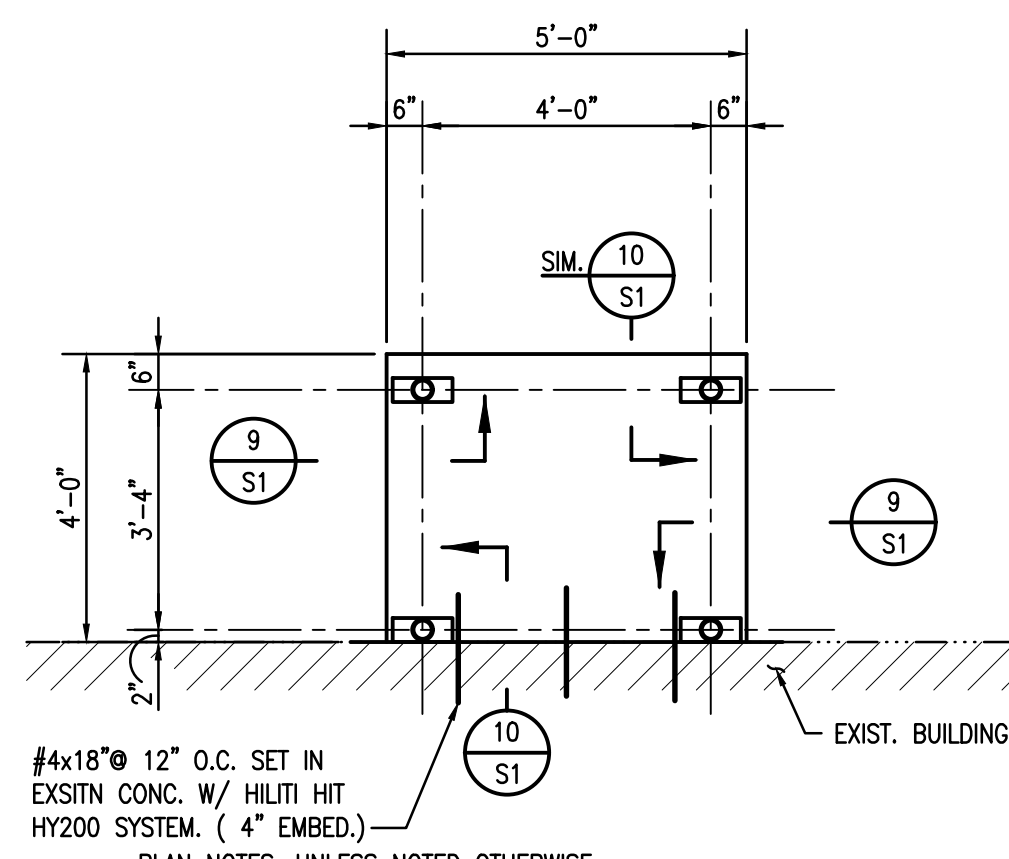
4 DETAIL
1 1/2"=1'-0"



5 DETAIL
1"=1'-0"

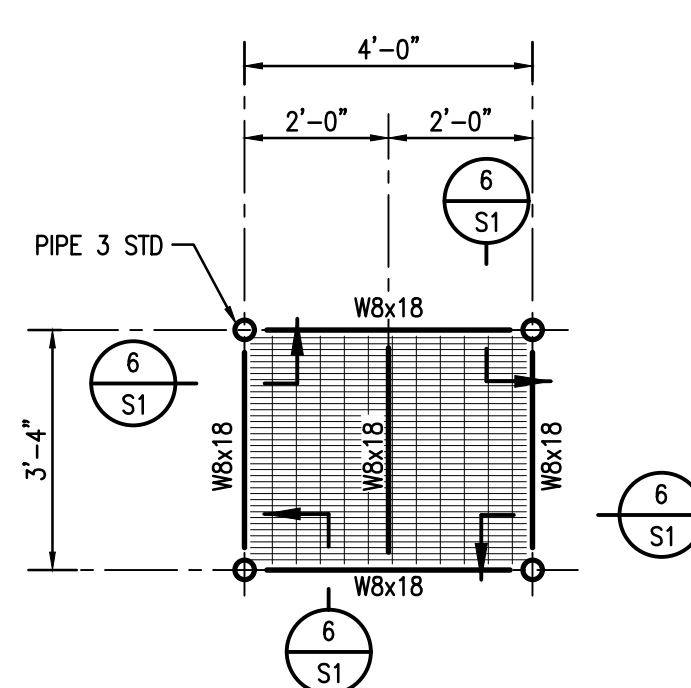


6 SECTION
1"=1'-0"



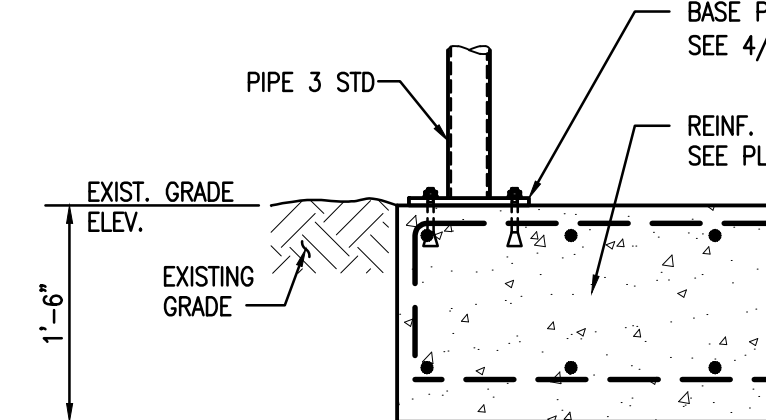
PLAN NOTES: UNLESS NOTED OTHERWISE:
1. VERIFY AND CONFIRM TOP OF PAD ELEVATION REQUIREMENTS.
2. 18" SLAB THROUGHOUT REINFORCED WITH #5@12" O.C. EACH WAY, TOP & BOT.
3. CONTRACTOR TO VERIFY EXISTING GRADE ELEVATION PRIOR TO CONSTRUCTION.

7 EXTERIOR PAD FOUNDATION
3/8"=1'-0"

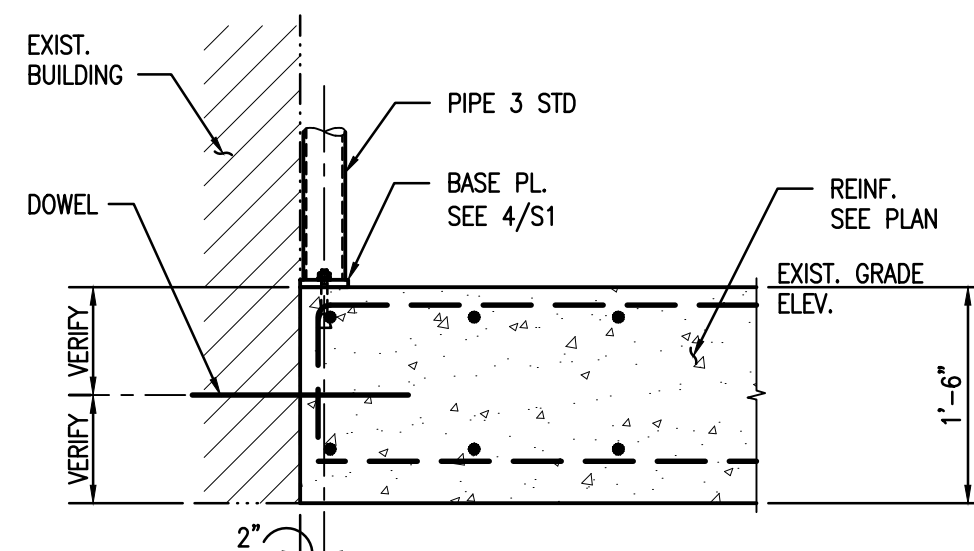


NOTE: UNLESS NOTED OTHERWISE:
1. TOP OF STEEL GRATING EL. 4'-1"
2. SEE 5/S1 FOR STEEL BEAM TO BEAM CONNECTIONS.
3. INDICATES GALVANIZED STEEL GRATING 1"x_x" BEARING BARS AT _ O.C.

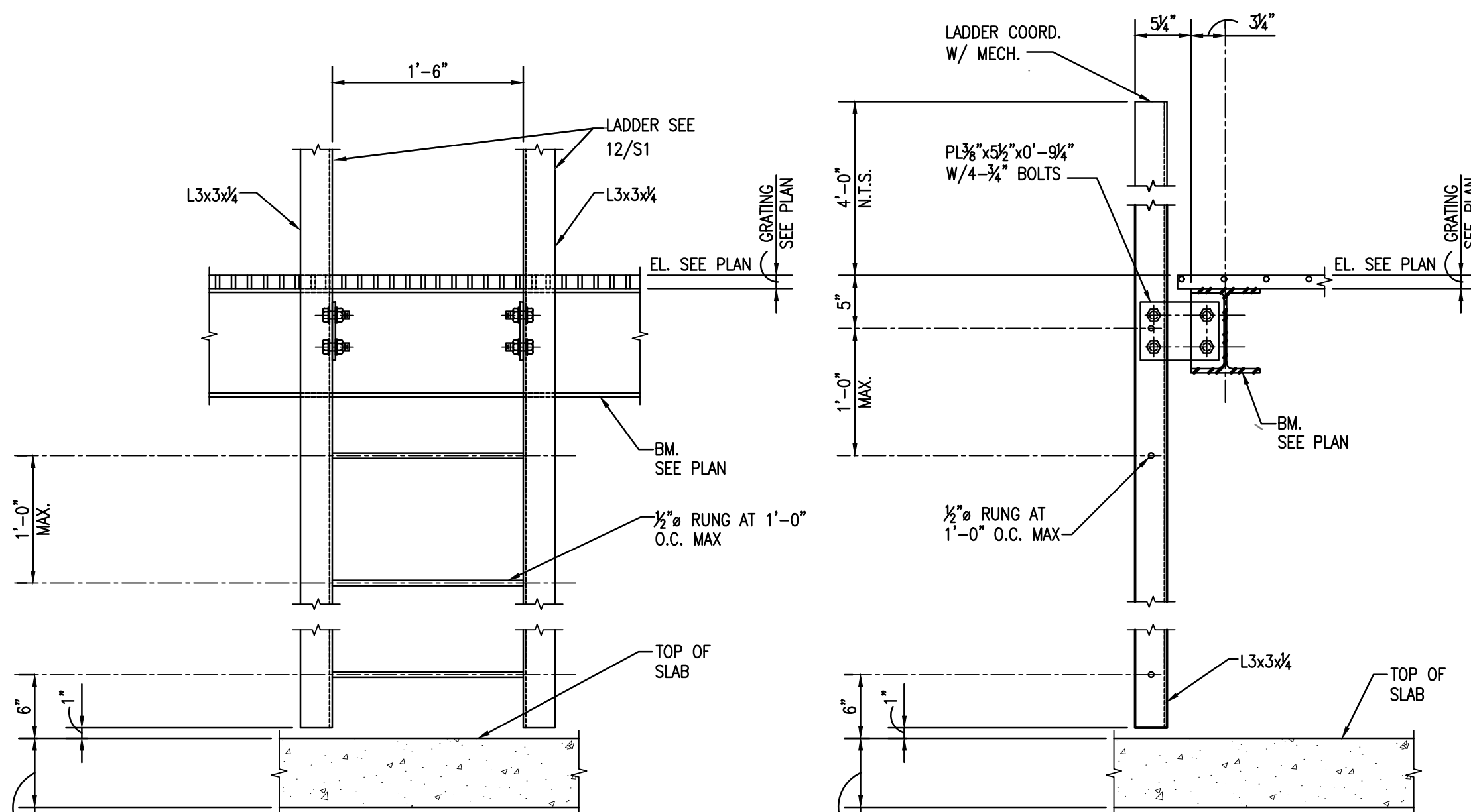
8 EXTERIOR FRAMING PLAN
3/8"=1'-0"



9 SECTION
3/4"=1'-0"

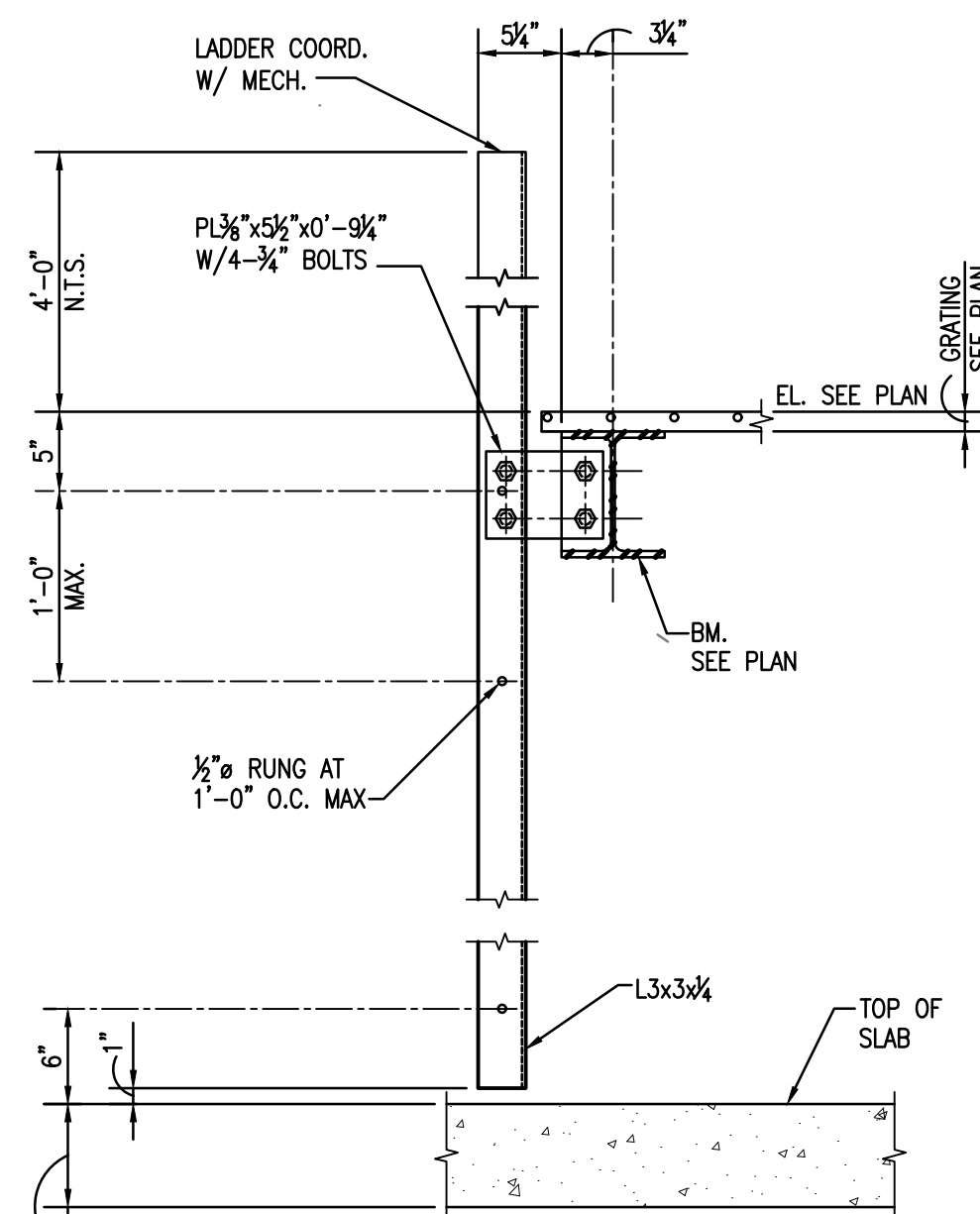


10 SECTION
3/4"=1'-0"



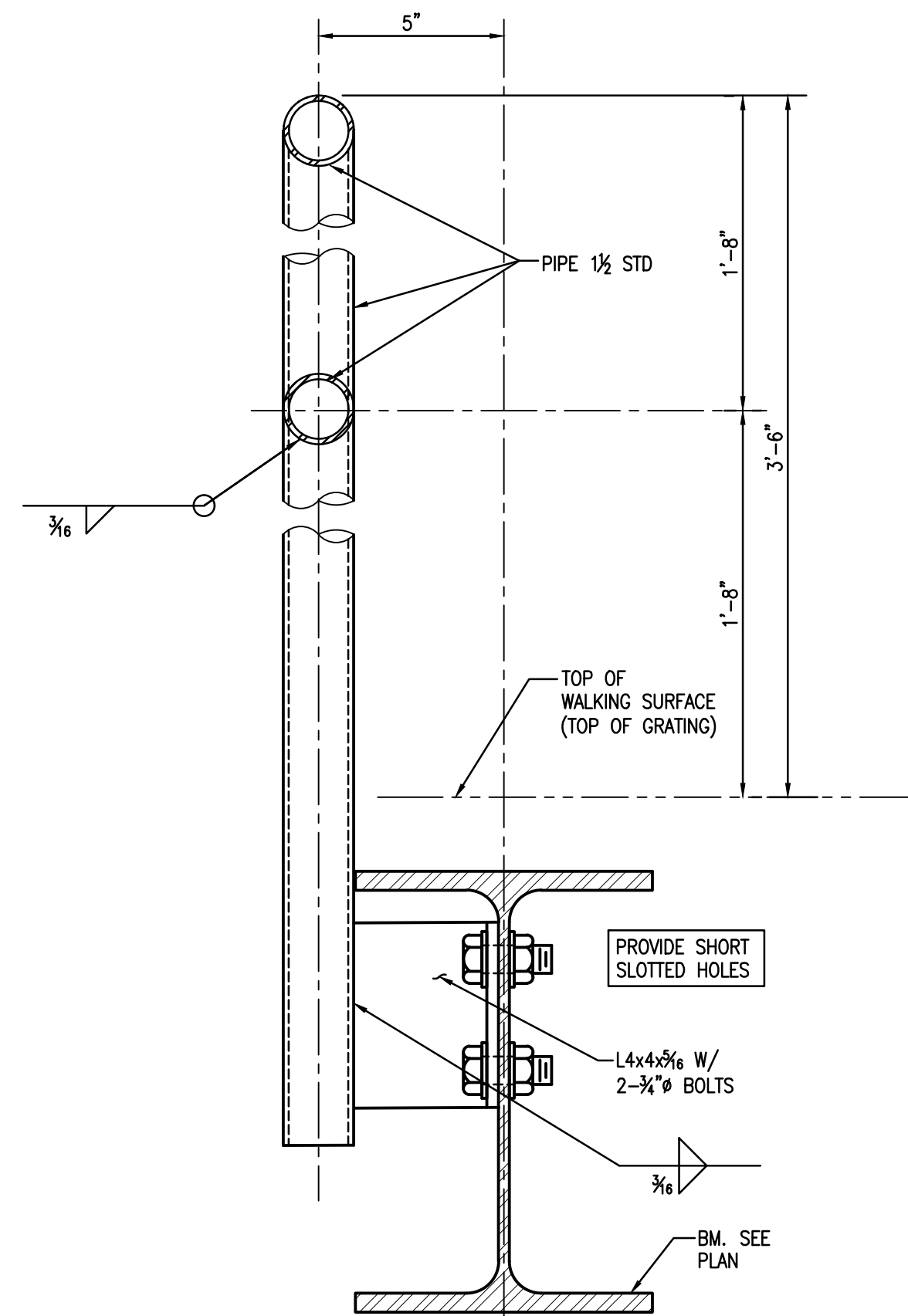
NOTES:
1. ALL STRUCTURAL STEEL & BOLTS TO BE HOT-DIPPED GALVANIZED AFTER FABRICATION. TOUCH UP ALL DAMAGE COATING WITH STICK GALV. SEE ALSO GENERAL NOTE # __, S __.
2. COORD. LADDER LOCATIONS WITH ARCH. DWG'S.

11 DETAIL - LADDER
NTS



NOTES:
1. ALL STRUCTURAL STEEL & BOLTS TO BE HOT-DIPPED GALVANIZED AFTER FABRICATION. TOUCH UP ALL DAMAGE COATING WITH STICK GALV. SEE ALSO GENERAL NOTE # __, S __.
2. COORD. LADDER LOCATIONS WITH ARCH. DWG'S.

12 SECTION
NTS



13 TYPICAL HANDRAIL DETAIL
NTS

14 GENERAL NOTES

1. EXISTING CONDITIONS:
ALL DIMENSIONS AND CONDITIONS TYING INTO OR GOVERNED BY EXISTING CONSTRUCTION ARE APPROXIMATE AND ARE NOT PURPORTED TO BE CORRECT. ALL SUCH DIMENSIONS AND CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE PREPARATION OF SHOP DRAWINGS. FIRST SUBMITTAL OF SHOP DRAWINGS MUST CONTAIN CORRECT CONDITIONS AND DIMENSIONS OBTAINED FROM THE FIELD. IF CONDITIONS AND DIMENSIONS VARY GREATLY FROM THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PREPARATION OF SHOP DRAWINGS.

2. EXISTING UTILITIES:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION OR FABRICATION. ANY CONFLICTS OR POTENTIAL CONFLICTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

3. CONCRETE:
A. ACI 301-10 SPECIFICATIONS
B. NORMAL WEIGHT CONCRETE: 150 PCF
C. COMPRESSIVE STRENGTH AT 28 DAYS: 4,000 PSI

4. REINFORCING STEEL:
A. REINFORCING BARS: ASTM A615, GRADE 60 OR 75
B. WELDABLE REINFORCING BARS: ASTM A706, GRADE 60
C. WELDED WIRE MESH: ASTM A1064

5. REINFORCING CLEARANCES REQUIRED FOR STRUCTURALLY SUPPORTED CONCRETE ARE AS FOLLOWS:

ACI 117 STANDARDS, UNLESS SPECIFICALLY NOTED OR SHOWN ON THE DRAWINGS, REINFORCING CLEARANCES SHALL BE AS FOLLOWS:
A. SLABS: 3/4" CLEAR TOP & BOTTOM FORMED, 1" CLEAR BOTTOM, 3/4" CLEAR TOP ON GRADE.
B. BEAMS: 1 1/2" CLEAR BOTTOM FORMED, 3" CLEAR BOTTOM CAST ON EARTH, 1 1/2" CLEAR SIDES AND TOP FORMED, 3" CLEAR SIDES EARTH FORMED, 1 1/2" CLEAR TOP.
C. COLUMNS: 2" CLEAR, TYPICAL. 3" CLEAR SIDES EXPOSED TO EARTH.
D. WALLS: 1 1/2" CLEAR, TYPICAL.

6. DRILLED SHAFTS:
MACHINE DRILLED, CONCRETE FILLED IN ACCORDANCE WITH SECTION 603.1 SSRB.
A. TIP PENETRATION BELOW EXISTING GRADE: SEE DETAILS SHT. S2
B. DIAMETER: SEE DETAILS SHT. S2
C. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: 5,000 PSI
D. REINFORCING STEEL: SEE DETAILS SHT. S2
E. CASING: PERMANENT & STRAIGHT-SIDED REQUIRED.
F. EXPLORATORY DRILLED SHAFTS: NONE REQUIRED
G. LOAD TEST: NONE REQUIRED F.S. = 3.0
H. DESIGN LOAD: SEE DETAILS SHT. S2

7. STRUCTURAL STEEL:
A. A.I.S.C. SPECIFICATIONS; STEEL CONSTRUCTION MANUAL 14TH EDITION;
ALL WIDE FLANGE SHAPES ASTM A992 GRADE 50, ALL MISCELLANEOUS SHAPES ASTM A36, HSS SHAPES ASTM A500 GRADE B Fy=46 ksi, STEEL PIPE ASTM A53 GRADE B Fy=35 ksi; HIGH STRENGTH BOLTS A325, 3/4" MIN. EXCEPT AS NOTED OTHERWISE; ANCHOR RODS AND BOLTS ASTM F1554 GRADE 36 EXCEPT AS NOTED OTHERWISE; HEADED CONCRETE ANCHOR (H.C.A.) PER A.W.S. SPECIFICATION D1.1; DEFORMED BAR ANCHOR (D.B.A.) ASTM A496; E-70 ELECTRODES.
B. ALL STRUCTURAL STEEL ITEMS AND RESPECTIVE ANCHORS AND FASTENERS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123. PROVIDE VENT HOLES AS REQUIRED. TOUCH UP ALL DAMAGED COATING WITH HOT STICK GALVANIZING PER ASTM A780. SEE ARCHITECT FOR PAINTING.

8. DAMAGE TO EXISTING CONSTRUCTION:
ALL WORK SHALL BE DONE IN A MANNER WHICH WILL NOT DAMAGE ADJACENT EXISTING CONSTRUCTION WHICH IS TO REMAIN.
9. PATCHING MATERIALS AND INSTALLATION:
ALL MATERIALS USED FOR PATCHING SHALL MATCH EXISTING MATERIALS IN APPEARANCE AND QUALITY. WORKMANSHIP SHALL BE IN CONFORMANCE WITH TODAY'S STANDARDS BUT SHOULD BE NO LESS IN QUALITY THAN ANY OF THE ADJACENT WORKMANSHIP IN THE AREA BEING PATCHED. USE SIKKA CORPORATION PRODUCTS OR AN APPROVED EQUAL.

ALL EXPOSED EXISTING REINFORCING SHALL BE CLEANED BY SAND BLASTING OR BY MACHINE WIRE BRUSHING TO A WHITE METAL FINISH PRIOR TO PLACING ANY REPAIR MATERIALS.
COAT ALL PREPARED REINFORCING WITH SIKKA ARMATEC 110. OR AN APPROVED EQUAL.

FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF MATERIALS. IN ADDITION, ALL LOOSE CONCRETE SHALL BE REMOVED TO OBTAIN A SOUND SURFACE OF EXISTING CONCRETE AT SPALLED AREAS.

MATERIAL MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT ON THE SITE WHEN PATCHING COMMENCES TO VERIFY PROPER PREPARATION OF SURFACES TO BE PATCHED AND APPLICATION OF MATERIALS.

10. OTHER WORK:
COORDINATE ALL OTHER WORK WITH STRUCTURAL. UNLESS DETAILED OR SPECIFIED, THE ARCHITECT IS TO APPROVE ALL OPENINGS, SLEEVES, EMBEDDED ITEMS ETC. INVOLVED IN STRUCTURAL WORK PRIOR TO THEIR BEING SET. DO NOT CUT OR DRILL HOLES IN STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE ARCHITECT. ALL SUCH ITEMS SHALL NOT IMPAIR THE STRUCTURAL INTEGRITY OF THE MEMBER AS DETERMINED BY THE ENGINEER OF RECORD.

11. DESIGN LOADS AND OTHER PERTINENT DESIGN INFORMATION:
A. BUILDING CODE: INTERNATIONAL BUILDING CODE 2021 / ASCE 7-16
B. FLOOR LIVE LOAD: 40 PSF
C. ROOF SNOW LOAD

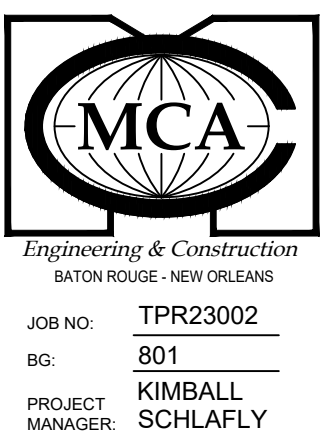
1. GROUND SNOW LOAD (Pg): 0 PSF
D. WIND LOAD
1. WIND SPEEDS: Vult = 145 MPH; Vpsd = 112 MPH
2. RISK CATEGORY: B
3. WIND EXPOSURE CATEGORY: II
4. INTERNAL PRESSURE COEFFICIENT: ±0.18
5. EDGE WIDTH "a": 5 FEET

12. REINFORCING DETAILS FOR STRUCTURALLY SUPPORTED CONCRETE:
ACI 315 STANDARDS, UNLESS SPECIFICALLY NOTED OR SHOWN ON THE DRAWINGS, BAR LAPS AND CONFIGURATIONS SHALL BE AS FOLLOWS:
A. TOP BARS: HOOK AT NON-CONTINUOUS ENDS, LAP 30 DIAS. AT MID-SPAN, FOR CONTINUOUS REINFORCING NOTED ON THE CONSTRUCTION DOCUMENTS AS FULLY CONT., SEE NOTE "F".
B. BOTTOM BARS: LAP 6" AT CENTER OF SUPPORT.
C. TEMPERATURE BARS IN SLAB AND INTERMEDIATE HORIZONTAL BARS IN WALLS AND BEAMS: TENSION LAP SPLICES, SEE TABLE BELOW.
D. SLAB TOP REINFORCING SUPPORT BARS: SLAB TOP REINFORCING BARS LESS THAN 6 FEET IN LENGTH SHALL HAVE 2-#4 CONT. SUPPORT BARS AND SLAB TOP REINFORCING BARS GREATER THAN 6 FEET IN LENGTH SHALL HAVE #4 SUPPORT BARS EQUALLY SPACED AT NO MORE THAN 4'-0" O.C.
E. CORNER BARS: PROVIDE CORNER BARS AT EACH OUTSIDE CORNER FOR EACH HORIZONTAL BAR IN WALLS AND BEAMS, CORNER BARS SHALL LAP WITH HORIZONTAL BARS. PROVIDE "U" BARS AT WALL ENDS. LAP #3 TO #6 BARS 30" EACH WAY AND LAP #7 TO #11 BARS 48" EACH WAY. HOOK INSIDE BARS IN WALLS AT ENDS.
F. LAP SPLICE TABLE FOR FULLY CONTINUOUS REINFORCING:

	LOCATION	LAP SPLICES (INCHES)									
		#3	#4	#5	#6	#7	#8	#9	#10	#11	BAR SIZE
SLABS	TOP	15	24	36	48	78	96	117	140	165	
	OTHER	12	19	28	37	60	74	90	108	127	
OTHER	TOP	24	32	40	48	70	80	91	102	113	
	OTHER	19	25	31	37	54	62	70	79	87	

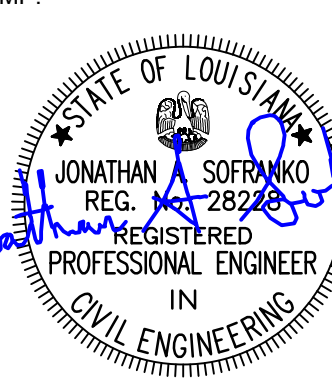
13. DISPOSAL OF WASTE MATERIALS:
REMOVE FROM OWNER'S PROPERTY ALL MATERIALS LABELED ON THESE DRAWINGS TO BE DEMOLISHED AS WELL AS ALL EXCESS EXCAVATED MATERIAL, TRASH, DEBRIS, CONSTRUCTION MATERIALS, ETC. AND LAWFULLY DISPOSE OF THESE MATERIALS OFF OF THE OWNER'S PROPERTY.

BASE BID



TERREBONNE PARISH DISTRICT 82921TPRD10
TPR DIST. 10 BALLFIELD IDA
625 BAYOU DULARGE ROAD
HOUMA, LA. 70363

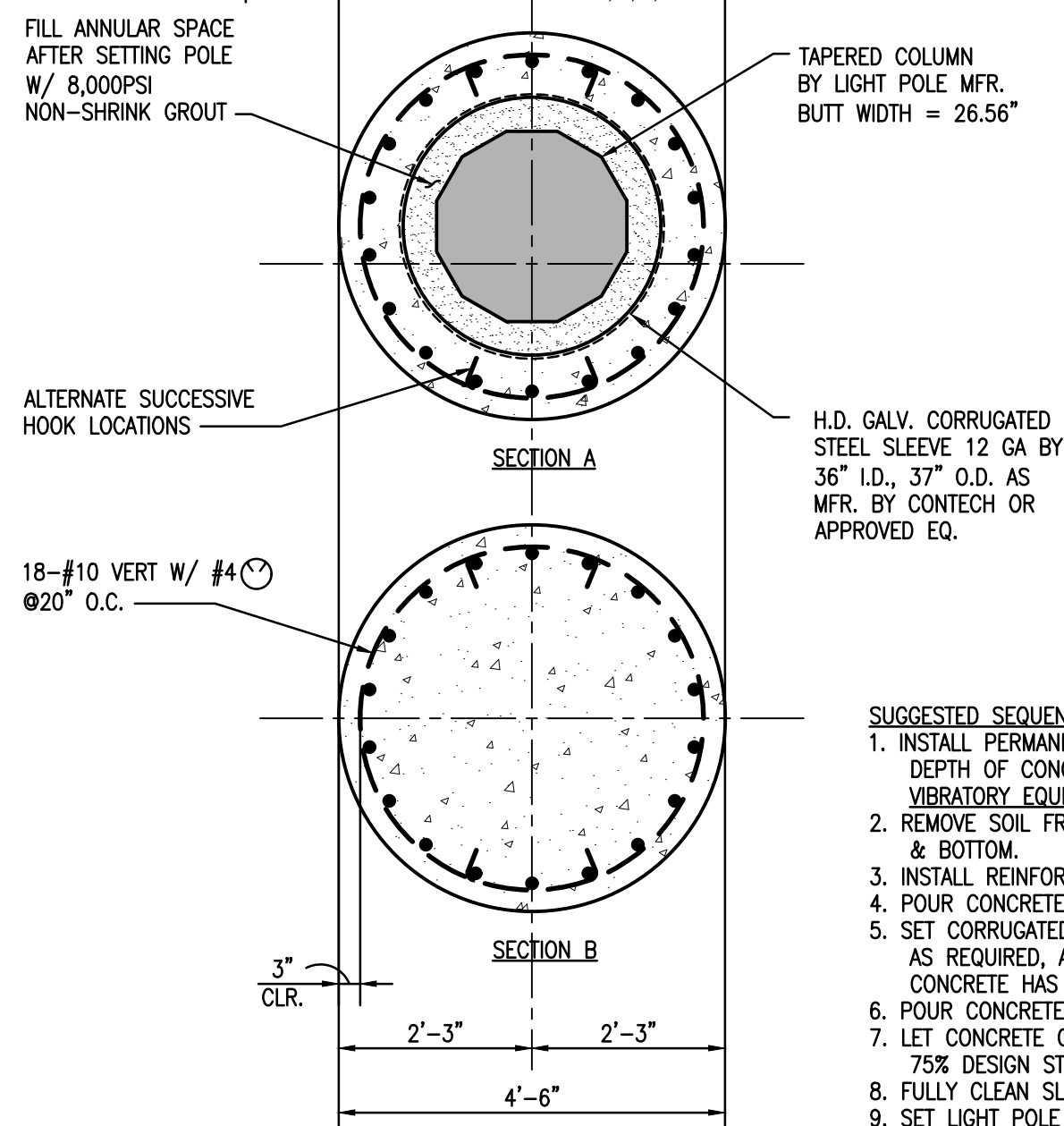
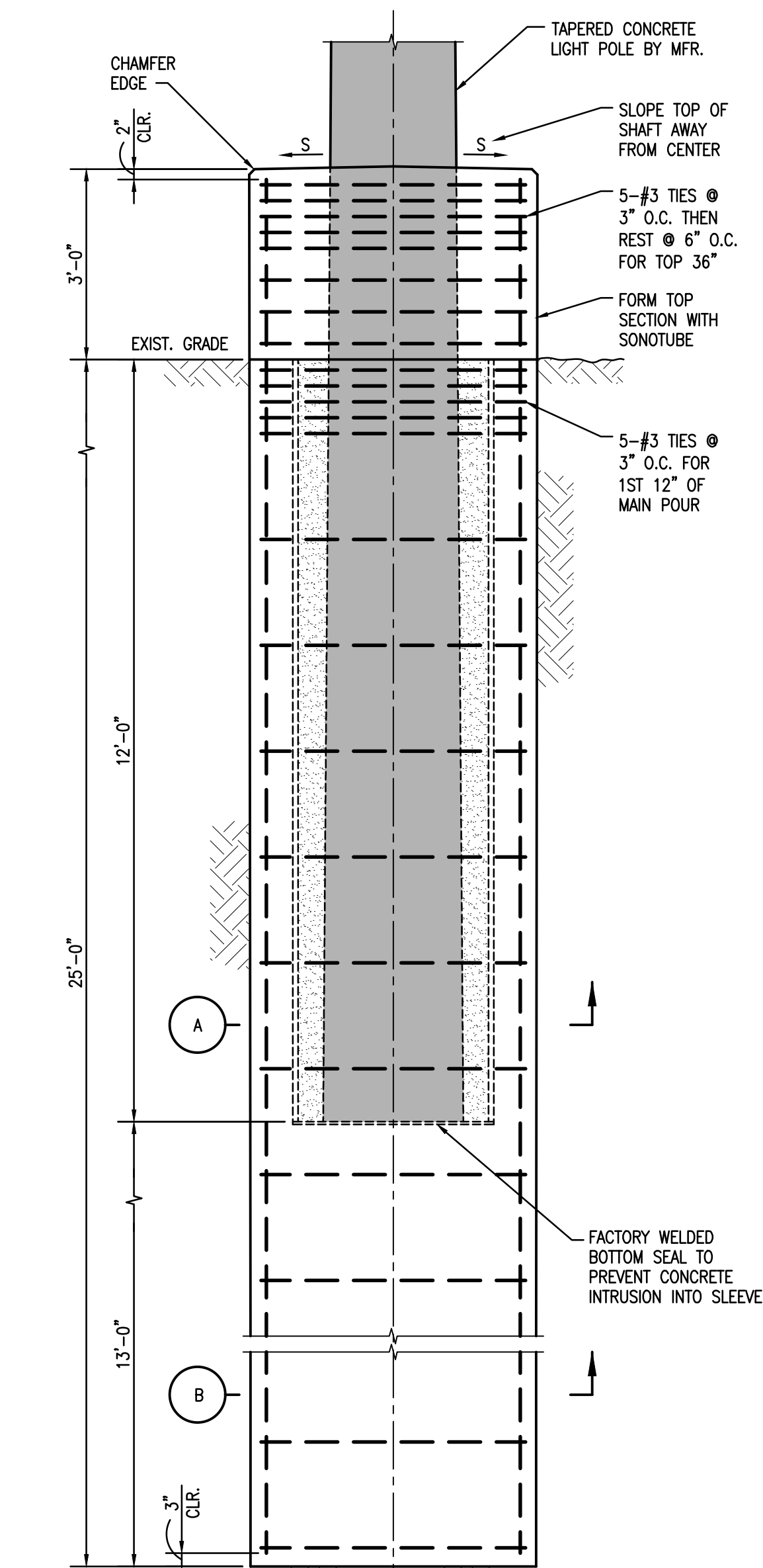
STAMP:



9/11/2026

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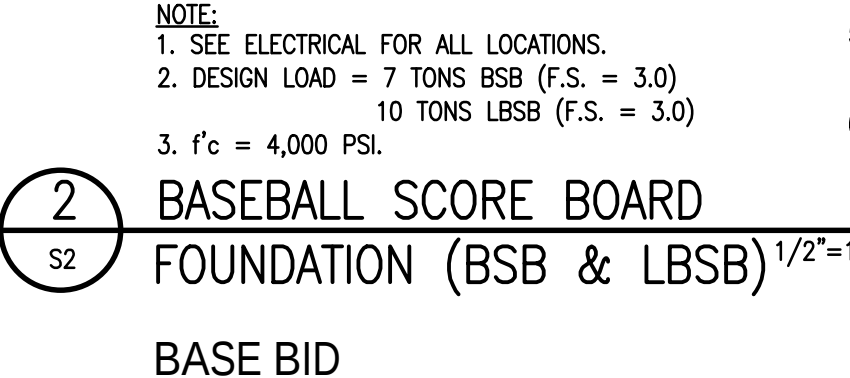
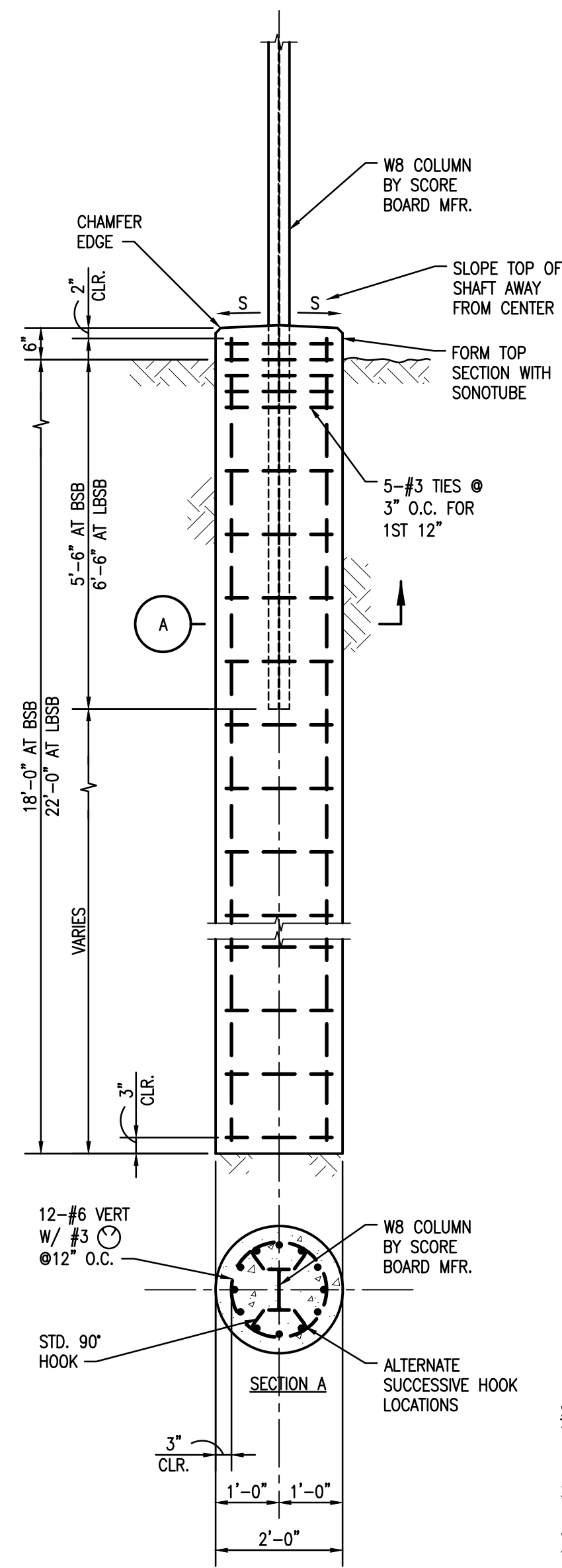
DWG TITLE:
DWG No. S1



- NOTE:
- SEE ELECTRICAL FOR ALL LOCATIONS.
 - DESIGN LOAD = 25 TONS (F.S. = 3.0)
 - $f'_c = 5,000$ PSI.

1 SPORTS LIGHT POLE
FOUNDATION $1/2"=1'-0"$

BASE BID AND ALTERNATE NO. 1

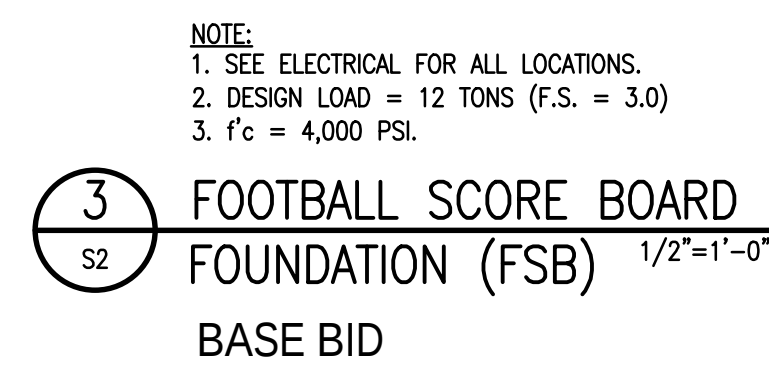
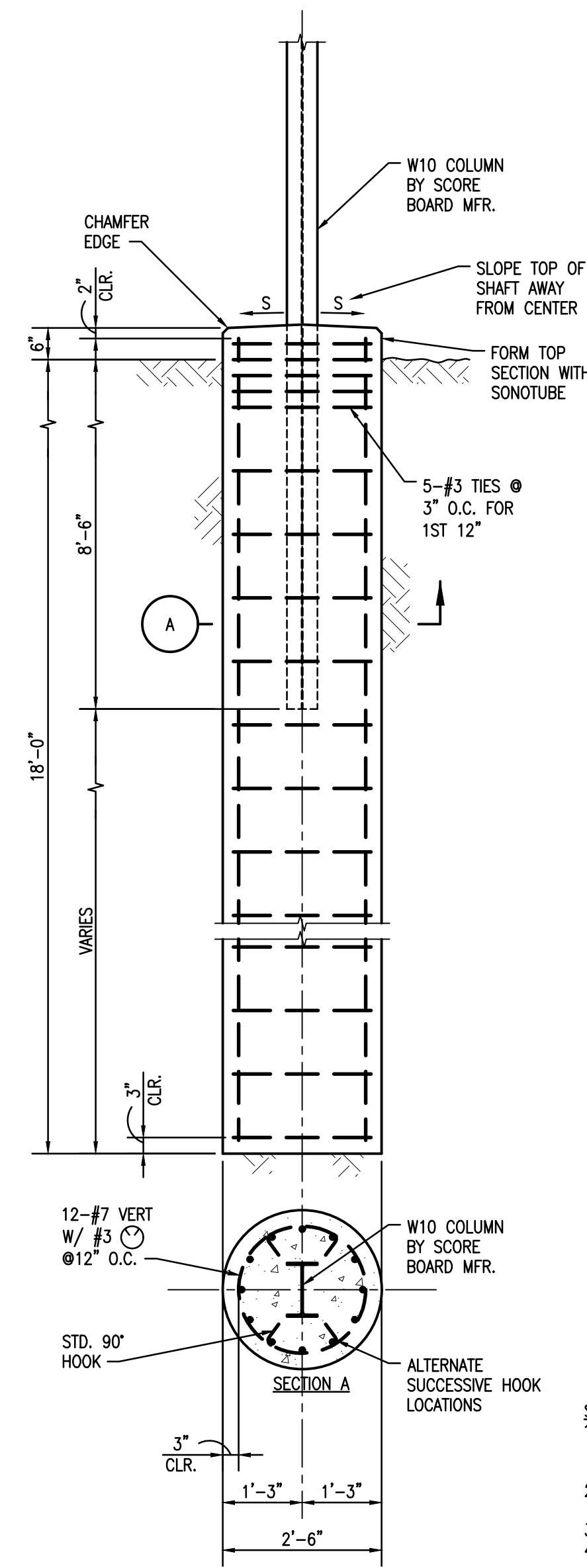


- NOTE:
- SEE ELECTRICAL FOR ALL LOCATIONS.
 - DESIGN LOAD = 7 TONS BSB (F.S. = 3.0)
10 TONS LBSB (F.S. = 3.0)
 - $f'_c = 4,000$ PSI.

2 BASEBALL SCORE BOARD
FOUNDATION (BSB & LBSB) $1/2"=1'-0"$

BASE BID

- SUGGESTED SEQUENCE OF CONSTRUCTION
- INSTALL PERMANENT OPEN-ENDED CASING TO FULL DEPTH OF CONCRETE SHAFT. **DO NOT INSTALL USING VIBRATORY EQUIPMENT.**
 - REMOVE SOIL FROM HOLE & CLEAN SHAFT SIDES & BOTTOM.
 - INSTALL REINFORCING CAGE & SECURE PROPERLY.
 - POUR CONCRETE SHAFT TO BOTTOM OF SCOREBOARD COLUMN.
 - IMMEDIATELY SET COLUMN AFTER INITIAL POUR AND SECURE PROPERLY WHILE ENSURING ADEQUATE PLUMBNESS & EMBEDMENT DEPTH PER MFR. REQUIREMENTS.
 - POUR CONCRETE IN SHAFT TO FINAL ELEVATION.



- NOTE:
- SEE ELECTRICAL FOR ALL LOCATIONS.
 - DESIGN LOAD = 12 TONS (F.S. = 3.0)
 - $f'_c = 4,000$ PSI.

3 FOOTBALL SCORE BOARD
FOUNDATION (FSB) $1/2"=1'-0"$

BASE BID

- SUGGESTED SEQUENCE OF CONSTRUCTION
- INSTALL PERMANENT OPEN-ENDED CASING TO FULL DEPTH OF CONCRETE SHAFT. **DO NOT INSTALL USING VIBRATORY EQUIPMENT.**
 - REMOVE SOIL FROM HOLE & CLEAN SHAFT SIDES & BOTTOM.
 - INSTALL REINFORCING CAGE & SECURE PROPERLY.
 - POUR CONCRETE SHAFT TO BOTTOM OF SCOREBOARD COLUMN.
 - IMMEDIATELY SET COLUMN AFTER INITIAL POUR AND SECURE PROPERLY WHILE ENSURING ADEQUATE PLUMBNESS & EMBEDMENT DEPTH PER MFR. REQUIREMENTS.
 - POUR CONCRETE IN SHAFT TO FINAL ELEVATION.

TERREBONNE PARISH DISTRICT 82921TPRD10
TPR DIST. 10 BALLFIELD IDA
625 BAYOU DULARGE ROAD
HOUMA, LA. 70363

STAMP:



DESIGN	BY
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DATE	
9/11/2026	
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SECTION 03 30 00 – CAST-IN-PLACE CONCRETE

PART 1 – GENERAL

1.1 SUMMARY

- A. SCOPE: THE WORK TO BE DONE UNDER THIS SECTION OF THE SPECIFICATIONS INCLUDES ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR CAST-IN-PLACE CONCRETE INCLUDING FORMWORK, REINFORCING, MIX DESIGN, PLACEMENT PROCEDURES, FINISHES, AS INDICATED ON DRAWINGS AND HEREIN SPECIFIED.

1.2 CAST-IN-PLACE CONCRETE: INCLUDES THE FOLLOWING:

- A. FOUNDATIONS AND FOOTINGS.

1.3 SUBMITTALS

- F. PRODUCT DATA FOR PROPRIETARY MATERIALS AND ITEMS, INCLUDING REINFORCEMENT AND FORMING ACCESSORIES, ADMIXTURES, PATCHING COMPOUNDS, WATERSTOPS, JOINT SYSTEMS, CURING COMPOUNDS, DRY-SHAKE FINISH MATERIALS, AND OTHERS IF REQUESTED BY ARCHITECT.
- G. SHOP DRAWINGS FOR REINFORCEMENT DETAILING FABRICATING, BENDING, AND PLACING CONCRETE REINFORCEMENT. COMPLY WITH ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" SHOWING BAR SCHEDULES, STRIPUP SPACING, BENT BAR DIAGRAMS, AND ARRANGEMENT OF CONCRETE REINFORCEMENT. INCLUDE SPECIAL REINFORCING REQUIRED FOR OPENINGS THROUGH CONCRETE STRUCTURES. REPRODUCTIONS FROM CONTRACT DOCUMENTS WILL NOT BE ALLOWED. SUBMIT ONE (1) HARD COPY PRINT FOR REVIEW AND COMMENT, AND ONE (1) ELECTRONIC PRINT. THE ENGINEER WILL HAVE UP TO TEN (10) WORKING DAYS FROM THE TIME OF RECEIPT OF THE SUBMITTAL TO COMPLETE HIS REVIEW AND RETURN THE SUBMITTAL TO THE ARCHITECT. REVIEW OF SHOP DRAWINGS BY THE ARCHITECT/ENGINEER WILL BE FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS. NO RESPONSIBILITY WILL BE ASSUMED FOR CORRECTNESS OF DIMENSIONS, AND QUANTITIES.

- H. SAMPLES OF MATERIALS AS REQUESTED BY ARCHITECT, INCLUDING NAMES, SOURCES, AND DESCRIPTIONS.

- I. LABORATORY TEST REPORTS FOR CONCRETE MATERIALS AND MIX DESIGN TEST.

- J. MATERIAL CERTIFICATES IN LIEU OF MATERIAL LABORATORY TEST REPORTS WHEN PERMITTED BY ARCHITECT. MATERIAL CERTIFICATES SHALL BE SIGNED BY MANUFACTURER AND CONTRACTOR, CERTIFYING THAT EACH MATERIAL ITEM COMPLIES WITH OR EXCEEDS SPECIFIED REQUIREMENTS. PROVIDE CERTIFICATION FROM ADMIXTURE MANUFACTURERS THAT CHLORIDE CONTENT COMPLIES WITH SPECIFICATION REQUIREMENTS.

1.4 QUALITY ASSURANCE

- A. CODES AND STANDARDS: COMPLY WITH PROVISIONS OF THE FOLLOWING CODES, SPECIFICATIONS, AND STANDARDS, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE SHOWN OR SPECIFIED:

1. AMERICAN CONCRETE INSTITUTE (ACI) 301-10, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."
 2. ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," CURRENT EDITION.
 3. CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE," CURRENT EDITION.
- B. CONCRETE TESTING SERVICE: THE OWNER WILL EMPLOY A TESTING AGENCY TO PERFORM MATERIAL EVALUATION TESTS AND TO REVIEW CONCRETE MIX DESIGNS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.
1. THE TESTING LAB SHALL BE IN COMPLIANCE WITH ASTM E 329 "STANDARD SPECIFICATION FOR AGENCIES ENGAGED IN CONSTRUCTION INSPECTION AND/OR TESTING" AND ASTM C 1077 "PRACTICE FOR LABORATORIES TESTING CONCRETE AND CONCRETE AGGREGATES FOR USE IN CONSTRUCTION AND CRITERIA FOR LABORATORY EVALUATION".
 2. THE TESTING LABORATORY SHALL SUBMIT A CERTIFICATE OF ACCREDITATION AND THE SCOPE OF ACCREDITATION THAT INDICATES COMPLIANCE WITH THE ABOVE STANDARDS.
- C. MATERIALS AND INSTALLED WORK MAY REQUIRE TESTING AND RETESTING AT ANY TIME DURING PROGRESS OF WORK. RETESTING OF REJECTED MATERIALS FOR INSTALLED WORK SHALL BE DONE AT CONTRACTOR'S EXPENSE.

PART 2 – PRODUCTS

2.1 FORM MATERIALS

- A. FORMS FOR EXPOSED FINISH CONCRETE: PLYWOOD, METAL, METAL-FRAMED PLYWOOD FACED, OR OTHER ACCEPTABLE PANEL-TYPE MATERIALS TO PROVIDE CONTINUOUS, STRAIGHT, SMOOTH, EXPOSED SURFACES. FURNISH IN LARGEST PRACTICABLE SIZES TO MINIMIZE NUMBER OF JOINTS AND TO CONFORM TO JOINT SYSTEM SHOWN ON DRAWINGS.
- B. FORMS FOR UNEXPOSED FINISH CONCRETE: PLYWOOD, LUMBER, METAL, OR ANOTHER ACCEPTABLE MATERIAL. PROVIDE LUMBER DRESSED ON AT LEAST TWO EDGES AND ONE SIDE FOR TIGHT FIT.
- C. FORM RELEASE AGENT: PROVIDE COMMERCIAL FORMULATION FORM RELEASE AGENT WITH A MAXIMUM OF 350 G/L VOLATILE ORGANIC COMPOUNDS (VOCs) THAT WILL NOT BOND WITH, STAIN, OR ADVERSELY AFFECT CONCRETE SURFACES AND WILL NOT IMPAIR SUBSEQUENT TREATMENTS OF CONCRETE SURFACES.
- D. FORM TIES: FACTORY-FABRICATED, ADJUSTABLE-LENGTH, REMOVABLE OR SNAP-OFF METAL FORM TIES DESIGNED TO PREVENT FORM DEFLECTION AND TO PREVENT SPALLING OF CONCRETE UPON REMOVAL. PROVIDE UNITS THAT WILL LEAVE NO METAL CLOSER THAN 1-½ INCHES TO THE PLANE OF THE EXPOSED CONCRETE SURFACE.

2.2 REINFORCING MATERIALS

- A. REINFORCING BARS: ASTM A 615, GRADE 60.
- B. STEEL WIRE: ASTM A 82, PLAIN, COLD-DRAWN STEEL.
- C. WELDED WIRE FABRIC: ASTM A 1064, WELDED STEEL WIRE FABRIC. FLAT SHEETS ONLY. ROLLS ARE NOT PERMITTED.
- D. DEFORMED-STEEL WELDED WIRE FABRIC: ASTM A 497.
- E. SUPPORTS FOR REINFORCEMENT: BOLSTERS, CHAIRS, SPACERS, AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCING BARS AND WELDED WIRE FABRIC IN PLACE. USE WIRE BAR-TYPE SUPPORTS COMPLYING WITH CRSI SPECIFICATIONS.
1. FOR SLABS-ON-GRADE, USE SUPPORTS WITH SAND PLATES OR HORIZONTAL RUNNERS WHERE BASE MATERIAL WILL NOT SUPPORT CHAIR LEGS.
 2. FOR EXPOSED-TO-VIEW CONCRETE SURFACES WHERE LEGS OF SUPPORTS ARE IN CONTACT WITH FORMS, PROVIDE SUPPORTS WITH LEGS THAT ARE PROTECTED BY PLASTIC (CRSI, CLASS 1).
- 2.3 CONCRETE MATERIALS
- A. PORTLAND CEMENT: ASTM C 150, TYPE I OR II.
1. USE ONE BRAND OF CEMENT THROUGHOUT PROJECT UNLESS OTHERWISE ACCEPTABLE TO ARCHITECT.
- B. NORMAL-WEIGHT AGGREGATES: ASTM C 33 AND AS SPECIFIED. PROVIDE AGGREGATES FROM A SINGLE SOURCE FOR EXPOSED CONCRETE.
1. FOR EXPOSED EXTERIOR SURFACES, DO NOT USE FINE OR COARSE AGGREGATES THAT CONTAIN SUBSTANCES THAT CAUSE SPALLING.
 2. LOCAL AGGREGATES NOT COMPLYING WITH ASTM C 33 THAT HAVE BEEN SHOWN TO PRODUCE CONCRETE OF ADEQUATE STRENGTH AND DURABILITY BY SPECIAL TESTS OR ACTUAL SERVICE MAY BE USED WHEN ACCEPTABLE TO ARCHITECT.
- C. WATER: POTABLE.
- D. ADMIXTURES, GENERAL: PROVIDE CONCRETE ADMIXTURES THAT CONTAIN NOT MORE THAN 0.1 PERCENT CHLORIDE IONS.
- E. AIR-ENTRAINING ADMIXTURE: ASTM C 260, CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER REQUIRED ADMIXTURES.
- F. WATER-REDUCING ADMIXTURE: ASTM C 494, TYPE A.
- G. HIGH-RANGE WATER-REDUCING ADMIXTURE: ASTM C 494, TYPE APPROVED BY ENGINEER.
- H. WATER-REDUCING, ACCELERATING ADMIXTURE: ASTM C 494, TYPE C OR E.
- I. WATER-REDUCING, RETARDING ADMIXTURE: ASTM C 494, TYPE D.

2.4 RELATED MATERIALS

- A. VAPOR RETARDER: PROVIDE VAPOR RETARDER CONFORMING TO ASTM E1745, CLASS A, 15 MIL., WITH A PERMEANCE OF LESS THAN 0.01 PERMS. INCLUDE MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE TAPE. MATERIAL SHALL BE BY STEGO WRAP, RAVEN INDUSTRIES, W.R. MEADOWS, OR APPROVED EQUAL.
- B. ABSORPTIVE COVER: BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING APPROXIMATELY 9 OZ. PER SQ. YD., COMPLYING WITH ASHTO M 182, CLASS 2.
- C. MOISTURE-RETAINING COVER: ONE OF THE FOLLOWING, COMPLYING WITH ASTM C 171.
1. WATERPROOF PAPER.
 2. POLYETHYLENE FILM.
 3. POLYETHYLENE-COATED BURLAP.
- D. LIQUID MEMBRANE-FORMING CURING COMPOUND: LIQUID-TYPE MEMBRANE-FORMING CURING COMPOUND COMPLYING WITH ASTM C 309, TYPE I, CLASS A. MOISTURE LOSS NOT MORE THAN 0.55 KG/SQ. METER WHEN APPLIED AT 200 SQ. FT./GAL.
1. PROVIDE MATERIAL THAT HAS A MAXIMUM VOLATILE ORGANIC COMPOUND (VOC) RATING OF 350 G PER LITER.
- E. WATER-BASED ACRYLIC MEMBRANE CURING COMPOUND: ASTM C 309, TYPE I, CLASS B.
- F. EVAPORATION CONTROL: MONOMOLECULAR FILM-FORMING COMPOUND APPLIED TO EXPOSED CONCRETE SLAB SURFACES FOR TEMPORARY PROTECTION FROM RAPID MOISTURE LOSS.
- G. UNDERLAYMENT COMPOUND: FREE-FLOWING, SELF-LEVELING, PUMPABLE, CEMENT-BASED COMPOUND FOR APPLICATIONS FROM 1 INCH THICK TO FEATHERED EDGES.
- H. BONDING AGENT: POLYVINYL ACETATE OR ACRYLIC BASE.
- I. EPOXY ADHESIVE: ASTM C 881, TWO-COMPONENT MATERIAL SUITABLE FOR USE ON DRY OR DAMP SURFACES. PROVIDE MATERIAL TYPE, GRADE, AND CLASS TO SUIT PROJECT REQUIREMENTS.
- 2.5 PROPORTIONING AND DESIGNING MIXES
- A. PREPARE DESIGN MIXES FOR EACH TYPE AND STRENGTH OF CONCRETE BY EITHER LABORATORY TRIAL BATCH OR FIELD EXPERIENCE METHODS AS SPECIFIED IN ACI 301. FOR THE TRIAL BATCH METHOD, USE AN INDEPENDENT TESTING AGENCY ACCEPTABLE TO ARCHITECT FOR PREPARING AND REPORTING PROPOSED MIX DESIGNS. THE INDEPENDENT TESTING AGENCY SHALL REVIEW AND APPROVE THE PROPOSED MIX DESIGN.
- B. SUBMIT WRITTEN REPORTS TO ARCHITECT OF EACH PROPOSED MIX FOR EACH CLASS OF CONCRETE AT LEAST 15 DAYS PRIOR TO START OF WORK. DO NOT BEGIN CONCRETE PRODUCTION UNTIL PROPOSED MIX DESIGNS HAVE BEEN SUBMITTED TO ARCHITECT.
- C. DESIGN MIXES TO PROVIDE NORMAL WEIGHT CONCRETE OR LIGHT WEIGHT CONCRETE WITH THE 28-DAY COMPRESSIVE STRENGTH AS INDICATED ON DRAWINGS.
- D. SLUMP LIMITS: PROPORTION AND DESIGN MIXES TO RESULT IN CONCRETE SLUMP AT POINT OF PLACEMENT AS FOLLOWS:
1. NOT MORE THAN 4 INCHES.
- E. ADJUSTMENT TO CONCRETE MIXES: MIX DESIGN ADJUSTMENTS MAY BE REQUESTED BY CONTRACTOR WHEN CHARACTERISTICS OF MATERIALS, JOB CONDITIONS, WEATHER, TEST RESULTS, OR OTHER CIRCUMSTANCES WARRANT, AS ACCEPTED BY ARCHITECT. LABORATORY TEST DATA FOR REVISED MIX DESIGNS, KEYWAYS, RESULTS MUST BE SUBMITTED TO AND ACCEPTED BY ARCHITECT BEFORE USING IN WORK.
- 2.6 ADMIXTURES
- A. USE WATER-REDUCING ADMIXTURE OR HIGH-RANGE WATER-REDUCING ADMIXTURE (SUPERPLASTICIZER) IN CONCRETE, AS REQUIRED, FOR PLACEMENT AND WORKABILITY.
- B. USE ACCELERATING ADMIXTURE IN CONCRETE SLABS PLACED AT AMBIENT TEMPERATURES BELOW 40 DEG F (10 DEG C) AND FALLING.
- 2.7 CONCRETE MIXING
- A. READY-MIXED CONCRETE: COMPLY WITH REQUIREMENTS OF ASTM C 94, AND AS SPECIFIED.
1. WHEN AIR TEMPERATURE IS BETWEEN 85 DEG F (30 DEG C) AND 90 DEG F (32 DEG C), REDUCE MIXING AND DELIVERY TIME FROM 1-½ HOURS TO 75 MINUTES, AND WHEN AIR TEMPERATURE IS ABOVE 90 DEG F (32 DEG C), REDUCE MIXING AND DELIVERY TIME TO 60 MINUTES. ICE CAN BE ADDED TO CONCRETE SO THAT DELIVERY TIME CAN REMAIN AT 1-½ HOURS.

PART 3 – EXECUTION

3.1 GENERAL

- A. COORDINATE THE INSTALLATION OF JOINT MATERIALS, VAPOR RETARDER/BARRIER, AND OTHER RELATED MATERIALS WITH PLACEMENT OF FORMS AND REINFORCING STEEL.

3.2 FORMS

- A. GENERAL: DESIGN, ERECT, SUPPORT, BRACE, AND MAINTAIN FORMWORK TO SUPPORT VERTICAL, LATERAL, STATIC, AND DYNAMIC LOADS THAT MIGHT BE APPLIED UNTIL CONCRETE STRUCTURE CAN SUPPORT SUCH LOADS. CONSTRUCT FORMWORK SO CONCRETE MEMBERS AND STRUCTURES ARE OF CORRECT SIZE, SHAPE, ALIGNMENT, ELEVATION, AND POSITION. MAINTAIN FORMWORK CONSTRUCTION TOLERANCES AND SURFACE IRREGULARITIES COMPLYING WITH THE FOLLOWING ACI 347 LIMITS:
1. PROVIDE CLASS A TOLERANCES FOR CONCRETE SURFACES EXPOSED TO VIEW.
 2. PROVIDE CLASS C TOLERANCES FOR OTHER CONCRETE SURFACES.
- B. CONSTRUCT FORMS TO SIZES, SHAPES, LINES, AND DIMENSIONS SHOWN AND TO OBTAIN ACCURATE ALIGNMENT, LOCATION, GRADES, LEVEL, AND PLUMB WORK IN FINISHED STRUCTURES. PROVIDE FOR OPENINGS, OFFSETS, SNAGS, KEYWAYS, RECESSES, MOLDINGS, RUSTICATIONS, REGLETS, CHAMFERS, BLOCKING, SCREEDS, BULKHEADS, ANCHORAGES AND INSERTS, AND OTHER FEATURES REQUIRED IN THE WORK. USE SELECTED MATERIALS TO OBTAIN REQUIRED FINISHES. SOLIDLY BUTT JOINTS AND PROVIDE BACKUP AT JOINTS TO PREVENT CEMENT PASTE FROM LEAKING.
- C. FABRICATE FORMS FOR EASY REMOVAL WITHOUT HAMMERING OR PRYING AGAINST CONCRETE SURFACES. PROVIDE CRUSH PLATES OR WRECKING PLATES WHERE STRIPPING MAY DAMAGE CAST CONCRETE SURFACES. PROVIDE TOP FORMS FOR INCLINED SURFACES WHERE SLOPE IS TOO STEEP TO PLACE CONCRETE WITH BOTTOM FORMS ONLY. KEF WOOD INSERTS FOR FORMING KEYWAYS, REGLETS, RECESSES, AND THE LIKE FOR EASY REMOVAL.
- D. FORMWORK FOR GRADE BEAMS AND PILE CAPS: PROVIDE VERTICAL FORMWORK AT THE PERIMETER OF GRADE BEAMS AND PILE CAPS. CONTRACTOR SHALL INSTALL FORMWORK AS DESCRIBED HERE-IN TO ENSURE PLUMBNESS OF CAST VERTICAL SURFACES.
- E. PROVIDE TEMPORARY OPENINGS FOR CLEAN-OUTS AND INSPECTIONS WHERE INTERIOR AREA OF FORMWORK IS INACCESSIBLE BEFORE AND DURING CONCRETE PLACEMENT. SECURELY BRACE TEMPORARY OPENINGS AND SET TIGHTLY TO FORMS TO PREVENT LOSING CONCRETE MORTAR. LOCATE TEMPORARY OPENINGS IN FORMS AT INCONSPICUOUS LOCATIONS.
- F. CHAMFER EXPOSED CORNERS AND EDGES AS INDICATED, USING WOOD, METAL, PVC, OR RUBBER CHAMFER STRIPS FABRICATED TO PRODUCE UNIFORM SMOOTH LINES AND TIGHT EDGE JOINTS.
- G. PROVISIONS FOR OTHER TRADES: PROVIDE OPENINGS IN CONCRETE FORMWORK TO ACCOMMODATE WORK OF OTHER TRADES. DETERMINE SIZE AND LOCATION OF OPENINGS, RECESSES, AND CHASES FROM TRADES PROVIDING SUCH ITEMS. ACCURATELY PLACE AND SECURELY SUPPORT ITEMS BUILT INTO FORMS.
- H. CLEANING AND TIGHTENING: THOROUGHLY CLEAN FORMS AND ADJACENT SURFACES TO RECEIVE CONCRETE. REMOVE CHIPS, WOOD, SAWDUST, DIRT, OR OTHER DEBRIS JUST BEFORE PLACING CONCRETE. RETIGHTEN FORMS AND BRACING BEFORE PLACING CONCRETE, AS REQUIRED, TO PREVENT MORTAR LEAKS AND MAINTAIN PROPER ALIGNMENT.

3.3 VAPOR RETARDER/BARRIER INSTALLATION

- A. INSTALL VAPOR BARRIER IN ACCORDANCE ASTM E1643.
1. UNROLL VAPOR BARRIER WITH THE LONGEST DIMENSION PARALLEL WITH THE DIRECTION OF THE CONCRETE PLACEMENT AND FACE LAPS AWAY FROM THE EXPECTED DIRECTION OF THE PLACEMENT WHENEVER POSSIBLE.
 2. VAPOR BARRIER SHALL BE NEATLY PLACED. FOLLOW THE PROFILE OF THE BOTTOM OF THE SLAB AND BEAMS, AND BE IN INTIMATE CONTACT WITH THE FILL. STOP AT IMPEDIMENTS SUCH AS PILES, DOWELS, AND WATERSTOPS.

3. IF ARRANGING PLACEMENT OF VAPOR BARRIER PERIMETER/EDGE SEALS PRIOR TO PLACEMENT OF CONCRETE, SEAL VAPOR BARRIER TO SCHEDULED WET-CAST SLAB PERIMETER/EDGE USING MANUFACTURER'S RECOMMENDED ADHESIVE PRODUCT DESIGNED FOR THIS USE, AND REMOVE DIRT, DEBRIS, AND MUD FROM THIS ADHESIVE PRODUCT PRIOR TO CONCRETE PLACEMENT.
4. SEAL VAPOR BARRIER TO FOOTING/GRADE BEAM WITH DOUBLE SIDED TAPE, TERMINATION BAR, OR BOTH.
5. OVERLAP JOINTS 6 INCHES AND SEAL WITH MANUFACTURER'S TAPE.
6. APPLY TAPE TO A CLEAN AND DRY VAPOR BARRIER.
7. SEAL ALL PENETRATIONS (INCLUDING PIPES) PER MANUFACTURER'S INSTRUCTIONS.
8. NO PENETRATION OF THE VAPOR BARRIER IS ALLOWED EXCEPT FOR REINFORCING STEEL AND PERMANENT UTILITIES.
9. REPAIR DAMAGED AREAS BY CUTTING PATCHES OF VAPOR BARRIER, OVERLAPPING DAMAGED AREA 6 INCHES AND TAPING ALL SIDES WITH TAPE.

3.4 PLACING REINFORCEMENT

- A. GENERAL: COMPLY WITH CONCRETE REINFORCING STEEL INSTITUTE'S RECOMMENDED PRACTICE FOR "PLACING REINFORCING BARS," FOR DETAILS AND METHODS OF REINFORCEMENT PLACEMENT AND SUPPORTS AND AS SPECIFIED.
1. AVOIDING CUTTING OR PUNCTURING VAPOR RETARDER/BARRIER DURING REINFORCEMENT PLACEMENT AND CONCRETING OPERATIONS. REPAIR DAMAGES BEFORE PLACING CONCRETE.
 2. CLEAN REINFORCEMENT OF LOOSE RUST AND MILL SCALE, EARTH, ICE, AND OTHER MATERIALS THAT REDUCE OR DESTROY BOND WITH CONCRETE.
 3. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. LOCATE AND SUPPORT REINFORCING BY METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS, AND HANGERS, AS APPROVED BY ARCHITECT.
 4. PLACE REINFORCEMENT TO MAINTAIN MINIMUM COVERAGES AS INDICATED FOR CONCRETE PROTECTION, ARRANGE, SPACE, AND SECURE THE BARS AND BAR SUPPORTS TO HOLD REINFORCEMENT IN POSITION DURING CONCRETE PLACEMENT OPERATIONS. SET WIRE TIES SO ENDS ARE DIRECTED INTO CONCRETE, NOT TOWARD EXPOSED CONCRETE SURFACES.
 5. INSTALL WELDED WIRE FABRIC IN LENGTHS AS LONG AS PRACTICABLE. LAP ADJOINING PIECES AT LEAST ONE FULL MESH AND LAP SPLICES WITH WIRE. OFFSET LAPS OF ADJOINING WIDTHS TO PREVENT CONTINUOUS LAPS IN EITHER DIRECTION.
 6. WHERE NOT SPECIFICALLY DETAILED ON THE DRAWINGS, SUPPORT SLAB TOP REINFORCING BARS WITH CONTINUOUS #4 REINFORCING BARS. SLAB TOP REINFORCING BARS LESS THAN 6 FEET IN LENGTH SHALL HAVE TWO SUPPORT BARS AND SLAB TOP REINFORCING BARS GREATER THAN 6 FEET IN LENGTH SHALL HAVE SUPPORT BARS SPACED AT NO MORE THAN 3'-0" O.C. THESE BARS SHALL BE EQUALLY SPACED ALONG THE LENGTH OF THE SLAB TOP REINFORCING BARS.

3.5 JOINTS

- A. CONSTRUCTION JOINTS: LOCATE AND INSTALL CONSTRUCTION JOINTS SO THEY DO NOT IMPAIR STRENGTH OR APPEARANCE OF THE STRUCTURE, AS ACCEPTABLE TO ARCHITECT.
- B. PROVIDE KEYWAYS AS INDICATED ON DRAWINGS OR AT LEAST 1-1/2 INCHES DEEP IN CONSTRUCTION JOINTS IN WALLS AND SLABS AND BETWEEN WALLS AND FOOTINGS. BULKHEADS DESIGNED AND ACCEPTED FOR THIS PURPOSE MAY BE USED FOR SLABS.
- C. PROVIDE WATERSTOPS AT ALL CONSTRUCTION JOINTS IN AREAS INDICATED ON THE DRAWINGS.
- D. PLACE CONSTRUCTION JOINTS PERPENDICULAR TO MAIN REINFORCEMENT. CONTINUE REINFORCEMENT ACROSS CONSTRUCTION JOINTS EXCEPT AS INDICATED OTHERWISE. DO NOT CONTINUE REINFORCEMENT THROUGH SIDES OF STRIP PLACEMENTS.
- E. USE BONDING AGENT ON EXISTING CONCRETE SURFACES THAT WILL BE JOINED WITH FRESH CONCRETE.
- F. ISOLATION JOINTS IN SLABS-ON-GRADE: CONSTRUCT ISOLATION JOINTS IN SLABS-ON-GRADE AT POINTS OF CONTACT BETWEEN SLABS-ON-GRADE AND VERTICAL SURFACES, SUCH AS COLUMN PEDESTALS, FOUNDATION WALLS, GRADE BEAMS, AND OTHER LOCATIONS, AS INDICATED.
1. JOINT FILLERS AND SEALANTS ARE SPECIFIED IN DIVISION 7 SECTION "JOINT SEALANTS."

3.6 INSTALLING EMBEDDED ITEMS

- A. GENERAL: SET AND BUILD INTO FORMWORK ANCHORAGE DEVICES AND OTHER EMBEDDED ITEMS REQUIRED FOR OTHER WORK THAT IS ATTACHED TO OR SUPPORTED BY CAST-IN-PLACE CONCRETE. USE SETTING DRAWINGS, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS PROVIDED BY SUPPLIERS OF ITEMS TO BE ATTACHED.
- B. FORMS FOR SLABS: SET EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED STRIPS FOR SLABS TO ACHIEVE REQUIRED ELEVATIONS AND CONTOURS IN FINISHED SURFACES. PROVIDE AND SECURE UNITS TO SUPPORT SCREED STRIPS USING STRIKE-OFF TEMPLETS OR COMPACTING-TYPE SCREEDS.

3.7 PREPARING FORM SURFACES

- A. GENERAL: COAT CONTACT SURFACES OF FORMS WITH AN APPROVED, NONRESIDUAL, LOW-VOC, FORM-COATING COMPOUND BEFORE PLACING REINFORCEMENT.
1. DO NOT ALLOW EXCESS FORM-COATING MATERIAL TO ACCUMULATE IN FORMS OR COME INTO CONTACT WITH IN-PLACE CONCRETE SURFACES AGAINST WHICH FRESH CONCRETE WILL BE PLACED. APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
 2. COAT STEEL FORMS WITH A NONSTAINING, RUST-PREVENTATIVE MATERIAL. RUST-STAINED STEEL FORMWORK IS NOT ACCEPTABLE.

3.8 CONCRETE PLACEMENT

- A. INSPECTION: BEFORE PLACING CONCRETE, INSPECT AND COMPLETE FORMWORK INSTALLATION, REINFORCING STEEL, AND ITEMS TO BE EMBEDDED OR CAST IN. NOTIFY OTHER TRADES TO PERMIT INSTALLATION OF THEIR WORK.
- B. GENERAL: COMPLY WITH ACI 304, "GUIDE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE," AND AS SPECIFIED.
1. DEPOSIT CONCRETE CONTINUOUSLY OR IN LAYERS OF SUCH THICKNESS THAT NO NEW CONCRETE WILL BE PLACED ON CONCRETE THAT HAS HARDENED SUFFICIENTLY TO CAUSE SEAMS OR PLANES OF WEAKNESS. IF A SECTION CANNOT BE PLACED CONTINUOUSLY, PROVIDE CONSTRUCTION JOINTS AS SPECIFIED. DEPOSIT CONCRETE TO AVOID SEGREGATION AT ITS FINAL LOCATION.
 2. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE INSIDE FORMS. INSERT AND WITHDRAW VIBRATORS VERTICALLY AT UNIFORMLY SPACED LOCATIONS NO FARTHER THAN THE VISIBLE EFFECTIVENESS OF THE MACHINE. PLACE VIBRATORS TO RAPIDLY PENETRATE PLACED LAYER AND AT LEAST 6 INCHES INTO PRECEDING LAYER. DO NOT INSERT VIBRATORS INTO LOWER LAYERS OF CONCRETE THAT HAVE BEGUN TO SET. AT EACH INSERTION, LIMIT DURATION OF VIBRATION TO THE TIME NECESSARY TO CONSOLIDATE CONCRETE AND COMPLETE EMBEDMENT OF REINFORCEMENT AND OTHER EMBEDDED ITEMS WITHOUT CAUSING MIX TO SEGREGATE.
- C. PLACING CONCRETE IN FORMS: DEPOSIT CONCRETE IN FORMS IN HORIZONTAL LAYERS NO DEEPER THAN 24 INCHES AND IN A MANNER TO AVOID INCLINED CONSTRUCTION JOINTS. WHERE PLACEMENT CONSISTS OF SEVERAL LAYERS, PLACE EACH LAYER WHILE PRECEDING LAYER IS STILL PLASTIC TO AVOID COLD JOINTS.
1. CONSOLIDATE PLACED CONCRETE BY MECHANICAL VIBRATING EQUIPMENT SUPPLEMENTED BY HAND-SPADING, RODDING, OR TAMPING. USE EQUIPMENT AND PROCEDURES FOR CONSOLIDATION OF CONCRETE COMPLYING WITH ACI 309.
 2. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE INSIDE FORMS. INSERT AND WITHDRAW VIBRATORS VERTICALLY AT UNIFORMLY SPACED LOCATIONS NO FARTHER THAN THE VISIBLE EFFECTIVENESS OF THE MACHINE. PLACE VIBRATORS TO RAPIDLY PENETRATE PLACED LAYER AND AT LEAST 6 INCHES INTO PRECEDING LAYER. DO NOT INSERT VIBRATORS INTO LOWER LAYERS OF CONCRETE THAT HAVE BEGUN TO SET. AT EACH INSERTION, LIMIT DURATION OF VIBRATION TO THE TIME NECESSARY TO CONSOLIDATE CONCRETE AND COMPLETE EMBEDMENT OF REINFORCEMENT AND OTHER EMBEDDED ITEMS WITHOUT CAUSING MIX TO SEGREGATE.
- D. PLACING CONCRETE SLABS: DEPOSIT AND CONSOLIDATE CONCRETE SLABS IN A CONTINUOUS OPERATION, WITHIN LIMITS OF CONSTRUCTION JOINTS, UNTIL COMPLETING PLACEMENT OF A PANEL OR SECTION.
1. CONSOLIDATE CONCRETE DURING PLACEMENT OPERATIONS SO THAT CONCRETE IS THOROUGHLY WORKED AROUND REINFORCEMENT, OTHER EMBEDDED ITEMS AND INTO CORNERS.
 2. BRING SLAB SURFACES TO CORRECT LEVEL WITH A STRAIGHTEDGE AND STRIKE OFF. USE BULL FLOATS OR DARBIES TO SMOOTH SURFACE FREE OF HUMPS OR FOLLOWS. DO NOT DISTURB SLAB SURFACES PRIOR TO BEGINNING FINISHING OPERATIONS.
 3. MAINTAIN REINFORCING IN PROPER POSITION ON CHAIRS DURING CONCRETE PLACEMENT.
 4. FLOOR SLAB TOLERANCE: FLOOR FINISH TOLERANCES OF FLOOR SLABS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFIED FINISH FLOOR MANUFACTURERS, AND IN ACCORDANCE WITH ACI 117 AND ASTM E 1155 STANDARD METHOD FOR DETERMINING FLOOR FLATNESS AND LEVELNESS USING THE F-NUMBER SYSTEM. FINISH FLOOR TOLERANCES SHALL MEET THE REQUIREMENTS OF "FLAT" AS DESCRIBED IN ACI 117, UNLESS A MORE STRINGENT TOLERANCE IS REQUIRED BY A FINISH FLOOR INSTALLATION.

- E. COLD-WEATHER PLACEMENT: COMPLY WITH PROVISIONS OF ACI 306 AND AS FOLLOWS. PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH THAT COULD BE CAUSED BY FROST, FREEZING ACTIONS, OR LOW TEMPERATURES.
- F. HOT-WEATHER PLACEMENT: WHEN HOT WEATHER CONDITIONS EXIST THAT WOULD IMPAIR QUALITY AND STRENGTH OF CONCRETE, PLACE CONCRETE COMPLYING WITH ACI 305 AND AS SPECIFIED.
1. USE WATER-REDUCING RETARDING ADMIXTURE WHEN REQUIRED BY HIGH TEMPERATURES, LOW HUMIDITY, OR OTHER ADVERSE PLACING CONDITIONS, AS ACCEPTABLE TO ARCHITECT.
- 3.9 FINISHING FORMED SURFACES
- A. ROUGH-FORMED FINISH: PROVIDE A ROUGH-FORMED FINISH ON FORMED CONCRETE SURFACES NOT EXPOSED TO VIEW IN THE FINISHED WORK OR CONCEALED BY OTHER CONSTRUCTION. THIS IS THE CONCRETE SURFACE HAVING TEXTURE IMPARTED BY FORM-FACING MATERIAL USED, WITH THE HOLES AND DEFECTIVE AREAS REPAIRED AND PATCHED, AND FINIS AND OTHER PROJECTIONS EXCEEDING 1/4 INCH IN HEIGHT RUBBED DOWN OR CHIPPED OFF.
- B. SMOOTH-FORMED FINISH: PROVIDE A SMOOTH-FORMED FINISH ON FORMED CONCRETE SURFACES TO BE EXPOSED TO VIEW, COVERED WITH A COATING MATERIAL APPLIED DIRECTLY TO CONCRETE, OR A COVERING MATERIAL APPLIED DIRECTLY TO CONCRETE, SUCH AS WATERPROOFING, DAMPROOFING, VENEER PLASTER, OR ANOTHER SIMILAR SYSTEM. THIS IS AN AS-CAST CONCRETE SURFACE OBTAINED WITH SELECTED FORM-FACING MATERIAL, ARRANGED IN AN ORDERLY AND SYMMETRICAL MANNER WITH A MINIMUM OF SEAMS. REPAIR AND PATCH DEFECTIVE AREAS WITH FINIS AND OTHER PROJECTIONS. THESE PROJECTIONS SHALL BE COMPLETELY REMOVED AND SMOOTHED. REPAIR ALL OTHER SURFACE DEFECTS IN ACCORDANCE WITH CONCRETE SURFACE REPAIRS, AS SPECIFIED HEREIN.
- C. RELATED UNFORMED SURFACES: AT TOPS OF WALLS, HORIZONTAL OFFSETS, AND SIMILAR UNFORMED SURFACES ADJACENT TO FORMED SURFACES, STRIKE-OFF SMOOTH AND FINISH WITH A TEXTURE MATCHING ADJACENT FORMED SURFACES.
- D. APPLICATION OF ACRYL COLOR STAIN TO CONCRETE SURFACE: REFER TO MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS. COORDINATE APPROVAL OF APPLIED PRODUCT APPEARANCE WITH THE ARCHITECT DURING THE MOCK-UP PHASE.

3.10 MONOLITHIC SLAB FINISHES

- A. SCRATCH FINISH: APPLY SCRATCH FINISH TO MONOLITHIC SLAB SURFACES TO RECEIVE CONCRETE FLOOR TOPPING OR MORTAR SETTING BEDS FOR TILE, PORTLAND CEMENT TERRAZZO, AND OTHER BONDED APPLY CEMENTITIOUS FINISH FLOORING MATERIAL, AND WHERE INDICATED.
- B. FLOAT FINISH: APPLY FLOAT FINISH TO MONOLITHIC SLAB SURFACES TO RECEIVE TROWEL FINISH AND OTHER FINISHES AS SPECIFIED; SLAB SURFACES TO BE COVERED WITH MEMBRANE OR ELASTIC WATERPROOFING, MEMBRANE OR ELASTIC ROOFING, OR SAND-BED TERRAZZO; AND WHERE INDICATED.
1. AFTER SCREEDING, CONSOLIDATING, AND LEVELING CONCRETE SLABS, DO NOT WORK SURFACE UNTIL READY FOR FLOATING. BEGIN FLOATING, USING FLOAT BLADES OR FLOAT SHOES ONLY, WHEN SURFACE WATER HAS DISAPPEARED, OR WHEN CONCRETE HAS STIFFENED SUFFICIENTLY TO PERMIT OPERATION OF POWER-DRIVEN FLOATS, OR BOTH. CONSOLIDATE SURFACE WITH POWER-DRIVEN FLOATS OR BY HAND-FLOATING IF AREA IS SMALL OR INACCESSIBLE TO POWER UNITS. UNIFORMLY SLOPE SURFACES TO DRAINS, IMMEDIATELY AFTER LEVELING, REFLOAT SURFACE TO A UNIFORM, SMOOTH, GRANULAR TEXTURE.
- C. TROWEL FINISH: APPLY A TROWEL FINISH TO MONOLITHIC SLAB SURFACES EXPOSED TO VIEW AND SLAB SURFACES TO BE COVERED WITH RESILIENT FLOORING, CARPET, CERAMIC OR QUARRY TILE, PAINT, OR ANOTHER THIN FILM-FINISH COATING SYSTEM.
1. AFTER FLOATING, BEGIN FIRST TROWEL FINISH OPERATION USING A POWER-DRIVEN TROWEL. BEGIN FINAL TROWELING WHEN SURFACE PRODUCES A RINGING SOUND AS TROWEL IS MOVED OVER SURFACE. CONSOLIDATE CONCRETE SURFACE BY FINAL HAND-TROWELING OPERATION, FREE OF TROWEL MARKS, UNIFORM IN TEXTURE AND APPEARANCE.
- D. TROWEL AND FINE BROOM FINISH: WHERE CERAMIC OR QUARRY TILE IS TO BE INSTALLED WITH THIN-SET MORTAR, APPLY A TROWEL FINISH AS SPECIFIED, THEN IMMEDIATELY FOLLOW BY SLIGHTLY SCARIFYING THE SURFACE WITH A FINE BROOM.
- E. NONSLIP BROOM FINISH: APPLY A NONSLIP BROOM FINISH TO EXTERIOR CONCRETE PLATFORMS, STEPS, AND RAMPS, AND ELSEWHERE AS INDICATED.
1. IMMEDIATELY AFTER FLOAT FINISHING, SLIGHTLY ROUGHEN CONCRETE SURFACE BY BROOMING WITH FIBER-BRISTLE BROOM PERPENDICULAR TO MAIN TRAFFIC ROUTE. COORDINATE REQUIRED FINAL FINISH WITH ARCHITECT BEFORE APPLICATION.

3.11 MISCELLANEOUS CONCRETE ITEMS

- F. FILLING IN: FILL IN HOLES AND OPENINGS LEFT IN CONCRETE STRUCTURES FOR PASSAGE OF WORK BY OTHER TRADES, UNLESS OTHERWISE SHOWN OR DIRECTED, AFTER WORK OF OTHER TRADES IS IN PLACE. MIX, PLACE, AND CURE CONCRETE AS SPECIFIED TO BLEND WITH IN-PLACE CONSTRUCTION. PROVIDE OTHER MISCELLANEOUS CONCRETE FILLING SHOWN OR REQUIRED TO COMPLETE WORK.
- G. CURBS: PROVIDE MONOLITHIC FINISH TO INTERIOR CURBS BY STRIPPING FORMS WHILE CONCRETE IS STILL GREEN AND BY STEEL-TROWELING SURFACES TO A HARD, DENSE FINISH WITH CORNERS, INTERSECTIONS, AND TERMINATIONS SLIGHTLY ROUNDED.
- H. EQUIPMENT BASES AND FOUNDATIONS: PROVIDE MACHINE AND EQUIPMENT BASES AND FOUNDATIONS AS SHOWN ON DRAWINGS. SET ANCHOR BOLTS FOR MACHINES AND EQUIPMENT TO TEMPLATE AT CORRECT ELEVATIONS, COMPLYING WITH DIAGRAMS OR TEMPLATES OF MANUFACTURER FURNISHING MACHINES AND EQUIPMENT.

3.12 CONCRETE CURING AND PROTECTION

- A. GENERAL: PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE OLD OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY WEATHER, PROTECT CONCRETE FROM RAPID MOISTURE LOSS BEFORE AND DURING FINISHING OPERATIONS WITH AN EVAPORATION-CONTROL MATERIAL. APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING, BUT BEFORE POWER FLOATING AND TROWELING.
1. START INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM CONCRETE SURFACE AFTER PLACING AND FINISHING. WEATHER PERMITTING, KEEP CONTINUOUSLY MOIST FOR NOT LESS THAN 7 DAYS.
 2. CURING METHODS: CURE CONCRETE BY CURING COMPOUND, BY MOIST CURING, BY MOISTURE-RETAINING COVER CURING, OR BY COMBINING THESE METHODS, AS SPECIFIED.
 3. PROVIDE MOISTURE CURING BY THE FOLLOWING METHODS:
 - A. KEEP CONCRETE SURFACE CONTINUOUSLY WET BY COVERING WITH WATER.
 - B. USE CONTINUOUS WATER-FOG SPRAY.
 - C. COVER CONCRETE SURFACE WITH SPECIFIED ABSORPTIVE COVER, THOROUGHLY SATURATE COVER WITH WATER, AND KEEP CONTINUOUSLY WET. PLACE ABSORPTIVE COVER TO PROVIDE COVERAGE OF CONCRETE SURFACES AND EDGES, WITH A 4-INCH LAP OVER ADJACENT ABSORPTIVE COVERS.
 2. PROVIDE MOISTURE-RETAINING COVER CURING AS FOLLOWS:
 - A. COVER CONCRETE SURFACES WITH MOISTURE-RETAINING COVER FOR CURING CONCRETE, PLACED IN WIDEST PRACTICABLE WIDTH WITH SIDES AND ENDS LAPPED AT LEAST 3 INCHES AND SEALED WATERPROOF TAPE OR ADHESIVE.
 - B. IMMEDIATELY REPAIR ANY HOLES OR TEARS DURING CURING PERIOD USING COVER MATERIAL AND WATERPROOF TAPE.
 3. APPLY CURING COMPOUND ON EXPOSED INTERIOR SLABS AND ON EXTERIOR SLABS, WALKS, AND CURB AS FOLLOWS:
 - A. APPLY CURING COMPOUND TO CONCRETE SLABS AS SOON AS FINAL FINISHING OPERATIONS ARE COMPLETE (WITHIN 2 HOURS AND AFTER SURFACE WATER SHEEN HAS DISAPPEARED). APPLY UNIFORMLY IN CONTINUOUS OPERATION BY POWER SPRAY OR ROLLER ACCORDING TO MANUFACTURER'S DIRECTIONS. RECOAT AREAS SUBJECTED TO HEAVY RAINFALL WITHIN 3 HOURS AFTER INITIAL APPLICATION. MAINTAIN CONTINUITY OF COATING AND REPAIR DAMAGE DURING CURING PERIOD.
 - B. USE MEMBRANE CURING COMPOUNDS THAT WILL NOT AFFECT SURFACES TO BE COVERED WITH FINISHES APPLIED DIRECTLY TO CONCRETE.
 - C. CURING FORMED SURFACES: CURE FORMED CONCRETE SURFACES, INCLUDING UNDERSIDE OF BEAMS, SUPPORTED SLABS, AND OTHER SIMILAR SURFACES, BY MOIST CURING WITH FORMS IN PLACE FOR THE FULL CURING PERIOD OR UNTIL FORMS ARE REMOVED. IF FORMS ARE REMOVED, CONTINUE CURING BY METHODS SPECIFIED ABOVE, AS APPLICABLE.
 4. CURING UNFORMED SURFACES: CURE UNFORMED SURFACES, INCLUDING SLABS, FLOOR TOPPING, AND OTHER FLAT SURFACES, BY APPLYING THE APPROPRIATE CURING METHOD.
 1. FINAL CURE CONCRETE SURFACES TO RECEIVE FINISH FLOORING WITH A MOISTURE-RETAINING COVER, UNLESS OTHERWISE DIRECTED.

3.13 REMOVING FORMS

- A. GENERAL: FORMWORK NOT SUPPORTING WEIGHT OF CONCRETE, SUCH AS SIDES OF BEAMS, WALLS, COLUMNS, AND SIMILAR PARTS OF THE WORK, MAY BE REMOVED AFTER CUMULATIVELY CURING AT NOT LESS THAN 50 DEG F (10 DEG C) FOR 24 HOURS AFTER PLACING CONCRETE, PROVIDED CONCRETE IS SUFFICIENTLY HARD TO NOT BE DAMAGED BY FORM-REMOVAL OPERATIONS, AND PROVIDED CURING AND PROTECTION OPERATIONS ARE MAINTAINED.

- B. FORMWORK SUPPORTING WEIGHT OF CONCRETE, SUCH AS BEAM SOFFITS, JOISTS, SLABS, AND OTHER STRUCTURAL ELEMENTS UNTIL CONCRETE HAS ATTAINED AT LEAST 75 PERCENT OF DESIGN MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS. DETERMINE POTENTIAL COMPRESSIVE STRENGTH OF IN-PLACE CONCRETE BY TESTING FIELD-CURED SPECIMENS REPRESENTATIVE OF CONCRETE LOCATION OR MEMBERS.
- C. COMPLY WITH ACI 301-10, CHAPTER 2, ARTICLE 2.3.3 – RESHORING AND BACKSHORING.
- 3.14 REUSING FORM
- A. CLEAN AND REPAIR SURFACES OF FORMS TO BE REUSED IN THE WORK. SPLIT, FRAYED, DELAMINATED, OR OTHERWISE DAMAGED FORM-FACING MATERIAL WILL NOT BE ACCEPTABLE. APPLY NEW FORM-COATING COMPOUND AS SPECIFIED FOR NEW FORMWORK.
- B. WHEN FORMS ARE EXTENDED FOR SUCCESSIVE CONCRETE PLACEMENT, THOROUGHLY CLEAN SURFACES, REMOVE FINIS AND LATANCE, AND TIGHTEN FORMS TO CLOSE JOINTS. ALIGN AND SECURE JOINT TO AVOID OFFSETS. SPLIT, FRAYED, DELAMINATED, OR OTHERWISE DAMAGED FORM-FACING MATERIAL WILL NOT BE ACCEPTABLE.

3.15 CONCRETE SURFACE REPAIRS

- A. PATCHING DEFECTIVE AREAS: REPAIR AND PATCH DEFECTIVE AREAS WITH CEMENT MORTAR IMMEDIATELY AFTER REMOVING FORMS, WHEN ACCEPTABLE TO ARCHITECT.
- B. MIX DRY-PACK MORTAR, CONSISTING OF ONE PART PORTLAND CEMENT TO 2-½ PARTS FINE AGGREGATE PASSING A NO. 16 MESH SIEVE, USING ONLY ENOUGH WATER AS REQUIRED FOR HANDLING AND PLACING.
1. CUT OUT HONEYCOMBS, ROCK POCKETS, VOIDS, AND HOLES LEFT BY THE REMOVAL AND BOLTS DOWN TO SOLID CONCRETE BUT IN NO CASE TO A DEPTH LESS THAN 1 INCH. MAKE EDGES OF CUTS PERPENDICULAR TO THE CONCRETE SURFACE. THOROUGHLY CLEAN, DAMPEN WITH WATER, AND BRUSH-COAT THE AREA TO BE PATCHED WITH BONDING AGENT. PLACE PATCHING MORTAR BEFORE BONDING AGENT HAS DRIED.
 2. FOR SURFACES EXPOSED TO VIEW, BLEND WHITE PORTLAND CEMENT AND STANDARD PORTLAND CEMENT SO THAT, WHEN DRY, PATCHING MORTAR WILL MATCH SURROUNDING COLOR. PROVIDE TEST AREAS AT INCONSPICUOUS LOCATIONS TO VERIFY MIXTURE AND COLOR MATCH BEFORE PROCEEDING WITH PATCHING. COMPACT MORTAR IN PLACE AND STRIKE-OFF SLIGHTLY HIGHER THAN SURROUNDING SURFACE.
- C. REPAIRING FORMED SURFACES: REMOVE AND REPLACE CONCRETE HAVING DEFECTIVE SURFACES IF DEFECTS CANNOT BE REPAIRED TO SATISFACTION OF ARCHITECT. SURFACE DEFECTS INCLUDE COLOR AND TEXTURE IRREGULARITIES, CRACKS, SPALLS, AIR BUBBLES, HONEYCOMB, ROCK POCKETS, FINIS AND OTHER PROJECTIONS ON THE SURFACE, AND STAINS AND OTHER DISCOLORATIONS THAT CANNOT BE REMOVED BY CLEANING. FLUSH OUT FORM TIE HOLES AND FILL WITH DRY-PACK MORTAR OR PRECAST CEMENT CONE PLUGS SECURED IN PLACE WITH BONDING AGENT.

1. REPAIR CONCEALED FORMED SURFACES, WHERE POSSIBLE, CONTAINING DEFECTS THAT AFFECT THE CONCRETE'S DURABILITY. IF DEFECTS CANNOT BE REPAIRED, REMOVE AND REPLACE THE CONCRETE.
2. REPAIRING UNFORMED SURFACES: TEST UNFORMED SURFACES, SUCH AS MONOLITHIC SLABS, FOR SMOOTHNESS AND VERIFY SURFACE TOLERANCES SPECIFIED FOR EACH SURFACE AND FINISH. CORRECT LOW AND HIGH AREAS AS SPECIFIED. TEST UNFORMED SURFACES SLOPED TO DRAIN FOR TRUENESS OF SLOPE AND SMOOTHNESS BY USING A TEMPLATE HAVING THE REQUIRED SLOPE.
3. REPAIR FINISHED UNFORMED SURFACES CONTAINING DEFECTS THAT AFFECT THE CONCRETE'S DURABILITY. SURFACE DEFECTS INCLUDE CRAZING AND CRACKS IN EXCESS OF 0.01 INCH WIDE OR THAT PENETRATE TO THE REINFORCEMENT, OR COMPLETELY THROUGH NONREINFORCED SECTIONS REGARDLESS OF WIDTH, SPALLING, POPOUTS, HONEYCOMBS, ROCK POCK

