

PICKLEBALL COURT LIGHTING

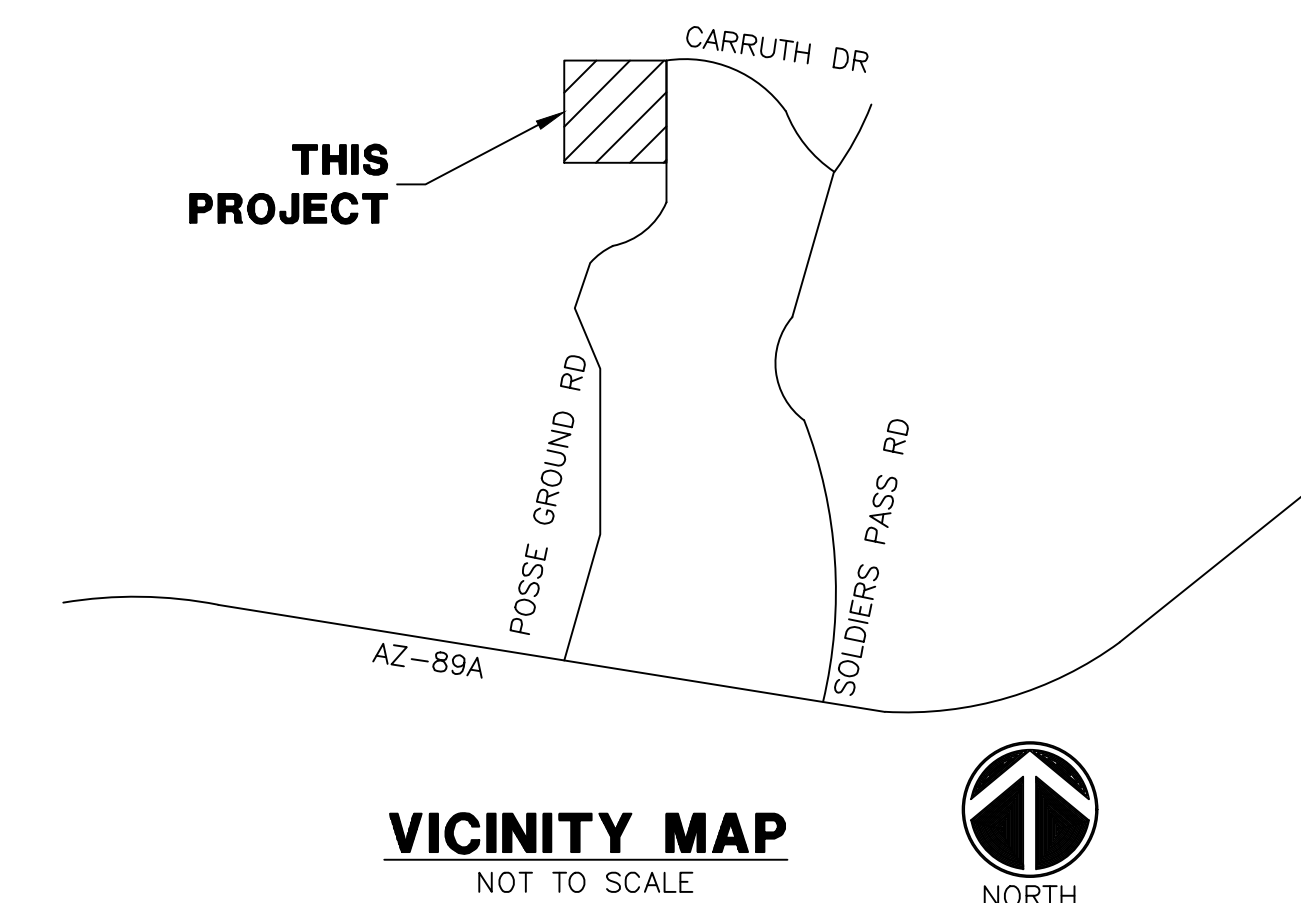
SITE ELECTRICAL

SEDONA, ARIZONA

GENERAL ELECTRICAL NOTES

- ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (LATEST EDITION), FEDERAL, STATE AND LOCAL JURISDICTION CODES.
- ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED AND SAFE MANNER, ACCORDING TO THE LATEST PUBLISHED NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION STANDARDS OF INSTALLATION, UNDER COMPETENT SUPERVISION.
- VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ALL OTHER FACTORS WHICH MAY AFFECT THE EXECUTION OF THIS WORK. INCLUDE ALL RELATED COSTS IN THE INITIAL BID PROPOSAL.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CONTRACTOR TO CALL 811 FOR BLUE STAKE. FOR ALL MUNICIPAL OR PRIVATELY OWNED UTILITIES EXISTING WITHIN LIMITS OF WORK OF PROJECT, CONTRACTOR TO PRIVATELY LOCATE UTILITIES. IRRIGATION LINES LESS THAN 2" WILL NOT TYPICALLY BE MARKED AND CAUTION SHOULD BE USED TO AVOID DAMAGE. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL UTILITIES CAUSED AS A RESULT OF CONTRACT WORK, ALL DAMAGES TO BE REPAIRED IN KIND.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING WALKS, WALLS, DRIVES, CURBS, ETC. DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- PROPER PROTECTION OF THE CONSTRUCTION AREA FOR SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COVER ALL TRENCHES AT THE END OF EACH WORK DAY. BARRICADES SHALL BE INSTALLED AS DIRECTED BY THE OWNER OR THE PROJECT INSPECTOR. THE SITE AND ALL WORK SHALL CONFORM TO OSHA REQUIREMENTS.
- ALL EXISTING LANDSCAPE, HARDSCAPE AND SPRINKLER SYSTEMS DAMAGED OR DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT BY THE CONTRACTOR SHALL BE REPLACED IN KIND.
- CONTRACTOR SHALL PAY FOR PERMITS AND INSPECTIONS AS MAY BE REQUIRED AND PROVIDE A CERTIFICATE OF INSPECTION TO THE OWNER.
- PROTECT ALL MATERIAL AND EQUIPMENT INSTALLED AGAINST DAMAGE BY OTHER TRADES, WEATHER CONDITIONS OR ANY OTHER CAUSES. EQUIPMENT FOUND DAMAGED OR IN OTHER THAN NEW CONDITION WILL BE REJECTED AS DEFECTIVE. ALL COMPONENTS SHALL BE FREE OF DUST, GRIT AND FOREIGN MATERIALS, AND LEFT AS NEW BEFORE FINAL ACCEPTANCE OF WORK.
- LEAVE THE SITE CLEAN, REMOVE ALL DEBRIS, EMPTY CARTONS, TOOLS, CONDUIT, WIRE SCRAPS AND ALL MISCELLANEOUS SPARE EQUIPMENT AND MATERIALS USED IN THE WORK DURING CONSTRUCTION.
- ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, BURIED 24" MINIMUM BELOW FINISHED GRADE, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
- PROVIDE EMT INDOOR AND GRS OUTDOOR FOR ABOVE GROUND CONDUIT. WHERE METALLIC CONDUITS COME IN CONTACT WITH DIRT, THEY SHALL BE HALF LAP WRAPPED WITH SCOTCH 50 TAPE TO 12" AFG. FITTINGS SHALL BE STEEL, THREADED TYPE WITH INSULATED THROATS. SECURELY ATTACH ALL SURFACE MOUNTED CONDUIT EVERY 10 FEET AND WITHIN 3 FEET OF EACH JUNCTION BOX, PER NEC ARTICLE 344.30.
- MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
- ALL FEEDERS AND BRANCH CIRCUIT WIRE SHALL BE COPPER TYPE XHHW (75 DEGREE C) FOR BELOW GRADE INSTALLATIONS (AND CONDUIT RISERS) AND THHN/THWN (75 DEGREE C) FOR ABOVE GRADE INSTALLATIONS. MINIMUM SIZE SHALL BE #12 AWG, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS. ALL WIRING SHALL BE IN CONDUIT. FOR NEW WIRING IN COMMERCIAL APPLICATIONS, THE USE OF TYPES NM, NMC, NMS (ROMEX) CABLES IS NOT PERMITTED. ALL CONDUCTORS SHALL BE NEW UNLESS NOTED OTHERWISE IN PLANS.
- A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR (BOND) SHALL BE INSTALLED WITHIN EACH RACEWAY, INCLUDING WITHIN EMT CONDUIT. EQUIPMENT GROUNDING CONDUCTOR SHALL BE SIZED PER NEC TABLE 250.122.
- WHEN A PANEL IS SUPPLIED BY A FEEDER OR BRANCH CIRCUIT, ANY INSTALLED GROUNDING CONDUCTOR SHALL NOT BE CONNECTED TO THE EQUIPMENT GROUNDING CONDUCTOR (GEC) OR TO THE GROUNDING ELECTRODE(S) PER NEC ARTICLE 250.32(B).
- BOND ALL ENCLOSURES PER NEC ARTICLE 250.96.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, ETC. NECESSARY FOR A COMPLETE AND WORKABLE ELECTRICAL SYSTEM WHETHER OR NOT THESE ITEMS ARE SPECIFICALLY NOTED ON THESE DRAWINGS. INCIDENTAL ITEMS NOT INDICATED ON THE DRAWINGS, NOR MENTIONED IN SPECIFICATIONS THAT CAN BE LEGITIMATELY AND REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED OR BE NECESSARY IN GOOD PRACTICE TO PROVIDE A COMPLETE SYSTEM, SHALL BE FURNISHED AND INSTALLED AS THOUGH ITEMIZED HERE IN EVERY DETAIL.
- CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE ALL LABOR, MATERIAL, TRENCHING, CONDUIT, TRANSFORMER PAD AND OTHER REQUIRED EQUIPMENT PER UTILITY COMPANY PLANS AND SPECIFICATIONS NECESSARY FOR A COMPLETE UNDERGROUND CONDUIT SYSTEM FROM THE UTILITY POINT OF SERVICE TO THE UTILITY CO. TRANSFORMER AND FROM THE UTILITY CO. TRANSFORMER TO THE ELECTRICAL SERVICE ENTRANCE SECTION.
- ALL TRENCHING, CONDUITS, ETC. SHALL BE ROUTED AND INSTALLED IN SUCH A MANNER THAT WILL NOT DAMAGE EXISTING FACILITIES. SHOULD DAMAGE OCCUR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR DAMAGE TO THE SATISFACTION OF THE OWNER OR INSPECTOR.
- ALL CONDUIT RUNS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MAKE SURE THAT ALL CONDUIT, ETC. FALLS WITHIN THE CONSTRUCTION AREA/RIGHT OF WAY. (THIS INCLUDES MAINTAINING ALL REQUIRED CLEARANCES.)
- WHEN CROSSING PATHWAYS OR SIDEWALKS, CONTRACTOR SHALL BORE UNDER EXISTING CONCRETE WALKS AND SAWCUT ASPHALT WALKS. ASPHALT WALKS SHALL BE REPLACED IN KIND.

- CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS, USUAL WEAR EXCEPTED, AND SHOULD ANY SUCH DEFECTS DEVELOP WITHIN A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE WHATSOEVER TO THE OWNER.
- CONTRACTOR SHALL IDENTIFY SERVICE ENTRANCE SECTION MAIN SERVICE DISCONNECT(S) WITH 3/32-INCH THICK LAMINATED PHENOLIC TYPE NAMEPLATES WITH 1/4-INCH MINIMUM HEIGHT LETTERS. NAMEPLATE TO BE BLACK MATTE FINISH SURFACE WITH WHITE LETTER ENGRAVING. ATTACH NAMEPLATE TO THE OUTSIDE PANEL FACE WITH TWO STAINLESS STEEL SELF-TAPPING SCREWS. NAMEPLATE SHALL READ "SERVICE DISCONNECT" PER NEC ARTICLE 230.70(B).
- ALL CIRCUITS SHALL BE LEGIBLY IDENTIFIED AT THE PANEL, JUNCTION BOXES AND AT ALL EQUIPMENT IN A PERMANENT MANNER (I.E. ETCHED PLATES, CONDUCTOR TAG, PERMANENT MARKER, ETC.). THE LABELING SHALL INCLUDE PANEL CIRCUIT NUMBER, "TO" AND "FROM" IDENTIFICATION, AND MARKED "SPARE" WHERE APPLICABLE.
- CONTRACTOR SHALL TEST ELECTRICAL SYSTEM FOR SHORT CIRCUITS AND MEGGER TEST FEEDER CIRCUIT WIRING. PROVIDE CERTIFIED TEST RESULTS FOR MEGGER TEST TO OWNER UPON COMPLETION OF PROJECT.
- ALL CONDUIT SHOWN SHALL BE CONCEALED WHEN POSSIBLE. WHEN NOT POSSIBLE, CONDUIT MAY BE SURFACE MOUNTED WITH PERMISSION OF THE OWNER OR OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL COORDINATE ALL EQUIPMENT CONNECTIONS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. PROVIDE ADDITIONAL FUSED DISCONNECT SWITCHES AND CONTROLS IF OVERCURRENT PROTECTION OR CONTROLS IS NOT INTEGRAL WITH UNITS.
- ALL EQUIPMENT SHALL BE FUSE SIZED PER MANUFACTURERS RECOMMENDATIONS AND BEAR U.L. APPROVAL. COORDINATE WITH ENGINEER/OWNER.
- ELECTRICAL DEVICES, DISCONNECT SWITCHES, ETC., SHALL BE SUPPORTED INDEPENDENT OF AND ISOLATED FROM EQUIPMENT VIBRATIONS.
- FULL LOAD AMPS (FLA) SIZES, AS NOTED IN THESE DRAWINGS, ARE BASED ON SPECIFIED EQUIPMENT DATA. CONTRACTOR SHALL VERIFY NAMEPLATE FLA OF EQUIPMENT SUPPLIED AND COORDINATE ACCORDINGLY PER EQUIPMENT SUPPLIERS RECOMMENDATIONS.
- ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE NEMA-3R OR NEMA-4 ENCLOSURES.
- CONDUITS OR RACEWAYS ROUTED FROM INDOORS TO OUTDOORS OR AS DESCRIBED IN NEC 300.7(A), SHALL BE SEALED WITH A PLIABLE SEALING COMPOUND AT A CONDUIT BODY OR AT A JUNCTION BOX BEFORE THE CONDUIT ENTERS THE COLDER ENVIRONMENT.
- CONDUITS OR RACEWAYS INSTALLED IN AREAS WHERE ELEVATION CHANGES MAY CAUSE WATER OR MOISTURE TO ENTER THE ELECTRICAL EQUIPMENT THROUGH THE CONDUIT SHALL BE SEALED WITH A HERMETIC CONDUIT SEAL AT BOTH ENDS OF THE CONDUIT OR RACEWAY.
- INSTALL FIRE SEALS IN ALL CONDUITS PENETRATING THE FIRE WALL TO MAINTAIN THE FIRE RESISTANCE RATING OF THE WALL, AS REQUIRED BY NEC 300.21.
- ALL POLE LIGHTS SHALL BE PROVIDED WITH A TWO POLE FUSE HOLDER BUSSMANN #HEX OR A SINGLE POLE FUSE HOLDER BUSSMANN #HEB OR EQUAL FOR INLINE FUSING, PROVIDE 5 AMP FUSING IN FUSEHOLDER.
- PRIOR TO POURING THE POLE BASES OR COVERING ANY ELECTRICAL CONDUITS, CONTACT THE INSPECTION DEPARTMENT 24 HOURS IN ADVANCE FOR APPROVAL.
- MATERIALS SHALL BE NEW AND OF THE BEST QUALITY WITH MANUFACTURER'S NAME PRINTED THEREON. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH NEMA, ANSI, UNDERWRITER'S LABORATORY OR OTHER APPLICABLE STANDARDS AND RATED FOR HEAVY DUTY SERVICE.
- ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE. ALL 15 AND 20 AMP, 125 AND 250 VOLT, NONLOCKING RECEPTACLES INSTALLED OUTDOORS SHALL BE LISTED WEATHER-RESISTANT TYPE. RECEPTACLE COVERS IN WET LOCATIONS SHALL BE EXTRA DUTY PER NEC 406.9(B). ALL WEATHERPROOF WHILE IN-USE RECEPTACLE COVERS SHALL BE METAL.
- SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE DRAWINGS AND/OR SPECIFICATIONS. THE USE OF MANUFACTURER'S NAME, MODEL, AND NUMBER IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, USEFULNESS AND BID PRICE. CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL (PRIOR TO ORDERING MATERIALS) COPIES OF EQUIPMENT SHOP DRAWINGS AS FOLLOWS: LIGHT FIXTURES, POLES, POLE BASES, SERVICE ENTRANCE SECTION, ELECTRICAL EQUIPMENT, DISCONNECT SWITCHES, TIME CLOCKS AND OTHER CONTROLS, LIGHTING CONTACTORS AND PULL BOXES. AT THE TIME OF EACH SUBMITTAL, THE CONTRACTOR SHALL DEFINE AND DELINEATE IN WRITING ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. THE REVIEW WILL BE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE WORK AND FOR COMPLIANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. THE REVIEW OF A SPECIFIED ITEM, AS SUCH, WILL NOT INDICATE REVIEW OF THE ASSEMBLY IN WHICH THE ITEM FUNCTIONS. REVIEW BY THE OWNER OR OWNER'S REPRESENTATIVE WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS IN THE SUBMITTALS NOR FROM HIS RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
- THE SUBMITTALS SHALL BE NEATLY GROUPED AND ORGANIZED. PERTINENT INFORMATION SHALL BE HIGHLIGHTED, AND THE SPECIFIC PRODUCT SHALL BE IDENTIFIED. ALL SUBMITTALS SHALL BE COMPLETE, AND PRESENTED IN ONE PACKAGE. THE SUBMITTAL SHALL INCLUDE A COMPLETE LIST OF THE EQUIPMENT AND MATERIALS, INCLUDING THE MANUFACTURER'S NAME, PRODUCT SPECIFICATION, DESCRIPTIVE DATA, TECHNICAL LITERATURE, PERFORMANCE CHARTS, CATALOG CUTS, INSTALLATION INSTRUCTIONS, AND SPARE PART RECOMMENDATIONS FOR EACH DIFFERENT ITEM OF THE EQUIPMENT SPECIFIED.



WRIGHT ENGINEERING
PROJECT NO:

23338

DESIGN BY: CDC

DRAWN BY: CDC

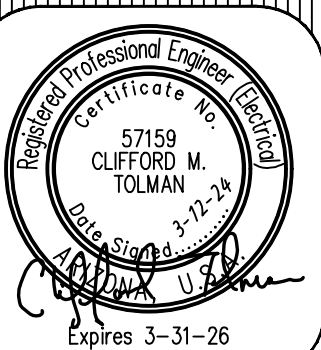
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PROJECT: TITLE:

SEDONA, ARIZONA
PICKLEBALL COURT LIGHTING
SITE ELECTRICAL
SITE ELECTRICAL COVER SHEET

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-12-24	1ST SUBMITTAL



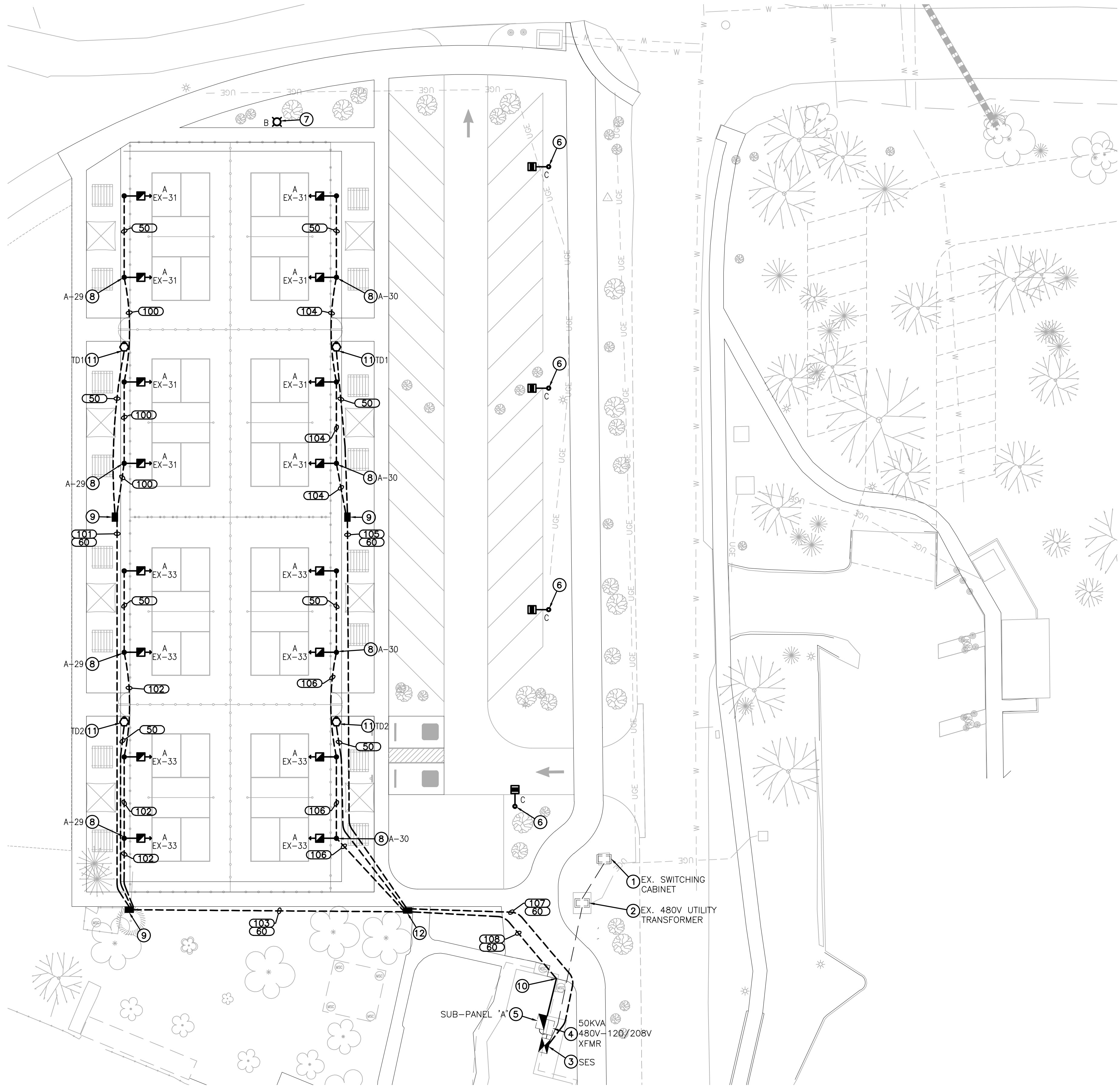
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SE1.1

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CONSTRUCTION NOTES

- 1 EXISTING APS SWITCHING CABINET TO REMAIN.
- 2 EXISTING APS 480V TRANSFORMER TO REMAIN.
- 3 EXISTING 600 AMP, 277/480V, 3Ø, 4W, METERED SERVICE ENTRANCE SECTION, SEE DETAIL 1 ON SE3.1.
- 4 EXISTING 50KVA 480V-120/208V, 3Ø PAD MOUNTED STEP-DOWN TRANSFORMER.
- 5 EXISTING 150 AMP, 120/208V, 3Ø, 4W, WALL-MOUNTED SUB-PANEL, SEE DETAIL 1 ON SE3.1.
- 6 SOLAR AREA LIGHT, SEE DETAIL 5 ON SE3.3.
- 7 SOLAR BOLLARD LIGHT, SEE DETAIL 6 ON SE3.3.
- 8 20A 120V GFCI DUPLEX RECEPTACLE WITH METAL WEATHERPROOF WHILE-IN-USE AND LOCKABLE COVER, FLUSH ON POLE AT 18" ABOVE GRADE, SEE DETAIL 3 ON SE3.2.
- 9 #3-1/2 CONCRETE PULL BOX, SEE DETAIL 2 ON SE3.1.
- 10 RUN CONDUIT UP EXTERIOR WALL AND ALONG ROOF OF BUILDING NEXT TO EXISTING CONDUIT RUN. CORE DRILL THROUGH WALL AND EXTEND CONDUIT TO ELECTRICAL PANEL, CAULK AROUND CONDUIT PENETRATION WITH WATERPROOFING SILICON CAULK IN EXTERIOR WALL.
- 11 INSTALL TWIST DIAL TIMER FOR COURT LIGHTS ON POST PER DETAIL 4 ON SE3.2.
- 12 #5 CONCRETE PULL BOX, SEE DETAIL 2 ON SE3.1.

LEGEND

- EXISTING UTILITY COMPANY EQUIPMENT
- 600A 277/480V 3Ø PEDESTAL
- 50KVA 480V-120/208V 3Ø XFMR
- 150A 120/208V 3Ø SUB-PANEL
- NEW PULL BOX
- NEW UNDERGROUND CONDUIT
- EXISTING CONDUIT
- A-1 CIRCUIT NUMBER
- WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- TWIST DIAL TIMER POST

WIRE & CONDUIT TABLE

CONDUIT NO.	CONDUIT SIZE	POWER	WIRE GROUND	WIRE TYPE* (CKT #)	REMARKS
50	1"	2-#12	1-#12	CU	TYPICAL
60	1.5"	PULL ROPE			SPARE
100	1"	2-#8	1-#8	CU	A-29
		2-#12		CU	EX-31
101	1"	2-#6	1-#6	CU	A-29
		2-#12		CU	EX-31
		2-#12		CU	TD1 ROTARY TIMER
		2-#12		CU	A-29
102	1"	2-#10	1-#10	CU	EX-33
		2-#12		CU	EX-33
		2-#12		CU	TD1 ROTARY TIMER
		2-#12		CU	TD2 ROTARY TIMER
103	1"	2-#6	1-#6	CU	A-29
		2-#12	1-#12	CU	EX-31
		2-#12		CU	EX-33
		2-#12		CU	TD1 ROTARY TIMER
104	1"	2-#8	1-#8	CU	A-30
		2-#12		CU	EX-31
		2-#8	1-#8	CU	A-30
		2-#12		CU	EX-31
106	1"	2-#10	1-#10	CU	A-30
		2-#12		CU	EX-33
		2-#12		CU	EX-31
		2-#12		CU	TD1 ROTARY TIMER
107	1"	2-#12	1-#12	CU	EX-33
		2-#12		CU	EX-31
		2-#12		CU	TD1 ROTARY TIMER
		2-#12		CU	TD2 ROTARY TIMER
108	1"	2-#6	1-#6	CU	A-29
		2-#8		CU	A-30
		2-#8		CU	A-30

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
 CU = COPPER, AL = ALUMINUM.

LIGHT FIXTURE SCHEDULE

SYMBOL	LETTER ID	MANUFACTURER	CATALOG NUMBER	FINISH COLOR	VOLTS	LAMP	LUMENS (MIN)	CCT	MOUNTING HEIGHT	DETAIL	NOTES
	A	COOPER LIGHTING	GLAN-SABC-730-U-T4FT-MA-BZ-PFS*	BRONZE	277	429W LED	51,588	3000K	20'-0"	PICKLEBALL LIGHT SEE DETAIL 3 SHEET SE3.2	*PFS BLACK PERIMETER SHIELD INSTALLED ONLY ON THE BACK SIDE OF THE BACK ROW OF LED SQUARES
	B	FIRST LIGHT TECHNOLOGIES	PLB-102-BZ-ASM-AMB-00	BRONZE	SOLAR	-	65	AMBER 595nm	2'-11"	SOLAR BOLLARD LIGHT SEE DETAIL 6 SHEET SE3.3	
	C	FIRST LIGHT TECHNOLOGIES	SCL-SPMU-BZ-T4-AMB-00	BRONZE	SOLAR	-	1,250	AMBER 595nm	12'-0"	SOLAR AREA LIGHT SEE DETAIL 5 SHEET SE3.3	

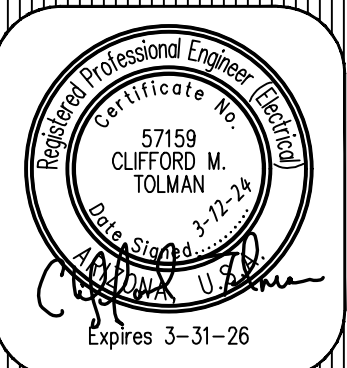
WRIGHT ENGINEERING
 PROJECT NO:
23338
 DESIGN BY: CDC
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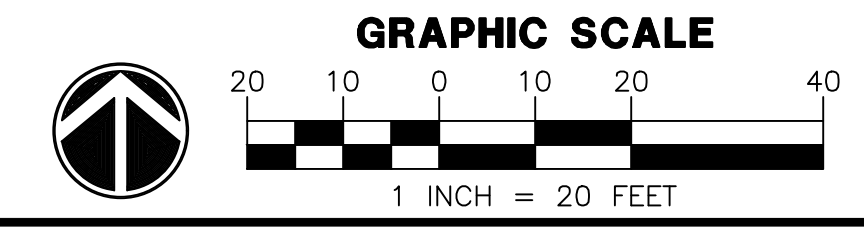
PROJECT: TITLE:

SEDONA, ARIZONA
PICKLEBALL COURT LIGHTING
SITE ELECTRICAL
SITE ELECTRICAL PLAN

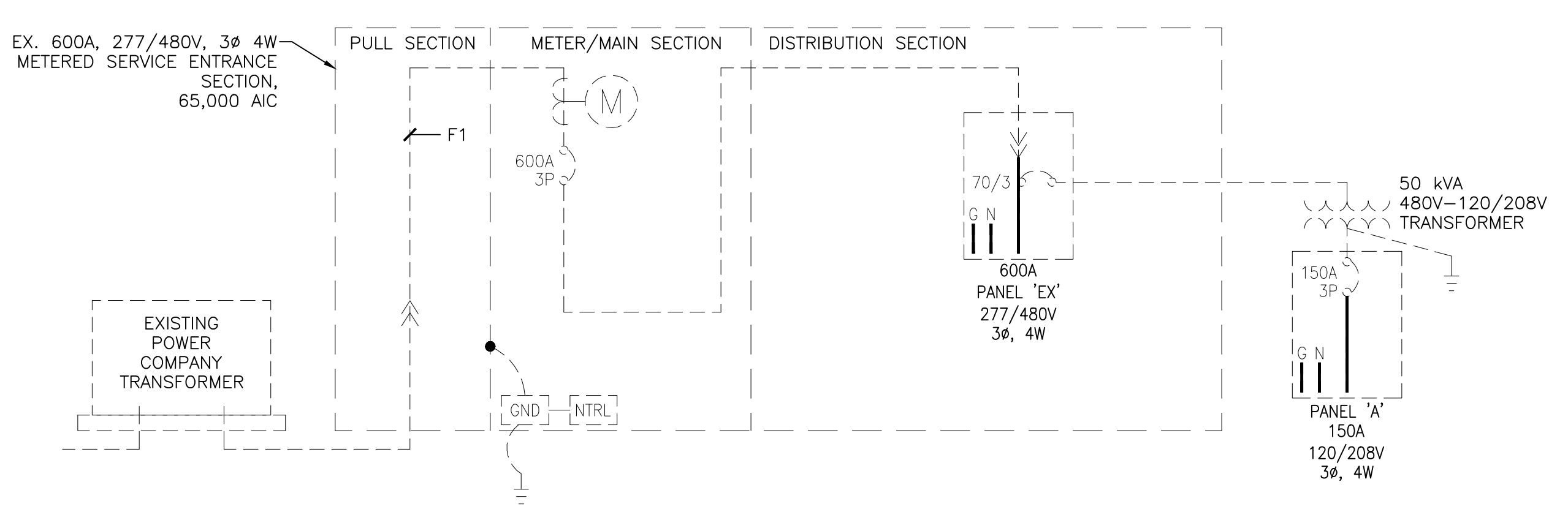
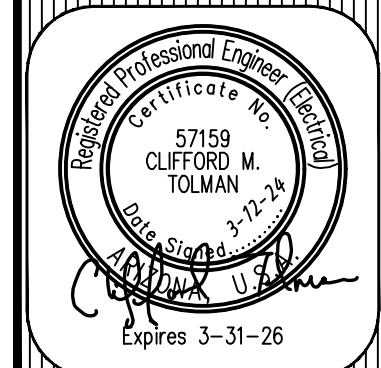
NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-12-24	1ST SUBMITTAL



DRAWING NO:
SE2.1
 OF 6



NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-12-24	1ST SUBMITTAL



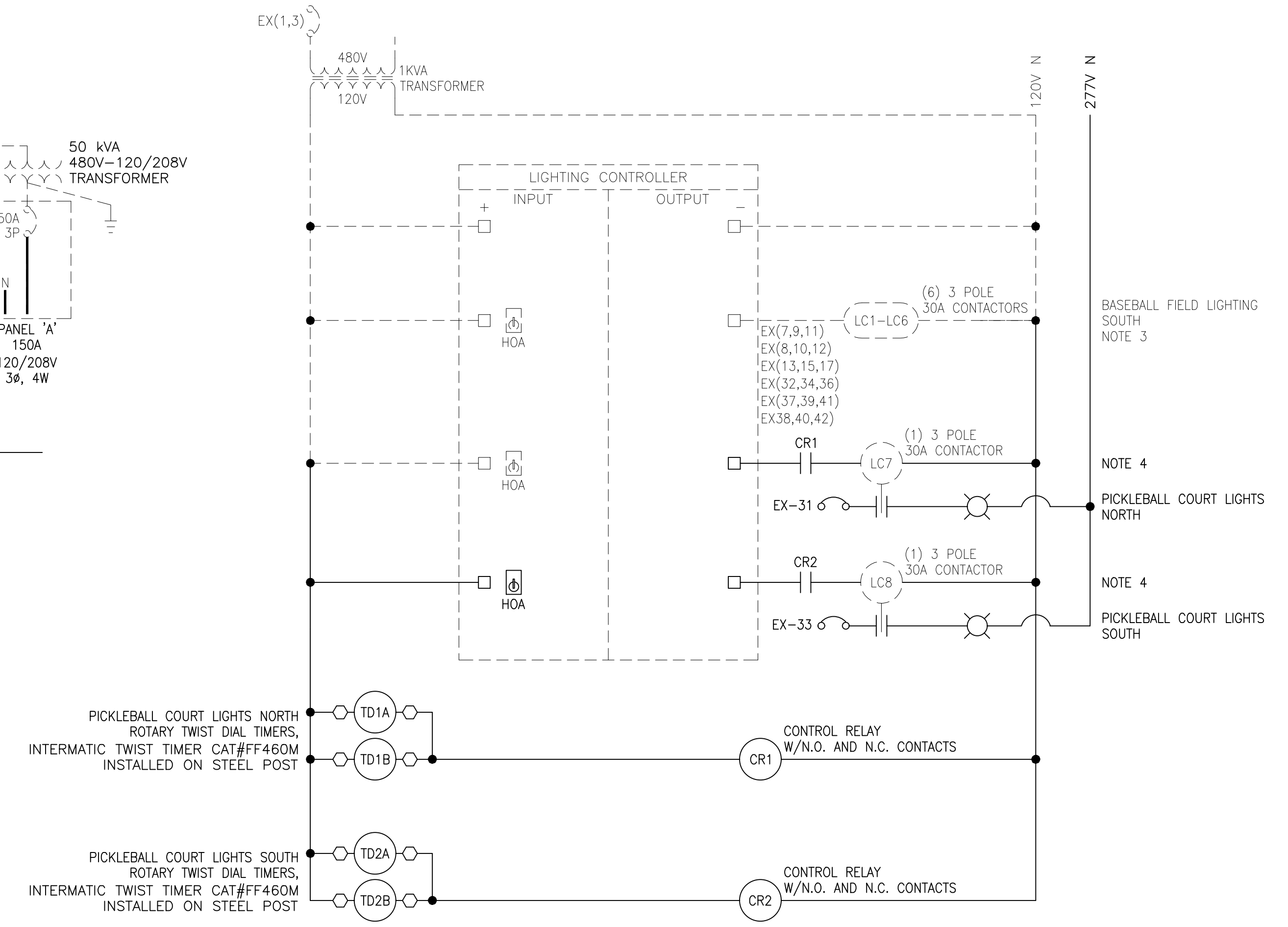
1A SINGLE LINE DIAGRAM
NO SCALE

PANEL NAME: EX			277/480V, 3Ø, 4W				600A MAIN BKR			
LOCATION: 525 W POSSE GROUNDS RD			TYPE: PLUG-IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	CØ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.
1	20/		100	500			400		20/	2
3	/	CONTROL XFMR	100		500		400	DUG-OUT LIGHTS	/	4
5	/3		100			500	400		/3	6
7	20/		4432	8864			4432		20/	8
9	/	POLE A1 SOUTH	4432		8864		4432	POLE A2 SOUTH	/	10
11	/3		4432			8864	4432		/3	12
13	30/		6648	6648			0		30/	14
15	/	POLE C1 SOUTH	6648		6648		0	SPARE	/	16
17	/3		6648			6648	0		/3	18
19	20/		0	0			0		20/	20
21	/	SPARE	0		0		0	SPARE	/	22
23	/3		0			0	0		/3	24
25	20/		0	0			0		20/	26
27	/	SPARE	0		0		0	BUSSED SPACE	/	28
29	/3		0			0	0		/3	30
31	20/1	PICKLEBALL COURT LIGHTS NORTH*	4290	13154			8864		40/	32
33	20/1	PICKLEBALL COURT LIGHTS SOUTH*	4290		13154		8864	POLE B1 SOUTH	/	34
35	20/1	SPARE	0			8864	8864		/3	36
37	30/		6648	15512			8864		40/	38
39	/	POLE C2 SOUTH	6648		15512		8864	POLE B2 SOUTH	/	40
41	/3		6648			15512	8864		/3	42
43	30/		0	0			0		40/	44
45	/	SPARE	0		0		0	SPARE	/	46
47	/3		0			0	0		/3	48
49	70/		16200	16200			0		40/	50
51	/	TRANSFORMER T-1	16440		16440		0	SPARE	/	52
53	/3		12440			12440	0		/3	54
CODE TOTAL VA/Ø			60878	61118	52828	*INDICATES LOAD @ 125%				
CODE TOTAL AMPS/Ø			219.8	220.6	190.7	65,000 AIC BREAKERS				

GRAY OR DASHED INDICATES EXISTING, BOLD INDICATES PROPOSED. NEW BREAKERS TO MATCH TYPE AND AIC RATING OF EXISTING.

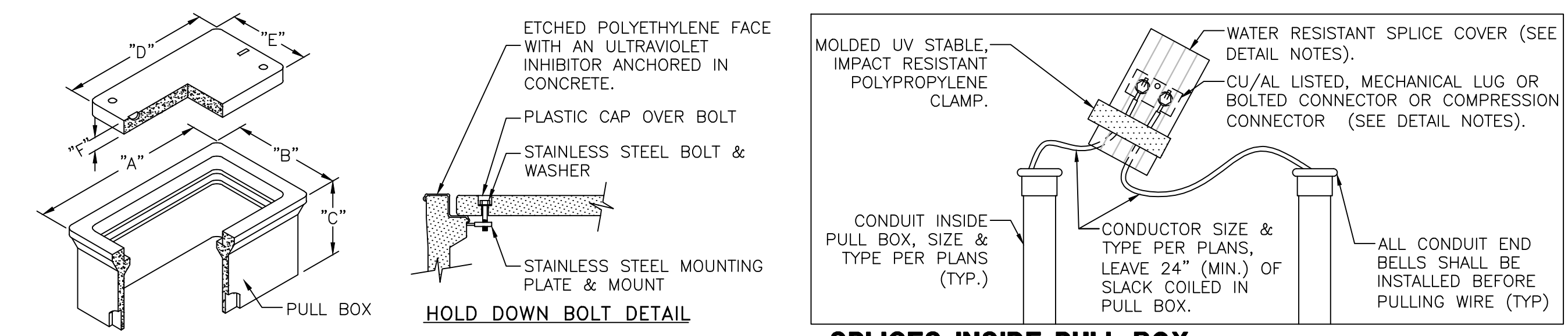
PANEL NAME: A			120/208V, 3Ø, 4W				150A MAIN BKR			
LOCATION: SEE SITE PLAN			TYPE: PLUG-IN				WALL MTD., NEMA 1			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	CØ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.
1	30/	BASKETBALL LIGHTS	2000	5000			3000	EX. LOAD	50/	2
3	/2		2000		5000		3000	EX. LOAD	/2	4
5	30/1	SCOREBOARD	1200			2400	600	EX. LOAD	20/1	6A
7	30/1	SPARE	0	1000			400	RESTROOM LIGHTS	20/1	8A
9	20/1	EX. LOAD	600		1560		480	COKE COOLER	20/1	10A
11	20/1	EX. LOAD	600			3600	480	MIDDLE FRIDGE	20/1	10B
13	20/1	ICE MAKER	600	3600			3000	EVENT POWER S. DIAMOND	50/	12
15	20/1	FRIDE	480		3480		3000	EVENT POWER S. DIAMOND	50/	16
17	20/1	EX. LOAD	480			3480	3000	EVENT POWER S. DIAMOND	/2	18
19	20/1	COOLER	1000	1200			200	IRRIGATION CLOCK	20/1	20
21	20/1	PRETZELS	600		1000		200	SCOREBOARD BOOTHS	20/1	22A
23	20/1	EXTERIOR PEPSI OUTLET	720			920	200	BASKETBALL COURT CAMERA	20/1	22B
25A	20/	BOYS RR HEATER	1200	5400			3000	DOOR TIME CLOCK	20/1	24
27A	20/	BOYS RR HEATER	1200					EVENT POWER NORTH		
27B	/2	GIRLS RR HEATER	1200		5400		3000		/2	28
25B	/2	BOYS RR HEATER	1200							
29	20/1	RAMADA RECEIPT	1020			2040	1020	RAMADA RECEIPT	20/1	30
CODE TOTAL VA/Ø			16200	16440	12440	*INDICATES LOAD @ 125%				
CODE TOTAL AMPS/Ø			135.0	137.0	103.7	22,000 AIC BREAKERS				

GRAY OR DASHED INDICATES EXISTING, BOLD INDICATES PROPOSED. NEW BREAKERS TO MATCH TYPE AND AIC RATING OF EXISTING.



1B LIGHTING CONTROL SCHEMATIC
NO SCALE
GRAY OR DASHED INDICATES EXISTING, BOLD INDICATES PROPOSED

NOTE: ALL NEW LIGHTING CONTROL EQUIPMENT TO BE INSTALLED IN EXISTING MUSCO LIGHTING CONTROL ENCLOSURE

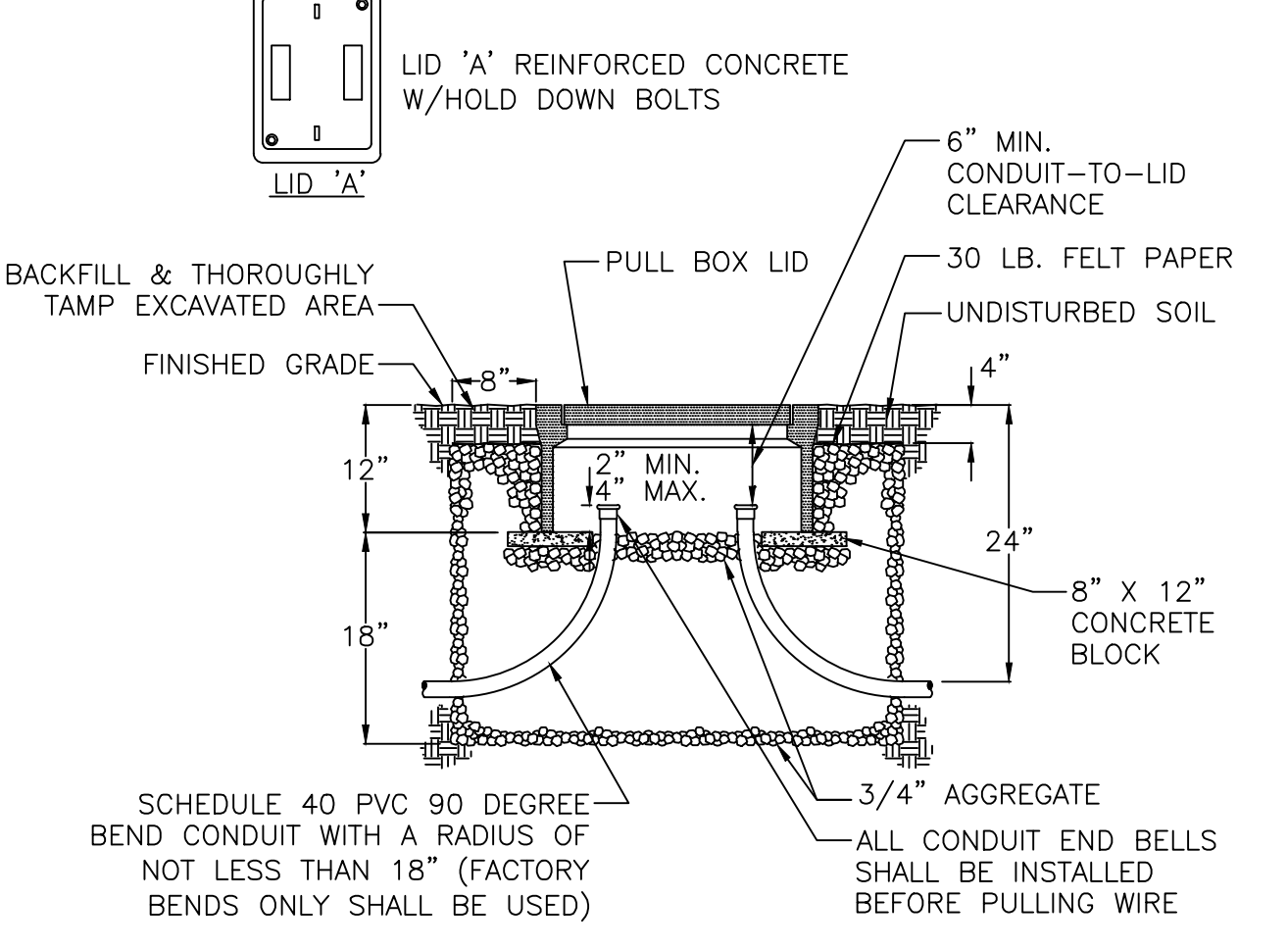


SPICES INSIDE PULL BOX

- DETAIL NOTES:**
1. THE PULL BOX SHALL BE MADE OF A HIGH DENSITY REINFORCED CONCRETE MATERIAL WITH END & SIDE KNOCKOUTS, & NON-SETTLING SHOULDERS TO MAINTAIN GRADE, MANUFACTURED WITH APPROXIMATE DIMENSIONS AS SHOWN.
 2. STEEL REINFORCEMENT SHALL BE AS REGULARLY USED IN STANDARD PRODUCTS OF THE RESPECTIVE MANUFACTURER.
 3. COVER LETTERING SHALL BE 1" LETTERS CAST IN STANDARD MARKINGS: "ELECTRIC" OR "HIGH VOLTAGE" OR "COMMUNICATIONS", AS REQUIRED.
 4. THE PULL BOX SHALL HAVE AN ETCHED POLYETHYLENE FACE WITH AN ULTRAVIOLET INHIBITOR ANCHORED IN CONCRETE.
 5. ALL CABLE & CONDUCTOR SPLICES MADE USING CU/AL LISTED, MECHANICAL LUG OR BOLTED CONNECTOR OR COMPRESSION CONNECTOR, (TYCO ELECTRONICS, NSI INDUSTRIES, ILS CO OR APPROVED EQUAL), CONNECTION TO BE INSULATED & MADE WATER RESISTANT WITH TYCO ELECTRONICS GELCAP-SL, NSI INDUSTRIES ESSLK-2/0 OR 3M SCOTCHCAST SPLICE KIT 85 SERIES.

DATA TABLE

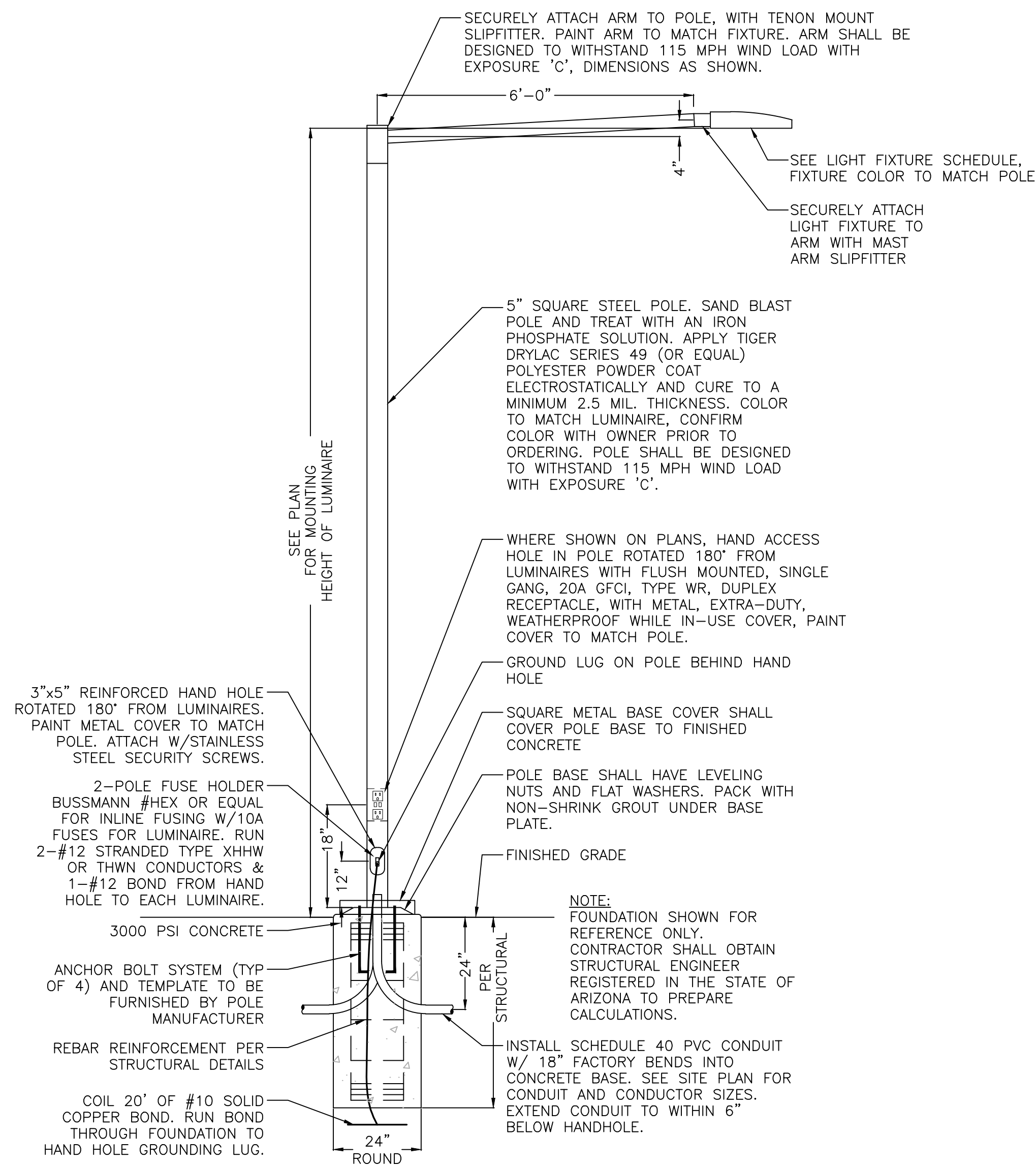
PULLBOX TYPE	PULLBOX LENGTH	PULLBOX WIDTH	PULLBOX HEIGHT	LID LENGTH	LID WIDTH	LID HEIGHT
"A"	"B"	"C"	"D"	"E"	"F"	"G"
#3-1/2	19-3/4"	14-1/4"	12"	15-1/2"	10"	1-3/4"
#5	25-1/8"	15-5/8"	12"	20-3/4"	10-5/8"	2"
#7	35"	22"	12"	30-1/2"	17-1/2"	2"
#9	40-1/2"	28-1/4"	18"	35-1/2"	24"	3"



2 PULL BOX INSTALLATION
NO SCALE

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3 FLUSH FOUNDATION STEEL COURT LIGHT DETAIL
NO SCALE

Project	Catalog #	Type
Prepared by	Notes	Date

Streetworks
GLAN Galleon II

Area / Site Luminaire

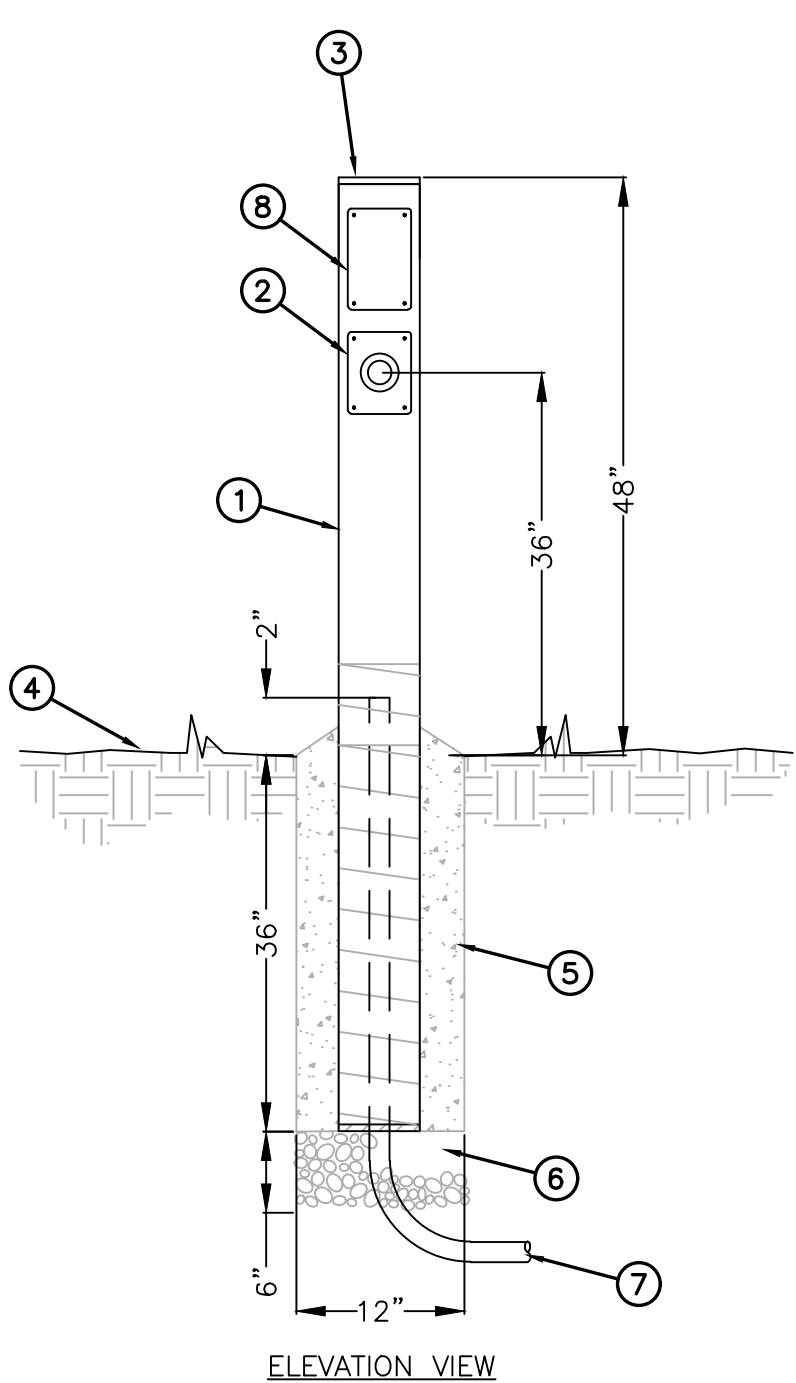
Product Features

Product Certifications

Quick Facts

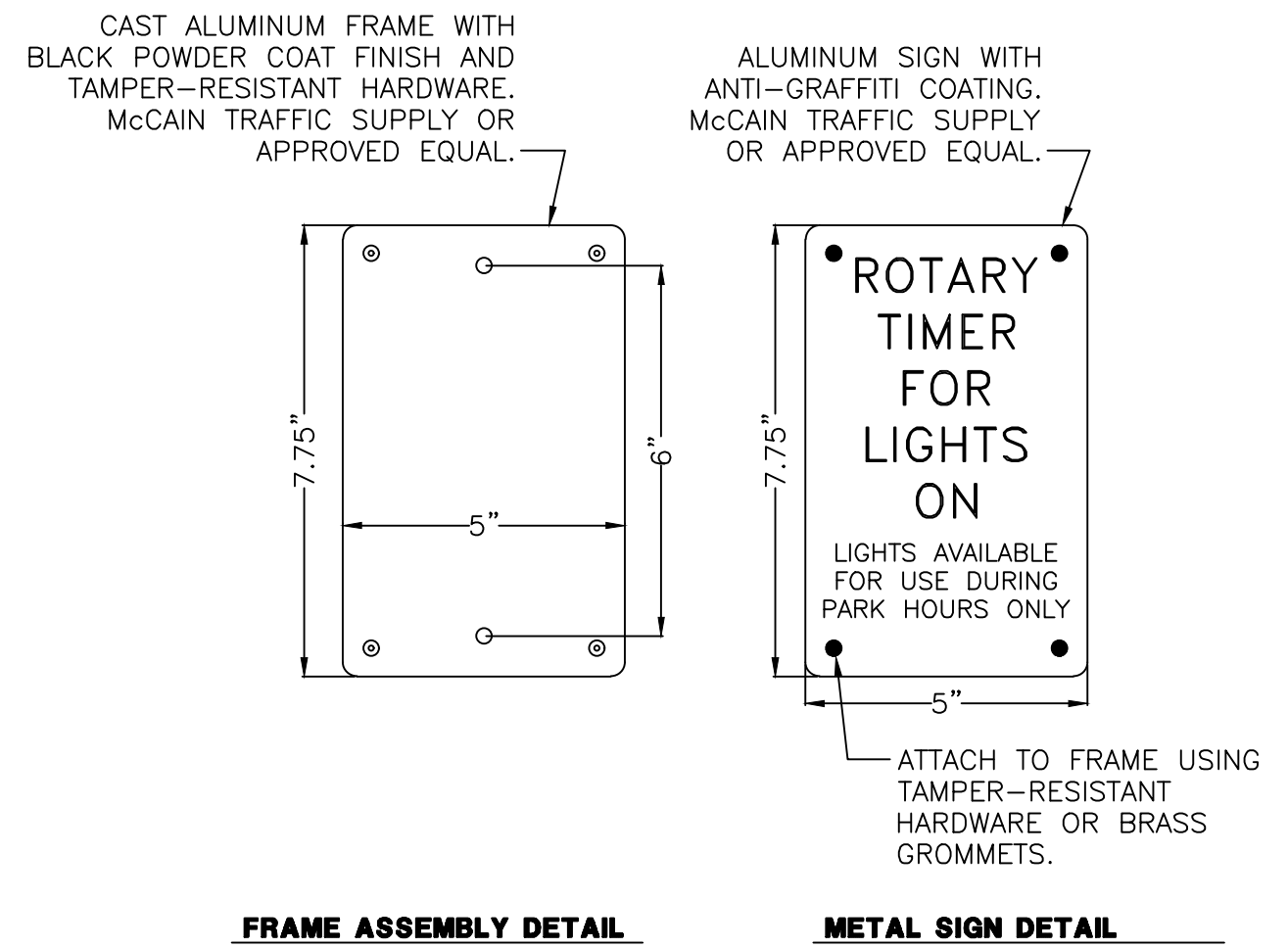
Dimensional Details

Number of Light Sources	Model #	Housing Length (ft)	Weight with Standard or Opt. Arm	CFE with Standard or Opt. Arm
1-4	16"	22"	29 lb	6.95
4-6	22"	22"	39 lb	6.95
7-9	22"	28-1/8"	49 lb	1.1



STEEL POST NOTES

- 5"x5"x7' LONG 11 GAUGE GALVANIZED SQUARE STEEL POST HALF-LAP WRAPPED W/ SCOTCH 50 TAPE TO +4" AFG. FINISH COLOR PER OWNER, SHALL BE POLYESTER POWDER COAT WITH MINIMUM 2.5 MILS THICKNESS.
- FLUSH MOUNTED INTERMATIC TWIST TIMER CAT#FF460M. INSTALLED FACING PATHWAY WITH METAL, EXTRA-DUTY, WEATHERPROOF WHILE IN-USE COVER, PAINT COVER TO MATCH POST. ROUTE TWIST TIMER CONTROL CIRCUIT BACK TO MUSCO LIGHTING CONTROL ENCLOSURE.
- 1/8" THICK GALVANIZED STEEL TOP. PROVIDE CONTINUOUS WELD ALONG PERIMETER OF CAP.
- FINISHED GRADE.
- AFTER POST HAS BEEN PLUMBED, BACKFILL EXCAVATED HOLE WITH 2500 PSI CONCRETE.
- 1" WASHED RIVER ROCK.
- ELECTRICAL WIRE & CONDUIT. SEE SITE PLAN FOR SIZES, ETC..
- METAL SIGN AND FRAME, SEE ABOVE FOR SPECIFICATIONS.



4 SPORT COURT LIGHTING TWIST DIAL TIMER DETAIL
NO SCALE

WRIGHT ENGINEERING
PROJECT NO:
23338
DESIGN BY: CDC
DRAWN BY: CDC
CHECKED BY: CMT

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:
PICKLEBALL COURT LIGHTING SITE ELECTRICAL
SITE ELECTRICAL DETAILS

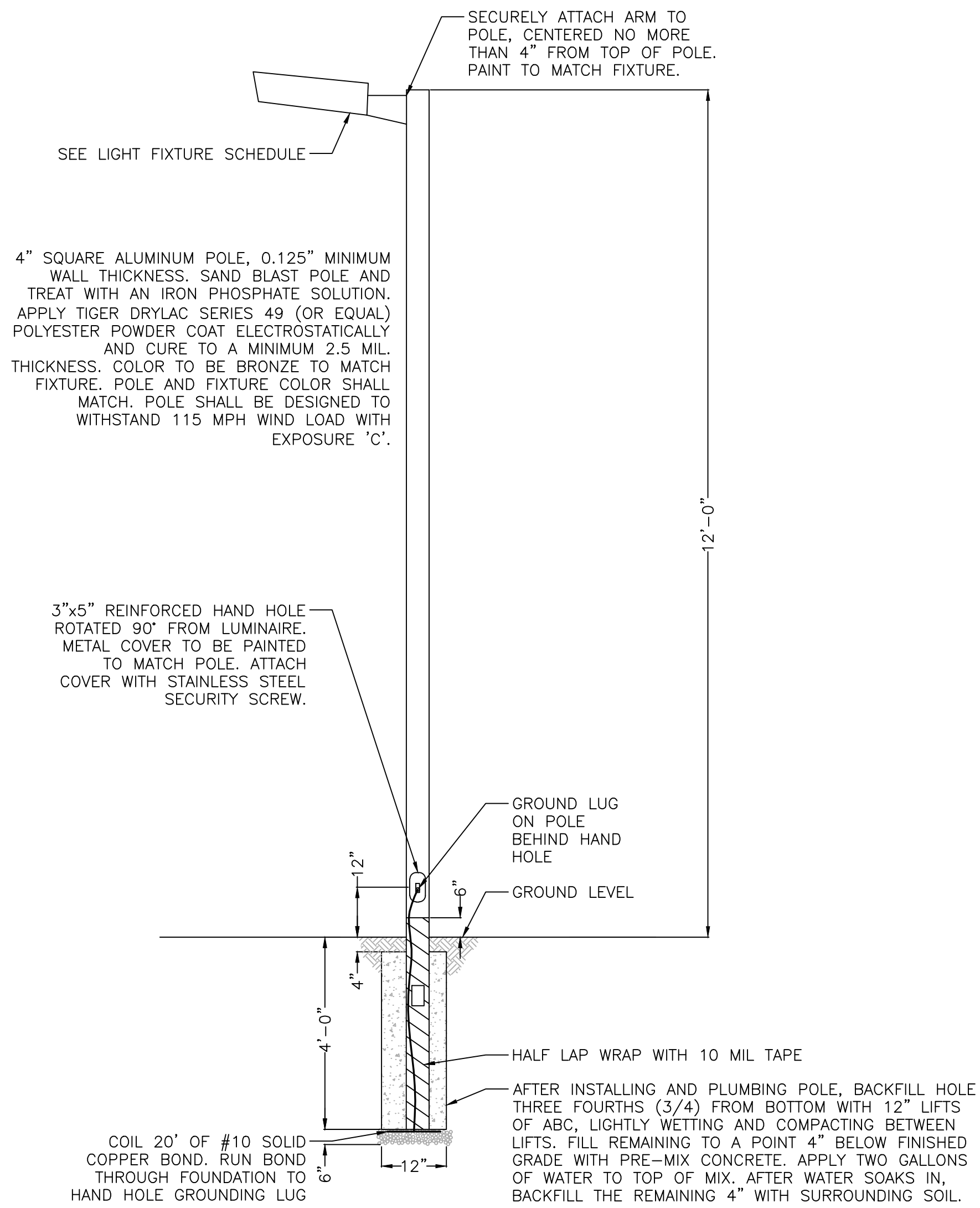
NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-12-24	1ST SUBMITTAL

Professional Engineer (Arizona)
57159
CLIFFORD M. TOLMAN
Expires 3-31-26

DRAWING NO:
SE3.2
OF 6

Call at least two full working days before you begin excavation.
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5 SOLAR AREA LIGHT DETAIL
NO SCALE

FIRSTLIGHT TECHNOLOGIES

SCL Series

SOLAR LED INTEGRATED COMMERCIAL AREA LIGHT

Project: _____

Type: _____ Quantity: _____

The SCL series solar LED luminaire is a great fit for commercial, recreational, bikeway, pathway and public space lighting applications. The self-contained, unobtrusive design integrates its solar power, adaptive control and LED technologies into a compact and efficient form. With robust construction and unequalled performance, the SCL series is an excellent fit wherever cost-effective, full-cutoff lighting is required.

Using solar power and LEDs, the SCL series is completely self-contained and offers significant benefits:

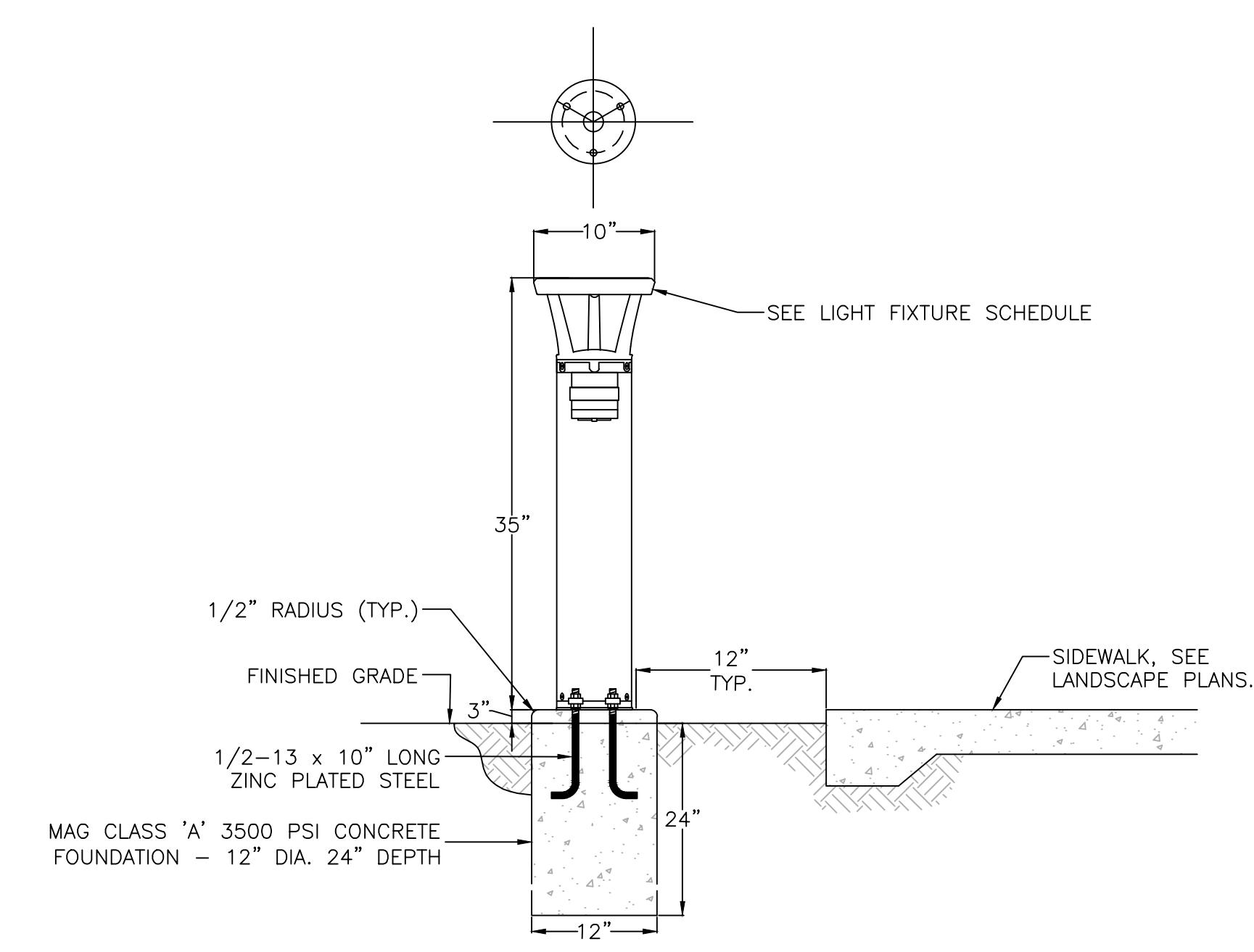
- Cost-effective design ships fully assembled and installs in minutes
- Low installation cost and minimal site impact with no trenching, cabling or wiring
- Wireless control & communication with your light
- Minimal ongoing costs with no electrical bills or bulbs to change
- Operates entirely independent from the grid and is immune to power outages
- A sustainable choice without recurring carbon emissions

All of our solar powered lights are enabled by our innovative Solar Lighting Controller (SLC). The SLC in each light is "self-learning" and allows the lights to predictively adapt to their surroundings, providing a level of lighting performance and reliability unavailable in other solar lighting products.

TECHNICAL SPECIFICATIONS

<p>Solar Module:</p> <ul style="list-style-type: none"> • High-efficiency monocrystalline cells • Incomparably integrated into the top of luminaire • Used for day/night detection (no photocell required) 	<p>LEDs and Optics:</p> <ul style="list-style-type: none"> • 100,000 hour L70 lifetime • Extra Warm White (2700K), Warm White (3000K), Neutral White (4000K), and Amber (2850m) LEDs available • High-efficiency type 3, 3, 4, 4, and 5, full cut-off optics • Typical lumen output of 1250 lumens • Optional backlight shield • Wildlife-friendly amber option available
<p>Solar Lighting Controller (SLC):</p> <ul style="list-style-type: none"> • High-efficiency Maximum Power Point Tracking (MPPT) • Microcontroller based technology • Includes high-efficiency LED driver • Multiyear data logging • Integrated into luminaire housing • Designed to automatically manage lighting performance based on environmental conditions and lighting requirements • Potted weatherproof construction 	<p>Mechanical Construction:</p> <ul style="list-style-type: none"> • Cast, low copper aluminum design • Stainless fasteners with security fastener option • Architectural grade, super durable, TBC powder coat • Mounts to 3 inch or greater round and square poles
<p>Battery:</p> <ul style="list-style-type: none"> • High-performance lithium (LiFePO₄) • Exceptional 10+ year lifecycle • High-temperature tolerance • Contained within luminaire housing • Designed for easy battery changes when required 	<p>Lighting Profiles:</p> <ul style="list-style-type: none"> • 11 standard profiles options • Real-time based lighting profiles available • See lighting profile sheet for all options • Motion sensing capabilities optimize performance based usage • Lighting profiles and motion sensing options are field configurable with app
	<p>Wireless Control:</p> <ul style="list-style-type: none"> • Bluetooth low energy interface with iOS app • Provide configuration and control of lighting profiles • Adjust dusk and dawn thresholds • Motion sensing capabilities optimize performance based on usage

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PLB Amber: 70-0010 September 2022 | © Copyright First Light Technologies Ltd.



6 SOLAR BOLLARD LIGHT DETAIL
NO SCALE

FIRSTLIGHT TECHNOLOGIES

PLB Amber Series

SOLAR POWERED AMBER LED BOLLARD

Project: _____

Type: _____ Quantity: _____

Approved by the Florida Fish and Wildlife Conservation Committee for safe installation near turtle nesting beaches, the PLB amber series provides reliable, off-grid light for beach front properties. The amber LED, 180 degree back light shield and low mounting height options help to ensure baby turtles do not become disorientated while migrating to the water.

Using the latest solar and LED technology, the PLB amber bollards are fully self-contained and offer significant benefits over typical wired bollards, especially within sensitive ecosystems:

- No trenching, cabling or wiring requirements lowers install costs and site disruption
- Minimal ongoing costs with no electricity bills or bulbs to change
- Not susceptible to power outages
- Provides a visibly green statement with no ongoing carbon emissions

To provide a level of lighting performance and reliability unavailable in other solar lighting products, all First Light solar powered products are enabled by an innovative Solar Lighting Controller (SLC). The SLC in each light "learns" so that the lights predictively adapt to the variability of their surroundings.

TECHNICAL SPECIFICATIONS

<p>Solar Module:</p> <ul style="list-style-type: none"> • High impact, UV resistant encapsulation • High-efficiency mono-crystalline cells • Integrated into bollard housing • Used for day/night detection (no photocell required) 	<p>LEDs and Optics:</p> <ul style="list-style-type: none"> • High-output Cree LEDs • High-efficiency optics • 100,000 hour L70 lifetime • Amber LED (2850m to 595nm) • Full cut-off type 3 optic with 180° backlight shield
<p>Solar Lighting Controller (SLC):</p> <ul style="list-style-type: none"> • High efficiency Maximum Power Point Tracking (MPPT) charge controller • Micro-controller based technology • High-efficiency LED driver • Integrated into bollard housing • Designed to automatically manage lighting performance based on environmental conditions and lighting requirements 	<p>Mechanical Construction:</p> <ul style="list-style-type: none"> • Cast, marine-grade, corrosion resistant aluminum housing • IP67 protection • Extruded, low copper aluminum post • Stainless fasteners with security fastener option • High-strength mounting base • Architectural grade, super durable, TBC powder coat • Four standard colors with custom colors available
<p>Battery:</p> <ul style="list-style-type: none"> • High-performance lithium (LiFePO₄) • Exceptional 10+ year lifecycle • High-temperature tolerance • Contained within bollard post • Designed for easy battery changes when required • Plug-and-play, sealed connector 	<p>Factory Set Lighting Profiles:</p> <ul style="list-style-type: none"> • On at dusk, off at dawn • On at dusk, turn off after 6 hours • On at dusk, dim to 30% after 6 hours, off at dawn • On at dusk, off after 5 hours, on 1 hour before dawn, off at dawn • On at dusk, dim to 30% after 5 hours, on 1 hour before dawn, off at dawn (default)

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WRIGHT ENGINEERING
PROJECT NO:
23338
DESIGN BY: CDC
DRAWN BY: CDC
CHECKED BY: CMT

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: _____ TITLE: _____

**SEDONA, ARIZONA
PICKLEBALL COURT LIGHTING
SITE ELECTRICAL**

SITE ELECTRICAL DETAILS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-12-24	1ST SUBMITTAL

Professional Engineer
57159
CLIFFORD M. TOLMAN
Arizona State Board of Professional Engineers and Land Surveyors
Expires 3-31-26

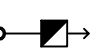

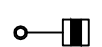
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PHOTOMETRIC LEGEND

- 
 Pickleball Court Light
 candela file 'GLAN-SA8C-730-U-T4W_51740 lumens.ies'
 128 lamp(s) per luminaire, photometry is absolute
 Light Loss Factor = 0.910, watts per luminaire = 429
 mounting height= 20 ft
 number locations= 16, number luminaires= 16
 kw all locations= 6.9
- 
 Bollard Light
 candela file 'FLT-PLB-ASM 1.4.ies'
 1 lamp(s) per luminaire, 300 initial lumens per lamp
 Light Loss Factor = 0.910, watts per luminaire = 0
 mounting height= 3 ft
 number locations= 1, number luminaires= 1
 kw all locations= 0.0
- 
 Parking Lot Light
 candela file 'FLT-SCL-Type4F 3.4.ies'
 1 lamp(s) per luminaire, 1198 initial lumens per lamp
 Light Loss Factor = 0.910, watts per luminaire = 0
 mounting height= 12 ft
 number locations= 4, number luminaires= 4
 kw all locations= 0.0

PHOTOMETRIC RESULTS

Parking Lot	
112 points at z=0, sp 10ft by 10ft	
HORIZONTAL FOOTCANDLES	
Average	0.2
Maximum	1.0
Minimum	0.0
Avg:Min	N/A
Max:Min	N/A
Coef Var	0.94
UnifGrad	N/A
Pickleball Courts	
120 points	
HORIZONTAL FOOTCANDLES	
Average	35.0
Maximum	40.1
Minimum	23.7
Avg:Min	1.48
Max:Min	1.69
Coef Var	0.14
Pathways	
122 points	
HORIZONTAL FOOTCANDLES	
Average	0.0
Maximum	0.8
Minimum	0.0
Avg:Min	N/A
Max:Min	N/A
Coef Var	2.71

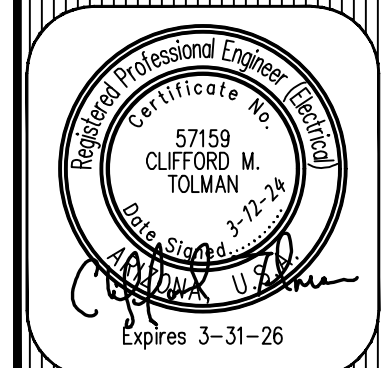
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PROJECT: TITLE:

SEDONA, ARIZONA
PICKLEBALL COURT LIGHTING
SITE ELECTRICAL
PHOTOMETRIC ANALYSIS

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	3-12-24	1ST SUBMITTAL



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