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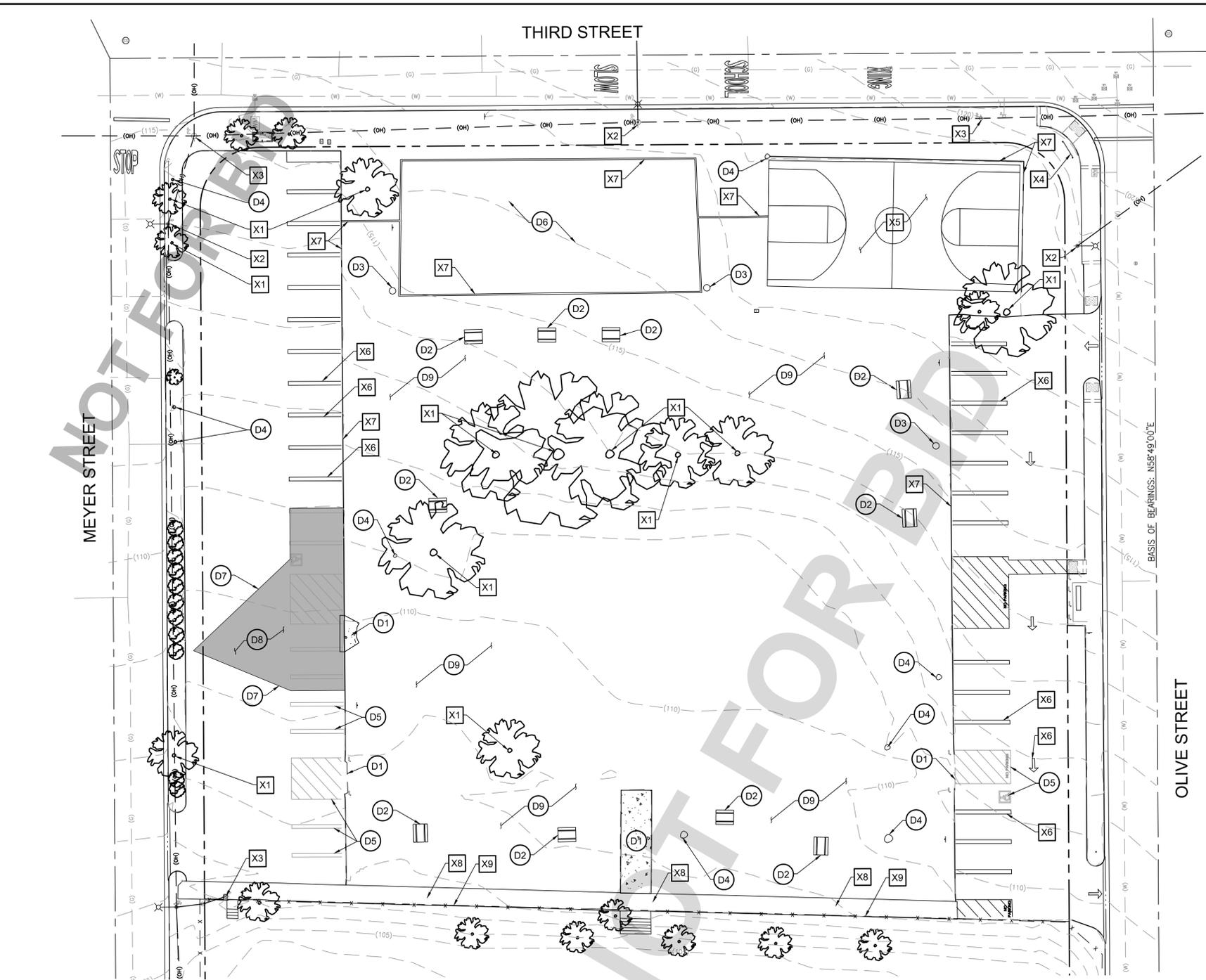
CONTRACT DRAWINGS

**ORO GRANDE PARK
REVITALIZATION PROJECT**

FOR

**COUNTY SERVICE AREA (CSA) 42
ORO GRANDE, CALIFORNIA**

PROJECT NO.: 30.30.0150



DEMOLITION ITEMS

BID STATUS	SYM.	DESCRIPTION	SYM.
BASE BID	(D1)	REMOVE EXISTING CONCRETE PAVING	
BASE BID	(D2)	10 EA REMOVE EXISTING PICNIC TABLES	
BASE BID	(D3)	3 EA REMOVE EXISTING TRASH RECEPTACLE	
BASE BID	(D4)	LS REMOVE EXISTING TREE STUMP	
BASE BID	(D5)	LS REMOVE EXISTING PARKING STRIPING	
BASE BID	(D6)	LS REMOVE EXISTING PLAYGROUND EQUIPMENT AND WOOD CHIP MULCH	
BASE BID	(D7)	LS SAWCUT FULL THICKNESS EXISTING PAVEMENT PER ENGINEERING PLAN	
BASE BID	(D8)	LS REMOVE EXISTING ASPHALT AND ADJACENT CONCRETE CURB	
BASE BID	(D9)	LS CONTRACTOR SHALL CLEAR AND GRUB ALL EXISTING TURF AREAS	

EXISTING ITEMS TO REMAIN

BID STATUS	SYM.	QTY.	DESCRIPTION	SYM.
BASE BID	(X1)	LS	EXISTING TREE TO REMAIN PROTECT IN PLACE	
BASE BID	(X2)	LS	EXISTING LIGHT STANDARD TO REMAIN PROTECT IN PLACE	
BASE BID	(X3)	LS	EXISTING POWER POLE TO REMAIN PROTECT IN PLACE	
BASE BID	(X4)	LS	EXISTING MONUMENT SIGN TO REMAIN PROTECT IN PLACE	
BASE BID	(X5)	LS	EXISTING BASKETBALL COURT TO REMAIN PROTECT IN PLACE	
BASE BID	(X6)	LS	EXISTING PARKING LINES TO REMAIN PROTECT IN PLACE	
BASE BID	(X7)	LS	EXISTING CURB TO REMAIN PROTECT IN PLACE	
BASE BID	(X8)	LS	EXISTING CONCRETE TO REMAIN PROTECT IN PLACE	
BASE BID	(X9)	LS	EXISTING FENCE TO REMAIN PROTECT IN PLACE	

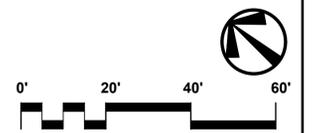
DEMOLITION NOTES

- QUANTITIES ARE GIVEN FOR ESTIMATING PURPOSES ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING MATERIAL IN ALL AREAS AS DESIGNATED ON PLAN AT NO ADDITIONAL COST TO THE DISTRICT.
- EXISTING UTILITY LINE LOCATIONS ARE NOT KNOWN. CONTRACTOR SHALL VERIFY LOCATIONS IN FIELD PRIOR TO DEMOLITION AND CONSTRUCTION WORK. CONTACT DIG ALERT PRIOR TO BEGINNING ANY DEMOLITION WORK.
- WITH THE EXCEPTION OF ALL IRRIGATION PIPE, REMOVE AND LEGALLY DISPOSE OF ITEMS, EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, OR REINSTALLED. ALL IRRIGATION MATERIALS SHALL REMAIN PROPERTY OF THE DISTRICT. DEMOLISHED MATERIALS SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE REMOVED, RECYCLED, OR DISPOSED FROM PROJECT SITE IN AN APPROPRIATE AND LEGAL MANNER. REFER TO SPECIFICATIONS.
- LEGALLY TRANSPORT AND DISPOSE OF MATERIALS TO A TRANSFER STATION OR DISPOSAL FACILITY THAT CAN LEGALLY ACCEPT THE MATERIALS FOR THE PURPOSE OF DISPOSAL.
- PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING THAT ARE DESIGNATED TO REMAIN IN PLACE. IF DAMAGED DURING CONSTRUCTION CONTRACTOR SHALL REPLACE AT NO COST TO THE DISTRICT.
- CONTRACTOR SHALL PROTECT STORM WATER DRAINAGE FACILITIES FROM POLLUTION RESULTING FROM CONTRACTOR'S ACTIVITIES FOR THE DURATION OF THE PROJECT.
- CONTRACTOR IS RESPONSIBLE FOR CLEARING AND GRUBBING ALL EXISTING TURF AREAS AND FINE GRADING FOR NEW PLANTING.

TREE & STUMP REMOVAL NOTE

- CONFIRM TREE REMOVAL WITH AUTHORIZED DISTRICT REPRESENTATIVE PRIOR TO REMOVING ANY TREES.

OLIVE STREET



UNDERGROUND SERVICE ALERT



BENCHMARK:

BASIS OF BEARINGS:



COMPANY ADDRESS AND LOGO

RAA
RIVERSIDE ARCHITECTS & PLANNERS, INC.
6840 INDIANA AVENUE SUITE #100
RIVERSIDE, CA 92506 LIC. #2799
PH. (951) 781-1930
FAX (951) 688-8091

PREPARED UNDER THE SUPERVISION OF:
DOUG GROVE 2799 4/1/2024
LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR. DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

APPROVALS	ASSISTANT DIRECTOR		DATE	
	PROJECT MANAGER	INITIAL	DATE	

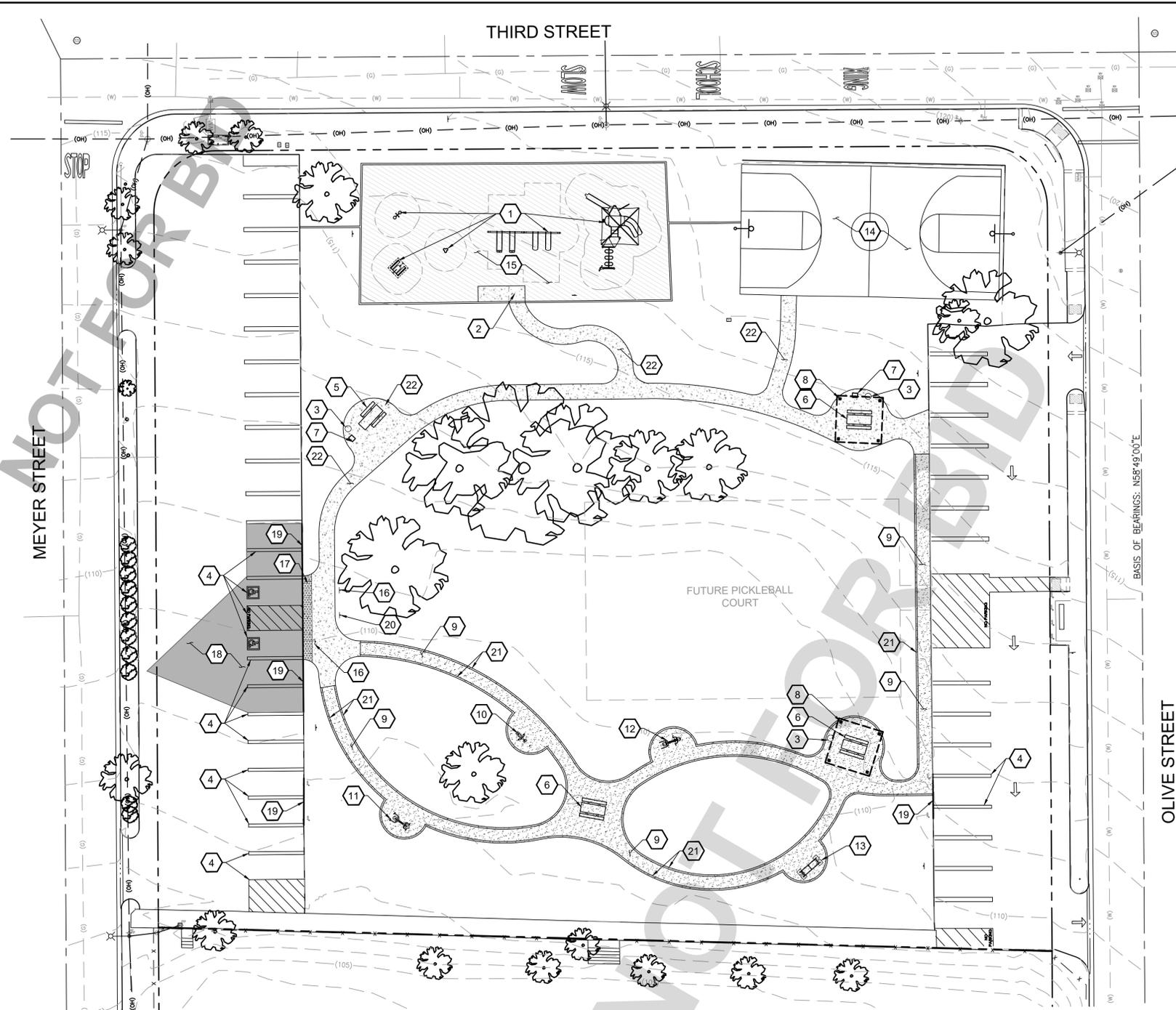
IMPROVEMENT PLANS

APN. NO. 046819502
ORO GRANDE PARK
REVITALIZATION PROJECT
DEMOLITION PLAN

DWG NO.
30.30.0042

FILE NO.

DP-1
SHEET 2 OF 9



CONSTRUCTION LEGEND

BID STATUS	SYM	QTY	DESCRIPTION	REMARKS/DETAIL
BASE BID	1	1 LS	FURNISH & INSTALL PLAYGROUND EQUIPMENT BY LSI - PRODUCT NUMBER: 1173188-01-01 CONTACT : TAYLOR SMITH , (909)-767-0201 OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	2	1 LS	CONSTRUCT PLAYGROUND RAMP	DETAIL 'B' SHEET CD-1
BASE BID	3	3 EA	FURNISH & INSTALL TRASH RECEPTACLE BY 'QCP' MODEL: QR-CAL2436W-A19 COLOR LATTE, FINISH - SANDSTONE, WITH BROWN TRASH LID OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	4	1 LS	PAINT PARKING STRIPING AND ACCESSIBLE STALLS	DETAIL 'E' SHEET CD-1
BASE BID	5	1 EA	FURNISH & INSTALL ACCESSIBLE 8' PICNIC TABLE BY 'QCP' MODEL: Q-LBT-102PTADA COLOR LATTE, FINISH - SANDSTONE OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	6	3 EA	FURNISH & INSTALL 8' PICNIC TABLE BY 'QCP' MODEL: Q-LBT-96PT COLOR LATTE, FINISH - SANDSTONE OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	7	2 EA	INSTALL BARBEQUE GRILL BY 'DUMOR', MODEL GRILL 21, COLOR: BLACK. DUMOR (800) 598-4018) OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	8	2 EA	FURNISH & INSTALL SQUARE SHADE STRUCTURE BY ICON, PRODUCT NUMBER: SQ15M WITH METAL ROOF. POST AND BEAM COLOR : SILK GREY, ROOF COLOR: MANSARD BROWN OR APPROVED EQUAL	PER MANUFACTURER AND SHELTER DETAILS ON SHEET CD-2
BASE BID	9	3,630SF	CONSTRUCT 3" STABILIZED DECOMPOSED GRANITE PATHWAY , COLOR : TAN CALIFORNIA GOLD	DETAIL 'A' SHEET CD-1
BASE BID	10	1 EA	FURNISH AND INSTALL ELLIPTICAL CROSS TRAINER GREENFIELD FITNESS EQ. NUMBER : SHP503 OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	11	1 EA	FURNISH AND INSTALL 2-PERSON ACCESSIBLE LAT PULL GREENFIELD FITNESS EQ. NUMBER : SGR048W OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	12	1 EA	FURNISH AND INSTALL ROWING MACHINE GREENFIELD FITNESS EQ. NUMBER : SGR091 OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	13	1 EA	FURNISH AND INSTALL 4-PERSON LOWER BODY COMBO GREENFIELD FITNESS EQ. NUMBER : SGR021 OR APPROVED EQUAL	PER MANUFACTURER
BASE BID	14	LS	RESURFACE & RESTRIPE BASKETBALL COURT	DETAIL 'A' SHEET CD-2 PER MANUFACTURER
BASE BID	15	4,386 SF	FURNISH AND INSTALL 12" MIN. OF 'FIBAR' WOODCHIPS. INSTALL 'FIBAR FELT' FABRIC BETWEEN WOODCHIPS AND SOIL. 80% COMPACTION IN 4" LIFTS. (FIBAR SYSTEMS)	PER MANUFACTURER (800)-342-2721
BASE BID	16	2 EA	INSTALL ACCESSIBLE STALL SIGN	DETAIL 'F' SHEET CD-1
BASE BID	17	1 EA	INSTALL TRUNCATED DOMES OVER AC PAVING PER ENGINEERING PLAN	DETAIL 'D' SHEET CD-1
BASE BID	18	1,825 SF	AC PAVING PER ENGINEERING PLAN	PER ENGINEERING PLAN
BASE BID	19	95 LF	CONSTRUCT VARIABLE CURB HEIGHT PER ENGINEERING PLAN	PER ENGINEERING PLAN
BASE BID	20	1 EA	INSTALL ACCESSIBLE PARKING LOT SIGN	DETAIL 'C' SHEET CD-1
BASE BID	21	965 LF	CONSTRUCT 6" CONCRETE MOW CURB	DETAIL 'A' SHEET CD-1
BASE BID	22	2,585 SF	CONSTRUCT 4" THICK CONCRETE PAVEMENT, NATURAL GRAY COLOR WITH MEDIUM BROOM FINISH	PER ENGINEER PLANS & DETAIL 'G' SHEET CD-1



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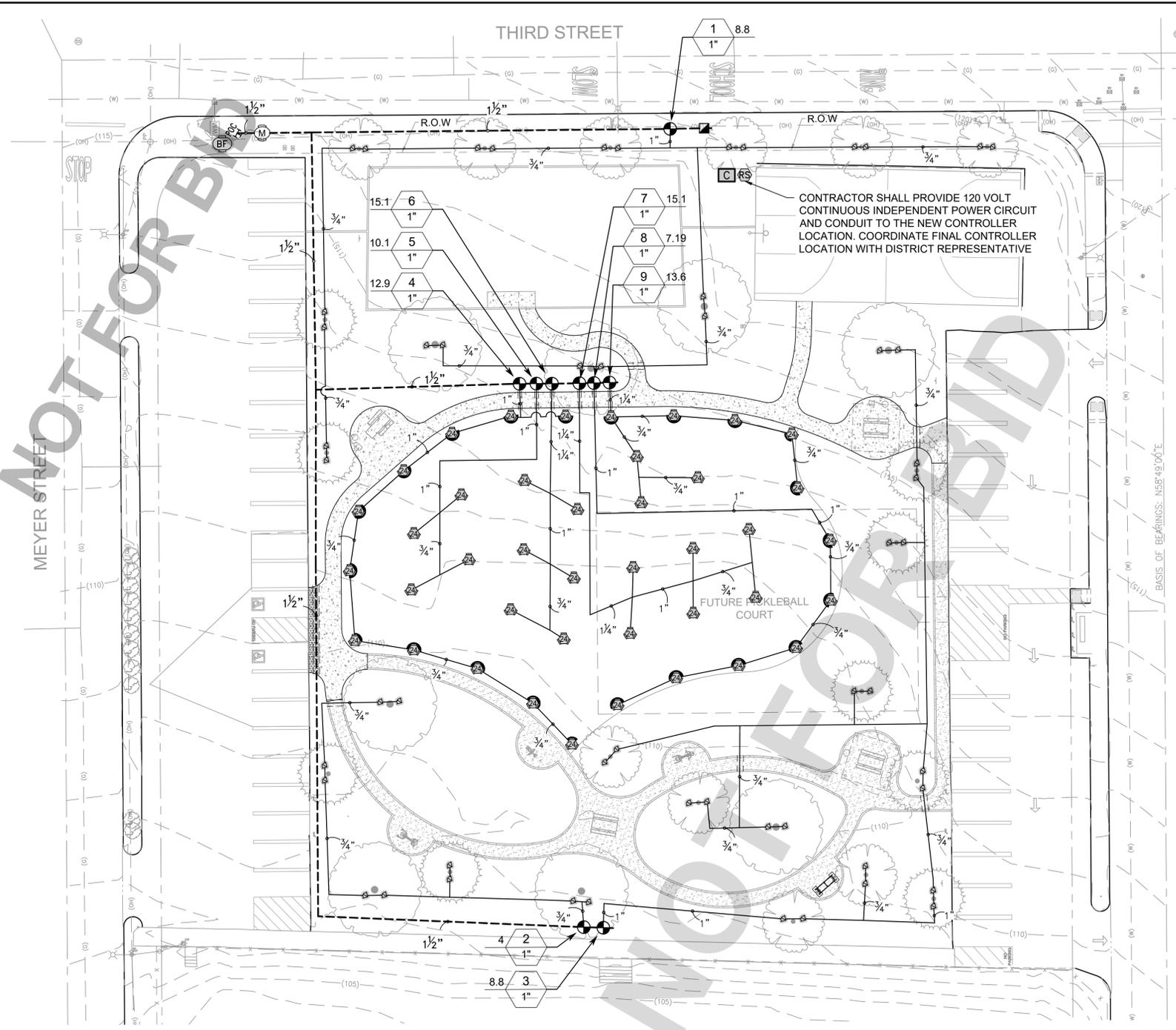
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ASSISTANT DIRECTOR		DATE	
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OPS, DIVISION MANAGER			
PM, DIVISION MANAGER			

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 SHEET 3 OF 9



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI	DETAIL
	RAIN BIRD R-VAN24 RD-06-SAM-P45 TURF ROTARY, 17FT.-24FT. W/RD1806 SPRAY BODY, WITH CHECK VALVE AND 45 PSI PRESSURE REGULATOR.	35	A/ID-1
	RAIN BIRD 1806-SAM-5 SERIES STREAM W/ PCS STREAM BUBBLER 6IN. POPUP WITH CHECK VALVE, PRESSURE COMPENSATING SCREEN.	30	B/ID-1
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL	
	RAIN BIRD EFB-CP-PRS-D NEW BRASS ELECTRIC REMOTE CONTROL VALVE, WITH PRESSURE REGULATOR. CONNECT TO SPARE CONTROL WIRE LOCATED NEAR THE LAST EXISTING VALVE.	C/ID-1	
	RAIN BIRD 44-LRC 1IN. BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.	E/ID-1	
	RAIN BIRD EFB-CP 1" BRASS MASTER VALVE, THAT IS CONTAMINATION PROOF W/SELF-FLUSHING FILTER SCREEN. GLOBE CONFIGURATION.	G/ID-1	
	BACKFLOW 2" EXISTING REDUCED PRESSURE BACKFLOW PREVENTER		
	RAIN BIRD ESPLXME2-LXMM-LXMMPED 12 STATION, TRADITIONALLY-WIRED, COMMERCIAL CONTROLLER. (1) ESPLXME2 12-STATION. INSTALL IN LXMM-LXMMPED POWDER COATED, METAL PEDESTAL	H/ID-1	
	RAIN BIRD RSD-BEX RAIN SENSOR, WITH METAL LATCHING BRACKET AND EXTENSION WIRE. INSTALL ON PEDESTAL PER MANUFACTURER.	H/ID-1	
	POINT OF CONNECTION 3" CONNECT TO EXISTING MAINLINE NEAR WATER METER.		
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	D/ID-1	
	IRRIGATION MAINLINE: PVC SCHEDULE 40	D/ID-1	
	PIPE SLEEVE: PVC SCHEDULE 40 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.	F/ID-1	

CRITICAL ANALYSIS

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P.O.C. NUMBER: 01
Water Source Information: Connect to existing mainline near water

FLOW AVAILABLE
Point of Connection Size: 3"
Flow Available: 159.76 GPM

PRESSURE AVAILABLE
Static Pressure at POC: 48 PSI
Pressure Available: 48 PSI

DESIGN ANALYSIS
Maximum Station Flow: 15.12 GPM
Flow Available at POC: 159.76 GPM
Residual Flow Available: 144.64 GPM

Critical Station: 4
Design Pressure: 35 PSI
Friction Loss: 5.08 PSI
Fittings Loss: 0.51 PSI
Elevation Loss: 0 PSI
Loss through Valve: 0.99 PSI
Pressure Req. at Critical Station: 41.6 PSI
Loss for Fittings: 0.09 PSI
Loss for Main Line: 0.85 PSI
Loss for POC to Valve Elevation: 0 PSI
Loss for Backflow: 0 PSI
Loss for Master Valve: 0.99 PSI
Critical Station Pressure at POC: 43.5 PSI
Pressure Available: 48 PSI
Residual Pressure Available: 4.5 PSI

SCH 40 PVC SLEEVING CHART

SLEEVE SIZE	WIRE COUNT	PIPE SIZE
1 1/4" SLEEVE	1-4 WIRES	1/2" PIPE
1 1/2" SLEEVE	5-10 WIRES	3/4" PIPE
2" SLEEVE	11-20 WIRES	1" PIPE
2 1/2" SLEEVE	21-30 WIRES	1 1/4" PIPE
3" SLEEVE	31-40 WIRES	1 1/2" PIPE
4" SLEEVE	41-60 WIRES	2" PIPE
6" SLEEVE	61-99 WIRES	3" PIPE
8" SLEEVE	100+ WIRES	4" PIPE
10" SLEEVE	N/A	6" PIPE

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP
1	RAIN BIRD EFB-CP-PRS-D	1"	BUBBLER	8.8	29.0	32.0	33.0	6.12 in/h
2	RAIN BIRD EFB-CP-PRS-D	1"	BUBBLER	4	476.0	31.2	31.6	6.12 in/h
3	RAIN BIRD EFB-CP-PRS-D	1"	BUBBLER	8.8	482.2	36.2	37.7	6.12 in/h
4	RAIN BIRD EFB-CP-PRS-D	1"	TURF ROTARY	12.86	289.4	41.6	43.5	0.33 in/h
5	RAIN BIRD EFB-CP-PRS-D	1"	TURF ROTARY	10.08	294.8	38.4	39.7	0.31 in/h
6	RAIN BIRD EFB-CP-PRS-D	1"	TURF ROTARY	15.12	299.7	38.1	40.6	0.34 in/h
7	RAIN BIRD EFB-CP-PRS-D	1"	TURF ROTARY	15.12	308.4	38.8	41.5	0.33 in/h
8	RAIN BIRD EFB-CP-PRS-D	1"	TURF ROTARY	7.19	313.1	39.1	39.9	0.3 in/h
9	RAIN BIRD EFB-CP-PRS-D	1"	TURF ROTARY	13.6	318.0	37.4	39.7	0.41 in/h
	Common Wire				589.4			

IRRIGATION NOTES

- EXISTING IRRIGATION OUTSIDE OF DEMO AREA SHALL BE PROTECTED IN PLACE AND KEPT OPERATIONAL DURING CONSTRUCTION. ANY DAMAGED IRRIGATION EQUIPMENT DUE TO CONSTRUCTION SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DISTRICT.
- LOCATION OF IRRIGATION LINES AND SYMBOLS ARE DIAGRAMMATIC. ALL IRRIGATION SHALL BE PLACED IN PLANTING AREAS EXCEPT WHEN CROSSING PAVEMENT. ALL PIPE AND WIRE CROSSING PAVEMENT SHALL BE SLEEVED.
- VALVE LOCATIONS SHOWN ON THE PLAN ARE APPROXIMATE. VERIFY IN FIELD. ANY EXISTING LATERAL LINES SERVICING EXISTING VALVES SHALL BE KEPT OPERATIONAL, PROTECT IN PLACE.
- CONTRACTOR TO CERTIFY EXISTING R.P. DEVICE.
- SYSTEM DESIGN IS BASED ON MINIMUM OPERATING PRESSURE SHOWN AT THE POINT OF CONNECTION WITH MAXIMUM GPM DEMAND SPECIFIED. IRRIGATION CONTRACTOR SHALL VERIFY ALL PRESSURES ON SITE PRIOR TO CONSTRUCTION TO OWNER'S 13. CONSTRUCTION REPRESENTATIVE.
- QUALITY CONTROL OBSERVATION SEQUENCES ARE FOUND IN THE SPECIFICATIONS.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE THEMSELVES WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, CURBS, ETC. COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR AND OTHER SUB-CONTRACTORS FOR LOCATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADS, PAVING AND STRUCTURES.
- MAINLINE FEEDER BETWEEN POINT OF CONNECTION AND WATER METER TO BE OF MATERIAL REQUIRED BY CURRENT WATER DISTRICT.
- CONTRACTOR TO PROVIDE AND INSTALL THE IRRIGATION CONTROLLER ASSEMBLY (SEE LEGEND FOR MODEL). GENERAL CONTRACTOR TO PROVIDE 120 VOLT CONTINUOUS INDEPENDENT POWER CIRCUIT AND CONDUIT TO THE CONTROLLER LOCATION.
- CONTRACTOR SHALL COORDINATE FINAL CONTROLLER LOCATION WITH DISTRICT REPRESENTATIVE.
- TWO SPARE WIRES SHALL BE INSTALLED ALONG THE LENGTH OF MAINLINE ALONG WITH 1 WIRE COILED IN EACH VALVE BOX. (DIFFERENT COLOR THAN FIELD WIRES AND COMMON WIRE).
- ALL VALVE CONTROL/Common WIRES THAT ARE NOT LOCATED ADJACENT TO MAINLINE SHALL BE INSTALLED IN SCH. 40 GRAY PVC CONDUITS.
- USE SOLVENT WELD PIPE WITH PVC SCHEDULE 80 FITTINGS ON ALL MAINLINE PIPING. USE SCHEDULE 40 FITTINGS FOR NON-PRESSURE LATERAL LINES. APPLY PRIMER TO ALL SURFACES PRIOR TO SOLVENT WELD.
- SLEEVES FOR IRRIGATION LINES UNDER PAVING AND ROADWAYS SHALL BE SCHEDULE 40 PVC, TWO TIMES THE DIAMETER OF THE PIPE BEING SLEEVED. MIN 2" SLEEVE SIZE, ALSO FOR WIRE ONLY SLEEVES, FOR POSSIBLE FUTURE USE. IN ADDITION TO THE SLEEVES SHOWN ON THE PLAN, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ADDITIONAL SLEEVES OF SUFFICIENT SIZE UNDER ALL PAVED AREAS PRIOR TO PAVING UPON APPROVAL OF THE DISTRICT REPRESENTATIVE, IF REQUIRED TO OPERATE SYSTEMS.

- IRRIGATION CONTRACTOR SHALL FLUSH ALL LINES AND ADJUST ARC AND RADIUS OF ALL HEADS FOR MAXIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, STREETS, AND BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST NOZZLE RADIUS TO FIT UNUSUAL SITE CONDITIONS FOR APPROVAL PURPOSES AT NO EXTRA CHARGE. CALL LANDSCAPE ARCHITECT AND DISTRICT 48 HOURS IN ADVANCE FOR ANY COVERAGE TESTS.
- EXISTING SPRAY HEADS AND VALVES FROM THE EXISTING IRRIGATION SYSTEM SHALL BE REMOVED AND GIVEN TO THE DISTRICT. ALL OTHER IRRIGATION EQUIPMENT AND CONTROL WIRES BELOW GRADE CAN BE ABANDONED IN PLACE IF IT DOES NOT INTERFERE WITH NEW CONSTRUCTION.
- PROTECT IN PLACE EXISTING WATER METERS AND BACKFLOW PREVENTERS. THEY ARE TO BE RE-USED FOR THE NEW IRRIGATION SYSTEM.
- MAINLINE, VALVES, IRRIGATION VALVES, ETC. ARE SHOWN IN THE HARDSCAPE FOR CLARIFICATION ONLY. INSTALL IN PLANTING AREAS THROUGHOUT SITE.
- CLEAN-UP ON A DAILY BASIS PER DISTRICT REPRESENTATIVE'S APPROVAL.



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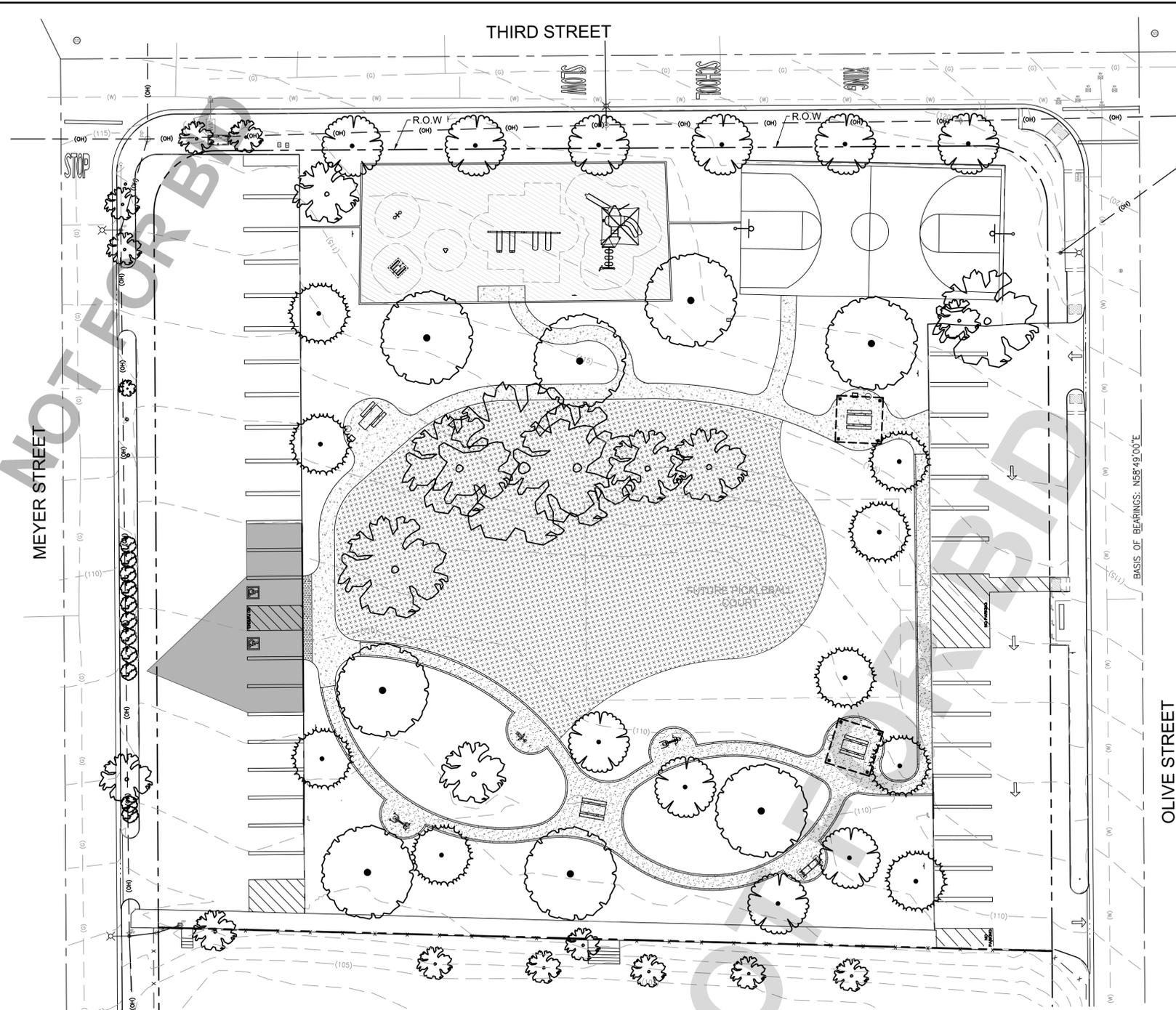
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REVITALIZATION PROJECT
IRRIGATION PLAN

DWG NO.
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FILE NO.

IP-1
SHEET 4 OF 9



PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	CONTAINER	WUCOLS	DETAIL
	10	CERCIDIUM X 'DESERT MUSEUM' / DESERT MUSEUM PALO VERDE	15 GAL	LOW	A/PD-1
	9	CERCIS OCCIDENTALIS / WESTERN REDBUD	15 GAL	LOW	A/PD-1
	8	QUERCUS AGRIFOLIA / COAST LIVE OAK MULTI-TRUNK	15 GAL	LOW	A/PD-1
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT	WUCOLS	DETAIL
	12,408 SF	NORTHBRIDGE BERMUDAGRASS / HYDRO-SEED	SEED		

PLANTING NOTES

1. CONTRACTOR SHALL INSTALL DEEPROOT BARRIERS IN ALL AREAS WHERE TREES ARE INSTALLED WITHIN 6' OF HARDSCAPE PER DETAIL 'B', ON SHEET PD-1. ROOT BARRIERS SHALL NOT ENCIRCLE THE TREE ROOTBALL BUT SHALL BE LOCATED AT EDGE OF HARDSCAPE AND EXTEND BEYOND CENTER OF TREE A MINIMUM OF 5' IN EACH DIRECTION.
2. ALL TREES SHALL MEET ANSI Z60.1 SPECIFICATIONS FOR NURSERY STOCK; BE FREE FROM DEFECTS INCLUDING CO-DOMINANT STEMS, AND GIRDLING ROOTS; ROOT FLARE SHALL BE VISIBLE AT TOP OF SOIL LEVEL. DEFECTIVE PLANT MATERIAL SHALL BE REMOVED AND REPLACED, AT NO ADDITIONAL COST TO THE CLIENT, AS SOON AS POSSIBLE AND VERIFIED AT FINAL INSPECTION OR TURN OVER.
3. CONTRACTOR IS RESPONSIBLE FOR CLEARING AND GRUBBING ALL TURF AREAS AND NEW PLANTING AREAS; FEATHER GRADE ALL PLANTING AREAS.
4. CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND/OR REPLACEMENT OF ANY DAMAGED LANDSCAPE AREAS BEYOND THE LIMIT OF WORK, INCLUDING REPAIRING ANY IRRIGATION LINES/ SPRINKLER HEADS, THAT IS A DIRECT RESULT OF THE LANDSCAPE CONSTRUCTION AND/OR HIS SUB-CONTRACTOR. REPLACEMENT ITEMS SHALL BE EXACT DUPLICATION OF ORIGINAL EQUIPMENT, UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT OR DISTRICT REPRESENTATIVE.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL GRADES AND FLOW LINES AS SHOWN ON THE GRADING PLAN.



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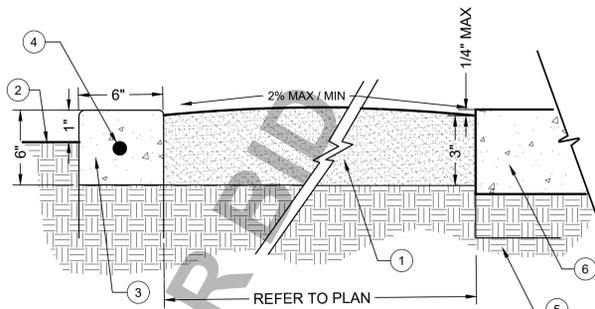
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 APN. NO. 046819502
 ORO GRANDE PARK
 REVITALIZATION PROJECT
 PLANTING PLAN

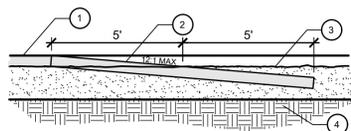
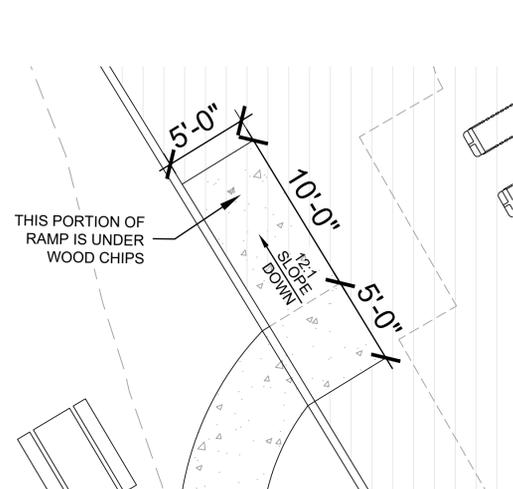
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 SHEET 5 OF 9



- LEGEND**
- 1 STABILIZED DECOMPOSED GRANITE, PER PLAN, INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
 - 2 FINISHED GRADE
 - 3 2800 PSI CONCRETE MOWSTRIP NATURAL GREY SMOOTH TROWEL FINISH 1/4" RADIUS TO ALL EDGES. INSTALL 1/2" PERFORMED EXPANSION JOINTS @ 15' O.C. MAX. AND AT BEGINNING & END OF RADIUS. WIDTH PER PLAN
 - 4 #3 REBAR CONT. (CENTERED) LAP BARS 8" @ SPLICES & TIE
 - 5 90% COMPACTED SUBGRADE
 - 6 ADJACENT PAVING PER PLAN

A DECOMPOSED GRANITE

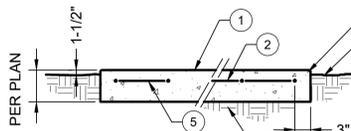
3/4" = 1'-0" 321516-03



- LEGEND**
- 1 CONCRETE LANDING PER PLAN
 - 2 CONCRETE RAMP INTO PLAY AREA @ 12:1 MAXIMUM.
 - 3 TOP OF WOOD CHIPS PER PLAN
 - 4 COMPACTED SUB-GRADE

B PLAY AREA ACCESSIBLE RAMP

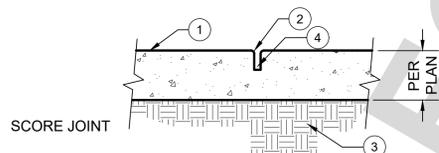
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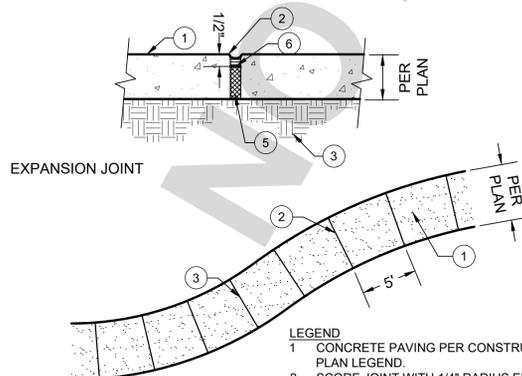
- LEGEND**
- 1 CONCRETE PAVING - REFER TO CONSTRUCTION PLAN FOR COLOR AND FINISH
 - 2 #3 REBAR AT 24" O.C. EACH WAY, CENTERED SLAB
 - 3 FINISH GRADE
 - 4 COMPACTED SUBGRADE - PER SOILS REPORT
 - 5 1/4" TOOLED RADIUS

NOTES

- PAVING THICKNESS, BASE PREPARATION AND REINFORCING ARE SHOWN FOR BID PURPOSES ONLY. VERIFY REQUIREMENTS OF THE SOILS REPORT AND COMPLY.



- LEGEND**
- 1 CONCRETE PAVING FINISH/COLOR PER PLAN
 - 2 1/4" RADIUS TROWELED EDGE
 - 3 COMPACTED SUBGRADE PER SOILS REPORT
 - 4 AFTER PRELIMINARY TROWELING, THE CONCRETE SHALL BE PARTED W/ A STRAIGHT EDGE TO A DEPTH OF 1/2 OF THE CONCRETE THICKNESS
 - 5 3/8" FOAM EXPANSION JOINT
 - 6 POLYURETHANE CAULKING TO MATCH CONCRETE COLOR. SPRINKLE W/ SAND WHILE STILL WET



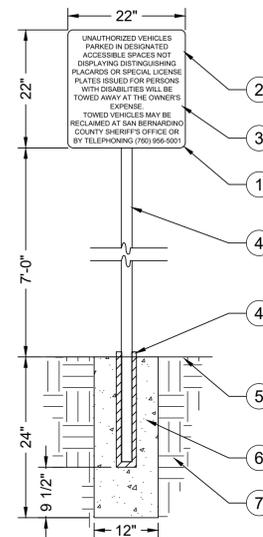
- LEGEND**
- 1 CONCRETE PAVING PER CONSTRUCTION PLAN LEGEND
 - 2 SCORE JOINT WITH 1/4" RADIUS EDGE. SEE PLAN FOR ON CENTER SPACING. SEE ABOVE.
 - 3 EXPANSION JOINT WITH 1/4" RADIUS EDGE @ 15' O.C. SEE ABOVE.

G CONCRETE PAVING WITH JOINTS

3/4" = 1'-0" 321313.13-20

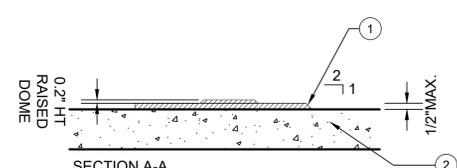
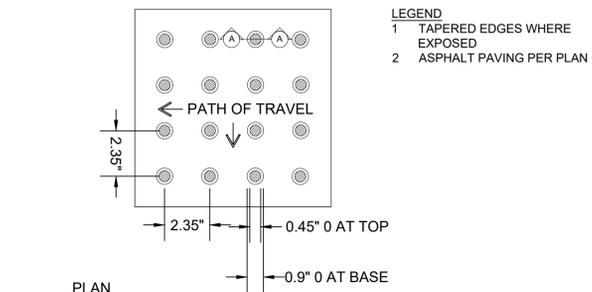
- LEGEND**
- 1 1" RADIUS TYP.
 - 2 1/4" THICK STEEL SIGN. PAINT DARK GREEN W/ WHITE LETTERS ATTACH TO POST WITH (2) 3/8" DIA. CARRIAGE BOLTS.
 - 3 1" LETTERS (HELVETICA BOLD)
 - 4 2" SQ. GALV. "QUICK PUNCH" POST W/ 18" ANCHOR SLEEVE (ALL POST MOUNTED SIGNS)
 - 5 FINISH GRADE
 - 6 CONCRETE FOOTING 2500 PSI
 - 7 90% COMPACTED SUBGRADE

NOTE: ADD ANTI-GRAFFITI COATING TO SIGN



C ACCESSIBLE PARKING LOT SIGN

3/4" = 1'-0" 010379-03



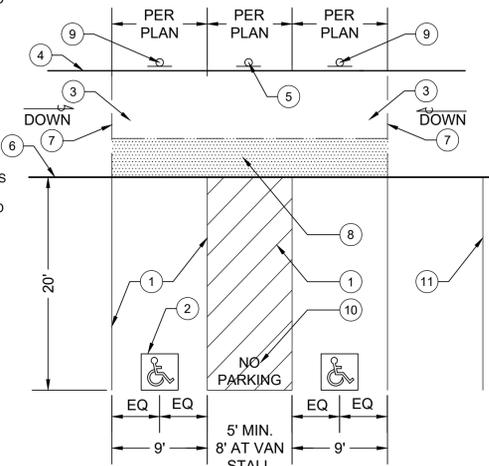
D TRUNCATED DOMES

NTS 010326-01

- LEGEND**
- 1 4" LINES PAINTED BLUE WITH HATCHED LINES AT 36" MAX O.C.
 - 2 3' SQ. INTERNATIONAL SYMBOL OF ACCESSIBILITY, STENCILED IN BLUE PAINT.
 - 3 SLOPE WALK PER GRADING PLAN
 - 4 EDGE OF PAVING PER PLAN.
 - 5 ACCESSIBLE PARKING LOT SIGN.
 - 6 CONCRETE CURB PER PLAN
 - 7 GRADE BREAK.
 - 8 TRUNCATED DOMES PER PLAN.
 - 9 ACCESSIBLE PARKING SIGN.
 - 10 PAINT "NO PARKING" IN WHITE LETTERS A MINIMUM OF 12" IN HEIGHT.
 - 11 4" LINES PAINTED WHITE AT STANDARD PARKING STALL.

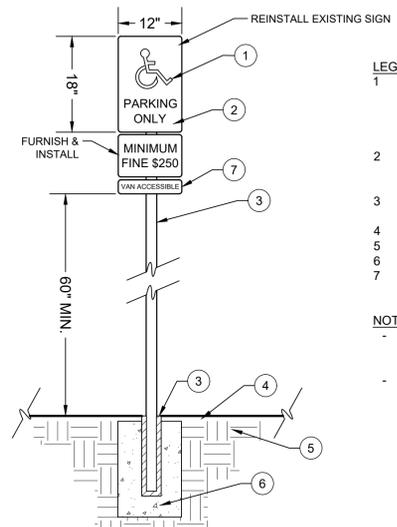
NOTES

- INSTALL STRIPING FOR PARKING STALLS AND OTHER MARKINGS AS SHOWN ON PLANS IN ACCORDANCE WITH STANDARD PUBLIC WORKS SPECIFICATIONS. CONFIRM WITH DISTRICT PRIOR TO PAINTING.
- DOUBLE STRIPE STALLS, MATCH EXISTING
- ALL STRIPING SHALL RECEIVE THREE (3) COATS OF PAINT



E ACCESSIBLE PARKING

NTS



- LEGEND**
- 1 INTERNATIONAL SYMBOL OF ACCESSIBILITY & GRAPHICS (AREA OF SIGN TO BE A MIN. OF 70 SQ. IN.) ON REFLECTORIZED BLUE BACKGROUND. BLUE SHALL BE EQUAL TO COLOR NO. 15090 IN FEDERAL STANDARD 5950.
 - 2 16 GA. GALV. STL. SIGN WITH 3-1/8" DIA. X 3/4" SHEET METAL SCREWS. PAINT FASTENERS TO MATCH BACKGROUND.
 - 3 2" SQ. GALV. "QUICK PUNCH" POST W/ 18" ANCHOR SLEEVE (ALL POST MOUNTED SIGNS)
 - 4 FINISH GRADE, PER PLAN
 - 5 90% COMPACTED SUBGRADE
 - 6 FOOTING, REFER TO DETAIL 'D', SHEET CD-1
 - 7 VAN ACCESSIBLE PARKING SPACES HAVE ADDITIONAL SIGNS.

NOTES

- INSTALL VEHICLE PARKING SIGNS PER CBC STANDARDS, 30" FROM FACE OF CURB AS SHOWN PER PLAN
- 5'-0" MIN CLEARANCE IN PLANTING AREAS, 6'-8" MIN IN PAVED PEDESTRIAN WAYS.

F ACCESSIBLE PARKING SIGNS

NTS

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1-800-227-2600
OR
811

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BENCHMARK:

BASIS OF BEARINGS:

COMPANY ADDRESS AND LOGO

6840 INDIANA AVENUE SUITE #100
RIVERSIDE, CA 92506 LIC. #2799
PH. (951) 781-1930
FAX (951) 688-8091

PREPARED UNDER THE SUPERVISION OF:

DOUG GROVE 2799 4/1/2024
LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:

SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS

PROJECT MANAGER	INITIAL	DATE
OPS, DIVISION MANAGER		
PM, DIVISION MANAGER		

IMPROVEMENT PLANS

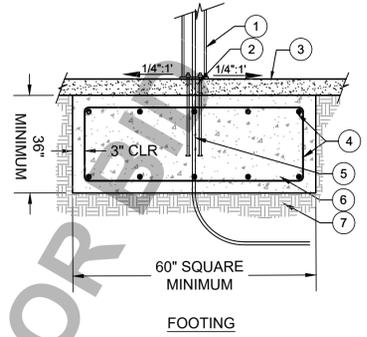
APN. NO. 046819502
ORO GRANDE PARK
REVITALIZATION PROJECT
CONSTRUCTION DETAILS

DWG NO.
30.30.0042

FILE NO.

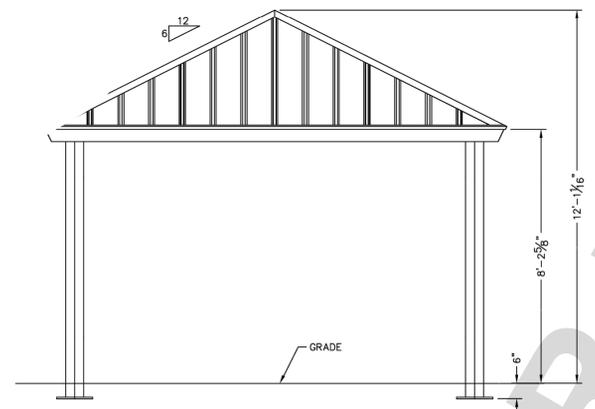
CD-1
SHEET 6 OF 9

NOT FOR CONSTRUCTION



- LEGEND**
- STRUCTURE POST
 - ANCHOR BOLTS, PER MANUFACTURER
 - CONCRETE PAVING PER PLAN
 - (8) #8 HORIZONTAL BARS (EQ. SPACED) EACH WAY, TOP & BOTTOM
 - ELECTRICAL CONDUIT
 - CONCRETE FOOTING, PER STRUCTURAL ENGINEER
 - 95% COMPACTED SUBGRADE

- NOTES**
- CONTRACTOR SHALL OBTAIN ANCHOR BOLTS FROM STRUCTURE REP. AND INSTALL IN CONCRETE FOOTING AS SHOWN
 - CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ANCHOR BOLTS WITH STRUCTURE REPRESENTATIVE.
 - ELECTRICAL CONDUIT SHALL BE INSTALLED INSIDE STEEL STRUCTURE POST.
 - SIZE OF FOOTING IS APPROXIMATE. ACTUAL SIZE WILL BE PROVIDED BY MANUFACTURER'S STRUCTURAL ENGINEER DURING THE CONSTRUCTION SUBMITTAL PROCESS.



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ROSELAND, MD. 20923
616.396.0919
800.748.0985
616.396.0944 FX

Elevation

DRAWN BY: EG
DATE: 7/16/2018
PRELIMINARY ID: 52739
REVISION: A
BUILDING TYPE: S015TM-P6
PROJECT: E

SHEET 1.0

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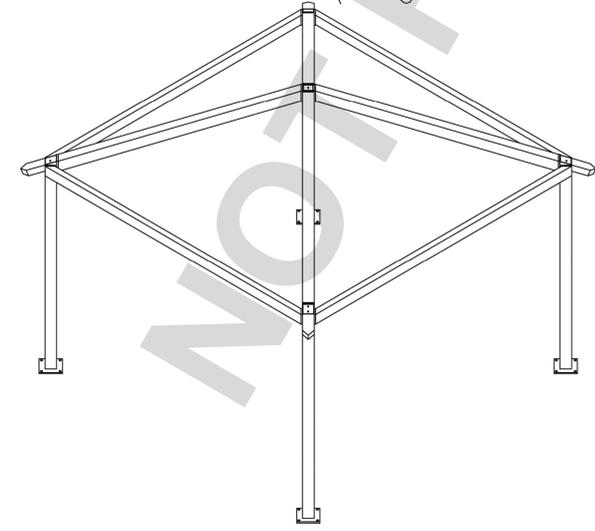
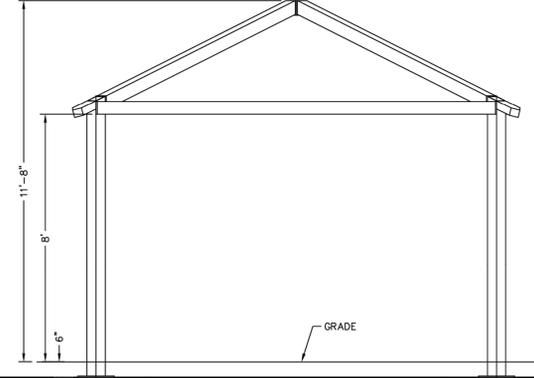
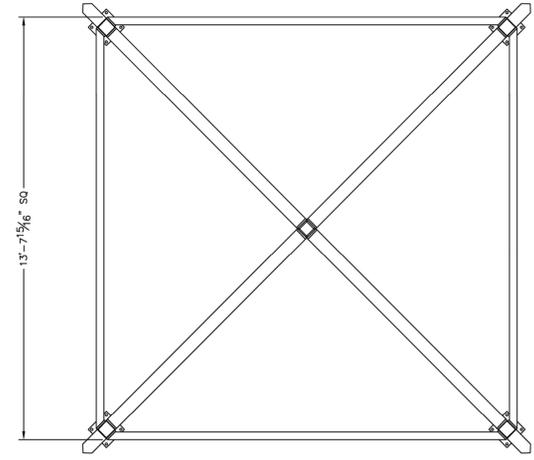
Frame

DRAWN BY: EG
DATE: 7/16/2018
PRELIMINARY ID: 52739
REVISION: A
BUILDING TYPE: S015TM-P6
PROJECT: E

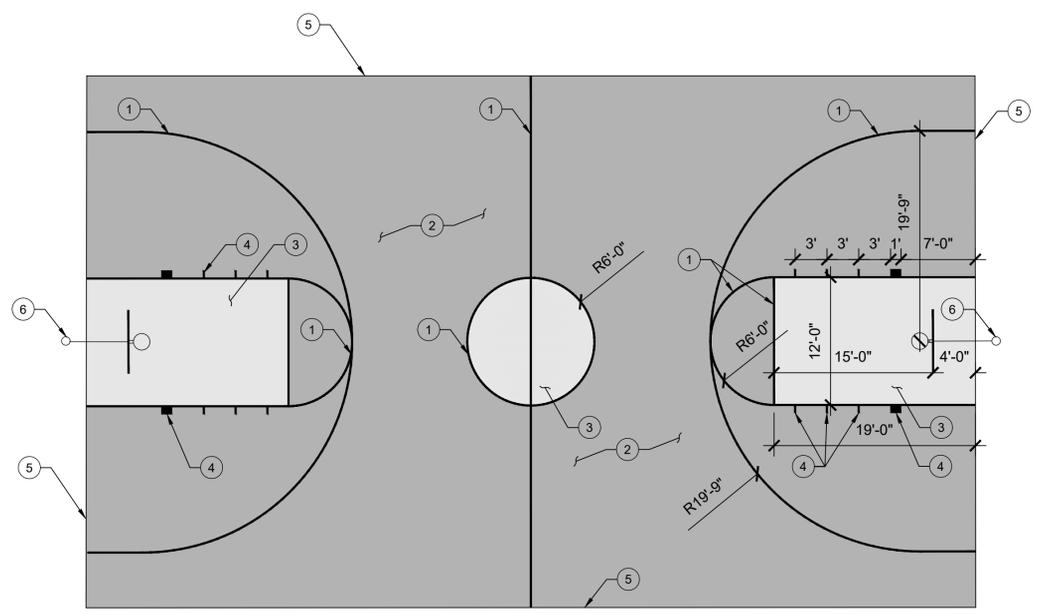
SHEET 3.0

PRELIMINARY: NOT FOR CONSTRUCTION

PRELIMINARY: NOT FOR CONSTRUCTION



ALL STRUCTURAL COMPONENTS WILL BE:
TUBE: ASTM A500 GRADE B
PLATE: ASTM A36
BOLTS: ASTM A325
NUTS: ASTM A563
WELDING: GMAW
NOTE:
COLUMN SIZE: HSS 5x5x3/16



- LEGEND**
- 2" WIDE STRIPE - LATEXITE WHITE TENNIS STRIPING PAINT
 - LATEXITE PULSH RECREATIONAL COATING - TOURNAMENT GREEN (TO BE APPROVED BY DISTRICT REPRESENTATIVE PRIOR TO INSTALLATION)
 - LATEXITE PULSH RECREATIONAL COATING - BLUE (TO BE APPROVED BY DISTRICT REPRESENTATIVE PRIOR TO INSTALLATION)
 - 2" WIDE WHITE LINE 8" DEEP
 - EDGE OF COURT PAVING
 - EXISTING BASKETBALL GOAL

- NOTES**
- CONTRACTOR SHALL CLEAN AND PREP SURFACE PRIOR TO RESURFACING. GRIND AND SMOOTH ALL CRACKS AND LIFTS IN THE COURT SURFACE. ALL GAPS LARGER THAN 1/4" SHALL BE FILLED WITH MASTIC. STRIPING PAINT SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATIONS

A BASKETBALL COURT LAYOUT
1/8"=1'-0"

UNDERGROUND SERVICE ALERT

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OR
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BENCHMARK:

BASIS OF BEARINGS:

COMPANY ADDRESS AND LOGO

RA
RIVERSIDE ARCHITECTS & PLANNERS, INC.
6840 INDIANA AVENUE SUITE #100
RIVERSIDE, CA 92506 LIC. #2799
PH. (951) 781-1930
FAX (951) 688-8091

PREPARED UNDER THE SUPERVISION OF:
DOUG GROVE 2799 4/1/2024
LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

ASSISTANT DIRECTOR _____ DATE _____

APPROVALS

	INITIAL	DATE
PROJECT MANAGER		
OPS, DIVISION MANAGER		
PM, DIVISION MANAGER		

IMPROVEMENT PLANS

APN. NO. 046819502
ORO GRANDE PARK REVITALIZATION PROJECT
CONSTRUCTION DETAILS

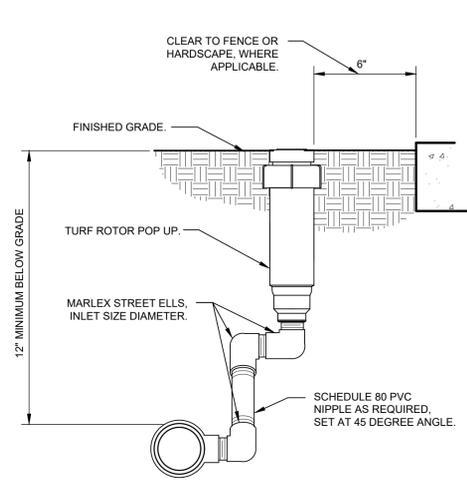
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FILE NO.

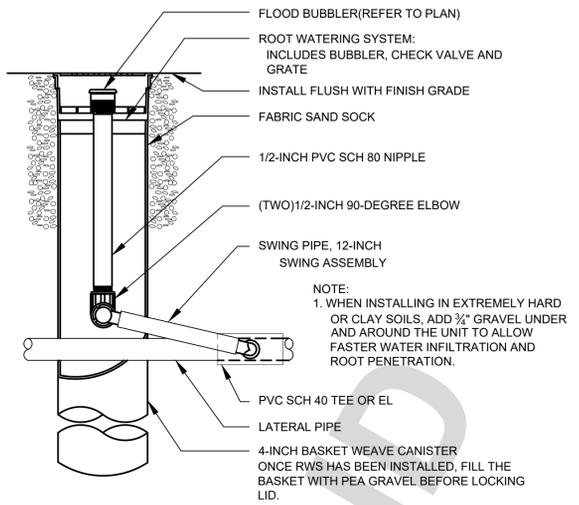
CD-2

SHEET 7 OF 9

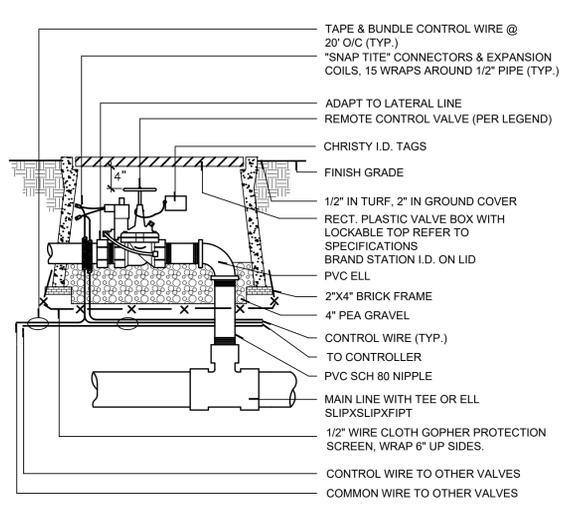
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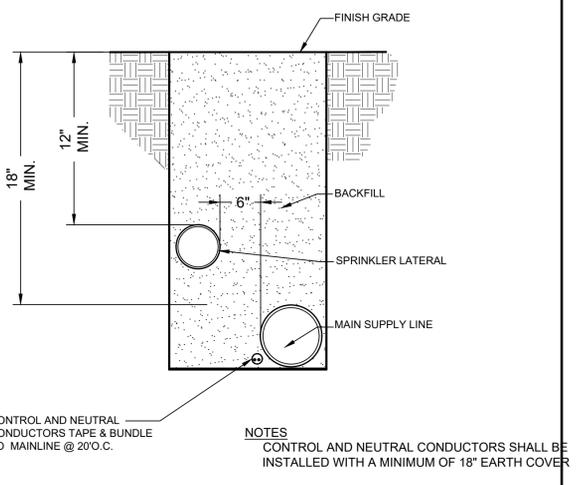
A TURF ROTOR MARLEX ASSEMBLY
3" = 1'-0" 328403.16-01



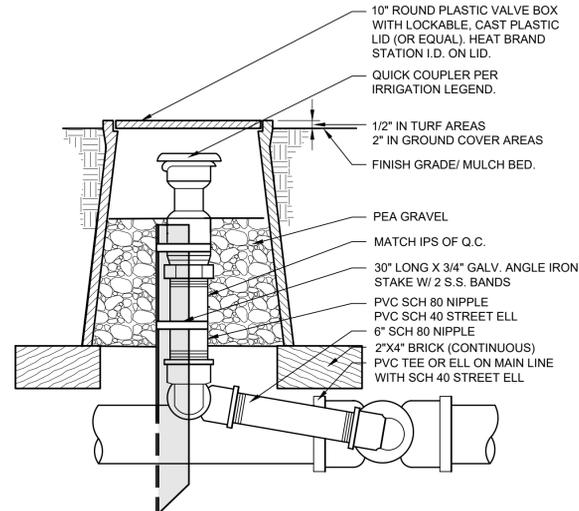
B TREE BUBBLER-ROOT WATERING SYSTEM
1" = 1" 328403.53-07



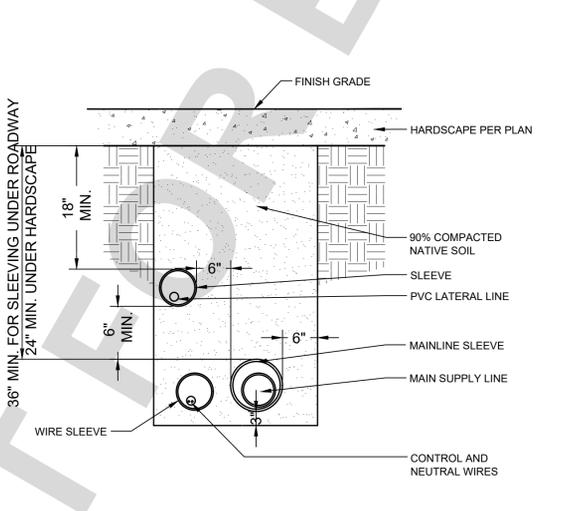
C REMOTE CONTROL VALVE
1" = 1" 328406.13-05



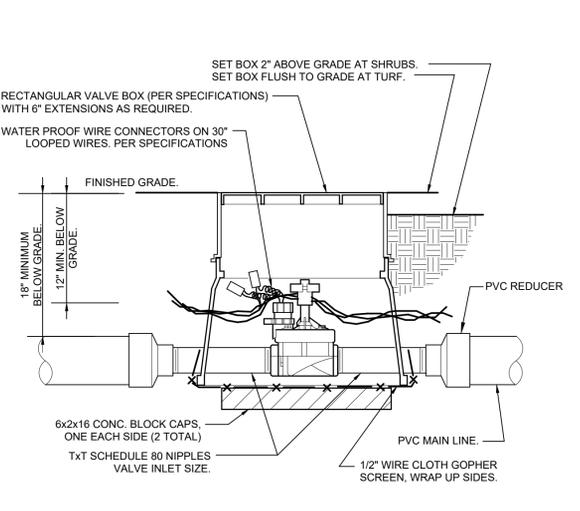
D PIPE AND WIRE TRENCH
NTS 328409.76-05



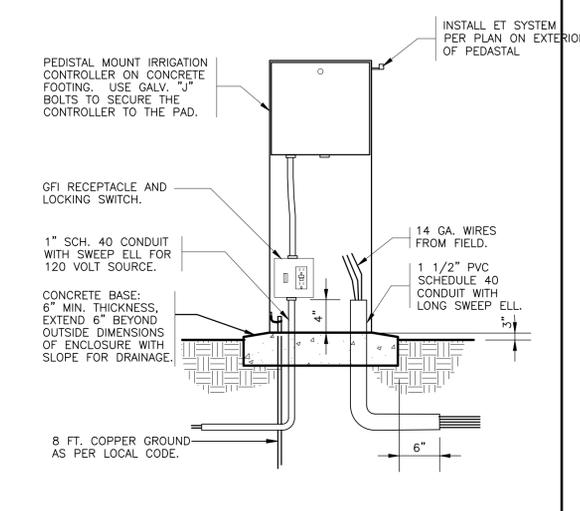
E QUICK COUPLER IN VALVE BOX
NTS 328406.43-07



F SLEEVING
1" = 1" 328409.76-05



G MASTER CONTROL VALVE
1" = 1" 328406.23-01



H PEDESTAL MOUNT CONTROLLER
NTS 328409.76-05

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 FAX (951) 686-8091
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DOUG GROVE 2799 4/1/2024
 LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS				
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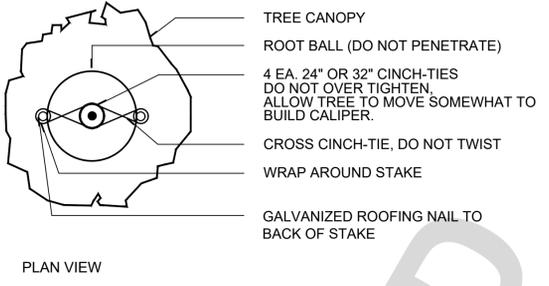
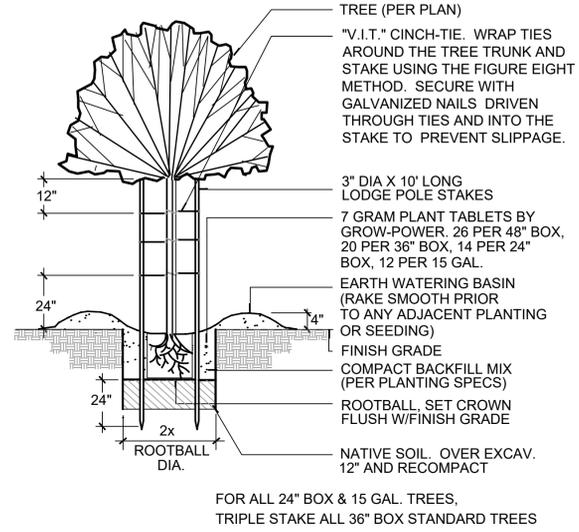
PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

ASSISTANT DIRECTOR	DATE
PROJECT MANAGER	INITIAL DATE
OPS. DIVISION MANAGER	
PM. DIVISION MANAGER	

IMPROVEMENT PLANS
 APN. NO. 046819502
ORO GRANDE PARK
 REVITALIZATION PROJECT
 IRRIGATION DETAILS

DWG NO.
30.30.0042
 FILE NO.
 ID-1
 SHEET 8 OF 9

NOT FOR BID



FOR ALL 24" BOX & 15 GAL. TREES,
TRIPLE STAKE ALL 36" BOX STANDARD TREES

A DOUBLE STAKE TREE
1" = 1"

329343.19-04

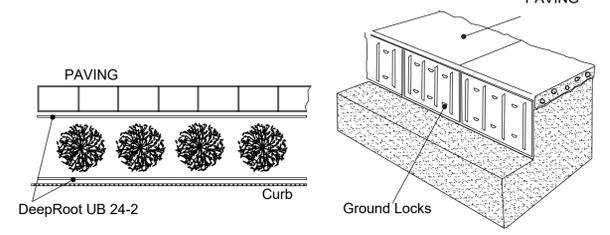
- Installation:
- The barriers for this project are 24" deep (61cm) (UB 24-2).
 - Dig the trench to the depth based upon the particular barrier chosen.
 - Install the barrier. When using DeepRoot Linear Barriers simply pull the appropriate number of panels out of the box (they come preassembled) and separate the joiner at the correct length. When installing DeepRoot Universal Barriers in a linear fashion you will need to join the appropriate number of panels together.
 - Next place the barrier in the trench with the vertical ribs facing toward the tree and align in a straight fashion. It is helpful to place the barrier against the hardscape. Use the hardscape as a guide and backfill against the barriers to promote a clean smooth fit to the hardscape. Be sure to keep the barrier's double top edge at least 1/2" (13mm) above grade to ensure roots do not grow over the top.
 - Plant the tree(s).

For additional information please consult the 16 page DeepRoot Product Selection and Installation Guidelines.

B ROOT BARRIER
N.T.S.

To determine the quantity of panels required use:
Estimated Diameter of the Tree Canopy at Maturity + 2' (61cm) = Length of Barrier per Side.

Expected Tree Canopy at Maturity	Number of Feet of Linear Barrier	Number of panels
12' (3.6m) Diameter	+2' (61cm) = 14' (4.2m)	7 Panels
18' (5.5m) Diameter	+2' (61cm) = 20' (6.1m)	10 Panels
24' (7.3m) Diameter	+2' (61cm) = 26' (7.9m)	13 Panels



For information regarding distributors please call: 1 800 ILV ROOT (458.7668).
For help with difficult drainage or other difficult installation questions please call DeepRoot Technical Support at: 1 800 ROOT TEK (766.8835).

329343.05-0

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OR
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BASIS OF BEARINGS:



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R.A. LANDSCAPE ARCHITECTS, INC.
6840 INDIANA AVENUE SUITE #100
RIVERSIDE, CA 92506 LIC. #2799
PH. (951) 781-1930
FAX (951) 688-8091
PREPARED UNDER THE SUPERVISION OF:
DOUG GROVE 2799 4/1/2024
LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

APPROVALS	ASSISTANT DIRECTOR		DATE	
	PROJECT MANAGER	INITIAL	DATE	DATE

IMPROVEMENT PLANS
APN. NO. 046819502
ORO GRANDE PARK
REVITALIZATION PROJECT
PLANTING DETAILS

DWG NO. 30.30.0042
FILE NO.
PD-1
SHEET 9 OF 9

ENGINEER'S NOTICE TO CONTRACTOR

- ALL AVAILABLE RECORDS FROM THE OWNER AND UTILITY COMPANIES HAVE BEEN INVESTIGATED AND ALL KNOWN UTILITY CONDUITS AND SUBSTRUCTURES ARE SHOWN HEREON. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITY CONDUITS AND SUBSTRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS BY "POT HOLING" PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR AND/OR REPLACEMENT OF SAID UTILITY CONDUITS AND SUBSTRUCTURES DAMAGED BY HIS OPERATION IN CONNECTION WITH THE LIMITS OF THIS PROJECT. CONTRACTOR TO POT HOLE AND VERIFY EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITY CROSSING PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE FIELD CONDITIONS AND THE PROJECT DRAWINGS. COMMENCEMENT OF WORK INDICATES ACCEPTANCE OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN BY THE CONTRACTOR.
- EXISTING UTILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR, UNLESS OTHERWISE NOTED. RELOCATION OR REMOVAL OF ANY EXISTING UTILITIES NOT COVERED BY THESE PLANS SHALL BE PERFORMED BY OR UNDER THE DIRECTION OF THE RESPECTIVE UTILITY OWNERS AT THE EXPENSE OF SAID UTILITY OWNER AND/OR DISTRICT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL, IF ANY, EXISTING SURVEY MONUMENTS.
- THE CONTRACTOR SHALL POSSESS A VALID STATE CONTRACTOR'S LICENSE WHILE PERFORMING WORK ON THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF ANY WORK COVERED BY THESE PLANS.
- THE CONTRACTOR(S) AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS.
- THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND ENGINEER OF RECORD HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER AND/OR THE ENGINEER OF RECORD.

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN HEREON AT THE JOB SITE PRIOR TO ANY CONSTRUCTION. THE ENGINEER OF RECORD SHALL BE NOTIFIED OF ANY DISCREPANCIES. REVISIONS TO THE PLAN SHALL BE APPROVED BY THE ENGINEER IN WRITING PRIOR TO IMPLEMENTATION.
- UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

SURVEYOR'S NOTE

- THIS MAP IS NOT A BOUNDARY SURVEY. NO PROPERTY CORNERS HAVE BEEN SET AS PART OF THIS WORK.
- SURVEY MONUMENTS FOUND IN THE COURSE OF THIS MAPPING HAVE BEEN SET BY OTHERS, AND USED ONLY AS REFERENCE FOR PURPOSES OF TOPOGRAPHIC MAPPING, WITHOUT THE VERIFICATION OF ITS AGREEMENT WITH APPLICABLE LEGAL DESCRIPTIONS AND SENIORITY OF DEEDS.
- RELATION OF TOPOGRAPHIC FEATURES (FENCES, WALLS, TREES, POWER POLES, ETC.) TO PROPERTY LINES SHOWN ON THIS MAP IS SUBJECT TO THE ADJUSTMENTS TO ANY BOUNDARY SURVEY THAT IS TO BE DONE ON THE PROPERTY.
- UTILITIES SHOWN ARE A COMPILATION OF EXISTING RECORD DRAWINGS AND FOUND SURFACE INDICATIONS. NO WARRANTY IS MADE TO THE ACCURACY EXISTING UTILITIES SHOWN HEREON.
- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS, IF ANY, ARE NOT SHOWN.

EARTHWORK QUANTITIES

CUT: 35 CY
FILL: 665 CY

EARTHWORK AND MATERIALS QUANTITIES ARE FOR PLAN CHECKING PURPOSES ONLY. CONTRACTOR TO PERFORM THEIR OWN TAKE-OFFS FOR CONSTRUCTION. ENGINEER MAKES NO WARRANTIES TO THE ACCURACY OF SAID QUANTITIES.

ENGINEER OF RECORD LID COMPLIANCE STATEMENT

AS THE ENGINEER OF THE PROJECT, I HAVE REVIEWED THE LOW IMPACT DEVELOPMENT (LID) STANDARDS MANUAL BY THE COUNTY OF SAN BERNARDINO, AND HAVE PROPOSED THE IMPLEMENTATION OF THE PERMANENT BEST MANAGEMENT PRACTICES (BMPs) APPLICABLE TO EFFECTIVELY MINIMIZE THE NEGATIVE IMPACTS OF THE PROJECT'S STORMWATER RUNOFF. THE SELECTED BMPs WILL BE INSTALLED PER THE APPROVED PLANS AND AS RECOMMENDED BY THE MANUFACTURER AS APPLICABLE.

DAVID M BECKWITH, PE, PLS, QSD, QSP, QISP
NAME OF SIGNER

(Signature)
SIGNATURE OF SIGNER

04/01/2024
DATE

SITE LID INFORMATION

PRE-CONSTRUCTION CONDITION (73,957 SF PROJECT SITE TOTAL)			
PERVIOUS		IMPERVIOUS	
AREA (SF)	PERCENTAGE (%)	AREA (SF)	PERCENTAGE (%)
64,843	87.7	9,114	12.3
POST CONSTRUCTION CONDITION (73,957 SF PROJECT SITE TOTAL)			
PERVIOUS		IMPERVIOUS	
AREA (SF)	PERCENTAGE (%)	AREA (SF)	PERCENTAGE (%)
62,605	84.7	11,352	15.3
AREA OF IMPERVIOUS SURFACE BEING R&R'G IN PROJECT		IMPERVIOUS SURFACE BEING ADDED TO TOTAL SITE	
AREA (SF)	PERCENTAGE (%)	AREA (SF)	PERCENTAGE (%)
1,825	2.5	2,238	19.7

CONSTRUCTION NOTES

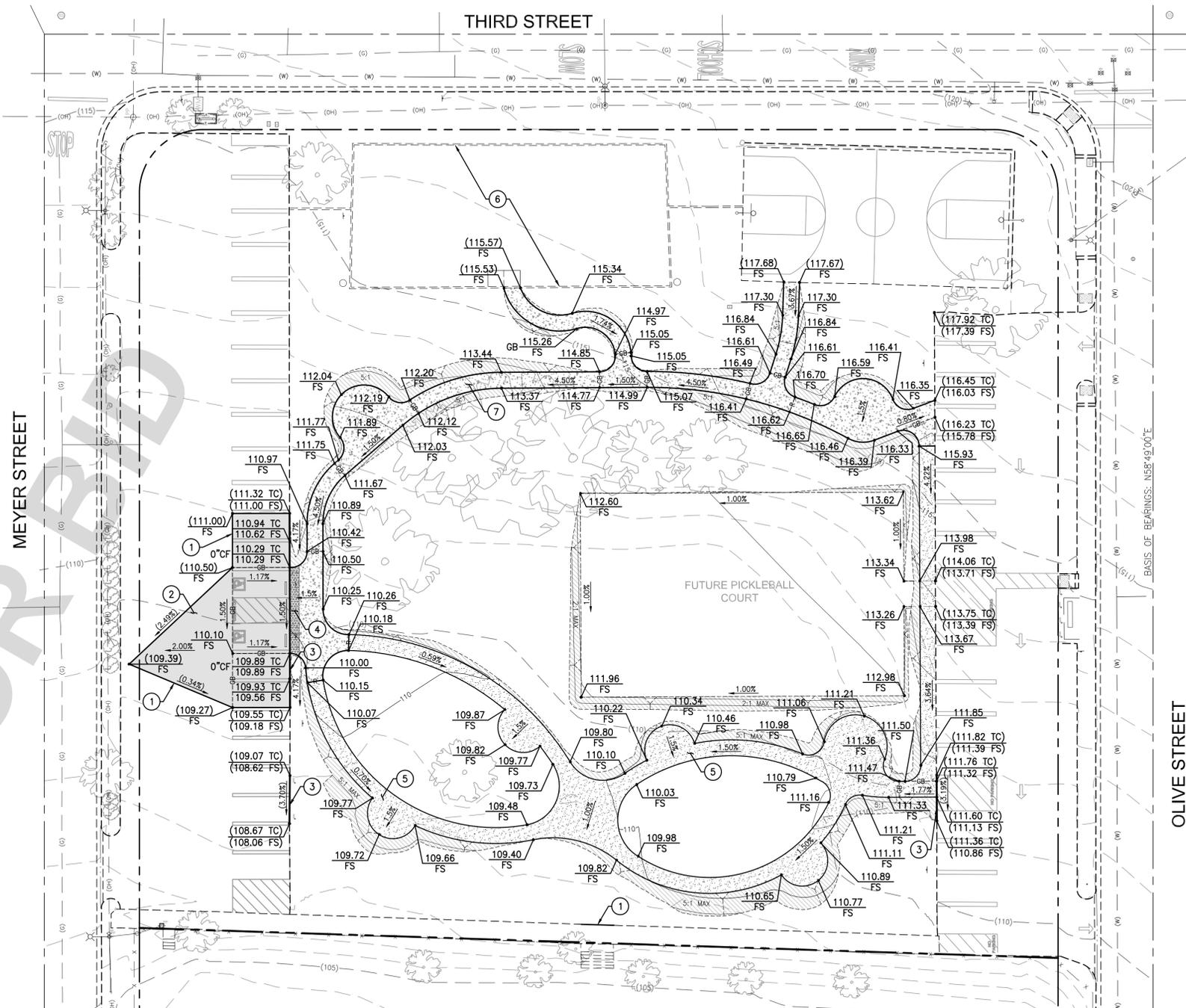
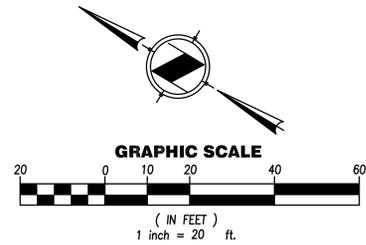
- SAWCUT FULL THICKNESS EXISTING AC/PCC PAVEMENT 145 LF
- CONSTRUCT 3" THICK AC PAVEMENT (2" D2-PG 64-10 WEAR COARSE OVER 1" C2-PG 64-10 BASE COARSE) OVER 3" OF CLASS II AGGREGATE BASE 1,825 SF
- CONSTRUCT VARIABLE HEIGHT (6" MAX) CURB ONLY PER SPPWC STD 120-2, TYPE A1-6(150), MATCH ADJACENT CURB HEIGHTS 95 LF
- INSTALL TRUNCATED DOMES PER LANDSCAPE ARCHITECT'S PLANS AND DETAILS --
- INSTALL STABILIZED DECOMPOSED GRANITE SURFACE PER LANDSCAPE PLANS AND DETAILS --
- INSTALL PLAY SURFACE PER LANDSCAPE ARCHITECT'S PLANS AND DETAILS --
- CONSTRUCT 4" THICK PCC PAVEMENT (560-C-3250) OVER COMPACTED NATIVE, JOINTS PER PROJECT SPECIFICATIONS (COLOR, AND FINISH PER LANDSCAPE ARCHITECT'S PLANS) 2,585 SF

QTY LEGEND

- (COMM) --- EXISTING COMMUNICATIONS LINE
- (IRRIG) --- EXISTING IRRIGATION
- (E) --- EXISTING ELECTRICAL
- (G) --- EXISTING GAS
- (SS) --- EXISTING SANITARY SEWER
- (SD) --- EXISTING STORM DRAIN
- (SL) --- EXISTING STREET LIGHT POWER LINE
- (W) --- EXISTING WATER
- (U) --- EXISTING UNKNOWN UTILITY
- (X) --- EXISTING CHAIN LINK FENCE
- (S) --- EXISTING FLOWLINE
- (-1020) --- EXISTING TOP/TOE OF SLOPE
- (M) --- EXISTING MAJOR CONTOUR
- (m) --- EXISTING MINOR CONTOUR
- (P) --- SAWCUT EXISTING PAVEMENT

- FF FINISHED FLOOR
- FG FINISHED GROUND
- FL FLOWLINE
- FS FINISHED SURFACE
- GB GRADE BREAK
- HP HIGH POINT
- INV INVERT
- LP LOW POINT
- NAP NOT A PART
- PIP PROTECT IN PLACE
- R RIDGE
- RIM TOP OF CLEANOUT
- TC TOP OF CURB
- TG TOP OF GRATE
- TW TOP OF WALL

- PROPOSED AC PAVEMENT
- PROPOSED PCC PAVEMENT
- PROPOSED DG SURFACE
- SPPWC STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
- SSPWC STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION



UNDERGROUND SERVICE ALERT

Call: TOLL FREE
1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:

FOUND 1" IRON PIPE TAGGED "SBC SURV" FLUSH AT THE CENTERLINE INTERSECTION OF FIRST STREET AND OLIVE STREET. ESTABLISHED AS TEMPORARY BENCHMARK.

ELEVATION: 100.00

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED UPON THE BEARING OF N58°49'00"E ALONG THE CENTER LINE OF OLIVE STREET BETWEEN FIRST STREET AND FOURTH STREET AS ESTABLISHED PER TRACT MAP No. 7681 IN MB 096/079-084, IN THE CITY OF ORO GRANDE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA.

COMPANY ADDRESS AND LOGO

DAVID BECKWITH AND ASSOCIATES INC
Civil & Structural Engineering - Land Surveying - QSD/QSP Environmental Services

9431 Haven Avenue, Suite 232
Rancho Cucamonga, CA 91730
(T) 714.349.7007 (F) 714.948.4471
www.davidbeckwithandassociates.com

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

ASSISTANT DIRECTOR: _____ DATE: _____

APPROVALS:

PROJECT MANAGER	INITIAL	DATE
OPS. DIVISION MANAGER		
PM. DIVISION MANAGER		

IMPROVEMENT PLANS

APN. NO. 046819502
ORO GRANDE PARK REVITALIZATION PROJECT
PRECISE GRADING PLAN

DWG NO.
30.30.0042

FILE NO.
C1.01

SHEET 1 OF 1

UTILITY GENERAL NOTES

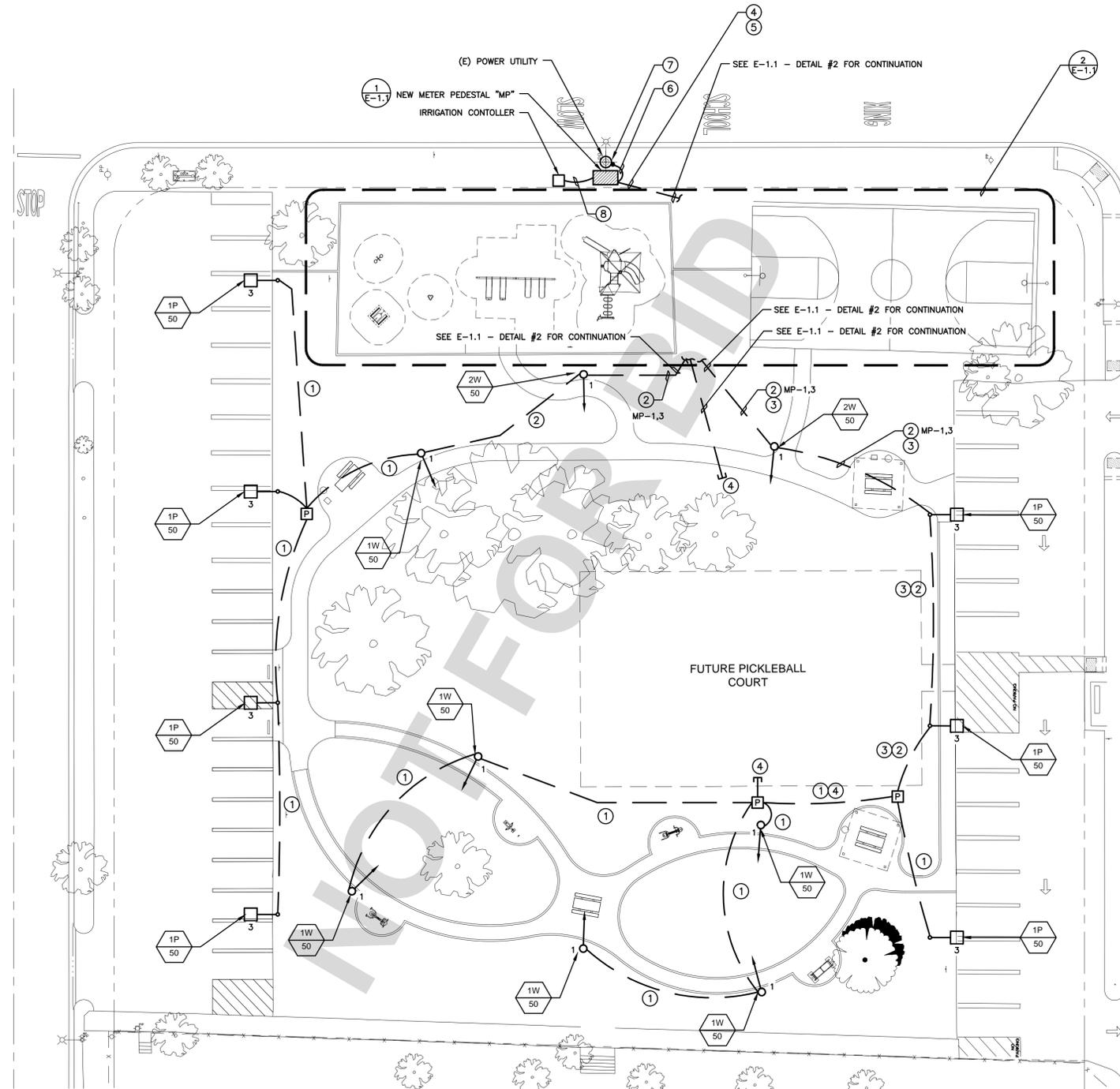
- UTILITY POINTS OF SERVICE AND WORK/ MATERIAL SHOWN ARE BASED ON PRELIMINARY INFORMATION ONLY BY THE UTILITY COMPANIES AND ARE FOR BID PURPOSES ONLY.
- LOCATION OF UTILITIES SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID EXISTING DUCTS, PIPING OR CONDUITS, ETC. AND TO PREVENT HAZARD TO PERSONNEL AND OR DAMAGE TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES WEATHER OR NOT SHOWN OR INSTALLED BY ANY OTHER CONTRACTS. THE ENGINEER IS NOT RESPONSIBLE FOR THE LOCATION UNDERGROUND UTILITIES OR STRUCTURES WEATHER OR NOT SHOWN OR INSTALLED BY ANY OTHER CONTRACTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATION DO NOT INCLUDE THE NECESSARY ELEMENTS FOR CONSTRUCTION SAFETY. CONTRACTOR SHALL PERFORM UTILITY POT-HOLING IN ORDER TO PROTECT EXISTING UTILITIES IN PLACE ANY UTILITIES DAMAGED BY CONTRACTOR SHALL BE REPAIRED BY CONTRACTOR AT NO EXPENSE TO DISTRICT
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING ITEMS AND SHALL INCLUDE ALL COST IN BID:
 - IDENTIFYING EACH UTILITY COMPANY SERVICE PLANNER.
 - SUBMITTAL OF PLANS AND ELECTRONIC FILES TO EACH UTILITY COMPANY.
 - APPROVAL OF PLANS AND FINAL DRAWING FROM EACH UTILITY COMPANY.
 - ALL COORDINATION WITH EACH UTILITY COMPANY.
 - INSTALLATION OF ALL REQUIRED CONDUIT, PULL WIRES CABLES, PULL BOXES, CONCRETE EASEMENT OF CONDUIT (IF REQUIRED) TRANSFORMER SLAB BOX, PROTECTION BARRIERS, POLE RISERS, TRENCHING AND BACKFILL FOR EACH UTILITY COMPANY
 - SUBMITTAL OF SHOP DRAWINGS FOR METERED PANEL TO POWER UTILITY CO. FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF METER PANEL.
- CALL "UNDERGROUND ALERT" BEFORE YOU DIG. SOUTHERN CALIFORNIA: 1 (800) 227-2600

PLAN NOTES:

- 1" C. 2 #10 & 1 #10 E/G.
- 1" C. 4 #10 & 1 #10 E/G.
- 1" C.O. ROUTE AROUND POLE BASES
- 1" C.O.
- (1) 1" C. 4 #10 & 1 #10 E/G. (MP-1,3)
(1) 1" C. 4 #10 & 1 #10 E/G. (MP-2,4)
- 5" C.O. INSTALL PER UTILITY COMPANY REQUIREMENTS.
- VERIFY RISER QUADRANT PRIOR TO ROUGH-IN
- 3/4" C. 2 #12 & 1 #12 E/G.

ELECTRICAL SYMBOLS LIST

- POLE MOUNTED COURT L.E.D. LIGHT FIXTURE W/ TYPE FIVE DISTRIBUTION - REFER TO LIGHTING SCHEDULE
- POLE MOUNTED WALKWAY L.E.D. AREA SECURITY FIXTURE W/ TYPE FIVE DISTRIBUTION - REFER TO FIXTURE SCHEDULE. ARROW INDICATED FRONT OF FIXTURE
- POLE MOUNTED L.E.D. PARKING LOT FIXTURE W/ TYPE THREE DISTRIBUTION - REFER TO FIXTURE SCHEDULE.
- CONDUIT RUN CONCEALED BELOW GRADE, 3/4" C MINIMUM. REFER TO E-1.1 - DETAIL #6
- JUNCTION BOX, ACCESSIBLE AND MOUNTED FOR THE APPLICATION DENOTED ON PLANS.
- CONCRETE PULLBOX WITH BOLT-ON COVER. SIZE AS REQUIRED BE C.E.C. REFER TO E-1.1 - DETAIL #5
- ELECTRIC METER PEDESTAL - REFER TO SINGLE LINE
- SURFACE MOUNTED ELECTRICAL PANELBOARD OR LOAD CENTER. REFER TO PANEL SCHEDULE.
- LIGHT FIXTURE CALL OUT. "1P" INDICATES FIXTURE TYPE (REFER TO FIXTURE SCHEDULE), "120" INDICATES TOTAL FIXTURE WATTAGE. NUMBER ADJACENT INDICATES QUANTITIES. (NUMBER IS SHOWN FOR BRANCH CIRCUIT PURPOSE ONLY, NOT FOR MATERIAL TAKE-OFF).
- DETAIL CALLOUT, "3" INDICATES DETAIL NUMBER "E-1" INDICATES SHEET NUMBER.
- PLAN NOTE REFERENCE.
- REVISION REFERENCE.
- CO CONDUIT ONLY, WITH PULL ROPE.
- WP WEATHERPROOF, NEMA 3R
- PROVIDE FURNISH, INSTALLED AND CONNECTED, COMPLETE.
- C CONDUIT
- E/G EQUIPMENT GROUND (GREEN)
- UG UNDERGROUND
- GEC GROUNDING ELECTRODE CONDUCTOR
- C.E.C. CALIFORNIA ELECTRICAL CODE
- U.O.N. UNLESS OTHERWISE NOTED
- G.F.I. GROUND FAULT INTERRUPTER
- A.F.G. ABOVE FINISHED GRADE



PANEL	LOCATION: NORTH SIDE SITE		BUS RATING		120/208V 3Ø 4W		
	MAIN:	100A/2P	100 AMP	MOUNTING: PEDESTAL			
WALKWAY LIGHTING	400	8	1	20	1600	B-BALL COURT	
PARKING LOT LIGHTING	350	7	3	20	1600	PLAYGROUND LIGHTING	
FUTURE PICKLE-BALL COURT	1600		5	20	1	300	TIME SWITCH
FUTURE PICKLE-BALL COURT	1600		7	20	1	300	IRRIGATION CONTROLLER
			9				
			11				
	2000	1950				1900	1900

- NOTES:**
- (A) PROVIDE 7-DAY/24 HOUR 4-CHANNEL ELECTRONIC TIME SWITCH (120V.)
 - (B) PROVIDE PHOTOCELL (120V.) AND MOUNT IN FACTORY PROVIDED WINDOW OF GEAR W/ 1/2" 3 #12 TO TIME SWITCH
 - (C) PROVIDE 250V.-2P-2ØA CONTACTOR/COIL (120V.) AND CONNECT TO ZONE #1 OF TIME SWITCH
 - (D) CONNECT TO ZONE #2 OF TIME SWITCH
 - (E) CONNECT TO ZONE #3 OF TIME SWITCH



ELECTRICAL SITE PLAN

SCALE 1"=20'-0" 1

UNDERGROUND SERVICE ALERT

CALL BEFORE YOU DIG

Call: TOLL FREE 1-800-227-2600 OR 811

TWO WORKING DAYS BEFORE YOU DIG

JCA Engineering Inc.
Electrical Engineering & Consulting
8048 Palm Ave
Highland, Ca 92346
909 864-0223
Fax 909 864-0260
james.corns@jcaeng.com



COMPANY ADDRESS AND LOGO

RA ARCHITECTS
6840 INDIANA AVENUE SUITE #100
RIVERSIDE, CA 92506 LIC. #2799
PH. (951) 781-1930
FAX (951) 686-8091

PREPARED UNDER THE SUPERVISION OF:

DOUG GROVE 2799 4/1/2024
LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

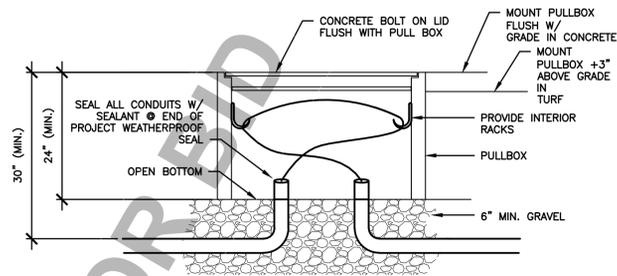
APPROVALS

PROJECT MANAGER	INITIAL	DATE
OPS, DIVISION MANAGER		
PM, DIVISION MANAGER		

IMPROVEMENT PLANS

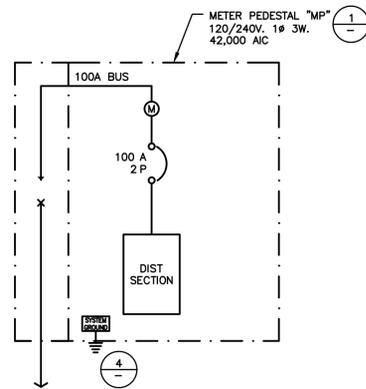
APN. NO. 046819502
ORO GRANDE PARK REVITALIZATION PROJECT
ELECTRICAL SITE PLAN

DWG NO. 30.30.0042
FILE NO. E-1.0
SHEET 1 OF 5



PULLBOX DETAIL

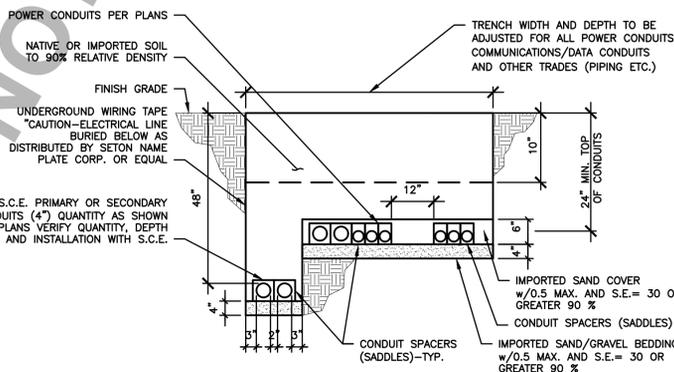
SCALE N.T.S. 5



NOTE: SERVICE SHALL MEET ALL CURRENT SOUTHERN CALIFORNIA EDISON (S.C.E.) STANDARDS AND SHALL BE APPROVED BY SOUTHERN CALIFORNIA EDISON (S.C.E.) POWER PRIOR TO ROUGH-IN.

SINGLE LINE DIAGRAM

SCALE N.T.S. 3

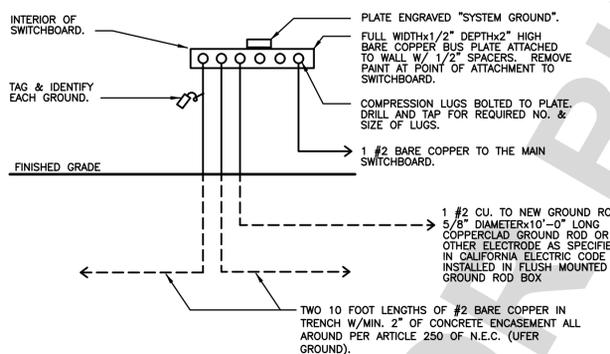


NOTES:
1. ALL UNDERGROUND CONDUITS PVC SCH. 40 UNLESS NOTED OTHERWISE ON PLANS
2. THIS DETAIL TO VARY PER EXACT SITE REQUIREMENT AND CONDUIT INSTALLATION

TRENCH DETAIL

SCALE N.T.S. 6

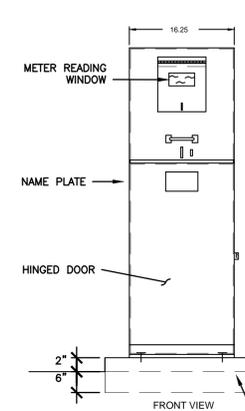
SYSTEM GROUND



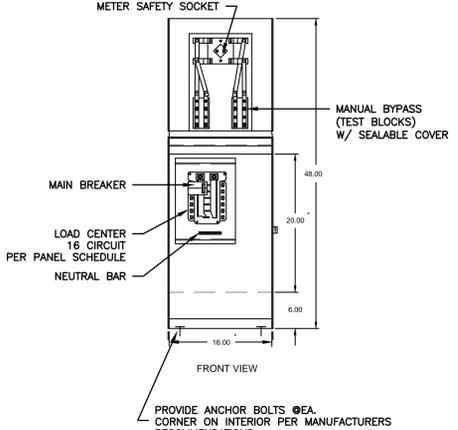
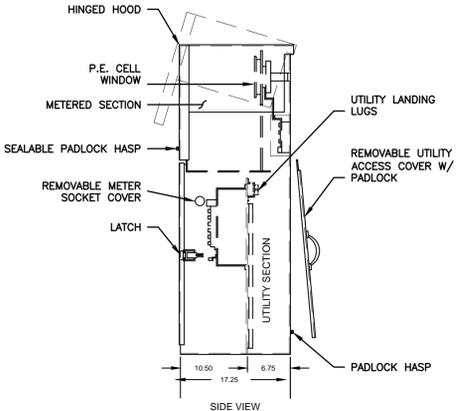
UTILITY NOTES:
1. ALL UTILITY BACKBONE AND DISTRIBUTION WORK SHALL BE PERFORMED BY A COMPANY WHO IS QUALIFIED TO INSTALL THE INFRASTRUCTURE AND APPROVED BY DISTRICT OR SOUTHERN CALIFORNIA EDISON (S.C.E.). CONTRACTOR SHALL PROVIDE PROOF OF APPROVAL PRIOR TO COMMENCEMENT OF ANY WORK.
2. INSTALLATION OF THE BACKBONE AND INFRASTRUCTURE SYSTEM SHALL BE PER DISTRICT OR S.C.E. DRAWING.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPROVED DRAWINGS FROM DISTRICT OR S.C.E.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE COORDINATION/INSTALLATION OF BACKBONE AND DISTRIBUTION INFRASTRUCTURE SYSTEM: PADS, PULLBOXES, CONDUITS, CONDUCTORS, TRENCHING, ENCASEMENT, BACKFILL, COMPACTION, ETC.

SCALE N.T.S. 4

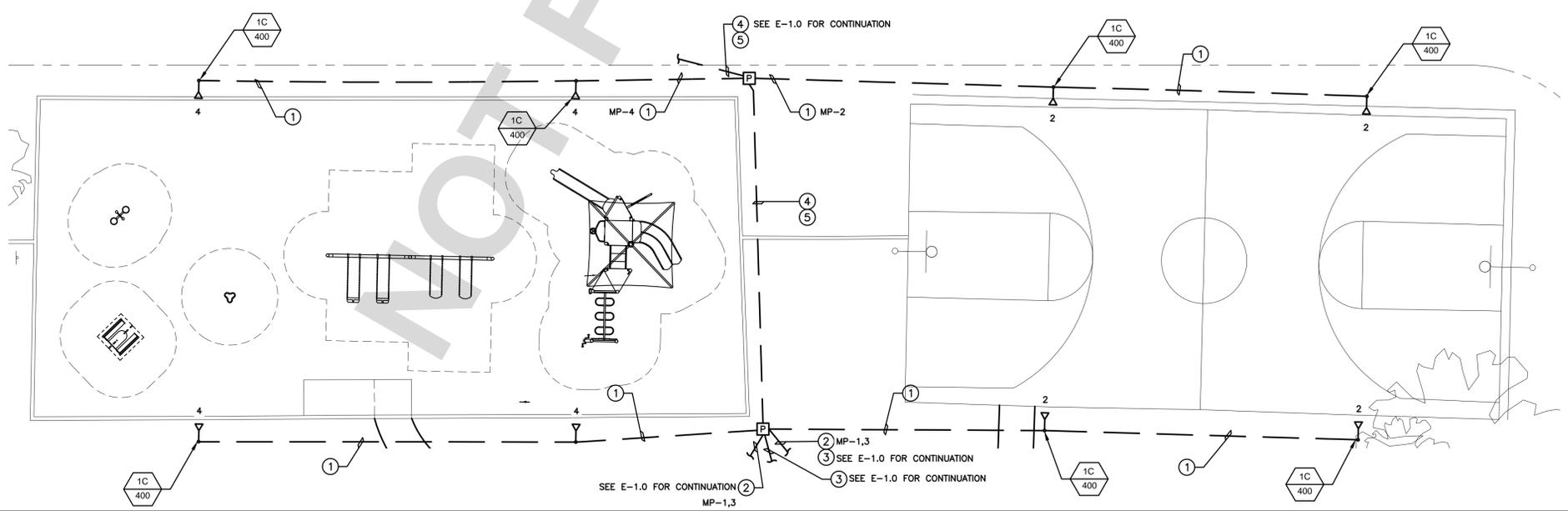
METERED PEDESTAL ELEVATION



POURED CONCRETE BASE 2500PSI @28 DAYS. REINFORCED W/ 6"x6", #10x#10 WELDED WIRE MESH INSTALLED AT MID POINT OF PAD. EXTEND CONCRETE 6" BEYOND OUTSIDE DIMENSION OF ENCLOSURE WITH 3% SLOPE AWAY FOR DRAINAGE.



SCALE N.T.S. 1



PLAN NOTES:
1 1" C. 2 #10 & 1 #10 E/G.
2 1" C. 4 #10 & 1 #10 E/G.
3 (2) 1" C.O. ROUTE AROUND POLE BOARD
4 1" C.O.
5 (1) 1" C. 4 #10 & 1 #10 E/G. (MP-1,3)
(1) 1" C. 4 #10 & 1 #10 E/G. (MP-2,4)

COURT AND PLAYGROUND ELECTRICAL PLAN

SCALE 1"=10'-0" 2

UNDERGROUND SERVICE ALERT
CALL BEFORE YOU DIG
TWO WORKING DAYS BEFORE YOU DIG

JCA Engineering Inc.
Electrical Engineering & Consulting
8048 Palm Ave
Highland, Ca 92346
909 864-0223
Fax 909 864-0290
james.coms@jcaeng.com

REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
STATE OF CALIFORNIA
Exp. 9/30/24

REGISTERED LANDSCAPE ARCHITECT
STATE OF CALIFORNIA

COMPANY ADDRESS AND LOGO
RAA LANDSCAPE ARCHITECTURE PLANNERS, INC.
6840 INDIANA AVENUE SUITE #100
RIVERSIDE, CA 92506 LIC. #2799
PH. (951) 781-1930
FAX (951) 686-8091
PREPARED UNDER THE SUPERVISION OF:
DOUG GROVE 2799 4/1/2024
LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

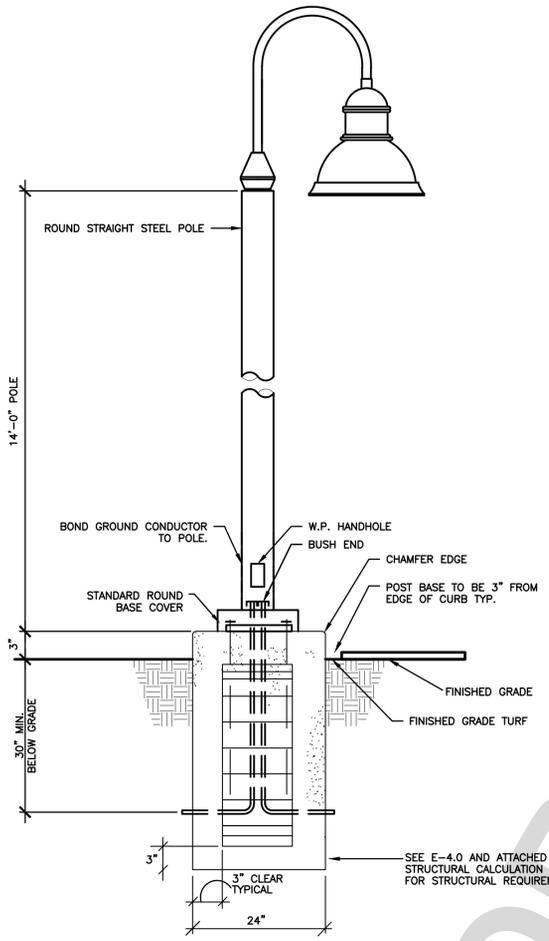
PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS
ASSISTANT DIRECTOR DATE
APPROVALS
PROJECT MANAGER INITIAL DATE
OPS, DIVISION MANAGER
PM, DIVISION MANAGER

IMPROVEMENT PLANS
APN. NO. 046819502
ORO GRANDE PARK
REVITALIZATION PROJECT
COURT AND PLAYGROUND ELECTRICAL PLAN, SINGLE LINE DIAGRAM AND DETAILS

DWG NO. 30.30.0042
FILE NO. E-1.1
SHEET 2 OF 5

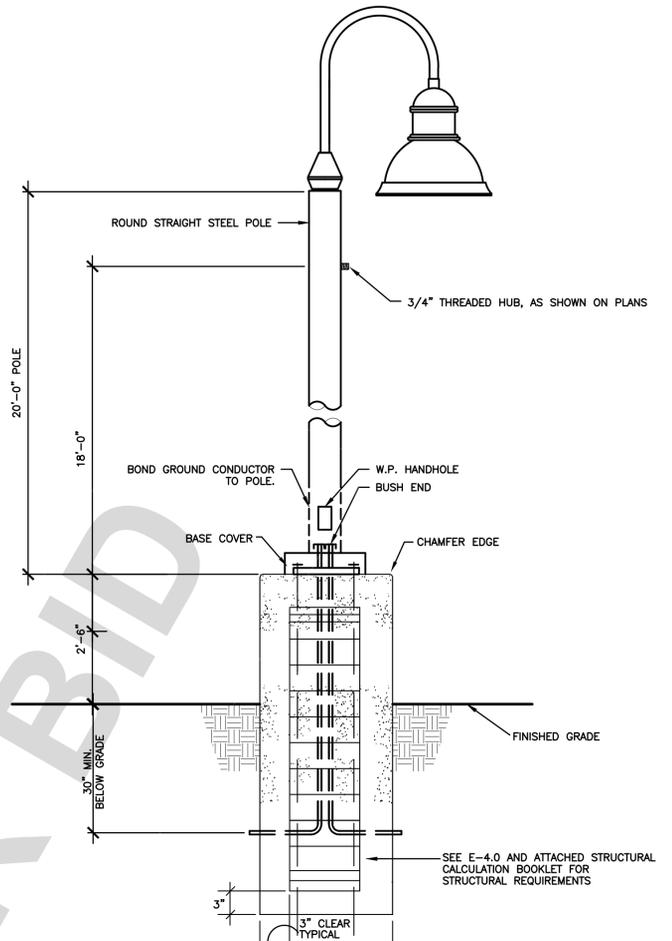
GENERAL NOTES

- THESE PLANS ARE DIAGRAMMATIC ONLY. FOLLOW AS CLOSELY AS POSSIBLE. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS, STRUCTURAL DETAILS, EXACT EQUIPMENT AND OUTLET LOCATIONS.
- DO NOT SCALE THE ELECTRICAL DRAWINGS FOR LOCATIONS OF ANY ELECTRICAL DEVICES OR EQUIPMENT.
- CONSTRUCTION TERMINOLOGY, AND THE STANDARDS OF INSTALLATION REQUIRED BY THESE CONTRACTOR DOCUMENTS ARE BASED ON PUBLISHED STANDARDS OF N.E.C.A. (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION), NATIONAL ELECTRICAL SAFETY CODE, AMERICAN NATIONAL STANDARDS INSTITUTE DOCUMENTS, NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION, UNDERWRITERS LABORATORIES, AND THE CALIFORNIA ELECTRICAL CODE. SUBMITTAL OF BID INDICATES THE CONTRACTOR IS FAMILIAR OF THESE STANDARDS AND THE REQUIREMENTS NECESSARY TO PERFORM ALL THE WORK AS SET FORTH IN THESE CONTRACT DOCUMENTS AND ACCEPTS THE CONDITIONS.
- CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS, SERVICE REQUIREMENTS AND EXACT LOCATIONS OF SERVICE FACILITIES BEFORE SUBMITTING BID. SUBMITTAL OF BID INDICATES CONTRACTOR ACCEPTS THE CONDITIONS UNDER WHICH HE SHALL BE REQUIRED TO PERFORM HIS WORK.
- ALL UTILITY WORK SHALL BE IN COMPLIANCE WITH THESE DRAWINGS AND THE REQUIREMENTS OF THE SERVING UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE SERVING UTILITY TO RECEIVE COMPLETE INFORMATION ON THEIR REQUIREMENTS PRIOR TO THE SUBMISSION OF THE BID. THE ACT OF SUBMITTING THE BID SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO INSTALL SERVICE IN COMPLIANCE WITH THE SERVING UTILITY AND THESE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL THE SERVICE IN COMPLIANCE WITH THE SERVING UTILITY COMPANY, AND SHALL PAY ALL CHARGES LEVIED BY THE SERVING UTILITY COMPANY FOR HIS SERVICE EXCEPT THE FIRST BILLING DEPOSIT, WHERE THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE, THE DOCUMENTS SHALL GOVERN. ALL ITEMS SUCH AS SERVICE CONDUIT, CONDUCTORS, DUCTS, CONCRETE PADS, TRANSFORMERS, RISERS, MANHOLES, PULL BOXES, AND PROTECTIVE COVERING FROM SERVICE LOCATION SHALL BE INSTALLED AND VERIFIED WITH THE SERVING UTILITY COMPANY.
- SUBMIT SHOP DRAWINGS FOR ALL MAJOR PIECES OF ELECTRICAL EQUIPMENT, WHICH INCLUDES, BUT NOT LIMITED TO: PEDESTAL LIGHTING FIXTURES, CONTROL PANELS, TIME SWITCHES, AND ELECTRICAL PRODUCTS.
- SHOP DRAWINGS SHALL BE SUBMITTED WITHIN THIRTY DAYS AFTER AWARD OF THE CONTRACT. THE CONTRACTOR SHALL SUBMIT EIGHT COPIES OF A COMPLETE LIST OF MATERIALS AND EQUIPMENT INCLUDING MANUFACTURER AND MODEL NUMBER PROPOSED FOR THE JOB. SHOP DRAWINGS SHALL INCLUDE JOB DESCRIPTION, ARCHITECT AND ENGINEER IDENTIFICATION, AND ALL DATA WITH CAPACITIES, SIZES, DIMENSIONS, CATALOG NUMBERS, MANUFACTURER'S BROCHURES, AND SUPPORT DATA.
- THE CONTRACTOR SHALL HAVE THE OPTION OF ROUTING RACEWAYS UNLESS OTHERWISE NOTED AND SHALL BE COORDINATED WITH OTHER TRADES.
- CONTRACTOR SHALL PROVIDE ALL J-BOXES, PULL BOXES, ELLS, OFFSETS ETC., FOR A COMPLETE, CODE APPROVED, INSTALLATION OF ALL CONDUIT. FOOTAGE SHOWN ON ELECTRICAL SINGLE LINES AND RISER DIAGRAMS ARE FOR CALCULATION PURPOSES ONLY, AND ARE NOT FOR BIDDING PURPOSES OR MATERIAL TAKEOFF. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND TO COORDINATE WITH MECHANICAL, FIRE PROTECTION, AND PLUMBING DRAWINGS FOR DUCTS, LINES, AND EQUIPMENT.
- THE CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY, LOCAL CODES, O.S.H.A., THE PRESENTLY ADOPTED NATIONAL ELECTRICAL CODE, AND PRESENTLY ADOPTED CALIFORNIA ELECTRICAL CODE (C.E.C.).
- THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AS TO THE EXACT LOCATION OF THEIR RESPECTIVE EQUIPMENT SUPPLY POWER AND MAKE CONNECTIONS TO MOTORS AND EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE SINGLE LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT. OBTAINING MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGH-IN IN ALL CONDUIT TO THIS EQUIPMENT.
- CONTRACTOR SHALL USE MATERIALS THAT ARE NEW, AND OF THE SAME MANUFACTURER FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY THE (U.L.) UNDERWRITER'S LABORATORIES FOR THE USE AND ENVIRONMENT, AND SHALL BEAR THE INSPECTION LABEL WHERE SUBJECT TO APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY, AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY A.N.S.I., U.L., N.E.M.A., AND N.B.F.U. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL EXCAVATE ALL TRENCH DEPTHS AND WIDTHS PER THE C.E.C. AND SHALL COMPACT IN A CONTINUOUS LAYER OF NOT MORE THAN 4" DEPTH. EXCAVATIONS IN A CONTINUOUS LAYER OF NOT MORE THAN 6" COMPACTED DEPTH TO THE REQUIRED DENSITY OF NINETY PERCENT (90%). THE CONTRACTOR SHALL ATTAIN THE SPECIFIED COMPACTION DENSITY BY MAINTAINING THE OPTIMUM MOISTURE CONTENT OF THE FILL MATERIAL.
- ATTENTION IS CALLED TO THE FACT THAT THERE ARE EXISTING UNDERGROUND UTILITY LINES, THEREFORE, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN TRENCHING FOR HIS WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER AND APPROVED REPAIR OF ANY AND ALL DAMAGES CAUSED BY HIM OR HIS WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAW CUTTING, TRENCHING, BACKFILLING, COMPACTION, AND PATCHING OF CONCRETE AND ASPHALT AS REQUIRED TO PERFORM HIS WORK.
- P.V.C. CONDUIT SHALL BE USED UNDERGROUND ONLY, IF APPROVED BY LOCAL CODE. INSTALL PER ALL REQUIRED LOCAL CODES. PROVIDE YELLOW HIGH VOLTAGE METALLIC TAPE +10" ABOVE ALL UNDERGROUND CONDUITS. ALL CONDUIT SWEEPS, RISERS, AND STUBS ABOVE GRADE SHALL BE I.M.C. WITH FACTORY INSTALLED PVC COATING. SITE INSTALLED 10 MIL HALF LAPPED TAPE IS PROHIBITED.
- ALL CONDUIT SHALL BE INSTALLED CONCEALED WHERE PHYSICALLY POSSIBLE.
- ALL CONDUIT ONLY (C.O.) SHALL HAVE A 3/16" PULL WIRE OR ROPE, MINIMUM.
- ALL CONDUCTORS OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN COMPLIANCE WITH O.S.H.A.
- THE COMPLETE ELECTRICAL SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH THE PRESENTLY ADOPTED EDITION OF THE C.E.C., ARTICLE #250.
- CONDUCTORS SHALL BE CODE GRADE, 600 VOLT CLASS, COPPER, MARKED 24" ALONG ITS LENGTH SHOWING MANUFACTURER'S NAME, MAXIMUM ALLOWABLE VOLTAGE AND SIZE. CONDUCTORS SHALL BE TYPE "THHN" (WET) OR "THWN" (DRY). DELIVER CONDUCTORS TO THE JOB SITE IN UNBROKEN PACKAGES.
- ALL UNDERGROUND PULLBOXES SHALL HAVE ALL CONDUITS COMPLETELY SEALED W/ WEATHERPROOF EXPANSION FOAM AT COMPLETION OF PROJECT.
- EXACT LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE LANDSCAPE DETAILS, OR SECTIONS PRIOR TO INSTALLATION. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE RECESSED IN WALLS UNLESS OTHERWISE NOTED.
- WHERE A CONFLICT OCCURS BETWEEN THESE NOTES, THE DRAWING OR SPECIFICATION ISSUED AS A PART OF THESE DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL PREVAIL.
- AT THE COMPLETION OF THE PROJECT, PROVIDE THE OWNER WITH ONE (1) SET OF COMPLETE, UP TO DATE, "AS-BUILT" REPRODUCIBLE DRAWINGS, SHOWING ACTUAL DEPTHS OF UNDERGROUND CONDUIT RUNS AT ALL LOCATIONS. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO THE OWNER AT PROJECT COMPLETION.
- AFTER DATE OF ACCEPTANCE BY OWNER, THE COMPLETED PROJECT SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED IN A TIMELY MANNER, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
- ENGRAVED PLASTIC NAMEPLATES SHALL BE PROVIDED FOR ALL METER PEDESTAL PLATES SHALL BE 3 PLY, BLACK FACE, WHITE CORE, WITH 1/4" HIGH GOTHIC LETTERING.
- METERED PEDESTAL SHALL BE PROVIDED WITH RATINGS, COMPONENTS, AND FEATURES IN STRICT ACCORDANCE WITH THE SERVING UTILITIES AND CODE ENFORCING AGENCY, ELECTRICAL DRAWINGS AND SPECIFICATIONS. THE METERED PEDESTAL DISTRIBUTION PANELS CONSIST OF A COMPLETELY ENCLOSED SELF-SUPPORTING, FLOOR STANDING STRUCTURE, OF THE REQUIRED NUMBER OF FORMED VERTICAL PANEL SECTIONS. PROVIDE BOLTED FRAMES AND INSULATING BLOCK TO SUPPORT THE MAIN HORIZONTAL BUS FOR SHORT CIRCUIT STRESS AS INDICATED ON THE DRAWINGS. ALL BUSSING SHALL BE 100% RATED MADE WITH COPPER HAVING A CURRENT DENSITY OF 1,000 AMPS PER SQUARE INCH. METERING PEDESTAL VENTILATED ENCLOSURE WITH NEMA 3R EXTERIOR ENCLOSURE SHALL TWO COATS OF PAINT WITH VANDAL PROOF LOCKING PAD LOCK COVER.



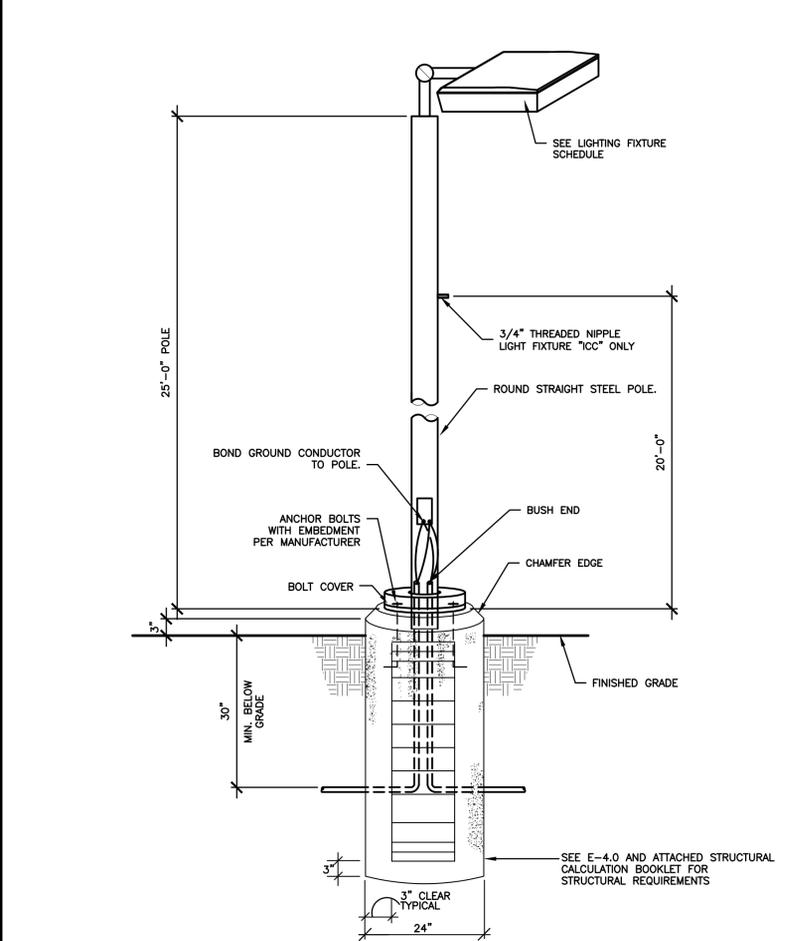
NOTE:
VERIFY BOLT PLACEMENT W/ POLE MANUFACTURER PRIOR TO ROUGH-IN.

WALKWAY LIGHT FIXTURE SCALE N.T.S. ③



NOTE:
VERIFY BOLT PLACEMENT W/ POLE MANUFACTURER PRIOR TO ROUGH-IN.

PARKING LOT LIGHT FIXTURE SCALE N.T.S. ②



NOTE:
VERIFY BOLT PLACEMENT W/ POLE MANUFACTURER PRIOR TO ROUGH-IN.

COURT/PLAYGROUND LIGHT FIXTURE SCALE N.T.S. ①

LIGHTING FIXTURE SCHEDULE

REFER TO DIVISION 1, GENERAL REQUIREMENTS, REGARDING PRODUCT OPTIONS AND SUBSTITUTION. WHERE PRODUCTS ARE LISTED BY NAMING ONE OR MORE MANUFACTURERS, WITHOUT "OR EQUAL" PROVISION FOR SUBSTITUTION, CONTRACTOR SHALL INCLUDE ONLY SPECIFIED PRODUCTS IN BID. REQUEST FOR SUBSTITUTION WITHIN 35 DAYS FROM THE DATE OF THE NOTICE TO PROCEED WILL ONLY BE CONSIDERED IN ACCORDANCE WITH DIVISION 1 OF THESE CONTRACT DOCUMENTS.

DESCRIPTION	ILLUMINATION		VOLTS	MANUFACTURER	CATALOG #	MOUNTING
	WATTS	TYPE				
①C 400	400	L.E.D. 40K	120	EVERLAST LIGHTING LYTE POLE	EL-ENR14-L1-400-UL-840-IV/KSF/BLFC POLE: 401-5011-25-T2-XX-ABS-BC (NON CORROSIVE)	25'-3" A.F.G. ②
①P 50	50	L.E.D. 40K	120	PACIFIC LIGHTING & STANDARDS CO	VAA-50-EXLED-MT-4K-III-1A-MOTION RSS-11-420-XX (POLE)	POLE 22'-6" A.F.G. ②
①W 50	50	L.E.D. 40K	120	PACIFIC LIGHTING & STANDARDS CO	VAB-50-EXLED-MT-4K-III-1A-MOTION RSS-11-414-XX (POLE)	POLE 14'-3" A.F.G. ③
②W 50	50	L.E.D. 40K	120	PACIFIC LIGHTING & STANDARDS CO	VAB-50-EXLED-MT-4K-V-1A-MOTION RSS-11-414-XX (POLE)	POLE 14'-3" A.F.G. ③

NOTES:
① COLOR BY OWNER
② AIM FOR BEST COVERAGE AFTER INSTALLATION.

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Electrical Engineering & Consulting
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Highland, Ca 92346
909 864-0223
James.corns@jcaeng.com

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ELECTRICAL
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT
STATE OF CALIFORNIA

COMPANY ADDRESS AND LOGO
RAA LANDSCAPE ARCHITECTS & PLANNERS, INC.
6840 INDIANA AVENUE SUITE #100
RIVERSIDE, CA 92506 LIC. #2799
PH. (951) 781-1930
FAX (951) 686-8091
PREPARED UNDER THE SUPERVISION OF:
DOUG GROVE 2799 4/1/2024
LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS
ASSISTANT DIRECTOR DATE
APPROVALS
PROJECT MANAGER INITIAL DATE
OPS, DIVISION MANAGER
PM, DIVISION MANAGER

IMPROVEMENT PLANS
APN. NO. 046819502
ORO GRANDE PARK
REVITALIZATION PROJECT
GENERAL NOTES, LIGHTING FIXTURE SCHEDULE AND DETAILS

DWG NO. 30.30.0042
FILE NO. E-2.0
SHEET 3 OF 5

NOT FOR BID

CONCRETE EXPOSURE REQUIREMENTS

ACI 318 TABLE 4.2.1 - EXPOSURE CATEGORIES AND CLASSES			
EXPOSURE CATEGORY	SEVERITY	CLASS	CONDITION
F FREEZING AND THAWING	NOT APPLICABLE	F0	CONCRETE NOT EXPOSED TO FREEZING AND THAWING CYCLES
	MODERATE	F1	CONCRETE EXPOSED TO FREEZING AND THAWING CYCLES AND OCCASIONAL EXPOSURE TO MOISTURE
	SEVERE	F2	CONCRETE EXPOSED TO FREEZING AND THAWING CYCLES AND IN CONTINUOUS CONTACT W/ MOISTURE
	VERY SEVERE	F3	CONCRETE EXPOSED TO FREEZING AND THAWING AND IN CONTINUOUS CONTACT W/ MOISTURE AND EXPOSED TO DEICING CHEMICALS
S SULFATE	NOT APPLICABLE	S0	WATER SOLUBLE SULFATE (SO ₄) IN SOIL, PERCENT BY WEIGHT
	MODERATE	S1	SO ₄ < 0.10
	SEVERE	S2	0.10 ≤ SO ₄ < 0.20
	VERY SEVERE	S3	SO ₄ > 0.20
P REQUIRED LOW PERMEABILITY	NOT APPLICABLE	P0	IN CONTACT W/ WATER WHERE LOW PERMEABILITY IS NOT REQUIRED
	REQUIRED	P1	IN CONTACT W/ WATER WHERE LOW PERMEABILITY IS REQUIRED
C CORROSION PROTECTION OF REINFORCEMENT	NOT APPLICABLE	C0	CONCRETE DRY OR PROTECTED FROM MOISTURE
	MODERATE	C1	CONCRETE EXPOSED TO MOISTURE BUT NOT TO EXTERNAL SOURCES OF CHLORIDES
	SEVERE	C2	CONCRETE EXPOSED TO MOISTURE AND AN EXTERNAL SOURCE OF CHLORIDES FROM DEICING CHEMICALS, SALT, BRACKISH WATER, SEAWATER, OR SPRAY FROM THESE SOURCES

ACI 318 TABLE 4.3.1 - REQUIREMENTS FOR CONCRETE BY EXPOSURE CLASS			
EXPOSURE CLASS	MAX W/C	MIN f _c	ADDITIONAL MINIMUM REQUIREMENTS
AIR CONTENT			
F0	N/A	2500	LIMITS ON CEMENTITIOUS MATERIALS
F1	0.45	4500	N/A
F2	0.45	4500	N/A
F3	0.45	4500	N/A
CEMENTITIOUS MATERIALS - TYPES			
			ASTM C1157
S0	N/A	2500	NO TYPE RESTRICTION
S1	0.50	4000	IP (HS) IS (<70) (MS)
S2	0.45	4500	V _s
S3	0.45	4500	V PLUS POZZOLAN OR SLAG _s
P0	N/A	2500	NONE
P1	0.50	4000	NONE
MAXIMUM WATER SOLUBLE CHLORIDE ION (CL ⁻) CONTENT IN CONCRETE PERCENT BY WEIGHT OF CEMENT			
C0	N/A	2500	1.00
C1	N/A	2500	0.30
C2	0.40	5000	0.15

- ALTERNATIVE COMBINATIONS OF CEMENTITIOUS MATERIALS OF THOSE LISTED IN TABLE 4.3.1 SHALL BE PERMITTED WHEN TESTED FOR SULFATE RESISTANCE AND MEETING THE CRITERIA IN 4.3.1.
- FOR SEAWATER EXPOSURE, OTHER TYPES OF PORTLAND CEMENTS WITH TRICALCIUM ALUMINATE (C3A) CONTENTS UP TO 10 PERCENT ARE PERMITTED IF THE W/C DOES NOT EXCEED 0.40.
- OTHER AVAILABLE TYPES OF CEMENT SUCH AS TYPE II OR TYPE I/AE PERMITTED IN EXPOSURE CLASSES S1 OR S2 IF THE C3A CONTENTS ARE LESS THAN 8 OR 5 PERCENT, RESPECTIVELY.
- THE AMOUNT OF THE SPECIFIC SOURCE OF THE POZZOLAN OR SLAG TO BE USED SHALL NOT BE LESS THAN THE AMOUNT THAT HAS BEEN DETERMINED BY SERVICE RECORD TO IMPROVE SULFATE RESISTANCE WHEN USED IN CONCRETE CONTAINING TYPE V CEMENT. ALTERNATIVELY, THE AMOUNT OF THE SPECIFIC SOURCE OF THE POZZOLAN OR SLAG TO BE USED SHALL NOT BE LESS THAN THE AMOUNT TESTED IN ACCORDANCE WITH ASTM C1157 AND MEETING THE CRITERIA IN 4.3.1.
- WATER-SOLUBLE CHLORIDE ION CONTENT THAT IS CONTRIBUTED FROM THE INGREDIENTS INCLUDING WATER, AGGREGATES, CEMENTITIOUS MATERIALS, AND ADMIXTURES SHALL BE DETERMINED ON THE CONCRETE MIXTURE BY ASTM C1218 AT AGE BETWEEN 28 AND 42 DAYS.
- REQUIREMENTS OF 7.7.6 SHALL BE SATISFIED. SEE 18.1.6 FOR UNBONDED TENDONS.

CONCRETE

- CONCRETE COMPRESSIVE STRENGTH: ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH AS SHOWN IN THE TABLE 2 BELOW AT 28 DAYS, U.N.O. ON PLANS. SEE ALSO SULFATE CONTENT NOTES.
- AGGREGATES IN CONCRETE SHALL BE NATURAL SAND AND ROCK (150 LB/CU. FT) CONFORMING TO ASTM C33. AGGREGATE SHALL HAVE PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN 0.04% PER ASTM C-197. DO NOT CHANGE SOURCE OF AGGREGATE DURING COURSE OF WORK WITHOUT WRITTEN CONSENT OF ENGINEER.
- CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150. CEMENT SHALL BE TYPE I OR AS REQUIRED TO SATISFY SITE SOIL CONDITIONS. REFER TO TABLE 4 FOR CONCRETE CEMENT REQUIREMENTS ON SOIL CONTAINING SULFATE. REFER TO TABLE 2 FOR MAXIMUM WATER TO CEMENT RATIO. USE A MINIMUM OF (6) STACKS OF CEMENT PER CUBIC YARD OF CONCRETE.

CONCRETE STRENGTH			
CONDITION	STRENGTH, f _c	WATER / CEMENT RATIO PER MIX DESIGNER	MAX. SLUMP PER MIX DESIGNER
FOOTING & GRADE BM	2,500 PSI		

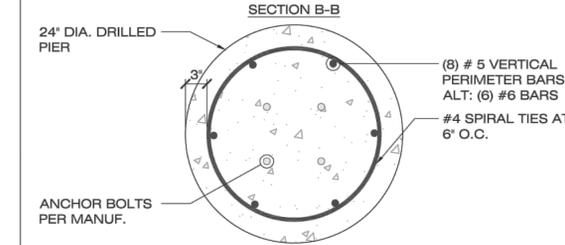
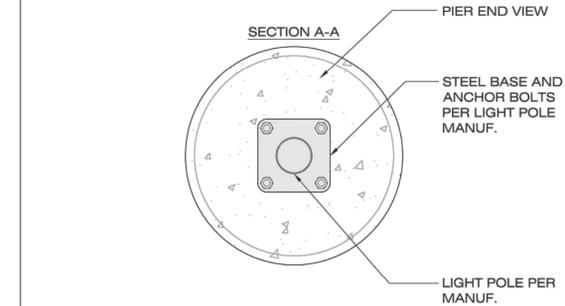
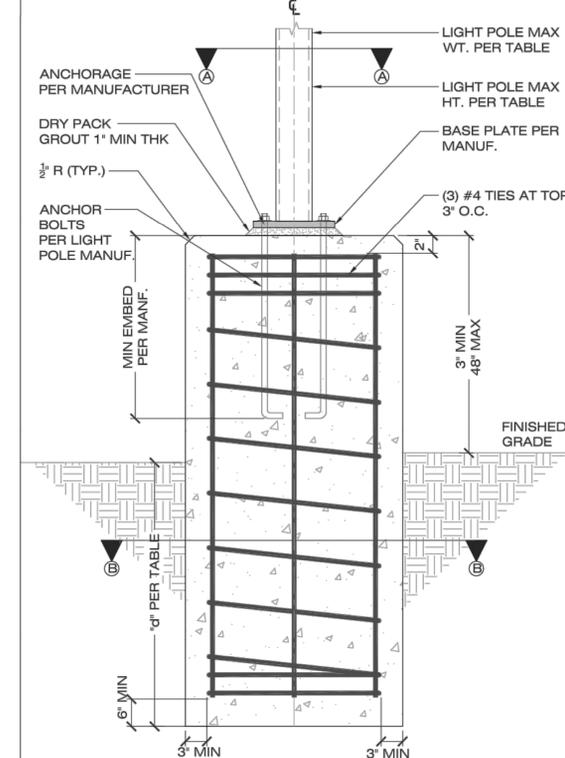
REBAR CLEAR COVER FOR CAST-IN-PLACE CONCRETE	
CONDITION	COVER
SLAB ON GRADE	CENTER OF SLAB OR 2" MIN
CONCRETE AGAINST & PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER	1"
WALL PANELS, SLABS, JOINTS	1 1/2"
OTHER MEMBERS	1 1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER	3/4"
SLABS, WALLS, JOINTS	1 1/2"
BEAM, COLUMNS PRIMARY REINFORCEMENT	1 1/2"
BEAM, COLUMNS TIES, STIRRUPS, SPIRALS	1"

PROJECT DESIGN CRITERIA	
BUILDING CODE:	2022 CALIFORNIA BUILDING CODE
LOCATION (LATITUDE / LONGITUDE):	34.600371° N / -117.332143° W
OCCUPANCY CATEGORY:	II
GEOTECHNICAL PARAMETERS	
SOILS ENGINEER REPORT NUMBER:	NOT PROVIDED
DATE:	-
ALLOWABLE SOIL BEARING PRESSURE:	1,500 PSF (PRESUMPTIVE)
ALLOWABLE PASSIVE PRESSURE:	200 PSF (PRESUMPTIVE)
EXPANSION INDEX:	-
PLASTICITY INDEX:	-
LIQUEFACTION POTENTIAL:	-
LATERAL SPREADING POTENTIAL:	-
DIFFERENTIAL SETTLEMENT POTENTIAL:	-
CORROSIVITY:	-
SULFATE CONTENT:	-
SEISMIC DESIGN PARAMETERS:	
SITE CLASS:	D-DEFAULT
SHORT PERIOD SPECTRAL ACCELERATION, S _{0.1} :	1.017G
1s PERIOD SPECTRAL ACCELERATION, S ₁ :	0.397G
SEISMIC DESIGN CATEGORY:	D
SEISMIC IMPORTANCE FACTOR, I _e :	1.0
WIND DESIGN PARAMETERS:	
BASIC DESIGN SPEED (3s GUST), V:	96 mph
ALLOWABLE STRESS DESIGN WIND SPEED, V _{ASD} :	74 mph
EXPOSURE CATEGORY:	C
WIND IMPORTANCE FACTOR, I _w :	1.0

REINFORCING STEEL

- REINFORCING STEEL:
A. ALL BARS, U.N.O.: ASTM A615, GRADE 60
B. BARS TO BE WELDED: ASTM A706, GRADE 60
- MINIMUM CLEARANCES BETWEEN PARALLEL REINFORCING STEEL INCLUDING DISTANCE BETWEEN SETS OF SPICED BARS: 1" OR 1 db, WHICHEVER IS GREATER, 1 1/2" OR 1 db WHICHEVER IS GREATER, AT COLUMNS, PIERS, AND PLASTERS ONLY. FOR BUNDLED BARS, MINIMUM CLEAR DISTANCES BETWEEN UNITS OF BUNDLED BARS SHALL BE SAME AS SINGLE BARS EXCEPT BAR DIAMETER IS DERIVED FROM EQUIVALENT TOTAL AREA OF BUNDLE.
- DOWELS AT CONSTRUCTION JOINTS: PROVIDE DOWELS MATCHING SIZE AND QUANTITY OF REINFORCING STEEL INTERRUPTED AT CONSTRUCTION JOINTS, UNLESS DETAILED OTHERWISE.
- BARS TERMINATING AT WALLS, COLUMNS, BEAMS, AND FOUNDATIONS: EXTEND BARS TO WITHIN 2" OF CONCRETE POURED AGAINST EARTH OR FACE OF WALL, COLUMN, BEAM OR FOUNDATION AND PROVIDE STANDARD 90-DEGREE HOOK UNLESS DETAILED OTHERWISE.
- BENDING: BEND COLD UNLESS OTHERWISE ACCEPTED BY ARCHITECT (STRUCTURAL ENGINEER). DO NOT FIELD-BEND REINFORCING STEEL BARS EMBEDDED IN CONCRETE UNLESS OTHERWISE ACCEPTED IN WRITING BY ARCHITECT (STRUCTURAL ENGINEER).
- LAP SPLICES: PROVIDE CLASS B SPLICES UNLESS INDICATED OTHERWISE.

MAX POLE HT (FT)	MAX POLE WT (LBS)	MAX LIGHT WT (LBS)	"d" (FT)
25'-0"	200	13	3'-6" MIN
20'-0"	125	25	4'-0" MIN
14'-0"	100	25	3'-0" MIN



TYP. CONCRETE FOOTING DETAILS
SCALE: N.T.S.

27389 VIA INDUSTRIAL
TAMECULA, CA 92580
TEL: (951) 800-9032
WWW.ISEENGINEERS.COM
SOCAL | NORCAL | COLORADO

TEAM CONTACT INFORMATION:

ISE PROJECT NO.: 23-7570.12
PROJECT MANAGER:
MATTHEW ESPINOZA
MATTHEW@ISEENGINEERS.COM

PROJECT DESIGN ENGINEER:
LUIS BOZ
LUISB@ISEENGINEERS.COM

PROJECT INFORMATION:

ORO GRANDE PARK
ORO GRANDE, CA

CONTACT INFORMATION:

CONTRACTOR:
JCA ENGINEERING, INC
8048 PALM AVE.
HIGHLAND CA 92346

GOVERNING JURISDICTION:
SAN BERNARDINO BUILDING & SAFE DEPARTMENT

PLAN REVISIONS		
DELTA	DESCRIPTION	DATE

ENGINEER STAMP & SIGNATURE

DATE: 05/11/2023
SHEET TITLE:
STRUCTURAL DETAIL AND GENERAL NOTES

SHEET REV:

SHEET NUMBER
SD1

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RIVERSIDE, CA 92506 LIC. #2799
PH. (951) 781-1930
FAX (951) 686-8091

PREPARED UNDER THE SUPERVISION OF:
DOUG GROVE 2799 4/1/2024
LICENSED LANDSCAPE ARCHITECT L.L.A. No. DATE

REVISIONS					
MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS

	INITIAL	DATE
PROJECT MANAGER		
OPS, DIVISION MANAGER		
PM, DIVISION MANAGER		

IMPROVEMENT PLANS

APN. NO. 046819502
ORO GRANDE PARK
REVITALIZATION PROJECT
POLE BASE STRUCTURAL CALCULATIONS

DWG NO.
30.30.0042

FILE NO.

E-4.0

SHEET **5** OF **5**