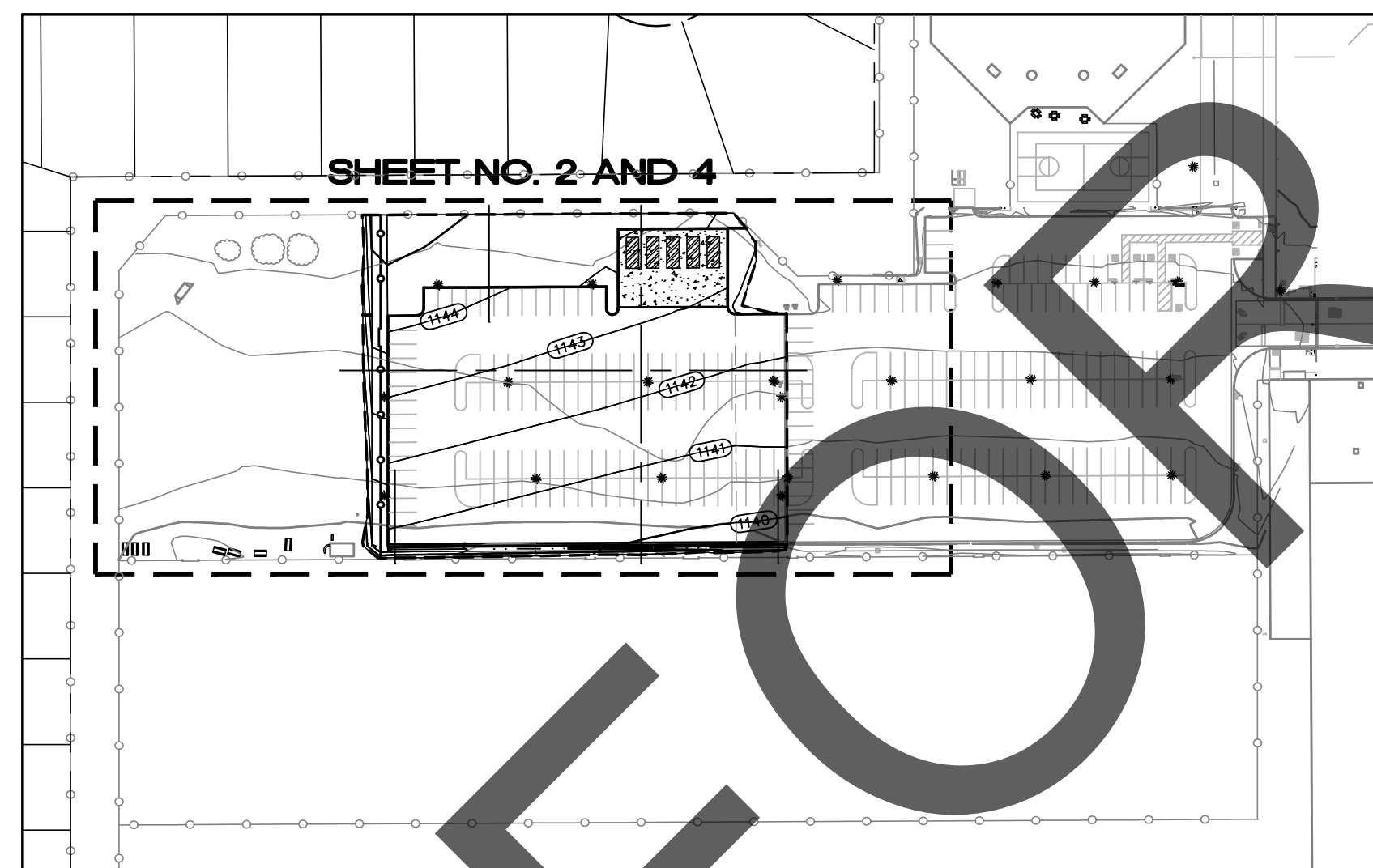


WARNING: ALL INDIVIDUALS INTERESTED IN BIDDING ON THIS PROJECT MUST OBTAIN THE FINAL PLANS AND SPECIFICATIONS FROM THE DEPARTMENT MANAGING THE PROJECT OR AS OTHERWISE STATED IN THE ADVERTISEMENT FOR BIDS FOR THE PROJECT. DO NOT USE THE PLANS AND SPECIFICATIONS POSTED ON THE CLERK OF THE BOARD'S WEBSITE FOR BIDDING ON THIS PROJECT.

VICINITY MAP:
N.T.S.

PROJECT LOCATION



	EXISTING FIRE HYDRANT	AB	ABANDON
	EXISTING WATER VALVE	AC	ASPHALT CONCRETE
	EXISTING POWER POLE	AP	ANGLE POINT
BOX □	EXISTING COMMUNICATION BOX	BC	BEGINNING OF CURVE
ELEC □	EXISTING ELECTRICAL BOX	BCR	BEGIN CURB RETURN
IRR □	EXISTING IRRIGATION BOX	CL	CENTERLINE
	EXISTING EDGE OF PAVEMENT	CF	CURB FACE
	EXISTING TREE	COMM	COMMUNICATION
	EXISTING SHRUB	EC	END OF CURVE
	EXISTING STREET LIGHT	ECR	END CURB RETURN
	EXISTING LIGHT POLE	EL	ELEVATION
	EXISTING SEWER MANHOLE	ELEC	ELECTRICAL
	EXISTING SURVEY CONTROL	FH	FIRE HYDRANT
R/W ---	EXISTING RIGHT-OF-WAY	FL	FLOW LINE
PL ---	EXISTING PROPERTY LINE	FS	FINISH SURFACE
	UTILITY INTERFERENCE FLAG (APPROXIMATE LOCATION OF INTERFERENCE WITH TYPE OF UTILITY INDICATED BY: W-WATER; G-GAS; T-TELEPHONE; SD-STORM DRAIN; S-SEWER; E-ELECTRIC; TV-CABLE TELEVISION; IR-IRRIGATION U-UNKNOWN UTILITY).	GB	GRADE BREAK
	EXISTING CENTERLINE	INV	INVERT
=====	EXISTING CURB AND GUTTER	IRR	IRRIGATION
=====	EXISTING CURB OR AC BERM	LF	LINEAR FEET
=====	PROPOSED CURB AND GUTTER	SMH	SEWER MANHOLE
	PROPOSED PCC CONCRETE	PCC	PORTLAND CEMENT CONCRETE
	PROPOSED LANDSCAPE GRADING AREA	PL	PROPERTY LINE
	PROPOSED ASPHALT CONCRETE	PRC	POINT OF REVERSE CURVE
	REMOVE EXISTING LANDSCAPE AND ABANDONED IRRIGATION	RW	RIGHT OF WAY
		S	SLOPE
		STA	STATION
		TC	TOP OF CURB
		WM	WATER METER

1. TITLE SHEET
2. DEMOLITION PLAN
3. HORIZONTAL CONTROL PLAN
4. GRADING PLAN
5. TYPICAL CROSS SECTIONS
6. SIGNING & STRIPING

ELECTRICAL IMPROVEMENTS

1. TITLE SHEET
2. LIGHTING PLAN, PANEL SCHEDULE AND DETAILS
3. POWER PLAN
4. PHOTOMETRIC CALCULATION
5. TITLE 24 ENERGY COMPLIANCE

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE DRAWINGS.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE COUNTY OF SAN BERNARDINO, THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

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.

THE LOCATION AND ELEVATION OF EXISTING PIPELINES SHOWN ON THESE PLANS ARE APPROPRIATE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION AND ELEVATION OF THE PIPELINES PRIOR TO ANY GRADING OR CONSTRUCTION NEAR EXISTING PIPELINES.

UNDERGROUND SERVICE ALERT 48 HOURS PRIOR TO EXCAVATION
TELEPHONE NO.: 1-800-422-4133

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THIS PLAN AND THE SAN BERNARDINO COUNTY STANDARDS AND SPECIFICATION.
2. BENCH MARK DATA:
ELEVATION: 0000.00
3. STREET MARKERS PER SAN BERNARDINO COUNTY STANDARD NO. 303, 304A AND 303B SHALL BE CONSTRUCTED AT EACH INTERSECTION.
4. STREET MARKERS SHALL BE CONSTRUCTED AT EACH INTERSECTION IN ACCORDANCE WITH APPLICABLE SAN BERNARDINO COUNTY STANDARDS. ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH COUNTY AND STATE SPECIFICATION.
5. A PERMIT WILL BE REQUIRED FROM THE COUNTY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY ENCROACHMENT OR CONSTRUCTION WITHIN THE COUNTY OF SAN BERNARDINO EASEMENT OR RIGHTS-OF-WAY.
6. LEAVE 8"x8" BLOCKOUTS IN SIDEWALKS FOR MAILBOXES, ETC. WHEN SIDEWALK IS PLACE ADJACENT TO CURB.
7. IF ASPHALT CONCRETE IS TO BE PLACED DIRECTLY ON SUBGRADE OF ROAD OR AND P.C.C. SHALL BE UNIFORMLY APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE FOR THE FULL PAVEMENT WIDTH PRIOR TO PAVING.
8. AT COMPLETION OF ROUGH GRADING, A MATERIALS REPORT AND THE PROPOSED STRUCTURAL SECTIONS SHALL BE SUBMITTED BY THE ENGINEER TO THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS, TRANSPORTATION OPERATIONS DIVISION, PERMIT SECTION, FOR REVIEW AND EVALUATION BY THE PAVEMENT DESIGN SECTION. THE SAMPLING AND TABULATION OF SIEVE ANALYSIS AND SAND EQUIVALENT TEST RESULTS, A STATEMENT OF RECOMMENDED STRUCTURAL SECTION AND TEST DATA SHEETS FOR ALL R-VALUE TESTS PERFORMED, INCLUDING EXPANSION PRESSURE READINGS, APPROVAL WILL BE GIVEN WHEN ALL STRUCTURAL SECTION REQUIREMENTS HAVE BEEN MET.
9. COMPACTION TESTS OF EMBANKMENT CONSTRUCTION, TRENCH BACKFILL, COMPACTING ORIGINAL GROUND, ALL SUBGRADES SHALL BE PERFORMED AT NO COSTS TO SAN BERNARDINO COUNTY. A WRITTEN REPORT WITH THESE COMPACTION TESTS SHALL BE SUBMITTED TO THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS, TRANSPORTATION OPERATIONS DIVISION, PERMIT SECTION FOR APPROVAL PRIOR TO PLACEMENT OF BASE MATERIALS AND/OR SURFACING.
10. AT THE COMPLETION OF PAVING, A MATERIALS REPORT SHALL BE SUBMITTED TO THE SAN BERNARDINO COUNTY PUBLIC WORKS DEPARTMENT, TRANSPORTATION OPERATIONS DIVISION, PERMIT SECTION, LISTING ALL TESTS OR DETERMINATIONS COMPLETED TO VERIFY: (A) R-VALUE, SIEVE ANALYSIS AND SAND EQUIVALENT (B) AGGREGATE BASE, (C) STABILITY, OIL CONTENT AND SIEVE ANALYSIS OF ASPHALT SURFACING.
11. THE WATER MAINS AND THE GAS MAINS SHALL BE PLACED UNDERGROUND PRIOR TO PAVING CONSTRUCTION. THE SERVICE LATERALS FOR THE WATER SYSTEM SHALL BE INSTALLED AT THE LATER SITE, WHERE IT IS NECESSARY TO CROSS PAVEMENT, SERVICE LATERALS SHALL BE BORED INTO PLACE.
12. FILL AND GRADE TO DRAIN ALL LOW AREAS ABUTTING TRACT ROADS TO A MINIMUM OF 1% GRADES.
13. ALL LATERAL CUTS INTO COUNTY MAINTAINED ROADWAYS SHALL BE TESTED TO VERIFY DENSIFICATION TO 90% RELATIVE COMPACTION (R.C.) AT VARYING DEPTHS TO WITHIN 0.5' OF GRADING PLANE. THE TOP 0.5' SHALL BE DENSIFIED TO 95%.
14. ALL LONGITUDINAL CUTS SHALL BE TESTED IN ACCORDANCE WITH THE SPECIFIED LIMITS AND FREQUENCY AS OUTLINED IN SECTION 6 OF THE SAN BERNARDINO COUNTY STANDARDS AND SPECIFICATIONS.
15. IMMEDIATELY FOLLOWING REMOVAL OF EXISTING PAVEMENT OR DIKE OR CURB AND/OR GUTTER, THE CONTRACTOR SHALL DILIGENTLY PURSUE THIS PORTION OF WORK UNTIL COMPLETION.
16. DEPARTMENT OF PUBLIC WORKS APPROVAL DOES NOT INCLUDE WATER SEWER SYSTEM OR ESTIMATE OF QUANTITIES.
17. A PERMIT SHALL BE OBTAINED FROM THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY CONSTRUCTION ON THIS PROJECT, THAT FALLS WITHIN SAN BERNARDINO COUNTY, ROAD RIGHT-OF-WAY.
18. EXPANSIVE SOILS: IN EXPANSIVE SOIL AREAS, THE SUBGRADE UNDER CURBS, GUTTERS, SIDEWALK AND DRIVEWAY APPROACHES SHALL BE SCARIFIED TO THE DEPTH OF AT LEAST EIGHT (8) INCHES AND MOISTURE SHALL BE APPLIED TO MAINTAIN FREE WATER ON THE SURFACE FOR AT LEAST 24 HOURS PRIOR TO PLACING CONCRETE AND THE SUBGRADE SHALL THEN BE PREPARED WITHOUT COMPACTION EFFORT.
19. CURB AND GUTTER, CROSS GUTTER AND SPANDRELS SHALL BE SO CONSTRUCTED THAT A MINIMUM OF PONDING OCCURS; SECTIONS HAVING GRADIENTS OF 0.5% OR FLATTER SHALL BE WATER TESTED IN THE PRESENCE OF THE INSPECTOR IMMEDIATELY

AND REPLACED TO REDUCE PONDING TO THE MAXIMUM SPECIFIED.

20. IF DURING CONSTRUCTION, GROUND WATER IS ENCOUNTERED, A SYSTEM APPROVED TO DEWATER SAID AREA AT THE DIRECTION OF THE SOILS ENGINEER.
21. THIS PRIVATE ROAD SHALL NOT BE ENTERED INTO THE COUNTY MAINTAINED ROAD SYSTEM.
22. THE ENGINEER SHALL INSPECT AND CERTIFY THAT ALL PRIVATE ROAD AND DRAINAGE IMPROVEMENTS HAVE BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS.
23. ALL 0.40% OR LESS CURB GRADE LINES SHALL BE STAKED AT 25' INTERVALS AND FORMS CERTIFIED BY THE ENGINEER BEFORE POURING CONCRETE.
24. EXISTING COUNTY ROADS THAT WILL REQUIRE RECONSTRUCTION SHALL REMAIN OPEN FOR TRAFFIC AT ALL TIMES WITH ADEQUATE DETOURS DURING ACTUAL CONSTRUCTION.
25. THE PRIVATE ENGINEER IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISE THE PLAN FOR APPROVAL BY THE COUNTY OF SAN BERNARDINO.
26. SHOULD ANY EXISTING STOP SIGN BE LOCATED ON A DEVELOPED CORNER OF AN INTERSECTION, IT MUST BE MAINTAINED IN PLACE NEXT TO THE EXISTING PAVEMENT UNTIL SUCH TIME AS THE WIDENED ROADWAY IS OPEN FOR TRAFFIC. AT THAT TIME, IT WILL BE RELOCATED THREE (3) FEET BEHIND THE NEW CURB IN THE VICINITY OF THE BEGINNING OF THE CURB RETURN OR AS OTHERWISE DIRECTED BY THE ENGINEER.



BENCHMARK:
BRASS DISK STAMPED B4-3 RESET MONUMENT IN SAN BERNARDINO CITY AT THE
INTERSECTION OF WATERMAN AVENUE & GILBERT STREET
B.M. No. B4-3 R5 ELEVATION= 1123.21'

BASIS OF BEARING:
C. OF 16TH STREET BEARING N89°49'00"E AS SHOWN ON TRACT MAP No. 3660
ON FILE IN PARCEL MAP BOOK 47 PAGES 98-102, RECORDS OF SAN
BERNARDINO COUNTY.

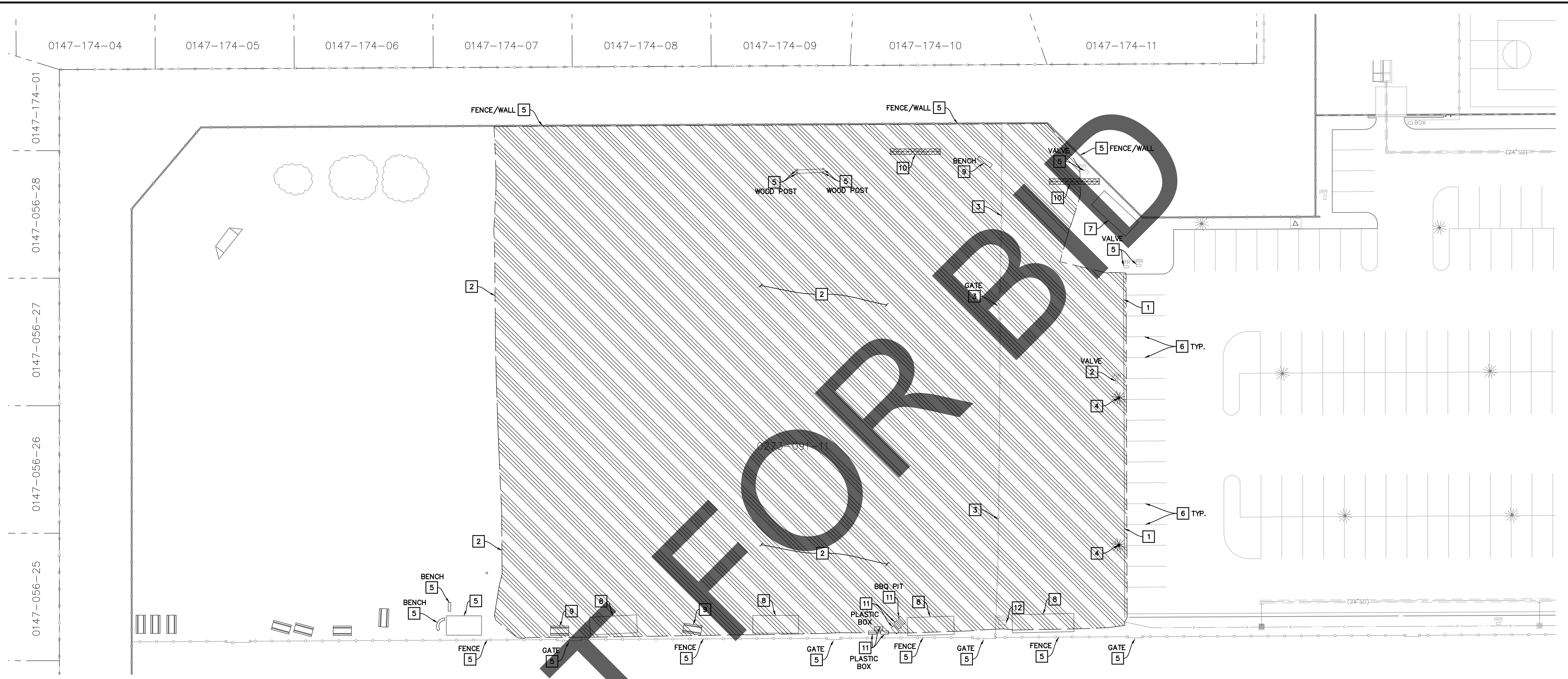
TKE ENGINEERING
TERRY M. RENNER R.C.E.
EXPIRES: 9-30-22

[illegible]

<h2 style="margin: 0;">SAN BERNARDINO COUNTY</h2> <h2 style="margin: 0;">DEPARTMENT OF PUBLIC WORKS</h2>			
DESIGNED BY TMR	DRAWN BY JH	CHECKED BY OP	<u>APPROVED BY:</u>
<u>RECOMMENDED/APPROVED BY:</u> 			<u>ASST. DIRECTOR OF PUBLIC WORKS</u> <u>DATE</u>
<u>LAND DEVELOPMENT ENGINEER</u> <u>DATE</u>			<u>DIRECTOR OF PUBLIC WORKS</u> <u>DATE</u>

SITE IMPROVEMENT PLANS	W.O. NO.
CENTRAL VALLEY JUVENILE DETENTION CENTER SECURED PARKING LOT EXPANSION	ROAD NO.
	FILE NO.
	SHEET 1 OF 6
TITLE SHEET	

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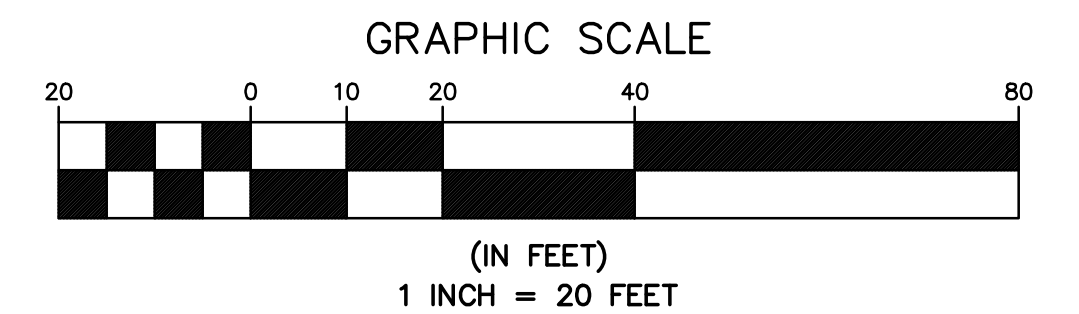
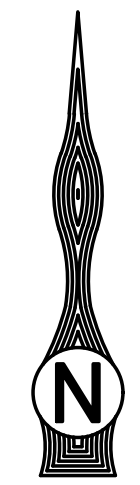


DEMOLITION NOTES:

- 1 SAWCUT AND REMOVE EXISTING PCC CURB AND PAVEMENT AS REQUIRED TO CONSTRUCT PROPOSED IMPROVEMENTS.
- 2 CLEAR, GRUB AND REGRADE AS NEEDED TO CONSTRUCT PROPOSED IMPROVEMENTS. CONTRACTOR TO CUT, PLUG AND ABANDONED EXISTING IRRIGATION SYSTEM AS SUCH TO ENSURE LANDSCAPE AREAS NOT INTENDED FOR REMOVAL RECEIVE PROPER IRRIGATION.
- 3 REMOVE AND SALVAGE EXISTING CHAIN LINK FENCE, INCLUDING GATES, AND RELOCATE AS SHOWN ON GRADING SHEET.
- 4 REMOVE, SALVAGE AND RELOCATE EXISTING PARKING LOT LIGHT PER ELECTRICAL PLANS.
- 5 PROTECT IN PLACE, AS NOTED.
- 6 SANDBLAST ALL EXISTING CONFLICTING STRIPING AS REQUIRED.
- 7 EXISTING METAL CONTAINER BIN TO BE RELOCATED TO NEW PCC PAD.
- 8 REMOVE, RELOCATE OR DISPOSE EXISTING METAL CONTAINER BIN PER FIELD INSPECTOR DIRECTIONS.
- 9 REMOVE, RELOCATE OR DISPOSE EXISTING TABLE BENCH PER FIELD INSPECTOR DIRECTIONS.
- 10 REMOVE, RELOCATE OR DISPOSE EXISTING STEEL TUBING STRUCTURE PER FIELD INSPECTOR DIRECTIONS.
- 11 REMOVE, RELOCATE OR DISPOSE EXISTING ITEMS AS NOTED PER FIELD INSPECTOR DIRECTIONS.
- 12 ADJUST EXISTING ELECTRICAL/TELEPHONE BOX TO GRADE.

HATCH LEGEND

- REMOVE EXISTING LANDSCAPE AND ABANDONED IRRIGATION



Know what's below.
Call before you dig.

BENCHMARK:

BRASS DISK STAMPED B4-3 RESET MONUMENT IN SAN BERNARDINO CITY AT THE INTERSECTION OF WATERMAN AVENUE & GILBERT STREET
B.M. No. B4-3 R5 ELEVATION= 1123.21'

BASIS OF BEARING:

☉ OF 16TH STREET BEARING N89°49'00"E AS SHOWN ON TRACT MAP No. 3660 ON FILE IN PARCEL MAP BOOK 47 PAGES 98-102, RECORDS OF SAN BERNARDINO COUNTY.

PREPARED BY:



TERRY M. RENNER R.C.E. No. 69984
EXPIRES: 9-30-22

TKE ENGINEERING, INC.
4446 CENTRAL AVENUE
RIVERSIDE, CA 92506
(951) 680-0440
FAX (951) 680-0490



FIELD BOOK REF.

MARK	REVISIONS	APPR	DATE

SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS

DESIGNED BY: TMR DRAWN BY: JH CHECKED BY: OP

RECOMMENDED/APPROVED BY:

LAND DEVELOPMENT ENGINEER DATE

APPROVED BY:

ASST. DIRECTOR OF PUBLIC WORKS DATE

DIRECTOR OF PUBLIC WORKS DATE

SITE IMPROVEMENT PLANS

CENTRAL VALLEY JUVENILE
DETENTION CENTER SECURED
PARKING LOT EXPANSION

DEMOLITION PLAN

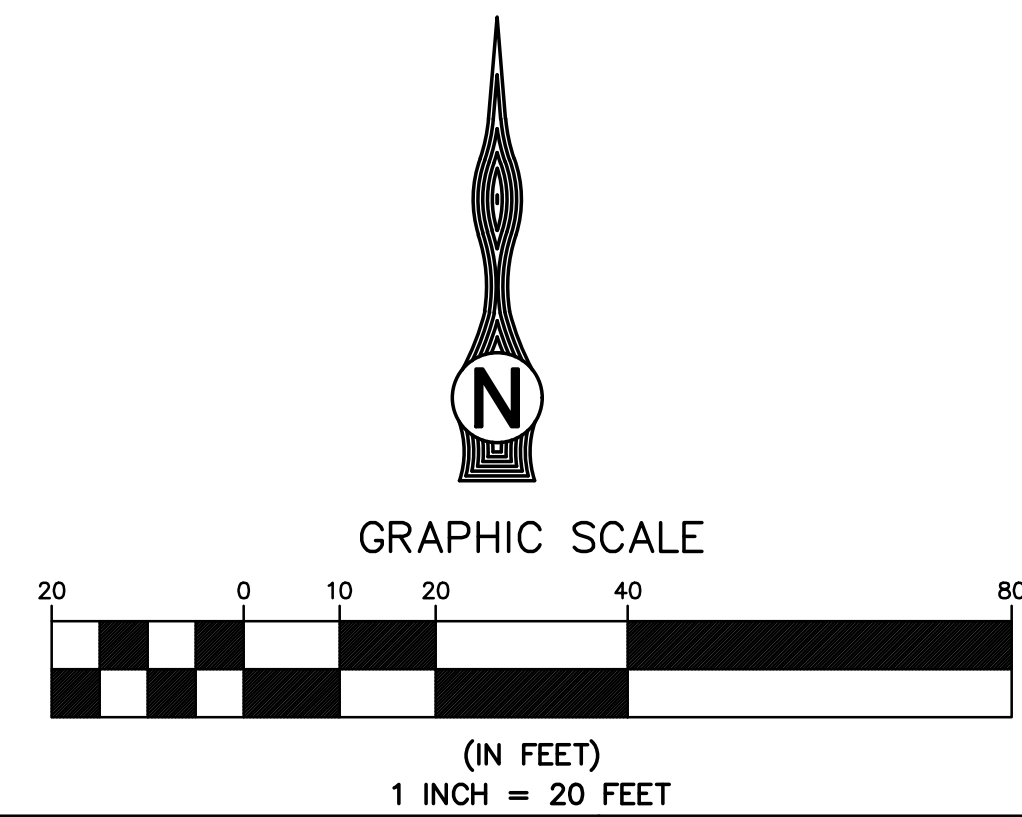
W.O. NO.

ROAD NO.

FILE NO.

SHEET 2 OF 6

CURVE/LINE TABLE				
#	DELTA/BEARING	RADIUS	LENGTH	TANGENT
1	S89°42'20"W		18.03	
2	89°42'20"	5.00'	7.83'	4.97
3	S0°00'00"E		13.03	
4	S0°00'00"E		14.17	
5	179°42'55"	4.00'	12.55'	1610.84
6	90°17'40"	5.00'	7.88'	5.03
7	S89°42'20"W		32.00'	



Know what's below.
Call before you dig.

BENCHMARK:

BRASS DISK STAMPED B4-3 RESET MONUMENT IN SAN BERNARDINO CITY AT THE
INTERSECTION OF WATERMAN AVENUE & GILBERT STREET
B.M. No. B4-3 R5 ELEVATION= 1123.21'

BASIS OF BEARING:

Q OF 16TH STREET BEARING N89°49'00"E AS SHOWN ON TRACT MAP No. 3660
ON FILE IN PARCEL MAP BOOK 47 PAGES 98-102, RECORDS OF SAN
BERNARDINO COUNTY.

PREPARED BY:



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FIELD BOOK REF.

MARK	REVISIONS	APPR	DATE

SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS

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RECOMMENDED/APPROVED BY:			ASST. DIRECTOR OF PUBLIC WORKS	DATE
LAND DEVELOPMENT ENGINEER			DIRECTOR OF PUBLIC WORKS	DATE

SITE IMPROVEMENT PLANS

CENTRAL VALLEY JUVENILE
DETENTION CENTER SECURED
PARKING LOT EXPANSION

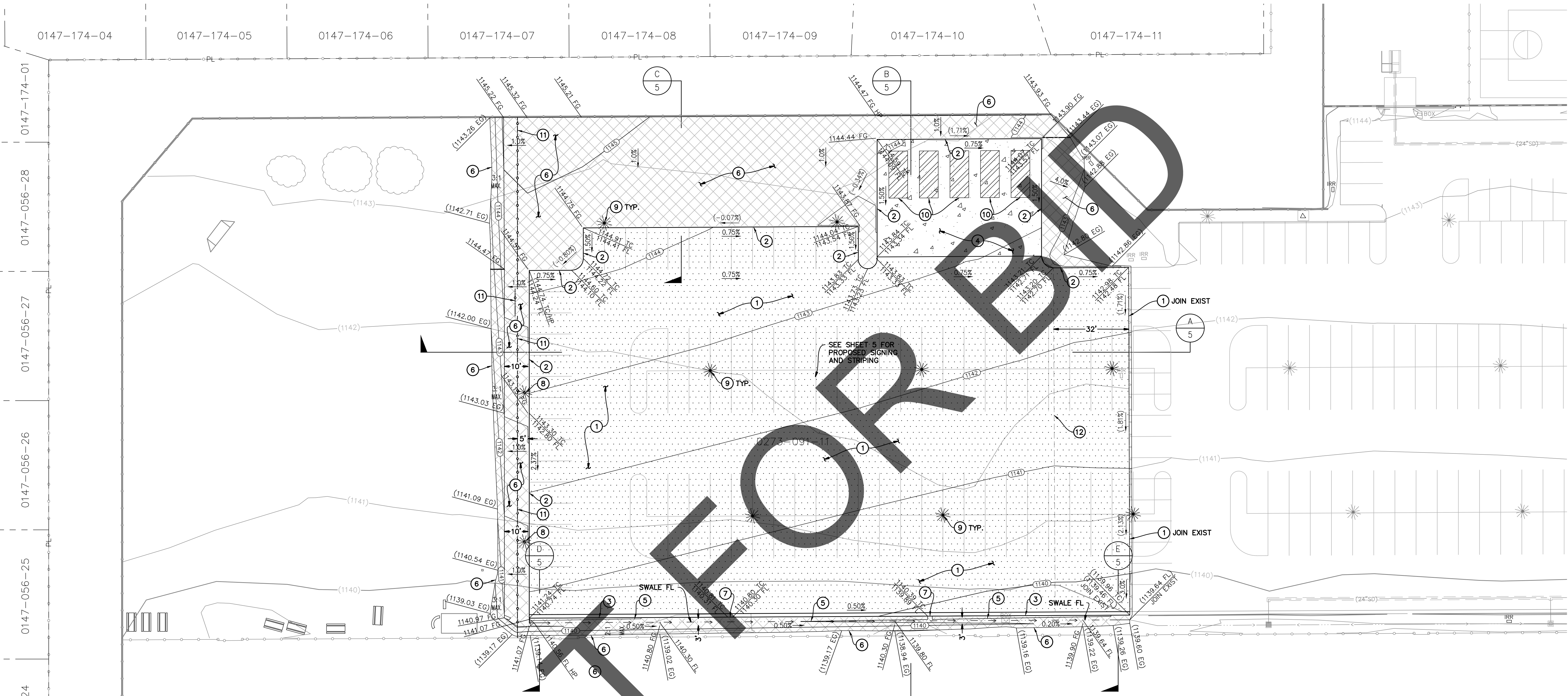
HORIZONTAL CONTROL PLAN

W.O. NO.

ROAD NO.

FILE NO.

SHEET 3 OF 6

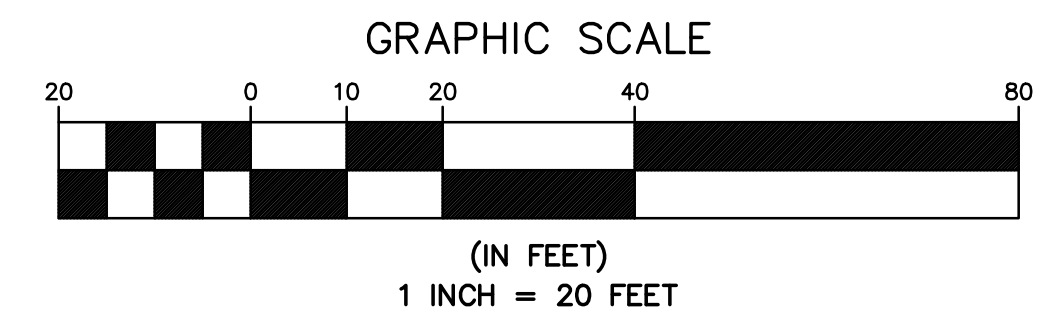
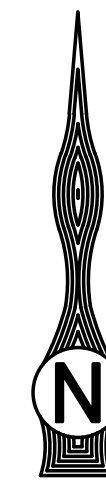


STREET/GRADING CONSTRUCTION NOTES:

- ① CONSTRUCT 3" OF ASPHALT CONCRETE PAVEMENT OVER 4" OF AGGREGATE BASE.
- ② CONSTRUCT 6" PCC CURB PER CALTRANS STANDARD PLAN A87A, TYPE "A1" CURB.
- ③ CONSTRUCT 6" PCC CURB AND GUTTER PER SAN BERNARDINO COUNTY TRANSPORTATION DEPT. STANDARD DRAWING NO. 116.
- ④ CONSTRUCT 6" PCC CONCRETE PAVEMENT OVER 12" OF 95% COMPACTED NATIVE SOIL.
- ⑤ CONSTRUCT 3' WIDE, 6" DEEP EARTHEN SWALE PER LOCATION AND ELEVATIONS NOTED ON PLANS.
- ⑥ REGRADE FINISHED GROUND AS SHOWN TO A MINIMUM OF 90% RELATIVE COMPACTION.
- ⑦ CONSTRUCT DRAINAGE SLOT 12" WIDE IN 6" PCC CURB PER LOCATION AND ELEVATION NOTED ON PLANS.
- ⑧ RELOCATE SALVAGED EXISTING PARKING LOT LIGHT PER ELECTRICAL PLANS.
- ⑨ CONSTRUCT PARKING LOT LIGHT, PER ELECTRICAL PLANS.
INSTALL NEW OR SALVAGED STORAGE CONTAINER BIN AT PROPOSED SHOWN LOCATIONS.
- ⑪ INSTALL SALVAGED CHAINLINK FENCE, INCLUDING GATES PER CALTRANS STANDARD PLAN A85 AND A85A AS SHOWN ON PLANS.
- ⑫ CONSTRUCT PAVEMENT TRANSITION AS SHOWN BY STRAIGHT GRADING FROM NORTH CURB FLOWLINE TO SOUTH GUTTER LIP.

HATCH LEGEND

- | | |
|--|---------------------------------|
| | PROPOSED PCC CONCRETE |
| | PROPOSED LANDSCAPE GRADING AREA |
| | PROPOSED ASPHALT CONCRETE |
| | SECTION |
| | SHEET REFERENCE |



Know what's below.
Call before you dig.

BENCHMARK:

BRASS DISK STAMPED B4-3 RESET MONUMENT IN SAN BERNARDINO CITY AT THE INTERSECTION OF WATERMAN AVENUE & GILBERT STREET
B.M. No. B4-3 R5 ELEVATION= 1123.21'

BASIS OF BEARING:

☉ OF 16TH STREET BEARING N89°49'00"E AS SHOWN ON TRACT MAP No. 3660 ON FILE IN PARCEL MAP BOOK 47 PAGES 98-102, RECORDS OF SAN BERNARDINO COUNTY.

PREPARED BY:



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FIELD BOOK REF.

MARK	REVISIONS	APPR	DATE

**SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS**

DESIGNED BY: TMR	DRAWN BY: JH	CHECKED BY: OP	APPROVED BY:
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LAND DEVELOPMENT ENGINEER DATE			DIRECTOR OF PUBLIC WORKS DATE

SITE IMPROVEMENT PLANS

CENTRAL VALLEY JUVENILE
DETENTION CENTER SECURED
PARKING LOT EXPANSION

GRADING PLAN

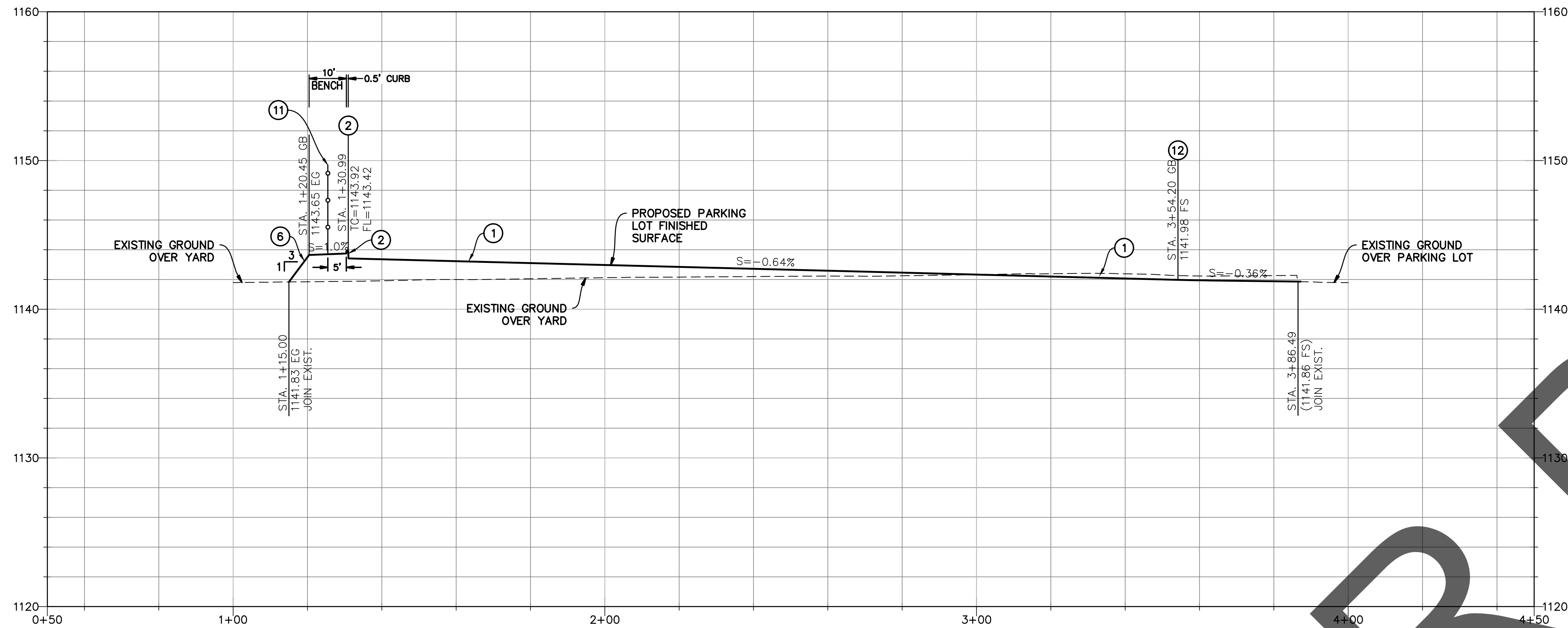
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ROAD NO.

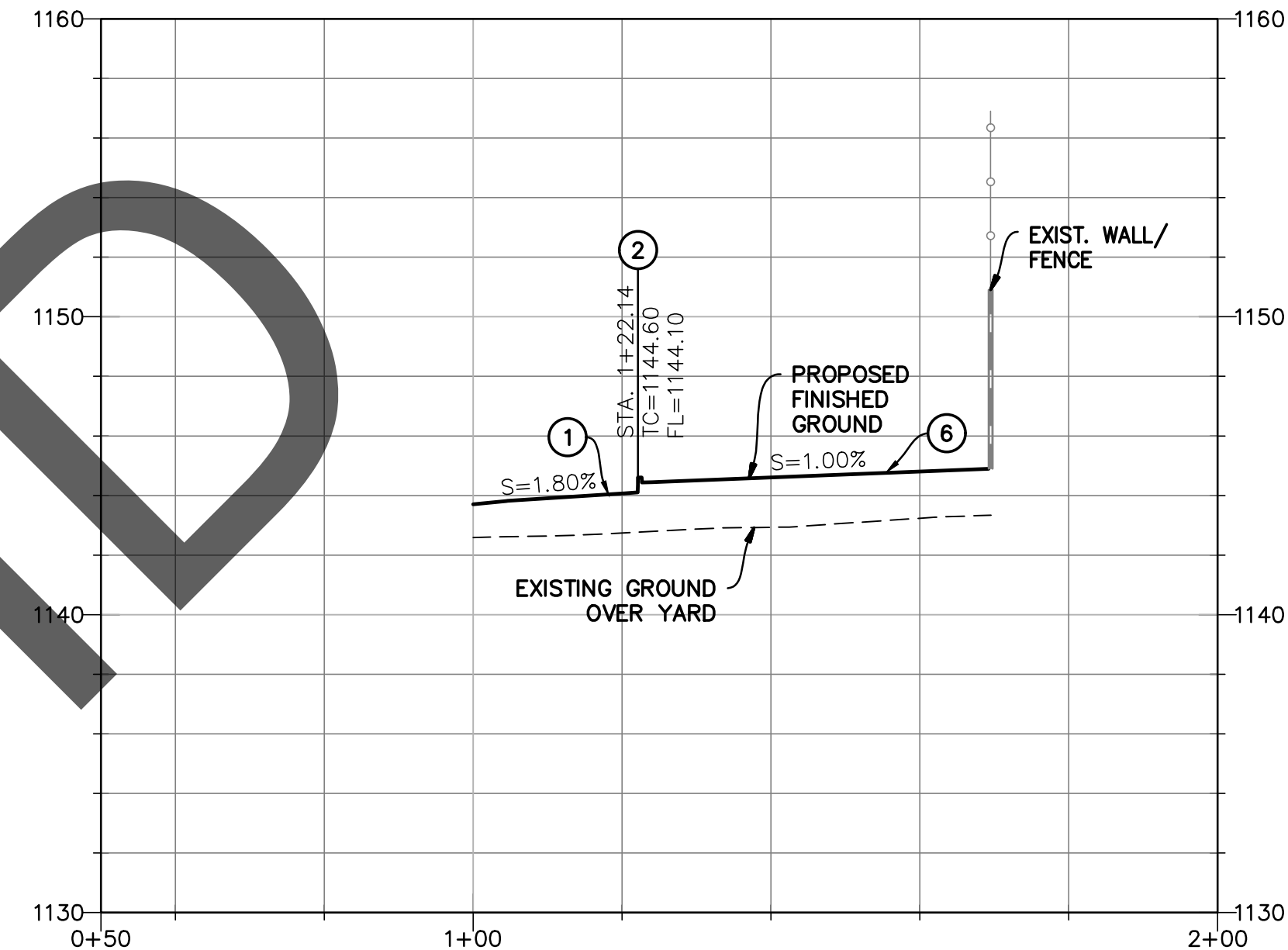
FILE NO.

SHEET 4 OF 6

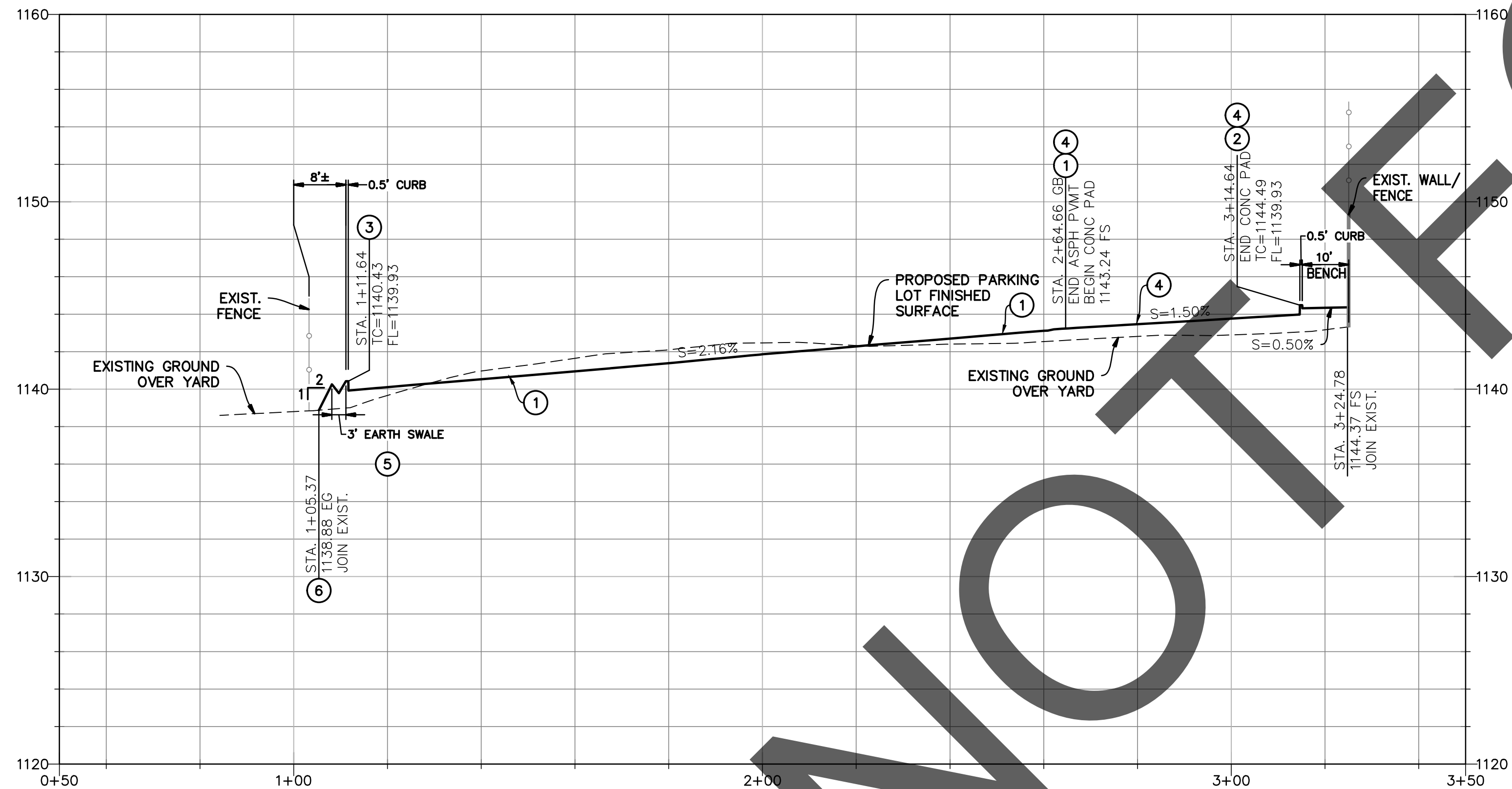
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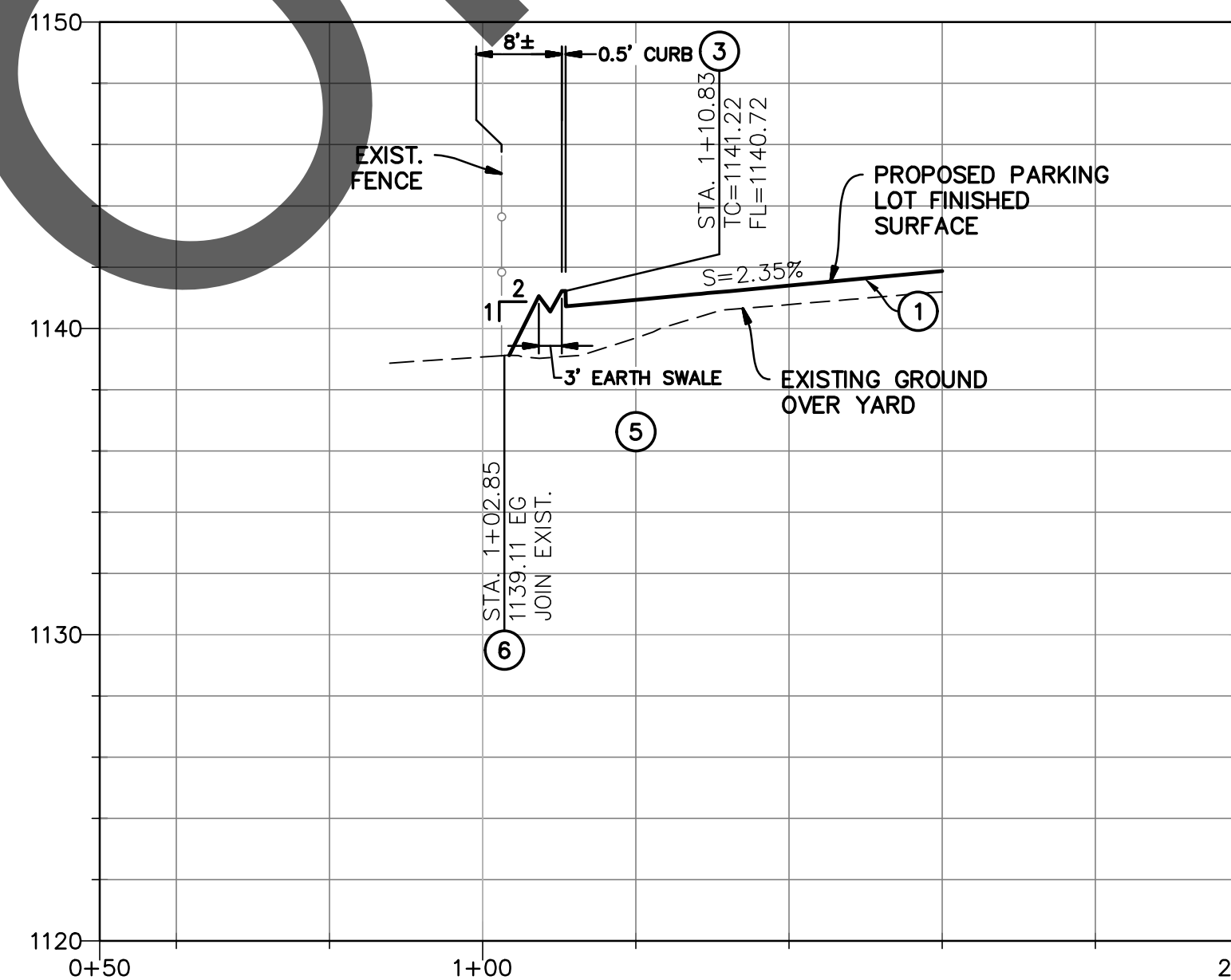
TYPICAL SECTION A
SCALE: (H) 1"=20'
(V) 1"=5'



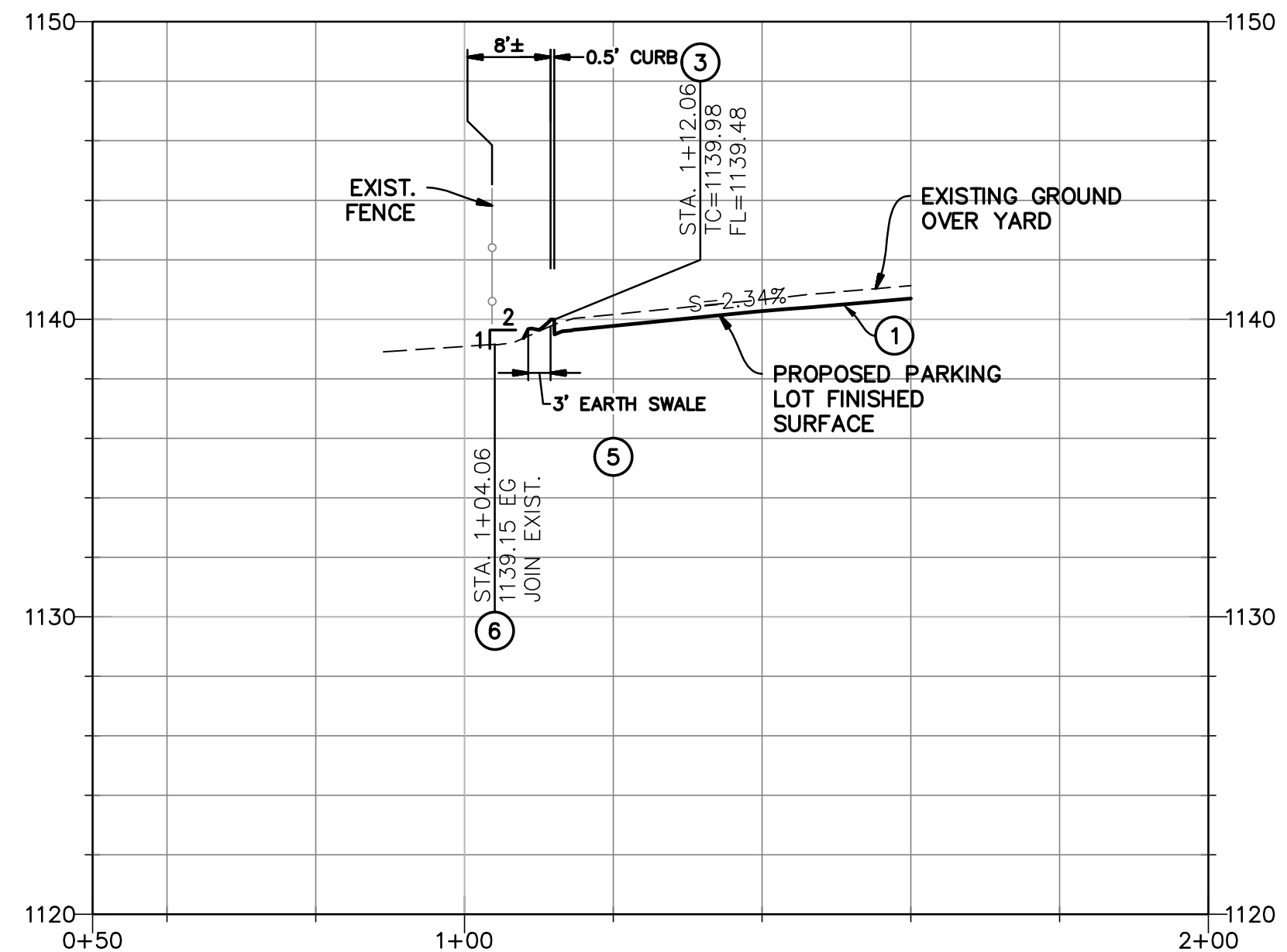
TYPICAL SECTION C
SCALE: (H) 1"=20'
(V) 1"=5'



TYPICAL SECTION B
SCALE: (H) 1"=20'
(V) 1"=5'



TYPICAL SECTION D
SCALE: (H) 1"=20'
(V) 1"=5'



TYPICAL SECTION E
SCALE: (H) 1"=20'
(V) 1"=5'

STREET/GRADING CONSTRUCTION NOTES:

- CONSTRUCT 3" OF ASPHALT CONCRETE PAVEMENT OVER 4" OF AGGREGATE BASE.
- CONSTRUCT 6" PCC CURB PER CALTRANS STANDARD PLAN A87A, TYPE "A1" CURB.
- CONSTRUCT 6" PCC CURB AND GUTTER PER SAN BERNARDINO COUNTY TRANSPORTATION DEPT. STANDARD DRAWING NO. 116.
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STREET/GRADING CONSTRUCTION NOTES:

- CONSTRUCT 3' WIDE, 6" DEEP EARTHEN SWALE PER LOCATION AND ELEVATIONS NOTED ON PLANS.
- REGRADE FINISHED GROUND AS SHOWN TO A MINIMUM OF 90% RELATIVE COMPACTION.
- INSTALL SALVAGED CHAINLINK FENCE, INCLUDING GATES AS SHOWN ON PLANS.
- CONSTRUCT PAVEMENT TRANSITION AS SHOWN BY STRAIGHT GRADING FROM NORTH CURB FLOWLINE TO SOUTH GUTTER LIP.



Know what's below.
Call before you dig.

BENCHMARK:

BRASS DISK STAMPED B4-3 RESET MONUMENT IN SAN BERNARDINO CITY AT THE INTERSECTION OF WATERMAN AVENUE & GILBERT STREET
B.M. No. B4-3 R5 ELEVATION= 1123.21'

BASIS OF BEARING:

6 OF 16TH STREET BEARING N89°49'00"E AS SHOWN ON TRACT MAP No. 3660 ON FILE IN PARCEL MAP BOOK 47 PAGES 98-102, RECORDS OF SAN BERNARDINO COUNTY.

PREPARED BY:



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FAX (951) 680-0490



FIELD BOOK REF.

MARK	REVISIONS	APPR	DATE

**SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS**

DESIGNED BY: TMR
DRAWN BY: JH
CHECKED BY: OP

RECOMMENDED/APPROVED BY:

LAND DEVELOPMENT ENGINEER DATE

APPROVED BY:

ASST. DIRECTOR OF PUBLIC WORKS DATE

DIRECTOR OF PUBLIC WORKS DATE

SITE IMPROVEMENT PLANS

CENTRAL VALLEY JUVENILE
DETENTION CENTER SECURED
PARKING LOT EXPANSION

TYPICAL CROSS SECTIONS

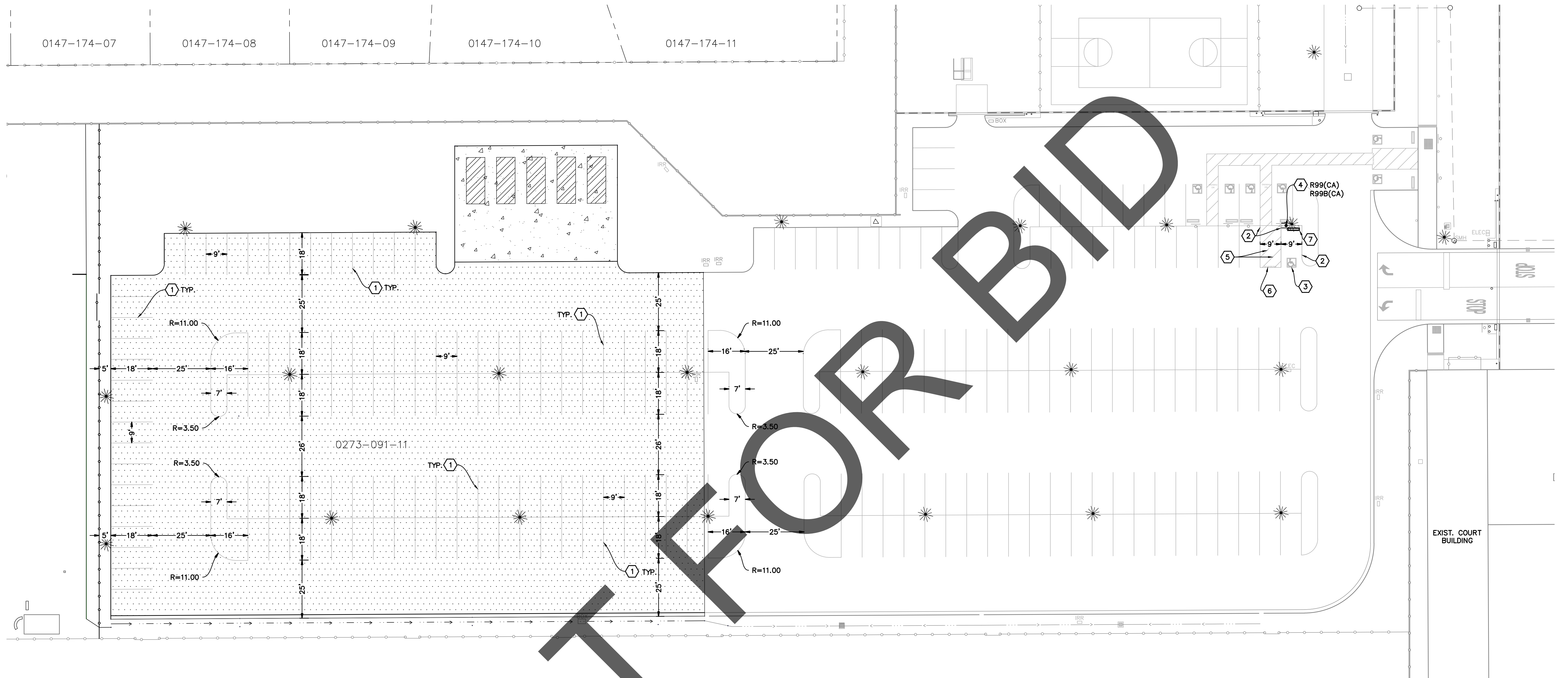
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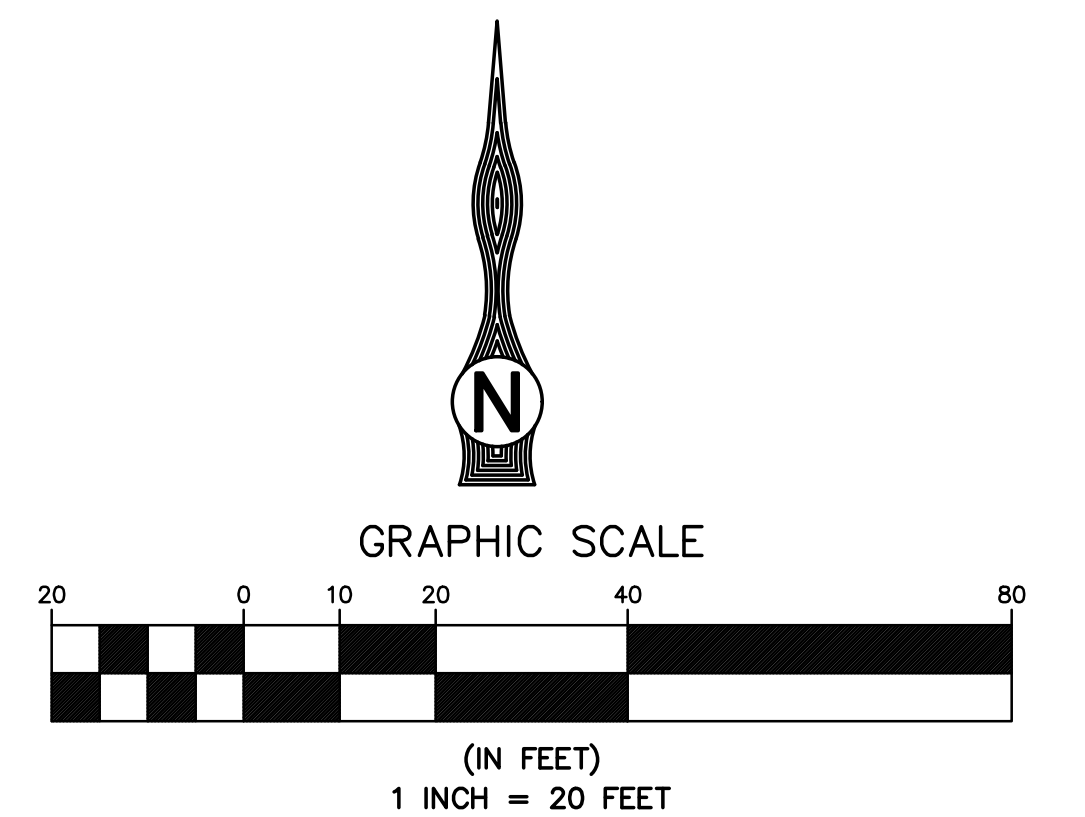
SHEET 5 OF 6

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SIGNING AND STRIPING CONSTRUCTION NOTES:

- 1 APPLY THERMOPLASTIC, 4" SOLID WHITE STRIPE.
- 2 APPLY THERMOPLASTIC, 4" SOLID BLUE EDGE STRIPE.
- 3 APPLY THERMOPLASTIC, HANDICAP SYMBOL PER CA MUTCD FIG. 3B-22.
- 4 FURNISH AND INSTALL SIGN AS NOTED.
- 5 APPLY THERMOPLASTIC, 4" DIAGONAL WHITE SOLID STRIPE EVERY 3' O.C. APPLY THE WORDS "NO PARKING" SHALL BE PAINTED ON THE GROUND WITH IN EACH 8"(2438MM) LOADING AND UNLOADING ACCESS AISLE. THIS NOTE SHALL BE PAINTED IN WHITE LETTERS NO LESS THAN 12"(305MM) HIGH AND LOCATED SO THAT IT IS VISIBLE TO TRAFFIC ENFORCEMENT OFFICIALS.
- 6 CONSTRUCT PCC CARSTOP.



Know what's below.
Call before you dig.

BENCHMARK:

BRASS DISK STAMPED B4-3 RESET MONUMENT IN SAN BERNARDINO CITY AT THE INTERSECTION OF WATERMAN AVENUE & GILBERT STREET
B.M. No. B4-3 R5 ELEVATION= 1123.21'

BASIS OF BEARING:

© OF 16TH STREET BEARING N89°49'00"E AS SHOWN ON TRACT MAP No. 3660 ON FILE IN PARCEL MAP BOOK 47 PAGES 98-102, RECORDS OF SAN BERNARDINO COUNTY.

PREPARED BY:



TERRY M. RENNER R.C.E. No. 69984
EXPIRES: 9-30-22

TKE ENGINEERING, INC.
4446 CENTRAL AVENUE
RIVERSIDE, CA 92506
(951) 680-0440
FAX (951) 680-0490



FIELD BOOK REF.

MARK	REVISIONS	APPR	DATE

**SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS**

DESIGNED BY: TMR	DRAWN BY: JH	CHECKED BY: OP	APPROVED BY:
RECOMMENDED/APPROVED BY:			ASST. DIRECTOR OF PUBLIC WORKS DATE
LAND DEVELOPMENT ENGINEER DATE			DIRECTOR OF PUBLIC WORKS DATE

SITE IMPROVEMENT PLANS

CENTRAL VALLEY JUVENILE
DETENTION CENTER SECURED
PARKING LOT EXPANSION
SIGNING AND STRIPING

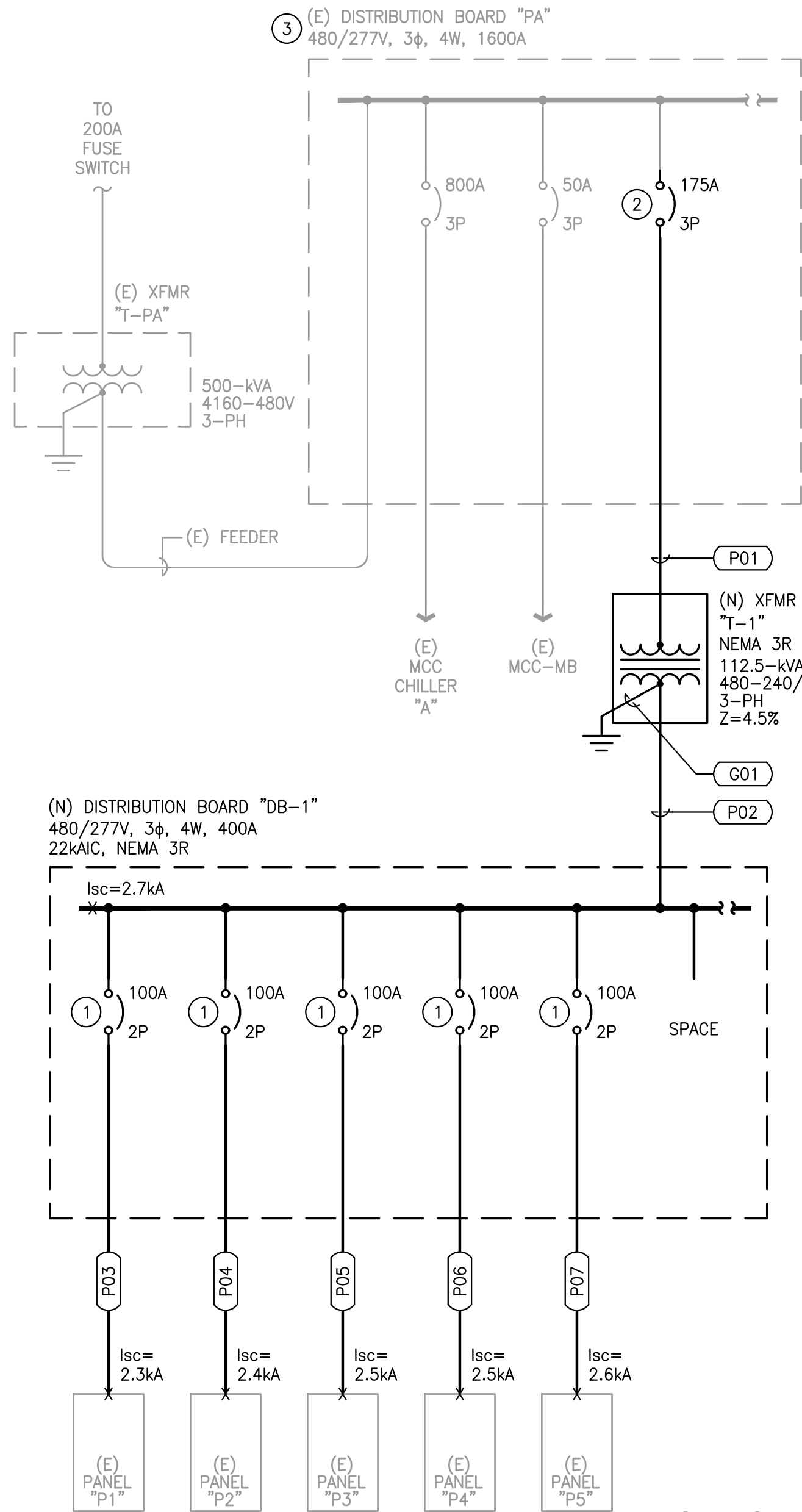
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ROAD NO.

FILE NO.

SHEET 6 OF 6

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SINGLE LINE DIAGRAM GENERAL NOTES:

- THE FAULT CURRENT RATING OF OVERCURRENT DEVICES ADDED TO THE EXISTING MAIN SERVICE EQUIPMENT SHALL HAVE GREATER THAN OR EQUAL TO THE FAULT CURRENT RATING OF THE EXISTING OVERCURRENT DEVICES. ALL ELECTRICAL SERVICE RELATED WORK SHALL COMPLY AND COORDINATE WITH UTILITY COMPANY.
- ALL CIRCUIT BREAKERS SHALL BE 80% RATED.
- ALL (N) CURRENT CARRYING EQUIPMENT SHALL BE U.L. LISTED AND BRACED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AT ITS TERMINAL.
- ALL OVERCURRENT DEVICES SHALL BE FULLY RATED TO AVAILABLE FAULT CURRENT.
- ALL NEW ELECTRICAL EQUIPMENT SHALL BE U.L. LISTED OR APPROVED BY A ELECTRICAL TESTING LABORATORY APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- CONTRACTOR SHALL COORDINATE THE OVERCURRENT PROTECTION DEVICE INCLUDING BUT NOT LIMITED TO UTILITY MAIN CIRCUIT BREAKER AND ALL DOWNSTREAM BRANCH CIRCUIT BREAKERS.
- HEAVY WEIGHT LINES ARE NEW, SCREENED LIGHT LINES ARE EXISTING.
- USE A LICENSED CA ELECTRICAL ENGINEER TO CALCULATE THE ARC-FLASH AND PROVIDE ARC-FLASH WARNING SIGNS AT EACH ELECTRICAL EQUIPMENT INDICATING THE REQUIRED INFORMATION BY NFPA 70E AND CAL-OSHA. SEE SAMPLE BELOW.
- CONDUCTOR LENGTH SHOWN HEREIN ARE FOR ENGINEERING CALCULATIONS ONLY AND ARE NOT FOR MATERIALS TAKE-OFF.

LOAD SUMMARY CALCULATION "PA"

SERVICE DESCRIPTION	LOAD (kW)
(E) MAXIMUM DEMAND LOAD	400.0
(N) DISTRIBUTION BOARD "DB-1"	76.8
SAFETY FACTOR (25% OF TOTAL LOAD)	119.2
TOTAL (kW)	476.8
TOTAL AMPERE AT 480V, 3φ	573.5

SINGLE LINE DIAGRAM KEY NOTES:

- INSTALL CIRCUIT BREAKERS CONTINUOUSLY WITHOUT SKIPPING ANY SPACE IN ORDER TO MAINTAIN THE LOAD BALANCE BETWEEN PHASES.
- REPLACE (E) CIRCUIT BREAKER AND REPLACE WITH (N) CIRCUIT BREAKER, RATING AS INDICATED. SEE SINGLE LINE DIAGRAM GENERAL NOTE 1.
- CONTRACTOR TO CONTINUOUSLY MONITOR THE (E) LOAD ON DISTRIBUTION "PA" FOR 30 DAYS TO DETERMINE THE MAXIMUM DEMAND. ADD THE (N) LOAD TO MAXIMUM DEMAND, IF THE TOTAL EXCEEDS THE RATING OF THE (E) TRANSFORMER "T-PA", DETERMINE IF PANEL DISTRIBUTION "PC" HAS AVAILABLE POWER. IF NEITHER DISTRIBUTION "PA" OR "PC" HAS AVAILABLE POWER, NOTIFY ENGINEER IMMEDIATELY.

SINGLE LINE DIAGRAM

SCALE: NONE

CONDUIT AND FEEDER SCHEDULE

PLAN SYMBOL	CONDUIT			WIRE		USE	LOCATION	
(XX)	QTY	SIZE (")	% FILL	QTY	SIZE		OCF	FROM
(P01)		2	29.73	3#3/0 + 1#6 GND.	175A	FEEDER	(E) DISTRIBUTION BOARD "PA"	(N) TRANSFORMER "T-1"
(P02)		3	37.92	4-400 KCMIL + 1#3 GND.	—	FEEDER	(N) TRANSFORMER "T-1"	(N) DISTRIBUTION BOARD "DB-1"
(P03)		1 1/2	30.35	3#1 + 1#6 GND.	100A	BRANCH FEEDER	(N) DISTRIBUTION BOARD "DB-1"	(E) PANEL "P1"
(P04)		1 1/2	30.35	3#1 + 1#6 GND.	100A	BRANCH FEEDER	(N) DISTRIBUTION BOARD "DB-1"	(E) PANEL "P2"
(P05)		1 1/2	30.35	3#1 + 1#6 GND.	100A	BRANCH FEEDER	(N) DISTRIBUTION BOARD "DB-1"	(E) PANEL "P3"
(P06)		1 1/2	30.35	3#1 + 1#6 GND.	100A	BRANCH FEEDER	(N) DISTRIBUTION BOARD "DB-1"	(E) PANEL "P4"
(P07)		1 1/2	30.35	3#1 + 1#6 GND.	100A	BRANCH FEEDER	(N) DISTRIBUTION BOARD "DB-1"	(E) PANEL "P5"
(G01)	—	—	—	1#1/0 BTCW	—	GROUNDING	AS SHOWN	AS SHOWN

VOLTAGE DROP CALCULATION 3 PHASE, 3 OR 4 WIRE

FEEDER TAG	WIRE LENGTH (FT)	LOAD (A)	VOLTS (V)	DESIRED % DROP	MIN. CIRC MILS	SELECTED WIRE	VOLTAGE DROP (V)	VOLTAGE AT TERM. (V)	%VD
P01	680	135	480	3%	146902	167800	12.61	467.39	2.63%

SHORT CIRCUIT AND ARC FLASH CALCULATION		Arc-In-Box energy = cal/cm² at specified working distance	
Transformer		Flash Protection Boundary (inches) where Arc incident energy = 1.2 cal/cm²	
Input:		Enter working distance (inches):	
Xlmr KVA: 112.5		N TRANSFORMER "T-1"	
Xlmr Secondary Line to Line (Volts): 240		Xlmr FLA = 271	
Xlmr impedance %: 4.50		Arc-In-Box Incident Energy: 46.53	
Fault Clearing Time (seconds): 2		Flash Protection Boundary: 162	
@ 3.165 arc fault current (Amps)			
Branch Circuit		(N) DISTRIBUTION BOARD "DB-1"	
Conductors per phase: 1		Enter working distance (inches): 18	
(S) Single conductors or (C) Cable: S		Arc-In-Box Incident Energy: 15.87	
AL or CU: CU		Flash Protection Boundary: 100	
Conductor length: 678			
Conductor AWG or kcmil: 400		I _{sc} at fault (Amps) = 2,720	
Metallic conduit? (Y or N): N		@ 1.768 arc fault current (Amps)	
Fault Clearing Time (seconds): 2			
Branch Circuit		(E) PANEL "P1"	
I _{sc} at beginning of circuit (Amps): 2,720		Enter working distance (inches): 18	
Conductors per phase: 1		Arc-In-Box Incident Energy: 15.87	
(S) Single conductors or (C) Cable: S		Flash Protection Boundary: 90	
AL or CU: CU			
Conductor length: 67		I _{sc} at fault (Amps) = 2,314	
Conductor AWG or kcmil: 41		@ 1.591 arc fault current (Amps)	
Metallic conduit? (Y or N): N			
Fault Clearing Time (seconds): 2			
Branch Circuit		(E) PANEL "P2"	
I _{sc} at beginning of circuit (Amps): 2,720		Enter working distance (inches): 18	
Conductors per phase: 1		Arc-In-Box Incident Energy: 16.34	
(S) Single conductors or (C) Cable: S		Flash Protection Boundary: 92	
AL or CU: CU			
Conductor length: 87		I _{sc} at fault (Amps) = 2,383	
Conductor AWG or kcmil: 41		@ 1.625 arc fault current (Amps)	
Metallic conduit? (Y or N): N			
Fault Clearing Time (seconds): 2			
Branch Circuit		(E) PANEL "P3"	
I _{sc} at beginning of circuit (Amps): 2,720		Enter working distance (inches): 18	
Conductors per phase: 1		Arc-In-Box Incident Energy: 16.84	
(S) Single conductors or (C) Cable: S		Flash Protection Boundary: 94	
AL or CU: CU			
Conductor length: 28		I _{sc} at fault (Amps) = 2,456	
Conductor AWG or kcmil: 1		@ 1.661 arc fault current (Amps)	
Metallic conduit? (Y or N): N			
Fault Clearing Time (seconds): 2			
Branch Circuit		(E) PANEL "P4"	
I _{sc} at beginning of circuit (Amps): 2,720		Enter working distance (inches): 18	
Conductors per phase: 1		Arc-In-Box Incident Energy: 17.33	
(S) Single conductors or (C) Cable: S		Flash Protection Boundary: 96	
AL or CU: CU			
Conductor length: 15		I _{sc} at fault (Amps) = 2,534	
Conductor AWG or kcmil: 1		@ 1.699 arc fault current (Amps)	
Metallic conduit? (Y or N): N			
Fault Clearing Time (seconds): 2			
Branch Circuit		(E) PANEL "P5"	
I _{sc} at beginning of circuit (Amps): 2,720		Enter working distance (inches): 18	
Conductors per phase: 1		Arc-In-Box Incident Energy: 17.33	
(S) Single conductors or (C) Cable: S		Flash Protection Boundary: 96	
AL or CU: CU			
Conductor length: 15		I _{sc} at fault (Amps) = 2,617	
Conductor AWG or kcmil: 1		@ 1.738 arc fault current (Amps)	
Metallic conduit? (Y or N): N			
Fault Clearing Time (seconds): 2			

VOLTAGE DROP CALCULATION 1 PHASE, 3 WIRE FROM 4 WIRE									
FEEDER TAG	WIRE LENGTH (FT)	LOAD (A)	VOLTS (V)	DESIRED % DROP	MIN. CIRC MILS	SELECTED WIRE	VOLTAGE DROP (V)	VOLTAGE AT TERM. (V)	%VD
P03	67	80	240	3%	15007	83600	1.65	238.35	0.69%
P04	54	80	240	3%	15480	83600	1.33	238.67	0.55%
P05	41	80	240	3%	11753	83600	1.01	238.99	0.42%
P06	28	80	240	3%	8027	83600	0.69	239.31	0.29%
P07	15	80	240	3%	4500	83600	0.37	239.63	0.15%

ELECTRICAL DRAWING LIST

- E1 SINGLE LINE DIAGRAM, CONDUIT AND FEEDER SCHEDULE, VOLTAGE DROP CALCULATION, SHORT-CIRCUIT AND ARC FLASH CALCULATIONS, ELECTRICAL GENERAL NOTES, SYMBOLS, ETC
- E2 PARKING LOT LIGHTING PLAN, PANEL SCHEDULE AND DETAIL
- E3 POWER PLAN
- E4 PHOTOMETRIC CALCULATION
- E5 TITLE 24 ENERGY COMPLIANCE

STANDARD SYMBOL LIST

SYMBOL	DESCRIPTION
	OUTDOOR AREA POLE FIXTURE
	BRANCH CIRCUIT PANELBOARDS, SURFACE AND RECESS MOUNTED
	CONDUIT RUN CONCEALED UNDERGROUND, 3/4" PVC-2#12 + 1#12 GND.

REFERENCE SYMBOLS

SYMBOL	DESCRIPTION
	SHEET NOTE REFERENCE
	BRANCH CIRCUIT OR FEEDER NOMINAL AMPACITY & TYPE, REFER TO BRANCH CIRCUIT AND FEEDER SCHEDULES FOR WIRE AND CONDUIT SIZES & QTY.
	REFER TO DETAIL NO. ON DRAWING INDICATED NOT ALL DETAIL REFERENCES ARE SHOWN. ALL DETAILS APPLY TO ALL APPLICABLE SITUATIONS, UON.
	KITCHEN EQUIPMENT REFERENCE, REFER TO KITCHEN EQUIPMENT SCHEDULE
	MECHANICAL EQUIPMENT IDENTIFICATION TAG
	EQUIPMENT BY OTHERS IDENTIFICATION TAG

BRANCH CIRCUIT WIRING LEGEND

	12-2 NM-B		6-2 NM-B *
	12-3 NM-B		6-3 NM-B *
	12-4 NM-B		6-4 NM-B *
	10-2 NM-B		
	10-3 NM-B		
	10-4 NM-B		
	8-2 NM-B *		
	8-3 NM-B *		
	8-4 NM-B *		

* FOR CONDUCTORS GREATER THAN AWG #10 STRANDED CONDUCTORS ARE TO BE USED.
NOTE: SYMBOL INCLUDES EQUIPMENT GROUND CONDUCTOR (NOT INDICATED).

ELECTRICAL GENERAL NOTES

- GENERAL PROVISIONS
A. THE REQUIREMENTS OF THE SPECIFICATIONS, THE FOREGOING ARCHITECTURAL GENERAL NOTES AND MECHANICAL NOTES SHALL APPLY TO ALL WORK HEREUNDER.
B. ALL WORK SHALL BE IN ACCORDANCE WITH 2008 CALIFORNIA ELECTRICAL CODE AND ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES, LAWS AND REGULATIONS.
C. CONTRACTOR IS DIRECTED TO OBTAIN AND REVIEW BUILDING CONSTRUCTION STANDARDS. WORK SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS WHETHER OR NOT SUCH ARE REPEATED HEREIN OR ON PLANS. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY CONFLICTS BETWEEN BUILDING STANDARDS AND THESE DRAWINGS.
D. CONTRACTOR SHALL VISIT SITE AND BE FULLY COGNIZANT OF ALL CONDITIONS PRIOR TO PROPOSAL. NOTIFY ARCHITECT OF DISCREPANCIES BETWEEN DOCUMENTS AND EXISTING CONDITIONS.
E. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITER'S LABORATORIES OR RECOGNIZED TESTING AGENCY.
- SCOPE
A. FURNISH AND INSTALL COMPLETE ALL MATERIALS, EQUIPMENT AND LABOR AS SHOWN AND AS NECESSARY FOR COMPLETE WORKABLE SYSTEM.
B. OBTAIN AND PAY FOR ALL REQUIRED FEES, PERMITS AND INSPECTIONS.
C. GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR FROM DATE OF FILING NOTICE OF COMPLETION.
D. DISCONNECT AND REMOVE ALL DEVICES, CONDUIT AND WIRES NOT BEING REUSED WITHIN REMODEL AREAS. DETERMINE FROM OWNER EQUIPMENT TO BE SALVAGED.
- SUBMITTALS
A. PROVIDE CATALOG CUTS OR SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT FOR THE FOLLOWING EQUIPMENT AND ITEMS:
1. LIGHTING FIXTURES AND CONTROL DEVICES
2. CIRCUIT BREAKERS, CONDUITS, FITTING, WIRES, BOXES
- RECORD DRAWINGS
A. SUBMIT AT THE PROJECT COMPLETION AND PRIOR TO FINAL PAYMENT ONE SET OF RECORD PRINTS NOTING ACTUAL ROUTINGS OF CONDUITS, EQUIPMENT LOCATIONS, ETC., AS WELL AS ANY REVISIONS MADE TO DESIGN DRAWINGS. SUBMIT WITH RECORD PRINTS TWO COPIES OF AVAILABLE EQUIPMENT MANUALS, SERVICE RECOMMENDATIONS, GUARANTEES, ETC.
- COORDINATION
A. COORDINATE ALL WORK WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL ALL WORK TO CLEAR NEW AND EXISTING ARCHITECTURAL AND STRUCTURAL MEMBERS. NO ITEM SUCH AS PIPE, DUCT, ETC. SHALL BE IN CONTACT WITH ANY ELECTRICAL EQUIPMENT.
B. CIRCUIT NUMBERS FOR ALL FIXTURES AND DEVICES (NEW AND EXISTING) WITHIN THE AREA OF WORK SHALL BE VERIFIED AND INDICATED ON RECORD DRAWINGS. PANEL SCHEDULES SHALL BE CORRECTED TO REFLECT ACTUAL INSTALLATION.
- RELATED WORK
A. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING NECESSARY FOR INSTALLATION OF HIS WORK.
B. OBTAIN WRITTEN PERMISSION FROM ARCHITECT AND GENERAL CONTRACTOR BEFORE PROCEEDING WITH ANY CUTTING OR PATCHING OF STRUCTURAL SYSTEMS, INCLUDING FLOOR SLABS.
C. REFINISH MARRED OR DAMAGED FACTORY FINISHED EQUIPMENT.
D. CONNECT ALL CONTRACTOR AND OWNER FURNISHED EQUIPMENT AND PROVIDE AND INSTALL REQUIRED DISCONNECTING MEANS.
E. RESTORE ALL DAMAGE RESULTING FROM YOUR WORK AND LEAVE PREMISES IN CLEAN CONDITION WHEN FINISHED WITH WORK.

ABBREVIATIONS

(E) EXISTING TO REMAIN	GEN GENERATOR	OFCI OWNER FURNISHED, CONTRACTOR INSTALLED
(N) NEW TO BE PROVIDED AND INSTALLED	GFI GROUND FAULT CIRCUIT INTERRUPTER	OFOI OWNER FURNISHED, OWNER INSTALLED
(R) EXISTING TO BE REMOVED	GND GROUND	P POLE
(RE) RELOCATED EXISTING	HOA HAND-OFF/AUTO SWITCH	PB PUSHBUTTON
(RL) EXISTING TO BE RELOCATED	HP HORSEPOWER	PH, ø PHASE
AB ABOVE COUNTER BACKSPASH	HPF HIGH POWER FACTOR	PNL PANEL
AC ALTERNATING CURRENT	HZ HERTZ (CYCLES PER SECOND)	+POS POSITIVE
A, AMP AMPERES	IER INTEGRATED EQUIPMENT (SHORT CIRCUIT) RATING (RMS SYM. AMPS)	PR PRIMARY
AF AMPERE (RATED) FUSE OR CB FRAME	IG ISOLATED GROUND	REQD REQUIRED
AFG ABOVE FINISHED FLOOR	K KEY OPERATED	SPDT SINGLE POLE DOUBLE THROW
AFS ABOVE FINISHED GRADE	KCMIL THOUSAND CIRCULAR MILS	SPST SINGLE POLE SINGLE THROW
ARS AVAILABLE RMS SYMMETRICAL AMPERE	KW KILOWATTS	SUB SUBSTATION
AS AMPERE (RATED) SWITCH	KVA KILOVOLT-AMPERES	SW SWITCH
AT CIRCUIT BRKR TRIP SETTING (AMPS)	LTC LIGHTING	SWGR SWITCHGEAR
ATS AUTOMATIC TRANSFER SWITCH	MAX MAXIMUM	TB TERMINAL BOARD
AUTO AUTOMATIC	MCA MINIMUM CIRCUIT AMPERES	TYP TYPICAL
AUX AUXILIARY	MFR MANUFACTURER	UL UNDERWRITERS LAB
AWG AMERICAN WIRE GAUGE	MIN MINIMUM	UON UNLESS OTHERWISE NOTED
BAT BATTERY	MISC MISCELLANEOUS	UPS UNINTERRUPTIBLE POWER SUPPLY
BC BELOW GRADE	MLO MAIN LUGS ONLY	V VOLTS
C CONDUIT (CIRCULAR RACEWAY)	MRS MINIMUM RMS SYMMETRIC AMPERE (EQUIPMENT RATING)	VA VOLT-AMPERES
CB CIRCUIT BREAKER	MTD MOUNTED	VFD VARIABLE FREQUENCY DRIVE
CKT CIRCUIT	MTR MOTOR	W WATT
CLG CEILING	-N- NEUTRAL (GROUNDED CONDUCTOR)	W/ WITH
CO CONDUIT ONLY	NC NORMALLY CLOSED	W/O WITHOUT
CU COPPER	NEC NATIONAL ELECTRICAL CODE	WCR WEATHERPROOF, SEE RECEPT. SYMBOL
DISC DISCONNECT	-NEG NEGATIVE	XFMR TRANSFORMER
DIA DIAMETER	NEMA NATIONAL ELECTRICAL MFGR'S ASSOC.	XP EXPLOSION PROOF
DIV DIVISION	NL NIGHT LIGHT (UNSWITCHED)	Z ZONE
E, EMERG EMERGENCY	NO NORMALLY OPEN	
EWG ELECTRIC WATER COOLER	NTS NOT TO SCALE	
EWI ELECTRIC WATER HEATER		
FBO FURNISHED BY OTHERS		
FC FOOT CANDLES		
FF FLUSH FLOOR MOUNTED		
FLA FULL LOAD AMPERES		
FLEX FLEXIBLE		
FU FUSE		

CONDUIT TRENCH DETAIL

SCALE: NONE		1
FIELD BOOK REF.		
DESIGNED BY		
DRAWN BY		
CHECKED BY		
RECOMMENDED/APPROVED BY:		
LAND DEVELOPMENT ENGINEER		
DATE		
MARK		
REVISIONS		
APPR		
DATE		

SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY:
LA	LA	OF	
RECOMMENDED/APPROVED BY:		ASST. DIRECTOR OF PUBLIC WORKS	DATE
LAND DEVELOPMENT ENGINEER		DIRECTOR OF PUBLIC WORKS	DATE

SITE IMPROVEMENT PLANS

CENTRAL VALLEY JUVENILE
DETENTION CENTER SECURED
PARKING LOT EXPANSION

TITLE SHEET

W.O. NO.

ROAD NO.

FILE NO.

SHEET 1 OF 5

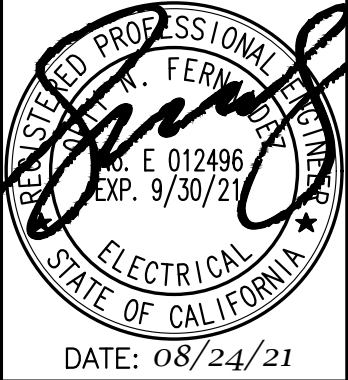


Know what's below.
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PREPARED BY:



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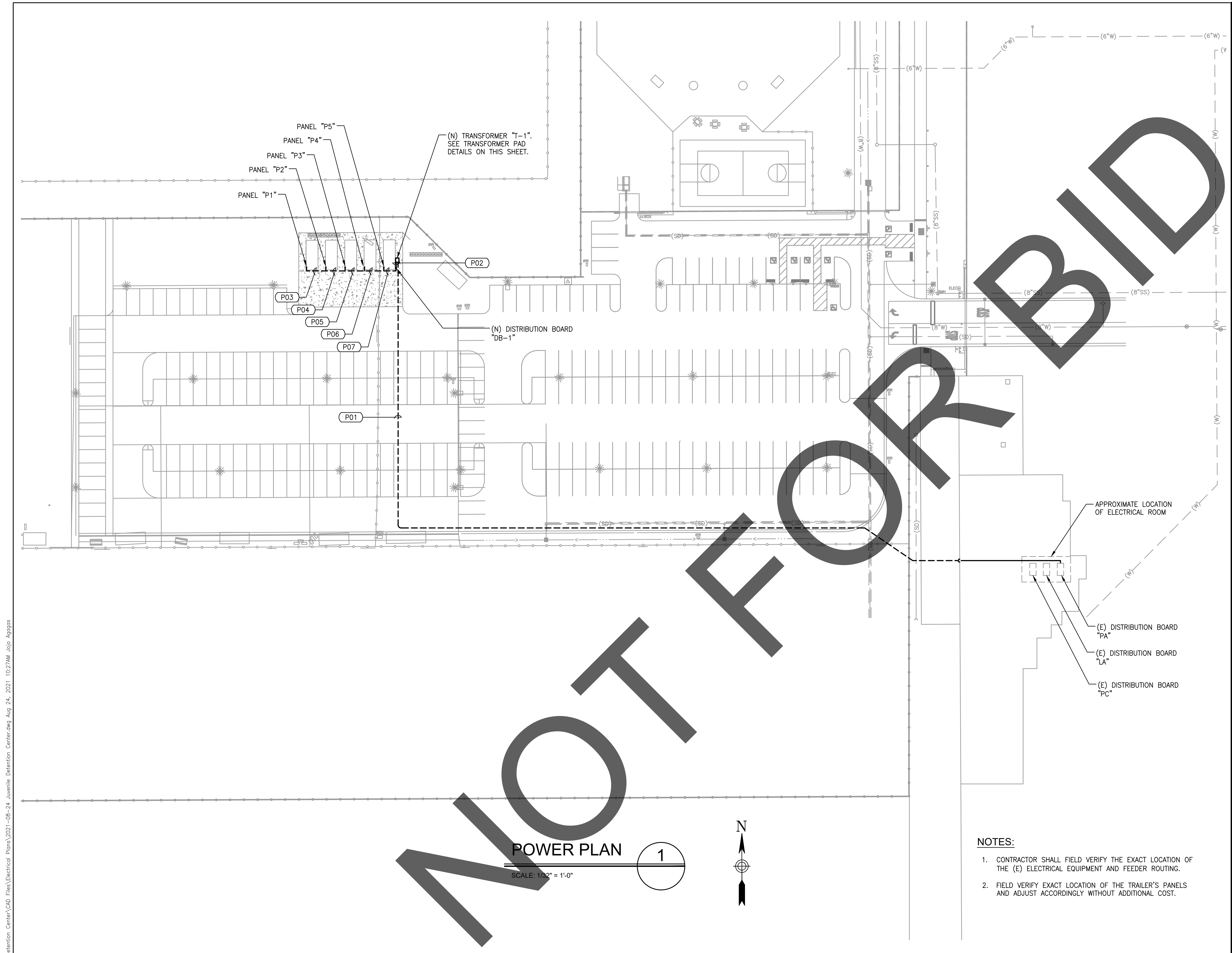
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RIVERSIDE, CA 92506

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POWER PLAN

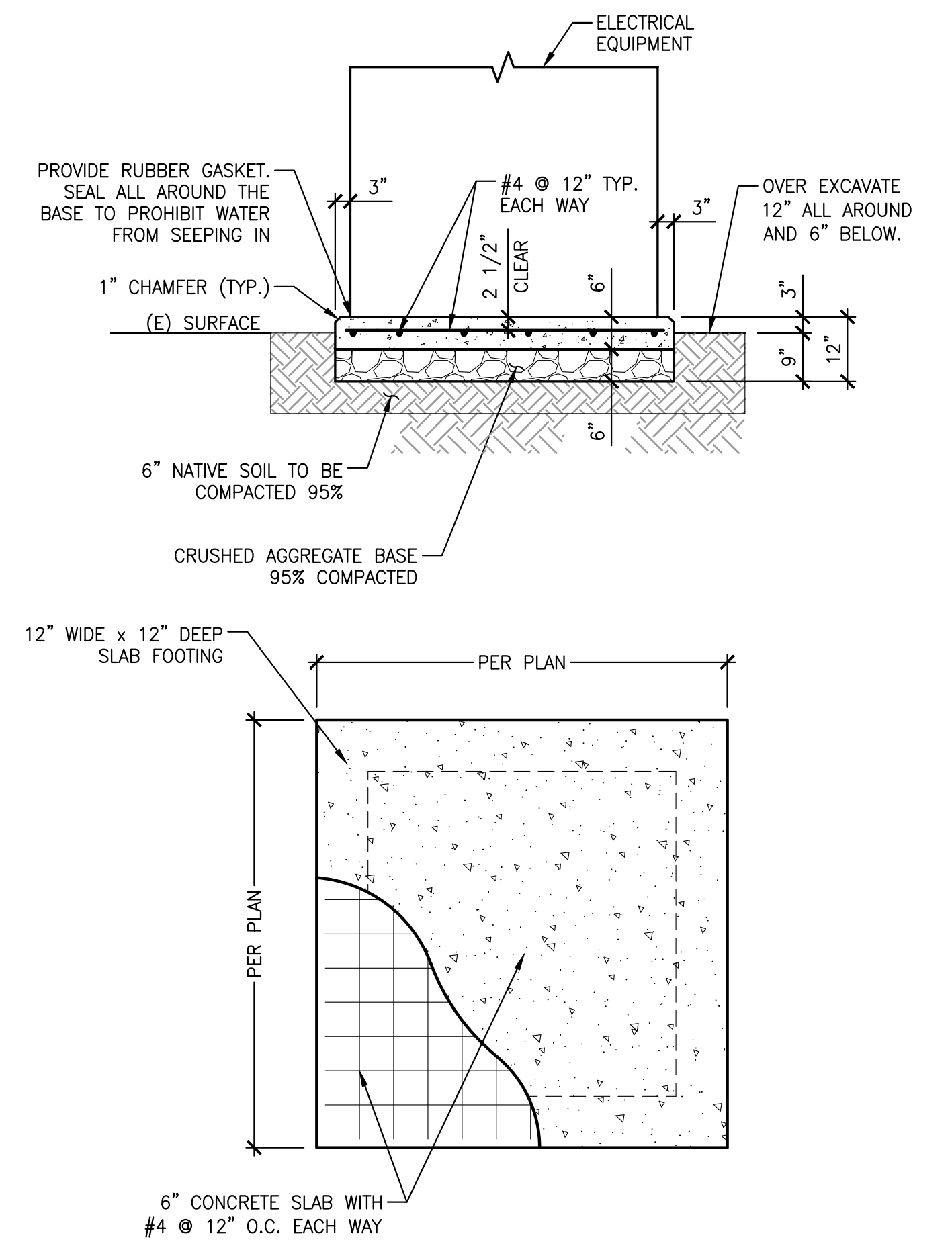
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SCALE: 1/32" = 1'-0"



NOTES:

1. CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF THE (E) ELECTRICAL EQUIPMENT AND FEEDER ROUTING.
2. FIELD VERIFY EXACT LOCATION OF THE TRAILER'S PANELS AND ADJUST ACCORDINGLY WITHOUT ADDITIONAL COST.



TRANSFORMER PAD DETAILS

2

SCALE: NONE

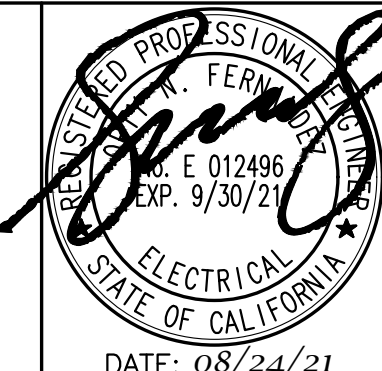


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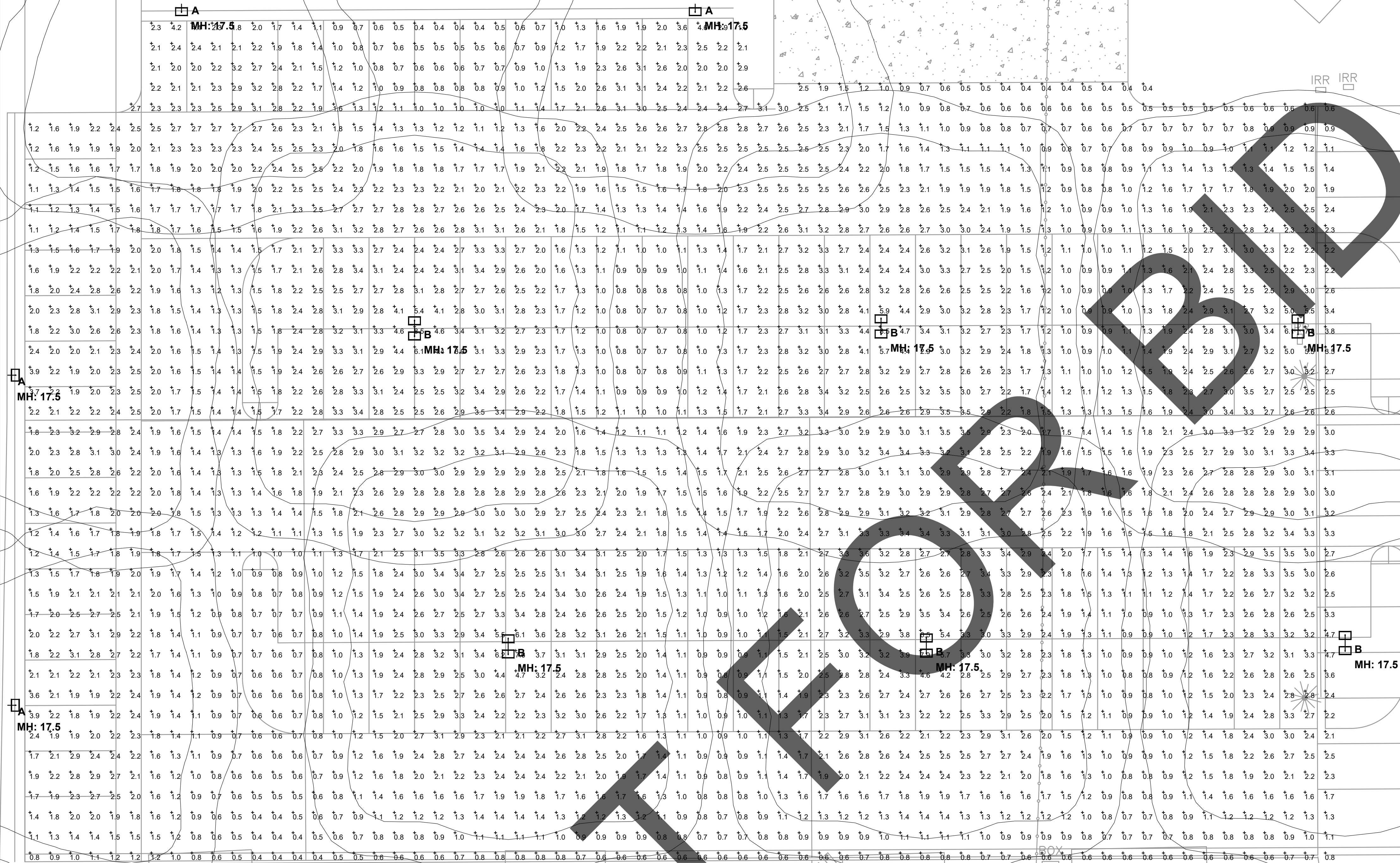
TERRY M. RENNEN R.C.E. No. 69984
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FAX (951) 680-0490

FIELD BOOK REF.			
MARK	REVISIONS	APPR	DATE

SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS			
DESIGNED BY: LA	DRAWN BY: LA	CHECKED BY: OF	APPROVED BY:
RECOMMENDED/APPROVED BY:			ASST. DIRECTOR OF PUBLIC WORKS DATE
LAND DEVELOPMENT ENGINEER DATE			DIRECTOR OF PUBLIC WORKS DATE

SITE IMPROVEMENT PLANS		W.O. NO.
CENTRAL VALLEY JUVENILE DETENTION CENTER SECURED PARKING LOT EXPANSION		ROAD NO.
		FILE NO.
		SHEET 3 OF 5



Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	4	A	SINGLE	N.A.	0.850	HUBBELL // CL1-30L-5K-4
	6	B	BACK-BACK	N.A.	0.850	HUBBELL // CL1-30L-5K-4

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking	Illuminance	Fc	1.97	8.5	0.4	4.93	21.25

Jobname
Central Valley Juvenile Detention Center Secured Parking Lot__2020-12-28.AGI
Report for: Kyle Kersten
Report by: Ismael Avina-Prieto / Applications Engineer
Mounting Ht.: See Drawing
See Luminaire Schedule for Light Loss Factor - Unless otherwise specified by customer
Reflectance: 80/50/20 - Unless otherwise specified by customer
Date:12/28/2020

-----Disclaimer-----
Luminaire data is obtained according to IES procedures under controlled laboratory conditions. Field results may differ from computer predictions due to many uncontrollable factors including, but not limited to Line Voltage Variations, Lamp Performance, Ballast input watts, LED Drivers input watts, Temperature Variations and Jobsite Conditions.

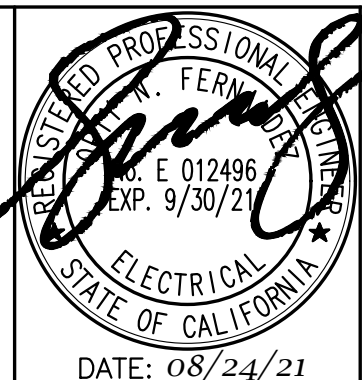


Know what's **below**.
Call before you dig.

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FIELD BOOK REF.				SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS				SITE IMPROVEMENT PLANS		W.O. NO.	
				DESIGNED BY LA	DRAWN BY LA	CHECKED BY OF	APPROVED BY: ASST. DIRECTOR OF PUBLIC WORKS DATE DIRECTOR OF PUBLIC WORKS DATE	CENTRAL VALLEY JUVENILE DETENTION CENTER SECURED PARKING LOT EXPANSION PHOTOMETRIC CALCULATION	ROAD NO.		
				RECOMMENDED/APPROVED BY:					FILE NO.		
				LAND DEVELOPMENT ENGINEER DATE					SHEET 4 OF 5		
MARK	REVISIONS		APPR DATE								

