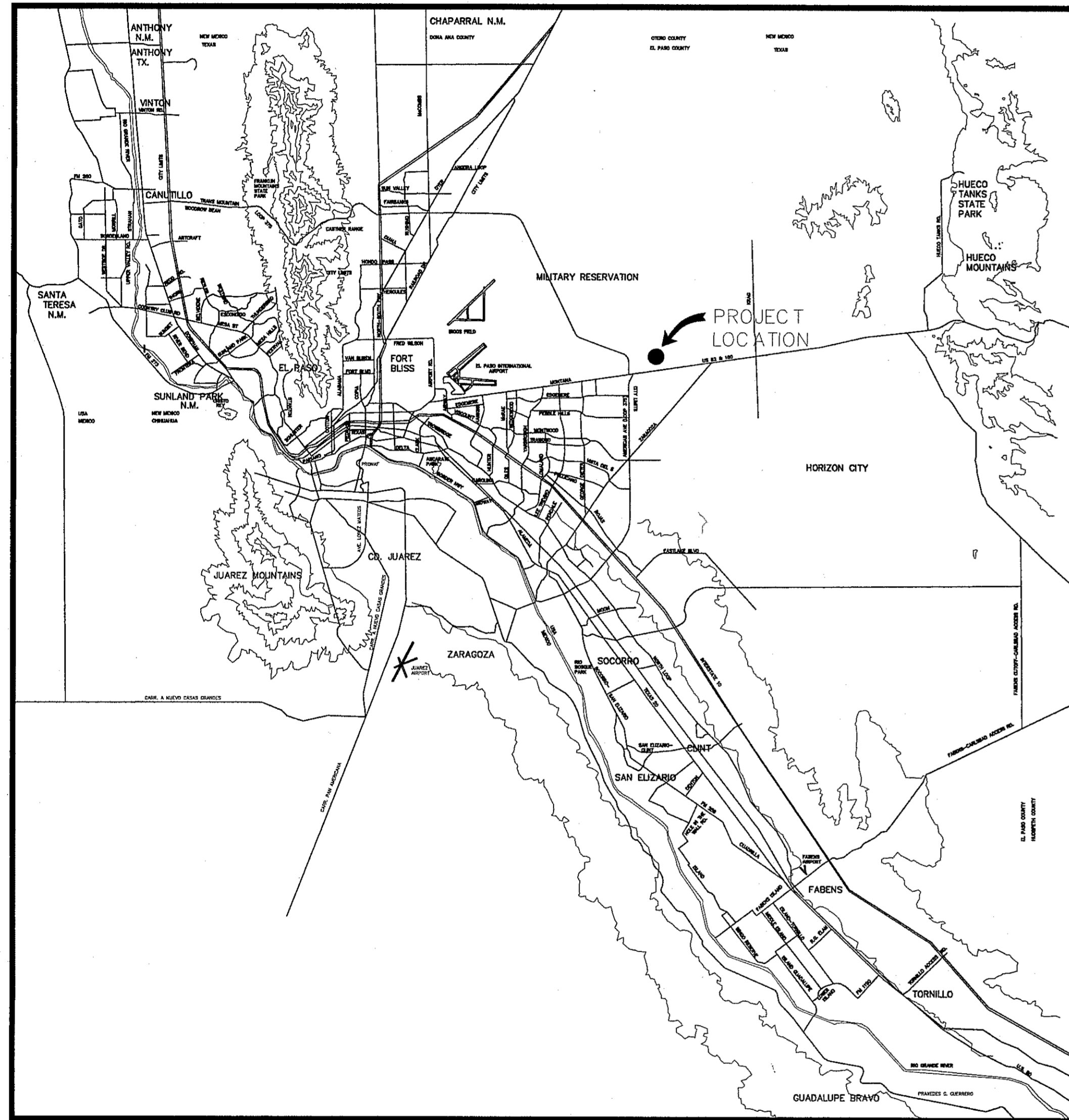


TRES SUEÑOS UNIT TEN SUBDIVISION IMPROVEMENTS

A PORTION OF SECTION 27, BLOCK 79, TOWNSHIP 2, TEXAS AND PACIFIC RAILROAD COMPANY SURVEYS, AND A REPLAT OF A PORTION OF ONNIE KIRK AVENUE, TRES SUEÑOS UNIT SIX, CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING 33.514 ACRES ±



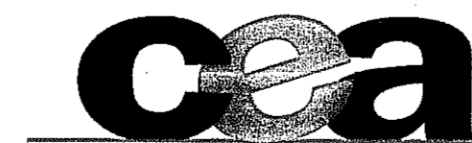
VICINITY MAP
APPROXIMATE SCALE:
1" = 2 MILES

SHEET NUMBER	SHEET TITLE
CVR & C1.1	COVER SHEET - HEADING WITH LEGAL DESCRIPTION AND NUMBER OF ACRES; INDEX OF SHEETS; VICINITY MAP; LOCATION MAP; PRINCIPAL CONTACTS, TITLE - REVISION BLOCK AND ENGINEER'S SEAL.
C2.1	FINAL PLAT
C3.1 - C3.2	GRADING PLAN AND ALLEY GRADING PLAN
C3.3	DEMOLITION PLAN
C4.1	DRAINAGE PLAN
C4.2	OFF-SITE AND FUTURE WATERSHEDS
C5.1 - C5.2	GRADING SECTIONS
C6.1 - C6.13	STREET PLAN & PROFILES
C7.1 - C7.3	STORM DRAIN PLAN & PROFILES
C8.1 - C8.3	STANDARD DETAILS
C9.1 - C9.2	DRAINAGE DETAILS
C10.1	ILLUMINATION PLAN AND DETAILS
C11.1	WATER INDEX / GENERAL INFORMATION
C11.2 - C11.5	WATER DETAILS
C12.1	SANITARY SEWER INDEX
C12.2 - C12.7	SANITARY SEWER PLAN & PROFILES
C12.8 - C12.10	SANITARY SEWER DETAILS
C13.1 - C13.3	STORM WATER POLLUTION PREVENTION PLAN: GENERAL NOTES, SITE PLAN, AND DETAILS
L-1.0 - L-6.0	LANDSCAPE AND IRRIGATION PLANS

CITY DEVELOPMENT DEPARTMENT
Reviewed For Conformance For Condition Related To:
 Sidewalks Driveways
 Grading & Drainage Retaining Rock Walls
 Wheelchair Ramps On Site Ponding of Storm Waters
 On-Site Parking Layout
 Contractor Must Call 24 Hours Prior To Construction for Inspections
 By JAVIER GUTIERREZ Date OCT. 8, 2013



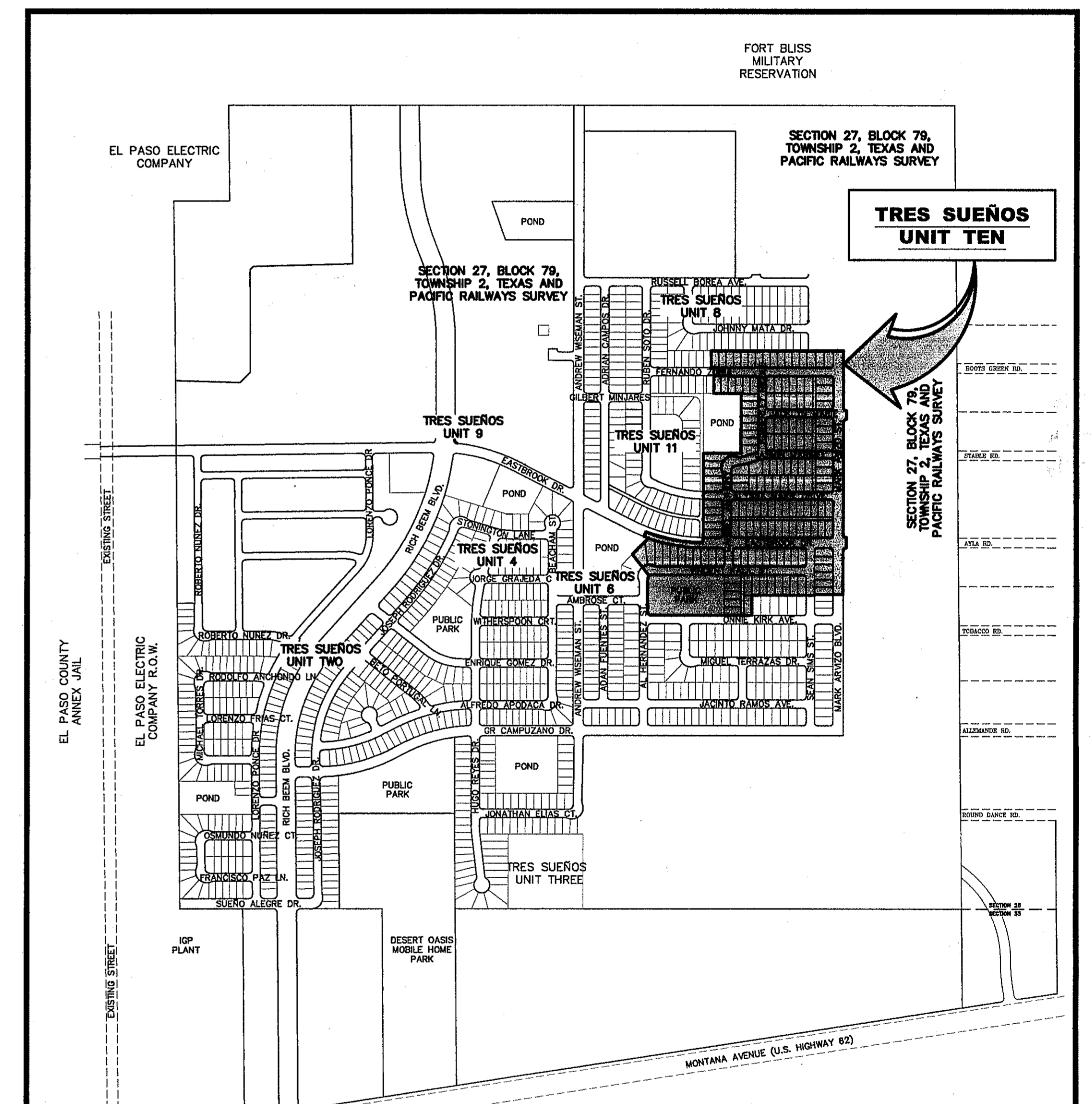
JORGE L. AZCARATE, P.E., PROJECT MANAGER



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Office: 915.544.5232 Fax: 915.544.5233 www.ceagroup.net
TEXAS FIRM REGISTRATION NO. 4564

PRINCIPAL CONTACTS:

NAME	ADDRESS	CITY & ZIP	PHONE	FAX
DEVELOPER: TROPICANA DEVELOPMENT INC.	4655 COHEN AVENUE	EL PASO, 79924	(915) 821-3550	(915) 821-3556
ENGINEER: CEA GROUP	4712 WOODROW BEAN STE. F	EL PASO, 79924	(915) 544-5232	(915) 544-5233
SURVEYOR: BARRAGAN & ASSOCIATES	10950 PELLICANO DR. SUITE F	EL PASO, 79935	(915) 591-5709	(915) 591-5706



LOCATION MAP
APPROXIMATE SCALE:
1" = 600'

TRES SUEÑOS UNIT TEN

COVER SHEET				
DATE PREPARED	DRAWN BY:	DESIGN BY:	CHECKED BY:	APPROVED BY:
MAY 2013	J.H.	J.H.	J.G.	J.L.A.
REVISION NUMBER	SHEET NAME OR NUMBER	DESCRIPTION OF REVISION	DATE OF REVISION	REVISION APPROVED BY:

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT AND FAMILIARIZE HIMSELF WITH THE PROJECT SITE PRIOR TO SUBMITTING BIDS.
2. CONTRACTOR SHALL WATER CONSTRUCTION AREA A MINIMUM OF TWICE A DAY TO KEEP DUST TO A MINIMUM - ONCE IN THE MORNING AND BEFORE QUITTING TIME. THIS SHALL ALSO BE DONE DURING WEEKENDS AND HOLIDAYS.
3. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, PROTECT, AND REPLACE ALL UNDERGROUND UTILITY LINES AT NO EXTRA COST TO THE OWNER WHEN LINES ARE DISTURBED AS A RESULT OF THE WORK.
4. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE AND PERFORM HIS WORK SO AS TO ASSURE PROPER PASSAGE OF STORM RUNOFF DURING THE COURSE OF HIS OPERATIONS. ALL LABOR, TOOLS, EQUIPMENT, AND SUPERVISION REQUIRED TO ASSURE SUCH PROPER PASSAGE OF RUNOFF WATER AND ANY REMOVAL OR HANDLING OF WATER IN ORDER TO MAINTAIN DRY CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE WORK, AND SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE USER, ALL UTILITIES, AND ALL OTHER AGENCIES WITH JURISDICTION OVER THE PROJECT.
6. ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC., DISTURBED AS A RESULT OF THE NEW CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. THE OWNER WILL FURNISH HORIZONTAL AND VERTICAL CONTROL REFERENCED POINTS ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES BEFORE PROCEEDING WITH THE WORK. ANY DISCREPANCIES FOUND SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER. OTHERWISE THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR CORRECTNESS.
8. SEE REFERENCED BENCHMARK ON TITLE BLOCK FOR DATUM ELEVATIONS.
9. VIBRATORY ROLLERS WILL NOT BE PERMITTED ON ANY PHASE OF THIS PROJECT, UNLESS APPROVED IN WRITING BY THE ENGINEER.
10. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THE PROJECT.

GRADING SPECIFICATIONS

1. CLEARING AND GRUBBING: CLEAR SITE OF TREES, SHRUBS AND OTHER VEGETATION; COMPLETELY REMOVE STUMPS, ROOTS AND OTHER DEBRIS PROTRUDING THROUGH GROUND SURFACE; FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY FILL MATERIAL, UNLESS FURTHER EXCAVATION OF EARTHWORK IS INDICATED; REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION. BURNING IS NOT PERMITTED ON OWNER'S PROPERTY. REMOVE WASTE MATERIALS FROM OWNER'S PROPERTY.
2. SATISFACTORY FILL MATERIALS: FILL MATERIALS SHALL BE FREE OF ANY ORGANIC OR DELETERIOUS SUBSTANCE AND SHALL NOT CONTAIN ROCKS OR LUMPS OVER 3 INCHES IN GREATEST DIMENSION AND SHALL BE DEFINED AS THOSE COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, GC, SM, SP, SW, AND SC.
3. UNSATISFACTORY FILL MATERIAL: ARE DEFINED AS THOSE COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS ML, MH, CL, CH, OL, OH, AND PT, OR WHERE THE PLASTICITY INDEX EXCEEDS 12, UNLESS OTHERWISE APPROVED BY ENGINEER OR CITY ENGINEER.
4. EXCAVATION: IS UNCLASSIFIED AND INCLUDES EXCAVATION TO ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIAL AND OBSTRUCTIONS ENCOUNTERED.
5. GROUND SURFACE PREPARATION FOR FILL: REMOVE VEGETATION, DEBRIS, UNSATISFACTORY SOIL MATERIALS, AND MATERIALS AND DELETERIOUS MATERIAL FROM GROUND SURFACE UPON WHICH THE FILL IS TO BE PLACED. THE SURFACE SHALL THEN BE SCARIFIED TO A DEPTH OF AT LEAST 6-INCHES, AND UNTIL THE SURFACE IS FREE FROM RUTS, HUMMOCKS OR OTHER UNEVEN FEATURES WHICH WOULD PREVENT UNIFORM COMPACTION. PLOW STRIP, OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SO THAT FILL MATERIAL WILL BOND WITH EXISTING SURFACE. AFTER PLOWING AND SCARIFYING FILL AREA, IT SHALL THEN BE DISCED OR BLADED UNTIL IT IS UNIFORM AND FREE FROM LARGE CLODS, BROUGHT TO OPTIMUM MOISTURE, AND COMPACTED TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557.
6. PLACEMENT OF FILL: PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. BEFORE COMPACTION, MOISTEN OR AERATE EACH LAYER AS NECESSARY TO PROVIDE OPTIMUM MOISTURE CONTENT. PLACE FILL MATERIALS EVENLY ADJACENT TO SITE APPURTENANCES, PIPING OR CONDUIT TO REQUIRED ELEVATIONS. PREVENT WEDGING ACTION OF BACKFILL AGAINST SITE APPURTENANCES OR DISPLACEMENT OF PIPING OR CONDUIT BY CARRYING MATERIAL UNIFORMLY AROUND SITE APPURTENANCES, PIPING, OR CONDUIT TO APPROXIMATELY SAME ELEVATION IN EACH LIFT. COMPACT SOIL TO NOT LESS THAN 95% OF MAXIMUM DENSITY, IN ACCORDANCE WITH ASTM D1557.
7. MOISTURE CONTROL: WHERE SUBGRADE OR LAYER OF SOIL MATERIAL MUST BE CONDITIONED FOR OPTIMUM MOISTURE BEFORE COMPACTION, UNIFORMLY APPLY WATER TO SURFACE OF SUBGRADE OR LAYER OF SOIL MATERIAL. APPLY WATER IN MINIMUM QUANTITY AS NECESSARY TO PREVENT FREE WATER FROM APPEARING ON SURFACE DURING OR SUBSEQUENT TO COMPACTION OPERATIONS. WATER CONTENT SHALL BE WITHIN 2 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY SOIL MATERIAL THAT IS TOO WET TO PERMIT COMPACTION TO SPECIFIED DENSITY.
8. QUALITY CONTROL: THE OWNER SHALL PROVIDE A GEOTECHNICAL ENGINEER TO PERFORM FIELD DENSITY TEST OF THE COMPACTION OF EACH LAYER OF FILL. DENSITY TESTS SHALL BE TAKEN IN THE COMPACTED MATERIAL BELOW THE DISTURBED SURFACE. WHEN THESE TESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY, THE PARTICULAR LAYER OR PORTION SHALL BE REWORKED UNTIL THE REQUIRED DENSITY HAS BEEN OBTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL TESTING AND WHEN REQUIRED DENSITIES ARE NOT MET, SUPERVISION BY THE GEOTECHNICAL ENGINEER DURING THE GRADING OPERATIONS TO ENSURE GRADING WORK IN ACCORDANCE WITH THIS PLAN AND SPECIFICATIONS.

ABBREVIATIONS

LP	LOW POINT
HP	HIGH POINT
ELEV	ELEVATION
STA	STATION
VCS	VERTICAL CURVE STATION
VCE	VERTICAL CURVE ELEVATION
TC	TOP OF CURB
TM	TOP OF MEDIAN
TP	TOP OF PAVEMENT
TYP	TYPICAL
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
AD	ALGEBRAIC DIFFERENCE
CR	CURVE RETURN
ROW	RIGHT OF WAY
CL	CENTER LINE
PL	PROPERTY LINE
FG	FINISH GRADE
FF	FINISH FLOOR
EG	EXISTING GRADE
MIN.	MINIMUM
MAX.	MAXIMUM
RCP	REINFORCED CONCRETE PIPE
Q	QUANTITY
CAP	CAPACITY
EXP	EXPECTED
INV	INVERT
CFS	CUBIC FEET PER SECOND
A	AREA
DA	DRAINAGE AREA
LF	LINEAR FEET
STD	STANDARD
CONC	CONCRETE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENT
L	LENGTH
R	RADIUS
T	TANGENT
Δ	DELTA ANGLE
S	SLOPE
TEMP	TEMPORARY
V	VELOCITY IN FEET PER SECOND
HGL	HYDRAULIC GRADE LINE
HWE	HIGH WATER ELEVATION

LEGEND

---	SUBDIVISION BOUNDARY
---	ROW LINE
---	CURB LINE
---	PROPERTY LINE
---	STREET CENTERLINE
---	EASEMENT LINE
---	MATCH LINE
---	STORM SEWER LINE
---	HIGH WATER MARK
---	CURB AND GUTTER DROP INLET
⊙	STORM SEWER MANHOLE
4000	FINISHED GROUND CONTOUR ELEVATION (INDEX)
4000	FINISHED GROUND CONTOUR ELEVATION (INTERMEDIATE)
4000	EXISTING GROUND CONTOUR ELEVATION (INDEX)
4000	EXISTING GROUND CONTOUR ELEVATION (INTERMEDIATE)
⊖	NEW RETAINING ROCKWALL (2'-3' IN HEIGHT)
⊖	NEW RETAINING ROCKWALL (3'-9' IN HEIGHT)
X	STANDARD DETAIL/SECTION NUMBER
X	SHEET NUMBER WHERE STANDARD/SECTION DETAIL IS LOCATED
4000.00	FINISHED SPOT ELEVATION
FG. 56.00	LOT FINISHED GROUND ELEVATION
TC 4000.00	TOP OF CURB ELEVATION
TP 4000.00	TOP OF PAVEMENT ELEVATION
1 2	SUBDIVISION LOT AND BLOCK NUMBER
→	DRAINAGE FLOW
▲	HIGH POINT
▼	LOW POINT
△	EXISTING HIGH POINT
▽	EXISTING LOW POINT
◁	HEADWALL WITH WINGWALLS
DA-4	DRAINAGE AREA
3:1 SLOPE	HORIZONTAL:VERTICAL SLOPE RATIO
♿	WHEELCHAIR RAMP

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 880-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

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REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BERM BLVD., 508'43.37'E, A DISTANCE OF 467.58 FEET FROM THE POINT OF CURVE TO THE MONUMENT
AVENUE CITY DATUM ELEVATION 1008.40
DATE
REVISIONS
BY

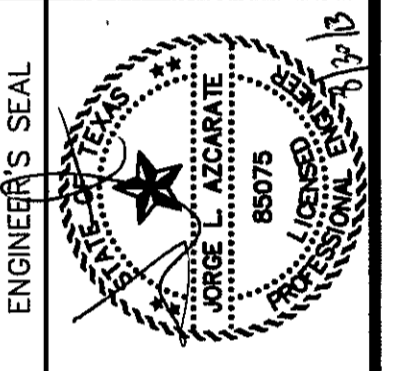
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SCALE	N/A
Horizontal	N/A
Vertical	N/A
Contour Interval	N/A
DATE	JULY 2013
DESIGN BY	J.H.
DRAWN BY	J.H.
CHECK BY	J.L.A.
APP'D. BY	J.L.A.
JOB No.	2250-030-ID

PROJECT TITLE

TRES SUEÑOS

UNIT TEN

SUBDIVISION IMPROVEMENTS

SHEET TITLE
GENERAL INFORMATION
SHEET NO.

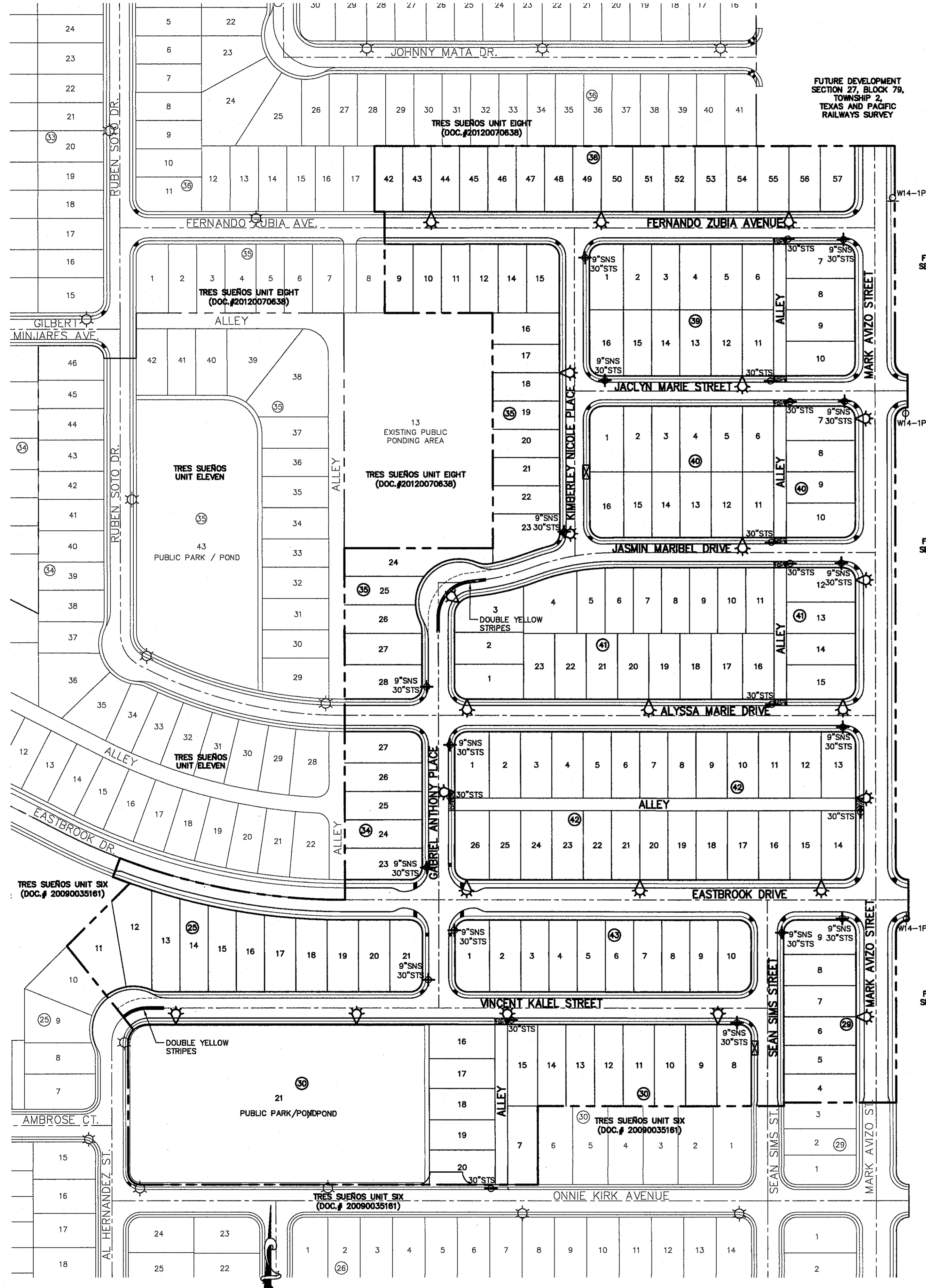
C1.1

CITY DEVELOPMENT DEPARTMENT

REVIEWED

S:\2250\2250-030\DWG\CSEACONSTRUCTION\Drawing\Improvements\Plan\C1.1.dwg, Model: 9/20/2013 2:24:22 PM

25 RESIDENTIAL STREET LIGHTS



UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
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FOR FIELD LOCATING EXISTING UTILITIES

- GENERAL NOTES:**
- A MINIMUM 3' CLEARANCE SHALL BE PROVIDED ON THE SIDEWALK AFTER THE LIGHT POLES & FIRE HYDRANTS ARE PLACED. SIDEWALK SHALL COMPLY WITH A.D.A AND T.D.L.R. STANDARDS.
 - U.S. POSTAL SERVICE DELIVERY WILL BE PROVIDED THROUGH NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS (NDCBU).
 - POSTS MUST BE BREAK-AWAY TYPE AS SHOWN ON THIS SHEET.
 - TRAFFIC STREET SIGNS MUST BE OF HIGH INTENSITY REFLECTIVE SHEETING.

- LEGEND:**
- EXISTING RESIDENTIAL STREET LIGHT
 - PROPOSED RESIDENTIAL STREET LIGHT
 - PROPOSED 30" STOP SIGN
 - PROPOSED 9" STREET NAME SIGN (TWO SIGNS) AND 30" STOP SIGN
 - W14-1P DEAD END SIGN
 - PROPOSED N.D.B.C.U. MAIL BOX

COMPONENTS OF THE POZITUBE® TRAFFIC POST

POZITUBE® Traffic Posts may be ordered with pre-punched 13-hole pattern or with hot-dipped galvanized mounting brackets including nuts and bolts.

Sign Mounting Brackets 2" = #206, 2.5" = #207 Quantities of 100 nuts & washers

PRODUCT	OUTSIDE DIAMETER	NORMAL PIPE SIZE	WALL THICKNESS	WEIGHT PER FOOT
Traffic Post	2.375"	2"	.065	1.60 lb
Posts Are Available In 8"-14", IN 1" INCREMENTS			.080	1.96 lb
			.095	2.315 lb

POZ-LOC™ SIGN POST SOCKET SYSTEM

Northwest Pipe Company also manufactures the POZ-LOC™ Sign Post Socket System which offers the simplest, most cost effective breakaway sign post system available today. It is installed flush with the ground, which prevents damage to the socket system and the vehicle upon impact. The POZ-LOC™ Socket System is easiest to install and simplest to reuse after impact.

POZITUBE® TRAFFIC POST

GALVANIZED TRAFFIC POSTS
COLOR COATINGS AVAILABLE
• High Visibility Yellow • Clear Coat • Green • Black • Brown

POZITUBE® Traffic Posts have the following characteristics and properties:

- Galvanized (inside and out).
- Electrostatically powder coated for years of additional life.
- Electric resistance welded from hot-dipped galvanized steel sheet conforming to ASTM specifications A-525-G90 commercial weight.
- Tubing is produced to ASTM A-513, Specification For Welded Mechanical Tubing.
- Excellent resistance to urban environments where air pollution causes accelerated corrosion.
- Resistant to damage by impact, abrasion, scratches, temperature variations. Provides superb protection against rust and chemicals such as salt, fertilizers, insecticides, fungicides and solvents such as motor oil, gasoline and other normally damaging substances.
- May be ordered with sign mounting brackets (listed under components), our standard 13-hole pre-punched pattern or punched to your specifications.

COMPONENTS OF THE POZ-LOC™ SIGN POST SOCKET SYSTEM

A. TRAFFIC POST Galvanized 2 3/8" O.D. traffic post available in several wall thicknesses

B. TUBULAR SOCKET Galvanized 2 7/8" O.D. x 27" long, 12 Ga. wall thickness

C. WEDGE Galvanized 1 1/2" Ga. wedge locks traffic post into socket

D. SOCKET DRIVER

E. DRIVE CAP

F. WEDGE PULLER

Replacement Tip

SPICE CONNECTOR

POZ-LOC™ SOCKET SYSTEM ORDERING INFORMATION

DESCRIPTION	PART No.	WT. (Lbs)	DESCRIPTION	PART No.	WT. (Lbs)
Socket 2 7/8" x 27"	2804	7.9	2 7/8" Drive Cap	2700	11.9
Wedge	2813	1.0	Wedge Puller	2713	6.0
Sign Post 2 3/4"			Puller Replacement Tip	2719	1.0
Sign Brackets 2"	206	0.39	Socket Driver	2712	45.0

INSTALLATION OF POZ-LOC™ SOCKET SYSTEM

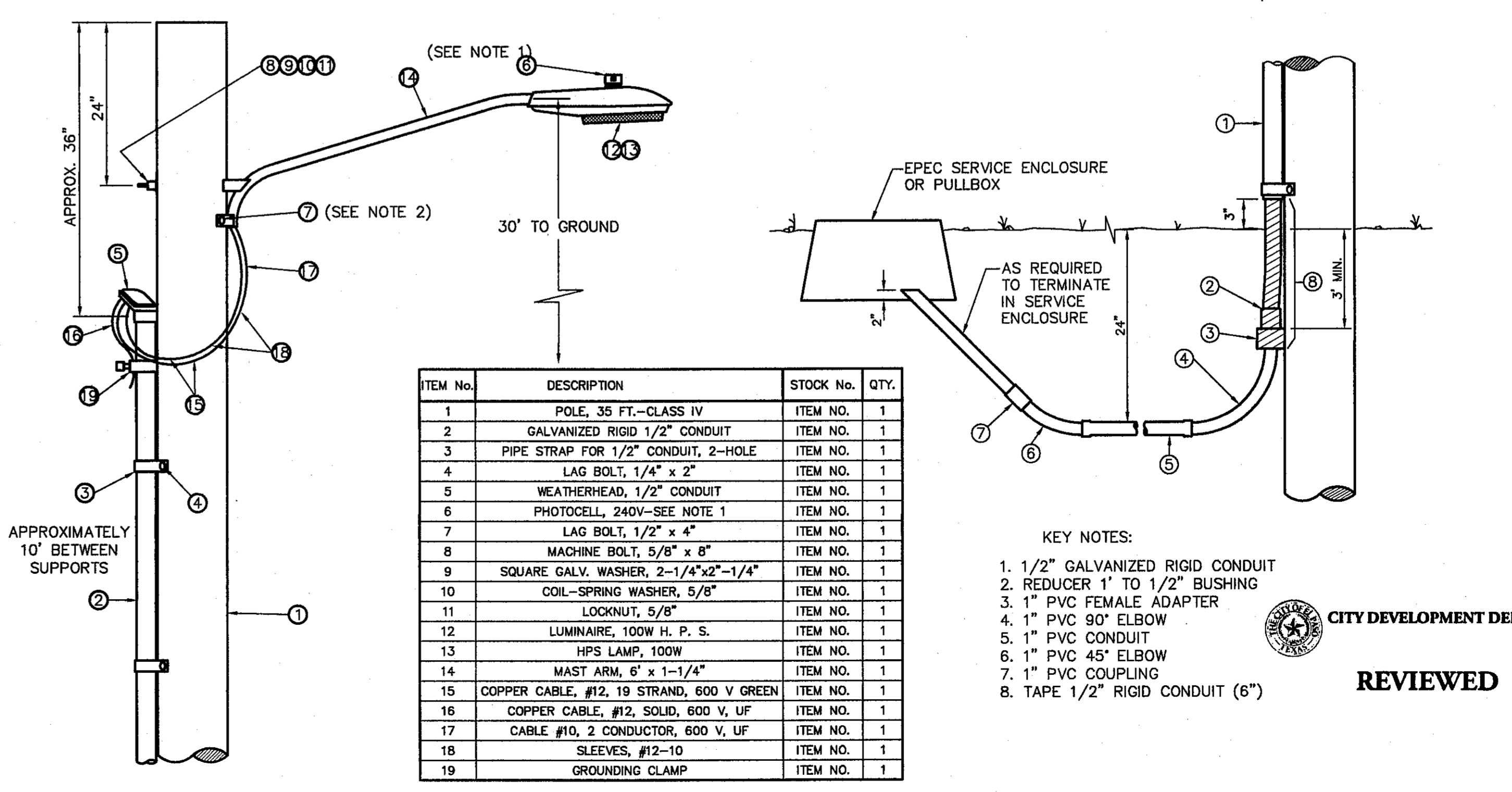
- With drive cap (E) in place on end of POZ-LOC tubular socket (B), drive socket into ground (orient flat end of socket parallel to sign face) using a mechanical hammer or a socket driver (D).
- Insert sign post (A) into socket and orient sign to roadway.
- Insert POZ-LOC wedge (C), with hole up, between post and socket interior and drive the wedge until the bottom of the hole is within 4" of socket rim.

KEY NOTES:

- MOUNT SO THAT CONTROL FACES NORTH
- ITEM 17 SHALL NOT BE SPLICED INSIDE ITEM 14

- KEYED NOTES:**
- MOUNT SO THAT CONTROL FACES NORTH
 - ITEM 17 SHALL NOT BE SPLICED INSIDE ITEM 14

- DESIGN NOTES:**
- INSTALLATION SHALL COMPLY WITH ALL LOCAL CODE REQUIREMENTS.
 - FOR ANY CLARIFICATION, EXCEPTIONS, OR QUESTIONS REGARDING CODE INTERPRETATION, CALL THE EL PASO ELECTRIC CO. DISTRIBUTION DEVELOPMENT DEPARTMENT.



ITEM No.	DESCRIPTION	STOCK No.	QTY.
1	POLE, 35 FT.—CLASS IV	ITEM NO.	1
2	GALVANIZED RIGID 1/2" CONDUIT	ITEM NO.	1
3	PIPE STRAP FOR 1/2" CONDUIT, 2-HOLE	ITEM NO.	1
4	LAG BOLT, 1/4" x 2"	ITEM NO.	1
5	WEATHERHEAD, 1/2" CONDUIT	ITEM NO.	1
6	PHOTOCELL, 240V—SEE NOTE 1	ITEM NO.	1
7	LAG BOLT, 1/2" x 4"	ITEM NO.	1
8	MACHINE BOLT, 5/8" x 6"	ITEM NO.	1
9	SQUARE GALV. WASHER, 2-1/4"x2"-1/4"	ITEM NO.	1
10	COIL-SPRING WASHER, 5/8"	ITEM NO.	1
11	LOCKNUT, 5/8"	ITEM NO.	1
12	LUMINAIRE, 100W H. P. S.	ITEM NO.	1
13	HPS LAMP, 100W	ITEM NO.	1
14	MAST ARM, 6" x 1-1/4"	ITEM NO.	1
15	COPPER CABLE, #12, 19 STRAND, 600 V GREEN	ITEM NO.	1
16	COPPER CABLE, #12, SOLID, 600 V, UF	ITEM NO.	1
17	CABLE #10, 2 CONDUCTOR, 600 V, UF	ITEM NO.	1
18	SLEEVES, #12-10	ITEM NO.	1
19	GROUNDING CLAMP	ITEM NO.	1

- KEY NOTES:**
- 1/2" GALVANIZED RIGID CONDUIT
 - REDUCER 1" TO 1/2" BUSHING
 - 1" PVC FEMALE ADAPTER
 - 1" PVC 90° ELBOW
 - 1" PVC CONDUIT
 - 1" PVC 45° ELBOW
 - 1" PVC COUPLING
 - TAPE 1/2" RIGID CONDUIT (6")

ILLUMINATION AND SIGNAGE PLAN
SCALE: 1" = 100'

RESIDENTIAL STREET LIGHT WOOD POLE
SCALE: N.T.S.

RESIDENTIAL STREET LIGHT WOOD POLE
SCALE: N.T.S.

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. DISTANCE TO RIGHT OF CENTERLINE 114.75' AVENUE CITY DATUM. ELEVATION 4005.40

CS&A
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4594
4712 Woodrow Beam, Ste. F El Paso, TX 79924
Office: 915.544.5222 Fax: 915.544.2233 www.csandamp.com

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
ILLUMINATION PLAN & DETAILS

SHEET No.
C10.1

SCALE
1" = 100'

Horizontal: N/A
Vertical: N/A
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.S.
APPROV. BY: J.L.A.
JOB No.: 2250-030-LD

REVISIONS

NO.	DATE	BY

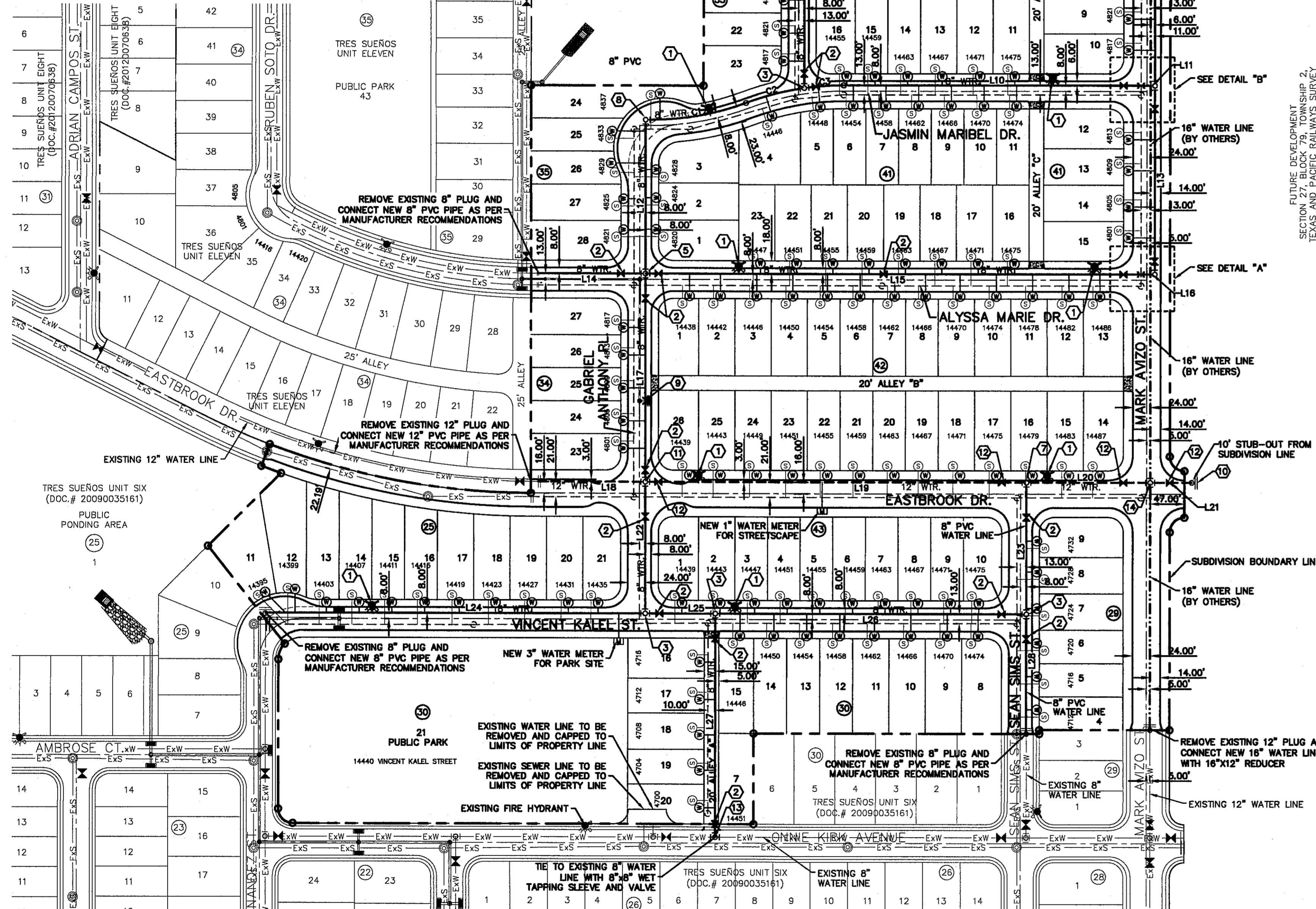
REVIEWED

CITY DEVELOPMENT DEPARTMENT

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LINE TABLE			LINE TABLE		
LINE	BEARING	LENGTH	LINE	BEARING	LENGTH
L1	N89°59'35"E	300.94'	L16	N89°59'46"W	6.00'
L2	N89°59'35"E	477.00'	L17	S00°00'26"E	286.00'
L3	N89°59'06"E	6.00'	L18	N89°59'10"E	147.50'
L4	S00°00'11"W	260.00'	L19	S89°59'49"E	524.82'
L5	S00°00'11"W	260.00'	L20	S89°59'49"E	170.43'
L6	N89°59'34"E	477.00'	L21	N89°59'49"W	57.00'
L7	N89°59'52"E	6.00'	L22	S00°00'25"E	181.00'
L8	S00°00'11"W	261.87'	L23	S00°00'00"E	181.00'
L9	N00°00'11"E	258.00'	L24	N89°59'49"W	522.49'
L10	S89°59'35"W	422.69'	L25	S89°59'49"E	96.26'
L11	S89°59'35"W	6.00'	L26	N89°59'49"W	426.56'
L12	S00°00'25"E	212.00'	L27	S00°00'10"W	307.59'
L13	S00°00'11"W	260.14'	L28	S00°00'25"E	164.59'
L14	N89°59'57"W	147.45'	L29	N89°59'35"E	51.00'
L15	N89°59'49"W	695.30'			

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	368.85'	140.66'	71.20'	139.81'	N80°19'07"E	021°50'59"
C2	383.00'	83.30'	41.81'	83.13'	S75°36'35"W	012°27'39"
C3	383.00'	84.50'	27.30'	54.45'	S85°54'59"W	008°09'10"



WARNING!
BEFORE YOU DIG
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES

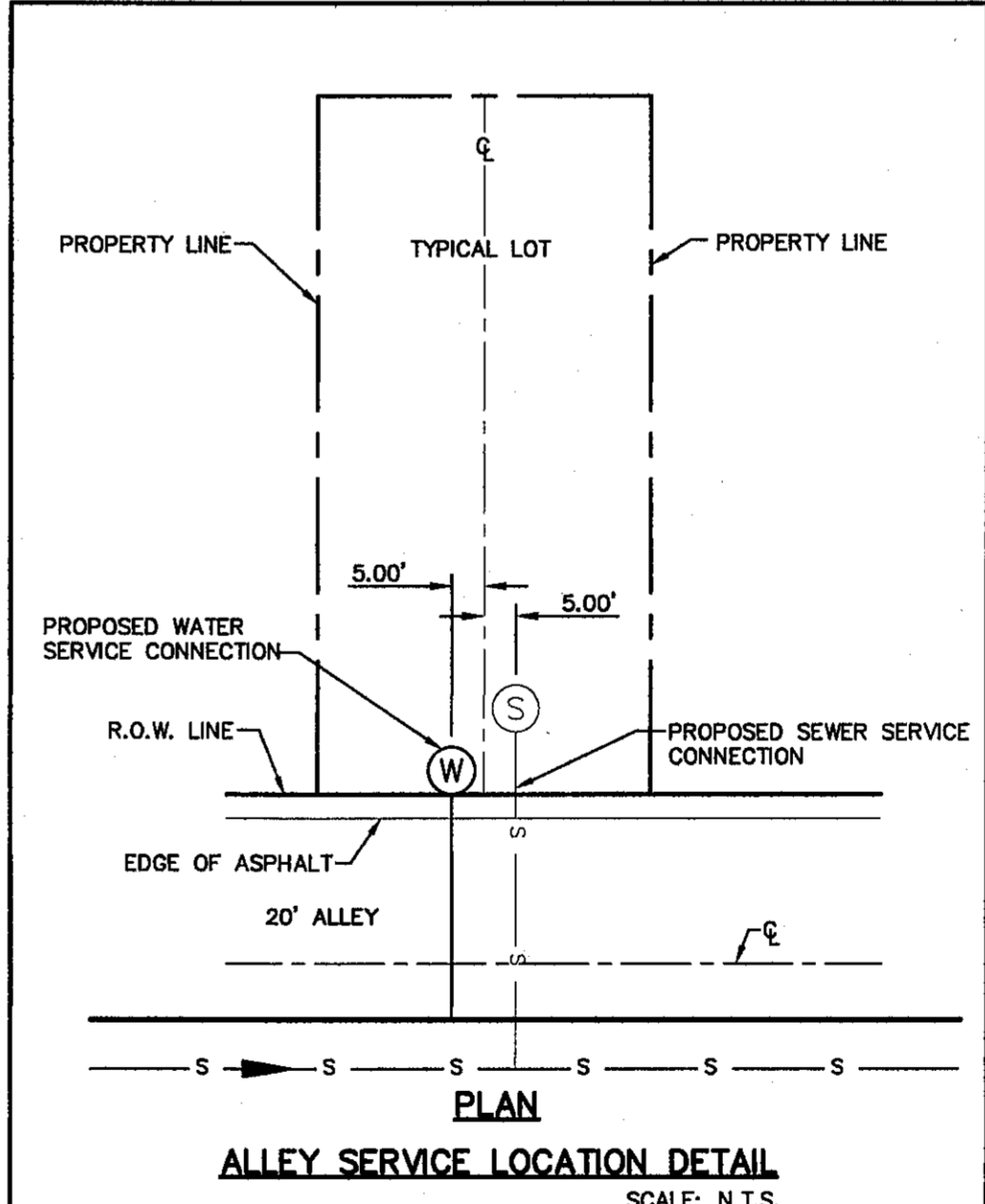
WATER QUANTITIES		
DESCRIPTION	QUANTITY	UNIT
8" PVC WATER LINE	6,387.34	LF
8" DIP WATER LINE	160	LF
8" GATE VALVE	28	EA
8" PLUG	1	EA
12" PVC WATER LINE	879.75	LF
12" DIP WATER LINE	20	LF
12" GATE VALVE	4	EA
FIRE HYDRANT	13	EA

INDEX	
SHEET NO.	DESCRIPTION
C11.1	TRES SUEÑOS UNIT TEN WATER MAIN PIPE LAYOUT
C11.3	WATER DETAILS
C11.4	WATER DETAILS
C11.5	WATER DETAILS
C11.6	WATER DETAILS

- NOTES:**
- ALL LOTS SHALL BE PROVIDED WITH ONE SERVICE CONNECTION TO BE INSTALLED AT THE LOCATION AS SHOWN ON THE SERVICE LOCATION DETAIL.
 - ALL WATER LINES SHALL BE PVC C-900, CLASS 150.
 - REFERENCE WATER DETAILS FOR TYPICAL VALVE AND WATER LOCATIONS AT STREET INTERSECTIONS.
 - REFERENCE TRES SUEÑOS UNIT SIX, EIGHT, AND ELEVEN FOR EXISTING WATER LINES ON FERNANDO ZUBIA AVE, ALYSSA MARIE DR, EASTBROOK DR., AL HERNANDEZ ST., ONNIE KIRK AVE., SEAN SIMS ST. AND MARK AVIZO ST.
 - THE WATER INDEX PLAN SHALL DICTATE THE LOCATIONS OF WATER VALVES AND FIRE HYDRANTS.

LEGEND	
SYMBOL	DESCRIPTION
8" WTR.	PROPOSED 8" C-900, CLASS 150 P.V.C. PIPE
12" WTR.	PROPOSED 12" C-900, CLASS 150 P.V.C. PIPE
16" WTR.	PROPOSED 16" C-900, CLASS 150 P.V.C. PIPE (BY OTHERS)
---	SUBDIVISION BOUNDARY LINE
---	PROPERTY LINE
---	STREET CENTER LINE
---	PROPOSED SEWER LINE (PLAN VIEW)
---	PROPOSED STORM SEWER
---	PROPOSED SERVICE CONNECTION (PLAN VIEW)
---	PROPOSED FIRE HYDRANT, KENNEDY OR MUELLER MODEL
---	PROPOSED 8" PLUG
---	PROPOSED GATE VALVE
---	POINT OF TANGENCY
---	EXISTING GATE VALVE
---	EXISTING FIRE HYDRANT
---	EXISTING PLUG
---	EXISTING SEWER LINE
---	EXISTING WATER LINE
---	WATER METER FOR LANDSCAPE AND IRRIGATION (SIZE AS NOTED)

WATER KEYED NOTES	
1	FIRE HYDRANT
2	8" GATE VALVE
3	8" TEE
4	12" CROSS
5	8" CROSS
6	8" PLUG
7	8" X 12" X 12" TEE
8	8" 90° BEND
9	NOT USED
10	12" PLUG
11	12" X 8" CROSS
12	12" X 8" GATE VALVE
13	8" X 8" WET TAPPING SLEEVE AND VALVE
14	16" X 12" CROSS
15	16" X 8" CROSS



WATER INDEX MAP
SCALE: 1" = 100'

- GENERAL NOTES**
- UNLESS OTHERWISE SHOWN ON THE DRAWINGS, THE PROPOSED WATER MAINS SHALL BE INSTALLED NO LESS THAN 10' AWAY FROM EXISTING SEWER LINE. SEPARATION DISTANCES SHALL FOLLOW T.C.E.Q. REQUIREMENTS (290-44).
 - THE INTENT OF THE OWNER IS TO HAVE THE WATER MAINS INSTALLED TO SUCH A DEPTH THAT THEY WILL HAVE AT LEAST 48" OF COVER BELOW PROPOSED GROUND AT ALL LOCATIONS. THE PIPELINES SHALL HAVE NO DIPS, SACS OR HUMPS OR OTHER IRREGULARITIES IN VERTICAL ALIGNMENT. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO INSTALLING THE WATER PIPELINE SO THAT AN ACCEPTABLE PROFILE CAN BE ESTABLISHED PRIOR TO INSTALLATION OF THE PIPELINE.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN IN THE PLANS, AND COORDINATE WORK WITH ALL UTILITY COMPANIES, EL PASO WATER UTILITIES, AND THE CITY OF EL PASO DEPARTMENT OF TRANSPORTATION PRIOR TO CONSTRUCTION. ALL EXISTING UTILITY DEPTHS ARE UNKNOWN. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR ACQUIRING FIELD DEPTHS OF ALL UTILITIES WITHIN THE PROJECT AREAS.
 - TRENCH SAFETY REQUIREMENTS SHALL COMPLY WITH CURRENT OSHA REGULATIONS.
 - AS-BUILT STATIONING, OFFSET FROM R.O.W. AND INVERT ELEVATIONS SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR ON A CLEAN SET OF PLANS FOR EACH VALVE, FIRE HYDRANT, ELBOW, SERVICE CONNECTION AND/OR STUB-OUT, WITH RESPECT TO THE APPROPRIATE PROJECT CONTROL POINT.
 - THE CITY OF EL PASO AND EL PASO WATER UTILITIES MUST BE NOTIFIED 48 HOURS PRIOR TO COMMENCING ANY WORK IN AREAS WITHIN THEIR JURISDICTION.
 - EXISTING STREETS, DRIVEWAYS, SIGNS, AND ALL OTHER MISCELLANEOUS STRUCTURES DAMAGE OR REMOVED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ORIGINAL OR BETTER THAN ORIGINAL CONDITION AT NO COST TO OWNER.
 - TRAFFIC CONTROL SHALL BE IN PLACE PRIOR TO INITIATING WORK.
 - ALL TIE-INS SHALL BE CLOSELY COORDINATED WITH THE EL PASO WATER UTILITIES AT LEAST 48 HOURS PRIOR TO ACTUAL CONSTRUCTION.
 - CONSTRUCTION OF THE PUBLIC WATER AND SEWER SYSTEM INCLUDING MATERIALS AND TESTING SHALL CONFORM WITH E.P.W.U. - P.S.B. STANDARD SPECIFICATIONS FOR THE INSTALLATION OF WATER MAINS, SEWER MAINS AND RELATED APPURTENANCES.

GENERAL UTILITIES:
TEXAS EXCAVATION SAFETY UTILITIES
11824 GREENVILLE AVENUE
DALLAS, TX. 75243
(800) 344-8377

ENGINEER:
CEA GROUP
4712 WOODROW BEAN, STE. F.
EL PASO, TX. 79924
(915) 544-5232
MR. JORGE L. AZCARATE, P.E.

EL PASO STREETS
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION
7969 SAN PAULO DR.
EL PASO, TX. 79907
(915) 821-6750
MR. TED MARQUEZ, P.E.

WATER & SEWER:
EL PASO WATER UTILITIES
1154 HAWKINS BLVD #1
EL PASO, TX. 79925
(915) 594-5500
MR. FELIPE LOPEZ, P.E.

FIBER OPTICS:
U.S. SPRINT
4712 WOODROW BEAN, STE. F.
EL PASO, TX. 79924
(915) 534-7910
MR. RICK DERAGISCH

RESIDENTIAL GAS LINES:
TEXAS GAS SERVICE
4700 POLLARD ST.
EL PASO, TX. 79930
(915) 680-7218

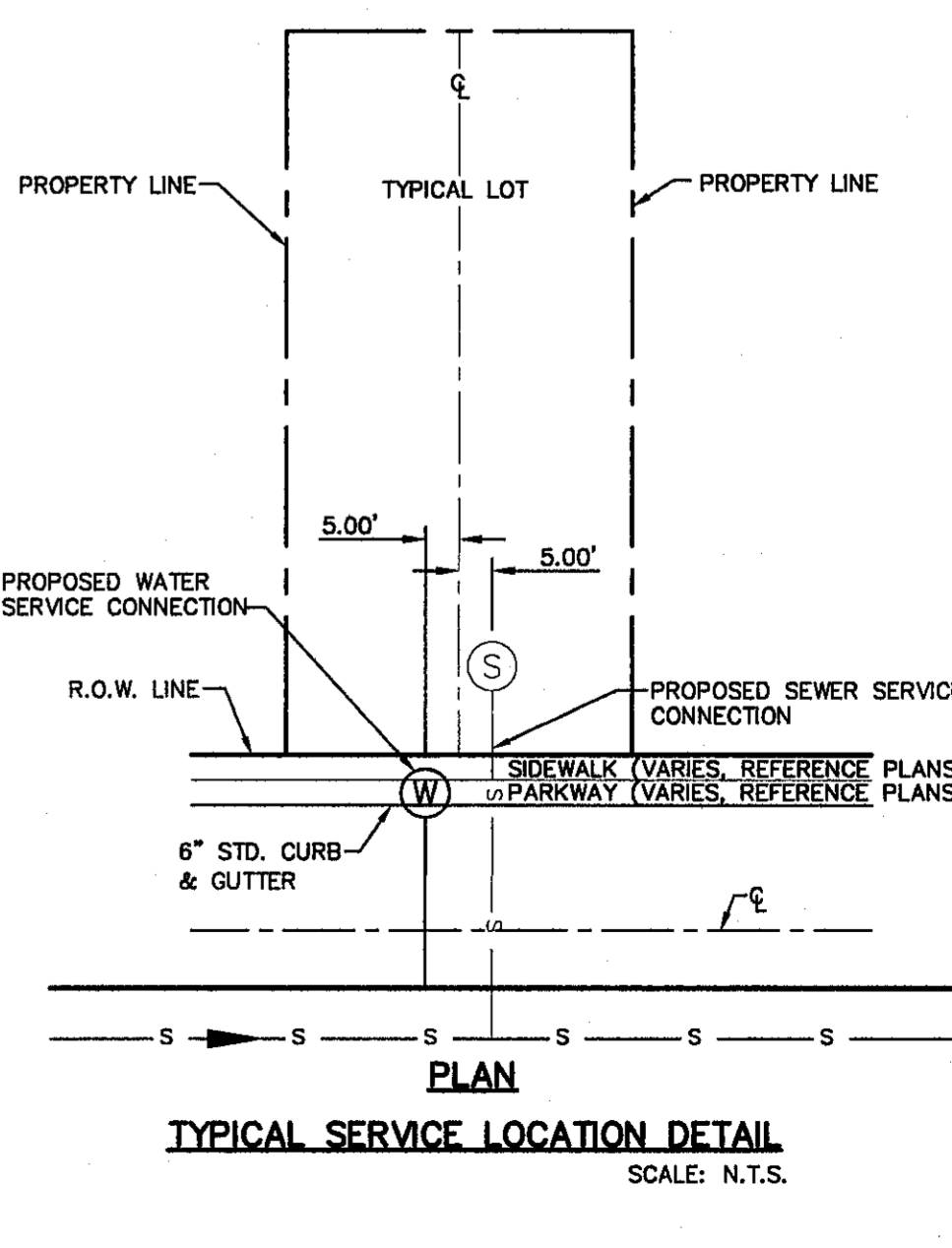
TELEPHONE:
SBC
11200 PELICANO
EL PASO, TX. 79935
(915) 595-5151
MR. TIM BROWN

FIBER OPTICS:
AT&T
P.O. BOX 1650
4712 WOODROW BEAN, STE. F.
EL PASO, TX. 79924
(800) 852-3786
MS. DARLENE NORIS

CABLE TELEVISION:
TIME WARNER COMMUNICATIONS
7010 AIRPORT ROAD
EL PASO, TX. 79906
(915) 772-1123

ELECTRIC:
EL PASO ELECTRIC CO.
501 W. SAN ANTONIO ST.
EL PASO, TX. 79902
(915) 543-2076
MR. FRANK VIGEL (DISTRIBUTION)

FIBER OPTICS:
MCI TELECOMMUNICATIONS CORP.
4045 DONIPHAN PARK CIRCLE
EL PASO, TX. 79922
(915) 542-2770 EXT. 201
MR. DANIEL HERNANDEZ



TYPICAL SERVICE LOCATION DETAIL
SCALE: N.T.S.

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLDG., 508'43.31" E, 487'58" FEET FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION: 4608.40

ENGINEER'S SEAL
JOSÉ L. AZCARATE
80075
Professional Engineer
Texas State Board of Engineering and Surveying

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
WATER INDEX

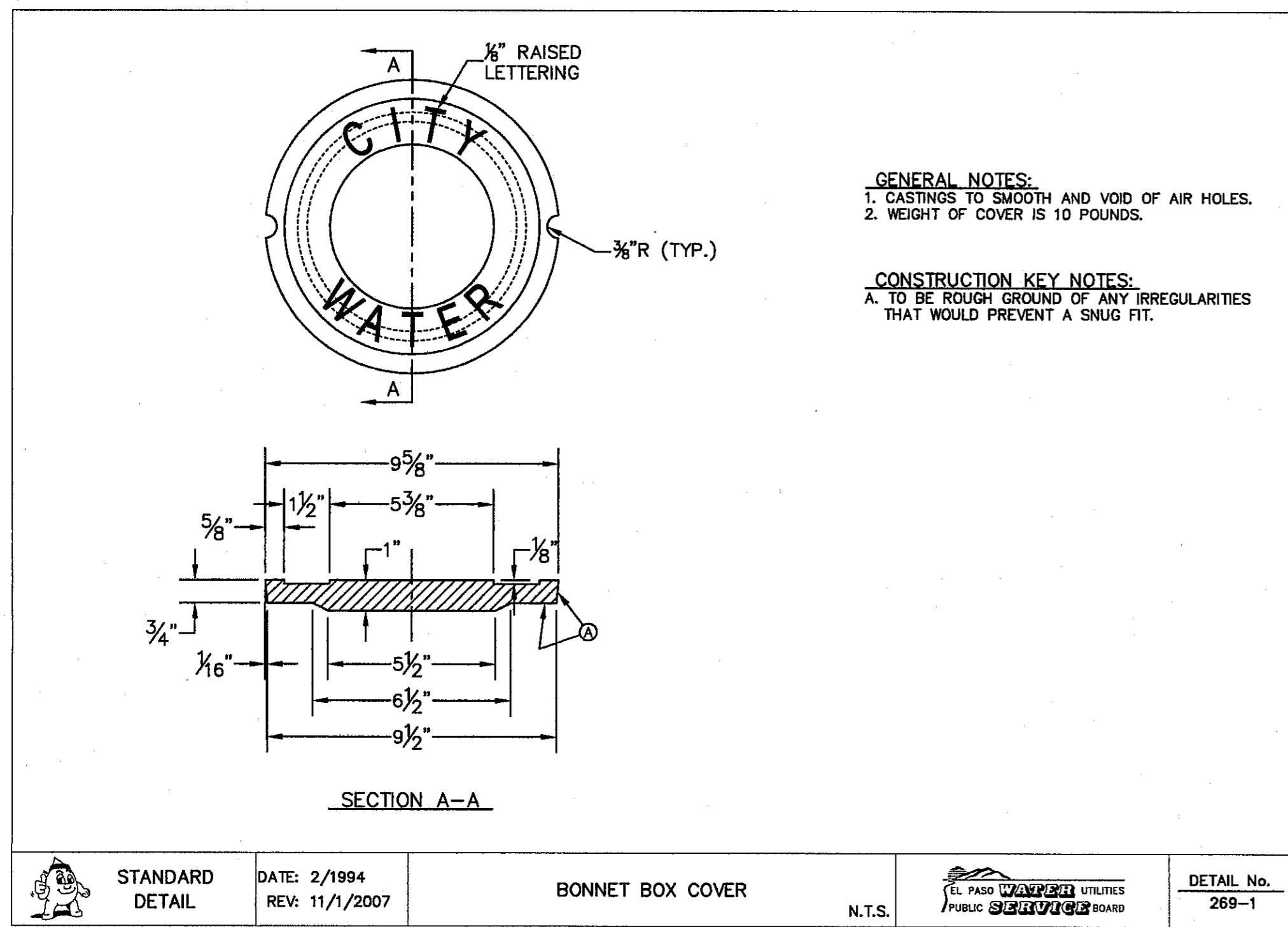
SHEET NO.
C11.1

SCALE
Horizontal: 1" = 100'
Vertical: N/A
Contour Interval: N/A

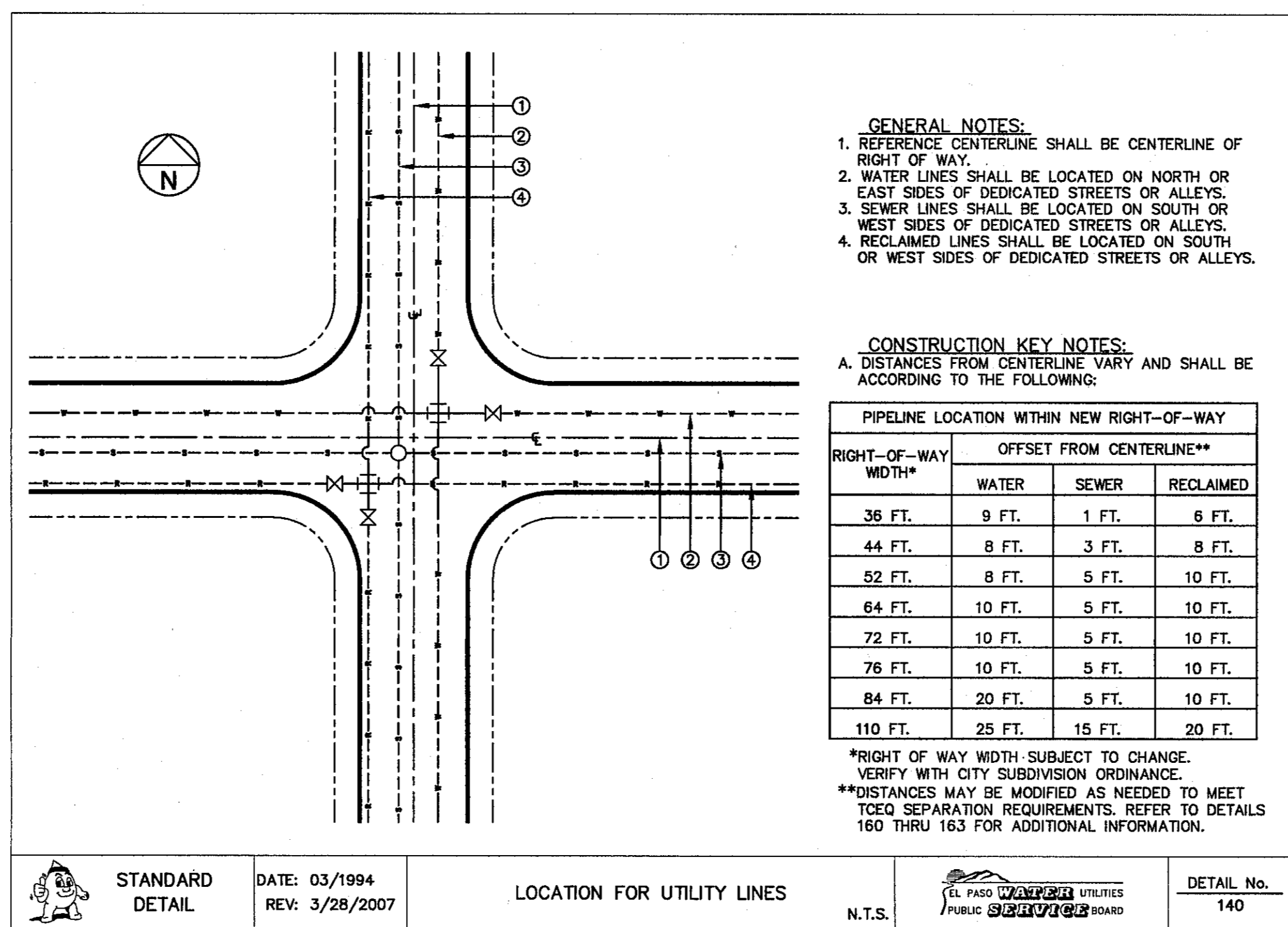
DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.L.A.
APPD. BY: J.L.A.

REVISIONS

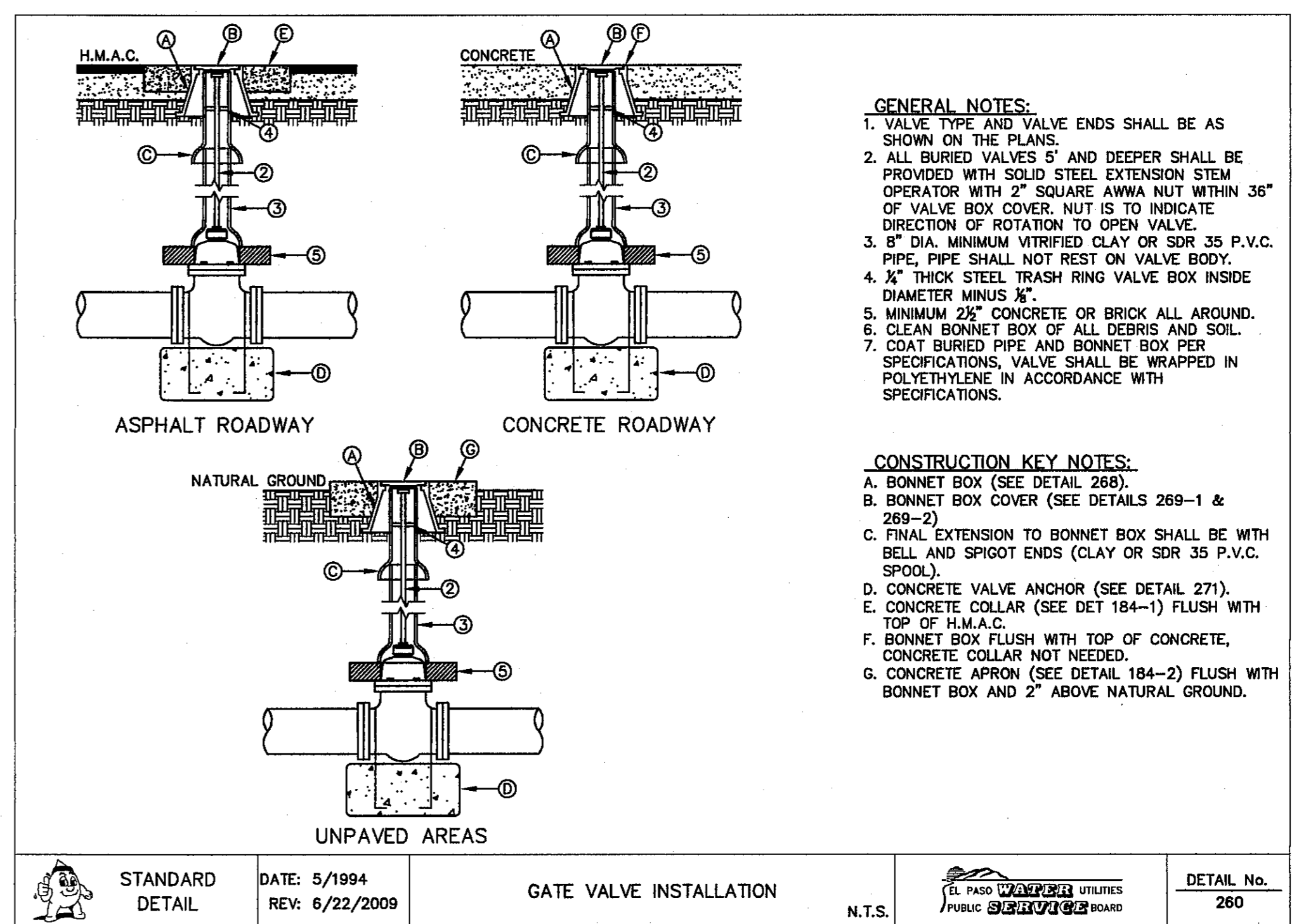
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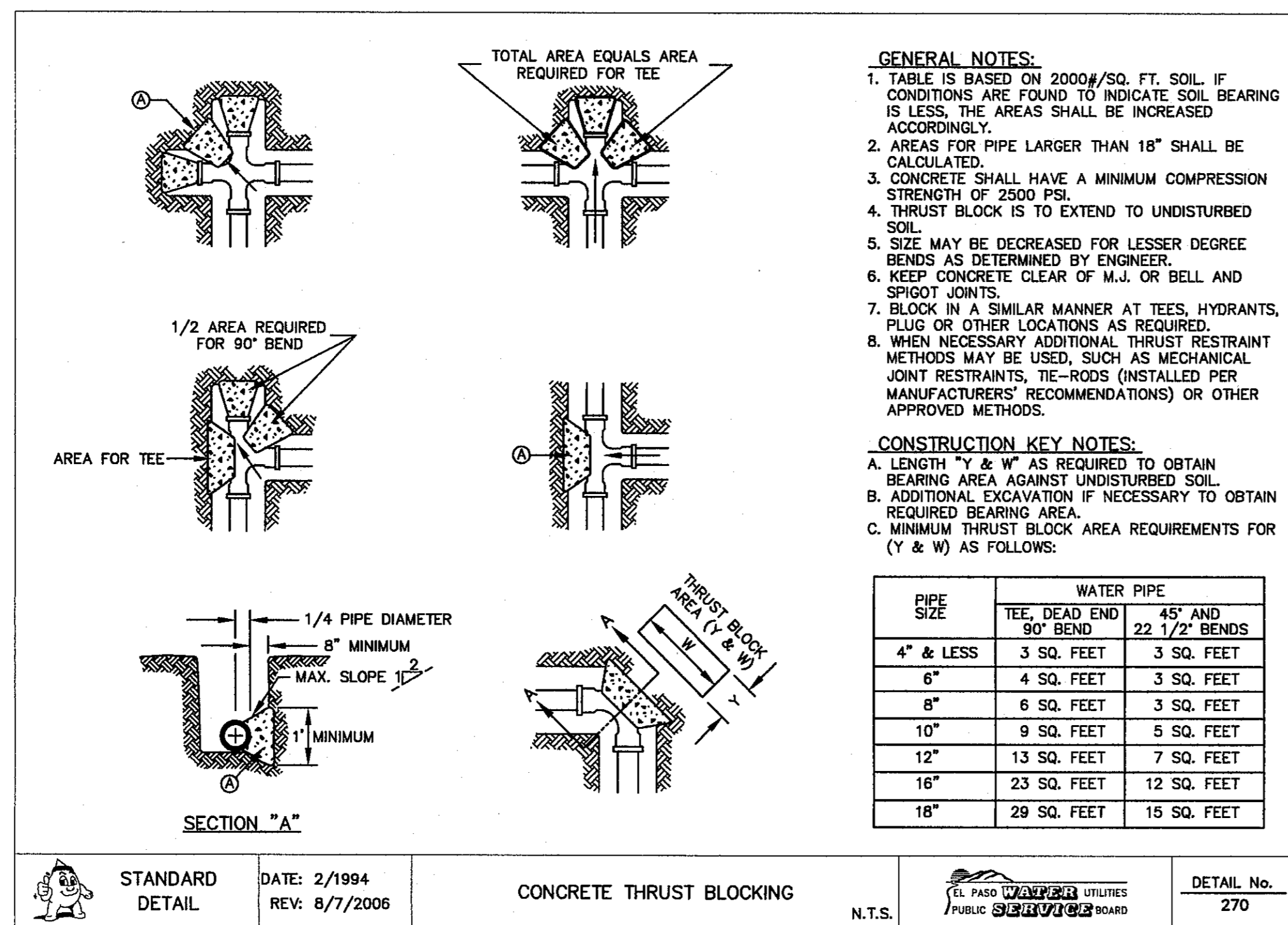
1 BONNET BOX COVER SCALE: N.T.S.



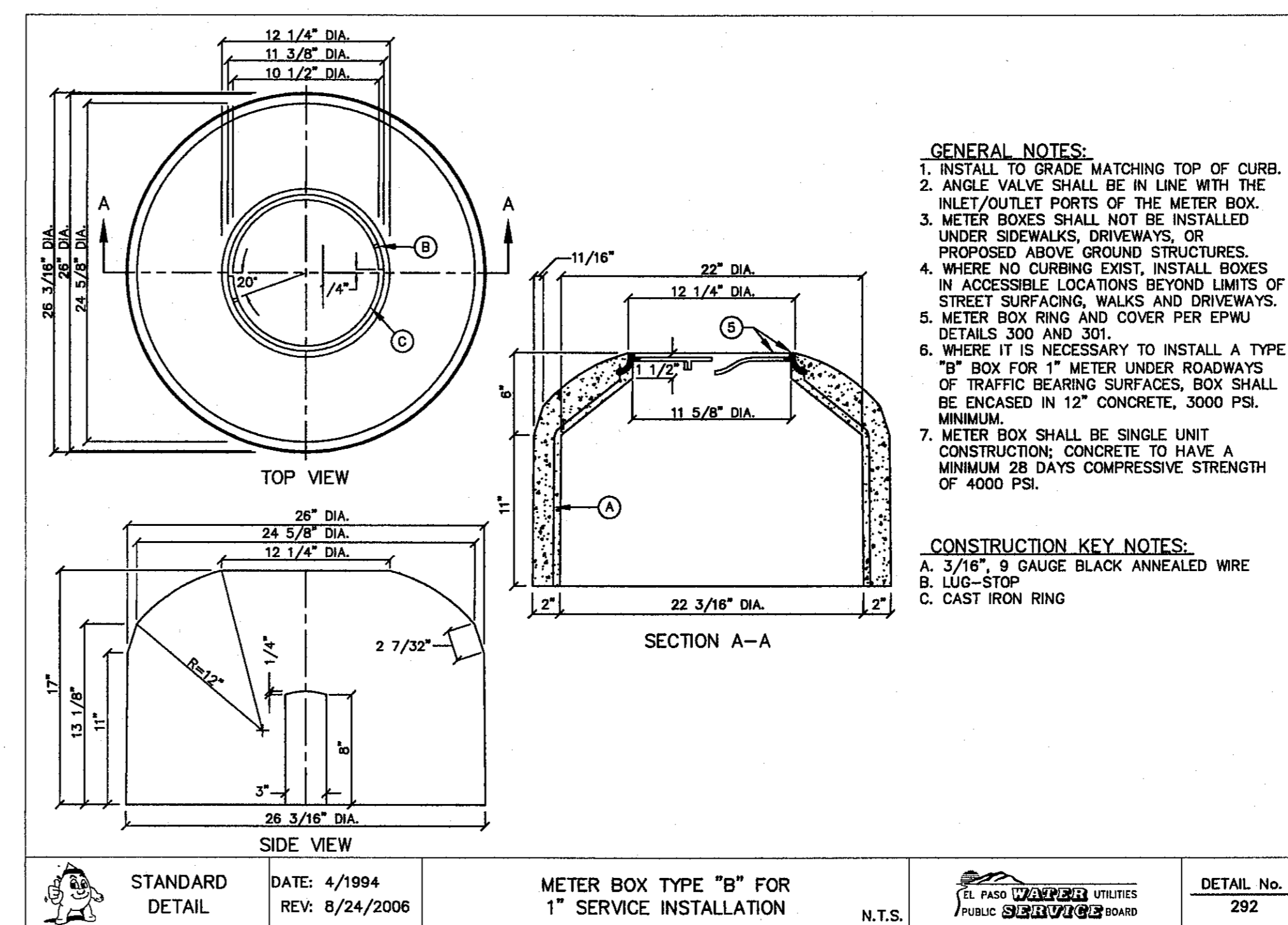
2 LOCATION FOR UTILITY LINES SCALE: N.T.S.



3 GATE VALVE INSTALLATION SCALE: N.T.S.



4 CONCRETE THRUST BLOCKING SCALE: N.T.S.



5 METER BOX TYPE "B" SCALE: N.T.S.

REFERENCES - BENCHMARKS
 CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., SDR 4337E A DISTANCE OF 467.58 FEET
 MONTANA AVENUE CITY DATUM. ELEVATION.....0008.40

DATE _____ BY _____
 REVISIONS _____

ces
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-454
 4712 Woodrow Babin, Ste. F El Paso, TX 79924
 Office: 915.544.5232 Fax: 915.544.5233 www.cesgroup.com

ENGINEER'S SEAL

 SCALE: N/A
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: JULY 2013
 DESIGN BY: J.H.
 DRAWN BY: J.H.
 CHKD. BY: J.L.A.
 APPD. BY: J.L.A.
 JOB No. 2250-030-1D

PROJECT TITLE
**TRES SUEÑOS
 UNIT TEN
 SUBDIVISION IMPROVEMENTS**

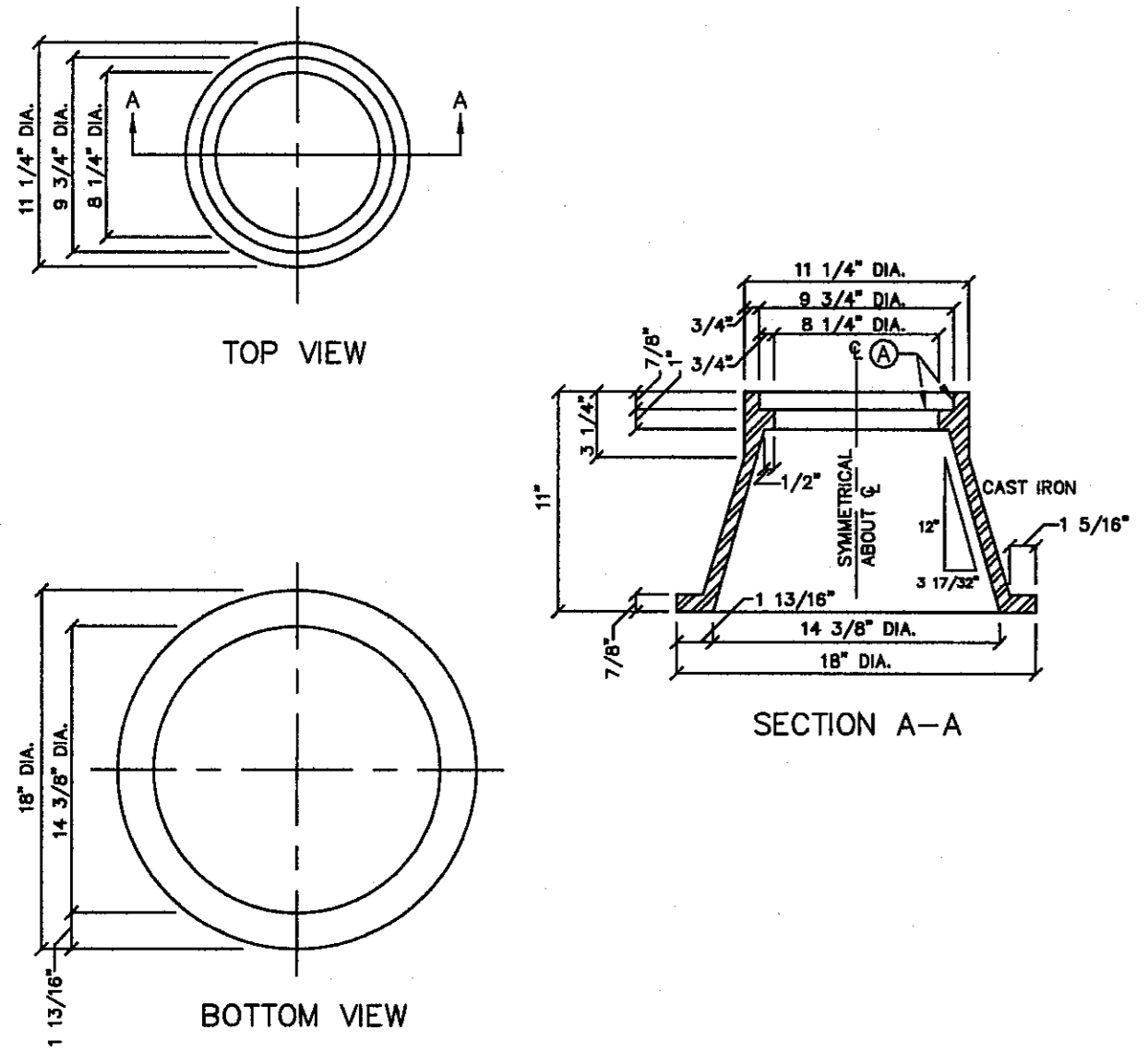
SHEET TITLE
WATER DETAILS
 (SHEET 1 OF 4)
 SHEET NO.

REVIEWED

 CITY DEVELOPMENT DEPARTMENT

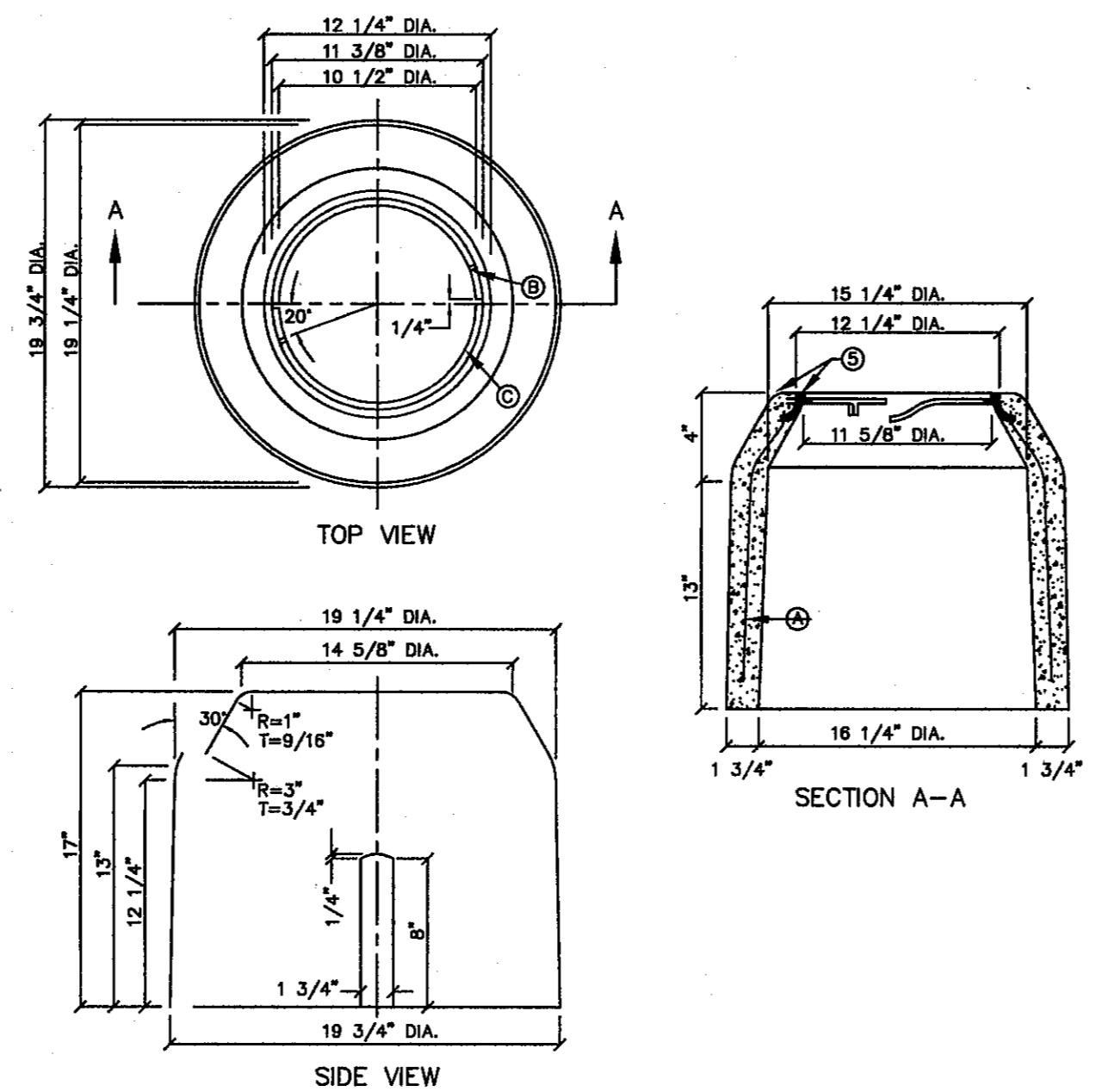
C11.2

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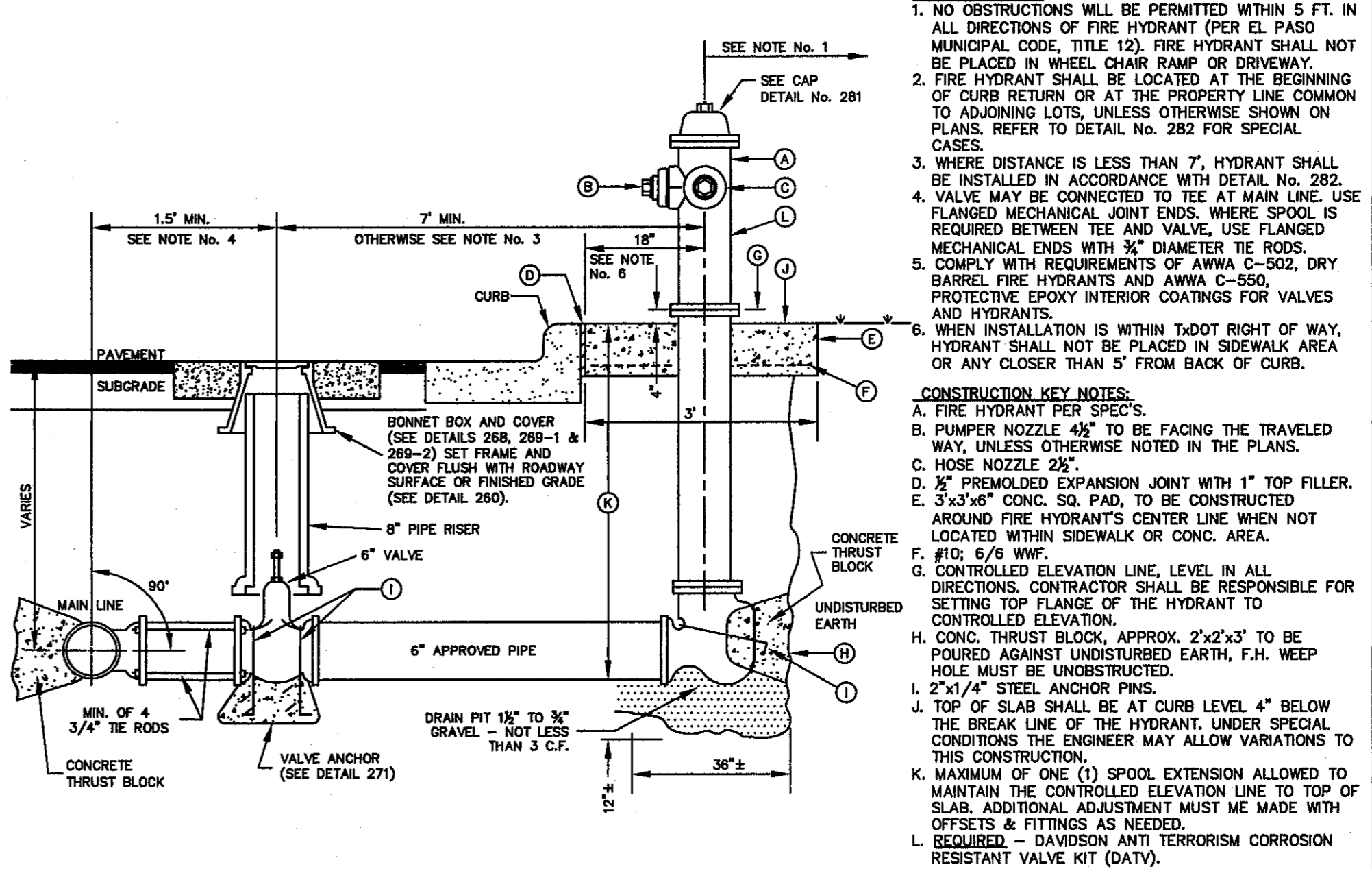
GENERAL NOTES:
 1. CASTING TO BE SMOOTH AND VOID OF AIR HOLES.
 2. WEIGHT OF BONNET BOX IS 95 POUNDS.

CONSTRUCTION KEY NOTES:
 A. TO BE ROUGH GROUND OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.



GENERAL NOTES:
 1. INSTALL TO GRADE MATCHING TOP OF CURB.
 2. ANGLE VALVE SHALL BE IN LINE WITH THE INLET/OUTLET PORTS OF THE METER BOX.
 3. METER BOXES SHALL NOT BE INSTALLED UNDER SIDEWALKS, DRIVEWAYS, OR PROPOSED ABOVE GROUND STRUCTURES.
 4. WHERE NO CURBING EXIST, INSTALL BOXES IN ACCESSIBLE LOCATIONS BEYOND LIMITS OF STREET SURFACING, WALKS AND DRIVEWAYS.
 5. METER BOX RING AND COVER PER EPWU DETAILS 300 AND 301.
 6. WHERE IT IS NECESSARY TO INSTALL A TYPE "A" BOX FOR 3/4" METER UNDER ROADWAYS OF TRAFFIC BEARING SURFACES, BOX SHALL BE ENCASED IN 12" CONCRETE, 3000 PSI. MINIMUM. CONCRETE TO HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 4000 PSI.

CONSTRUCTION KEY NOTES:
 A. 3/16" 9 GAUGE BLACK ANNEALED WIRE
 B. LUG-STOP C. CAST IRON RING



GENERAL NOTES:
 1. NO OBSTRUCTIONS WILL BE PERMITTED WITHIN 5 FT. IN ALL DIRECTIONS OF FIRE HYDRANT (PER EL PASO MUNICIPAL CODE, TITLE 12). FIRE HYDRANT SHALL NOT BE PLACED IN WHEEL CHAIR RAMP OR DRIVEWAY.
 2. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB RETURN OR AT THE PROPERTY LINE COMMON TO ADJOINING LOTS, UNLESS OTHERWISE SHOWN ON PLANS. REFER TO DETAIL No. 282 FOR SPECIAL CASES.
 3. WHERE DISTANCE IS LESS THAN 7', HYDRANT SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL No. 282.
 4. VALVE MAY BE CONNECTED TO TEE AT MAIN LINE. USE FLANGED MECHANICAL JOINT ENDS. WHERE SPOOL IS REQUIRED BETWEEN TEE AND VALVE, USE FLANGED MECHANICAL ENDS WITH 3" DIAMETER TIE RODS.
 5. COMPLY WITH REQUIREMENTS OF AWMA C-502, DRY BARREL FIRE HYDRANTS AND AWMA C-550, PROTECTIVE EPOXY INTERIOR COATINGS FOR VALVES AND HYDRANTS.
 6. WHEN INSTALLATION IS WITHIN 10'00" RIGHT OF WAY, HYDRANT SHALL NOT BE PLACED IN SIDEWALK AREA OR ANY CLOSER THAN 5' FROM BACK OF CURB.

CONSTRUCTION KEY NOTES:
 A. FIRE HYDRANT PER SPECS.
 B. PUMPER NOZZLE 4 1/2" TO BE FACING THE TRAVELED WAY, UNLESS OTHERWISE NOTED IN THE PLANS.
 C. HOSE NOZZLE 2 1/2"
 D. 2" PREMOLDED EXPANSION JOINT WITH 1" TOP FILLER.
 E. 3"x3"x6" CONC. SQ. PAD, TO BE CONSTRUCTED AROUND FIRE HYDRANT'S CENTER LINE WHEN NOT LOCATED WITHIN SIDEWALK OR CONC. AREA.
 F. #10; 6/8 WWF.
 G. CONTROLLED ELEVATION LINE. LEVEL IN ALL DIRECTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING TOP FLANGE OF THE HYDRANT TO CONTROLLED ELEVATION.
 H. CONC. THRUST BLOCK, APPROX. 2'x2'x3' TO BE POURED AGAINST UNDISTURBED EARTH, F.H. WEEP HOLE MUST BE UNDISTURBED.
 I. 2"x1/4" STEEL ANCHOR PINS.
 J. TOP OF SLAB SHALL BE AT CURB LEVEL 4" BELOW THE BREAK LINE OF THE HYDRANT, UNDER SPECIAL CONDITIONS THE ENGINEER MAY ALLOW VARIATIONS TO THIS CONSTRUCTION.
 K. MAXIMUM OF ONE (1) SPOOL EXTENSION ALLOWED TO MAINTAIN THE CONTROLLED ELEVATION LINE TO TOP OF SLAB. ADDITIONAL ADJUSTMENT MUST BE MADE WITH OFFSETS & FITTINGS AS NEEDED.
 L. REQUIRED - DAVIDSON ANTI TERRORISM CORROSION RESISTANT VALVE KIT (DATV).

STANDARD DETAIL	DATE: 2/1994 REV:	BONNET BOX	N.T.S.	EL PASO WATER UTILITIES PUBLIC UTILITIES BOARD	DETAIL No. 268
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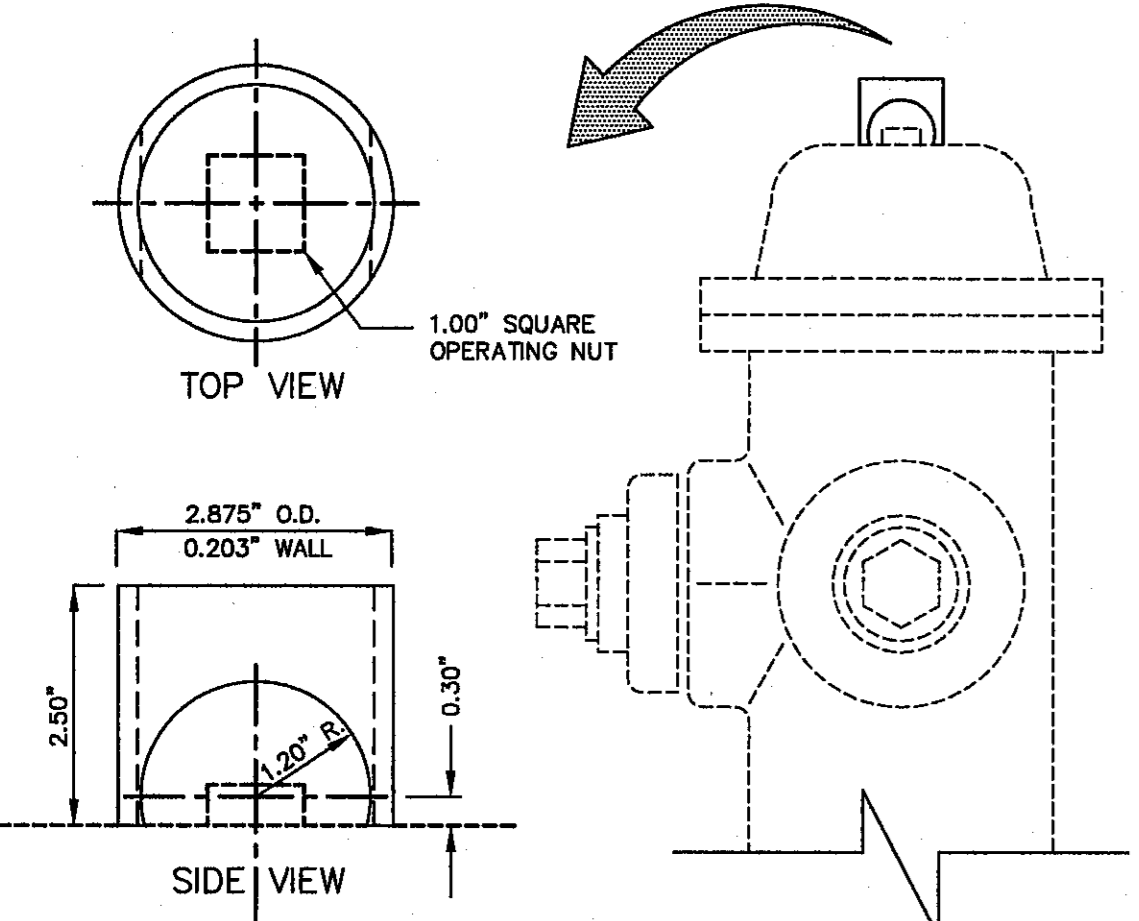
STANDARD DETAIL	DATE: 4/1994 REV: 8/24/2006	METER BOX TYPE "A" FOR 3/4" SERVICE INSTALLATION	N.T.S.	EL PASO WATER UTILITIES PUBLIC UTILITIES BOARD	DETAIL No. 291
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STANDARD DETAIL	DATE: 2/1993 REV: 12/1/2011	FIRE HYDRANT INSTALLATION	N.T.S.	EL PASO WATER UTILITIES PUBLIC UTILITIES BOARD	DETAIL No. 280-1
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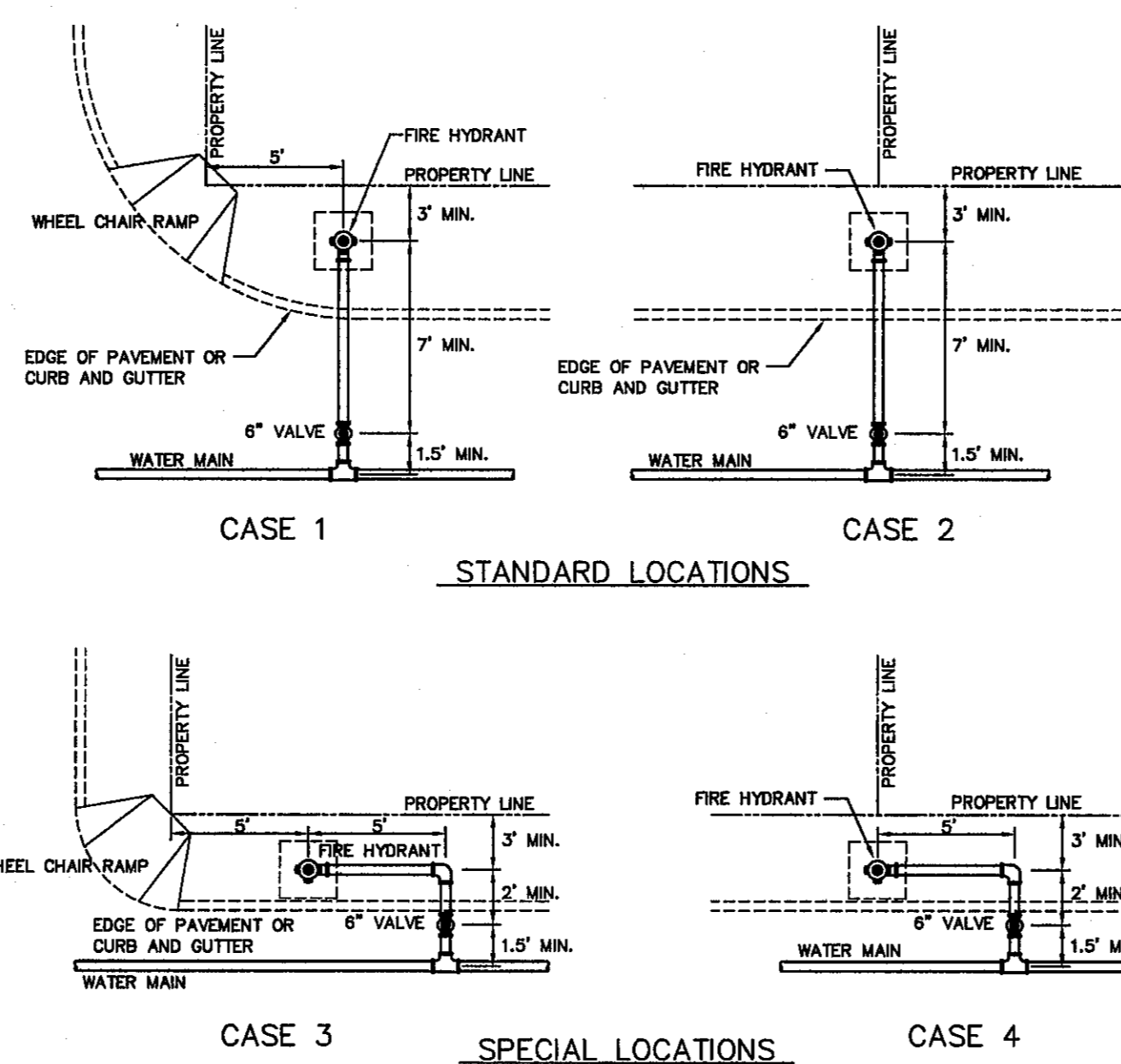
1 BONNET BOX
C11.3 N.T.S.

2 METER BOX TYPE "A"
C11.3 N.T.S.

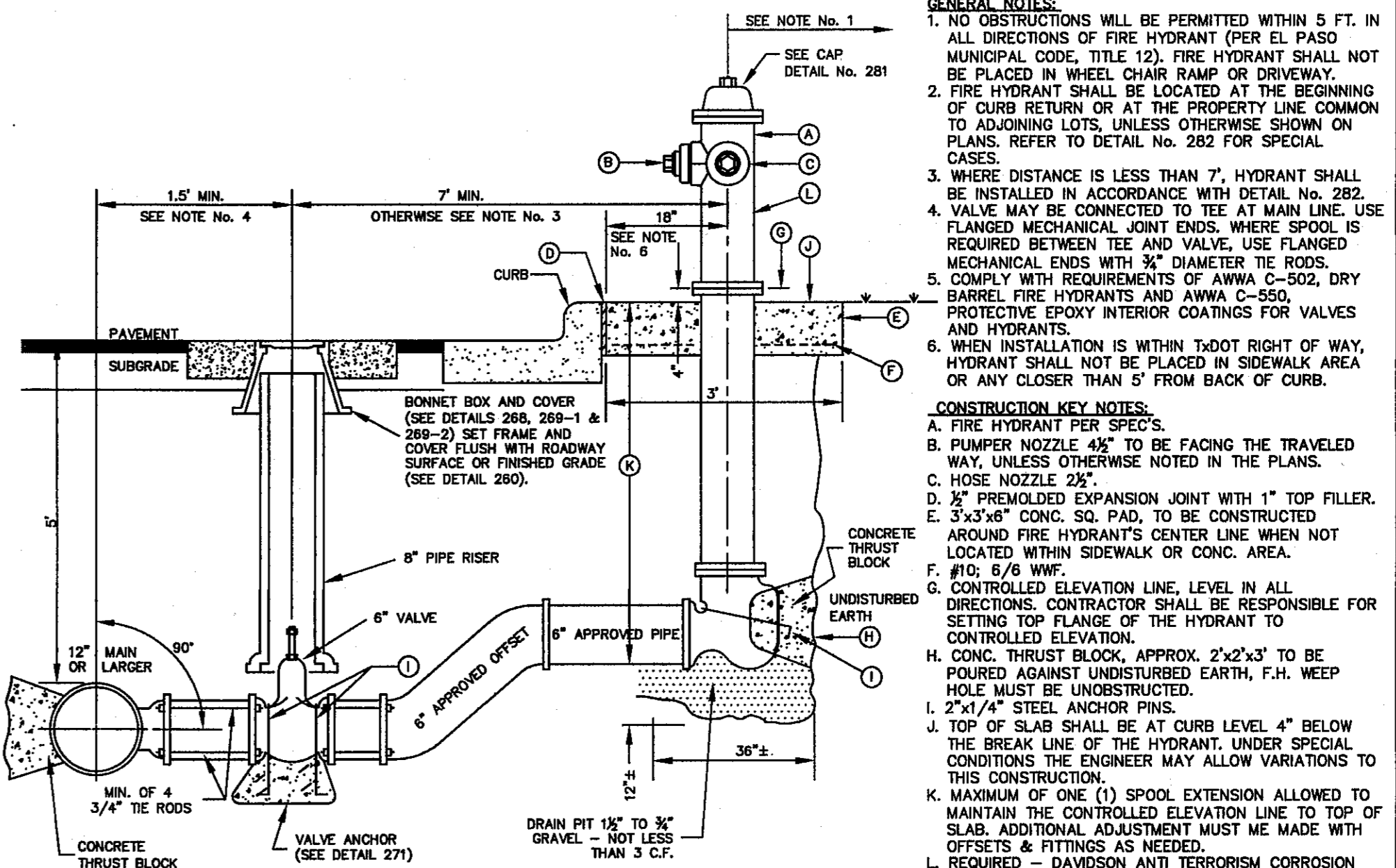
3 FIRE HYDRANT INSTALLATION
C11.3 N.T.S.



GENERAL NOTES:
 1. STEEL CAPS TO BE MACHINED FROM STEEL PIPE. NOMINAL SIZE = 2 1/2" DIA. OUTSIDE DIA. = 2.875" WALL THICKNESS = 0.203 LBS./FT. = 5.79
 2. CAPS ARE TO BE TACK WELDED OR BRAZED ON FIRE HYDRANT BONNET OR WEATHER CAP.
 3. THE CAPS OVER THE OPERATING NUT WILL PREVENT ACCESS TO THE UNAUTHORIZED USE OF HYDRANT WATER.



GENERAL NOTES:
 1. FOR CASE I FIRE HYDRANT SHALL BE LOCATED AT A DISTANCE OF 5 FT. MINIMUM FROM THE PROPERTY LINE OR AT THE BEGINNING OF CURB RETURN.
 2. FOR CASE 2 FIRE HYDRANT SHALL BE LOCATED AT THE PROPERTY LINE COMMON TO ADJOINING LOTS.
 3. FOR CASE 3 AND IV WHERE THE DISTANCE BETWEEN THE VALVE AND THE HYDRANT IS LESS THAN 7 FT. PLACE HYDRANT AS SHOWN.
 4. FOR INSTALLATION OF FIRE HYDRANT SEE DETAIL 280-1 OR 280-2.
 5. A MINIMUM CLEARANCE OF 3 FT. WILL BE PROVIDED BETWEEN A FIRE HYDRANT AND A PERMANENT OBSTRUCTION (UTILITY POLE, LIGHT STANDARD, TRAFFIC SIGNAL, WHEEL CHAIR RAMP, FENCE PROTECTIVE POSTS, ETC.).
 6. WHEN INSTALLATION IS WITHIN 10'00" RIGHT OF WAY, HYDRANT SHALL NOT BE PLACED IN SIDEWALK AREA OR ANY CLOSER THAN 5' FROM BACK OF CURB.



GENERAL NOTES:
 1. NO OBSTRUCTIONS WILL BE PERMITTED WITHIN 5 FT. IN ALL DIRECTIONS OF FIRE HYDRANT (PER EL PASO MUNICIPAL CODE, TITLE 12). FIRE HYDRANT SHALL NOT BE PLACED IN WHEEL CHAIR RAMP OR DRIVEWAY.
 2. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB RETURN OR AT THE PROPERTY LINE COMMON TO ADJOINING LOTS, UNLESS OTHERWISE SHOWN ON PLANS. REFER TO DETAIL No. 282 FOR SPECIAL CASES.
 3. WHERE DISTANCE IS LESS THAN 7', HYDRANT SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL No. 282.
 4. VALVE MAY BE CONNECTED TO TEE AT MAIN LINE. USE FLANGED MECHANICAL JOINT ENDS. WHERE SPOOL IS REQUIRED BETWEEN TEE AND VALVE, USE FLANGED MECHANICAL ENDS WITH 3" DIAMETER TIE RODS.
 5. COMPLY WITH REQUIREMENTS OF AWMA C-502, DRY BARREL FIRE HYDRANTS AND AWMA C-550, PROTECTIVE EPOXY INTERIOR COATINGS FOR VALVES AND HYDRANTS.
 6. WHEN INSTALLATION IS WITHIN 10'00" RIGHT OF WAY, HYDRANT SHALL NOT BE PLACED IN SIDEWALK AREA OR ANY CLOSER THAN 5' FROM BACK OF CURB.

CONSTRUCTION KEY NOTES:
 A. FIRE HYDRANT PER SPECS.
 B. PUMPER NOZZLE 4 1/2" TO BE FACING THE TRAVELED WAY, UNLESS OTHERWISE NOTED IN THE PLANS.
 C. HOSE NOZZLE 2 1/2"
 D. 2" PREMOLDED EXPANSION JOINT WITH 1" TOP FILLER.
 E. 3"x3"x6" CONC. SQ. PAD, TO BE CONSTRUCTED AROUND FIRE HYDRANT'S CENTER LINE WHEN NOT LOCATED WITHIN SIDEWALK OR CONC. AREA.
 F. #10; 6/8 WWF.
 G. CONTROLLED ELEVATION LINE. LEVEL IN ALL DIRECTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING TOP FLANGE OF THE HYDRANT TO CONTROLLED ELEVATION.
 H. CONC. THRUST BLOCK, APPROX. 2'x2'x3' TO BE POURED AGAINST UNDISTURBED EARTH, F.H. WEEP HOLE MUST BE UNDISTURBED.
 I. 2"x1/4" STEEL ANCHOR PINS.
 J. TOP OF SLAB SHALL BE AT CURB LEVEL 4" BELOW THE BREAK LINE OF THE HYDRANT, UNDER SPECIAL CONDITIONS THE ENGINEER MAY ALLOW VARIATIONS TO THIS CONSTRUCTION.
 K. MAXIMUM OF ONE (1) SPOOL EXTENSION ALLOWED TO MAINTAIN THE CONTROLLED ELEVATION LINE TO TOP OF SLAB. ADDITIONAL ADJUSTMENT MUST BE MADE WITH OFFSETS & FITTINGS AS NEEDED.
 L. REQUIRED - DAVIDSON ANTI TERRORISM CORROSION RESISTANT VALVE KIT (DATV).

STANDARD DETAIL	DATE: FEB. 1993 REV: FEB. 1994	FIRE HYDRANT CAP	N.T.S.	EL PASO WATER UTILITIES PUBLIC UTILITIES BOARD	DETAIL No. 281
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STANDARD DETAIL	DATE: 5/1994 REV: 6/25/2007	FIRE HYDRANT LOCATIONS	N.T.S.	EL PASO WATER UTILITIES PUBLIC UTILITIES BOARD	DETAIL No. 282
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STANDARD DETAIL	DATE: 12/1995 REV: 12/1/2011	FIRE HYDRANT INSTALLATION (12" MAIN OR LARGER)	N.T.S.	EL PASO WATER UTILITIES PUBLIC UTILITIES BOARD	DETAIL No. 280-2
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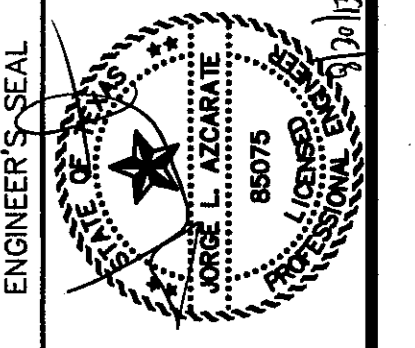
4 FIRE HYDRANT CAP
SCALE: N.T.S.

5 FIRE HYDRANT LOCATIONS
SCALE: N.T.S.

6 FIRE HYDRANT INSTALLATION (12" MAIN OR LARGER)
C11.3 N.T.S.

REFERENCES - BENCHMARKS
 CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. S094337E A DISTANCE OF 467.58 FEET FROM THE MONUMENT TO THE CENTERLINE OF THE AVENUE CITY DATUM. ELEVATION: 4008.40

CS&S
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-4584
 4712 Woodrow Dr., Ste. F El Paso, TX 79904
 Office: 915.544.6222 Fax: 915.544.6223 www.csands.com



SCALE: N/A
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: JULY 2013
 DESIGN BY: J.H.
 DRAWN BY: J.H.
 CHKO. BY: J.L.A.
 APPD. BY: J.L.A.
 JOB No. 2250-030-LD

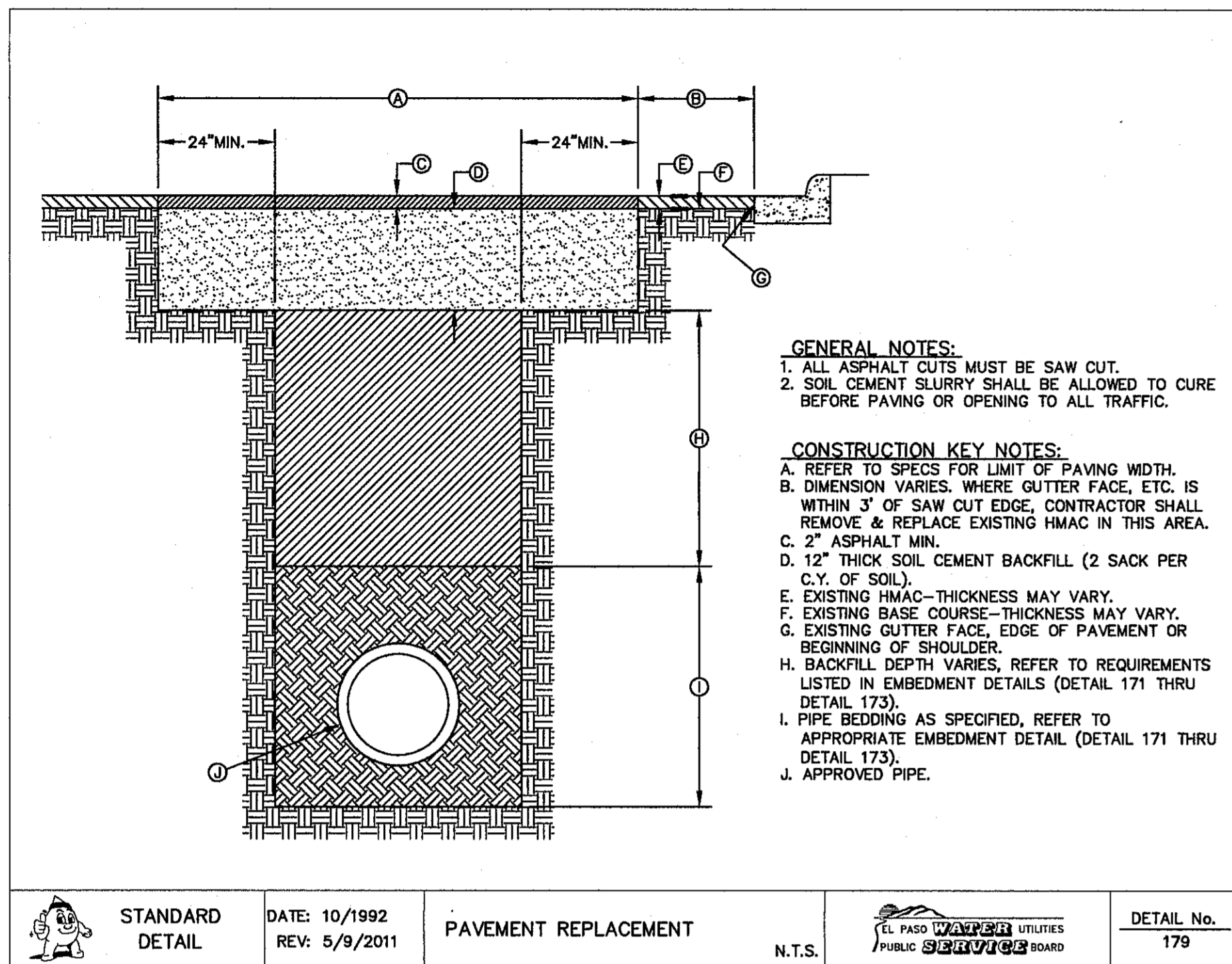
PROJECT TITLE
**TRES SUEÑOS
 UNIT TEN
 SUBDIVISION IMPROVEMENTS**

SHEET TITLE
WATER DETAILS
 (SHEET 2 OF 4)
 SHEET NO.

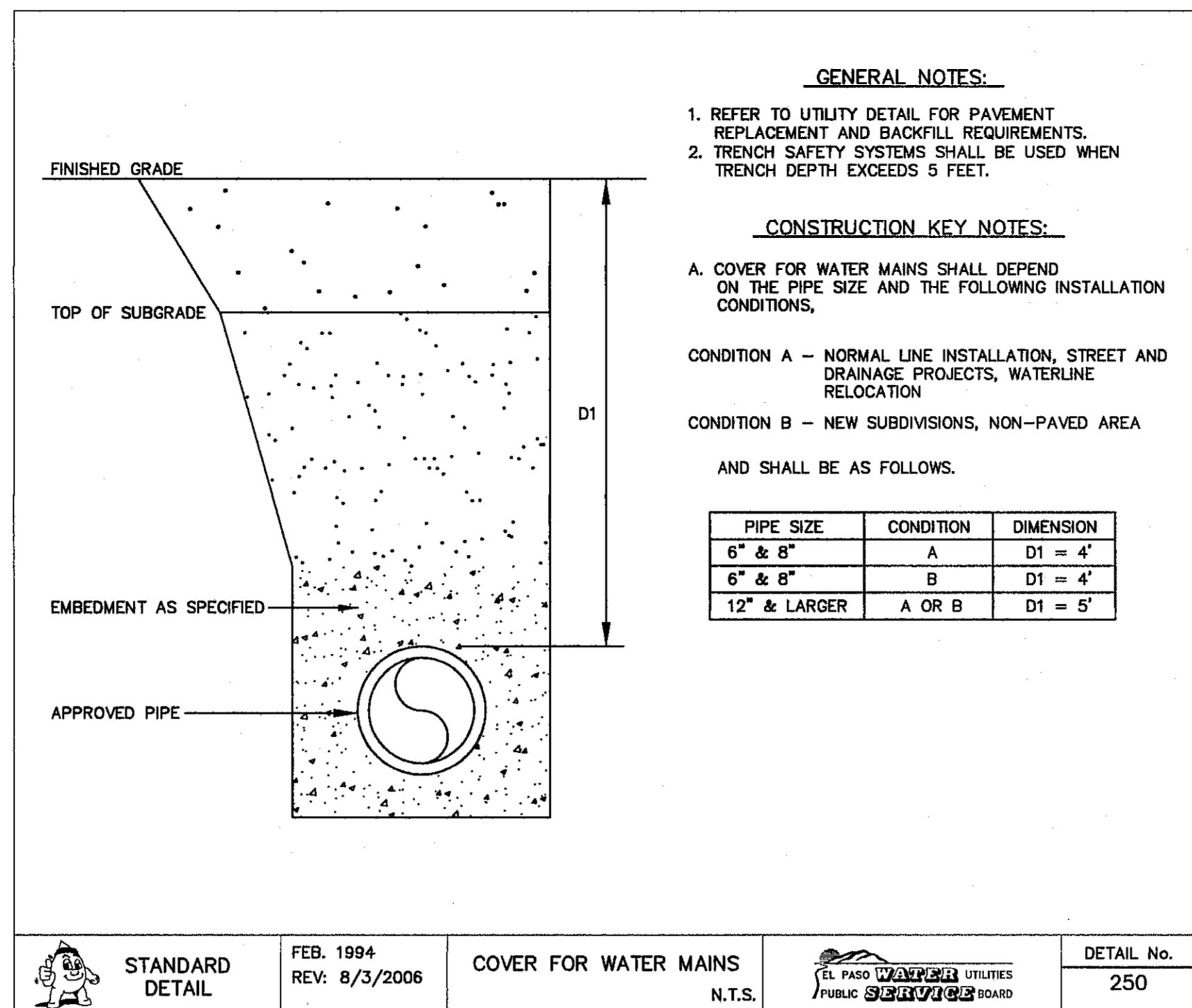
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CITY DEVELOPMENT DEPARTMENT
 REVIEWED

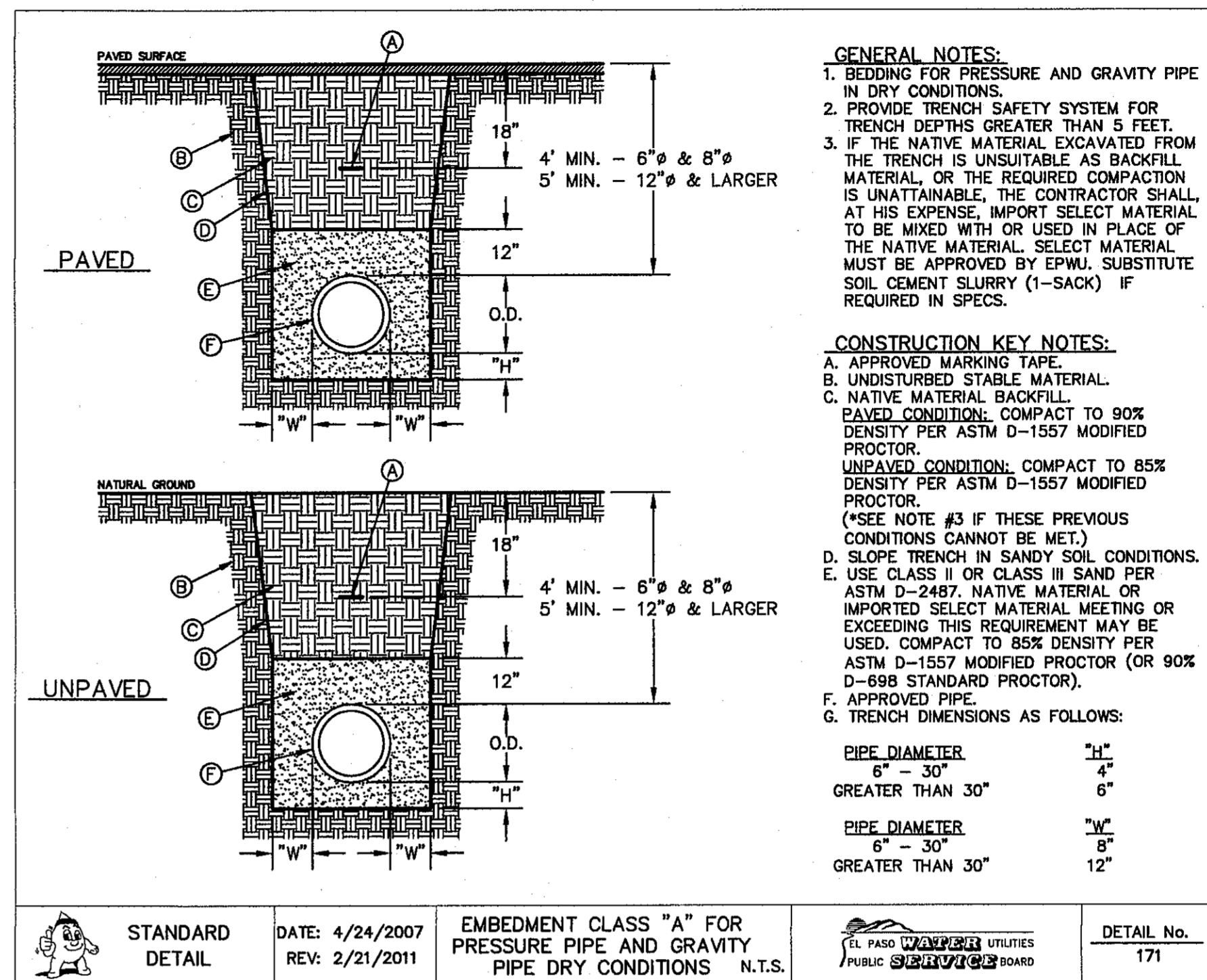
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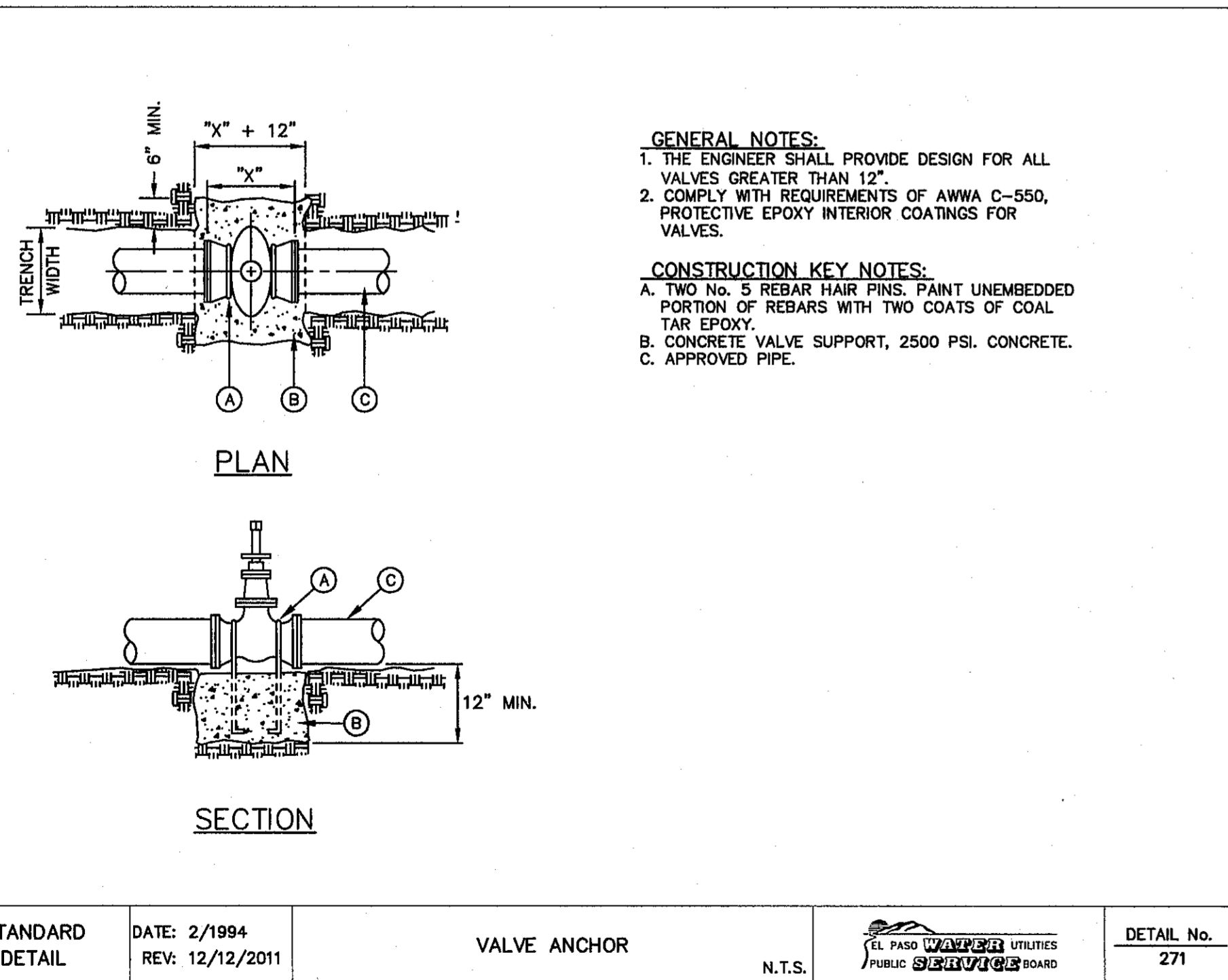
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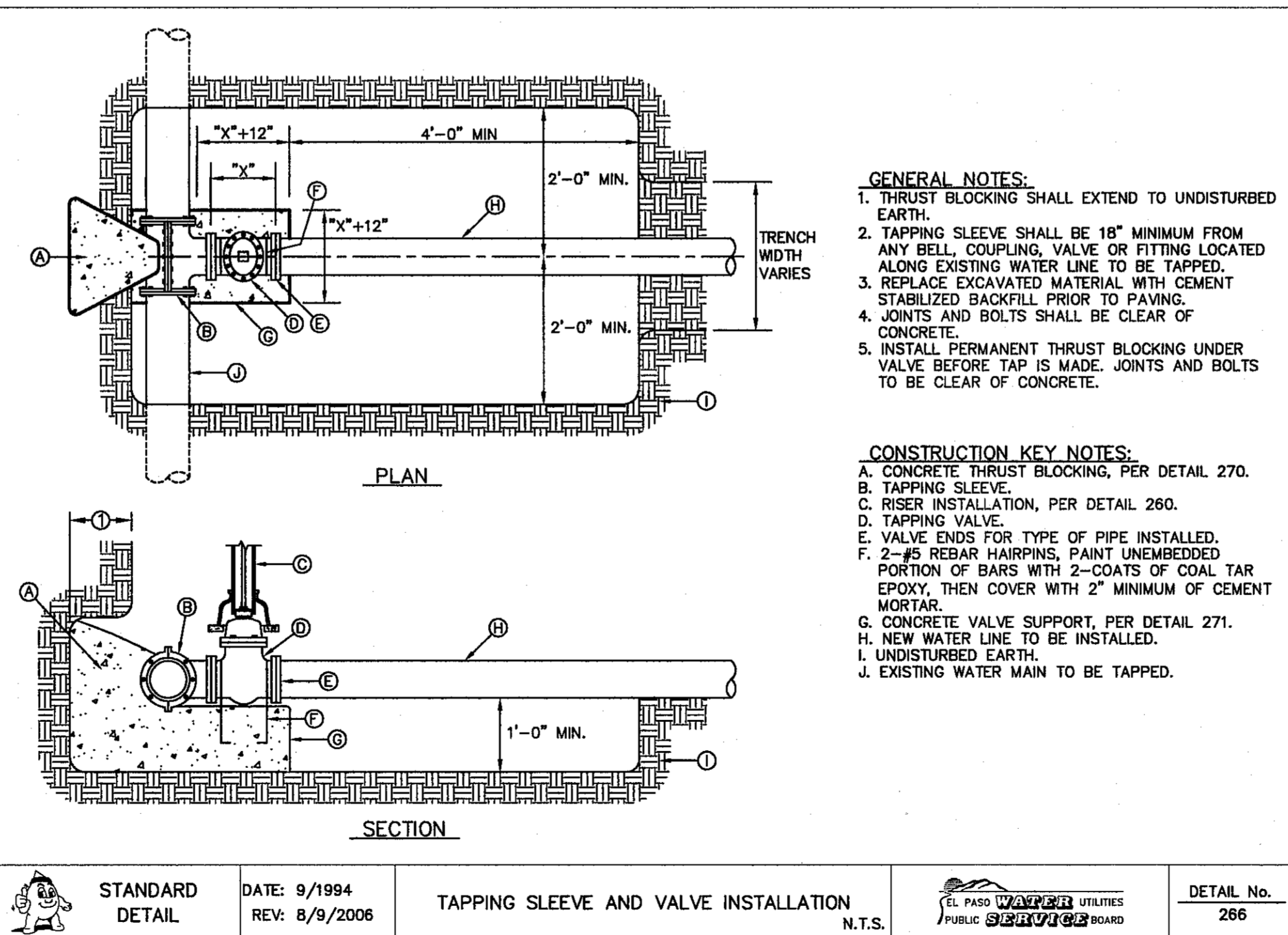
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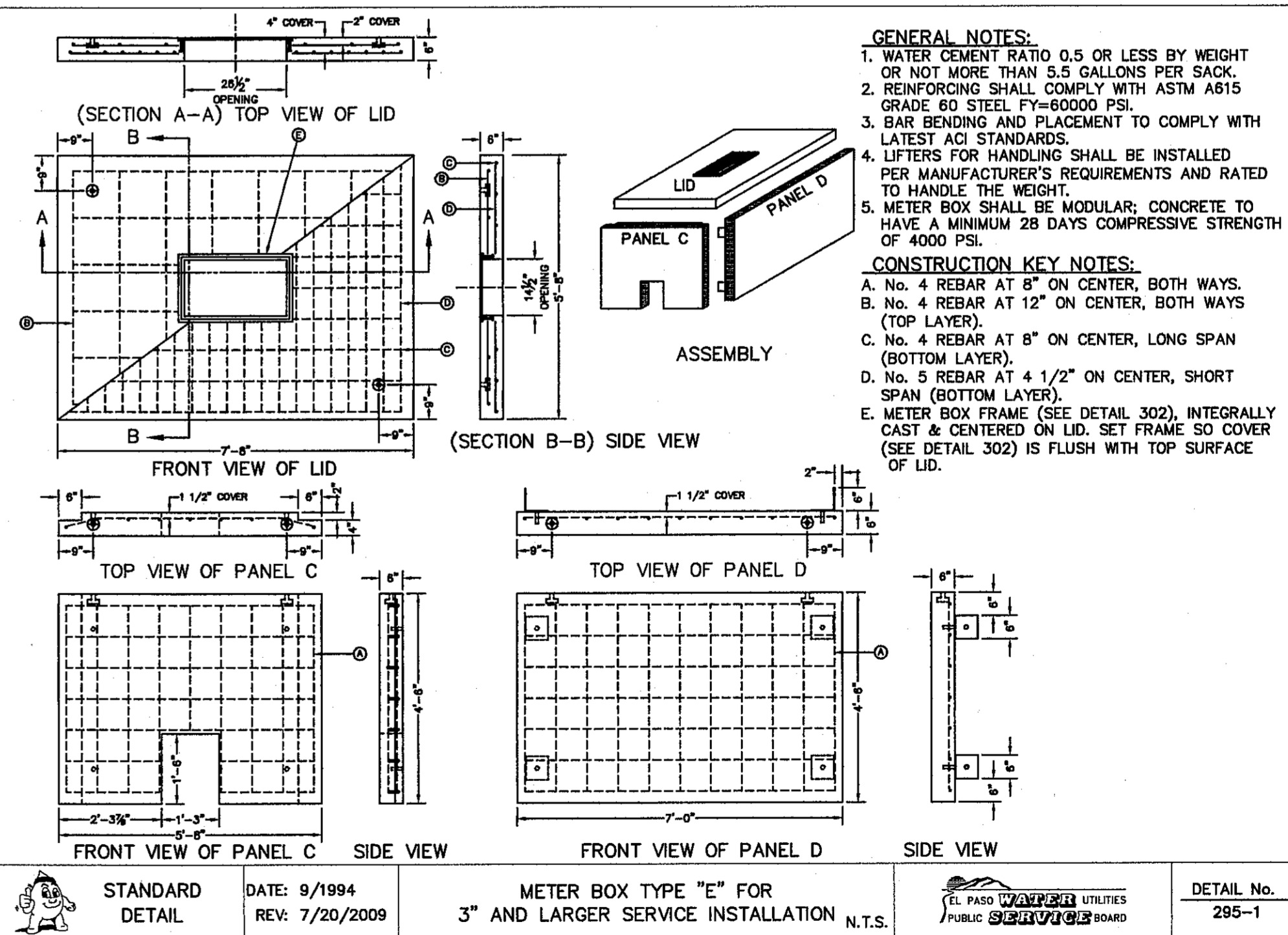
3 EMBEDMENT CLASS "A" FOR PRESSURE PIPE AND GRAVITY PIPE DRY CONDITIONS
SCALE: N.T.S.



4 VALVE ANCHOR
SCALE: N.T.S.



5 TAPPING SLEEVE AND VALVE INSTALLATION
SCALE: N.T.S.



6 METER BOX TYPE "E" FOR 3\"/>

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., 508°43'37\"/>

ENGINEER'S SEAL
JOSUE L. AZCARRATE
REGISTERED PROFESSIONAL ENGINEER
NO. 0075
EXPIRES 12/31/17

SCALE: N/A
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.L.A.
APPRD. BY: J.L.A.

JOB NO. 22550-030-LD

PROJECT TITLE
TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
WATER DETAILS
(SHEET 3 OF 4)
SHEET NO.

REVISIONS
DATE
BY

EL PASO WATER UTILITIES
PUBLIC UTILITIES BOARD

DETAIL No. 179

DATE: 10/1992
REV: 5/9/2011

PAVEMENT REPLACEMENT

STANDARD DETAIL

DATE: 4/24/2007
REV: 2/21/2011

EMBEDMENT CLASS "A" FOR PRESSURE PIPE AND GRAVITY PIPE DRY CONDITIONS

STANDARD DETAIL

DATE: 9/1994
REV: 12/12/2011

VALVE ANCHOR

STANDARD DETAIL

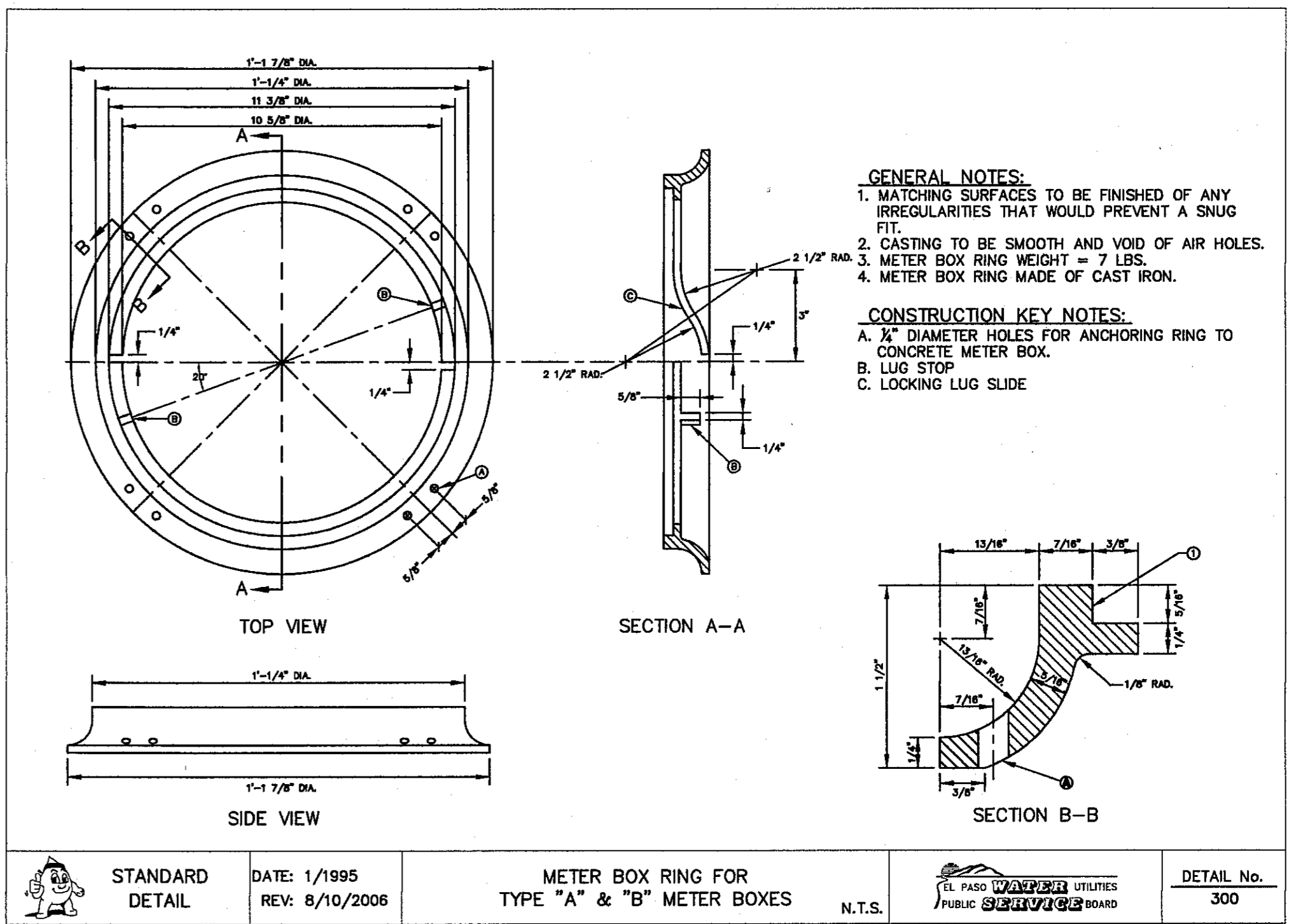
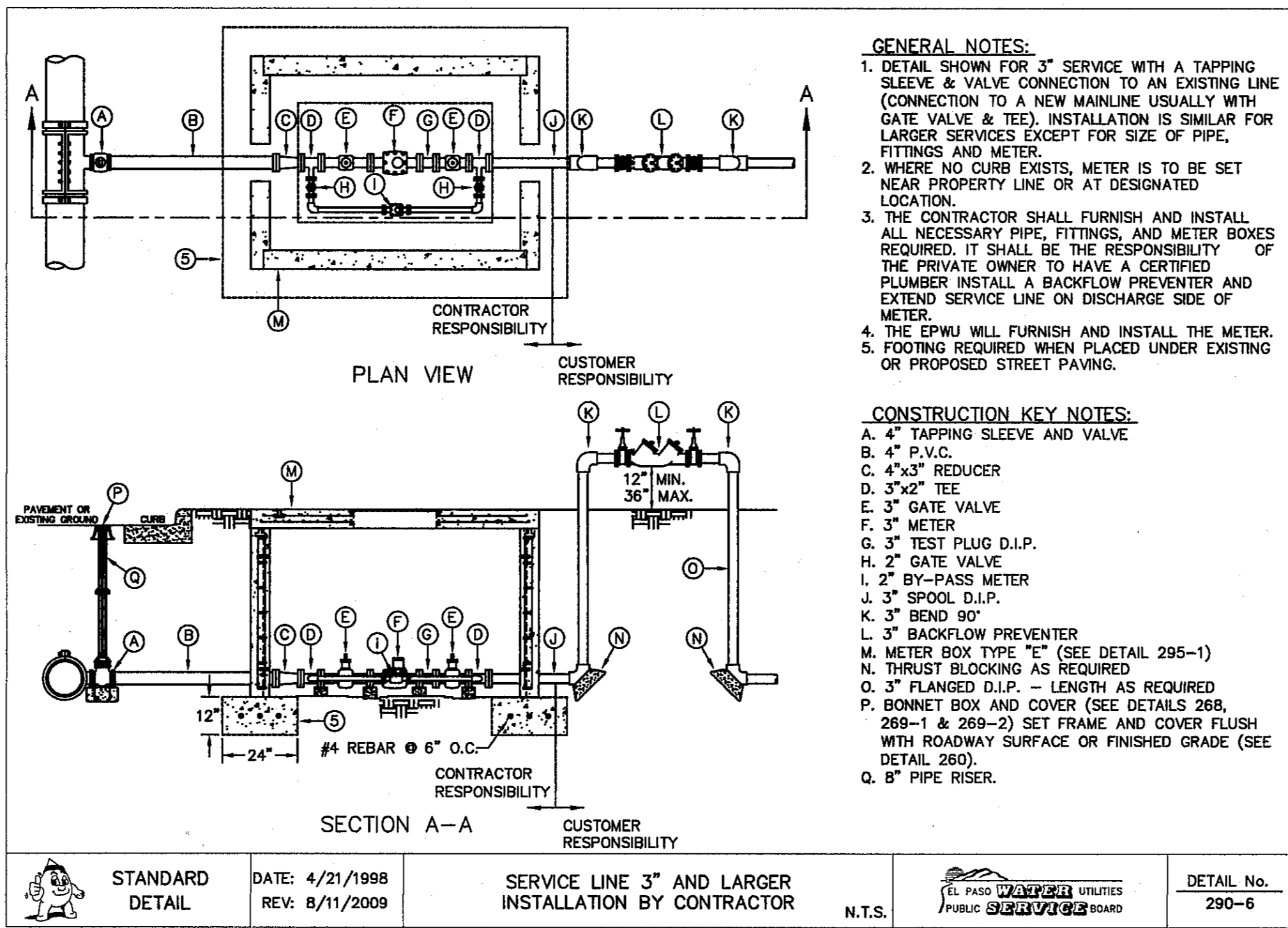
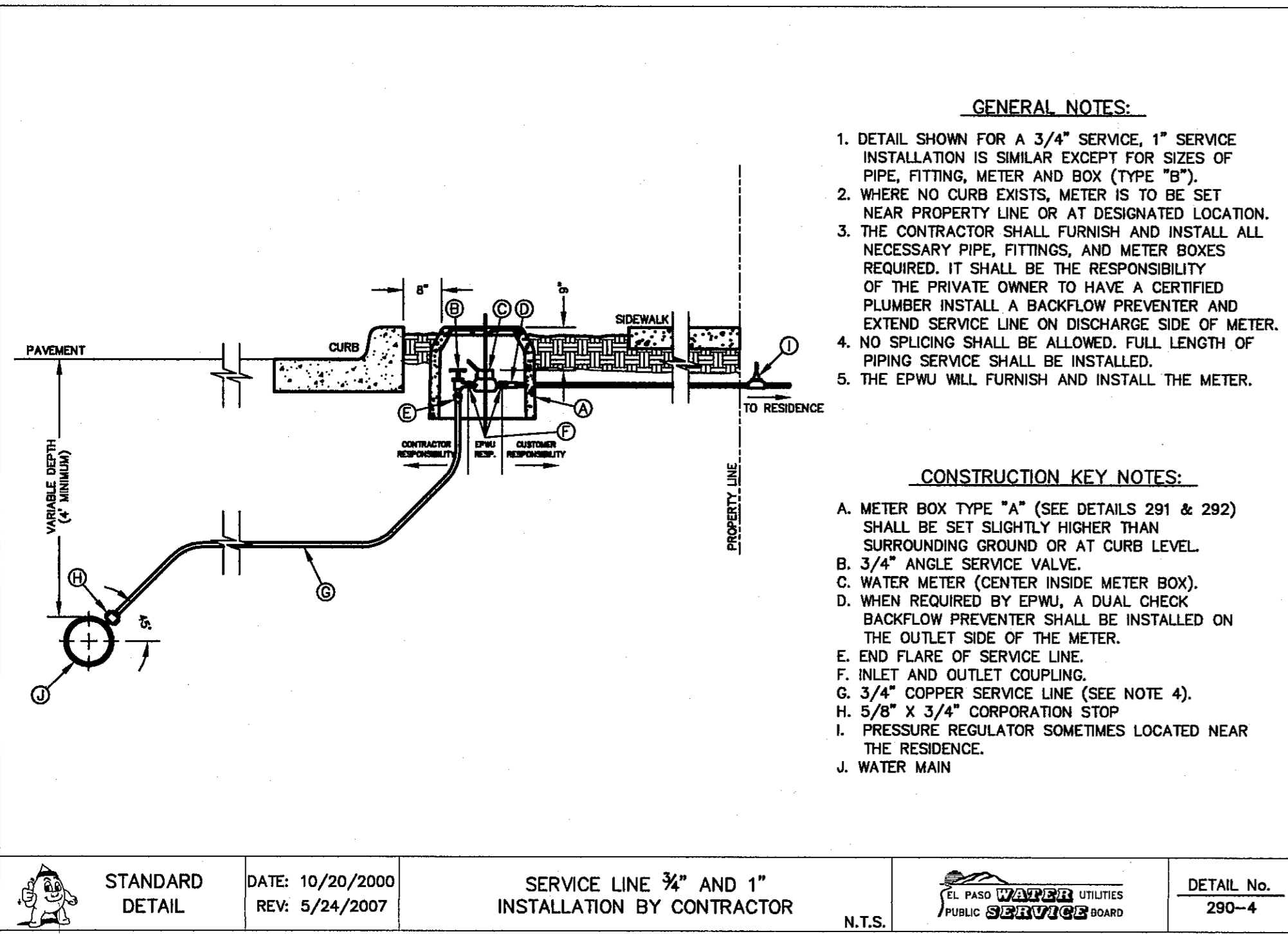
DATE: 9/1994
REV: 8/9/2006

TAPPING SLEEVE AND VALVE INSTALLATION

STANDARD DETAIL

DATE: 9/1994
REV: 7/20/2009

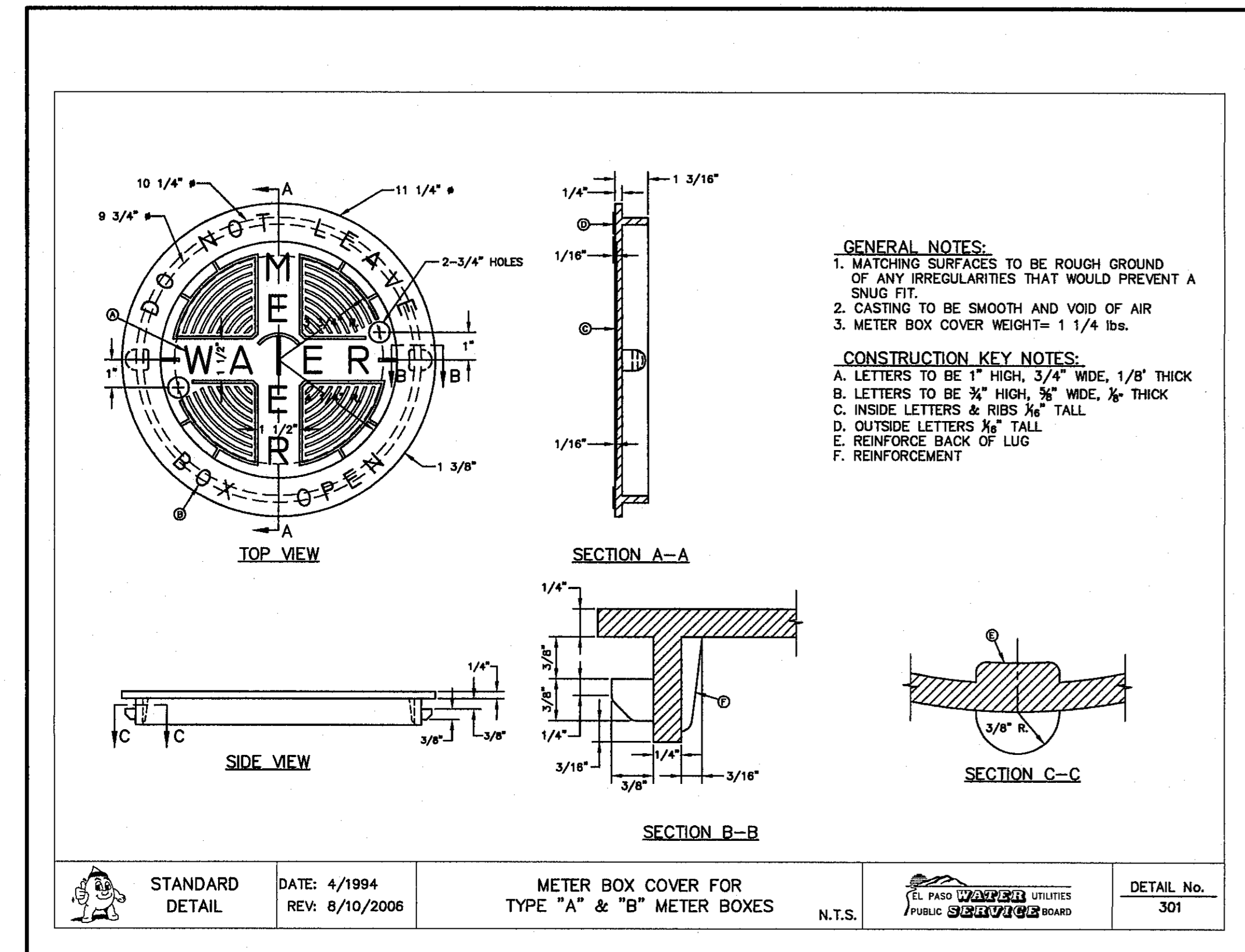
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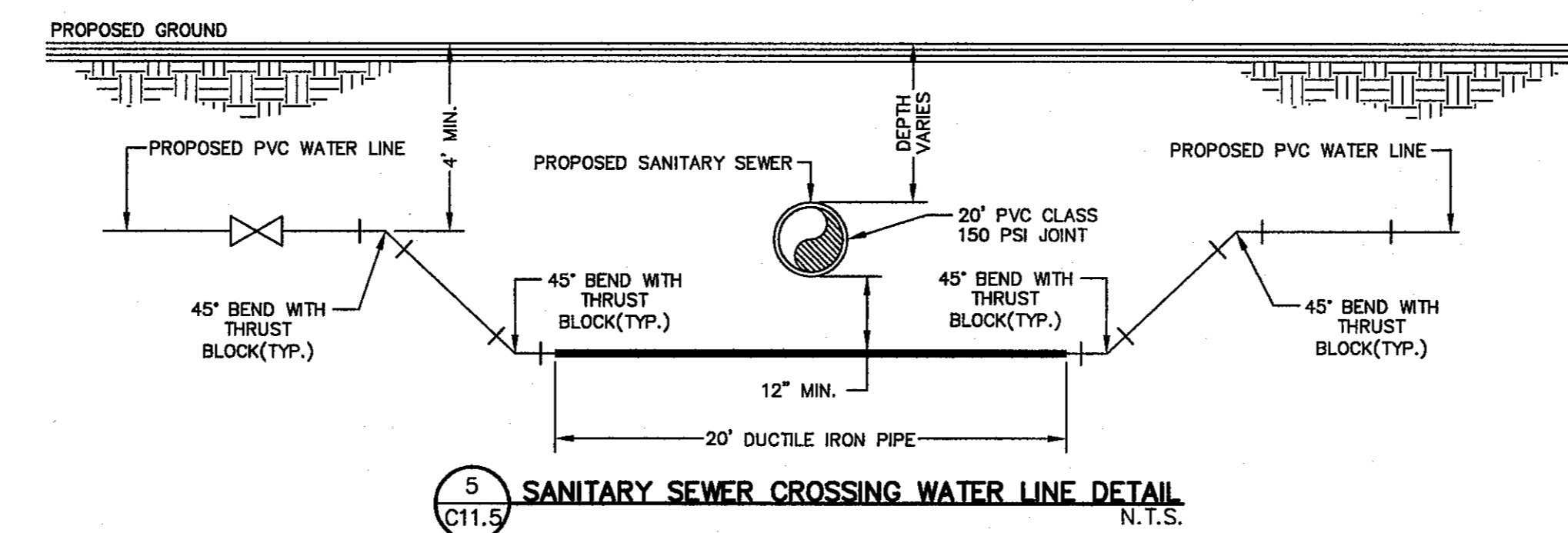
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2 TYPICAL 3" AND LARGER SERVICE LINE INSTALLATION
SCALE: N.T.S.

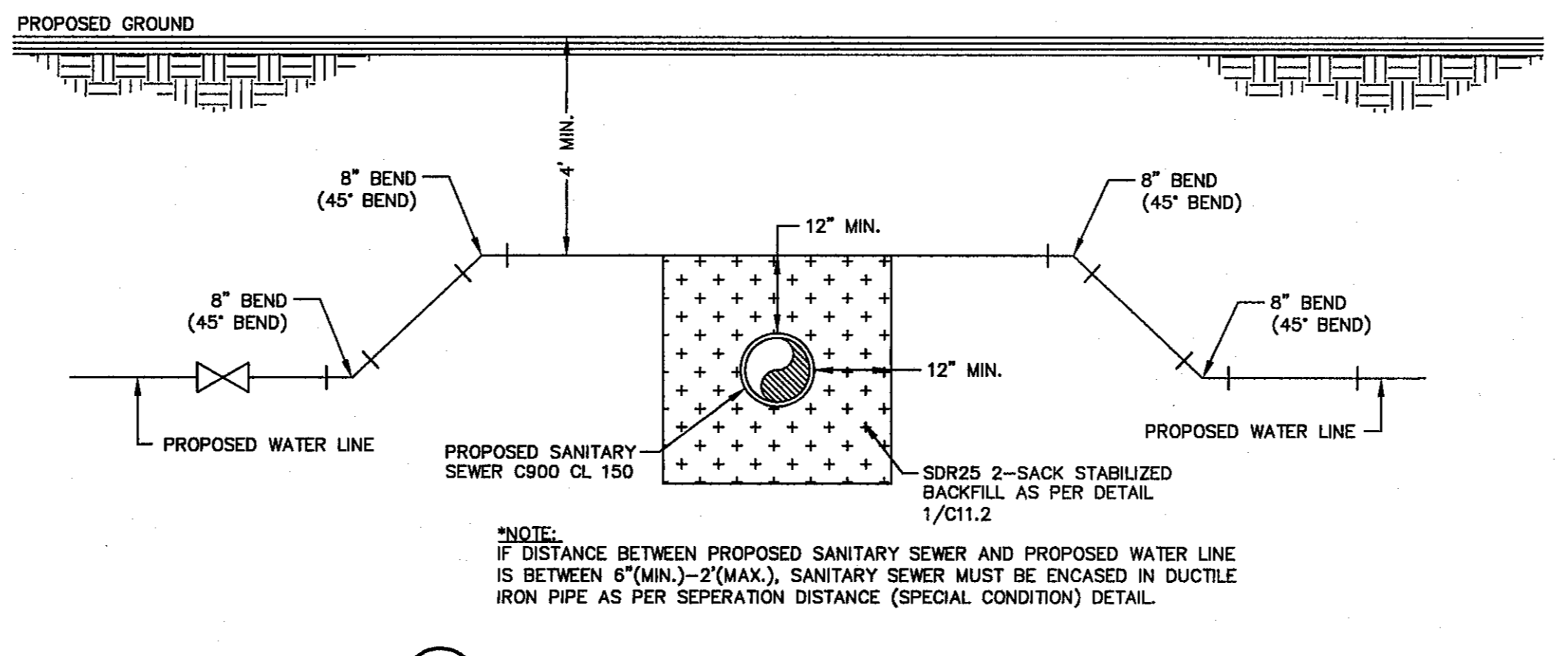
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SCALE: N.T.S.



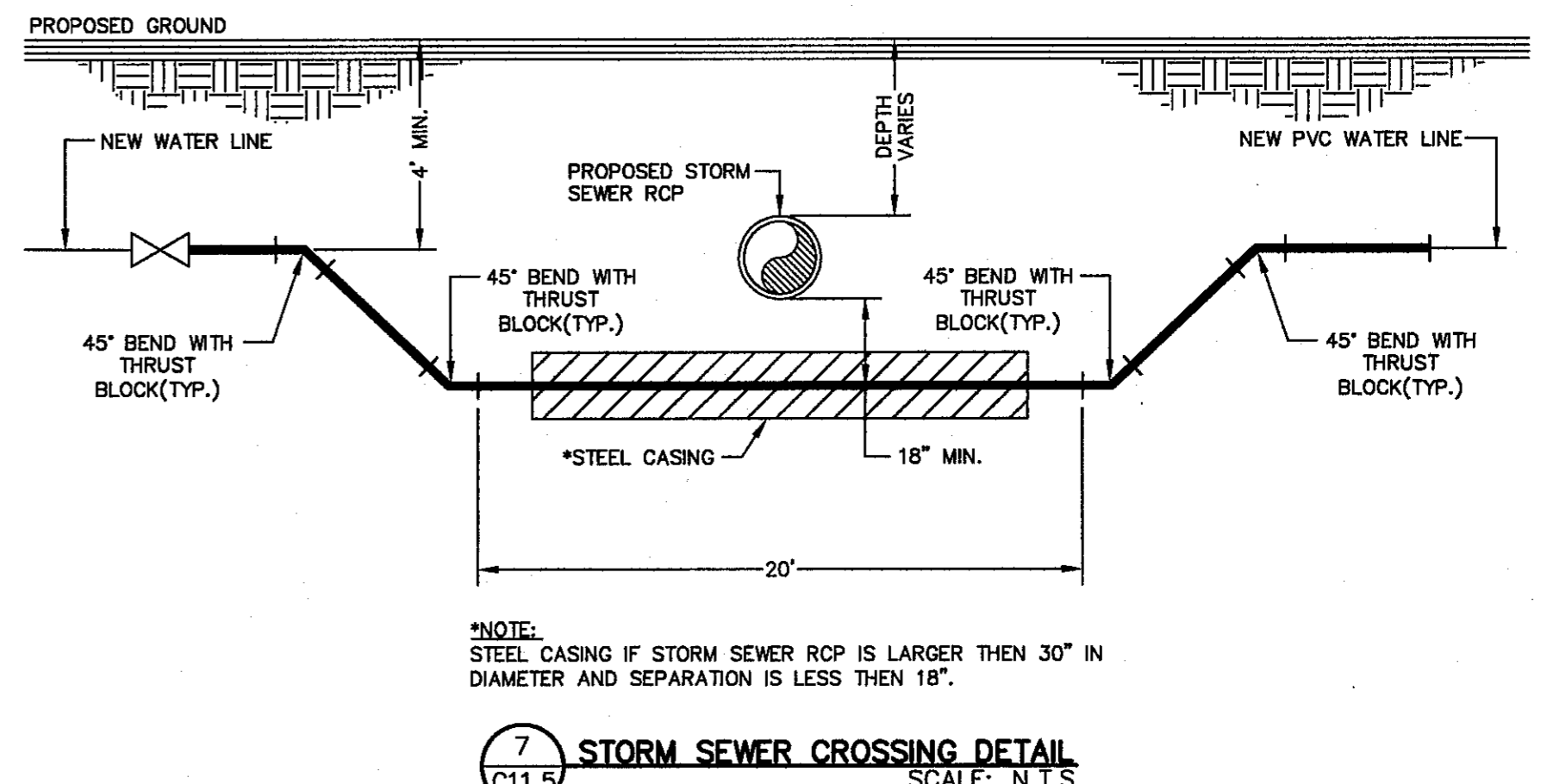
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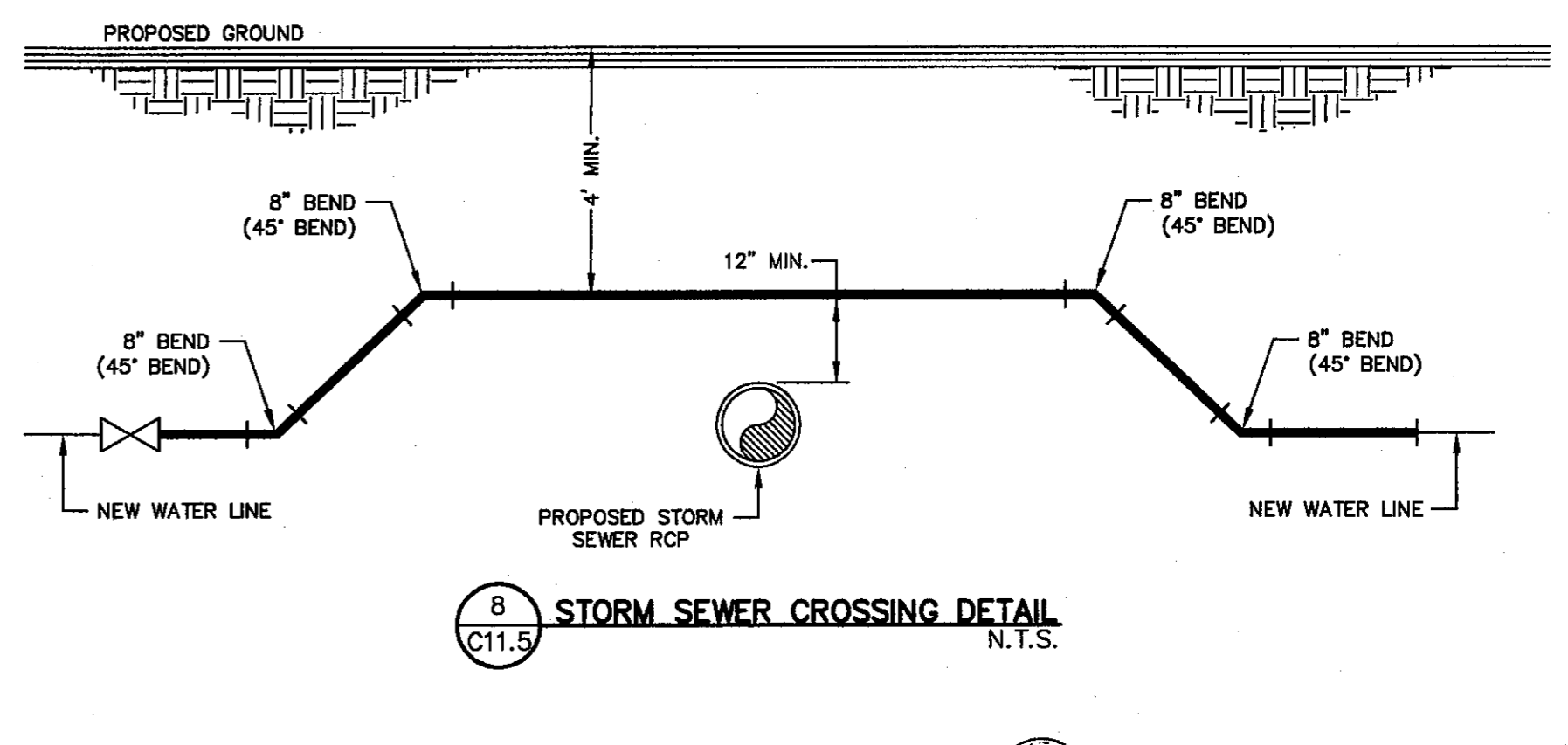
5 SANITARY SEWER CROSSING WATER LINE DETAIL
SCALE: N.T.S.



6 SANITARY SEWER CROSSING WATER LINE DETAIL
SCALE: N.T.S.



7 STORM SEWER CROSSING DETAIL
SCALE: N.T.S.



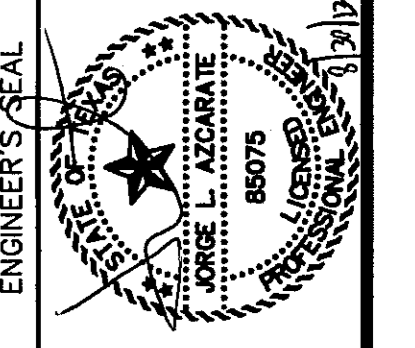
8 STORM SEWER CROSSING DETAIL
SCALE: N.T.S.

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM 510.00 TO 510.33 DISTANCE OF 32.97 FEET FROM MONUMENT TO BENCHMARK ELEVATION 1005.40 AVENUE CITY DATUM. ELEVATION 1005.40

DATE	REVISIONS	BY

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4712 Woodrow Bean, Ste. F, El Paso, TX 79924
Office: 915.544.8222 Fax: 915.544.8223 www.ceea.com



SCALE: N/A
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: JHL
DRAWN BY: JHL
CHKD. BY: JHL
APP'D. BY: JHL
JOB No. 22-50-030-LD

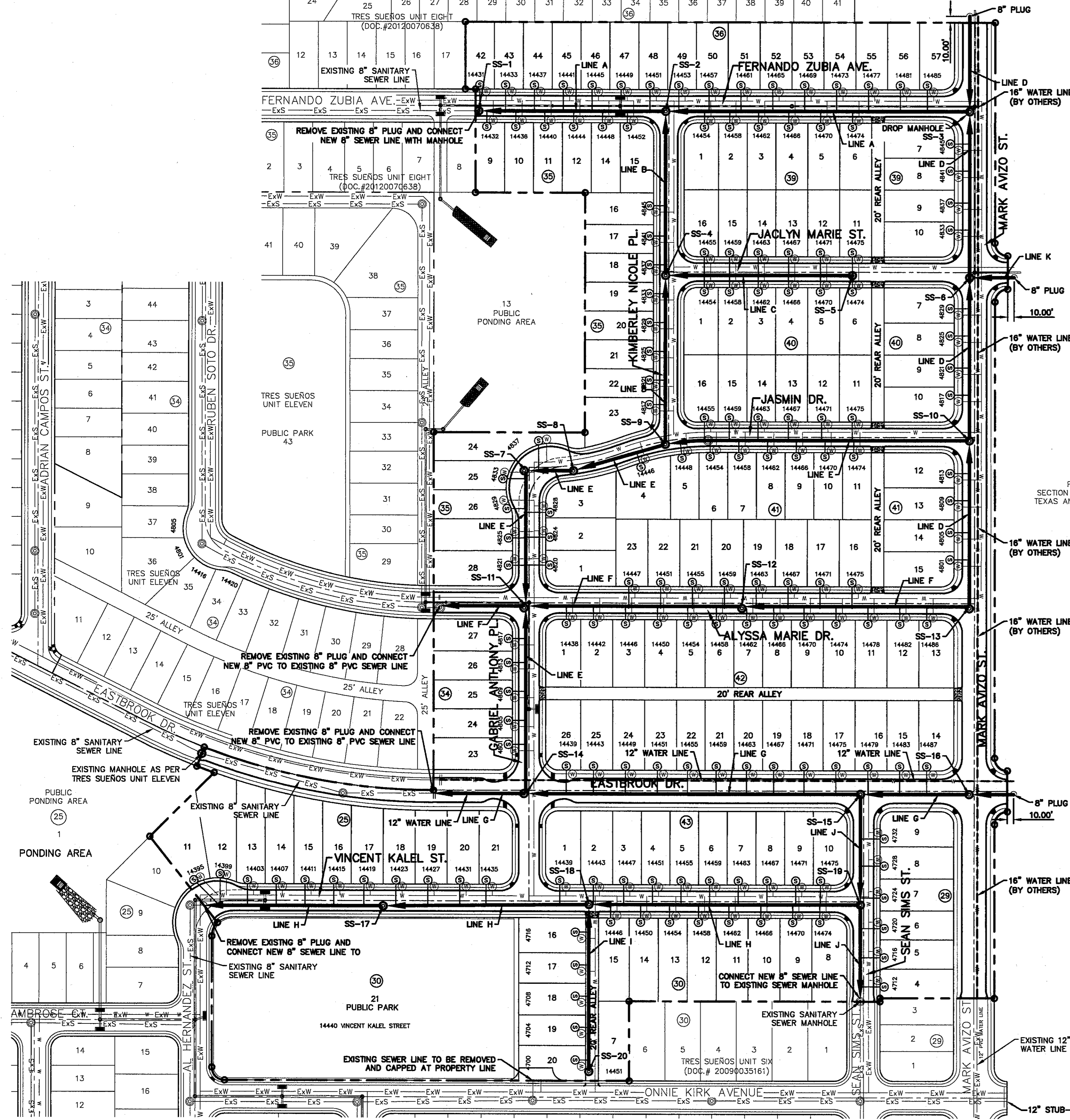
PROJECT TITLE
**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

SHEET TITLE
WATER DETAILS
(SHEET 4 OF 4)
SHEET NO.

CITY DEVELOPMENT DEPARTMENT
REVIEWED

C11.5

S:\2250\2250-0000\CIBCS\Construction Drawings\Improvement Plans\C11.5 WTR DET ALL.dwg, Model, 8/20/2013 3:17:42 PM



CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.

WARNING I BEFORE YOU DIG
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES

LINE TABLE			LINE TABLE		
LINE	BEARING	LENGTH	LINE	BEARING	LENGTH
L1	N89°59'35"E	292.93'	L15	N89°59'49"W	134.50'
L2	N89°59'35"E	477.00'	L16	N89°59'49"W	338.86'
L3	N00°00'11"E	149.00'	L17	S89°59'49"E	356.65'
L4	N00°00'11"E	257.00'	L18	S00°00'25"E	294.00'
L5	S00°00'11"W	272.00'	L19	N89°59'49"W	144.50'
L6	N89°59'35"E	293.01'	L20	S89°59'49"E	524.82'
L7	N89°59'35"E	70.00'	L21	S89°59'49"E	170.43'
L8	N00°00'11"E	264.18'	L22	S89°59'49"E	70.00'
L9	N00°00'11"E	243.00'	L23	N00°00'25"W	173.00'
L10	N89°59'49"W	74.40'	L24	S89°59'45"E	280.85'
L11	N73°46'52"E	149.91'	L25	N89°28'08"E	322.29'
L12	N89°59'35"E	409.68'	L26	N89°59'49"W	425.56'
L13	N00°00'25"W	212.00'	L27	N00°00'11"E	282.04'
L14	N00°00'11"E	260.14'	L28	N00°00'25"W	151.59'

INDEX

SHEET NO.	DESCRIPTION
C14.1	TRES SUEÑOS UNIT TEN SANITARY PIPE LAYOUT
C12.2-C12.7	SANITARY SEWER PLAN & PROFILE.
C12.8-C12.8	SANITARY DETAILS

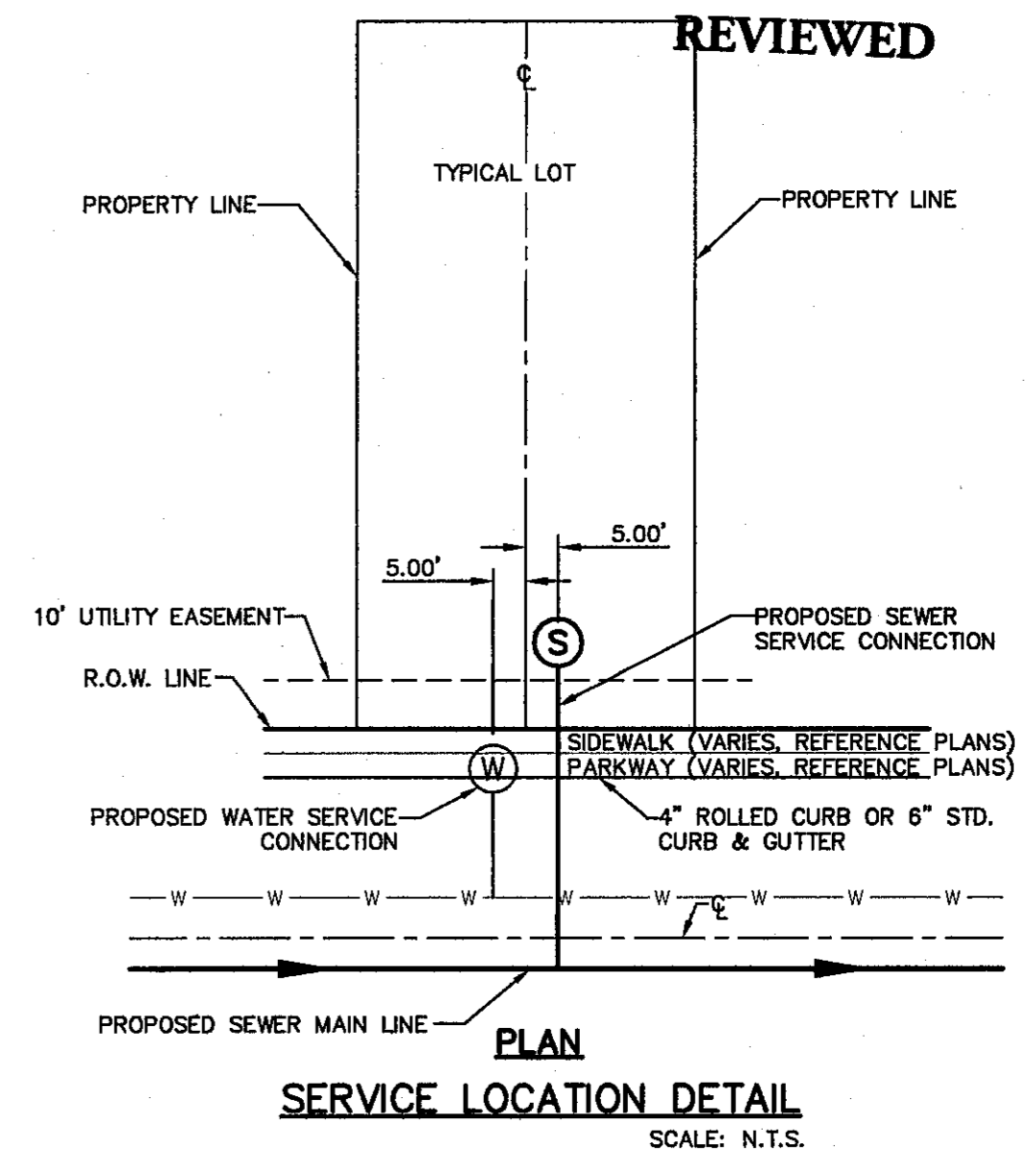
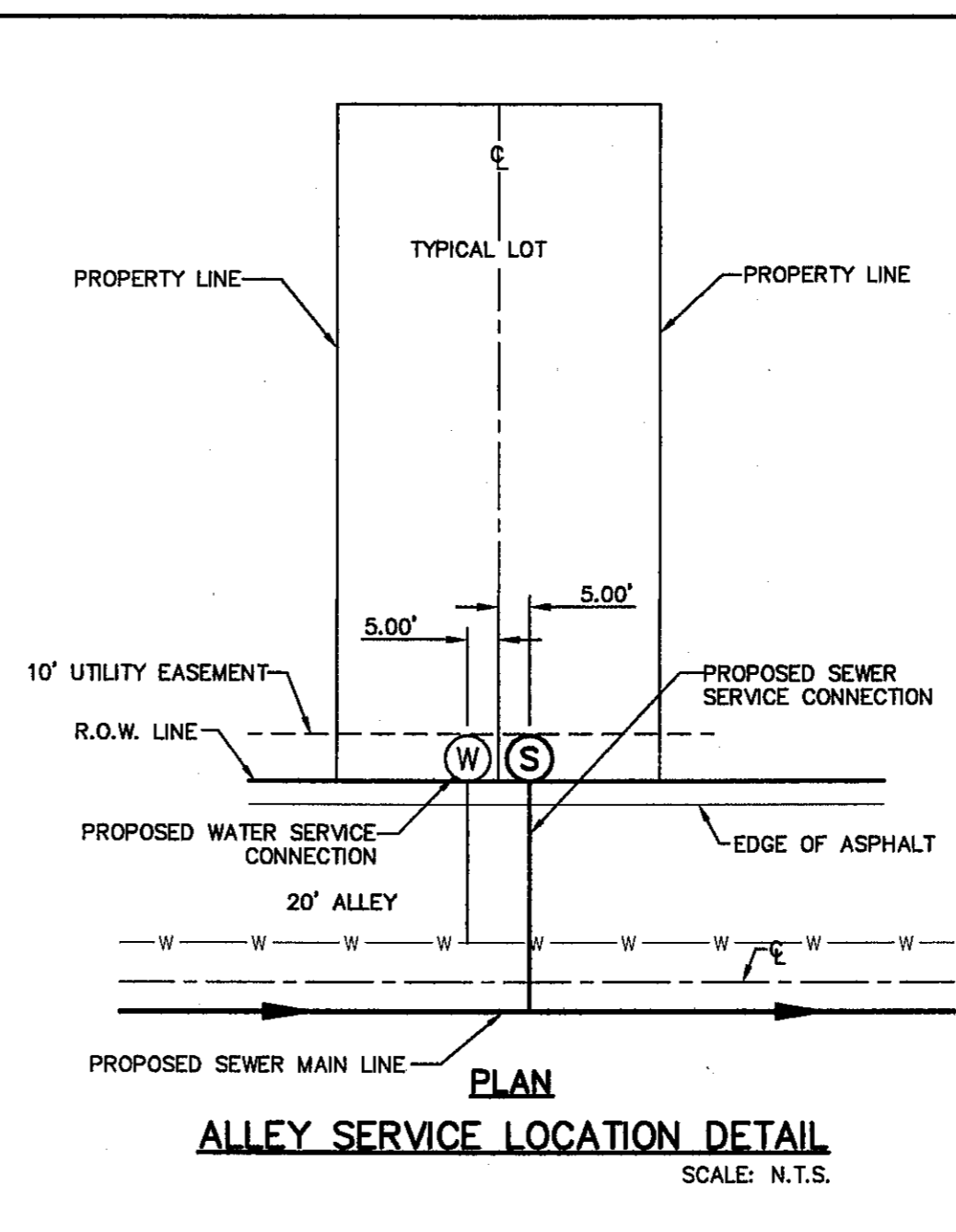
NOTES:

- ALL LOTS SHALL BE PROVIDED WITH ONE SERVICE CONNECTION TO BE INSTALLED AT THE LOCATION AS SHOWN ON THE SERVICE LOCATION DETAIL.
- ALL SANITARY SEWER PIPES SHALL BE PVC, SDR 35, (D 3034), UNLESS OTHERWISE SHOWN.
- REFERENCE TRES SUEÑOS UNIT SIX, TRES SUEÑOS UNIT EIGHT, AND TRES SUEÑOS UNIT ELEVEN FOR EXISTING SANITARY SEWER LINES ON FERNANDO ZUBIA AVENUE, ALYSSA MARIE DRIVE, EASTBROOK DRIVE, AL HERNANDEZ, STREET, SEAN SIMS STREET, AND MARK AVIZO STREET.

LEGEND

SYMBOL	DESCRIPTION
	PROPOSED STORM SEWER LINE
	SUBD. BOUNDARY LINE
	PROPERTY LINE
	CENTER LINE
	PROPOSED SEWER LINE (PLAN VIEW)
	PROPOSED SEWER LINE ON ANOTHER SHEET (PLAN VIEW)
	PROPOSED SEWER LINE (PROFILE VIEW)
	PROPOSED SERVICE CONNECTION (PLAN VIEW)
	PROPOSED MANHOLE (PLAN VIEW)
	EXISTING MANHOLE (PLAN VIEW)
	EXISTING SEWER LINE
	PROPOSED MANHOLE (PROFILE VIEW)
	EXISTING MANHOLE (PROFILE VIEW)

SANITARY SEWER INDEX MAP
SCALE: 1" = 100'



GENERAL NOTES

- UNLESS OTHERWISE SHOWN ON THE DRAWINGS, THE PROPOSED SEWER MAINS AND SEWER MANHOLES SHALL BE INSTALLED NO LESS THAN 10' AWAY FROM EXISTING WATER LINE. SEPARATIONS DISTANCES SHALL FOLLOW TCEQ STANDARD REQUIREMENTS (§290.44)
- THE INTENT OF THE OWNER IS TO HAVE THE SANITARY SEWER PIPELINES INSTALLED TO SUCH A DEPTH THAT THEY WILL HAVE AT LEAST 48" OF COVER BELOW PROPOSED GROUND AT ALL LOCATIONS. THE PIPELINES SHALL HAVE NO DIPS, SAGS OR HUMPS OR OTHER IRREGULARITIES IN VERTICAL ALIGNMENT. CONSIDERING UTILITIES AND OTHER CONDITIONS, VARIANCE FROM GRADE PROFILE IS NOT RECOMMENDED IF OTHER EXISTING UTILITIES OR OBSTRUCTIONS ARE ENCOUNTERED DURING THE WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO INSTALLING THE SEWER PIPELINE SO THAT AN ACCEPTABLE PROFILE CAN BE ESTABLISHED PRIOR TO INSTALLATION OF THE PIPELINE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN IN THE PLANS, AND COORDINATE HIS WORK WITH ALL UTILITY COMPANIES, EL PASO WATER UTILITIES AND CITY OF EL PASO PRIOR TO CONSTRUCTION. ALL EXISTING UTILITY DEPTHS ARE UNKNOWN. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR ACQUIRING FIELD DEPTHS OF ALL UTILITIES WITH THE PROJECT AREAS.
- TRENCH SAFETY REQUIREMENTS SHALL COMPLY WITH CURRENT OSHA REGULATIONS.
- AS-BUILT STATIONING, OFFSET FROM R.O.W. AND INVERT ELEVATIONS SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR ON A CLEAN SET OF PLANS FOR EACH MANHOLE, SERVICE CONNECTION AND/OR STUB-OUT, WITH RESPECT TO THE APPROPRIATE PROJECT CONTROL POINT.
- THE EL PASO WATER UTILITIES AND CITY OF EL PASO MUST BE NOTIFIED 48 HOURS PRIOR TO COMMENCING ANY WORK IN AREAS WITHIN THEIR JURISDICTION. A COPY OF ALL FIELD SOIL DENSITY TESTS WITHIN THEIR RESPECTIVE R.O.W. SHALL BE FORWARDED TO THE DEVELOPER'S ENGINEER AND THE DEVELOPER BY THE CONTRACTOR.
- EXISTING STREETS, DRIVEWAYS AND ALL OTHER MISCELLANEOUS STRUCTURES DAMAGE OR REMOVED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ORIGINAL OR BETTER THAN ORIGINAL CONDITION.
- CONSTRUCTION OF THE PUBLIC WATER AND SEWER SYSTEM INCLUDING MATERIALS AND TESTING SHALL CONFIRM TO EPWU-PSB STANDARD SPECIFICATIONS FOR THE INSTALLATION OF WATER MAINS, SEWER MAINS, SERVICE LINES, AND RELATED APPURTENANCES.

GENERAL UTILITIES:
TEXAS EXCAVATION SAFETY SERVICE
11284 GREENVILLE AVENUE
DALLAS, TX 75243
(800) 344-8377

WATER & SEWER:
EL PASO WATER UTILITIES
1154 HAWKINS BLVD #1
EL PASO, TX 79902
(915) 594-5500
MR. FELIPE LOPEZ, P.E.

TELEPHONE:
SBC
11200 PELICANO
P.O. BOX 1650
EL PASO, TX 79949
(915) 595-5151
MR. TIM BROWN

ELECTRIC:
EL PASO ELECTRIC CO.
4045 DONIPHAN PARK CIRCLE
EL PASO, TX 79902
(915) 543-2076
MR. FRANK VIGEL (DISTRIBUTION)

ENGINEER:
CEA GROUP
4712 WOODROW BEAN, STE. F.
EL PASO, TX 79924
(915) 544-5232
MR. JORGE L. AZCARATE, P.E.

FIBER OPTICS:
U.S. SPRINT
151 N. BOONE ST.
EL PASO, TX 79905
(915) 534-7910
MR. RICK DERAGISCH

FIBER OPTICS:
AT&T
P.O. BOX 1650
EL PASO, TX 79949
(800) 852-3786
MS. DARLENE NORIS

FIBER OPTICS:
MCI TELECOMMUNICATIONS CORP.
4045 DONIPHAN PARK CIRCLE
EL PASO, TX 79902
(915) 542-2770 EXT. 201
MR. DANIEL HERNANDEZ

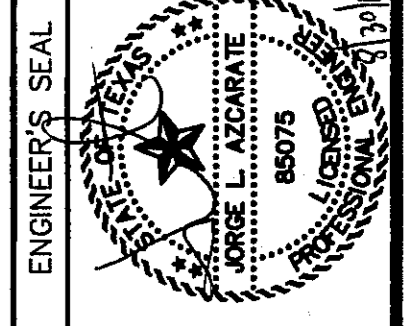
EL PASO STREETS
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION
7069 SAN PAULLO DR.
EL PASO, TX 79907
(915) 621-6750
MR. TED MARQUEZ, P.E.

RESIDENTIAL GAS LINES:
TEXAS GAS SERVICE
4700 POLLARD ST.
EL PASO, TX 79930
(915) 680-7218

CABLE TELEVISION:
TIME WARNER COMMUNICATIONS
7010 AIRPORT ROAD
EL PASO, TX 79906
(915) 772-1123

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM THE SOUTHERLY RIGHT OF WAY OF MONTANA AVENUE CITY DATUM. ELEVATION: 4006.40

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Group
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4712 Woodrow Bean, Ste. F, El Paso, TX 79924
Phone: 544-5232 Fax: 544-5233 www.ceea.com



SCALE: 1"=100'
Horizontal: N/A
Contour Interval: N/A
DATE: JULY 2013
DESIGN BY: JH
DRAWN BY: JH
CHKD. BY: J.G.
APPVD. BY: J.L.A.
JOB No. 2250-030-LD

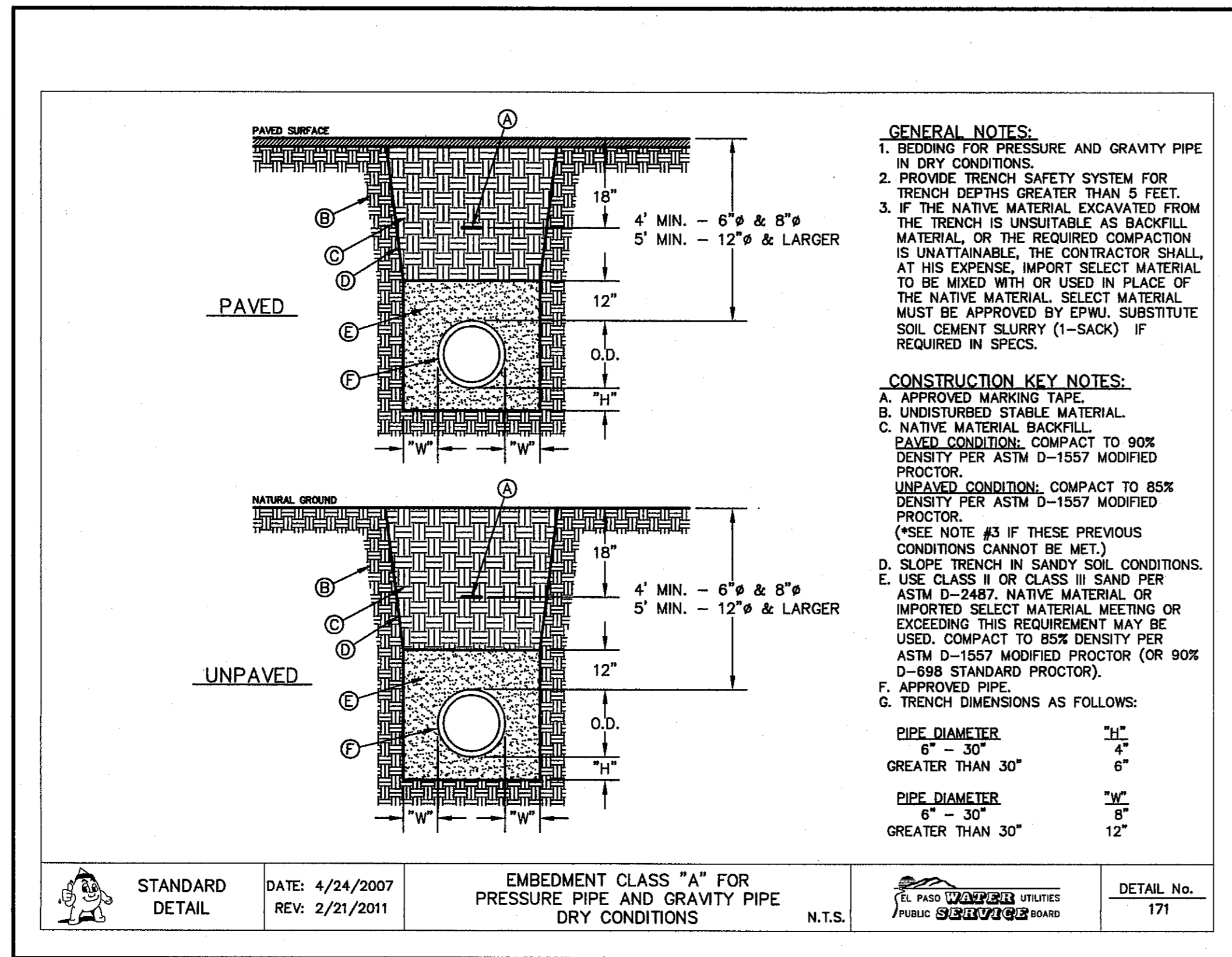
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TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE

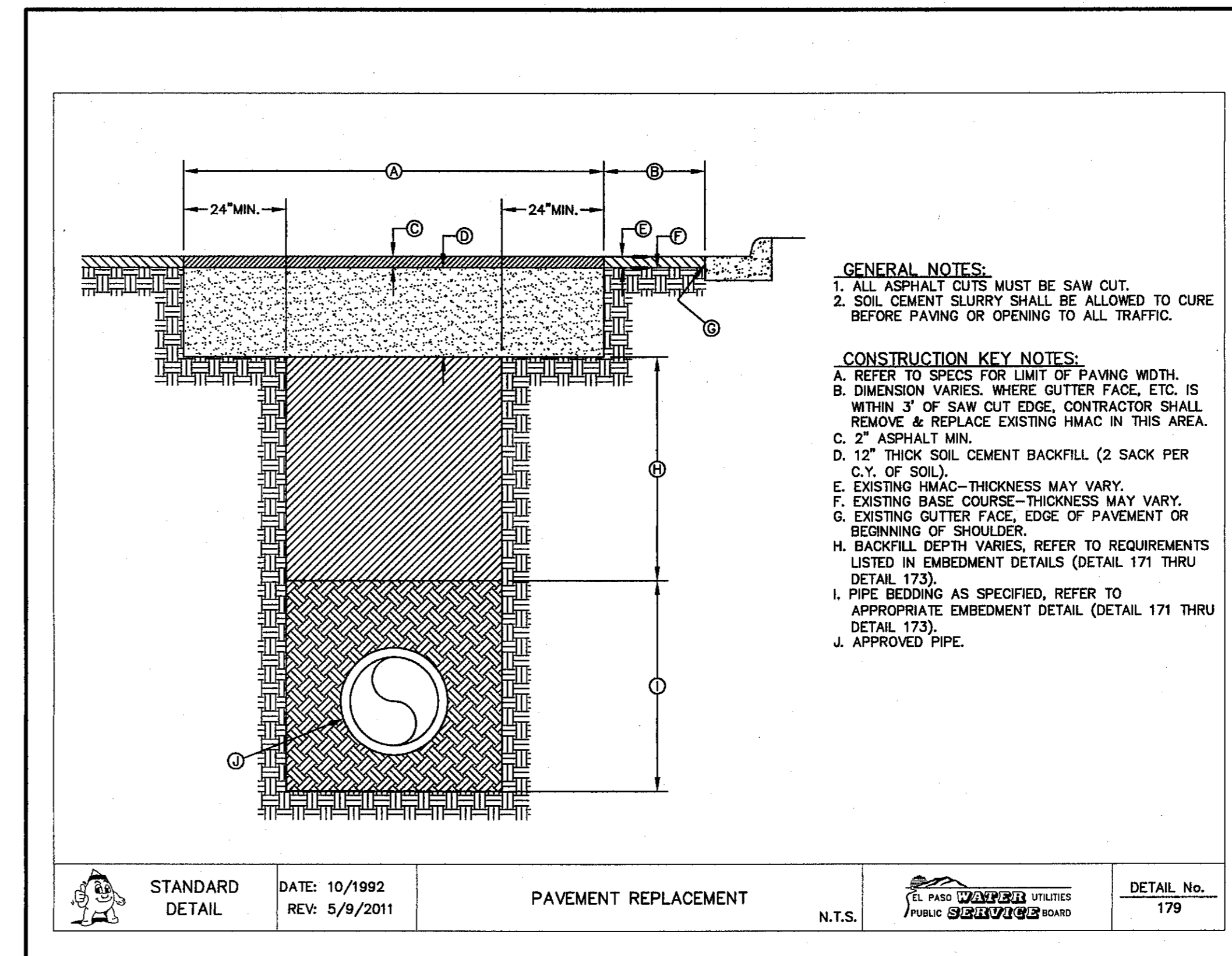
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SHEET NO.

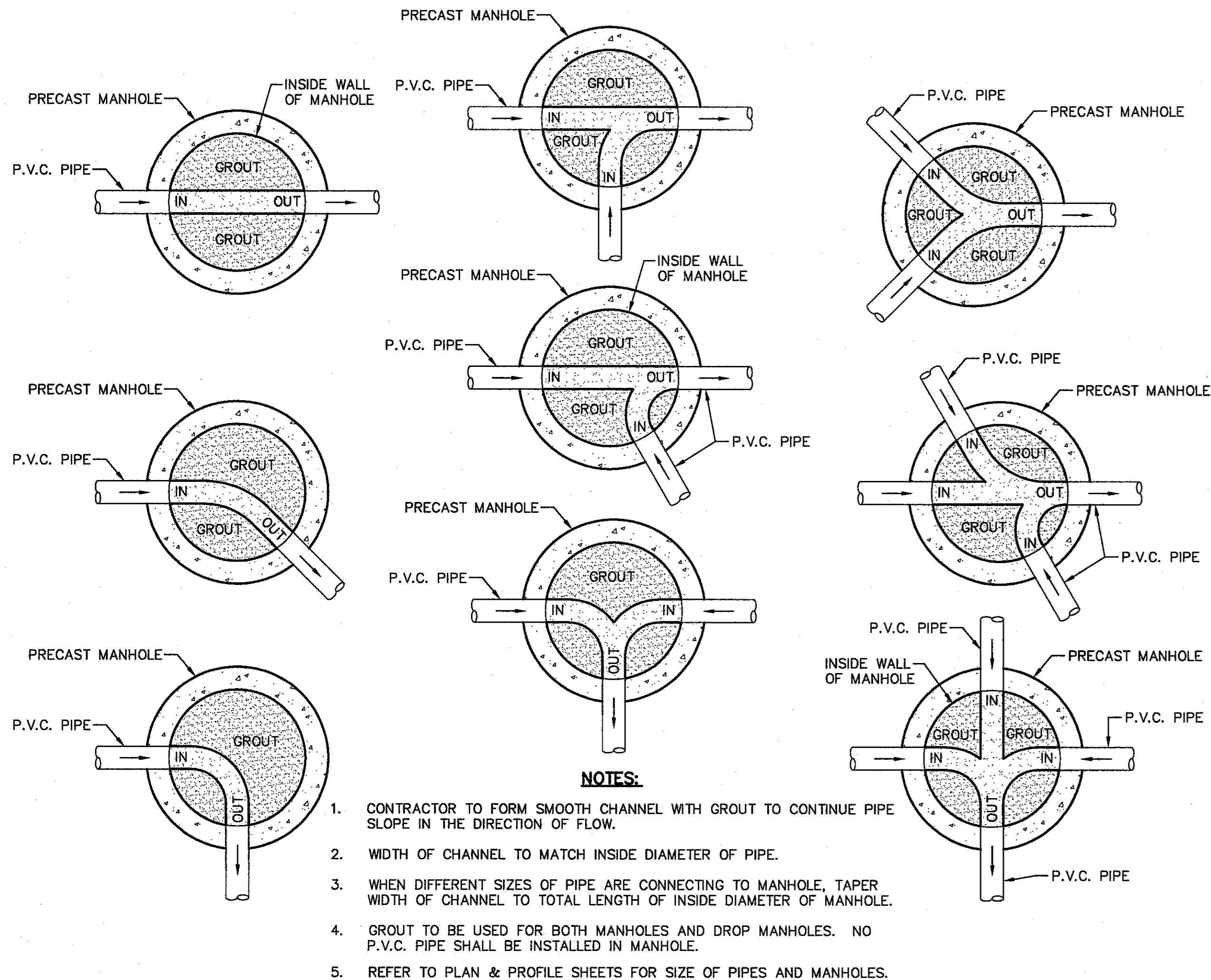
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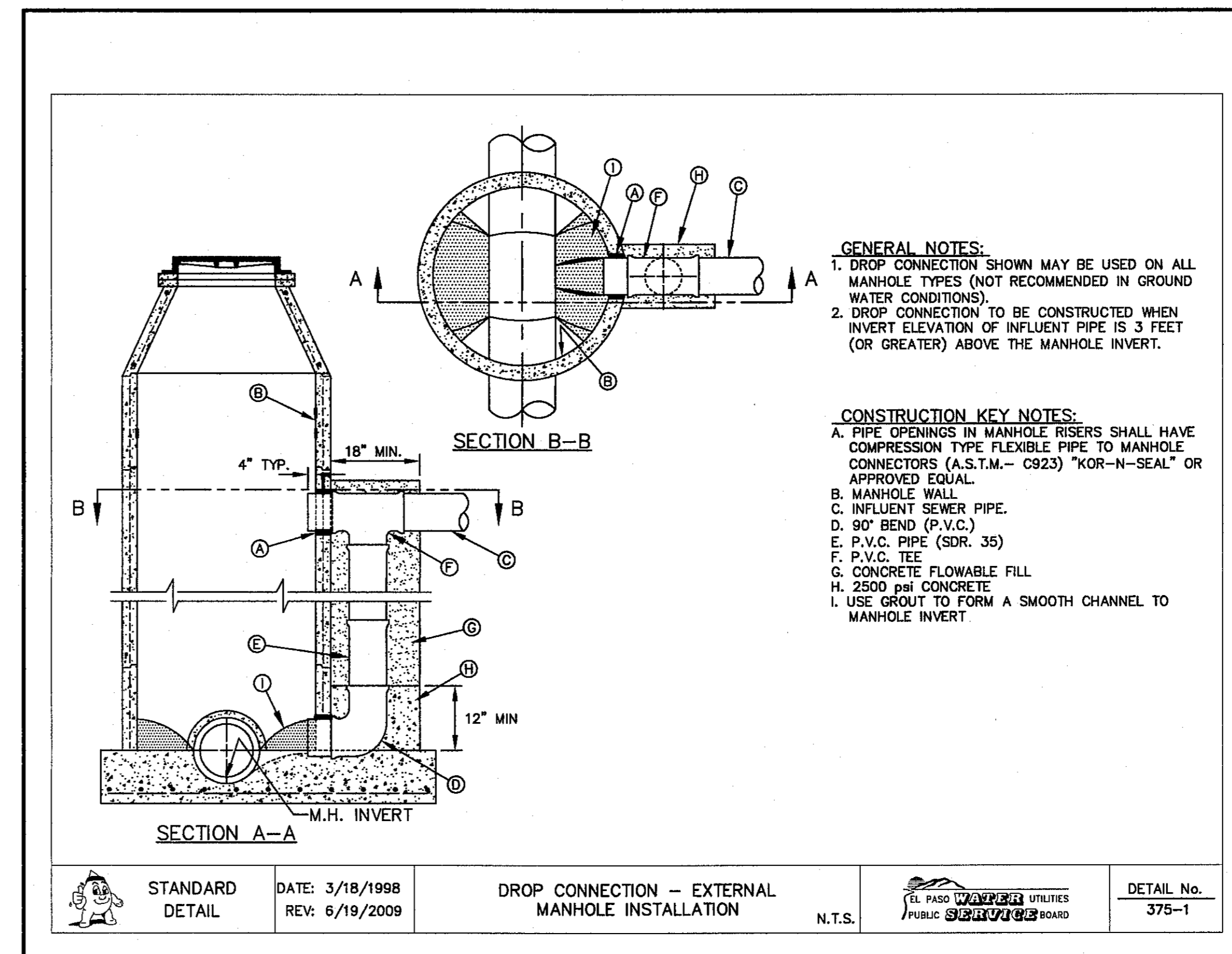
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2 PAVEMENT REPLACEMENT SCALE: N.T.S.



3 TYPICAL MANHOLE INVERT PLANS SCALE: N.T.S.



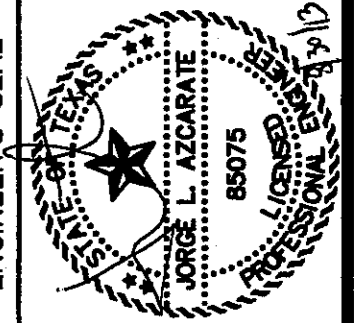
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REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH
FROM BLDG. CORNER TO BLDG. CORNER DISTANCE 1467.50 FEET
FROM BLDG. CORNER TO BLDG. CORNER DISTANCE 1467.50 FEET
AVENUE CITY DATUM. ELEVATION 4005.40

DATE	REVISIONS	BY

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TEXAS REGISTERED ENGINEERING FIRM F-4684
4712 Woodrow Wilson, Ste. F El Paso, TX 79924
Office: 915.544.5222 Fax: 915.544.4233 www.cesgroup.net



SCALE: N/A
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.G.
APPRD. BY: J.L.A.
JOB No. 22450-030-1LD

PROJECT TITLE
**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**SANITARY SEWER
DETAILS**
(SHEET 3 OF 3)
SHEET NO.

C12.10

CITY DEVELOPMENT DEPARTMENT
REVIEWED

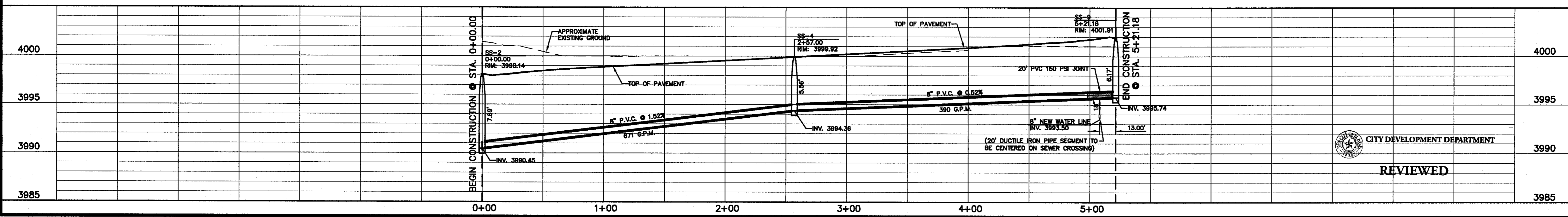
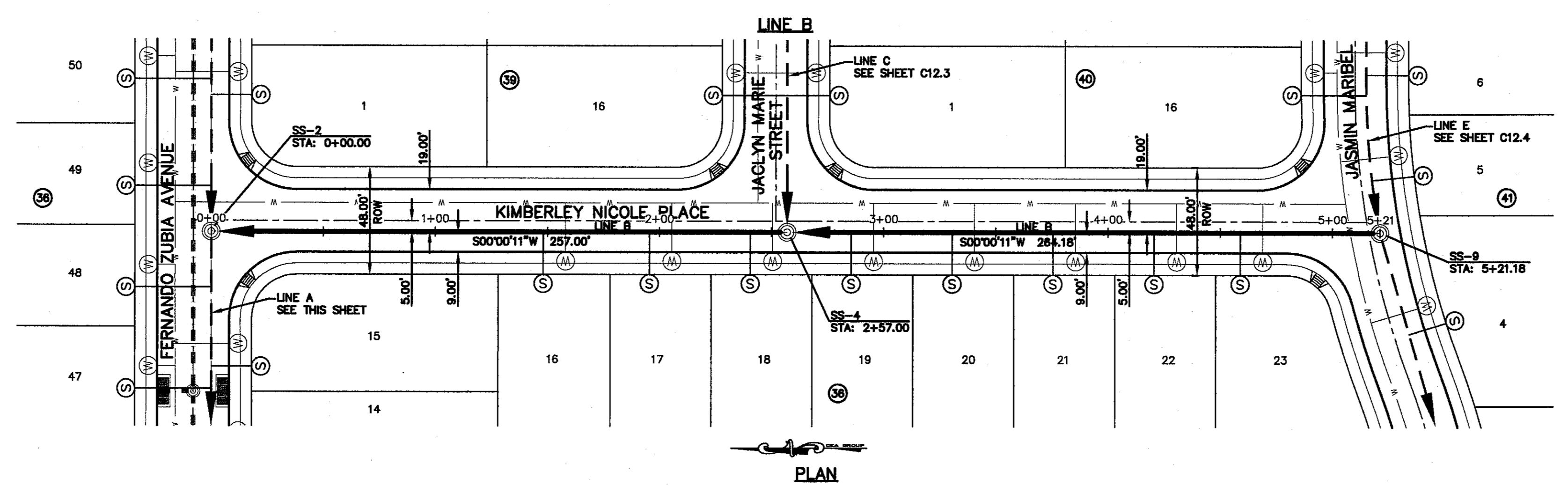
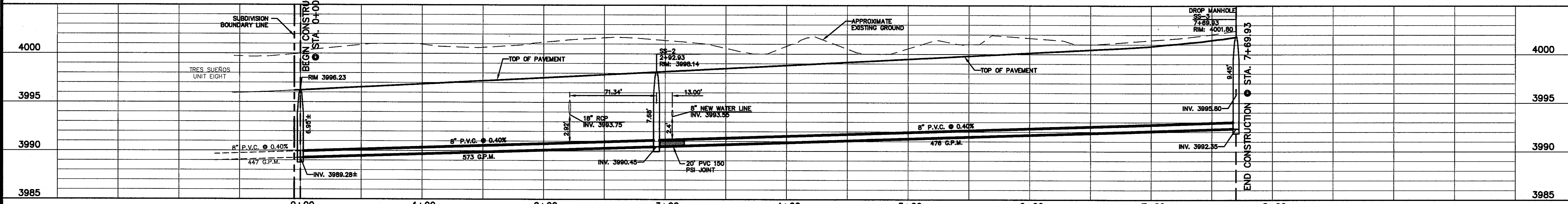
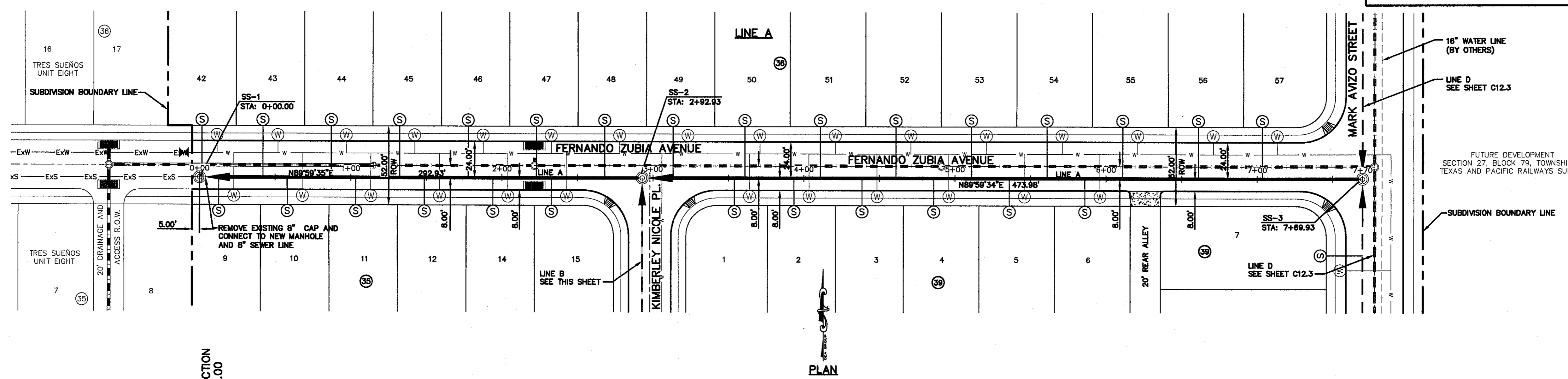
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UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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CALL
1-800-DIG-TESS
1-800-344-8377

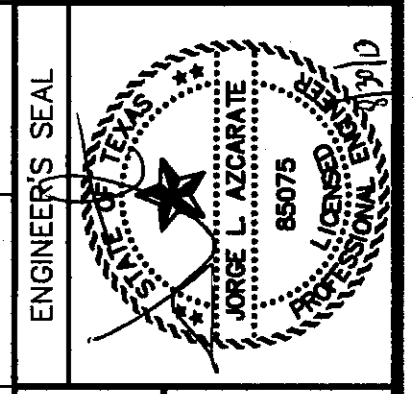
FOR FIELD LOCATING EXISTING UTILITIES



- LEGEND:**
- PROPOSED SEWER LINE
 - PROPOSED SEWER LINE ON ANOTHER SHEET (PLAN VIEW)
 - - - - - PROPOSED STORM SEWER LINE
 - - - - - PROPOSED WATER LINE
 - ⊙ PROPOSED WATER SERVICE
 - ⊙ PROPOSED SEWER SERVICE
 - ⊙ PROPOSED SEWER MANHOLE
 - - - - - EXS EXS EXISTING SEWER LINE
 - - - - - EXW EXW EXISTING WATER LINE
- NOTE:**
- 20' C-900, CLASS 150 SEGMENT SHALL BE CENTERED ABOVE ALL WATER CROSSINGS, ON SEWER LINE WHERE APPLICABLE.

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40

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Office: 915-594-5522 Fax: 915-594-5523 www.cead.com



SCALE: 1"=40'
Horizontal: 1"=5'
Vertical: Contour Interval: N/A
DATE: JULY 2013
DESIGN BY: JH
DRAWN BY: JH
CHKD BY: JG
APPVD BY: JLA
JOB No. 2250-030-LD

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
SANITARY SEWER PLAN & PROFILE LINE A & LINE B

SHEET NO.
C12.2

REVIEWED
CITY DEVELOPMENT DEPARTMENT

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
BEFORE YOU DIG

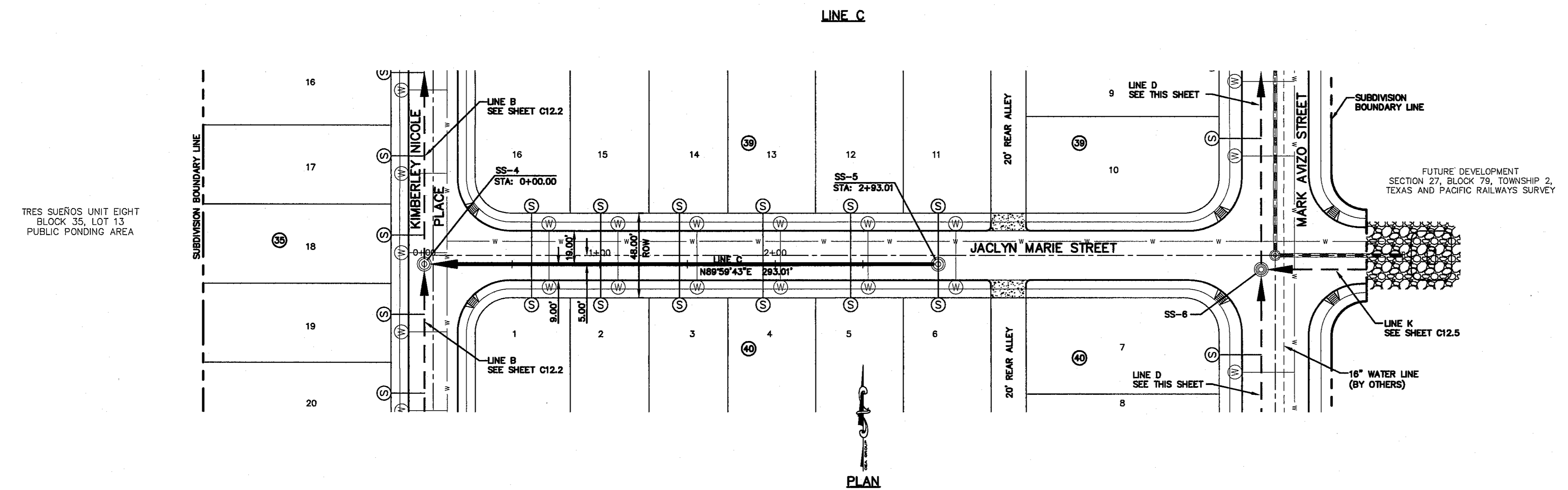
CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

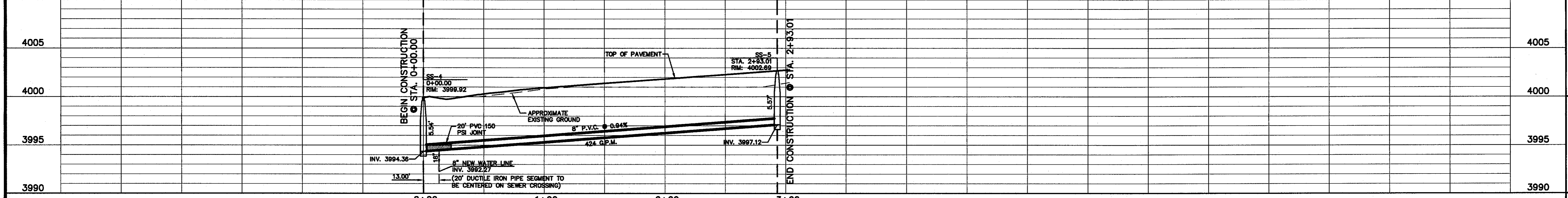
REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., SUB-93.37'E, A DISTANCE OF 487.56 FEET FROM THE INTERSECTION OF RICH BEEM BLVD. AND AVENUE CITY DATUM. ELEVATION: 4065.40

DATE	REVISIONS	BY



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4712 Woodrow Bess, Ste. F, El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.csandamp.com

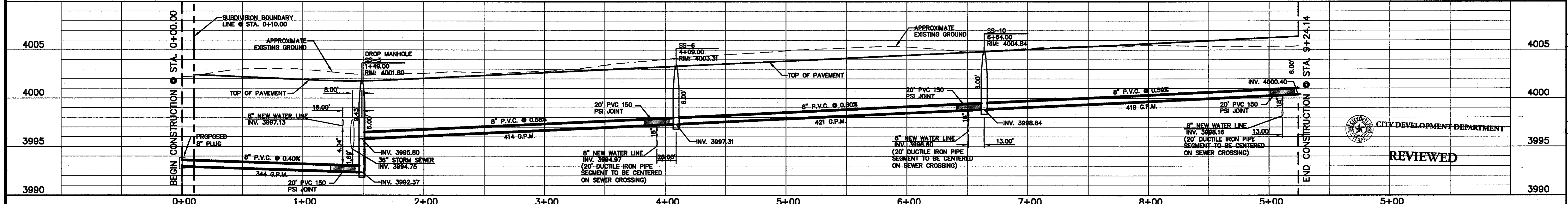
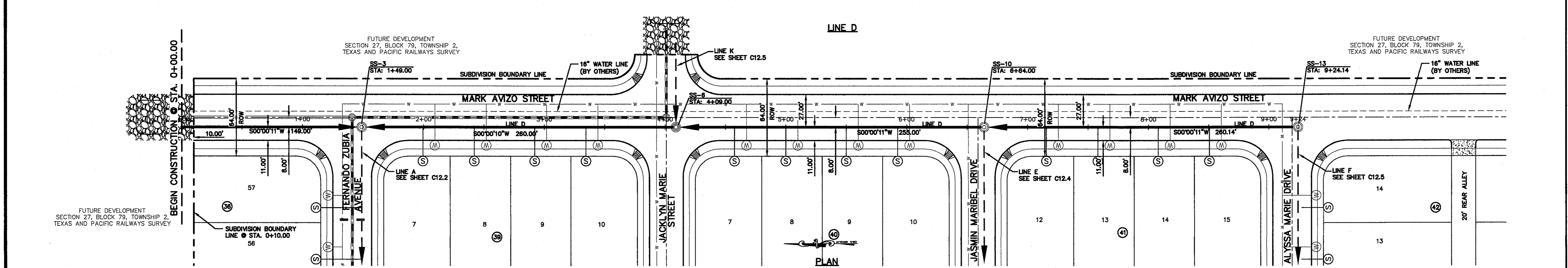


ENGINEER'S SEAL

SCALE: 1"=40'
Vertical: 1"=5'
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.G.
APPD. BY: J.L.A.

JOB No. 2250-030-LD



PROJECT TITLE

TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE

SANITARY SEWER
PLAN & PROFILE
LINE C & LINE D

SHEET NO.

C12.3

REVIEWED

CITY DEVELOPMENT DEPARTMENT

E:\2250\2250-030\2250-C12.3\Construction\Drawings\Improvements\Plan\07.23.13\07.23.13_01.dwg, Sheet: Line C & D, 7/29/2013, 3:21:50 PM

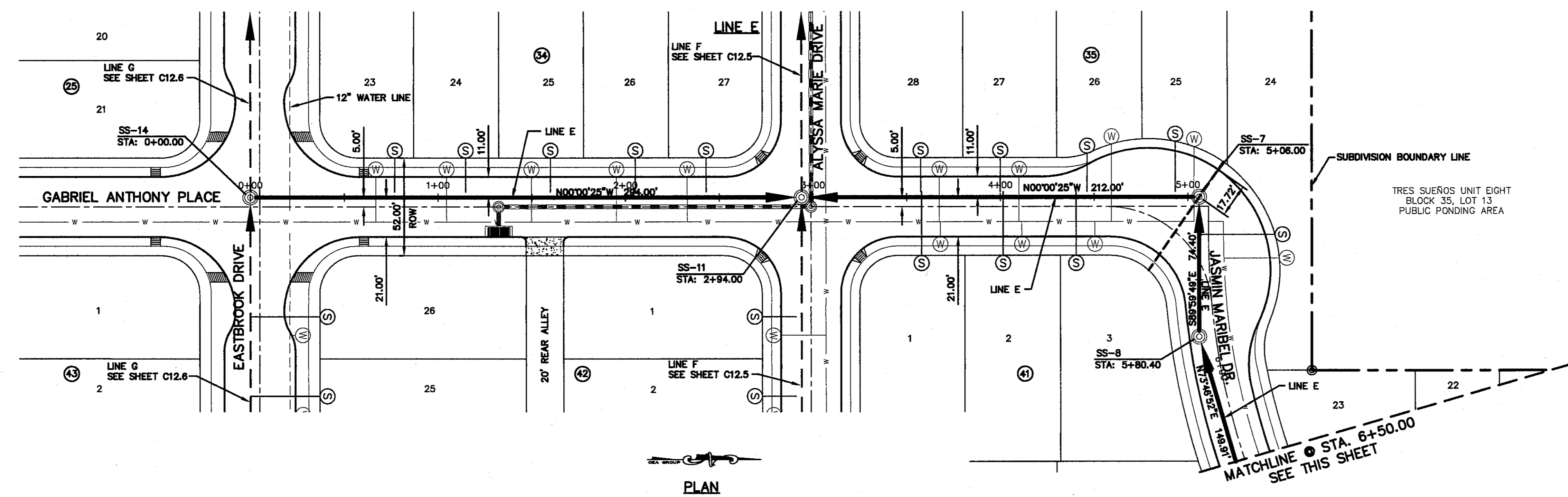
UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES



- LEGEND:**
- PROPOSED SEWER LINE
 - PROPOSED SEWER LINE ON ANOTHER SHEET (PLAN VIEW)
 - - - PROPOSED STORM SEWER LINE
 - - - PROPOSED WATER LINE
 - W PROPOSED WATER SERVICE
 - S PROPOSED SEWER SERVICE
 - ⊙ PROPOSED SEWER MANHOLE
- NOTE:**
- 20' C-900, CLASS 150 SEGMENT SHALL BE CENTERED ABOVE ALL WATER CROSSINGS, ON SEWER LINE WHERE APPLICABLE.

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., 589'43.73' E, A DISTANCE OF 487.56 FEET FROM THE CENTERLINE OF AVENUE CITY DATUM. ELEVATION 4006.40

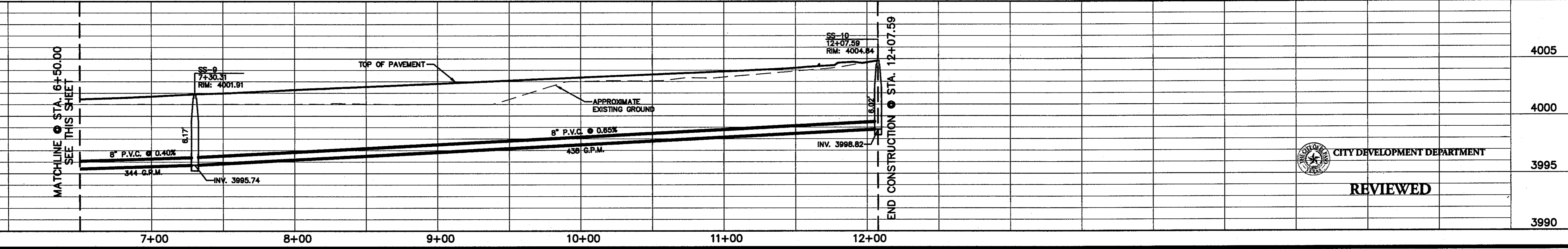
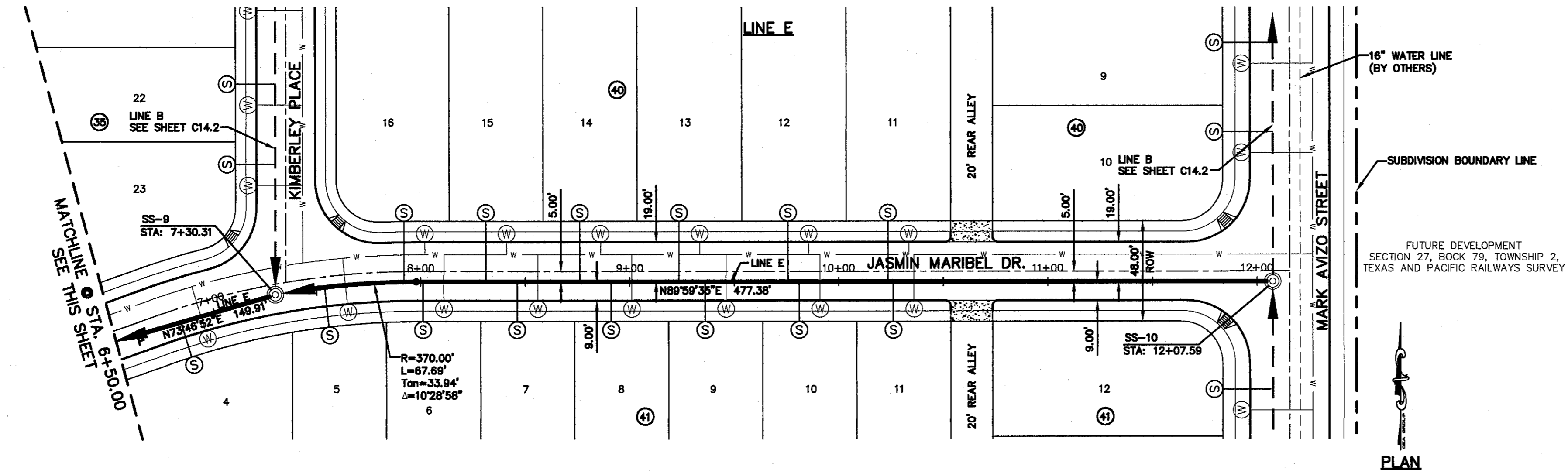
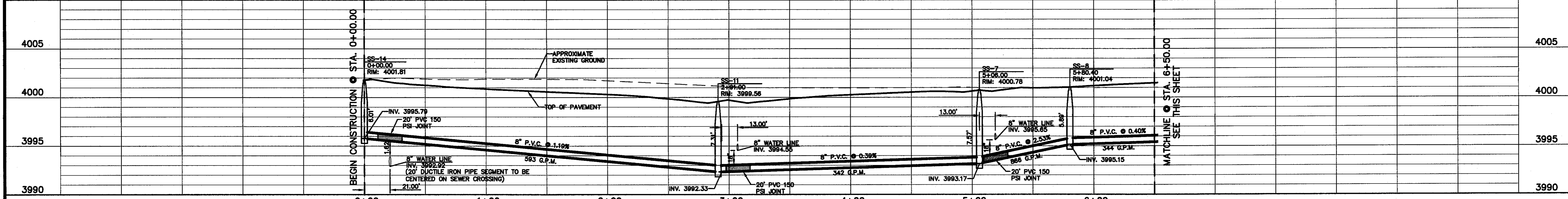
DATE	REVISIONS	BY

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4712 Woodrow Bann, Ste. F El Paso, TX 79924
Office: 915.544.6222 Fax: 915.544.6233 www.csandamp.com



ENGINEER'S SEAL

SCALE 1"=40'

Horizontal: 1"=50'

Vertical: 1"=5'

Contour Interval: N/A

DATE: JULY 2013

DESIGN BY: J.H.

DRAWN BY: J.H.

CHKD. BY: J.G.

APPRD. BY: J.L.A.

JOB No. 2250-030-LD

PROJECT TITLE

TRES SUEÑOS UNIT TEN SUBDIVISION IMPROVEMENTS

SHEET TITLE

SANITARY SEWER PLAN & PROFILE LINE E

SHEET NO.

C12.4

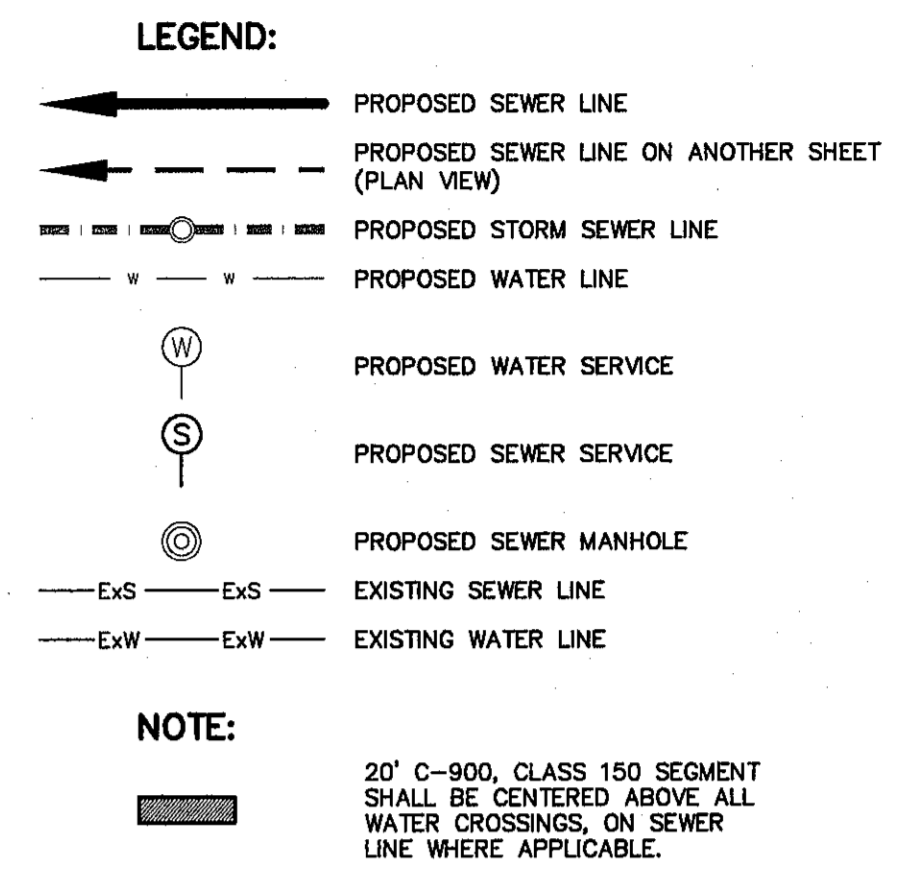
CITY DEVELOPMENT DEPARTMENT

REVIEWED

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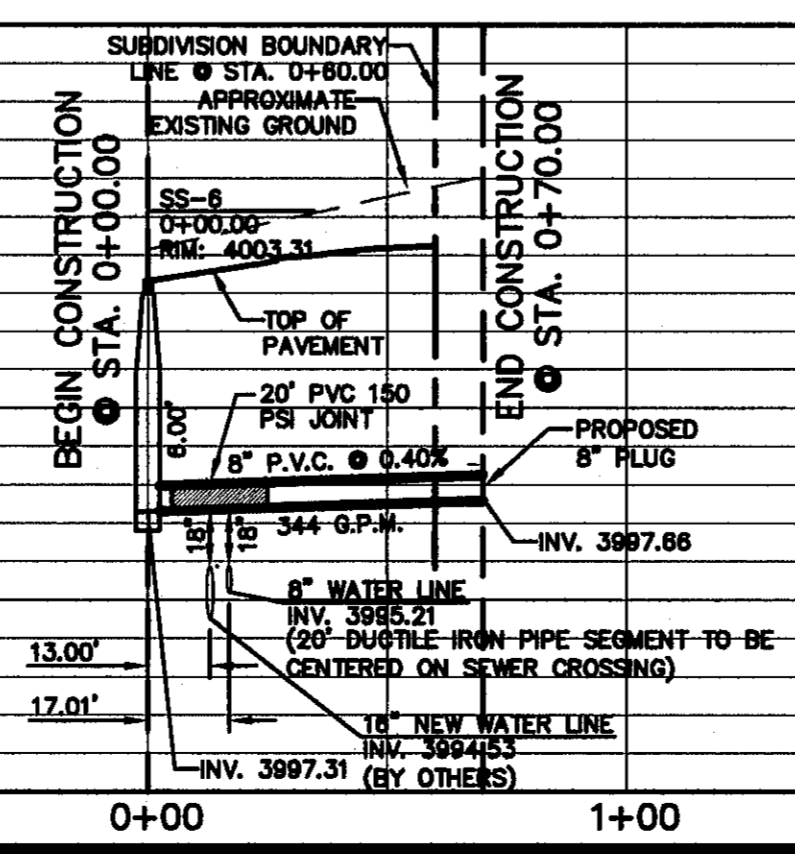
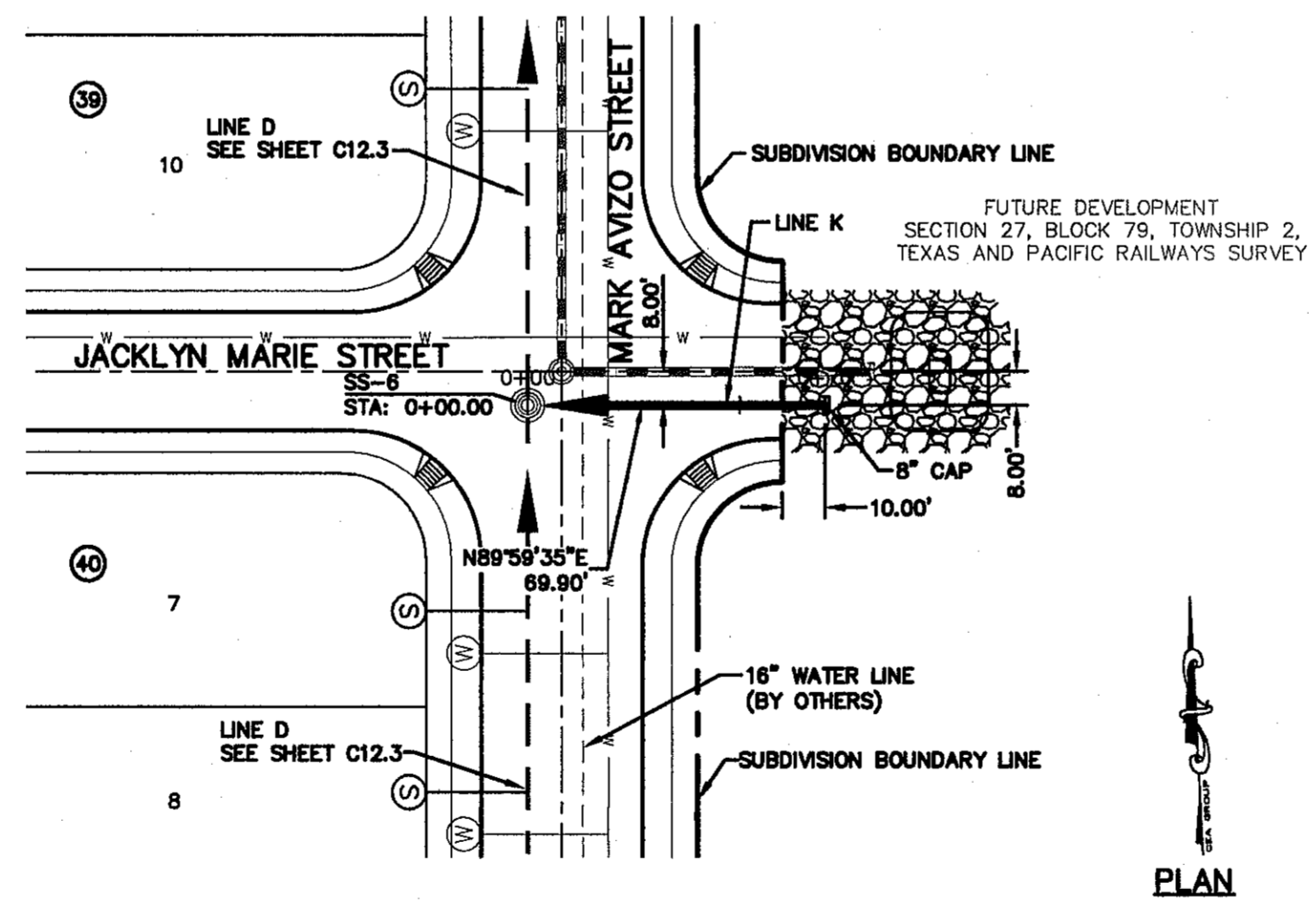
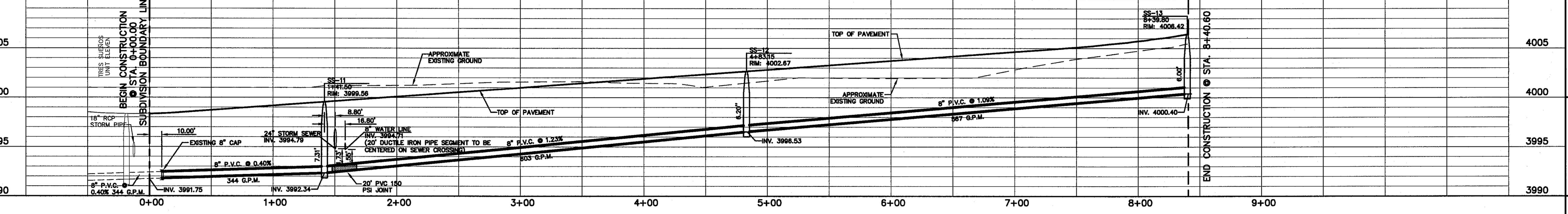
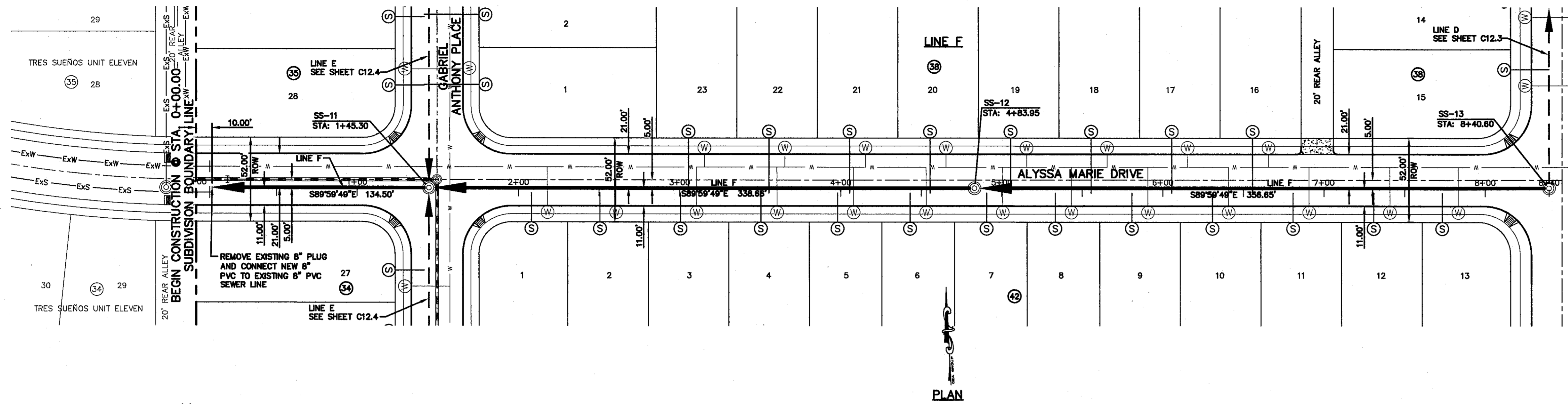
UTILITY LOCATOR SERVICES
 EL PASO ELECTRIC COMPANY (915) 543-5720
 EL PASO ENERGY CORPORATION (915) 496-5244
 EL PASO WATER UTILITIES (915) 594-5500
 MCI SURVEILLANCE (800) MCI-WORK
 TIME WARNER COMMUNICATIONS (915) 772-1123
 TEXAS GAS SERVICE (915) 680-7200
 SBC (800) 545-6005
 AT&T (800) 852-3786
 U.S. SPRINT TELECOMM (800) 521-0579

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 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES



REFERENCES - BENCHMARKS
 CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., S89°43'3"E, A DISTANCE OF 487.56 FEET FROM ANGLE POINT, STATION 0+00.00, ELEVATION 4005.40
 AVENUE CITY DATUM, ELEVATION 4005.40

ENGINEER'S SEAL
 J. H. ALZARATE
 J. H. ALZARATE
 80075
 TEXAS REGISTERED ENGINEERING FIRM # 4584
 4712 Woodrow Bean, Ste. F El Paso, TX 79924
 Office: 915.544.8232 Fax: 915.544.5233 www.cesaeng.com



PROJECT TITLE
 TRES SUEÑOS
 UNIT TEN
 SUBDIVISION IMPROVEMENTS

SHEET TITLE
 SANITARY SEWER
 PLAN & PROFILE
 LINE F & LINE K

SHEET NO.
 C12.5

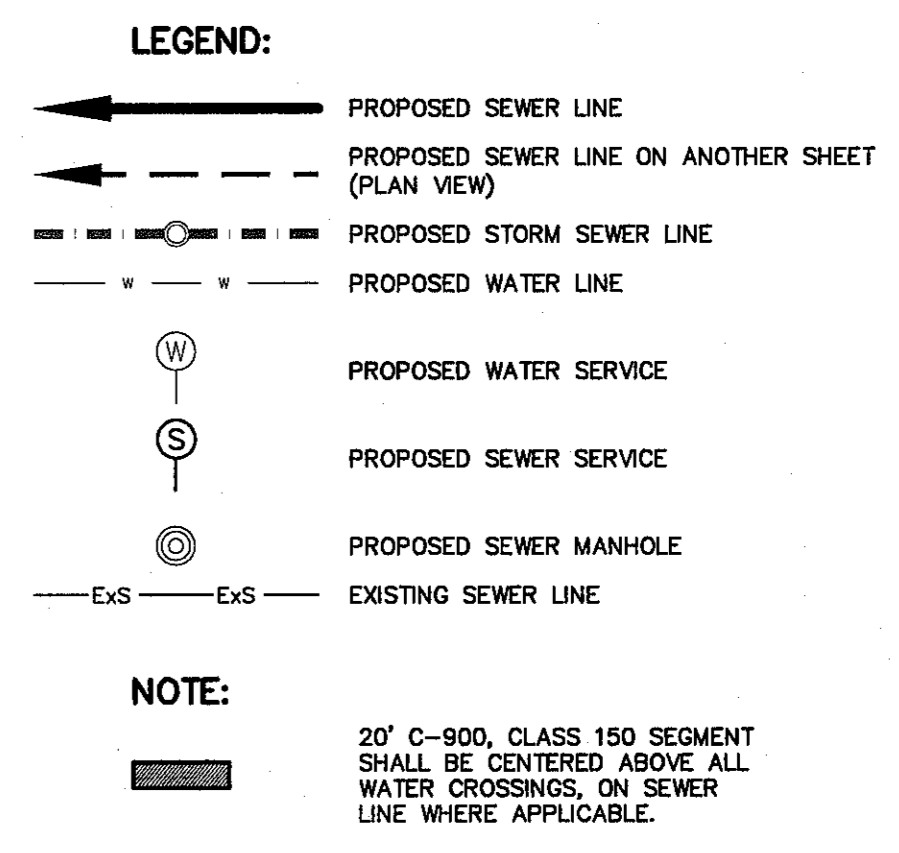
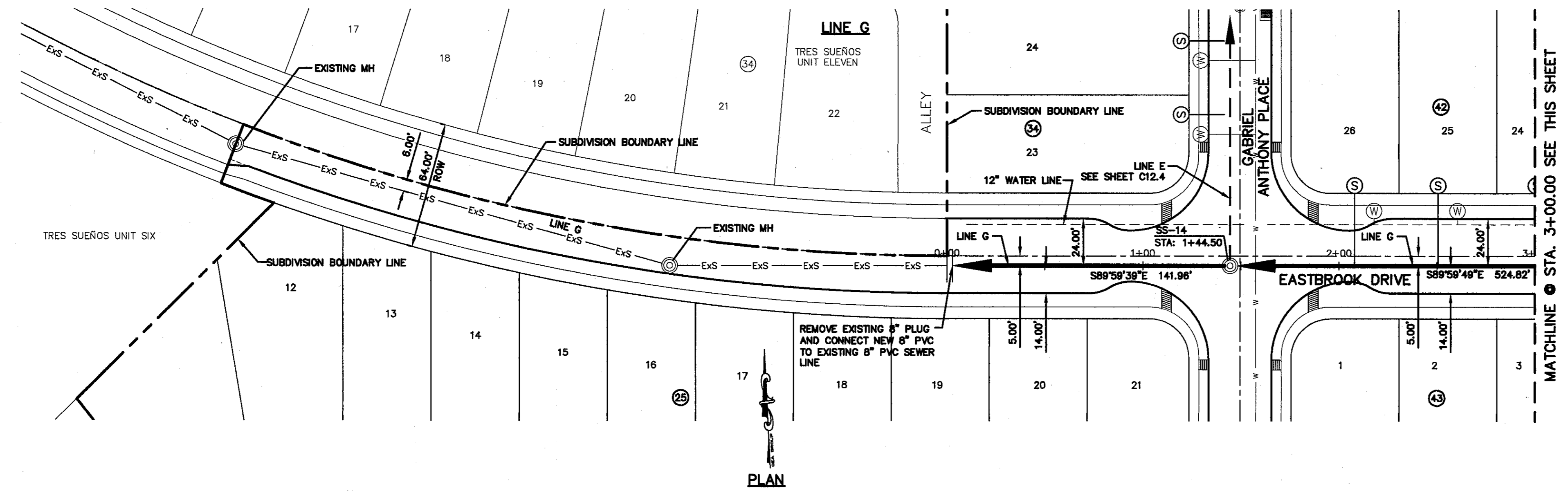
SCALE
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 Horizontal
 1"=5'
 Vertical
 Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.G.
APPD. BY: J.L.A.
JOB NO.: 2250-030-1D

CITY DEVELOPMENT DEPARTMENT
REVIEWED

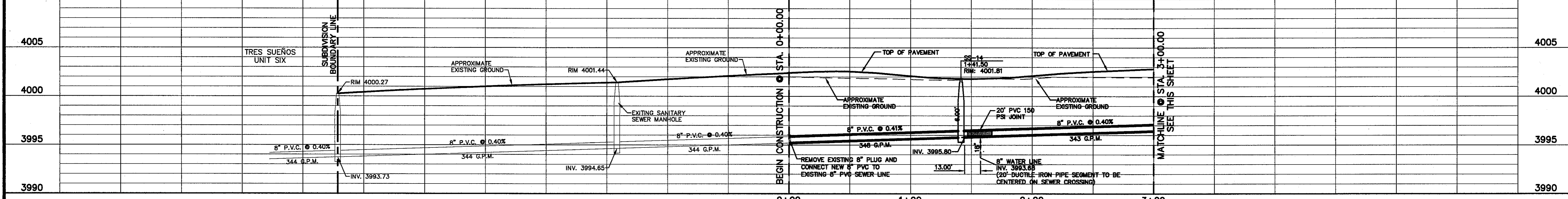
UTILITY LOCATOR SERVICES
 EL PASO ELECTRIC COMPANY (915) 543-5720
 EL PASO ENERGY CORPORATION (915) 496-5244
 EL PASO WATER UTILITIES (915) 594-5500
 MCI SURVEILLANCE (800) MCI-WORK
 TIME WARNER COMMUNICATIONS (915) 772-1123
 TEXAS GAS SERVICE (915) 680-7200
 SSC (800) 545-6005
 AT&T (800) 852-3786
 U.S. SPRINT TELECOMM (800) 521-0579

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 1-800-DIG-TESS
 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES



REFERENCES - BENCHMARKS
 CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., S89°43'3"E, A DISTANCE OF 467.56 FEET FROM THE INTERSECTION OF RICH BEEM BLVD. AND AVENUE CITY DATUM. ELEVATION: 4006.40

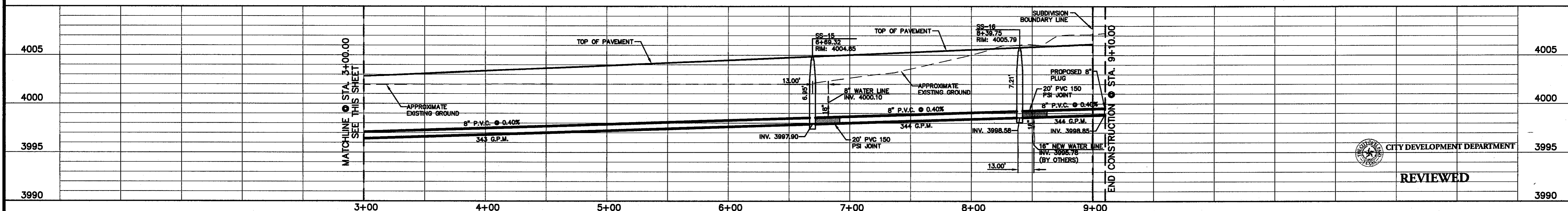
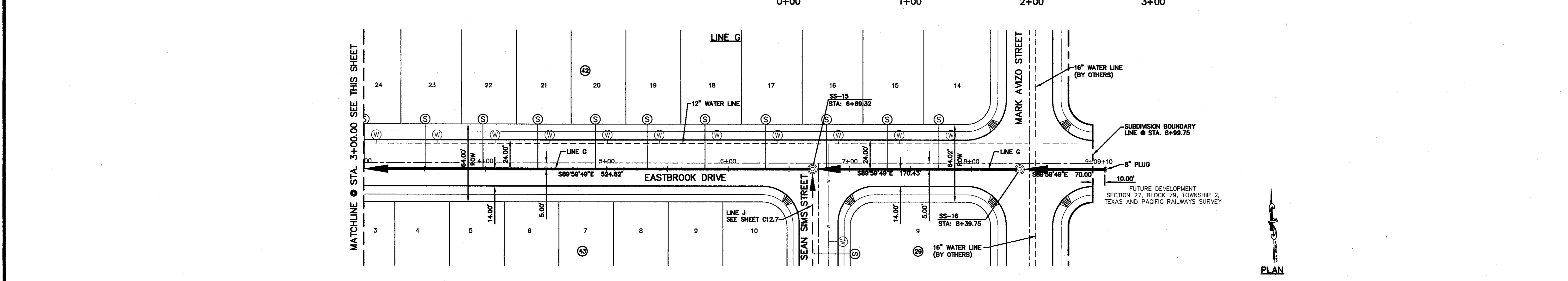
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 4712 Woodrow Bessie, Ste. F El Paso, TX 79924
 Office: 915.544.6332 Fax: 915.544.6333 www.csandco.com



ENGINEER'S SEAL

SCALE: 1"=40'
 Horizontal: 1"=5'
 Vertical: 1"=5'
 Contour Interval: N/A

DATE: JULY 2013
 DESIGN BY: J.H.
 DRAWN BY: J.H.
 CHECKED BY: J.G.
 APPROV. BY: J.L.A.
 JOB NO. 2250-030-LD



PROJECT TITLE
 TRES SUEÑOS
 UNIT TEN
 SUBDIVISION IMPROVEMENTS

SHEET TITLE
 SANITARY SEWER
 PLAN & PROFILE
 LINE G

SHEET NO.
 C12.6

REVIEWED
 CITY DEVELOPMENT DEPARTMENT

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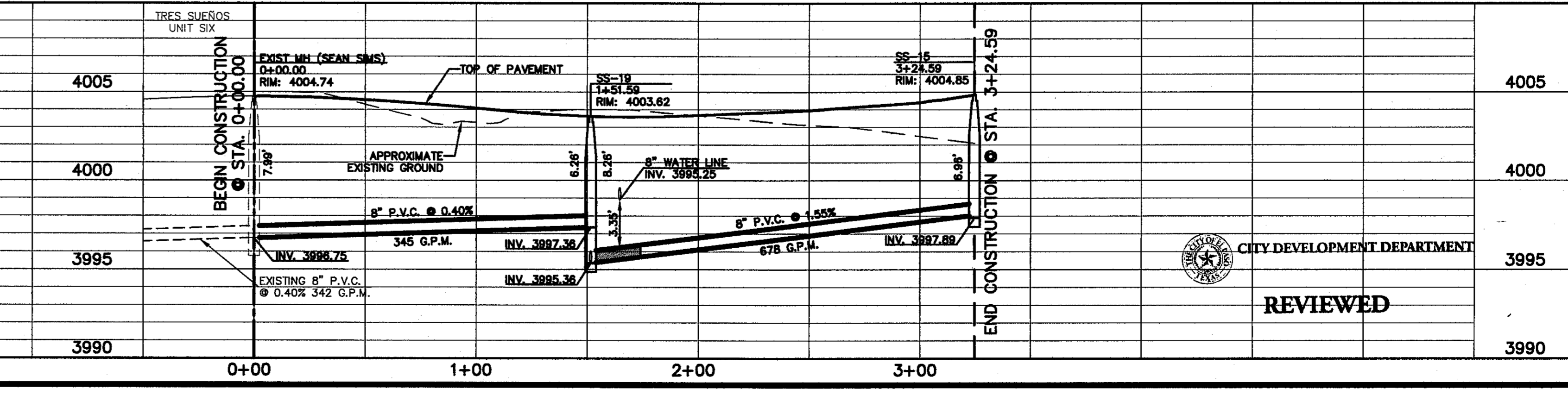
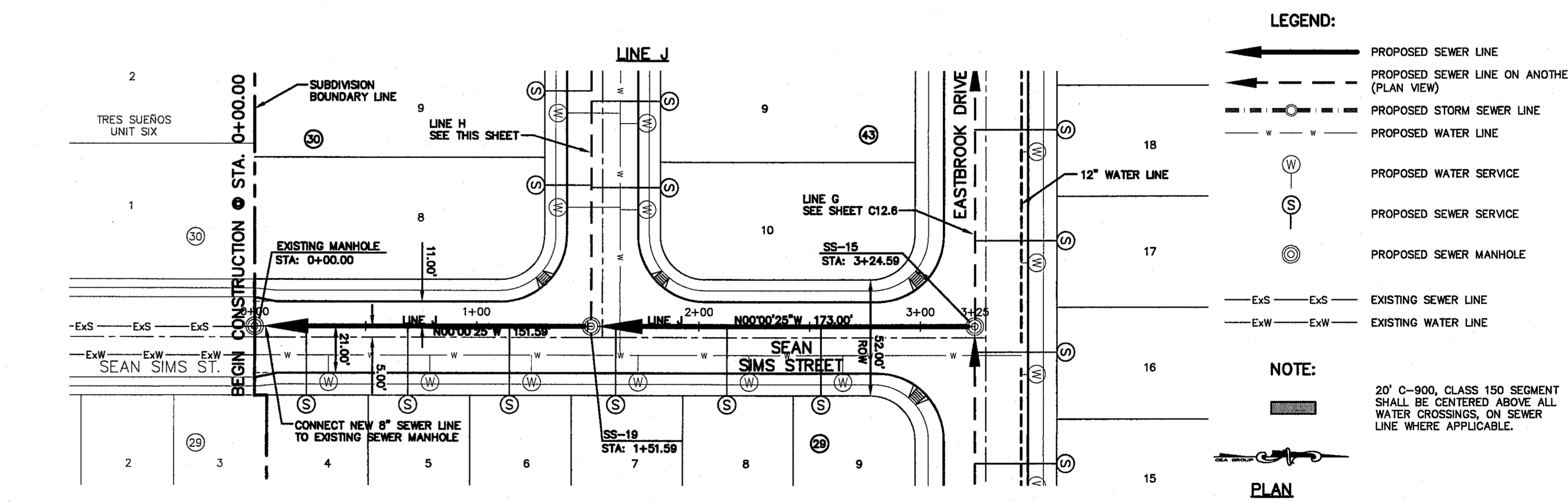
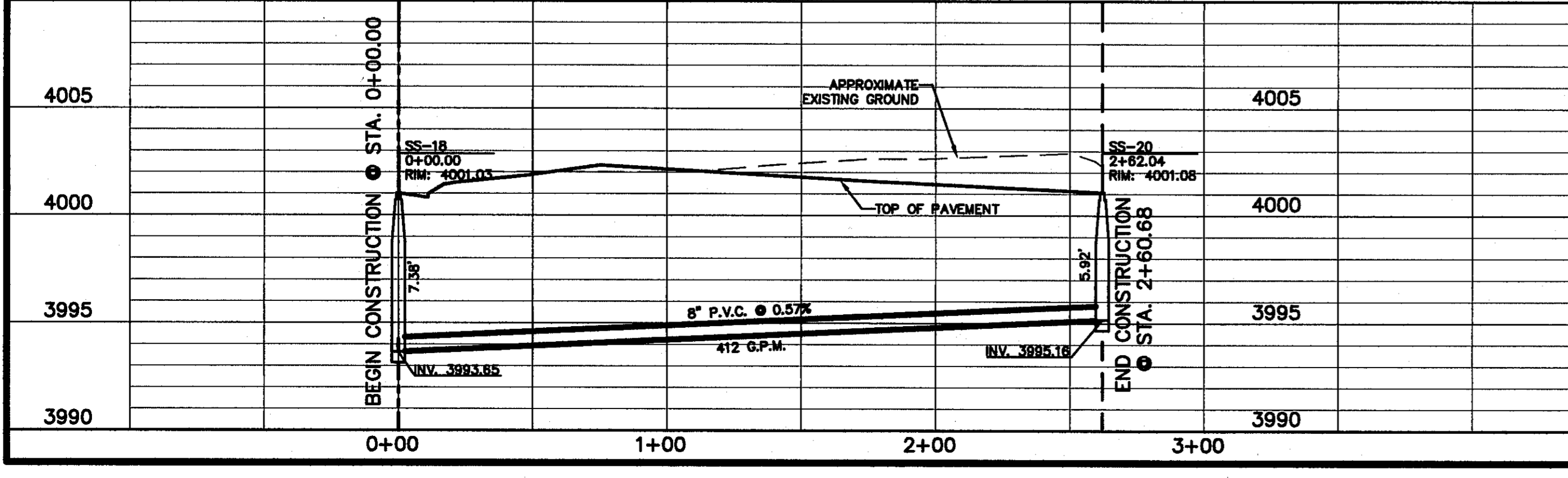
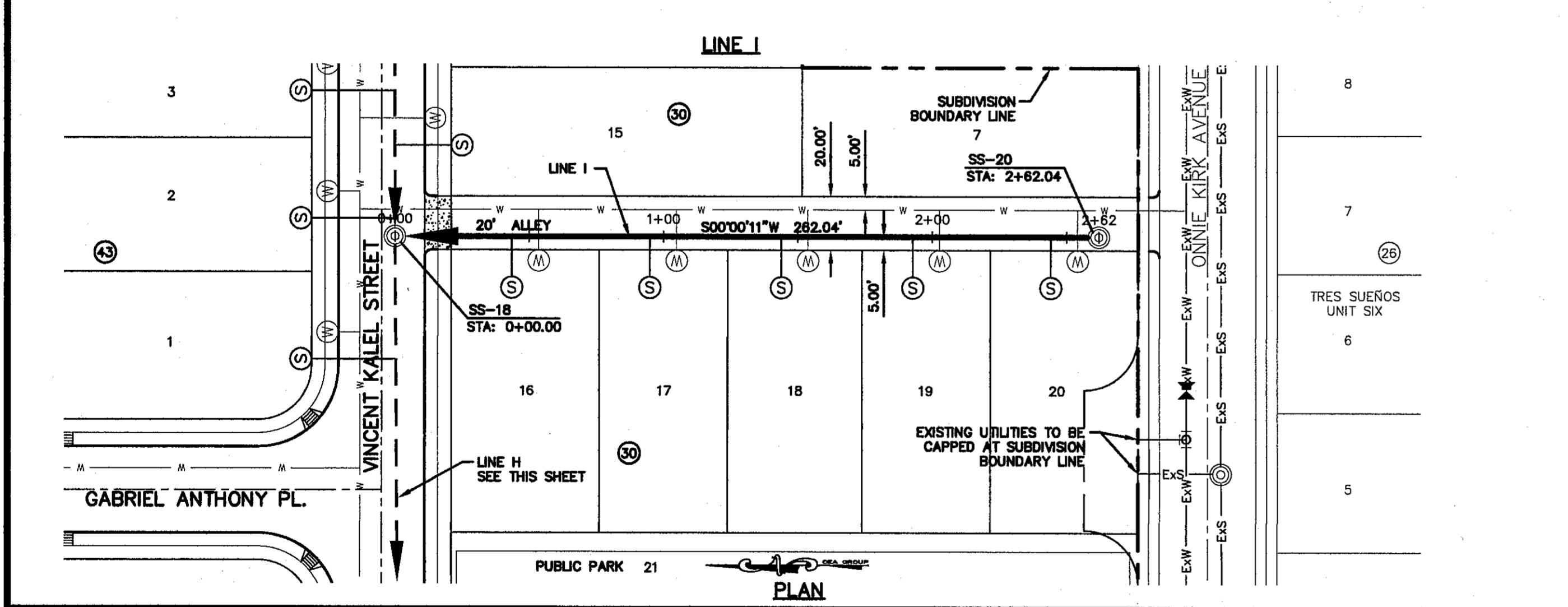
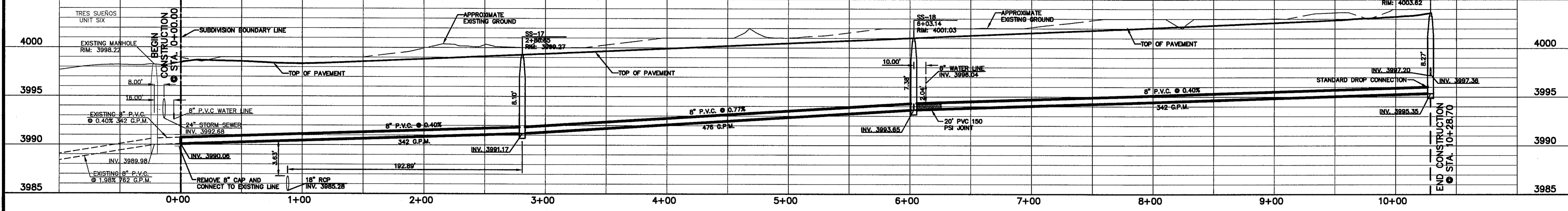
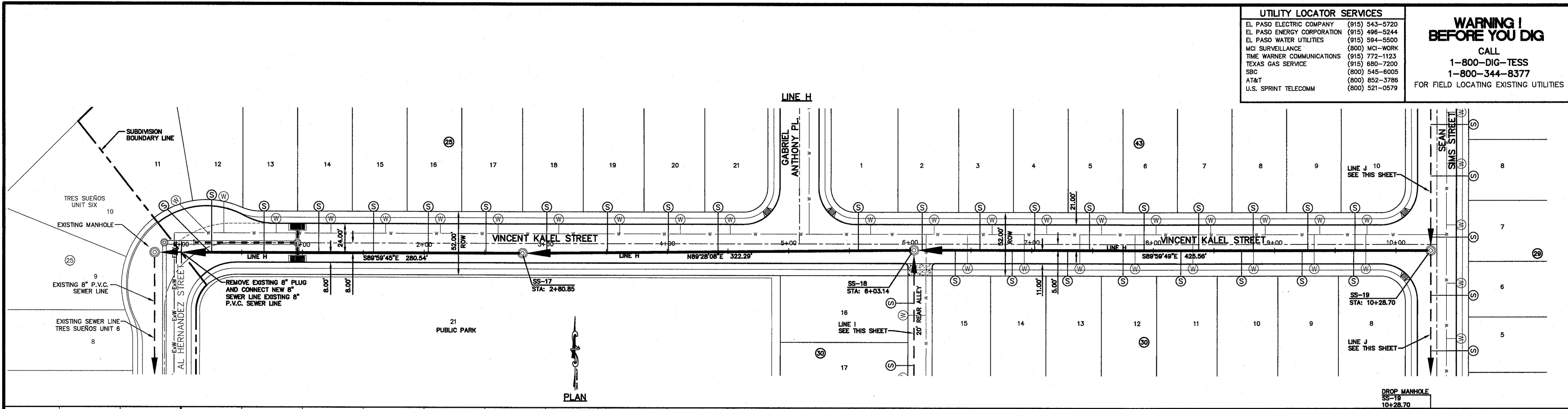
UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SSC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

DATE	REVISIONS	BY



- LEGEND:**
- PROPOSED SEWER LINE
 - - - PROPOSED SEWER LINE ON ANOTHER (PLAN VIEW)
 - - - PROPOSED STORM SEWER LINE
 - - - PROPOSED WATER LINE
 - PROPOSED WATER SERVICE
 - PROPOSED SEWER SERVICE
 - PROPOSED SEWER MANHOLE
 - ExS — Existing Sewer Line
 - ExW — Existing Water Line
- NOTE:**
- 20' C-900, CLASS 150 SEGMENT SHALL BE CENTERED ABOVE ALL WATER CROSSINGS, ON SEWER LINE WHERE APPLICABLE.

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ENGINEER'S SEAL

SCALE: 1"=40'
 Horizontal: 1"=5'
 Contour Interval: N/A

DATE: JULY 2013
 DESIGN BY: J.H.
 DRAWN BY: J.H.
 CHECKED BY: J.G.
 APP'D. BY: J.G.
 JOB NO. 22560-030-LD

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

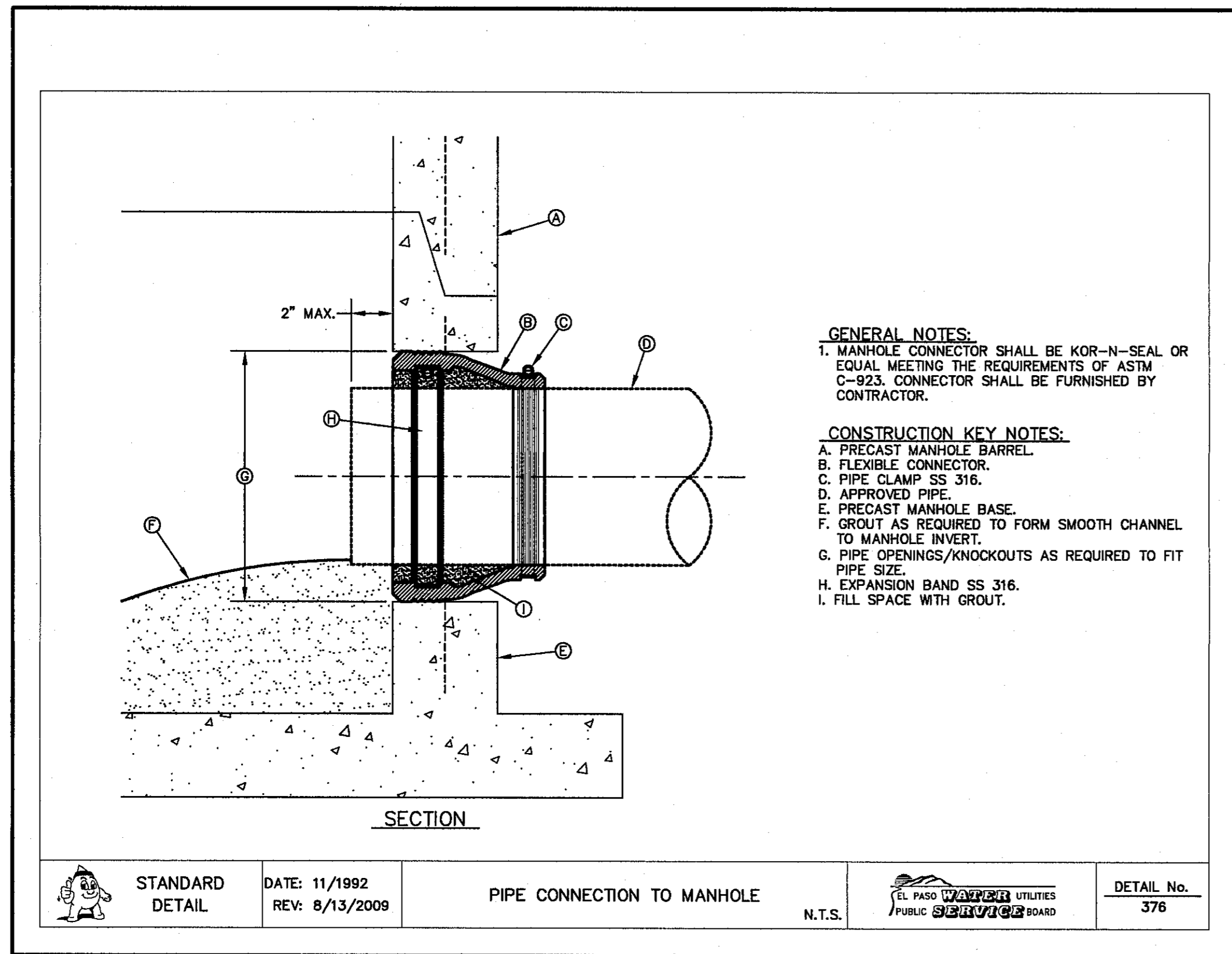
SHEET TITLE
SANITARY SEWER PLAN & PROFILE LINE H, LINE I, AND LINE J

SHEET NO.
C12.7

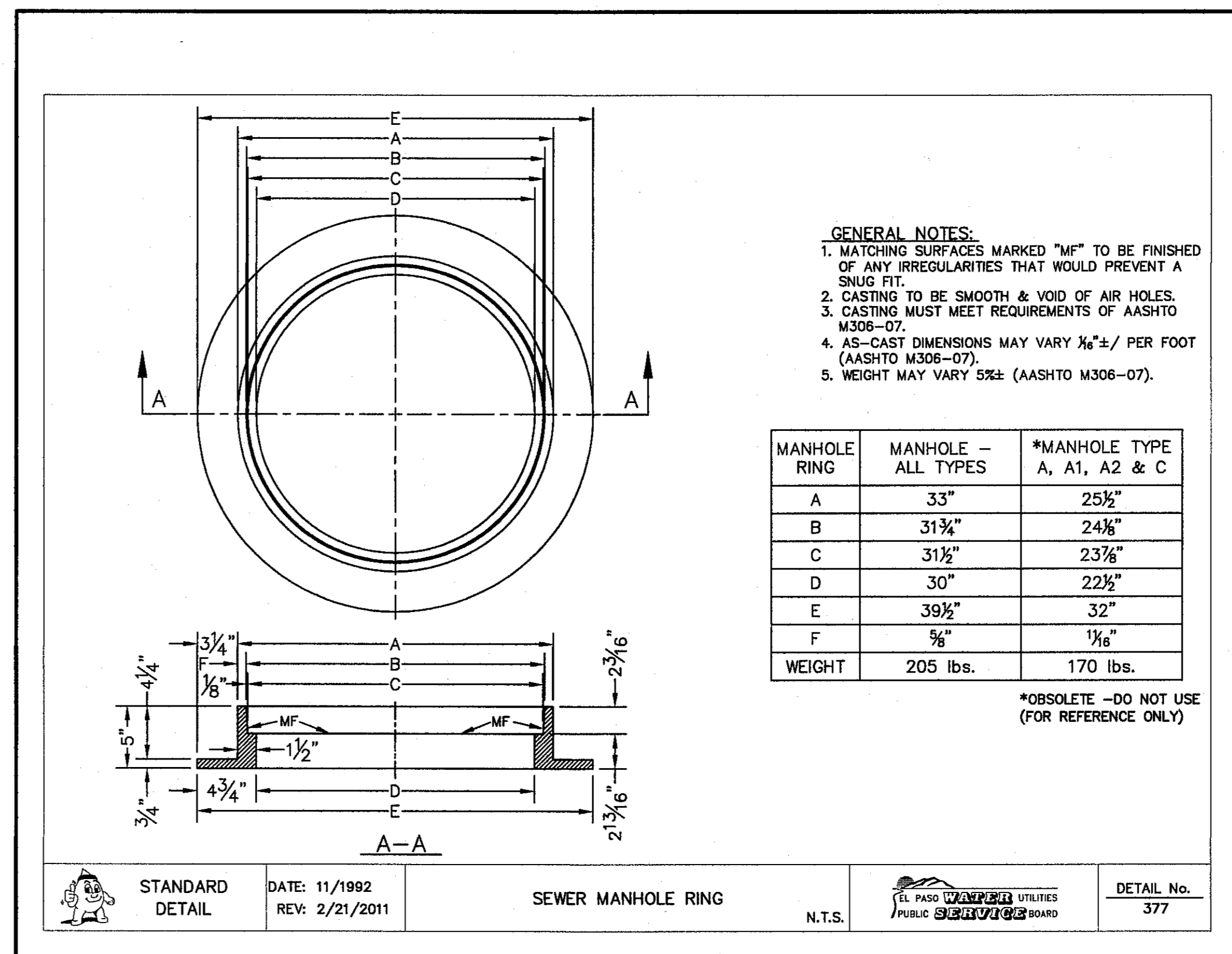
REVIEWED

CITY DEVELOPMENT DEPARTMENT

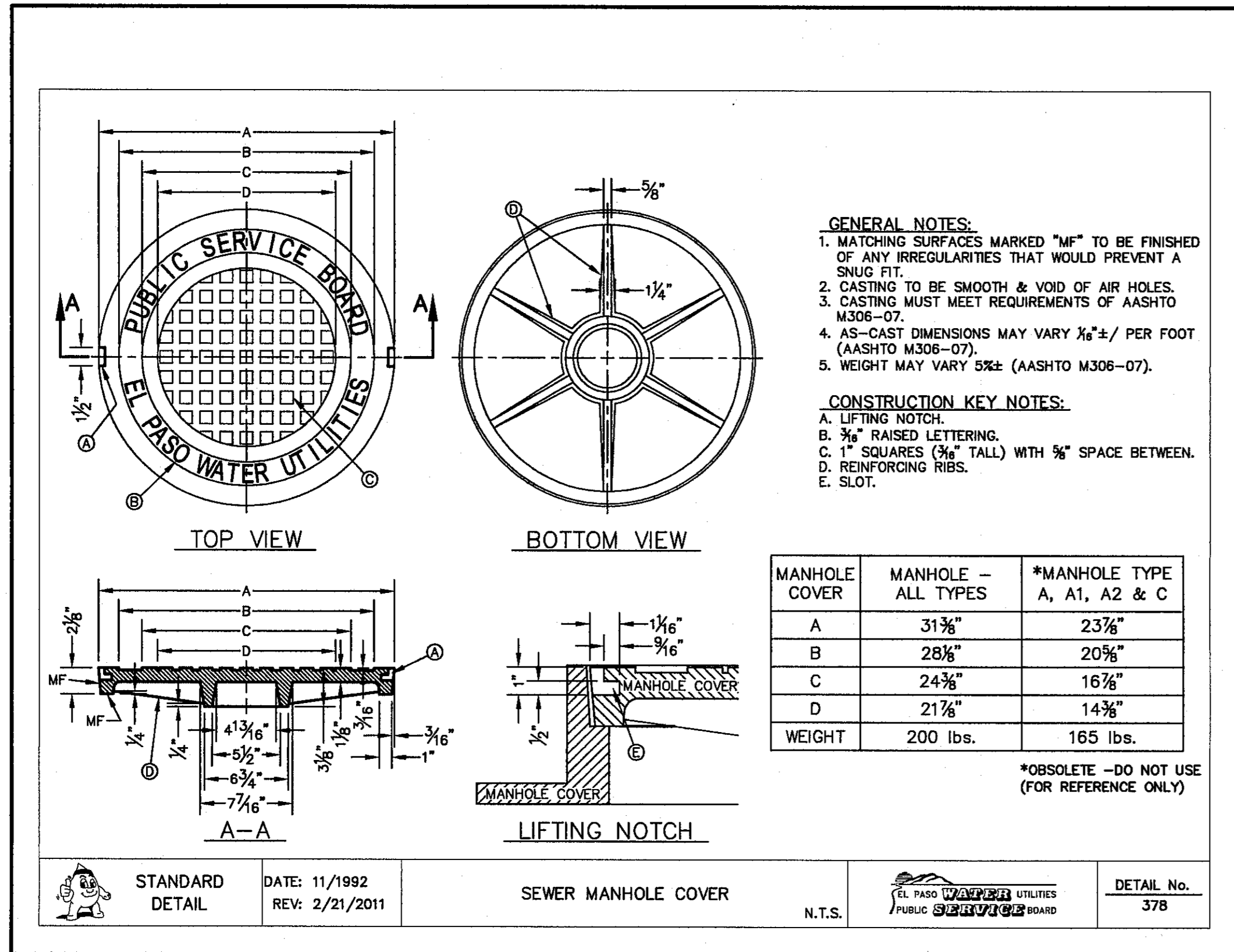
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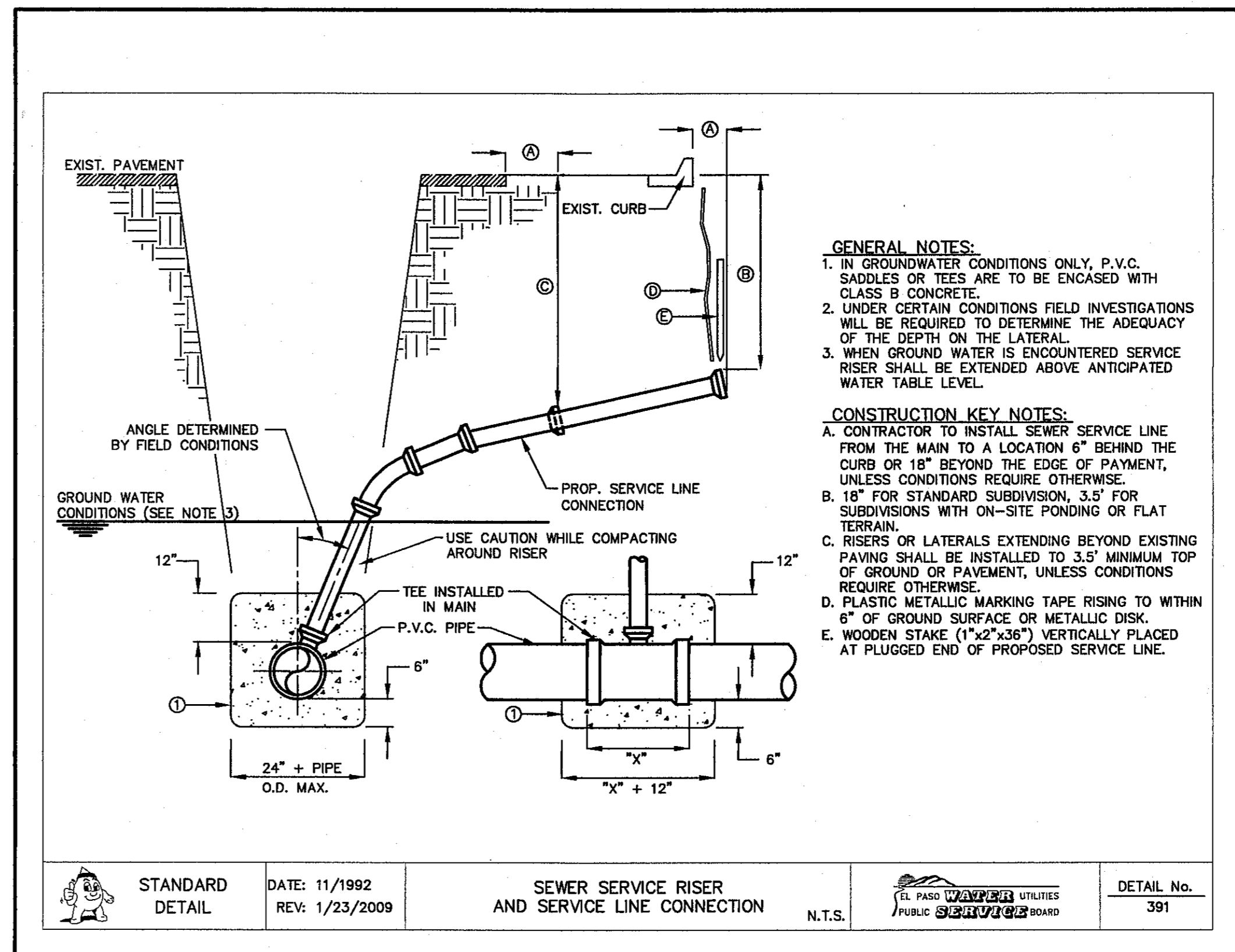
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2 STANDARD MANHOLE RING SCALE: N.T.S.



3 STANDARD COVER DETAIL SCALE: N.T.S.

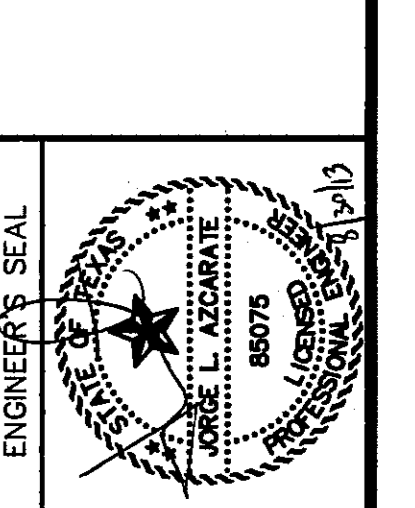


4 SEWER SERVICE RISER AND SERVICE LINE CONNECTION SCALE: N.T.S.

REFERENCES - BENCHMARKS
 CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. 5094337E A DISTANCE OF 467.98 FEET FROM MONUMENT TO POINT OF CURVE CENTERLINE AVENUE CITY DATUM. ELEVATION: 4006.40

DATE REVISIONS BY

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 4712 Woodrow Bean, Ste. F El Paso, TX 79924
 Office: 915.544.5222 Fax: 915.544.5203 www.cesaprof.com



SCALE: N/A
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: JULY 2013
 DESIGN BY: J.H.
 DRAWN BY: J.H.
 CHKD. BY: J.G.
 APPVD. BY: J.L.A.
 JOB No. 2250-030-LD

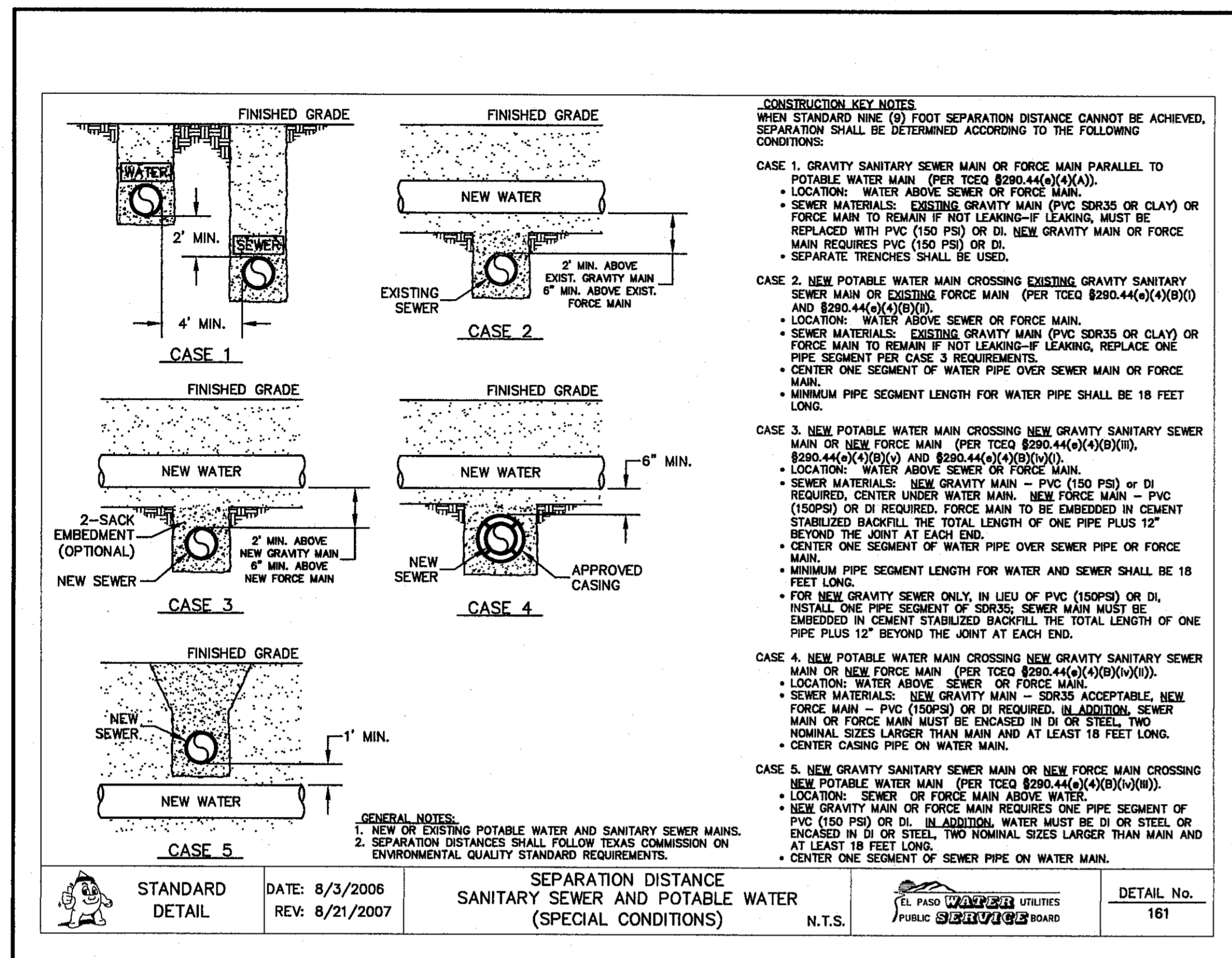
PROJECT TITLE
**TRES SUEÑOS
 UNIT TEN
 SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**SANITARY SEWER
 DETAILS**
 (SHEET 1 OF 3)

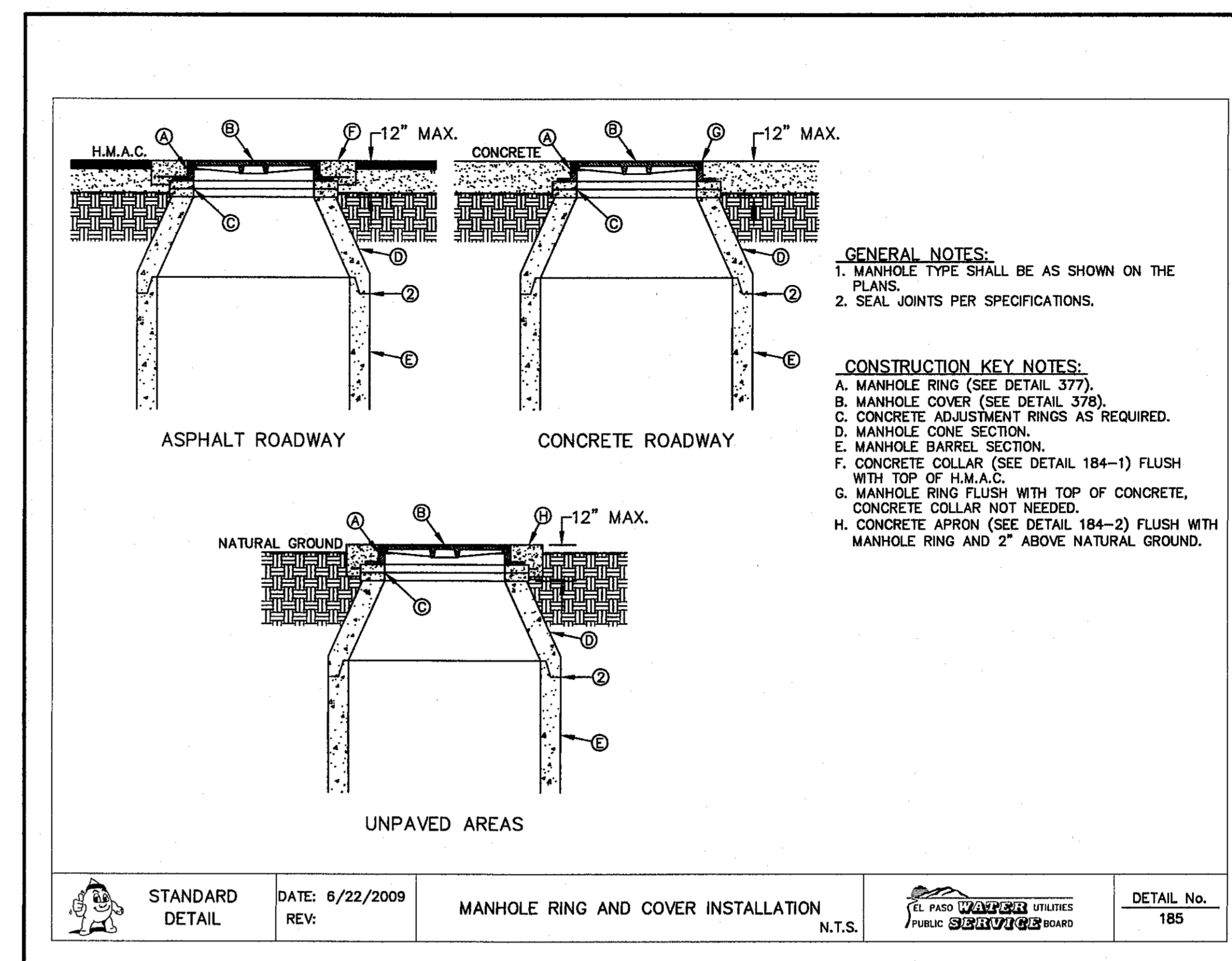
SHEET No.
C12.8

CITY DEVELOPMENT DEPARTMENT
REVIEWED

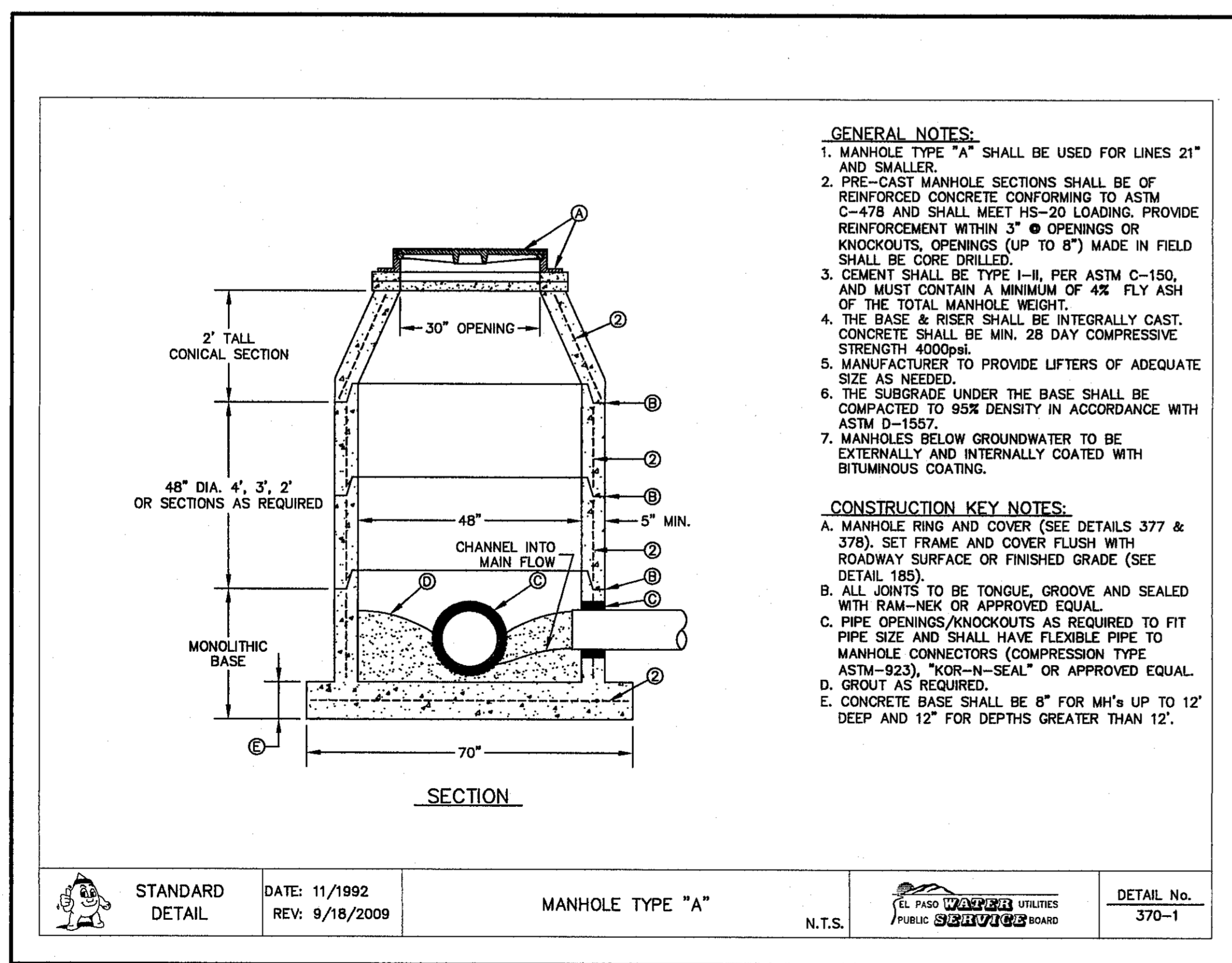
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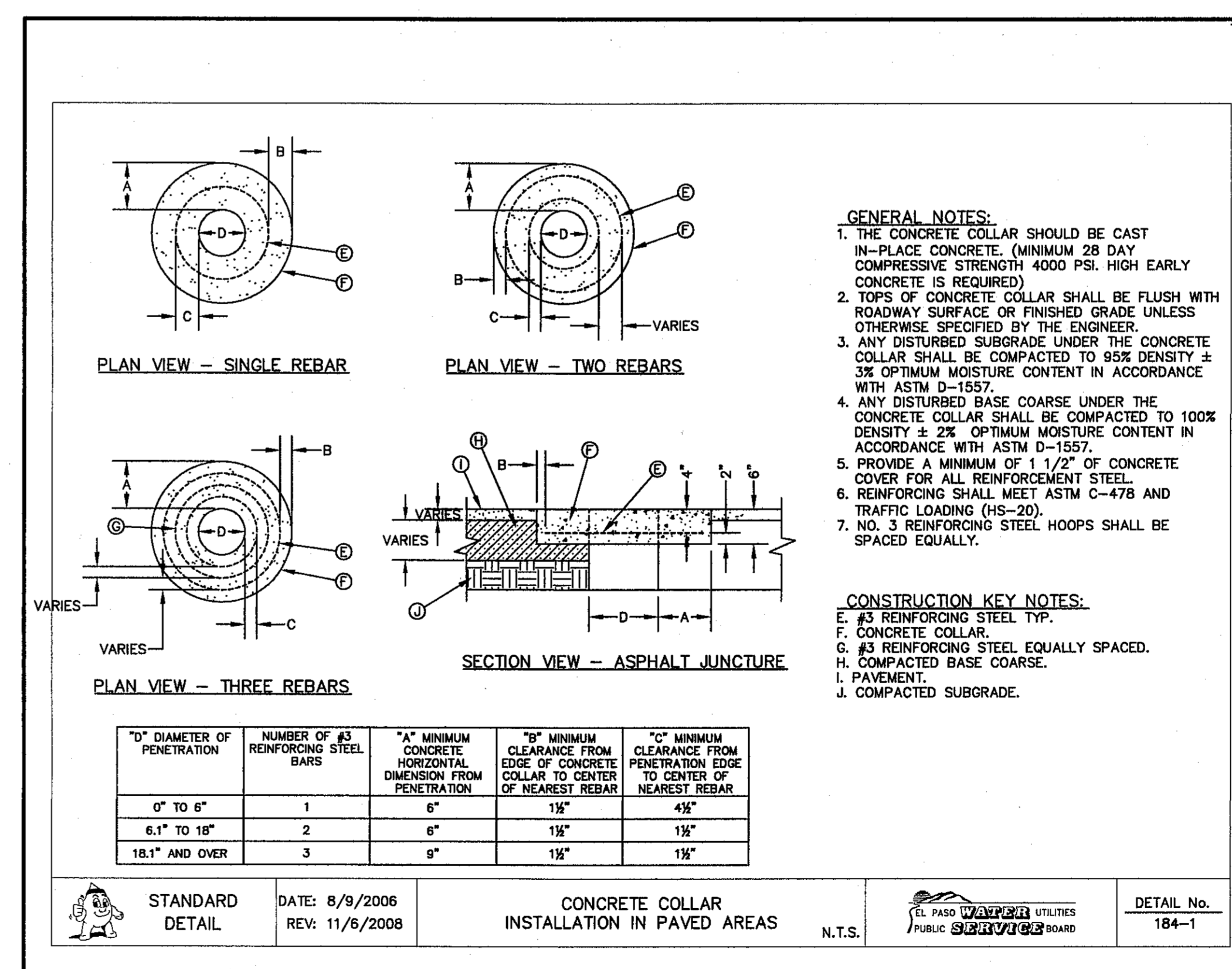
1 SEPARATION DISTANCE SANITARY SEWER AND POTABLE WATER (SPECIAL CONDITIONS) SCALE: N.T.S.



2 STANDARD MANHOLE RING AND COVER INSTALLATION DETAIL SCALE: N.T.S.



3 MANHOLE TYPE "A" SCALE: N.T.S.



4 CONCRETE COLLAR INSTALLATION IN PAVED AREAS SCALE: N.T.S.

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH
BEN BEW. SURVEY. DISTANCE OF 67.98 FEET
FROM SURFACE OF ROADWAY TO BENCHMARK
AVENUE CITY DATUM. ELEVATION.....4005.40

DATE: 8/21/09 REVISIONS TO INVERT ELEV'S: J.G.
BY

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4712 Woodrow Behm, Ste. F, El Paso, TX 79904
Office: 915.544.5222 Fax: 915.544.5225 www.ceea.com

ENGINEER'S SEAL
JAMES L. ACCORATE
85075
LICENSED PROFESSIONAL ENGINEER
CIVIL

SCALE: N/A
Vertical: N/A
Contour Interval: N/A
DATE: JULY 2013
DESIGN BY: JHL
DRAWN BY: JHL
APP'D. BY: JHL
JOB NO.: 2250-030-LD

PROJECT TITLE
TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE

SANITARY SEWER DETAILS

(SHEET 2 OF 3)

SHEET NO.

C12.9

CITY DEVELOPMENT DEPARTMENT
REVIEWED

SITE DESCRIPTION

PROJECT NAME AND LIMITS: TRES SUEÑOS UNIT TEN
 THE PROJECT IS BORDERED BY SECTION 27, BLOCK 79, TOWNSHIP 2, TEXAS AND PACIFIC RAILWAYS SURVEY TO THE WEST AND EAST, TRES SUEÑOS UNIT EIGHT TO THE NORTH AND TRES SUEÑOS UNIT SIX TO THE SOUTH.

PROJECT DESCRIPTION: THE SITE FOR THE NEW SUBDIVISION WILL ENCOMPASS APPROXIMATELY 33.514± ACRES AND WILL CONTAIN 164 RESIDENTIAL LOTS AND ONE PUBLIC PARK.

EXISTING CONDITIONS: THE SITE IS CLEAR OF SITE IMPROVEMENTS AND IS COVERED WITH ITS NATURAL SURROUNDINGS.

MAJOR SOIL DISTURBING ACTIVITIES: MAJOR SOIL DISTURBING ACTIVITIES WILL CONSIST OF CLEARING AND GRUBBING, GRADING FOR BUILDING PAD ELEVATIONS, CONSTRUCTION OF STREETS, ROCKWALLS, AND EXCAVATION FOR UTILITIES.

TOTAL PROJECT AREA: 33.514± A.C.

TOTAL AREA TO BE DISTURBED: 35.740± A.C.

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 0.676

EXISTING CONDITION OF SOIL AND VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER: HUECO-WINK ASSOCIATION: NEARLY LEVEL AND GENTLY SLOPING SOILS THAT HAVE A FINE SANDY LOAM SUBSOIL AND ARE MODERATELY DEEP OVER CALICHE, IN THE HUECO BOLSON.

NAME OF RECEIVING WATERS: STORM RUNOFF FROM THE NEW SUBDIVISION WILL BE CONVEYED BY STREET SHEET FLOW AND STORM SEWER INFRASTRUCTURE TO ULTIMATELY BE DISCHARGED TO OFF-SITE PONDING AREAS LOCATED IN THE TRES SUEÑOS UNIT EIGHT AND SIX SUBDIVISIONS.

EROSION AND SEDIMENT CONTROL

SOIL STABILIZATION PRACTICES

- TEMPORARY SEEDING
- PERMANENT PLANTING, SODDING, OR SEEDING
- MULCHING
- SOIL RETENTION BLANKET
- BUFFER ZONES
- PRESERVATION OF NATURAL RESOURCES

OTHER: _____

STRUCTURAL PRACTICES:

- SILT FENCES
- EARTHEN BERMS
- ROCK BERMS
- DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- DIVERSION DIKE AND SWALE COMBINATION
- PIPE SLOPE DRAINS
- CONCRETE FLUMES
- ROCK BEDDING AT CONSTRUCTION EXIT
- TIMBER MATTING AT CONSTRUCTION EXIT
- CHANNEL LINERS
- SEDIMENT TRAPS
- SEDIMENT BASINS
- STORM INLET SEDIMENT TRAP
- STONE OUTLET STRUCTURES
- CURBS AND GUTTERS
- STORM DRAINS
- VELOCITY CONTROL DEVICES
- VEGETATED SWALES & NATURAL DEPRESSIONS

OTHER: _____

NARRATIVE - SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROLS (e.g. SILT FENCE AND/OR EARTHEN BERM, AND STABILIZED CONSTRUCTION ENTRANCE);
2. PERFORM CLEARING AND GRUBBING;
3. EXCAVATION FOR UTILITIES;
4. COMPLETE STREET AND LOT GRADING;
5. CONSTRUCTION OF SUBDIVISION IMPROVEMENTS; AND,
6. WHEN ALL CONSTRUCTION ACTIVITY RELATED IN DEVELOPMENT OF THE SITE IS COMPLETE, REMOVE TEMPORARY CONTROLS IN 1. ABOVE.

SWPPP GENERAL NOTES:

1. PLACEMENT OF SILT FENCE SHALL BE ADJUSTED AS NECESSARY TO PREVENT THE BLOCKING OF DRIVEWAYS OR DRIVING LANES.
2. THE SWPPP MANUAL IDENTIFIES THE DUTIES AND RESPONSIBILITIES OF THE GENERAL CONTRACTOR IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. THIS ITEM SHALL BE SUBSIDIARY TO THE SWPPP BEST MANAGEMENT PRACTICES (COMPLETE IN PLACE) ITEMS. THE SWPPP PROJECT MANUAL IS AVAILABLE FOR REVIEWING AT THE CITY OF EL PASO - ENGINEERING DEPARTMENT. UPON SELECTION, THE CONTRACTOR WILL BE PROVIDED AN SWPPP MANUAL. THE CONTRACTOR SHALL MAINTAIN THIS MANUAL AT THE CONSTRUCTION SITE AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD.
3. THE CONTRACTOR SHALL COMPLETE AND SUBMIT ALL REGULATORY FORMS AND APPLICATIONS, AS PROVIDED IN THE SWPPP MANUAL, INCLUDING, BUT NOT LIMITED TO; NOI, NOT, SDPCP, AND ANY OTHER FORM REQUIRED BY THE CITY OF EL PASO AND TCEQ.
4. ALLOWABLE STORM WATER AND NON-STORMWATER DISCHARGE SHALL COMPLY WITH 15.20.080 (GENERAL PROHIBITION) AND 15.20.090 (SPECIFIC PROHIBITIONS AND REQUIREMENTS) OF THE CITY OF EL PASO DRAIN POLLUTION CONTROL PLAN ORDINANCE. NON-STORMWATER DISCHARGES MAY CONSIST OF, BUT ARE NOT LIMITED TO, THE DISCHARGE RESULTING FROM FIREFIGHTING, LAWN WATERING, LANDSCAPE IRRIGATION, NATURAL SPRING, AND/OR AGRICULTURAL STORM WATER RUNOFF.
5. REFER TO DRAINAGE PLAN SHEET C4.1 AND C4.2, FOR ADDITIONAL INFORMATION ON WATERSHED AREAS AND RUNOFF QUANTITIES (Q).
6. THE FOLLOWING HAVE BEEN IDENTIFIED AS POTENTIAL CONTAMINATION SOURCES: CLEARED AND GRADED AREAS; CONSTRUCTION SITE ENTRANCE AND ASPHALT PARKING AREA CONSTRUCTION; ASPHALT LOADING/UNLOADING AREAS; CONCRETE LOADING/UNLOADING AREAS; AND, ALL UNDISTURBED AREAS.
7. THE FOLLOWING IS A LIST OF POTENTIAL CONSTRUCTION SITE STORM WATER POLLUTANTS: ASPHALT; CONCRETE; GLUE/ADHESIVE; PAINTS; CURING COMPOUNDS; WASTEWATER FROM CONSTRUCTION EQUIPMENT WASHING; HYDRAULIC OIL/FLUIDS; GASOLINE; DIESEL FUEL; KEROSENE; ANTIFREEZE/COOLANT; AND EROSION.

BEST MANAGEMENT PRACTICES CONTROLS

I. WASTE MATERIALS:

ALL WASTE MATERIALS, INCLUDING CONSTRUCTION DEBRIS, SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. NO CONSTRUCTION WASTE MATERIAL SHALL BE BURIED ON SITE. THE TRANSIT DUMPSTER SHALL COMPLY WITH ORDINANCE 18.52.010 (ENCLOSURE AND REMOVAL OF WASTE MATERIALS DURING CONSTRUCTION). THE DUMPSTER SHALL BE EMPTIED AS NECESSARY OR AS REQUIRED BY ORDINANCE 9.04 (SOLID WASTE MANAGEMENT) AND THE TRASH SHALL BE HAULED TO A LICENSED LANDFILL.

II. HAZARDOUS WASTE:

AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES SHALL BE CONSIDERED HAZARDOUS: PAINT, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SPILL STABILIZATION, CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION AND CONTACT THE FIRE DEPT. AND TCEQ.

III. SANITARY WASTE:

ALL SANITARY WASTE SHALL BE COLLECTED FROM THE CONSTRUCTION PORTABLE UNITS AS NECESSARY OR AS REQUIRED, CHAPTER 18.08 (BUILDING CODE), BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

IV. SPILL PREVENTION:

THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURES OF MATERIALS TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

- A. STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB
- B. NEATLY STORE MATERIALS ON-SITE IN AN ORDERLY MANNER
- C. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER
- D. DO NOT MIX SUBSTANCES WITH ONE ANOTHER, UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER
- E. USE ENTIRE CONTENTS OF A PRODUCT BEFORE DISPOSING THE CONTAINER
- F. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL

HAZARDOUS PRODUCTS:

PRACTICES USED TO REDUCE RISKS:

- A. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER IF AT ALL POSSIBLE
- B. RETAIN ORIGINAL LABELS, PRODUCT INFORMATION AND MATERIAL SAFETY DATA SHEETS (MSDS)
- C. DISPOSE SURPLUS PRODUCT IN ACCORDANCE WITH MANUFACTURER'S OR LOCAL & STATE RECOMMENDED METHODS

PETROLEUM PRODUCTS:

ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.

SPILL CONTROL PRACTICES:

- A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES;
- B. MATERIALS AND EQUIPMENT NECESSARY FOR CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE;
- C. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY
- D. SPILL AREA SHALL BE WELL VENTILATED AND APPROPRIATE CLOTHING WILL BE WORN;
- E. ANY SPILL SHALL BE REPORTED TO THE APPROPRIATE GOVERNMENTAL AGENCY
- F. MEASURES SHALL BE TAKEN TO PREVENT A SPILL FROM REOCCURRING

V. MAINTENANCE AND INSPECTION PROCEDURES:

ALL POLLUTION PREVENTION MEASURES SHALL BE INSPECTED AT LEAST ONCE A MONTH OR WITHIN 24-HOURS PRIOR TO ANTICIPATED STORM EVENT AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR MORE. INSPECTION IN FINAL STABILIZED AREAS OR DURING ARID PERIODS WILL BE CONDUCTED MONTHLY, BEST MANAGEMENT PRACTICES AND POLLUTION CONTROL PROCEDURES SHALL BE INSPECTED FOR ADEQUACY.

VI. REMARKS:

DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, WATERBODY OR STREAMBED. CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEANED AS SOON AS PRACTICABLE OF TEMPORARY EMBANKMENT, TEMPORARY BRIDGES, MATTING, FALSEWORK, PILING DEBRIS OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT A PART OF THE FINISHED WORK.

VII. OFFSITE VEHICLE TRACKING:

IN ADDITION TO THE STABILIZED CONSTRUCTION ENTRANCES, THE FOLLOWING MEASURES SHALL BE OBSERVED DURING CONSTRUCTION:

- HAUL ROADS SHALL BE DAMPENED FOR DUST CONTROL
- LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPULIN
- EXCESS DIRT ON ROAD SHALL BE REMOVED IMMEDIATELY
- STABILIZED CONSTRUCTION ENTRANCE
- OTHER: _____

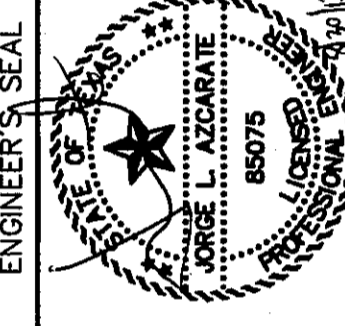
VIII. REFER TO SWPPP REPORT FOR ADDITIONAL INFORMATION



REVIEWED

REFERENCES - BENCHMARKS	CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM THE SURVEY DISTANCE OF 67.95 FEET FROM THE SURVEY POINT TO THE POINT OF BEGINNING AVENUE CITY DATUM. ELEVATION: 4008.40
DATE	REVISIONS
BY	

ceea
GROUP
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-4584
 4712 Woodrow Brien, Ste. F, El Paso, TX 79924
 Office: 915.544.5222 Fax: 915.544.5203 www.ceea.org



SCALE	Horizontal: N/A	Vertical: N/A
Contour Interval:	N/A	
DATE:	JULY 2013	
DESIGN BY:	JHL	JHL
DRAWN BY:	JHL	JHL
CHECKED BY:	JHL	JHL
APP. NO.:	2250-030-LD	

PROJECT TITLE
TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

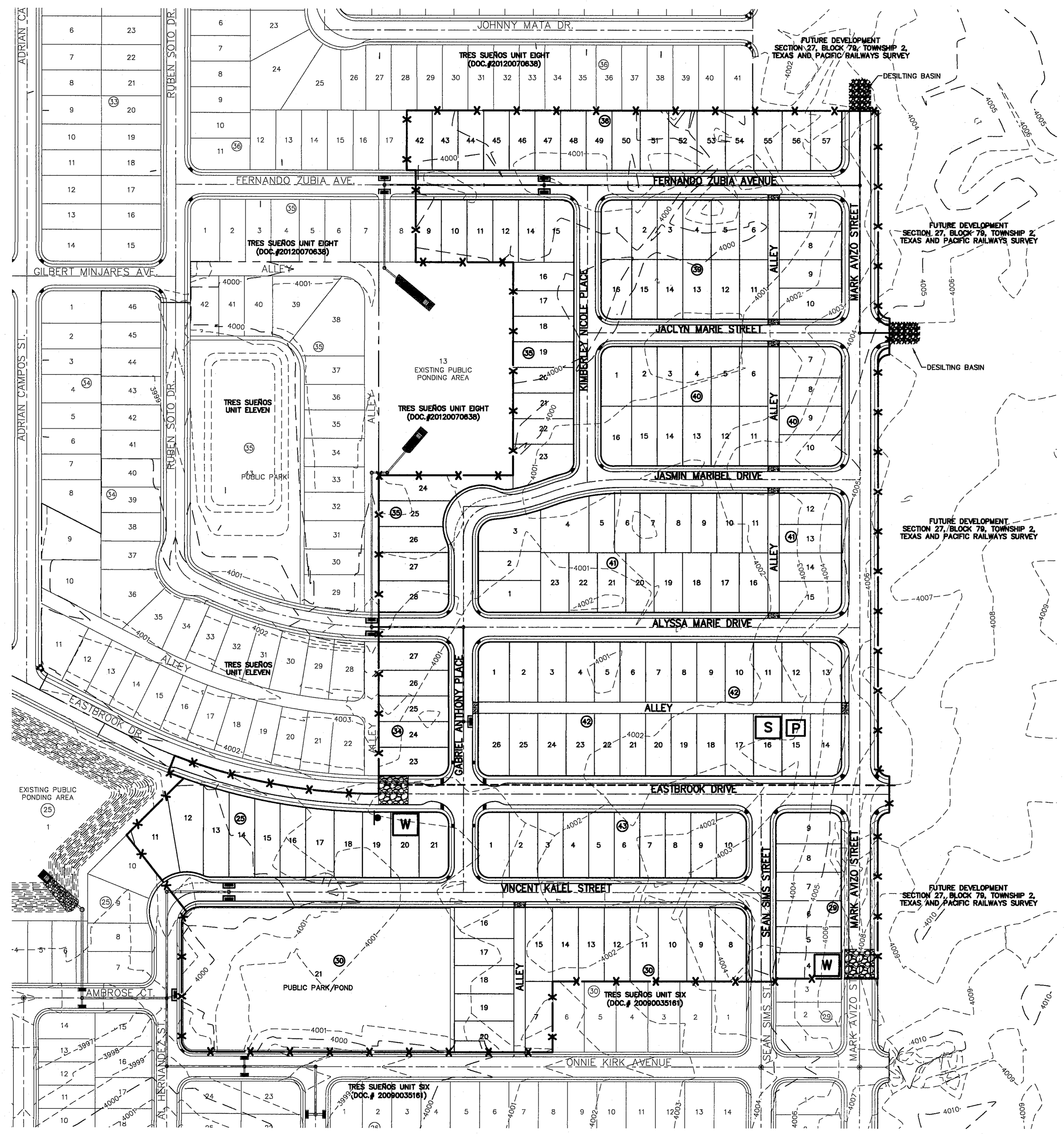
SHEET TITLE

STORM WATER POLLUTION PREVENTION PLAN: GENERAL NOTES

SHEET NO.

C13.1

S:\2350\2350-0002\DWG\Construction\Drawings\Improvement\Plan\13.2 Storm Site Plan.dwg, layout, 8/20/2013, 3:35:07 PM



UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
BEFORE YOU DIG
 CALL
 1-800-DIG-TESS
 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES

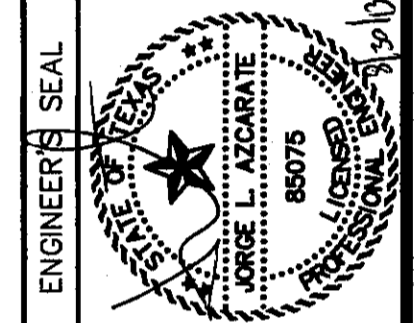
- LEGEND**
- SILT FENCE OR EARTHEN BERM
 - STABILIZED CONSTRUCTION ENTRANCE
 - STAGING AREA
 - PORTABLE TOILETS
 - WASH OUT
 - LOCATION OF NOTICE OF INTENT (NOI)
 - INLET PROTECTION

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM ELEV. 5094.37' E A DISTANCE OF 467.58 FEET FROM THE INTERSECTION OF MARK AVIZO STREET AND AVENUE CITY DATUM. ELEVATION 4005.40

DATE	REVISIONS	BY

CS&A
 ENGINEERS • ARCHITECTS • PLANNERS
 TEXAS REGISTERED ENGINEERING FIRM F-4584
 4712 Woodrow Blain, Ste. F El Paso, TX 79924
 Office: 915.544.6222 Fax: 915.544.5203 www.csand.com



SCALE 1" = 100'
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: JULY 2013
 DESIGN BY: J.H.
 DRAWN BY: J.H.
 CHKD. BY: J.L.A.
 APPVD. BY: J.L.A.
 JOB No. 2260-030-LD

PROJECT TITLE
 TRES SUEÑOS
 UNIT TEN
 SUBDIVISION IMPROVEMENTS

CITY DEVELOPMENT DEPARTMENT
REVIEWED

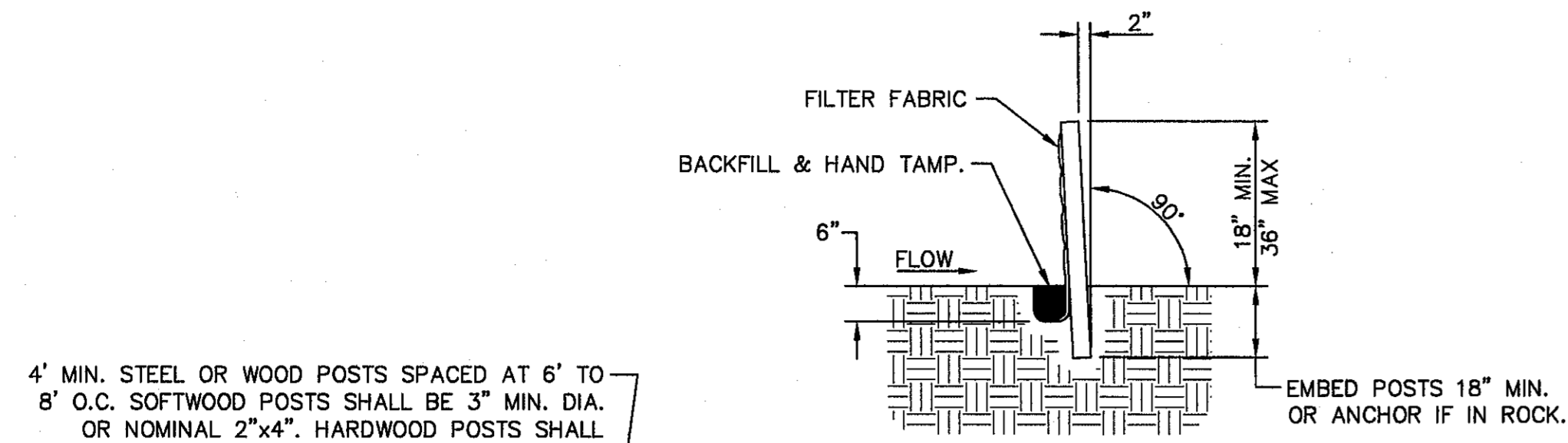
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STORM WATER
 POLLUTION
 PREVENTION PLAN:
 SITE PLAN

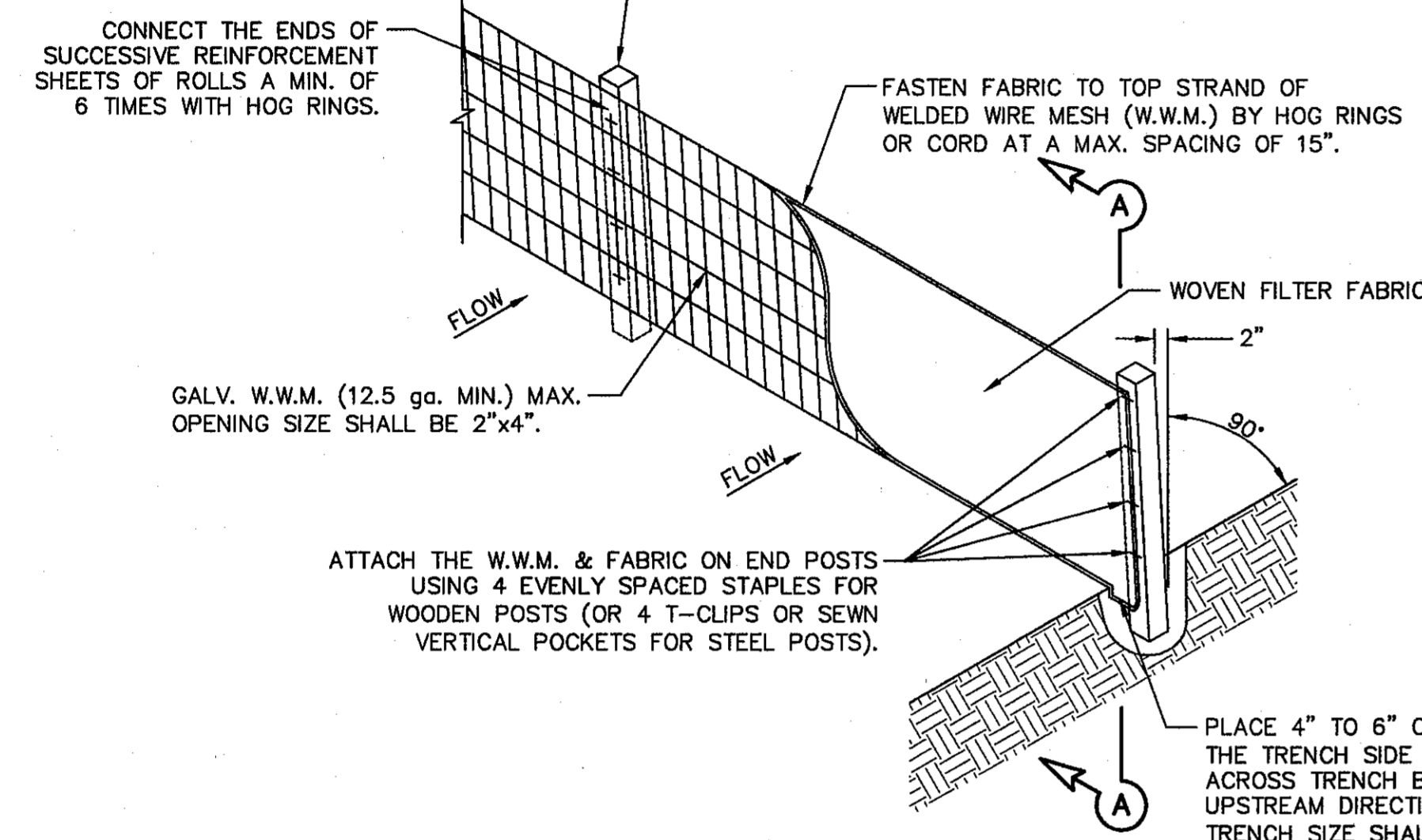
SHEET NO.

C13.2

SITE PLAN
 SCALE: 1" = 100'



4' MIN. STEEL OR WOOD POSTS SPACED AT 6' TO 8' O.C. SOFTWOOD POSTS SHALL BE 3" MIN. DIA. OR NOMINAL 2"x4". HARDWOOD POSTS SHALL HAVE A MIN. CROSS SECTION OF 1.5"x1.5".

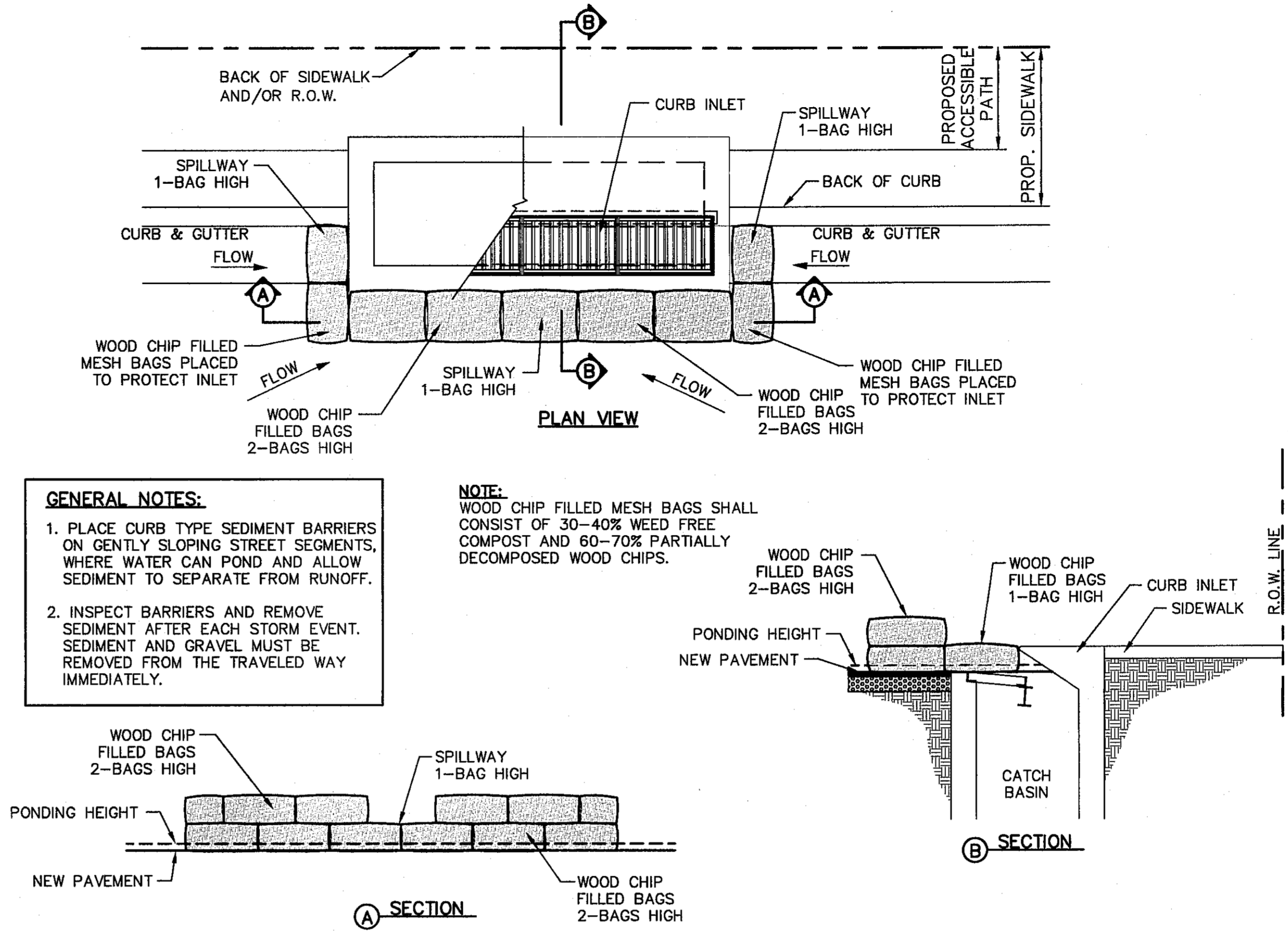


GALV. W.W.M. (12.5 GA. MIN.) MAX. OPENING SIZE SHALL BE 2"x4".

ATTACH THE W.W.M. & FABRIC ON END POSTS USING 4 EVENLY SPACED STAPLES FOR WOODEN POSTS (OR 4 T-CLIPS OR SEWN VERTICAL POCKETS FOR STEEL POSTS).

PLACE 4" TO 6" OF FABRIC AGAINST THE TRENCH SIDE AND APPROX. 4" ACROSS TRENCH BOTTOM IN UPSTREAM DIRECTION. MINIMUM TRENCH SIZE SHALL BE 6" SQUARE. BACKFILL AND HAND TAMP.

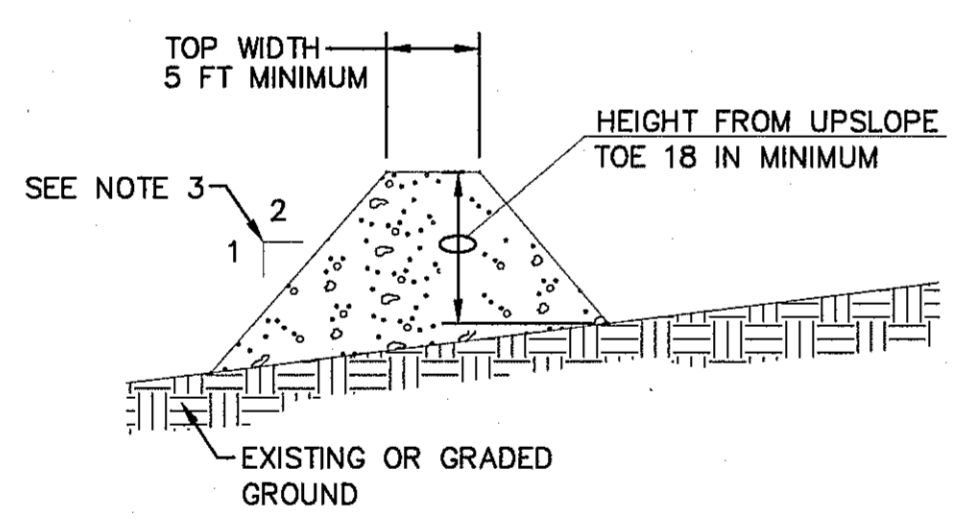
1 TEMPORARY SEDIMENT CONTROL FENCE
SCALE: N.T.S.



GENERAL NOTES:
1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

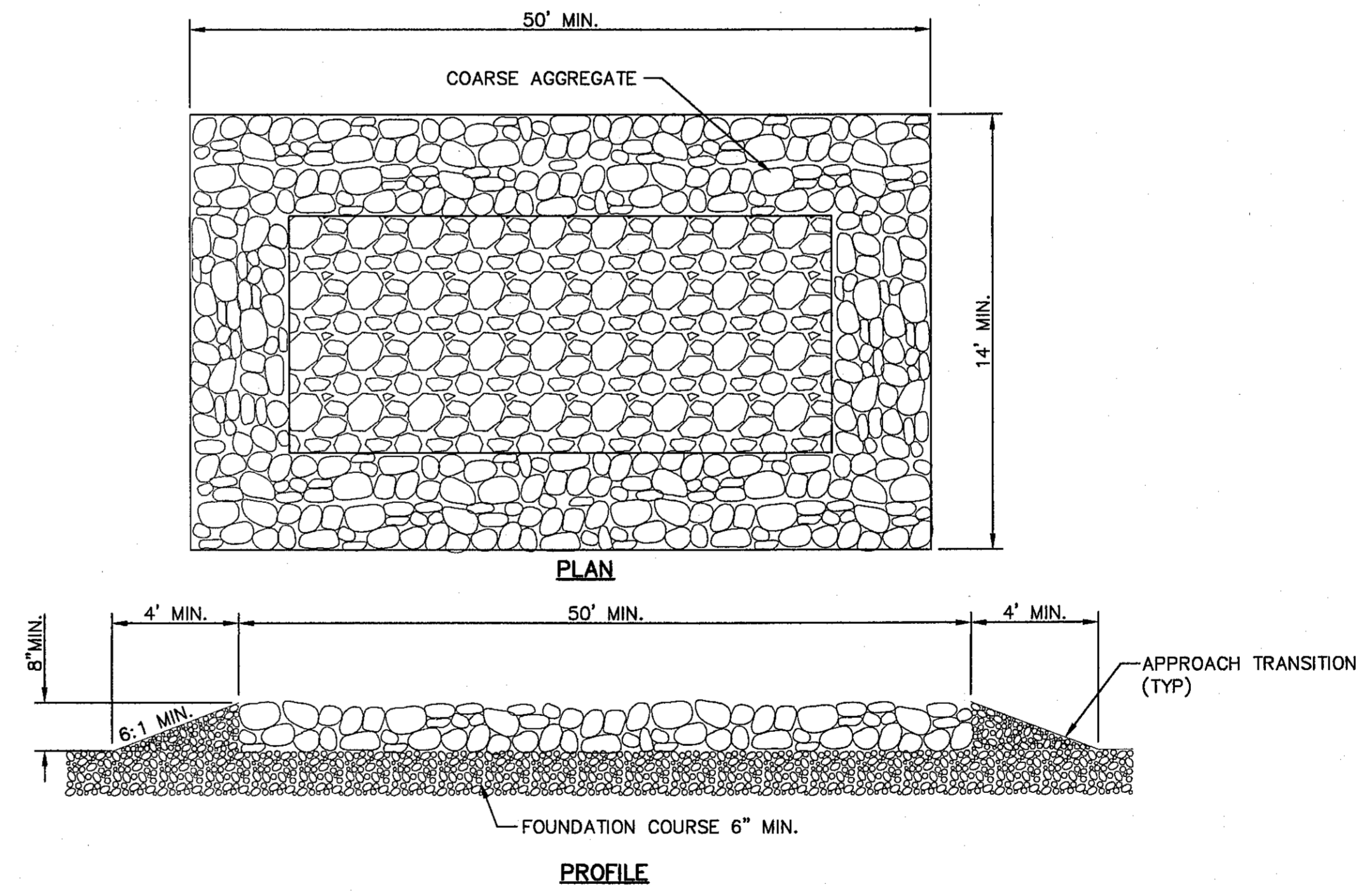
NOTE:
WOOD CHIP FILLED MESH BAGS SHALL CONSIST OF 30-40% WEED FREE COMPOST AND 60-70% PARTIALLY DECOMPOSED WOOD CHIPS.

2 TEMPORARY INLET PROTECTION
SCALE: N.T.S.



- GENERAL NOTES:**
- SOIL USED IN BERM CONSTRUCTION SHALL BE MACHINE COMPACTED.
 - TOP WIDTH AND HEIGHT OF BERM MAY BE MODIFIED WITH PRIOR APPROVAL OF THE ENGINEER.
 - SIDE SLOPES WITHIN THE SAFETY CLEAR ZONE OF A ROADWAY SHALL BE 6:1 OR FLATTER.
 - GRADING SHALL BE SHOWN ELSEWHERE IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
 - THE ENGINEER RESERVES THE RIGHT TO MODIFY THE DIMENSIONS SHOWN FOR THE BERM DEPENDENT ON RUNOFF VOLUME CHARACTERISTICS.
 - BERM THAT ARE IN PLACE FOR MORE THAN 14 CALENDAR DAYS SHOULD BE STABILIZED TO PREVENT SEDIMENT RUNOFF.
 - THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

3 TYPICAL BERM CONFIGURATION
SCALE: N.T.S.



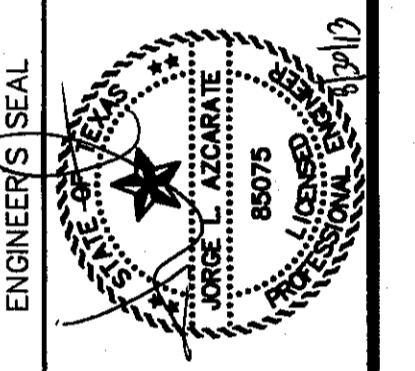
- GENERAL NOTES**
- THE LENGTH OF THE TYPE 1 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
 - THE COARSE AGGREGATE SHOULD BE OPEN GRADED WITH A SIZE OF 4" TO 8".
 - THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6:1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
 - THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.
 - THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
 - THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

4 CONSTRUCTION EXIT (TYPE 1)
SCALE: N.T.S.

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., 508'3.3' E. A DISTANCE OF 487.56 FEET FROM THE CENTERLINE OF RICH BEEM BLVD. TO AVENUE CITY DATUM. ELEVATION.....4005.40

DATE	REVISIONS	BY

CS&A
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4684
4712 Woodrow Bean, Ste. F Bldg. TX 78924
Office: 915.541.8225 Fax: 915.541.8223 www.csandamp.com



SCALE	N/A
Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	JULY 2013
DESIGN BY:	J.H.
DRAWN BY:	J.H.
CHKD. BY:	J.G.
APPRD. BY:	J.L.A.
JOB No.	2250-050-LD

PROJECT TITLE
**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

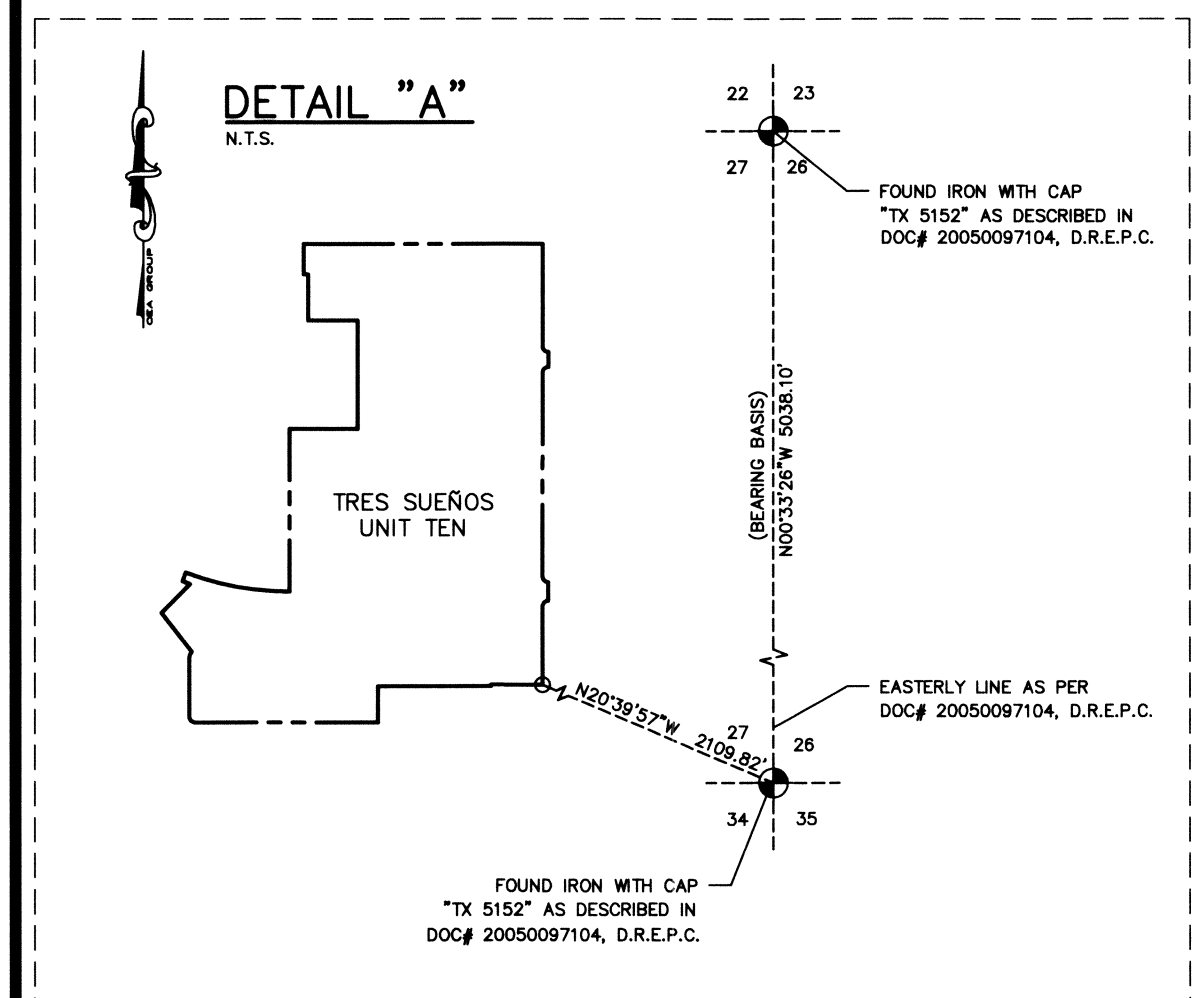
SHEET TITLE
**STORM WATER
POLLUTION
PREVENTION PLAN:
DETAILS**

SHEET NO.
C13.3

CITY DEVELOPMENT DEPARTMENT
REVIEWED

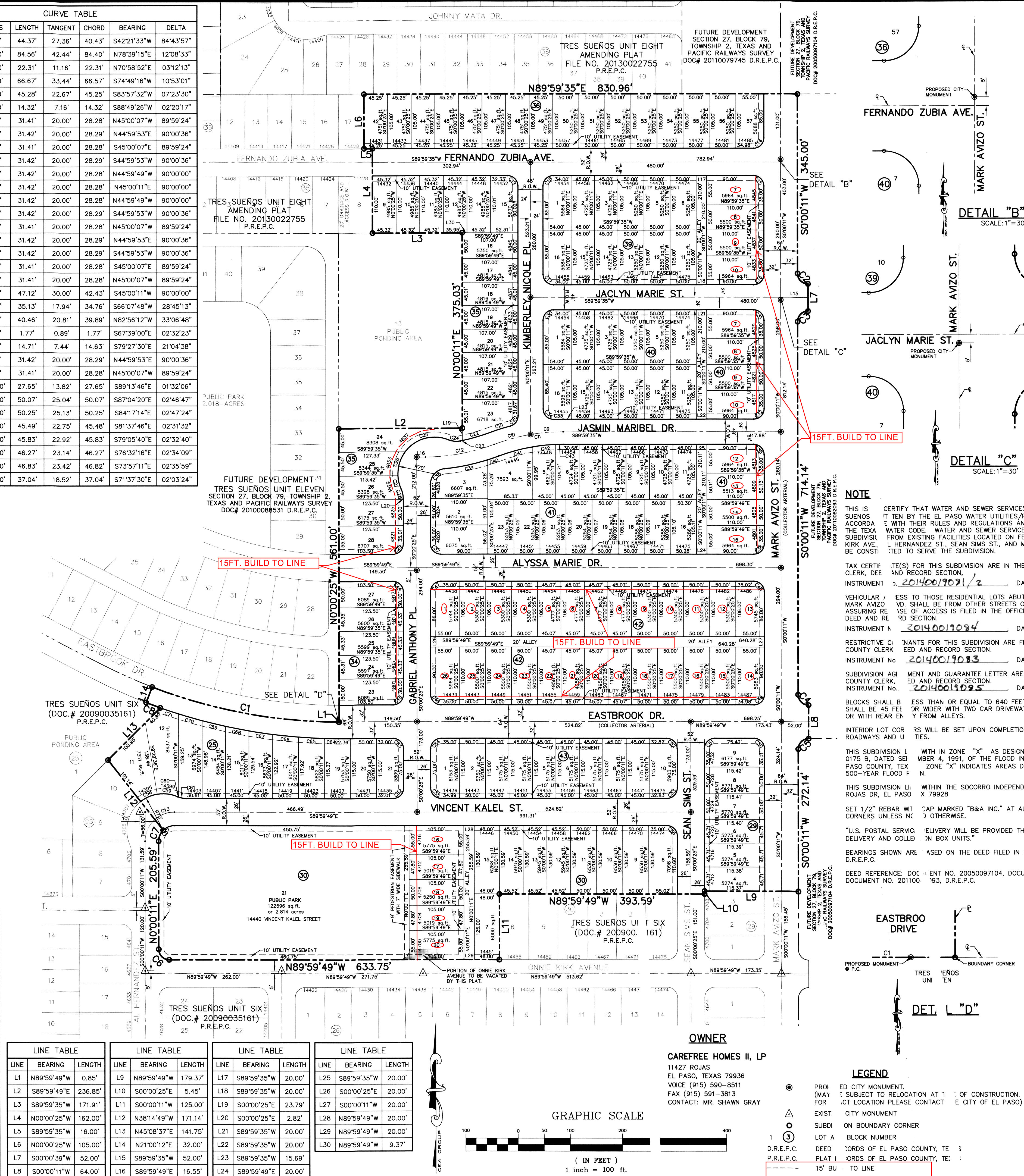
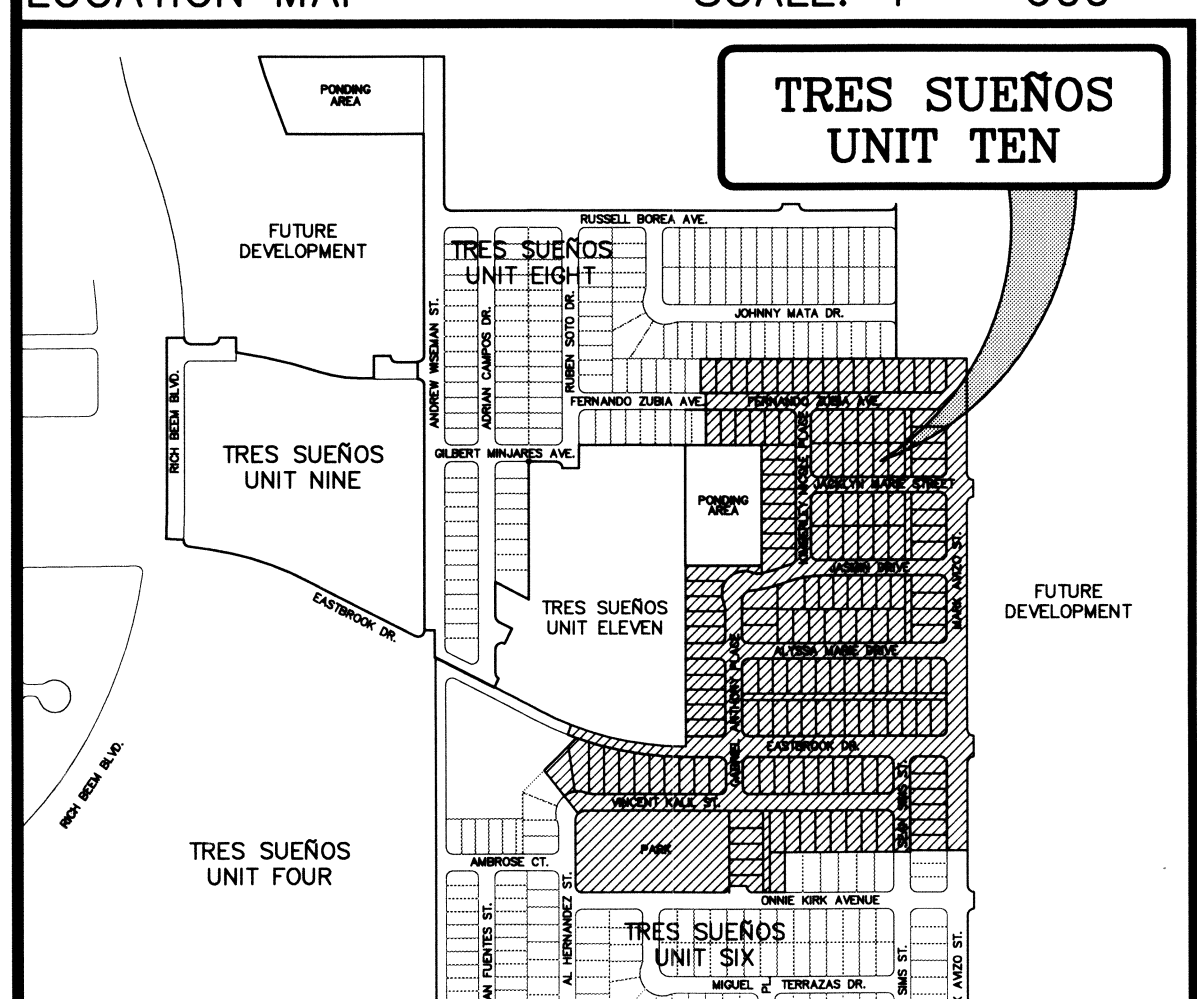
CURVE TABLE with columns: CURVE, RADIUS, LENGTH, TANGENT, CHORD, BEARING, DELTA. Contains data for curves C1 through C37.

CURVE TABLE with columns: CURVE, RADIUS, LENGTH, TANGENT, CHORD, BEARING, DELTA. Contains data for curves C38 through C71.

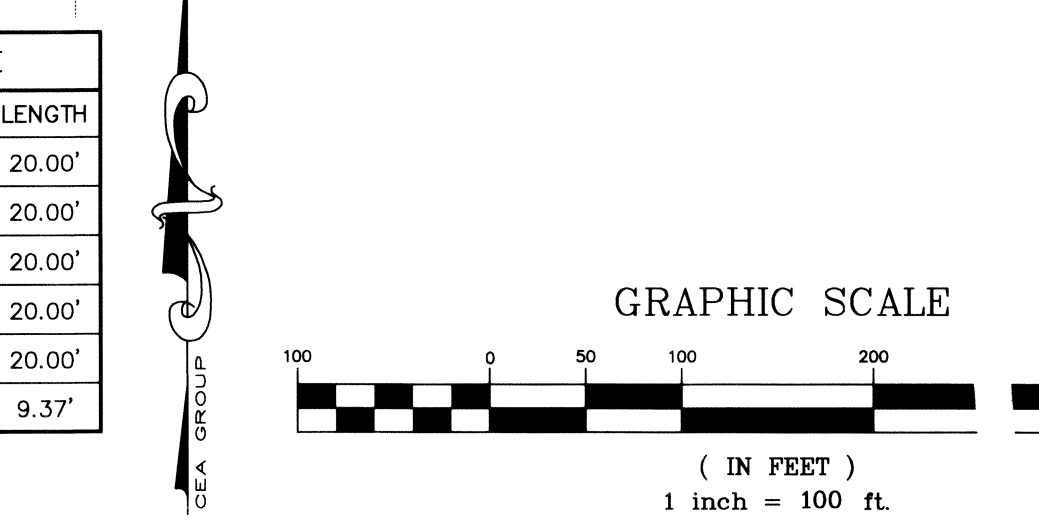


BENCHMARK. CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. S08°43'31"E A DISTANCE OF 467.58 FEET FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION: 4005.40

LOCATION MAP SCALE: 1" = 600'



LINE TABLE with columns: LINE, BEARING, LENGTH. Contains data for lines L1 through L30.



OWNER CAREFREE HOMES II, LP. LEGEND. COVENANT C-5 Vehicular Access to Lots. 1:27/2013

TRES SUEÑOS UNIT TEN

A PORTION OF SECTION 27, BLOCK 79, TOWNSHIP 2, TEXAS AND PACIFIC RAILROAD COMPANY SURVEYS, AND A REPLAT OF A PORTION OF ONNIE KIRK AVENUE, TRES SUEÑOS UNIT SIX, AN ADDITION TO THE CITY OF EL PASO, EL PASO COUNTY, TEXAS CONTAINING 33.514 ACRES ±

DEDICATION. Carefree Homes II, LP, property owners of this land do hereby present this plat and dedicate, if not previously dedicated, its respective portion of said property to the use of the public, the streets, utility easements, parks, pedestrian easement, and alleys, as hereon laid down, and designated, including easements for overhead service wires, conduits and pipes for underground utilities, the right to ingress and egress for service and construction, and the right to trim interfering trees and shrubs.

Witness our signature this 13 day of November 2013. CAREFREE HOMES II, LP

ACKNOWLEDGEMENT. STATE OF TEXAS, COUNTY OF EL PASO. Before me, the undersigned authority, on this day personally appeared Shawn Gray, President of Carefree Homes II, LP, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations herein expressed.

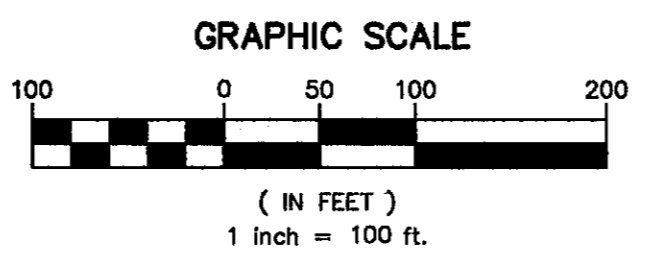
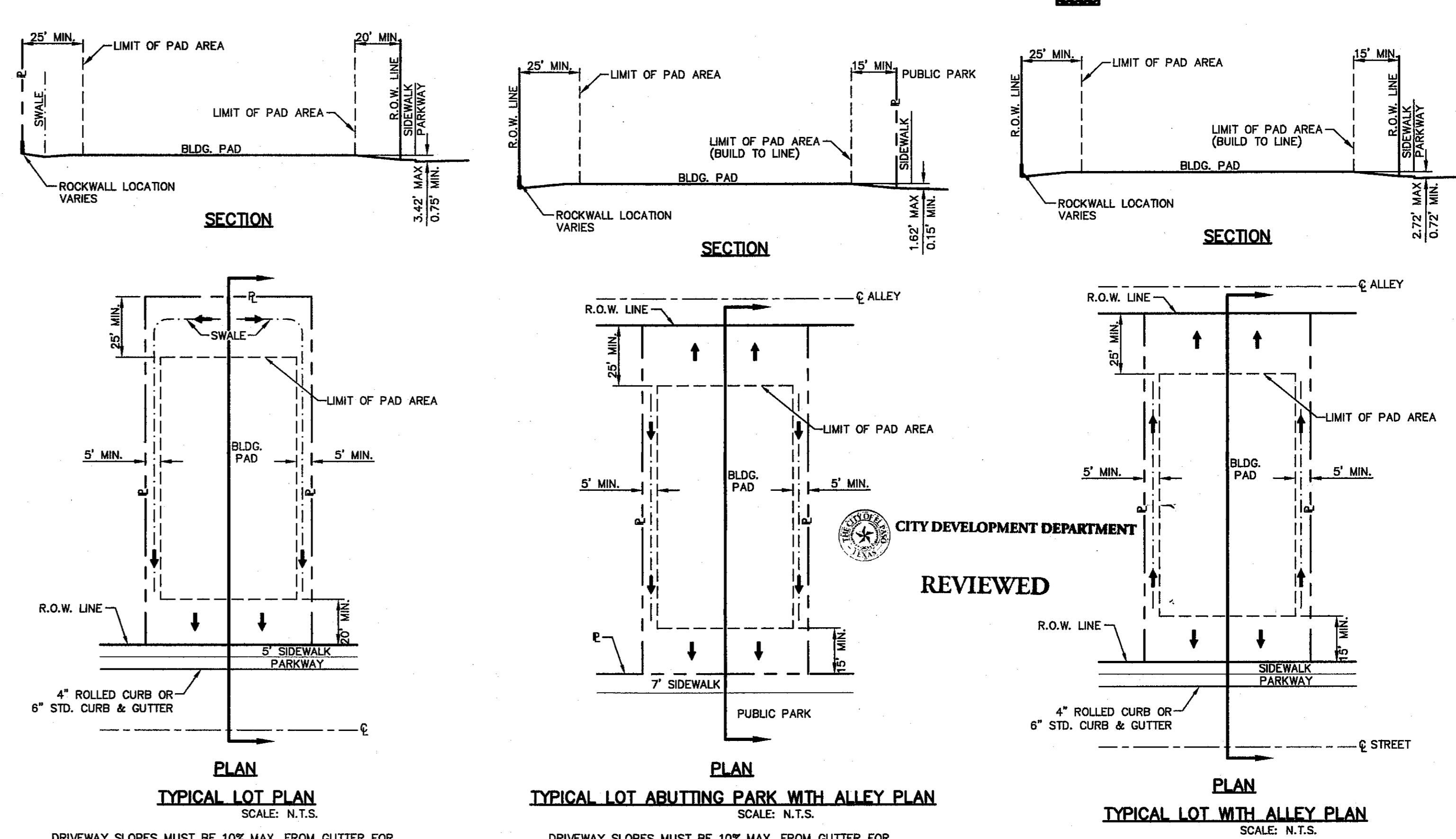
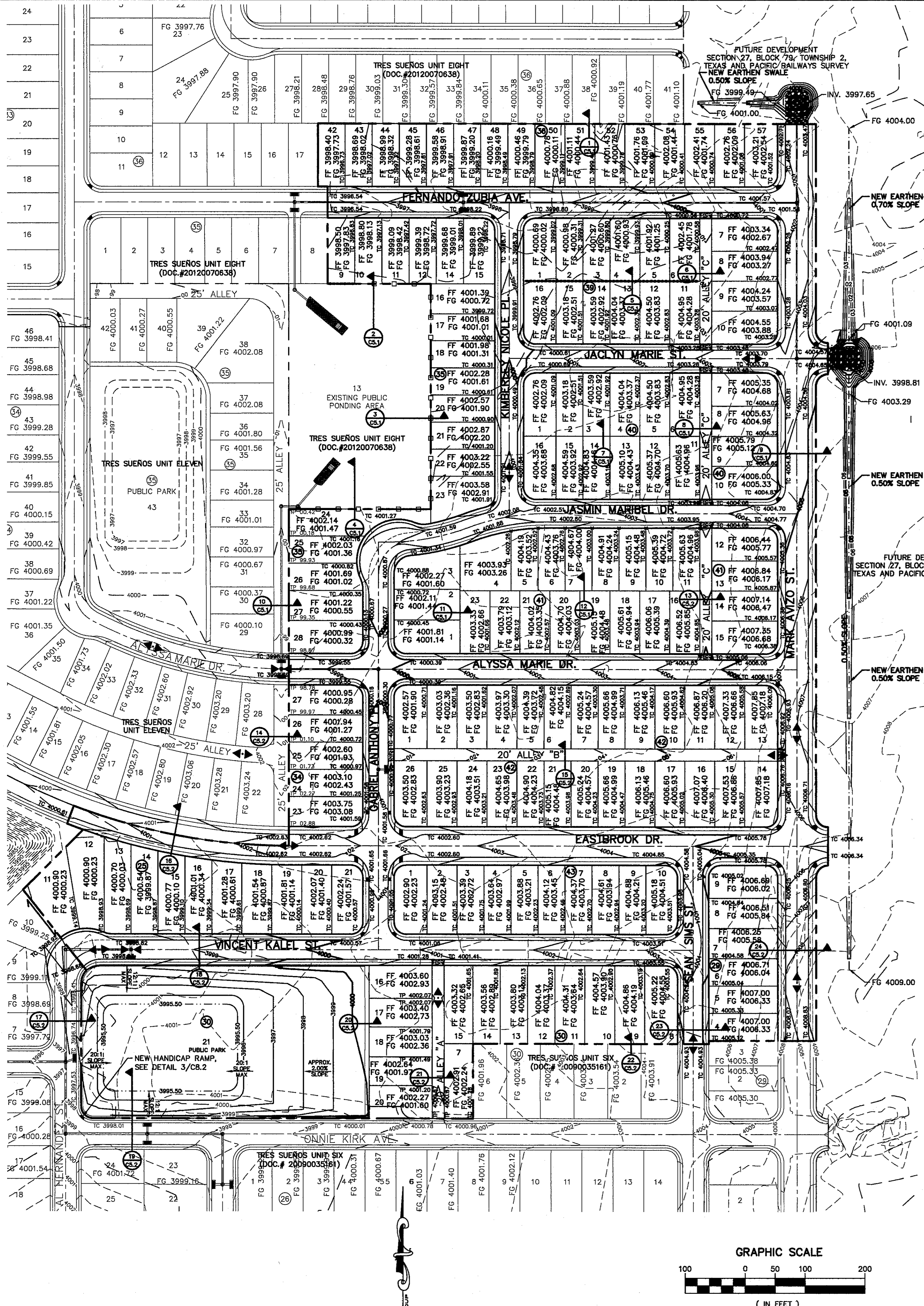
Given under my hand and seal of office this 13 day of November 2013. RICARDO V. AGUILAR, Notary Public, State of Texas, My Commission Expires April 23, 2015.

CITY PLAN COMMISSION. This subdivision is hereby approved as to the platting and as to the condition of the dedication in accordance with Chapter 212 of the Local Government Code of Texas this 13th day of March 2013, A.D. Approved by the City Plan Commission.

FILED. Filed and recorded in the office of the County Clerk of El Paso County, Texas, this 27 day of March 2013, A.D. Document No. 20140019080 of the Plat Records.

SURVEYOR BENITO BARRAGAN, R.P.L.S. No. 5615. ENGINEER JORGE L. AZCARATE, P.E. 85075.

CONTACT: BENITO BARRAGAN, R.P.L.S. CONTACT: JORGE L. AZCARATE, P.E. DATE OF PREPARATION: AUGUST 20, 2013



GRADING PLAN
SCALE: 1" = 100'

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
A&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
BEFORE YOU DIG
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES

- NOTES:**
- RETAINING WALLS SHALL BE CONSTRUCTED FOR VERTICAL GRADES GREATER THAN 2-FEET.
 - SLOPED AREAS SHALL BE MAINTAINED BY THE PROPERTY OWNERS.
 - ALL RETAINING WALLS NOT SPECIFIED TO BE CONSTRUCTED BY DEVELOPER, SHALL BE BUILT BY BUILDER.
 - RETAINING ROCKWALLS (RETAINING PORTIONS ONLY) IN EXCESS OF 4' HIGH TO BE BUILT BY DEVELOPER. REMAINING ROCKWALL SECTIONS TO BE BUILT BY BUILDER.
 - DEVELOPER SHALL COMPLY WITH SECTION 13.08.170 (EXCESSIVE PAVING CUTS) OF THE EL PASO MUNICIPAL CODE.
 - IMPROVEMENTS SHALL NOT BE PLACED ON SIDEWALK (NDBCO), SIGNS, POLES, FIRE HYDRANTS, ELECTRIC TRANSFORMERS, UTILITY PEDESTALS, AND JUNCTION BOXES, ETC.) REFER TO STANDARD DETAIL SHEETS.
 - IMPROVEMENTS SHALL COMPLY WITH T.A.S./A.D.A.
 - WHEELCHAIR RAMPS WILL BE CONSTRUCTED BY DEVELOPER AS PART OF SUBDIVISION IMPROVEMENTS.
 - REFERENCE SHEET C3.2 FOR ALLEY GRADING.
 - ALL UNDERGROUND UTILITIES WITHIN PARK SHALL BE AT 5 FT. MIN. DEPTH.
- BENCHMARK**
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., S08°43'31" E A DISTANCE OF 467.58 FEET FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40
- FLOOD ZONE:**
THIS SUBDIVISION LIES WITHIN ZONE "X" AS DESIGNATED IN PANEL NO. 480212 0175 B, DATED SEPTEMBER 4, 1991, OF THE FLOOD INSURANCE RATE MAPS, EL PASO COUNTY, TEXAS. ZONE "X" INDICATES AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAIN.
- LEGEND:**
- SUBDIVISION BOUNDARY LINE
 - NEW 6' HIGH RETAINING ROCKWALL (2'-3' RETAINING HEIGHT)
 - NEW 6' HIGH RETAINING ROCKWALL (3'-9' RETAINING HEIGHT)
 - PROPOSED MAJOR CONTOURS
 - PROPOSED MINOR CONTOURS
 - EXISTING MAJOR CONTOURS
 - EXISTING MINOR CONTOURS
 - PROPOSED TEMPORARY DESILTING BASIN

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., S08°43'31" E A DISTANCE OF 467.58 FEET FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40

ENGINEER'S SEAL

 J. L. SIMS
 ENGINEER
 STATE OF TEXAS
 LICENSE NO. 85075

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
GRADING PLAN

SHEET NO.
C3.1

SCALE: 1" = 100'
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: JULY 2013
 DESIGN BY: J.H.
 DRAWN BY: J.H.
 CHKD. BY: J.L.C.
 APPVD. BY: J.L.A.
 JOB NO. 2250-030-1D

REVISIONS

DATE	REVISIONS	BY

S:\2250\2250 - 020\DWG\Construction\Grading\Improvements\Plan\C3.1 GRADING PLAN.dwg, 9/19/2013 9:08:08 AM

S:\2350\1250-0320\DWG\Construction\Grading\Improvements_Plan\C3.2_ALEYS A-C_RIP.dwg, User: J. 8/29/2013 2:21:07 PM

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-6500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

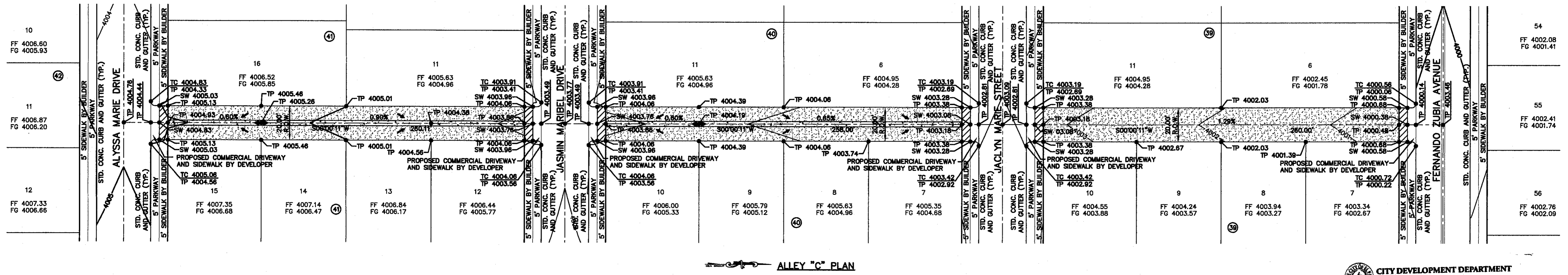
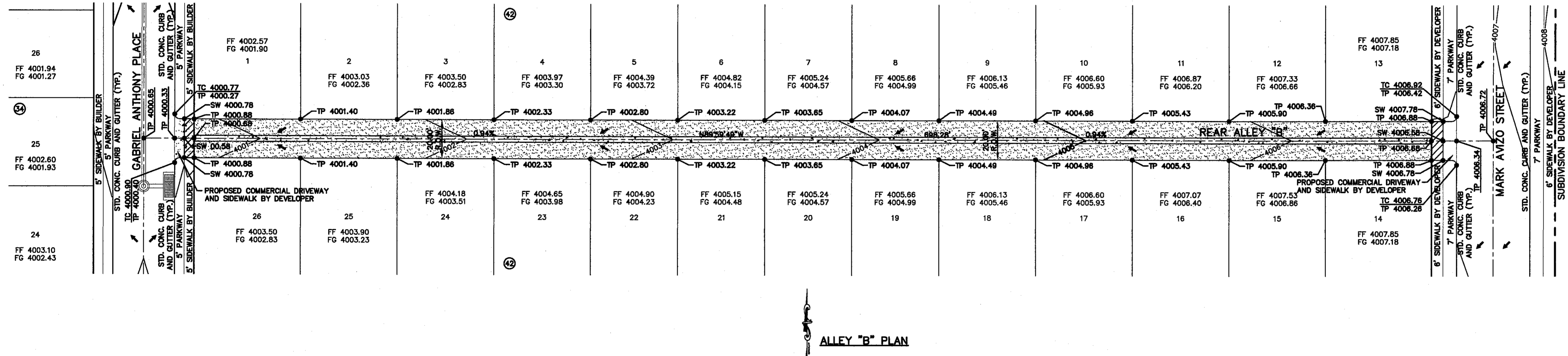
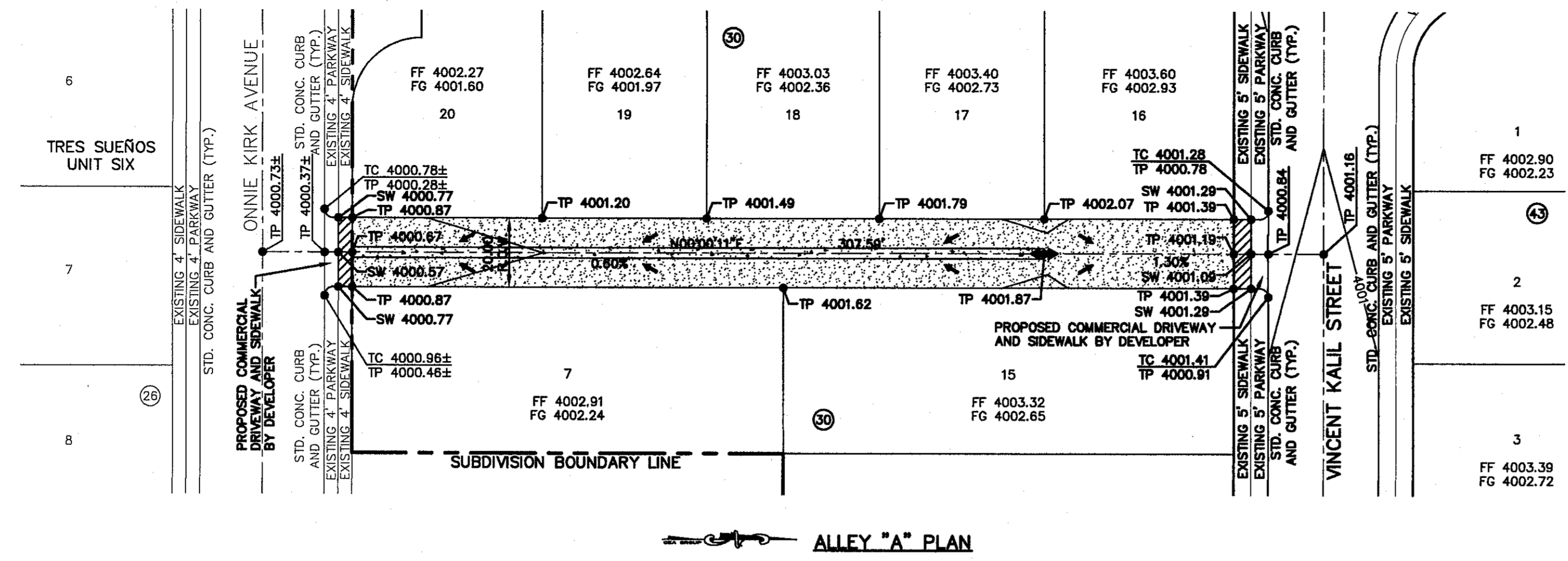
WARNING!
BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

LEGEND:

- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- NEW 4' HIGH RETAINING ROCKWALL (2'-3' RETAINING HEIGHT)
- NEW 4' HIGH RETAINING ROCKWALL (3'-9' RETAINING HEIGHT)
- PROPOSED ASPHALT PAVEMENT
- SIDEWALK BY DEVELOPER, 2% MAX. CROSS SLOPE. SEE DETAIL 2/C8.3
- CONCRETE VALLEY GUTTER SEE DETAIL 4/C8.3



REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., SUBSTANTIAL DISTANCE OF 467.58 FEET WEST OF THE CENTERLINE OF WAY LINE MONTANA AVENUE CITY DATA. ELEVATION: 6082.70

DATE _____ BY _____

REVISIONS _____

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TEXAS REGISTERED ENGINEERING FIRM F-464

4712 Woodrow Bean, Ste. F El Paso, TX 79924

Office: 915.544.5222 Fax: 915.544.5233 www.cesgroup.net

ENGINEER'S SEAL

SCALE: "1" = 30'

Horizontal: N/A

Contour Interval: N/A

DATE: JULY 2013

DESIGN BY: J.H.

DRAWN BY: J.H.

CHKD. BY: J.G.

APPVD. BY: J.L.A.

JOB NO. 2250-030-LD

PROJECT TITLE

TRES SUEÑOS UNIT TEN

SUBDIVISION IMPROVEMENTS

SHEET TITLE

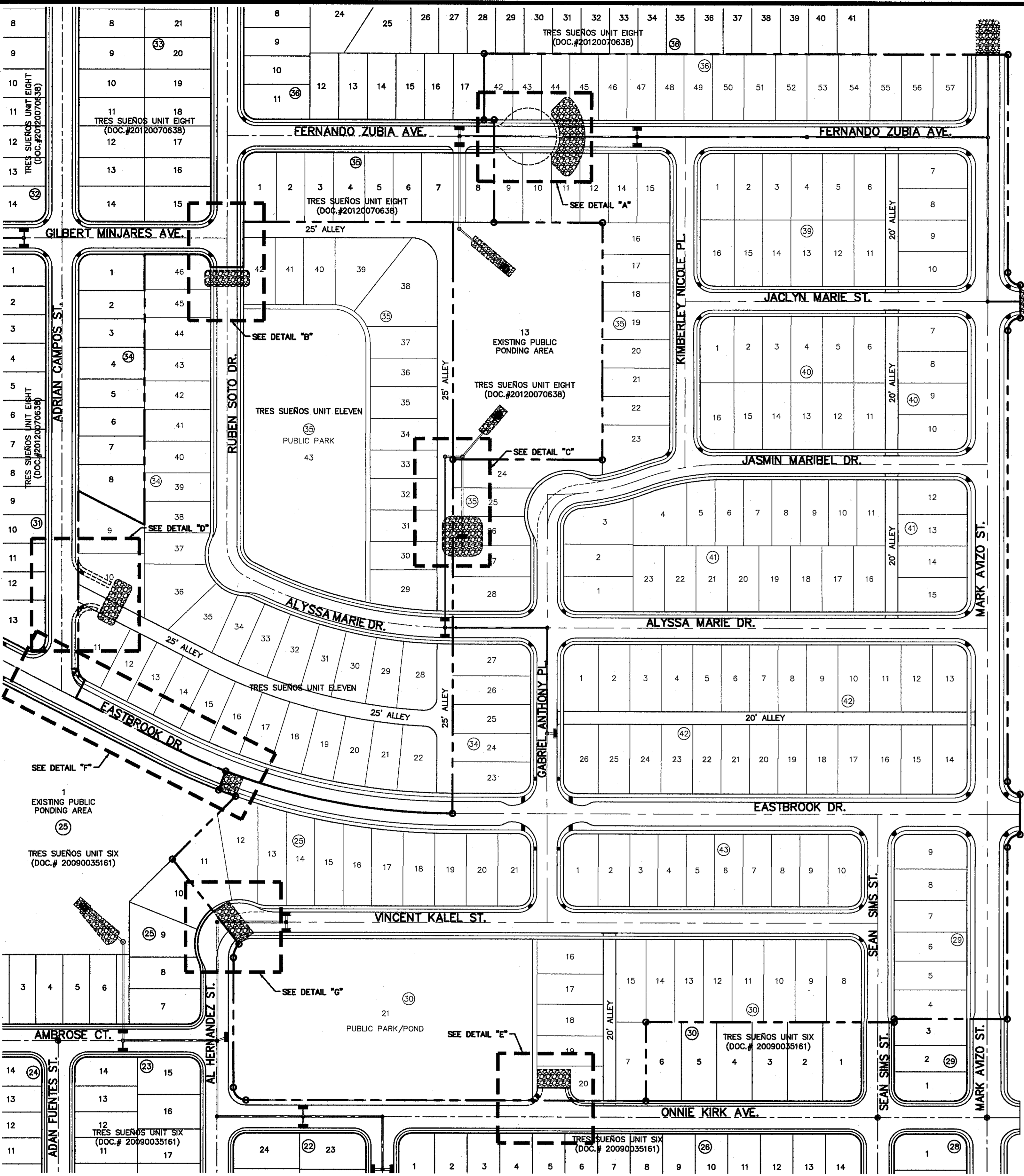
REAR ALLEY "A", "B", & "C" GRADING PLAN

SHEET NO.

C3.2

CITY DEVELOPMENT DEPARTMENT

REVIEWED



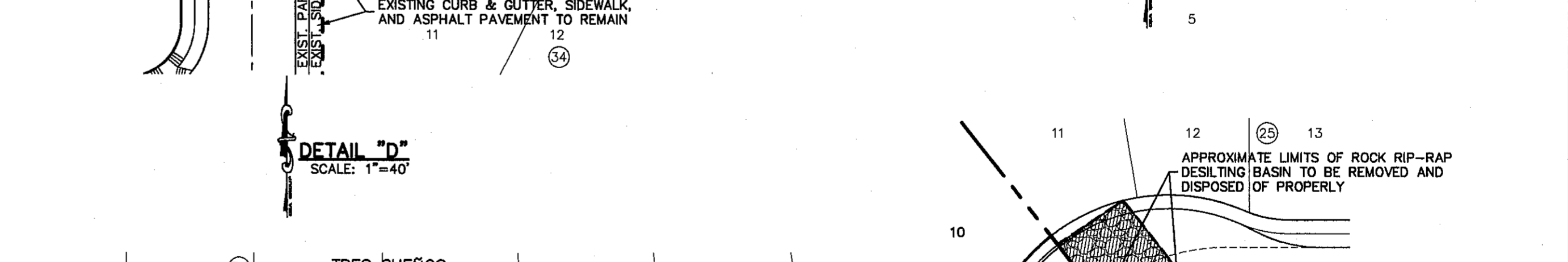
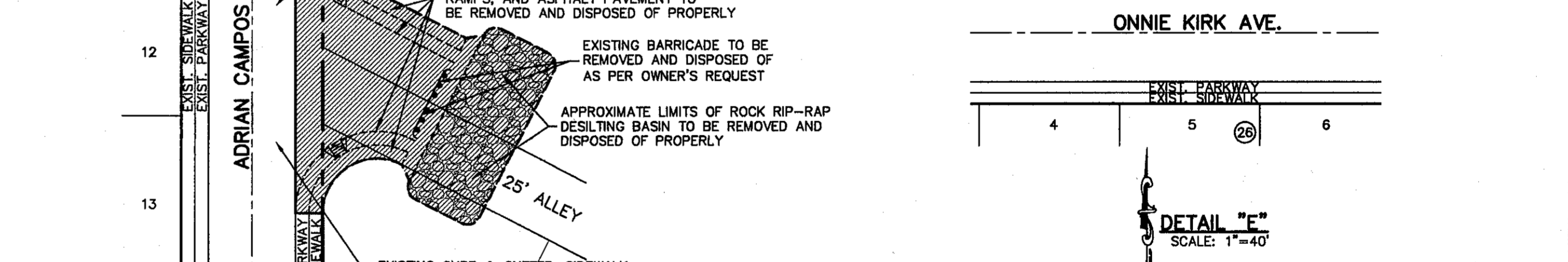
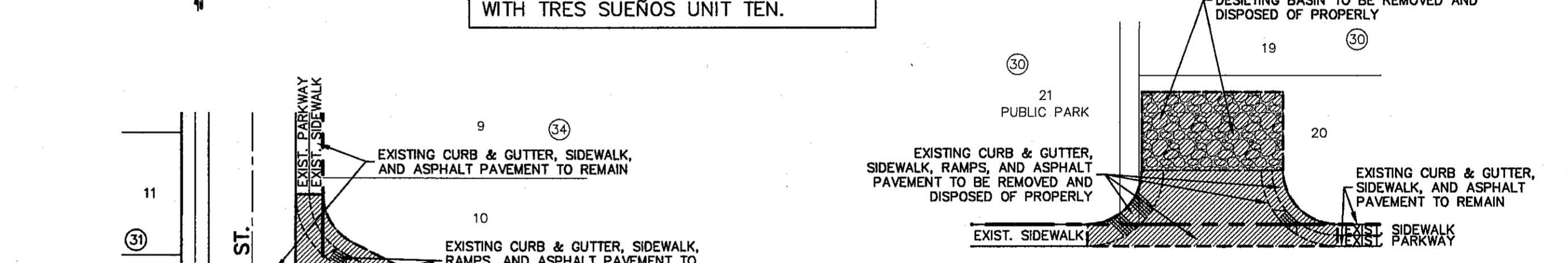
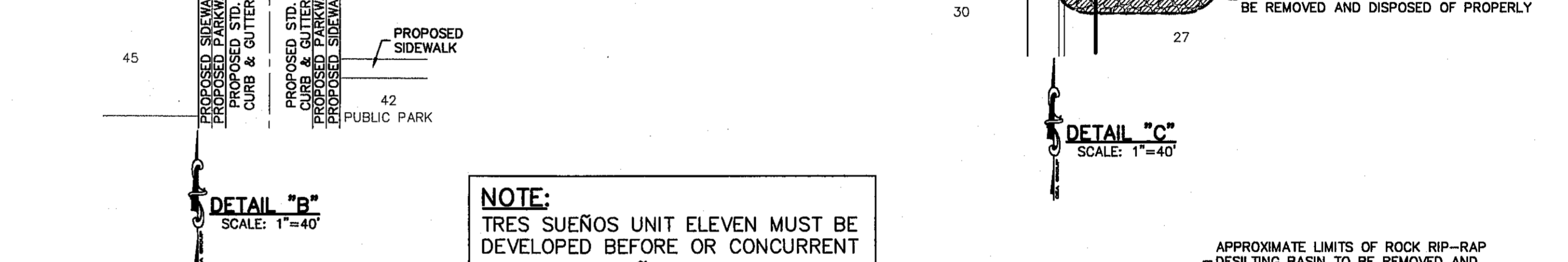
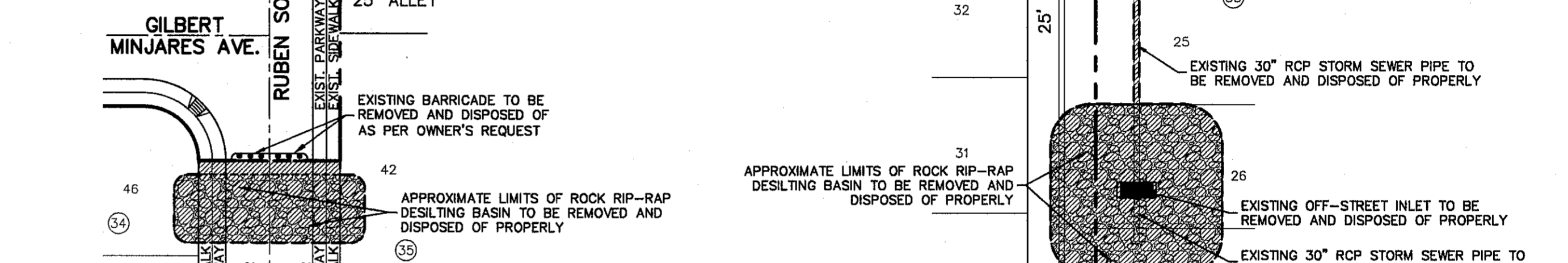
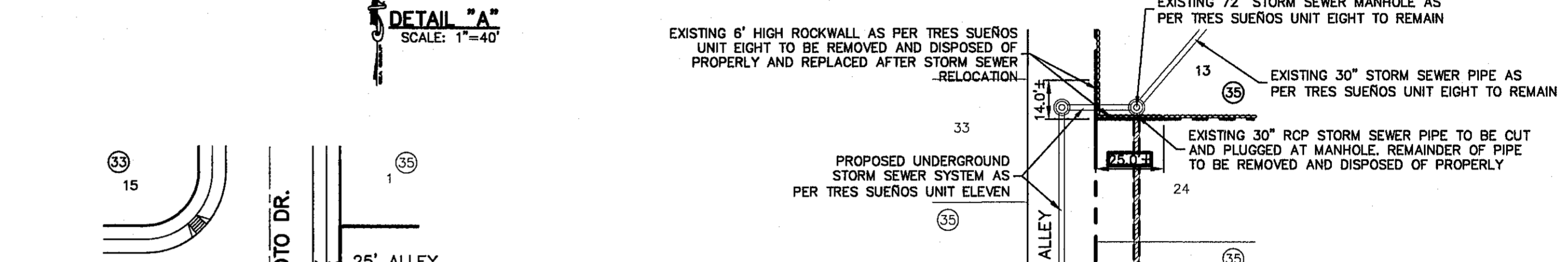
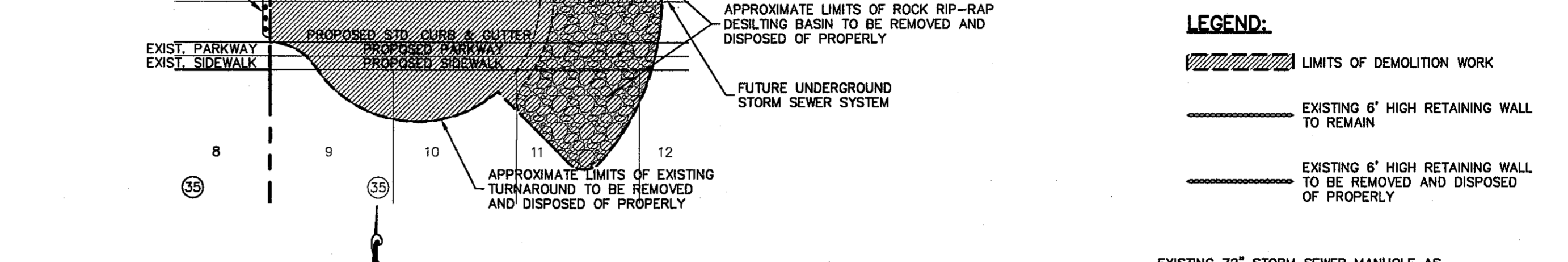
UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 498-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3788
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
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1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES



NOTE:
TRES SUEÑOS UNIT ELEVEN MUST BE DEVELOPED BEFORE OR CONCURRENT WITH TRES SUEÑOS UNIT TEN.

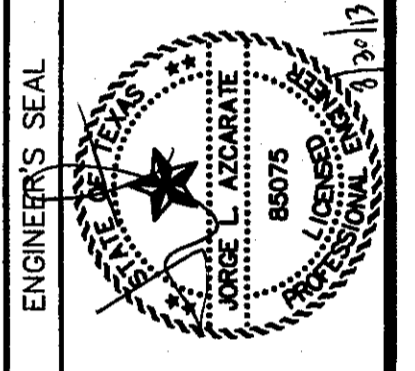
DEMOLITION PLAN
SCALE: 1" = 100'

REFERENCES - BENCHMARKS

CITY MONUMENT AT FRONT OF CURVE CENTERLINE RICH BEEM BLVD., SABBASTY'S, A DISTANCE OF 467.58 FEET FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION: 4005.40

BY	
REVISIONS	
DATE	

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GROUP
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TEXAS REGISTERED ENGINEERING FIRM F-4584
4719 Woodchuck Bend, Ste. F El Paso, TX 79924
Office: 915.544.5233 Fax: 915.544.5233 www.ceagroup.com



SCALE: 1"=100'

Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	JULY 2013
DESIGN BY:	J.H.
DRAWN BY:	J.H.
CHKD. BY:	J.L.A.
APPROV. BY:	J.L.A.
JOB No.:	2250-030-LD

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
DEMOLITION PLAN

SHEET NO.
C3.3

CITY DEVELOPMENT DEPARTMENT
REVIEWED

S:\2250\2250-030-LD\030-DEMOLITION PLAN.dwg, 0300 PLAN, 8/20/2013 2:29:48 PM

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 690-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

50 YEAR STORM CALCULATIONS FOR WATERSHED AREAS

DRAINAGE AREA NO. (1)	DRAINAGE AREA (AC) (2)	DESIGN STORM INTENSITY (50) (3)	TIME OF CONCENTRATION (4)	RUNOFF COEFF. (C) (5)	ADDITIONAL FLOW (CFS) (6)	Q50 (CFS) (7)
WS-1	0.941	5.573	10.00	0.330	0.000	1.731
WS-2	12.572	3.594	23.82	0.330	0.000	14.911
DA-14*	0.362	3.708	22.62	0.900	0.000	1.207
DA-15*	0.078	3.745	22.22	0.900	0.000	0.263
DA-16*	1.781	2.956	32.51	0.752	0.000	3.959
DA-17*	4.678	2.742	36.39	0.693	0.000	8.889
DA-18*	8.120	3.501	24.87	0.616	0.000	17.512
DA-19*	3.228	3.654	23.16	0.683	0.000	8.056
DA-20*	1.723	3.900	20.71	0.668	0.000	4.489
DA-21*	3.723	3.658	23.14	0.681	0.000	9.269
DA-22*	1.980	3.953	20.39	0.697	0.000	5.455
DA-23*	3.308	3.637	23.35	0.654	0.000	7.868

* FUTURE WATERSHED CONTRIBUTIONS (OFF-SITE)
NOT PART OF SUBDIVISION IMPROVEMENTS PLAN

REFERENCE: CITY OF EL PASO SUBDIVISION STANDARDS (3-11-97)

- (1) WATERSHED AREA IDENTIFICATION
- (2) AREA FROM DRAINAGE PLAN
- (3) RAINFALL INTENSITY, 50 YEAR STORM => PLATE NO. 2-14
- (4) TIME OF CONCENTRATION: TC = T (OVERLAND) + T (GUTTER)
- (5) RUNOFF COEFFICIENT => PLATE NO. 2-10 TABLE A
RESIDENTIAL AREA = 0.60
PAVEMENT AREA = 0.90
PARK AREA = 0.40
UNDEVELOPED AREA = 0.33
- (6) $Q_{50} = C \times A \times I \times 1.50$

CALCULATIONS FOR NEW PUBLIC PARK/POND

QT = (ARC)/12	SILT VOLUME = 0.012 AC-FT/AC
QT = 0.313	3.313 X 0.012 = 0.040 AC-FT
A = 3.313	0.313 + 0.040 = 0.353 AC-FT
R = 3.20'	
C = 0.354	

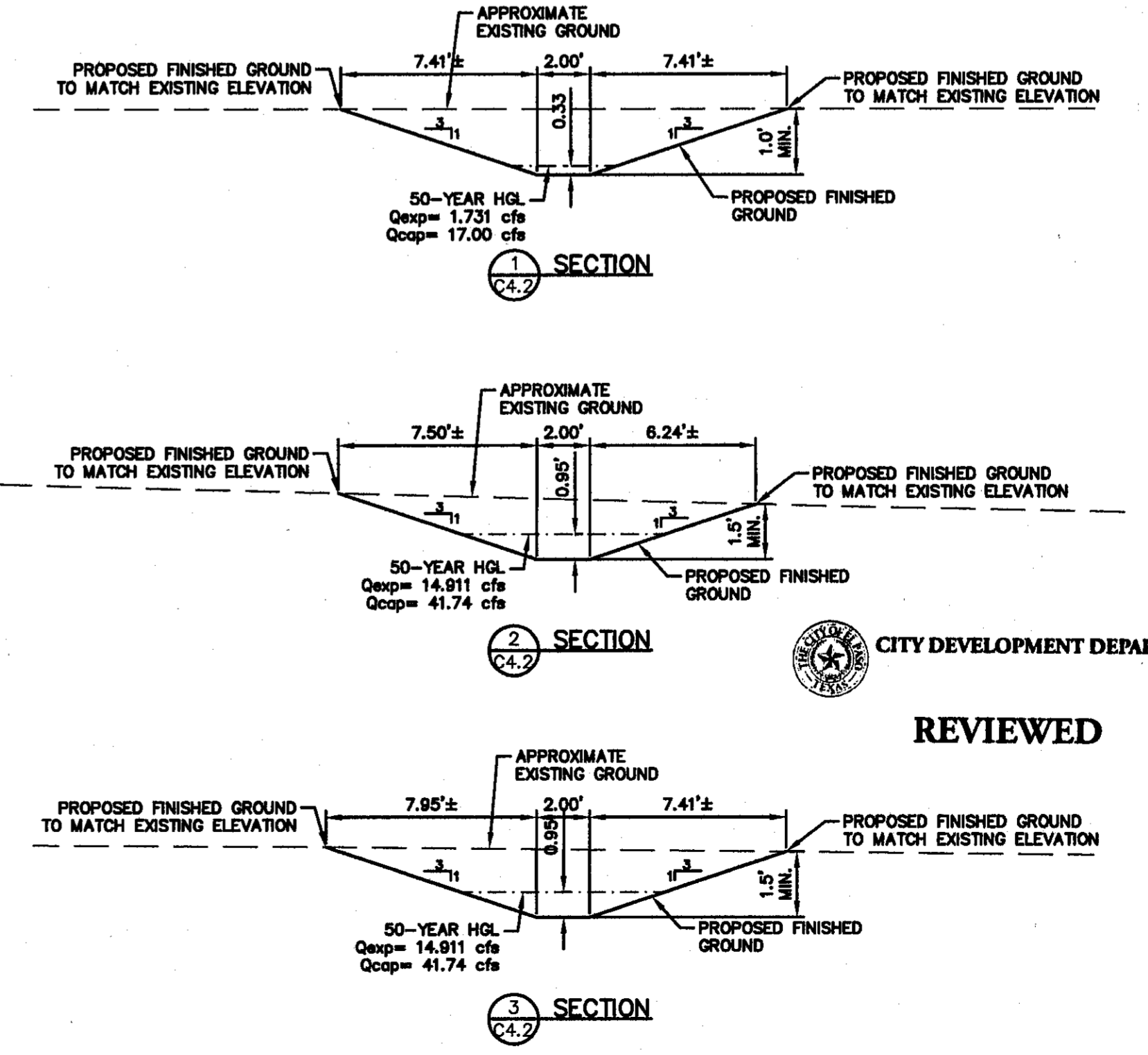
TOTAL_{runoff} = 0.353 AC-FT
TOTAL_{silt} = 0.419 AC-FT

NEW PARK RETENTION POND

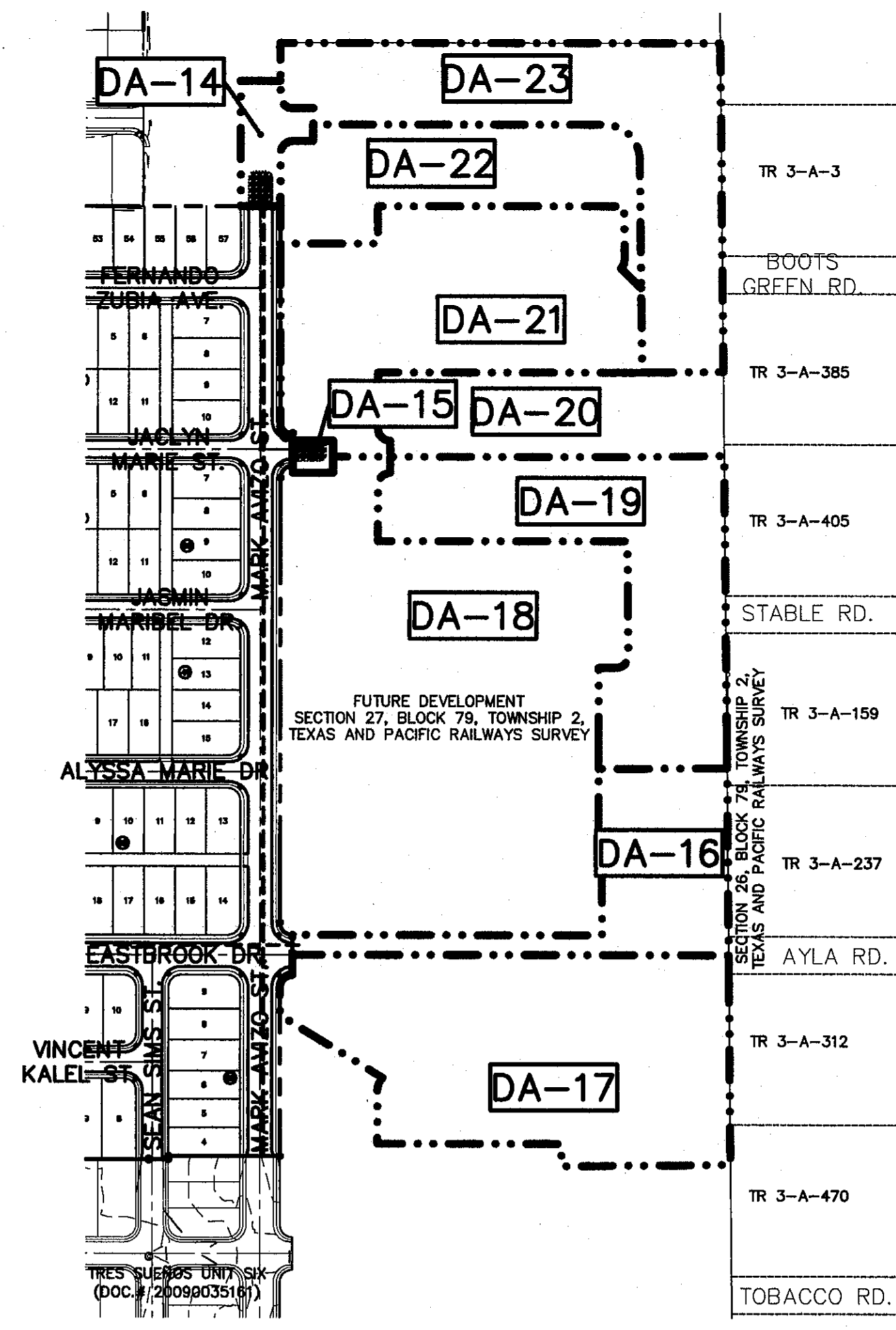
POND NO.	REQUIRED CAPACITY (AC.-FT.)	AVAILABLE CAPACITY (AC.-FT.)	PEAK INFLOW (CFS)	OUTLET PIPE FLOW (CFS)	HIGH WATER SURFACE ELEV. (FT.)	BOTTOM ELEVATION (FT.)	FREE BOARD (FT.)
PARK	0.353 (1)	0.419	6.376	0	3995.92± (1)	3995.50	0.08

NOTES FOR NEW PARK RETENTION POND

1. THE TOTAL STORAGE HWSE REFLECTS THE ELEVATION AS REQUIRED BY THE CITY OF EL PASO.
HWSE = QT + SILT VOLUME
HWSE = 0.313 + 0.040 = 0.353 AC-FT
CONTOUR 3995.50, ACCUMULATED VOLUME = 0.000 AC-FT
CONTOUR 3996.00, ACCUMULATED VOLUME = 0.419 AC-FT
HIGH WATER SURFACE ELEVATION = 3995.92±
2. THE NEW PARK RETENTION POND WAS DESIGNED TO ACCOMMODATE DEVELOPED RUN-OFF FROM DA-11 AND DA-14. THIS DRAINAGE AREA INCLUDES THE PARK AREA AND A PORTION OF LOTS 16-20, BLOCK 30.



CITY DEVELOPMENT DEPARTMENT
REVIEWED



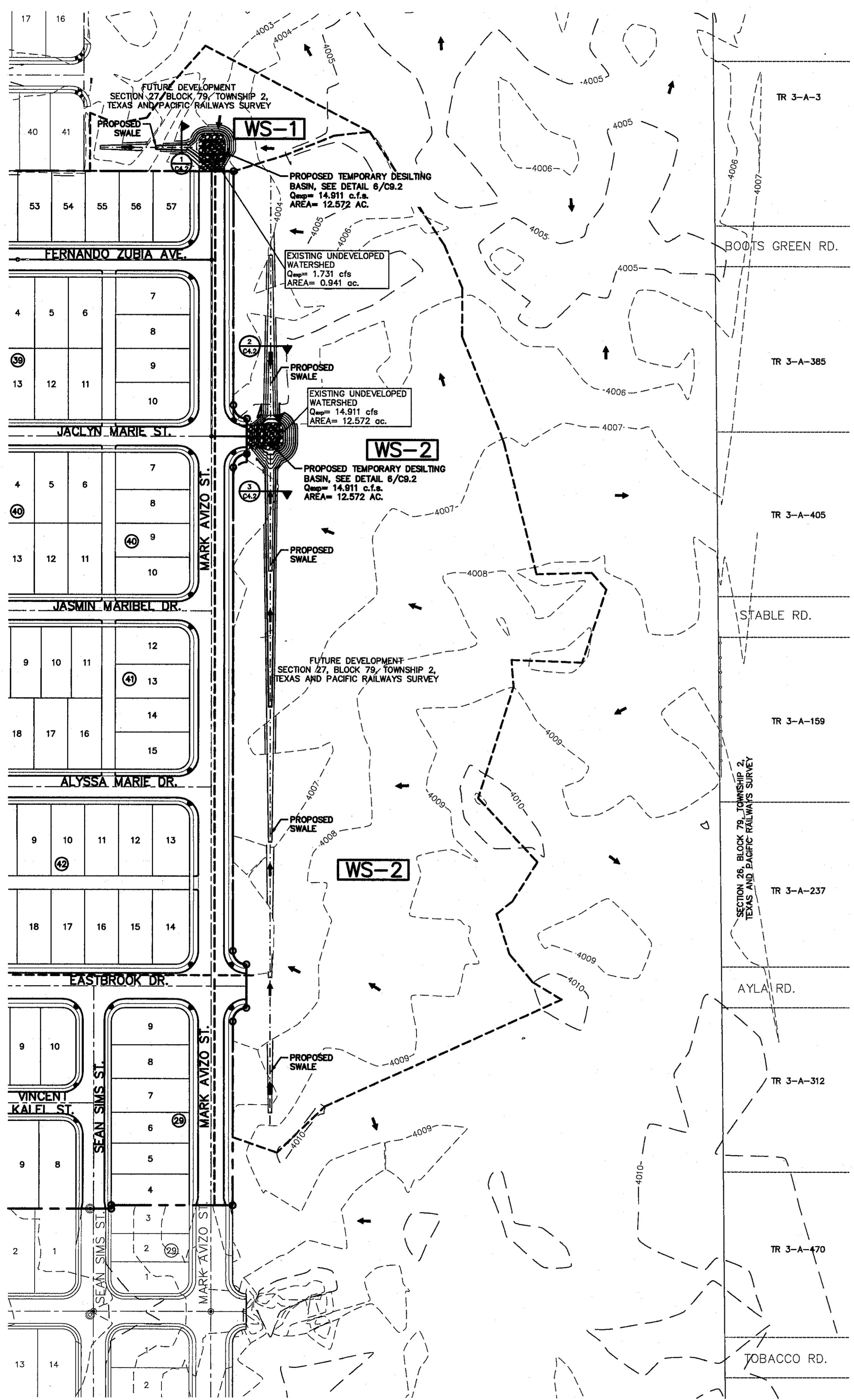
NEW PARK POND AREAS

CONTOUR	ACCUMULATED VOLUME (AC.-FT.)
3995.50	0.000
3996.00	0.419

FUTURE WATERSHEDS
SCALE: 1" = 100'

- LEGEND**
- FUTURE DRAINAGE AREA BOUNDARY
 - - - EXISTING DRAINAGE AREA BOUNDARY
 - PROPOSED DRAINAGE FLOW
 - EXISTING DRAINAGE FLOW
 - - - PROPOSED SWALE
 - ▲ HIGH POINT
 - ▼ LOW POINT
 - DROP INLET
 - STORM SEWER MANHOLE
 - RCP
 - THRUST BLOCK STRUCTURE
 - DA-10 DRAINAGE AREA
 - WS-10 WATERSHED AREA

OFF-SITE WATERSHEDS
SCALE: 1" = 100'



REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM BLDG. 506433 BY DISTANCE 86.4750 FEET FROM AVENUE CITY DATUM. ELEVATION4005.40

DATE: _____ BY: _____ REVISIONS: _____

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4712 Woodrow Branch, Ste. F El Paso, TX 79924
Office: 915.544.5222 Fax: 915.544.5233 www.csandamp.com

ENGINEER'S SEAL
JOSUE L. AZCARRATE
18075
1/14/13

SCALE: 1" = 100'
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A

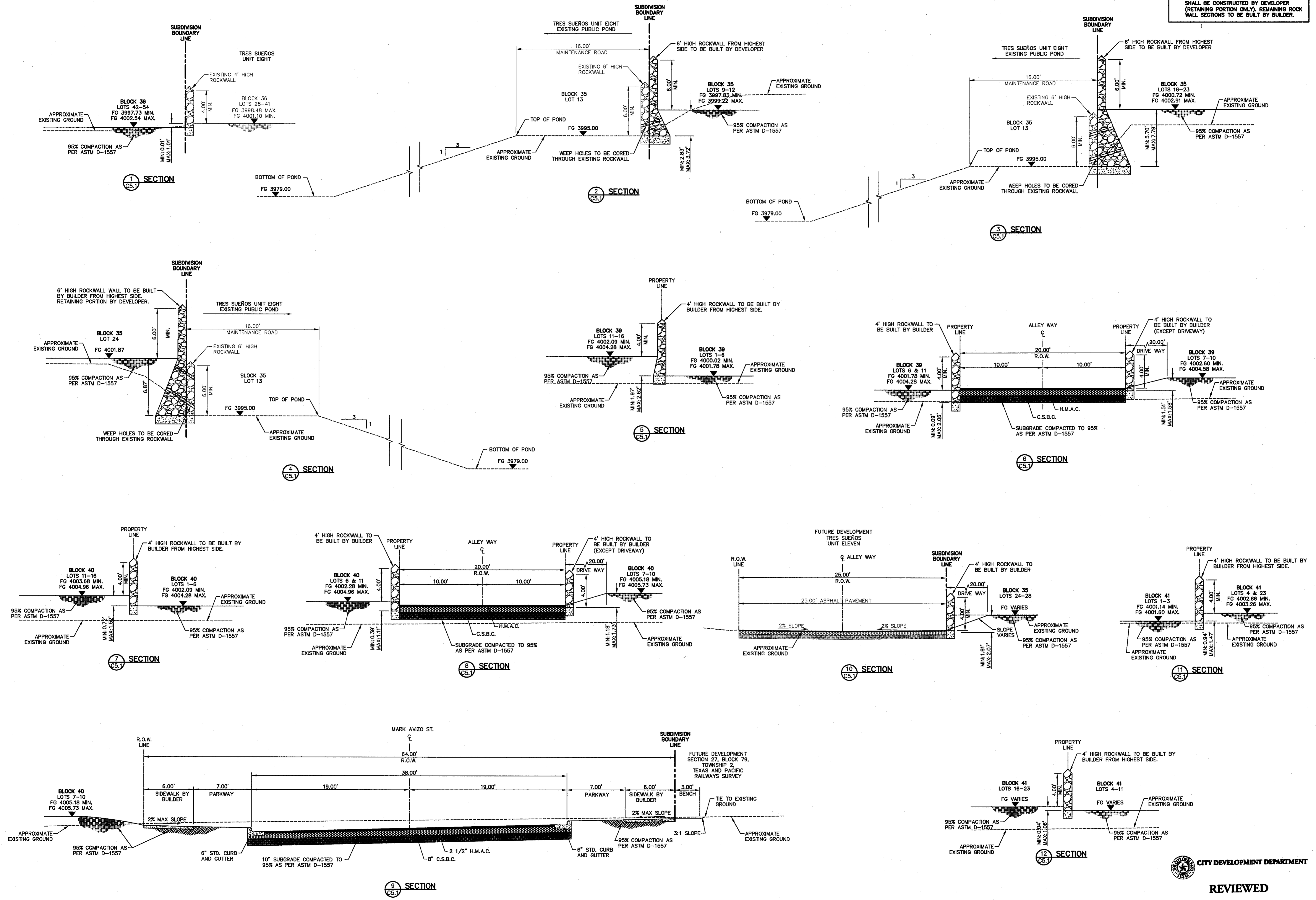
DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.H.
APP'D. BY: J.H.
JOB NO.: 22550-030-LD

PROJECT TITLE
TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
OFF-SITE AND FUTURE WATERSHEDS

SHEET NO.
C4.2

NOTES:
 1. ALL RETAINING WALLS OVER 4 FT IN HEIGHT SHALL BE CONSTRUCTED BY DEVELOPER (RETAINING PORTION ONLY). REMAINING ROCK WALL SECTIONS TO BE BUILT BY BUILDER.

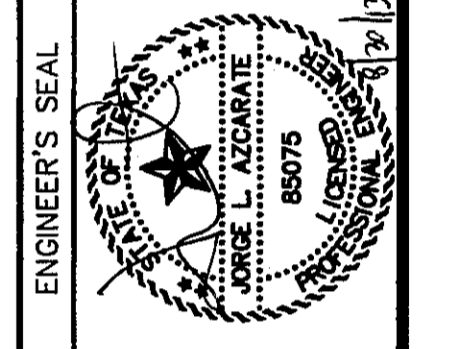


REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM 1954 SURVEY DISTANCE OF 138.28 FEET FROM 1954 SURVEY POINT OF BEGINNING OF AVENUE CITY DATUM. ELEVATION 4005.40

DATE	BY

ceda
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-684
 4712 Woodrow Blvd., Ste. F El Paso, TX 79904
 Office: 915.544.8222 Fax: 915.544.8203 www.ceda.net



SCALE: 1" = 100'
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 Vertical: N/A
 Contour Interval: N/A

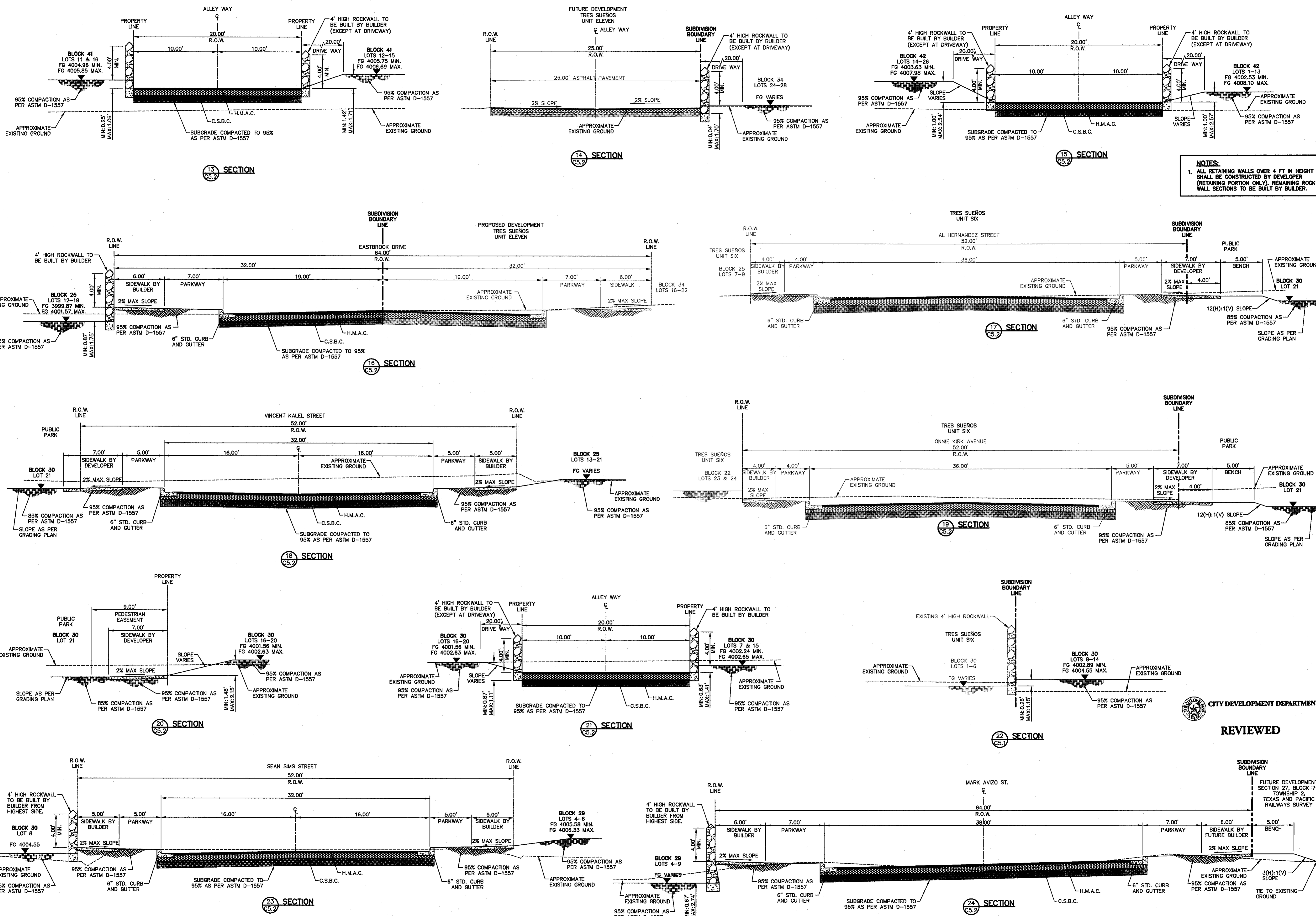
DATE: JULY 2013
 DESIGN BY: JHL
 DRAWN BY: JHL
 CHECKED BY: JHL
 JOB NO.: 2250-030-LD
 JOB NO. 2250-030-LD

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
GRADING CROSS SECTIONS
 (SHEET 1 OF 2)
 SHEET NO.

CITY DEVELOPMENT DEPARTMENT
REVIEWED
C5.1

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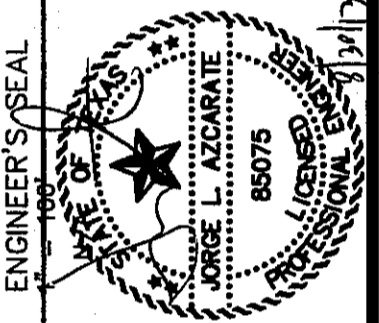
NOTES:
 1. ALL RETAINING WALLS OVER 4 FT IN HEIGHT SHALL BE CONSTRUCTED BY DEVELOPER (RETAINING PORTION ONLY). REMAINING ROCK WALL SECTIONS TO BE BUILT BY BUILDER.

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., 508°43'37" E. A DISTANCE OF 467.68 FEET TO MONUMENT AT POINT OF CURVE CENTERLINE RICH AVENUE CITY DATUM. ELEVATION 1008.40

DATE	REVISIONS	BY

CSA
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-4684
 4712 Woodrow Wilson, Ste. F El Paso, TX 79924
 Office: 915.544.6222 Fax: 915.544.2203 www.csaengineers.com



SCALE

Vertical: N/A
 Contour Interval: N/A

DATE: JULY 2013
 DESIGN BY: J.H.
 DRAWN BY: J.H.
 CHKO. BY: J.L.A.
 APPROV. BY: J.L.A.

JOB No. 2250-030-LD

PROJECT TITLE

TRES SUEÑOS UNIT TEN

SUBDIVISION IMPROVEMENTS

CITY DEVELOPMENT DEPARTMENT
REVIEWED

SHEET TITLE

GRADING CROSS SECTIONS

(SHEET 2 OF 2)

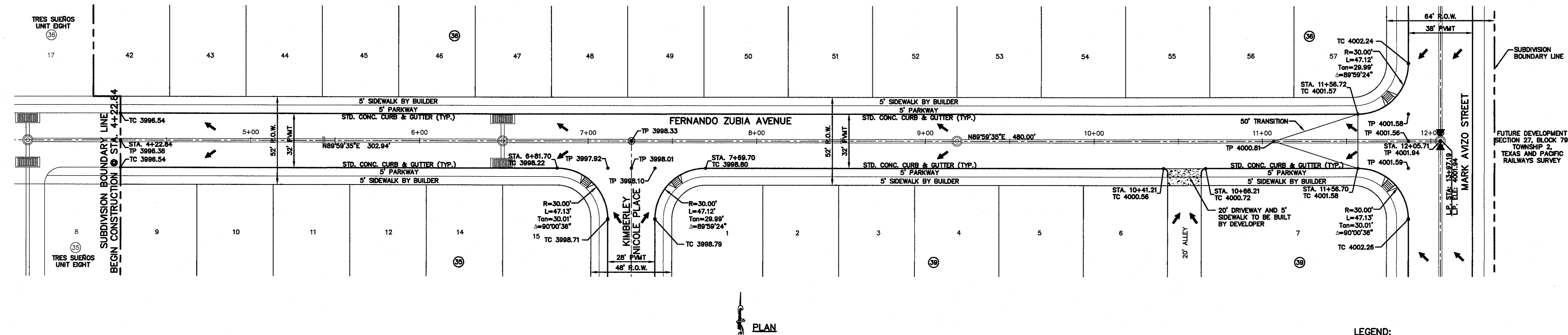
SHEET NO.

C5.2

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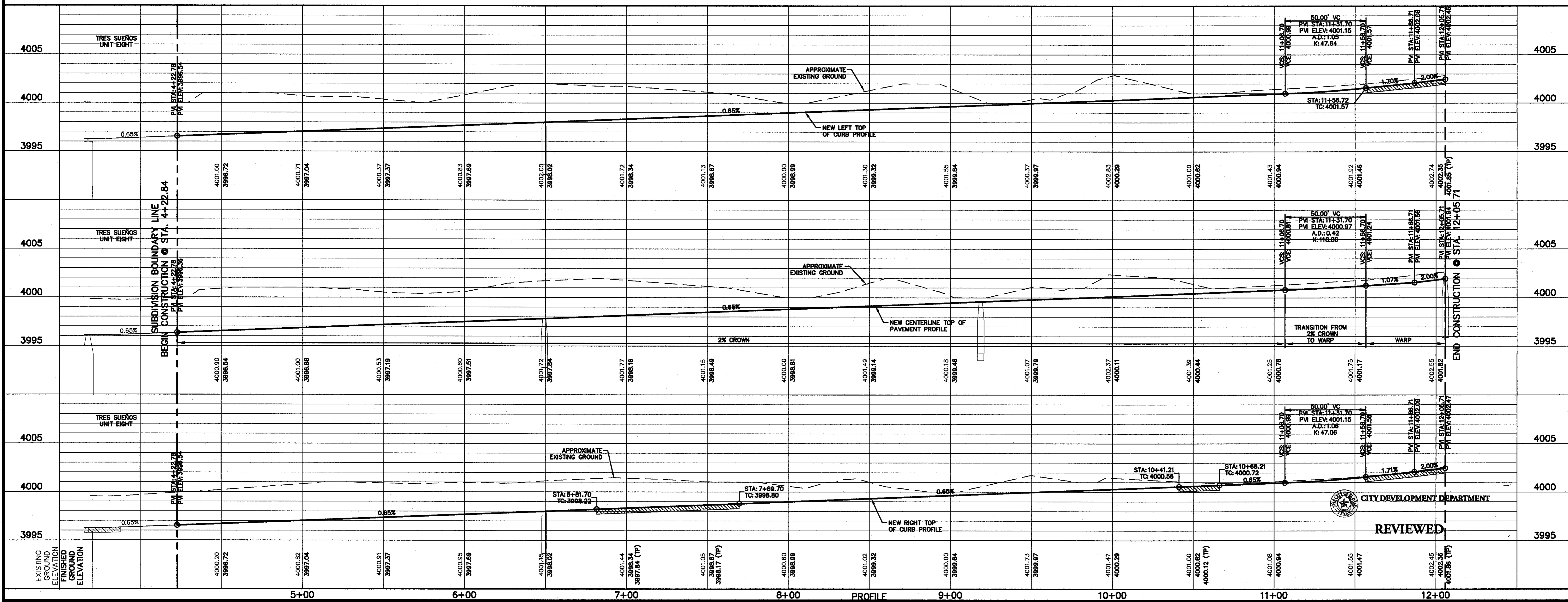
UTILITY LOCATOR SERVICES
 EL PASO ELECTRIC COMPANY (915) 543-5720
 EL PASO ENERGY CORPORATION (915) 496-5244
 EL PASO WATER UTILITIES (915) 594-5500
 MCI SURVEILLANCE (800) MCI-WORK
 TIME WARNER COMMUNICATIONS (915) 772-1123
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 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES



PLAN

LEGEND:
 WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
 PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



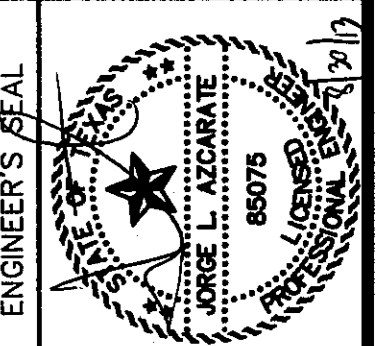
REVIEWED

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM E.P.U. 5564337 DISTANCE 0.6758 FEET FROM E.P.U. 5564337 ELEVATION 4006.40 AVENUE CITY DATUM. ELEVATION 4006.40

DATE	REVISIONS	BY

ceea
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-1684
 4712 Woodrow Wilson, Ste. F El Paso, TX 79924
 Office: 915.544.5222 Fax: 915.544.5203 www.ceea.com



SCALE: 1" = 30'
 Horizontal: 1" = 5'
 Vertical: Contour Interval: N/A

DATE: JULY 2013
 DESIGN BY: JHL
 DRAWN BY: JHL
 CHECK BY: J.G.
 APP'D. BY: J.G.
 JOB No. 2250-030-LD

PROJECT TITLE
TRES SUEÑOS UNIT TEN
 SUBDIVISION IMPROVEMENTS

SHEET TITLE
FERNANDO ZUBIA AVE. PLAN & PROFILE FROM STA. 4+22.84 TO STA. 12+05.71

SHEET NO.

C6.1

S:\2250\2250-030-LD\030-Construction\Drawings\Improvements\Plan\K&L_FERNANDO_ZUBIA_AVE.dwg, 8/20/2013 2:43:39 PM

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
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1-800-344-8377

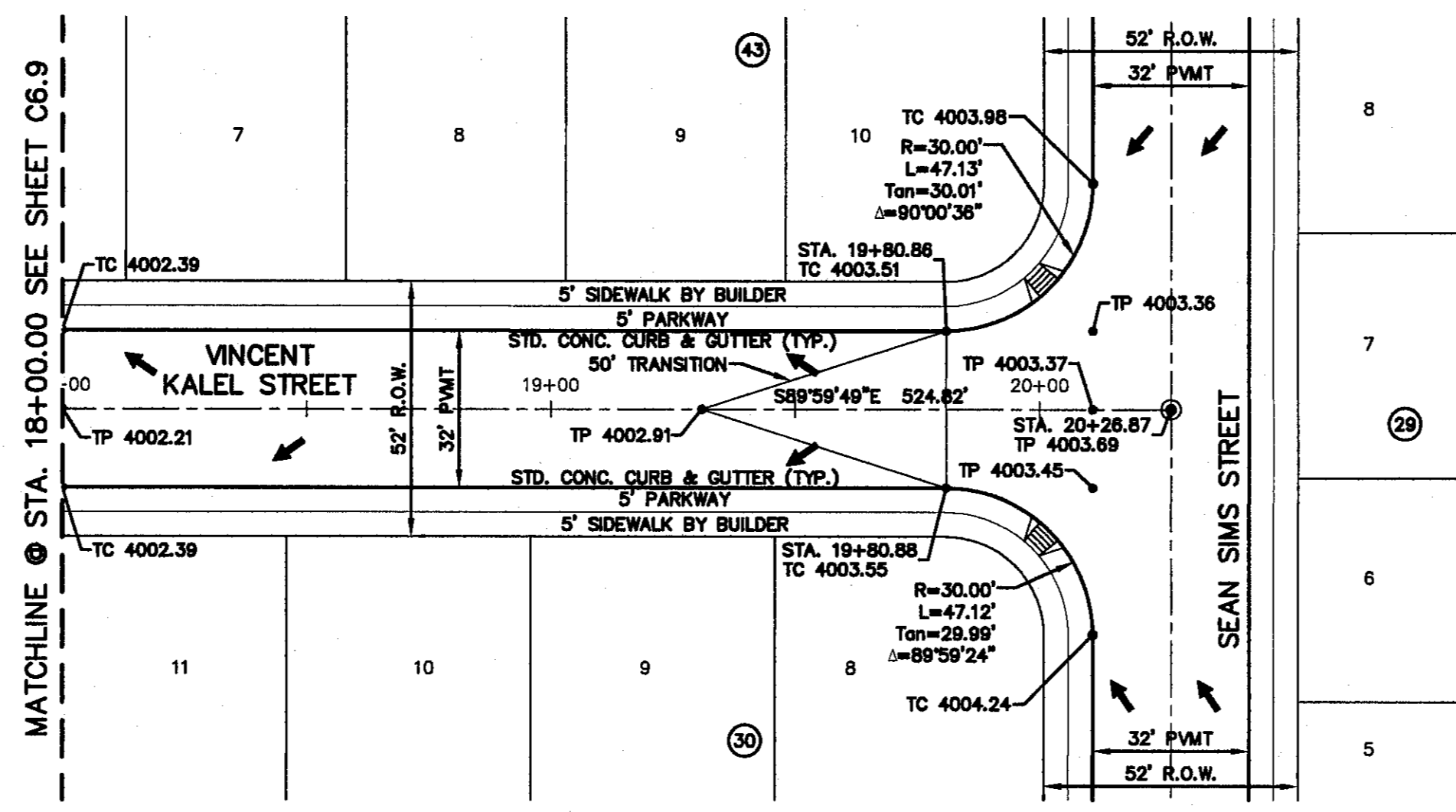
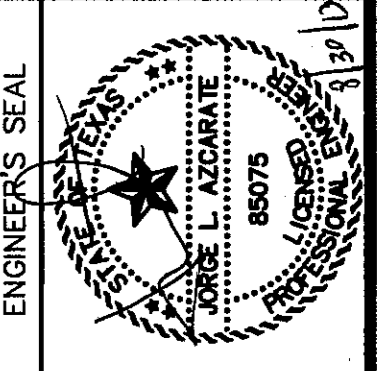
FOR FIELD LOCATING EXISTING UTILITIES

DATE	REVISIONS	BY

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. 50°43'37"E A DISTANCE OF 467.56 FEET FROM THE INTERSECTION OF RICH BLVD. AND PANAMA AVENUE CITY DATUM. ELEVATION 4006.40

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4712 Woodrow Dr., Ste. F El Paso, TX 79924
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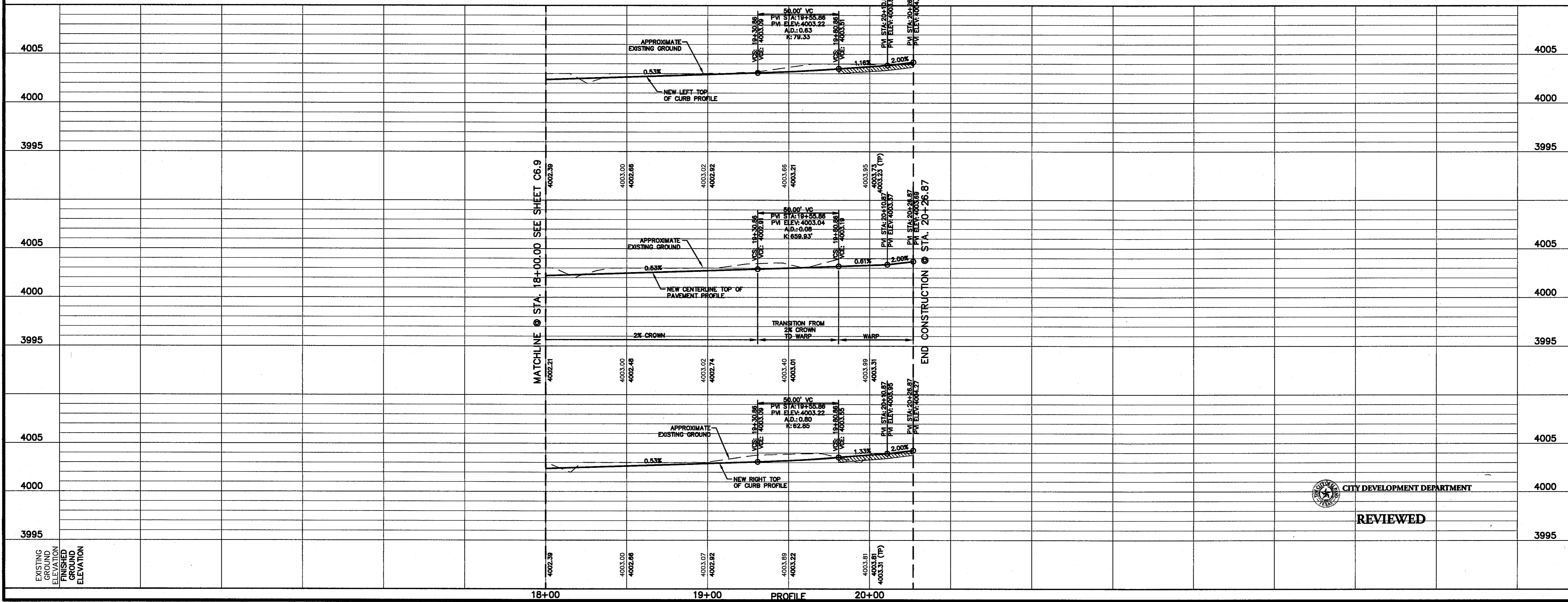


PLAN

LEGEND:

WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)

PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



SCALE: 1" = 30'
Horizontal: 1" = 5'
Vertical: 1" = 5'
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.G.
CHKD. BY: J.L.A.
APPROV. BY: J.L.A.
JOB No. 2250-030-LD

PROJECT TITLE
**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

SHEET TITLE
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PLAN & PROFILE
FROM STA. 18+00.00
TO STA. 20+26.87**

SHEET NO.
C6.10

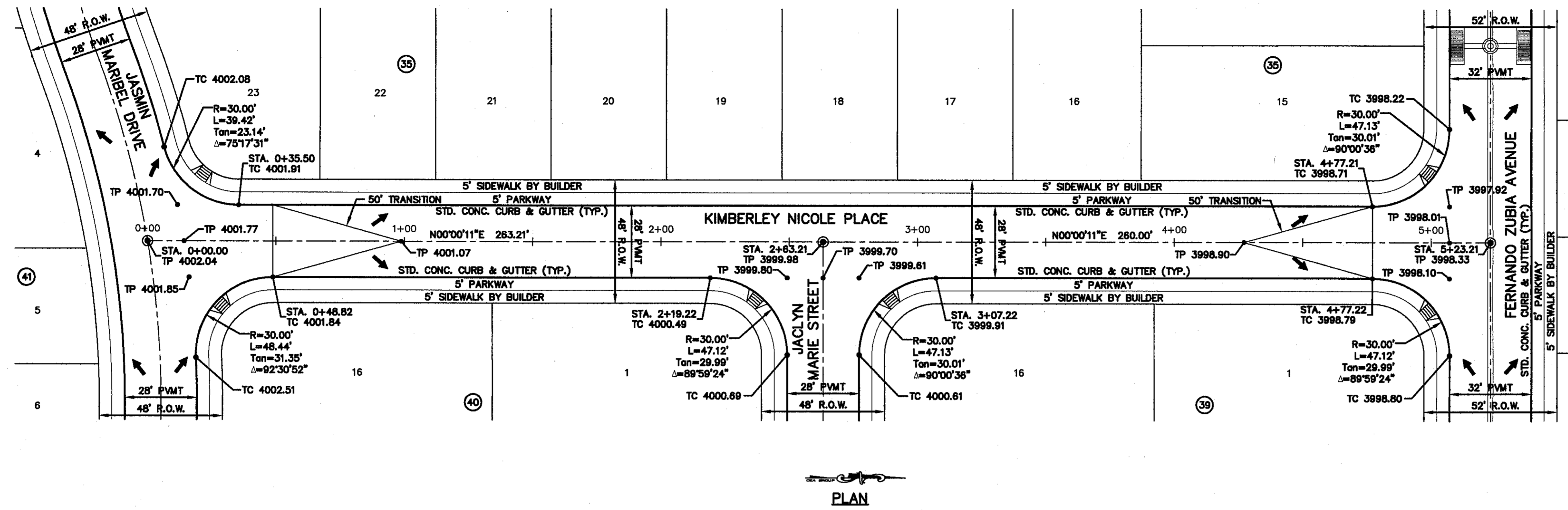
CITY DEVELOPMENT DEPARTMENT
REVIEWED

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SSC	(800) 545-6005
A&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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1-800-344-8377

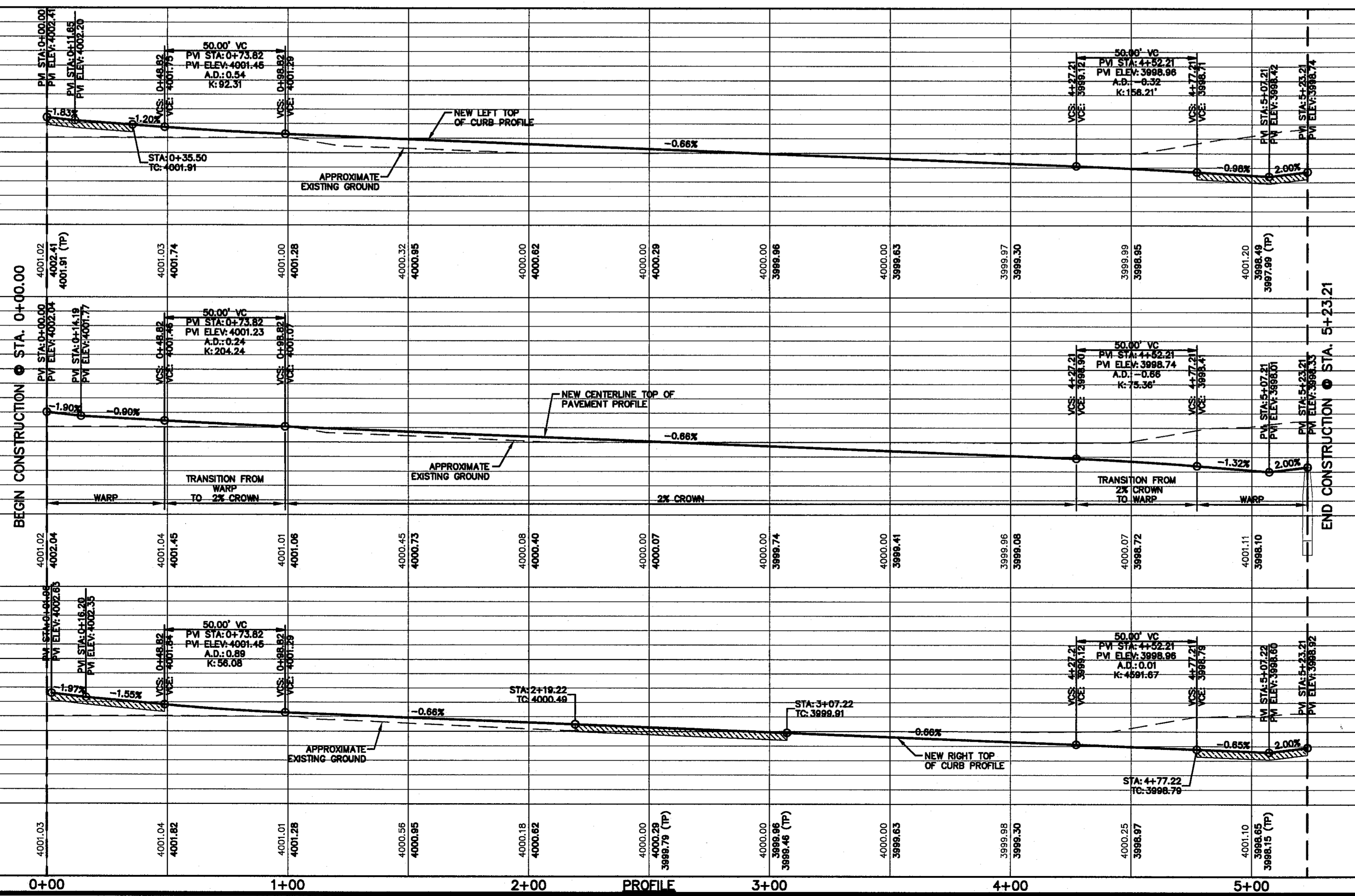
FOR FIELD LOCATING EXISTING UTILITIES



PLAN

LEGEND:

- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.

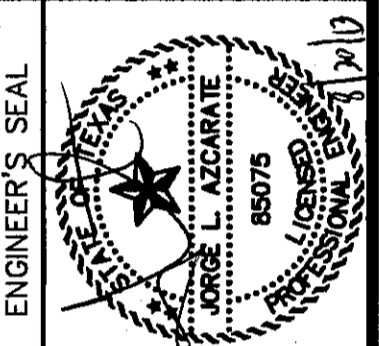


PROFILE

DATE	REVISIONS	BY

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., 508+43.37'E, A DISTANCE OF 467.58 FEET FROM THE POINT OF CURVE CENTERLINE TO THE BENCHMARK AVENUE CITY DATUM. ELEVATION: 4008.40

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4712 Woodrow Wilson, Ste. F El Paso, TX 79924
Office: 915.544.6222 Fax: 915.544.6223 www.csandamp.com



SCALE: 1" = 30'
Horizontal: 1" = 5'
Vertical: 1" = 5'
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.L.A.
APPROV. BY: J.L.A.
JOB No. 2250-030-LD

PROJECT TITLE	
TRES SUEÑOS UNIT TEN SUBDIVISION IMPROVEMENTS	
SHEET TITLE	
KIMBERLEY NICOLE PL PLAN & PROFILE FROM STA. 0+00.00 TO STA. 5+23.21	
SHEET NO.	
C6.11	

CITY DEVELOPMENT DEPARTMENT

REVIEWED

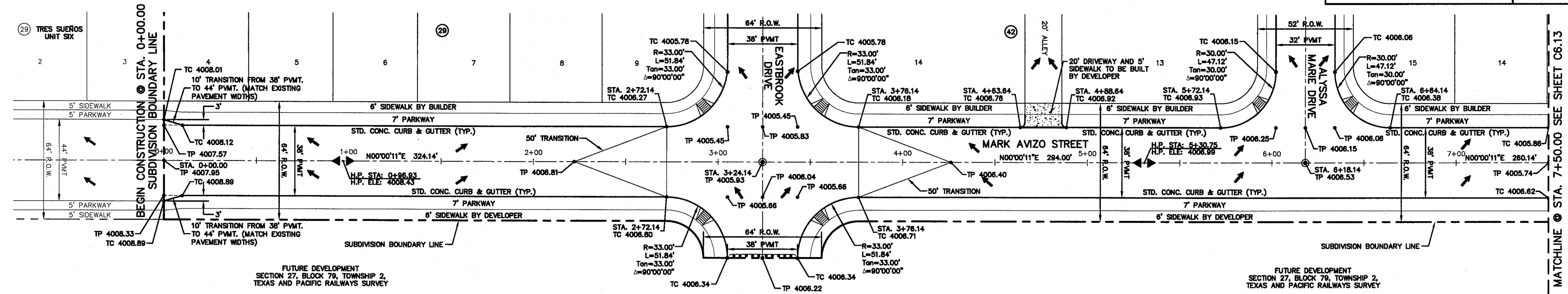
UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 498-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 880-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
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1-800-344-8377

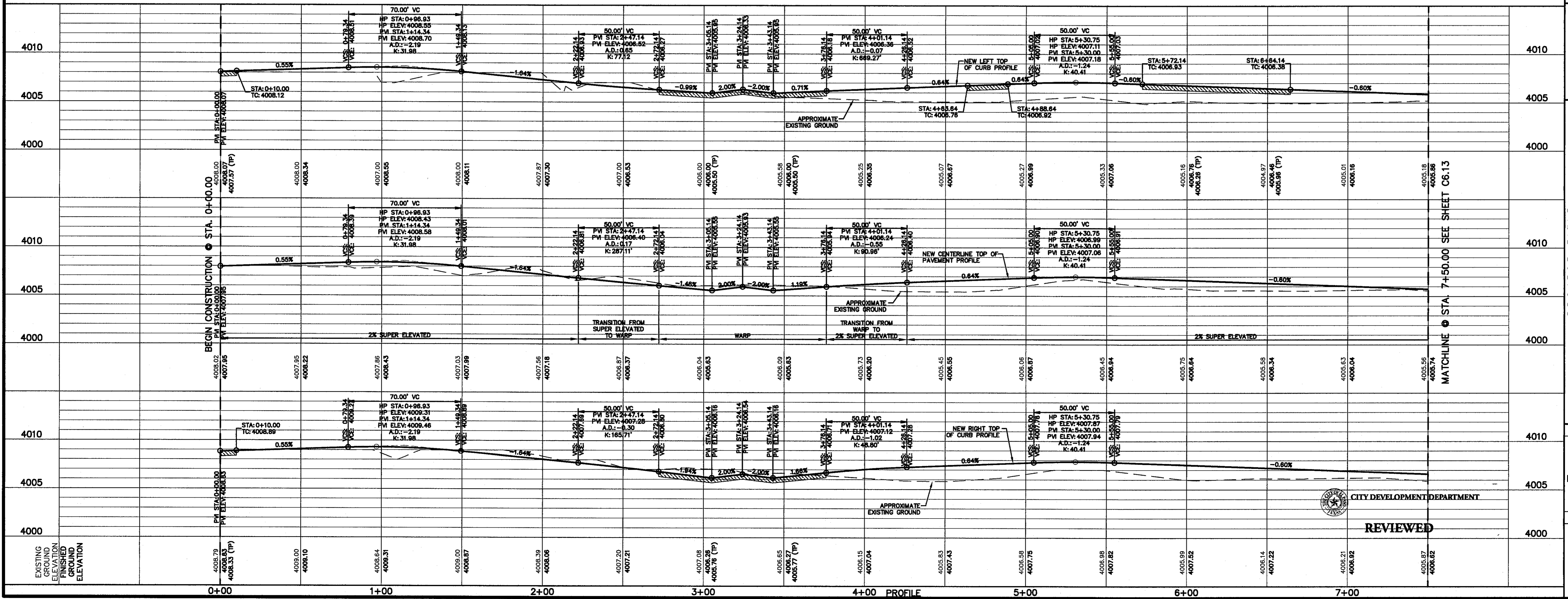
FOR FIELD LOCATING EXISTING UTILITIES



PLAN

LEGEND:

- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PVI ELEVATIONS ARE SHOWN AT TOP OF CURB, REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



PROFILE

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BERM BLVD. S89°43'31"E A DISTANCE OF 467.98 FEET FROM THE INTERSECTION OF MARK AVIZO STREET AND TRES SUEÑOS AVENUE CITY DATUM. ELEVATION: 4006.48

ENGINEER'S SEAL

Jorge L. Azcarate
Professional Engineer
No. 88075

PROJECT TITLE

TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE

MARK AVIZO ST.
PLAN & PROFILE
FROM STA. 0+00.00
TO STA. 8+00.00

SHEET NO.

C6.12

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.G.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB NO.: 2250-030-ID

SCALE: 1" = 5'
Horizontal: 1" = 5'
Vertical: 1" = 10'
Contour Interval: N/A

DESIGN BY: J.H.
DRAWN BY: J.G.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB NO.: 2250-030-ID

S:\2250\2250-030-ID\DWG\Construction\Drawings\Improvement Plans\C6.12-C6.13 MARK AVIZO PARK.dwg, C6.12, 8/20/2013, 2:18:21 PM

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
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TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
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FOR FIELD LOCATING EXISTING UTILITIES

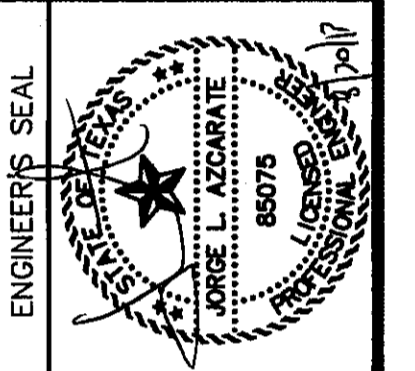
DATE	REVISIONS	BY

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4712 Woodrow Blinn, Ste. F El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.cesgroup.net



SCALE: 1" = 30'

Horizontal: 1" = 30'
Vertical: 1" = 3'

Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.G.
APPRD. BY: J.L.A.
JOB No. 2250-030-LD

PROJECT TITLE

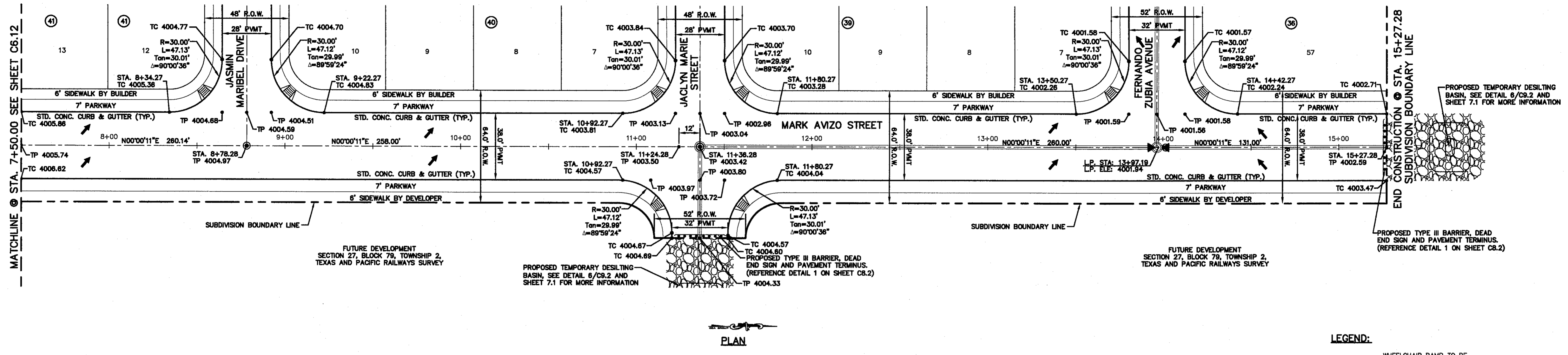
TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE

MARK AVIZO ST. PLAN & PROFILE FROM STA. 8+00.00 TO STA. 15+27.28

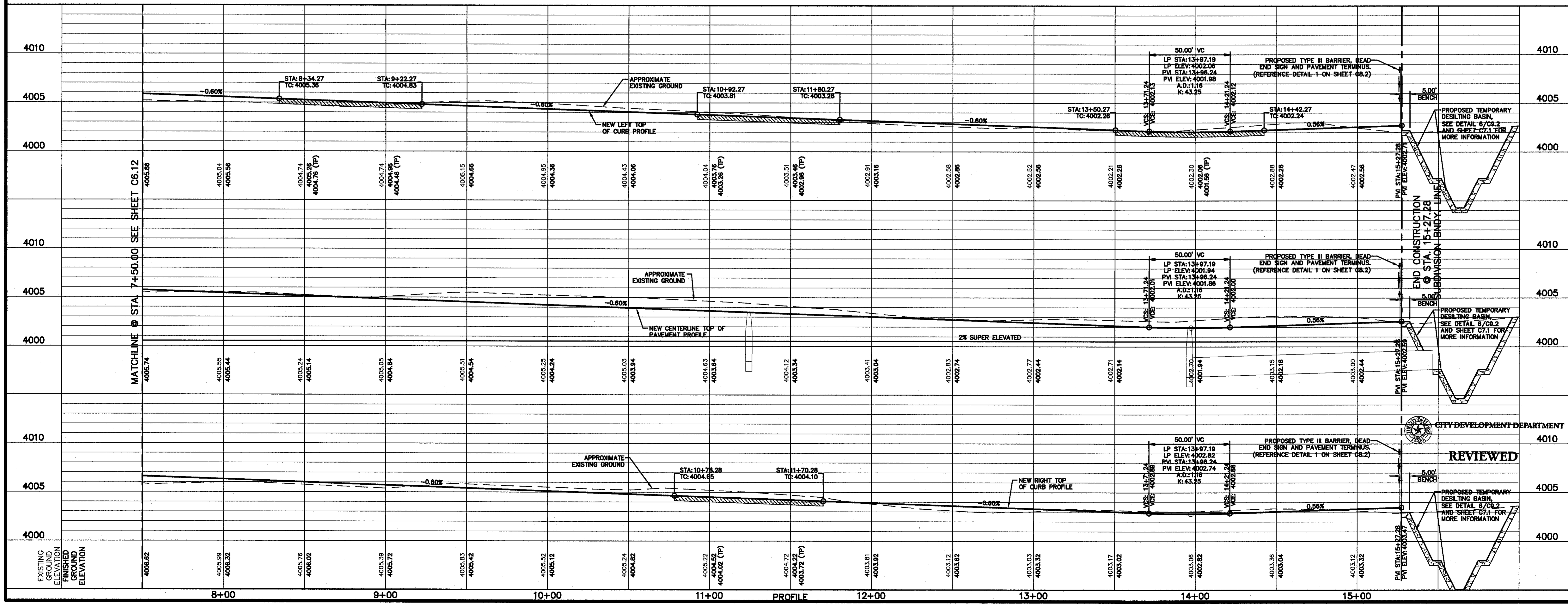
SHEET NO.

C6.13



LEGEND:

- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PAV ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



CITY DEVELOPMENT DEPARTMENT

REVIEWED

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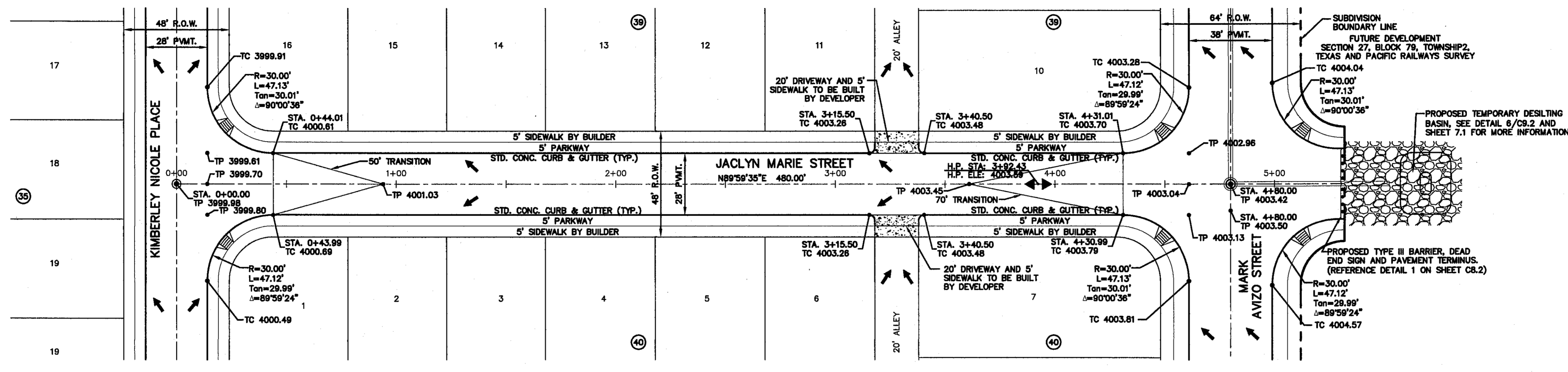
UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 690-7200
SBC	(800) 543-6005
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1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES



PLAN

LEGEND:

- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PM ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., 508'3.3' E, A DISTANCE OF 487.56 FEET FROM AVENUE CITY DATUM. ELEVATION: 4005.40

DATE: _____ BY: _____

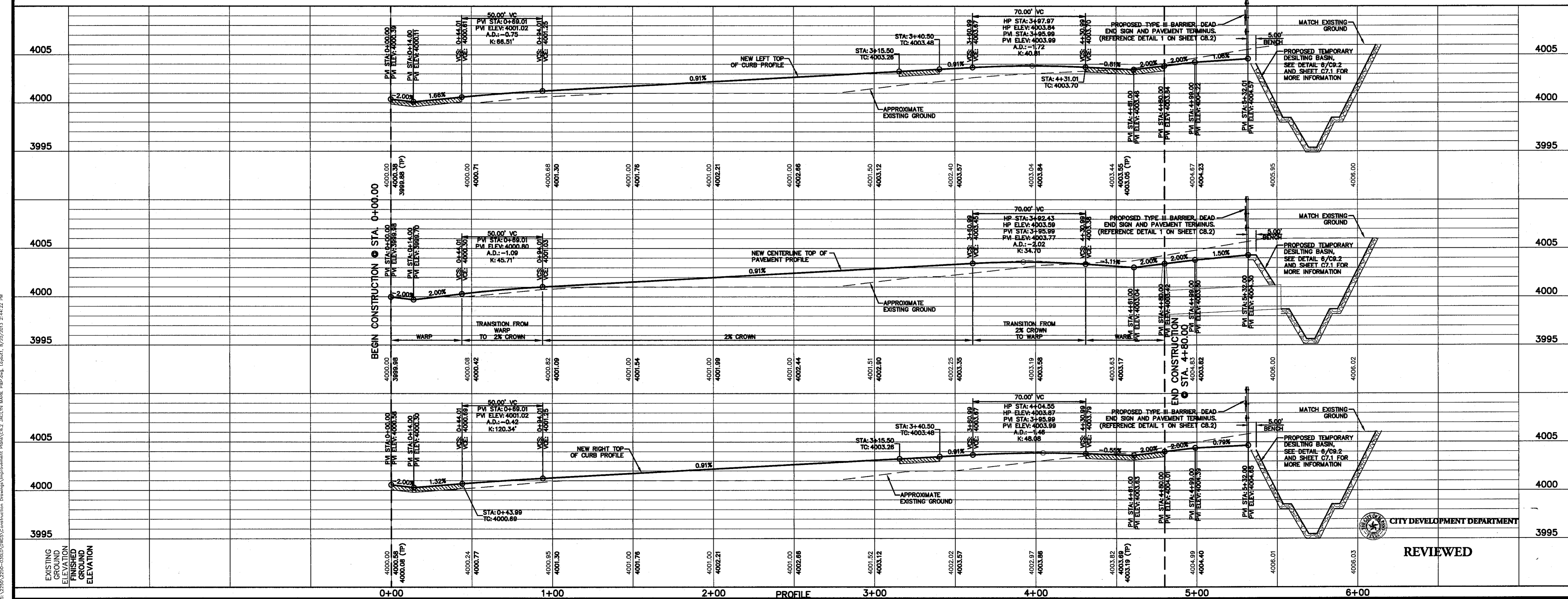
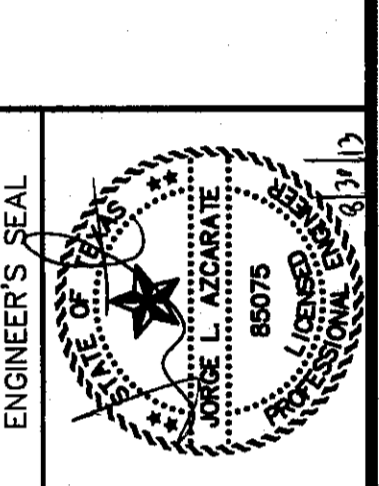
REVISIONS:

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SCALE: 1" = 30'
Vertical: 1" = 5'
Contour Interval: N/A

DATE: JULY 2013
DRAWN BY: J.H.
CHKD. BY: J.G.
APPROV. BY: J.L.A.
JOB NO. 2250-030-LD

PROJECT TITLE

TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE

JACLYN MARIE
PLAN & PROFILE
FROM STA. 0+00.00
TO STA. 4+80.00

SHEET NO.

C6.2

CITY DEVELOPMENT DEPARTMENT

REVIEWED

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
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EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 853-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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1-800-344-8377

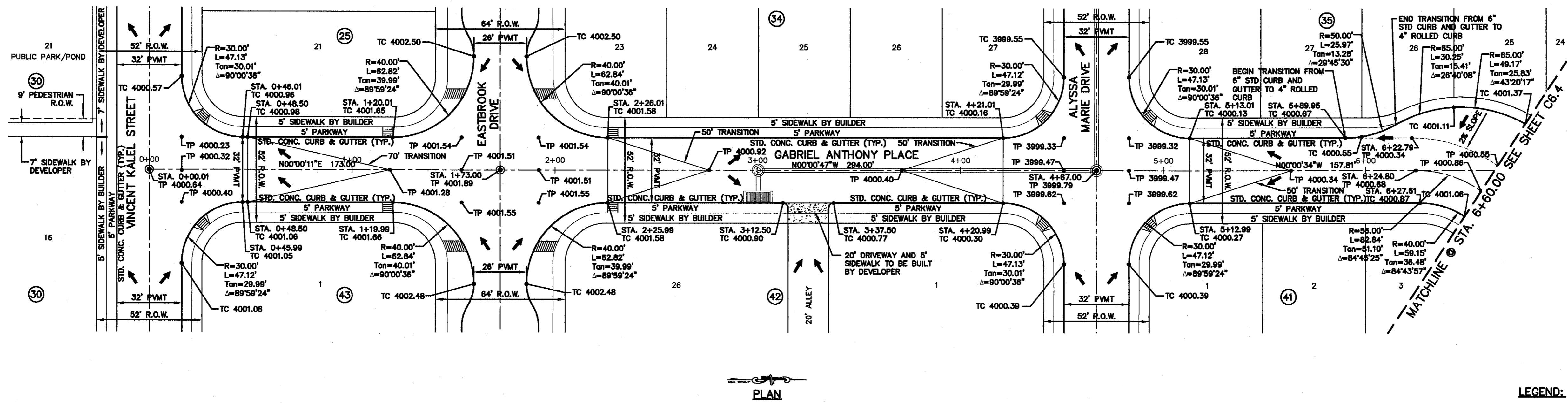
FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. S094337E A DISTANCE OF 467.58 FEET FROM MONUMENT TO POINT OF CURVE. ELEVATION: 4005.40

AVENUE CITY DATUM. ELEVATION: 4005.40

DATE	REVISIONS	BY



PLAN

LEGEND:

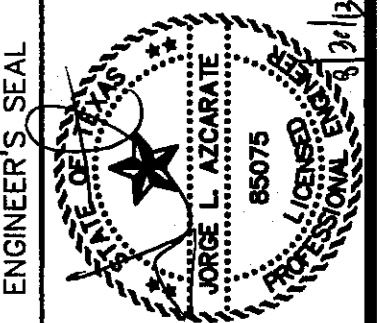
- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PAV ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.

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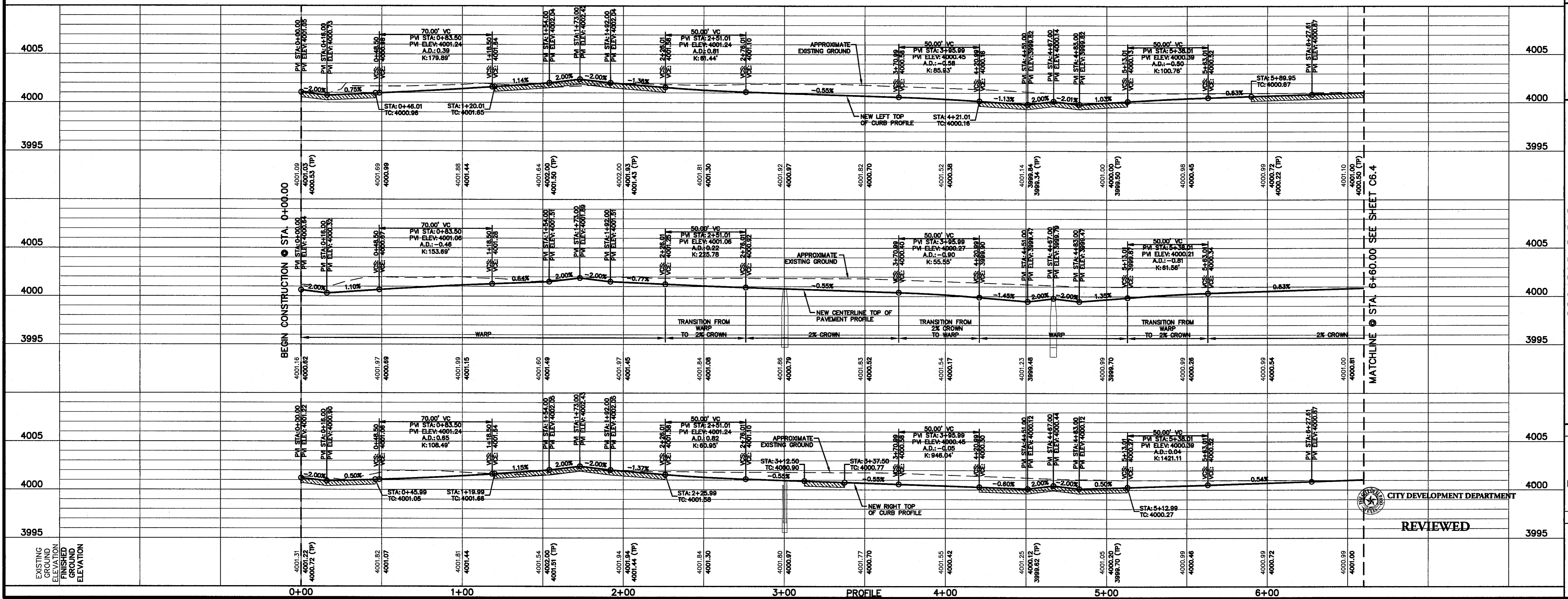
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SCALE: 1" = 30'
Horizontal: 1" = 50'
Vertical: 1" = 5'
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.L.A.
APPD. BY: J.L.A.
JOB No. 2250-0300-LD

PROJECT TITLE

**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

SHEET TITLE

**GABRIEL ANTHONY PL.
PLAN & PROFILE
FROM STA. 0+00.00
TO STA. 6+60.00**

SHEET NO.

C6.3

CITY DEVELOPMENT DEPARTMENT

REVIEWED

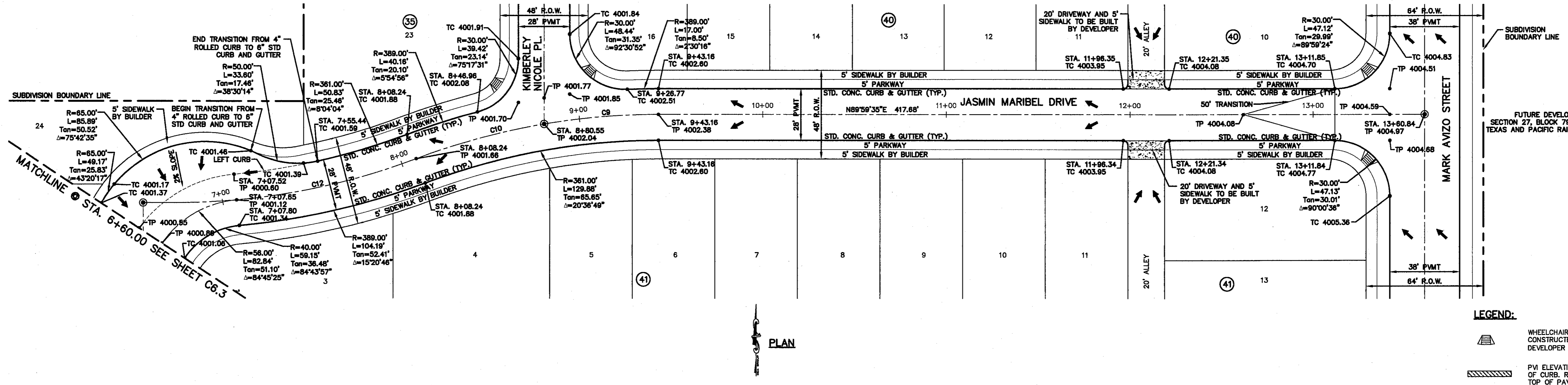
UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
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SBC	(800) 543-6006
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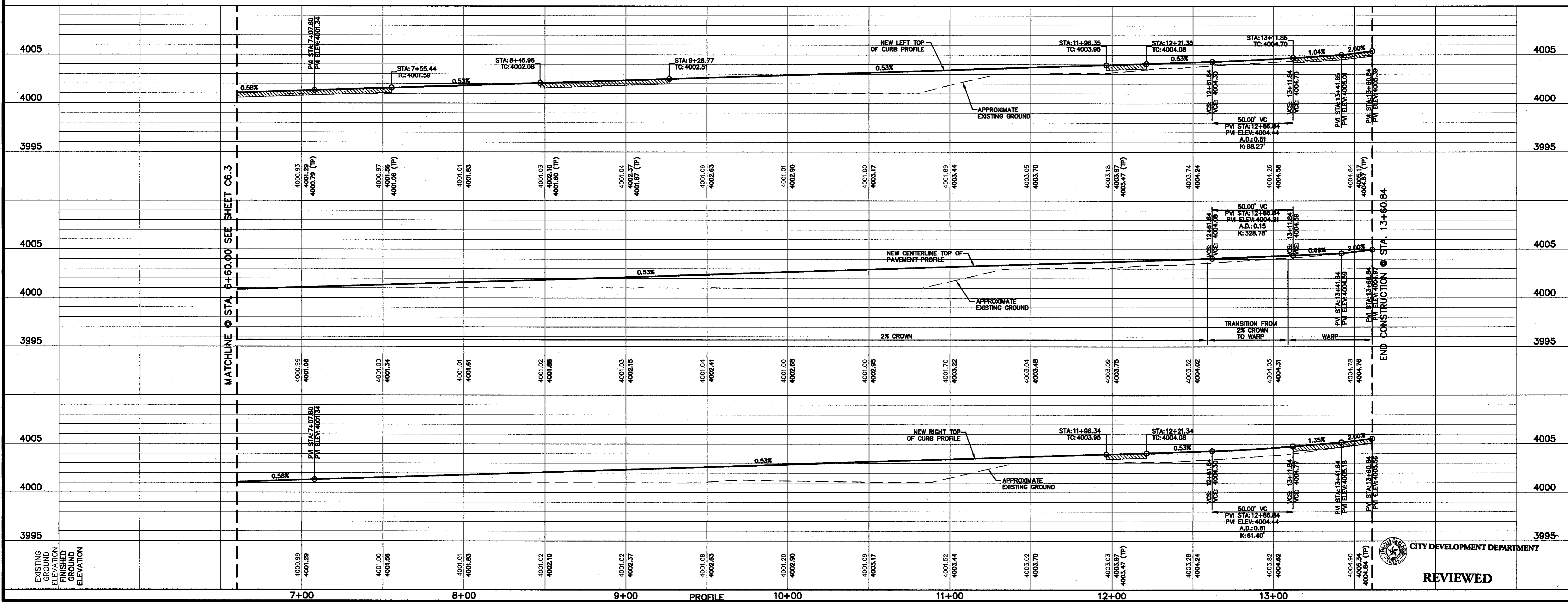
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FOR FIELD LOCATING EXISTING UTILITIES



LEGEND:

- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM THE SOUTHWEST CORNER OF THE INTERSECTION OF AVENUE CITY DATUM. ELEVATION: 4005.40

ENGINEER'S SEAL

PROJECT TITLE
TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
JASMIN MARIBEL DR.
PLAN & PROFILE
FROM STA. 6+60.00
TO STA. 13+60.84

SHEET NO.
C6.4

SCALE:
Horizontal: 1" = 5'
Vertical: Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: JCL
DRAWN BY: JCL
CHECK BY: JCL
APP'D. BY: JCL

REVISIONS

NO.	DATE	REVISIONS	BY

CITY DEVELOPMENT DEPARTMENT
REVIEWED

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UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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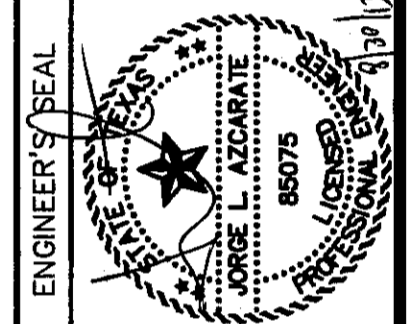
FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40

DATE	REVISIONS	BY

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SCALE: 1" = 30'
Horizontal: 1" = 5'
Vertical: Contour Interval: N/A

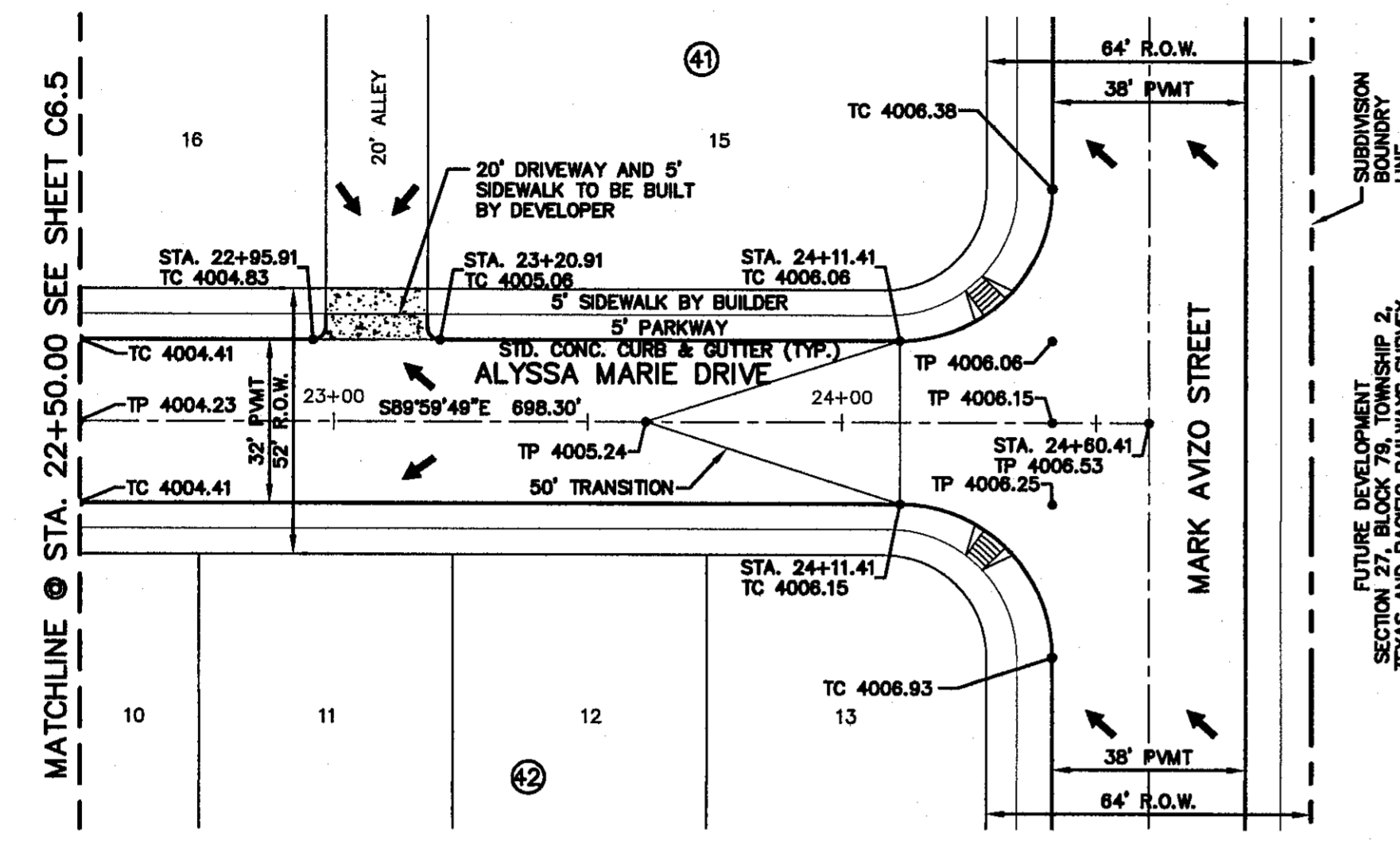
DATE: JULY 2013
DESIGN BY: JH
CHECKED BY: JH
APPROVED BY: JLA
JOB NO.: 2250-030-LD

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

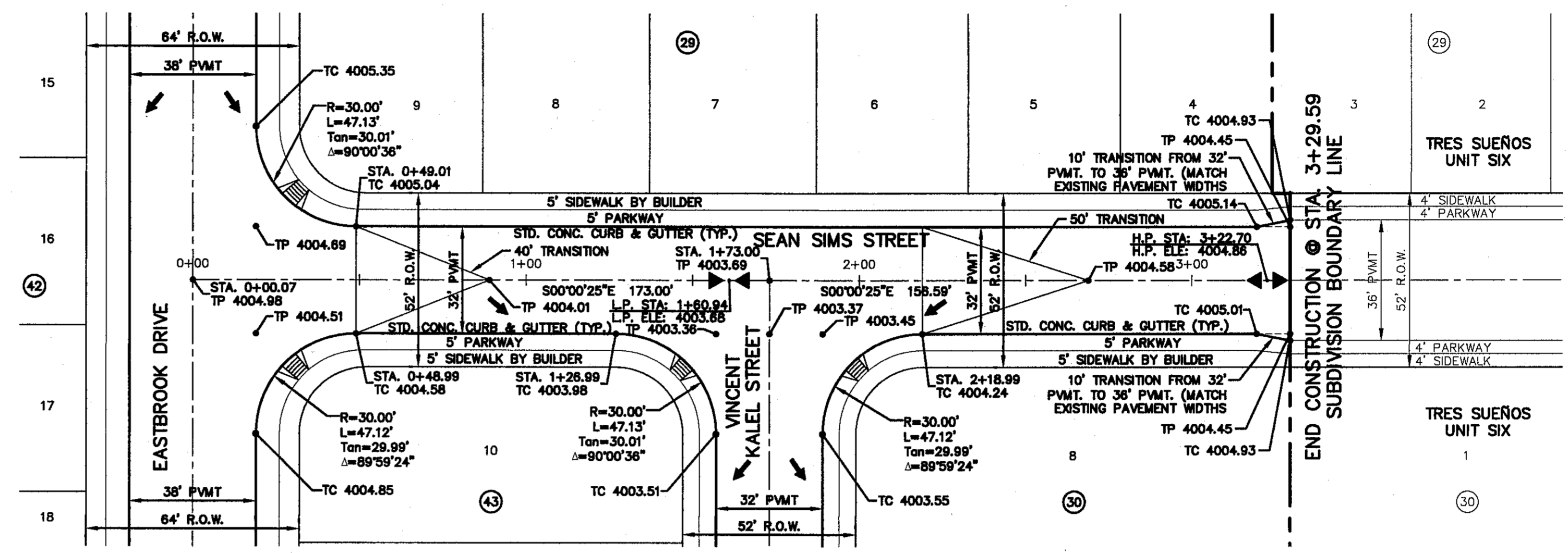
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ALYSSA MARIE DR. PLAN & PROFILE FROM STA. 22+50.00 TO STA. 24+60.41
SEAN SIMS STREET PLAN & PROFILE FROM STA. 0+00.00 TO STA. 3+29.59

SHEET NO.

C6.6



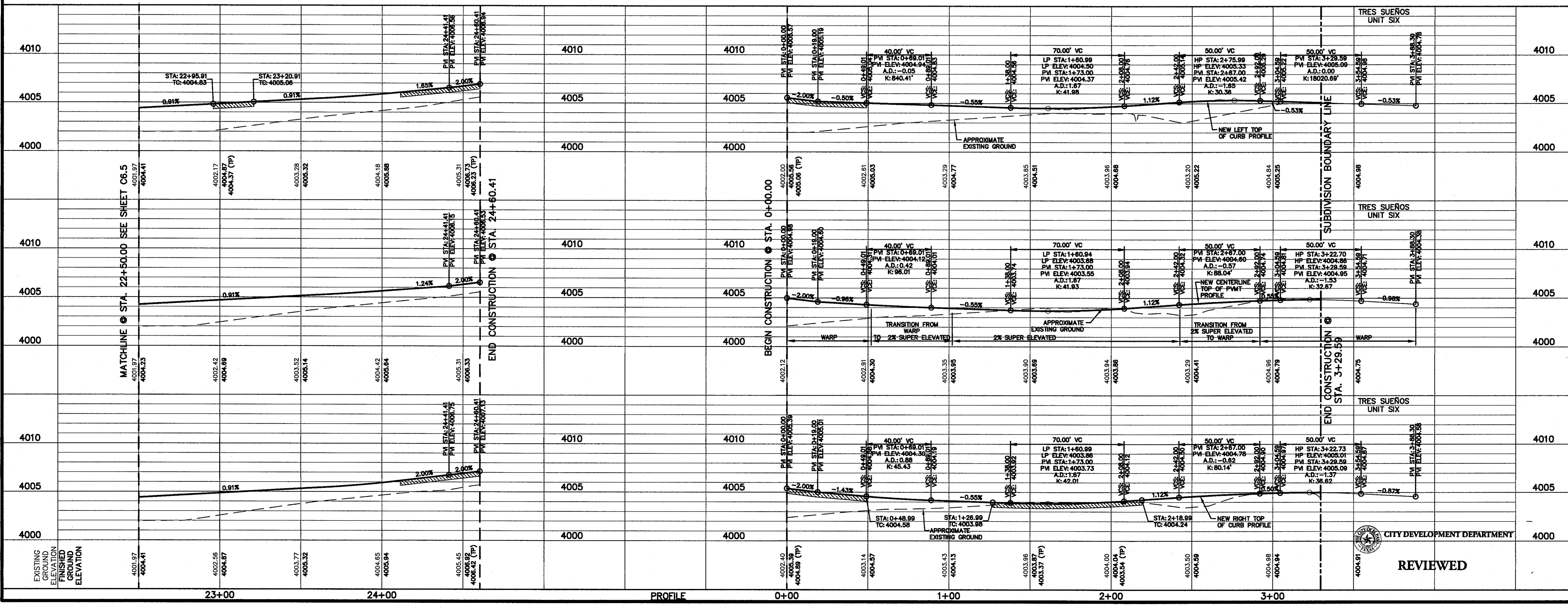
PLAN



PLAN

LEGEND:

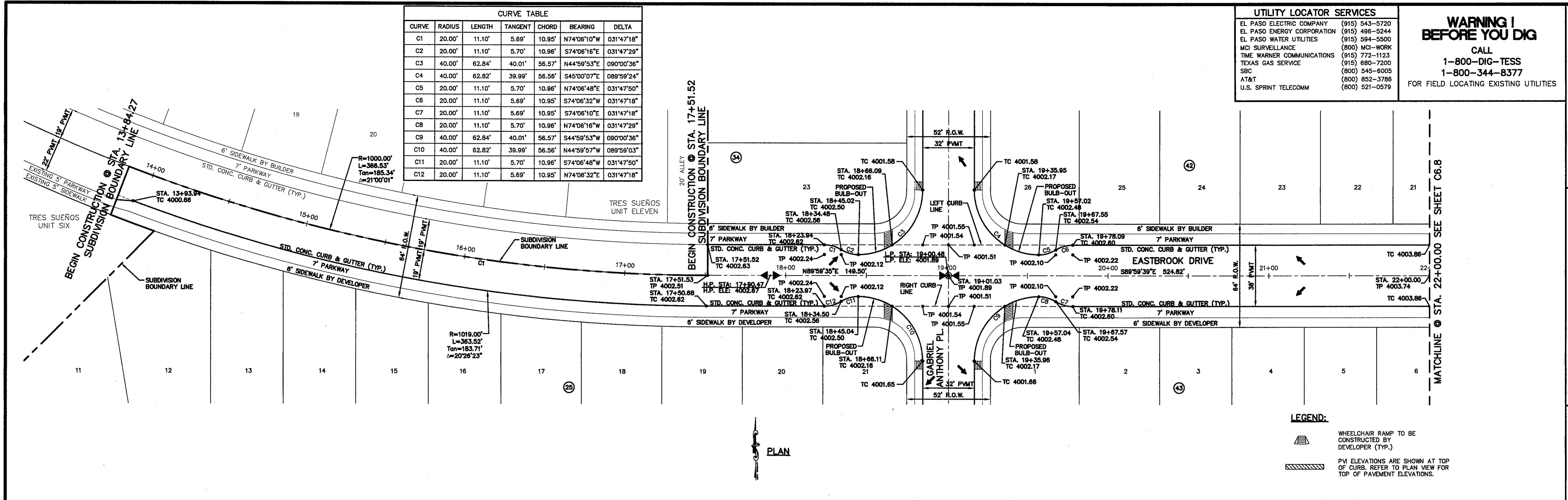
- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PAVEMENT ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



CITY DEVELOPMENT DEPARTMENT

REVIEWED

S:\2250\2250-030\DWG\Construction Drawings\Improvements Plan\AC6.6 SEAN SIMS P&P.dwg, Layout, 8/29/2013 2:46:58 PM



CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	20.00'	11.10'	5.69'	10.95'	N74°06'10"W	031°47'18"
C2	20.00'	11.10'	5.70'	10.96'	S74°06'16"E	031°47'29"
C3	40.00'	62.84'	40.01'	56.57'	N44°59'53"E	090°00'36"
C4	40.00'	62.82'	39.99'	56.56'	S45°00'07"E	089°59'24"
C5	20.00'	11.10'	5.70'	10.96'	N74°06'16"E	031°47'50"
C6	20.00'	11.10'	5.69'	10.95'	S74°06'32"W	031°47'18"
C7	20.00'	11.10'	5.69'	10.95'	S74°06'10"E	031°47'18"
C8	20.00'	11.10'	5.70'	10.96'	N74°06'16"W	031°47'29"
C9	40.00'	62.84'	40.01'	56.57'	S44°59'53"W	090°00'36"
C10	40.00'	62.82'	39.99'	56.56'	N44°59'57"W	089°59'03"
C11	20.00'	11.10'	5.70'	10.96'	S74°06'48"W	031°47'50"
C12	20.00'	11.10'	5.69'	10.95'	N74°06'32"E	031°47'18"

UTILITY LOCATOR SERVICES

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TEXAS GAS SERVICE	(800) 680-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

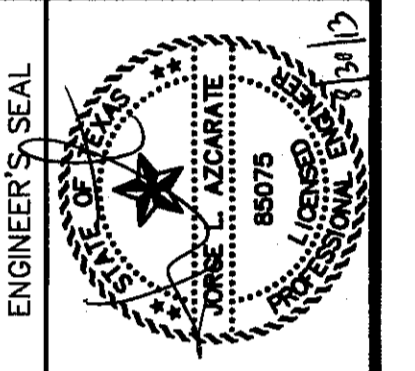
REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., S88°43'5"E, A DISTANCE OF 487.56 FEET FROM THE POINT OF BEGINNING OF EASTBROOK DRIVE, AVENUE CITY DATUM, ELEVATION 4006.90

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TEXAS REGISTERED ENGINEERING FIRM F-4684

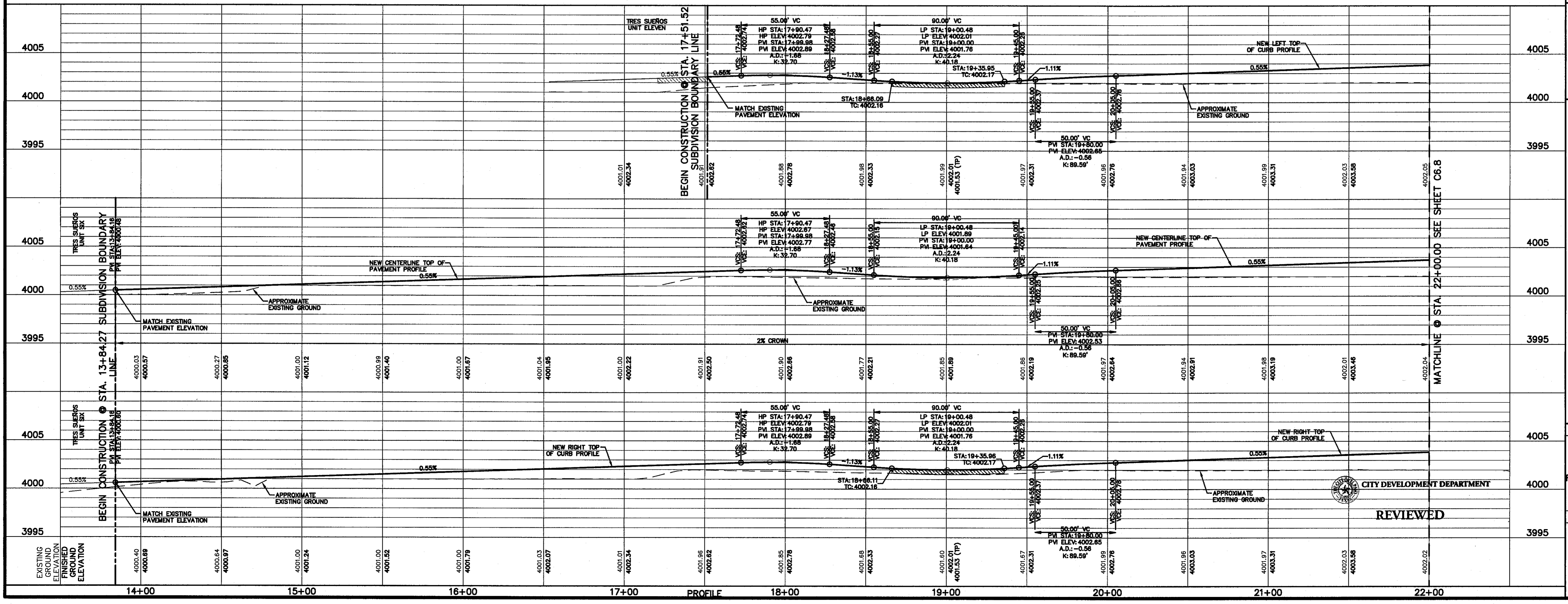
4712 Woodrow Wilson, Ste. F, El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.cesgroup.net



PLAN

LEGEND:

- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



SCALE: 1" = 30'
Horizontal: 1" = 50'
Vertical: 1" = 5'
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-030-ID

PROJECT TITLE
TRES SUEÑOS UNIT TEN SUBDIVISION IMPROVEMENTS

SHEET TITLE
EASTBROOK DR. PLAN & PROFILE FROM STA. 13+84.27 TO STA. 22+00.00

SHEET NO.
C6.7

REVIEWED
CITY DEVELOPMENT DEPARTMENT

S:\2250-030-ID\Drawings\Construction\Drawings\Improvements\Plan\C6.7-4.8 EASTBROOK IMP.Dwg, C6.7, 8/7/2013 2:47:42 PM

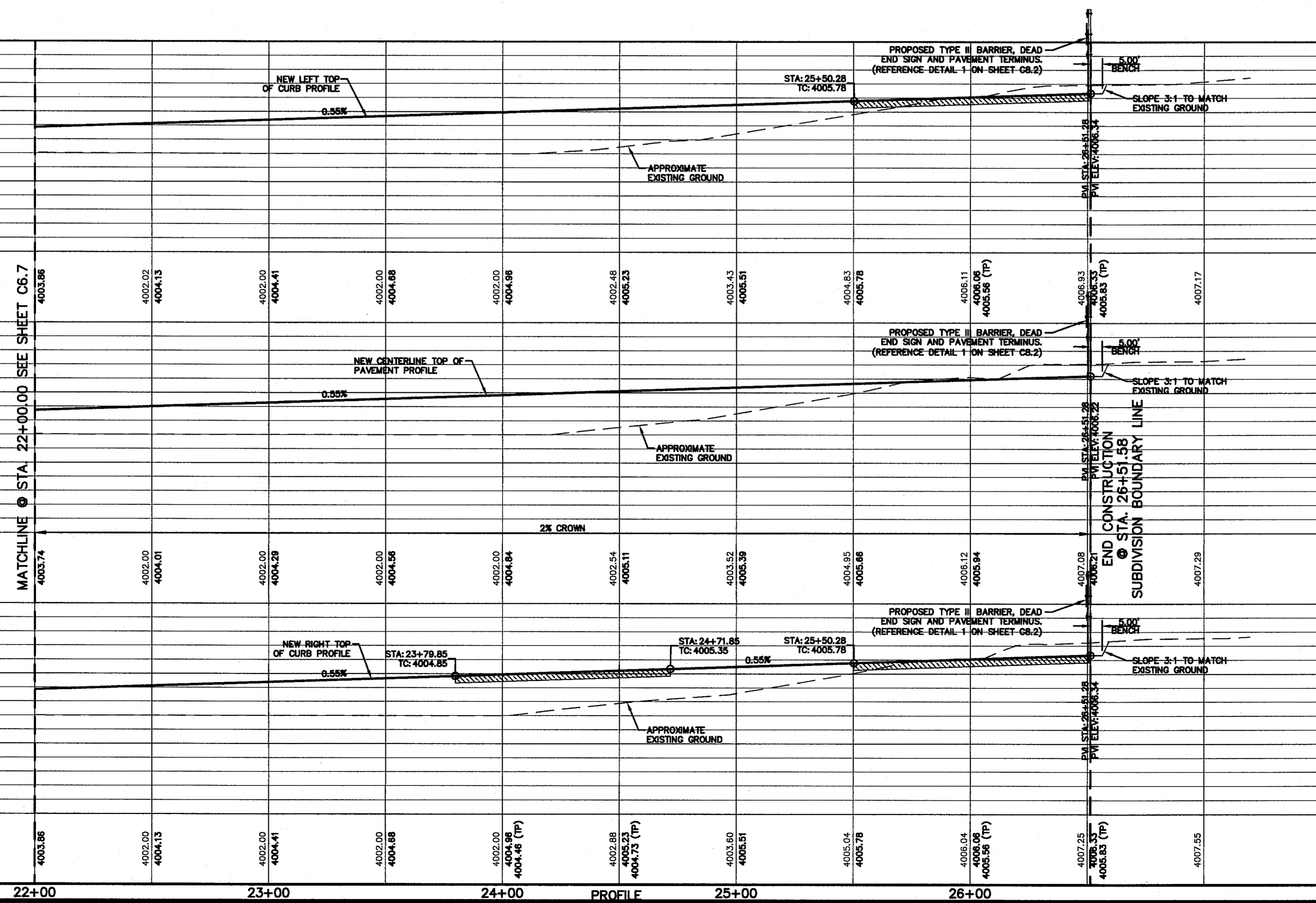
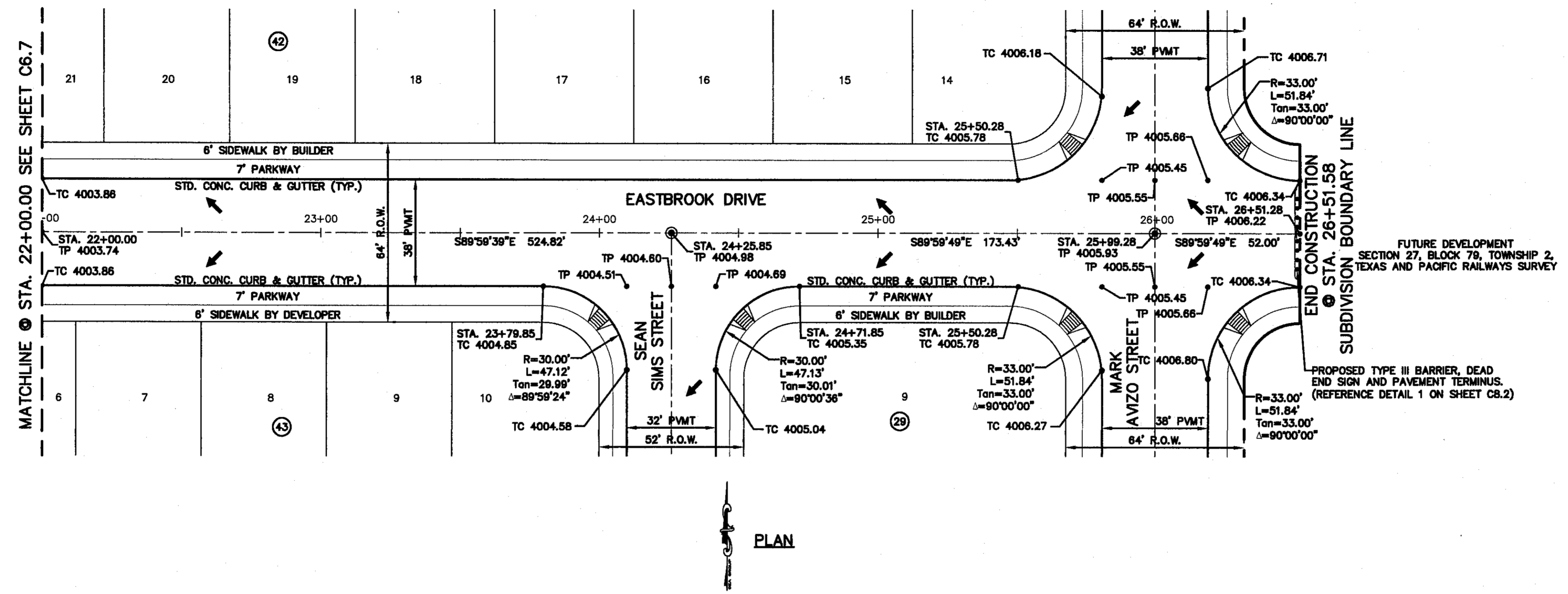
UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 498-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 690-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
BEFORE YOU DIG

CALL
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1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES



REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. S89°53'33"E DISTANCE OF 467.56 FEET FROM BENCHMARK TO POINT OF CURVE CENTERLINE AVENUE CITY DATUM. ELEVATION.....4005.40

DATE	REVISIONS	BY

ceea

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ENGINEER'S SEAL

STATE OF TEXAS

REGISTERED PROFESSIONAL ENGINEER

NO. 13113

EXPIRES 12/31/13

JOSE L. AZCARRATE

85075

1/1/13

SCALE: 1" = 30'

Horizontal: 1" = 5'

Vertical: 1" = 5'

Contour Interval: N/A

DATE: JULY 2013

DESIGN BY: J.H.

DRAWN BY: J.H.

CHECKED BY: J.H.

APP'D. BY: J.H.

J.C.

APP'D. NO. 22550-030-1LD

PROJECT TITLE

TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE

EASTBROOK DR.
PLAN & PROFILE
FROM STA. 22+00.00
TO STA. 26+51.28

SHEET NO.

C6.8

S:\2250\2250-030\LD\030\Construction Drawings\Improvement Plans\C6.7-08 EASTBROOK IMP.Dwg, C6.8, 8/20/2013 2:48:38 PM

CITY DEVELOPMENT DEPARTMENT

REVIEWED

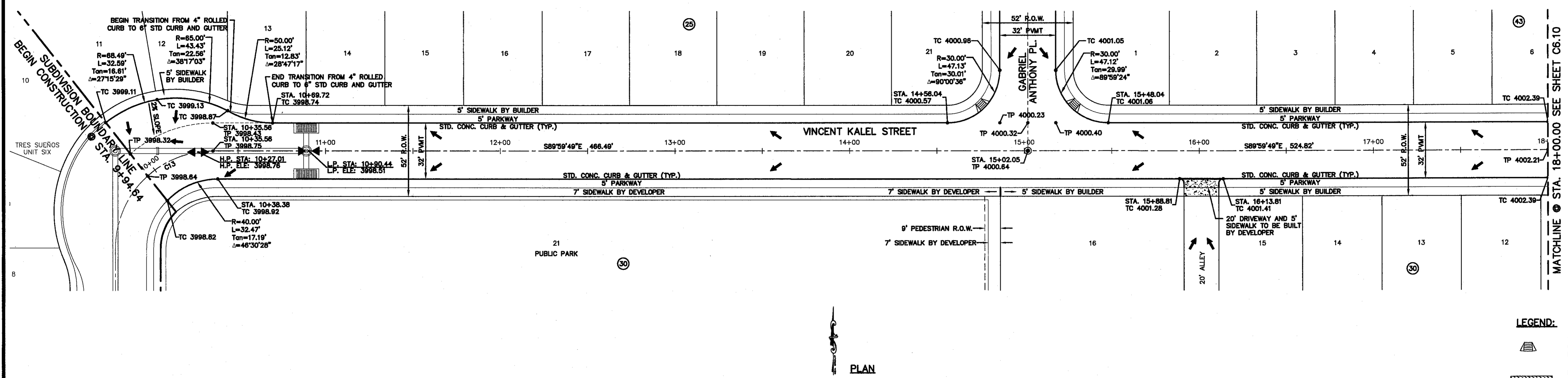
UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

**WARNING !
BEFORE YOU DIG**

CALL
1-800-DIG-TESS
1-800-344-8377

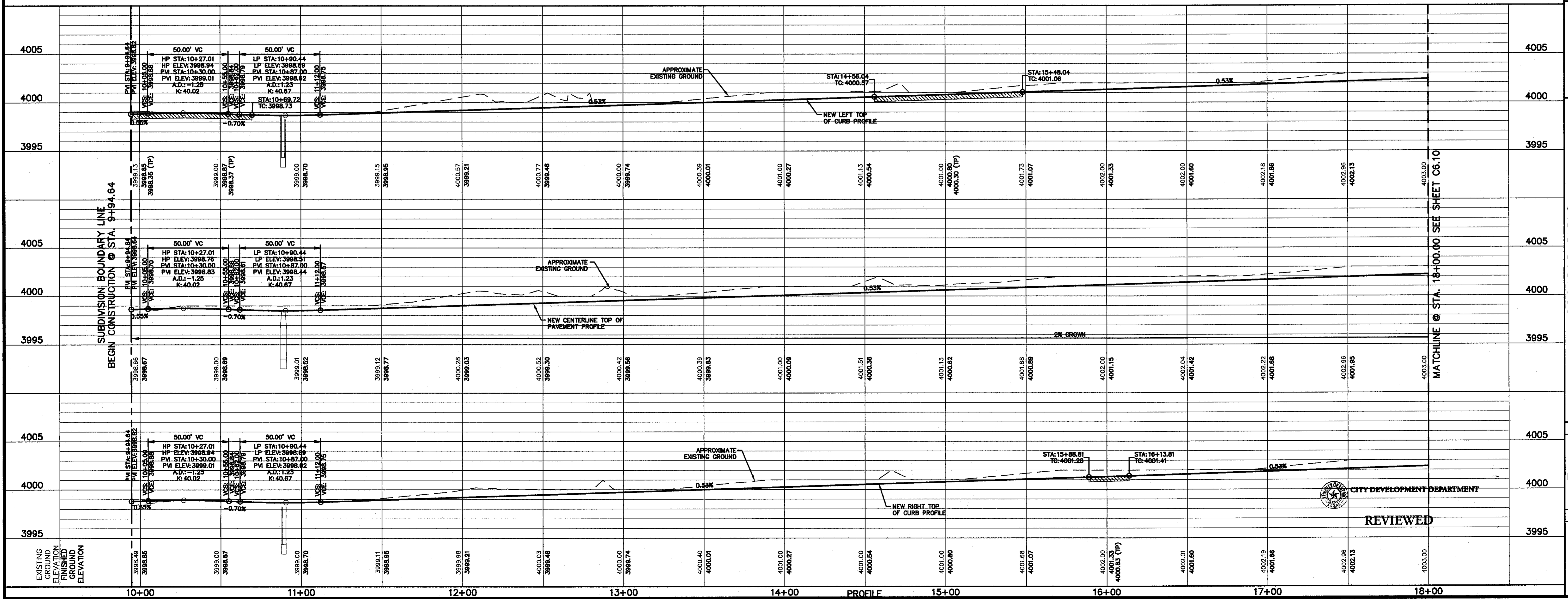
FOR FIELD LOCATING EXISTING UTILITIES



PLAN

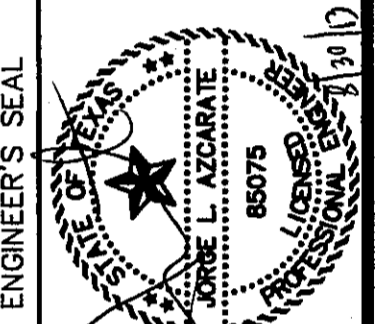
LEGEND:

- WHEELCHAIR RAMP TO BE CONSTRUCTED BY DEVELOPER (TYP.)
- PAVEMENT ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM THE SUBDIVISION RECORD OF SURVEY OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40

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Office: 915.544.5222 Fax: 915.544.5223 www.ceandesign.com



SCALE: 1" = 30'
Horizontal: 1" = 50'
Vertical: 1" = 5'
Contour Interval: N/A

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.L.A.
APPRD. BY: J.L.A.
JOB NO. 2250-030-LD

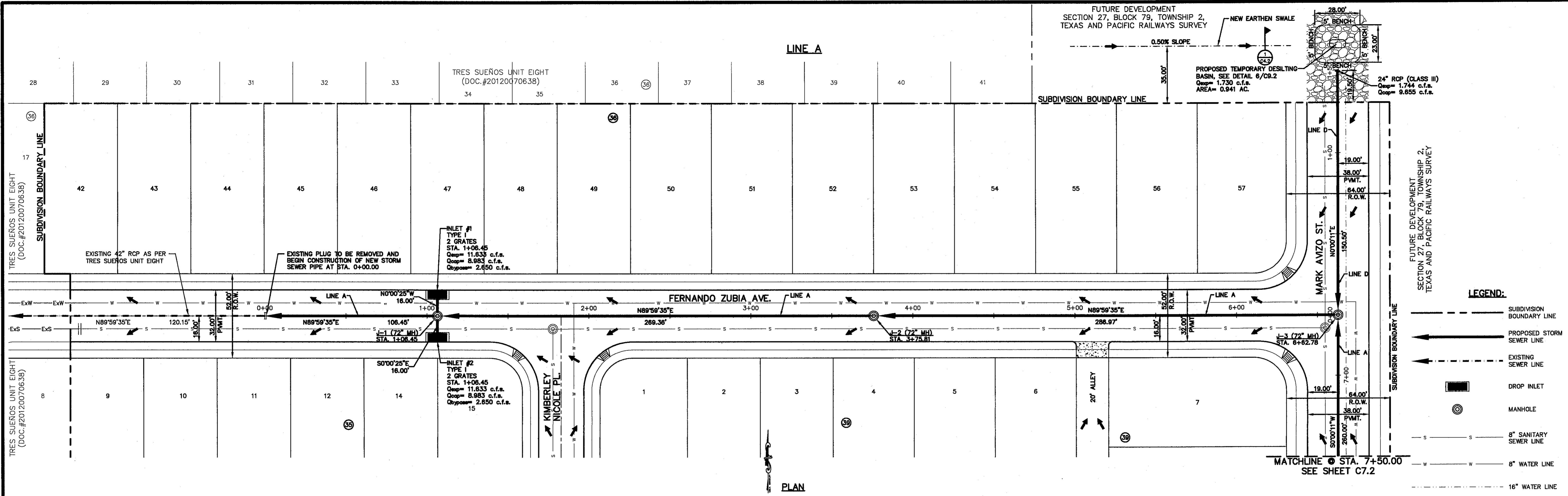
PROJECT TITLE
**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**VINCENT KAEL ST.
PLAN & PROFILE
FROM STA. 9+94.64
TO STA. 18+00.00**

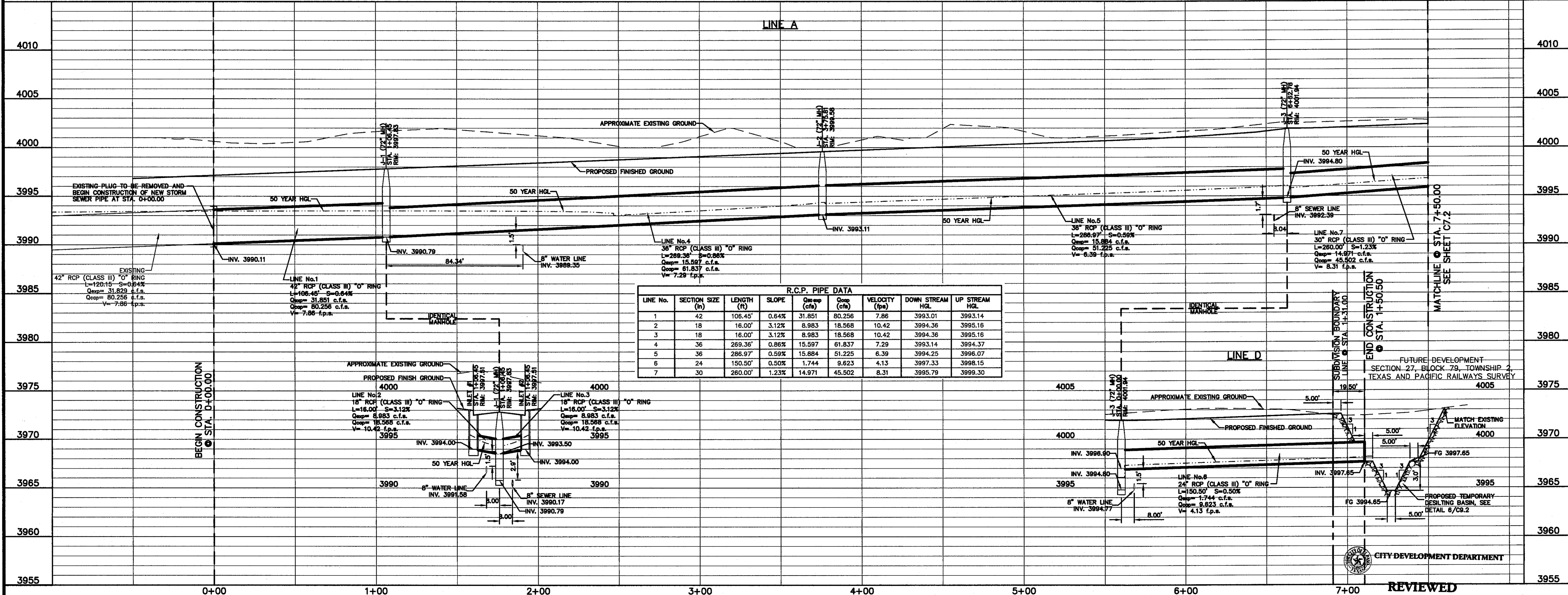
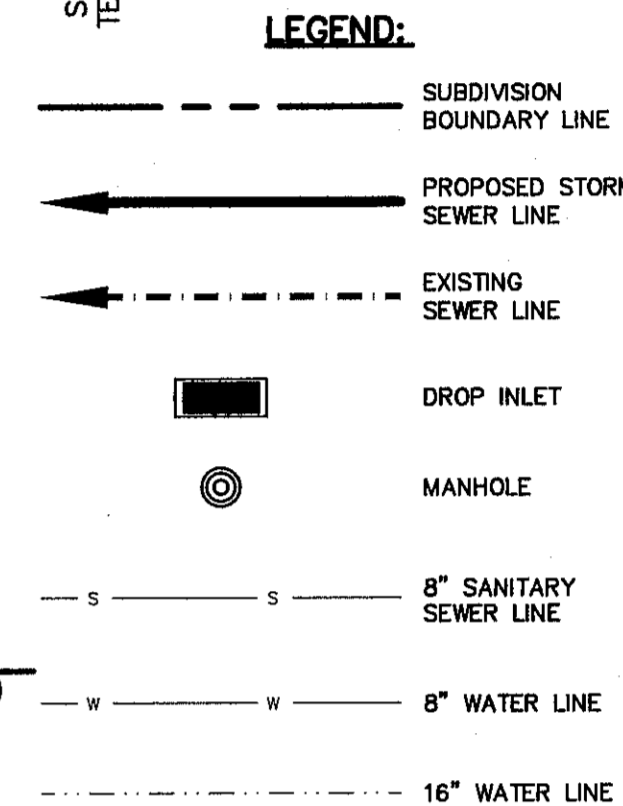
SHEET NO.
C6.9

CITY DEVELOPMENT DEPARTMENT

REVIEWED



PLAN



R.C.P. PIPE DATA								
LINE No.	SECTION SIZE (in)	LENGTH (ft)	SLOPE	Q _{prop} (cfs)	Q _{cap} (cfs)	VELOCITY (fps)	DOWN STREAM HGL	UP STREAM HGL
1	42	106.45'	0.64%	31.851	80.256	7.86	3993.01	3993.14
2	18	18.00'	3.12%	8.983	18.568	10.42	3994.36	3995.16
3	18	18.00'	3.12%	8.983	18.568	10.42	3994.36	3995.16
4	36	269.36'	0.86%	15.597	61.837	7.29	3993.14	3994.37
5	36	286.97'	0.59%	15.884	51.225	6.39	3994.25	3996.07
6	24	150.50'	0.50%	1.744	9.623	4.13	3997.33	3998.15
7	30	260.00'	1.23%	14.971	45.502	8.31	3995.79	3999.30

REFERENCES - BENCHMARKS
 CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40

oea
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 TEXAS REGISTERED ENGINEERING FIRM #454
 4712 Woodrow Bush, Ste. F El Paso, TX 79964
 Office: 915.544.2222 Fax: 915.544.2233 www.oeaup.com

ENGINEER'S SEAL
 JORGE L. ALZARATE
 85075
 (SEAL)

SCALE: 1" = 30'
 Horizontal
 Vertical: 1" = 5'
 Contour Interval: 1/4"
 DATE: JULY 2013
 DESIGN BY: JHL
 DRAWN BY: JLC
 CHECK BY: JLC
 APPROV. BY: JLC
 JOB No.: 2250-030-LD

PROJECT TITLE
TRES SUEÑOS UNIT TEN
SUBDIVISION IMPROVEMENTS

SHEET TITLE
LINE A STORM SEWER PLAN & PROFILE FROM STA. 0+00.00 TO STA. 7+50.00
LINE D STORM SEWER PLAN & PROFILE FROM STA. 0+00.00 TO STA. 1+50.50

SHEET NO.
C7.1

REVISIONS
 DATE BY

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 685-7200
SSC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

**WARNING !
BEFORE YOU DIG**

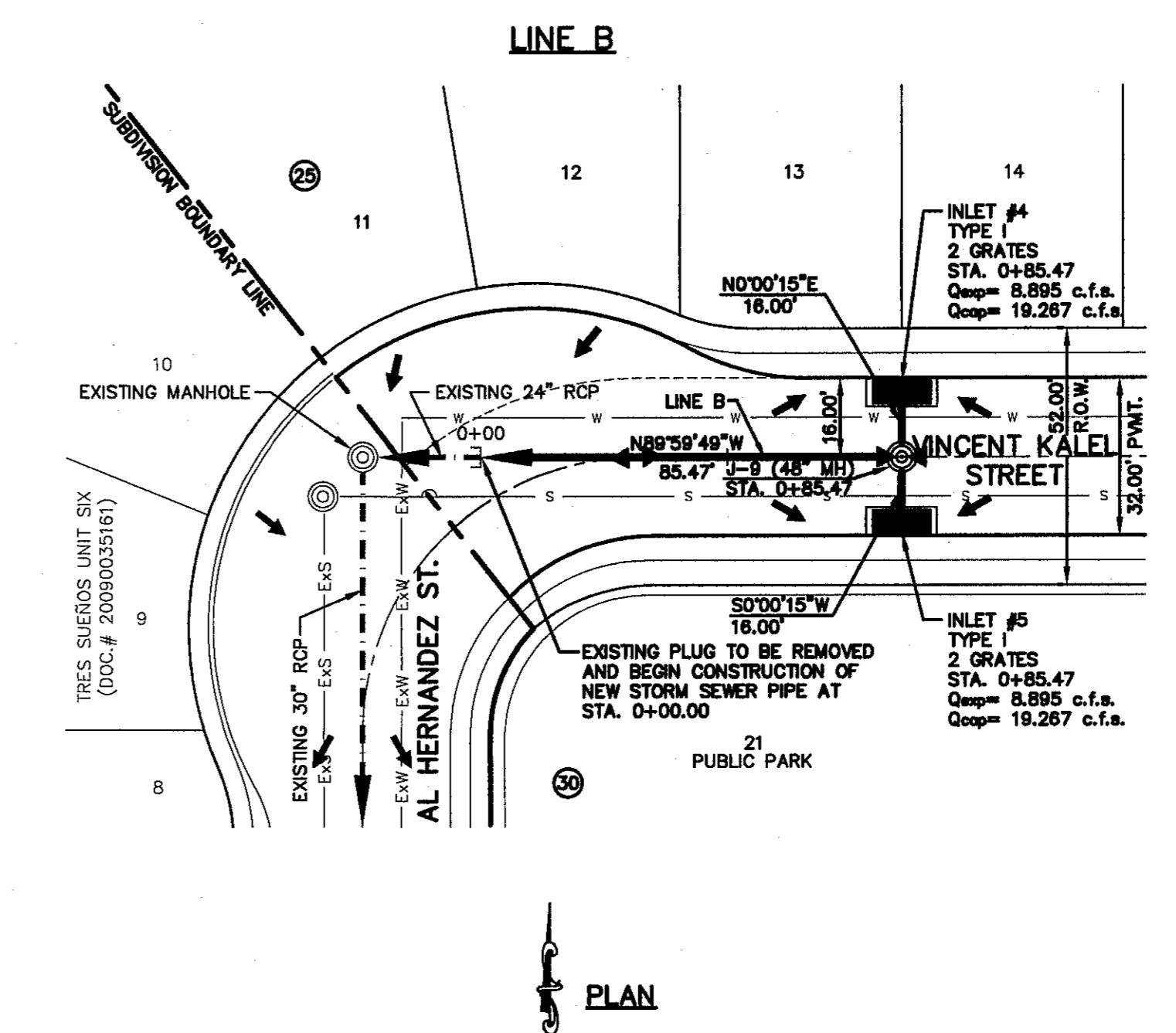
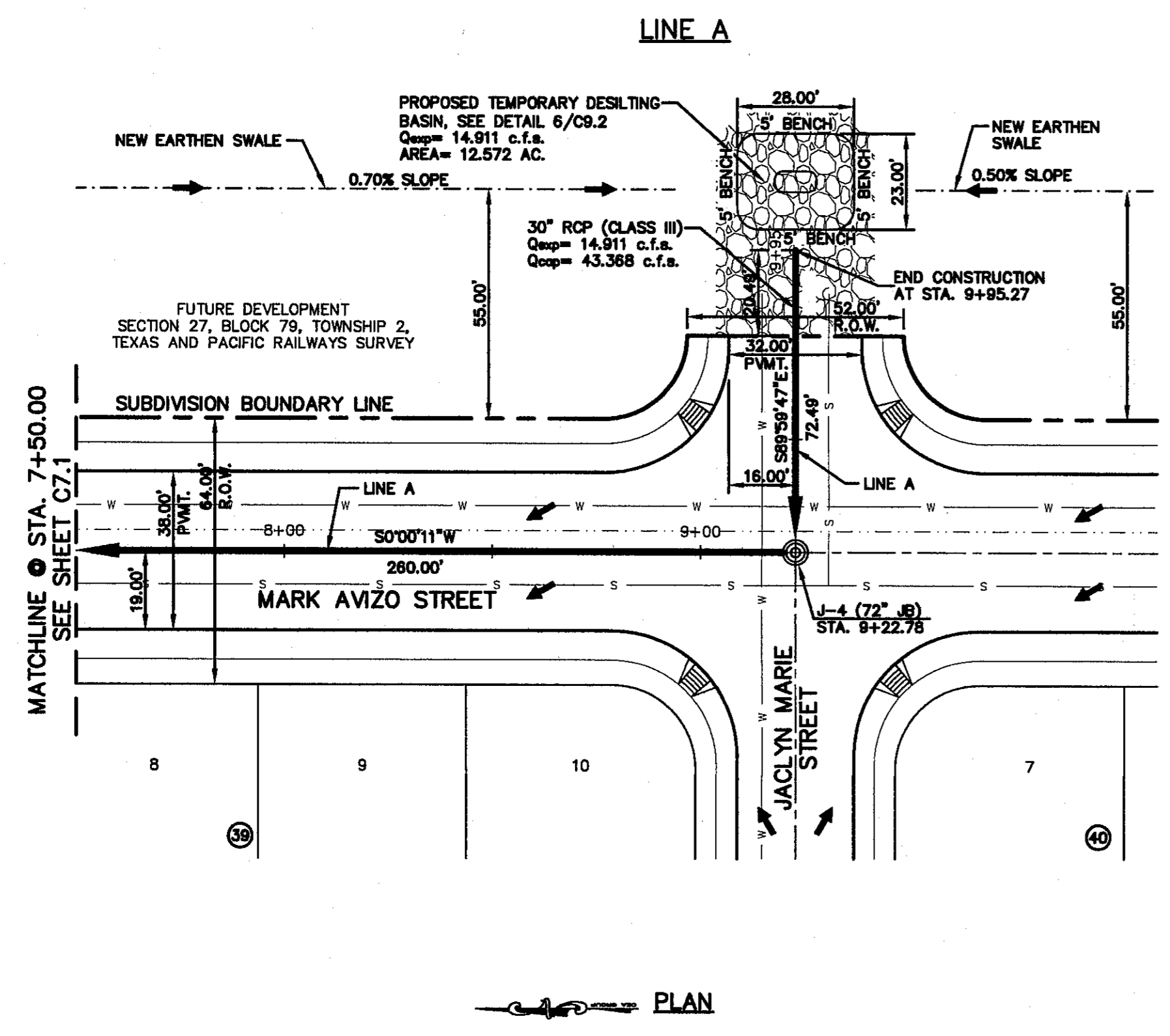
CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., S89°43'31"E, A DISTANCE OF 487.56 FEET FROM THE INTERSECTION OF MARK AVIZO STREET AND AVENUE CITY DATUM. ELEVATION: 4005.40

DATE	REVISIONS	BY



LEGEND:

- SUBDIVISION BOUNDARY LINE
- PROPOSED STORM SEWER LINE
- EXISTING SEWER LINE
- DROP INLET
- MANHOLE
- 8" SANITARY SEWER LINE
- 8" WATER LINE
- 16" WATER LINE
- EXISTING SEWER LINE (ExS)
- EXISTING WATER LINE (ExW)

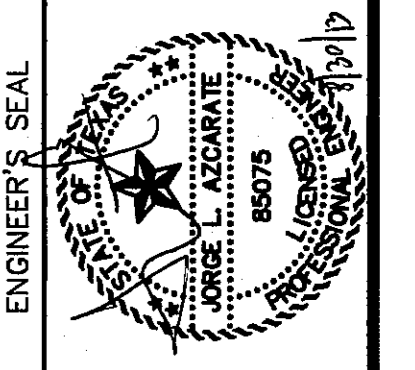
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Office: 915.544.5222 Fax: 915.544.5233 www.csandamp.com



LINE A			LINE B		
4020	4020	4015	4020	4015	4015
4015	4015	4010	4015	4010	4010
4010	4010	4005	4010	4005	4005
4005	4005	4000	4005	4000	4000
4000	4000	3995	4000	3995	3995
3995	3995	3990	3995	3990	3990
3990	3990	3985	3990	3985	3985
3985	3985	3980	3985	3980	3980
3980	3980	3975	3980	3975	3975
3975	3975	3970	3975	3970	3970
3970	3970	3965	3970	3965	3965
3965	3965	3960	3965	3960	3960

R.C.P. PIPE DATA								
LINE No.	SECTION SIZE (in)	LENGTH (ft)	SLOPE (%)	Q _{prop} (cfs)	Q _{cap} (cfs)	VELOCITY (ft/s)	DOWN STREAM HGL	UP STREAM HGL
7	30	260.00	1.23%	14.971	45.502	8.31	3995.79	3999.30
8	30	72.49	1.10%	15.028	43.070	7.99	3999.03	4000.11
9	24	85.47	1.13%	17.723	24.099	8.39	3995.18	3995.51
10	18	16.00	2.00%	8.895	14.855	5.34	3995.88	3996.01
11	18	16.00	2.00%	8.895	14.855	5.34	3995.88	3996.01

SCALE 1" = 30'

Vertical: 1" = 5'

Horizontal: 1" = 100'

DATE: JULY 2013

DESIGN BY: J.H.

DRAWN BY: J.H.

CHKD. BY: J.L.A.

APPRD. BY: J.L.A.

JOB No. 2250-030-LD

PROJECT TITLE

TRES SUEÑOS UNIT TEN SUBDIVISION IMPROVEMENTS

SHEET TITLE

LINE A STORM SEWER PLAN & PROFILE FROM STA. 7+50.00 TO STA. 9+95.27

LINE B STORM SEWER PLAN & PROFILE FROM STA. 0+00.00 TO STA. 0+85.47

SHEET NO.

C7.2

S:\2250\2250-030\DWG\Construction\DWG\Improvements_Plan\C7.2 LINE A & B STORM SEWER IMPROVEMENTS.dwg, layout1, 6/25/2013 11:47:12 AM

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
BEFORE YOU DIG

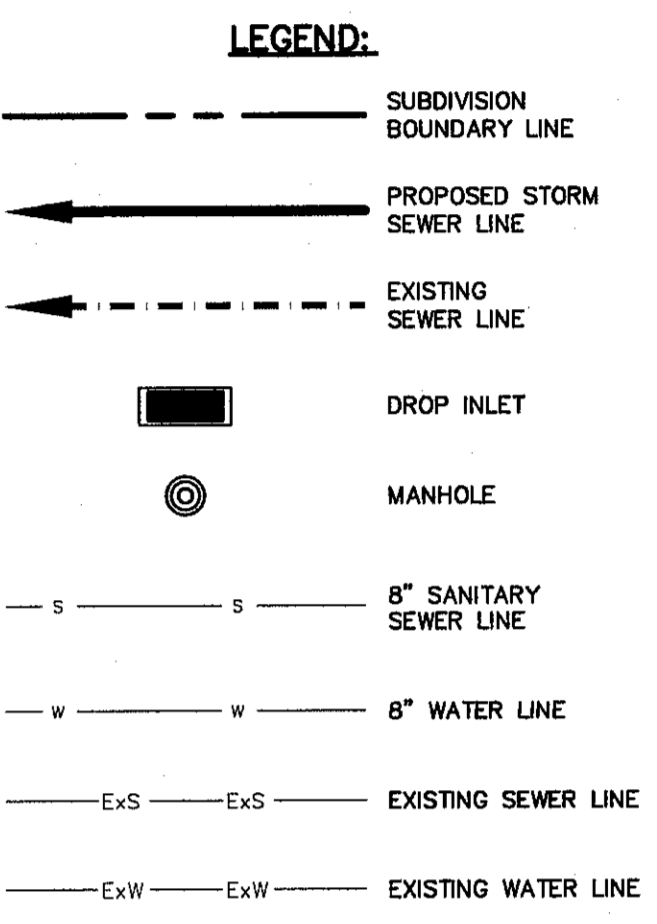
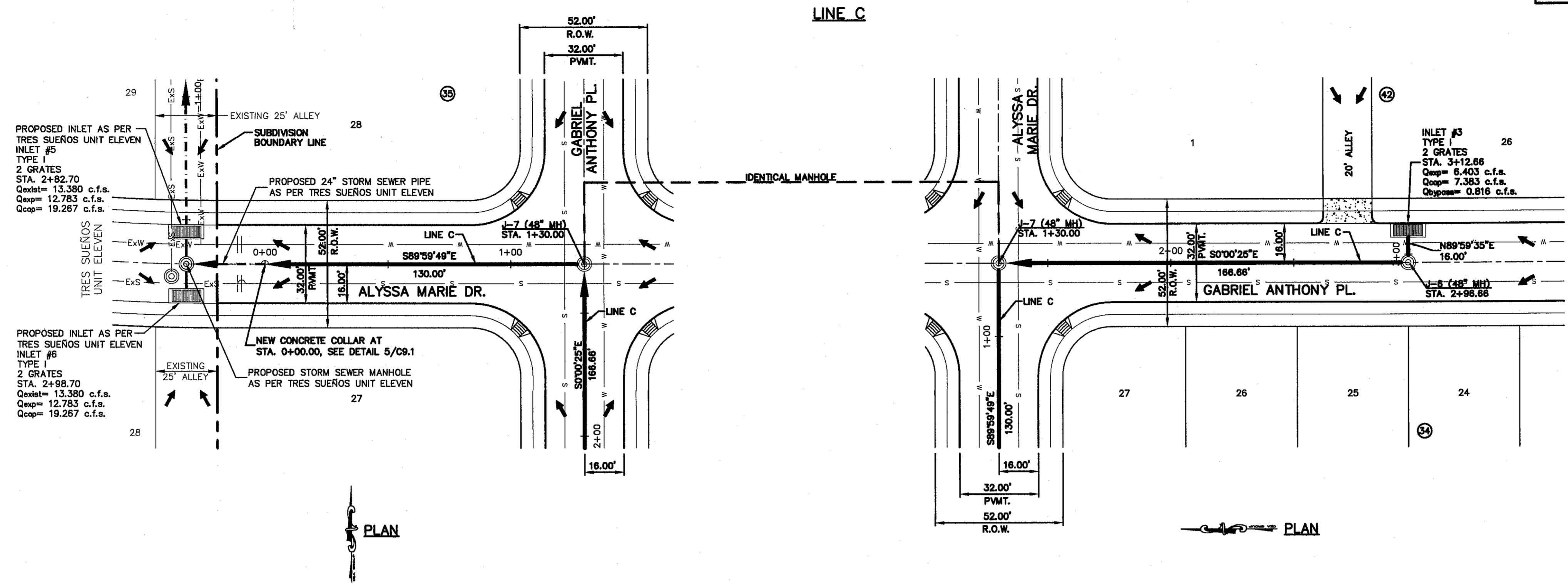
CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES — BENCHMARKS

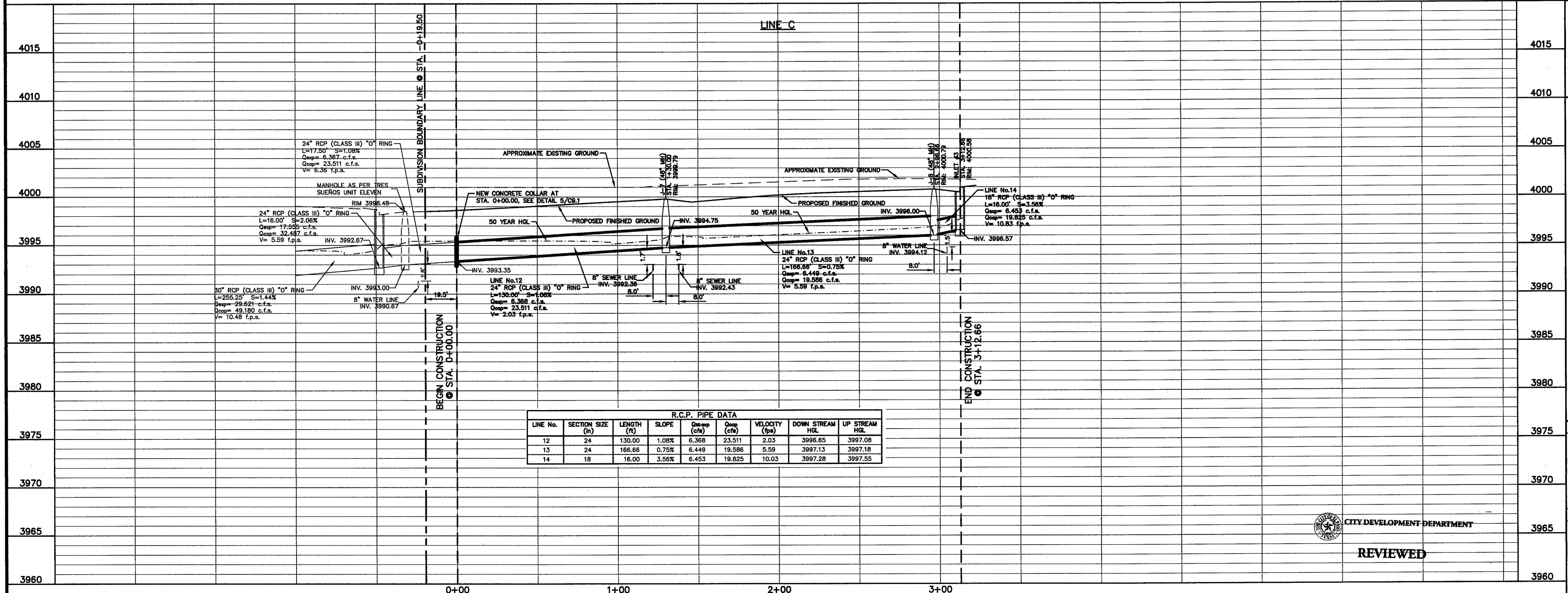
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEAM BLVD. CORNER OF EAST 1ST WAY OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40

DATE	REVISIONS	BY



ENGINEER'S SEAL

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PROJECT TITLE
TRES SUEÑOS UNIT TEN SUBDIVISION IMPROVEMENTS

SHEET TITLE
LINE C STORM SEWER PLAN & PROFILE FROM STA. 0+00.00 TO 3+12.66

SHEET NO.
C7.3

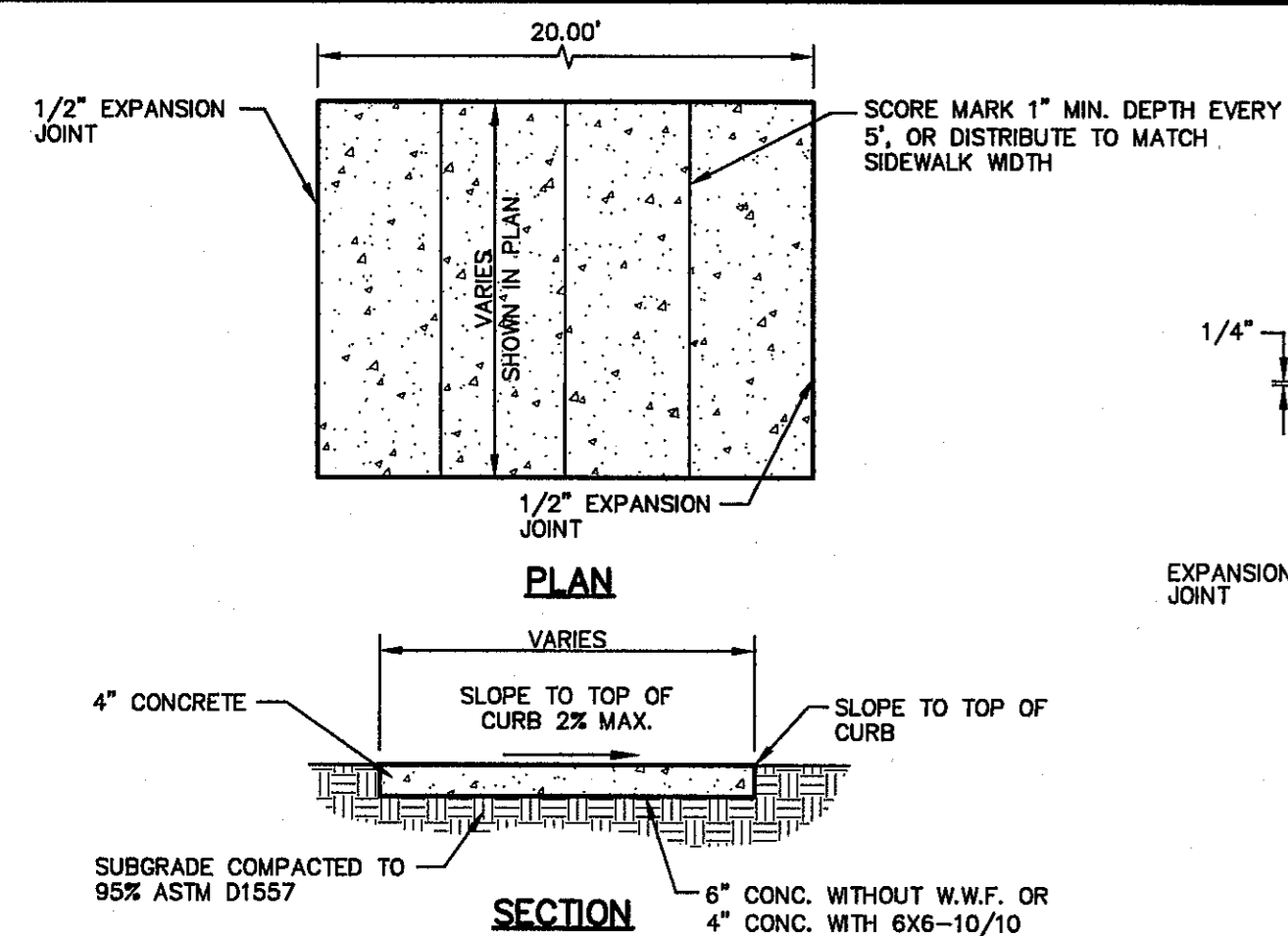
SCALE: 1" = 5' Horizontal, 1" = 5' Vertical, Contour Interval: 1/4"

DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.G.
APPRD. BY: J.L.A.
JOB No.: 2250-030-10

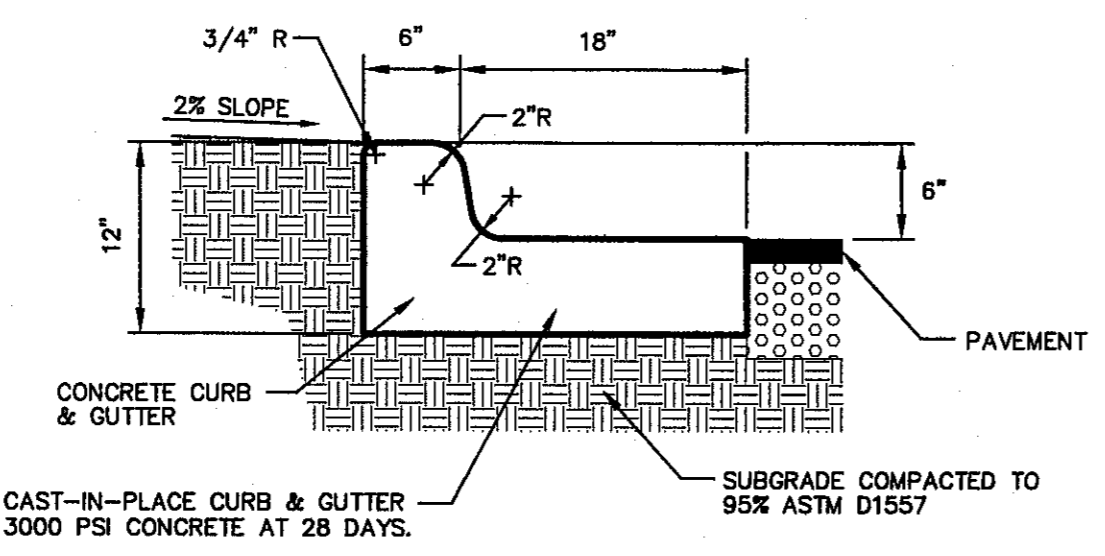
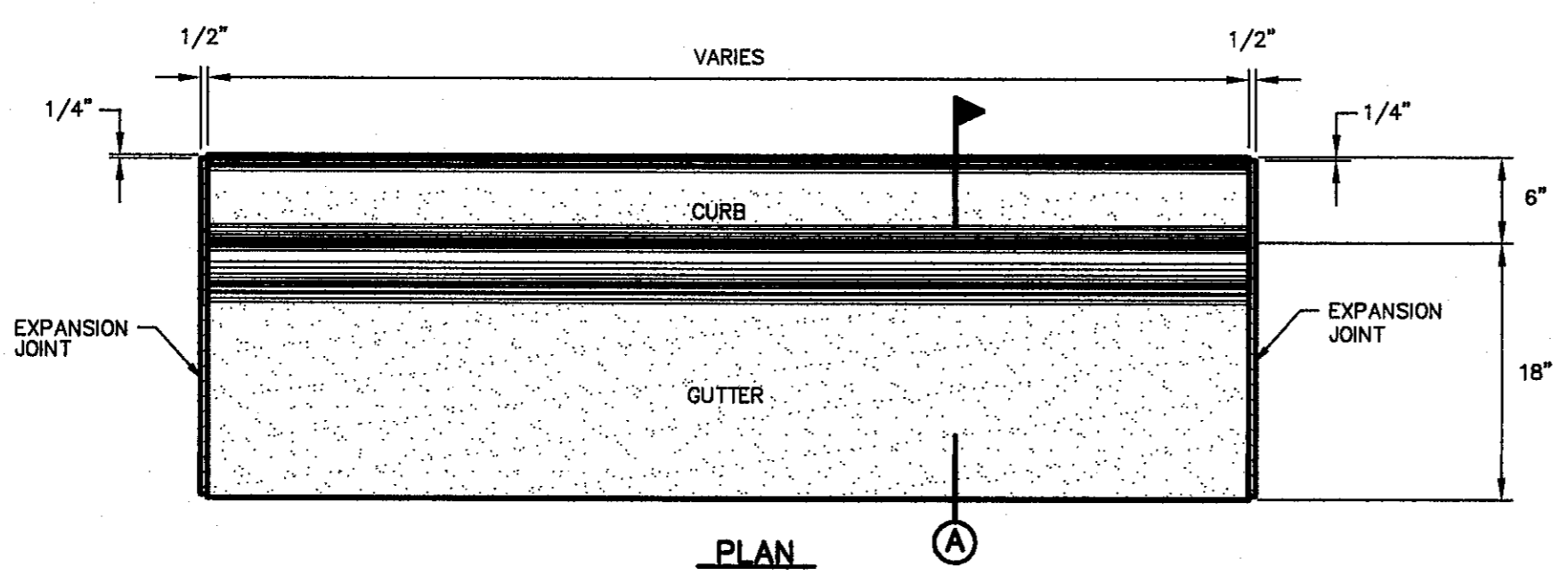
REVIEWED

CITY DEVELOPMENT DEPARTMENT

S:\2250\2250-030\DWG\CAD\CAD\Drawings\Improvement Plans\C7.3 LINE C 310204.dwg P&S.dwg, layout1, 8/28/2013 11:48:38 AM

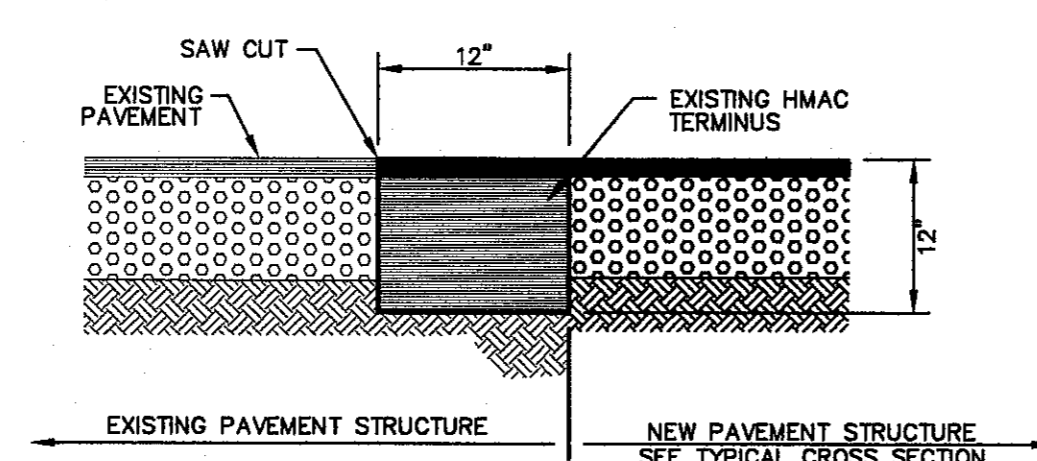


- SIDEWALK NOTES:**
1. CONCRETE SIDEWALK SHALL BE 3,000 P.S.I.
 2. DUMMY JOINTS REQUIRED AT 5' O.C.
 3. EXPANSION JOINTS SHALL BE AT 20' O.C. MAXIMUM, USE 1/2" PREMOULDED BITUMINOUS EXPANSION JOINTS (AASHTO M-33)
 4. EXPANSION JOINT FILLER SHALL BE PLACED WHEREVER SIDEWALK ABUTS ROCK OR MASONRY STRUCTURES SUCH AS CURBS OR BUILDINGS.
 5. SUBGRADE TO BE COMPACTED TO 95% ASTM D1557.

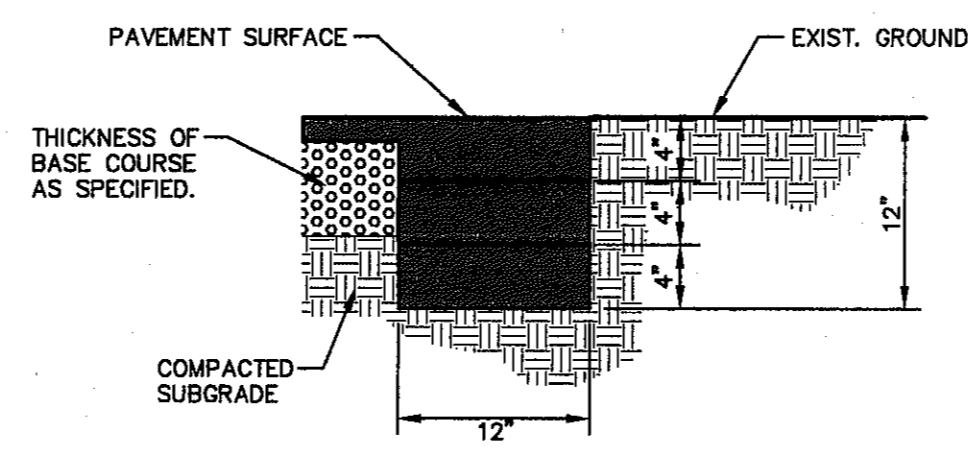


- NOTES:**
1. CONCRETE CURB, GUTTER, AND RETURNS SHALL BE 3,000 P.S.I. MIN.
 2. DUMMY JOINTS REQUIRED AT 10' O.C.
 3. 1/2" PREMOULDED BITUMINOUS EXPANSION JOINT (AASHTO M-33) IS REQUIRED FOR ALL CURBS RETURNS. TRIM BITUMINOUS MATERIAL 1/4" LESS THAN NEAT CURB & GUTTER DIMENSION.
 4. SUBGRADE UNDER CURBS MUST BE FORMED AND COMPACTED TO 95% ASTM D1557.
 5. EXPANSION JOINTS REQUIRED AT 50' O.C. WHEN FORMING FOR CURBS.

2 CURB & GUTTER DETAIL
SCALE: 1"=1'-0"

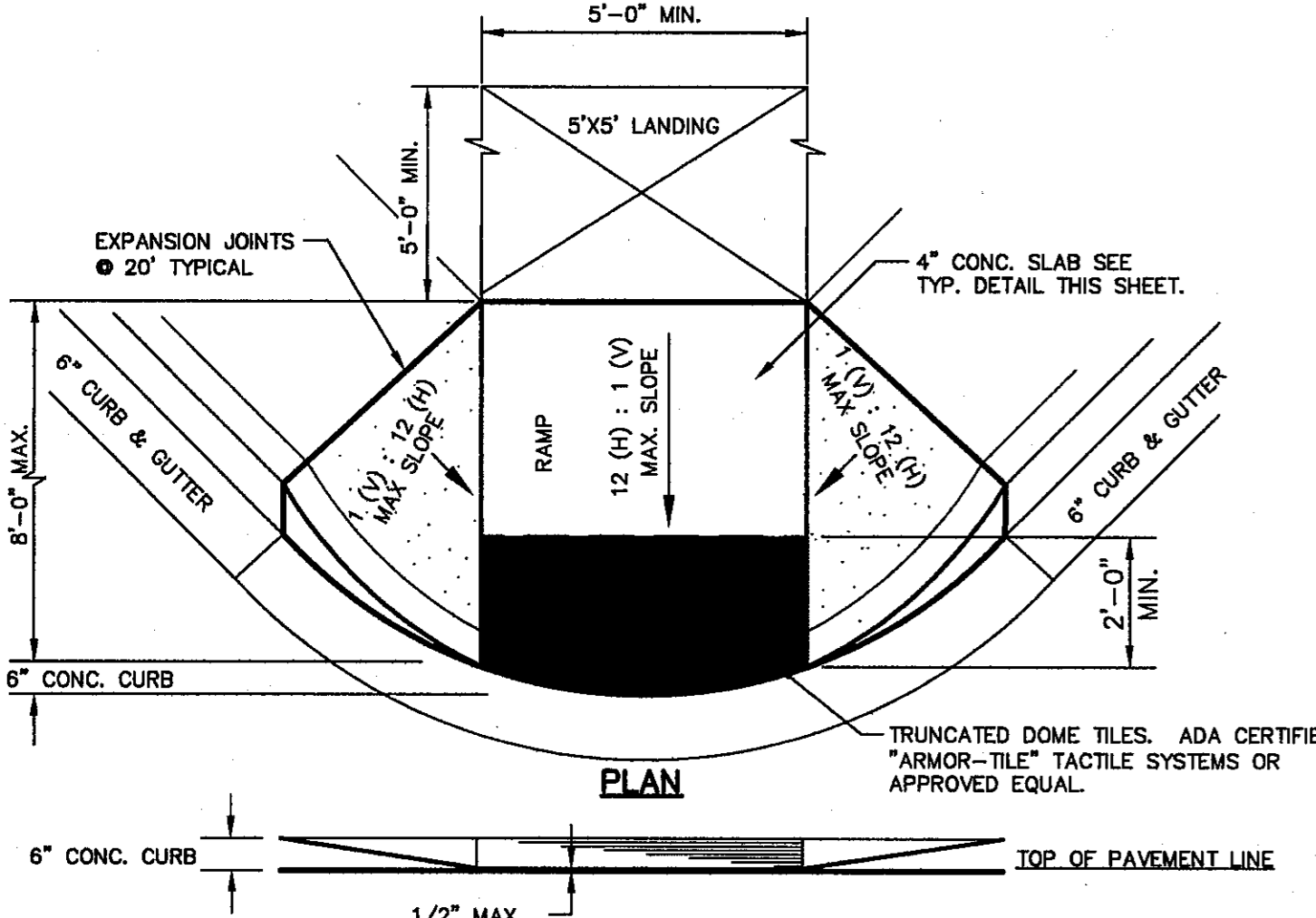


7 TYPICAL PAVEMENT JOINT SECTION
SCALE: N.T.S.



8 TERMINUS OF STREET
SCALE: 1"=1'-0"

1 SECTION-SIDEWALK/SLAB
SCALE: 1"=2'-0"

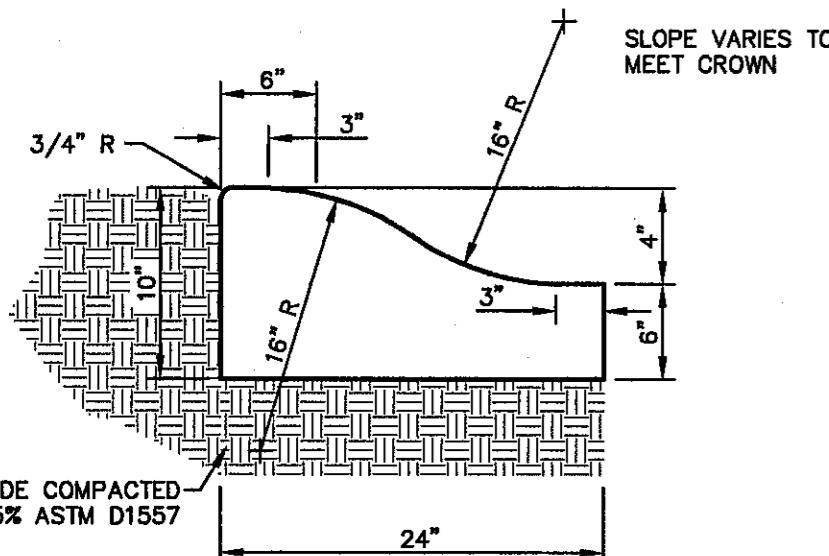


6 TYPICAL WHEELCHAIR RAMP DETAIL
SCALE: N.T.S.

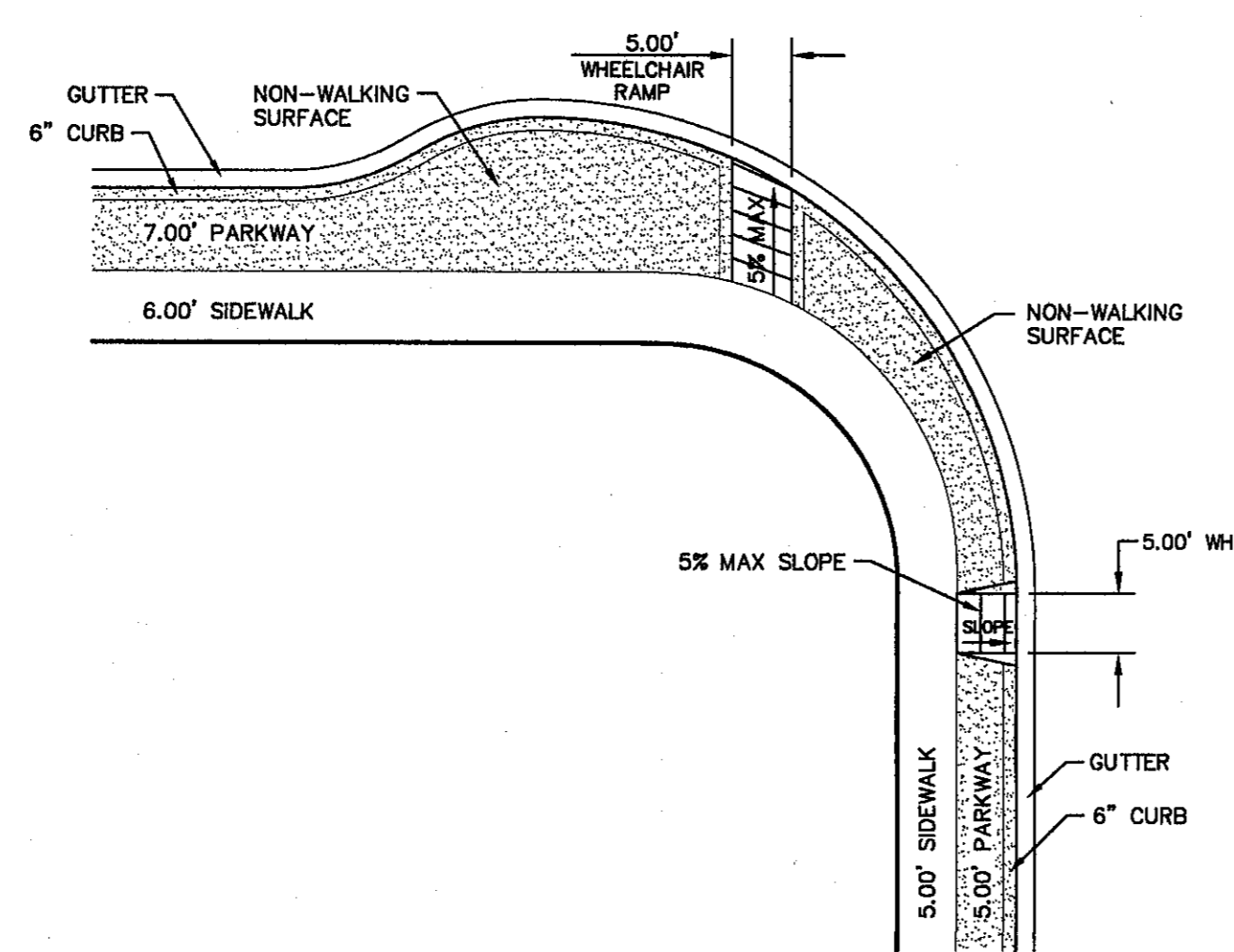
LEGEND

DETECTABLE WARNING SURFACE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE, OR THE DETECTABLE WARNING SHALL BE "RED BRICK" COLOR, UNLESS OTHERWISE DIRECTED BY THE COUNTY OF EL PASO ROAD AND BRIDGE DEPARTMENT. THE MATERIAL USED TO PROVIDE VISUAL CONTRAST SHALL BE AN INTEGRAL PART OF THE DETECTABLE WARNING SURFACE. CONTRAST SHALL BE PROVIDED BY PLACING AND MIXING TINT IN THE PLASTIC CONCRETE USED FOR THE DETECTABLE WARNING SURFACE. NO PAINTING OF SURFACE SHALL BE PERMITTED.

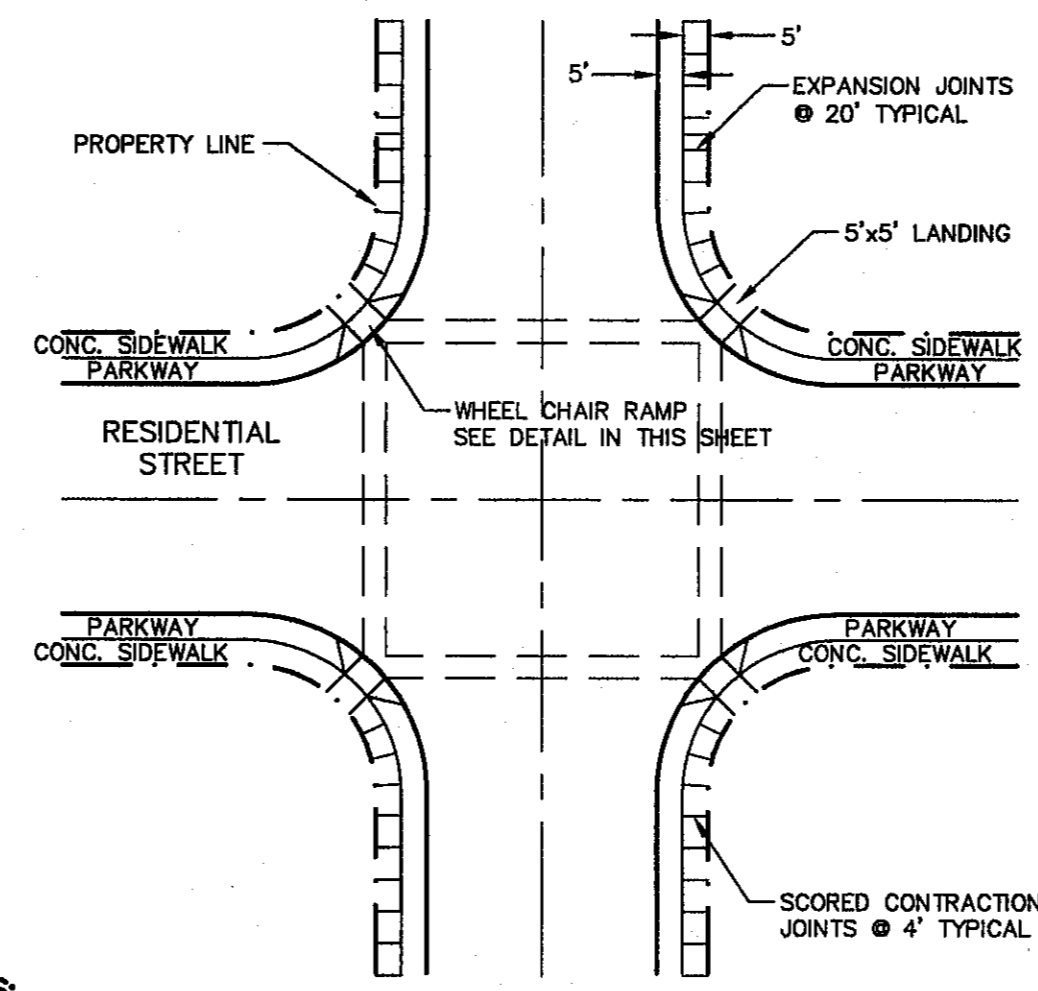
- NOTES:**
1. ALL CONCRETE SHALL BE 3,000 P.S.I. MIN. AT 28 DAYS.
 2. CONCRETE SLABS SHALL BE A MIN. 4" THICK.
 3. ALL NEW RAMPS SHALL COMPLY WITH T.A.S. AND A.D.A. REQUIREMENTS, ANY SECTIONS NOT CONFORMING WILL BE REMOVED AT THE CONTRACTORS EXPENSE.
 4. ALL ADA RAMPS SHALL BE BUILT BY DEVELOPER.



10 4\"/>

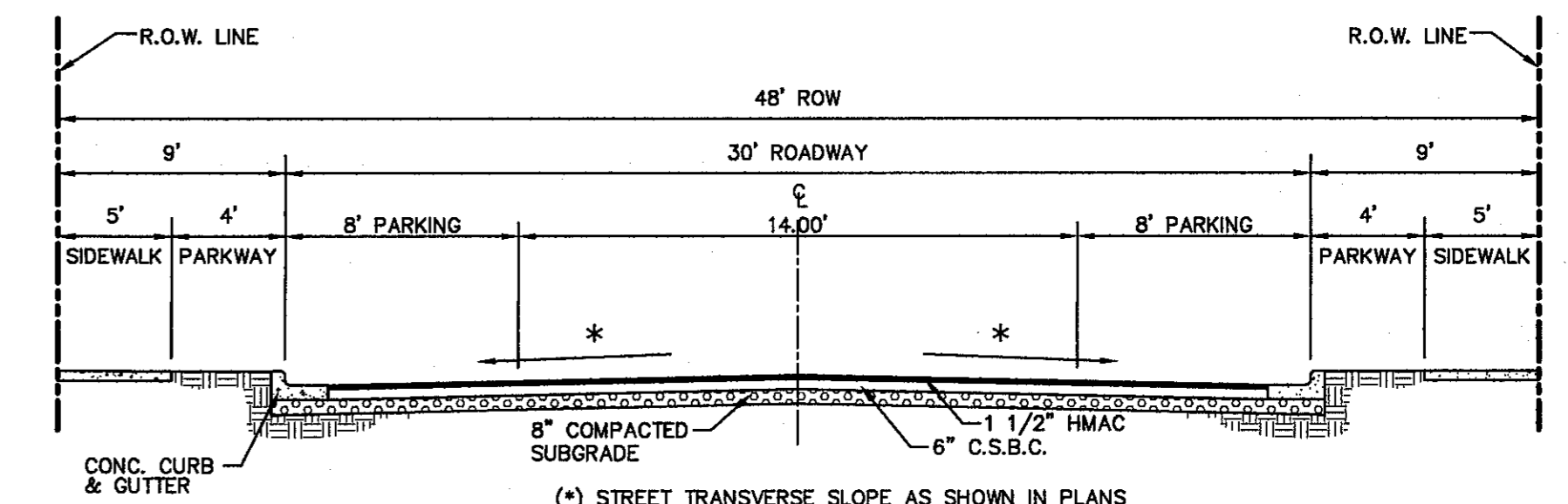


11 DIRECTIONAL RAMP @ BULB-OUT INTERSECTION
SCALE: N.T.S.



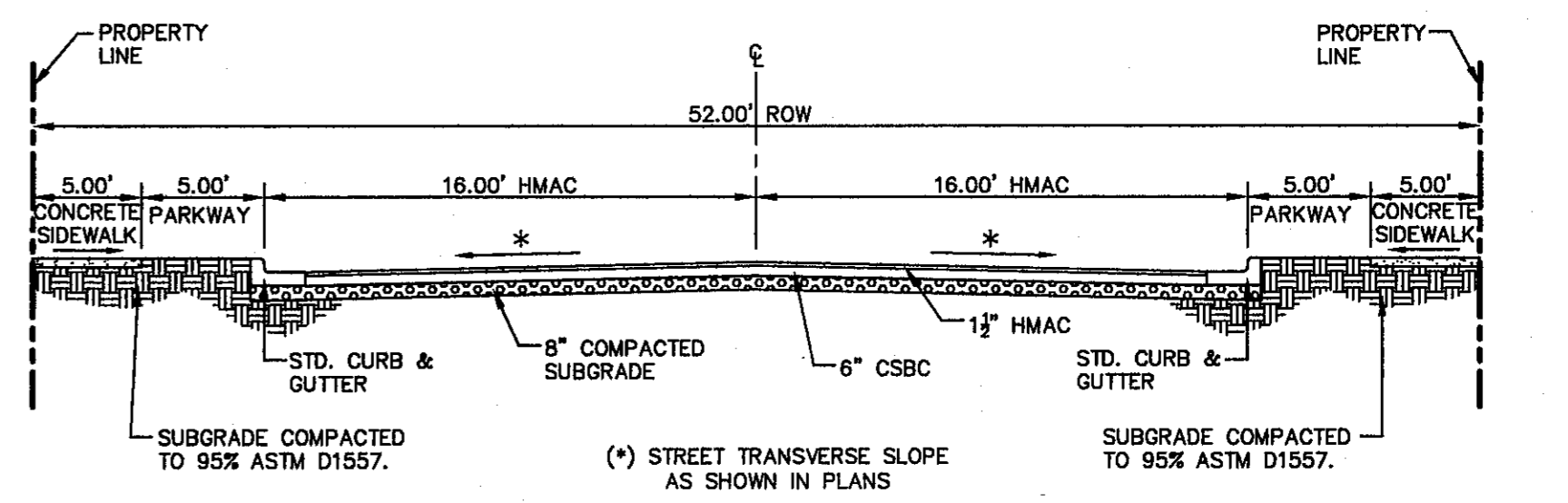
- NOTES:**
1. RAMPS MAY BE PLACED AS SUGGESTED, HOWEVER EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. MAY AFFECT PLACEMENT.
 2. THE CONCRETE SURFACE SHALL HAVE A ROUGH, NONSKID TYPE FINISH.
 3. CONSTRUCTION METHODS SHALL CONFORM WITH THE CITY OF EL PASO SPECIFICATIONS.
 4. ALL PARKING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE COUNTY OF EL PASO ROAD AND BRIDGE DEPARTMENT.

3 WHEELCHAIR RAMP STREET PLAN
SCALE: 1"=30'



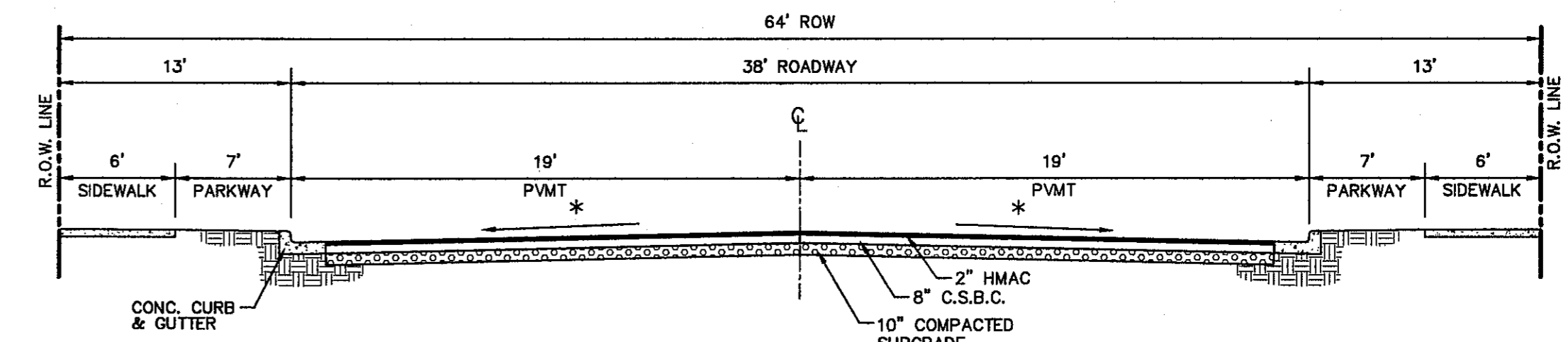
4 TYPICAL 48' R.O.W. STREET SECTION DETAIL
SCALE: N.T.S.

NOTE:
STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CITY OF EL PASO PAVING CONSTRUCTION DETAILS AND STANDARD SPECIFICATIONS. CBR @ EVERY 500' RESULTS TO BE SUBMITTED TO THE CITY OF EL PASO ENGINEERING & CONSTRUCTION MANAGEMENT DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF PAVEMENT. THE CBR RESULTS WILL DICTATE THE REQUIRED THICKNESS OF THE PAVEMENT STRUCTURE BASED ON CITY OF EL PASO DESIGN STANDARDS. THE DEVELOPER SHALL PLACE THE HIGHER VALUE OF PAVEMENT STRUCTURE BASED ON THE CBR RESULTS OR THE MINIMUM PAVEMENT THICKNESS AS SHOWN ON THE CITY OF EL PASO DESIGN STANDARDS.



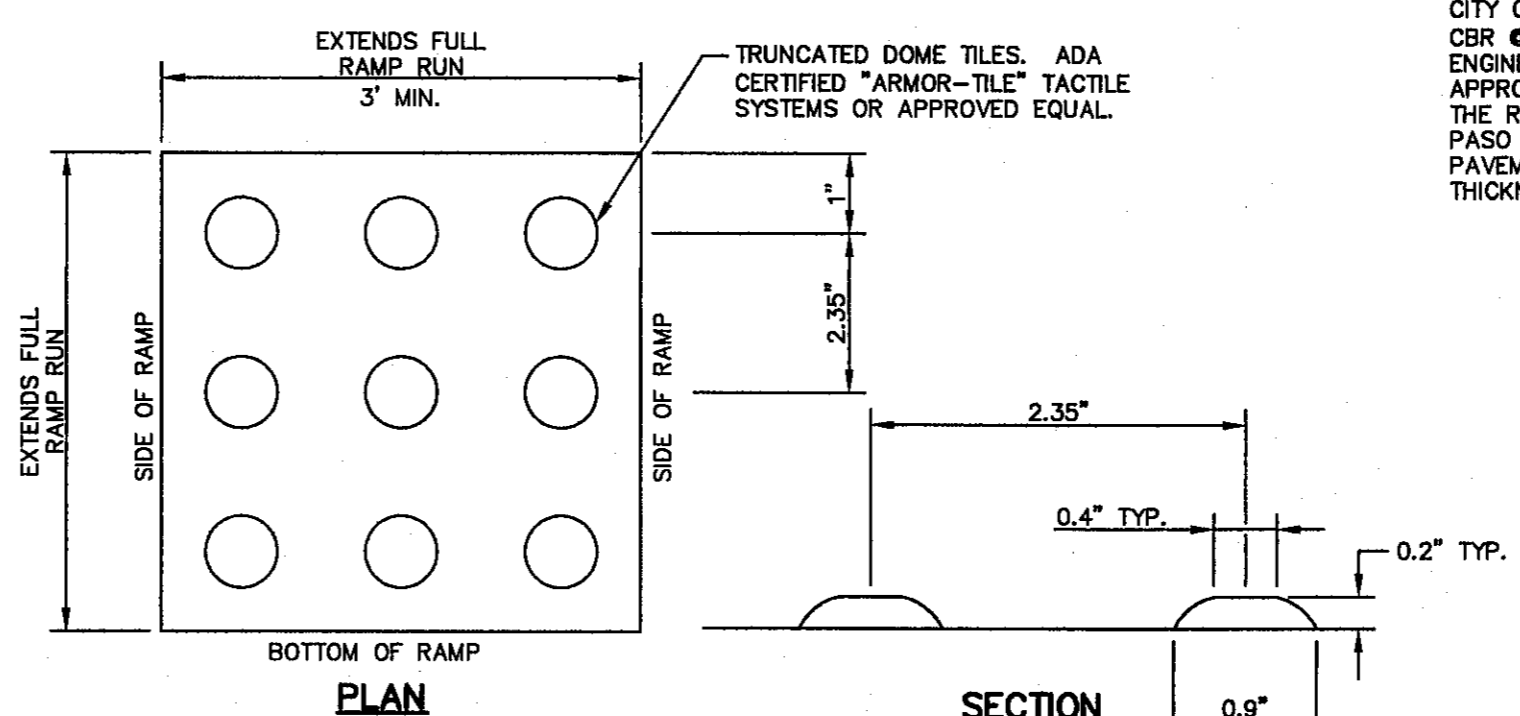
5 TYPICAL 52' ROW STREET SECTION DETAIL
SCALE: N.T.S.

NOTE:
STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CITY OF EL PASO PAVING CONSTRUCTION DETAILS AND STANDARD SPECIFICATIONS. CBR @ EVERY 500' RESULTS TO BE SUBMITTED TO THE CITY OF EL PASO ENGINEERING & CONSTRUCTION MANAGEMENT DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF PAVEMENT. THE CBR RESULTS WILL DICTATE THE REQUIRED THICKNESS OF THE PAVEMENT STRUCTURE BASED ON CITY OF EL PASO DESIGN STANDARDS. THE DEVELOPER SHALL PLACE THE HIGHER VALUE OF PAVEMENT STRUCTURE BASED ON THE CBR RESULTS OR THE MINIMUM PAVEMENT THICKNESS AS SHOWN ON THE CITY OF EL PASO DESIGN STANDARDS.



9 TYPICAL 64' ROW STREET SECTION DETAIL
SCALE: N.T.S.

NOTE:
STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CITY OF EL PASO PAVING CONSTRUCTION DETAILS AND STANDARD SPECIFICATIONS. CBR @ EVERY 500' RESULTS TO BE SUBMITTED TO THE CITY OF EL PASO ENGINEERING & CONSTRUCTION MANAGEMENT DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF PAVEMENT. THE CBR RESULTS WILL DICTATE THE REQUIRED THICKNESS OF THE PAVEMENT STRUCTURE BASED ON CITY OF EL PASO DESIGN STANDARDS. THE DEVELOPER SHALL PLACE THE HIGHER VALUE OF PAVEMENT STRUCTURE BASED ON THE CBR RESULTS OR THE MINIMUM PAVEMENT THICKNESS AS SHOWN ON THE CITY OF EL PASO DESIGN STANDARDS.



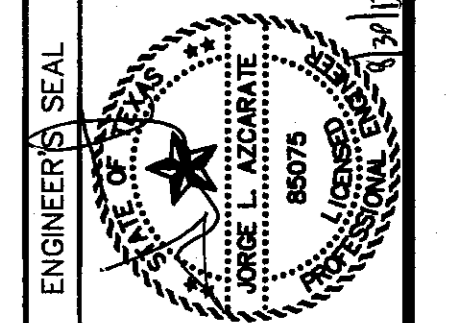
LEGEND

DETECTABLE WARNING SURFACE SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A NOMINAL DIAMETER OF 0.9 IN. A NOMINAL HEIGHT OF 0.2 IN AND A CENTER TO CENTER NOMINAL SPACING OF 2.35 IN. AND SHALL NOT BE STAGGERED. THE SURFACE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE, OR THE DETECTABLE WARNING SHALL BE "RED BRICK" COLOR, UNLESS OTHERWISE DIRECTED BY THE CITY OF EL PASO TRANSPORTATION DEPARTMENT. THE MATERIAL USED TO PROVIDE VISUAL CONTRAST SHALL BE AN INTEGRAL PART OF THE DETECTABLE WARNING SURFACE. CONTRAST SHALL BE PROVIDED BY PLACING AND MIXING TINT IN THE PLASTIC CONCRETE USED FOR THE DETECTABLE WARNING SURFACE. NO PAINTING OF SURFACE SHALL BE PERMITTED.

12 TRUNCATED DOME
SCALE: N.T.S.

REFERENCES - BENCHMARKS	CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. SUBSTATION A DISTANCE OF 487.58 FEET FROM THE CENTERLINE OF THE MAINWAY LINE#008.40 AVENUE CITY DATUM. ELEVATION: 1008.40
DATE	REVISIONS
BY	

CS&A
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4664
4712 Woodrow Wilson, Ste. F El Paso, TX 79924
Office: 915.544.6222 Fax: 915.544.6233 www.csandamp.com



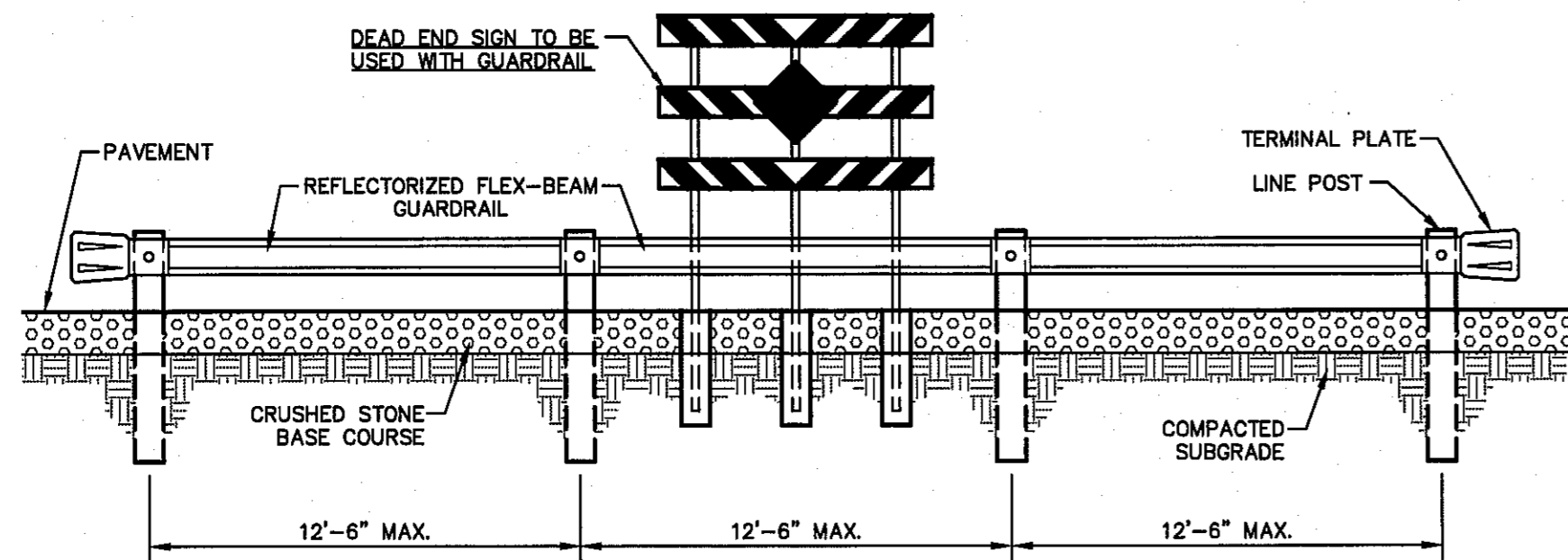
SCALE	N/A
Horizontal	N/A
Vertical	N/A
Contour Interval	N/A
DATE	JULY 2013
DESIGN BY	J.H.
DRAWN BY	J.H.
CHECKED BY	J.L.A.
APPROVED BY	J.L.A.
JOB No.	2250-030-LD

PROJECT TITLE
**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

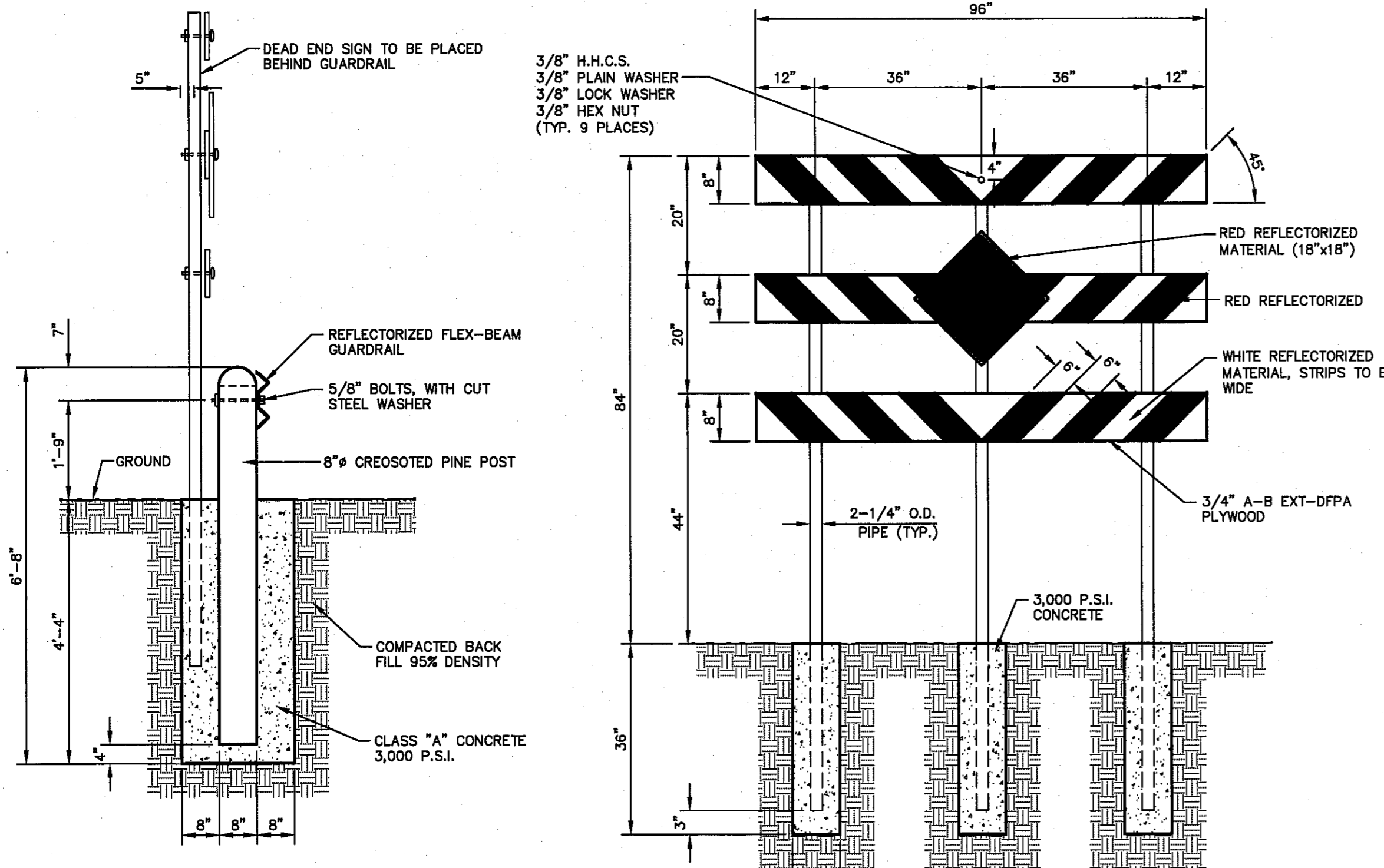
SHEET TITLE
STANDARD DETAILS
(SHEET 1 OF 3)
SHEET NO.

CITY DEVELOPMENT DEPARTMENT
REVIEWED

C8.1



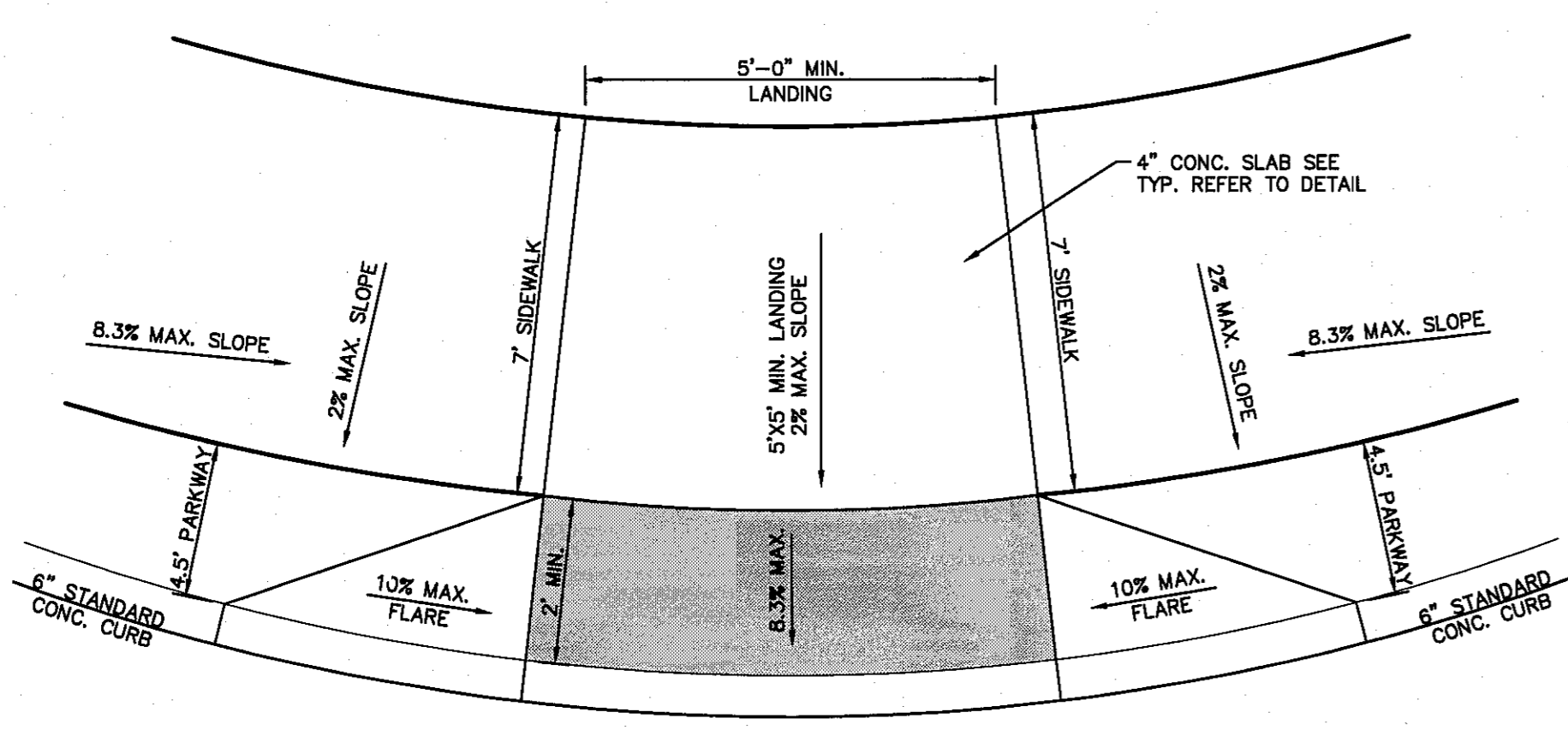
ELEVATION
SCALE: 1"=5'



POST AND SIGN DETAIL
SCALE: N.T.S.

DEAD END SIGN DETAIL
SCALE: 1" = 2'-0"

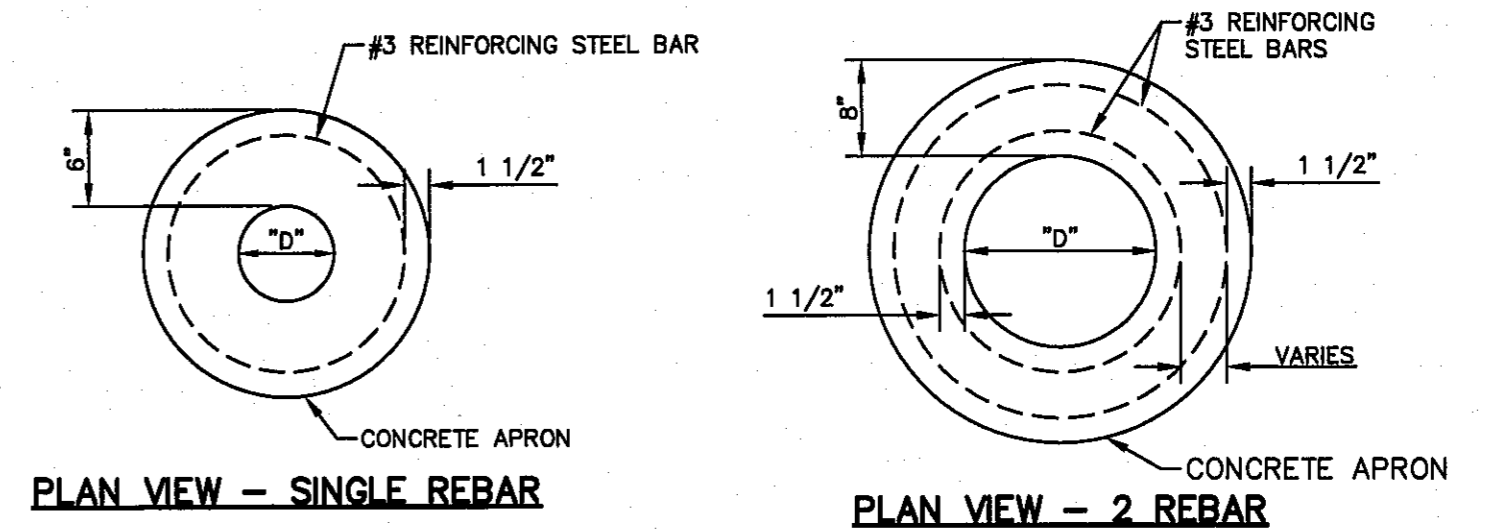
1 GUARD RAIL/SIGN ASSEMBLY AT DEAD END STREET DETAIL
SCALE: AS SHOWN



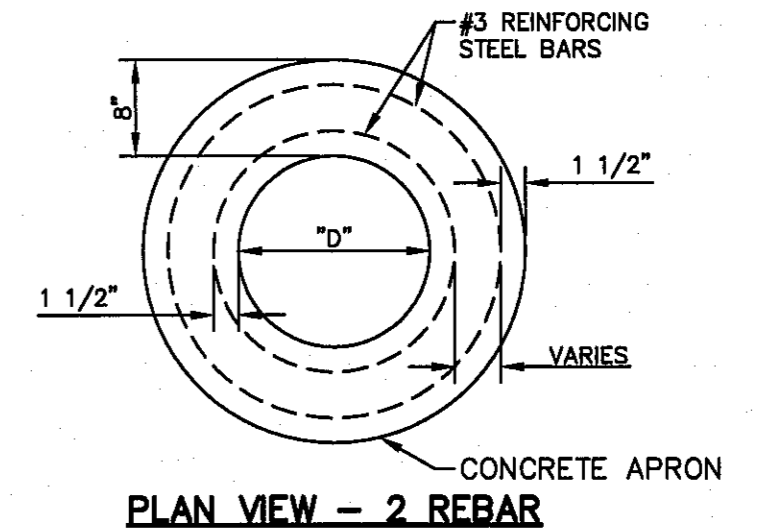
3 TYPICAL WHEELCHAIR RAMP DETAIL AT PARK
SCALE: 1" = 2'-0"

- CONSTRUCTION NOTES**
1. ANY DISTURBED SUBGRADE UNDER THE CONCRETE APRON SHALL BE COMPACTED TO 95% DENSITY ±3% OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557.
 2. ANY DISTURBED COARSE UNDER THE CONCRETE APRON SHALL BE COMPACTED TO 100% DENSITY ±2% OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557.
 3. PROVIDE A MINIMUM OF 1 1/2" OF CONCRETE COVER FOR ALL REINFORCING STEEL.
 4. REINFORCING SHALL MEET ASTM C-475 AND TRAFFIC LOADING (HS-20).
 5. NO. 3 REINFORCING STEEL HOOPS SHALL BE SPACED EQUALLY.

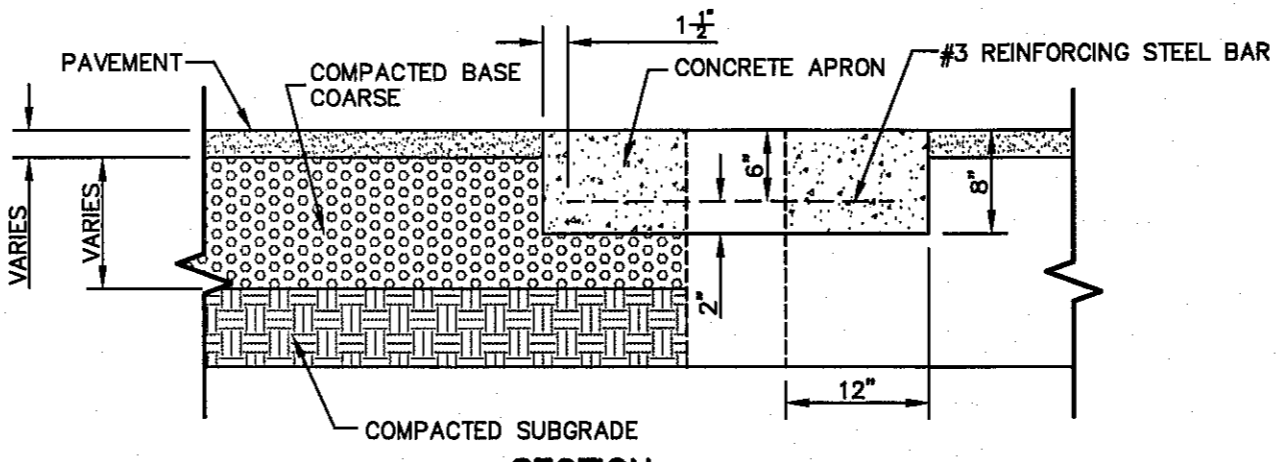
- GENERAL NOTES**
1. THE PENETRATION APRON SHOULD BE CAST IN-PLACE CONCRETE. (MINIMUM 28 DAY COMPRESSIVE STRENGTH 4000 PSI. HIGH EARLY CONCRETE IS REQUIRED). TOPS OF PENETRATION APRON SHALL BE FLUSH WITH ROADWAY SURFACE OR FINISHED GRADE UNLESS OTHERWISE SPECIFIED BY THE CITY ENGINEER.
 3. PENETRATION APRON SHALL BE APPLIED ON SANITARY SEWER MANHOLES, STORM SEWER MANHOLES, WATER VALVES, AND MONUMENTS.



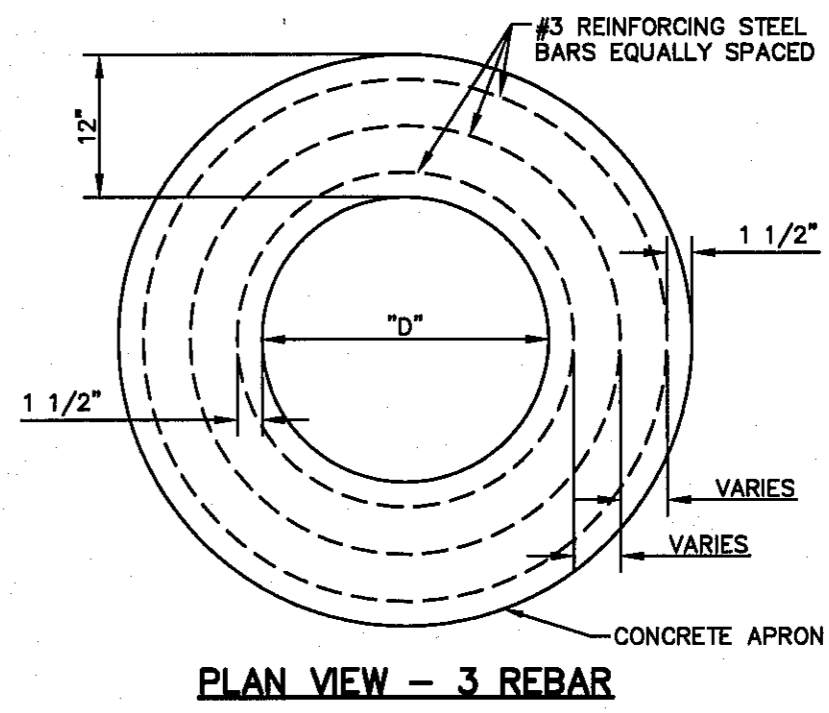
PLAN VIEW - SINGLE REBAR



PLAN VIEW - 2 REBAR



SECTION



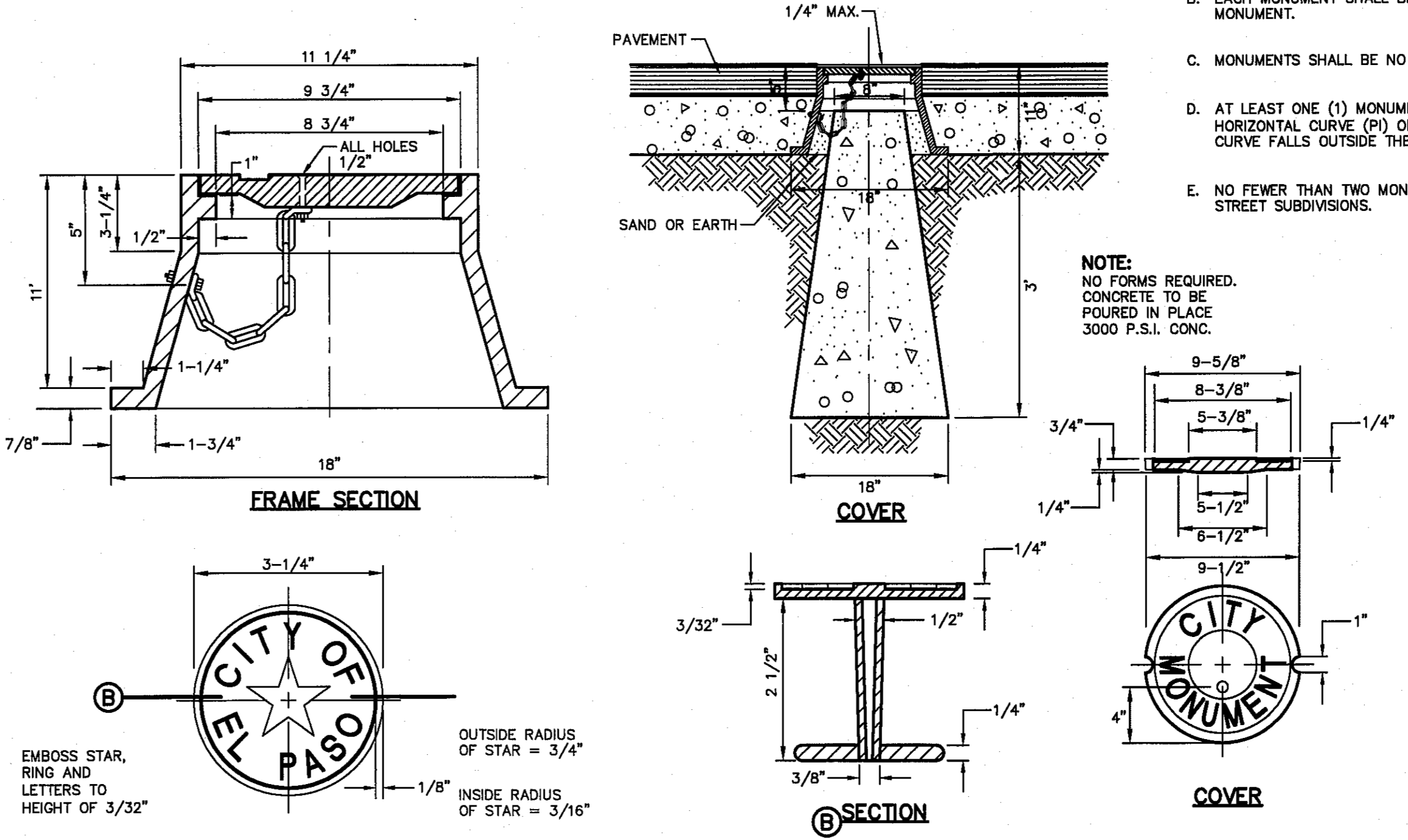
PLAN VIEW - 3 REBAR

CONCRETE APRON FOR CIRCULAR PENETRATIONS IN ASPHALT PAVEMENTS

"D" DIAMETER OF PENETRATION (INCHES)	"A" CONCRETE HORIZONTAL DIMENSION FROM PENETRATION (INCHES)	NUMBER OF NO. 3 REINFORCING STEEL BARS (INCHES)	"B" MINIMUM CLEARANCE FROM EDGE OF CONCRETE APRON TO CENTER OF NEAREST REBAR (INCHES)	"C" MINIMUM CLEARANCE FROM PENETRATION EDGE TO CENTER OF NEAREST REBAR (INCHES)
0 TO 6.01	6	1	1 1/2	1 1/2
6.01 TO 18.01	8	2	1 1/2	1 1/2
18.01 AND OVER	12	3	1 1/2	1 1/2

2 PENETRATION APRON DETAILS
SCALE: N.T.S.

- PROPOSED MONUMENT LOCATIONS**
- MONUMENTS SHALL BE INSTALLED SO THAT ALL FRONT PROPERTY CORNERS OF ALL LOTS IN THE SUBDIVISION ARE WITHIN LINE OF SIGHT OF A MONUMENT, OR WITHIN SIGHT OF THE LINE BETWEEN TWO ADJACENT MONUMENTS.
 - EACH MONUMENT SHALL BE WITHIN LINE OF SIGHT OF ANOTHER MONUMENT.
 - MONUMENTS SHALL BE NO FARTHER THAN 2000 FEET APART.
 - AT LEAST ONE (1) MONUMENT SHALL BE PLACED ON EACH HORIZONTAL CURVE (PI) OF THE TANGENTS LEADING INTO THE CURVE FALLS OUTSIDE THE CURB LINE.
 - NO FEWER THAN TWO MONUMENTS SHALL BE PLACED IN ONE (1) STREET SUBDIVISIONS.



BRONZE MONUMENT CAP

4 CITY SURVEY MONUMENT DETAILS
SCALE: N.T.S.

REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH COUNTY, ILLINOIS
FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40

DATE	REVISIONS	BY

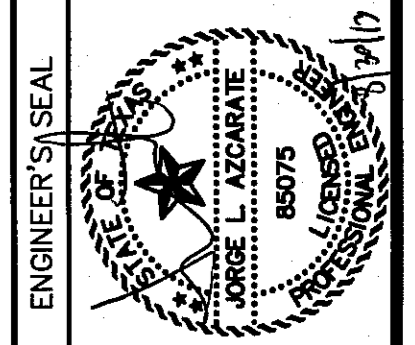
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engineers • architects • planners

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SCALE	N/A
Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	JULY 2013
DESIGN BY:	J.H.
DRAWN BY:	J.H.
CHECKED BY:	J.L.C.
APPROVED BY:	J.L.A.
JOB No.	2250-030-ID

PROJECT TITLE

TRES SUEÑOS UNIT TEN

SUBDIVISION IMPROVEMENTS

SHEET TITLE

STANDARD DETAILS

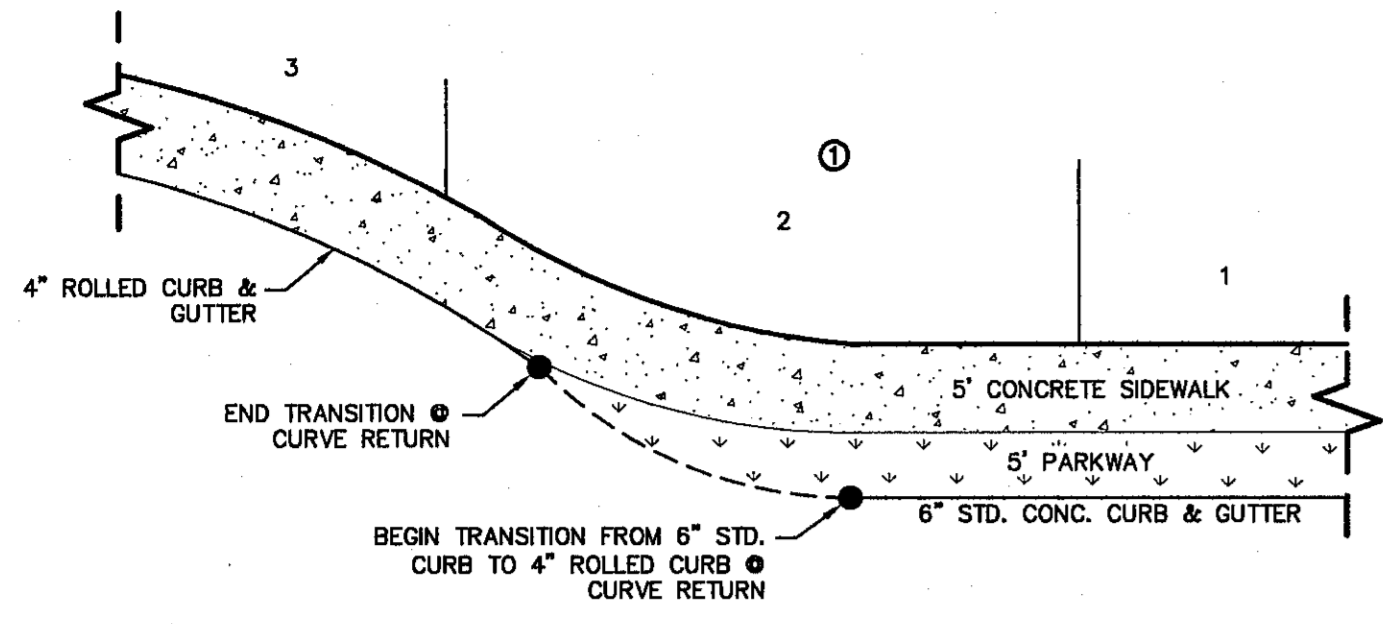
(SHEET 2 OF 3)

SHEET NO.

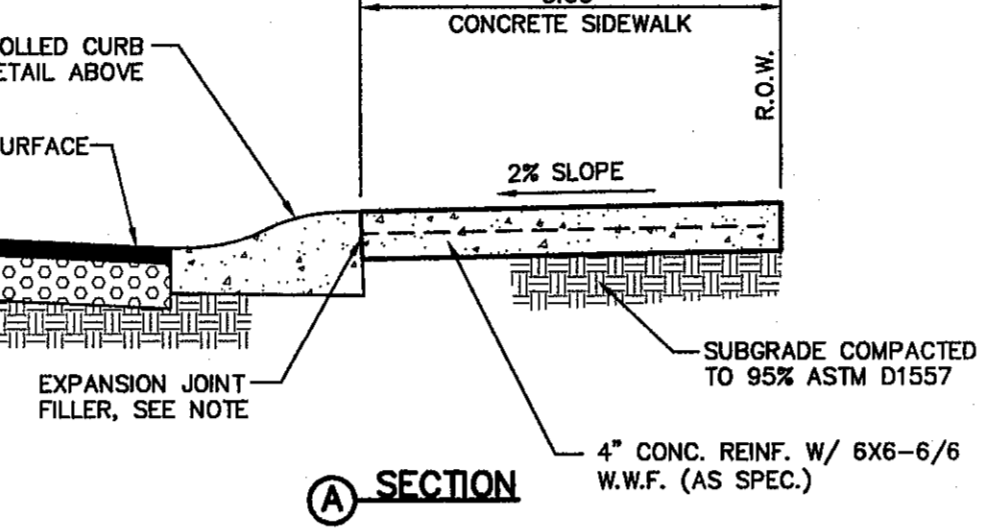
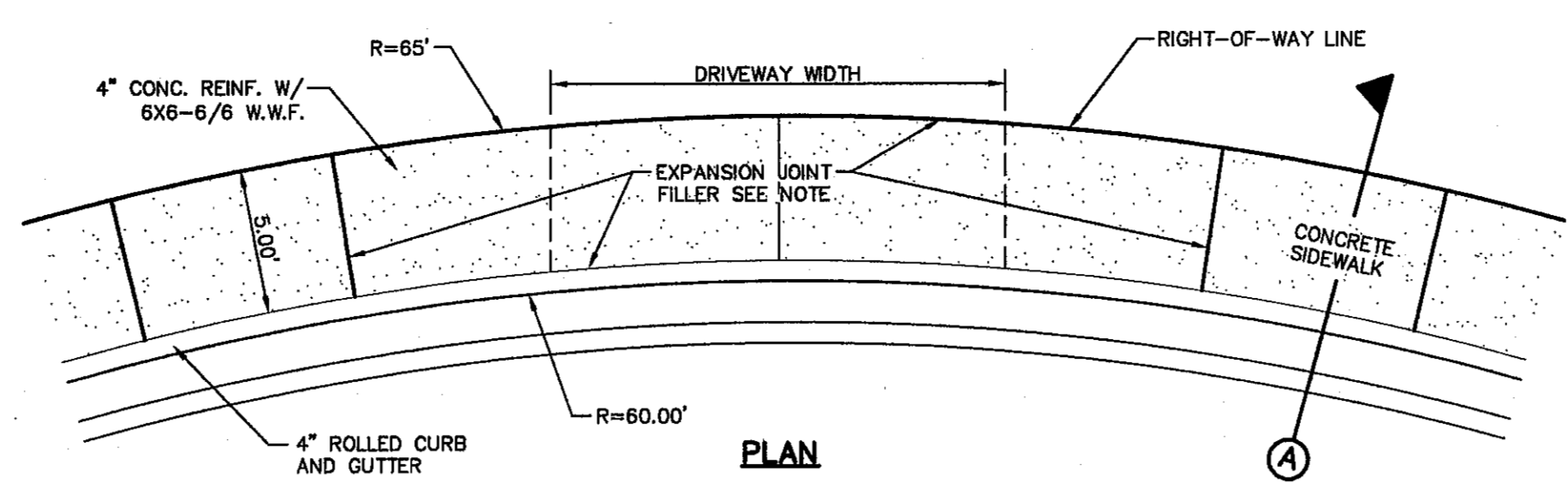
CITY DEVELOPMENT DEPARTMENT

REVIEWED

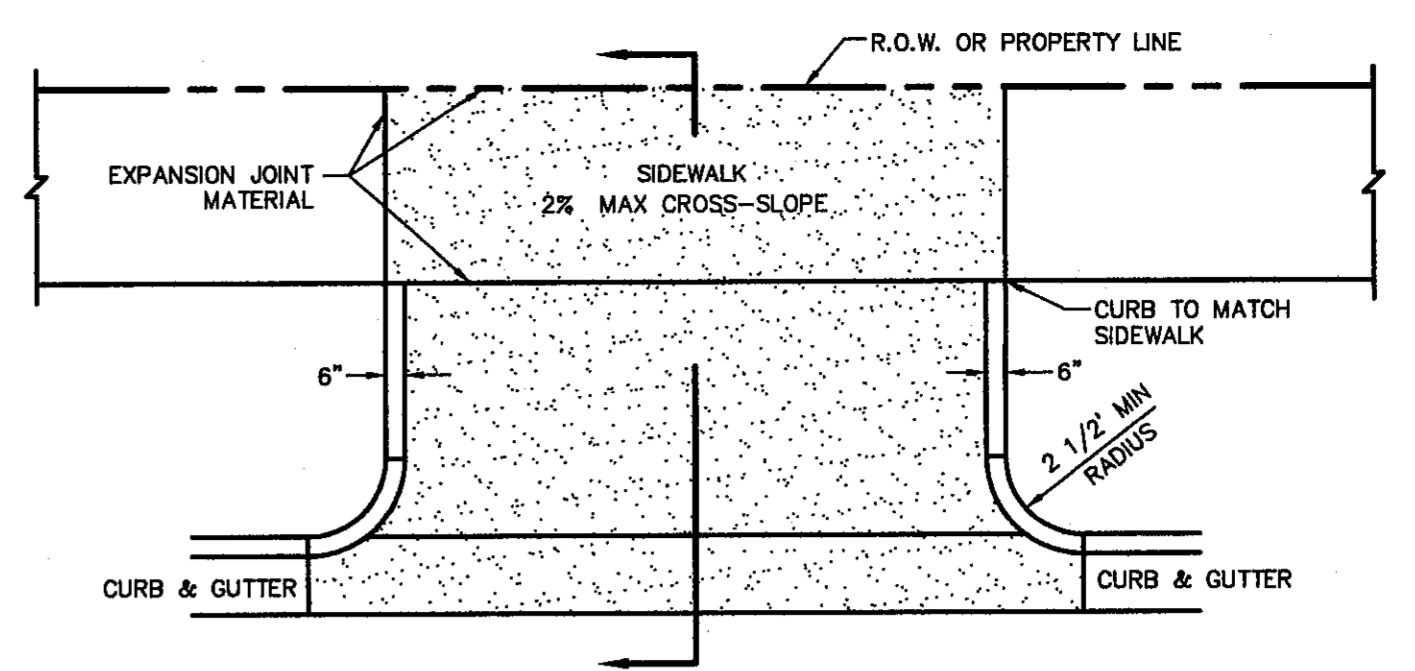
C8.2



1 TYPICAL HEEL/CUL-DE-SAC SIDEWALK TRANSITION
SCALE: N.T.S.



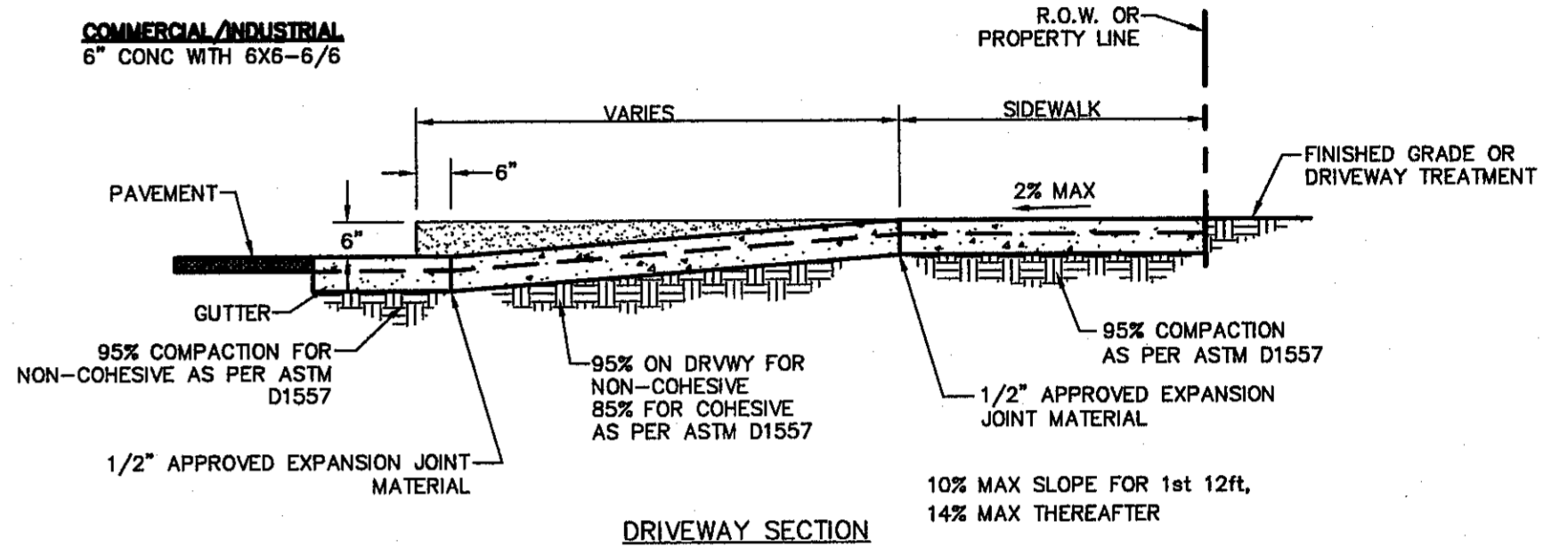
2 HEEL (65' R) DRIVEWAY DETAIL
SCALE: N.T.S.



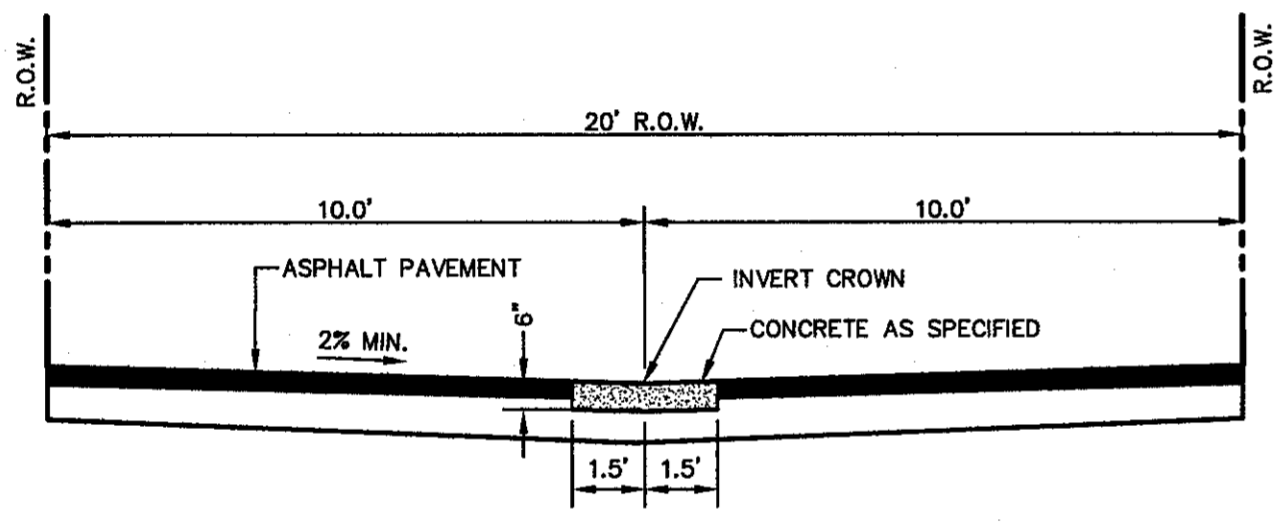
DRIVEWAY WIDTH	MIN	MAX
COMMERCIAL/INDUSTRIAL	24'	35'
RESIDENTIAL (SINGLE FAMILY 60' LOTS)	10'	20'
LESS THAN 60' LOTS, DUPLEX AND TOWN HOMES (REFER TO PLATE 6-16)	15'	25'

RESIDENTIAL
6" CONC WITHOUT W.W.F.
4" CONC WITH 6X8-10/10

COMMERCIAL/INDUSTRIAL
6" CONC WITH 6X8-6/6



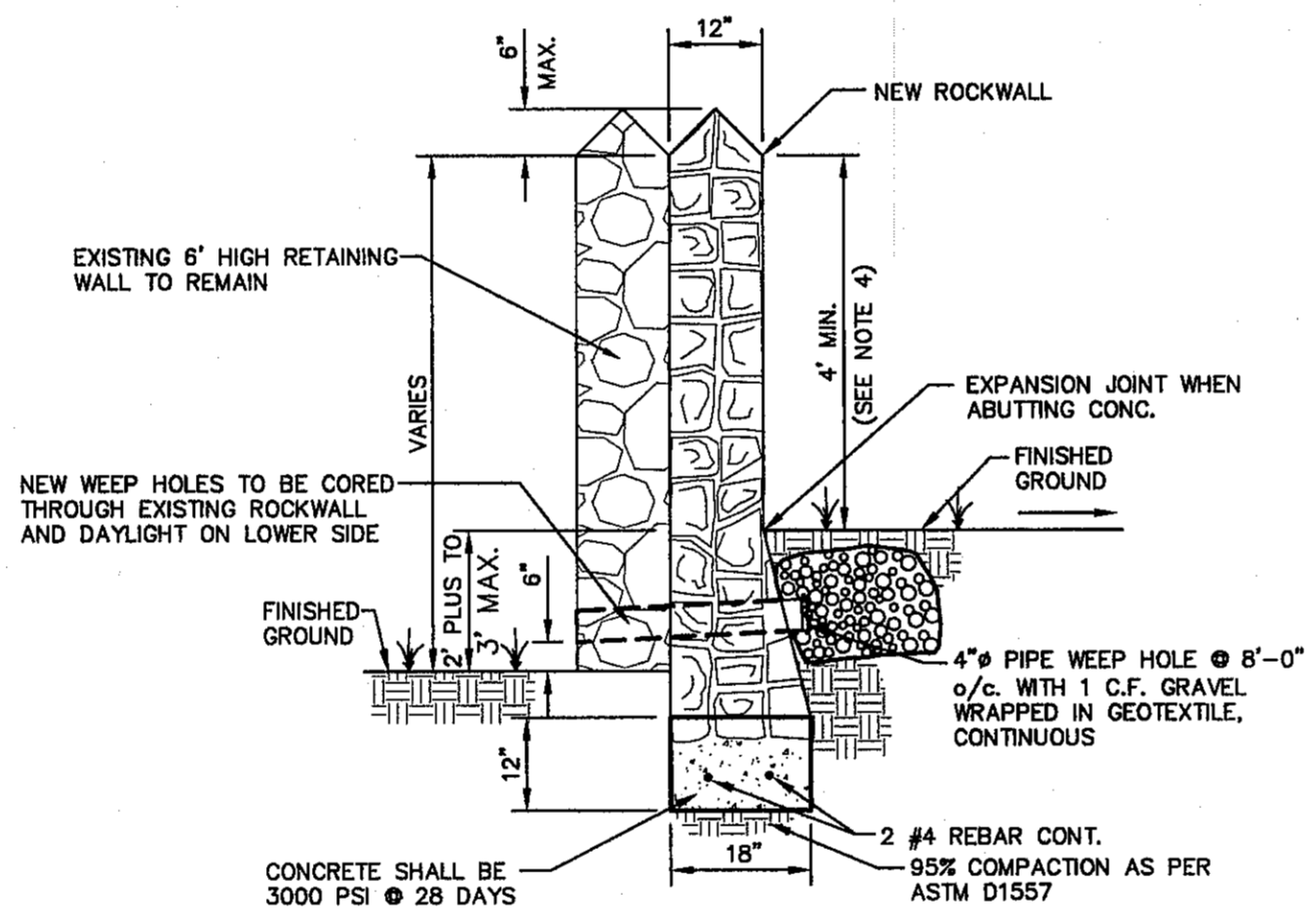
3 CONCRETE APRON FOR DRIVEWAYS/ALLEYWAYS
SCALE: N.T.S.



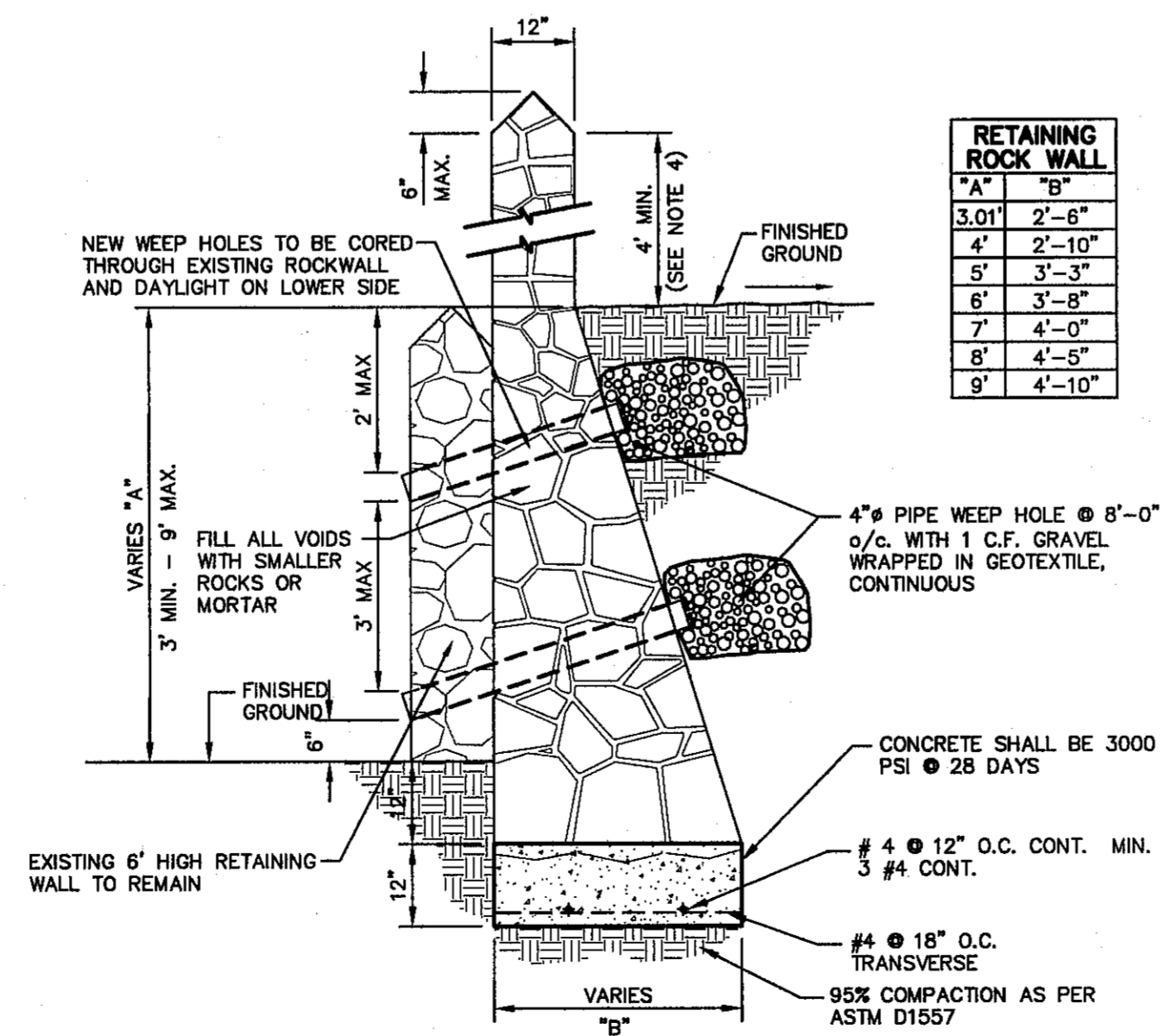
ALLEY
ONE (2) WAY LANE

- NOTES:
- ONE (1)-THREE FOOT CONCRETE VALLEY GUTTER LOCATED AT THE CENTERLINE OF THE RIGHT-OF-WAY WHEN THE LONGITUDINAL SLOPE OF THE ALLEY IS LESS THAN ONE (1) PERCENT, AND DRAINAGE IS TO BE CARRIED WITHIN THE ALLEY.
 - NO CONCRETE VALLEY GUTTER REQUIRED WHEN LONGITUDINAL SLOPE OF THE ALLEY IS EQUAL OR GREATER THAN ONE (1) PERCENT.

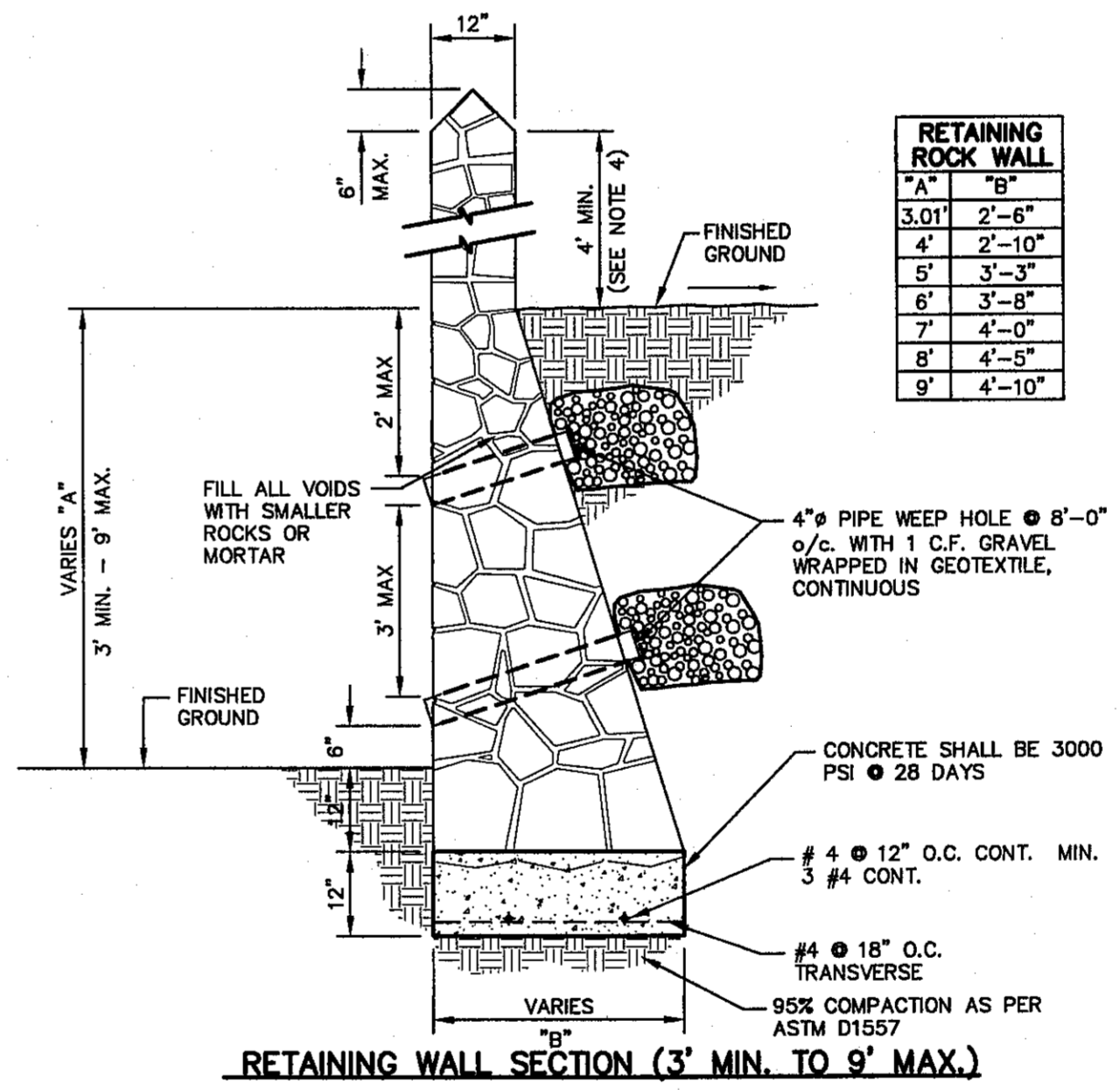
4 ALLEY CROSS-SECTIONS AND DETAILS
SCALE: N.T.S.



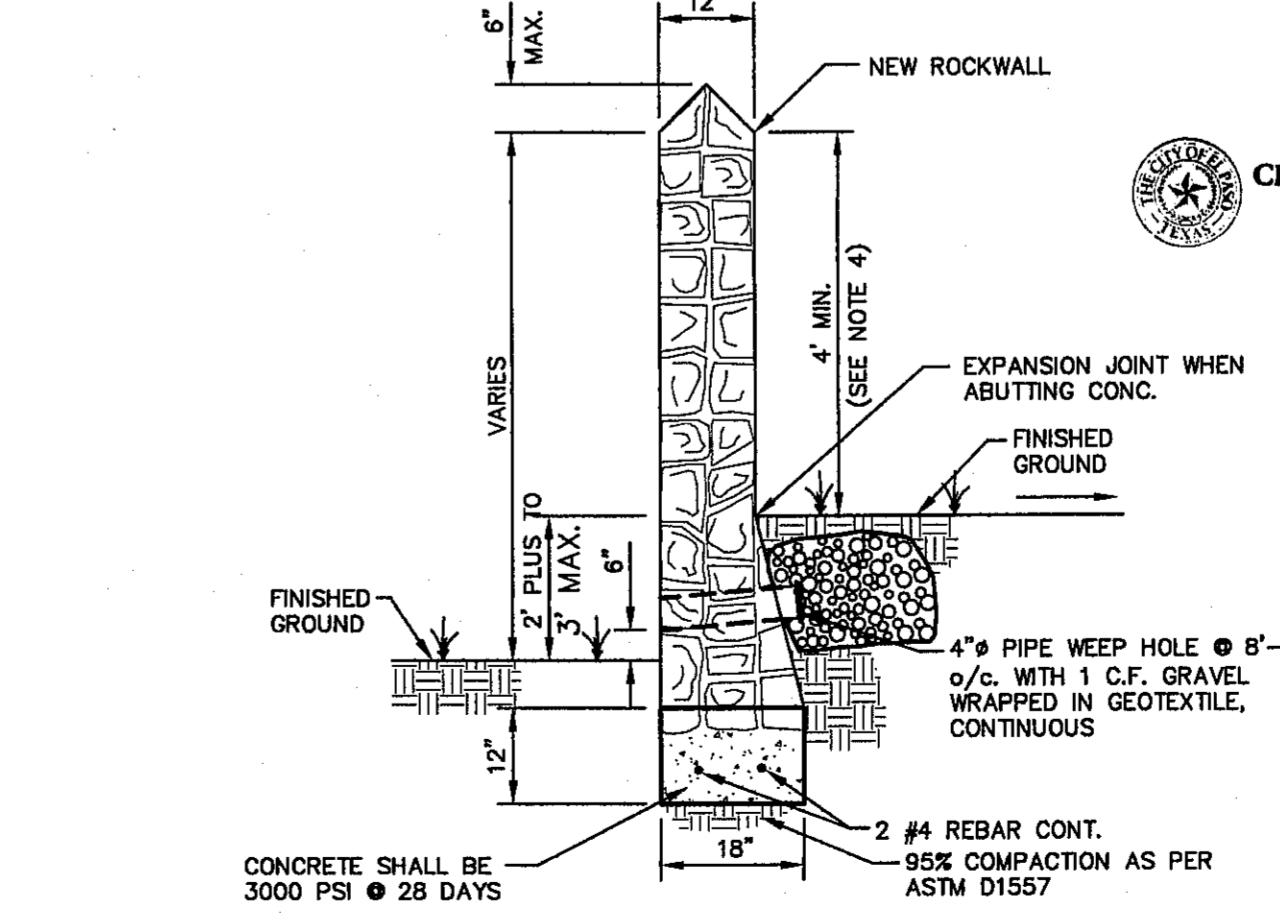
RETAINING WALL SECTION ABUTTING
EXISTING ROCKWALL (2' MIN. TO 3' MAX.)



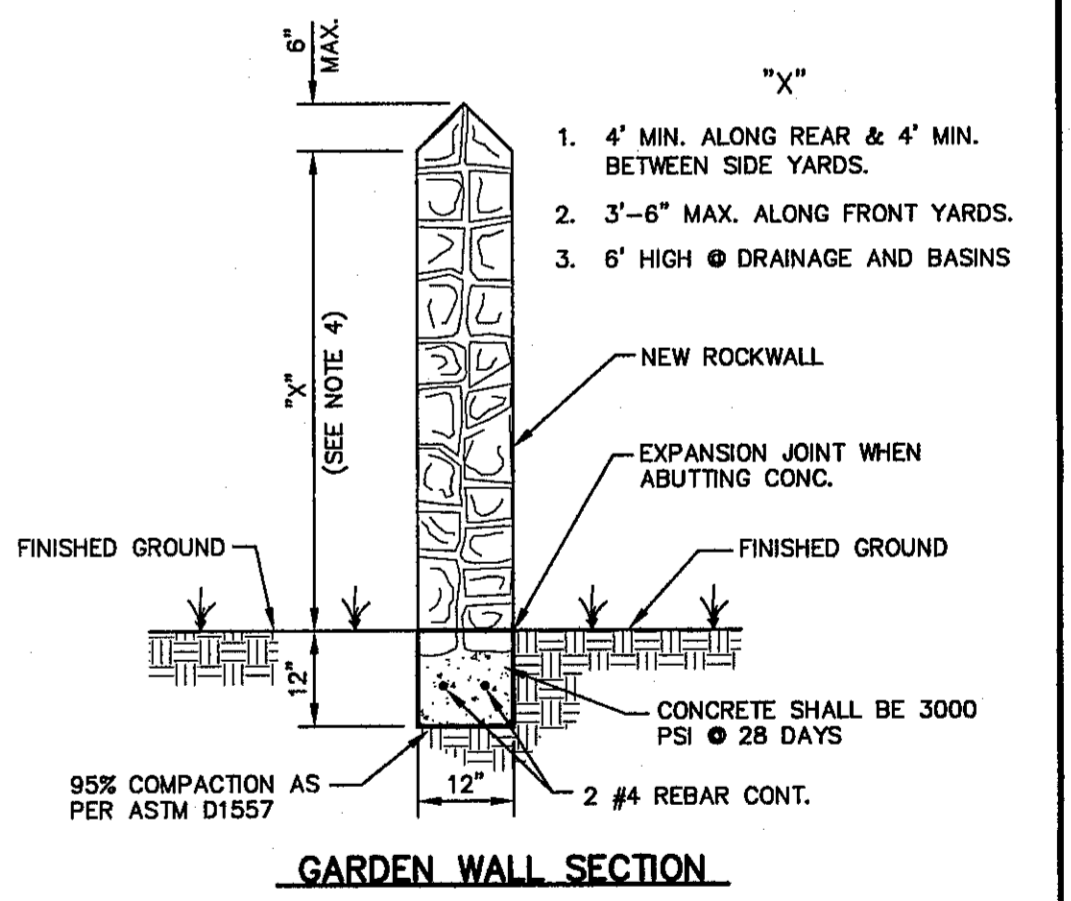
RETAINING WALL SECTION ABUTTING
EXISTING ROCKWALL (3' MIN. TO 9' MAX.)



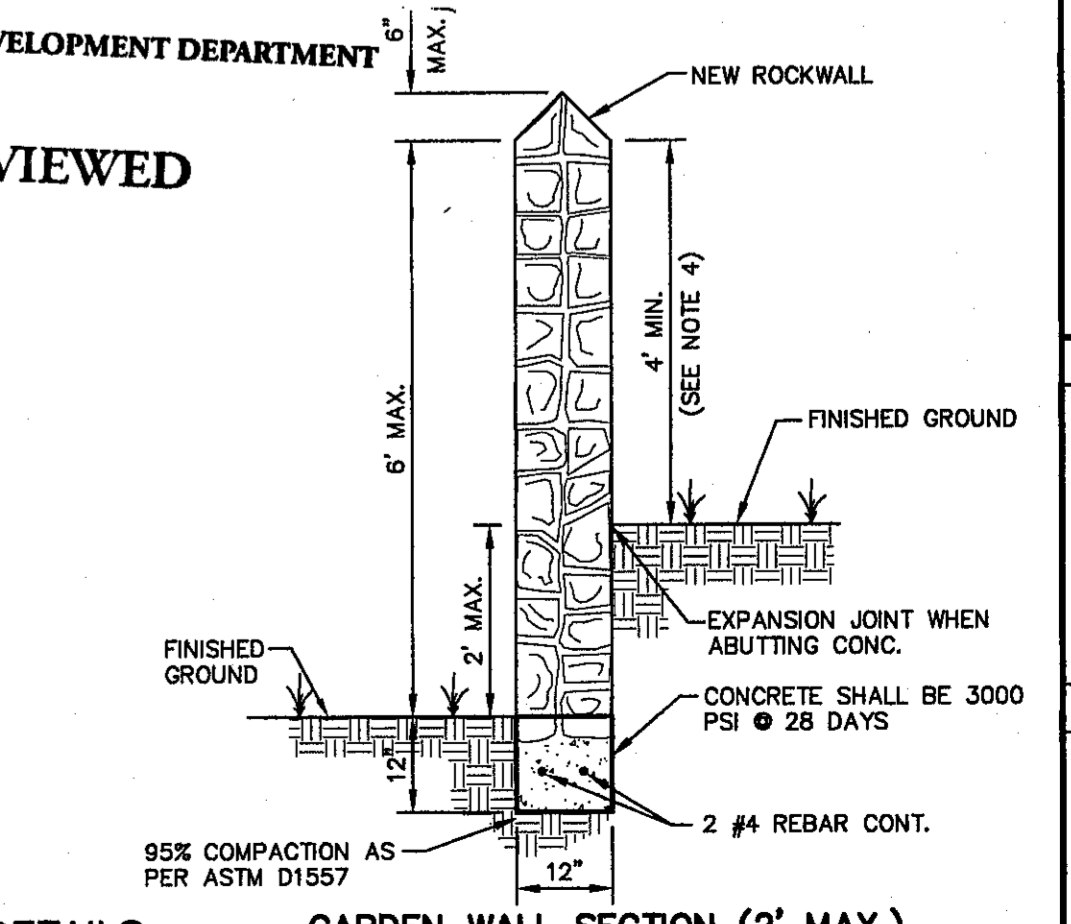
RETAINING WALL SECTION (3' MIN. TO 9' MAX.)



RETAINING WALL SECTION
(2' PLUS TO 3' MAX.)



GARDEN WALL SECTION



GARDEN WALL SECTION (2' MAX.)

ROCK WALL NOTES

- STONE FOR ROCKWALL SHALL BE AS NEARLY UNIFORM IN SECTIONS AS IN PRACTICABLE THE STONE SHALL BE DENSE AND RESISTANT OF AIR AND WATER
- MORTAR MUST BE TYPE "S": 1800 P.S.I. AS PER ASTM C270
- MASONRY WALL OVER SIX (6) FEET IN HEIGHT AND THOSE USED FOR EARTH RETENTION OVER TWO (2) FEET MUST BE DESIGNED AS STRUCTURAL WALLS.
- WALLS ADJACENT TO PONDING AREAS OR DRAINAGE DITCHES MAY BE CONSTRUCTED OF BRICK, ROCK, STONE OR CINDER BLOCK AND SHALL NOT BE LESS THAN SIX (6) FEET HIGH.
- ROCKWALL MORTAR JOINTS MUST NOT EXCEED TWO (2) INCHES
- PROVIDE ONE (1) INCH EXPANSION JOINTS AT EVERY 100 FEET
- ALL STONE SHALL BE THOROUGHLY SOAKED BEFORE BEING PLACED
- ALL STONE FOR ROCKWALLS SHALL BE FRACTURED QUARRIED ROCK OR ROUND ROCK, NO RIVER ROCK SHALL BE ALLOWED.
- REINFORCING STEEL SHALL BE ASTM A615 GRADE 40.
- ALLOWABLE SOIL BEARING PRESSURE = 2,500 PSI (MINIMUM)
- BACKFILL MATERIALS SHALL CONSIST OF COARSE GRAINED, WELL-DRAINED SOILS (WITH NO CLAY CONTENT).
- ALL THE RETAINING WALLS OVER 4' IN DEPTH SHALL BE BUILT BY DEVELOPER, REMAINING ROCKWALL TO BE BUILT BY BUILDER.

5 TYPICAL ROCKWALL DETAILS
SCALE: 1/2" = 1'-0"

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH FROM THE SOUTHERLY RIGHT OF WAY LINE OF MONTANA AVENUE CITY DATUM. ELEVATION.....4005.40

DATE	REVISIONS	BY

CEA
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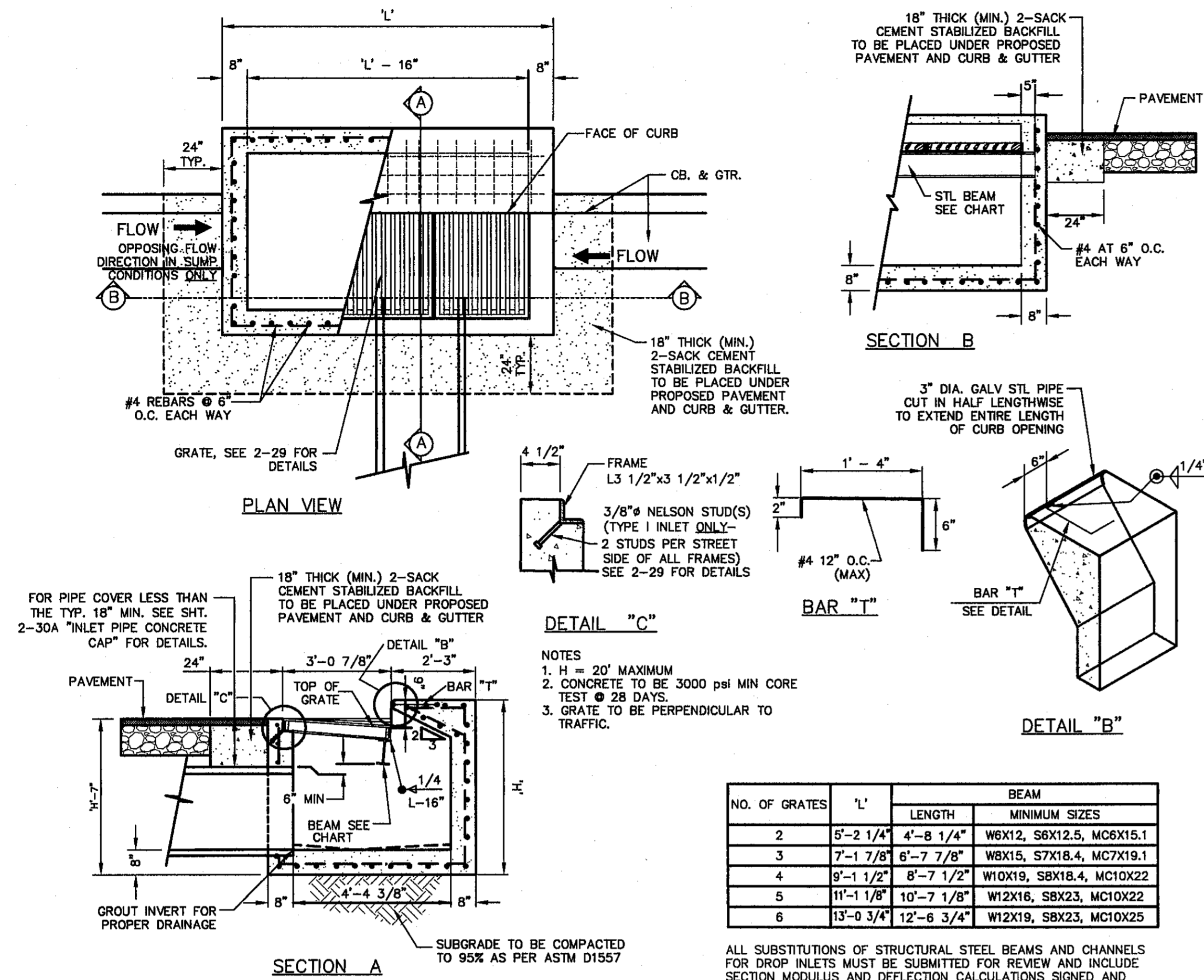


SCALE	N/A
Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	JULY 2013
DESIGN BY:	J.H.
DRAWN BY:	J.H.
CHKD. BY:	J.G.
APPRD. BY:	J.L.A.
JOB NO.	Z250-030-LD

PROJECT TITLE
**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

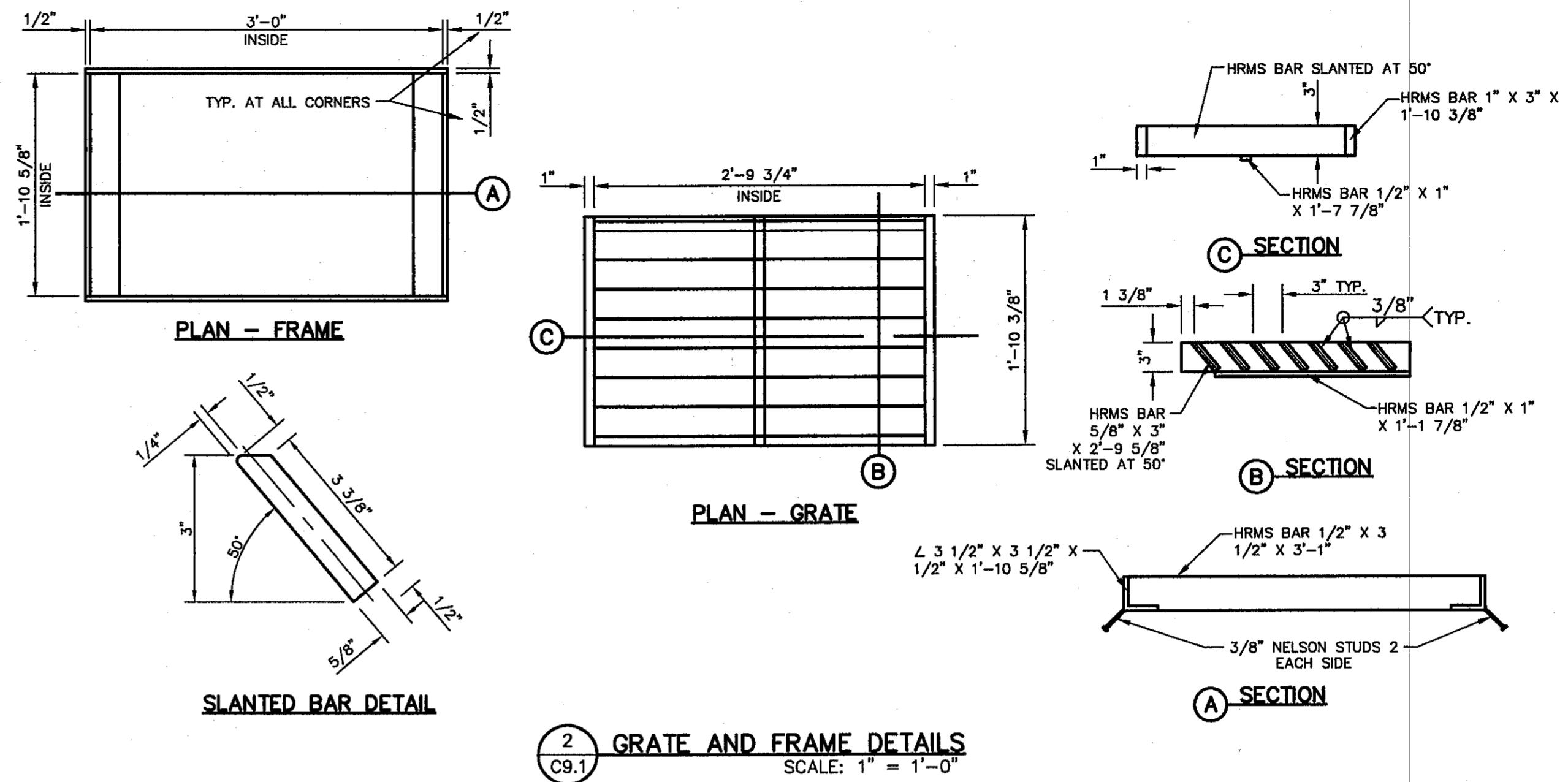
SHEET TITLE
**STANDARD
DETAILS
(SHEET 3 OF 3)**

C8.3



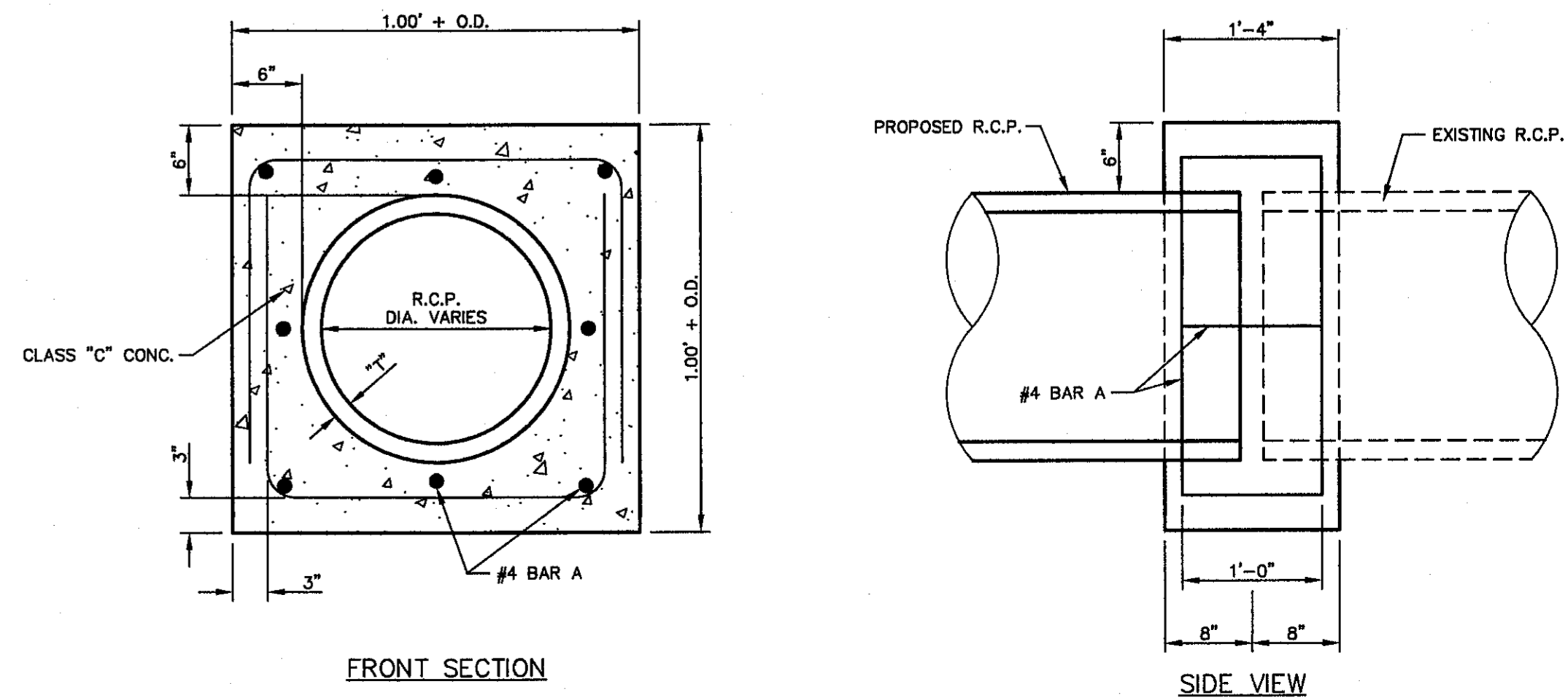
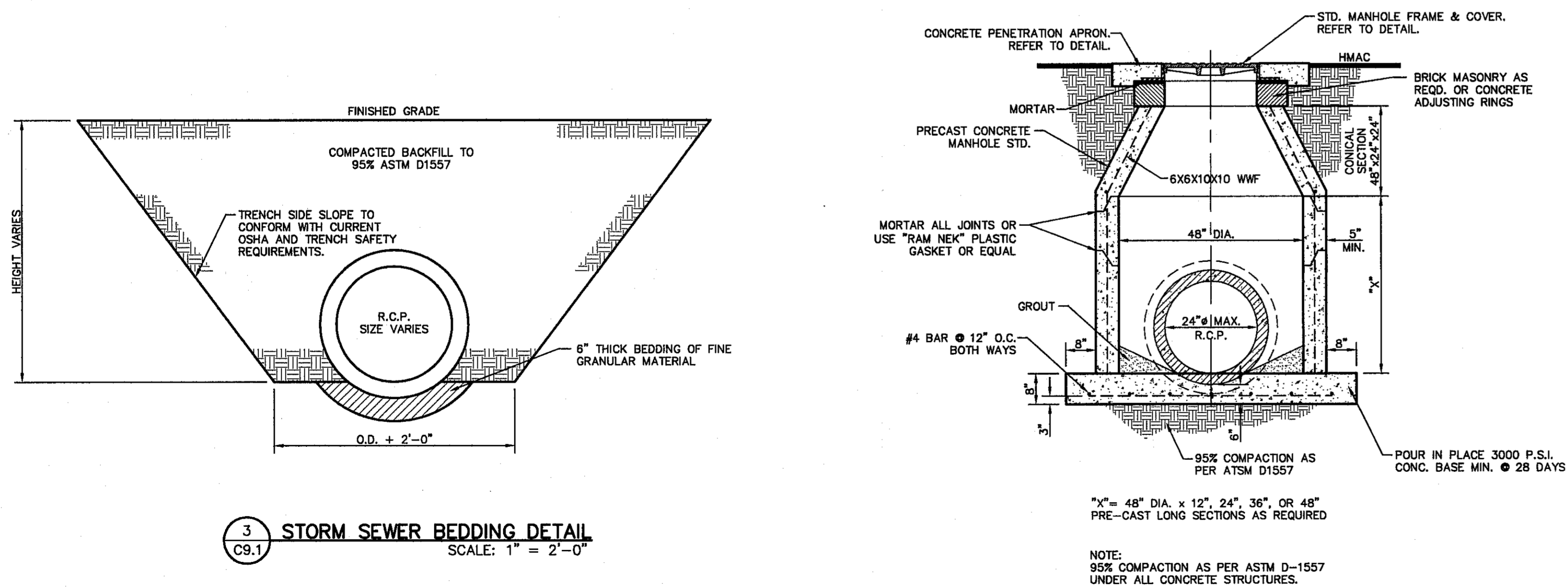
NO. OF GRATES	L'	BEAM	
		LENGTH	MINIMUM SIZES
2	5'-2 1/4"	4'-8 1/4"	W6X12, S6X12.5, MC6X15.1
3	7'-1 7/8"	6'-7 7/8"	W8X15, S7X18.4, MC7X19.1
4	9'-1 1/2"	8'-7 1/2"	W10X19, S8X18.4, MC10X22
5	11'-1 1/8"	10'-7 1/8"	W12X16, SBX23, MC10X22
6	13'-0 3/4"	12'-6 3/4"	W12X19, SBX23, MC10X25

ALL SUBSTITUTIONS OF STRUCTURAL STEEL BEAMS AND CHANNELS FOR DROP INLETS MUST BE SUBMITTED FOR REVIEW AND INCLUDE SECTION MODULUS AND DEFLECTION CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS.



DROP INLET GENERAL NOTES:

- WELDED STEEL OR CAST GRATES AS DETAILED ARE ALL ACCEPTABLE GRATES. MIXING OF ALTERNATE TYPES OF GRATES ON THE SAME PROJECT WILL BE PERMITTED WITH THE APPROVAL OF THE CITY ENGINEER.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.
- SHARP EDGES RESULTING FROM FABRICATION SHALL BE DULLED BY ANY ACCEPTABLE METHOD FOR SAFETY IN HANDLING.
- GRATES SHALL BE INSTALLED IN FRAME WITH FLOW ARROW POINTING DOWNSTREAM OR TOWARD THE LOW POINT IN A SUMP.
- WELDED GRATES SHALL BE STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M-183 OR OF CORROSION RESISTANT STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M-161 OR M-222 OR BE MADE OF OTHER APPROVED STEELS OF EQUAL QUALITY. MIXING GRADES OF STEEL ON THE SAME GRATE WILL NOT BE PERMITTED.
- GRATES MADE OF M-183 STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-111 SPECIFICATIONS OR SHALL BE PAINTED WITH INORGANIC ZINC PAINTS, MEETING THE REQUIREMENTS OF CURRENT STANDARD SPECIFICATIONS.
- ALL WELDS SHALL HAVE A MINIMUM OF 1/4" FILLET AND SHALL CONFORM TO THE SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND TO THE AWS STRUCTURAL WELDING CODE. ELECTRODES SHALL BE COMPATIBLE TO THE DIFFERENT GRADES OF STEEL THAT COMPRISE THE GRATE MEMBERS.
- CAST GRATES SHALL BE CAST STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M-103, GRADE 65-35 OR OF DUCTILE IRON CONFORMING TO THE REQUIREMENTS OF ASTM A-536, SPECIAL GRADE 60-45, OR OF GRAY IRON CONFORMING TO THE REQUIREMENTS OF AASHTO M-105, CLASS 35B OR ASTM A-48 CLASS 35B. THE SPECIFICATIONS OF GENERAL APPLICATION FOR CAST STEEL GRATES SHALL BE AASHTO M-103 SCOPE 1.2.1, GRADE N-1.
- FERROUS CASTINGS SHALL BE OF UNIFORM QUALITY, FREE OF BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR OTHER APPROVED CLEANING METHOD. AFTER CLEANING THEY SHALL BE COATED WITH ASPHALT BASE PAINT RESULTING IN A SMOOTH COATING, TOUGH AND TENACIOUS WHEN COLD, NOT TACKY OR BRITTLE.
- ALL CASTING SHALL BE MANUFACTURED TRUE TO PATTERN. COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER.
- ALL CONCRETE TO BE 3000 PSI. CHAMFER ALL EXPOSED EDGES 3/4". ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
- MINIMUM CONCRETE COVER SHALL BE 1 1/2" FOR STEEL REINFORCING.
- EXPANSION MATERIAL TO BE 1/2" BITUMINOUS FIBER AND PLACED WHERE PROPOSED CONCRETE COMES IN CONTACT WITH ANY EXISTING OR PROPOSED CONCRETE OR MASONRY STRUCTURE.
- STRUCTURAL STEEL SHALL BE SHOP PAINTED IN ACCORDANCE WITH TxDOT ITEM 446 "PAINT AND PAINTING"
- SURFACE OF ALL EXPOSED CONCRETE SHALL CONFORM TO SLOPE AND GRADE TO EXISTING OR PROPOSED CURB AND WALK ADJACENT TO INLETS.
- GRATES WILL BE DEPRESSED 1" BELOW PROPOSED OR EXISTING GRADE.
- ALL REINFORCING BARS TO BE #4 BARS AT 6" O.C. GRADE 60. BEND BARS AROUND PIPE OPENINGS.
- INLETS TO BE DESIGNATED IN PLANS BY NUMBER OF GRATES REQUIRED.
- LOCATION OF SEWER PIPES SHOWN ELSEWHERE IN PLANS.
- TWO 1/2"x4"x4" LONG CONCRETE ANCHOR STUDS REQUIRED FOR EACH SIDE OF FRAME, WHERE RESTING ON CONCRETE, USE NELSON STUDS OR EQUAL CLASS 35B.
- THE GRATES OF ALL INLETS WITHIN THE STREET PAVEMENT MUST BE CONSTRUCTED WITH THE GRATE BARS PERPENDICULAR TO THE CURB.

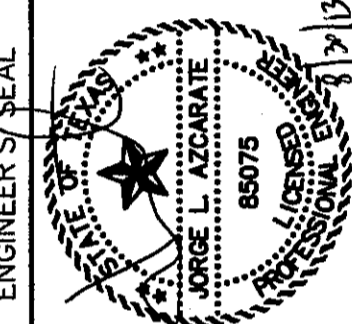


NOTE:
CONCRETE COLLARS SHALL BE USED AT LOCATIONS AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER, IN ORDER TO ENSURE A PROPER WATER TIGHT SEAL ON ALL REINFORCED CONCRETE PIPE CONNECTIONS AS DIRECTED BY ENGINEER.

CITY DEVELOPMENT DEPARTMENT
REVIEWED

DATE	REVISIONS	BY

o&a
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SCALE	N/A
Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	JULY 2013
DESIGN BY:	J.H.
DRAWN BY:	J.H.
CHKD. BY:	J.G.
APP'D. BY:	J.L.A.
JOB No.	2250-030-LD

PROJECT TITLE
**TRES SUEÑOS
UNIT TEN
SUBDIVISION IMPROVEMENTS**

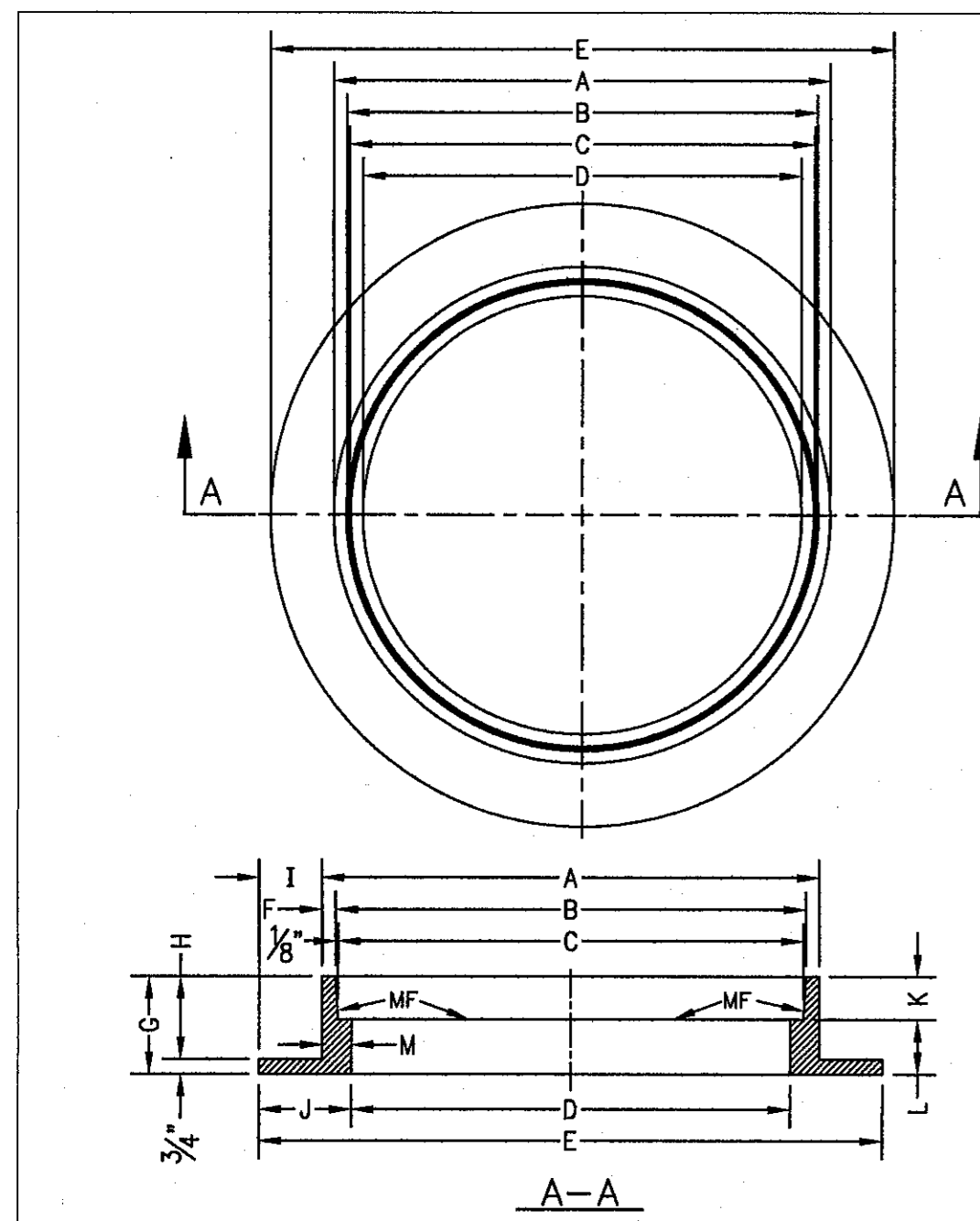
SHEET TITLE

**DRAINAGE DETAILS
DETAILS**

(SHEET 1 OF 2)

SHEET NO.

C9.1

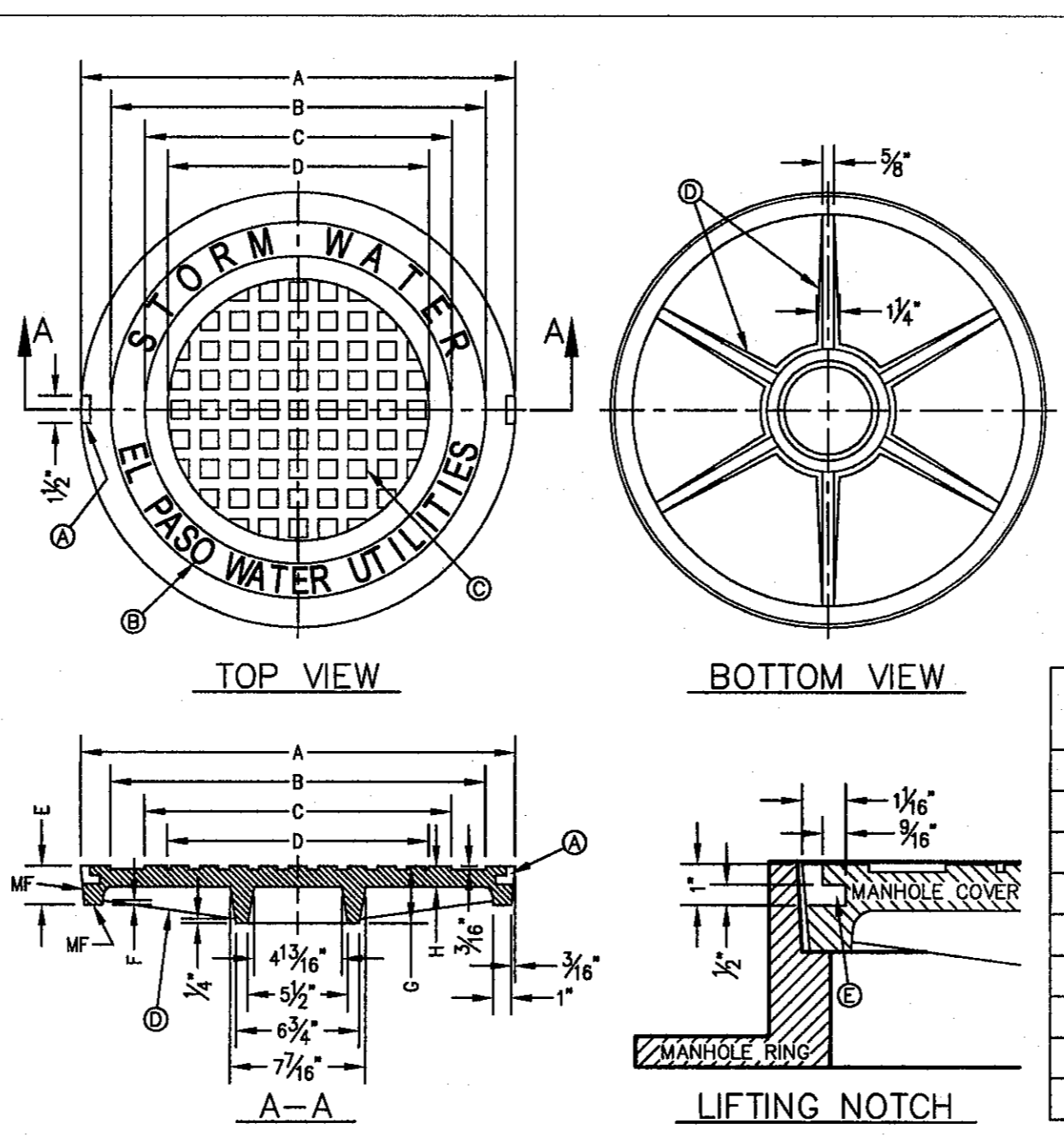


- GENERAL NOTES:**
1. MATCHING SURFACES MARKED "MF" TO BE FINISHED OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
 2. CASTING TO BE SMOOTH & VOID OF AIR HOLES.
 3. CASTING MUST MEET REQUIREMENTS OF AASHTO M306-07.
 4. AS-CAST DIMENSIONS MAY VARY $\frac{1}{16}$ " PER FOOT (AASHTO M306-07).
 5. WEIGHT MAY VARY 5% (AASHTO M306-07).
 6. SHADED DIMENSIONS IN TABLE FOR REFERENCE ONLY. SOURCE: CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION, DETAIL 2-16.

MANHOLE RING	MANHOLE - ALL TYPES	SEE NOTE 6	
		MANHOLE TYPE 48"	MANHOLE TYPE 72"
A	33"	25 1/4"	32 3/4"
B	31 1/4"	23 1/8"	31 3/8"
C	31 1/2"	23 3/8"	31 1/2"
D	30"	22 1/2"	30"
E	30 1/2"	24 1/2"	31 1/2"
F	5 1/2"	1 1/8"	1 1/8"
G	5"	1"	1"
H	4 1/4"	5/8"	5/8"
I	3 1/4"	4 1/8"	4 1/8"
J	4 3/4"	5"	5"
K	2 1/8"	3 1/8"	3 1/8"
L	2 1/16"	2 1/16"	2 1/16"
M	1 1/2"	1 1/8"	1 1/8"
WEIGHT	220 lbs.	185 lbs.	225 lbs.

STANDARD DETAIL DATE: 8/19/2009 REV: STORMWATER MANHOLE RING N.T.S. EL PASO WATER UTILITIES PUBLIC UTILITIES BOARD DETAIL No. 916

1 STORMWATER MANHOLE RING SCALE: N.T.S.



- GENERAL NOTES:**
1. MATCHING SURFACES MARKED "MF" TO BE FINISHED OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
 2. CASTING TO BE SMOOTH & VOID OF AIR HOLES.
 3. CASTING MUST MEET REQUIREMENTS OF AASHTO M306-07.
 4. AS-CAST DIMENSIONS MAY VARY $\frac{1}{16}$ " PER FOOT (AASHTO M306-07).
 5. WEIGHT MAY VARY 5% (AASHTO M306-07).
 6. SHADED DIMENSIONS IN TABLE FOR REFERENCE ONLY. SOURCE: CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION, DETAIL 2-17.

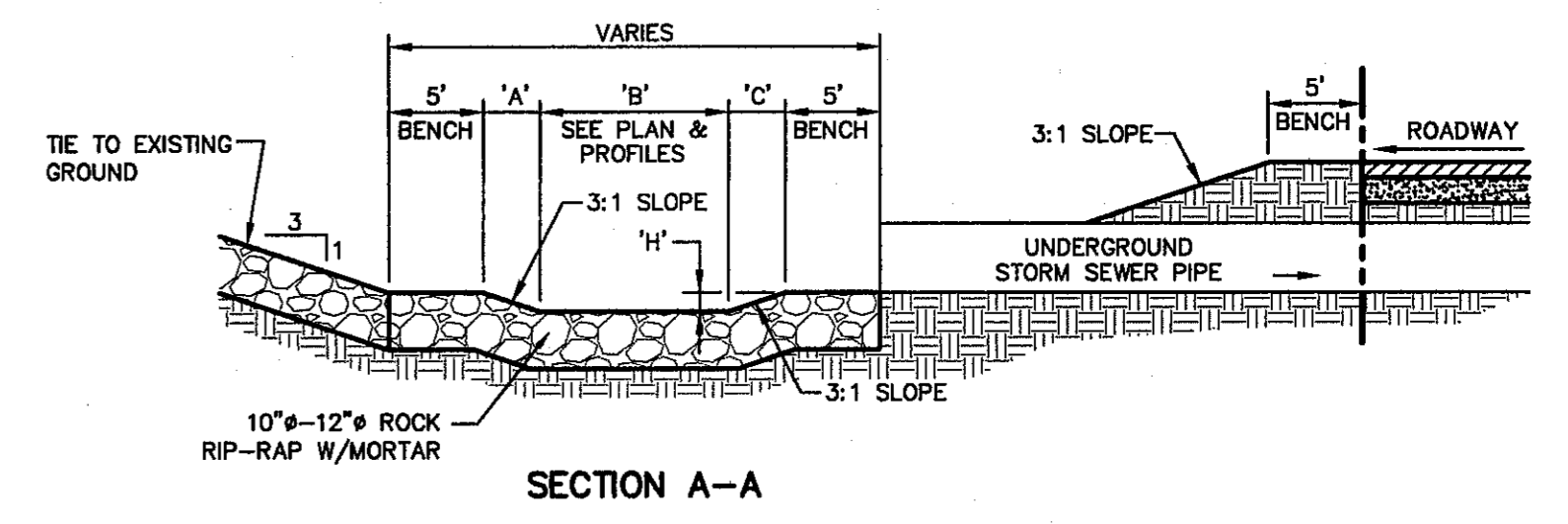
CONSTRUCTION KEY NOTES:

- A. LIFTING NOTCH.
- B. $\frac{3}{16}$ " RAISED LETTERING.
- C. 1" SQUARES ($\frac{3}{4}$ " TALL) WITH $\frac{1}{8}$ " SPACE BETWEEN.
- D. REINFORCING RIBS.
- E. SLOT.

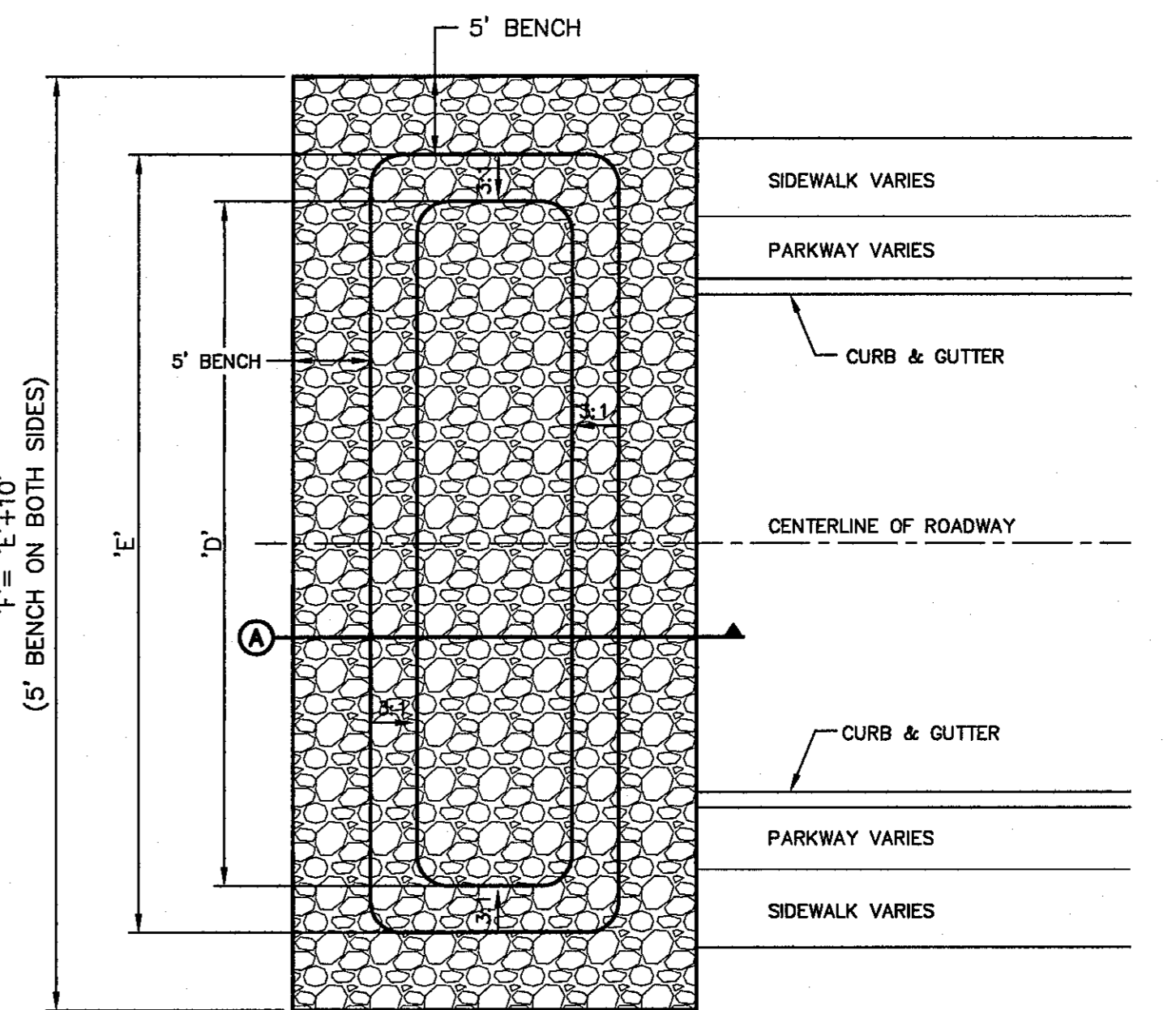
MANHOLE COVER	MANHOLE - ALL TYPES	SEE NOTE 6	
		MANHOLE TYPE 48"	MANHOLE TYPE 72"
A	31 3/8"	23 3/4"	31 1/8"
B	28 3/8"	20 3/8"	28 3/8"
C	24 3/8"	16 3/4"	24 3/8"
D	21 1/8"	14 3/8"	21 1/8"
E	2 1/8"	3"	3"
F	1 1/2"	1 1/4"	1 1/4"
G	3 1/8"	3"	3"
H	1 1/8"	1"	1"
WEIGHT	265 lbs.	175 lbs.	310 lbs.

STANDARD DETAIL DATE: 8/19/2009 REV: STORMWATER MANHOLE COVER N.T.S. EL PASO WATER UTILITIES PUBLIC UTILITIES BOARD DETAIL No. 917

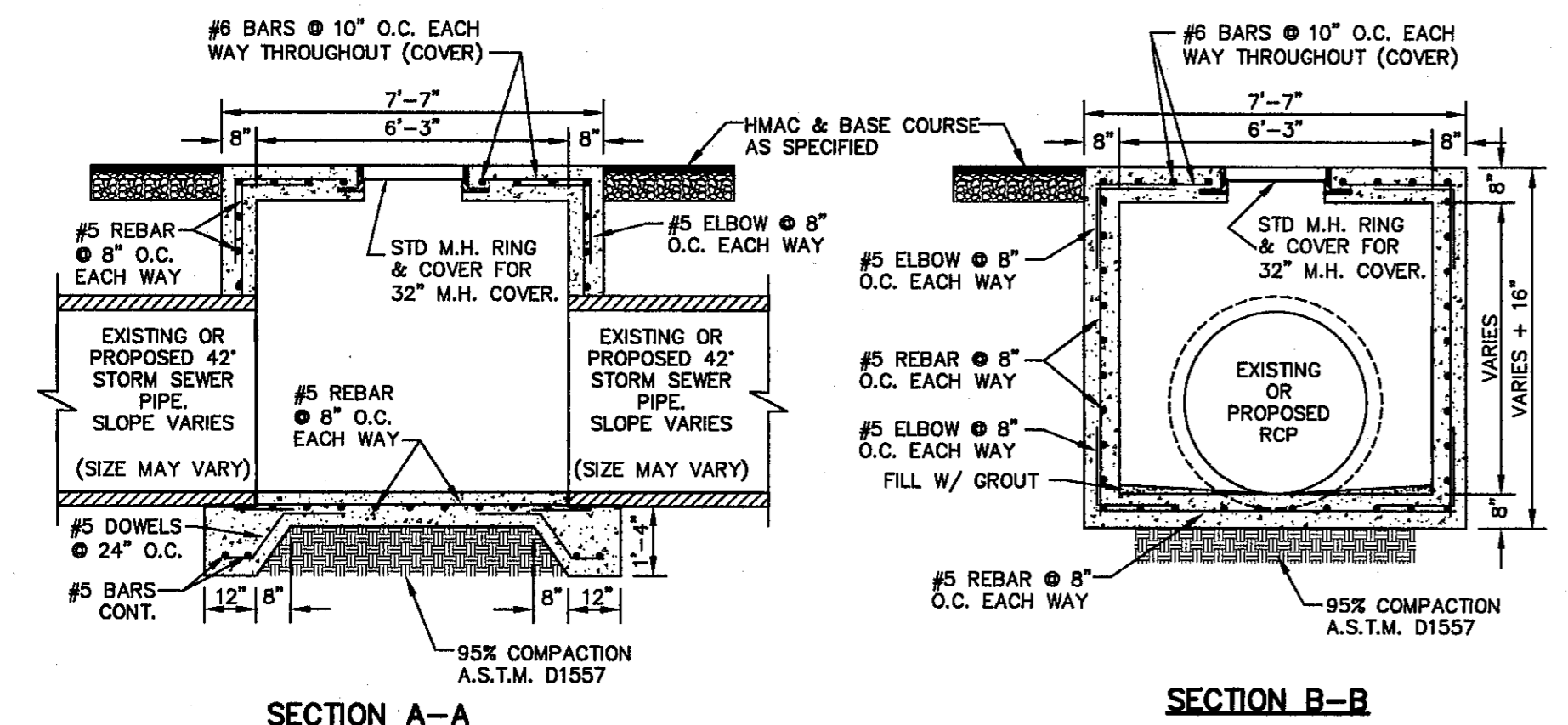
2 STORMWATER MANHOLE COVER SCALE: N.T.S.



DESILTING BASIN No.	'A'	'B'	'C'	'D'	'E'	'F'	'H'
1	9.00'	5.00'	9.00'	10.00'	28.00'	38.00'	3.00'
2	9.00'	5.00'	9.00'	10.00'	28.00'	38.00'	3.00'

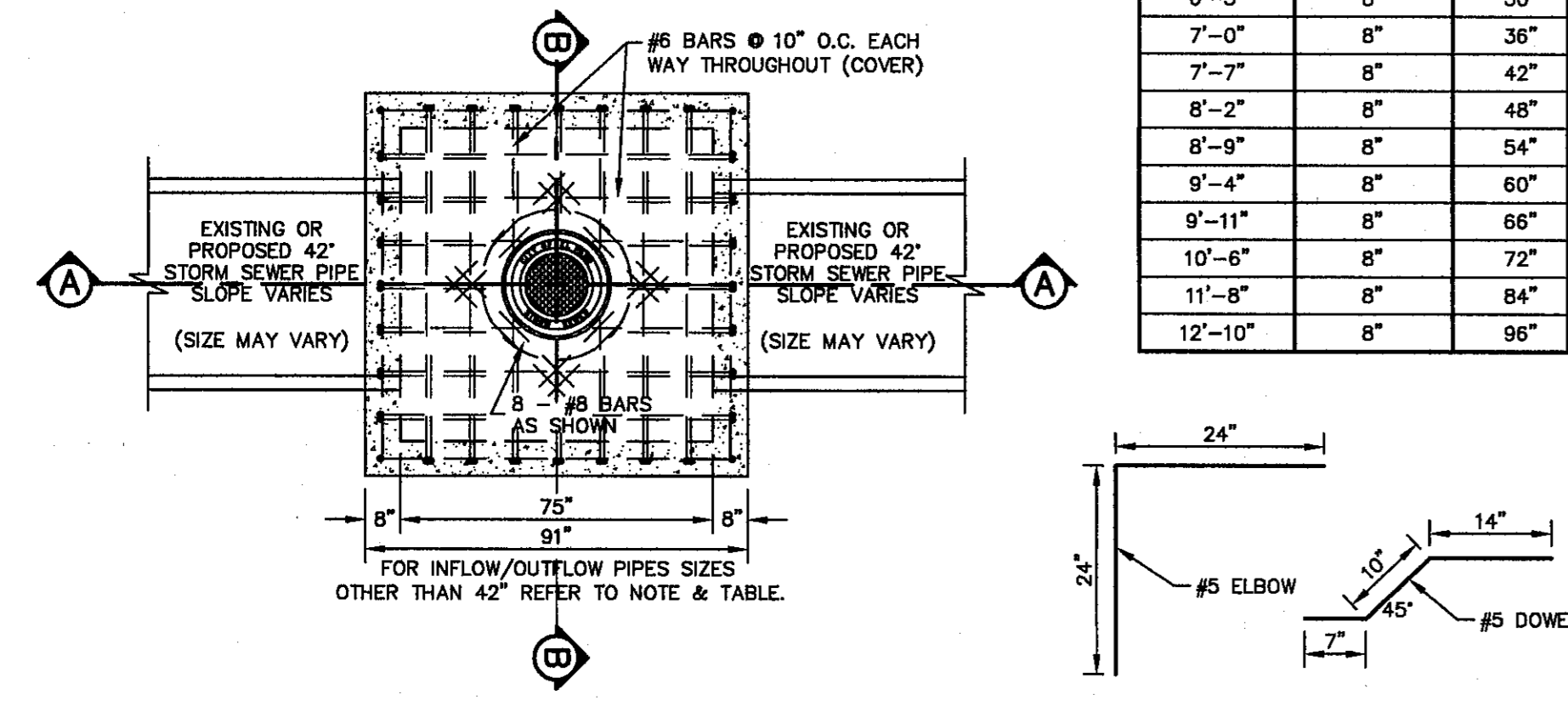


3 TEMPORARY DESILTING BASIN DETAIL SCALE: N.T.S.

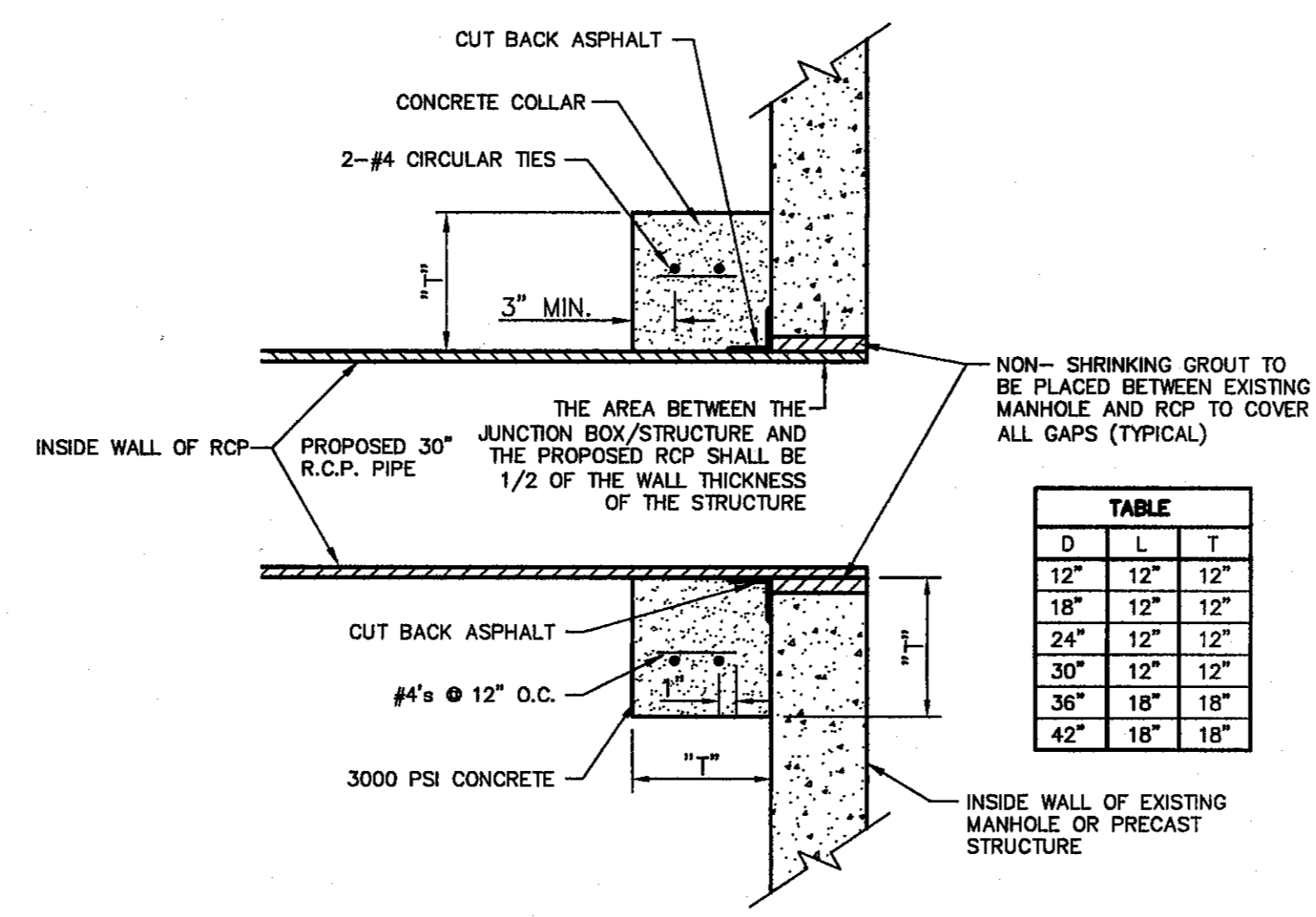


WIDTH OF JUNCTION BOX (MIN.)	JUNCTION BOX WALL THICKNESS	PIPE SIZE ENTERING JUNCTION BOX
5'-3"	8"	18"
5'-10"	8"	24"
6'-5"	8"	30"
7'-0"	8"	36"
7'-7"	8"	42"
8'-2"	8"	48"
8'-9"	8"	54"
9'-4"	8"	60"
9'-11"	8"	66"
10'-6"	8"	72"
11'-8"	8"	84"
12'-10"	8"	96"

NOTE: FOR JUNCTION BOXES USING INFLOW/OUTFLOW PIPE SIZES OTHER THAN THOSE INDICATED IN THIS TYPICAL DETAIL, ATTACHED TABLE SHALL BE USED AS A GUIDELINE FOR BOX SIZING ONLY. COMPLETE ENGINEERING DESIGN DRAWINGS INCLUDING ALL CALCULATIONS, DIMENSIONING, REINFORCEMENT AND SPECIFICATIONS SHALL BE SUBMITTED FOR REVIEW AND COMMENT SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS.

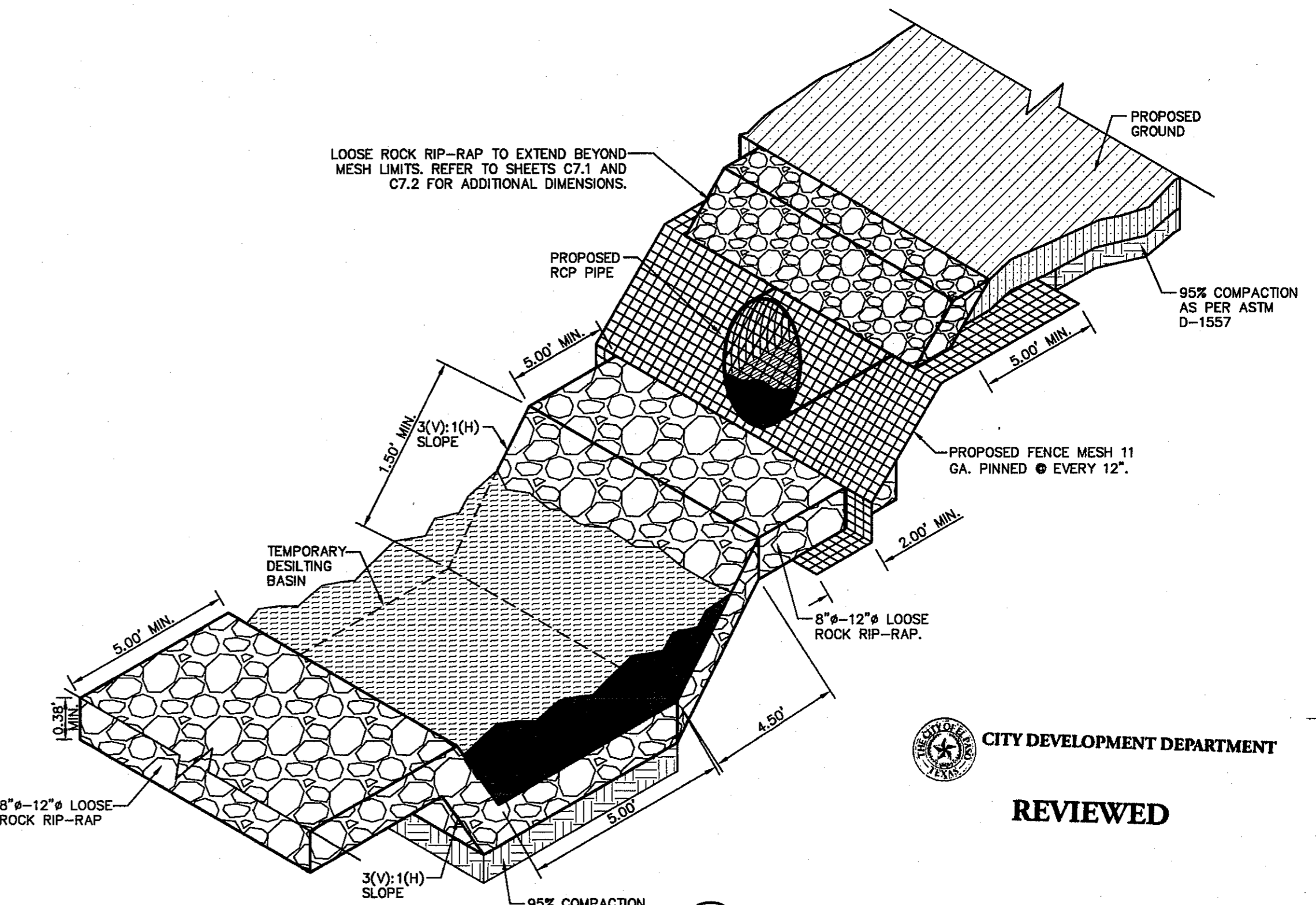


4 72" SQUARE CAST-IN-PLACE STANDARD JUNCTION BOX SCALE: N.T.S.



D	L	T
12"	12"	12"
18"	12"	12"
24"	12"	12"
30"	12"	12"
36"	18"	18"
42"	18"	18"

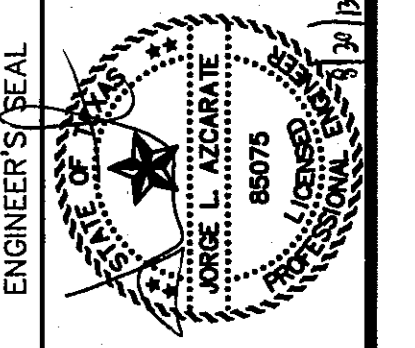
5 PIPE TO JUNCTION BOX CONNECTION DETAIL SCALE: 1" = 2'-0"



6 STORM PIPE MESH DETAIL SCALE: N.T.S.

REFERENCES - BENCHMARKS
 CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. SUBSTATION A DISTANCE OF 467.58 FEET FROM MONUMENT TO MANHOLE NO. 1005.40
 AVENUE CITY DATUM. ELEVATION: 4005.40

ces
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-4584
 4712 Woodrow Wilson, Ste. F El Paso, TX 79924
 Office: 915.544.6222 Fax: 915.544.6203 www.cesgroup.net



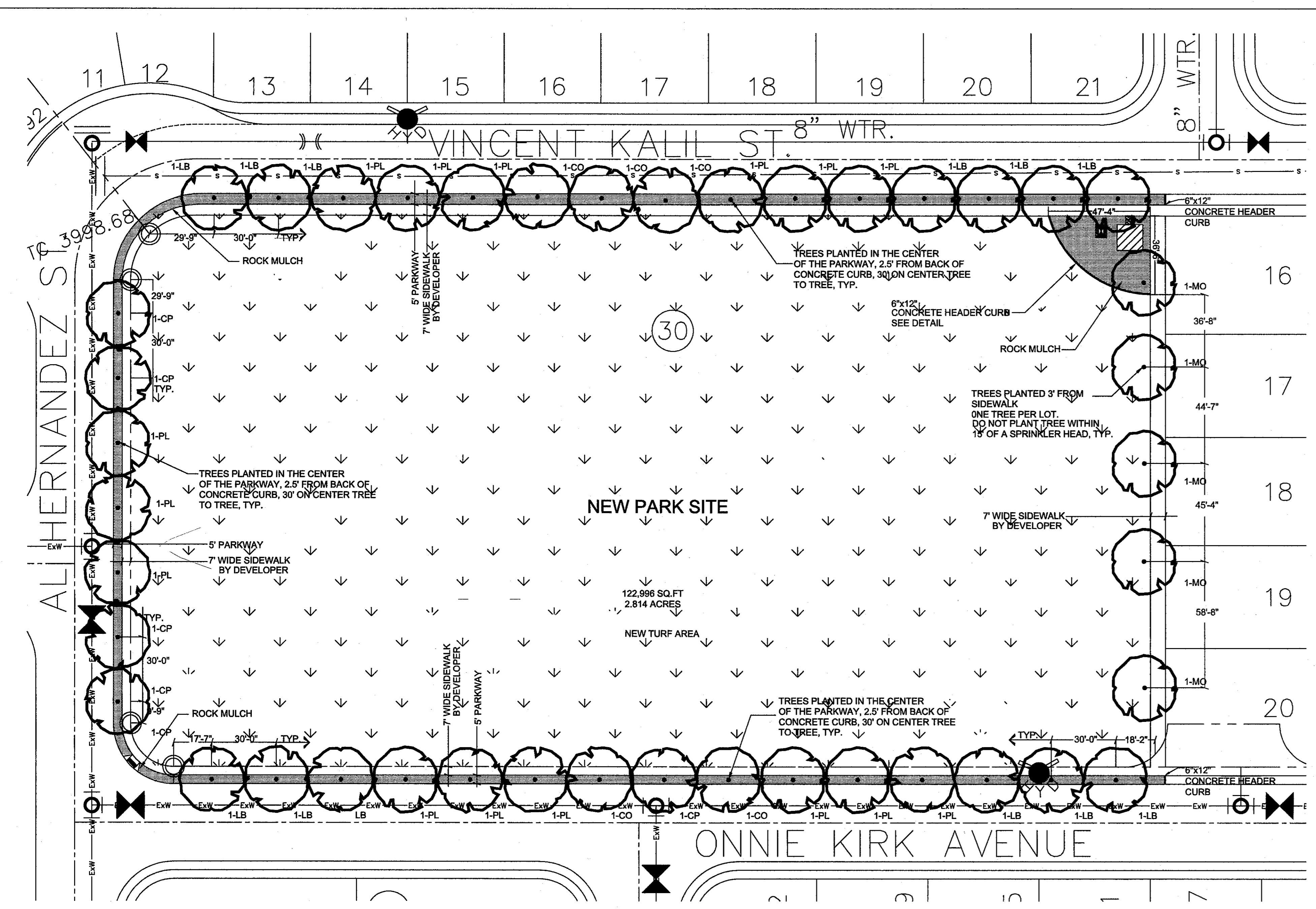
SCALE: N/A
Vertical: N/A
Horizontal: N/A
Contour Interval: N/A
DATE: JULY 2013
DESIGN BY: J.H.
DRAWN BY: J.H.
CHKD. BY: J.G.
APPVD. BY: J.L.A.
JOB No.: 2250-030-LD

PROJECT TITLE
 TRES SUEÑOS
 UNIT TEN
 SUBDIVISION IMPROVEMENTS

SHEET TITLE
 DRAINAGE DETAILS
 DETAILS
 (SHEET 2 OF 2)
 SHEET NO.

C9.2

S:\2250\2250-030\LD\0625\Construction Drawings\Improvement Plans\C9.2_DRAINAGE_DETAILS.dwg, Modk, 8/20/2013 3:30:00 PM



NOTES FOR PLANTING:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS FROM FALLING OR BEING BLOWN OVER AND TO STRAIGHTEN OR REPLANT ALL PLANTS WHICH ARE DAMAGED DUE TO WIND. PLANTS BLOWN OVER BY HIGH WINDS SHALL NOT BE A CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.
2. TOPSOIL MATERIAL FOR PLANTING SHALL BE FREE FROM HARD CLDS, STIFF CLAY, HARD PAN, STONES LARGER THAN 1" IN DIAMETER, NOXIOUS WEEDS AND PLANTS, SOD, PARTIALLY DISINTEGRATED DEBRIS, INSECTS OR ANY OTHER UNDESIRABLE MATERIAL. PLANTS OR SEEDS THAT WOULD BE TOXIC OR HARMFUL TO GROWTH.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF PLANT MATERIAL QUANTITIES.
4. IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. IMPROPER PLANT COUNT MADE BY THE LANDSCAPE CONTRACTOR SHALL BE NO CAUSE FOR ADDITIONAL COSTS TO THE OWNER.
5. THE CONTRACTOR SHALL MEET BOTH THE CONTAINER SIZE AND CALIPER SIZE, AS WELL AS HEIGHT AND SPREAD SPECIFICATIONS SPECIFIED.
6. EXCAVATE TWO TIMES GREATER THAN THE ROOT BALL-DIAMETER OF THE SHRUB, TWO TIMES GREATER THAN THE ROOT BALL FOR TREES. SCARIFY BOTTOM OF PLANTING PIT BEFORE PLACING PLANT. PLACEMENT OF PLANT SHALL BE PERPENDICULAR TO GROUND.
7. CONTRACTOR WILL NOT PLANT MATERIAL SHOWN ON PLANS WHEN IT IS EVIDENT THAT FIELD CONDITIONS HAVE CHANGES SINCE PLANS WERE DRAWN. ANY CHANGES ARE TO BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE DESIGNER BEFORE ANY PLANTING IS DONE IN THE AREA.
8. PLANT SUBSTITUTIONS WILL BE PERMITTED, REQUEST SUBSTITUTION IN WRITING GIVING REASONS FOR SUCH SUBSTITUTIONS.
9. TURF QUANTITY TAKE-OFF ARE THE RESPONSIBILITY OF THE CONTRACTOR.
10. TREAT ALL PLANTING AREAS WITH AN APPLICATION OF SURF. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR APPLICATION.
11. REMOVE ALL WIRE, STRING, WIRE BASKETS, BURLAP, CONTAINERS, ETC., FROM THE ROOTBALL OF PLANTS BEFORE BACKFILLING THE PLANTING HOLE.
12. WARRANTY FOR THE PLANTING MATERIAL SHALL BE ONE YEAR FROM THE DATE OF ACCEPTANCE. (TREES, SHRUBS AND GROUNDCOVER).

GENERAL NOTES:

1. DEVELOPER SHALL OBTAIN SOIL SAMPLES (TAKEN FROM PROPOSED PARK SITE FINISHED GRADE) AND PROVIDE COMPLETE ANALYSIS REPORT (TEXTURAL, MINERALS AVAILABILITY, WATER PECELOCATION, DETAILED SALINITY & PH TEST WITH RECOMMENDATIONS FOR SOIL AMENDMENTS TO INSURE EXISTING SOIL CONDITIONS ARE SUITABLE FOR TURF, SHRUBS AND TREES GROWTH; COORDINATE SITE VISIT WITH LANDSCAPE ARCHITECT FOR COLLECTION OF SOIL SAMPLES (TO BE A DEPTH OF 12").
2. ANY UNSUITABLE SOIL CONDITIONS SHALL BE REMEDIATED BY REMOVAL OF SOILS, SOILS WITH STONES, HIGH CALICHE SOILS, CLAY SOILS AND CONTAMINATED SOILS TO A MINIMUM DEPTH OF 12 INCHES AS REQUIRED FOR PROPER PLANTING AS PER PARKS DESIGN GUIDELINES AND CONSTRUCTION STANDARDS.
3. ANY UNSUITABLE SOIL MATERIALS NOT APPROVED BY LANDSCAPE ARCHITECT ARE TO BE REMOVED, DISPOSED-OFF SITE (APPROVED SITE) AND REPLACED WITH TOPSOIL TO THE REMOVAL DEPTH AS NEEDED.
4. CONTRACTOR SHALL BE REQUIRED TO OBTAIN PROPER PERMITS.
 - a. IRRIGATION PERMIT: FOR IRRIGATION SYSTEM.
 - b. ELECTRICAL PERMIT: FOR ELECTRICAL AND SERVICE.
 - c. BUILDING PERMIT: FOR PUMP HOUSE
 - d. ALL PARK IMPROVEMENTS SHALL COMPLY WITH APPLICABLE ADAAG AND TAS RULES AND REGULATIONS
5. DEVELOPER SHOULD PROVIDE TDLR REGISTRATION NUMBER TO LANDSCAPE ARCHITECT, CITY OF EL PASO, PARKS DEPARTMENT. INSPECTION AND CERTIFICATE TO BE INCLUDED

MATERIAL LEGEND:

- TURF TYPE SHALL BE CELEBRATION HYBRID BERMUNDA
- ROCK MULCH SHALL BE SCREENINGS 3" DEPTH PLACED ON GEOTEX FABRIC, CONTECH MARFI 160N. PLACE OVER LIGHTLY COMPACTED SOIL. OVERLAP GEOTEX FABRIC MINIMUM OF 12" AND PIN WITH U-SHAPE METAL PIN 3" LENGTH ON 12" CENTER. GEOTEX FABRIC SHALL BE MARFI 160N SEE DETAIL L-3

LANDSCAPE PLAN - PARK SITE



SCALE: 1" = 30'-0"

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
CP	PISTACIA TEXANA	TEXAS PISTACHE	3" CAL.	4
CO	QUERCUS MUHLENBERGII	CHINQUAPIN OAK	3" CAL.	6
MO	QUERCUS POLYMORPHA	MONTERREY OAK	3" CAL.	5
LB	ULMUS PARVIFOLIA	LACEBARK ELM	3" CAL.	12
PL	ROBINIA PSEUDOACACIA	PURPLE ROBE LOCUST	2" CAL.	15
TOTAL				42

SODDING NOTES

- SUBMIT THE FOLLOWING:**
1. SOD CERTIFICATION FOR GRASS SPECIES AND NAME AND LOCATION OF SOD SOURCE. SODDING SCHEDULE, INCLUDING DATES AND TYPE OF WORK TO BE PERFORMED. PRIOR TO ORDERING, NAME OF SUPPLIER OF SOIL AMENDMENTS MATERIALS.
 2. MINIMUM AGE 18 MONTHS, WITH ROOT DEVELOPMENT THAT WILL SUPPORT ITS OWN WEIGHT WITHOUT TEARING. WHEN SUSPENDED VERTICALLY BY HOLDING THE UPPER TWO CORNERS.
 3. TIME DELIVERY SO THAT SOD WILL BE PLACED WITHIN 24 HOURS OF DELIVERY AT SITE. PROTECT AGAINST DRYING AND BREAKING OF ROLLED STRIPS.
 4. DELIVER PACKAGED MATERIALS IN CONTAINERS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY AND WHILE STORED ON SITE.
- SITE CONDITIONS**
5. PROCEED WITH AND COMPLETE LANDSCAPE WORK AS RAPIDLY AS PORTIONS OF SITE BECOME AVAILABLE, WORKING WITHIN SEASONAL LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED.
 6. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS CONSULT THE LANDSCAPE DESIGNER AND CITY OF EL PASO PARKS AND RECREATION BEFORE PLANTING.
 7. PLANT OR INSTALL MATERIALS DURING NORMAL PLANTING SEASONS FOR EACH TYPE OF LANDSCAPE WORK REQUIRED. CORRELATE PLANTING WITH SPECIFIED MAINTENANCE PERIODS TO PROVIDE MAINTENANCE FROM DATE OF FINAL ACCEPTANCE.
- SOIL AMENDMENTS**
8. PROVIDE SOIL ANALYSIS BEFORE ADDITION OF SOIL AMENDMENTS & ANALYSES OF SOIL AMENDMENTS. ORGANIC AMENDMENTS SHALL CONSIST OF WELL-AGED ORGANIC COMPOST OR APPROVED EQUAL FERTILIZER
 9. SLOW-RELEASE STARTER FERTILIZER ANALYSIS AS RECOMMENDED BY LANDSCAPE ARCHITECT BY WEIGHT AT A RATE OF 1 LB OF ACTUAL NITROGEN PER 1,000 SQUARE FEET BY WEIGHT.
- GRASS MATERIALS**
10. PROVIDE STRONGLY ROOTED SOD, NOT LESS THAN 18 MONTHS OLD AND FREE OF WEEDS AND UNDESIRABLE NATIVE GRASSES AND MACHINE CUT TO PAD THICKNESS OF 3/4 INCH (PLUS OR MINUS 1/4 INCH), EXCLUDING TOP GROWTH AND THATCH. PROVIDE SOD CAPABLE OF GROWTH AND DEVELOPMENT WHEN PLANTED. CUT SOD PIECES A MINIMUM OF 18 INCHES WIDE.
- PREPARATION**
11. PRIOR TO START OF SOIL PREPARATION ALL FINISH GRADES SHALL BE ESTABLISHED AND APPROVED AS MEETING THE REQUIREMENTS OF THE GRADING PLAN. APPLY A UNIFORM ONE-INCH LAYER (3 C.Y./1000 SQUARE FEET) OF ORGANIC SOIL AMENDMENT, AFTER APPLICATION OF ORGANIC AMENDMENT AND STARTER FERTILIZER ALL AREAS TO BE SODDED SHALL BE THOROUGHLY ROTOTILLED TO A MINIMUM DEPTH OF 12 INCHES. AFTER ROTOTILLING IS COMPLETE AT CROSS DIRECTIONS, DRAG, AND LASER LEVEL TO AN EVEN GRADE, THEN ROLL FOR FIRMNESS. RAKE TILLED AREA AND REMOVE ROLL ENTIRE AREA WITH WEIGHTED HAND ROLLER.
 12. STONES OVER 1 INCH IN ANY DIMENSION, STICKS, ROOTS, RUBBISH AND OTHER EXTRANEIOUS MATTER.
- SODDING OPERATIONS**
13. LAY SOD WITHIN 24 HOURS OF DELIVERY AT SITE. DO NOT PLANT DORMANT SOD OR ON FROZEN GROUND.
 14. IF SOIL IS DRY, MOISTEN AREAS BEFORE SODDING. WATER THOROUGHLY AND ALLOW SURFACE MOISTURE TO DRY. DO NOT CREATE A MUDDY SOIL CONDITION.
 15. REMOVE FIBER MESH USED BY SOD FARM TO TRANSPORT SOD ROLLS AS SOD IS BEING INSTALLED.
 16. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. NO JOINT SHALL BE MORE THAN 1/4" GAP. SOD SHOULD BE MOISTENED SOIL, LIGHTLY RAKING THE SOIL AHEAD OF EACH SOD STRIP. BUTT ENDS AND SIDES OF SOD STRIPS; DO NOT OVERLAP. STAGGER STRIPS TO OFF-SET JOINTS IN ADJACENT COURSES. LAY SOD PARALLEL TO CONTOURS OF SLOPE. WORK FROM BOARDS TO AVOID DAMAGE TO SUBSOIL OR SOD. TAMP FIRMLY AND EVENLY BY HAND TO ENSURE CONTACT WITH SUBSOIL. WORK SIFTED TOPSOIL OR SAND INTO MINOR CRACKS BETWEEN PIECES OF SOD
 17. WATER SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING.
 18. MAINTENANCE IMMEDIATELY AFTER PLANTING.
 19. MAINTAIN LAWNS FOR NOT LESS THAN A PERIOD OF AT LEAST 60 DAYS AFTER COMPLETION AND ACCEPTANCE OF SOD. INSPECTION TO DETERMINE ACCEPTANCE OF SODDED LAWNS WILL BE MADE BY PARKS STAFF AND SITES SOUTHWEST REPRESENTATIVE UPON CONTRACTOR'S REQUEST. PROVIDE NOTIFICATION AT LEAST 10 WORKING DAYS BEFORE REQUESTED INSPECTION DATE. AND LONGER AS REQUIRED TO ESTABLISH AN ACCEPTABLE LAWN.
 20. SODDED LAWNS TO BE MAINTAINED NOT LESS THAN 60 DAYS AFTER COMPLETION AND ACCEPTANCE OF SODDING OPERATIONS.
 21. MAINTENANCE TO INCLUDE: WATER SOD THOROUGH EVERY 2 TO 3 DAYS MIN. AS REQUIRED TO ESTABLISH PROPER ROOTING. REPAIR, REWORK AND RESOD AREAS THAT HAVE WASHED OUT OR ERODED. REPLACE DEAD OR UNDESIRABLE SOD SECTIONS WITH NEW SOD. MOW LAWN AREAS WHEN THE GRASS IS OVER 2 INCHES HIGH FOR FIRST CUTTING. FERTILIZE LAWN WITH TOP DRESSING FERTILIZER AT 1 LB. PER 1,000 SQ.FT. OF NITROGEN, WATER THOROUGHLY.
 22. ADDITIONAL LAWN MAINTENANCE CONSISTS OF WEEDING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS. CLEANUP AND PROTECTION
 23. DURING THE WORK, KEEP PAVEMENTS CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
 24. PROTECT WORK AND MATERIALS FROM DAMAGE DUE TO SODDING OPERATIONS. OPERATIONS BY OTHER CONTRACTORS AND TRADES AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR OR REPLACE DAMAGED WORK AS DIRECTED. INSPECTION AND ACCEPTANCE
 25. WHEN INSPECTED WORK DOES NOT COMPLY WITH REQUIREMENTS, REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL REINSPECTED BY THE LANDSCAPE DESIGNER AND CITY OF EL PASO PARKS AND RECREATION AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED SOD AND

PARKS DEPARTMENT
REVIEWED BY
[Signature]
10/5/13

LAS LANDSCAPE ARCHITECTURAL SERVICES
LANDSCAPE ARCHITECT & IRRIGATION CONSULTANT
4004 KEMP AVE. SUITE B EL PASO, TX. 79904
PHONE: (915) 422-7739 FAX: (915) 561-8730
EMAIL: lwrightlas@gmail.com

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- UTILITY LOCATOR SERVICES**
- EL PASO ELECTRIC COMPANY (915) 543-5720
 - EL PASO ENERGY CORPORATION (915) 498-5244
 - EL PASO WATER UTILITIES (915) 594-5500
 - MCI SURVEILLANCE (800) MCI-WORK
 - TIME WARNER COMMUNICATIONS (915) 772-1123
 - TEXAS GAS SERVICE (915) 680-7200
 - SBC (800) 545-6005
 - AT&T (800) 852-3766
 - U.S. SPRINT TELECOMM (800) 521-0579

WARNING!
BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

ENGINEER'S SEAL

PROJECT TITLE
TRES SUEÑOS UNIT TEN
"DREAMLAND PARK" - LOT 21, BLOCK 30
LOT SIZE: 122,596 SQ.FT, 2.814 ACRES
14440 VINCENT KALEL STREET
EL PASO, TEXAS

SCALE
Vertical: N/A
Horizontal: 1" = 30'-0"

DATE: AUGUST 2013
DESIGN BY: LW
DRAWN BY: LW
CHKD. BY: LW
APPVD. BY: L. WRIGHT
JOB NO. 22590-030-1D

REVIEWED
SHEET TITLE
LANDSCAPE PLAN
PARK SITE

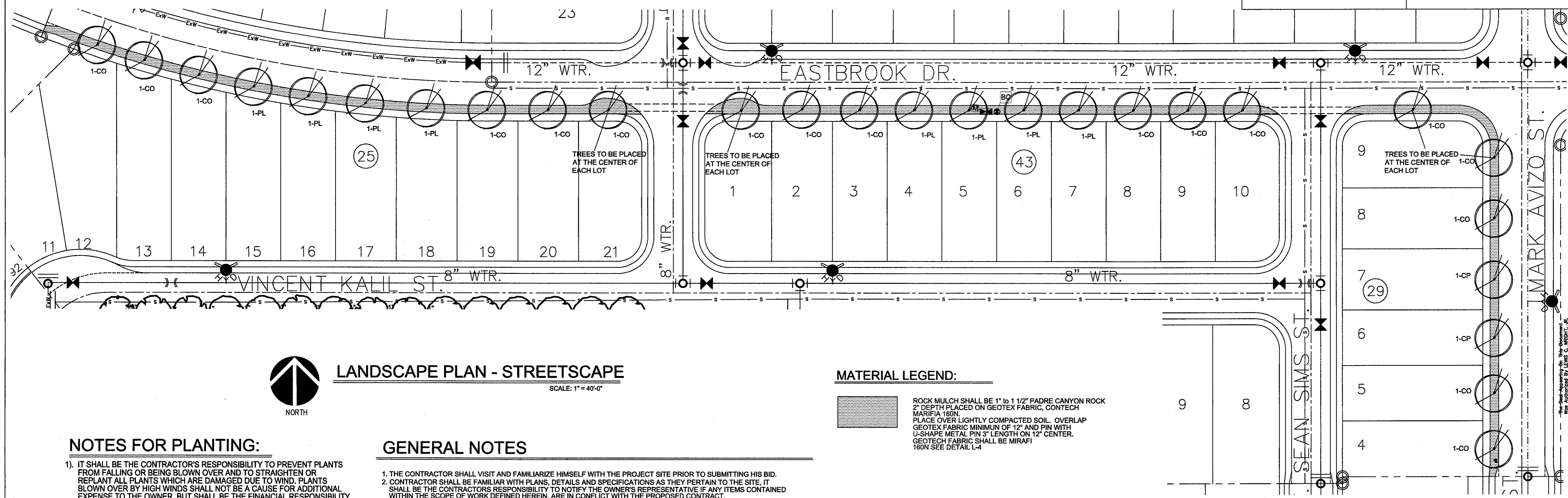
SHEET NO.
L-1.0

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 498-5244
EL PASO WATER UTILITIES	(915) 594-5500
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AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING!
BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES



LANDSCAPE PLAN - STREETSCAPE

SCALE: 1" = 40'-0"

MATERIAL LEGEND:

- ROCK MULCH SHALL BE 1" to 1 1/2" PADRE CANYON ROCK 2" DEPTH PLACED ON GEOTEX FABRIC, CONTECH MARIFIA 160N.
- PLACE OVER LIGHTLY COMPACTED SOIL. OVERLAP GEOTEX FABRIC MINIMUM OF 12" AND PIN WITH U-SHAPE METAL PIN 3" LENGTH ON 12" CENTER.
- GEOTEX FABRIC SHALL BE MIRAFI 160N SEE DETAIL L-4

NOTES FOR PLANTING:

- 1) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS FROM FALLING OR BEING BLOWN OVER AND TO STRAIGHTEN OR REPLANT ALL PLANTS WHICH ARE DAMAGED DUE TO WIND. PLANTS BLOWN OVER BY HIGH WINDS SHALL NOT BE A CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE FINANCIAL RESPONSIBILITY OF CONTRACTOR.
- 2) TOPSOIL MATERIAL FOR PLANTING SHALL BE FREE FROM HARD CLODS, STIFF CLAY, HARD PAN, STONES LARGER THAN 1" IN DIAMETER, NOXIOUS WEEDS AND PLANTS, SOD, PARTIALLY DISINTEGRATED DEBRIS, INSECTS OR ANY OTHER UNDESIRABLE MATERIAL. PLANTS OR SEEDS THAT WOULD BE TOXIC OR HARMFUL TO GROWTH.
- 3) CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF PLANT MATERIAL QUANTITIES.
- 4) IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. IMPROPER PLANT COUNT MADE BY THE LANDSCAPE CONTRACTOR SHALL BE NO CAUSE FOR ADDITIONAL COSTS TO THE OWNER.
- 5) THE CONTRACTOR SHALL MEET BOTH THE CONTAINER SIZE AND CALIPER SIZE, AS WELL AS HEIGHT AND SPREAD SPECIFICATIONS SPECIFIED.
- 6) EXCAVATE TWO TIMES GREATER THAN THE ROOT BALL DIAMETER OF THE SHRUB, TWO TIMES GREATER THAN THE ROOT BALL FOR TREES. SCARIFY BOTTOM OF PLANTING PIT BEFORE PLACING PLANT. PLACEMENT OF PLANT SHALL BE PERPENDICULAR TO GROUND.
- 7) CONTRACTOR WILL NOT PLANT MATERIAL SHOWN ON PLANS WHEN IT IS EVIDENT THAT FIELD CONDITIONS HAVE CHANGES SINCE PLANS WERE DRAWN. ANY CHANGES ARE TO BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT BEFORE ANY PLANTING IS DONE IN THE AREA.
- 8) PLANT SUBSTITUTIONS WILL BE PERMITTED. REQUEST SUBSTITUTION IN WRITING GIVING REASONS FOR SUCH SUBSTITUTIONS.
- 9) TURF QUANTITY TAKE-OFF ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 10) TREAT ALL PLANTING AREAS WITH AN APPLICATION OF SURF. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR APPLICATION.
- 11) REMOVE ALL WIRE, STRING, WIRE BASKETS, BURLAP, CONTAINERS, ETC., FROM THE ROOTBALL OF PLANTS BEFORE BACKFILLING THE PLANTING HOLE.
- 12) WARRANTY FOR THE PLANTING MATERIAL SHALL BE ONE YEAR FROM THE DATE OF ACCEPTANCE. (TREES, SHRUBS AND GROUND COVER).

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT AND FAMILIARIZE HIMSELF WITH THE PROJECT SITE PRIOR TO SUBMITTING HIS BID.
2. CONTRACTOR SHALL BE FAMILIAR WITH PLANS, DETAILS AND SPECIFICATIONS AS THEY PERTAIN TO THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER'S REPRESENTATIVE IF ANY ITEMS CONTAINED WITHIN THE SCOPE OF WORK DEFINED HEREIN, ARE IN CONFLICT WITH THE PROPOSED CONTRACT.
3. EXISTING UTILITY LINES ARE TO BE BLUE STAKED PRIOR TO EXCAVATION, CHECK AND FIELD VERIFY ALL SITE CONDITIONS, UTILITIES AND SERVICES PRIOR TO EXCAVATION. CONSTRUCTION WORK IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES SHALL BE COORDINATED WITH APPROPRIATE AGENCY.
4. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH OWNER, ALL AFFECTED UTILITY COMPANIES, AND ALL OTHER ENTITIES HAVING JURISDICTION OVER THE PROJECT.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES PRIOR TO COMMENCING WITH THE WORK. ANY DISCREPANCY NOTED SHALL BE REPORTED IMMEDIATELY TO THE PROJECT MANAGER. FAILURE OF THE CONTRACTOR TO REPORT ANY FIELD AND PLAN DISCREPANCIES SHALL MAKE THE CONTRACTOR RESPONSIBLE FOR WORK THAT IS PERFORMED.
6. VIBRATORY ROLLERS SHALL NOT BE PERMITTED ON ANY PHASE OF THIS PROJECT, UNLESS APPROVED IN WRITING BY THE CITY ENGINEER.
7. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN STRICT CONFORMANCE WITH ALL CURRENT SAFETY CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO, OSHA REQUIREMENTS.
8. WARNING! BEFORE EXCAVATING, CONTRACTOR SHALL LOCATE AND PROTECT ALL UNDERGROUND UTILITIES LINES. CONTRACTOR SHALL REPLACE ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO OWNER.
9. CONTRACTOR SHALL WATER CONSTRUCTION SITE AREA A MINIMUM OF TWICE A DAY TO DUST CONTROL, ONCE IN THE MORNING AND ONCE IN THE AFTERNOON. THIS SHALL ALSO BE DONE ON WEEKENDS AND HOLIDAYS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING IMPROVEMENTS IN THE PROJECT AREA AND ITS VICINITY. ANY DAMAGE RESULTING FROM CONTRACTOR WORK SHALL BE RESTORED AT NO COST TO OWNER.
11. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATION DURING CONSTRUCTION ACTIVITY.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ENVIRONMENTAL FINES RESULTING FROM HIS/HER WORK AND HOLD THE OWNER HARMLESS IN SUCH CASES.
13. CONTRACTOR SHALL SECURE THE SITE DURING CONSTRUCTION TO PROTECT THE AREA FROM VANDALISM AND ILLEGAL TRESPASSING. CONTRACTOR SHALL SECURE THE SITE AT HIS/HER OWN COST. CONTRACTOR SHALL SITE PROTECTION MEASURES SHALL BE SUBMITTED TO THE PARKS AND RECREATION DEPT. FOR APPROVAL.
14. ALL EXISTING UTILITIES CURRENTLY IN SERVICE MUST REMAIN IN SERVICE THROUGHOUT CONSTRUCTION EXCEPT AS NOTED IN THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES (INCLUDING SERVICE CONNECTIONS) FROM DAMAGE AS A RESULT OF CONSTRUCTION ACTIVITIES.
15. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO VERIFY LOCATION OF EXISTING UTILITIES & CONTRACTOR SHALL CALL THE RESPECTIVE "1-CALL" NUMBER FOR SUCH UTILITIES.

PLANT SCHEDULE FOR TREES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
CP	PISTACIA TEXANA	TEXAS PISTACHE	2" CAL.	2
CO	QUERCUS MUHLENBERGII	CHINQUAPIN OAK	2" CAL.	17
PL	ROBINIA PSEUDOACACIA	PURPLE ROBE LOCUST	2" CAL.	8
	TOTAL			27

REFERENCES - BENCHMARKS
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., S09°43'37"E A DISTANCE OF 467.59 FEET
NATIONAL GRID POINT 14000000.000000
AVENUE CITY DATUM ELEVATION 1000.40

DATE _____ BY _____
REVISIONS _____

engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4664
4712 Woodrow Bean, Ste. F El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.aepgroup.net

ENGINEER'S SEAL
L. A. No. 1063 On 10/22/2013

SCALE
Horizontal: _____
Vertical: _____
Contour Interval: N/A
DATE: AUG 2013
DESIGN BY: LW
DRAWN BY: JC
CHKD. BY: LW
APPRD. BY: L. WRIGHT
JOB NO. 2250-030-LD

PROJECT TITLE
TRES SUEÑOS UNIT TEN
"DREAMLAND PARK" - LOT 21, BLOCK 30
LOT SIZE: 122,996 SQ.FT., 2.814 ACRES
14440 VINCENT KALEL STREET
SUBDIVISION IMPROVEMENTS
A PORTION OF SECTION 27, BLOCK 79, TOWNSHIP 2, TEXAS
AND PACIFIC RAILROAD COMPANY SURVEYS

SHEET TITLE
LANDSCAPE PLAN
STREETSCAPE

SHEET NO.
L-3.0

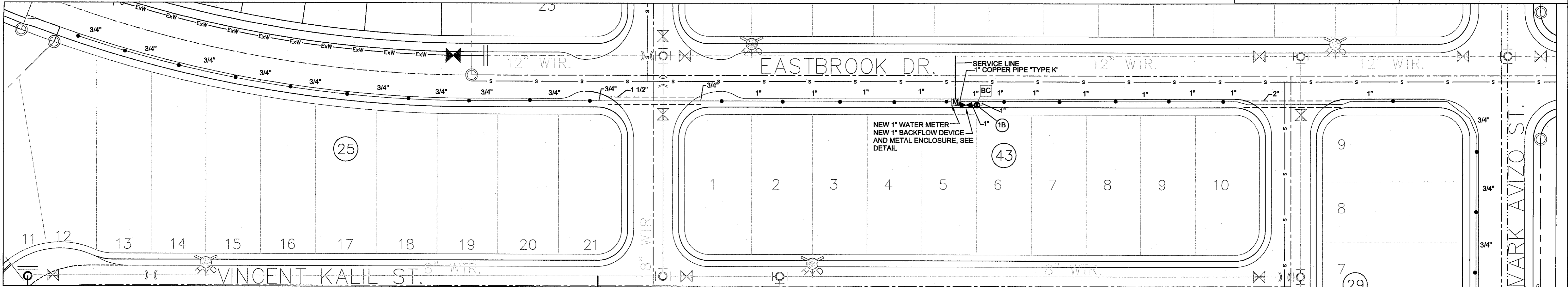
CITY DEVELOPMENT DEPARTMENT
REVIEWED

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-8720
EL PASO ENERGY CORPORATION	(915) 499-5214
EL PASO WATER UTILITIES	(915) 934-9500
MCI SURVEILLANCE	(300) MCI-WORK
TEXAS GAS SERVICE	(915) 722-1123
SSC	(800) 843-9999
AT&T	(800) 852-3709
U.S. SPRINT TELEPHONE	(800) 851-0579

**WARNING 1
BEFORE YOU DIG**

CALL
1-800-DIG-TESS
1-800-344-8377

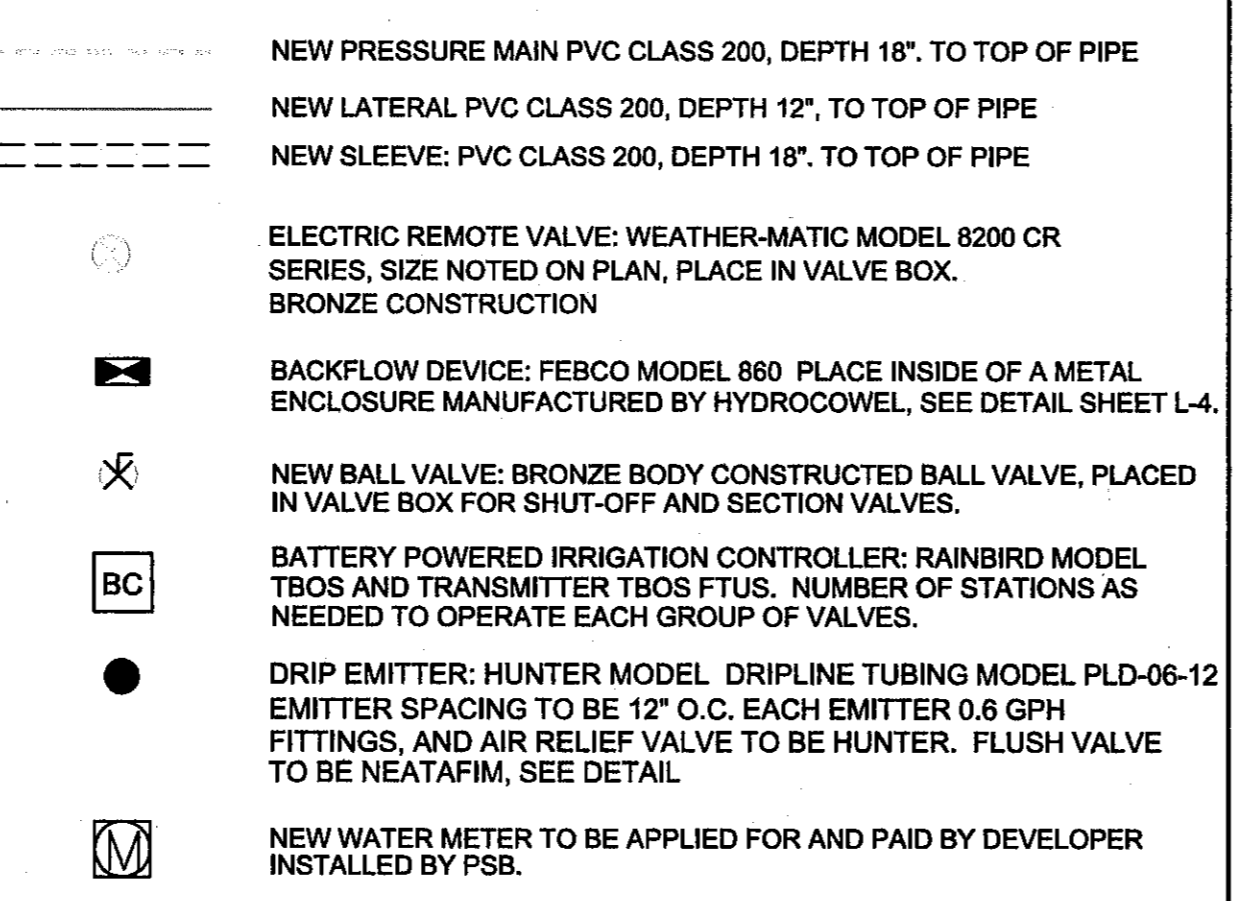
FOR FIELD LOCATING EXISTING UTILITIES



IRRIGATION PLAN GENERAL NOTES

- IRRIGATION PLAN IS DIAGRAMMATIC IN NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR ACCOMPLISHING FULL COVERAGE IN ALL AREAS WITH SPECIFIED EQUIPMENT. ANY DISCREPANCIES IN THE PLAN SHOULD BE BROUGHT TO THE PROJECT MANAGER'S ATTENTION DURING CONSTRUCTION.
- ALL FITTINGS AND NECESSARY EQUIPMENT REQUIRED TO MAKE THIS IRRIGATION SYSTEM OPERATE PROPERLY AND TO COMPLY WITH LOCAL AND STATE CODES ARE INCIDENTAL TO THESE PLANS AND ARE THE CONTRACTOR'S RESPONSIBILITY.
- CONTRACTOR WILL BE HELD LIABLE FOR GAINING ACCESS UNDER ALL PAVEMENTS.
- SLEEVES SHOWN ON THE PLANS SHOULD BE VERIFIED FOR ACCESSIBILITY AND FEASIBILITY BEFORE BID IS MADE.
- THE CONTRACTOR SHALL LOCATE AND VERIFY EACH WATER TAP TO WHICH THE IRRIGATION SYSTEM WILL CONNECT. ALL EQUIPMENT AND INSTALLATION METHODS SHALL COMPLY WITH THE STANDARDS OF THE CITY OF EL PASO AND THE SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR ALL CONNECTIONS AND VALVES REQUIRED FOR THE FULL IMPLEMENTATION OF THE SYSTEM.
- THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO INITIATING WORK.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE OR INTERRUPTION IN SERVICE CAUSED BY HIS EXCAVATIONS AND/OR WORK.
- EACH CONTROLLER WILL HAVE AN INDEPENDENT COMMON WIRE LOOPED TO THE VALVES CONNECTED TO IT.
- REMOTE CONTROL VALVE WIRES ARE TO BE IN A SEPARATE TRENCH 5' FROM MAIN LINE ON NORTH OR WEST SIDE OF MAINLINE.
- ALL REMOTE CONTROL VALVE WIRES NEED TO BE LABELED AT VALVE W/ WEATHER (WATER) PROOF LABELS AND AT CONTROLLER WITH CORRESPONDING LABEL. (LETTER AND/OR NUMBER TAGS IN SEQUENTIAL ORDER WILL BE PROVIDED).
- SPLICING OF REMOTE CONTROL VALVE WIRES IS NOT ALLOWED BETWEEN CONTROLLER & VALVE BOX FOR WIRES MUST BE CONTINUOUS FROM CONTROLLER TO REMOTE CONTROL VALVE WITHOUT SPLICING.
- ALL SPRINKLER HEADS SHALL BE ON STAINLESS STEEL RISERS WITH CHECK VALVE.
- CONTRACTOR SHALL PROVIDE SLEEVES FOR NEW IRRIGATION LINES CROSSING UNDER CONCRETE SIDEWALKS AND STREETS. SLEEVE SHALL BE 2 TIMES THE PIPE(S) SIZE EXTENDED 24" BEYOND EDGE OF SURFACE, ENDS OF ALL SLEEVES TO BE FILLED WITH FOAM INSULATION TO PREVENT SLEEVE FROM FILLING UP WITH SOIL.

MATERIAL LEGEND:



NOTES FOR IRRIGATION:

- Some pipes and valves may be shown in paving or outside of property boundaries for clarity only. Install all pvc pipe min. 1' (feet) behind back of curb.
- Electrical wire splices will not be permitted between controller and valves, all connections will be permitted in valve boxes only.
- All valves and regulators shall be installed in plastic valve boxes with locking covers. Valve box(es) shall be manufactured by Carson Industries, model series 1419 box with bolt down cover. Drip emitter box shall be Carson model 809.
- Actual conditions in the field may necessitate adding, or adjusting heads to insure uniform coverage and distribution, contractor shall be responsible for field changes with the Landscape Architect.
- Contractor will not willfully install the irrigation system as designed, when it is obvious that field conditions exist, that were not considered at time of designing the system. Any conditions noted as such, shall be reported to the Landscape Architect. If the contractor fails to do so, the Contractor assumes full responsibility for any corrections needed.
- Location of drip emitters shall be installed exactly as shown on plans. Piping and valve(s) are diagrammatically shown and may vary with approval from Landscape Architect.
- Contractor shall stake out in the field all head and piping locations, first, for approval by the Landscape Architect before trenching and installation of equipment.
- All access box for drip emitters shall be installed flush with finished grade.
- All access boxes and valve boxes along walkways within interior grounds of the site(s) shall be installed min. 12" from edge of all walkways to the back of the sprinkler head or valve boxes.



IRRIGATION PLAN

SCALE: 1" = 10'-0"

NOTE:
CONTRACTOR SHALL BE REQUIRED TO OBTAIN A PERMIT FROM BUILDING PERMITS AND INSPECTIONS FOR THE IRRIGATION SYSTEM.



REVIEWED

DRAWING COORDINATION

ARCHITECTURAL, CIVIL, MECHANICAL, STRUCTURAL, ELECTRICAL, AND LANDSCAPE DRAWINGS ARE INTERRELATED. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW AND COORDINATE THE ENTIRE SET OF DRAWINGS AND PROJECT MANUAL.

LAS LANDSCAPE ARCHITECTURAL SERVICES
LANDSCAPE ARCHITECT & IRRIGATION CONSULTANT
4004 KEMP AVE SUITE B EL PASO, TX 79904
PHONE: (915) 422-7739 FAX: (915) 581-6730
EMAIL: lwrightlas@gmail.com

IRRIGATION IS REGULATED BY:
TCEQ
PO BOX 13087
AUSTIN, TEXAS 78711-3087
512 239-6719
CHAPTER 34, TEXAS WATER CODE
IRRIGATOR'S LIC. # 829

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PRECIPITATION SCHEDULE						
CONTROLLER	STATION # & CONTROLLER	TOTAL GPM	VALVE SIZE	NUMBER & TYPE OF HEADS	AREA COVERED	PRECIPITATION RATE / WATERING TIME REQUIREMENTS
B	1	8	1"	27 SETS DRIP LINE RINGS	NEWLY PLANTED TREES	1.30 INCHES PER HOUR / 120 MIN. 3 TIMES PER WEEK

REFERENCES - BENCHMARKS
CITY HONOLULU AT FRONT OF CURVE CENTERLINE RICH
BEEK BLVD. SUBDIVISION A DISTANCE OF 4524.58 FEET
FROM THE SOUTHERLY RIGHT OF WAY LINE OF HONOLULU
AVENUE CITY DATA. ELEVATION: 6966.40

DATE _____ REVISIONS _____ BY _____

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TEXAS REGISTERED ENGINEERING FIRM F-4594
4772 Woodrow Blinn, Ste. F, El Paso, TX 79924
Office: 915.541.5232 Fax: 915.541.5233 www.ceasplanning.com

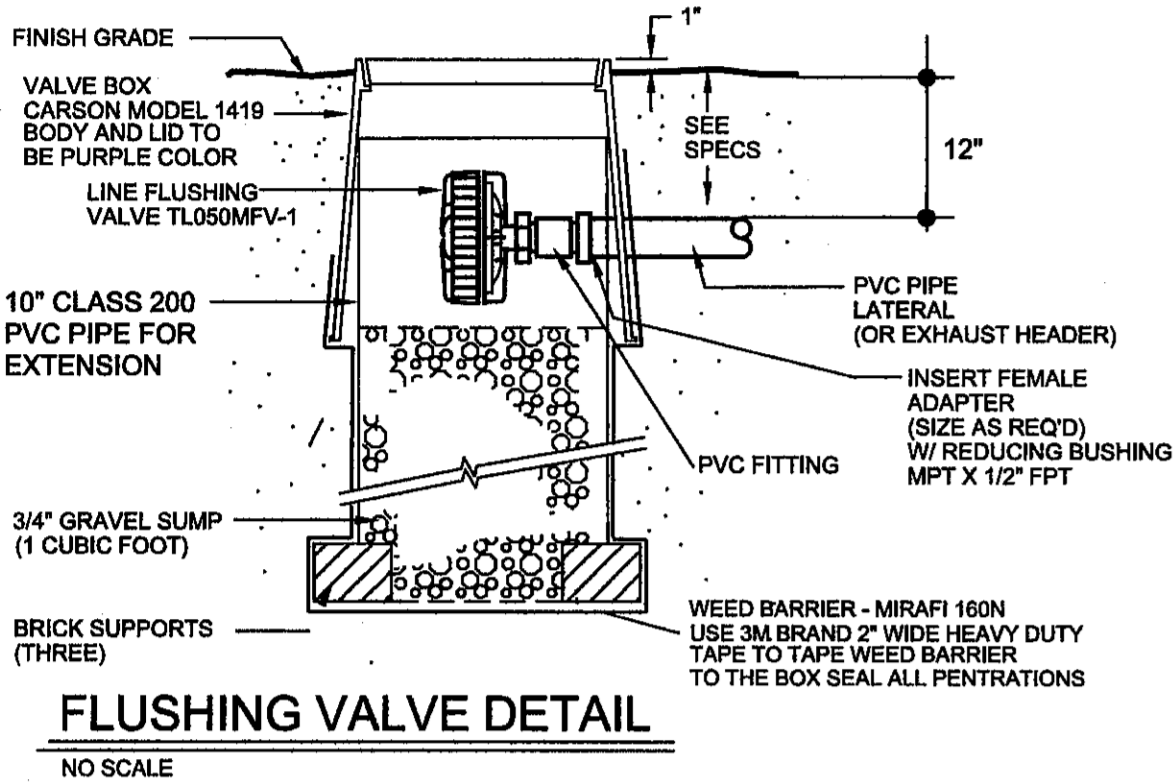
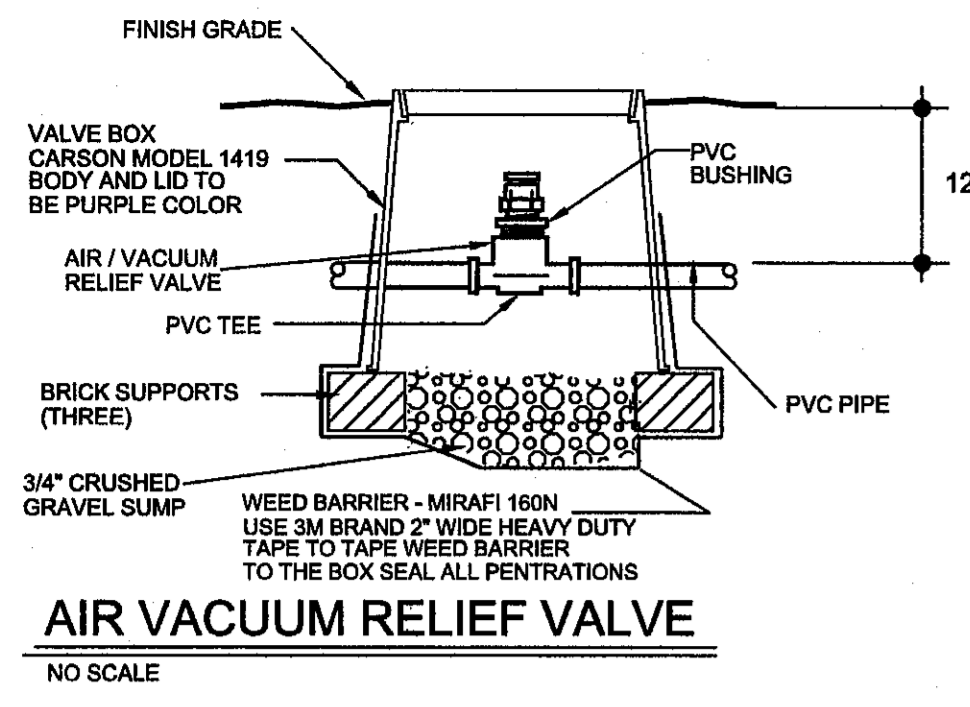
SCALE: 1" = 10'-0"

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Horizontal: _____
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Contour: Interval: 1/2"
DATE: AUG-2013
DESIGN BY: LW
DRAWN BY: LW
CHKD. BY: LW
APP'D. BY: LW
JOB No.: 2250-030-LD

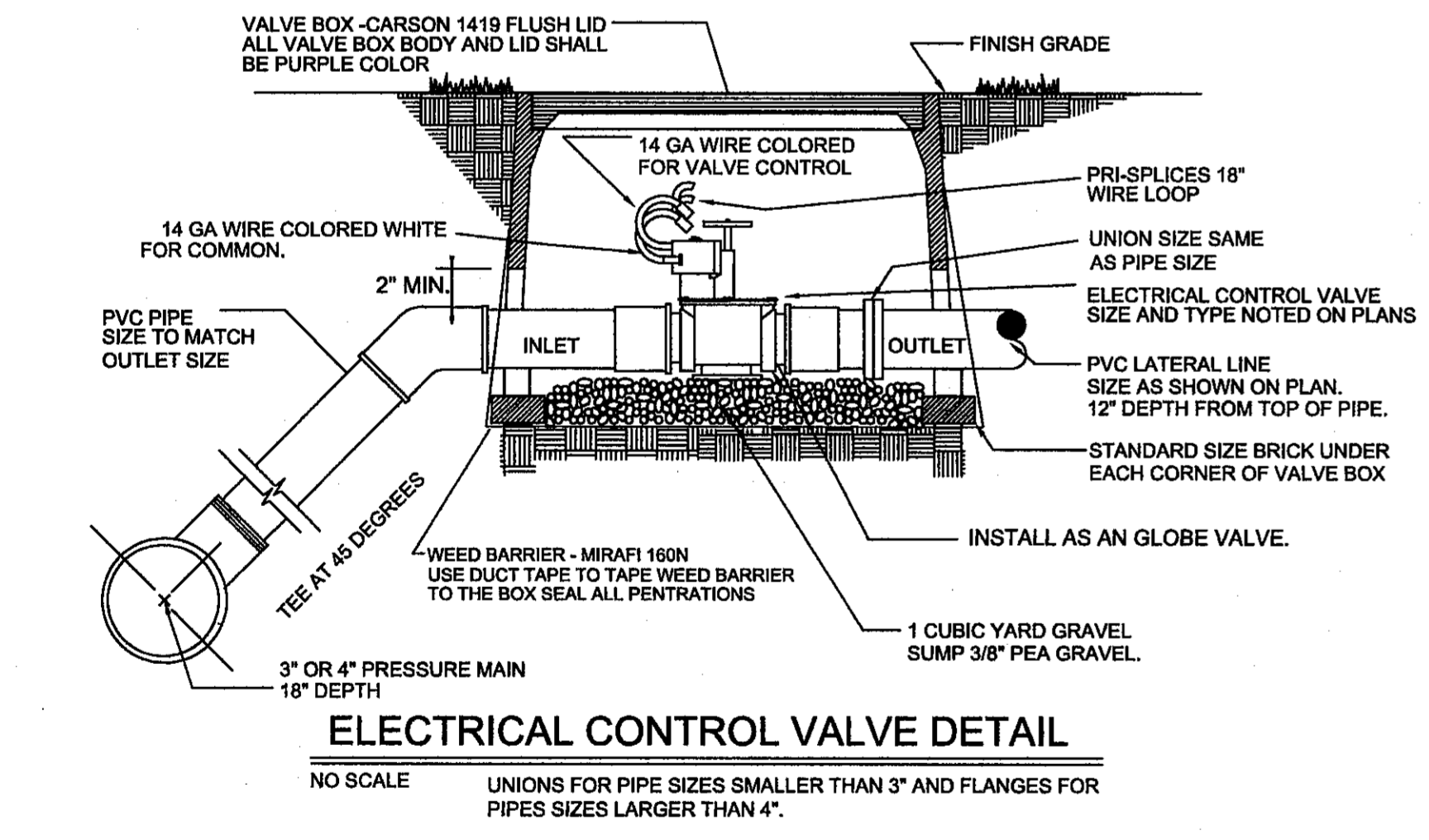
SHEET TITLE
IRRIGATION PLAN
STREETSCAPE

SHEET NO.
L-4.0



GENERAL NOTES FOR VALVE AND ALL BOXES:

- 1) ONLY ONE COURSE OF BRICK AT EACH CORNER SHALL BE ALLOWED.
- 2) CONTRACTOR SHALL USE VALVE BOX EXTENSIONS ONLY TO FINISH GRADE OF MULCH.
- 3) ALL VALVE AND EMITTER BOXES SHALL HAVE GEOTEX FABRIC INSTALLED UNDERNEATH AND TAPED TO SEAL ALL OPENINGS. TAPE SHALL BE 3M BRAND 2" WIDE HEAVY DUTY PLASTIC TAPE ONLY, NO DUCT TAPE SHALL BE ALLOWED.
- 4) ALL VALVE, EXTENSIONS AND EMITTER BOXES SHALL NOT REST OR CONTACT THE PVC PIPE OR DRIPLINE TUBING.

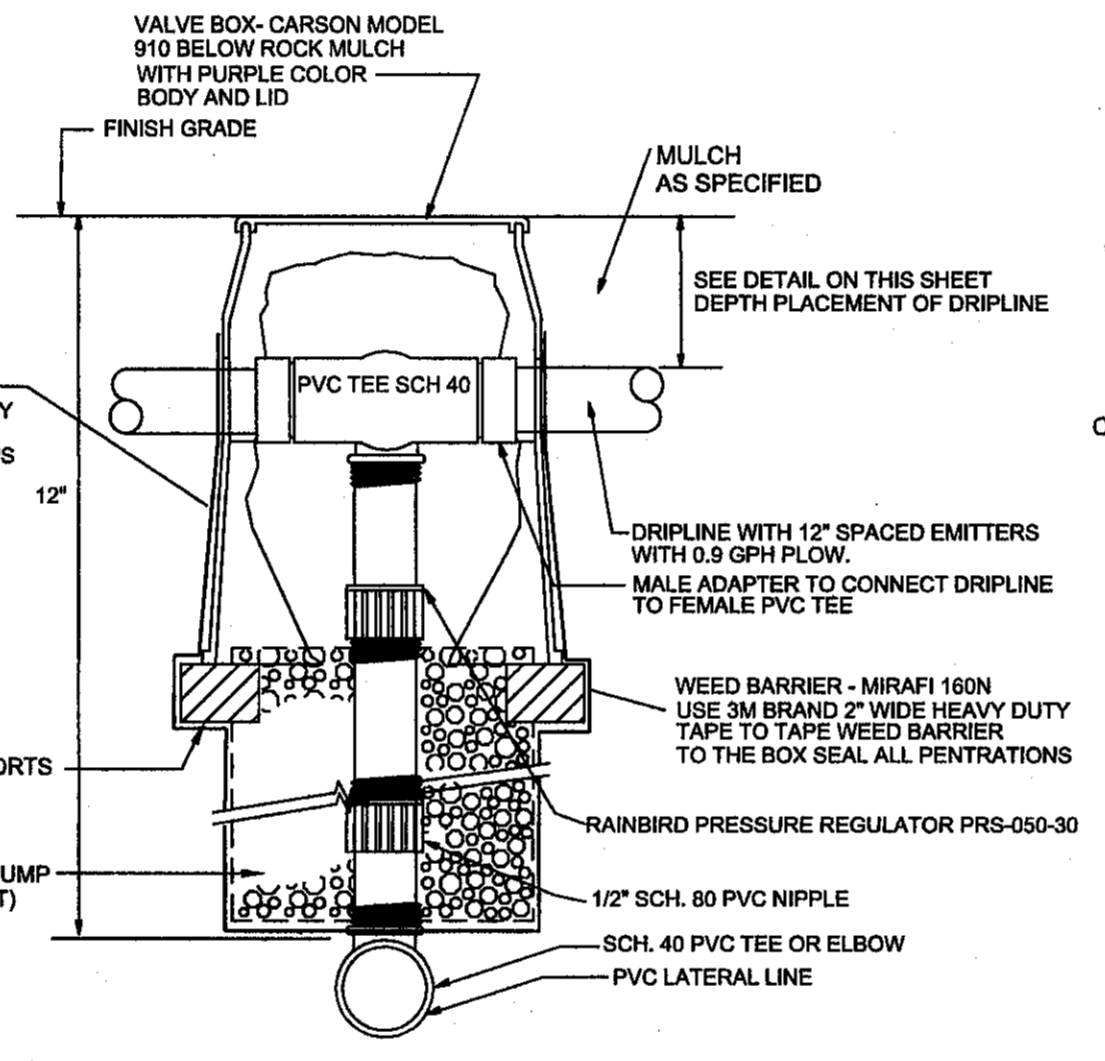
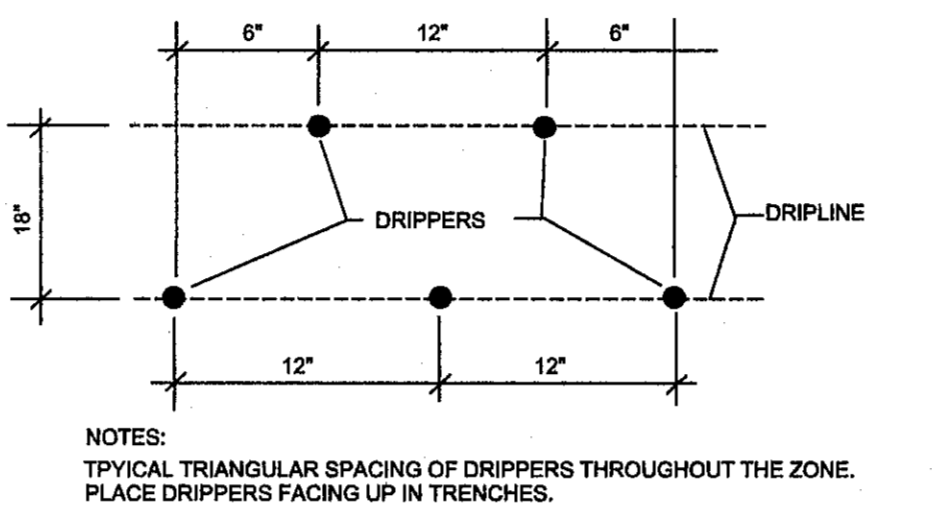
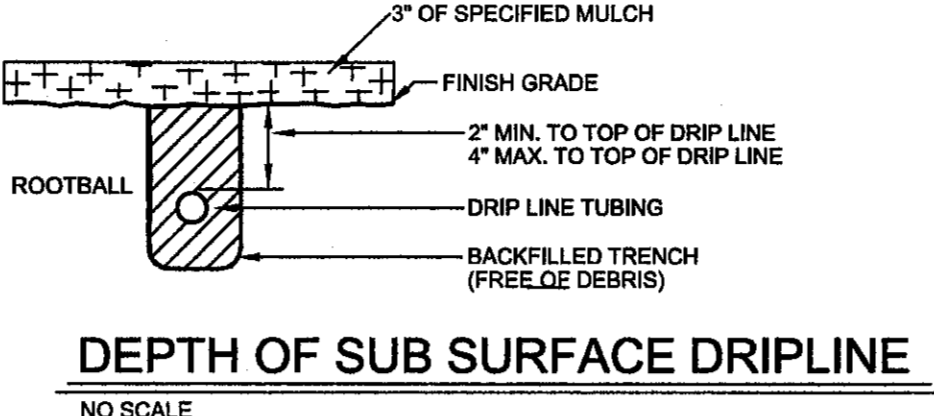
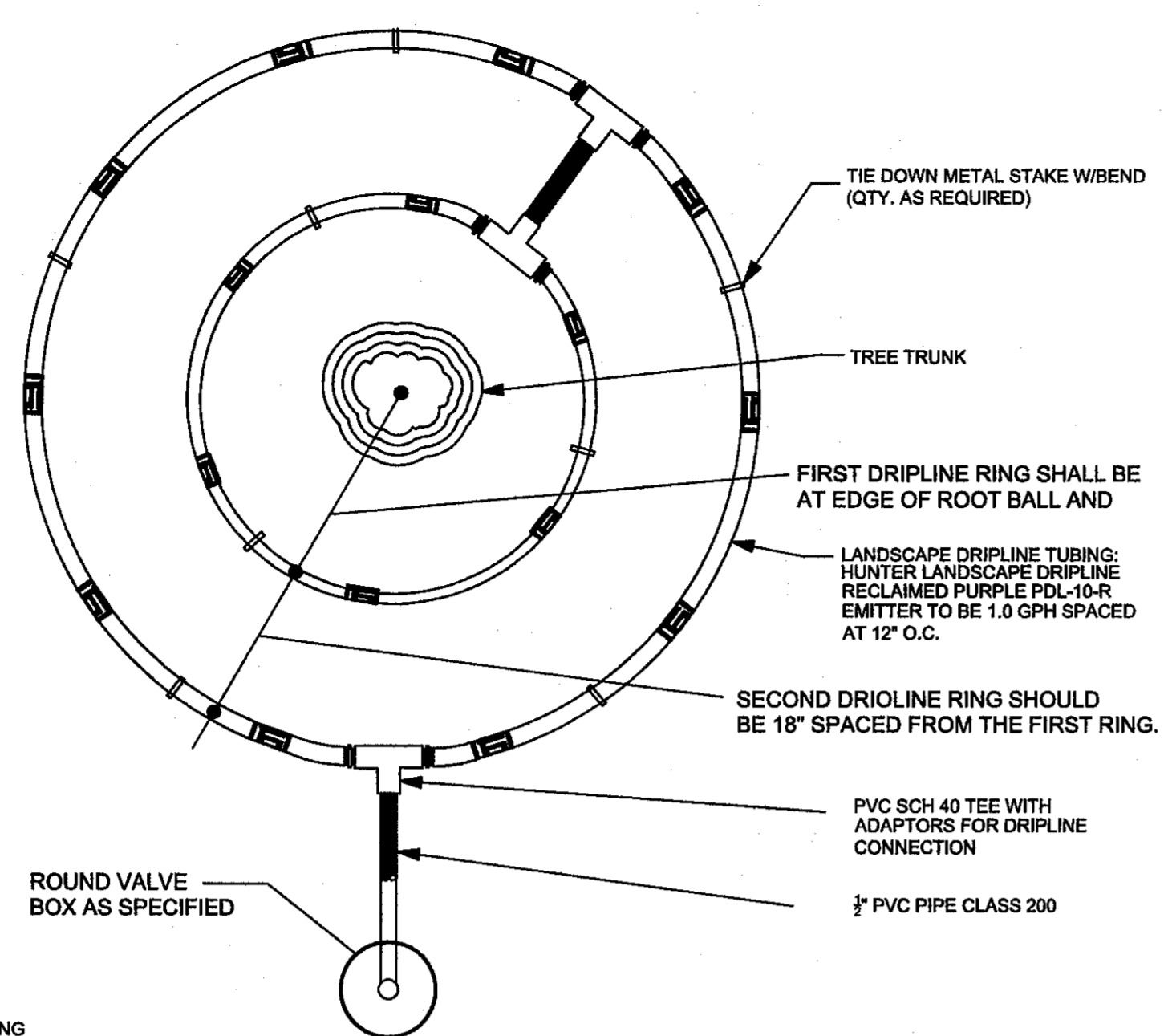


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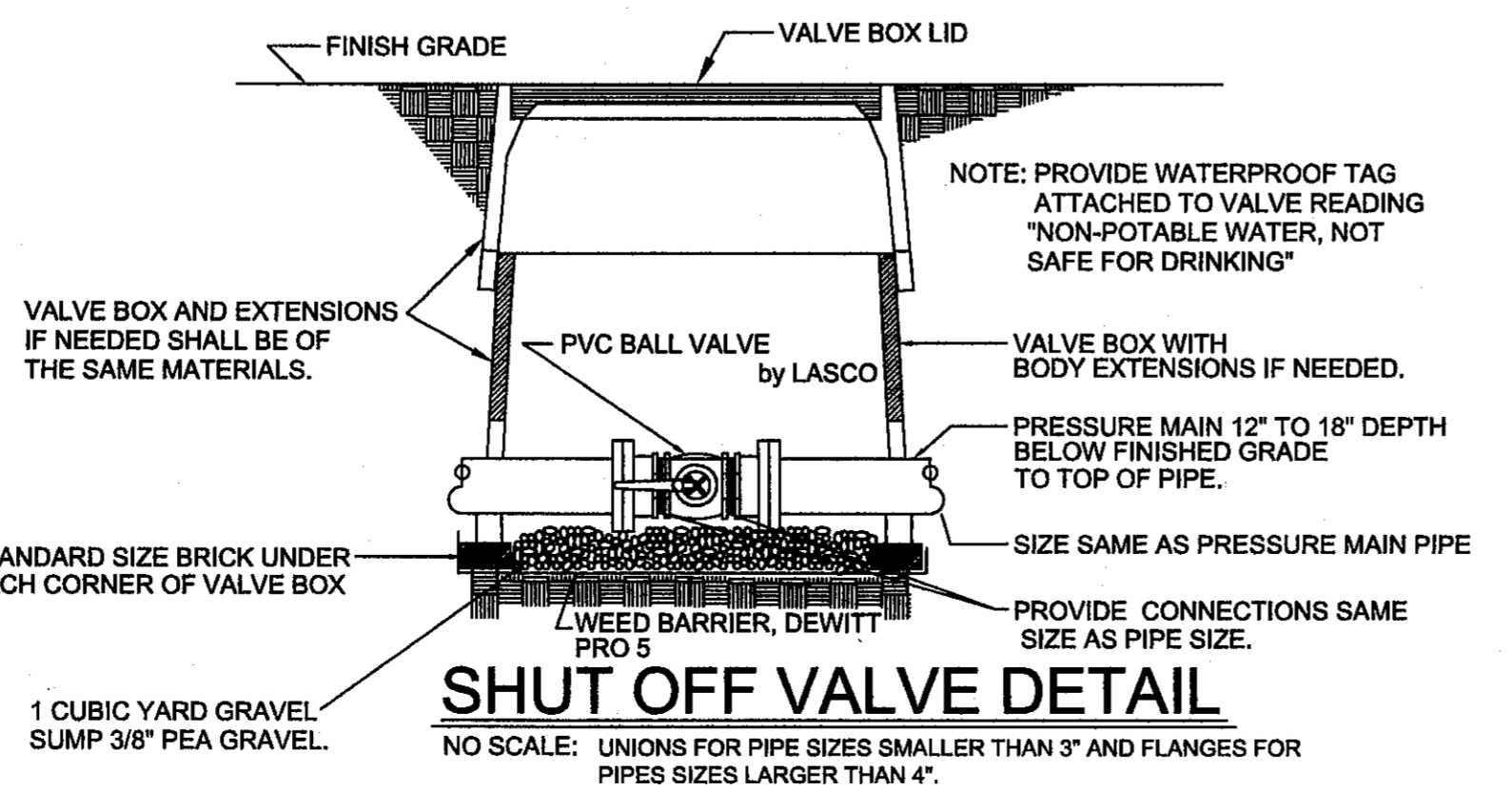
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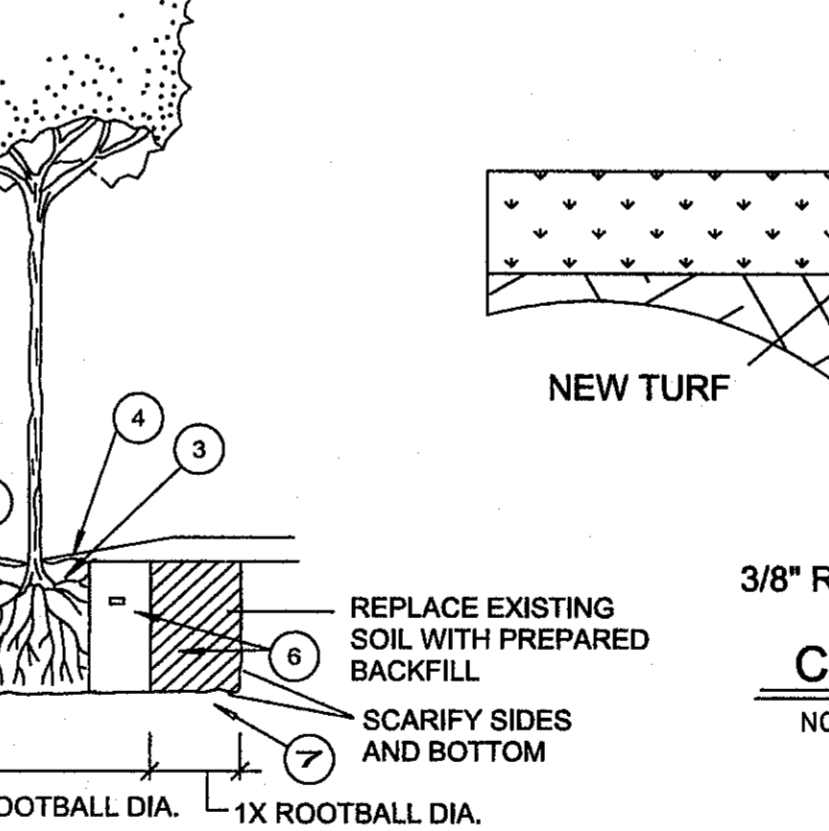
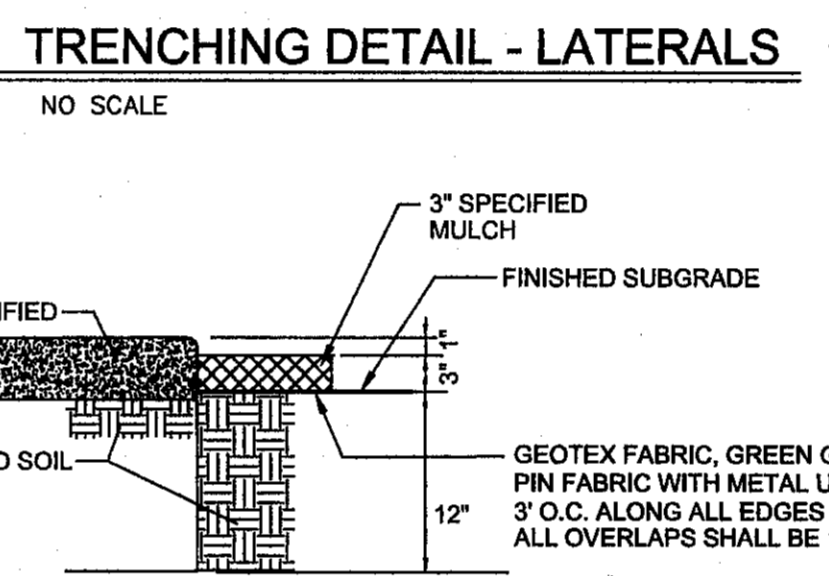
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NOTE:
PLACEMENT OF ACCESS BOX FOR CONNECTION SHALL BE FIVE FEET (5') FROM THE TREE TRUNK ON THE WEST SIDE.



- LEGEND (FOR TREES)**
1. TREE PER PLAN
 2. 21 GRAM PLANT TABLETS
5 GAL = 3, 15 GAL = 5, 24" BOX = 8
 3. ROOTBALL (SET CROWN FLUSH WITH FINISH GRADE)
 4. EARTH WATERING BASIN (COVER WITH 2" DEPTH OF SPECIFIED MULCH ON PLAN OR BARK MULCH FOR TURF AREAS).
 5. FINISH GRADE
 6. COMPACTED BACKFILL MIX WITH SOIL AMENDMENTS AS PER PLANTING SPECIFICATIONS AND NOTES)
 7. UNDISTURBED NATIVE SOIL

STANDARD TREE PLANTING DETAIL
NO SCALE



HEADER CURB NOTES:

1. HEADER CURBS SHALL BE 3,000 PSI CONCRETE STRENGTH.
2. HEADER CURBS HAND POURED AND PLACED SHALL INCLUDE:
 - (a) 2 CONTINUOUS #4 REBARS.
 - (b) WITH 1/2 INCH EXPANSION JOINTS EVERY 20.0 FEET AND CONTROL JOINTS EVERY 5.0 FEET, AND A BROOM FINISH.
3. HEADER CURBS MACHINE INSTALLED SHALL INCLUDE:
 - (a) 2.0 POUNDS OF LONG FIBERGLASS MESH CUBIC YARD.
 - (b) WITH 1/2 INCH EXPANSION JOINTS EVERY 20.0 FEET AND CONTROL JOINTS EVERY 5.0 FEET, AND A BROOM FINISH.

PARKS DEPARTMENT

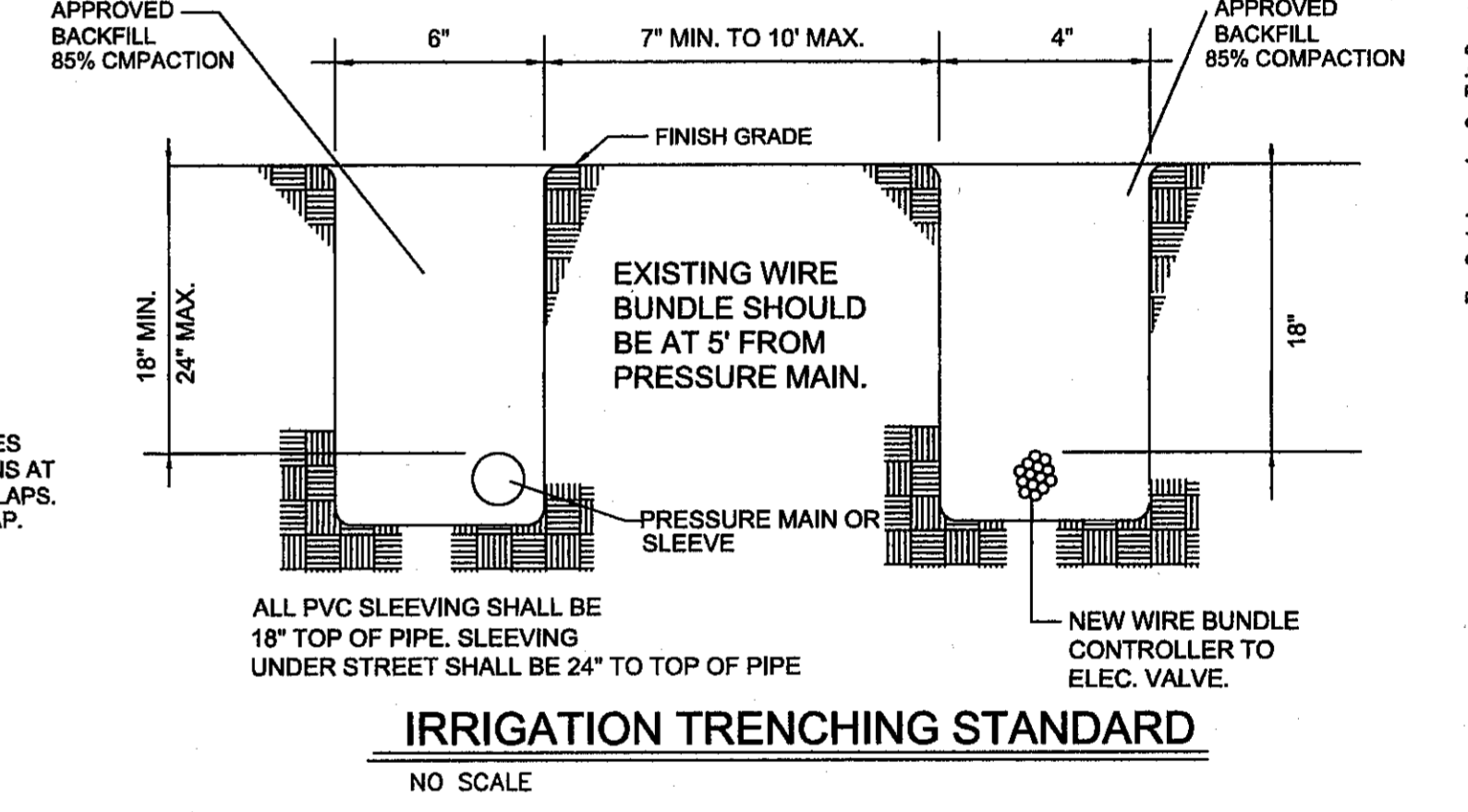
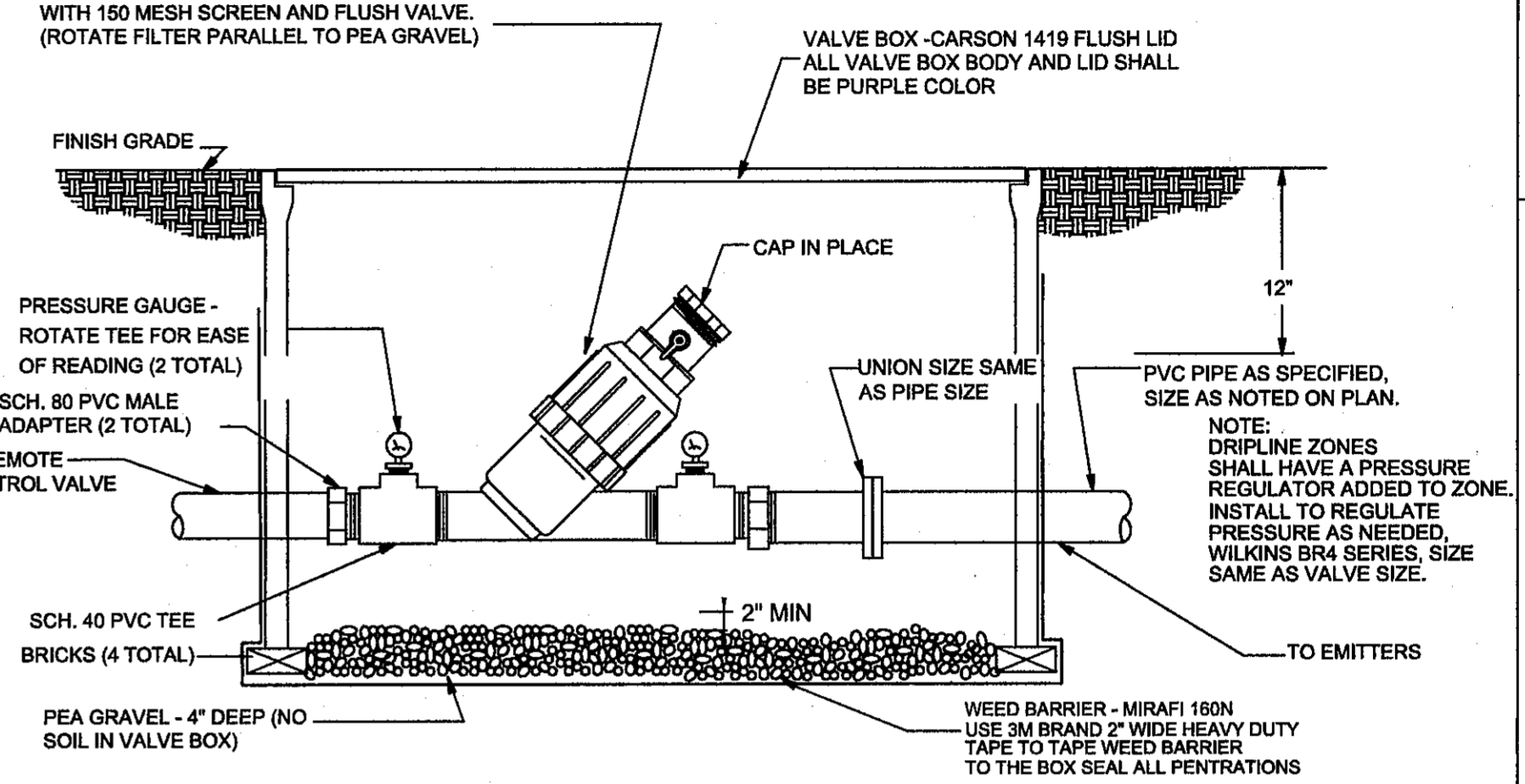
IRrigation IS REGULATED BY: TCEQ
PO BOX 13087
AUSTIN, TEXAS 78711-3087
512 238-6719
CHAPTER 34, TEXAS WATER CODE
IRRIGATOR'S LIC. # 829

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

WARNING ! BEFORE YOU DIG

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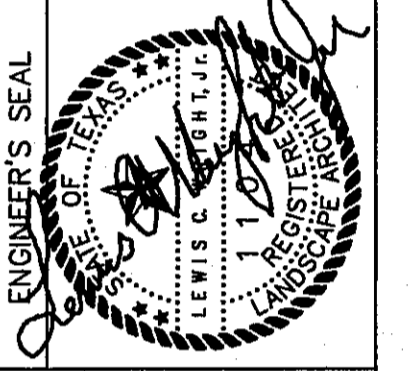
REFERENCES - BENCHMARKS

CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD., SUBPAR 31' E. A DISTANCE OF 467.58 FEET FROM MONUMENT TO POINT OF CURVE CENTERLINE RICH BEEM BLVD. TO POINT OF CURVE CENTERLINE RICH BEEM BLVD. TO POINT OF CURVE CENTERLINE RICH BEEM BLVD.

DATE	REVISIONS

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4712 Woodrow Bean, Ste. F, El Paso, TX 79904
Office: 915.544.5232 Fax: 915.544.5233 www.cogroup.net



SCALE

Horizontal: 1" = 10'

Vertical: 1" = 10'

Contour Interval: 1/4"

DATE: AUGUST 2013

DESIGN BY: LW

DRAWN BY: JC

CHKD. BY: LW

APPVD. BY: L. WRIGHT

JOB NO.: 2250-030-LD

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LANDSCAPE AND IRRIGATION DETAILS

SHEET NO.

L-5.0

DRAWING COORDINATION

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LANDSCAPE ARCHITECTURAL SERVICES

NEW MEXICO
TEXAS
ARIZONA
LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT
4004 KEMP
EL PASO, TX. 79904
PHONE: (915) 422-7739 EMAIL: lwrightias@gmail.com

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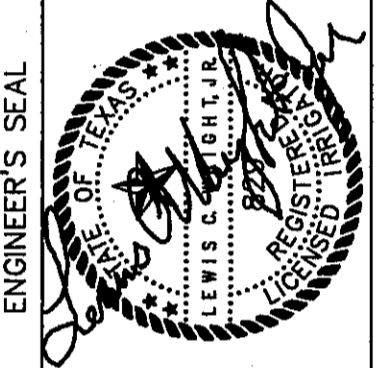
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1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS	DATE	REVISIONS	BY
CITY MONUMENT AT POINT OF CURVE CENTERLINE RICH BEEM BLVD. SUBDIVISION A DISTANCE OF 67.98 FEET FROM 5000' POINT OF BEGINNING OF BENTON AVENUE. CITY DATUM. ELEVATION: 4009.40			

UP
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4564
4712 Woodrow Bean, Ste. F El Paso, TX 79904
Office: 915.542.5232 Fax: 915.542.5233 www.upgroup.net



SCALE	DATE	BY	CHKD.	APP'D.	JOB NO.
Vertical: N/A	AUGUST 2013	JC	JC	L. WRIGHT	22593-030-UD

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TRES SUENOS UNIT TEN
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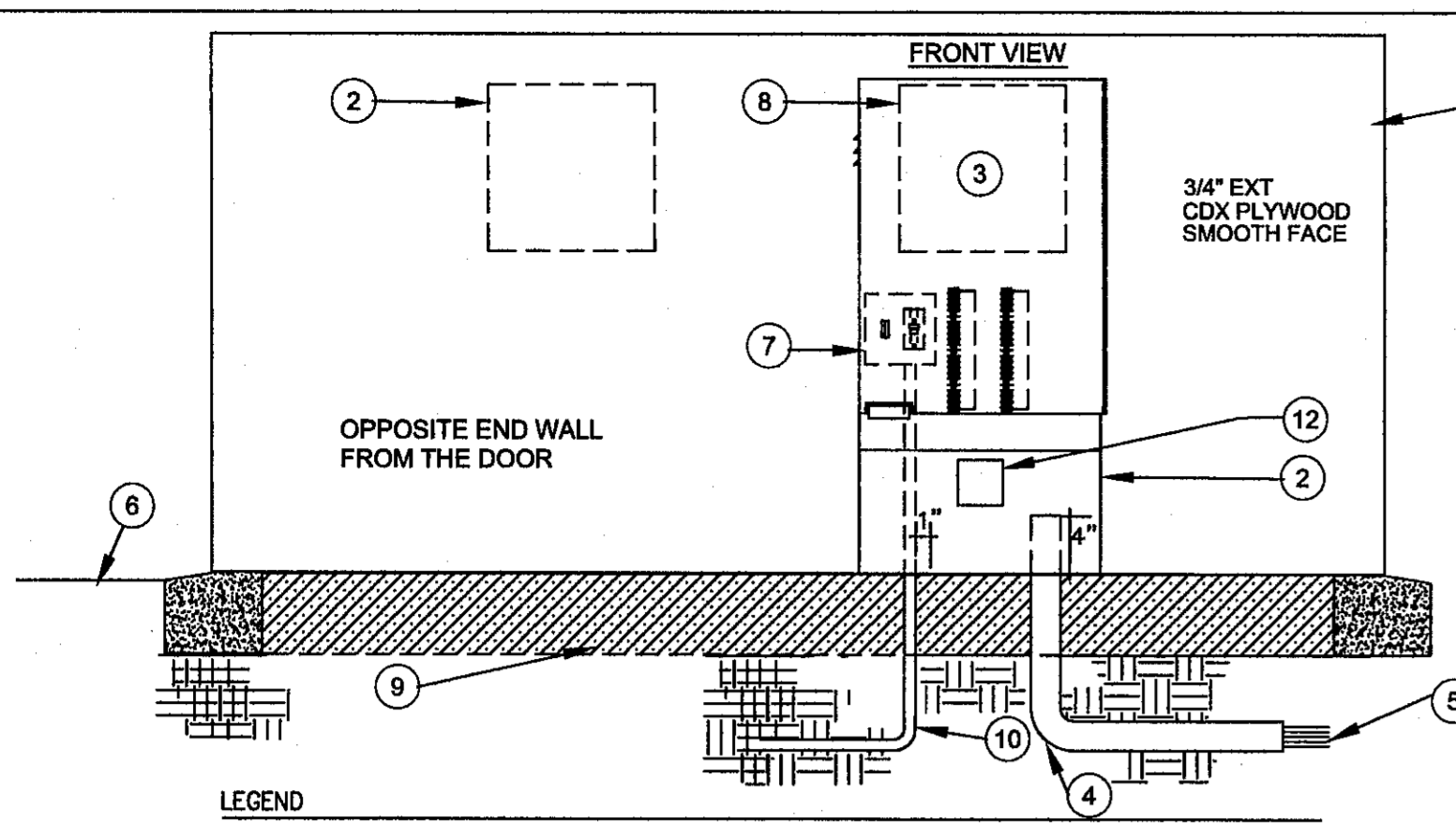
PARKS DEPARTMENT

REVIEWED BY
10/9/13

WIRE CONNECTORS

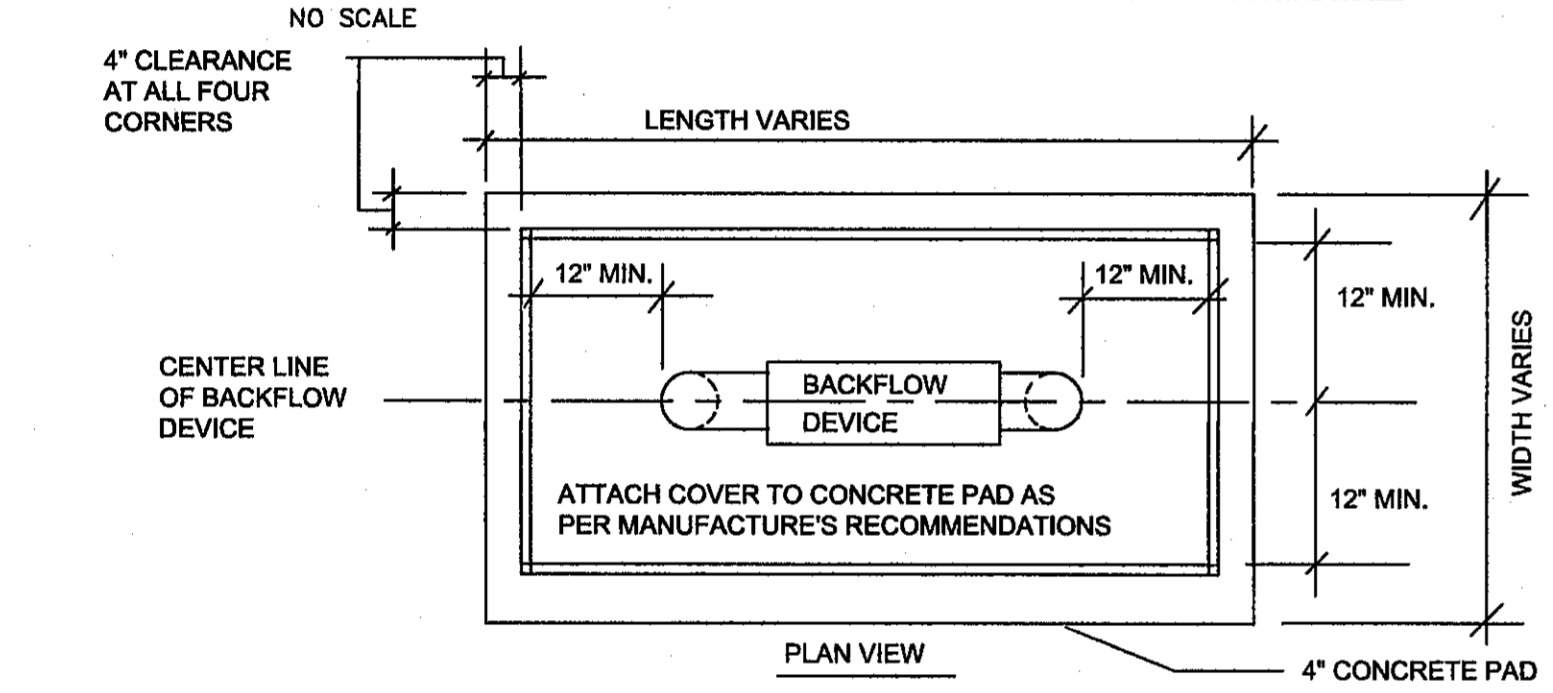
SHEET TITLE
IRRIGATION DETAILS

SHEET NO.
L-6.0

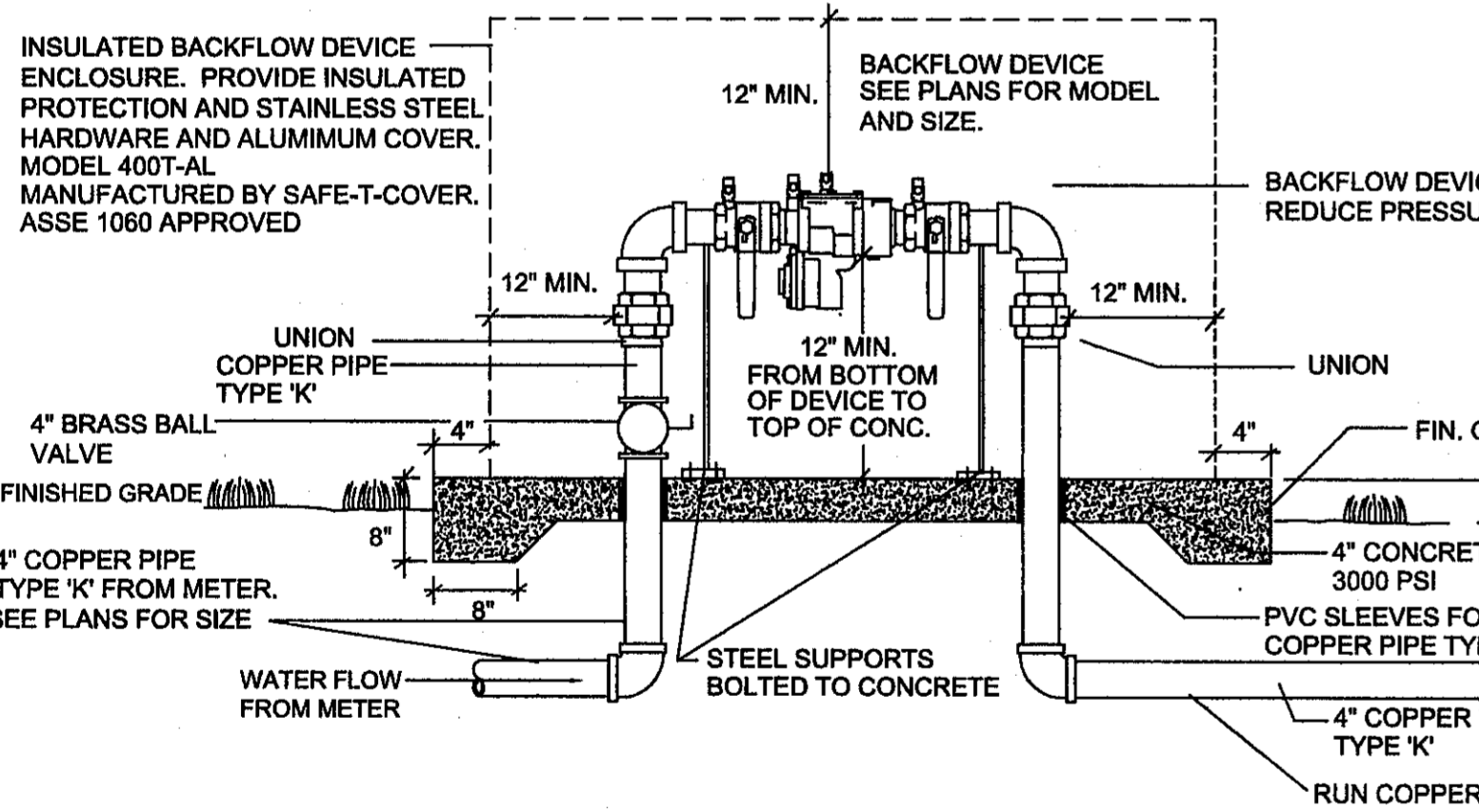


- LEGEND**
- TUFF SHED INTERIOR WALL OF PUMP HOUSE PROVIDE ALL BRACING AS NEEDED TO MOUNT PANELS.
 - PUMP CONTROL PANEL AND BREAKERS
 - EQUIPMENT TO BE LABELED WITH PERMANENT ENGRAVED LABELS OR STAMPED TAGS THAT ARE SECURED TO EQUIPMENT. CONTROLLER, PUMP CONTROLLER, PUMP CONTROL PANEL, CABLES, POWER CORDS, ELECTRICAL PANEL, ETC...
 - PVC LONG SWEEP ELL-USE ONE SWEEP ELL PER CONTROLLER 18" DEEP.
 - DIRECT BURIAL CONTROL WIRES TO CONTROL VALVES. LABEL ALL WIRING AT CONTROLLER, PANELS AND AND AT VALVES WITH WEATHER PROOF TAGS. OR USE DIFFERENT COLOR FOR EA. VALVE WIRE AND PANEL WIRING.
 - FINISH GRADE.
 - CONTROLLER SUB-ASSEMBLY INCLUDES GFI OUTLET AND TOGGLE SWITCH, TERMINAL STRIPS WITH OUTLET, ONE CIRCUIT FULL TIME AND ONE FOR LIGHT MODEL AS-110-A. PROVIDE ELECTRIC CORD TO PLUG CONTROLLER TO OUTLET.
 - AUTOMATIC CONTROLLER, AND CCU WITH POWER CORDS.
 - 3/4" WASHED PEA GRAVEL.
 - 120-VOLT SERVICE IN CONDUIT 36" DEEP.
 - LABEL ALL WIRING COMING INTO THE ENCLOSURE WEATHER PROOF TAGS.
 - PROVIDE METAL ENCLOSURE WITH COVER TO HOUSE THE SURGE ARRESTOR. PROVIDE RAINBIRD MODEL MSP-1 SURGE PROTECTOR.

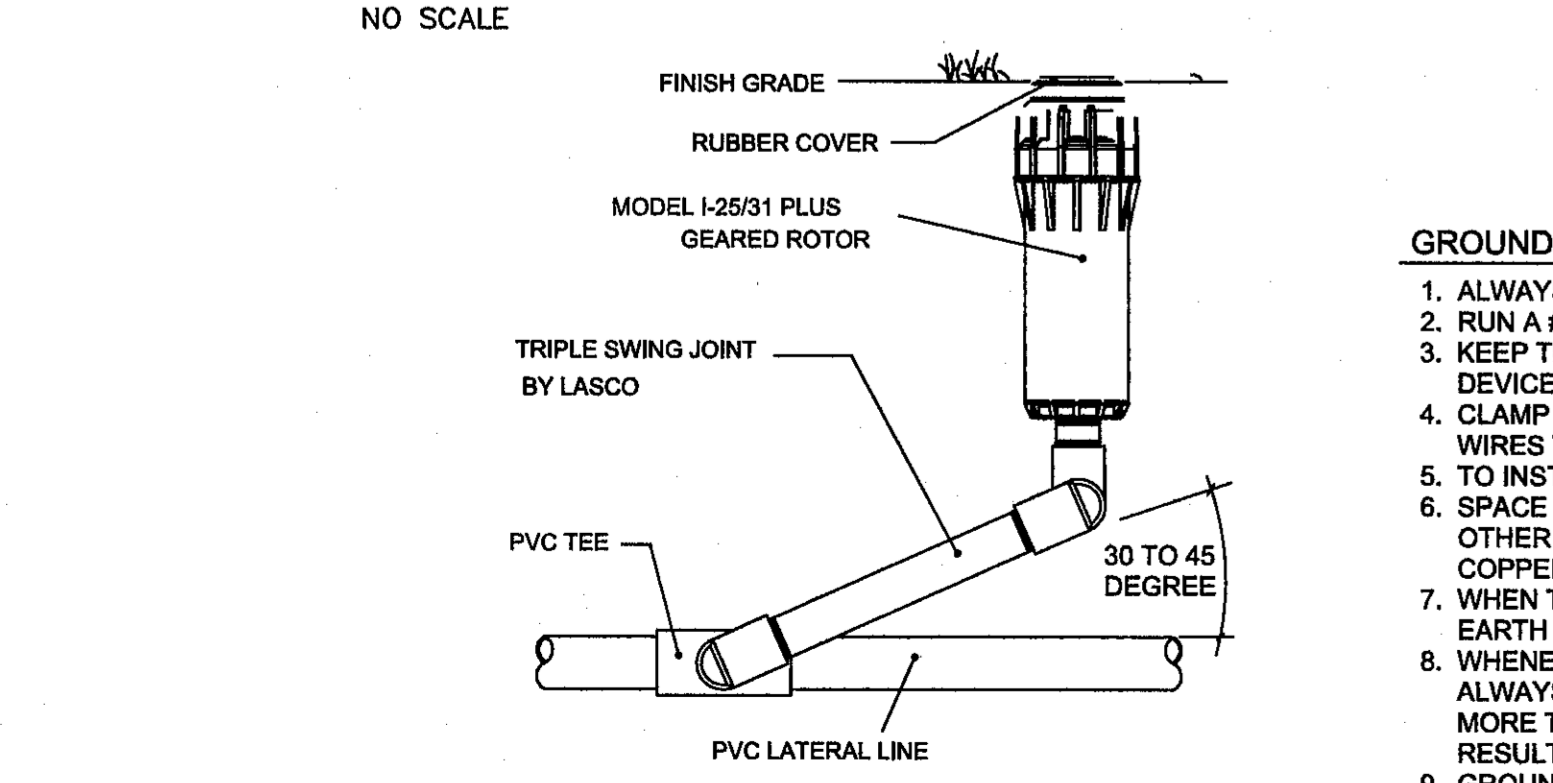
CONTROLLER ENCLOSURE DETAIL



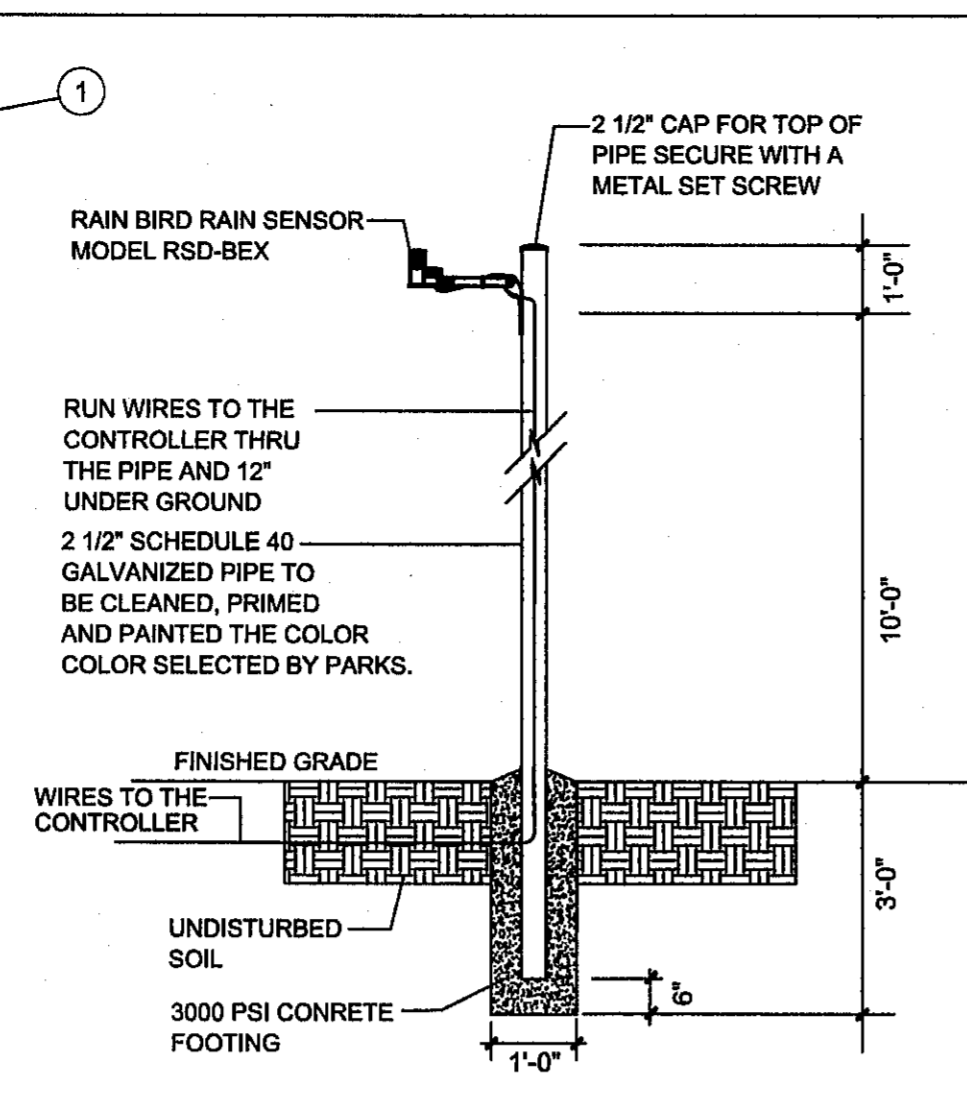
NOTE: ENCLOSURE SHALL HAVE ADDITIONAL INSULATION ADDED TO THE INSIDE LINING TO ACHIEVE AND MEET R VALUE OF 25.



BACKFLOW DEVICE DETAIL

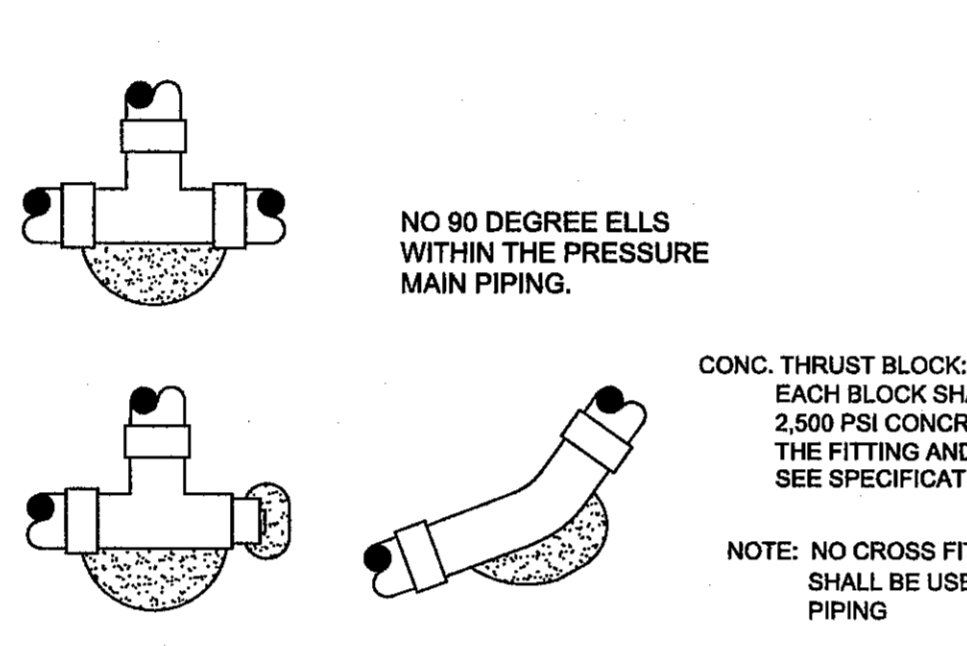


1-25 HUNTER SPRINKLER HEAD



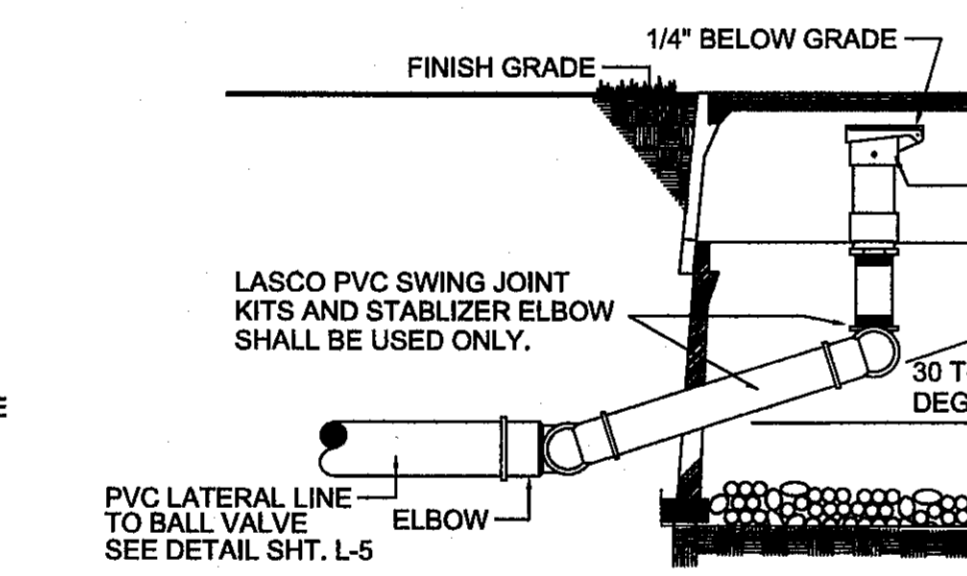
RAIN SENSOR DETAIL

NOTE: INSTALL MINIMUM 7" OF CONTROLLER ENCLOSURE, TUFF SHED OR ROCK WALLS



THRUST BLOCK DETAIL

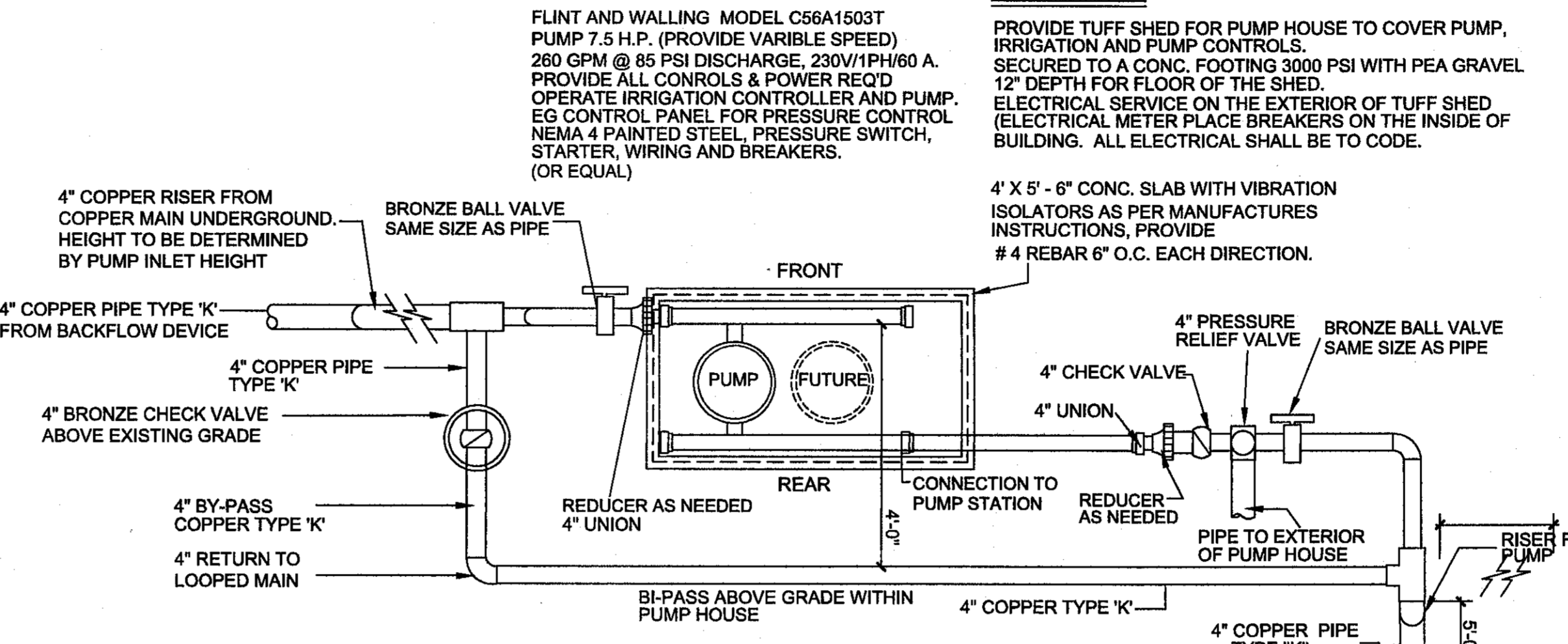
NOTE: 1. INSTALL THRUST BLOCK ON 2 1/2" AND LARGER PVC PIPE. APPLIES TO ALL 45 ELLS AND TEES IN THE PRESSURE MAIN.
2. ALL PVC FITTING SHALL BE MANUFACTURED BY LASCO



QUICK COUPLING DETAIL

NOTE: a. PURPLE COLOR LOCKABLE QUICK COUPLER CAP.
b. PURPLE WEATHER PROOF TAGS THAT READ, "NON-POTABLE WATER, NOT SAFE FOR DRINKING," AND PURPLE COLOR VALVE BOXES.

NOTE: ALL PIPING ABOVE GRADE SHALL BE TYPE 'K' WITH LEAD-FREE SOLDER FITTINGS. SUPPORT PIPE WITH APPROVED PIPE SUPPORT SADDLES AS REQUIRED. ALL PIPING AND EQUIPMENT TO HAVE ADEQUATE WALL CLEARANCE FOR OPERATION AND MAINTENANCE.

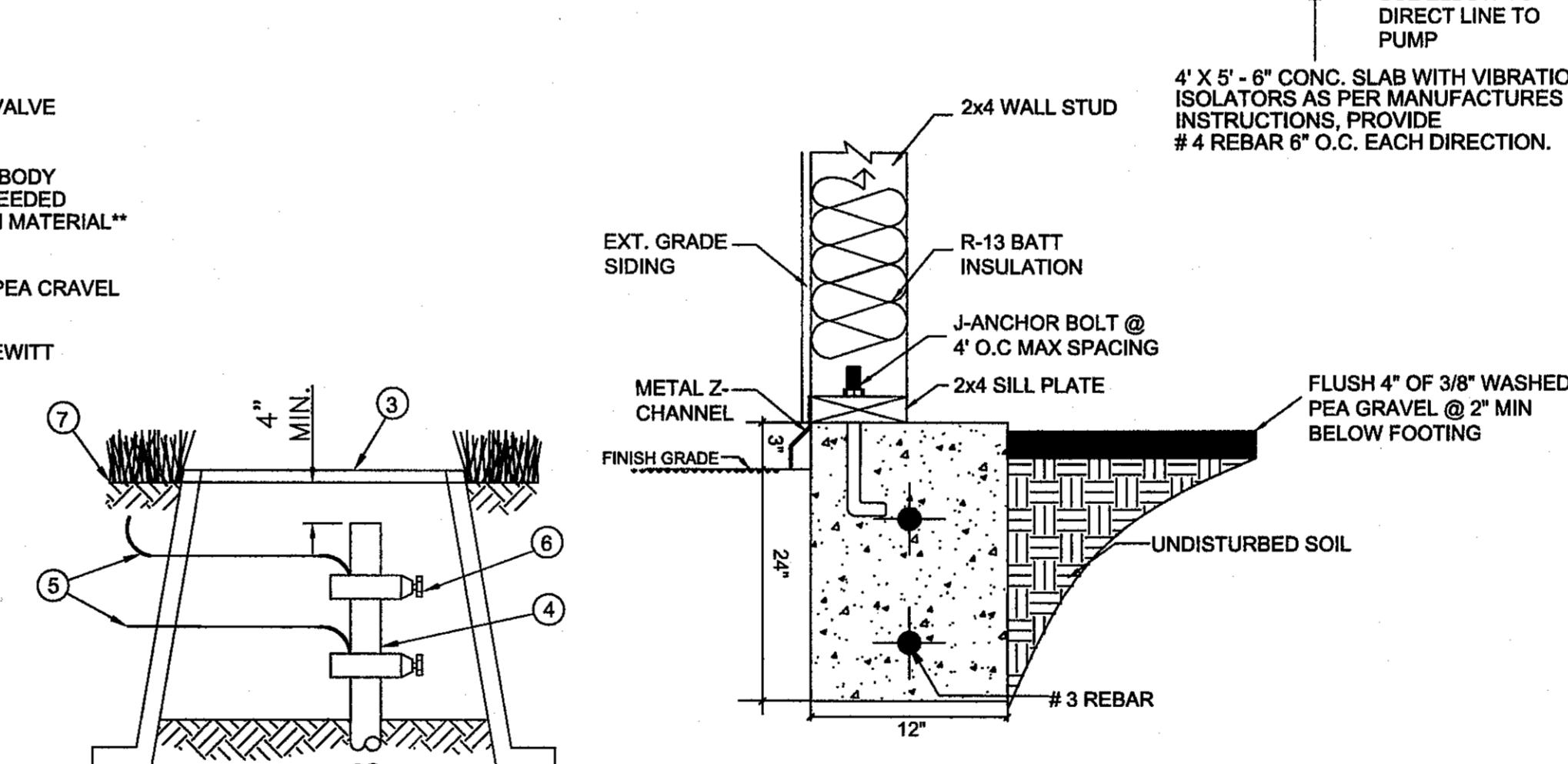


BOOSTER PUMP DETAIL

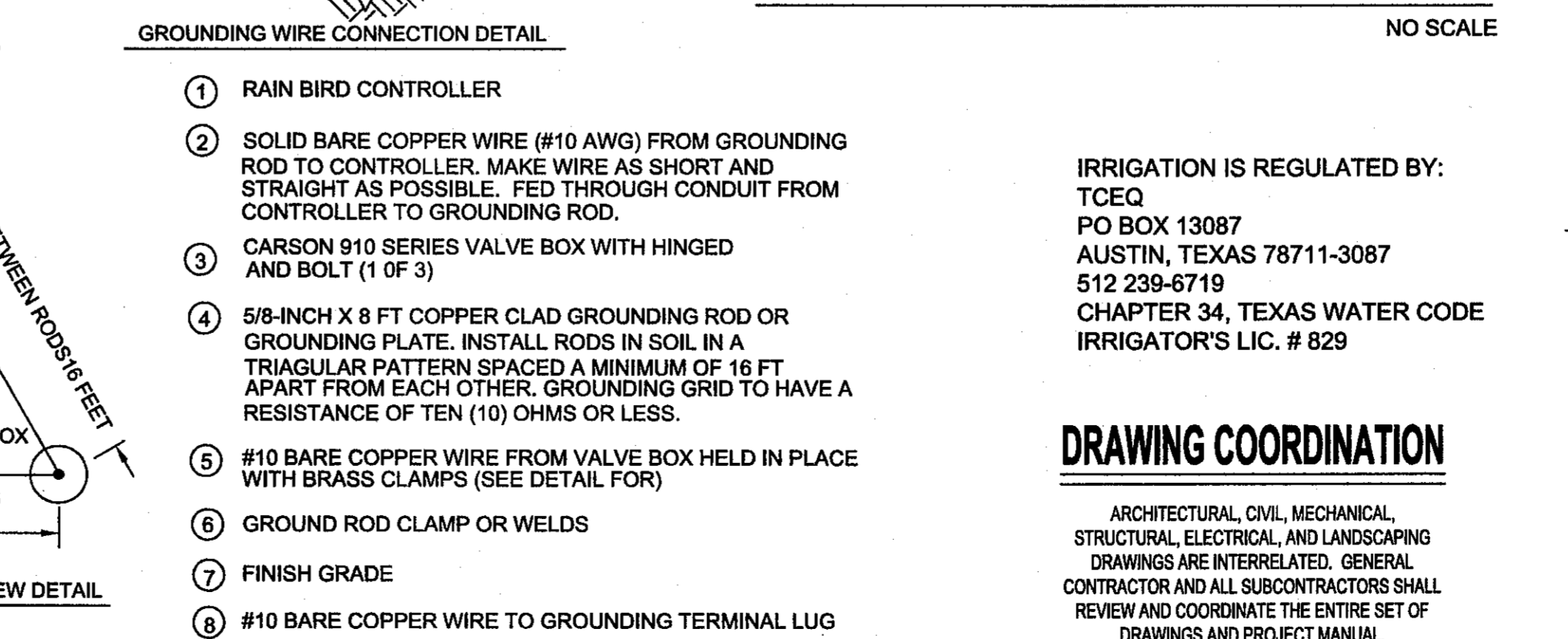
NOTE: ALL ABOVE GROUND COPPER PIPE SHALL BE WRAP WITH PIPE WRAP AND SEAL PENETRATIONS OF WATER

NOTES FOR BOOSTER PUMP AND ALL PIPING.

- PRESSURE RELIEF VALVE 4" BRONZE BODY WITH PRESSURE SET AT 125 PSI FEMALE INLET & OUTLET WATTS MODEL No. 174A OR APPROVED EQUAL.
- PRESSURE GAUGE; STAINLESS STEEL CASE BRONZE BOURDON TUBE AND BRASS SOCKET, DRY CONSTRUCTION CALIBRATED 0 TO 200 PSI. MARSHALL TOWN MODEL No 185 OR APPROVED EQUAL.
- CHECK VALVE: IRON BODIED SWINK CHECK VALVE, 4", RATED 200 PSI AMERICAN VALVE MFG. MODEL No WOG OR APPROVED EQUAL.
- VIBRATION ISOLATORS: STEEL OR CAST IRON HOUSINGS INCORPORATING ONE OR MORE STEEL BUILT-IN SPRINGS AND SHALL BE PROVIDED WITH BUILT-IN LEVELING BOLTS AND BUILT-IN RESILIENT CHOCKS TO CONTROL OSCILLATIONS AND WITHSTAND LATERAL FORCES IN ALL DIRECTIONS. KORFUND SERIES L OR APPROVED EQUAL INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS
- PIPE SUPPORTS: TO REST ON CONCRETE PAD WITH RUBBER ISOLATORS UNDER VALVES, PRESSURE RELIEF, T-FITTINGS AND ELBOWS
- CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT, SENSORS, WIRING, RELAYS, CONNECTORS, ETC. TO ALLOW BOTH PUMPS TO OPERATE ON PRESSURE DEMAND.
- CONCRETE PAD FOR BOOSTER PUMP AND RELATED PLUMBING SUPPORTS SHALL MOUNTED ON A CONCRETE PAD. CONCRETE PADS SHALL BE MINIMUM 2" AND MAXIMUM 4" ABOVE PUMP HOUSE FOOTING ELEVATION.



PUMP HOUSE FOOTING



GROUND ROD DETAIL

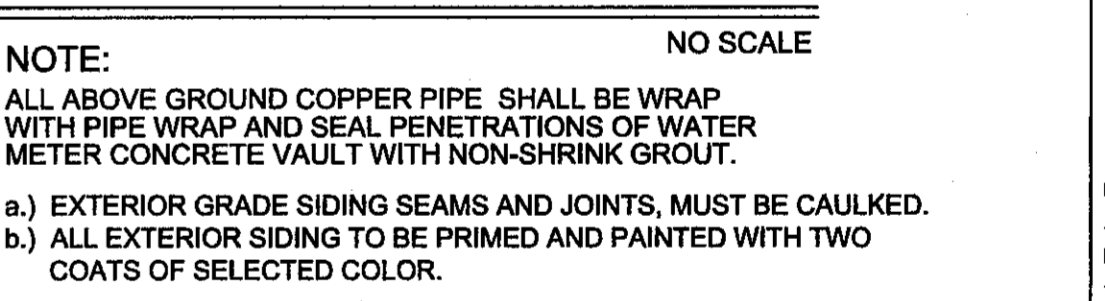
- RAIN BIRD CONTROLLER
- SOLID BARE COPPER WIRE (#10 AWG) FROM GROUNDING ROD TO CONTROLLER. MAKE WIRE AS SHORT AND STRAIGHT AS POSSIBLE. FED THROUGH CONDUIT FROM CONTROLLER TO GROUNDING ROD.
- CARSON 910 SERIES VALVE BOX WITH HINGED AND BOLT (1 OF 3)
- 5/8-INCH X 8 FT COPPER CLAD GROUNDING ROD OR GROUNDING PLATE. INSTALL RODS IN SOIL IN A TRIANGULAR PATTERN SPACED A MINIMUM OF 16 FT APART FROM EACH OTHER. GROUNDING GRID TO HAVE A RESISTANCE OF TEN (10) OHMS OR LESS.
- #10 BARE COPPER WIRE FROM VALVE BOX HELD IN PLACE WITH BRASS CLAMPS (SEE DETAIL FOR)
- GROUND ROD CLAMP OR WELDS
- FINISH GRADE
- #10 BARE COPPER WIRE TO GROUNDING TERMINAL LUG

DRAWING COORDINATION

IRRIGATION IS REGULATED BY:
TCEQ
PO BOX 13087
AUSTIN, TEXAS 78711-3087
512 239-6719
CHAPTER 34, TEXAS WATER CODE
IRRIGATOR'S LIC. # 829

ARCHITECTURAL, CIVIL, MECHANICAL, STRUCTURAL, ELECTRICAL AND LANDSCAPING DRAWINGS ARE INTERRELATED. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW AND COORDINATE THE ENTIRE SET OF DRAWINGS AND PROJECT MANUAL.

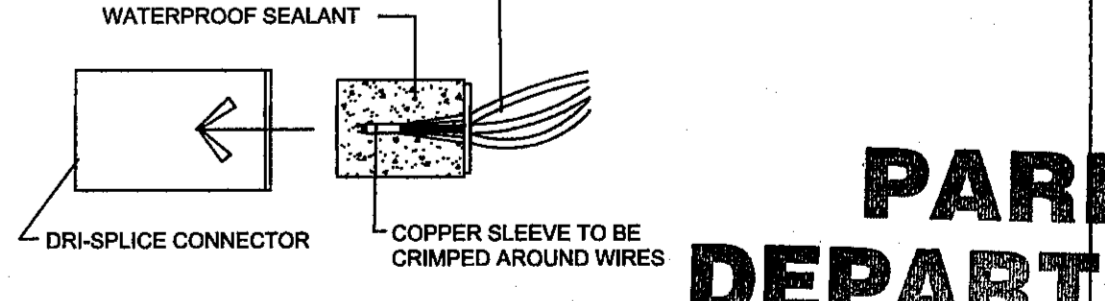
PUMP HOUSE PLAN



NOTE: ALL ABOVE GROUND COPPER PIPE SHALL BE WRAP WITH PIPE WRAP AND SEAL PENETRATIONS OF WATER METER CONCRETE VAULT WITH NON-SHRINK GROUT.

- EXTERIOR GRADE SIDING SEAMS AND JOINTS, MUST BE CAULKED.
- ALL EXTERIOR SIDING TO BE PRIMED AND PAINTED WITH TWO COATS OF SELECTED COLOR.

INSULATION FOR PUMP HOUSE
WALL- R-13
CEILING- R-19



WIRE CONNECTORS

NO SCALE

LANDSCAPE ARCHITECTURAL SERVICES
LANDSCAPE ARCHITECT & IRRIGATION CONSULTANT
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PHONE: (915) 422-7739 FAX: (915) 581-6730
EMAIL: lwrighttas@gmail.com

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