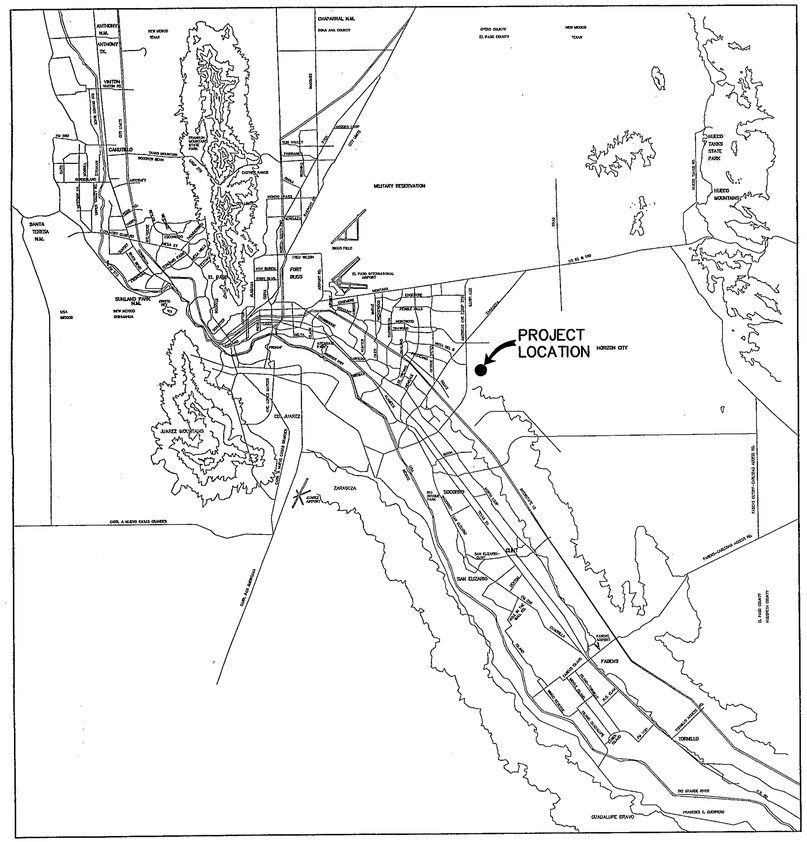
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS



VICINITY MAP
APPROXIMATE SCALE:
1" = 2 MILES

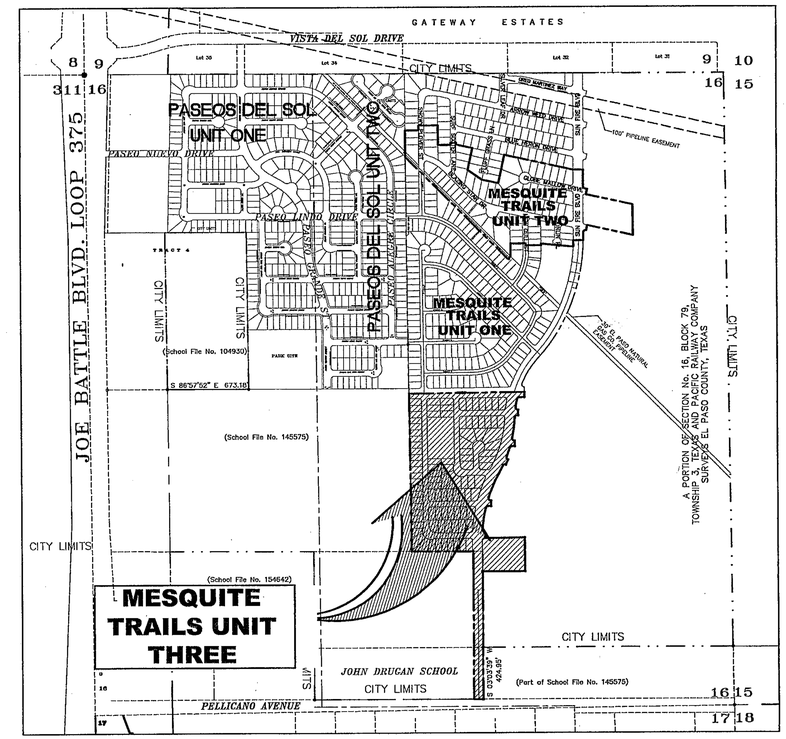
SHEET NUMBER	SHEET TITLE
CVR,1	COVER SHEET, GENERAL INFORMATION
2	PLAT
3	GRADING PLAN
4	DRAINAGE PLAN
5-7	GRADING SECTIONS
8-15	STREET PLAN & PROFILES
16-19	STORM DRAIN PLAN & PROFILES
20-22	STANDARD DETAILS
23 & 24	DRAINAGE DETAILS
25	ILLUMINATION PLAN
26 & 27	POND DESIGN PLANS 1 & 2
28-30	STORM WATER POLLUTION CONTROL PLANS

STATE OF TEXAS
JORGE L. AZCARATE
85075
LICENSED
PROFESSIONAL ENGINEER

6/15/07

6/15/07
JORGE L. AZCARATE, P.E. PROJECT MANAGER

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 7990 2
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net



LOCATION MAP
APPROXIMATE SCALE: 1" = 600'

DEVELOPMENT SERVICES DEPARTMENT
SITE PLAN REVIEW
Reviewed For Conformance For Conditions Related To:

- Demolition Only
- Grading & Drainage
- Wheelchair Ramps
- On Site Parking Layout
- Sidewalks
- Driveways
- Retaining Rock Walls
- On-Site Ponding of Storm Waters

Contractor Must Call 24 Hours Prior To Construction For
BY DATE 7/3/2007

RECEIVED
JUN 28 2007
LAND DEVELOPMENT

PRINCIPAL CONTACTS:

	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	CAREFREE LAND LTD.	1560 GOODYEAR LTD.	EL PASO, 79936	(915) 590-8511	(915) 591-3813
ENGINEER:	CEA ENGINEERING GROUP	1204 MONTANA AVE.	EL PASO, 79902	(915) 544-5232	(915) 544-5233
SURVEYOR:	BARRAGAN & ASSOCIATES	1450 PENDALE ROAD SUITE B	EL PASO, 79936	(915) 591-5709	(915) 591-5706

MESQUITE TRAILS UNIT THREE
COVER SHEET

DATE PREPARED	DRAWN BY:	DESIGN BY:	CHECKED BY:	APPROVED BY:
MAY 2007	F.Z	F.Z	J.L.A.	J.L.A.
REVISION NUMBER	SHEET NAME OR NUMBER	DESCRIPTION OF REVISION	DATE OF REVISION	REVISION APPROVED BY:

103025

MAY 2007

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.
10. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THE PROJECT.
11. THE LOCATION OF THE INLETS SHALL BE AT THE FIELD LOW POINT AND APPROVED BY THE ENGINEER.

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)
- FINISHED GROUND CONTOUR ELEVATION (INTERMEDIATE)
- 4000 — EXISTING GROUND CONTOUR ELEVATION (INDEX)
- EXISTING GROUND CONTOUR ELEVATION (INTERMEDIATE)
- NEW RETAINING ROCKWALL (2'–3' IN HEIGHT)
- NEW RETAINING ROCKWALL (3'–9' IN HEIGHT)
- X / X — STANDARD DETAIL/SECTION NUMBER; 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

GRADING SPECIFICATIONS

1. CLEARING AND GRUBBING: CLEAR SITE OF TREES, SHRUBS AND OTHER VEGETATION; COMPLETELY REMOVE STUMPS, ROOTS AND OTHER DEBRIS PROTUDING THROUGH GROUND SURFACE; FILL DEPPRESIONS 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 NECCESSARY TO FACILITATE NEW CONSTRUCTION. BURNING IS NOT PERMITED 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, SM, 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, M.U.D. ENGINEER OR COUNTY 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 MATERIAL, OBSTRUCTIONS, 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
HFL	HYDRAULIC GRADE LINE
HWE	HIGH WATER ELEVATION

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
STREET DEPT. – SIGNAL & SIGN	(915) 621–6750
(AFTER HOURS)	(915) 240–3220

WARNING ! BEFORE YOU DIG

CALL
1–800–DIG–TESS
1–800–344–8377
FOR FIELD LOCATING EXISTING UTILITIES

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REFERENCES – BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
1206A Montana Ave., El Paso, Texas 79902
Office 915.544.0232 Fax 915.544.0233
www.ceagroup.net

ENGINEER'S SEAL

JORGE L. AZCARATE 85075 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS

9/5/17

SCALE	N/A
Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	MAY 2007
DESIGN BY:	F.Z.
DRAWN BY:	A.B.
CHKD. BY:	J.L.A.
APP'VD. BY:	J.L.A.
JOB No.	2250–012–D

PROJECT TITLE

MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE

GENERAL INFORMATION

SHEET NO.

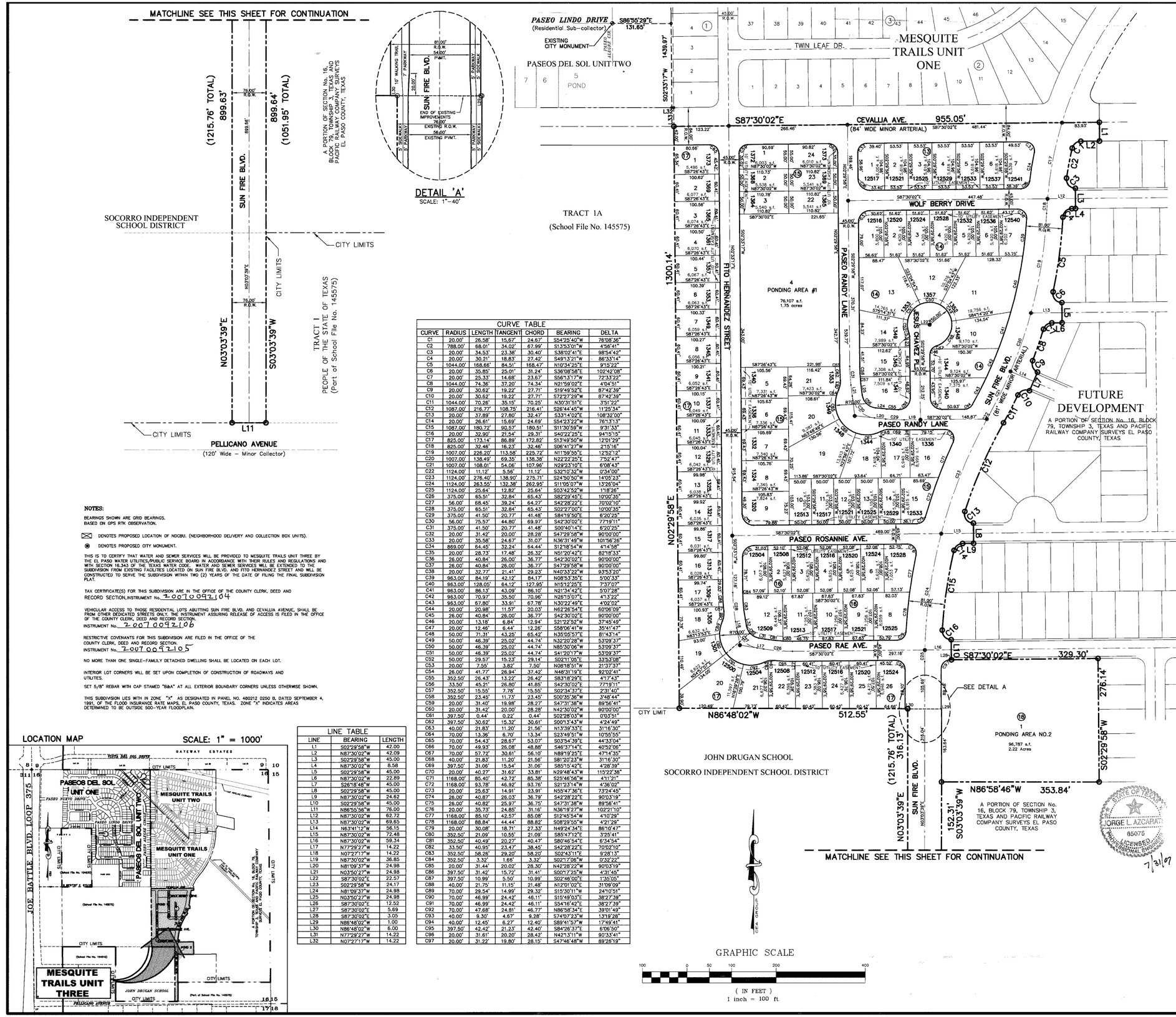
1

OF 30

103025

MESQUITE TRAILS UNIT THREE

BEING A PORTION OF
SECTION No. 16, BLOCK 79, TOWNSHIP 3,
TEXAS AND PACIFIC RAILWAY COMPANY SURVEYS
CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING 26.647± ACRES



DEDICATION

Americas Loop 375 Joint Venture, L.P. and Socorro Independent School District the owners of this land, do hereby present this map and dedicate their respective portions of property to the use of the public, the street, drives, ponding areas, and utility easements as hereon laid down and designated, including easements for overhang of service wires for pole type utilities and the right for installation of service poles alongside lot lines as may be required, easements for buried service wires, conduits and pipes for underground utilities, and the right to ingress and egress for service and construction, and the right to trim interfering trees and shrubs.

Witness my signature this 6th day of August 2007.

FRANK ARROYS, Managing Partner
Americas Loop 375 Joint Venture, L.P.

THOMAS EYEINGTON, Director Facilities
Socorro Independent School District

ACKNOWLEDGEMENT

STATE OF TEXAS
COUNTY OF EL PASO

Before me, the undersigned authority, on this day personally appeared Frank Arroyos, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed for the purpose and consideration herein expressed.

Given under my hand and seal of office this 6th day of August 2007.

Notary Public in and for El Paso County — My Commission Expires January 8, 2011

MICHELLE SIQUEIROS
My Commission Expires
January 8, 2011

STATE OF TEXAS
COUNTY OF EL PASO

Before me, the undersigned authority, on this day personally appeared Thomas Eyeington, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed for the purpose and consideration herein expressed.

Given under my hand and seal of office this 27th day of August 2007.

Notary Public in and for El Paso County — My Commission Expires January 8, 2011

MICHELLE SIQUEIROS
My Commission Expires
January 8, 2011

CITY PLANNING 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 ____ day of ____, 200__.

Chairman — Secretary

Approved for filing this 5th day of September 2007.

Development Services Director

FILING

Filed and recorded in the office of the County Clerk of El Paso County, Texas, this 26 day of September 2007, in File No. 20070092103 of the Plat Records.

County Clerk — Sandra Acevedo, by Deputy

Subdivision improvement plans prepared by and under the supervision of CEA Engineering Group.

JORGE L. AZCARATE, P.E.
Licensed Professional Engineer
Texas License No. 85075

STATE OF TEXAS — JORGE L. AZCARATE — 85075 — LICENSED PROFESSIONAL ENGINEER — 7/31/07

This plat represents a survey made on the ground by me or under my supervision and complies with the current Texas Board of Professional Land Surveying Professional and Technical Standards.

Benito Barragan, R.P.L.S. Texas, No. 5615 — 8/1/07

STATE OF TEXAS — BENITO BARRAGAN — 5615 — REGISTERED PROFESSIONAL LAND SURVEYOR

LOCATION MAP

SCALE: 1" = 1000'

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	20.00'	26.58'	15.67'	24.67'	S54°25'40"W	76°08'36"
C2	788.00'	68.01'	34.02'	67.99'	S13°53'01"W	4°56'41"
C3	20.00'	34.53'	23.38'	30.40'	S38°02'41"E	98°54'42"
C4	20.00'	30.21'	18.83'	27.42'	S49°13'21"W	86°33'14"
C5	1044.00'	168.66'	84.51'	168.47'	N10°34'23"E	9°15'22"
C6	20.00'	35.85'	25.01'	31.24'	S36°08'58"E	102°42'08"
C7	20.00'	25.33'	14.68'	23.67'	S56°31'17"W	72°33'22"
C8	1044.00'	74.36'	37.20'	74.34'	N21°59'02"E	4°04'51"
C9	20.00'	30.62'	19.22'	27.71'	S19°49'52"E	87°42'39"
C10	20.00'	30.62'	19.22'	27.71'	S72°27'29"W	87°42'39"
C11	1044.00'	70.26'	35.15'	70.25'	N30°31'51"E	3°51'22"
C12	1087.00'	216.77'	108.75'	216.41'	S26°44'45"W	11°25'34"
C13	20.00'	37.89'	27.80'	32.47'	S33°14'02"E	108°32'00"
C14	20.00'	26.61'	15.69'	24.69'	S54°23'22"W	76°13'13"
C15	1087.00'	180.72'	90.57'	180.51'	S11°30'59"W	9°31'33"
C16	20.00'	32.90'	21.54'	29.31'	S40°22'25"E	94°15'15"
C17	825.00'	173.14'	86.89'	172.82'	S13°49'50"W	12°01'29"
C18	825.00'	32.46'	16.23'	32.46'	S06°41'27"W	2°15'16"
C19	1007.00'	226.20'	113.58'	225.72'	N11°59'55"E	12°52'12"
C20	1007.00'	138.49'	69.35'	138.38'	N22°22'25"E	7°52'47"
C21	1007.00'	108.01'	54.06'	107.96'	N29°23'10"E	6°08'43"
C22	1124.00'	11.12'	5.56'	11.12'	S32°10'32"W	0°34'00"
C23	1124.00'	276.40'	138.90'	275.71'	S24°50'50"W	14°05'23"
C24	1124.00'	263.55'	132.38'	262.95'	S11°05'07"W	13°26'04"
C25	1124.00'	25.64'	12.82'	25.64'	S03°42'52"E	1°18'26"
C26	375.00'	65.51'	32.84'	65.43'	S82°29'45"E	10°00'35"
C27	56.00'	68.45'	39.24'	64.27'	S42°28'22"E	70°02'10"
C28	375.00'	65.51'	32.84'	65.43'	S02°27'00"E	10°00'35"
C29	375.00'	41.50'	20.77'	41.48'	S84°19'50"E	6°20'25"
C30	56.00'	75.57'	44.80'	69.97'	S42°30'02"E	77°19'11"
C31	375.00'	41.50'	20.77'	41.48'	S00°40'14"E	6°20'25"
C32	20.00'	31.42'	20.00'	28.28'	S47°29'58"W	90°00'00"
C33	20.00'	35.58'	24.67'	31.07'	N36°31'49"W	101°56'26"
C34	869.00'	64.45'	32.24'	64.44'	S12°18'54"W	4°14'58"
C35	20.00'	28.73'	17.48'	26.32'	N51°20'42"E	82°18'33"
C36	28.00'	40.84'	26.00'	36.77'	S42°30'02"E	90°00'00"
C37	26.00'	40.84'	26.00'	36.77'	S47°29'58"W	90°00'00"
C38	20.00'	32.77'	21.41'	29.23'	N40°33'22"W	93°53'20"
C39	983.00'	84.19'	42.12'	84.17'	N08°53'35"E	5°00'33"
C40	983.00'	128.05'	64.12'	127.95'	N15°12'25"E	7°37'07"
C41	983.00'	86.13'	43.09'	86.10'	N21°34'42"E	5°07'28"
C42	983.00'	70.97'	35.50'	70.96'	N26°15'07"E	4°13'22"
C43	983.00'	67.80'	33.91'	67.78'	N30°22'49"E	4°02'02"
C44	20.00'	20.98'	11.57'	20.03'	N62°26'54"E	60°06'09"
C45	26.00'	40.84'	26.00'	36.77'	S42°30'02"E	90°00'00"
C46	20.00'	13.18'	6.84'	12.94'	S21°22'52"W	37°45'49"
C47	20.00'	12.46'	6.44'	12.26'	S58°06'41"W	35°41'47"
C48	50.00'	71.31'	43.25'	65.42'	N35°05'57"E	81°43'14"
C49	50.00'	46.39'	25.02'	44.74'	N32°20'28"W	53°09'37"
C50	50.00'	46.39'	25.02'	44.74'	N85°30'06"W	53°09'37"
C51	50.00'	46.39'	25.02'	44.74'	S41°20'17"W	53°09'37"
C52	50.00'	29.57'	15.23'	29.14'	S02°11'05"E	33°53'08"
C53	20.00'	7.55'	3.82'	7.50'	N08°18'51"W	21°37'37"
C54	28.00'	41.77'	28.94'	37.42'	N48°31'19"E	92°02'41"
C55	352.50'	26.43'	13.22'	26.42'	S83°18'29"E	4°17'43"
C56	33.50'	45.21'	26.80'	41.85'	S42°30'02"E	77°19'11"
C57	352.50'	15.55'	7.78'	15.55'	S02°34'37"E	2°31'40"
C58	352.50'	23.45'	11.73'	23.45'	S00°35'36"W	3°48'44"
C59	20.00'	31.40'	19.98'	28.27'	S47°31'38"W	89°56'41"
C60	20.00'	31.42'	20.00'	28.28'	N42°30'02"W	90°00'00"
C61	397.50'	0.44'	0.22'	0.44'	S02°28'03"W	0°03'51"
C62	397.50'	30.62'	15.32'	30.61'	S00°13'43"W	4°24'49"
C63	40.00'	21.83'	11.20'	21.56'	N13°39'33"E	31°16'30"
C64	70.00'	13.36'	6.70'	13.34'	S23°49'51"W	10°55'55"
C65	70.00'	54.43'	28.67'	53.07'	S03°54'39"E	44°33'04"
C66	70.00'	49.93'	26.08'	48.88'	S46°37'14"E	40°52'06"
C67	70.00'	57.72'	30.81'	56.10'	N89°19'25"E	47°14'35"
C68	40.00'	21.83'	11.20'	21.56'	S81°20'23"W	31°16'30"
C69	397.50'	31.06'	15.54'	31.06'	S85°15'42"E	4°28'39"
C70	20.00'	40.27'	31.62'	33.81'	N29°48'43"W	115°22'38"
C71	1168.00'	85.40'	42.72'	85.38'	S25°46'56"W	4°11'21"
C72	1168.00'	93.78'	46.92'	93.76'	S21°23'14"W	4°36'02"
C73	20.00'	25.63'	14.91'	23.91'	N55°47'36"E	73°24'45"
C74	28.00'	40.87'	26.03'	36.79'	S42°28'22"E	90°03'19"
C75	28.00'	40.82'	25.97'	36.75'	S47°31'38"W	89°58'41"
C76	20.00'	35.73'	24.85'	31.16'	N36°19'27"W	102°21'10"
C77	1168.00'	85.10'	42.57'	85.08'	S12°45'54"W	4°10'29"
C78	1168.00'	88.84'	44.44'	88.82'	S08°29'55"W	4°21'29"
C79	20.00'	30.08'	18.71'	27.33'	N49°24'34"E	86°10'47"
C80	352.50'	21.09'	10.55'	21.09'	S85°47'12"E	3°25'41"
C81	352.50'	40.49'	20.27'	40.47'	S80°46'54"E	6°34'54"
C82	33.50'	40.95'	23.47'	38.45'	S42°28'22"E	70°02'10"
C83	352.50'	58.26'	29.20'	58.20'	S02°43'11"E	9°28'13"
C84	352.50'	3.32'	1.66'	3.32'	S02°17'06"W	0°32'22"
C85	20.00'	31.44'	20.02'	28.30'	N42°28'22"W	90°03'19"
C86	397.50'	31.42'	15.72'	31.41'	S00°17'25"W	4°31'45"
C87	397.50'	10.99'	5.50'	10.99'	S02°46'00"E	1°35'05"
C88	40.00'	21.75'	11.15'	21.48'	N12°01'02"E	31°09'09"
C89	70.00'	28.54'	14.99'	29.32'	S15°30'11"W	24°10'51"
C90	70.00'	46.99'	24.42'	46.11'	S15°49'03"E	38°27'39"
C91	70.00'	46.99'	24.42'	46.11'	S54°16'42"E	38°27'39"
C92	70.00'	47.68'	24.81'	46.77'	N86°58'34"E	39°01'49"
C93	40.00'	9.30'	4.67'	9.28'	S74°07'23"W	13°19'28"
C94	40.00'	12.45'	6.27'	12.40'	S89°41'57"W	17°49'41"
C95	397.50'	42.42'	21.23'	42.40'	S84°26'37"E	6°06'50"
C96	20.00'	31.61'	20.20'	28.42'	N42°13'11"W	90°33'41"
C97	20.00'	31.22'	19.80'	28.15'	S47°46'48"W	89°26'19"

LINE TABLE		
LINE	BEARING	LENGTH
L1	S02°29'58"W	42.00
L2	N87°30'02"W	42.09
L3	S02°29'58"W	45.00
L4	N87°30'02"W	8.58
L5	S02°29'58"W	45.00
L6	N87°30'02"W	22.89
L7	S26°18'48"W	45.00
L8	S02°29'58"W	45.00
L9	N87°30'02"W	24.62
L10	S02°29'58"W	45.00
L11	N86°55'56"W	76.00
L12	N87°30'02"W	62.72
L13	N87°30'02"W	69.65
L14	N63°41'12"W	56.15
L15	N87°30'02"W	72.48
L16	N87°30'02"W	59.34
L17	N77°29'27"W	14.22
L18	N07°27'17"W	14.22
L19	N87°30'02"W	36.65
L20	N81°09'37"W	24.98
L21	N03°50'27"W	24.98
L22	S87°30'02"E	22.57
L23	S02°29'58"W	24.17
L24	N81°09'37"W	24.98
L25	N03°50'27"W	24.98
L26	S87°30'02"E	12.52
L27	S87°30'02"E	5.69
L28	S87°30'02"E	3.05
L29	N86°48'02"W	1.00
L30	N86°48'02"W	6.00
L31	N77°29'27"W	14.22
L32	N07°27'17"W	14.22

NOTES:

BEARINGS SHOWN ARE GRID BEARINGS.
BASED ON GPS RTK OBSERVATION.

DENOTES PROPOSED LOCATION OF NDCBU. (NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS).

DENOTES PROPOSED CITY MONUMENT.

THIS IS TO CERTIFY THAT WATER AND SEWER SERVICES WILL BE PROVIDED TO MESQUITE TRAILS UNIT THREE BY THE EL PASO WATER UTILITIES/PUBLIC SERVICE BOARD IN ACCORDANCE WITH THEIR RULES AND REGULATIONS AND WITH SECTION 16.343 OF THE TEXAS WATER CODE. WATER AND SEWER SERVICES WILL BE EXTENDED TO THE SUBDIVISION FROM EXISTING FACILITIES LOCATED ON SUN FIRE BLVD. AND FITO HERNANDEZ STREET AND WILL BE CONSTRUCTED TO SERVE THE SUBDIVISION WITHIN TWO (2) YEARS OF THE DATE OF FILING THE FINAL SUBDIVISION PLAT.

TAX CERTIFICATE(S) FOR THIS SUBDIVISION ARE IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION, INSTRUMENT No. 20070092104

VEHICULAR ACCESS TO THOSE RESIDENTIAL LOTS ABUTTING SUN FIRE BLVD. AND CEVALLIA AVENUE, SHALL BE FROM OTHER DEDICATED STREETS ONLY. THE INSTRUMENT ASSURING RELEASE OF ACCESS IS FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION, INSTRUMENT No. 20070092106

RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION. INSTRUMENT No. 20070092105

NO MORE THAN ONE SINGLE-FAMILY DETACHED DWELLING SHALL BE LOCATED ON EACH LOT.

INTERIOR LOT CORNERS WILL BE SET UPON COMPLETION OF CONSTRUCTION OF ROADWAYS AND UTILITIES.

SET 5/8" REBAR WITH CAP STAMED "B&A" AT ALL EXTERIOR BOUNDARY CORNERS UNLESS OTHERWISE SHOWN.

THIS SUBDIVISION LIES WITH IN ZONE "X" AS DESIGNATED IN PANEL NO. 480212 0250 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 FLOODPLAIN.

ENGINEER

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net
CONTACT: JORGE L. AZCARATE, P.E.

SURVEYOR

Barragan & Associates
LAND PLANNING & LAND SURVEYING
1450 Pendale Road Suite B -El Paso Tx 79936
Phone (915) 591-5709 Fax (915) 591-5706
CONTACT: BENITO BARRAGAN, R.P.L.S.

MESQUITE TRAILS UNIT 3

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
STREET DEPT. – SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

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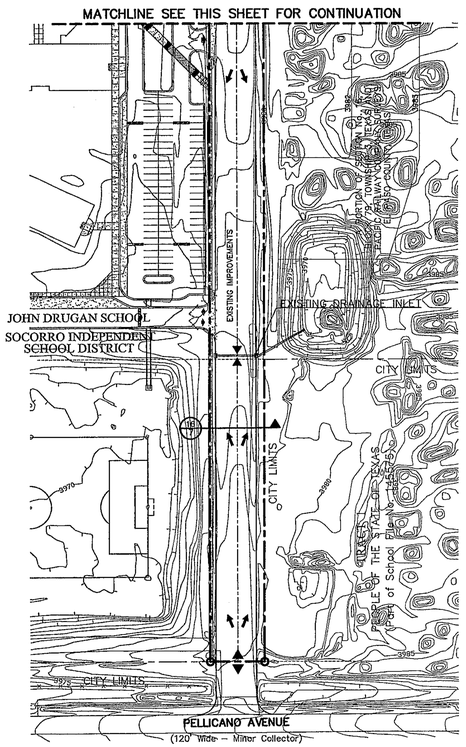
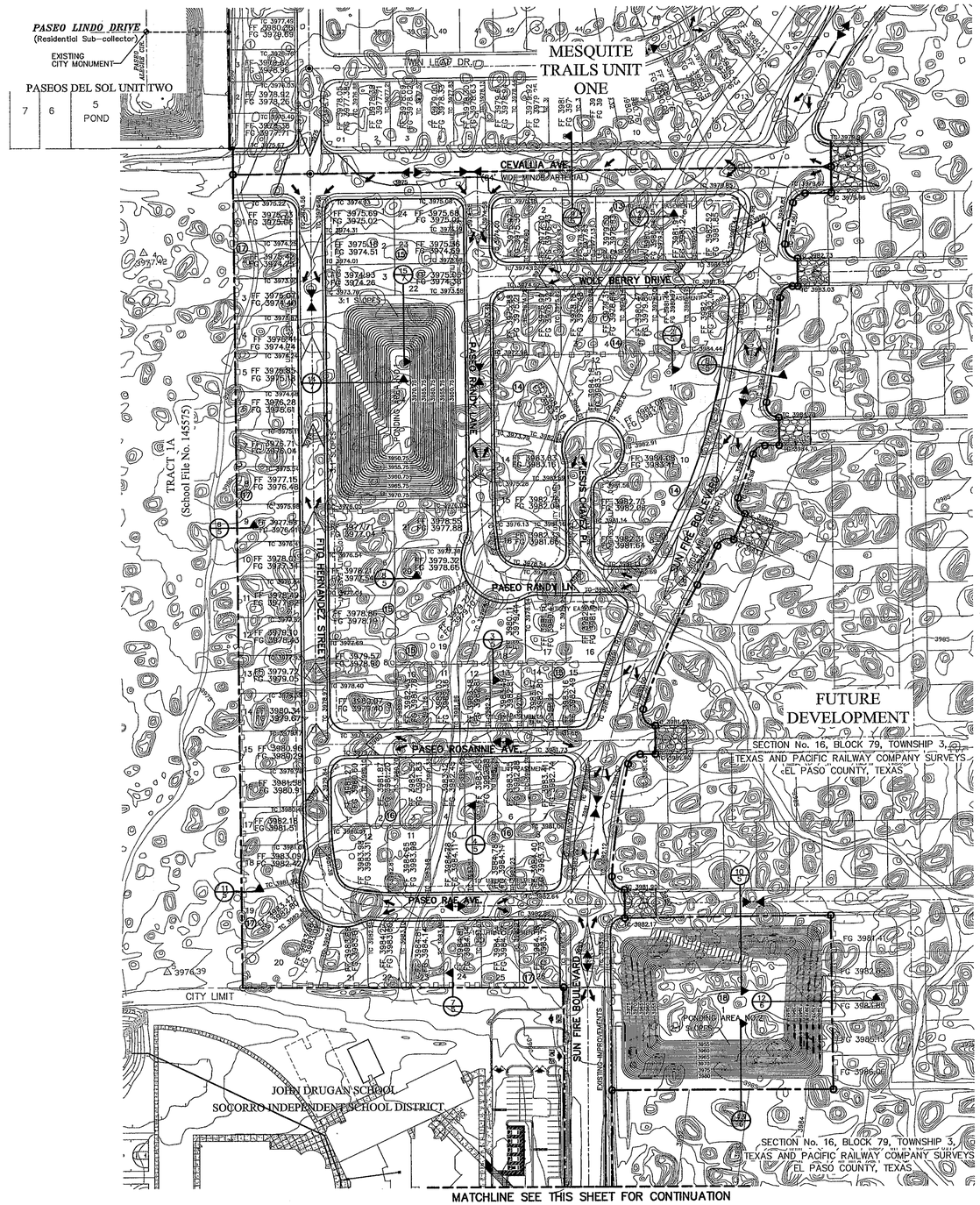
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES





GRADING PLAN
SCALE: 1" = 100'

LEGEND:

- NEW RETAINING ROCKWALL (2'-3' IN HEIGHT)
- NEW RETAINING ROCKWALL (3'-9' IN HEIGHT)
- TEMPORARY 8" TO 10" LOOSE ROCK RIP-RAP

NOTES:

1. RETAINING WALLS SHALL BE CONSTRUCTED FOR VERTICAL GRADES GREATER THAN 2-FEET.
2. SLOPED AREAS SHALL BE MAINTAINED BY THE PROPERTY OWNERS.
3. ALL RETAINING WALLS NOT SPECIFIED TO BE CONSTRUCTED BY DEVELOPER, SHALL BE BUILT BY BUILDER.
4. RETAINING WALL DESIGN REQUIRED AT THE TIME OF BUILDING PERMIT.
5. DEVELOPER SHALL COMPLY WITH SECTION 13.08.170 (EXCESSIVE PAVING CUTS) OF THE EL PASO MUNICIPAL CODE.
6. IMPROVEMENTS SHALL NOT BE PLACED ON SIDEWALK (NDBCU's, SIGNS, POLES, FIRE HYDRANTS, ETC.) REFER TO STANDARD DETAILS SHEET FOR SPECIFICATIONS.
7. IMPROVEMENTS SHALL COMPLY WITH T.A.S./A.D.A. STANDARDS REFER TO DETAIL 10-22 FOR PASSING SPACE DETAIL.
8. MAINTENANCE OF BASINS, SLOPED AREAS, FENCING AND LOOSE ROCK RIP-RAP OUTSIDE SUBDIVISION BOUNDARIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER UNTIL ADJACENT SUBDIVISIONS ARE FULLY DEVELOPED AND DEDICATED TO THE CITY OF EL PASO FOR MAINTENANCE.

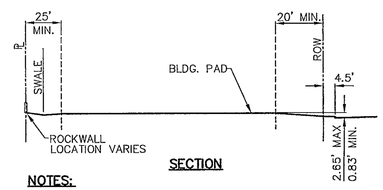
BENCHMARK

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

FLOOD ZONE

THIS SUBDIVISION LIES WITH IN ZONE "X" AS DESIGNATED IN PANEL NO. 480212 0250 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 FLOODPLAIN.

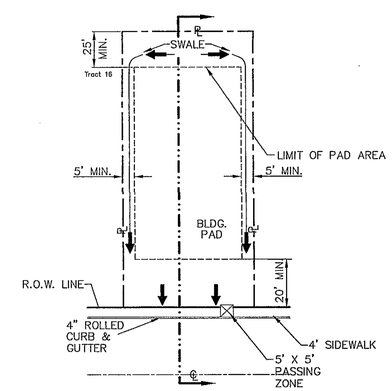
4/15/07



SECTION

NOTES:

1.– DRIVEWAY SLOPES MUST BE 10% MAX. FROM GUTTER FOR FIRST 12 FEET AND 14% MAX. THEREAFTER (EL PASO MUNICIPAL CODE 13.12.095) (DRIVEWAY SHALL BE LOCATED @ HIGH SIDE OF LOT UNLESS OTHERWISE COORDINATED WITH BUILDING SERVICES)



PLAN

TYPICAL LOT PLAN
SCALE: 1"=30'

REFERENCES – BENCHMARKS
BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. AZCARATE
85075
4/15/07

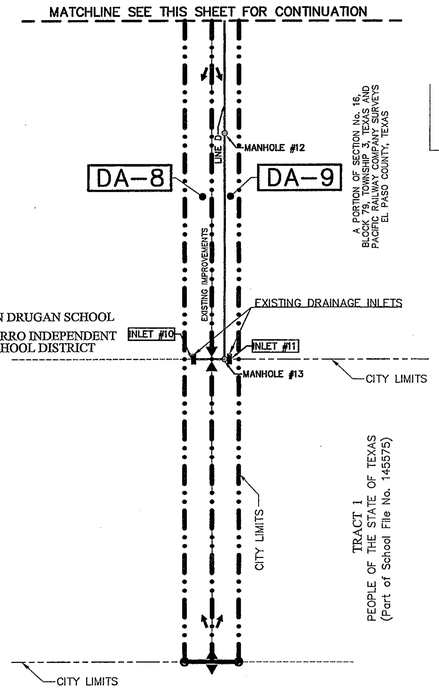
SCALE	
Horizontal:	1"=100'
Vertical:	N/A
Contour Interval:	N/A
DATE:	MAY 2007
DESIGN BY:	F.Z.
DRAWN BY:	F.Z.
CHKD. BY:	J.L.A.
APPV'D. BY:	J.L.A.
JOB No.	2250-012

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMRPOVEMENTS

SHEET TITLE
GRADING PLAN

SHEET NO.
3
OF 30

103025

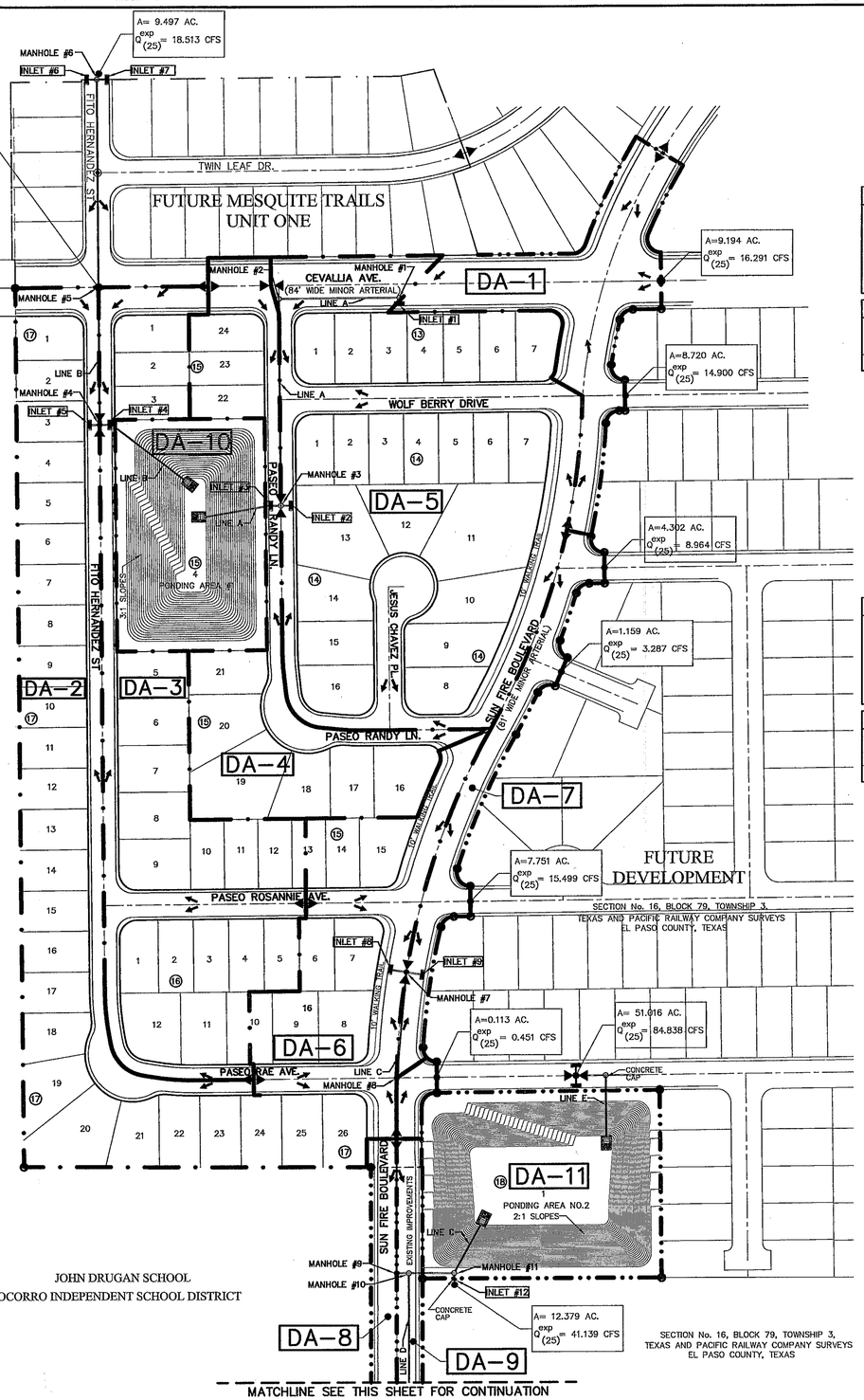


NOTE:

THIS SUBDIVISION LIES WITH IN ZONE "X" AS DESIGNATED IN PANEL NO. 480212 0250 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 FLOODPLAIN.

DRAINAGE PLAN

SCALE: 1" = 100'



MOMENTUM COMPUTATION			
LOCATION @ INLET (1)	DEPTH (2)	VELOCITY (3)	PRODUCT NUMBER (4)
1	0.44	5.26	2.31
2	0.28	3.67	1.03
3	0.20	2.93	0.59
4	0.33	3.42	1.13
5	0.29	3.14	0.91
6	0.22	3.08	0.68
7	0.29	3.72	1.08
8	0.28	2.20	0.62
9	0.50	3.25	1.63
10	0.24	2.53	0.61
11	0.24	2.52	0.60
12	0.50	5.47	2.74

(1) LOCATION

(2) DEPTH

(3) VELOCITY

(4) PRODUCT NUMBER = DEPTH X VELOCITY

DROP INLETS						
NO.	REQ. FLOW CAPACITY Q REQ (CFS)	AVAIL. FLOW CAPACITY Q AVAIL. (CFS)	ADDITIONAL FLOW (CFS)	FLOW BYPASS (CFS)	# OF GRATES	TYPE OF INLET
1	30.429	39.100	0.000	0.000	4	I
2	11.880	14.155	0.000	0.000	3	III
3	4.866	9.436	0.000	0.000	2	III
4	14.837	18.873	0.000	0.000	4	III
5	10.495	14.155	0.000	0.000	3	III
6	5.924	9.436	0.000	0.000	2	III
7	12.589	14.155	0.000	0.000	3	III
8	5.156	19.630	0.000	0.000	2	I
9	24.467	29.690	0.000	0.000	3	I
*10	4.399	9.840	0.000	0.000	1	I
*11	4.371	9.840	0.000	0.000	1	I
12	41.139	48.720	0.000	0.000	5	I

**NOTE:
EXISTING INLETS. FOR REFERENCE INFORMATION SEE SOCORRO INDEPENDENT SCHOOL DISTRICT (JOHN DRUGAN SCHOOL) PROJECT No. 03–210.

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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(AFTER HOURS)	(915) 240–3220

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

NEW POND #1 CALCULATIONS

QT = (ARC)/12
QT = 10.972
A = 51.753
R = 4"
C = 0.636
QT X 25% = 2.743
10.972 + 2.743 = 13.715

SILT VOLUME = 0.621
0.012 AC–FT/AC
13.715 + 0.621 = 14.336 AC–FT

$TOTAL_{req}$= 14.336 AC–FT

NEW RETENTION BASIN #1

BASIN NO.	REQUIRED CAPACITY (AC.–FT.)	AVAILABLE CAPACITY (AC.–FT.)	PEAK INFLOW (CFS)	OUTLET TOWER FLOW (CFS)	HIGH WATER SURFACE ELEV. (FT.)	BOTTOM ELEVATION	FREE BOARD (FT.)
1	14.336	15.728	93.575	0	3971.68±	3948.75	1.070

NOTE:
1. THE HWSE REFLECTS THE ELEVATION AS REQUIRED BY THE CITY OF EL PASO. THE HWSE DOES NOT INCLUDE 25% EMERGENCY STORAGE. HOWEVER, THE TOTAL POND CAPACITY SHALL HOLD TOTAL REQUIRED STORM WATER RUNOFF.
   HWSE = QT + SILT VOLUME
   HWSE = 10.972 + 0.621 = 11.593 AC–FT
   CONTOUR 3969.75, ACCUMULATED VOLUME = 12.029 AC–FT
   CONTOUR 3970.75, ACCUMULATED VOLUME = 13.195 AC–FT
   HIGH WATER SURFACE ELEVATION = 3970.01
2. THE TOTAL STORAGE HWSE REFLECTS THE ELEVATION AS REQUIRED BY THE CITY OF EL PASO AND INCLUDES 25% EMERGENCY STORAGE.
   HWSE = QT + SILT VOLUME + 25% EMERGENCY STORAGE
   HWSE = 10.972 + 0.621 + 2.743 = 14.336 AC–FT
   CONTOUR 3970.75, ACCUMULATED VOLUME = 13.195 AC–FT
   CONTOUR 3971.75, ACCUMULATED VOLUME = 14.427 AC–FT
   HIGH WATER SURFACE ELEVATION = 3971.68

NEW POND #1 AREAS

CONTOUR	ACCUMULATED VOLUME (AC–FT.)
3972.75	15.728
3971.75	14.427
3970.75	13.195
3969.75	12.029
3968.75	10.927
3967.75	9.889
3966.75	8.913
3965.75	7.997
3964.75	7.139
3963.75	6.337
3962.75	5.591
3961.75	4.898
3960.75	4.257
3959.75	3.666
3958.75	3.123
3957.75	2.628
3956.75	2.177
3955.75	1.770
3954.75	1.404
3953.75	1.079
3952.75	0.793
3951.75	0.543
3950.75	0.329
3949.75	0.149
3948.75	0.000

NEW POND #2 CALCULATIONS

QT = (ARC)/12
QT = 18.696
A = 84.345
R = 4"
C = 0.665
QT X 25% = 4.674
18.696 + 4.674 = 23.370

SILT VOLUME = 1.012
0.012 AC–FT/AC
23.370 + 1.012 = 24.383 AC–FT

$TOTAL_{req}$= 24.383 AC–FT

NEW RETENTION BASIN #2

BASIN NO.	REQUIRED CAPACITY (AC.–FT.)	AVAILABLE CAPACITY (AC.–FT.)	PEAK INFLOW (CFS)	OUTLET TOWER FLOW (CFS)	HIGH WATER SURFACE ELEV. (FT.)	BOTTOM ELEVATION	FREE BOARD (FT.)
1	24.383	26.145	129.712	0	3975.88±	3952.00	1.120

NOTE:
1. THE HWSE REFLECTS THE ELEVATION AS REQUIRED BY THE CITY OF EL PASO. THE HWSE DOES NOT INCLUDE 25% EMERGENCY STORAGE. HOWEVER, THE TOTAL POND CAPACITY SHALL HOLD TOTAL REQUIRED STORM WATER RUNOFF.
   HWSE = QT + SILT VOLUME
   HWSE = 18.696 + 1.012 = 19.708 AC–FT
   CONTOUR 3972, ACCUMULATED VOLUME = 18.746 AC–FT
   CONTOUR 3973, ACCUMULATED VOLUME = 20.1203 AC–FT
   HIGH WATER SURFACE ELEVATION = 3972.70
2. THE TOTAL STORAGE HWSE REFLECTS THE ELEVATION AS REQUIRED BY THE CITY OF EL PASO AND INCLUDES 25% EMERGENCY STORAGE.
   HWSE = QT + SILT VOLUME + 25% EMERGENCY STORAGE
   HWSE = 18.696 + 1.012 + 4.674 = 24.383 AC–FT
   CONTOUR 3975, ACCUMULATED VOLUME = 23.034 AC–FT
   CONTOUR 3976, ACCUMULATED VOLUME = 24.564 AC–FT
   HIGH WATER SURFACE ELEVATION = 3975.88

NEW POND #2 AREAS

CONTOUR	ACCUMULATED VOLUME (AC–FT.)
3977	26.145
3976	24.564
3975	23.034
3974	21.553
3973	20.120
3972	18.736
3971	17.399
3970	16.109
3969	14.865
3968	13.666
3967	12.511
3966	11.400
3965	10.332
3964	9.306
3963	8.321
3962	7.377
3961	6.473
3960	5.607
3959	4.780
3958	3.991
3957	3.239
3956	2.522
3955	1.840
3954	1.193
3953	0.580
3952	0.000

WATERSHED AREAS

DRAINAGE AREA NO. (1)	DRAINAGE AREA (AC) (2)	DESIGN STORM INTENSITY (I25) (3)	TIME OF CONCENTRATION (4)	RUNOFF COEFF. (C) (5)	Q25 (CFS) (6)
DA–1	1.456	4.431	10.000	0.900	5.806
DA–2	4.367	3.005	22.875	0.660	8.661
DA–3	3.879	2.983	23.175	0.685	7.926
DA–4	2.316	3.032	22.500	0.693	4.866
DA–5	6.092	2.770	26.400	0.704	11.880
DA–6	2.389	3.010	22.800	0.717	5.156
DA–7	0.815	4.236	11.200	0.900	3.107
DA–8	1.103	4.431	10.000	0.900	4.399
DA–9	1.096	4.431	10.000	0.900	4.371
DA–10	1.747	4.431	10.000	0.330	2.555
DA–11	2.222	4.431	10.000	0.330	3.249

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

(1) WATERSHED AREA IDENTIFICATION

(2) AREA FROM DRAINAGE PLAN

(3) RAINFALL INTENSITY, 25 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

(6) Q_{25}= C X A X I_{25}

REFERENCES – BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

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Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. ACCIARITE
85075
5/17/07

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: F.Z.
CHKD. BY: J.L.A.
APPV'D. BY: J.L.A.
JOB No. 2250–012

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
DRAINAGE PLAN

SHEET NO.
4
OF 30

103025

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5527
LOWER VALLEY WATER DISTRICT	(915) 791-4480
MCI SURVEILLANCE	(800) MCI-WORK
PARAGON CABLE	(915) 772-1123
TEXAS GAS CO.	(915) 544-6300
SOUTHWESTERN BELL TELEPHONE	(800) 828-5127
AT&T	(800) 852-3788
U.S. SPRINT TELECOMM	(800) 521-0579

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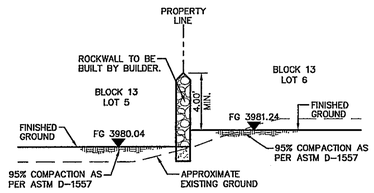
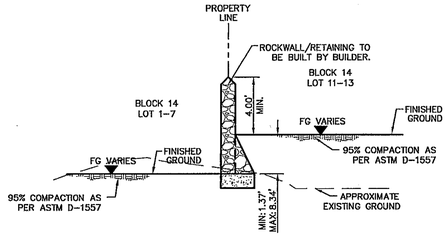
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES



1/5 SECTION



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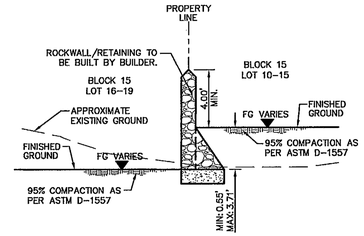

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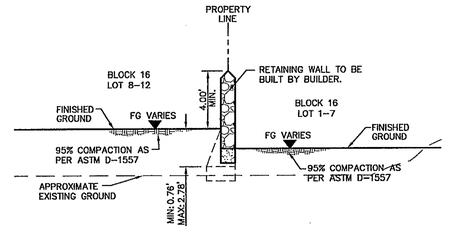

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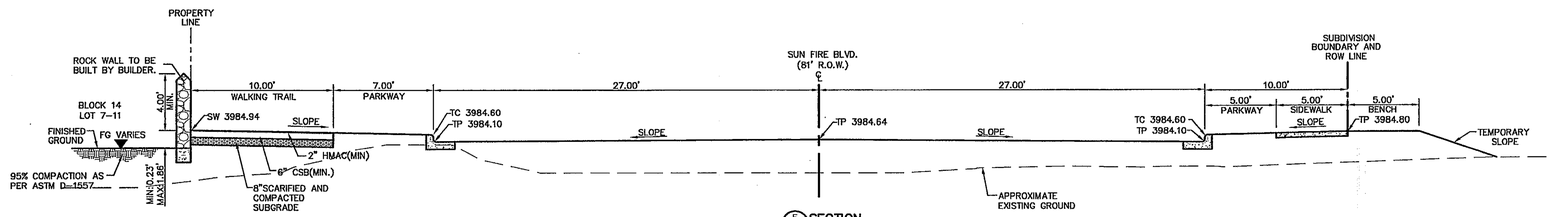
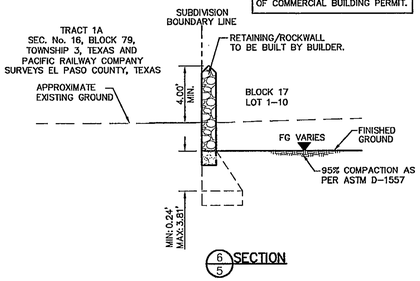


5/5 SECTION

COMMERCIAL DEVELOPER TO RAISE ROCKWALL TO 6' AT TIME OF COMMERCIAL BUILDING PERMIT.



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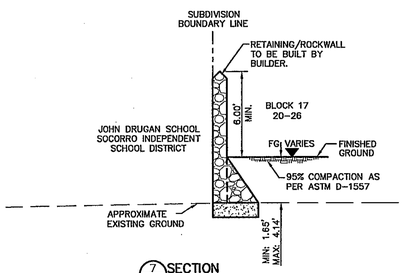

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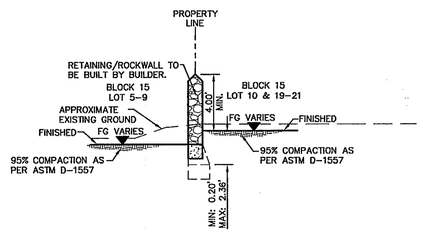

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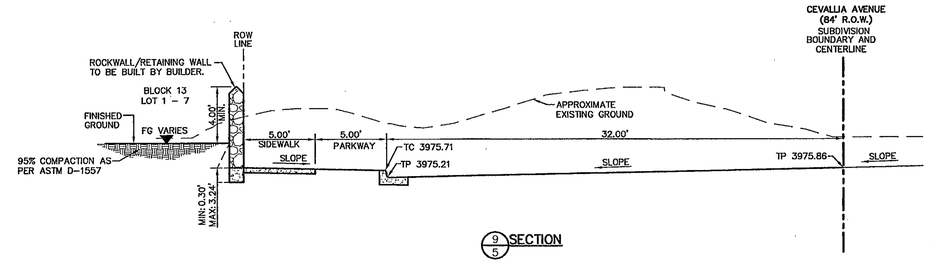

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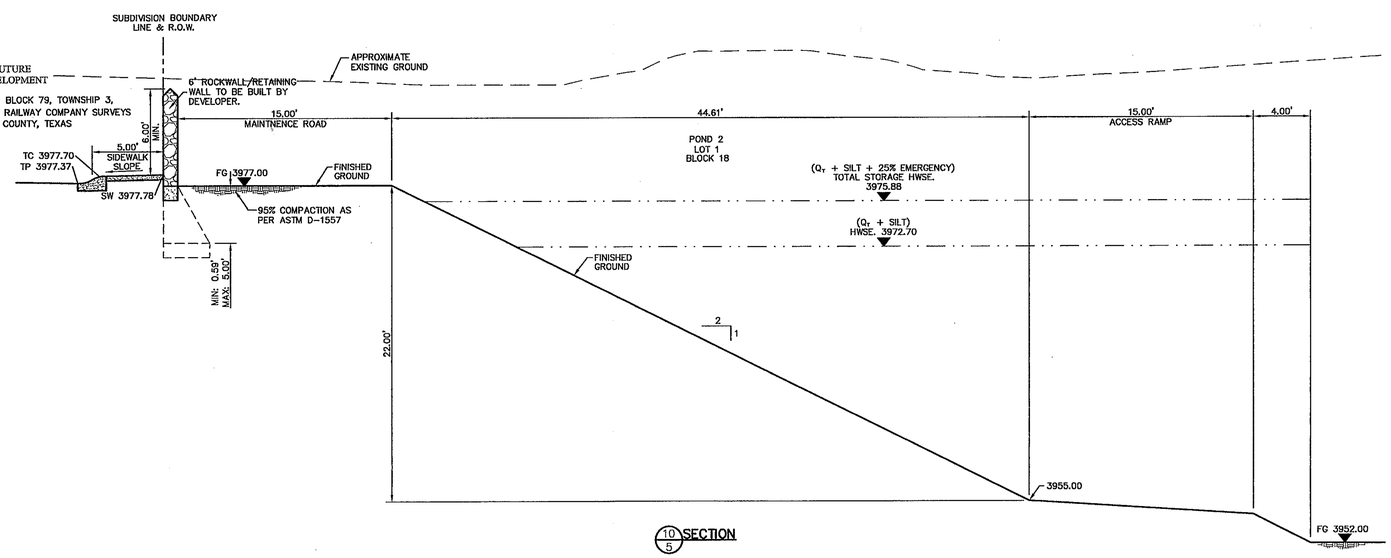
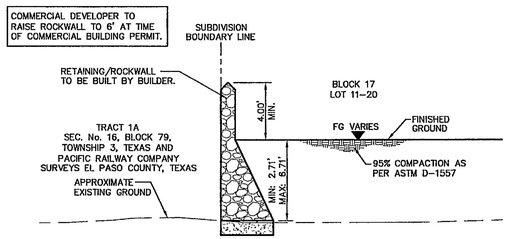


10/5 SECTION

COMMERCIAL DEVELOPER TO RAISE ROCKWALL TO 6' AT TIME OF COMMERCIAL BUILDING PERMIT.



11/5 SECTION

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF EL PASO DRIVE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

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Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. AZCARATE
85075
5/7/07

SCALE
Horizontal: 1"=5'
Vertical: 1"=5'
Contour Interval: N/A
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.L.
CHKD. BY: J.L.A.
APPV'D. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
TYPICAL GRADING SECTIONS
(SHEET 1 OF 3)

SHEET NO.
5
OF 30

103025

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5527
LOWER VALLEY WATER DISTRICT	(915) 791-4480
MCI SURVEILLANCE	(800) MCI-WORK
PARAGON CABLE	(915) 772-1123
TEXAS GAS CO.	(915) 544-6300
SOUTHWESTERN BELL TELEPHONE	(800) 828-5127
AT&T	(800) 852-3786
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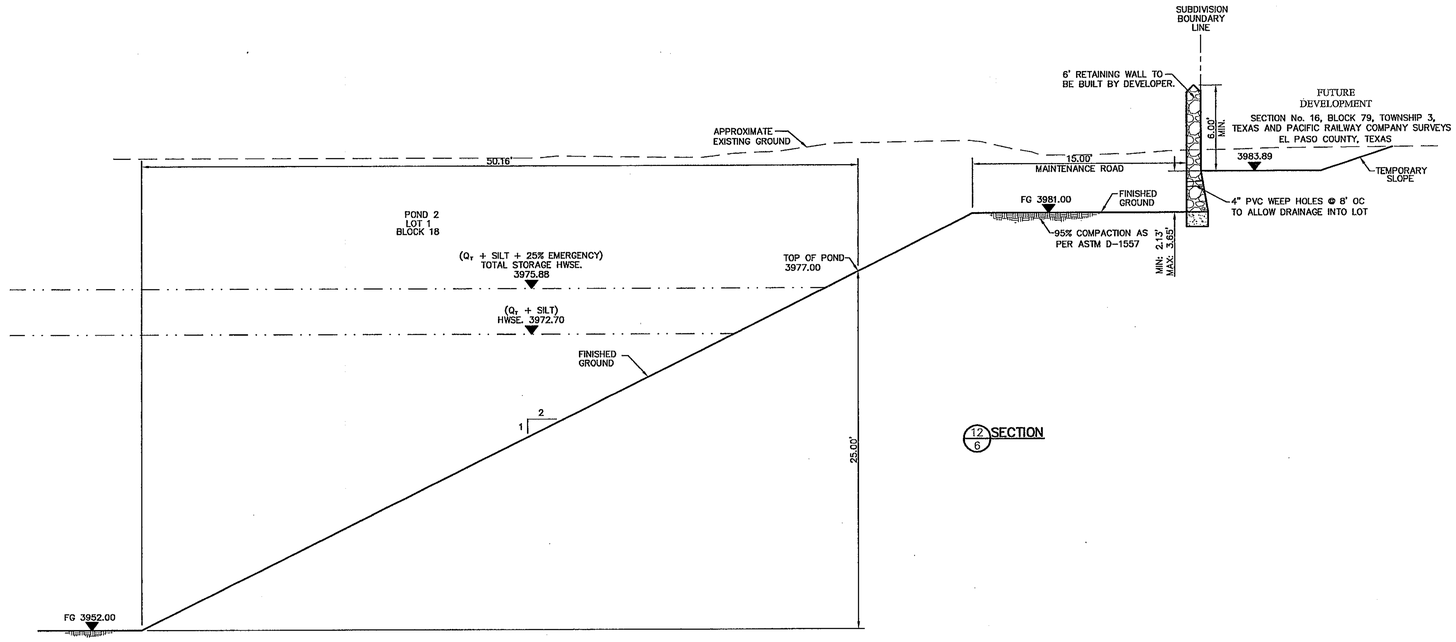
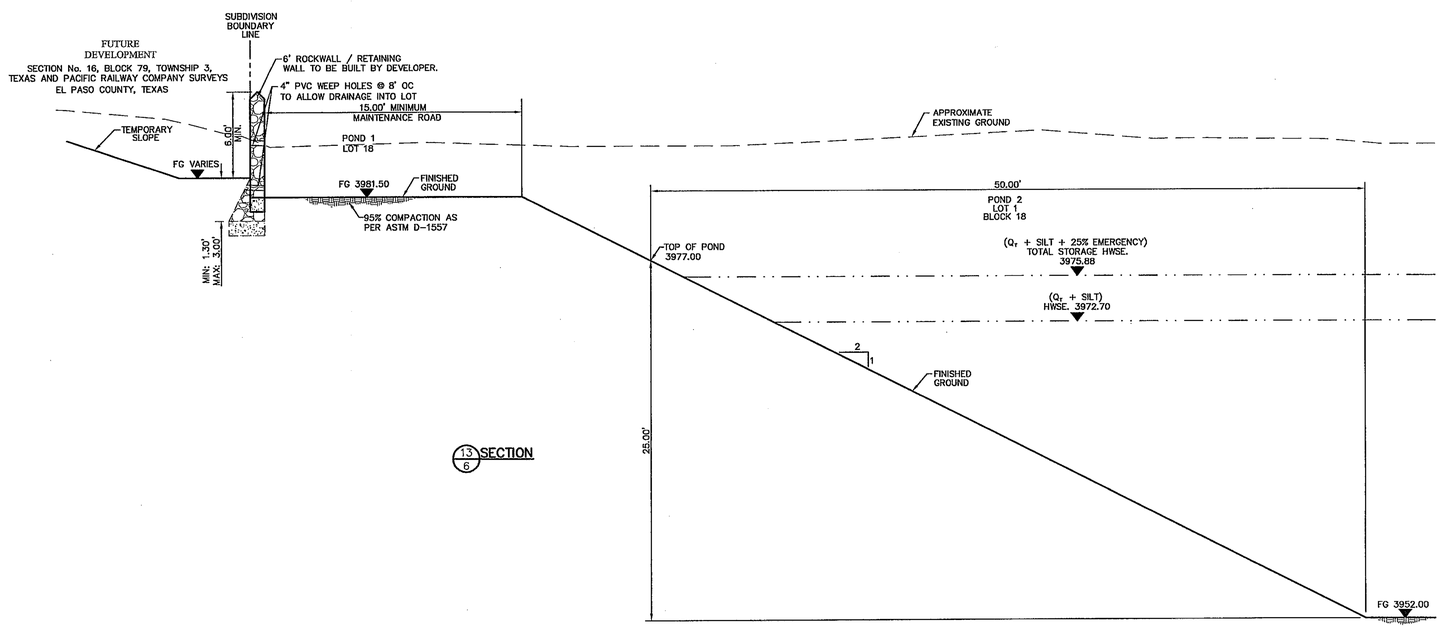
WARNING ! BEFORE YOU DIG

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



12/6 SECTION



13/6 SECTION

REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF EL PASO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

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ENGINEER'S SEAL

JORGE L. AZCARATE
85075
CONTINENTAL ENGINEERING
5/17/07

5/17/07

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APP'VD. BY: J.L.A.
JOB No. 2259-012-D

PROJECT TITLE

MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE

TYPICAL GRADING SECTIONS

(SHEET 2 OF 3)

SHEET NO.

6

OF 30

103025

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5527
LOWER VALLEY WATER DISTRICT	(915) 791-4480
MCI SURVEILLANCE	(800) MCI-WORK
PARAGON CABLE	(915) 772-1123
TEXAS GAS CO.	(915) 544-6300
SOUTHWESTERN BELL TELEPHONE	(800) 828-5127
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579

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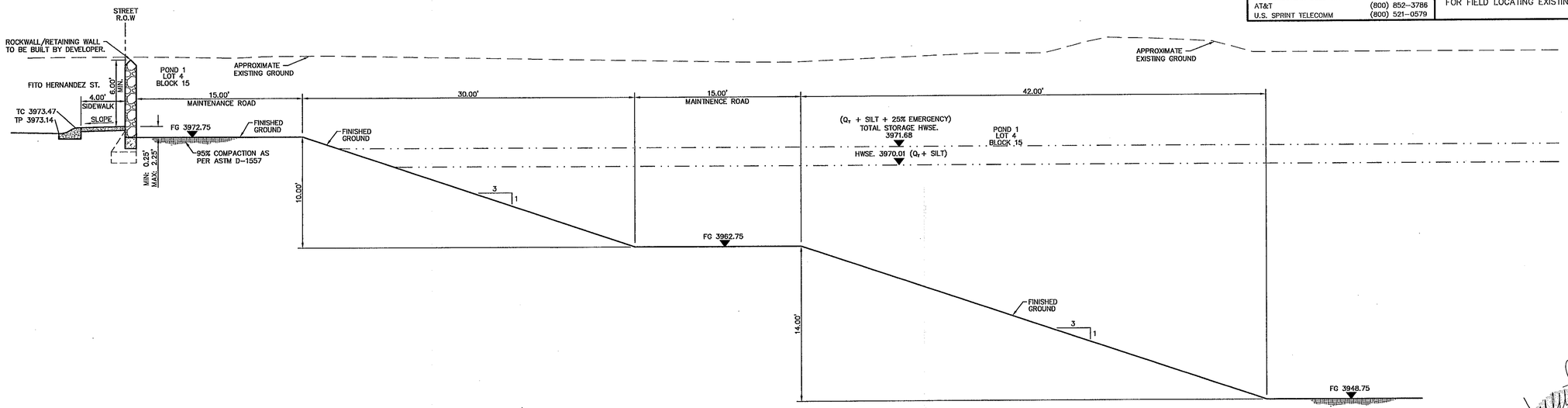
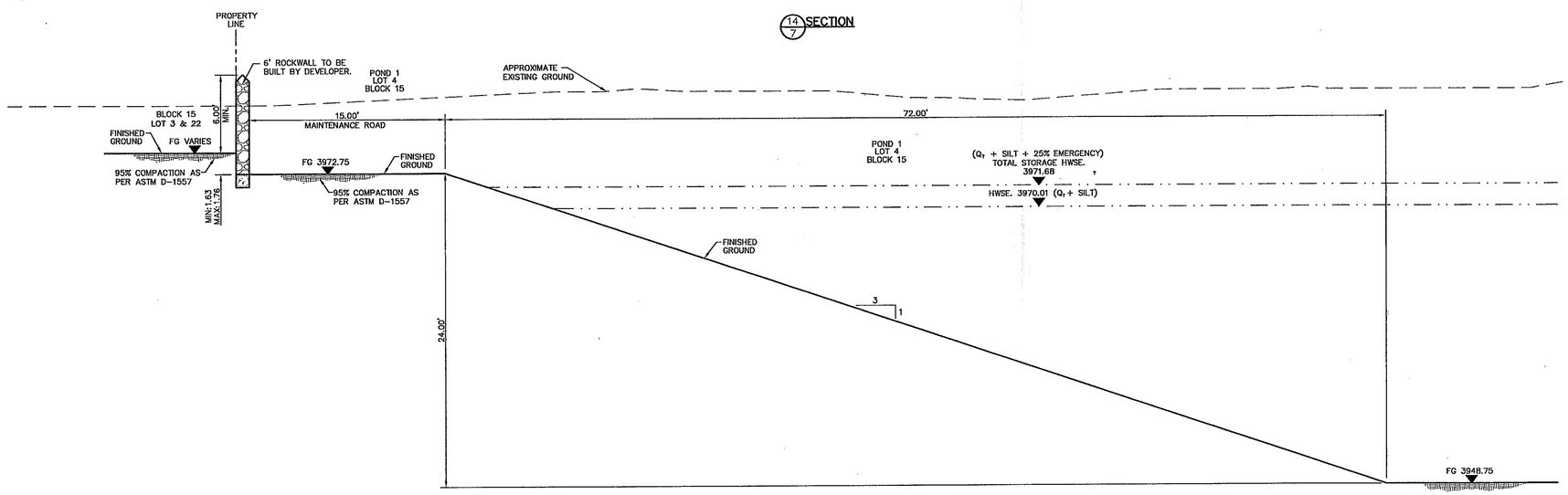
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES



14/7 SECTION



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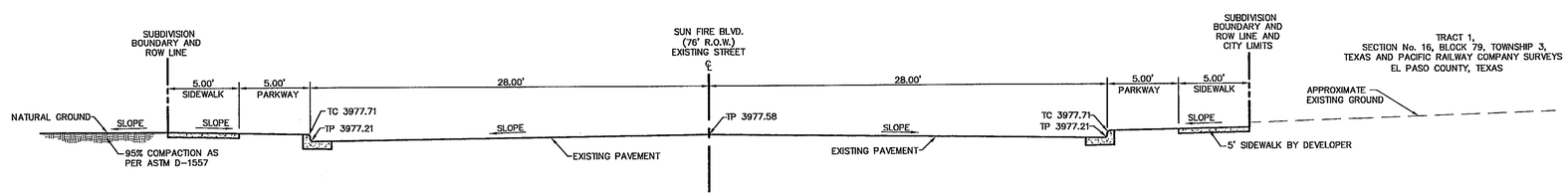

16/7 SECTION

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF EL PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

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Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. AZCARATE
65075
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
6/13/07

SCALE
Horizontal: 1"=5'
Vertical: 1"=5'
Contour Interval: N/A
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
TYPICAL GRADING SECTIONS
(SHEET 3 OF 3)

SHEET NO.
7
OF 30

103025

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
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING ! BEFORE YOU DIG

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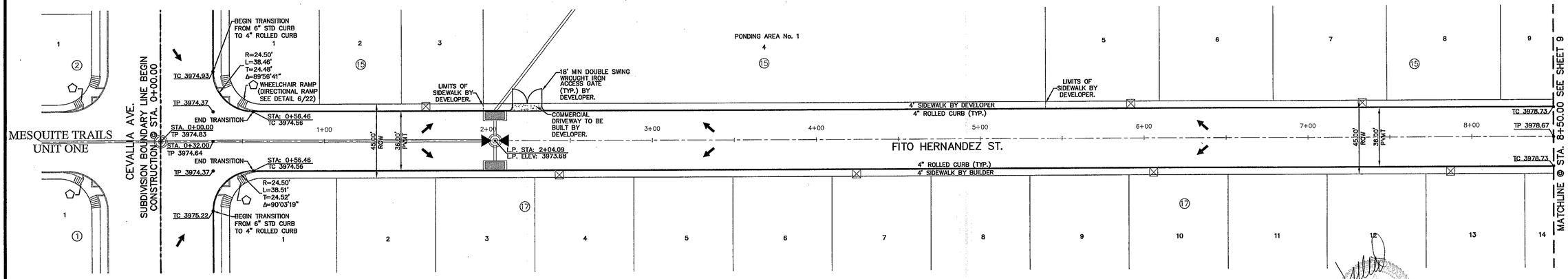
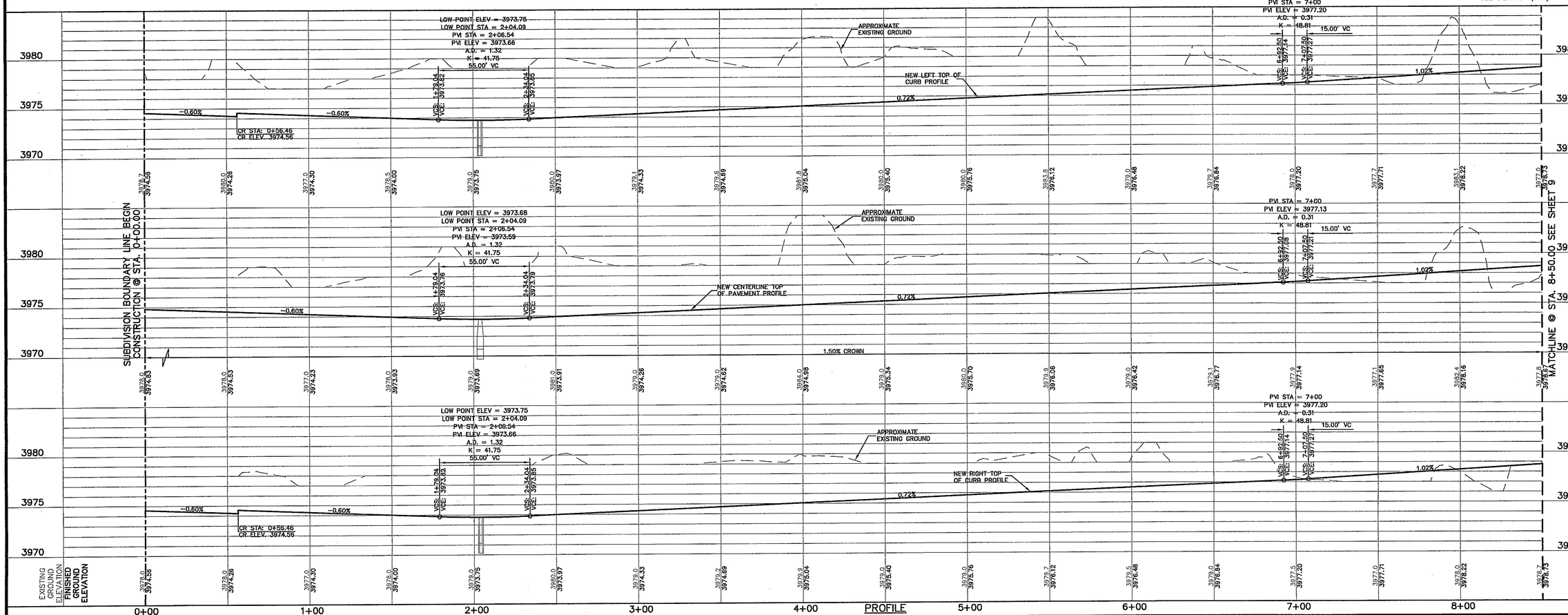
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES



PLAN

LEGEND:

- ☒ 5' X 5' WHEELCHAIR PASSING
- ⬠ WHEELCHAIR RAMP (DIRECTIONAL RAMP SEE DETAIL 6/22)



REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF EL PASO ALLEY AND PASEO LINDO DRIVE ELEVATION = 4003.19 (CITY DATUM).

DATE	REVISIONS	BY

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Office 915.544.3232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL

JORGE L. AZCARATE 85075 TEXAS REGISTERED PROFESSIONAL ENGINEER

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: A.B.
CHKD. BY: J.L.A.
APP'VD. BY: J.L.A.
JOB No. 2230-012-D

PROJECT TITLE

MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE

FITO HERNANDEZ ST. PLAN & PROFILE FROM STA. 0+00.00 TO STA. 8+50.00

SHEET NO.

8

OF 30

103 025

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
STREET DEPT. – SIGNAL & SIGN (AFTER HOURS)	(915) 621–6750 (915) 240–3220

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1–800–DIG–TESS
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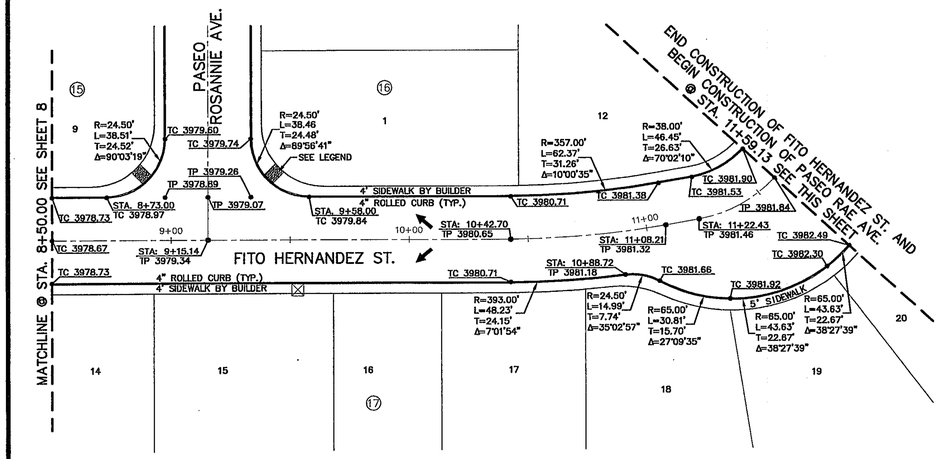
FOR FIELD LOCATING EXISTING UTILITIES

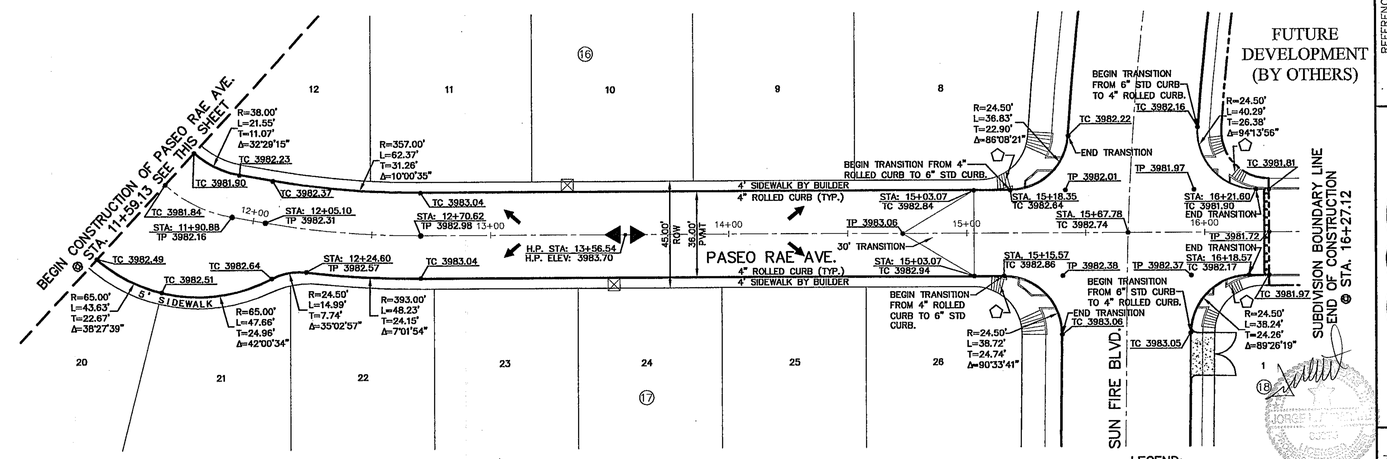
REFERENCES – BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO REAL AVE. AND PASEO LINDO DRIVE
ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY



PLAN

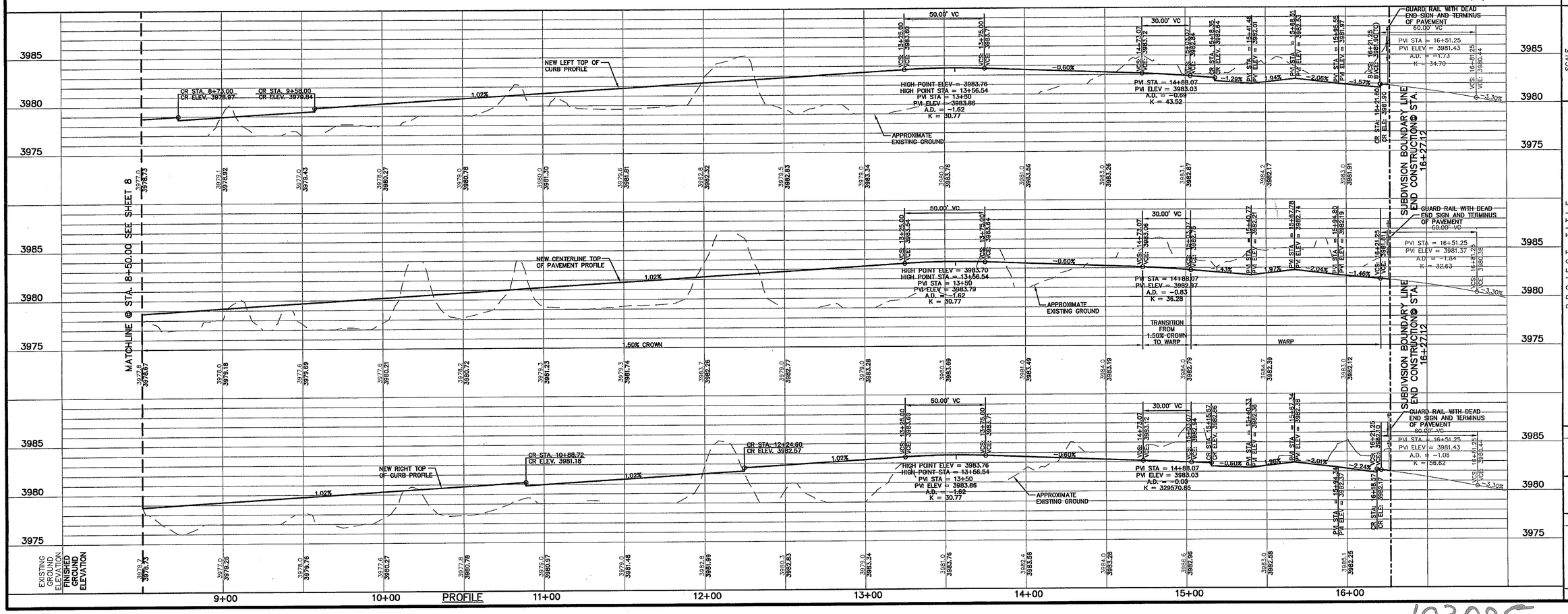


PLAN

LEGEND:

- 5' X 5' WHEELCHAIR PASSING
- PARALLEL CURB RAMP (TYPE II) SEE DETAIL 4/22
- WHEELCHAIR RAMP (DIRECTIONAL RAMP SEE DETAIL 6/22)

5/14/07



ENGINEER'S SEAL

JORGE L. AZCARATE
85075
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
5/14/07

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5233
www.ceagroup.net

SCALE Horizontal: 1"=30' Vertical: 1"=5' Contour Interval: N/A	
DATE:	MAY 2007
DESIGN BY:	F.Z.
DRAWN BY:	J.L.A.
CHKD. BY:	J.L.A.
APPVD. BY:	J.L.A.
JOB No.	2250–012–D

PROJECT TITLE

MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE

FITO HERNANDEZ ST. PLAN & PROFILE FROM STA. 8+50.00 TO STA. 11+59.13

PASEO RAE AVE. PLAN & PROFILE FROM STA. 11+59.13 TO STA. 16+27.12

SHEET NO.

6

OF 30

103025

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
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

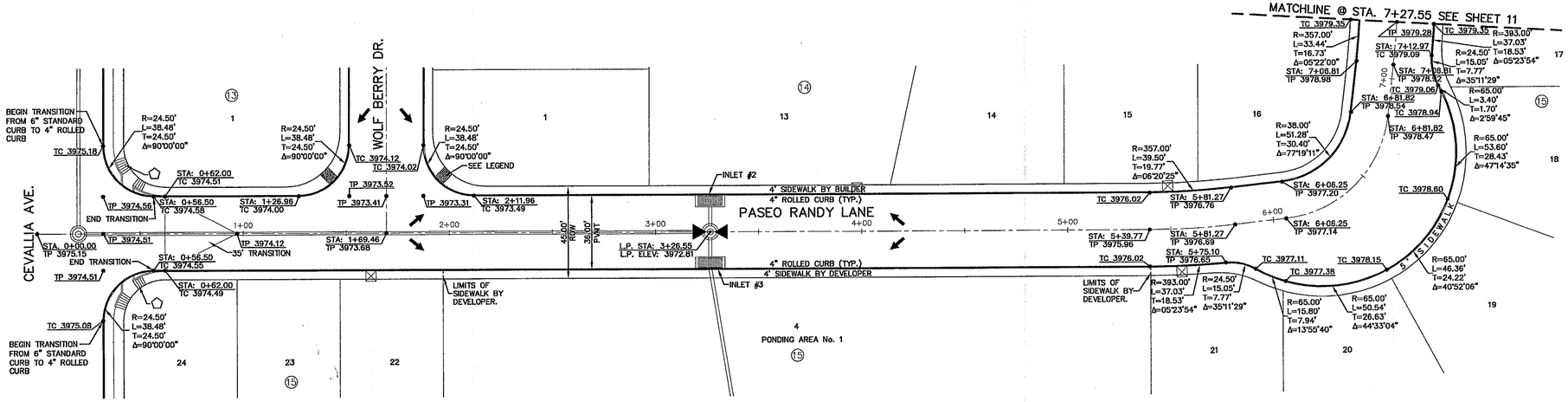
WARNING ! BEFORE YOU DIG

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

REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4000.19 (CITY DATUM).

DATE	REVISIONS	BY



PLAN

LEGEND:

- 5' X 5' WHEELCHAIR PASSING
- PARALLEL CURB RAMP (TYPE II) SEE DETAIL 4/22
- WHEELCHAIR RAMP (DIRECTIONAL RAMP SEE DETAIL 6/22)

5/6/07

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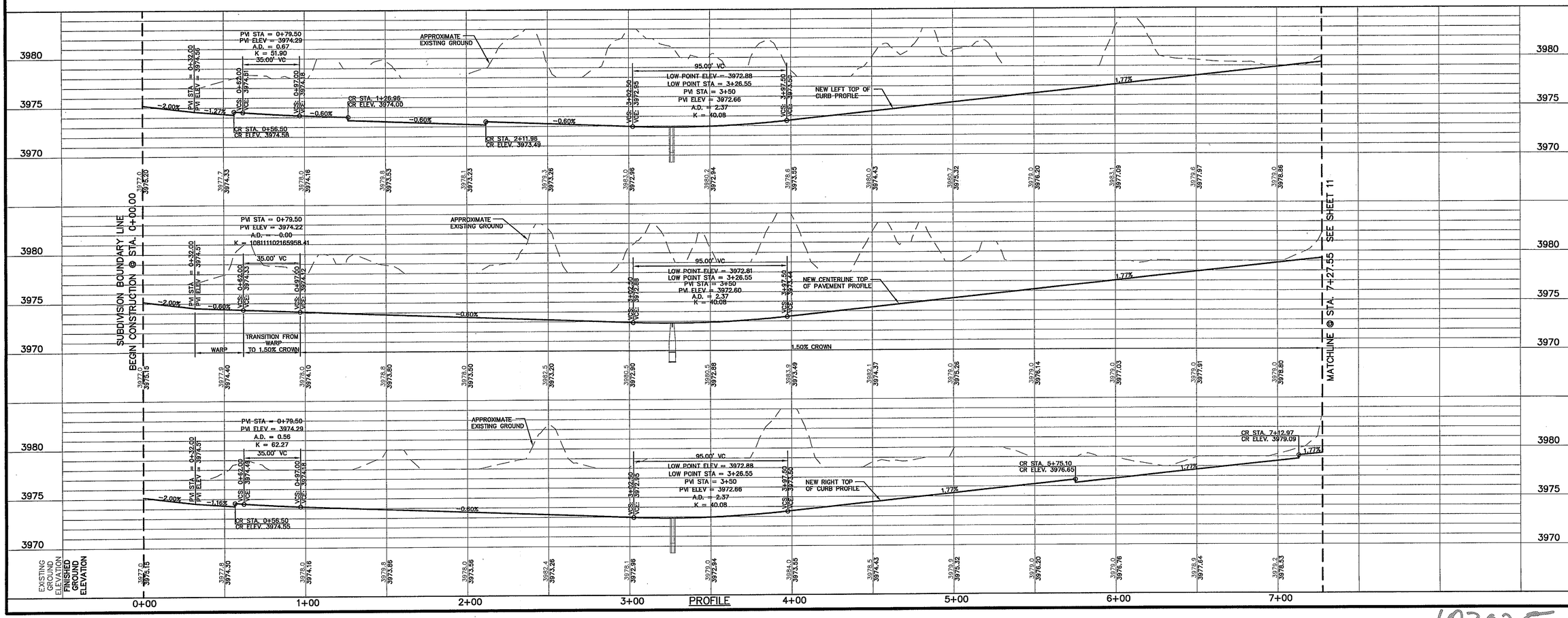
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEERS SEAL

JORGE L. AZCARATE 85075 CIVIL STATE OF TEXAS 5/16/07



PROFILE

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-D

PROJECT TITLE

MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE

PASEO RANDY LANE PLAN & PROFILE FROM STA.0+00.00 TO STA. 7+27.55

SHEET NO.

10

OF 30

103025

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
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

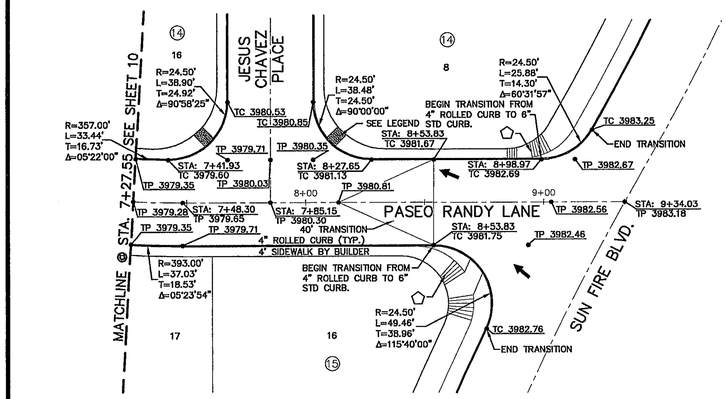
WARNING ! BEFORE YOU DIG

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

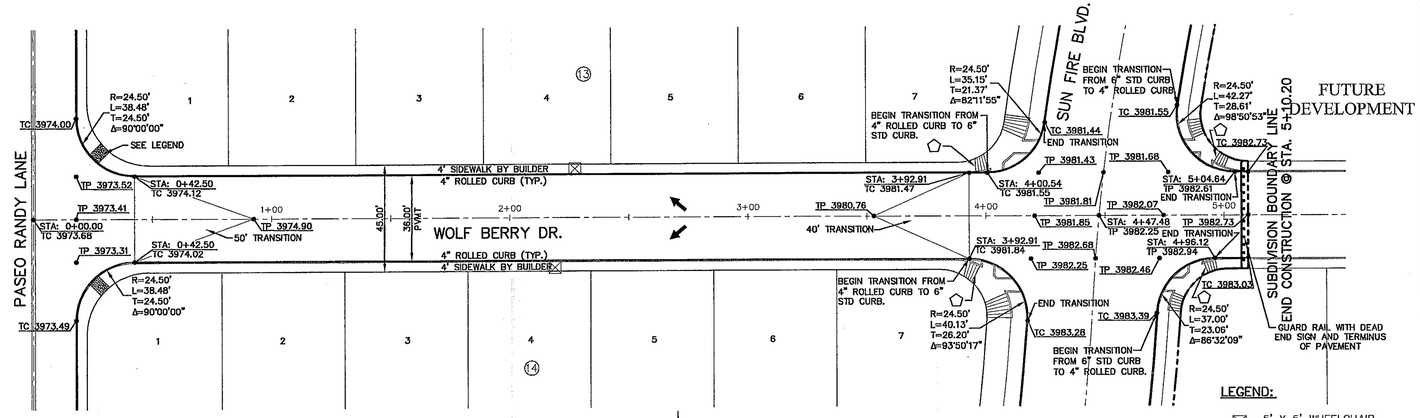
REFERENCES - BENCHMARKS

BENCHMARK 18 CITY MONUMENT AT THE INTERSECTION OF PASEO DEL NORTE AND PASEO LINDO DRIVE
ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY



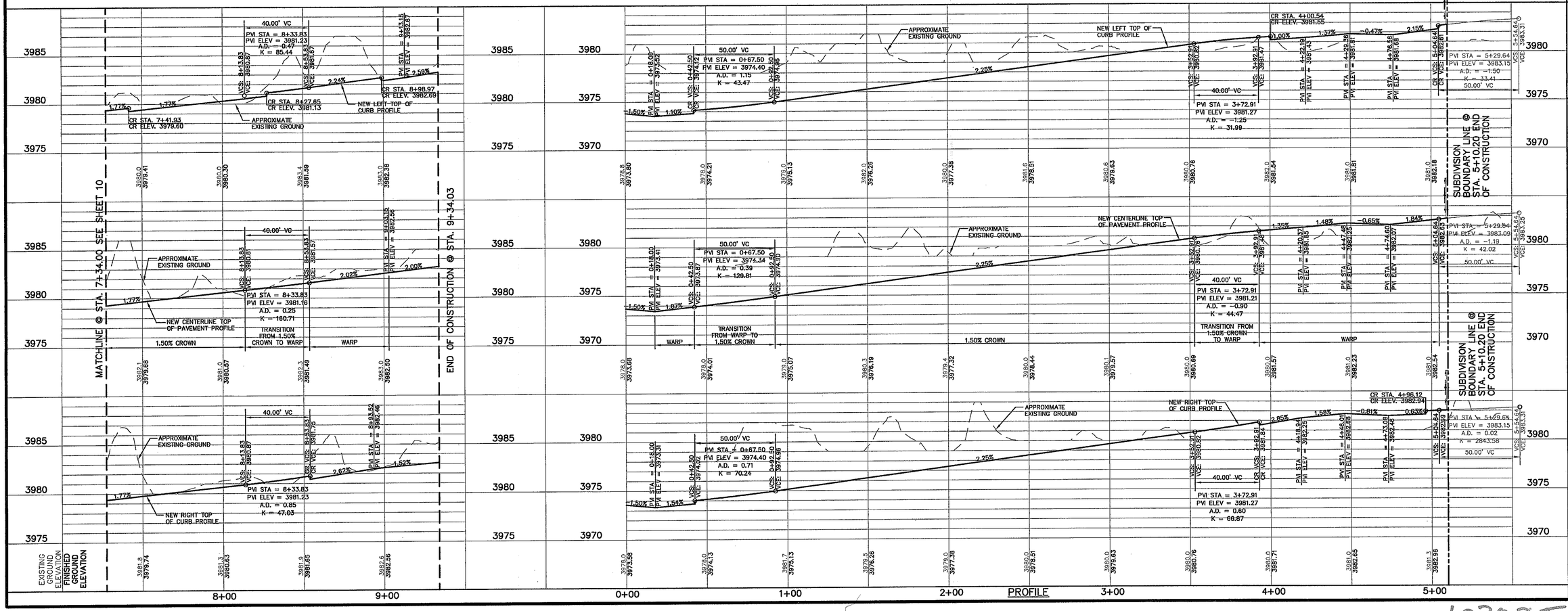
PLAN



PLAN

LEGEND:

- 5' X 5' WHEELCHAIR PASSING
- PARALLEL CURB RAMP (TYPE II) SEE DETAIL 4/22
- WHEELCHAIR RAMP (DIRECTIONAL RAMP SEE DETAIL 6/22)



PROFILE

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.L.A.
CHECKED BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-LD

ENGINEER'S SEAL
JORGE L. AZCARATE
85075
STATE OF TEXAS

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.2233 Fax 915.544.3263
www.ceagroup.net

PROJECT TITLE

MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE

PASEO RANDY LANE PLAN & PROFILE FROM STA. 7+27.55 TO STA. 9+34.03

WOLF BERRY DR. PLAN & PROFILE FROM STA. 0+00.00 TO STA. 5+10.20

SHEET NO.

11

OF 30

103025

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
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

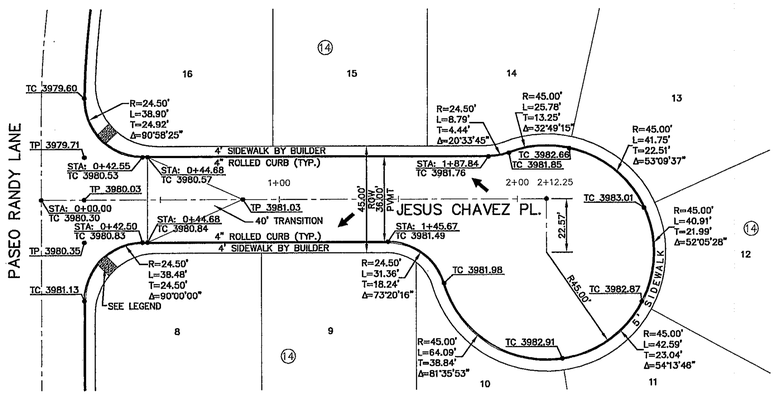
WARNING ! BEFORE YOU DIG

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

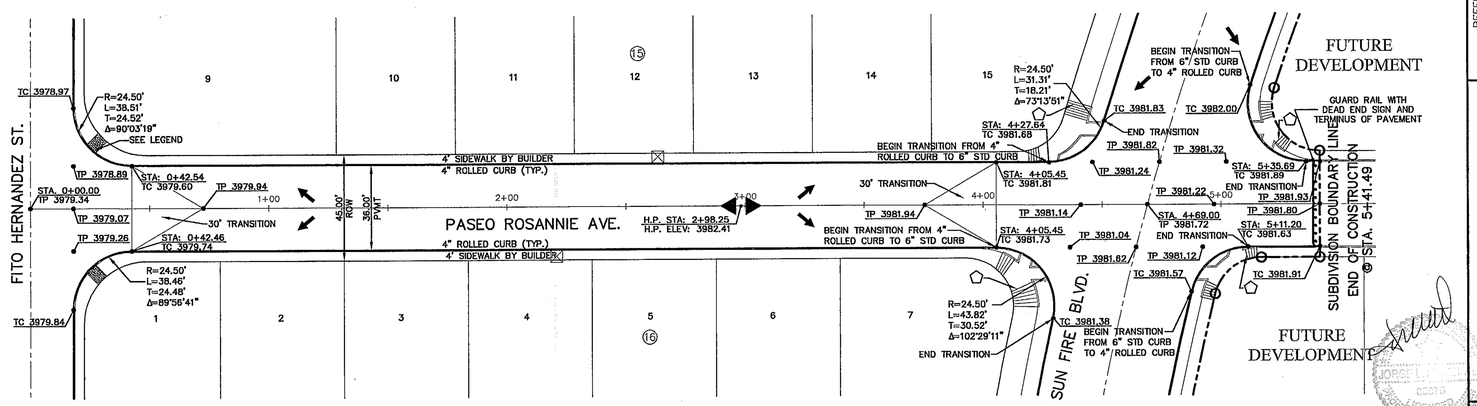
REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4063.10 (CITY DATUM).

DATE	REVISIONS	BY



PLAN



PLAN

LEGEND:

- 5' X 5' WHEELCHAIR PASSING
- PARALLEL CURB RAMP (TYPE II) SEE DETAIL 4/22
- WHEELCHAIR RAMP (DIRECTIONAL RAMP SEE DETAIL 6/22)

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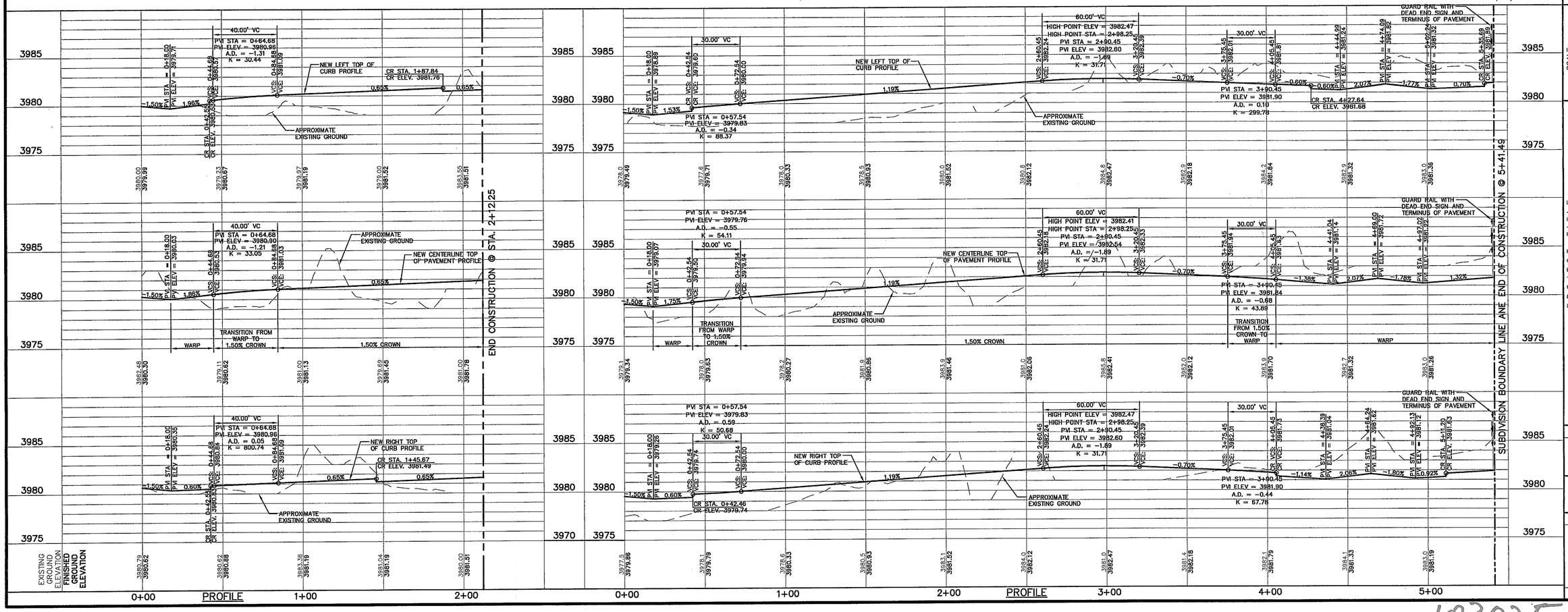
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL

JORGE L. AZCARATE 85075 CONSULTING ENGINEER STATE OF TEXAS

5/10/07



SCALE	
Horizontal:	1" = 30'
Vertical:	1" = 5'
Contour Interval:	N/A
DATE:	MAY 2007
DESIGN BY:	F.Z.
DRAWN BY:	J.M.
CHKD. BY:	J.L.A.
APPVD. BY:	J.L.A.
JOB No.	22259-012-ID

PROJECT TITLE

MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE

JESUS CHAVEZ PL. PLAN & PROFILE FROM STA. 0+00.00 TO STA. 2+12.25

PASEO ROSANNIE AVE. PLAN & PROFILE FROM STA. 0+00.00 TO STA. 5+41.49

SHEET NO.

12

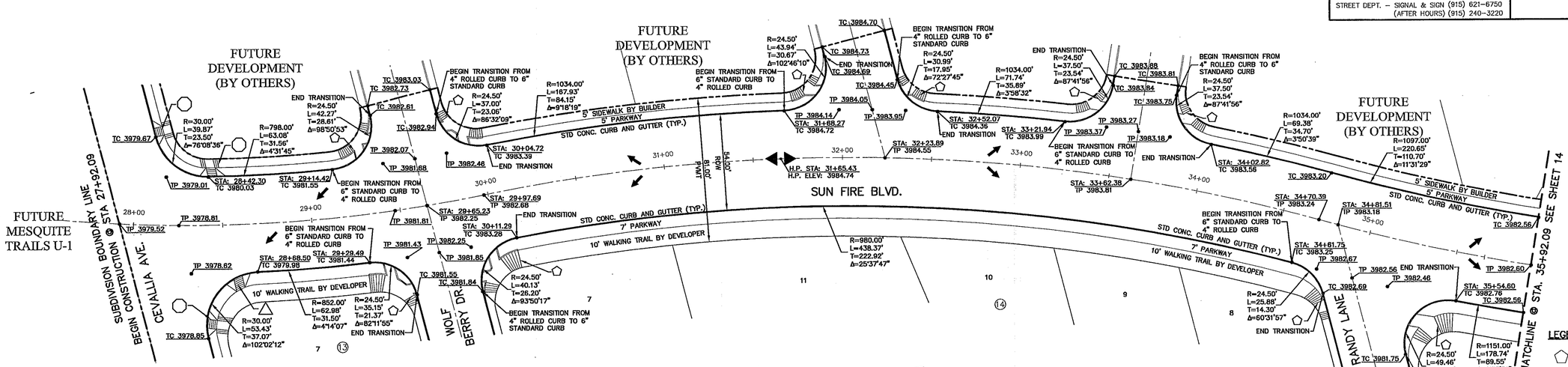
OF 30

103025

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) 852-3788
U.S. SPRINT TELECOMM	(800) 521-0579
STREET DEPT. - SIGNAL & SIGN (AFTER HOURS)	(915) 621-6750 (915) 240-3220

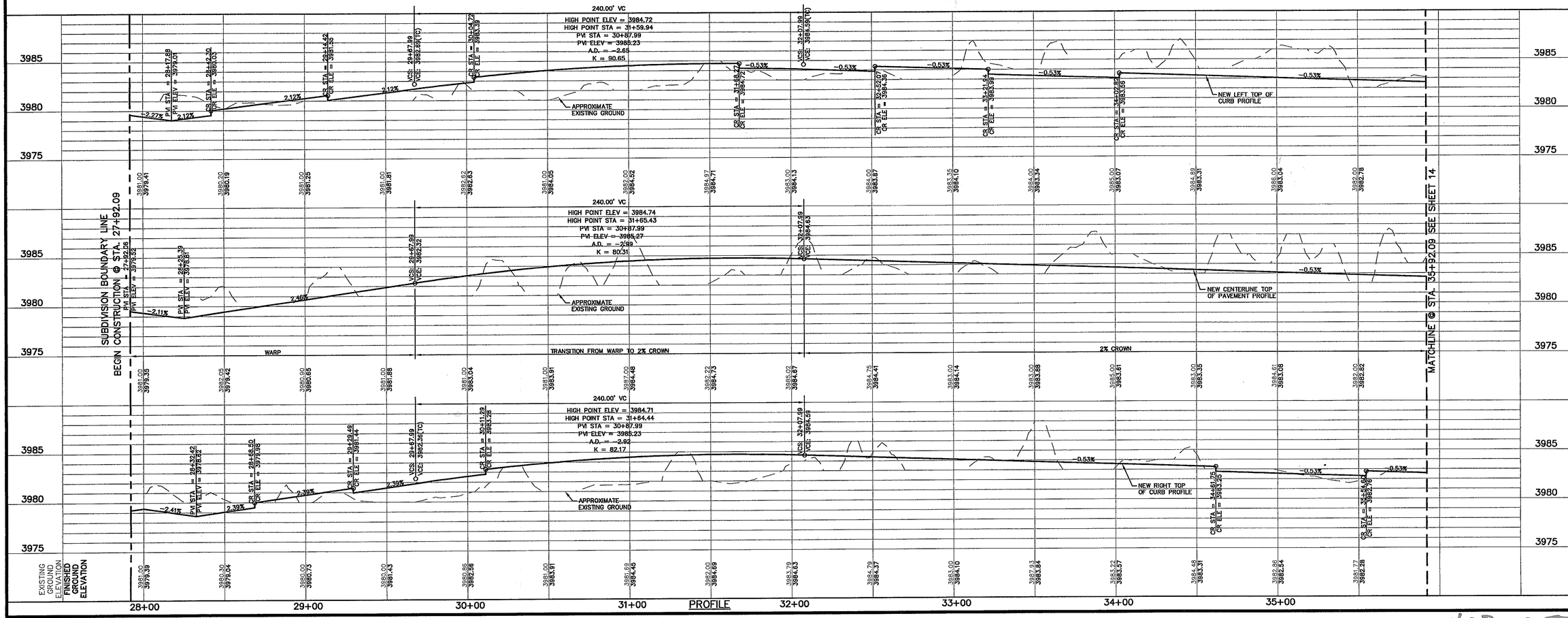
WARNING ! BEFORE YOU DIG

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



LEGEND:

- WHEELCHAIR RAMP (DIRECTIONAL RAMP SEE DETAIL 6/22)
- DIAGONAL CURB RAMP (TYPE V) FLARED SIDES SEE DETAIL 5/22
- DIAGONAL CURB RAMP (TYPE III) SEE DETAIL 7/22)



REFERENCES — BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE AND LINDO DRIVE ELEVATION = 4033.10 (CITY DATUM).

DATE	REVISIONS	BY

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1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

5/10/07

ENGINEER'S SEAL

JORGE L. AZCARATE 85075 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS

5/10/07

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE

MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE

SUN FIRE BLVD. PLAN & PROFILE FROM STA. 27+92.09 TO STA. 35+92.09

SHEET NO.

13

OF 30

103025

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
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

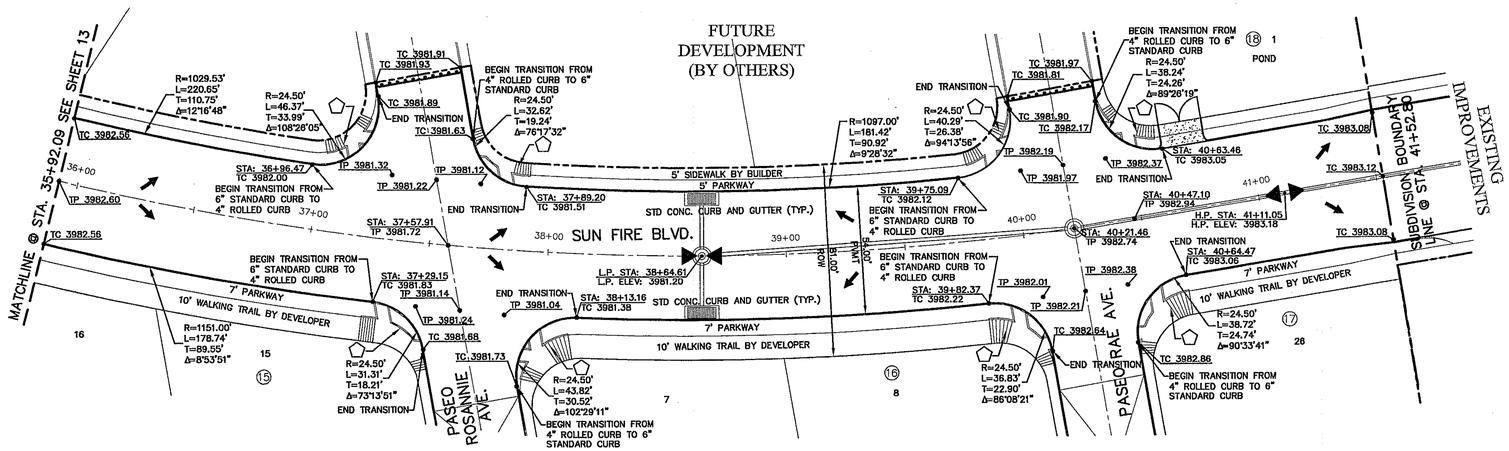
WARNING ! BEFORE YOU DIG

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

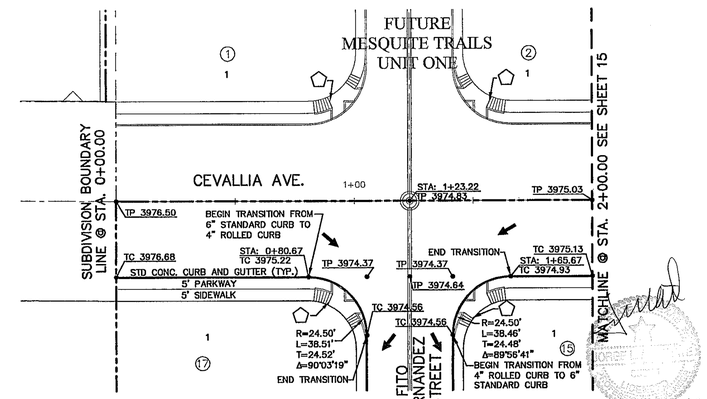
REFERENCES - BENCHMARKS

BENCHMARK 18 CITY MONUMENT AT THE INTERSECTION OF PASEO ROSANNIE AVE. AND PASEO DINDO DRIVE
ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY



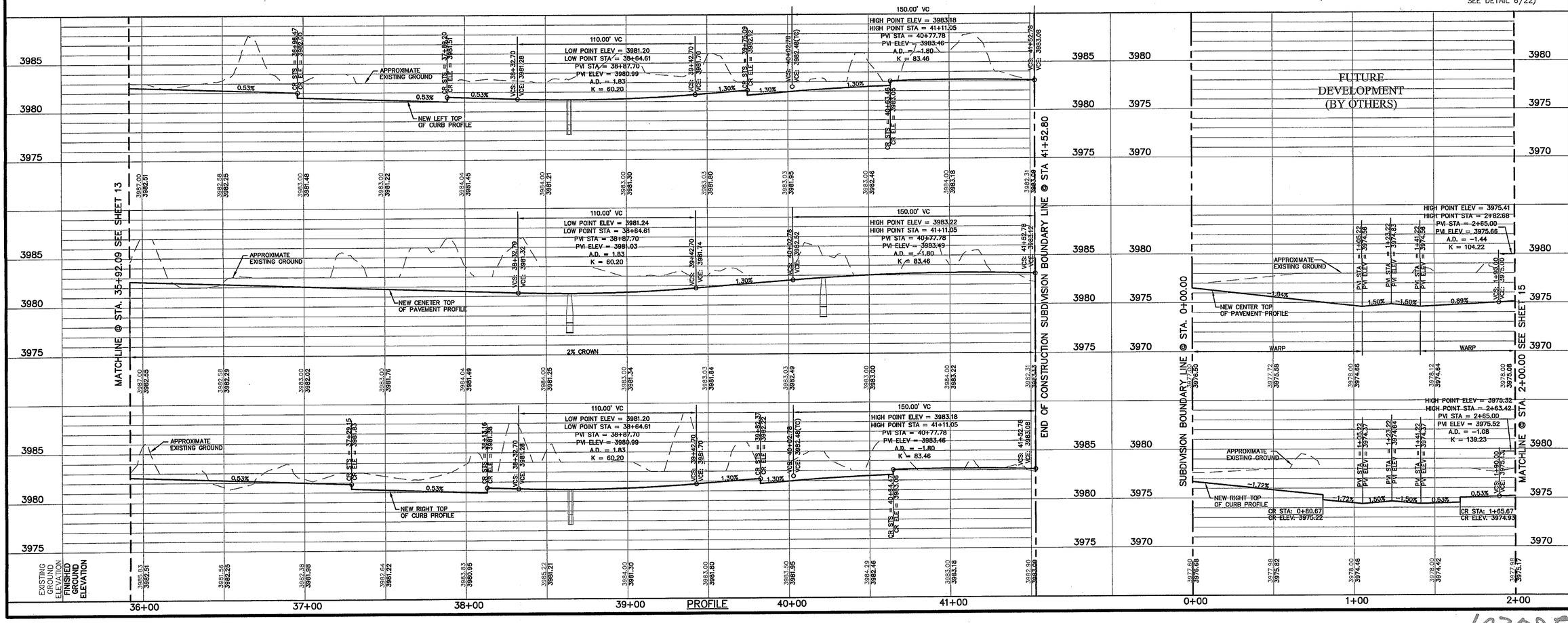
PLAN



PLAN

LEGEND:

- 5' X 5' WHEELCHAIR PASSING
- WHEELCHAIR RAMP (DIRECTIONAL RAMP SEE DETAIL 6/22)



ENGINEER'S SEAL

JORGE L. AZCARATE
85075
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
5/16/07

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

DATE:	MAY 2007
DESIGN BY:	F.Z.
DRAWN BY:	J.N.
CHKD BY:	J.L.A.
APPVD. BY:	J.L.A.
JOB No.	2250-012-D

PROJECT TITLE

MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE

SUN FIRE BLVD. PLAN & PROFILE FROM STA. 35+92.09 TO STA. 41+52.80

CEVALLIA AVE. PLAN & PROFILE FROM STA. 0+00.00 TO STA. 2+00.00

SHEET NO.

14 OF 30

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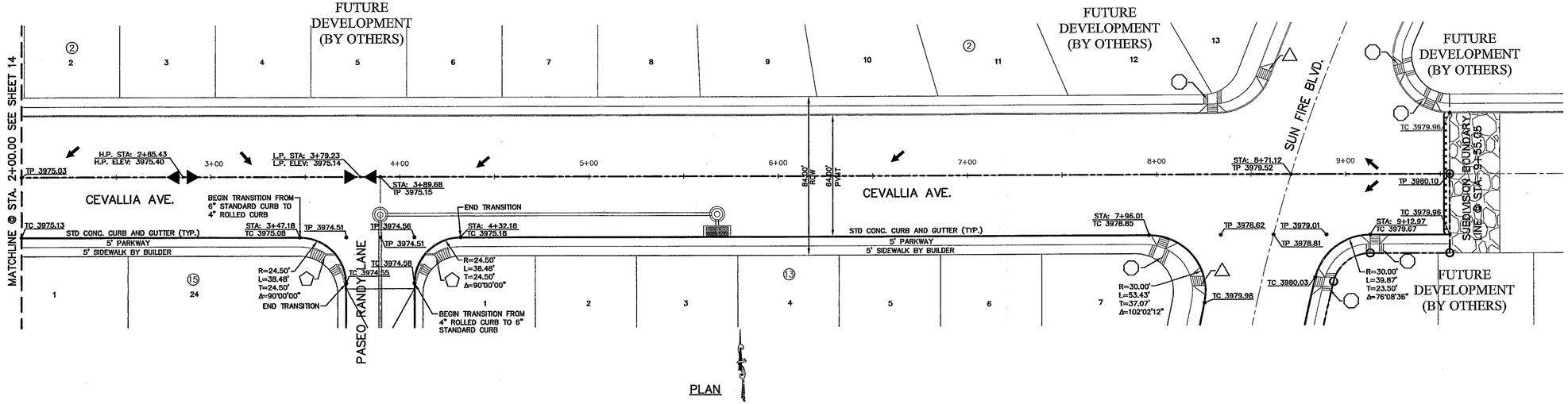
www.ceagroup.net

103025

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
STREET DEPT. – SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

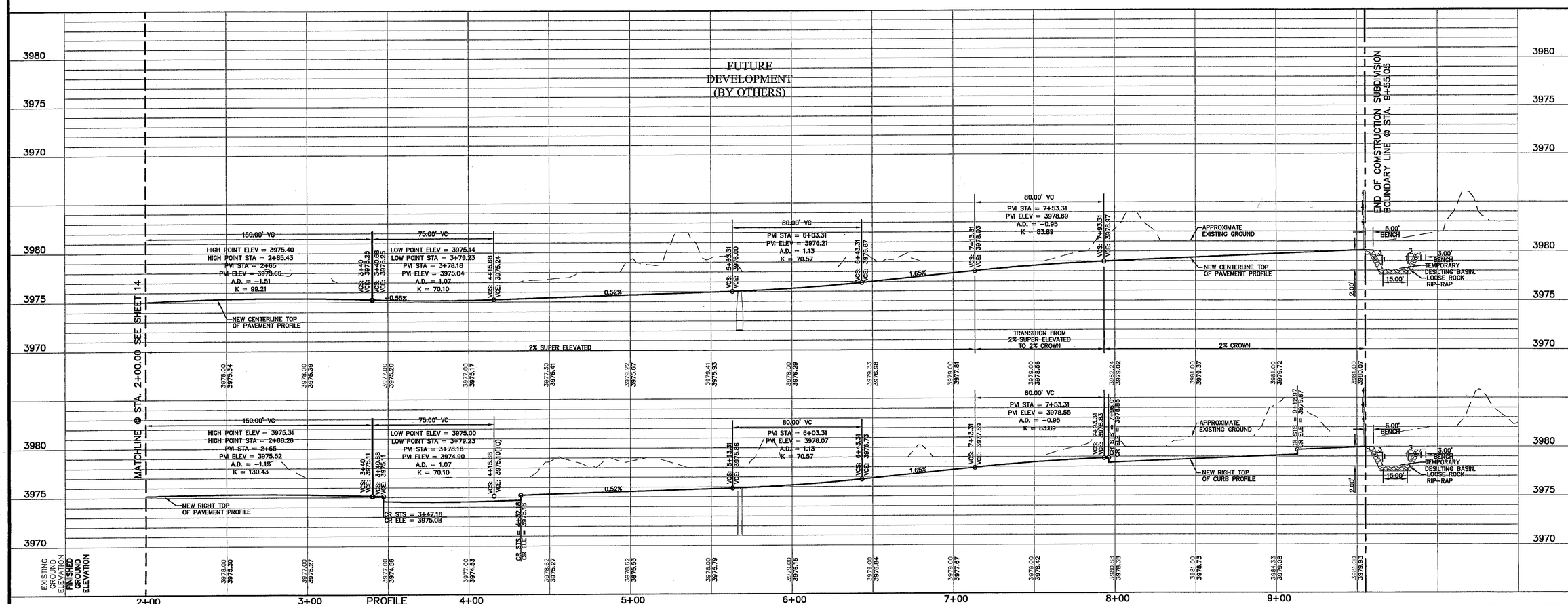
WARNING ! BEFORE YOU DIG

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



LEGEND:

- WHEELCHAIR RAMP (DIRECTIONAL RAMP SEE DETAIL 6/22)
- DIAGONAL CURB RAMP (TYPE V) FLARED SIDES SEE DETAIL 5/22
- DIAGONAL CURB RAMP (TYPE III) SEE DETAIL 7/22



REFERENCES – BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO AND LARGE CIRCLE AND PASEO LINDO DRIVE. ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

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engineers • architects • planners
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Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL

JORGE L. MONTANEZ 86075 STATE OF TEXAS 5/16/07

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APP'VD. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE

MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE

CEVALLIA AVE. PLAN & PROFILE FROM STA. 2+00.00 TO STA. 9+55.05

SHEET NO.

15

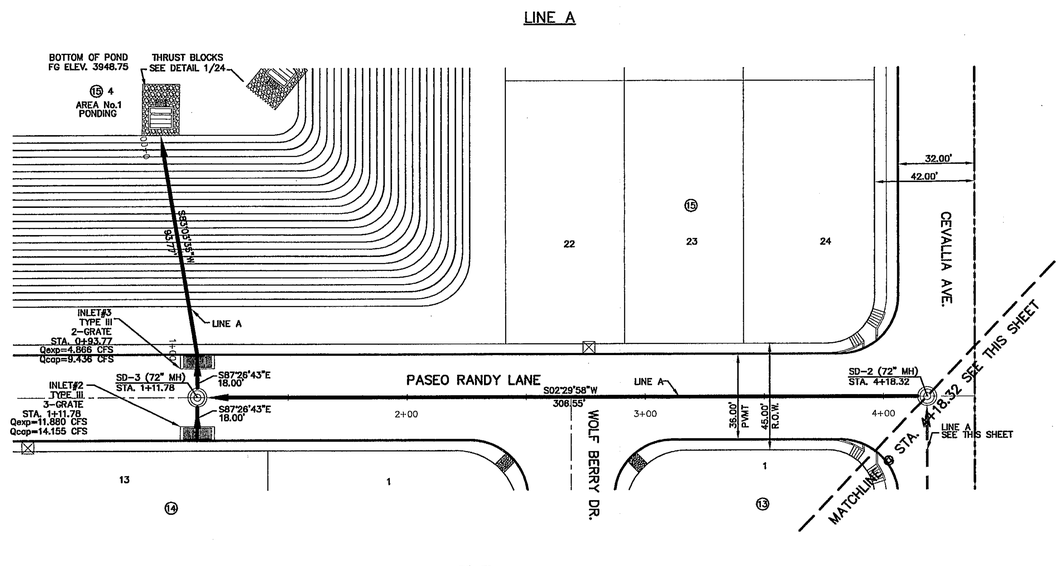
OF 30

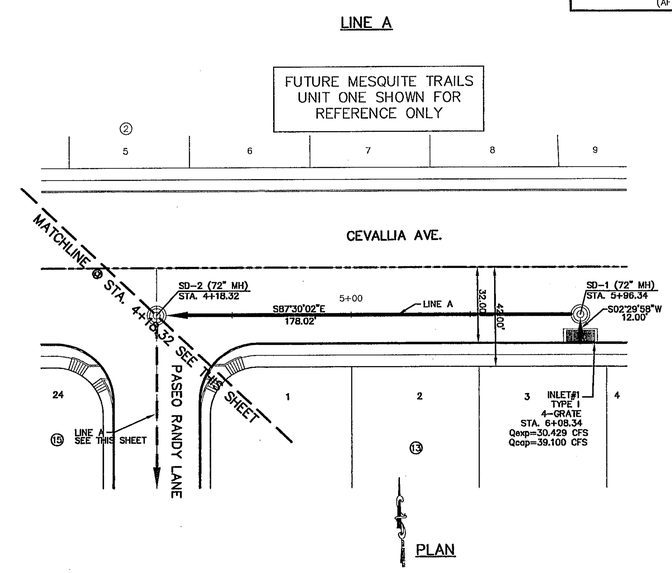
103025

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
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING ! BEFORE YOU DIG

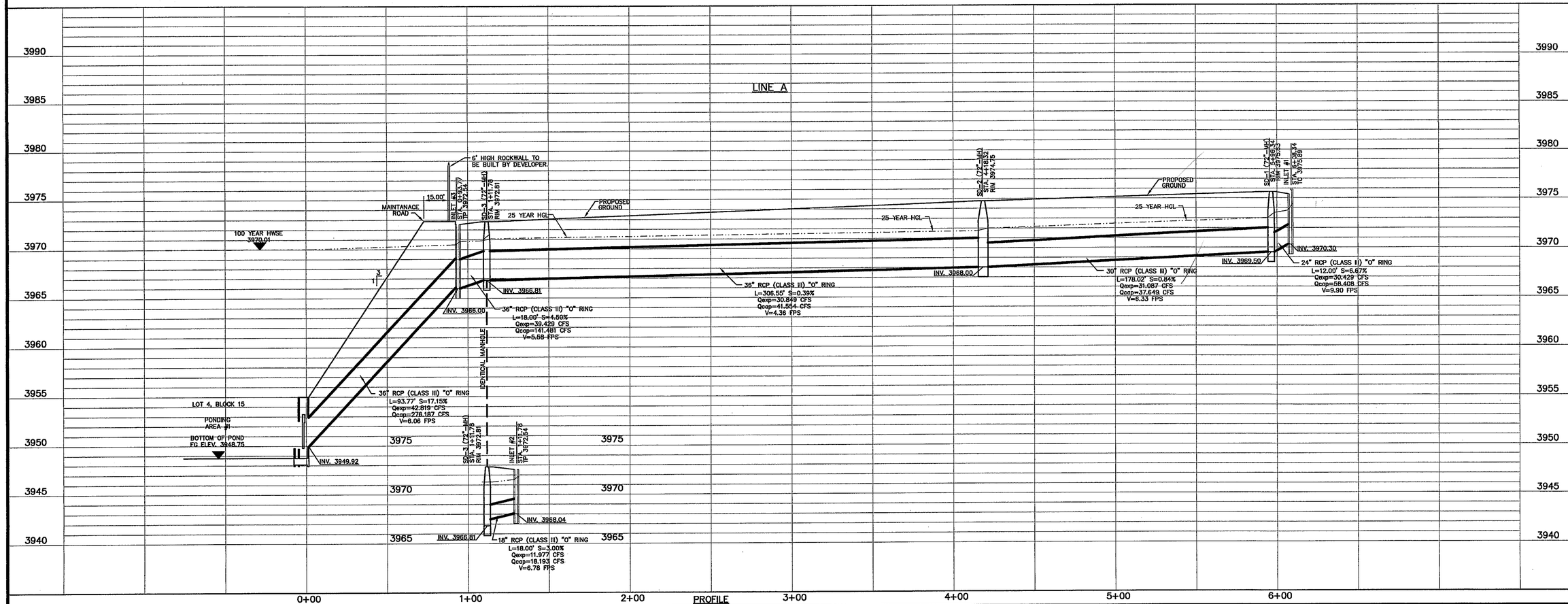
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES





LEGEND:

STORM SEWER LINE
PROPSED STORM SEWER LINE ON OTHER STREETS



REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO RANDY LANE AND LINDO DRIVE
ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

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Office 915.544.3228 Fax 915.544.3233
www.ceagroup.net

ENGINEER'S SEAL
JOSE L. ROMANI III
85075
5/17/07

SCALE
Horizontal: 1"=30'
Vertical: 1"=5'
Contour Interval: N/A
DATE: MAY 2007
DESIGN BY: E.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPV'D. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
LINE A
PLAN & PROFILE
FROM STA. 0+00.00
TO STA. 6+08.34

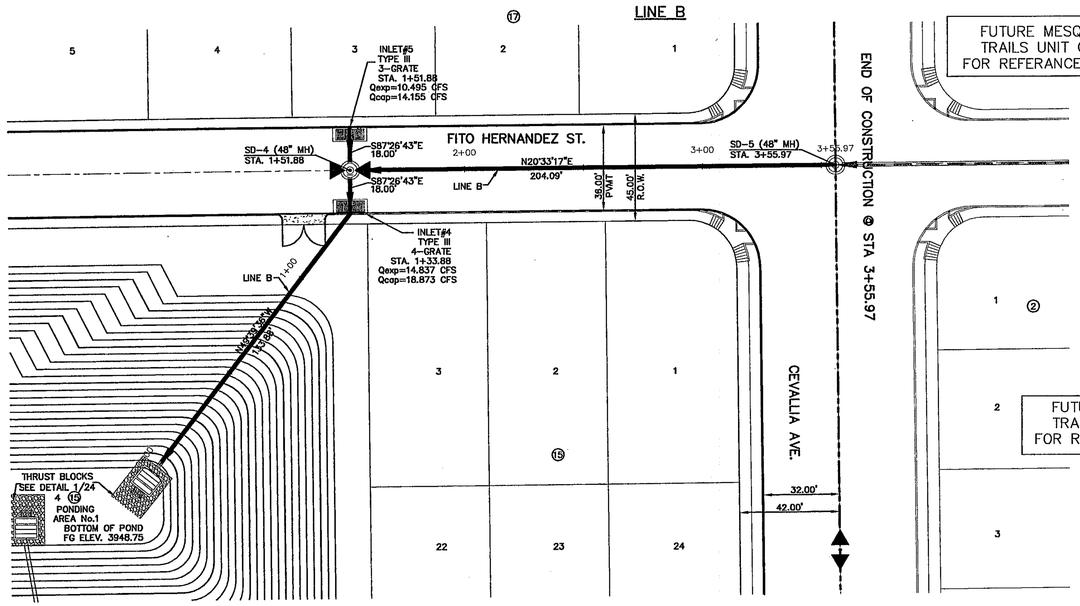
SHEET NO.
16
OF 30

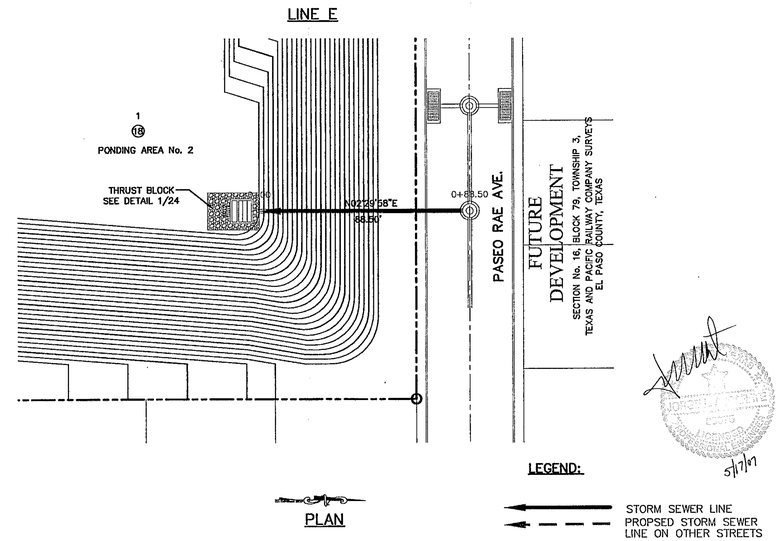
103025

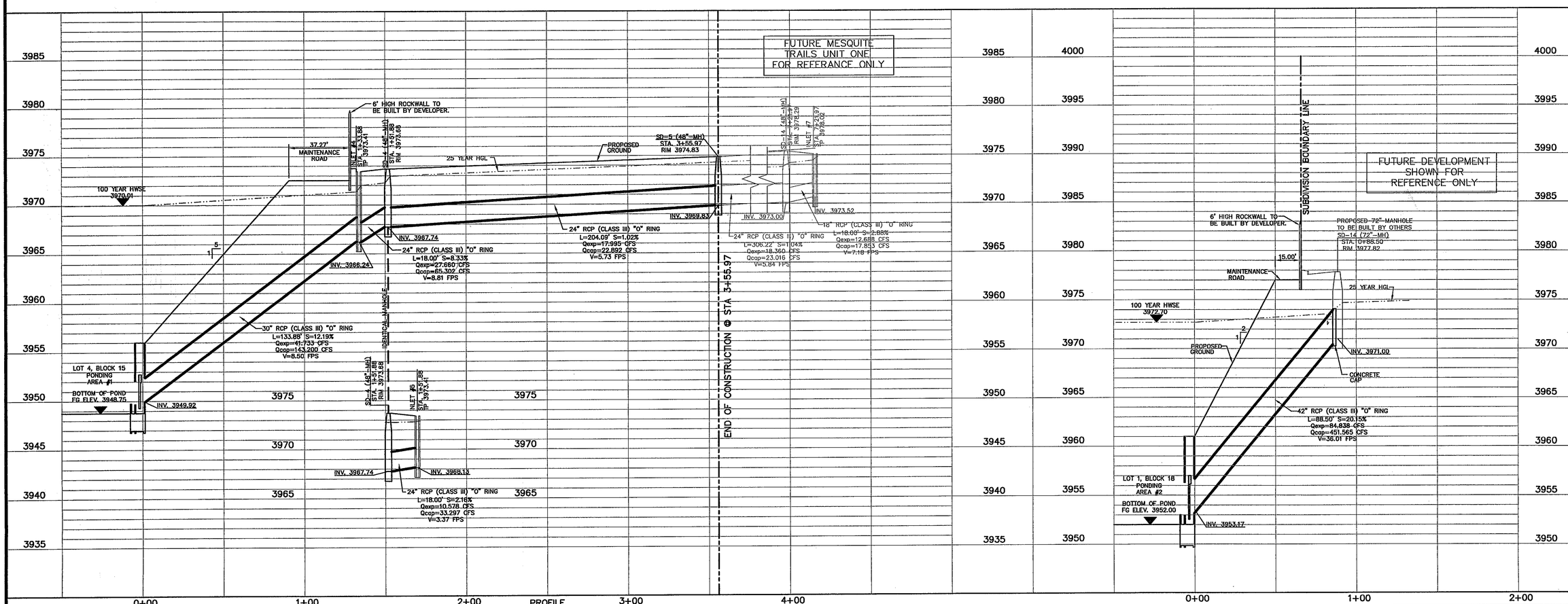
UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
STREET DEPT. – SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING ! BEFORE YOU DIG

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







REFERENCES – BENCHMARKS
BENCHMARK: IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
1204 Montana Ave. El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. LAZCANO
86075
PROFESSIONAL ENGINEER
5/7/07

SCALE
Horizontal: 1"=30'
Vertical: 1"=5'
Contour Interval: N/A
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: R.O.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
LINE B
PLAN & PROFILE
FROM STA. 0+00.00
TO STA. 3+55.97

LINE E
PLAN & PROFILE
FROM STA. 0+00.00
TO STA. 0+88.50

SHEET NO.
17
OF 30

103025

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
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

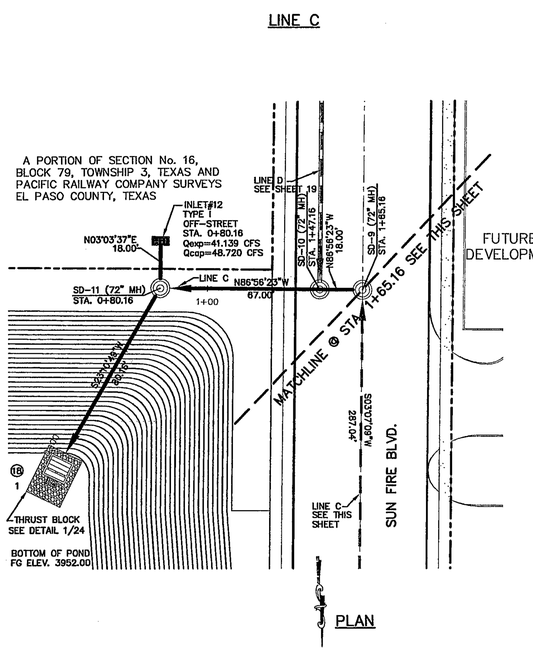
WARNING ! BEFORE YOU DIG

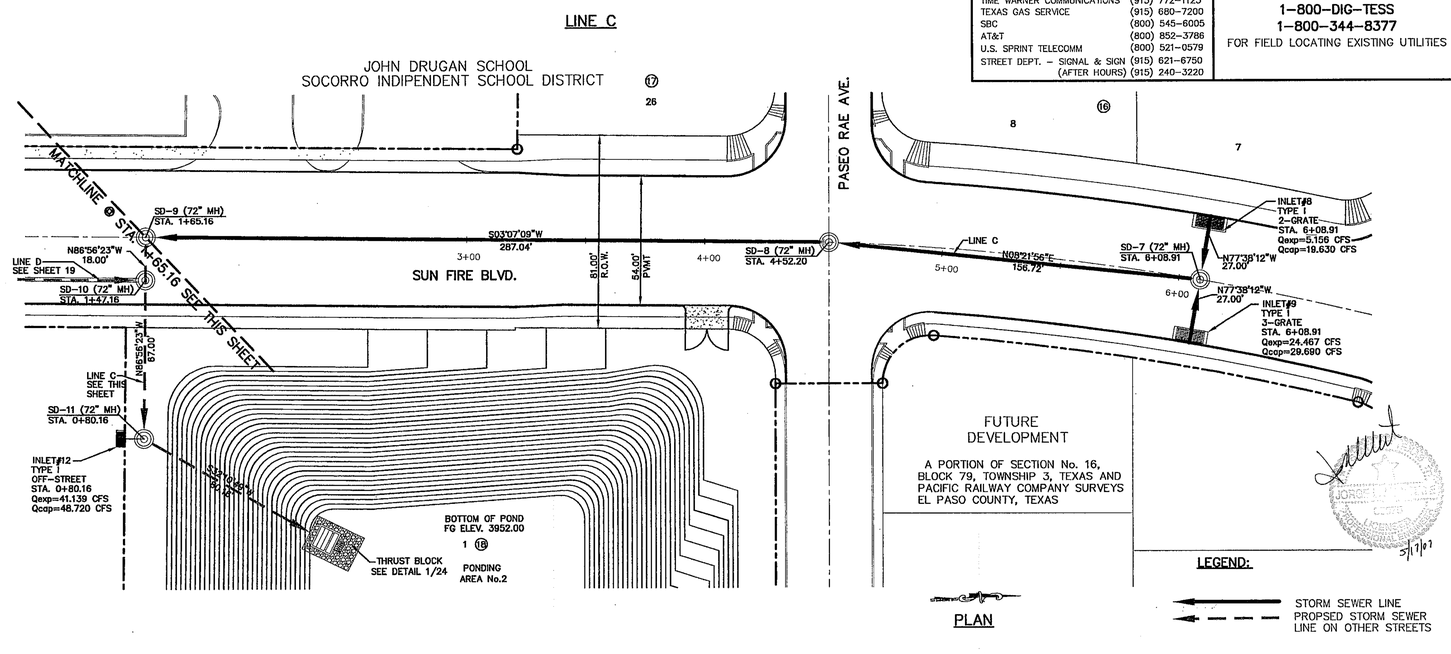
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES

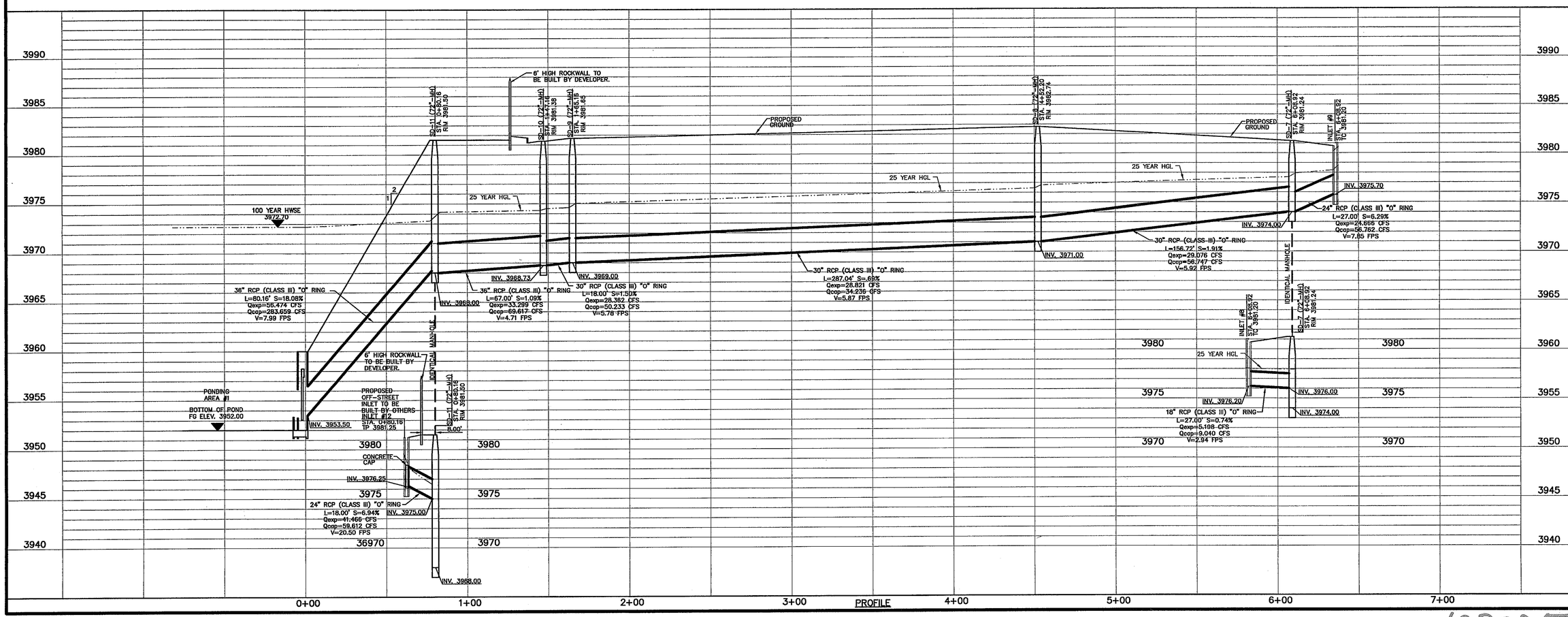
REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4033.10 (CITY DATUM).

DATE	REVISIONS	BY







ENGINEER'S SEAL

JORGE L. AZCARATE 85075 TEXAS 3/7/07

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE

MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE

LINE C
PLAN & PROFILE
FROM STA. 0+00.00
TO STA. 6+08.91

SHEET NO.

18

OF 30

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

103025

UTILITY LOCATOR SERVICES	
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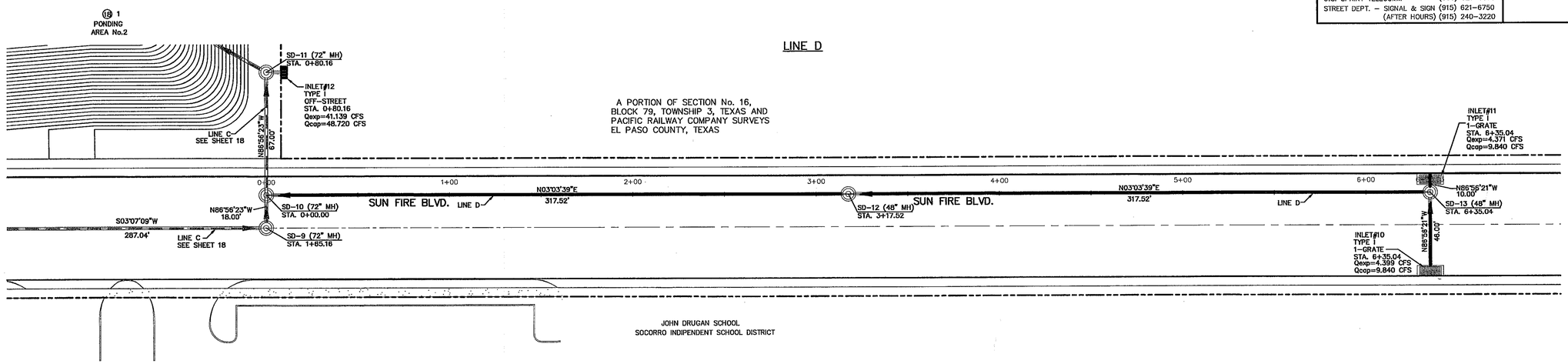
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING ! BEFORE YOU DIG

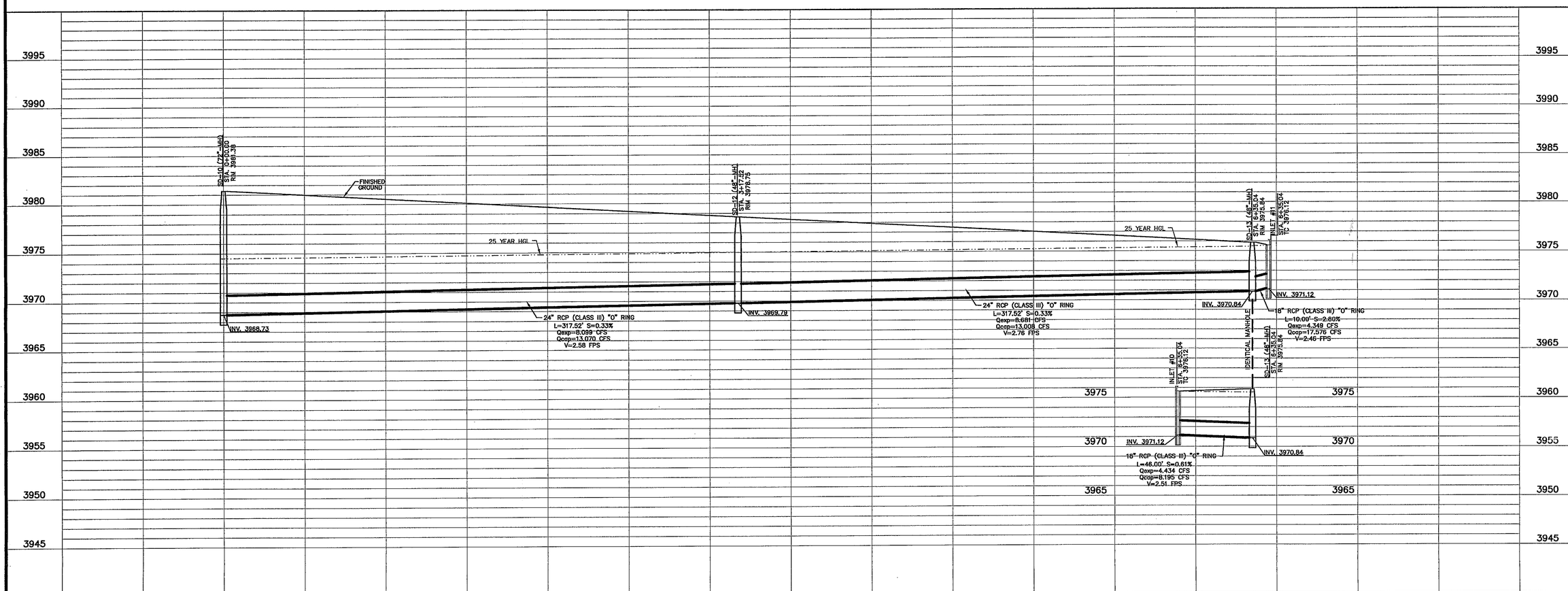
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES



PLAN

LEGEND:

STORM SEWER LINE
PROPSED STORM SEWER LINE ON OTHER STREETS



PROFILE

REFERENCES - BENCHMARKS
BENCHMARK 15 CITY MONUMENT AT THE INTERSECTION OF PASO ALTO AND ALAMEDA LINCO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

caa engineering
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.caaengineering.net

ENGINEER'S SEAL
JORGE L. ALDAHUTE
86075
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
5/16/07

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

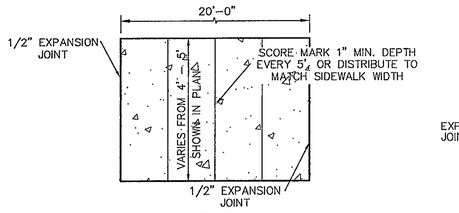
DATE:	MAY 2007
DESIGN BY:	E.Z.
DRAWN BY:	J.M.
CHKD. BY:	J.L.A.
APPVD. BY:	J.L.A.
JOB No.	2250-012-LD

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
LINE D
PLAN & PROFILE
FROM STA. 0+00.00
TO STA. 6+35.04

SHEET NO.
19
OF 30

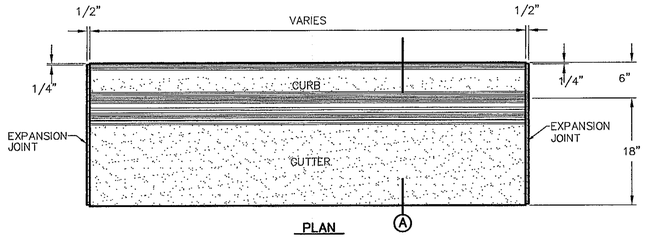
103025



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" PREMOLDED 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.

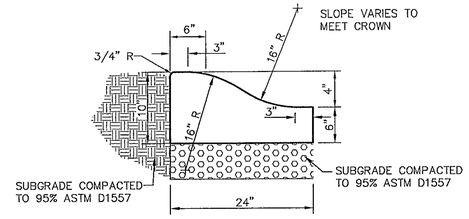
1/20 SECTION-SIDEWALK/SLAB
SCALE: 1"=2'-0"



NOTES:

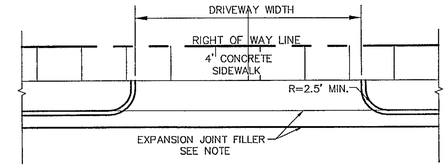
1. CONCRETE CURB, GUTTER, AND RETURNS SHALL BE 3,000 P.S.I. MIN.
2. DUMMY JOINTS REQUIRED AT 10' O.C.
3. 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT (AASHTO M-33) IS REQUIRED FOR ALL CURBS RETURNS. TRIM BITUMINOUS MATERIAL 1/4" LESS THAN NEAT CURB & GUTTER DIMENSION.
4. SUBGRADE UNDER CURBS MUST BE FORMED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

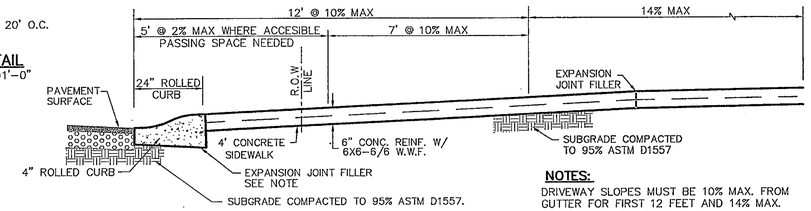
2/20 CURB & GUTTER DETAIL
SCALE: 1"=1'-0"



1. CONCRETE TO BE 3000 PSI MIN. @28 DAYS
2. DUMMY JOINTS REQUIRED AT 10' O.C. FOR HEADERS AND 5' O.C. FOR SIDEWALK
3. EXPANSION MATERIAL REQUIRED AT CURB RETURNS WITH 1/2" PREMOLDED ASPHALT IMPREGNATED EXPANSION MATERIAL OR EQUAL.
4. EXPANSION JOINTS REQUIRED AT 50' O.C. WHEN FORMING FOR HEADERS.
5. EXPANSION JOINTS REQUIRED FOR SIDEWALK AT 20' O.C.
6. * FOR CUL-DE-SAC AND HEEL ONLY.

3/20 4" CONCRETE ROLLED CURB DETAIL
SCALE: 1"=1'-0"



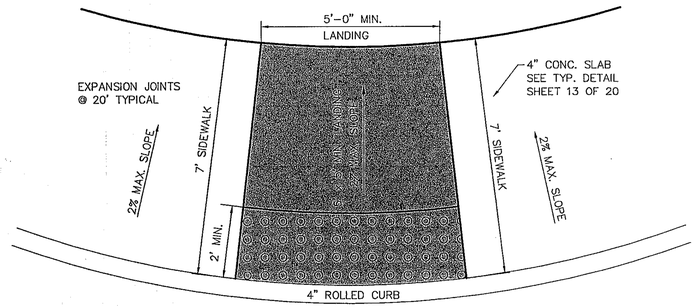


NOTES:

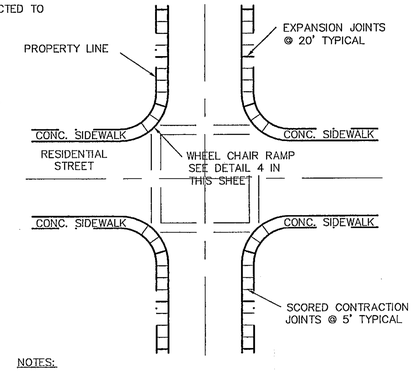
DRIVEWAY SLOPES MUST BE 10% MAX. FROM GUTTER FOR FIRST 12 FEET AND 14% MAX. THEREAFTER (DRIVEWAY SHALL BE LOCATED @ HIGH SIDE OF LOT UNLESS OTHERWISE COORDINATED WITH CITY OF EL PASO)

* WHERE ACCESIBLE PASSING SPACE NEEDED DRIVEWAY SLOPES MUST BE 2% MAX FROM GUTTER FROM FIRST 5 FEET AND 10% MAX FROM NEXT 7 FEET AND 14% MAX THEREAFTER.

4/20 TYPICAL DRIVEWAY DETAIL
SCALE: N.T.S.



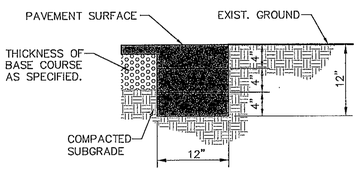
5/20 TYPICAL WHEELCHAIR RAMP DETAIL
SCALE: 1" = 2'-0"



NOTES:

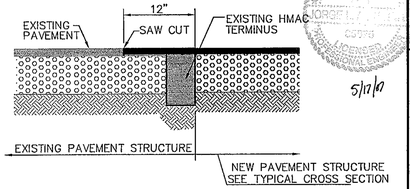
1. RAMPS MAY BE PLACED AS SUGGESTED, HOWEVER EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC., MAY AFFECT PLACEMENT.
2. THE CONCRETE SURFACE SHALL HAVE A ROUGH, NONSKID TYPE FINISH.
3. CONSTRUCTION METHODS SHALL CONFORM WITH THE CITY OF EL PASO SPECIFICATIONS.
4. ALL PARKING AND PAVEMENT MARKINGS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

6/20 WHEELCHAIR RAMP STREET PLAN
SCALE: 1" = 30'-0"



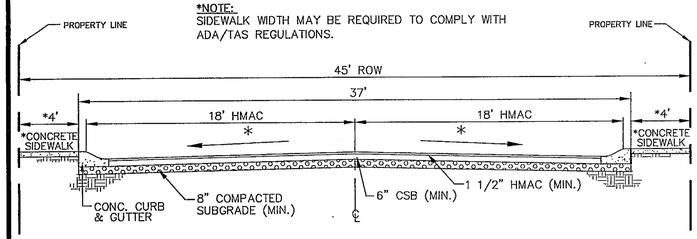
NOTE :
TERMINUS MUST BE CONSTRUCTED IN 4" LIFTS.
FINAL LIFT MUST BE PLACED WITH FINAL PAVEMENT COURSE.

7/20 TERMINUS OF STREET
SCALE: 1"=1'-0"



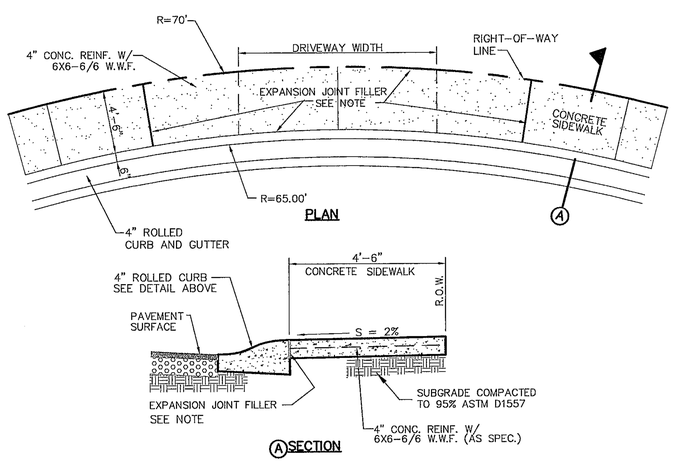
8/20 TYPICAL PAVEMENT JOINT SECTION
SCALE: N.T.S.

***NOTE:**
SIDEWALK WIDTH MAY BE REQUIRED TO COMPLY WITH ADA/TAS REGULATIONS.

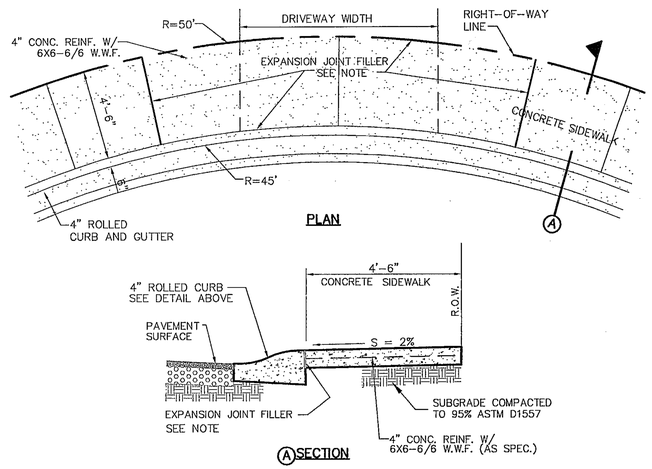


NOTE:
ROADWAY THICKNESS SHOWN ARE BASED ON CBR RESULTS PREPARED BY SOIL MECHANINCS. STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT COUNTY OF EL PASO PAVING CONSTRUCTION DETAILS AND STANDARD SPECIFICATIONS (SEE GENERAL INFORMATION SHEET 1 FOR ROADWAY CONSTRUCTION SPECIFICATIONS).

9/20 TYPICAL 45' ROW STREET SECTION DETAIL
SCALE: N.T.S.



10/20 HEEL (70' R) DRIVEWAY DETAIL
SCALE: N.T.S.



NOTE: EXPANSION JOINT FILLER SHALL CONSIST OF 1/2" BITUMINOUS TYPE PREFORMED (AASHTO M-33)

11/20 CUL-DE-SAC (50' R) DRIVEWAY DETAIL
SCALE: N.T.S.

REFERENCES - BENCHMARKS
BENCHMARK (B) CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE. ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

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engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
STATE OF TEXAS
JOSEPH L. LAZARINE
86075
LICENSED PROFESSIONAL ENGINEER
5/17/07

5/17/07

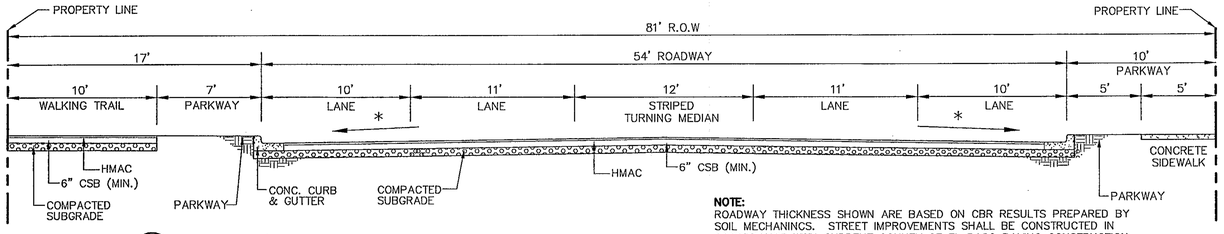
SCALE
Horizontal: AS SHOWN
Vertical: N/A
Contour Interval: N/A
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPV'D. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
STANDARD DETAILS
(SHEET 1 OF 3)

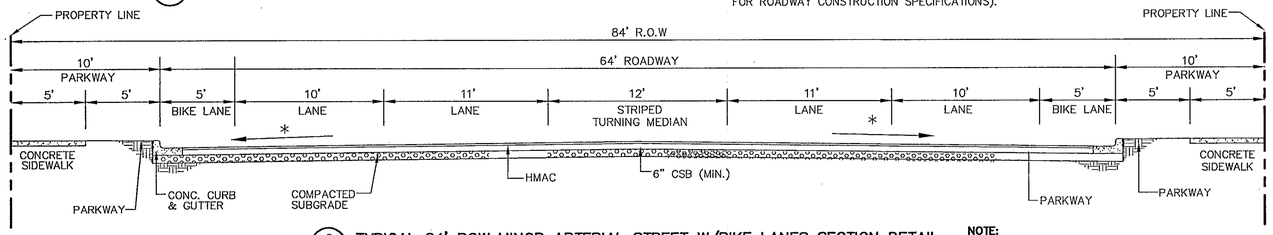
SHEET NO.
20
OF 30

103025



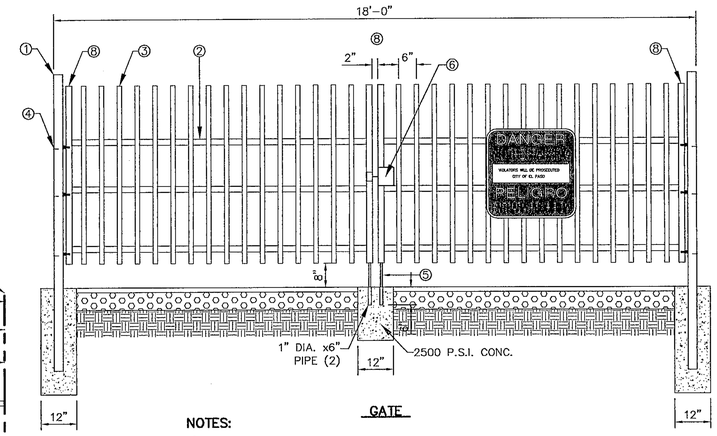
1/21 TYPICAL 81' ROW MINOR ARTERIAL STREET SECTION DETAIL
SCALE: N.T.S.

NOTE:
ROADWAY THICKNESS SHOWN ARE BASED ON CBR RESULTS PREPARED BY SOIL MECHANINCS. STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT COUNTY OF EL PASO PAVING CONSTRUCTION DETAILS AND STANDARD SPECIFICATIONS (SEE GENERAL INFORMATION SHEET 1 FOR ROADWAY CONSTRUCTION SPECIFICATIONS).

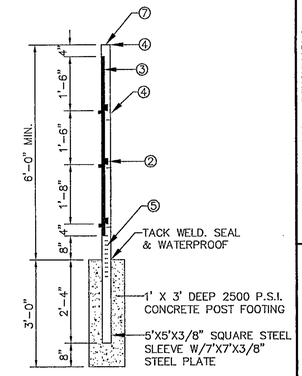


2/21 TYPICAL 84' ROW MINOR ARTERIAL STREET W/BIKE LANES SECTION DETAIL
SCALE: N.T.S.

NOTE:
ROADWAY THICKNESS SHOWN ARE BASED ON CBR RESULTS PREPARED BY SOIL MECHANINCS. STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT COUNTY OF EL PASO PAVING CONSTRUCTION DETAILS AND STANDARD SPECIFICATIONS (SEE GENERAL INFORMATION SHEET 1 FOR ROADWAY CONSTRUCTION SPECIFICATIONS).



GATE

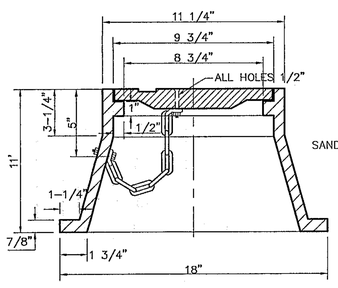


GATE POST

NOTES:

1. 3"X3"X3/16" SQUARE STEEL TUBING
2. 2"X1"X14 GA. RECTANGULAR STEEL TUBING
3. 1 1/2"X 1/2" X16 GA. RECTANGULAR STEEL TUBING
4. BOLT HOOK AND STRAP HINGE
5. CANE BOLT LATCH W/KEEPER 5-8"X18" LONG (2 REQUIRED)
6. DOUBLE GATE HEAVY DUTY INDUSTRIAL LATCH W/PAD LOCK
7. FLAT TOP POLYVINYL CAP
8. 2"X1"X10 GA. RECT. STL. TUBING

3/21 WROUGHT IRON GATE
SCALE: 1"=2'-0"



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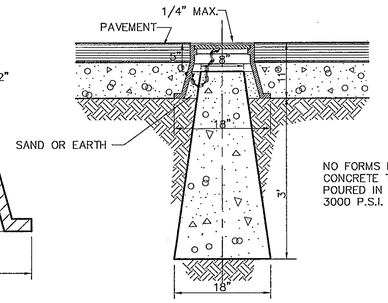
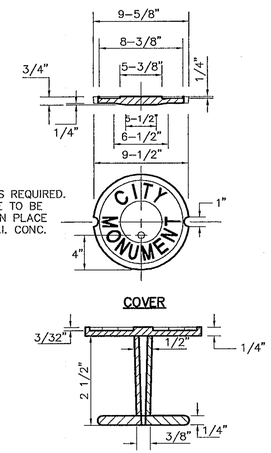
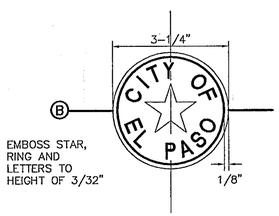


NO FORMS REQUIRED. CONCRETE TO BE POURED IN PLACE 3000 P.S.I. CONC.





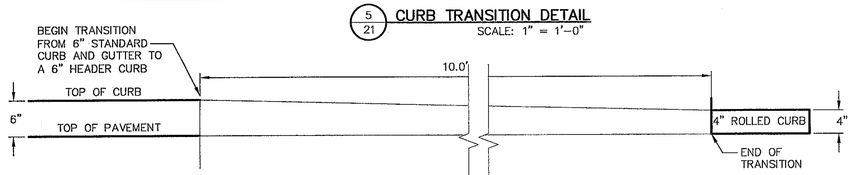
BRONZE MONUMENT CAP

OUTSIDE RADIUS OF STAR = 3/4"

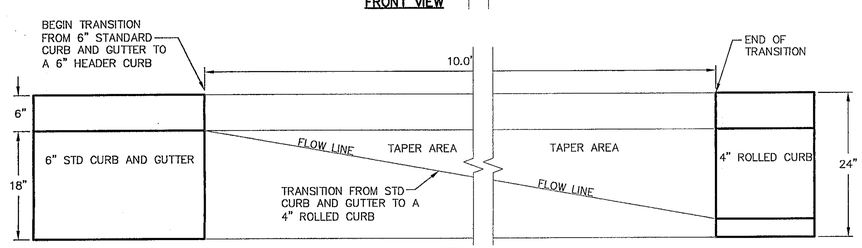
INSIDE RADIUS OF STAR = 3/16"

4/21 CITY SURVEY MONUMENT DETAILS
SCALE: N.T.S.

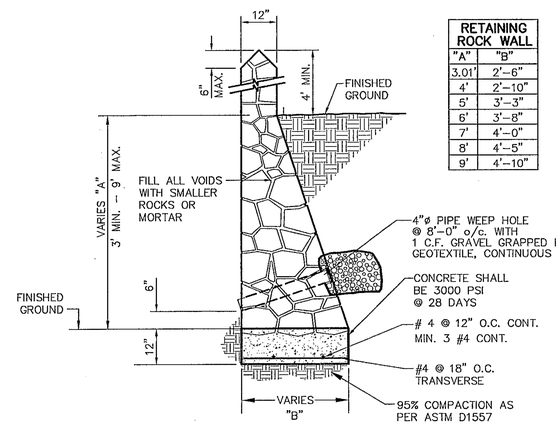
5/21 CURB TRANSITION DETAIL
SCALE: 1" = 1'-0"



FRONT VIEW



TOP VIEW



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

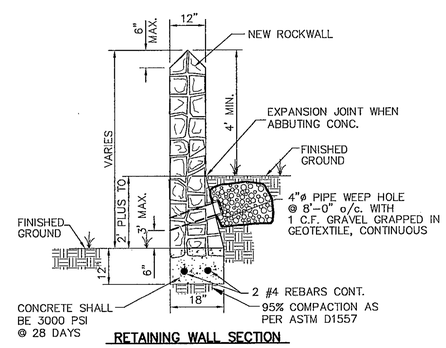
RETAINING ROCK WALL	
"A"	"B"
3.01'	2'-6"
4'	2'-10"
5'	3'-3"
6'	3'-8"
7'	4'-0"
8'	4'-5"
9'	4'-10"

ROCK WALL NOTES

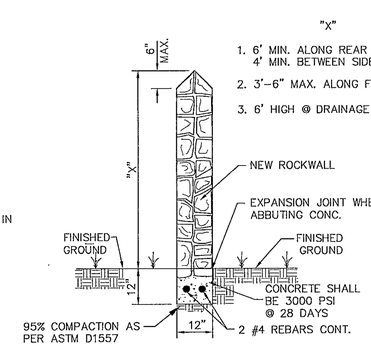
1. STONE FOR ROCKWALL SHALL BE AS NEARLY UNIFORM IN SECTIONS AS IN PRACTICABLE THE STONE SHALL BE DENSE AND RESISTANT OF AIR AND WATER
2. MORTAR MUST BE TYPE "S" 1800 P.S.I. AS PER ASTM C270
3. MASONRY WALL OVER SIX (6) FEET IN HEIGHT AND THOSE USED FOR EARTH RETENTION OVER TWO (2) FEET MUST BE DESIGNED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

NOTE: ALL ROCKWALLS AND RETAINING ROCKWALLS INDICATED "BY BUILDER" SHALL BE REQUIRED AT TIME OF BUILDING PERMIT.

NOTE: BUILDER SHALL SUBMIT ROCKWALL AND RETAINING ROCKWALL COMPUTATIONS TO THE BUILDING SERVICES FOR APPROVAL.

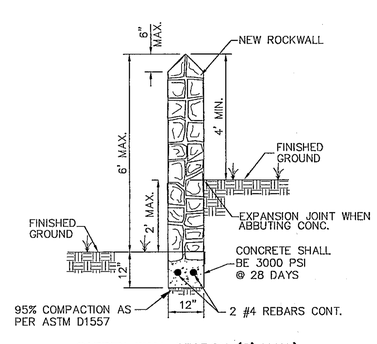


RETAINING WALL SECTION (2' PLUS TO 3' MAX.)



GARDEN WALL SECTION

1. 6' MIN. ALONG REAR & 4' MIN. BETWEEN SIDE YARDS.
2. 3'-6" MAX. ALONG FRONT YARDS.
3. 6' HIGH @ DRAINAGE AND BASINS.



GARDEN WALL SECTION (2' MAX.)

6/21 TYPICAL ROCKWALL DETAILS
SCALE: 1" = 2'-0"

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND RAISED LINDO DRIVE ELEVATION = 4063.10 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. AZCARATE
85075
5/4/07

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

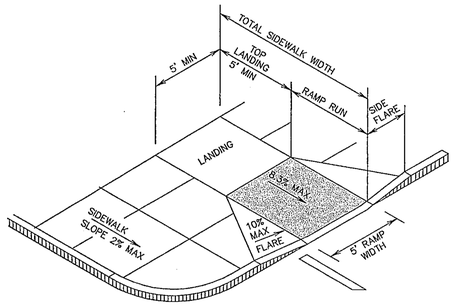
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APP'D. BY: J.L.A.
JOB No. 2250-012-ID

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

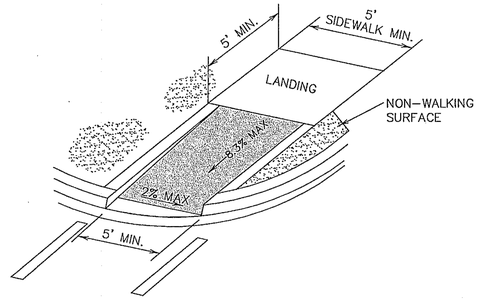
SHEET TITLE
STANDARD DETAILS
(SHEET 2 OF 3)

SHEET NO.
21
OF 30

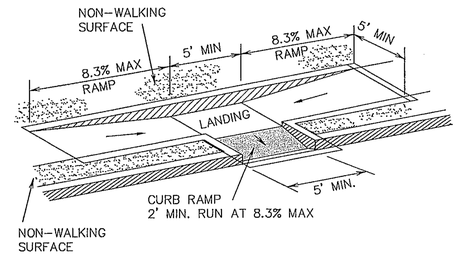
103025



1/22 PERPENDICULAR CURB RAMP (TYPE I)
SCALE: NTS



2/22 DIRECTIONAL RAMP WITHIN RADIUS (TYPE IV)
SCALE: NTS



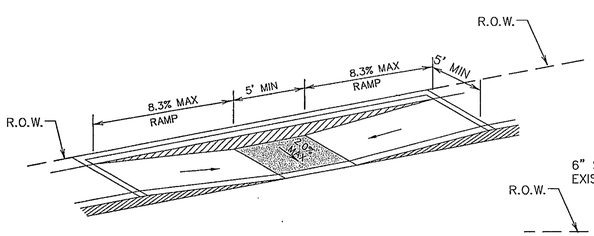
3/22 COMBINATION CURB RAMPS (TYPE VII)
SCALE: NTS

GENERAL NOTES:

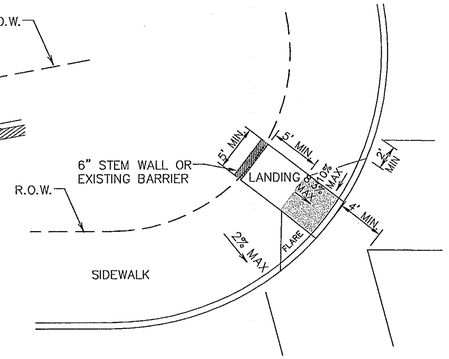
LEGEND

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 HAVE A COLOR CONTRAST VISUALLY WITH ADJOINING SURFACES.

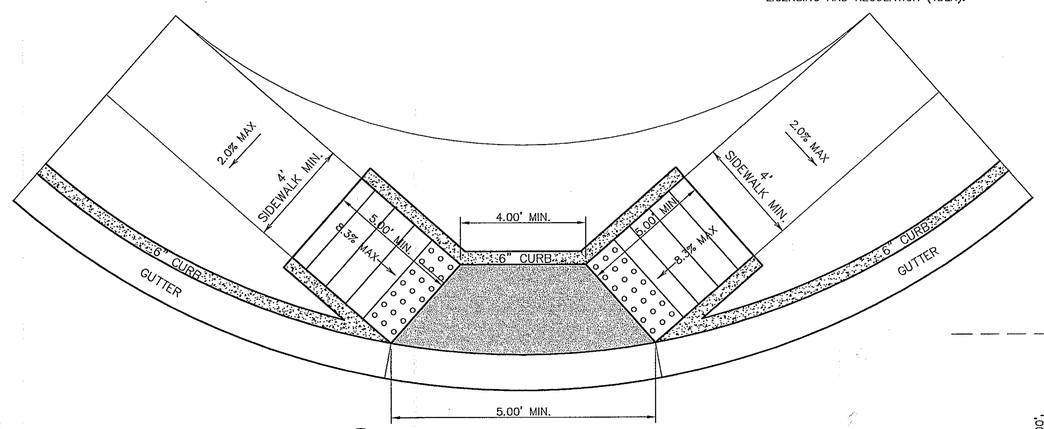
1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
2. THE MINIMUM SIDEWALK WIDTH IS 5'. WHERE A 5' SIDEWALK CAN NOT BE PROVIDED DUE TO SITE CONSTRAINTS, A MINIMUM 3' SIDEWALK WITH 5'X 5' PASSING AREAS AT INTERVALS NOT TO EXCEED 200 FT IS REQUIRED.
3. LANDINGS SHALL BE 5' X 5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION.
4. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE A MINIMUM OF 4'X 4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
5. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. OTHERWISE, FLARED SIDES SHALL BE PROVIDED.
6. ALL CONCRETE SIDEWALK SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE IN THE PLANS.
7. RAMP TEXTURES MUST CONSIST OF TRUNCATED DOMED SURFACES. TEXTURES ARE REQUIRED TO BE DETECTABLE UNDERFOOT. SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED. REFER TO TRUNCATED DOME DETAIL.
8. CROSSWALK DIMENSIONS, CROSSWALK MARKINGS AND STOP BAR LOCATIONS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS. AT INTERSECTIONS WHERE CROSSWALK MARKINGS ARE NOT REQUIRED, RAMPS SHALL BE ALIGNED WITH THEORETICAL CROSSWALKS, OR AS DIRECTED BY THE ENGINEER.
9. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND RAMP SURFACES IS 2%.
10. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADMINISTERED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR).



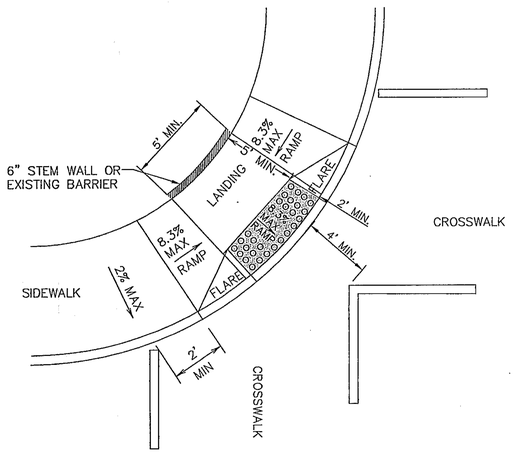
4/22 PARALLEL CURB RAMP (TYPE II)
SCALE: NTS



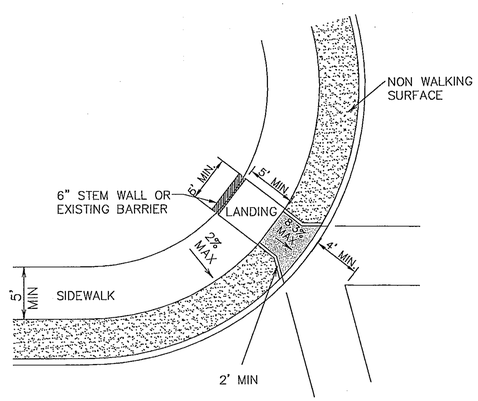
5/22 DIAGONAL CURB RAMP (FLARED SIDES) (TYPE V)
SCALE: NTS



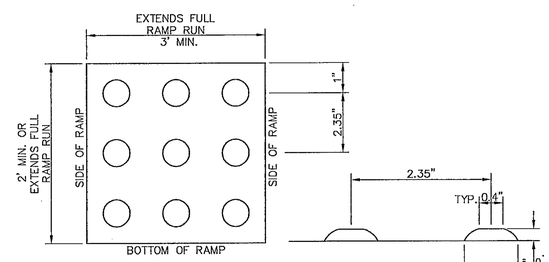
6/22 DIRECTIONAL RAMP @ INTERSECTION
SCALE: NTS



7/22 DIAGONAL COMBINATION CURB RAMP (TYPE III)
SCALE: NTS



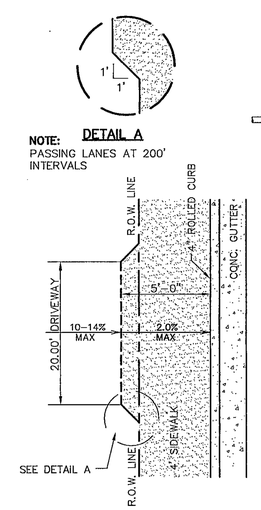
8/22 DIAGONAL CURB RAMP (RETURNED CURB) (TYPE VI)
SCALE: N.T.S



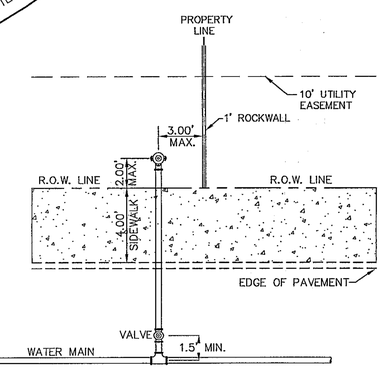
NOTES:

1. ALL CONCRETE SHALL BE 3,000 P.S.I. MIN. AT 28 DAYS.
2. CONCRETE SLABS SHALL BE A MIN. 4" THICK.
3. 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 HAVE A COLOR CONTRAST VISUALLY WITH ADJOINING SURFACES.
4. 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.

9/22 TRUNCATED DOME
SCALE: NTS



10/22 DRIVEWAY ACCESSIBLE PASSING SPACE DETAIL
SCALE: NTS



GENERAL NOTES:

1. FIRE HYDRANT SHALL BE LOCATED AT A DISTANCE OF 2 FT. MINIMUM FROM THE PROPERTY LINE AND INSIDE THE 10 FEET UTILITY EASEMENT.
2. A MINIMUM CLEARANCE OF 3 FT. WILL BE PROVIDED BETWEEN A FIRE HYDRANT AN A PERMANENT OBSTRUCTION (UTILITY POLE, LIGHT STANDARD, TRAFFIC SIGNAL, WHEEL CHAIR RAMP, FENCE, PROTECTIVE POST, ETC.)

11/22 FIRE HYDRANT LOCATION
SCALE: NTS

REFERENCES – BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. ACARATE
85075
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
9/14/07

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

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APP'D. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE

MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE

STANDARD DETAILS

(SHEET 3 OF 3)

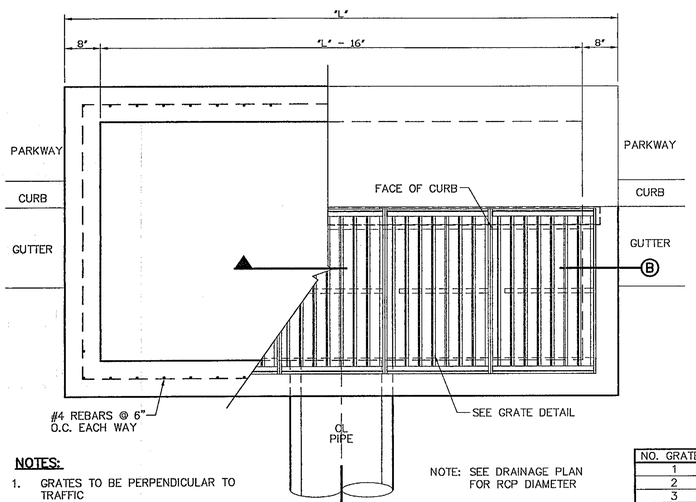
SHEET NO.

22

OF 30

103025

1/23 NO TRESPASSING WARNING SIGN
SCALE: N.T.S



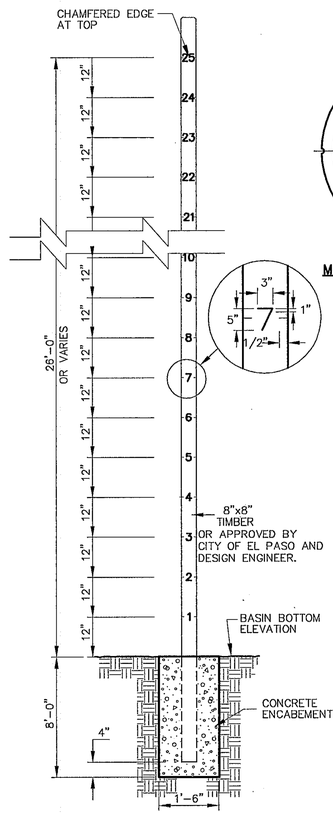
NOTE: SEE DRAINAGE PLAN FOR RCP DIAMETER

PLAN

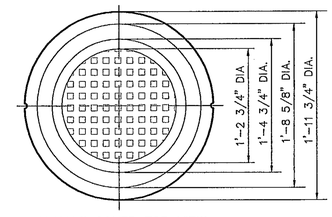
NOTES:

1. GRATES TO BE PERPENDICULAR TO TRAFFIC
2. CONCRETE TO BE 3,000 PSI (MINIMUM) CORE TEST @ 28 DAYS.
3. H=20' MAXIMUM
4. **SEE DRAINAGE PLAN FOR APPROVED PIPE DIAMETER.**

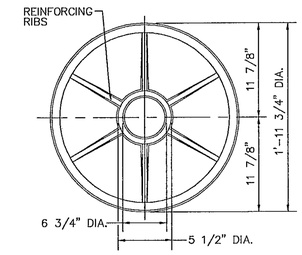
NO. GRATES	CAPACITY	"L"	BEAM LENGTH	BEAM (MIN. SIZES)
1	9.84 CFS	3'-2 5/8"	2'-10"	W6x12, S4x13, MC6x8.2
2	19.63 CFS	5'-1 1/8"	4'-7 1/8"	W6x12, S6x12.5, MC6x15.1
3	29.69 CFS	7'-0 1/4"	6'-5 1/8"	W8x15, S7x15.3, MC7x17.6
4	39.10 CFS	8'-9 7/8"	8'-3 7/8"	W9x18, S8x18.4, MC10x21.9
5	48.72 CFS	10'-8"	10'-2"	W12x16, S8x21, MC10x21.9



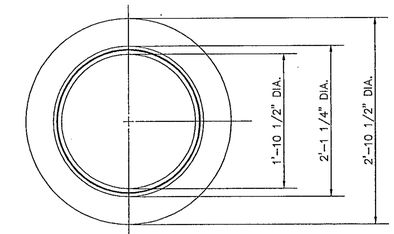
2/23 WATER DEPTH POLE DETAIL
SCALE: N.T.S.



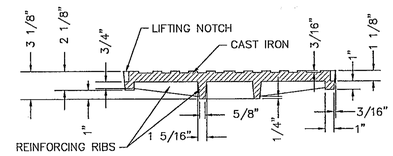
MANHOLE COVER TOP VIEW
SCALE: 3" = 4'-0"



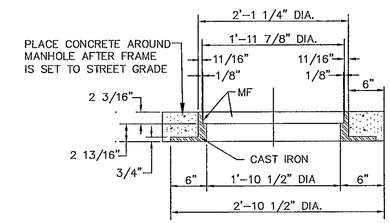
MANHOLE COVER BOTTOM VIEW
SCALE: 3" = 4'-0"



MANHOLE RING TOP VIEW
SCALE: 1" = 1' - 0"



MANHOLE COVER SECTION
SCALE: 2" = 3' - 0"

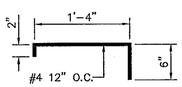


MANHOLE RING SECTION
SCALE: 1" = 1' - 0"

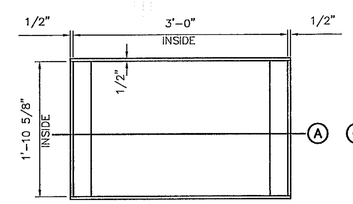
MANHOLE RING NOTES:

1. MATCHING SURFACES MARKED "MF" TO BE MACHINE FINISHED OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
2. CASTING TO BE SMOOTH & VOID OF AIR HOLES.

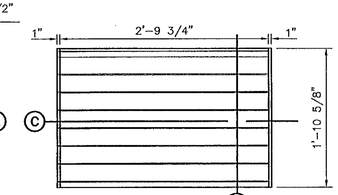
3/23 MANHOLE RING AND COVER DETAILS
SCALE: E AS SHOWN



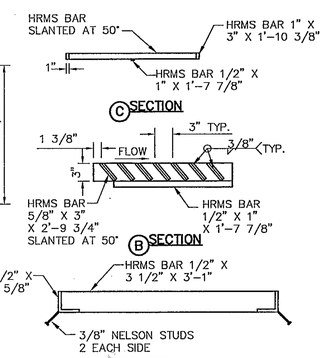
BAR "T" DETAIL
SCALE: 1" = 1' - 0"

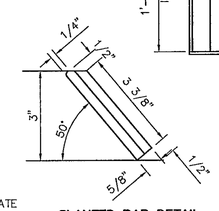


PLAN – FRAME

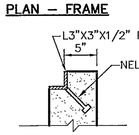


PLAN – GRATE



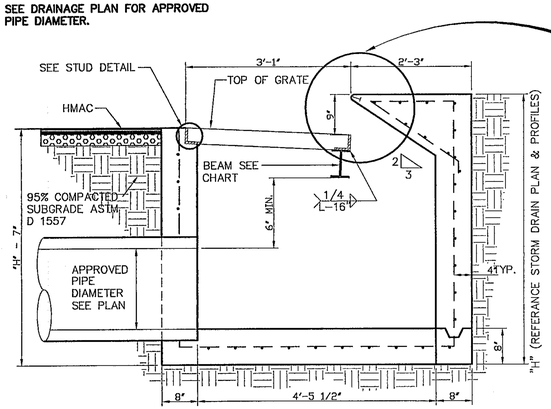


SLANTED BAR DETAIL

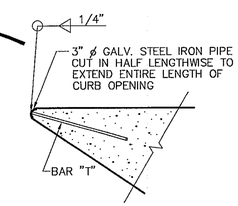


STUD DETAIL

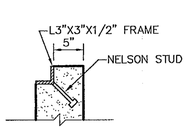
4/23 GRATE AND FRAME DETAILS
SCALE: 1"=1'-0"



A SECTION



DETAIL
N.T.S.



STUD DETAIL
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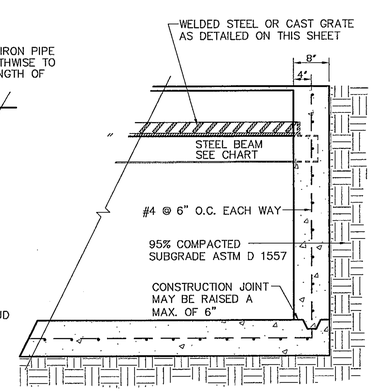


B SECTION

5/23 DROP INLET (TYPE 1) DETAILS
SCALE: 3" = 4'-0"

DROP INLET GENERAL NOTES:

1. 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 COUNTY ENGINEER.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.
3. SHARP EDGES RESULTING FROM FABRICATION SHALL BE DULLED BY ANY ACCEPTABLE METHOD FOR SAFETY IN HANDLING.
4. GRATES SHALL BE INSTALLED IN FRAME WITH FLOW ARROW POINTING DOWNSTREAM OR TOWARD THE LOW POINT IN A SUMP.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. ALL CASTING SHALL BE MANUFACTURED TRUE TO PATTERN. COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER.
11. ALL CONCRETE TO BE 3000 PSI. CHAMFER ALL EXPOSED EDGES 3/4". ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
12. MINIMUM CONCRETE COVER SHALL BE 1 1/2" FOR STEEL REINFORCING.
13. 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.
14. STRUCTURAL STEEL SHALL BE SHOP PAINTED IN ACCORDANCE WITH TxDOT. ITEM 446 "PAINT AND PAINTING"
15. SURFACE OF ALL EXPOSED CONCRETE SHALL CONFORM IN SLOPE AND GRADE TO EXISTING OR PROPOSED CURB AND WALK ADJACENT TO INLETS.
16. GRATES WILL BE DEPRESSED 1" BELOW PROPOSED OR EXISTING GRADE.
17. ALL REINFORCING BARS TO BE #4 BARS AT 6" O.C. GRADE 60. BEND BARS AROUND PIPE OPENINGS.
18. INLETS TO BE DESIGNATED IN PLANS BY NUMBER OF GRATES REQUIRED.
19. LOCATION OF SEWER PIPES SHOWN ELSEWHERE IN PLANS.
20. TWO 1/2"øX4" LONG CONCRETE ANCHOR STUDS REQUIRED FOR EACH SIDE OF FRAME, WHERE RESTING ON CONCRETE, USE NELSON STUDS OR EQUAL.
21. THE GRATES OF ALL INLETS WITHIN THE STREET PAVEMENT MUST BE CONSTRUCTED WITH THE GRATE BARS PERPENDICULAR TO THE CURB.

REFERENCES – BENCHMARKS
BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5227 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. AZCARATE
85075
5/14/07

SCALE
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-LD

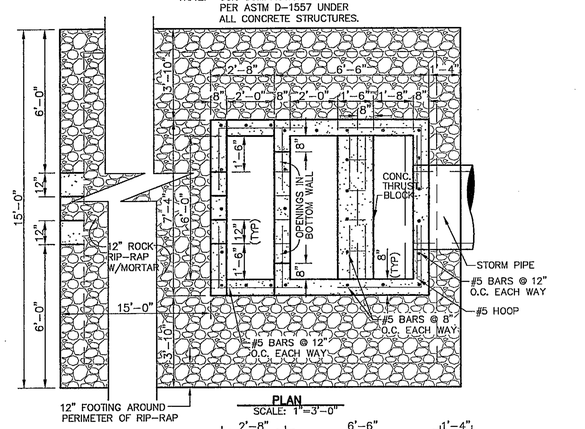
PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
DRAINAGE DETAILS
(SHEET 1 OF 2)

SHEET NO.
23
OF 30

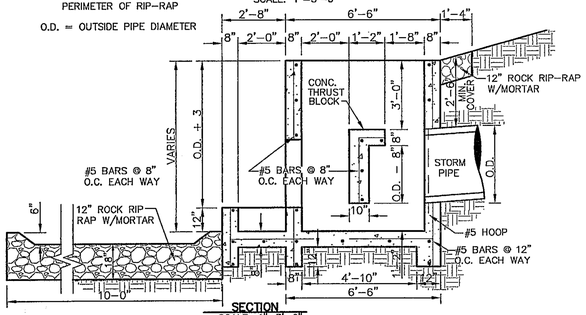
103025

NOTE: 95% COMPACTION AS PER ASTM D-1557 UNDER ALL CONCRETE STRUCTURES.



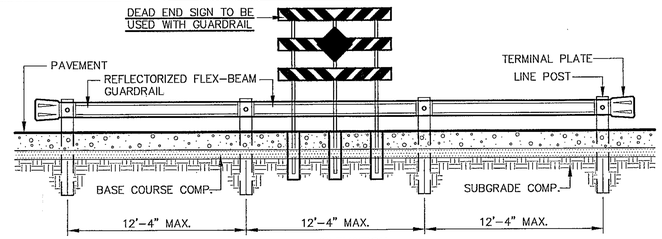
PLAN
SCALE: 1"=3'-0"

O.D. = OUTSIDE PIPE DIAMETER

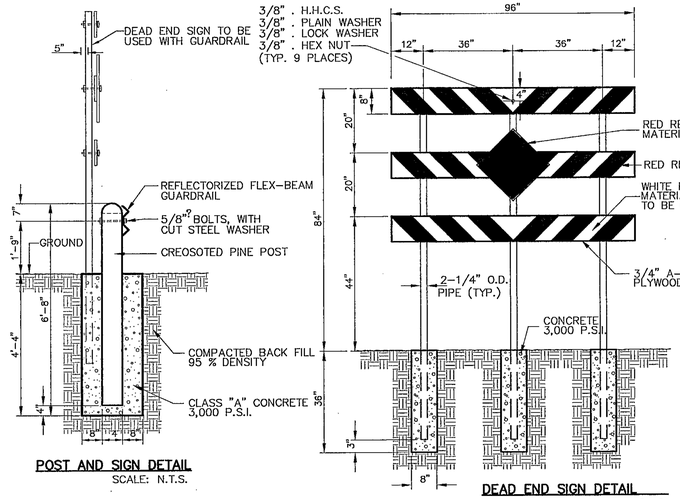


SECTION
SCALE: 1"=3'-0"

1/24 CONCRETE THRUST BLOCK STRUCTURE DETAIL
SCALE AS SHOWN



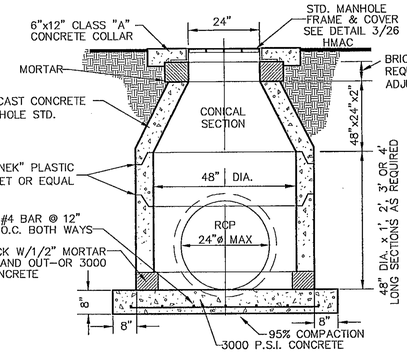
ELEVATION
SCALE: 1'=5'



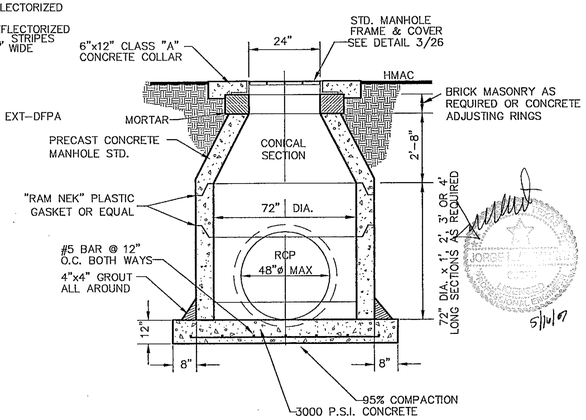
POST AND SIGN DETAIL
SCALE: N.T.S.

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

2/24 GUARD RAIL/SIGN ASSEMBLY AT DEAD END STREET DETAIL
SCALE: AS SHOWN



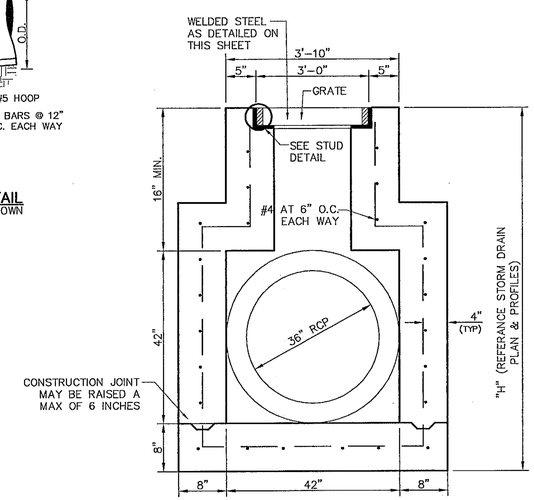
3/24 48" STANDARD MANHOLE DETAIL
SCALE: N.T.S.



4/24 72" STANDARD MANHOLE DETAIL
SCALE: N.T.S.

NUMBER OF GRATES	"L"	CAPACITY*
1	3'-2 5/8"	4.718 CFS
2	5'-2 1/4"	9.436 CFS
3	7'-1 7/8"	14.155 CFS
4	9'-1 1/2"	18.873 CFS
5	11'-1 1/8"	23.592 CFS

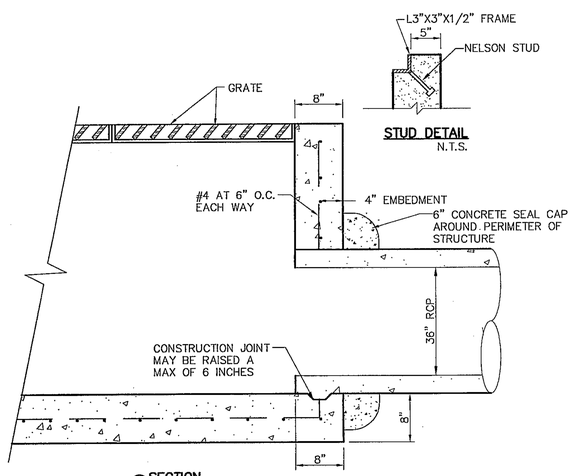
* THESE CAPACITIES CORRESPOND TO A CLOGGING FACTOR OF 0.5



A SECTION

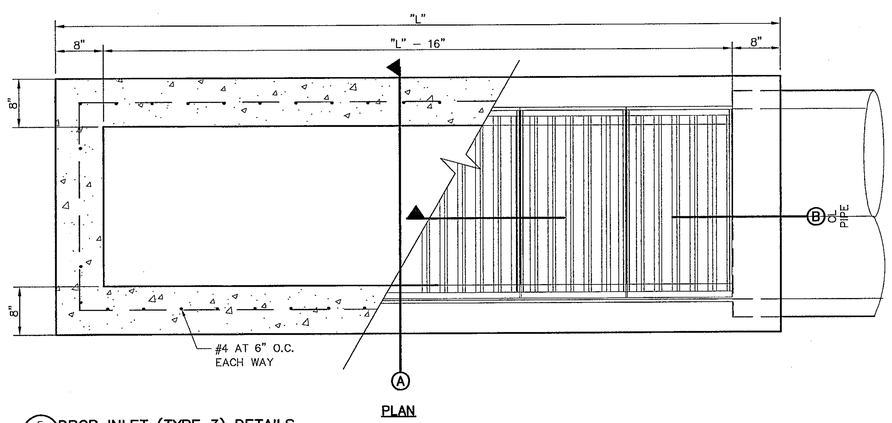
NOTES:

1. GRATES TO BE PERPENDICULAR TO TRAFFIC
2. CONCRETE TO BE 3,000 PSI (MINIMUM) CORE TEST @ 28 DAYS.
3. H=20' MAXIMUM
4. **SEE DRAINAGE PLAN FOR APPROVED PIPE DIAMETER.**



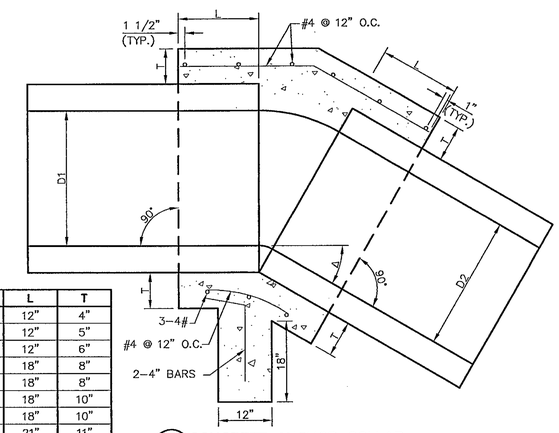
STUD DETAIL
N.T.S.

B SECTION



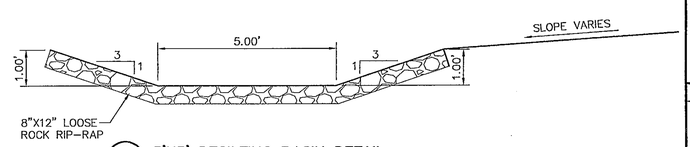
PLAN

5/24 DROP INLET (TYPE 3) DETAILS (CAST IN-PLACE)
SCALE: N.T.S.



D	L	T
12"	12"	4"
18"	12"	5"
24"	12"	6"
30"	18"	8"
36"	18"	8"
48"	18"	10"
54"	18"	10"
60"	21"	11"
66"	21"	11"

6/24 CONCRETE ANCHOR COLLAR
SCALE: 3" = 4'-0"



7/24 5'X5' DESILTING BASIN DETAIL
SCALE: 1" = 2'-0"

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO & LEAGUE CIRCLE AND PASEO LINDO DRIVE. ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
12204 Montana Ave., El Paso, Texas 79936
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL
JORGE L. ROMERO
65075
5/14/07

SCALE
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
DRAINAGE DETAILS
(SHEET 2 OF 2)

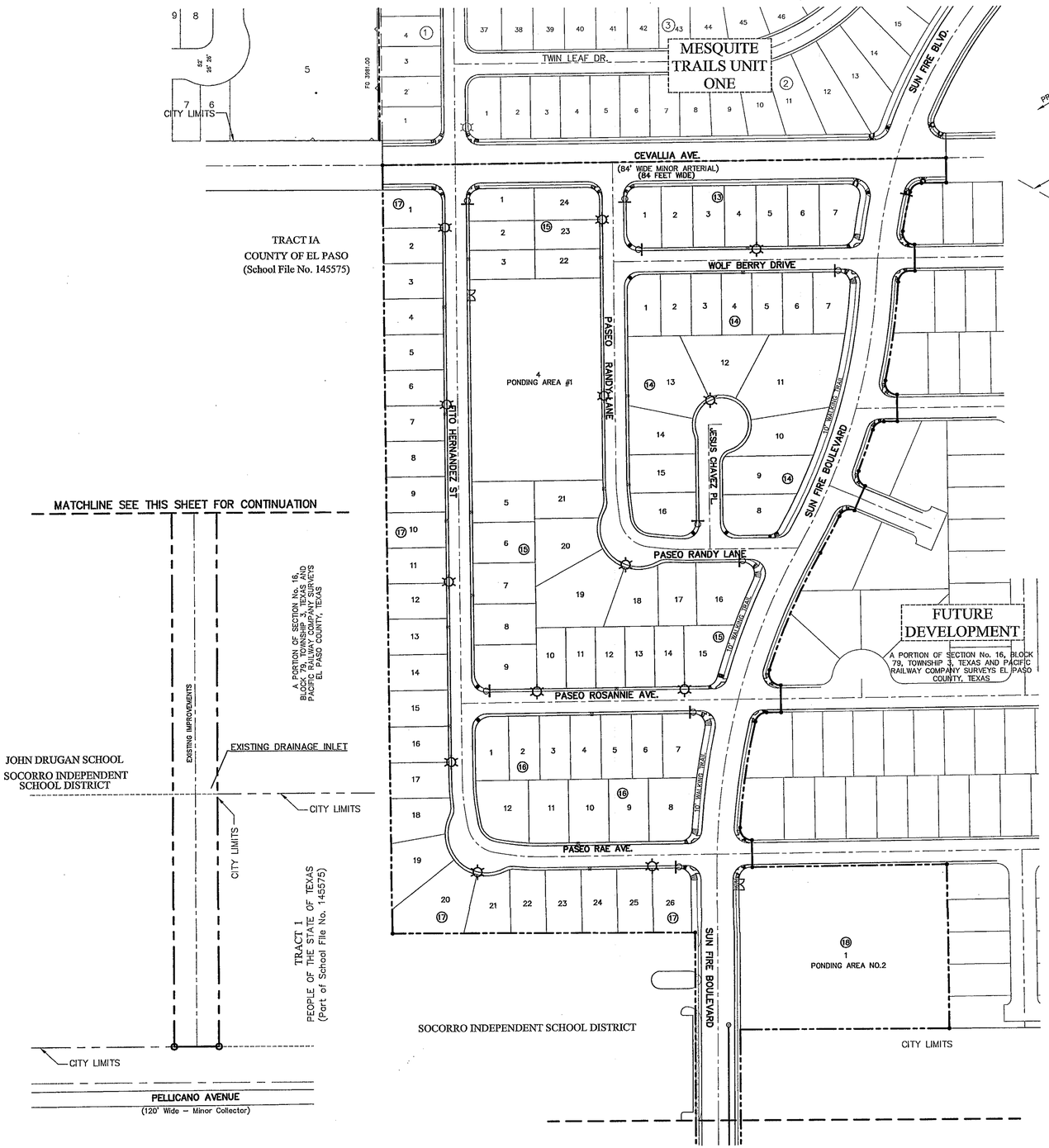
SHEET NO.
24
OF 30

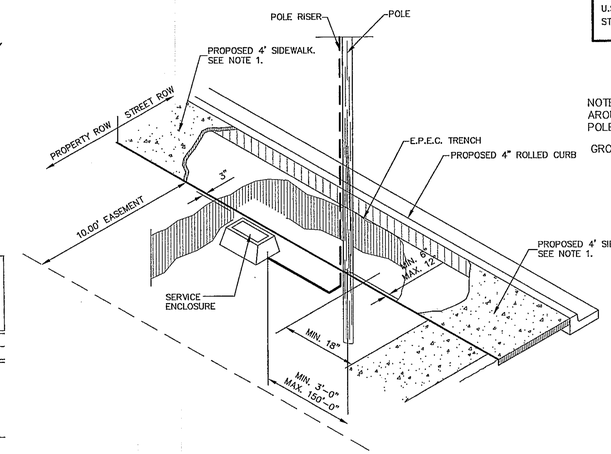
103025

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) 580-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

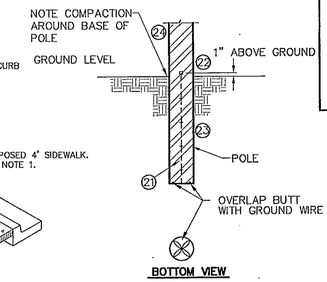
WARNING ! BEFORE YOU DIG

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

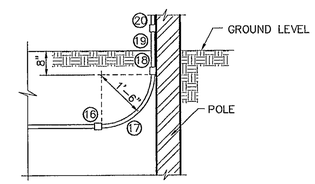




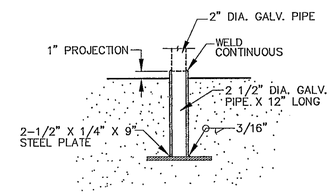
POLE LOCATION DETAIL
SCALE: 1" = 5'-0"



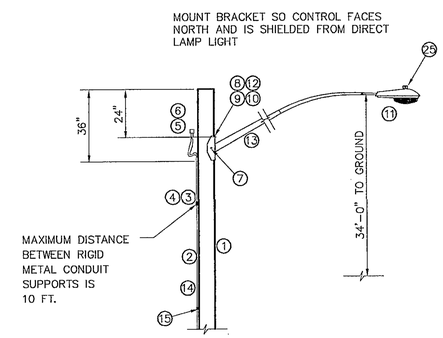
(BUTT GROUNDING)
DISTRIBUTION DETAIL
SCALE: 1"=2'-0"



POLE RISER DETAIL
SCALE: 1"=2'-0"



POST SLEEVE DETAIL
SCALE: 1"=1'-0"



STREET LIGHT DETAIL
SCALE: 1"=3'-0"

ITEM	QTY.	DESCRIPTION
1	1	POLE, PENTA TREATED PINE 40' CLASS III
2	27	1/2" RIGID GALVANIZED STEEL CONDUIT
3	4	TWO HOLE STEEL PIPE STRAP FOR 1/2" CONDUIT
4	8	1/4" x 1" LAG BOLT
5	1	PHOTO CELL RECEPTACLE WITH 1/2" THREADED BASE AND MOUNTING BRACKET
6	1	PHOTO CELL 240V.
7	4	1/2" x 4" LAG BOLT
8	1	WASHER, SQ. GALV. 2-1/4" x 2-1/4"
9	1	MACHINE BOLT 5/8" x 8"
10	1	LOCKNUT 5/8"
11	1	LUMINARE 100W H.P.S.
12	1	WASHER, COIL SPRING 5/8"
13	1	STEEL LUMINAIRE SUPPORT (10' OR 8') UNION METAL MANUF. CO. DESIGN 348 OR EQUIVALENT
14		2 - #12 COPPER WIRES WITH THW INSULATION
15	1	GROUND CLAMP FOR 1/2" RIGID CONDUIT
16	1	1/2" SCHEDULE 40 PVC COUPLING
17	1	1/2" SCHEDULE 40 PVC 18" RADIAL BEND
18	1	1/2" SCHEDULE 40 PVC FEMALE ADAPTER
*19	1	1/2" x 8" PVC COATED RIGID STEEL CONDUIT NIPPLE
*20	1	1/2" PVC COATED RIGID STEEL COUPLING
21		COPPER WIRE, #6 BARE SOLID HARD DRAWN
22		ALUMINUM WIRE, #4 BARE SOLID HARD DRAWN
23	1/2#	STAPLE, GALV. 1-1/2" NO. 9
24	1	SPLICE, #4 SOLID ALUM. TO #6 SOLID CU.
25	1	PHOTOCELL, 240V

* MUST MEET OCCIDENTAL COATING CO. SPECS.

ILLUMINATION PLAN
SCALE: 1" = 100'

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALCERE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.19 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

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

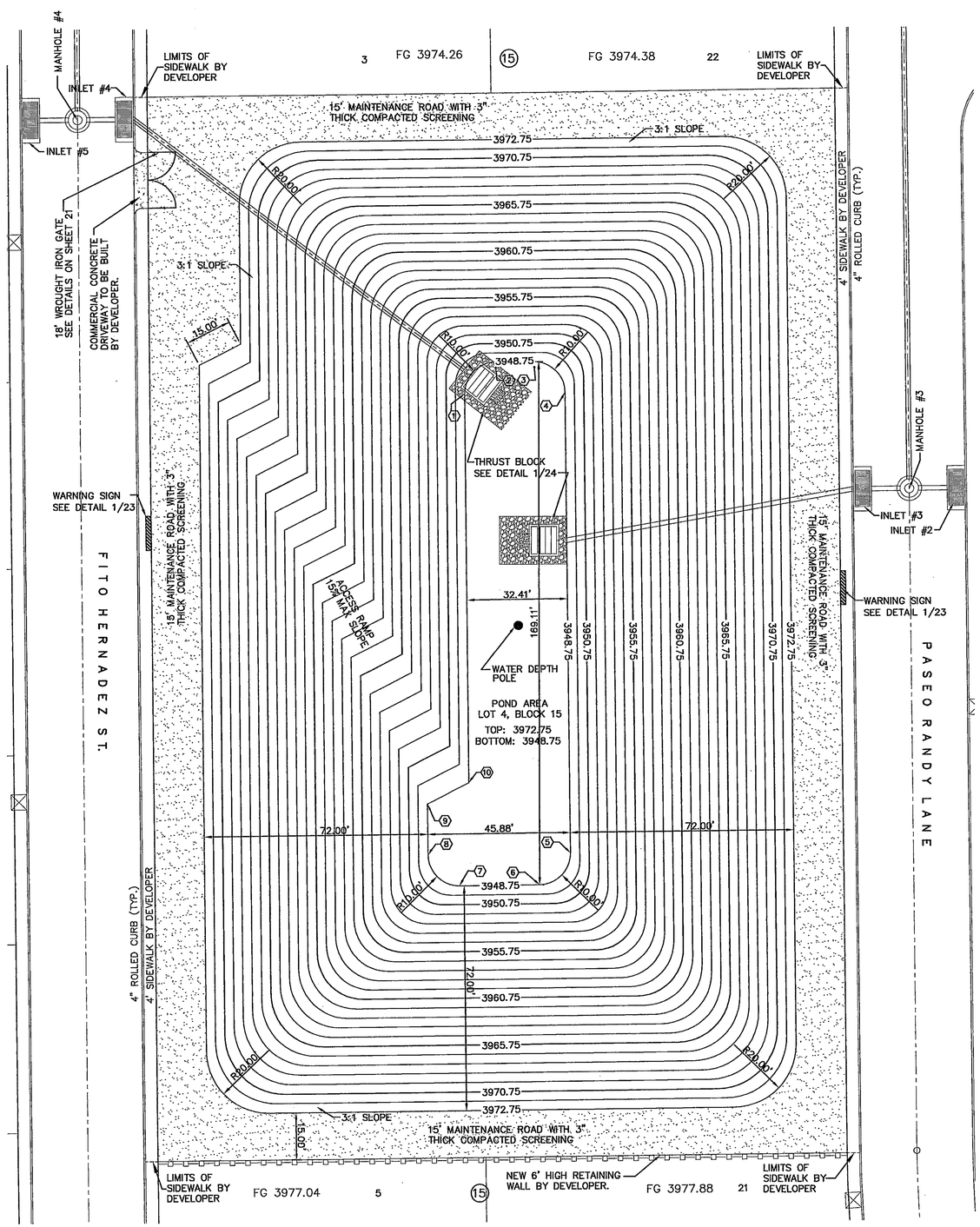
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE
MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE
ILLUMINATION PLAN

SHEET NO.
25
OF 30

103025



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
STREET DEPT. - SIGNAL & SIGN	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

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

KEY #	NORTH	EAST
1	N 10642886.4434	E 455435.0711
2	N 10642895.98	E 455445.4973
3	N 10642895.4497	E 455457.8337
4	N 10642885.0231	E 455467.3881
5	N 10642736.045	E 455460.885
6	N 10642726.4912	E 455450.4487
7	N 10642727.6452	E 455425.5868
8	N 10642738.081	E 455115.0425
9	N 10642754.2651	E 455415.7646
10	N 10642760.4112	E 455429.4476

POND DESIGN PLAN
SCALE: 1" = 20'

LEGEND:

- NEW RETAINING ROCKWALL (2'-3' IN HEIGHT)
- NEW RETAINING ROCKWALL (3'-9' IN HEIGHT)
- 3" THICK COMPACTED SCREENING

NOTE:

15' WIDE POND ACCESS RAMP SHALL HAVE A MINIMUM P.I. OF 8 WITH NO LOOSE MATERIAL AND A MINIMUM 90% COMPACTION PER ASTM-D1557.

REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE. ELEVATION = 4003.10 (CITY DATUM).

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www.ceagroup.net

ENGINEER'S SEAL

JORGE L. AZCARATE
85075
PROFESSIONAL ENGINEER
STATE OF TEXAS
5/14/12

5/14/12

SCALE
Horizontal: 1" = 20'
Vertical: 1" = 5'
Contour Interval: N/A

DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPV'D. BY: J.L.A.
JOB No. 2250-012-LD

PROJECT TITLE

MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE

POND No.1
DESIGN PLAN

SHEET NO.

26

OF 30

103025

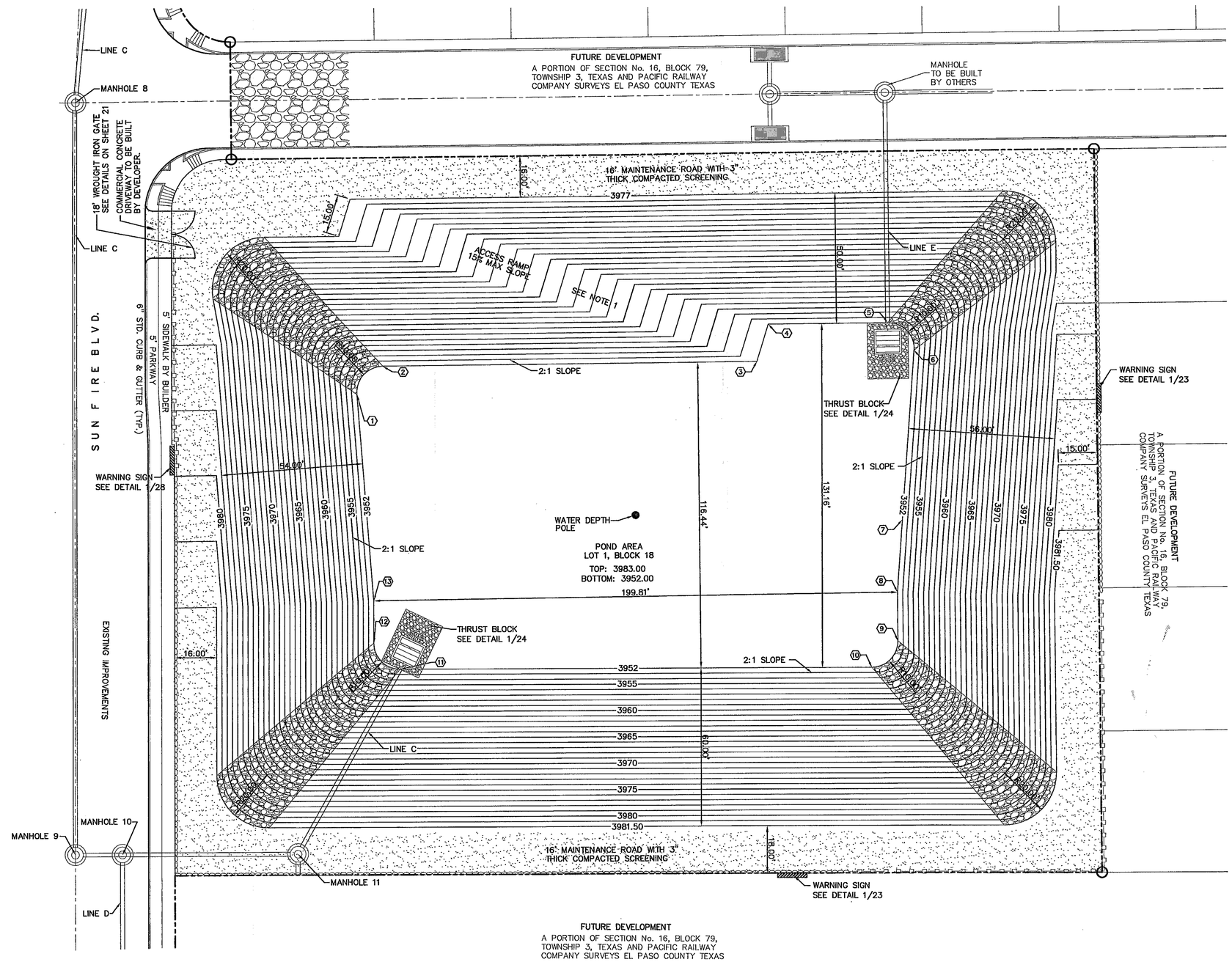
UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543–5720
EL PASO ENERGY CORPORATION	(915) 496–5244
EL PASO WATER UTILITIES	(915) 594–5500
MCI SURVEILLANCE	(800) MCI–WORK
TIME WARNER COMMUNICATIONS	(915) 772–1123
TEXAS GAS SERVICE	(915) 880–7200
SBC	(800) 545–6005
AT&T	(800) 852–3786
U.S. SPRINT TELECOMM	(800) 521–0579
STREET DEPT. – SIGNAL & SIGN	(915) 621–6750
(AFTER HOURS)	(915) 240–3220

WARNING ! BEFORE YOU DIG

CALL
1–800–DIG–TESS
1–800–344–8377
FOR FIELD LOCATING EXISTING UTILITIES

POND DESIGN PLAN

SCALE: 1" = 20'



KEY #	NORTH	EAST
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2	N 10641884.6385	E 455813.2773
3	N 10641878.4131	E 455955.8952
4	N 10641892.5123	E 455961.0149
5	N 10641890.527	E 456006.4959
6	N 10641879.3026	E 456015.9834
7	N 10641814.8834	E 456007.9733
8	N 10641787.6018	E 456004.588
9	N 10641769.1838	E 456003.7841
10	N 10641759.6337	E 455993.2666
11	N 10641769.1174	E 455813.5408
12	N 10641779.6374	E 455804.082
13	N 10641795.6487	E 455804.938

LEGEND:

- NEW RETAINING ROCKWALL (2'–3' IN HEIGHT)
- NEW RETAINING ROCKWALL (3'–9' IN HEIGHT)
- 3" THICK COMPACTED SCREENING
- 10"–12" LOOSE ROCK RIP–RAP

NOTE:

15' WIDE POND ACCESS RAMP SHALL HAVE A MINIMUM P.I. OF 8 WITH NO LOOSE MATERIAL AND A MINIMUM 90% COMPACTION PER ASTM–D1557.

REFERENCES – BENCHMARKS

BENCHMARK IS SITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

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Office 915.544.3232 Fax 915.544.5233
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ENGINEER'S SEAL

JORGE L. AZCARATE
85075
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
5/14/07

5/14/07

SCALE
Horizontal: 1"=20'
Vertical: 1"=5'
Contour Interval: N/A

DATE: MAY 2007
DESIGN BY: T.Z.
DRAWN BY: J.L.A.
CHKD. BY: J.L.A.
APPV'D. BY: J.L.A.
JOB No. 2250–012–LD

PROJECT TITLE

MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE

POND No.2
DESIGN PLAN

SHEET NO.

27

OF 30

103025

SITE DESCRIPTION

PROJECT NAME AND LIMITS: MESQUITE TRAILS UNIT THREE
THE PROJECT IS BORDERED BY PASEOS DEL SOL UNIT TWO TO THE WEST, AND PORTION OF SECTION 16, BLOCK 79, TOWNSHIP 3, T&P R.R Co. SURVEYS TO THE NORTH, EAST AND SOUTH, AND IT IS ALL A PORTION OF SECTION 16, BLOCK 79, TOWNSHIP 3, T&P R.R Co. SURVEYS

PROJECT DESCRIPTION: THE SITE FOR THE NEW SUBDIVISION WILL ENCOMPASS APPROXIMATELY 26.647± ACRES, AND WILL CONTAIN 95 RESIDENTIAL LOTS, AND 2 PONDING AREA. PROJECT IMPROVEMENTS SHALL CONSIST OF GRADING AND PAVING.

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 AND EXCAVATION FOR UTILITIES.

TOTAL PROJECT AREA: 26.647± ac.

TOTAL AREA TO BE DISTURBED: 26.647± ac.

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 0.601

EXISTING CONDITION OF SOIL AND VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER: THE PROJECT SITE IS LOCATED IN THE VICINITY OF THE HUECO–WINK ASSOCIATION. THE SOILS IN THESE AREA ARE GENERALLY DESCRIBED AS 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 DISCHARGED INTO A NEW RETENTION BASIN.

EROSION AND SEDIMENT CONTROL

SOIL STABILIZATION PRACTICES

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

OTHER:

STRUCTURAL PRACTICES:

- X SILT FENCES
- ____ HAY BALES
- ____ 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
- X CURBS AND GUTTERS
- X STORM DRAINS
- X 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 EARTHERN 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 SWPP 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 STORM 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 4, 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.

V. 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

VI. 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

JORGE L. AZCARATE 85075 5/11/07

VII. 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.

VIII. 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

IX. 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.

X. 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.

XI. 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 TARPAULIN
- EXCESS DIRT ON ROAD SHALL BE REMOVED IMMEDIATELY
- STABILIZED CONSTRUCTION ENTRANCE
- OTHER:

SDPCP #: __–____
SDPCP DATE: __–__–__

REFERENCES – BENCHMARKS

BENCHMARK IS CITY MONUMENT AT THE INTERSECTION OF PASEO ALEGRE CIRCLE AND PASEO LINDO DRIVE ELEVATION = 4003.10 (CITY DATUM).

DATE	REVISIONS	BY

cea group
engineers • architects • planners
1204 Montana Ave., El Paso, Texas 79902
Office 915.544.5232 Fax 915.544.5233
www.ceagroup.net

ENGINEER'S SEAL: JORGE L. AZCARATE 85075 5/11/07

SCALE
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A
DATE: MAY 2007
DESIGN BY: F.Z.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2250–012–LD

PROJECT TITLE: MESQUITE TRAILS UNIT THREE SUBDIVISION IMPROVEMENTS

SHEET TITLE: STORM WATER POLLUTION CONTROL PLAN GENERAL NOTES

SHEET NO. 28 OF 30

103025

UTILITY LOCATOR SERVICES	
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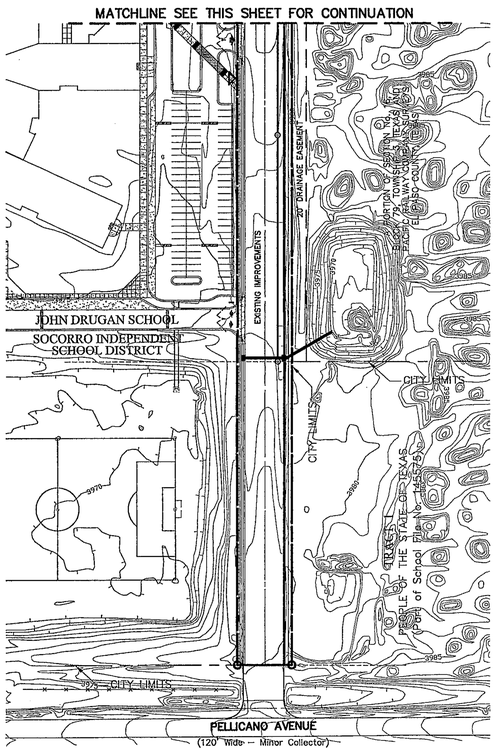

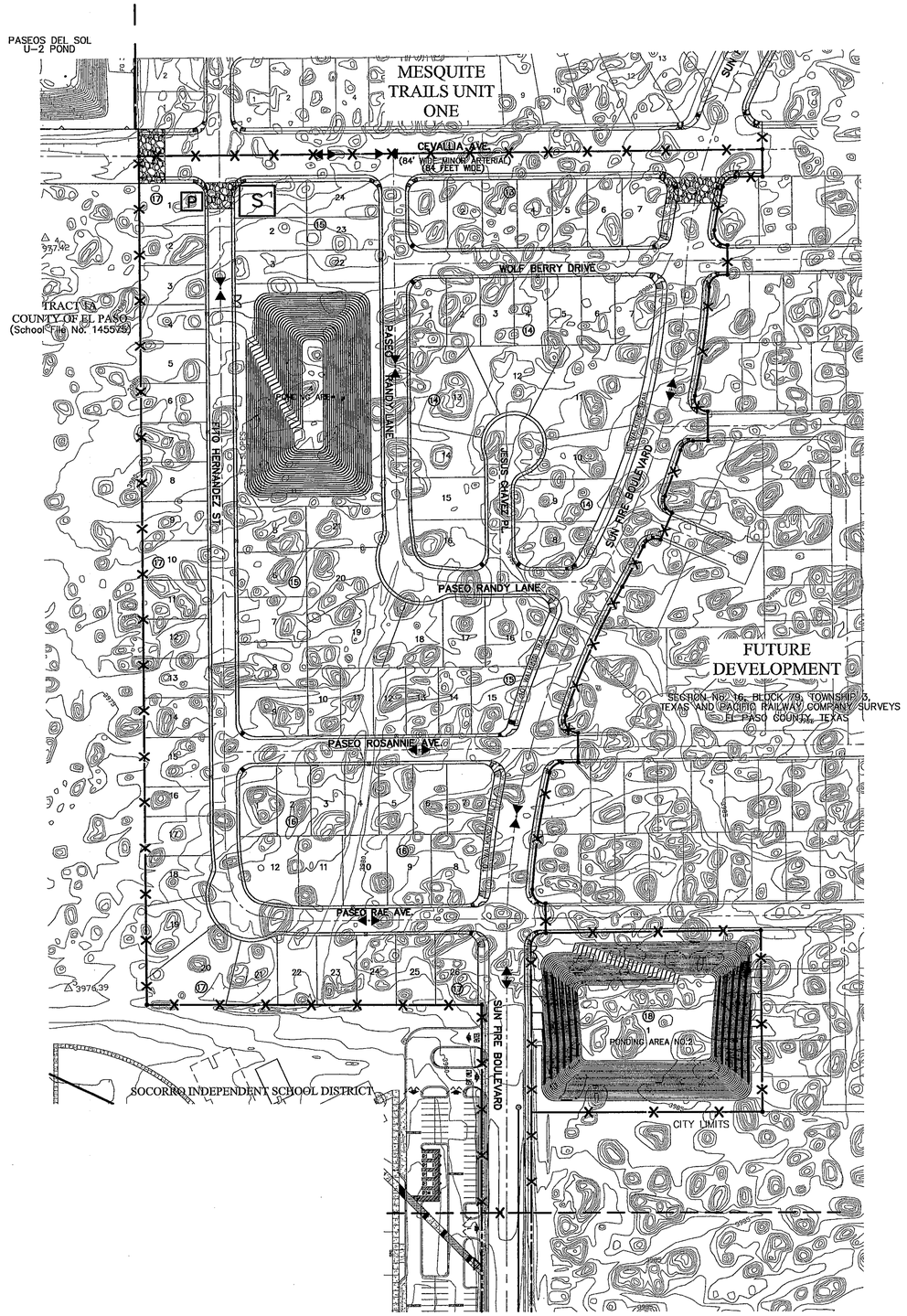

LEGEND

—X—X— SILT FENCE OR EARTHERN BERM

STABILIZED CONSTRUCTION ENTRANCE

S STAGING AREA

P PORTABLE TOILETS

SITE PLAN

SCALE: 1" = 100'

SDPCP #: __-____
SDPCP DATE: __-__-__

REFERENCES – BENCHMARKS

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PROJECT TITLE

MESQUITE TRAILS UNIT THREE
SUBDIVISION IMPROVEMENTS

SHEET TITLE

STORM DRAIN POLLUTION CONTROL SITE PLAN

SHEET NO.

29 OF 30

103025