Page 1 of 5 | Issue Date: January 24, 2011 | Effective Date: June 8, 2011 | Case No.: 10-06-2130P | LOMR-APP

Follows Conditional Case No.: 08-06-0747R



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

	COMMUNITY AND REVISION	INFORMATION	PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	El Pas	of El Paso so County ſexas	CHANNELIZATION DETENTION BASIN FILL STORM DRAIN	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 480214			
IDENTIFIER	Pond 3		APPROXIMATE LATITUDE AND LONG SOURCE: Precision Mapping Streets	*
	ANNOTATED MAPPING E	NCLOSURES	ANNOTATED ST	UDY ENCLOSURES
TYPE: FIRM* TYPE: FIRM*	NO.: 4802140016C NO.: 4802140017C	DATE: February 5, 1986 DATE: February 5, 1986	DATE OF EFFECTIVE FLOOD INSURA PROFILE(S): 234P (DELETED), 235 228P, 229P AND 230P SUMMARY OF DISCHARGES TABLE STILLWATER ELEVATION TABLE:	P (DELETED), 236P, 237P, 238P, 239P

Enclosures reflect changes to flooding sources affected by this revision.

FLOODING SOURCE(S) & REVISED REACH(ES)

See Page 2 for Additional Flooding Sources

Flow Path No. 38A - from upstream of Pond 4 inlet to approximately 5,060 feet upstream of Pond 4 inlet

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Flow Path No. 38A	Zone A2	Zone A2	YES	YES
	BFEs*	BFEs	YES	YES
	Zone A2	Zone C	NONE	YES
	Zone B	Zone C	NONE	YES

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 7390 Coca Cola Drive, Suite 204, Hanover, MD 21076. Additional information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

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Michael J. McGinn, Program Specialist Engineering Management Branch Federal Insurance and Mitigation Administration

^{*} FIRM - Flood Insurance Rate Map

Page 2 of 5 | Issue Date: January 24, 2011 | Effective Date: June 8, 2011 | Case No.: 10-06-2130P | LOMR-APP



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

OTHER FLOODING SOURCES AFFECTED BY THIS REVISION

FLOODING SOURCE(S) & REVISED REACH(ES)

Flow Path No. 38B - from Pond 3 inlet to approximately 960 feet upstream of Pond 3 inlet Pond 3 - approximately 500 feet northeast of the intersection of Flow Path No. 38A and Dirt Road Pond 4 - approximately 3,600 feet southwest of the intersection of Flow Path No. 38A and Dirt Road

	SUMMARY OF REVISIONS			
Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Flow Path No. 38B	Zone A2	Zone A2	YES	YES
	BFEs*	BFEs	YES	YES
	Zone A2	Zone B	NONE	YES
	Zone B	Zone C	NONE	YES
	Zone A2	Zone C	NONE	YES
Pond 3	Zone B BFEs*	Zone A2 BFEs	NONE YES	YES NONE
Pond 4	Zone A2 BFEs*	Zone A2 BFEs	NONE NONE	YES YES

* BFEs - Base Flood Elevations

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 7390 Coca Cola Drive, Suite 204, Hanover, MD 21076. Additional information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

Michael J. McGinn, Program Specialist Engineering Management Branch Federal Insurance and Mitigation Administration

102-I-A-C

Page 3 of 5 | Issue Date: January 24, 2011 | Effective Date: June 8, 2011 | Case No.: 10-06-2130P | LOMR-APP



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State or local requirements to which the regulations apply.

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the altered or relocated watercourse, including any related appurtenances such as bridges, culverts, and other drainage structures, rests with your community. We may request that your community submit a description and schedule of maintenance activities necessary to ensure this requirement.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance discharges computed in the submitted hydrologic model. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State law have been obtained. State or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This revision has met our criteria for removing an area from the 1-percent-annual-chance floodplain to reflect the placement of fill. However, we encourage you to require that the lowest adjacent grade and lowest floor (including basement) of any structure placed within the subject area be elevated to or above the Base (1-percent-annual-chance) Flood Elevation.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 7390 Coca Cola Drive, Suite 204, Hanover, MD 21076. Additional information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

Michael J. McGinn, Program Specialist Engineering Management Branch Federal Insurance and Mitigation Administration Page 4 of 5 | Issue Date: January 24, 2011 | Effective Date: June 8, 2011 | Case No.: 10-06-2130P | LOMR-APP



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Frank Pagano
Director, Mitigation Division
Federal Emergency Management Agency, Region VI
Federal Regional Center, Room 206
800 North Loop 288
Denton, TX 76209
(940) 898-5127

STATUS OF THE COMMUNITY NFIP MAPS

We are processing a revised FIRM and FIS report for El Paso County in our countywide format; therefore, we will not physically revise and republish the FIRM and FIS report for your community to incorporate the modifications made by this LOMR at this time. Preliminary copies of the countywide FIRM and FIS report, which present information from the effective FIRMs and FIS reports for your community and incorporated communities in El Paso County, were submitted to your community for review on June 29, 2007. We will incorporate the modifications made by this LOMR into the countywide FIRM and FIS report before they become effective.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 7390 Coca Cola Drive, Suite 204, Hanover, MD 21076. Additional information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

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Michael J. McGinn, Program Specialist Engineering Management Branch Federal Insurance and Mitigation Administration

10-06-2130P 102-I-A-C

Page 5 of 5 | Issue Date: January 24, 2011 | Effective Date: June 8, 2011 | Case No.: 10-06-2130P | LOMR-APP



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

PUBLIC NOTIFICATION

FLOODING SOURCE	LOCATION OF REFERENCED ELEVATION	BFE (FEET	MAP PANEL	
T EGODING GOORGE	ESSATION OF THE ETIENDED ELEVATION	EFFECTIVE	REVISED	NUMBER(S)
Flow Path No. 38A	Approximately 40 feet upstream of Pond 4 Inlet	3,951	3,942	4802140017C
	Approximately 4,960 feet upstream of Pond 4 Inlet	4,120	4,121	4802140017C
Flow Path No. 38B	Approximately 190 feet upstream of Pond 3 Inlet	4,096	4,089	4802140017C
	Approximately 860 feet upstream of Pond 3 Inlet	4,117	4,116	4802140017C
Pond 3	Approximately 500 feet northeast of the intersection of Flow Path No. 38A and Dirt Road	NONE	4,074	4802140017C
Pond 4	Approximately 3,600 feet southwest of the intersection of Flow Path No. 38A and Dirt Road	3,946	3,940	4802140017C

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised BFEs presented in this LOMR may be changed.

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below. Please refer to FEMA's website at https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp for a more detailed description of proposed BFE changes, which will be posted within a week of the date of this letter.

LOCAL NEWSPAPER Name: The El Paso Times

Dates: 02/01/2011 and 02/08/2011

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 7390 Coca Cola Drive, Suite 204, Hanover, MD 21076. Additional information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

Michael J. McGinn, Program Specialist Engineering Management Branch Federal Insurance and Mitigation Administration

10-06-2130P 102-I-A-C

<u>TABLE 2 - SUMMARY OF DISCHARGES</u> - (continued)

FLOODING SOURCE	DRAINAGE AREA		PEAK DISC	HARGES (cfs)		
AND LOCATION_	(sq. miles)	10-YEAR	50-YEAR	100-YEAR	500-YEAR	
FLOW PATH NO. 32A						
At station 5360	0.7	290	510	630	940	
At station 2300	1.0	400	740	920	1,400	
At station 840	1.4	440	1,030	1,300	2,000	
FLOW PATH NO. 33						
(Middle Drain)				*		
At station 8000	0.3	140	240	300	395	
At station 6760	0.3	130	220	270	360	
At station 5680	0.3	120	170	205	335	
At station 5000	0.3	135	190	230	300	
At station 3400	0.4	130	190	220	305	
FLOW PATH NO. 34 At mouth	0.5	310	540	660	950	
FLOW PATH NO. 35 At mouth	0.4	270	460	550	800	
FLOW PATH NO. 36	2.5	640	1,370	1,740	2,800	
At mouth	2.0	0.0	1,570			
FLOW PATH NO. 37				REVISEI		0007
(Franklin Drain)				LOMR DA	ATED AUG 06,	2007
At station 4220 ¹	0.2	45	80	90	170	
At station 2650 ¹	0.3	90	160	190	350	
At station 1070 ¹	0.4	33	157	180	290	
FLOW PATH NO.38					V	
Just upstream of Pond 1	0.6	731	858	1,153	1,397	
Just upstream of	3.1	601 ²	662 ²	894 ²	$2,101^2$	
Northwestern Drive					ŕ	
FLOW PATH NO.38A 5,200 feet upstream of Pond 4	1.8	815	1,260	1,450	1,910	
FLOW PATH NO.38B 9,500 feet upstream of Pond 4	0.8	430	655	750	980	
FLOW PATH NO. 39 Cross Section B	3.3	1,640	2,820	3,300	REVISED DAT 4,420	Ά
FLOW PATH NO. 39A Cross Section B	2.8	1,640	2,820	3,300	4,420	

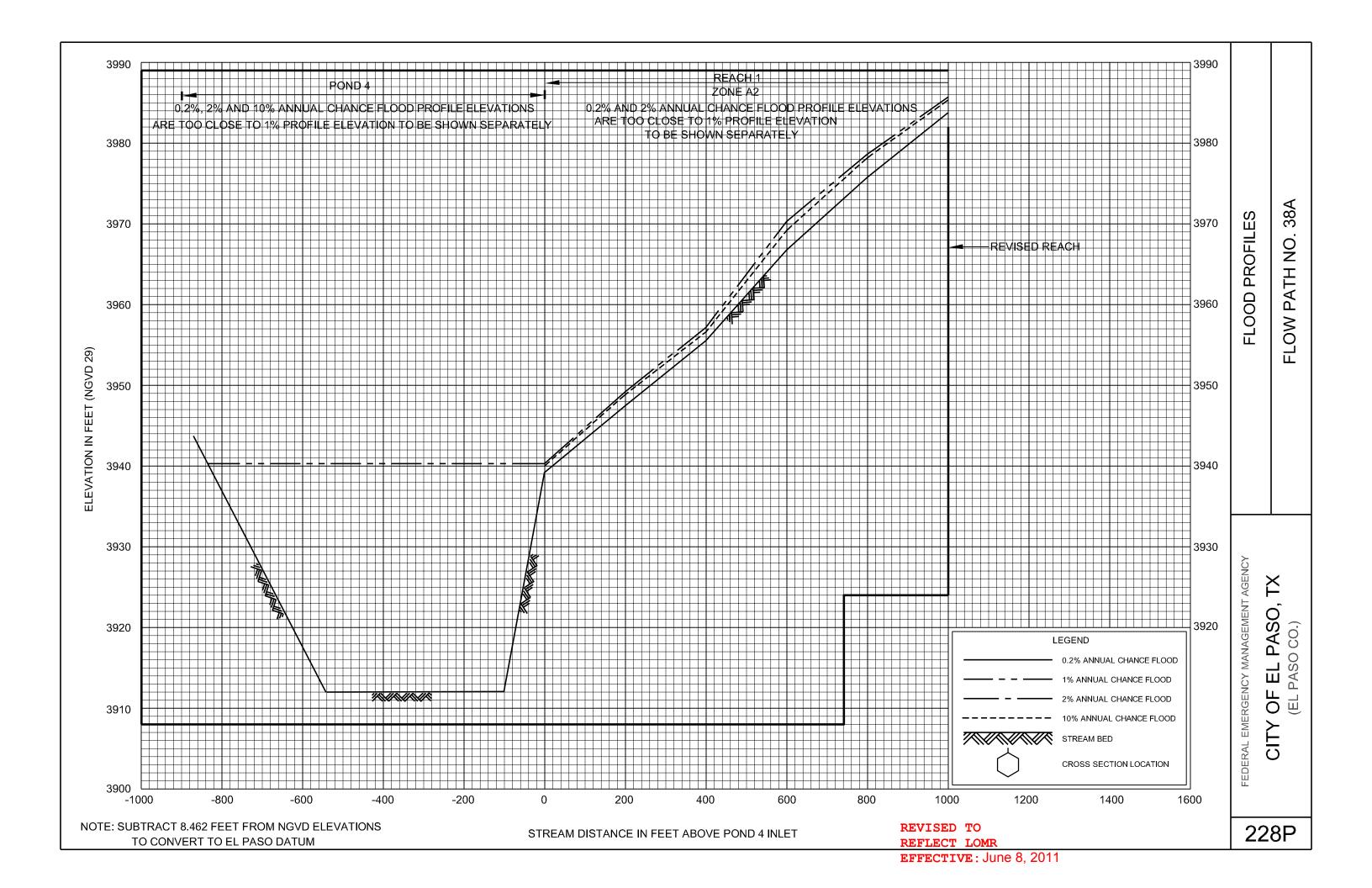
¹Feet above Mesa Drain Interceptor

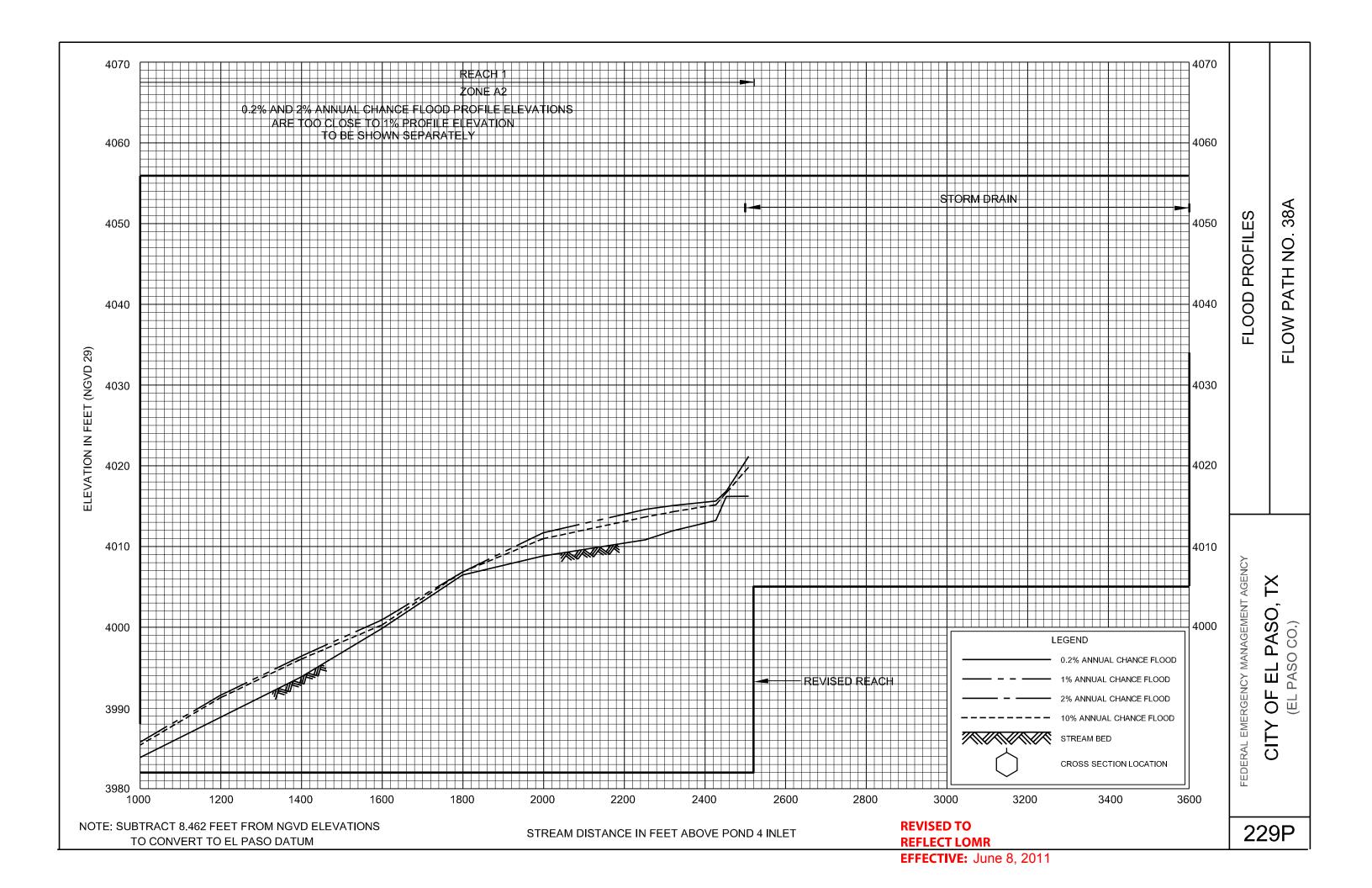
REVISED TO REFLECT LOMR

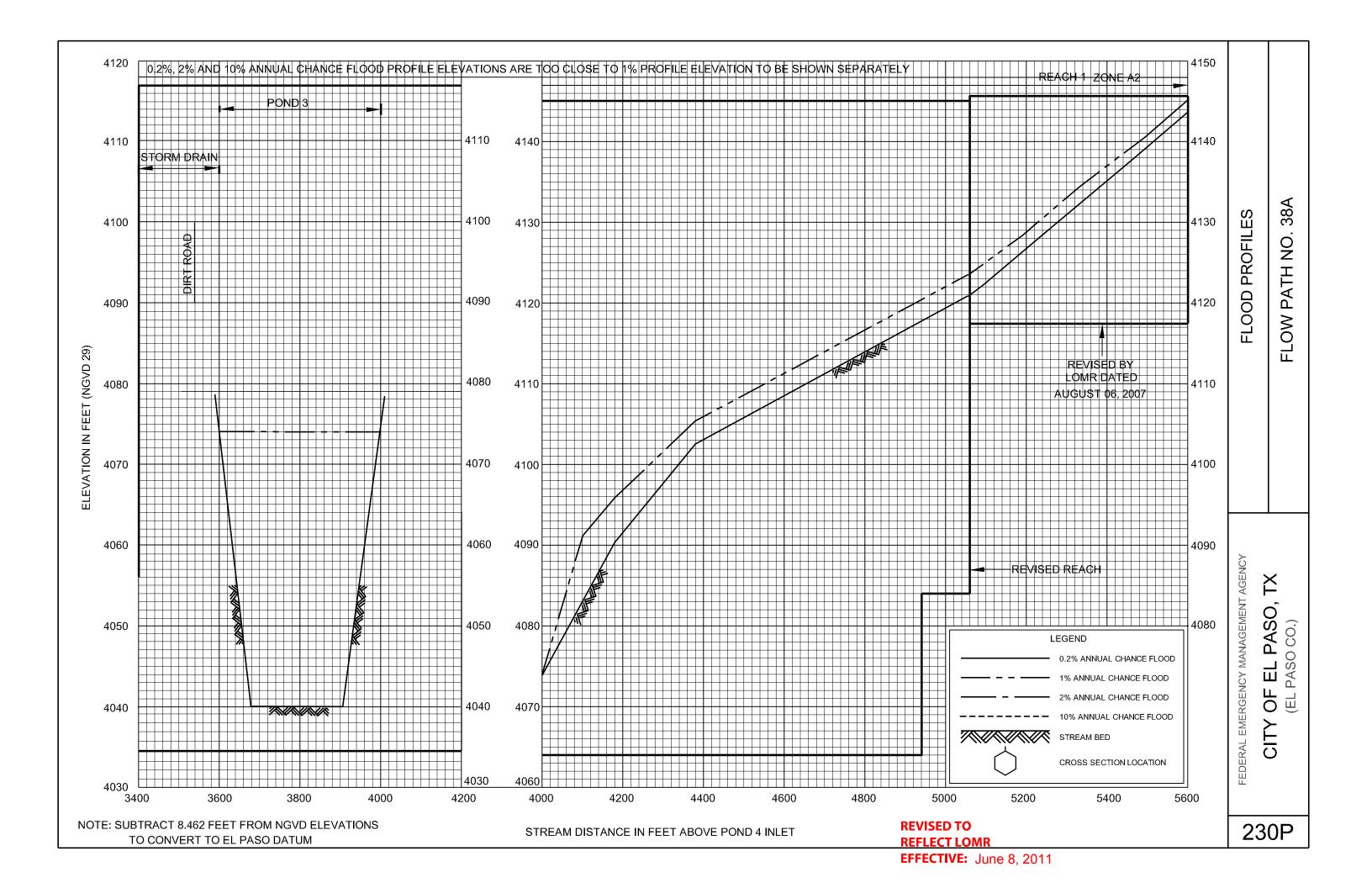
EFFECTIVE: June 8, 2011

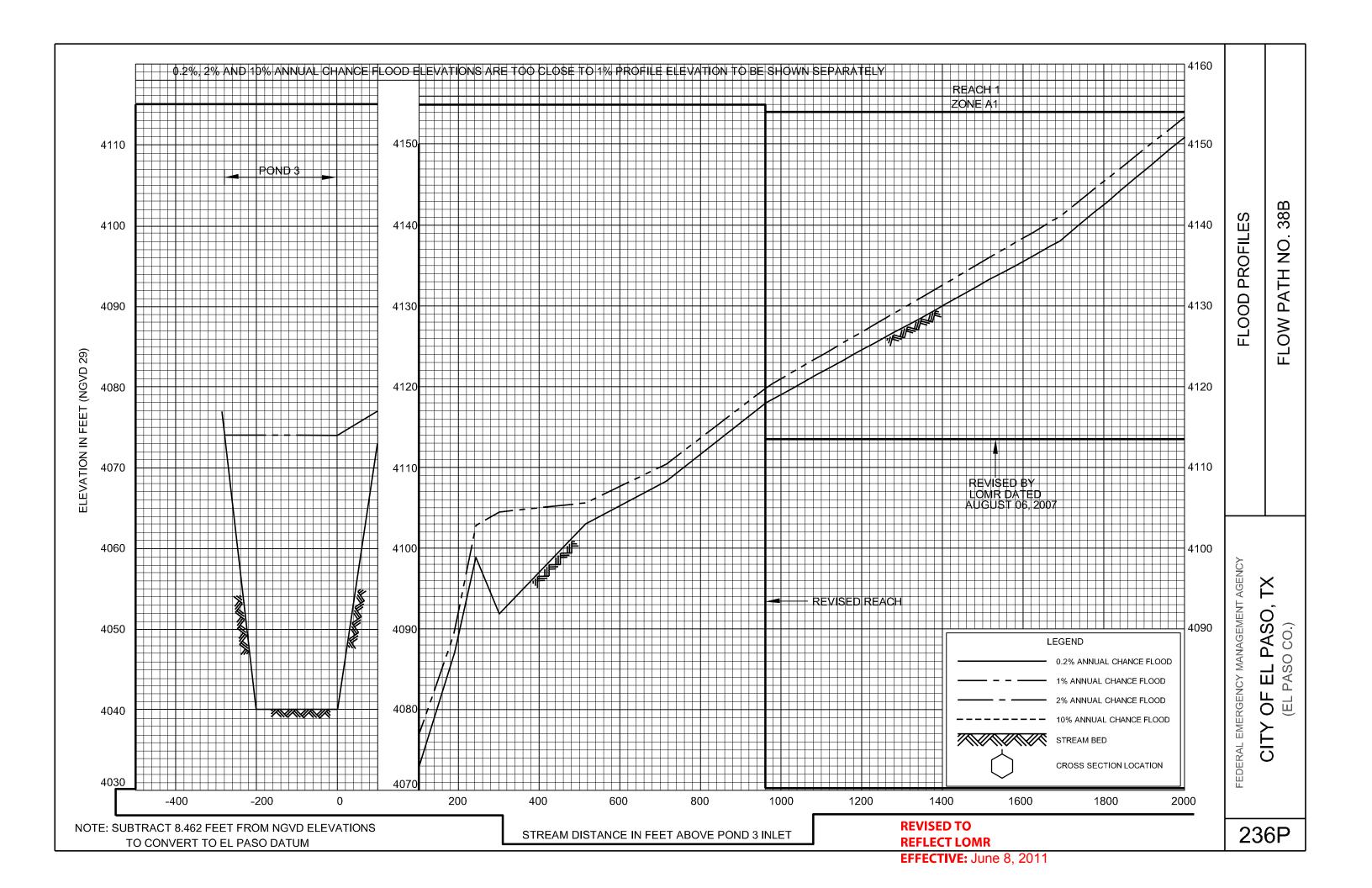
²Flow rate reduction due to a number of ponds upstream

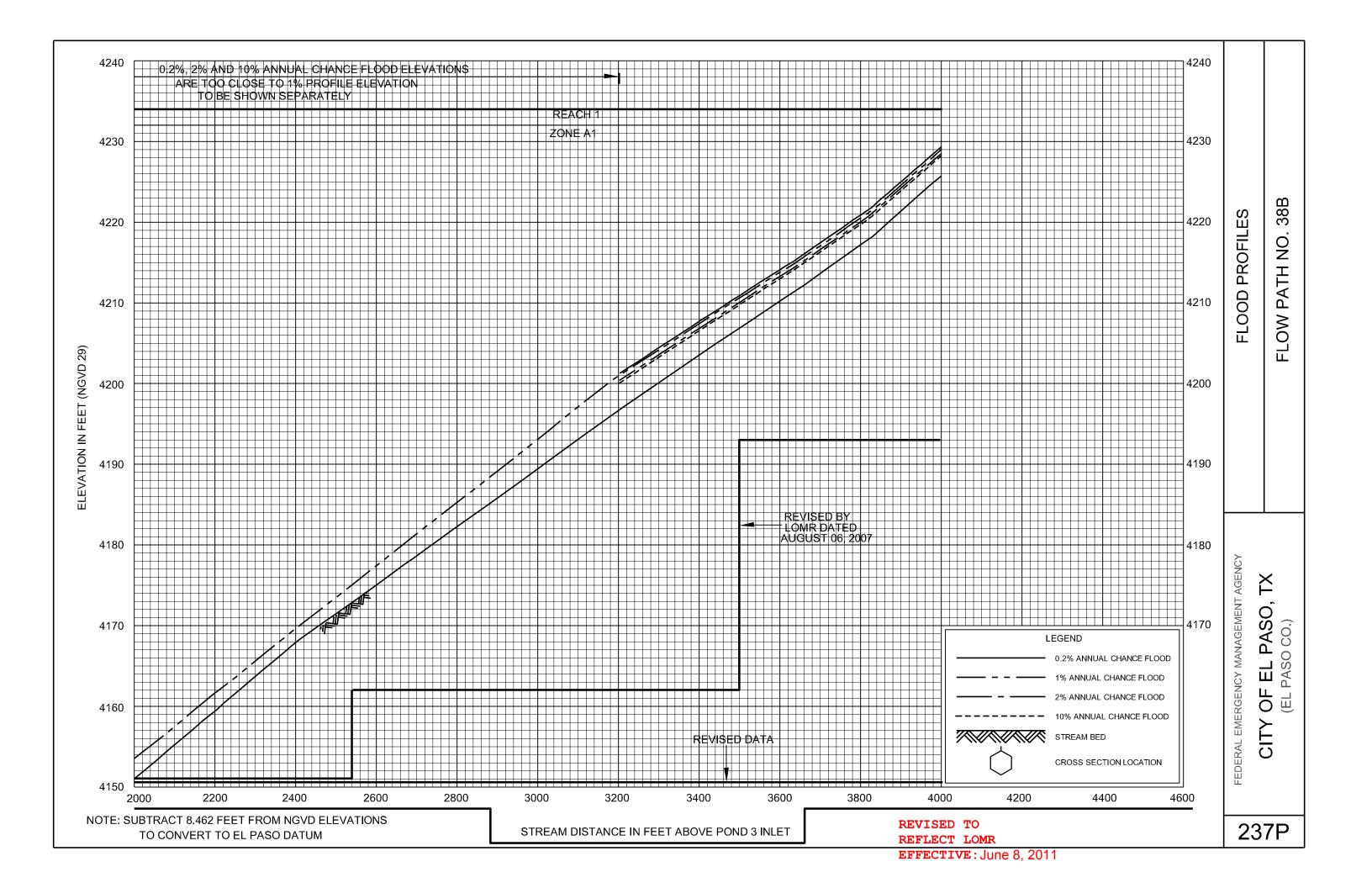
FLOODING SOURCE AND LOCATION	10-YEAR	ELEVA?	ΓΙΟΝ (feet) 100-YEAR	500-YEAR	
NORTH HILLS DAM, DETENTION BASIN 2 Approximate center	*	4,212.0	4,213.5	4,216.7	
FLOW PATH NO. 27A (Left bank lateral street flow of		7,212.0	REVI	SED BY R DATED AUG 06	5, 2007
Flow Path No. 27) At Valencia Place	*	*	3,697.0	*	
FLOW PATH NO. 38				•	
Pond 1 Pond 2 Pond 5	4,212.1 4,129.1 4,080.8	4,217.5 4,130.9 4,083.1	4,220.9 4,134.0 4,086.0	4,222.0 4,138.2 4,088.0	
Pond 3 Pond 4	4,073.4 3,940.1	4,073.8 3,940.3	4,073.9 3,940.3	4,074.2 3,940.5	
OVERLAND FLOODING Northwest of Arroyo 1 and				EVISED DATA	
North of Mulberry Avenue	3,745.5	3,747.8	3,749.0	3,750.8	
LOMALAND BASIN East bank of Juan De Herrera Lateral Branch A and Lomita Drive	3,677.5	3,681.0	3,683.0	3,686.0	
SHALLOW FLOODING Between Juan De Herrera Lateral Branch B between Interstate 10 and Flow Path No. 28 (Mesa Drain Interceptor)	*	*	3,668.0	*	
West bank of Ysleta Lateral at Americas Avenue West of Flow Path No. 28 (Mesa	*	*	3,665.0	*	
Drain and Interceptor - Franklin Drive) at Oro Verde	*	*	3,664.0	*	
MIDDLE DRAIN (Below Interceptor)					
Ponding Area 1 Inglewood Drive Ponding Area 2	*	*	3,665.0	*	
Approximate Center	*	*	3,664.0	*	
PLAYA LATERAL Approximately 300 feet southeast of Zaragosa Road	3,661.2	3,661.9	3,662.0	3,663.4	
Shallow flooding west of Flow Path No. 27 at Knights Drive	*	*	3,677.0	*	
* Data not determined				CT LOMR	
	31		EFFEC	TIVE: June 8,	2011

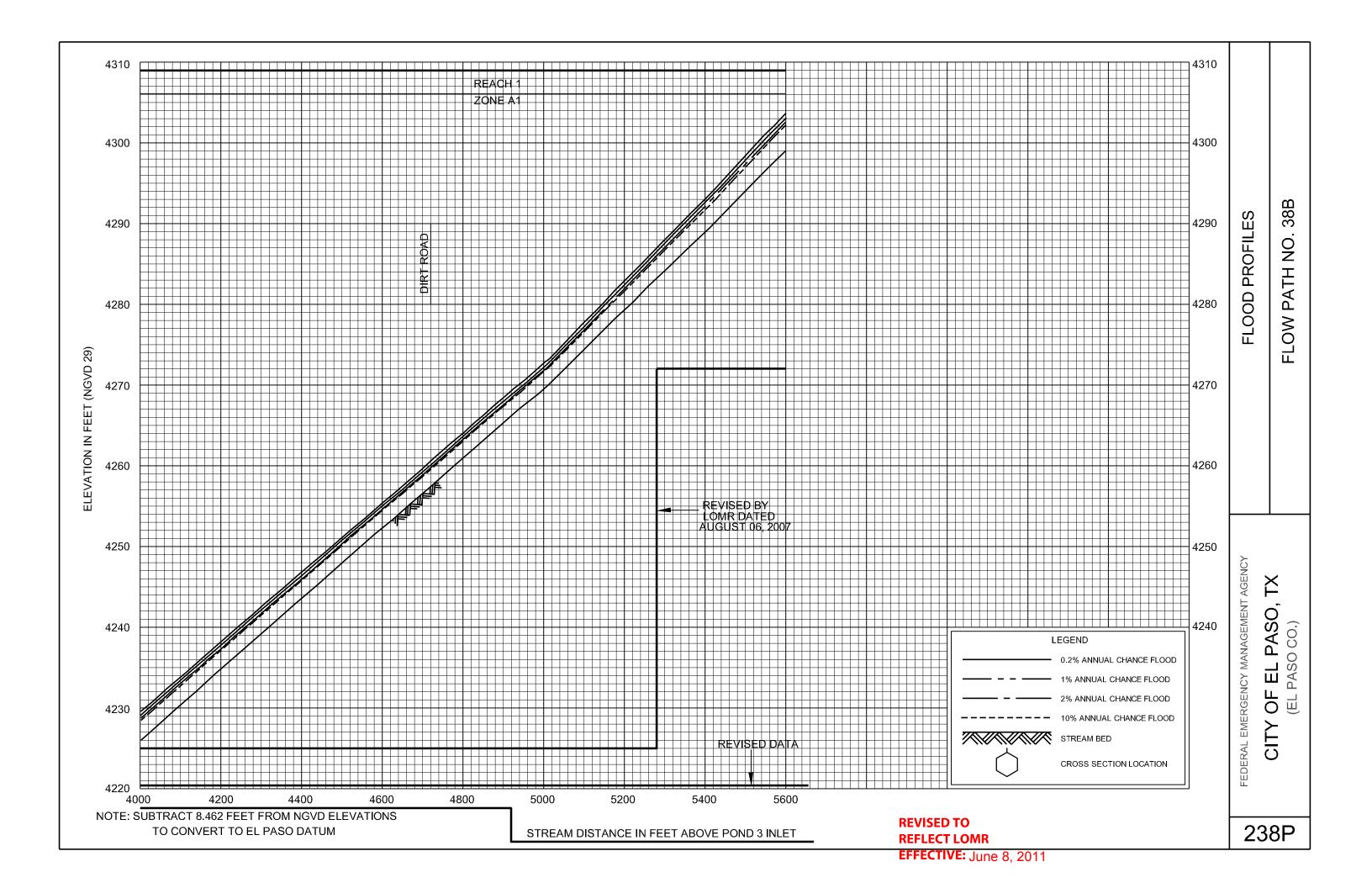


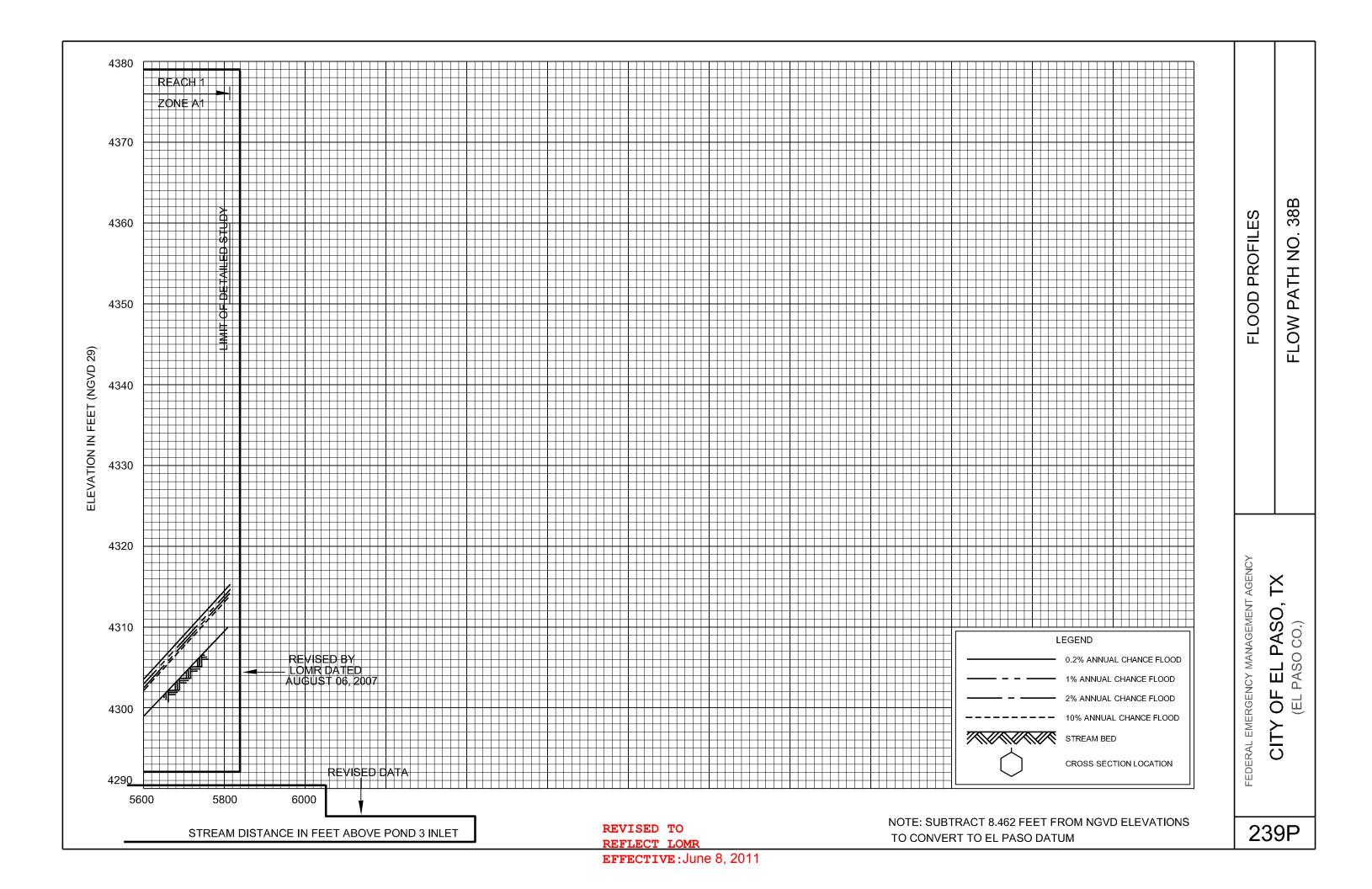


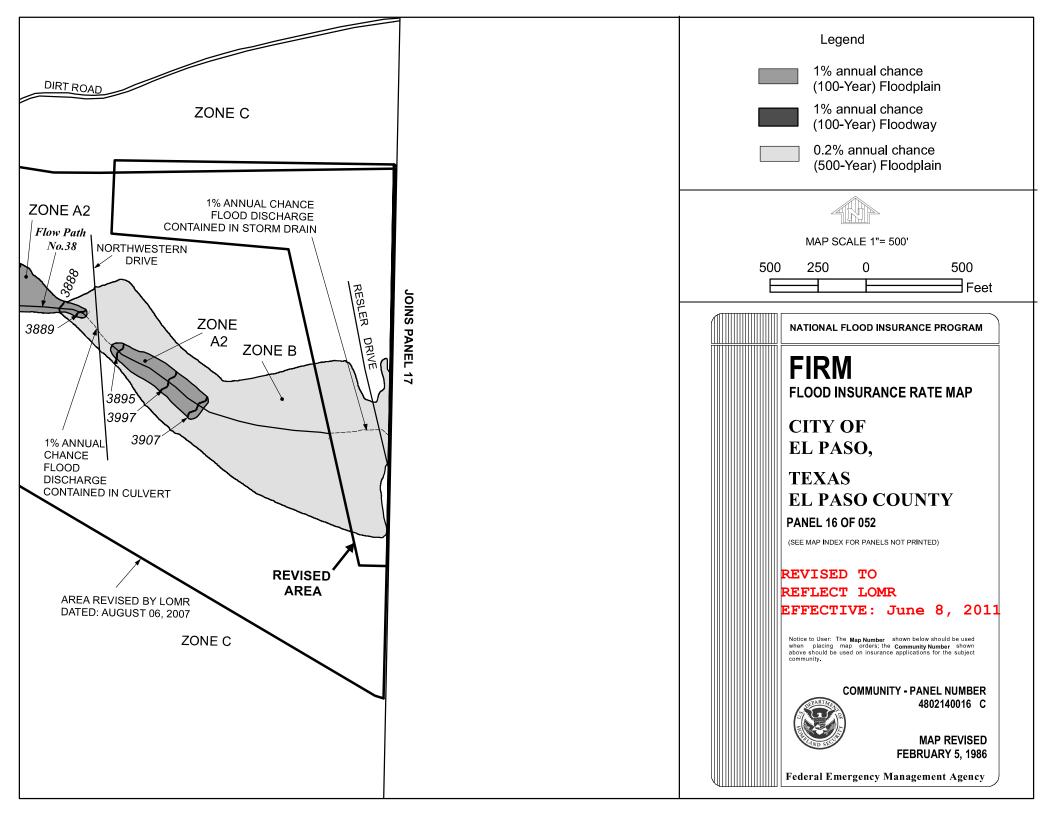


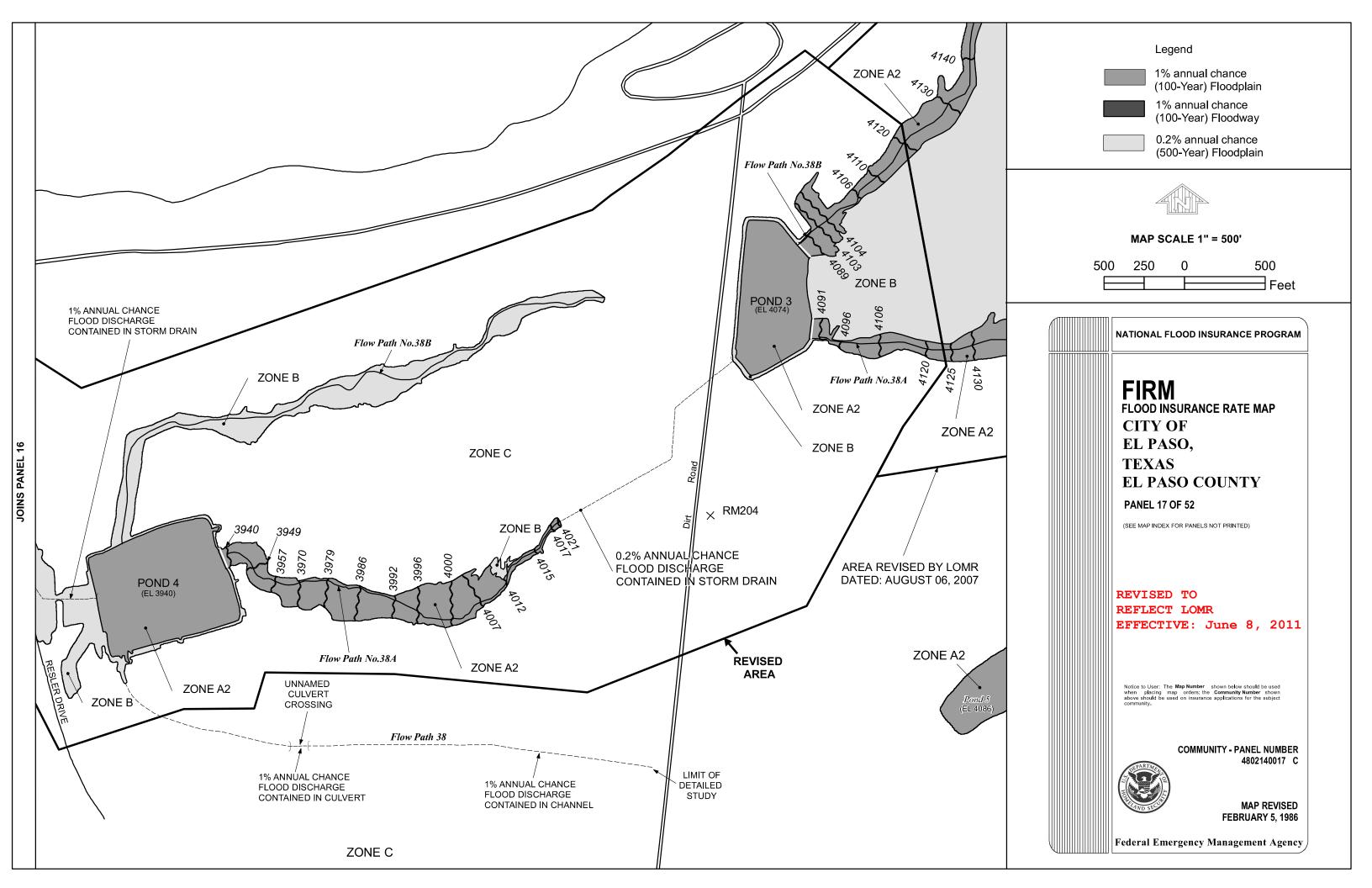








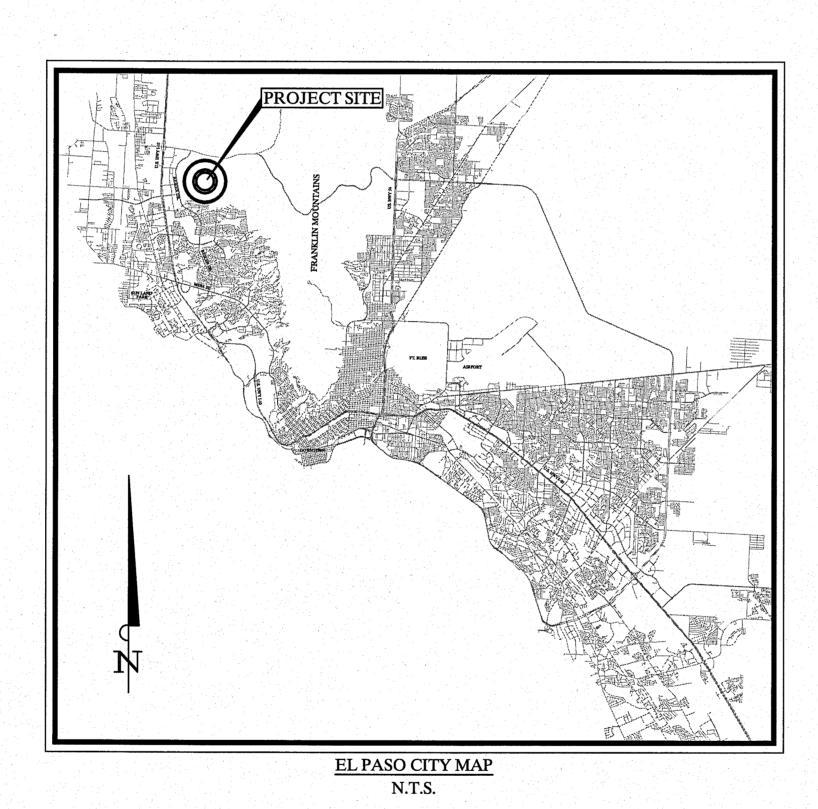


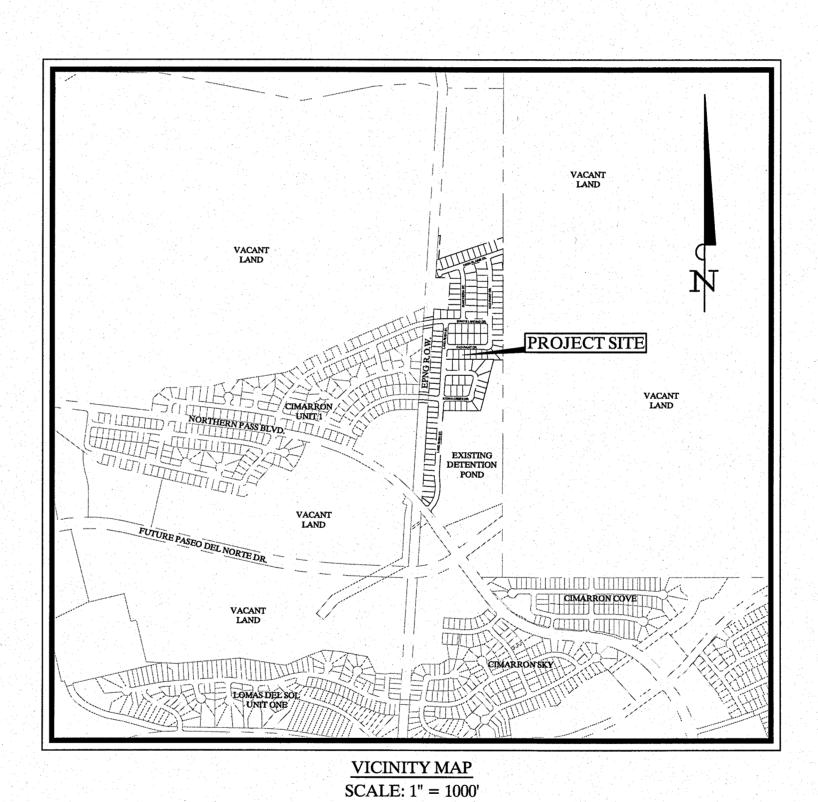


SUBDIVISION IMPROVEMENT PLANS FOR

THE FALLS AT CIMARRON UNIT ONE

EL PASO, TEXAS





INDEX OF SHEETS

EET NO	. DESCRIPTION	REVI
0.1	LOVED STEET	
C-1	COVER SHEET	
	THE FALLS AT CIMARRON UNIT ONE - PRELIMINARY PLAT(SHEET 1 OF 2)	
	THE FALLS AT CIMARRON UNIT ONE - PRELIMINARY PLAT(SHEET 2 OF 2)	
	THE FALLS AT CIMARRON UNIT ONE - PLAT (SHEET 1 OF 2)	
	THE FALLS AT CIMARRON UNIT ONE - PLAT (SHEET 2 OF 2)	
C-2	GENERAL NOTES	
C-3	GRADING PLAN A	
C-4	GRADING PLAN B	
C-5	GRADING DETAILS DRAINAGE AREA MAP	
C-6 C-7	STORM LINE A PLAN AND PROFILE STA. 0+00 TO 9+00	
	STORM LINE A PLAN AND PROFILE STA. 0+00 TO 9+00 STORM LINE A PLAN AND PROFILE STA. 9+00 TO END	
C-8		
C-9	STORM LINE B PLAN AND PROFILE STA. 0+00 TO END	<u> </u>
C-10	STORM LINE C AND LINE D PLAN AND PROFILE	
C-11	STORM LATERALS A2, A3 AND A4 PROFLIES	
C-12	LAND RUSH STREET PAVING PLAN AND PROFILE STA. 0+00 TO 8+00	
C-13	LAND RUSH STREET PAVING PLAN AND PROFILE STA. 8+00 TO 15+50	11
C-14	LAND RUSH STREET PAVING PLAN AND PROFILE STA. 15+50 TO END	
C-15	KIOWA CREEK DRIVE PAVING PLAN AND PROFILE STA. 0+00 TO 6+50	<u> </u>
C-16	KIOWA CREEK DRIVE PAVING PLAN AND PROFILE STA. 6+50 TO END	
C-17	OLD PAINT DRIVE PAVING PLAN AND PROFILE STA. 0+00 TO 6+50	
C-18	OLD PAINT DRIVE PAVING PLAN AND PROFILE STA. 6+50 TO END	
C-19	BRAYS LANDING DRIVE PAVING PLAN AND PROFILE STA. 0+00 TO END	
C-20	HIGH PLAINS DRIVE PAVING PLAN AND PROFILE STA. 0+00 TO END	
C-21	RANCHERIA STREET PAVING PLAN AND PROFILE STA 0+00 TO END	
C-22	EL PASO NATURAL GAS RIGHT-OF-WAY CROSSINGS PLAN	
C-23	PAVING DETAILS	
C-24	PAVING DETAILS	
C-25	CITY OF EL PASO STANDARD DETAILS	t in the contract of
C-26	CITY OF EL PASO STANDARD DETAILS	
C-27	EROSION CONTROL PLAN	· · · ·
C-28	EROSION CONTROL DETAILS	1 11
C-29	STORM WATER POLLUTION PREVENTION PLAN	
C-30	SIGNAGE PLAN	
C-31	ILLUMINATION PLAN	14 m
C-32	ACCESSIBLE ROUTE PLAN	
U-1	WATER PLAN 1	
U-2	WATER PLAN 2	and the second
U-3	WATER PLAN 3	
U-4	SANITARY SEWER PLAN 1	
U-5	SANITARY SEWER PLAN 2	
U-6	SANITARY SEWER PLAN 3	
U-7	SANITARY SEWER PROFILES	
U-8	SANITARY SEWER PROFILES	A Transport
U-9	SANITARY SEWER PROFILES	the first transfer
U-10	SANITARY SEWER PROFILES	
U-11	WATER DETAILS	
U-12	SANITARY SEWER DETAILS	
PN-1	MATERIALS LEGEND AND PLANTING NOTES	
L-1 - 2	LANDSCAPE PLANS	
L-1 - 2	LANDSCAPE PLANS LANDSCAPE DETAILS	
L-GR-1	GRADING PLAN	·
	-	
LD-1	ENTRY MONUMENT AND FENCE DETAILS IDDICATION BLANS	
IR-1 - 3	IRRIGATION PLANS	11
ID-1 - 2	IRRIGATION DETAILS	

DO HUNT COMMUNITIES

4401 NORTH MESA STREET EL PASO, TEXAS 79902 PH (915) 533-7900

ENGINEER
Kimley-Horn
and Associates, Inc

12700 PARK CENTRAL DRIVE SUITE 1800 DALLAS, TEXAS 75251 PH (972) 770-1300 CONTACT: HUGO MORALES, P.E. JANUARY 2011



STOP!

CALL BEFORE YOU DIG

DIG TESS
1-800-DIG-TESS
(@ least 72 hours prior to digging)



C-1

GENERAL NOTES:

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THESE PLANS AND THE CITY OF EL PASO DEVELOPMENT SERVICES' DESIGN STANDARDS FOR CONSTRUCTION DATED JUNE 3, 2008 AND THE EL PASO WATER UTILITIES - PUBLIC SERVICES BOARD'S DESIGN STANDARDS AND UTILITY DETAIL STANDARDS MANUALS DATED AUGUST 2008.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OFFSITE OF ANY EXISTING PAVING AND STRUCTURES REMOVED.
- BEFORE STARTING CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES WHERE PROPOSED UTILITIES ARE BEING CONNECTED. THE LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS WAS TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY CONTRACTOR. IT SHALL BE THE DUTY AND RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF A DISCREPANCY AND/OR CONFLICT IS DISCOVERED. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES DURING CONSTRUCTION.
- 5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN NEAT AND ACCURATE CONSTRUCTION
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
- 7. WATER AND SEWER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF EL PASO STANDARDS AND SPECIFICATIONS. WATER AND SEWER MAIN LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE EL PASO WATER UTILITIES - PUBLIC SERVICES BOARD'S DESIGN STANDARDS AND UTILITY DETAIL STANDARDS MANUALS DATED AUGUST 2008.
- ALL EXISTING TRAFFIC AND STREET SIGNS DISTURBED SHALL BE REINSTALLED WHERE
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING STRUCTURES, UTILITIES, AND SERVICES PRIOR TO EXCAVATION AND CONSTRUCTION.
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH UTILITY COMPANIES FOR THE
- RELOCATION OF ANY EXISTING UTILITIES. 11. CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD
- 12. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS SHOWN ON THE PLANS AND REVIEW ALL FIELD CONDITIONS, INCLUDING EXISTING GRADES AND UTILITY FLOW LINES, AND SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
- 13. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, UTILITIES, AND OTHER FACILITIES TO REMAIN AND SHALL REPAIR ANY DAMAGES DUE TO HIS CONSTRUCTION ACTIVITIES AT NO COST TO THE OWNER.
- 14. ALL EXISTING SHRUBS, TREES, PLANTING, AND OTHER VEGETATION, OUTSIDE OF PROPERTY LIMITS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH EQUIVALENT MATERIAL BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 15. THE CONTRACTOR SHALL CONSTRUCT SILT SCREENS OR OTHER APPROVED DEVICES PRIOR TO CONSTRUCTION TO PREVENT ADVERSE OFF SITE IMPACT OF STORM WATER QUALITY, AS REQUIRED BY THE CITY OF EL PASO. CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. THE EROSION CONTROL DEVICES SHOULD REMAIN IN PLACE, WHERE PRACTICAL, UPON COMPLETION OF CONSTRUCTION.
- 16. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS OFFSITE FROM THE EXISTING ROADWAYS AND PROJECT SITE THAT ARE A RESULT OF THE PROPOSED CONSTRUCTION AS REQUESTED BY THE CITY OF EL PASO. AS A MINIMUM, THIS TASK SHOULD
- 17. CONNECTIONS TO EXISTING FACILITIES SHALL BE ACCOMPLISHED IN A NEAT AND PROFESSIONAL MANNER. WHEN FIELD CONDITIONS INDICATE ANY VARIANCE FROM DETAILED METHODS, THE CONTRACTOR SHALL PROVIDE COMPREHENSIVE AND DETAILED DRAWINGS (FOR APPROVAL) OF METHODS PROPOSED.
- 18. WATER SHALL NOT BE PERMITTED IN OPEN TRENCHES DURING CONSTRUCTION.
- CONTRACTOR SHALL CONTACT THE CITY ENGINEERING DEPARTMENT'S INSPECTOR AND THE EL PASO WATER UTILITIES INSPECTOR ASSIGNED TO THIS PROJECT AT LEAST 48 HOURS PRIOR
- 20. CONTRACTOR IS RESPONSIBLE FOR STABILIZING DISTURBED AREAS FROM BACK OF CURB TO THE RIGHT-OF-WAY AND AREAS OTHERWISE SPECIFIED ON THE PLANS.
- 21. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP WITH A MIN. ALLOWABLE STRENGTH OF 4,200
- 22. CONTRACTOR IS TO CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL PRIMARY POINTS OF ACCESS. THIS STABILIZED EXIT SHALL BE CONSTRUCTED PER CITY DETAILS ACCORDING TO THE STORM WATER POLLUTION PREVENTION PLAN.
- 23. ANY WATER OR SANITARY SEWER SERVICE LOCATED OUTSIDE OF A STREET, ALLEY, OR EASEMENT SHALL BE INSTALLED BY A PLUMBER AND BE INSPECTED BY CODE ENFORCEMENT.
- 24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A TRENCH SAFETY PLAN TO THE CITY OF EL PASO ENGINEERING DEPARTMENT AT THE TIME OF THE PRECONSTRUCTION MEETING, OR PRIOR TO REGINNING CONSTRUCTION OF THESE IMPROVEMENTS, CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT WITHOUT THE PRIOR SPECIFIC WRITTEN APPROVAL OF THE CITY OF EL PASO ENGINEERING DEPARTMENT. ONSITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 25. DURING CONSTRUCTION, ALL MATERIAL TESTING SHALL BE COORDINATED WITH THE CITY OF EL PASO'S CONSTRUCTION INSPECTOR.
- 26. CONTRACTOR SHALL CONTACT THE CITY BUILDING OFFICIAL TO LEARN OF ANY UNUSUAL CONSTRUCTION SEQUENCING REQUIREMENTS THE CITY MAY REQUIRE.
- 27. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH CITY SPECIFICATIONS FOR PAVING CONSTRUCTION, COMPACTION REQUIREMENTS, AND SUBGRADE PREPARATION.
- 28. CONTRACTOR TO REVIEW DESIGN INTENT OF THESE PLANS AND SUBMIT REQUESTS-FOR-INFORMATION IN A TIMELY MANNER PRIOR TO COMMENCING THAT WORK.
- 29. CONTRACTOR SHALL COORDINATE WITH FRANCHISE UTILITY COMPANIES FOR SLEEVING REQUIREMENTS PRIOR TO ANY PAVING ACTIVITIES.
- 30. ALL APPURTENANCES INSTALLED IN PAVEMENT AREAS SHALL BE ADJUSTED AS REQUIRED TO
- BE FLUSH WITH FINISHED PAVEMENT.
- 31. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR COMPLETING AND IMPLEMENTING TRAFFIC CONTROL PLAN.

DEVELOPER SHALL COORDINATE WITH CITY OF EL PASO DEPARTMENT OF TRANSPORTATION PRIOR TO FINAL ACCEPTANCE OF SUBDIVISION IMPROVEMENTS FOR MAINTENANCE, FINAL LOCATION AND TYPE OF ALL SIGNS INCLUDING HANDICAP ACCESSIBILITY ROUTE SIGNAGE TO BE REQUIRED BY EL PASO DEPARTMENT OF TRANSPORTATION.

- STORM DRAINAGE

 1. ALL CONSTRUCTION SHALL BE IN GENERAL ACCORDANCE WITH THESE PLANS, CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION DATED JUNE 3, 2008 AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS.
- 2. THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY THE CONSTRUCTION MANAGER AND ENGINEER OF ANY CONFLICTS DISCOVERED. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
- 3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION REQUIREMENTS. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND SUBMIT A NOTICE OF INTENT (N.O.I.) ACCORDING TO THE STORM WATER POLLUTION PREVENTION PLAN.
- 4. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS,
- MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. DURING ALL CONSTRUCTION PHASES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE TRENCH SAFETY DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A TRENCH EXCAVATION PROTECTION PLAN, SEALED BY AN ENGINEER REGISTERED IN THE STATE OF TEXAS, FOR ALL TRENCHES DEEPER THAN FIVE (5) FEET.
- THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS AND GRATE INLETS AND ALL
- THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER.
- 8. THE INSPECTOR SHALL INSPECT ALL "PUBLIC" CONSTRUCTION. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
- 9. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION.
- 10. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND ANY SPECIAL PROVISION AS APPROVED BY THE CITY
- 11. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING FOR ALL STORM SEWER LINES
- EMBEDMENT FOR ALL ONSITE SEWER LINES, PUBLIC OR PRIVATE, SHALL BE PER CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION DATED JUNE 3, 2008.
- REFER TO TNRCC/TCEQ DESIGN GUIDELINES (CHAPTER 290) FOR ALL UTILITY CROSSINGS.

- 1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THESE PLANS AND THE CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL MAKE CERTAIN THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- BARRICADING, TRAFFIC CONTROL, AND PROJECT SIGNS SHALL CONFORM TO THE CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION.
- THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES. MINOR ADJUSTMENTS TO FINISH GRADE TO ACCOMPLISH SOPOT DRAINAGE ARE ACCEPTABLE. IF NECESSARY, UPON PRIOR APPROVAL OF ENGINEER. PAVING INSTALLED SHALL "FLUSH OUT" AT ANY JUNCTURE WITH EXISTING PAVING.
- THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN IN THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTRACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL EXISTING INVERTS AND RIM ELEVATIONS PRIOR TO CONSTRUCTION
- ALL PROPOSED CONTOURS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND STREET PROFILES ARE TO BE USED IN THE EVENT OF ANY DISCREPANCIES.
- REFER TO PAVING PLANS AND PLAT FOR HORIZONTAL DIMENSIONS.
- UNLESS NOTED OTHERWISE, ALL GRADES NOTES ARE TO TOP OF SURFACE. REFER TO PAVING PLANS FOR CURBING PROFILES AND BACK-OF-CURB ELEVATIONS.
- REFER TO LANDSCAPE PLANS FOR GRADING ON PRIVATE OPEN SPACE AREAS.
- 11. REFER TO STORM SEWER PLANS FOR INLET SPECIFICATIONS AND DETAILS.
- 12. REFER TO STORM WATER POLLUTION PREVENTION PLAN FOR EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO COMMENCING GRADING OPERATIONS
- 13. ALL SURFACE ORGANIC SOIL AND VEGETATION SHOULD BE REMOVED AND DISPOSED OF OFF THE CONSTRUCTION SITE. ALL VEGETATION SHALL BE CLEARED AND GRUBBED FOR ALL AREAS TO BE
- 14. AREAS WHERE FILL IS TO PLACED SHALL CONFORM TO THE RECOMMENDATIONS PROVIDED BY THE SOILS REPORT PREPARED BY SPEESOIL INC. (SPG10040 , DATED MARCH 19, 2010).
- 15. PRIOR TO THE PLACEMENT OF FILL MATERIAL, THE EXPOSED SUBGRADE SHOULD BE SCARIFIED TO THE DEPTHS OF 10-INCHES AND THEN RE-COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY
- 16. ALL FILL MATERIAL TO BE PLACED AT THE SITE SHOULD BE PLACED AT 8-INCHES LOOSE LIFTS. EACH LIFT SHOULD BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY PER ASTM-1557.
- MATERIAL USED AS ENGINEERED FILL SHOULD BE GRANULAR, FREE OF CLAY AND ORGANIC SOIL AND SHALL NOT CONTAIN GRAVEL LARGER THAN 3-INCHES IN ITS GREATEST DIMENSION, ENGINEERED FILL SHOULD NOT POSSESS PLASTICITY INDEX LARGER THAN 12. NATIVE SOIL WITH TESTED PLASTICITY INDEX LESS THAN 12 COULD BE USED AS ENGINEERED FILL.
- WATER CONTENT OF THE FILL MATERIAL SHOULD BE MAINTAINED AT ±3 PERCENT OF THE OPTIMUM WATER CONTENT UNTIL THE ENGINEERED FILL IS PERMANENTLY COVERED.

- ALL CONSTRUCTION SHALL BE IN GENERAL ACCORDANCE WITH THESE PLANS, CITY OF EL PASO STANDARD SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS.
- THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY THE CONSTRUCTION MANAGER AND ENGINEER OF ANY CONFLICTS DISCOVERED. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
- 3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION.
- 4. ALL EXCAVATING IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED. UNUSABLE EXCAVATED MATERIAL AND ALL WASTE RESULTING FROM SITE CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF SITE BY THE GRADING CONTRACTOR AT HIS EXPENSE
- BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF PAVEMENT AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SURVEYING FOR LINE AND GRADE CONTROL POINTS
- 6. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. THAT ARE TO REMAIN OR BE RELOCATED DURING ALL CONSTRUCTION PHASES.
- THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO
- TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS. THE NOMINATION OF THE TESTING LABORATORY AND THE PAVEMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE CONTRACTOR. THE OWNER SHALL APPROVE THE LABORATORY NOMINATED TO DO THE TESTING OF MATERIALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED DOES MEET THE REQUIREMENTS OF THE CITY'S SPECIFICATIONS AND THESE
- BARRIER FREE RAMPS SHALL BE CONSTRUCTED AT ALL DRIVEWAY APPROACHES PER CITY STANDARDS AND IN ACCORDANCE WITH THESE PLANS.
- 10. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM
- TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES. PARKING STALLS, HANDICAPPED PARKING SYMBOLS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AND AROUND BUILDING AS SHOWN ON THE PLANS. ALL PAINT FOR PAVEMENT
- 12. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT OF 1990.
- 13. REFERENCE CITY OF EL PASO STANDARD CONSTRUCTION DETAILS FOR HANDICAP RAMP AND OTHER PAVING DETAILS.

MARKINGS SHALL ADHERE TO SECTION 2.9 OF THE N.C.T.C.O.G. STANDARD SPECIFICATIONS

- 14. REFERENCE LANDSCAPE PLANS FOR LOCATION AND TYPE OF HANDICAP RAMPS TO BE
- 15. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS
- FOR CONSTRUCTION AND ANY SPECIAL PROVISION AS APPROVED BY THE CITY OF EL PASO.
- 16. CONTRACTOR RESPONSIBLE FOR PREPARATION, SUBMITTAL, AND APPROVAL BY CITY OF EL PASO OF TRAFFIC CONTROL PLAN PRIOR TO START OF CONSTRUCTION. 17. SIDEWALKS TO CONFORM TO THE MINIMUM STANDARDS PER CITY OF EL PASO CONSTRUCTION
- 18. UNLESS THE PLANS SPECIFICALLY DICTATE TO THE CONTRARY, ON-SITE AND OTHER DIRECTIONAL SIGNS SHALL BE LOCATED OUT OF THE PEDESTRIAN AND AUTOMOBILE ROUTES SIGN HEIGHT, LOCATION, AND STRUCTURE SHALL BE SUCH THAT THE SIGNS POSE NO THREAT TO PUBLIC SAFETY AND CONFORM TO THE STANDARDS ESTABLISHED PER CITY OF EL PASO
- DEVELOPMENT SERVICES' DESIGN STANDARDS FOR CONSTRUCTION DATED JUNE 3, 2008. 19. CONTRACTOR SHALL VERIFY HANDICAP RAMPS COMPLY WITH A.D.A. AND T.A.S STANDARDS.
- 20. REFER TO GEOTECHNICAL REPORT FOR SOIL COMPACTION SPECIFICATION.

- WATER AND SANITARY

 1. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE REQUIREMENTS SET FORTH IN THE EL PASO WATER UTILITIES - PUBLIC SERVICES BOARD'S DESIGN STANDARDS AND UTILITY DETAIL STANDARDS DATED AUGUST 2008.
- 2. WATER MAINS SHALL BE PVC C-900 DR 14, EXCEPT WHEN OTHERWISE NOTED.
- 3. SEWER PIPE SHALL BE MINIMUM SDR 35 PVC OR ULTRA RIB PVC SDR 26.
- 4. WATER MAINS SHALL HAVE THE FOLLOWING MINIMUM COVER BELOW STREET GRADES:
- 5. ANY NEW UTILITY LINE SHALL BE MARKED BY INSTALLING THE APPROPRIATE MARKING TAPE IN THE TRENCH. THE TAPE SHALL MEET THE FOLLOWING SPECIFICATION: A. MARKING TAPE SHALL CONSIST OF A 5.0 MIL INERT POLYETHYLENE PLASTIC MATERIAL.
- B. BURIAL DEPTH SHALL GENERALLY BE 18" BELOW FINAL GRADE FOR SHALLOW

COMPONENT" AS MANUFACTURED BY HYDRA-LOK, INC., OR EQUAL, APPROVED BY EL PASO

IN AN EXECUTED DEVELOPMENT AGREEMENT BETWEEN EL PASO WATER UTILITIES AND THE

- FOR DEEPER EXCAVATIONS (GREATER THAN 5' COVER), A SECOND TAPE SHALL BE PLACED 2' ABOVE THE TOP OF PIPE. ALL FIRE HYDRANTS SHALL BE FURNISHED WITH ONE (1) "AG-45 4-1/2" N.S.T. HYDRANT
- EL PASO WATER UTILITIES WILL VIDEO RECORD THE MAIN IN ACCORDANCE WITH THE TERMS
- 8. FIRE HYDRANTS SHALL BE LOCATED 18" FROM THE BACK OF CURB ACCORDING TO THE EL

PASO WATER UTILITIES STANDARD DETAILS.

- 9. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY EXACT LOCATIONS OF EXISTING PUBLIC AND PRIVATE UTILITIES AND SERVICES PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL CALL 1-800-DIG-TESS FOR FIELD LOCATION OF EXISTING UTILITIES. CALL AT LEAST 48 HOURS BEFORE LOCATIONS ARE NEEDED. NOTE THAT THE DIG TESS SERVICE DOES NOT LOCATE ALL UTILITIES, ONLY THOSE REGISTERED WITH THE SERVICE.
- 10. REFER TO SITE GRADING PLANS, PAVING PLANS, AND LANDSCAPE PLANS FOR FINAL GRADES FOR DETERMINING PROPOSED MANHOLE RIM ELEVATIONS.
- 11. LOCATIONS AND SIZES OF EXISTING PUBLIC AND PRIVATE UTILITIES SHOWN ON THESE PLANS ARE FROM CITY AND UTILITY COMPANY RECORDS ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING ALL UTILITIES AND FOR DAMAGES RESULTING FROM FAILURE
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING "RECORD" PLANS TO THE ENGINEER SHOWING THE LOCATION OF WATER AND SEWER SERVICES AND ANY DEVIATIONS FROM PLANS MADE DURING CONSTRUCTION.
- 13. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN, COORDINATING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITY SERVICES ENTERING THE BUILDING AND/OR CROSSING OTHER UTILITIES.
- 14. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE UTILITIES. ALL PUBLIC PIPE, STRUCTURES AND FITTINGS SHALL BE INSPECTED BY THE EL PASO WATER UTILITIES INSPECTOR PRIOR TO BEING COVERED. THE INSPECTOR MUST ALSO BE PRESENT DURING DISINFECTION, PRESSURE AND MANDREL TESTING OF ALL MAINS. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL
- 15. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE TRENCH SAFETY DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A TRENCH EXCAVATION PROTECTION PLAN, SEALED BY A GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF TEXAS, FOR ALL TRENCHES DEEPER THAN FIVE (5) FEET.
- 16. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE EL PASO WATER UTILITIES -PUBLIC SERVICES BOARD'S TECHNICAL SPECIFICATIONS AND ANY SPECIAL PROVISION AS APPROVED BY THE CITY OF EL PASO.
- 17. IN ACCORDANCE TO THE TERMS OF AN EXECUTED DEVELOPMENT AGREEMENT BETWEEN EL PASO WATER UTILITIES AND THE DEVELOPER, THE CONTRACTOR SHALL STAKE OUT THE ALIGNMENT OF THE PROPOSED STREET RIGHT-OF-WAY FOR USE BY EL PASO WATER UTILITIES IN STAKING THE ALIGNMENT OF THE PROPOSED WATER AND SANITARY SEWER MAINS.
- 18. REFER TO TNRCC/TCEQ DESIGN GUIDELINES (CHAPTER 290) FOR ALL UTILITY CROSSINGS.

REFER TO TNRCC/TCEQ DESIGN **GUIDELINES (CHAPTER 290) FOR** ALL UTILITY CROSSINGS.

CALL BEFORE YOU DIG

1-800-DIG-TESS (at least 72 hours prior to digging)

WARNING: CONTRACTOR TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

> GEOTECHNICAL REPORT JOB NO. SMF 10019-10070 BY SOILS MECHANICS INTERNATIONAL JOB NO. SPG 10040, 10055 BY SPEESAL INC. DATED 03/19/201

UTILITY CONTACTS

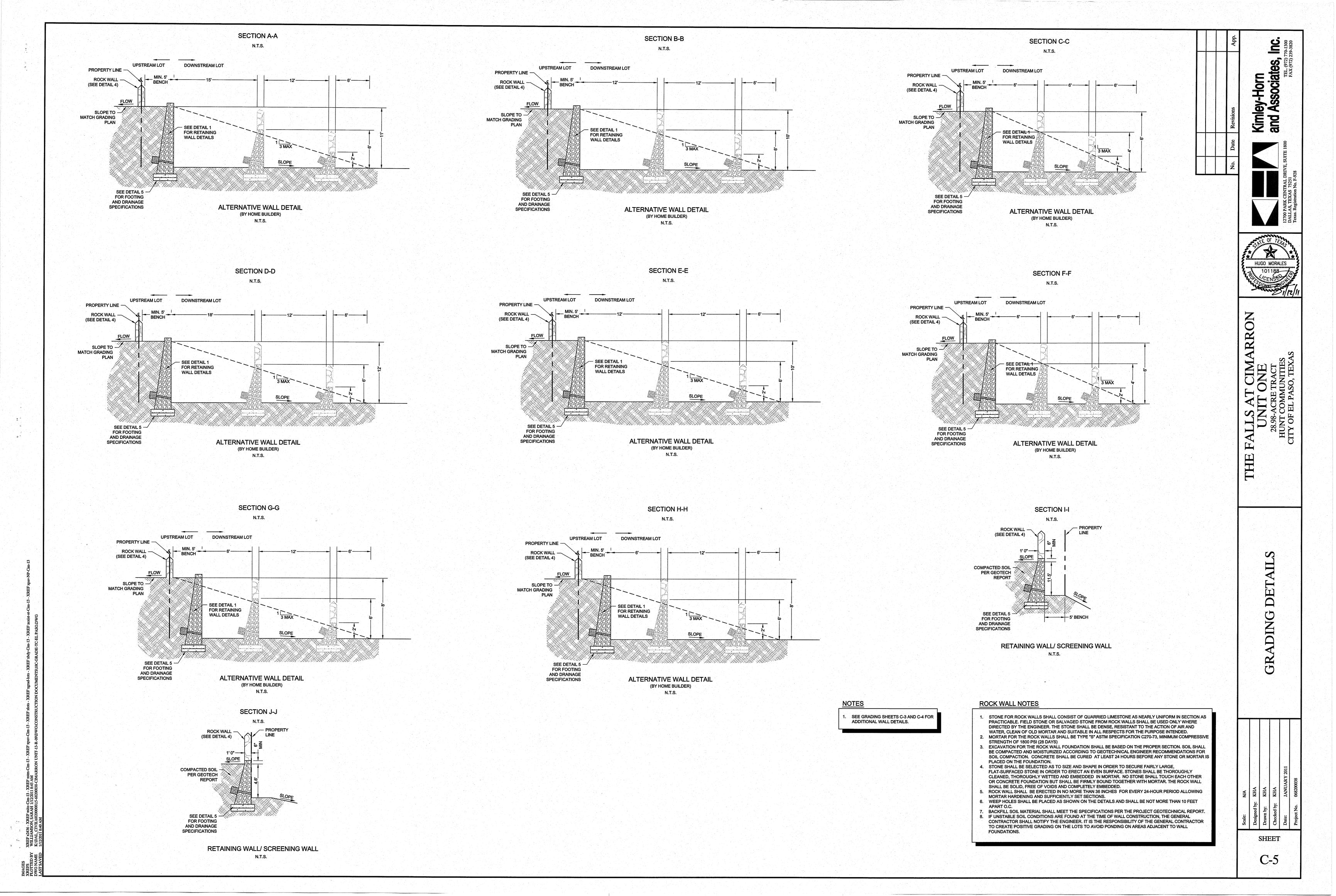
915-543-2075 EL PASO ELECTRIC CO. EL PASO NATURAL GAS 915-842-7315 915-595-5119 SBC-ATT 915-775-7415 ROAD RUNNER CABLE

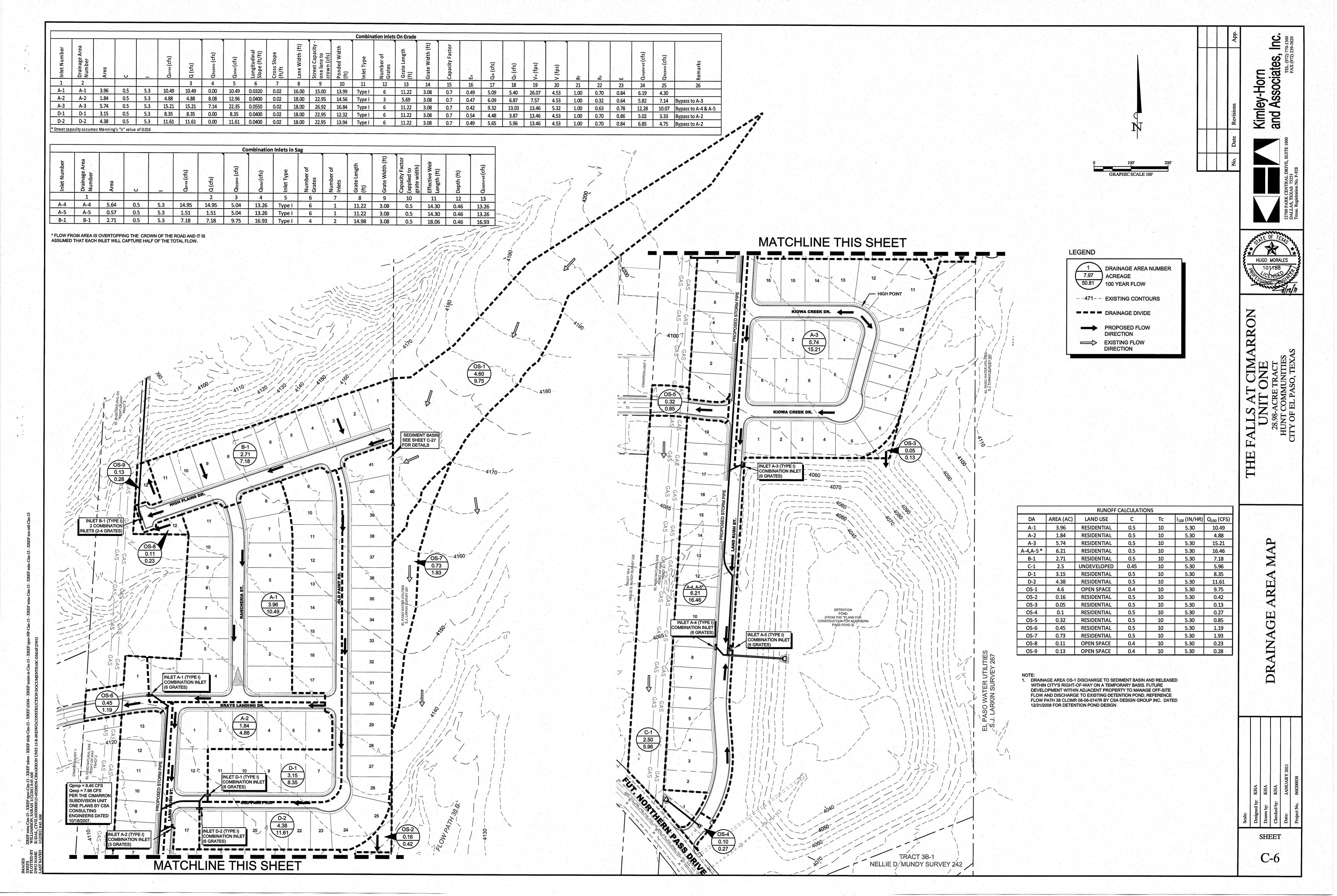
BENCHMARKS

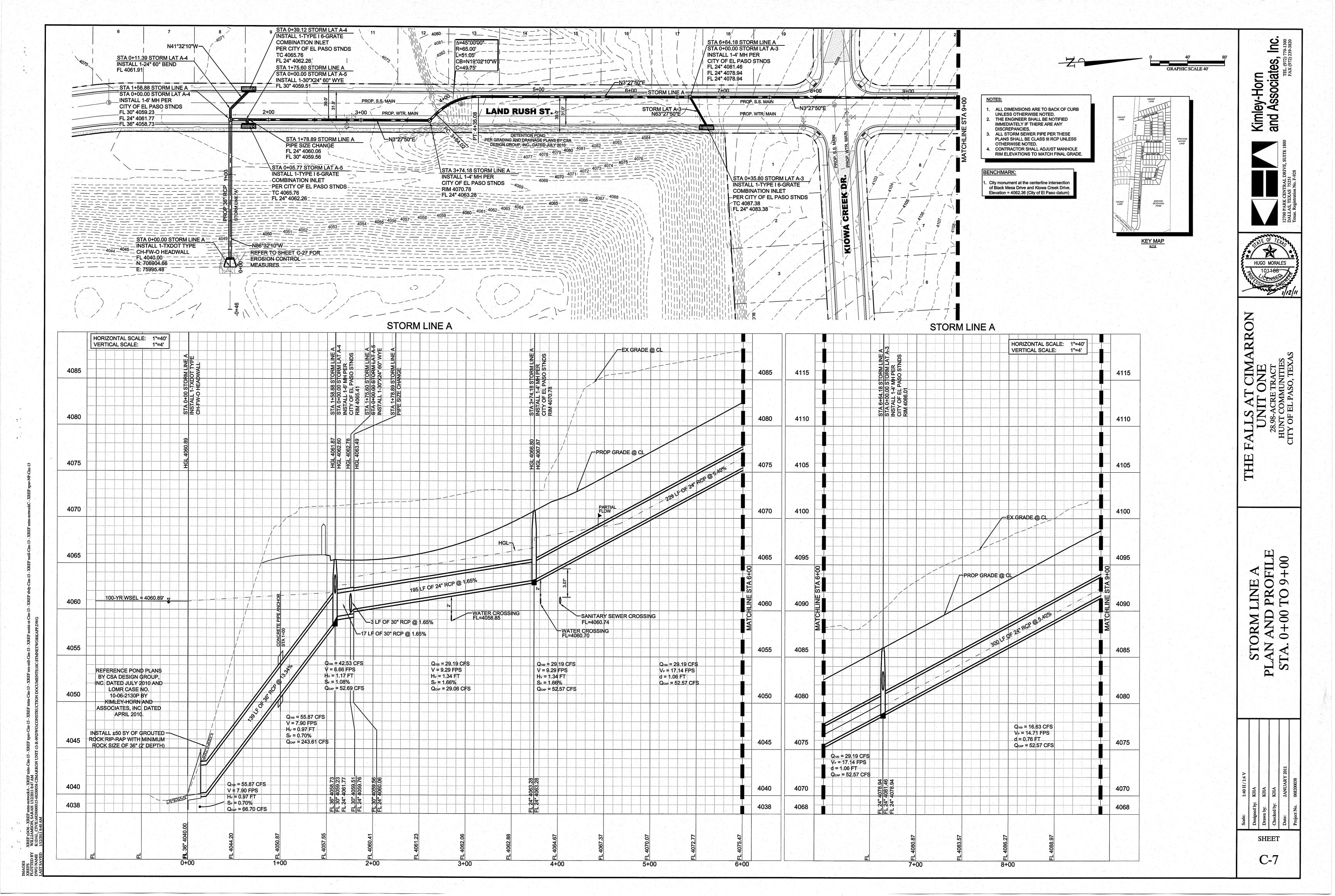
CITY MONUMENT AT THE CENTERLINE INTERSECTION OF BLACK MESA DRIVE AND KIOWA CREEK DRIVE. ELEVATION=4062.36 (CITY OF EL PASO DATUM)

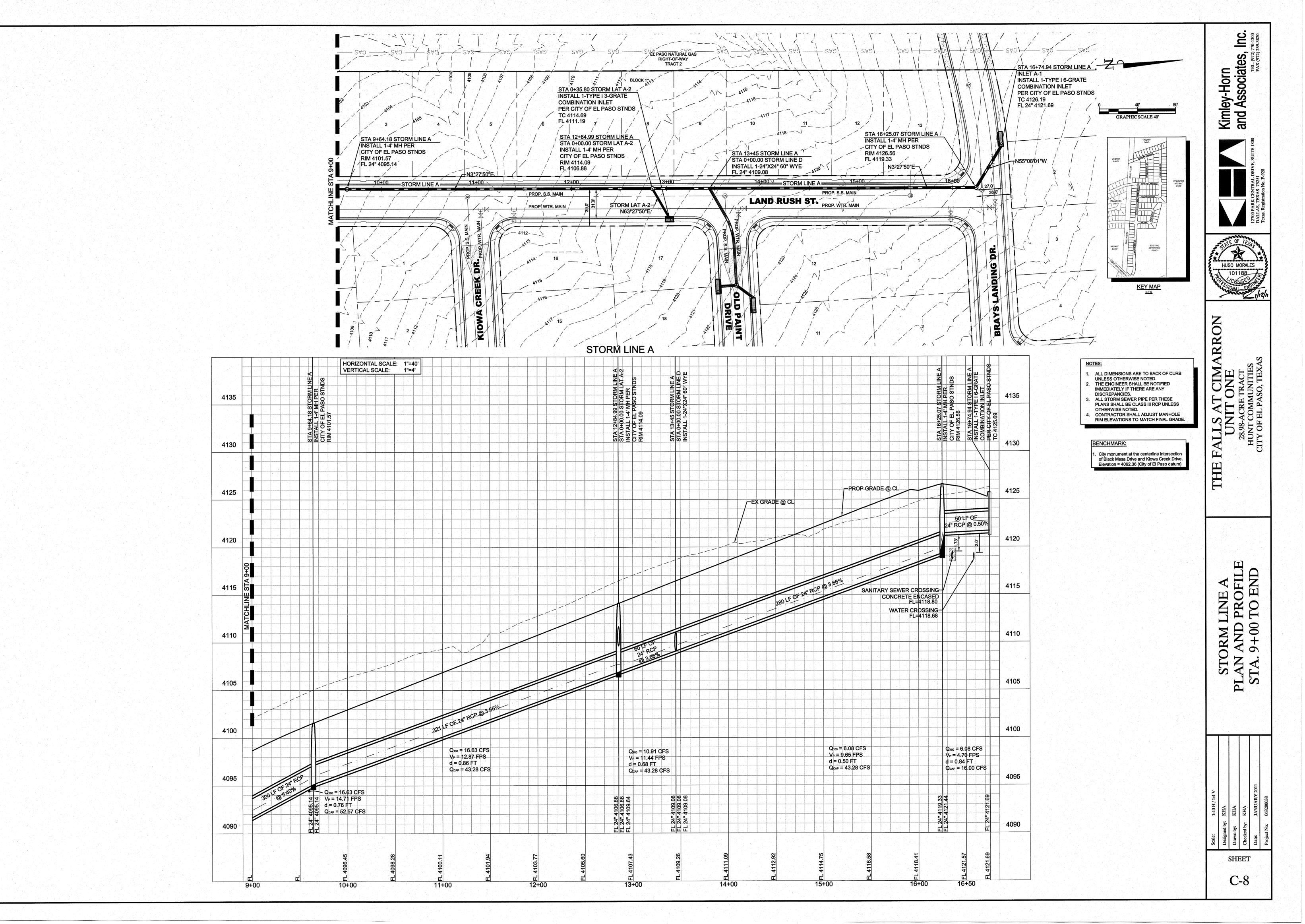


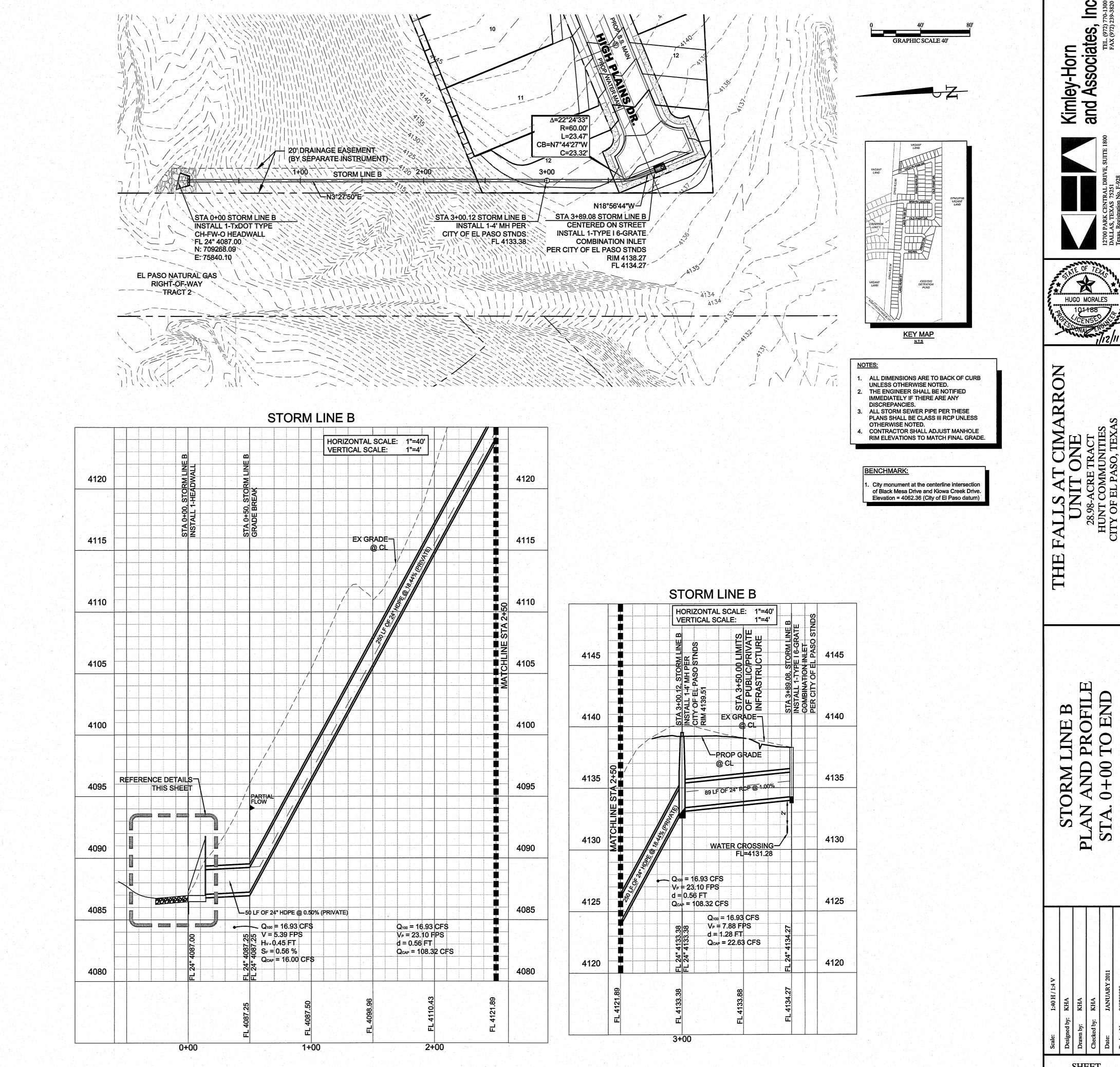
SHEET





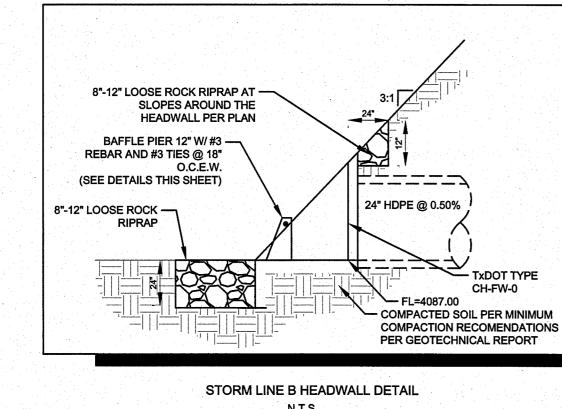




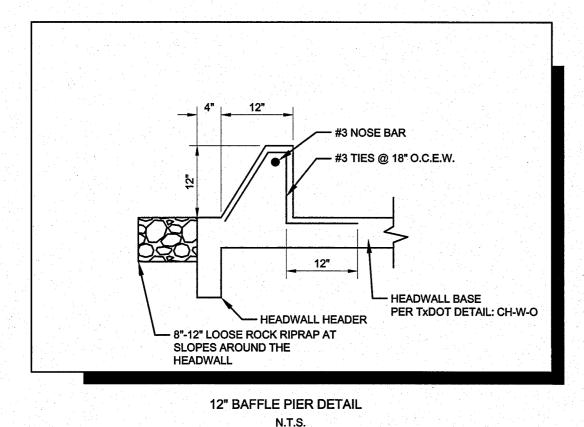


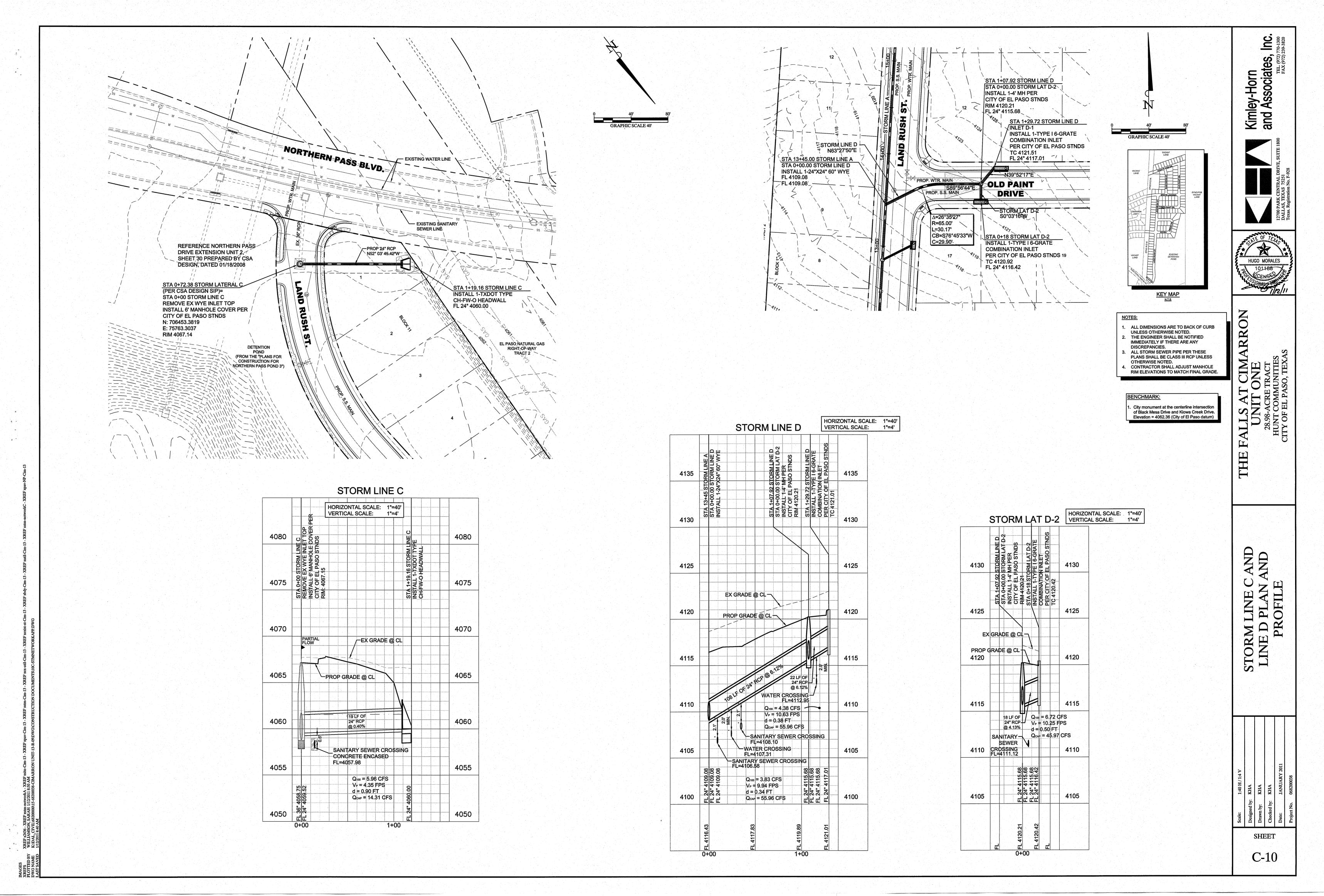
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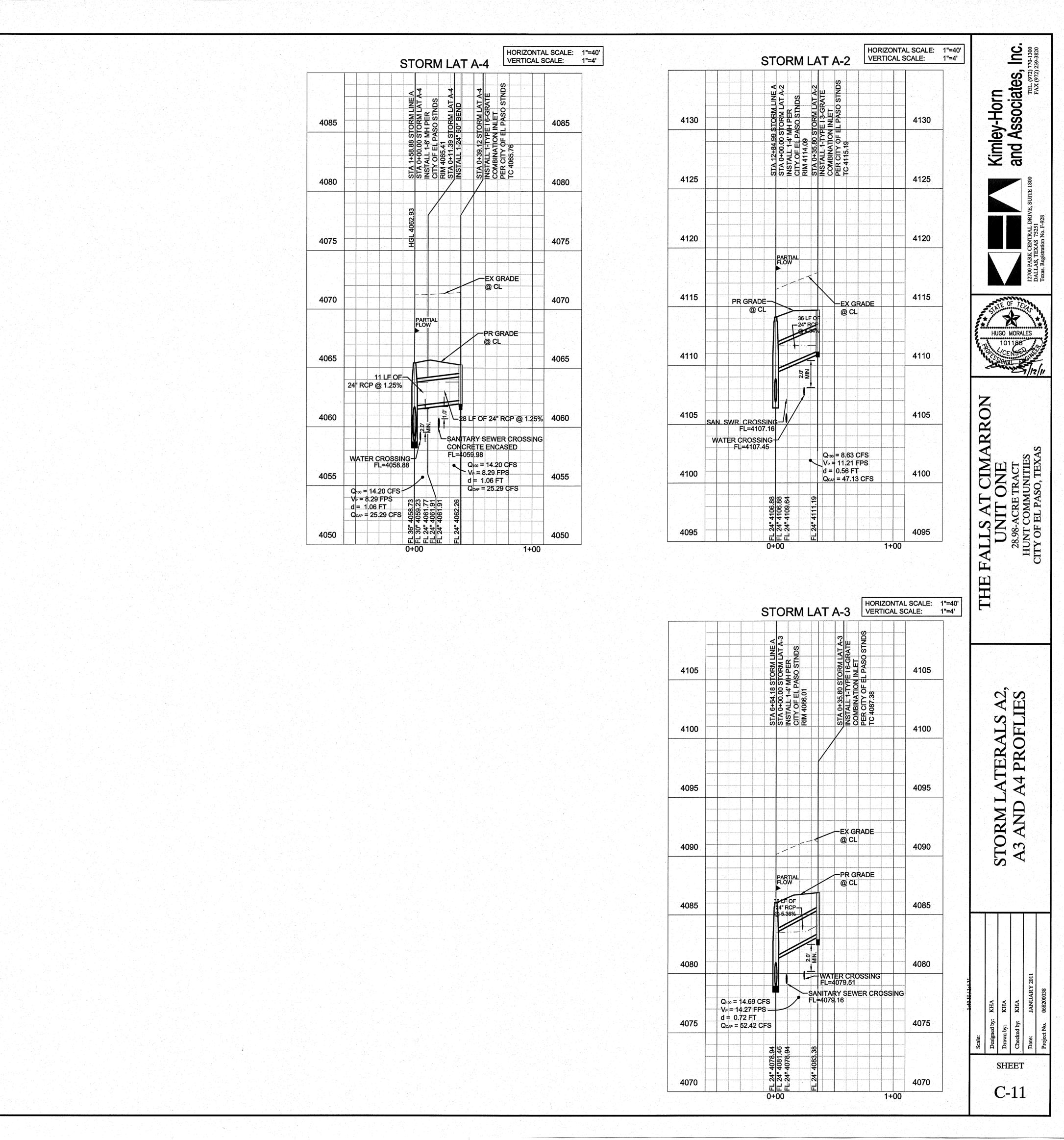
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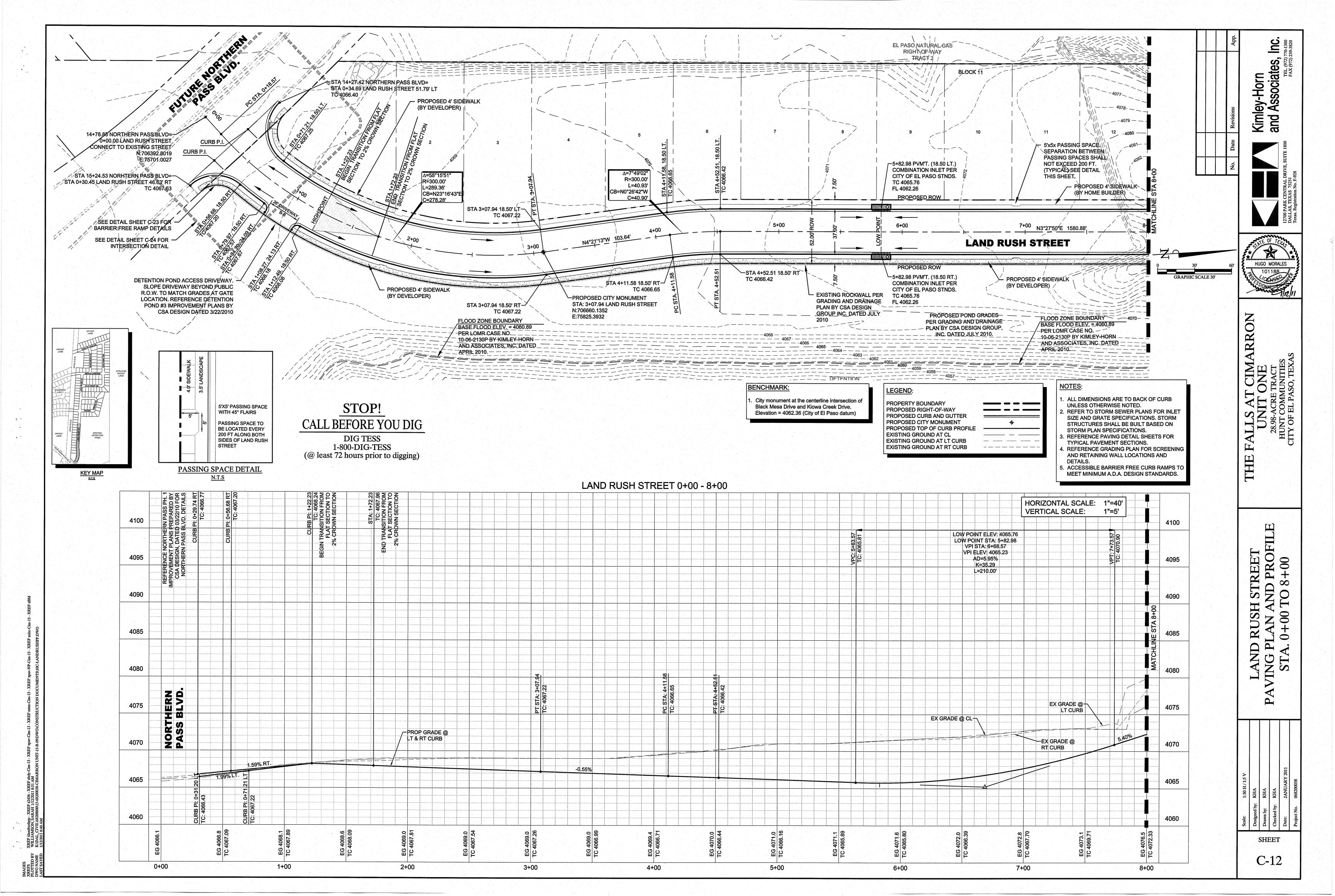


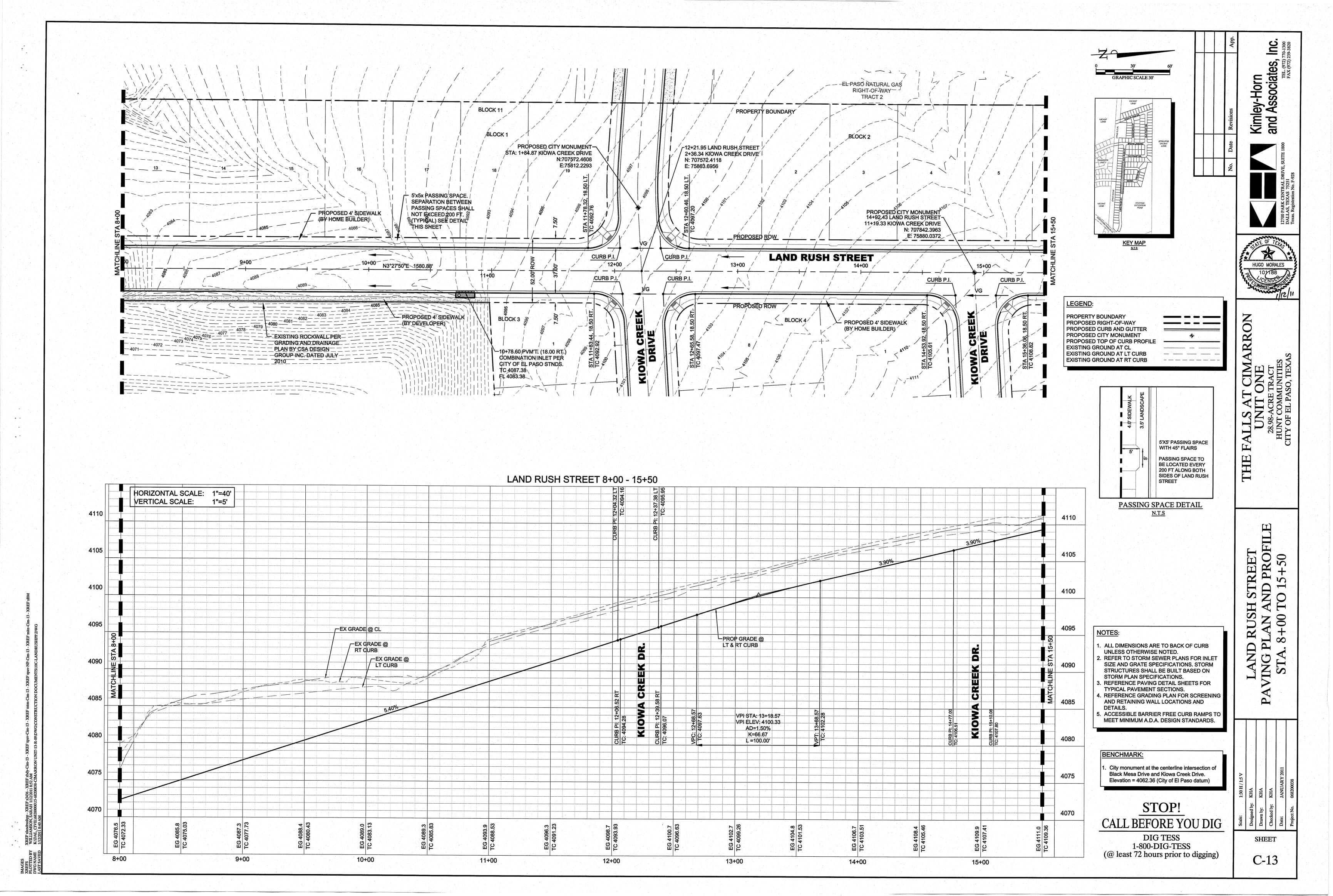
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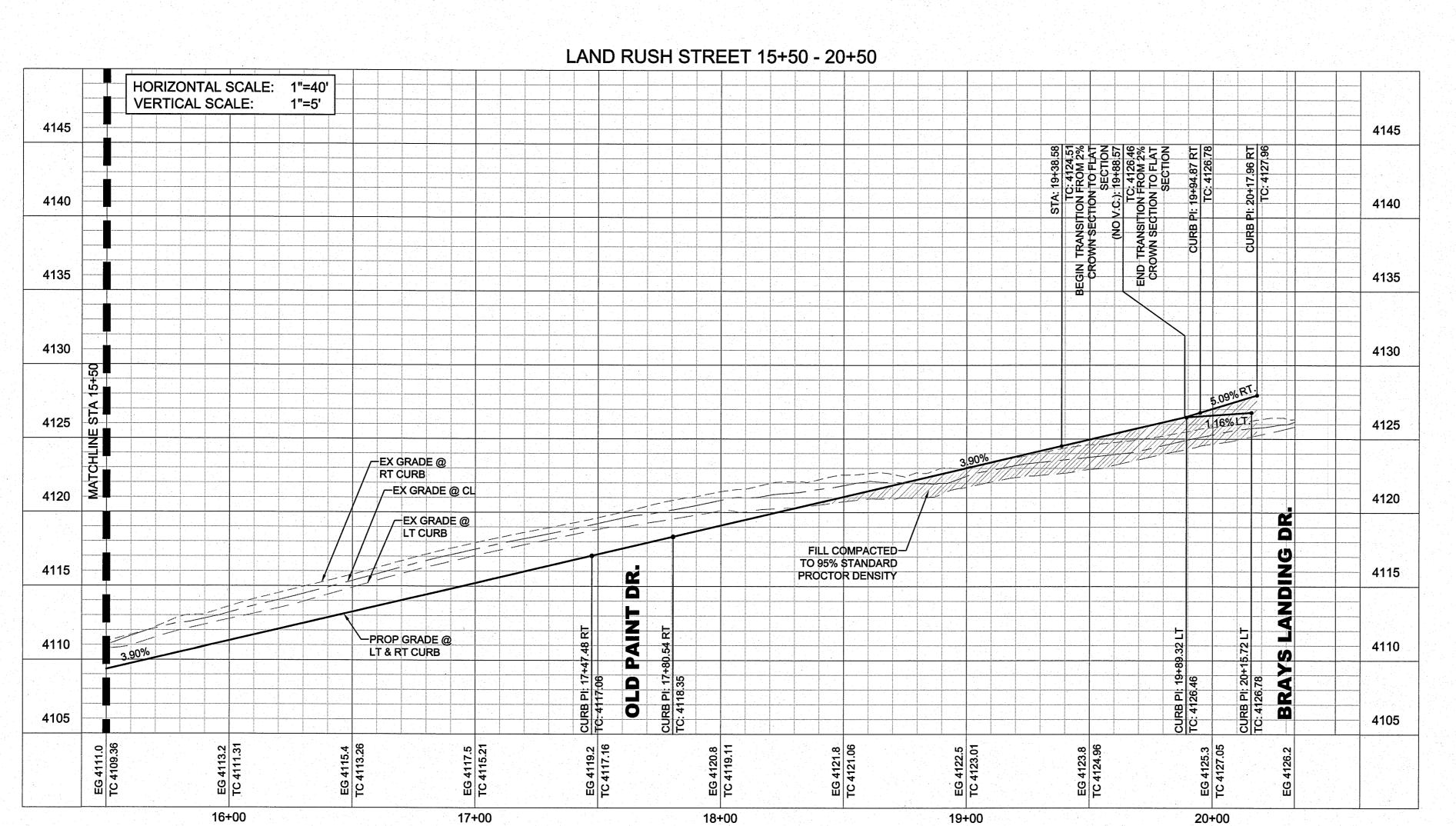


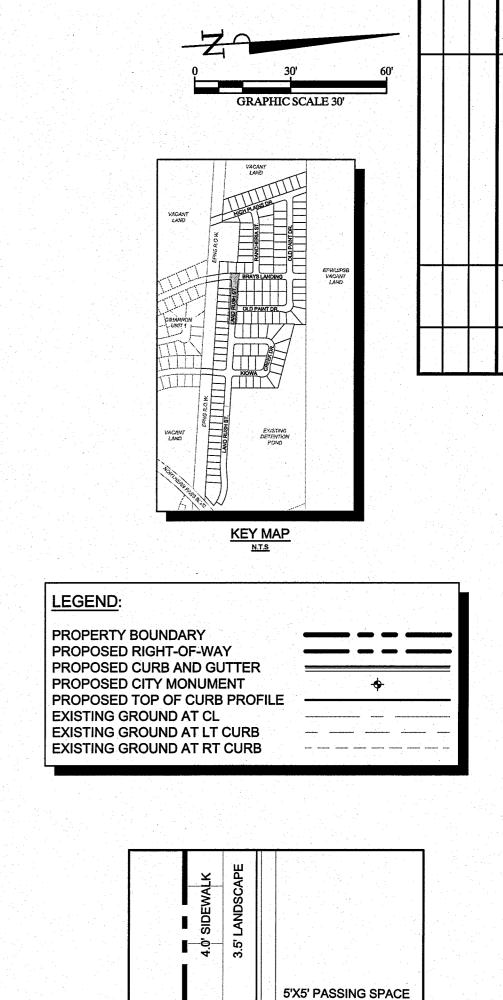












WITH 45° FLAIRS

PASSING SPACE DETAIL

PASSING SPACE TO BE LOCATED EVERY 200 FT ALONG BOTH SIDES OF LAND RUSH

- 1. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED. 2. REFER TO STORM SEWER PLANS FOR INLET SIZE AND GRATE SPECIFICATIONS. STORM STRUCTURES SHALL BE BUILT BASED ON STORM PLAN SPECIFICATIONS.
- REFERENCE PAVING DETAIL SHEETS FOR TYPICAL PAVEMENT SECTIONS.
 REFERENCE GRADING PLAN FOR SCREENING AND RETAINING WALL LOCATIONS AND
- DETAILS. . ACCESSIBLE BARRIER FREE CURB RAMPS TO MEET MINIMUM A.D.A. DESIGN STANDARDS.

BENCHMARK:

. City monument at the centerline intersection of Black Mesa Drive and Kiowa Creek Drive. Elevation = 4062.36 (City of El Paso datum)

STOP! CALL BEFORE YOU DIG

DIG TESS 1-800-DIG-TESS
(@ least 72 hours prior to digging) SHEET

Kimley-Horn and Associates, Inc.

HUGO MORALES

E FALLS AT CIMARRON
UNIT ONE
28.98-ACRE TRACT
HUNT COMMUNITIES
CITY OF EL PASO, TEXAS

AN AND PROFILE 5+50 TO END

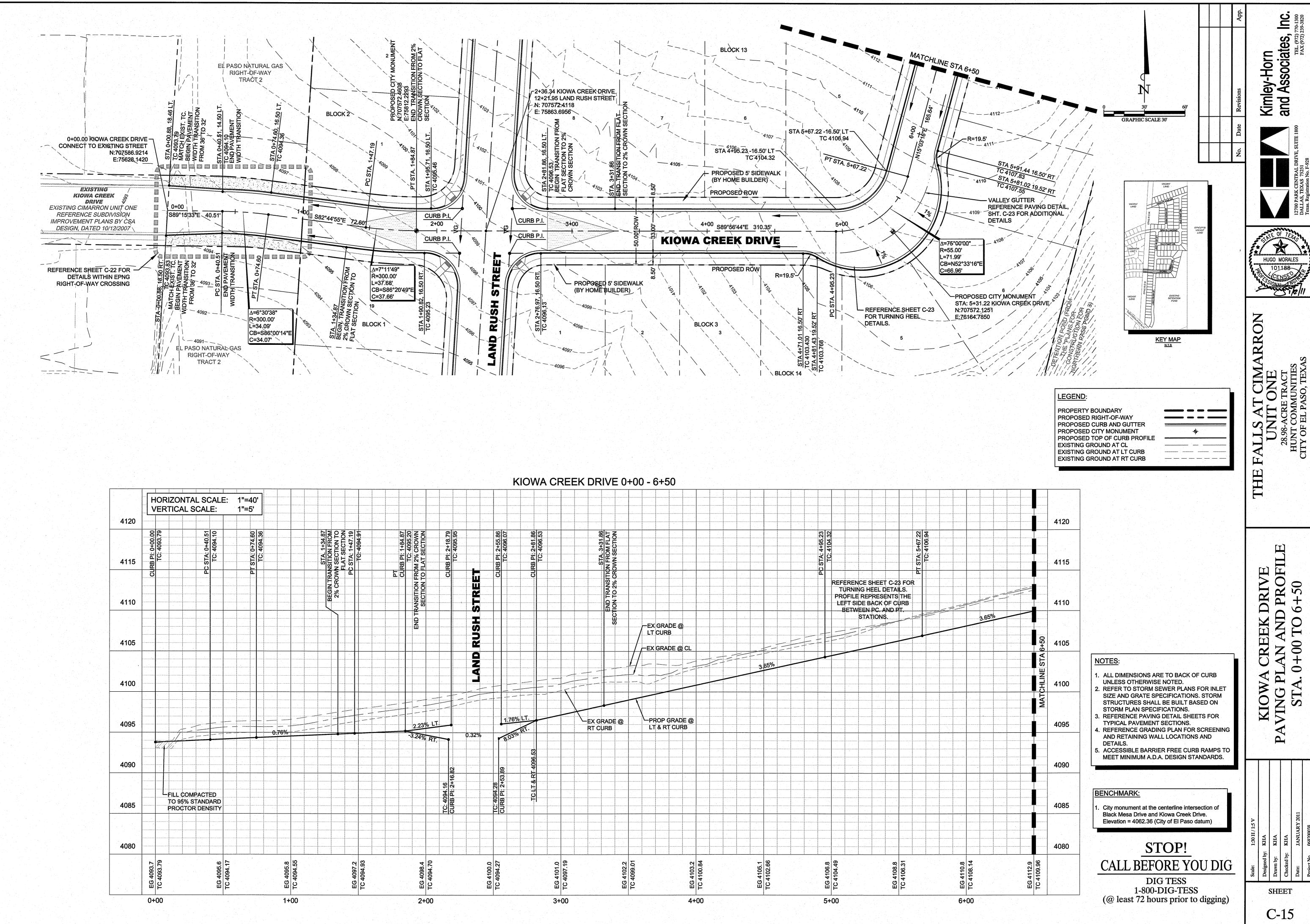
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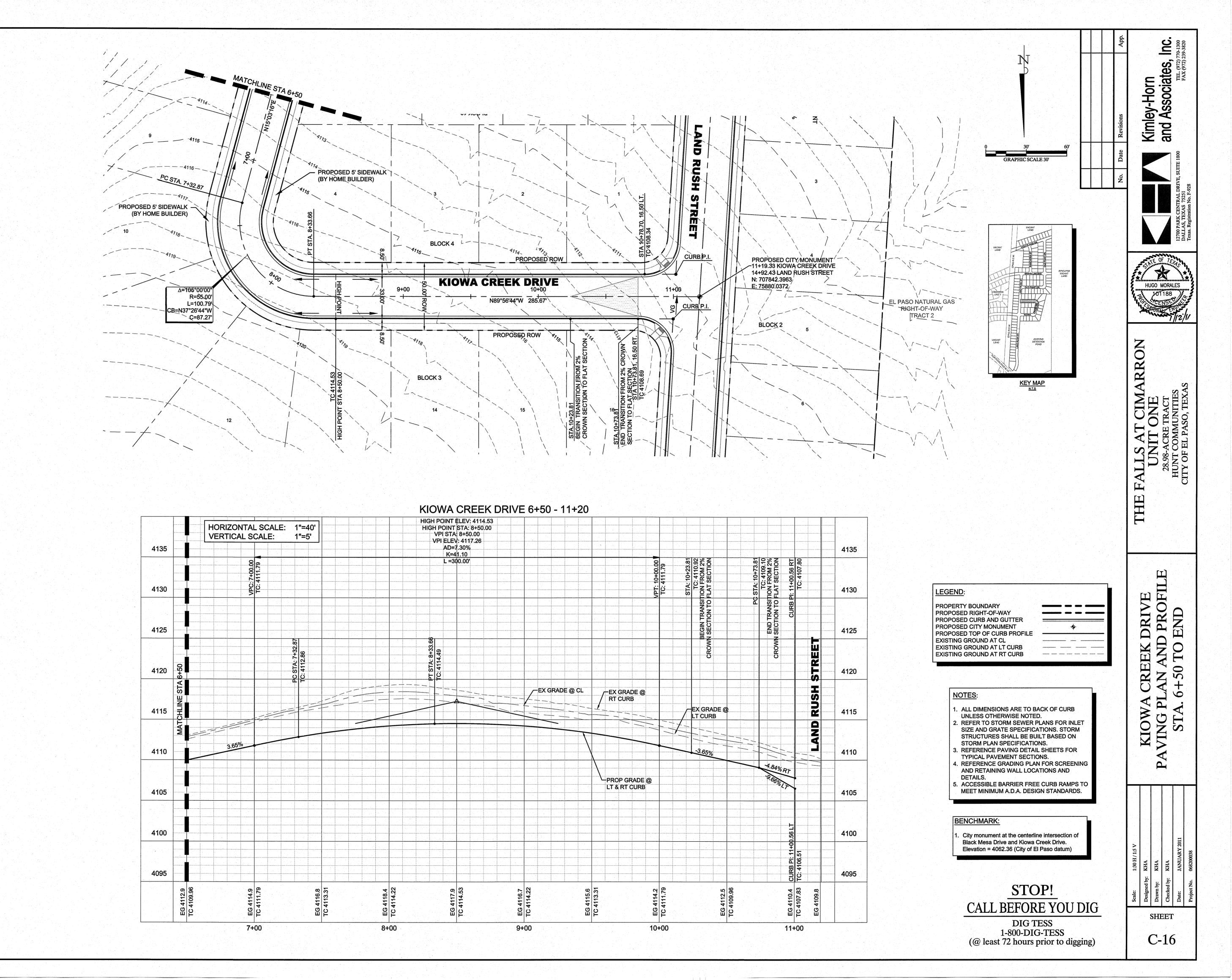
RUSH LAN AD

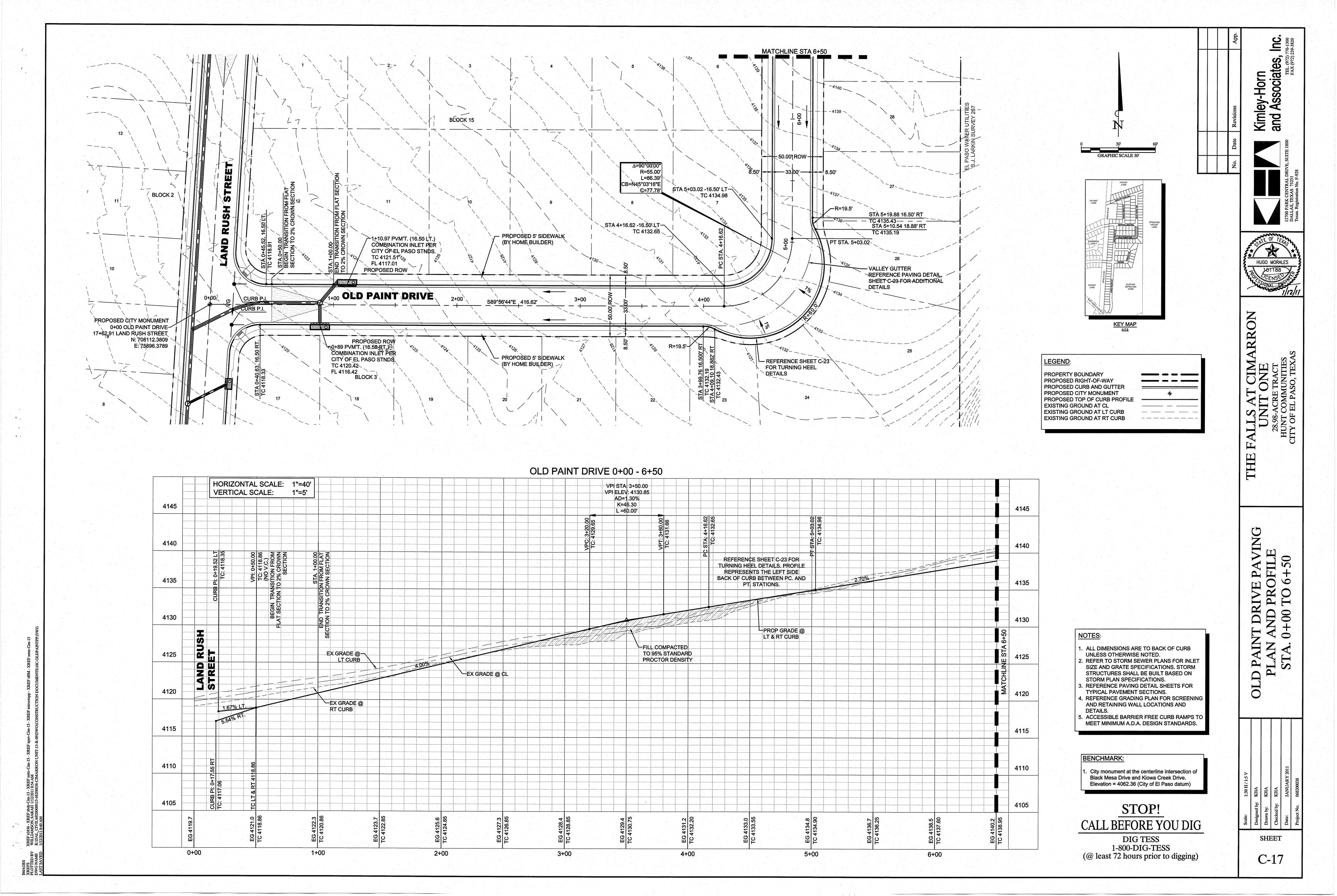
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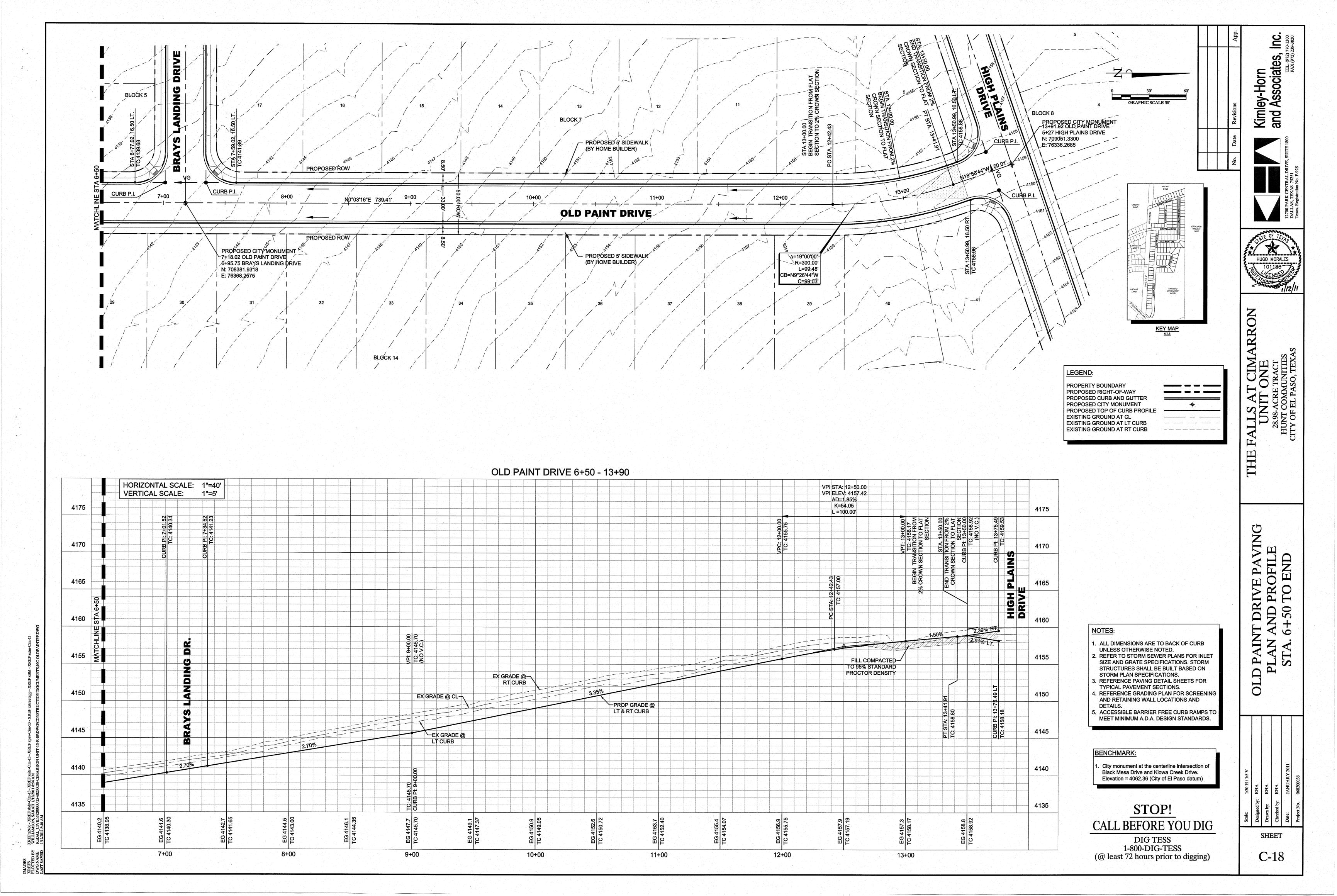
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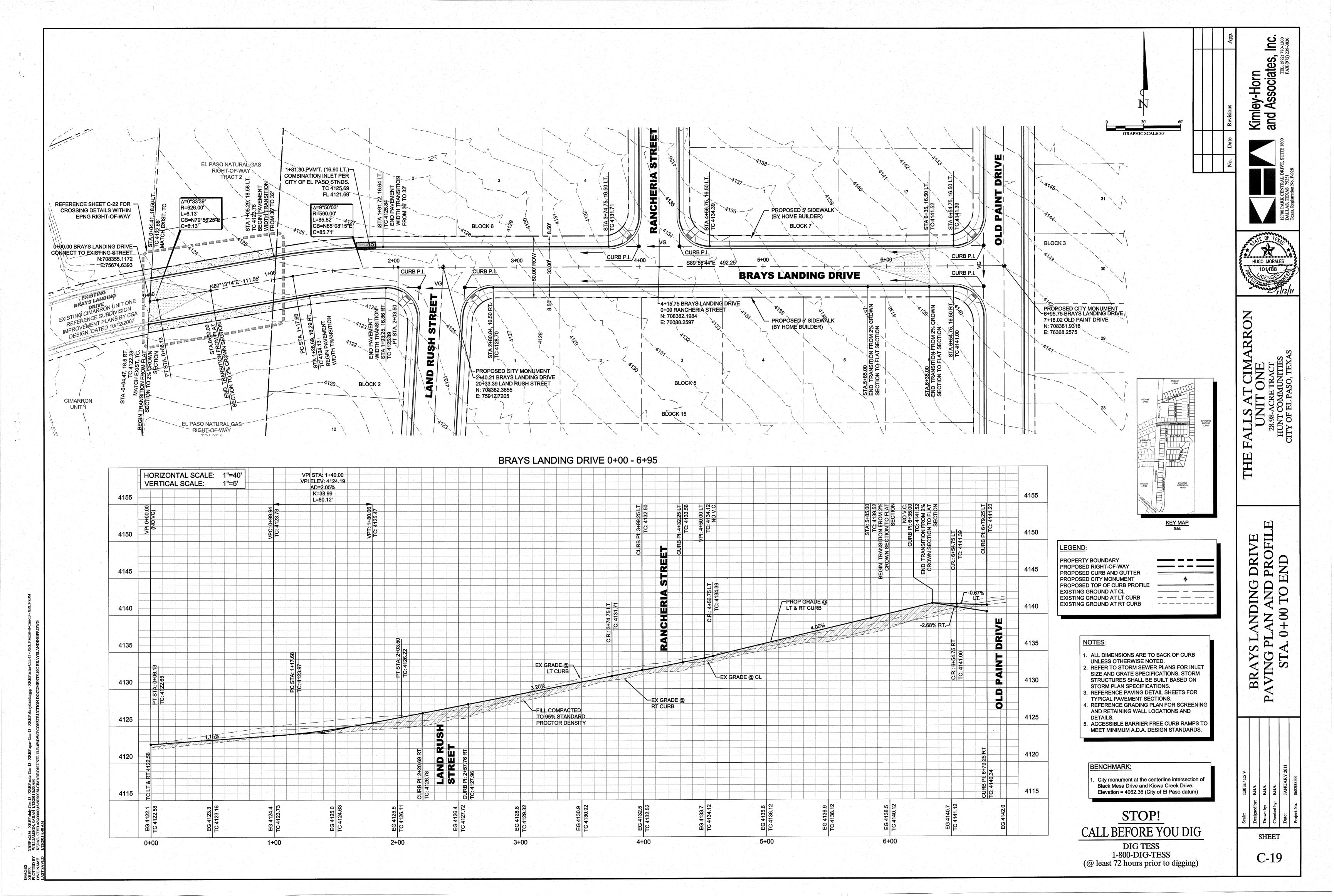
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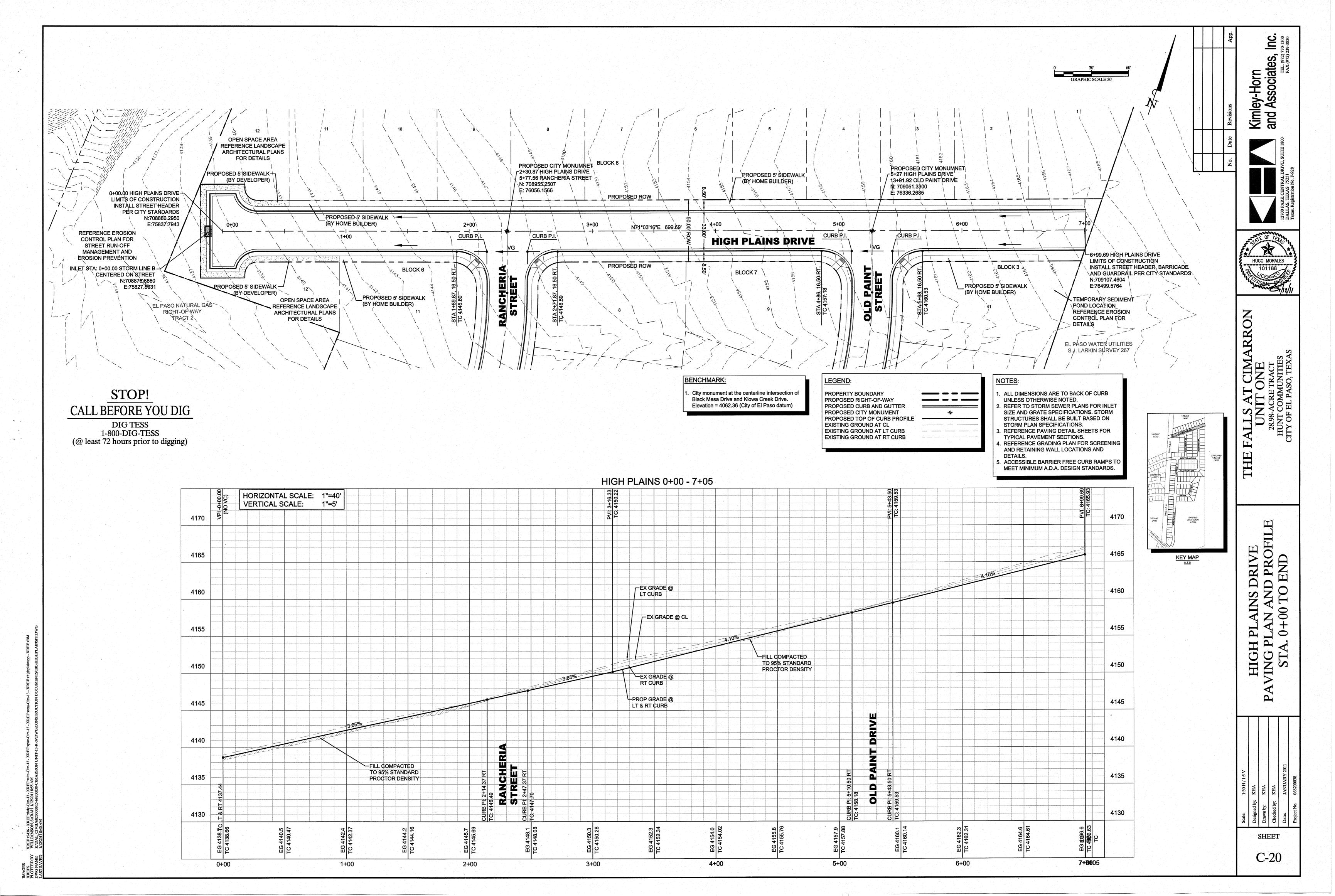


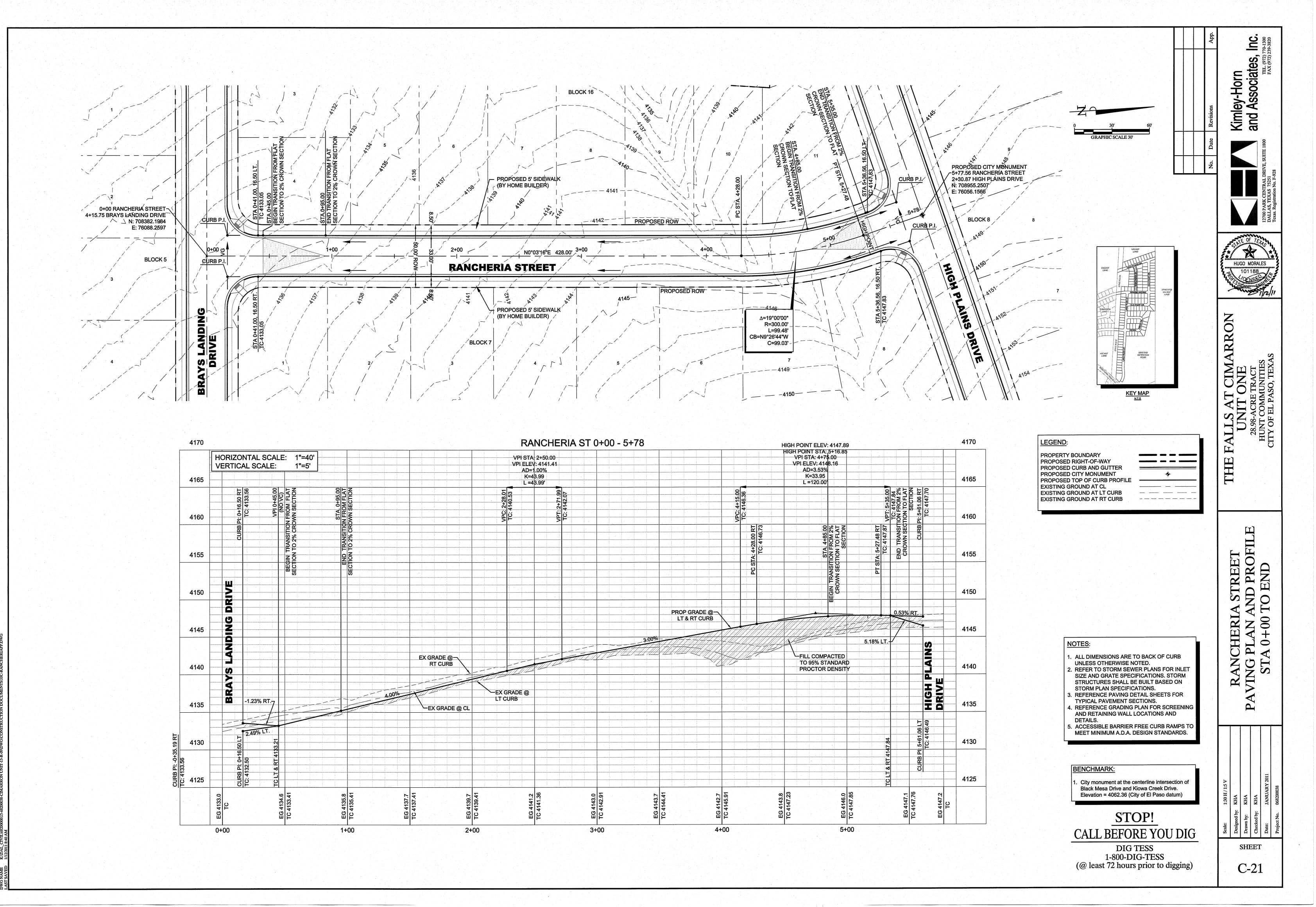


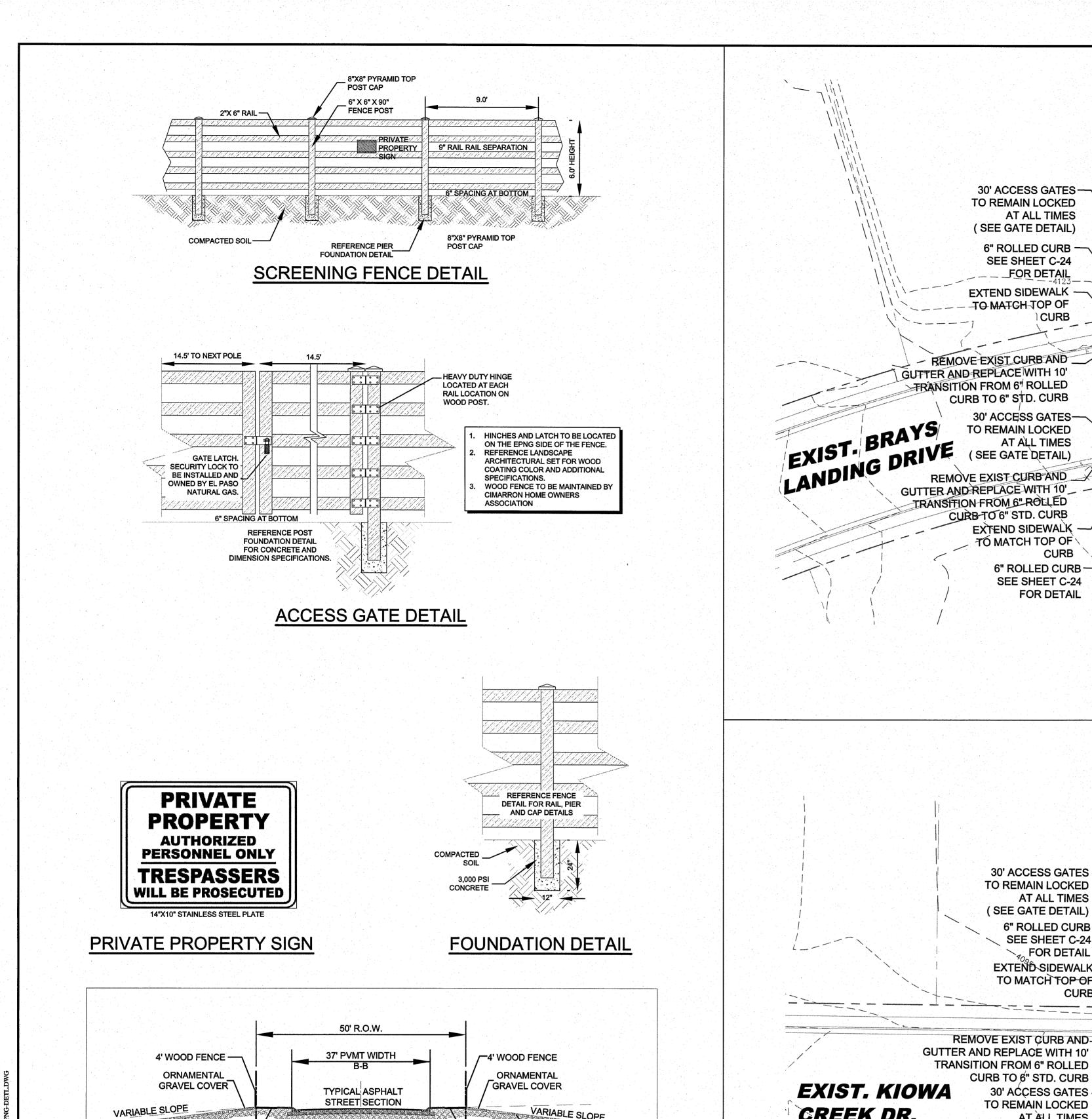












VARIABLE SLOPE

EROSION

RIP-RAP

ENTRANCE

6"-8" ROCK SIZE

EPNG

VARIABLE SLOPE

EROSION

RIP-RAP

ENTRANCE

6"-8" ROCK

EPNG

-PREVENTION

4' WOOD FENCE

ORNAMENTAL

GRAVEL COVER

BRAYS LANDING DRIVE

EPNG-CROSSING DETAIL

VARIABLE 50'-52'

VARIABLE 33'-37'

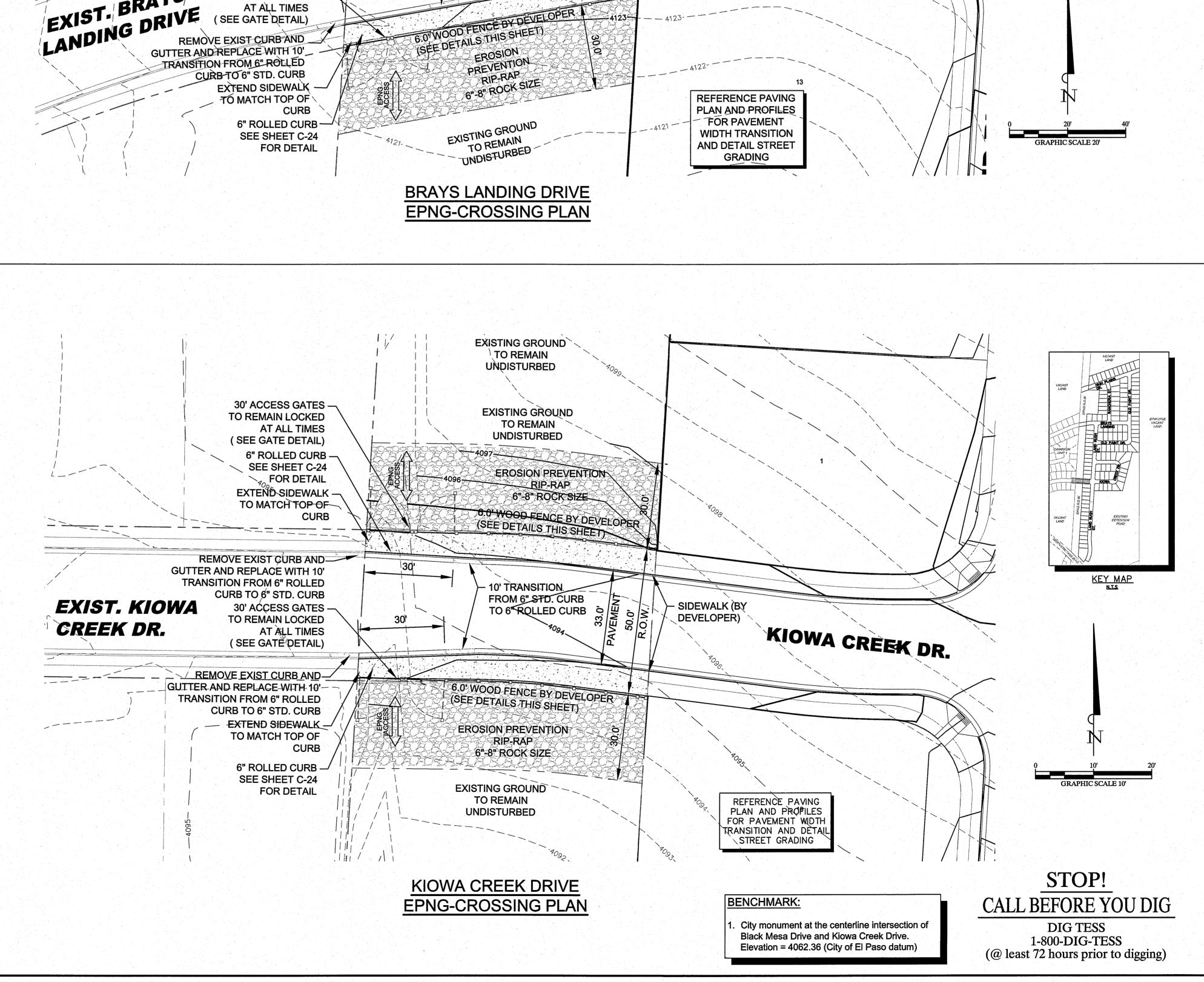
TYPICAL ASPHALT

STREET SECTION

KIOWA CREEK DRIVE

EPNG-CROSSING DETAIL

-PREVENTION



EXISTING GROUND TO REMAIN UNDISTURBED

10' TRANSITION

FROM 6" STD. CURB TO 6"

ROLLED CURB

PREVENTION

SIDEWALK (BY

BRAYS LANDING DR.

T DEVELOPER)

6.0 WOOD FENCE BY DEVELOPER
(SEE DETAILS THIS SHEET)

Kimley-Horn and Associates,

HUGO MORALES

ARRON

GAS

TURAL ON THE CASE

EL PASO RIGHT-OF-

SHEET

OLD PAINT DR.

KEY MAP

EROSION

RIP-RAP

VARIABLE SLOPE

EROSION

RIP-RAP

PREVENTION-

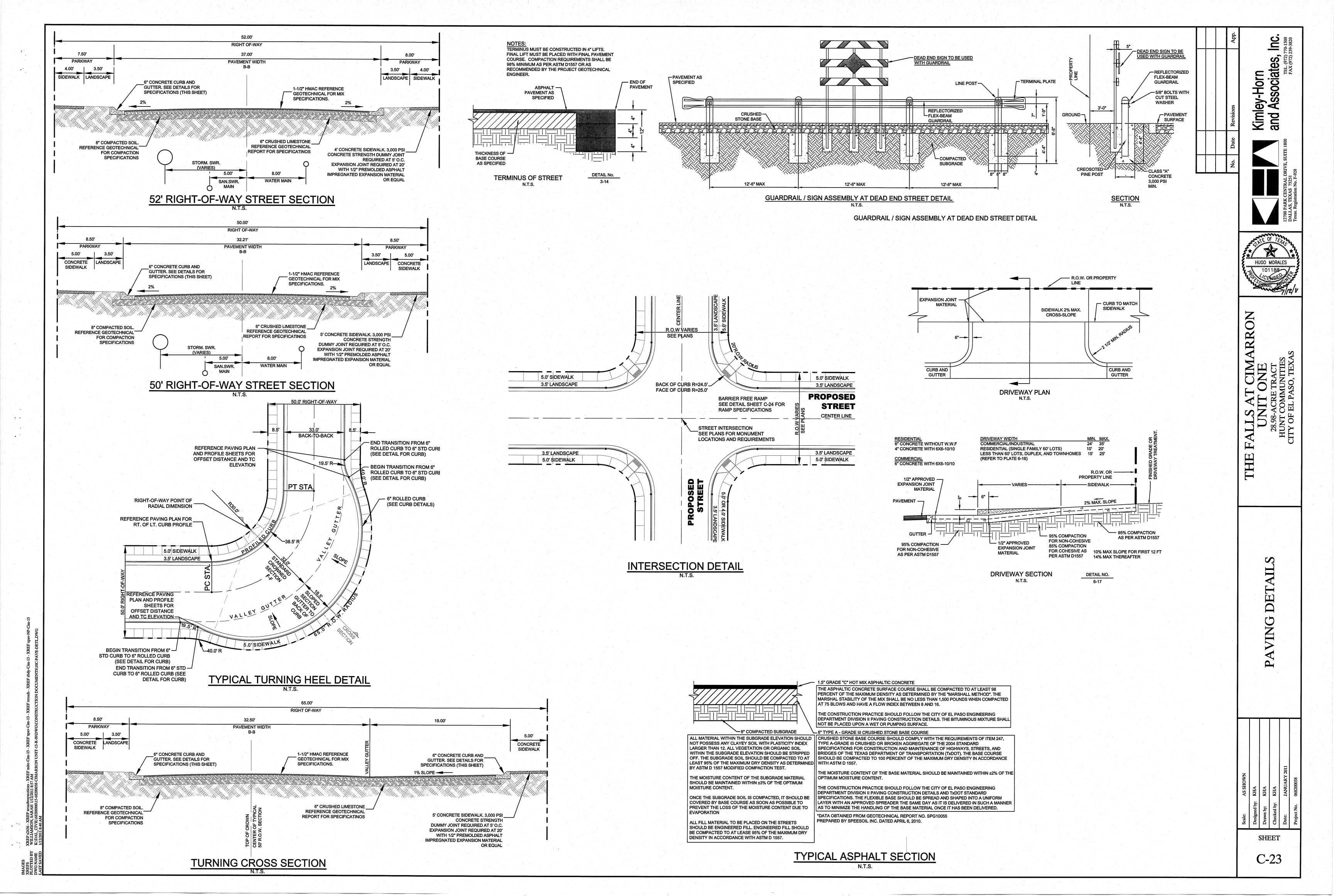
4' WOOD FENCE -

ORNAMENTAL

GRAVEL COVER

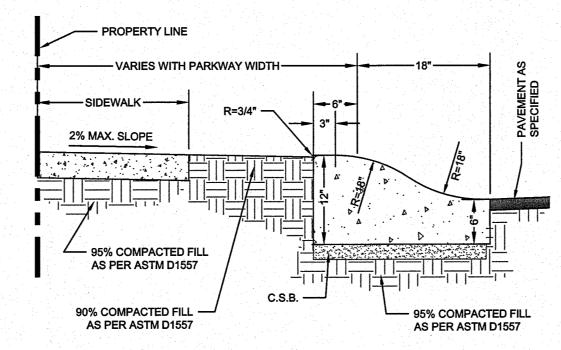
5' SIDEWALK-

PREVENTION-



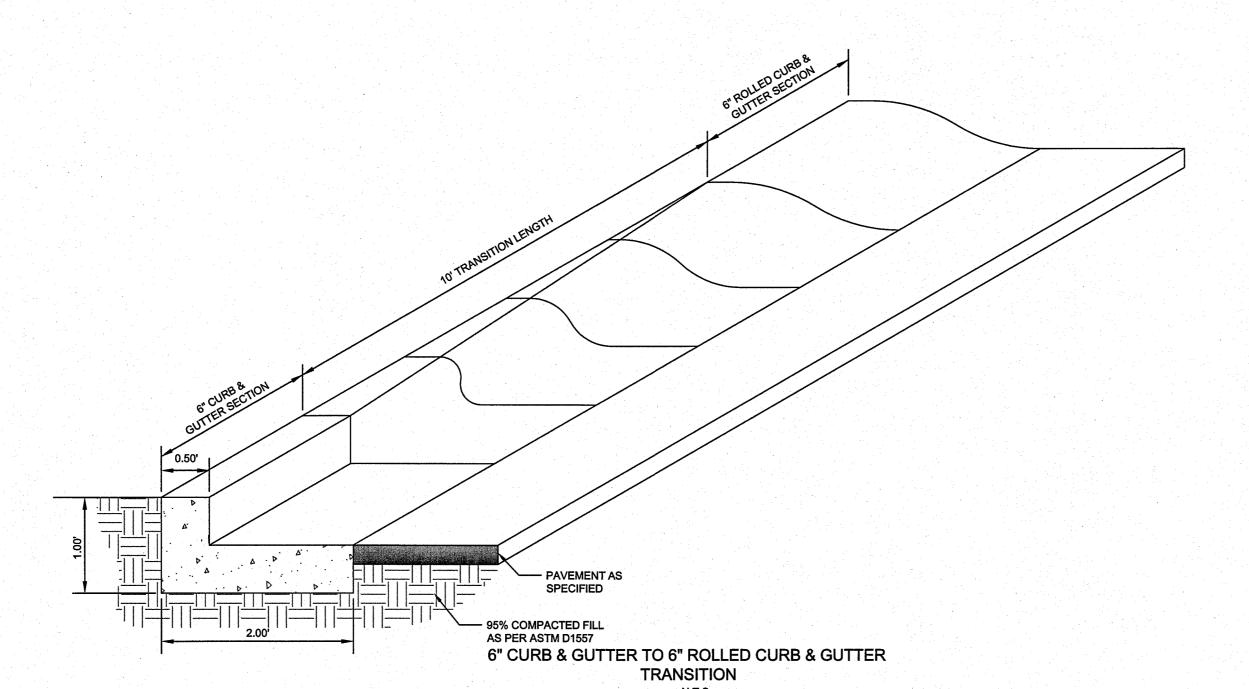
- 1. CONCRETE SHALL BE 3000 P.S.I. MIN. DUMMY JOINT REQUIRED AT 10' O.C. FOR CURB AND GUTTER AND 5' O.C. FOR SIDEWALK.
- 3. EXPANSION MATERIAL REQUIRED AT CURB RETURNS AND AT 20' O.C. FOR SIDEWALKS WITH 1/2" PREMOLDED ASPHALT IMPREGNATED EXPANSION MATERIAL OR EQUAL.
- 4. EXPANSION JOINTS REQUIRED AT 50' O.C. WHEN FORMING CURBS.

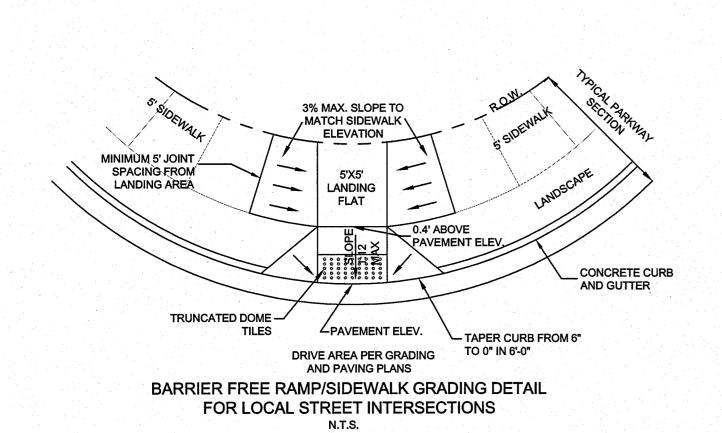
6" CURB & GUTTER WITH SIDEWALK SECTION

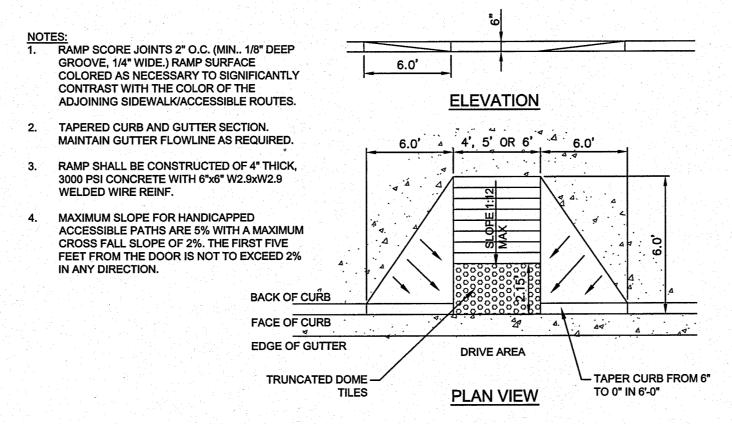


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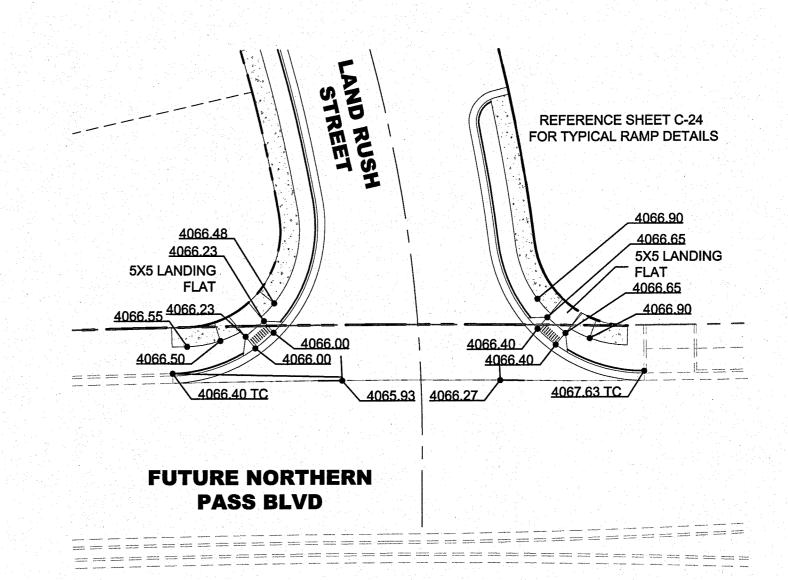
6" ROLLED CURB & GUTTER WITH SIDEWALK SECTION N.T.S.



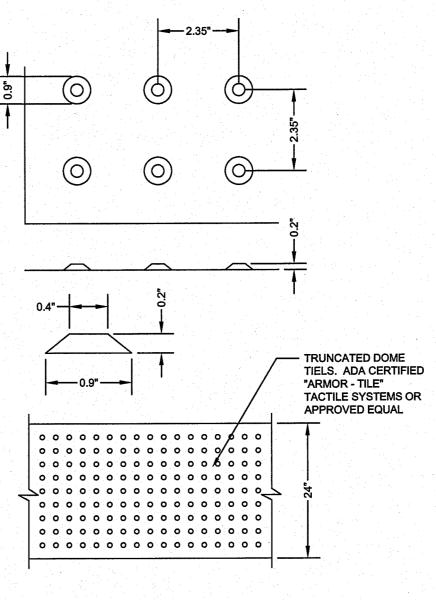




BARRIER FREE RAMP W/6' FLARES DETAIL N.T.S.



INTERSECTION OF LAND RUSH STREET AND NORTHERN PASS BLVD DETAIL SCALE: 1"=20'



DOME SIZE AND SPACING
TRUNCATED DOMES SHALL HAVE A DIAMETER OF NOMINAL 0.9 INCHES (23 MM) AT THE BOTTOM, A DIAMETER OF 0.4 INCH (10 MM) AT THE TOP, A HEIGHT OF NOMINAL 0.2 INCHES (5 MM) AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 INCHES (60 MM) MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT.

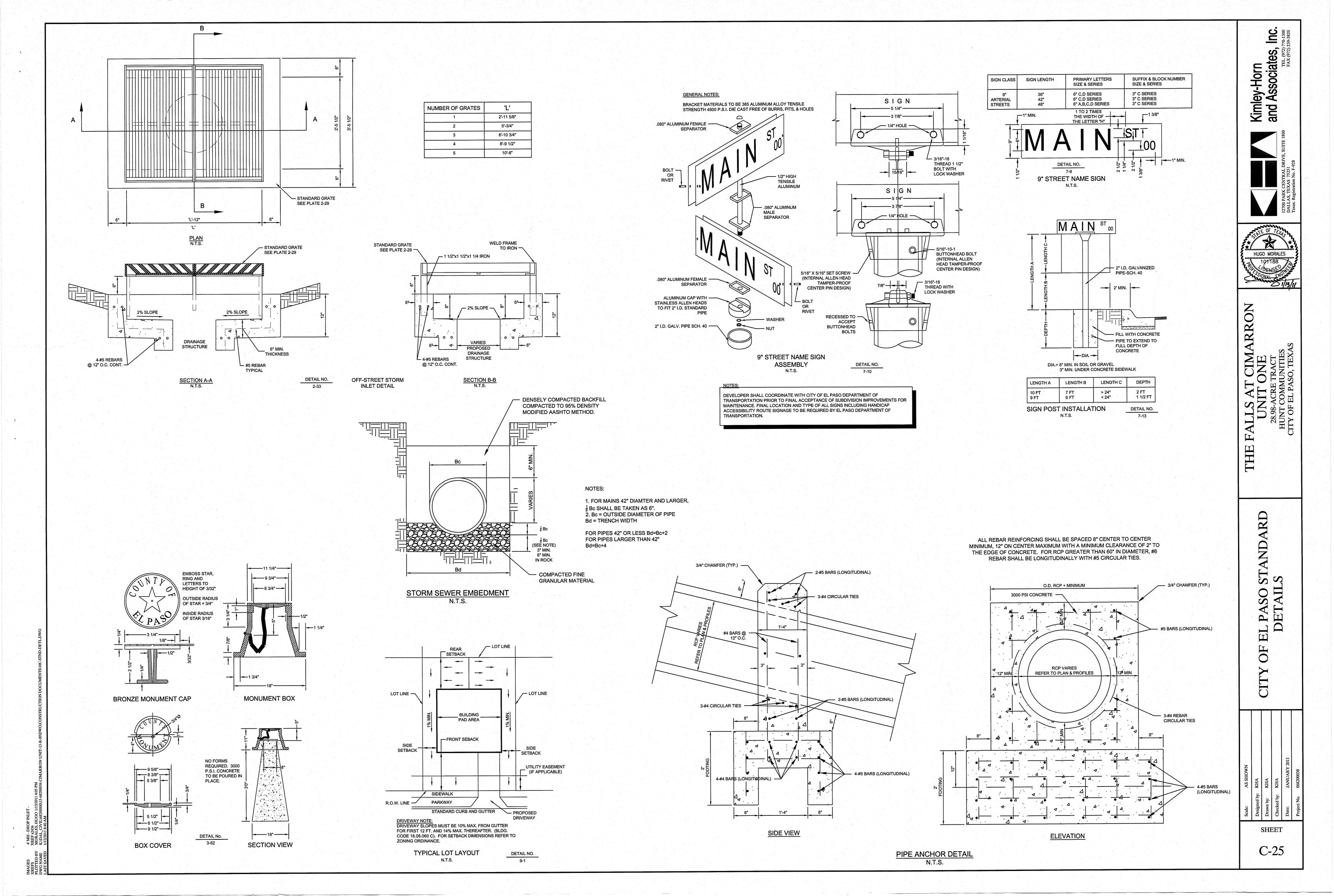
DOME ALIGNMENT
DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES. DETECTABLE WARNING SURFACES SHALL EXTEND 24 INCHES (610 MM) MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION.

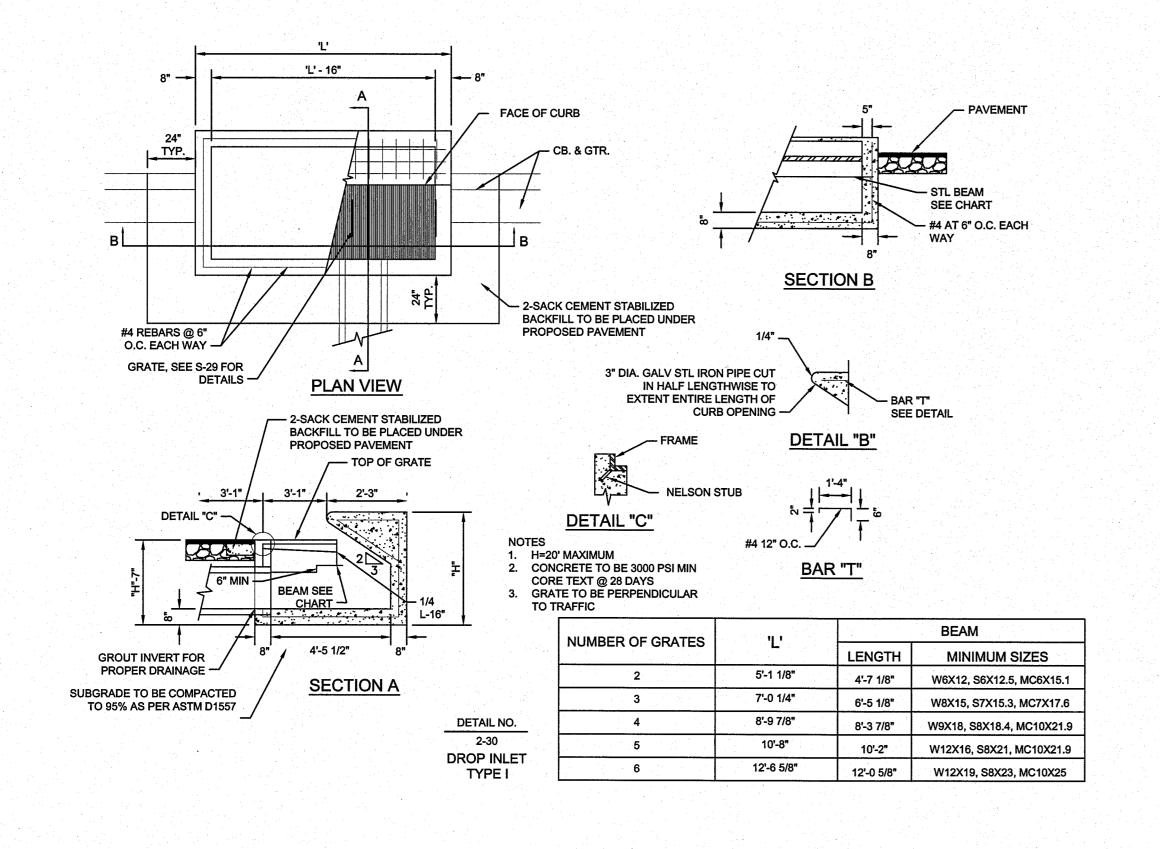
TRUNCATED DOME
TIELS. ADA CERTIFIED
"ARMOR - TILE"
TACTILE SYSTEMS OR
TARREDOVED FOLIAL
TERRE SHALL BE A MINIMUM OF 70
PERCENT CONTRAST IN LIGHT
REFLECTANCE BETWEEN THE
DETECTABLE WARNING AND AN DETECTABLE WARNING AND AN ADJOINING SURFACE, OR THE DETECTABLE WARNING SHALL BE "RED BRICK" COLOR, UNLESS OTHERWISE DIRECTED BY THE OWNER. THE MATERIAL USED TO PROVIDE VISUAL CONTRAST SHALL BE AN INTEGRAL PART OF THE DETECTABLE WARNING SURFACE. CONTRAST SHALL BE USED FOR THE DETECTABLE WARNING SURFACE. NO PAINTING OF SURFACE SHALL BE PERMITTED.

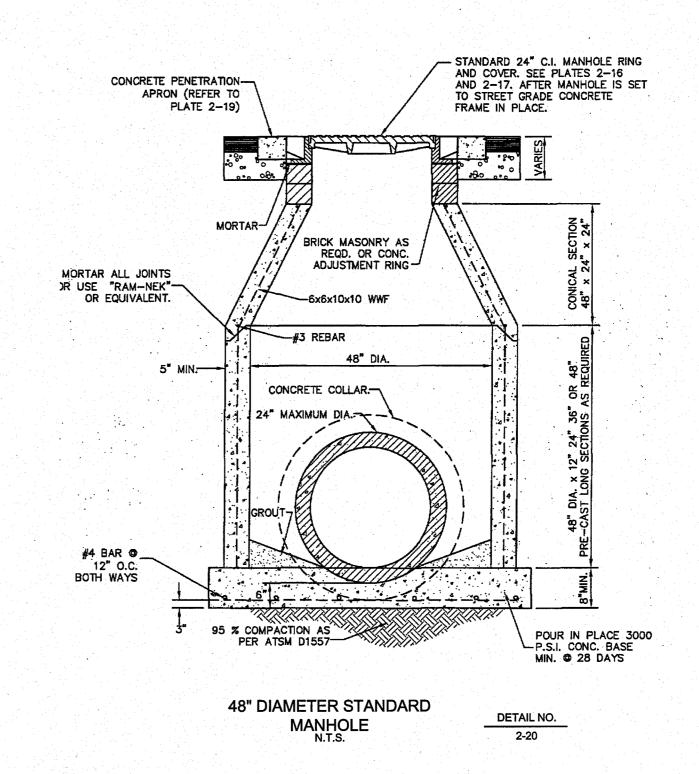
DOME SIZE AND SPACING

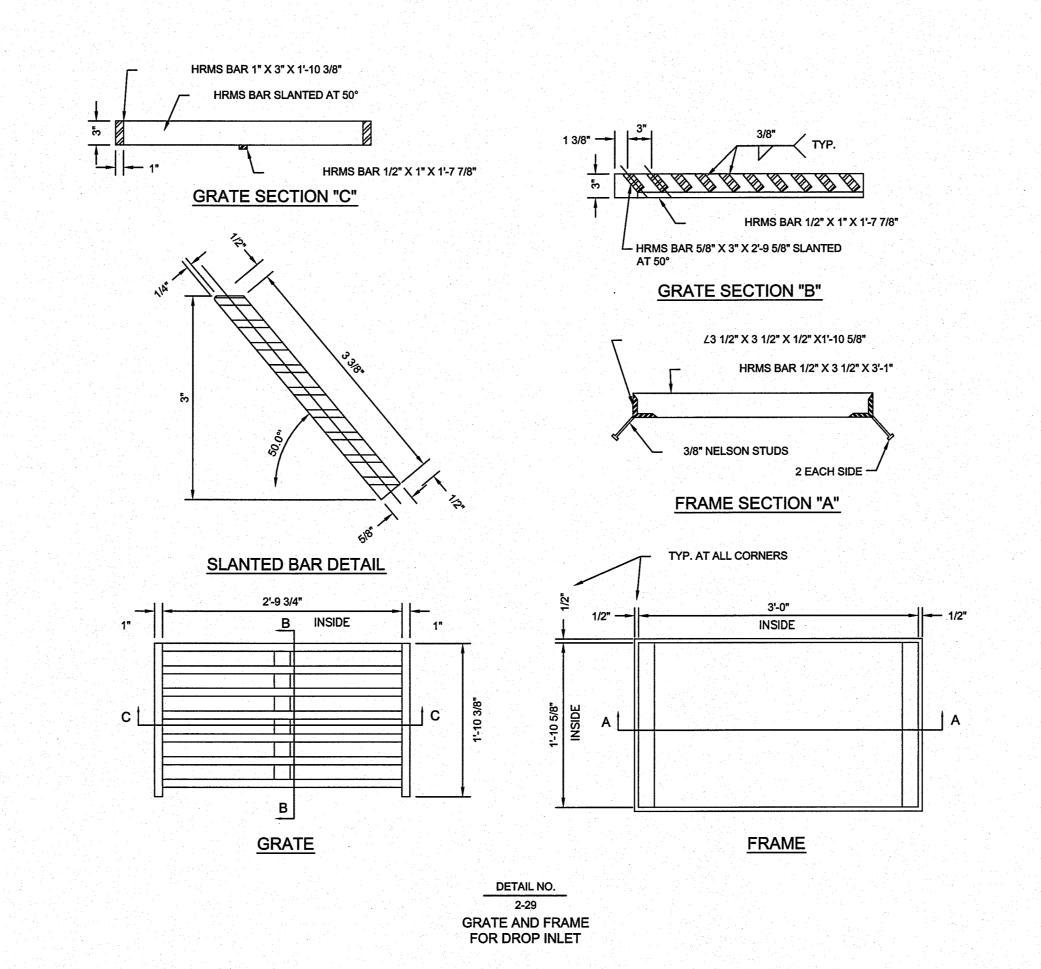
DETAIL NO.

ARRON









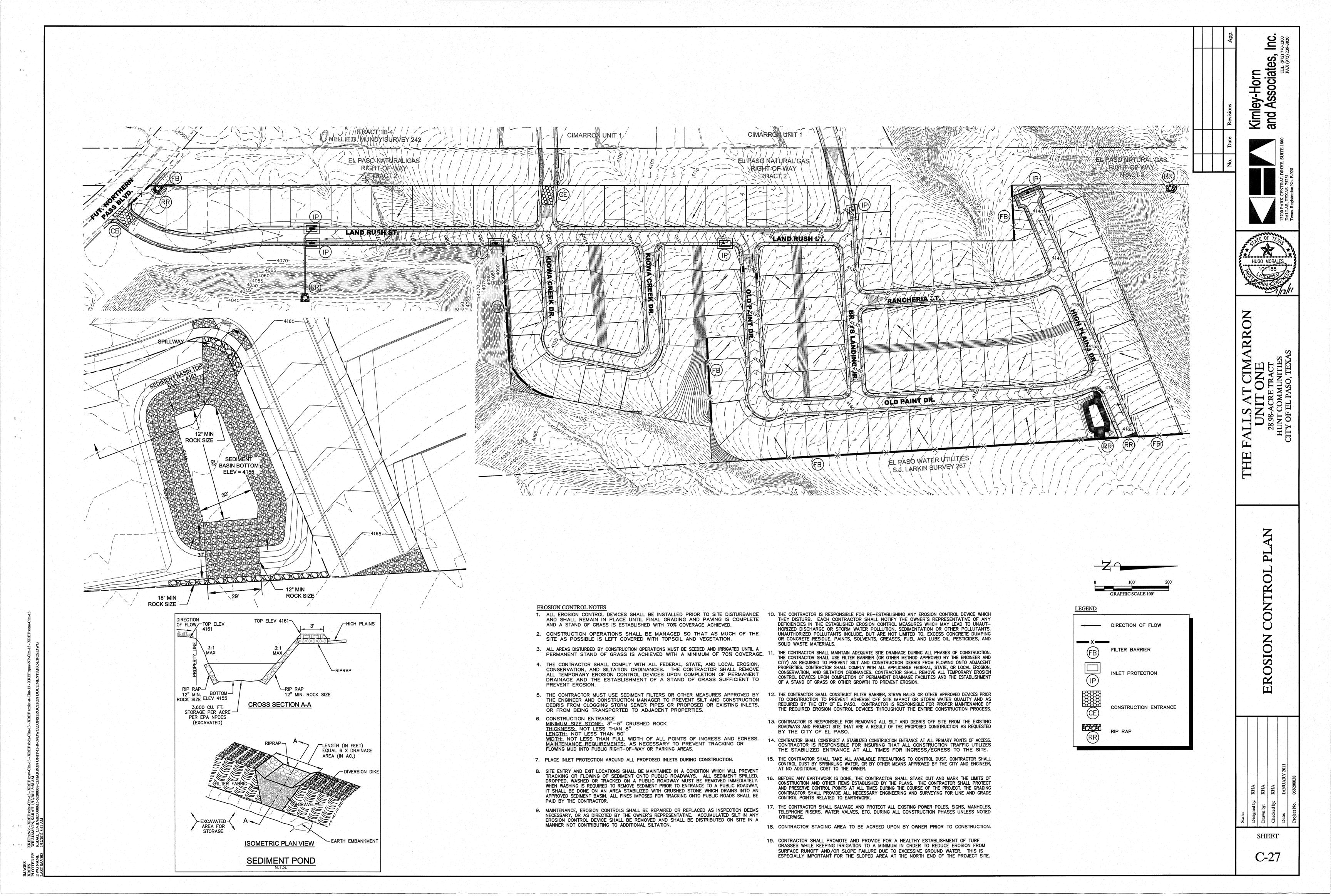
HI STANDARD LS EL PASO S DETAIL

Kimley-Horn and Associates,

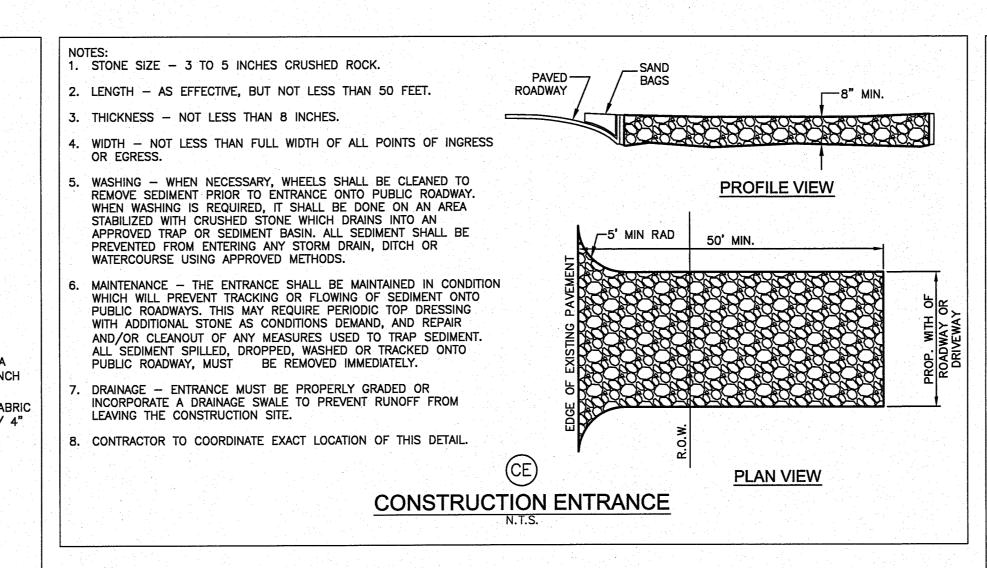
HUGO MORALES

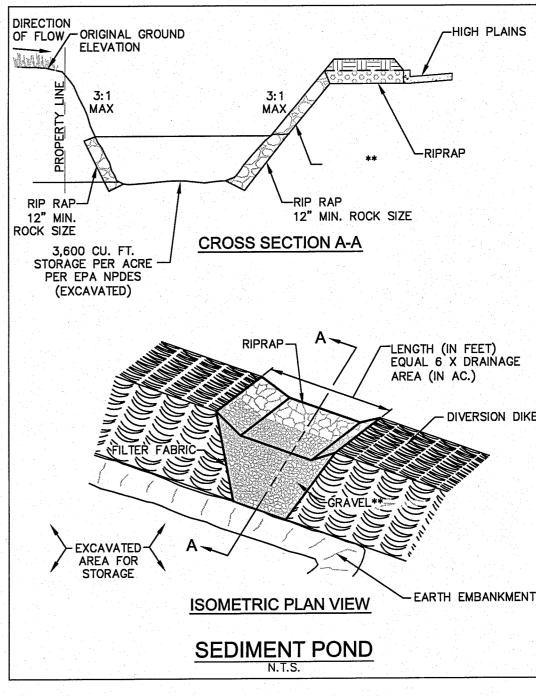
CIMARRON

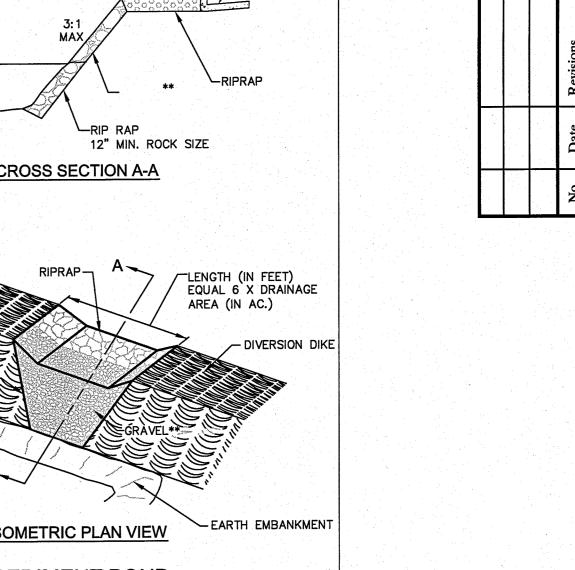
C-26



- WOVEN WIRE FENCE (MIN. 14-1/2







GENERAL NOTES

1. ALL ENTITIES MEETING THE DEFINITION OF A "PRIMARY OPERATOR" SHOULD SUBMIT A NOTICE OF INTENT (NOI) AT LEAST SEVEN DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES IF MAILING A PAPER NOI, OR PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES IF UTILIZING ELECTRONIC SUBMITTAL. BOTH THE CONTRACTOR AND OWNER MAY BE DEFINED AS A PRIMARY OPERATOR. EACH PRIMARY OPERATOR IS RESPONSIBLE FOR RETAINING PROOF THAT THE NOI WAS SUBMITTED TO TCEQ. ALL PRIMARY OPERATORS MUST PROVIDE A COPY OF THE SIGNED NOI AT LEAST SEVEN DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO ANY SECONDARY OPERATOR AND TO THE OPERATOR OF ANY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) RECEIVING CONSTRUCTION SITE DISCHARGE. THE NAMES AND ADDRESSES OF ALL MS4 OPERATORS RECEIVING A COPY OF THE NO! ARE TO BE RECORDED IN THE SWPPP. ALL PRIMARY OPERATORS SHALL ALSO POST A COPY OF THE SIGNED NOI AT THE CONSTRUCTION SITE IN A LOCATION WHERE IT IS READILY AVAILABLE FOR VIEWING BY THE GENERAL PUBLIC, LOCAL, STATE, AND FEDERAL AUTHORITIES PRIOR TO STARTING CONSTRUCTION ACTIVITIES UNTIL COMPLETION OF THE CONSTRUCTION ACTIVITY. ALL PRIMARY AND SECONDARY OPERATORS SHALL POST A COMPLETE CONSTRUCTION SITE NOTICE AT THE CONSTRUCTION SITE.

2. TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) CONSTRUCTION GENERAL PERMIT TXR150000, CIVIL ENGINEERING PLANS AND ALL APPLICABLE SPECIFICATIONS ARE HEREBY INCORPORATED INTO THE SWPPP. CONTRACTOR SHALL OBTAIN AND KEEP A CURRENT COPY OF THESE DOCUMENTS AT THE

3. ALL EROSION AND SEDIMENTATION CONTROLS MUST BE DESIGNED, INSTALLED AND MAINTAINED TO RETAIN SEDIMENT ON-SITE TO THE EXTENT PRACTICABLE.

4. ALL CONTROL MEASURES MUST BE SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND GOOD ENGINEERING PRACTICES.

5. EROSION CONTROL MEASURES MAY ONLY BE PLACED IN FRONT OF INLETS, OR IN CHANNELS, DRAINAGEWAYS OR BORROW DITCHES AT RISK OF CONTRACTOR AND IN COMPLIANCE WITH SECTIONS 401 AND 404 OF THE CLEAN WATER ACT. CONTRACTOR SHALL REMAIN LIABLE FOR ANY DAMAGE CAUSED BY THE MEASURES, INCLUDING FLOODING DAMAGE, WHICH MAY OCCUR DUE TO BLOCKED DRAINAGE. AT THE CONCLUSION OF ANY PROJECT, ALL CHANNELS, DRAINAGEWAYS AND BORROW DITCHES IN THE WORK ZONE SHALL BE DREDGED OF ANY SEDIMENT GENERATED BY THE PROJECT OR DEPOSITED AS A RESULT OF EROSION CONTROL MEASURES.

6. CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWP3 AND EROSION CONTROL PLAN TO INCLUDE BMPS FOR ANY OFF-SITE MATERIAL WASTE, BORROW, OR EQUIPMENT STORAGE AREAS.

7. OFF-SITE ACCUMULATIONS OF SEDIMENT ESCAPING PROJECT SITE MUST BE REMOVED AT A FREQUENCY NECESSARY TO MINIMIZE OFF-SITE IMPACTS. FOR EXAMPLE, SEDIMENTATION WITHIN STREETS ADJACENT TO THE PROJECT SITE MUST BE REMOVED PRIOR TO RAINFALL EVENTS. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC ROADS SHALL BE PAID BY THE CONTRACTOR. IN ANY EVENT SILT SHALL ALWAYS BE REMOVED SUCH THAT POOLING IN A STREET IS PREVENTED.

8. CONTRACTOR MUST REMOVE SEDIMENT FROM ALL APPLICABLE CONTROLS WHEN DESIGN SILT STORAGE CAPACITY HAS BEEN REDUCED BY 50%.

9. CONTRACTOR SHALL ENSURE THAT ALL LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS ARE PREVENTED FROM BECOMING POLLUTANT SOURCES.

10. OFF-SITE MATERIAL STORAGE AREAS USED SOLELY FOR THIS PROJECT, INCLUDING DIRT STOCKPILES AND BORROW AREAS (AS APPLICABLE), MUST BE PREVENTED FROM BECOMING POLLUTANT SOURCES BY INSTALLATION OF BMP'S.

11. CONTRACTOR SHALL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE. 12. DISTURBED PORTIONS OF SITE MUST BE STABILIZED. STABILIZATION PRACTICES MUST BE INITIATED WITHIN

14 DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS BEEN EITHER TEMPORARILY OR PERMANENTLY

CEASED, UNLESS EXCEPTED WITHIN THE TPDES PERMIT. 13. CONTRACTOR MUST MAINTAIN RECORDS OF DATES IN THE SWPPP OF WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION ACTIVITIES EITHER TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES ARE INITIATED. CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT IN

14. CONTRACTOR SHALL ENSURE THAT SWPPP IS CONSISTENT WITH SEDIMENT AND EROSION SITE PLANS, STORM WATER PERMITS, AND STORM WATER MANAGEMENT PLANS APPROVED BY STATE, TRIBAL, OR LOCAL OFFICIALS. UPDATES TO SWPPP ARE REQUIRED UPON WRITTEN NOTICE TO PERMITTEE OF CHANGES APPLICABLE TO STORM WATER PERMITS, SEDIMENT AND EROSION CONTROL PLANS, OR STORM WATER MANAGEMENT PLANS BY SUCH OFFICIALS.

THE SWP3 OR NOT).

15. ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND ANY OTHER PROTECTIVE MEASURES IDENTIFIED IN THE SWPPP MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. WHEN INSPECTIONS IDENTIFY CONTROLS OPERATING INEFFECTIVELY, THE CONTROLS SHALL BE MAINTAINED PRIOR TO THE NEXT RAINFALL EVENT OR AS NECESSARY TO MAINTAIN EFFECTIVENESS OF THE CONTROL, OR AS SOON AS

16. CONTRACTOR SHALL INSPECT DISTURBED AREAS, MATERIAL STORAGE AREAS EXPOSED TO PRECIPITATION STRUCTURAL CONTROL MEASURES, AND VEHICLE ENTRY AND EXIT AREAS AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER OR ONCE EVERY 7 DAYS ON THE SAME DAY OF THE WEEK EACH WEEK, REGARDLESS IF THERE HAS BEEN A RAINFALL EVENT. THE SWP3 MUST REFLECT THE SCHEDULE IN USE.

17. CONTRACTOR SHALL INSPECT STABILIZED AREAS AND AREAS WHERE RUNOFF IS UNLIKELY DUE TO FROZEN OR ARID WEATHER CONDITIONS AT LEAST ONCE PER MONTH.

18. CONTRACTOR SHALL INSPECT ACCESSIBLE DISCHARGE LOCATIONS (OR NEARBY DOWNSTREAM LOCATIONS IF DISCHARGE POINT IS NOT ACCESSIBLE) IN ORDER TO ASCERTAIN WHETHER OR NOT EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.

19. STRUCTURAL BMP'S SHOULD NOT, TO THE DEGREE ATTAINABLE, BE PLACED WITHIN FLOOD PLAINS.

20. BASED ON INSPECTION RESULTS, REVISIONS TO SWPPP MUST BE MADE WITHIN 7 CALENDAR DAYS OF THE INSPECTION. NEW OR MODIFIED CONTROL MEASURES MUST BE INSTALLED PRIOR TO THE NEXT RAINFALL EVENT, OR AS SOON AS PRACTICABLE.

21. ANY OPERATOR THAT HAS SUBMITTED A NOI MUST APPLY TO TERMINATE AUTHORIZATION OF THE GENERAL PERMIT. THE NOT SHOULD BE COMPLETED AND SUBMITTED TO THE TCEQ WITHIN 30 DAYS OF THE FOLLOWING CONDITIONS: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE THAT ARE THE RESPONSIBILITY OF THE PERMITTEE; A TRANSFER OF OPERATIONAL CONTROL HAS OCCURRED; OR THE OPERATOR HAS OBTAINED ALTERNATIVE AUTHORIZATION UNDER AN INDIVIDUAL TPDES PERMIT OR ALTERNATIVE TPDES GENERAL PERMIT.

22. REPORTS SUMMARIZING THE SCOPE OF ALL INSPECTIONS, INCLUDING NAME AND , DATE OF INSPECTION, AND MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP (INCLUDING LOCATION OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS, LOCATION OF CONTROLS THAT NEED TO BE MAINTAINED, LOCATIONS WHERE CONTROLS ARE INADEQUATE OR ARE OPERATING IMPROPERLY, AND LOCATIONS WHERE ADDITIONAL CONTROLS ARE NEEDED) MUST BE SIGNED BY THE INSPECTOR PER 30 TEXAS ADMINISTRATIVE CODE (TAC) SECTION 305.128, AND RETAINED WITHIN THE SWPPP FOR AT LEAST 3 YEARS FROM THE DATE THE SITE IS FINALLY STABILIZED. REPORTS THAT DO NOT IDENTIFY INCIDENTS OF NON-COMPLIANCE SHALL CONTAIN A CERTIFICATION STATING THAT THE SITE IS IN COMPLIANCE WITH THE SWPPP AND THE GENERAL

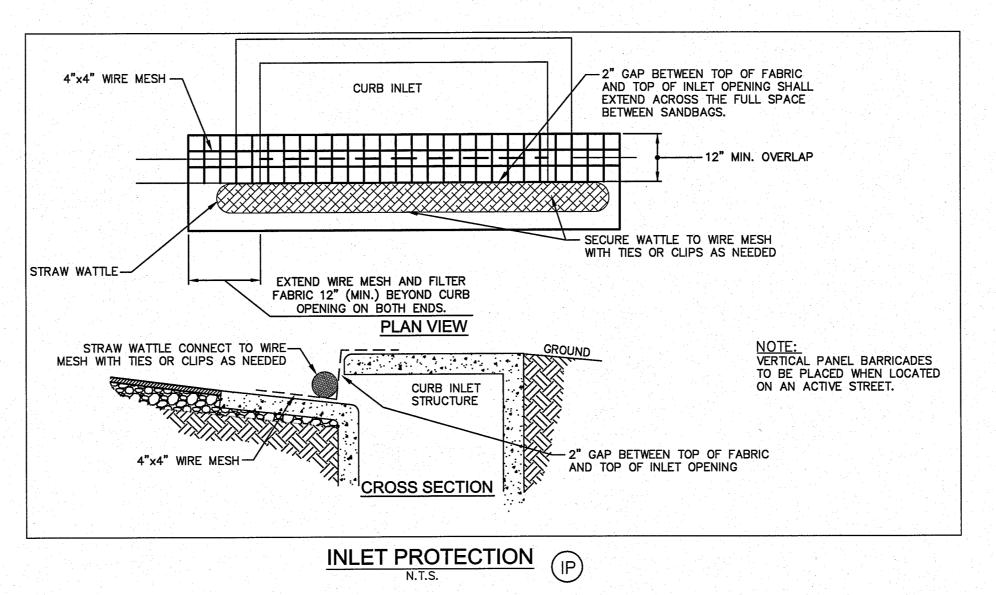
THE CONTRACTOR SHALL CERTIFY AS FOLLOWS:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE, I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING

20, CONTRACTOR SHALL IDENTIFY ALL SOURCES OF ALLOWABLE NON-STORM WATER THAT WILL BE COMBINED WITH STORM WATER AT THE SITE (EXCEPT FIRE-FIGHTING ACTIVITIES) AND ENSURE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR NON-STORM WATER COMPONENT(S) OF DISCHARGE.

21. CONTRACTOR SHALL ENSURE THAT THE INDIVIDUAL SIGNING THE SWPPP MAKES THE CERTIFICATION UNDER PART VI.G.2.d OF THE GENERAL PERMIT. THIS CERTIFICATION MUST APPEAR WITHIN THE SWPPP.

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."



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A. GENERAL REQUIREMENTS

- 1. EROSION AND SEDIMENT CONTROLS MUST BE DESIGNED TO RETAIN SEDIMENT ON-SITE TO THE EXTENT PRACTICABLE WITH CONSIDERATION FOR LOCAL TOPOGRAPHY, SOIL TYPE, AND RAINFALL.
- 2. CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED ACCORDING TO THE MANUFACTURER'S OR DESIGNER'S SPECIFICATIONS.
- 3. CONTROLS MUST BE DEVELOPED TO MINIMIZE THE OFFSITE TRANSPORT OF LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION MATERIALS.
- B. EROSION CONTROL AND STABILIZATION PRACTICES
- 1. EROSION CONTROL AND STABILIZATION PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: ESTABLISHMENT OF TEMPORARY OR PERMANENT VEGETATION, MULCHING, GEOTEXTILES, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS. PROTECTION OF EXISTING SLOPE TEXTURING, TEMPORARY VELOCITY DISSIPATION DEVICES, FLOW DIVERSION MECHANISMS, AND OTHER SIMILAR MEASURES.
- 2. THE FOLLOWING RECORDS MUST BE MAINTAINED AND ATTACHED TO THE SWP3:
- a) THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR,
- b) THE DATES WHEN THE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND
- c) THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
- 3. EROSION CONTROL AND STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED. STABILIZATION MEASURES THAT PROVIDE A PROTECTIVE COVER MUST BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED. THESE MEASURES MUST BE INITIATED NO MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED UNLESS PROVIDED FOR IN PART III.F.2.B.III OF THE GENERAL PERMIT.

C. SEDIMENT CONTROL PRACTICES

- 1. SITES WITH DRAINAGE AREAS OF TEN OR MORE ACRES
- a) A SEDIMENTATION BASIN IS REQUIRED, WHERE FEASIBLE, FOR A COMMON DRAINAGE LOCATION THAT SERVES AN AREA WITH TEN (10) OR MORE ACRES DISTURBED AT ONE TIME. SEDIMENTATION BASIN INFORMATION IS LOCATED IN
- b) AT A MINIMUM, SILT FENCES, VEGETATIVE BUFFER STRIPS, OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA, AND FOR THOSE SIDE SLOPE BOUNDARIES DEEMED APPROPRIATE AS DICTATED BY INDIVIDUAL SITE CONDITIONS.
- 2. A DESCRIPTION OF ANY MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER DISCHARGES THAT MAY OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED MUST BE INCLUDED IN THE SWP3. PERMITTEES ARE ONLY RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF STORM WATER MANAGEMENT MEASURES PRIOR TO FINAL STABILIZATION OF THE SITE OR PRIOR TO SUBMISSION OF AN NOT.

OTHER REQUIRED CONTROLS AND BMPS ARE LISTED BELOW.

- c) PERMITTEES SHALL MINIMIZE, TO THE EXTENT PRACTICABLE, THE OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST.
- d)PERMITTEES MUST INCLUDE A DESCRIPTION OF CONSTRUCTION AND WASTE MATERIALS EXPECTED TO BE STORED ON-SITE AND A DESCRIPTION OF CONTROLS TO MINIMIZE POLLUTANTS FROM THESE MATERIALS.
- e) PERMITTEES MUST INCLUDE A DESCRIPTION OF POTENTIAL POLLUTANT SOURCES FROM AREAS OTHER THAN CONSTRUCTION (SUCH AS STORM WATER DISCHARGES FROM DEDICATED ASPHALT PLANTS AND DEDICATED CONCRETE BATCH PLANTS), AND A DESCRIPTION OF CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THOSE SITES TO MINIMIZE POLLUTANT DISCHARGES.
- f) PERMITTEES SHALL PLACE VELOCITY DISSIPATION DEVICES AT DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL (I.E., RUNOFF CONVEYANCE) TO PROVIDE A NON-EROSIVE FLOW VELOCITY FROM THE STRUCTURE TO A WATER COURSE, SO THAT THE NATURAL PHYSICAL AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS ARE MAINTAINED AND PROTECTED.
- g)PERMITTEES SHALL DESIGN AND UTILIZE APPROPRIATE CONTROLS TO MINIMIZE THE OFFSITE TRANSPORT OF SUSPENDED SEDIMENTS AND OTHER POLLUTANTS IF IT IS NECESSARY TO PUMP OR CHANNEL STANDING WATER FROM THE SITE.

BEST MANAGEMENT PRACTICES

A. EXAMPLE STABILIZATION PRACTICES

1. TEMPORARY STABILIZATION

TOP SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. AREAS OF THE SITE WHICH ARE TO BE PAVED WILL BE TEMPORARILY STABILIZED UNTIL PAVEMENT CAN BE APPLIED.

2. PERMANENT STABILIZATION

DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

B. EXAMPLE STRUCTURAL PRACTICES

1. INTERCEPTOR SWALE

AN INTERCEPTOR SWALE IS A SMALL V-SHAPED OR PARABOLIC CHANNEL WHICH COLLECTS RUNOFF AND DIRECTS IT TO A DESIRED LOCATION. IT CAN EITHER HAVE A NATURAL GRASS LINING OR, DEPENDING UPON SLOPE AND DESIGN VELOCITY, A PROTECTIVE LINING OF EROSION MATTING, STONE OR CONCRETE. THE INTERCEPTOR SWALE CAN EITHER BE USED TO DIRECT SEDIMENT-LADEN FLOW FROM DISTURBED AREAS INTO A CONTROLLED OUTLET OR TO DIRECT "CLEAN" RUNOFF AROUND DISTURBED AREAS. SINCE THE SWALE IS EASY TO INSTALL DURING EARLY GRADING OPERATIONS, IT CAN SERVE AS THE FIRST LINE OF DEFENSE IN REDUCING RUNOFF ACROSS DISTURBED AREAS. AS A METHOD OF REDUCING RUNOFF ACROSS THE DISTURBED CONSTRUCTION AREA. IT REDUCES THE REQUIREMENTS OF STRUCTURAL MEASURES TO CAPTURE SEDIMENT FROM RUNOFF SINCE THE FLOW IS REDUCED. BY INTERCEPTING SEDIMENT-LADEN FLOW DOWNSTREAM OF THE DISTURBED AREA, RUNOFF CAN BE DIRECTED INTO A SEDIMENT BASIN OR OTHER BMP FOR SEDIMENTATION AS OPPOSED TO LONG RUNS OF SILT FENCE, STRAW BALES OR OTHER FILTRATION METHOD.

2. SILT FENCE

A SILT FENCE CONSISTS OF GEOTEXTILE FABRIC SUPPORTED BY POULTRY NETTING OR OTHER BACKING STRETCHED BETWEEN EITHER WOODEN OR METAL POSTS WITH THE LOWER EDGE OF THE FABRIC SECURELY EMBEDDED IN THE SOIL. THE FENCE IS TYPICALLY LOCATED DOWNSTREAM OF DISTURBED AREAS TO INTERCEPT RUNOFF IN THE FORM OF SHEET FLOW. SILT FENCE PROVIDES BOTH FILTRATION AND TIME FOR SEDIMENTATION TO REDUCE SEDIMENT AND THE VELOCITY OF THE RUNOFF. PROPERLY DESIGNED SILT FENCE IS ECONOMICAL SINCE IT CAN BE RELOCATED DURING CONSTRUCTION AND REUSED ON OTHER PROJECTS. SILT FENCE IS NORMALLY USED AS PERIMETER CONTROL LOCATED DOWNSTREAM OF DISTURBED AREAS. IT IS ONLY FEASIBLE FOR NON-CONCENTRATED, SHEET FLOW CONDITIONS.

3. INLET CONTROL

INLET PROTECTION CONSISTS OF A VARIETY OF METHODS OF INTERCEPTING SEDIMENT AT LOW POINT INLETS THROUGH THE USE OF STONE, FILTER FABRIC AND OTHER MATERIALS. THIS IS NORMALLY LOCATED AT THE INLET, PROVIDING EITHER DETENTION OR FILTRATION TO REDUCE SEDIMENT AND FLOATABLE MATERIALS IN STORM WATER. INLET PROTECTION IS NORMALLY USED AS A SECONDARY DEFENSE IN SITE EROSION CONTROL DUE TO THE LIMITED EFFECTIVENESS AND APPLICABILITY OF THE TECHNIQUE. IT IS NORMALLY USED IN NEW DEVELOPMENTS THAT INCLUDE NEW INLETS OR ROADS WITH NEW CURB INLETS OR DURING MAJOR REPAIRS TO EXISTING ROADWAYS. INLET PROTECTION HAS LIMITED USE IN DEVELOPED AREAS DUE TO THE POTENTIAL FOR LOADING, TRAFFIC SAFETY AND PEDESTRIAN SAFETY AND MAINTENANCE PROBLEMS. INLET PROTECTION CAN REDUCE SEDIMENT IN A STORM SEWER SYSTEM BY SERVING AS A BACK SYSTEM TO ONSITE CONTROLS OR BY REDUCING SEDIMENT LOADS FROM CONTROLS WITH LIMITED EFFECTIVENESS SUCH AS STRAW BALE DIKES.

4. CHECK DAMS

CHECK DAMS ARE SMALL BARRIERS CONSISTING OF STRAW BALES, ROCK, OR EARTH BERMS PLACED ACROSS A DRAINAGE SWALE OR DITCH. THEY REDUCE THE VELOCITY OF SMALL CONCENTRATED FLOWS, PROVIDE A LIMITED BARRIER FOR SEDIMENT AND HELP DISPERSE CONCENTRATED FLOWS, REDUCING POTENTIAL EROSION. CHECK DAMS ARE USED FOR LONG DRAINAGE SWALES OR DITCHES IN WHICH PERMANENT VEGETATION MAY NOT BE ESTABLISHED AND EROSIVE VELOCITIES ARE PRESENT. THEY ARE TYPICALLY USED IN CONJUNCTION WITH OTHER TECHNIQUES SUCH AS INLET PROTECTION. RIP RAP OR OTHER SEDIMENT REDUCTION TECHNIQUES. CHECK DAMS PROVIDE LIMITED TREATMENT. THEY ARE MORE USEFUL IN REDUCING FLOW TO ACCEPTABLE LEVELS.

5. STABILIZED CONSTRUCTION ENTRANCE

A STABILIZED CONSTRUCTION ENTRANCE CONSISTS OF A PAD CONSISTING OF GRAVEL, CRUSHED STONE, RECYCLED CONCRETE OR OTHER ROCK LIKE MATERIAL ON TOP OF GEOTEXTILE FILTER CLOTH TO FACILITATE THE WASH DOWN AND REMOVAL OF SEDIMENT AND OTHER DEBRIS FROM CONSTRUCTION EQUIPMENT PRIOR TO EXITING THE CONSTRUCTION SITE. FOR ADDED EFFECTIVENESS, A WASH RACK AREA CAN BE INCORPORATED INTO THE DESIGN TO FURTHER REDUCE SEDIMENT TRACKING. FOR LONG TERM PROJECTS, CATTLE GUARDS OR OTHER TYPE OF PERMANENT RACK SYSTEM CAN BE USED IN CONJUNCTION WITH A WASH RACK. THIS DIRECTLY ADDRESSES THE PROBLEM OF SILT AND MUD DEPOSITION IN ROADWAYS USED FOR CONSTRUCTION SITE ACCESS. STABILIZED CONSTRUCTION ENTRANCES ARE USED PRIMARILY FOR SITES IN WHICH SIGNIFICANT TRUCK TRAFFIC OCCURS ON A DAILY BASIS. IT REDUCES THE NEED TO REMOVE SEDIMENT FROM STREETS. IF USED PROPERLY, IT ALSO DIRECTS THE MAJORITY OF TRAFFIC TO A SINGLE LOCATION, REDUCING THE NUMBER AND QUANTITY OF DISTURBED AREAS ON THE SITE AND PROVIDING PROTECTION FOR OTHER STRUCTURAL CONTROLS THROUGH TRAFFIC CONTROL.

6. SEDIMENT BASIN

SEDIMENT BASINS ARE REQUIRED, WHERE FEASIBLE, FOR SITES WITH DRAINAGE AREAS OF TEN (10) OR MORE ACRES. ADDITIONAL INFORMATION FOR SEDIMENTATION BASINS IS LOCATED IN APPENDIX N.

C. WASTE CONTROL AND DISPOSAL

1. WASTE MATERIALS

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATIONS OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

3. SANITARY WASTE

- ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS PERIODICALLY BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. AS REQUIRED BY LOCAL REGULATION.
- 4. OFFSITE VEHICLE TRACKING AND DUST CONTROL
- A STABILIZED CONSTRUCTION ENTRANCE HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN. IF DUST IS VISIBLE WHEN DUMP TRUCKS ARE LEAVING THE SITE DUE TO CONSTRUCTION ACTIVITIES, DUST SUPPRESSION TECHNIQUES SUCH AS WETTING THE SOIL WILL BE EMPLOYED.

PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE FOLLOWING IS A SAMPLE EROSION CONTROL SEQUENCE:

- CONSTRUCTION ENTRANCE SHALL BE INSTALLED.
- DISTURBED AREAS.
- PHASES MUST CONTINUE.
- PAVEMENT INSTALLATION: IN ADDITION TO MAINTAINING THE CONTROL MEASURES SUPPLEMENTAL MEASURES SHOULD BE INSTALLED. UPON COMPLETION OF PAVING AND CURB BACKFILL OPERATIONS, CONTROL MEASURES SHOULD BE INSTALLED BEHIND CURBS AT HANDICAP RAMPS AND ALONG PARKWAYS WHERE SEDIMENT COULD ENTER STREETS AND/OR PAVED AREAS.
- INSTALLED DURING PREVIOUS PHASES WILL CONTINUE.

SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

- CONTROL PLANS
- 3. CLEARING AND GRUBBING
- 6. PERIODIC INSPECTIONS OF SWPPP STRUCTURES AND MAINTENANCE
- 9. END CONSTRUCTION FINAL STABILIZATION, REMOVE TEMPORARY CONTROLS

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER RENTED FROM A LOCAL WASTE MANAGEMENT COMPANY, WHICH IS A LICENSED SOLID WASTE MANAGEMENT COMPANY. THE DUMPSTER WILL MEET ALL LOCAL AND ANY STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED PERIODICALLY OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED TO AN APPROPRIATE WASTE MANAGEMENT FACILITY. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ONSITE. STAGING AREAS FOR CONSTRUCTION MATERIALS SHOULD HAVE SECONDARY CONTAINMENT. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE OFFICE TRAILER. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

2. HAZARDOUS WASTE

TIMING OF CONTROLS/MEASURES

THE CONTRACTOR AND THE OPERATOR SHALL REVIEW THE SWP3 REQUIREMENTS

- SITE MOBILIZATION: PRIOR TO ANY CONSTRUCTION ON THE SITE A STABILIZED
- CLEARING AND ROUGH GRADING: PRIOR TO ANY GRADING OF THE SITE, EROSION CONTROL MEASURES SHALL BE INSTALLED. THESE CONTROLS MAY INCLUDE BUT ARE NOT LIMITED TO SILT FENCES, SEDIMENTATION PONDS AND VEGETATED SWALES. THE INSTALLATION IS REQUIRED TO PREVENT SEDIMENT FROM LEAVING
- STORM DRAIN INSTALLATION: IN ADDITION TO MAINTAINING THE DEVICES INSTALLED DURING INITIAL GRADING, SUPPLEMENTAL CONTROL MEASURES WILL NEED TO BE INSTALLED. THESE DEVICES WILL INCLUDE DEVICES SHOWN ON THE PLAN SUCH AS STORM DRAIN INLET PROTECTION AND SEDIMENT TRAPS. INLET PROTECTION DEVICES PREVENT SEDIMENTATION FROM ENTERING THE INLET AND SUBSEQUENTLY. THE STORM SEWER SYSTEM AS WELL AS THE RECEIVING WATER BODY. OTHER DEVICES MAY BE REQUIRED AS SHOWN ON THE EROSION CONTROL PLAN OR REQUESTED BY THE INSPECTOR OR OPERATOR.
- <u>INSTALLATION OF PUBLIC UTILITIES:</u> ADDITIONAL CONTROL MEASURES ARE LIKEWISE NOT REQUIRED DURING INSTALLATION OF PUBLIC UTILITIES. HOWEVER. MAINTENANCE OF EXISTING CONTROL MEASURES INSTALLED DURING PREVIOUS
- INSTALLED DURING INITIAL GRADING AND STORM DRAIN INSTALLATION PHASES.
- FINAL GRADING: ADDITIONAL CONTROL MEASURES ARE NOT REQUIRED DURING FINAL GRADING. HOWEVER, MAINTENANCE OF EXISTING CONTROL MEASURES
- BEGIN CONSTRUCTION AND MOBILIZATION
- 2. INSTALL INITIAL STORM EROSION PREVENTIONS AS INDICATED IN EROSION
- 4. SITE AND OFF-SITE GRADING
- INSTALL ALL SWPPP AS INDICATED IN EROSION CONTROL PLANS.
- 7. EXCAVATION FOR SITE UTILITIES AND STORM SEWER SYSTEMS 8. CONSTRUCTION OF SITE IMPROVEMENTS
- AND SUBMIT N.O.T.

PROJECT SITE DESCRIPTION

The construction site is located in The City of El Paso. The site covers an area of approximately 29.65 acres. The project site is located east of the existing Cimarron Unit One subdivisions, west of the El Paso Water Utilities Property with access through Northern Pass Blvd., Brays Landing Dr. and Kiowa Creek Dr.

SWPPP AVAILABILITY

This SWP3 must be retained on-site at the construction site, or if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3. This SWPPP must be made read available at the time of an on-site inspection.

NATURE OF CONSTRUCTION ACTIVITY

The purpose of the construction project is to construct a residential with approximately 129 lots This project is built in one phase. The General Contractor the Owner will submit the NOI.

SOIL TYPES AND EXISTING CONDITIONS

The site terrain is irregular with sparse desert vegetation. Subsurface soils encountered at the site consist of silty sand, poorly graded silty sand and poorly graded sand. Soils are dry at a medium dense to dense relative density.

RECEIVING WATERS AND WETLANDS

Off-site run off from the Franklin Mountains and run-off generated on-site will be transported on street run-off and captured on curb inlets to convey the run-off through an underground system which ultimately will drain to a regional detention

THE FALLS AT CIMARRON UNIT ONE THE CITY OF EL PASO, TEXAS

BEING A PORTION OF TRCTS 3B AND 3B1, NELLIE D. MUNDY SURVEY 242, CITY OF EL PASO, EL PASO COUNTY, TEXAS. CONTAINING 29.653

EROSION AND SEDIMENT CONTROL

SOIL STABILIZATION PRACTICES

CONSTRUCTION START (DATE):

CONSTRUCTION END (DATE):

dily	TEMPORARY S		DING, OR SEEDI	NG
	MULCHING SOIL RETENTIO BUFFER ZONE PRESERVATIO	ON BLANKET S		
or	OTHER:			

STRUCTURAL PRACTICES (P-PERMAMENT T-TEMPORARY)

STRUCTURAL FRACTICES (F-FERWANIENT T-TEMPORART)
T SILT FENCE HAY BALES ROCK BERMS
DIVERSION, INTERCEPTION BERMS
DIVERSION, INTERCEPTION SWALES
DIVERSION, DIKE AND SWALE COMBINATIONS PIPE SLOPE DRAINS
CONCRETE FLUMES
T ROCK BEDDING AT CONSTRUCTION EXIT
CHANNEL LINERS
SEDIMENT TRAPS
T SEDIMENT BASINS
T STORM INLET SEDIMENT TRAP
P STONE OUTLET STRUCTURES
P CURB AND GUTTERS
P UNDERGROUND STORM DRAINS
P VELOCITY CONTROL DEVICES
NATURAL SWALES AND NATURAL DEPRESSIONS
OTHER:
POST CONSTRUCTION CONTROLS: INLETS, EARTH BERMS, ROCK RIP-RAP, PER ENGINEERING PL

SITE DATA

TOTAL AREA	29.653 AC.	
TOTAL AREA DISTURBED *	29.653 AC.	
PAVED AREA	4.55 AC.	
PRE-DEVELOPEMENT RUNOFF COE	FFICIENT 0.50	
POST-DEVELOPEMENT RUNOFF CO	DEFFICIENT 0.67	
* DOES NOT INCLUDE ANY OFF-SITE OR BORROW AREAS - CONTRACTOR		

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS

OF THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) GENERAL PERMIT

COMPANY:

ADDRESS:

SIGNED

TELEPHONE

COMPANY: ADDRESS: TELEPHONE

TELEPHONE:

THAT AUTHORIZES STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION

I CERTIFY UNDER PENALTY OF LAW THAT I WILL COORDINATE, EITHER THROUGH THE

GENERAL CONTRACTOR, OWNER,OR DIRECTLY, WITH THE CONTRACTOR(S) AND/OR

IMPLEMENTING STORM WATER CONTROL MEASURES TO MINIMIZE ANY IMPACT MY

ACTIONS MAY HAVE ON THE EFFECTIVENESS OF THESE STORM WATER CONTROLS

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS

WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A

POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND

PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE, I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE

EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR

SUBCONTRACTOR(S) IDENTIFIED IN THE SWPPP HAVING RESPONSIBILITY FOR

ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THE THIS

AS NECESSARY DURING CONSTRUCTION.

GENERAL CONTRACTOR CERTIFICATION

SUB-CONTRACTOR CERTIFICATION

CERTIFICATION.

SIGNED

NAME

DATE:

MEASURES.

SIGNED

COMPANY

ADDRESS

TELEPHONE

OWNER CERTIFICATION

NAME

TITLE

DATE:

SIGNED

SWPPP-GENERAL NOTES

1. CONTRACTOR IS SOLELY RESPONSIBLE FOR SELECTION. IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL SWPPP CONTROLS - CONTROLS SHOWN ON THIS SITE MAP ARE SUGGESTED CONTROLS ONLY.

2. CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT ON ORIGINAL SWPPP OR NOT) DIRECTLY ON THE SITE MAP.

3. DRAINAGE PATTERNS ARE SHOWN ON THIS PLAN BY PROPOSED AND EXISTING CONTOURS, FLOW ARROWS, AND SLOPES.

4. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.

5. BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECIEVING SEDIMENT FROM SITE RUN-OFF.

6. SANITARY SEWER EFFLUENT IS DISPOSED OF VIA AN ONSITE SEWER SYSTEM CONNECTED TO A MUNICIPAL SEWER SYSTEM. RM V PRE

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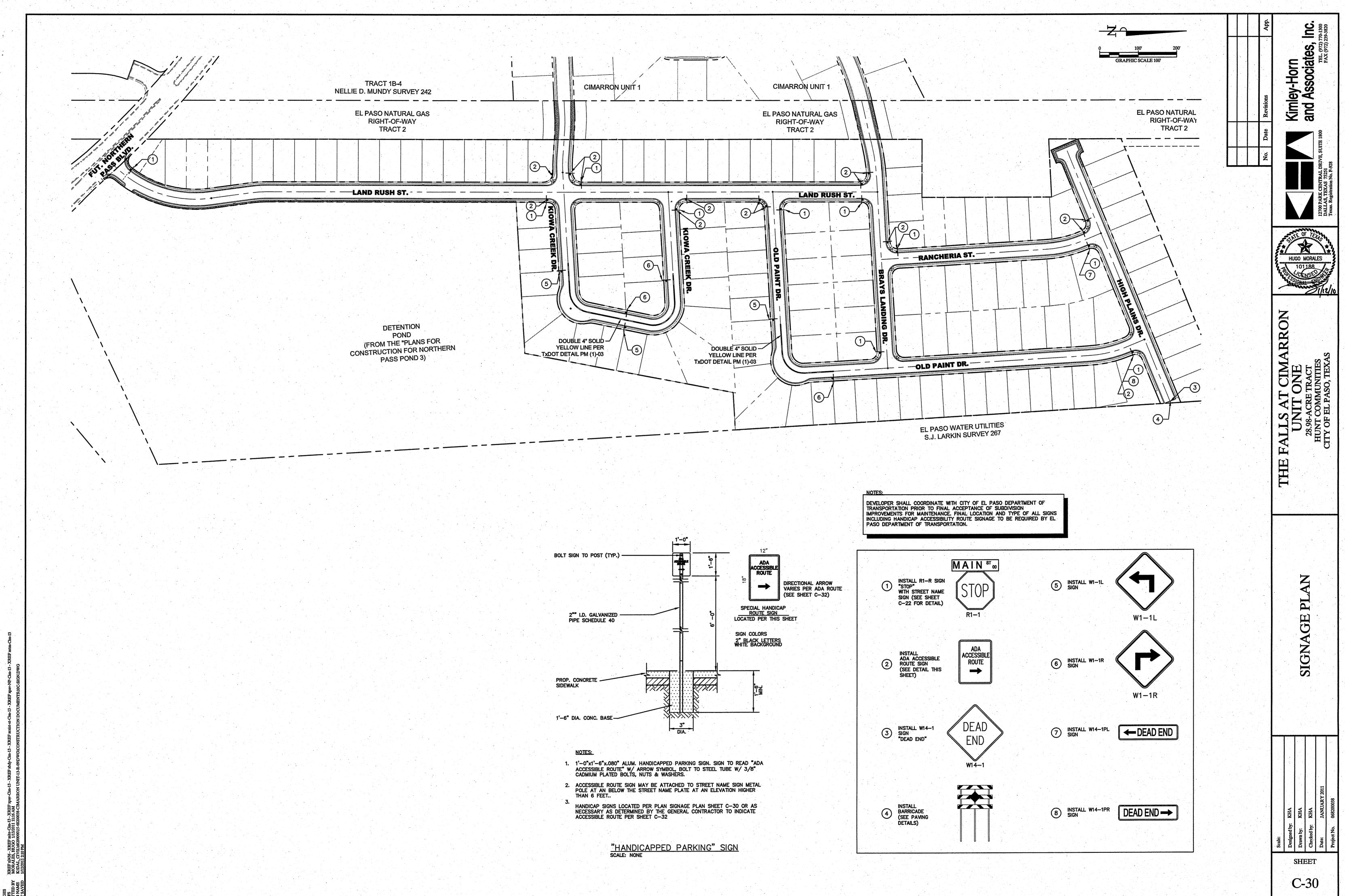
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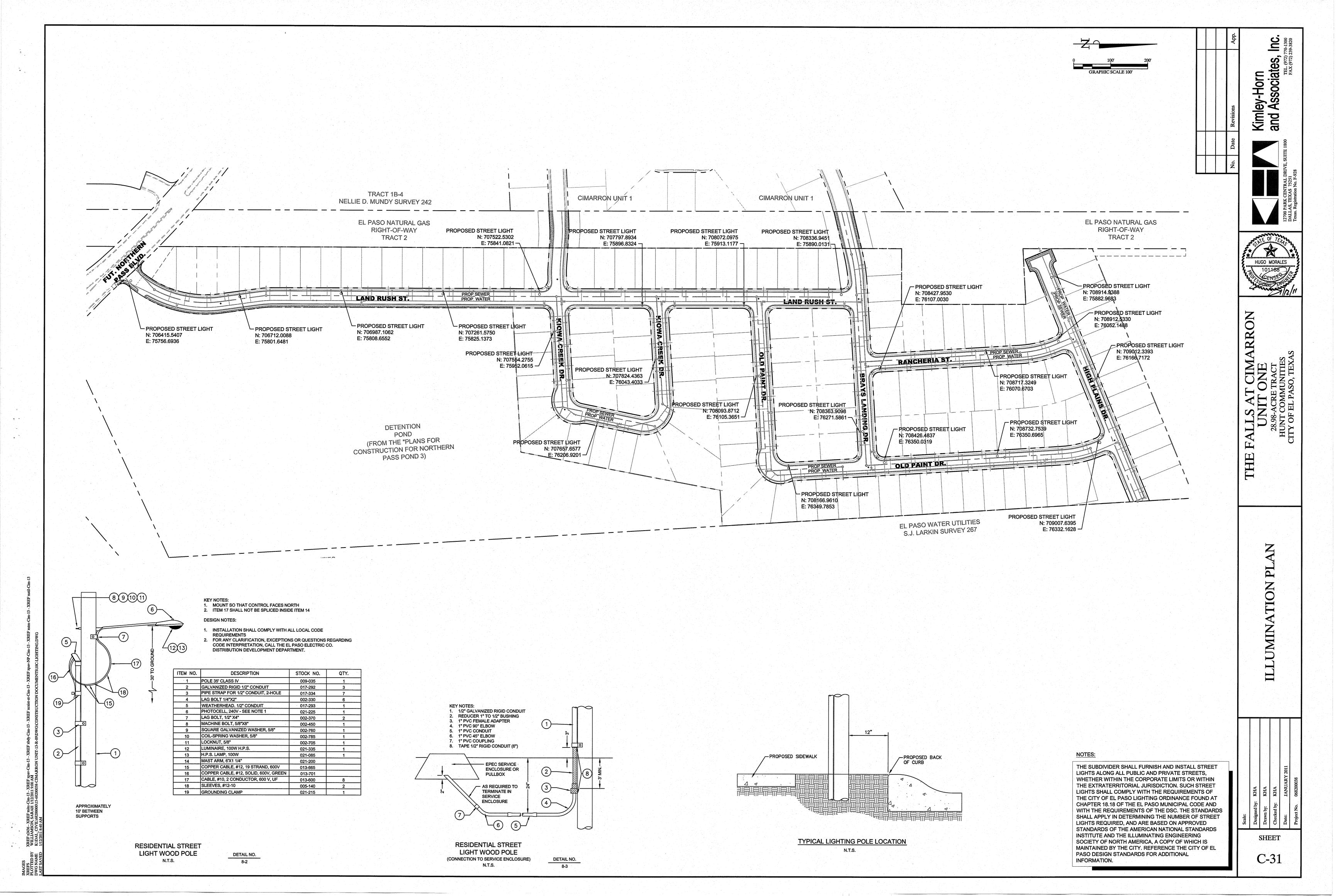
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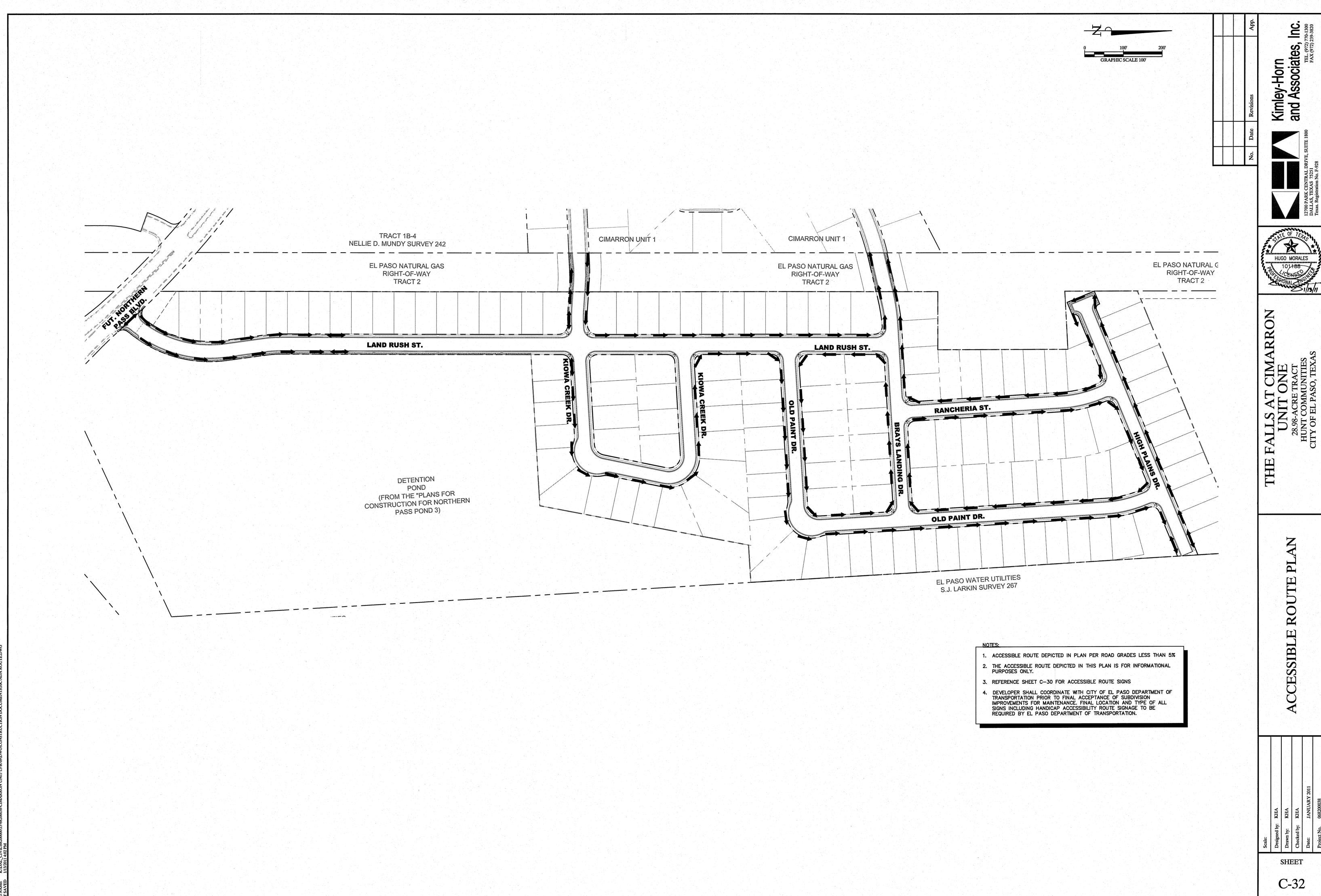
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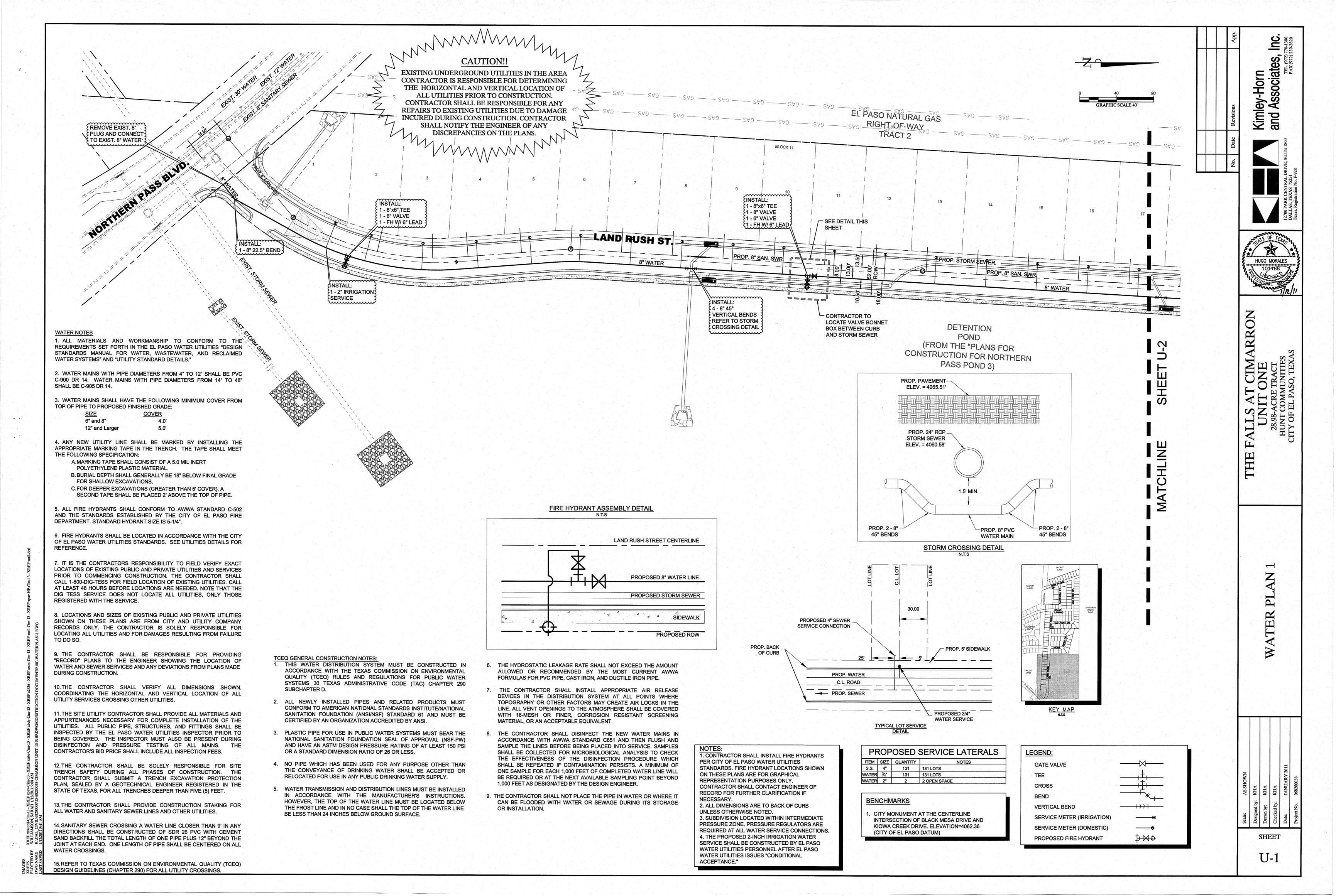
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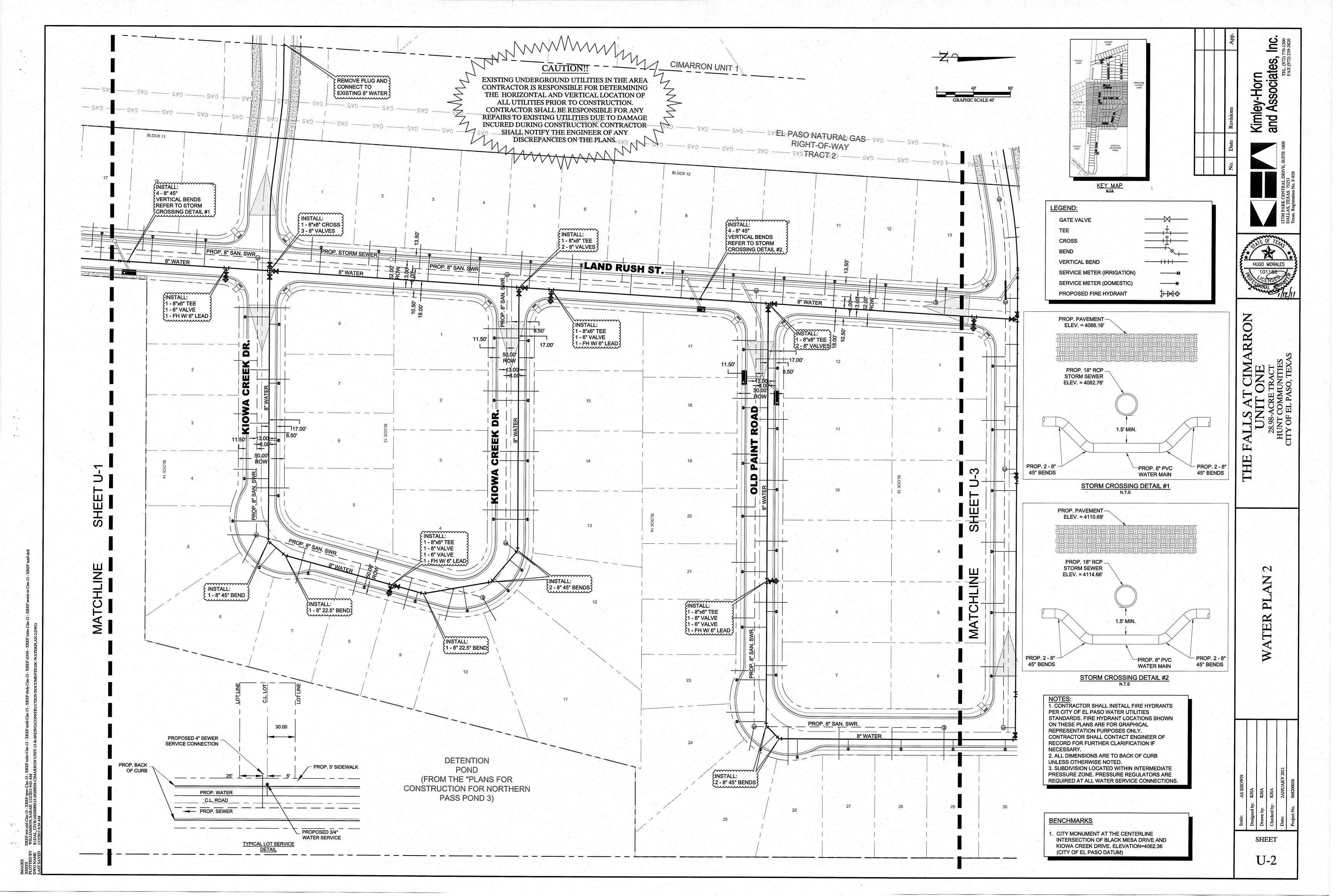


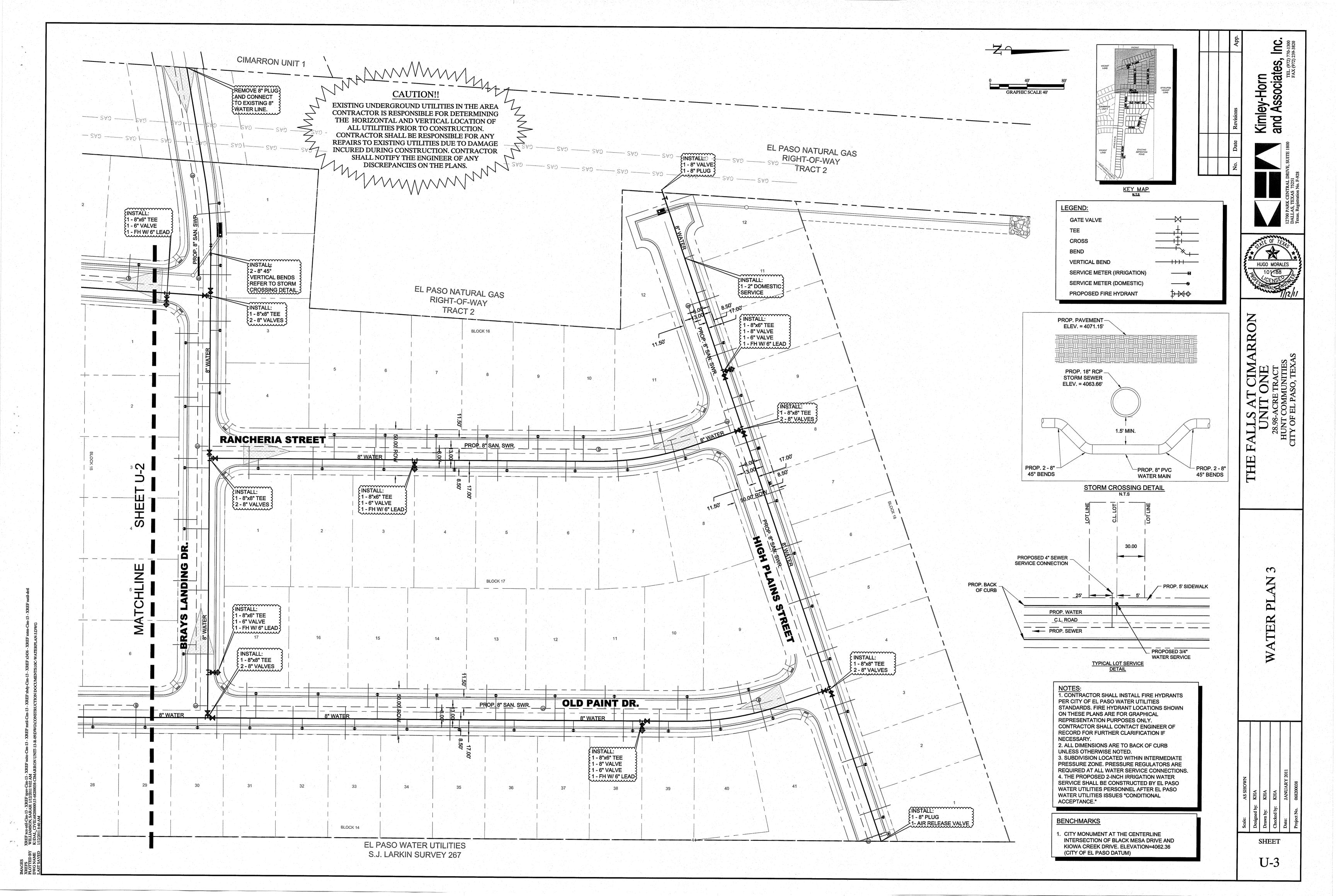


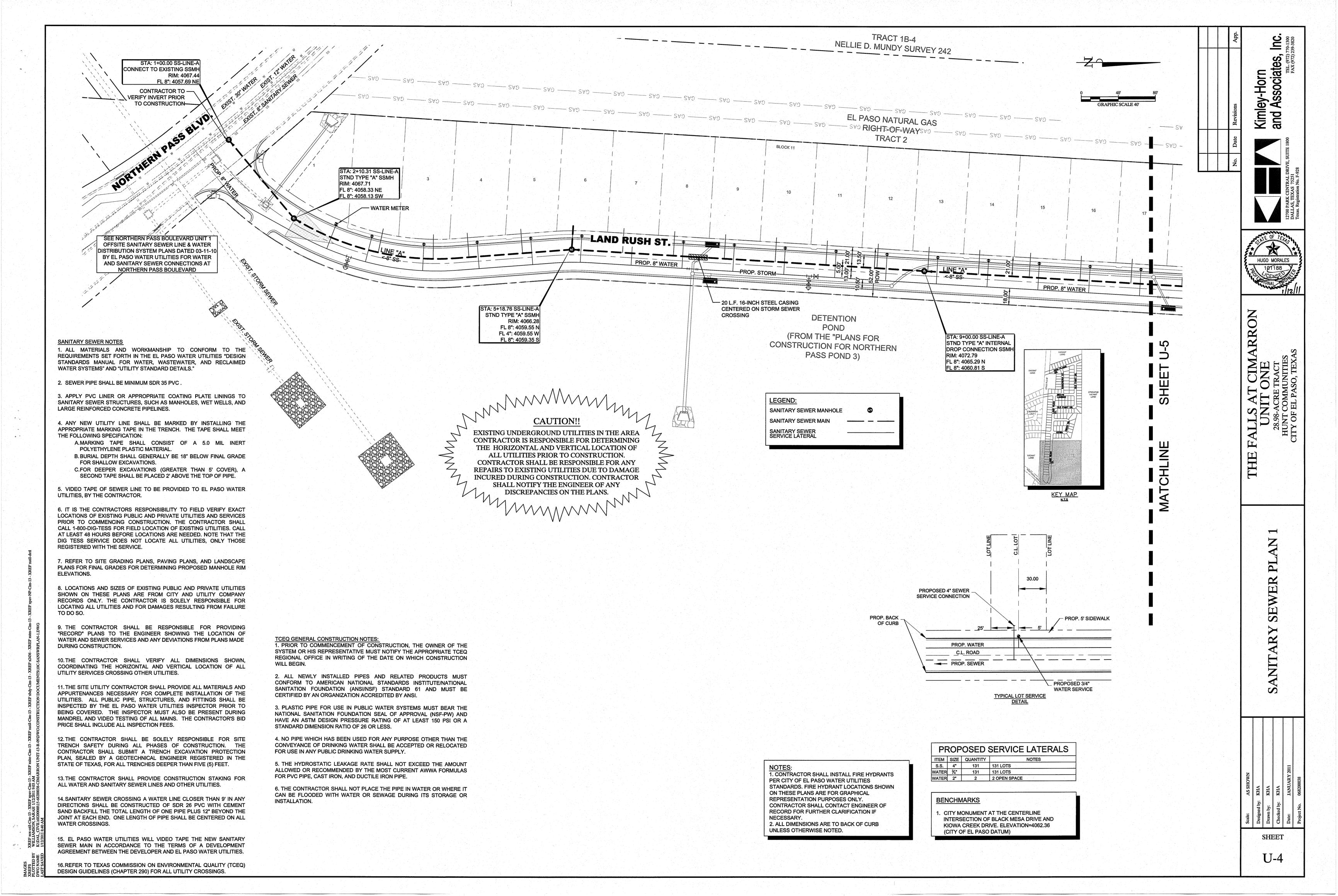


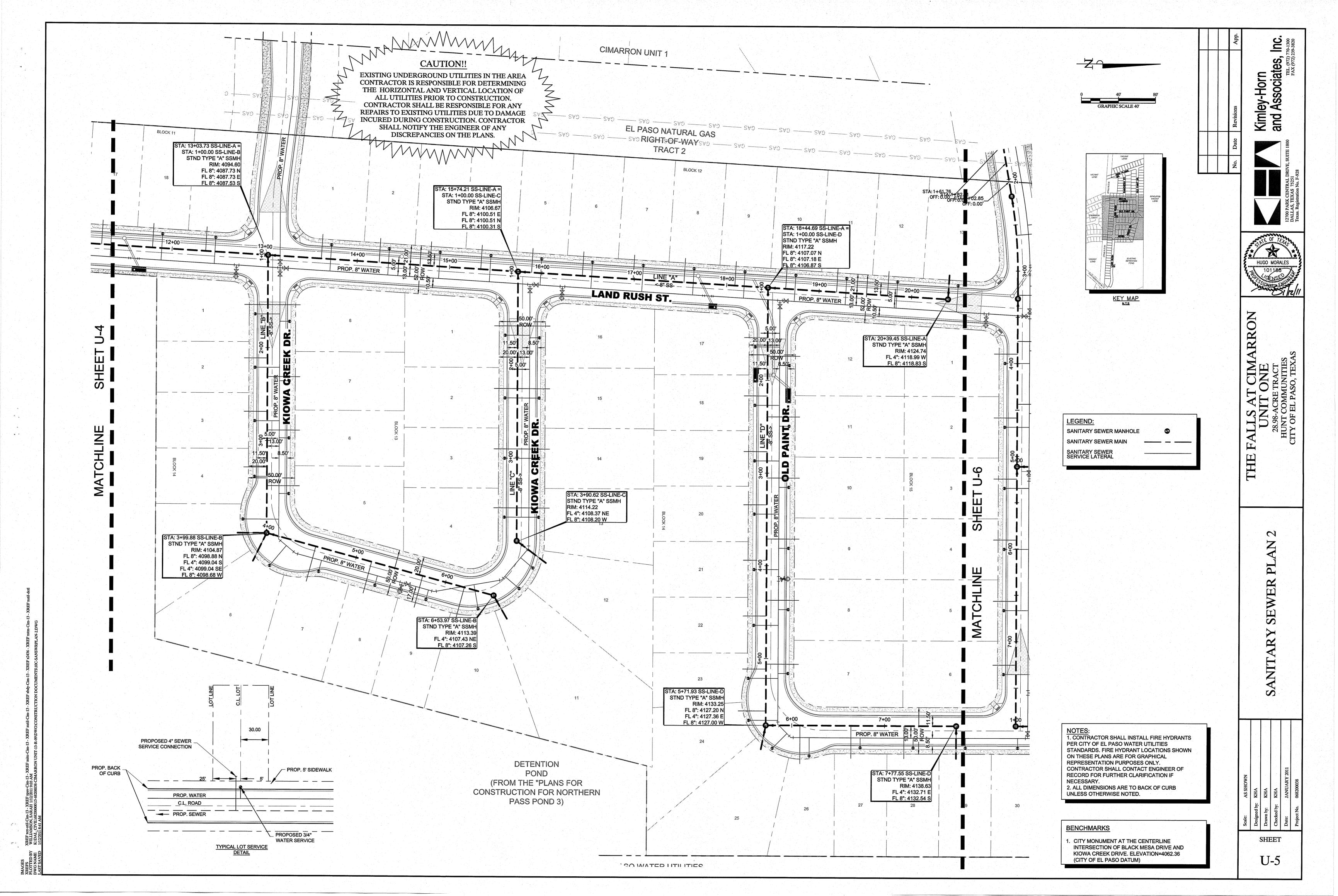
HUGO MORALES

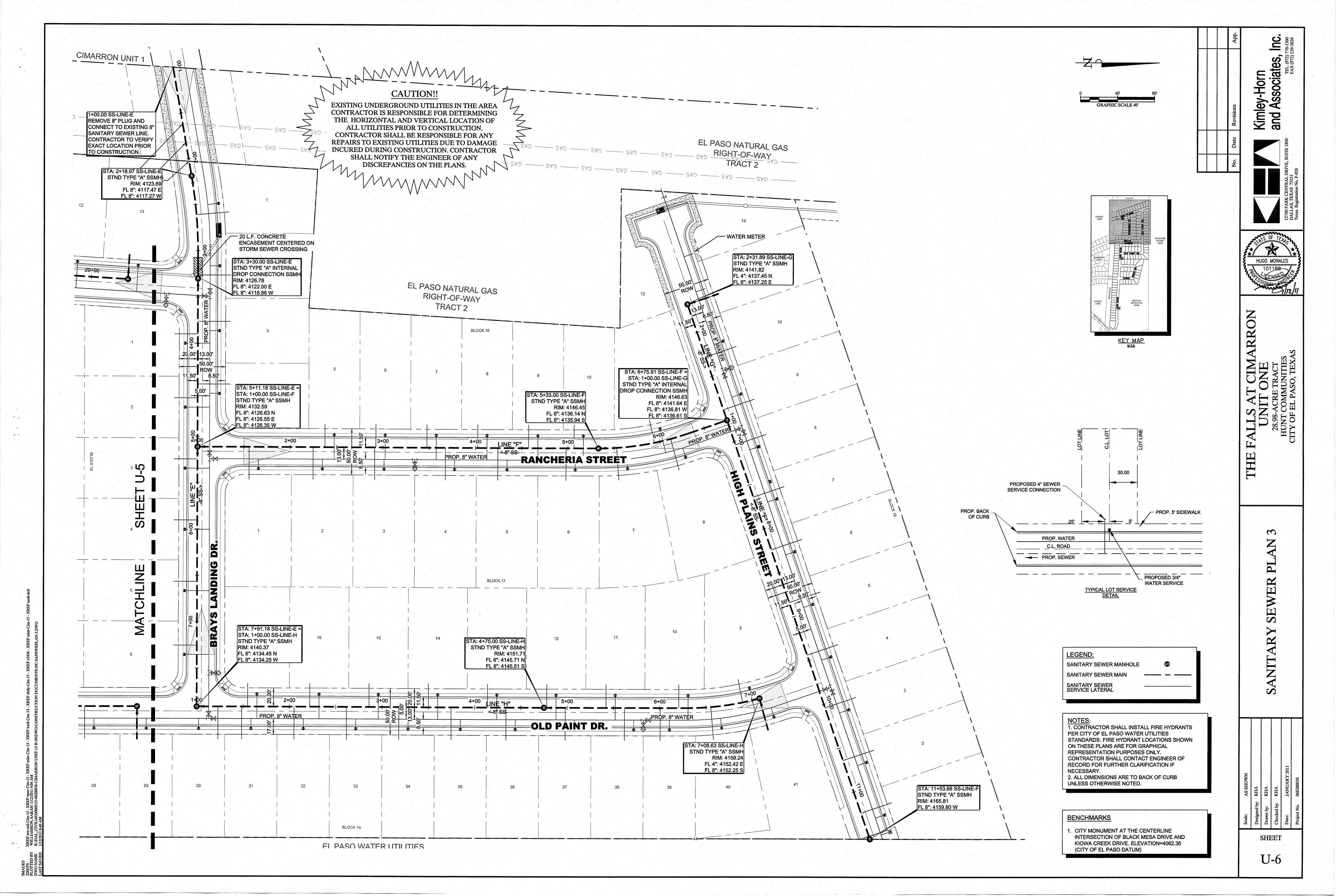


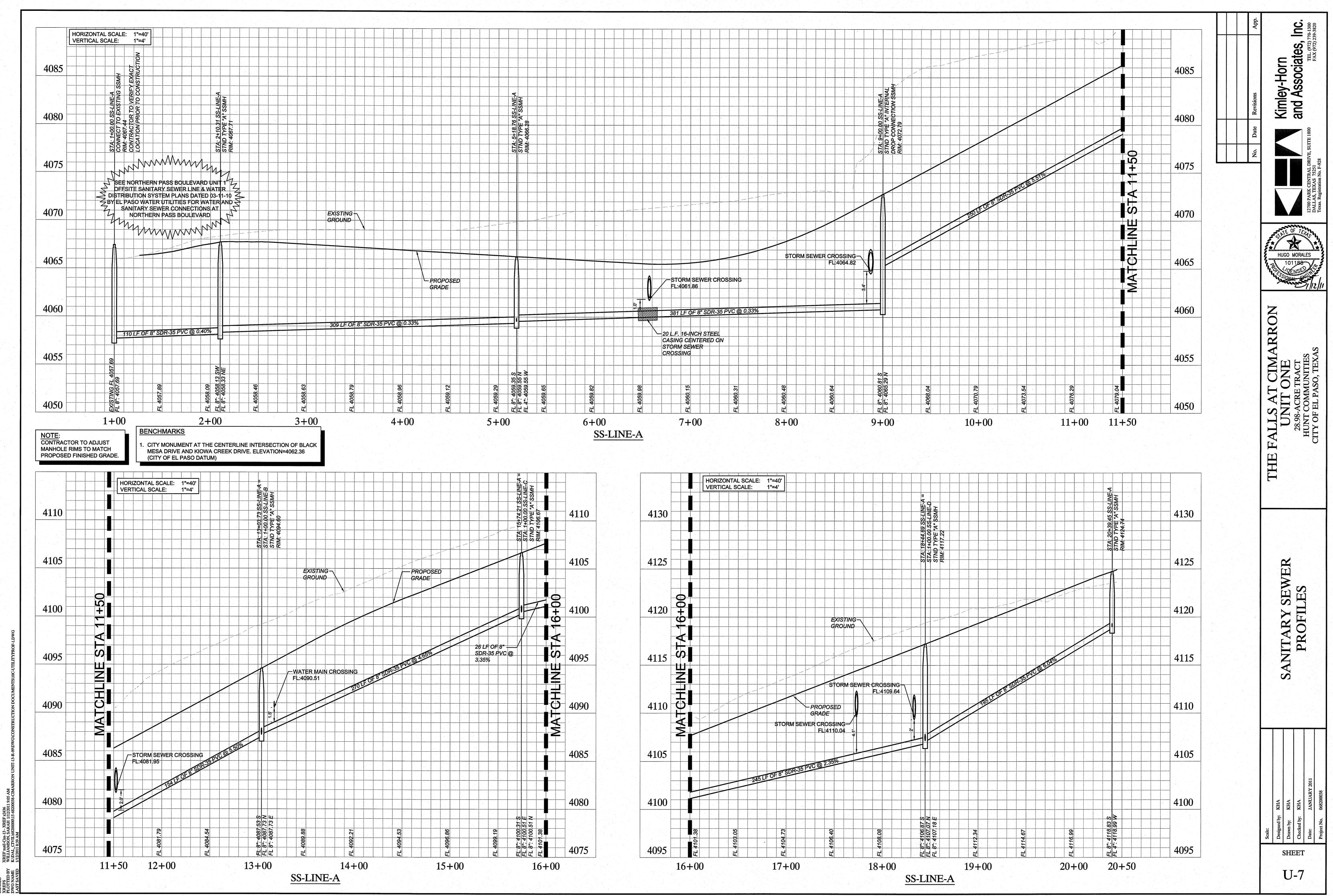


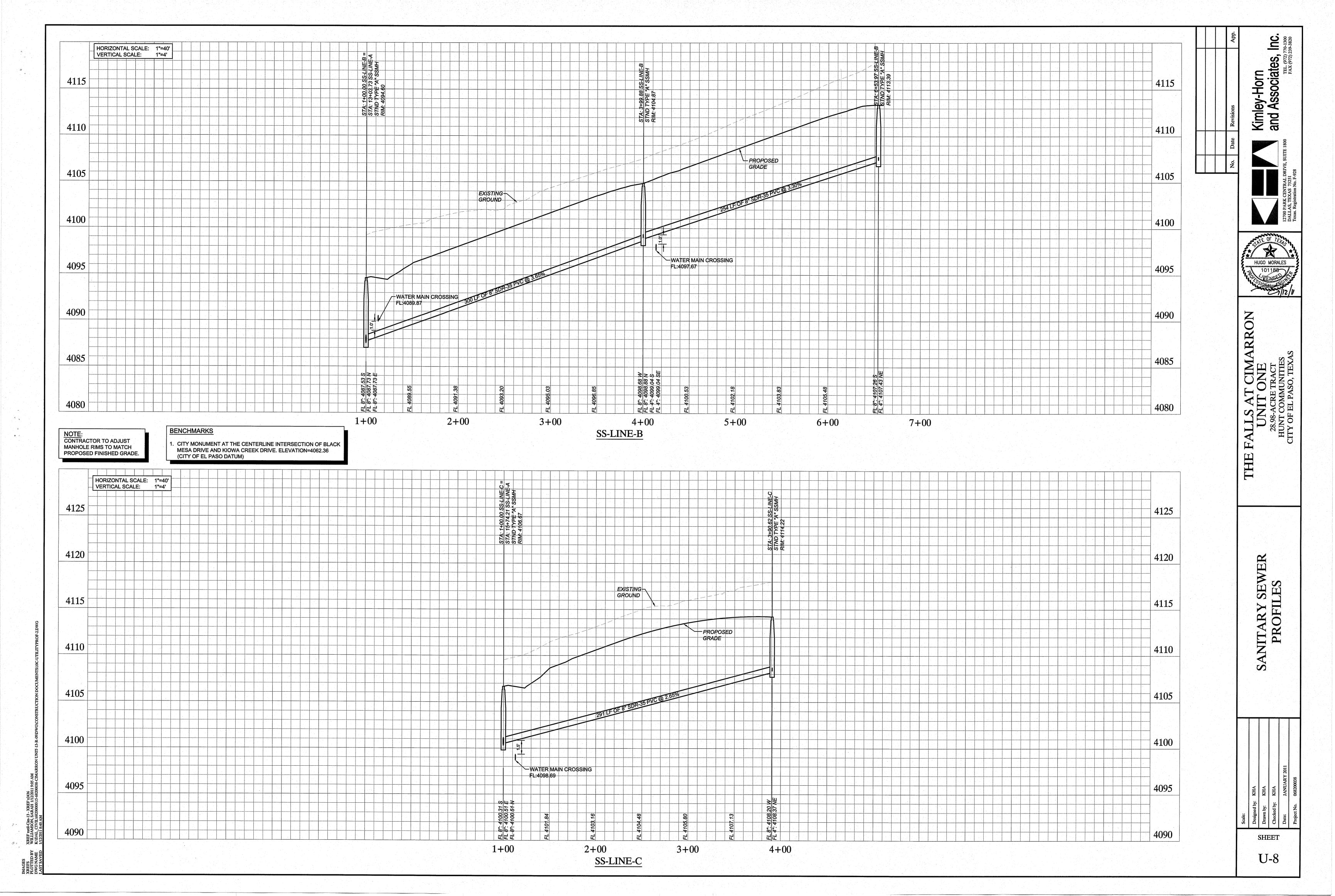


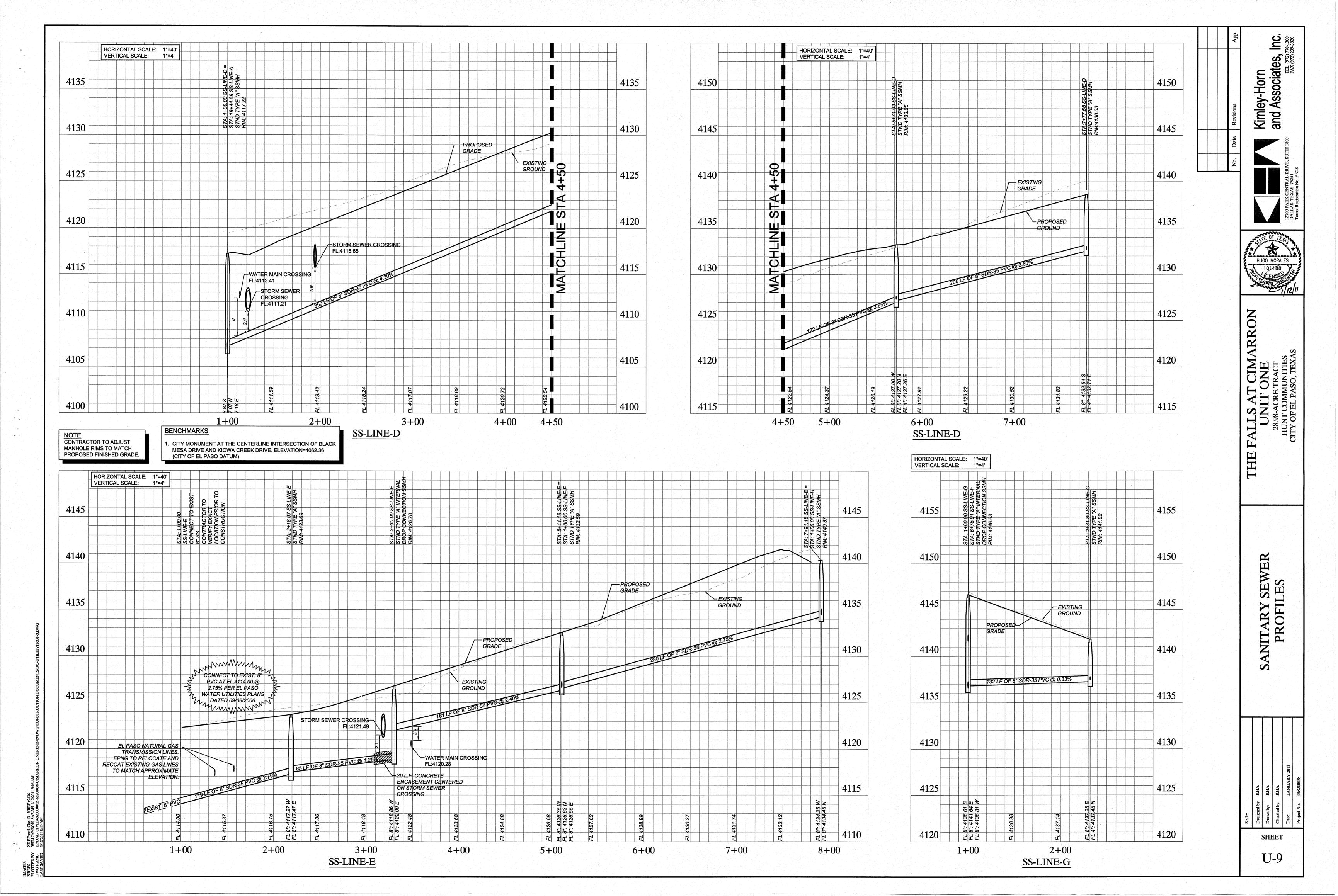


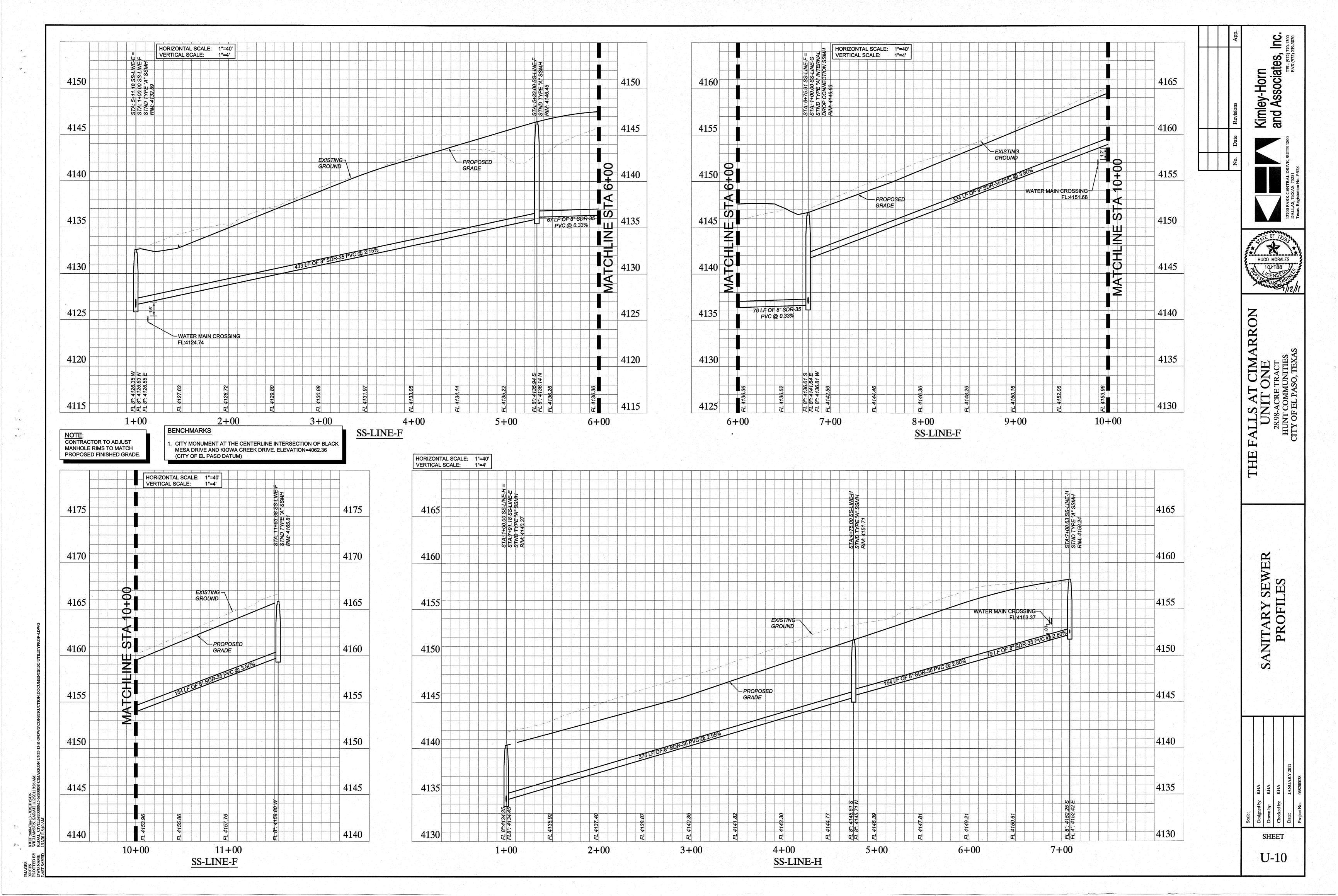


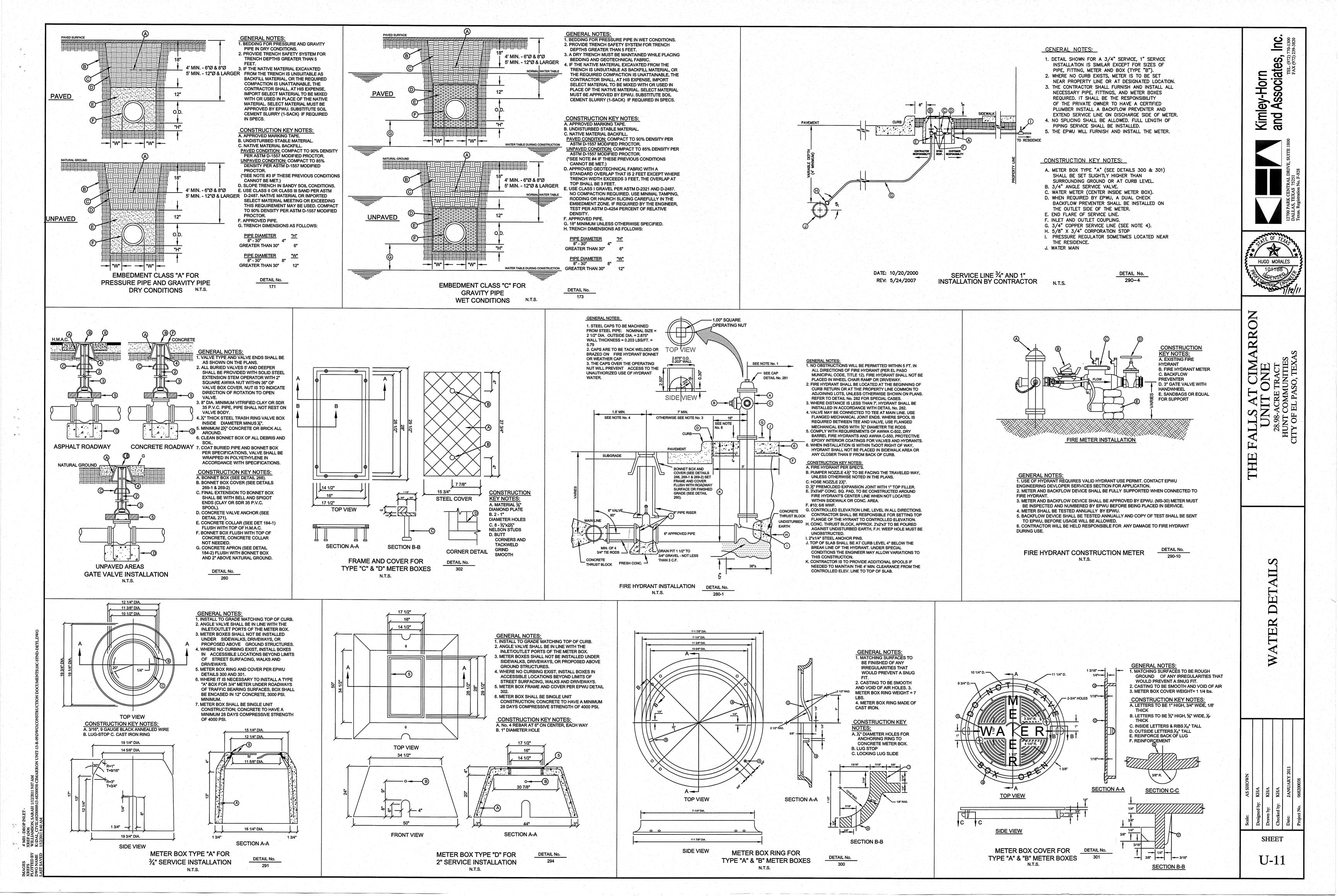


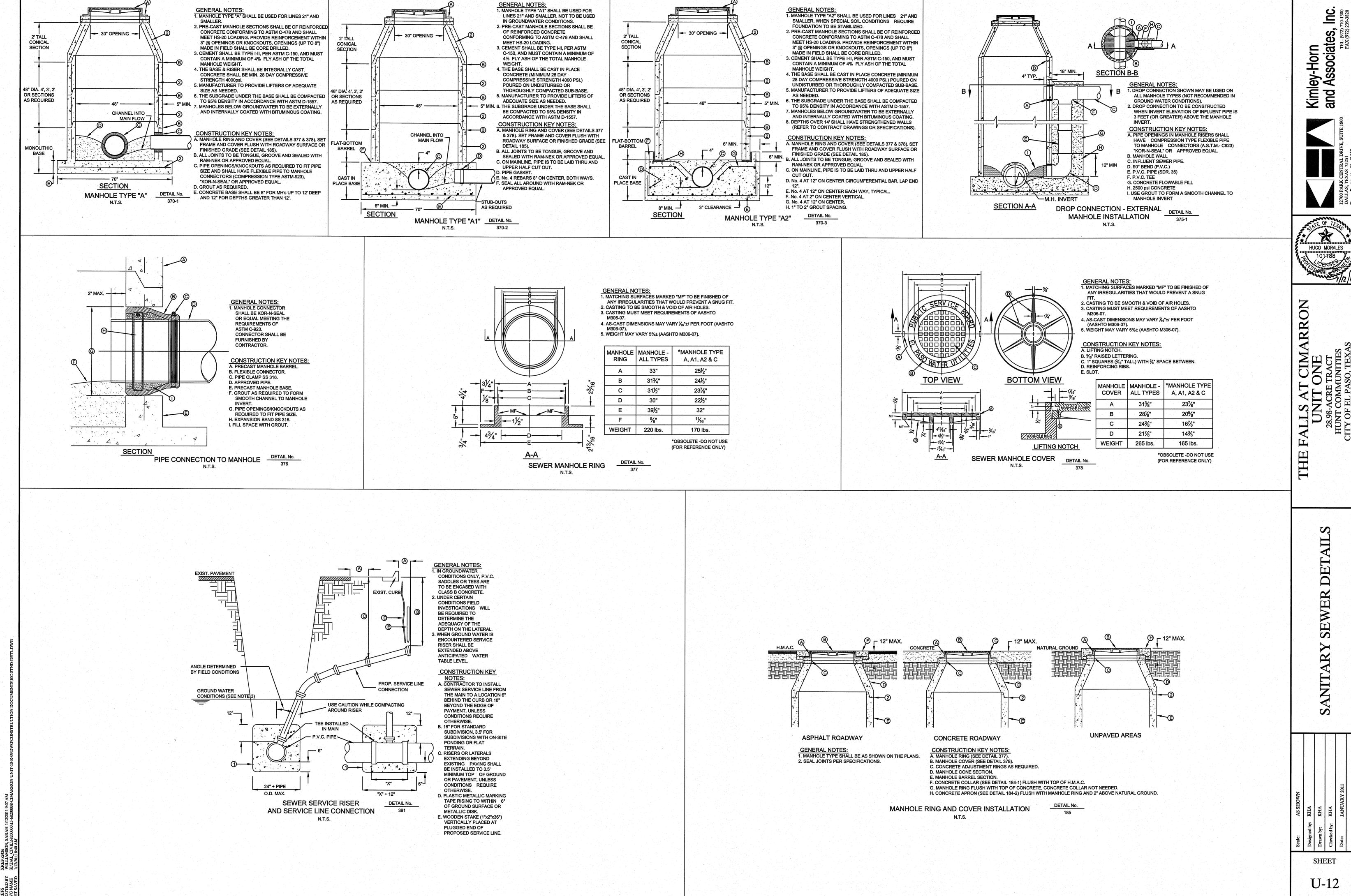












- 1. SITE GRADING NECESSITATED BY THE WORK AS IT PROGRESSES AND NOT SPECIFICALLY CALLED OUT ON THE PLANS SHALL BE CONSIDERED INCIDENTAL WORK.
- 2. ALL VALVES, CLEAN-OUTS, METERS, AND BOXES (INCLUDING IRRIGATION) SHALL BE ADJUSTED TO FINISH GRADE AND SHALL BE INCIDENTAL TO CONSTRUCTION WORK.
- 3. NO PLANT SUBSTITUTIONS, TYPE, OR QUANTITY DEVIATIONS FROM THE APPROVED LANDSCAPE PLANS UNLESS AUTHORIZED IN WRITING BY THE OWNER'S REPRESENTATIVE AND APPROVED BY THE CITY OF EL PASO.
- 4. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL BRANCHED, AND DENSLY FOLIATED (WHEN IN-LEAF) AS IS TYPICAL FOR THE SPECIES. THEY SHALL HAVE HEALTHY, WELL DEVELOPED STANDARDS, AND FREE OF ANY BRUISES, CUTS OR OTHER ABNORMALITIES. PLANT MATERIAL SHALL BE SIZED IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN.
- 5. LANDSCAPE CONTRACTOR SHALL STAKE THE LOCATION OF ALL PLANT MATERIAL AND SHALL HAVE LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO DIGGING.
- 6. ALL SHRUBS SHALL BE PLANTED A MINIMUM OF 24" FROM EDGE OF WALKS, WALLS, BUILDINGS, AND CURBS UNLESS DIRECTED OTHERWISE BY THE LANDSCAPE ARCHITECT.
- 7. ALL TREES SHALL BE PLANTED A MINIMUM OF 4' FROM EDGE OF WALLS, FENCES, WALKS, AND PATHS IN THE LAWN AREA.
- 8. ALL PLANT PITS SHALL BE AMENDED AS DETAILED.
- 9. ALL SHRUBS SHALL HAVE A FULL HEAD THAT COVERS THE CAN DIAMETER AND A MINIMUM OF THREE STEMS/BRANCHES.
- 10. FINISH GRADE OF PLANTED AREAS SHALL BE 1" BELOW ALL CURBS, WALKS, AND PAVING WITH SMOOTH EVEN LINES AT EDGES OF STRUCTURES.
- 11. FINISH GRADE OF TURF AND/OR NATIVE SOIL SHALL SLOPE AT A 2% GRADE AWAY FROM CURBS, WALKS, CONCRETE PADS, AND WALLS.
- 12. CONCRETE WALKS AND CONCRETE PADS SHALL HAVE A CROSS SLOPE OF 1.5%. SEE ENGINEERING PLANS FOR DETAIL.
- 13. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF UNDERGROUND INSTALLATIONS THAT MAY BY AFFECTED BY THEIR WORK AND SHALL BE RESPONSIBLE FOR DAMAGES TO SUCH INSTALLATIONS CAUSED AS A RESULT OF LANDSCAPE INSTALLATION.
- 14. GRAVEL: ALL AREAS LABELED GRAVEL ON THE PLANS ARE TO BE APPROVED BY OWNER. 2" DEPTH THROUGHOUT ENTIRE PROJECT. FINISH GRADE IN ALL AREAS TO BE SMOOTH AND EVEN AND 2" BELOW TOP OF CURB OR SIDEWALK.
- 15. AREAS TO RECEIVE GRAVEL SHALL BE SPRAYED AT LEAST ONCE WITH A CONTACT HERBICIDE PRIOR TO PLANTING OPERATIONS IMMEDIATELY PRIOR TO PLACEMENT OF DECOMPOSED GRANITE. CONTRACTOR TO APPLY PRE-EMERGENT PER MANUFACTURER RECOMMENDATIONS.
- 16. GRAVEL SHALL EXTEND UNDER TREES AND SHRUBS.
- 17. OWNERS REPRESENTATIVE AND CITY OF EL PASO RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL DEEMED UNACCEPTABLE.
- 18. PLANT/BOULDER QUANTITIES LISTED IN THE PLANT LEGEND ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL DO THEIR OWN TAKE-OFFS AND BASE BID ACCORDINGLY.
- 19. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE ENTIRE PROJECT FOR 90 DAYS AFTER ACCEPTANCE OF THE WORK BY THE CITY OF EL PASO. UPON COMPLETION OF THE MAINTENANCE PERIOD THE OWNER WILL ASSUME ALL MAINTENANCE RESPONSIBILITY.
- 20. PRIOR TO INITIATING THE 90-DAY MAINTENANCE PERIOD, COMPLETE ANY INITIAL PUNCHLIST ITEMS. THEN OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE OF SUBSTANTIAL COMPLETION. DETERMINE WITH THE OWNER'S REPRESENTATIVE THE START DATE FOR THE 90-DAY MAINTENANCE PERIOD. CONTRACTOR TO MAINTAIN LANDSCAPE WHICH MAY INCLUDE WATERING, WEEDING, PRUNING, AND REPLACEMENT OF ANY MATERIAL THAT HAS DIED OR IS SHOWING EVIDENCE OF STRESS. SUBMIT WRITTEN REQUEST FOR FINAL PUNCHLIST ONE WEEK PRIOR TO END OF MAINTENANCE PERIOD.
- 21. ALL TREE LOCATIONS TO BE STAKED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 22. THERE ARE NO EXISTING PLANT MATERIALS THAT ARE GOING TO REMAIN IN PLACE DURING CONSTRUCTION.

	SYM	BOTANICAL NAME	COMMON NAME	SIZE	QTY	NOTES
TREES		Quercus muhlenbergii	Chinquapin Oak	24" Box	2	Straight trunk, Full Head
_	\otimes	Parkinsonia X Cercidium 'Desert Museum'	Palo Verde 'Desert Museum'	36" Box	9	Multi-trunk
ω		Louganhadlum	<u> </u>	T	Γ	
SHRUBS	0	Leucophyllum 'Cimarron'	Cimarron Texas Ranger Sage	5 Gal.	32	Full Plant, Well Rooted
S	0	Rosmarinus officinalis	Rosemary	5 Gal.	65	Full Plant, Well Rooted
	⊗	Leucophyllum candidum 'Thunder Cloud'	Thundercloud Sage	5 Gal.	34	Full Plant, Well Rooted
	\odot	Ericameria laricifolia	Turpentine Bush	5 Gal.	40	Full Plant, Well Rooted
(0			T	T	<u> </u>	
OVERS	₩	Hesperaloe parviflora	Red Yucca	5 Gal.	24	Full Plant, Well Rooted
OUNDC	*	Muhlenbergia capillaris	Muhly Grass 'Regal Mist'	5 Gal.	84	Full Plant, Well Rooted
TS/GROUNDCOVERS	⊗	Hymenoxys acaulis	Angelita Daisy	5 Gal.	59	Full Plant, Well Rooted
ACCEN	0	Lantana camara 'New Gold'	Lantana	5 Gal.	47	Full Plant, Well Rooted
	®	Melampodium leucanthum	Blackfoot Daisy	5 Gal.	66	Full Plant, Well Rooted
INERTS		Gravel	Color: Franklin Red Size: ¾" Screened	SF	9,300	2" depth in all planting areas or as designated on plans.
	÷÷;	Gravel	Color: Franklin Red Size: 1-½ Screened	SF	6,200	2" depth in all planting areas or as designated on plans.
		Cynodon dactylon	Bermuda Tifway 419	SF	7,200	Net SF, add for cut and waste
	€	Surface Select Granite Boulder 'A'	Size: 2' x 2' x 2'	EA	2	See Detail 5, Sheet L-3
	8	Surface Select Granite Boulder 'B'	Size: 3' x 3' x 3'	EA	2	See Detail 5, Sheet L-3
	8	Surface Select Granite Boulder 'C'	Size: 4' x 4' x 4'	EA	1	See Detail 5, Sheet L-3
		Steel Edging	Commercial Grade 14 Gauge	ĹF	21	

No. Date Revisions

LANDSCAPE OF THE STATE OF THE S

THE FALLS AT CIMAR

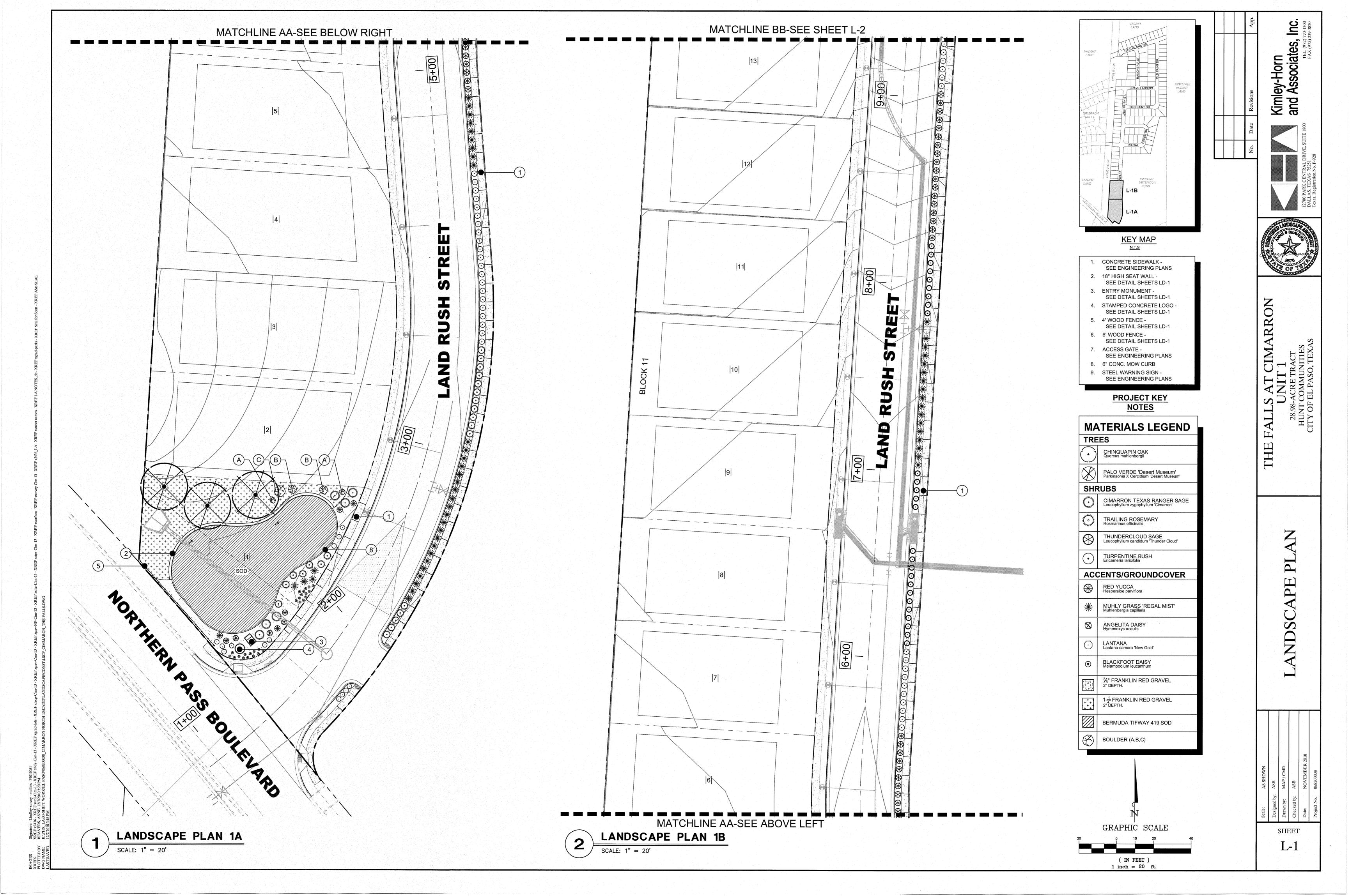
UNIT 1

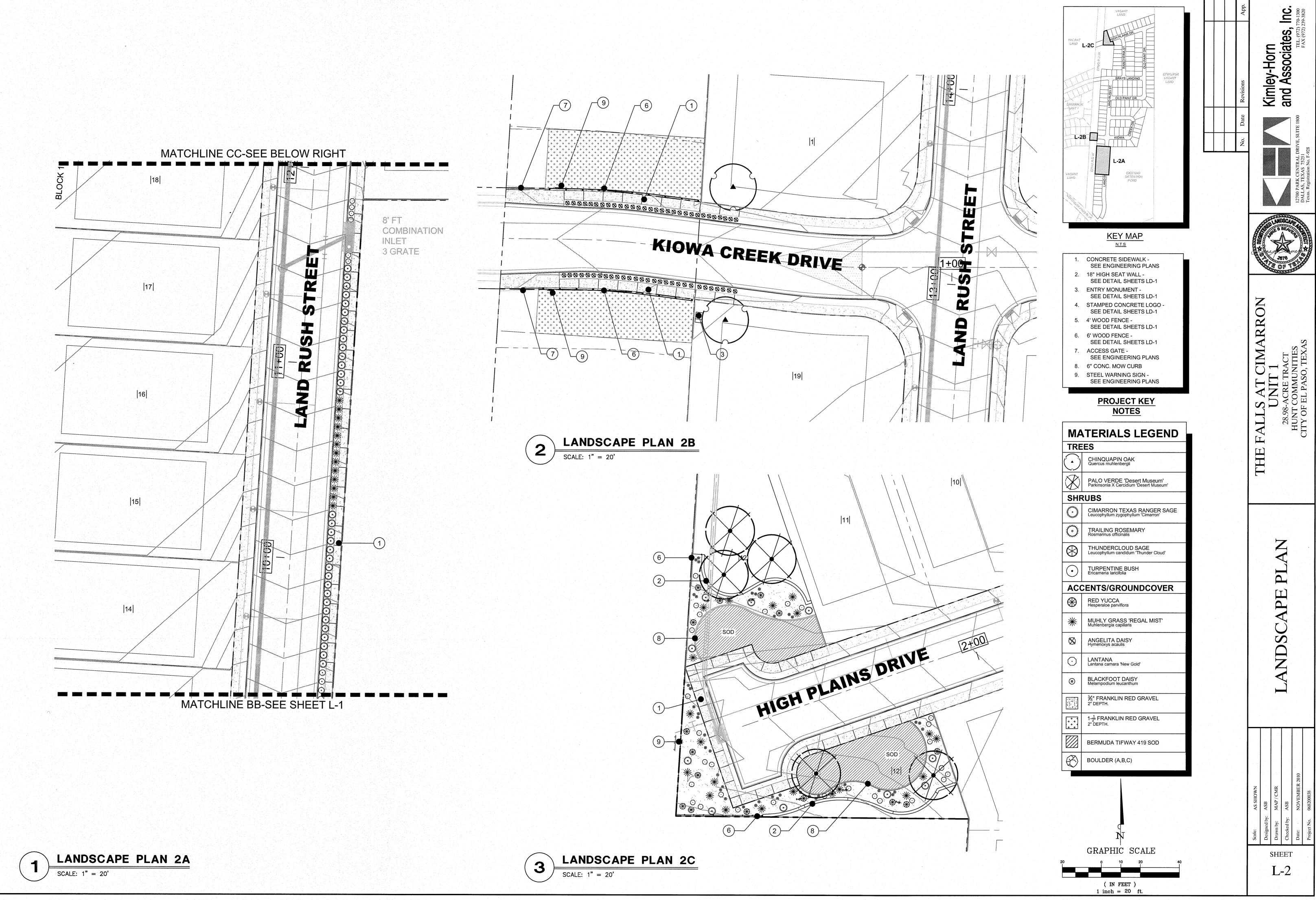
28.98-ACRE TRACT
HUNT COMMUNITIES

ERIALS LEGEND AN

Drawn by: MAP / CMR
Checked by: ASB
Date: NOVEMBER 2010
Project No. 068200038

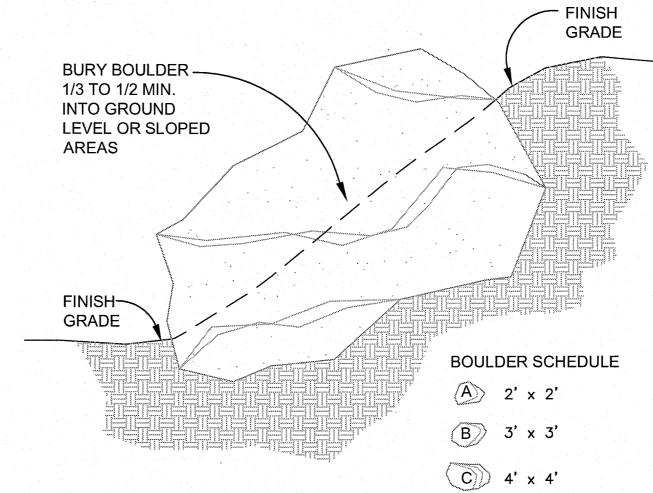
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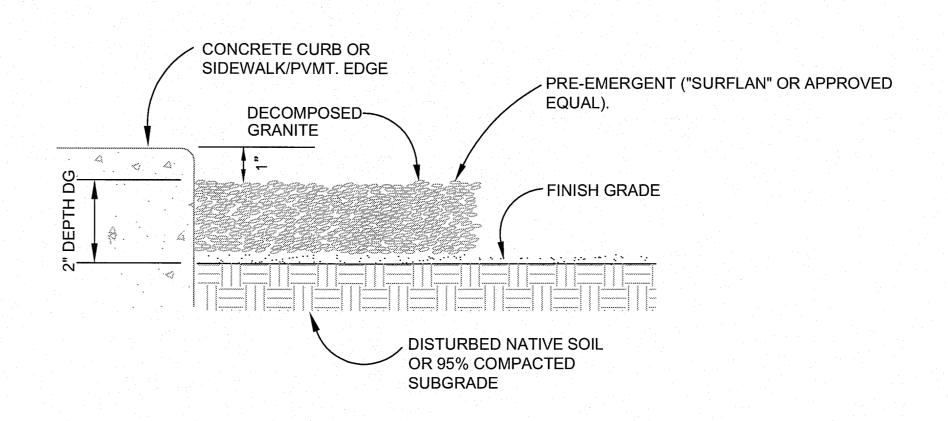


NOTES 1. PLANT ALL GROUNDVOCERS ON CENTER AND IN A TRIANGLE PATTERN. 2.DIMENSIONS "Y" EQ. .86 TIMES DIMENSION "X" THAT'S NOTED ON PLANT 3. SCHEDULE SIZE OF PLANT MATERIAL AS NOTED ON PLANT SCHEDULE

GROUNDCOVER SPACING



NOTES 1.BOULDERS TO BE NATIVE GRANITE, CLEAN AND UNSCARRED. SIZE TO BE AS



NOTES 1. APPLY PRE-EMERGENT TO FINISH GRADE BEFORE PLACING DECOMPOSED

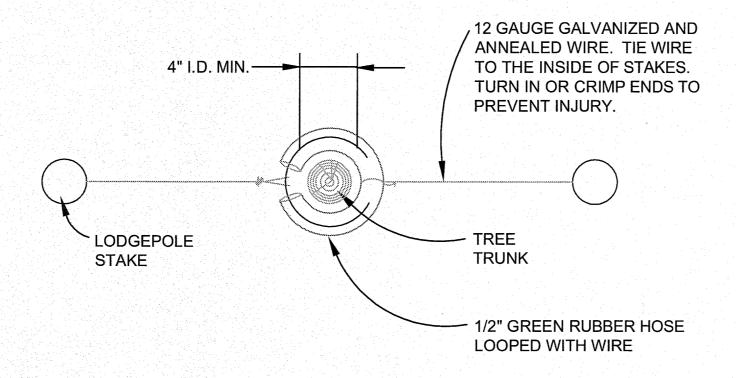
DECOMPOSED GRANITE

6 PLACEMENT
N.T.S.

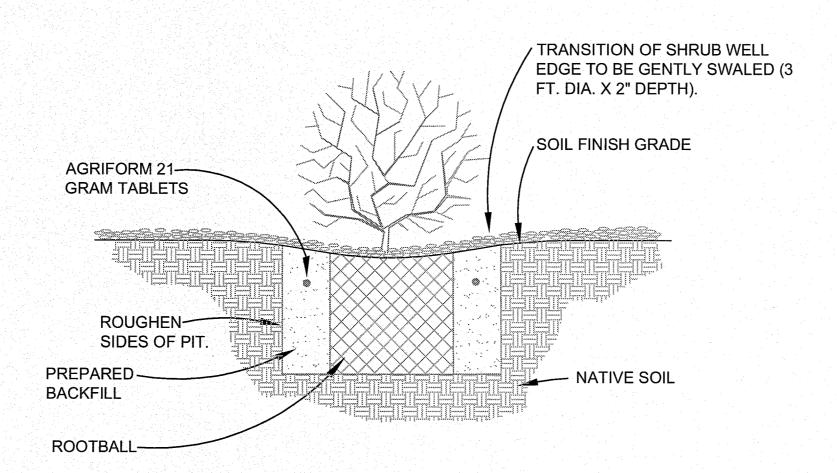
2 - 1/2" I.D. RUBBER HOSE LOOPED W/ 12 GA. DBL. STRAND GALV. & ANNEALED WIRE 2 - 2" DIA. LODGE POLE PINE STAKES - 10' HT. MIN. EMBED MIN. 3' FT. INTO HOLE TO SUPPORT MAIN TRUNK. DRIVE FIRMLY INTO SUBGRADE. ~ 2" DEPTH DECOMPOSED GRANITE. CARRY UNDER TREE CANOPY AS SHOWN — SOIL - FINISH GRADE - 8' FT. DIA. X 2" DEPTH SWALE -SMOOTH TRANSITION OF TREE WELL PREPARED SOIL BACKFILL - AGRIFORM 21 GRAM TABLETS - ROOTBALL

2.BACKFILL MATERIAL TO BE: 1/3 BARK HUMUS 2/3 EXCAVATED SOIL BY VOLUME. 3.WATERING BASIN SHALL BE GENTLE AND UNIFORM THROUGHOUT, 8' DIAMETER.

1 TREE PLANTING N.T.S.



2 TREE STAKING N.T.S.



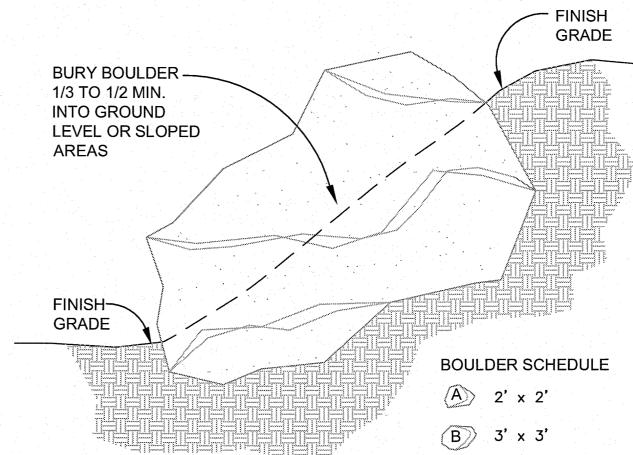
NOTES 1.PLANT PIT DIMENSIONS TO BE: 2x WIDTH AND 1.5x HEIGHT OF ROOTBALL. 2.BACKFILL MATERIAL TO BE: 1/3 BARK HUMUS 2/3 EXCAVATED SOIL BY VOLUME 3.WATERING BASIN SHALL BE GENTLE AND UNIFORM THROUGHOUT, 3' DIAMETER.

SHRUB AND GROUNDCOVER

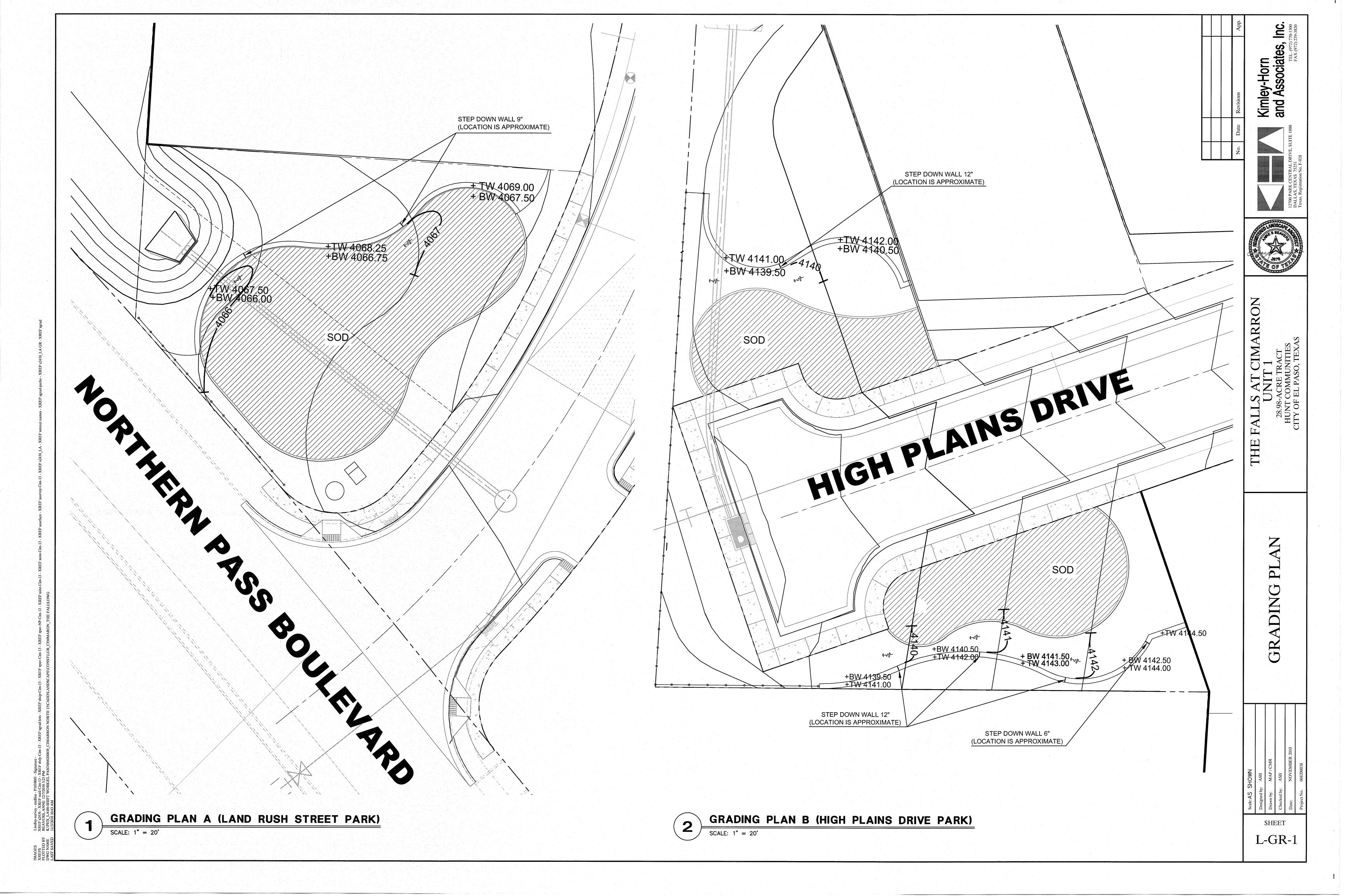
PLANTING
N.T.S.

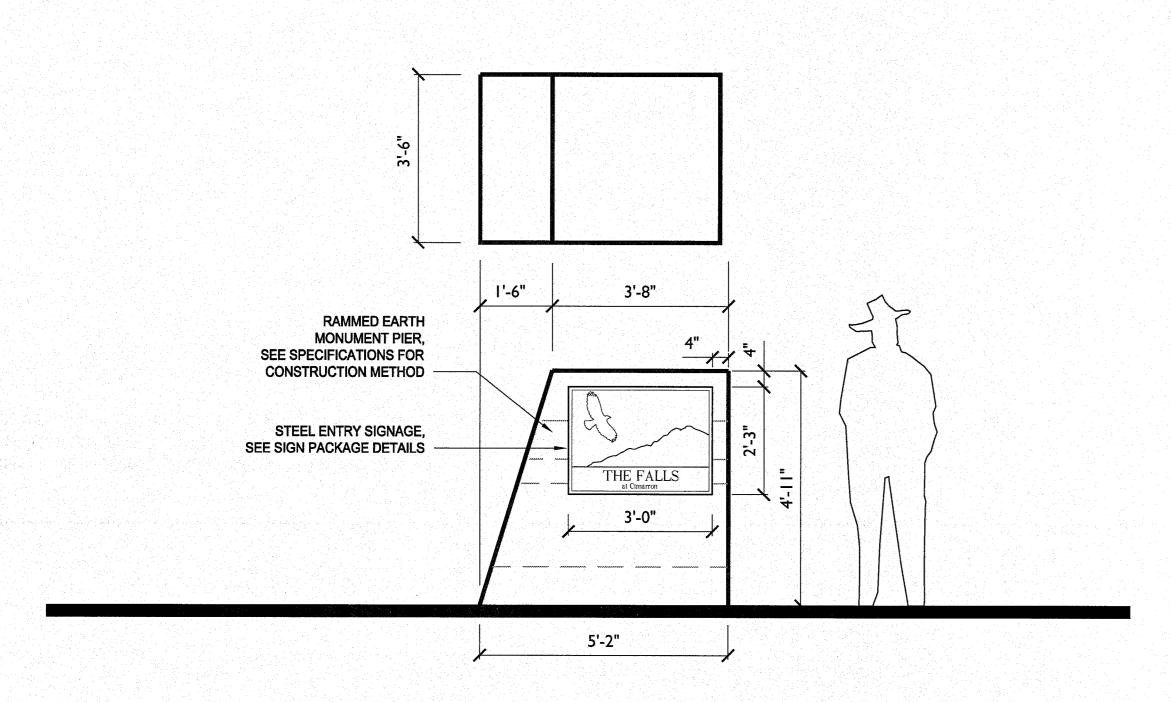
SHEET

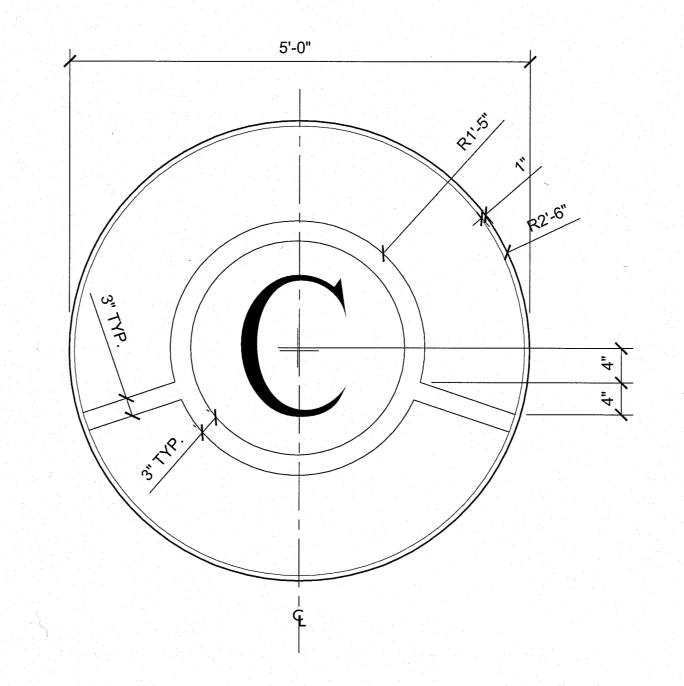
SOIL NOTES
1.PLANT PIT DIMENSIONS TO BE: 2x WIDTH AND 1.5x HEIGHT OF ROOTBALL. - FOR ALL GROUNDCOVERS-

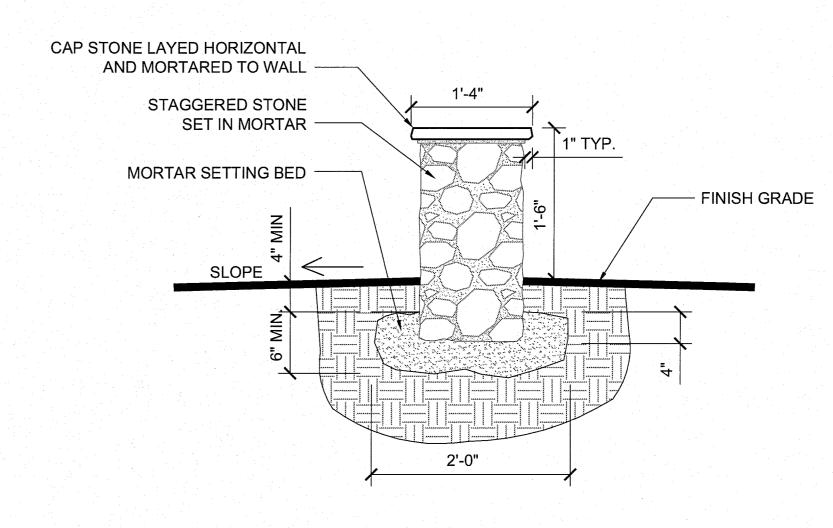


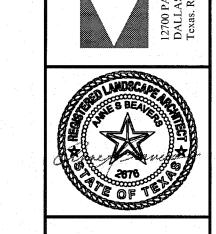
INDICATED ON PLANS.











MARRON

THE FALLS ENTRY MONUMENT PLAN AND ELEVATION

6' GAS EASEMENT WOOD FENCE ELEVATION

- 8" x 8" PYRAMID TOP POST CAP

- 2" x 6" TOP RAIL

- (2) 2" x 6" SUPPORT RAILS

2" x 4" VERTICAL RAIL
2" x 6" SUPPORT RAIL
7 2" x 4" VERTICAL RAIL

- 6" x 6" SQ. FENCE POST

SCALE: 1/2" = 1' - 0"

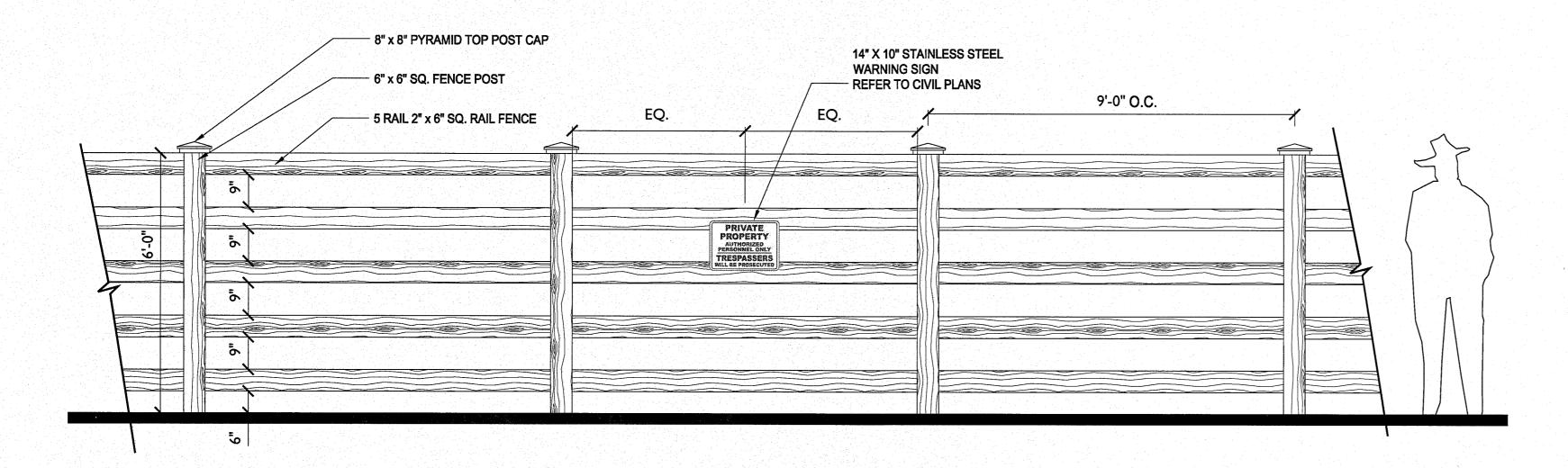
SCALE: 1/2" = 1' - 0"

CIMARRON STAMPED CONCRETE LOGO SCALE: 1" = 1' - 0"

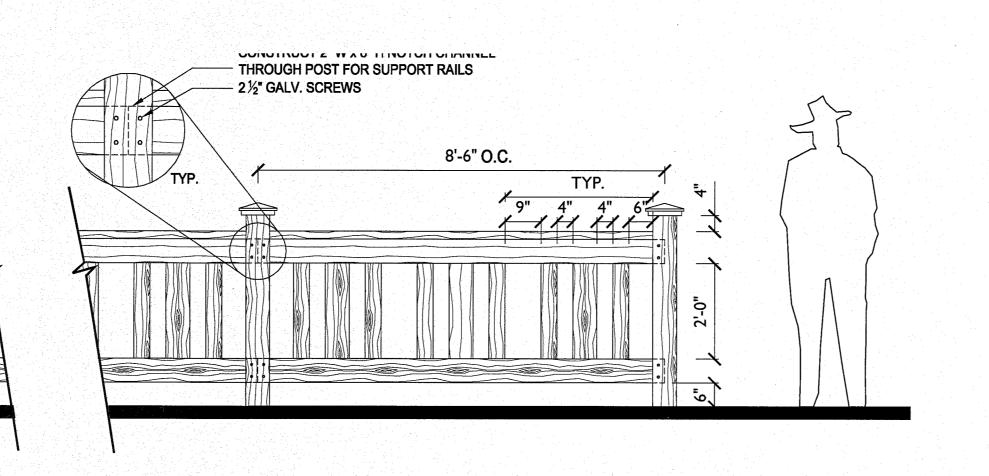
> 8" x 8" PYRAMID TOP POST CAP 21/2" GALV. SCREWS 2" x 6" FENCE RAILS 6" x 6" POSTS FINISH GRADE ---SLOPE CONC. TO DRAIN NOTE: 8 16d GALV NAILS ALL WOOD TO BE P.T. ALL FASTENERS POST EXTEND TO BE GALV. BEYOND CONC. COMPACTED SUBGRADE

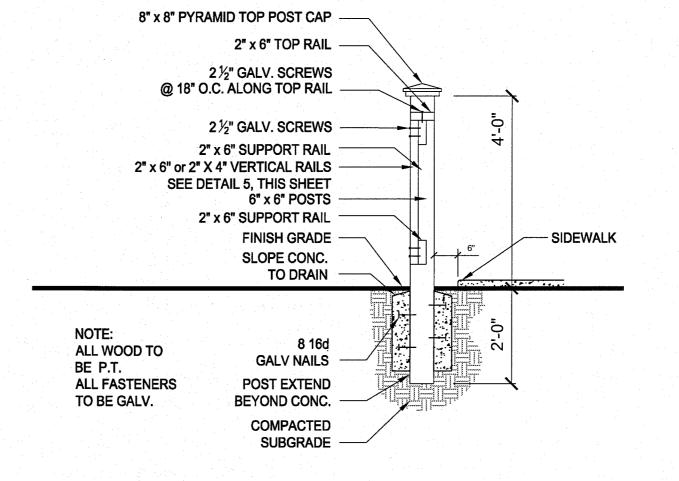
18" HIGH SEAT WALL

SCALE: 1'' = 1' - 0''



6' GAS EASEMENT WOOD FENCE SECTION SCALE: 1/2" = 1' - 0"





4' ENTRY WOOD FENCE ELEVATION SCALE: 1/2" = 1' - 0"

4' ENTRY WOOD FENCE SECTION

SHEET

LD-1

ENTRY MONUMENT FENCE DETAILS

SCALE: 1/2" = 1' - 0"

IRRIGATION CONTROLLER SCHEDULE								
VALVE #/ TYPE	SIZE/GPM	CONTROLLER TYPE						
A-1/ TREE	1"/ 0.75 GPM	LEITX						
A-2/ SHRUB	1"/ 1.08 GPM	LEIT X						
A-3/ TURF	1-1/2"/ 14.39 GPM	LEITX						
A-4/ TURF	1-1/2"/ 9.62 GPM	LEIT X						
B-1/ SHRUB	1"/ 1.95 GPM	LEIT-2						
C-1/ SHRUB	1"/ 1.5 GPM	LEIT-2						
D-1/ SHRUB	1"/ 1.0 GPM	LEIT-2						
D-2/ TREE	1"/ 1.0 GPM	LEIT-2						
E-1/ TURF	1-1/2"/ 7.32 GPM	LEITX						
E-2/ TREE	1"/1.5 GPM	LEITX						
E-3/ SHRUB	1"/ 0.65 GPM	LEITX						
E-4/ TURF	1-1/2"/ 10.21 GPM	LEITX						
E-5/ TREE	1"/ 0.5 GPM	LEITX						
E-6/ SHRUB	1"/ 1.56 GPM	LEITX						

	SYM	BOTANICAL NAME	COMMON NAME	F SIZE	low per Outle (GPM)	t Type of Bubbler/ RWS	Number of Ports	Total Flow pe Plant (GPM)
TREES		Quercus muhlenbergii	Chinquapin Oak	24" Box	0.5 GPM	RWS	1	0.5
	X	Parkinsonia X Cercidium 'Desert Museum'	Palo Verde 'Desert Museum'	36" Box	0.25 GPM	RWS	1	0.25
	SYM	BOTANICAL NAME	COMMON NAME	F	low per Outle (GPH)	t Qty and Type of Emitter	Number of Ports Open	Total Flow po
SHRUBS	0	Leucophyllum zygophyllum 'Cimarron'	Cimarron Texas Range Sage	or 5 Gal.	1 GPH	1 Single- Outlet emitters	1. 1	1
Ŗ	0	Rosmarinus officinalis	Rosemary	5 Gal.	1 GPH	1 Single- Outlet emitters	1	1
	⊛	Leucophyllum candidum 'Thunder Cloud'	Thundercloud Sage	5 Gal.	1 GPH	1 Single- Outlet emitters	1	1 1
	0	Ericameria laricifolia	Turpentine Bush	5 Gal.	1 GPH	1 Single- Outlet emitters	H _{ar} . .1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
VERS	₩	Hesperaloe parviflora	Red Yucca	5 Gal.	1 GPH	1 Single- Outlet emitters	1	1
GROUNDCOVERS	*	Muhlenbergia capillaris	Muhly Grass 'Regal Mis	st' 5 Gal.	2 GPH	1 Single- Outlet emitters	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	2
	⊗	Hymenoxys acaulis	Angelita Daisy	5 Gal.	1 GPH	1 Single- Outlet emitters	1	1
ACCENTS/	0	Lantana camara 'New Gold'	Lantana	5 Gal.	1 GPH	1 Single- Outlet emitters	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
	(H)	Melampodium leucanthum	Blackfoot Daisy	5 Gal.	1 GPH	1 Single- Outlet emitters	1	1

IRRIGATION NOTES

- 1. IRRIGATION CONTRACTOR SHALL TEST EXISTING STATIC PRESSURE ON SITE PRIOR TO CONSTRUCTION. SHOULD EXISTING SITE PRESSURE BE BELOW 60 PSI, CONTRACTOR SHALL CONTACT THE IRRIGATION DESIGNER PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2. COORDINATE IRRIGATION INSTALLATION WITH PLANTING PLAN AND SITE CONDITIONS TO PROVIDE COMPLETE COVERAGE WITH MINIMUM OVERSPRAY. THE IRRIGATION CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO ENSURE PROPER COVERAGE AT NO ADDITIONAL COST TO THE OWNER.
- 3. THE IRRIGATION CONTRACTOR WILL SECURE ALL REQUIRED PERMITS AND PAY ALL ASSOCIATED FEES UNLESS OTHERWISE NOTED. ALL LOCAL CODES SHALL PREVAIL OVER ANY DISCREPANCIES HEREIN.
- 4. LATERAL PIPE SHALL BE INSTALLED AT A MINIMUM DEPTH OF 12 INCHES. MAINLINE PIPE AND WIRES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 18 INCHES.
- 5. 24 VOLT VALVE WIRE SHALL BE A MINIMUM OF 16 GAUGE, U.L. APPROVED FOR DIRECT BURIAL, SINGLE CONDUCTOR "IRRIGATION
- 6. VALVE BOXES SHALL BE INSTALLED FLUSH WITH GRADE, WITH THREE INCHES OF CLEAN PEA GRAVEL LOCATED BELOW THE VALVE. USE 10" ROUND VALVE BOXES FOR ELECTRIC VALVES AND QUICK COUPLING VALVES UNLESS NOTED OTHERWISE, D.C.A. SHALL BE BOXED ACCORDING TO LOCAL CODES.
- 7. USE PVC SWING JOINT ASSEMBLIES TO CONNECT ALL SPRAY HEADS AND ROTOR HEADS.
- 8. CONTRACTOR IS TO CONTACT APPROPRIATE AUTHORITIES AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
- 9. SLEEVES SHALL BE INSTALLED BY GENERAL CONTRACTOR. SLEEVE MATERIAL SHALL BE PVC, SCHD. 40. CONTRACTOR SHALL EXTEND SLEEVES ONE FOOT BEYOND EDGE OF ALL PAVEMENT.
- 10. LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO SUPPLY OWNER AND OWNERS CONTRACTOR WITH ALL EQUIPMENT SPECIFICATIONS AND MAINTENANCE GUIDELINES.
- 11. LICENSED IRRIGATION CONTRACTOR SHALL ADJUST SPRAY NOZZLES FOR "HEAD-TO-HEAD" COVERAGE AND ADJUST FOR MINIMUM OVERSPRAY ONTO PAVEMENT. NO OVERSPRAY IS PERMITTED ONTO STREETS OR SIDEWALK. IN PARK AREAS, THE TURF HEADS ARE ALIGNED TO PROVIDE 10' OVERLAP AS RECOMMENDED BY ITEM 18, DIVISION 2, CITY OF EL PASO DESIGN AND CONSTRUCTION STANDARDS (ADOPTED BY COUNCIL JUNE 3, 2008).
- 12. IRRIGATION CONTRACTOR SHALL SUPPLY AND CONSTRUCT IRRIGATION SYSTEM WITH ALL MATERIALS AND PER MANUFACTURER SPECIFICATIONS SHOWN ON THIS PLAN. IF CONTRACTOR PREFERS MATERIALS THAT DIFFER FROM THE THIS PLAN, THEY SHALL BE REVIEWED BY THE IRRIGATION DESIGNER PRIOR TO CONSTRUCTION.

SHEET LEGEND

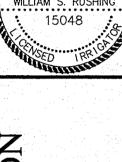
IRRIGATION LEGEND AND NOTES

IRRIGATION PLAN SHEETS IR-2 -IR-3

ID-1-ID-2 IRRIGATION DETAIL SHEETS



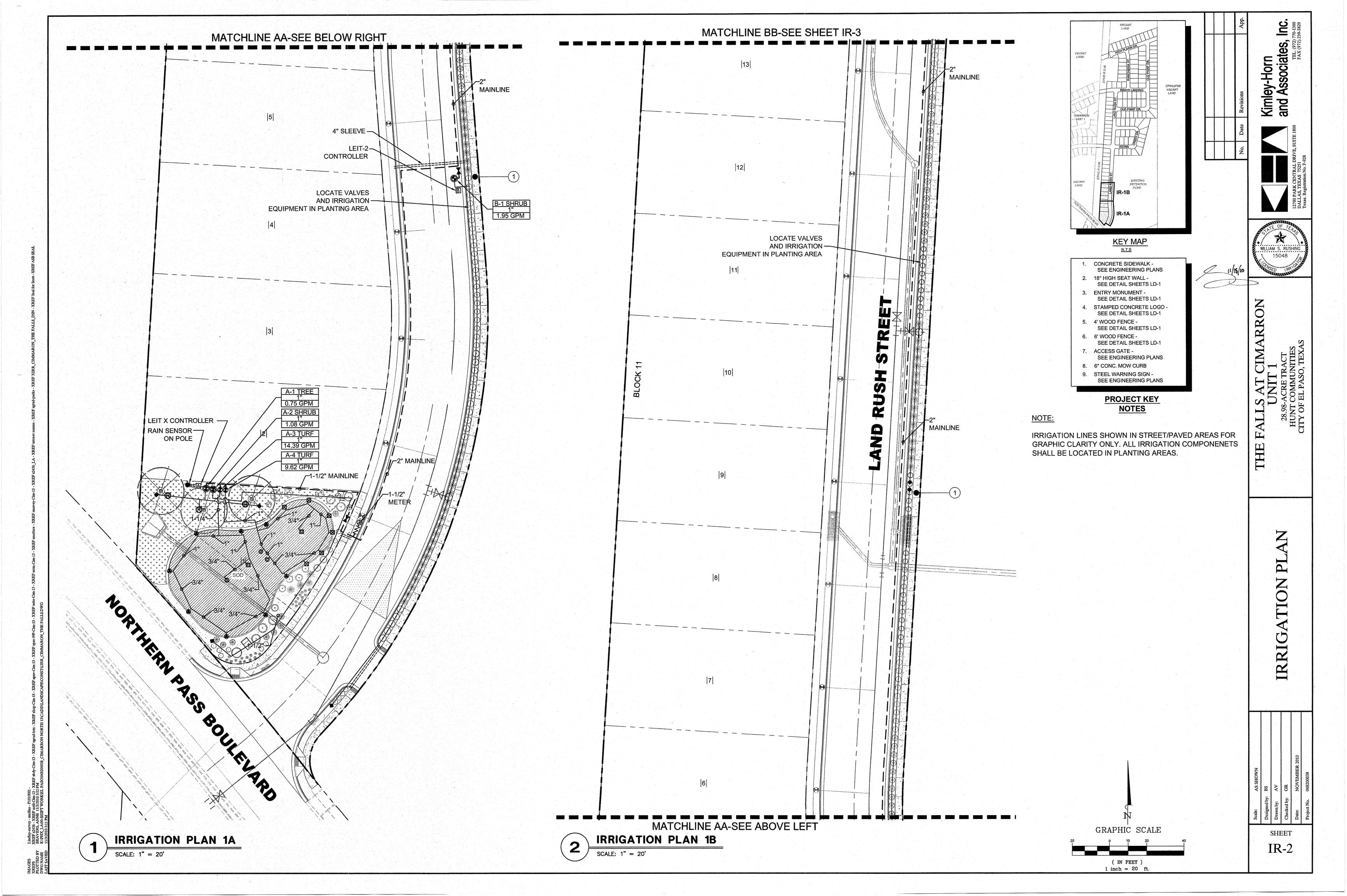


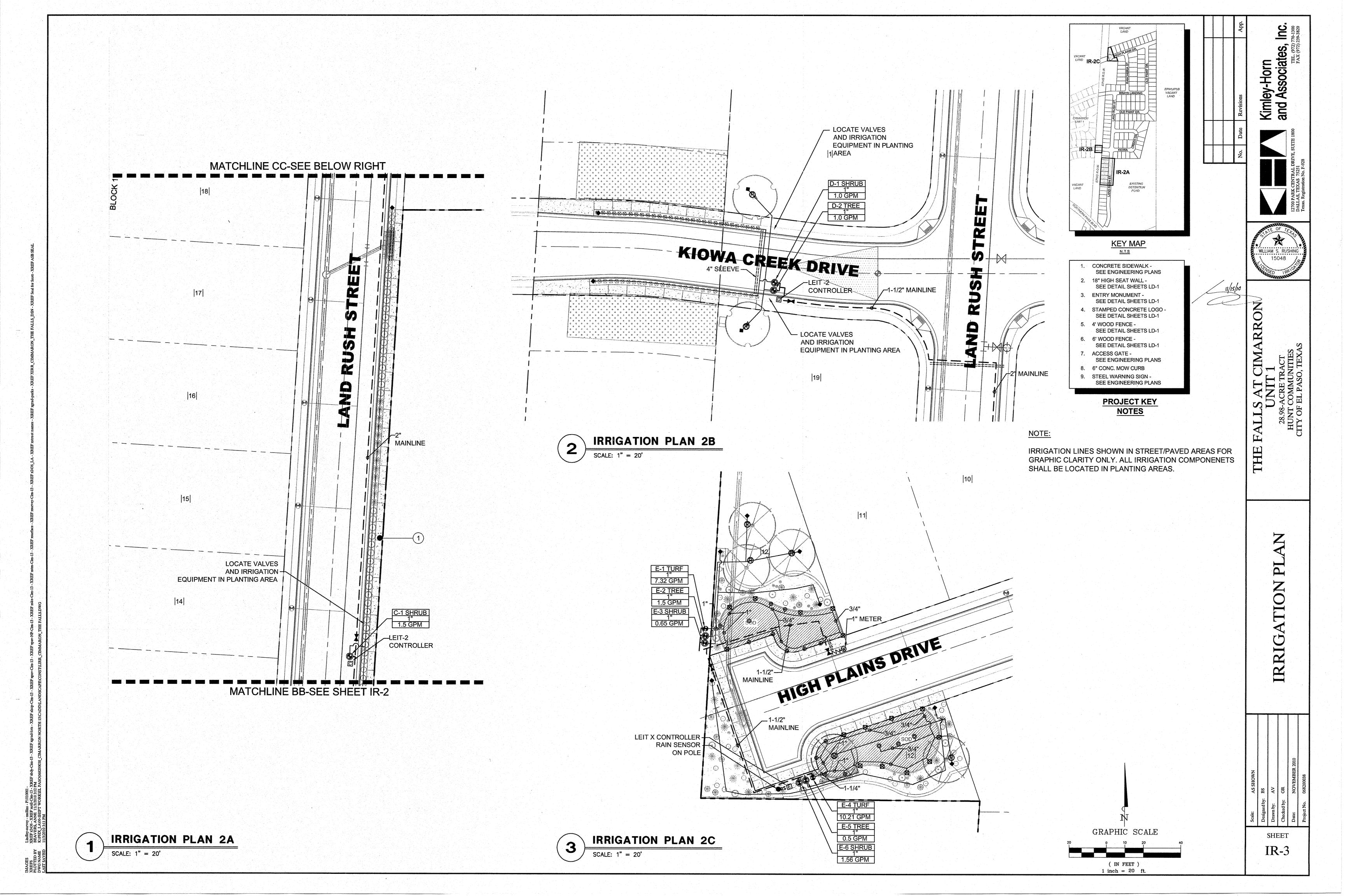


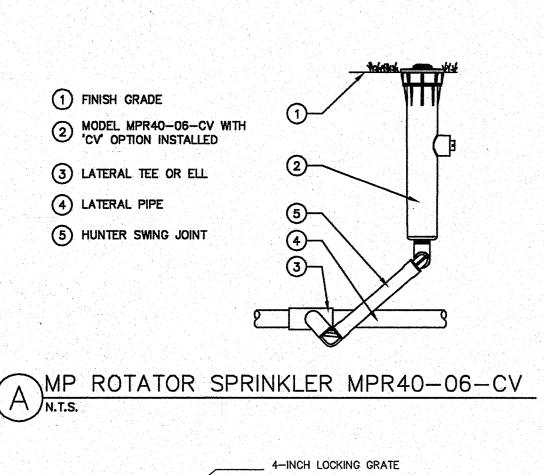
RRIG

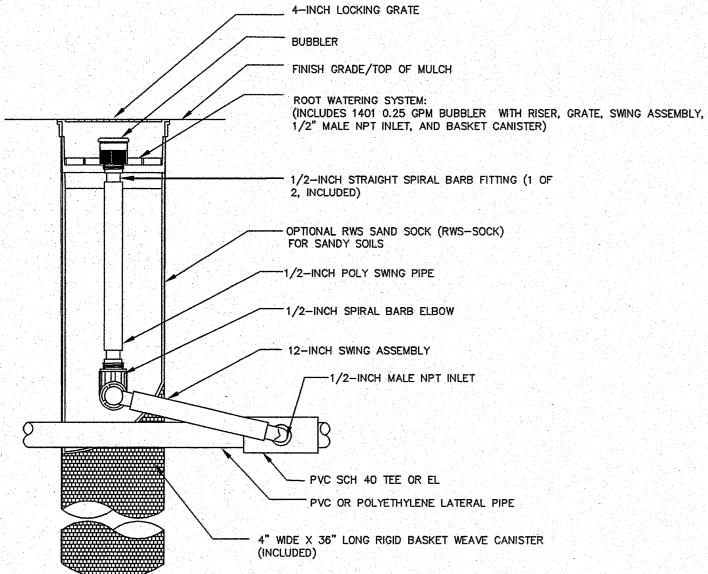
NOTE:

IRRIGATION LINES SHOWN IN STREET/PAVED AREAS FOR GRAPHIC CLARITY ONLY. ALL IRRIGATION COMPONENETS SHALL BE LOCATED IN PLANTING AREAS.





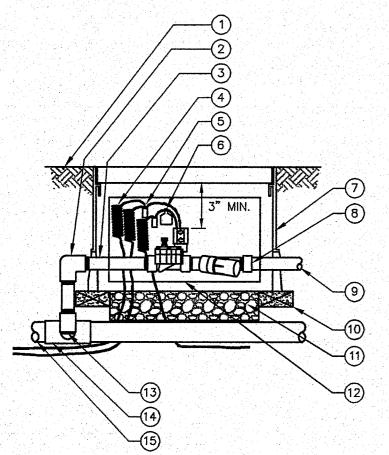




NOTES:
1. 4" GRATE IS ALSO AVAILABLE IN PURPLE (RWS-GRATE-P). INSTALL PRODUCT SO THAT THE GRATE IS EVEN WITH FINISH GRADE OR TOP OF MULCH. 3. SAND SOCK (RWS-SOCK) IS 34" IN LENGTH TO COVER MESH BASKET AREA. 4. WHEN INSTALLING IN EXTREMELY HARD OR CLAY SOILS, ADD 3/4" GRAVEL UNDER AND AROUND THE UNIT TO ALLOW FASTER WATER INFILTRATION AND ROOT PENETRATION.

5. ONCE RWS HAS BEEN INSTALLED FILL THE BASKET WITH PEA GRAVEL BEFORE LOCKING LID.

ROOT WATERING SYSTEM



(1) FINISHED GRADE (2) PVC SCH 40 ELL

(3) PVC SCH 80 NIPPLE (LENGTH AS REQUIRED, 1 OF 2)

NTS

4) 30-INCH LINEAR LENGTH OF WIRE, COILED (5) WATERPROOF CONNECTION:

RAIN BIRD SPLICE-1 (1 OF 2) (6) ID TAG: RAIN BIRD VID SERIES

7 VALVE BOX WITH COVER: RAIN BIRD VB-STD (8) PVC SCH 40 FEMALE ADAPTER

(9) LATERAL PIPE

(10) BRICK (1 OF 4) (11) 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

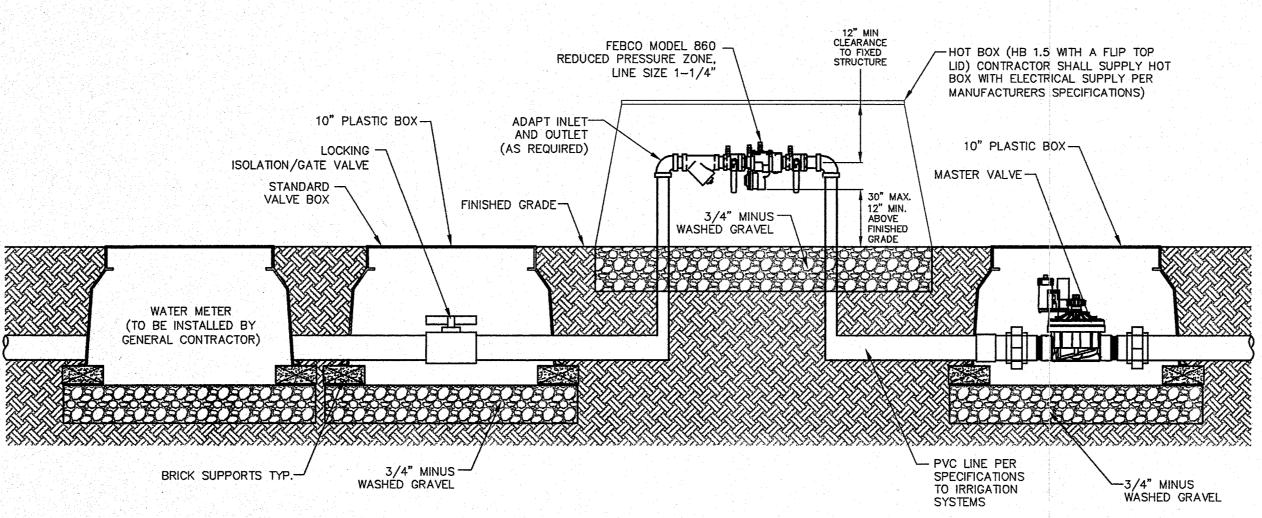
(12) CONTROL ZONE KIT: RAIN BIRD XCZ-100-PRF (INCLUDED DV-100 VALVE, PRF-100 PRESSURE REGULATING FILTER) (13) PVC SCH 40 NIPPLE

(2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL (14) PVC SCH 40 TEE OR ELL

(15) PVC MAINLINE

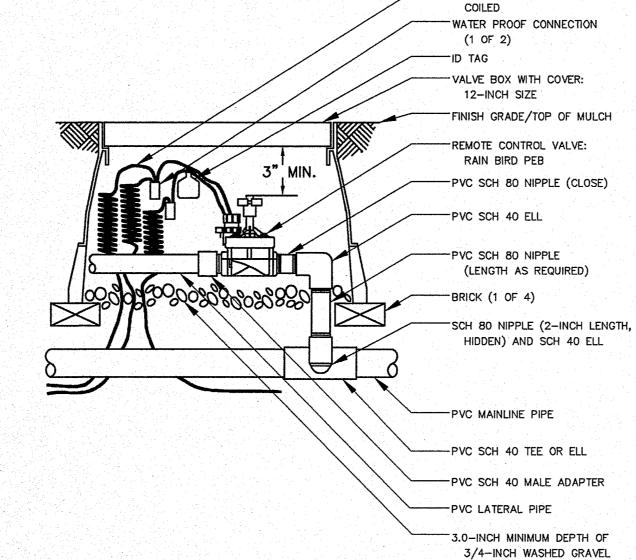
TO REPLACE INLINE WYE FILTERS. USE REPLACEMENT FILTER ELEMENTS RAIN BIRD MODELS RBY-150MX OR RBY-200MX.

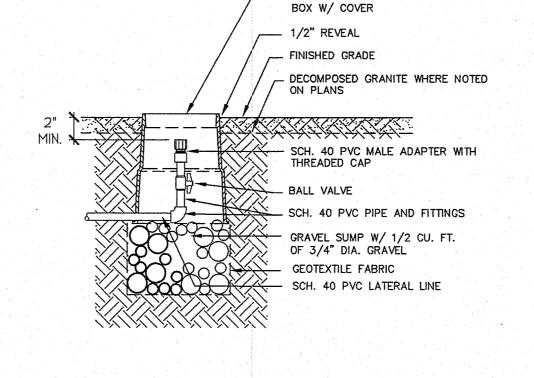
1" CONTROL ZONE KIT WITH PRESSURE REGULATING FILTER RAIN BIRD PEB-SIZE PER PLAN



----30-INCH LINEAR LENGTH OF WIRE,

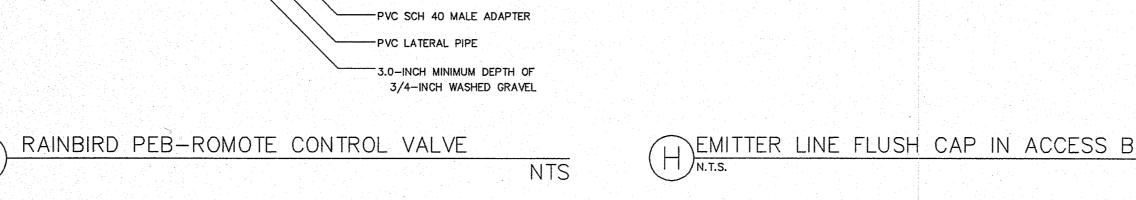
REDUCED PRESSURE ZONE BACKFLOW PREVENTER

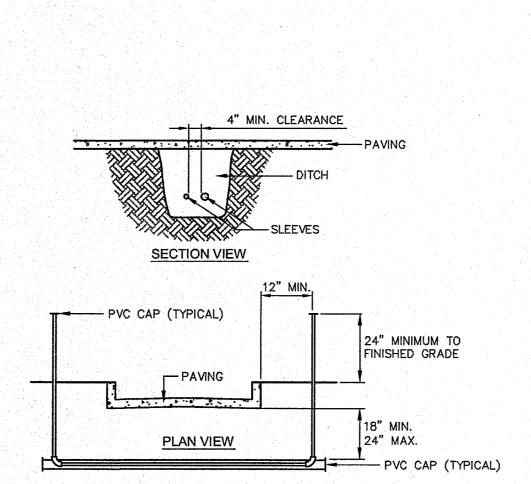




- 10" ROUND, REINFORCED PLASTIC ACCESS

PEMITTER LINE FLUSH CAP IN ACCESS BOX





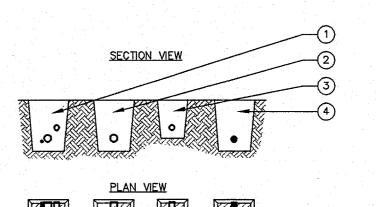
1. ALL IRRIGATION SLEEVES TO BE SCHEDULE 40 PVC.

2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.

3. WHERE THERE IS MORE THAN ONE SLEEVE. EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISHED GRADE.

4. MECHANICALLY TAMP TO 95° PROCTOR.

SLEEVE DETAIL



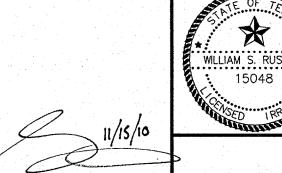
1) MAINLINE, LATERAL AND WIRING IN THE SAME TRENCH (2) MAINLINE PIPE (3) LATERAL PIPE

(4) WRING IN CONDUIT (5) TIE A 24-INCH LOOP IN ALL WRING AT CHANGES OF DIRECTION OF 30° OR GREATER. UNTIE AFTER ALL CONNECTIONS HAVE BEEN MADE.

6 ALL SOLVENT WELD PLASTIC PIPING TO BE SNAKED IN TRENCH AS SHOWN. 7 RUN WRING BENEATH AND BESIDE MAINLINE. TAPE AND BUNDLE AT 10-FOOT INTERVALS.

1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH SCHD. 40 PVC TWICE THE DIAMETER OF THE PIPE OR WITH BUNDLE WITHIN. 2. FOR PIPE AND WIRE BURIAL DEPTHS SEE SPECIFICATIONS.

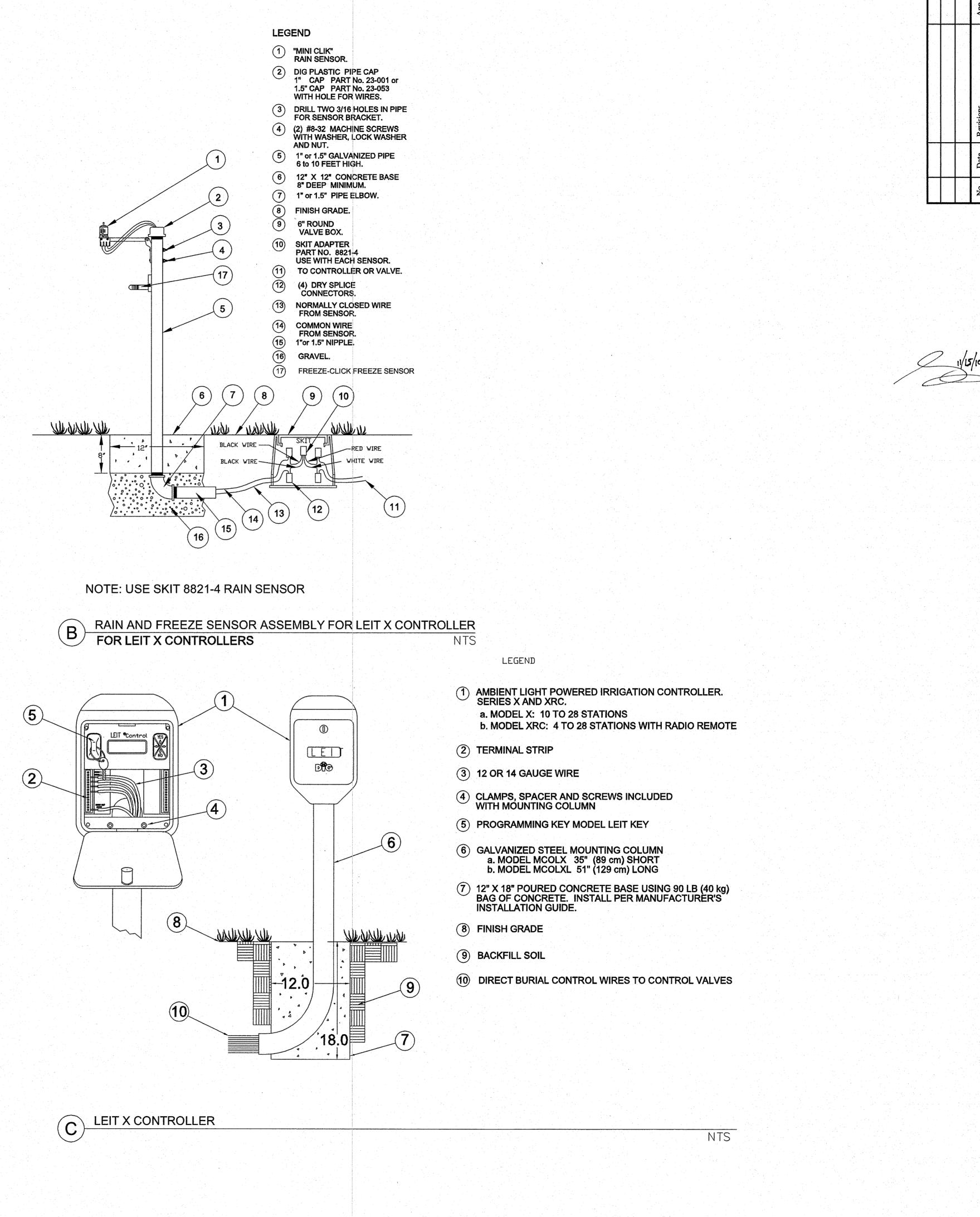
PIPE AND WIRE TRENCHING



CIMARRON

Kimley-Horn and Associate

山



LEGEND

2 SENSOR WIRES

4 FINISH GRADE TOP.

5 DIG VALVE MODEL 3/4" 305DC - 075 1" 305DC - 100

(8) PVC LATERAL LINE.

SIDE FEED LAYOUT

CONTROLLER LEIT-2 ET VALVE BOX MOUNTING INSTALLATION

3 LEIT 2 ET WITH VALVE BOX MOUNTING DOME

7 PVC SCH 40 MALE ADAPTER.

(9) BRICK SUPPORT AT EACH CORNER.

10 PEA GRAVEL SUMP - MINIMUM 3".

12 BACK-UP NPT PVC BALL VALVE.

1) DRY SPLICE CONNECTORS

(13) PVC SCH 40 90 DEGREE ELL.

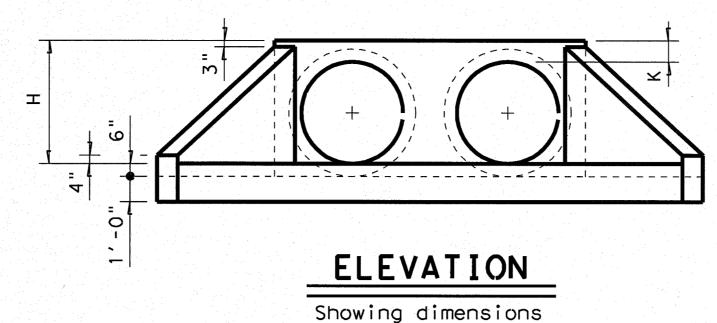
(14) SCH 40 TEE.

SHEET

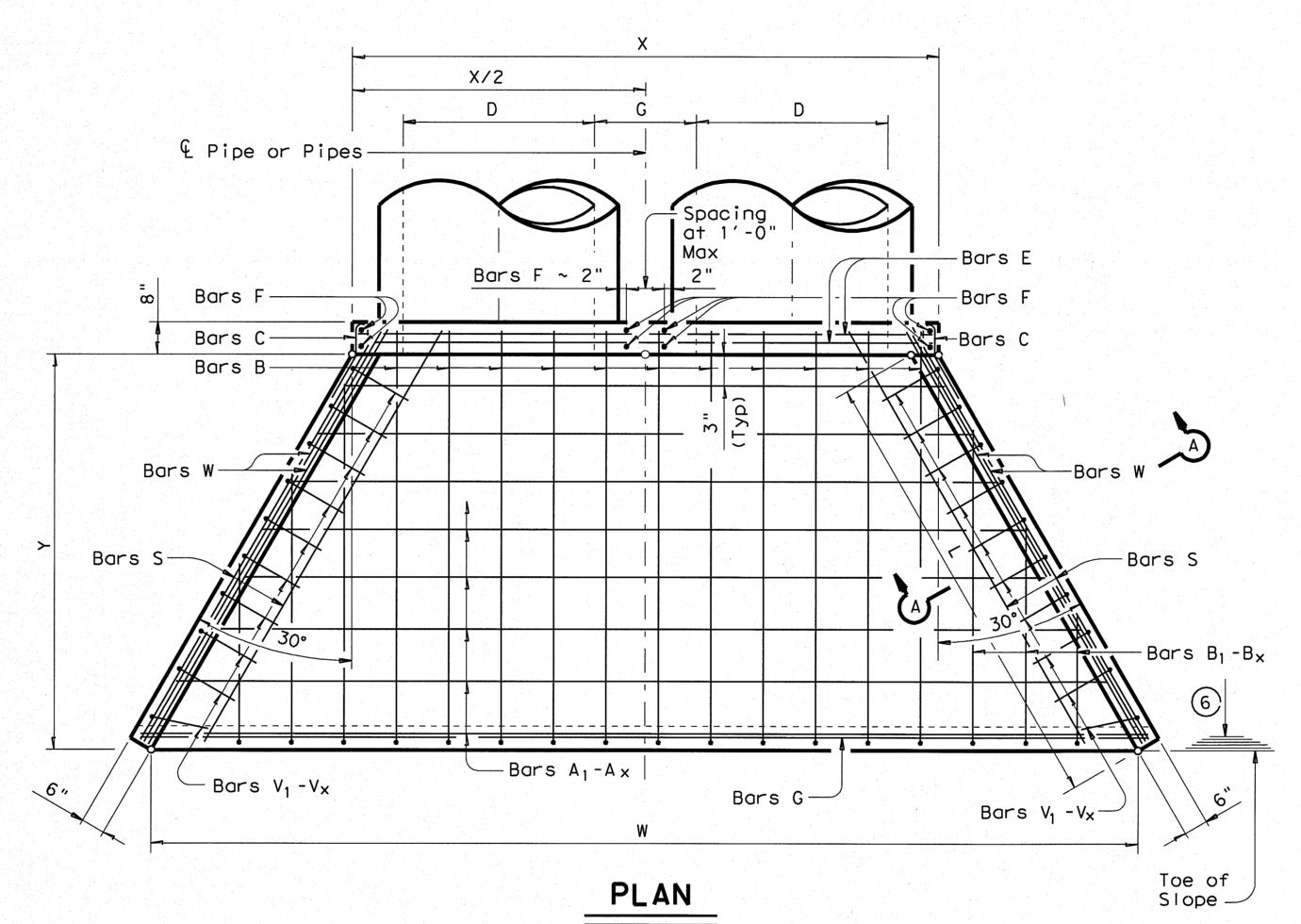
Kimley-Horn and Associate

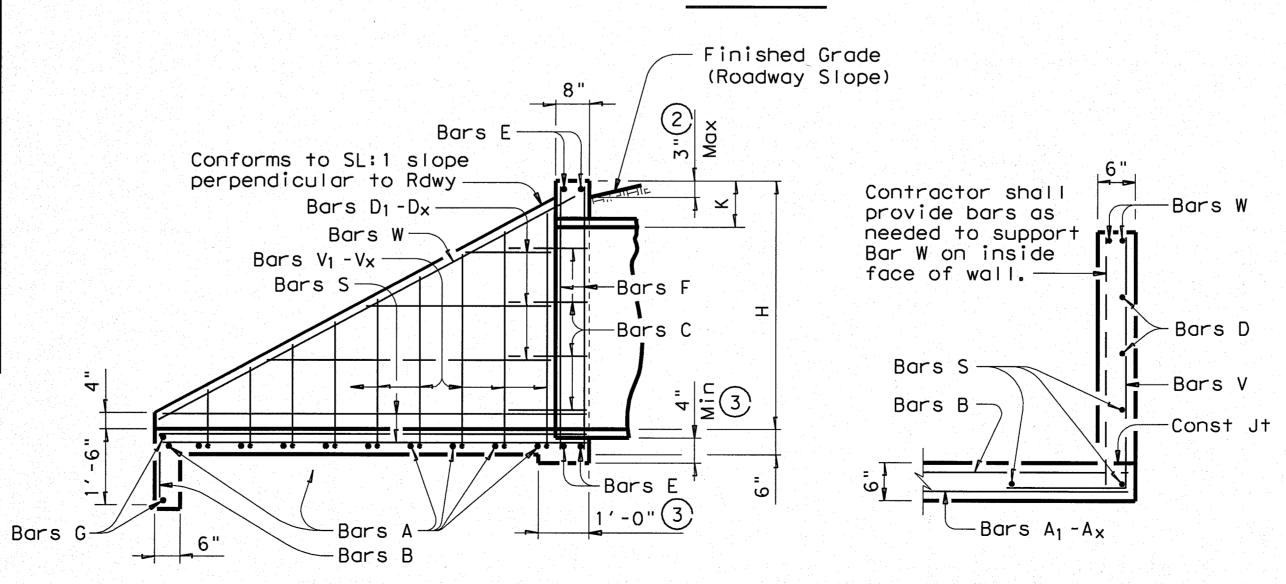
SLOPE	A OF PE, D		Values	for one P	ipe I		1 4 1 5 1 T	Values to for each o	iddt' I	Pip
SL	DI PI	W	X	Y	Ĺ	Reinf (Lbs)		X and W	Reinf (Lbs)	
	12"	4' - 7 1/2"	2' - 6"	2'-10"	3' - 3 1/4"	84	0.6	1'- 9"	20	0.2
	15"	5' - 5 3/4"	2'- 9 1/2"	3'- 4"	3'-10 1/4"	99	0.7	2' - 2"	24	0,
	18"	6' - 4 1/4"	3'-1"	3′-10"	4′- 5"	120	0.9	2′-8"	32	0.
	21"	7' - 2 3/4"	3' - 4 1/2"	4'- 4"	5'-0"		1,1	3′-1"	43	0,4
	24"	8' - 2 1/2"	3'-9 1/2"	4′-10"	5′- 7"	* * * * * *	1.3	3'-7"	50	0.5
	27"	9' - 1"	4'-1"	5'- 4"	6' - 2"	173	1.5	3′-11"	56	0.6
_	30"	9'-11 1/2"	4' - 4 1/2 "	5′-10"	6' - 8 3/4"	197	1.7	4' - 4"	65	0.8
2.	33" 36"	10'-10" 11'- 8	4'-8"	6′- 4" 6′-10"	7'-3 3/4" 7'-10 3/4"	216	2.0	4' - 8" 5' - 1"	71	0.9
	42"	13' - 5 1/4"	5'-6 1/2"	7'-10"	9'-01/2"	241	2.2	5'-10"	81 97	1,(1,3
	48"	15' - 9"	6' - 1 1/2"	9' - 4"	10' - 9 1/4"	350	3.8	6'-7"	117	1.7
	54"	17' - 5 3/4"	6' - 8 1/2"	10' - 4"	11'-11 1/4"	415	4.5	7' - 6"	151	2,1
	60"	19' - 2 3/4"	7' - 3 1/2"	11'- 4"	13'-1"		5.3	8' - 3"	174	2.5
	66"	20'-11 1/2"	7'-10 1/2"	12'- 4"	14'- 3"	530	6.2	8'-9"	194	2.9
	72"	22' - 8 1/2"	8' - 5 1/2"	13' - 4"	15' - 4 3/4"	587	7.1	9' - 4"	213	3.3
	12"	6'- 3"	2′ - 6"	4'- 3"	4'-11"	114	0.8	1'-9"	22	0.2
	1.5 "	7′ - 5"	2'- 9 1/2"	5'- 0"	5'-91/4"	133	1,1	2' - 2"	28	0.3
	18"	8' - 6 3/4"	3′-1"	5′- 9"	6' - 7 3/4"	166	1.3	2′- 8"	37	0.5
	21"	9' - 8 3/4"	3' - 4 1/2"	6′ - 6"	7' - 6"	189	1.6	3′ - 1"	48	0.6
	24"	11'- 0"	3'-9 1"	7' - 3"	8' - 4 1/2"	221	2.0	3′- 7"	58	0.7
	27"	12' - 2"	4.5.1	8'-0"	9' - 2 3/4"	245	2.3	3′-11"	67	0.8
-	30"	13' - 4"	4'- 4 1/2"	8'- 9"	10' - 1 1/4"	287	2.7	4' - 4"	77	1.0
3:	33" 36"	14' - 5 ¾" 15' - 7 ¾"	4'-11 1/2"	9'- 6" 10'- 3"	10'-11 3/4"	310	3.1	4'- 8" 5'- 1"	84	1.2
	42"	4 = 4 4 4 1 / 11	5' - 6 1/2"	10'- 3" 11'- 9"	13' - 6 3/4"	343	3.5 4.5	5'-10"	96	1,4
	48"	$17' - 11 \frac{1}{2}$ " $21' - 1 \frac{3}{4}$ "	6' - 1 1/2"	14'- 0"	16' - 2"	527	6,1	6' - 7"	146	2.
	54"	23' - 5 1/2"	6' - 8 1/2"	15'- 6"	17'-10 3/4"	618	7.3	7′-6"	186	2,9
	60"	25' - 9 1/4"	7' - 3 1/2"	17'- 0"	19' - 7 1/2"	707	8.7	8'-3"	219	3.4
	66"	28' - 1"	7'-10 1/2"	18'- 6"	21'- 4 1/4"	797	10.1	8'-9"	242	3.9
	72"	30' - 4 3/4"	8'-5 1/2"	20'- 0"	23' - 1 1/4"	910	11,7	9' - 4"	272	4,4
	12"	7'-10 3/4"	2'-6"	5′-8"	6' - 6 1/2"	144	1,1	1'- 9"	24	0.3
	15"	9'- 4"	2'- 9 1/2"	6′-8"	7' - 8 1/2"	177	1.5	2'-2"	32	0.4
	18"	10' - 9 ½"	3′ - 1"	7′ - 8"	8'-10 1/4"		1.9	2'-8"	42	0.5
	21"	12' - 2 3/4"	3'- 4 1/2"	8'-8"	10'-0"	254	2.3	3' - 1"	57	0.
	24"	13'- 9 ½"	3'- 9 ½"	9'-8"	11' - 2"	295	2.8	3′ - 7"	67	0, 9
	27" 30"	15' - 3" 16' - 8 1/4"	4' - 1" 4' - 4 ½"	10'- 8"	12' - 3 3/4"	328 379	3,3	3'-11" 4'- 4"	77	1.(
	33"	10/_ 1 3/. 11	4'-8"	12' - 8"	144 7 1/ "	417	3.8 4.5	4 - 4	89	1,3
4:	36"	19' - 7"	4'-11 1/2"	13' - 8"	15' - 9 1/4"	464	5.1	5′-1"	115	1,
	42"	22' - 5 3/4"	5' - 6 1/2"	15'- 8"	18' - 1"	575	6,5	5'-10"	141	2.1
	48"	26' - 6 1/4"	6'-1 1/2"	18' - 8"	21'- 6 3/4"	720	8.9	6'-7"	175	2.8
	54"	29' - 5"	6' - 8 1/2"	20' - 8"	23'-10 1/4"	863	10.7	7′ - 6"	226	3.6
	60"	32' - 3 ¾ "	7'- 3 1/2"	22' - 8"	26' - 2"	984	12,7	8'-3"	264	4,3
	66"	35′ - 2 ½ "	7'-10 1/2"	24' - 8"	28' - 5 3/4"	1126	14.9	8'- 9"	300	4.9
	72"	38' - 1 1/4"	8'- 5 1/2"	26'-8"	30' - 9 1/2"	1283	17.3	9'- 4"	334	5,6
	12"	11' - 2"	2' - 6"	8'-6"	9'- 9 3/4"	220	1.9	1'- 9"	28	0, 4
	15" 18"	13' - 2 1/4"	2'- 9 ½" 3'- 1"	10'- 0"	11'- 6 1/2"	264	2,5	2' - 2"	37	0,5
	21"	$15' - 2 \frac{1}{2}$ " $17' - 2 \frac{3}{4}$ "	3' - 4 1/2"	13'- 0"	13' - 3 1/4"	326 381	3.2	2'- 8" 3'- 1"	50 69	0, 9
	24"	19' - 4 1/2"	3' - 9 1/2"	14'-6"	16' - 9"	447	4.8	3' - 7"	80	1.2
	27"	21' - 4 3/4"	4' - 1"	16'- 0"	18' - 5 3/4"	506	5.7	3'-11"	96	1.4
	30"	23' - 5 1/4"	4' - 4 1/2"	17' - 6"	20' - 2 1/2"	587	6.7	4'- 4"	110	1.7
9	33"	25' - 5 1/2"	4' - 8"	19'- 0"	21'-11 1/4"	667	7,8	4'-8"	127	2.0
	36"	27' - 5 3/4"	4'-11 1/2"	20' - 6"	23′ - 8"	727	9,0	5′ - 1"	144	2,3
ľ	42"	31'- 6 1/4"	5'-6 1/2"	23' - 6"	27' - 1 1/2"	914	11.5	5'-10"	179	3.0
	48"	37' - 3 ½"	6' - 1 1/2"	28'- 0"	32' - 4"	1181	15.9	6'-7"	231	4.0
	54"	41' - 4 1/4"	6' - 8 1/2"	31'- 0"	35' - 9 1/2"	1412	19.2	7′ - 6"	300	5,0
	60"	45' - 4 3/4"	7'- 3 1/2"	34' - 0"	39′ - 3"	1619	22,9	8' - 3"	353	6. (

TABLE OF VARIABLE DIMENSIONS AND QUANTITIES FOR ONE HEADWALL



- 1 Quantities shown are for concrete pipe and will increase slightly for metal pipe installations.
- 2 For vehicle safety, curbs shall project no more than 3" above finished grade. Curb heights shall be reduced, if necessary, to meet these requirements. No changes will be made in quantities and no additional compensation will be allowed for this work,
- 3 Provide a 1'-0" footing as shown where required to maintain 4" Min cover for pipes.
- Quantities shown are for one structure end only (one headwall).
- (5) Min Length = 6" + 3" $\times \left(\frac{12 \times H 7}{12 \times L}\right)$ Max Length = 12 x H - 3" x $\left(\frac{12 \times H - 7}{12 \times L}\right)$ - 1"
- 6 Lengths of wings based on SL:1 Slope along this line.

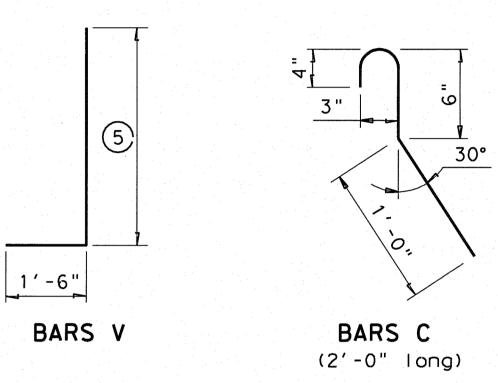




TYPICAL WING ELEVATION

SECTION A-A

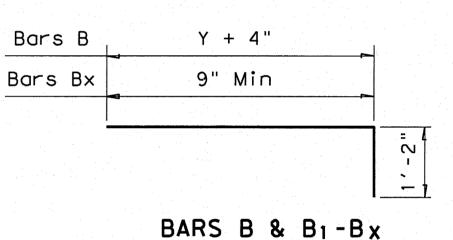
	TABI	LE OF	(4) TABLE OF					
REIN	NFORC	ING S	TEEL	CON	STANT	DIMEN	SIONS	
Bar	Size	Spa	No.	OF , D				
Α	# 4	1'-0"	~	I A I P E	G	K	Н	
В	# 3	1'-6"	~	О				
С	# 4	1′-0"	~	12"	9"	1'-0"	2'- 0"	
D	# 3	1'-0"	~	15"	11"	1'-0"	2'- 3"	
Е	# 5	~	4	18"	1'-2"	1'-0"	2'- 6"	
F	# 5	~	~	21"	1'- 4"	1'-0"	2'- 9"	
G	# 3	~	2	24"	1'- 7"	1'-0"	3'- 0"	
S	# 4		6	27"	1'-8"	1'-0"	3'- 3"	
٧	# 4	1 ′ -0"	~	30"	1′-10"	1'-0"	3'- 6"	
W	# 5	~	4	33"	1′-11"	1'- 0"	3'- 9"	
	e de la companya de l			36"	2'- 1"	1'- 0"	4'- 0"	
				42"	2'- 4"	1'-0"	4'- 6"	
				48"	2'- 7"	1'- 3"	5'-3"	
				54"	3'- 0"	1'- 3"	5'- 9"	



60" 3'- 3" 1'- 3" 6'- 3"

66" 3'- 3" 1'- 3" 6'- 9'

72" 3'- 4" 1'- 3" 7'- 3



GENERAL NOTES:

Designed according to AASHTO LRFD Specifications.

Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete,

All reinforcing steel shall be Grade 60. All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.

No bridge rails of any type may be mounted directly to these culvert headwalls.



CONCRETE HEADWALLS WITH FLARED WINGS FOR SKEW PIPE CULVERTS

CH-FW-O

FILE: chfw00se,dgn	DN: TXDOT	ck: TxDOT	DW: T	xDOT	CK:	GAF
© TxDOT February 2010	DISTRICT	FEDERAL	AID PRO	JECT		SHEET
REVISIONS						
	COUNTY		CONTROL	SECT	JOB	HIGHWAY

1. BASIS OF BEARINGS IS THE MONUMENTED CENTERLINE OF NORTHWESTERN DRIVE FROM THE PLAT OF EL PASO WEST UNIT ONE IN BOOK 57, PAGE 5, PLAT RECORDS, EL PASO COUNTY, TEXAS.

2. THE EL PASO NATURAL GAS COMPANY RIGHT—OF—WAY IS DESCRIBED JANUARY 23, 1973, IN BOOK 431, PAGE 617, DEED RECORDS, EL PASO COUNTY, TEXAS.

3. NELLIE D. MUNDY SURVEY 242 IS DESCRIBED SEPTEMBER 10, 1949, IN BOOK 945, PAGE 411, DEED RECORDS, EL PASO COUNTY, TEXAS.

4. THE SOUTH 1/2 OF NELLIE D. MUNDY SURVEY 240 IS DESCRIBED DECEMBER 4, 1943, IN BOOK 727, PAGE 353, DEED RECORDS, EL PASO COUNTY, TEXAS.

5. SET 5/8" REBAR WITH CAP MARKED "RPLS 4178" AT ALL EXTERIOR BOUNDARY CORNERS UNLESS OTHERWISE INDICATED.

6. 5/8" REBAR WITH CAP MARKED "RPLS 4178" WILL BE SET AT ALL LOT CORNERS UPON COMPLETION OF CONSTRUCTION.

7. WATER AND SEWER SERVICES WILL BE PROVIDED TO THE FALLS AT CIMARRON UNIT ONE FROM EXISTING FACILITIES ON KIOWA CREEK DRIVE AND BRAYS LANDING DRIVE 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.

8. S.J. LARKIN SURVEY 267 IS DESCRIBED JANUARY 25, 1956, IN BOOK 1272, PAGE 325, DEED RECORDS, EL PASO COUNTY, TEXAS.

9. TITLE COMMITMENT NO. 1039066-DN52, DATED NOVEMBER 6, 2007, PROVIDED BY FIRST AMERICAN TITLE INSURANCE COMPANY.

10. NORTHERN PASS DRIVE IS FROM THE PLAT OF NORTHERN PASS DRIVE EXTENSION UNIT TWO IN EL PASO COUNTY CLERK'S FILE NO. 20090035858, EL

11. CIMARRON UNIT ONE IS RECORDED IN EL PASO COUNTY CLERK'S FILE NO. 20070089227, EL PASO COUNTY, TEXAS.

12. PRIVATE COMMON OPEN SPACES TO BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION ESTABLISHED WITH THIS SUBDIVISION.

13. U.S. POSTAL SERVICE DELIVERY WILL BE PROVIDED THROUGH NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS.

14. THE SUBDIVISION IMPROVEMENTS AGREEMENT AND GUARANTEE SHALL BE RECORDED CONCURRENTLY WITH THIS PLAT.

TITLE COMMITMENT EXCEPTIONS (NOT PLOTTABLE):

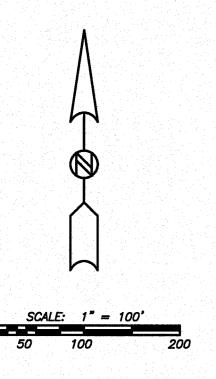
1. PROPERTY DEVELOPMENT AGREEMENT DATED JULY 20, 1990, IN BOOK 2201, PAGE 1360, AMENDED NOVEMBER 20, 1991 IN BOOK 2370, PAGE 1636, APRIL 17, 1992 IN BOOK 2455, PAGE 612, AND DECEMBER 17, 2003, IN BOOK 4780, PAGE 768, DEED RECORDS, EL PASO COUNTY, TEXAS.

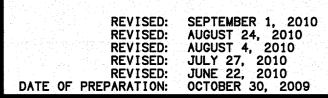
2. RESERVATION OF MINERAL RIGHTS TO THE STATE OF TEXAS DATED SEPTEMBER 10, 1949, IN BOOK 945, PAGE 411, DEED RECORDS, EL PASO COUNTY, TEXAS (NELLIE D. MUNDY SURVEY 242).

3. RESTRICTIVE COVENANTS AND USE AGREEMENT DATED AUGUST 24, 2001, IN BOOK 4189, PAGE 1643, DEED RECORDS, EL PASO COUNTY, TEXAS. 4. CITY OF EL PASO REZONING ORDINANCE, DATED JANUARY 20, 2004, IN

BOOK 4825, PAGE 1944 (PARCEL 8), DEED RECORDS, EL PASO COUNTY,

ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP PANEL 480214-0017C, DATED FEBRUARY 5, 1986, THIS PROPERTY LIES IN FLOOD HAZARD ZONES "A1", "A2", "B" AND "C".



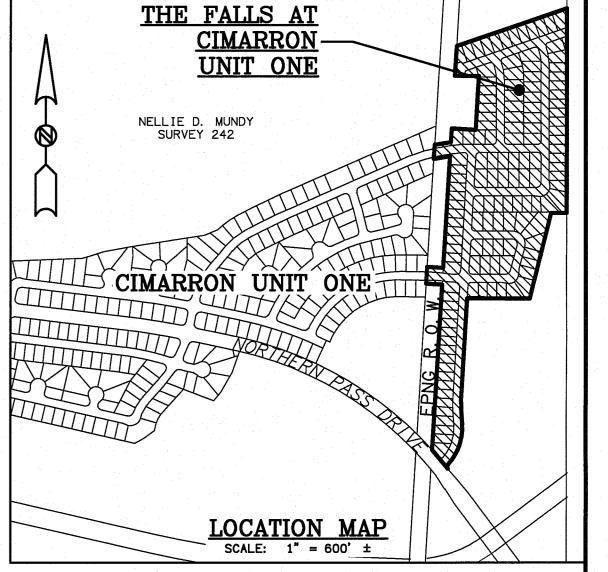


THE FALLS AT CIMARRON UNIT

BEING A PORTION OF TRACTS 3B AND 3B1, NELLIE D. MUNDY SURVEY 242, CITY OF EL PASO, EL PASO COUNTY, TEXAS.

CONTAINING 29.653 ± ACRES SHEET 1 OF 2





PROPERTY OWNERS:

CIMARRON HUNT COMMUNITIES, LLC, by HUNT COMMUNITIES DEVELOPMENT CO., LLC c/o KIMLEY-HORN AND ASSOCIATES, INC. 12700 PARK CENTRAL DRIVE SUITE 1800 DALLAS TX 75251 972-770-1300

PLAT PREPARED BY: ROBERT R. SEIPEL, TEXAS RPLS #4178

SCHOOL DISTRICT:

CANUTILLO INDEPENDENT SCHOOL DISTRICT

EXISTING LAND USE: UNDEVELOPED PROPOSED LAND USE: RESIDENTIAL

PROPOSED PAVING WIDTH: 32 FEET AND 36 FEET

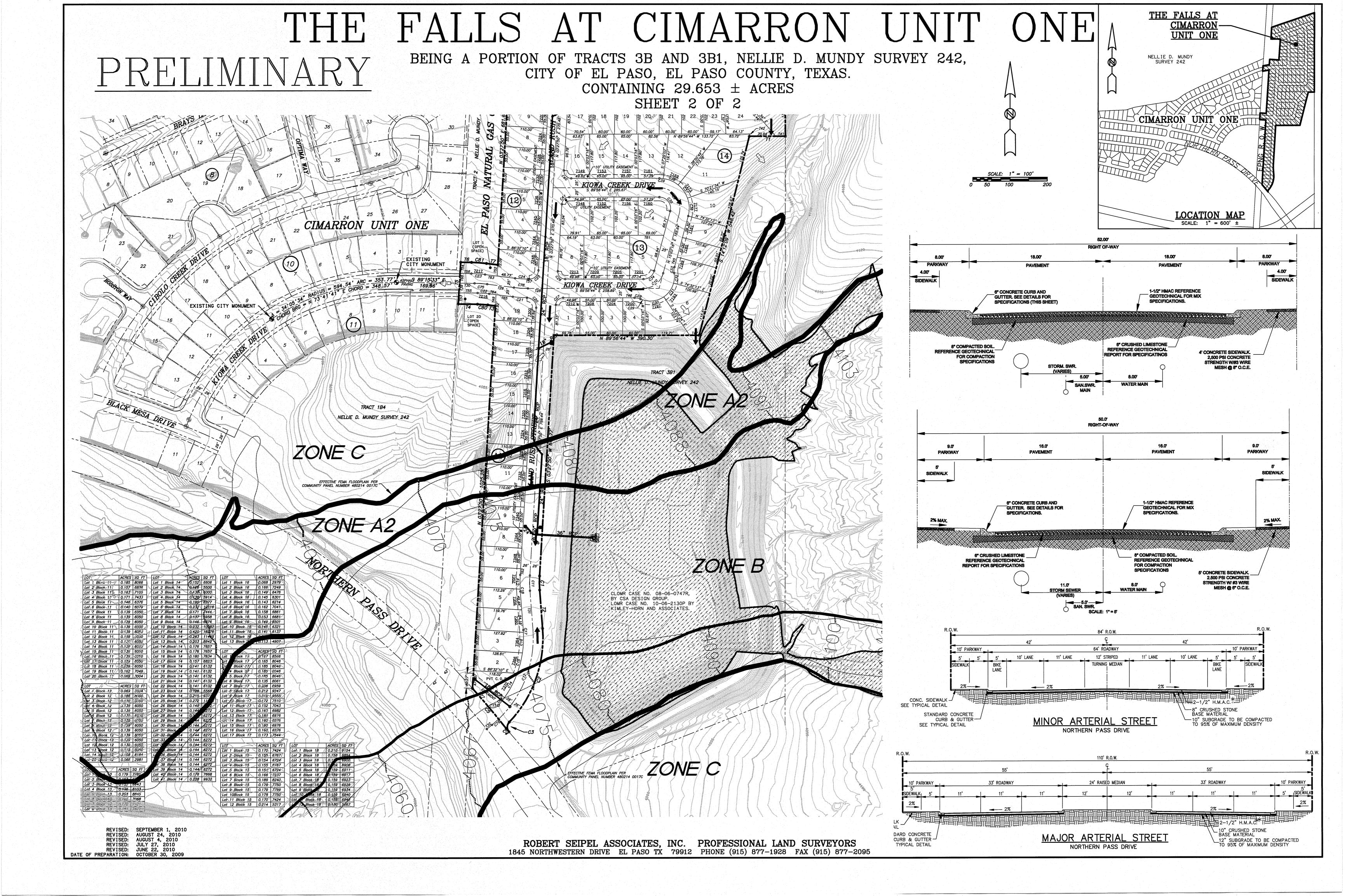
CITY MONUMENT AT THE CENTERLINE INTERSECTION OF BLACK MESA DRIVE AND KIOWA CREEK DRIVE.

ELEVATION = 4062.36 (CITY OF EL PASO DATUM)



DRAINAGE FLOW ARROW EXISTING DRAINAGE

ROBERT SEIPEL ASSOCIATES, INC. PROFESSIONAL LAND SURVEYORS 1845 NORTHWESTERN DRIVE EL PASO TX 79912 PHONE (915) 877-1928 FAX (915) 877-2095



GENERAL NOTES: THE FALLS AT CIMARRON UNIT BASIS OF BEARINGS IS THE MONUMENTED CENTERLINE OF NORTHWESTERN DRIVE FROM THE PLAT OF EL PASO WEST UNIT ONE IN BOOK 57, PAGE 5, PLAT RECORDS, EL PASO COUNTY, TEXAS. 2. THE EL PASO NATURAL GAS COMPANY RIGHT—OF—WAY IS DESCRIBED JANUARY 23, 1973, IN BOOK 431, PAGE 617, DEED RECORDS, EL PASO COUNTY, TEXAS. BEING A PORTION OF TRACTS 3B AND 3B1, NELLIE D. MUNDY SURVEY 242, 3. NELLIE D. MUNDY SURVEY 242 IS DESCRIBED SEPTEMBER 10, 1949, IN CITY OF EL PASO, EL PASO COUNTY, TEXAS. CONTAINING 29.653 \pm ACRES BOOK 945, PAGE 411, DEED RECORDS, EL PASO COUNTY, TEXAS. 4. THE SOUTH 1/2 OF NELLIE D. MUNDY SURVEY 240 IS DESCRIBED DECEMBER 4, 1943, IN BOOK 727, PAGE 353, DEED RECORDS, EL PASO COUNTY, TEXAS. SHEET 1 OF 2 5. SET 5/8" REBAR WITH CAP MARKED "RPLS 4178" AT ALL EXTERIOR BOUNDARY CORNERS UNLESS OTHERWISE INDICATED. 6. 5/8" REBAR WITH CAP MARKED "RPLS 4178" WILL BE SET AT ALL LOT CORNERS UPON COMPLETION OF CONSTRUCTION. 7. WATER AND SEWER SERVICES WILL BE PROVIDED TO THE FALLS AT CIMARRON UNIT ONE FROM EXISTING FACILITIES ON KIOWA CREEK DRIVE AND BRAYS LANDING DRIVE 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. 8. S.J. LARKIN SURVEY 267 IS DESCRIBED JANUARY 25, 1956, IN BOOK 1272, PAGE 325, DEED RECORDS, EL PASO COUNTY, TEXAS. 9. TITLE COMMITMENT NO. 1039066-DN52, DATED NOVEMBER 6, 2007, PROVIDED BY FIRST AMERICAN TITLE INSURANCE COMPANY. 10. NORTHERN PASS DRIVE IS FROM THE PLAT OF NORTHERN PASS DRIVE EXTENSION UNIT TWO IN EL PASO COUNTY CLERK'S FILE NO. 20090035858, EL NELLIE D. MUNDY SURVEY 242 11. CIMARRON UNIT ONE IS RECORDED IN EL PASO COUNTY CLERK'S FILE NO. 20070089227, EL PASO COUNTY, TEXAS. 12. PRIVATE COMMON OPEN SPACES TO BE MAINTAINED BY THE NOTE: ALL FRONT LOT UTILITY EASEMENTS ARE 10 FEET WIDE UNLESS OTHERWISE INDICATED. HOMEOWNER'S ASSOCIATION ESTABLISHED WITH THIS SUBDIVISION. 13. U.S. POSTAL SERVICE DELIVERY WILL BE PROVIDED THROUGH NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS. 14. THE SUBDIVISION IMPROVEMENTS AGREEMENT AND GUARANTEE SHALL BE RECORDED CONCURRENTLY WITH THIS PLAT. TITLE COMMITMENT EXCEPTIONS (NOT PLOTTABLE): 1. PROPERTY DEVELOPMENT AGREEMENT DATED JULY 20, 1990, IN BOOK 2201, PAGE 1360, AMENDED NOVEMBER 20, 1991 IN BOOK 2370, PAGE 1636, APRIL 17, 1992 IN BOOK 2455, PAGE 612, AND DECEMBER 17, 2003, IN BOOK 4780, PAGE 768, DEED RECORDS, EL PASO COUNTY, TEXAS. 2. RESERVATION OF MINERAL RIGHTS TO THE STATE OF TEXAS DATED SEPTEMBER 10, 1949, IN BOOK 945, PAGE 411, DEED RECORDS, EL PASO COUNTY, TEXAS (NELLIE D. MUNDY SURVEY 242). Justin Chapman, President 3. RESTRICTIVE COVENANTS AND USE AGREEMENT DATED AUGUST 24, 2001, IN BOOK 4189, PAGE 1643, DEED RECORDS, EL PASO COUNTY, TEXAS. 4. CITY OF EL PASO REZONING ORDINANCE, DATED JANUARY 20, 2004, IN BOOK 4825, PAGE 1944 (PARCEL 8), DEED RECORDS, EL PASO COUNTY, STATE OF COUNTY OF EL PASO Chapman, President ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP PANEL 480214-0017C, DATED FEBRUARY 5, 1986, THIS PROPERTY LIES IN FLOOD HAZARD ZONES "A1", "A2", "B" AND "C". NELLIE D. MUNDY SURVEY 242 Notary Public, State of Texas 32 S 89'56'44" E 111.00' RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE RECORDED IN THE OFFICE OF THE CLERK OF EL PASO COUNTY, TEXAS, DEED AND RECORDS SECTION, 111.00' INSTRUMENT NO. ______, DATE _____ TAX CERTIFICATES FOR THIS SUBDIVISION ARE RECORDED IN THE OFFICE OF THE CLERK OF EL PASO COUNTY, TEXAS, DEED AND Chair RECORDS SECTION, 29 INSTRUMENT NO. ______, DATE _____. Approved for filing this _____, 2010. 28 L(OPEN SPACE) Development Services Director S 89'56'44" E PROPOSED CITY MONUMENT _10' UTILITY EASEMENT PROPOSED NEIGHBORHOOD DELIVERY & COLLECTION BOX UNIT (N. D. C. B. U.) _____ day of _____, 2010, in File No. _____, Plat 7 18 18 19 18 20 18 21 18 22 18 23 23 24 Records. 33 County Clerk and Associates, Inc Hugo Morales, P.E. 20 Registered Professional Engineer Texas License No. 101188 CIMARRON UNIT ONE Professional and Technical Standards. (OPEN-SPACE) Robert Seipel Associates, Inc. Professional Land Surveyors REVISED: SEPTEMBER 1, 2010 REVISED: SEPTEMBER 1, 2010 REVISED: AUGUST 24, 2010 REVISED: JULY 27, 2010 REVISED: JUNE 22, 2010 Robert R. Seipel, President ROBERT SEIPEL ASSOCIATES, INC. PROFESSIONAL LAND SURVEYORS

DATE OF PREPARATION: OCTOBER 30, 2009

1845 NORTHWESTERN DRIVE EL PASO TX 79912 PHONE (915) 877-1928 FAX (915) 877-2095

THE FALLS AT CIMARRON-NELLIE D. MUNDY SURVEY 242 CIMARRON UNIT ONE LOCATION MAP

DEDICATION

We, Cimarron Hunt Communities, LLC, a Texas limited liability company, owners of this land, do hereby present this plat and dedicate to the use of the public the streets, drives, and utility easements as hereon laid down and designated, including easements for overhang of service wires, conduits and pipes for underground utilities, the right to ingress and egress for service and construction, and the right to trim interfering trees

ACKNOWLEDGMENT

	-		
TEXAS	\$.,		
E EL DASO			

This instrument was acknowledged before me on _____ by Justin

Given under my hand and seal of office this _____ day of ____

My Commission Expires

Executive Secretary

CITY PLAN COMMISSION

This subdivision is hereby approved as to the platting and as to the conditions of the dedication in accordance with Chapter 212 of the Local Government Code of Texas this

_____, day of _____, 2010.

FILING

Filed and recorded in the office of the County Clerk of El Paso County, Texas, this

Subdivision improvement plans prepared by and under the supervision of Kimley-Horn

I hereby certify that this plat represents an on—the—ground survey made under my supervision in compliance with current Texas Board of Professional Land Surveying

Registered Professional Land Surveyor Texas License No. 4178

