





SAN ANGELO, TEXAS

KEY PLAN

—				
	01/26/2018	RESPONSE TO I	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	GNAGE	
1	10/03/2017	RESPONSE TO 1	XDOT COMMENTS	
0	07/14/2017	100% CONSTRU	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PROJECT NO: 3755.			3755.16	

**COVER SHEET** 

**G-101** 

## SHEET INDEX

GENERAL

D

G-101	COVER SHEET
G-102	SHEET INDEX
G-103	GENERAL NOTES
G-104	GENERAL NOTES
G-105	TXDOT GENERAL NOTES
G-106	EXISTING SURVEY
CIVIL	
C-100	SUMMARY SHEET
C-100A	SUMMARY OF SMALL SIGNS
C-101A	TRAFFIC CONTROL AND PHASING PLAN
C-101B	TRAFFIC CONTROL AND PHASING PLAN
C-101C	TRAFFIC CONTROL AND PHASING PLAN
C-101D	TRAFFIC CONTROL AND PHASING PLAN
C-102	REMOVAL PLAN
C-103	SITE PLAN
C-104	UTILITY PLAN
C-105	JOINTING PLAN
C-106	SIDEWALK PLAN
C-201	EROSION CONTROL PLAN
C-202	DRAINAGE MODIFICATION PLAN
C-301	W. CONCHO AVENUE PLAN AND PROFILE
C-302	STORM SEWER PLAN AND PROFILE
C-401	INTERSECTION LAYOUT
C-402	INTERSECTION AND DRIVEWAY LAYOUTS
C-403	SIGNAGE AND PAVEMENT MARKING PLAN
C-501	DETAILS
C-502	DETAILS
C-503	DETAILS
STRUCTUAL	
S-501	WAYFINDING SIGNAGE DETAILS
TRAFFIC SIGNAL	
TS-101	TRAFFIC SIGNAL PLAN
TS-102	SIGN PLAN
TS-103	ELECTRICAL PLAN
TS-104	TRAFFIC SIGNAL BASIS OF ESTIMATE
TS-501	SIGN DETAILS
TS-502	TRAFFIC SIGNAL DETAILS (TXDOT-SAN ANGELO)

SJT03	CURB RAMPS SUPPLEMENTARY INFORMATION
	SIDEWALK DETAILS
SJR37	
	PAVEMENT MARKING DETAILS (URBAN)
	TYPICAL STANDARD PAVEMENT MARKINGS
( )	POSITION GUIDANCE USING RAISED MARKERS REFLECTORIZED PROFILE MARKINGS
	PAVEMENT MARKINGS FOR TWO-WAY LEFT TURN LANES DIVIDED HIGHWAYS AND RURAL LEFT TURN B
. ,	TRAFFIC SIGNAL WORK TYPICAL DETAILS
· · ·	TRAFFIC SIGNAL WORK BARRICADES AND SIGNS
	PEDESTRIAN FACILITIES CURB RAMPS
. ,	PEDESTRIAN FACILITIES CURB RAMPS
	PEDESTRIAN FACILITIES CURB RAMPS PEDESTRIAN FACILITIES CURB RAMPS
	BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS
. ,	BARRICADE AND CONSTRUCTION PROJECT LIMIT
. ,	BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT
BC(4)-14	BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES
. ,	BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT
	BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)
	BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR
	BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES
	BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES
	BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES
BC(11)-14	BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS
. ,	BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS
	CURB INLET TYPE C AND EXTENSION TYPE E (5'-0" INLET)
PJB	
PDD	DESIGN DATA FOR PRECAST BASE AND JUNCTION BOX
SMD(GEN)-08	SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS
SMD(SLIP-1)-08	SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM
SMD(SLIP-2)-08	SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM
SMD(SLIP-3)-08	SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM
TCP(1-4)-12	TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANS CONVENTIONAL ROADS
TCP(2-5)-12	TRAFFIC CONTROL PLAN LONG TERM LANE CLOSURES MULTILANE CONVENTIONAL RDS.
SMA-80(1)-12	SINGLE MAST ARM ASSEMBLY (80 MPH)
SMA-80(2)-12	SINGLE MAST ARM ASSEMBLY (80 MPH)
LMA(1)-12	LONG MAST ARM ASSEMBLY (80 & 100 MPH)
LMA(2)-12	LONG MAST ARM ASSEMBLY (80 & 100 MPH)
LMA(3)-12	LONG MAST ARM ASSEMBLY (80 & 100 MPH)
LMA(4)-12	LONG MAST ARM ASSEMBLY (80 & 100 MPH)
LMA(5)-12	LONG MAST ARM ASSEMBLY (80 & 100 MPH)
MA-C-12	MAST ARM CONNECTIONS
MA-D-12	MAST ARM POLE DETAILS
	MAST ARM DAMPING PLATE
TS-FD-12	TRAFFIC SIGNAL POLE FOUNDATION
TS-CF-04	TRAFFIC SIGNAL CONTROLLER CABINET
	LUMINAIRE SUPPORT STRUCTURES
	CONDUITS & NOTES
ED(3)-14	CONDUCTORS
ED(4)-14	
	SERVICE NOTES & DATA
ED(6)-14	SERVICE ENCLOSURE AND NOTES
	SERVICE SUPPORT TYPES SF & SP
	TYPICAL TRAFFIC SIGNAL SYSTEM DETAILS
ED(11)-14	DUCT CABLE/HDPE CONDUIT

3

1

B

2

4



## WEST CONCHO AVENUE WIDENING

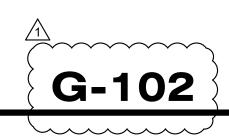


SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO T	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	BNAGE	
1	10/03/2017	RESPONSE TO T	XDOT COMMENTS	
0	07/14/2017	100% CONSTRUC	TION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PROJECT NO: 3			3755.16	

SHEET INDEX



<u>GENI</u> 1. 2. 3.	ERAL CONSTRUCTION NOTES - CITY OF SAN ANGELO UTILITY LOCATION: THE UTILITIES SHOWN ON THE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW IN GENERAL THE EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE UTILITY INFORMATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTRACT ALL UTILITY COMPANIES 34 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES IN ORDER TO DETERMINE IF THERE IS ANY CONFLICT WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF CONFLICTS WITH EXISTING UTILITIES ARE DISCOVERED. THE CONTRACTOR SHALL VERIFY, OR HAVE VERIFIED BY THE APPROPRIATE UTILITY COMPANY, ALL ACTUAL LINE LOCATIONS, ELEVATIONS AND CONFIGURATIONS PRIOR TO CONSTRUCTION IN DRORE TO MAKE ANY NECESSARY TIE-INS OR BY-PASSES. SUCH VERIFICATIONS SHALL BE CONSIDERED SUBSIDIARY TO THE COST OF THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. UTILITY PROTECTION: THE PROPOSED UTILITY LINES AT TIMES WILL BE LAID CLOSE TO OTHER EXISTING UTILITIES AND STRUCTURES BOTH ABOVE AND BELOW GROUND. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE PROTECTION AND SUPPORT OF ALL UTILITY FACILITIES AND STRUCTURES BOTH ABOVE AND BELOW GROUND. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE PROTECTION AND SUPPORT OF ALL UTILITY FACILITIES AND STRUCTURES BOTH ABOVE AND BELOW GROUND. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE PROTECTION AND SUPPORT OF ALL UTILITY FACILITIES AND STRUCTURES BOTH ABOVE AND BELOW THE GANNEL UTILITY SERVICES. OTHER UTILITIES, FROCES, TREES AND SHRIUBS) BOTH ABOVE AND BELOW THE GROUND DURING CONSTRUCTION. IT IS THE CONTRACTOR'S REPONSIBILITY TO NOTIFY ALL UTILITY OWNERS PRIOR TO ANY CONSTRUCTION IN THE AREA AND VERIFY THE ACTUAL LOCATION SHALL PRESERVE AND PROTECT ALL UNDERGROUND AND OVERHED FACILITIES AND BE RESOUNSIBLE FOR ANY DAMAGE CAUSED BY CONTRACTOR'S OP	15.	WITH CONS REMOVED F UNDAMAGE TO CONSTF SUBSIDIARY LISTED IN T WHEN IT IS SHALL DIST BEGINNING NUMBERS ( TIME FRAM INSPECTOR PROJECT A
2.	SURCES AND ARE INTENDED TO SHOW IN GENERAL THE EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE UTILITY INFORMATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES IN ORDER TO DETERMINE IF THERE IS ANY CONFLICT WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF CONFLICTS WITH EXISTING UTILITIES AND REPORT. THE CONTRACTOR SHALL VERIFY OR HAVE VERIFIED BY THE APPROPRIATE UTILITY COMPANY, ALL ACTUAL LINE LOCATIONS, ELEVATIONS AND CONFIGURATIONS PRIOR TO CONSTRUCTION IN ORDER TO MAKE ANY NECESSARY DIE-INS OR BY-PASSES. SUCH VERIFICATIONS SHALL BE CONSIDERED SUBSIDIARY TO THE COST OF THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. UTILITY PROTECTION: THE PROPOSED UTILITY LINES AT TIMES WILL BE LAID CLOSE TO OTHER EXISTING UTILITIES AND STRUCTURES BOTH ABOVE AND BELOW GROUND. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE PROTECTION AND SUPPORT OF ALL UTILITY FACILITIES AND STRUCTURES (INCLUDING BUT NOT LIMITED TO: UTILITY POLES, GAS MAINS, TELEPHONE CABLES, ELECTRIC CABLES, TY CABLES, DRAINAGE PIPES AND STRUCTURES, UTILITY SERVICES, OTHER UTILITIES, FENCES, TREES AND SHRUBS) BOTH ABOVE AND BELOW THE GROUND DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY OWERS PRIOR TO ANY CONSTRUCTION IN THE AREA AND VERIFY THE ACTUAL LOCATION OF ALL BURIED UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL UNDERGROUND AND OVERHEAD FACILITIES AND BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY CONTRACTOR'S PERATIONS. THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING AT EACH LOCATION. MERINT QUEST GTTG DISTESS (UTILITIES) (800) 344-8377 AEP-TEXAS, KEVIN POOL (361) 230-7046 SUDDENLINK, CRAIG THORNELL (325) 486-4113 WHEN NOTIFYING UTILITY CO	15. 16. 17.	SPECIFIED. CONTRACT WHICH REG REMOVED B "PREPARE I CITY. STUM BELOW EXIS ALL MAILBO DRAINAGE REPLACEM SHALL BE F MATERIAL A CONTRACT END OF EVIS ANY OTHEF THE CONTF WITH CONST SUBSIDIAR LISTED IN T WHEN IT IS SHALL DIST BEGINNING NUMBERS O TIME FRAM INSPECTOF PROJECT A THE CONTF SHALL BE II INCLUDING CITY'S FLOO THE CITY LI EXCAVATED
3.	EXISTING UTILITIES AND STRUCTURES BOTH ABOVE AND BELOW GROUND. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE PROTECTION AND SUPPORT OF ALL UTILITY FACILITIES AND EXISTING STRUCTURES (INCLUDING BUT NOT LIMITED TO: UTILITY POLES, GAS MAINS, TELEPHONE CABLES, ELECTRIC CABLES, TV CABLES, DRAINAGE PIPES AND STRUCTURES, UTILITY SERVICES, OTHER UTILITIES, FENCES, TREES AND SHRUBS) BOTH ABOVE AND BELOW THE GROUND DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY OWNERS PRIOR TO ANY CONSTRUCTION IN THE AREA AND VERIFY THE ACTUAL LOCATION OF ALL BURIED UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL UNDERGROUND AND OVERHEAD FACILITIES AND BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY CONTRACTOR'S OPERATIONS. THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING AT EACH LOCATION: CITY OF SAN ANGELO (325) 657-4299 ATMOS ENERGY (GAS), EARIA AHRENS (325) 650-1167 AT&T, NICK ROSE (325) 315-8993 FRONTIER COMMUNICATIONS, WILLIAM CATLIN (325) 949-7667 VERIZON SPRINT QUEST GTTG DIGTESS (UTILITIES) (800) 344-8377 AEP-TEXAS, KEVIN POOL (361) 290-7046 SUDDENLINK, CRAIG THORNELL (325) 486-4113 WHEN NOTIFYING UTILITY COMPANIES BY CALLING 1-800-DIG-TESS (1-800-344-8377) THE CONTRACTOR SHALL CAL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONTRACTOR SHALL CAL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONTRACTOR SHALL CAL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONTRACTOR SHALL CAL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONTRACTOR SHALL CAL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONFIRMATION NUMBERS ISSUED BY DIG TESS. THESE NUMBERS AND/OR TICKETS SHALL BE PROVIDED TO THE CITY ON REQUEST.	17.	MATERIAL A CONTRACT END OF EVE ANY OTHEF THE CONTR WITH CONSE REMOVED F UNDAMAGE TO CONSTF SUBSIDIAR' LISTED IN T WHEN IT IS SHALL DIST BEGINNING NUMBERS O TIME FRAM INSPECTOF PROJECT A THE CONTR SHALL BE IF INCLUDING CITY'S FLOO THE CITY LI EXCAVATED WITHOUT W PLAIN ADMI
4.	UTILITY OWNERS PRIOR TO ANY CONSTRUCTION IN THE AREA AND VERIFY THE ACTUAL LOCATION OF ALL BURIED UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL UNDERGROUND AND OVERHEAD FACILITIES AND BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY CONTRACTOR'S OPERATIONS. THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING AT EACH LOCATION: CITY OF SAN ANGELO (325) 657-4299 ATMOS ENERGY (GAS), EARIA AHRENS (325) 650-1167 AT&T, NICK ROSE (325) 315-8993 FRONTIER COMMUNICATIONS, WILLIAM CATLIN (325) 949-7667 VERIZON SPRINT QUEST GTTG DIGTESS (UTILITIES) (800) 344-8377 AEP-TEXAS, KEVIN POOL (361) 290-7046 SUDDENLINK, CRAIG THORNELL (325) 486-4113 WHEN NOTIFYING UTILITY COMPANIES BY CALLING 1-800-DIG-TESS (1-800-344-8377) THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONFIRMATION NUMBERS ISSUED BY DIG TESS. THESE NUMBERS AND/OR TICKETS SHALL BE PROVIDED TO THE CITY ON REQUEST.	18.	WITH CONS REMOVED I UNDAMAGE TO CONSTE SUBSIDIAR LISTED IN T WHEN IT IS SHALL DIST BEGINNING NUMBERS O TIME FRAM INSPECTOF PROJECT A THE CONTE SHALL BE II INCLUDING CITY'S FLOO THE CITY L EXCAVATEI WITHOUT V PLAIN ADMI
4.	AT EACH LOCATION: CITY OF SAN ANGELO (325) 657-4299 ATMOS ENERGY (GAS), EARIA AHRENS (325) 650-1167 AT&T, NICK ROSE (325) 315-8993 FRONTIER COMMUNICATIONS, WILLIAM CATLIN (325) 949-7667 VERIZON SPRINT QUEST GTTG DIGTESS (UTILITIES) (800) 344-8377 AEP-TEXAS, KEVIN POOL (361) 290-7046 SUDDENLINK, CRAIG THORNELL (325) 486-4113 WHEN NOTIFYING UTILITY COMPANIES BY CALLING 1-800-DIG-TESS (1-800-344-8377) THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONFIRMATION NUMBERS ISSUED BY DIG TESS. THESE NUMBERS AND/OR TICKETS SHALL BE PROVIDED TO THE CITY ON REQUEST.		LISTED IN T WHEN IT IS SHALL DIST BEGINNING NUMBERS ( TIME FRAM INSPECTOF PROJECT A THE CONTF SHALL BE II INCLUDING CITY'S FLOO THE CITY L EXCAVATEI WITHOUT V PLAIN ADMI
	ATMOS ENERGY (GAS), EARIA AHRENS (325) 650-1167 AT&T, NICK ROSE (325) 315-8993 FRONTIER COMMUNICATIONS, WILLIAM CATLIN (325) 949-7667 VERIZON SPRINT QUEST GTTG DIGTESS (UTILITIES) (800) 344-8377 AEP-TEXAS, KEVIN POOL (361) 290-7046 SUDDENLINK, CRAIG THORNELL (325) 486-4113 WHEN NOTIFYING UTILITY COMPANIES BY CALLING 1-800-DIG·TESS (1-800-344-8377) THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONFIRMATION NUMBERS ISSUED BY DIG TESS. THESE NUMBERS AND/OR TICKETS SHALL BE PROVIDED TO THE CITY ON REQUEST.		SHALL DIST BEGINNING NUMBERS ( TIME FRAM INSPECTOF PROJECT A THE CONTF SHALL BE II INCLUDING CITY'S FLOO THE CITY L EXCAVATED WITHOUT V PLAIN ADMI
	DIGTESS (UTILITIES) (800) 344-8377 AEP-TEXAS, KEVIN POOL (361) 290-7046 SUDDENLINK, CRAIG THORNELL (325) 486-4113 WHEN NOTIFYING UTILITY COMPANIES BY CALLING 1-800-DIG·TESS (1-800-344-8377) THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONFIRMATION NUMBERS ISSUED BY DIG TESS. THESE NUMBERS AND/OR TICKETS SHALL BE PROVIDED TO THE CITY ON REQUEST.	19.	SHALL BE IN INCLUDING CITY'S FLOO THE CITY LI EXCAVATED WITHOUT W PLAIN ADMI WRITTEN P
	CONTRACTOR SHALL CALL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND SHALL RECORD THE CONFIRMATION NUMBERS ISSUED BY DIG TESS. THESE NUMBERS AND/OR TICKETS SHALL BE PROVIDED TO THE CITY ON REQUEST.		EXCAVATEI WITHOUT W PLAIN ADMI WRITTEN P
э.	CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING GENERAL SAFETY AT AND ADJACENT TO		
	THE PROJECT AREA. INCLUDING THE PERSONAL SAFETY OF THE CONSTRUCTION CREW AND GENERAL PUBLIC, AND THE SAFETY OF PUBLIC AND PRIVATE PROPERTY.	20.	ALL EXISTIN
6.	THE TYPES AND LOCATIONS OF THE TEMPORARY BARRICADES AND SIGNS USED DURING CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. PLACEMENT AND MAINTENANCE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR WITH APPROVED TRAFFIC CONTROL PLAN.		NEW CONC
7.	THE CONTRACTOR SHALL NOTIFY ALL EMERGENCY UNITS AND SCHOOL DISTRICTS OPERATING WITHIN THE AREA OF THE PROPOSED WORK OF ANY LANE CLOSURES AND CONSTRUCTION SCHEDULES WITH 72 HRS MINIMUM ADVANCED NOTICE.		ALL ROADV THE CONTF UNDERGRO ELECTRIC, 5
3.	THE CONTRACTOR SHALL MAINTAIN FIRE EMERGENCY VEHICLE ACCESS TO FIRE HYDRANTS THROUGHOUT THE DURATION OF THE PROJECT. INACTIVE FIRE HYDRANTS SHALL BE BLACK BAGGED.	24.	ALL EXCAV REQUIREMI REGULATIC
9.	OF SAN ANGELO THROUGH AN INDEPENDENT TESTING LABORATORY. ALL MATERIAL TESTING SHALL BE COORDINATED WITH THE PROJECT INSPECTOR. THE PROJECT INSPECTOR SHALL BE PRESENT DURING ALL TESTS AND SHALL BE GIVEN A MINIMUM OF 24 HOURS ADVANCED NOTICE PRIOR TO ANY TESTING. ANY TEST RESULTS NOT MEETING THE SPECIFICATIONS SHALL REQUIRE ADDITIONAL INSPECTIONS AND TESTS WHICH WILL BE PAID FOR BY THE CONTRACTOR. THE CITY	25.	THE CONTR AND HAULII SUBSIDIAR
	EXTRA INSPECTION REQUIRED TO INSURE CONFORMANCE WITH THE CONTRACT DOCUMENTS.	26.	DISTANCE I COMMISSIC
10.	UNLESS OTHERWISE APPROVED OR DIRECTED IN WRITING BY THE PROJECT INSPECTOR.	27.	CONTRACT WHICH IDEI
11.	THE CONTRACTOR WILL VIDEO ALL BUILDING FACADES WITHIN THE CONSTRUCTION LIMITS PRIOR TO WORK AND CONDUCT A PRE-CONSTRUCTION VIDEO TAPING OF ENTIRE PROJECT LIMITS IN DETAIL. VIDEOS SHALL INCLUDE DATE NOTATION AND AUDIO IDENTIFICATION OF PROPERTY. THIS SHALL BE CONSIDERED SUBSIDIARY WORK. CONTRACTOR SHALL SPRAY PAINT ADDRESS #'S ON DRIVE APPROACHES.	28.	COSTS ASS IN EACH RE THESE PLA
12.	THE CONTRACTOR SHALL TAKE ADEQUATE MEASURES TO PREVENT EROSION. IN THE EVENT THAT SIGNIFICANT EROSION OCCURS AS A RESULT OF THE CONSTRUCTION, THE CONTRACTOR SHALL RESTORE THE ERODED AREA TO ITS ORIGINAL OR BETTER CONDITION AT HIS OWN EXPENSE.	29.	CONTRACT HOMES ANI INTERRUPT UNREINSTA
13.	ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE CONSTRUCTION PLANS AND/OR PROJECT SPECIFICATIONS. REVEGETATION OF ALL DISTURBED OR EXPOSED AREAS SHALL CONSIST OF SODDING, SEEDING, OR HYDROMULCH AS INDICATED IN THE PLANS & SPECS. HOWEVER THE TYPE OF REVEGETATION MUST EQUAL OR EXCEED THE TYPE OF VEGETATION PRESENT BEFORE CONSTRUCTION BEGAN.	30.	CONTRACT INFORM PR SCHOOL M CONSTRUC
1 1	<ol> <li>3.</li> <li>0.</li> <li>1.</li> <li>2.</li> </ol>	<ol> <li>THE CONTRACTOR SHALL NOTIFY ALL EMERGENCY UNITS AND SCHOOL DISTRICTS OPERATING WITHIN THE AREA OF THE PROPOSED WORK OF ANY LANE CLOSURES AND CONSTRUCTION SCHEDULES WITH 72 HRS MINIMUM ADVANCED NOTICE.</li> <li>THE CONTRACTOR SHALL MAINTAIN FIRE EMERGENCY VEHICLE ACCESS TO FIRE HYDRANTS THROUGHOUT THE DURATION OF THE PROJECT. INACTIVE FIRE HYDRANTS SHALL BE BLACK BAGGED.</li> <li>INITIAL CONSTRUCTION INSPECTIONS AND MATERIAL TESTING WILL BE PERFORMED BY THE CITY OF SAN ANGELO THROUGH AN INDEPENDENT TESTING LABORATORY. ALL MATERIAL TESTING SHALL BE COORDINATED WITH THE PROJECT INSPECTOR. THE PROJECT INSPECTOR SHALL BE PRESENT DURING ALL TESTS AND SHALL BE GIVEN A MINIMUM OF 24 HOURS ADVANCED NOTICE PRIOR TO ANY TESTING. ANY TEST RESULTS NOT MEETING THE SPECIFICATIONS SHALL REQUIRE ADDITIONAL INSPECTIONS AND TESTS WHICH WILL BE PAID FOR BY THE CONTRACTOR. THE CITY ENGINEER AND/OR THE PROJECT INSPECTOR WILL DETERMINE THE ADDITIONAL TESTING AND EXTRA INSPECTIONS AND TESTS WHICH WILL BE PAID FOR BY THE CONTRACTOR. THE CITY ENGINEER AND/OR THE PROJECT INSPECTOR WILL DETERMINE THE ADDITIONAL TESTING AND EXTRA INSPECTION ACTIVITIES SHALL BE LIMITED TO THE HOURS OF 7:00 AM TO 6:00 PM MONFRI. UNLESS OTHERWISE APPROVED OR DIRECTED IN WRITING BY THE PROJECT INSPECTOR.</li> <li>CONSTRUCTION ACTIVITIES SHALL BUILDING FACADES WITHIN THE CONSTRUCTION LIMITS PRIOR TO WORK AND CONDUCT A PRE-CONSTRUCTION NAD AUDIO IDENTIFICATION OF PROPERTY. THIS SHALL BE CONSIDERED SUBSIDIARY WORK. CONTRACTOR SHALL SPRAY PAINT ADDRESS #S ON DRIVE APPROACHES.</li> <li>THE CONTRACTOR SHALL TAKE ADEQUATE MEASURES TO PREVENT EROSION. IN THE EVENT THAT SIGNIFICANT EROSION OCCURS AS A RESULT OF THE CONSTRUCTION, THE CONTRACTOR SHALL RESTORE THE ERODED AREA TO ITS ORIGINAL OR BETTER CONDITION AT HIS OWN EXPENSE.</li> <li>ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE CONSTRUCTION PLANS AND/OR PROJECT SPECIFICATIONS. REVEGETATION OF ALL DISTREDED OR EXPOSED DURING CONSTRUC</li></ol>	22.         7. THE CONTRACTOR SHALL NOTIFY ALL EMERGENCY UNITS AND SCHOOL DISTRICTS OPERATING       23.         8. THE CONTRACTOR SHALL MAINTAIN FIRE EMERGENCY VEHICLE ACCESS TO FIRE HYDRANTS       23.         7. THE CONTRACTOR SHALL MAINTAIN FIRE EMERGENCY VEHICLE ACCESS TO FIRE HYDRANTS       24.         8. THE CONTRACTOR SHALL MAINTAIN FIRE EMERGENCY VEHICLE ACCESS TO FIRE HYDRANTS       24.         9. INITIAL CONSTRUCTION INSPECTIONS AND MATERIAL TESTING WILL BE PERFORMED BY THE CITY OF SAN ANGELO THROUGH AN INDEPENDENT TESTING LABORATORY. ALL IMPERIAL TESTING SHALL BE COORDINATED WITH THE PROJECT INSPECTOR. THE PROJECT INSPECTOR SHALL BE PRESENT DURING ALL TESTS AND SHALL BE GIVEN A MINIMUM OF 24 HOURS ADVANCED NOTICE PRIOR TO ANY TEST RESULTS NOT MEETING THE SPECIFICATIONS SHALL REQUIRE ADDITIONAL INSPECTIONS AND TESTS WHICH WILL BE PAID FOR BY THE CONTRACTOR. THE CITY ENGINEER AND/OR THE PROJECT INSPECTOR WILL DETERMINE THE ADDITIONAL TESTING AND TESTS WHICH WILL BE PAID FOR BY THE CONTRACTOR. THE CITY ENGINEER AND/OR THE PROJECT INSPECTOR WILL DETERMINE THE ADDITIONAL TESTING AND EXTRA INSPECTION REQUIRED TO INSURE CONFORMANCE WITH THE CONTRACTOR. THE CITY ENGINEER AND/OR THE PROJECT INSPECTOR WILL DETERMINE THE ADDITIONAL TESTING AND EXTRA INSPECTION REQUIRED TO INSURE CONFORMANCE WITH THE CONTRACTOR. THE CITY ENGINEE APPROVED OR DIRECTED IN WRITING BY THE PROJECT INSPECTOR.       26.         0. CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE HOURS OF 7.00 AM TO 6.00 PM MONFRI. UNLESS OTHERWISE APPROVED OR DIRECTED IN WRITING BY THE PROJECT INSPECTOR.       27.         1. THE CONTRACTOR WILL VIDEO ALL BUILDING FACADES WITHIN THE CONSTRUCTION LIMITS PRIOR TO WORK AND CONDUCU A PRE-CONSTRUCTION VIDEO TAPING OF ENTINE PROPERTY. THIS SHALL BE

SHOWN ON PLANS AND WITHIN ROW SHALL REMAIN IN PLACE UNLESS OTHERWISE . ALL TREES TO REMAIN IN PLACE SHALL BE PRESERVED & PROTECTED BY THE TOR. TREES WITHIN FIVE (5) FEET OF THE PROPOSED CURB LINE OR ANY OTHER TREES QUIRE REMOVAL IN ORDER TO FACILITATE THE PROPOSED CONSTRUCTION SHALL BE BY THE CONTRACTOR AS PART OF THE WORK PERFORMED UNDER THE PAY ITEM FOR RIGHT-OF-WAY" BUT ONLY WITH THE SPECIFIC AUTHORIZATION AND APPROVAL OF THE MPS SHALL BE GROUND AND ROOT SYSTEMS REMOVED TO A CLEAR DEPTH OF 36" ISTING GROUND.

DXES, FENCES, DRIVEWAYS, LANDSCAPING, IRRIGATION SYSTEMS, CULVERT PIPES, DITCHES, AND ANY IMPROVEMENTS ON PRIVATE PROPERTY NOT SCHEDULED FOR IENT DURING CONSTRUCTION WHICH ARE DAMAGED OR MOVED BY THE CONTRACTOR RESTORED TO ORIGINAL OR BETTER CONDITION BY THE CONTRACTOR WITH LIKE AT NO ADDITIONAL COST TO THE CITY OR TO THE AFFECTED PROPERTY OWNER.

FOR SHALL MAKE THE WORK SITE AND ANY OPEN TRENCHES SECURE AND SAFE AT THE ERY DAY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ANY FENCING OR R SAFETY EQUIPMENT.

RACTOR SHALL REMOVE ALL FENCES, LOCATED WITHIN EASEMENTS, INTERFERING STRUCTION OPERATION, AND PROVIDE TEMPORARY FENCING DURING CONSTRUCTION. FENCES, WOODEN OR CHAIN LINK, SHALL BE REPLACED WITH A NEW FENCE OR ED ORIGINAL FENCING. ALL AFFECTED PROPERTY OWNERS SHALL BE NOTIFIED PRIOR RUCTION. REMOVAL AND REPLACEMENT OF EXISTING FENCES SHALL BE CONSIDERED RY TO THE PROJECT COST AND REFLECTED IN THE UNIT 810 PRICES FOR VARIOUS ITEMS THE PROPOSAL.

REQUIRED THAT A CONTRACTOR WORK IN PRIVATE PROPERTY, THE CONTRACTOR TRIBUTE LETTERS TO ALL AFFECTED PROPERTY OWNERS 48 HOURS PRIOR TO WORK ON EACH PROPERTY. THE LETTER SHALL INCLUDE NAMES AND TELEPHONE OF CONTRACTOR CONTACTS. A DESCRIPTION OF THE WORK TO BE DONE, AND THE IE FOR DOING THE WORK. COPIES OF THE LETTER SHALL BE FORWARDED TO THE CITY .. DISTRIBUTION OF LETTERS SHALL BE CONSIDERED AS SUBSIDIARY TO THE COST OF ND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

RACTOR SHALL REMOVE FROM THE PROJECT AREA ALL SURPLUS MATERIAL. THIS NCIDENTAL AND NOT A SEPARATE PAY ITEM. SURPLUS MATERIALS FROM EXCAVATION GORT, TRASH, ETC. SHALL BE PROPERLY DISPOSED OF AT A SITE ACCEPTABLE TO THE OD PLAIN ADMINISTRATOR IF WITHIN THE CITY LIMITS. IF THE LOCATION IS NOT WITHIN IMITS, THE CONTRACTOR SHALL PROVIDE A LETTER STATING SO. NO EXCESS ED MATERIAL SHALL BE DEPOSITED IN LOW AREAS OR ALONG NATURAL DRAINAGE WAY VRITTEN PERMISSION FROM THE AFFECTED PROPERTY OWNER AND THE CITY'S FLOOD INISTRATOR. IF THE CONTRACTOR PLACES EXCESS MATERIAL IN THE AREAS WITHOUT PERMISSION, he will BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM SUCH FILL ALL REMOVE THE MATERIAL AT HIS OWN COST.

ING CONCRETE AND ASPHALT DRIVEWAYS ARE TO BE SAWCUT WHEN CONSTRUCTING A RETE DRIVEWAY APPROACH.

JRN RADII FOR DRIVEWAYS SHALL BE 5 FEET UNLESS OTHERWISE NOTED.

WAY DIMENSIONS ARE TO THE BACK-OF-CURB UNLESS OTHERWISE NOTED.

RACTOR SHALL USE EXTREME CAUTION IN LOCATING AND PROTECTING ALL EXISTING DUND UTILITIES AND INFRASTRUCTURE INCLUDING BUT NO LIMITED TO WATER, GAS, SEWER SERVICES, COMMUNICATION, AND FIBER OPTIC CABLES.

VATIONS, TRENCHING AND SHORING OPERATIONS SHALL COMPLY WITH THE IENTS OF THE u.s. DEPARTMENT OF LABOR. OSHA. "CONST. SAFETY AND HEALTH ONS", VOL. 29, SUBPART P., PG 128 · 137, AND ANY AMENDMENTS THERETO.

RACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EXCESS TRENCH EXCAVATIONS NG MATERIALS TO AN APPROVED DISPOSAL SITE. THIS SHALL BE CONSIDERED

BETWEEN ALL WATERLINES AND SANITARY SEWERS SHALL CONFORM TO THE TEXAS N ON ENVIRONMENTAL QUALITY (TCEQ) REGULATIONS (CHP. 290.44 (E) (4) (A&B)).

FOR'S PERSONNEL SHALL HAVE IDENTIFYING CLOTHING, HATS OR BADGES AT ALL TIMES INTIFY THE CONTRACTOR'S NAME, LOGO OR COMPANY.

SOCIATED WITH PROPOSED CONNECTIONS TO EXISTING FACILITIES SHALL BE INCLUDED ESPECTIVE BID ITEM, NO SEPARATE PAY, EXCEPT AS SPECIFICALLY INDICATED WITHIN NS OR THE CONTRACT DOCUMENTS.

FOR IS RESPONSIBLE FOR MAINTAINING WATER AND SEWER CONNECTIONS TO ALL ID BUSINESSES IN WORKING ORDER AT ALL TIMES, EXCEPT FOR BRIEF PRE-NOTIFIED TIONS IN WATER SERVICES. IN NO CASE SHALL SERVICES BE ALLOWED TO REMAIN ATED OVERNIGHT.

FOR SHALL CONTACT LOCAL SCHOOLS PRIOR TO BEGINNING CONSTRUCTION TO INCIPALS AND ADMINISTRATORS OF CONSTRUCTION IN THE AREA. A NOTE ON THE IARQUEE IS SUGGESTED TO INFORM PARENTS AND STUDENTS OF CONSTRUCTION AND TION DURATION AND POSSIBLE ALTERNATE ROUTES AROUND CONSTRUCTION SITES.

- 31. ALL VALVE BOXES AND MANHOLE LIDS SHALL BE SET TO MATCH FINISHED GRADE, UNLESS OTHERWISE NOTED.
- 32. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS **BEFORE CONSTRUCTION BEGINS.**
- 33. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THAT ELECTRIC POWER AND TELEPHONE POLES ARE NOT DISTURBED DURING CONSTRUCTION. ALL COSTS INCURRED FOR SUPPORTING ELECTRIC POWER AND TELEPHONE POLES SHALL BE INCLUDED IN THE PRICE BID FOR THE CONSTRUCTION OF THE WATER LINE OR SEWER LINE. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 34. ALL STREETS WITHIN THE SCOPE OF THE CONTRACT SHALL BE KEPT ACCESSIBLE TO FIRE TRUCKS, AMBULANCES AND OTHER EMERGENCY VEHICLES
- 35. CONTRACTOR SHALL MAINTAIN SUITABLE CONSTRUCTION ACCESS TO PRIVATE PROPERTY OWNERS, THE ENGINEER, AND CITY OF SAN ANGELO AT ALL TIMES DURING CONSTRUCTION.
- 36. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN NEAT AND ACCURATE PLANS ON RECORD.
- 37. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE SITE DRAINAGE THROUGHOUT THE DURATION OF THIS PROJECT
- 38. THE CONTRACTOR SHALL NOT PLACE FILL OR WASTE MATERIAL ON ANY PRIVATE PROPERTY WITHOUT PRIOR WRITTEN PERMISSION FROM THE PROPERTY OWNER AND PROVIDE CITY WITH A COPY. NO EXCESS EXCAVATED MATERIAL SHALL BE DEPOSITED IN LOW AREAS OR ALONG NATURAL DRAINAGE WAYS THAT WILL RESTRICT THE NATURAL FLOW OF WATER. IF THE CONTRACTOR PLACES EXCAVATED MATERIAL IN LOW AREAS THAT WILL CAUSE FLOOD DAMAGE, HE WILL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM SUCH FILL AND HE SHALL REMOVE THE FILL AT HIS EXPENSE.
- 39. THE CONTRACTOR SHALL AVOID DAMAGING ANY EXISTING WATER SPRINKLER SYSTEM THAT MAY BE IN THE CONSTRUCTION AREA AND WILL BE RESPONSIBLE FOR REPAIRS TO ANY DAMAGED HEADS OR LINES. REPLACEMENT, AS NECESSARY, SHALL BE AT LIKE OR BETTER MATERIAL AND INSTALLED BY a LICENSED IRRIGATOR, at THE CONTRACTORS EXPENSE. DAMAGED SPRINKLERS SHALL BE REPLACED the SAME DAY THEY ARE DAMAGED TO THE SATISFACTION OF THE CITY. DEVELOPER AND OWNER.
- 40. ALL DRIVEWAYS, WHICH SHALL BE SAW CUT, SHALL HAVE ACCESS PROVIDED AT ALL TIMES. CLOSURES, PART OR FULL, OF ANY DRIVEWAYS SHALL BE COORDINATED WITH PROPERTY OWNER. FOR DRIVEWAY TIE-INS THAT EXTEND BEYOND THE RIGHT-OF-WAY, THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF SAN ANGELO AND THE PROPERTY OWNER TO OBTAIN PERMISSION TO ACCESS THE PROPERTY AS NECESSARY TO HARMONIZE THE DRIVEWAY CONNECTION.
- 41. PI'S AND VPI'S ARE SHOWN IN THE PLANS FOR ALIGNMENT PURPOSES
- 42. CONTRACTOR SHALL USE STANDARD FITTINGS SHOWN ON THE PLAN AND DEFLECTED PIPE JOINTS, NO GREATER THAN 75% OF THE MANUFACTURERS RECOMMENDATIONS, TO ACHIEVE THE ALIGNMENT SHOWN IN THE PLANS. PIPELINE O.D. SHALL BE MAINTAINED MINIMUM 5' WITHIN R.O.W. OR PERMANENT EASEMENT.
- 43. THE CONTRACTOR SHALL DISINFECT THE NEW WATER MAINS IN ACCORDANCE WITH AWWA STANDARD C651 AND THEN FLUSH AND SAMPLE, AND PROVIDE A HARD COPY OF TEST RESULTS PRIOR TO TESTING THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATER LINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER. TEST MUST BE APPROVED BY THE CITY OF SAN ANGELO BEFORE THE WATER LINE CAN BE PUT IN SERVICE.
- 44. ALL NEWLY INSTALLED WATER PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/ NATIONAL SCIENCE FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
- 45. UNLESS SPECIFICALLY STATED ON DRAWING, THE CONTRACTOR SHALL NOT REMOVE, CUT OR DAMAGE TREES OR LIMBS WITHOUT WRITTEN APPROVAL OF THE CITY.
- 46. CONTRACTOR SHALL INSTALL TEMPORARY BACKFILL AS REQUIRED FOR OPEN TRENCH IN ESTABLISHED ROADWAYS. NO OPEN TRENCH WILL BE ALLOWED IN EXISTING PAVEMENT EXCEPT DURING DAYLIGHT HOURS, DURING CONSTRUCTION OPERATIONS. TEMPORARY BACK FILL SHALL BE INSTALLED TO THE FINISHED GRADE OF THE EXISTING PAVEMENT AND SHALL BE MAINTAINED BY THE CONTRACTOR TO ENSURE A SMOOTH DRIVING SURFACE FREE OF RUTTING AND POTHOLES. REPAIR DAMAGED PAVEMENT IN ACCORDANCE WITH SPECIFICATIONS.
- 47. CONTRACTOR SHALL DELIVER ALL SALVAGED ITEMS TO THE CITY OF SAN ANGELO'S BELL STREET YARD.



## WEST CONCHO **AVENUE** WIDENING

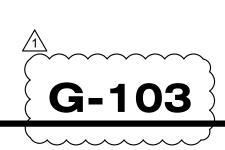


## SAN ANGELO, TEXAS

KEY PLAN

	01/26/2018	RESPONSE TO D	(DOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	NAGE	
_1	10/03/2017	RESPONSE TO T	DOT COMMENTS	
0	07/14/2017	100% CONSTRUC	TION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSL	ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16			3755.16

## **GENERAL NOTES**



	1 2		
ER	SION AND SEDIMENTATION CONTROL NOTES	SIDE	EWALKS AND C
1.	CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH TCEQ'S TPDES AND EPA'S NPDES PROGRAMS FOR CONTROL OF SILT AND EROSION. CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL UPDATE THE SWPPP AS NECESSARY BASED ON FIELD CONDITIONS.	1.	THE CURB RA CONSTRUCTION MEET THE RE 2010 ADA STA
2.	ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES. THEY SHALL REMAIN IN PLACE AND FUNCTIONAL UNTIL AFTER THE PROPOSED IMPROVEMENTS ARE IN PLACE.	2.	THE CONTRA WITHOUT APF AND CURB RA
3.	THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS AND SIDEWALKS ADJACENT TO THE PROJECT FREE OF MUD AND DEBRIS FROM CONSTRUCTION AT ALL TIMES.	3.	APPROVED B CURB RAMP F
4.	SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS INDICATED ON THE PLANS, PRIOR TO ANY EMBANKMENT OR EXCAVATION WORK BEING DONE. WHEN THE PROJECT IS COMPLETE AND THE ENTIRE PROJECT SITE IS COMPLETELY STABILIZED, THE SEDIMENT CONTROL DEVICES AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER. THE	4. 5.	LENGTH OR G CURB RAMP F OF CURB. MAXIMUM ALL
5.	CONTRACTOR HAS THE ULTIMATE RESPONSIBILITY FOR THE EFFECTIVE CONTROL OF EROSION AND SEDIMENTATION. THE SITE SHALL BE REVIEWED WEEKLY AND AFTER ANY MAJOR STORM ADJUSTMENTS/ REPAIRS	6.	THE MINIMUM UNDER 4 FEE
5. 6.	THE SITE SHALL BE REVIEWED WEEKLY AND AFTER ANY MAJOR STORM ADJUSTMENTS/ REPAIRS TO THE EROSION CONTROL DEVICES SHALL BE MADE AS DIRECTED BY THE CITY. THE EROSION CONTROL PLANS PROVIDED IN THE PLAN SET DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED BY THE SWPPP OR AS	7.	LANDINGS SH BE 5 FEET MIN WIDE AS THE
	REQUIRED BY FIELD CONDITIONS AND DIRECTED BY THE CITY. THE EROSION CONTROL PLANS ARE PROVIDED AS A COURTESY TO THE CONTRACTOR. HOWEVER, IT IS THE CONTRACTORS RESPONSIBILITY TO MEET ALL REGULATORY REQUIREMENTS FOR EROSION CONTROL.	8.	2% IN ANY DIF IN ALTERATIO FLARES SHAL
7.	EROSION CONTROL MEASURES MAY ONLY BE PLACED IN FRONT OF INLETS, OR IN CHANNELS, DRAINAGEWAYS OR BORROW DITCHES AT RISK OF CONTRACTOR. CONTRACTOR SHALL REMAIN LIABLE FOR ANY DAMAGE CAUSED BY THE MEASURES, INCLUDING FLOODING DAMAGE, WHICH MAY	9.	WHERE TURN SHALL BE 5 FI WITHIN THE C
	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.	10.	CURB RAMPS NORMALLY NO PLANTING OR SUBSTANTIAL
8.	THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARING, IMPLEMENTATION AND MAINTENANCE OF THE SWPPP. THE INSPECTION AND MAINTENANCE OF THE EROSION PREVENTION MEASURES SHALL BE THE CONTRACTOR'S RESPONSIBILITY THROUGHOUT ALL PHASES OF CONSTRUCTION. IT	11.	WHERE CURE SHALL BE ALI
	SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH TCEQ'S TPDES AND THE EPA'S NPDES (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM) REGULATIONS 40-CFR-122, 123, 124 CONCERNING EROSION AND SEDIMENT CONTROL. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUBMITTING A NOTICE OF INTENT "NOI" TO EPA 72 HOURS PRIOR TO BEGINNING	12.	COUNTER SLO CURB RAMP S
	CONSTRUCTION AND NOTICE OF TERMINATION "NOT" TO EPA UPON COMPLETION OF THE PROJECT.	<u>TRA</u>	FFIC CONTROL
TR	FFIC SIGNS AND PAVEMENT MARKINGS:	1. 2.	THE CONTRA
1.	ALL TRAFFIC SIGNS SHOWN ON THE PLANS WILL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.	3.	THE AREA OF ROADS AND S ARRANGE CO
		4.	AT A TIME. ALL CONSTRU TRAFFIC. ALL
		5.	CONTINUOUS
1.	ALL DRIVEWAYS, WHICH ARE OPEN CUT, SHALL HAVE AT LEAST A TEMPORARY DRIVING SURFACE AT THE END OF EACH DAY. THE TEMPORARY SURFACE SHALL BE CONSIDERED AS A SUBSIDIARY ITEM OF WORK. THE COST OF WHICH SHALL BE INCLUDED IN THE PRICE BID IN THE PROPOSAL FOR VARIOUS BID ITEMS.	6.	ALL SIGNS, BA PLACEMENT, TRAFFIC CON
		7.	ALL TRAFFIC CONTRACTOF CHARGED SU
		8.	THE CONTRAC FLASHERS, AI UNIFORM TRA
		9.	
		10.	TWO·WAY TR AROUND CON ACCEPTABLE
		11.	A TRAFFIC CC RESPONSIBLE CHANGES MA ENGINEER AN OWNER. TWO SIGNS, LIGHT

_	
3	

CURB RAMP NOTES

RAMP STANDARD DETAILS ARE INTENDED TO SHOW TYPICAL LAYOUTS FOR THE TION OF THE CURB RAMPS. THE INFORMATION SHOWN ON THE STANDARD DETAILS REQUIREMENTS SHOWN IN THE 2012 TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE TANDARDS FOR ACCESSIBLE DESIGN BY THE DEPARTMENT OF JUSTICE.

ACTOR MAY NOT MAKE CHANGES TO THE SIDEWALK AND CURB RAMP LAYOUT PPROVAL OF THE CITY. THE CONTRACTOR MAY PROPOSE CHANGES TO THE SIDEWALK RAMP LAYOUT DUE TO FIELD CONDITIONS, BUT ANY PROPOSED CHANGES MUST BE BY THE CITY.

PRUNNING SLOPES SHALL NOT BE STEEPER THAN 8.3% (12:1). ADJUST CURB RAMP CRADE OF APPROACH SIDEWALKS AS DIRECTED BY THE CITY.

P FLARE SLOPES SHALL NOT BE STEEPER THAN 10% (10:1) AS MEASURED ALONG BACK

LLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP SURFACES IS 2%.

JM WIDTH OF SIDEWALKS AND CURB RAMPS SHALL BE 3 FEET. SIDEWALK WIDTHS EET CANNOT EXCEED 150 FT IN LENGTH.

SHALL BE PROVIDED AT THE TOP OF CURB RAMPS. THE LANDING CLEAR LENGTH SHALL INIMUM FROM THE END OF RAMP. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS IE CURB RAMP, EXCLUDING FLARES. THE LANDING SHALL HAVE A MAXIMUM SLOPE OF DIRECTION.

IONS WHERE THERE IS NO LANDING AT THE TOP OF THE CURB RAMP, CURB RAMP ALL BE PROVIDED AND SHALL NOT BE STEEPER THAN 8.3% (12:1).

RNING IS REQUIRED, MANEUVERING SPACE AT THE TOP AND BOTTOM OF CURB RAMPS FEET BY 5 FEET MINIMUM. THE SPACE AT THE BOTTOM SHALL BE WHOLLY CONTAINED E CROSSWALK MARKINGS AND SHALL NOT PROJECT INTO VEHICULAR TRAFFIC LANES.

PS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT WALK ACROSS THE RAMP, EITHER BECAUSE THE ADJACENT SURFACE IS OR OTHER NON-WALKING SURFACE OR BECAUSE THE SIDE APPROACH IS ALLY OBSTRUCTED.

RB RAMPS ARE PROVIDED, CROSSWALK MARKINGS SHALL BE REQUIRED AND RAMPS LIGNED WITH THE CROSSWALK.

SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE P SHALL NOT BE STEEPER THAN 5% (20:1) IN ANY DIRECTION.

2

ACTOR SHALL SUBMIT A WORK SCHEDULE & TRAFFIC CONTROL PLAN.

ACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PEDESTRIANS AND MOTORISTS IN OF THE TRAFFIC SIGNAL CONSTRUCTION SITE.

) STREETS SHALL BE KEPT OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL CONSTRUCTION SO AS TO CLOSE ONLY ONE LANE IN EACH DIRECTION OF A ROADWAY

RUCTION OPERATIONS SHALL BE CONDUCTED TO PROVIDE MINIMAL INTERFERENCE TO L TRAFFIC SIGNAL EQUIPMENT INSTALLATIONS SHALL BE ARRANGED SO AS TO PERMIT JS MOVEMENT OF TRAFFIC IN ALL DIRECTIONS AT ALL TIMES.

OR SHALL BE RESPONSIBLE FOR ANY SIGNAGE NECESSARY DURING CONSTRUCTION. BARRICADES, PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES INCLUDING I, SHALL CONFORM TO THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM ONTROL DEVICES.

C CONTROL DEVICES USED AT NIGHT SHALL BE REFLECTORIZED AND/OR ILLUMINATED. OR IS RESPONSIBLE FOR ENSURING THAT BATTERIES IN ILLUMINATED DEVICES ARE SUCH THAT NO DEVICE FAILS TO OPERATE DURING THE NIGHT.

ACTOR SHALL FURNISH, INSTALL AND MAINTAIN BARRICADES, WARNING SIGNS, AND OTHER DEVICES OF THE TYPE AND SIZE INDICATED IN THE TEXAS MANUAL ON RAFFIC CONTROL DEVICES, CURRENT REVISION.

OR SHALL MAINTAIN ACCESS TO ALL PROPERTIES DURING CONSTRUCTION.

RAFFIC MUST BE MAINTAINED AT ALL TIMES ONE LANE OF TRAFFIC IN EACH DIRECTION ONSTRUCTION OPERATIONS IN PROGRESS WITH ADEQUATE SAFEGUARDS WILL BE \_E, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

CONTROL PLAN WAS PREPARED FOR THIS PROJECT. THE CONTRACTOR IS LE FOR THE IMPLEMENTATION AND MAINTENANCE OF THE TRAFFIC CONTROL PLAN. IADE TO THE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A PROFESSIONAL AND SUBMITTED FOR APPROVAL BY THE OWNER AT NO ADDITIONAL COST TO THE O-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES. ALL BARRICADES, WARNING ITS DEVICES, ETC., FOR THE GUIDANCE AND PROTECTION OF TRAFFIC AND NS MUST CONFORM TO THE INSTALLATION SHOWN IN THE TEXAS MANUAL ON UNIFORM ONTROL DEVICES (LATEST EDITION), TXDOT. ALL TRAFFIC CONTROL DEVICES SHALL BE DAILY.

WATER & WASTEWATER NOTES:

- 1. FOR UTILITY WORK WITHIN UTILITY EASEMENTS, ONCE PIPE OR APPURTENANCES HAVE BEEN INSTALLED OR REHABILITATED, IMMEDIATELY COMMENCE TEMPORARY SURFACE RESTORATION. COMPLETE SURFACE RESTORATION TO THE OWNER'S SATISFACTION WITHIN SEVEN (7) DAYS OF WORK FINISHING ON-SITE. FAILURE TO MAINTAIN SURFACE RESTORATION, AS NOTED ABOVE, MAY RESULT IN SUSPENSION OF WORK UNTIL RESTORATION IS COMPLETE.
- EXISTING VERTICAL DEFLECTIONS AND PIPE SLOPES SHOWN ON THE DRAWINGS ARE 2. APPROXIMATE AND HAVE NOT BEEN FIELD VERIFIED, UNLESS OTHERWISE NOTED. RIM ELEVATIONS, FLOW LINES, AND HORIZONTAL LOCATIONS OF EXISTING MANHOLES WERE DETERMINED FROM FIELD SURVEY. IF FIELD CONDITION VARY FROM THOSE SHOWN ON DRAWINGS, CONTRACTOR SHALL NOTIFY CITY.
- MAINTAIN ALL EXISTING WATER AND WASTEWATER CONNECTIONS TO CUSTOMERS IN WORKING ORDER AT ALL TIMES, EXCEPT FOR BRIEF INTERRUPTIONS IN SERVICE FOR WATER AND SEWER SERVICES TO BE REINSTATED. IN NO CASE SHALL SERVICES BE ALLOWED TO REMAIN OUT OF SERVICE OVERNIGHT.
- 4. PROVIDE AND FOLLOW APPROVED CONFINED SPACE ENTRY PROGRAM IN ACCORDANCE WITH OSHA REQUIREMENTS. CONFINED SPACES SHALL INCLUDE MANHOLES AND ALL OTHER CONFINED SPACES IN ACCORDANCE WITH OSHA'S PERMIT REQUIRED FOR CONFINED SPACES.

### WATER:

- 1. PROVIDE THRUST RESTRAINT BY MEANS OF RESTRAINING JOINTS AT FITTINGS AND CONCRETE BLOCKING. WHEN SPECIFICALLY INDICATED ON THE DRAWINGS, PROVIDE THRUST RESTRAINT AT DESIGNATED JOINTS BEYOND THE FITTINGS. EACH METHOD SHALL BE CAPABLE OF THRUST RESTRAINT INDEPENDENT OF THE OTHER SYSTEM.
- 2. PROPOSED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36-INCHES COVER ABOVE THE TOP OF PIPE, UNLESS SHOWN OTHERWISE ON THE DRAWINGS OR DETAILS.
- 3. ELEVATION ADJUSTMENT AT CONNECTIONS MAY BE MADE WITH BENDS, OFFSETS, OR JOINT DEFLECTIONS. JOINT DEFLECTIONS SHALL NOT EXCEED SEVENTY-FIVE PERCENT (75%) OF MANUFACTURER'S RECOMMENDATIONS.
- 4. TEMPORARY PRESSURE PLUGS REQUIRED FOR SEQUENCING OF CONSTRUCTION AND TESTING OF PROPOSED WATER LINES SHALL BE CONSIDERED SUBSIDIARY TO THE WORK AND SHALL BE INCLUDED IN THE PRICE BID IN THE PROPOSAL FOR VARIOUS BID ITEMS.
- 5. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION.
- CONTRACTOR SHALL DECHLORINATE WATER USED FOR FLUSHING NEW PIPELINE PRIOR TO DISCHARGE TO STORM DRAIN PER TCEQ AND EPA REQUIREMENTS. WATER DISCHARGE WHILE DRAINING, TESTING, OR DISINFECTING PIPELINES SHALL BE DONE IN ACCORDANCE WITH TCEQ GENERAL PERMIT NO. TX670000.
- 7. ALL BURIED VALVES, FIRE HYDRANTS, METALLIC PIPING, AND METALLIC EQUIPMENT SHALL BE WRAPPED IN POLYETHYLENE IN ACCORDANCE WITH THE SPECIFICATIONS.
- 8. THE CONTRACTOR SHALL NOT OPERATE WATER MAIN VALVES WITHOUT DIRECT SUPERVISION BY CITY.
- CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY BY-PASS WATER SYSTEMS AS REQUIRED TO MAINTAIN FRESH, CLEAN, POTABLE WATER SUPPLY TO WATER SERVICE CUSTOMERS. ONLY MINIMAL SERVICE SHUTDOWNS WILL BE ALLOWED. CONTRACTOR SHALL NOTIFY THE OWNER AND ALL WATER SERVICE CUSTOMERS OF ANY TEMPORARY WATER SERVICE SHUTDOWNS.
- 10. CONTRACTOR SHALL COORDINATE WITH THE CITY FOR ALL REMOVED AND SALVAGED EQUIPMENT TO BE TRANSPORTED TO THE CITY YARD ON BELL STREET. CONTRACTOR SHALL NOT REUSE ANY SALVAGED EQUIPMENT FOR NEW CONSTRUCTION.



## WEST CONCHO AVENUE WIDENING



## SAN ANGELO, TEXAS

KEY PLAN

_				
_4	01/26/2018	RESPONSE TO T	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	SNAGE	
1	10/03/2017	RESPONSE TO T	XDOT COMMENTS	
0	07/14/2017	100% CONSTRUC	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSU	ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16			3755.16

**GENERAL NOTES** 



	1 2	
	TXDOT GENERAL NOTES	COVER NEW SIGN
	THE FOLLOWING STANDARD SHEETS HAVE BEEN MODIFIED: "NONE"	INSTALL MAST-AR
	LOCATE THE PROJECT BULLETIN BOARD AT AN APPROVED LOCATION WITHIN THE PROJECT LIMITS SUCH AS AT A FIELD OFFICE, STAGING AREA, OR STOCKPILE, AND MAKE ACCESSIBLE TO THE PUBLIC AT ALL TIMES. DO NOT REMOVE THE BULLETIN BOARD FROM THE PROJECT UNTIL APPROVED. IF A CONSTRUCTION SITE NOTICE IS REQUIRED FOR THE PROJECT, POST A COPY AT EACH GEOGRAPHICALLY SEPARATED WORK LOCATION.	INDICATED. PROVIDE IMSA LE SIGNAL MAINTEN/ PERIODS. FURNIS FOR TRAFFIC SIG TRAVEL TIME FRO
D	<u>ITEM 5, "CONTROL OF THE WORK"</u> MAKE SUITABLE ADVANCE NOTIFICATION TO AFFECTED NON-PARTICIPATING MUNICIPALITIES REGARDING CLASS B UNDERGROUND FACILITIES, CALL THE DEPARTMENT'S SAN ANGELO DISTRICT	REPAIRS WITHIN 2 SHALL KEEP A RE TROUBLE CALL. T TEST PERIOD WIT
	TRAFFIC OFFICE AT TELEPHONE NUMBER (325) 947-9208 TO HAVE THE DEPARTMENT'S EXISTING TRAFFIC SIGNAL AND ILLUMINATION UTILITIES LOCATED, AND CALL THE DEPARTMENT'S SAN ANGELO DISTRICT MAINTENANCE OFFICE AT TELEPHONE NUMBER (325) 947-9322 TO HAVE THE DEPARTMENT'S EXISTING IRRIGATION UTILITIES LOCATED.	DEMONSTRATE T CONTROLLER AS CONTROLLER AS THAT THE FIELD V PERIOD WILL BEG
	<u>ITEM 618, "CONDUIT"</u>	REMOVE AND DEL
	WHERE PVC, DUCT CABLE, AND HDPE CONDUIT 1 IN. DIAMETER AND LARGER IS ALLOWED AND INSTALLED AS PER DEPARTMENT STANDARDS, OPTIONALLY PROVIDE PVC ELBOWS IN PLACE OF THE GALVANIZED RIGID METAL ELBOWS REQUIRED BY THE ELECTRICAL DETAILS STANDARD SHEETS. PROVIDE PVC ELBOWS OF THE SAME SCHEDULE RATING AS THE CONDUITS TO WHICH THEY CONNECT. USE ONLY A FLAT, HIGH TENSILE STRENGTH POLYESTER FIBER PULL TAPE FOR PULLING CONDUCTORS THROUGH THE PVC CONDUIT SYSTEM THAT USES PVC ELBOWS.	CONTROLLERS TO KNICKERBOCKER REMOVE EXISTING OR AS DIRECTED. CONTROLLER CAI
	SECURE PERMISSION FROM THE PROPER AUTHORITY BEFORE CUTTING INTO OR REMOVING ANY WALKS OR CURBS.	ITEM 682, "VEHICL
	INSTALL CONDUIT UNDER EXISTING PAVEMENT BY AN APPROVED BORING METHOD UNLESS OTHERWISE DIRECTED. DO NOT CONSTRUCT BORING PITS WITHIN 2 FT. OF THE EDGE OF THE PAVEMENT UNLESS OTHERWISE DIRECTED. WHEN CONDUITS ARE BORED, THE VERTICAL AND	SIGNAL HEADS, LI SHALL BE BLACK MANUFACTURED
	HORIZONTAL TOLERANCES SHALL NOT EXCEED 18 IN. AS MEASURED FROM THE INTENDED TARGET POINT.	SIGNAL HEADS M
С	DO NOT USE A PNEUMATICALLY DRIVEN DEVICE FOR PUNCHING HOLES BENEATH THE PAVEMENT, COMMONLY KNOWN AS A "MISSILE."	ENCLOSE ELECTF
	INSTALL A PULL ROPE IN CONDUIT RUNS IN EXCESS OF 60 FT.	ITEM 684, "TRAFFI
	FURNISH AND INSTALL DUCT SEAL AT ENDS OF CONDUITS. FURNISH AND INSTALL ACCESS FITTINGS IN BRIDGES FOR CONDUIT.	LEAVE A MINIMUM ENCLOSURE.
	OPTIONALLY SUBSTITUTE HDPE CONDUIT MEETING THE REQUIREMENTS OF ITEM 622, "DUCT	TERMINATE THE N
	CABLE" FOR BORES REQUIRING PVC SCHEDULE 40 AND SCHEDULE 80 CONDUIT WHEN APPROVED. HDPE SHALL BE THE SAME SIZE AS THE PVC CONDUIT SHOWN ON THE PLANS. NO ADDITIONAL COMPENSATION WILL BE PAID WHEN HDPE IS SUBSTITUTED FOR THIS PURPOSE.	THE HAND HOLE. IDENTIFY EACH CA DOUBLE-TIE STRA
	INSTALL A CONTINUOUS BARE OR GREEN INSULATED COPPER WIRE NUMBER 8 AWG OR LARGER IN EVERY CONDUIT THROUGHOUT THE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE ELECTRICAL DETAIL SHEETS AND THE NEC.	ITEM 686, "TRAFFI
	ITEM 620, "ELECTRICAL CONDUCTORS"	SET ANCHOR BOL COMPRESSION.
	GROUNDING CONDUCTORS THAT SHARE THE SAME CONDUIT, JUNCTION BOX, GROUND BOX OR STRUCTURE SHALL BE BONDED TOGETHER AT EVERY ACCESSIBLE POINT IN ACCORDANCE WITH THE NEC.	TRAFFIC SIGNAL I PURPOSES ONLY POLE HEIGHT NEC
	FOR BOTH TRANSFORMER AND SHOE-BASE TYPE ILLUMINATION POLES, PROVIDE DOUBLE-POLE BREAKAWAY FUSE-HOLDERS AS NOTED ON THE DEPARTMENT'S MATERIAL/PRODUCER LIST FOR ROADWAY ILLUMINATION AND ELECTRICAL SUPPLIES.	ROADWAY SURFA MAST ARM, AND T HEADS OVER THE WHERE THE SIGN DETERMINED FRO
В	ITEM 628, "ELECTRICAL SERVICES"	AND BELOW-GRO
	COSTS FOR UTILITY-OWNED POWER LINE EXTENSIONS, CONNECTION CHARGES, METER CHARGES, AND OTHER CHARGES WILL BE PAID FOR BY THE CITY OF SAN ANGELO. THE CITY OF SAN ANGELO WILL REIMBURSE THE CONTRACTOR ONLY THE AMOUNT BILLED BY THE UTILITY. NO ADDITIONAL AMOUNT FOR SUPERVISION OF THE UTILITY'S WORK WILL BE PAID.	ITEM 687, "PEDES INSIDE EACH BRE MATERIAL/PRODU NEUTRAL BREAKA
	<u>ITEM 636, "SIGNS"</u> INSTALL THE PRISMATIC SHEETING FOR OVERHEAD SIGNS MATERIAL TO WITHIN 30 DEGREES OF THE MANUFACTURER-SPECIFIED ORIENTATION.	
	ITEM 680, "HIGHWAY TRAFFIC SIGNALS"	
	SIGNAL AND SIGN MOUNTS SHALL BE AS MANUFACTURED BY THE FOLLOWING, OR APPROVED EQUAL:	
A	PELCO PRODUCTS 320 WEST 18TH STREET EDMOND, OKLAHOMA 73013 405-340-3434 WWW.PELCOINC.COMTRAFFIC PARTS INC. OR TRAFFIC PARTS INC. P.O. BOX 837 SPRING, TEXAS 77383 800-345-6329	
	WWW.TRAFFICPARTS.COM	

EVEL I PERSONNEL ON THE JOB OR ON-CALL 24 HOURS PER DAY TO PROVIDE TRAFFIC NANCE AFTER INSTALLATION OF THE TRAFFIC SIGNALS, DURING THE SPECIFIED TEST SH THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE PERSON RESPONSIBLE GNAL MAINTENANCE. RESPOND TO REPORTED TROUBLE CALLS WITHIN A REASONABLE COM A SAN ANGELO ADDRESS, NOT TO EXCEED THIRTY MINUTES. MAKE APPROPRIATE 1 24 HOURS. FURNISH AND INSTALL A LOGBOOK IN THE CONTROLLER CABINET AND ECORD OF EACH TROUBLE CALL REPORTED. NOTIFY THE ENGINEER OF EACH THE ERROR LOG IN THE CONFLICT MONITOR SHALL NOT BE CLEARED DURING THE ITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

THAT THE FIELD WIRING IS PROPERLY INSTALLED AND THEN INSTALL THE SSEMBLY ON THE COMPLETED FOUNDATION. CONNECT THE FIELD WIRING TO THE SSEMBLY, SET UP, AND TURN ON THE CONTROLLER. AFTER IT HAS BEEN DETERMINED WIRING (INCLUDING ANY DETECTOR LOOPS) IS SATISFACTORY, THE SPECIFIED TEST GIN.

ELIVER MAST ARM ASSEMBLIES, PEDESTRIAN SIGNAL HEADS, AND TRAFFIC SIGNAL TO THE SAN ANGELO DISTRICT TRAFFIC SIGNAL SHOP LOCATED AT 4502 R ROAD IN SAN ANGELO.

NG GROUND BOXES THAT ARE NOT INDICATED TO REMAIN, AS SHOWN IN THE PLANS D.

ABINETS SHALL BE BASE-MOUNTED.

### CLE AND PEDESTRIAN SIGNAL HEADS"

LENSES AND VISORS SHALL BE MANUFACTURED OF POLYCARBONATE. SIGNAL HEADS ( OR OTHER COLOR AS APPROVED. MOUNTING BRACKETS AND PIPES SHALL NOT BE ) OF POLYCARBONATE.

NOUNTED ON POLES AND MAST ARM SHALL BE LEVEL AND PLUMB.

RICAL WIRING AND TRAFFIC SIGNAL CABLE IN AN APPROVED TRAFFIC SIGNAL DEVICE.

### FIC SIGNAL CABLES"

IM OF 1 FT. OF EACH SIGNAL CABLE IN EACH SIGNAL POLE BASE AND CONTROLLER

MULTICONDUCTOR SIGNAL CABLE SHOWN ON THE PLANS ON THE TERMINAL STRIP IN DO NOT SPLICE THE CONDUCTORS AT THE HAND HOLE.

CABLE AS SHOWN ON THE PLANS WITH PERMANENT MARKING LABELS USING A RAP LABEL AT EACH GROUND BOX, POLE BASE AND CONTROLLER.

### FIC SIGNAL POLE ASSEMBLIES (STEEL)"

OLTS FOR SIGNAL POLES SO THAT TWO ARE IN TENSION AND TWO ARE IN

POLE HEIGHTS AND MAST ARM LENGTHS ARE SHOWN ON THE PLANS FOR BIDDING Y. BEFORE FABRICATION, MAKE FIELD MEASUREMENTS TO DETERMINE THE ACTUAL ECESSARY TO ENSURE A VERTICAL CLEARANCE BETWEEN 17'-6" AND 19'-0" FROM THE FACE TO THE BOTTOM OF THE LOWEST POINT ON THE SIGNAL HEAD ASSEMBLY OR TO DETERMINE THE MAST ARM LENGTHS REQUIRED TO MOUNT THE TRAFFIC SIGNAL IE TRAVEL LANES. THE MAST ARM SHALL BE STRAIGHT AND LEVEL IN THE SPAN AREA ENAL HEADS ARE ATTACHED. THESE FIELD MEASUREMENTS AND ELEVATIONS SHALL BE ROM THE ACTUAL FIELD LOCATIONS OF THE POLE FOUNDATIONS, CONSIDERING ABOVE-OUND UTILITIES AND THE EXISTING ROADWAY ELEVATIONS AND WIDTHS.

### STAL POLE ASSEMBLIES"

2

EAKAWAY BASE, PROVIDE BREAKAWAY FUSE-HOLDERS CONFORMING TO DUCER LIST, "ITEM 620 - ELECTRICAL CONDUCTORS" FOR UNGROUNDED CABLES, KAWAY CONNECTORS FOR NEUTRAL CABLE, AND PEDESTRIAN BUTTON CABLES. \_



## WEST CONCHO AVENUE WIDENING

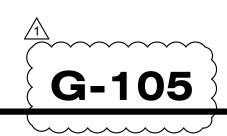


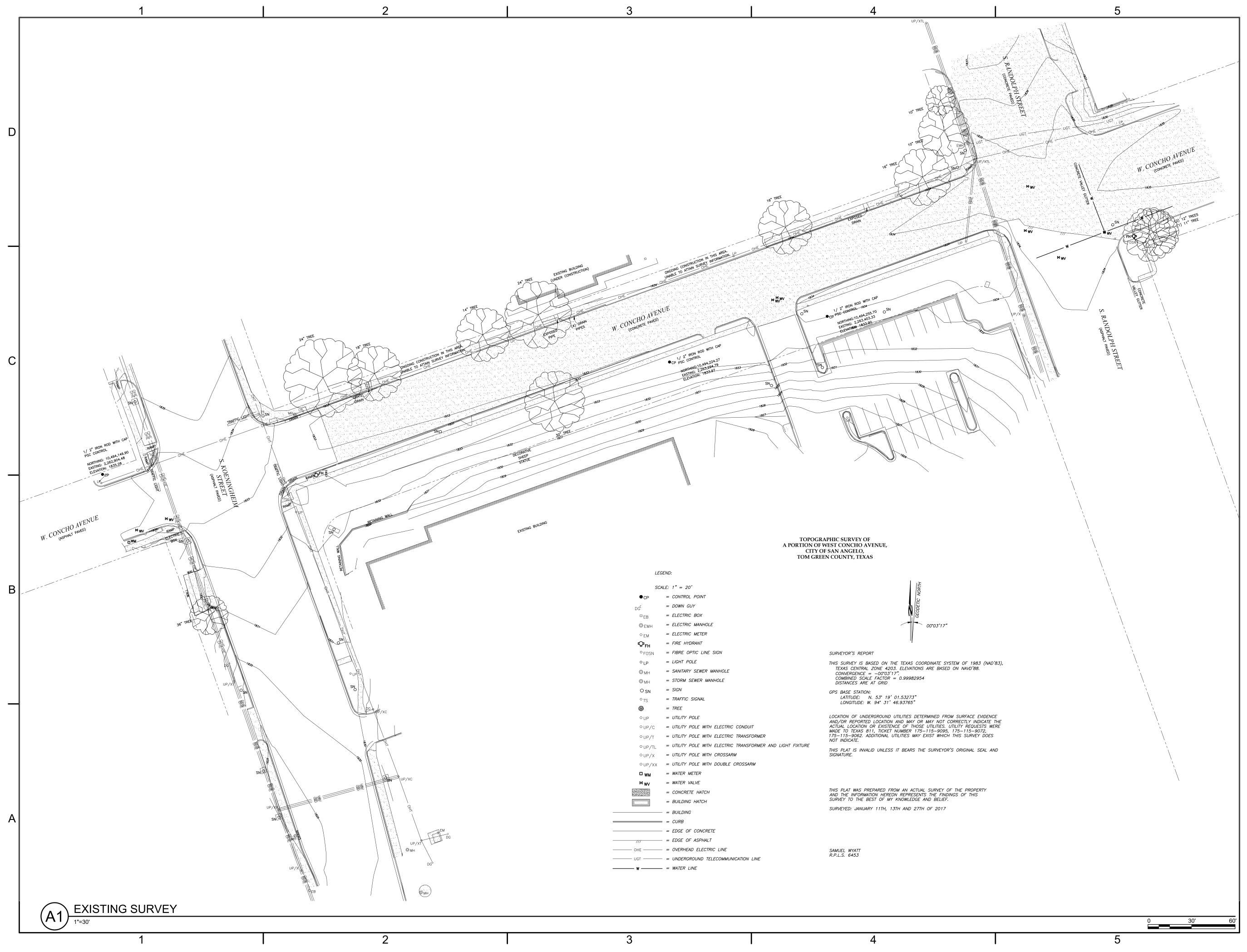
SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO T	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	GNAGE	
1	10/03/2017	RESPONSE TO T	XDOT COMMENTS	
0	07/14/2017	100% CONSTRU	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16			3755.16	

**GENERAL NOTES** 







SMITI

PARKHIL

## WEST CONCHO AVENUE WIDENING



## SAN ANGELO, TEXAS

KEY PLAN

—						
4	01/26/2018	RESPONSE TO T	KDOT COMMENTS			
3	12/29/2017	WAYFINDING SIGNAGE				
1	10/03/2017	RESPONSE TO T				
0	07/14/2017	100% CONSTRUC	TION DOCUMENTS			
NO	DATE	DESCRIPTION				
ISSL	JING OFFICE:	MIDLAND	PROJECT NO:	3755.16		

**EXISTING SURVEY** 



			-									2					•		
				SU	MMARY	of Re	EMOVA		MS (C	oSA FL	NDED	<b>)</b> )							
		10			104 6029		104 6036			105 6015		496 600		496 6002		677 6007			
REMOVAL F	PLAN	REMOVIN (P/	IG CON	C (CURE	OVING CO OR CUR		MOVING SIDEWAL RAMP	CONC K OR		MOVING S AND ASP (8"-10")			E STR	REMOVE S (INLET)	TR	LEMEXTP. /IRK&MRK (24'')	S		
		S			LF		SY	, 		SY		LF		EA	(C	ROSSWAL LF	<u>_K)</u>		
SHEET C- TOTALS		29 2,9	50 50		1060 1,060		470 470			430 430		- 0		- 0		- 0			
$\sim\sim\sim$	$\sim$	$\sim$	$\sim$	$\frown$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$ \searrow $			
				SUMM	ARY OF	UTILIT	YITEN	IS (Co	SA FI	UNDED	)								
			667 )02	2667 003	2667 004	260 00		2667 006	2667 007	260 00		2667 009	266 01		2667 011				
PLAN AND PROFILE SHEE	T LI	NES LI	ATER NES 0 IN)	WATER LINES (8 IN)	WATE LINES (6 IN)	; VAL\	/ES   VA	ATER ALVES 10 IN)	WATE VALVES IN)	R WAT S (8 VALVI IN	S (6	WATER ITTINGS	RELO FIR HYRD		GATION PIPE .EEVE				
SHEET C-104			LF 30	LF 160	LF 60	E/ 8		EA 2	EA 4	E.		TONS 2.856	E/	A	EA 11				
TOTALS		70	30	160		8		2	4			3			11	])			
		440								TEMS (			-	504		504	504		
		110 6001	13 60	32 01	351 6013	_	360 6047		529 001	53 60			30 )04	531 6001		531 6004	531 6010	4:	33 )1
PLAN AND PROFILE SHEE		AVATION DADWAY)	EMBAN (FINAL) COMP)	) (ORD ) (TYA)	FLEXIBL PAVEME STRUCTU <u>REPAIR (</u> CY	NT (CO	NC PVMT NT REINF RCP) (6") SY	Cl (1	DNC JRB 'Y I) LF	INTERSE (CO	NC)	(CC	EWAYS DNC)	CONC SIDEWAI (4") SY		CURB RAMPS (TY 1) EA	CURB RAMPS (TY 7) EA	AND S	NING EALING 6 (CL 5) F
SHEET C-301 TOTALS		260 260	1 1	0	21 21		2,765 2,765	1,	210 210	3 1,0 1,0	90	8	35 35	605 605		8 8	2 2 2	6,0	
EROSION		506 6020 DNSTRUCT		500 602	4	60	06 136 AGS FOR	TEN	506 6038 /IP SEDI	MT TI	506 6039 MP SE		10 00 EEDIN		160 00 <sup>-</sup> RNISHI	1			
CONTROL SHEET		S (INSTAL 1)	V (TV		EMOVE)	ERO CONTF	SION ROL (6'')		NT FENO	CE C	DNT FE REMO	NCE	EROS CONT	ROL	PLAC TOPS	ING OIL			
SHEET C-201 TOTALS		SY - 0		  0		3	.F 60 60		LF 470 470		LF 470 470		500 500	2	SY 500 500	)			
			I											oSA FU					
		666		666	666		666	6	68	66	3	666	3	636		644		644	644
SIGNING AN MARKING PL SHEETS		6167 REFL PAV WARK TY II V) 4" (BRK	REF MAF	5176 FL PAV RK TY II 8'' (DOT)	6178 REFL P MARK T (W) 8" (S	AV R YII MA	6182 EFL PAV ARK TY II 24" (SLD	PREF MRł	077 AB PAV ( TY C W)	608 PREFA MRK (W) (W	B PAV Y C	620 REFL MARK (Y) 4" (S	PAV TY II	6001 ALUMINUM SIGN (TY A		6023 SM RD SN SUP&AM RP(1)UA(P	RELOC RD SN	075 CATE SM SUP&AM I ONLY)	
		LF		LF	LF		LF	<u>´ (AR</u>	ROW) EA	EA		LF		SF		EA	E	ĒA	EA
SHEET C-403 TOTALS	3	200 200		18 18	95 95		780 780		4 4	2		961 961		12.5 12.5		7 7		5 5	6 6
<u> </u>				CONT					<u> </u>										
502		662		66		-	62		677										
6001 BARRICADES, AND TRAFI	FIC	NON-RE	V MRK MOV	REMOV	PAV MRK (REFL)	WK ZN F	058 PAV MRK V (TRAF	ELEN MRK	6001 I EXT PA & MRK										
HANDLIN MO 5	J	(Y)4"S LF 1,00		TY II 5		Ē	TY Y EA 50		(4") LF 1,000										
SUMMARY					-		)ED)	) 🔏											
WAYFINDIN SIGNAGE		VEH	ICULAR		LARGE [	T.11.1 DOWNTO /AY, LAR(		) )											
SHEET C-1	-	DIRECT	EA			PRINT SK		) ) \											

2

SHEET C-102 TOTALS



		SUMMARY OF	REMOVAL ITEM	IS (TxDOT FUNDE	ED)	
	104	104	104	105	496	
	6001	6029	6036	6015	6007	6
REMOVAL PLAN	REMOVING CONC (PAV)	REMOVING CONC (CURB OR CURB & GUTTER)	REMOVING CONC (SIDEWALK OR RAMP)	REMOVING STAB BASE AND ASPH PAV (8"-10")	REMOVE STR (PIPE)	REM(
	SY	quan	SY	SY	LF	
SHEET C-102	-	120	50	140	80	

50

SUM		JTILITY ITE	EMS (TxDC	OT FUNDED)	
	464	465	465	402	402
	6005	2001	2008	6001	6173
PLAN AND PROFILE SHEET	RC PIPE (CL III) (24 IN)	INLET (COMPL) (TY C)	INLET EXT (TY E)	TRENCH EXCAVATION PROTECTION	JCT BOX (COMPL) (SPL)
	LF	EA	EA	LF	EA
SHEET C-104	145	2	8	145	1
TOTALS	145	2	8	145	1

\_\_\_\_\_

120

0

	110	132	351	360	529	530	530	531	531	531
	6001	6001	6013	6047	6001	6001	6004	6001	6004	6010
PLAN AND PROFILE SHEET	EXCAVATION (ROADWAY)	EMBANKMENT (FINAL) (ORD COMP) (TYA)	FLEXIBLE PAVEMENT STRUCTURE REPAIR (4")	CONC PVMT (CONT REINF - CRCP) (6'')	CONC CURB (TY I)	INTERSECTIONS (CONC)	DRIVEWAYS (CONC)	CONC SIDEWALKS (4'')	CURB RAMPS (TY 1)	CURE RAMP (TY 7
	CY	CY	CY	SY	LF	SY	SY	SY	EA	EA
SHEET C-301	-	-	46	-	110	160	-	60	4	-
TOTALS	0	0	46	0	110	160	0	60	4	0

SHEET EXITS (INSTALL) (TY EXITS (REMOVE) EROSION CONT FENCE CONT FEN	)				
	506	506	506	506	506
EPOSION	6020	6024	6036	6038	6039
	CONSTRUCTION		SANDBAGS FOR	TEMP SEDMT	TEMP SEDMT
	EXITS (INSTALL) (TY		EROSION	506506506603860395 FORTEMP SEDMTTEMP SEDONCONT FENCECONT FENOL (6")(INSTALL)(REMOVE)	CONT FENCE
SHELT	1)		CONTROL (6")		(REMOVE)
	N         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         506         507         507         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501         501	LF			
SHEET C-201	-	-	70	-	-
TOTALS	0	0	70	0	0

$\sim\sim\sim\sim$	$\sim$	$\sim$	$\sim$	$\sim\sim\sim$	
SUMMARY OF		ND PAVEME OT FUNDED		NG ITEMS	$\left.\right)^{\underline{4}}$
	666	644	644	644	)
	6182	6027	6075	6076	<
SIGNING AND MARKING PLAN SHEETS	REFL PAV MARK TY II (W) 24'' (SLD)	IN SM RD SN SUP&AM TYS80(1)SA(P)	RELOCATE SM RD SN SUP&AM (SIGN ONLY)	REMOVE SM RD SN SUP&AM	$\left\{ \right\}$
	LF	EA	EA	EA	
SHEET C-403	840	1	1	1	<
TOTALS	840	1	1	1	)

## SUMMARY OF TRAFFIC CONTROL ITEMS (TxDOT FUNDED)

(1 X L	(IXDOI FUNDED)									
502	672	672								
6001	6016	6012								
BARRICADES, SIGNS AND TRAFFIC HANDLING	TRAFFIC BUTTON TY W	TRAFFIC BUTTON TY FC								
MO	EA	EA								
5	15	15								

96	677
002	6007
	ELEM EXT PAV
VE STR	MRK & MRKS
LET)	(24'')
	(CROSSWALK)
ΞA	LF
1	300
1	300

80

140



## WEST CONCHO AVENUE WIDENING

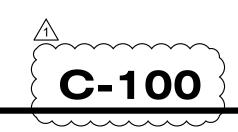


### SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING SI	GNAGE	
1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRU	ICTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSL	JING OFFICE:	MIDLAND	PROJECT NO:	3755.16

SUMMARY SHEET



F			1		2			
				SUMMA	RY OF	SN	ΛΑ	<u>\</u>
D	PLAN SHEET NO.	SIGN NO.	SIGN NOMENCLATURE	SIGN	DIMENSION	S	FLAT ALUMINUM (TYPE A)	EXAL ALUMINUM (TYPE G)
	1 OF C-40	25	R3-7R	RIGHT LANE MUST TURN RIGHT	36X36			
-	C-40		EXISTING		T.		• •	
	C-40		EXISTING	TEXAS BANK SPORTS COMPLEX AHE			•	
	C-40		EXISTING	YMCA ENTRANCE			✓ ✓	
-								
-								
-								
B -								
-								
-								-
ļ								F
A -								
ł								$\left  \right $
FILE:								

<u> </u>		4	Z		3		
							SIGNS
	BRIDGE		<u>X—XXXX)</u>	<u>(X) XX (</u>	ASSM TY XXXX	SGN	
	MOUNT			·			
	CLEARANCE SIGNS	DN	I NTING DESIGNATIO	MOL	ANCHOR TYPE	POSTS	POST TYPE
	(See m Note 2)		1EXT or 2EXT =	REFABRICATED			
		ft Wing	BM = Extruded WC = 1.12 #/f	⊃ = "Plain"	UB=Universal Bolt SA=Slipbase-Conc	1 or 2	FRP = Fiberglass FWT = Thin-Wall
	TY = TYPE		Channel EXAL= Extruded	T = "T" J = "U"	SB=Slipbase-Bolt WS=Wedge Steel		0BWG = 10 BWG 580 = Sch 80
	TY N TY S	Alum Sign	Panels	J = U	WP=Wedge Plastic		560 - 361 60
				P		1	10BWG
<b></b>				Ρ	SA		TOBWG
ALUMINU				Ρ	SA	1	10BWG
				P	SA	1	10BWG
						1	100.000
				Ρ	SA		10BWG
(							
The Star for Texa							
the follo							
NOTE:							
1. Sign supp on the p							
may shif design g							
secure a avoid co							
otherwise Contract							
will verify							
2. For instal signs, se							
Assembly							
7 Fan Sian							
3. For Sign Sign Mou Signs Ge							
Signs Ge							
Texas De							
	FILE:						
xDOT							
REVISIONS							
<del></del>		4	/		3		
I		•	-	T	$\checkmark$		1



			THICKNESS	BLANKS	SIGN	INUM
	ess	Thickn	Minimum	Feet	quare	S
	080"	0.0		ın 7.5	ss tha	Le
<b>c"</b>	0.100			15	7.5 to	-
25"	0.1			nan 15	ater th	Gree

Standard Highway Sign Designs Texas (SHSD) can be found at following website.

http://www.txdot.gov/

supports shall be located as shown he plans, except that the Engineer shift the sign supports, within guidelines, where necessary to re a more desirable location or to I conflict with utilities. Unless rwise shown on the plans, the ractor shall stake and the Engineer verify all sign support locations.

installation of bridge mount clearance is, see Bridge Mounted Clearance Sign embly (BMCS)Standard Sheet.

Sign Support Descriptive Codes, see Mounting Details Small Roadside s General Notes & Details SMD(GEN).

## WEST CONCHO AVENUE WIDENING



### SAN ANGELO, TEXAS

KEY PLAN

Department of Transportation

Traffic Operations Division Standard

SHEET NO.

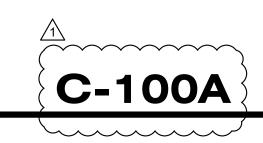
## SUMMARY OF SMALL SIGNS

SOSS						
	dn: Tx[	)OT	ск: TxDOT	DW:	TxDOT	ск: ТхDOT
	CONT	SECT	JOB		HIGH	IWAY

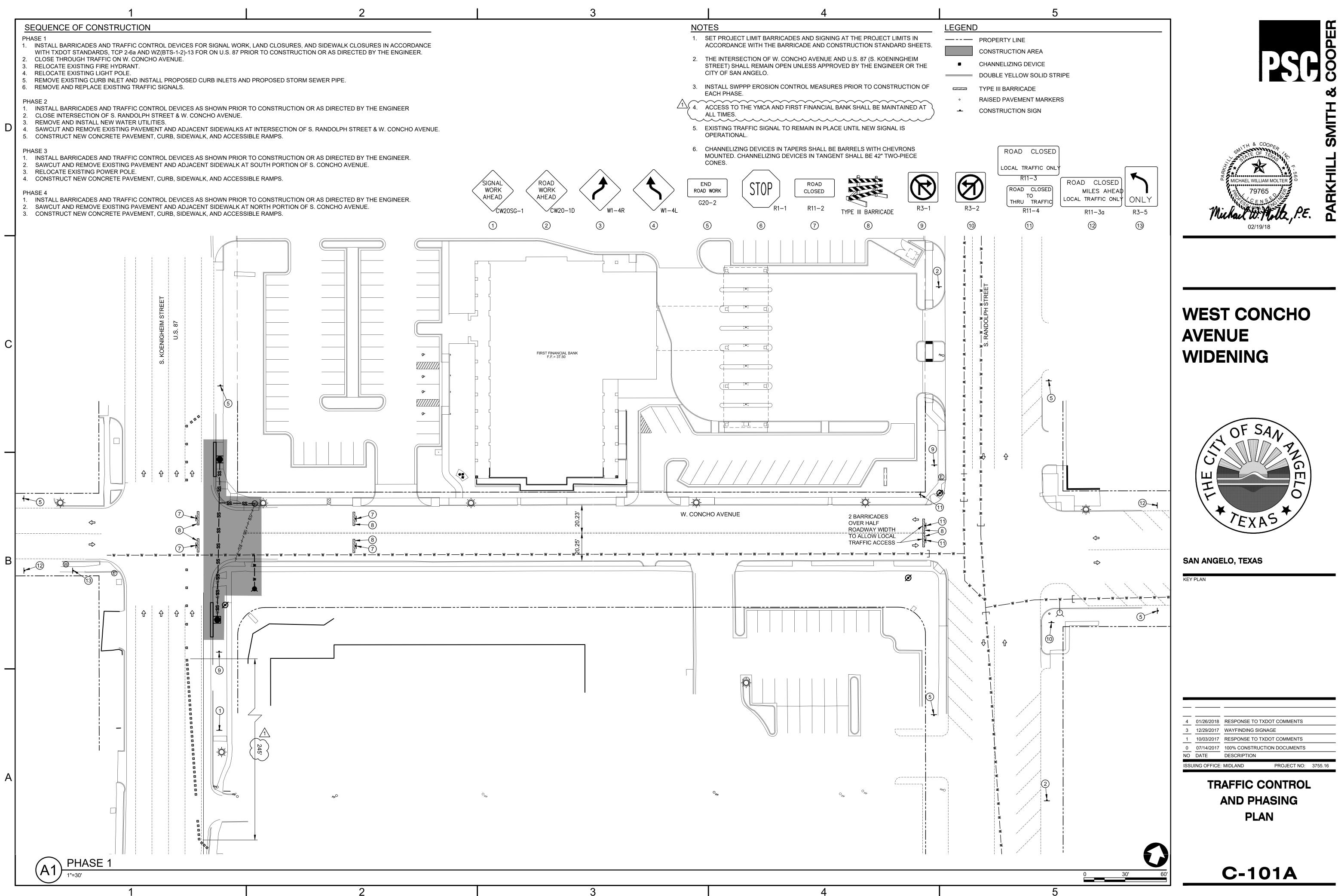
COUNTY

4	01/26/2018	RESPONSE TO 1	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	GNAGE	
1	10/03/2017	RESPONSE TO 1	XDOT COMMENTS	
0	07/14/2017	100% CONSTRU	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSI	JING OFFICE:	MIDLAND	PROJECT NO:	3755.16

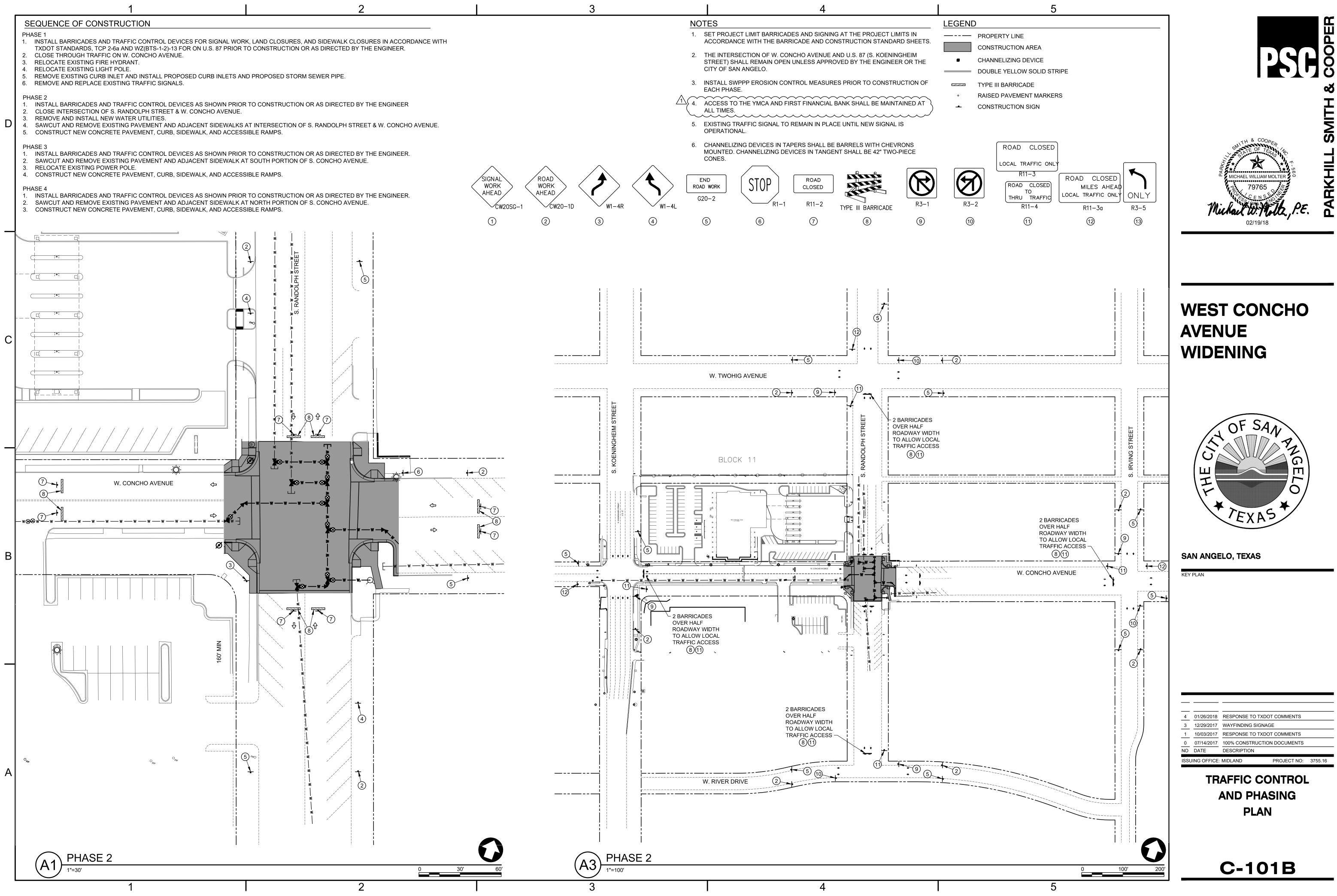




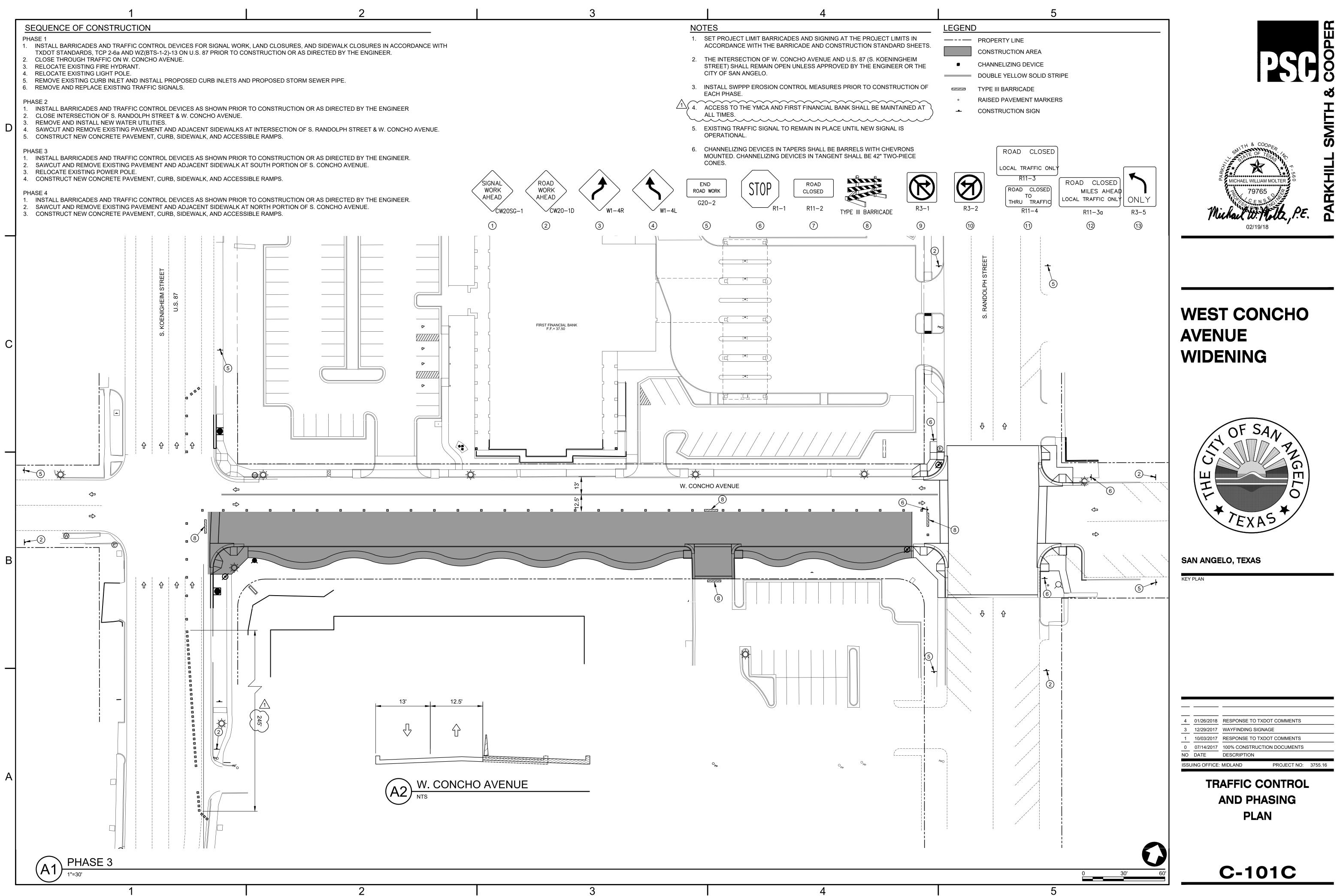
DIST



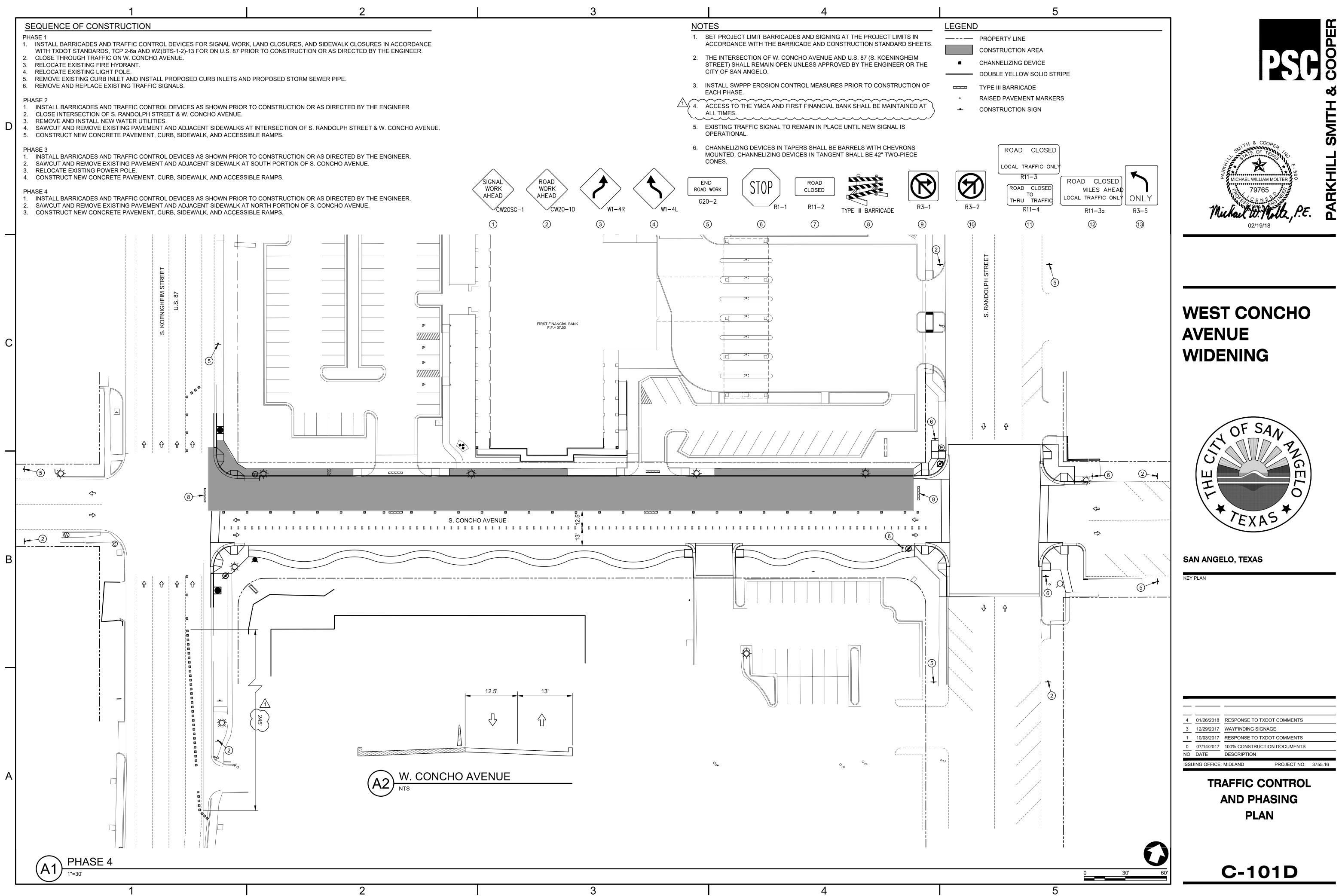
4	01/26/2018	RESPONSE TO TXD	OT COMMENTS	
3	12/29/2017	WAYFINDING SIGNA	AGE	
1	10/03/2017	RESPONSE TO TXD	OT COMMENTS	
0	07/14/2017	100% CONSTRUCTI	ON DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAN		MIDLAND	PROJECT NO:	3755.16



—				
4	01/26/2018	RESPONSE TO TXE	OOT COMMENTS	
3	12/29/2017	WAYFINDING SIGN	AGE	
1	10/03/2017	RESPONSE TO TXE	OOT COMMENTS	
0	07/14/2017	100% CONSTRUCT	ION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PROJECT			PROJECT NO:	3755.16

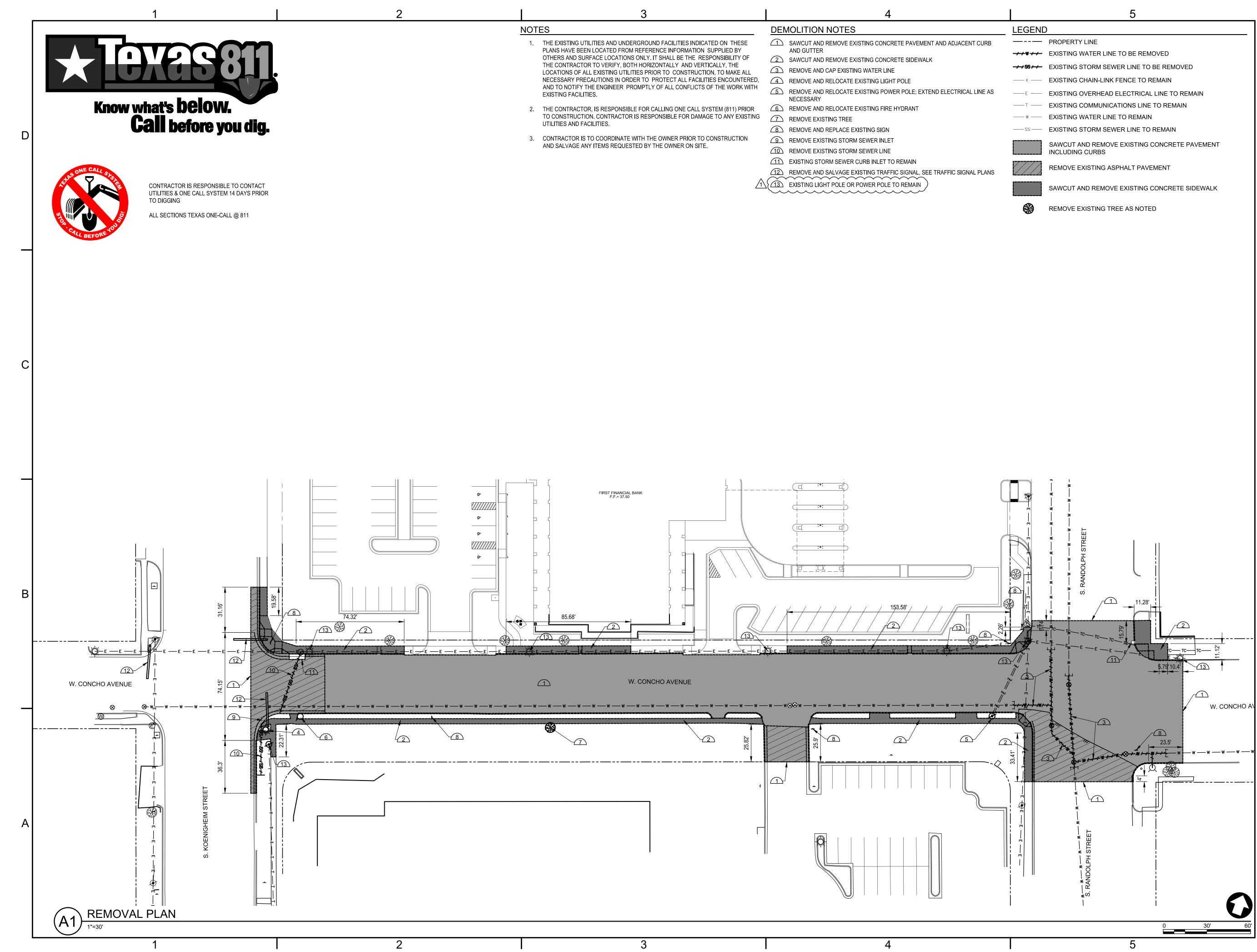


2
J



3	4

4	01/26/2018	RESPONSE TO T	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIC	GNAGE	
1	10/03/2017	RESPONSE TO T	XDOT COMMENTS	
0	07/14/2017	100% CONSTRUC	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PRO			PROJECT NO:	3755.16



5	<b></b>		
NOTES	DEMOLITION NOTES	LEGEN	D
<ol> <li>THE EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION SUPPLIED BY OTHERS AND SURFACE LOCATIONS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, BOTH HORIZONTALLY AND VERTICALLY, THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, TO MAKE ALL NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING FACILITIES.</li> <li>THE CONTRACTOR, IS RESPONSIBLE FOR CALLING ONE CALL SYSTEM (811) PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES AND FACILITIES.</li> <li>CONTRACTOR IS TO COORDINATE WITH THE OWNER PRIOR TO CONSTRUCTION AND SALVAGE ANY ITEMS REQUESTED BY THE OWNER ON SITE.</li> </ol>	<ul> <li>SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT AND ADJACENT CURB AND GUTTER</li> <li>SAWCUT AND REMOVE EXISTING CONCRETE SIDEWALK</li> <li>REMOVE AND CAP EXISTING WATER LINE</li> <li>REMOVE AND RELOCATE EXISTING LIGHT POLE</li> <li>REMOVE AND RELOCATE EXISTING POWER POLE; EXTEND ELECTRICAL LINE AS NECESSARY</li> <li>REMOVE AND RELOCATE EXISTING FIRE HYDRANT</li> <li>REMOVE EXISTING TREE</li> <li>REMOVE AND REPLACE EXISTING SIGN</li> <li>REMOVE EXISTING STORM SEWER INLET</li> <li>REMOVE EXISTING STORM SEWER LINE</li> <li>EXISTING STORM SEWER CURB INLET TO REMAIN</li> <li>REMOVE AND SALVAGE EXISTING TRAFFIC SIGNAL, SEE TRAFFIC SIGNAL PLANS</li> <li>EXISTING LIGHT POLE OR POWER POLE TO REMAIN</li> </ul>		EXIST EXIST EXIST EXIST

3	4



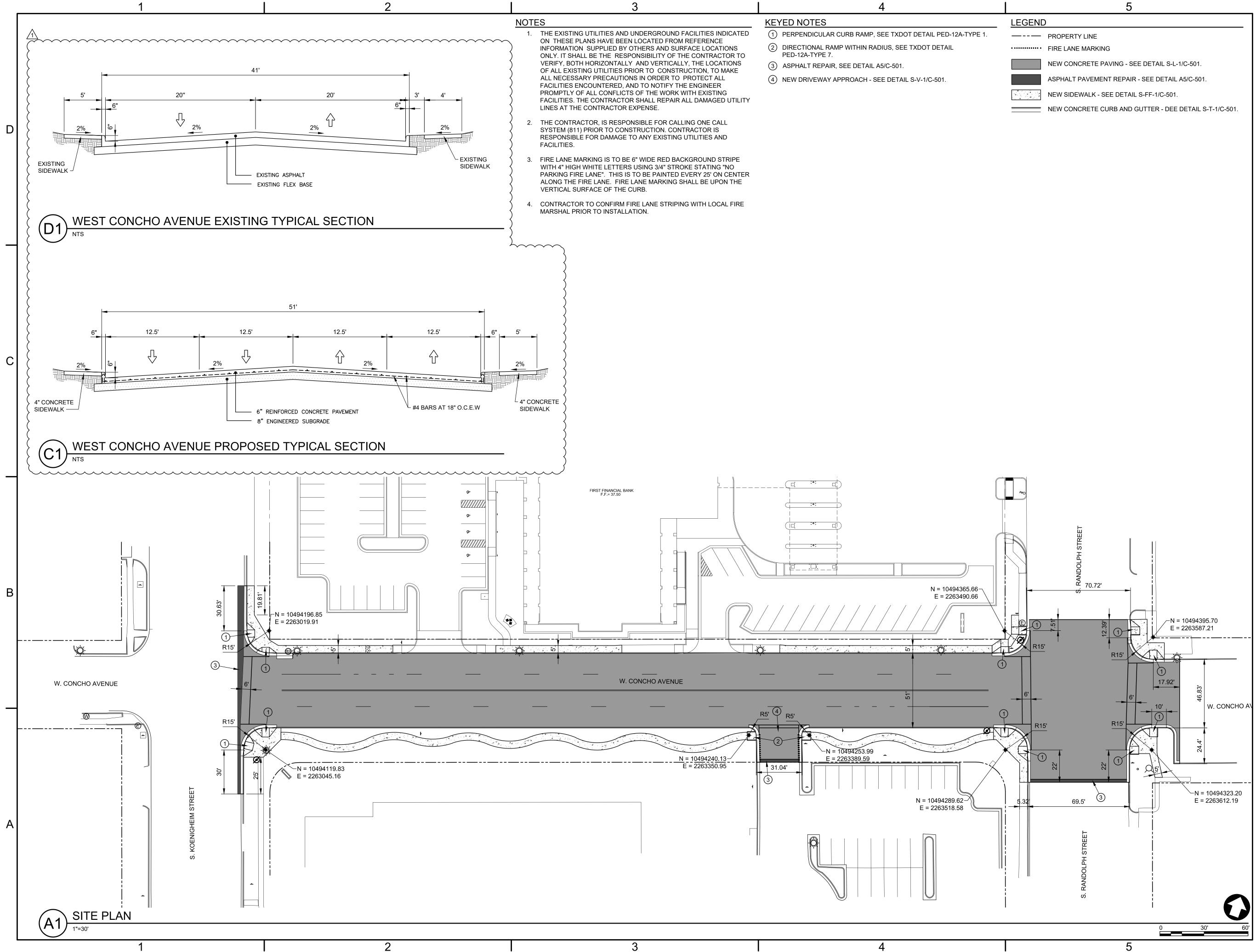


### SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING SI	GNAGE	
1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRU	ICTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSU	ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16			

**REMOVAL PLAN** 



3	4



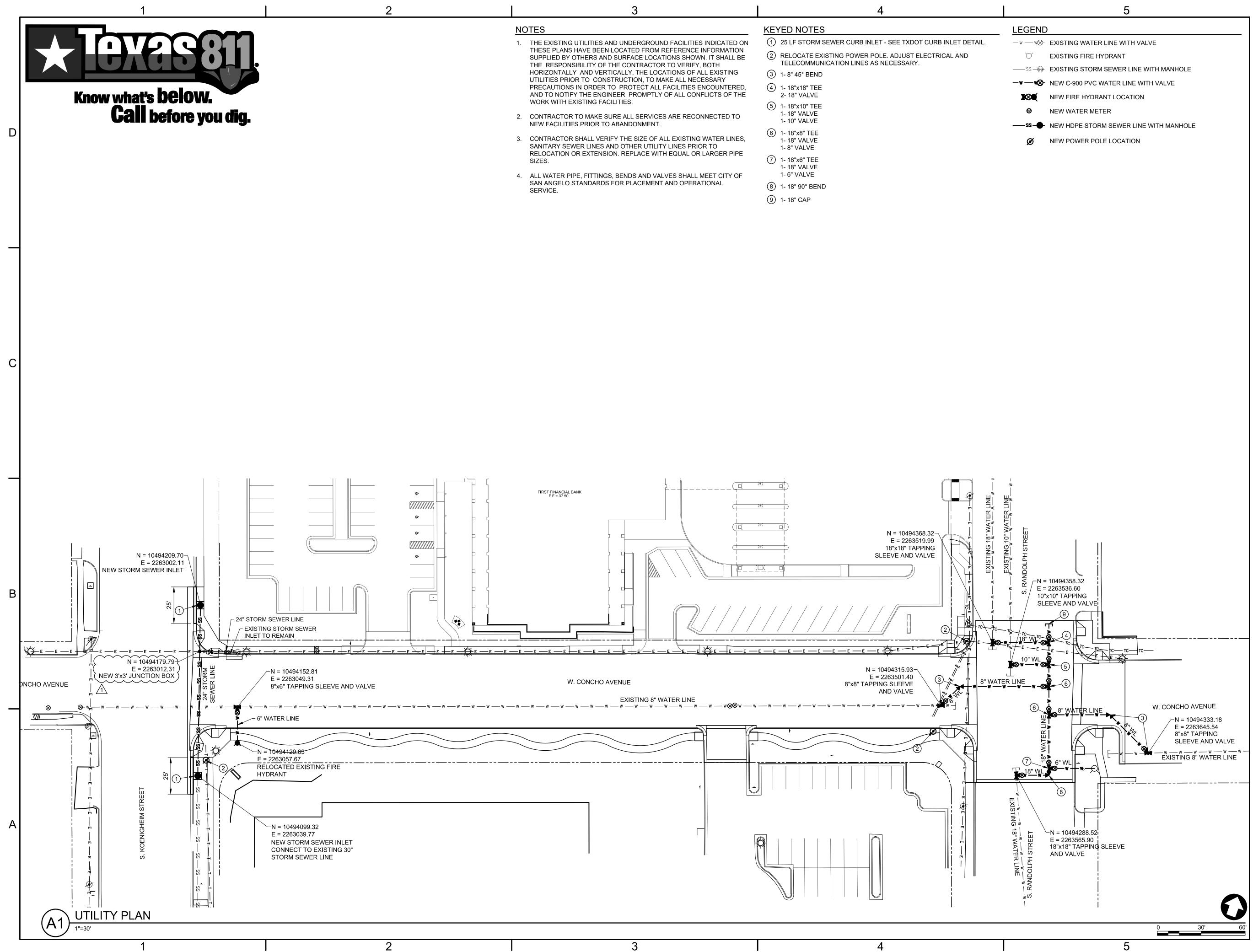


### SAN ANGELO, TEXAS

KEY PLAN

—				
4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING SI	GNAGE	
1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRUCTION DOCUMENTS		
NO	DATE	DESCRIPTION		
ISSL	ISSUING OFFICE: MIDLAND		PROJECT NO:	3755.16

SITE PLAN



	3	1



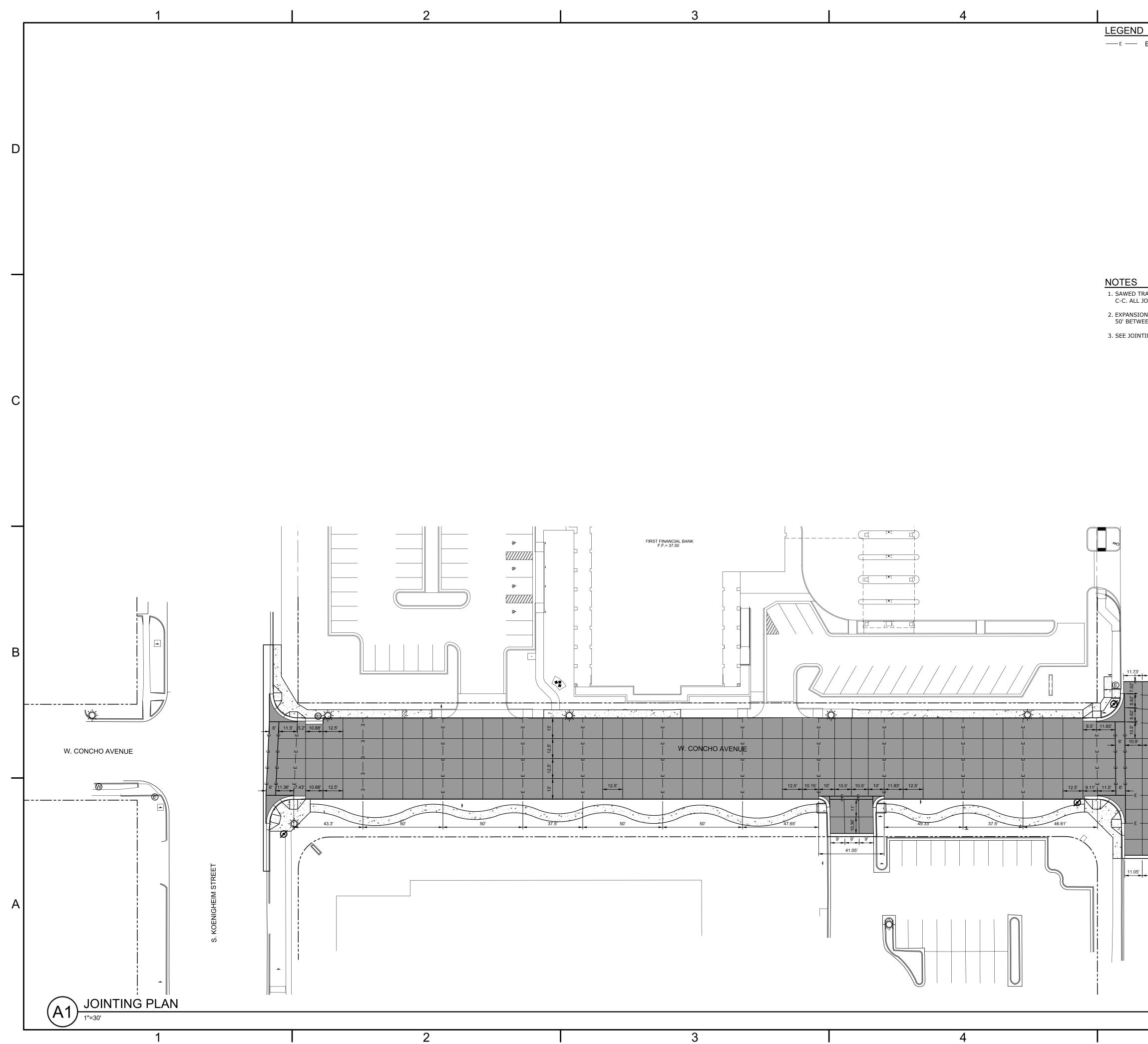


### SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING S	IGNAGE	
1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRU	JCTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSL	JING OFFICE:	MIDLAND	PROJECT NO:	3755.16

**UTILITY PLAN** 



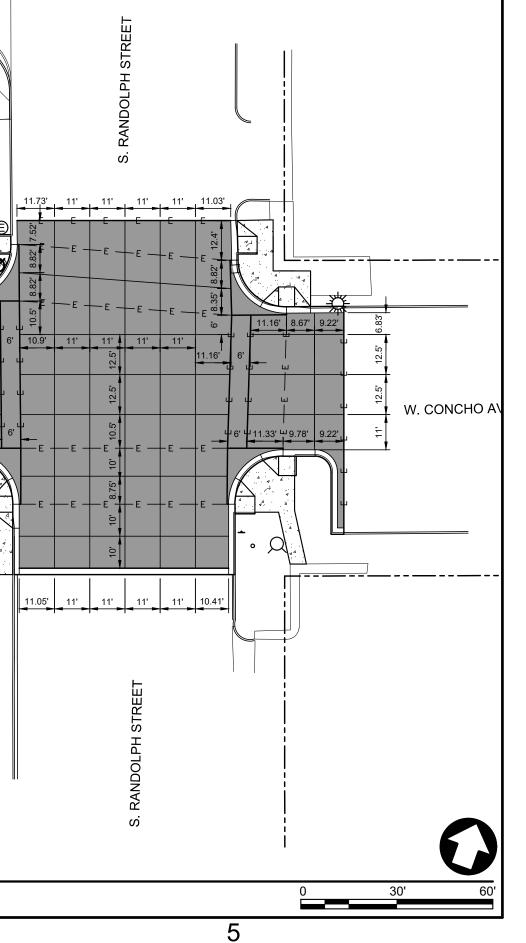




-----E ----- EXPANSION JOINT - TYPE 'E'

1. SAWED TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED NOT MORE THAN 15' C-C. ALL JOINTS SHOWN ARE CONTRACTION JOINTS UNLESS NOTED OTHERWISE. 2. EXPANSION JOINTS SHALL BE PLACED AT ALL INTERSECTIONS AND NOT TO EXCEED 50' BETWEEN JOINTS.

3. SEE JOINTING DETAILS S-S-1/C-502 & S-R-1/C-502.





## WEST CONCHO AVENUE WIDENING

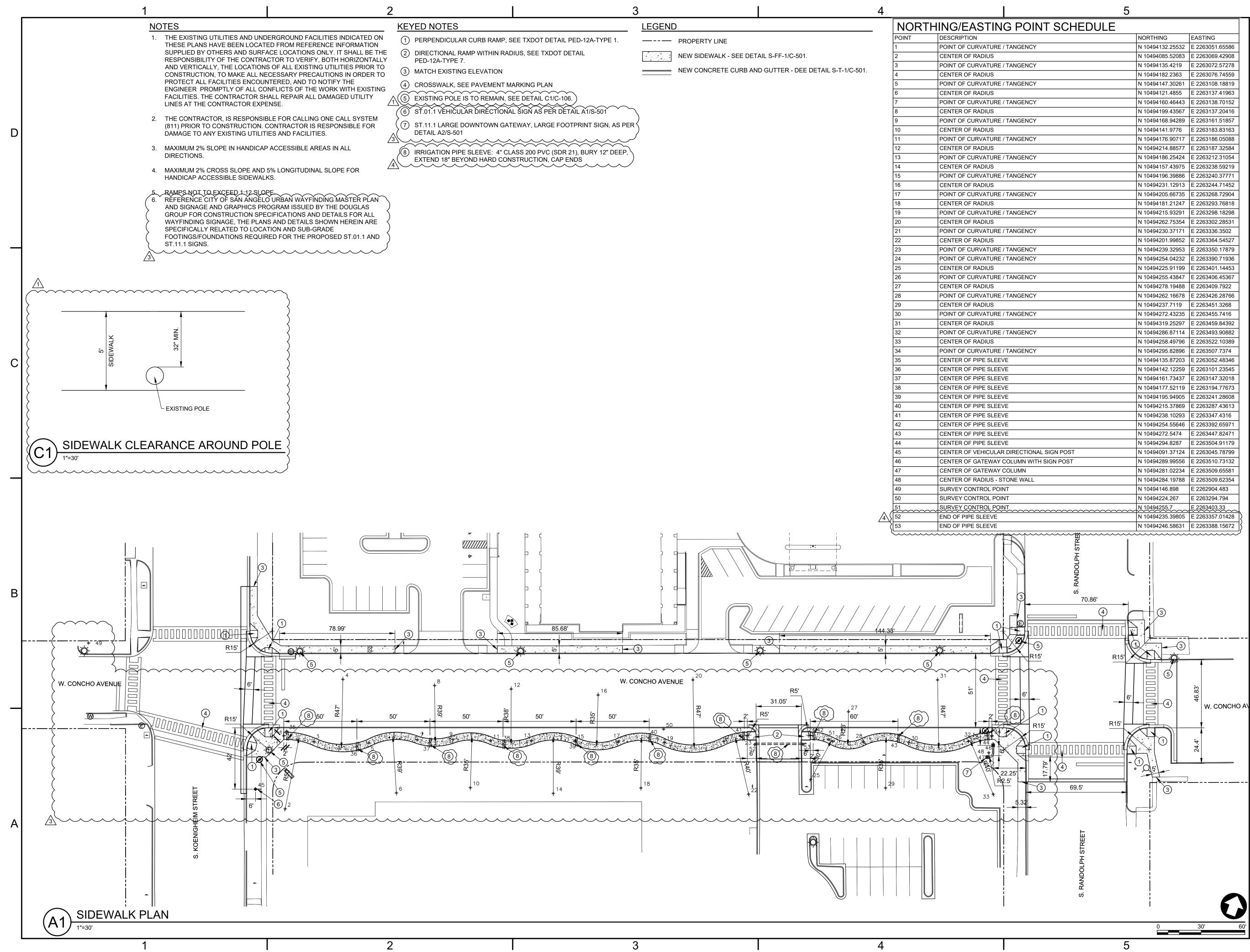


## SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO T	KDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	NAGE	
1	10/03/2017	RESPONSE TO T	OOT COMMENTS	
0	07/14/2017	100% CONSTRUC	TION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSL	JING OFFICE:	MIDLAND	PROJECT NO:	3755.16

JOINTING PLAN



3	}	]	4			
	LEGEND			NORTH	ING/EASTIN	
SEE TXDOT DETAIL PED-12A-TYPE 1.			ľ	POINT	DESCRIPTION	
	FROFERITLINE		ľ	1	POINT OF CURVATURE /	TANGENCY
DIUS, SEE TXDOT DETAIL	NEW SIDEWALK - SEE DET	AIL S-FF-1/C-501.	Ī	2	CENTER OF RADIUS	
			ľ	3	POINT OF CURVATURE /	TANGENCY
		ID GUTTER - DEE DETAIL S-T-1/C-501.	Ī	4	CENTER OF RADIUS	
IARKING PLAN			Ī	5	POINT OF CURVATURE /	TANGENCY
			Ī	6	CENTER OF RADIUS	
SEE DETAIL C1/C-106.			ſ	7	POINT OF CURVATURE /	TANGENCY
AL SIGN AS PER DETAIL A1/S-501	N		Ī	8	CENTER OF RADIUS	
TEWAY, LARGE FOOTPRINT SIGN, AS PER	2		ſ	9	POINT OF CURVATURE /	TANGENCY
TEWAT, LARGE FOOTFRINT SIGN, AS FER	)		ſ	10	CENTER OF RADIUS	
······································			Ī	11	POINT OF CURVATURE /	TANGENCY
_ASS 200 PVC (SDR 21), BURY 12" DEEP,			Ī	12	CENTER OF RADIUS	
NSTRUCTION, CAP ENDS			ſ	13	POINT OF CURVATURE /	TANGENCY
			Ī	14	CENTER OF RADIUS	
			Ī	15	POINT OF CURVATURE /	TANGENCY
			Ī	16	CENTER OF RADIUS	
			Ī	17	POINT OF CURVATURE /	TANGENCY
			Ī	18	CENTER OF RADIUS	
			ſ	19	POINT OF CURVATURE /	TANGENCY
			Ī	20	CENTER OF RADIUS	
			Ī	21	POINT OF CURVATURE /	TANGENCY
			Ī	22	CENTER OF RADIUS	
			Ī	23	POINT OF CURVATURE /	TANGENCY

3	4





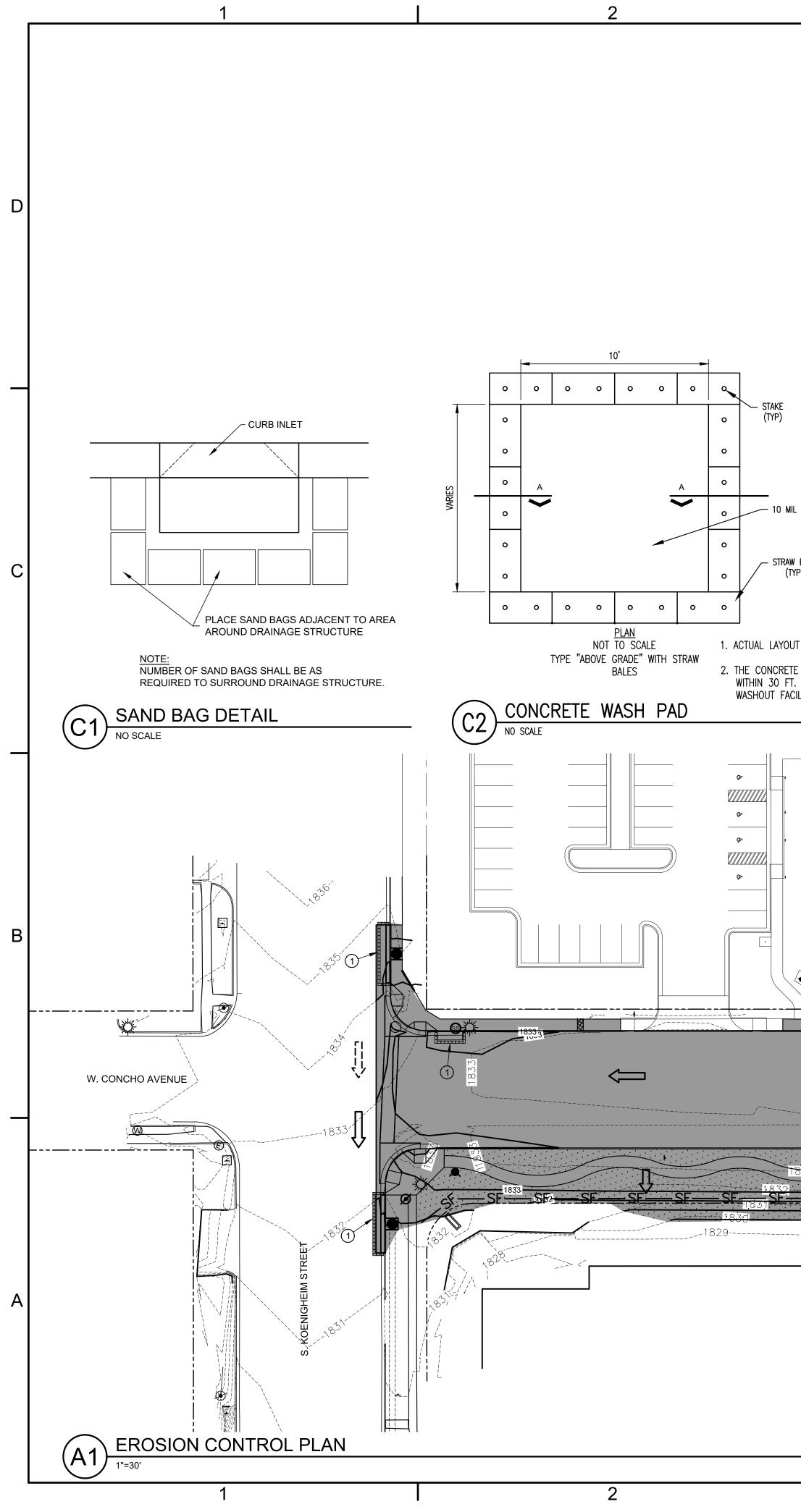
## SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO T	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	NAGE	
_1	10/03/2017	RESPONSE TO T	XDOT COMMENTS	
0	07/14/2017	100% CONSTRUC	TION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PROJECT NO:		3755.16		

SIDEWALK PLAN





	3	4	
	KEYED NOTES	NOTE	LEGEND
	1 SAND BAGS, SEE DETAIL C1/THIS SHEET.	1. THIS MAP IS PART OF A TPDES STORMWATER POLLUTION PREVENTION PLAN. REFER TO THE TEXT PORTION OF THE PLAN	A
	2 CONCRETE WASH PAD, SEE DETAIL C2/THIS SHEET.	FOR ADDITIONAL INFORMATION, REQUIREMENTS AND PROCEDURES.	[·····
	③ RESEED AREA OF DISTURBANCE DUE TO CONSTRUCTION ACTIVITY		— SF— s
			F
			 、 _
	PLYWOOD		
	6" HEIGHT		
	WOOD POST 3" X 3" X 8'		
	STAPLE DETAIL CONCRETE WASHOUT SIGN DETAIL		
MIL P	LASTIC LINING (OR EQUIVALENT)		
	(2 PER BALE)		
RAW BA	ALE 10 MIL PLASTIC LINING		
RAW B/ (TYP)			
	NOTES:		
OUT	<u>NOTES:</u> <u>NATIVE MATERIAL</u> WOOD OR <u></u> BINDING WIRE DETERMINED IN FIELD. (OPTIONAL) METAL STAKES (2 PER BALE)		
ETE \	NASHOUT SIGN SHALL BE INSTALLED <u>SECTION A-A</u>		
FT. C ACILI	OF THE TEMPORARY CONCRETE NOT TO SCALE		
NOL			
		•	
•	FIRST FINANCIAL BANK		
8			
8			
1			
	<u>کار کار کار کار کار کار کار کار کار کار </u>		
	4		
	W. CONCHO AVENUE		
		1834	
183	3		
2	$-SF \longrightarrow SF \longrightarrow SF \longrightarrow SF \longrightarrow SF$	-1833 Tes SF SF SF SF SF SF SF	
	1831		
	3		1834
		1832	
		1829 $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$ $1829$	
	1828	1828	

4

- AREA AFFECTED BY PROJECT (APPROX. 1.25 ACRES)
- SEEDING FOR EROSION CONTROL
- SILT FENCE, SEE DETAIL S-CC-1/C-502.
- PROPOSED SAND BAGS, SEE DETAIL C1/THIS SHEET.
- FLOW DIRECTION (EXISTING)
- FLOW DIRECTION (PROPOSED)
- EXISTING CONTOURS (1' INTERVAL)
- PROPOSED CONTOURS (1' INTERVAL)



## WEST CONCHO AVENUE WIDENING

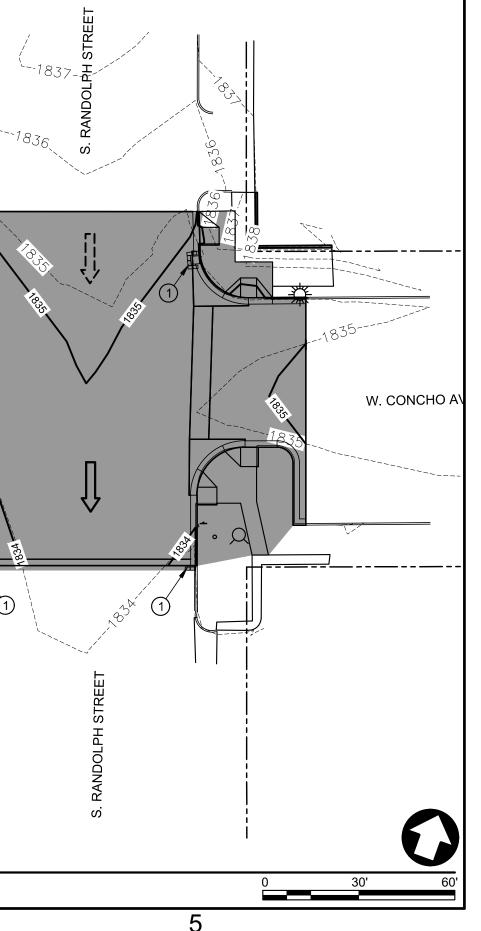


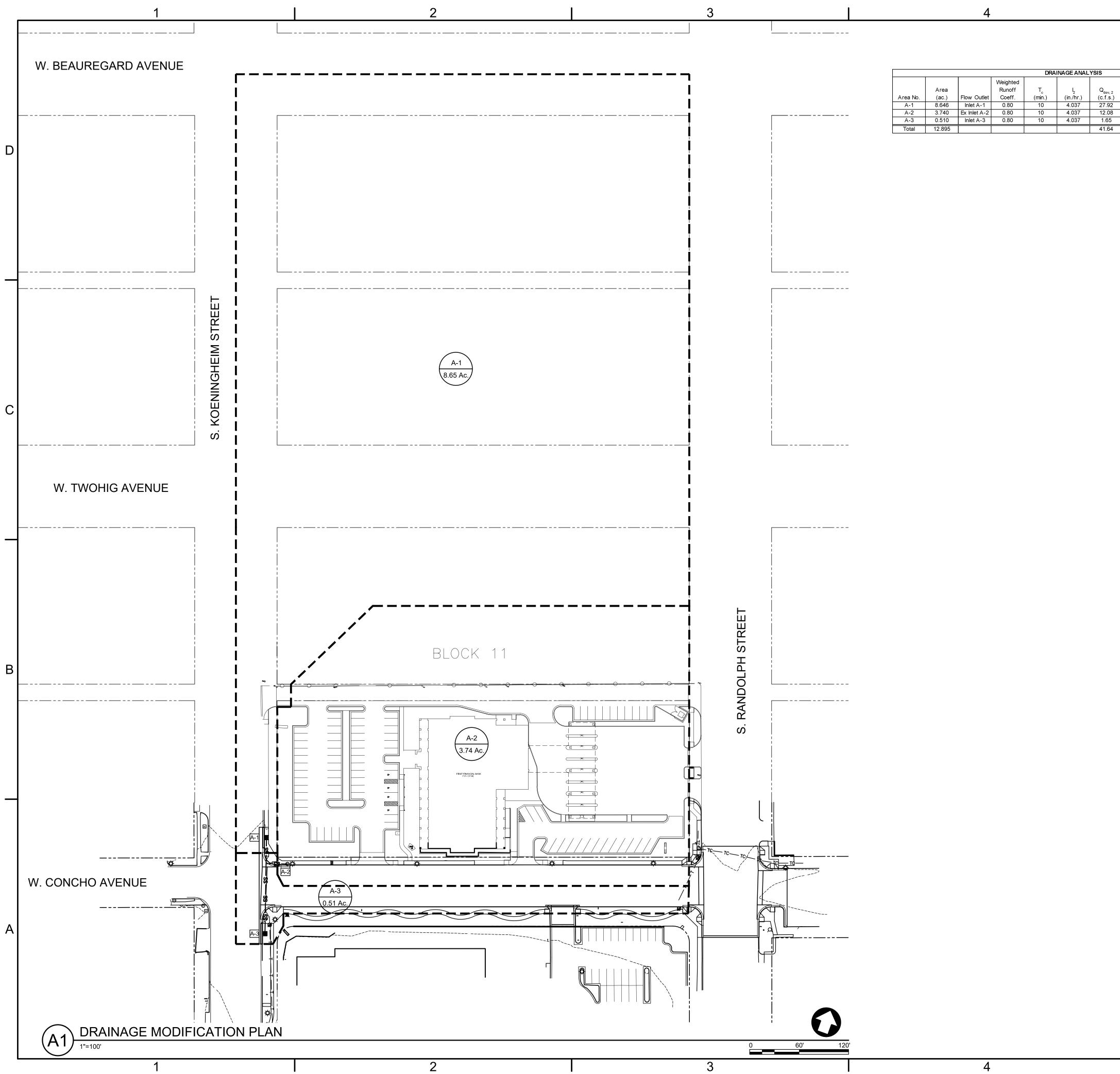
### SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING SI	GNAGE	
1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRU	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSL	JING OFFICE:	MIDLAND	PROJECT NO:	3755.16

EROSION CONTROL PLAN





(in./hr.)

5.299

5.299

NOTES

LEGEND

 $\sim$ 

\_\_\_\_

 $\Rightarrow$ 

XX YY

27.92

1.65

41.64

(c.f.:

5 .)	l <sub>100</sub> (in./hr.)	Q <sub>dev, 100</sub> (c.f.s.)
5	10.304	71.27
5	10.304	30.83
6	10.304	4.20
7		106.30

1. THE DRAINAGE AREA AND STORM SEWER ANALYSIS DATA IS FROM TXDOT FEDERAL AID PROJECT NO. U 145 (10), TOM GREEN COUNTY U.S. HIGHWAY 87 ON KOENIGHEIM STREET.



## WEST CONCHO AVENUE WIDENING



### SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO T	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	GNAGE	
1	10/03/2017	RESPONSE TO T	XDOT COMMENTS	
0	07/14/2017	100% CONSTRU	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSL	ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16			3755.16

DRAINAGE MODIFICATION PLAN

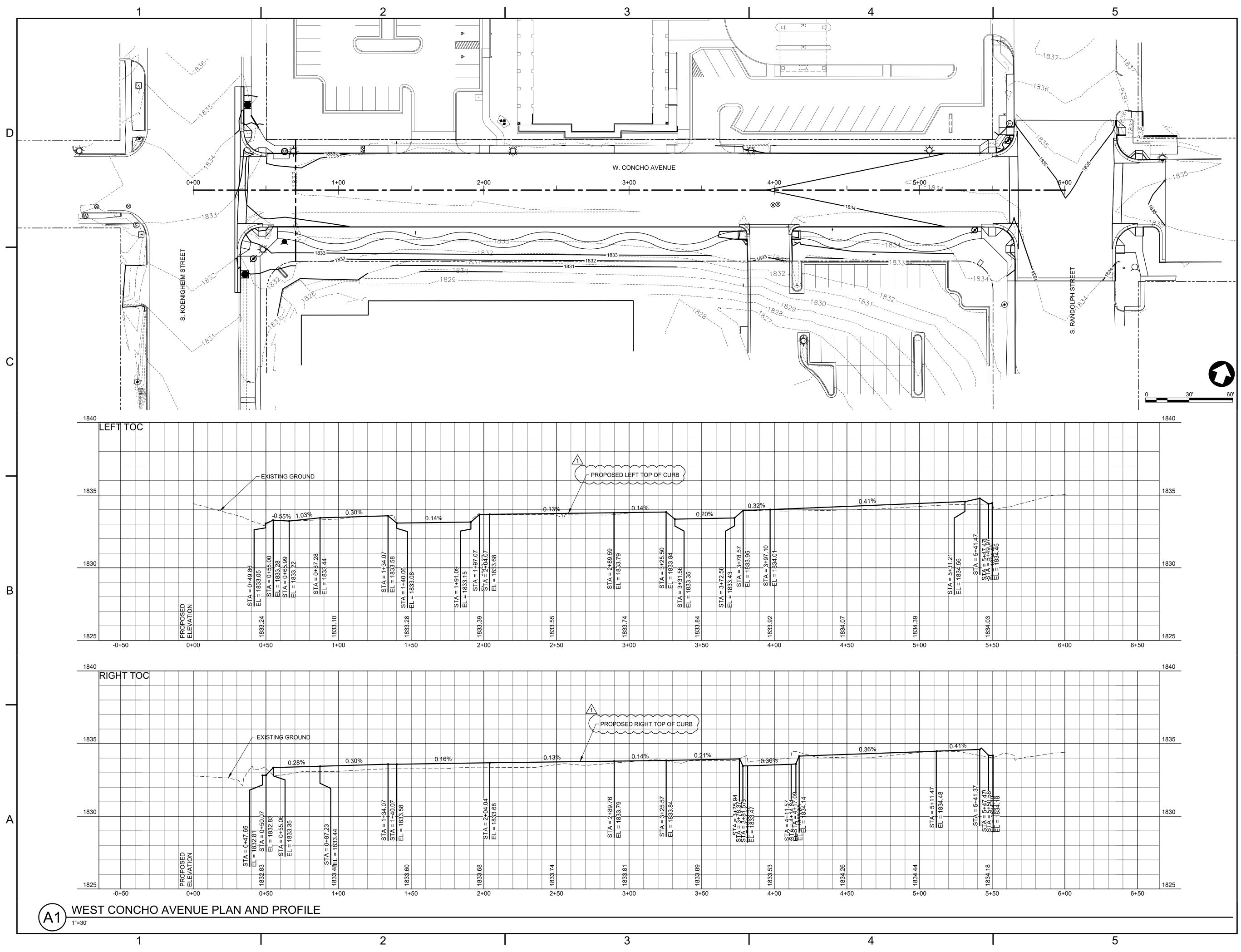
**C-202** 

EXISTING CONTOURS (1' INTERVAL) PROPOSED CONTOURS (1' INTERVAL)

DRAINAGE AREA BOUNDARY

PROPOSED DIRECTION OF FLOW

XX = DRAINAGE AREA NUMBER YY = AREA IN ACRES



3	4





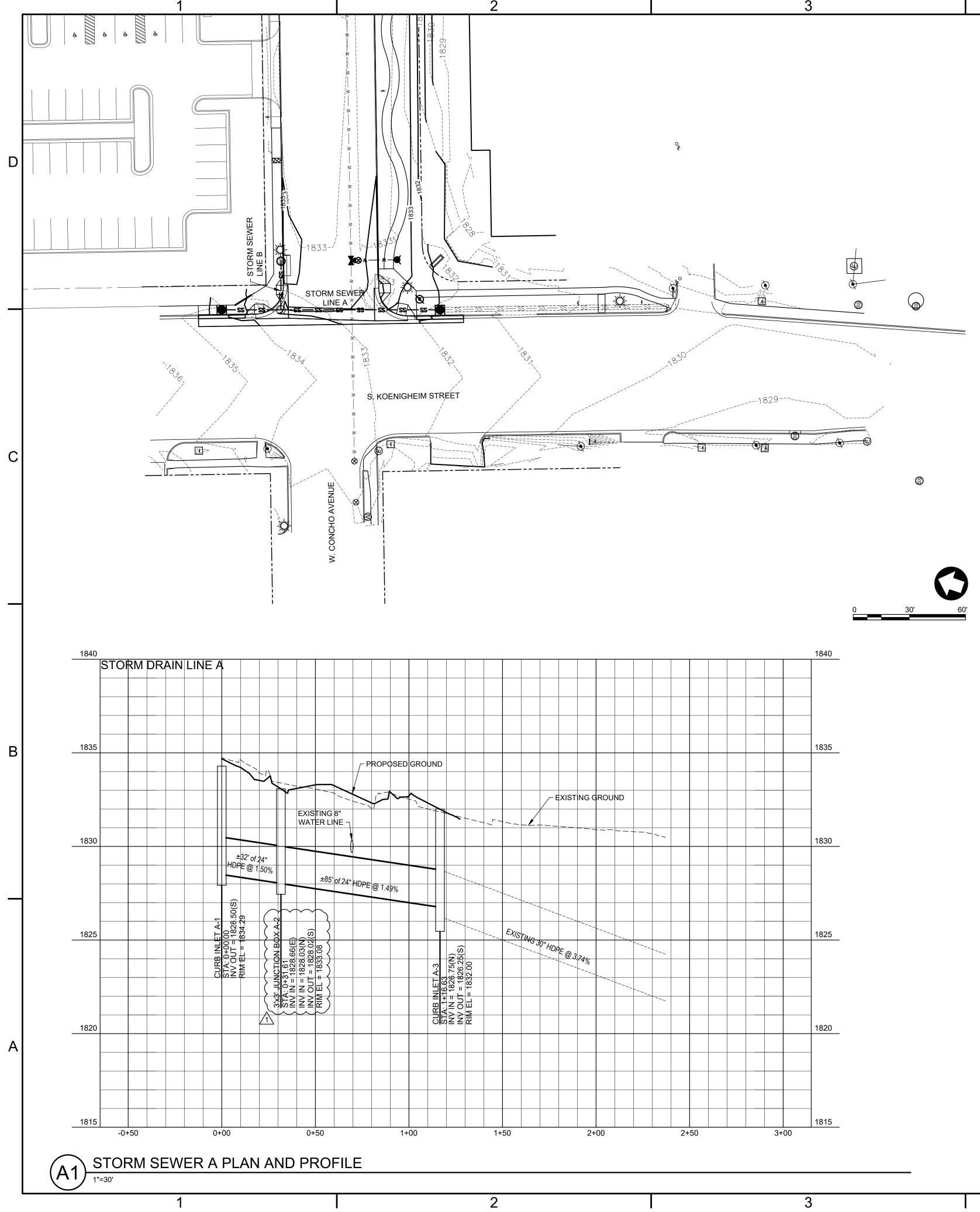
## SAN ANGELO, TEXAS

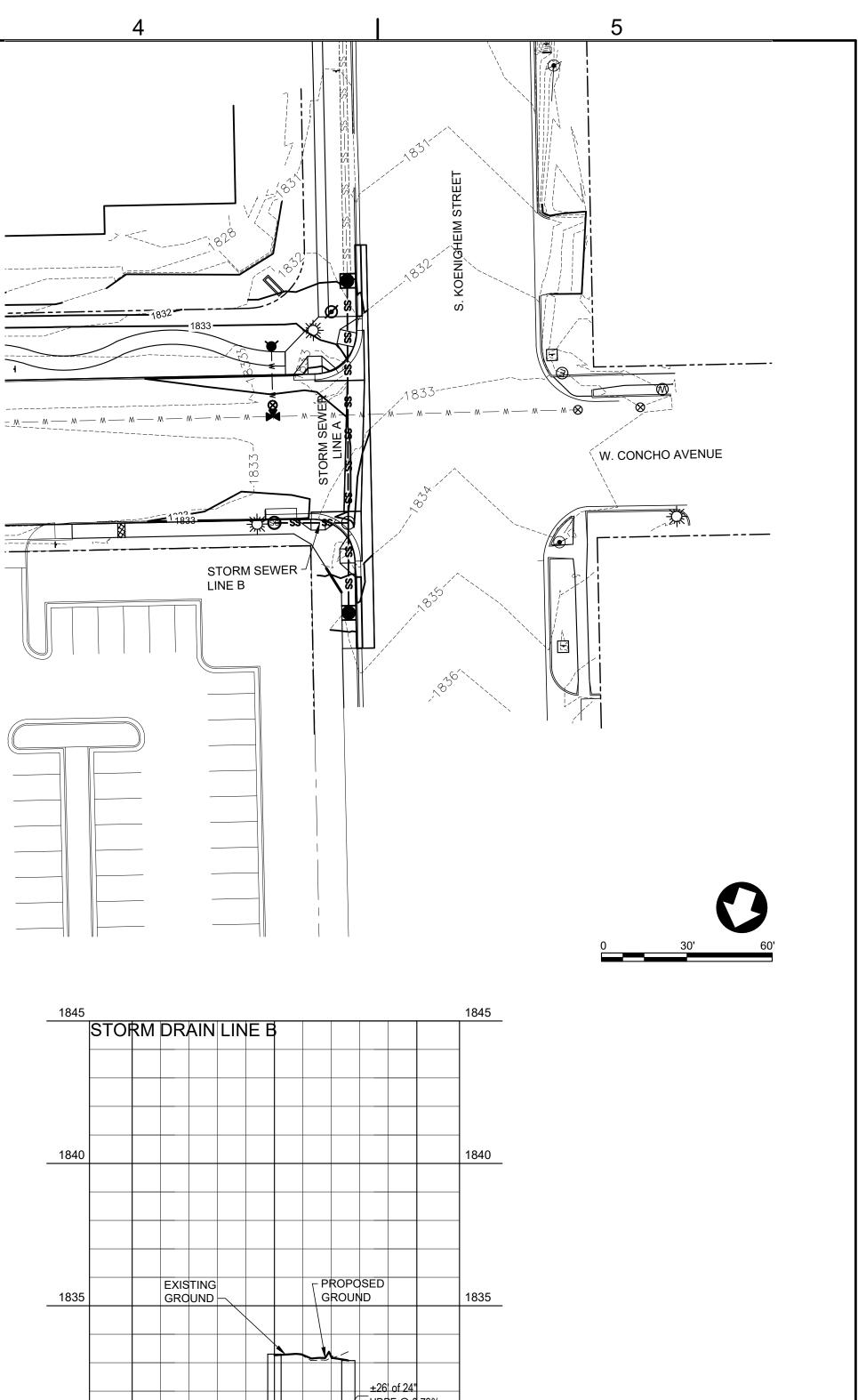
KEY PLAN

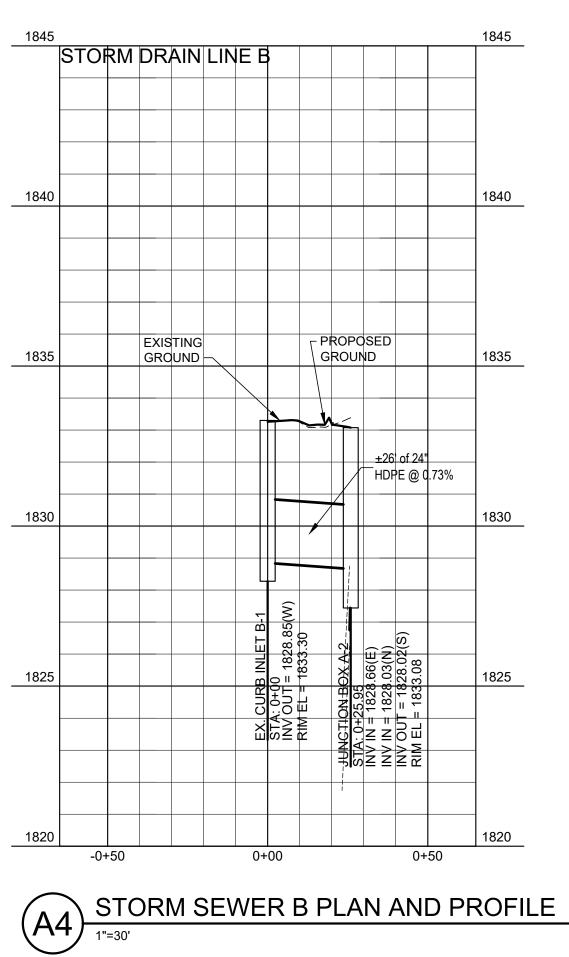
SCALE: H: 1"=30' V: 1"=3'

01/26/2018	RESPONSE TO T	KDOT COMMENTS	
12/29/2017	WAYFINDING SIG	NAGE	
10/03/2017	RESPONSE TO T	KDOT COMMENTS	
07/14/2017	100% CONSTRUC	TION DOCUMENTS	
DATE	DESCRIPTION		
ING OFFICE:	MIDLAND	PROJECT NO:	3755.16
	12/29/2017 10/03/2017 07/14/2017 DATE	12/29/2017         WAYFINDING SIG           10/03/2017         RESPONSE TO TX           07/14/2017         100% CONSTRUCT	12/29/2017WAYFINDING SIGNAGE10/03/2017RESPONSE TO TXDOT COMMENTS07/14/2017100% CONSTRUCTION DOCUMENTSDATEDESCRIPTION

W. CONCHO AVENUE PLAN AND PROFILE









## WEST CONCHO AVENUE WIDENING



## SAN ANGELO, TEXAS

KEY PLAN

SCALE: H: 1"=30' V: 1"=3'

—				
4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING SI	GNAGE	
1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRUCTION DOCUMENTS		
NO	DATE	DESCRIPTION		
ISSL	ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16			3755.16

STORM SEWER PLAN AND PROFILE

**C-302** 

1820



# PER Ο 000 ŏ ARKHII CHAEL WILLIAM MOLTER

1 VALLEY GUTTER, SEE DETAILS S-W-1/C-501 & S-W-2/C-501. 2 NEW STORM INLET, SEE TXDOT CURB INLET DETAIL. (3) MATCH EXISTING ELEVATION

1. MAXIMUM 2% SLOPE IN HANDICAP ACCESSIBLE AREAS IN ALL

MAXIMUM 2% CROSS SLOPE AND 5% LONGITUDINAL SLOPE FOR HANDICAP ACCESSIBLE SIDEWALKS.

3. RAMPS NOT TO EXCEED 1:12 SLOPE.

## WEST CONCHO AVENUE WIDENING



### SAN ANGELO, TEXAS

KEY PLAN

PROPERTY	L	INE

- ····· FIRE LANE MARKING
  - NEW CONCRETE PAVING SEE DETAIL S-L-1/C-501.
  - ASPHALT PAVEMENT REPAIR SEE DETAIL A5/C-501.
- NEW SIDEWALK SEE DETAIL S-FF-1/C-501.
- NEW CONCRETE CURB AND GUTTER DEE DETAIL S-T-1/C-501.
- EXISTING CONTOURS (1' INTERVAL)
- 2% PROPOSED DIRECTION OF FLOW WITH PERCENT SLOPE

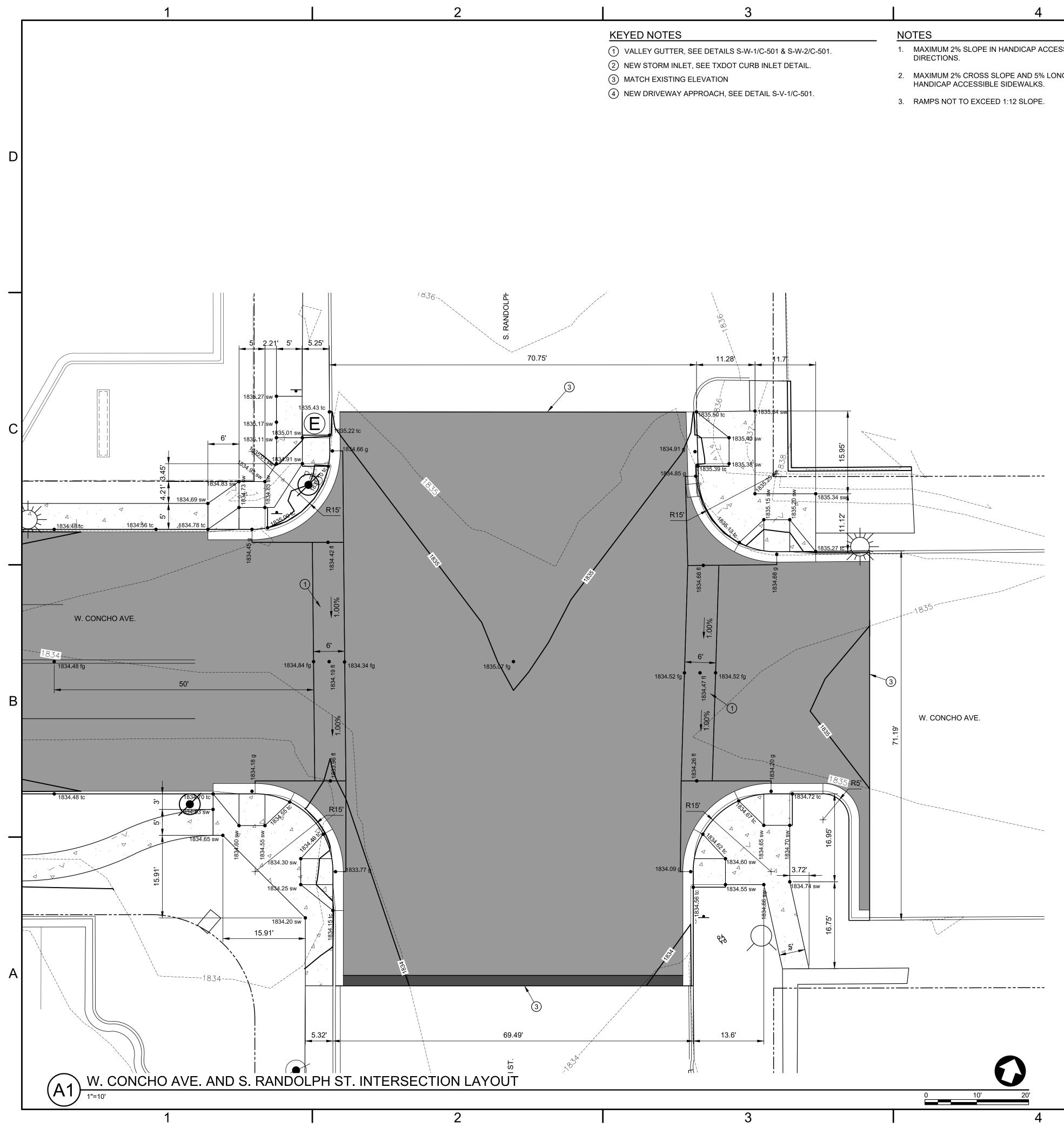
  - NEW SPOT ELEVATION
  - fg = finish grade
  - g = gutter
  - fl = flowline
  - t = topsoil
  - sw = sidewalk
  - tc = top of curb

5

4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING SI	GNAGE	
1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRU	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSL	ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16			

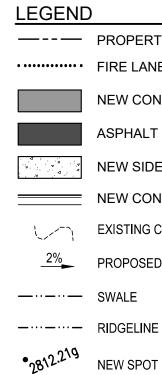
## INTERSECTION LAYOUT

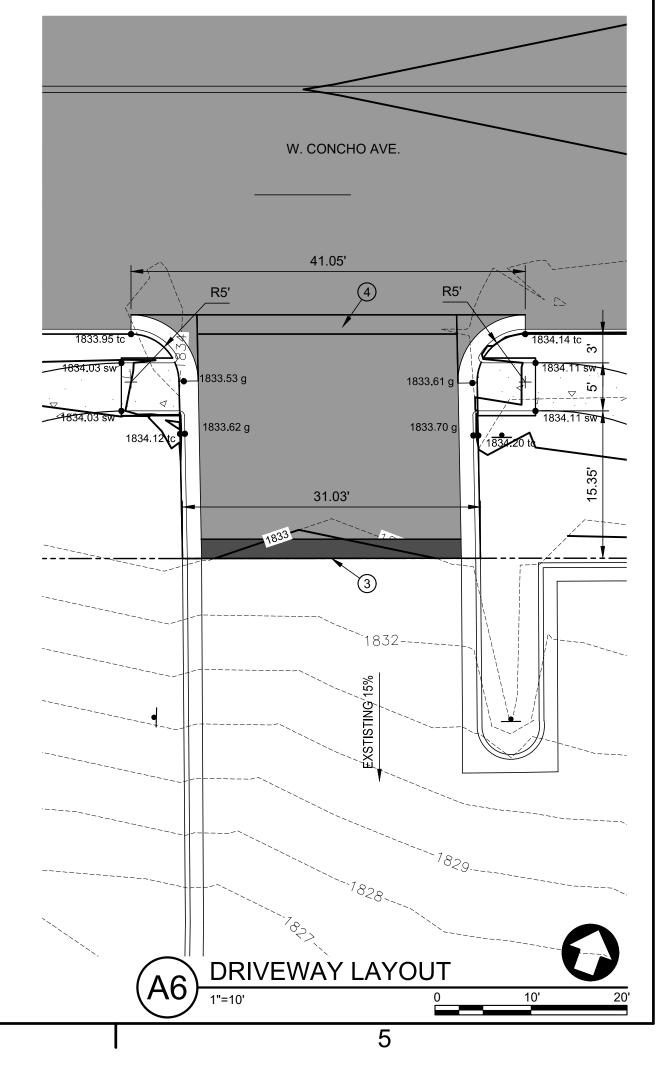




3	4
KEYED NOTES	NOTES
1 VALLEY GUTTER, SEE DETAILS S-W-1/C-501 & S-W-2/C-501.	1. MAXIMUM 2% SLOPE IN HANDICAP ACCESSIBLE AREAS IN ALL DIRECTIONS.

- 2. MAXIMUM 2% CROSS SLOPE AND 5% LONGITUDINAL SLOPE FOR





- ---- PROPERTY LINE
- •••••• FIRE LANE MARKING
  - NEW CONCRETE PAVING SEE DETAIL S-L-1/C-501.
  - ASPHALT PAVEMENT REPAIR SEE DETAIL A5/C-501.
  - NEW SIDEWALK SEE DETAIL S-FF-1/C-501.
- NEW CONCRETE CURB AND GUTTER DEE DETAIL S-T-1/C-501. EXISTING CONTOURS (1' INTERVAL)
- 2% PROPOSED DIRECTION OF FLOW WITH PERCENT SLOPE

  - NEW SPOT ELEVATION
  - fg = finish grade
  - g = gutter
  - fl = flowline
  - t = topsoil
  - sw = sidewalk
  - tc = top of curb
  - ex = existing



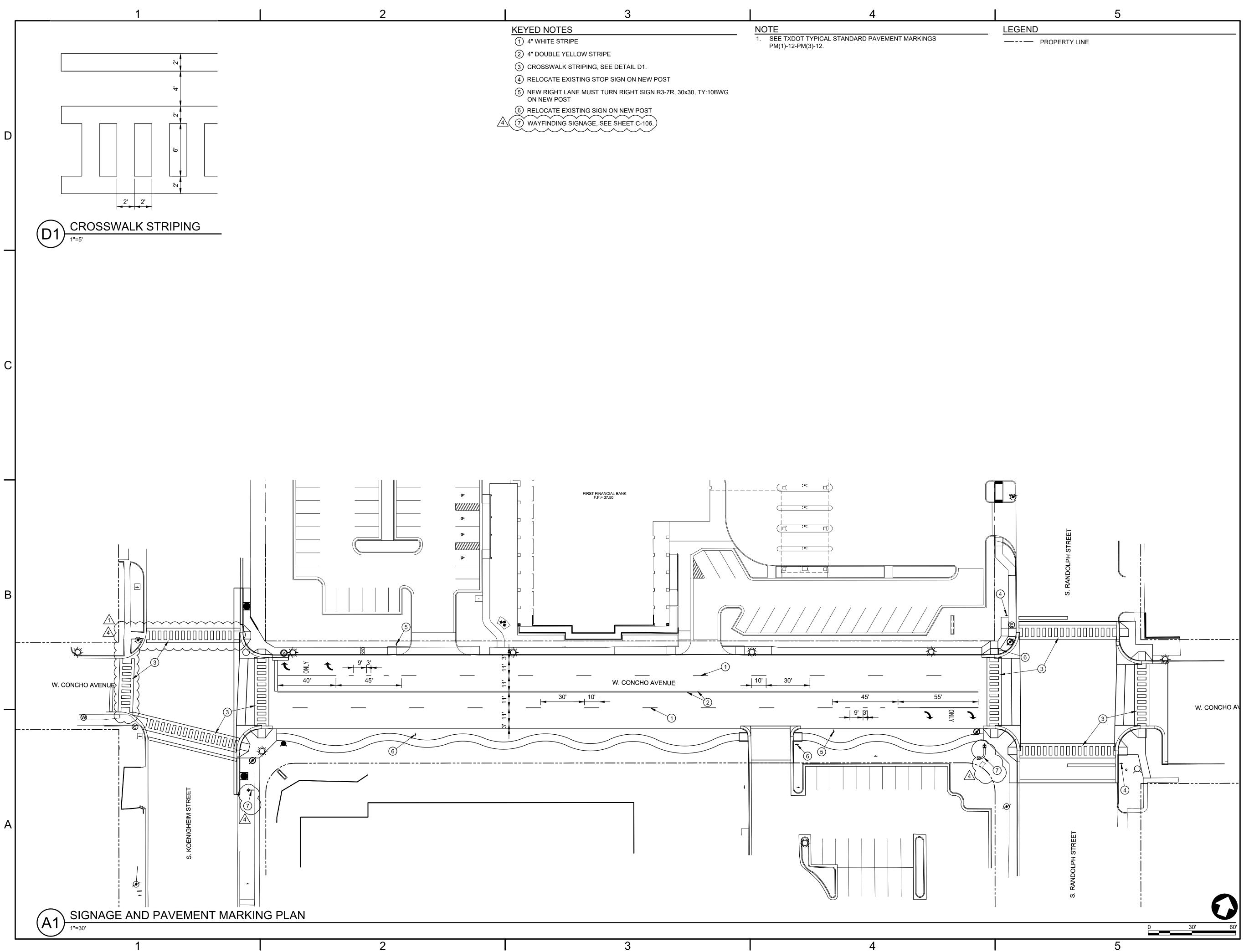


### SAN ANGELO, TEXAS

KEY PLAN

4	01/26/2018	RESPONSE TO T	KDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	NAGE	
1	10/03/2017	RESPONSE TO T	KDOT COMMENTS	
0	07/14/2017	100% CONSTRUCTION DOCUMENTS		
NO	DATE	DESCRIPTION		
ISSL	ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16			3755.16

**INTERSECTION AND** DRIVEWAY LAYOUTS



3	4	
KEYED NOTES	NOTE	LEGEND
1 4" WHITE STRIPE	1. SEE TXDOT TYPICAL STANDARD PAVEN PM(1)-12-PM(3)-12.	MENT MARKINGS PF
(2) 4" DOUBLE YELLOW STRIPE		



## WEST CONCHO AVENUE WIDENING

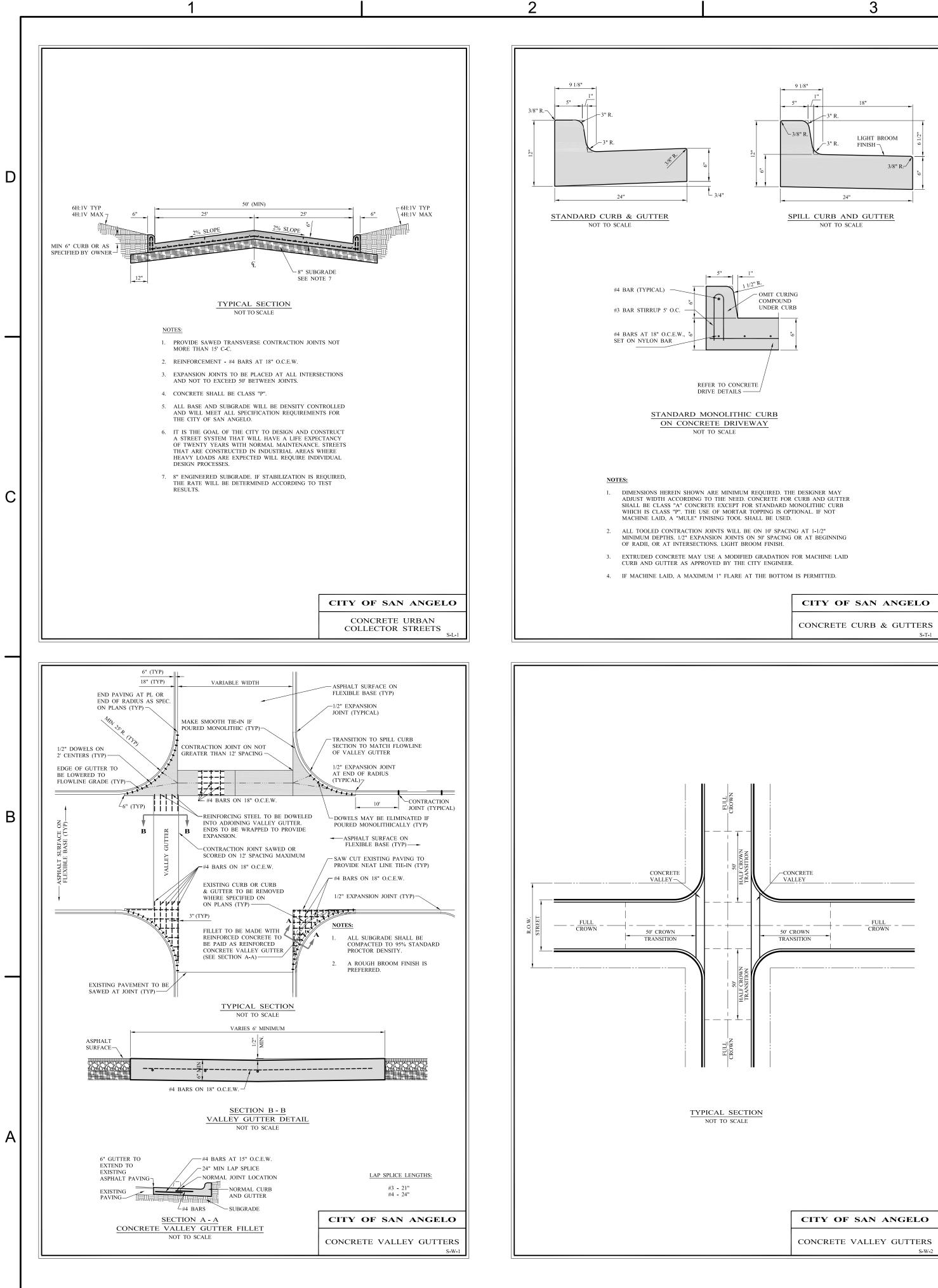


### SAN ANGELO, TEXAS

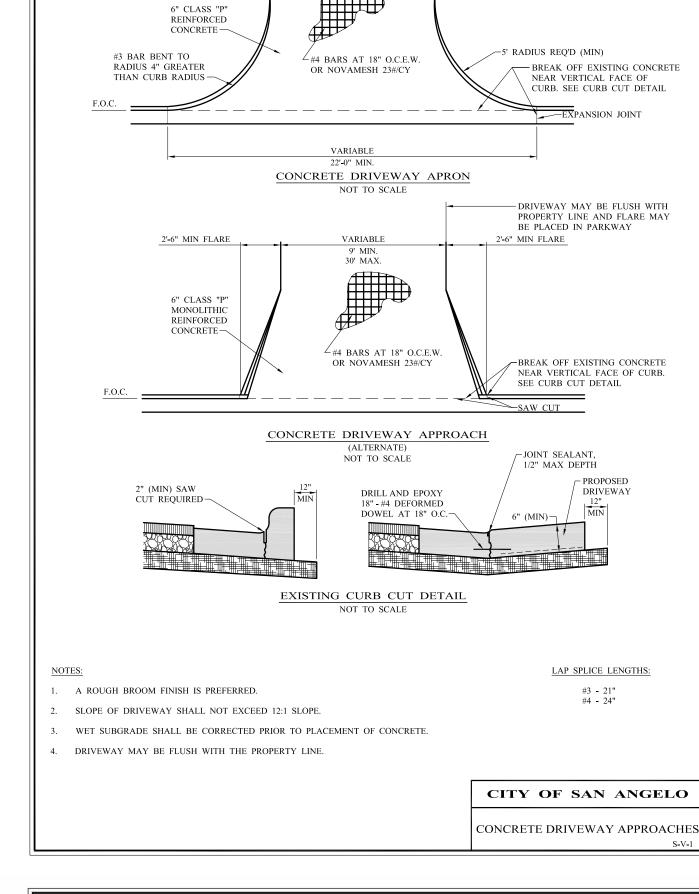
KEY PLAN

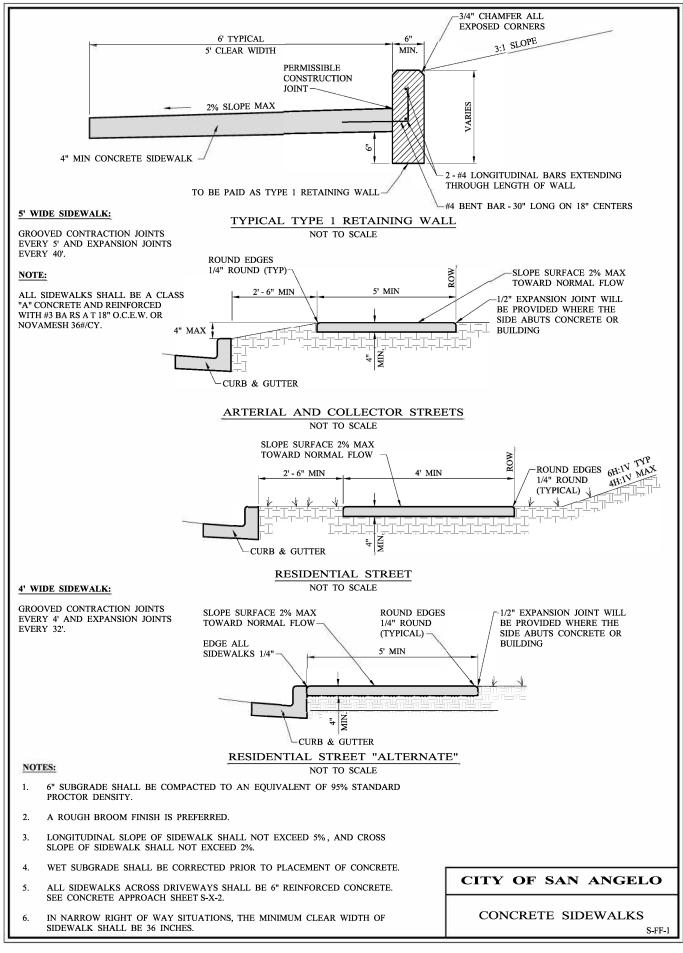
4	01/26/2018	RESPONSE TO T	XDOT COMMENTS	
3	12/29/2017	WAYFINDING SIG	GNAGE	
1	10/03/2017	RESPONSE TO T	XDOT COMMENTS	
0	07/14/2017	100% CONSTRU	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND		MIDLAND	PROJECT NO:	3755.16

SIGNAGE AND **PAVEMENT MARKING** PLAN



VARIABLE 9' MIN. 30' MAX.





Δ

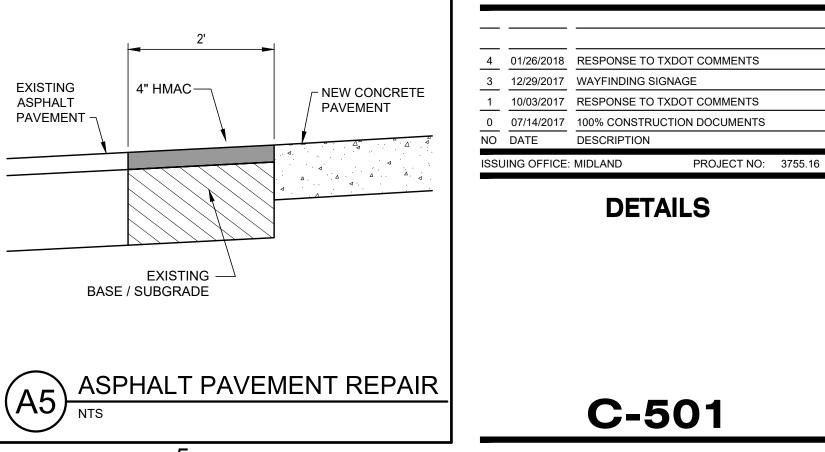


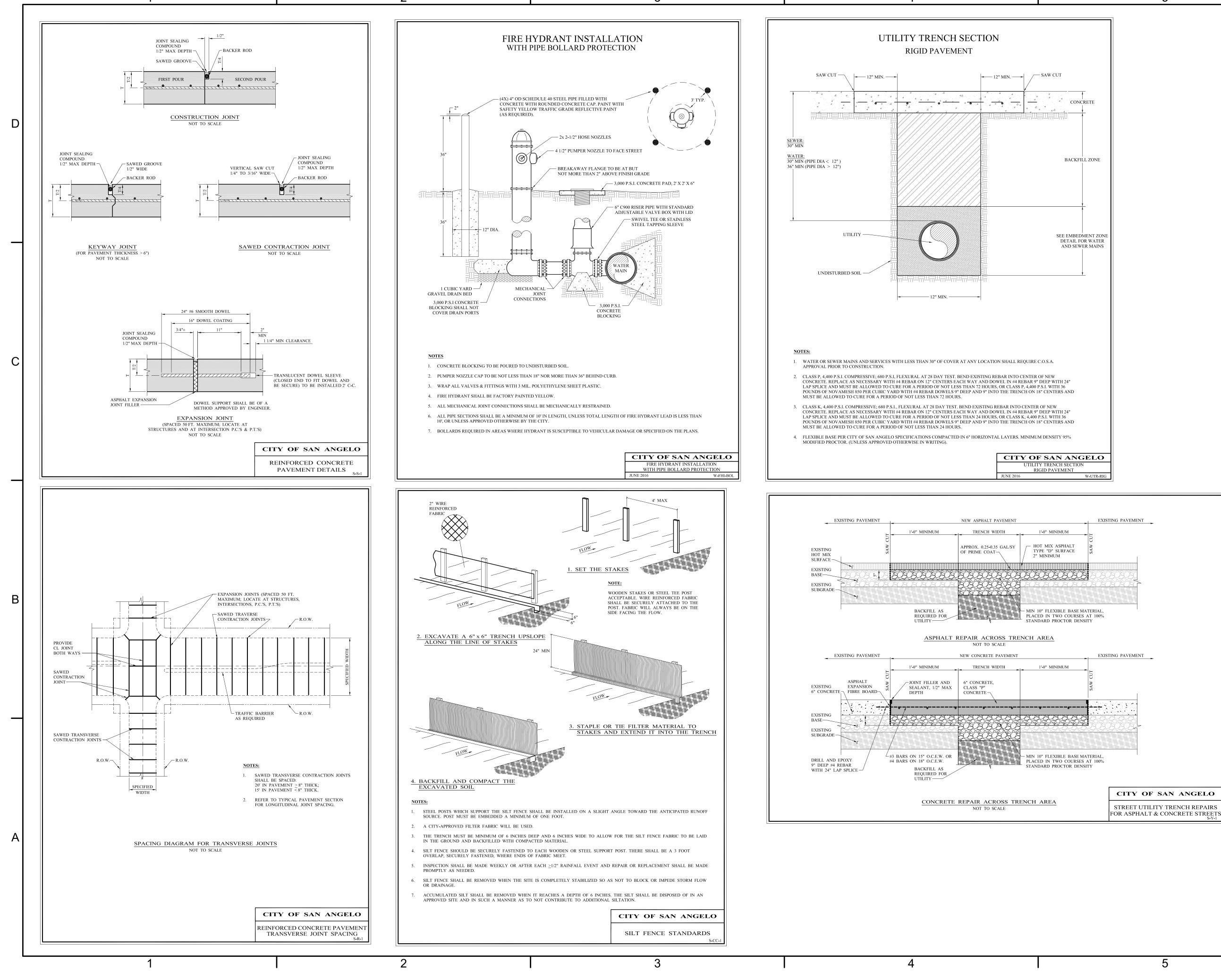
## WEST CONCHO AVENUE WIDENING



SAN ANGELO, TEXAS

KEY PLAN









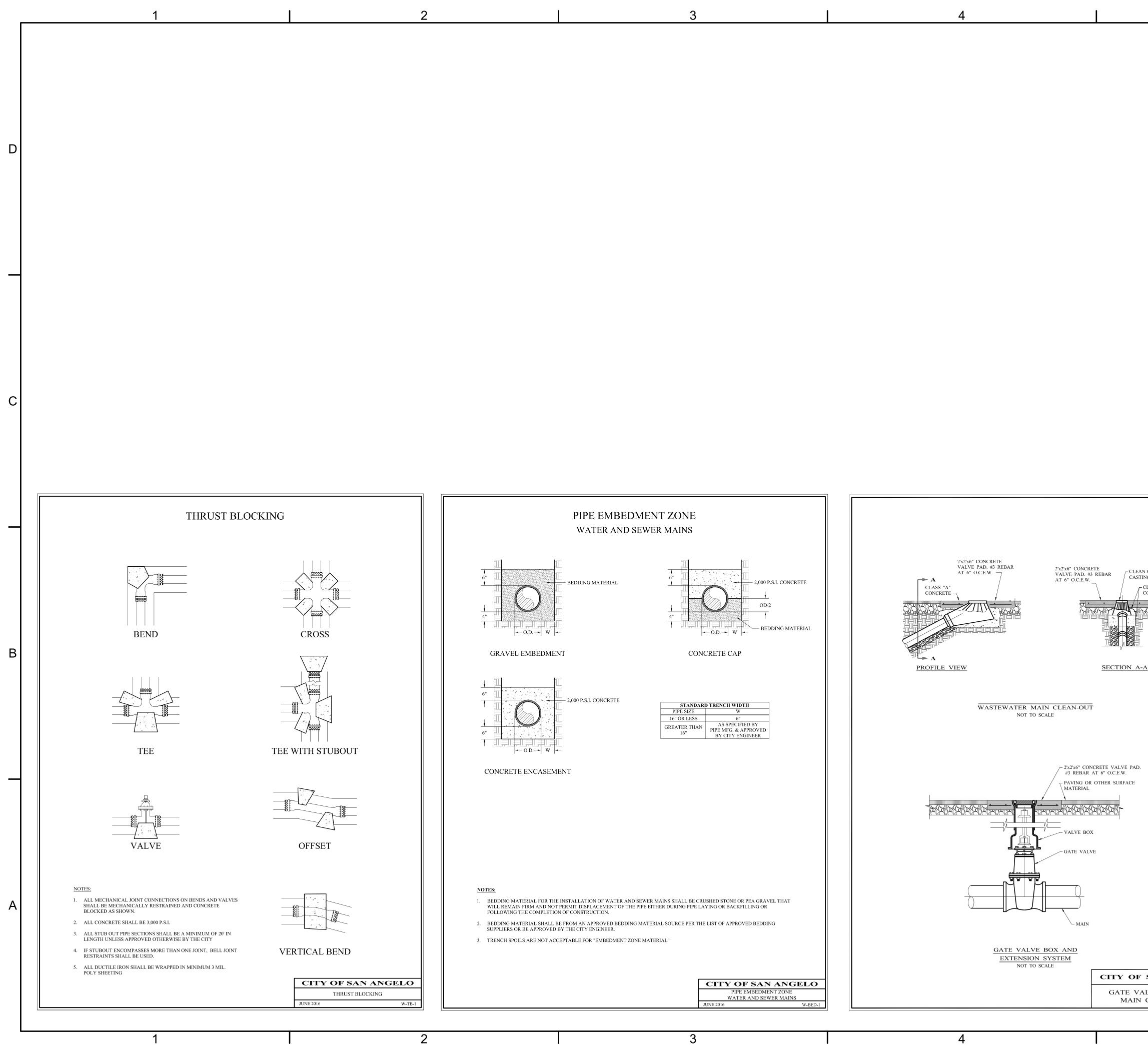
## SAN ANGELO, TEXAS

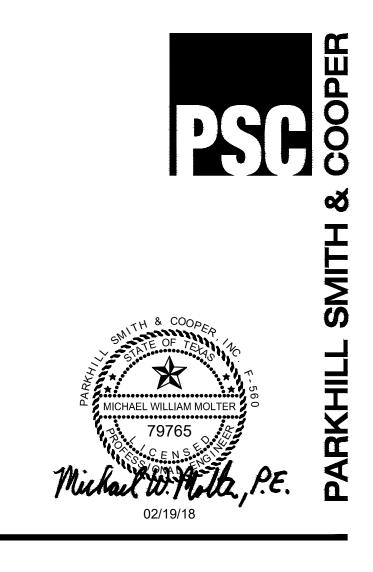
KEY PLAN

4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING SI	GNAGE	
1	10/03/2017	RESPONSE TO 1	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRU	CTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PROJECT		PROJECT NO:	3755.16	

DETAILS









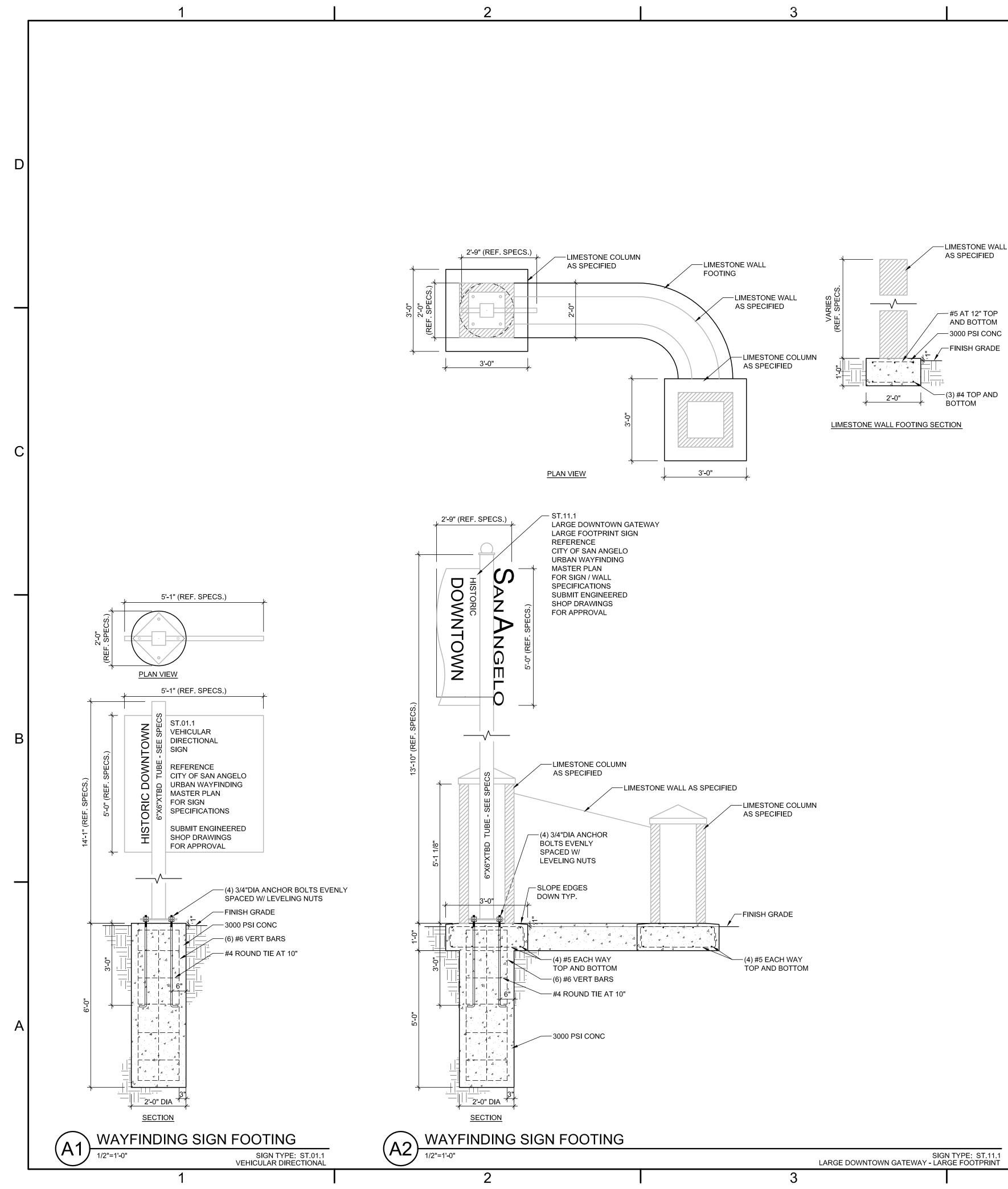
## SAN ANGELO, TEXAS

KEY PLAN

—				
4	01/26/2018	RESPONSE TO	TXDOT COMMENTS	
3	12/29/2017	WAYFINDING S	BIGNAGE	
1	10/03/2017	RESPONSE TO TXDOT COMMENTS		
0	07/14/2017	100% CONSTRUCTION DOCUMENTS		
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PROJEC		PROJECT NO:	3755.16	

DETAILS

-OUT NG		
CLASS "A" CONCRETE		
=   =   =     =   =		
<u>\</u>		
SAN	ANG	ELO
LVE B CLEAN	OX AN N-OUT	
		S-Z-2



	SIGN TYPE: ST 11.1
LARGE DOWNTOWN GATEWAY	- LARGE FOOTPRINT

WNTOWN	GATEWAY - LAR	
	SIG	NIYPE SI1

4
---





SAN ANGELO, TEXAS

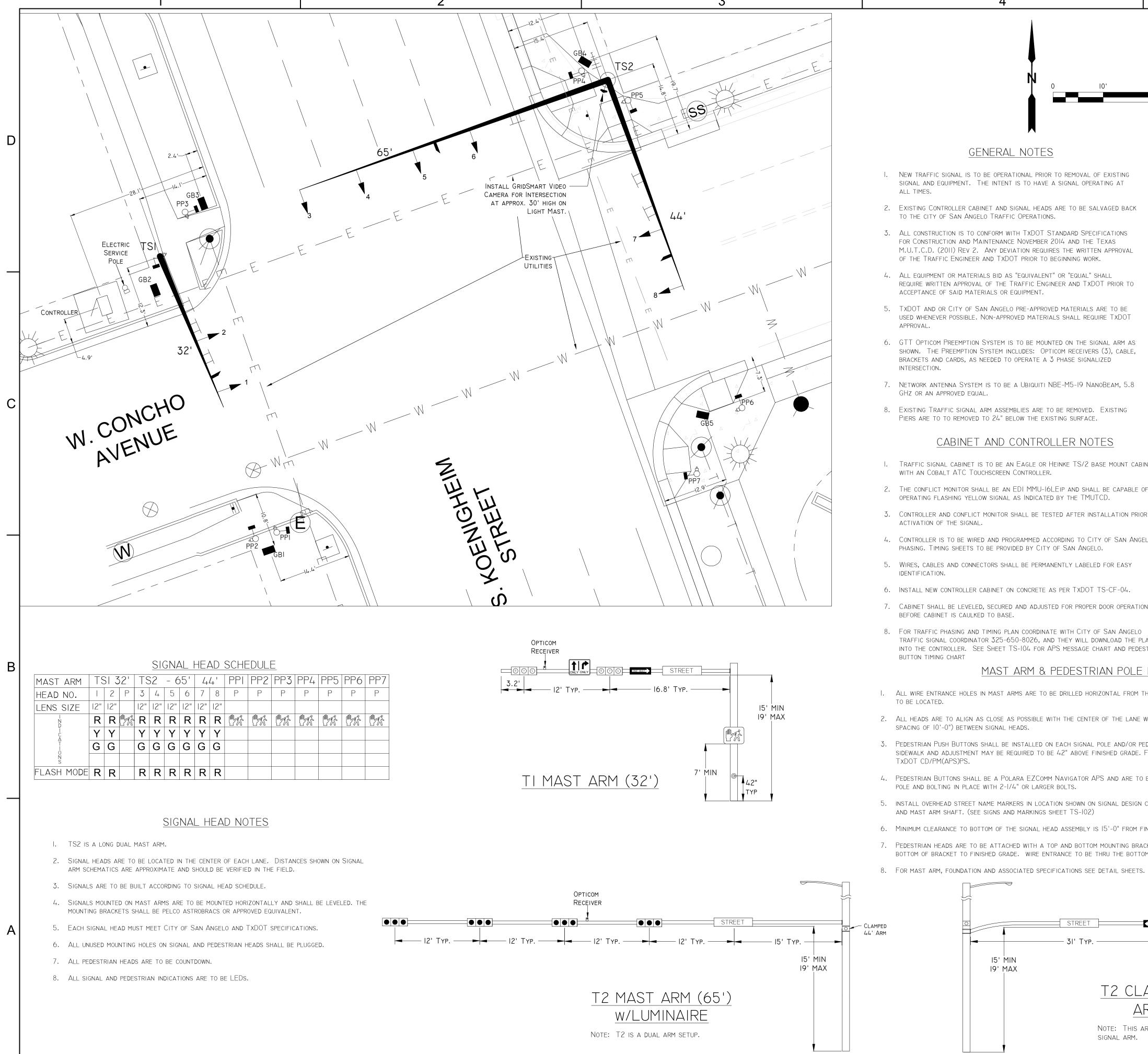
KEY PLAN

_				
3	12/29/2017	WAYFINDING SIG	NAGE	
1	10/03/2017	RESPONSE TO TXDOT COMMENTS		
0	07/14/2017	100% CONSTRUCTION DOCUMENTS		
NO	DATE	DESCRIPTION		
ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16				

WAYFINDING SIGNAGE DETAILS

S-501

THE SEAL APPEARING ON THIS DRAWING APPLIES TO THE DESIGN OF THE FOUNDATION ELEMENTS INDICATED ON THIS SHEET.



### GENERAL NOTES

- I. NEW TRAFFIC SIGNAL IS TO BE OPERATIONAL PRIOR TO REMOVAL OF EXISTING SIGNAL AND EQUIPMENT. THE INTENT IS TO HAVE A SIGNAL OPERATING AT ALL TIMES.
- 2. EXISTING CONTROLLER CABINET AND SIGNAL HEADS ARE TO BE SALVAGED BACK TO THE CITY OF SAN ANGELO TRAFFIC OPERATIONS.
- 3. ALL CONSTRUCTION IS TO CONFORM WITH TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE NOVEMBER 2014 AND THE TEXAS M.U.T.C.D. (2011) REV 2. ANY DEVIATION REQUIRES THE WRITTEN APPROVAL OF THE TRAFFIC ENGINEER AND TXDOT PRIOR TO BEGINNING WORK.
- 4. ALL EQUIPMENT OR MATERIALS BID AS "EQUIVALENT" OR "EQUAL" SHALL REQUIRE WRITTEN APPROVAL OF THE TRAFFIC ENGINEER AND TXDOT PRIOR TO ACCEPTANCE OF SAID MATERIALS OR EQUIPMENT.
- 5. TXDOT AND OR CITY OF SAN ANGELO PRE-APPROVED MATERIALS ARE TO BE USED WHENEVER POSSIBLE. NON-APPROVED MATERIALS SHALL REQUIRE TXDOT APPROVAL.
- 6. GTT OPTICOM PREEMPTION SYSTEM IS TO BE MOUNTED ON THE SIGNAL ARM AS SHOWN. THE PREEMPTION SYSTEM INCLUDES: OPTICOM RECEIVERS (3), CABLE, BRACKETS AND CARDS, AS NEEDED TO OPERATE A 3 PHASE SIGNALIZED INTERSECTION.
- 7. NETWORK ANTENNA SYSTEM IS TO BE A UBIQUITI NBE-M5-19 NANOBEAM, 5.8 GHZ OR AN APPROVED EQUAL.
- 8. EXISTING TRAFFIC SIGNAL ARM ASSEMBLIES ARE TO BE REMOVED. EXISTING PIERS ARE TO TO REMOVED TO 24" BELOW THE EXISTING SURFACE.

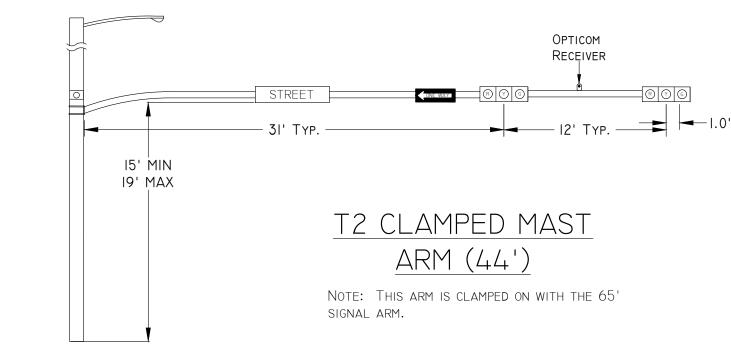
### CABINET AND CONTROLLER NOTES

- I. TRAFFIC SIGNAL CABINET IS TO BE AN EAGLE OR HEINKE TS/2 BASE MOUNT CABINET WITH AN COBALT ATC TOUCHSCREEN CONTROLLER.
- 2. THE CONFLICT MONITOR SHALL BE AN EDI MMU-I6LEIP AND SHALL BE CAPABLE OF OPERATING FLASHING YELLOW SIGNAL AS INDICATED BY THE TMUTCD.
- 3. CONTROLLER AND CONFLICT MONITOR SHALL BE TESTED AFTER INSTALLATION PRIOR TO ACTIVATION OF THE SIGNAL.
- 4. CONTROLLER IS TO BE WIRED AND PROGRAMMED ACCORDING TO CITY OF SAN ANGELO PHASING. TIMING SHEETS TO BE PROVIDED BY CITY OF SAN ANGELO.
- 5. WIRES, CABLES AND CONNECTORS SHALL BE PERMANENTLY LABELED FOR EASY IDENTIFICATION.
- 6. INSTALL NEW CONTROLLER CABINET ON CONCRETE AS PER TXDOT TS-CF-04.
- /. CABINET SHALL BE LEVELED, SECURED AND ADJUSTED FOR PROPER DOOR OPERATION BEFORE CABINET IS CAULKED TO BASE.
- 8. For traffic phasing and timing plan coordinate with City of San Angelo TRAFFIC SIGNAL COORDINATOR 325-650-8026, AND THEY WILL DOWNLOAD THE PLANS INTO THE CONTROLLER. SEE SHEET TS-104 FOR APS MESSAGE CHART AND PEDESTRIAN BUTTON TIMING CHART

### MAST ARM & PEDESTRIAN POLE NOTES

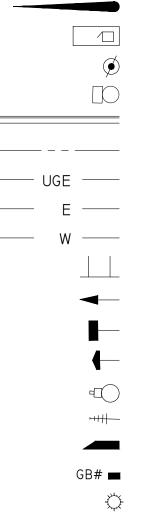
- I. ALL WIRE ENTRANCE HOLES IN MAST ARMS ARE TO BE DRILLED HORIZONTAL FROM THE FRONT OF ARM WHERE SIGNAL HEADS ARE TO BE LOCATED.
- 2. All heads are to align as close as possible with the center of the lane with a typical spacing of 12'-0" (minimum SPACING OF 10'-0") BETWEEN SIGNAL HEADS.
- 3. PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED ON EACH SIGNAL POLE AND/OR PEDESTRIAN POLE, 42" ABOVE EXISTING SIDEWALK AND ADJUSTMENT MAY BE REQUIRED TO BE 42" ABOVE FINISHED GRADE. FOR POLES INSTALLATION SEE DETAIL SHEET TXDOT CD/PM(APS)PS.
- 4. PEDESTRIAN BUTTONS SHALL BE A POLARA EZCOMM NAVIGATOR APS AND ARE TO BE INSTALLED BY DRILLING AND TAPPING THE POLE AND BOLTING IN PLACE WITH 2-1/4" OR LARGER BOLTS.
- 5. INSTALL OVERHEAD STREET NAME MARKERS IN LOCATION SHOWN ON SIGNAL DESIGN CENTERED BETWEEN CURB LANE SIGNAL HEAD AND MAST ARM SHAFT. (SEE SIGNS AND MARKINGS SHEET TS-102)
- 6. MINIMUM CLEARANCE TO BOTTOM OF THE SIGNAL HEAD ASSEMBLY IS 15'-0" FROM FINISHED ROAD SURFACE.
- 7. PEDESTRIAN HEADS ARE TO BE ATTACHED WITH A TOP AND BOTTOM MOUNTING BRACKET AT A MOUNTING HEIGHT OF 7'-0" FROM
- BOTTOM OF BRACKET TO FINISHED GRADE. WIRE ENTRANCE TO BE THRU THE BOTTOM OF THE PEDESTRIAN HEAD.

Δ



## LEGEND

5



_	
	NEW SHAFT AND MAST ARM
	NEW CONTROLLER CABINET W/ PAD
	UTILITY POLE
	NEW STEEL POLE WITH SERVICE
	CURB & GUTTER
	RIGHT OF WAY
	NEW UNDERGROUND SIGNAL CONDUIT
	OVERHEAD ELECTRIC LINES
	WATER LINES
	OVERHEAD STREET SIGN
	NEW SIGNAL HEAD
	NEW PEDESTRIAN HEAD
	NEW GRIDSMART VIDEO CAMERA
	NEW PEDESTRIAN POLE w/BUTTON
	5.8 GHz Antenna
	OPTICOM PREEMPTION SYSTEM
	NEW GROUND BOX
	Street Light

### CONSTRUCTION NOTES

I. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BEFORE DIGGING OR TRENCHING.

- 2. ALL EQUIPMENT LOCATIONS ARE SUBJECT TO UNDERGROUND UTILITIES LOCATION. ANY RELOCATION SHALL BE APPROVED BY THE TRAFFIC ENGINEER PRIOR TO RELOCATION.
- 3. All NEW GROUND BOXES AND COVERS SHALL BE TXDOT TYPE D CONSTRUCTED OF POLYMER CONCRETE TXDOT APPROVED. TXDOT MATERIAL SECIFICATION DMS-11070 "GROUND BOXES".
- 4. DETECTION IS TO BE GRIDSMART VIDEO CAMERA FOR STOP BAR DETECTION.
- 5. All conduit exposed above grade Shall be galvanized rigid METALLIC CONDUIT.
- 6. ALL CONDUIT SHALL CLEAR PULL BOX LID BY 8" MINIMUM.
- 7. TOP OF GROUND BOX SHALL BE FLUSH WITH SURROUNDING SURFACE.
- 8. SEE TS-103 TRAFFIC SIGNAL ELECTRICAL PLAN FOR UTILITIES.

### TEXAS8II CALL BEFORE YOU DIG

UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS8II (811) AND CITY OF SAN ANGELO TRAFFIC OPERATIONS (FOR SIGNAL LOCATES 325-650-8026) AND WATER DISTRIBUTION (FOR WATER AND SEWER LOCATES 325-657-4295) 48 HOURS PRIOR TO CONSTRUCTION.



## WEST CONCHO AVENUE WIDENING



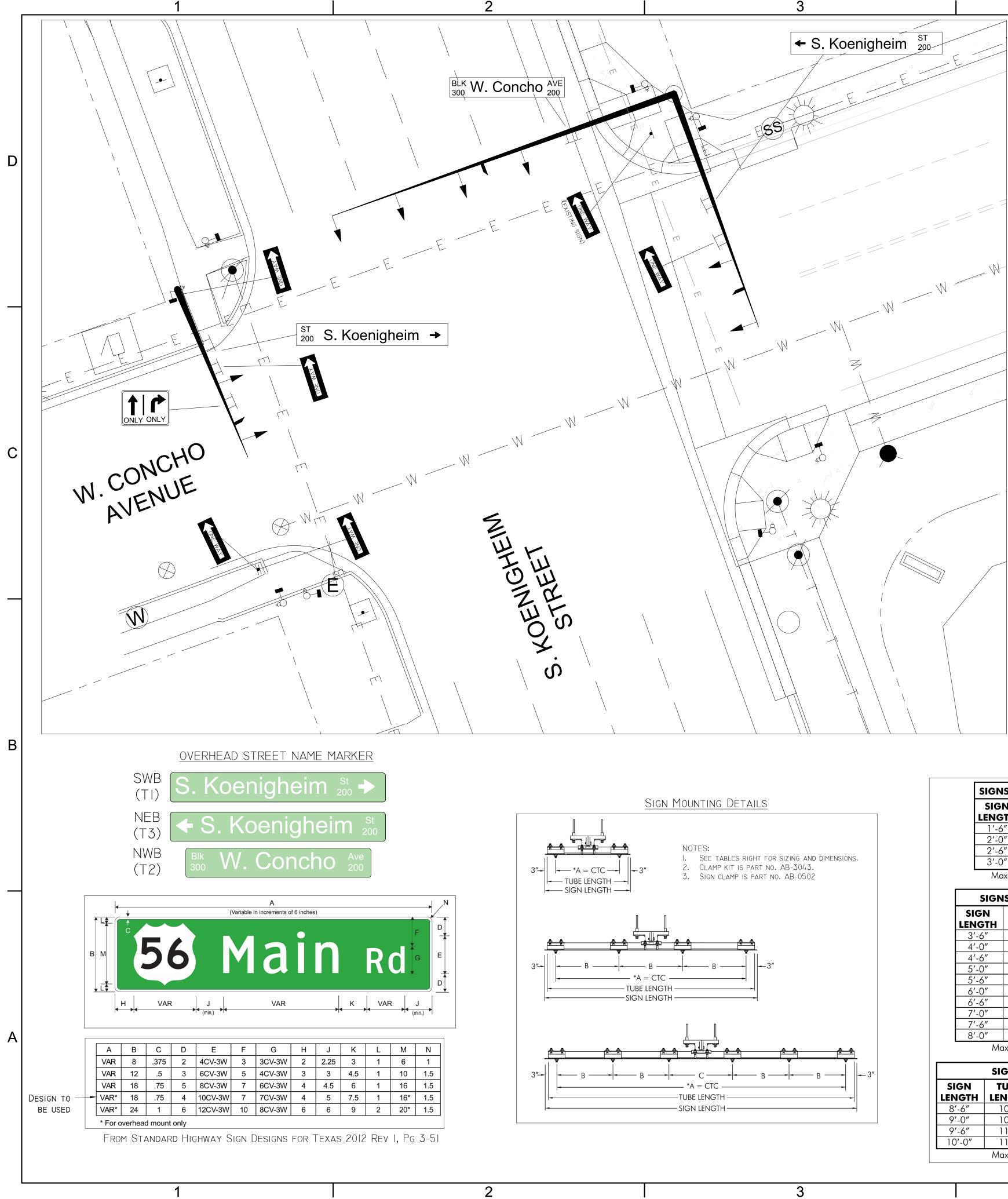
### SAN ANGELO, TEXAS

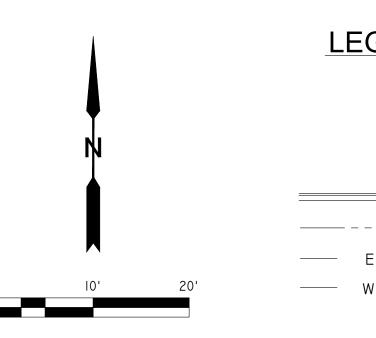
KEY PLAN

1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTR	UCTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSU	ISSUING OFFICE: MIDLAND PROJECT			3755.16



 $\top S - 1 \cap 1$ 





### GENERAL NOTES

- I. ALL CONSTRUCTION IS TO CONFORM WITH TXDOT SPECIFICATIONS AND THE TEXAS M.U.T.C.D. (2011) REV 2. ANY DEVIATION REQUIRES THE WRITTEN APPROVAL OF THE TRAFFIC ENGINEER AND TXDOT PRIOR TO BEGINNING WORK.
- 2. ALL EQUIPMENT OR MATERIALS BID AS "EQUIVALENT" OR "EQUAL" SHALL REQUIRE WRITTEN APPROVAL OF THE TRAFFIC ENGINEER AND TXDOT PRIOR TO ACCEPTANCE OF SAID MATERIALS OR EQUIPMENT.
- 3. PRE-APPROVED MATERIALS ARE TO BE USED WHENEVER POSSIBLE. NON-APPROVED MATERIALS REQUIRE TXDOT APPROVAL.

### CONSTRUCTION NOTES

- I. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BEFORE DIGGING OR TRENCHING.
- 2. ALL EQUIPMENT LOCATIONS ARE SUBJECT TO UNDERGROUND UTILITIES LOCATION. ANY RELOCATION SHALL BE APPROVED BY THE TRAFFIC ENGINEER PRIOR TO RELOCATION.

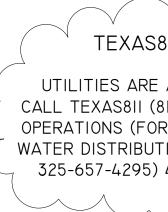
### <u>SIGNS</u>

- I. INSTALL OVERHEAD STREET NAME MARKERS IN LOCATION SHOWN ON SIGNAL DESIGN CENTERED BETWEEN CURB LANE SIGNAL HEAD AND MAST ARM SHAFT.
- 2. OVERHEAD LANE USE DESIGNATION SIGN IS TO BE A R3-8RS AS SHOWN ON SIGN DETAIL SHEET TS-501.
- 3. ONE WAY SIGNS SHOULD BE MOUNTED A MINIMUM OF 7' ABOVE THE FINISHED GRADE.
- 4. ONE WAY SIGNS INSTALLED ON SOUTHWEST CORNER. SEE SHEET C-403.
- 5. One way sign is to be an R6-I as shown on Sign Detail Sheet TS-501.

SIGN LENGTH	TUBE LENGT	
1′-6″	16″	12″
2'-0″	22″	18″
2′-6″	28″	24″
3'-0″	34″	30″
Maxim	um sign he	eight: 48″
SIGNS 3	′-6″ to 8	'-0" LON
GN 1	<b>UBE</b>	СТС

2 J.G.N	IUBE			
LENGTH	LENGTH	* <b>A</b>	В	
3′-6″	40″	36″	12″	
4'-0″	46″	42″	14″	
4'-6″	52″	48″	16″	
5′-0″	58″	54″	18″	
5′-6″	64″	60″	20″	
6′-0″	70″	66″	22″	
6′-6″	76″	72″	24″	
7′-0″	82″	78″	26″	
7′-6″	88″	84″	28″	
8′-0″	94″	90″	30″	
Maximum sign height: 24″				

SIGNS 8' to 10' LONG					
SIGN LENGTH	TUBE LENGTH	CTC *A	В	С	
8′-6″	100″	96″	19″	20″	
9′-0″	106″	102″	20″	22″	
9′-6″	112″	108″	21″	24″	
10'-0"	118″	114″	22″	26″	
Maximum sign height: 16″					



## 5

## LEGEND

NEW CONTROLLER CABINET W/ PAD UTILITY POLE NEW STEEL POLE WITH SERVICE CURB & GUTTER RIGHT OF WAY OVERHEAD ELECTRIC LINES WATER LINES OVERHEAD STREET SIGN NEW SIGNAL HEAD NEW PEDESTRIAN HEAD NEW GRIDSMART VIDEO CAMERA NEW PEDESTRIAN POLE W/BUTTON





## WEST CONCHO AVENUE WIDENING



### SAN ANGELO, TEXAS

KEY PLAN

1	10/03/2017	RESPONSE TO	TXDOT COMMENTS	
0	07/14/2017	100% CONSTRU	JCTION DOCUMENTS	
NO	DATE	DESCRIPTION		
ISSL	JING OFFICE:	MIDLAND	PROJECT NO:	3755.16

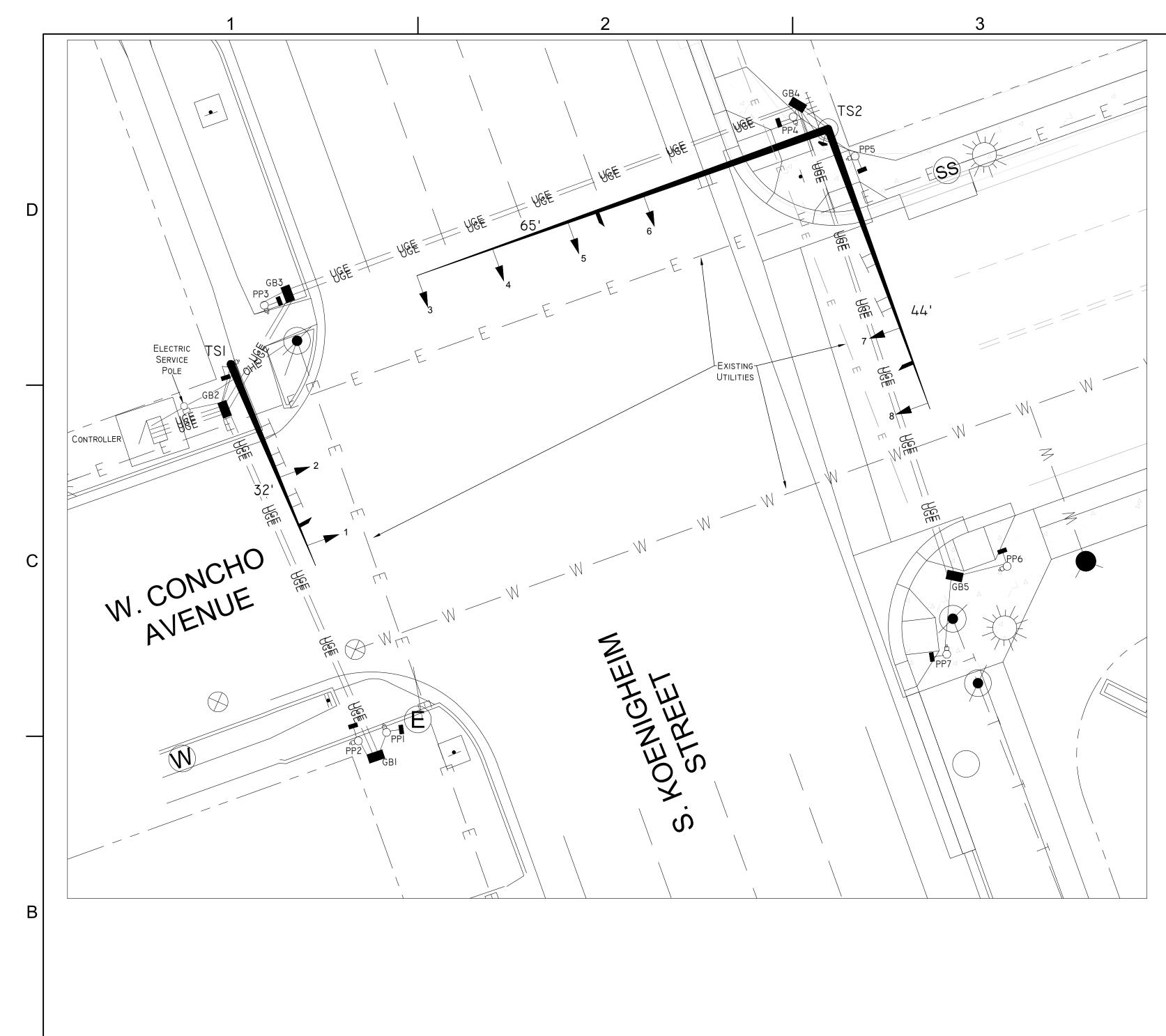
SIGN PLAN

TS - 102

TEXAS8II CALL BEFORE YOU DIG

UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL CALL TEXAS8II (811) AND CITY OF SAN ANGELO TRAFFIC OPERATIONS (FOR SIGNAL LOCATES 325-650-8026) AND WATER DISTRIBUTION (FOR WATER AND SEWER LOCATES 325-657-4295) 48 HOURS PRIOR TO CONSTRUCTION

5



Α

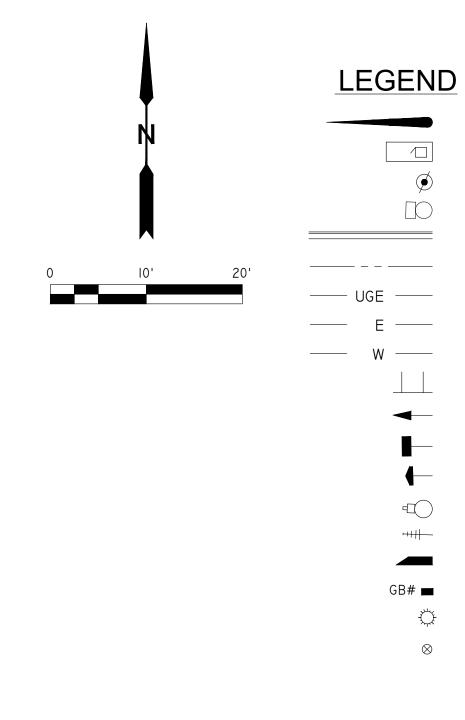
1

### ELECTRICAL SERVICE DATA [SEE SHEET ED(5)-14 FOR NOTES]

		LLLCIRICAL SLRV	ICL DAT	A [SEE S		5(5)-14 1	OK NOT	_3]				
ELEC. SERVICE ID	Plan Sheet Number	ELECTRICAL SERVICE DESCRIPTION	SERVICE CONDUIT **SIZE	SERVICE CONDUTORS NL./SIZE		Main Ckt. Bkr. Pole/Amps	CONTACTOR	Pane Ibd/ Loadcenter Amp Rating	Branch Circuit ID	Branch Ckt. Bkr. Pole/Amps	Branch Circuit Amps	KVA Load
Koenigheim & Concho	TS-103	ELC SRV TY D 120/240 060 (NS) GS (E) SP (0)	2"	3/#6	N/A	2P/60		100	SIG. CONTROLLER	IP/30	23	5.3
							<del>30</del>		LUMINA IRES	<del>2P/20</del>	<del>4</del>	

2

## UTILITY POLE CURB & GUTTER RIGHT OF WAY WATER LINES NEW SIGNAL HEAD NEW PEDESTRIAN HEAD 5.8 GHz Antenna NEW GROUND BOX STREET LIGHT $\otimes$ Water Value



## CONDUIT AND CABLE SUMMARY

	2" T PVC Schd	3"Т РVС Schd	3" B PVC	CONDUIT	TOTAL CONDUIT	MAST	IC	16C	7C	4C	#6	IC	VIDEO CABLE (GridSmart	ANTENNA CABLE	OPTICOM 1070 CABLE
CONDUIT RUN	40	40	SCHD 80		LENGTHS	ARM	#8	#12	#12	#12	BARE	<del>#</del> 6	DETECTOR)	(RADIO)	(PREMPTION)
GBI-PPI				5	5						I				
GBI-PP2				5	5					I	ļ				
GBI-GB2			2	58	116				2	2	]				
GB2-TSI		2		6	12							3			I
GB2-GB3		2		20	40				5	5	I	3		I	2
GB3-PP3				8	8										
GB2-CONT		3		12	36			2	8	8	ļ			1	3
GB3-GB4			2	82	164				4	4	1	3	I	<u> </u>	2
GB4-TS2		2		5	10						1	3	1	1	2
GB4-PP4				5	5										
GB4-PP5				10	10				1		I				
GB4-GB5			2	73	146				2	2	ļ				
GB5-PP6				8	8						1				
GB5-PP7	1			7	7										
SERV-CONT*				15	15		3				1				
SERV-GB2				6	6						I	3			
SHAFT/PED POLE															
VIDEO CABLE				30		TS2							I		
70#12				52		TSI									
7C#12 IN Arm/Shafts/Ped				188		TS2 (65')			l						
Pole				76		TS2 (44')									
TULE				70		PPI-PP7									
3C#12 IN SHAFT/PED				4		TSI									
Pole				28		PPI-PP6									
ANTENNA CABLE				30		TS2								I	
OPTICOM CABLE				61		TSI,TS2									I
	69	98	426		593	0	45	137	1226	872	325	357	149	149	417

NOTES: I) PULL STRING IS TO BE PROVIDED IN ALL CONDUITS 2) SIGNAL CONDUIT FROM GB4-GB5 MAY NEED TO BE COORDINATED WITH STORM SEWER CONSTRUCTION 3) ILLUMINATION CIRCUIT IS TO RUN IN ONE OF THE 3" CONDUITS SEPARATE FROM SIGNAL CABLES

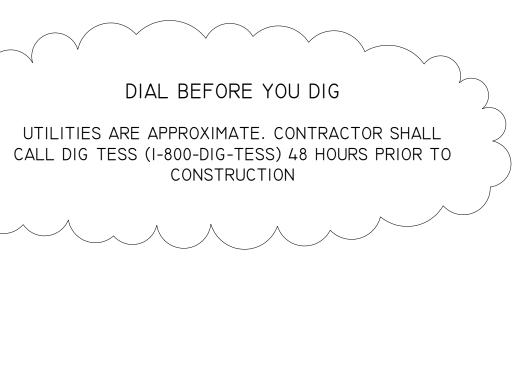
4) SERVICE CONDUIT IS TO BE 2" RIGID METAL

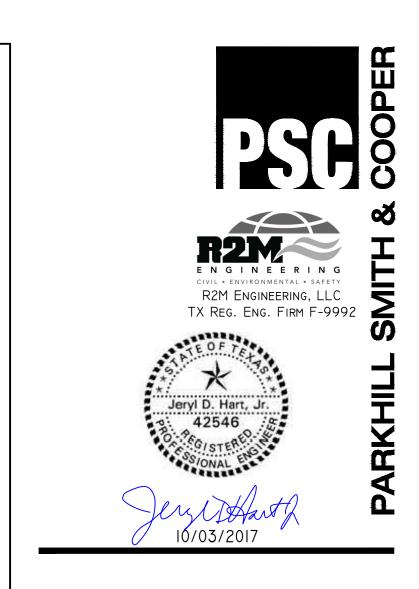
NEW SHAFT AND MAST ARM NEW CONTROLLER CABINET W/ PAD NEW STEEL POLE WITH SERVICE NEW UNDERGROUND SIGNAL CONDUIT OVERHEAD ELECTRIC LINES OVERHEAD STREET SIGN

NEW GRIDSMART VIDEO CAMERA

NEW PEDESTRIAN POLE W/BUTTON

OPTICOM PREEMPTION SYSTEM





## WEST CONCHO AVENUE WIDENING



### SAN ANGELO, TEXAS

KEY PLAN

1 0 NO	10/03/2017 07/14/2017 DATE		TXDOT COMMENTS				
ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16							
_			SIGN A RICAL	↓ L			

TS - 103

		APS MESSAGE CHA	RT
POLE LOCATION	PEDESTRIAN MOVEMENT	FUNCTIONS	SPEECH MESSAGE/SOUN
		BUTTON PUSH ON DW	WAIT
PPI, PP7	PHASE 4	LOCATOR TONE	SLOW TICK
		WALK INDICATOR	RAPID TICK
		BUTTON PUSH ON DW	WAIT
PP3, PP4	PHASE 4	LOCATOR TONE	SLOW TICK
		WALK INDICATOR	RAPID TICK
		BUTTON PUSH ON DW	WAIT
TSI, PP2	PHASE 2	LOCATOR TONE	SLOW TICK
		WALK INDICATOR	RAPID TICK
		BUTTON PUSH ON DW	WAIT
PP5, PP6	PHASE 2	LOCATOR TONE	SLOW TICK
		WALK INDICATOR	RAPID TICK

NOTE: CITY SIGNAL OPERATIONS WILL PROGRAM SPEECH MESSAGE

PED BUTTON TIMING CHART							
	PHASE TIME						
PED BUTTON	PHASE ALLOWED	×	١ ١				
PPI, PP7	PHASE 4	7 SECONDS	24 SECONDS				
PP3, PP4	PHASE 4	7 SECONDS	24 SECONDS				
TSI, PP2	PHASE 2	7 SECONDS	18 SECONDS				
PP5, PP6	PHASE 2	7 SECONDS	18 SECONDS				

DON'T WALK PHASE BASED ON CLEARANCE OF 3FT/SEC FOR CROSSING PATH.

2

2

D

С

В

\_\_\_\_

A

1

3

4

OUND DETAILS

TRAFFIC SIGNAL BID ITEM SUMMARY TABLE

DRILL SHAFT (TRF SIG POLE) (24 IN) DRILL SHAFT (TRF SIG POLE) (30 IN) DRILL SHAFT (TRF SIG POLE) (48 IN) CL B CONC (MISC) CONDT (PVC)(SCH 40) (2") CONDT (PVC)(SCH 40) (3") CONDT (PVC)(SCH 80) (3") BORE CONDT (PVC)(SCH 80) (3") BORE CONDT (RM) (2") ELEC CONDR (NO.8) INSULATED ELEC CONDR (NO.6) BARE	LF LF CY LF LF LF LF LF	426 15
DRILL SHAFT (TRF SIG POLE) (48 IN) CL B CONC (MISC) CONDT (PVC)(SCH 40) (2") CONDT (PVC)(SCH 40) (3") CONDT (PVC)(SCH 80) (3") BORE CONDT (PVC)(SCH 80) (3") BORE CONDT (RM) (2") ELEC CONDR (NO.8) INSULATED	LF CY LF LF LF LF LF	22   
CL B CONC (MISC) CONDT (PVC)(SCH 40) (2") CONDT (PVC)(SCH 40) (3") CONDT (PVC)(SCH 80) (3") BORE CONDT (RM) (2") ELEC CONDR (NO.8) INSULATED	CY LF LF LF LF LF	 6  98 426 15
CONDT (PVC)(SCH 40) (2") CONDT (PVC)(SCH 40) (3") CONDT (PVC)(SCH 80) (3") BORE CONDT (RM) (2") ELEC CONDR (NO.8) INSULATED	LF LF LF LF LF	98 426 15
CONDT (PVC)(SCH 40) (3") CONDT (PVC)(SCH 80) (3") BORE CONDT (RM) (2") ELEC CONDR (NO.8) INSULATED	LF LF LF LF	98 426 15
CONDT (PVC)(SCH 80) (3") BORE CONDT (RM) (2") ELEC CONDR (NO.8) INSULATED	LF LF	426 15
CONDT (RM) (2") ELEC CONDR (NO.8) INSULATED	LF LF	15
ELEC CONDR (NO.8) INSULATED	LF	
ELEC CONDR (NO.6) BARE		45
	LF	325
ELEC CONDR (NO.6) INSULATED	LF	357
GROUND BOX TY D (162922)W/APRON	EA	5
ELC SRV TY D 120/240 060(NS)GS(E)SP(0)	EA	
ALUMINUM SIGNS ON ARM (TY A) [INCLUDED IN ITEM 680]	SF	48
NSTALL HWY TRF SIG (SYSTEM)	EA	
REMOVING TRAFFIC SIGNALS	EA	
VEH SIG SEC (12")LED(GRN)	EA	8
VEH SIG SEC (12")LED(YEL)	EA	8
VEH SIG SEC (12")LED(RED)	EA	8
PED SIG SEC (LED)(COUNTDOWN)	EA	8
TRF SIG CBL (TY A)(12 AWG)(4 CONDR)	LF	872
TRF SIG CBL (TY A)(12 AWG)(7 CONDR)	LF	1,226
TRF SIG CBL (TY A)(12 AWG)(16 CONDR)	LF	137
NS TRF SIG PL AM(S)I ARM(32')	EA	
NS TRF SIG PL AM(S)2 ARM(65-44')LUM	EA	
PED POLE ASSEMBLY	EA	7
PED DETECT PUSH BUTTON (APS)	EA	8
RADIO SET-UP SYSTEM - UBIQUITI SYSTEM INCLUDING UBIQUITI NBE-M5-19, CABLES, BRACKETS, ANTENNA, INSTALLATION AND SETUP.	EA	
VIVDS SET-UP SYSTEM - GRIDSMART CAMERA SYSTEM INCLUDING CAMERA, PROCESSOR, COMMUNICATION CABLES, BRACKETS, INSTALLATION AND SETUP.	EA	
MV PRIORITY CONTROL UNIT W/CABLE - GTT OPTICOM PREEMPTION SYSTEM INCLUDING PROCESSOR(S), CABLE, 3 RECEIVER UNITS, BRACKETS, INSTALLATION AND SETUP.	EA	
	ELEC CONDR (NO.6) INSULATED GROUND BOX TY D (I62922)W/APRON ELC SRV TY D 120/240 060(NS)GS(E)SP(0) ALUMINUM SIGNS ON ARM (TY A) [INCLUDED IN ITEM 680] NSTALL HWY TRF SIG (SYSTEM) REMOVING TRAFFIC SIGNALS 7/EH SIG SEC (12")LED(GRN) 7/EH SIG SEC (12")LED(GRN) 7/EH SIG SEC (12")LED(RED) 7/ED SIG SEC (LED)(COUNTDOWN) 7/EF SIG CBL (TY A)(12 AWG)(4 CONDR) 7/EF SIG CBL (TY A)(12 AWG)(4 CONDR) 7/EF SIG CBL (TY A)(12 AWG)(16 CONDR) 7/EF SIG PL AM(S)1 ARM(32') 7/ED POLE ASSEMBLY 7/ED DETECT PUSH BUTTON (APS) 7/ADIO SET-UP SYSTEM - UBIQUITI SYSTEM INCLUDING UBIQUITI NBE-M5-19, CABLES, 7/ACKETS, ANTENNA, INSTALLATION AND SETUP. 7/IVDS SET-UP SYSTEM - GRIDSMART CAMERA SYSTEM INCLUDING CAMERA, PROCESSOR, 0/MMUNICATION CABLES, BRACKETS, INSTALLATION AND SETUP. 7/V PRIORITY CONTROL UNIT W/CABLE - GTT OPTICOM PREEMPTION SYSTEM INCLUDING	LEC CONDR (N0.6) INSULATEDLFGROUND BOX TY D (162922)W/APRONEAGROUND BOX TY D 120/240 060(NS)GS(E)SP(0)EASLC SRV TY D 120/240 060(NS)GS(E)SP(0)EAALUMINUM SIGNS ON ARM (TY A) [INCLUDED IN ITEM 680]SFNSTALL HWY TRF SIG (SYSTEM)EAREMOVING TRAFFIC SIGNALSEAVEH SIG SEC (12")LED(GRN)EAVEH SIG SEC (12")LED(YEL)EAVEH SIG SEC (12")LED(YEL)EAVEH SIG SEC (12")LED(RED)EAVET SIG SEC (LED)(COUNTDOWN)EAVET SIG CBL (TY A)(12 AWG)(4 CONDR)LFTRF SIG CBL (TY A)(12 AWG)(7 CONDR)LFTRF SIG CBL (TY A)(12 AWG)(16 CONDR)LFNS TRF SIG PL AM(S) ARM(32')EANS TRF SIG PL AM(S) ARM(65-44')LUMEAVED DOLE ASSEMBLYEAVED DETECT PUSH BUTTON (APS)EAXADIO SET-UP SYSTEM - UBIQUITI SYSTEM INCLUDING UBIQUITI NBE-M5-19, CABLES, ANTENNA, INSTALLATION AND SETUP.EAVIVDS SET-UP SYSTEM - GRIDSMART CAMERA SYSTEM INCLUDING CAMERA, PROCESSOR, OMMUNICATION CABLES, BRACKETS, INSTALLATION AND SETUP.EAV PRIORITY CONTROL UNIT W/CABLE - GTT OPTICOM PREEMPTION SYSTEM INCLUDING EAEA



## WEST CONCHO AVENUE WIDENING



SAN ANGELO, TEXAS

KEY PLAN

 1
 10/03/2017
 RESPONSE TO TXDOT COMMENTS

 0
 07/14/2017
 100% CONSTRUCTION DOCUMENTS

 NO
 DATE
 DESCRIPTION

 ISSUING OFFICE: MIDLAND
 PROJECT NO: 3755.16

 TRAFFIC
 SIGNAL

 SUMMARY
 TABLES

TS-104

5

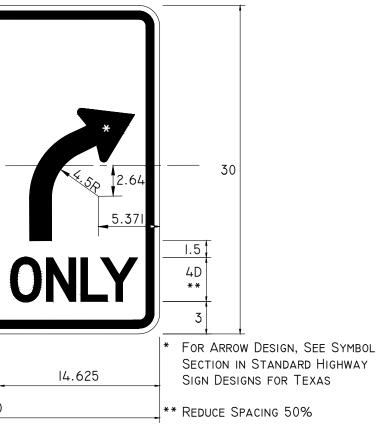
	1	2
D		
	36       12       .5       3.375       2.625       3       1.25       9.125       2       9.625       9       2         54       18       1       5.5       3.5       5       4       12.309       2.929       12.762       13       4       DESIGN TO BE USED         N       P       Q       R       S       T       U       V         4 D       1.5       11       9.125       2       9.625       1.3       4       DESIGN TO BE USED         P       Q       R       S       T       U       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V	LI4.625 0.75 30 COLORS: LEGEND BACKGRO
С	For the subsection of the subs	
	NOTE: For further information regarding signs see TxDOT Standard Highway Sign Designs for Texas 2012 Edition - Revision 2	
В		
A		

2

3







O - BLACK ROUND - WHITE



## WEST CONCHO AVENUE WIDENING



SAN ANGELO, TEXAS

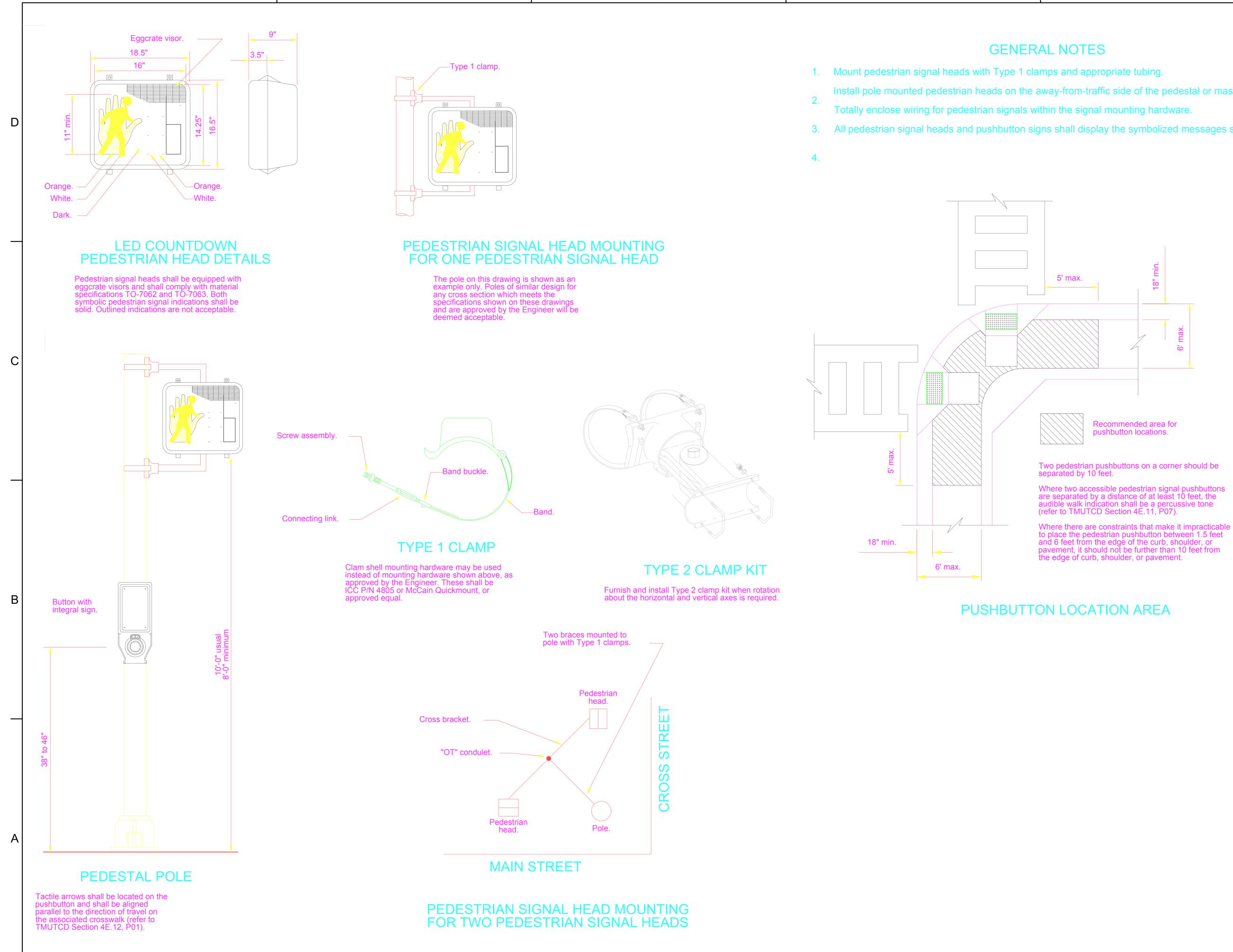
KEY PLAN

1	10/03/2017	RESPONSE TO TXI	DOT COMMENTS			
0	07/14/2017	100% CONSTRUCTION DOCUMENTS				
NO	DATE	DESCRIPTION				
ISSUING OFFICE: MIDLAND			PROJECT NO:	3755.16		



TS-501



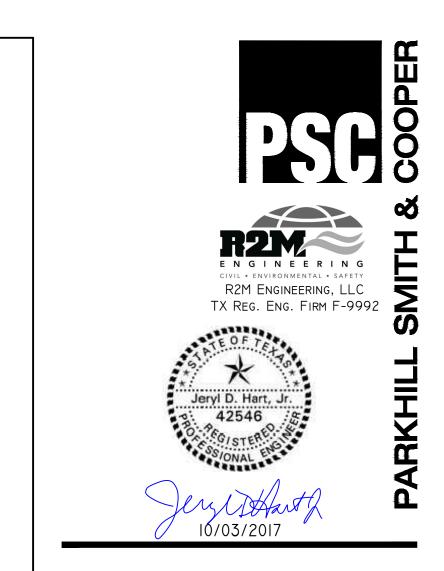


1

- Install pole mounted pedestrian heads on the away-from-traffic side of the pedestal or mast arm pole
- 3. All pedestrian signal heads and pushbutton signs shall display the symbolized messages shown.

3

4



## WEST CONCHO AVENUE WIDENING



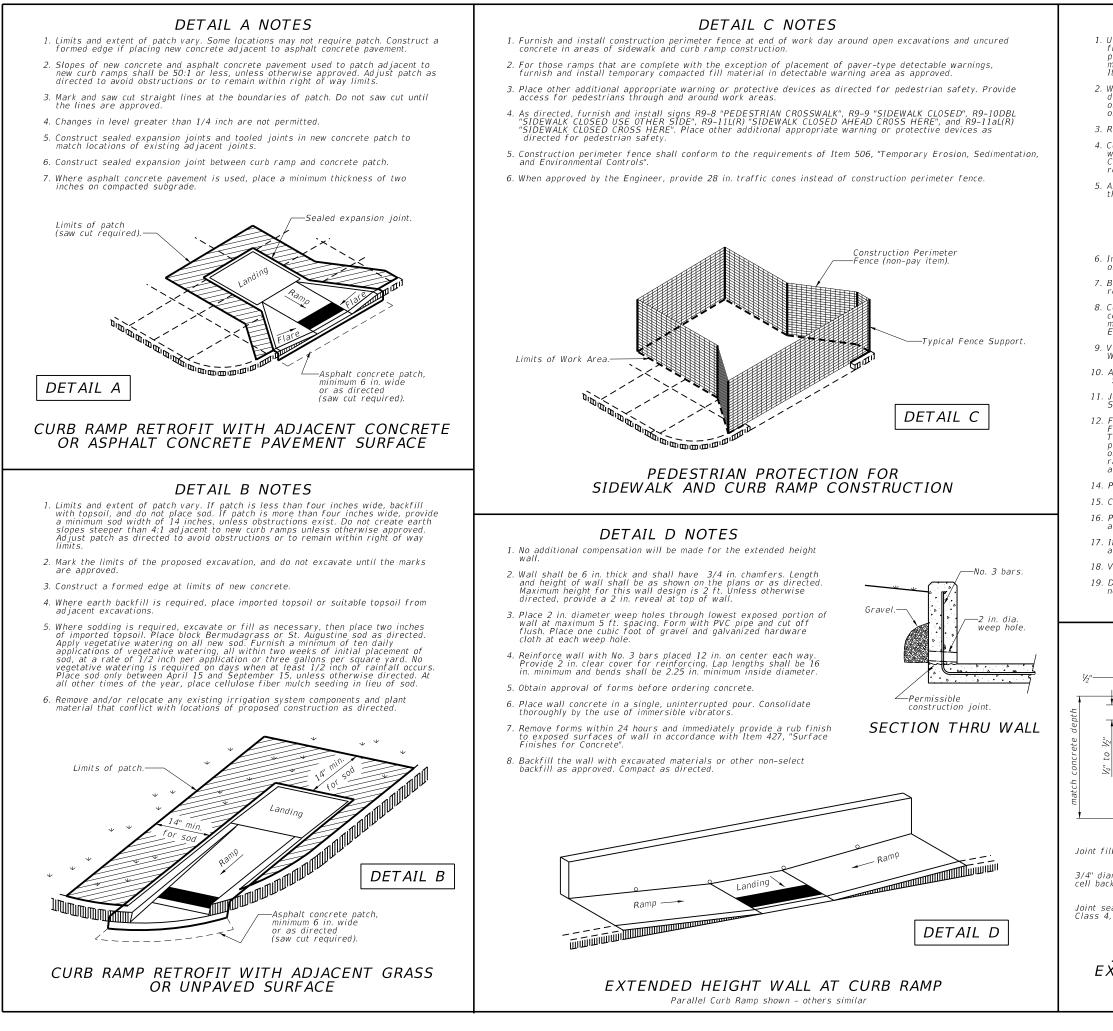
### SAN ANGELO, TEXAS

KEY PLAN

—							
1	10/03/2017	RESPONSE TO T	OOT COMMENTS				
0	07/14/2017	100% CONSTRUCTION DOCUMENTS					
NO	DATE	DESCRIPTION					
ISSL	ISSUING OFFICE: MIDLAND PROJECT NO: 3755.16						



TS - 502



1:27:36

/28/2017

δi

### GENERAL NOTES

Unless otherwise indicated on the plans, the work performed, materials furnished, equipment, labor, tools, and incidentals for patches and pedestrian protection (including all pertinent items described on this sheet) will not be measured or paid directly, but will be considered as included in payment for Item 531, "Sidewalks."

2. Walking surfaces include ramps, landings, flares, and sidewalk and will be denoted in the plans as "concrete" or "asphalt" and require treatment as shown on Detail A. Non-walking surfaces will be denoted in the plans as "sod," "seed," "unpaved" and require treatment as shown on Detail B.

3. Refer to PED Standard Sheets for additional details.

4. Concrete for patches adjacent to new curb ramps shall be 5 in. thick, reinforced with synthetic fiber listed on the Department's "Fibers for Class A and Class B Concrete Applications" Material/Producer List, and shall conform to the requirements of Item 421, "Hydraulic Cement Concrete," Class A.

Asphalt concrete for patches adjacent to new curb ramps shall be two inches thick and shall conform to the requirements of the following:

 a. Item 330, "Limestone Rock Asphalt Pavement",
 b. Item 334, "Hot-Mix Cold-Laid Asphalt Concrete Pavement",
 c. Item 340, "Dense-Graded Hot-Mix Asphalt (Small Quantity)",
 d. Item 344, "Superpave Mixtures", or

- Other material as approved

6. Imported topsoil for patches adjacent to new curb ramps and beneath new sod or seeding shall conform to the requirements of Item 160, "Topsoil."

7. Block sod for patches adjacent to new curb ramps shall conform to the requirements of Item 162, "Sodding for Erosion Control."

8. Cellulose fiber mulch seeding for patches adjacent to new curb ramps shall conform to the requirements of Item 164, "Seeding For Erosion Control." Seed mix shall conform to Table 1, Table 2, Table 3, or Table 4 as directed by the Engineer

9. Vegetative watering shall conform to the requirements of Item 168, "Vegetative

10. Acceptable joint sealing compounds are listed on the Department's "Joint Sealers" Material/Producer List.

11. Joint filler boards shall conform to the requirements of DMS-6310, "Joint Sealants and Fillers."

12. Furnish and install 2 in. of flexible base under new sidewalks and curb ramps. Flexible base shall conform to the requirements of Item 247, "Flexible Base," Type A, Grade 5 (without minimum strengths or classification). Recycled asphalt pavement (RAP) may be incorporated into the flexible base or may used in place of flexible base. Flexible base used as a foundation for sidewalks and curb ramps will not be measured and paid for separately, but will be considered as included in payment for the pertinent items.

14. Plastic drums shall conform to the requirements of Standard Sheet BC(8).

15. Compact soils beneath new patch materials as directed.

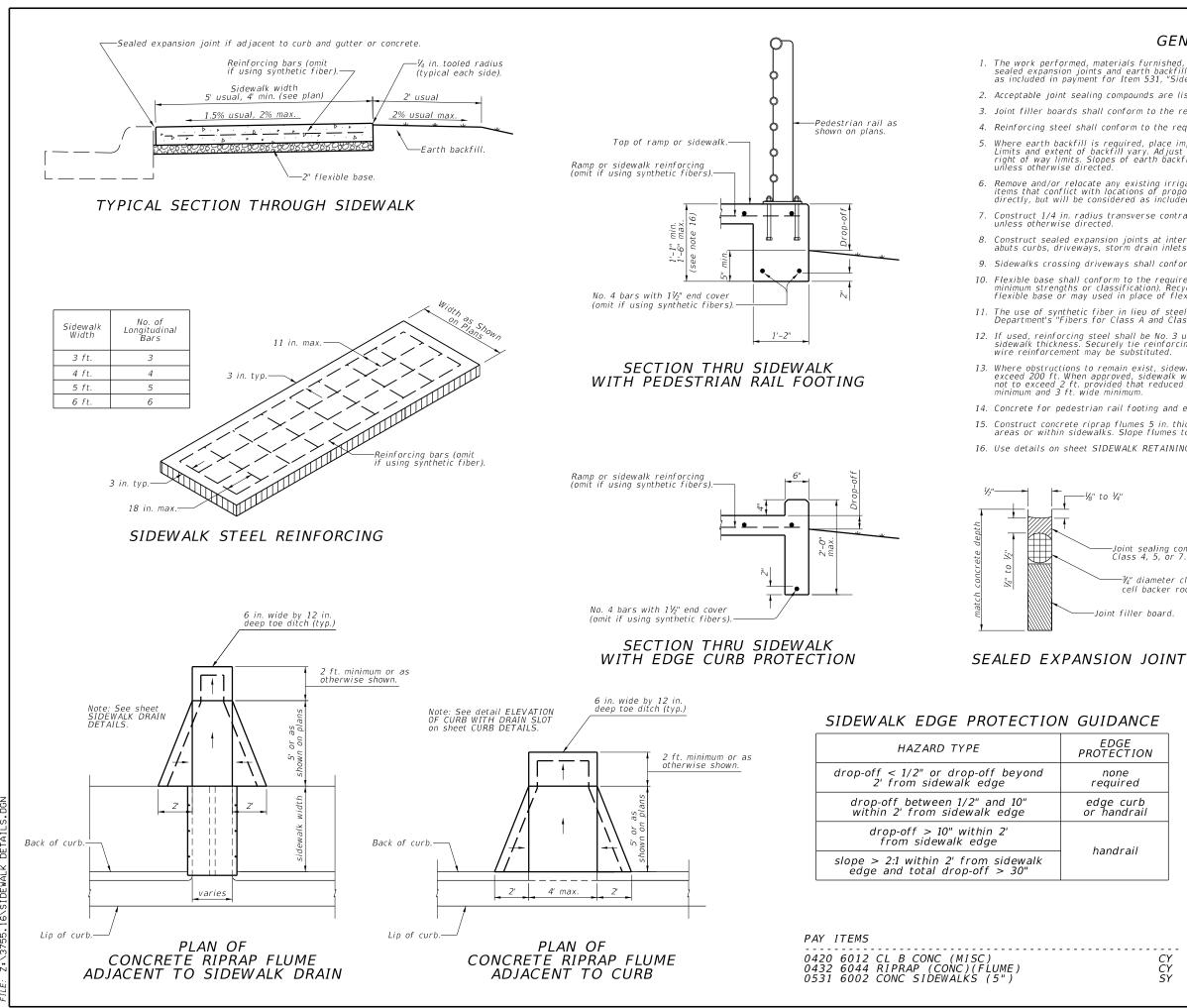
16. Prior to final inspection by Registered Accessibility Specialist, remove accumulated sediment on ramps and clean detectable warning surfaces.

17. If approved, perform planing in front of new curb ramp as an alternative to asphalt concrete patch.

18. Vertical walls adjacent to ramps and landings shall be 6 in. wide.

19. Detectable warnings are required on curb ramps crossing public alleys but are not required on curb ramps crossing unsignalized private driveways.

to 1/4"	Micha	NO. F. 560 R. B. S. F. E.		
iller board.	Texas Department of	Transpo	ortation	San Angelo District
iameter closed icker rod. sealing compound 4, 5, or 7.	CURB SUPPLE INFOR	MEN	ITARY	,
SEALED XPANSION JOINT	<i>REVISIONS</i> Ø7-16	cont sect €C\$\$\$\$ DIST DIST\$	NOT JOB \$ J\$ COUNTY \$CTY\$	TO SCALE HIGHWAY \$HWY\$ SHEET NO. SJTØ3



E: 9/28/2017 1:27:53 PM E: Z:\3755.16\SIDEWALK DETAIL

### GENERAL NOTES

 The work performed, materials furnished, equipment, labor, tools, and incidentals for flexible base, sealed expansion joints and earth backfill will not be measured or paid directly, but will be considered as included in payment for Item 531, "Sidewalks."

Acceptable joint sealing compounds are listed on the Department's "Joint Sealers" Material/Producer List.
 Joint filler boards shall conform to the requirements of DMS-6310, "Joint Sealants and Fillers."

4. Reinforcing steel shall conform to the requirements of Item 440, "Reinforcement for Concrete."

5. Where earth backfill is required, place imported topsoil or suitable topsoil from adjacent excavations. Limits and extent of backfill vary. Adjust backfill as directed to avoid obstructions or to remain within right of way limits. Slopes of earth backfill used to patch adjacent to new sidewalk shall be 3:1 or less, unless otherwise directed.

6. Remove and/or relocate any existing irrigation system components, plant material, and other landscaping items that conflict with locations of proposed construction as directed. This will not be measured or paid directly, but will be considered as included in payment for Item 531, "Sidewalks."

7. Construct 1/4 in. radius transverse contraction (tooled) joints at intervals equal to the sidewalk width, unless otherwise directed.

8. Construct sealed expansion joints at intervals not to exceed 40 ft. and where new concrete sidewalk abuts curbs, driveways, storm drain inlets, and existing concrete or buildings.

9. Sidewalks crossing driveways shall conform to the driveway details as shown elsewhere in the plans.

10. Flexible base shall conform to the requirements of Item 247, "Flexible Base," Type A, Grade 5 (without minimum strengths or classification). Recycled asphalt pavement (RAP) may be incorporated into the flexible base or may used in place of flexible base.

11. The use of synthetic fiber in lieu of steel reinforcing is acceptable, provided the fiber is listed on the Department's "Fibers for Class A and Class B Concrete Applications" Material/Producer List.

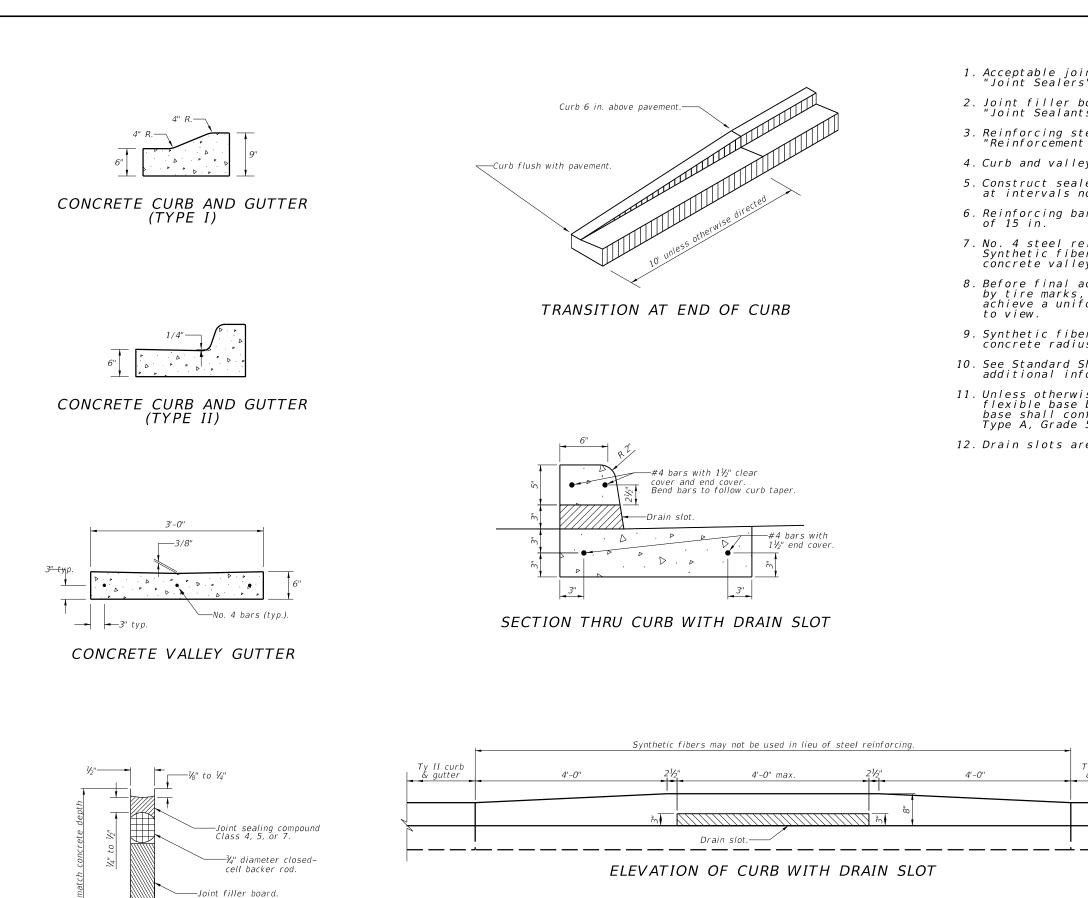
12. If used, reinforcing steel shall be No. 3 uncoated deformed bars, placed at the vertical mid-point of the sidewalk thickness. Securely tie reinforcing steel where bars lap, intersect, or cross. Equivalent welded wire reinforcement may be substituted.

13. Where obstructions to remain exist, sidewalk width may be decreased to 3 ft. for a distance not to exceed 200 ft. When approved, sidewalk width may be decreased at obstructions to 32 in. for a distance not to exceed 2 ft. provided that reduced width segments are separated by segments that are 4 ft. long minimum and 3 ft. wide minimum.

Concrete for pedestrian rail footing and edge curb protection will be measured and paid for as Item 420.
 Construct concrete riprap flumes 5 in. thick. Flumes adjacent to curbs are not intended for use in urban areas or within sidewalks. Slope flumes to match surrounding grades.

16. Use details on sheet SIDEWALK RETAINING WALL DETAILS if pedestrian rail footing height exceeds 1'-6".

2' typ. Sealeo -Joint sealing compound Class 4, 5, or 7. expansion ioint. min -¾" diameter closedcell backer rod. JOINT LAYOUT Joint filler board. AT OBSTRUCTION 11110 MICHAEL WILLIAM MOLTER 79765 EDGE PROTECTION none required edge curb or handrail 10/03/17  $\star$ San Angelo District Texas Department of Transportation handrail SIDEWALK DETAILS NOT TO SCALE SHEET 1 OF 1 CY OTXDOT \$YEAR\$ CONT SEC JOB ČΥ ŜΫ \$C\$ \$S\$ \$.]\$ \$HWY\$ Ø8-17 DST\$ \$CTY\$ SJT36



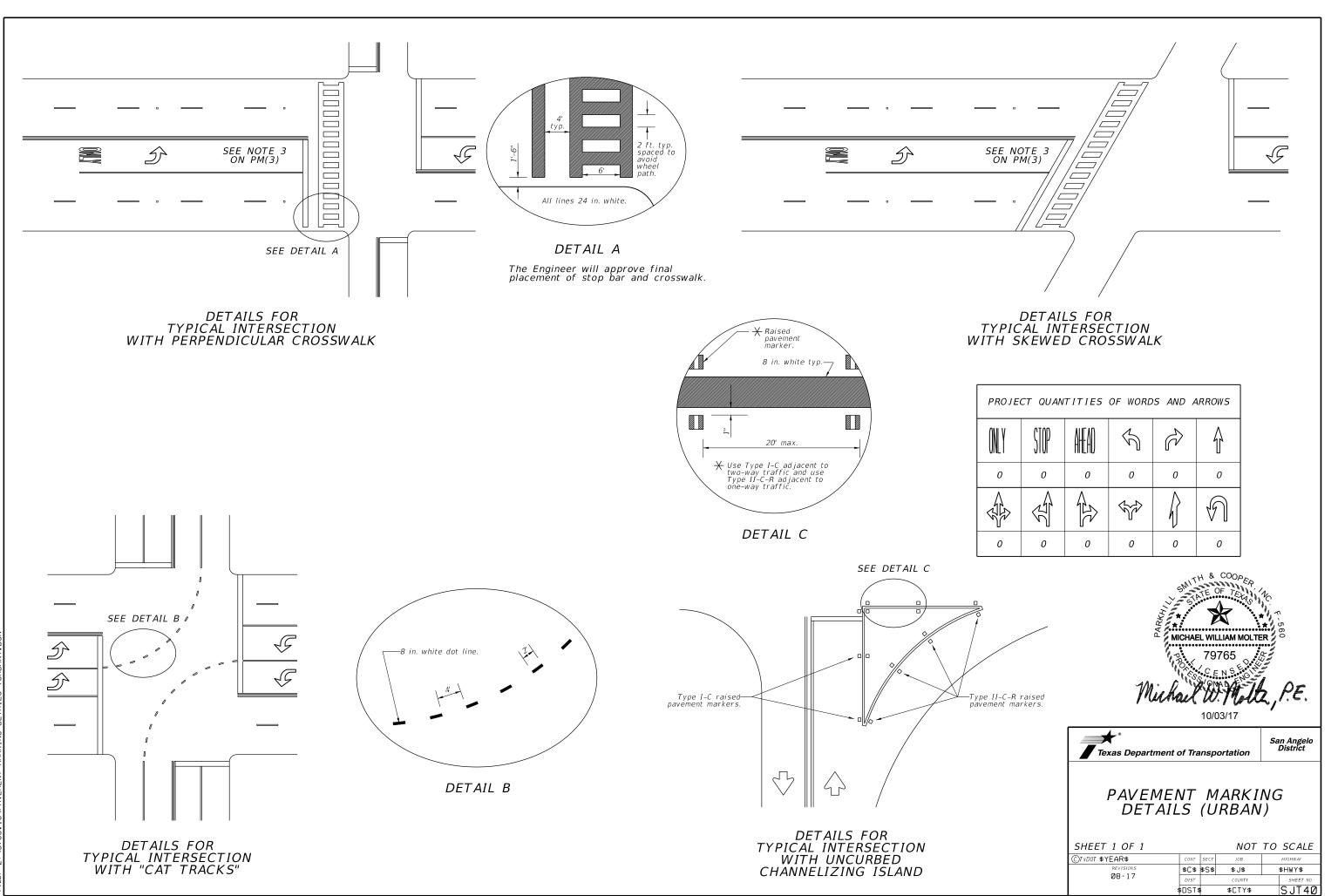
SEALED EXPANSION JOINT

PAY ITEMS 0529 6007 CONC CURB & GUTTER (TY I) LF 0529 6008 CONC CURB & GUTTER (TY II) LF 0529 6023 CONC CURB & GUTTER(VALLEY GUTTER)(36") LF

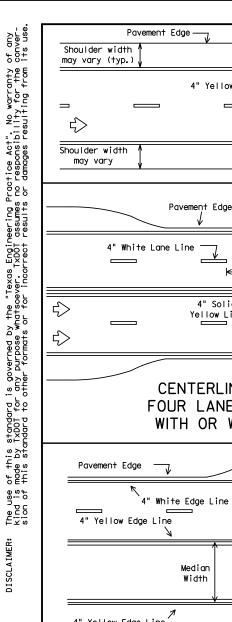
### ------

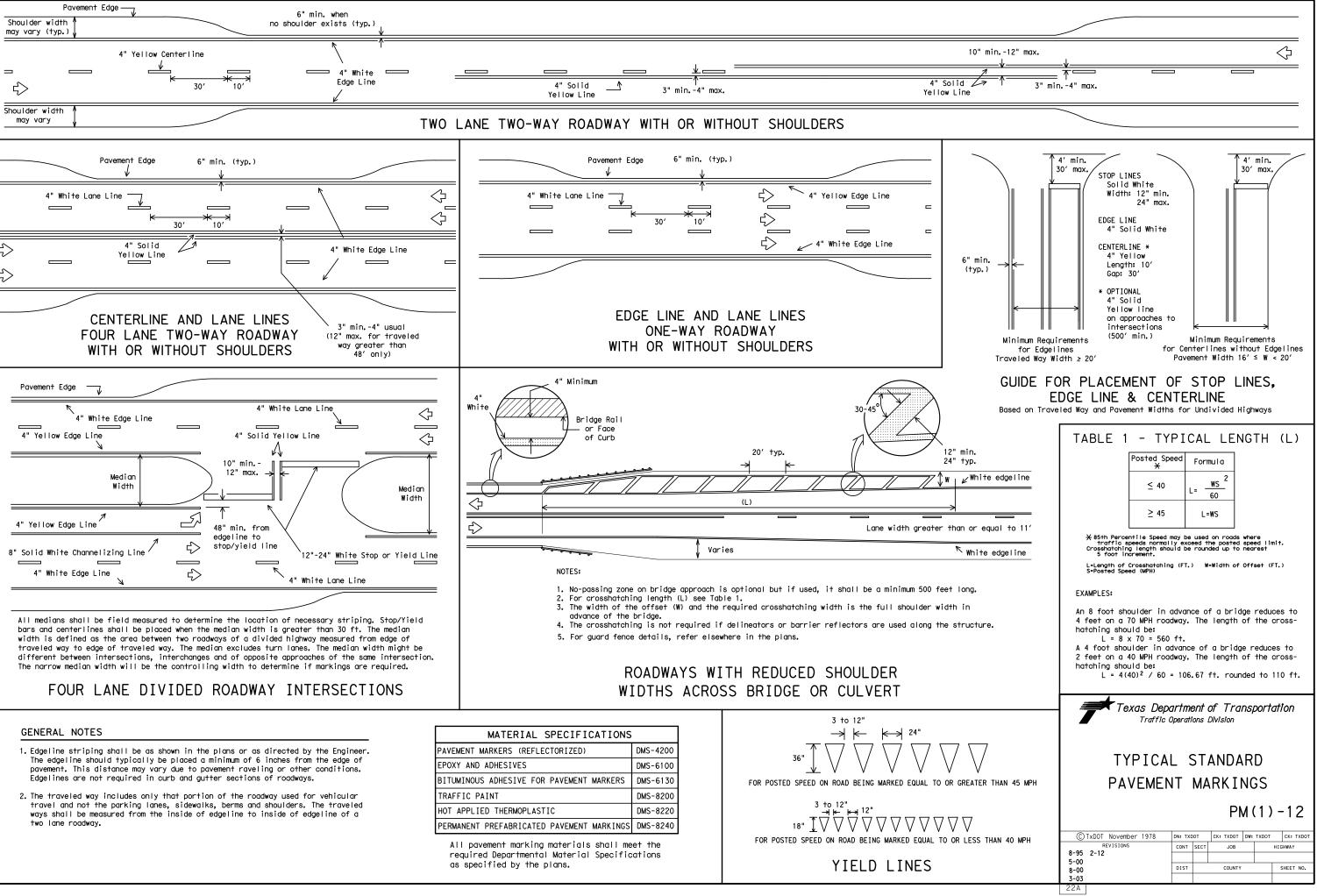
GENERA	AL NOTES	
nt sealing compou " Material/Produc	unds are listed on the Departmenter The content of the content of	nt's
oards shall confo s and Fillers."	orm to the requirements of DMS-6	5310,
eel shall conform for Concrete."	n to the requirements of Item 44	40,
y gutter shall ha	ave no contraction joints.	
ed expansion joir o greater than 12	nts in curb at points of curvatu 20 ft.	ire and
rs in curb and va	alley gutter shall be lapped a m	ninimum
inforcing bars sh rs may not be use y gutter.	nall be used in concrete valley ed in lieu of steel reinforcing	gutter. in
cceptance of the mud, asphalt, pa orm color and tex	project, remove discoloration of aint or other similar material t cture of the finished surface ex	aused to kposed
rs may not be use	ed in lieu of steel reinforcing roadway intersections.	in
,	b steel reinforcing details and	1
se shown in the p beneath curb and form to the requi	olans, furnish and install 8 in gutter and valley gutter. Flexi rements of Item 247, "Flexible	ible Base,"
	ım strengths or classification). shown on the plans.	
	SMITH & COOPER	k
	MICHAEL WILLIAM MOLTE	α Π, <sup>Ο</sup>
Ty II curb & gutter	79765 1000 CENSE	
& gutter	Michael W. Holt	R.P.E.
	*	San Angelo District
	Texas Department of Transportation	DISTRICT
	CURB DETAILS	

SHEET 1 OF 1			NOT	TO SCALE
CTXDOT \$YEAR\$	CONT	SECT	JOB	HIGHWAY
REVISIONS	\$C\$	\$5\$	\$J\$	\$HWY\$
Ø5-17	DIST		COUNTY	SHEET NO.
	¢DST4		\$YT0	

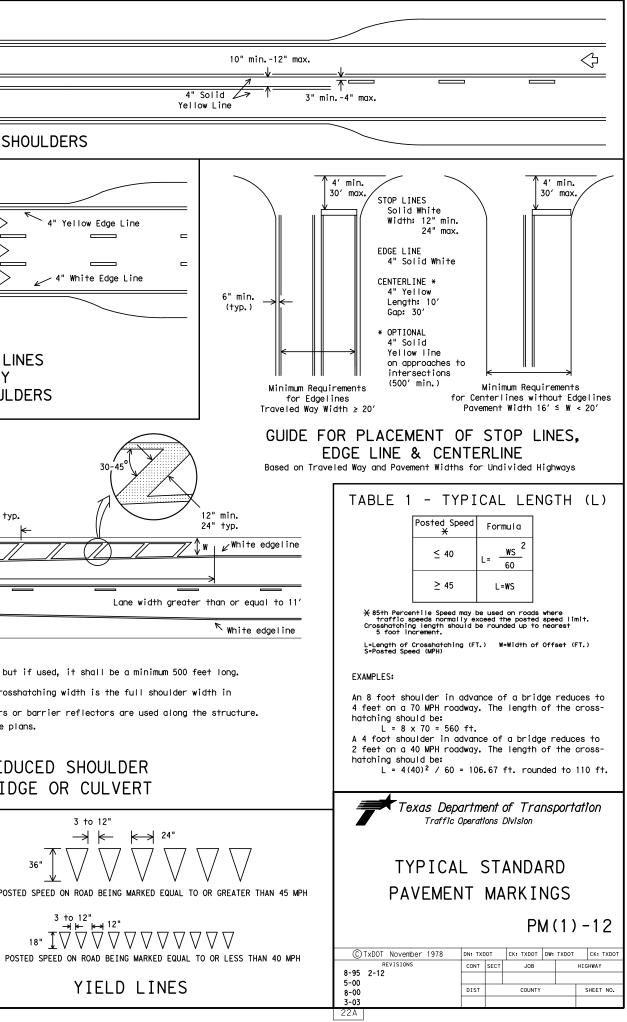


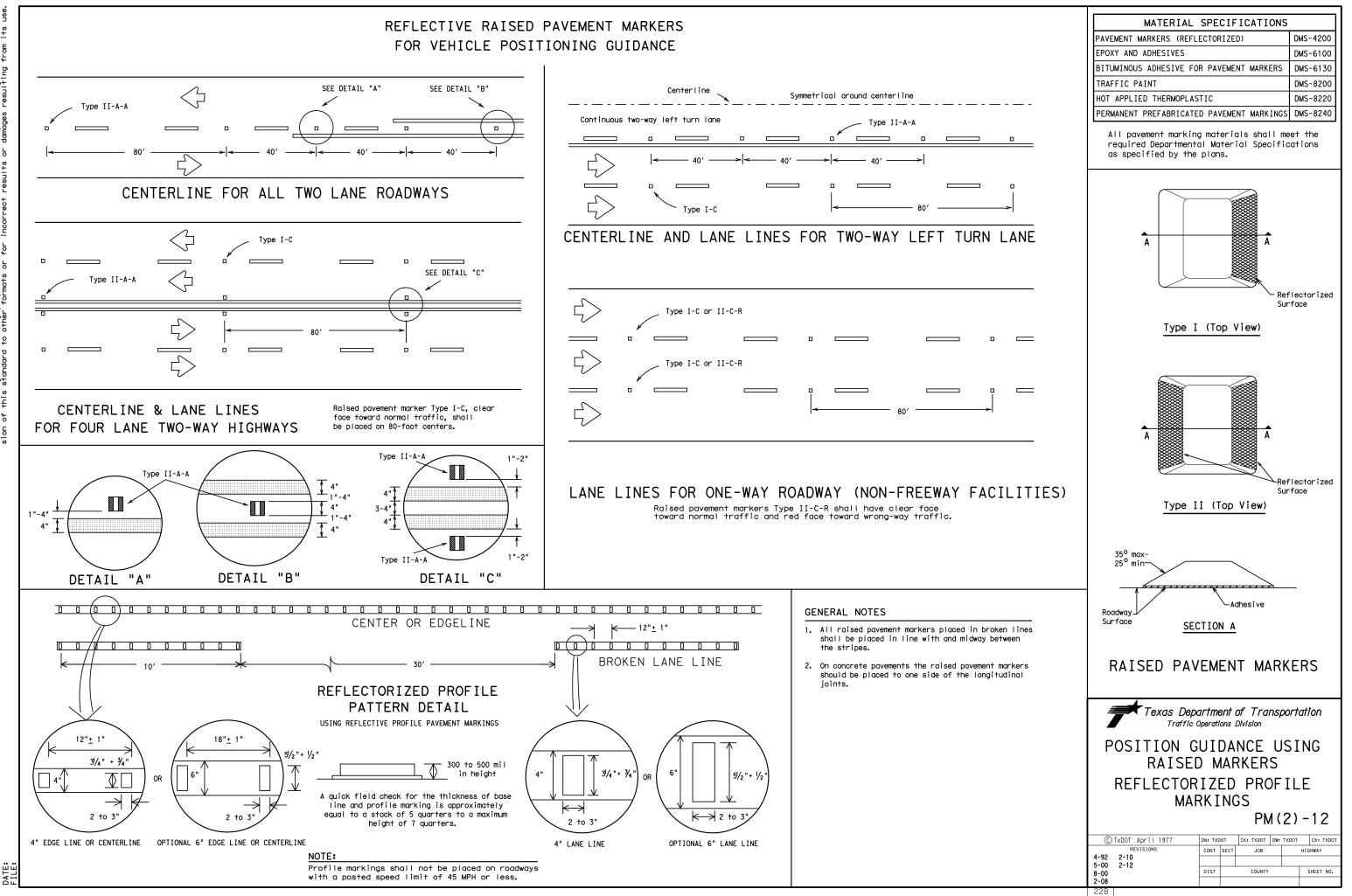
9/28/2017 1:27:48 PM Z:\3755.16\PAVEMENT MA DATE:

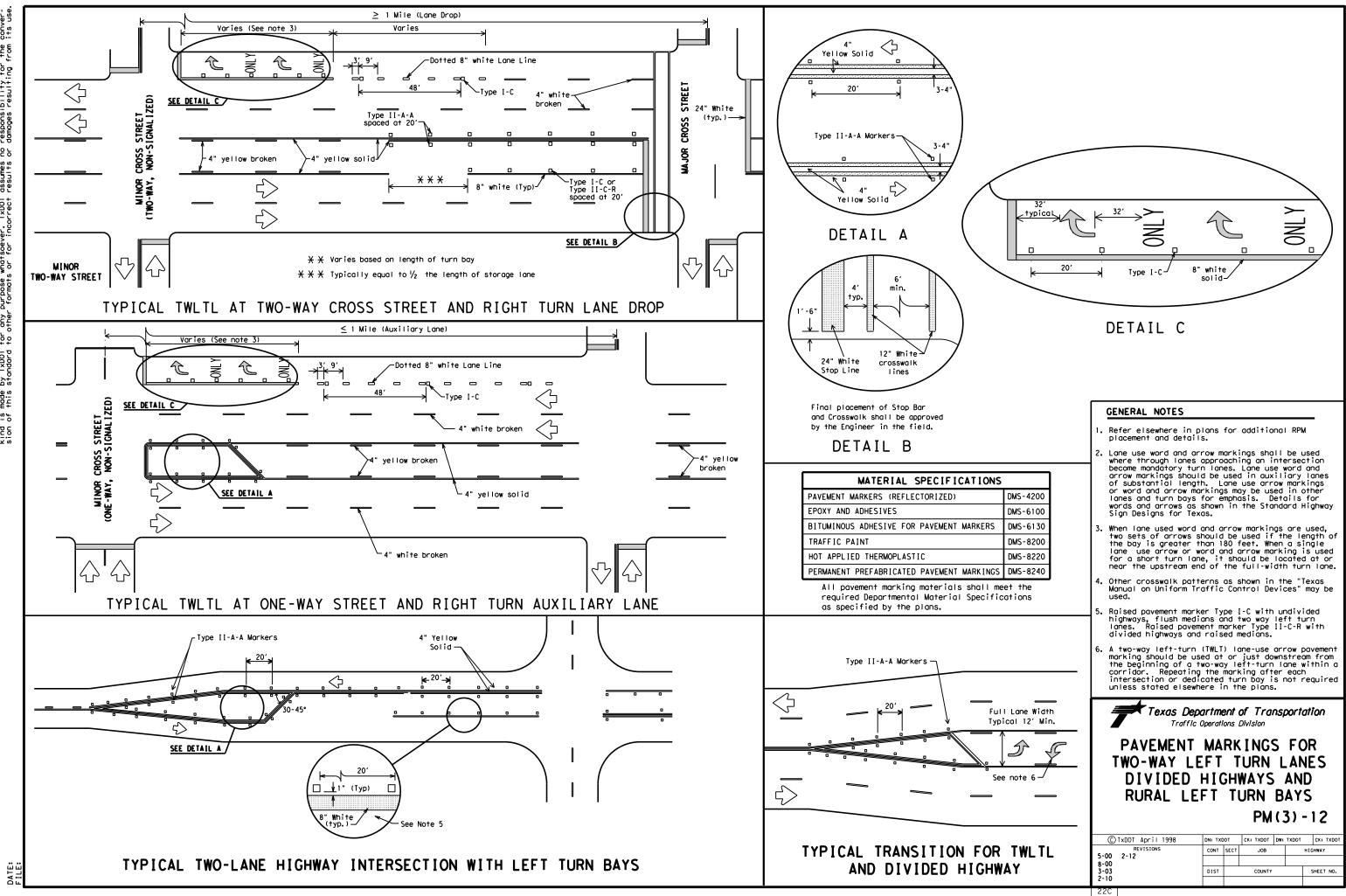


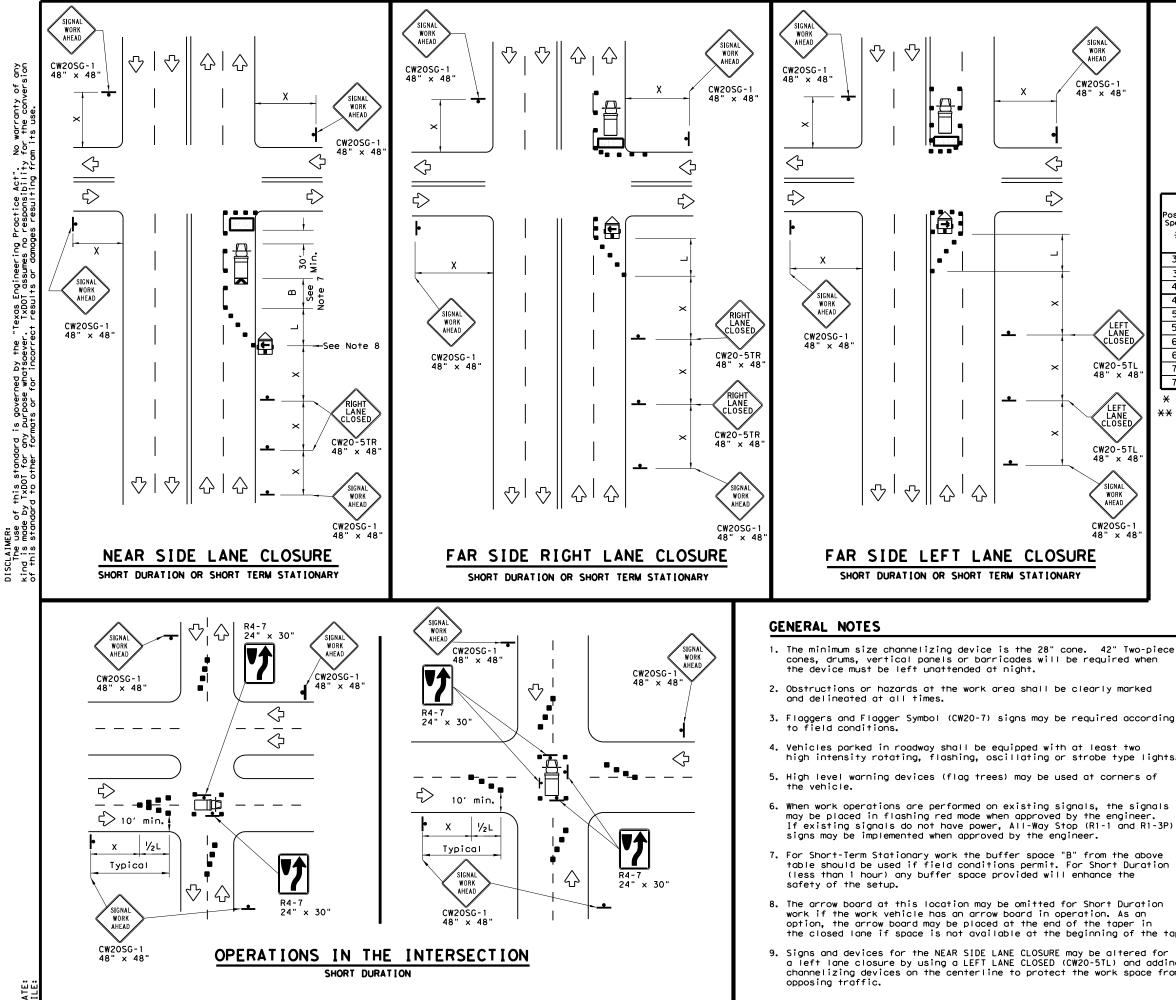


MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-42
EPOXY AND ADHESIVES	DMS-61
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-61
TRAFFIC PAINT	DMS-82
HOT APPLIED THERMOPLASTIC	DMS-82
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-82









LEGEND						
<u>e z z z z</u>	Type 3 Barricade		Channelizing Devices			
□¤	Heavy Work Vehicle	K	Truck Mounted Attenuator (TMA)			
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)			
4	Sign	2	Traffic Flow			
$\langle \rangle$	Flag	٩	Flagger			

Posted Speed <del>X</del>	Formula	* *		Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X"	Suggested Longitudinal Buffer Space	
*		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent	Distance	"В"
30	WS <sup>2</sup>	150'	1651	180'	30′	60,	120'	90'
35	$L = \frac{WS}{60}$	205'	225′	245'	35′	70′	160'	120′
40	60	265′	295′	320'	40′	80′	240'	155'
45		450′	495 <i>'</i>	540′	45′	90 <i>'</i>	320′	195'
50		500'	550′	600'	50 <i>'</i>	100'	400′	240'
55	L=WS	550'	605 <i>'</i>	660′	55 <i>'</i>	110'	500 <i>1</i>	295′
60	L-#3	600 <i>'</i>	660 <i>'</i>	720'	60′	120'	600′	350′
65		650 <i>'</i>	715′	780′	65 <i>'</i>	130'	700'	410′
70		700′	770′	840'	70′	140′	800′	475′
75		750'	825′	900′	75′	150'	900′	540'

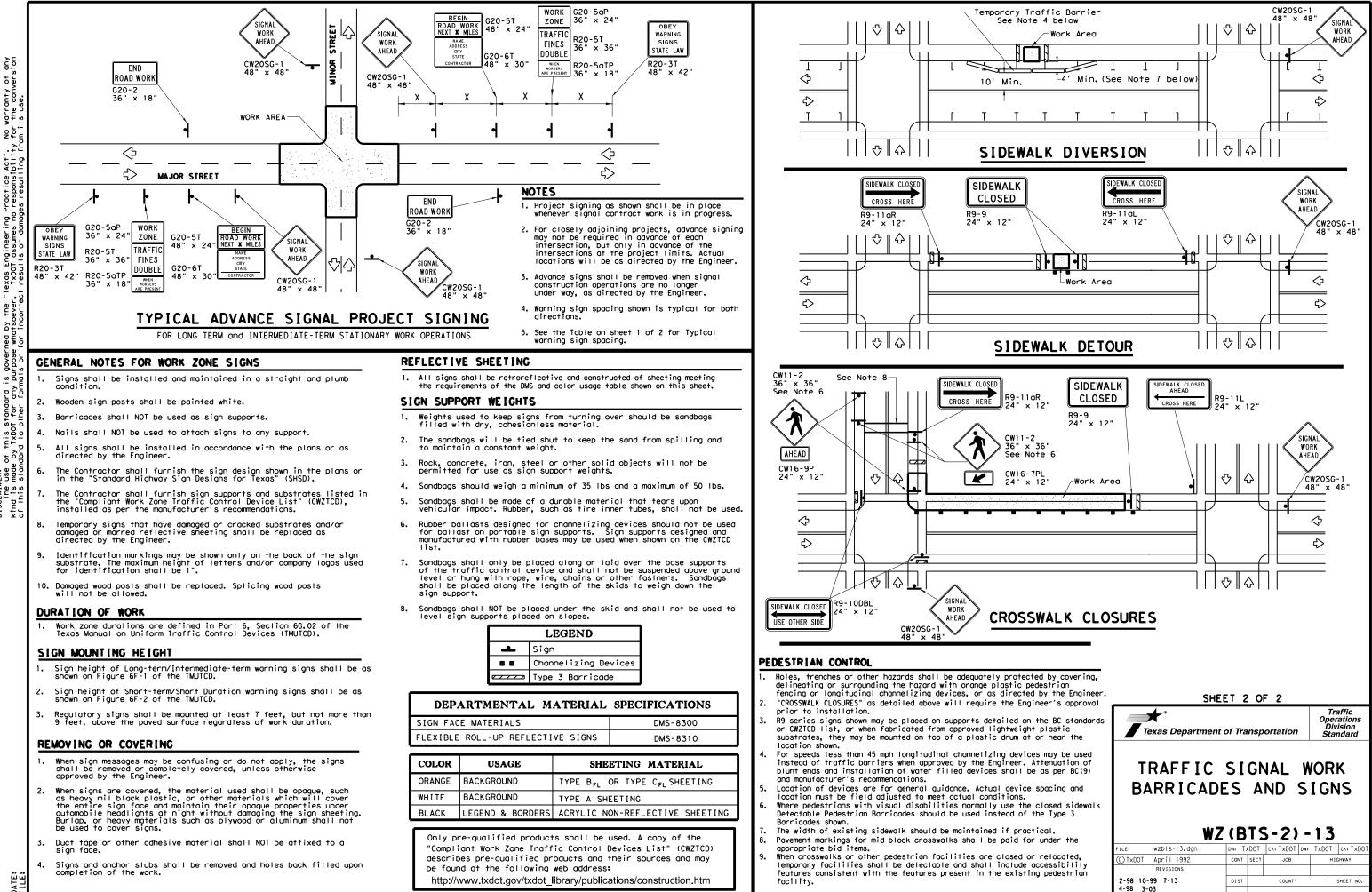
X Conventional Roads Only

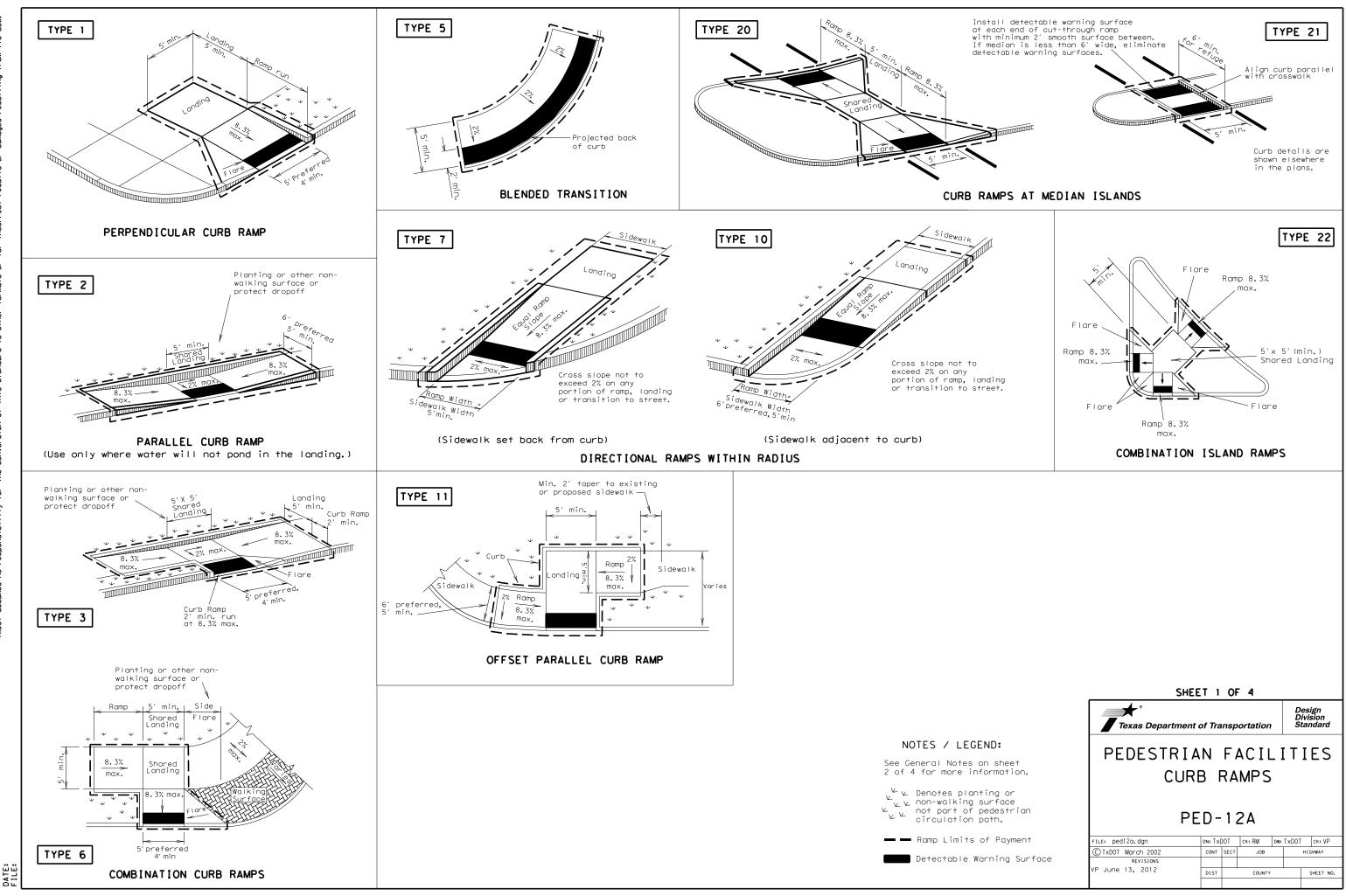
XX Taper lengths have been rounded off.

L=Length of Taper (FT) W=Width of Offset (FT) S=Posted Speed (MPH)

WORKERS IN BUCKET TRUCKS SHALL NOT WORK ABOVE OPEN LANES OF TRAFFIC.

hen					
ed					
ording					
lights.					
of	SHE	ET 1	OF 2		
gnals er. R1-3P)	Texas Department	of Tran	sportation	Ope D	Traffic erations pivision randard
bove ation	TRAFFIC TYPICA				8K
tion n in the taper.			[S-1).		5
d for	FILE: wzbts-13.dgn	DN: TXD	OT CK: TXDOT DW	TxDOT	Г ск: TxDOT
adding ce from	© TxDOT April 1992	CONT S	ECT JOB		HIGHWAY
	REVISIONS 2-98 10-99 7-13 4-98 3-03	DIST	COUNTY		SHEET NO.
	114				





### General Notes

what:

for any purpose s resulting from

T×DOT

ያዖ

is made results

any kind incorrect

anty of or for i

ats

No Form

Act".

Engineering Practice of this standard to (

"Texas ersion

é te

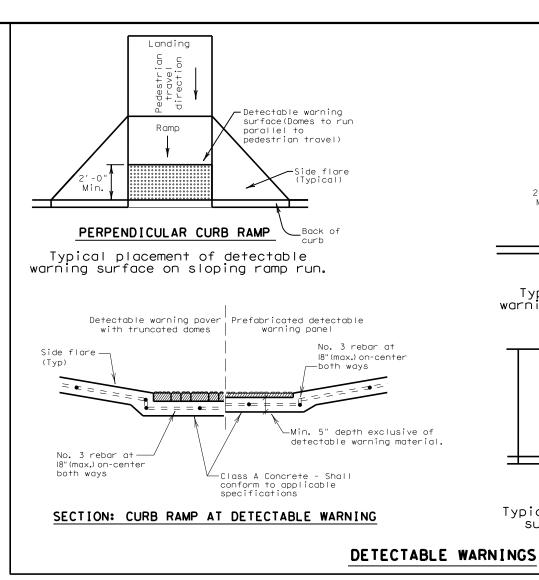
Şđ

JISCLAIMER: The use of this standard is governed ixDD1 assumes no responsibility for 1

- 1. Install a curb ramp or blended transition at each pedestrian street crossing.
- 2. All slopes shown are maximum allowable. Lesser slopes that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
- 3. The minimum sidewalk width is 5'. Where the sidewalk is adjacent to the back of curb, a 6' sidewalk width is desirable. Where a 5' sidewalk cannot be provided due to site constraints, sidewalk width may be reduced to 4' for short distances. 5'x 5' passing areas at intervals not to exceed 200' are required.
- 4. Landings shall be 5'x 5' minimum with a maximum 2% slope in any direction.
- 5. Maneuvering space at the bottom of curb ramps shall be a minimum of 4'x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
- 6. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
- 7. Provide flared sides where the pedestrian circulation path crosses the curb ramp. Flared sides shall be sloped at 10% maximum, measured parallel to the curb. Returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planted, substantially obstructed, or otherwise protected.
- 8. Additional information on curb ramp location, design, light reflective value and texture may be found in the current edition of the Texas Accessibility Standards (TAS) and 16 TAC 68.102.
- 9. To serve as a pedestrian refuge area, the median should be a minimum of 6' wide, measured from back of curbs. Medians should be designed to provide accessible passage over or through them.
- 10. Small channelization islands, which do not provide a minimum 5'x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
- 11. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall align with theoretical crosswalks unless otherwise directed.
- 12. Handrails are not required on curb ramps. Provide curb ramps wherever on accessible route crosses (penetrates) a curb.
- Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
- Place concrete at a minimum depth of 5" for ramps, flares and landings, unless otherwise directed.
- 15. Provide a smooth transition where the curb ramps connect to the street.
- 16. Curbs shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
- 17. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.

### Detectable Warning Material

- 18. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with Section 705 of the TAS. The surface must contrast visually with adjoining surfaces, including side flares. Furnish and install an approved cast-in-place dark brown or dark red detectable warning surface material adjacent to uncolored concrete, unless specified elsewhere in the plans.
- 19. Detectable Warning Materials must meet TxDOT Departmental Materials Specification DMS 4350 and be listed on the Material Producer List. Install products in accordance with manufacturer's specifications.
- 20. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
- 21. Detectable warning surfaces shall be a minimum of 24" in depth in the direction of pedestrian travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
- 22. Detectable warning surfaces shall be located so that the edge nearest the curb line is at the back of curb. Align the rows of domes to be perpendicular to the grade break between the ramp run and the street. Detectable warning surfaces may be curved along the corner radius.
- 23. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.



### Detectable Warning Pavers

- 24. Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.
- 25. Lay full-size units first followed by closure units consisting of at least 25 percent of a full unit. Cut detectable warning paver units using a power saw.

### Sidewalks

- 26. Provide clear ground space at operable parts, including pedestrian push buttons. Operable parts shall be placed within one or more reach ranges specified in TAS 308.
- 27. Place traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items so as not to obstruct the pedestrian access route or clear ground space.
- 28. Street grades and cross slopes shall be as shown elsewhere in the plans.
- 29. Changes in level greater than 1/4 inch are not permitted.
- 30. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks within the public right of way may follow the grade of the parallel roadway. Where a continuous grade greater than 5% must be provided, handrails may be desirable to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions. If provided, handrails shall comply with TAS 505.
- 31. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
- 32. Driveways and turnouts shall be constructed and paid for in accordance with Item "Intersections, Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item, "Sidewalks".
- 33. Sidewalk details are shown elsewhere in the plans.

