WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

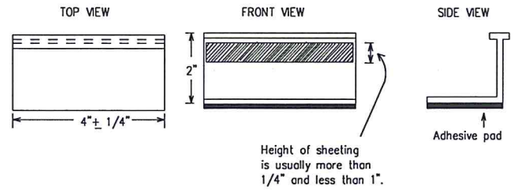
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

DRAWN BY: KDC
CHECKED BY: KJB
HORIZONTAL SCALE: N/A
VERTICAL SCALE: N/A
JOB NUMBER: ES-5-14
DATE: NOVEMBER, 2014

Barricade and Construction Pavement Markings

BC(11)-13

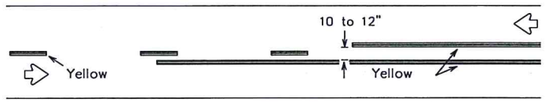
Sheet 11 of 12

THE CITY OF SAN ANGELO TEXAS
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

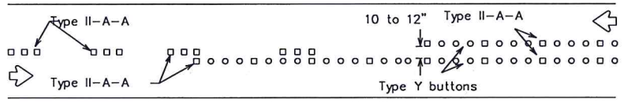
M-877K

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

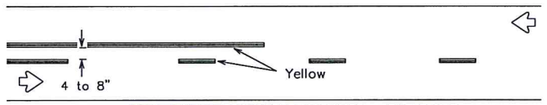
PAVEMENT MARKING PATTERNS



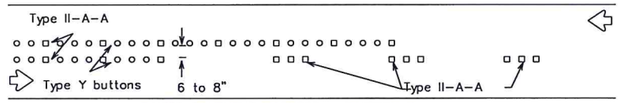
REFLECTORIZED PAVEMENT MARKINGS – PATTERN A



RAISED PAVEMENT MARKERS – PATTERN A



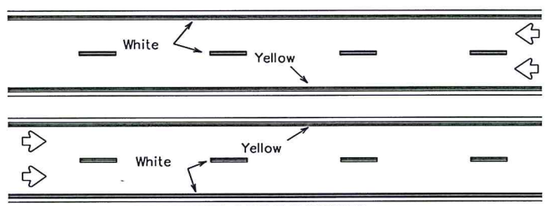
REFLECTORIZED PAVEMENT MARKINGS – PATTERN B



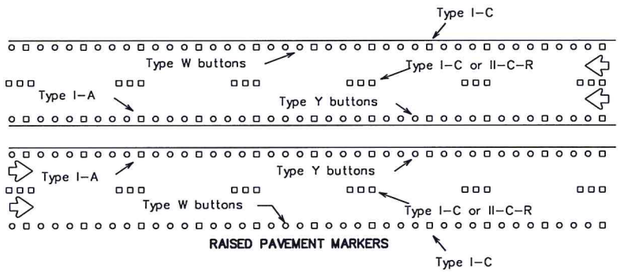
RAISED PAVEMENT MARKERS – PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer. Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



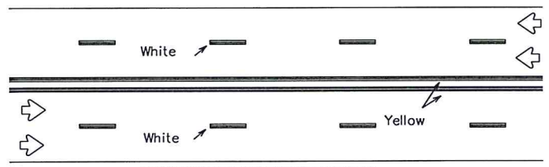
REFLECTORIZED PAVEMENT MARKINGS



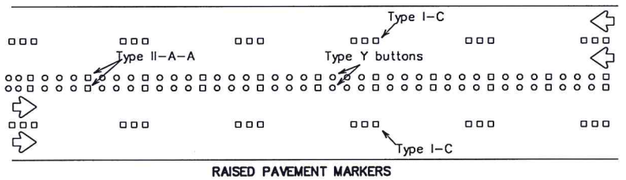
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



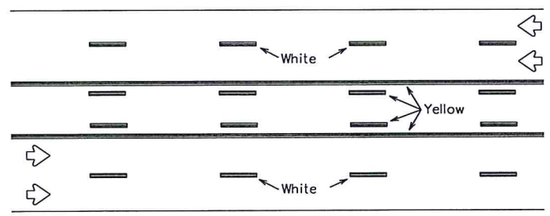
REFLECTORIZED PAVEMENT MARKINGS



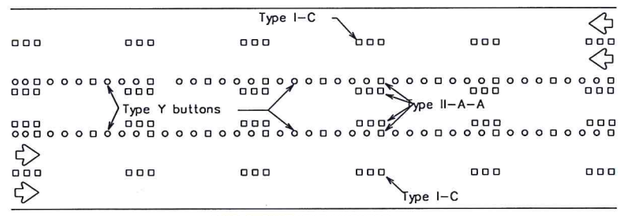
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS

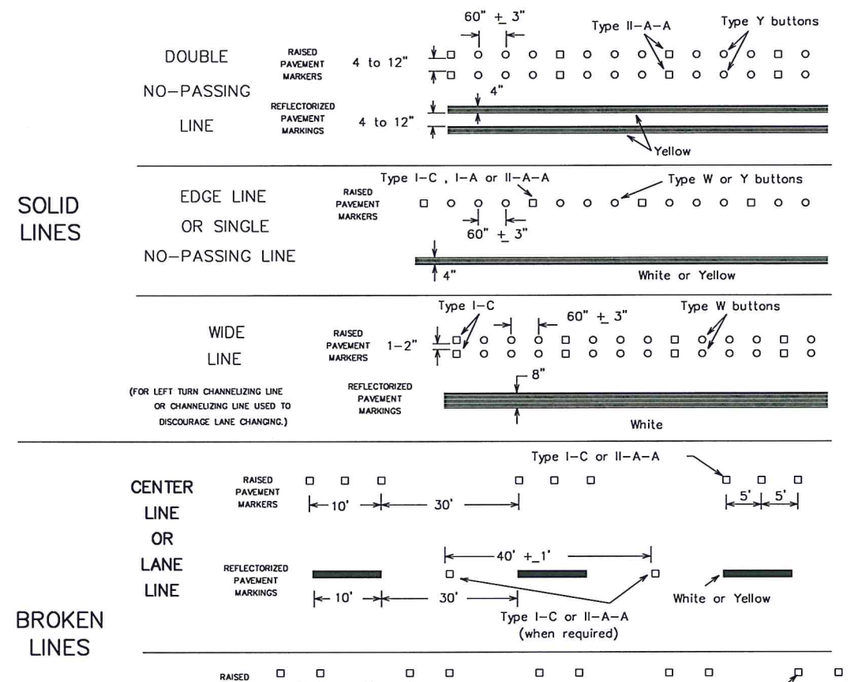


RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

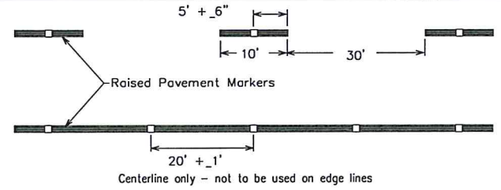
TWO-WAY LEFT TURN LANE

STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only – not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	N/A
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

Barricade and Construction Pavement Marking Patterns

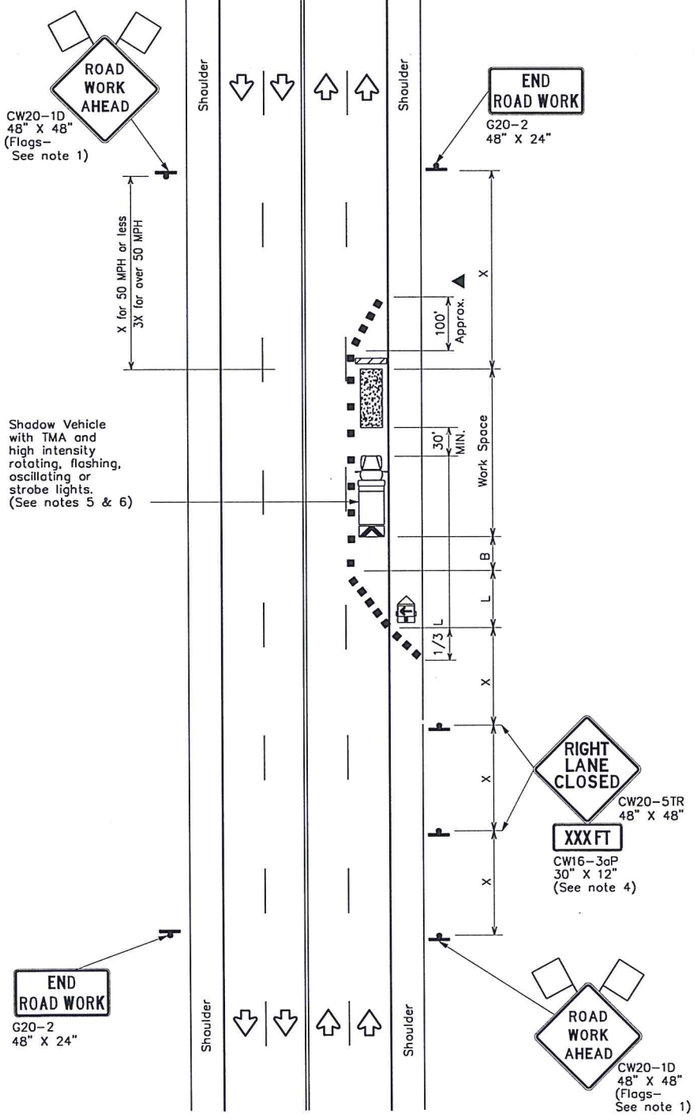
BC(12)-13

Sheet 12 of 12

THE CITY OF SAN ANGELO TEXAS

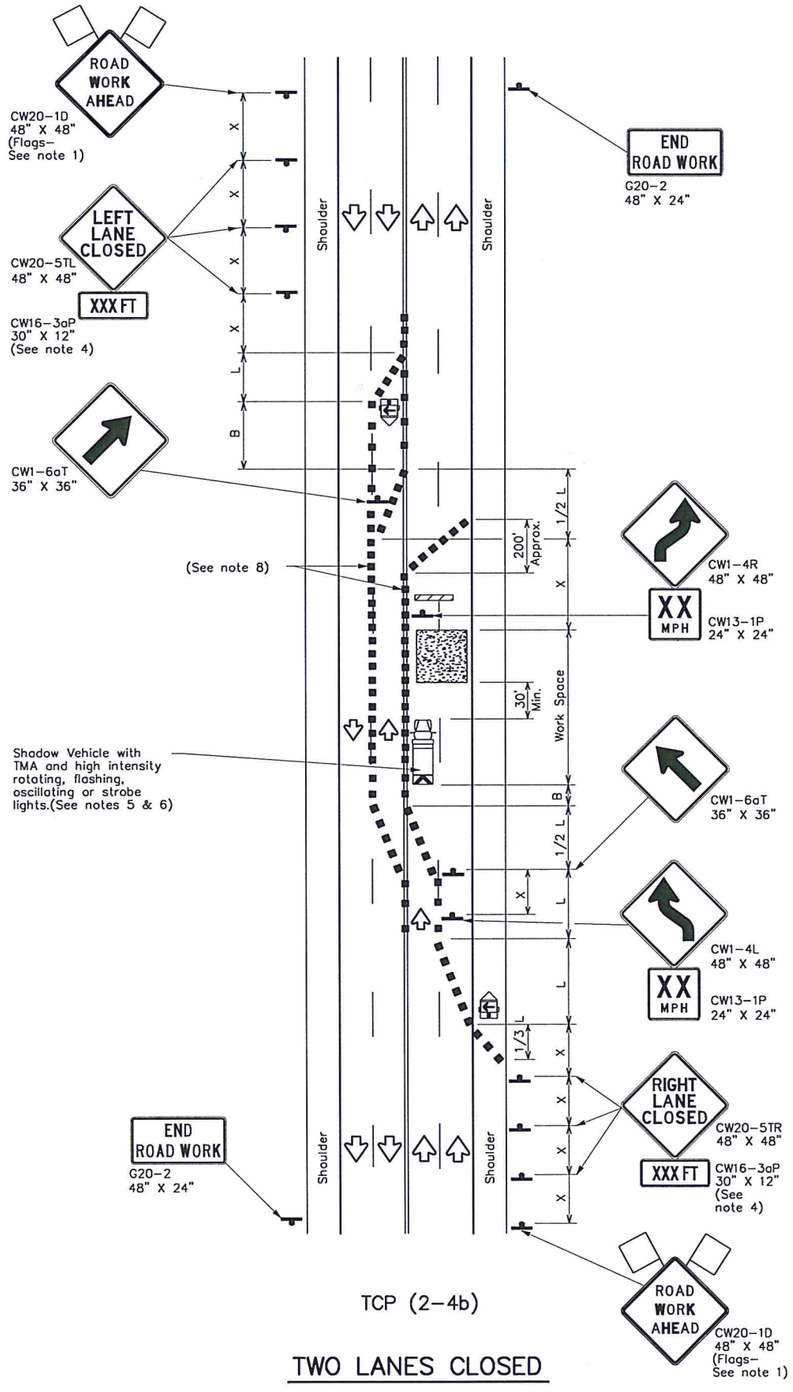
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

M-877L



TCP (2-4a)

ONE LANE CLOSED



TCP (2-4b)

TWO LANES CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
		✓	✓	

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The downstream taper is optional. When used, it should be 100 feet minimum length per lane.
4. For short term applications, when post mounted signs are not used, the distance legend may be shown on the sign face rather than on a CW16-3aP supplemental plaque.
5. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
6. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-4a)

7. If this TCP is used for a left lane closure, CW20-5TL "LEFT LANE CLOSED"signs shall be used and channelizing devices shall be placed on the centerline to protect the work space from opposing traffic with the arrow board placed in the closed lane near the end of the merging taper.

TCP (2-4b)

8. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2(S) where S is the speed in mph. This tighter devices spacing is intended for the area of conflicting markings, not the entire work zone.

For construction or maintenance contract work, specific project requirements for shadow vehicles can be found in the project GENERAL NOTES for Item 502, Barricades, Signs and Traffic Handling.

DRAWN BY: KDC
CHECKED BY: KJB
HORIZONTAL SCALE: N/A
VERTICAL SCALE: N/A
JOB NUMBER: ES-5-14
DATE: NOVEMBER, 2014

Traffic Control Plan Lane Closures On Multilane Conventional Roads

TCP(1-4)-12

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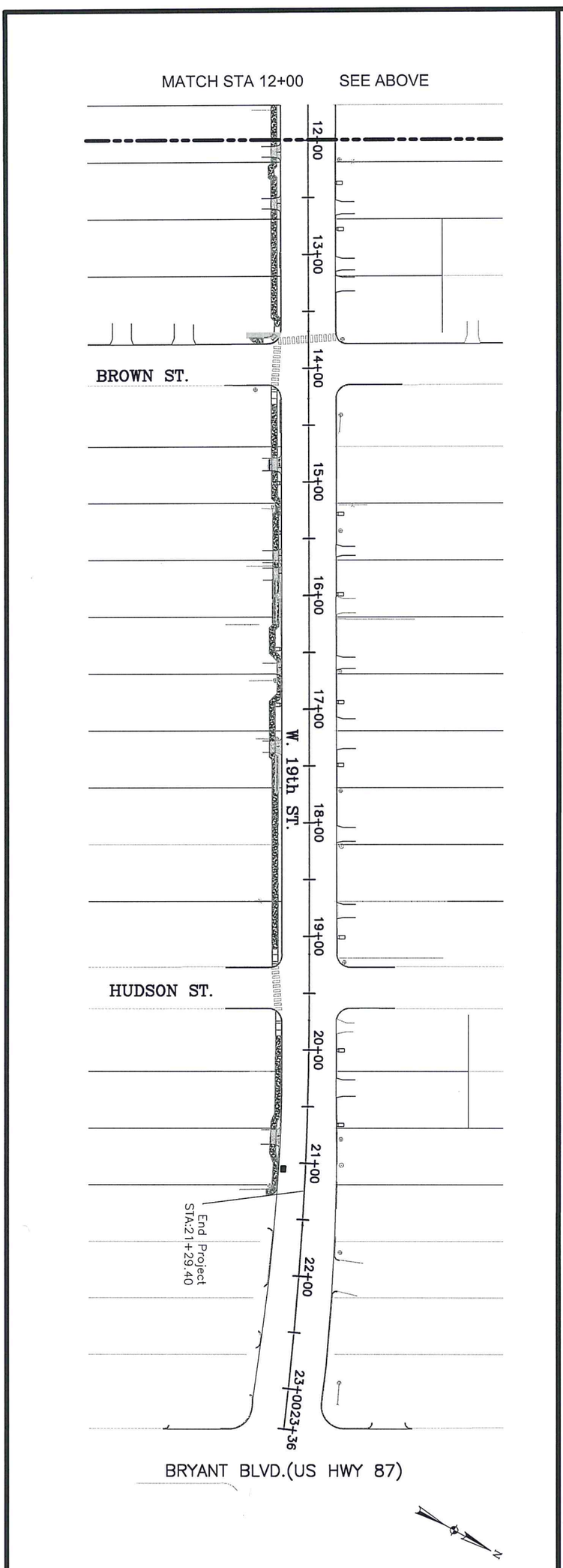
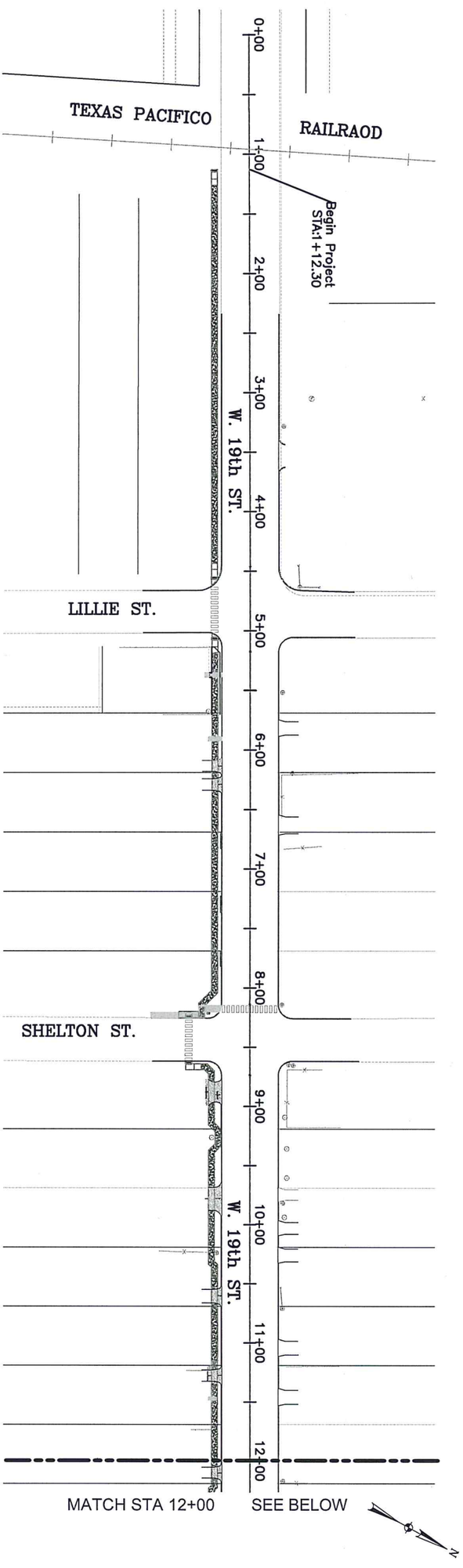
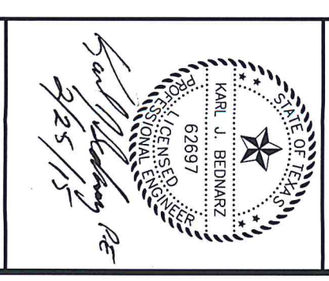
SAN ANGELO, TX 76903





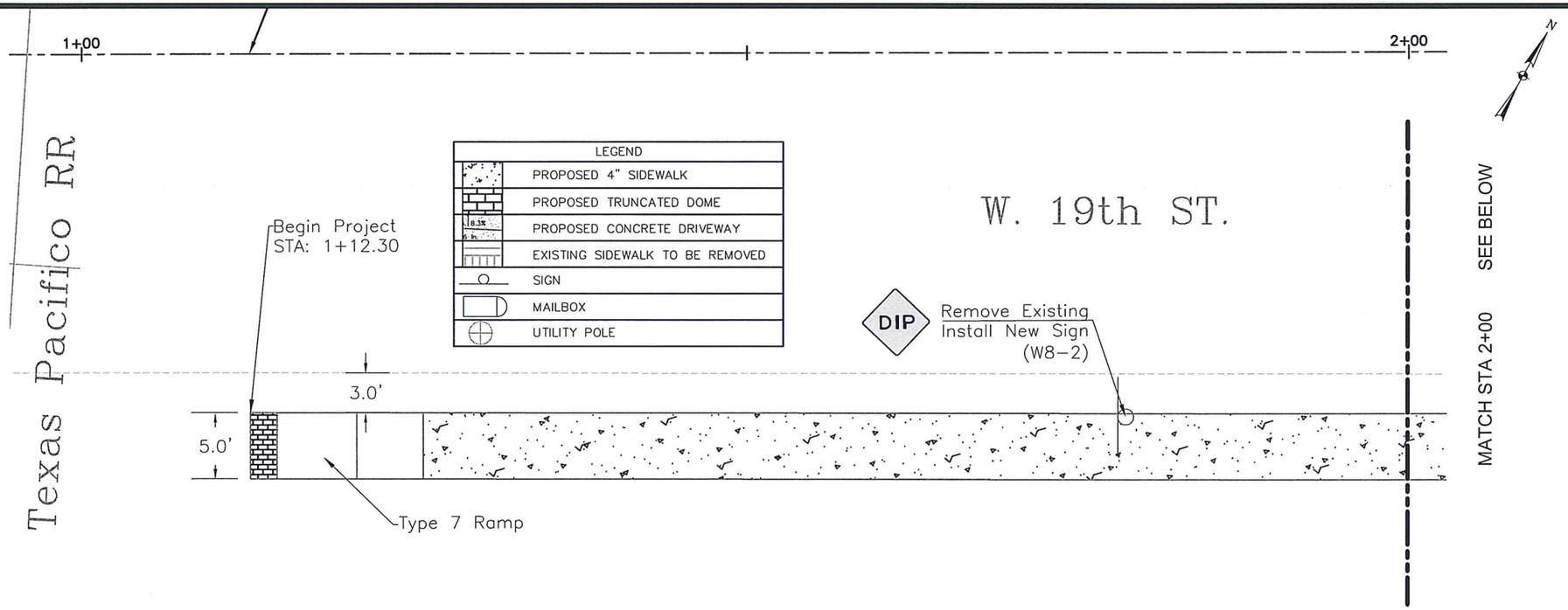


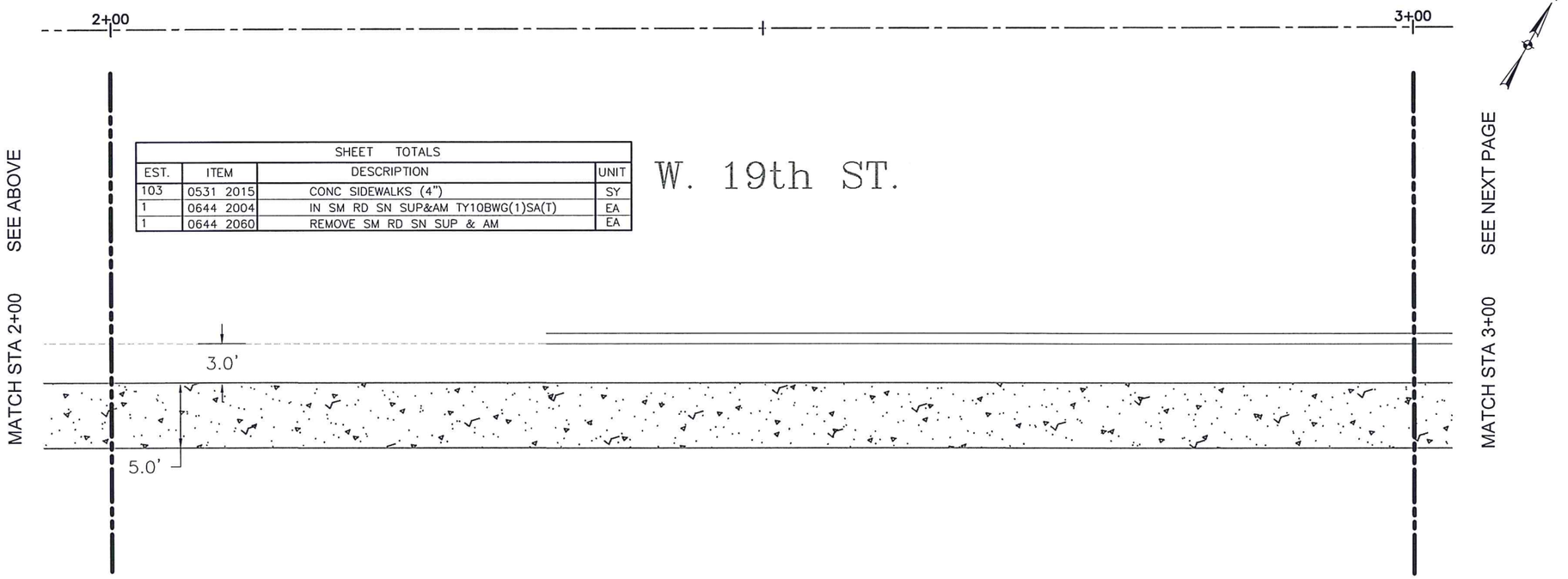
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

OVERALL SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=100'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

R-1857A





SHEET TOTALS			
EST.	ITEM	DESCRIPTION	UNIT
103	0531 2015	CONC SIDEWALKS (4")	SY
1	0644 2004	IN SM RD SN SUP&AM TY10BWG(1)SA(T)	EA
1	0644 2060	REMOVE SM RD SN SUP & AM	EA

DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

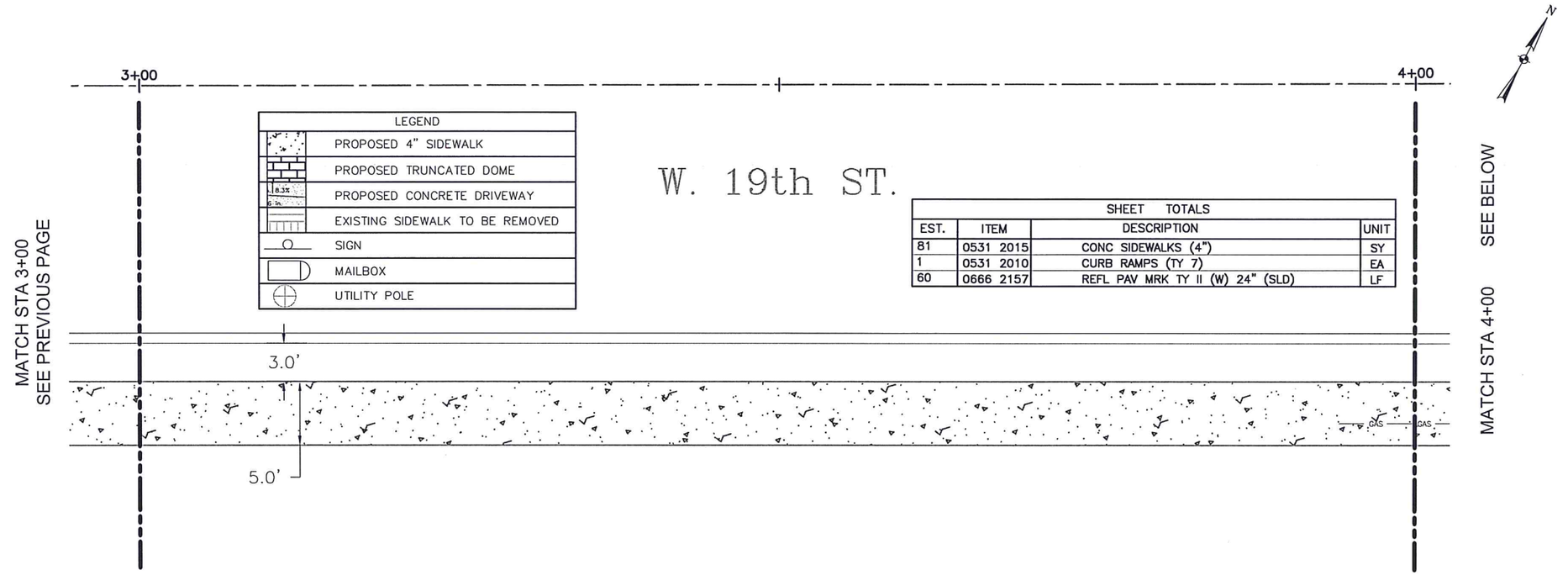
STA 1+00 TO STA 3+00

THE CITY OF SAN ANGELO TEXAS

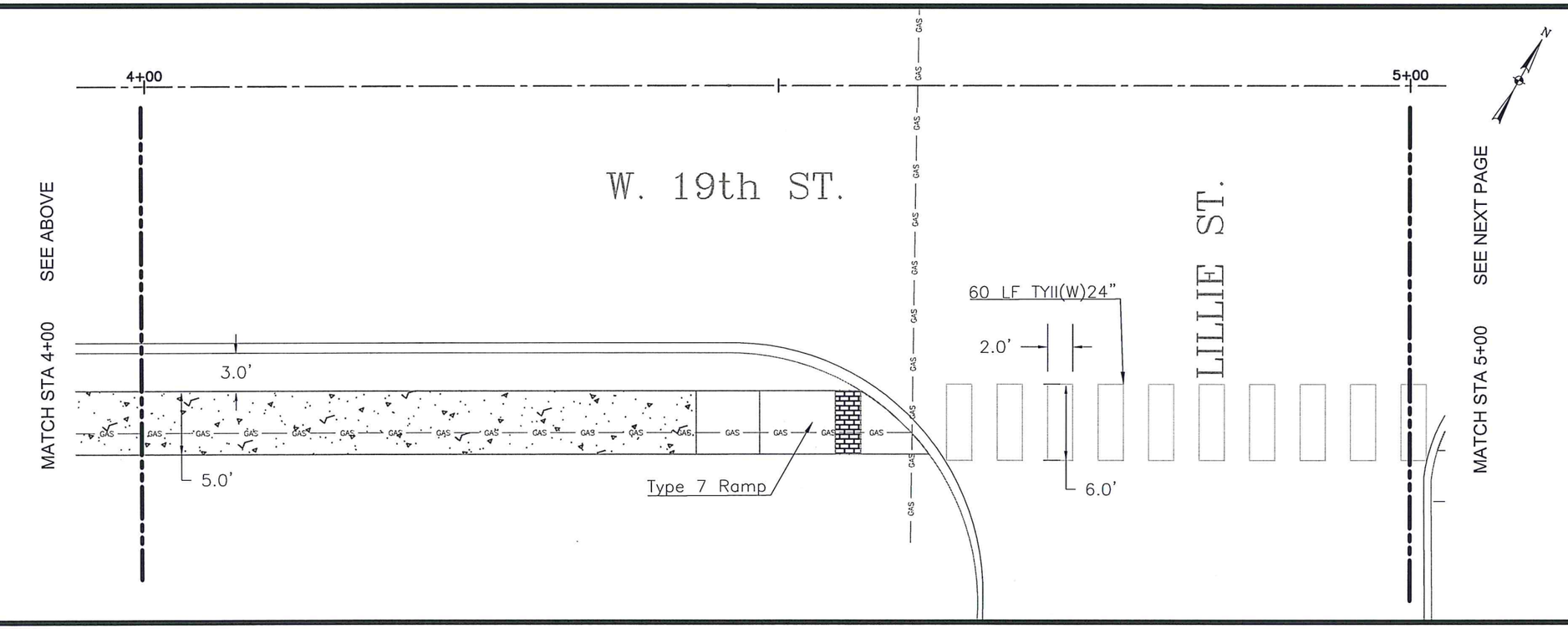
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED
PROFESSIONAL ENGINEER

Karl J. Bednarz P.E.
2/25/15



SHEET TOTALS			
EST.	ITEM	DESCRIPTION	UNIT
81	0531 2015	CONC SIDEWALKS (4")	SY
1	0531 2010	CURB RAMPS (TY 7)	EA
60	0666 2157	REFL PAV MRK TY II (W) 24" (SLD)	LF



DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

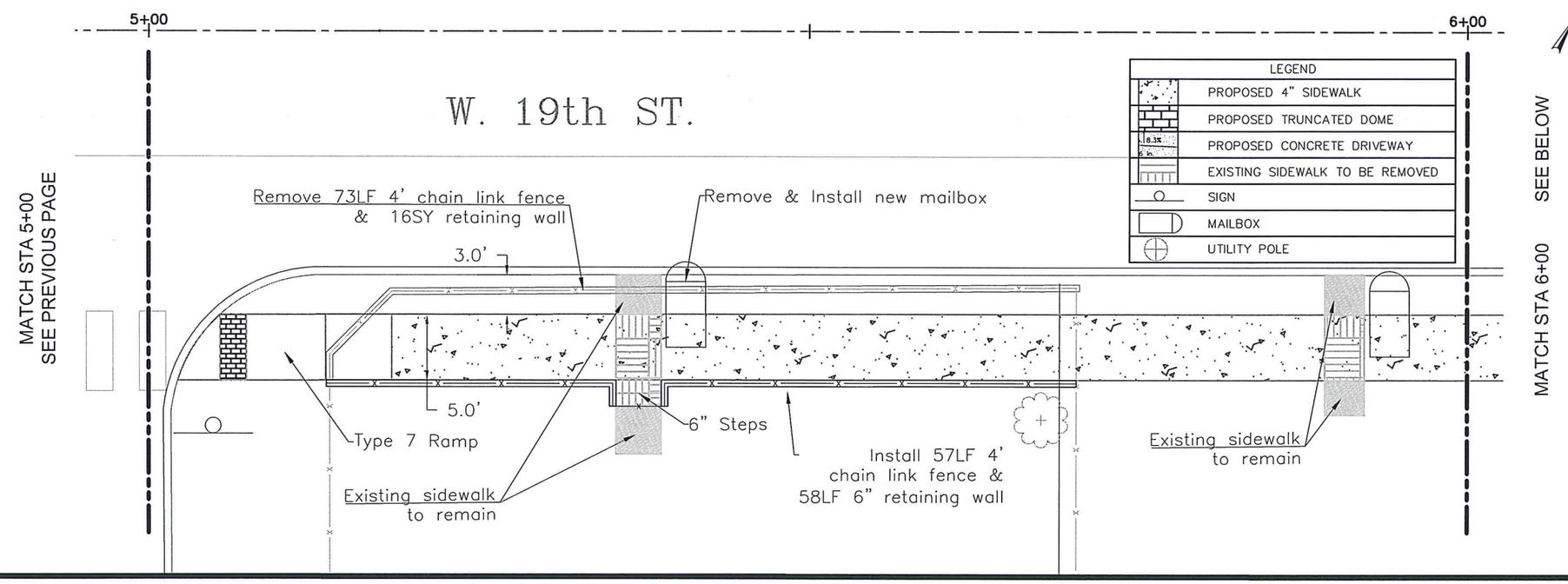
STA 3+00 TO STA 5+00

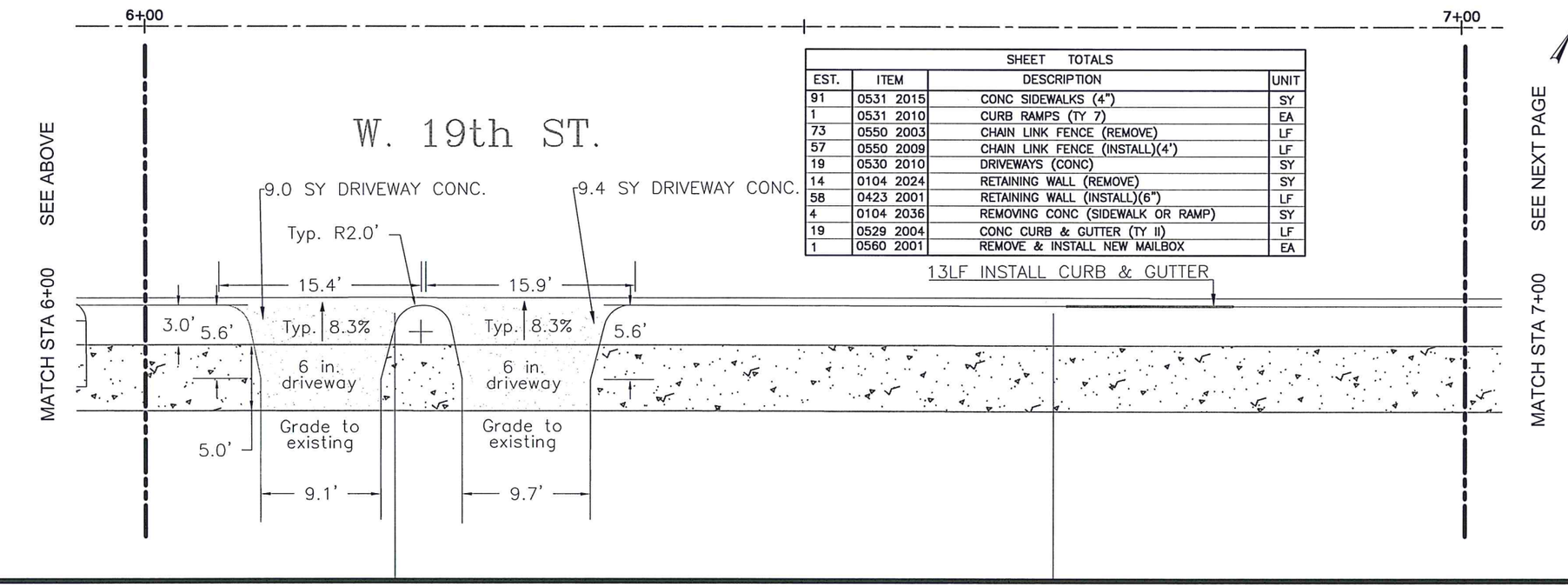
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

THE CITY OF SAN ANGELO · TEXAS ·

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED PROFESSIONAL ENGINEER

2/25/15





SHEET TOTALS			
EST.	ITEM	DESCRIPTION	UNIT
91	0531 2015	CONC SIDEWALKS (4")	SY
1	0531 2010	CURB RAMPS (TY 7)	EA
73	0550 2003	CHAIN LINK FENCE (REMOVE)	LF
57	0550 2009	CHAIN LINK FENCE (INSTALL)(4')	LF
19	0530 2010	DRIVEWAYS (CONC)	SY
14	0104 2024	RETAINING WALL (REMOVE)	SY
58	0423 2001	RETAINING WALL (INSTALL)(6")	LF
4	0104 2036	REMOVING CONC (SIDEWALK OR RAMP)	SY
19	0529 2004	CONC CURB & GUTTER (TY II)	LF
1	0560 2001	REMOVE & INSTALL NEW MAILBOX	EA

DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

STA 5+00 TO STA 7+00

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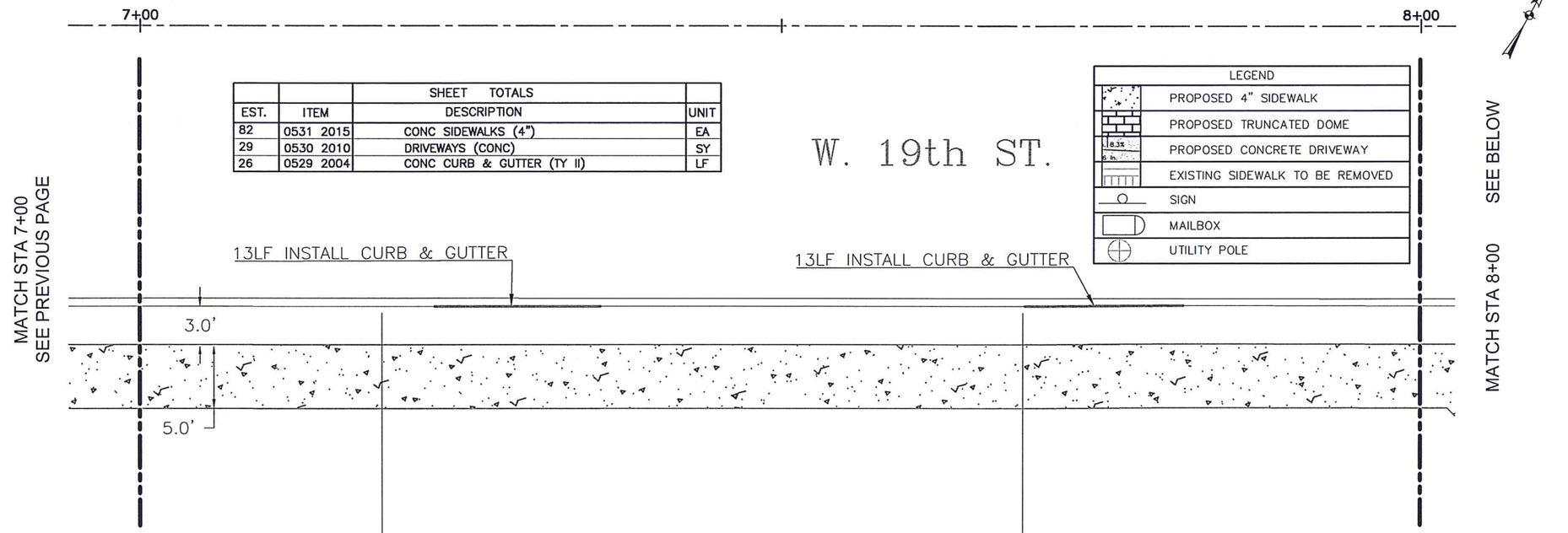
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED
PROFESSIONAL ENGINEER
Karl J. Bednarz
2/25/15



SHEET TOTALS			
EST.	ITEM	DESCRIPTION	UNIT
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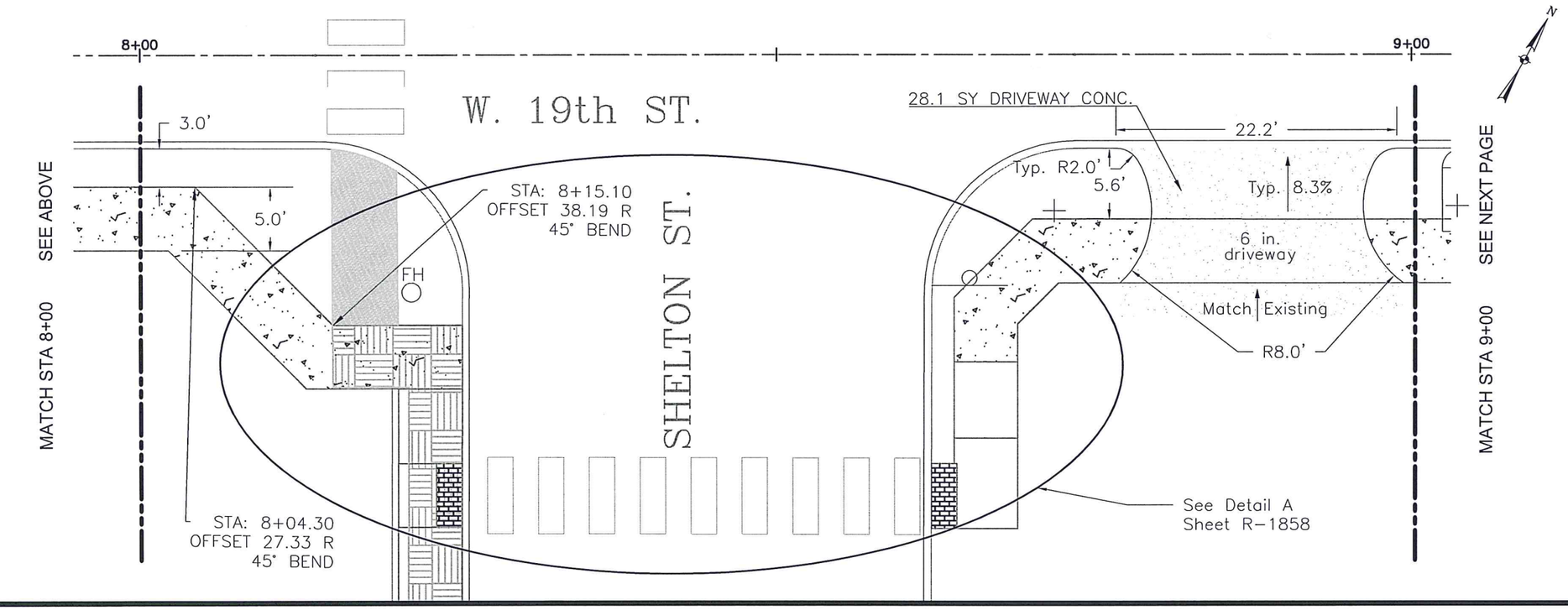
29	0530 2010	DRIVEWAYS (CONC)	SY
26	0529 2004	CONC CURB & GUTTER (TY II)	LF



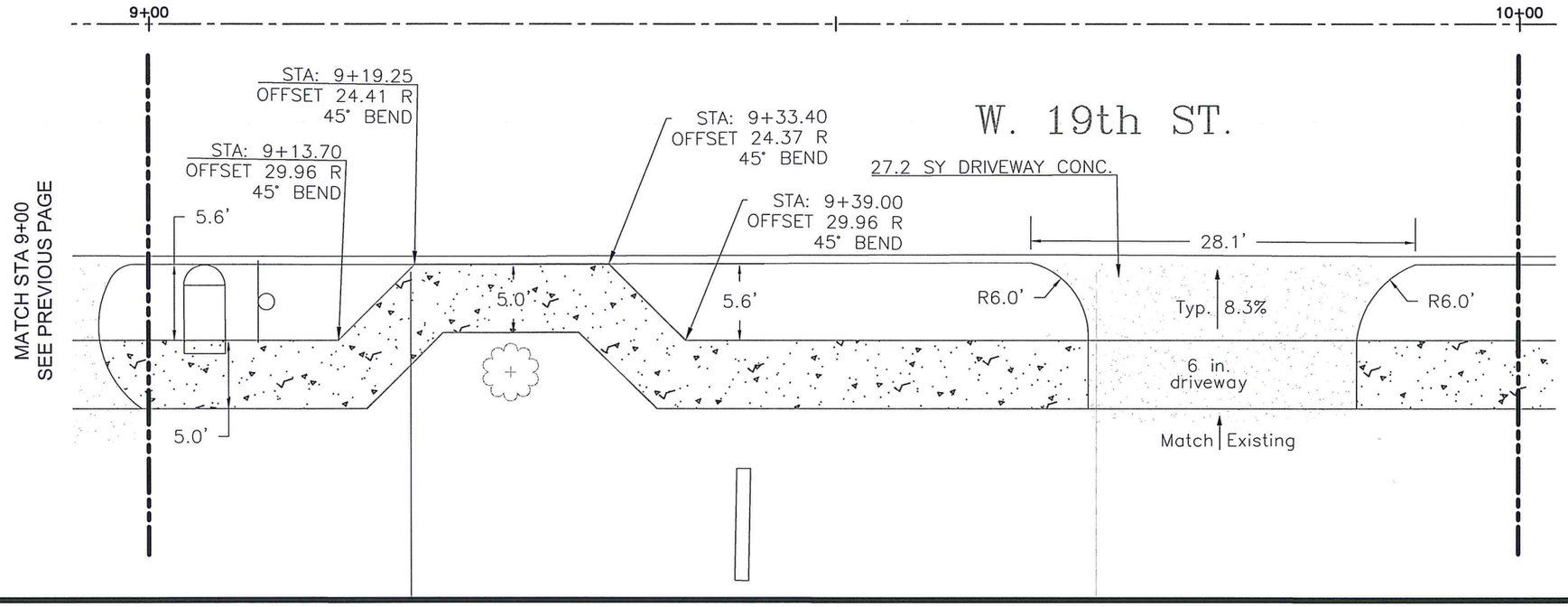
DRAWN BY: KDC
CHECKED BY: KJB
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: N/A
JOB NUMBER: ES-5-14
DATE: NOVEMBER, 2014

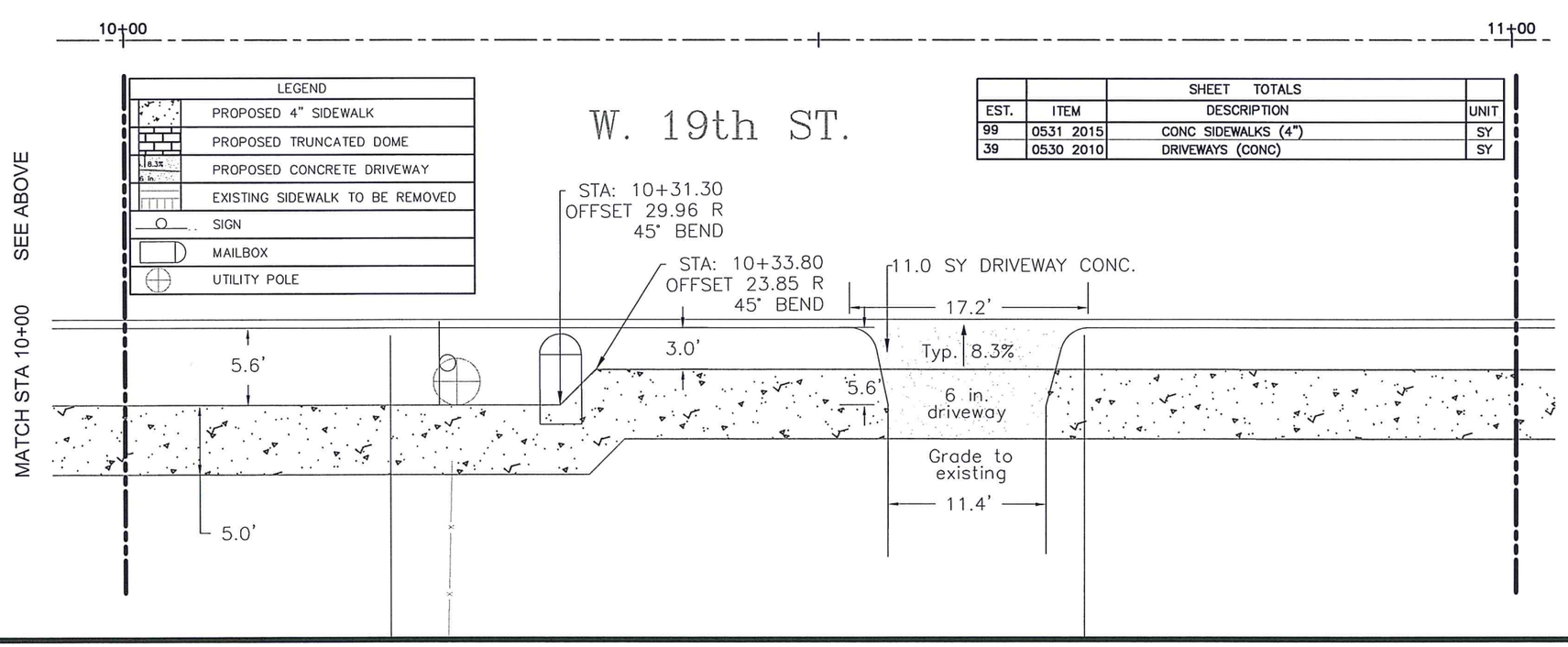
SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

STA 7+00 TO STA 9+00

ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED PROFESSIONAL ENGINEER
2/25/15





		SHEET TOTALS	
EST.	ITEM	DESCRIPTION	UNIT
99	0531 2015	CONC SIDEWALKS (4")	SY
39	0530 2010	DRIVEWAYS (CONC)	SY

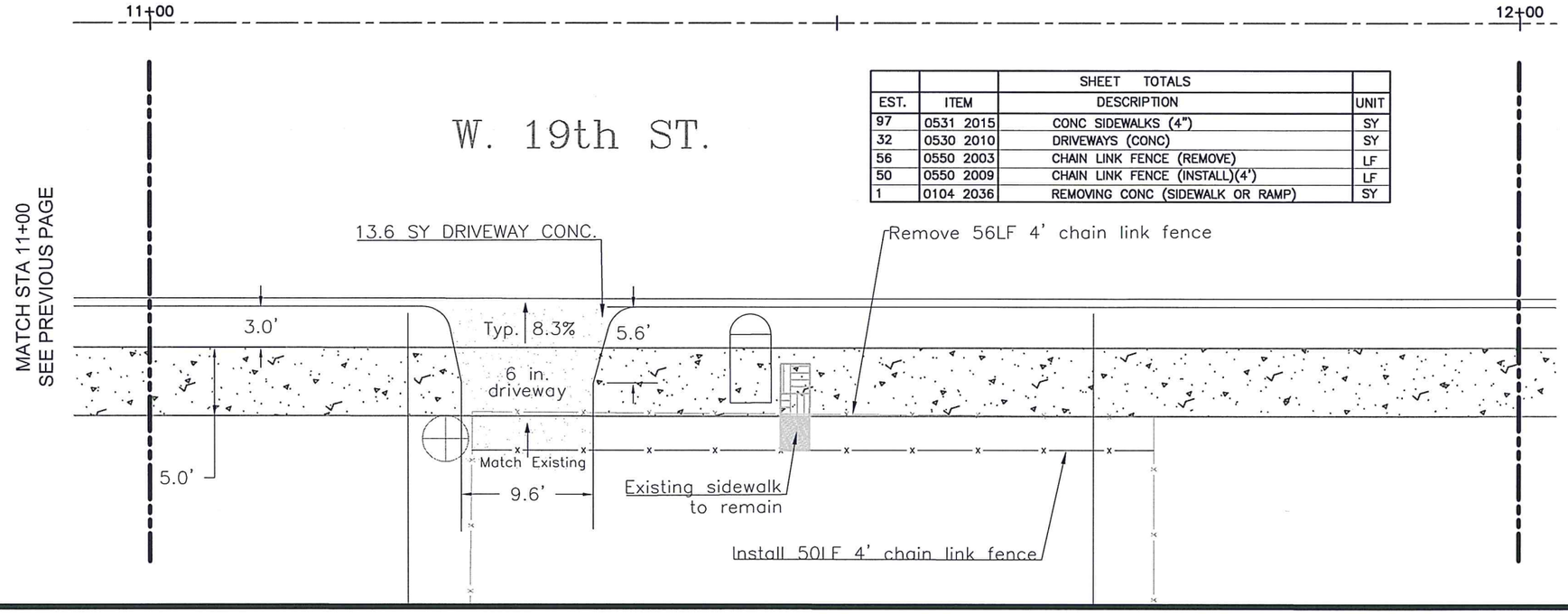
DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

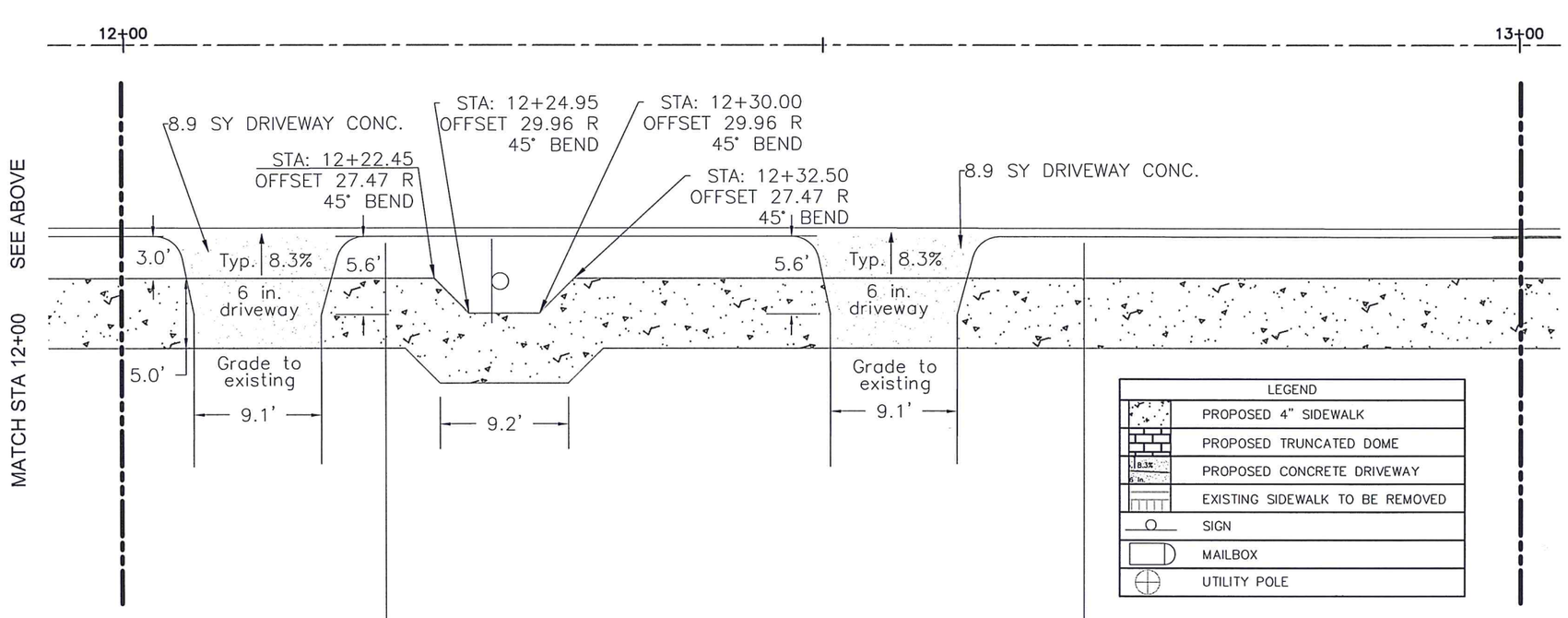
STA 9+00 TO STA 11+00

THE CITY OF SAN ANGELO · TEXAS ·
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED PROFESSIONAL ENGINEER
2/20/15



		SHEET TOTALS	
EST.	ITEM	DESCRIPTION	UNIT
97	0531 2015	CONC SIDEWALKS (4")	SY
32	0530 2010	DRIVEWAYS (CONC)	SY
56	0550 2003	CHAIN LINK FENCE (REMOVE)	LF
50	0550 2009	CHAIN LINK FENCE (INSTALL)(4')	LF
1	0104 2036	REMOVING CONC (SIDEWALK OR RAMP)	SY



LEGEND
PROPOSED 4" SIDEWALK
PROPOSED TRUNCATED DOME
PROPOSED CONCRETE DRIVEWAY
EXISTING SIDEWALK TO BE REMOVED
SIGN
MAILBOX
UTILITY POLE

DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

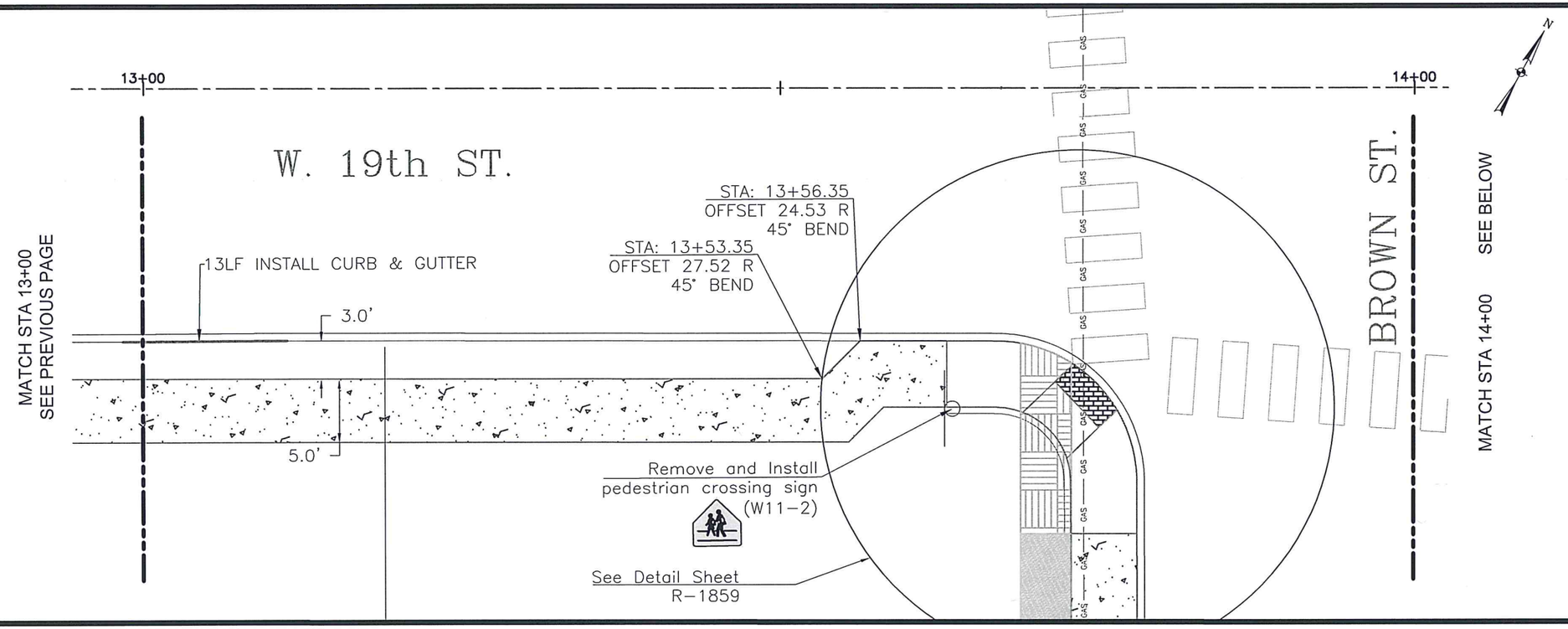
SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

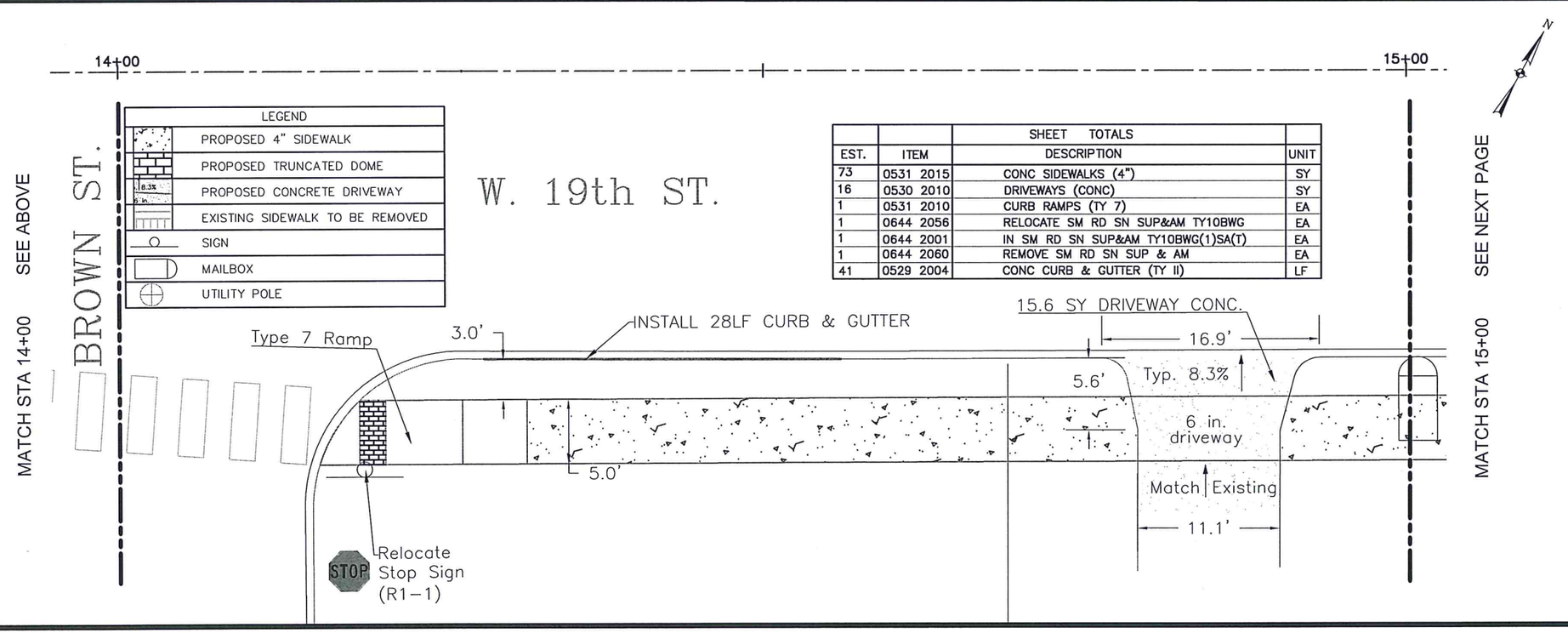
STA 11+00 TO STA 13+00

THE CITY OF SAN ANGELO TEXAS

ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED PROFESSIONAL ENGINEER
2/25/15





		SHEET TOTALS	
EST.	ITEM	DESCRIPTION	UNIT
73	0531 2015	CONC SIDEWALKS (4")	SY
16	0530 2010	DRIVEWAYS (CONC)	SY
1	0531 2010	CURB RAMPS (TY 7)	EA
1	0644 2056	RELOCATE SM RD SN SUP&AM TY10BWG	EA
1	0644 2001	IN SM RD SN SUP&AM TY10BWG(1)SA(T)	EA
1	0644 2060	REMOVE SM RD SN SUP & AM	EA
41	0529 2004	CONC CURB & GUTTER (TY II)	LF

DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

STA 13+00 TO STA 15+00

THE CITY OF SAN ANGELO TEXAS
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED PROFESSIONAL ENGINEER
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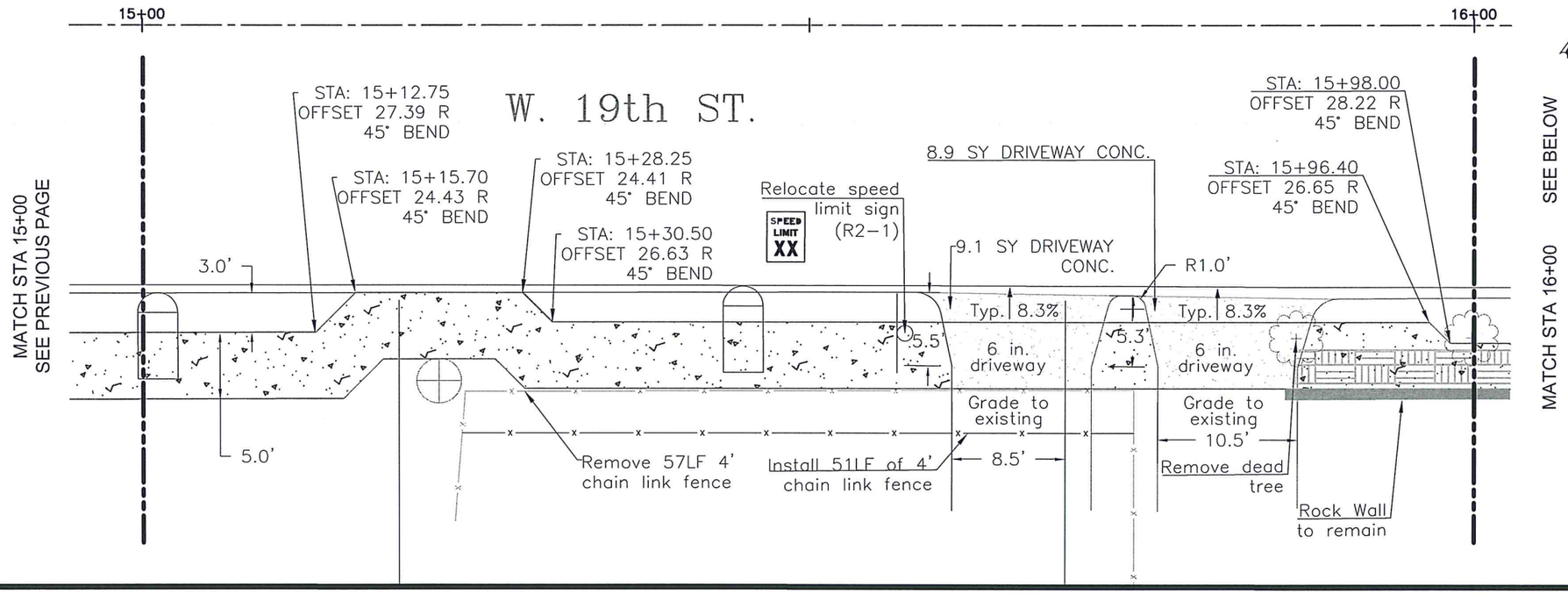
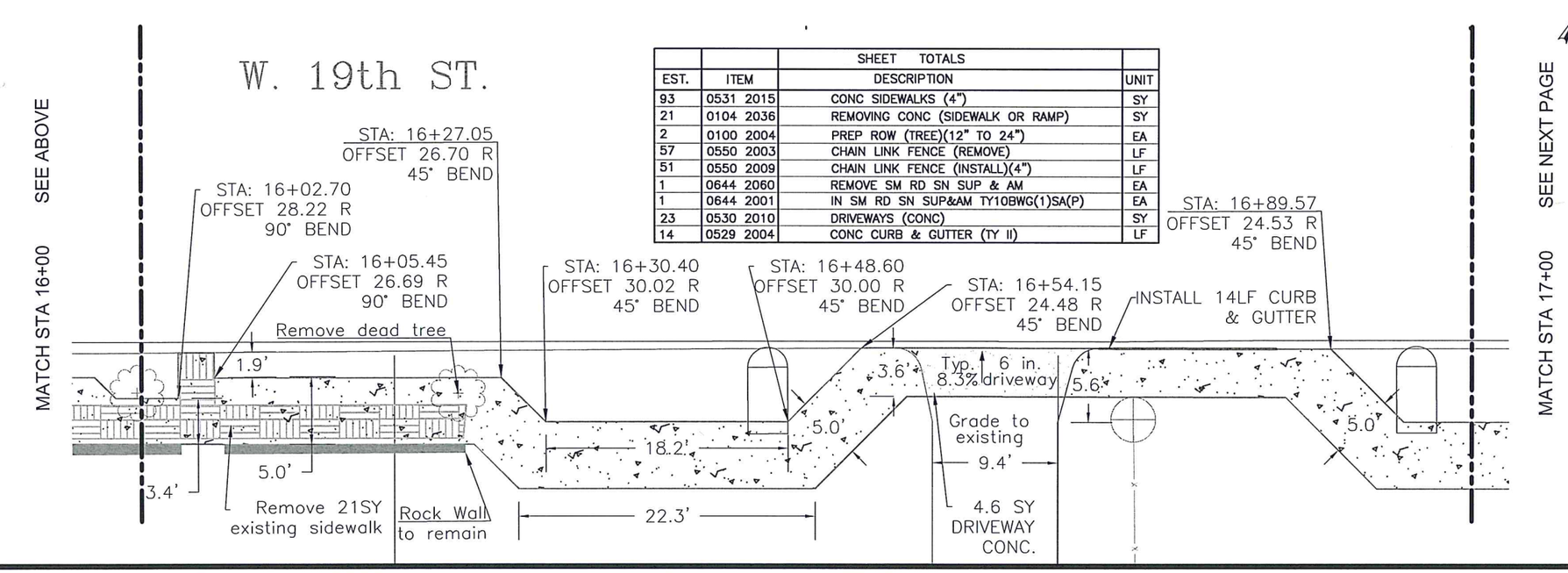




		SHEET TOTALS	
EST.	ITEM	DESCRIPTION	UNIT
93	0531 2015	CONC SIDEWALKS (4")	SY
21	0104 2036	REMOVING CONC (SIDEWALK OR RAMP)	SY
2	0100 2004	PREP ROW (TREE)(12" TO 24")	EA
57	0550 2003	CHAIN LINK FENCE (REMOVE)	LF
51	0550 2009	CHAIN LINK FENCE (INSTALL)(4")	LF
1	0644 2060	REMOVE SM RD SN SUP & AM	EA
1	0644 2001	IN SM RD SN SUP&AM TY10BWG(1)SA(P)	EA
23	0530 2010	DRIVEWAYS (CONC)	SY
14	0529 2004	CONC CURB & GUTTER (TY II)	LF

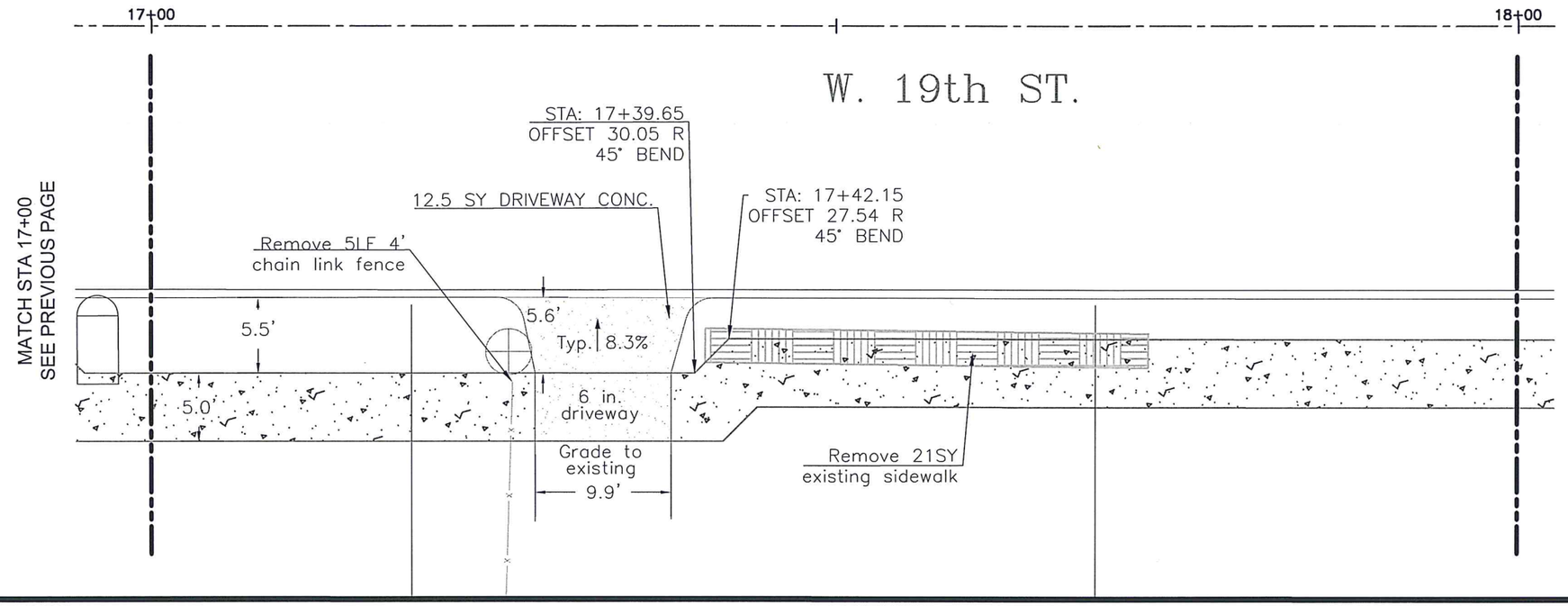
DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

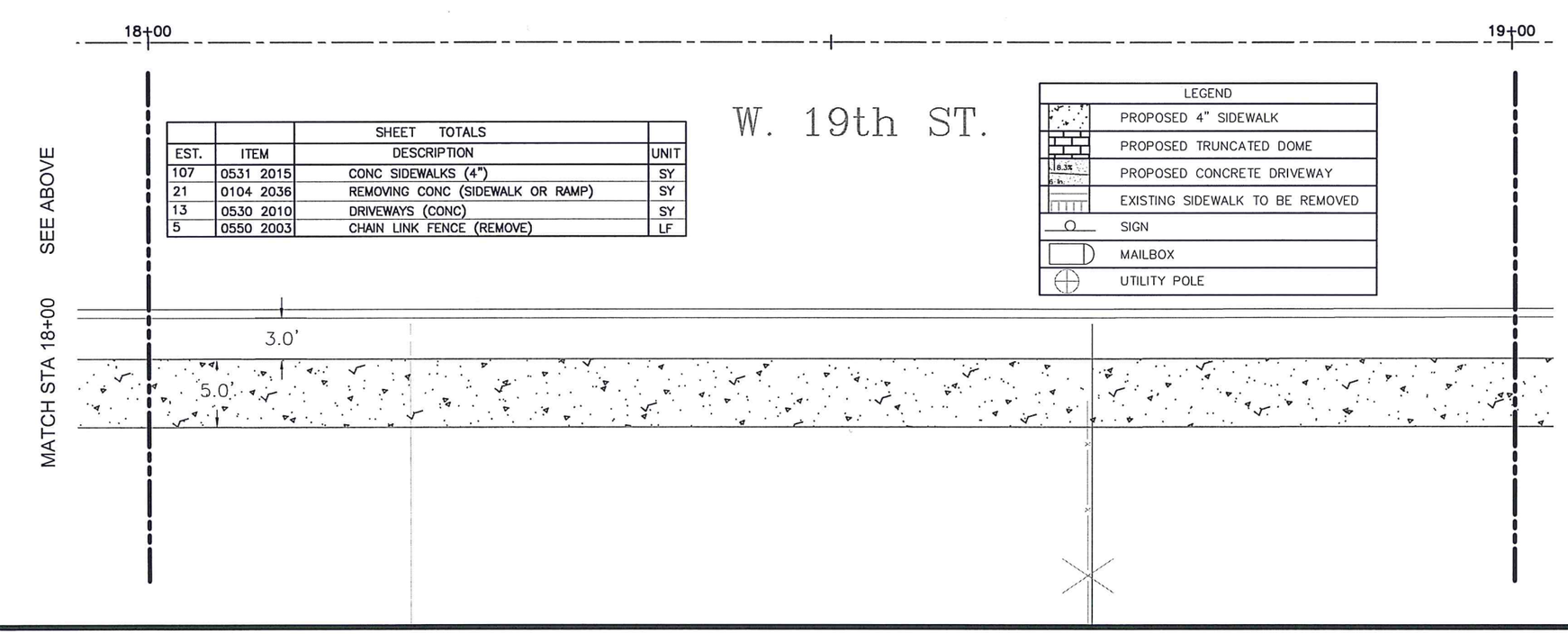
SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

STA 15+00 TO STA 17+00

THE CITY OF SAN ANGELO TEXAS
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED PROFESSIONAL ENGINEER
Karl J. Bednarz P.E.
2/25/15





		SHEET TOTALS	
EST.	ITEM	DESCRIPTION	UNIT
107	0531 2015	CONC SIDEWALKS (4")	SY
21	0104 2036	REMOVING CONC (SIDEWALK OR RAMP)	SY
13	0530 2010	DRIVEWAYS (CONC)	SY
5	0550 2003	CHAIN LINK FENCE (REMOVE)	LF

DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

STA 17+00 TO STA 19+00

THE CITY OF SAN ANGELO · TEXAS ·

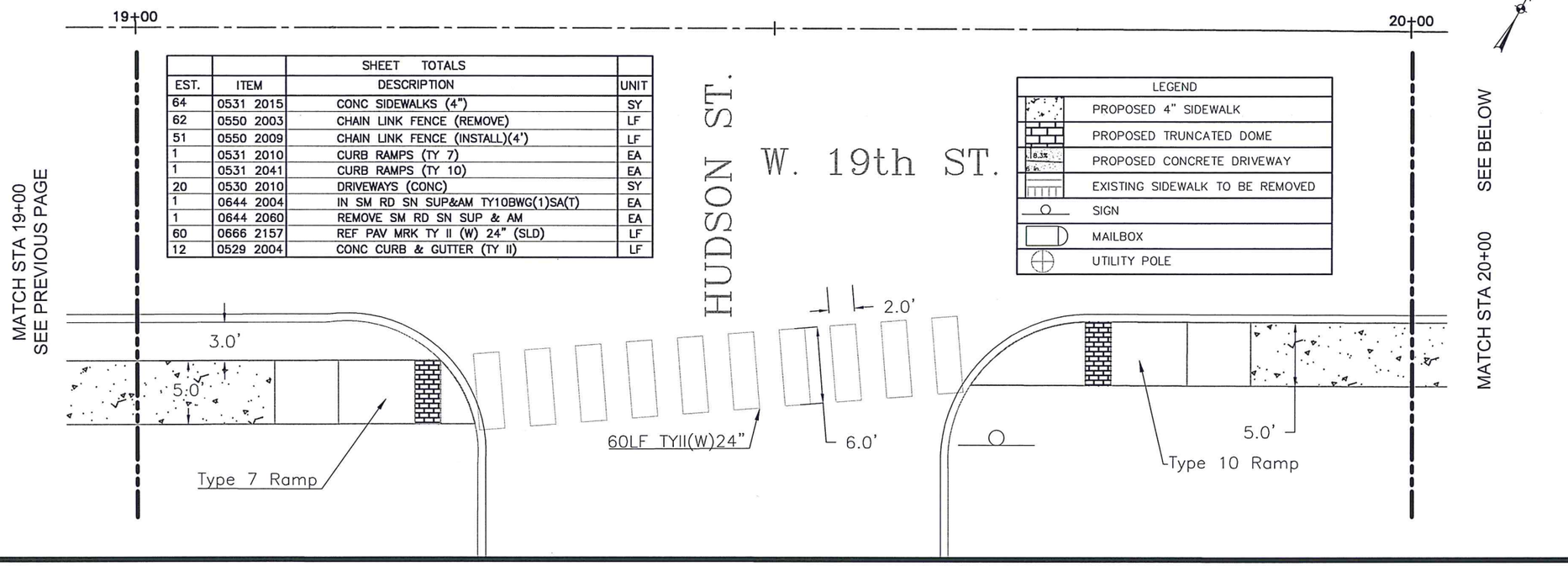
ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

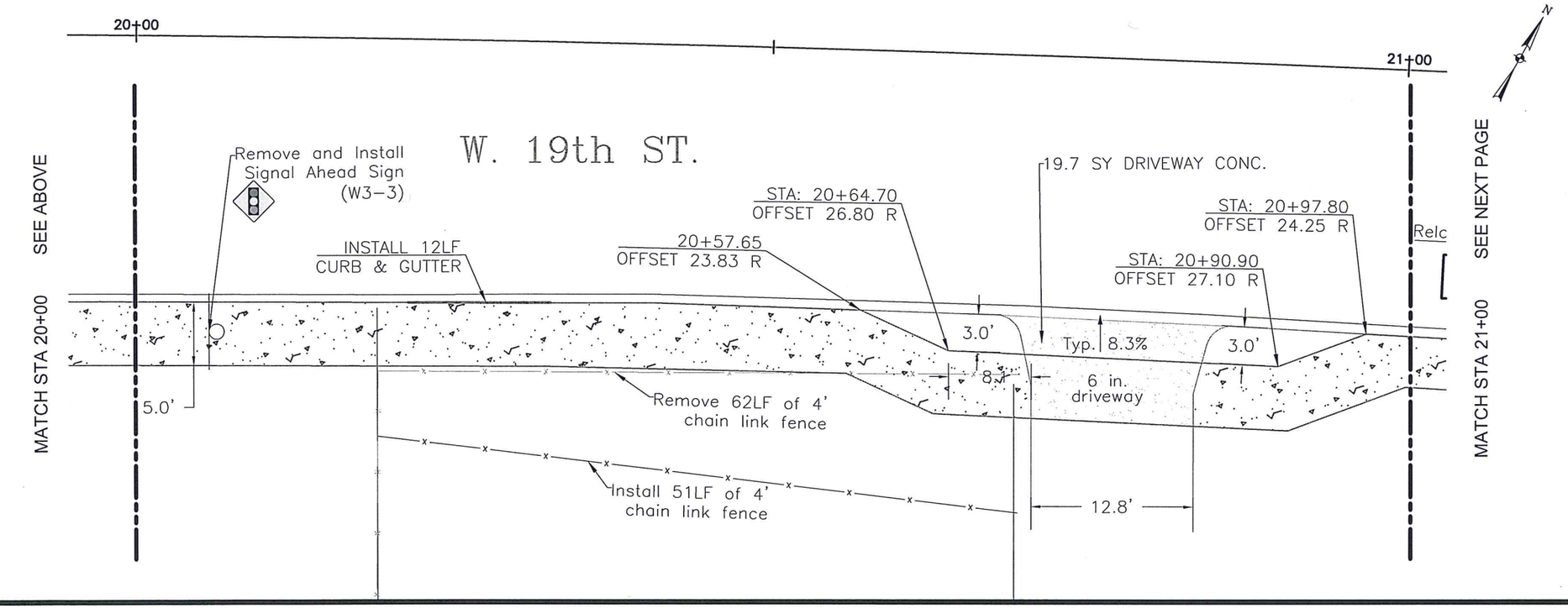
STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED PROFESSIONAL ENGINEER

Karl J. Bednarz P.E.
2/25/15

R-1857J

SHEET TOTALS			
EST.	ITEM	DESCRIPTION	UNIT
64	0531 2015	CONC SIDEWALKS (4")	SY
62	0550 2003	CHAIN LINK FENCE (REMOVE)	LF
51	0550 2009	CHAIN LINK FENCE (INSTALL)(4')	LF
1	0531 2010	CURB RAMPS (TY 7)	EA
1	0531 2041	CURB RAMPS (TY 10)	EA
20	0530 2010	DRIVEWAYS (CONC)	SY
1	0644 2004	IN SM RD SN SUP&AM TY10BWG(1)SA(T)	EA
1	0644 2060	REMOVE SM RD SN SUP & AM	EA
60	0666 2157	REF PAV MRK TY II (W) 24" (SLD)	LF
12	0529 2004	CONC CURB & GUTTER (TY II)	LF





DRAWN BY:	KDC
CHECKED BY:	KJB
HORIZONTAL SCALE:	1"=10'
VERTICAL SCALE:	N/A
JOB NUMBER:	ES-5-14
DATE:	NOVEMBER, 2014

SIDEWALK PROJECT
WEST 19TH STREET FROM LILLIE ST. TO BRYANT BLVD. (U.S. HWY. 87)

STA 19+00 TO STA 21+00

THE CITY OF SAN ANGELO · TEXAS ·

ENGINEERING SERVICES
72 W. COLLEGE AVE.
SAN ANGELO, TX 76903

STATE OF TEXAS
KARL J. BEDNARZ
62697
LICENSED
PROFESSIONAL ENGINEER

Karl J. Bednarz P.E.
2/25/15