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WILLIAMSON COUNTY, TEXAS
CHANGE ORDER NUMBER: 4

1. CONTRACTOR: **Dan Williams Company**

2. Change Order Work Limits: Sta. **9+00** to Sta. **12+00**

3. Type of Change(on federal-aid non-exempt projects): **Minor** (Major/Minor)

4. Reasons: **3H, 3F, 4B** (3 Max. - In order of importance - Primary first)

Project: ***11WC906***

Roadway: ***O'Connor Dr Ext***

Purchase Order Number:

5. Describe the work being revised:

3H: County Convenience. Cost savings opportunity discovered during construction. This Change Order provides for changes to the signal and roadway work at the intersection of O'Connor and RM 620 to match the future widening of RM 620 and minimize rework. **3F: County Convenience. Additional work desired by the County.** This Change Order adjusts the alignment of the roadway and the width of the center median so that the striping layout of the lanes south of RM 620 line up with the striping layout of the lanes north of RM 620. **4B: Third Party Accommodation. Third party requested work.** This Change Order also compensates the Contractor for changing the landscape paver pattern on O'Connor, north of RM 620, at the request of the Neighborhood Association.

6. Work to be performed in accordance with Items: **See Attached**

7. New or revised plan sheet(s) are attached and numbered: **2, 4, 12, 12A, 16-17, 19, 35-36, 42, 133, 157-159, 190-193**

8. New Special Provisions to the contract are attached: ☐ Yes ☑ No

9. New Special Provisions to Item N/A No. N/A, Special Specification Item N/A are attached.

Each signatory hereby warrants that each has the authority to execute this Change Order (CO).

The contractor must sign the Change Order and, by doing so, agrees to waive any and all claims for additional compensation due to any and all other expenses; additional changes for time, overhead and profit; or loss of compensation as a result of this change.

THE CONTRACTOR Date 3-2-12

By

Typed/Printed Name STEVE CARSWELL

Typed/Printed Title VP CENTRAL TEXAS

The following information must be provided

Time Ext. #: **N/A** Days added on this CO: **0**

Amount added by this change order: **($3,842.95)**

RECOMMENDED FOR EXECUTION:

P.E. 3/6/12
Project Manager Date

N/A
Design Engineer Date

3/9/2012
Program Manager Date

Design Engineer's Seal:

See Revised Plan Sheets

County Commissioner Precinct 1 Date
☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 2 Date
☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 3 Date
☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 4 Date
☐ APPROVED ☐ REQUEST APPROVAL

☐ County Judge Date
APPROVED

WILLIAMSON COUNTY, TEXAS

CHANGE ORDER NUMBER: 4 ***Project # 11WC906***

TABLE A: Force Account Work and Materials Placed into Stock

	LABOR	HOURLY RATE			HOURLY RATE
	PAYMENT FOR ITEM 9004-000 AND 9007-000 WILL BE TRACKED				
	ACCORDING TO THE "GENERAL CONDITIONS OF AGREEMENT" AS				
	DEFINED IN SECTION 13, PART 6, EXTRA WORK AND CLAIMS.				
	METHOD "C" WILL BE USED TO PAY THE "ACTUAL FIELD COSTS"				
	OF THE WORK.				

TABLE B: Contract Items

				ORIGINAL + PREVIOUSLY REVISED		ADD or (DEDUCT)	NEW		
ITEM	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	ITEM COST	QUANTITY	QUANTITY	ITEM COST	OVERRUN/ UNDERRUN
110-2001	EXCAVATION (ROADWAY)	CY	$6.00	19,608.00	$117,648.00	278.00	19,886.00	$119,316.00	$1,668.00
160-2003	FURNISHING AND PLACING TOPSOIL (4")	SY	$1.00	84,011.00	$84,011.00	668.00	84,679.00	$84,679.00	$668.00
164-2009	BROADCAST SEED (TEMP)(WARM)	SY	$0.20	42,006.00	$8,401.20	334.00	42,340.00	$8,468.00	$66.80
164-2011	BROADCAST SEED (TEMP)(COOL)	SY	$0.20	42,006.00	$8,401.20	334.00	42,340.00	$8,468.00	$66.80
164-2035	DRILL SEEDING (PERM)(RURAL)(CLAY)	SY	$0.20	83,409.00	$16,681.80	668.00	84,077.00	$16,815.40	$133.60
247-2366	FL BS (CMP IN PLC)(TY A GR 5)(FINAL POS)	CY	$20.00	26,698.00	$533,960.00	278.00	26,976.00	$539,520.00	$5,560.00
310-2001	PRIME COAT (MC-30)	GAL	$3.00	11,091.00	$33,273.00	8.00	11,099.00	$33,297.00	$24.00
341-2007	D-GR HMA (QCQA)TY-A PG 70-22	TON	$56.00	458.00	$25,648.00	124.00	582.00	$32,592.00	$6,944.00
341-2050	D-GR HMA (QCQA)TY-C PG 70-22	TON	$50.00	12,100.00	$605,000.00	(1.00)	12,099.00	$604,950.00	($50.00)
416-2032	DRILL SHAFT (TRF SIG POLE)(36IN)	LF	$210.00	28.00	$5,880.00	(28.00)	0.00	$0.00	($5,880.00)
416-2032	DRILL SHAFT (TRF SIG POLE)(48IN)	LF	$310.00	44.00	$13,640.00	(44.00)	0.00	$0.00	($13,640.00)
432-2002	RIPRAP (CONC)(5 IN)	CY	$400.00	36.00	$14,400.00	2.00	38.00	$15,200.00	$800.00
528-2004	LANDSCAPE PAVERS	SY	$36.00	2,847.00	$102,492.00	(775.00)	2,072.00	$74,592.00	($27,900.00)
529-2002	CONC CURB (TY II)	LF	$7.00	11,878.00	$83,146.00	(16.00)	11,862.00	$83,034.00	($112.00)
529-WC01	CONC CURB (TY II)(HAND FORM)	LF	$19.66	0.00	$0.00	400.00	400.00	$7,864.00	$7,864.00
531-2010	CURB RAMPS (TY 7)	EA	$1,200.00	2.00	$2,400.00	1.00	3.00	$3,600.00	$1,200.00
618-2018	CONDT (PVD) (SCHD 40) (2")	LF	$7.50	210.00	$1,575.00	144.00	354.00	$2,655.00	$1,080.00
618-2022	CONDT (PVD) (SCHD 40) (3")	LF	$12.50	105.00	$1,312.50	1,140.00	1,245.00	$15,562.50	$14,250.00
620-2009	ELEC CONDR (NO. 6) BARE	LF	$1.30	195.00	$253.50	(195.00)	0.00	$0.00	($253.50)
620-2010	ELEC CONDR (NO. 6) INSULATED	LF	$1.46	390.00	$569.40	(390.00)	0.00	$0.00	($569.40)
620-2011	ELEC CONDR (NO. 8) BARE	LF	$1.10	925.00	$1,017.50	(925.00)	0.00	$0.00	($1,017.50)
620-2012	ELEC CONDR (NO. 8) INSULATED	LF	$1.30	760.00	$988.00	(760.00)	0.00	$0.00	($988.00)
624-2014	GROUND BOX TYPE D (120/240) 100 (NS) AL € SP (0)	EA	$750.00	4.00	$3,000.00	2.00	6.00	$4,500.00	$1,500.00
628-2179	ELEC SRV TY D 120/240 100 (NS)AL(E)SP)(0)	EA	$5,000.00	1.00	$5,000.00	(1.00)	0.00	$0.00	($5,000.00)
636-2001	ALUMINUM SIGNS (TY A)	SF	$11.40	99.00	$1,128.60	(1.00)	98.00	$1,117.20	($11.40)
644-2001	INS SM RD SN SUM & AM TY 10BWG(1) SA(P)	EA	$210.00	16.00	$3,360.00	(1.00)	15.00	$3,150.00	($210.00)
666-2047	REFL PAV MRK TY I (W) 24"(SLD)(90MIL)	LF	$5.50	175.00	$962.50	101.00	276.00	$1,518.00	$555.50
666-2110	REFL PAV MRK TY I (Y) 4" (SLD)(90 MIL)	LF	$0.40	14,523.00	$5,809.20	(138.00)	14,385.00	$5,754.00	($55.20)
666-2131	REFL PAV MRK TY I (Y) 24" (SLD) (90 MIL)	LF	$5.78	58.00	$335.24	(43.00)	15.00	$86.70	($248.54)
672-2015	REFL PAV MRKR TY-A-A	EA	$5.00	30.00	$150.00	8.00	38.00	$190.00	$40.00
TOTALS					$1,680,443.64			$1,666,928.80	($13,514.84)

WILLIAMSON COUNTY, TEXAS

CHANGE ORDER NUMBER: 4 ***Project # 11WC906***

TABLE B: Contract Items (*Continued*)

				ORIGINAL + PREVIOUSLY REVISED		ADD or (DEDUCT)	NEW		
ITEM	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	ITEM COST	QUANTITY	QUANTITY	ITEM COST	OVERRUN/ UNDERRUN
680-2002	INSTALL HWY TRF SIG (ISOLATED)	EA	$4,800.00	2.00	$9,600.00	(1.00)	1.00	$4,800.00	($4,800.00)
681-2001	TEMPORARY TRAFFIC SIGNALS	EA	$34,624.28	0.00	$0.00	1.00	1.00	$34,624.28	$34,624.28
682-2001	BACK PLATE (12 IN) (3 SEC)	EA	$85.00	13.00	$1,105.00	(10.00)	3.00	$255.00	($850.00)
682-2003	BACK PLATE (12 IN) (5 SEC)	EA	$100.00	4.00	$400.00	(4.00)	0.00	$0.00	($400.00)
682-2022	VEH SIG SEC (12 IN) LED (GRN ARW)	EA	$220.00	9.00	$1,980.00	(7.00)	2.00	$440.00	($1,540.00)
682-2023	VEH SIG SEC (12 IN) LED (GRN)	EA	$240.00	12.00	$2,880.00	(11.00)	1.00	$240.00	($2,640.00)
682-2024	VEH SIG SEC (12 IN) LED (YEL ARW)	EA	$240.00	9.00	$2,160.00	(7.00)	2.00	$480.00	($1,680.00)
682-2025	VEH SIG SEC (12 IN) LED (YEL)	EA	$260.00	12.00	$3,120.00	(11.00)	1.00	$260.00	($2,860.00)
682-2026	VEH SIG SEC (12 IN) LED (RED ARW)	EA	$210.00	6.00	$1,260.00	(3.00)	3.00	$630.00	($630.00)
682-2027	VEH SIG SEC (12 IN) LED (RED)	EA	$220.00	12.00	$2,640.00	(11.00)	1.00	$220.00	($2,420.00)
684-2031	TRF SIG CBL (TY A) (14 AWG) (5 CONDR)	LF	$1.20	2,715.00	$3,258.00	(2,715.00)	0.00	$0.00	($3,258.00)
684-2033	TRF SIG CBL (TY A) (14 AWG) (7 CONDR)	LF	$1.40	1,235.00	$1,729.00	(1,235.00)	0.00	$0.00	($1,729.00)
684-2080	TRF SIG CBL (TY C) (14 AWG) (2 CONDR)	LF	$1.00	1,140.00	$1,140.00	(1,140.00)	0.00	$0.00	($1,140.00)
686-2041	INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	$5,800.00	1.00	$5,800.00	(1.00)	0.00	$0.00	($5,800.00)
686-2047	INS TRF SIG PL AM (S) 1 ARM (48')	EA	$5,700.00	1.00	$5,700.00	(1.00)	0.00	$0.00	($5,700.00)
686-2055	INS TRF SIG PL AM (S) 1 ARM (55')	EA	$10,400.00	1.00	$10,400.00	(1.00)	0.00	$0.00	($10,400.00)
686-2065	INS TRF SIG PL AM (S) 1 ARM (65') LUM	EA	$12,000.00	1.00	$12,000.00	(1.00)	0.00	$0.00	($12,000.00)
6006-2001	SPREAD SPECTRUM RADIO	EA	$2,400.00	1.00	$2,400.00	(1.00)	0.00	$0.00	($2,400.00)
6006-2005	ANTENNA(UNI-DIRECTIONAL)	EA	$565.00	1.00	$565.00	(1.00)	0.00	$0.00	($565.00)
6266-2005	VIVDS COMMUNICATION CABLE (COAXIAL)	LF	$2.70	1,300.00	$3,510.00	(1,300.00)	0.00	$0.00	($3,510.00)
9004-000	TEMP SIGNAL MAINTENANCE (FORCE ACCOUNT)	DOL	$1.00	0.00	$0.00	5,000.00	5,000.00	$5,000.00	$5,000.00
9005-000	SIGNAL MATERIALS NOT USED	LS	$32,126.58	0.00	$0.00	1.00	1.00	$32,126.58	$32,126.58
9006-000	DELIVERY OF SIGNAL MATERIALS TO COUNTY	LS	$750.00	0.00	$0.00	1.00	1.00	$750.00	$750.00
9007-000	REVISE LANDSCAPE PAVERS AT O'CONNOR (FORCE ACCT)	DOL	$1.00	0.00	$0.00	1,493.03	1,493.03	$1,493.03	$1,493.03
The "Totals" from Table B of the previous work sheet:					$1,680,443.64			$1,666,928.80	($13,514.84)
TOTALS					$1,752,090.64			$1,748,247.69	($3,842.95)

CHANGE ORDER REASON(S) CODE CHART

1. Design Error or Omission	1A. Incorrect PS&E 1B. Other
2. Differing Site Conditions (unforeseeable)	2A. Dispute resolution (expense caused by conditions and/or resulting delay) 2B. Unavailable material 2C. New development (conditions changing after PS&E completed) 2D. Environmental remediation 2E. Miscellaneous difference in site conditions (unforeseeable)(Item 9) 2F. Site conditions altered by an act of nature 2G. Unadjusted utility (unforeseeable) 2H. Unacquired Right-of-Way (unforeseeable) 2I. Additional safety needs (unforeseeable) 2J. Other
3. County Convenience	3A. Dispute resolution (not resulting from error in plans or differing site conditions) 3B. Public relations improvement 3C. Implementation of a Value Engineering finding 3D. Achievement of an early project completion 3E. Reduction of future maintenance 3F. Additional work desired by the County 3G. Compliance requirements of new laws and/or policies 3H. Cost savings opportunity discovered during construction 3I. Implementation of improved technology or better process 3J. Price adjustment on finished work (price reduced in exchange for acceptance) 3K. Addition of stock account or material supplied by state provision 3L. Revising safety work/measures desired by the County 3M. Other
4. Third Party Accommodation	4A. Failure of a third party to meet commitment 4B. Third party requested work 4C. Compliance requirements of new laws and/or policies (impacting third party) 4D. Other
5. Contractor Convenience	5A. Contractor exercises option to change the traffic control plan 5B. Contractor requested change in the sequence and/or method of work 5C. Payment for Partnering workshop 5D. Additional safety work/measures desired by the contractor 5E. Other
6. Untimely ROW/Utilities	6A. Right-of-Way not clear (third party responsibility for ROW) 6B. Right-of-Way not clear (County responsibility for ROW) 6C. Utilities not clear 6D. Other

Williamson County Road Bond Program
O'Connor Drive Extension
Williamson County Project No. 11WC906

Change Order No. 4

Reason for Change

This Change Order provides for changes to the signal and roadway work at the intersection of O'Connor Drive and RM 620 to match the future widening of RM 620 and align the northbound lanes north and south of RM 620. It eliminates work items that were going to be constructed as part of the O'Connor Drive Extension Project and then removed or reconstructed with the RM 620 Improvements Project.

The permanent mast arm signals at O'Connor and RM 620 will be replaced with temporary strain wire signals. The original O'Connor plans called for installation of mast arm signals that would have been removed and replaced with the temporary signals for construction of the RM 620 widening. Signal materials that were already acquired by the Contractor will be purchased by the County for use on the RM 620 Improvements Project. A force account for signal maintenance is also being added to the Contract.

The alignment of the roadway and the width of the center median were changed so that the striping layout of the lanes south of RM 620 line up with the striping layout of the lanes north of RM 620. The center median width was reduced from 7.5 LF to back to back curbs in order to achieve the alignment, which also reduces the quantity of landscape pavers needed on the project. The embankment in this area had already been constructed in accordance with the original plans and will be removed and replaced with flex base where the center median is narrowed. This Change Order also provides a new Contract item for hand forming curb, since one side of the median curb cannot be slipformed because the curbs are back to back.

This Change Order also compensates the Contractor for changes the landscape paver design on O'Connor north of RM 620, at the request of the neighborhood association. A portion of the landscape pavers on O'Connor, north of RM 620, had already been installed before a representative from the Cat Hollow Neighborhood Association requested a change to the pattern. Costs to revise the paver pattern were tracked by force account.

Following is a summary of new items required for this Change Order:

Item	Description	Unit	Qty
529-WC01	CONC CURB (TY II)(HAND FORM)	LF	400
681-2001	TEMPORARY TRAFFIC SIGNALS	EA	1.00

9004-000	TEMP SIGNAL MAINTENANCE (FORCE ACCOUNT)	DOL	5,000.00
9005-000	PAY FOR SIGNAL MATERIALS NOT USED	LS	1.00
9006-000	DELIVERY OF SIGNAL MATERIALS TO COUNTY	LS	1.00
9007-000	REVISE LANDSCAPE PAVERS AT O'CONNOR (FORCE ACCOUNT)	DOL	1,493.03

This Change Order results in a net decrease of $3,842.95 to the Contract amount, for an adjusted Contract amount of $5,903,420.29. The original Contract amount was $5,742,529.92. As a result of this and all Change Orders to date, $160,990.37 has been added to the Contract, resulting in a 2.8% net increase in the Contract cost. No additional days will be added to or deducted from the Contract as a result of this Change Order.

HNTB Corporation

James Klotz, P.E.

GENERAL

1	TITLE SHEET - O'CONNOR DRIVE EXTENSION
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96 - 97	BENT 8 PLAN AND ELEVAITION
98 - 99	BENT 9 PLAN AND ELEVATION
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SIGNING AND STRIPING STANDARDS

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301	SW3P PLAN - O'CONNOR DR.
302	SW3P PLAN - GREAT OAKS DR.

EROSION CONTROL STANDARDS

303	EC(1)-09 (TXDOT STANDARD)

CROSS SECTIONS

304 - 305	CROSS SECTIONS - O'CONNOR DR.

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN SELECTED BY MEOR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

J. Kent O'Brien, PE

09/19/11

STATE OF TEXAS · J. KENT O'BRIEN · 84398 · LICENSED PROFESSIONAL ENGINEER

NOTE:
1. BOTH THE O'CONNOR DRIVE EXTENSION AND THE INTERSECTION IMPROVEMENT PROJECT ARE INCLUDED IN THIS PLAN SET.
2. ONE PROJECT CONSTRUCTION MANUAL (PCM) AND ONE WATER POLLUTION ABATEMENT PLAN (WPAP) HAS BEEN ISSUED THAT INCLUDES BOTH PROJECTS.

WILLIAMSON COUNTY
1848

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Texas PE Firm Reg. #F-928

REV	DESCRIPTION	BY	DATE
1	ADDENDUM #1		12-10-10
2	HMT AND DRIVEWAYS		4/2011
3	TEMP SIGNAL		9/2011

O'CONNOR DRIVE EXTENSION

INDEX OF SHEETS

Klotz Project No	0510.003
CSJ#	0914-05-139
Extent I.D.	O'CONNOR DRIVE EXTENSION
Drawn By	Checked By
Scale	AS SHOWN
Date	Sheet 1 of 1
	Sheet No. 2

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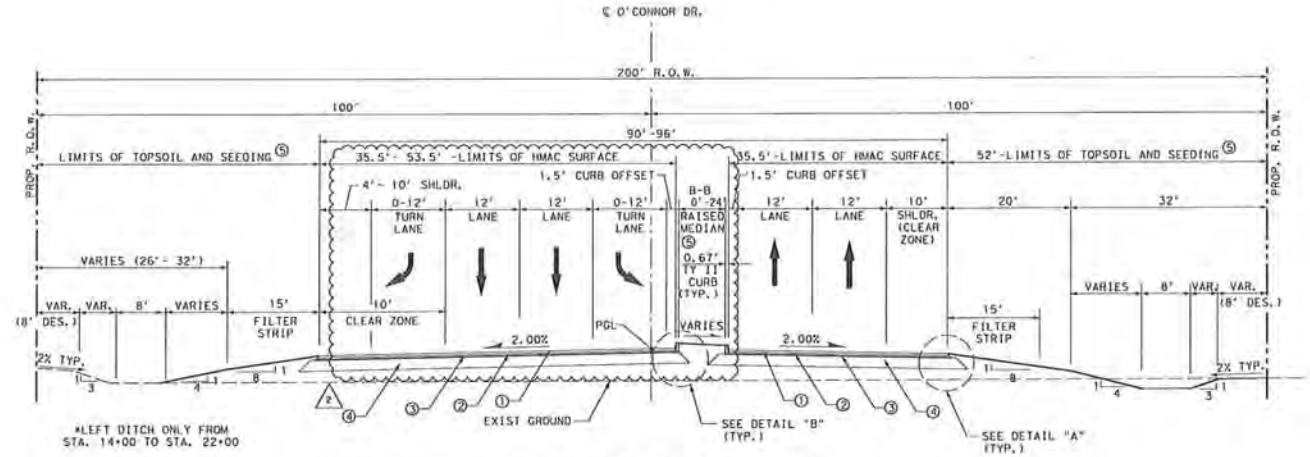
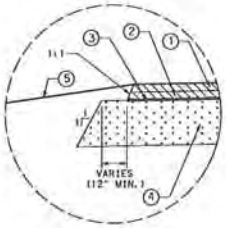


PROPOSED O'CONNOR DR. TYPICAL SECTION

STA. 10+32.06 TO STA. 18+37.45



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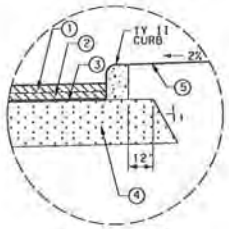

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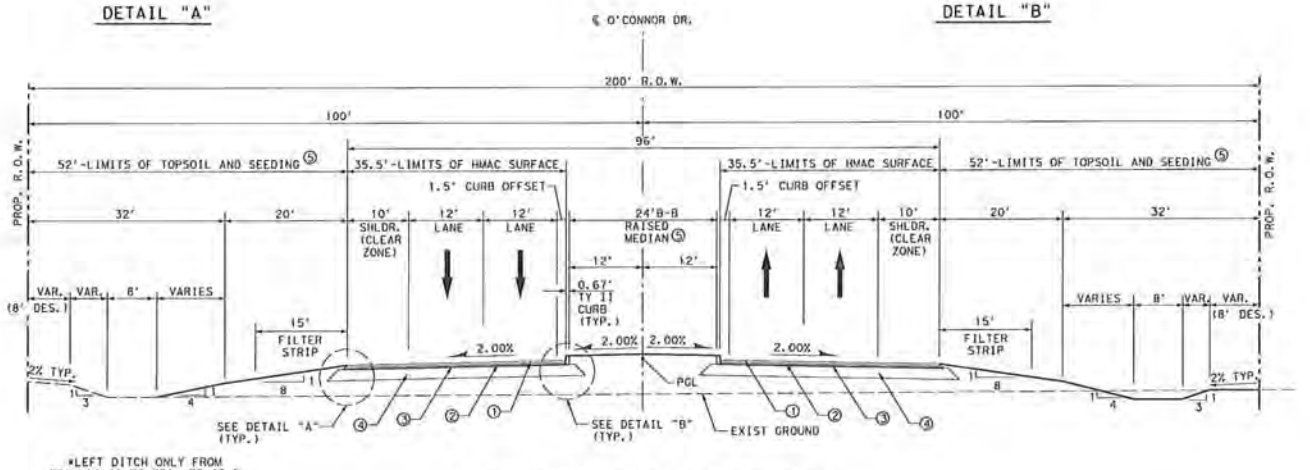

PROPOSED O'CONNOR DR. TYPICAL SECTION

STA. 18+37.45 TO STA. 57+47.07

12/2/2011 11:00:35 PM
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WILLIAMSON COUNTY
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LEGEND

① 2" TYPE C HMACP (PG 70-22) (OVERLAY)

② 2" TYPE C HMACP (PG 70-22) (SURF) △1

③ ASPHALT MATERIAL (MC-30) (PRIME)

④ 15.5" FLEX BASE (TY A GR 5) (3 EQUAL LIFTS)

⑤ 4" TOPSOIL & SEEDING

NOTES:

SUBGRADE TO BE LIME TREATED BY CONTRACTOR IN AREAS WITH HIGH PI SOILS AS DEFINED IN THE GEOTECHNICAL REPORT OR AS DETERMINED BY ENGINEER DURING CONSTRUCTION.

REV	DESCRIPTION	BY	DATE
1	HMAC TYPE		4/2011
2	MEDIAN MODIFICATION		11/2011

STATE OF TEXAS
DAVID WILSON JONES JR.
106091
LICENSED PROFESSIONAL ENGINEER
12-02-11

O'CONNOR DRIVE EXTENSION

TYPICAL SECTIONS

Klotz Project No. 0510.003	
CSJ# 0914-05-139	
Extent I.D. O'CONNOR DRIVE EXTENSION	
Drawn By: APM	Designed By: MWM
Scale: AS SHOWN	Sheet: 1 of 4
Date: 12/2/2011	Sheet No. 4

3. Install the equipment supplied by the District or location designated by Engineer. Install the supplied traffic signal controller and cabinet.

4. Connect all field wiring to the controller assembly. The District will assist in determining how the detector loop lead-in cables are to be connected, and will also program the controller for operation, program the video detection, hook up the conflict monitor, detector units and other equipment, and turn on the controller. Pick up the signal cabinet from the District Signal Shop or location designated by the Engineer. Have a qualified technician and a representative from the controller supplier (if Contractor supplied controller) on the project site to place the traffic signals in operation.

5. Notify the District Signal Maintenance Office at (512) 832-7061 one week before beginning any work involving traffic signals.

Once the integrity of and/or the function of the existing traffic signal is altered by the Contractor, maintain and operate the existing traffic signal until the traffic signal is accepted by the department. During the construction of the proposed traffic signal work, maintain the existing traffic signal and/or temporary construction traffic signal in conformance with the latest Texas Manual on Uniform Traffic Control Devices (TMUTCD).

1

During construction of the proposed signal work if the existing traffic signal equipment requires replacement due to wear, deterioration, or any circumstance over which the Contractor has no control, the equipment will be furnished by the department at no cost to the Contractor. Install this equipment at no cost to the department. Such materials will be provided at TxDOT's signal shop at telephone number 512-832-7061.

Adjust existing signal heads so that they are centered on the approaching lane after the proposed geometry is constructed, in accordance with the plans.

After the completion of the entire signal installation (including striping), a thirty (30) day test period begins. County Inspector to notify signal shop supervisor (512)832-7061 when test begins. After it has been determined by the Department that the field wiring and controller operation are satisfactory after this test period, and all other requirements of the project have been met, the Department will relieve the Contractor of any other responsibilities for the operation of the signal.

1. Use qualified personnel to respond to and diagnose all trouble calls during the thirty-day test period. Repair any malfunction to Contractor-supplied signal equipment. Provide to the Engineer a local telephone number, not subject to frequent changes and available on a 24-hour basis, for reporting trouble calls. Response time to reported calls must be less than 2 hours. Make appropriate repairs within 24 hours. Place a logbook in the controller cabinet and keep a record of each trouble call reported. Notify the Engineer of each trouble call. Do not clear the error log in the conflict monitor during the thirty-day test period without the approval of the Engineer.

2. Connect all field wiring to the controller assembly. The District will assist in determining how the detector loop lead-in cables are to be connected, and will also program the controller for operation, program the video detection, hook up the conflict monitor, detector units and other equipment, and turn on the controller. Have a qualified technician and a representative from the controller supplier on the project site to place the traffic signals in operation.

3. Notify the District Signal Maintenance Office at (512) 832-7061 one week before beginning any work involving traffic signals.

ITEM 681 - TEMPORARY TRAFFIC SIGNALS

Take control and be responsible for all Signals within the Project limits as shown on the plans, to commence when the signal system or roadway capacity is affected, or within 30 days after the start of work, whichever comes first. Contact the District Signal Shop Supervisor, at least two weeks in advance, at (512) 832-7061 to arrange to take over maintenance.

The scope of this contract will include modifications of existing signal systems as required to support the traffic control plan at the following locations:

Signal Location(s):
RM 620 at O'Connor Boulevard

Provide and maintain traffic signal operation of all signalized intersections within the project limits during all phases of construction whether existing, temporary, or final. Provide all items for temporary traffic signal including Video Imaging Vehicle Detection System (VIVDS) equipment, timber poles, span wire, conductors and signal heads. Have a qualified technician and a representative from the controller supplier on the project site to place the traffic signals in operation.

The controller cabinet assembly, including all accessories and components, and all video detection (VIVDS) cameras and processors will be salvaged and delivered to the TxDOT Signal Shop at 7901 N. IH 35, Austin, TX, 78753 at the end of this project. Provide a 48-hour notice to TxDOT at (512) 832-7061, prior to delivery of salvaged material.

Operation and maintenance of the temporary signal includes repair of Contractor-supplied equipment, provision of telephone number to the District for trouble calls, adjustment of timing, and the generation and implementation of traffic signal timing during all phases of the project. Coordinated timing will be provided by the State.

Video equipment will meet all the requirements of Item 6266. Provide signal phasing and timing plans for all construction signals throughout the entire duration of the project. These plans will match the construction sequencing or the Contractor's construction sequencing if different from what is shown in the plans. These plans will be submitted for approval and will provide operations equivalent to the existing signals.

Provide the Department the name and 24-hour telephone number of a person responsible for emergency maintenance operations. Use qualified personnel to respond to and diagnose all trouble calls during the length of the project. Repair any malfunction to signal equipment. Response time to reported trouble calls must be less than 2 hours. Make appropriate repairs within 24 hours. Place a logbook in the controller cabinet and keep a record of each trouble call reported. Notify the Engineer of each trouble call. Do not clear the error log in the conflict monitor without approval.

Relocate and modify signal heads as required by project phasing or other project work as directed by the Department. Relocation of signal heads for a phase change will be done during the same day. Consider subsidiary to the pertinent Items.

Be responsible for video detection changes as required by project phasing or other project work as directed by the Department. Consider subsidiary to the pertinent Items.

Maintain an 18-foot minimum vertical clearance for all construction signals at all times.

Make field measurements for treated timber poles in cooperation with the Engineer before construction to ensure the above clearance height from the highest point of the roadway surface. Timber poles provided will meet all the requirements of Item 627. In addition, place the signal heads a minimum of 40 feet and a maximum of 150 feet from the stop line. If the nearest signal head must be more than 150 feet from the stop line, place a supplemental nearside signal head. Determine the field measurements and elevations from the actual field location of the poles, considering all above and below ground utilities and existing roadway elevations.

All permanent signs mounted on the traffic signal wires, traffic signal poles, or traffic signal mast arms will be furnished and installed by the Contractor. The cost of the signs, hardware and erecting the signs will be subsidiary to the pertinent items.

Be responsible for furnishing all other materials, tools, and labor required to maintain the signal in this project in accordance with the plans and specifications. All new materials provided by the Contractor will be new un-depreciated stock.

ITEM 6266 - VIDEO IMAGING VEHICLE DETECTION SYSTEM (VIVDS)

Install the VIVDS cameras onto the mast arms with the attachment mechanisms provided with the camera system. Place the traffic signal cable (TY A) (3-conductor) (16 AWG) and the VIVDS communication cable coaxial in continuous and separate runs from each VIVDS camera to the controller. Consider the costs associated with the above work subsidiary to the pertinent Items.

Aim and adjust the cameras, install the cables and VIVDS cards into the controller cabinet and complete any other necessary work to bring the traffic signal into operation.

Provide the traffic signal cable and coaxial cable above and any incidentals necessary to install them.

Provide a Video Processor System (VPS) that can provide up to thirty-two (32) detector outputs to the controller from up to eight (8) camera/video processor units (C/VPU). Route the detector outputs through the Bus Interface Unit (BIU) or approved product, which replaces the functions of the BIU. Field of view for each C/VPU shall provide a minimum of thirty-two (32) virtual detection zones for vehicle detection.

Provide 6 cameras for this project, including one (1) spare camera.

Provide a set-up system. Load required set-up software onto all of the District Signal Shop's notebook computers and provide all necessary licensing. Computers shall not be provided by the Contractor as part of the set-up system.

Provide and install all cables necessary to provide complete VIVDS operation. Provide a minimum of 10 cables to direct connect the notebook to the VIVDS port.

Phase red and green load switch outputs from up to sixteen (16) phases of a NEMA TS2 Type 2 controller shall be provided as inputs to the VPU for use with internal detector extend/delay timing functions. The C/VPU shall be able to condition the detector outputs and detection zones based on the state of the associated phase number and color.

The serial communication port on the front of the VPU shall be a DB-9 RS-232 connector. Supply a package that will operate with Windows XP and NT and provide the functionality defined in both sections 7.0 and 8.0 in both a direct connect and remote communications mode. The software resident in the VPU and the personal computer shall be capable of transmitting and receiving all information needed for zone set up, monitoring vehicle detection by viewing flashing detection zone overlays, and uploading/downloading and interrogating all stored data within the VPU. Remote communications with the VCU shall be possible with the addition of external communication devices (modem, Codec, etc.) using the RS-232 and video output ports on the front of the VPU.

The VPU operational software shall be stored internally in flash memory and be capable of being updated without the removal and replacement of memory devices.

Provide surge protection in the controller cabinet protecting the camera video and power inputs/outputs. All surge protection shall be dinrail mounted.

Install the VIVDS detection zones as directed. Have qualified personnel on site at the time of the signal turn-on to assist with the installation of detection zones.

If the camera locations shown in the plans do not allow for proper sight of the proposed detection zones, relocate the cameras as needed and as directed. This labor and material cost will not be paid separately, but is subsidiary to this Item.

The video output from the C/VPU shall be in color or black/white with active detection zones overlaid on full motion video.

ITEM 682 - VEHICLE AND PEDESTRIAN SIGNAL HEADS

Install signal head attachments so the wiring to each passes from the mast arm or signal pole through the attachment hardware to the signal head. Exposed cable or wiring is not permitted, unless otherwise directed.

Ensure the signal heads are made of aluminum and are hooded and covered until the signal system is put into operation.

Each signal head will be one way with the proper number of sections shown on the plans. Each head color will be bright yellow (Federal Yellow #13538 of Federal Standard 595). The inside of the visors will have a flat black finish.

Installed traffic signal heads within the project will have backplates unless otherwise shown on the plans. Backplates will be black aluminum.

Provide pedestrian signal head assemblies, which have a flush "egg-crated" or "Z" pattern visor for all lamps, and a one-piece reflector assembly for incandescent lamps only.

Provide louvers, which have five (5) vanes with a black finish on inside surfaces when required within the project. Fasten a hardware cloth screen, securely, with ¼" or smaller mesh size to the front face of each louver to prevent entry by birds.

Mount signal heads level and plumb as directed.

Replace, at Contractor's expense, all burned out or defective lamps for a period of 4 weeks from the date of the initial turn on. At the end of this 4-week period, the Engineer will relieve the Contractor of any maintenance of this portion of the signal system.

Use the four point mounting system (TY A) for signal heads, except in cases of skewed or vertical heads when (TY B) will be used.

Place LED's at the proper angle with the ground. The wording "top" or the "up arrow" indicates the proper fixed alignment within the signal head. Hang the head parallel to the ground once attached and not angled down as with incandescent heads. Ensure the signal head to be level and within tolerances. LED's are designed to direct the indication towards the roadway surface. Variance in head leveling will cause the LED indication to appear dim during slight movement. Ensure each LED head to be properly leveled and sight tested before final acceptance.

2

WILLIAMSON COUNTY
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Texas PE Firm Reg. #F-929

REV	DESCRIPTION	BY	DATE
1	NOTE CHANGES/ SIGNAL		4/2011
2	NOTE CHANGES/ SIGNAL		7/2011

STATE OF TEXAS
JAMES E. SCHNEROFFEDER
97266
LICENSED
PROFESSIONAL ENGINEER
7/12/11

O'CONNOR DRIVE EXTENSION

GENERAL NOTES AND SPECIFICATIONS

Klotz Project No. 0510.003	
CSJ# 0914-05-139	
Project I.D. O'CONNOR DRIVE EXTENSION	
Drawn By JES	Checked By CMS
Scale AS SHOWN	Sheet 5 of 5
Date 7/12/2011	Sheet No. 12

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ITEM 684 - TRAFFIC SIGNAL CABLES

Leave at least 2 feet for each cable run in each pull box and leave at least 2 feet in each steel pole in addition to the required length for each separate cable. Provide an extra 5 feet of each conductor terminating in the controller cabinet. Ensure conductors are continuous without splice from terminal point to terminal point or as directed. Do not use wire nuts.

Provide a separate multi-conductor signal cable (14 AWG) inside pedestal poles and mast-arm signal poles from the terminal strip to each signal head as shown on the plans.

ITEM 686 - TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)

Install air wings on all mast arms of 30 feet and over. Consider the cost for the provision and installation of air wings as subsidiary to the various bid items found within this project.

Provide double nuts on top and bottom of the base plate as shown on the standards.

Provide signal pole assemblies as shown on plans. Luminaire lamps and the installation of the arms and lamps are considered subsidiary to the pertinent items.

When luminaires are to be installed on mast arm poles, provide a separate terminal strip in the signal pole access compartment. The terminal strip shall be a 4-circuit Buchanan-Type 104SN, Kulka-Type 985-GP-4 CU, or equivalent.

Provide a 10-amp time-delay fuse for traffic signal poles onto which luminaires are to be installed. Place the fuse in the fuse block indicated within note #4 found on State standard MA-D-07.

ITEM 688 - PEDESTRIAN DETECTORS AND VEHICLE LOOP DETECTORS

Pedestrian push buttons will be mounted at a height of 3'-6" (42") above the sidewalk or landing and will be of the type that have permanent-type signs within the detector unit (9" x 12" sign & push button station on Signal Poles and 5" x 7" sign & push button station on Pedestrian Poles), which explains their purpose and indicates which crosswalk signal is actuated.

Repair or replace any push button detector, which proves to be inoperable for a period of 4 weeks from the initial flash turn on date. At the end of this 4-week period, the Engineer will relieve the Contractor of any maintenance of this portion of the signal system.

Pedestrian Push buttons will be of substantial tamper proof construction. The push button will be ADA and TS 2 compliant. The push button will have a powder coated aluminum bezel with stainless steel actuator. The push button will utilize a momentary contact solid-state switching mechanism rated for 20 X 10^6 operations. The push button will provide visual and audible feedback to the pedestrian. The low movement push button will be functional in icing conditions. All fastening hardware will be stainless steel.

The audible feedback will be solely a confirmation chirp, be able to be turned on and off, and not conflict with any ADA issues.

ITEM 6007 - REMOVING TRAFFIC SIGNALS

Provide for the removal and storage of the existing signal once the rebuilt signal is in operation. Remove abandoned foundations as described in 2004 Special Specification. Items to be returned to the Austin District Traffic Signal Shop (7901 North IH 35) include: signal section assembly from Pole D. Contact the Signal Shop Supervisor at (512) 832-7061 to make arrangements for delivery of salvaged items.

The list of material below is for the Contractor's information only. It is the responsibility of the Contractor to verify all items and quantities listed below.

LIST OF MATERIAL/LABOR
SUBSIDIARY TO ITEM 681

Description	UNIT	Quantity
40 FT TIMBER POLE (CLASS 2)	EA	2
3/8" ZINC-COATED STRANDED STEEL CABLE	LF	560
1/4" ZINC-COATED STRANDED STEEL CABLE	LF	560
GROUND ANCHORS	EA	4
YELLOW PLASTIC GUY GUARD	EA	4
VIVDS CAMERA ASSEMBLIES	EA	6
VIVDS PROCESSOR CARDS (4 CHANNEL)	EA	2
VIVDS EXTENSION MODULES (4 CHANNEL)	EA	1
VIVDS VIDEO MONITORS	EA	1
VIVDS COMM. CABLE (COAX)	LF	1,310
VIVDS (16 AWG) (3 CONDR)	LF	1,310
CONDT (PVC) (SCHD 40) (3/4")	LF	70
ELEC CONDR (NO. 8) (BARE)	LF	70
BACK PLATE (12 IN) (3 SEC)	EA	7
BACK PLATE (12 IN) (4 SEC)	EA	2
BACK PLATE (12 IN) (5 SEC)	EA	2
VEH SIG SEC (12 IN) LED (GRN ARW)	EA	4
VEH SIG SEC (12 IN) LED (GRN)	EA	11
VEH SIG SEC (12 IN) LED (YEL ARW)	EA	2
VEH SIG SEC (12 IN) LED (YEL)	EA	11
VEH SIG SEC (12 IN) LED (RED)	EA	11
TRF SIG CBL (TY A) (14 AWG) (5 CONDR)	LF	1,090
TRF SIG CBL (TY A) (14 AWG) (7 CONDR)	LF	480
RELOCATE SMALL SIGNS	EA	5

2

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REV	DESCRIPTION	BY	DATE
1	NOTE CHANGES/ SIGNAL		4/2011
2	NOTE CHANGES/ SIGNAL		7/2011

STATE OF TEXAS
JAMES L. SCHNEIDER
97266
LICENSED
PROFESSIONAL ENGINEER
7/12/11

O'CONNOR DRIVE EXTENSION

GENERAL NOTES AND SPECIFICATIONS

Klotz Project No. 0510.003
CSJ# 0914-05-139
Client I.D. O'CONNOR DRIVE EXTENSION
Drawn By: JES | Checked By: CMS
Scale: AS SHOWN | Sheet: 5 of 5A | Sheet No. 12A
Date: 7/12/2011

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ROADWAY QUANTITIES

	SUMMARY OF ROADWAY QUANTITIES																
	100	110	132	247	310	341	432	432	500	502	528	529	529	529	530	531	538
	2002	2001	2003	2366	2001	2050	2002	2040	2001	2001	2004	2002	2004	2006	2010	2010	2001
	PREP ROW	EXCAVATION (RDWY)	EMBANKMENT (FINAL) (ORD COMP) (TY B)	FL BS (CMP IN PLC) (TY A GR 5) (FNAL POS)	PRIME COAT (MC-30)	D-GR HMA (QCQA) TY-C PG70-22	RIPRAP (CONC) (5 IN)	RIPRAP (MOW STRIP) (5 IN)	MOBILIZATION	BARRICADES, SIGNS AND TRAFFIC HANDLING	LANDSCAPE PAVERS	CONC CURB (TY II)	CONC CURB & GUTTER (TY II)	CONC CURB (MONO) (TY II)	DRIVEWAYS (CONC)	CURB RAMPS (TY 7)	RIGHT OF WAY MARKERS
STA TO STA	STA	CY	CY	CY	GAL	TON	CY	CY	LS	MO	SY	LF	LF	LF	SY	EA	EA
BEGINNING TO STA. 17+00.00	6.7	2,636	2,430	4,096	1,379	1,516	2	0			0	1,170	0	0	0	1	4
STA. 17+00.00 TO STA. 29+00.00	12.0	7,074	8,810	4,725	1,893	2,092	0	0			0	2,400	0	0	0	0	2
STA. 29+00.00 TO STA. 41+00.00	12.0	7,460	6,495	4,725	1,893	2,092	0	0			0	2,400	0	0	0	0	2
STA. 41+00.00 TO STA. 53+00.00	12.0	3,558	15,769	4,724	1,893	2,092	0	0			0	2,400	0	0	0	0	2
STA. 53+00.00 TO STA. 65+00.00	12.0	2,015	19,190	5,395	2,131	2,467	0	0			851	2,093	41	0	0	0	4
STA. 65+00.00 TO STA. 77+00.00	12.0	931	4,380	1,647	664	740	0	8			763	761	0	1,642	905	0	2
STA. 77+00.00 TO END	5.7	3,099	3,759	1,664	698	768	0	8			168	638	0	407	0	0	0
PROJECT TOTALS	72.4	26,773	60,833	26,976	10,552	11,768	2	16.0	1	12	1,782	11,862	41	2,049	905	1	16

ROADWAY QUANTITIES (CONT.)

	SUMMARY OF ROADWAY QUANTITIES							
	540	540	540	544	690	690	690	690
	2001	2005	2011	2006	2006	2024	2038	2051
	MTL W-BEAM GD FEN (TIM POST)	TERMINAL ANCHOR SECTION	MTL BEAM GD FEN TRANSITION (THRIE-BEAM)	GDRAIL END TRT (INST) (WOOD POST) (TY III)	REMOVAL OF GROUND BOXES	REMOVAL OF SIGNAL HEAD ASSM	REMOVAL OF CONTROL CABINET (GND MNT)	REMOVAL OF SIGNAL POLE ASSEMBLY
STA TO STA	LF	EA	EA	EA	EA	EA	EA	EA
BEGINNING TO STA. 17+00.00	0	0	0	0	6	7	1	4
STA. 17+00.00 TO STA. 29+00.00	0	0	0	0	0	0	0	0
STA. 29+00.00 TO STA. 41+00.00	0	0	0	0	0	0	0	0
STA. 41+00.00 TO STA. 53+00.00	0	0	0	0	0	0	0	0
STA. 53+00.00 TO STA. 65+00.00	0	0	0	0	0	0	0	0
STA. 65+00.00 TO STA. 77+00.00	50	1	1	1	0	0	0	0
STA. 77+00.00 TO END	50	1	1	1	0	0	0	0
PROJECT TOTALS	100	2	2	2	6	7	1	4

SIGNING AND STRIPING QUANTITIES

	SUMMARY OF SIGNING & STRIPING QUANTITIES														
	644	644	644	644*	658	658	658	666	666	666	666	666	666	666	666
	2001	2004	2006	2020	2007	2260	2316	2002	2011	2035	2041	2047	2053	2095	2110
	INS SM RD SN SUP&AM TY 10 BWG(1) SA(P)	INS SM RD SN SUP&AM TY 10 BWG(1) SA(T)	INS SM RD SN SUP&AM TY 10 BWG(1) SA(U)	INS SM RD SN SUP&AM TY FRP(2) UB(P)	INSTL DEL ASSM (D-SW)TY A (FLX)GND	INSTL DEL ASSM (D - SW) SZ (TYC) GF1	INSTL OM ASSM (OM-2Z) (FLX)GND	REFL PAV MRK TY I (W) 4" (BRK) (090MIL)	REFL PAV MRK TY I (W) 4" (SLD) (090MIL)	REFL PAV MRK TY I (W) 8" (SLD) (090MIL)	REFL PAV MRK TY I (W) 12"(SLD) (090MIL)	REFL PAV MRK TY I (W) 24"(SLD) (090MIL)	REFL PAV MRK TY I (W) (ARROW) (090MIL)	REFL PAV MRK TY I (W) (WORD) (090MIL)	REFL PAV MRK TY I (Y) 4" (SLD) (090MIL)
STA TO STA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	EA	EA	LF
BEGINNING TO STA. 29+00.00	5	2	1	0	9	0	2	926	3,735	906	0	191	6	6	4,090
STA. 29+00.00 TO STA. 52+00.00	1	0	0	0	15	0	2	1,150	4,600	0	0	0	0	0	4,600
STA. 52+00.00 TO STA. 75+00.00	6	2	0	0	9	11	3	1,105	4,450	680	0	0	4	4	4,285
STA. 75+00.00 TO END	2	0	0	4	1	9	0	387	1,550	150	0	0	1	1	1,410
PROJECT TOTALS	14	4	1	4	34	20	7	3,568	14,335	1,736	0	191	11	11	14,385

* FOR DEAD END BARRICADES

SIGNING AND STRIPING QUANTITIES (CONT.)

	SUMMARY OF SIGNING & STRIPING QUANTITIES												
	666	666	666	666	666	666	666	666	672	672	672	677	5445
	2131	2142	2145	2153	2155	2157	2178	2185	2012	2015	2017	2001	2001
	REFL PAV MRK TY I (Y) 24" (SLD) (090MIL)	REF PAV MRK TY II (W) 4" (BRK) (090MIL)	REF PAV MRK TY II (W) 4" (SLD) (090MIL)	REFL PAV MRK TY II (W) 8" (SLD) (090MIL)	REFL PAV MRK TY II (W) 12"(SLD) (090MIL)	REFL PAV MRK TY II (W) 24"(SLD) (090MIL)	REF PAV MRK TY II (Y) 4" (SLD) (090MIL)	REF PAV MRK TY II (Y) 24" (SLD) (090MIL)	REFL PAV MRKR TY I-C	REFL PAV MRKR TY II A-A	REFL PAV MRKR TY II-C-R	ELIM EXT PAV MRK & MRKS (4")	DEAD END ROADWAY BARRICADE (TY III)
STA TO STA	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	LF	LF
BEGINNING TO STA. 29+00.00	0	926	3,735	906	0	191	4,090	0	10	26	92	740	0
STA. 29+00.00 TO STA. 52+00.00	0	1,150	4,600	0	0	0	4,600	0	0	0	58	0	0
STA. 52+00.00 TO STA. 75+00.00	0	1,105	4,450	680	0	0	4,285	0	0	0	89	0	72
STA. 75+00.00 TO END	15	387	1,550	150	0	0	1,410	15	0	0	27	0	0
PROJECT TOTALS	15	3,568	14,335	1,736	0	191	14,385	15	10	26	265	740	72

WILLIAMSON COUNTY
1848

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Texas PE Firm Reg. #F-929

REV	DESCRIPTION	BY	DATE
1	ADDENDUM #1		12-10-10
2	UPDATED QUANTITIES		4/2011
3	INTER. MODIFICATION		7/2011
4	MEDIAN MODIFICATION		11/2011

O'CONNOR DRIVE EXTENSION

SUMMARY OF ROADWAY QUANTITIES

Klotz Project No	0510.003
CSJ#	0914-05-139
Client I.D.	O'CONNOR DRIVE EXTENSION
Drawn By	Checked By
Scale AS SHOWN	Sheet 1 of 3
Date	Sheet No. 16

DRAINAGE QUANTITIES

	SUMMARY OF DRAINAGE QUANTITIES										
	402	432	432	462	462	464	467	467	467	467	467
	2001	2002	2051	2007	2012	2005	2042	2043	2051	2115	2124
	TRENCH EXCAVATION PROTECTION	RIPRAP (CONC) (5 IN)	RIPRAP (STONE PROTECTION) (DRY)	CONC BOX CULV (5 FT X 3 FT)	CONC BOX CULV (6 FT X 5 FT)	RC PIPE (CL III) (24 IN)	SET (TY I) (S= 5 FT) (HW= 7 FT) (3:1) (C)	SET (TY I) (S= 5 FT) (HW= 8 FT) (3:1) (C)	SET (TY I) (S= 6 FT) (HW= 7 FT) (3:1) (C)	SET (TY I) (S= 5 FT) (HW= 5 FT) (4:1) (C)	SET (TY I) (S= 6 FT) (HW= 8 FT) (4:1) (C)
PROJECT STATION	LF	CY	CY	LF	LF	LF	EA	EA	EA	EA	EA
21+40.54	360	0	47	0	360	172*	0	0	1	0	1
42+64.95	134	18	11	134	0	0	1	1	0	0	0
58+14.00	240	18	46	240	0	0	0	0	0	2	0
PROJECT TOTALS	734	36	104	374	360	0	1	1	1	2	1

* LOCATED AT INTERSECTION RM 620 AND O'CONNOR DR. (2)

EROSION CONTROL QUANTITIES

	SUMMARY OF EROSION CONTROL QUANTITIES													
	103	150	160	164	164	164	166	168	506	506	506	506	506	506
	2001	2002	2003	2009	2011	2035	2002 *	2001	2001	2002	2003	2009	2016	2019
	DISPOSAL OF WATER WELLS	BLADING	FURNISHING AND PLACING TOPSOIL (4")	BROADCAST SEED (TEMP) (WARM)	BROADCAST SEED (TEMP) (COOL)	DRILL SEEDING (PERM) (RURAL) (CLAY)	FERTILIZER *	VEGETATIVE * WATERING	ROCK FILTER DAMS (INSTALL) (TY 1)	ROCK FILTER DAMS (INSTALL) (TY 2)	ROCK FILTER DAMS (INSTALL) (TY 3)	ROCK FILTER DAMS (REMOVE)	CONSTRUCTION EXITS (INSTALL) (TY 1)	CONSTRUCTION EXITS (REMOVE)
STA TO STA	EA	HR	SY	SY	SY	SY	TON	MG	LF	LF	LF	LF	SY	SY
BEGINNING TO STA. 29+00.00	0	30	24,852	12,426	12,426	24,852	1.55	746	20	40	40	100	401	401
STA. 29+00.00 TO STA. 52+00.00	1	39	32,487	16,244	16,244	32,487	2.03	975	0	60	20	80	0	0
STA. 52+00.00 TO STA. 75+00.00	0	25	21,111	10,556	10,556	21,111	1.32	633	0	80	70	150	0	0
STA. 75+00.00 TO END	0	7	5,627	2,814	2,814	5,627	0.35	169	20	20	0	40	0	0
PROJECT TOTALS	1	100	84,077	42,039	42,039	84,077	5.25	2,522	40	200	130	370	401	401

* - FOR CONTRACTOR'S INFORMATION ONLY.

EROSION CONTROL QUANTITIES (CONT.)

	SUMMARY OF EROSION CONTROL QUANTITIES			
	506	506	1018	XXXX
	2026	2034	2001	XXXX
	FRNT END LOADER WORK (ERSN & SEDM CONT)	TEMP SEDMT CONT FENCE	TREE PROTECTION	HAZARDOUS MATERIAL TRAPS
STA TO STA	HR	LF	EA	EA
BEGINNING TO STA. 29+00.00	5	2,912	7	0
STA. 29+00.00 TO STA. 52+00.00	6	2,370	0	0
STA. 52+00.00 TO STA. 75+00.00	4	2,380	12	1
STA. 75+00.00 TO END	1	1,708	14	2
PROJECT TOTALS	16	9,370	33	3

BRIDGE QUANTITIES

	SUMMARY OF BRIDGE QUANTITIES													
	416	416	416	420	420	420	420	422	425	425	426	428	432	450	454
	2001	2004	2007	2003	2019	2033	2051	2001	2067	2069	2001	2001	2066	2013	2001
	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	DRILL SHAFT (54 IN)	CL C CONC (ABUT)	CL C CONC (CAP)	CL S CONC (APPR SLAB)	CL C CONC (COLUMN)	REINF CONC SLAB	CONC GIRDER (TX46)	CONC GIRDER (TX62)	POST-TENSIONING (GROUTED)	CONC SURF TREAT (CLASS I)	RIPRAP (CONC) (CL B)	RAIL (TY	SEALED EXPANSION JOINT (4 IN) (SEJ-A)
BRIDGE	LF	LF	LF	CY	CY	CY	CY	SF	LF	LF	MKF	SY	CY	LF	LF
LAKE CREEK	60	1,555	279	133.0	732.0	351.0	160.5	70,003	7,680.14	1,223.23	454.88	7,778	312	1,889	645
PROJECT TOTALS	60	1,555	279	133.0	732.0	351.0	160.5	70,003	7,680.14	1,223.23	454.88	7,778	312	1,889	645

WILLIAMSON COUNTY 1848

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Texas PE Firm Reg. #F-929

REV	DESCRIPTION	BY	DATE
1	UPDATED QUANTITIES		4/2011
2	INTER. MODIFICATION		7/2011
3	MEDIAN MODIFICATION		11/2011

O'CONNOR DRIVE EXTENSION

SUMMARY OF ROADWAY QUANTITIES

Klotz Project No. 0510.003
CSJ# 0914-05-139
Client I.D. O'CONNOR DRIVE EXTENSION
Drawn By
Checked By
Scale AS SHOWN
Date
Sheet 2 of 3
Sheet No. 17

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SUMMARY OF SMALL SIGNS

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

Post Type: FRP = Fiberglass; TWT = Thin-Wall; 10BWG = 10 BWG; S80 = Sch 80
Posts (1 or 2)
Anchor Type: UA=Univer-Conc; UB=Univer-Bolt; SA=Slip-Conc; SB=Slip-Bolt; WA=Wedge-Conc
Mounting Designation: P = Prefab. "Plain"; T = Prefab. "T"; U = Prefab. "U"; 1EXT or 2EXT = # of Ext.; BM = Extruded Wind Beam; WC = 1.12 #/ft Wing Chan.; EXAL = Extruded Alum. signs

PLAN SHEET NO.	SIGN NO.	SIGN NOMENCLATURE	SIGN TEXT	DIMENSIONS	BACKGROUND SHEETING	ALUMINUM TYPE A	ALUMINUM TYPE G	SM RD SGN ASSM TY
130	1	OMIT						
	2	R3-8 VAR	↰ONLY ↑ONLY ↑ONLY ↱ONLY	63 X 30	C	X		10BWG(1)SA(T)
	3	M3-4	WEST	24 X 12	C	X		10BWG(1)SA(U)
		M1-6R	RANCH ROAD 620	24 X 24	C	X		
		M6-1L	←	21 X 15	C	X		
		M3-2	EAST	24 X 12	C	X		
		M1-6R	RANCH ROAD 620	24 X 24	C	X		
		M6-1R	→	21 X 15	C	X		
	4	R3-8 VAR	↰ONLY ↑ONLY ↑ONLY ↱ONLY	63 X 30	C	X		10BWG(1)SA(T)
	5	R2-1	SPEED LIMIT 40	24 X 30	C	X		10BWG(1)SA(P)
	6	R3-7L	LEFT LANE MUST TURN LEFT	30 X 30	C	X		10BWG(1)SA(P)
	7	R3-7R	RIGHT LANE MUST TURN RIGHT	30 X 30	C	X		10BWG(1)SA(P)
	8	W1-2R	↱	30 X 30	C	X		10BWG(1)SA(P)
	9	M2-1	JCT	21 X 15	C	X		10BWG(1)SA(P)
		M1-6R	RANCH ROAD 620	24 X 24	C	X		
131	10	W1-2L	↰	30 X 30	C	X		10BWG(1)SA(P)
132	11	W14-1T	ROAD ENDS	36 X 36	C	X		10BWG(1)SA(P)
		W16-2(1000)	1000 FT	24 X 18	C	X		
	12	W1-5R	⟆	30 X 30	C	X		10BWG(1)SA(P)
	13	W14-1T	ROAD ENDS	36 X 36	C	X		10BWG(1)SA(P)
		W16-2(500)	500 FT	24 X 18	C	X		
	14	D1-1	→ GREAT OAKS DRIVE	73 X 12	C	X		10BWG(1)SA(T)
	15	R3-5L	↰ ONLY	24 X 30	C	X		10BWG(1)SA(P)
		R4-7	MEDIAN VEER RIGHT	24 X 30	C	X		
	16	R3-5L	↰ ONLY	30 X 36	C	X		10BWG(1)SA(P)
		R4-7	MEDIAN VEER RIGHT	24 X 30	C	X		
	17	W19-2	WATCH FOR ICE ON BRIDGE	36 X 36	C	X		10BWG(1)SA(P)
	18	D1-1	← GREAT OAKS DRIVE	73 X 12	C	X		10BWG(1)SA(T)
133	19	W1-5L	⟅	30 X 30	C	X		10BWG(1)SA(P)
	20	W19-2	WATCH FOR ICE ON BRIDGE	36 X 36	C	X		10BWG(1)SA(P)

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Texas PE Firm Reg. #F-929

REV	DESCRIPTION	BY	DATE
1	MEDIAN MODIFICATION	JES	11/2011

ALUMINUM SIGN BLANKS (TYPE A)

Square Ft.	Min. Thickness
Less than 7.5	0.080"
7.5 to 15	0.100"
Greater than 15	0.125"

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

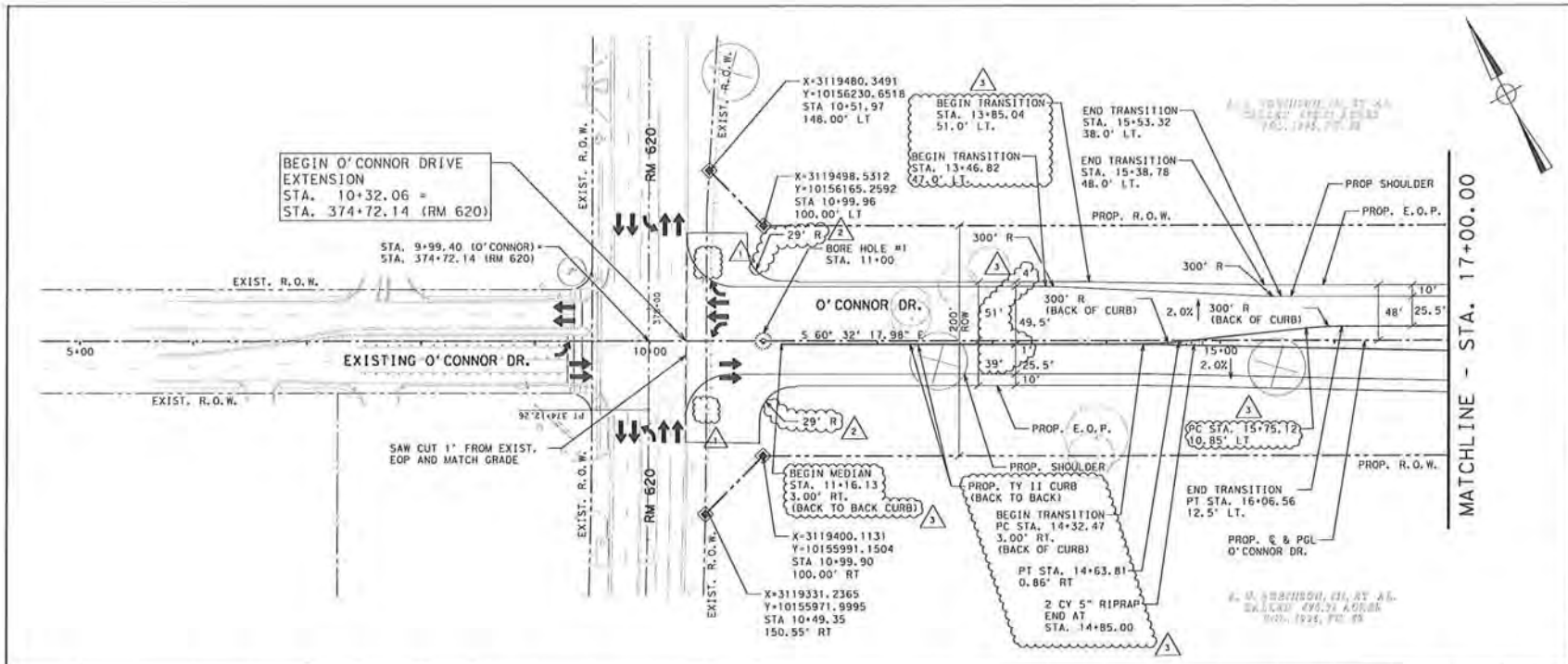
Reflective sheeting will be designated as:

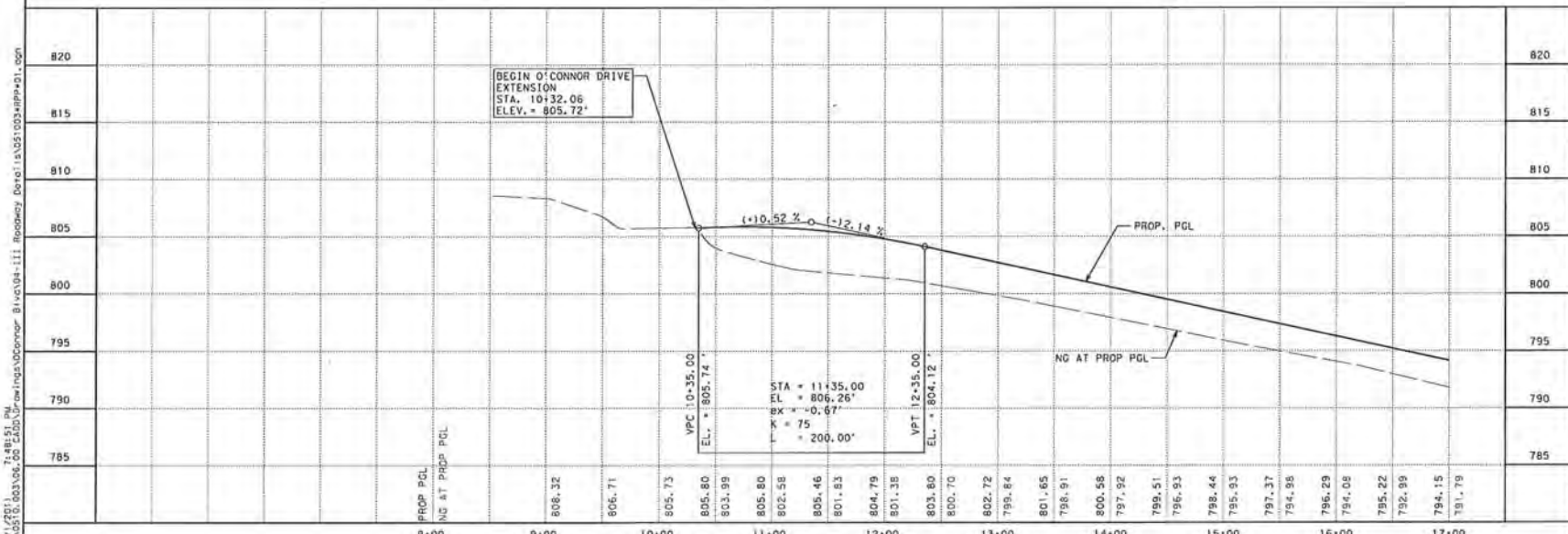
Type C - High Intensity - C
Type D - Prismatic - D
Type E - Flourescent Prismatic - E

STATE OF TEXAS — JAMES E. SCHROEDER — 97266 — LICENSED PROFESSIONAL ENGINEER — 12/2/11

SUMMARY OF SMALL SIGNS

© TxDOT May 1987
DN: WT — CK: BAS — DW: FDN — CK: CAL
REVISIONS: 11-93, 8-95, 1-02, 7-02, 2-07
DIST: 6 — SHEET: 19
18





WILLIAMSON COUNTY
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Texas PE Firm Reg. #F-929

LEGEND

- MEDIAN PAVERS
- 5" CONCRETE RIP-RAP
- PROP WIDENING BY OTHERS
- PROP. R.O.W.
- EXIST. R.O.W.
- PROPERTY LINE
- KARST FEATURE
- TREE
- R.O.W. MARKER
- BORE HOLE

NOTE:
1. DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION OF ALL EXISTING UTILITIES BEFORE BEGINNINGANY TYPE OF WORK.

SCALE: 1" = 100' (H)
SCALE: 1" = 10' (V)
50 0 50

REV	DESCRIPTION	BY	DATE
1	SIGNAL MODIFICATION	JES	4/2011
2	INTER. MODIFICATION	JES	7/2011
3	MEDIAN MODIFICATION	JES	11/2011

STATE OF TEXAS
DAVID WILSON JONES JR.
106091
LICENSED
PROFESSIONAL ENGINEER
12/1/11

O'CONNOR DRIVE EXTENSION

ROADWAY PLAN AND PROFILE

BEGINNING TO STA. 17+00.00

Klotz Project No. 0510.003	
CSJ# 0914-05-139	
Client I.D. O'CONNOR DRIVE EXTENSION	
Drawn By APM	Checked By MWM
Scale AS SHOWN	Sheet 1 of 7
Date 12/1/2011	Sheet No. 35

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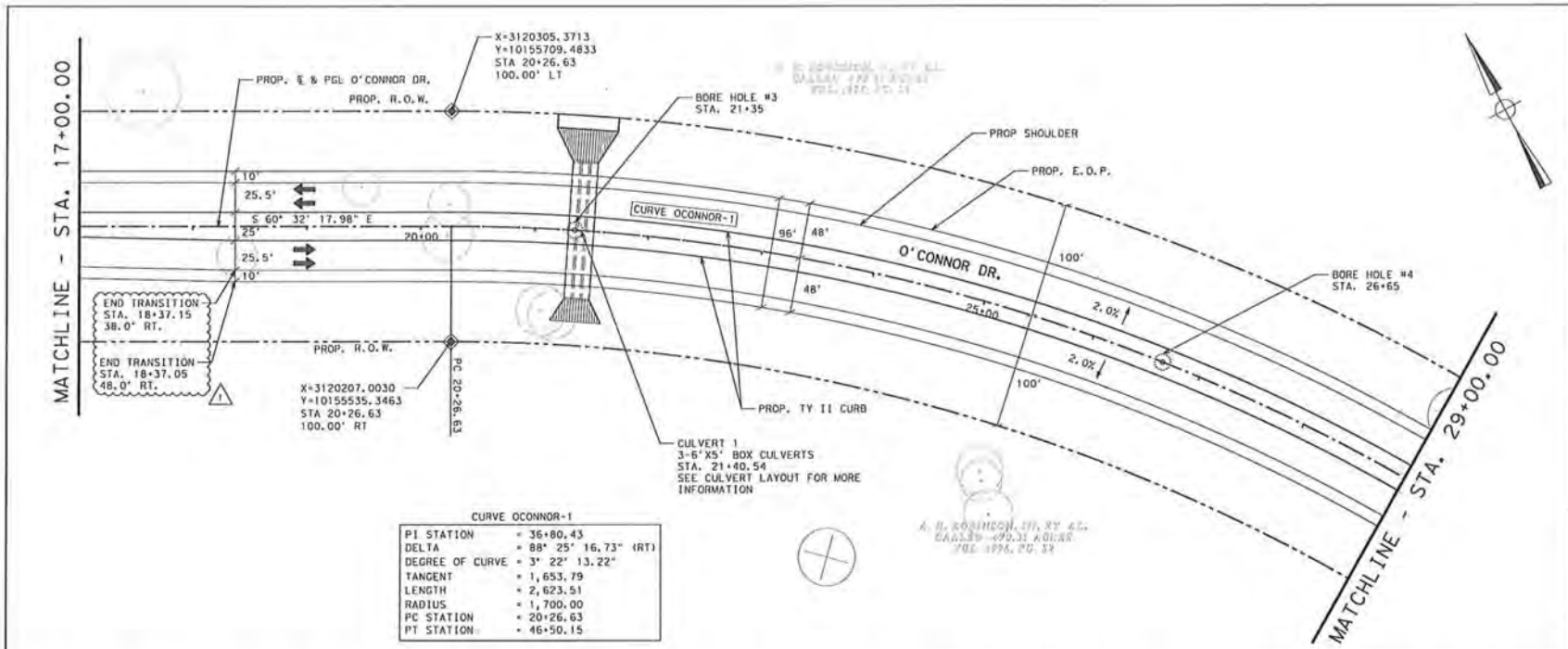
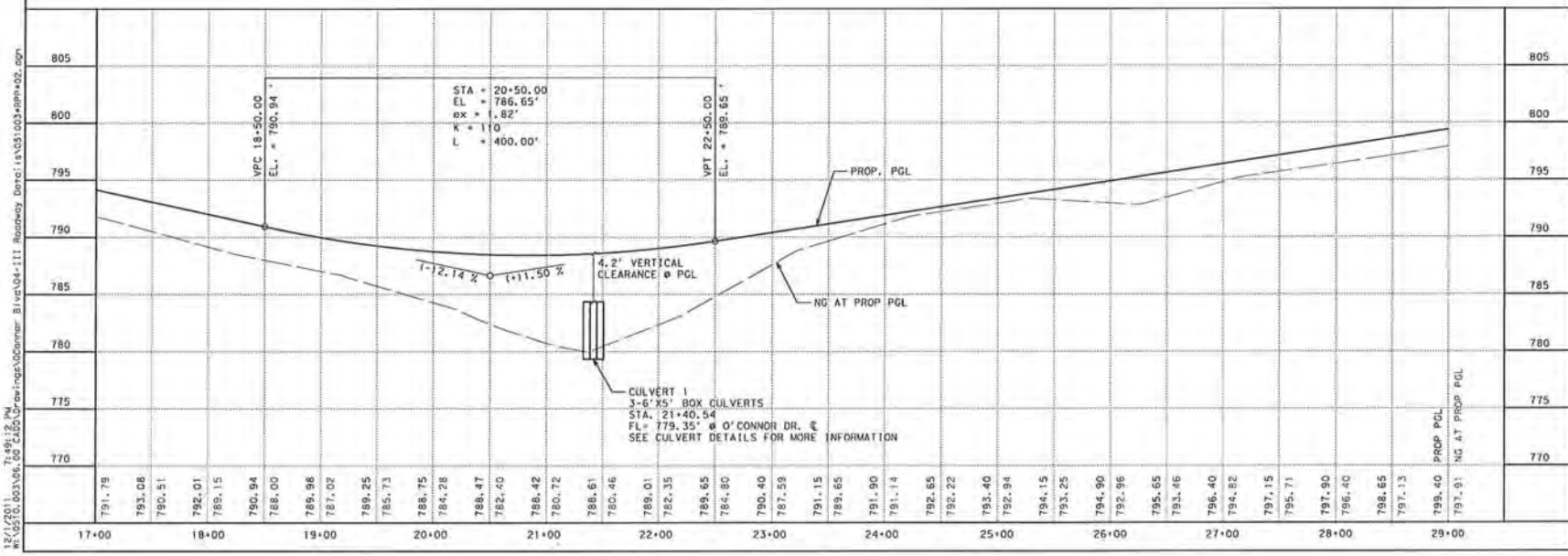


CURVE OCONNOR-1

PI STATION	= 36+80.43
DELTA	= 88° 25' 16.73" (RT)
DEGREE OF CURVE	= 3° 22' 13.22"
TANGENT	= 1,653.79
LENGTH	= 2,623.51
RADIUS	= 1,700.00
PC STATION	= 20+26.63
PT STATION	= 46+50.15



WILLIAMSON COUNTY
1848

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Phone: (512) 328-5771 Fax: (512) 328-5776
Texas PE Firm Reg. #7-929

LEGEND

- MEDIAN PAVERS
- 5" CONCRETE RIP-RAP
- PROP WIDENING BY OTHERS
- PROP. R.O.W.
- EXIST. R.O.W.
- PROPERTY LINE
- KARST FEATURE
- TREE
- R.O.W. MARKER
- BORE HOLE

NOTE:
1. DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION OF ALL EXISTING UTILITIES BEFORE BEGINNINGANY TYPE OF WORK.

SCALE: 1" = 100' (H)
SCALE: 1" = 10' (V)
50 0 50

REV	DESCRIPTION	BY	DATE
1	MEDIAN MODIFICATION	JES	11/2011

STATE OF TEXAS
DAVID WILSON JONES JR.
106091
LICENSED
PROFESSIONAL ENGINEER

O'CONNOR DRIVE EXTENSION

ROADWAY PLAN AND PROFILE

STA 17+00.00 TO STA. 29+00.00

Klotz Project No.	0510.003
CSJ#	0914-05-139
Client J.O.	O'CONNOR DRIVE EXTENSION
Drawn By	AFM
Checked By	MWM
Scale	AS SHOWN
Sheet	2 of 7
Sheet No.	36
Date	12/1/2011

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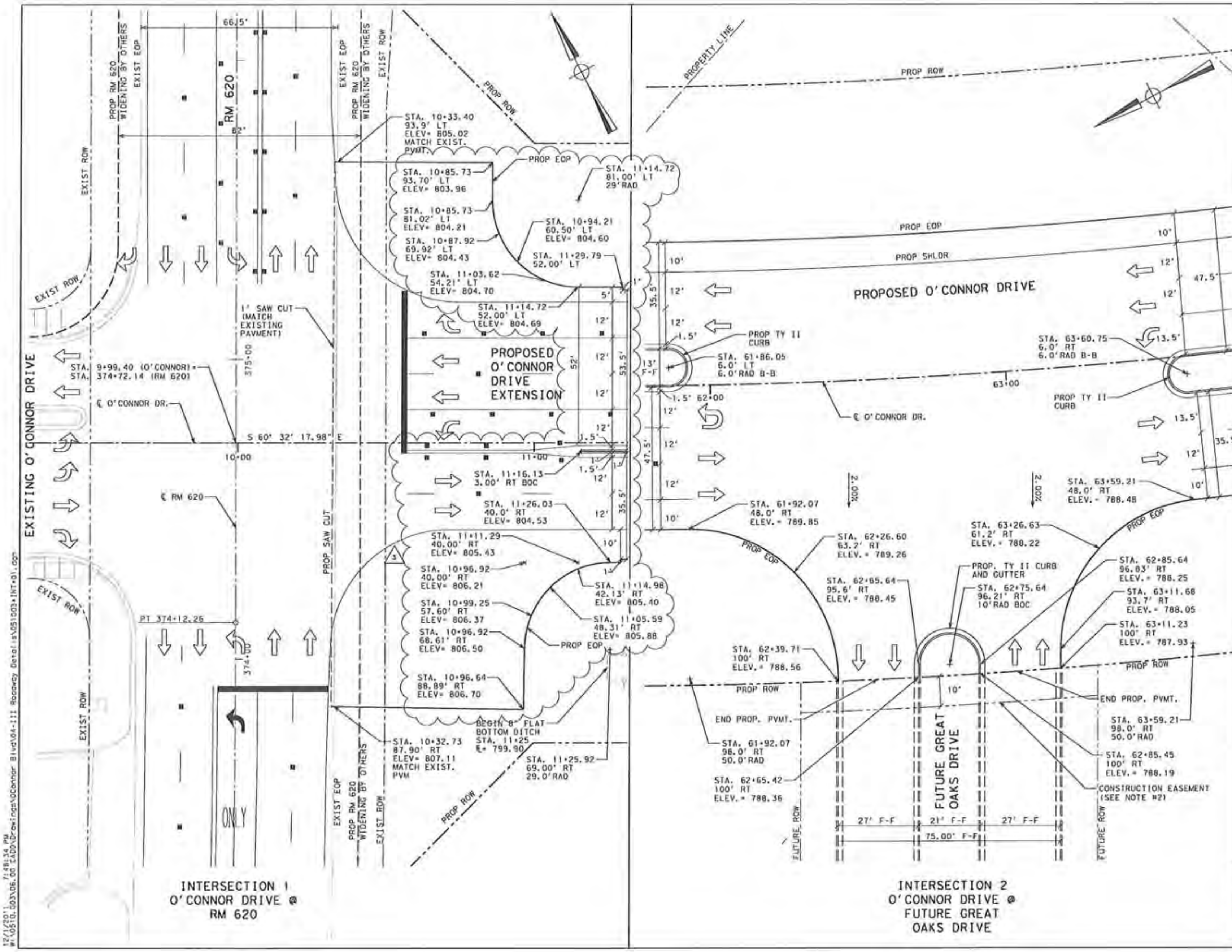

WILLIAMSON COUNTY 1848

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Phone: (512) 328-5771 Fax: (512) 328-5774
Texas PE Firm Reg. #F-929

LEGEND

- PROP WIDENING BY OTHERS
- PROP ROW
- EXIST ROW
- PROPERTY LINE

NOTE:
1. DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. EASEMENT WILL ONLY BE NEEDED IF GREAT OAKS DRIVE IS CONSTRUCTED TO THE R.O.W. OF O'CONNOR.

SCALE: 1" = 30'

REV	DESCRIPTION	BY	DATE
1	INTER. MODIFICATION	JES	7/2011
2	MEDIAN MODIFICATION	JES	7/2011
3	MEDIAN MODIFICATION	JES	11/2011

STATE OF TEXAS — DAVID WILSON JONES JR. — 106091 — LICENSED PROFESSIONAL ENGINEER — 12-2-11

O'CONNOR DRIVE EXTENSION

INTERSECTION LAYOUTS

RM 620 & GREAT OAKS DRIVE

Klotz Project No. 0510.003
CSJ# 0914-05-139
Client I.D. O'CONNOR DRIVE EXTENSION
Drawn By APM | Checked By MMM
Scale AS SHOWN | Sheet 1 of 1 | Sheet No. 42
Date 12/1/2011

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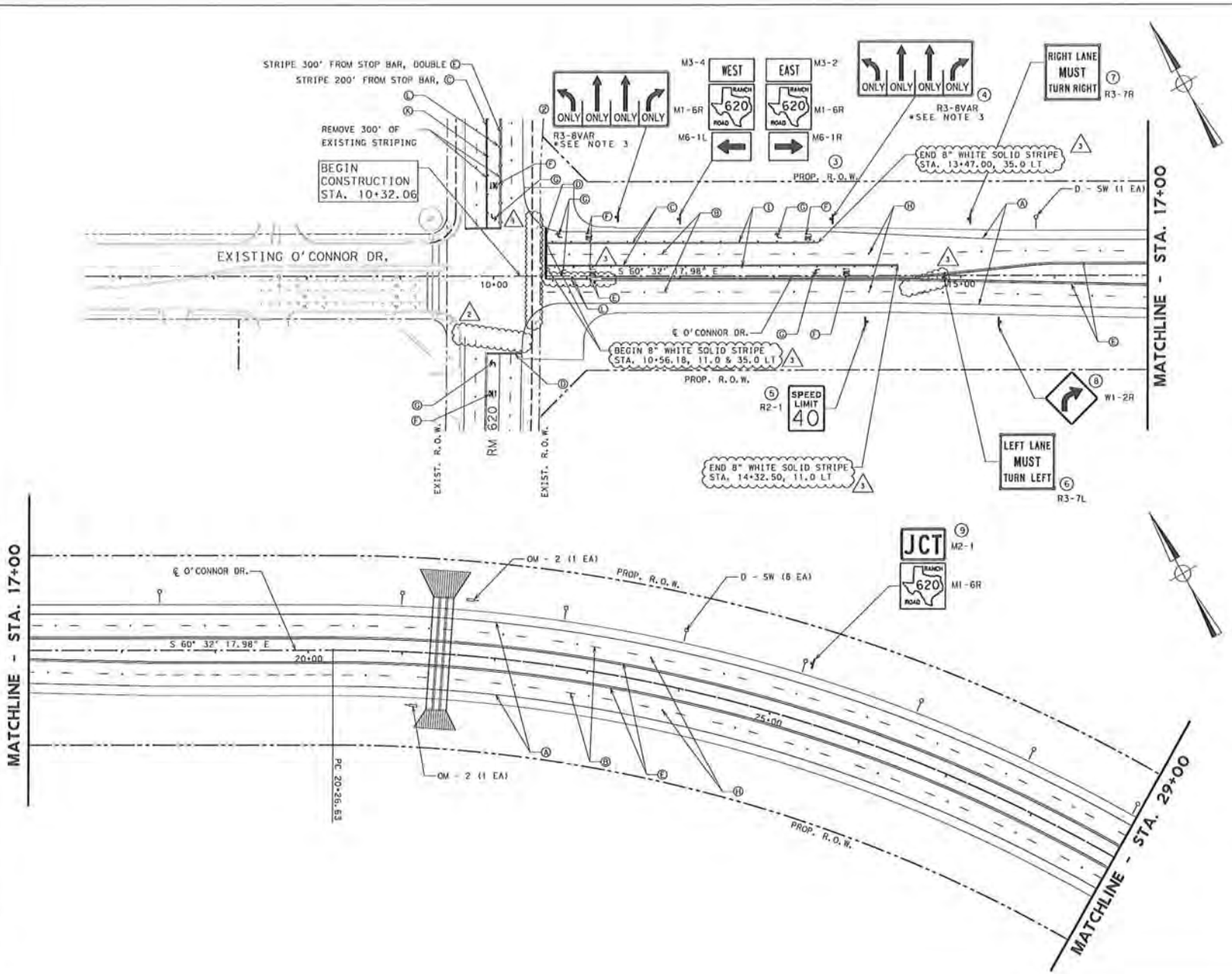

WILLIAMSON COUNTY
1848

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AUSTIN, TX 78746
Phone: (512) 328-5371 Fax: (512) 328-5774
Texas PE Firm Reg. #F-529

LEGEND

- (A) REFL PAV MRK (W) 4" (SLD)
- (B) REFL PAV MRK (W) 4" (BRK)
- (C) REFL PAV MRK (W) 8" (SLD)
- (D) REFL PAV MRK (W) 24" (SLD)
- (E) REFL PAV MRK (Y) 4" (SLD)
- (F) REFL PAV MRK (W) (WORD)
- (G) REFL PAV MRK (W) (ARROW)
- (H) REFL PAV MRKR TY II-C-R (SPACED 80' APART)
- (I) REFL PAV MRKR TY II-C-R (SPACED 20' APART)
- (J) REFL PAV MRK (W) 12" (SLD)
- (K) REFL PAV MRKR TY I-C (SPACED 20' APART)
- (L) REFL PAV MRKR TY II-A-A (SPACED 20' APART)

- PROPOSED SIGN
- D - SW
- OM - 2Z
- * TY C REFL (BRIDGE RAILS)

NOTES:

1. ALL SIGNING, STRIPING AND DELINEATION SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. ALL SIGNS SHALL BE PLACED PER SMD(GEN)-02.
3. SEE SIGN DETAIL SHEET FOR DIMENSIONS.

SCALE: 1"=100'
0 50 100

REV	DESCRIPTION	BY	DATE
1	SIGNAL MODIFICATION	JES	4/2011
2	INTER. MODIFICATION	JES	7/2011
3	MEDIAN MODIFICATION	JES	11/2011

JAMES E. SCHROTTEGER 97266 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
12/1/11

O'CONNOR DRIVE EXTENSION

SIGNING AND STRIPING PLAN

BEGINNING TO STA. 29+00.00

Klotz Project No. 0510.003			
CSJ# 0914-05-139			
Street I.D. O'CONNOR DRIVE EXTENSION			
Drawn By JES	Checked By JKO		
Scale AS SHOWN	Sheet 1 of 8	Sheet No. 133	
Date 12/1/2011			

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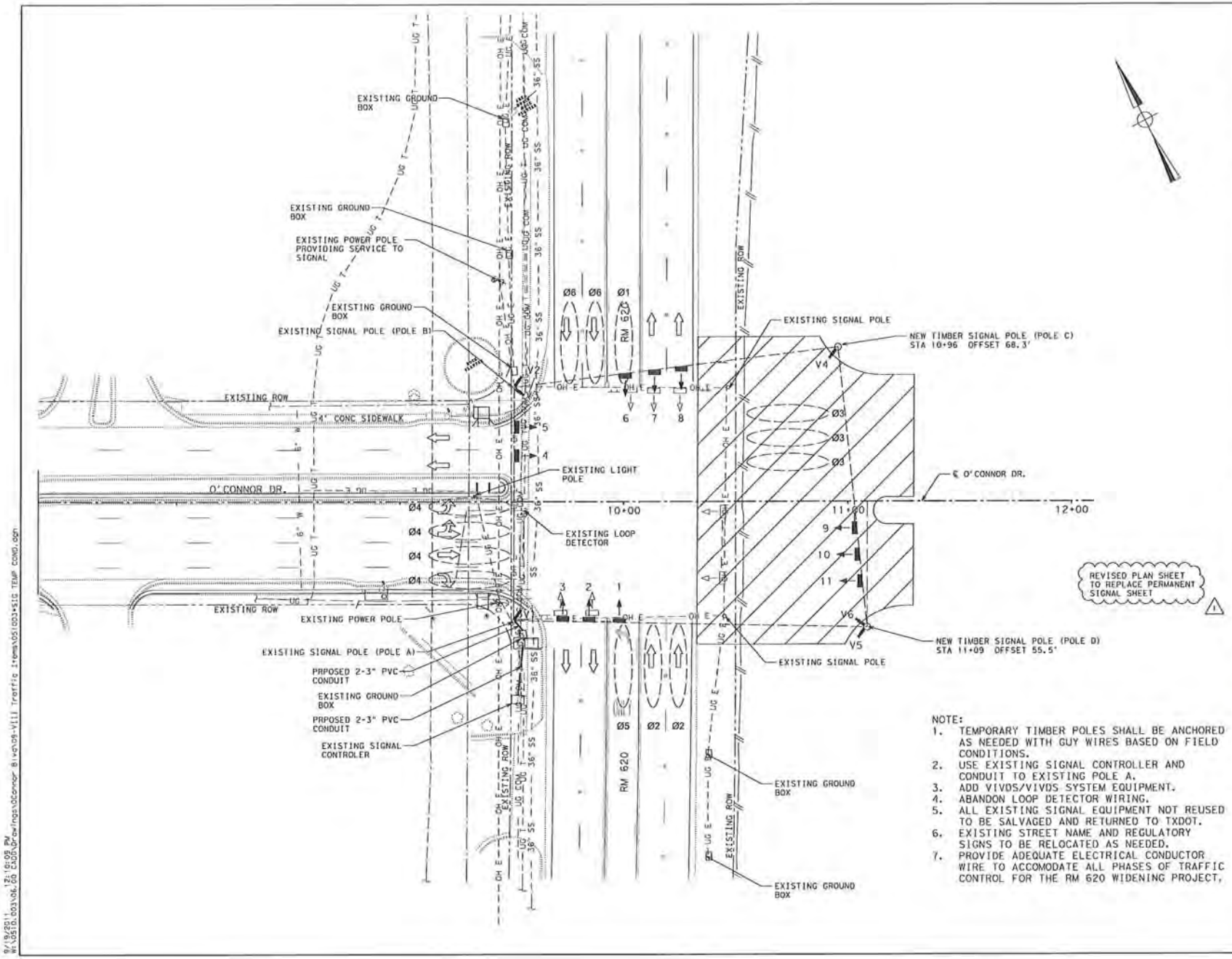

NOTE:
1. TEMPORARY TIMBER POLES SHALL BE ANCHORED AS NEEDED WITH GUY WIRES BASED ON FIELD CONDITIONS.
2. USE EXISTING SIGNAL CONTROLLER AND CONDUIT TO EXISTING POLE A.
3. ADD VIVDS/VIVDS SYSTEM EQUIPMENT.
4. ABANDON LOOP DETECTOR WIRING.
5. ALL EXISTING SIGNAL EQUIPMENT NOT REUSED TO BE SALVAGED AND RETURNED TO TXDOT.
6. EXISTING STREET NAME AND REGULATORY SIGNS TO BE RELOCATED AS NEEDED.
7. PROVIDE ADEQUATE ELECTRICAL CONDUCTOR WIRE TO ACCOMODATE ALL PHASES OF TRAFFIC CONTROL FOR THE RM 620 WIDENING PROJECT.

WILLIAMSON COUNTY
1848

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BUILDING V, SUITE 220
AUSTIN, TX 78746
Phone: (512) 328-5771 Fax: (512) 328-5778
Texas PE Firm Reg. #F-929

LEGEND

- EXSITING SIGNAL POLE
- EXISTING SIGNAL HEAD
- EXISTING GROUND MOUNTED CONTROLLER CABINET
- EXISTING ELECTRICAL SERVICE
- EXISTING GROUND BOX
- EXISTING OVERHEAD SIGN
- DETECTION ZONE
- DIRECTION OF TRAFFIC FLOW
- EXISTING ROW
- TEMPORARY SIGNAL HEAD
- FUTURE INTERSECTION PAVEMENT

NOTE: SIGNAL POLES TO BE RETURNED TO TXDOT.

SCALE: 1" = 40'
20 0 20

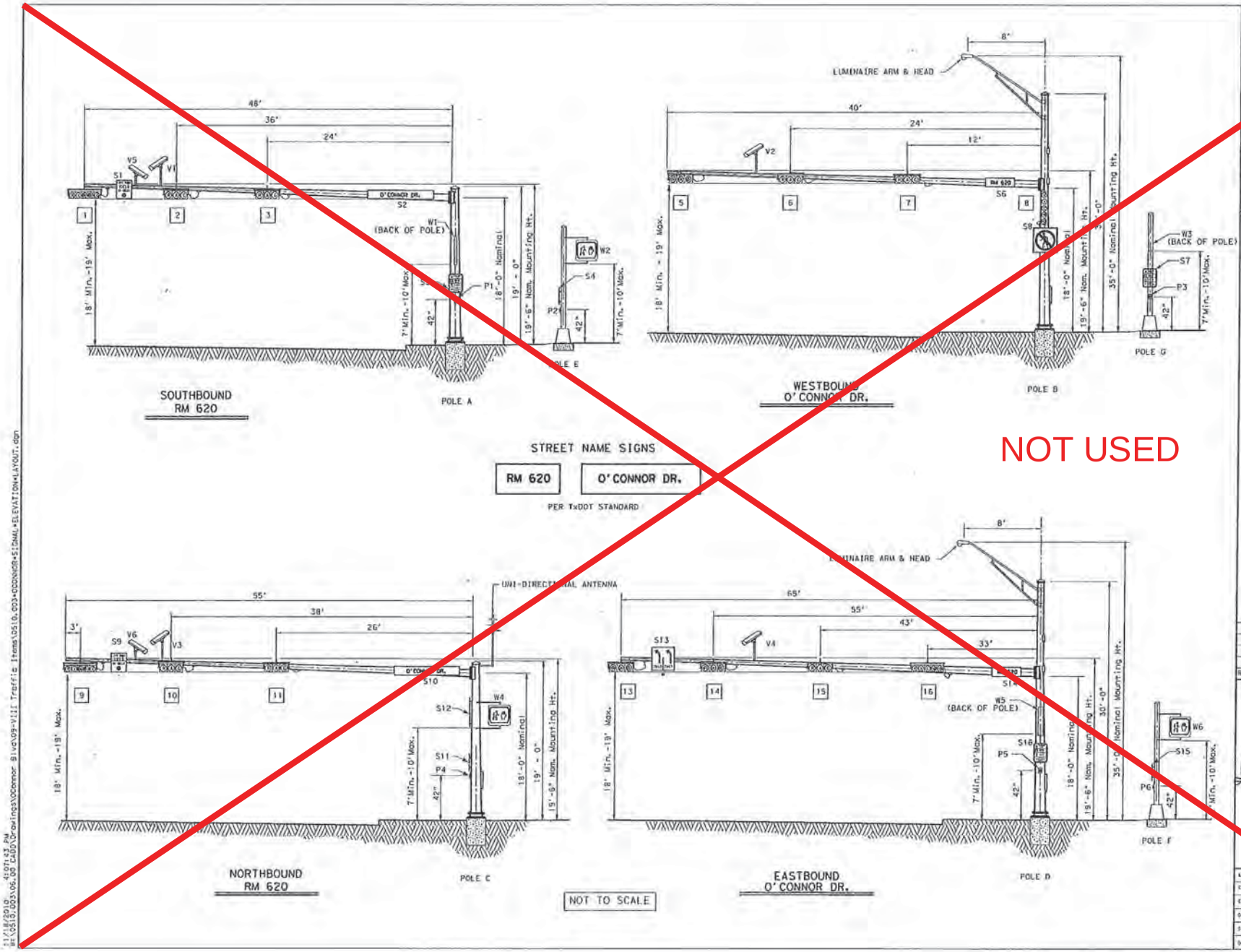
REV	DESCRIPTION	BY	DATE
1	TEMP SIGNAL	JES	7/2011

STATE OF TEXAS
JAMES C. SCHMOTTEGER
97266
LICENSED
PROFESSIONAL ENGINEER
9/19/11

O'CONNOR DRIVE EXTENSION

TEMPORARY SIGNAL LAYOUT

Klotz Project No. 0510.003	
CSJ# 0914-05-139	
Client J.O. O'CONNOR DRIVE EXTENSION	
Drawn By: JES	Checked By: JKO
Scale: AS SHOWN	Sheet: 1 of 1
Date: 9/19/2011	Sheet No. 157



WILLIAMSON COUNTY
1848

klotz associates
901 SOUTH MOPAC EXPRESSWAY
BUILDING V, SUITE 220
AUSTIN, TX 78746
Phone: (512) 328-5771 Fax: (512) 328-5774
Texas PE Firm Reg. #F-929

REV	DESCRIPTION	BY	DATE

STATE OF TEXAS
JAMES E. SCHNEIDTSEGGER
91266
LICENSED
PROFESSIONAL ENGINEER
11/18/10

O' CONNOR DRIVE EXTENSION
SIGNAL ELEVATION LAYOUT

Klotz Project No.	0903
CSJ#	0914-05-139
Extent I.D.	O' CONNOR DRIVE EXTENSION
Drawn By	JES
Checked By	JMS
Scale:	AS SHOWN
Date	11/18/2010
Sheet	1 of 1
Sheet No.	13

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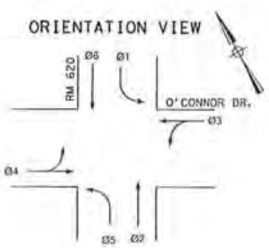
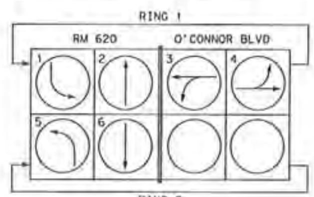
CABLE TERMINATION CHART						
WIRE COLOR	CABLE 1 HEAD 1 TO CNTRL 7 CNDR.	CABLE 2 HEAD 2 & 3 TO CNTRL 5 CNDR.	CABLE 3 HEAD 4 & 5 TO CNTRL 5 CNDR.	CABLE 4 HEAD 9, 10 & 11 TO CNTRL 5 CNDR.	CABLE 5 HEAD 6 TO CNTRL 7 CNDR.	CABLE 6 HEAD 7 & 8 TO CNTRL 5 CNDR.
BLACK	SH 1Y PHASE Ø6	SH 2, 3Y PHASE Ø6	SH 4, 5Y PHASE Ø3	SH 9, 10, 11Y PHASE Ø4	SH 6Y PHASE Ø2	SH 7, 8Y PHASE Ø2
WHITE	SIGNAL COMMON	SIGNAL COMMON	SIGNAL COMMON	SIGNAL COMMON	SIGNAL COMMON	SIGNAL COMMON
RED	SH 1R PHASE Ø6	SH 2, 3 R PHASE Ø6	SH 4, 5 R PHASE Ø3	SH 9, 10, 11R PHASE Ø4	SH 6 R PHASE Ø2	SH 7, 8 R PHASE Ø2
GREEN	SH 1G PHASE Ø6	SH 2, 3 G PHASE Ø6	SH 5 G SH 4 G, G ARW PHASE Ø3	SH 10, 11G SH 9 G, G ARW PHASE Ø4	SH 6 G PHASE Ø2	SH 7, 8 G PHASE Ø2
ORANGE	SH 1Y ARW PHASE Ø1	SPARE	SPARE	SPARE	SH 6 Y ARW PHASE Ø5	SPARE
BLUE	SH 1G ARW PHASE Ø1				SH 6 G ARW PHASE Ø5	
WHITE / BLACK	SPARE				SPARE	

ORIENTATION VIEW



PHASING DIAGRAM



REVISED PLAN SHEET TO REPLACE PERMANENT SIGNAL SHEET

SIGNAL HEADS

3 SECTION SIGNAL W/BACKPLATE
HEADS: 2, 3, 5, 7, 8, 10, 11

5 SECTION SIGNAL W/BACKPLATE
HEADS: 1, 6

4 SECTION SIGNAL W/BACKPLATE
HEADS: 4, 9

WILLIAMSON COUNTY 1848

klotz associates
901 SOUTH MOPAC EXPRESSWAY
BUILDING V, SUITE 220
AUSTIN, TX 78746
Phone: (512) 328-5771 Fax: (512) 328-5774
Texas PE Firm Reg. #F-929

REV	DESCRIPTION	BY	DATE
1	SIGNAL MODIFICATION	JES	4/2011
2	TEMP SIGNAL	JES	7/2011

STATE OF TEXAS
JAMES E. SCHNEROFFEGER
97266
LICENSED PROFESSIONAL ENGINEER

O'CONNOR DRIVE EXTENSION

ELECTRICAL SCHEDULE

Klotz Project No 0510.003
CSJ 0914-05-139
Extent I.D. O'CONNOR DRIVE EXTENSION
Drawn By JBSS
Checked By JMS
Scale AS SHOWN
Date 7/12/2011
Sheet 1 of 1
Sheet No. 159

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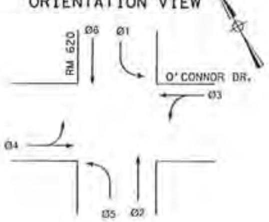
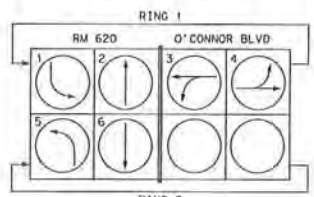
CABLE TERMINATION CHART						
WIRE COLOR	CABLE 1 HEAD 1 TO CNTRL 7 CNDR.	CABLE 2 HEAD 2 & 3 TO CNTRL 5 CNDR.	CABLE 3 HEAD 4 & 5 TO CNTRL 5 CNDR.	CABLE 4 HEAD 9, 10 & 11 TO CNTRL 5 CNDR.	CABLE 5 HEAD 6 TO CNTRL 7 CNDR.	CABLE 6 HEAD 7 & 8 TO CNTRL 5 CNDR.
BLACK	SH 1Y PHASE Ø6	SH 2, 3Y PHASE Ø6	SH 4, 5 Y PHASE Ø3	SH 9, 10, 11 Y PHASE Ø4	SH 6 Y PHASE Ø2	SH 7, 8 Y PHASE Ø2
WHITE	SIGNAL COMMON	SIGNAL COMMON	SIGNAL COMMON	SIGNAL COMMON	SIGNAL COMMON	SIGNAL COMMON
RED	SH 1R PHASE Ø6	SH 2, 3 R PHASE Ø6	SH 4, 5 R PHASE Ø3	SH 9, 10, 11R PHASE Ø4	SH 6 R PHASE Ø2	SH 7, 8 R PHASE Ø2
GREEN	SH 1G PHASE Ø6	SH 2, 3 G PHASE Ø6	SH 5 G SH 4 G, G ARW PHASE Ø3	SH 10, 11 G SH 9 G, G ARW PHASE Ø4	SH 6 G PHASE Ø2	SH 7, 8 G PHASE Ø2
ORANGE	SH 1Y ARW PHASE Ø1	SPARE	SPARE	SPARE	SH 6 Y ARW PHASE Ø5	SPARE
BLUE	SH 1G ARW PHASE Ø1				SH 6 G ARW PHASE Ø5	
WHITE / BLACK	SPARE				SPARE	

ORIENTATION VIEW



PHASING DIAGRAM



REVISED PLAN SHEET
TO REPLACE PERMANENT
SIGNAL SHEET

SIGNAL HEADS

3 SECTION SIGNAL W/BACKPLATE
HEADS: 2, 3, 5, 7, 8, 10, 11

5 SECTION SIGNAL W/BACKPLATE
HEADS: 1, 6

4 SECTION SIGNAL W/BACKPLATE
HEADS: 4, 9

WILLIAMSON COUNTY
1848

klotz associates
901 SOUTH MOPAC EXPRESSWAY
BUILDING V, SUITE 220
AUSTIN, TX 78746
Phone: (512) 328-5771 Fax: (512) 328-5774
Texas PE Firm Reg. #F-929

REV	DESCRIPTION	BY	DATE
1	SIGNAL MODIFICATION	JES	4/2011
2	TEMP SIGNAL	JES	7/2011

STATE OF TEXAS
JAMES E. SCHNEROFFEGER
97266
LICENSED PROFESSIONAL ENGINEER

O'CONNOR DRIVE
EXTENSION

ELECTRICAL SCHEDULE

Klotz Project No. 0510.003
CSJ# 0914-05-139
Extent I.D. O'CONNOR DRIVE EXTENSION
Drawn By JDES Checked By JMS
Scale AS SHOWN Sheet 1 of 1 Sheet No. 159
Date 7/12/2011

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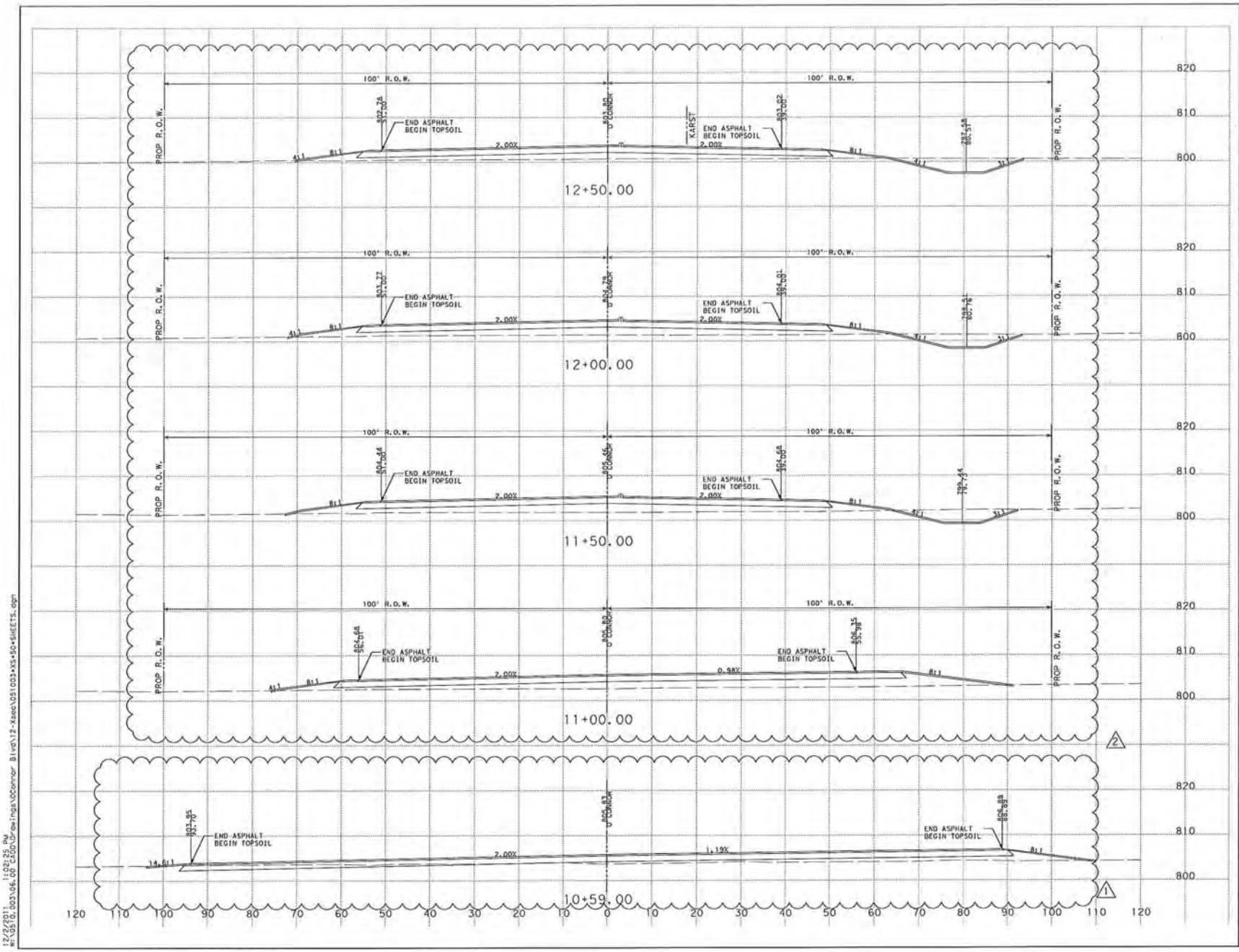

WILLIAMSON COUNTY
1848

klotz associates
901 SOUTH MOPAC EXPRESSWAY
BUILDING V, SUITE 220
AUSTIN, TX 78746
Phone (512) 328-5771 Fax (512) 328-5774

NOTES:

200' R.O.W. WIDTH (TYP) FOR THE FULL LENGTH OF THE PROJECT. O'CONNOR ℄ LOCATED IN CENTER OF 200' R.O.W. CORRIDOR. (TYP)

BEGIN PROJECT
STA. 10+32.06 (OCONNOR)

SCALE: 1" = 20' (H)
SCALE: 1" = 20' (V)
10 0 10

REV	DESCRIPTION	BY	DATE
1	INTER. MODIFICATIONS	JES	7/2011
2	MEDIAN MODIFICATIONS	JES	11/2011

STATE OF TEXAS
DAVID WILSON JONES JR.
106091
LICENSED
PROFESSIONAL ENGINEER
12-20-11

O'CONNOR DRIVE EXTENSION

CROSS SECTIONS

Klotz Project No.	0510.003
CSJ#	0914-05-139
Client I.D.	O'CONNOR DRIVE EXTENSION
Drawn By	
Checked By	
Scale	AS SHOWN
Sheet	1 OF 38
Sheet No.	190
Date	

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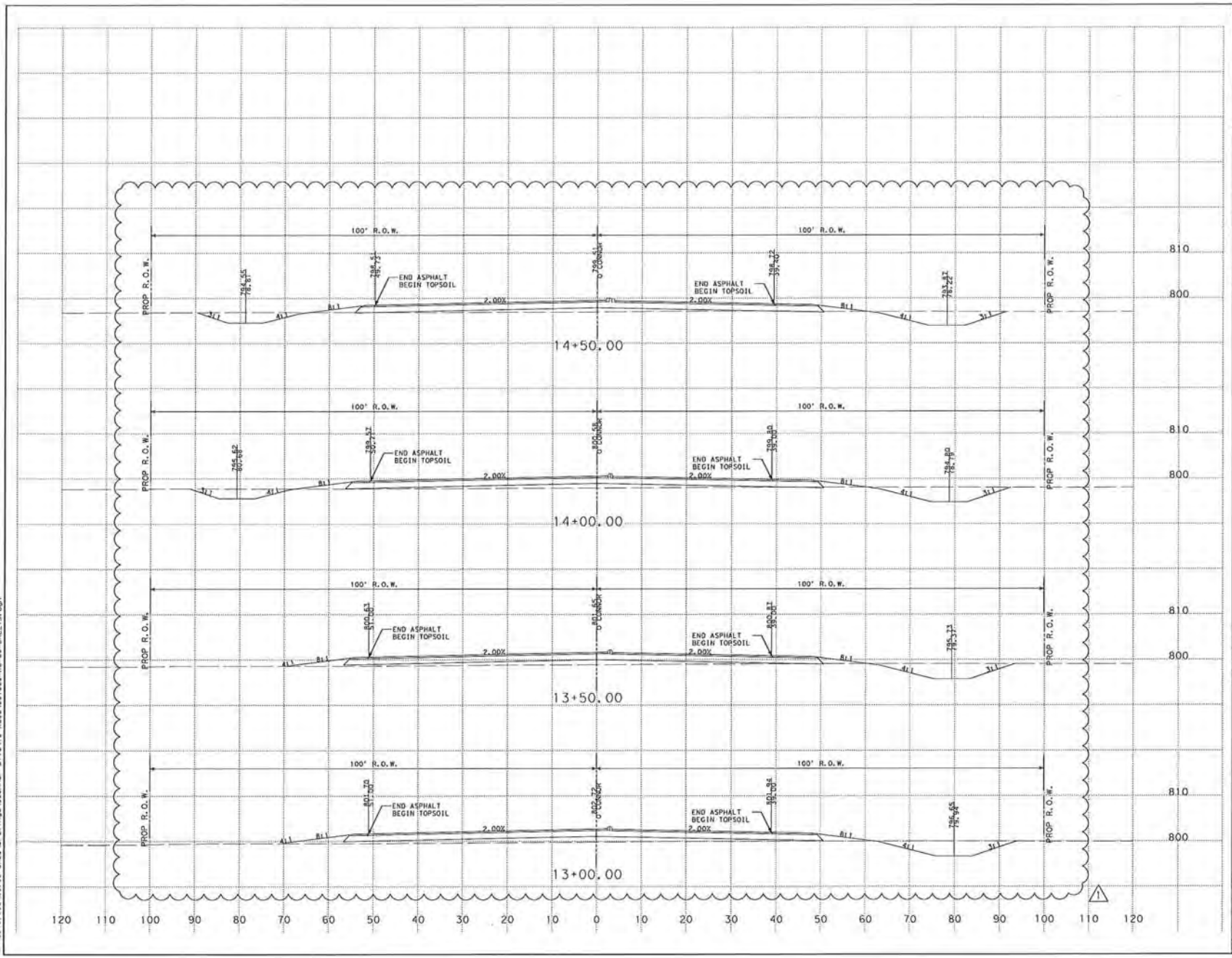

WILLIAMSON COUNTY
1848

klotz associates
901 SOUTH MOPAC EXPRESSWAY
BUILDING V, SUITE 220
AUSTIN, TX 78746
Phone: (512) 328-5771 Fax: (512) 328-5774

NOTES:

200' R.O.W. WIDTH (TYP) FOR THE FULL LENGTH OF THE PROJECT. O'CONNOR ℄ LOCATED IN CENTER OF 200' R.O.W. CORRIDOR. (TYP)

SCALE: 1" = 20' (H)
SCALE: 1" = 20' (V)
10 0 10

REV	DESCRIPTION	BY	DATE
1	MEDIAN MODIFICATIONS	JES	11/2011

STATE OF TEXAS
DAVID WILSON JONES JR.
106091
LICENSED
PROFESSIONAL ENGINEER
12-05-11

O'CONNOR DRIVE EXTENSION

CROSS SECTIONS

Klotz Project No	0510.003
CSJ#	0914-05-139
Client I.D.	O'CONNOR DRIVE EXTENSION
Drawn By	Checked By
Scale AS SHOWN	Sheet 2 of 38
Date	Sheet No. 191

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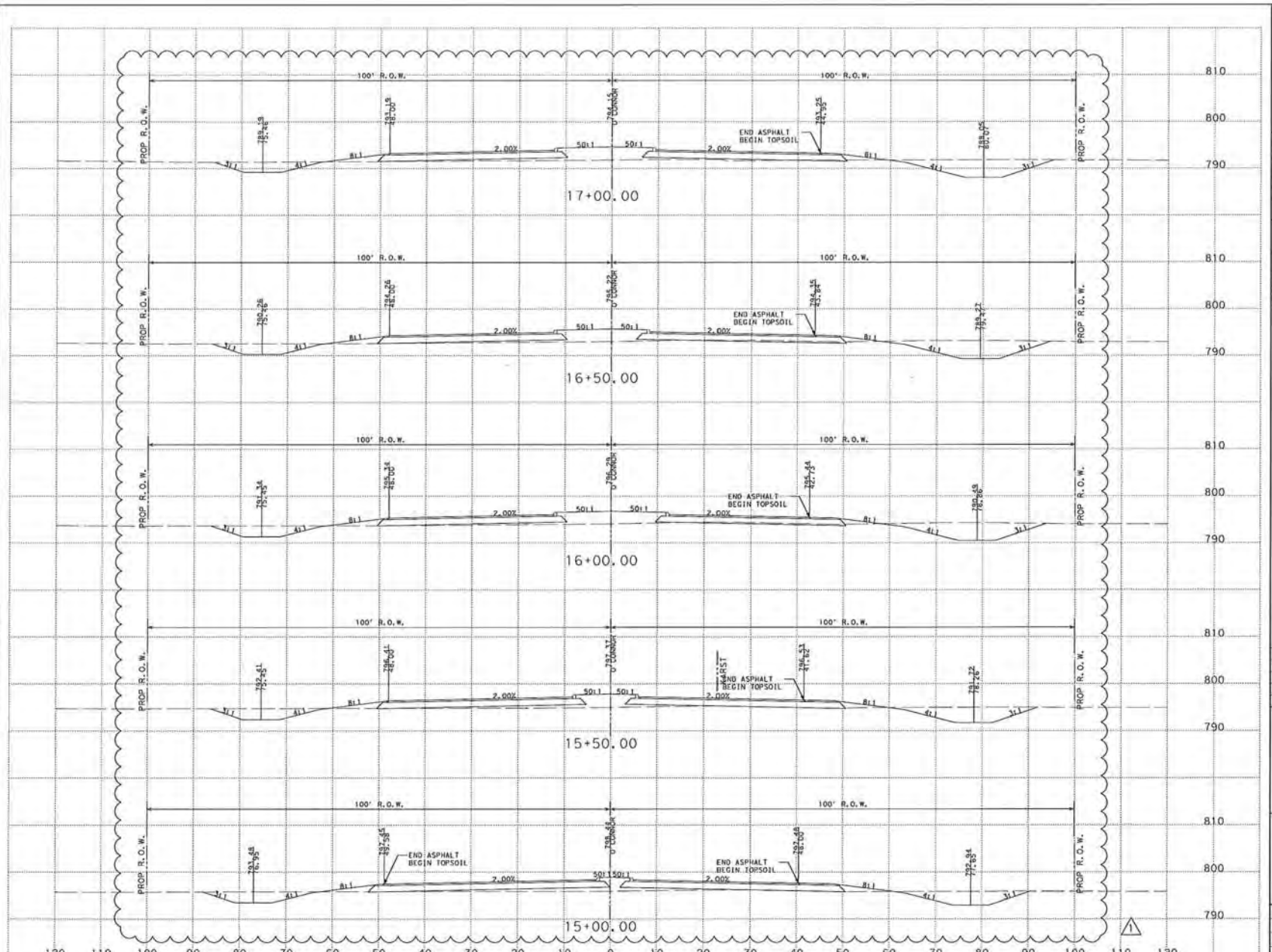

WILLIAMSON COUNTY
1848

klotz associates
901 SOUTH MOPAC EXPRESSWAY
BUILDING V, SUITE 220
AUSTIN, TX 78746
Phone: (512) 328-5771 Fax: (512) 328-5774

NOTES:

200' R.O.W. WIDTH (TYP) FOR THE FULL LENGTH OF THE PROJECT. O'CONNOR & LOCATED IN CENTER OF 200' R.O.W. CORRIDOR. (TYP)

SCALE: 1" = 20' (H)
SCALE: 1" = 20' (V)
10 0 10

REV	DESCRIPTION	BY	DATE
1	MEDIAN MODIFICATIONS	JES	11/2011

STATE OF TEXAS
DAVID WILSON JONES JR.
106091
LICENSED
PROFESSIONAL ENGINEER
12-28-11

O'CONNOR DRIVE EXTENSION

CROSS SECTIONS

Klotz Project No. 0510.003	
CSJ# 0914-05-139	
Client I.D. O'CONNOR DRIVE EXTENSION	
Drawn By	Checked By
Scale AS SHOWN	Sheet 3 OF 38
Date	Sheet No. 192

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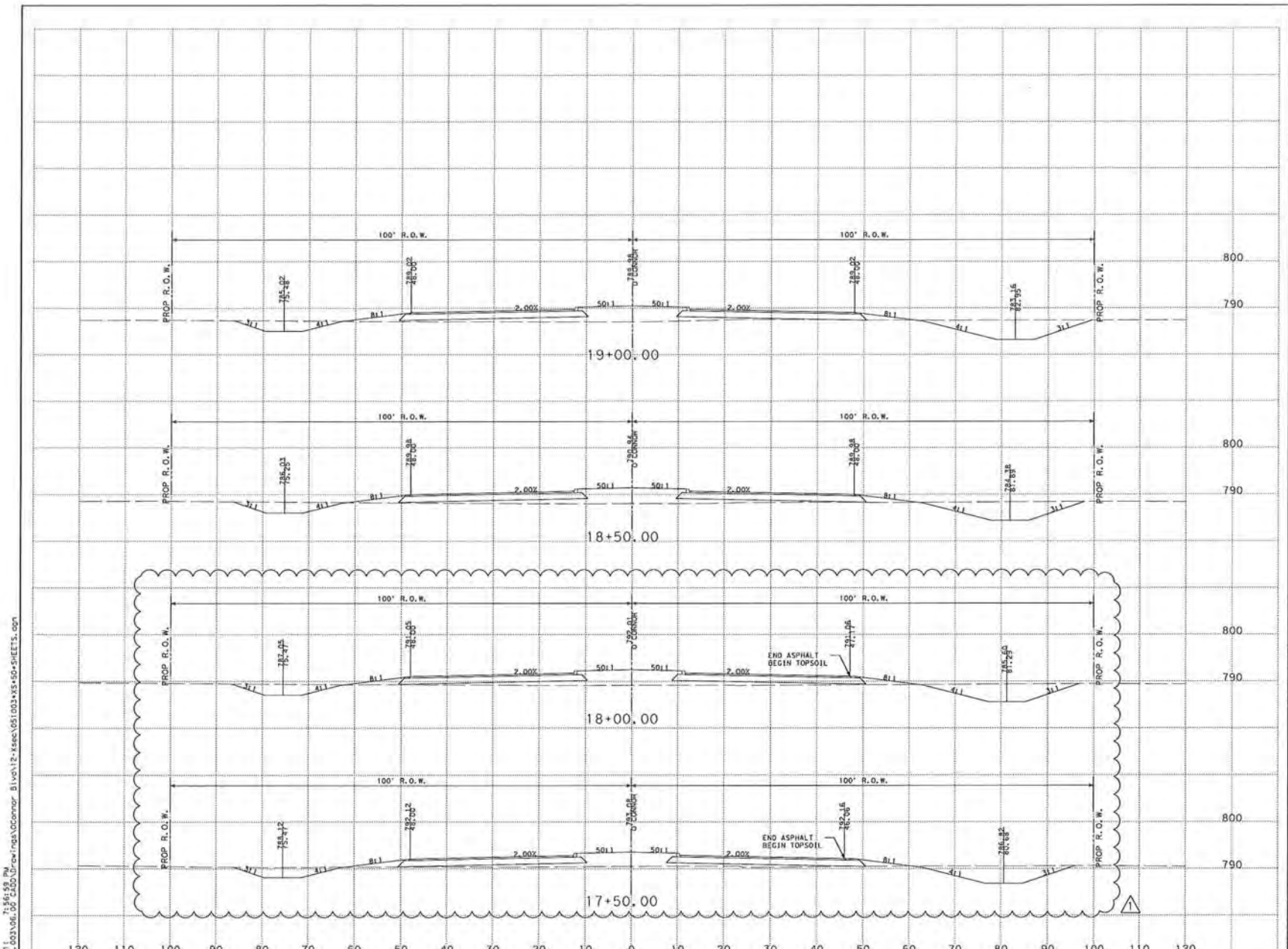

SCALE: 1" = 20' (H)
SCALE: 1" = 20' (V)
10 0 10

REV	DESCRIPTION	BY	DATE
1	MEDIAN MODIFICATIONS	JES	11/2011

WILLIAMSON COUNTY
1848

klotz associates
901 SOUTH MOPAC EXPRESSWAY
BUILDING V, SUITE 220
AUSTIN, TX 78746
Phone: (512) 328-5771 Fax: (512) 328-5778

STATE OF TEXAS
DAVID WILSON JONES JR.
106091
LICENSED
PROFESSIONAL ENGINEER
12-30-11

O'CONNOR DRIVE EXTENSION
CROSS SECTIONS

Klotz Project No.	0510.003
CSJ#	0914-05-139
Client I.D.	O'CONNOR DRIVE EXTENSION
Drawn By	
Checked By	
Scale	AS SHOWN
Date	
Sheet	4 of 38
Sheet No.	193

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REC'D 8-26-11

DAN WILLIAMS COMPANY
Contractors – Heavy/Highway
PO Box 80069, Austin, TX 78708
Telephone (512) 320-1410 Fax (512) 320-1413

August 25, 2011

Mr. Clayton Weber
HNTB
14 Galloping Road
Round Rock, Texas 78681

RE: Project: 11WC906
CSJ: 0914-05-139
Williamson County

Dear Sir,

Dan Williams Company is submitting a revised cost proposal with backup for a change order due to the revisions to utilize temporary signals at O'Connor Drive Extension for the project referenced above. Also, included are the material charges which Williamson County will take ownership of for items of work being deleted due to the future RM620 widening project that would remove and change the traffic signals and configuration. The total costs being submitted is attached from our subcontractor and is listed below.

1. Temporary Signals = $32,975.00 + 6% = $34,953.50
2. Materials to Williamson County = $32,126.58 + 6% = $34,054.17
3. Delivery Charge for Materials = $750.00 + 6% = $795.00 ✓

Please feel free to call at (512) 320-1410 should there be any questions concerning this correspondence.

Respectfully,

Steve Cardwell
Project Manager
Dan Williams Company

1. 32975.50 × 1.05 = $34624.28
2. 30598.75 × 1.05 = $32126.58
3. 750.00 = $750.00

Specs only allow our 5% markup.

P.O. Box 760
Cedar Park, Texas 78630-0760

(512) 258-1025
Fax (512) 258-1026

8/16/2011

Project: 11WC906
County: Williamson
Highway: O'Connor Drive @ Great Oaks Drive

G Carter Construction Co., Inc. proposes to install a Temporary Signal at the price stated below. Material acquired for this project and unable to restock or use elsewhere will paid at Invoice + 5%. We were able to restock the Signals with no charge and use the Electric Service, Wire, Traffic Signal Cable on other projects. The signal installation at Great Oaks and the conduit crossings, pull boxes, signal removal, etc. at O'Conner will be paid for under the original contract per unit bid price. Upon the Temporary Signal 30 day test period completion, maintenance and service calls shall be paid for as force account as needed.
*All change orders previously approved will be accomplished at the established rate.

Item No.	Description	Qty	Unit	Unit Price	Extension
681-2001	TEMP TRAFFIC SIGNALS	1.0	EA	$ 32,975.00	$ 32,975.00 ✓
xxx-xxxx	Deliver Material to Williamson County	1.0	LS	$ 750.00	$ 750.00
		TOTAL		**$**	**33,725.00**

Materials will be as follows:

Structural & Steel Traffic Signal Pole Invoice + 5%	$ 29,415.83
CMC REBAR Foundation Steel + 5%	$ 2,710.75
TOTAL MATERIAL:	**$ 32,126.58**

These prices do not include any Bond, Traffic Control or Engineering. If Bond is required, the General Contractor will add 3 1/2% to the Bid. These prices are contingent on being awarded all items bid.

G. Carter Construction Company, Inc. is a State Certified WBE and HUB.

If this bid is accepted, it becomes a part of the contract. This quote is good for 30 days from date of this letter.

If additional information is needed, please contact me at (512) 258-1025.

Sincerely,

Pete Smith

Pete Smith
Vice President

P.O. Box 760
Cedar Park, Texas 78630-0760

(512) 258-102
Fax (512) 258-102

Project: 11WC906
County: Williamson
Highway: O'Connor Drive @ Great Oaks Drive
RE: 681 TEMP SIGNAL JUSTIFICATION

8/24/2011

Item No.	Description	Qty	Unit	Unit Price	Extension
681-xxxx	40 FT TIMBER POLE (CLASS 2)	2	EA	$ 1,275.00	$ 2,550.00
681-xxxx	3/8" ZINC COATED CABLE	560	LF	$ 1.85	$ 1,036.00
681-xxxx	1/4" ZINC COATED CABLE	560	LF	$ 1.65	$ 924.00
681-xxxx	Ground Anchors	4	EA	$ 875.00	$ 3,500.00
681-xxxx	Yellow Plastic Guy Guard	4	EA	$ 100.00	$ 400.00
681-xxxx	VIVIDS CAMERA ASSM (INSTALL)	6	EA	$ 525.00	$ 3,150.00
681-xxxx	VIVIDS PROCESSOR CARDS (INSTALL)	2	EA	$ 275.00	$ 550.00
681-xxxx	VIVIDS EXTENSION MODULES (INSTALL)	1	EA	$ 250.00	$ 250.00
681-xxxx	VIVIDS VIDEO MONITOR (INSTALL)	1	EA	$ 125.00	$ 125.00
681-xxxx	VIVIDS SET UP SYSTEM	1	EA	$ 850.00	$ 850.00
681-xxxx	VIVIDS COMM CABLE (COAX)	1310	LF	$ 2.45	$ 3,209.50
681-xxxx	VIVIDS (16 AWG) (3 CONDR)	1310	LF	$ 0.75	$ 982.50
681-xxxx	CONDT PVC SCH 40 (3")	70	LF	$ 12.25	$ 857.50
681-xxxx	ELECT CONDR #8 BARE	70	EA	$ 1.10	$ 77.00
681-xxxx	BACK PLATE (12") (3 SECT)	7	EA	$ 85.00	$ 595.00
681-xxxx	BACK PLATE (12") (4 SECT)	2	EA	$ 95.00	$ 190.00
681-xxxx	BACK PLATE (12") (5 SECT)	2	EA	$ 100.00	$ 200.00
681-xxxx	VEH SIG SECT (12") LED (GRN ARW)	4	EA	$ 220.00	$ 880.00
681-xxxx	VEH SIG SECT (12") LED (GRN)	11	EA	$ 236.00	$ 2,596.00
681-xxxx	VEH SIG SECT (12") LED (YEL ARW)	2	EA	$ 233.00	$ 466.00
681-xxxx	VEH SIG SECT (12") LED (YEL)	11	EA	$ 252.00	$ 2,772.00
681-xxxx	VEH SIG SECT (12") LED (RED)	11	EA	$ 214.00	$ 2,354.00
681-xxxx	TRF SIG CABLE (TY A) 14 AWG (5 CONDR)	1090	LF	$ 1.20	$ 1,308.00
681-xxxx	TRF SIG CABLE (TY A) 14 AWG (7 CONDR)	480	LF	$ 1.35	$ 648.00
681-xxxx	RELOCATE SMALL SIGNS ON SPAN	5	EA	$ 276.00	$ 1,380.00
681-xxxx	Re-wire Controller for new Temp heads	1	EA	$ 1,125.00	$ 1,125.00
		TOTAL		**$**	**32,975.50**

This quote is based on General Contractor furnishing lane closures and police officers for traffic control to pull up span wire, hang signals and wire, and switch over intersection to new. The removal of old signal shall be covered under existing bid items.

These prices do not include any Bond, Traffic Control or Engineering. If Bond is required, the General Contractor will add 3 1/2% to the Bid. These prices are contingent on being awarded all items bid.

G. Carter Construction Company, Inc. is a State Certified WBE and HUB.

If this bid is accepted, it becomes a part of the contract. This quote is good for 30 days from date of this letter.

If additional information is needed, please contact me at (512) 258-1025.

Sincerely,

Pete Smith

Pete Smith
Vice President

Structural & Steel Products, Inc.

1320 South University Drive, Suite 701

Fort Worth, Texas 76107

Phone: (817) 332-7417 Fax: (817) 338-0638

30529 - 1

Original Quote	12/6/2010
Revised Quote	12/6/2010

Submitted To	G. Carter Construction Co.	**Project Name :**	O'Connor Drive Extensions
Address :	P.O. Box 760	**Project No :**	Williamson County
		Control No :	
	-	**Working Days :**	0
		Engineer/Architect:	
	Cedar Park TX 78630-0000	**Phone No :**	
		Letting Date :	12/15/2010
Contact	Pete Smith		
Phone :	512-258-1025		
Fax :	512-258-1026		
Email :	-		

We are pleased to offer the following proposal for your consideration :

Item No	Item Description	Qty	Unit	Unit Price($)	Total Price ($)
0628 2100	ELEC SRV POLE TY SP(O)	1.00	EA	~~407.68~~ OK	407.68
0686 0000	250w Cobra Hd Fixt w/Lamp	2.00	EA	478.50	957.00
0686 2041	TRF SIG PL AM(S) 1 ARM (40) LUM	1.00	EA	3,999.52	3,999.52
0686 2047	TRF SIG PL AM(S) 1 ARM (48)	1.00	EA	3,960.32	3,960.32
0686 2055	TRF SIG PL AM(S) 1 ARM (55')	1.00	EA	8,639.68	8,639.68
0686 2065	TRF SIG PL AM(S) 1 ARM (65') LUM	1.00	EA	10,050.88	10,050.88
				Total Bid Price :	28,015.08

Notes :

~~25% 7003.75~~

~~$35,018.83~~

5% 1400.75

$29,415.83

Freight prepaid and allowed. Prices based on shipping in complete quantities to the jobsite with unloading, storage and erection by others. Less than complete quantites may incur additonal freight charges.
All fixtures shipped from TXDOT approved stock. Lamps included. Photo cell not included. Customer to determine voltage.
Fixtures ordered in quantity of 3 or less will be shipped with freight prepay and bill. Any quantity over 3 is freight allowed.
Lead time is based on current business conditions and is subject to change at the time of release.

Lead time 8-10 weeks from reciept of order or approved drawings.

Prices include anchor bolts & galvanized finish. Signal Hangers, brackets and CGB connectors are NOT included

Terms & Conditions :

Payment Terms are Net 30 Days, no retainage, subject to credit approval

This proposal is subject to Structural & Steel Products terms and conditions. Please request a copy by calling (817)332-7417
Prices are good for 30 days and delivery within 180 days of receipt of order.

Used the Quote

SALES INVOICE

Please Remit Payments To:
CMC Rebar
DEPT. 1088 P.O.Box 121088
DALLAS,TX,75312-1088

Correspondence
CMC Rebar
PO Box 3195
AUSTIN TX 78764-0000 USA
Phone: 512 282 8820
Fax: 512 279 3868
CMC Rebar - Austin
T034

Invoice No / Date: 90543758 06/03/2011
Salesorder/Ref No:
Customer : 3017076
Job : R/9923700123
Salesperson :

BILL TO PARTY 3017076
G Carter Construction Co Inc
P.O Box 760
Cedar Park, TX 78630-0760

SHIP TO PARTY 3017076
G Carter Construction Co Inc
805 N Bell Blvd
Cedar Park, TX 78613-2212

SHIP-VIA	INCO-TERMS	PAYMENT TERMS
Road / Truck	CPT Cedar Park	Net Due in 30 Days

ITEM	DESCRIPTION	QTY-SHPD		PRICE	AMOUNT
Reinforcing Steel by MISCSALE per CC AWLK ,Rel 5 LIST - JOB #236 PO# BOL# 404884 Del# 573654					
Plain Round	420 Black	512.00	LB	53.35/CWT	273.16
Rebar	420 Black	2,014.00	LB	53.35/CWT	1,074.50
Reinforcing Steel by MISCSALE per CC AWLM ,Rel 6 LIST - JOB #233 PO# BOL# 404884 Del# 573657					
Plain Round	420 Black	922.00	LB	53.35/CWT	491.90
Rebar	420 Black	3,917.00	LB	53.35/CWT	2,089.77
Reinforcing Steel by MISCSALE per CC AWLO ,Rel 7 LIST - ADDITIONAL PO# BOL# 404884 Del# 573661					
Plain Round	420 Black	51.00	LB	53.35/CWT	27.21
Rebar	420 Black	40.00	LB	53.35/CWT	21.34

O'Connor

2371

1347.66

2581.67

48.55

5% #2581 67 / 129 08 = $2710 75

~~2581 67~~ ~~2570~~ 645 42 ~~$3227 09~~

REBAR Weight:	7,456.00 LB	**Line Totals:**	$3,977.88
		Tax:	$0.00
		Freight:	$0.00
		Total Invoice Value:	$3,977.88

JOB # 236 & 233, PRICE INCLUDES A $100 DELIVERY CHARGE

DAN WILLIAMS COMPANY
Contractors – Heavy/Highway
PO Box 80069, Austin, TX 78708
Telephone (512) 320-1410 Fax (512) 320-1413

December 12, 2011

Mr. Gregory Jenkins
HNTB
14 Galloping Road
Round Rock, Texas 78681

RE: Project: 11WC906
CSJ: 0914-05-139
Williamson County

Dear Sir,

Dan Williams Company is submitting our proposed pricing for a change order due to plan sheet revisions dated 12-2-2011 concerning the width of the median and transitions at Stations 10+32 to 18+37. Purpose of this change is due to the revisions and Dan Williams Company will now have to place approximately 400 linear feet of TY II Curb using a hand pour method with the new curb profile having the curb placed back to back and not allowing our company to slip-form this area like we had initially bid to install the work.

Please feel free to call at (512) 320-1410 should there be any questions concerning this correspondence.

Respectfully,

Steve Cardwell
Project Manager
Dan Williams Company

PROJECT 11WC906 | BID ITEM: 529-2002 | BID QUANTITY: 400
ESTM S. Cardwell | DESCRIPTION: Change Order | UNIT: LF
ITEM SUMMARY | ACTIVITY: SUMMARY OF CHANGES

UNIT COST $ 17.67
UNITS/MAN HOUR 2.00

ACTIVITY	QUANTITY	DESCRIPTION	UNIT	LABOR	PERMANENT MATERIAL	EQUIPMENT RENTAL	MISC EXPENSE	SUBCONTRACT	TOTAL	UNIT COST	MAN HOURS	UNITS /MnHr
1	400	TY II CURB (HAND POUR)	LF	3,190.00	822.00	1,001.00	300.00	0.00	5,313.00	13.28	200.00	2.00
									-			
									-			
									-			
									-			
									-			
									-			
									-			
									-			
	SUBTOTAL COST			3,190.00	822.00	1,001.00	300.00	0.00	5,313.00		200.00	MAN HOURS
	DIRECT UNIT COST			7.98	2.06	2.50	0.75	0.00	13.28		0.500	MnHr/Un
	TAXES ON LABOR		55.00%	1,754.50	-	-	-	-	1,754.50			
	529-2002	Change Order		4,944.50	822.00	1,001.00	300.00	-	7,067.50			
	TOTAL UNIT COST			12.36	2.06	2.50	0.75	-	17.67			
	MARKUPS			15.00%	15.00%	15.00%	15.00%	15.00%				
				478.50	123.30	150.15	45.00	-	796.95			
	UNIT TOTALS			5,423.00	945.30	1,151.15	345.00	-				

ESTIMATED CHANGE $ 7,864.45
ESTIMATED UNIT PRICE $ 19.66

PROJECT	11WC906	BID ITEM:	529-2002	BID QUANTITY:	400		
ESTM	SC	DESCRIPTION:	Change Order	UNIT:	LF		
ACTIVITY#	1	ACTIVITY:	TY II CURB (HAN D POUR)				
		QUANTITY:	400				
		UNIT:	LF	PRODUCTION:	1.00	UNITS/HOUR	
REMARKS: 1)				DURATION:	1.00	HOURS	
2)							
3)							

CODE	NUMBER	DESCRIPTION	Hours	LABOR	MATERIAL	EQUIPMENT	MISC	SUBCONTRACT	TOTAL	EXTENSION
EQUIPMENT	1	F250 TRUCK	30.00	-	-	28.04	-	-	28.04	841.00
	1	UTILITY TRAILER	30.00	-	-	3.49	-	-	3.49	105.00
	1	GENERATOR	15.00	-	-	3.67	-	-	3.67	55.00
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
TOTAL	1	UNITS/EQUP HOUR	75.00	-	-	1,000.95	-	-	35.20	1,001.00
LABOR	1	FORMAN	30.00	31.25	-	-	-	-	31.25	938.00
	3	FORM BUILDERS	85.00	13.00	-	-	-	-	13.00	1,105.00
	3	CONCRETE FINISHERS	85.00	13.50	-	-	-	-	13.50	1,148.00
			0.00	-	-	-	-	-	-	125.00
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
			0.00	-	-	-	-	-	-	-
TOTAL	2	UNITS/MAN HOUR	200.00	3,190.00	-	-	-	-	57.75	3,316.00
INCEDENTAL	OUANTITY	DESCRIPTION	UNIT							
	12	CL A CONCRETE W/YIELD	CY	-	68.50	-	-	-	68.50	822.00
	400	FORM LUMBER/SUPPLIES	LF	-	-	-	0.75	-	0.75	300.00
				-	-	-	-	-	-	-
				-	-	-	-	-	-	-
				-	-	-	-	-	-	-
				-	-	-	-	-	-	-
				-	-	-	-	-	-	-
				-	-	-	-	-	-	-
		TOTAL INCEDENTAL COSTS		-	822.00	-	300.00	-	1,122.00	1,122.00
	TOTAL		275.00	3,190.00	822.00	1,000.95	300.00	-	5,313.00	5,439.00
	UNIT COST			7.975	2.055	2.502375	0.75	0	13.28	5,313.00

EQUIPMENT WATCH

www.equipmentwatch.com

Rental Rate Blue Book®

December 12, 2011

On-Highway Light Duty Trucks

Miscellaneous Models

Size Class:
200 - 299 HP

Configuration for On-Highway Light Duty Trucks

Power Mode	**Gasoline**	Cab Type	**Conventional**
Axle Configuration	**4X2**	Ton Rating	**3/4**
Horsepower	**285.0**		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$650.00	$180.00	$45.00	$7.00	$24.75	$28.44
Adjustments						
Region (Texas: 91.4%)	($55.90)	($15.48)	($3.87)	($0.60)		
Model Year (2008: 97.5%)	($14.85)	($4.11)	($1.03)	($0.16)		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$579.25**	**$160.41**	**$40.10**	**$6.24**	**$24.75**	**$28.04**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	58%	$377.00 / mo
Overhaul (ownership)	27%	$175.50 / mo
CFC (ownership)	5%	$32.50 / mo
Indirect (ownership)	10%	$65.00 / mo
Fuel (operating) @ $3.84	84%	$20.79 / hr

Revised Date: 2nd Half 2011

EQUIPMENT WATCH®

www.equipmentwatch.com

Rental Rate Blue Book®

December 12, 2011

Non-Tilt Deck Utility Trailers

Miscellaneous Models

Size Class:
All

Configuration for Non-Tilt Deck Utility Trailers

Number of Axles	2	Number of Tires	4
Hitch Type	Tow	Capacity	8.0 t

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	$335.00	$94.00	$24.00	$4.00	$1.90	$3.80
Adjustments						
Region (Texas: 86.8%)	($44.22)	($12.41)	($3.17)	($0.53)		
Model Year (2007: 96.1%)	($11.34)	($3.18)	($0.81)	($0.14)		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$279.44**	**$78.41**	**$20.02**	**$3.33**	**$1.90**	**$3.49**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	46%	$154.10 / mo
Overhaul (ownership)	35%	$117.25 / mo
CFC (ownership)	6%	$20.10 / mo
Indirect (ownership)	13%	$43.55 / mo
Fuel (operating)	Fuel cost data is not available for these rates.	

Revised Date: 2nd Half 2011

EQUIPMENT WATCH®

www.equipmentwatch.com

Rental Rate Blue Book®

December 12, 2011

Small Generator Sets

Miscellaneous Models

Size Class:
Prime Output: To 5,000 Watts

Configuration for Small Generator Sets

Power Mode	**Gasoline**	Prime Output	**3,000 w**
Horsepower	**8.0**		

Manufacturer Notes: Small diesel generators are enclosed and trailer mounted.

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$115.00	$32.00	$8.00	$1.00	$3.10	$3.75
Adjustments						
Region (Texas: 86.6%)	($15.41)	($4.29)	($1.07)	($0.13)		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$99.59**	**$27.71**	**$6.93**	**$0.87**	**$3.10**	**$3.67**

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	51%	$58.65 / mo
Overhaul (ownership)	30%	$34.50 / mo
CFC (ownership)	8%	$9.20 / mo
Indirect (ownership)	11%	$12.65 / mo
Fuel (operating) @ $2.87	63%	$1.97 / hr

Revised Date: 1st Half 2011

APAC Texas, Inc.
Texas Concrete Materials
1 Chisholm Trail Ste 450
Round Rock, TX 78681

Phone: 512-861-7100

TEXAS CONCRETE MATERIALS
apac Safety First Always
a division of the Southwest Group of Oldcastle Materials

DAN WILLIAMS CO
PO BOX 80069
AUSTIN, TX 78708-0069

Customer Number	Invoice Date	Invoice Number	Customer Job	Receivable Type
241597	11/23/11	200137739	1118	41
Customer PO		**Plant**		**Tax Code**
620 & O CONNOR ---		05086 Readymix - Brushy Creek		TX0000
Ship to	620 & O CONNOR --- CURB // FIB			

TOTALS	Product Cost	Freight	CY QTY	Tax	Total
	$2,055.00	$0.00	30.00	$0.00	$2,055.00

Date	Ticket#	Product	Product Description	U/M	Quantity	Price	Tax	Amount
11/23/11	8619458	TXDOT2A	5.0 SK 30% FA TX	CY	10.00	54.50	0.00	545.00
11/23/11	8619458	FIBER35	PSI FIBRILLATED	BAG	10.00	14.00	0.00	140.00
11/23/11	8619477	TXDOT2A	5.0 SK 30% FA TX	CY	10.00	54.50	0.00	545.00
11/23/11	8619477	FIBER35	PSI FIBRILLATED	BAG	10.00	14.00	0.00	140.00
11/23/11	8619492	TXDOT2A	5.0 SK 30% FA TX	CY	10.00	54.50	0.00	545.00
11/23/11	8619492	FIBER35	PSI FIBRILLATED	BAG	10.00	14.00	0.00	140.00

JOB NO. 1013-Nov.

SUB ☐ EQ RENT ☐ OTHER ☐

DAN WILLIAMS CO
PO BOX 80069
AUSTIN, TX 78708-0069

Invoice Number	Invoice Date	Customer Number	Invoice Amount
200137739	11/23/11	241597	$2,055.00

apac

Terms: Our terms are Net 30 Days. We will assess up to the states legal maximum rate for finance charges on delinquent accounts.

Please tear off and return this remittance coupon with your payment so it can be applied correctly.

Remit To:
APAC Texas, Inc.
Texas Concrete Materials
1 Chisholm Trail Ste 450
Round Rock, TX 78681