

Crossville Downtown Economic Development / Streetscape Improvement Project - Watermain
Ironwood Construction Engineering, LLC
Change Order 03 - Additional Work
February 8, 2016

Item #	Description	Unit price	Unit	Quantity		Amount	
				Add (+)	Deduct (-)	Increase	Decrease
105-01	Line & Grade Survey	\$2,000.00	LS	1.00		\$ 2,000.00	
717-01S	Mobilization	\$5,000.00	LS	1.00		\$ 5,000.00	
712-01S	Traffic Control	\$5,000.00	LS	1.00		\$ 5,000.00	
722-01.01	Field Office (Type I)	\$1,000.00	LS	1		\$ 1,000.00	
202-03	Removal of Sidewalk	\$15.00	SY	1390		\$ 20,850.00	
202-08.10	Removal of Curb	\$10.00	LF	35		\$ 350.00	
209-09.41	Curb Inlet Protection (Type 2)	\$100.00	EA	9		\$ 900.00	
801-01.07S	Temporary Seeding (With Mulch)	\$2.00	SY	365		\$ 730.00	
603-05.20	Containment and Disposal of Waste	\$75.00	CY	500		\$ 37,500.00	
501-01S	Trench Repair (Asphalt Area Including Removal)	\$95.00	SY	50		\$ 4,750.00	
630-01.06S	6" DIP PR350 Waterline	\$71.80	LF	178		\$ 12,780.40	
630-01.08S	8" DIP PR350 Waterline	\$76.29	LF	12		\$ 915.48	
630-01.12S	12" DIP PR350 Waterline	\$94.23	LF	1300		\$ 122,499.00	
630-03.01S	M.J. Waterline Fittings	\$3.00	LB	5500		\$ 16,500.00	
630-04.02S	2" Gate Valve w/ Valve Box & Marker	\$1,000.00	EA	4		\$ 4,000.00	
630-04.06S	6" Gate Valve w/ Valve Box & Marker	\$1,900.00	EA	3		\$ 5,700.00	
630-04.08S	8" Gate Valve w/ Valve Box & Marker	\$2,100.00	EA	1		\$ 2,100.00	
630-05.10S	10" Tapping Sleeve & Valve	\$6,000.00	EA	1		\$ 6,000.00	
630-04.12S	12" Gate Valve w/ Valve Box & Marker	\$4,000.00	EA	1		\$ 4,000.00	
630-06.05S	5-1/4" Fire Hydrant Assembly	\$4,000.00	EA	3		\$ 12,000.00	
630-08.01S	3/4" Water Service Installation	\$1,000.00	EA	2		\$ 2,000.00	
630-08.02S	1" Water Service Installation	\$2,000.00	EA	1		\$ 2,000.00	
630-08.03S	1-1/2" Water Service Installation	\$2,500.00	EA	2		\$ 5,000.00	
630-08.04S	2" Water Service Installation	\$3,000.00	EA	1		\$ 3,000.00	
630-09.01S	3/4" Copper Service Tubing	\$20.00	LF	117		\$ 2,340.00	
630-09.03S	1-1/2" Copper Service Tubing	\$80.00	LF	30		\$ 2,400.00	
630-09.04S	2" Copper Service Tubing	\$100.00	LF	144		\$ 14,400.00	
701-02.02S	Concrete Sidewalk (6")	\$7.00	SF	717		\$ 5,019.00	
702-03S	Concrete Combined Curb & Gutter Type 6-30	\$50.00	LF	35		\$ 1,750.00	
803-01	Sodding (New Sod)	\$1.00	SY	2120		\$ 2,120.00	
204-08.01	Backfill Material (Flowable Fill)	\$85.00	CY	49		\$ 4,165.00	
Additional Work Totals						\$ 308,768.88	\$ -

Total Increase	\$ 308,768.88
Total Decrease	\$ -
Net Increase	\$ 308,768.88
Original Contract Amount	\$ 1,057,857.00
Net Increase from Previous Change Orders	\$ (13,708.05)
Contract Amount prior to this Change Order	\$ 1,044,148.95
Net Increase from this Change Order	\$ 308,768.88
Contract Amount with all Approved Change Orders	\$ 1,352,917.83



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

RIGHT OF WAY DIVISION
SUITE 600, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-3186

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

Authorization Date:
JANUARY 11, 2016

Mr. Kevin Oakes
City of Crossville
392 North Main Street
Crossville TN 38555

PERMIT NO.: UO-2007045263-2016 201520393 BOND: \$50,000.00
DESCRIPTION: To install approximately 1300' of 12" Class 350 DIP Water main, Fire Hydrants, two service line bores, and three side road crossings with casings.

Route	Begin LM	Ending LM	County	Start Long/Lat	End Long/Lat
S.R. - 28, (US-127)	14.296	14.296	Cumberland (18)	-85.029675, 35.953558	-85.029667, 35.953544
S.R. - 28, (US-127)	14.152	14.172	Cumberland (18)	-85.028496, 35.951652	-85.028658, 35.951915
S.R. - 28, (US-127)	14.222	14.242	Cumberland (18)	-85.029067, 35.952568	-85.029233, 35.95283
S.R. - 28, (US-127)	14.122	14.362	Cumberland (18)	-85.028247, 35.951253	-85.030183, 35.95434
S.R. - 28, (US-127)	14.152	14.152	Cumberland (18)	-85.028496, 35.951652	-85.028488, 35.951638
S.R. - 28, (US-127)	14.297	14.317	Cumberland (18)	-85.029675, 35.953558	-85.029825, 35.953802

Dear Mr. Kevin Oakes,

Enclosed is an approved drawing covering the installation of the above referenced facilities. This permit was approved **01/11/2016**. The performance of this work will be covered under terms of the enclosed permit or general agreement between the utility and the Department of Transportation and the attached Permit Notes.

Please make sure your work forces have a copy of this approved drawing on hand at all times while working on the state rights-of-way. The attached notes are approval conditions to this permit and drawings.

In accordance with the State's Rules and Regulations, the Utility shall provide appropriate signing at all times during the construction and maintenance of facilities; therefore, signs must be in place before construction begins.

Please notify the District Utility Inspector at least three working days prior to the proposed date to begin work, of the date construction will begin in order to determine if a preconstruction conference is needed and to arrange proper inspection.

DISTRICT UTILITY CONTACT:

Name: Utilities Office
Address: P.O. Box 22368 CHATTANOOGA TN 37422
Phone: (423) 510-1274
Fax: (423) 510-1131
Cell (423) 290-5403
E-mail: Jim.Thompson@tn.gov

The Utility must notify the District Utility Inspector upon completion of the installation in order that a final inspection can be made to facilitate the release of the bond. This permit expires one year from date of issuance.

Regards,



Mr. Jim Thompson | Transportation Technician 3

TDOT Region 2 ROW / Utilities Office / Permits

4005 Cromwell Rd. Chattanooga, TN 37421

p. 423-510-1274 c. 423-290-5403

jim.thompson@tn.gov

tn.gov/tdot

Enclosure:

CC: Utilities Office

Conditions:

APPROVED AS NOTED

BY:

DATE:

TDOT REGION 2 UTILITY DEPARTMENT

1. Note: The permit proprietor will be responsible for the repair of any damage to the roadway or TDOT appurtenances caused by utility construction.
2. Note: The Permit Proprietor is to ensure that all Parties associated with this project complies with all "Rules and Regulations for Accommodating Utilities within Highway Rights-of-Ways."
3. Note: All installations and repairs are to be installed in compliance to TDOT'S "Rules and Regulations for Accommodating Utilities within Highway Rights-of Ways".
4. Note: The Permit Proprietor is responsible for all erosion and sediment control required for the Utility installation
5. Note: The T.D.O.T. inspector must be notified at least three (3) days before the commencement of the work to arrange proper inspection to insure a valid permit.
6. Note: T.D.O.T. approved drawings and permit must be present at the job site while work is in progress.
7. Tennessee811. Dial 811 for Utility locates
8. Note: Flaggers and workers in work zones shall wear Safety apparel meeting the requirements of ISEA "American National Standard for High Visibility Apparel" Refer to the latest edition of the "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES." (MUTCD), Section 6E.02
9. Note: Delineator cones or barrels required along with the proper signage to close shoulders or lanes for Work-Zones or Buffer-Zones according to the latest edition of the "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES." (MUTCD)
10. Note: Signing and Traffic Control Must be in conformance with the latest edition of the "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES." (MUTCD)
11. Note: Machinery, materials and workers are not to be located in the roadway, shoulders or in the clear-zones without proper traffic control measures in compliance with the MUTCD requirements. D)
12. Note: Stay Out Of Wetlands.
13. Note: All logs, stumps, and other construction related debris must be removed from the Right-of-Ways.
14. Note: Rule 1680-6-1-.06,(f) Pedestals, fire hydrants, markers, or other above Ground utility appurtenances installed as a part of Underground utility facilities shall be located at or as near the highway Right-of-Way lines as practical. In all cases they must be outside the Clear-Zone.
15. Note: Underground Pneumatic Piercing tools (Hammerhead Mole, Hole-Hog, etc...) shall not be used for boring under State Routes.
16. Note: All casings and conduits installed under State Routes shall meet or exceed the minimum AASHTO requirements.
17. Note: All steel casings must have continuous welds around every joint.
18. Note: The Utility installation must be installed with 36" or more of cover where installed within 5 feet of the drainage ditch.
19. Note: Buried installation shall not go over culverts or other TDOT structures.
20. Note: All Side Road Crossings must include a steel casing across the side road and if open-cut, the open-cut must be filled with Flowable-fill and repaved.

City of Crossville
Engineering Department



392 N Main St.
Crossville, TN 38555
Phone 931-484-5113
Fax 931-484-7713

RECEIVED

JAN - 8 2016

RIGHT OF WAY
CHATTANOOGA

January 08, 2016

Jim Thompson
TDOT
Utilities Department
P.O. Box 22368
4005 Cromwell Road
Chattanooga, TN 37422-2368

201520393
New

RE: Permit Number 201520393 - Main St Water Extension (S.R. 28) Water Line.

Dear Mr. Thompson:

The City of Crossville has digitally submitted a revised plan for this project on January 07, 2016 (MAIN ST 12 Inch Water Main New Alignment.pdf). Please review the plans and let us know if there is anything else we need to submit for permitting for the project. Should you have any questions please call me at 931-787-1692.

Sincerely,

Handwritten signature of Kevin G. Oakes in blue ink.

Kevin G. Oakes
Engineering Assistant

APPROVED AS NOTED

Handwritten signature of Jim Thompson in blue ink.
TDOT REGION 2 UTILITY DEPARTMENT
DATE: January 11, 2016

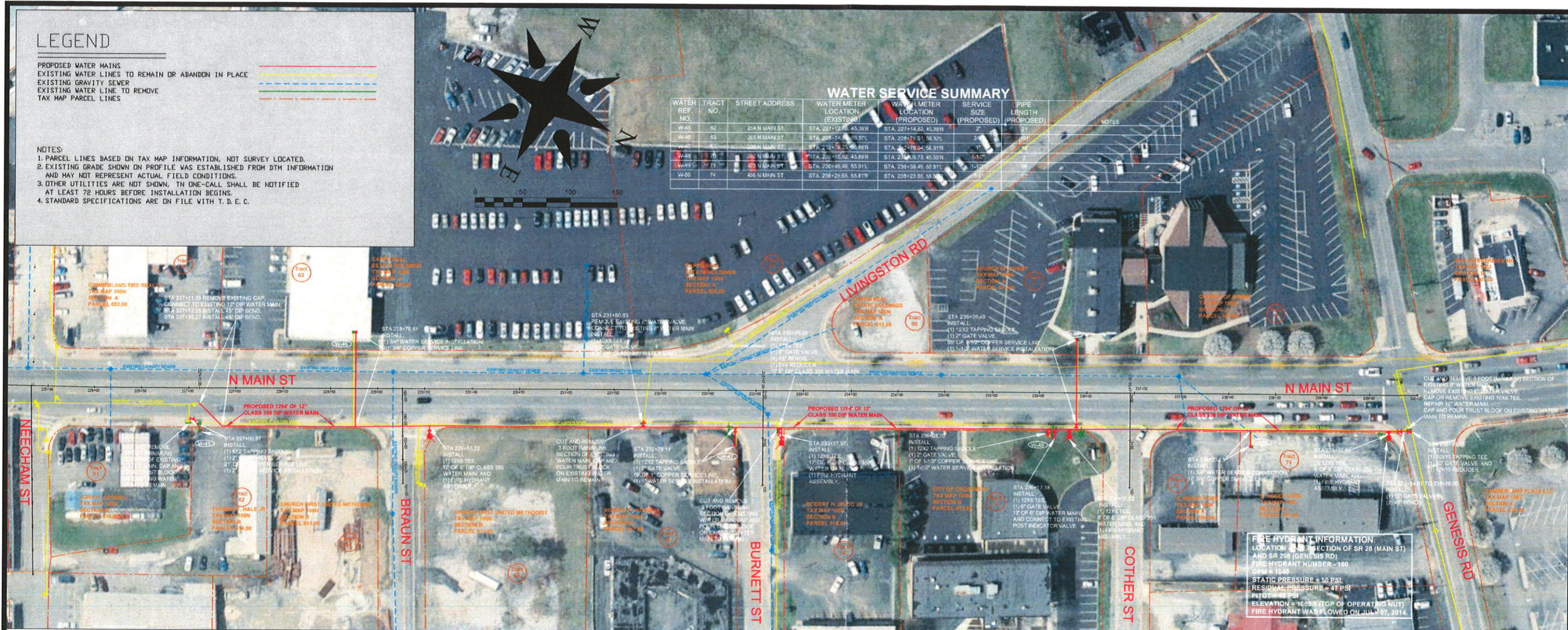
LEGEND

- PROPOSED WATER MAINS
- EXISTING WATER LINES TO REMAIN OR ABANDON IN PLACE
- EXISTING GRAVITY SEWER
- EXISTING WATER LINE TO REMOVE
- TAX MAP PARCEL LINES

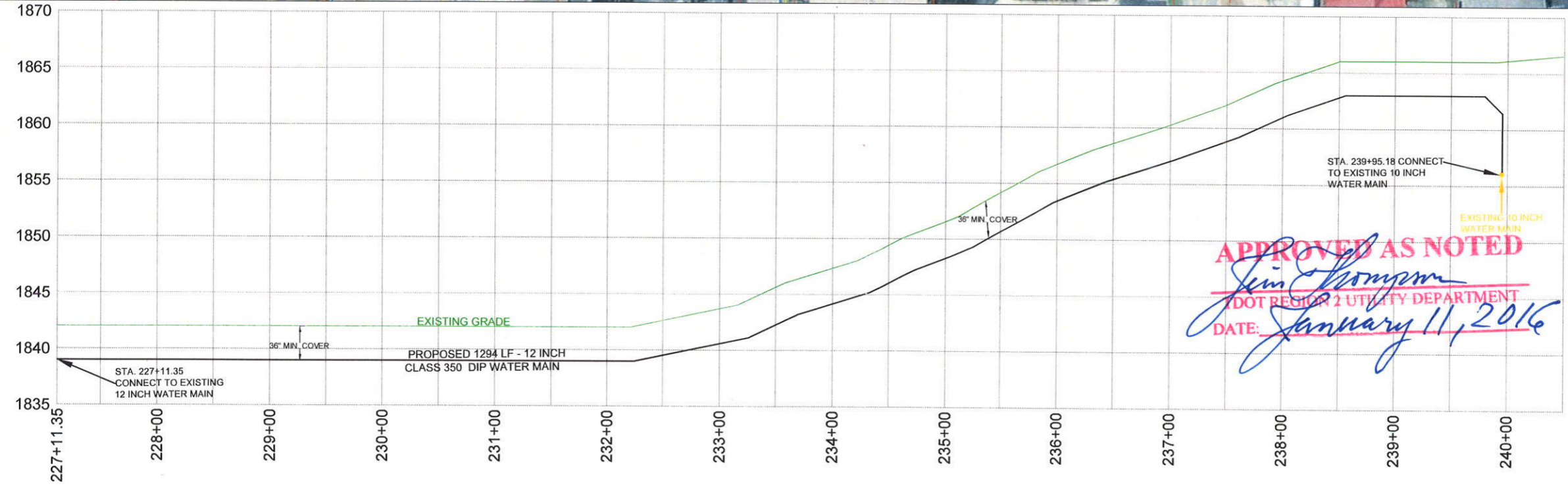
- NOTES:
1. PARCEL LINES BASED ON TAX MAP INFORMATION, NOT SURVEY LOCATED.
 2. EXISTING GRADE SHOWN ON PROFILE WAS ESTABLISHED FROM DTM INFORMATION AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS.
 3. OTHER UTILITIES ARE NOT SHOWN, TN ONE-CALL SHALL BE NOTIFIED AT LEAST 72 HOURS BEFORE INSTALLATION BEGINS.
 4. STANDARD SPECIFICATIONS ARE ON FILE WITH T. D. E. C.

WATER SERVICE SUMMARY

WATER REF. NO.	TRACT NO.	STREET ADDRESS	WATER METER LOCATION (EXISTING)	WATER METER LOCATION (PROPOSED)	SERVICE SIZE (PROPOSED)	PIPE LENGTH (PROPOSED)	NOTES
W-45	62	254 N MAIN ST	STA. 227+12.65 45.36R	STA. 227+14.62 45.36R	2"	21'	
W-46	63	263 N MAIN ST	STA. 228+74.65 59.37L	STA. 228+76.61 59.32L	3"	109'	
W-47	64	328 N MAIN ST	STA. 232+76.23 60.66R	STA. 232+78.04 58.31R	1"	17'	
W-48	70	362 N MAIN ST	STA. 234+10.92 45.89R	STA. 234+19.73 45.55R	1-1/2"	7'	
W-49	71	473 N MAIN ST	STA. 236+40.46 55.91L	STA. 236+39.49 55.91L	1-1/2"	9'	
W-50	74	466 N MAIN ST	STA. 238+25.65 55.81R	STA. 238+23.85 55.81R	3"	17'	



FIRE HYDRANT INFORMATION:
 LOCATION: INTERSECTION OF SR 28 (MAIN ST) AND SR 298 (GENESIS RD)
 FIRE HYDRANT NUMBER - 160
 GPM = 1048
 STATIC PRESSURE = 50 PSI
 RESIDUAL PRESSURE = 47 PSI
 DATE: 12/29/15
 ELEVATION = 1865.5 (TOP OF OPERATING NUT)
 FIRE HYDRANT WAS FLOWED ON JULY 07, 2014



APPROVED AS NOTED
Jim Thompson
 TDOT REGION 2 UTILITY DEPARTMENT
 DATE: January 11, 2016

CITY OF CROSSVILLE
ENGINEERING DEPARTMENT
 392 N MAIN ST
 CROSSVILLE, TN 38555
 PHONE: (931) 484-5113
 FAX: (931) 484-7713

MAIN STREET 12" WATER MAIN

NO.	DATE	REVISION DESCRIPTION
1		
2		
3		
4		
5		

FILE NAME:
 Main St 12" Water Main
 DWG
 DRAWN BY: KGO
 CHECKED BY: TRB
 DATE: 12/29/15

SHEET NO.
 1 of 2

PROFILE:
 SCALE 1" = 50' HORIZONTAL
 SCALE 1" = 5' VERTICAL