WARREN COUNTY TRANSPORTATION IMPROVEMENT DISTRICT

Resolution Number 2019 – 19

A RESOLUTION AUTHORIZING THE AWARD OF CONSTRUCTION CONTRACT FOR THE COLUMBIA ROAD WIDENING PROJECT,

WHEREAS, the WCTID is authorized by ORC Chapter 5540 (1) to finance, construct, maintain, repair and operate street, highway, and other transportation projects; and (2) to construct, reconstruct, improve, alter, and repair roads, highways, public places, buildings, and other infrastructure, and to implement and effect a regional approach to transportation improvements;

WHEREAS, the projects undertaken by the WCTID and exercise of its authority, pursuant to ORC Chapter 5540, are essential governmental functions and considered to contribute to the improvement of the prosperity, health, safety, and welfare of the people of the County and the State, and is consistent with and will promote industry, commerce, distribution, and research activity within the County, the region and the State;

WHEREAS, the WCTID recognizes, consistent with its charter, mission and in the development of its projects under ORC Chapter 5540 as established by its Board of Trustees, that it is a priority to engage and cooperate to the greatest extent practical in related efforts and with the Township, the City and the County;

WHEREAS, the WCTID committed to further develop, facilitate, fund and construct, in conjunction with ODOT as appropriate, certain necessary roadway improvements, for a public use within the County, and the City of Mason ("Mason"), including a roadway improvement project known as the: the *Columbia Road Widening Project*, which includes improvements of a roadway open to and to serve the public, without charge, and as is further described and set forth in plans and documents on file with the WCTID, the WCEO (also specifically referred to hereafter as the "Project"); and, the Project is included in and part of the WCTID Program of Projects;

WHEREAS, the WCTID, in cooperation and coordination with Mason and the WCEO, invited and accepted bids to provide all labor and materials necessary to construct the Project in accordance with the project bid package, plans and specifications, which bids were opened and reviewed and tabulated by the WCEO on behalf of the WCTID, and accordingly determined that the bid submitted by Barrett Paving Materials, Inc. ("Barrett"), in the amount of \$1,004,345.62, was the apparent best, most responsive and responsible bid among those bids received on or before 11:00 a.m. local time, September 24, 2019, in response to the invitation to bid by the WCTID;

WHEREAS, the WCTID, pursuant to ORC §5540.03 is authorized to take such actions, receive such funding, and enter into all agreements necessary or incidental to performance of its functions and the execution of its powers to effect its purposes and transportation projects under ORC Chapter 5540; and,

NOW, THEREFORE, BE IT RESOLVED, that the WCTID Board of Trustees confirms and authorizes acceptance of the bid submitted by Barrett in the amount of \$1,004,345.62, as the apparent best most responsive and responsible bid among those bids received, on or before 11:00 a.m. local time, September 24, 2019 in response to the invitation to bid by the WCTID to provide all labor and materials necessary to construct the Project in accordance with the project bid package, plans and specifications, and the WCTID Board hereby accordingly authorizes the WCTID Secretary-Treasurer to accept the bid and award the Project to Barrett, in the bid amount of \$1,004,345.62, and, in conjunction therewith, to take any and all further actions and to execute, to acknowledge, and to deliver or to accept, any and all such other and further documents or instruments, including, but not limited to, certificates, affidavits, ratifications, reaffirmations, and any and all other contract documents or instruments, all containing such provisions, clauses, covenants, agreements, warranties, terms, and conditions as the WCTID Chairperson or Secretary-Treasurer, in his sole and absolute discretion upon consultation with WCTID legal counsel and the WCEO, deems necessary or appropriate relative to the award and execution of the contract for the Project construction contracting services work, and, further, any appropriate change order(s), as may be determined appropriate and necessary by the WCTID Secretary-Treasurer in his sole and absolute discretion, upon consultation with WCTID legal counsel, not to exceed a total amount of 5% of the contract amount or \$50,217.28, and that the taking of any such action and the execution and delivery or acceptance of any such documents or instruments by the WCTID Chairperson or Secretary-Treasurer relative to any appropriate and required change orders, shall be conclusive evidence of the Board's determination that such actions are necessary in order for the WCTID to carry out the purposes of this resolution and of the authorization thereof by the Board.

It is found and determined that all formal actions of this Board concerning and relating to the adoption of this resolution were adopted in an open meeting of this Board, and that all deliberations of this Board that resulted in such formal action, were in meetings open to the public, in compliance with the law, including § 121.22 of the Ohio Revised Code.

Adopted at a regularly adjourned meeting of the Board of Trustees of the Warren County Transportation Improvement District, Warren County, Ohio, this 26th day of September, 2019.

In Ann

Warren County Transportation Improvement District Presiding Trustee

Attest: heil f. Tunion

Warren County Transportation Improvement District Secretary-Treasurer

Motion to Pass Resolution: Mr. Eric Reiners

Seconded by: Ms. Tiffany Zindel

Columbia Road (CR15) Improvements Deerfield Township and City of Mason, Warren County, Ohio

Ref	Item				Unit	Total
No.	No.	Item Description	Quantity	Unit	Price	Cost
		Roadway				
1	201	CLEARING AND GRUBBING	1	LS		
2	202	PAVEMENT REMOVED	716	SY		
3	202	CURB REMOVED	123	FT		
4	202	CURB AND GUTTER REMOVED	1319	FT		
5	202	PIPE REMOVED, 24" AND UNDER	60	FT		
6	202	CATCH BASIN REMOVED	4	EACH		
7	203	EXCAVATION	843	CY		
8	203	EMBANKMENT	399	CY		
		ROADWAY, MISC.: HIGH-VEHICULAR LOAD				
9	203	GRASSED FIRE LANE	1	LS		
10	204	SUBGRADE COMPACTION	2385	SY		
11	204	EXCAVATION OF SUBGRADE	55	CY		
12	204	GRANULAR MATERIAL, TYPE C	55	CY		
13	204	GEOTEXTILE FABRIC	120	SY		
14	254	PAVEMENT PLANING, ASPHALT CONCRETE	220	SY		
15	301	ASPHALT CONCRETE BASE, PG64-22	492	CY		
16	304	AGGREGATE BASE	397	CY		
17	407	NON-TRACKING TACK COAT	263	GAL		
		ASPHALT CONCRETE SURFACE COURSE, TYPE				
18	441	1, (448), PG64-22	91	CY		
		ASPHALT CONCRETE INTERMEDIATE COURSE,				
19	441	TYPE 1, (448)	91	CY		
20		GUARDRAIL, TYPE MGS	200	FT		
21	606	ANCHOR ASSEMBLY, MGS TYPE E	1	EACH		
22	606	ANCHOR ASSEMBLY, MGS TYPE T	1	EACH		
23	608	4" CONCRETE WALK	1786	SF		
24	609	COMBINATION CURB AND GUTTER, TYPE 2	1204	FT		
25	609	COMBINATION CURB AND GUTTER, TYPE 3	347	FT		
26	659	TOPSOIL	326	CY		
27	659	SEEDING AND MULCHING, CLASS 1	2959	SY		
		SPECIAL - PAVEMENT CRACK AND JOINT				
28	690	REINFORCING FABRIC	220	SY		
		CONCRETE BASE, MISC.: CONCRETE BASE, AS				
29	305	PER PLAN	31	SY		

Columbia Road (CR15) Improvements Deerfield Township and City of Mason, Warren County, Ohio

Ref	Item				Unit	Total
No.	No.	Item Description	Quantity	Unit	Price	Cost
30	605	4" BASE PIPE UNDERDRAINS	1060	FT		
31	611	12" CONDUIT, TYPE B	250	FT		
32	611	12" CONDUIT, TYPE C	47	FT		
33	611	CATCH BASIN, NO. 3	4	EACH		
34	832	EROSION CONTROL	16670	EACH		
35	621	RPM	30	EACH		
36	621	RAISED PAVEMENT MARKER REMOVED	30	EACH		
37	630	GROUND MOUNTED SUPPORT, NO. 3 POST	69	FT		
38	630	SIGN, FLAT SHEET	34.25	SF		
		REMOVAL OF GROUND MOUNTED SIGN AND				
39	630	DISPOSAL	3	EACH		
		REMOVAL OF GROUND MOUNTED SIGN AND				
40	630	REERECTION	1	EACH		
		REMOVAL OF GROUND MOUNTED POST				
41	630	SUPPORT AND DISPOSAL	3	EACH		
		REMOVAL OF GROUND MOUNTED POST				
42	630	SUPPORT AND REERECTION	1	EACH		
43	644	EDGE LINE, 4"	0.23	MILE		
44	644	LANE LINE, 4"	0.21	MILE		
45	644	CENTER LINE	0.19	MILE		
46	644	CHANNELIZING LINE, 8"	513	FT		
47	644	STOP LINE	28	FT		
48	644	ISLAND MARKING	54	SF		
49	644	LANE ARROW	12	EACH		
50	644	DOTTED LINE, 4"	132	FT		
51	644	REMOVAL OF PAVEMENT MARKING	5	EACH		
52	644	REMOVAL OF PAVEMENT MARKING	0.33	MILE		
53	614	MAINTAINING TRAFFIC	1	LS		
		CONSTRUCTION LAYOUT STAKES AND				
54	623	SURVEYING	1	LS		
55	624	MOBILIZATION	1	LS		
					Sub-Total =	
		Water Improvements				
		24" WATER MAIN DUCTILE IRON PIPE ANSI				
		CLASS 52, MECHANICAL JOINTS AND FITTINGS				
56	638	(UNRESTRAINED)	630	EACH		

Columbia Road (CR15) Improvements Deerfield Township and City of Mason, Warren County, Ohio

Ref	Item				Unit	Total
No.	No.	Item Description	Quantity	Unit	Price	Cost
		24" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 52, MECHANICAL JOINTS AND FITTINGS				
57	638	(RESTRAINED)	1430	EACH		
58	638	16" GATE VALVE, VALVE AND VALVE BOX	1	EACH		
59	638	24" GATE VALVE, VALVE AND VALVE BOX	3	EACH		
60	638	1" AIR RELEASE VALVE	2	EACH		
61	638	FIRE HYDRANT AND GATE VALVE REMOVED AND RESET	3	EACH		
62	638	FIRE HYDRANT ASSEMBLY	1	EACH		
					Sub-Total =	
			1	fotal E	Bid Amount	



September 19, 2019

Re: Addendum No. 1 – Project No. 19-04: Columbia Road Widening Project

Dear Prospective Bidder:

Listed below is Addendum No. 1 for the referenced project. Please note the following clarifications/modifications to be included in your bid price. The bid opening for this project will remain as scheduled on Tuesday, September 24th, 2019 at 11:00 a.m. at the Warren County Engineer's Office, 210 West Main Street, Lebanon, Ohio 45036.

ADDENDUM NO. 1

1. **Clarification/Modification:** (Bid Proposal)

Reissuance of "Bid Proposal" sheet eliminating the reference to "Phase 1" and "Phase 2".

Addendum No. 1 shall be signed and included with the submission of the bid. Please sign below and enter the date you received this addendum. Any bid submitted without the signed Addendum No. 1 shall be rejected. If you have any questions please contact Dan Corey, P.E. at <u>Dan.Corey@co.warren.oh.us</u> (513) 695-7725.

Sincerely,

Neil F. Tunison, P.E., P.S. Secretary/Treasurer

Received by

Signature

Company

Date

cc: file

BID PROPOSAL

PROJECT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

DEERFIELD TOWNSHIP

TO THE WARREN COUNTY TRANSPORTATION IMPROVEMENT DISTRICT:

The undersigned certifies that he/she has examined the plans and specifications and has inspected the site of the proposed improvements. It is understood that the following bid will be governed by the UNIT PRICE BID, unless otherwise specified, also that the quantities may be increased or decreased, if the bid is a unit price bid.

The undersigned submits with the following bid a bid guarantee for the amount, as set forth in Section 200.5 of the General Provisions, and proposes to furnish all labor (prevailing wage rates apply), equipment, and materials necessary for the construction of **PROJECT NO. 19-04**: **COLUMBIA ROAD WIDENING PROJECT** in accordance with the Ohio Department of Transportation Construction and Material Specifications, Standard Construction Drawings, Ohio Manual of Uniform Traffic Control, The Ohio Department of Transportation Bridge Design manual, and the Technical Specifications contained in the Construction Drawings, under the most current versions of the aforementioned drawings and specifications and in force on the date of letting shall be enforced by the Warren County Transportation Improvement District:

PROJECT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

DEERFIELD TOWNSHIP

TOTAL ENGINEER'S ESTIMATE: \$1,200,000.00

Please enter the total cost of the Bid Proposal, OBTAINED FROM THE ATTACHED WORKSHEETS, in the space below:

TOTAL BID AMOUNT:

\$							

Amount of Guaranty: Each Proposal must be accompanied by a bond in the sum of One Hundred (100) percent (%) of the Bid Amount or a CERTIFIED CHECK, CASHIER'S CHECK, OR IRREVOCABLE LETTER OF CREDIT pursuant to Chapter 1305 of the Ohio Revised Code in the sum of ten (10) percent (%) of the Bid Amount on a solvent bank as a guarantee that if the Proposal is accepted a contract will be entered into.

BID OPENING DATE:Tuesday September 24th, 2017BIDS RECEIVED BY:11:00 a.m. Local Time

107158\000001\4812-3242-9219v1-8/30/19

Columbia Road Widening Project Warren County Transportation Improvement District

PLAN HOLDERS LIST

Columbia Road Widening Project

Individuals or companies can be added to the plan holders list by contacting Dan Corey at <u>dan.corey@co.warren.oh.us</u>

Name	Company	Phone Number	E-mail Address
Tyler Holden	Rack and Ballauer Excavating Co. Inc.	513.738.7000 ext. 20	holden.tyler@gmail.com
Lisa McNabb	W G Stang, LLC	513.863.6924	wgstang@cinci.rr.com
Rahsaan Jackson	Ford Development Corp.	513.722.1521	rahsaan@forddevelopment.com
Michael Majors	Majors Supply	513.539.8212	majorssupply@hotmail.com
Ryan Wheeler	R. B. Jergens	937.669.9799	Ryan.wheeler@rbjergens.com
Drew Townsend	Welsh Excavation	513.353.9014	drewt@welshexcavation.com
Chad Baker	Barrett Paving Materials, Inc.	513.422.4662	Chad.baker@barrettpaving.com



COLUMBIA ROAD (CR15) **IMPROVEMENTS**

DEERFIELD TOWNSHIP AND CITY OF MASON

WARREN COUNTY, OHIO

THIS PROJECT INCLUDES IMPROVEMENTS OF COLUMBIA ROAD NORTH OF SOCIALVILLE FOSTER ROAD TO SOUTH OF FITZGERALD WAY. THE PROJECT INVOLVES WIDENING APPROXIMATELY 1,300 LINEAL FEET OF ROADWAY ALONG THE WEST SIDE OF COLUMBIA ROAD. ASSOCIATED IMPROVEMENTS INCLUDE THE ADDITION AND/OR MODIFICATION OF PAVEMENT MARKINGS. SIGNAGE. STORM SEWER, AND WATER MAIN.

INDEX OF SHEETS

TITLE SHEET	1
SCHEMATIC LAYOUT	2
TYPICAL SECTIONS	3
GENERAL NOTES	4
PLAN & PROFILES	5-8
MISCELLANEOUS STORM PROFILES	9
CROSS SECTIONS	10-16
INERSECTION DETAILS	17
CONCRETE PAVEMENT DETAILS	18
TRAFFIC CONTROL PLAN	19-20
WATER MAIN PLAN SET	W1-W7

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VICINITY MAP NOT TO SCALE

	LEGEND	DESIGN DESIGNATION	
ø	LIGHT POLE	CURRENT ADT (2018)	9,290 cpd
_		DESIGN YEAR ADT (2038)	11,340 vpd
-0-	UTILITY POLE	DESIGN HOURLY VOLUME	1,300 vph
Ļ	GUY WIRE	DIRECTIONAL DISTRIBUTION	0.54
E	ELECTRIC MANHOLE	TRUCKS (24 HOUR B&C)	3%
TR	TRAFFIC SIGNAL BOX	DESIGN SPEED	45MPH
_		LEGAL SPEED	45 MPH
TRP	TRAFFIC SIGNAL POLE	FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR
MB	MAILBOX	NHS	NO
● ^{GP}	GUARD POST	CLASSIFICATION	URBAN

- Ġ GAS VALVE
- Q FIRE HYDRANT
- ١ WATER VALVE
- WATER METER 1
- W TELEPHONE BOX T

WATER MANHOLE

- SIGN (1 POST)
- SIGN (2 POST) - - - -
- 67 TREE

靋 BUSH

- -X-X-FENCE LINE
- w--- w-WATERI INE
- UNDERGROUND GASLINE - G - G -
- FIBER OPTIC -FO-FO-- OU - OU -OVERHEAD UTILITY
- UNGERGROUND ELECTRIC -UE-UE-
- UNDERGROUND TELEPHONE -UT-UT-
- ----SAWCUT
- EXISTING SWALE ~~~ DITCH
- CONSTRUCTION LIMITS





OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)

SIGNE	SUPPLEMENTAL SPECIFICATIONS	STANDARD CONSTRUCTION DRAWINGS								
	800 04/19/2019		4/19/19	MT-95-31	10/18/13	TC-41.20	1/15/16	MH-1.2	7/28/00	BP-1.1
· · · · ·	832 10/19/2018		4/19/19	MT-97.10	10/18/13	TC-41.30			7/17/15	BP-2.1
ENGINEER'S			7/21/17	MT-101.90	10/18/13	TC-42.10	1/19/18	MGS-1.1	7/18/14	BP-3.1
			7/19/13	MT-105.10	10/18/13	TC-42.20	1/19/18	MGS-2.1	1/18/19	BP-5.1
STATE OF							1/20/17	MGS-4.1		
STATE OF OHIO					1/17/14	TC-65.10	7/19/13	MGS-4.2	7/20/18	CB-2.1
YEZNIK Y	PLAN INSERT				7/21/17	TC-65.11				
* YERETZIAN E-59092	SHEETS				1/19/18	TC-71.10			7/21/17	DM-1.1
1 8 CONTROL	SHEETS								1/18/13	DM-1.2
South Browner									1/15/16	DM-4.4
00.000) -										
9/9/20									7/20/18	HW-1.1
/ //									7/20/18	HW-2.2

SIGNED NEIL F. TUNISON, WARREN COUNTY ENGINEER



PROJECT DESCRIPTION

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS PROJECT.

PROJECT EARTH DISTURBED AREA:	0.97
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.00
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A

9/9/19

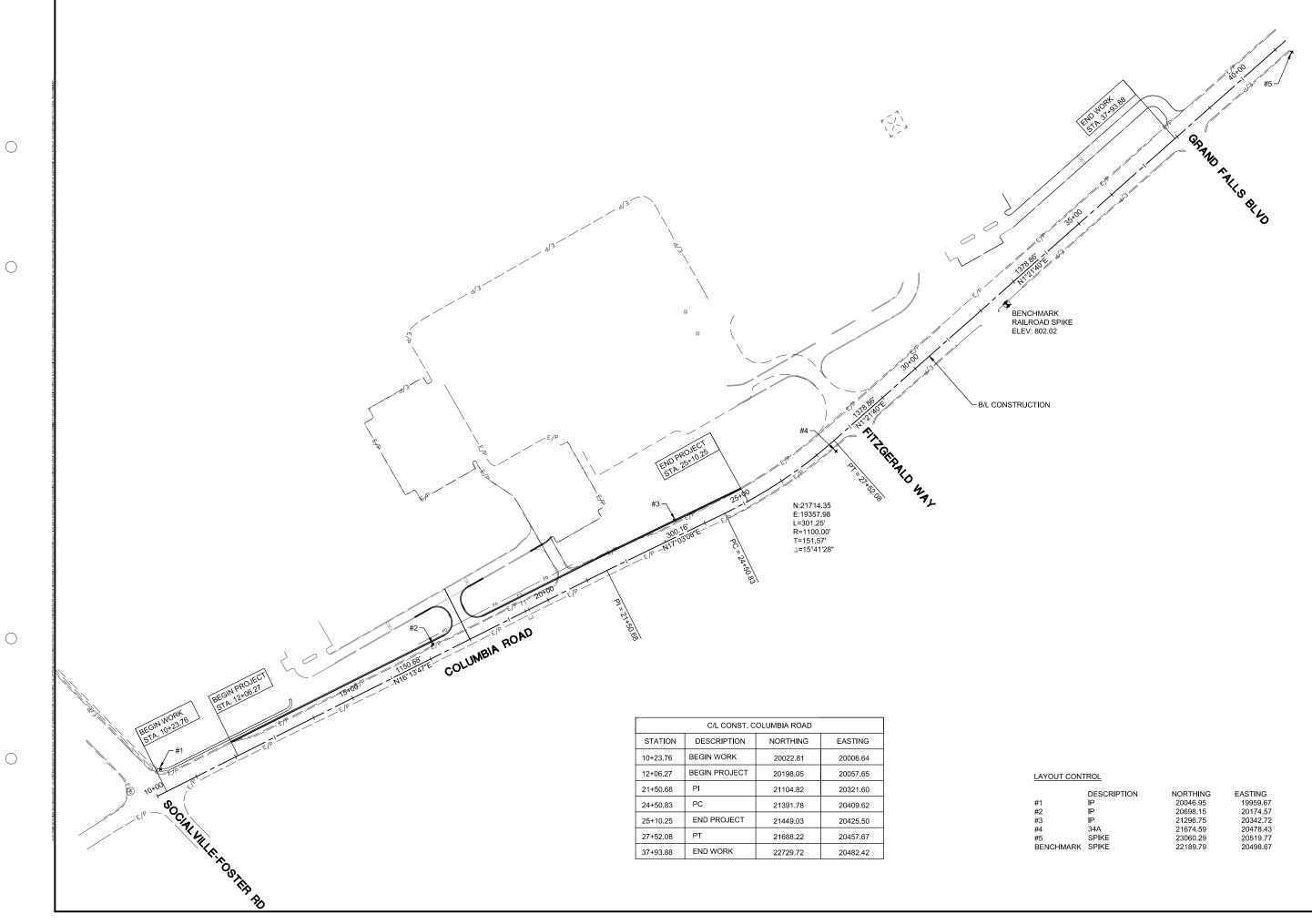
PLANS PREPARED BY

KLEINGERS CIVIL ENGINEERING | www.kleingers.com SURVEYING 6219 Centre Park D LANDSCAPE ARCHITECTURE 513,779,785

DATE

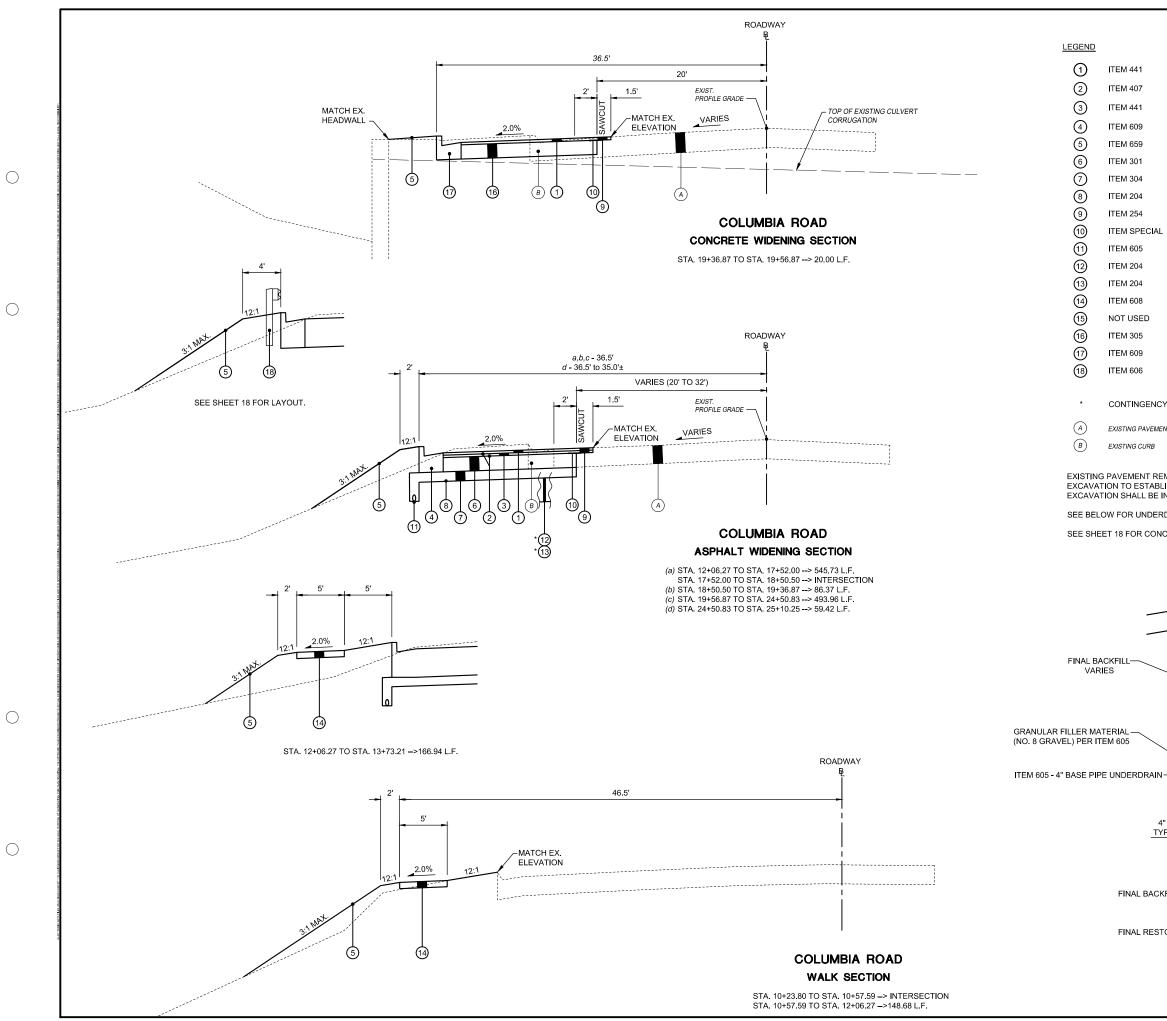
180166 003

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SEC CHECKED MWN COLUMBIA ROAD (CR15) IMPROVEMENTS SCHEMATIC LAYOUT





	SEC CHECKED MWN
	8
1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
NON-TRACKING TACK COAT (0.06 GAL/S.Y.)	
1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
CURB & GUTTER, TYPE 2	
4" TOPSOIL/SEEDING AND MULCHING	
9" ASPHALT CONCRETE BASE, PG64-22 (2 LIFTS)	
6" AGGREGATE BASE	
SUBGRADE COMPACTION WITH PROOF ROLLING	
PAVEMENT PLANING (3" TYPICAL)	
JOINT FABRIC, AS PER PLAN	
4" BASE PIPE UNDERDRAIN	
EXCAVATION OF SUBGRADE (16")	<u> </u> ମ
GRANULAR MATERIAL, TYPE C (16")	
CONCRETE WALK (4")	₩
CONCRETE BASE, AS PER PLAN (9.7")	
CURB & GUTTER, TYPE 2, AS PER PLAN	
GUARDRAIL, TYPE MGS	
	ROAD (CR15) IMPROVEMENTS TYPICAL SECTION
Y ITEM NOTE: SEE CROSS SECTIONS	
FOR EXACT TIE-IN SLOPES	
EMOVAL MAY INCLUDE VARIABLE DEPTH LISH SUBGRADE ELEVATIONS. COST OF THE	AD ((YPICA
INCIDENTAL ITEM 202 - PAVEMENT REMOVED.	IS≿I
RDRAIN DETAILS.	
ICRETE BLAB DETAILS.	
FINAL RESTORATION	ABIA
(3" ITEM 653 @ GRASS AREAS)	
•	
•	
•	
ITEM 304	
	ahc
12"± ITEM 605	DPM, sar
⊢>	115151
KFILL: a) UNDER PAVEMENT - ODOT ITEM 304 OR ITEM 310; 98% COMPACTION	A/s/2011
b) GRASS AREAS - APPROVED NATIVE MATERIAL FREE OF LARGE STONES &	03.dwg
CLUMPS (MAX. 8" LIFTS; 95% COMPACTION)	MLEINGERS GROUP
TORATION: COST INCLUDED WITH OTHER ITEMS	
UNDERDRAIN DETAIL	

FINAL RESTORATION: COST INCLUDED WITH OTHER ITEMS

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SPECIFICATIONS AND STANDARD CONSTRUCTION DRAWINGS THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS

SPECIFICATIONS, DATED JANUARY 1, 2019, AND THE NOTED STANDARD CONSTRUCTION DRAWINGS

WHEREVER THE WORD "DIRECTOR" OR "ENGINEER" OCCURS, IT IS TO MEAN THE WARREN COUNTY ENGINEER AND/OR HIS DESIGNATED REPRESENTATIVE, LIMITED TO THE PARTICULAR DUTIES ENTRUSTED TO HIM.

PRE-CONSTRUCTION MEETING FOLLOWING THE AWARD OF THE CONTRACT AND BEFORE STARTING ANY WORK, THE CONTRACTOR AND HIS SUPERINTENDENT, SHALL MEET WITH THE ENGINEER FOR A PRE-CONSTRUCTION MEETING. THE PURPOSE OF SUCH IS FOR REVIEWING THE SITE, AND ANY RESTRICTIONS AND REGULATIONS GOVERNING THE WORK

ANY SCHEDULES, REQUESTS, PAPERS, APPROVALS, SUBMITTALS, SHOP DRAWINGS, CHANGES, ETC. AS CALLED FOR IN THE CONTRACT DOCUMENTS SHALL BE DONE AT THIS TIME UNLESS OTHERWISE DIRECTED.

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PERMITS, FEES AND NOTICES THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ANY AND ALL PERMITS AND INSPECTIONS REQUIRED FOR THE PROSECUTION OF THE WORK BY LOCAL LAWS, ORDINANCES, RULES AND REGULATIONS

MATERIALS AND WORKMANSHIP UNLESS OTHERWISE SPECIFIED. ALL MATERIALS SHALL BE NEW AND BOTH WORKMANSHIP AND UNLESS OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE NEW AND BOTH WORKMASHIP AND MATERIALS SHALL BE OF THE FIRST QUALITY, PROPER AND SUFFICIENT FOR THE PURPOSE CONTEMPLATED. THE CONTRACTOR SHALL FURNISH, IF SO REQUIRED, SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF MATERIALS AND WORKMANSHIP. ALL ITEMS OF EQUIPMENT AND/OR MATERIALS PROPOSED FOR SUBSTITUTION MUST BE APPROVED BY THE ENGINEER IN WRITING AND SHALL BE EQUAL OR BE SUPERIOR TO THE ITEMS SPECIFIED IN THE CONTRACT DOCUMENTS. IF SAID SUBSTITUTION PROPOSED BY THE CONTRACTOR FOR A SPECIFIED ITEM REQUIRED ENGINEERING DEVINION THE FURDER OF QUILING IN THE CONTRACT DOCUMENTS. IF SAID SUBSTITUTION DEVICE OF QUILING IN THE CONTRACT DOCUMENTS. IF SAID REVISIONS, THE EXPENSE OF SUCH REVISIONS SHALL BE PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

EXISTING FACILITIES IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM HIS WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING FACILITY. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, HE SHALL REPLACE THE DAMAGED PORTION AT HIS EXPENSE AND TO THE SATISFACTION OF THE OWNER.

EXAMINATION OF THE SITE THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE OF THE PROPOSED WORK, THE PLANS AND SPECIFICATIONS. THE SUBMISSION OF A BID SHALL BE CONSIDERED EVIDENCE THAT THE CONTRACTOR HAS MADE SUCH EXAMINATION AND IS SATISFIED AS TO THE CONDITIONS TO BE ENCOUNTERED IN PERFORMING THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

CONSTRUCTION LIMITS THE CONTRACTOR SHALL RESTRICT ALL OF HIS ACTIVITIES, EQUIPMENT STORAGE AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE ACTUAL CONSTRUCTION LIMITS ARE SHOWN ON THE PLANS OR THE EXISTING OR PROPOSED RW, WHICHEVER IS NEAREST. SHOULD THE CONTRACTOR WISH TO USE ANY AREA OUTSIDE THESE LIMITS, HE MUST SUBMIT HIS REQUEST IN WRITING TO THE ENGINEER. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA THAT THE CONTRACTOR PLANS TO USE AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. THE ENGINEER SHALL APPROVE THE REQUEST IN WRITING BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA. PRIOR TO THE BEGINNING OF WORK, THE REPRESENTATIVE OF THE MAINTAINING AGENCY SHALL REVIEW WAD RECORD ALL ADJACENT SITES WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF THE ADACENT SY WILL BE MADE. ANY AREAS DAMAGED BEYOND THE CONSTRUCTION REVIEW OF THE ADJACENT SITES WILL BE MADE. ANY AREAS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPAIRED OR REPLACED, AT THE CONTRACTOR'S EXPENSE, IN KIND OR AS DIRECTED BY THE ENGINEER.

PROTECTING EXISTING UNDERGROUND UTILITIES THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING, MARKING, OR OTHERWISE DESIGNATING THE LOCATIONS OF THE UNDERGROUND UTILITIES IN THE CONSTRUCTION AREAS IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH OF WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF PLANNED CONSTRUCTION. EXTREME CARE SHALL BE TAKEN IN THE VICINITY OF THE EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ISOLATE, BRACE, SUPPORT, SHEET, ETC. AND PROTECT THE EXISTING UTILITY FROM MOVING EITHER HORIZONTALLY OR VERTICALLY. IF SUCH MOVEMENT DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR MAY ELECT TO REMOVE AND RECONSTRUCT PORTIONS OF THE EXISTING UTILITY AT HIS OWN EXPENSE IF HE SO DESIRES. THE COST OF REPAIR SHALL BE INCURRED BY THE CONTRACTOR.

SHOULD AN UNLOCATED OR AN EXTREME VARIANCE IN LOCATION OF A UTILITY BE ENCOUNTERED DURING EXCAVATION, CONSULT THE OWNER IMMEDIATELY FOR DIRECTIONS.

DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICING HAS BEEN PROVIDED. COOPERATION WITH THE OWNER IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION IS ESSENTIAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM HIS WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING UTILITY. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, HE SHALL NOTIFY THE OWNER IMMEDIATELY AND REPLACE THE DAMAGED PORTION IMMEDIATELY, AND AT HIS EXPENSE.

WORK LIMITS THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

WEATHER CONDITIONS NO CONSTRUCTION SHALL BE DONE DURING STORMY, FREEZING, OR INCLEMENT WEATHER UNLESS PERMISSION IS GIVEN BY THE ENGINEER. WHENEVER WORK PROCEEDS DURING SUCH WEATHER, THE CONTRACTOR SHALL PROVIDE APPROVED FACILITIES, INCLUDING HEAT (IF REQUIRED), FOR THE PROTECTION OF ALL MATERIALS AND FINISHED WORK.

UNDERGROUND UTILITIES THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE AS OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE.

THE UNDERGROUND UTILITIES SHOWN ON THE PLAN HAVE BEEN LOCATED BY FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT; BUT THERE IS NO GUARANTEE TO THEIR ACCURACY OR COMPLETENESS.

COOPERATION WITH UTILITY COMPANIES WHILE THE WORK OF THIS CONTRACT IS BEING PERFORMED, THE UTILITY COMPANIES MAY BE WORKING IN THE AREA ADJUSTING AND RESETTING EXISTING FACILITIES. THE CONTRACTOR SHALL FULLY COOPERATE WITH UTILITY COMPANIES SO THAT THE ENTIRE WORK IS COMPLETED IN A MANNER CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. THE CONTRACTOR, UTILITIES, AND ENGINEER SHALL DISCUSS THE NECESSARY CONSTRUCTION SCHEDULES TO COMPLETE THE PROJECT AT THE PRE-CONSTRUCTION MEETING.

<u>UTILITIES NOTIFICATION</u> AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN ON THE PLAN.

THE OWNER OF THE UNDERGROUND FACILITY SHALL, WITHIN 48 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS), MARK THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE AND THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION.

CHARTER COMMUNICATIONS

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RESTORATION THE CONTRACTOR SHALL PROVIDE FOR PROTECTION OF THE FOLLOWING: EXISTING STREETS, THE CONTRACTOR SHALL PROVIDE FOR PROTECTION OF THE FOLLOWING: EXISTING STREETS, DRIVEWAYS, SIDEWALKS, CURRS, GUTTERS, RE-SEEDING/RE-SODDING, REMOVAL OF TREES, RESTORATION OF AGRICULTURAL LAND, THE MAINTENANCE OF THE CONSTRUCTION AREA DURING PROGRESS OF THE WORK AND THE COMPLETE RESTORATION OF THE CONSTRUCTION AREA ATO ITS ORIGINAL CONDITION AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL CONTINUOUSLY CARRY ON WITH THE FINAL RESTORATION OF THE CONSTRUCTION AREA AFTER THE BACKFILLING IS COMPLETED, AND HE SHALL PROCEED TO RESTORE TO ITS ORIGINAL CONDITION ALL STREETS, DRIVEWAYS, SIDEWALKS, CURBS, GUTTERS, STRUCTURES, AND ALL AREAS THAT WERE DAMAGED, DISTURBED, OR OCCUPIED BY THE CONTRACTOR IN CONNECTION WITH ANY PHASE OF THE WORK.

PAVEMENTS, TREES, SHRUBS, FENCES, POLES, OR OTHER PROPERTY AND SURFACE STRUCTURES WHICH HAVE BEEN DAMAGED, REMOVED, OR DISTURBED BY THE CONTRACTOR, WHETHER DELIBERATELY OR THROUGH FAILURE TO CARRY OUT THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, STATE LAWS, MUNICIPAL ORDINANCES, THE SPECIFIC DIRECTION OF THE ENGINEER, OR THROUGH FAILURE TO EMPLOY USUAL AND REASONABLE SAFEGUARDS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

ALL TEMPORARY SIGNS, SPRINKLER SYSTEMS, LANDSCAPING, ORNAMENTAL FENCING, ETC., LOCATED WITHIN THE PROJECT LIMITS MUST BE REPLACED OR RELOCATED UPON COMPLETION OF THE

COST OF THE ABOVE SHALL BE PAID FOR UNDER ITEM 201 CLEARING AND GRUBBING

MAINTENANCE OF STORM SEWER FLOWS THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN SEWER FLOWS AT ALL TIMES THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PLACED

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED.

ALL EXISTING SEWERS SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER

SUBGRADE STABILIZATION A UNIFORM DEPTH OF 16 INCHES OF UNDERCUT AND ODOT GRANULAR BACKFILL IS SHOWN AS A CONTINGENCY. THE ACTUAL DEPTH OF UNDERCUT SHALL BE DETERMINED, IN THE FIELD, BY THE ENGINEER BASED ON PROOF ROLLING PERFORMANCE.

ITEM 305 CONCRETE BASE, AS PER PLAN ITEM 305 CONCRETE BASE, AS PER PLAN - CONCRETE SHALL BE CLASS QC 2 (28 DAY COMPRESSION STRENGTH = 5,000 PSI). THE CONTRACTOR SHALL REINFORCE THE CONCRETE SLAB USING #5 REBAR SPACED AT 8 INCH INTERVALS CENTER TO CENTER. REINFORCING SHALL BE PROVIDED IN BOTH LONGITUDINAL AND TRANSVERSE DIRECTIONS ALL REINFORCING AND LOW MORTAR STRENGTH BACKFILL SHALL BE INCIDENTAL TO ITEM 305 CONCRETE BASE, AS PER PLAN.

ITEM 609 CURB & GUTTER, TYPE 2, AS PER PLAN GUTTER THICKNESS SHALL BE 11.2" AT EDGE OF PAVEMENT.

MAINTENANCE OF TRAFF TO AND THAT PROVIDES THE REQUIREMENTS FOR TRAFFIC CONTROL DEVIC CURRENT EDITION PERT ENGINEER SHALL APPLY

SHOULD ANY PAVED ARE DESTROYED DURING COM PROVIDE ADEQUATE SIG THE RESTORATION OF TH THE SATISFACTION OF TH

TEMPORARY PAVEMENT OPENED TO TRAFFIC.

DRUMS SHALL BE REFLEC DRUMS SHALL BE SPACED OTHERWISE ON THESE PL FOOT INTERVALS ALONG DRUMS AS DIRECTED BY DURING CONSTRUCTION

THE CONTRACTOR WILL AND LEGIBLE, AND IN GO OTHER TRAFFIC CONTRO BE REFLECTORIZED OR II AND PROCEED IN THE DI SHALL BEGIN AT THE END THE CONTRACTOR SHALL DEVICES BEFORE BEGINI SUSPENDED OR COMPLE

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THE CONTRACTOR SHALL PROJECT LIMITS THROUG

BEFORE THE WORK BEGI TELEPHONE NUMBERS O ENGINEER, AFFECTED SA AND/OR REPLACE THE TH TRAVELED PAVEMENT.

ALL WORK AND TRAFFIC APPLICABLE PORTIONS C CONTROL DEVICES. PAY THE LUMP SUM CONTRAC

LOW STRENGTH MORTAR WHENEVER WATER LINES CROSSINGS AND/OR BRID ROADWAYS. THE BACKEL

ON THE PLANS. WHENEVER A CUT IN PAV STRENGTH MORTAR. THI OF THE CUT TO THE SUB

ALL CUTS IN DRIVEWAYS TWO FEET ON EACH SIDE

LOW STRENGTH MORTAR PAVEMENT HAS TO BE RE

THIS QUANTITY IS TO BE

CONSTRUCTION NOTIFIC CONSTRUCTION NOTIFIC, FOURTEEN (14) DAYS PRI CLOSURES, AND ROAD C WARREN COUNTY PROJE NOTIFICATION. THAT OFF AFFECTED SCHOOLS AND ABOVE MENTIONED ITEM

REMOVAL OF PAVEMENT PAVEMENT MARKINGS SH PAVEMENT SURFACE SC

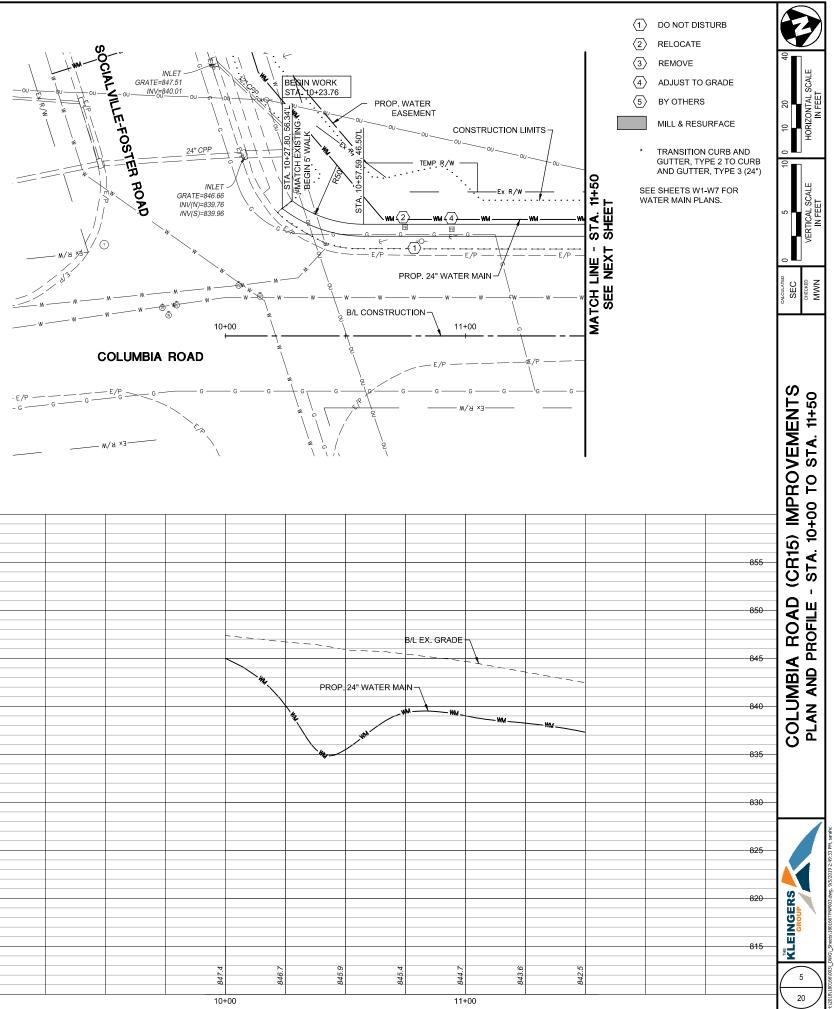
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FIC, <u>GENERAL REQUIREMENTS</u> HALL BE PERFORMED IN A MANNER THAT CAUSES THE LEAST INCONVENIENCE THE MAXIMUM SAFETY FOR THE TRAVELING PUBLIC AND THE CONTRACTOR. R MAINTAINING TRAFFIC AS INDICATED IN THE OHIO MANUAL OF UNIFORM ICES FOR STREETS AND HIGHWAYS (REFERRED TO AS THE "OMUTCD"), TINENT ITEMS IN THE ODOT SPECIFICATIONS, AND AS REQUESTED BY THE ' IN ADDITION TO THE FOLLOWING NOTES.	0			
EAS NOT DESIGNATED FOR MAINTAINING TRAFFIC BECOME DAMAGED OR INSTRUCTION DUE TO THE CONTRACTOR'S NEGLIGENCE OR FAILURE TO INS, BARRICADES, DRUMS, FLAGGERS OR OTHER TRAFFIC CONTROL DEVICES, HE PAVED AREAS SHALL BE AT THE EXPENSE OF THE CONTRACTOR AND TO 'HE ENGINEER.				
MARKINGS SHALL BE IN PLACE PRIOR TO A STAGE OF CONSTRUCTION BEING				
ECTORIZED, AND USED IN ACCORDANCE WITH ITEM 614.03 AND THE OMUTCD. ED AT A MAXIMUM INTERVAL OF 50 FEET CENTER TO CENTER UNLESS SHOWN PLANS OR AS DIRECTED BY THE ENGINEER. DRUMS SHALL BE SPACED AT 10 5 ALL CURB RADII. THE CONTRACTOR SHALL ADJUST THE SPACING ON ALL Y THE ENGINEER TO ALLOW ACCESS AS REQUIRED, WHILE MAINTAINING SAFETY I.				
BE REQUIRED TO PROVIDE, ERECT, MAINTAIN (PROPER POSITION, KEPT CLEAN DOD WORKING CONDITION), AND REMOVE LIGHTS, SIGNS, DRUMS, AND ALL OL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC. ALL SIGNS SHALL ILLUMINATED. PLACEMENT OF ALL TRAFFIC CONTROL DEVICES SHALL START IRECTION OF THE FLOW OF TRAFFIC. REMOVAL OF TRAFFIC CONTROL DEVICES D OF THE CONSTRUCTION AREA AND PROCEED TOWARD ONCOMING TRAFFIC. LL PROVIDE FOR THE INSTALLATION OF ALL NECESSARY TRAFFIC CONTROL INING WORK AND IMMEDIATELY REMOVE THESE DEVICES WHEN WORK IS ETE.	VENTO	_		
OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE TENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC, LANE CLOSURES OR GMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A ME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL ITENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN		N D V EINEN		
L MAINTAIN ACCESS TO ALL LOCAL DRIVES, PRIVATE OR PUBLIC, WITHIN THE GHOUT CONSTRUCTION.			TES	
SINS, THE CONTRACTOR WILL PROVIDE THE ENGINEER WITH THE NAMES AND DF TWO (2) PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE AFETY-SERVICE AGENCIES, AND ALL INTERESTED POLICE AGENCIES, TO REPAIR RAFFIC CONTROL DEVICES AS NEEDED TO MAINTAIN THE SAFETY OF THE			R N N	
CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 614 AND OTHER OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC YMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN ICT PRICE FOR 614, MAINTAINING TRAFFIC.			GENERA	
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R BACKFILL IS, STORM LINES, SANITARY LINES, CULVERT PIPES, BOX CULVERTS, ALL UTILITY IDGE REPLACEMENT OR REPAIRS (INCLUDING ABUTMENTS) CROSS PUBLIC ILL REQUIRED WILL BE LOW STRENGTH MORTAR UNLESS OTHERWISE NOTED	I 1			
VEMENTS IS MADE FOR REMOVAL ITEMS, THE BACKFILL REQUIRED WILL BE LOW HE LIMITS OF THE BACKFILL SHALL BE 2' BEHIND THE CURB, AND FROM THE BASE 3GRADE.		≥ D		
S SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR UNLESS THE DRIVEWAY REMOVED. LIMITS OF BACKFILL SHALL BE THE WIDTH OF THE DRIVEWAY PLUS E.		20		
R BACKFILL WILL BE REQUIRED FOR ANY CUT IN PUBLIC ROADWAYS WHERE THE IEMOVED.				
INCLUDED IN THE UNIT PRICE FOR THE OCCURRENCES AS DESCRIBED ABOVE.				
CATION CATION THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF NOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANG LOSURES, THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE ECT ENGINEER AND ANY OTHER LOCAL OFFICIALS RESPONSIBLE FOR PUBLIC FICIAL WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, ID BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF THE AS, VIA THE APPROPRIATE MEDIA SOURCES.				
<u>I MARKINGS</u> /ATER BLASTING, OR OTHER NON-DESTRUCTIVE MEANS OF REMOVAL OF HALL BE PERMITTED. GRINDING METHODS OF REMOVAL THAT LEAVE THE :ARRED OR SIGNIFICANTLY ROUGHENED SHALL NOT BE PERMITTED.				
I <u>BRIC, AS PER PLAN</u> SET UP IN THE PLANS FOR THE APPLICATION OF AN ASPHALT IMPREGNATED AL, 24 INCHES IN WIDTH, TO BE PLACED OVER THE JUNCTION OF THE EXISTING W PAVEMENT BASE COURSE. THIS MATERIAL SHALL BE PETROTAC OR SHALL BE PLACED AS DIRECTED BY THE ENGINEER.				010 0-04:11 AM sarahc

GEOTECH CONTRACTOR TO INCLUDE GEOTECH FOR CONSTRUCTION.

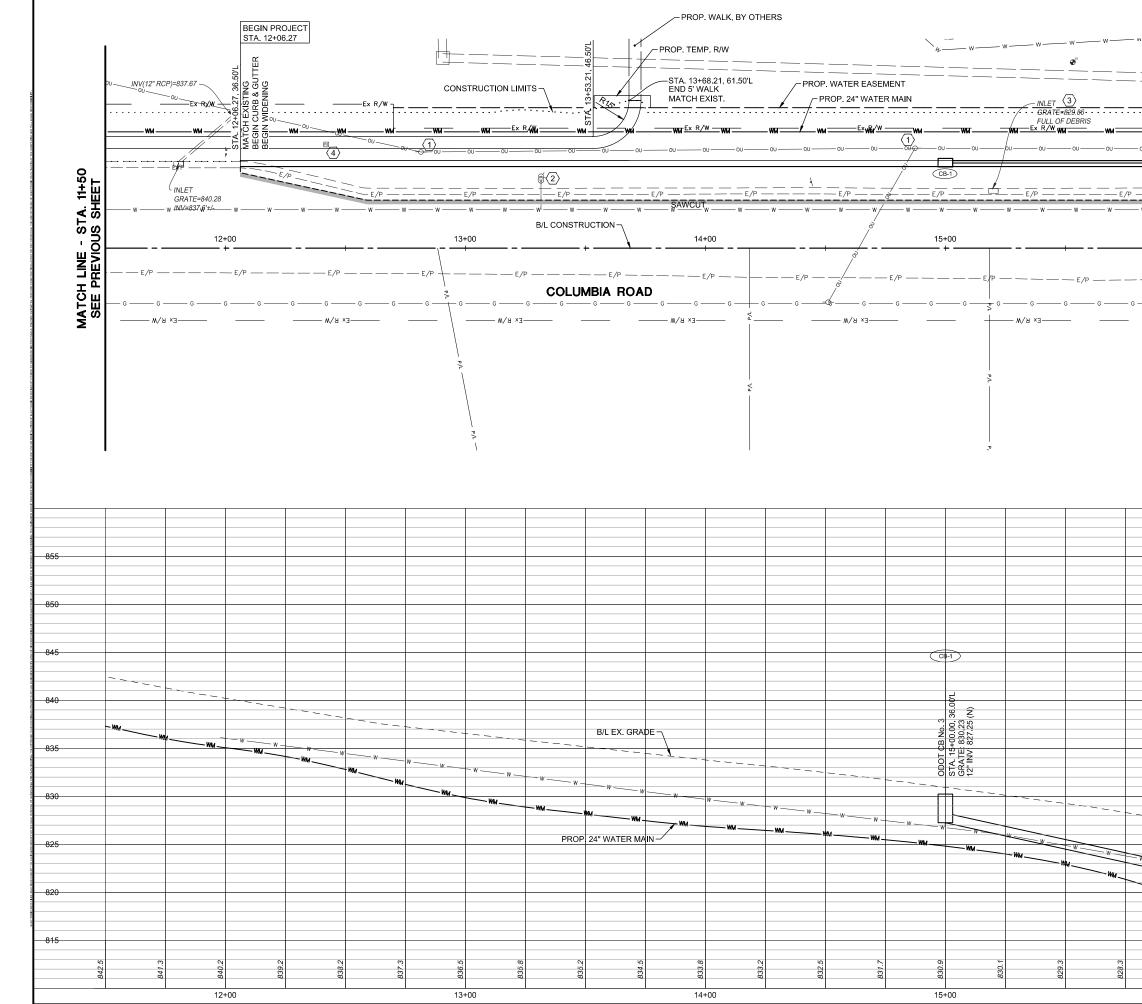
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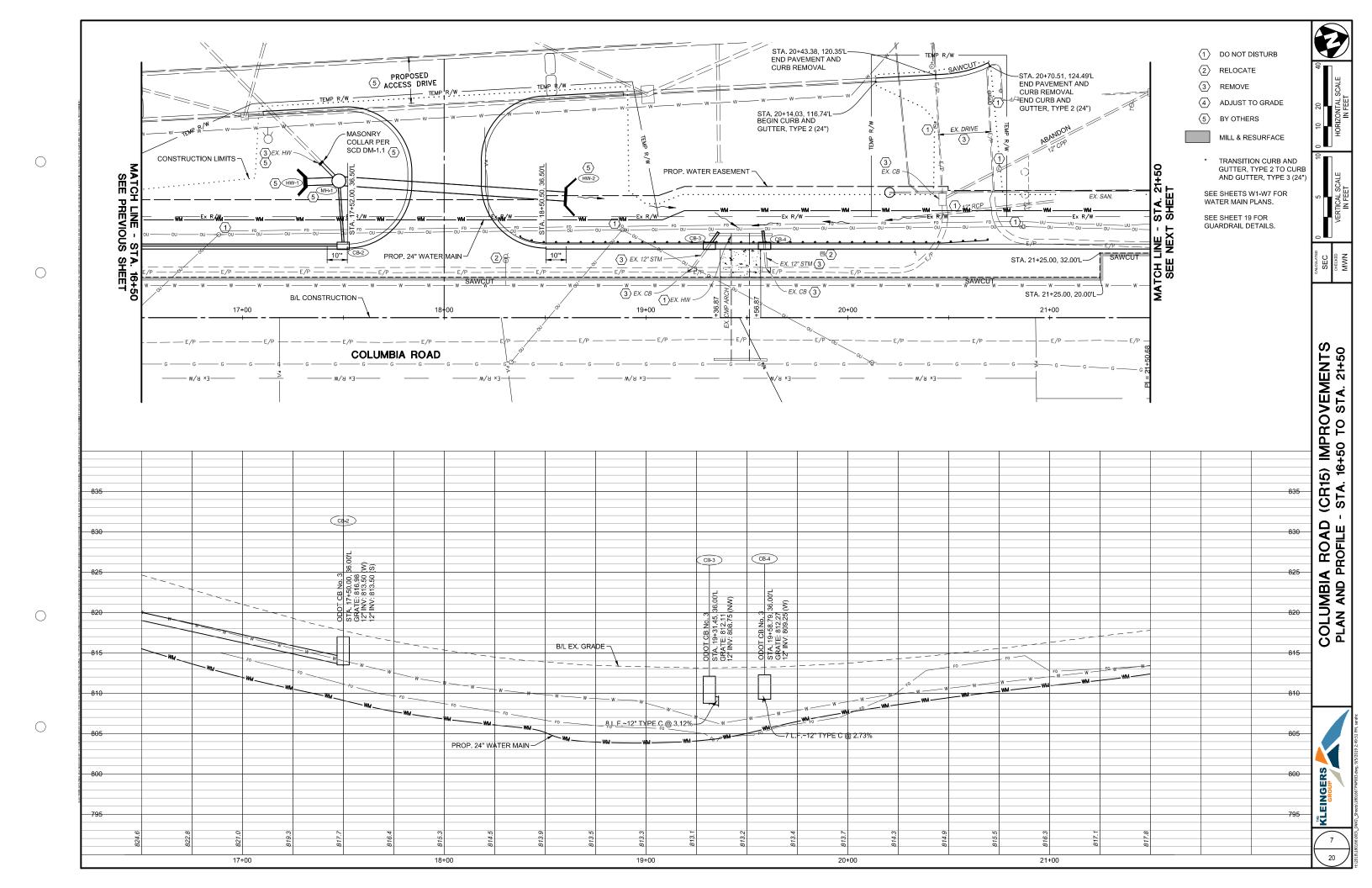
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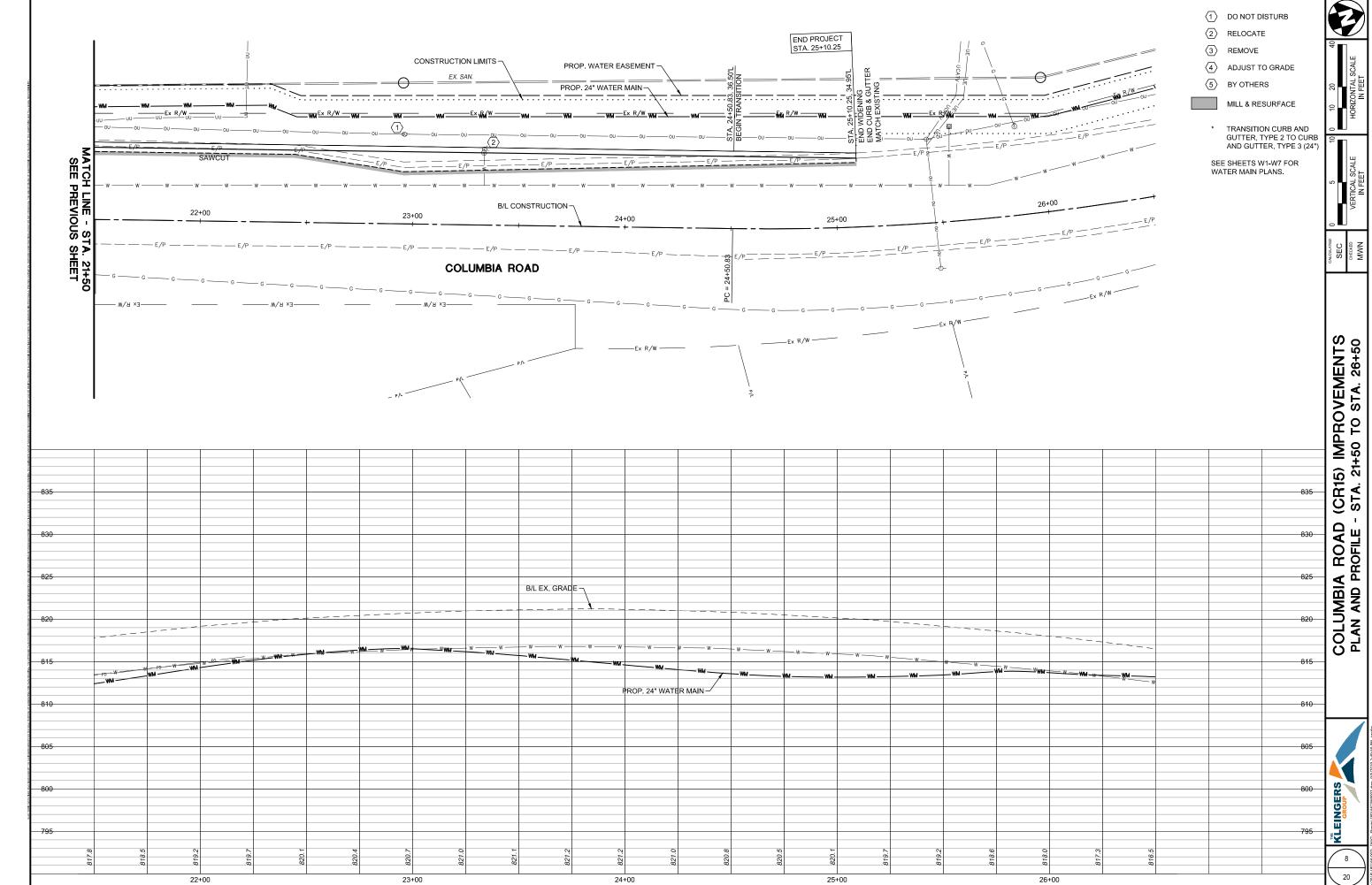


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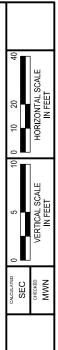
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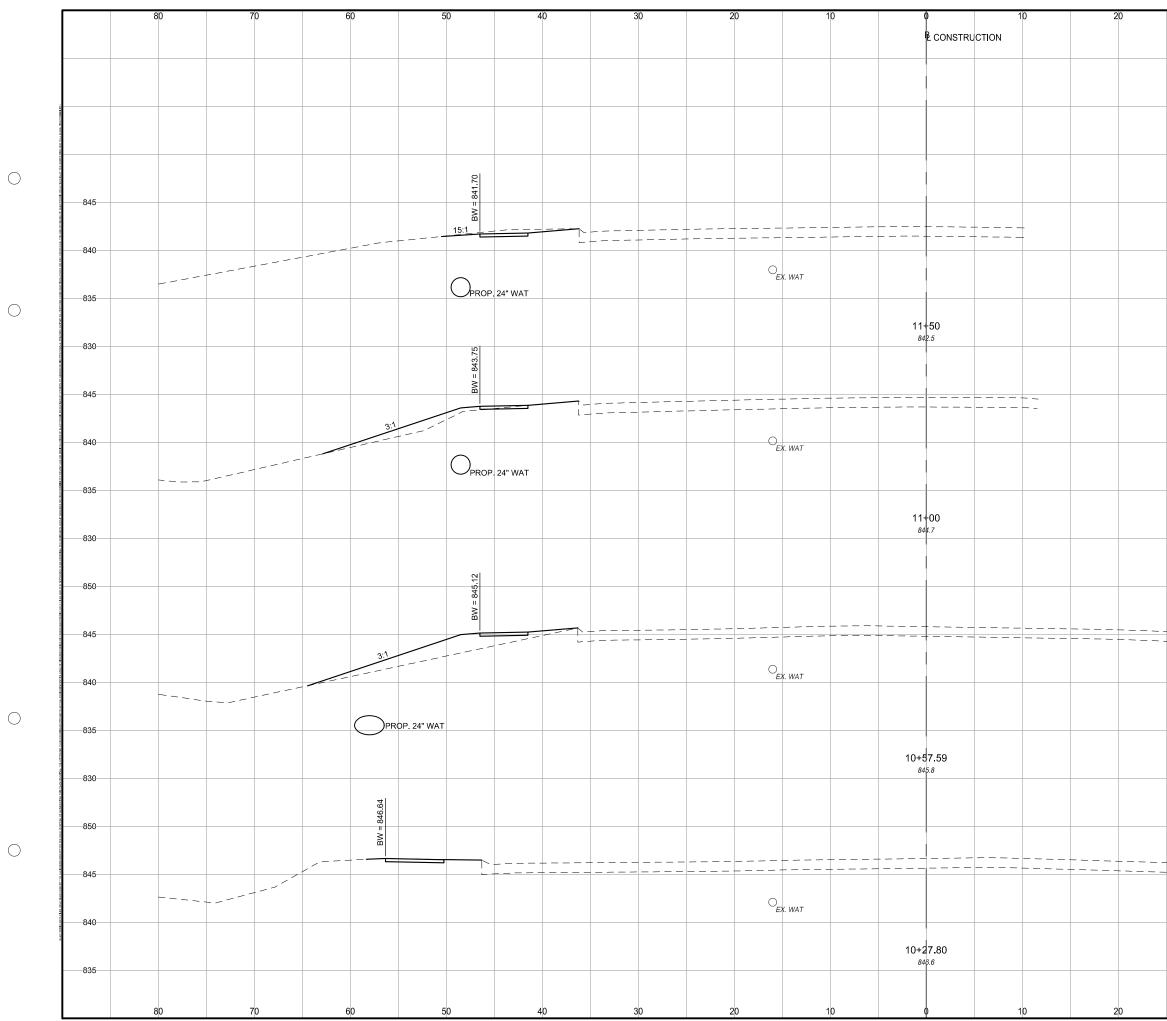
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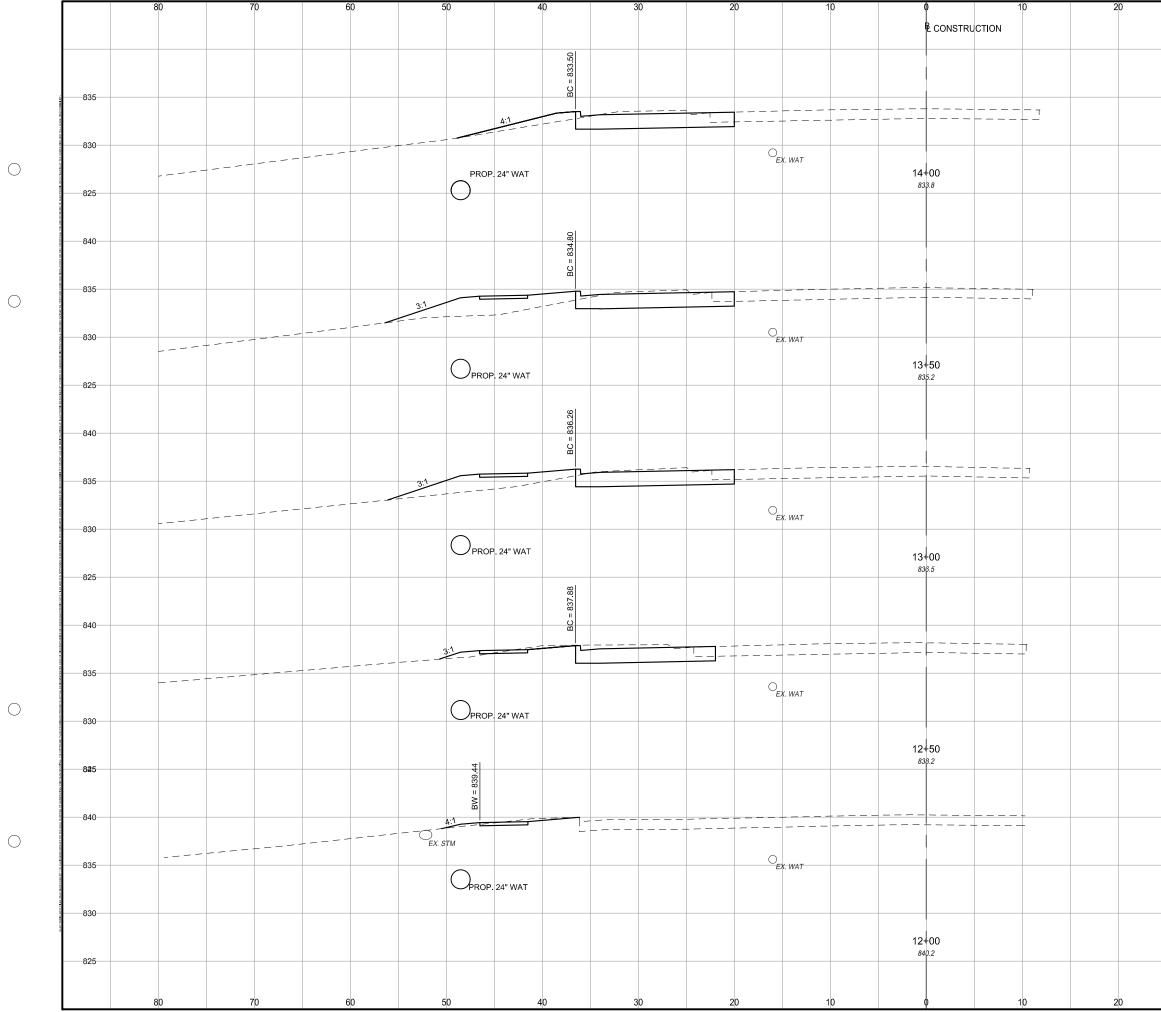
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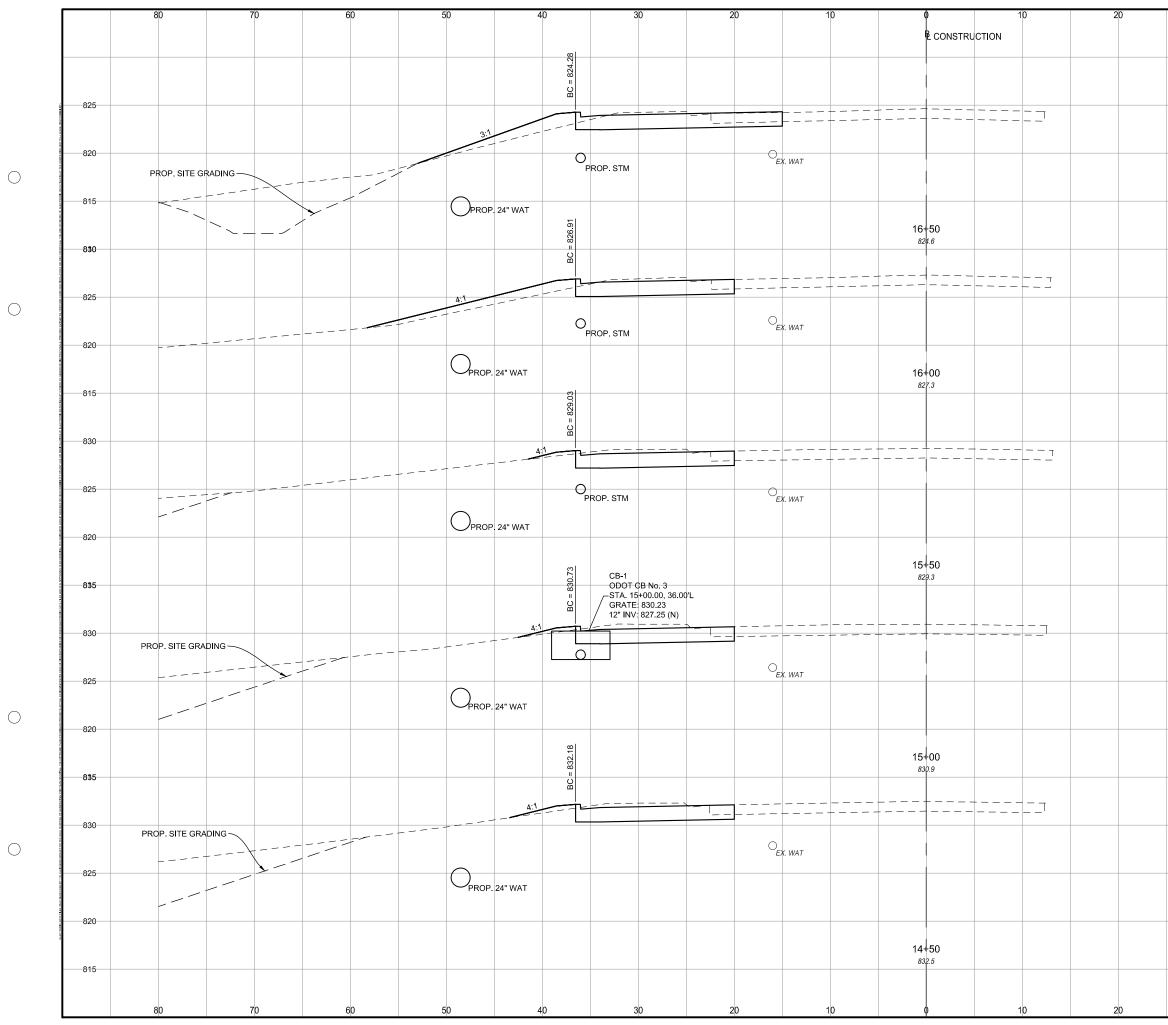
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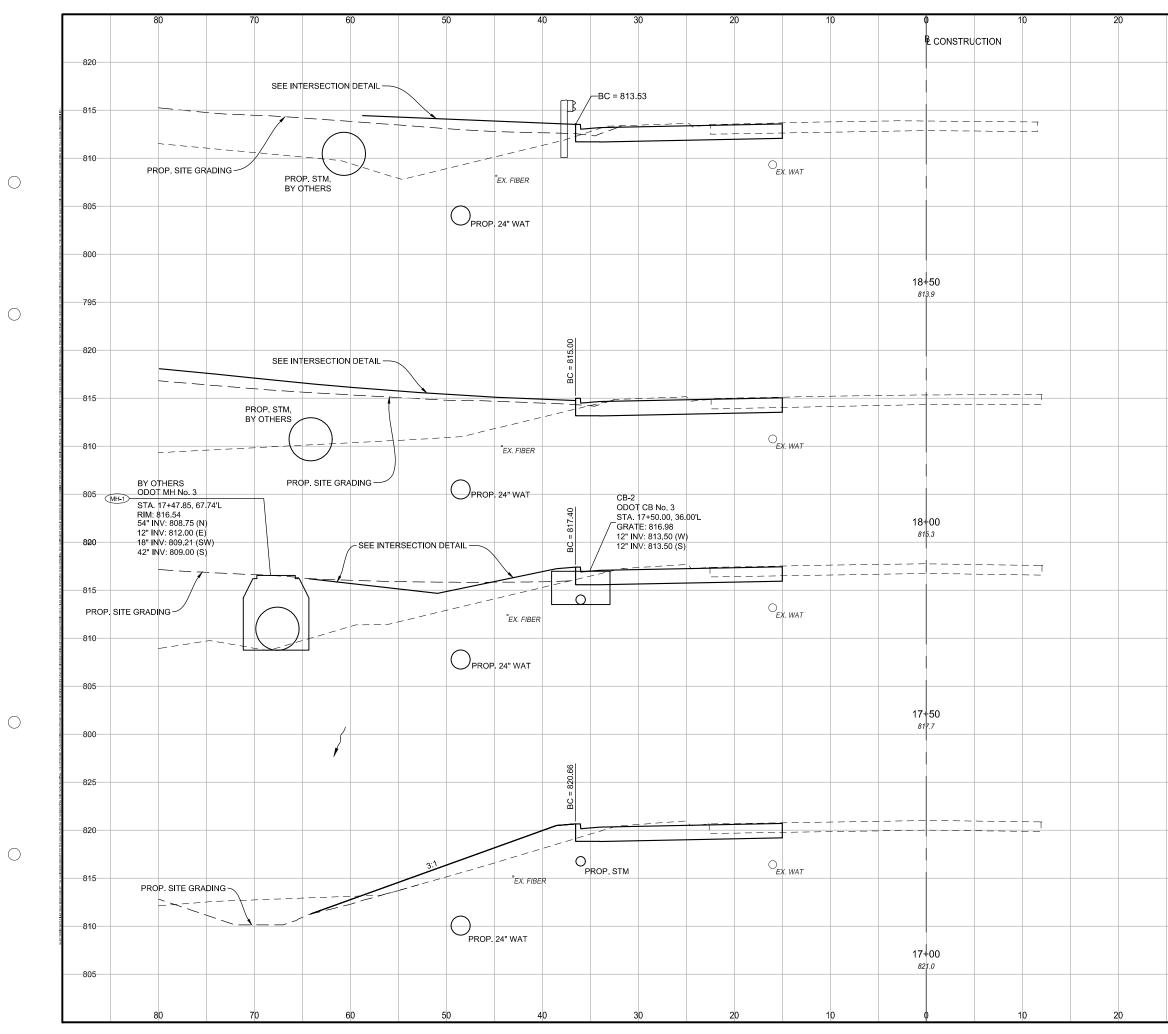
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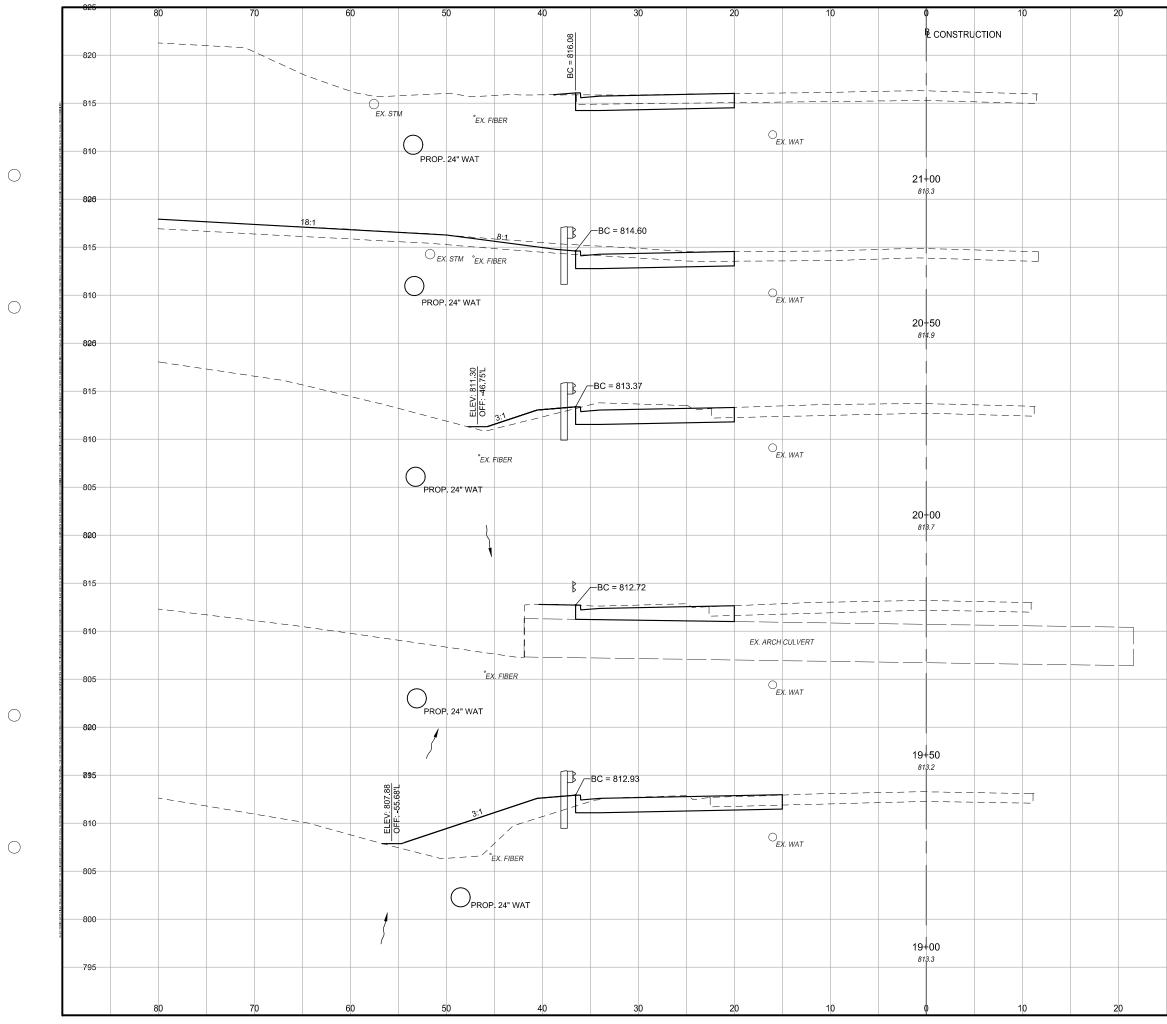
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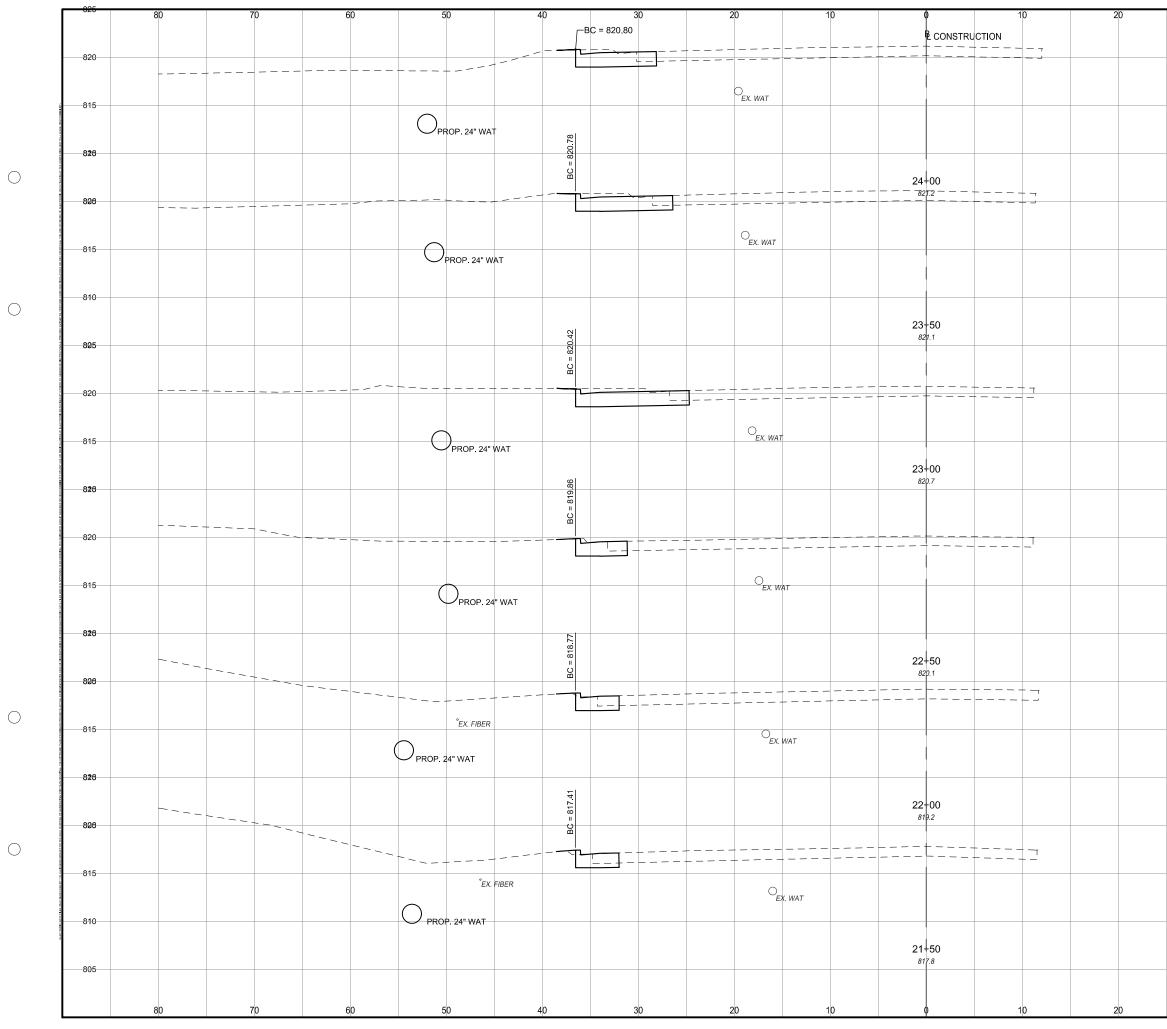
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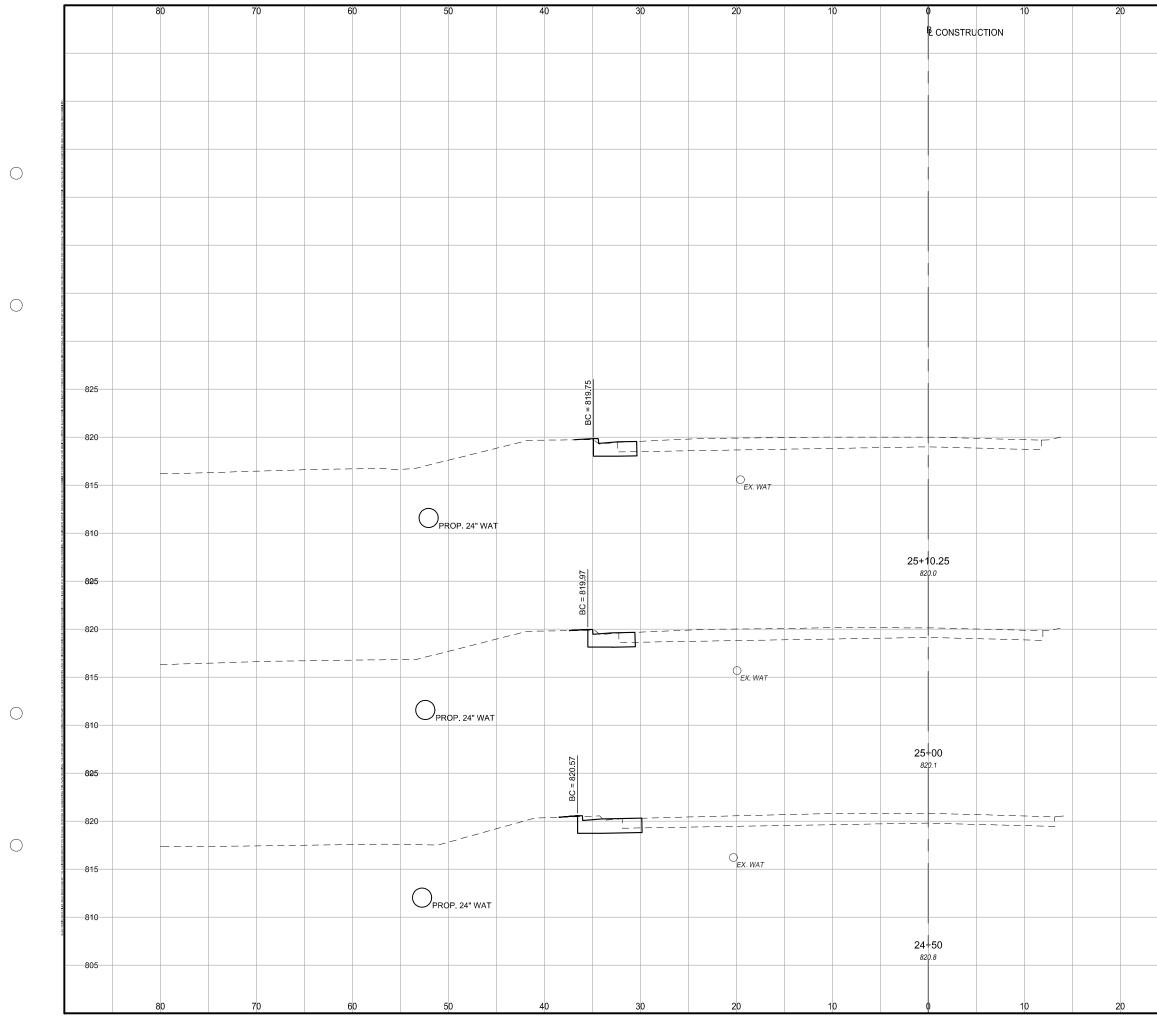
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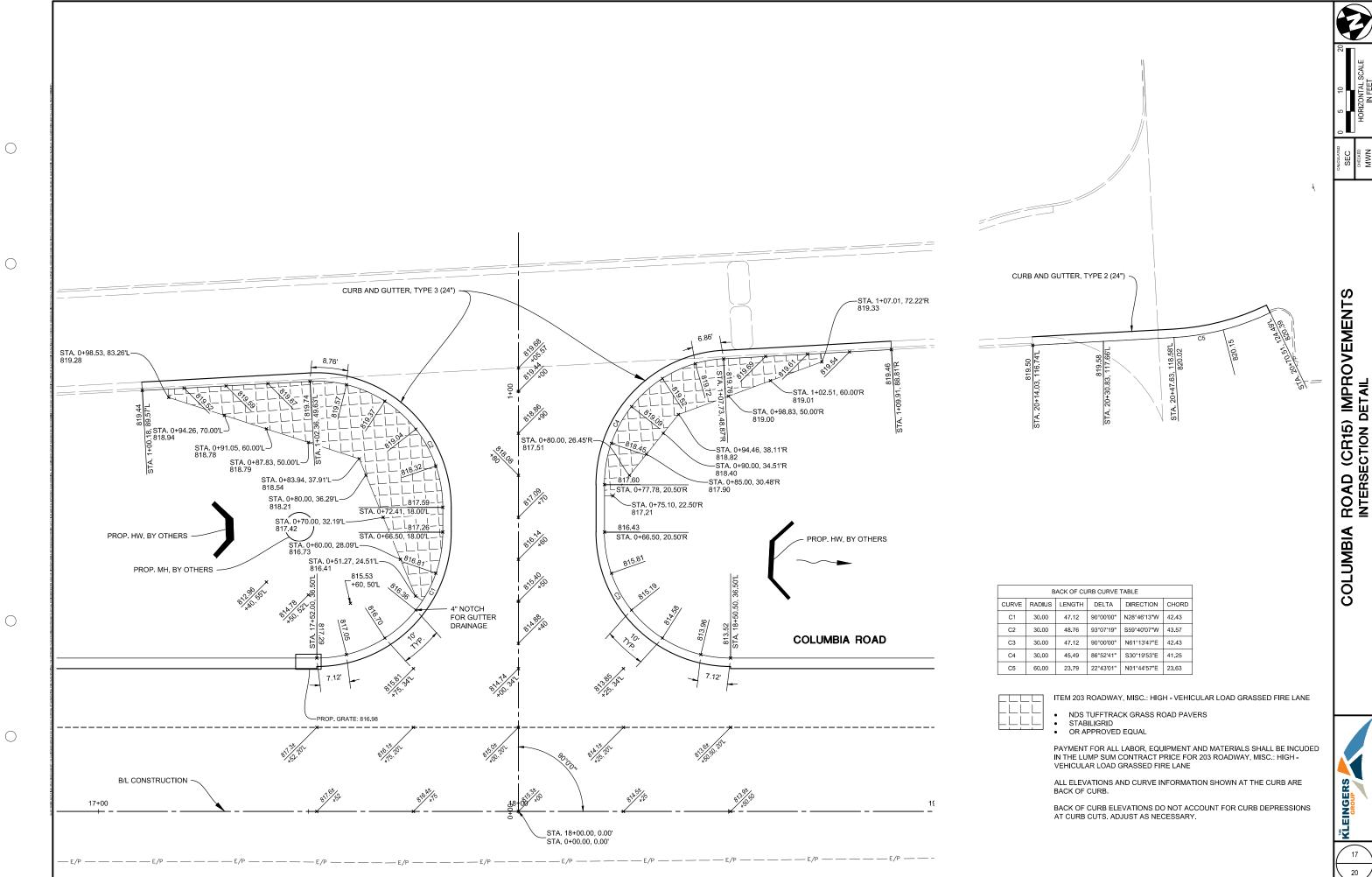
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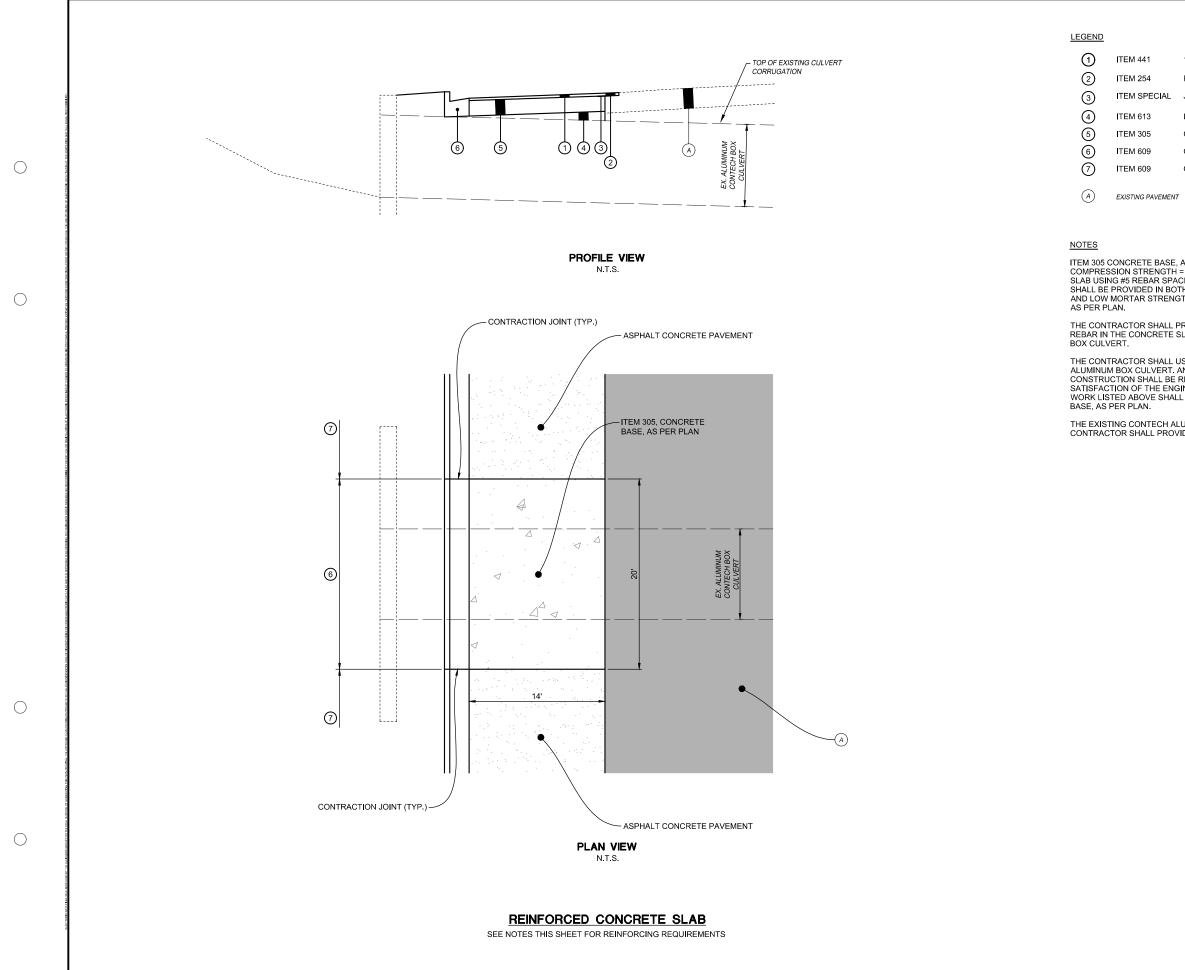


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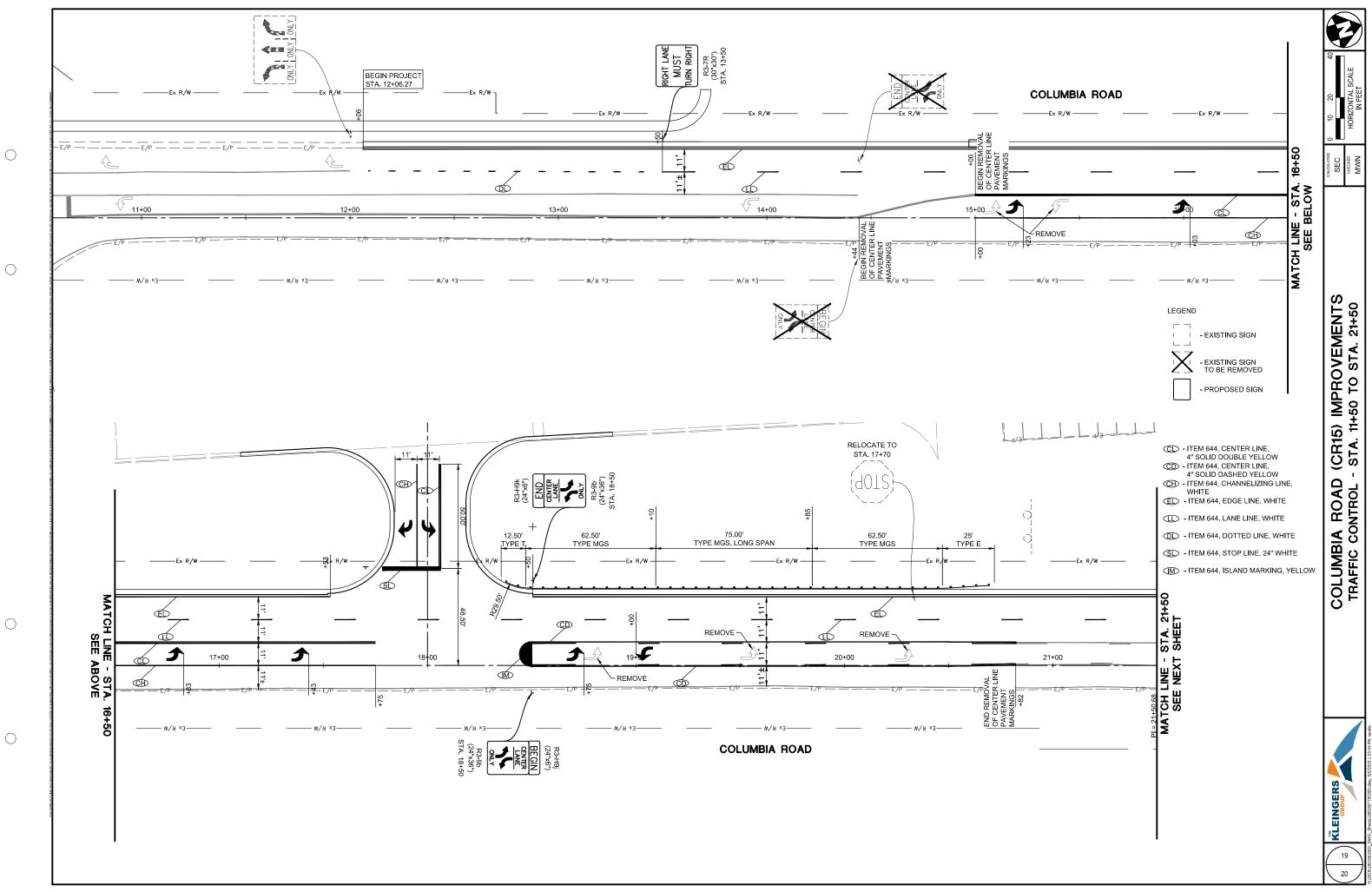


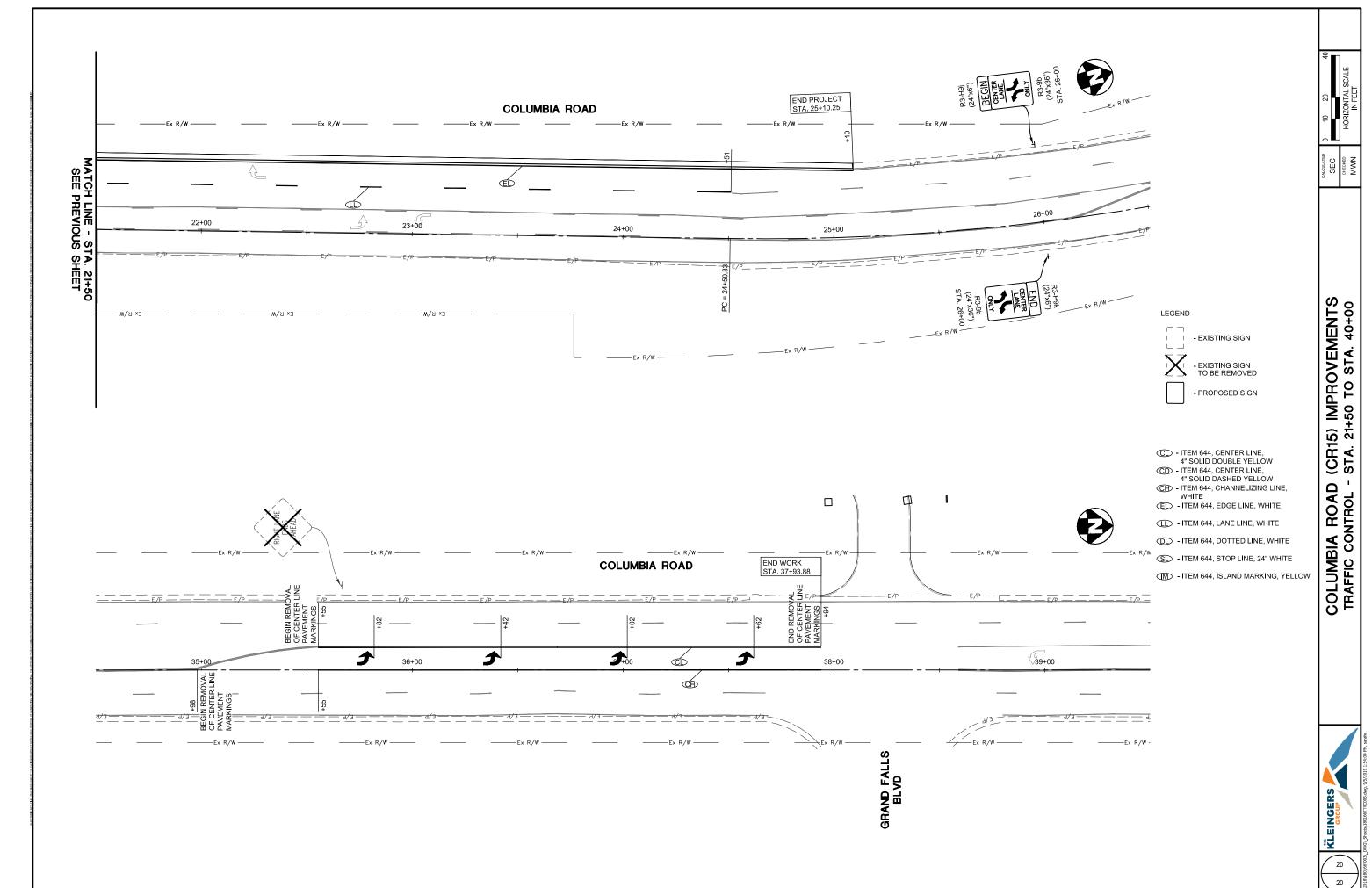
	В	ACK OF CU	RB CURVE	TABLE	
VE	RADIUS	LENGTH	DELTA	DIRECTION	CHORD
	30.00	47.12	90°00'00"	N28°46'13"W	42.43
	30.00	48.76	93°07'19"	S59°40'07"W	43.57
	30.00	47.12	90°00'00"	N61°13'47"E	42.43
	30.00	45.49	86°52'41"	S30°19'53"E	41.25
	60.00	23.79	22°43'01"	N01°44'57"E	23.63





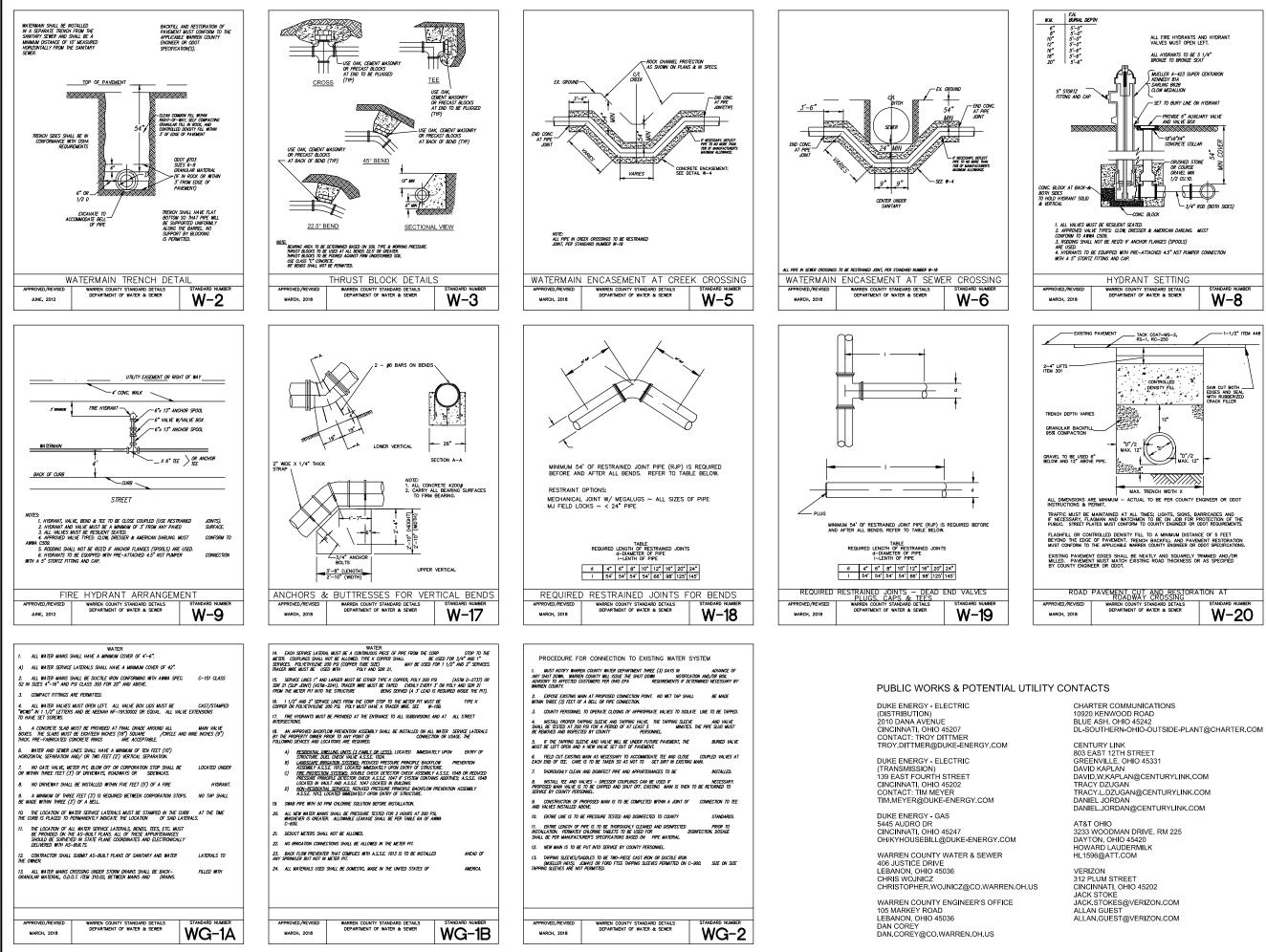
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ENT	1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 PAVEMENT PLANING (3" TYPICAL) JOINT FABRIC, AS PER PLAN LOW STRENGTH MORTAR BACKFILL, VARIABLE DEPTH CONCRETE BASE, AS PER PLAN (9.7") CURB & GUTTER, TYPE 2, AS PER PLAN CURB & GUTTER, TYPE 2		
TH PA 30 NC L F E L U T. J BE NC IAL	AS PER PLAN - CONCRETE SHALL BE CLASS QC 2 (28 DAY = 5,000 PS), THE CONTRACTOR SHALL REINFORCE THE CONCRETE GCD AT 8 INCH INTERVALS CENTER TO CENTER, REINFORCING STH BACKFILL SHALL BE INCIDENTAL TO ITEM 305 CONCRETE BASE, "ROVIDE ALL NECESSARY PROVISIONS TO ENSURE THE STEEL SLAB DOES NOT COME IN CONTACT WITH THE EXISTING ALUMINUM JSE EXTREME CAUTON WHEN EXCAVATING MATERIAL OVER THE REPLACED OR REPAIRED BY THE CONTRACTOR TO THE INTERVAND AT NO EXPENSE TO THE ENSINEER, PAYMENT FOR THE L BE INCLUDED IN THE BID PRICE PER CY FOR ITEM 305 CONCRETE JUMINUM BOX CULVERT RIBS PROTRUDE A DISTANCE OF 3-9/16". THE IDE A MINIMUM OF 1 INCH OF FLOWABLE FILL ABOVE THE RIBS.	COLUMBIA ROAD (CR15) IMPROVEMENTS	CONCRETE PAVEMENT DETAILS





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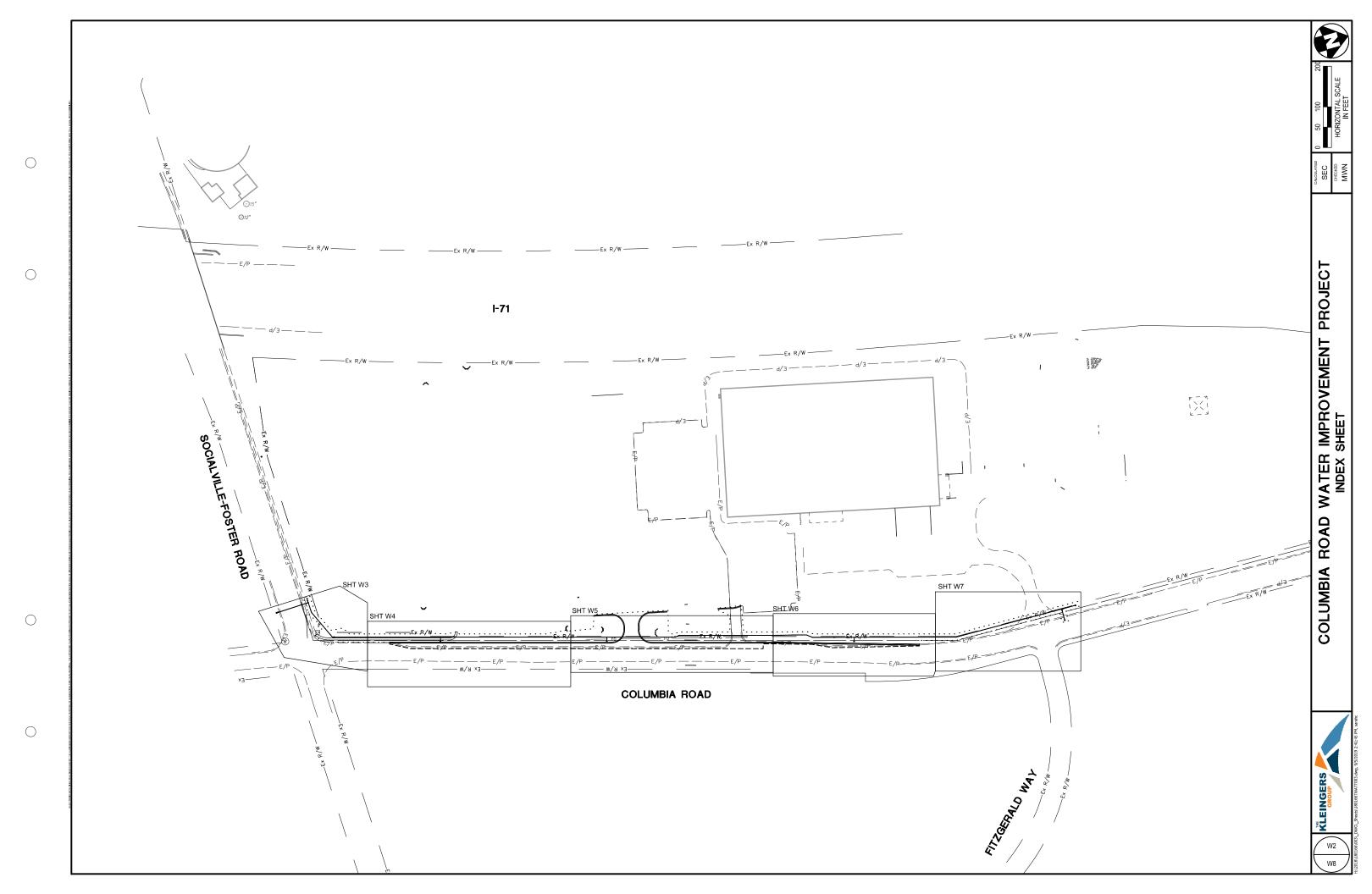
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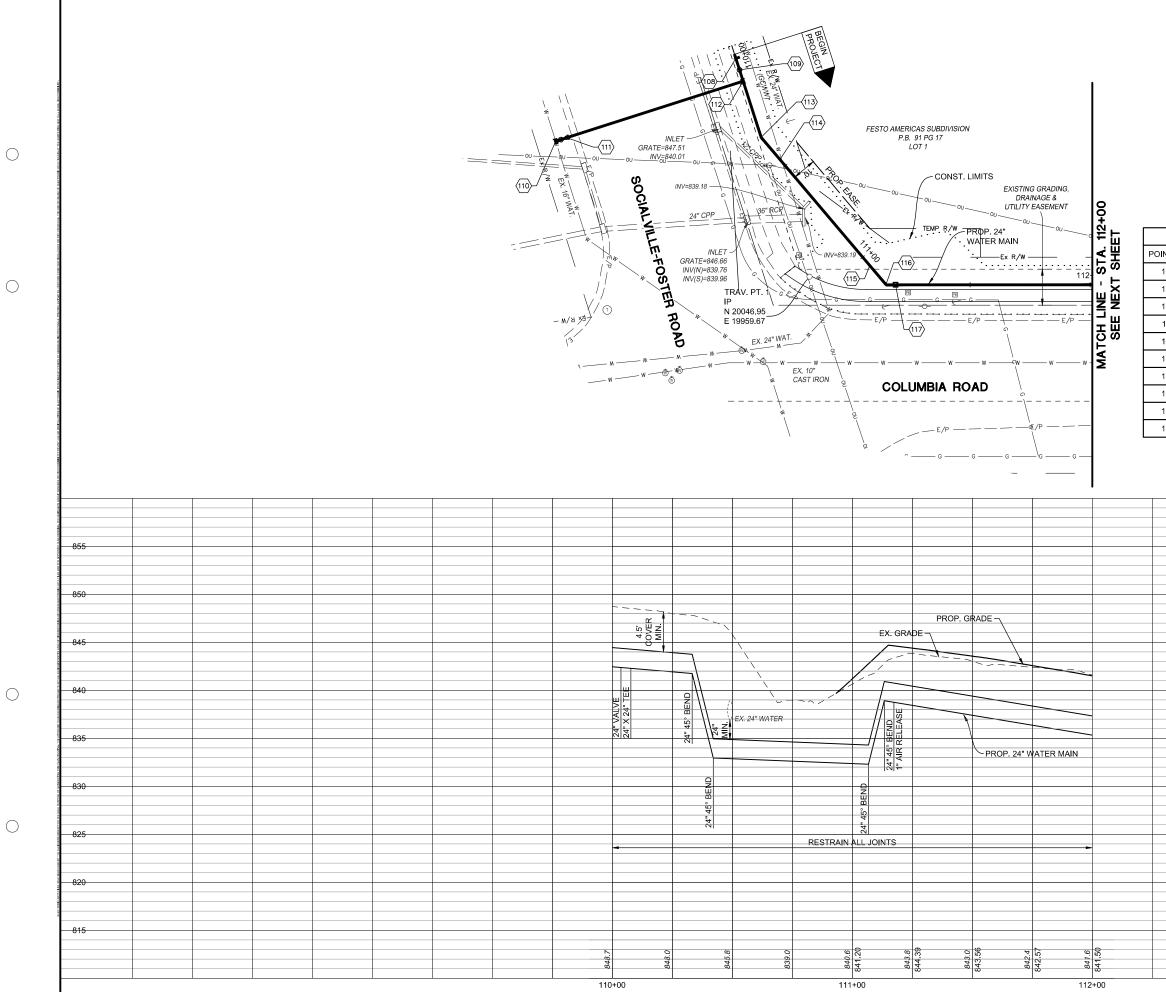


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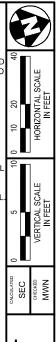
NOTES: ROAD CLOSURE IS ALLOWABLE BETWEEN THE HOURS OF 8:00 AM AND 4:00 PM. ROADWAY SHALL REMAIN OPEN DURING EVENING, OVERNIGHT AND MORNING. CONTRACTOR SHALL WORK THE LOCAL BUSINESSES, RESIDENTS AND SCHOOL BUSES TO ENABLE INGRESS AND EGRESS DURING CLOSURE. ROADWAY SHALL BE CLEANED AND CLEAR OF ALL HAZARDS AFTER EACH WORKDAY. PROVIDE WRITTEN NOTIFICATION TO THE WARREN COUNTY ENGINEER'S OFFICE A MINIMUM OF 30 DAYS PRIOR TO CLOSURE.

PIPE SHALL NOT BE STAGE, STORED OR STRUNG ALONG THE RIGHT-OF-WAY. ONLY PIPING INSTALLED EACH DAY SHALL BE LOCATED ALONG THE RIGHT-OF-WAY.

INSTALL WATER MAIN IN ROADWAY PER STANDARD DETAIL ON SHEET 2. RESTORE PAVEMENT OVER TRENCH TO A DEPTH OF THE EXISTING ASPHALT WITH ITEM 301 BASE ANDS ITEM 448 SURFACE ASPHALT PER STANDARD DETAIL

CONTRACTOR TO PROVIDE 48 HOURS NOTICE TO LOCAL BUSINESSES AND RESIDENTS BEFORE ANY WATER SERVICE INTERRUPTION.

APPURTENANCE TABLE					
INT No.	DESCRIPTION	NORTHING	EASTING	STATION	OFFSET
108	24" TEE AND PLUGS	20042.9149	19863.7576	109+79.49	
109	24" VALVE	20043.0529	19868.7500	110+03.31	
110	16" TEE AND VALVE	19961.2031	19875.9206	110+09.10	81.99
111	24" X 16" REDUCER	19966.0967	19875.7916	110+09.12	77.11
112	24" X 24" TEE	20043.1791	19873.7541	110+09.11	
113	24" 45° BEND	20043.8269	19898.2594	110+34.51	
114	24" 45° BEND	20048.8179	19909.4619	110+46.77	
115	24" 45° BEND	20072.3328	19962.2420	111+04.56	
116	24" 45° BEND	20076.5818	19971.7792	111+15.00	
117	1" AIR RELEASE VALVE	20080.4224	19972.8971	111+19.00	



IMPROVEMENT PROJECT 110+00 TO STA. 112+00 ROAD WATER & PROFILE - STA.

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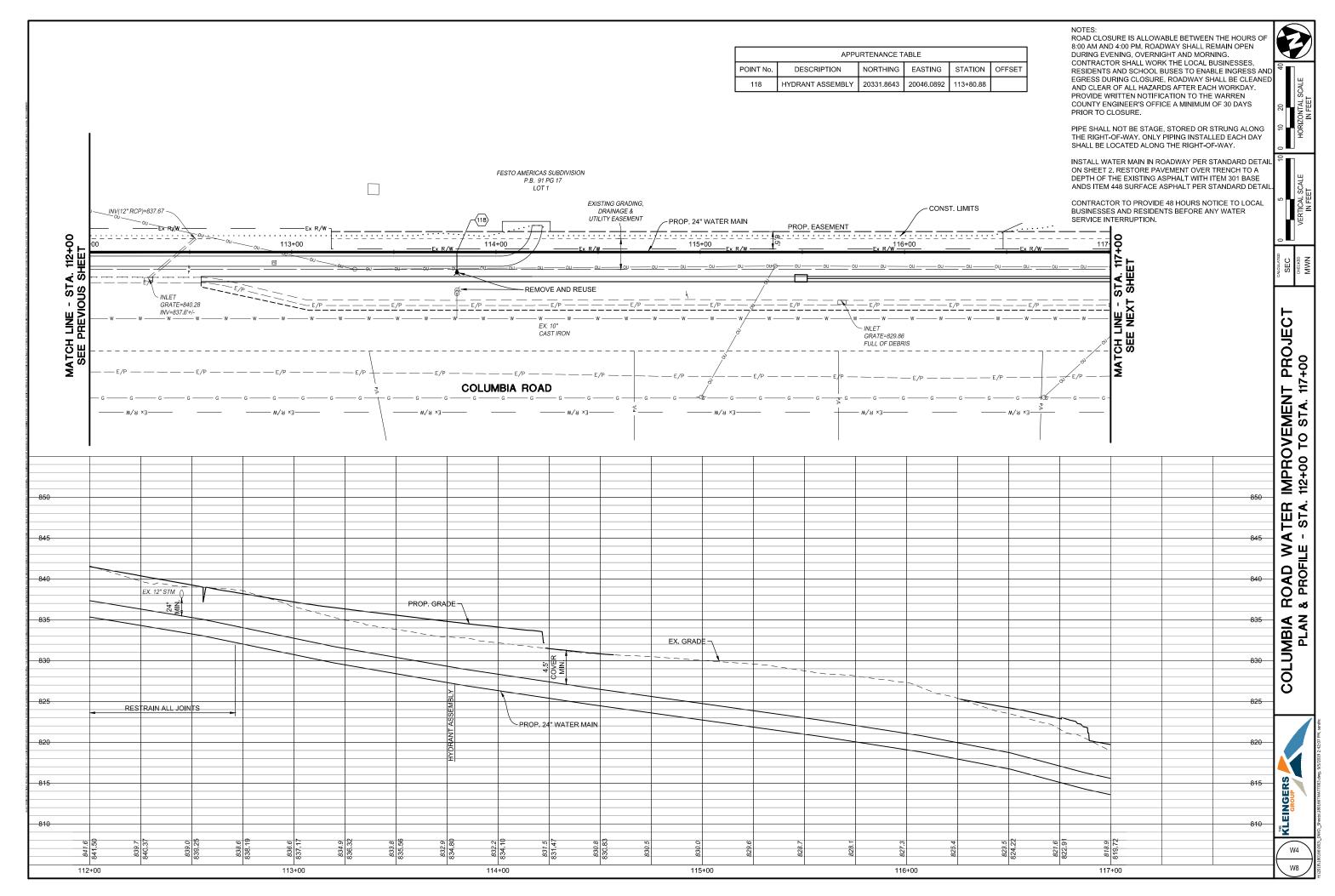
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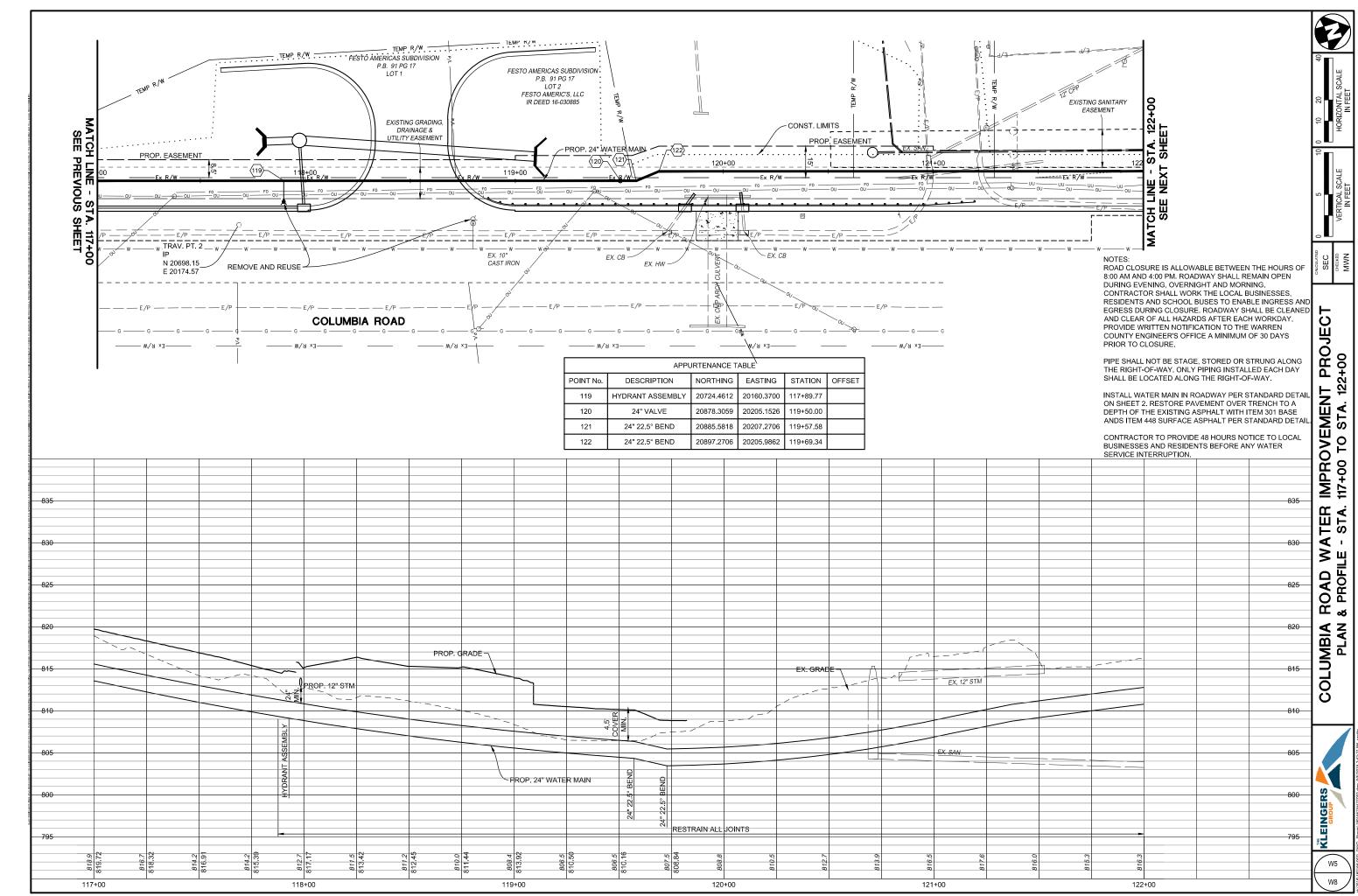
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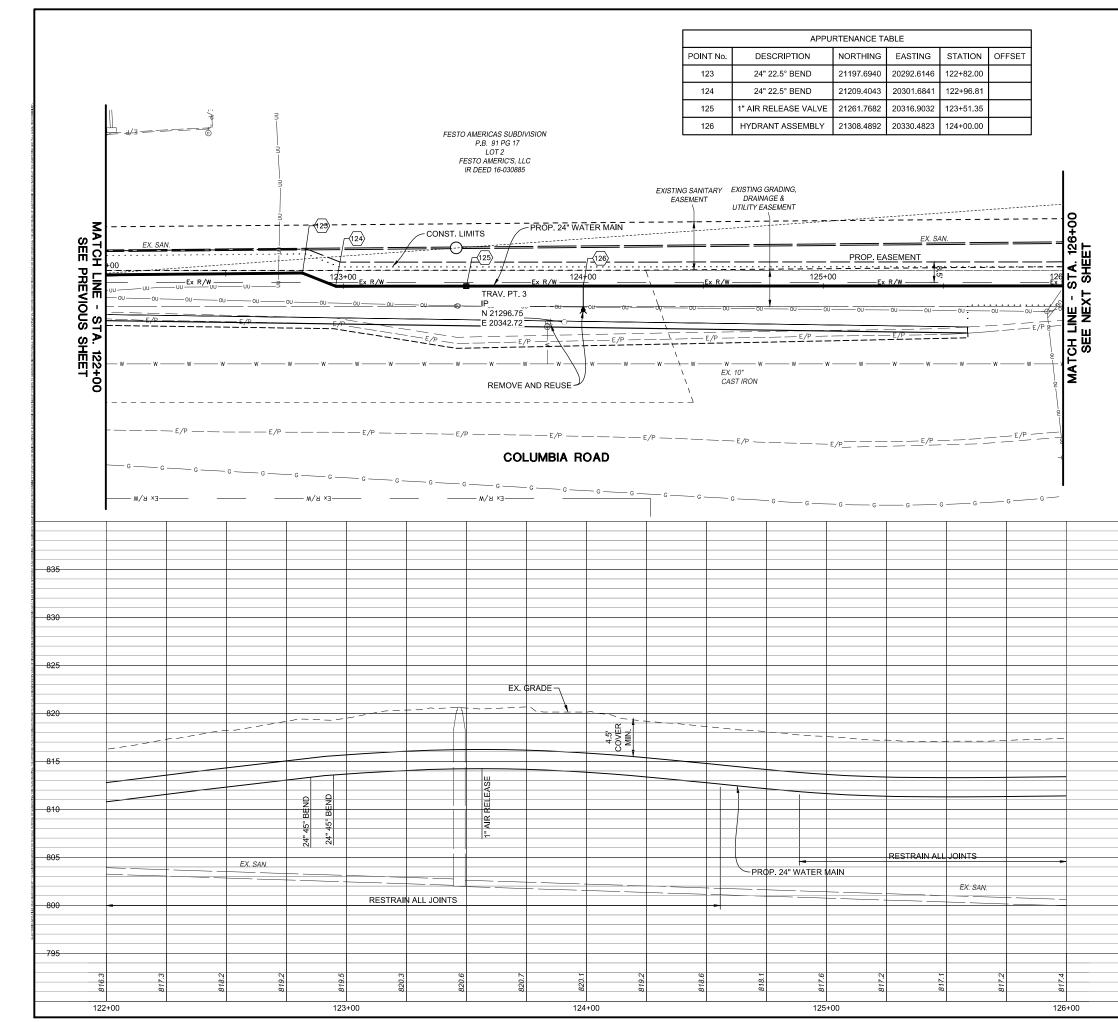
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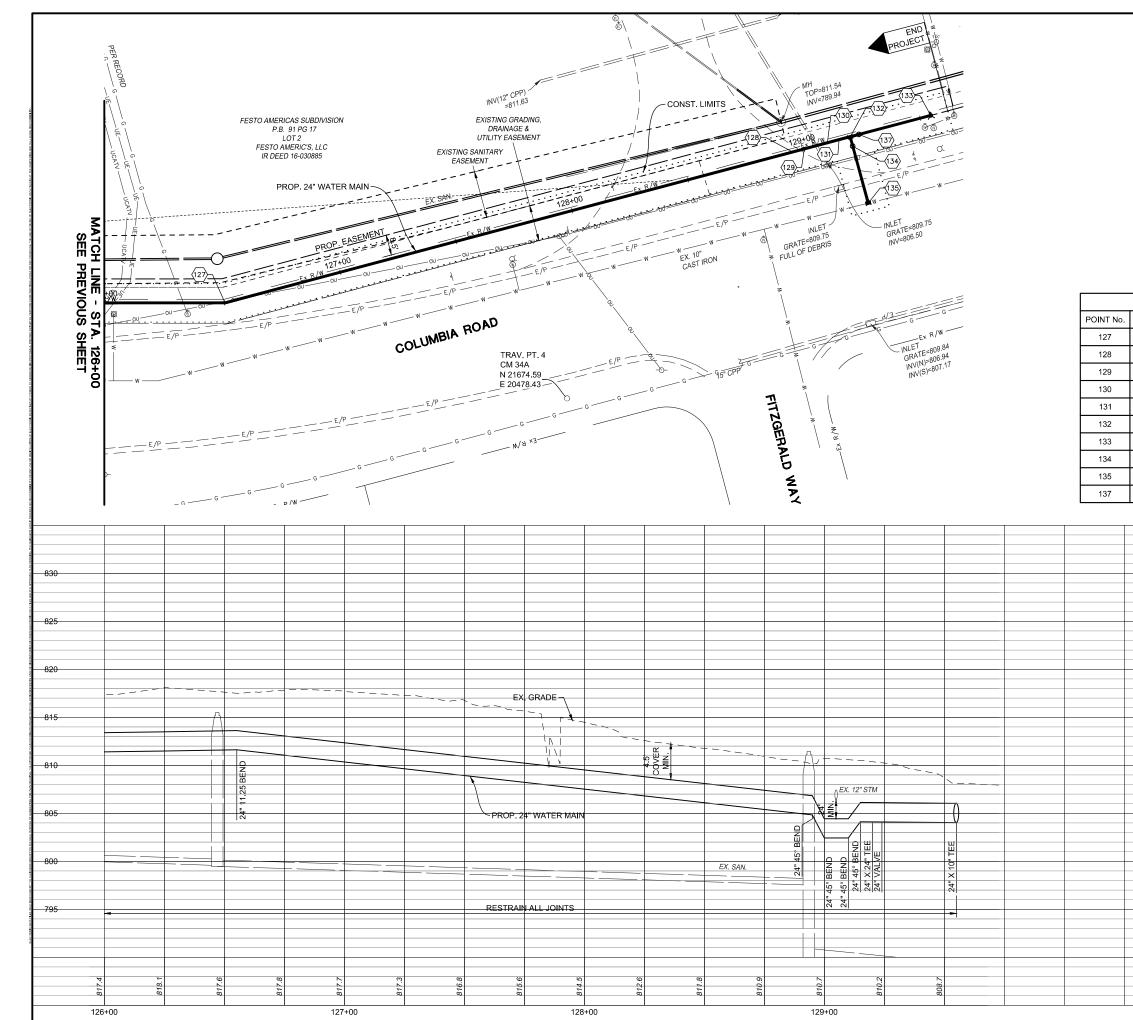
INSTALL WATER MAIN IN ROADWAY PER STANDARD DETAIL ON SHEET 2. RESTORE PAVEMENT OVER TRENCH TO A DEPTH OF THE EXISTING ASPHALT WITH ITEM 301 BASE ANDS ITEM 448 SURFACE ASPHALT PER STANDARD DETAIL.

CONTRACTOR TO PROVIDE 48 HOURS NOTICE TO LOCAL BUSINESSES AND RESIDENTS BEFORE ANY WATER SERVICE INTERRUPTION.



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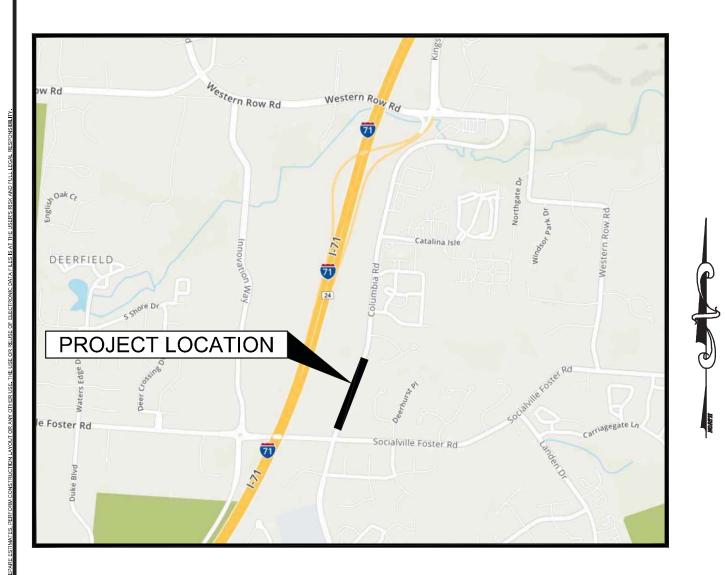
APPURTENANCE TABLE					
DESCRIPTION	NORTHING	EASTING	STATION	OFFSET	
24" 11.25° BEND	21548.8554	20400.3425	126+50.31		
24" 45° BEND	21793.4739	20406.1547	128+95.00		
24" 45° BEND	21798.4724	20406.2735	129+00.00		
24" 45° BEND	21808.4701	20406.4882	129+09.98		
24" 45° BEND	21813.4682	20406.6298	129+15.00		
24" TEE	21818.2788	20406.7441	129+19.81		
HYDRANT ASSEMBLY	21852.9759	20407.5604	129+29+54.51		
24" VALVE	21818.2068	20410.7435	129+19.83	4.00	
24" X 10" TEE	21817.7629	20435.3871	129+19.98	28.65	
24" VALVE	21822.0689	20406.8124	129+23.58		

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PLAN & PROFILE

COLUMBIA ROAD (CR15) **IMPROVEMENTS**



VICINITY MAP NOT TO SCALE

	LEGEND	DESIGN DESIGNATION	
ϕ	LIGHT POLE	CURRENT ADT (2018)	9,290 cpd
		DESIGN YEAR ADT (2038)	11,340 vpd
-0-	UTILITY POLE	DESIGN HOURLY VOLUME	1,300 vph
\downarrow	GUY WIRE	DIRECTIONAL DISTRIBUTION	0.54
E	ELECTRIC MANHOLE	TRUCKS (24 HOUR B&C)	3%
TR	TRAFFIC SIGNAL BOX	DESIGN SPEED	45MPH
_		LEGAL SPEED	45 MPH
TRP	TRAFFIC SIGNAL POLE	FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR
MB	MAILBOX	NHS	NO
● ^{GP}	GUARD POST	CLASSIFICATION	URBAN
Ġ	GAS VALVE		

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(Non-me BP-1.1	mbers must b 7/28/00	e called o	directly) STA	
(Non-me BP-1.1 BP-2.1	mbers must b 7/28/00 7/17/15	e called o	directly) STA 1/ 1/	/15/1
(Non-me BP-1.1 BP-2.1 BP-3.1 BP-5.1	mbers must b 7/28/00 7/17/15 7/18/14 1/18/19	MH-1.2 MGS-1.1	directly) STA 1/ 1/ 1/	(15/1 (19/1 (19/1
(Non-me BP-1.1 BP-2.1 BP-3.1	mbers must b 7/28/00 7/17/15 7/18/14	e called o MH-1.2 MGS-1.1 MGS-2.1	directly) STA 1/ 1/ 1/ 1/	'15/1 '19/1 '19/1 '20/1
(Non-me BP-1.1 BP-2.1 BP-3.1 BP-5.1	mbers must b 7/28/00 7/17/15 7/18/14 1/18/19	e called o MH-1.2 MGS-1.1 MGS-2.1 MGS-4.1	directly) STA 1/ 1/ 1/ 1/	'15/1 '19/1 '19/1 '20/1
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DEERFIELD TOWNSHIP AND CITY OF MASON WARREN COUNTY, OHIO

PROJE ESTIM NOTIC

INDEX OF SHEETS

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TYPICAL SECTIONS	3
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TRAFFIC CONTROL PLAN	19-20
WATER MAIN PLAN SET	W1-W7

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TC-41.20 10/18/13	MT-95-31 4/19/19	80	00 04/19/2019	1
TC-41.30 10/18/13	MT-97.10 4/19/19	83	32 10/19/2018	· · · · · · · · · · · · · · · · · · ·
TC-42.10 10/18/13	MT-101.90 7/21/17			ENGINEER'S SEAL:
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				9/9/2019

PROJECT DESCRIPTION

THIS PROJECT INCLUDES IMPROVEMENTS OF COLUMBIA ROAD NORTH OF SOCIALVILLE FOSTER ROAD TO SOUTH OF FITZGERALD WAY. THE PROJECT INVOLVES WIDENING APPROXIMATELY 1,300 LINEAL FEET OF ROADWAY ALONG THE WEST SIDE OF COLUMBIA ROAD. ASSOCIATED IMPROVEMENTS INCLUDE THE ADDITION AND/OR MODIFICATION OF PAVEMENT MARKINGS, SIGNAGE, STORM SEWER, AND WATER MAIN.

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS PROJECT

JECT EARTH DISTURBED AREA:	0.97
MATED CONTRACTOR EARTH DISTURBED AREA:	0.00
CE OF INTENT EARTH DISTURBED AREA:	N/A

Juil F. Juinon

EIL F. TUNISON, WARREN COUNTY ENGINEER



DATE

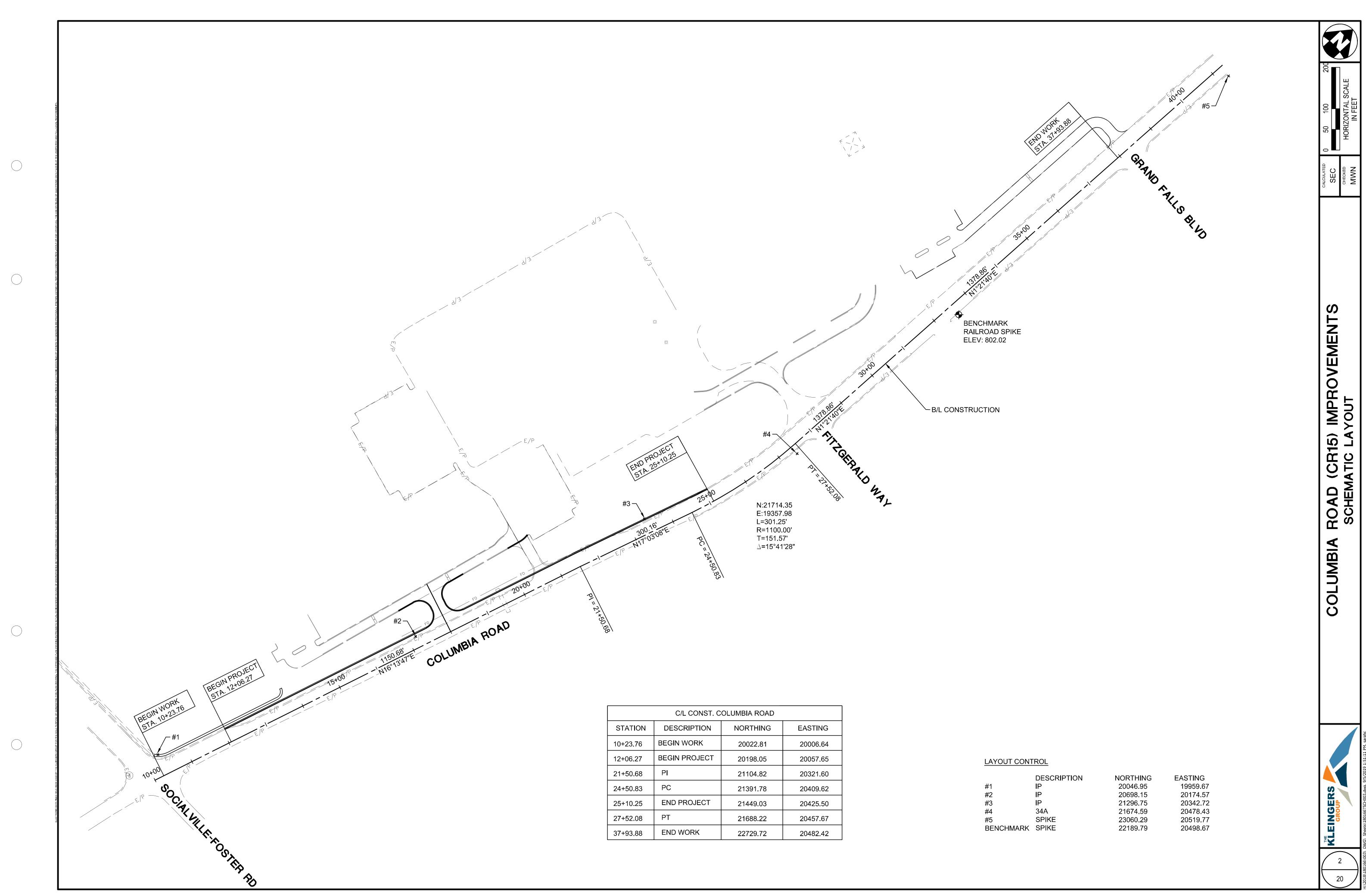
PLANS PREPARED BY: **KLEINGERS** GROUP CIVIL ENGINEERING | www.kleingers.com SURVEYING

LANDSCAPE ARCHITECTURE

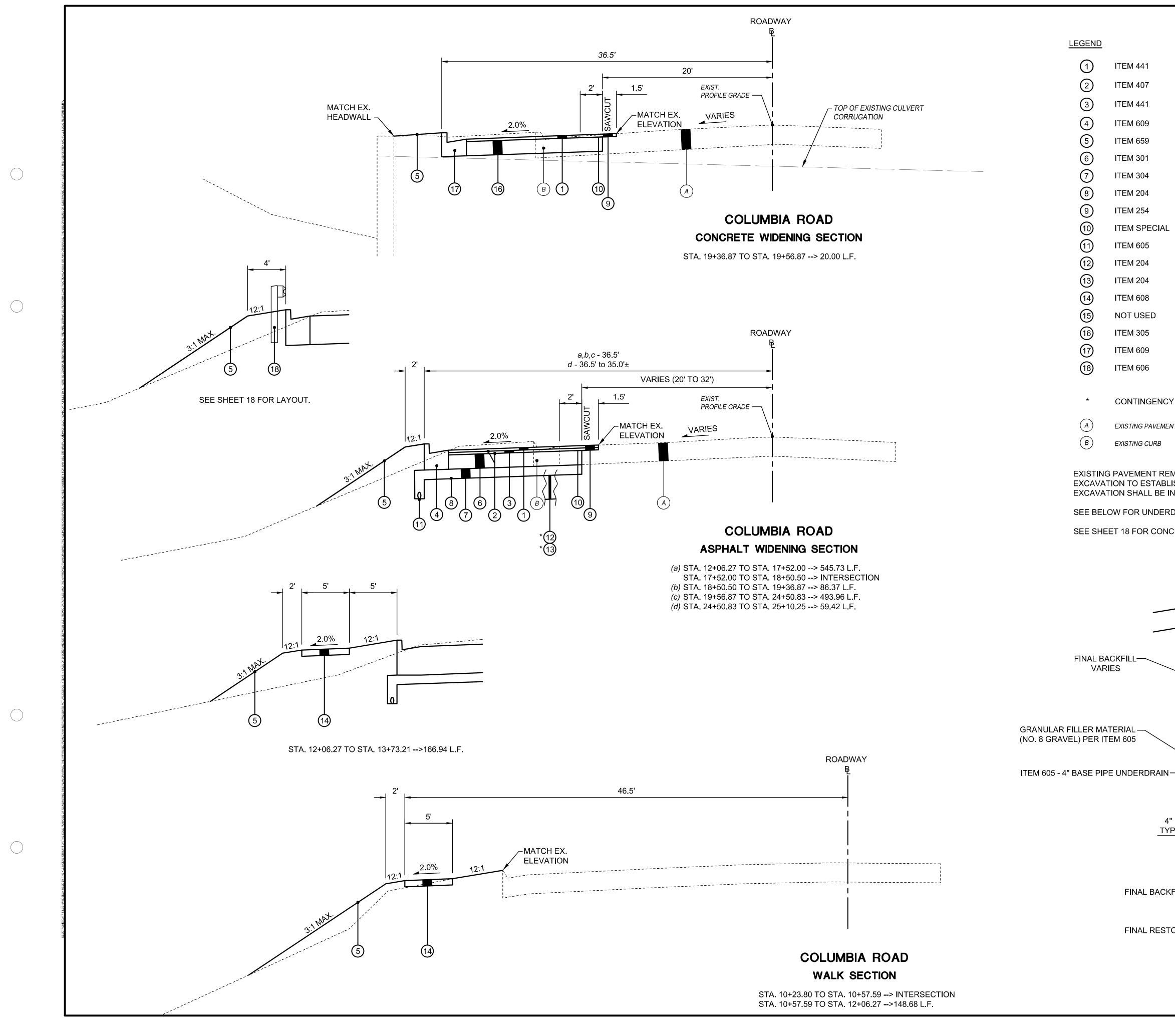
6219 Centre Park Dr. West Chester, OH 45069 513.779.7851

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	C/L CONST. C	OLUMBIA ROAD	
STATION	DESCRIPTION	NORTHING	EASTING
10+23.76	BEGIN WORK	20022.81	20006.64
12+06.27	BEGIN PROJECT	20198.05	20057.65
21+50.68	PI	21104.82	20321.60
24+50.83	PC	21391.78	20409.62
25+10.25	END PROJECT	21449.03	20425.50
27+52.08	PT	21688.22	20457.67
37+93.88	END WORK	22729.72	20482.42



	CALCULATED SEC CHECKED MWN
	S CAL
1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
NON-TRACKING TACK COAT (0.06 GAL/S.Y.)	
1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
CURB & GUTTER, TYPE 2	
4" TOPSOIL/SEEDING AND MULCHING	
9" ASPHALT CONCRETE BASE, PG64-22 (2 LIFTS)	
6" AGGREGATE BASE	
SUBGRADE COMPACTION WITH PROOF ROLLING	
PAVEMENT PLANING (3" TYPICAL)	
_ JOINT FABRIC, AS PER PLAN	
4" BASE PIPE UNDERDRAIN	
EXCAVATION OF SUBGRADE (16")	S S
GRANULAR MATERIAL, TYPE C (16")	
CONCRETE WALK (4")	
	Σ
CONCRETE BASE, AS PER PLAN (9.7")	
CURB & GUTTER, TYPE 2, AS PER PLAN	10
GUARDRAIL, TYPE MGS	ŭ
	IMPROVEME Ion
CY ITEM	
NOTE: SEE CROSS SECTIONS	(CR15) AL SEC
FOR EXACT TIE-IN SLOPES	<u>E</u> <u>o</u>
RDRAIN DETAILS.	COLUMBIA RO
 YP. 1 12"± ITEM 605 KFILL: a) UNDER PAVEMENT - ODOT ITEM 304 OR ITEM 310; 98% COMPACTION b) GRASS AREAS - APPROVED NATIVE MATERIAL FREE OF LARGE STONES & CLUMPS (MAX. 8" LIFTS; 95% COMPACTION) TORATION: COST INCLUDED WITH OTHER ITEMS 	KLEINGERS GROUP
UNDERDRAIN DETAIL	Ê X

FINAL BACKFILL: a) UNDER PAVEMENT - ODOT ITEM 304 OR ITEM 310; 98% COMPACTION b) GRASS AREAS - APPROVED NATIVE MATERIAL FREE OF LARGE STONES & CLUMPS (MAX. 8" LIFTS; 95% COMPACTION)

FINAL RESTORATION: COST INCLUDED WITH OTHER ITEMS

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THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS SPECIFICATIONS, DATED JANUARY 1, 2019, AND THE NOTED STANDARD CONSTRUCTION DRAWINGS SHALL GOVERN THIS IMPROVEMENT.

WHEREVER THE WORD "DIRECTOR" OR "ENGINEER" OCCURS, IT IS TO MEAN THE WARREN COUNTY ENGINEER AND/OR HIS DESIGNATED REPRESENTATIVE, LIMITED TO THE PARTICULAR DUTIES ENTRUSTED TO HIM.

PRE-CONSTRUCTION MEETING

FOLLOWING THE AWARD OF THE CONTRACT AND BEFORE STARTING ANY WORK, THE CONTRACTOR AND HIS SUPERINTENDENT, SHALL MEET WITH THE ENGINEER FOR A PRE-CONSTRUCTION MEETING. THE PURPOSE OF SUCH IS FOR REVIEWING THE SITE, AND ANY RESTRICTIONS AND REGULATIONS GOVERNING THE WORK.

ANY SCHEDULES, REQUESTS, PAPERS, APPROVALS, SUBMITTALS, SHOP DRAWINGS, CHANGES, ETC. AS CALLED FOR IN THE CONTRACT DOCUMENTS SHALL BE DONE AT THIS TIME UNLESS OTHERWISE DIRECTED.

PERMITS, FEES AND NOTICES

THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ANY AND ALL PERMITS AND INSPECTIONS REQUIRED FOR THE PROSECUTION OF THE WORK BY LOCAL LAWS, ORDINANCES, RULES AND **REGULATIONS.**

MATERIALS AND WORKMANSHIP

UNLESS OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE NEW AND BOTH WORKMANSHIP AND MATERIALS SHALL BE OF THE FIRST QUALITY, PROPER AND SUFFICIENT FOR THE PURPOSE CONTEMPLATED. THE CONTRACTOR SHALL FURNISH, IF SO REQUIRED, SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF MATERIALS AND WORKMANSHIP. ALL ITEMS OF EQUIPMENT AND/OR MATERIALS PROPOSED FOR SUBSTITUTION MUST BE APPROVED BY THE ENGINEER IN WRITING AND SHALL BE EQUAL OR BE SUPERIOR TO THE ITEMS SPECIFIED IN THE CONTRACT DOCUMENTS. IF SAID SUBSTITUTION PROPOSED BY THE CONTRACTOR FOR A SPECIFIED ITEM REQUIRED ENGINEERING REVISIONS, THE EXPENSE OF SUCH REVISIONS SHALL BE PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

EXISTING FACILITIES

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM HIS WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING FACILITY. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, HE SHALL REPLACE THE DAMAGED PORTION AT HIS EXPENSE AND TO THE SATISFACTION OF THE OWNER.

EXAMINATION OF THE SITE

THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE OF THE PROPOSED WORK, THE PLANS AND SPECIFICATIONS. THE SUBMISSION OF A BID SHALL BE CONSIDERED EVIDENCE THAT THE CONTRACTOR HAS MADE SUCH EXAMINATION AND IS SATISFIED AS TO THE CONDITIONS TO BE ENCOUNTERED IN PERFORMING THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

CONSTRUCTION LIMITS

THE CONTRACTOR SHALL RESTRICT ALL OF HIS ACTIVITIES, EQUIPMENT STORAGE AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE ACTUAL CONSTRUCTION LIMITS ARE SHOWN ON THE PLANS OR THE EXISTING OR PROPOSED R/W. WHICHEVER IS NEAREST. SHOULD THE CONTRACTOR WISH TO USE ANY AREA OUTSIDE THESE LIMITS, HE MUST SUBMIT HIS REQUEST IN WRITING TO THE ENGINEER. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA THAT THE CONTRACTOR PLANS TO USE AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. THE ENGINEER SHALL APPROVE THE REQUEST IN WRITING BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA. PRIOR TO THE BEGINNING OF WORK, THE REPRESENTATIVE OF THE MAINTAINING AGENCY SHALL REVIEW AND RECORD ALL ADJACENT SITES WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF THE ADJACENT SITES WILL BE MADE. ANY AREAS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPAIRED OR REPLACED, AT THE CONTRACTOR'S EXPENSE, IN KIND OR AS DIRECTED BY THE ENGINEER.

PROTECTING EXISTING UNDERGROUND UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING, MARKING, OR OTHERWISE DESIGNATING THE LOCATIONS OF THE UNDERGROUND UTILITIES IN THE CONSTRUCTION AREAS IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH OF WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF PLANNED CONSTRUCTION. EXTREME CARE SHALL BE TAKEN IN THE VICINITY OF THE EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ISOLATE, BRACE, SUPPORT, SHEET, ETC. AND PROTECT THE EXISTING UTILITY FROM MOVING EITHER HORIZONTALLY OR VERTICALLY. IF SUCH MOVEMENT DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR MAY ELECT TO REMOVE AND RECONSTRUCT PORTIONS OF THE EXISTING UTILITY AT HIS OWN EXPENSE IF HE SO DESIRES. THE COST OF REPAIR SHALL BE INCURRED BY THE CONTRACTOR.

SHOULD AN UNLOCATED OR AN EXTREME VARIANCE IN LOCATION OF A UTILITY BE ENCOUNTERED DURING EXCAVATION, CONSULT THE OWNER IMMEDIATELY FOR DIRECTIONS.

DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICING HAS BEEN PROVIDED. COOPERATION WITH THE OWNER IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION IS ESSENTIAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM HIS WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING UTILITY. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS. HE SHALL NOTIFY THE OWNER IMMEDIATELY AND REPLACE THE DAMAGED PORTION IMMEDIATELY, AND AT HIS EXPENSE.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

WEATHER CONDITIONS

NO CONSTRUCTION SHALL BE DONE DURING STORMY, FREEZING, OR INCLEMENT WEATHER UNLESS PERMISSION IS GIVEN BY THE ENGINEER. WHENEVER WORK PROCEEDS DURING SUCH WEATHER, THE CONTRACTOR SHALL PROVIDE APPROVED FACILITIES, INCLUDING HEAT (IF REQUIRED), FOR THE PROTECTION OF ALL MATERIALS AND FINISHED WORK.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE AS OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE.

THE UNDERGROUND UTILITIES SHOWN ON THE PLAN HAVE BEEN LOCATED BY FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT; BUT THERE IS NO GUARANTEE TO THEIR ACCURACY OR COMPLETENESS.

COOPERATION WITH UTILITY COMPANIES

WHILE THE WORK OF THIS CONTRACT IS BEING PERFORMED, THE UTILITY COMPANIES MAY BE WORKING IN THE AREA ADJUSTING AND RESETTING EXISTING FACILITIES. THE CONTRACTOR SHALL FULLY COOPERATE WITH UTILITY COMPANIES SO THAT THE ENTIRE WORK IS COMPLETED IN A MANNER CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. THE CONTRACTOR, UTILITIES, AND ENGINEER SHALL DISCUSS THE NECESSARY CONSTRUCTION SCHEDULES TO COMPLETE THE PROJECT AT THE PRE-CONSTRUCTION MEETING.

UTILITIES NOTIFICATION

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN ON THE PLAN.

THE OWNER OF THE UNDERGROUND FACILITY SHALL, WITHIN 48 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS), MARK THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE AND THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION.

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DUKE ENERGY - ELECTRIC (TRANSMISSION) 139 EAST FOURTH STREET CINCINNATI, OHIO 45202 CONTACT: TIM MEYER TIM.MEYER@DUKE-ENERGY.COM

DUKE ENERGY - GAS 5445 AUDRO DR CINCINNATI, OHIO 45247 OH/KYHOUSEBILL@DUKE-ENERGY.COM

WARREN COUNTY WATER & SEWER 406 JUSTICE DRIVE LEBANON, OHIO 45036 CHRIS BRAUSCH CHRIS.BRAUSCH@CO.WARREN.OH.US CHRIS WOJNICZ CHRISTOPHER.WOJNICZ@CO.WARREN.OH.US

RESTORATION

THE CONTRACTOR SHALL PROVIDE FOR PROTECTION OF THE FOLLOWING: EXISTING STREETS, DRIVEWAYS, SIDEWALKS, CURBS, GUTTERS, RE-SEEDING/RE-SODDING, REMOVAL OF TREES, RESTORATION OF AGRICULTURAL LAND, THE MAINTENANCE OF THE CONSTRUCTION AREA DURING PROGRESS OF THE WORK AND THE COMPLETE RESTORATION OF THE CONSTRUCTION AREA TO ITS ORIGINAL CONDITION AT THE COMPLETION OF THE WORK. THE CONTRACTOR SHALL CONTINUOUSLY CARRY ON WITH THE FINAL RESTORATION OF THE CONSTRUCTION AREA AFTER THE BACKFILLING IS COMPLETED, AND HE SHALL PROCEED TO RESTORE TO ITS ORIGINAL CONDITION ALL STREETS, DRIVEWAYS, SIDEWALKS, CURBS, GUTTERS, STRUCTURES, AND ALL AREAS THAT WERE DAMAGED, DISTURBED, OR OCCUPIED BY THE CONTRACTOR IN CONNECTION WITH ANY PHASE OF THE WORK.

PAVEMENTS, TREES, SHRUBS, FENCES, POLES, OR OTHER PROPERTY AND SURFACE STRUCTURES WHICH HAVE BEEN DAMAGED, REMOVED, OR DISTURBED BY THE CONTRACTOR, WHETHER DELIBERATELY OR THROUGH FAILURE TO CARRY OUT THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, STATE LAWS, MUNICIPAL ORDINANCES, THE SPECIFIC DIRECTION OF THE ENGINEER, OR THROUGH FAILURE TO EMPLOY USUAL AND REASONABLE SAFEGUARDS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

ALL TEMPORARY SIGNS, SPRINKLER SYSTEMS, LANDSCAPING, ORNAMENTAL FENCING, ETC., LOCATED WITHIN THE PROJECT LIMITS MUST BE REPLACED OR RELOCATED UPON COMPLETION OF THE CONSTRUCTION.

COST OF THE ABOVE SHALL BE PAID FOR UNDER ITEM 201 CLEARING AND GRUBBING

MAINTENANCE OF STORM SEWER FLOWS

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN SEWER FLOWS AT ALL TIMES THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PLACED IN USE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED.

ALL EXISTING SEWERS SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

SUBGRADE STABILIZATION

A UNIFORM DEPTH OF 16 INCHES OF UNDERCUT AND ODOT GRANULAR BACKFILL IS SHOWN AS A CONTINGENCY. THE ACTUAL DEPTH OF UNDERCUT SHALL BE DETERMINED, IN THE FIELD, BY THE ENGINEER BASED ON PROOF ROLLING PERFORMANCE.

ITEM 305 CONCRETE BASE, AS PER PLAN

ITEM 305 CONCRETE BASE, AS PER PLAN - CONCRETE SHALL BE CLASS QC 2 (28 DAY COMPRESSION STRENGTH = 5,000 PSI). THE CONTRACTOR SHALL REINFORCE THE CONCRETE SLAB USING #5 REBAR SPACED AT 8 INCH INTERVALS CENTER TO CENTER. REINFORCING SHALL BE PROVIDED IN BOTH LONGITUDINAL AND TRANSVERSE DIRECTIONS. ALL REINFORCING AND LOW MORTAR STRENGTH BACKFILL SHALL BE INCIDENTAL TO ITEM 305 CONCRETE BASE, AS PER PLAN.

ITEM 609 CURB & GUTTER, TYPE 2, AS PER PLAN GUTTER THICKNESS SHALL BE 11.2" AT EDGE OF PAVEMENT

CHARTER COMMUNICATIONS 10920 KENWOOD ROAD BLUE ASH, OHIO 45242

DL-SOUTHERN-OHIO-OUTSIDE-PLANT@CHARTER.COM

CENTURY LINK 803 EAST 12TH STREET **GREENVILLE, OHIO 45331** DAVID KAPLAN DAVID.W.KAPLAN@CENTURYLINK.COM TRACY DZUGAN TRACY.L.DZUGAN@CENTURYLINK.COM DANIEL JORDAN DANIEL.JORDAN@CENTURYLINK.COM

AT&T OHIO 3233 WOODMAN DRIVE, RM 225 DAYTON, OHIO 45420 HOWARD LAUDERMILK HL1596@ATT.COM

VERIZON 312 PLUM STREET CINCINNATI, OHIO 45202 JACK STOKE JACK.STOKES@VERIZON.COM ALLAN GUEST ALLAN.GUEST@VERIZON.COM

REMOVAL OF PAVEMENT MARKINGS ONLY SANDBLASTING, WATER BLASTING, OR OTHER NON-DESTRUCTIVE MEANS OF REMOVAL OF PAVEMENT MARKINGS SHALL BE PERMITTED. GRINDING METHODS OF REMOVAL THAT LEAVE THE PAVEMENT SURFACE SCARRED OR SIGNIFICANTLY ROUGHENED SHALL NOT BE PERMITTED.

ITEM SPECIAL - JOINT FABRIC, AS PER PLAN A QUANTITY HAS BEEN SET UP IN THE PLANS FOR THE APPLICATION OF AN ASPHALT IMPREGNATED POLYETHYLENE MATERIAL, 24 INCHES IN WIDTH, TO BE PLACED OVER THE JUNCTION OF THE EXISTING PAVEMENT AND THE NEW PAVEMENT BASE COURSE. THIS MATERIAL SHALL BE PETROTAC OR APPROVED EQUAL AND SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

<u>GEOTECH</u> CONTRACTOR TO INCLUDE GEOTECH FOR CONSTRUCTION.

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MAINTENANCE OF TRAFFIC, GENERAL REQUIREMENTS THE REQUIRED WORK SHALL BE PERFORMED IN A MANNER THAT CAUSES THE LEAST INCONVENIENCE TO AND THAT PROVIDES THE MAXIMUM SAFETY FOR THE TRAVELING PUBLIC AND THE CONTRACTOR. THE REQUIREMENTS FOR MAINTAINING TRAFFIC AS INDICATED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (REFERRED TO AS THE "OMUTCD"), CURRENT EDITION, PERTINENT ITEMS IN THE ODOT SPECIFICATIONS, AND AS REQUESTED BY THE ENGINEER SHALL APPLY IN ADDITION TO THE FOLLOWING NOTES.	5
SHOULD ANY PAVED AREAS NOT DESIGNATED FOR MAINTAINING TRAFFIC BECOME DAMAGED OR DESTROYED DURING CONSTRUCTION DUE TO THE CONTRACTOR'S NEGLIGENCE OR FAILURE TO PROVIDE ADEQUATE SIGNS, BARRICADES, DRUMS, FLAGGERS OR OTHER TRAFFIC CONTROL DEVICES, THE RESTORATION OF THE PAVED AREAS SHALL BE AT THE EXPENSE OF THE CONTRACTOR AND TO THE SATISFACTION OF THE ENGINEER.	
TEMPORARY PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO A STAGE OF CONSTRUCTION BEING OPENED TO TRAFFIC.	
DRUMS SHALL BE REFLECTORIZED, AND USED IN ACCORDANCE WITH ITEM 614.03 AND THE OMUTCD. DRUMS SHALL BE SPACED AT A MAXIMUM INTERVAL OF 50 FEET CENTER TO CENTER UNLESS SHOWN OTHERWISE ON THESE PLANS OR AS DIRECTED BY THE ENGINEER. DRUMS SHALL BE SPACED AT 10 FOOT INTERVALS ALONG ALL CURB RADII. THE CONTRACTOR SHALL ADJUST THE SPACING ON ALL DRUMS AS DIRECTED BY THE ENGINEER TO ALLOW ACCESS AS REQUIRED, WHILE MAINTAINING SAFETY DURING CONSTRUCTION.	
THE CONTRACTOR WILL BE REQUIRED TO PROVIDE, ERECT, MAINTAIN (PROPER POSITION, KEPT CLEAN AND LEGIBLE, AND IN GOOD WORKING CONDITION), AND REMOVE LIGHTS, SIGNS, DRUMS, AND ALL OTHER TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC. ALL SIGNS SHALL BE REFLECTORIZED OR ILLUMINATED. PLACEMENT OF ALL TRAFFIC CONTROL DEVICES SHALL START AND PROCEED IN THE DIRECTION OF THE FLOW OF TRAFFIC. REMOVAL OF TRAFFIC CONTROL DEVICES SHALL BEGIN AT THE END OF THE CONSTRUCTION AREA AND PROCEED TOWARD ONCOMING TRAFFIC. THE CONTRACTOR SHALL PROVIDE FOR THE INSTALLATION OF ALL NECESSARY TRAFFIC CONTROL DEVICES BEFORE BEGINNING WORK AND IMMEDIATELY REMOVE THESE DEVICES WHEN WORK IS SUSPENDED OR COMPLETE.	MENTS
LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.	IMPROVEME ES
THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL LOCAL DRIVES, PRIVATE OR PUBLIC, WITHIN THE PROJECT LIMITS THROUGHOUT CONSTRUCTION.	∑ S
BEFORE THE WORK BEGINS, THE CONTRACTOR WILL PROVIDE THE ENGINEER WITH THE NAMES AND TELEPHONE NUMBERS OF TWO (2) PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE ENGINEER, AFFECTED SAFETY-SERVICE AGENCIES, AND ALL INTERESTED POLICE AGENCIES, TO REPAIR AND/OR REPLACE THE TRAFFIC CONTROL DEVICES AS NEEDED TO MAINTAIN THE SAFETY OF THE TRAVELED PAVEMENT.	CR15) AL NO
ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC.	OAD ((GENER
LOW STRENGTH MORTAR BACKFILL WHENEVER WATER LINES, STORM LINES, SANITARY LINES, CULVERT PIPES, BOX CULVERTS, ALL UTILITY CROSSINGS AND/OR BRIDGE REPLACEMENT OR REPAIRS (INCLUDING ABUTMENTS) CROSS PUBLIC ROADWAYS, THE BACKFILL REQUIRED WILL BE LOW STRENGTH MORTAR UNLESS OTHERWISE NOTED ON THE PLANS.	MBIA R(
WHENEVER A CUT IN PAVEMENTS IS MADE FOR REMOVAL ITEMS, THE BACKFILL REQUIRED WILL BE LOW STRENGTH MORTAR. THE LIMITS OF THE BACKFILL SHALL BE 2' BEHIND THE CURB, AND FROM THE BASE OF THE CUT TO THE SUBGRADE.	
ALL CUTS IN DRIVEWAYS SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR UNLESS THE DRIVEWAY IS TO BE PERMANENTLY REMOVED. LIMITS OF BACKFILL SHALL BE THE WIDTH OF THE DRIVEWAY PLUS TWO FEET ON EACH SIDE.	COL
LOW STRENGTH MORTAR BACKFILL WILL BE REQUIRED FOR ANY CUT IN PUBLIC ROADWAYS WHERE THE PAVEMENT HAS TO BE REMOVED.	
THIS QUANTITY IS TO BE INCLUDED IN THE UNIT PRICE FOR THE OCCURRENCES AS DESCRIBED ABOVE.	
CONSTRUCTION NOTIFICATION CONSTRUCTION NOTIFICATION THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE CLOSURES, AND ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE WARREN COUNTY PROJECT ENGINEER AND ANY OTHER LOCAL OFFICIALS RESPONSIBLE FOR PUBLIC NOTIFICATION. THAT OFFICIAL WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF THE ABOVE MENTIONED ITEMS, VIA THE APPROPRIATE MEDIA SOURCES.	
REMOVAL OF PAVEMENT MARKINGS	

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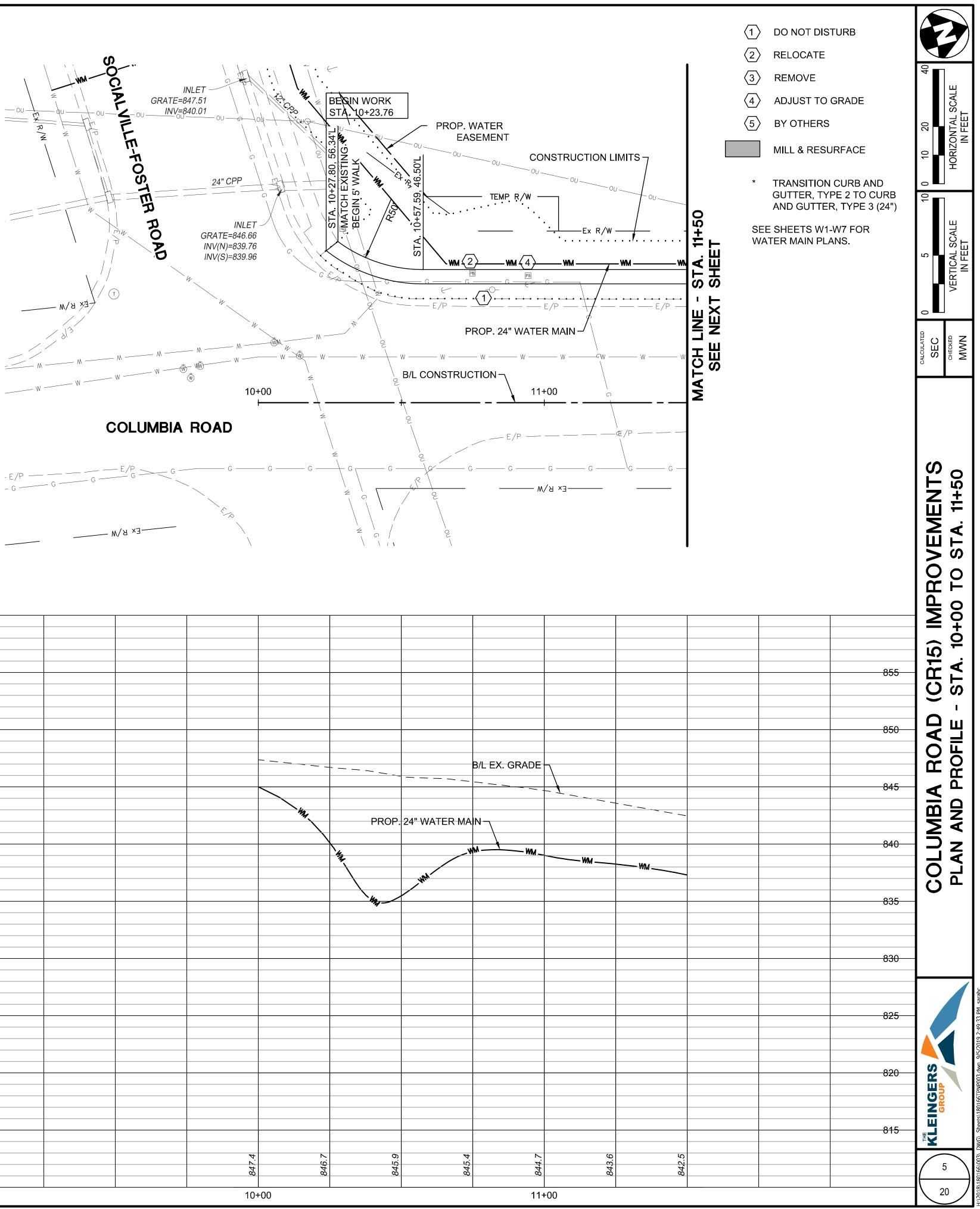
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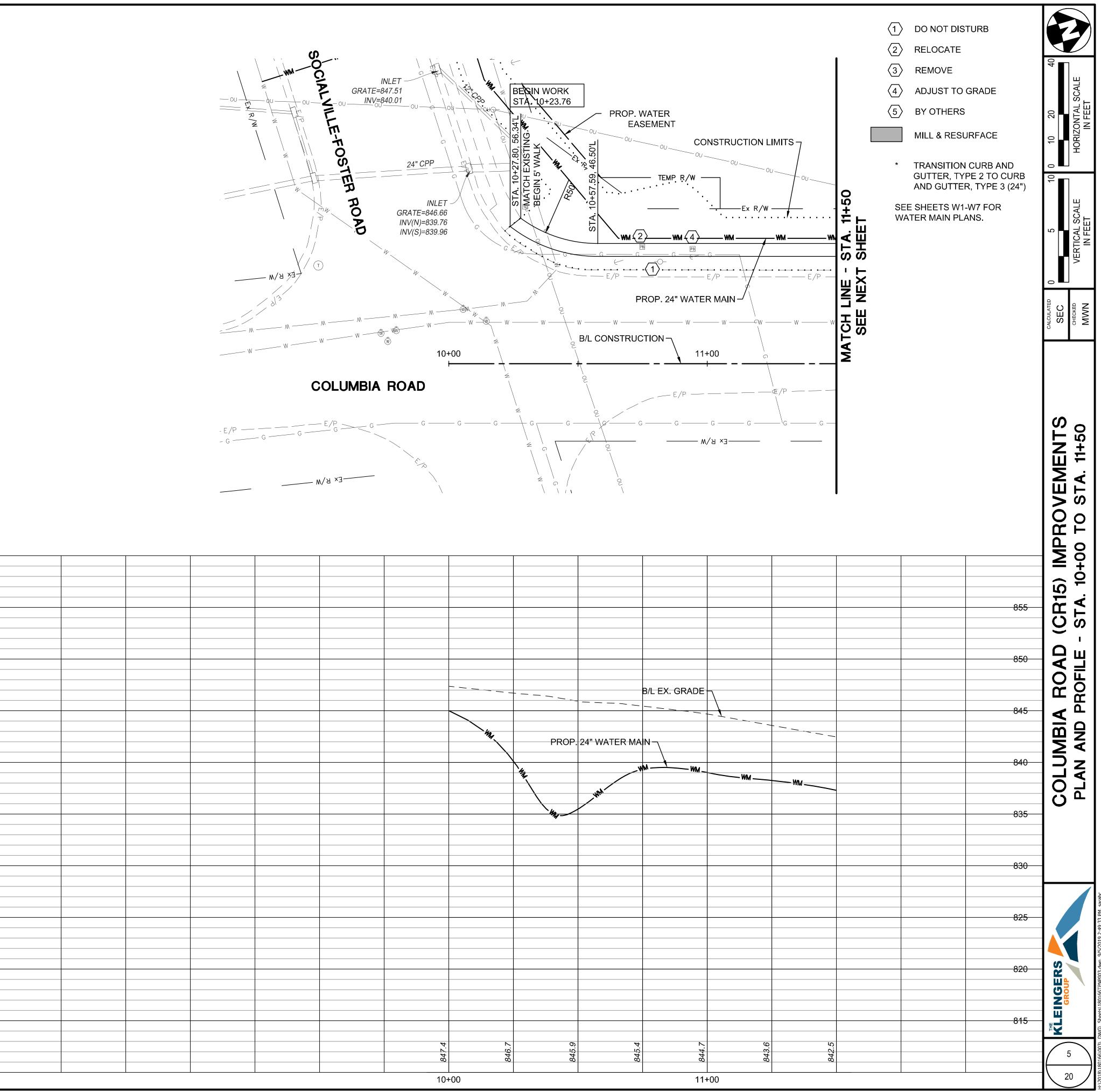
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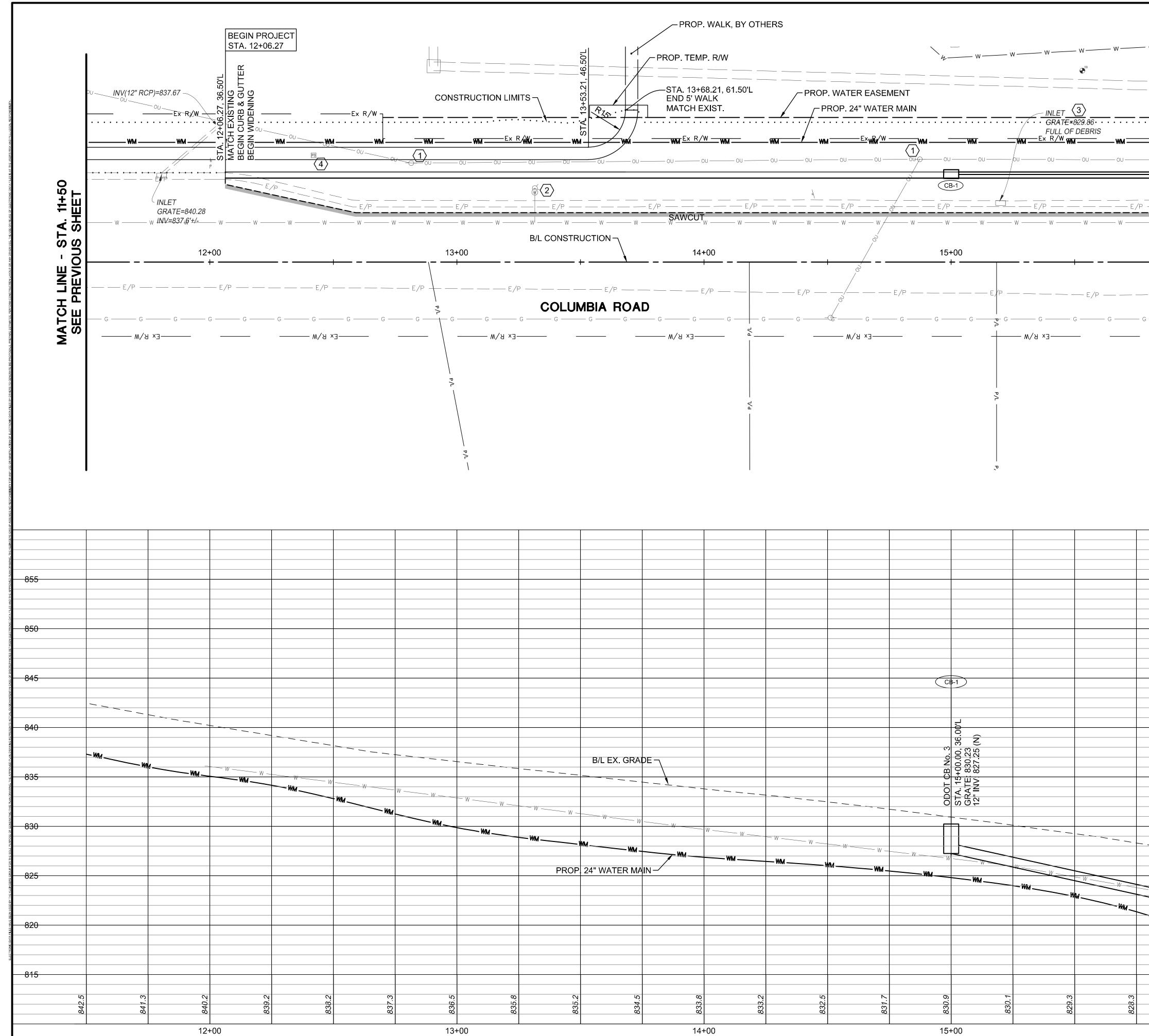
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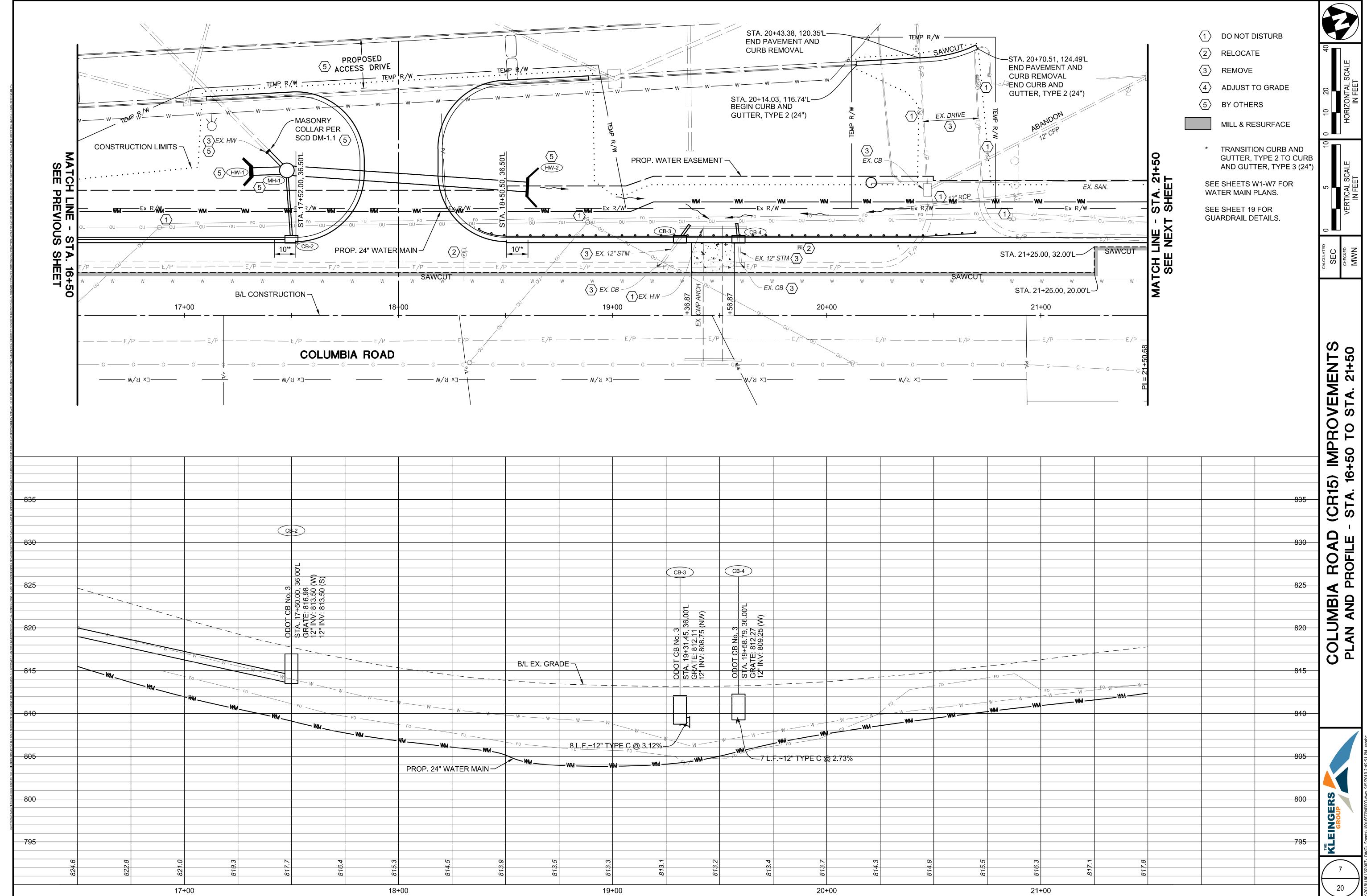




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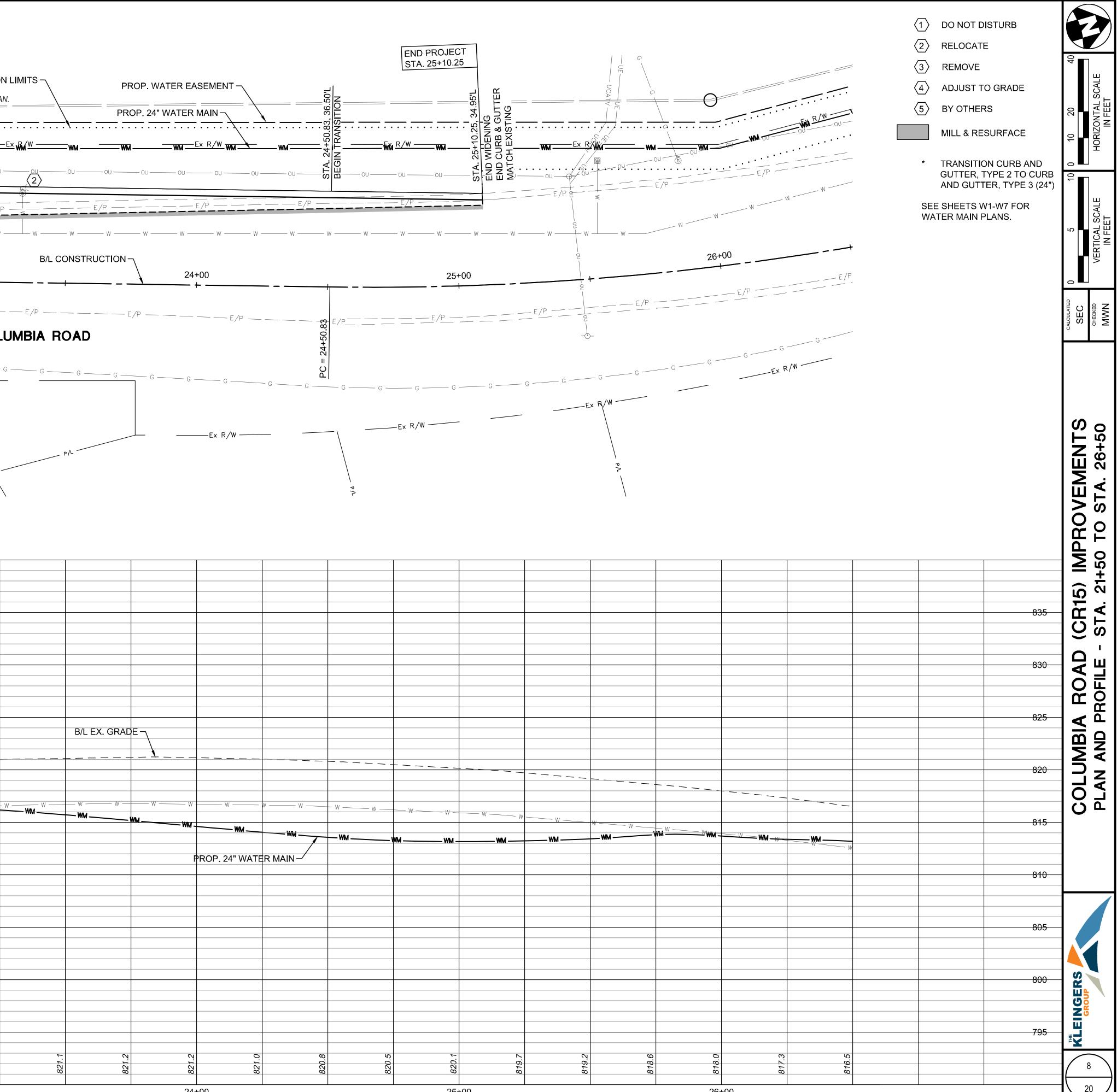
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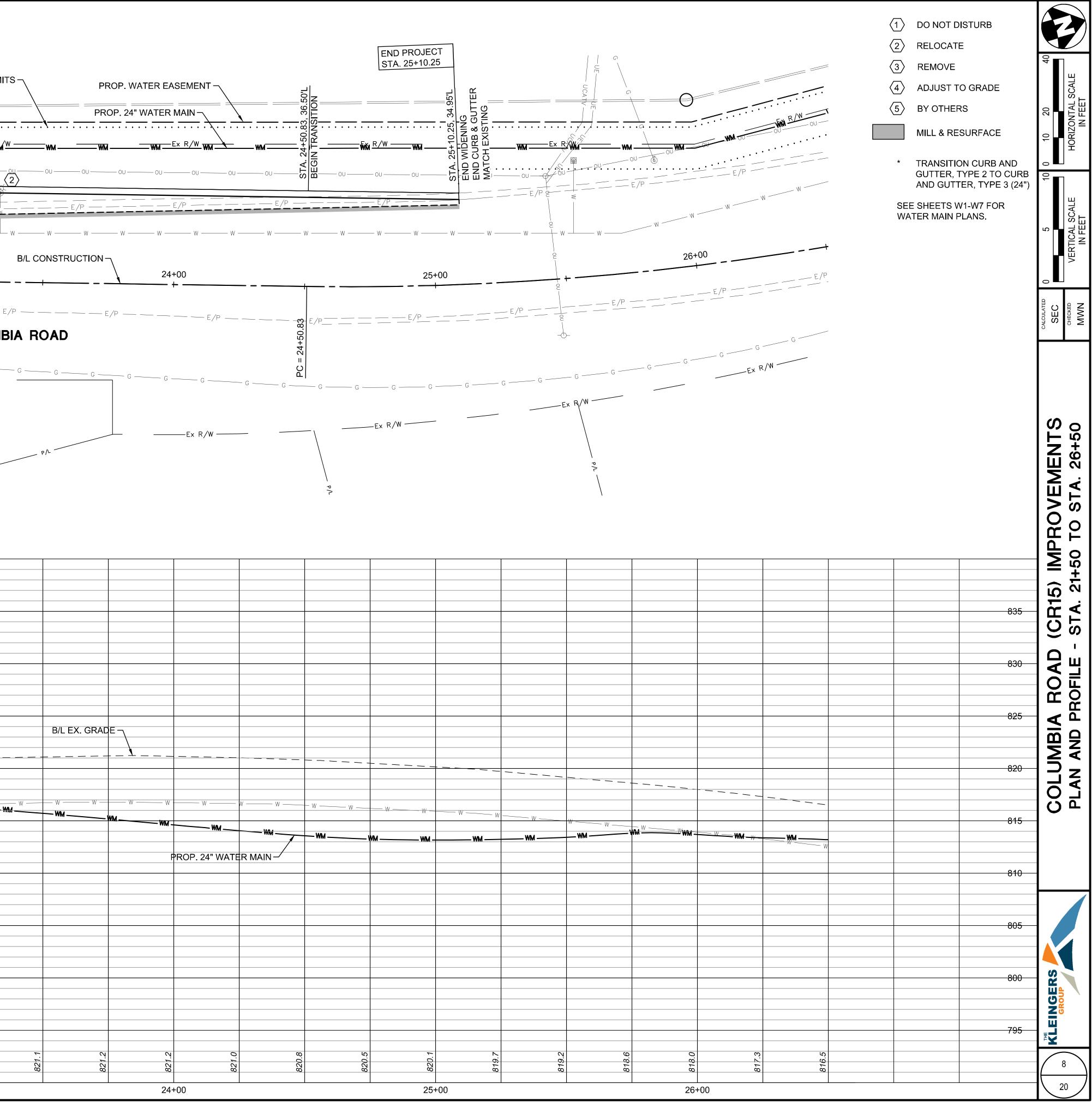
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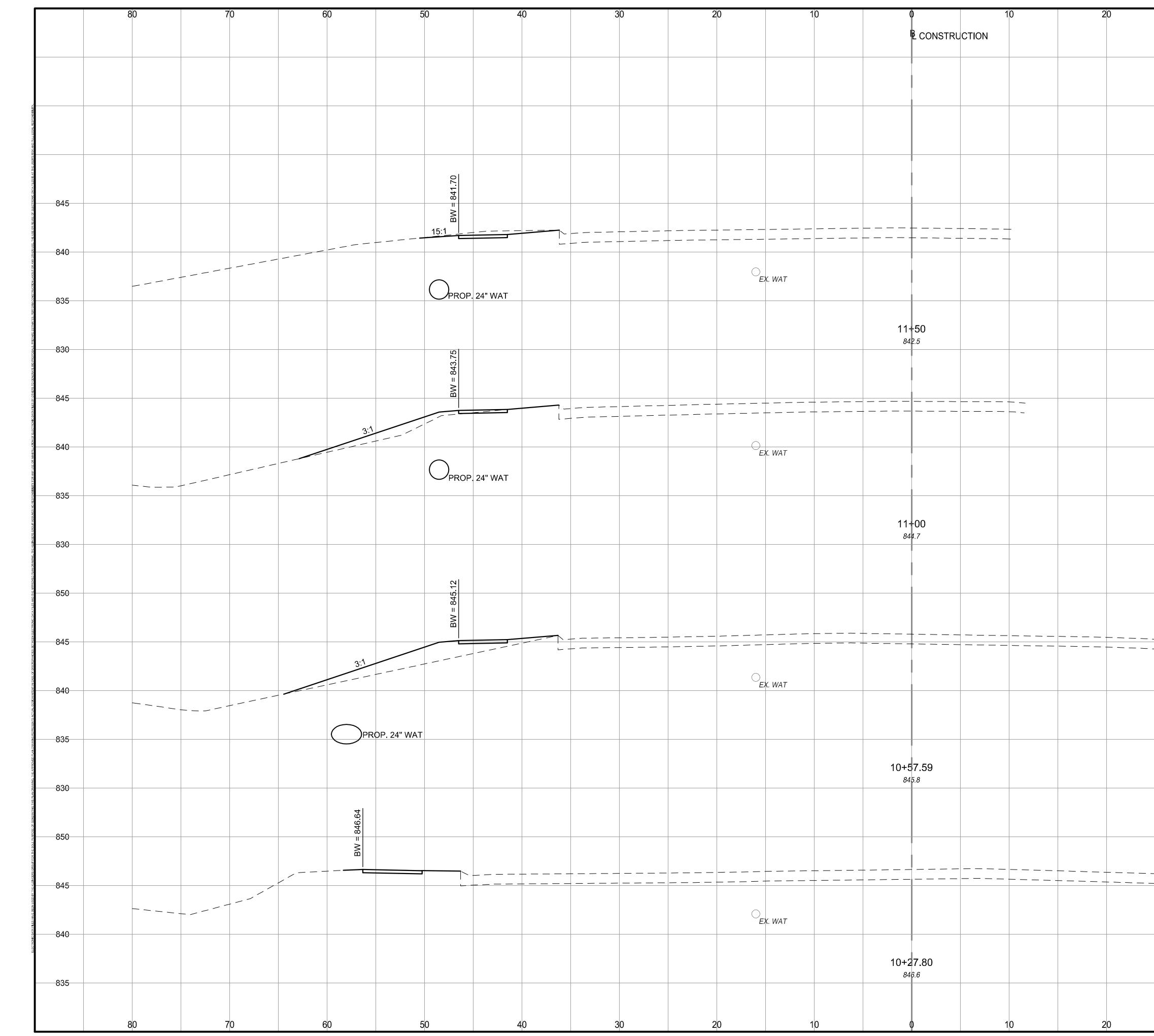
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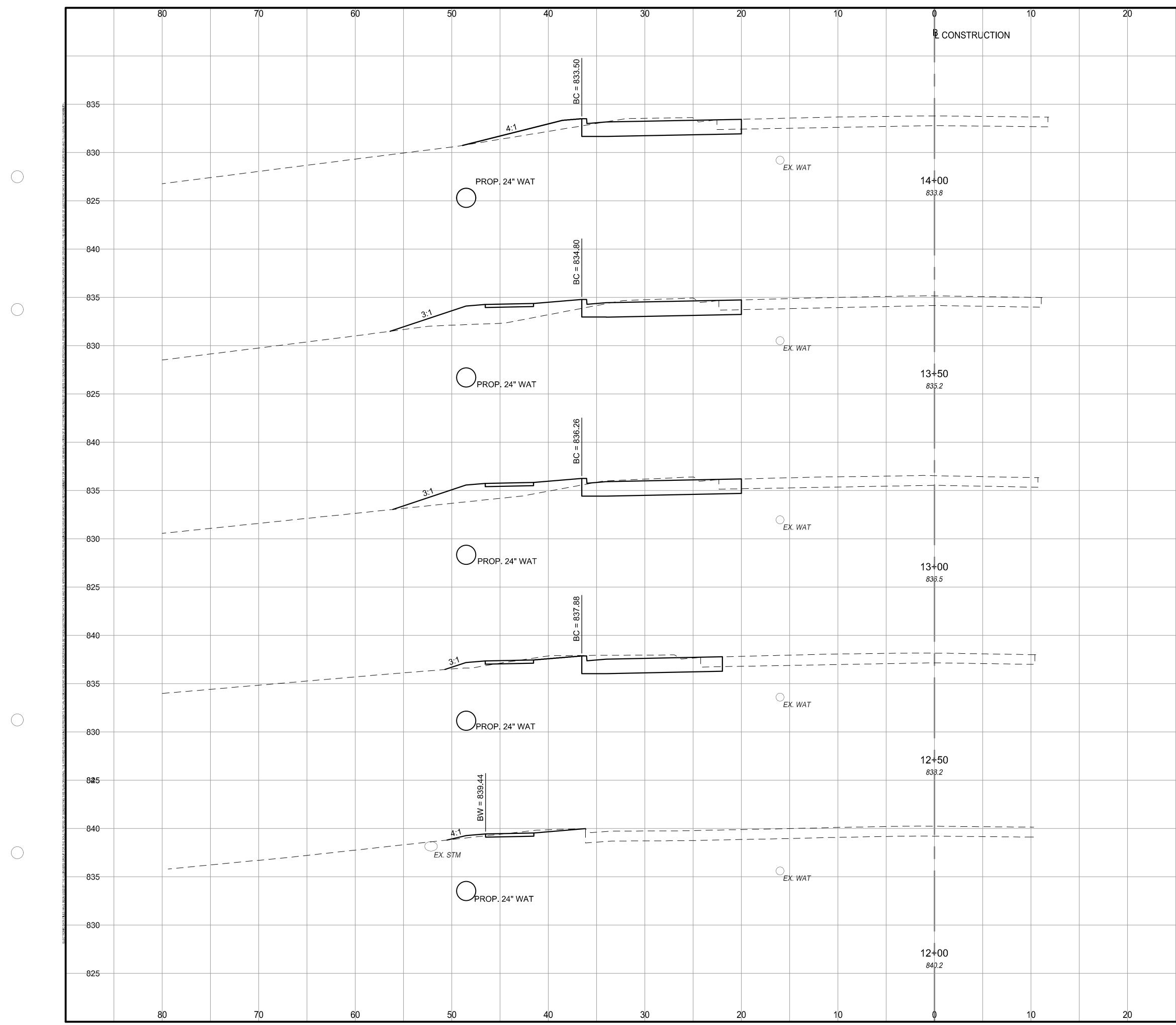


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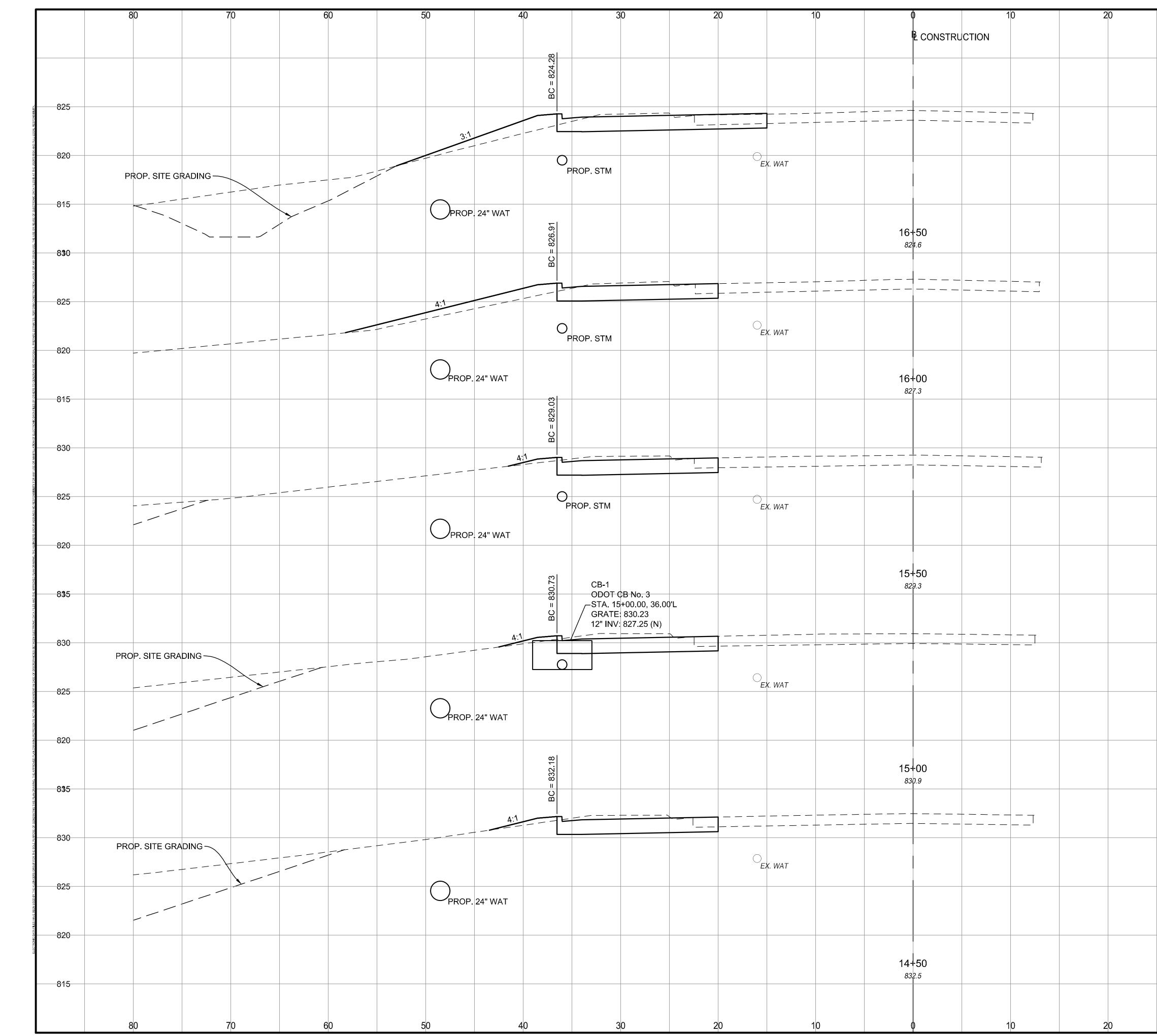
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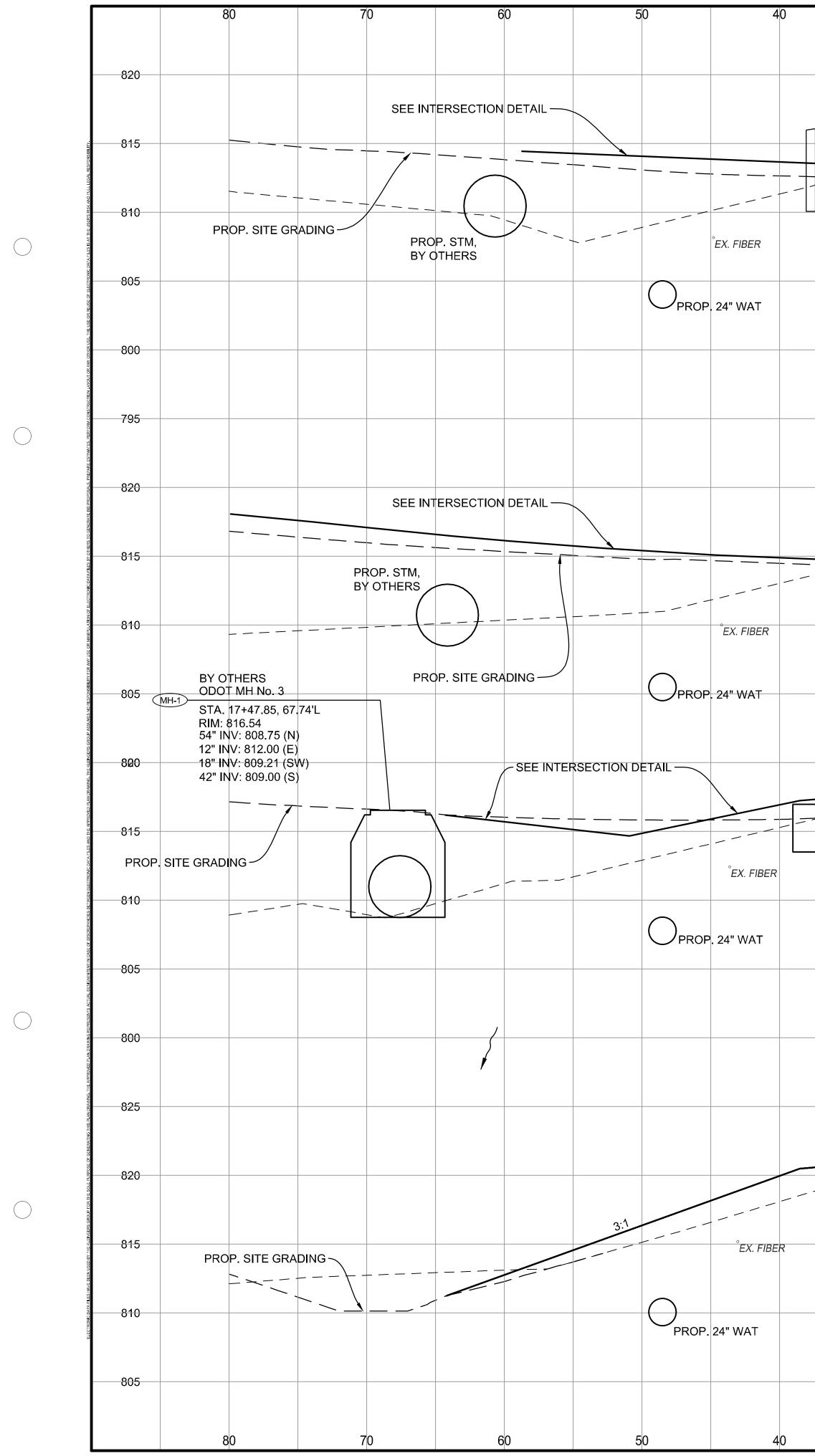
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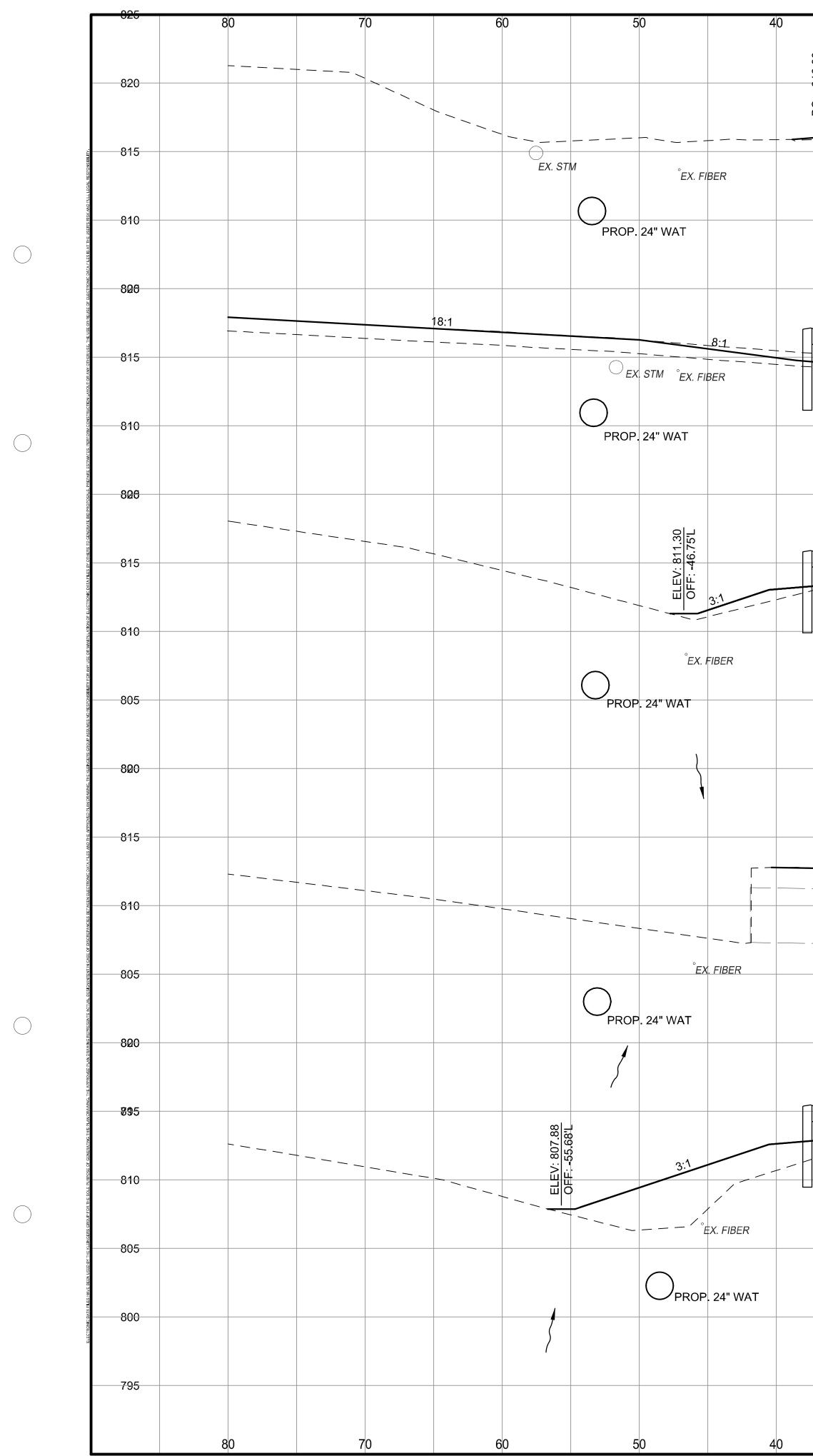
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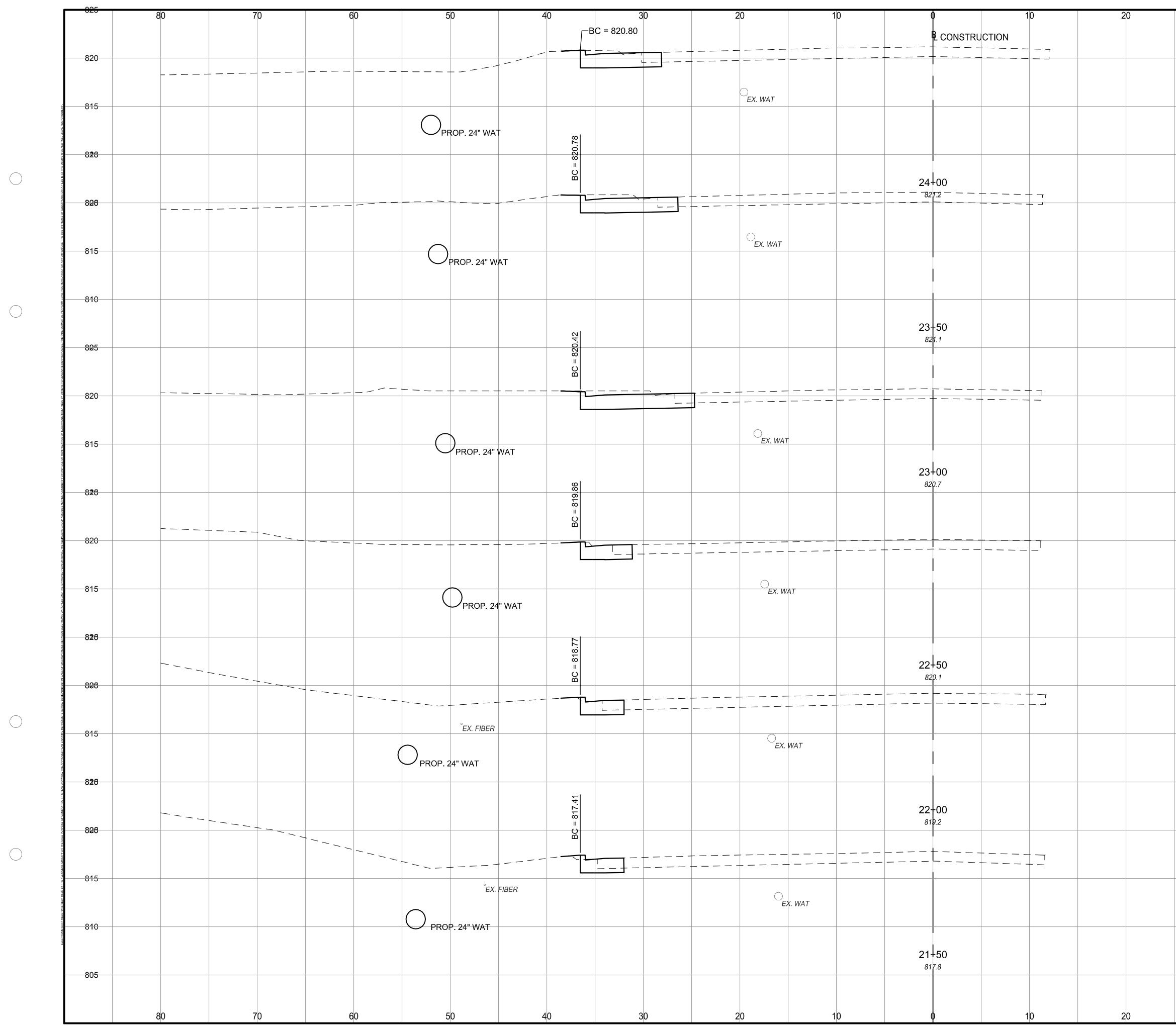
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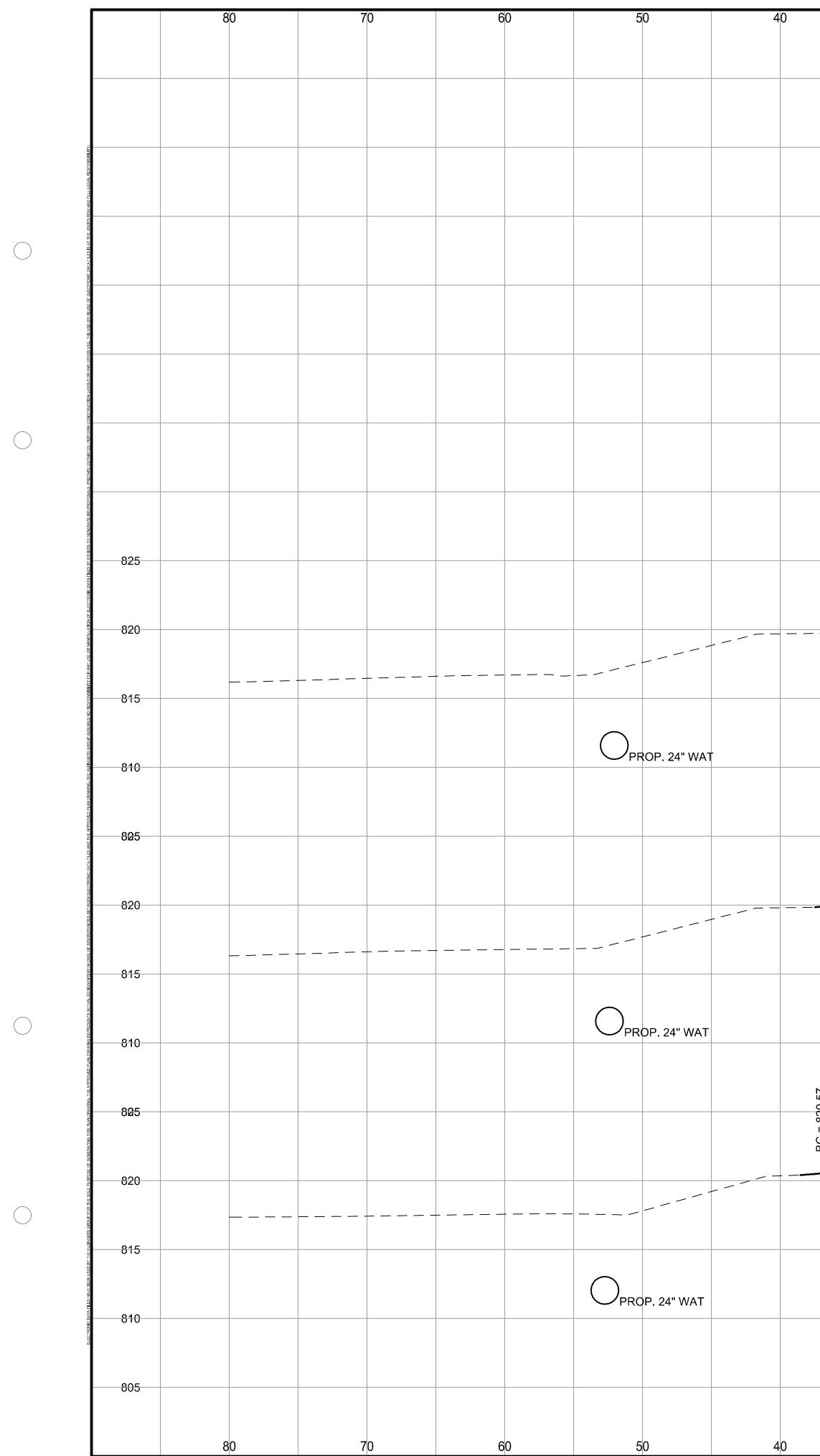


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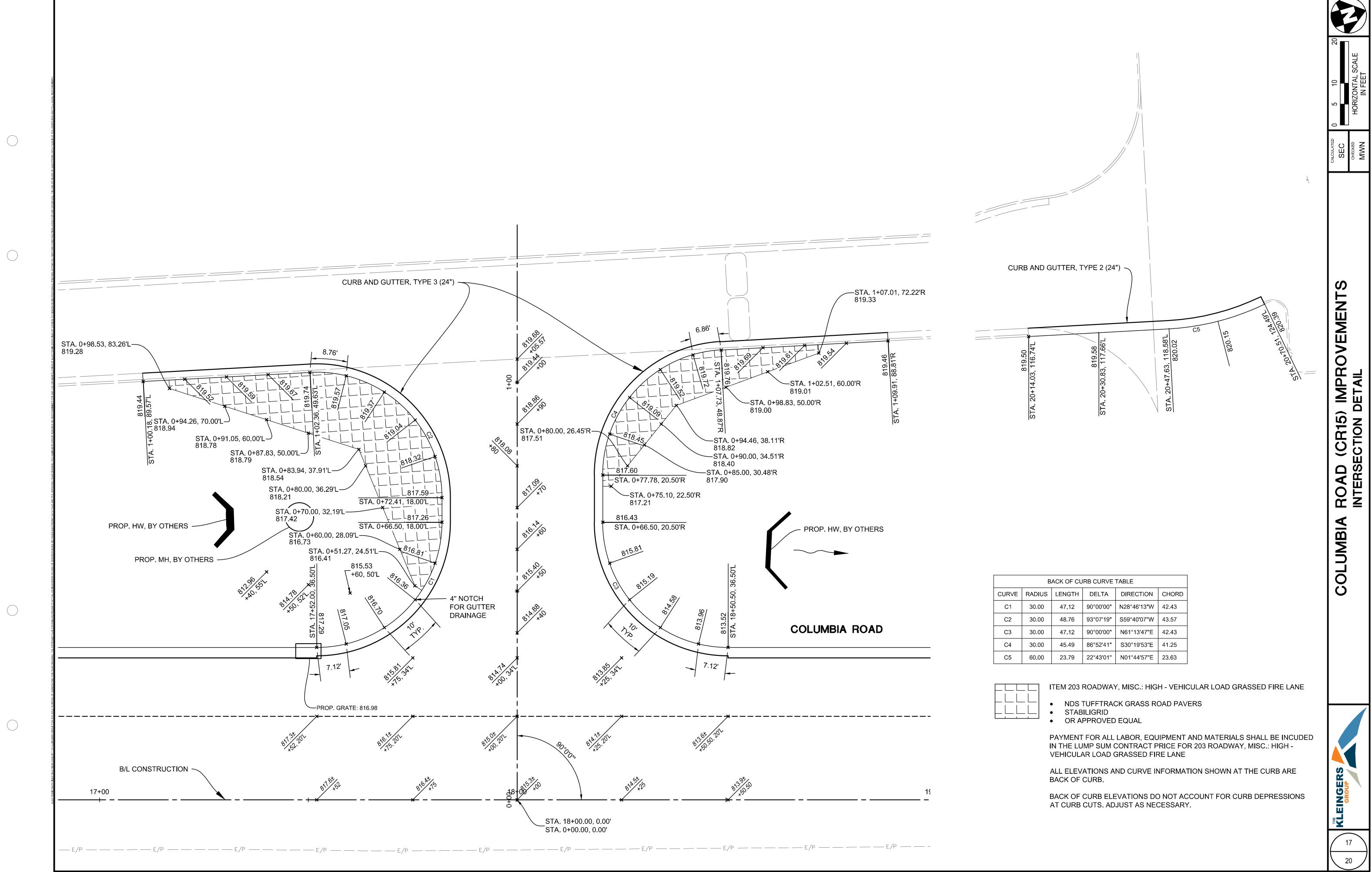
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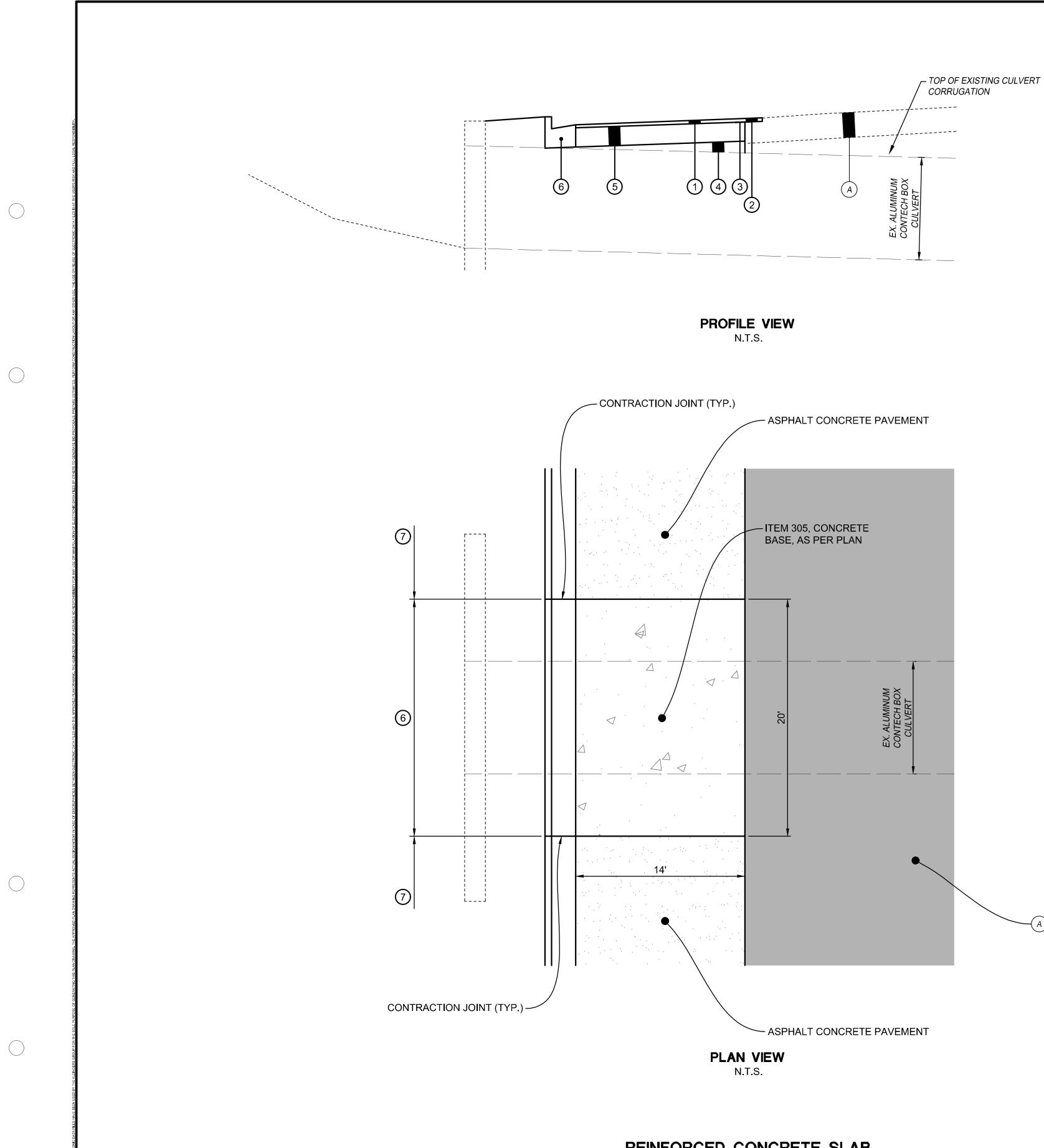


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2	30.00	48.76	93°07'19"	S59°40'07"W	43.57				
3	30.00	47.12	90°00'00"	N61°13'47"E	42.43				
4	30.00	45.49	86°52'41"	S30°19'53"E	41.25				
5	60.00	23.79	22°43'01"	N01°44'57"E	23.63				

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REINFORCED CONCRETE SLAB SEE NOTES THIS SHEET FOR REINFORCING REQUIREMENTS

LEGEND

1	ITEM 441
2	ITEM 254
3	ITEM SPECIAL
4	ITEM 613
5	ITEM 305
6	ITEM 609
7	ITEM 609
A	EXISTING PAVEME

<u>NOTES</u>

ITEM 305 CONCRETE BASE COMPRESSION STRENGTH AS PER PLAN.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROVISIONS TO ENSURE THE STEEL REBAR IN THE CONCRETE SLAB DOES NOT COME IN CONTACT WITH THE EXISTING ALUMINUM BOX CULVERT.

THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN EXCAVATING MATERIAL OVER THE ALUMINUM BOX CULVERT. ANY PART OF THE CULVERT THAT IS DAMAGED DUE TO CONSTRUCTION SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AND AT NO EXPENSE TO THE ENGINEER. PAYMENT FOR THE WORK LISTED ABOVE SHALL BE INCLUDED IN THE BID PRICE PER CY FOR ITEM 305 CONCRETE BASE, AS PER PLAN.

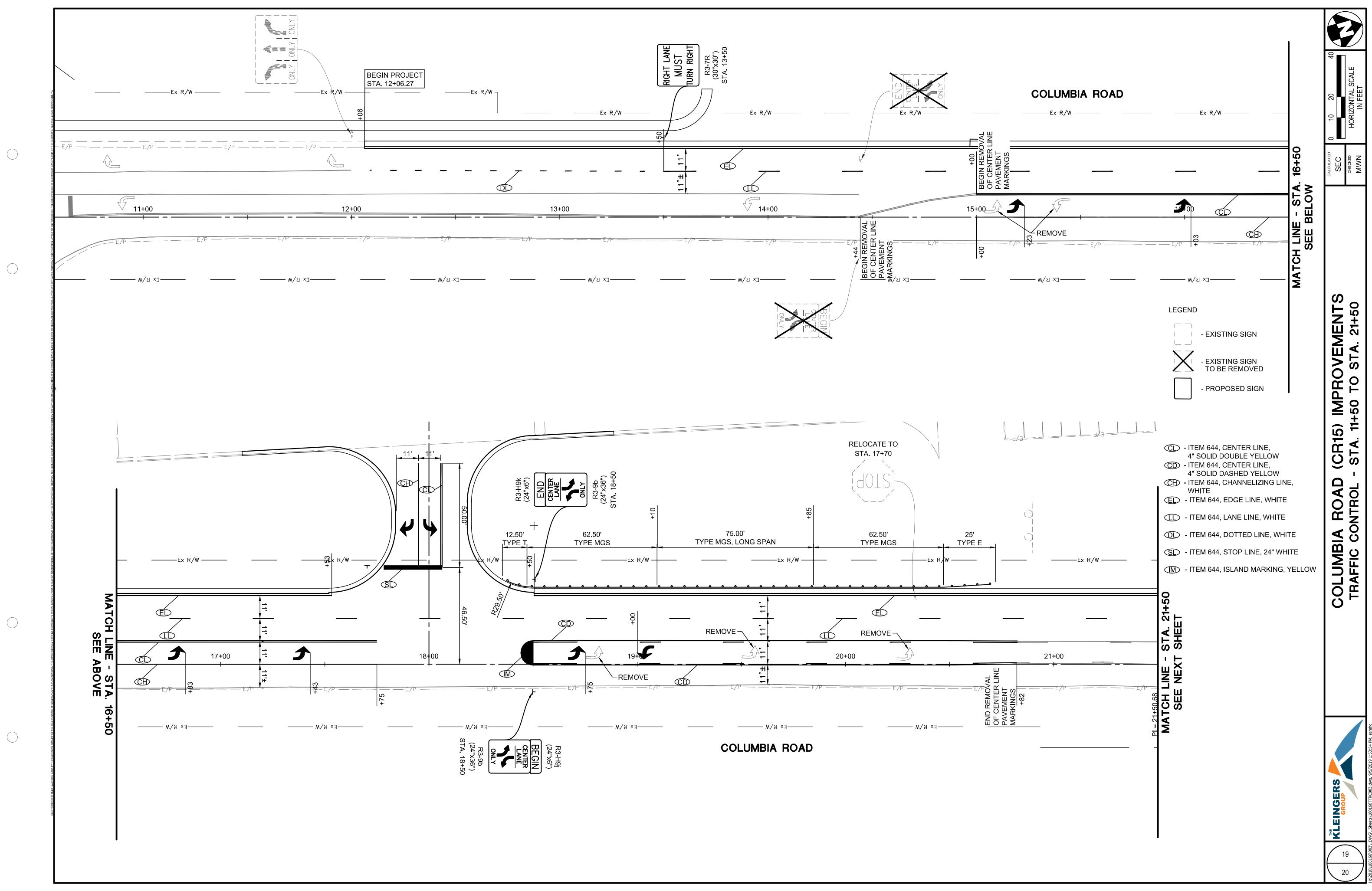
THE EXISTING CONTECH ALUMINUM BOX CULVERT RIBS PROTRUDE A DISTANCE OF 3-9/16". THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 1 INCH OF FLOWABLE FILL ABOVE THE RIBS.

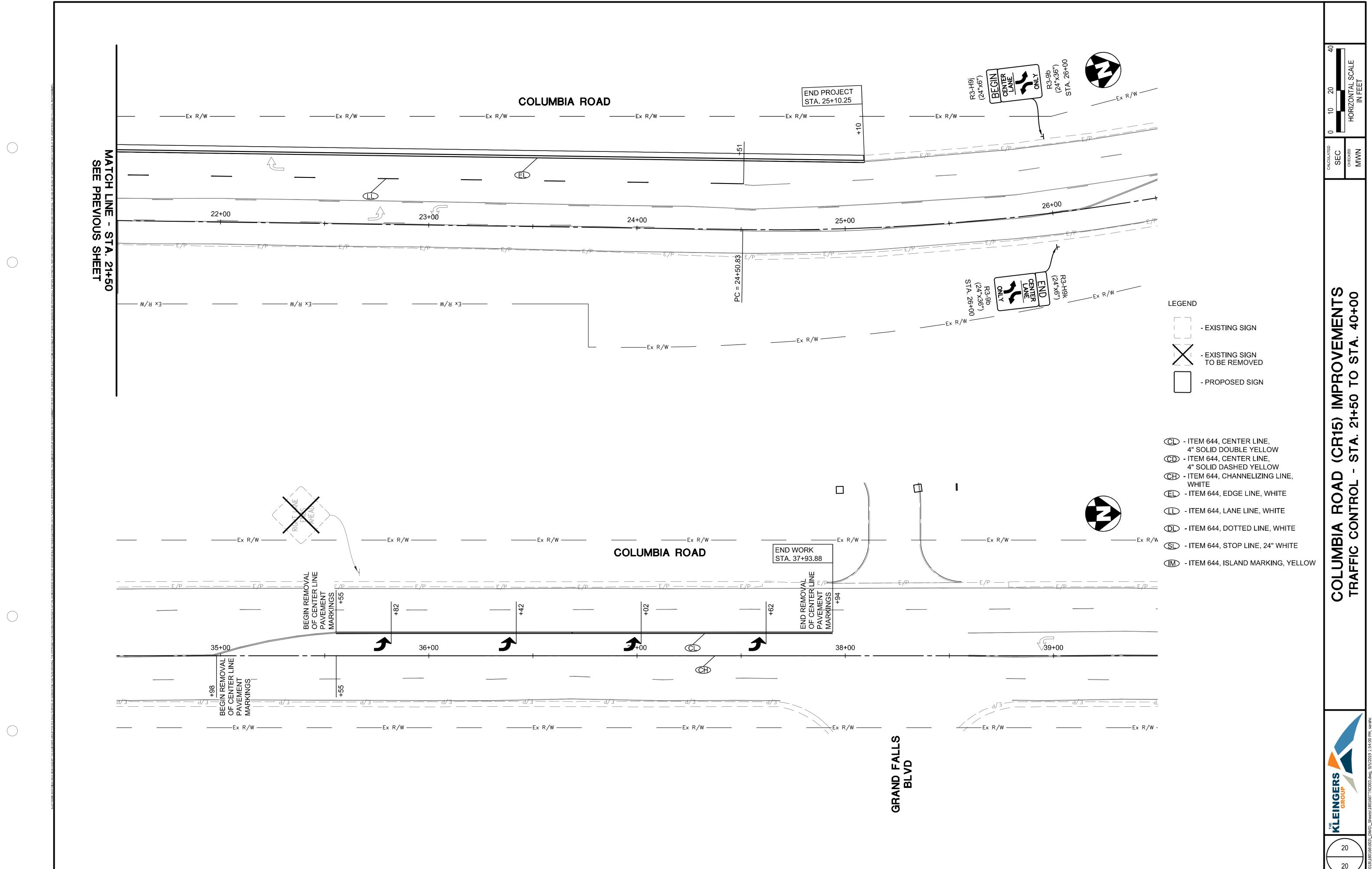
		L L	SEC	CHECKED
ITEM 441	1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22			
ITEM 254	PAVEMENT PLANING (3" TYPICAL)			
ITEM SPECIAL	JOINT FABRIC, AS PER PLAN			
ITEM 613	LOW STRENGTH MORTAR BACKFILL, VARIABLE DEPTH			
ITEM 305	CONCRETE BASE, AS PER PLAN (9.7")			
ITEM 609	CURB & GUTTER, TYPE 2, AS PER PLAN			
ITEM 609	CURB & GUTTER, TYPE 2			
EXISTING PAVEMENT				
	AS PER PLAN - CONCRETE SHALL BE CLASS QC 2 (28 DAY = 5,000 PSI). THE CONTRACTOR SHALL REINFORCE THE CONCRETE		SIN	

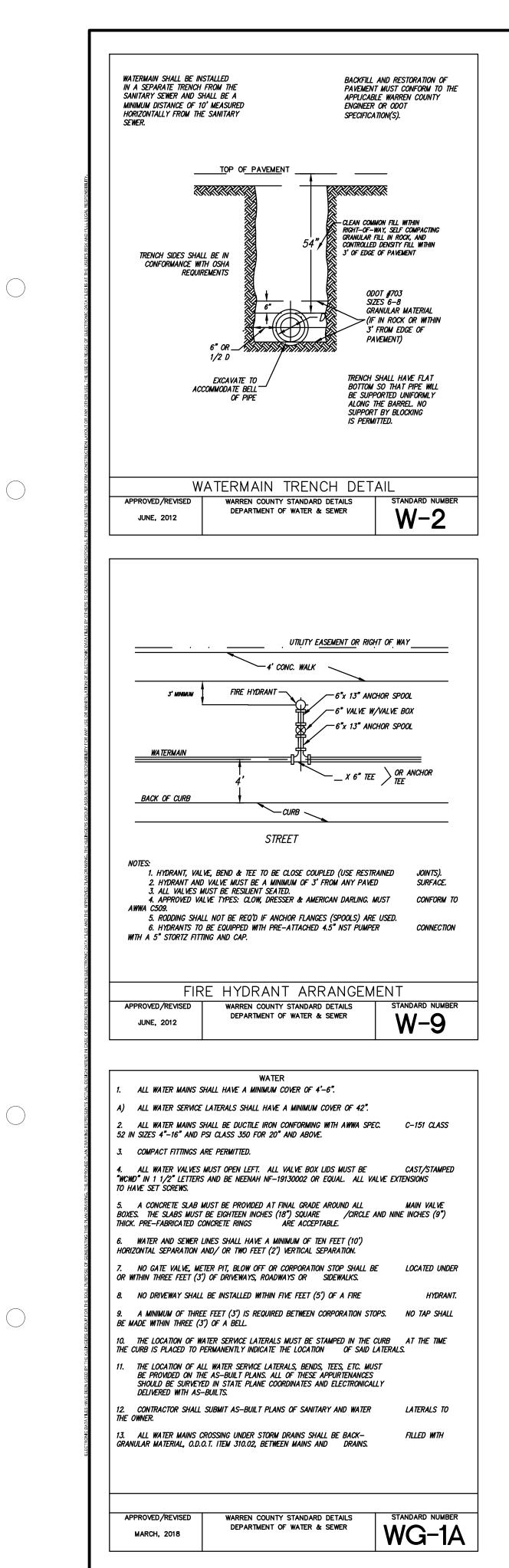
SLAB USING #5 REBAR SPACED AT 8 INCH INTERVALS CENTER TO CENTER. REINFORCING SHALL BE PROVIDED IN BOTH LONGITUDINAL AND TRANSVERSE DIRECTIONS. ALL REINFORCING AND LOW MORTAR STRENGTH BACKFILL SHALL BE INCIDENTAL TO ITEM 305 CONCRETE BASE,

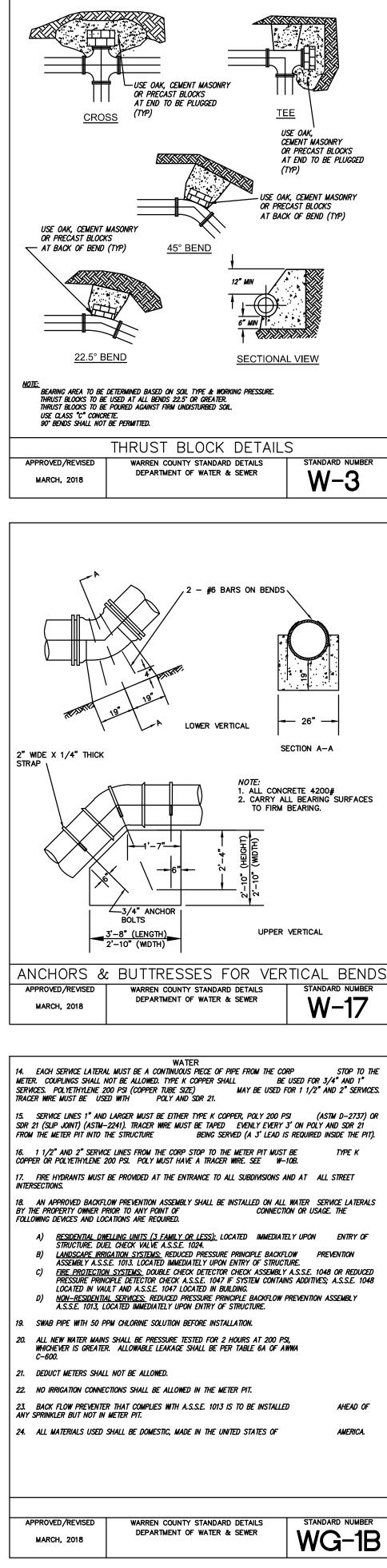
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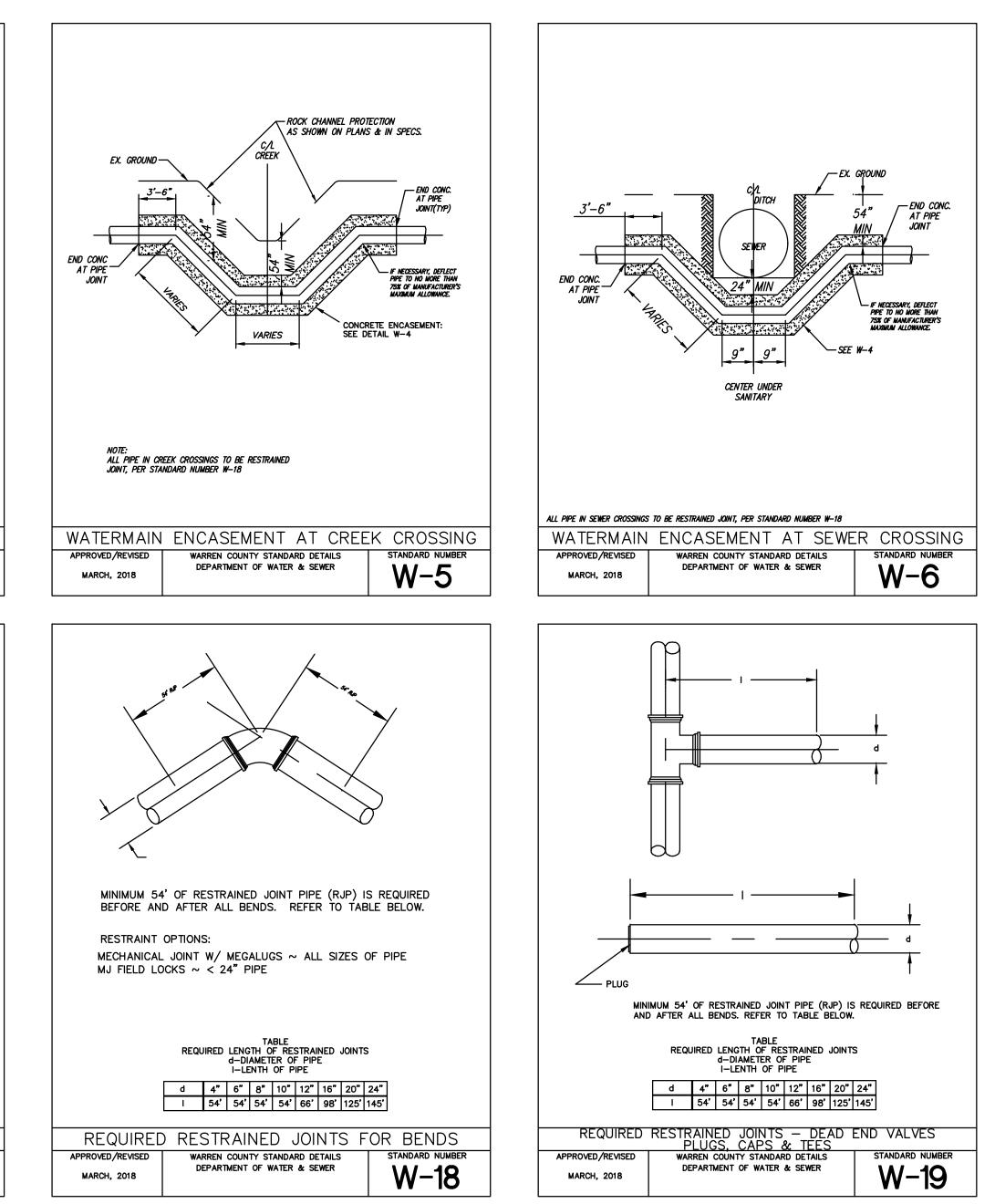
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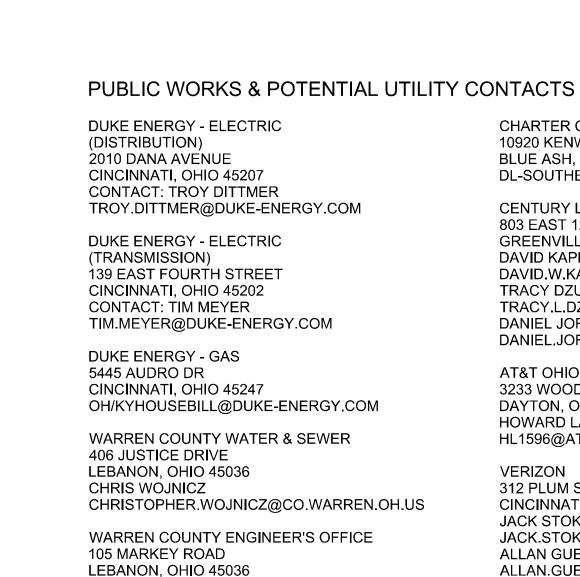






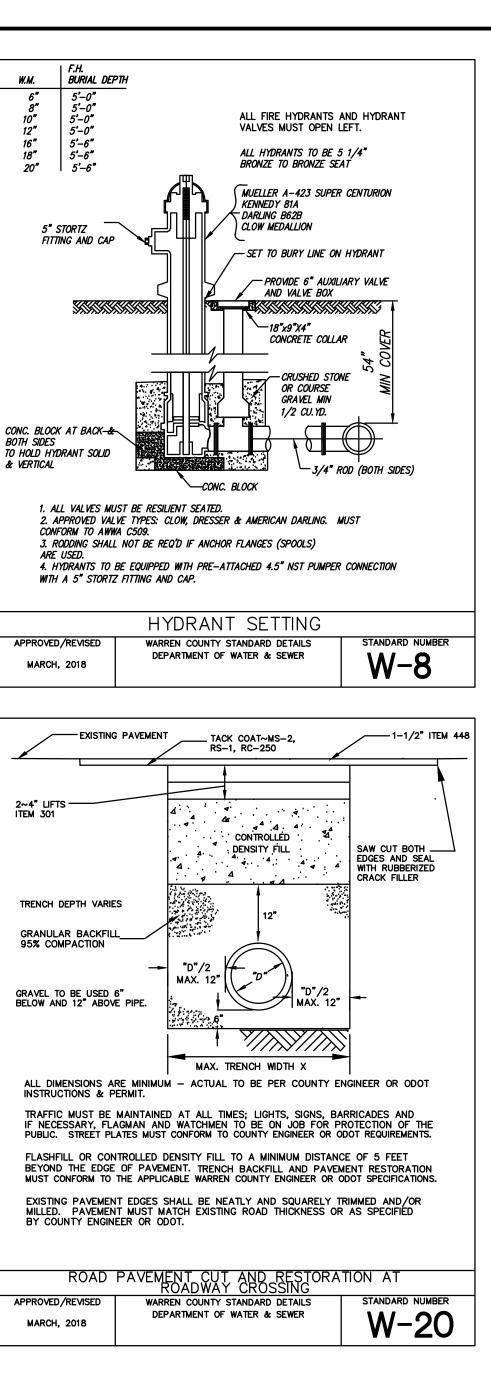


PROCEDURE FO	R CONNECTION TO EXISTING	WATER SYSTEM
ANY SHUT DOWN. WARREN	N COUNTY WATER DEPARTMENT THREE (3) N COUNTY WILL ISSUE THE SHUT DOWN ISTOMERS PER OHIO EPA REQUI	NOTIFICATION AND/OR BOIL
	IN AT PROPOSED CONNECTION POINT. NO A BELL OR PIPE CONNECTION.	WET TAP SHALL BE MADE
3. COUNTY PERSONNEL	TO OPERATE CLOSING OF APPROPRIATE V	ALVES TO ISOLATE LINE TO BE TAPPE
4. INSTALL PROPER TAI SHALL BE TESTED AT 200 BE REMOVED AND INSPECT	PPING SLEEVE AND TAPPING VALVE. THE PSI FOR A PERIOD OF AT LEAST 5 ED BY COUNTY PERSONNEL.	TAPPING SLEEVE AND VALVE MINUTES. THE PIPE SLUG MUST
	EVE AND VALVE WILL BE UNDER FUTURE P A NEW VALVE SET OUT OF PAVEMENT.	AVEMENT, THE BURIED VAL
	MAIN AS NECESSARY TO ACCOMMODATE TE IS TO BE TAKEN SO AS NOT TO GET D	
7. THOROUGHLY CLEAN	AND DISINFECT PIPE AND APPURTENANCES	TO BE INSTALLED.
8. INSTALL TEE AND VA PROPOSED MAIN VALVE IS SERVICE BY COUNTY PERSO	ALVES – DRESSER COUPLINGS CAN BE USE TO BE CAPPED AND SHUT OFF. EXISTING ONNEL.	D IF NECESSARY. MAIN IS THEN TO BE RETURNED TO
9. CONSTRUCTION OF P. AND VALVES INSTALLED AE	ROPOSED MAIN IS TO BE COMPLETED WITH BOVE.	IN A JOINT OF CONNECTION TO T.
10. ENTIRE LINE IS TO B	e pressure tested and disinfected to	COUNTY STANDARDS
INSTALLATION. PERMATEX	PIPE IS TO BE THOROUGHLY CLEANED AND CHLORINE TABLETS TO BE USED FOR IRER'S SPECIFICATIONS BASED ON PIPE I	DISINFECTION. DOSAGE
12. NEW MAIN IS TO BE	PUT INTO SERVICE BY COUNTY PERSONNEL	L.
	NDDLES TO BE TWO-PIECE CAST IRON OR L CM412 OR FORD FTSS TAPPING SLEEVES PL PERMITTED.	
APPROVED/REVISED	WARREN COUNTY STANDARD DE	
	DEPARTMENT OF WATER & SE	wer VG-



DAN COREY

DAN.COREY@CO.WARREN.OH.US



CHARTER COMMUNICATIONS 10920 KENWOOD ROAD BLUE ASH, OHIO 45242 DL-SOUTHERN-OHIO-OUTSIDE-PLANT@CHARTER.COM CENTURY LINK 803 EAST 12TH STREET GREENVILLE, OHIO 45331 DAVID KAPLAN DAVID.W.KAPLAN@CENTURYLINK.COM TRACY DZUGAN TRACY.L.DZUGAN@CENTURYLINK.COM DANIEL JORDAN DANIEL.JORDAN@CENTURYLINK.COM AT&T OHIO 3233 WOODMAN DRIVE, RM 225 DAYTON, OHIO 45420 HOWARD LAUDERMILK HL1596@ATT.COM VERIZON 312 PLUM STREET CINCINNATI, OHIO 45202 JACK STOKE

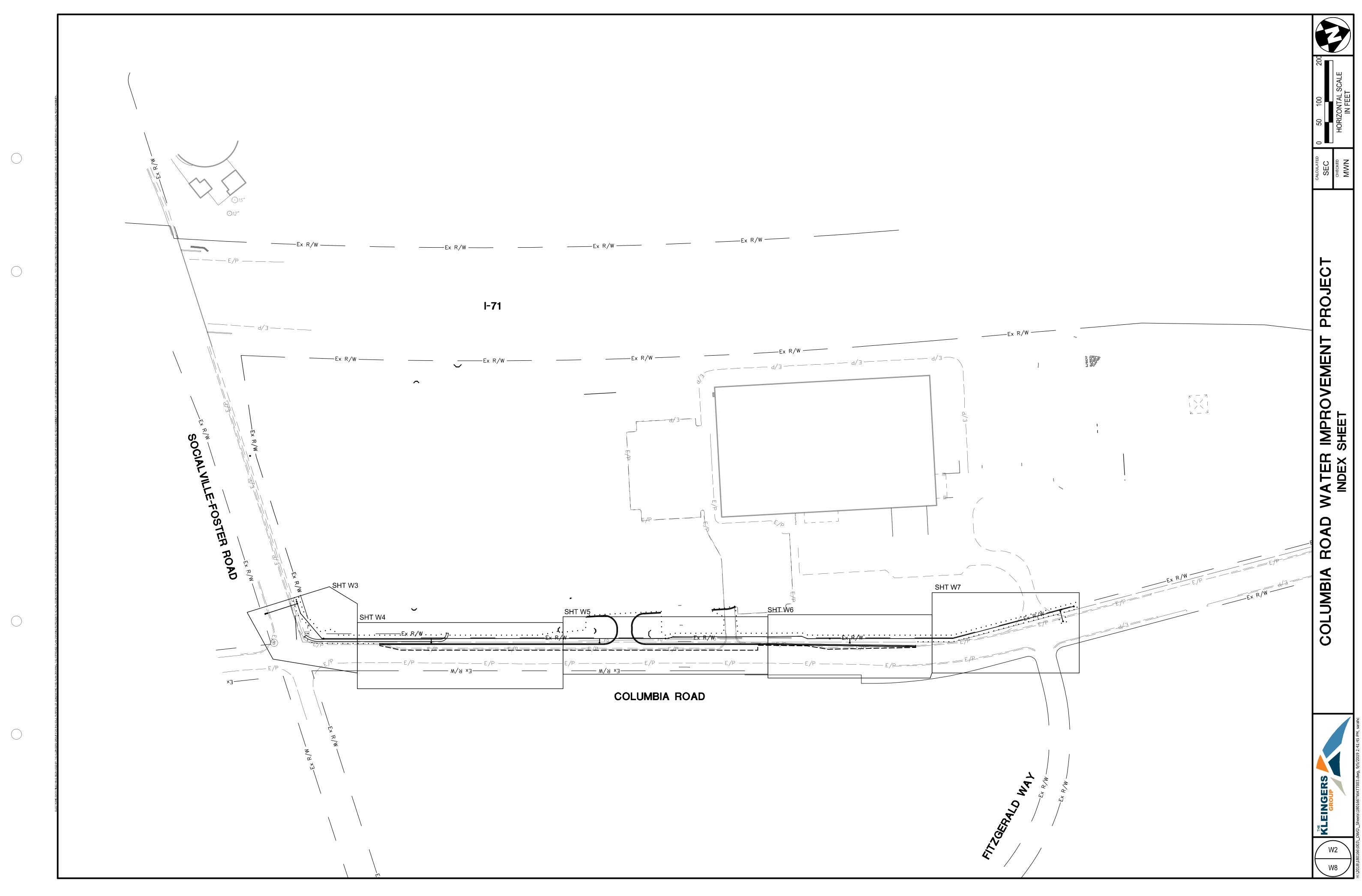
JACK.STOKES@VERIZON.COM ALLAN GUEST ALLAN.GUEST@VERIZON.COM

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COLUMBIA ROAD WATER IMPROVEMENT PROJECT	GENERAL NOTES & STANDARD DETAILS
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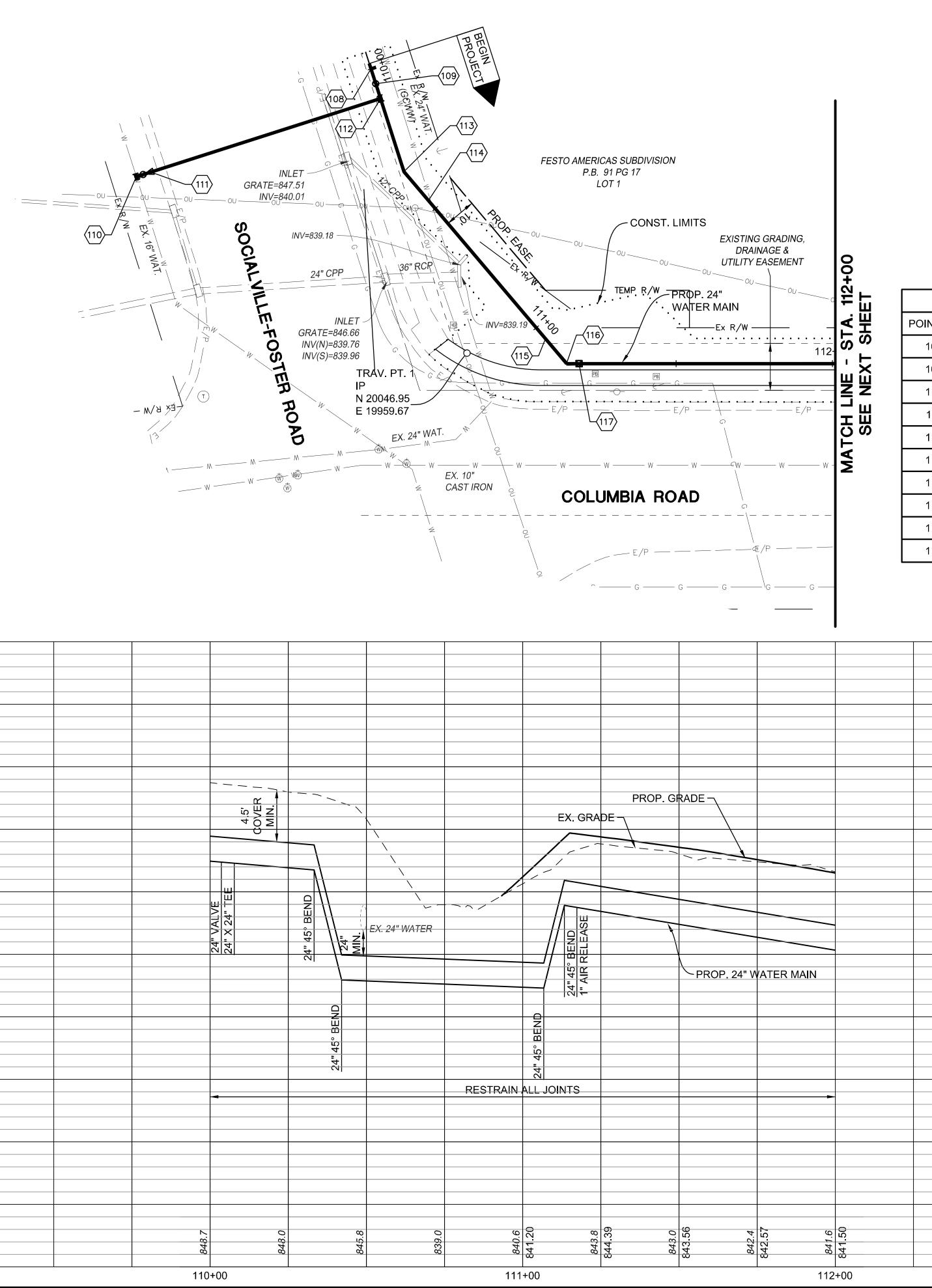
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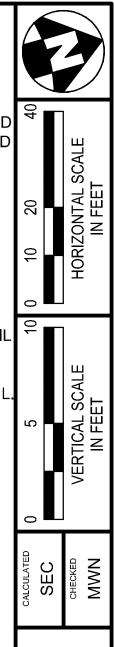
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CONTRACTOR TO PROVIDE 48 HOURS NOTICE TO LOCAL BUSINESSES AND RESIDENTS BEFORE ANY WATER SERVICE INTERRUPTION.

APPURTENANCE TABLE								
INT No.	DESCRIPTION	NORTHING	EASTING	STATION	OFFSET			
108	24" TEE AND PLUGS	20042.9149	19863.7576	109+79.49				
109	24" VALVE	20043.0529	19868.7500	110+03.31				
110	16" TEE AND VALVE	19961.2031	19875.9206	110+09.10	81.99			
111	24" X 16" REDUCER	19966.0967	19875.7916	110+09.12	77.11			
112	24" X 24" TEE	20043.1791	19873.7541	110+09.11				
113	24" 45° BEND	20043.8269	19898.2594	110+34.51				
114	24" 45° BEND	20048.8179	19909.4619	110+46.77				
115	24" 45° BEND	20072.3328	19962.2420	111+04.56				
116	24" 45° BEND	20076.5818	19971.7792	111+15.00				
117	1" AIR RELEASE VALVE	20080.4224	19972.8971	111+19.00				



PROJEC⁻ 2+00 112[.] IMPROVEMENT 110+00 TO STA. 11 Ц Ч ST/ Υ ' ROAD W/ & PROFILE COLUMBIA

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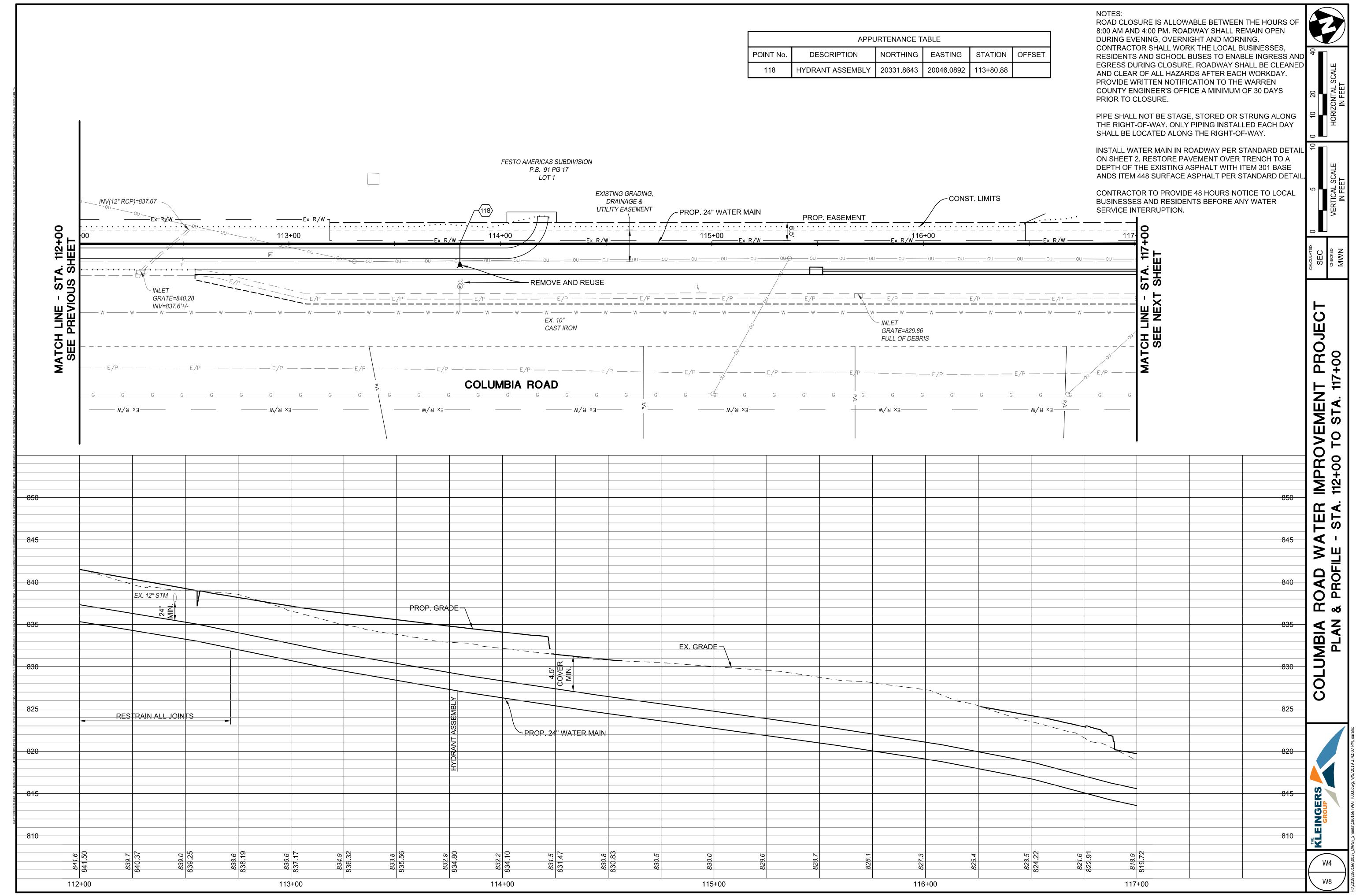
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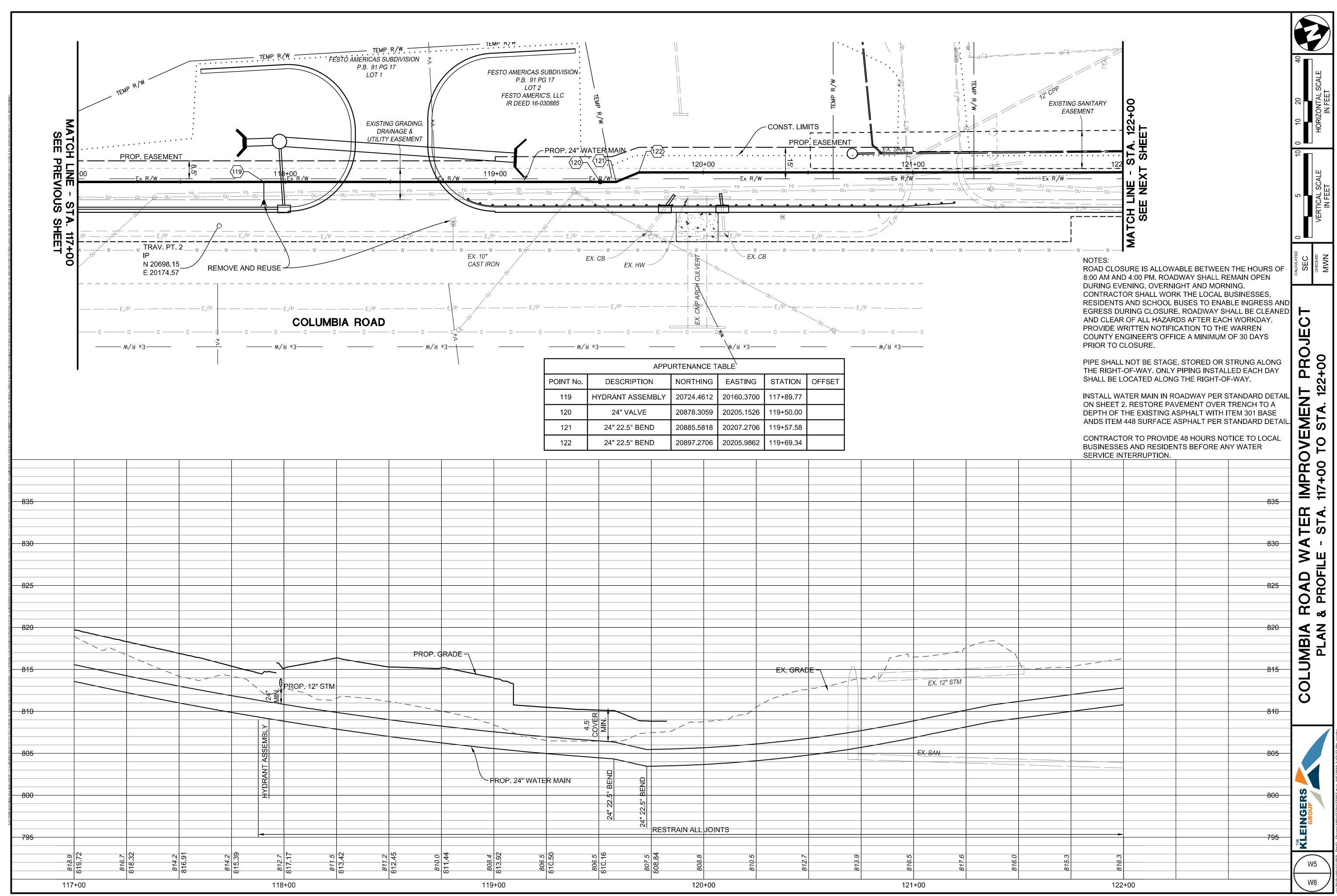
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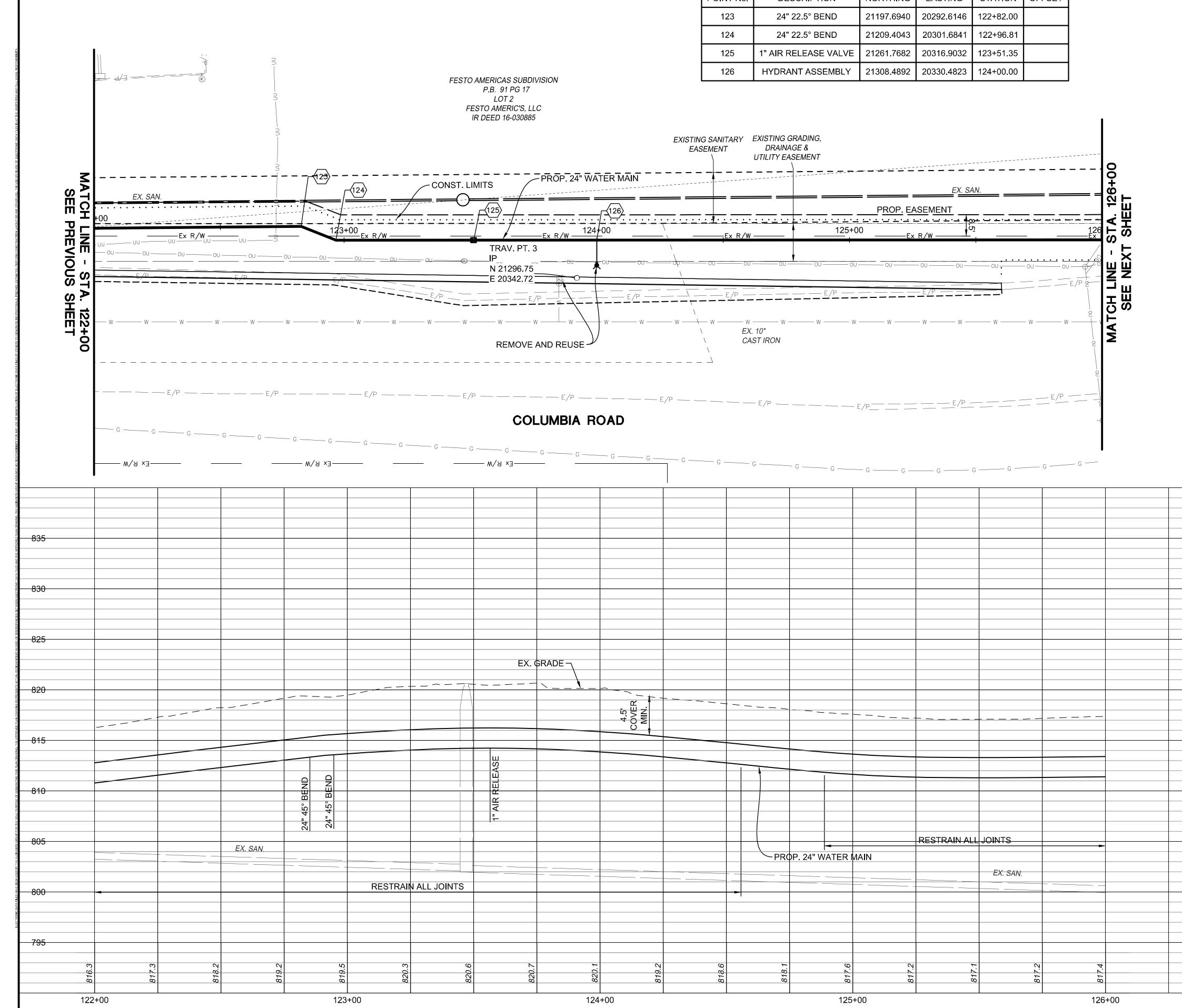
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APPURTENANCE TABLE						
POINT No.	DESCRIPTION	NORTHING	EASTING	STA		
118	HYDRANT ASSEMBLY	20331.8643	20046.0892	113+		



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	APPURTENANCE TABLE								
POINT No.	DESCRIPTION	NORTHING	EASTING	STATION	OFFSET				
123	24" 22.5° BEND	21197.6940	20292.6146	122+82.00					
124	24" 22.5° BEND	21209.4043	20301.6841	122+96.81					
125	1" AIR RELEASE VALVE	21261.7682	20316.9032	123+51.35					
126	HYDRANT ASSEMBLY	21308.4892	20330.4823	124+00.00					

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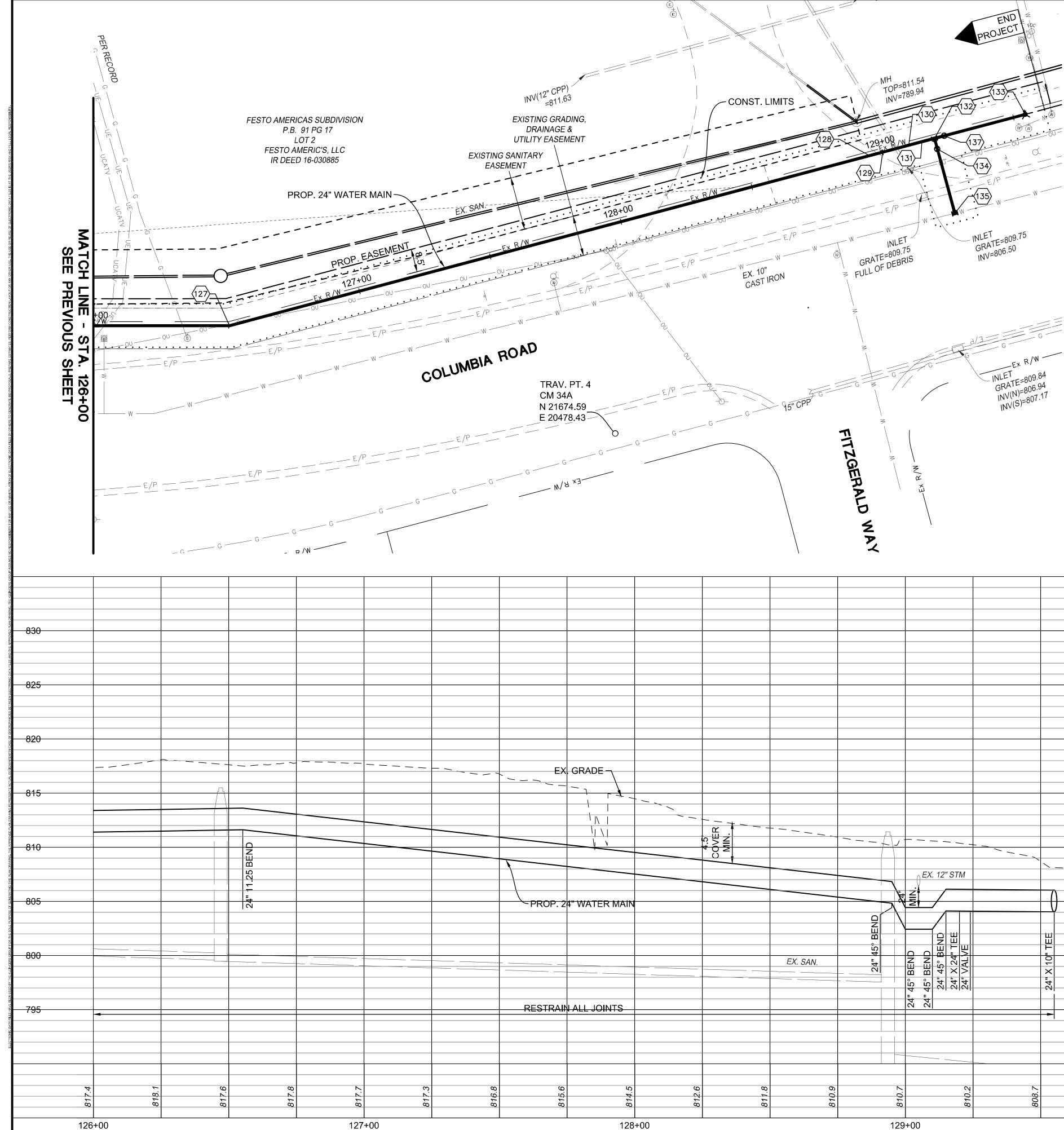
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APPURTENANCE TABLE								
POINT No.	DESCRIPTION	NORTHING	EASTING	STATION	OFFSET			
127	24" 11.25° BEND	21548.8554	20400.3425	126+50.31				
128	24" 45° BEND	21793.4739	20406.1547	128+95.00				
129	24" 45° BEND	21798.4724	20406.2735	129+00.00				
130	24" 45° BEND	21808.4701	20406.4882	129+09.98				
131	24" 45° BEND	21813.4682	20406.6298	129+15.00				
132	24" TEE	21818.2788	20406.7441	129+19.81				
133	HYDRANT ASSEMBLY	21852.9759	20407.5604	129+29+54.51				
134	24" VALVE	21818.2068	20410.7435	129+19.83	4.00			
135	24" X 10" TEE	21817.7629	20435.3871	129+19.98	28.65			
137	24" VALVE	21822.0689	20406.8124	129+23.58				

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24" 45° BEN	ND	217	98.4724	20406.2735		129+00.00				OJEC
24" 45° BEN	ND	218	08.4701	20406.4882		129+09.98				
24" 45° BEN	ND	21813.4682		20406	6.6298	129+15.00				
24" TEE		218	18.2788	2040	6.7441	129+1	19.81			T PR(129+75
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WARREN COUNTY TRANSPORTATION IMPROVEMENT DISTRICT

BID PACKAGE

COLUMBIA ROAD WIDENING PROJECT

PROJECT NO. 19-04

DEERFIELD TOWNSHIP

WARREN COUNTY, OHIO

 $107158 \\ 000001 \\ 4812 \\ -3242 \\ -9219 \\ v1 \\ -8/30/19$

TABLE OF CONTENTS

PROJECT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

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SECTION II	General Instructions to Bidders	5 Pages
SECTION III	General Provisions	21 Pages
SECTION IV	Bidder's Checklist, Bid Proposal and Bid Guaranty	9 Pages
SECTION V	Affidavits	4 Pages
SECTION VI	Prevailing Wage Rates	120 Pages
SECTION VII	Contract No. 19-04 / Change Order Form	2 Pages
SECTION VIII	Special Provisions /Technical Specifications	51 Pages

TOTAL

213 Pages

SECTION I

Notice to Contractors

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LEGAL NOTICE TO CONTRACTORS

The Warren County Transportation Improvement District (WCTID), in cooperation and coordination with the Warren County Engineer's Office will be accepting sealed bids for the furnishing of all labor (prevailing wage rates apply), equipment, and materials needed to construct **PROJECT NO. 19-04: COLUMBIA ROAD WIDENING PROJECT**, in accordance with the applicable Ohio Department of Transportation Construction and Material Specifications (effective January 1, 2019 and its revisions and supplements), Standard Construction Drawings, Standard Bridge Drawings, Ohio Manual of Uniform Traffic Control, The State of Ohio Department of Transportation Bridge Design Manual, and other applicable standards in force on the date of letting and in accordance with the Project Specifications and Construction Plans on file in the office of the Warren County Engineer. The project includes improvement on Columbia Road north of Socialville Fosters Road to south of Fitzgerald Way. The project involves widening approximately 1,300 linear feet of roadway along with the addition and/or modification of pavement markings, signage, storm sewer and water main. The Engineer's Estimate for this project is One Million Two Hundred Thousand Dollars and Zero Cents (*\$1,200,000.00*).

All bids must be submitted in conformance with the requirements of the Project Specifications and in a sealed envelope marked: **BID: PROJECT 19-04, COLUMBIA ROAD WIDENING PROJECT,** and received in the office of the Warren County Engineer, 210 West Main Street, Lebanon, Ohio 45036, no later than 11:00 a.m. Local Time on Tuesday, September 24th, 2019 after which time all bids shall be opened and read publicly.

Instructions to Bidders, Specifications, Bid Documents, and Plans detailing the terms and conditions of the proposed improvement may be obtained after September 9th, 2019 and are available online at the Warren County's Website at <u>http://www.co.warren.oh.us/commissioners/Resources/Bids/Default.aspx</u>. Questions regarding the technical specifications should be directed to Dan Corey, P.E., Warren County Engineer's Office at 513-695-7725 or Dan.Corey@co.warren.oh.us. Each contractor shall be ODOT prequalified.

This notice is posted on the Warren County Government internet site. The Warren County Government Web Site can be onto internet accessed bv loaaina the and typina in the following address http://www.co.warren.oh.us/commissioners/Resources/Bids/Default.aspx. To access bid project information, under the "Your Government" heading click on the "Board of Commissioners" tab, then click on the "Bid Projects" tab and choose the project you wish to obtain information about. Please contact the Warren County Commissioners Office at (513) 695- 1250 if you have trouble with this procedure or if you need additional information on accessing bid project information on our web site. If the contractor would like to bid the project, they must contact kiana.hawk@co.warren.oh.us to be put on the bidders list. Please be aware that if you are downloading this document to bid this project, addendums to the scope may be issued prior to the bid date. In order to stay updated on any change, please email Kiana Hawk in the Commissioner's Office at Kiana.Hawk@co.warren.oh.us with your contact information.

WCTID reserves the right to waive any informalities, reject any or all bids and to hold such bids for a period of sixty (60) days before taking any action thereon, and to award a contract to the best, most responsive and responsible bidder.

SECTION II

General Instructions to Bidders

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II. GENERAL INSTRUCTIONS TO BIDDERS FOR PUBLIC IMPROVEMENTS

PROJECT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

DEERFIELD TOWNSHIP

SECTION 100 ITEM BID (DESCRIPTION OF WORK)

- **II.100.1** Work under consideration for bidding purposes shall be that "Work" as shown on the Project Plans and Specifications to provide all the labor (prevailing wage rates apply) and materials necessary to construct **PROJECT NO. 19-04: COLUMBIA ROAD WIDENING PROJECT**, located in the City of Mason and Deerfield Township, in Warren County, Ohio, in accordance with the Project Specifications and Construction Plans (the "Specifications") on file in the office of the Warren County Engineer. This project is located on Columbia Road (CR21) between Socialville-Fosters Road and Fitzgerald Way in Deerfield Township with portions of the project also located within the City of Mason.
- **II.100.2** All bids submitted for consideration by the WCTID must comply with these instructions in order to be considered. These instructions set forth minimum requirements as the terms and conditions of the purchase. Therefore, if any time frames, bid bond or other surety requirements set forth herein are in conflict with stated requirements in the Specifications, the specification requirements shall prevail.
- **II.100.3** It is intended that the Specifications governing this project (and any bidding requirements and conditions) and any ODOT specifications or references to the Ohio Revised Code as set forth herein, and any attachments(s) or documents incorporated by reference herein, be construed harmoniously wherever possible in order to carry out the full intent and purposes of the WCTID with respect to this project. But if there is a conflict or inconsistency between any provisions(s) of the ODOT specifications or references to the Ohio Revised Code and those contained herein, the provisions(s) granting rights, remedies, discretion and/or latitude to the WCTID, or imposing the greater duty, standard, responsibility and/or obligation on the Contractor shall govern.

SECTION 200 THE WCTID

- **II.200.1** The WCTID is the Warren County Transportation Improvement District, 210 West Main Street, Lebanon, Ohio 45036, and is referred to throughout the Contract Documents as if singular in number.
- **II.200.2** The WCTID is exempt from State sales tax. Contractors shall provide Construction Contract Exemption Certificate to the WCTID for signature as required. Each Contractor and subcontractor must procure Vendor's License as required by law. Warren County is exempt from payment of Federal Excise Tax, Transportation Tax and Ohio State Tax. Prices shall not include these taxes.

SECTION 300 ENGINEER

II.300.1 The term "Engineer" shall be taken to mean the Warren County Engineer.

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SECTION 400 SUBMISSION OF BID PROPOSALS

- **II.400.1** Bids shall be submitted in a sealed envelope marked accordingly with item(s) bid on and name of bidder, and delivered in compliance with the Legal Notice. Any improperly marked bid will not be considered.
- **II.400.2** Bidders must be on The Ohio Department of Transportation's Prequalified Contractors List. In addition, bidders must be prequalified for the necessary Work types to complete the project.
- **II.400.3** All bids must comply with the specifications attached hereto. Alternative bids may be considered only if clearly marked as such with an explanation as to how the item is sufficient to meet required needs.
- **II.400.4** Each person bidding for a contract for the construction, demolition, alteration, repair, or reconstruction of any public improvement is required to file with its bid a bid guaranty in the form of either (1) a bond for the full amount of the bid or (2) a certified check, cashier's check or irrevocable letter of credit pursuant to Chapter 1305 of the Ohio Revised Code in an amount equal to ten (10) percent of the bid pursuant to Section 153.54 of the Ohio Revised Code. The successful bidder at the time he/she enters into the contract shall be required to file a performance bond in the full amount of the contract pursuant to Section 153.54(c) of the Ohio Revised Code. In lieu of a Performance Bond, bidder may submit a Combined Bid Guaranty and Contract Bond in conformance with Ohio Revised Code Section 153.571 with the proposal. Each bond must be accompanied by an effectively dated Power of Attorney which authorizes the agent to sign on behalf of the surety.

Attention Bidders: Letters of credit and bid bonds must be filed with original signatures. Facsimile and electronic copies of the letter of credit, bid bond and Power of Attorney of the Surety will be deemed non-responsive.

- **II.400.5** All bidders are required to submit the following affidavits with their bid proposal and the successful bidder will be required to enter into a written contract with the WCTID (the "Contract") within ten (10) days of the notification of the award thereof:
 - (A) Non-Collusion Affidavit
 - (B) Affidavit Affirming Compliance with 9.24 and 5719.042 O.R.C.
 - (C) Affidavit Affirming Compliance with 3517.13 O.R.C.

These affidavits and specifications heretofore referenced shall be incorporated into and become part of the contract document. Failure to include the three (3) above-referenced affidavits will disqualify the bid submitted for consideration. Should a bid be awarded, and the WCTID later determine that the affidavit was incorrect or falsified, the Contract shall be immediately canceled and the bidder subject to the penalties and damages, both civil and criminal, as provided by law and this Contract.

- **II.400.6** The WCTID reserves the right to waive any informalities, to reject any or all bids, to accept any bid which may be deemed to be for the best interest of the WCTID and to hold such bids for a period of sixty (60) days before taking any action.
- **II.400.7** The Proposal forms furnished with these documents shall be completed in full; in writing in ink (or typewritten) and signed in ink.

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- **II.400.8** Proposals are due at the place, date, and time indicated in the Legal Notice and will be opened publicly and read aloud.
- **II.400.9** All prices, quantities, etc. as bid must be firm for a period of sixty (60) days from the date of the bid opening.
- **II.400.10** Contractor hereby agrees to defend, indemnify, and hold the Warren County Transportation Improvement District, Warren County Engineer's Office, Warren County, Deerfield Township, Warren County, Ohio, City of Mason and their respective boards, chairmen, officers, trustees, commissioners, employees, members, agents and volunteers harmless from any claims, demands or losses of any type or nature to any person, bidder or corporation arising in any manner from the Contractor's performance or failure to perform the Work required under this Contract and shall pay any liabilities, judgments (including reasonable attorney's fees and litigation expenses) or losses.
- **II.400.11** All materials and exhibits submitted in the bid response shall become the property of WCTID and will not be returned to the bidder. All bids received constitute public information as a matter of statutory law and will be made available for public inspection and copying upon request by members of the public pursuant to the requirements of Section 149.43 of the Ohio Revised Code. Any portion of the bid that the bidder requires to be treated as confidential in nature must be marked to that effect and provided that the information falls within an appropriate exemption enumerated under Section 149.43 of the Ohio Revised Code, that portion will not be considered public record. A blanket indication of confidentiality or privilege will not be accepted and unless specific materials that fall within the appropriate statutory exemption are identified, the entire bid response will be treated as a public record.

SECTION 500 GENERAL BID SPECIFICATIONS

- **II.500.1** Unless otherwise specified, all material shall be new and of the best grade in its particular line and all articles shall be complete and in first class condition. All Work shall be done in the best and most skilled manner, exactly as specified or detailed, and shall be subject to the approval of the Engineer and/or the WCTID. When required in the specifications, bidders shall make available for inspection a sample or similar model of the bid item prior to the award of the bid.
- **II.500.2** Reference to a particular trade name, manufacturer's catalog or model number for descriptive purposes is intended to guide the bidder in interpreting the requirements of the Engineer and/or the WCTID and should not be construed as excluding proposals on other types of materials, equipment and supplies. However, the bidder, if awarded a contract, will be required to furnish the particular item referred to in the specifications or description unless a departure or substitution is clearly noted and described in the bid proposal.
- **II.500.3** Every effort shall be made by the bidder awarded the contract to deliver items by or before the time designated in the contract. Any delinquency in such delivery without satisfactory written explanation directed to the WCTID may result in cancellation of the contract and substitution of other goods. The defaulting bidder shall be liable for any such default, or damages, costs, or expenses arising therefrom.
- **II.500.4** In case of default by the bidder or Contractor, WCTID may procure the articles or service from other sources without further advertising and shall hold the Bidder or Contractor responsible for any excess costs occasioned thereby, including any reasonable expenses incurred in procuring the articles or services.

SECTION 600 INTERPRETATION OF DOCUMENTS

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- **II.600.1** If the Bidder is in doubt as to true meaning of any part of Drawings, Specifications, or other Contract Documents, submit a written request for an interpretation therefore to the Engineer and the WCTID. The Bidder making a request will be responsible for its prompt delivery. Any interpretation of the Contract Documents will be made only by Addendum duly issued to each prospective Bidder. Neither the WCTID nor the Engineer will be responsible for explanations or interpretation of the proposed Documents except as issued in accordance therewith.
- **II.600.2** Addenda involving a modification to the design or specifications may be issued not later than 72 hours preceding bid due date excluding Saturdays, Sundays, and legal holidays. Questions requiring interpretation and not answered prior to the bid due date may, at the sole discretion of the WCTID, (a) be recorded and answered during the bid negotiations preceding the signing of the contract; and/or (b) may result in an extension of the bid due date.

SECTION 700 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK

- **II.700.1** The Bidder is expected to examine carefully the site of the proposed Work, the proposal, plans specifications, contract forms, general conditions, and addenda, before submitting a proposal. The submission of a bid shall be considered evidence that the Bidder has made such examination and is satisfied as to the conditions to be encountered in performing the Work and as to the requirements of the plans, specifications, special provisions, general conditions, addenda and Contract.
- **II.700.2** Subject to public safety and convenience, prospective Bidders will be permitted to explore the site of the Work by boring or test pits, permits for which will be issued by the Owner. Explorations shall be at the sole risk and expense to the Bidder and under conditions of maintaining and restoring safety.
- **II.700.3** The WCTID and the Engineer does not make any representation of soil or foundation conditions or materials, nor does it represent that drawing may not be modified to meet changes in soil conditions encountered as the Work progresses. The Contractor must inspect the site of the proposed Work and must assume all risk as to the nature and behavior of the material which may be encountered in excavation, whether apparent on the surface or disclosed only in the course of the Work. Any geotechnical subsurface investigation or soil boring logs that may be provided by the WCTID are provided for general information only to Contractors for this project and do not change the obligations or responsibilities set forth herein. It is the sole responsibility of the Contractor to take any and all measures it feels necessary to determine the subsurface conditions prior to bidding and the nature and extent of the subsurface conditions (including variations, if any, between borings and observation locations) may not be evident until construction. In order to induce the WCTID to enter into a Contract for the Work, Contractor represents that it understands its obligations hereunder and that: (a) during construction, it will be required to provide all labor (prevailing wage rates apply), equipment, materials, and other measures to construct the improvements regardless of the subsurface conditions encountered; (b) No claims for additional costs will be considered for material, labor, equipment, or subcontractors/subconsultants to address subsurface conditions encountered during construction; and (c) costs for all related activities shall be incidental to the Project.

SECTION 800 AWARD OF CONTRACT

II.800.1 The selection of the bidder is at the sole discretion of the WCTID. **PROJECT NO. 19-04**, **COLUMBIA ROAD WIDENING PROJECT**, will be awarded as soon as practicable, after opening of bids.

- **II.800.2** In determining the Bidder, the WCTID will consider, but not be limited to, the following criteria in addition to the Bid Amount:
 - A. Bidder involved maintains permanent place of business.
 - B. Bidder has adequate equipment and facilities to perform Work properly and expeditiously.
 - C. Bidder has suitable financial status to meet obligations incident to Work.
 - D. Bidder has appropriate technical experience.
 - E. Bidder can complete Work in timely and expeditious manner.
- **II.800.3** When analyzing the bids submitted, superior design, technology, workmanship, materials, size of component parts, operating costs, warranty, service facility etc. will be considered in addition to the price of the bid. It is WCTID's intent to accept the bid for which a thorough analysis of the bids submitted, proves to be the most suitable for the intended use. WCTID will consider awarding the Contract to the best, most responsive and responsible bidder, as solely determined by WCTID to be in the best interest of the Project and WCTID, but reserves the right to reject any or all bids.
- **II.800.4** The WCTID further reserves the right to conduct such investigations and meetings as it deems necessary after receipt of bids to assist in the evaluation of any bid and to establish the responsibility, qualifications and financial ability of the Bidders, proposed sub-contractors and other persons and organizations to do the Work in accordance with the Contract Documents to the WCTID's satisfaction within the prescribed time limits. In order to facilitate this investigation, the apparent best, most responsive and responsible bidder may be required to complete a Bidders Qualification Questionnaire.

SECTION III

General Provisions

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III. GENERAL PROVISIONS

PROJECT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

DEERFIELD TOWNSHIP

The Specifications, General Instructions, General Provisions and Special Provisions contained herein are Contract Documents, together with, the State of Ohio, Department of Transportation, Construction and Material Specifications incorporated in the Contract and not specifically excluded, and are to be read in conjunction with said ODOT Specifications. It is intended that the Specifications, General Instructions, General Provisions and Special Provisions governing this project (and any bidding requirements and conditions) and any ODOT specifications or references to the Ohio Revised Code as set forth herein, and any attachments(s) or documents incorporated by reference herein, be construed harmoniously wherever possible in order to carry out the full intent and purposes of the WCTID with respect to this project. But if there is a conflict or inconsistency between any provisions(s) of the ODOT specifications or references to the Ohio Revised Code and those contained herein, the provisions(s) granting greater rights, remedies, discretion and/or latitude to the WCTID, or imposing the greater duty, standard, responsibility and/or obligation on the Contractor shall govern.

SECTION 100 DEFINITIONS

- III.100.1 WCTID Whenever the word "WCTID" is used, it shall be held to mean the Warren County Transportation Improvement District, Warren County, Ohio. The word "WCTID" shall also be substituted for the words "Director" or "Department" as specified in the State of Ohio, Department of Transportation, Construction and Materials Specifications. The word "WCTID" shall also mean "Owner."
- **III.100.2** Engineer Whenever the word "Engineer" is used, it shall be held to mean the County Engineer of Warren County, the Engineer's Deputy, Project Supervisor, or Inspectors delegated by the Engineer to supervise or inspect the Work. The same interpretation shall apply to the word "engineer" as used in the State of Ohio, Department of Transportation, Construction and Materials Specifications.
- **III.100.3 Bidder** An individual, firm, or corporation submitting a bid for the advertised Work, acting directly or through the duly authorized representative, and qualified as provided in the Ohio Revised Code.
- **III.100.4** County Shall, at all times, mean Warren County, Ohio.
- **III.100.5 Estimates** Payments to the Contractor for Work, labor (prevailing wage rates apply), or materials whether partial or final payment.

SECTION 200 PROVISIONS AND PROPOSALS

III.200.1 Plans - The official plan sets, profiles, typical cross-sections, general cross-sections, working drawings and supplemental drawings, or exact reproductions thereof, approved by the WCTID which show the location, character, dimensions and detail of the Work to be done, and which are to be considered as a part of the contract supplementary to these specifications.

The official plan sets (2) are titled: Columbia Road Improvements

- III.200.2 Special Provisions Specific clauses included hereafter setting forth conditions or requirements peculiar to the project under consideration and covering Work or materials involved in the proposal and estimate but not satisfactorily covered by the general specifications. Note: All Special Provisions/Technical Specifications can be found on the corresponding Construction Drawings included as part of this bid package.
- III.200.3 Supplemental Agreements Written agreements executed by the WCTID covering alterations necessary to the project as herein after provided.
- **III.200.4** Delivery of Proposal The proposals for each project shall be placed together with the proposal guaranty, in a sealed envelope so marked as to indicate the identity of the project and the name and address of the bidder. If forwarded by mail, said envelope shall then be placed in another envelope which shall be sealed and addressed as indicated in the "Notice to Contractors." The proposal will be received until the hour and date set for the opening thereof and must be in the hands of the WCTID by such time. Proposals received after the time set for receiving bids and/or opening bids shall be returned to the bidder unopened.
- Proposal Guaranty Each Bidder is required to submit with its proposal a Bid Guaranty III.200.5 and Contract Bond in accordance with Section 153.571 of the Ohio Revised Code which specifies that each proposal must be accompanied by a bond in the sum of one-hundred (100) percent (%) of the amount bid or a certified check, cashier's check or irrevocable letter of credit in the sum of ten (10) percent (%) of the amount bid as a guarantee that, if the proposal is accepted, a contract shall be entered into. If a check is filed, it shall be made payable to The Warren County Transportation Improvement District. If a surety bond is posted, it shall be made out to the Warren County Transportation Improvement District.
- III.200.6 Proposal Withdrawal A bidder may withdraw its proposal, provided the request in writing is in the hands of the WCTID before the time set for opening proposals. When such proposal is withdrawn it will be returned to the bidder unopened.
- Public Opening of Proposals Proposals will be opened and read publicly at the time III.200.7 and place designated by the WCTID. Bidders, their authorized agents, and the public are invited.
- III.200.8 Consideration of Proposals After the proposals are opened and read, they will be compared on the basis, if a unit price proposal, of the summation of the products of the approximate quantities shown in the proposal by the unit bid prices. In event of a discrepancy between unit bid prices and extensions thereof, the unit price bid shall govern. In the event lump sum items are included in the proposal, the final correct total of the proposal, after all unit price corrections are made, if any, shall govern. The WCTID will consider all properly submitted proposals, reserves the right to reject any and all bids, and if a Contract is awarded, may award it to the best, most responsive and responsible bidder.
- III.200.9 Disgualification of Bidders - Not more than one proposal from an individual, a firm or partnership, a corporation or an association under the same or different names, will be considered for one project. Reasonable ground for believing that any bidder is interested in more than one proposal for the Work contemplated shall cause the rejection of all proposals in which the bidder is interested. The bidder shall make a non-collusion affidavit, which is properly executed and part of the proposal. Proposals in which the

prices obviously are unbalanced may be rejected. Contracts will be awarded only to responsible bidders capable of performing the class of Work contemplated. The WCTID reserves the right to reject any or all bids.

- **III.200.10 Materials and Workmanship** Any additional items required, including labor (prevailing wage rates apply), equipment, and/or materials, but not listed as a separate pay item in the proposal, shall be furnished, installed, removed etc. as incidental to the contract, except where noted on the plans and in the specifications.
- **III.200.11** No Waiver of Legal Rights Neither the inspection by the WCTID and/or Engineer or by any of their duly authorized agents, nor any order, measurement, or certificate by the Engineer, or said agents, nor any order by the WCTID and/or Engineer for the payment of money, nor any payment for, nor acceptance of, any Work by the WCTID and/or Engineer, nor any extension of time, nor any possession taken by the WCTID or its duly authorized agents, shall operate as a waiver of any provision of this contract, or of any power herein reserved to the WCTID, or any right to damages herein provided; nor shall any waiver of any breach of this contract or failure to comply with any notice or other provision of the contract be held to be a waiver of any other or subsequent breach or failure by Contractor.
- **III.200.12 Laws to be Observed** The Contractor warrants that it is familiar with and agrees at all times to comply with the provisions of all Federal and State laws and ordinances and regulations of all political subdivisions, of the Workman's Compensation Laws, ordinances and regulations in any manner affecting the conduct of the Work and it shall defend, indemnify, and save harmless Warren County, Ohio and its representatives against any claims arising from the violation of any such law, ordinance or regulation, either by the Contractor or its agents, servants or employees or the negligence of such Contractor, agent, servant or employee.
- **III.200.13 Home Office Overhead Calculations** ODOT Specification 109.05.D.2.f is specifically excluded from incorporation into the Contract. In the event of a compensable delay for which Contractor seeks to recover its unabsorbed Home Office Overhead expenses, Contractor and the WCTID agree that the HOOP formula is not an appropriate or accurate measurement of such damages under the Contract and that the Eichleay Formula is the sole measure of such allowable damages provided that Contractor can prove entitlement to such damages under the Eichleay formula as applied by the Courts of Ohio.

SECTION 300 CONTRACTS

- III.300.1 Requirements of Contract Performance Bond Provided that the successful Bidder has not previously submitted a combined Bid Guaranty and Contract Bond with the Bid Proposal, the successful bidder must, within ten (10) days after the award to him, and before entering into contract, furnish a bond in form consistent with the requirements of Section 153.54 and related sections of the Ohio Revised Code, to the approval of, and of the form prescribed by the WCTID, in an amount equal to one-hundred (100) percent (%) of the full amount of the bid. Said Performance Bond shall have a date of validity until "final payment" is deposited with the Contractor or until a later date as required.
- **III.300.2 Execution of Contract** The Contract shall be signed by the successful Bidder and returned, together with the performance bond, if applicable, within ten (10) days after the bidder has received notice that the Contract has been awarded. No proposal shall be considered binding upon the WCTID until the execution of the Contract and performance bond.

- **III.300.3** Failure to Execute Contract Failure to execute and file an acceptable performance bond, if applicable, and as provided herein within ten (10) days from date of award shall be just cause for the annulment of the award and the forfeiture of the bid guaranty to WCTID, not as a penalty, but as liquidated damages. Award may then be made to the next best, most responsive and responsible bidder, as solely determined by the WCTID, or the Work may be re-advertised, as determined by the WCTID. Said forfeiture shall be guided by the provisions of Section 153.54 of the Ohio Revised Code.
- **III.300.4** Lump Sum Contract If the Work is let on the basis of a lump sum contract, the estimated quantities of Work are only approximate, although the result of calculations, and the bidder must obtain and be responsible for the data upon which it based its bid. It shall not be entitled to any additional compensation in case the quantities of Work actually done to fulfill the contract and complete the project are greater than said estimate quantities, and assumes all risks for any mistakes in calculations.
- **III.300.5** Specifications Governing This Project The terms and conditions of the Contract Documents will govern this Project, including but not limited to these general provisions, provisions set forth in any proposal notes, and the 2019 "ODOT Specifications" (the State of Ohio Department of Transportation Construction and Materials Specifications effective January 1, 2019 its revisions and supplements) that are incorporated herein (and not excluded). WCTID will be substituted where the specification refers to the Director. Notwithstanding the foregoing, the following ODOT Specifications are specifically excluded from this Contract:

III.300.5.1 Excluded ODOT Specifications:

Section 102.01, 102.03, 102.06, 102.09, 102.10, 102.11, , 102.14, 103.01, 103.02, 103.04, 103.06, 103.07, 104.02, 105.05, 105.13, 107.04, 107.13, 108.01, 108.02 (A), 108.02 (H), 108.06 (D)(2), 108.08, 108.09, 109.05(D), 109.06, 109.09, 109.12 (A), 109.12 (B), 109.12 (C), 109.12 (D), 109.12 (E), 401.20.

- **III.300.5.2 Interpretation/Precedence** It is intended that the specifications governing this project (and any bidding requirements and conditions) and any ODOT Specifications or references to the Ohio Revised code as set forth herein, and any attachment(s) or documents incorporated by reference herein, be construed harmoniously wherever possible in order to carry out the full intent and purposes of the WCTID with respect to this project. But if there is a conflict or inconsistency between any provision(s) of the ODOT Specifications or references to the Ohio Revised Code and those contained herein, the provision(s) granting greater rights or remedies to the WCTID, or imposing the greater duty, standard, responsibility or obligation on the Contractor shall govern.
- **III.300.6 Federal Requirements.** During the performance of the Contract, Contractor for itself, its assignees and successors in interest agrees as follows:
 - **III.300.6.1** The Contractor will ensure that applicants are hired and that employees are treated during employment without regard to their race, religion, color, sex, national origin (ancestry), disability, genetic information, age (40 years or older), sexual orientation, or military status (past, present, or future). Such action shall include, but not be limited to, the following: Employment, Upgrading, Demotion, or Transfer; Recruitment or Recruitment Advertising; Layoff or Termination; Rates of Pay or other forms of Compensation; and Selection for Training including Apprenticeship.

- **III.300.6.2** The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, national origin (ancestry), disability, genetic information, age (40 years or older), sexual orientation, or military status (past, present, or future).
- **III.300.6.3 Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Acts and Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWS), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- **III.300.6.4 Nondiscrimination:** The Contractor, with regard to the Work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (ancestry), sec, age (40 years or older), disability, low-income status, or limited English proficiency in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations as set forth in subsection 300.6.9 herein, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- **III.300.6.5** Solicitations for the Contractor, including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Contractor for Work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential contractor or supplier will be notified by the Contractor of the Contractor's obligations under this Agreement and the Acts and the Regulations relative to nondiscrimination on the grounds of race, color, national origin (ancestry), sex, age (40 years or older), disability, low-income status, or limited English proficiency.
- **III.300.6.6 Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the WCTID, ODOT or FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor will so certify to the WCTID, ODOT or FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.
- **III.300.6.7 Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this agreement, WCTID will impose such contract sanctions as it, ODOT, or FHWA may determine to be appropriate, including, but not limited to:
 - a) Withholding of payments to the Contractor under the Agreement until the Contractor complies, and/or

- b) Cancellation, termination or suspension of the Agreement, in whole or in part.
- **III.300.6.8 Incorporation of Provisions:** Contractor must include the provisions of the above subparagraphs 300.6.1 through 300.6.6 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the WCTID, ODOT or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor or supplier because of such direction, the Contractor may request the WCTID to enter into any litigation to protect the interests of the TID. In addition, the Contractor may request the United States.
- **III.300.6.9 Pertinent Non-Discrimination Authorities.** During the performance of this Agreement, the Contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

.a Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;

.b The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-Aid programs and projects);

.c Federal-Aid Highway Act of 1973 (23 U.S.C. § 324 et seq.) (prohibits discrimination on the basis of sex);

.d Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 et seq.), as amended (prohibits discrimination on the basis of disability) and 49 CFR Part 27;

.e The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 et seq.) (prohibits discrimination on the basis of age);

.f Airport and Airway Improvement Act of 1982 (49 U.S.C. § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);

.g The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage, and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of Federal-Aid recipients, sub-recipients, and Contractors, whether such programs or activities are Federally funded or not);

.h Titles II and III of the Americans with Disabilities Act (42 U.S.C. §§ 12131-12189), as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38 (prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) .i The Federal Aviation Administration's Non-Discrimination Statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex)

.j Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations)

.k Executive Order 13166, Improving Access to Services for People with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

.I Title VIII of the Civil Rights Act of 1968 (Fair Housing Act), as amended (prohibits discrimination in the sale, rental, and financing of dwellings on the basis of race, color, religion, sex, national origin, disability, or familial status (presence of child under the age of 18 and pregnant women)

.m Title IX of the Education Amendments Act of 1972, as amended (20 U.S.C. 1681 et seq.) (prohibits discrimination on the basis of sex in education programs or activities);

.n Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA 38 U.S.C. 4301-4335) (prohibits discrimination on the basis of present, past or future military service)

III.300.7 Entire Agreement - The Contract Documents contain the entire agreement between Contractor and WCTID, and no oral statements or prior written matter not specifically incorporated therein shall be of any force or effect. The Contract may not be modified except by a written document executed by both parties thereto.

SECTION 400 WCTID and ENGINEER, WORK, AND PLANS

- **III.400.1** Authority of Engineer The Engineer, in consultation with the WCTID: (a) has immediate charge of the engineering details of each construction project; (b) is responsible for the administration and satisfactory completion of the project; and (c) has the authority to reject defective material and to suspend any Work that is being improperly performed.
- **III.400.2 Errors and Omissions** The Right is reserved by the WCTID, in consultation with the Engineer, to correct by change order any errors or omissions in said plans or specifications wherever such correction is necessary for the proper fulfillment of the intention of the plans or specifications.
- **III.400.3** Interpretation of Estimates The quantities listed in the Bid Proposal form(s) are to be considered as approximate and are to be used for the comparison of bids only. The unit prices to be tendered by the bidder are to be tendered expressly for the scheduled quantities which later may be increased or decreased within the restricting limits herein after stipulated. Where there is a conflict between the unit price and the extension thereof made by the bidder, the unit price shall govern and the WCTID and/or Engineer shall be authorized to make a correct extension of such unit bid price and to use such corrected extension in comparing bids.

- **III.400.4 Pre-Construction Meeting** After the award of the contract and before beginning any Work, the Contractor and its superintendent, shall meet with the Engineer for a pre-construction meeting, to review all restrictions and regulations governing the Work. Any schedules, requests, papers, approvals, submittals, changes, etc. as called for in the Contract Documents shall be made at this time unless otherwise directed.
- **III.400.5** Use of Premises The Contractor shall confine its equipment, tools, the storing of materials, and the operation of its workmen within the right-of-way and/or Work limits as approved by the Engineer. It is emphasized that damage to vegetation, especially trees, shall be held to an absolute minimum.
- **III.400.6 Dust, Water Pollution, and Erosion Control** The Contractor shall be responsible for complying with the Water Management and Sediment Control Regulations of Warren County that are in effect at the date of letting. The Contractor shall employ measures to prevent or control spills of fuels or lubricants from entering the waters of the state and submit a contingency plan to the Engineer to be effective in the event of a spill. Dust shall be kept to a minimum.
- **III.400.7 Coordination of Plans, Specifications, and Special Provisions** The specifications, plans, special provisions, and all supplementary documents are essential parts of the contract and a requirement appearing in one is as binding as though in all. They are intended to be cooperative, to describe and provide for a complete work. In case of a discrepancy, figured dimensions shall govern over scaled dimensions and special provisions shall govern over both specifications and plans.

SECTION 500 PROGRESS OF WORK AND QUANTITIES

- **III.500.1 Extra Work** Unforeseen or other Work made necessary by minor alterations of the plans, or necessary to complete the proposed improvement contract, shall be deemed extra and shall be performed by the Contractor in accordance with the specifications and as directed; provided, however, that before any extra Work is started the Contractor has been authorized by the Engineer in writing to do the Work. When the nature of the Work required is such that the exact amount of Work to be done cannot be determined precisely, the Contractor shall proceed only when authorized to do so by the Engineer.
- **III.500.2** Incidental Work at Contractor's Expense All Work done by the Contractor, specified or mentioned in the plans or specifications, as well as any minor details of Work not specifically mentioned but obviously necessary for the proper completion of the Work, shall be considered as incidental, and as being part of any included in the Contract. The Contractor will not be entitled to any extra or additional compensation for the same.
- **III.500.3** Increased or Decreased Quantities The WCTID reserves the right to make such alterations in the plans or in the quantities of the Work as may be considered necessary or desirable, and no conditions or provisions of the contract shall be ordered in writing and that equitable adjustment of compensation shall be agreed upon; provided further that before the Work is started on any such alteration at the opinion of the WCTID a Supplemental Agreement setting forth the adjustment shall be executed by the WCTID and the Contractor. The Contractor shall perform the Work as increased or decreased and compensation for materials shall be adjusted per unit price bid.
 - **III.500.3.1** All change orders shall be in writing. The WCTID shall not pay any increase in expense, and Contractor agrees that it waives all right to payment for extras or otherwise valid claims for extras or change order Work performed without first (a) complying with the notice provisions set forth below and (b) obtaining a prior

approved change order in the form included here as part of the Contract Documents.

- III.500.3.2 Unit Prices for Remediation of hazardous materials Contractor acknowledges that Work for the WCTID under this Contract may involve the risk of encountering petroleum contaminated soils (PCS) or other hazardous materials during construction excavation and other Work. Contractor agrees and represents that the nature of the Contract Work is such that any soil borings or similar analysis by WCTID or its Engineer or consultants may not indicate the complete and full amount of contaminated soils and that Contractor may encounter more extensive or additional PCS or other hazardous materials contamination during construction excavation than indicated in any soil borings or other tests. Contractor represents that its unit price bid for any remediation work involving hazardous materials includes all costs and considerations arising out of or relating to the Work involved, including the cost of schedule impacts as a whole, all delay-related costs (including but not limited to extended home office overhead, extended field conditions, extended site conditions, labor) and all costs to excavate, store, test, transport, and dispose of contaminated materials. The original Contract unit price shall thus cover all expenses and impacts associated with remediation and handling of both the contaminated soils identified in any environmental studies plus those actually discovered during construction. Contractor's payment for any required remediation work thus shall be at the original Contract unit price for the agreed quantities of the Work in question and shall constitute full and final reimbursement of Contractor for the Work and settlement of all claims arising out of or pertaining to the Work regardless of whether the Contract items vary in any respect from the estimated quantities. Notwithstanding the foregoing, WCTID has sole discretion to determine that an original Contract unit price would not be fair to WCTID or result in a windfall to Contractor, and may by notice to Contractor enter into negotiations over a reasonable price for excess contract Work involving contaminated soils.
- III.500.4 Claims and Notice Contractor shall submit to WCTID and Engineer any requests or claims for adjustment in the Contract Price, Time, or other provisions of the Contract for changes directed by the Owner, as a result of deficiencies or discrepancies in the Contract Documents, for unforeseen causes, unanticipated site conditions, and for any other circumstance otherwise permitted by law or the Contract Documents within five (5) days of the act or occurrence giving rise to the claim and before Contractor proceeds to perform any extra Work and seek a confirmation of receipt from WCTID and Engineer. Within ten days after providing such written notice, Contractor shall submit a written statement to the owner setting forth in detail: (1) the nature and cause of the claim and the specific provision of this Contract which support such claim; (2) specific references to the details of the Drawings and any Specifications that are affected by the claim; and (3) an itemized and substantiated statement of the amount of the claim, or of the time extension support by such documentation as the Owner may reasonably request. Failure to provide such notice and said confirmation procedure within the five day period, or to comply with said written statement procedures within the ten day period, shall constitute Contractor's waiver of the right to compensation or time for the act or occurrence in question. Any increase in the Contract Price, or extension in the Contract Time resulting from such claim or change may only be effected by an authorized written Change Order signed by WCTID.
- III.500.5 Certification of Claims and Written Statement. All written statements (as set forth above in 500.4) and claims made by Contractor, or by any subcontractor or supplier of any tier through Contractor, shall be accompanied by a sworn and notarized certification by the designated representative of Contractor having overall responsibility for Contractor's affairs, stating: (1) the claim is made in good faith; (2) the supporting data 107158\000001\4812-3242-9219v1-8/30/19

are accurate and complete to the best of Contractor's knowledge and belief; (3) the amount requested accurately reflects the contract adjustment for which Contractor believes the WCTID is liable. For subcontractor claims Contractor may not rely on subcontractor certifications but must conduct an evaluation reasonably sufficient to certify the claim as stated above, Contractor's certification of a false or inaccurate claim will entitle WCTID to recover its costs of investigating, evaluating, and defending such including but not limited to attorney, accountant and expert fees, from Contractor and/or the individual certifying the claim. Failure to provide a full and complete Certification required at the time the claim or written statement is provided shall constitute Contractor's waiver of the right to the relief it has requested but failed to properly or timely certify.

- **III.500.6 Date of Completion -** The Contractor shall have completed the Work on or before the calendar date specified in the Bid Proposal. Otherwise the WCTID may proceed per Sections 500.7 and 500.8 of these Specifications. If the Contract is revised in any material respect and it is determined that said revision will cause delay in the completion of the Work, the WCTID shall postpone the completion date by the number of calendar days they determine.
 - **III.500.6.1 Delays for Cause**. When delay occurs due to unforeseen causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to calamities, acts of the public enemy, acts of Government, acts of the State or any political subdivision thereof, fires, floods, epidemics, strikes, except those caused by improper acts or omissions of the Contractor, extra ordinary delays in delivery of materials caused by strikes, lockouts, wrecks, freight embargoes (acts of Government) or calamities, the time of completion shall be extended in whatever amounts determined by the WCTID to be equitable, provided notice and certification has been given as required above.
 - **III.500.1.1.1** A "Calamity" is construed to mean an earthquake, flood, cloud burst, cyclone, or other cataclysmic phenomenon of nature beyond the power of the Contractor to foresee or to make allowances for.
 - III.500.6.1.2 Delays and Time Extensions when the proximate cause is the act or inaction of the WCTID. If the Contractor is delayed in the progress of the Work by causes reasonably beyond its control and through no fault of its own, and the proximate cause of the delay is the WCTID's actions or inactions (within the meaning of O.R.C. §4113.62(C)(2)), the Contractor shall be entitled to a reasonable time extension and extended field general conditions in a reasonable amount as determined by the WCTID (which determination may be made after consultation with its Engineer, Consultant, Construction Manager, or Architect, if any). In addition, Home office overhead shall be allowable pursuant only to the Eichleay formula as applied by the Courts of Ohio and such unabsorbed home office overhead shall (a) be based on business days lost to the critical path of the Project and (B) only be allowed if the cumulative delay in guestion to the critical path exceeds fourteen (14) days. Contractor represents and agrees that any such extension of time, extended field general conditions, and Eichleav Damages shall be the Contractor's sole remedy and measure of "delay damages" and Contractor represents as a material inducement to WCTID to enter this Contract, that Contractor shall not be entitled to any additional compensation for any other damages allegedly arising out of or relating to the delay in question, including but not limited to, any additional fees, costs of acceleration, consequential damages, loss of efficiency, loss of productivity, lost opportunity costs, impact damages, lost profits or other similar remuneration.

- **III.500.6.2** No time extensions will be granted for any delay or suspension of the Work due to fault of the Contractor.
- **III.500.6.3** Postponement of the completion date shall be immediately recorded by the appropriate journal entry by the WCTID and the Contractor formally advised. If the WCTID should suspend the Work in whole or in part as provided in these specifications, the date of completion shall be extended the number of days that the suspension directly or indirectly delays completion of the Work.
- **III.500.6.4** If the WCTID for any reason extends the completion date, the extension of time shall not relieve the bond annexed this agreement or the sureties thereon from any of the obligations therein expressed.
- **III.500.6.5 Coordination Responsibilities.** Contractor shall be responsible to coordinate with any utility or railroad company (or entities) responsible for any necessary utility relocation, railroad coordination, electrical service installation or any similar services required during the construction to complete the construction within the Contract Times. Any Contractor costs for such shall be incorporated into the line item and/or profit and overhead markups incorporated into the Contract and the time for same shall be considered incorporated into Contractor's obligation to complete within the Contract Times. The WCTID will assist Contractor in obtaining such coordination, but such assistance shall not relieve the Contractor of its obligations hereunder. The WCTID will coordinate with and obtain approval by ODOT and/or the Engineer, as may be appropriate or required, for any necessary traffic signal or roadway design elements of the construction. Contractor shall be responsible to coordinate any inspections or approvals necessary to be obtained from ODOT and/or the Engineer, as may be appropriate or required, for the Work durina construction

- **III.500.6.6** If the Contractor files any bankruptcy related action such as Chapter 7 or Chapter 11 or placed in receivership, the WCTID may terminate this Contract and seek alternative completion. The Contractor will be paid for Work completed to date, less any damages or expenses incurred by the WCTID in re-bidding the project, awarding it elsewhere, or completing it itself.
- **III.500.7** WCTID to Complete Work In Case of Failure If in the opinion of the WCTID, the Contractor has not commenced the Work, within a reasonable time or does not carry the same forward with reasonable progress, or is improperly performing its work, or has abandoned or fails or refuses to complete the Work under the provisions of these specifications and the Contract, said WCTID shall have full power and authority to enter upon and construct said improvement or any part thereof either by Contract, force account, or in such manner as it may deem for the best interest of the public; paying in full costs and expenses thereof from the balance of the Contract price unpaid to the Contractor. In case there is insufficient balance to pay for the Work, the WCTID shall require the Contractor, or the surety on its bond, to pay the cost of completing the Work.
 - **III.500.7.1** The WCTID shall withhold estimates, or partial estimates, that may be due the Contractor for Work performed to date, until it has fulfilled all the provisions mentioned above the extension of time.
 - **III.500.7.2** If the conditions beyond the control of the WCTID or Contractor prevent the completion of the project, such as (but not limited to) changes in the law, EPA regulations, catastrophe or court order, then the WCTID may, in its discretion, pro-rate and cancel the project. Any materials purchased but not utilized shall be paid for by and become property of the WCTID.
- III.500.8 Failure to Complete by Specified Date Time is of the essence of this Contract. The parties hereto acknowledge that the WCTID is entitled to full use of the completed Work, or any portion thereof as applicable to any interim completion dates or milestones, following expiration of the Contract Time and that if the Contractor fails to complete the Contract or any portion thereof on or before the completion date the WCTID will sustain extensive damage and serious loss as a result. The exact amount of such damages will be extremely difficult to establish and calculate with certainty. Thus, the WCTID and Contractor agree that if the Contractor fails to complete the Work or any portion thereof before the date agreed upon as mentioned elsewhere in the Contract, the WCTID shall be entitled to retain or recover from the Contractor, as liquidated damages and not as a penalty, the per diem amounts set forth in the 2019 ODOT CMS Table 108.07-1 SCHEDULE OF LIQUIDATED DAMAGES (the "2019 ODOT CMS Schedule of Liquidated Damages"), commencing upon the first day following expiration of the Contract Time and continuing until the actual Date of Substantial Completion. Contractor and the WCTID agree that such liquidated damages are a reasonable pre-estimate of damages the WCTID will incur because of delayed completion of the Work. If the above per diem figure is left blank, Contractor agrees that a fair and reasonable alternate estimate of the damages WCTID will incur because of delayed completion of the Work, and thus the liquidated damages that shall be paid is that set forth in Table 108.07-1 of the 2019 ODOT CMS Schedule of Liquidated Damages. Permitting the Contractor to continue and complete the Work or any part of the Work after the Completion Date, or after extensions to the Completion Date, is without prejudice to and will not waive any of the rights of the Department under the Contract.
 - **III.500.8.1** The WCTID may deduct liquidated damages described above from any unpaid amounts then or thereafter-due Contractor under the Contract. Any liquidated damages not so deducted from any unpaid amounts due the Contractor shall be payable to the WCTID upon demand.

- **III.500.8.2** The liquidated damages set forth herein shall be WCTID's exclusive damage remedy for Contractor's failure to complete the Work on or before the date of Substantial Completion, but such liquidated damages shall in no way limit Owner's entitlement to damages for any other injury, damage, or loss, other than for delay, for which Contractor may be responsible pursuant to the terms of this Agreement or applicable law.
- **III.500.9** Suspension of Work For such a period as is necessary or during such time the weather is unsuitable for proceeding with the Work, the WCTID may suspend Work, at places or altogether, if in its opinion, public need requires it. In case of such suspension during a working season, the time within which the Contractor is required to complete the Work shall be extended by as many days as the same was suspended. Upon any stoppage of the Work, all material shall be safely placed, so as to not obstruct or impede travel on the right-of-way.
- **III.500.10 Order and Progress of Work** The Work under this contract shall be prosecuted at as many different places, at such times in such sections along the improvement and with such forces as the Engineer may direct. Completed portions of the roadway shall be opened to travel as directed by the Engineer, but shall not be construed as an acceptance of the Work done. Should the Work, for any reason, be discontinued by the Contractor, it shall, before again commencing the Work, give the Engineer notice of its intention at least twenty-four (24) hours in advance of commencement.

III.500.11 WCTID's Termination for Convenience

III.500.11.1 The WCTID reserves the right to terminate the Contract for Convenience and without cause even though the Contractor has not breached or otherwise failed to perform any part of the Contract. Termination of the Work/Contract shall be given by written notice to the Contractor. Upon receipt of such notice, the Contractor shall, unless the notice otherwise directs immediately:

.a discontinue the Work and the placing of all orders and subcontracts in connection with this Contract;

.b cancel all of the existing orders and subcontracts made hereunder;

.c transfer to the WCTID all materials, supplies, Work in progress, appliances, facilities, machinery, and tools acquired by the Contractor in connection with the performance of the Contract, and take such action as may be necessary or as the WCTID may direct for protection and preservation of the Work relating to this Contract; and

.d deliver all plans, drawings, specifications, and other necessary information to the WCTID.

III.500.11.2 If the WCTID terminates the Contract for Convenience, the following shall be the Contractor's exclusive remedies:

.a reimbursement of all actual expenditures and costs approved by the WCTID as having been made or incurred in performing the Work, and unpaid at the time of the termination; and

.b reasonable demobilization expenses actually incurred, not to exceed 5% of the sums of the total reimbursement otherwise due under subsection III.500.11.2.a above.

.c No other claims, costs, expenses or damages of any kind or nature arising out of or related to the terminated Contract or Work shall be recoverable by Contractor.

- **III.500.11.3** All obligations of the Contractor under the Contract with respect to completed Work, including but not limited to all warranties, guarantees, and indemnities, shall apply to all Work completed by the Contractor prior to a convenience termination by the WCTID. Notwithstanding the above, any convenience termination by the WCTID or payments to the Contractor shall be without prejudice to any claims or legal remedies that the WCTID may have against the Contractor for any cause.
- **III.500.12 When Estimates May Be Withheld** Estimates may at any time be withheld or reduced if, in the opinion of the WCTID, the Work is not proceeding in accordance with the provisions of this contract; or if the Work is not progressing in proportion to the time spent working; or if the estimate is not in the same proportion to the entire contract price as the amount of the Work completed is to the entire Work.
- **III.500.13 Violations** At no time during the execution of this Contract shall the Contractor or any subcontractor violate any Federal, State, Municipal, Township, or local laws, statutes, regulations, ordinances, or resolutions.
- **III.500.14 Injunctions** If legal obstruction to the completion of the Work arises, and if the legal obstruction will cause delay in the completion of the Work, the WCTID may postpone the completion date by the number of calendar days they determine.

SECTION 600 CONTRACTOR INSURANCE REQUIREMENTS

The following types of insurance coverages and limits are required and shall be written for not less than the following, or greater if required by law and/or as otherwise specifically provided in the Contract or required by the WCTID as listed below. The Warren County Transportation Improvement District, Warren County Engineer's Office, Warren County, Deerfield Township, Warren County, Ohio, City of Mason and their respective boards, chairmen, officers, trustees, commissioners, employees, members, agents and volunteers are to be named as additional insureds with all rights under those policies unless otherwise determined by the WCTID.

- **III.600.1** Workmen's Compensation and Employers Liability as required by the laws of the State of Ohio.
- **III.600.2** The Contractor shall not commence Work under the Contract until it has obtained all the insurance required hereunder and has submitted, in quadruplicate, an appropriate Declaration of Insurance, as evidence of coverage which has been approved by the WCTID and concurred by the Engineer. The Contractor shall not allow any Subcontractor to commence Work on its subcontract until all similar insurance required by the Subcontractor has been so obtained and approved. Approval of the insurance by the WCTID shall not relieve or decrease the liability of the Contractor hereunder.

III.600.3 Contractor's Liability Insurance

- **III.600.3.1** The Contractor shall acquire and maintain during the term of the Contract Bodily Injury and Property Damage Liability Insurance under a standard Comprehensive General/Automobile Liability Policy which shall provide and include coverage on all Contractor's Operations, Protective (Sublet) Liability, Contractual Liability, Completed Operations Liability, Owned Automobiles and Non-Owned and Hired Automobiles.
- **III.600.3.2** Coverage for an "if any" basis: Property Damage Liability Insurance shall be provided on any demolition, blasting, excavating, shoring or similar operation on an "if any" basis.

- **III.600.3.3** Bodily Injury Liability limits shall be for an amount of no less than One-Million (\$1,000,000.00) Dollars for injuries, including wrongful death to any one person and subject to the same limit for each person, in an amount of not less than One-Million (\$1,000,000.00) Dollars on the account of any one occurrence.
- III.600.3.4 Property Damage Liability Insurance in an amount of not less than One-Million (\$1,000,000.00) Dollars per occurrence with General Liability extended to provide "Broad Form Property Damage Liability" and in an amount of not less than Two-Million Five-Hundred Thousand (\$2,500,000.00) Dollars aggregate for damage on account of all occurrences.
- III.600.3.5 Any combination of underlying Comprehensive General/Automobile Liability coverage with Umbrella/Excess Liability coverage which provides no less than Two-Million Five-Hundred Thousand (\$2,500,000.00) Dollars Single Limit Bodily Injury & Property Damage Liability Insurance for the Contractor will also be acceptable.
- **III.600.4 Contractor's Risk and/or Installation Floater Insurance** Each Contractor shall maintain insurance to protect the Project, the Work, and/or the Warren County Transportation Improvement District, Warren County Engineer's Office, Warren County, Deerfield Township, Warren County, Ohio, City of Mason and their respective boards, chairmen, officers, trustees, commissioners, employees, members, agents and volunteers from loss incurred by fire, lightning, extended coverage hazards, vandalism, theft, explosion, and malicious mischief in the full amount of the Contract and such insurance shall cover all labor and materials connected with the Work, including materials delivered to the site but not yet installed. The Contractor may obtain this insurance either through a standard Builder's Risk policy or Installation Floater Coverage sufficient to cover the above risks as they pertain to the Project.
- **III.600.5** The Policies as listed in the paragraphs 600.1 through 600.4 shall all contain the following special provisions:
 - * The Contractor agrees that written notice will be mailed to the WCTID thirty (30) days prior to cancellation or reduction of the insurance afforded by this policy with respect to the Contract involved.
 - * The Contractor shall submit evidence of such insurance to the WCTID with the executed contract in the form of a Certificate of Insurance, naming the Warren County Transportation Improvement District as the Certificate holder.
 - **III.600.5.1** The maintaining of such insurance as outlined herein shall in no way constitute a waiver of legal liability for damage to an adjoining property or their contents or the Work of others.
 - **III.600.5.2** Should any liability arise as a result of the action of the Contractor, its subcontractors or suppliers, or employees for which there is insufficient insurance coverage, the Contractor agrees to indemnify, defend, and hold the Warren County Transportation Improvement District, Warren County Engineer's Office, Warren County, Deerfield Township, Warren County, Ohio, City of Mason and their respective boards, chairmen, officers, trustees, commissioners, employees, members, agents and volunteers harmless from any liability or judgment (including reasonable attorney's fees and litigation expenses) and losses. Nothing in the Contract Documents and insurance requirements is intended to create in the public or any member thereof a third party beneficiary hereunder, nor is any term and condition or other provision of the Contract intended to establish a standard of care owed to the public or any member thereof.

III.600.6 Reporting, Investigating, and Resolving Motorist Damage Claims. The Contractor is required to report, investigate, and resolve motorist damage claims according to this Section III.600 of the General Provisions herein and 107.10 and 107.12 of the 2019 ODOT Specifications as follows. When a motorist reports damage to its vehicle either verbally or in writing to the Contractor, the Contractor shall within 3 days make and file a written report to the WCTID. If the WCTID directly receives a motorist's claim, it will, in its discretion, forward the claim report to the Contractor and/or the Contractor's insurance company to resolve. If the Contractor or its insurance company does not resolve the claim in a timely manner, the WCTID may advise the motorist of the option of pursuing the claim in the Ohio Courts. In the event of a lawsuit filed against the WCTID by the motorist, the WCTID, as co-insured party, may request the Contractor's insurance company to defend this lawsuit and hold the WCTID harmless according to the insurance requirements of this Contract. Any attorney's fees, court costs, litigation expenses, judgments, or settlement amount incurred by the WCTID arising out of any litigation or claims by a motorist hereunder will be assessed to the Contractor and deducted from the project, and notify Contractor of such action. If the Contract balance is insufficient to cover the extent of the backcharge, Contractor shall pay the WCTID the difference on demand.

SECTION 700 PAYMENTS, RETAINAGE, AND FINALITIES

- **III.700.1 Payroll Records** Payroll records kept in accordance with Section 4115.07, of the Ohio Revised Code and shall be open to inspection of authorized representatives or officials of WCTID. The contractor shall furnish the WCTID with an affidavit every thirty (30) days during the construction period stating that all employees and sub-contractors performing services on this project have been paid the prevailing rate of wages as certified by the Department of Industrial Relations provided by Chapter 4115 of the Revised Code of the State of Ohio.
 - **III.700.1.1** The Contractor furnish upon the request of the WCTID prior to any partial payment(s) an affidavit IAW O.R.C. 1311 (Mechanics Liens) listing money owed or paid to all subcontractors, laborers, or materialmen, and the WCTID, upon receipt of said affidavit, may, in its discretion, disburse appropriate sums owing as indicated directly to subcontractor's, materialmen, and laborers, with the balance being remitted to the Contractor.
- **III.700.2 Retainage** Partial payments to the Contractor for labor performed under either a unit price or lump sum price contract shall be made at the rate of ninety-two (92) percent of the estimates prepared by the Contractor and approved by the Engineer. All labor performed after the project is fifty (50) percent complete shall be paid for at the rate of one-hundred (100) percent of the estimates submitted by the Contractor and approved by the Engineer. The aforementioned requirements are pursuant to Section 153.13 of the Ohio Revised Code.
 - III.700.2.1 From the date the contract is fifty (50) percent complete, as evidenced by payments in the amount of at least fifty (50) percent of the contract to the person(s) with whom the WCTID has contracted, except in the case of contracts the total cost of which is less than fifteen thousand (\$15,000) dollars, all funds retained pursuant to Sections 153.12 and 153.14 of the Ohio Revised Code for the faithful performance of Work shall be deposited in the escrow account designated in Section 153.63 of the Ohio Revised Code. After the contract is fifty (50) percent complete, no further funds shall be required.
- **III.700.3** Final Cleaning Up Upon completion of the Work and before acceptance and final payments shall be made, the Contractor shall clean the roadway, borrow pits, stream channels and banks within the right-of-way at drainage structures, and all ground occupied by the Contractor in 107158\000001\4812-3242-9219v1-8/30/19

connection with the work, of all rubbish, excess materials, false Work, temporary structures and equipment, and all parts of the Work shall be left in a neat and presentable condition satisfactory to the Engineer. All land on which a temporary easement existed shall be returned to its preconstruction condition by the Contractor, the expense of which is included in the amount of this contract.

- **III.700.4** Final Inspection Wherever the Work provided and contemplated by the Contractor has been satisfactorily completed and the final cleaning up performed, the Engineer shall, within ten (10) days, unless otherwise provided, make the final inspection.
- **III.700.5** Final Payments The Engineer shall, as soon as possible after the completion of the entire Work, certify such completion to the WCTID, and the WCTID shall pay the entire sum so found to be due hereunder, after deducting there from all previous payments and all amounts to be kept and all amounts to be retained, under the provisions of this contract. All prior partial estimates and payments shall be subject to correction in the full settlement.
- **III.700.6** Payment of Total Costs to be Final Settlement of all Claims of the Contractor The WCTID shall pay, and the Contractor shall receive, the sum herein stipulated as full compensation for everything furnished and done by the Contractor under this contract, including all incidental Work required but not specifically mentioned, and also for all loss or damage arising out of the nature of the Work aforesaid, or from the action of the weather, or from any unforeseen obstruction or difficulty encountered in the prosecution of the Work, and for all risks of any description connected with the Work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the Work, as herein specified, and for well and faithfully completing the Work, and whole thereof, as herein provided, together with remedying all defects developing during the period for which the Work is guaranteed. Final payment by the WCTID does not release the Contractor for any defects in construction, workmanship, or materials which could not have been ascertained by reasonable inspection.
- **III.700.7** Last Payment to be Final Before the final estimate is allowed, the WCTID will require the Contractor to submit an affidavit showing that all claims and obligations arising in connection with the performance of the contract to include, but limited to, money owing to subcontractors, materialmen, or laborers have been satisfactorily settled. This requirement also includes an affidavit from any sub-contractor(s) employed on the project. The acceptance by the Contractor of the last payment as aforesaid shall operate as and shall be a release by the Contractor to the WCTID and agents thereof for all claims and liability to the Contractor for anything done or furnished for, or relating to the Work, or for any act or neglect of the WCTID, or of any person relating to or affecting the Work except for any pending or asserted claims that have been properly preserved in accordance with the Contract requirements by written notice to WCTID, and which remain unresolved at the time of final payment.
- **III.700.8 Construction Funds Held in Trust.** Contractor agrees that all funds it receives from WCTID for the performance of this Contract shall be held in trust by Contractor for the benefit of all its Subcontractors, suppliers, laborers, and materialmen, and Contractor shall not itself have any interest in such funds until all these obligations have been satisfied in full. Contractor further agrees that any funds received shall be uses exclusively for the prosecution of the Project Work, and none will be diverted to satisfy other obligations of Contractor. WCTID does not have an obligation to pay or see to the payment of money to any subcontractor or supplier.

SECTION 800 CLOSE-OUT PROCEDURE

III.800.1 When the Engineer and a Contractor determine the Work or a designated portion thereof is complete and acceptable in accordance with the Contract Documents, the Contractor shall submit 107158\000001\4812-3242-9219v1-8/30/19

a letter so stating to the Engineer, with a list of all incomplete items of Work and anticipated dates of completion for each.

- **III.800.2** Upon receipt of the letter claiming Substantial Completion, the Engineer will conduct an inspection. A list of items requiring completion or correction will be issued. If the Engineer approves the Contractor's claim of Substantial Completion, the Contractor will prepare a "Certificate of Substantial Completion" for acceptance by the WCTID and the Engineer. This Certificate will establish the Date of Substantial Completion.
- **III.800.3** When the Contractor has completed all items of Work on the "Completion and Corrections List" and is satisfied that all Work required by the Plans and Specifications for its contract Work has been completed, it shall submit its Final "Application for Payment" for all funds due and/or the retained percentage to the Engineer along with the following items:
 - **III.800.3.1** "Final Certification of Contractor" and "Consent of Surety" form.
 - **III.800.3.2** Affidavits as required by the Contract if required by the WCTID.
 - **III.800.3.3** Copies of test reports as may be required.
 - **III.800.3.4** Record Drawings or information as required by the Contract Documents for Record Drawings.
 - **III.800.3.5** Operating and Maintenance Instructions or Manuals required by the Contract Documents.
 - **III.800.3.6** Other data as required by governing bodies.
 - **III.800.3.7** Other submittals as required by the Technical Specifications such as Specific Guaranties, Warranties, Certificates, etc.
- **III.800.4** Upon receipt of the Contractor's Final Application and other required material, the Engineer shall verify its completeness and/or correctness. Incomplete or incorrect items shall be returned to the Contractor for corrections and resubmitted.
- **III.800.5** When the Engineer can certify that all Work under the Contract is complete and the Contractor has submitted all required items, it shall include the Contractor's Final Application on the "Final Certificate for Payment" and submit it to the WCTID.
- **III.800.6** The Engineer shall approve the "Final Certificate for Payment"; execute and forward three (3) copies to the WCTID. Any Contract or Contractor not receiving Engineer approval shall be deleted from the "Final Certificate for Payment."
- **III.800.7** The WCTID shall approve the "Final Certificate for Payment," deleting any unacceptable Contracts or Contractors, and return two (2) executed copies to the Engineer. Final checks shall then be distributed by the WCTID as required by the Contract Documents.
- **III.800.8** The Bid Guaranty shall not be released until final payment is deposited by the Contractor.

SECTION 900 SAFETY

III.900.1 The Contractor will be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. It will take all necessary precautions for 107158\000001\4812-3242-9219v1-8/30/19

the safety of, and will provide the necessary protection to prevent damage, injury, or loss to all the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

- **III.900.2** Contractor will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety protection. It will notify owners of adjacent utilities when prosecution of the Work may affect them.
- **III.900.3** The Contractor shall maintain at its office or other well-known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured at the job site. In no case shall employees be permitted to Work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.
- **III.900.4** Lights, signs and barricades shall be used to maintain traffic and safety for vehicular and pedestrian traffic during the course of this contract in accordance with the specifications.

III.900.5 The Contractor must have a Safety & Health Management Program in place and shall submit a copy of their Program to the Warren County Engineer's Safety/Risk Manager prior to the commencement of construction. The Program shall include, but shall not be limited to, management commitment, employee involvement, periodic Work site surveys, hazards prevention, and control of safety and health education training (see 29 CFR 1926.20 for reference). In addition, prior to the commencement of construction, contractor shall designate a qualified and experienced safety representative at the site, whose duties and responsibilities shall be the prevention of accidents and the maintaining of supervising and safety precautions and programs.

SECTION 1000 MISCELLANEOUS

- **III.1000.1 Permits -** The Contractor is responsible for obtaining and paying for all necessary permits and licenses from the proper authorities. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the Work as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, it shall promptly notify the Owner in writing.
- **III.1000.2 Course of Conduct -** No course of conduct or dealing between the parties, nor express or implied acceptance of alterations or additions to the Work, and no claim that WCTID has been unjustly enriched by an alteration or addition to the Work, whether or not such unjust enrichment to the Work or WCTID in fact exists, shall form the basis of any claim for an increase in the Contract Sum or any amount due under the Contract Documents, or a change in the Contract Time. Any claim by Contractor that is not made in strict compliance with the provisions of the Contract, including but not limited to sections 500.4 and 500.5 herein, is waived.

III.1000.3 Disputes.

- **III.1000.3.1** All claims, disputes, or other controversies between WCTID and Contractor arising out of or relating to the Contract or the breach thereof shall be decided by litigation in the Warren County Court of Common Pleas, which shall have exclusive jurisdiction to hear and determine any such claims, disputes, or other controversies.
- **III.1000.3.2** The Contract shall be governed by the law of the State of Ohio, without regard to principles of conflicts of laws.

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- **III.1000.3.3** Notwithstanding any claim, dispute or other controversy between WCTID and Contractor, or between Contractor and its subcontractor(s), it shall be the responsibility of Contractor to continue to prosecute all of the Work and perform all of its services diligently and in a good and workmanlike manner in conformity with the Contract.
- **III.1000.3.4** In any litigation between WCTID and Contractor arising out of or relating to the Contract or the breach thereof, WCTID shall recover all reasonable attorney's fees and costs, court costs and fees, and expert witness fees and expenses incurred.
- **III.1000.4 Jointly Drafted** The parties acknowledge that each party and, if it so chooses, its counsel have reviewed this Contract and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Contract and any amendments or exhibits thereto.
- **III.1000.5 Interest** Amounts due and unpaid Contractor under this Agreement shall accrue interest at the rate of two percent per annum, commencing sixty (60) days after such amounts were due.
- **III.1000.6 No third-party beneficiaries.** Nothing in this Contract is intended, nor will be deemed, to confer rights or remedies upon any person or legal entity not a party to this Agreement.
- **III.1000.7** Severability If any portion of this Contract is determined to be void, voidable or illegal, such portion shall be deemed severed from the other portions that are not void, voidable or illegal and (a) such other portions shall be enforceable in accordance with their terms; and (b) the severed provision shall be substituted by a valid provision which most closely approximates the intent and purpose of the severed provision and which would be enforceable to the maximum extent permitted by law.

SECTION 1100 Drug-Free Workplace

- **III.1100.1** Selected Contractor and each subcontractor shall be enrolled and in good standing in the Drug-Free Workplace (DFWP) Program or a similar program approved by the Bureau of Worker's Compensation.
- **III.1100.2** The Contractor shall insert in each of its subcontracts a clause requiring all subcontractors to comply with this requirement

III. 1200.3 Warranty and Correction Period.

- **1200.3.1 Warranty** The Contractor fully warrants, for the benefit of the WCTID that all materials and equipment shall be new unless otherwise specified, of good quality, in conformance with the Contract Documents and free from defects in materials or workmanship.
- **1200.3.2 Correction Period.** In addition to the Contractor's obligations under this Section 1000.8, if, within one year after the date of substantial completion of the Work or after the date of commencement of the warranties hereunder (or such longer period of time as may be prescribed by the terms of any applicable special warranty or guarantee required by the Contract Documents), any of the Work is found not to be in accordance with the requirements of the Contract Documents, or if the repair of any damages to the land or any areas made available for Contractor's use in performing the Work is found to be defective, the Contractor shall, without cost to the WCTID, promptly correct or repair the damage, land, or defective Work after receipt of written notice from the WCTID or Engineer. If the Contractor fails to correct or take steps to correct such defective or nonconforming Work within seven (7) days after receipt of notice from the WCTID or Engineer, the WCTID may

correct or repair the Work in question and all costs, claims, and damages arising out of or relating to such corrective action will be paid by Contractor to the WCTID on demand, including but not limited to, attorney fees, and costs or charges of engineers, and other professionals, and all court or other dispute resolution costs).

SECTION IV

Bidder's Checklist, Bid Proposal and Bid Guaranty

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BIDDER'S CHECKLIST

PROJECT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

DEERFIELD TOWNSHIP

Required Submittals

- □ Non-Collusion Affidavit
- □ Affidavit Affirming Compliance with 9.24 and 5719.042 O.R.C.
- □ Affidavit Affirming Compliance with 3517.13 O.R.C.
- Bid Proposal, including Bid Proposal Unit Cost spreadsheet
- Worksheet with line item unit prices
- □ Addenda(s) (if applies)

Bid Guaranty

(Select only one)

- Certified Check (10% of Bid)
- □ Cashier's Check (10% of Bid)
- □ Irrevocable letter of Credit (10% of Bid)
- Bid Guaranty and Contract Bond, Combination (100% of Bid)

If Using Bid Guaranty and Contract Bond

- □ Signed by Bidder & Surety Agent
- Dever of Attorney Proper Agent Name and Date
- □ Current Financial Statement of Surety
- Current Certificate of Insurance for Surety from Department of Insurance

Additional Reminders

- Reviewed Proposal and worksheets for mathematical errors
- □ All information supplied in duplicate

This checklist is not intended to relieve the bidder of the responsibility to provide other required documents. Rather, this checklist is offered merely to serve as an aid in assisting in the preparation of the bid. Notice is hereby given that the failure to submit all required documents duly and properly constituted including but not limited to all required signatures may result in the rejection of your bid on the basis that the bid is non-responsive.

Columbia Road (CR15) Improvements Deerfield Township and City of Mason, Warren County, Ohio

Ref	Item				Unit	Total
No.	No.	Item Description	Quantity	Unit	Price	Cost
		Roadway				
1	201	CLEARING AND GRUBBING	1	LS		
2	202	PAVEMENT REMOVED	716	SY		
3	202	CURB REMOVED	123	FT		
4	202	CURB AND GUTTER REMOVED	1319	FT		
5	202	PIPE REMOVED, 24" AND UNDER	60	FT		
6	202	CATCH BASIN REMOVED	4	EACH		
7	203	EXCAVATION	843	СҮ		
8	203	EMBANKMENT	399	СҮ		
		ROADWAY, MISC.: HIGH-VEHICULAR LOAD				
9	203	GRASSED FIRE LANE	1	LS		
10	-0.	SUBGRADE COMPACTION	2385	SY		
11	204	EXCAVATION OF SUBGRADE	55	СҮ		
12	204	GRANULAR MATERIAL, TYPE C	55	СҮ		
13	204	GEOTEXTILE FABRIC	120	SY		
14		PAVEMENT PLANING, ASPHALT CONCRETE	220	SY		
15	001	ASPHALT CONCRETE BASE, PG64-22	492	СҮ		
16	001	AGGREGATE BASE	397	СҮ		
17	407	NON-TRACKING TACK COAT	263	GAL		
		ASPHALT CONCRETE SURFACE COURSE, TYPE				
18	441	1, (448), PG64-22	91	CY		
		ASPHALT CONCRETE INTERMEDIATE COURSE,				
19		TYPE 1, (448)	91	СҮ		
20	000	GUARDRAIL, TYPE MGS	200	FT		
21		ANCHOR ASSEMBLY, MGS TYPE E	1	EACH		
22	606	ANCHOR ASSEMBLY, MGS TYPE T	1	EACH		
23	608	4" CONCRETE WALK	1786	SF		
24	609	COMBINATION CURB AND GUTTER, TYPE 2	1204	FT		
25		COMBINATION CURB AND GUTTER, TYPE 3	347	FT		
26	007	TOPSOIL	326	CY		
27	659	SEEDING AND MULCHING, CLASS 1	2959	SY		
		SPECIAL - PAVEMENT CRACK AND JOINT				
28	690	REINFORCING FABRIC	220	SY		
		CONCRETE BASE, MISC.: CONCRETE BASE, AS				
29	305	PER PLAN	31	SY		

Columbia Road (CR15) Improvements Deerfield Township and City of Mason, Warren County, Ohio

Ref	Item				Unit	Total
No.	No.	Item Description	Quantity	Unit	Price	Cost
30	605	4" BASE PIPE UNDERDRAINS	1060	FT		
31	611	12" CONDUIT, TYPE B	250	FT		
32	611	12" CONDUIT, TYPE C	47	FT		
33	611	CATCH BASIN, NO. 3	4	EACH		
34	832	EROSION CONTROL	16670	EACH		
35	021	RPM	30	EACH		
36	621	RAISED PAVEMENT MARKER REMOVED	30	EACH		
37	000	GROUND MOUNTED SUPPORT, NO. 3 POST	69	FT		
38	630	SIGN, FLAT SHEET	34.25	SF		
		REMOVAL OF GROUND MOUNTED SIGN AND				
39	630	DISPOSAL	3	EACH		
		REMOVAL OF GROUND MOUNTED SIGN AND				
40	630	REERECTION	1	EACH		
		REMOVAL OF GROUND MOUNTED POST				
41	630	SUPPORT AND DISPOSAL	3	EACH		
		REMOVAL OF GROUND MOUNTED POST				
42	000		1	EACH		
43		EDGE LINE, 4"	0.23	MILE		
44	• • •	LANE LINE, 4"	0.21	MILE		
45	0		0.19	MILE		
46		CHANNELIZING LINE, 8"	513	FT		
47	011		28	FT		
48	• • •	ISLAND MARKING	54	SF		
49	011		12	EACH		
50	011	DOTTED LINE, 4"	132	FT		
51	011	REMOVAL OF PAVEMENT MARKING	5	EACH		
52	011	REMOVAL OF PAVEMENT MARKING	0.33	MILE		
53	614	MAINTAINING TRAFFIC	1	LS		
		CONSTRUCTION LAYOUT STAKES AND				
54	020		1	LS		
55	624	MOBILIZATION	1	LS		
		Mater Insurances and			Sub-Total =	ļ
		Water Improvements				ļ
		24" WATER MAIN DUCTILE IRON PIPE ANSI				
		CLASS 52, MECHANICAL JOINTS AND FITTINGS				
56	638	(UNRESTRAINED)	630	EACH		

Columbia Road (CR15) Improvements Deerfield Township and City of Mason, Warren County, Ohio

Ref	Item				Unit	Total
No.	No.	Item Description	Quantity	Unit	Price	Cost
		24" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 52, MECHANICAL JOINTS AND FITTINGS				
57	638	(RESTRAINED)	1430	EACH		
58	638	16" GATE VALVE, VALVE AND VALVE BOX	1	EACH		
59	638	24" GATE VALVE, VALVE AND VALVE BOX	3	EACH		
60	638	1" AIR RELEASE VALVE	2	EACH		
61		FIRE HYDRANT AND GATE VALVE REMOVED AND RESET	3	EACH		
62	638	FIRE HYDRANT ASSEMBLY	1	EACH		
					Sub-Total =	
]	otal E	Bid Amount	

BID PROPOSAL

PROJECT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

DEERFIELD TOWNSHIP

TO THE WARREN COUNTY TRANSPORTATION IMPROVEMENT DISTRICT:

The undersigned certifies that he/she has examined the plans and specifications and has inspected the site of the proposed improvements. It is understood that the following bid will be governed by the UNIT PRICE BID, unless otherwise specified, also that the quantities may be increased or decreased, if the bid is a unit price bid.

The undersigned submits with the following bid a bid guarantee for the amount, as set forth in Section 200.5 of the General Provisions, and proposes to furnish all labor (prevailing wage rates apply), equipment, and materials necessary for the construction of **PROJECT NO. 19-04: COLUMBIA ROAD WIDENING PROJECT** in accordance with the Ohio Department of Transportation Construction and Material Specifications, Standard Construction Drawings, Ohio Manual of Uniform Traffic Control, The Ohio Department of Transportation Bridge Design manual, and the Technical Specifications contained in the Construction Drawings, under the most current versions of the aforementioned drawings and specifications and in force on the date of letting shall be enforced by the Warren County Transportation Improvement District:

PROJECT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

DEERFIELD TOWNSHIP

TOTAL ENGINEER'S ESTIMATE: \$1,200,000.00

Please enter the total cost of the Bid Proposal, OBTAINED FROM THE ATTACHED WORKSHEETS, in the space below:

PHASE 1 BID AMOUNT:	\$
PHASE 2 BID AMOUNT:	\$
TOTAL BID AMOUNT:	\$

Amount of Guaranty: Each Proposal must be accompanied by a bond in the sum of One Hundred (100) percent (%) of the Bid Amount or a CERTIFIED CHECK, CASHIER'S CHECK, OR IRREVOCABLE LETTER OF CREDIT pursuant to Chapter 1305 of the Ohio Revised Code in the sum of ten (10) percent (%) of the Bid Amount on a solvent bank as a guarantee that if the Proposal is accepted a contract will be entered into.

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BID OPENING DATE: Tuesday September 24th, 2017 BIDS RECEIVED BY: 11:00 a.m. Local Time

COMPLETION DATE: The anticipated completion date is May 29th, 2020.

The undersigned hereby acknowledges receipt of the following addenda:

Project No. 19-04, COLUMBIA ROAD WIDENING PROJECT

Addendum No. _____Date _____ Addendum No. _____Date _____ Addendum No. _____ Date _____ Addendum No. _____Date _____ Addendum No. ____ Date ____ Addendum No. _____Date _____ Addendum No. Date

It is understood that if this bid is accepted, the undersigned will enter into a contract and give bond with approved security in the full amount of the bid within ten (10) days after the award of the contract by the Warren County Transportation Improvement District, otherwise the Bid Guarantee will be forfeited.

Witness our hands this _	day of	 , 20

NAME OF BIDDER: (COMPANY OR CORPORATION)

(SIGNATURE OF AGENT)

EXCEPTION SHEET

submitted with each bid. If there are no exceptions, indicate "None" below.
1)
2)
3)
4)
5)
6)
7)
8)
9)
10)

Exceptions: Exceptions to any bid specification must be clearly stated on this sheet. This sheet must be submitted with each bid. If there are no exceptions, indicate "None" below.

BID GUARANTY AND CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _________as Principal and _______as Principal and _______as Surety, are hereby held and firmly bound unto The Warren County Transportation Improvement District and the State of Ohio, Department of Transportation, herein after called the Obligee, in the penal sum of the dollar amount of the bid submitted by the Principal to the Obligee, on this ______ day of ______, 20_____ to undertake the Project known as:

PROJECT NO. 19-04, COLUMBIA ROAD WIDENING PROJECT

The penal sum referred to herein shall be the dollar amount of the Principal's bid to the Obligee, incorporating any additive or deductive alternate proposals made by the Principal on the date referred to above to the Obligee, which are accepted by the Obligee. In no case shall the penal sum exceed the amount of _______ dollars (\$_______). (If the above line is left blank, the penal sum will be the full amount of the Principal's bid, including alternates. Alternatively, if completed, the amount stated must not be less than the full amount of the bid, including alternates, in dollars and cents. A percentage is not acceptable.) For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above named Principal has submitted a bid on the above referred to project.

NOW, THEREFORE, if the Obligee accepts the bid of the Principal and the Principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material; and in the event the Principal pays to the Obligee the difference not to exceed ten percent to the penalty hereof between the amount specified in the bid and such larger amount for which the Obligee may in good faith contract with the next bidder to perform the Work covered by the bid; or in the event the Obligee does not award the Contract to the next best, most responsive and responsible bidder and resubmits the project for bidding, the Principal will pay the Obligee the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid, or the costs, in connection with the resubmission, of printing new contract documents, required advertising and printing and mailing notices to prospective bidders, whichever is less, then this obligation shall be void, otherwise to remain in full force and effect. If the Obligee accepts the bid of the Principal and the Principal, within ten days after the awarding of the contract, enters into a proper contract in accordance with the bid, plans, details, specifications, and bills of material, which said contract is made a part of this bond the same as though set forth herein; and IF THE SAID Principal shall well and faithfully perform each and every condition of such contract; and indemnify the Warren County Transportation Improvement District against all damage suffered by failure to perform such contract according to the provisions thereof and in accordance with the plans, details, specifications and bills of material, therefore; and shall pay all lawful claims of subcontractors, materialmen, and laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said contract, we agreeing and assenting that this undertaking shall be for the benefit of any materialman or laborer having a just claim, as well as for the Obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claim hereunder shall in no event exceed the penal amount of this obligation as herein stated.

THE SAID Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of said contract or in or to the plans or specifications therefore shall in any way affect the obligations of said Surety on this bond, and it does hereby waive notice of any such modifications, omissions or additions to the terms of the contract or to the Work or to the specifications.

SIGNED AND SEALED this	day of	, 20
Principal	_	
By:(Seal)	_	
Surety		
By: Attorney/Attorney-In-Fact	_	
		(SEAL)

Awarding authorities are simultaneously, with notice of award to Contractor, to give written notice to Surety and Agent. Show name and mailing address of both Agent and Surety.

Surety's Address:

Agent's Address:

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SECTION V

Affidavits

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AFFIDAVIT IN COMPLIANCE WITH SECTION 3517.13 OF THE OHIO REVISED CODE

STATE OF}			ı
COUNTY OF	}	SS:	}

Personally appeared before me the undersigned, as an individual or as a representative of for a contract for:

(Name of Entity)

PROJECT NO. 19-04, COLUMBIA ROAD WIDENING PROJECT

to be let by Warren County Transportation Improvement District, who, being duly cautioned and sworn, makes the following statement with respect to prohibited activities constituting a conflict of interest or other violations under Ohio Revised Code Section 3517.13 (campaign contributions and reporting) and further states that the undersigned has the authority to make the following representation on behalf of himself or herself or of the business entity:

1. That none of the following has individually made within the previous twenty-four months and that, if awarded a contract for the purchase of goods or services with a cost aggregating in excess of \$10,000 in a calendar year, none of the following individually will make, beginning on the date the contract is awarded and extending until one year following the conclusion of the contract, as an individual, one or more campaign contributions totaling in excess of \$1,000, to any member of the Warren County Transportation Improvement District or their individual campaign committees, or if the contracting authority is another elected official of Warren County, to that official or their individual campaign committee:

- a. myself;
- b. any partner or owner or shareholder of the partnership (if applicable);
- c. any owner of more than 20% of the corporation or business trust (if applicable);
- d. each spouse of any person identified in (a) through (c) of this section;
- e. each child seven years of age to seventeen years of age of any person identified in divisions (a) through (c) of this section (only applicable to contributions made on or after January 1, 2007).

2. That none of the following have collectively made since January 1, 2007, and that, if awarded a contract for the purchase of goods and services with a cost aggregating in excess of \$10,000 in a calendar year, none of the following collectively will make, beginning on the date the contract is awarded and extending until one year following the conclusion of the contract, one or more campaign contributions totaling in excess of \$2,000, to any member of the Warren County Transportation Improvement District or their individual campaign committees, or if the contracting authority is another elected official of Warren County, to that official or their individual campaign committee:

- a. myself;
- b. any partner or owner or shareholder of the partnership (if applicable);
- c. any owner of more than 20% of the corporation or business trust (if applicable);
- d. each spouse of any person identified in (a) through (c) of this section;
- e. each child seven years of age to seventeen years of age of any person identified in divisions (a) through (c) of this section.

3. That this representation is made to induce the County to enter into a contractual relationship with the Contractor, and with the knowledge that County officials will rely on the authenticity of statements made herein in awarding and administering such contracts.

Signature	
Title	
Sworn to before me and subscribed in my presence this 20	day of,
Notary Public	

My Commission Expires: _____

(Seal)

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AFFIDAVIT IN COMPLIANCE WITH SECTIONS 9.24 AND 5719.042 OF THE OHIO REVISED CODE

WARREN COUNTY, OHIO

PROJECT NO. 19-04, COLUMBIA ROAD WIDENING PROJECT

(PLEASE TYPE OR PRINT NAME OF FIRM) (AGENT/OWNER FOR FIRM)

personally appeared before me, the undersigned, a Bidder in competitive bidding for a Construction Contract to be let by the Warren County Transportation Improvement District, who, being duly cautioned and sworn, makes the following statement with respect to the personal property taxes on the general tax list of personal property of Warren County, Ohio:

- (1) That the above mentioned firm and its owner/agent at the time of making his/her Bid (Proposal) on the aforementioned Contract was not charged with any delinquent personal property taxes on the general tax list of personal property of Warren County, Ohio.
- (2) That this statement is made in compliance with Section 5719.042 of the Ohio Revised Code to be incorporated into the Contract between the parties as provided in Section 5719.042 of the Ohio Revised Code.
- (3) That pursuant to §9.24 of the Ohio Revised Code, if the project for which this bid is submitted has been identified as being funded in whole or in part with funds from the State of Ohio, the affiant further certifies that the bidder, if an individual, or if a corporation, any principal owning more than 10% equitable interest in the corporation, does not have a finding for recovery issued by the Auditor of State which remains unresolved as defined in §9.24 O.R.C.

		(SIGNATURE)	
	-	(TITLE/POSITION)	
Sworn to me this	, day of	· · · · · · · · · · · · · · · · · · ·	, 20
(NOTARY PUBLIC)	,,		
(
My Commission expires on			
	(SEAL)		
NON-COLL	USION AFFIDAVIT	OF PRIME BIDDER	

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WARREN COUNTY, OHIO

PROJECT NO. 19-04, COLUMBIA ROAD WIDENING PROJECT

(PLEASE TYPE OR PRINT FULL NAME) (TITLE/POSITION)
being duly sworn, do depose and say the following:
1. He/She is ______, _____, _____, (TITLE/POSITION)

the bidder that has submitted the attached Bid or Proposal;

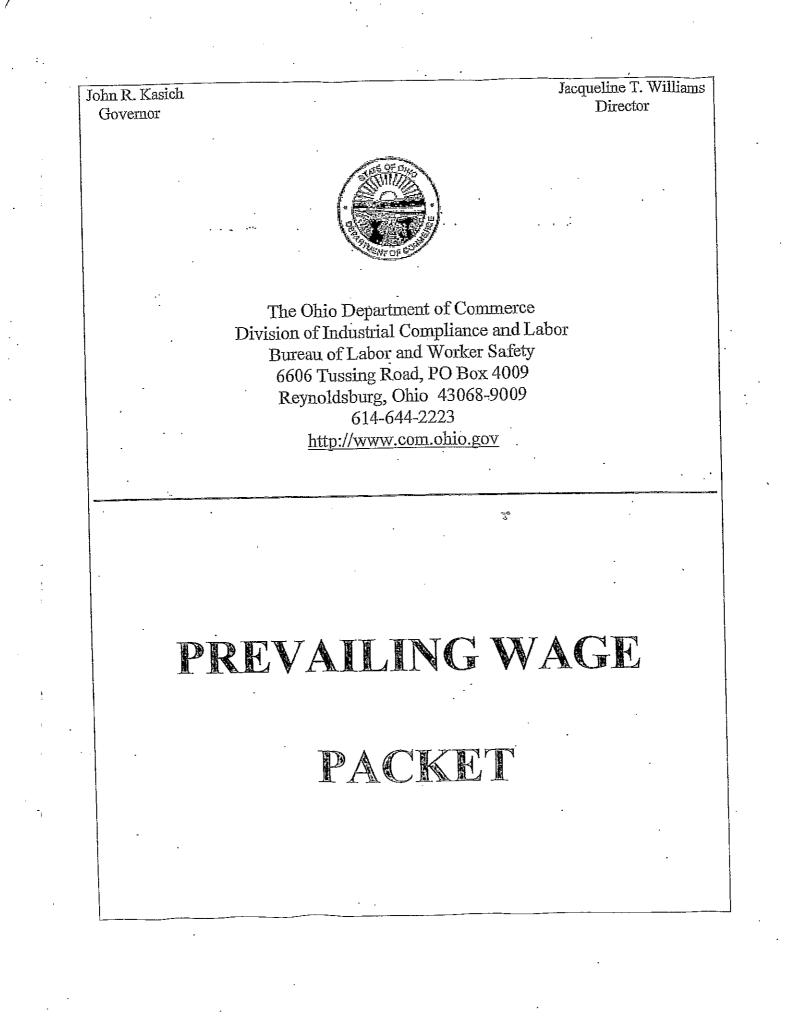
- 2. He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid (Proposal);
- 3. Such Bid (Proposal) is genuine and is not a collusive or sham Bid (Proposal);
- 4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this Affidavit, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham Bid (Proposal) in connection with the Contract for which the attached Bid (Proposal) has been submitted or to refrain from bidding in connection with such Contract or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person, to fix the price or prices in the attached Bid or of any other Bidder or to fix any overhead, profit or cost element of the Bid Price or Bid Price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the Warren County Transportation Improvement District or any person interested in the proposed Contract;
- 5. The price or prices quoted in the attached Bid (Proposal) are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the Part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this Affidavit.

	(SIGNATURE)	
	(TITLE/POSITION)	—
, day of	, 20	
,		
(SEAL)	,,,	
	,	(TITLE/POSITION)

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SECTION VI

Prevailing Wage Rates



This packet of information is provided as a summary of the Prevailing Wage guidelines and responsibilities. The Ohio Revised Code, Chapter 4115 should be referred to for the exact words of the law. Also included are references and forms which should be helpful in the compliance of the Prevailing Wage Law.

PACKET INFORMATION INDEX

- A. The Ohio Department of Commerce Division of Industrial Compliance, Wage and Hour Administration Investigators and their assigned counties
 - 1. The Wage and Hour Investigators for the State of Ohio are listed with their contact information
 - a. If you have questions or need assistance pertaining to Prevailing Wage, you can contact the Investigator in your area
- B. Prevailing Wage Guide for Public Authorities

<u>h</u>.

- 1. Notice of change of the Prevailing Wage Threshold Level
 - a. A notification will be sent to you when there is a change of the Prevailing Wage threshold level
- 2. Outline of the Public Authority's responsibilities for Prevailing Wage
- 3. Public Authority's Compliance Checklist form
- a. A form for tracking the progress of a Prevailing Wage project
- 4. Request form for Prevailing Wage Rates
 - a. PW Rates can be obtained on the website www.com.obio.gov
 - 1. Prevailing Wage Determination Schedule of wages must be attached to and made part of the specifications for the project, and must be printed on the bidding blanks where the work is done by contact
- 5. Bid Tabulation form

C.

D.

- a. A form to be completed and returned to ODOC-DIC-Bureau of Wage and Hour Administration when the contract has been awarded
- 6 Prevailing Wage Bonds form
 - a. Information needed to be kept on file by the PW Coordinator when bonds from the Public Authority are used for a project
- Prevailing Wage Guidelines for the Public Authority's Coordinator
 - 1. Guideline for the Prevailing Wage Coordinator
 - a. The Prevailing Wage complaint form and instructions can be obtained on the website <u>www.com.chio.gov</u>
 - 2. Record of the Certified Payroll Reports Received form
 - a. Helpful form for recording the Certified Payroll Reports and the dates received from the contractors and subcontractors
 - 3. Employee Interview form
 - a. Helpful form for the use by the PW Coordinator when making on-site visits
 - 4. Employee vs. Independent Contractor
 - a. Helpful questions when determining if a person is an Employee or an Independent Contractor
 - Prevailing Wage Guide for Contractors

(Incorporate this section in the Specs. or supply copies for the pre-construction meeting)

- 1. Outline of responsibilities for the Prevailing Wage Contractor
- 2. Notification form from the Contractor to the Employee
 - a. The contractor must submit to employees a completed and signed notification form
 - b. Some PW Coordinators may require a copy of the completed Notification to the Employee form be submitted with the Certified Payroll Reports
- Certified Payroll Report form
 - a. The contractor can use any form/format he chooses as long as ALL the information has been provided
- Certified Payroll Report form instruction sheet
- 5. Corrected Certified Payroll Report Example
- 6. Affidavit of Compliance form

a.

.

- No Public Authority shall make final payment unless the Final Affidavits have been filed
- by the contractors and subcontractors



John R. Kasich Governor

Jacqueline T. Williams Director

INVESTIGATORS CONTACT INFORMATION

OHIO DEPARTMENT OF COMMERCE Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239 Fax: 614-728-8639 <u>www.com.ohio.gov</u> TTY/TDD: 1-800-750-0750

The Ohio Department of Commerce is an Equal Opportunity Employer and Service Provider

Ohio

Department of Commerce

Division of Industrial Compliance

John R. Kasich, Governor Jacqueline T. Williams, Director Bureau of Wage and Hour Administration 6606 Tussing Road - PO Box 4009 Reynoldsburg, OH 43608-9009 Phone 614-644-2239 | Fax 614-728-8639 TTY/TDD 800-750-0750 com.ohio.gov An Equal Opportunity Employer and Service Provider

PREVAILING WAGE CONTRACTOR RESPONSIBILITIES

This is a summary of prevailing wage contractors' responsibilities. For more detailed information please refer to Chapter 4115 of the Ohio Revised Code

General Information

Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$250,000 for new construction or \$75,000 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting.

Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$91,150 for new construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction or \$27,309 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting of a public improvement that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction.

- a) Thresholds are to be adjusted biennially by the Administrator of Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration
- b) Biennial adjustments to threshold levels are made according to the Price Deflator for Construction Index, United States Department of Commerce, Bureau of the Census*, but may not increase or decrease more than 3% for any year

Penalties for violation

Violators are to be assessed the wages owed, plus a penalty of 100% of the wages owed.

Intentional Violations

If an intentional violation is determined to have occurred, the contractor is prohibited from contracting directly or indirectly with any public authority for the construction of a public improvement. Intentional violation means "a willful, knowing, or deliberate disregard for any provision" of the prevailing wage law and includes but is not limited to the following actions:

- Intentional failure to submit payroll reports as required, or knowingly submitting false or erroneous reports.
- Intentional misclassification of employees for the purpose of reducing wages.
- Intentional misclassification of employees as independent contractors or as apprentices.
- Intentional failure to pay the prevailing wage.
- Intentional failure to comply with the allowable ratio of apprentices to skilled workers as required by the regulations established by Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration.
- Intentionally employing an officer, of a contractor or subcontractor, that is known to be prohibited from contracting, directly or indirectly, with a public authority.

Responsibilities

- A. Pay the prevailing rate of wages as shown in the wage rate schedules issued by the Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration, for the classification of work being performed.
 - Wage rate schedules include all modifications, corrections, escalations, or reductions to wage rates issued for the project.

- 2. Overtime must be paid at time and one-half the employee's base hourly rate. Fringe benefits are paid at straight time rate for all hours including overtime.
- 3. Prevailing wages must be paid in full without any deduction for food, lodging, transportation, use of tools, etc.; unless, the employee has voluntarily consented to these deductions in writing. The public authority and the Director of Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration - must approve these deductions as fair and reasonable. Consent and approval must be obtained before starting the project.
- B. Use of Apprentices and Helpers cannot exceed the ratios permitted in the wage rate schedules.
 - 1. Apprentices must be registered with the U.S. Department of Labor Bureau of Apprenticeship and Training.
 - 2. Contractors must provide the Prevailing Wage Coordinator a copy of the Apprenticeship Agreement for each apprentice on the project.
- C. Keep full and accurate payroll records available for inspection by any authorized representative of the Ohio Department of Commerce, Division of Industrial Compliance, and Labor, Bureau of Wage and Hour Administration or the contracting public authority, including the Prevailing Wage Coordinator. Records should include but are not limited to:
 - 1. Time cards, time sheets, daily work records, etc.
 - 2. Payroll ledger\journals and canceled checks\check register.
 - 3. Fringe benefit records must include program, address, account number, & canceled checks.
 - 4. Records made in connection with the public improvement must not be removed from the State for one year following the completion of the project.
 - 5. Out-of-State Corporations must submit to the Ohio Secretary of State the full name and address of their Statutory Agent in Ohio.
- D. Prevailing Wage Rate Schedule must be posted on the job site where it is accessible to all employees.
- E. Prior to submitting the initial payroll report, supply the Prevailing Wage Coordinator with your project dates to schedule reporting of your payrolls.
- F. Supply the Prevailing Wage Coordinator a list of all subcontractors including the name, address, and telephone number for each.

1. Contractors are responsible for their subcontractors' compliance with requirements of Chapter 4115 of the Ohio Revised Code.

- G. Before employees start work on the project, supply them with written notification of their job classification, prevailing wage rate, fringe benefit amounts, and the name of the Prevailing Wage Coordinator for the project. A copy of the completed signed notification should be submitted to Prevailing Wage Coordinator.
- H. Supply all subcontractors with the Prevailing Wage Rates and changes.
- I. Submit certified payrolls within two (2) weeks after the initial pay period. Payrolls must include the following information:
 - Employees' names, addresses, and social security numbers.
 - (a) Corporate officers/owners/partners and any salaried personnel who do physical work on the project are considered employees. All rate and reporting requirements are applicable to these individuals.
 - 2. Employees' work classification.

1.

- (a) Be specific about the laborers and/or operators (Group)
- (b) For all apprentices, show level/year and percent of journeyman's rate
- 3. Hours worked on the project for each employee.

- (a) The number of hours worked in each day and the total number of hours worked each week.
- 4. Hourly rate for each employee.
 - (a) The minimum rate paid must be the wage rate for the appropriate classification. The Department's Wage Rate Schedule sets this rate.
 - (b) All overtime worked is to be paid at time and one-half for all hours worked more than forty (40) per week.
- 5. Where fringes are paid into a bona fide plan instead of cash, list each benefit and amount per hour paid to program for each employee.
 - (a) When the amount contributed to the fringe benefit plan and the total number of hours worked by the employee on all projects for the year are documented, the hourly amount is calculated by dividing the total contribution of the employer by the total number of hours worked by the employee.
 - (b) When the amount contributed to the fringe benefit is documented but not the total hours worked, the hourly amount is calculated by **dividing the total yearly contribution by 2080**.
- 6. Gross amount earned on all projects during the pay period.
- 7. Total deductions from employee's wages.
- 8. Net amount paid.
- J. The reports shall be certified by the contractor, subcontractor, or duly appointed agent stating that the payroll is correct and complete; and that the wage rates shown are not less than those required by the O.R.C. 4115.

K. Provide a Final Affidavit to the Prevailing Wage Coordinator upon the completion of the project.

OHIO DEPARTMENT OF COMMERCE Division of Industrial Compliance Bureau of Wage and Hour Administration Chief, Stephen Clegg

6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 614-644-2239 Fax: 614-728-8639 www.com.ohio.gov

INVESTIGATORS and THEIR ASSIGNED COUNTIES

	-
#48 Dave Horvath	Allen *
PO Box 1512	
Lima, Ohio 45802-1512	
Voice: (419)302-1200	
Fax : (614) 728-8639	
Dave.Horvath@com.state.oh.us	-
	Guernsey *
#30 Mike McKee	
PO Box 1342	
Cambridge, Ohio 43725-2247	
Voice: (740) 432-1987	
Michael.McKee@com.state.oh.us	43.
· · · · · ·	
#56 Shawn Miles	Stark *
PO Box 2547	
North Canton, Ohio 44720	
Voice: (614) 496-9076	· ·
Shawn.Miles@com.state.oh.us	
Snawn.miles@com.state.on.as	
#37 David Rice	Montgomery *
PO Box 291843	
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Voice: (740) 502-0883, Fax: (614)995-7768	
Dave.Rice@com.state.oh.us	
	Lake *
#35 Sean Seibert	
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Paînesville, Ohio 44077-3938	
Voice: (614) 557-8662	
Fax: (614) 232-9541	
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#11 Kela D. Thompson 6606 Tussing Rd, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Voice: (614) 728-5007 Fax: (614) 232-9537 <u>Kela.Thompson@com.state.oh.us</u>	Franklin *
* Headquarter County	· · · · · · · · · · · · · · · · · · ·
Stephen Clegg, Chief 6606 Tussing Rd, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Voice: (614) 728-8686 Fax: (614) 728-8639 Stephen.Clegg@com.state.oh.us	#90 Jackie Clark, Supervisor 6606 Tussing Rd, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Voice: (614) 728-5019 Fax: (614) 728-8639 Jackie.Clark@com.state.oh.us

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John R. Kasich Governor

Jacqueline T. Williams Director

PREVAILING WAGE GUIDE FOR

PUBLIC AUTHORITIES

OHIO DEPARTMENT OF COMMERCE Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239 Fax: 614-728-8639 <u>www.com.ohio.gov</u> TTY/TDD: 1-800-750-0750

The Ohio Department of Commerce is an Equal Opportunity Employer and Service Provider

PREVAILING WAGE THRESHOLD LEVELS IMPORTANT NOTICE

Before advertising for bids, contracting, or undertaking construction with its own forces, to construct a public improvement, the Public Authority shall have the Ohio Department of Commerce-Division of Industrial Compliance, Bureau of Wage and Hour Administration determine the prevailing rates of wages for workers employed on the public improvement. The wage determination must be included in the project specifications and printed on the bidding blanks where work is done by contract.

"New" construction threshold for <i>Building</i> Construction:	\$250,000
"Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" threshold level for <i>Building</i> Construction:	\$75,000

As of January 1, 20

"New" construction that involves roads, streets, alleys, sewers,	
ditches and other works connected to road or bridge construction	\$91,150
threshold level has been adjusted to:	

"Reconstruction, enlargement, alteration, repair, remodeling,	
renovation, or painting" that involves roads, streets, alleys, sewers,	\$37 300 ···
ditches and other works connected to road or bridge construction	\$27,309
threshold level has been adjusted to:	

- A) Thresholds are to be adjusted biennially by the Director of the Ohio Department of Commerce.
- B) Biennial adjustments to threshold levels are made according to the Building Cost for Skilled Labor Index published by McGraw-Hill's Engineering News-Record, but may not increase or decrease more than 3% for any year.

If there are questions concerning this notification, please contact:

Ohio Department of Commerce Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239 Fax: 614-728-8639 www.com.ohio.goy

Public Authority Responsibilities <u>ORC Chapter 4115: Wages and Hours on Public Works</u> <u>(Prevailing Wage Coordinator)</u>

- Before advertising for bids, contracting, or undertaking construction with its own forces, to construct a public improvement, the public authority shall have the Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration determine the prevailing rates of wages for workers employed on the public improvement. The wage determination must be included in the project specifications and printed on the bidding blanks where work is done by contract.
 - a) "New" construction has a threshold level of \$250,000.
 - b) "Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" has a threshold level of \$75,000.
 - c) "New" construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction has a threshold level of <u>\$91,150</u>.
 - d) "Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction has a threshold of <u>\$27,309</u>.
 - i.) Thresholds are to be adjusted biennially by the Director of Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration.
 - Biennial adjustments to threshold levels are made according to the Price Deflator for Construction Index, United States Department of Commerce, Bureau of the Census, but may not increase or decrease more than 3% for any year.
- Every contract for public work shall contain a provision that each worker employed by the contractor or subcontractor, or other person about or upon the public work, must be paid the prevailing rate of wages.
- 3. If contracts are not awarded or construction undertaken within ninety days (90) from the date of the determination of the prevailing wage there shall be a re-determination of the wage rates before the contract is awarded.
- 4. Within seven (7) working days after the receipt of notification of a change in the prevailing wage rates, the public authority shall notify all affected contractors and subcontractors. If it is determined that a contractor or subcontractor has violated sections 4115.03 to 4115.16 of the Ohio Revised Code because they were not notified as required, the public authority is liable for any back wages, fines, damages, court costs and attorney's fees for the period of time covering the receipt of wage changes, until they give the required notice.
- 5. No public authority shall award a contract for a public improvement to any contractor or subcontractor whose name appears on the list of debarred contractors. This list is filed with the Secretary of State by the Ohio Department of Commerce-Division of Industrial Compliance & Labor-Bureau of Wage and Hour Administration The filing of the notice of conviction with the secretary of state constitutes notice to all public authorities. These contractors are prohibited from working on public improvements for periods ranging from one to three years. The list of debarred contractors can be located on the website www.com.ohio.gov/laws
- 6. A public authority must designate and appoint one of its own employees to serve as the Prevailing Wage Coordinator during the life of the contract for constructing the public improvement. A Prevailing Wage Coordinator must be appointed no later than ten days before the first payment of wages by contractors to employees working on the public improvement.

PUBLIC AUTHORITY'S COMPLIANCE CHECKLIST FOR PREVAILING WAGE

F	· _ · · ·	۰. ۱			
Project:		. Number:			
Department:		Phone#:			
PW Coordinator:	Phone#:				
Architect/Engineer		· · · · · · · · · · · · · · · · · · ·	Phone#:		
Contractor:					
Comfactor:			Phone#:		
Contact Person:			Title:		
General Contractor	:	Prime Contractor:	Construction Mgr:		
Date Completed		Compliance Item Des	cription		
	1.	Request Prevailing Wage Determination Schedu Hour	ule from ODOC-DIC-Wage &		
	2.	Received Prevailing Wage Determination S	chedule		
-	3.	Incorporate Determination Schedule in Spec	s./Bidding Blanks		
	4	Incorporate notice of Prevailing Wage requirem to Bidders	ents in Invitation for Bids/Notice		
	5.	Incorporate Prevailing Wage requirements i	n Contract		
	6.				
	7.	Submit complete Invitation for Bid to ODOC-DIC-Wage & Hour Invitation for Bids			
	8.	Bid Opening			
	9.	Check Listing of Violators			
· · · · · ·	10.	Award of Contract. (see note)			
~	11.	Submit Bid Tabulation/Award to ODOC-DI	C-WAGE & HOUR		
•	12.	Notice to Successful Bidder			
	13.	Work Commenced(see note)	-		
	14.	Appoint Prevailing Wage Coordinator			
	15.	Received list of Subcontractors' names, add	esses, phone #'s & email's		
-	16.	Received Payroll Date Schedule			
	17.	Received Registered Apprenticeship Agreement Certifications			
	18.	Received Deduction Agreements			
	19.	Received Payroll Reports with Certification(see attachment)			
	20.	Visited project site			
	21.	Received Changes to Determination Schedule			
-	22.	Notice to Contractors of Determination Sche	dule change		
	23.	Request Final Compliance Affidavit from con	ntractors & subcontractors		
	24,	Received Final Affidavits from all contractor	s & subcontractors		
	25.	Certify Final Payment			

Note: If contract is not awarded or construction undertaken within 90 days from the date of establishment of the Prevailing Wage Rates, a re-determination of the Prevailing Wage Rates is required.

REQUEST FOR STATE OF OHIO PREVAILING WAGE RATES

-	·		
Date	, Linn,	(Mark (X) One)	Constraction
The first former the state of t	minut and and activity the		~ Construction
Project Information (only one p County of Project	Project Name	a request form please)	This form MUST be filled out COMPETELY & CORRECTLY for us to process your
Site Address	City		request. Forms not completed correctly will be RETURNED TO THE SENDER.
Owner/Public Authority		· ·	Prevailing Wage Rates can be obtained on the website <u>www.com.ohlo.gov</u>
Address	Telephone Numb	er	ODOC-DIC-WAGE & HOUR DATE STAMP
City	Zip Code		·
PW Coordinator	Telephone Numb	er	
Issuing Authority of Bonds	Type of Financin	g .	
Estimated Total Overall Project	Cost		
 New Construction ~ "Old" Construction * A copy of this form will be returned to you with your wage rates. You must send that copy to us with your bid tabulations once the contract has been awarded. 		PLEASE MAIL THIS REQUEST TO: Ohio Department of Commerce Division of Industrial Compliance Bureau of Wage & Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009	
Expected Date of Contract Aw	ard		PHONE: (614) 644-2239 FAX: (614) 728-8639
Projected Completion Date	· · · · · · · · · · · · · · · · · · ·		
Send Wage Rates to: (contractors are charged \$5.00 per county)		ODOC-DIC-W&H DATE STAMP (bid tab)	
~ Mail ~ Pick Up ~ Federal Express Account Nun	nber		
Name	Company	y or Public Authority	
Address ·		、	
City Zi	p Telephor	ne Number	energene server i 17 - 36 - 14 - 400 - 24 - 1 100 03 23 40 (27 - 14 - 14 - 14 - 14 - 14 - 14 - 14 - 1
* "Old" construction is reconstruction renovation, or painting.	ruction, enlargement, alt	eration, repair, remodeling,	,

BID TABULATION SHEET

Please attach a copy of your original dated and stamped "Request for Prevailing Wage Rates" with this Bid Tabulation. Please check mark which company was awarded the contract for the project.

(Note: DO NOT SEND UNTIL THE CONTRACT HAS BEEN OFFICIALLY AWARDED.)

Ohio Department of Commerce Division of Industrial Compliance, Bureau of Wage & Hour 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 (Phone) 614-644-2239, (Fax) 614-728-8639 www.com.ohio.gov

Contracting Public Authority:

Project Name:

Project #:

Estimate:

Contract Description: -- General -- HVAC -- Electrical -- Plumbing -- Asbestos -- Other:

Bid Date:

AWARDED TO (CHECK)	LIST OF THE BIDDING CONTRACTORS	TOTAL BID AMOUNT
	· · ·	
	· · · · · · · · · · · · · · · · · · ·	
	·	
· · · · ·		

SUBMITTED BY		
Title:		
FAX #:		
EMAIL:		
Date:		

INDUSTRIAL DEVELOPMENT BONDS

Bond Projects require th	e Public Authorit	y to keep the fol	lowing information on file
1. Type of Bonds issued:		Amount:	
		·	•
2. The total cost of the Project:	•		
3. The other type of financing involved	l in the project:		
· · ·		of Enoncing:	
4. Portion of the project being construct	cen with each type	or mancing.	
5. Are Prevailing Wage Rates being ap	plied to all constru	ction on the proje	ect: ~ Yes ~ No
6. The name of the political subdivisio	n who issued the b	onds:	
7. When were the bonds issued:			······
8. For what purpose were the bonds iss	sued:	-	
5. TO What purpose were the solids lat	juva.		
9. Who handles the funds once the bor	ids are sold:		
10. Who is the lending institution that p	urchased the bonds		
11. How are the funds to be paid out:			· · · · · · · · · · · · · · · · · · ·
_			•
12. When are the funds to be paid out:			
13. Who is the Bond Council:			
14. Who has been appointed as the Prev	vailing Coordinator	*	<u></u>
PWC Address:			
City:	OHIO	Zip:	Telephone #:
15. Obtain a copy of the inducement an	d other official doc		sumce of the bonds.
15. Obtain a copy of the inducement an	a dator Orrestar der	VIETICATO FOR DEC 10	



John R. Kasich . Governor

Jacqueline T. Williams Director

PREVAILING WAGE GUIDELINES FOR THE PUBLIC AUTHORITIES PW COORDINATOR

OHIO DEPARTMENT OF COMMERCE Division of Industrial Compliance and Labor Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239 Fax: 614-728-8639 <u>www.com.ohio.gov</u> TTY/TDD: 1-800-750-0750

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Prevailing Wage Coordinator Guidelines

For more detailed information please refer to Chapter 4115 of the Ohio Revised Code

- Α.
- Attend any pre-bid and/or pre-construction meetings.
 1. To explain the prevailing wage rate requirements.
 2. To explain the contractor's responsibilities.
- Set up and maintain files containing all contractors' and subcontractors' payroll reports, affidavits, and related documents. These files must be available for public inspection. Β.
- Obtain from each contractor a list of their subcontractors' names, addresses, telephone numbers. C. and email addresses.
- Require each contractor and subcontractor to provide their project dates. This will be used to D. make a time schedule for receiving their certified payrolls.
- Obtain from each contractor, the name and address of their Bonding\Surety Company. E.
- Obtain from out-of-state corporations, the name and address of their Statutory Agent. (This agent must be located in the State of Ohio and registered with the Ohio Secretary of State.) 1. Records made in connection with the public improvement must not be removed from the State of Ohio for the period of one year following the completion of the project. F.
- Supply contractors with any changes in the Prevailing Wage Rates. G.
- Within two weeks after the first pay, obtain a certified payroll report from each contractor. A H. certified report is one that is sworn to and signed by the contractor.
 - If the job will exceed four months, all reports after the initial report can be filed 1. once per month. (The initial report must be filed within two weeks.)
 - If the job will last less than four months, all reports are to be filed weekly after 2. the initial report.
 - Establish and follow procedures to monitor compliance by contractors and subcontractors. 1. Visit project to verify posting requirements and job classifications.

 - Review certified payroll reports to ensure they are submitted in a timely fashion and 2, complete with the following information for each employee:
 a) Name, current address, and their social security number or last 4 when permitted
 b) Classification (must be specific for laborers and operators, including level)
 c) Hours worked on the project

 - c) d)
 - Hourly rate

I.

- e) f)
- Fringe benefits, if applicable Total hours worked for the week (all jobs)
- g) Gross wages, all deductions, net pay Compare rates and fringes reported to rates in prevailing wage schedule. 3.
- Upon completion of the project and prior to the final payment, require an affidavit of compliance from each contractor and subcontractor. No public authority shall make final payment to any contractor or subcontractor unless the final affidavits have been filed by the respective contractor and subcontractor. (O.R.C. section 4115.07) J.
- Report any non-compliance to Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage & Hour Administration. The PW complaint form and instructions can be obtained on the website www.com.ohio.gov. Κ.

RECORD OF THE CERTIFIED PAYROLL REPORTS RECEIVED

Project:		Number:
Contractor:		Phone #:
		Email:
General Contractor:	Prime Contractor:	Subcontractor:
Date work commenced:	Completed:	Final Affidavit:
General Contractor: Date work commenced:		

Payroll	Payroll Date	Date Received		Payroll	Payroll Date	Date Received
1				33		
2				34		
3				35		
4				36	······	
5			1	37		
6				38		
7		,		39		· · · · · · · · · · · · · · · · · · ·
8				40		
9				41		
10			1	42		<u> </u>
11				43		
12				44		
13			4	45		
14				46		· · · · · · · · · · · · · · · · · · ·
15			4	47		
				48		
17				49		<u> </u>
18				50		
19				51		
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30				62	· · · · · · · · · · · · · · · · · · ·	
31			- F	63		
32				64	<u> </u>	

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the independent contractor?

EMPLOYEE VS. INDEPENDENT CONTRACTOR

INDEPENDENT CONTRACTOR

PREVAILING WAGE INVESTIGATION/EMPLOYEE INTERVIEW

Failure to cor	nplete this interview form may red	the out	r ability to re	cover b	ack wa	ges which may b	e owed to	o you.	
Project:						(Case #:		
Address:		c	ity:				County:		
Employee Name:						Last 4 digits	of the S	S#:	
Address:	· · · · · · · · · · · · · · · · · · ·	City:				State:			Zip:
Telephone #: (Home)	(Work)	Email				Best time to	be reac	hed:	
Another source by which we can con	ntact you. (Someone not living at yo	ur addr	ess):						·
Name:	Relationship:		<u>.</u>		Tele	phone #:			· · · · · · · · · · · · · · · · · · ·
Contractor's Name:					Tele	phone #:		N	999 - 29 <mark>9 - 200 -</mark>
Address:	Cit	y:			Stat	e:		Zip:	<u></u>
Date hired: Date	started on this project :		Approxim	ate ho	urs -	Straight time:		Overti	me:
Method of recording hours:	~ Time Card ~ Called	into o	ffice	Reco	rded i	oy: ~ Emp	loyee	~~	Foreman
Did you keep a personal reco	ord of your hours worked on	this p	roject? ~	Yes	- No				
Did anyone else keep a pers			lf yes,				<u>.</u>		
List your job classification(s):						Journeyman Apprentice - I		~ Help	er
List your specific job duties:	· .		List tools\	equipr	nenti	used:		<u>-</u> .	
Hourly rate of pay for this pro	ject:		Your regu	ılar rat	e of p	ay:			······
Fringe benefits paid by contra ~ Vacation - Amount ~ Other (list):	actor: ~ None ~ Hea ~ Holidays - Amour		urance	~ Life	e Insu	· · · · · · · · · · · · · · · · · · ·	ension ining		onus Profit Sharing
Did you work overtime? ~	Yes - No Were hour	s over	40 per we	ek pai	d at t	me and one h	alf?	~ Yes	~ No
When is your pay day?		1	Method of			· · · · · · · · · · · · · · · · · · ·			ect Deposit
List names of co-workers on	this project:				<u> </u>	·	· · · · ·		
Comments:			worked	within	each	ailed list of th classification rate sheet.	e dates, that ma	times y appl	and hours y to the work
SIGNATURE AND NOTARY									
Affiant is further informed that Sectio provides a penalty of a misdemeanor will be pursued of those persons who false statement whenthe statemen public" Swom to before me and subscribed i	r of the first degree and that prosec o "knowingly swear or affirm the trut It is sworn or affirmed before a nota	ution th of a	I hereby or belief. Signature Return to:			a true statement		st of my	knowledge and
in my presence this	_ day of 20 Notary	Public		Di Bu 66 Pie (6	vision (Jreau c 106 Tus 2900lds 14) 844	of Industrial Comp f Wage and Hour sing Road P.O. sburg, Ohio 43068	oliance & I Administr Box 400	ration	
میکند. میکند و میکند میکند میکند از میکند و میکند و میکند میکند و میکند میکند میکند میکند. میکند و میکند و میکند.							· · ·		
Signature of PW Coordinator:							Date:		

EMPLOYEE VS. INDEPENDENT CONTRACTOR-continued

-

NO CONTRACTOR				YES ++ INDEPENDENT CONTRACTOR		YES ↔ INDEPENDENT CONTRACTOR
Does the worker perform services personally rather than delegating them to others?	Does the employer set a specific time when the individual services are to be performed?	Does the employer furnish the tools and materials used by the worker performing services?	Is the employer assuming all the financial risk, rather than the worker making a significant financial investment in the job and having the opportunity to realize a profit or loss from the work?	Does the individual performing the services publicly advertise these services in for example, the newspaper or yellow pages ?	Does the Individual performing the services have a business license?	the individual perform der a tradename?
YES	YES	YES	YES	ON	ON	ON
⊅	Ĵ)	\$	ţ.	\$	\$
EMPLOYEE	EMPLOYEE	EMPLOYEE	EMPLOYEE	EMPLOYEE	EMPLOYEE	EMPLOYEE



John R. Kasich Governor

Jacqueline T. Williams Director

PREVAILING WAGE GUIDE

FOR

CONTRACTORS

(Revised January 2016)

OHIO DEPARTMENT OF COMMERCE

Division of Industrial Compliance and Labor Bureau of Wage and Hour Administration . 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239 Fax: 614-728-8639 www.com.ohio.gov TTY/FDD: 1-800-750-0750

The Ohio Department of Commerce is an Equal Opportunity Employer and Service Provider

PREVAILING WAGE CONTRACTOR RESPONSIBILITIES

This is a summary of prevailing wage contractors' responsibilities. For more detailed information please refer to Chapter 4115 of the Ohio Revised Code

General Information

Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$250,000 for new construction or \$75,000 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting.

Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$88,495 for new construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction or \$26,514 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting of a public improvement that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction.

- a) Thresholds are to be adjusted biennially by the Administrator of Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration
- Biennial adjustments to threshold levels are made according to the Construction Cost Index for Commercial Construction published by McGraw Hill's Engineering News Record.

Penalties for violation

Violators are to be assessed the wages owed, plus a penalty of 100% of the wages owed.

Intentional Violations

- If an intentional violation is determined to have occurred, the contractor is prohibited from contracting directly or indirectly with any public authority for the construction of a public improvement. Intentional violation means "a willful, knowing, or deliberate disregard for any provision" of the prevailing wage law and includes but is not limited to the following actions:
- Intentional failure to submit payroll reports as required or knowingly submitting false or erroneous reports.
- Intentional misclassification of employees for the purpose of reducing wages.
- Intentional misclassification of employees as independent contractors or as apprentices.
- Intentional failure to pay the prevailing wage.
- Intentional failure to comply with the allowable ratio of apprentices to skilled workers as required by the regulations established by Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration.
- Intentionally employing an officer, of a contractor or subcontractor, that is known to be prohibited from contracting, directly or indirectly, with a public authority.

Responsibilities

Α.

- Pay the prevailing rate of wages as shown in the wage rate schedules issued by the Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration, for the classification of work being performed.
 - 1. Wage rate schedules include all modifications, corrections, escalations, or reductions to wage rates issued for the project.
 - 2. Overtime must be paid at time and one-half the employee's base hourly rate. Fringe benefits are paid at straight time rate for all hours including overtime.
 - 3. Prevailing wages must be paid in full without any deduction for food, lodging,
 - transportation. use of tools, etc.; unless, the employee has voluntarily consented to these deductions in writing. The public authority and the Director of Ohio Department of

Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration - must approve these deductions as fair and reasonable. Consent and approval must be obtained before starting the project.

B. Use of Apprentices and Helpers cannot exceed the ratios permitted in the wage rate schedules.

- 1. Apprentices must be registered with the U.S. Department of Labor Bureau of Apprenticeship and Training.
- [•]2. Contractors must provide the Prevailing Wage Coordinator a copy of the Apprenticeship Agreement for each apprentice on the project.
- C. Keep full and accurate payroll records available for inspection by any authorized representative of the Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration or the contracting public authority, including the Prevailing Wage Coordinator. Records should include but are not limited to:

1. Time cards, time sheets, daily work records, etc.

- 2. Payroll ledger\journals and canceled checks\check register.
- 3. Fringe benefit records must include program, address, account number, & canceled checks.
- 4. Records made in connection with the public improvement must not be removed from the State for one year following the completion of the project.
- 5. Out-of-State Corporations must submit to the Ohio Secretary of State the full name and address of their Statutory Agent in Ohio.
- D. Prevailing Wage Rate Schedule **must** be posted on the job site where it is accessible to all employees.
- E. Prior to submitting the initial payroll report, supply the Prevailing Wage Coordinator with your project dates to schedule reporting of your payrolls.
- F. Supply the Prevailing Wage Coordinator a list of all subcontractors including the name, address, and telephone number for each.
 - 1. Contractors are responsible for their subcontractors' compliance with requirements of Chapter 4115 of the Ohio Revised Code.
- G. Before employees start work on the project, supply them with written notification of their job classification, prevailing wage rate, fringe benefit amounts, and the name of the Prevailing Wage Coordinator for the project. A copy of the completed signed notification should be submitted to Prevailing Wage Coordinator.
- H. Supply all subcontractors with the Prevailing Wage Rates and changes.
- I. Submit certified payrolls within two (2) weeks after the initial pay period. Payrolls must include the following information:
 - 1. Employees' names, addresses, and social security numbers.
 - (a) Corporate officers/owners/partners and any salaried personnel who do physical work on the project are considered employees. All rate and reporting requirements are applicable to these individuals.
 - 2. Employees' work classification.
 - (a) Be specific about the laborers and/or operators (Group)
 - (b) For all apprentices, show level/year and percent of journeyman's rate
 - 3. Hours worked on the project for each employee.
 - (a) The number of hours worked in each day and the total number of hours worked each week.
 - Hourly rate for each employee.

4.

(a) The minimum rate paid must be the wage rate for the appropriate classification. The Department's Wage Rate Schedule sets this rate.

(b) All overtime worked is to be paid at time and one-half for all hours worked more than forty (40) per week.

5. Where fringes are paid into a bona fide plan instead of cash, list each benefit and amount per hour paid to program for each employee.

- (a) When the amount contributed to the fringe benefit plan and the total number of hours worked by the employee on all projects for the year are documented, the hourly amount is calculated by dividing the total contribution of the employer by the total number of hours worked by the employee.
- (b) When the amount contributed to the fringe benefit is documented but not the total hours worked, the hourly amount is calculated by dividing the total yearly contribution by 2080.
- 6. Gross amount earned on all projects during the pay period.
- 7. Total deductions from employee's wages.
- 8. Net amount paid.

The reports shall be certified by the contractor, subcontractor, or duly appointed agent stating that the payroll is correct and complete; and that the wage rates shown are not less than those required by the O.R.C. 4115.

K.

Provide a Final Affidavit to the Prevailing Wage Coordinator upon the completion of the project.

PREVAILING WAGE NOTIFICATION to EMPLOYEE

5.05...the contractor or subcontractor shall furnish each employee <u>NOT covered by a collective bargaining agreement</u> written notification of the job classification to ch the employee is assigned, the prevailing wage determined to be applicable to that classification, separated into the hourly rate of pay and the fringe payments, and the nity of the prevailing wage coordinator appointed by the public authority. The contractor or subcontractor shall furnish the same notification to each affected employee ty time the job classification of the employee is changed.

oject Name:

-

Job Number:

ontractor:

oject Location:

Prevailing Wage Coordinator	Employee
blic Authority:	Name:
Ime of PWC:	Street:
reet:	City:
iy:	State/Zip:
ate/Zip:	Phone:
	Email:
ione:	Last 4 Digits of SS #:

u will be performing work on this project that falls under these classifications. You will be paid the appropriate rate for the performing,

Classification:	Prevailing Wage Rate Total Package:	Minus your fringe benefits *:	Your hourly base rate and overtime:
			7
			/
			1
			/
			1
			1

surly fringe benefits paid on your behalf by this company (Yearly amount the company pays divided by 2080):

Fringe	Amount	Fringe	Amount
alth Insurance		Vacation	
e Insurance		Holiday	
insion		Sick Pay	
her (specify)		Training	
her (Specify)		Total Hourly Fringes *	
ntractor's Signature:			Date:
nployee's Signature:			Date:

INSTRUCTIONS FOR PREPARING CERTIFIED PAYROLL REPORTS

General:

Contractors and subcontractors are required by law to submit certified payroll reports for work on projects covered by Ohio's Prevailing Wage Law. This form meets the reporting requirements established by Ohio Revised Code Chapter 4115. The use of this form is not mandatory; employers may submit their own forms provided that all of the required information is included. This form may be reproduced, or additional copies obtained from:

Ohio Department of Commerce Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, P.O. Box 4009 Reynoldsburg, Ohio 43068-9009 614-644-2239 www.com.ohio.gov

Certified Payroll Heading:

<u>Employer name and address</u>: Company's full name and address...Indicate if the company is a subcontractor. <u>Subcontractor</u>: Check and list the name of the General Contractor or Prime. <u>Project</u>: Name and location of the project, including county.

Contracting Public Authority: Name and address of the contracting public authority... (Owner of the project):

Week Ending: Month, day, and year for last day of reporting period.

Payroll # : Indicates first, second, third, etc. payroll filed by the company for the project.

Page indicator: number of pages included in the report.

Project Number: Determined by the public authority. ... If there is no number leave blank.

Payroll Information by column:

3.

4.

5.

7.

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1. <u>Buployee Name, Address and Social Security number</u>: This information must be provided for all employees that perform physical labor on the project. The Social Security number is required; the last four digits may be permitted by the public authority. Corporate officers, partners, and salaried employees are considered employees and must be paid the prevailing rate. Individual sole proprietors do not have to pay themselves prevailing rate but must report their hours on the project.

· 4.

- 2. <u>Work Class</u>: List classification of work actually performed by employee. If unsure of work classification, consult the Ohio Department of Commerce-Division of Industrial Compliance & Labor-Bureau of Wage and Hour Administration. Employees working more than one classification should have separate line entries for each classification. Indicate what year/level for Apprentices. Be specific when using laborer and operator classifications; for example, Backhoe Operator or Asphalt Laborer or by "Group".
 - Hours Worked. Day & Date: In the first row of column 3, enter days of the company's pay period for example; M T W TH F S S. The second row is for the date that corresponds with each day for the pay period. In the employee information section, enter the number of hours worked on the prevailing wage project and which day the hours were worked. Separate rows are labeled for (ST) straight time hours and (OT) overtime hours. All hours worked after 40, must be paid at the appropriate overtime rate.
 - Project Total Hours : Total the hours entered for pay period.
 - <u>Base Rate</u>: Enter actual rate per hour paid to the employee. The overtime hourly rate is time and one-half the base rate listed in the prevailing wage schedule plus fringe benefits at straight time rate. The prevailing wage schedule lists the base rate plus fringe benefit amounts. These amounts added together equal the total prevailing wage rate. Employers must pay this total amount in one of three ways.
 - 1) Total rate may be paid in entirety in the base rate to the employee; in which case, the cash designation will be checked for fringe benefits.
 - 2) Total rate may be paid as listed in prevailing wage rate schedule with total fringe amounts paid approved plans.
 - 3) Total rate may be paid with a combination of base rate and fringe payments to approved plans in amounts other than those listed in schedule.
- 6. <u>Project Gross</u>: Enter total gross wages earned on the project for straight time and overtime. Project hours "X" base rate should equal project gross.
 - <u>Princes</u>: if fringe benefits are paid in the hourly base rate, indicate this by marking the Cash space. If fringe benefits are paid to approved plans as listed in the prevailing wage rate schedule, mark the space Approved Plans. If fringe benefits are paid partially in the base rate and partially to approved plans, mark the space Cash & Approved Plans. List the hourly amount paid to approved plans for each fringe. If payments are not made on a per hour basis, calculate the hourly fringe credit by dividing the yearly employer contribution by the lesser of: hours actually worked in the year (these must be documented) or 2080. Fringe benefits include: Employer's share of health insurance, life insurance, retirement plan, bonus/profit sharing, sick pay, holiday pay, personal leave, vacation, and education/training programs. If unsure of a possible fringe benefit, contact the Ohio Department of Connterce-Division of Industrial Compliance & Labor-Bureau of Wage and Hour Administration.
- Total Hours All Jobs: Total all hours worked during the pay period including non-prevailing wage jobs.
 - Total Gross All Jobs: Gross amount earned in the pay period for all hours worked.
- 10. Self explanatory.
- 11. Self explanatory.

Certified Payroll Report

Report for: Company: ¹⁾		Check if Subcontractor ¹⁾ If Sub, GC/Prime Contractor Name:	Contract No:		Payroll No:	Vo:		
Address: City, State, Zip		Public Authority (Owner)-	Project Name & Location:	Location:	Week Ending:	nding:		
Phone No;					Sheet: ²⁾	- - -	' đ	
1. Employee Name, 2. Work Address, & SS# (Last 4 Class ³⁾ digits if namithari	9 6	3.Prevailing Wage Project 4.Total Hours Worked - Day & Date Hours	5.Base Rate	6.Project 7. Fringes:	l plans	Weekly Pa	Weekly Payroll Amount	
				Fringe Rate Your Company Pays Per Hour H&W Pens Vac Hot Other To	r Hour 8.Total Hrs for r Total all Jobs	9. Total Gross on All Jobs	10. Total Deductions	11. Net Pay on All Jobs
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 By signing below, I certify that: (1) I pay, rate for the class of work done; (3) the fringe defined in ORC Chapter 4115; and (5) appret Subcontractor to civil or criminal prosecution. 	ay, or supervit oge benetits h prentices are lon.	1) By signing below, I cartify that: (1) I pay, or supervise the payment of the employees shown above; (2) during the pay period reported on this form, all hours worked on this project have been paid at the appropriate prevailing wage defined in OFC Chapter 4115; and (5) the fringe benefits have been paid as Indicated above; (4) no rebates or deductions have been or will be made, directly from the total wages earned, other than permissable deductions as defined in OFC Chapter 4115; and (5) apprentices are registered with the U.S. Dept. of Labor, Bureau of Apprenticesthp and Training. I understand that the willful falsification of any of the above statements may subject the Contractor or Subcontractor to civil or oriminal prosecution.	 2) during the pay perio or deductions have to f Apprenticeship and T 	d reported on this form, all hours worked on the an or will be made, directly or indirectly from t raining. I understand that the willful falsificatio	is project have bee he total wages еал n of any of the abov	I paid at the approving the approximation of the	Driate prevallir missable dedu subject the Oc	ng wage clions as ontractor or
Type or Print Name and Title		Sign	Signature		-	Date		
11/14 jc				²⁾ Attach additional sheets as necessary.	³¹ Type in con	³¹ Type in continuous line, text will wrap.	will wrap.	
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Fill In My signature on this form signifies th Doto Fill In My signature on this form signifies th form, ell hours worked on this project have been paid al the ap rebates or doctacions have boan or will be made, directly or in rebates are pagistered with the U.S. Dopartment of subcontractor to civil or criminal progracution.	rm signifies that I pay, or aupervise the payment paid at the appropriate pravailing wages rate for i directly or indirectly from the totol wages astree Oopartment of Labor, Bureau of Apprenticeship a	al I pay, or aupervise the payment of the employees shown above. I am certifying: 1) Thei during the pay periad reported on this propriate provinging wages rate for the class of work done. 2) That the fringe benefits have been paid as indicated above. 3) That no directly from the totol wages aarned, other than permissable deductions as defined in the Ohio Revised Code Chapter 4115. Labor, Bureau of Apprenticeship and Training. The willful faisification of any of the above statements may aubject the contractor or tabor.	hai during the pay period reported on this ve been paid as indicated above. 3) That no ha Chio Revtaed Code Chapter 4115. we statements may subject the contractor or
Name and Title Complete		Signature , Sign	
Send cover letter stating what happened, with	ned, with a signed letter from the employee	nployee acknowledging that they were	acknowledging that they were underpaid, received payment,
check or transaction number.			

FINAL AFFIDAVIT OF COMPLIANCE PREVAILING WAGES

I,	do hereby certify
(Name of person signing affidavit)	(Title)
that the wages paid to all employees	s of :
	(Company name)
for all hours worked on project:	-
	(Project name)
	(Project location)
During the period from	toare in compliance with (Project Dates)
	apter 4115 of the Ohio Revised Code. I further certify that
no rebates or deductions have been o	or will be made, directly or indirectly, from any wages paid
in connection with this project, other	r than those provided by law
(Signature of Officer or Agent)	-275-7-5%.
(Signature of Officer or Agent)	(Print Name of Officer or Agent)
(Signature of Officer or Agent)	(Print Name of Officer or Agent)
(Signature of Officer or Agent)	(Print Name of Officer or Agent)

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Prevailing Wage Rate Skilled Crafts

Name of Union: Boilermaker Local 105

Change #: LCN02-2013fbLoc 105

Craft : Boilermaker Effective Date : 10/01/2013 Last Posted : 09/25/2013

	B	HR		Fringe Benefit 1			nents		Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Boilermaker	\$3.	5.26	\$7.07	\$13.28	\$0.89	\$0.00	\$3.00	\$0.55	\$0.00	\$0.00	\$60.05	\$77.68
Apprentice	Per	cent										
1st 6 months	70.03	\$24.69	\$7.07	\$11.30	\$0.89	\$0.00	\$2.10	\$0.55	\$0.00	\$0.00	\$46.60	\$58.95
2nd 6 months	75.02	\$26.45	\$7.07	\$11.30	\$0.89	\$0.00	\$2.25	\$0.55	\$0.00	\$0.00	\$48.51	\$61.74
3rd 6 months	80.00	\$28.21	\$7.07	\$11.30	\$0.89	\$0.00	\$2.40	\$0.55	\$0.00	\$0.00	\$50.42	\$64.52
4th 6 months	85.02	\$29.98	\$7.07	\$11.30	\$0.89	\$0.00	\$2.55	\$0.55	\$0.00	\$0.00	\$52.34	\$67.33
5th 6 months	87.52	\$30.86	\$7.07	\$13.28	\$0.89	\$0.00	\$2.63	\$0.55	\$0.00	\$0.00	\$55.28	\$70.71
6th 6 months	90.03	\$31.74	\$7.07	\$13.28	\$0.89	\$0.00	\$2.70	\$0.55	\$0.00	\$0.00	\$56.23	\$72.11
7th 6 months	92.50	\$32.62	\$7.07	\$13.28	\$0.89	\$0.00	\$2.78	\$0.55	\$0.00	\$0.00	\$57.19	\$73.49
8th 6 months	95.00	\$33.50	\$7.07	\$13.28	\$0.89	\$0.00	\$2.85	\$0.55	\$0.00	\$0.00	\$58.14	\$74.89

Special Calculation Note : Other is Supplemental Health and Welfare

Ratio :

5 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ATHENS, BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GREENE, GUERNSEY, HAMILTON, HIGHLAND, HOCKING, JACKSON, LAWRENCE, LICKING, MADISON, MEIGS, MIAMI, MONTGOMERY, MORGAN, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PREBLE, ROSS, SCIOTO, VINTON, WARREN

Special Jurisdictional Note :

Prevailing Wage Rate Skilled Crafts

Name of Union: Asbestos Heat & Frost Insulators Local 8

Change # : LCN02-2019fbAsbLoc8

Craft : Asbestos Worker Effective Date : 07/03/2019 Last Posted : 07/03/2019

	BI	HR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Asbestos Insulators	\$30.32		\$6.64	\$9.35	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$48.82	\$63.98
Apprentice	e Percent											
1st year	46.35	\$14.05	\$6.64	\$5.10	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$28.30	\$35.33
2nd year	53.59	\$16.25	\$6.64	\$6.65	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$32.05	\$40.17
3rd year	58.54	\$17.75	\$6.64	\$6.65	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$33.55	\$42.42
4th year	63.48	\$19.25	\$6.64	\$6.65	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$35.05	\$44.67

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeymen to 1 Apprentice 2 Journeymen to 2 Apprentice

3 Journeymen to 3 Apprentice

3 Journeymen to 1 Apprentice there After

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, BROWN, BUTLER*, CLERMONT, HAMILTON, HIGHLAND, WARREN*

Special Jurisdictional Note : In Butler County:townships of

Fairfield, Hanover, Liberty, Milford, Morgan, Oxford, Ripley, Ross, St. Clair, Union & Wayne. In Warren County: Townships of Deerfield, Hamilton, Harlan, Salem, Union & Washington

Details:

All work in connection with Asbestos Removal, Abatement, Encapsulation, Lead Abatement, Hazardous Materials and Fire Stopping which is performed by employees in the Mechanic or Apprentice Classification shall be covered under the terms of this Agreement.

Prevailing Wage Rate Skilled Crafts

Name of Union: Asbestos Local 50 Zone 1

Change # : LCN02-2019fbLoc50

Craft : Asbestos Worker Effective Date : 07/10/2019 Last Posted : 07/10/2019

	BI	IR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Asbestos Insulation Mechanic	\$32.53		\$7.20	\$7.24	\$0.44	\$0.00	\$2.50	\$0.15	\$0.00	\$0.00	\$50.06	\$66.33
Firestop Technician	\$32.53		\$7.20	\$7.24	\$0.44	\$0.00	\$2.50	\$0.15	\$0.00	\$0.00	\$50.06	\$66.33
Apprentice Percent												
1st year	52,50	\$17.08	\$6.96	\$0.00	\$0.40	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$24.59	\$33.13
2nd year	62.83	\$20.44	\$6.96	\$0.91	\$0.40	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$28.86	\$39.08
3rd year	72.20	\$23.49	\$6.96	\$1.81	\$0.40	\$0.00	\$0.30	\$0.15	\$0.00	\$0.00	\$33.11	\$44.85
4th year	82.53	\$26.85	\$6.96	\$1.81	\$0.40	\$0.00	\$0.30	\$0.15	\$0.00	\$0.00	\$36.47	\$49.89

Special Calculation Note : Other is Industry Fund.

Ratio :

4 Journeymen to 1 Apprentice Company Wide except no apprentice may work on the jobsite without a Mechanic ATHENS, AUGLAIZE, BUTLER*, CLINTON, CRAWFORD, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GUERNSEY, HARDIN, HOCKING,

Jurisdiction (* denotes special jurisdictional note) :

ATHENS, AUGLAIZE, BUTLER*, CLINTON, CRAWFORD, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GUERNSEY, HARDIN, HOCKING, KNOX, LICKING, LOGAN, MADISON, MARION, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, ROSS, SHELBY, UNION, VINTON, WARREN*

Special Jurisdictional Note : Township of Butler County-Townships of Lemon and Madison. Warren County-Township of Cleer Creek, Franklin, Massie, Turtle Creek and Wayne

Details :

Name of Union: Boilermaker Local 154

Change # : LCN01-2012kpLoc 154

Craft : Boilermaker Effective Date : 03/22/2012 Last Posted : 03/22/2012

	BI	HR		Fring	ge Bene	fit Payı	nents		Irrevo Fu		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classi	fication											
Boilermaker	\$36	5.17	\$8.57	\$11.28	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$62.56	\$80.65
Trainee 60%	\$23	3.25	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$41.95	\$53.57
Trainee 70%	\$27	7.13	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$45.83	\$59.40
Trainee 80%	\$31	1.00	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$49.70	\$65.20
Trainee 90%	\$34	4.88	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$53.58	\$71.02
Apprentice Registered After 11/01/2005	Per	cent										
1st 6 months	60.00	\$21.70	\$8.57	\$3.59	\$0.55	\$0,00	\$4.25	\$0.34	\$0.00	\$1.40	\$40.40	\$51.25
2nd 6 months	65.00	\$23.51	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$42.21	\$53.97
3rd 6 months	70.00	\$25.32	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$44.02	\$56.68
4th 6 months	75.00	\$27.13	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$45.83	\$59.39
5th 6 months	80.00	\$28.94	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$47.64	\$62.10
6th 6 months	85.00	\$30.74	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$49.44	\$64.82
7th 6 months	90.00	\$32.55	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$51.25	\$67.53
8th 6 months	.95.00	\$34.36	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$53.06	\$70.24

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

Jurisdiction (* denotes special jurisdictional note) :

PW Rate Skilled LCN01-2012kpLoc 154 Page

BUTLER, COLUMBIANA, FAYETTE, JEFFERSON, LAWRENCE, MERCER, WARREN, WASHINGTON

Special Jurisdictional Note :

5 Journeymen to 1 Apprentice

Details :

Work includes but not limited to: boiler making, acetylene burning, riveting, chipping, caulking, rigging, fittingup, grinding, reaming, impact machine operating, unloading, and handling of boilermaker's material and equipment. Boilermakers, Blacksmiths, Forgers, Iron Shipbuilders

Name of Union: Bricklayer Local 18

Change # : LCN01-2019fbLoc18

Craft : Bricklayer Effective Date : 06/05/2019 Last Posted : 06/05/2019

	B	HR		Frin	ge Bene	fit Payn	nents		Irrevo Fui	11	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification				**************************************							
Bricklayer	\$2	8,66	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.32	\$57.65
Stone Mason	\$2	8.66	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.32	\$57.65
Pointer Caulker Cleaner	\$2	8.66	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.32	\$57.65
Refractory Workers	\$2	9.66	\$8.75	\$5.38	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.31	\$59.14
Refractory Worker Hot Pay	\$3	1.66	\$8.75	\$5.38	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$46.31	\$62.14
Sawman	\$2	8.91	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.57	\$58.03
Layout Man	\$2	8.91	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.57	\$58.03
Free Standing Chimney	\$2	9.16	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.82	\$58.40
Apprentice	Per	rcent										
1st 6 months	60.00	\$17.20	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.86	\$40.45
2nd 6 months	65.00	\$18.63	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.29	\$42.60
3rd 6 months	70.00	\$20.06	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.72	\$44.75
4th 6 months	75.00	\$21.50	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.16	\$46.90
5th 6 months	80.00	\$22.93	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.59	\$49.05
6th 6 months	85.00	\$24.36	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.02	\$51.20
7th 6 months	90.00	\$25.79	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.45	\$53.35
8th 6 months	95.00	\$27.23	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.89	\$55.50

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6/6/2019

PW Rate Skilled LCN01-2019fbLoc18 Page

0/0/2019						1 11 110			101020010	age			
FINIS 1st	SON SHER 180 ays	45.00	\$12.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.90	\$19.35
H&W	Year V after onths	45,00	\$12.90	\$8.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21.65	\$28.10
2nd	Year	50.00	\$14.33	\$8.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23.08	\$30.25

Special Calculation Note : **In order to utilize a Pre-Apprentice, you must have 1 Registerd Apprentice in your employ.

Ratio :

1-2 Journeyman to 1 Apprentice 3-4 Journeyman to 2 Apprentice 5-6 Journeyman to 2 Apprentice 7-10 Journeyman to 3 Apprentice Jurisdiction (* denotes special jurisdictional note): BROWN, BUTLER, CLERMONT, HAMILTON, PREBLE*, WARREN

1 Apprentice permits 1 Mason Trainee

2 Apprentice permits 1 Mason Trainee

3 Apprenticepermits 2 Mason Trainees

4 Apprentice permits 2 Mason Trainees

For each additional 5 Journeyman to 1 Apprentice, for every 3 additional Apprentices, 1 Mason Finisher may be added

Special Jurisdictional Note : In Preble County the following townships are included: (Dixon, Gasper, Graits, Israel, Lanier and Somers)

Details :

MASON FINISHER: duties shall be to work in all aspects of Masonry construction taking direction from the employer and the Journeyman Bricklayer & Stone Mason's working on the job. Mason Finisher's may work on job site only when a registered apprentice is on job and the ratios in table above will strictly be enforced.

Refractory work is classified as working with any of the following materials: Acid brick, carbon black brick or carbon black block, firebrick grinding, plastics (with a gun) and any resinous cement.

Fifty cents (\$0.50) per hour above scale shall be paid to employees working on free standing industrial or institutional chimneys which are completely detached from any building structure.

Name of Union: Bricklayer Local 18 Tile Finisher

Change # : LCN01-2018fbLoc18

Craft : Bricklayer Effective Date : 09/01/2018 Last Posted : 08/15/2018

	B	HR.		Frin	ge Bene	fit Payr	nents		Irrevo Fu		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classific	cation											- JAMES - H -
Bricklayer Tile Marble Terrazzo Finisher	\$24	4.20	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.21	\$50.31
Terrazzo Base Grinder	\$24	4.70	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.71	\$51.06
Marble Sander Polisher	\$24	4.30	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.31	\$50.46
Apprentices	Per	cent										
1st 6 months 0-600 hrs	60.00	\$14.52	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28.53	\$35.79
2nd 6 months 601-1200 hrs	65.00	\$15.73	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.74	\$37.60
3rd 6 months 1201-1800 hrs	70.00	\$16.94	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.95	\$39.42
4th 6 months 1801-2400 hrs	75.00	\$18.15	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$32.16	\$41.23
5th 6 months 2401-3000 hrs	80.00	\$19.36	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.37	\$43.05
6th 6 months 3001-3600	90.00	\$21.78	\$8.61	\$4.92	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.79	\$46.68
1-30 Days Prior to Entering Apprenticeship	50.00	\$12.10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.10	\$18.15

Special Calculation Note : Classification title contains "Bricklayer" because contract originates within the Bricklayer Local.

Note that the classification description is clarified after the local union number at the top of the page. **In order to utilize a Pre-Apprentice, you must have 1 Registerd Apprentice in your employ.**

Ratio :

1 Journeyman to 1 Apprentice 5 Journeymen to 1 Apprentice 10 Journeymen to 2 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, BROWN, BUTLER, CLERMONT, GALLIA, HAMILTON, LAWRENCE, PREBLE*, SCIOTO, WARREN, WARREN* 15 Journeymen to 3 Apprentices20 Journeymen to 4 Apprentices25 Journeymen to 5 Apprentices

Special Jurisdictional Note : Warren in the townships of Dixon, Gasper, Isrsel, Somers & Gratis in Prebble County

Details :

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Name of Union: Bricklayer Local 18 Tile Mechanic

Change # : LCN01-2018fbLoc18

Craft : Bricklayer Effective Date : 09/01/2018 Last Posted : 08/15/2018

	B	HR		Frin	ge Bene	fit Payn	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Clas	sification											
Bricklayer Tile Terrazzo Marble Mason Mechanic	\$2	8.74	\$8.61	\$4.92	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.80	\$57.17
Marble Layout Work	\$2	9.24	\$8.61	\$4.92	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.30	\$57.92
Swing Scaffold Worker	\$2	9.74	\$8.61	\$4.92	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.80	\$58.67
Apprentice after 2 years (2400 hrs) as Apprentice Finisher												
5th/6 Months 0- 600 hrs.	70.00	\$20.12	\$8.61	\$4.92	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.18	\$44.24
6th/6 months 601-1200 hrs.	75.00	\$21.55	\$8.61	\$4.92	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.62	\$46.39
7th/6 months 1201-1800 hrs.	80.00	\$22.99	\$8.61	\$4.92	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.05	\$48.55
8th/6 months 1801-2400 hrs.	90.00	\$25.87	\$8.61	\$4.92	\$0.53	\$0.00		\$0.00	\$0.00	\$0.00	\$39.93	\$52.86

Special Calculation Note : Classification title contains "Bricklayer" because contract originates within the Bricklayer Local.

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Note that the classification description is clarified after the local union number at the top of the page.

Ratio :

Journeyman to 1 Apprentice
 Journeymen to 1 Apprentice
 Journeymen to 2 Apprentices
 Journeymen to 3 Apprentices
 Journeymen to 4 Apprentices
 Journeymen to 5 Apprentices

Jurisdiction (* denotes special jurisdictional note): ADAMS, BROWN, BUTLER, CLERMONT, GALLIA, HAMILTON, LAWRENCE, PREBLE*, SCIOTO, WARREN

Special Jurisdictional Note : In Preble County the Townships of Dixon, Israel, Gasper, Lanier, Somers and Gratis.

Details :

In order to utilize a Pre-Apprentice, you must have 1 Registerd Apprentice in your employ.

Name of Union: Carpenter Floorlayer SW District G

Change # : LCR01-2018fbLocSWDayton

Craft : Carpenter Effective Date : 10/10/2018 Last Posted : 10/10/2018

	Bl	-IR		Frin	ge Bene	fit Payr	nents		Irrevo Fui	11	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)	· · · · · · · · · · · · · · · · · · ·	
Class	ification										*****	
Carpenter Floorlayer	\$2:	5.16	\$7.11	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0,00	\$0.00	\$40.63	\$53.21
Apprentice	Per	cent										
1st 3 months	50.00	\$12.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.58	\$18.87
2nd 3 months	50.00	\$12.58	\$6.65	\$0.00	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$20.64	\$26.93
2nd 6 months	55.00	\$13.84	\$6.65	\$0.00	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$21.90	\$28.82
3rd 6 months	60.00	\$15.10	\$6.65	\$0.00	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$23.16	\$30.70
4th 6 months	65.00	\$16.35	\$6.65	\$0.00	\$0.29	\$0.00	\$ 1.0Ò	\$0.12	\$0.00	\$0.00	\$24.41	\$32.59
5th 6 months	70.00	\$17.61	\$6.65	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$32.62	\$41.43
6th 6 months	75.00	\$18.87	\$6.65	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$33.88	\$43.32
7th 6 months	80.00	\$20.13	\$6.65	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$35.14	\$45.20
8th 6 months	85.00	\$21.39	\$6.65	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$36.40	\$47.09

Special Calculation Note : Other for \$0.12 is for UBC National Fund.

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN

Special Jurisdictional Note :

Details:

Scope of work shall include, but not be limited to: receiving, unloading, handling, distribution and installation of all carpeting materials, carpet padding or matting materials and all resilient materials whether for use on walls,

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PW Rate Skilled LCR01-2018fbLocSWDayton Page

floors,counter, sink,table and all preparation work necessary in connection therewith, including sanding work. the installation of nonstructural under-layment and the work of removing, cleaning waxing of any of the above. Carpeting shall include any floor covering composed of either natural or synthetic fibers that are made in breadths to be sewed, fastened or directly glued to floors or over cushioning sound-proofing materials.Resilient Floors shall consist of and include the laying of all special designs of wood,wood block, wood composition, cork, linoleum, asphalt, mastic, plastic, rubber tile,whether nailed or glued.

Name of Union: Carpenter Millwright Local 1090 SW Zone I

Change # : LCN01-2018fbLoc1066

Craft : Carpenter Effective Date : 10/17/2018 Last Posted : 10/17/2018

	BI	ŧR		Frin	ge Bene	fit Payn	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Carpenter Millwright	\$30).48	\$7.17	\$6.95	\$0.44	\$0.00	\$6.36	\$0.25	\$0.00	\$0.00	\$51.65	\$66.89
Apprentice	Per	cent										
1st 6 months	60.00	\$18.29	\$7.17	\$4.27	\$0.44	\$0.00	\$3.82	\$0.25	\$0.00	\$0.00	\$34.24	\$43,38
2nd 6 months	65.00	\$19.81	\$7.17	\$4.61	\$0.44	\$0.00	\$4.13	\$0.25	\$0.00	\$0.00	\$36.41	\$46.32
3rd 6 months	70.00	\$21.34	\$7.17	\$4.94	\$0.44	\$0.00	\$4.45	\$0.25	\$0.00	\$0.00	\$38.59	\$49.25
4th 6 months	75.00	\$22.86	\$7.17	\$5.28	\$0.44	\$0.00	\$4.77	\$0.25	\$0.00	\$0.00	\$40.77	\$52.20
5th 6 months	80.00	\$24.38	\$7.17	\$5.61	\$0.44	\$0.00	\$5.09	\$0.25	\$0.00	\$0.00	\$42.94	\$55.14
6th 6 months	85.00	\$25.91	\$7.17	\$5.95	\$0.44	\$0.00	\$5.41	\$0.25	\$0.00	\$0.00	\$45.13	\$58.08
7th 6 months	90.00	\$27.43	\$7.17	\$6.28	\$0.44	\$0.00	\$5.72	\$0.25	\$0.00	\$0.00	\$47.29	\$61.01
8th 6 months	95.00	\$28.96	\$7.17	\$6.62	\$0.44	\$0.00	\$6.04	\$0.25	\$0.00	\$0.00	\$49.48	\$63.95

Special Calculation Note : Other (\$0.25) \$0.10 National Fund, \$0.10. Drug Safety Program \$0.10 and National Millwright Fund \$0.05

Ratio :

Jurisdiction (* denotes special jurisdictional note) : BROWN, BUTLER, CLERMONT, CLINTON,

HAMILTON, WARREN

3 Journeymen to 1 Apprentice

Special Jurisdictional Note :

Details :

Name of Union: Carpenter NE District Industrial Dock & Door

Change # : LCN01-2014fbCarpNEStatewide

Craft : Carpenter Effective Date : 03/05/2014 Last Posted : 03/05/2014

		IR				fit Payn	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	H&WPensionApp Tr.Vac.AnnuityOth						MISC (*)		
Cla	Classification											
Carpenter	er \$19.70		\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.90	\$35.75
Trainee												
1st Year	60.00	\$11.82	\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.02	\$23.93
2nd Year	80.20	\$15.80	\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$22.00	\$29.90

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeymen to 1 Trainee

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON; MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note : Industrial Dock and Door is the installation of overhead doors, roll up doors and dock leveling equipment

Details :

10/27/10 New Contract jc

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Name of Union: Carpenter & Pile Driver SW Zone 2

Change # : LCN01-2018fbLoc126

Craft : Carpenter Effective Date : 06/13/2018 Last Posted : 06/13/2018

	Bl	HR.		Frin	ge Bene	fit Payn	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Carpenter	\$2	6.47	\$7.07	\$6.95	\$0.40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	\$42.17	\$55.41
Pile Driver	\$2:	5.84	\$6.62	\$6.95	\$0.40	\$0.00	\$0.91	\$0.10	\$0.00	\$0.00	\$40.82	\$53.74
Apprentice	Per	cent										
1st 3 Months	60.00	\$15.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15.88	\$23.82
2nd 3 Months	60.00	\$15.88	\$7.07	\$0.00	\$0.40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	\$24.63	\$32.57
2rd 6 Months	60.00	\$15.88	\$7.07	\$0.00	\$0.40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	\$24.63	\$32.57
3rd 6 Months	65.00	\$17.21	\$7.07	\$0.00	\$0,40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	\$25.96	\$34.56
4th 6 Months	65.00	\$17.21	\$7.07	\$0.00	\$0.40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	\$25.96	\$34.56
5th 6 Months	70.00	\$18.53	\$7.07	\$6.95	\$0.40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	\$34.23	\$43.49
6th 6 Months	75.00	\$19.85	\$7.07	\$6.95	\$0.40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	\$35.55	\$45.48
7th 6 Months	80.00	\$21.18	\$7.07	\$6.95	\$0.40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	.\$36.88	\$47.46
8th 6 Months	85.00	\$22.50	\$7.07	\$6.95	\$0.40	\$0.00	\$1.13	\$0.15	\$0.00	\$0.00	\$38.20	\$49.45

Special Calculation Note : Other is for UBC National Fund.

Ratio :

1 Journeyman to 1 Apprentice

3 Journeyman to 1 Apprentice

5 Journeyman to 1 Apprentice

Special Jurisdictional Note :

Details:

Carpenter duties shall include but not limited to: Pile driving,

Jurisdiction (* denotes special jurisdictional note): BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN 1/2/2019

PW Rate Skilled LCN01-2018fbLoc126 Page

milling, fashioning, joining, assembling, erecting, fastening, or dismantling of all material of wood, plastic, metal, fiber, cork, and composition, and all other substitute materials: pile driving, cutting, fitting, and placing of lagging, and the handling, cleaning, erecting, installing, and dismantling of machinery, equipment, and erecting pre-engineered metal buildings.

Pile Drivers work but not limited to: unloading, assembling, erection, repairs, operation, signaling, dismantling, and reloading all equipment that is used for pile driving including pile butts. pile butts is defined as sheeting or scrap piling. Underwater work that may be required in connection with the installation of piling. The diver and his tender work as a team and shall arrive at their own financial arrangements with the contractor. Any configuration of wood, steel, concrete, or composite that is jetted, driven, or vibrated onto the ground by conventional pile driving equipment for the purpose of supporting a future load that may be permanent or temporary. Driving bracing, plumbing, cutting off and capping of all piling whether wood, metal, pipe piling or composite. loading, unloading, erecting, framing, dismantling, moving, and handling of pile driving equipment. piling used in the construction and repair of all wharves, docks, piers, trestles, caissons, cofferdams, and the erection of all sea walls and breakwaters. All underwater and marine work on bulkheads, wharves, docks, shipyards, caissons, piers, bridges, pipeline work, viaducts, marine cable and trestles, as well as salvage and reclamation work where divers are employed.

Rate shall include carpenters, acoustic, and ceiling installers, drywall installers, pile drivers, and floorlayers.

Name of Union: Carpenter & Pile Driver SW District HevHwy

Change # : LCN01-2018fbLoc126

Craft : Carpenter Effective Date : 06/13/2018 Last Posted : 06/13/2018

Craft : Ca	BH			Fring	ge Benef	it Paym	ents		Irrevoo Fun	11	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Carpenter	\$29	0,87	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$46.59	\$61.53
Pile Driver		9,34	\$6.63	\$6.95	\$0.40	\$0.00	\$1.97	\$0.10	\$0.00	\$0.00	\$45.39	\$60.06
Apprentice	Per	cent	1									
1st 6	60.00	\$17.92	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$34.64	\$43.60
Months 2nd 6 Months is	65.00	\$19.42	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$36.14	\$45.84
1st year 3rd 6	70.00	\$20.91	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$37.63	\$48.08
Months 4th 6 Months is 2 years	75.00	\$22.40	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$39.12	\$50.32
5th 6	80.00	\$23.90	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$40.62	\$52.56
Months 6th 6 Months is 3	85.00	\$25.39	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$42.11	\$54.80
years 7th 6	90.00	\$26.88	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	2 \$0.00	\$0.00	\$43.60	\$57.04
Months 8th 6 Months is 4 years	95.00	\$28.38	\$7.08	\$6.95	\$0.38	\$ \$0.00	\$2.19	\$0.12	2 \$0.00	\$0.00	\$45.10	\$59.28

Special Calculation Note : Other is UBC National Fund.

Ratio :

1 Journeymen to 1 Apprentice

An employer shall have the right to employ one (1) Apprentice for one (1) Journeyman Carpenter in its employment for the first Apprentice employed, and 1 (1) Apprentice for two (2) Journeyman Carpenter for additional Apprectices employed. Thereafter, every third additonal carpenter hired shall be

Jurisdiction (* denotes special jurisdictional note) :

BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN an apprentice, if available, and if practical for the type of work being performed.

Special Jurisdictional Note :

Details :

Highway Construction, Airport Construction, Heavy Construction but not limited to:(tunnels,subways,drainage projects,flood control,reservoirs). Railroad Construction,Sewer Waterworks & Utility Construction but not limited to: (storm sewers, waterlines, gaslines). Industrial & Building Site, Power Plant, Amusement Park, Athletic Stadium Site, Sewer and Water Plants.

When the Contractor furnishes the necessary underwater gear for the Diver, the Diver shall be paid one and one half (1&1/2) times the journeyman rate for the time spent in the water.

Name of Union: Cement Mason Bricklayer Local 97 HevHwy A

Change # : LCN01-2019fbHvyHwy

Craft : Bricklayer Effective Date : 06/01/2019 Last Posted : 05/29/2019

	BI	IR		Frin	ge Bene	fit Payn	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification		•									
Cement Mason Bricklayer Sewer Water Works A	\$29.34		\$9.25	\$6.41	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.45	\$60.12
Apprentice	Percent											
1st year	50.00	\$14.67	\$9.25	\$6.41	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.78	\$38.12
2nd year	70.00	\$20.54	\$9.25	\$6.41	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.65	\$46.92
3rd year	90.00	\$26.41	\$9.25	\$6.41	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.52	\$55.72

Special Calculation Note : NOT FOR BUILDING CONSTRUCTION.

Ratio :

3 Journeymen to 1 Apprentice 6 Journeymen to 2 Apprentice 9 Journeymen to 3 Apprentice 12 Journeymen to 4 Apprentice 15 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note :

Details :

(A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.

(B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control,Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Name of Union: Cement Mason Bricklayer Local 97 HevHwy B

Change # : LCN01-2019fbHvyHwy

Craft : Bricklayer Effective Date : 06/01/2019 Last Posted : 05/29/2019

		IR			ge Bene	fit Payn	nents		Irrevoo Fun		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Cement Mason Bricklayer Power Plants Tunnels Amusement Parks B	\$30	0.33	\$9.25 `	\$6.41	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$46.45	\$61.62
Apprentice	Per	cent										
1st year	50.00	\$15.16	\$9.25	\$6.41	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.28	\$38.87
2nd year	70.00	\$21.23	\$9.25	\$6.41	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.35	\$47.97
3rd year	90.00	\$27.30	\$9.25	\$6.41	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.42	\$57.07

Special Calculation Note : NOT FOR BUILDING CONSTRUCTION.

Ratio :

3 Journeymen to 1 Apprentice 6 Journeymen to 2 Apprentice

9 Journeymen to 2 Apprentice

12 Journeymen to 4 Apprentice

15 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT,

TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note :

Details :

(A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.

(B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control,Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Name of Union: Cement Mason Local 132 (Cincinnati)

Change # : LCN01-2019fbLoc132

Craft : Cement Effective Date : 06/05/2019 Last Posted : 06/05/2019

	B	HR		Fring	ge Bene	fit Payr	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	&W Pension App Vac. Annuity Other Tr.					LECET (*)	MISC (*)		
Class	sification											
Cement Mason	\$24	4.50	\$6.70	\$6.50	\$0.60	\$0.00	\$0.80	\$0.00	\$0.00	\$0.00	\$39.10	\$51.35
Apprentice	Per	cent										
lst yr	70.00	\$17.15	\$6.70	\$6.50	\$0.60	\$0.00	\$0.80	\$0.00	\$0.00	\$0.00	\$31.75	\$40.32
2nd yr	80.00	\$19.60	\$6.70	\$6.50	\$0.60	\$0.00	\$0.80	\$0.00	\$0.00	\$0.00	\$34.20	\$44.00
3rd yr	90.00	\$22.05	\$6.70	\$6.50	\$0,60	\$0.00	\$0.80	\$0.00	\$0.00	\$0.00	\$36.65	\$47.68

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeymen to 1 Apprentice 4 Journeymen to 2 Apprentice 7 Journeymen to 3 Apprentice 10 Journeymen to 4 Apprentice

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

Special Jurisdictional Note :

Details:

*Cement Masons working on silo & slip form work shall receive \$.50 per hour over Journeyman scale. *Cement Masons working on swinging scaffolds shall receive \$.50 per hour over Journeyman scale.

*Cement Masons working on high lifts from 20' and above shall receive \$.50 per hour over Journeyman scale.

Name of Union: Cement Mason Statewide HevHwy Exhibit A District II

Change # : LCN01-2019fbCementHevHwy

Craft : Cement Mason Effective Date : 06/26/2019 Last Posted : 06/26/2019

	В	HR		Frin	ge Bene	fit Payr	nents		Irrevo Fu		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Cement Mason	\$2	9.36	\$8.00	\$6.90	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$47.16	\$61.84
Apprentice	Per	rcent										
1st Year	70.00	\$20.55	\$8.00	\$6.90	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$38.35	\$48.63
2nd Year	80.00	\$23,49	\$8.00	\$6.90	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$41.29	\$53.03
3rd Year	90.00	\$26.42	\$8.00	\$6.90	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$44.22	\$57.44

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeymen to 1 Apprentice 2 to 1 thereafter

Jurisdiction (* denotes special jurisdictional note) :

BROWN, BUTLER, CLERMONT, COLUMBIANA, DEFIANCE, ERIE, HAMILTON, HIGHLAND, HURON, LORAIN, MAHONING, MEDINA, OTTAWA, PAULDING, PORTAGE, SANDUSKY, SENECA, STARK, SUMMIT, TRUMBULL, WARREN, WILLIAMS

Special Jurisdictional Note : (A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site, Heavy

Construction, Airport Construction Or Railroad Construction Work.

Details :

Name of Union: Cement Mason Statewide HevHwy Exhibit B District II

Change # : LCN01-2018fbCementHevHwy

Craft : Cement Mason Effective Date : 05/01/2018 Last Posted : 04/11/2018

Craft : Cer	nent IVia BH			Fring	ge Benef	it Paym	ents		Irrevocable Fund		Total PWR	Overtime Rate
- F			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification	ation										
Cement	\$29	9.73	\$7.65	\$6.50	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$46.78	\$61.64
Mason	L] 	JL	1L 1	<u> </u>][][1	1		
Apprentice	Per	cent			1 40.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$34,89	\$43.81
1st Year	60.00	\$17.84	\$7.65					1 \$0.00	\$0.00	\$0.00	\$39.35	\$50.50
2nd Year	75.00	\$22.30	\$7.65			\$0.00		\$0.00		\$0.00	\$43.81	\$57.19
3rd Year	90.00	\$26.76	\$7.65	\$6.50	\$0.65	\$0.00	\$2.25	1 20.00				ired at this

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeymen to 1 Apprentice 2 to 1 thereafter

Jurisdiction (* denotes special jurisdictional note) :

BROWN, BUTLER, CLERMONT, COLUMBIANA, DEFIANCE, ERIE, HAMILTON, HIGHLAND, HURON, LORAIN, MAHONING, MEDINA, OTTAWA, PAULDING, PORTAGE, SANDUSKY, SENECA, STARK, SUMMIT, TRUMBULL, WARREN, WILLIAMS

Special Jurisdictional Note : (B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control, Sewer Plant,

Work Pollution Control, Sewer Fland, Waste Plant, & Water Treatment Facilities, Construction.

Details :

Name of Union: Electrical Local 71 High Tension Pipe Type Cable

Change #: LCN01-2019fbLoc7

Craft : Lineman Effective Date : 04/24/2019 Last Posted : 04/24/2019

	BHR		Fring	ge Bene	fit Payr	nents		Irrevo Fui	1	Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classi	fication										
Electrical Lineman	\$43.48	\$6.00	\$1.30	\$0.43	\$0.00	\$10.00	\$0.35	\$0.00	\$0.00	\$61.56	\$83.30
Certified Lineman Welder	\$43.48	\$6.00	\$1.30	\$0.43	\$0.00	\$10.00	\$0.35	\$0.00	\$0.00	\$61.56	\$83.30
Certified Cable Splicer	\$43.48	\$6.00	\$1.30	\$0.43	\$0.00	\$10.00	\$0.35	\$0.00	\$0.00	\$61.56	\$83.30
Operator A	\$39.02	\$6.00	\$1.17	\$0.39	\$0.00	\$8.97	\$0.35	\$0.00	\$0.00	\$55.90	\$75.41
Operator B	\$34.60	\$6.00	\$1.04	\$0.35	\$0,00	\$7.96	\$0.35	\$0.00	\$0.00	\$50.30	\$67.60
Operator C	\$27.93	\$6.00	\$0,84	\$0.28	\$0.00	\$6.42	\$0.35	\$0.00	\$0.00	\$41.82	\$55.79
Groundman 0-12 months Exp	\$21.74	\$6.00	\$0.65	\$0.22	\$0.00	\$5.00	\$0.35	\$0.00	\$0.00	\$33.96	\$44.83
Groundman 0-12 months Exp w/CDL	\$23.91	\$6.00	\$0.72	\$0.24	\$0.00	\$5.50	\$0.35	\$0.00	\$0.00	\$36.72	\$48.68
Groundman 1 yr or more	\$23.91	\$6.00	\$0.72	\$0.24	\$0.00	\$5.50	\$0.35	\$0.00	\$0.00	\$36.72	\$48.68
Groundman 1 yr or more w/CDL	\$28.26	\$6.00	\$0.85	\$0.28	\$0.00	\$6.50	\$0.35	\$0.00	\$0.00	\$42.24	\$56.37
Equipment Mechanic A	\$34,60	\$6.00	\$1.04	\$0.35	\$0.00	\$7.96	\$0.35	\$0.00	\$0.00	\$50.30	\$67.60
Equipment Mechanic B	\$31.26	\$6.00	\$0.94	\$0.31	\$0.00	\$7.19	\$0.35	\$0.00	\$0.00	\$46.05	\$61.68
Equipment Mechanic C	\$27.93	\$6.00	\$0.84	\$0.28	\$0.00	\$6.42	\$0.35	\$0.00	\$0.00	\$41.82	\$55.79
X-Ray Technician	\$43.48	\$6.00	\$1.30	\$0.43	\$0.00	\$10.00	\$0.35	\$0.00	\$0.00	\$61.56	\$83.30

https://wagehour.com.ohio.gov/w3/Webwh.nsf/\$docUniqIDAII/852565B80070693285257745004D91C8?opendocument

Apprentice	Per	cent										
1st 1000 hrs	60.00	\$26.09	\$6.00	\$0.78	\$0.26	\$0.00	\$6.00	\$0.35	\$0.00	\$0.00	\$39.48	\$52.52
2nd 1000 hrs	65.00	\$28.26	\$6.00	\$0.85	\$0.28	\$0.00	\$6.50	\$0.35	\$0.00	\$0.00	\$42.24	\$56.37
3rd 1000 hrs	70.00	\$30.44	\$6.00	\$0.91	\$0.30	\$0.00	\$7.00	\$0.35	\$0.00	\$0.00	\$45.00	\$60.21
4th 1000 hrs	75.00 '	\$32.61	\$6.00	\$0.98	\$0.33	\$0.00	\$7.50	\$0.35	\$0.00	\$0.00	\$47.77	\$64.07
5th 1000 hrs	80.00	\$34.78	\$6.00	\$1.04	\$0.35	\$0.00	\$8.00	\$0.35	\$0.00	\$0.00	\$50.52	\$67.92
6th 1000 hrs	85.00	\$36.96	\$6.00	\$1.11	\$0.37	\$0.00	\$8.50	\$0.35	\$0.00	\$0.00	\$53.29	\$71.77
7th 1000 hrs	90.00	\$39.13	\$6.00	\$1,17	\$0.39	\$0.00	\$9.00	\$0.35	\$0.00	\$0.00	\$56.04	\$75.61

Special Calculation Note : Other is Health Retirement Account

Operator "A"

John Henry Rock Drill, D-6 (or equivalent) and above, Trackhoe Digger, (320 Track excavator), Cranes (greater then 25 tons and less than 45 tons).

Operator "B"

Cranes (greater than 6 tons and up to 25 tons), Backhoes, Road Tractor, Dozer up to D-5, Pressure Digger- wheeled or tracked, all Tension wire Stringing equipment.

Operator "C"

Trench, Backhoe, Riding type vibratory Compactor, Ground Rod Driver, Boom Truck (6 ton & below), Skid Steer Loaders, Material Handler.

*All Operators of cranes 45 ton or larger shall be paid the journeyman rate of pay. \$0.30 is for Health Retirement Account.

Jurisdiction (* denotes special jurisdictional Ratio: note): ADAMS, ASHLAND, ASHTABULA, ATHENS, 1 Journeyman to 1 Apprentice AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL,

PW Rate Skilled LCN01-2019fbLoc7 Page

TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note :

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Details :

Heli - Arc Welding will be paid \$.30 above Journeyman rate. Additional compensation of 10% over the Journeyman Lineman and Journeyman Technician for performing work on structures outside of buildings such as water towers, smoke stacks, radio and television towers, more than 75' above the ground.

Name of Union: Electrical Local 71 Outside Cincinnati

Change # : LCN01-2019fbLoc71Cincinnati

Craft : Lineman Effective Date : 04/24/2019 Last Posted : 04/24/2019

	BHR		Frin _f	ge Bene	fit Payr	nents		Irrevo Fur	and PWR	Overtime Rate	
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classi	fication										
Electrical Lineman	\$38.27	\$6.00	\$1.15	\$0.38	\$0.00	\$6.89	\$0.06	\$0.00	\$0.00	\$52.75	\$71.89
Traffic Signal & Lighting Journeyman	\$36.81	\$6.00	\$1.10	\$0.37	\$0.00	\$6.63	\$0.06	\$0.00	\$0.00	\$50.97	\$69.37
Equipment Operator	\$33.62	\$6.00	\$1.01	\$0.34	\$0.00	\$6.05	\$0.06	\$0.00	\$0.00	\$47.08	\$63.89
Groundman 0-12 months (W/O CDL)	\$20.39	\$6.00	\$0.61	\$0.20	\$0.00	\$3.67	\$0.06	\$0.00	\$0.00	\$30.93	\$41.13
Groundman 0-21 Months (W/CDL)	\$22.27	\$6.00	\$0.67	\$0.22	\$0.00	\$4.01	\$0.06	\$0.00	\$0.00	\$33.23	\$44.37
Groundman 1 Year or More (W/CDL)	\$24.17	\$6.00	\$0.73	\$0.24	\$0.00	\$4.35	\$0.06	\$0.00	\$0.00	\$35.55	\$47.64
Traffic Signal Apprentices											
1st 1,000 hours	\$22.09	\$6.00	\$0.66	\$0.22	\$0.00	\$3.98	\$0,06	\$0.00	\$0.00	\$33.01	\$44.05
2nd 1,000 hours	\$23.93	\$6.00	\$0.72	\$0.24	\$0.00	\$4.31	\$0.06	\$0.00	\$0.00	\$35.26	\$47.23
3rd 1,000 hours	\$25.77	\$6.00	\$0.77	\$0.26	\$0.00	\$4.64	\$0.06	\$0.00	\$0.00	\$37.50	\$50.39
4th 1,000 hours	\$27.61	\$6.00	\$0.83	\$0.28	\$0.00	\$4.97	\$0.06	\$0.00	\$0.00	\$39.75	\$53.56
5th 1,000 hours	\$29.45	\$6.00	\$0.88	\$0.29	\$0.00	\$5.30	\$0.06	\$0.00	\$0.00	\$41.98	\$56.71
6th 1,000 hours	\$33.13	\$6.00	\$0.99	\$0.33	\$0.00	\$5.96	\$0.06	\$0.00	\$0.00	\$46.47	\$63.04

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Apprentice Lineman	Per	cent										
1st 1,000 Hours	60.00	\$22.96	\$6.00	\$0.69	\$0.23	\$0.00	\$4.13	\$0.06	\$0.00	\$0.00	\$34.07	\$45.55
2nd 1,000 Hours	65.00	\$24.88	\$6.00	\$0.75	\$0.25	\$0.00	\$4.48	\$0.06	\$0.00	\$0.00	\$36.42	\$48.85
3rd 1,000 Hours	70.00	\$26.79	\$6.00	\$0.80	\$0.27	\$0.00	\$4.82	\$0.06	\$0.00	\$0.00	\$38.74	\$52.13
4th 1,000 Hours	75.00	\$28.70	\$6.00	\$0.86	\$0.29	\$0.00	\$5.17	\$0.06	\$0.00	\$0.00	\$41.08	\$55.43
5th 1,000 Hours	80.00	\$30.62	\$6.00	\$0.92	\$0.31	\$0.00	\$5.51	\$0.06	\$0.00	\$0.00	\$43.42	\$58.72
6th 1,000 Hours	85.00	\$32.53	\$6.00	\$0.98	\$0.33	\$0.00	\$5.86	\$0.06	\$0.00	\$0.00	\$45.76	\$62.02
7th 1,000 Hours	90.00	\$34.44	\$6.00	\$1.03	\$0.34	\$0.00	\$6.20	\$0.06	\$0.00	\$0.00	\$48.07	\$65.29

Special Calculation Note : Other is Safety & Education Fund.

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note): BROWN, BUTLER, CLERMONT, HAMILTON, WARREN

Special Jurisdictional Note :

Details :

A groundman when directed shall assist a Journeyman in the performance of his/her work on the ground, including the use of hand tools. A Groundman under no circumstances shall climb poles, towers, ladders, or work from an elevated platform or bucket truck.

No more than three (3) Groundmen shall work alone. Jobs with more that three Groundmen shall be supervised by a Groundcrew Foreman, Journeyman Lineman, Journeyman Traffic Signal Technician or an Equipment Operator.

Scope of Work: installation and maintenance of highway and street lighting, highway and street sign lighting, electronic message boards and traffic control systems, camera systems, traffic signal work, substation and line construction including overhead and underground projects for private and industrial work as in accordance with the IBEW Constitution. This Agreement includes the operation of all tools and equipment necessary for the installation of the above projects.

Name of Union: Electrical Local 71 Outside Utility Power

Change #: LCN01-2019fbLoc7

Craft : Lineman Effective Date : 04/24/2019 Last Posted : 04/24/2019

	BHR		Fring	ge Bene	fit Payr	nents		Irrevo Fui		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classifi	cation										
Electrical Lineman	\$41.22	\$6.00	\$1.24	\$0.41	\$0.00	\$9.48	\$0.35	\$0.00	\$0.00	\$58.70	\$79.31
Substation Technician	\$41.22	\$6.00	\$1.24	\$0.41	\$0.00	\$9.48	\$0.35	\$0.00	\$0.00	\$58.70	\$79.31
Cable Splicer	\$43.14	\$6.00	\$1.29	\$0.43	\$0.00	\$9.92	\$0.35	\$0.00	\$0.00	\$61.13	\$82.70
Operator A	\$37.00	\$6.00	\$1.11	\$0.37	\$0.00	\$8.51	\$0.35	\$0.00	\$0.00	\$53.34	\$71.84
Operator B	\$32.78	\$6.00	\$0.98	\$0.33	\$0.00	\$7.54	\$0.35	\$0.00	\$0.00	\$47.98	\$64.37
Operator C	\$26.44	\$6.00	\$0.79	\$0.26	\$0.00	\$6.08	\$0.35	\$0.00	\$0.00	\$39.92	\$53.14
Groundman 0-12 months Exp	\$20.61	\$6.00	\$0.62	\$0.21	\$0.00	\$4.74	\$0.35	\$0.00	\$0.00	\$32.53	\$42.84
Groundman 0-12 months Exp w/CDL	\$22.67	\$6.00	\$0.68	\$0.23	\$0.00	\$5.21	\$0.35	\$0.00	\$0.00	\$35.14	\$46.48
Groundman 1 yr or more	\$22.67	\$6.00	\$0.68	\$0.23	\$0.00	\$5.21	\$0.35	\$0.00	\$0.00	\$35.14	\$46.48
Groundman 1 yr or more w/CDL	\$26.80	\$6.00	\$0.80	\$0.27	\$0.00	\$6.16	\$0.35	\$0.00	\$0.00	\$40.38	\$53.78
Equipment Mechanic A	\$32.78	\$6.00	\$0.98	\$0.33	\$0.00	\$7.54	\$0.35	\$0.00	\$0.00	\$47.98	\$64.37
Equipment Mechanic B	\$29.62	\$6.00	\$0.89	\$0.30	\$0.00	\$6.81	\$0.35	\$0.00	\$0.00	\$43.97	\$58.78
Equipment Mechanic C	\$26.44	\$6.00	\$0.79	\$0.26	\$0.00	\$6.08	\$0.35	\$0.00	\$0.00	\$39.92	\$53.14
Line Truck w/uuger	\$29.17	\$6.00	\$0.88	\$0.29	\$0.00	\$6.71	\$0.35	\$0.00	\$0.00	\$43.40	\$57.99
Apprentice	Percent										

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lst 1000 hrs	60.00	\$24.73	\$6.00	\$0.74	\$0.25	\$0.00	\$5.69	\$0.35	\$0.00	\$0.00	\$37.76	\$50.13
2nd 1000 hrs	65.00	\$26.79	\$6.00	\$0.80	\$0.27	\$0.00	\$6.16	\$0.35	\$0.00	\$0.00	\$40.37	\$53.77
3rd 1000 hrs	70.00	\$28.85	\$6.00	\$0.87	\$0.29	\$0.00	\$6.64	\$0.35	\$0.00	\$0.00	\$43.00	\$57.43
4th 1000 hrs	75.00	\$30.91	\$6.00	\$0.93	\$0.31	\$0.00	\$7.11	\$0.35	\$0.00	\$0.00	\$45.62	\$61.07
5th 1000 hrs	80.00	\$32.98	\$6.00	\$0.99	\$0.33	\$0.00	\$7.59	\$0.35	\$0.00	\$0.00	\$48.24	\$64.72
6th 1000 hrs	85.00	\$35.04	\$6.00	\$1.05	\$0.35	\$0.00	\$8.06	\$0.35	\$0.00	\$0.00	\$50.85	\$68.37
7th 1000 hrs	90.00	\$37.10	\$6.00	\$1.11	\$0.37	\$0.00	\$8.53	\$0.35	\$0.00	\$0.00	\$53.46	\$72.01

Special Calculation Note : Other is Health Retirement Account

Operator "A"

John Henry Rock Drill, D-6 (or equivalent) and above, Trackhoe Digger, (320 Track excavator), Cranes (greater then 25 tons and less than 45 tons).

Operator "B"

Cranes (greater than 6 tons and up to 25 tons), Backhoes, Road Tractor, Dozer up to D-5, Pressure Digger- wheeled or tracked, all Tension wire Stringing equipment.

Operator "C"

Trench, Backhoe, Riding type vibratory Compactor, Ground Rod Driver, Boom Truck (6 ton & below), Skid Steer Loaders, Material Handler.

Ratio :

(1) Journeyman Lineman to (1) Apprentice

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note : 0.30 is for Health Retirement Account.

Details :

Heli - Arc Welding will be paid \$.30 above Journeyman rate. Additional compensation of 10% over the Journeyman Lineman and Journeyman Technician for performing work on structures outside of buildings such

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as water towers, smoke stacks, radio and television towers, more than 75' above the ground.

MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note :

Cable Splicer: Inspect and test lines or cables, analyze results, and evaluate transmission characteristics. Cover conductors with insulation or seal splices with moisture-proof covering. Install, splice, test, and repair cables using tools or mechanical equipment. This will include the splicing of fiber.

Journeyman Technician I: Must know all aspects of telephone and cable work. This is to include aerial, underground, and manhole work. Must know how to climb and run bucket. Must have all the tools required to perform these tasks. Must be able to be responsible for the safety of the crew at all times. Must also have CDL license and have at least 5 years experience.

Installer/Repairman: Perform tasks of repairing, installing, and testing phone and CATV services.

Technician II: Have at least three years of telephone and CATV experience. Must have the knowledge of underground, aerial, and manhole work. Must be able to climb and operate bucket. Must have CDL. Must have all tools needed to perform these tasks.

Equipment Operator I: Able to operate a digger derrick or bucket truck. Have at least 5 years of experience and must have a valid CDL license.

Equipment Operator II: Able to operate a digger derrick or bucket truck. Have at least 3 years of experience and must have a valid CDL license.

Groundman W/CDL: Must have a valid CDL license and be able to perform tasks such as: climbing poles, pulling downguys, making up material, and getting appropriate tools for the job. Must have at least 5 year's experience.

Groundman: Perform tasks such as: climbing poles, pulling downguys, making up material, and getting appropriate tools for the job. Experience 0-5 years.

Name of Union: Elevator Local 11

Change # : LCN01-2019fbLoc11

Craft : Elevator Effective Date : 01/09/2019 Last Posted : 01/09/2019

		BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
ļ	ification											
Elevator Mechanic	\$4	5.73	\$15.58	\$9.96	\$0.62	\$3.66	\$7.55	\$1.46	\$0.00	\$0.00	\$84.56	\$107.42
Probationary Apprentice	50.00	\$22.86	\$0.00	\$0.00	\$0.00	\$1.37	\$0.00	\$0.73	\$0.00	\$0.00	\$24.96	\$36.40
1st year	55.00	\$25.15	\$15.58	\$9.96	\$0.62	\$1.51	\$7.55	\$0.80	\$0.00	\$0.00	\$61.17	\$73.75
2nd year	65.00	\$29.72	\$15.58	\$9.96	\$0.62	\$1.78	\$7.55	\$0.95	\$0.00	\$0.00	\$66.16	\$81.03
3rd year	70.00	\$32.01	\$15.58	\$9.96	\$0.62	\$1.92	\$7.55	\$1.02	\$0.00	\$0.00	\$68.66	\$84.67
4th year	80.00	\$36.58	\$15.58	\$9.96	\$0.62	\$2.19	\$7.55	\$1.17	\$0.00	\$0.00	\$73.65	\$91.95
Helper	70.00	\$32.01	\$15.58	\$9.96	\$0.62	\$1.92	\$7.55	\$1.02	\$0.00	\$0.00	\$68.66	\$84.67
Assistant Mechanic	80.00	\$36.58	\$15.58	\$9.96	\$0.62	\$2.19	\$7.55	\$1.17	\$0.00	\$0.00	\$73.65	\$91.95

Special Calculation Note : Other is Holiday Pay. Vacation calcuated at 6%.

Ratio :

The total number of Helpers & Apprentices employed shall not exceed the number of Mechanics on any one job, except on jobs where (2) teams or more are working, (1) extra Helper or Apprentice may be employed for the first (2) teams and an extra Helper or Apprentice for each additional (3) teams.

1 Journeymen to 1 Apprentice

2 Journeymen to 5 Apprentice

3 Journeymen to 6 Apprentice

Special Jurisdictional Note:

Details :

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, BROWN, BUTLER, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, HIGHLAND, MIAMI, MONTGOMERY, PREBLE, SCIOTO, SHELBY, WARREN

Name of Union: Glazier Local 387

Change # : LCN01-2019fbLoc387

Craft : Glazier Effective Date : 01/30/2019 Last Posted : 01/30/2019

	BI	ĦR		Frin	ge Bene	fit Payn	nents		Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Glazier	\$20	5.73	\$5.47	\$9.00	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.45	\$54.82
Apprentice	Per	cent										
1st 6 months	56.10	\$15.00	\$5.47	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20.72	\$28.21
2nd 6 months	65.00	\$17.37	\$5.47	\$5.09	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28.18	\$36.87
3rd 6 months	70.00	\$18.71	\$5.47	\$5.61	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.04	\$39.40
4th 6 months	75.00	\$20.05	\$5.47	\$5.75	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.52	\$41.54
5th 6 months	80.00	\$21.38	\$5.47	\$6.33	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.43	\$44.13
6th 6 months	85.00	\$22.72	\$5.47	\$6.47	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.91	\$46.27
7th 6 months	90.00	\$24.06	\$5.47	\$6.99	\$0.25	\$0.00	\$0.00	\$0,00	\$0.00	\$0.00	\$36.77	\$48.80
8th 6 months	95.00	\$25.39	\$5.47	\$7.58	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.69	\$51.39

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio:

Jurisdiction (* denotes special jurisdictional note):

Each employer may employ and train Apprentices in the ADAMS, BROWN, BUTLER, CHAMPAIGN, following ratio to journey workers employed: 1 apprentice per 3 Journeymen

CLARK, CLERMONT, CLINTON, DARKE, FAYETTE*, GREENE, HAMILTON, HIGHLAND, MIAMI, MONTGOMERY, PREBLE, SHELBY*, WARREN

Special Jurisdictional Note : Fayette County: Eastern portion of route #41 being the dividing line between locals 372 and 387. Local 387 has jurisdiction of projects built on property which borders route #41 East. Shelby County: Southern portion of routes #47 & 29.

Details:

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Name of Union: Electrical Local 71 Voice Data Video Outside

Change # : LCR01-2017fbLoc71VDV

Craft : Voice Data Video Effective Date : 10/18/2017 Last Posted : 10/18/2017

	BHR		Frit	ige Bene	fit Paym	ients		Irrevo Fui	1	Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification										
Electrical Installer Technician I	\$23.46	\$5.50	\$0.70	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$29.96	\$41.69
Installer Technician II	\$22.37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Equipment Operator I	\$22,37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Equipment Operator II	\$18.43	\$5.50	\$0.55	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$24.78	\$33.99
Installer /Repair Outside	\$22.37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Ground Driver W/CDL	\$15.83	\$5.50	\$0.47	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$22.10	\$30.01
Groundman	\$13.24	\$5.50	\$0.40	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$19.44	\$26.06
Cable Splicer	\$23.46	\$5.50	\$0.70	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$29.96	\$41.69

Special Calculation Note :

Ratio:

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE,

Name of Union: Labor HevHwy 3

Change # : LCN01-2019fbLocalHevHwy3

Craft : Laborer Group 1 Effective Date : 05/23/2019 Last Posted : 05/23/2019

	BH	IR		Fring	ge Bene	fit Payr	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Laborer Group 1	\$31	.62	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$42.87	\$58.68
Group 2	\$31	.79	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$43.04	\$58.94
Group 3	\$32	.12	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$43.37	\$59.43
Group 4	\$32	.57	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$43.82	\$60.11
Watch Person	\$24	.35	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$35.60	\$47.78
Apprentice	Perc	cent										
0-1000 hrs	60.00	\$18.97	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$30.22	\$39.71
1001-2000 hrs	70.00	. \$22.13	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$33.38	\$44.45
2001-3000 hrs	80.00	\$25.30	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$36.55	\$49.19
3001-4000 hrs	90.00	\$28.46	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.71	\$53.94
More than 4000 hrs	100.00	\$31.62	\$7,00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$42.87	\$58.68

Special Calculation Note : Watchmen have no Apprentices. Tunnel Laborer rate with air-pressurized add \$1.00 to the above wage rate.

Ratio :

1 Journeymen to 1 Apprentice

3 Journeymen to 1 Apprentice thereafter

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN,

MORROW, MUSKINGUM, NOBLE, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS, SCIOTO, SENECA, SHELBY, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WYANDOT

Special Jurisdictional Note : Hod Carriers and Common Laborers - Heavy, Highway, Sewer, Waterworks, Utility, Airport, Railroad, Industrial and Building Site, Sewer Plant, Waste Water Treatment Facilities Construction

Details :

Group 1

Laborer (Construction); Plant Laborer or Yardman, Right-of-way Laborer, Landscape Laborer, Highway Lighting Worker, Signalization Worker, (Swimming) Pool Construction Laborer, Utility Man, *Bridge Man, Handyman, Joint Setter, Flagperson, Carpenter Helper, Waterproofing Laborer, Slurry Seal, Seal Coating, Surface Treatment or Road Mix Laborer, Riprap Laborer & Grouter, Asphalt Laborer, Dump Man (batch trucks), Guardrail & Fence Installer, Mesh Handler & Placer, Concrete Curing Applicator, Scaffold Erector, Sign Installer, Hazardous Waste (level D), Diver Helper, Zone Person and Traffic Control.

*Bridge Man will perfomr work as per the October 31, 1949, memorandum on concrete forms, byand between the United Brotherhood of Caprpenters and Joiners of Americ and the Laborers' International Union of North America, which states in; "the moving, cleaning, oiling and carrying to the next point of erection, and the stripping of forms which are not to be re-used, and forms on all flat arch work shall be done by members of the Laborers' International Union of North America."

Group 2

Asphalt Raker, Screwman or Paver, Concrete Puddler, Kettle Man (pipeline), All Machine-Driven Tools (Gas, Electric, Air), Mason Tender, Brick Paver, Mortar Mixer, Skid Steer, Sheeting & Shoring Person, Surface Grinder Person, Screedperson, Water Blast, Hand Held Wand, Power Buggy or Power Wheelbarrow, Paint Striper, Plastic fusing Machine Operator, Rodding Machine Operator, Pug Mill Operator, Operator of All Vacuum Devices Wet or Dry, Handling of all Pumps 4 inches and under (gas, air or electric), Diver, Form Setter, Bottom Person, Welder Helper (pipeline), Concrete Saw Person, Cutting with Burning Torch, Pipe Layer, Hand Spiker (railroad), Underground Person (working in sewer and waterline, cleaning, repairing and reconditioning). Tunnel Laborer (without air), Caisson, Cofferdam (below 25 feet deep), Air Track and Wagon Drill, Sandblaster Nozzle Person, Hazardous Waste (level B), ***Lead Abatement, Hazardous Waste (level C)

***Includes the erecting of structures for the removal, including the encapsulation and containment of Lead abatement process.

Group 3

Blast and Powder Person, Muckers will be defined as shovel men working directly with the miners, Wrencher (mechanical joints & utility pipeline), Yarner, Top Lander, Hazardous Waste (level A), Concrete Specialist, Curb Setter and Cutter, Grade Checker, Concrete Crew in Tunnels. Utility pipeline Tappers, Waterline, Caulker, Signal Person will receive the rate equal to the rate paid the Laborer classification for which the Laborer is signaling.

Group 4 Miner, Welder, Gunite Nozzle Person

A.) The Watchperson shall be responsible to patrol and maintain a safe traffic zone including but not limited to barrels, cones, signs, arrow boards, message boards etc.

Name of Union: Labor Local 534 Building

Change # : LCNO1-2019fbLoc534

Craft : Laborer Effective Date : 06/01/2019 Last Posted : 05/23/2019

	BH	R		Fring	ge Bene	fit Payı	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification	<u> </u>										
Laborer Group 1	\$27	.59	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$38.84	\$52.64
Laborer Group 2	\$27	.69	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	*\$38.94	\$52.79
Laborer Group 3	\$27	.79	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.04	\$52.94
Laborer Group 4	\$27	.92	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.17	\$53.13
Laborer Group 5	\$28.17		\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.42	\$53.51
Laborer Group 6	\$27	.94	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.19	\$53.16
Laborer Group 7	\$27	.14	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$38.39	\$51.96
Apprentice	Per	cent										
0-1000 hrs	60.00	\$16.55	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$27.80	\$36.08
1001-2000 hrs	70.00	\$19.31	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$30.56	\$40.22
2001-3000 hrs	80.00	\$22.07	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$33.32	\$44.36
3001-4000	90.00	\$24.83	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$36.08	\$48.50
4001	100.00	\$27.59	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$38.84	\$52.64

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeman to 1 Apprentice 3 Journeman to 1 Apprentice Jurisdiction (* denotes special jurisdictional note) : BUTLER, WARREN

Special Jurisdictional Note :

Details :

Note:

Group 1: Building & Common Laborer; All general laborers work including all forms of landscaping, Rough Rider - all pump's 4 inch or smaller, Small Pump Portable Generators-Bobcat to Cleanup, Firewatch and Monitor, (Safety Person)

Group 2: Asphalt Raker, Tamper, Smoother, Hand Air Pump, Hand air Tamper, Chisel, Power Tamper, Operator, Switch, Assemblies, Handling & Laying Precast Concrete Floors & Deck Tool Repairman.

Group 3: Concrete Specialist; Skid Steers (with attachments to perform Laborer's duties) Jack Hammer * Concrete Busterman, Barco Tamper Man, Power Georgia Buggy Man, Power Sweeper Man, Vibrator, Concrete Saw Man, Rail Spikers, Acetylene Burner, Pipelayers, Bos'n Cradleman, Bottom Man, Chipping Hammer Grade Checker, Radio Operator, Form Cleanout & blowout Man, Red Concrete Coloring Man (Electrical Safety)

Group 4: Mason Tender, Mortar Mixers & Scaffold Builders

Group 5: Fork Lift for Mason, all work involving Refractory Materials Including Demolition of Refractory Materials.

Asbestos Removal and Hazardous Waste Removal (handling, control, removal abatement, encapsulation or disposal of asbestos & hazardous waste),

Group 6: Gunnite Man, Sand Blaster, Concrete & Grout Pump & Hose Man, Blast Trac, Miners & Muckers, Free Air, Powderman or Blaster, Mortar or Gypsum Machineman, Welder, Scuba Diver.

Group 7: Watchman & Tool Checker/Toolroom Man

Name of Union: Operating Engineers - Building Local 18 - Zone III

Change #: LCN01-2019fbLoc18zone3

Craft : Operating Engineer Effective Date : 05/01/2019 Last Posted : 05/01/2019

	B	HR		Frin	ge Bene	fit Payn	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Operator Class 1	\$3	7.14	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.34	\$70.91
Class 2	\$3	7.02	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.22	\$70.73
Class 3	\$3.	5.98	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$51.18	\$69.17
Class 4	\$34	4.80	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0,00	\$0.00	\$50.00	\$67.40
Class 5	\$2	9.34	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.54	\$59.21
Class 6	\$3	7.39	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.59	\$71.28
Class 7	\$3	7.64	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.84	\$71.66
Class 8	\$3	8.14	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.34	\$72.41
Class 9	\$3	8.39	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.59	\$72.78
Apprentice	Per	rcent										
1st Year	50.00	\$18.57	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$33.77	\$43.06
2nd Year	60.00	\$22.28	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$37.48	\$48.63
3rd Year	70.00	\$26.00	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$41.20	\$54.20
4th Year	80.00	\$29.71	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.91	\$59.77
Field Mechanic Trainee												
1st Year	50.00	\$18.57	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$33.77	\$43.06
2nd Year	60.00	\$22.28	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$37.48	\$48.63
3rd Year	70.00	\$26.00	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$41.20	\$54.20
4th Year	80.00	\$29.71	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.91	\$59.77

Special Calculation Note : Other: Education & Safety \$0.09

Ratio :

For every (3) Operating Engineer Journeymen employed by the company there may be employed (1) Registered Apprentice or trainee Engineer through the referral when they are available. An apprenice, while employed as part of a crew per Article VIII, paragraph

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, 77, will not be subject to the apprenticeship ratios in this collective bargaining agreement

GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WYANDOT

Special Jurisdictional Note :

Details:

**Apprentices will receive a 10% increase on top of the percentages listed above provided they are operating mobile equipment. Mechanic Trainees will receive 10% increase if required to have CDL

Class 1 - Barrier Moving Machine; Boiler Operators or Compressor Operators, when compressor or boiler is mounted on crane (Piggyback Operation); Boom Trucks (all types); Cableways Cherry Pickers; Combination -Concrete Mixers & Towers; All Concrete Pumps with Booms; Cranes (all types) Derricks (all types); Draglines Dredges (dipper, clam or suction) 3-man crew; Elevating Graders or Euclid Loaders; Floating Equipment; Gradalls; Helicopter Operators; hoisting building materials; Helicopter Winch Operators, Hoisting building materials; Hoes (All types); Hoists (with two or more drums in use): Hydraulic Gantry (lift system); Laser Finishing Machines; Lift Slab or Panel Jack Operators; Locomotives (all types); Maintenance Engineers (Mechanic and/or Welder); Mixers, paving (multiple drum); Mobile Concrete Pumps, with booms, Panelboards, (all types on site); Pile Drivers; Power Shovels; Prentice Loader; Rail Tamper (with automatic lifting and aligning device);' Rotary Drills (all) used on caissons for foundations and sub-structure work; Side Booms; Slip Form Pavers; Straddle Carriers (Building Construction on site); Tug Boats. Horizontal Directional Drill, Rough Terrain Fork-lift with Winch/Hoist, Laser Screed, and Like equipment;Compact Cranes,track or rubber over 4,000 pound capacity,self-erecting cranes:stationary,track or truck (all configurations) bucket trench machines (over 24 " wide).

Class 2 - Asphalt Pavers; Bobcat-type and/or skid steer loader with hoe attachment greater than 7000 lbs. Bulldozers; CMI type Equipment; Endloaders; Hydro Milling Machine; Kolman-type Loaders (Dirt Loading); Lead Greasemen; Mucking Machines; Pettibone-Rail Equipment; Power Graders; Power Scoops; Power Scrapers; Push Cats; Vermeer Type Concrete Saw;All rotomills, grinders & planers of all types. Articulating/end dumps (minus \$4.00/hour from Class 2 rate)

Class 3 - A Frames; Air Compressors, Pressurizing Shafts or Tunnels; All Asphalt Rollers; Bobcat-type and/or skid steer loader with or without attachments; Boilers (15 lbs pressure and over); All concrete Pumps (without booms with 5 inch system); Fork Lifts (except masonry); Highway Drillers - all types (with integral power); Hoists (with one drum); House Elevators (except those automatic call button controlled); Man lifts; Mud Jacks; Pressure Grouting; Pump Operators (installing or operating Well Points or other types of Dewatering Systems); Pumps (4 inches and over discharge); Railroad Tie Inserter/Remover; Rotator (Lime-Soil Stabilizer); Submersible Pumps (4 inches and over discharge); Switch & Tie Tampers (without lifting and aligning device); Trench Machines (24 inches and under); Utility Operators; Material hoist/elevators.

Class 4 - Ballast Re-locator; Backfillers and Tampers; Batch Plant Operators; Bar and Joint Installing Machines; Bull Floats; Burlap and Curing Machines; Clefplanes; Compressors, on building construction; Concrete Spreader; Conveyors, used for handling building materials; Concrete Mixers, one bag capacity (side loader); Concrete Mixers, capacity more than one bag; Crushers; Deck Hands; Drum Fireman (in Asphalt Plant); Farm type tractors pulling attachments; Finishing Machines; Form Trenchers; Generators: Gunite Machines; Hydro5/13/2019

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Seeders; Pavement Breakers (hydraulic or cable); Post Drivers; Post Hole Diggers; Pressure Pumps (over 1/2 inch discharge); Road Widening Trenchers; Rollers (except asphalt); All Concrete pumps (without Boom with 4 inch or smaller systems); Self-Propelled Power Spreaders; Concrete Spreaders; Self-Propelled Sub-graders; Shotcrete Machines; Tire Repairmen; Tractors, pulling sheepfoot rollers or graders; VAC/ALLS; Vibratory Compactors, with integral power; Welder Operators.

Class 5 - Boilers (less than 15 lbs. pressure); Inboard/outboard Motor Boat Launches; Light Plant Operators; Masonry Fork Lifts; Oilers/Helpers; Power Driven Heaters (oil fired); Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Signalmen, Submersible Pumps (under 4 inch discharge). Directional Drill Locator and Allen Screed Concrete Paver. Fueling and greasing (plus \$3.00), compact cranes; track or rubber under 4,000 pounds.

Class 6 - Master Mechanic

Class 7 - Boom & Jib 150 - 180 feet

Class 8 - Boom & Jib 180 - 249 feet

Class 9 - Boom & Jib 250 - or over

Name of Union: Operating Engineers - HevHwy Zone II

Change #: LCN01-2019fbLoc18hevhwyll

Craft: Operating Engineer Effective Date: 05/01/2019 Last Posted: 05/01/2019

	BI	łR		Frin	ge Bene	fit Payn	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Operator Class 1	\$37	7.14	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.34	\$70.91
Class 2	\$31	7.02	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.22	\$70.73
Class 3	\$3:	5.98	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$51.18	\$69.17
Class 4	\$34	4.80	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$50.00	\$67.40
Class 5	\$29	9.34	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.54	\$59.21
Class 6	\$31	7.39	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.59	\$71.28
Apprentice	Per	cent				* .i						
1st Year	50.00	\$18.57	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$33.77	\$43.06
2nd Year	60.00	\$22.28	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$37.48	\$48.63
3rd Year	70.00	\$26.00	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$41.20	\$54.20
4th Year	80.00	\$29.71	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.91	\$59.77
Field Mech Trainee Class 2												
lst year	49.85	\$18.51	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$33.71	\$42.97
2nd year	59.79	\$22.21	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$37.41	\$48.51
3rd year	69,77	\$25.91	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$41.11	\$54.07
4th year	79.75	\$29.62	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.82	\$59.63

Special Calculation Note : Other: Education & Safety Fund is \$0.09 per hour.

Ratio:

For every (3) Operating Engineer Journeymen employed by the company, there may be employed (1) AUGLAIZE, BELMONT, BROWN, BUTLER, Registered Apprentice or Trainee Engineer through the referral when they are available. An apprentice, while employed as part of a crew per Article VIII paragraph 65, will not be subject the apprenticeship ratios in this collective bargaining agreement.

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ATHENS, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS,

MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note:

Details :

**Apprentices will receive a 10% increase on top of the percentages listed above provided they are operating mobile equipment. Mechanic Trainees will receive 10% increase if they are required to have CDL.

Class 1 - Air Compressors on Steel Erection; Barrier Moving Machine; Boiler Operators, on Compressors or Generators, when mounted on a rig: Cableways, Combination Concrete mixers & Towers; Concrete Pumps; Concrete Plants (over 4 yd capacity); Cranes (all types, including Boom Trucks, Cherry Pickers); Derricks; Draglines, Dredgers (dipper, clam or suction); Elevating Graders or Euclid Loaders; Floating Equipment (all types); Gradalls, Helicopter Crew (Operator- hoist or winch); Hoes (all types); Hoisting Engines, on shaft or tunnel work; Hydraulic Gantry (lifting system); Industrial - Type Tractors; Jet Engine Dryers (D8 or D9), Diesel Tractors; Locomotives (standard gage); Maintenance Operators (class A); Mixers, paving (single or double drum); Mucking Machines; Multiple Scrapers; Piledriving Machines (all types); Power Shovels, Prentice Loader; Quad 9 (double pusher); Rail Tamper (with automatic lifting and aligning device); Refrigerating Machines (freezer operation); Side Booms; Slip Form Pavers; Tower Dericks; Tree Shredders; Truck Mounted Concrete Pumps; Tug Boats; Tunnel Machines and /or Mining Machines; Wheel Excavators. Rough Terrain Fork-lift with Winch/Hoist; Compact Cranes, track rubber over 4,000 pound capacity, self-erecting cranes; stationary, track or truck (all configurations) Bucket trench machines (over 24 inches wide).

Class 2 - Asphalt Pavers; Automatic Subgrade Machines, self-propelled (CMI-type); Bobcat-type and /or skid steer loader with hoe attachment greater than 7000 lbs.; Boring Machine Operators (more than 48 inches); Bulldozers; Endloaders; Hydro Milling Machine; Kolman-type Loaders (production type-dirt); Lead Greasemen; Maintenance Operators, Class B (Portage and Summit Counties only); Pettibone-Rail Equipment; Power Graders; Power Scrapers; Push Cats; Lighting and Traffic Signal Installation Equipment includes all groups or classifications; Trench Machines (24inch wide and under); Vermeer Type Concrete saw. Material Transfer Equipment (Shuttle buggy) Asphalt; All rotomills,grinders and planers of all types. Horizontal Directional Drill (Over 50,000 ft.lbs.thrust and over)

Class 3 - A-Frames; Air Compressors, on tunnel work (low Pressure); Asphalt Plant Engineers; Bobcat-type and/or skid steer loader with or without attachments; Power Boilers (15 lbs pressure and over); Highway Drills (all types); Rollers, asphalt; Pump Operators (installing or operating well Points); Pumps (4 inch and over discharge); Railroad Tie Inserter/Remover; Rotator (lime-soil Stabilizer), Switch & Tie Tampers (without lifting and aligning device); Locomotives (narrow gage); Mixers, concrete (more than one bag capacity); Mixers, one bag capacity (side loader); Utilities Operators, (small equipment); Welding Machines; Material hoist/elevators. Articulating/straight bed end dumps if assigned (minus \$4.00 per hour).

Class 4 -Ballast Re-locator; Backfillers, Batch Plants; Bar and Joint Installing Machines; Boring Machine Operators (48 inch or less); Bull Floats; Burlap and Curing Machines; Concrete Plants (capacity 4 yd and under); Conveyors (highway); Concrete Saws (multiple); Crushers; Deckhands; Farm type tractors, with attachments (highway), except masonry; Finishing Machines; Firemen, Floating Equipment (all types); Fork Lifts (highway); Form Trenchers; Hydro Hammers; Hydro Seeders; Pavement Breakers; Plant Mixers; Post Drivers; Post Hole Diggers (power auger); Power Brush Burners; Power Form Handling Equipment; Road Widening Trenchers; Rollers (brick, grade, macadam); Self-Propelled Power Spreaders; Self-Propelled Sub-

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Graders; Tractors, pulling sheepsfoot rollers or graders; Steam Firemen; Vibratory Compactors, with integral power.

Class 5 - Compressors (portable, Sewer, Heavy and Highway); Generators; Inboard-Outboard Motor Boat Launches; Masonry Fork Lifts; Oilers/Helpers; Power Driven Heaters; Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Signalmen; Drum Fireman (in Asphalt Plant); Oil Heaters (Asphalt Plant); Tire Repairmen; VAC/ALLS; Fueling and greasing (plus \$3.00), compact cranes: track or rubber under 4,000 pounds.

Class 6 - Master Mechanic

Name of Union: Painter Local 123 & 238 Hvy Hwy

Change # : LCN01-2019fbLoc123

Craft : Painter Effective Date : 08/21/2019 Last Posted : 08/21/2019

·	BH	IR		Fring	ge Bene	fit Payn	nents		Irrevo Fur	13	Total PWR	Overtime Rate
		a na shara 194 ti sagari tu sa	H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classifica	ntion											
Painter Bridge Class 1	\$30	.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.94	\$55.94
Bridge Painter, Rigger, Containment Builder, Spot Blaster Class 2	\$25	.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.94	\$48.44
Equipment Operator/Field Mechanic, Grit Reclamation, Paint Mixer, Traffic Control, Boat Person Class 3	\$25	.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.94	\$48.44
Concrete Sealing, Concrete Blasting/Power Washing, Etc. Class 4	\$25	5.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.94	\$48.44
Quality Control/Quality Assurance, Traffic Safety, Competent Person Class 5	\$24	1.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.94	\$46.94
Apprentice	Per	cent]							
1st year	55.00	\$16.50	\$5,69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24.80	\$33.05
2nd year	65.00	\$19.50	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.80	\$37.55
3rd year	75.00	\$22.50	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.80	\$42.05
4th year	80.00	\$24.00	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$32.30	\$44.30

Special Calculation Note : Apprentices shall be paid proper % of the classification above.

Ratio :

Jurisdiction (* denotes special jurisdictional note) :

1 Journeyman to 1 Apprentice per job

3 Journeyman to 1 Apprentice per company

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

Special Jurisdictional Note :

Details:

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-GuardRails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

Class 1 – Abrasive blasting of any kind.

Class 2 – Bridge painting, coating application of any kind. All steel surface preparation other than abrasive blasting. All necessary rigging and containment building. All remedial/ spot blasting.

Class 3 – Tend to all equipment including but not limited to abrasive basting, power washing, spray painting, forklifts, hoists, trucks, etc. Load and unload trucks, handle materials, man safety boats, handle traffic control, clean up/ vacuum abrasive blast materials and related tasks.

Class 4 - All aspects of concrete coating/ sealing including but not limited to preparation, containment, etc. Class 5 - Verify and record that all work is completed according to job specifications. Assure that all health and safety standards are adhered to. Assure all traffic is safely handled.

Name of Union: Painter Local 639

Change #: LCNO1-2015fbLoc639

Craft : Painter Effective Date : 06/10/2015 Last Posted : 06/10/2015

	BHR		Frin	ge Bene	fit Paym	ients		Irrevo Fut	i i	Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classific:	ation										
Painter Metal Finisher/Helpers											
Top Helper Class A	\$19.09	\$3.65	\$0.00	\$0.00	\$0.66	\$0.00	\$0.00	\$0.00	\$0.00	\$23.40	\$32.94
Top Helper Class B	\$19.09	\$3.65	\$0.65	\$0.00	\$1.03	\$0.00	\$0.37	\$0.00	\$0.00	\$24.79	\$34.33
Top Helper Class C	\$19.09	\$3.65	\$1.00	\$0.00	\$1.76	\$0.00	\$0.37	\$0.00	\$0.00	\$25.87	\$35.41
Helper Class A	\$14.69	\$3.65	\$0.00	\$0.00	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$18.85	\$26.19
Helper Class B	\$14.69	\$3.65	\$0.65	\$0.00	\$0.79	\$0.00	\$0.28	\$0.00	\$0.00	\$20.06	\$27.40
Helper Class C	\$14.69	\$3.65	\$1.00	\$0.00	\$1.64	\$0.00	\$0.28	\$0.00	\$0.00	\$21.26	\$28.60
New Hire 90 Days	\$11.00	\$3.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14.65	\$20.15

Special Calculation Note : Other is Sick and Personal Time

Ratio :

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY,

SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note :

Details:

Top Helper: Shall perform the responsibilities of a Helper and be responsible for the setup, break down, safety and quality of the company's product.

Helper : Shall be responsible for performing tasks in refinishing, compliance with safety procedures, setting up and breaking down job sites, scaffolding and swing stages and preparing surfaces for refinishing including but not limited to, masking and stripping and cleaning, oxidizing, polishing and scratch removal on various surfaces

Class A Workers: Less than 1 Year of Service.

Class B Workers: More than 1 and less than 8 Years of Service.

Class C Workers: More than 8 Years of Service.

Metal Polisher Scope of Work: Polishing, buffing, stripping, coloring, lacquering, spraying, cleaning and maintenance of ornamental and architectural metals, iron, bronze, nickel, aluminum and stainless steel and in mental specialty work, various stone finishes, stone specialty work and any other work pertaining to the finishing of metal, stones, woods, and any window washing/cleaning done in conjunction with this work, using chemicals, solvents, coatings and hand applied lacquer thinner, removing scratches from mirrow finished metals, burnishing of bronze, statuary finishes on exterior and interior surfaces and the use of all tools required to perform such work, including but not limited to polishes, spray equipment and scaffolding.

Swing State Rate: All work on scaffold 4 sections or higher, including any boom lifts and swing stage scaffolds including the rigging and derigging of hanging/suspended swing stage systems and rappelling/bolson chair work, ADD \$1.50 per hour.

Name of Union: Painter Local 639 Zone 2 Sign

Change # : LCN01-2016fbLoc639

Craft : Painter Effective Date : 08/03/2016 Last Posted : 08/03/2016

	BHR		Frin	ge Benei	iit Paym	ents		Irrevo Fur	11	Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification										
Painter Sign Journeyman Tech/Team Leader Class A	\$21.25	\$1.33	\$0.14	\$0.00	\$0.00	\$0.00	\$0.57	\$0.00	\$0.00	\$23.29	\$33.92
Painter Sign Journeyman Tech/Team Leader Class B	\$21.25	\$1.33	\$0.14	\$0.00	\$0.41	\$0.00	\$0.57	\$0.00	\$0.00	\$23.70	\$34.32
Painter Sign Journeyman Tech/Team Leader Class C	\$21.25	\$1.33	\$0.14	\$0.00	\$0.82	\$0.00	\$0.57	\$0.00	\$0.00	\$24.11	\$34.74
Painter Sign Journeyman Tech/Team Leader Class D	\$21.25	\$1.33	\$0.14	\$0.00	\$1.23	\$0.00	\$0.57	\$0.00	\$0.00	\$24.52	\$35.14
Sign Journeyman Class A	\$20.98	\$1.33	\$0.14	\$0.00	\$0.00	\$0.00	\$0.56	\$0.00	\$0.00	\$23.01	\$33.50
Sign Journeyman Class B	\$20.98	\$1.33	\$0.14	\$0.00	\$0.40	\$0.00	\$0.56	\$0.00	\$0.00	\$23.41	\$33.90
Sign Journeyman Class C	11	\$1.33	\$0.14	\$0.00	\$0.81	\$0.00	\$0.56	\$0.00	\$0.00	\$23.82	\$34.31
Sign Journeyman Class D	\$20.98	\$1.33	\$0.14	\$0.00	\$1.21	\$0.00	\$0.56	\$0.00	\$0.00	\$24.22	\$34.71
Tech Sign Fabrication/ Erector Class A	\$15.90	\$1.33	\$0.14	\$0.00	\$0.00	\$0.00	\$0.43	\$0.00	\$0.00	\$17.80	\$25.75
Tech Sign	\$15.90	\$1.33	\$0.14	\$0.00	\$0.31	\$0.00	\$0.43	\$0.00	\$0.00	\$18.11	\$26.06

PW Rate Skilled LCN01-2016fbLoc639 Page

Fabrication/ Erector Class B											
Tech Sign Fabrication/ Erector Class C	\$15.90	\$1.33	\$0.14	\$0.00	\$0.61	\$0.00	\$0.43	\$0.00	\$0.00	\$18.41	\$26.36
Tech Sign Fabrication/ Erector Class D	\$15.90	\$1.33	\$0.14	\$0.00	\$0.92	\$0.00	\$0.43	\$0.00	\$0.00	\$18.72	\$26.67

Special Calculation Note : Other is for paid holidays.

Ratio:

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, AUGLAIZE, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GREENE, HAMILTON, HANCOCK, HARDIN, HENRY, HIGHLAND, HOLMES, HURON, JACKSON, KNOX, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MERCER, MIAMI, MONTGOMERY, MORROW, MUSKINGUM, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, WARREN, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note :

Details :

Class A: less that 1 year. Class B: 1-3 years. Class C; 3-10 years. Class D: More than 10 years.

Name of Union: Painter Locals 123 & 238 Commercial & Industrial

Change #: LCN01-2019fbLoc123

Craft : Painter Effective Date : 08/21/2019 Last Posted : 08/21/2019

	BH	IR		Fring	ge Benei	fit Payn	ients		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Painter Brush Roll	\$24	.61	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.55	\$47.85
Paper Hanger	\$24	.61	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.55	\$47.85
Spray Painter	\$25	5.11	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.05	\$48.60
Sand Blaster Water Blaster	\$25.36		\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.30	\$48.98
Elevated Tanks	\$2:	5.61	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.55	\$49.35
Apprentice	Per	септ										
1st year	55.00	\$13.54	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21.84	\$28.60
2nd year	65.00	\$16.00	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24.30	\$32.29
3rd year	75.00	\$18.46	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26.76	\$35.99
4th year	80.00	\$19.69	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.99	\$37.83

Special Calculation Note : Apprentices shall be paid the proper % of the classification above.

Ratio :

Journeymen to (1) Apprentice per jobsite
 Journeymen to (1) Apprentice per company

Special Jurisdictional Note :

Details :

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-GuardRails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the

Jurisdiction (* denotes special jurisdictional note): BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

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PW Rate Skilled LCN01-2019fbLoc123 Page

industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

Name of Union: Painter Locals 123 & 238

Change # : LCN01-2019fbLoc123-238

Craft : Drywall Finisher Effective Date : 08/21/2019 Last Posted : 08/21/2019

	BI	EIR		Fring	ge Bene	fit Payr	nents		Irrevo Fun		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Painter Drywall Finisher	\$24	4.61	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.55	\$47.85
Tapers and Finishers	\$24	\$24.61		\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.55	\$47.85
Apprentice	Per	cent										
1st year	55.00	\$13.54	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21.84	\$28.60
2nd year	65.00	\$16.00	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24.30	\$32.29
2rd year	75.00	\$18.46	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26.76	\$35.99
4th year	80.00	\$19.69	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.99	\$37.83

Special Calculation Note : Apprentices shall be paid the proper % of the classification above.

Ratio :

Journeyman to 1 Apprentice per job
 Journeyman to 1 Apprentice per company

Jurisdiction (* denotes special jurisdictional note) :

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

Special Jurisdictional Note :

Details :

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-GuardRails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

Name of Union: Plasterer Local 132 (Cincinnati)

Change # : LCN01-2016fbLoc132

Craft : Plasterer Effective Date : 06/24/2016 Last Posted : 06/24/2016

	BI	HR		Frin	ge Bene	fit Payr	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Plasterer	\$23	3.61	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$36.45	\$48.25
Apprentice	Per	cent										
1st 900 hours	55.00	\$12.99	\$5.59	\$0.00	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$19.68	\$26.17
2nd 900 hours	60.00	\$14.17	\$5.59	\$0.00	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$20.86	\$27.94
3rd 900 hours	65.00	\$15.35	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$28.19	\$35.86
4th 900 hours	70.00	\$16.53	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$29.37	\$37.63
5th 900 hours	80.00	\$18.89	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$31.73	\$41.17
6th 900 hours	85.00	\$20.07	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$32.91	\$42.94
7th 900 hours	90.00	\$21.25	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$34.09	\$44.71
8th 900 hours	95.00	\$22.43	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$35.27	\$46.48

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

Journeyman to 1 Apprentice
 Journeyman to 2 Apprentice
 Journeyman to 3 Apprentice

Jurisdiction (* denotes special jurisdictional note): BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

Special Jurisdictional Note:

Details :

Apprentice and Shop Hand Pension are \$1.00 less than Journeyman.

Name of Union: Plumber Pipefitter Local 392

Change # : LCN01-2019-fbLoc392

Craft : Plumber/Pipefitter Effective Date : 06/05/2019 Last Posted : 06/05/2019

	B	ĦR		Frin	ge Bene	fit Payn	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Plumber Pipefitter	\$3:	2.81	\$7.40	\$12.39	\$0.50	\$0.00	\$0.00	\$0.98	\$0.00	\$0.00	\$54.08	\$70.48
Plumber Helper	\$2	1.33	\$7.30	\$6.59	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.72	\$46.38
Apprentice	Per	cent										
lst yr	46.50	\$15.26	\$7.20	\$0.40	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$23.84	\$31.46
2nd yr	51,53	\$16.91	\$7.20	\$0.40	\$0,50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$25.49	\$33.94
3rd yr	56.53	\$18.55	\$7.20	\$6.59	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$33.32	\$42.59
4th yr	61.53	\$20.19	\$7.20	\$6.59	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$34.96	\$45.05
5th yr	76.53	\$25.11	\$7.20	\$12.39	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$45.68	\$58.23

Special Calculation Note : OTHER IS: SUPPLEMENTAL UNEMPLOYMENT BENEFITS.

Ratio :

1 Journeymen to 1 Apprentice

2 Journeymen to 4 Apprentices

3 Journeymen to 6 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

BROWN, BUTLER, CLERMONT, HAMILTON, WARREN

When more than twenty (20) Journeymen are employed additional apprentices may be acquired at a ratio of one (1) apprentice to four (4) journeymen.

Special Jurisdictional Note :

Details :

Helpers shall be permitted to work on ONLY, Exterior Sewers, Concrete, Vitrified Clay or PVC Pipe and Digging and Backfilling for Piping Work. The ratio shall not exceed 2 helpers to 1 Journeymen when performing the scope of work listed above

Name of Union: Roofer Local 42

Change # : LCR01-2019fbLoc42

Craft : Roofer Effective Date : 02/27/2019 Last Posted : 02/27/2019

	В	HR		Frin	ge Bene	fit Payı	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Clas	ssification											1
Roofer	\$27.50		\$7.87	\$7.10	\$0.32	\$0.00	\$0.25	\$0.06	\$0.00	\$0.00	\$43.10	\$56.85
Tradesmen	\$2	2.00	\$7.87	\$5.68	\$0.32	\$0.00	\$0.25	\$0.06	\$0.00	\$0.00	\$36.18	\$47.18
Apprentice	Per	cent										
1st period	60.00	\$16.50	\$7.87	\$4.26	\$0.06	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$28.94	\$37.19
2nd period	70.00 \$19.25		\$7.87	\$4.97	\$0.06	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$32.40	\$42.03
3rd period	80.00 \$22.00		\$7.87	\$5.68	\$0.06	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$35.86	\$46.86

Special Calculation Note : Other is Education and Safety.

Journeymen shall receive \$1.00 per hour above journeyman rate for work with pitch material.

Ratio :

Employer may employ 1 apprentice for every 2 journeymen in his employment.

Special Jurisdictional Note :

Details :

Any Tradesman Worker completing 2,000 hours in (2) years may move to Journeyman status by utilizing the Training Yard to improve their skills. Tradesman Workers will be tested at these yards to determine their competency for Journeyman status. Tradesman Workers must schedule and successfully complete the industry test battery in order to gain journeyman status.

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

Name of Union: Sheet Metal Local 24 (Dayton)

Change #: LCR01-2019fbLoc24(Day)

Craft : Sheet Metal Worker Effective Date : 02/20/2019 Last Posted : 02/20/2019

	B	HR		Fring	ge Bene	fit Payr	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classi	fication											
Sheet Metal Worker	\$2	7.77	\$8.00	\$13.66	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50.28	\$64.16
5th Year B	80.00	\$22.22	\$7.75	\$10.92	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.74	\$52.84
5th Year A	75.00	\$20.83	\$7.68	\$10.25	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.61	\$50.02
4th Year B	70.00	\$19.44	\$7.62	\$9.56	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.47	\$47.19
4th Year A	65.00	\$18.05	\$7.56	\$8.89	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.35	\$44.38
3rd year B	60.00	\$16.66	\$7.50	\$8.20	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.21	\$41.54
3rd Year A	55.00	\$15.27	\$7.44	\$7.51	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.07	\$38.71
2 Year B	52.00	\$14.44	\$7.40	\$7.10	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.79	\$37.01
2 Year A	50.00	\$13.89	\$7.37	\$6.84	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28.94	\$35.89
Probationary 1 Year	47.50	\$13.19	\$7.34	\$6.49	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.87	\$34.47

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeyman to 1 Apprentice then,

1 Apprentice for every 2 Journeymen thereafter

Jurisdiction (* denotes special jurisdictional note) :

ALLEN, AUGLAIZE, BUTLER, CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, HARDIN, LOGAN, MERCER, MIAMI, MONTGOMERY, PREBLE, SHELBY, VAN WERT, WARREN, WYANDOT

Special Jurisdictional Note :

Details:

Name of Union: Sprinkler Fitter Local 669

Change #: LCN03-2018fbLoc669

Craft : Sprinkler Fitter Effective Date : 01/01/2019 Last Posted : 12/19/2018

	BI	HR		Fring	ge Bene	fit Payn	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Sprinkler Fitter	\$31	7.78	\$10.02	\$6.60	\$0.52	\$0.00	\$5.12	\$0.00	\$0.00	\$0.00	\$60.04	\$78.93
Apprentice Indentured after April 1, 2013	Per	cent										
CILASS 1	45.00	\$17.00	\$7.75	\$0.00	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.27	\$33.77
CLASS 2	50.00	\$18.89	\$7.75	\$0.00	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.16	\$36.61
CLASS 3	55.00	\$20.78	\$10.02	\$6.60	\$0.52	\$0.00	\$0.65	\$0.00	\$0.00	\$0.00	\$38.57	\$48.96
CLASS 4	60.00	\$22.67	\$10.02	\$6.60	\$0.52	\$0.00	\$0.65	\$0.00	\$0.00	\$0.00	\$40.46	\$51.79
CLASS 5	65.00	\$24.56	\$10.02	\$6,60	\$0.52	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$42.60	\$54.88
CLASS 6	70.00	\$26.45	\$10.02	\$6.60	\$0,52	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$44.49	\$57.71
CLASS 7	75.00	\$28.33	\$10.02	\$6.60	\$0.52	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$46.38	\$60,54
CLASS 8	80.00	\$30.22	\$10.02	\$6.60	\$0.52	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$48.26	\$63.38
CLASS 9	85.00	\$32.11	\$10.02	\$6.60	\$0.52	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$50.15	\$66.21
CLASS 10	90.00	\$34.00	\$10.02	\$6.60	\$0.52	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$52.04	\$69.04

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE,

MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note :

Details:

Sprinkler Fitter work shall consist of the installation, dismantling, maintenance, repairs, adjustments, and corrections of all fire protection and fire control systems including the unloading, handling by hand, power equipment and installation of all piping or tubing, appurtenances and equipment pertaining thereto, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes and hose connections to sprinkler systems used in connection with sprinkler and alarm systems. Also all tanks and pumps connected thereto, also included shall be CO-2 and Cardox Systems, Dry Chemical Systems, Foam Systems and all other fire protection systems.

Name of Union: Truck Driver Bldg & HevHwy Class 1 Locals 20,40,92,92b,100,175,284,438,377,637,908,957

Change # : LCON1-2017fbBldgHevHwy

Craft : Truck Driver Effective Date : 07/05/2017 Last Posted : 07/05/2017

	BF	İR		Fring	ge Bene	fit Payr	nents		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Truck Driver CLASS 1 4 wheel service, dump, and batch trucks, Oil Distributor - Asphalt Distributor- Tandems	\$26	.49	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.99	\$54.24
Apprentice	Per	cent										
First 6 months	80.00	\$21.19	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.69	\$46.29
7-12 months	85.00	\$22.52	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.02	\$48.27
13-18 months	90.00	\$23.84	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.34	\$50.26
19-24 months	95.00	\$25.17	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.67	\$52.25
25-30 months	100.00	\$26.49	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.99	\$54.24

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

3 Journeymen to 1 Apprentice per company/project

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE,

GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note :

Details :

** Asphalt - Oil spray bar man when operating from cab shall receive \$0.20 cents per hour above their Basic Hourly Rate.

Name of Union: Truck Driver Bldg & HevHwy Class 2 Locals 20,40,92,92b,100,175,284,438,377,637,908,957

Change #: CN1-2017-fbBldgHevHwy

Craft : Truck Driver Effective Date : 07/05/2017 Last Posted : 07/05/2017

	BF	IR		Fring	ge Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Truck Driver CLASS 2 Tractor Trailer-Semi Tractor Trucks-Pole Trailers-Ready Mix Trucks-Fuel Trucks- Asphalt-Oil Spray bar men- 5 Axle & Over - Belly Dumps-End Dumps-Articulated Dump Trucks- Low boys-Heavy duty Equipment(irrespective of load carried) when used exclusively for transportation-Truck Mechanics (when needed)	\$26	.91	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.41	\$54.87
Apprentice	Per	cent										
First 6 months	80.00	\$21.53	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.03	\$46.79
7-12 months	85.00	\$22.87	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.37	\$48.81
13-18 months	90.00	\$24.22	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.72	\$50.83
19-24 months	95.00	\$25.56	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.06	\$52.85
25-30 months	100.00	\$26.91	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.41	\$54.87

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

3 Journeymen to 1 Apprentice per company/project

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE,

GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note :

Details:

** Asphalt - Oil spray bar man when operating from cab shall receive \$0.20 cents per hour above their Basic Hourly Rate.

Name of Union: Asbestos Heat & Frost Insulators Local 8

Change # : LCN01-2019fbAsbLoc8

Craft : Asbestos Worker Effective Date : 03/06/2019 Last Posted : 03/06/2019

	B	HR		Frin	ge Ben	efit Payı	ments .	Irrevo Fu		Total PWR	Overtime Rate	
		· · · · · · · · · · · · · · · · · · ·	H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	Classification											
Asbestos Insulators	\$2	9.77	\$6.64	\$9.10	\$0.36	\$0.00	\$1.60	\$0.00	\$0.00	\$0.00	\$47.47	\$62.36
Apprentice	Pei	rcent									······································	
1st year	46.53	\$13.85	\$6.64	\$4.85	\$0.36	\$0.00	\$1.60	\$0.00	\$0.00	\$0.00	\$27.30	\$34.23
2nd year	53.90	\$16.05	\$6.64	\$6.40	\$0.36	\$0.00	\$1.60	\$0.00	\$0.00	\$0.00	\$31.05	\$39.07
3rd year	58.95	\$17.55	\$6.64	\$6.40	\$0.36	\$0.00	\$1.60	\$0.00	\$0.00	\$0.00	\$32.55	\$41.32
4th year	63.99	\$19.05	\$6.64	\$6.40	\$0.36	\$0.00	\$1.60	\$0.00	\$0.00	\$0.00	\$34.05	\$43.57

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, BROWN, BUTLER*, CLERMONT, HAMILTON, HIGHLAND, WARREN*

Special Jurisdictional Note : In Butler County:townships of

Fairfield,Hanover,Liberty,Milford,Morgan,Oxford,Ripley,Ross,St.Clair,Union & Wayne. In Warren County: Townships of Deerfield,Hamilton,Harlan,Salem,Union & Washington

Details :

All work in connection with Asbestos Removal, Abatement, Encapsulation, Lead Abatement, Hazardous Materials and Fire Stopping which is performed by employees in the Mechanic or Apprentice Classification shall be covered under the terms of this Agreement.

Name of Union: Asbestos Local 207 OH

Change #: LCN01-2018fbLoc207OH

Craft : Asbestos Worker Effective Date : 08/23/2018 Last Posted : 08/23/2018

	BHR		Frin	ige Bene	fit Payn	ients		Irrevo Fur		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Cla	sification					:					
Asbestos Abatement	\$25.50	\$7.25	\$6.45	\$0.65	\$0.00	\$0.00	\$0.07	\$0.00	\$0.00	\$39.92	\$52.67
Trainee	\$16.50	\$7.25	\$7.25 \$1.50 \$0.65 \$0.00 \$0.00 \$0.0						\$0.00	\$25.97	\$34.22 -

Special Calculation Note :

Ratio :

3 Journeymen to 1 Trainee

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ASHLAND, ASHTABULA*, ATHENS, AUGLAIZE, BROWN, BUTLER*, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARDIN, HARRISON, HIGHLAND, HOCKING, HOLMES, HURON, KNOX, LAKE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MIAMI, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PORTAGE, PREBLE, RICHLAND, ROSS, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN*, WAYNE

Special Jurisdictional Note : Butler County: (townships of

Fairfield, Hanover, Liberty, Milford, Morgan, Oxford, Ripley, Ross, StClair, Union & Wayne.) (Lemon & Madison) Warren County: (townships of: Deerfield, Hamilton, Harlan, Salem, Union & Washington). (Clear Creek, Franklin, Mossie, Turtle Creek & Wayney). Ashtabula County: (post offices & townships of Ashtabula, Austinburg, Geneva, Harperfield, Jefferson, Plymouth & Saybrook) (townships of Andover, Cherry Valley, Colbrook, Canneaut, Denmark, Dorset, East Orwell, Hartsgrove, Kingville, Lenox, Monroe, Morgan, New Lyme, North Kingsville, Orwell, Pierpoint, Richmond Rock Creek, Rome, Shefield, Trumbull, Wayne, Williamsfield & Windsor) Erie County:(post offices & townships of Berlin, Berlin Heights, Birmingham, Florence, Huron, Milan, Shinrock & Vermilion)

Details :

Asbestos & lead paint abatement including, but not limited to the removal or encapsulation of asbestos & lead paint, all work in conjunction with the preparation of the removal of same & all work in conjunction with the

clean up after said removal. The removal of all insulation materials, whether they contain asbestos or not, from mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) is recognized as being the exclusive work of the Asbestos Abatement Workers.

On all mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) that are going to be demolished, the removal of all insulating materials whether they contain asbestos or not shall be the exclusive work of the Laborers.

An Abatement Journeyman is anyone who has more than 300 hours in the Asbestos Abatement field.

Name of Union: Asbestos Local 50 Zone 2

Change # : LCN01-2018fbLoc50

Craft : Asbestos Worker Effective Date : 07/18/2018 Last Posted : 07/18/2018

	B	HR		Frin	ge Bene	fit Payn	ients		Irrevo Fur	1	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	Classification											
Asbestos Insulation Mechanic	\$29.84		\$6.46	\$6.88	\$0.40	\$0.00	\$2.00	\$0.15	\$0.00	\$0.00	\$45.73	\$60.65
Firestop Technician	\$2	9.84	\$6.46	\$6.88	\$0.40	\$0.00	\$2.00	\$0.15	\$0.00	\$0.00	\$45.73	\$60.65
Apprentice	Per	cent										
1st year	55.15	\$16.46	\$6.46	\$0,00	\$0.40	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$23.47	\$31.70
2nd year	65.98	\$19.69	\$6.46	\$0.86	\$0.40	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$27.56	\$37.40
3rd year	75.80	\$22.62	\$6.46	\$1.72	\$0.40	\$0.00	\$0.30	\$0.15	\$0.00	\$0.00	\$31.65	\$42.96
4th year	86.65	\$25.86	\$6.46	\$1.72	\$0.40	\$0.00	\$0.30	\$0.15	\$0.00	\$0.00	\$34.89	\$47.81

Special Calculation Note : Other is Industry Fund & Labor Management Fund.

Ratio :

4 Journeymen to 1 Apprentice Company Wide except no apprentice may work on a job site without a Mechanic.

Jurisdiction (* denotes special jurisdictional note) :

AUGLAIZE, BUTLER*, CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN*

Special Jurisdictional Note : In Butler County the following townships are included: (Lemon Twp, Madison Twp) In Warren County the following townships are included: (Clear Creek Twp, Franklin Twp, Massie Twp, Turtle Creek Twp, Wayne Twp)

Details :

Name of Union: Electrical Local 648 Inside

Change # : LCN02-2018fbLoc648in

Craft : Electrical Effective Date : 09/03/2018 Last Posted : 08/23/2018

	B	HR		Frin	ge Bene	fit Payr	nents		Irrevo Fui	1	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Electrician	\$30.00		\$6,45	\$8.90	\$0.45	\$0.00	\$2.00	\$0.90	\$0.00	\$0.00	\$48.70	\$63.70
Apprentice	Per	cent										
1st period 0-1000 hrs	45.00	\$13.50	\$3.42	\$0.00	\$0.20	\$0.00	\$2.00	\$0.41	\$0.00	\$0.00	\$19.53	\$26.28
2nd period 1000- 2000 hrs	45.00	\$13.50	\$3.42	\$0.00	\$0.20	\$0.00	\$2.00	\$0.41	\$0.00	\$0.00	\$19.53	\$26.28
3rd period 2000- 3500 hrs	50.00	\$15.00	\$6.45	\$4.45	\$0.23	\$0.00	\$2.00	\$0.45	\$0.00	\$0.00	\$28.58	\$36.08
4th period 3500- 5000 hrs	55.00	\$16.50	\$6.45	\$4.90	\$0.25	\$0.00	\$2.00	\$0.50	\$0.00	\$0.00	\$30.60	\$38.85
5th period 5000- 6500 hrs	62.00	\$18.60	\$6.45	\$5.52	\$0.28	\$0.00	\$2.00	\$0.56	\$0.00	\$0.00	\$33.41	\$42.71
6th period 6500- 8000 hrs	71.00	\$21.30	\$6.45	\$6.32	\$0.32	\$0.00	\$2.00	\$0.64	\$0.00	\$0.00	\$37.03	\$47.68

Special Calculation Note : Other is NEBF (Natioanl Electrical Benifit Fund.)

Ratio :

3 Journeyman to 2 Apprentices or fraction thereof: BUTLER, WARREN*

1-3 Journeymen to 2 Apprentice

4-6 Journeymen to 4 Apprentice

7-9 Journeymen to 6 Apprentice

first person assigned to any job site shall be a journeyman

Special Jurisdictional Note : In Warren County the following townships are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)

Jurisdiction (* denotes special jurisdictional

Details :

Electricians while splicing cable shall receive \$.50 an hour above the regular electrical rate.

All work that requires the use of gas masks or respirators, shall be paid 50% above the appropriate rate of pay. Work up to & including 40 feet shall be paid \$.50 over the journeyman rate. All work from a Boatswain Chair, Swinging Scaffold, or Barrel shall be at double the Journeyman rate. Workmen required to work 50 feet or more below the surface of the earth will be paid 50% above the Journeyman rate.

Name of Union: Electrical Local 648 Lt Commercial South West

Change #: LCN02-2018fbLoc648in

Craft : Electrical Effective Date : 01/01/2019 Last Posted : 12/28/2018

	B	HR.		Frin	ge Bene	fit Payr	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Electrician	\$3	0.00	\$6.45	\$8.90	\$0.45	\$0.00	\$2.00	\$0.90	\$0.00	\$0.00	\$48.70	\$63.70
CE-3 12,001- 14,000 Hrs	\$2	1.89	\$5.95	\$0.66	\$0.66	\$0.00	\$0.64	\$0.48	\$0.00	\$0.00	\$30.28	\$41.22
CE-2 10,001- 12,000 Hrs	\$1	7.20	\$5,95	\$0.52	\$0.66	\$0.00	\$0.66	\$0.48	\$0.00	\$0.00	\$25.47	\$34.07
CE-1 8,001- 10,000 Hrs	\$1.	5.64	\$5.95	\$0.47	\$0.66	\$0.00	\$0.52	\$0.48	\$0.00	\$0.00	\$23.72	\$31.54
CW-4 6,001-8,000 Hrs	\$1.	4.07	\$5.95	\$0.42	\$0.66	\$0.00	\$0.42	\$0.48	\$0.00	\$0.00	\$22.00	\$29.04
CW-3 4,001-6,000 Hrs	\$1	2.51	\$5.95	\$0.38	\$0.66	\$0.00	\$0.38	\$0.48	\$0.00	\$0.00	\$20.36	\$26.61
CW-2 2,001-4,000 Hrs	\$1	1.73	\$5.95	\$0.35	\$0.66	\$0.00	\$0.35	\$0.48	\$0.00	\$0.00	\$19.52	\$25.39
CW-1 0- 2,000 Hrs	\$1	0.94	\$5.95	\$0.33	\$0.66	\$0.00	\$0.33	\$0.48	\$0.00	\$0.00	\$18.69	\$24.16
Apprentice Indentured AFTER 9/1/2006	Per	rcent										
1st period 0-1000 hrs	45.00	\$13.50	\$3.42	\$0.00	\$0.20	\$0.00	\$2.00	\$0.41	\$0.00	\$0.00	\$19.53	\$26.28
2nd period 1001- 2000 hrs	45.00	\$13.50	\$3.42	\$0.00	\$0.20	\$0.00	\$2.00	\$0.41	\$0.00	\$0.00	\$19.53	\$26.28
3rd period 2001- 3500 hrs	50.00	\$15.00	\$6.45	\$4.45	\$0.23	\$0.00	\$2.00	\$0.45	\$0.00	\$0.00	\$28.58	\$36.08
4th period 3501- 5000 hrs	55.00	\$16.50	\$6.45	\$4.90	\$0.25	\$0.00	\$2.00	\$0.50	\$0.00	\$0.00	\$30.60	\$38.85

5th period 5001- 6500 hrs	62.00	\$18.60	\$6.45	\$5.52	\$0.28	\$0.00	\$2.00	\$0.56	\$0.00	\$0.00	\$33.41	\$42.71
6th period 6501- 8000 hrs	71.00	\$21,30	\$6.45	\$6.32	\$0.32	\$0.00	\$2.00	\$0.64	\$0.00	\$0.00	\$37.03	\$47.68

Special Calculation Note : Other is for NEBF (National Electrical Benifit Fund)

Ratio :

1-3 Journeymen to 2 Apprentice4-6 Journeymen to 4 Apprentice7-9 Journeymen to 6 Apprenticefirst person assigned to any job site shall be a journeyman

Construction Electrician and Construction Wireman Ratio

There shall be a minimum ratio of one inside Journeyman to every (4) employees of different classification per jobsite. An inside Journeyman Wireman is required on the project as the fifth (5th) worker or when apprentices are used Jurisdiction (* denotes special jurisdictional note) : BUTLER, WARREN*

Special Jurisdictional Note : In Warren County the following townships are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)

The scope of work for the light commercial agreement shall apply to the following facilities not to exceed 200,000 square feet; office buildings, shopping centers, auto sales agencies and garages, churches, funeral homes, nursing homes, hotels, retail and wholesale facilities, small stand-alone manufacturing facilities when free standing and not part of a larger facility (not to exceed 50,000 square fee), solar projects (500 panels or less) unless otherwise covered under the agreement, lighting retrofits (when not associated with remodels involving branch re-circuiting) lighting retrofits shall be defined as the changing of lamps and ballasts in existing light fixtures and shall also include the one for one replacement of existing fixtures, warehouses, gas stations, food service centers, restaurants, entertainment facilities, hospitals, clinics, motels, residential buildings.

Details :

Electricians while splicing cable shall receive \$.50 an hour above the regular electrical rate.

All work that requires the use of gas masks or respirators, shall be paid 50% above the appropriate rate of pay. Work up to & including 40 feet shall be paid \$.50 over the journeyman rate. All work from a Boatswain Chair, Swinging Scaffold, or Barrel shall be at double the Journeyman rate. Workmen required to work 50 feet or more below the surface of the earth will be paid 50% above the Journeyman rate.

Name of Union: Electrical Local 648 Voice Date Video

Change #: LCR02-2018fbLoc648VDV

Craft : Voice Data Video Effective Date : 11/28/2018 Last Posted : 11/28/2018

	BHR		Frin	ge Bene	fit Payr	nents		Irrevo Fur	11	Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classif	ication										
Electrical Installer Technician A	\$24.35	\$6.10	\$0.73	\$0.46	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$35.64	\$47.82
Electrical Installer Technician B	\$23.13	\$6.10	\$0.69	\$0.44	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$34.36	\$45.92
JW Installer Technician B	\$21.92	\$6.10	\$0.66	\$0.42	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$33.10	\$44.06
Non BICSI Installer	\$15.83	\$3.00	\$0.47	\$0.30	\$0.00	\$2.00	\$0.00	\$0.00	\$0.00	\$21.60	\$29.51
Apprentice Indentured AFTER 09- 03-2018											
1 st Period 0-800 Hrs	\$13.14	\$3.00	\$0.38	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0,00	\$17.02	\$23.59
2nd Period 801-1600 Hrs	\$13.14	\$3.00	\$0.38	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.02	\$23.59
3rd Period 1601-2400 Hrs	\$15.83	\$6.00	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.60	\$34.52
4th Period 2401-3200 Hrs	\$15.83	\$6.00	\$0,47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.60	\$34.52
5th Period 3201-4000 Hrs	\$18.26	\$6.03	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.19	\$38.32
6th Period 4001-4800 Hrs	\$18.26	\$6.03	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.19	\$38.32
7th Period	\$19.48	\$8.04	\$0.58	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$32.40	\$42.14

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				•					21.32			
4801-5600 Hrs												
8th Period 5601-6400	\$1	9.48	\$8.04	\$0.58	\$0.37	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$32.47	\$42.21
Cable Puller	\$12	2.18	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.03	\$22.12
Apprentice Indentured PRIOR to 09-03-2018	Per	Percent 50.00 \$12.18										
1st period 0-800 hrs	50.00	\$12.18	\$6.10	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.12	\$25.21
2nd period 801-1600 hrs	50.00	\$12.18	\$6.10	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.12	\$25.21
3rd period 1601-2400 hrs	60.00	\$14.61	\$6.10	\$0.44	\$0.28	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$25.43	\$32.74
4th period 2401-3200 hrs	65.00	\$15.83	\$6.10	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.70	\$34.61
5th period 3201-4000 hrs	70.00	\$17.04	\$6.10	\$0.51	\$0.32	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$27.97	\$36.50
6th period 4001-4800 hrs	75.00	\$18.26	\$6.10	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.26	\$38.39
Cable Puller	50.00	\$12.18	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.02	\$22.11

Special Calculation Note :

Ratio :

Jurisdiction (* denotes special jurisdictional note) : BUTLER, WARREN*

1Technician to 1 Apprentice

Special Jurisdictional Note : The following townships In Warren County are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)

Details :

The following work is excluded from the Teledata Technician work scope:

*The installation of computer systems in industrial applications such as assembly lines, robotics, computer controller manufacturing systems.

*The installation of conduit and/or raceways shall be installed by Inside Wireman. On sites where there is no Inside Wireman employed, the

Teledata Technician may install raceway or conduit not greater than 10 ft.

*Fire Alarm work is excluded on all new construction sites or wherever the fire alarm system is installed in conduit

*All HVAC control work.

Name of Union: Electrical Local 82 Inside

Change # : LCN01-2018fbLoc82in

Craft : Electrical Effective Date : 12/03/2018 Last Posted : 11/14/2018

	BI	ER		Fring	ge Bene	fit Payn	nents		Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	Classification											
Electrician	\$3(0.15	\$6.80	\$8.75	\$0.51	\$0.00	\$3.20	\$0.00	\$0.00	\$0.00	\$49.41	\$64.48
Apprentice	Per	cent										
1st period 0 - 1000 hrs	42.00	\$12.66	\$3.42	\$0.58	\$0.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.88	\$23.21
2nd period 1001-2000 hrs	42.00	\$12.66	\$3.42	\$0.58	\$0.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.88	\$23.21
3rd period 2001-3500 hrs	47.00	\$14.17	\$6.27	\$4.12	\$0.24	\$0.00	\$1.50	\$0.00	\$0.00	\$0.00	\$26.30	\$33.39
4th period 3501-5000 hrs	52.00	\$15.68	\$6,32	\$4.55	\$0.27	\$0.00	\$1.66	\$0.00	\$0.00	\$0.00	\$28.48	\$36.32
5th period 5001-6500 hrs	60.00	\$18.09	\$6.80	\$5.25	\$0.31	\$0.00	\$1.92	\$0.00	\$0.00	\$0.00	\$32.37	\$41.42
6th period 6501-8000 hrs	75.00	\$22.61	\$6.80	\$6.57	\$0.38	\$0.00	\$2.40	\$0.00	\$0.00	\$0.00	\$38.76	\$50.07

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 to 3 Journeymen to 3 Apprentices 4 to 6 Journeymen to 6 Apprentices per job site Jurisdiction (* denotes special jurisdictional note): CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN*

Special Jurisdictional Note : The following townships in Warren County are included: Clearcreek, Franklin and Wayne.

Details :

Name of Union: Electrical Local 82 Inside Lt Commercial South West

Change # : LCNO1-2016fbLoc82in

Craft : Electrical Effective Date : 01/06/2016 Last Posted : 01/06/2016

	B	HR		Frin	ge Bene	fit Payr	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Clas	sification	·										
Electrician	\$2	8.60	\$6.20	\$8.46	\$0.49	\$0.00	\$2.45	\$0.00	\$0.00	\$0.00	\$46.20	\$60.50
CE-3 12,001- 14,000	\$2	0.67	\$5.21	\$0.62	\$0.63	\$0.00	\$0.62	\$0.00	\$0.00	\$0.10	\$27.85	\$38.19
CE-2 10,000- 12,000'Hrs	\$1	6.24	\$5.21	\$0.49	\$0.63	\$0.00	\$0.49	\$0.00	\$0.00	\$0.10	\$23.16	\$31.28
CE-1 8,001- 10,000 Hrs	\$1	4.77	\$5.21	\$0.44	\$0.63	\$0.00	\$0.44	\$0.00	\$0.00	\$0.10	\$21.59	\$28.98
CW-4 6,001- 8,000 Hrs	\$1	3.29	\$5.21	\$0.40	\$0.63	\$0.00	\$0.40	\$0.00	\$0.00	\$0.10	\$20.03	\$26.67
CW-3 4,001- 6,000 Hrs	\$1	1.81	\$5.21	\$0.35	\$0.63	\$0.00	\$0.35	\$0.00	\$0.00	\$0.10	\$18.45	\$24.36
CW-2 2,001- 4,000 Hrs	\$1	0.34	\$5.21	\$0.31	\$0.63	\$0.00	\$0.31	\$0.00	\$0.00	\$0.10	\$16.90	\$22.07
CW-1 0- 2,000 Hrs	\$1	0.34	\$5.21	\$0.31	\$0.63	\$0.00	\$0.31	\$0.00	\$0.00	\$0.10	\$16.90	\$22.07
Apprentice	Pei	rcent										
1st period 0 - 1000 hrs	40.00	\$11.44	\$6.20	\$0.34	\$0.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.17	\$23.89
2nd period 1001-2000 hrs	40.00	\$11.44	\$6.20	\$0.34	\$0.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.17	\$23.89
3rd period 2001-3500 hrs	45.00	\$12.87	\$6.20	\$3.81	\$0.22	\$0.00	\$1.10	\$0.00	\$0.00	\$0.00	\$24.20	\$30.63
4th period 3501-5000 hrs	50.00	\$14.30	\$6.20	\$4.23	\$0.24	\$0.00	\$1.23	\$0.00	\$0.00	\$0.00	\$26.20	\$33.35
5th period 5001-6500	60.00	\$17.16	\$6.20	\$5.07	\$0.29	\$0.00	\$1.47	\$0.00	\$0.00	\$0.00	\$30.19	\$38.77

hrs											L	
6th period	75.00	\$21.45	\$6.20	\$6.34	\$0.36	\$0.00	\$1.84	\$0.00	\$0.00	\$0.00	\$36.19	\$46.92
6501-8000												
hrs												

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 to 3 Journeymen to 3 Apprentices 4 to 6 Journeymen to 6 Apprentices per job site Jurisdiction (* denotes special jurisdictional note): CLINTON, DARKE, GREENE, MIAMI,

MONTGOMERY, PREBLE, WARREN*

Construction Electrician and Construction Wireman Ratio

There shall be a minimum ratio of one inside Journeyman to every (4) employees of different classification per jobsite. An inside Journeyman Wireman is required on the project as the fifth (5th) worker or when apprentices are used.

Special Jurisdictional Note : The following townships in Warren County are included: Clearcreek, Franklin and Wayne.

The scope of work for the light commercial agreement shall apply to the following facilities not to exceed 200,000 square feet; office buildings, shopping centers, auto sales agencies and garages, churches, funeral homes, nursing homes, hotels, retail and wholesale facilities, small stand-alone manufacturing facilities when free standing and not part of a larger facility (not to exceed 50,000 square fee), solar projects (500 panels or less) unless otherwise covered under the agreement, lighting retrofits (when not associated with remodels involving branch re-circuiting) lighting retrofits shall be defined as the changing of lamps and ballasts in existing light fixtures and shall also include the one for one replacement of existing fixtures, warehouses, gas stations, food service centers, restaurants, entertainment facilities, hospitals, clinics, motels, residential buildings.

Details :

Name of Union: Electrical Local 82 Lightning Rod

Change # : LCR02-2018fbLoc82

Craft : Electrical Effective Date : 12/03/2018 Last Posted : 11/14/2018

	BHR		Frin	ge Bene	fit Payr	nents		Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Cla	ssification										
Electrical Lightning Rod Technican	\$29.79	\$6.80	\$8.74	\$0.00	\$0.00	\$3.20	\$0.00	\$0.00	\$0.00	\$48.53	\$63.43

Special Calculation Note : No Apprentice approved by OSAC.

Ratio :

Jurisdiction (* denotes special jurisdictional note): CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN*

Special Jurisdictional Note : The following townships in Warren County are included: (Clearcreek, Franklin and Wayne)

Details :

Name of Union: Electrical Local 82 Voice Data Video

Change # : LCR05-2018fbLoc82VDV

Craft : Voice Data Video Effective Date : 11/28/2018 Last Posted : 11/28/2018

	BHR		Frin	ge Bene	fit Payr	nents		Irrevo Fui		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classif	ication										
Electrical Installer Technician A	\$24.35	\$6.10	\$0.73	\$0.46	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$35.64	\$47.82
Electrical Installer Technician B	\$23.13	\$6.10	\$0.69	\$0.44	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$34.36	\$45.92
JW Installer Technician	\$21.92	\$6.10	\$0.66	\$0.42	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$33.10	\$44.06
NON BICSI Installer	\$15.83	\$3.00	\$0.47	\$0.30	\$0.00	\$2.00	\$0.00	\$0.00	\$0.00	\$21.60	\$29.51
Apprentice Indentured Before 09- 03-2018											
1st Period 0-800 Hrs	\$12.18	\$6.10	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0,00	\$0.00	\$19.13	\$25.22
2nd Period 801-1600 Hrs	\$12.18	\$6.10	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.13	\$25.22
3rd Period 1601-2400 Hrs	\$14.61	\$6.10	\$0.44	\$0.28	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$25.43	\$32.74
4th Period 2401-3200 Hrs	\$15.83	\$6.10	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.70	\$34.61
5th Period 3201-4000 Hrs	\$17.05	\$6.10	\$0.51	\$0.32	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$27.98	\$36.51
6th Period 4001 Hours	\$18.26	\$6.10	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0,00	\$0.00	\$29.26	\$38.39
Cable Puller	\$12.18	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.03	\$22.12

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PW Rate Skilled LCR05-2018fbLoc82VDV Page

							51100 2010					
Apprentice Indentured After 09- 04-2018	Per	rcent										
1st 0-1000 hours	55.00	\$13.39	\$3.00	\$0.39	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.28	\$23.98
2nd 1001- 2000 hours	55.00	\$13.39	\$3.00	\$0.39	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.28	\$23.98
3rd 2001- 3000 hours	65.00	\$15.83	\$6.00	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.60	\$34.51
4th 3001- 4000 hours	65.00	\$15.83	\$6.00	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.60	\$34.51
5th 4001- 5000 hours	75.00	\$18.26	\$6.03	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.19	\$38.32
6th 5001- 6000 hours	75.00	\$18.26	\$6.03	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.19	\$38.32
7th 6001- 7000 hours	80.00	\$19.48	\$6.04	\$0.58	\$0.37	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$30.47	\$40.21
8th 7001 hours	80.00	\$19.48	\$6.04	\$0.58	\$0.37	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$30.47	\$40.21
Cable Puller	50.00	\$12.18	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.02	\$22.11

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 Journeymen to 2 Apprentice (Indentured After 9-4-2018) Jurisdiction (* denotes special jurisdictional note): CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN*

1 Journeymen to 1 Apprentice (Indentured Before 9--03-2018)

Special Jurisdictional Note : The following townships in Warren County are included: (Clearcreek, Franklin and Wayne)

Details :

Work covered but not limited to: installation which utilize transmission and/or transference of voice, sound, vision or digital for commercial, education, security and entertainment purposes for the following:

TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multimedia, multiplex, nurse call system, radio page, school intercom, sound and low voltage master clock systems.

Fire Alarm work is excluded on all new construction sites or wherever the fire alarm system is installed in conduit.

All HVAC control work is not covered by this wage rate but by the Inside Electrical wage rate.

Name of Union: Ironworker Local 290

Change #: LCN01-2019fbLoc290

Craft : Ironworker Effective Date : 06/01/2019 Last Posted : 05/23/2019

	BH	R		Fring	ge Bene	fit Payn	nents		Irrevo Fur	1	Total PWR	Overtime Rate
L L			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Ironworker Structural	\$29	.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Welder	\$29	.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Fence Erector	\$29	.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Reinforcing Rods	\$29	9.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Machinery Mover	\$29	0.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Sheeter	\$29	.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Metal Building Erector	\$29	0.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Rigger & Erector	\$29	9.29	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.66	\$66.30
Apprentice	Per	cent	1][
1st year	65.15	\$19.04	\$8.20	\$9.50	\$0.65	\$0.00	\$2.50	\$0.02	\$0.00	\$0.00	\$39.91	\$49.44
2nd year	75.15	\$21.97	\$8.20	\$9.50	\$0.65	\$0.00	\$2.50	\$0.02	\$0.00	\$0.00	\$42.84	\$53.82
3rd year	85.15	\$24.89	\$8.20	\$9.50	\$0.65	\$0.00	\$2.50	\$0.02	\$0.00	\$0.00	\$45.76	\$58.20
4th year	95.15	\$27.81	\$8.20	\$9.50	\$0.65	\$0.00	\$2.50	\$0.02	\$0.00	\$0.00	\$48.68	\$62.59

Special Calculation Note : Other is for Industry Fund.

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

ALLEN*, AUGLAIZE, BUTLER*, CHAMPAIGN*, CLARK, CLINTON, DARKE, FAYETTE*, GREENE, HARDIN*, HIGHLAND*, LOGAN*, MADISON*, MERCER*, MIAMI, MONTGOMERY, PREBLE, SHELBY, VAN WERT*, WARREN*

Special Jurisdictional Note : Allen County Twps included are: Auglaize, Perry, Shawnee, Amanda, Spencer, Marion, Sugar Creek, American, Bath, Jackson. Butler County Twps included are: Milford, Wayne, Madison, Lemon. Champaign Cnty Twps included are: Union, Urbana, Jackson, Concord, Salem, Mad River, Johnson, Harrison, Adams. Fayette County Twps included are: Green, Jasper,

Concord, Jefferson. Hardin County Twps included are: Round Head, Marion, Liberty. Highland County Twps included are: Fairfield, Penn, Union, Marshall, Liberty, Paint, Brush Creek. Logan County Twps included are: Richland, Stokes, Bloomfield, Washington, Harrison, McArthur, Lake, Liberty, Pleasant, Miami. Madison County Twps included are: Stokes. Mercer County Twps included are: Dublin, Washington, Jefferson, Recovery, Gibson, Union, Liberty, Butler, Granville, Center, Hopewell, Franklin, Marion. VanWert County Twps included are: Jennings. Warren County Twps included are: Franklin, Clear Creek, Turtle Creek, Wayne, Massie, Washington, Salem, Union.

Details :

Structural Iron Work but not limited to:field fabrication, all loading to and including the erecting,rigging,assembly,dismantling, placing, temporary and permanent securing by any means of all structural iron,steel,ornamental lead,bronze,brass,copper,aluminum,glass all ferrous and non ferrous metal and composite material, precast prestressed and post-stressed concrete structures. Bridges and bridge rails,bridge viaducts,bucks bulkheads,bumper and bumper post,canopies and unistrut canopies,corrugated ferrous and non ferrous sheets when attached to steel frames,columns,beams,bar-joists,trusses,grinders,roof decking,electrical supports,elevator cars,elevator fronts and enclosures,erection of steel towers,flag poles, gymnasium equipment,stadium and arena seating,jail cell work,jail cell beds,benches,bunks,chairs,tables,mirrors,jail cell access doors,rigging and installation of machinery and equipment(erecting,aligning,anchoring and dismantling, erection and dismantling of tower cranes,derrick monorail systems, Chicago booms,overhead cranes,gantries,material and personnel hoists,tanks,hoppers and conveyors. All pre-engineered metal buildings and their entirety including siding,roofing, gutters, downspouts and erection of all.

Ornamental Iron Work but not limited to:all work in connection with field fabrication,handling including loading/off loading,sorting,cutting,fastening,anchoring,bending,hoisting,placing,burning,welding,and tying,dismantling of all materials used in miscellaneous iron or steel, for stairs,hand railings,rolling doors, rolling gates,rolling shutters,fence,windows,curtain wall,erection and welding of all metal, sash,architectural and ornamental treatments, but not necessarily limited to all sizes and types of ornamental,steel iron,lead,bronze,brass,copper,aluminum,all ferrous and non ferrous metals and composite materials

Fence Erector Iron Worker but not limited to: All work in connection with the field fabrication and erection of chain link fence, which includes but not limited to the loading and of the fence fabric and posts also the installation of the above.

Name of Union: Ironworker Local 44

Change # : LCNO1-2019fbLoc44

Craft : Ironworker Effective Date : 06/05/2019 Last Posted : 06/05/2019

	BE	IR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate
	errorete geologické konvoluziek (Holilik, Sk		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification	n											
Ironworker Reinforcing	\$29	.87	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.36	\$66.29
Structural	\$29	.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Ornamental	\$29	.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Machine Mover/Rigger	\$29	.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Conveyer Mechanic	\$29	.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Maintenance/Heavy Hwy	\$29	.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Welder A	\$29	.62	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.11	\$65.92
Welder B	\$29	.87	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.36	\$66.29
Sheeter	\$29	.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Fence Erector	\$27	.90	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$49.39	\$63.34
Ironworker	\$29	.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Apprentice	Per	cent										
Apprentice												
lst yr A	55.00	\$16.43	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$35.67	\$43.88
lst yr B	60.00	\$17.92	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$37.16	\$46.12
1st yr C	65.00	\$19.42	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$38.66	\$48.36
2nd yr A	70.00	\$20.91	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$40.15	\$50.60
2nd yr B	75.00	\$22.40	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$41.64	\$52.84
3rd yr A	80.00	\$23.90	\$8.20	\$9.50	\$0.60	\$0.00	\$1.50	\$0.19	\$0.00	\$0.00	\$43.89	\$55.83
3rd yr B	85.00	\$25.39	\$8.20	\$9.50	J L	\$0.00		\$0.19	\$0.00	\$0.00	\$45.38	\$58.07
4th yr A	90.00	\$26.88	\$8.20	\$9.50	\$0.60	\$0.00	\$2.25	\$0.19	\$0.00	\$0.00	\$47.62	\$61.06
4th yr B	95.00	\$28.38	\$8.20	\$9.50	\$0.60	\$0.00	\$2.25	\$0.19	\$0.00	\$0.00	\$49.12	\$63.30
4th yr C	100.00	\$29.87	\$8.20	\$9.50	\$0.60	\$0.00	\$2.25	\$0.19	\$0.00	\$0.00	\$50.61	\$65.54

Special Calculation Note : Other is Impact Fund Training

Ratio :

1 Journeymen to 1 Apprentice 2 Journeymen to 2 Apprentice 10 Journeymen to 4 Apprentices Jurisdiction (* denotes special jurisdictional note): ADAMS*, BROWN, BUTLER*, CLERMONT, CLINTON*, HAMILTON, HIGHLAND*, WARREN*

Special Jurisdictional Note: Adams County Twps included: Bratton, Scott, Winchester, Wayne. Butler County Twps included: Oxford, St. Clair, Fairfield, Morgan, Liberty, Union, Ross, Reily, Hanover. West Chester. In Clinton County, Manchester and South West Borrow. Highland County Twps included: Dotson, Salem, Clay, White Oak, Hamer, New Market, Concord, Jackson, Washington. Warren County Twps included: Harlan, Deerfield, Hamilton.

Details :

Structural Iron Work but not limited to:field fabrication, all loading to and including the erecting,rigging,assembly,dismantling, placing, temporary and permanent securing by any means of all structural iron,steel,ornamental lead,bronze,brass,copper,aluminum,glass all ferrous and non ferrous metal and composite material, precast prestressed and post-stressed concrete structures. Bridges and bridge rails,bridge viaducts,bucks bulkheads,bumper and bumper post,canopies and unistrut canopies,corrugated ferrous and non ferrous sheets when attached to steel frames,columns,beams,bar-joists,trusses,grinders,roof decking,electrical supports,elevator cars,elevator fronts and enclosures,erection of steel towers,flag poles, gymnasium equipment,stadium and arena seating,jail cell work,jail cell beds,benches,bunks,chairs,tables,mirrors,jail cell access doors,rigging and installation of machinery and equipment(erecting,aligning,anchoring and dismantling, erection and dismantling of tower cranes,derrick monorail systems, Chicago booms,overhead cranes,gantries,material and personnel hoists,tanks,hoppers and conveyors. All pre-engineered metal buildings and their entirety including siding,roofing, gutters, downspouts and erection of all.

Ornamental Iron Work but not limited to:all work in connection with field fabrication,handling including loading/off loading,sorting,cutting,fastening,anchoring,bending,hoisting,placing,burning,welding,and tying,dismantling of all materials used in miscellaneous iron or steel, for stairs,hand railings,rolling doors, rolling gates,rolling shutters,fence,windows,curtain wall,erection and welding of all metal, sash,architectural and ornamental treatments, but not necessarily limited to all sizes and types of ornamental,steel iron,lead,bronze,brass,copper,aluminum,all ferrous and non ferrous metals and composite materials

Fence Erector Iron Worker but not limited to: All work in connection with the field fabrication and erection of chain link fence, which includes but not limited to the loading and of the fence fabric and posts also the installation of the above.

Name of Union: Glazier Local 387

Change #: LCN02-2019fbLoc387

Craft : Glazier Effective Date : 08/28/2019 Last Posted : 08/28/2019

	Bl	ĦR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification						-						
Glazier	\$26	5.73	\$5.47	\$9.00	\$0.25	\$0.00	\$G.00	\$0.00	\$0.00	\$0.00	\$41.45	\$54.82
Apprentice	Per	cent										
1st 6 months	56.10	\$15.00	\$5.47	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20.72	\$28.21
2nd 6 months	65.00	\$17.37	\$5.47	\$5.09	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28.18	\$36.87
3rd 6 months	70.00	\$18.71	\$5.47	\$5.61	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.04	\$39.40
4th 6 months	75.00	\$20.05	\$5.47	\$5.75	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.52	\$41.54
5th 6 months	80.00	\$21.38	\$5.47	\$6.33	\$0.25	\$0.00	\$2.00	\$0.00	\$0.00	\$0.00	\$33.43	\$44.13
6th 6 months	85.00	\$22.72	\$5.47	\$6.47	\$0.25	\$0.00	\$2.00	\$0.00	\$0.00	\$0.00	\$34.91	\$46.27
7th 6 months	90.00	\$24.06	\$5.47	\$6.99	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.77	\$48.80
8th 6 months	95.00	\$25.39	\$5.47	\$7.58	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.69	\$51.39

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio :

Jurisdiction (* denotes special jurisdictional note):

Each employer may employ and train Apprentices in theADAMS, BROWN, BUTLER, CHAMPAIGN, following ratio to journeymen workers employed. 1 Journeymen to 1 Apprentice

CLARK, CLERMONT, CLINTON, DARKE, FAYETTE*, GREENE, HAMILTON, HIGHLAND, MIAMI, MONTGOMERY, PREBLE, SHELBY*, WARREN

Special Jurisdictional Note : Fayette County: Eastern portion of route #41 being the dividing line between locals 372 and 387. Local 387 has jurisdiction of projects built on property which borders route #41 East. Shelby County: Southern portion of routes #47 & 29.

Details :

SECTION VII

Contract No. 19-04

COLUMBIA ROAD WIDENING PROJECT

107158\000001\4812-3242-9219v1-8/30/19

CONTRACT NO. 19-04

COLUMBIA ROAD WIDENING PROJECT

DEERFIELD TOWNSHIP

PROJECT NO. 19-04

THIS AGREEMENT, made and entered into this _____ day of ______, 20____, by and between the Warren County Transportation Improvement District, 210 West Main Street, Lebanon, Ohio 45036, hereafter designated as the WCTID, and ______, hereinafter designated as the Contractor.

WITNESSETH: That the Contractor has agreed, and by these presents does agree with the WCTID for the consideration herein below mentioned, to furnish at Contractor's own proper cost and expense all necessary materials and labor (prevailing wage rates apply) of every description, and to carry out complete in good, firm and timely substantial manner the following project in accordance with the surveys, plats, plans, cross-sections and profiles and specifications on file in the office of the said WCTID and in accordance with the specifications and conditions hereinbefore and hereinafter set forth, all of which are made a part hereof as if totally rewritten herein:

PROJECT NO. 19-04, COLUMBIA ROAD WIDENING PROJECT

The project includes the furnishing of all labor (prevailing wage rates apply), equipment, and materials needed to construct PROJECT NO. 19-04: COLUMBIA ROAD WIDENING PROJECT.

The provisions contained in the "Notice to Contractors," the "General Instructions," the "Bid Proposal," and the "General Provisions" (including any conditions or specifications incorporated therein), as well as any provisions in the surveys, plats, cross-sections, profiles, and other associated plans for this Work on file in the offices of the WCTID, are also hereby combined, and incorporated by reference thereto, as part of this agreement.

The Contractor shall pay into the State Insurance Fund the amount of premium determined and fixed by the Industrial Commission of Ohio, promptly when due, or elect to pay compensation direct and contribute to the surplus of the fund as provided by law. The Contractor and his Surety agree to defend and indemnify WCTID, WCEO, Warren County the Township and the City against liability and loss by reason of the breach of the obligation of this paragraph and agree that it shall run to the benefit of the Industrial Commission of Ohio and the State Insurance Fund for the recovery of premiums that should have been paid. All of the foregoing provisions of this paragraph shall be equally binding upon each sub-contractor whose performance thereof is warranted by the Contractor who employs such sub-contractor. The Warren County Transportation Improvement District may require of the Contractor, as a condition of permitting the beginning or continuance of Work, a Certificate of Compliance with the paragraph issued by the Industrial Commission of Ohio.

In consideration whereof, the WCTID hereby agrees and promises to pay to the Contractor, at the times, under the conditions and in the manner provided in the specifications, and in full of all compensation for material furnished or Work done thereunder, at the unit prices, or lump sum, as stated in the proposal, the sum of approximately:

TOTAL AMOUNT:

S

107158\000001\4812-3242-9219v1-8/30/19

IN WITNESS WHEREOF, the said WCTID has caused its name to be signed by the WCTID and the Contractor, the day and the year aforesaid.

CONTRACTOR

WARREN COUNTY TRANSPORTATION DISTRICT, WARREN COUNTY, OHIO

(COMPANY/CORPORATION NAME)

(SIGNATURE OF OWNER/AGENT)

(TITLE/POSITION)

APPROVED AS TO FORM:

WCTID Legal Counsel

Date

 $107158 \\ 000001 \\ 4812 \\ -3242 \\ -9219 \\ v1 \\ -8/30/19$

(Chair)

(Secretary-Treasurer)

Warren County Transportation Improvement District (WCTID) Construction Change Order Form

PROJECT:	Contract No.:			
CONTRACTOR:	Change Order No:			
The terms and conditions of the above-referenced Contract shall govern this Change Order. This Change Order is mutually agreed to amend the above-referenced Contract, effective as of, as follows:				

The Contract Sum will be adjusted as follows, and any payments made to Contractor hereunder will be paid according to the terms of the Contract. The change, if any, in the Contract Price shall be computed according to one of the following methods (select as appropriate):

1. No Change	
2. Lump Sum of \$	
3. Unit Price GMP	
4. Other (Describe)	

The Contract Time will be increased by ______ (___) Calendar Days. If left blank, this shall be considered a zero time extension Change Order.

By signing below, Contractor acknowledges that this Change Order is a full and final settlement of all claims against Warren County, the Warren County Transportation Improvement District, the Engineer or Architect, and their respective officers, trustees, partners, members, agents, related entities, and volunteers arising from the work described in this Change Order and any other work affected by or related to the work described herein (collectively the "Change Order Work"). Thus as consideration for this Change Order. Contractor hereby releases all claims for any additional time or compensation extensions arising out of or related to the Change Order Work, including but not limited to, claims for additional time or compensation for any materials, labor, services, overhead, profit, and any time extensions or damages arising out of or related to any delays or impacts on the Contractor's schedule for performance of the Contract and Change Order Work ("Claims"). Contractor expressly waives any right to pursue any further Claims arising out of or related to the Change Order Work in any way including, but not limited to, cumulative impact claims associated with multiple changes. Any Contractor Claims back-up, change order proposals, change orders or other documentation that may be attached to this Change Order are agreed solely to described the changed work in question and, if applicable, the Contractor's pricing thereof, but does not vary, amend, alter in any way, the terms and conditions herein and the scope of the terms, conditions, agreements, payment amounts, releases, and waivers expressly set forth in this Change Order. Any estimated quantities of items of Unit Price Work are not guaranteed and are solely to determine an initial guaranteed maximum change order price. Engineer will determine the actual quantities and classifications of Unit Price Work that Contractor performs but in no event shall the final change in Contract Price or Times exceed the amount(s) set forth above.

Recommended By:	Warren County Engineer's Office Printed Name:		
Accepted By:	Contractor Printed Name:	Date:	
Accepted By:	Secretary-Treasurer – Warren Count Printed Name:	Date: t y TID	

SECTION VIII

SPECIAL PROVISIONS/TECHNICAL SPECIFICATIONS

VIII. SPECIAL PROVISIONS / TECHNICAL SPECIFICATIONS

PROJECT NO. 19-04

The 2019 Ohio Department of Transportation Construction and Material Specifications and the Supplemental Specifications shall govern this project unless stated otherwise by the Warren County Transportation Improvement District, herein referred to as any of the following: "Warren County Transportation Improvement District", "Warren County Engineer", "Engineer" and "Project Engineer".

Conflicting Items in Bid Documents

Whenever the Technical Specifications and Bid Proposal Quantities differ from the Construction Plans the Technical Specifications and Bid Proposal Quantities shall control for the bidding of this project.

Operations Schedule

The Contractor shall advise and coordinate all work with the Engineer. A detailed schedule of operations shall be furnished by the Contractor to the Engineer and shall list the order of operations and the time frame for the completion of each item of work. The Engineer and the Owner prior to the beginning of the work shall approve the schedule of operations. Changes to said schedule are to be issued in writing and approved by the Engineer before operations are changed or rescheduled. The Contractor shall schedule operations so that the improved areas have had sufficient time to cure, set and/or harden before the area is opened to traffic or use. The Contractor shall be responsible for the improved area if any damage is done by traffic. The Contractor shall also be responsible for the immediate rectification of problems created in areas outside of the improved areas.

The Contractor will also incorporate the following considerations into their scheduling:

Utility Status

At the time of the bid, there is no known utility conflict for the project. The utility company Ifiber is known to be in the project area, however, they have not responded.

Preconstruction Meeting

The time, date and location of the preconstruction meeting will be determined after the awarding of the contract. At the preconstruction meeting the Contractor shall submit to the Project Engineer a construction schedule, list of subcontractors, list of suppliers, and a completed Ohio EPA Co-Permittee Notice of Intent (NOI).

Project Start Date

VIII. SPECIAL PROVISIONS / TECHNICAL SPECIFICATIONS

The Contractor shall begin the construction once a written notice-to-proceed has been given by the Warren County Transportation Improvement District and a preconstruction meeting with the Warren County Engineer has been held. The anticipated first day of construction is Monday, November 4, 2019.

Completion Time

All work shall be completed within 29 weeks after the written notice-to-proceed has been issued by the Warren County Transportation Improvement District, a preconstruction meeting has been held, and construction has started. The anticipated completion date is May 29, 2020. Liquidated damages for non-completion beyond the 64 weeks shall follow the CMS 108.07 except that weather days will not be a cause to extend the completion date due to commitments on the completion time made by the County to local employer(s). It is anticipated that all work shall be completed within a continuous work period, not counting inclement weather, once work has started. Once work has started it shall be expected that work will be performed every work day on the project in an expeditious manner until the project is complete unless of inclement weather.

Working Time and Location Restrictions

Construction activities will not take place on Sundays or holidays at any time or on any day other between the evening/early morning hours of 9:00 p.m. to 7:00 a.m. unless authorized by the Engineer in consultation with City of Mason and Deerfield Township.

Also see the description of utility conflicts provided under "Operations Schedule" in these specifications.

Payment of Work

This project is being <u>100% locally funded</u> with reimbursements from State of Ohio agencies.

Contractor Estimates shall not be submitted more than once a month to the Warren County Transportation Improvement District for work included in the Contract between the Warren County Transportation Improvement District and the Contractor.

Retainage and Affidavits

The contractor shall provide the County Engineer with affidavits stating that all subcontractors and suppliers for this project have been paid in full in accordance with Item 109.08. A percentage of the original contract bid amount shall be retained on this project. Until 50% of the original contract has been performed, 8% of the amount of work performed will be retained. The entire retainage will be released to the Contractor after the final inspection and subsequent punch list is successfully completed, and after all affidavits have been submitted to the County Engineer by the Contractor.

Change Orders

No change orders involving performance or nonperformance contract quantities of project materials shall be processed without direct approval by the Warren County Engineer.

VIII. SPECIAL PROVISIONS / TECHNICAL SPECIFICATIONS

Storage of Construction Materials

The Contractor shall obtain prior approval of the Owner and/or Engineer for the locations to be used for the temporary storage of construction materials, tools, and/or machinery. All such materials, tools, and machinery shall be neatly and compactly piled in such a manner as to cause the least inconvenience to the property owners and to traffic. Under no circumstances shall existing drainage courses be blocked or water hydrants, valves, or meter pits covered.

Protection of Areas Outside of Work Limits

The Contractor shall be responsible for the protection of areas outside of the designated work limits, but which may be adjacent to those work limits. This will include those areas used by construction traffic for access to and from the work areas. Where the Engineer determines that the Contractor's operations have been responsible for damage to areas outside of the work limits, the Contractor shall be responsible for the repair of the area subject to the approval of the Engineer. No additional compensation will be due to the Contractor for any repair of these areas.

Debris Removal

The Contractor will be responsible for removal from the site of all construction debris material. All debris material shall be disposed of in a proper manner and shall be as directed by any applicable local, state or federal regulations.

Utility Notification

The Contractor shall notify at least 48 hours before breaking ground all public and/or private service corporation having wires, poles, conduits, manholes, or other structures that may be affected by the construction on this project, including all structures which are affected and not shown on the plans. Owners of underground utilities, which are members of OUPS, can be notified by calling 1-800-362-2764. Non-member underground utility owners must be called directly.

Utility Adjustments

The Contractor shall adjust to proposed grade all existing utility facilities, i.e. manholes, catch basins, valves, boxes, etc., prior to the commencement of paving operation. This shall include utility facilities, not shown on the plan, which may be found to be located within the pavement area. Work performed on the utility facilities shall be in strict accordance with the specifications of the applicable utility owner and shall be performed under the direction, supervision and inspection of said owner.

Existing Pipe

The location, size, type and depth of all existing pipe are shown as according to the best information. The Engineer will not be responsible for any variations found during construction.

Where the plans provide for conduit to be connected to, or to cross either over or under, or close to an existing underground structure, it shall be the responsibility of the Contractor to locate the existing

VIII. SPECIAL PROVISIONS / TECHNICAL SPECIFICATIONS

structure, both as to line and grade, before he starts to lay the proposed conduit, in order to assure compatibility of line and grade of the proposed conduit. Payment for all operations described above shall be included in the unit price bid for the pertinent conduit item. Grading at Inlets and Outfalls of Proposed Conduits

The cost of the necessary reconstruction and/or re-grading of swales or disturbed areas at the inlets and outfalls of all proposed conduits shall be included in the price bid for the pertinent conduit and inlet items.

Conduit End Treatment

Immediately after placement of any conduits, the Contractor shall construct the end treatments required by the plans at both the outlet and inlet ends. This shall include headwalls, concrete riprap, rock channel protection, sodding, etc.

Grading at Inlets and Outfalls of Proposed Conduits

The cost of the necessary reconstruction and/or regrading of swales or disturbed areas at the inlets and outfalls of all proposed conduits shall be included in the price bid for the pertinent conduit and inlet items.

Maintenance of Sewer Flows

The Contractor shall conduct his operations so as to maintain at all times storm water and sewer flows through existing facilities to remain in place and through existing facilities to be replaced until new facilities are completed and placed in use

Restoration of Areas Disturbed by Drainage Facilities

Soil areas disturbed by construction of underdrains, trench drains, catch basins or other drainage facilities shall be regraded to drain properly and then restored. The cost of restoration of these soil areas is to be per the unit bid for the pertinent item. Pavement areas disturbed by the construction of the drainage facilities will be restored as per the asphalt pavement repair detail. Payment for the restoration of these areas will be at the unit price bid for the pertinent item.

Conduit, Drainage and Utility Items

Unless otherwise specified on the plans, the unit price bid for the pertinent conduit, drainage and/or utility item shall include the cost of all-necessary appurtenances, connections, fittings, plugs, tees, collars, etc.

Unless otherwise noted on the plans, the unit price for the pertinent conduit, drainage and/or utility item is to include the costs involved in the excavation of the trench in unclassified material, the supplying and placing of the required bedding material and the backfilling of the trench with the specified material to the appropriate subgrade elevations.

The contractor shall take precaution while excavating for pipe near existing utilities. If necessary, the contractor shall hand dig in areas where proposed pipe is to be installed near an existing utility. The

VIII. SPECIAL PROVISIONS / TECHNICAL SPECIFICATIONS

Contractor shall hold the Warren County Transportation Improvement District harmless of liabilities which may arise from the damaging of existing utilities. The payment for hand digging in areas near existing utilities shall be paid for under the price bid for the pertinent item.

"Or Approved Equal" Items

In the preparation of these documents and plans, proprietary products may have been specified. In all such cases, it is indicated by the words "Or Approved Equal." However, the Contractor must be aware that, before commencement of construction, he must provide information to the Engineer concerning the substituted product and that the Engineer must approve the offered product as being equal to the specified product. Unless otherwise modified by the Engineer, proprietary products are to be installed and/or constructed in strict compliance with the pertinent manufacturer's specifications.

Item 201 - Clearing and Grubbing

This work shall consist of clearing, grubbing, scalping, removal of trees and stumps, and removing and disposing of all vegetation and debris within the limits of construction, except such objects as are to remain or are to be removed in accordance with other sections of these specifications. The Contractor shall keep clearing to a minimum removing only what is necessary to complete construction. Payment for the work listed above shall be included in the Lump Sum bid price for Item 201 Clearing and Grubbing.

The County removed trees along the P&G frontage that may be potential Indiana Bat habitat prior to bidding this project. Other trees to be removed by the project contractor include the pine trees located between Old Irwin-Simpson and Irwin-Simpson on the right (east) side of the roadway. A courtesy letter was sent to Fish and Wildlife in early March for their concurrence that the pine trees marked for removal can be removed prior to November 1. The County had not received confirmation as of March 24. The contractor will coordinate this work with the Engineer prior to tree clearing.

Item 202 – Removals

This work shall consist of the removal, wholly or in part, and satisfactory disposal of all buildings, fences, guardrails, structures, old pavements, abandoned pipe lines, storage tanks, septic tanks, privy vaults, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the contract. It shall also include the salvaging of designated materials and backfilling the resulting trenches, holes, and pits.

Item 305 - Concrete Base, As Per Plan (9.7") (5,000 psi)

The Contractor shall be responsible for all the labor and material necessary in constructing the concrete pavement as detailed in the plans. The concrete shall be Class "QC 3" (28 day compressive strength = 5000 psi). The Contractor shall follow section 499.03 for concrete slump. The Contractor shall place Item 613 Low Strength Mortar Backfill on top of the existing aluminum box culvert up to the bottom grade for the concrete pavement. The low strength mortar backfill shall extend from the back of the

VIII. SPECIAL PROVISIONS / TECHNICAL SPECIFICATIONS

headwall to the toe of the concrete pavement in all excavated areas within the limits of the concrete pavement. The Contractor shall use extreme caution when excavating material over the aluminum box culvert. Any part of the culvert that is damaged due to construction shall be replaced or repaired by the Contractor to the satisfaction of the Engineer and at no expense to the Engineer. Payment for the work listed above shall be included in the bid price per SY for Item 305 Concrete Base, As Per Plan (9.7") (5,000 psi).

Item 503 – Unclassified Excavation

The Contractor shall be responsible for all the labor and equipment necessary in excavating the existing material that is necessary to construct the concrete footings for the proposed headwall. Payment for the work listed above shall be included in the Lump Sum bid price for Item 503 Unclassified Excavation.

Asphalt Concrete

The Contractor shall supply the Warren County Transportation Improvement District with a weigh ticket for each load of material placed. Periodic asphalt samples will be obtained for a test purposes and an independent testing laboratory will perform tests.

No material shall be placed upon collected water. Asphalt surfaces shall be clear of dirt and debris prior to the placing of each subsequent lift. The Contractor shall adhere to the judgment of the Warren County Transportation Improvement District's designated representatives.

The Contractor's attention is directed to Section 401.14 of the ODOT Specifications and he is hereby instructed that requirements for preparation of asphalt pavement to be resurfaced will be adhered to, and cost of any and all cleaning is to be included in the unit price bid for Item 301 and Item 448.

All gas and water valves in the proposed pavement areas that are not being milled shall be raised to proposed grade and the cost shall be included in the cost per ton bid for the pertinent Asphalt Concrete Surface Course.

A butt joint shall be constructed by grinding/planing existing pavement at each start/stop location, or where newly placed asphalt abuts existing pavement or curb at intersections or cross roads. The Engineer will mark all butt joints in the field with paint. The butt joints shall be constructed by grinding/planing the existing pavement for a length of 6 feet, varying in depth from 2" to 1". The newly formed joint shall be properly installed so as to provide a smooth transition and shall also be properly sealed. The cost of necessary pavement grinding/planing shall be included and paid for in Item 441 Asphalt Concrete.

Item 611 - Pipe Culverts, Sewers and Drains, Ex. Downspouts, Ex. Farm Drains

This work shall consist of the construction or reconstruction of pipe culverts, sewers and drains hereinafter referred to as Type A, Type B, Type C, Type D, Type E and Type F Conduit. The work shall be in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans or established by the Engineer. This work shall include the following: excavating for pipe and foundations for same, including clearing and grubbing and the removal of all materials necessary for placing the pipe except removals listed separately; furnishing and placing granular or concrete bedding and granular backfill as required; constructing and subsequently removing all necessary cofferdams, cribs and sheeting; pumping and dewatering; sealing or banding all pipe joints where required; furnishing and installing all necessary pipe bends and branches of a

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type at least equal to the conduit of which they become a part; joining to existing and proposed appurtenances as required; performing leakage tests as specified; restoration of disturbed facilities and surfaces; and providing erosion control pads and animal guards on underdrain and farm drain outlets.

Item 611 – Allowable Storm Sewer Materials

All Type A or Type B Storm Sewer for these Columbia Road Improvements shall be Reinforced Concrete Pipe per ODOT CMS 706.02.

Type C or Type D storm sewer pipe materials by be either Reinforced Concrete Pipe per 706.02, 707.65 (24" or below), 707.69 (30" and above) unless noted otherwise noted in the plans, general summary or bid line item description.

Item 611 - Manholes, Catch Basins and Inlets

The Contractor is responsible for supplying, delivering and installing the Precast Concrete Sections and the related material. All related material shall be included with the bid and shall be provided by the Contractor. The Contractor shall furnish, unload, assemble, and install the Precast Concrete Sections and all related material at the location shown on the plans. All castings for manholes, catch basins and inlets shall conform to those specified in the standard construction drawings or as specified by the Engineer. All castings which might be subject to vehicle traffic shall be of the heavy-duty grade. Grated inlet tops shall be placed as specified on the plans. Top of casting elevations are subject to final adjustments as approved by the Engineer. All castings used shall be subject to the final approval of the Engineer.

Bedding and Backfill

All bedding and Backfill shall be in strict accordance with the specifications of O.D.O.T. Item 603 for the type of conduit specified. All trenches, that are under or within three (3) feet of existing or proposed roadway pavement, shall be backfilled in the following manner:

In the case of Water Transmission and Distribution Lines, Storm Sewer, and Sanitary Sewer facilities, granular material, Type 1 and Type 3 shall be used to backfill the trench from the bottom of the trench to a maximum distance of twelve (12) inches above the top of the facility within one (1) foot of subgrade. The granular material MUST be properly compacted and tested to ensure minimal settlement of the trench.

Payment for the work listed above shall be included in the price of Item 611.

Item 614 - Maintaining Traffic

Traffic control shall be the sole responsibility of the Contractor. The Warren County Transportation Improvement District shall be held harmless from liabilities caused by improper traffic control by the Contractor. The contractor shall indemnify the Warren County Transportation Improvement District from any and all liabilities due to improper maintenance of traffic. All road construction signs shall also be the responsibility of the Contractor. All traffic control shall conform to the Ohio Manual of

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Uniform Traffic Control Devices (OMUTCD) as well as the Ohio Department of Transportation Standards at all times.

Any devices that are determined by the Engineer to be substandard shall be repaired to the satisfaction of the Engineer or shall be immediately removed from the site and replaced with acceptable devices. Any temporary traffic control devices that are determined by the Engineer to have become substandard during the course of the project shall be removed from the jobsite and immediately replaced by devices meeting the approval of the Engineer.

The contractor shall provide and maintain all signs, barricades, labor, flagmen, steel plates, etc. for all work on this project. The Contractor shall notify the Warren County Transportation Improvement District two (2) weeks prior to any road closure. Any conflicting markings shall be removed or covered in accordance with Item 614.

When it is necessary to install or refresh pavement markings during or prior to cold temperature periods, the Contractor will use spray thermoplastic material per ODOT Specification 614.11 and ODOT Specification 648 with the exception ODOT Specification 648.05 shall be modified to allow placement of the material at a temperature of not less than 35 degrees Fahrenheit. It is the intent to place the material for a work zone which will require the work zone pavement marking to be placed late in the construction season when weather conditions do not allow a plan Work Zone Pavement Marking to be placed per the ODOT Specification temperature conditions and the pavement marking will be in place over the winter.

Methods of maintaining traffic shall conform to the Manual of Uniform Traffic Control Devices and Item 614 of the ODOT Specifications. Payment for the work listed above shall be included in the Lump Sum price bid for Item 614 Maintaining Traffic unless specifically provided for with a separate bid item.

One truck entrance and one employee entrance for the business FESTO shall be maintained at all times. FESTO's business signs shall be maintained at all times with the existing addresses and existing wayfinding markings clearly being identified. Payment shall be included in the Lump Sum price bid for Item 614 – Maintaining Traffic.

Item 623 - Construction Layout Stakes

All centerline of survey and property corner monumentation that is disturbed during construction shall be reset by a Professional Surveyor. Payment for the construction layout and work listed above shall be included in the Lump Sum price bid for Item 623 Construction Layout Stakes.

<u>Item 630 – Ground Mounted Support Bid Items</u>

All posts shall be galvanized. Payment for the galvanized posts and installation shall be included in the F.T. price bid for Item 630 Ground Mounted Support, No. _, Galvanized.

Pavement Marking Material

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All pavement marking material and work shall comply with Item 641 Pavement Marking - General, Item 642 Traffic Paint and Item 644 Thermoplastic Pavement Marking in the 2019 ODOT Construction and Materials Specifications.

Item 642 Traffic Paint (temporary pavement markings) shall be placed prior to work being considered substantially complete. Item 644 Thermoplastic Pavement Markings shall be placed after the final asphalt surface course.

See also the requirement for spray thermoplastic material for temporary markings through the winter months in the Special Provision/Technical Specification note under 614 Maintaining Traffic.

Item 659 – Topsoil, Seeding & Mulching, Commercial Fertilizer, Water

The contractor shall submit supporting documentation/tickets for quantities billed for these items.

Item 832 – Erosion Control

The Contractor shall execute the design details created in the Storm Water Pollution Prevention Plan in accordance with Supplemental Specification 832. The Contractor shall furnish and install temporary sediment and erosion control best management practices required prior to any earth disturbing activity. All pollution prevention measures must be maintained for the duration of construction. The Contractor shall remove all best management practices before the project is accepted. Payment for this work shall be included in the bid price per Each for Item 832 Erosion Control.

<u>Item Special – Contingency</u>

This Item will be used in the event that there are change orders in the contract. No work will be paid or recognized under this item unless agreed upon in writing by an authorized representative of the Warren County Transportation Improvement District. Any Item over the plan quantity will not be paid or recognized unless agreed upon in writing by an authorized representative of the Warren County Engineer. Payment for this work shall be included in the bid price per Each for Item Special Contingencies.

SECTION 33 05 23.16

UTILITY PIPE JACKING

PART 1 GENERAL

1.00 DESCRIPTION

- A. Scope: CONTRACTOR shall provide all labor, materials, equipment, supervision, and incidentals required to excavate, dewater, protect existing structures and furnish and install casing pipe as shown on the Plans and specified. Also included is the provision of pipe support structures, grout, construction bulkheads, disposal of waste material and the installation of the water carrier pipe.
- B. CONTRACTOR shall provide all temporary means needed to prevent discharge of sediment to drainage courses or structures from dewatering systems or due to construction operations.
- C. No classification of excavated material will be made. Excavation includes all materials regardless of type, character, composition, moisture, or condition thereof.
- D. Installation of casing pipes shall be performed by jacking and boring.
- E. Related Sections:
 - 1. Section 31 23 00, Excavation and Fill
 - 2. Section 32 05 33, Site Restoration and Rehabilitation
 - 3. Section 31 23 23.33, Controlled Density Fill
 - 4. Section 33 11 13, Public Water Utility Distribution Piping

1.01 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. Provide steel casing pipe and accessories manufactured by a single firm specializing in the production of this Work and complying with all applicable standards of the American Association of State Highway and Transportation Officials (A.A.S.H.T.O.)
- B. Installer's Qualifications and Experience:
 - 1. Installer shall be a specialist in the construction of casing pipes by jacking or boring and shall have at least five years experience in this specialty. Installer shall have satisfactorily constructed completely in Installer's own name, during the past five years, not less than ten similar installations which are comparable in diameter and length to that shown and specified herein or as approved by the ENGINEER.
 - 2. Installer shall use only personnel thoroughly trained and experienced in the skills required. The field supervisor of the operations and any machine operator shall have not less than 12 months experience in the operations of the equipment being used.
 - 3. Welds shall be made only by welders, tackers and welding operators who have been previously qualified by tests as prescribed by the Structural Welding Society to perform the type of work required. Installer shall show proof of certification when requested by the Owner's Representative.
- C. Requirements of Regulatory Agencies:

- 1. CONTRACTOR shall perform jacking and boring work in compliance with applicable requirements of governing authorities having jurisdiction and obtain all necessary permits for work. CONTRACTOR shall also obtain permits as required by local, state, and federal agencies for discharging water from excavations. The CONTRACTOR shall comply with all provisions of these permits at CONTRACTOR'S own expense.
- 2. The CONTRACTOR shall, in addition to above, obtain all additional permits, provide insurance, bonds, and guarantees, and all else required by the governing authorities at CONTRACTOR'S own expense. The CONTRACTOR'S responsibility under this paragraph includes, but is not limited to, the following:
 - a. Constructing and removing temporary facilities or structures.
 - b. Provide details of construction methods.
 - c. Provide details of construction schedules.
 - d. Reimbursing the applicable authority for all expenses incurred by them in connection with the work, including inspection costs.
 - e. Traffic maintenance.
 - f. Coordination of scheduling with the authority.
 - g. Necessary clean-up and restoration.
- 3. Materials and methods of construction used on gas companies property shall be subject to the approval of the gas companies and the CONTRACTOR shall, at times, conduct work and operations fully within the gas companies rules, regulations, and requirements. The CONTRACTOR must ascertain from the gas companies its rules, regulations, and requirements, and what, if any costs and/or delays may be encountered. Such delays or costs are to be included in the CONTRACTOR'S bid and shall not be the basis for additional compensation or time extension. If required by the gas companies, the CONTRACTOR must submit for approval specific details of the methods of construction CONTRACTOR intends to utilize together with any sketches or drawings.
- D. Design Criteria:
 - 1. The casing pipe shall provide strength commensurate for the diameter, depth of cover and all loads imposed during construction and the service life in accordance with the design requirements of A.A.S.H.T.O and ODOT and in addition be at least equal to the minimum thickness shown on the drawings.
 - 2. The casing pipe and carrier pipe shall be installed in conformity with the line and grade shown on the Contract Drawings.
 - 3. CONTRACTOR shall be wholly responsible for designing, installing and operating the jacking and boring system CONTRACTOR selects as is necessary to satisfactorily accomplish all operations.
 - 4. Tolerances:
 - a. The casing pipes shall be installed on the lines and grades shown on the Plans and within tolerances required to allow the water main to be installed in accordance with the lines and grades shown on the Plans.
 - b. Allowable vertical tolerance as follows:
 - 1) Road Crossing -0.06ft \pm
 - 2) Allowable Horizontal Tolerance 0.50 ft (all crossings)
- E. Reference Standards:
 - 1. ASTM A 53. Specification for Pipe, Steel Black and Hot-Dipped, Zinc Coated Welded and Seamless.
 - 2. ASTM A 139, Grade B; ASTM A 252, Grade 2 for Welded Steel Casing Pipe.
 - 3. ASTM A 153, Zinc-Coating (Hot Dip) on Iron and Steel Hardware.
 - 4. ASTM A 307, Low-Carbon Steel Externally and Internally Threaded Standard Fasteners.

- 5. ASTM C 109, Compressive Strength of Hydraulic Cement Mortars
- 6. ASTM C 150, Portland Cement.
- 7. AWS D1.1, Structural Welding Code.

1.02 SUBMITTALS

- A. Within 30 days of Notice to Proceed submit for approval of the following:
 - 1. Method of Installation and evidence of CONTRACTOR'S experience in jacking and boring.
 - 2. Drawings and details showing the casing pipe proposed. Drawings shall give location of grout holes all pertinent design criteria.
 - 3. Calculations demonstrating that the casing pipe provides adequate strength commensurate with the dead load, live load and depth of cover.
 - 4. Casing pipe and carrier pipe installation procedure including equipment and manpower schedule.
 - 5. Details of access or jacking pit, sheeting and bracing and analysis of soil capacity behind backstop to sustain maximum jacking load. All details and calculations shall be stamped by a professional engineer licensed in Ohio.
 - 6. Description of jacking and boring method; procedure; equipment; manpower schedule; design of leading edge shield and method of directional control; bulkheading procedures and breasting jacks to support excavation face; and a certificate from manufacturer or professional engineer that casing pipe can withstand maximum jacking forces imposed, if applicable.
 - 7. Grouting system including equipment, procedure and schedule.
 - 8. Dewatering system.
 - 9. Protection methods.
 - 10. During jacking and boring operation, submit daily reports indicating progress, line data and grade of installed work.
- B. Technical data, work schedules and any other information required by the authority having jurisdiction.
- C. Certificates: Certificate of Conformance in accordance with paragraph 21.1 of ASTM A 139.
- D. Record Documents: During progress of the Work, keep an up-to-date set of Drawings showing field and Shop Drawing modifications. Submit reproducible mylars at a scale satisfactory to the ENGINEER that show the actual in-place installation of casing pipe and all piping installed under this Section. The drawings shall show all piping on plans and in sections and grouting details, with all reference dimensions and elevations required for complete record drawings of the Work. The record drawings shall be furnished not later than 30 days after Substantial Completion of the Work.

1.03 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Delivery:
 - 1. Exercise special care during delivery not to damage the casing pipe and carrier pipe.
 - 2. Damaged materials will be rejected by the ENGINEER and replaced by the CONTRACTOR at his expense.
 - 3. Deliver materials to such locations so as to avoid excessive handling.
- B. Storage:

- 1. Store casing pipe and carrier pipe on approved blocking for protection from corrosion until incorporation into the Work in accordance with manufacturer's recommendation.
- 2. Store in areas shown on the Plans or as approved by the ENGINEER.
- 3. The ENGINEER shall be permitted access to inspect the materials in storage areas.

C. Handling:

- 1. Handle materials in a manner so as to avoid damage.
- 2. Materials damaged during handling shall be repaired or replaced as ordered by the ENGINEER.

1.04 JOB CONDITIONS

- A. Existing Structures: Shown on the Drawings are certain surface and underground structures adjacent to the Work. This information has been obtained from existing record drawings and ground survey. It is shown for the convenience of the CONTRACTOR. CONTRACTOR shall explore ahead of the required excavation to determine the exact location of all structures. They shall be supported and protected from injury by CONTRACTOR. If they are broken or damaged, they shall be restored immediately by CONTRACTOR at CONTRACTOR'S expense.
- B. Existing Utilities: Locate existing underground utilities in the areas of Work. If utilities are to remain in place, provide adequate means of protection during jacking and boring operations. Pay particular attention to the special notes on the construction plans and general notes sheet to comply with the requirements of the multiple gas transmission companies.
 - Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult the ENGINEER immediately for directions as to procedure. Cooperate with OWNER and Owner of the utility service in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
 - 2. Do not interrupt existing utilities serving facilities occupied and used by OWNER or others, except when permitted in writing by ENGINEER and then only after acceptable temporary utility services has been provided.
- C. Protection: Guardrails, fences, signs, lights, barricades, barrels, and all other protective items necessary shall be provided in accordance with the requirements of all applicable permits, laws, regulations, and ordinances, and a necessary to prevent damage or injury to private or public property or to workers or the general public.
- D. Adequately support and protect structures, utilities, pavements and facilities that are encountered in, or may be affected by, the work from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by jacking and boring operations.
- E. All excavations shall be sheeted, shored, and braced as required to prevent subsurface subsidence as specified in Section 31 23 00.
- F. Access and jacking pits shall be kept dewatered, and pumps shall be attended on a 24-hour basis, if conditions so require. Close observation shall be maintained to detect any settlement or displacement of facilities during dewatering operations. Dewater into a sediment trap and comply with applicable environmental protection criteria.
- G. Maintain the in the excavation in a condition suitable for the health of workers at all times.

H. Use of explosives shall not be permitted.

1.05 GUARANTEE

A. Guarantee of work completed by the CONTRACTOR shall be as specified in the General Conditions of these specifications, except that longer periods may be required where noted in the permits or specified by applicable authorities.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Steel Casing Pipe:
 - 1. Casing pipe shall be steel pipe meeting the requirements of ASTM A 139, Grade B, leakproof construction capable of withstanding Cooper E-80 loading. Pipe shall be seamless or have not more than one (1) longitudinal weld.
 - 2. Minimum wall thickness shall be designed by the CONTRACTOR from design criteria specified in paragragh 1.2.C. and any other applicable loads.
 - 3. Unless shown otherwise on the drawings, the inside diameter of casing pipe shall be selected by CONTRACTOR and approved by ENGINEER and shall be a minimum of 6 inches larger than the greatest outside diameter of the carrier pipe.
 - 4. Casing pipe shall be furnished with plain ends, mill beveled for butt welding. Field welded joints shall be full penetration single-vee groove, butt type welds around the entire circumference of the pipe.
 - 5. An adequate number of 1-1/2-inch or 2-inch holes shall be drilled 3 feet on center alternating 30 degrees with a vertical plane through the casing of the pipe, before installation to check for voids after the casing pipe is installed. The holes shall be tapped for plugs. Plugs shall be furnished and installed by the CONTRACTOR.
 - 6. Refer to Watermain in Casing Detail (W-7) in the construction plans.
- B. Carrier Pipe:
 - 1. The carrier pipe material, joint type, class, thickness, coating, finish, etc. shall be as shown on the drawings and shall conform to the appropriate pipe specifications included in these specifications.
 - 2. The carrier pipe shall be furnished with restrained joints throughout the casing pipe and 5 feet beyond each end.
- C. Carrier Pipe Spacers and Blocks:
 - 1. Provide manufactured spacers made from stainless steel, polyethylene, or precast nonmetallic composite (polypropylene) with self adhesive backing.
 - 2. Spacers shall be installed at least 2 per length of pipe (18")
 - 3. See Watermain in Casing Detail (W-7) for proper spaceing.
 - 4. Provide spacers manufactured by one of the following:
 - a. Cascade Waterworks Mfg. Co.b. Or approved equal.
 - 5. Attach spacers to pipe with high strength steel bands or mechanically clamp to pipe with built-in clamping features of spacers.
- 2.02 MIXES

- A. Grout:
 - 1. Use Low Strength Mortar backfill at 50 psi compressive strength per Section 31 23 23.33.

PART 3 EXECUTION

3.01 GENERAL

- A. Installation of the crossings shall be jacking or boring and shall conform in all respects to requirements contained herein and other applicable standards.
- B. Lines and Grades: The CONTRACTOR is responsible for establishing and maintaining proper line and grade at each crossing.
 - 1. The CONTRACTOR shall daily check line and grade to assure conformance with line and grade shown on Plans and within the tolerances indicated in this Section.
 - 2. Work required because of the CONTRACTOR'S failure to maintain the proper line and grade shall be performed by the CONTRACTOR at no additional cost to the OWNER.
 - 3. CONTRACTOR shall submit daily reports, in a format approved by the ENGINEER, for recording progress and results of line and grade checks.

3.02 INSPECTION

- A. As required by the ENGINEER and/or OWNER.
- B. CONTRACTOR will examine the areas and conditions under which jacking and boring is to be performed and notify the ENGINEER of conditions he may find that are detrimental to the proper and timely completion of the Work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

3.03 PREPARATION

- A. Access pits at each end of the crossing shall be sufficiently large to permit satisfactory installation of the casing pipe. All excavation, backfill, sheeting, shoring, bracing and dewatering shall comply with applicable requirements of Section 02315, Excavation and Backfill, of these specifications and the requirements of the applicable authorities.
- B. The CONTRACTOR shall provide control points for the casing installation. CONTRACTOR shall protect and safeguard such control points from damage or movement, and utilize the control points to install the casing within the line and grade tolerance specified. As a minimum for vertical control, CONTRACTOR shall set a vertical control benchmark and set points, PK nails at 25 feet spacing along the alignment, for daily settlement measurements.

3.04 INSTALLATION

- A. General:
 - 1. Installation shall be by boring and jacking a steel casing pipe. Method used shall be the option of the CONTRACTOR.
 - 2. Adequate methods of dewatering shall be provided to produce satisfactory and safe working conditions.

- 3. Stabilize soils at the excavation face using chemical grout or other approved means where necessary to advance the excavation without loss of ground.
- 4. Use bentonite slurry or other lubricant to facilitate jacking operation.
- 5. Installation of the carrier pipe shall be performed so as not to damage the pipe or joints.
- 6. Any pit necessary in the performance of the Work shall be located as approved by the Engineer and adequately sheeted and shored to protect the work, all persons and adjacent property.
- B. Installation of Steel Casing Pipe by Jacking:
 - 1. Install in accordance with current State of Ohio D.O.T. requirements and local authority requirements.
 - 2. Design bracing and backstops and use jacks of sufficient rating that jacking can be accomplished in a continuous manner until the leading edge of the pipe reaches the final positions shown on the Plans.
 - 3. If voids develop around the casing pipe as it is jacked, pump cement grout to fill all such voids, or fill by other means acceptable to the ENGINEER.
 - 4. Fill all voids as specified hereafter as soon as possible after completion of jacking operation.
 - 5. Provide casing pipe with a minimum yield strength of 35,000 PSI and in accordance with the details on the drawings.
- C. Installation of Steel Casing Pipe by Boring:
 - 1. The boring method shall consist of pushing the pipe into the fill with a boring auger rotating inside the pipe to remove the soil.
 - 2. Provide the front of the casing pipe with suitable mechanical arrangements or devices that will positively prevent the auger and cutting head from leading the pipe so that there will be no unsupported excavation ahead of the pipe.
 - 3. The equipment and mechanical arrangements or devices used to bore and remove earth shall be removable from within the casing pipe in the event an obstruction is encountered.
 - 4. The face of the cutting edge shall be arranged to provide reasonable obstruction to the free flow of soft or poor soil.
 - 5. Do not use water or other liquids to facilitate casing emplacement or spoil removal.
 - 6. If voids develop around the casing pipe as it is bored, pump cement grout to fill all such voids, or fill by other means acceptable to the ENGINEER.
 - 7. Fill all voids as specified hereafter as soon as possible after completion of jacking operation.
 - 8. Provide casing pipe with a minimum yield strength of 35,000 PSI and in accordance with the details on the drawings.
- D. Grouting: The following requirements apply to steel casing pipe installation:
 - 1. Start at the lowest middle hole of each section to be grouted, grout holes above o remain open, and proceed upward progressively and, if possible, simultaneously on both sides of the casing until all voids are completely filled with grout.
 - 2. Provide grout holes in addition to those specified where directed by the ENGINEER to insure filling of all voids.
 - 3. At any given location, grouting pressures shall not exceed one-half (1/2) PSI for each foot of overburden in earth.
 - 4. Grouting shall be done as near the end of the casing pipe as practical and if required by the ENGINEER, grout stops shall be placed behind the sections at or near the end of the casing pipe to permit grouting to or near the end.

- E. Obstructions: If an obstruction is encountered during installation stopping the forward action of the casing pipe, and it becomes evident that is impossible to advance the pipe, the CONTRACTOR shall remove obstruction at the leading end of the casing pipe. No blasting shall be permitted.
- F. Installation of the Waterline Carrier Pipe:
 - 1. After completion of the steel casing pipe, the carrier pipe shall be installed and pressure tested by an approved method.
 - 2. Care shall be taken to prevent undue disturbances of the joints.
 - 3. Pipe shall be laid to the line and grade shown on the Plans.
 - 4. The pipe shall be blocked in place using approved blocks or spacers at a maximum spacing of 10 feet center to center along the length of the casing pipe, top and bottom in accordance with the details on the drawings, or as recommended by the manufacturer.
 - 5. The CONTRACTOR shall repair, replace or take whatever action is deemed necessary by the ENGINEER to correct all disturbed joints at no additional cost to the OWNER.
- G. Bulkheads (Carrier Pipe Installation Only):
 - 1. After the carrier pipe is installed in the steel casing pipe and successfully pressure tested, construct brick and mortar bulkheads.
 - 2. Prior to the installation of bulkheads, the carrier pipe shall be properly and sufficiently secured against flotation and against all movement which would disturb joints.
 - a. The CONTRACTOR shall be responsible for maintaining all joints.
 - b. The CONTRACTOR shall repair, replace, or take whatever action is deemed necessary by the ENGINEER to correct all disturbed joints at no additional expense to the OWNER.
 - c. The annular space in the casing shall be filled with grout. Grout shall be pumped through a tremie pipe delivering grout material from the higher end of the casing to the face of the lower end bulkhead.
- H. Dispose of by-products of operations in accordance with all applicable codes, regulations, ordinances, laws, etc. By-products shall be hauled off-site to final disposal on a daily basis.

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SECTION 33 11 13.13

DUCTILE IRON PUBLIC WATER UTILITY DISTRIBUTION PIPING

PART 1 GENERAL

1.01 DESCRIPTION

- A. Scope:
 - 1. CONTRACTOR shall provide all labor, materials, equipment, and incidentals as shown, specified, and required to furnish ductile iron pipe and fittings.
 - 2. Extent of piping is shown on the Drawings. Piping schedules included in Section 33 11 13 Public Water Utility Distribution Piping, specify pipe service, diameter, material, lining, coating, pressure rating, joint type, and testing required.

B. Coordination:

- 1. Review installation procedures under this and other Specification sections and coordinate installation of items that are to be installed with or before ductile iron pipe Work.
- 2. Notify other contractors in advance of installation of ductile iron pipe to provide them with sufficient time to install items included in their contracts that must be installed with or before ductile iron pipe Work.

1.02 RELATED WORK

- A. Section 31 23 00, Excavation and Fill.
- B. Section 33 11 13, Public Water Utility Distribution Piping.
- C. Division 33, Applicable Sections on Piping, Valves and Appurtenances.

1.03 REFERENCES

- A. Standards referenced in this Section are listed below:
 - 1. ANSI B18.2.1, Square and Hex Bolts and Screws Inch Series.
 - 2. ANSI B18.2.2, Square and Hex Nuts. (Inch Series).
 - 3. ASTM A193, Alloy Steel and Stainless Steel Bolting Materials for High-Temperature Service.
 - 4. ASTM A194, Specification for Carbon Steel and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both.
 - 5. ASTM A307, Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
 - 6. ASTM A354, Specification for Quenched and Tempered Alloy Steel Bolts, Studs and Other Externally Threaded Fasteners.
 - 7. ASTM A563, Specification for Carbon and Alloy Steel Nuts.
 - 8. ASTM B117, Practice for Operating Salt Spray (Fog) Apparatus.
 - 9. ASTM C283, Test Methods for Resistance of Porcelain Enameled Utensils to Boiling Acid.
 - 10. ASTM D714, Test Method for Evaluating Degree of Blistering of Paints.
 - 11. ASTM D792, Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
 - 12. ASTM D5162, Discontinuity (Holiday) Testing of Non-Conductive Protective Coating on Metallic Substrates.
 - 13. ASTM E96, Test Methods for Water Vapor Transmission of Materials.

- 14. ASTM G14, Test Method for Impact Resistance of Pipeline Coatings (Falling Weight Test).
- 15. ASTM G62, Test Methods for Holiday Detection in Pipeline Coatings.
- 16. ASTM G95, Test Methods for Cathodic Disbondment Test of Pipeline Coatings (Attached Cell Method).
- 17. ANSI/AWWA C104, Cement-Mortar Lining for Ductile Iron Pipe and Fittings for Water.
- 18. ANSI/AWWA C110, Ductile Iron and Gray-Iron Fittings, 3 in. 48 in. for Water.
- 19. ANSI/AWWA C111, Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
- 20. ANSI/AWWA C115, Flanged Ductile Iron Pipe with Ductile Iron or Gray Iron Threaded Flanges.
- 21. ANSI/AWWA C116, Protective Fusion-Bonded Epoxy Coatings for the Interior and Exterior Surfaces of Ductile Iron and Gray Iron Fittings for Water Service.
- 22. ANSI/AWWA C151, Ductile Iron Pipe, Centrifugally Cast, for Water.
- 23. ANSI/AWWA C153, Ductile Iron Compact Fittings for Water Service.
- 24. ANSI/AWWA C606, Grooved and Shouldered Type Joints.
- 25. European Standard (EN), EN 598: Ductile Iron Pipe, Fittings, Accessories and Their Joints for Sewerage Applications.
- 26. Manufacturers Standardization Society of the Valves and Fittings Industry (MSS), MSS-SP 60, Connecting Flange Joint Between Tapping Sleeves and Tapping Valves.
- 27. NACE RP0188, Discontinuity (Holiday) Testing of New Protective Coatings on Conductive Substrates.
- National Association of Pipe Fabricators, Inc. (NAPF), NAPF 500-03, Surface Preparation Standard for Ductile Iron Pipe and Fittings Receiving Special External Coatings and/or Special Internal Linings.
- 29. ANSI /NSF 61, Drinking Water System Components Health Effects.
- 30. SSPC PA 2, Measurement of Dry Coating Thickness with Magnetic Gages.
- 31. SSPC Painting Manual, Volume 1, Para. XIV.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. Manufacturer shall have a minimum of five years successful experience producing ductile iron pipe and fittings and shall be able to show evidence of at least five installations in satisfactory operation in the United States that are similar applications to the specified service.
 - 2. Lining and coating products shall be manufactured by a firm with a minimum of five years successful experience in protecting pipelines exposed to the specified service conditions, and shall be able to show evidence of at least five installations in satisfactory operation in the United States that are similar applications to the specified service.
 - 3. When not applied by the manufacturer, lining and coating Subcontractor shall have a minimum of five years successful experience in the application of the specified linings and coatings for similar applications for the specified service, and shall be able to show evidence of at least five installations in satisfactory operation in the United States.
- B. Supply and Compatibility:
 - 1. Unless otherwise approved by Engineer, obtain all pipe, fittings, and appurtenances included in this Section from a single ductile iron pipe manufacturer.
 - 2. Ductile iron pipe manufacturer shall review and approve or prepare all Shop Drawings and other submittals for all pipe, fittings, and appurtenances furnished under this Section.
 - 3. All pipe, fittings, and appurtenances shall be suitable for the specified service and shall be integrated into the overall piping system by ductile iron pipe manufacturer.
 - 4. Ductile iron pipe manufacturer shall be responsible for all products and all factory-applied

linings and coatings, whether installed at pipe manufacturer's facility or at manufacturer's Subcontractor's facility.

1.05 SUBMITTALS

- A. Shop Drawings: Submit the following with Shop Drawings required under Section 33 11 13, Public Water Utility Distribution Piping:
 - 1. Detailed drawings and data for pipe, fittings, gaskets, appurtenances, linings, and coatings.
- B. Certificates:
 - 1. Submit a certificate signed by manufacturer of each product that product conforms to applicable referenced standards and the Contract Documents.
 - 2. Submit a certificate signed by the applicator of the linings and coatings stating that the product to be applied conforms to applicable referenced standards and that the applicator shall conform to the Contract Documents.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Refer to Section 33 11 13, Public Water Utility Distribution Piping.
- B. Handling of Pipe and Fittings Lined with Ceramic Epoxy, Fusion Bonded Epoxy, or Glass: Lifting devices shall not come into contact with lined surfaces. Use hooks, forks, chains, straps, and other lifting devices only on exterior of pipe and fittings. Pipe and fittings with damaged lining shall be replaced regardless of cause of damage.
- C. Handling of Pipe and Fittings Coated with Fusion Bonded Epoxy: Hooks, forks, chains, straps, and other lifting devices shall be rubber-coated and be used only on exterior of pipe and fittings in such a manner to avoid damaging the coating. If coating becomes damaged, CONTRACTOR shall notify pipe and coating manufacturer to determine if repair of damaged area or re-coating is required. Perform repairs using recommended procedures and materials provided by manufacturer, as accepted by ENGINEER. Pipe and fittings requiring re-coating shall be removed from Site and returned to manufacturer's facility. Repaired or re-coated pipe and fittings shall meet all requirements of this Section.

PART 2 PRODUCTS

2.01 MATERIALS

- A. General:
 - 1. Piping systems shall be suitable for their intended use.
 - 2. Joints shall be as specified in Section 33 11 13, Public Water Utility Distribution Piping. If not specified, provide flanged joints for exposed piping and push-on or mechanical joints for buried piping. Provide couplings on pipe with plain or grooved ends where shown or where approved by ENGINEER.
- B. Ductile Iron Pipe and Fittings:
 - 1. Flanged Pipe: Fabricate in accordance with ANSI/AWWA C115.
 - a. Pressure Class: As specified on drawings. If not otherwise specified use Class 52
 - 2. Non-Flanged Pipe: Conform to ANSI/AWWA C151 for material, pressure, dimensions, tolerances, tests, markings, and other requirements.
 - a. Pressure Class: As specified on drawings. If not otherwise specified, use Class 52.

- 3. Joints:
 - a. Flanged Joints: Conform to ANSI/AWWA C110 and ANSI/AWWA C115 capable of meeting the Class 52
 - Gaskets: Unless otherwise specified, gaskets shall be at least 1/8-inch hick, ring or full-face as required for the pipe, of a synthetic rubber compound containing not less than 50 percent by volume nitrile or neoprene, and shall be free from factice, reclaimed rubber, and other deleterious substances. Gaskets shall be suitable for the service conditions specified, specifically designed for use with ductile iron pipe and fittings.
 - i. Gasket Sealing Compounds: Provide high temperature resistant sealing compound (Loctite PST 592 or equivalent) with Dimethacrylate-ester base, and Teflon.
 - 2) Bolts: Conform to ANSIB18.2.1
 - i. Exposed: ASTM A 307, Grade B
 - ii. Buried or Submerged: ASTM A 193, Grade B8M, Class 2, Heavy hex, Type 316 stainless steel.
 - 3) Nuts: Conform to ANSI B18.2.2.
 - i. Exposed: ASTM A 563, Grade A, Heavy Hex.
 - ii. Buried or Submerged: ASTM A 194, Grade B8M. Heavy hex, Type 316 stainless steel.
 - b. Mechanical Joints: Conform to ANSI/AWWA C110 and ANSI/AWWA C111, capable of meeting Class 52 or special thickness class, and test pressure specified in Section 33
 - 11 13 Public Water Utility Distribution Piping.
 - 1) Glands: Ductile Iron.
 - 2) Gaskets: Plain tip.
 - 3) Bolts and Nuts: High strength, low alloy steel.
 - 4) Manufacturers: Provide products of one of the following:
 - i. Clow Water Systems, a Division of McWane, Inc.
 - ii. American Cast Iron Pipe Co.
 - iii. U.S. Pipe and Foundry Co.
 - c. Push-on Joints: Conform to ANSI/AWWA C111, capable of meeting Class 52 or special thickness class, and test pressure specified in Section 33 11 13 Public Water Utility Distribution Piping.
 - 1) Gaskets: Molded rubber.
 - 2) Stripes: Each plain end shall be painted with a circular stripe to provide a guide for visual check that joint is properly assembled.
 - 3) Products and Manufacturers: Provide products of one of the following:
 - i. Tyton or Fastite Joint by Clow Water Systems, a Division of McWane, Inc.
 - ii. Fastite Joint by American Cast Iron Pipe Co.
 - iii. Tyton Joint by U.S. Pipe and Foundry Co.
 - d. Grooved End Joints: Conform to ANSI/AWWA C606.
 - 1) Gaskets: Flush seal type designed for ductile iron.
 - 2) Bolts and nuts: As specified for flanged joints.
 - 3) Unless otherwise specified, grooved end couplings shall be rigid joint for exposed service and flexible joint for buried service.
 - 4) Products and Manufacturers: Provide products of one of the following:
 - i. Victaulic, Style 31.
 - ii. Or equal.
 - e. Restrained Joints: Restrained push-on joints shall be capable of being deflected after full assembly. Field cuts of restrained pipe are not allowed without approval of ENGINEER.
 - 1) Products and Manufacturers: Provide restrained joints for mechanical joint piping by the following:

- i. Megalug, Series 1100, manufactured by EBAA Iron Sales, Inc.
- 2) Products and Manufacturers: Provide restrained joints for push-on joint piping by one of the following:
 - i. Super-Lock Joint Pipe, manufactured by Clow Water Systems, a division of McWane, Inc.
 - ii. Lok-Ring Joint, or Flex-Ring Joint, manufactured by American Cast-Iron Pipe Company.
 - iii. TR Flex Joint or Field Lok, manufactured by U.S. Pipe and Foundry Co.
 - iv. Series 1700 D.I. Restrained Harness manufactured by EBAA Iron.
 - i. All mechanical restraint devices shall be coated with a fully bonded coating system on castings and wedge assemblies.
- 4. Flanged Fittings: Conform to ANSI/AWWA C110 or ANSI/AWWA C153.
 - a. Pressure Rating: As specified above for flanged joints.
 - b. Material: Ductile iron.
 - c. Gaskets: As specified above for flanged joints.
 - d. Bolts and Nuts: As specified above for flanged joints.
- 5. Mechanical Joint Fittings: Conform to ANSI/AWWA C110 or ANSI/AWWA C153.
 - a. Pressure Rating: As specified above for mechanical joints.
 - b. Material: Ductile iron.
 - c. Glands: Ductile iron.
 - d. Gaskets: As specified above for mechanical joints.
 - e. Bolts and Nuts: As specified above for mechanical joints.
- C. General Requirements for Lining:
 - 1. Surface Preparation:
 - a. Initial Surface Inspection: Surface to be lined shall be inspected by pipe and fitting manufacturer and applicator, if applicator is other than pipe and fitting manufacturer. The inspecting parties shall inspect the surface to be coated and mutually determine the recommended surface preparation method.
 - b. Surface Preparation: Prepare surface in accordance with the recommended method.
 - c. Finished Surface Inspection: Lining applicator shall inspect finished surface prior to application to determine acceptability. If surface is unacceptable, surface preparation shall be repeated as necessary.
- D. Cement-mortar Lining:
 - 1. Where specified in piping schedules included with Section 33 11 13 Public Water Utility Distribution Piping, pipe and fittings shall be lined with a bituminous seal coated cement-mortar lining in accordance with ANSI/AWWA C104.
- E. Polyethylene Encasement
 - 1. Encase ductile iron pipe, fittings, valves, and other appurtenances with polyethylene film as indicated or specified.
 - 2. Materials:
 - a. Polyethylene material shall be as follows:
 - i. Conform to ASTM D1248 Type 1
 - ii. Class A or C
 - b. Adhesive tape shall be as follows:
 - i. Approximately 1-1/2" wide and plastic backed.
 - ii. Capable of bonding securely to metal surfaces and/or polyethylene material.
 - iii. Tape should be recommended by film manufacturer.

F. Specials:

- 1. Transition Pieces:
 - a. Furnish suitable transition pieces (adapters) for connecting to existing piping.
 - b. Unless otherwise shown or specified, expose existing piping to determine material, dimensions, and other data required for transition pieces.
- 2. Taps:
 - a. Provide taps where shown or required for small-diameter pipe connections.
 - b. Provide corporation stops where shown or required.
 - c. Where pipe wall thickness or tap diameter will not permit the engagement of the required minimum number of full threads, provide a tapping saddle with outlet joints conforming to requirements of Paragraph 2.1.B.3.a for 4-inch through 12-inch diameter pipe, and Paragraph 2.1.B.3.b. for 14-inch through 54-inch diameter pipe.

2.02 MARKING FOR IDENTIFICATION

- A. In addition to identification markings specified in Section 33 11 13, Public Water Utility Distribution Piping, also stamp, mark, and identify pipe materials with:
 - 1. Name or trademark of manufacturer.
 - 2. Size and length dimensions.
 - 3. Date and place of manufacture, including country.
 - 4. Pipe Class

2.02 EXTERIOR SURFACE PREPARATION AND COATINGS

- A. General Coating Requirements:
 - 1. Coating types are specified in section 33 11 13, Public Water Utility Distribution Piping.
- B. Buried Pipe and Fittings:
 - 1. Asphaltic Coating: Where specified in piping schedule in Section 15051, Buried Piping Installation, coat pipe and fittings with an asphaltic coating approximately one mil thick, in accordance with ANSI/AWWA C151, ANSI/AWWA C115, ANSI/AWWA C110, and ANSI/AWWA C153, as applicable.
 - 2. Fusion Bonded Epoxy Coating for Fittings:
 - a. When specified in piping schedule in Section 15051, Buried Piping Installation, fittings shall be factory coated with 100 percent solids, thermosetting, dry powder epoxy, in conformance with ANSI/AWWA C116.
 - b. Apply coating utilizing a method, recommended by manufacturer, that meets requirements of this Section, with a finished dry film thickness of at least six mils, with exception of joint areas, which shall receive at least a four-mil dry film thickness coating. Heat and cure the fittings per coating manufacturer's recommendations.
 - c. Shop Testing: Cut a test coupon from a coated fitting no less than six inches in diameter, and approximately 4 inches in length, and split coupon lengthwise into two equal sections. Surface preparation, application procedure, thickness, and curing parameters shall be the same or the test coupon as for Project fittings. Perform the following tests on test coupon:
 - Scribe coating material through to bare surface of fitting with an "X" across full length of test coupon. Immerse coupon for 500 hours in 150-degree F bath of distilled water. Coating shall show no signs of disbondment or blistering.
 - 2) Test coupon shall be impact tested using ASTM G14 test method with a 20 in.-lbf impact applied near center of convex section of test coupon. Coating shall show no signs of cracking or disbondment.
 - d. Manufacturer's Inspection and Certification:

- 1) All coated fittings shall be visually inspected by manufacturer and show no sign of blisters, cracks, or lack of coverage.
- 2) Check all coated fittings for coating thickness using a magnetic film thickness gage utilizing method outlined in SSPC PA 2 Film Thickness Rating.
- 3) Holiday-test all coated fittings in accordance with ASTM D5162, NACE RP0188, and SSPC Painting Manual Vol. 1, Para. XIV, with a low voltage, wet sponge holiday detector. Repair methods and materials for holidays shall be as recommended by coating manufacturer and made prior to shipment to the Site.
- e. Products and Manufacturers: Provide products of one of the following:
 - 1) Pipeclad 1500, by Valspar Corporation.
 - 2) Or equal.

PART 3 EXECUTION

3.01 INSPECTION

- A. Inspect piping to assure that piping is free from defects in material and workmanship. Verify compatibility of all pipe, fittings, gaskets, linings, and coatings.
- 3.02 INSTALLATION AND FIELD QUALITY CONTROL
 - A. For buried piping installation and testing, refer to Section 33 11 13, Public Water Utility Distribution Piping.

END OF SECTION

SECTION 33 11 13

PUBLIC WATER UTILITY DISTRIBUTION PIPING

PART 1 GENERAL

1.01 DESCRIPTION

A. Scope:

- 1. Contractor shall provide all labor, materials, equipment and incidentals as shown, specified and required to install and test all buried piping, fittings, and specials. The Work includes, but is not limited to, the following:
 - a. All types and sizes of buried piping, except where buried piping installations are specified under other Sections or other Contracts.
 - b. Unless otherwise specifically shown, specified, or included under other Sections, all buried piping Work required, beginning at the outside face of structures or structure foundations, including piping beneath structures, and extending away from structure.
 - c. Work on or affecting existing piping.
 - d. Installation of all jointing and gasket materials, specials, flexible couplings, mechanical couplings, harnessed and flanged adapters, sleeves, tie rods, and all other Work required for a complete, buried piping installation.
 - e. Supports, restraints, and thrust blocks.
 - f. Pipe encasements, with the exception of piping embedded in concrete within a structure or foundation.
 - g. Field Quality Control, including Testing.
 - h. Cleaning and disinfecting.
 - i. Incorporation of valves, meters and special items shown or specified into the piping systems per the Contract Documents and as required.

B. Coordination:

- 1. Review installation procedures under this and other Sections and coordinate the installation of items that must be installed with, or before the buried piping installation Work.
- 2. Coordinate with the appropriate piping Sections of Division 33, Utilities.
- 3. Notify other contractors in advance of the installation of the buried piping installation to provide them with sufficient time for the installation of items included in their contracts that must be installed with, or before, the buried piping installation Work.
- C. No existing structure or concrete shall be shifted, cut, removed, or otherwise altered until authorization is given by the Engineer.

1.02 RELATED WORK

- A. Section 31 23 00, Excavation and Fill.
- B. Section 30 40 00, Precast Concrete Manholes and Structures.
- C. Section 03 30 00, Cast-In-Place Concrete.
- D. Division 33, Applicable Sections on Piping, Valves and Appurtenances.

1.03 REFERENCES

- A. Standards referenced in this Section are listed below:
 - 1. American National Standards Institute, (ANSI):
 - a. ANSI B31.1, Power Piping.
 - 2. American Society for Testing and Materials, (ASTM):
 - a. ASTM B 32, Specification for Solder Metal.
 - b. ASTM C 924, Practice for Testing Concrete Pipe Sewer Lines by Low-Pressure Test Method.
 - c. ASTM D 2321, Practice for Underground Installation of Thermoplastic Pipe for Sewers and other Gravity-Flow Applications.
 - d. ASTM D 2774, Practice for Underground Installation of Thermoplastic Pressure Piping.
 - e. ASTM F 1417, Test Method for Installation Acceptance of Plastic Gravity Sewer Lines using Low-Pressure Air.
 - 3. American Water Works Association, (AWWA):
 - a. AWWA C111, Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
 - b. AWWA C600, Installation of Ductile-Iron Water Mains and Their Appurtenances.
 - c. AWWA C605, Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water.
 - d. AWWA C606, Grooved and Shouldered Joints.
 - e. AWWA C651, Disinfecting Water Mains.
 - f. AWWA M9, Concrete Pressure Pipe.
 - g. AWWA M23, PVC Pipe Design and Installation
 - h. AWWA M41, Ductile-Iron Pipe and Fittings.
 - 4. American Society of Civil Engineers, (ASCE):
 - a. ASCE 37, Design and Construction of Sanitary and Storm Sewers.
 - 5. Concrete Pipe Handbook, American Concrete Pipe Association.
 - 6. Factory Mutual System, (FM).
 - 7. National Fire Protection Association, (NFPA):
 - a. NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances.
 - 8. Underwriters' Laboratories, Inc., (UL).

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with applicable provisions and recommendations of the following except as otherwise shown or specified.
 - 1. Comply with requirements of authorities having jurisdiction at the site.
 - 2. Obtain all necessary permits for Work in roads, rights-of-way, railroads, and other areas of the Project. Also, obtain permits as required by local, state and federal agencies for discharging water from excavations.

1.05 SUBMITTALS

- A. Shop Drawings: Submit the following:
 - 1. Laying schedules for all concrete pipe and piping with restrained joints.
 - 2. Full details of piping, specials, joints, harnessing and thrust blocks, and connections to piping, structures, equipment and appurtenances.
- B. Tests: Submit description of proposed testing methods, procedures and apparatus. Prepare and submit report for each test.

- C. Certificates: Submit certificates of compliance with referenced standards.
- D. Record Documents:
 - 1. Maintain accurate and up-to-date record documents showing field and Shop Drawing modifications. Record documents for buried piping Work shall show actual location of all piping and appurtenances at same scale as the Contract Drawings.
 - 2. Record documents shall show piping with elevations referenced to the project datum and dimensions to at least three permanent structures, when possible. For straight runs of pipe provide offset dimensions as required to document pipe location.
 - 3. Include profile drawings with buried piping record documents when the Contract Documents include pipe profile drawings.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Delivery:
 - 1. Deliver materials to the Site to ensure uninterrupted progress of the Work.
 - 2. Upon delivery inspect pipe and appurtenances for cracked, gouged, chipped, dented, and other damaged material and immediately remove from Site.
- B. Storage:
 - 1. Store materials to allow convenient access for inspection and identification. Keep material off the ground using pallets, platforms, or other supports. Protect steel members and packaged materials from corrosion and deterioration.
 - 2. Pipe and fittings other than PVC and CPVC may be stored outdoors without cover. PVC and CPVC pipe and fittings stored outdoors shall be covered.
- C. Handling:
 - 1. Handle all pipe, fittings, specials and accessories carefully with approved handling devices. Do not drop or roll material off trucks. Do not otherwise drop, roll or skid piping.
 - 2. Avoid unnecessary handling of pipe.
 - 3. Keep pipe interiors free from dirt and foreign matter.
 - 4. Protect interior linings and exterior coatings of pipe and fittings from damage during handling. Pipe and fittings with damaged lining shall be replaced regardless of cause of damage.

PART 2 PRODUCTS

2.01 MATERIALS

A. Piping materials are specified in the Buried Piping Schedule at the end of this Section. Piping materials shall conform to specification for each type of pipe and piping appurtenances in applicable sections of Division 33, Utilities.

B. General:

- 1. Marking Piping:
 - a. Factory mark each piece of pipe or fitting with a designation conforming to those shown on the laying schedule.
 - b. Manufacturer shall cast or paint material, type and pressure designation on each piece of pipe or fitting 4-inches in diameter and larger.
 - c. Pipe and fittings smaller than 4-inches in diameter shall be clearly marked by manufacturer as to material, type and rating.

2.02 BURIED PIPING IDENTIFICATION

- A. Detectable Underground Warning Tape for Non-Metallic Pipelines:
 - 1. Tape shall be of inert, acid and alkali-resistant, polyethylene, 5 mil thick, six inches wide with aluminum backing, and have 1,500 psi strength and 140 percent elongation capability. Tape shall be suitable for direct burial.
 - Message shall read, "CAUTION [insert name of pipe service, i.e., "WATERLINE", "SANITARY SEWER", "CHLORINE GAS", etc.] PIPE BURIED BELOW" with bold letters approximately two inches high. Messages shall be printed at maximum intervals of two feet. Tape shall be colored the same as the background colors as specified for the associated pipe service.
 - 3. Manufacturer: Provide products of one of the following:
 - a. Brady Corporation
 - b. Seton Identification Products
 - c. Marking Services, Inc.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General:
 - 1. Install piping as shown, specified and as recommended by the manufacturer.
 - 2. If there is a conflict between manufacturer's recommendations and the Contract Documents, request instructions from Engineer, in writing, before proceeding.
 - 3. Engineer shall inspect all trench excavations and bedding prior to laying pipe. Notify Engineer, in writing, in advance of excavating, bedding pipe laying, and backfill operations.
 - 4. Minimum cover over piping shall be four feet, unless otherwise shown or accepted by Engineer.
 - 5. Earthwork required is specified in the applicable Sections of Division 31, Earthwork
 - 6. Excavation in excess of that required or shown and which is not authorized by the Engineer shall be replaced at Contractor's expense with approved granular material, furnished, placed and compacted in accordance with the requirements of the applicable Sections of Division 31, Earthwork.
 - 7. Comply with NFPA 24 for "Outside Protection", where applicable to water pipe systems used for fire protection.
- B. Manufacturer's Installation Specialist:
 - 1. Provide the services of a competent installation specialist of the pipe manufacturer when pipe laying commences for the following:
 - a. Reinforced concrete pipe.
 - b. Prestressed concrete cylinder pipe.
 - c. FRP and CCFRPM pipe.
 - d. Thermoplastic pipe.
 - 2. Retain installation specialist at the Site for a minimum of two days or until competency of the pipe laying crew has been satisfactorily demonstrated.
- C. Separation of Sewers and Potable Water Pipe Lines:
 - 1. Horizontal Separation:
 - a. Wherever possible, existing and proposed potable water mains and service lines, and sanitary and storm sewers shall be separated horizontally by a clear distance of not less than ten feet.
 - b. If local conditions preclude a clear horizontal separation of not less ten feet, the

installation will be permitted provided the potable water main is in a separate trench or on a undistributed earth shelf located on one side of the sewer and at an elevation so the bottom of the potable water main is at least 24-inches above the top of the sewer.

- c. Exception: Where it is not possible to provide the minimum horizontal and vertical separation described above, both the potable water main and sewer must be constructed of cement lined ductile iron piping with restrained push-on joint or restrained mechanical joint pipe complying with public water supply design standards of the agency having jurisdiction. Both pipes shall be pressure tested in accordance with the requirements of the Buried Piping Schedule, but in no case less than 150 psi, to ensure watertightness before backfilling.
- 2. Vertical Separation:
 - a. Provide a minimum vertical distance of 18 inches between the outside of the potable water main and the outside of the sewer when a sewer or drain must cross over a potable water main.
 - b. Center a section of potable water main at least 12.5 feet long over the sewer so that the sewer joints will be equidistant from the potable water main joints.
 - c. Provide adequate structural support where a potable water main crosses under a sewer to maintain line and grade.
 - d. Exceptions:
 - 1) Where it is not possible to provide the minimum horizontal and vertical separation described above, both the potable water main and sewer must be constructed of cement lined ductile iron pipe. Both pipes shall be pressure tested in accordance with the requirements of the Buried Piping Schedule, but in no case less than 150 psi, to ensure watertightness before backfilling.
 - 2) Encase either potable water main or sewer in a watertight carrier pipe which extends ten feet on both sides of the crossing, measured perpendicular to the potable water main.

D. Plugs:

- 1. Temporarily plug installed pipe at the end of each day's Work or other interruption to the installation of any pipe line. Plugging shall prevent the entry of animals, liquids or persons into the pipe or the entrance or insertion of deleterious materials.
- 2. Install standard plugs into all bells at dead ends, tees or crosses. Cap all spigot ends.
- 3. Fully secure and block all plugs and caps installed for pressure testing to withstand the specified test pressure.
- 4. Where plugging is required for phasing of the Work or for subsequent connection of piping, install watertight, permanent type plugs.
- E. Bedding Pipe: Bed pipe as specified below and in accordance with the details shown.
 - 1. Trench excavation and backfill, and bedding materials shall conform to the requirements of Section 31 23 00, Excavation and Fill, as applicable.
 - 2. Where Engineer deems the existing bedding material unsuitable, remove and replace it with approved granular materials. Payment for the additional excavation and crushed stone or gravel refill will be made at the unit prices bid in the Bid Form.
 - 3. Where pipe is installed in rock excavation, provide a minimum of three inches of granular bedding material underneath pipe smaller than 4-inch diameter and a minimum of six inches of granular bedding material underneath pipes 4-inch diameter and larger.
 - 4. Excavate trenches below the pipe bottom by an amount shown and specified. Remove all loose and unsuitable material from the trench bottom.
 - 5. Carefully and thoroughly compact all pipe bedding with hand held pneumatic compactors.
 - 6. Do not lay pipe until the Engineer approves the bedding condition. If a conflict exists obtain direction from Engineer before proceeding.

- 7. No pipe shall be brought into position until the preceding length has been bedded and secured in its final position.
- F. Laying Pipe:
 - 1. Conform to manufacturer's instructions and requirements of standards and manuals listed below, as applicable:
 - a. Ductile Iron Pipe: ANSI/AWWA C600, ANSI/AWWA C105, AWWA M41. Concrete Pipe: AWWA M9.
 - b. Steel Pipe: ANSI/AWWA C206, AWWA M11.
 - c. Thermoplastic Pipe: ASTM D2321, ASTM D2774, ANSI/AWWA C605, AWWA M23, AWWA M45, AWWA, M55.
 - d. Vitrified Clay Pipe: ASTM C12.
 - e. Sanitary and Storm Sewers: ASCE 37.
 - 2. Install all pipe accurately to line and grade shown, unless otherwise approved by Engineer. Remove and relay pipes that are not laid correctly.
 - 3. Slope piping uniformly between elevations shown.
 - 4. Ensure that ground water level in trench is at least 6-inches below bottom of pipe before laying piping. Do not lay pipe in water. Maintain dry trench conditions until jointing and backfilling are complete and protect and keep clean water pipe interiors, fittings and valves.
 - 5. Start laying pipe at lowest point and proceed towards the higher elevations, unless otherwise approved by Engineer.
 - 6. Place bell and spigot pipe so that bells face the direction of laying, unless otherwise approved by Engineer.
 - 7. Place concrete pipe containing elliptical reinforcement with minor axis of reinforcement in a vertical position.
 - 8. Excavate around joints in bedding and lay pipe so that the barrel bears uniformly on the trench bottom.
 - 9. Deflections at joints shall not exceed 75 percent of the amount allowed by the pipe manufacturer.
 - 10. For PVC and CPVC piping with solvent welded joints, two and one-half inches in diameter and smaller and copper tubing and thermoplastic piping, snake piping in trench to compensate for thermal expansion.
 - 11. Carefully examine all pipe, fittings and specials for cracks, damage or other defects while suspended above the trench before installation. Immediately remove defective materials from the Site.
 - 12. Inspect interior of all pipe and fittings and completely clean all dirt, gravel, sand, debris or other foreign material from pipe interior and joint recesses before it is moved into the trench. Bell and spigot mating surfaces shall be thoroughly wire brushed, and wiped clean and dry immediately before the pipe is laid.
 - 13. Field cut pipe, where required, with a machine specially designed for cutting piping. Make cuts carefully, without damage to pipe or lining, and with a smooth end at right angles to the axis of pipe. Cut ends on all types of push-on joints shall be tapered and sharp edges filed off smooth. Flame cutting will not be allowed.
 - 14. Blocking under piping will not be permitted, unless specifically approved by Engineer for special conditions. If permitted, conform to requirements of AWWA C600.
 - 15. Touch up protective coatings in a satisfactory manner prior to backfilling.
 - 16. Contractor shall notify Engineer in advance of backfilling operations. All piping shall be inspected by the Engineer prior to any backfilling.
 - 17. On steep slopes, take measures acceptable to Engineer to prevent movement of the pipe during installation.
 - 18. Thrust Restraint: During the installation of the pipe, thrust blocks, tied joints, or proprietary restrained joint systems shall be provided wherever required for thrust restraint. Thrust

restraint shall conform to the applicable requirements of Paragraph 3.3.

- 19. Exercise care to avoid flotation when installing pipe in cast-in-place concrete.
- G. Jointing Pipe:
 - 1. Ductile Iron Mechanical Joint Pipe:
 - a. Wipe clean the socket, plain end and adjacent areas immediately before making joint. Make certain that cut ends are tapered and sharp edges are filed off smooth.
 - b. Lubricate the plain ends and gasket with soapy water or the manufacturer's recommended pipe lubricant, in accordance with AWWA C111, just prior to slipping the gasket onto the plain end of the joint assembly.
 - c. Place the gland on the plain end with the lip extension toward the plain end, followed by the gasket with the narrow edge of the gasket toward the plain end.
 - d. Insert the pipe into the socket and press the gasket firmly and evenly into the gasket recess. Keep the joint straight during assembly.
 - e. Push gland toward socket and center it around pipe with the gland lip against the gasket.
 - f. Insert bolts and hand tighten nuts.
 - g. Make deflection after joint assembly, if required, but prior to tightening bolts. Alternately tighten bolts 180 degrees apart to seat the gasket evenly. The bolt torque shall be as follows:

<u>Pipe Size</u> (Inches)	Bolt Size (Inches)	<u>Range of Torque</u> (Ft-lbs)
<u>(11101105)</u>		
3	5/8	45 to 60
4 to 24	3/4	75 to 90
30 to 36	1	100 to 120
42 to 48	1-1/4	120 to 150

- h. All bolts and nuts shall be coated with two 8 mil dry film thickness per coat, coats of coal-tar epoxy coating as manufactured by Tnemec, or equal.
- i. Restrained mechanical joints shall be in accordance with Section 33 11 13.13, Ductile Iron Public Water Utility Distribution Piping.
- 2. Ductile Iron Push-On Joint Pipe:
 - a. Prior to assembling the joints, the last 8-inches of the exterior surface of the spigot and the interior surface of the bell shall be thoroughly cleaned with a wire brush, except where joints are lined or coated with a special protective lining or coating.
 - b. Rubber gaskets shall be wiped clean and flexed until resilient. Refer to manufacturer's instructions for procedures to ensure gasket resiliency when assembling joints in cold weather.
 - c. Insert gasket into joint recess and smooth out the entire circumference of the gasket to remove bulges and to prevent interference with the proper entry of the spigot of the entering pipe.
 - d. Immediately prior to joint assembly, apply a thin film of pipe manufacturer's recommended lubricant to the surface of the gasket that will come in contact with the entering spigot end of pipe. Contractor may, at their option, apply a thin film of lubricant to the outside of the spigot of the entering pipe.
 - e. For assembly, center spigot in the pipe bell and push pipe forward until it just makes contact with the rubber gasket. After gasket is compressed and before pipe is pushed or pulled all the way home, carefully check the gasket for proper position around the full circumference of the joint. Final assembly shall be made by forcing the spigot end of the entering pipe past the rubber gasket until it makes contact with the base of the bell. When more than a reasonable amount of force is required to assemble the joint, the spigot end

of the pipe shall be removed to verify the proper positioning of the rubber gasket. Gaskets which have been scoured or otherwise damaged shall not be used.

- f. Maintain an adequate supply of gaskets and joint lubricant at the Site at all times when pipe jointing operations are in progress.
- 3. Proprietary Joints:
 - a. Pipe which utilizes proprietary joints for restraint specified in Section 33 11 13.13, Ductile Iron Public Water Utility Distribution Piping, or other such joints shall be installed in strict accordance with the manufacturer's instructions.
- 4. Ductile Iron Flanged Joints:
 - a. Assemble flanged joints using ring-type gaskets, thickness as recommended by pipe manufacturer but not less than 1/8-inch thick, for raised face flanges. Use full face gaskets for flat face flanges, unless otherwise approved by ENGINEER or recommended by pipe manufacturer. Gaskets shall be suitable for the service intended in accordance with manufacturer's ratings and instructions. Gaskets shall be properly centered.
 - b. Bolts shall be tightened as recommended by the manufacturer in a sequence that ensures equal distribution of bolt loads.
 - c. Length of bolts shall be uniform. Bolts shall not project beyond the nut more than 1/4inch when fully tightened. Bolts shall not fall short of the nut when fully taken up. Ends of bolts shall be machine cut and neatly rounded. Do not use washers.
 - d. Prior to assembly, lubricate bolt threads and gasket faces.
 - e. After assembly, coat all bolts and nuts, except those of stainless steel, with two coats, minimum dry film thickness of 8-mils each, of a high-build epoxy or bituminous coating manufactured by Tnemec, or equal.
- 5. Thermoplastic Pipe Joints:
 - a. Solvent Cement Joints:
 - 1) Bevel pipe ends and remove all burrs before making joints. Clean both pipe and fittings thoroughly. Do not attempt to make solvent cement joints if temperature is below 40 degrees F nor in wet conditions.
 - 2) Use solvent cement supplied or recommended by the pipe manufacturer.
 - Apply joint primer and solvent cement and assemble joints in strict accordance with the recommendations and instructions of the manufacturer of the joint materials and the pipe manufacturer.
 - 4) Observe safety precautions with the use of joint primers and solvent cements. Allow air to circulate freely through pipelines to permit solvent vapors to escape. Slowly admit water when flushing or filling pipelines to prevent compression of gases within pipes.
 - b. Bell and Spigot Joints:
 - 1) Bevel field-cut pipe, remove all burrs, and provide a reference mark at the correct distance from pipe end.
 - 2) Clean spigot end and bell thoroughly before making the joint. Insert O-ring gasket while ensuring that gasket is properly oriented. Lubricate spigot well with manufacturer's recommended lubricant. Do not lubricate bell and O-ring. Insert spigot end of pipe carefully into bell until reference mark on spigot is flush with bell.
- 6. Copper Tubing Joints:
 - a. Assemble copper tubing with soldered joints. Solder shall be 95-5 tin-antimony solder conforming to ASTM B 32.
 - b. Ream or file pipe to remove burrs.
 - c. Clean and polish contact surfaces of joints.
 - d. Apply flux to both male and female ends.
 - e. Insert end of tube into full depth of fitting socket.
 - f. Heat joint evenly.

- g. Form continuous solder bead around entire circumference of joint.
- h. Runs shall contain unions at connection to equipment and at reasonable distances along the lengths of runs to permit convenient disassembly of piping and removal of equipment.
- 7. Steel Pipe Joints:
 - a. Joints in steel pipe shall be butt welded or lap welded joints, except that split flexible couplings, shall be provided at connections to structures and at transitions to different material piping.
 - b. Welding shall conform to the requirements of AWWA C206.
 - c. After welding, the joint and the surrounding damaged or uncoated area shall be coated with the same material and to the same thickness as the shop applied coating.
 - d. Where flanged connections or couplings are provided, the flanges, couplings, bolts and nuts shall be coated with two coats, 8 mil dry film thickness per coat, of high-build epoxy or bituminous coating as manufactured by Tnemec, or equal.
 - e. All welds shall be free from embedded scale or slag and shall have the tensile strength across the weld not less than the thinnest of the connected sections.
 - f. All welds shall be watertight.
- 8. HDPE Pipe Joints:
 - a. Bell and Spigot Joints:
 - 1) Remove all burrs, and provide a reference mark at the correct distance from pipe end. Mark shall be placed such that no more than one half inch of the machined spigot surface will be visible outside of the bell after the pipe has been joined.
 - 2) Clean spigot end and bell thoroughly with soap and water before positioning the gasket.
 - Lubricate spigot groove with manufacturer's recommended lubricant. Thoroughly clean the gasket and place in the spigot groove starting at the bottom, ensuring that the gasket fins face backwards towards the pipe.
 - 4) Thoroughly lubricate the gasket with manufacturer's recommended lubricant and equalize the stretch in the gasket by running a screwdriver under the gasket around its entire circumference three times. Reposition the gasket in the groove after stretching.
 - 5) Thoroughly clean and lubricate the receiving bell. Align the pipe as straight as possible and insert spigot end of pipe carefully into bell until reference mark on spigot is flush with bell.
 - 6) If a mechanical means is used to insert the spigot end, the end of the pipe being pushed shall be protected with wood and to ensure even distribution of pressure.
 - b. Butt Fusion Welded Joints:
 - Joints shall be installed in accordance with the manufacturer's instructions using a hydraulic butt fusion machine, or a manual machine equipped with a torque wrench. All equipment shall be able to achieve and maintain a heating tool temperature range of 400 to 450 degrees F and an interface pressure of 60 to 90 psi.
 - 2) Clean the interior and exterior of the pipe or fitting ends with a clean, dry, lint-free cloth.
 - 3) Align the ends to be joined in the fusion machine, without forcing ends into alignment. Adjust the alignment as necessary and tighten the clamps to prevent slippage.
 - 4) Place the facing tool between the ends to be joined, and face them to provide a clean, smooth, parallel mating surface. If stops are present, face the ends down to the stops. Remove all shavings after facing without touching the ends.
 - 5) Re-check alignment of the ends and check for slippage against the fusion pressure. Check that there are no detectable gaps between the ends and that outside diameters are in alignment.

6) Verify the heating tool is maintaining the recommended temperature range and then place the tool between the ends to be joined. Move the ends against the heating tool to ensure full contact. Hold the ends against the heating tool without force until the proper melt bead size is formed. Approximate melt bead sizes are as follows:

Pipe Diameter (inches)	Approximate Melt Bead Size (inches)
2 to 4	1/8 to 3/16
4 to 12	3/16 to 1/4
12 to 24	1/4 to 7/16
24 to 54	7/16 to 9/16

- 7) Upon formation of the proper melt bead size, quickly separate the ends and remove the heating tool.
- 8) After removing the heating tool, quickly inspect the melted ends, and then bring the ends together applying the correct joining force, as recommended by the manufacturer, using 60-90 psi interfacial pressure, to form a double bead rolled over the surface of the pipe on both ends.
- 9) Hold the joining force against the ends until the joint is cool to the touch. Cooling period shall last approximately 30-90 seconds per inch of pipe diameter. Heavier wall thicknesses may require longer cooling times as recommended by the manufacturer.
- 10) Upon completion of the joint, joint shall be inspected to ensure a double bead has been formed on both sides, uniformly rounded and consistent in size all around the joint. Any joint found to be faulty shall be cut out of the system and removed.
- H. Polyethylene Encasement
 - 1. Encase ductile iron pipe, fittings, valves, and other appurtenances with polyethylene film as indicated or specified.
 - 2. Materials:
 - a. Polyethylene material shall be as follows:
 - i. Conform to ASTM D1248 Type 1
 - ii. Class A or C
 - b. Adhesive tape shall be as follows:
 - i. Approximately 1-1/2" wide and plastic backed.
 - ii. Capable of bonding securely to metal surfaces and/or polyethylene material.
 - iii. Tape should be recommended by film manufacturer.
 - 3. Installation:
 - a. Perform to conform to AWWA C105.
 - b. Use adhesive tape to fasten polyethylene film in place.
 - c. Minimize exposure of polyethylene film to sunlight.
 - d. Wrap ductile iron pipe, valves, fittings, and couplings per AWWA C105 installation standards.
- I. Backfilling:
 - 1. Conform to the applicable requirements of Section 31 23 00, Excavation and Fill.
 - 2. Place backfill as the Work progresses. Backfill by hand and use power tampers until pipe is covered by at least one foot of backfill.
- J. Connections to Valves and Hydrants:

- 1. Install valves and hydrants as shown on Drawings.
- 2. Provide suitable adapters when valves or hydrants and piping have different joint types.
- 3. Provide thrust restraint at all hydrants and at valves at pipeline terminations.
- K. Transitions from One Type of Pipe to Another
 - 1. Provide all necessary adapters, specials and connection pieces required when connecting different types and sizes of pipe or connecting pipe made by different manufacturers.

L. Closures:

- 1. Provide all closure pieces shown or required to complete Work.
- 2. Locate closures in straight runs of pipe.

3.02 TRACER TAPE INSTALLATION

- A. Detectable Underground Warning Tape for Non-Metallic Pipelines:
 - 1. Provide polyethylene tracer tape with aluminum backing for buried, nonmetallic piping.
 - 2. Provide magnetic tracer tape 12 to 18 inches below finished grade, above and parallel to buried pipe.
 - 3. For pipelines buried eight feet or greater below finished grade, provide a second line of magnetic tracer tape 2.5 feet above crown of buried pipe, aligned along the pipe centerline.
 - 4. Tape shall be spread flat with message side up before backfilling.

3.03 THRUST RESTRAINT

- A. Provide thrust restraint on all pressure piping systems and where otherwise shown and specified.
- B. Thrust restraint may be accomplished by means of restrained pipe joints. Thrust restraints shall be designed for the axial thrust exerted by the test pressure specified in the Buried Piping Schedule located at the end of the Section.
- C. Restrained Pipe Joints:
 - 1. Pipe joints shall be restrained by means suitable for the type of pipe being installed.
 - a. Restrain ductile iron push-on joints and mechanical joints utilizing a proprietary restrained joint system as specified in Section 33 11 13.13, Ductile Iron Public Water Utility Distribution Piping, lugs and tie rods, or other systems approved by Engineer.
 - b. Where push-on type or other non-restrained joints are utilized for thermoplastic piping, Contractor shall provide tie rods or other suitable joint restraint system, subject to the approval of Engineer.
 - c. Prestressed concrete cylinder pipe shall be restrained utilizing bell-bolt, clamp type, or snap ring-type restrained joints.
 - d. Steel pipe shall have butt-welded or lap welded joints or split flexible coupling connections.
 - e. Harnessed lengths for buried pipe shall be determined by the pipe manufacturer in accordance with the formula for Determination of Buried Pipe Harnessed Lengths located at the end of this Section.

3.04 WORK AFFECTING EXISTING PIPING

- A. Location of Existing Piping
 - 1. Locations of existing piping shown should be considered approximate.
 - 2. Contractor shall determine the true location of existing piping to which connections are to be

made, crossed or could be disturbed and location of other facilities which could be disturbed during earthwork operations, or which may be affected by Contractor's Work in anyway.

- 3. Conform to applicable requirements of Division 1, General Requirements, pertaining to cutting and patching, and connections to existing facilities.
- B. Taking Existing Pipelines Out of Service:
 - 1. Do not take pipelines out of service, unless specifically listed below, or approved by ENGINEER, in writing.
 - a. None.
 - 2. Notify ENGINEER, in writing, at least 48 hours prior to taking pipeline out of service.
- C. Work on Existing Pipelines:
 - 1. Cut or tap pipes as shown or required with machines specifically designed for this work.
 - 2. Install temporary plugs to prevent entry of mud, dirt, water and debris.
 - 3. Provide all necessary adapters, fittings, pipe and appurtenances required to complete the Work.

3.05 TESTING OF PIPING

- A. General:
 - 1. Test all piping, except as otherwise authorized by Engineer.
 - 2. Notify Engineer, in writing, and local authorities having jurisdiction at least 48 hours in advance of testing if their presence is required.
 - 3. Conduct all tests in the presence of the Engineer.
 - 4. Remove or protect any pipeline-mounted devices that may be damaged by the test pressure.
 - 5. Provide all apparatus and services required for testing, including but not limited to, the following:
 - a. Test pumps, bypass pumps, hoses, calibrated gages, meters, test containers, valves and fittings.
 - b. Temporary bulkheads, bracing, blocking and thrust restraints.
 - 6. Provide air if an air test is required and power if pumping is required.
 - 7. Unless otherwise noted, pipelines shall hold specified test pressure for two hours.
 - 8. Repair and retest pipelines which fail to hold specified test pressure or which exceed the allowable leakage rate.
 - 9. Unless otherwise specified, test pressures required are at the lowest elevation of the pipeline section being tested.
 - 10. Advise local authorities having jurisdiction if their presence is required during testing.
- B. Test Schedule:
 - 1. Test piping at 1.5 times the operating pressure or at 250 psi, whichever is greater.
- C. Hydrostatic Testing:
 - 1. Preparation for Testing
 - a. For thermoplastic pipe, including fiberglass pipe, follow procedures described in Section 7 of AWWA Standard C605.
 - a. For all other piping follow procedures described in AWWA Manual M9.
 - b. Ensure that adequate thrust protection is in place and that all joints are properly installed.
 - 2. Test Procedure:
 - a. Fill pipeline slowly to minimize air entrapment and surge pressures. Fill rate should not exceed one foot per second in the pipe being tested.
 - b. Examine exposed joints and valves, and correct visible leakage.

- c. After the wetting period prescribed above, add fluid to pressurize line to the required test pressure. Maintain test pressure for a stabilization period of ten minutes before beginning test.
- d. After the stabilization period, maintain test pressure for a two-hour period. Add fluid to restore test pressure if pressure drops five psi below test pressure at any time during the test period.
- e. Pump from a test container to maintain test pressure. Measure the volume of fluid pumped from the container and record on the test report. Record pressure at the test pump at 15 minute intervals for the duration of the test.
- 3. Allowable Leakage Rates: Leakage is defined as the quantity of fluid that must be supplied to the pipeline or any section thereof to maintain pressure within five psi of the test pressure during a two-hour period. The two-hour test period shall not begin until after the pipe has been filled, exposed to the required wetting period, air has been expelled and pressure has been stabilized. Allowable leakage rates for all other piping system are listed below:
 - a. No Leakage: Pipe with flanged, welded, fused, screwed or soldered joints.
 - b. Rates based on the formula or table in AWWA Manual M41:
 - 1) Metal and fiberglass pipe joined with rubber gaskets as sealing members. This includes the following joint types:
 - i. Push-on joints
 - ii. Mechanical joints.
 - iii. Bolted sleeve type couplings
 - iv. Grooved and shouldered couplings.
 - c. Rates based on the make-up allowance in AWWA Manual M9:
 - 1) Cylinder and non-cylinder concrete pipe joined with O-ring rubber gasket sealing members.
 - d. Rates based on the formula or table in AWWA C605:
 - 1) Plastic pipe joined with O-ring gasket sealing members.
- D. Exfiltration Testing:
 - 1. Plug and bulkhead the section of pipe to be tested at both ends and admit fluid until the pipe is full.
 - Allow fluid to wet the pipe interior for the period indicated below before measuring leakage:
 a. Concrete Pipe: 48 hours.
 - 3. Provide a minimum head of two feet above the crown of the pipe at the upstream end.
 - 4. Add fluid from a test container or from a metered supply as required to maintain the level within 3-inches of the minimum head throughout the test duration.
 - 5. Test duration shall not be less than two hours.
 - 6. Allowable Leakage Rates:
 - a. Leakage is defined as the quantity of fluid that must be supplied to the pipeline or any section thereof to maintain the head within 3-inches of the test elevation during the test duration after the pipe has been filled and exposed to the required wetting period plus the quantity required to refill to the original head.
 - b. Leakage shall not be greater than 200 gal/inch dia./mdc/24 hours.
- E. Vertical Deflection Test for Thermplastic Pipe:
 - 1. The vertical deflection test shall be conducted after the final backfill has been in place at least 30 days.
 - 2. Contractor shall manually pull a pin-type vertical gauge mounted on a sled through the pipe. Gauge shall be set so that if vertical deflection of pipe exceeds five percent, it will stop. Contractor shall excavate and relay all such piping. Gage shall be as manufactured by Quality Test Products, or equal.

3.06 CLEANING AND DISINFECTION

- A. Clean all pipe systems and all other piping shall be cleaned as follows:
 - 1. Thoroughly clean all piping and flush in a manner approved by Engineer, prior to placing in service.
 - 2. Piping 24-inches in diameter and larger shall be inspected from inside and all debris, dirt and foreign matter removed.
 - 3. If piping which requires disinfection has not been kept clean during storage or installation, Contractor shall swab each section individually before installation with a five percent hypochlorite solution, to ensure clean piping.

B. Disinfection:

- 1. Disinfect all potable and finished water piping.
- 2. A suggested procedure for accomplishing complete and satisfactory disinfection is specified below. Other procedures will be considered for approval by the Engineer.
 - a. Thoroughly flush piping prior to disinfection with water. For pipelines 24 inches in diameter and larger, pipelines shall be manually cleaned, carefully removing all sweepings, dirt and debris prior to disinfection.
 - b. Conform to procedures described in AWWA C651. Calcium hypochlorite tablets manufactured by Permatex shall be used as means of disinfection, unless alternative method is acceptable to Engineer.
- 3. Water for initial flushing, testing and chlorination will be furnished by the Contractor. Contractor shall provide all temporary piping, hose, valves, appurtenances and services required.
- 4. Chlorine tablets will be supplied by Contractor.
- 5. Bacteriologic tests will be performed by Owner. A certified test laboratory report will be made available to Contractor, if requested.
- 6. Chlorine concentration in the water entering the piping shall be between 50 and 100 parts per million, such that a minimum residual concentration of 25 mg/l will be left after a 24-hour retention period. Care shall be taken to ensure disinfection of the piping in all its parts. The operation shall be repeated as necessary to provide complete disinfection.
- 7. After the required retention period, the heavily chlorinated water shall be flushed to drain, unless otherwise directed by the Engineer.

END OF SECTION

SECTION 33 12 00

WATER UTILITY DISTRIBUTION EQUIPMENT

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required and install complete and ready for operation and test all non-buried valves, hydrants and appurtenances as shown on the Drawings and as specified herein.
- B. The equipment shall include, but not be limited to, the following. However all items specified herein may not be included in this project.
 - 1. Valve Actuators General
 - 2. Gate Valves
 - 3. Resilient Seated Gate Valves
 - 4. Air Release Valves
 - 5. Hydrants

1.02 RELATED WORK

- A. Section 31 23 00, Excavation and Fill.
- B. Section 03 30 00, Cast-in-Place Concrete.
- C. Piping and disinfection for potable water systems is included in the respective Sections of Divisions 33.

1.03 SUBMITTALS

- A. Submit to the ENGINEER, in accordance with Section 01 33 00, materials required to establish compliance with this Section. Submittals shall include at least the following:
 - 1. Certified drawings showing all important details of construction and dimensions.
 - 2. Descriptive literature, bulletins and/or catalogs of the equipment.
 - 3. The total weight of each item.
 - 4. A complete bill of materials.
 - 5. Additional submittal data, where noted with individual pieces of equipment.
- B. Test Reports
 - 1. Provide certified hydrostatic test data, per manufacturer's standard procedure or MSS-SP-61 for all valves.

C. Certificates

- 1. For each valve specified to be manufactured, tested and/or installed in accordance with AWWA and other standards, submit an affidavit of compliance with the appropriate standards, including certified results of required tests and certification of proper installation.
- D. Manufacturer's Installation and Application Data
- E. Operating and Maintenance Data
 - 1. Operating and maintenance instructions shall be furnished to the ENGINEER. The instructions shall be prepared specifically for this installation and shall include all required cuts, drawings, equipment lists, descriptions and other information required to instruct operating and maintenance personnel unfamiliar with such equipment.

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM A48 Standard Specification for Gray Iron Castings.
 - 2. ASTM A126 Standard Specification for Gray Iron Castings for Valves, Flanges and Pipe Fittings.
 - 3. ASTM A159 Standard Specification for Automotive Gray Iron Castings.
 - 4. ASTM A240 Standard Specification for Heat-Resisting Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels.
 - 5. ASTM A276 Standard Specification for Stainless Steel Bars and Shapes.
 - 6. ASTM A436 Standard Specification for Austenitic Gray Iron Castings.
 - 7. ASTM A536 Standard Specification for Ductile Iron Castings.
 - 8. ASTM B30 Standard Specification for Copper-Base Alloys in Ingot Form.
 - 9. ASTM B62 Standard Specification for Composition Bronze or Ounce Metal Castings
- B. American Water Works Association (AWWA)
 - 1. AWWA C111 Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
 - 2. AWWA C500 Metal-Seated Gate Valves Supply Service
 - 3. AWWA C502 Dry-Barrel Fire Hydrants.
 - 4. AWWA C504 Rubber Seated Butterfly Valves.
 - 5. AWWA C507 Ball Valves, 6-in Through 48-in (150mm Through 1200mm)
 - 6. AWWA C508 Swing-Check Valves for Waterworks Service, 2-in (50mm Through 24-in (600mm) NPS
 - 7. AWWA C509 Resilient-Seated Gate Valves for Water Supply Service
 - 8. AWWA C511 Reduced-Pressure Principle Backflow-Prevention Assembly
 - 9. AWWA C540 Power-Actuating Devices for Valves and Sluice Gates
 - 10. AWWA C550 Protective Epoxy Interior Coatings for Valves and Hydrants
 - 11. AWWA C800 Underground Service Line Valves and Fittings
- C. American National Standards Institute (ANSI)
 - 1. ANSI B2.1 Specifications, Dimensions, Gauging for Taper and Straight Pipe Threads (except dry seals).
 - 2. ANSI B16.1 Cast Iron Pipe Flanges and Flanged Fittings
 - 3. ANSI B16.10 Face-to-Face and End-to-End Dimensions of Valves
- D. American Iron and Steel Institute (AISI)
- E. Manufacturer's Standardization Society of the Valve and Fittings Industry (MSS)
 - 1. MSS-SP-61 Pressure Testing of Steel Valves.
 - 2. MSS-SP-70 Cast Iron Gate Valves, Flanged and Threaded Ends.
 - 3. MSS-SP-71 Cast Iron Swing Check Valves, Flanges and Threaded Ends.
 - 4. MSS-SP-72 Ball Valves with Flanged or Butt-Welding Ends for General Services.
 - 5. MSS-SP-78 Cast Iron Plug Valves, Flanged and Threaded Ends.
 - 6. MSS-SP-80 Bronze Gate, Globe, Angle and Check Valves.
 - 7. MSS-SP-82 Valve Pressure Testing Methods
 - 8. MSS-SP-98 Protective Coatings for the Interior of Valves, Hydrants and Fittings.
- F. National Electrical Manufacturers Association (NEMA)
- G. Underwriters Laboratories (UL)
- H. Factory Mutual (FM)
- I. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.
- 1.05 QUALITY ASSURANCE
 - A. Qualifications
 - 1. Valves, hydrants and appurtenances shall be products of well established firms who are fully experienced, minimum 10 years, reputable and qualified in the manufacture of the particular equipment to be furnished.

- 2. The equipment shall be designed, constructed and installed in accordance with the best practices and methods and shall comply with this Section as applicable.
- 3. All units of the same type shall be the product of one manufacturer.
- B. Certifications
 - 1. The manufacturers shall furnish an affidavit of compliance with Standards referred to herein as specified in Paragraph 1.03C above. Refer to PART 3 for testing required for certain items in addition to that required by referenced standards.
- C. Provide the services of a qualified and factory-trained service representative of the manufacturer to provide operational and maintenance instruction, for a 1 day, 8 hour period for:
 - 1. Valve motor operators.
- D. Inspection of the units may also be made by the ENGINEER or other representative of the OWNER after delivery. The equipment shall be subject to rejection at any time due to failure to meet any of the specified requirements, even though submittal data may have been accepted previously. Equipment rejected after delivery shall be marked for identification and shall be removed from the job site at once.

1.06 SYSTEM DESCRIPTION

- A. All of the equipment and materials specified herein is intended to be standard for use in controlling the flow of wastewater, air, raw, and finished water as noted on the Drawings.
- B. Valves, appurtenances and miscellaneous items shall be installed as shown on the Drawings and as specified, so as to form complete workable systems.
- C. Unless otherwise noted all powered valve operators shall have:
 - 1. Valves larger than 3-in: electric operators 460 Volt, 3 Phase, 60 Hz.
 - 2. Solenoid valves: 120 volt, single phase, 60 Hz, NEMA 4 enclosure, continuous duty Class F coils and manual operator.

1.07 DELIVERY, STORAGE AND HANDLING

A. Packing and Shipping

- 1. Care shall be taken in loading, transporting and unloading to prevent injury to the valves, appurtenances, or coatings. Equipment shall not be dropped. All valves and appurtenances shall be examined before installation and no piece shall be installed which is found to be defective. Any damage to the coatings shall be repaired as acceptable to the ENGINEER.
- 2. Prior to shipping, the ends of all valves shall be acceptably covered to prevent entry of foreign material. Covers shall remain in place until after installation and connecting piping is completed.
 - a. All valves 3-in and larger shall be shipped and stored on site until time of use with wood or plywood covers on each valve end.
 - b. Valves smaller than 3-in shall be shipped and stored as above except that heavy cardboard covers may be used on the openings.
 - c. Rising stems and exposed stem valves shall be coated with a protective oil film which shall be maintained until the valve is installed and put into use.
 - d. Any corrosion in evidence at the time of acceptance by the OWNER shall be removed, or the valve shall be removed and replaced.
- C. Storage and Protection
 - 1. Special care shall be taken to prevent plastic and similar brittle items from being directly exposed to the sun, or exposed to extremes in temperature, to prevent deformation. See the individual piping sections and manufacturer's information for further requirements.
- 1.08 MAINTENANCE

- A. Special tools and the manufacturer's standard spare parts, if required for normal operation and maintenance, shall be supplied with the equipment in accordance with Section 01730 and where noted, as specified herein.
- B. Provide all special tools required for normal maintenance. Tools shall be packaged in a steel case, clearly and indelibly marked on the exterior to indicate equipment for which tools are intended.
- C. Provide to the OWNER a list of all spare and replacement parts with individual prices and location where they are available. Prices shall remain in effect for a period of not less than 1 year after start-up and final acceptance.

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT - GENERAL

- A. Reference is made to Division 1 for additional requirements, including nameplates, provisions for temporary pressure gauges, protection against electrolysis and anchor bolts.
- B. The use of a manufacturer's name and/or model or catalog number is for the purpose of establishing the standard of quality and general configuration desired.
- C. Valves, hydrants and appurtenances shall be of the size shown on the Drawings or as noted and as far as possible equipment of the same type shall be identical and from one manufacturer.
- D. Valves, hydrants and appurtenances shall have the name of the maker, nominal size, flow directional arrows, working pressure for which they are designed and standard referenced, cast in raised letters or indelibly marked upon some appropriate part of the body.
- E. Unless otherwise noted, items shall have a minimum working pressure of 250 psi or be of the same working pressure as the pipe they connect to, whichever is higher and suitable for the pressures noted where they are installed.
- F. Joints, size and material unless otherwise noted or required by the ENGINEER:
 - 1. Except where noted, all joints referred to herein shall be of the same type, nominal diameter, material and with a minimum rating equal to the pipe or fittings they are connected to.
 - 2. Valves and appurtenances shall be of the same nominal diameter as the pipe or fittings they are connected to.
 - 3. All valves exposed to view, or in vaults.
 - a. 3-in and smaller threaded ends
 - b. 4-in and larger flanged ends.
- G. Provide all special adaptors as required to ensure compatibility between valves, appurtenances and adjacent pipe.
- H. Valves and actuators located outdoors but not within a building; within maximum 2-ft above liquid; in vaults; or where otherwise noted shall be especially designed for submerged service where water may completely submerge the valve and operator. All other units shall be as a minimum weather tight.

2.02 VALVE ACTUATORS - MANUAL

- A. See the Paragraph 2.01H above for submergence requirements.
- B. The valve manufacturer shall supply and integrally, rigidly mount all actuators, including any type of manual actuators, on valves at the factory. The valves and their individual actuators shall be shipped as a unit.
- C. Unless otherwise noted, valves shall be manually actuated; non-buried valves shall have an operating wheel, handle or lever mounted on the operator

- D. All actuators shall be capable of moving the valve from the full open to full close position and in reverse and holding the valve at any position part way between full open or closed.
- E. Each operating device shall have cast on it the word "OPEN" and an arrow indicating the direction of operation.
- F. Floor boxes for operating nuts recessed in concrete shall be standard cast iron type, cast-in-place, with fastening top by Clow or equal.
- G. Gear Actuators
 - 1. Unless otherwise noted, gear actuators shall be provided for the following: all valves of larger than 8-in nominal diameter; where specified and/or indicated on the Drawings; where manual operator effort is greater than 80 ft-lbs rim pull.
 - 2. Gear actuators shall be of the worm or helical gear type with output shaft perpendicular to valve shaft, having a removable hand wheel mounted on the output shaft. Unless noted they shall conform to AWWA C504, but except with butterfly valves, need not be certified.
 - 3. Actuators shall be capable of being removed from the valve without dismantling the valve or removing the valve from the line.
 - 4. Gearing shall be machine-cut steel designed for smooth operation. Bearings shall be permanently lubricated, with bronze bearing bushings provided to take all thrusts and seals and to contain lubricants. Housings shall be sealed to exclude moisture and dirt, allow the reduction mechanisms to operate in lubricant and be of the same material as the valve body.
 - 5. Manual operator input effort to the handwheel shall be a maximum of 40 ft-lbs for operating the valve from full open to full close, under any conditions. Gear actuators shall indicate valve position and have adjustable stops. Maximum handwheel size shall be 24-in diameter.
- H. Additional valve actuators are included with the individual valve types and as noted in Paragraph 1.02 above.
- I. All position indication and direction of opening arrows shall be embossed, stamped, engraved, etched or raised decals.
- J. Unless otherwise noted, all valves larger than 3-in nominal diameter shall be provided with position indicators at the point of operation.
- 2.03 VALVE ACTUATORS ELECTRIC
 - A. All electric actuators shall conform to the requirements of AWWA Standard C540-93.
 - B. Actuators shall contain motor, gearing, manual over-ride, limit switches, torque switches, drive coupling, integral motor controls and mechanical dial position indicator.
 - C. The motor shall be specifically designed for actuator service. The motor will be of the induction type with class F insulation and protected by means of thermal switches imbedded in the motor windings. Motor enclosure will be totally enclosed, nonventilated.
 - D. Motors will be capable of operating on 460 volt 3 phase 60 hertz power.
 - E. Actuator enclosure shall be NEMA 4 (watertight) rated for IP68 (20 ft for 72 hours) submersibility. All external fasteners on the electric actuator will be stainless steel. Fasteners on limit switch and terminal compartments shall be captured to prevent loss while covers are removed. All wiring shall be terminated at a plug and socket connector. Provide a double environmental seal to prevent moisture from entering the actuator through the electrical wiring compartment.
 - F. All gearing shall be grease lubricated and designed to withstand the full stall torque of the motor.

- G. Manual over-ride shall be by handwheel. Manual operation will be via power gearing to minimize required rimpull and facilitate easy change-over from motor to manual operation when actuator is under load. Return from manual to electric mode of operation will be automatic upon motor operation. A seized or inoperable motor shall not prevent manual operation.
- H. Limit switches shall be furnished at each end of travel. Limit switch adjustment shall not be altered by manual operation. Limit switch drive shall be by countergear. Limit switches must be capable of quick adjustment requiring no more than five (5) turns of the limit switch adjustment spindle. Actuators requiring remotes, computers or cables for limit switch setting are not acceptable. One set of normally open and one set of normally closed contacts will be furnished at each end of travel where indicated. Contacts shall be of silver and capable of reliably switching low voltage DC source from the control system furnished by others.
- I. Mechanically operated torque switches shall be furnished at each end of travel. Torque switches will trip when the valve load exceeds the torque switch setting. The torque switch adjustment device must be calibrated directly in engineering units of torque.
- J. Actuator must be capable of the following valve closing times/operating speeds: quarterturn valves - 60 second closing time, gate valves and sluice gates - 12 inches per minute operating speed. Actuators will be capable of operating in an ambient temperature range of -20 to +160 degrees F.
- K. Actuators will be capable of operating in an ambient temperature range of -20 to +160 degrees F. All actuators in open/close service will be furnished with integral motor controls consisting of reversing starters, control transformer, phase discriminator, monitor relay(to signal fault conditions such as thermal switch trip, torque switch tripped in mid-travel, wrong phase sequence or phase failure), "open-stop-close" pushbuttons, "local-off-remote" selector switch in addition to red and green indicating lights. An interface with the control system must be furnished with optical isolators to separate incoming voltage signals from the internal motor controls.
- L. Actuators in modulating service will be selected such that the required dynamic valve torque is no more than 60% of the electric actuator's maximum rated breakaway torque. Power gearing in modulating actuators shall have zero backlash between the motor and actuator output.
- M. All actuators in modulating service will be furnished with a feedback potentiometer in addition to the following motor controls: reversing starters, control transformer, phase discriminator, monitor relay, positioner, "open-stop-close" pushbuttons, "local-off-remote"
- selector switch in addition to red and green indicating lights. The positioner shall be capable of accepting a 4-20mADC command signal and positioning the valve by comparing the command signal with the present valve position as indicated by the feedback potentiometer mounted inside the actuator. The positioner shall be field adjustable to fail to the "open", "closed" or "last" position on loss of 4-20mADC command signal. Actuator shall be capable of sending a 4-20mADC signal for position feedback.
 - N. Product and Manufacturer
 - 1. Auma

2.03 GATE VALVES (3-IN AND LARGER)

- A. General Requirements
 - 1. Unless otherwise specified below, these requirements shall apply to all gate valves.
 - 2. Gate valves shall meet the requirements of AWWA C500, AWWA C509, AWWA C515 as applicable to the type of valve specified.
 - 3. Submerged valves shall be furnished with mechanical joints and stainless steel hardware; non-rising stem design.
 - 4. Exposed valves shall be furnished with Class 125 flanged ends; provide valves with outside screw and yoke.
 - 5. All-metal valves shall be manufactured of ASTM A126 Cast Iron, Class B, with bronze mounting design.
 - 6. Rising stem valves shall be sealed with adjustable and replaceable packing; valve design must permit packing replacement under operating system pressures with only moderate leakage.
 - 7. Non-rising stem valves shall use a double O-ring stem seal, except that packing shall be used where geared operators are required.
 - 8. Except as otherwise specified, valves shall be rated for the following working water pressures:

Valve Size	Pressure (psig)
3-in to 12-in	250
14-in to 20-in	250
24-in and greater	250

- a. All valve bodies shall be hydrostatically tested to at least twice the rated working water pressure. In addition, valves shall be seat-tested, bi-directional at the rated working pressure, with seat leakage not to exceed one fluid ounce per inch of valve diameter per hour. Provide certificates of testing.
- 9. Flanged valves to have face-to-face dimensions per ANSI B16.10 and flanges per ANSI B16.1.
- 10. All bonnet and packing gland bolts shall be zinc or cadmium electroplated steel; packing gland bolts shall have bronze nuts.
- 11. Provide geared operator and chainwheel, chain and chain guides for valves with handwheel centerline more than 7-ft above operating level.
- 12. All valves shall be marked per AWWA Standards, including name of manufacturer, valve size and working pressure and year of manufacturer.
- 13. Unless otherwise indicated, valves 12-in and smaller shall be capable of installation in the vertical or horizontal position, and sealing in both directions at the rated pressure.
- 15. Unless otherwise indicated, 24-inch valves shall be installed as horizontal with vertical risers/ offset stems.
- 14. Valve operation shall be counterclockwise for potable water; clockwise for wastewater and other non-potable waters. Provide permanent label showing "OPEN" and arrows.
- 15. Metal-seated valves shall be coated internally and externally with an asphaltic varnish, per AWWA C500. Resilient seated valves shall be coated, interior and exterior, with fusion bonded epoxy per AWWA C550.
- **B.** Valve Applications
 - 1. Valves for Potable Water Service.
 - Double disc design manufactured by American-Darling Valve; Kennedy Valve; M&H a. Valve Company or equal.
 - b. Double revolving disc manufactured by American-Darling Valve.
 - 2. At the CONTRACTOR's option and unless otherwise indicated, any of the listed valve styles may be used, at no additional cost to the OWNER.
- C. Valve Requirements
 - 1. Solid Wedge

 - a. Conform to AWWA C500.b. Tongue and grooved guides for wedges.
 - 2. Resilient Seated
 - a. Conform to AWWA C509. Also UL and FM approved.
 - b. Internal and external epoxy coating of valve body, including bonnet, per AWWA C550.

- c. Gate shall be encapsulated with synthetic rubber. It shall be bonded and vulcanized in accordance with ASTM B429 Method B.
- d. No recesses in valve body.
- D. Tapping Valves and Sleeves
 - 1. Tapping valves shall comply with the same requirements as solid wedge or double disc gate valves except they shall have the flanged end and port opening modified for tapping service. Valves shall be capable of passing a full nominal sized cutter without damage to the valve. The tapping sleeve shall be gray cast iron or ductile iron mechanical joint type with the outlet flange conforming to MSS-SP-60.
 - 2. All water valves, 4-in and larger, shall be iron body gates, bronze trim, flanged ends, O.S.&Y. pattern, solid wedge, rising spindle, Jenkins No. 651, or Hammond 1R-1140.

2.04 AIR RELEASE VALVES

A. As shown on drawings and details.

2.05 HYDRANTS

- A. Type: Compression/Post-type dry barrel.
- B. Construction:
 - 1. Cast iron body.
 - 2. Bronze Mounted.
 - 3. Working Pressure: 250 psi in accordance with AWWA C502.
 - 4. Test Pressure: 400 psi in accordance with AWWA C502.

C. Connections/Features:

- 1. Main Valve:
 - a. Seat: Rubber.
 - b. Opening: 5-1/4 inches.
- 2. Pumper Connections:
 - a. Number: One NST, with 5" Stortz fitting and chained cap.
 - b. Diameter: 4-1/2 inches.
- 3. Hose Connection:
 - a. Number: Two with chained caps.
 - b. Diameter: 2-1/2 inches.
- 4. Thread Type: National Standard
- 5. Nozzles: Bronze with "O"-ring type seals. Lead caulking will not be allowed.
- 6. Inlet:
 - a. Type: Mechanical Joint
 - b. Size: 6 inches.
- D. Miscellaneous Features:
 - 1. Chained caps and operating nut shall be square, tapered from 7/8 inches at the top to one-inch at the bottom and shall turn to the left to open.
 - 2. Provide barrel extension sections with stem extensions as required to set hydrant at grade level.
 - 3. Provide ground (grade) line breakable component to protect the hydrant barrel from impact.
 - 4. Provide cast iron safety stem coupling to keep the main valve closed if barrel and stem are damaged or separated from the hydrant.
 - 5. Depth of Bury (Grade to top of inlet pipe): 5.5 feet (minimum).
 - 6. Lubricant: USEPA approved food-grade grease. Oil will not be allowed.
 - 7. Main stem and valve assembly shall be removable from top of hydrant for maintenance of valve seat.

8. Provide drain openings (minimum 3/8 inch diameter) to drain barrel standpipe completely when main valve is closed. Drain openings shall close completely with no leakage when main valve is opened.

E. Paint:

- 1. Use manufacturer's standard paint system.
- 2. Color:
 - a. Body: Red
 - b. Bonnet: Red
- F. Product and Manufacturer:
 - 1. Mueller Super Centurion A-423; American Darling B62B; Kennedy 81A; or Clow Medallion.

2.06 GATE VALVES FOR HYDRANTS; 6-INCH VALVE

- A. All gate valves shall conform to AWWA standard C509.
- B. Gate valves shall be installed in each hydrant installation between the hydrant and main line in accordance with the Warren County Standard Details W-8, W-9, and W-9A.
- C. Valves shall be iron body, bronze mounted with modified wedge disc, resilient seat.
- D. O-ring seals and non-rising stems to withstand working pressure of 250 psi and test pressure of 400 psi.
- E. The valves shall be equipped with mechanical joint ends and be provided with all required bolts, glands, and rubber gaskets. Provide grooved or shouldered.
- F. A valve box with cover shall be provided for each buried valve.
- G. Product and Manufacturer:
 - 1. Clow; Dresser; and American Darling.

2.07 TAPPING SLEEVE AND VALVE

- A. Tapping Valve:
 - 1. Valve shall be cast iron body, bronze mounted, double disc, non-rising stem, parallel seat gate valve.
 - 2. Valve shall have "O" ring seals and shall conform to the requirements of AWWA C-500.
 - 3. The valve shall be designed for a test pressure of 200 psi.
 - 4. The tapping valve shall be provided with extra heavy ends designed for tapping services. The flange on the sleeve end of the valve shall be drilled and faced to insure proper alignment with the saddle.
 - 5. The other end connection shall be mechanical joint and suitable for bolting to the tapping machine.
 - 6. Tapping sleeve shall be ductile iron, mechanical joint with a class 125 pound outlet flange.
 - 7. Product and Manufacturer:
 - a. American Darling.
 - b. U.S. Pipe.
 - c. American Flow Control.
 - d. Or equal.
- B. A valve box with cover shall be provided for each buried valve.

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- A. Corporation Stops:
 - 1. Provide ball type corporation stops conforming to AWWA Standard C800 and of all bronze construction.
 - 2. Corporation stop diameter shall be a minimum 3/4-inch up to 2-inch as required or shown on the Warren County Standard Detail W-10.
 - 3. Threaded tap end of stop shall have AWWA (Mueller) standard taper threads with the service line connection end for flared fitting copper tubing.
 - 4. Acceptable Manufacturer:
 - a. Ford Co. Model F-1000 or FB-1000.

2.09 WATER METERS AND PITS

A. Comply with the Warren County Water and Sewer Standard Details W-10 through W-15C.

2.10 SURFACE PREPARATION AND SHOP COATINGS

- A. Not withstanding any of the specified requirements, all coatings and lubricants in contact with potable water shall be certified as acceptable for use with that fluid.
- B. If the manufacturer's requirement is not to require finished coating on any interior surfaces, then manufacturer shall so state and no interior finish coating will be required, if acceptable to the ENGINEER.
- C. The exterior surface of various parts of valves, operators, floor-stands and miscellaneous piping shall be thoroughly cleaned of all scale, dirt, grease or other foreign matter and thereafter one shop coat of an approved rust-inhibitive primer shall be applied in accordance with the instructions of the paint manufacturer or other primer compatible with the finish coat provided.
- D. Unless otherwise noted, interior ferrous surfaces of all valves shall be given a shop finish of an asphalt varnish conforming to AWWA C509, (except mounting faces/surfaces) or epoxy AWWA C550 with a minimum thickness of 4 mil.
- E. Ferrous surfaces obviously not to be painted shall be given a shop coat of grease or other suitable rust-resistant coating. Mounting surfaces shall be especially coated with a rust preventative.
- F. Special care shall be taken to protect uncoated items and plastic items, especially from environmental damage.
- 2.11 FACTORY INSPECTION, TESTING AND CORRECTION OF DEFICIENCIES
 - A. Factory inspection, testing and correction of deficiencies shall be done in accordance with the referenced standards and as noted herein.
 - B. See Division 1 for additional requirements. Also refer to PART 1, especially for required submission of test data to the ENGINEER.
 - C. In addition to all tests required by the referenced standards, the following shall also be factory tested:
 - 1. All types of air and vacuum valves.

2.12 BUTTERFLY VALVES

- A. Manufactrer
 - 1. DeZurik

- 2. Pratt
- B. Performance
 - 1. Port areas shall provide the minimum flow coefficient, 12" 5730.
- C. Materials
 - 1. Body ASTM A 126, Class B cast iron or ASTM A 536 ductile iron.
 - 2. Shaft Stainless Steel.
 - 3. Discs Ductile iron with 316 stainless steel edges.
 - 4. Seats NBR or EPDM rubber
 - 5. Fasteners or Retaining Rings 316 stainless steel.

PART 3 EXECUTION

- 3.01 INSTALLATION GENERAL
 - A. All valves, hydrants and appurtenances shall be installed per the manufacturer's instructions in the locations shown, true to alignment and rigidly supported. Any damage to the above items shall be repaired to the satisfaction of the ENGINEER before they are installed.
 - B. Install all brackets, extension rods, guides, the various types of operators and appurtenances as shown on the Drawings, or otherwise required. Before setting these items, check all Drawings and figures which have a direct bearing on their location. The CONTRACTOR shall be responsible for the proper location of valves and appurtenances during the construction of the work.
 - C. All materials shall be carefully inspected for defects in construction and materials. All debris and foreign material shall be cleaned out of openings, etc. All valve flange covers shall remain in place until connected piping is in place. All operating mechanisms shall be operated to check their proper functioning and all nuts and bolts checked for tightness. Valves and other equipment which do not operate easily, or are otherwise defective, shall be repaired or replaced at no additional cost to the OWNER.
 - D. Where installation is covered by a referenced standard, installation shall be in accordance with that standard, except as herein modified, and the CONTRACTOR shall certify such. Also note additional requirements in other parts of this Section.
 - E. Unless otherwise noted, joints for valves and appurtenances shall be made up utilizing the same procedures as specified under the applicable type connecting pipe joint and all valves and other items shall be installed in the proper position as recommended by the manufacturer. CONTRACTOR shall be responsible for verifying manufacturers' torquing requirements for all valves.
- 3.02 INSTALLATION OF VALVE BOXES
 - A. Valve boxes shall be set plumb, and centered with the bodies directly over the operating nuts. The valve box shall be set so traffic loads are not transmitted to the valve. Any valve box set too high or too low shall be adjusted at the CONTRACTOR's expense.

3.03 INSTALLATION OF FIRE HYDRANTS

- A. Hydrants shall be set on a solid concrete block unit 1'6" x 8" x 1'-4" and backfill with No. 57 gravel.
- B. Concrete blocks shall be set at the back and both sides of the hydrant to hold it solid and in vertical position.

- C. The hydrant shall be set with the center of the lowest nozzle at least 15-inches, but not more than 18-inches above finished grade and/or as approved by the ENGINEER. The pumper nozzle shall be oriented normal to the edge of pavement.
- D. The hydrant shall be harnessed to the gate valve and the gate valve shall be harnessed to the main line by using suitable tie anchor pipe and fittings to suit the installation as shown on the drawings and Standard Detail W-8. The gate valves required for hydrants shall be in accordance with Paragraph 2.10.

3.04 INSTALLATION OF MANUAL OPERATIONAL DEVICES

- A. Unless otherwise noted, all operational devices shall be installed with the units of the factory, as shown on the Drawings or as acceptable to the ENGINEER to allow accessibility to operate and maintain the item and to prevent interference with other piping, valves and appurtenances.
- B. For manually operated valves 3-in in diameter and smaller, valve operators and indicators shall be rotated to display toward normal operation locations.
- C. Floor boxes, valve boxes, extension stems and low floor stands shall be installed vertically centered over the operating nut, with couplings as required and the elevation of the box top shall be adjusted to conform with the elevation of the finished floor surface or grade at the completion of the Contract. Boxes and stem guides shall be adequately supported during concrete pouring to maintain vertical alignment.

3.05 INSPECTION, TESTING AND CORRECTION OF DEFICIENCIES

- A. See also Division 1. Take care not to over pressure valves or appurtenances during pipe testing. If any unit proves to be defective, it shall be replaced or repaired to the satisfaction of the ENGINEER.
- B. Functional Test: Prior to plant startup, all items shall be inspected for proper alignment, quiet operation, proper connection and satisfactory performance. All units shall be operated continuously while connected to the attached piping for at least one hour, without vibration, jamming, leakage, or overheating and perform the specified function.
- C. The various pipe lines in which the valves and appurtenances are to be installed are specified to be field tested. During these tests any defective valve or appurtenance shall be adjusted, removed and replaced, or otherwise made acceptable to the ENGINEER.
- D. Various regulating valves, strainers, or other appurtenances shall be tested to demonstrate their conformance with the specified operational capabilities and any deficiencies shall be corrected or the device replaced or otherwise made acceptable to the ENGINEER.

3.06 CLEANING

A. All items (including valve interiors) shall be cleaned prior to installation, testing disinfection and final acceptance.

3.07 DISINFECTION

A. Disinfection of valves and appurtenances on all potable water lines and where otherwise noted, shall be as noted in Paragraph 1.02B above.

END OF SECTION

LEGAL NOTICE TO CONTRACTORS

The Warren County Transportation Improvement District (WCTID), in cooperation and coordination with the Warren County Engineer's Office will be accepting sealed bids for the furnishing of all labor (prevailing wage rates apply), equipment, and materials needed to construct **PROJECT NO. 19-04: COLUMBIA ROAD WIDENING PROJECT**, in accordance with the applicable Ohio Department of Transportation Construction and Material Specifications (effective January 1, 2019 and its revisions and supplements), Standard Construction Drawings, Standard Bridge Drawings, Ohio Manual of Uniform Traffic Control, The State of Ohio Department of Transportation Bridge Design Manual, and other applicable standards in force on the date of letting and in accordance with the Project Specifications and Construction Plans on file in the office of the Warren County Engineer. The project includes improvement on Columbia Road north of Socialville Fosters Road to south of Fitzgerald Way. The project involves widening approximately 1,300 linear feet of roadway along with the addition and/or modification of pavement markings, signage, storm sewer and water main. The Engineer's Estimate for this project is One Million Two Hundred Thousand Dollars and Zero Cents (*\$1,200,000.00*).

All bids must be submitted in conformance with the requirements of the Project Specifications and in a sealed envelope marked: **BID: PROJECT 19-04, COLUMBIA ROAD WIDENING PROJECT,** and received in the office of the Warren County Engineer, 210 West Main Street, Lebanon, Ohio 45036, no later than 11:00 a.m. Local Time on Tuesday, September 24th, 2019 after which time all bids shall be opened and read publicly.

Instructions to Bidders, Specifications, Bid Documents, and Plans detailing the terms and conditions of the proposed improvement may be obtained after September 9th, 2019 and are available online at the Warren County's Website at http://www.co.warren.oh.us/commissioners/Resources/Bids/Default.aspx. Questions regarding the technical specifications should be directed to Dan Corey, P.E., Warren County Engineer's Office at 513-695-7725 or Dan.Corey@co.warren.oh.us. Each contractor shall be ODOT prequalified.

This notice is posted on the Warren County Government internet site. The Warren County Government Web Site can be accessed by logging onto the internet and typing in the following address <u>http://www.co.warren.oh.us/commissioners/Resources/Bids/Default.aspx</u>. To access bid project information, under the "Your Government" heading click on the "Board of Commissioners" tab, then click on the "Bid Projects" tab and choose the project you wish to obtain information about. Please contact the Warren County Commissioners Office at (513) 695- 1250 if you have trouble with this procedure or if you need additional information on accessing bid project information on our web site. If the contractor would like to bid the project, they must contact kiana.hawk@co.warren.oh.us to be put on the bidders list. Please be aware that if you are downloading this document to bid this project, addendums to the scope may be issued prior to the bid date. In order to stay updated on any change, please email Kiana Hawk in the Commissioner's Office at Kiana.Hawk@co.warren.oh.us with your contact information.

WCTID reserves the right to waive any informalities, reject any or all bids and to hold such bids for a period of sixty (60) days before taking any action thereon, and to award a contract to the best, most responsive and responsible bidder.