

ADDENDUM NO. 001

TO: All Plan Holders

RE: Water System Capital Improvements – Phase II For Town of Bluefield T&L Project No. 16176

DATE: May 30, 2023

ORIGINAL BIDS RECEIVED DATE: June 7, 2023

REVISED BIDS RECEIVED DATE: June 28, 2023

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated May 5, 2023, as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

This Addendum consists of 5 pages and 1 drawing sheet with the revised date of May 30, 2023.

CLARIFICATIONS AND ANSWERS TO PRE-BID QUESTIONS:

1. The Pre-Bid Conference Attendance Record is enclosed.

CHANGES TO BIDDING REQUIREMENTS:

 The bids received date and time is being extended to June 28, 2023, at 2:00 pm local prevailing time. The location for delivery of bids received remains as the office of Town of Bluefield, 112 Huffard Drive, Bluefield, VA 24605.

CHANGES TO PROJECT MANUAL:

1. The boring location plans have been added to Appendix B – Geotechnical Engineering Report. The boring location plans are enclosed.

CHANGES TO DRAWINGS:

1. General Note 17. has been added to Sheet G001 verifying the Town of Bluefield land disturbing permit fees. The revised sheet is attached.





Addendum No. 001 Water System Capital Improvements – Phase II May 30, 2023 Page 2

- 2. Sheet No. E002 is not part of the drawing set and has been removed from the Sheet Index on Sheet G001. The revised sheet is attached.
- Enclosures: Boring Location Plans, 2 pages Sheet G001



PRE-BID CONFERENCE ATTENDANCE RECORD WEDNESDAY, MAY 24, 2023; 10:00 AM

WATER SYSTEM CAPTIAL IMPROVEMENTS- PHASE II For TOWN OF BLUEFIELD T&L Project No. 16176

NAME	COMPANY	WORK NUMBER	MOBILE NUMBER	EMAIL ADDRESS		
Tony Delpercio	Del/shires,Inc.	304-323-1996	540-320-5054	TONYDELEDUShings		
Dee Braun	DCI/SHIRES, INC. PO BOX 1259, BLUEFIELD WV 2470 PH 304-323-1996 FAX 304-323-303 EMAIL: robertdeeb@dcishires.com	1				
SamLilly	AMR Pemco	276-928-6725	54Me	stilly @ amrom co.com		
Matt Cleeper	Vorney Inc (Electrical)	540 427 7852	334 685 3672	mcclpepper@vorney inc.com		
Vania Thompson	Chesdard Environments	1720-908-094	3 Same	Athompson Delecer in		
ctJones	Orders Construction	204-881-3572	Same	Pational and a line		
Brian McGough	Thompson & Li Alan	2763282161	9762759290	have use a t-1 com		
3m young	Thompson' Litton	304 425-9555	304 - 8624	Dupund @ t-L am		
Kick Chitwood T	Thompson' Litton	-		rchitweeter tol co		
Kim Hennander	TOB	(276)322-4626		CLETTIK @ bluefiching an-		

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PRE-BID CONFERENCE ATTENDANCE RECORD WEDNESDAY, MAY 24, 2023; 10:00 AM

WATER SYSTEM CAPTIAL IMPROVEMENTS- PHASE II For TOWN OF BLUEFIELD T&L Project No. 16176

NAME	COMPANY	WORK NUMBER	MOBILE NUMBER	EMAIL ADDRESS		
James Hampton	TOB	276)327-44026		be NOLL CH		
Lane Bleyins	Frizzell Const	423 968 5967	47.3 534 4007	Kenith A attack a		
Kell HITARD	-HZ	2115-985-7921	215-971-7996	Chitmand at 1 com		
		Ne i se i le i	VIR 11/2010	Canwelle V CAM		





NOTE:

BORING LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE.







CONSIDERED APPROXIMATE.



SHEET INDEX		EROSION & SEDIMENT CONTROL MINIMUM STANDARDS		<u>GENERAL LEGEND</u>			EROSION AND SEDIMENT CONTROL LEGEND		
HEET NO.	DESCRIPTION	1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR	EXISTING	NEW	DESCRIPTION	SYMBOL	DESCRIPTION		
T001	COVER SHEET (CONTRACTS I & II)	2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE		V7777	BUILDING				
G001	SHEET INDEX, NOTES & LEGENDS (CONTRACTS I & II)	APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.			PAVEMENT / ROAD		SILT FENCE		
G002	PROJECT LOCATION MAP (CONTRACTS I & II)	3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.		·····	GRAVEL / UNPAVED ROAD	TS	TEMPORARY SEEDING		
C101	EXISTING SITE CONDITIONS - TOWN OF BLUEFIELD WATER TREATMENT PLANT (CONTRACT I)	4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.		· · · · · · · · · · · · · · · · · · ·					
C102	DEMOLITION PLAN - TOWN OF BLUEFIELD WATER TREATMENT PLANT (CONTRACTS I & II)	- 5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.		R	RAW WATER	(10)	TOPSOILING		
C103	SITE PLAN - TOWN OF BLUEFIELD WATER TREATMENT PLANT - NEW WASTE HOLDING BASINS & MAIN WASTEWATER PUMP STATION (CONTRACTS 1 & II)	 6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN. A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE 	S	s	SANITARY SEWER	PS	PERMANENT SEEDING		
C104	MECHANICAL PLAN - TOWN OF BLUEFIELD WATER TREATMENT PLANT - NEW WASTE HOLDING BASINS (CONTRACT I)	B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED				MU	MULCHING		
C201	SITE PLANS - BRIERWOOD AND KERSEY PUMP STATIONS (CONTRACT II)	BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALL, AT A MINIMUM STORAGE AREA. THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALL, AT A MINIMUM STORAGE AREA. THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALL, AT A MINIMUM STORAGE AREA. THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALL, AT A MINIMUM STORAGE AREA.	BS						
C202	MECHANICAL PLAN - KERSEY PUMP STATION (CONTRACT II)	7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY				(CRS)	CONSTRUCTION ROAD STABLIZATION		
C203	MAIN WASTEWATER PUMP STATION AND WTP PUMP REPLACEMENTS (CONTRACTS I & II)	WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.	W	W	- WATER				
C204	SITE PLAN - DOUBLE GATES WATER STORAGE TANK (CONTRACT II)	8. CONCENTRATED RONOFF SHALL NOT FLOW DOWN COT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLOME OR SLOPE DRAIN STRUCTURE.	G		GAS		CONSTRUCTION ENTRANCE		
C205	SITE LOCATION MAP - LEAK DETECTION METERS (CONTRACT II)	9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.	OO	<u> </u>	- FENCE	(OP)	OUTLET PROTECTION		
C206	SITE PLANS - LEAK DETECTION METERS (CONTRACT II)	10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT_LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.			CULVERT				
C207	RAW. FINISHED AND KERSEY PUMPS. BACKWASH PUMP MOTOR (CONTRACT)	11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.	-0-		UTILITY POLE		RIPRAP		
C301	MISCELLANEOUS DETAILS (CONTRACTS I & II)	12. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND	0		MANHOLE				
C302		COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.	\otimes		GATE VALVE				
(202		13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.	Ŕ	۲	FIRE HYDRANT				
C505		14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.			AIR RELEASE VALVE				
5001	GENERAL NOTES AND TYPICAL DETAILS (CONTRACT I)	15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.	O Ssmh		MANHOLE				
\$100	SEDIMENTATION BASIN PLAN AND SECTIONS (CONTRACTT)	A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.	W		WELL				
E001	ELECTRICAL LEGEND, NOTES, AND ABBREVIATIONS AND BACKBOARD/SHELTER DETAILS (CONTRACTS I & II)	B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.			DISTURBED AREA				
E101	ELECTRICAL PLANS - BLUEFIELD WATER TREATMENT PLANT (CONTRACT II)	C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF SITE PROPERTY.							
E102	ELECTRICAL SITE PLANS AND ONE-LINES - BRIERWOOD AND KERSEY PUMP STATIONS (CONTRACT II)	D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.							
E103	ELECTRICAL SITE PLANS AMD ONE-LINE - DOUBLE GATE TANK AND FALLS MILL PUMP STATION (CONTRACT II)	E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.							
		F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.							
GENERAL NOTES		VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND_DISTURBING ACTIVITIES.							
MA	PPING/EXISTING INFORMATION	18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS							
 AERIAL PHOTOGRAPHY TO PROVIDE PLANIMETRIC MAPPING WAS OBTAINED FROM THE VIRGINIA GEOGRAPHIC INFORMATION NETWORK (VGIN). THE MAPPING WAS PREPARED IN 2019. FIELD SURVEY WAS PERFORMED BY THOMPSON & LITTON IN MAY 2022. 		RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION. 19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA. STREAM RESTORATION AND	ES-1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BECONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 1992 AND THE VIRGINIA EROSION AND SEDIMENT CONTROL			ICES I DNTROL			
 THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT GUARANTEED AND SHALL BE INVESTIGATED AND FIELD VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. ANY DAMAGE DONE TO EXISTING UNDERGROUND UTILITIES AND FACILITIES SHALL BE REPAIRED WITH THE UTILITIES AND FACILITIES RESTORED TO AT LEAST THEIR ORIGINAL CONDITION. THE CONTRACTOR SHALL CALL "VIRGINIA 811" 72 HOURS BEFORE EXCAVATION WORK HAS BEGUN. "VIRGINIA 811" MAY BE REACHED AT 811 OR 1-800-552-7001. VERTICAL CONTROL IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1983. 		RELOCATION PROJECTS THAT INCORPORATE NATURAL CHANNEL DESIGN CONCEPTS ARE NOT MAN-MADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS:	REGULATIONS.						
		A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.	RATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED. CY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER: ICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE N QUESTION; OR RAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS;		OR TO THE PRE-CONSTRUCTION CONFERENCE, TWO W CTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECT	EEKS TION.			
		 ADEQUACY OF ALL CHAININES AND FIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER: (1) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE POINT OF ANALYSIS WITHIN THE POINT OF ANALYSIS			THE NAME OF THE RESPONSIBLE LAND DISTURBER MUST BE PROVIDED TO THE ADMINISTRATOR TWO WEEKS PRIOR				
		(2) (A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS;			G ACTIVITY, THE PLAN'S APPROVAL WILL BE REVOKED.				
5. HORIZONTAL CONTROL IS BASED UPON THE NORTH AMERICAN DATUM OF 1983.		 (B) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A 10-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND (C) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A 10-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM. 	ES-3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.			RING.			
<u>1113</u> C		(1) IMPROVE THE CHANNELS TO A CONDITION WHERE A 10-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS;		ES-4. A COPY OF T	HE APPROVED E&SC PLAN SHALL BE MAINTAI	INED ON THE SITE AT ALL TIMES.			
0. 7	ALL UNPAVED AND UNGRAVELED AREAS DISTURBED BY EXCAVATION SHALL BE SEEDED	 (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE 10-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES; (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT 		ES-5. PRIOR TO CO	MMENCING LAND DISTURBING ACTIVITIES IN	NAREAS OTHER THAN INDICATED ON THESE PLANS			
8.	ABANDONED WATER LINES AND ANY CUT SECTION THEREOF SHALL BE CAPPED WITH CLASS A-3	CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A 10-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESCP AUTHORITY TO PREVENT DOWNSTREAM EROSION.		(INCLUDING, SUPPLEMEN	BUT NOT LIMITED TO, OFF-SITE BORROW OR TARY E&SC PLAN TO THE ADMINISTRATOR FC	R WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A DR REVIEW AND APPROVAL.			
Q	CONCRETE ON BOTH ENDS. MINIMUM PIPE COVER FOR GRAVITY SEWER LINES SHALL BE 2'-6" UNLESS OTHERWISE INDICATED.	 D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS. E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT CONDITION OF THE SUBJECT PROJECT. 		ES-6. THE CONTRA	CTOR IS RESPONSIBLE FOR INSTALLATION OF	ANY ADDITIONAL EROSION CONTROL MEASURES NEC	CESSARY		
10.	THE TOPS OF ALL MANHOLES SHALL TERMINATE AT GRADE UNLESS OTHERWISE INDICATED.	F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESCP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.		TO PREVENT	EROSION AND SEDIMENTATION AS DETERMI	INED BY THE INSPECTOR.			
11.	ALL SPOT ELEVATIONS ARE INTENDED FOR FINAL GRADE.	G. OUTFALL FROM A DETENTION FAULTIT SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.		ES-7. ALL DISTURB	ED AREAS ARE TO DRAIN TO APPROVED SEDI	MENT CONTROL MEASURES AT ALL TIMES DURING LAI	ND		
GE	NERAL	 ALL ON-SITE CHANNELS INTO IT DE VERTIFIED TO DE ADEQUATE. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY 		DISTURBING UPON APPRO	ACTIVITIES AND DURING SITE DEVELOPMENT OVAL BY THEINSPECTOR, THE CONTROLS SHAI	TUNTIL FINAL STABILIZATION IS ACHIEVED, AFTER WHI LL BE REMOVED. TRAPPED SEDIMENT AND THE DISTUF	ICH, RBED		
12. OWNERSHIP OF DOCUMENTS: THIS DOCUMENT, INCLUDING THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THOMPSON & LITTON AND		J. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.	SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.			ΤΟ			
	IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THOMPSON & LITTON.	K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.		ES-8. DURING DEV	ATERING OPERATIONS, WATER SHALL BE PU	IMPED INTO AN APPROVED FILTERING DEVICE.			
13.	ALL WORK PERFORMED SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE INTERRUPTION OF WATER TRANSMISSIONS AT PUMP STATIONS. FOR MORE INFORMATION, REFER TO THE SUGGESTED SEQUENCE OF CONSTRUCTION IN SPECIFICATION SECTION 01000 - GENERAL REQUIREMENTS.	L. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS IF THE PRACTICES ARE DESIGNED TO (I) DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (II) DETAIN AND RELEASE OVER A 24-HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24-HOUR STORM; AND (III) REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1.5, 2, AND 10-YEAR, 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY		ES-9. THE CONTRA AFTER EACH EFFECTIVENE	CTOR SHALL INSPECT ALL EROSION CONTROL RUNOFF-PRODUCING RAINFALL EVENT. ANY SSS OF THE EROSION CONTROL DEVICES SHAL	L MEASURES AT LEAST EVERY 2 WEEKS AND IMMEDIAT NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE L BE MADE IMMEDIATELY.	ΓELY		
14.		REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO § 62.1-44.15:55 OF 62.1-44.15:55 OF THE ACT.							

- 15. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE STATEWIDE BUILDING CODE AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION'S ROAD AND BRIDGE STANDARDS, AS APPLICABLE.
- 16. SECTIONS ON THE DRAWINGS ARE IDENTIFIED AS FOLLOWS:

SHEET WHERE SECTION WAS TAKEN.

SHEET WHERE SECTION

IS SHOWN

- SECTION IDENTIFICATION

- 17. THE CONTRACTOR MUST APPLY FOR A LOCAL LAND DISTURBING PERMIT THROUGH THE TOWN OF BLUEFIELD, POST AN EROSION AND SEDIMENT CONTROL BOND, AND PAY ALL APPLICABLE FEES. LISTED BELOW ARE THE FEES AND CONTROL BOND AMOUNT FOR THIS PROJECT, WATER SYSTEM CAPITAL IMPROVEMENTS - PHASE II (BLUEFIELD PROJECT #23-002):
 - LOCAL LAND DISTURBANCE PERMIT \$25.00
 - E&S CONTROL BOND WAIVED

CASH AND CHECK PAYMENTS ARE ACCEPTED AT OUR OFFICE, 112 HUFFARD DRIVE, BLUEFIELD, VA 24605 FROM 8:00AM TO 4:30PM MONDAY THROUGH FRIDAY, EXCLUDING NATIONAL HOLIDAYS. CHECKS SHALL BE MADE PAYABLE TO TOWN OF BLUEFIELD AND REFERENCE THE PROJECT NUMBER.

EROSION & SEDIMENT CONTROL SEQUENCE

WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (§ 62.1-44.15:24 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING

ACTIVITIES (I) ARE IN ACCORDANCE WITH PROVISIONS FOR TIME LIMITS ON APPLICABILITY OF APPROVED DESIGN CRITERIA IN 9VAC25-870-47 OR GRANDFATHERING IN 9VAC25-870-48 OF THE VIRGINIA

STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION, IN WHICH CASE THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62.1-44.15:52 A OF THE ACT SHALL APPLY, OR (II) ARE

N. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25-870-66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION SHALL BE DEEMED TO

1. CONTRACTOR TO INSTALL EROSION AND SEDIMENT CONTROLS.

- 2. CONTRACTOR TO COMPLETE DEMOLITION.
- 3. CONTRACTOR TO COMPLETE SITE IMPROVEMENTS.
- 4. CONTRACTOR TO STABILIZE SITE.

EXEMPT PURSUANT TO § 62.1-44.15:34 C 7 OF THE ACT.

SATISFY THE REQUIREMENTS OF THIS SUBDIVISION 19.

5. CONTRACTOR TO REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS, UPON COMPLETION / STABILIZATION OF PROJECT.

ES-10. THE CONTRACTOR IS RESPONSIBLE FOR THE DAILY REMOVAL OF SEDIMENT THAT HAS BEEN TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE.

ES-11. SEEDING OPERATIONS SHALL BE INITIATED WITHIN 7 DAYS AFTER REACHING FINAL GRADE OR UPON SUSPENSION OF GRADING OPERATIONS FOR ANTICIPATED DURATION OF GREATER THAN 14 DAYS OR UPON COMPLETION OF GRADING OPERATIONS FOR A SPECIFIC AREA.

ES-12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOILS WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS, OR HARM ANIMAL OR PLANT LIFE.

ES-13. A VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) PERMIT FOR THE DISCHARGE OF STORMWATER FROM CONSTRUCTION ACTIVITIES IS REQUIRED FOR PROJECTS DISTURBING 1 ACRE OR GREATER. VISIT DEQ'S CONSTRUCTION GENERAL PERMIT WEB PAGE AT THE FOLLOWING LINK FOR MORE INFORMATION: HTTP://WWW.DEQ.STATE.VA.US/PROGRAMS/WATER/STORMWATERMANAGEMENT/VSMPPERMITS/CONSTRUCTIONGENERALPERMIT.ASPX



Sheet No.

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JENNIFER L.

DAWS

CONTRACTS I & II