ADDENDUM NUMBER 2:

TOWN OF EXETER, NH COURT STREET over LITTLE RIVER BRIDGE REPLACEMENT CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS

Issued: May 15, 2017 For Bids Due: May 22, 2017

This addendum modifies, amends, and supplements parts of the Project Specifications, Contract Documents, and Drawings for the Town of Exeter, Court Street Little River Bridge Replacement Project, and is hereby made an integral part thereof by reference and shall be as binding as though inserted in its entirety in the locations specified herein. The Contractor shall notify their subcontractors and suppliers of any changes or modifications contained in this addendum. The Contractor shall acknowledge receipt of this addendum on the Bid Form.

The Plans, Technical Specifications and Contract Documents for the subject project shall be supplemented and/or amended as follows:

A. CONTRACT DOCUMENTS

1. Bid Proposal

The quantity for items 604.124 – Catch Basins Type B, 4-Foot Diameter and 603.00212 – 12" R.C. Pipe, 2000D have been updated. Item 604.242 – Drop Inlets Type D-B has been added.

2. Bid Plans – Sheets R-1 to R-3, and R-6

The sheets listed above have been modified to reflect changes to the drainage structures and drainage layout for the project. A note has been added to sheet R-1 to provide clarification regarding the removal of the dry hydrant near the northwest corner of the bridge.

END OF ADDENDUM NO. 2

1

Attachments:

- Revised Bid Proposal
- May 12, 2017 Pre-bid Conference Meeting Minutes
- Revised Plan Sheets
- Existing Sewer Force Main Plans



BID PROPOSAL

BIDDER:	

PROJECT: Court Street Little River Bridge Replacement

OWNER: Town of Exeter, New Hampshire

The undersigned, hereafter referred to as the BIDDER has examined the Contract Documents prepared in connection herewith by CMA Engineers, Inc., the ENGINEER. In addition, he has examined the site and is familiar with all the conditions surrounding the Work contemplated. He hereby submits the following:

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices or lump sums:

BID PROPOSAL

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
201.1	1	LS	Clearing & Grubbing (F)dollars andcents	\$	\$
202.43	110	LF	Removal of Exist. Asbest. Cement Pipe, 0-24" Diamdollars andcents	\$	\$
202.5	4	EA	Removal of Catch Basins, Drop Inlets, and Manholesdollars andcents	\$	\$
202.7	360	LF	Removal of Guardraildollars andcents	\$	\$

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
203.1	1300	CY	Common Excavation	\$	\$
			dollars		
			andcents		
203.2	15	CY	Rock Excavation	\$	\$
			and dollars		
203.6	150	CY	Embankment-in-Place (F) dollars	\$	\$
			andcents		
206.19	93	CY	Common Structure Excavation Exploratory	\$	\$
			dollars		
			andcents		
207.1	1250	CY	Common Channel Excavation	\$	\$
			dollars		
			andcents		
209.201	130	CY	Granular Backfill Bridge (F)	\$	\$
			and cents		
_					
214	1	U	Fine Grading dollars	\$	\$
			andcents		
304.2	980	CY	Gravel (F)	\$	\$
			dollars		
			andcents		
304.3	500	CY	Crushed Gravel (F)	\$	\$
			and cents		
			undCCIItS		

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
403.11	500	TON	Hot Bituminous Pavement, Machine Method dollars andcents	\$	\$
403.12	6	TON	Hot Bituminous Pavement, Hand Methoddollars andcents	\$	\$
403.6	4100	LF	Pavement Joint Adhesivedollars andcents	\$	\$
403.911	20	TON	Hot Bituminous Bridge Pavement, 1 1/2" Base Course (F) dollars andcents	\$	\$
417	81	SY	Cold Planning Bituminous Surfaces dollars andcents	\$	\$
502	1	U	Removal of Existing Bridge Structure dollars andcents	\$	\$
503.101	1	U	Water Diversion Structuredollars andcents	\$	\$
504.1	340	CY	Common Bridge Excavation (F) dollars andcents	\$	\$

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
504.2	5	CY	Rock Bridge Excavationdollars andcents	\$	\$
508	28	CY	Structural Filldollars andcents	\$	\$
510.1	1	U	Pile Driving Equipmentdollars andcents	\$	\$
510.61	28200	LB	Furnishing and Driving Steel Bearing Pilesdollars andcents	\$	\$
510.65	14	EA	Driving-Points for Steel Bearing Pilesdollars andcents	\$	\$
520.01	140	CY	Concrete Class AAdollars andcents	\$	\$
520.0302	71	CY	Concrete Class AA Approach Slabsdollars andcents	\$	\$
520.21	7	CY	Concrete Class B, Footings (F) dollars andcents	\$	\$
528.3224	2300	SF	Prestressed Concrete Bridge Deck, 24" Butted Box Beams (F) dollars andcents	\$	\$

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
534.3	15	GAL	Water Repellent (Silane-Siloxane)dollars andcents	\$	\$
538.2	9	SY	Barrier Membrane, Peel and Stick – Vertical Surfaces (F)dollars andcents	\$	\$
538.5	250	SY	Barrier Membrane, Heat Welded (F)dollars andcents	\$	\$
544.3	7100	LB	Reinforcing Steel, (Contractor Detailed) dollars andcents	\$	\$
544.31	16700	LB	Reinforcing Steel, Epoxy Coated (Contractor Detailed) dollars andcents	\$	\$
544.7	500	LB	Synthetic Fiber Reinforcement (F) dollars andcents	\$	\$
548.11	44	EA	Elastomeric Bearing Pads (F) dollars andcents	\$	\$
559.4	34	LF	Asphaltic Plug Expansion Joint (F) dollars and cents	\$	\$
559.41	34	LF	Asphaltic Plug for Crack Control (F) dollars and cents	\$	\$

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
562.1	23	LF	Silicone Joint Sealant (F)	\$	\$
			anddollars cents		
563.3	60	LF	Bridge Rail T101	\$	\$
			anddollars cents		
563.353	60	LF	Bridge Rail T101 with Snow Screening	\$	\$
			anddollars cents		
570.4	19	CY	Mortar Rubble Masonry (F)	\$	\$
			anddollars cents		
583.3	280	CY	Riprap Class III	\$	\$
			anddollars cents		
593.411	650	SY	Geotextile, Permanent Control, Class 1, Non-Woven	\$	\$
			and dollars cents		
603.00212	250	LF	12" R.C. Pipe, 2000D	\$	\$
			anddollars cents		
604.0007	3	EA	Polyethylene Liner	\$	\$
			anddollars cents		
604.124	4	U	Catch Basins Type B, 4-Foot Diameter	\$	\$
			anddollars cents		

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
604.242	1	U	Drop Inlets Type D-B	\$	\$
			dollars andcents		
604.324	1	U	Drainage Manholes, 4-Foot Diameter	\$	\$
			anddollars cents		
604.325	1	U	Drainage Manholes, 5-Foot Diameter	\$	\$
			anddollars cents		
604.51	3	LF	Reconstructing/Adjusting Sewer Manholes	\$	\$
			anddollars cents		
604.52	7	LF	Reconstructing/Adjusting Drainage Manholes	\$	\$
			dollars and cents		
604.54	1	LF	Reconstructing/Adjusting Telephone Manholes	\$	\$
			dollars and cents		
606.1255	3	U	Beam Guardrail (Terminal Unit Type EAGRT 25 ft.) (Steel Post)	\$	\$
			dollars and cents		
606.1285	4	U	Beam Guardrail (Bridge Approach Unit)	\$	\$
			andconts		
606.147	1	U	Beam Guardrail (Terminal Unit Type G-2)	\$	\$
			anddollars cents		

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
606.18001	63	LF	Beam Guardrail (Standard Section) (Steel Post)	\$	\$
			dollars and cents		
608.125	130	SY	2.5" Bituminous Sidewalk (F)	\$	\$
			and dollars cents		
608.36	8	SY	6" Reinforced Concrete Sidewalk (F)	\$	\$
			and dollars cents		
608.54	3	SY	Detectable Warning Devices, Cast Iron	\$	\$
			and dollars cents		
609.01	250	LF	Straight Granite Curb	\$	\$
			and dollars cents		
611.05212	40	LF	12" Cement Lined Ductile Iron Water Pipe, CL 52	\$	\$
			anddollars		
611.052121	120	LF	12" Insulated Cement Lined Ductile Iron Water Pipe, CL 52	\$	\$
			anddollars		
611.700121	2	EA	12" Fitting (Hymax Transition Coupling)	\$	\$
			anddollars cents		
611.700122	4	EA	12" Insulated Fitting	\$	\$
			dollars and cents		

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
611.71012	2	EA	12" Gate Valve with Box	\$	\$
			andcents		
618.61	2500	\$	Uniformed Officers with Vehicle	\$2,500	\$2,500
			and dollars cents		
619.1	1	U	Maintenance of Traffic	\$	\$
			anddollars cents		
619.25	2	U	Portable Changeable Message Sign	\$	\$
			andcents		
628.2	330	LF	Sawed Bituminous Pavement	\$	\$
			andcents		
632.0104	2700	LF	Retroreflective Paint Pave. Marking, 4" Line	\$	\$
			dollars andcents		
645.531	990	LF	Silt Fence	\$	\$
			dollars		
645.7	1	U	andcents Storm Water Pollution Prevention Plan	\$	\$
073.7	1		dollars	Ψ	Ψ
			andcents		
645.71	50	HR	Monitoring SWPPP and Erosion and Sediment Controls	\$	\$
			anddollars		

ITEM NO.	EST QTY	UNIT	ITEM DESCRIPTION WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE (FIGURES)	EXTENDED TOTAL (FIGURES)
646.51	560	SY	Turf Establishment with Mulch, Tackifiers, and Loam	\$	\$
			dollars and cents		
692	1	U	Mobilization	\$	\$
			and dollars cents		
1008.11	15000	\$	Alterations and Additions as Needed – Unanticipated Work	\$15,000	\$15,000
			dollars and cents		
1008.9	6000	\$	Alterations and Additions as Needed – Testing of Material	\$6,000	\$6,000
			anddollars		

Total Bid Price

(Figures)		
(Written)		
	dollars and	cents

The Bidder agrees to **add** <u>or</u> **deduct** work required by the Owner or Engineer for the above mentioned Lump Sum prices (as applicable).

The undersigned, as Contractor herein referred to as singular and masculine declares as follows:

- (1) The only parties interested in the BID as Principals are named herein;
- (2) This BID is made without collusion with any other person, firm, or corporation;

- (3) The Bidder has carefully examined the site of the proposed work and is fully informed and is satisfied as to the conditions there existing, the character and requirements of the proposed Work, and the difficulties attendant upon its execution. The Bidder has carefully read and examined the Drawings, the proposed AGREEMENT and the Specifications and other Contract Documents therein referred to and knows and understands the terms and provisions thereof;
- (4) The Bidder understands the information relative to subsurface and other conditions, natural phenomena, existing pipes and other structures (surface and/or subsurface) has been furnished only for his information and convenience without any warranty or guarantee, expressed or implied, that the subsurface and/or other conditions, natural phenomena, existing pipes and other structures (surface or subsurface) actually encountered will be the same as those shown on the Drawings or in any other Contract Documents and he agrees that he shall not use or be entitled to use such information made available to him through the Contract Documents or otherwise obtained by him in his own examination of the site, as a basis of or ground for any claim against the Owner or Engineer arising from or by reasons of any variance which may exist between the aforesaid information made available to, or otherwise obtained by, him and the subsurface and/or other conditions, natural phenomena, existing pipes and other structures (surface and/or subsurface) actually encountered during the construction work, and he has made due allowance therefore in the BID:
- (5) He understands that all reports of investigations and tests of subsurface physical conditions at the site and other information affecting the performance of the Work which have been relied upon by the Engineer in preparation of the Drawings and Specifications are not guaranteed as to accuracy or completeness and are not part of the Contract Documents.
- (6) And he understands that the quantities of work tabulated in this Proposal and indicated on the Drawings and in the Specifications and other Contract Documents are approximate and are subject to increase or decrease as deemed necessary by the Engineer, and as allowed for under the Contract Documents.

The undersigned agrees that for <u>extra</u> work, if any, authorized in writing by the Engineer to be performed by him in accordance with the terms and provisions of the Agreement, he will accept compensation as stipulated in the Contract Documents in full payment for such extra work, and agrees that for <u>reductions</u> in work as directed by the Engineer, he will accept reduced compensation as stipulated in the Contract Documents.

If this Bid Proposal is accepted by the Owner, the undersigned agrees to substantially complete the work in accordance with the schedule for substantial completion of

work per the Special Conditions, provided to be done under the Contract, and accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete any element of the work on time, except as otherwise expressly provided in the AGREEMENT.

The Bidder hereby agrees that, once opened, he will not withdraw this Bid within 90 days of Bid opening, and that if the Owner shall accept this Bid, the Bidder will duly execute the Contract and provide BONDS as provided in paragraph 14 of Instructions to Bidders.

				Company Name
	Ву:			
	Name (Printed)		Address	
	Title	-	Address	
			Tidaress	
	Signature	-	Date	
	(SEAL if Proposal is by a Corpor	ation)		
	Attest	-		
		ADDENDA		
The E	SIDDER acknowledges receipt of th	e following Adde	enda*	
No	Dated			

Respectfully Submitted:

* to be filled in as appropriate

MEETING MINUTES

PROJECT: Court Street Little River Bridge Replacement

Exeter, NH

CMA Engineers Project No. 923

MEETING DATE: May 12, 2017, 10:00 am

MINUTES ISSUE DATE: May 15, 2017

Overview:

The supplemental Pre-Bid meeting was held at the project site to review the project parameters.

Attendees:

Jim DeWever, Cairns
Jason Gallant, CMA Engineers

Meeting Notes/Summary:

FairPoint

- Same as 5/2 meeting, no lines have been relocated.

<u>Unitil – Electric</u>

- A permanent new pole has been set immediately adjacent to the existing pole at the southwest corner of the bridge.
- No lines have been relocated to date.

Unitil - Gas

 Town coordination with Unitil is ongoing to relocate the gas main west of the existing / proposed bridge.

Contractor Questions

o None



General Notes:

- 1) ALL WORK SHALL BE IN CONFORMANCE WITH CURRENT NHDOT STANDARD SPECIFICATIONS, DETAILS, AND THE TOWN OF EXETER REQUIREMENTS.
- 2) ENGINEER SHALL BE DEFINED AS THE RESIDENT ENGINEER / OWNER'S REPRESENTATIVE, WHO IS RESPONSIBLE FOR ENGINEERING OBSERVATION DURING CONSTRUCTION, ACTING DIRECTLY OR THROUGH HIS DULY AUTHORIZED REPRESENTATIVES.
- 3) THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN, PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH PROPOSED CONSTRUCTION AND THE APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL NOTIFY DIG—SAFE (1—800—DIG—SAFE) AT LEAST 72 HOURS PRIOR TO THE BEGINNING OF WORK TO CONFIRM THE LOCATION OF UNDERGROUND UTILITIES.
- 4) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING THE HORIZONTAL AND VERTICAL CONTROL THROUGHOUT THE PROJECT.
- 5) THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING RESIDENTS OF ANY WORK RESTRICTING ACCESS TO ANY DRIVEWAY 24 HOURS IN ADVANCE.
- 6) SURVEY DATA FOR THIS PROJECT WAS COLLECTED BY DOUCET SURVEY, INC. IN JUNE 2014. HORIZONTAL DATUM BASED ON NHSPC (2800) NAD83 (US FEET). VERTICAL DATUM IS BASED ON NHDOT DISK B 13 1934 ELEV. = 60.47 (NGVD29).
- 7) ALL MAIL BOXES SHALL REMAIN AT THE SAME LOCATION AND BE RESET TO SAME HEIGHT IF TEMPORARY REMOVAL IS NECESSARY.
- 8) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING OR RE-ESTABLISHING ALL PROPERTY MONUMENTATION (IRON PIPE, REBAR BOUNDS, ETC.). THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 9) FOR STANDARD PLANS, SEE THE NHDOT "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" DATED 2010 (A BOUND BOOK).
- 10) OVERHEAD UTILITY LINES ARE LOCATED THROUGHOUT THE PROJECT WITH CROSSINGS AT VARIOUS LOCATIONS AND RUNNING ALONG THE ROAD THROUGHOUT THE PROJECT. THE CONTRACTOR IS ADVISED THAT EXTREME CAUTION WILL BE REQUIRED IN THE OPERATION OF EQUIPMENT, ESPECIALLY CRANES.
- 11) REMOVE TOPSOIL FOR ITS TOTAL DEPTH WITHIN THE LIMITS OF THE SLOPE LINES, UNLESS OTHERWISE DIRECTED. STOCKPILE TOPSOIL AND USE IT ON THIS PROJECT AS NEEDED UNDER SECTION 646.51 TURF ESTABLISHMENT WITH MULCH, TACKIFIERS AND LOAM. STOCKPILE LOCATION SHALL BE DETERMINED BY THE CONTRACTOR WITHIN THE RIGHT—OF—WAY OR OFF SITE. ALL COST FOR STOCKPILING OF TOPSOIL SHALL BE INCLUDED IN THE APPROPRIATE 646 ITEM OF THIS CONTRACT.
- 12) PERFORM ALL WORK WITHIN THE EXISTING RIGHT-OF-WAY OR ACQUIRED TEMPORARY RIGHT-OF-ENTRY LIMITS.
- 13) CONTRACTOR SHALL PLACE BARRICADES IN A MANNER THAT WILL PROVIDE CONTINUOUS AND UNRESTRICTED ACCESS FOR RESIDENTS WITHIN THE PROJECT LIMITS.

Survey Notes:

- 1) FIELD SURVEY AND RIGHT-OF-WAY DELINEATION PERFORMED BY DOUCET SURVEY INC. BY J.P.E. & P.J.S. DURING 06/14 USING A TRIMBLE 5603 DR 200 PLUS TOTAL STATION WITH A TDS RANGER DATA COLLECTOR AND A SOKKIA B21 AUTO/TRIMBLE DINI DIGITAL LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
- 2) JURISDICTIONAL WETLANDS DELINEATED BY NHSC, INC., A GZA COMPANY, DURING JUNE 2014 IN ACCORDANCE WITH 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1.
- 3) HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM STATIC GPS OBSERVATIONS PROCESSED BY THE NATIONAL GEODETIC SURVEY ON—LINE POSITIONING USER SERVICE (OPUS).
- 4) VERTICAL DATUM IS BASED ON NGVD29. LINDEN ST. DISK STAMPED B 13 1934 ELEV.=60.47 AND COURT ST. DISK STAMPED B 14 1934 ELEV.=37.67.
- 5) THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING; THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.
- 6) UNDERGROUND UTILITY DATA WAS MARKED BY DIGSMART OF MAINE TO ASCE QUALITY LEVEL B. THIS DATA IS FOR PLANNING PURPOSES ONLY AND DOUCET SURVEY DOES NOT GUARANTEE THE ACCURACY OR EXISTENCE OF THE DATA PROVIDED. ON—SITE INSPECTION SHOULD BE CONDUCTED PRIOR FINAL DESIGN AND/OR CONSTRUCTION
- 7) DUE TO THE COMPLEXITY OF RESEARCHING ROAD RECORDS AS A RESULT OF INCOMPLETE, UNORGANIZED, INCONCLUSIVE, OBLITERATED, OR LOST DOCUMENTS, THERE IS AN INHERENT UNCERTAINTY INVOLVED WHEN ATTEMPTING TO DETERMINE THE LOCATION AND WIDTH OF A ROADWAY RIGHT OF WAY. THE EXTENT OF THE ROADS AS DEPICTED HEREON ARE BASED ON PHYSICAL EVIDENCE FOUND AND RECORD PLANS OBTAINED THROUGH RESEARCH CONDUCTED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AND THE TOWN OF EXETER MUNICIPAL OFFICES.
- 8) FLOOD HAZARD ZONE: "AE", PER FIRM MAP #33015C0402E, DATED 5/17/05.

Roadway Notes:

- 1) THE PAVEMENT SHALL BE SUPERPAVE MIXTURE WITH PERFORMANCE GRADE 64—28 LIQUID ASPHALT. TOTAL REUSED BINDER LIMITED TO 1.0% MAXIMUM. THE VOLUMETRIC MIX DESIGN SHALL BE IN ACCORDANCE WITH NHDOT SPECIFICATIONS AND AASHTO STANDARD PRACTICE R35.
- 2) ALL PAVEMENT EDGES SHALL BE SAWCUT. THE CONTRACTOR SHALL TRIM, TACK, AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
- 3) A TACK COAT SHALL BE APPLIED TO PAVEMENT BETWEEN COURSES AND TO ALL ABUTTING PAVEMENT SURFACES IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATION SECTION 410. THE TACK COAT SHALL BE SUBSIDIARY TO THE PAVEMENT COST.
- 4) PAVEMENT JOINT ADHESIVE (ITEM 403.6) SHALL BE APPLIED ON ALL LONGITUDINAL PAVEMENT JOINTS FOR ALL COURSES AND AT TRANSVERSE JOINTS FOR DRIVEWAYS AND PROJECT LIMITS FOR ALL COURSES.

PAVEMENT COURSES				
COURSE	MINIMUM LIFT THICKNESS	NOMINAL MAX. AGGREGATE SIZE	GYRATORY COMPACTION EFFORT	MINIMUM BINDER CONTENT*
WEARING	1"	3/8"	75	6.0%
ROAD-BINDER	3"	3/4"	50	5.1%
BRIDGE-BINDER	1 1/2"	1/2"	50	5.1%

*SEE ROADWAY NOTES

Erosion Control Notes:

- 1) THE CONTRACTOR IS RESPONSIBLE FOR THE DEVELOPMENT AND APPROVAL OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
- PRIOR TO CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NECESSARY. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION. WHEN LAND IS EXPOSED DURING CONSTRUCTION, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. ANY DISTURBED AREAS THAT ARE TO BE LEFT UN-STABILIZED LONGER THAN TWO WEEKS SHALL BE TEMPORARILY SEEDED AND MULCHED AT THE RATE OF 2 TONS PER ACRE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL REMEDIAL WORK REQUIRED TO REPAIR AREAS WHICH ARE DAMAGED BY EROSION.
- 3) HAY BALE BARRIERS SHALL BE INSTALLED AND MAINTAINED AT DRAIN INLETS AND OUTLETS AND ALONG LIMITS OF WORK WHERE NECESSARY. HAY BALE BARRIERS SHALL NOT BE PLACED CLOSER THAN 25-FEET TO DRAIN INLETS AND OUTLETS. ADDITIONAL HAY BALES SHALL BE ADDED AS REQUIRED BY THE ENGINEER. HAY BALES WILL BE STAKED AND MAINTAINED PRIOR TO AND DURING CONSTRUCTION UNTIL DISTURBED AREAS HAVE A HEALTHY STAND OF GRASS.
- 4) ALL DISTURBED AREAS AND SIDE SLOPES THAT ARE AT ARE FINISH GRADED WITH NO FURTHER CONSTRUCTION TAKING PLACE SHALL BE TRACKED, SEEDED (IN ACCORDANCE WITH SECTION 644 OF THE STANDARD SPECIFICATIONS) AND MULCHED. ALL SEED, LIME AND FERTILIZER PROGRAMS SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE SPECIFICATIONS (SECTION 642 AND SECTION 643).
- 5) CONSTRUCTION TRAFFIC SHALL TRAVEL THE ROADBEDS OF EXISTING ROADS.
- 6) SILT FENCE SHALL BE INSTALLED AND MAINTAINED WHERE NECESSARY AND ADDITIONAL SILT FENCE ADDED AS REQUIRED BY THE ENGINEER PRIOR TO ANY ON—SITE GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. GENERALLY, SILT FENCE SHALL BE INSTALLED TO PREVENT MIGRATION OF THE SEDIMENT FROM THE WORK AREA. IT SHOULD BE MAINTAINED DURING AND AFTER CONSTRUCTION TO REMOVE SEDIMENT FROM NATURAL DRAINAGE WAYS. THE SILT FENCE IS TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
- 7) AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND ACCUMULATED SEDIMENT DISPOSED OF IN A LOCATION DESIGNATED BY THE OWNER.
- 8) HAY BALES AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE FROM NOXIOUS WEEDS OR WOODY STEMS AND SHALL BE DRY.
- 9) SILT FENCES SHALL BE A MINIMUM OF 36 INCHES HIGH WITH THE BOTTOM OF THE CLOTH KEYING INTO THE GROUND. POSTS SHALL BE OF WOOD OR STEEL.
- 10) THE EROSION CONTROL DEVICES DESCRIBED AND AS SPECIFIED IN THE SPECIFICATIONS REPRESENT THE MINIMUM REQUIRED MEASURES FOR EROSION CONTROL. THE CONTRACTOR SHALL ADD TO THESE DEVICES ANY OTHER MEASURES AS REQUIRED OR AS DIRECTED BY THE ENGINEER TO EFFECTIVELY PREVENT MIGRATION OF SEDIMENT FROM THE WORK AREA AND PROTECT WETLAND AREAS, WATERWAYS, EXISTING AND PROPOSED DRAINAGE FEATURES, SLOPES, LAWNS, AND PLANTS ADJACENT TO THE WORK AREA.

Guardrail Notes:

- 1) GUARDRAIL OFFSET BLOCKS SHALL BE SYNTHETIC.
- 2) ALL OFFSETS ARE TO FACE OF RAIL. EAGRT OFFSETS ARE TO THE FACE OF RAIL AT THE TERMINAL UNIT.
- 3) G4 IS LOCATED ON THE RADIUS BETWEEN COURT STREET AND BELL AVE. STATION OFFSETS ARE GIVEN FROM BOTH ALIGNMENTS. REFERENCED ALIGNMENT IS INDICATED WITH (C) FOR COURT STREET ALIGNMENT AND (B) FOR BELL AVE ALIGNMENT.

G1	STA 11+83.5 TO 12+08.5 LT 21.0' AT 11+83.5
اتا	LT 21.0' AT 11+83.5
	LT 20.0' AT 12+08.5
	CONST. T101 APPROACH RAIL
	STA 11+58.5 TO 11+83.5
	LT 22.3' AT 11+58.5
	LT 21.0' AT 11+83.5
	CONST. 25' EAGRT W/O PLATFORM

G2 STA 12+66 TO 12+91
LT 20.0' AT 12+66
LT 20.9' AT 12+91
CONST. T101 APPROACH RAIL
STA 12+91 TO 13+16
LT 20.9' AT 12+91
LT 22.3' AT 13+16
CONST. 25' EAGRT W/O PLATFORM

G3 STA 12+65.5 TO 12+90.5
RT 19.5' AT 12+65.5
RT 19.8' AT 12+90.5
CONST. T101 APPROACH RAIL
STA 12+90.5 TO 13+46.75
RT 19.8' AT 12+90.5
RT 20.5' AT 13+46.75
CONST. 56.25 LF W BEAM GUARDRAIL
STA 13+46.75 TO 13+71.75
RT 20.5' AT 13+46.75
RT 22.2' AT 13+71.75
CONST. 25' EAGRT W/O PLATFORM

G4 STA 12+10 (C) TO 20+31.5 (B)
RT 19.5' AT 12+10 (C)
LT 20.6' AT 20.31.5 (B)
RADIUS = 24.55'
CONST. T101 APPROACH RAIL
STA 20+31.5 (B) TO 20+37.5 (B)
LT 20.6' AT 20+31.5 (B)
LT 18.3' AT 20+37.5 (B)
RADIUS = 24.55'
CONST. 6.25' LF W BEAM GUARDRAIL
STA 20+37.5 (B) TO 20+50.5 (B)
LT 18.3' AT 20+37.5 (B)
LT 17.5 AT 20+50.5 (B)
CONST. 12.5' BEAM GUARDRAIL
TERMINAL UNIT TYPE G-2

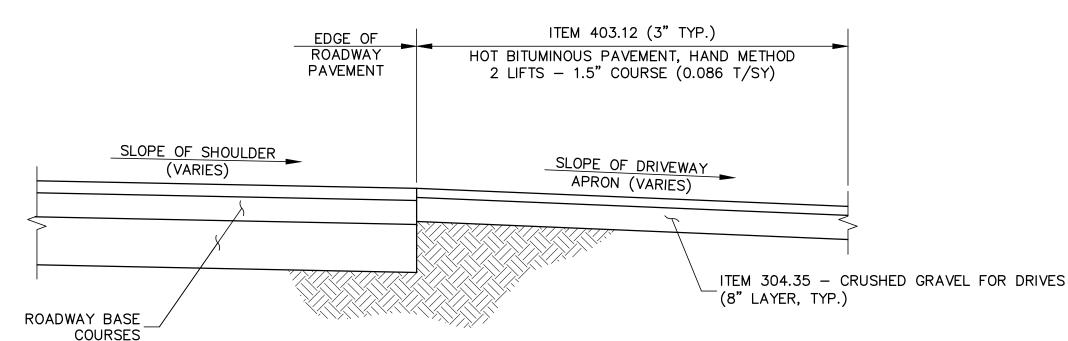
Pavement Marking Notes:

PLACEMENT AND COLOR OF PAVEMENT MARKING LINES, SYMBOLS AND WORDS SHALL CONFORM TO THE LATEST EDITION OF MUTCD, SECTION 632 OF NHDOT STANDARD SPECIFICATIONS, CONTRACT SUPPLEMENTAL SPECIFICATIONS, THE STATE OF NEW HAMPSHIRE PAVEMENT MARKING STANDARD DETAIL SHEETS, AND STANDARD PLAN SHEETS.

Retroreflective Paint Pavement Marking Key:

{}SSL()={SIZE IN INCHES} SINGLE SOLID LINE (COLOR)
{}DSL()={SIZE IN INCHES} DOUBLE SOLID LINE (COLOR)
{}SSBL()={SIZE IN INCHES} SINGLE SOLID W/BROKEN LINE (COLOR)
{}SBL()={SIZE IN INCHES} SINGLE BROKEN LINE (COLOR)
{}DBL()={SIZE IN INCHES} DOUBLE BROKEN LINE (COLOR)
(W) = WHITE
(Y) = YELLOW

2011 CLEARING AND GRUBERG (F) 1 2014 5 5 5 5 5 5 5 5 5	ITEM NO.	SUMMARY OF ROADWAY QUANTITIES ITEM DESCRIPTION	QUANTITY	UNIT
2004.5 REMOVAL OF EXISTING ASSESTED CEMENT PIPE 0-24" DIAMSTER 110 1 1 1 1 1 1 1 1			QOANTIT 1	LS
501.5 REVOVAL OF CATOL BASINS, ORDER PRICES, AND VANHOLES 4 7 7 7 7 7 7 7 7 7			110	LF
200.2 SCHOVAL OF CUARDINAL 1300				EA
205. COMMON EXCAVATION				LF
203.2 ROCK EXCAVATION				CY
2005 MHANKMENT IN FLACE (*) 158 C 2007 C COMMON STRUCTURE FXCAVATION FXPLORATORY 9.3 C 214 II CORDING 1 1 1 1 1 1 1 1 1				CY
208.18 COMMON STRUCTURE FROAVATION EXPECTATIONY 1				CY
214				CY
304.2 GRAVEL (F)				
304.3 CRUSHED GRAVEL (F) 500 C 403.11 HOT BITLAMINOUS PAVEMENT, MACHINE METHOD 500 7 403.12 HOT BITLAMINOUS PAVEMENT, MACHINE METHOD 5 500 7 403.12 HOT BITLAMINOUS PAVEMENT, HAND METHOD 5 7 7 7 7 7 7 7 7 7				U CY
403.11 HOT BILMINGUS PAYEMENT, MACHINE METHOD 50 71		, ,		
HOT BITUMINOUS PAVEMENT, FAND METHOD				CY
403.6				TON
417			-	TON
12" R.C. PIPE, 20000 250 1				LF_
SOURCE S				SY
604.124 CAIST BASINS TYPE 3, 4-FOOT DIAMPTER 4 604.242 DROP IN ETS TYPE 0-B				LF
694-324 DROP INLES TYPE D=B 1 1 694-324 BRAINAGE MANHOLES, 4-POOT DIAMETER 1 1 694-324 BRAINAGE MANHOLES, 5-POOT DIAMETER 1 1 694-325 DRAINAGE MANHOLES, 5-POOT DIAMETER 1 1 696-454 RECONSTRUCT NG/ADJUSTING SEWER MANHOLES 7 1 696-454 RECONSTRUCT NG/ADJUSTING DRAINAGE MANHOLES 7 1 696-454 RECONSTRUCT NG/ADJUSTING DRAINAGE MANHOLES 1 1 696-454 RECONSTRUCT NG/ADJUSTING TELEPHONE MANHOLES 1 1 696-454 RECONSTRUCT NG/ADJUSTING TELEPHONE MANHOLES 1 1 696-474 REAM CUARDARIAL (TERMINAL UNIT TYPE EAGRT 25 FT.) (STEEL POST) 3 1 696-474 REAM CUARDARIAL (TERMINAL UNIT TYPE EAGRT 25 FT.) (STEEL POST) 6-3 1 1 696-474 REAM CUARDARIAL (HRIDS APPROACH UNIT) 4 1 696-474 REAM CUARDARIAL (HRIDS APPROACH UNIT) 6-3 1 1 696-474 REAM CUARDARIAL WITH B** OFFSET BLOCK (STEEL POST) 6-3 1 1 696-474 REAM GUARDARIAL WITH B** OFFSET BLOCK (STEEL POST) 6-3 1 696-475 REAM GUARDARIAL WITH B** OFFSET BLOCK (STEEL POST) 6-3 1 1 696-475 REAM GUARDARIAL WITH B** OFFSET BLOCK (STEEL POST) 6-3 1 1 696-475 REAM GUARDARIAL WITH B** OFFSET BLOCK (STEEL POST) 6-3 1 1 1 1 1 1 1 1 1			3	EA
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884.325 DRAINAGE MANHOLES, 5-FOOT DIAMETER 1 1 804.51 RECONSTRUCTING/ADJUSTING SEWER MANHOLES 3 L 804.52 RECONSTRUCTING/ADJUSTING DRAINAGE MANHOLES 7 L 804.54 RECONSTRUCTING/ADJUSTING DRAINAGE MANHOLES 1 L 805.128.5 BEAM GUARDRAIL (TERMINAL UNIT TYPE EAGRT 25 FT.) (STEEL POST) 3 I 806.125.5 BEAM GUARDRAIL (TERMINAL UNIT TYPE CHECK 1 I 806.147 BEAM GUARDRAIL (TERMINAL UNIT TYPE CHECK) 1 I 806.147 BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST) 63 I 806.147 BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST) 63 I 806.147 BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST) 63 I 806.147 BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST) 63 I 806.147 BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST) 63 I 806.147 BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST) 63 I 806.152 2.5° GITUMINOUS SDEWALK (F) 8 S 80	604.242	DROP INLETS TYPE D-B	1	U
RECONSTRUCTING/ADJUSTING SEWER MANHOLES			1	U
604.52 RECONSTRUCTNG/ADJUSTING DRAINAGE MANHOLES 7 L 604.54 RECONSTRUCTNG/ADJUSTING TELEPHONE MANHOLES 1 L 606.1256 BEAM GUARDRAIL (TERMINAL UNIT TYPE EAGRT 25 FT.) (STEEL POST) 3 L 606.1256 BEAM GUARDRAIL (BRIDGE APPROACH UNIT) 4 L 606.147 BEAM GUARDRAIL (HEMINAL UNIT TYPE 6-2) 1 L 606.18001 31" W-BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST) 63 L 806.125 2.5" BITUMINGUS SIDEWALK (T) 130 S 608.35 6" REINFORCED CONCRETE SDEWALK (F) 8 S 608.36 6" REINFORCED CONCRETE SDEWALK (F) 8 S 608.37 6" REINFORCED CONCRETE SDEWALK (F) 8 S 608.36 6" REINFORCED CONCRETE SDEWALK (F) 8 S 608.37 6" REINFORCED CONCRETE SDEWALK (F) 8 S 608.39 0" TERMANTIC DRAIN (F) 3 S 609.10 2" TERMANTIC DRAIN (F) 2 L 611.05212 12" INSLITATED FITTING 1 L <tr< td=""><td>604.325</td><td>DRAINAGE MANHOLES, 5-FOOT DIAMETER</td><td>1</td><td>U</td></tr<>	604.325	DRAINAGE MANHOLES, 5-FOOT DIAMETER	1	U
S04.54 RECONSTRUCTING/ADJUSTING TELEPHONE MANHOLES 1 1 1 1 1 1 1 1 1	604.51	RECONSTRUCTING/ADJUSTING SEWER MANHOLES	3	LF
BEAM GUARDRAIL (TERMINAL UNIT TYPE EAGRT 25 FT.) (STEEL POST) 3 1 1 1 1 1 1 1 1 1	604.52	RECONSTRUCTING/ADJUSTING DRAINAGE MANHOLES	7	LF
606.1285 BEAM GUARDRAIL (BRIDGE APPROACH UNIT) 4 6 6 6 6 6 6 6 6 6	604.54	RECONSTRUCTING/ADJUSTING TELEPHONE MANHOLES	1	LF
606.147 BEAM GUARDRAIL (TERMINAL UNIT TYPE S-2) 1 1 606.18001 31" W-BEAM GUARDRAIL WTH 8" OFFSET BLOCK (STEEL POST) 63 L 608.125 2.5" BITUMINOUS SIDEWALK (F) 130 S 608.36 6" REINFORCED CONCRETE SIDEWALK (F) 8 S 608.54 DETECTABLE WARNING DEVICES, CAST IRON 3 S 609.01 STRAIGHT GRANITE CURB 250 L 611.05212 12" CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 40 L 611.05212 12" INSULATED CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 120 L 611.70012 12" INSULATED CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 120 L 611.70012 12" INSULATED FITTING 4 E 611.70012 12" INSULATED FITTING 4 E 611.71012 12" GATE VALVE WITH BOX 2 E 618.61 UNIFORWED OFFICERS WITH VEHICLE 2500 1 619.15 PORTABLE CHANGEABLE MESSAGE SIGN 2 1 628.2 SAWED BITUMINOUS PAVEMENT 330 L 645.531 SILT FENCE 990 L	606.1255	BEAM GUARDRAIL (TERMINAL UNIT TYPE EAGRT 25 FT.) (STEEL POST)	3	U
606.18001 31" W-BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST) 63 L 608.125 2.5" BITUMINOUS SIDEWALK (F) 130 S 608.36 6" REINFORCED CONCRETE SIDEWALK (F) 8 S 608.54 DETECTABLE WARNING DEVICES, CAST IRON 3 S 609.01 STRAIGHT GRANITE CURB 250 L 611.05212 12" CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 40 L 611.052121 12" INSULATED CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 120 L 611.700121 12" FITTING (HYMAX TRANSITION COUPLING) 2 E 611.700122 12" INSULATED FITTING 4 E 611.71012 12" GATE VALVE WITH BOX 2 E 618.61 UNIFORMED OFFICERS WITH VEHICLE 2500 3 619.1 MAINTENANCE OF TRAFFIC 1 1 619.25 PORTABLE CHANGEABLE MESSAGE SIGN 2 1 628.2 SAWED BITUMINOUS PAVEMENT 330 L 645.73 SILT FENCE 990 L 645.71 MONITORING SWPPP AND EROSION AND SEDIMENT CONTROLS 50 H	606.1285	BEAM GUARDRAIL (BRIDGE APPROACH UNIT)	4	U
608.125 2.5" BITUMINOUS SIDEWALK (F) 130 9 608.36 6" REINFORCED CONCRETE SIDEWALK (F) 8 8 808.54 DETECTABLE WARNING DEVICES, CAST IRON 3 8 609.01 STRAIGHT GRANITE CURB 250 L 611.05212 12" CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 40 L 611.052121 12" INSULATED CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 120 L 611.700121 12" FITTING (HYMAX TRANSITION COUPLING) 2 E 611.71012 12" INSULATED FITTING 4 E 611.71012 12" GATE VALVE WITH BOX 2 E 618.61 UNIFORMED OFFICERS WITH VEHICLE 2500 3 619.1 MAINTENANCE OF TRAFFIC 1 1 619.25 PORTABLE CHANCEABLE MESSAGE SIGN 2 1 628.2 SAWED BITUMINOUS PAVEMENT 330 L 632.0104 RETROREFLECTIVE PAINT PAVE, MARKING, 4" LINE 2700 L 645.531 SILT FENCE 990 L 645.7 STORM WATER POLLUTION PREVENTION PLAN 1 1 645.71	606.147	BEAM GUARDRAIL (TERMINAL UNIT TYPE G-2)	1	U
608.36 6" REINFORCED CONCRETE SIDEWALK (F) 8 S 608.54 DETECTABLE WARNING DEVICES, CAST IRON 3 S 609.01 STRAIGHT GRANITE CURB 250 L 611.05212 12" CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 40 L 611.052121 12" INSULATED CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 120 L 611.700121 12" FITTING (HYMAX TRANSITION COUPLING) 2 E 511.700122 12" INSULATED FITTING 4 E 611.71012 12" GATE VALVE WITH BOX 2 E 618.61 UNIFORMED OFFICERS WITH VEHICLE 2500 S 619.1 MAINTENANCE OF TRAFFIC 1 I 619.25 PORTABLE CHANGEABLE MESSAGE SIGN 2 I 628.2 SAWED BITUMINOUS PAVEMENT 330 L 632.0104 RETROREFLECTIVE PAINT PAVE, MARKING, 4" LINE 2700 L 645.73 STORM WATER POLLUTION PREVENTION PLAN 1 I 645.71 MONITORING SWIPPP AND EROSION AND SEDIMENT CONTROLS 50 H <	606.18001	31" W-BEAM GUARDRAIL WITH 8" OFFSET BLOCK (STEEL POST)	63	LF
608.54 DETECTABLE WARNING DEVICES, CAST IRON 3 S 609.01 STRAIGHT GRANITE CURB 250 L 611.05212 12" CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 40 L 611.052121 12" INSULATED CEMENT LINED DUCTILE IRON WATER PIPE, CL 52 120 L 611.700121 12" FITTING (HYMAX TRANSITION COUPLING) 2 E 511.700122 12" INSULATED FITTING 4 E 611.71012 12" GATE VALVE WITH BOX 2 E 618.61 UNIFORMED OFFICERS WITH VEHICLE 2500 S 619.1 MAINTENANCE OF TRAFFIC 1 I 619.25 PORTABLE CHANGEABLE MESSAGE SIGN 2 I 632.0104 RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE 2700 L 645.531 SILT FENCE 990 L 645.7 STORM WATER POLLUTION PREVENTION PLAN 1 I 645.71 MONITORING SWPPP AND EROSION AND SEDIMENT CONTROLS 50 H 692 MOBILIZATION 1 I I	608.125	2.5" BITUMINOUS SIDEWALK (F)	130	SY
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611.71012 12" GATE VALVE WITH BOX 2 E 618.61 UNIFORMED OFFICERS WITH VEHICLE 2500 3 619.1 MAINTENANCE OF TRAFFIC 1 0 619.25 PORTABLE CHANGEABLE MESSAGE SIGN 2 0 628.2 SAWED BITUMINOUS PAVEMENT 330 0 632.0104 RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE 2700 0 645.531 SILT FENCE 990 0 645.7 STORM WATER POLLUTION PREVENTION PLAN 1 0 645.71 MONITORING SWPPP AND EROSION AND SEDIMENT CONTROLS 50 H 646.51 TURF ESTABLISHMENT WITH MULCH, TACKIFIERS, AND LOAM 560 S 692 MOBILIZATION 1 0	 611.700122	12" INSULATED FITTING	4	EA
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646.51 TURF ESTABLISHMENT WITH MULCH, TACKIFIERS, AND LOAM 560 S 692 MOBILIZATION 1			50	HR
692 MOBILIZATION 1				SY
		, ,		
	1008.11	ALTERATIONS AND ADDITIONS AS NEEDED — UNANTICIPATED WORK	15000	 \$



Typical Apron Section at Driveway

Scale: 3/8" = 1'-0"

Town of Exeter

April 2017

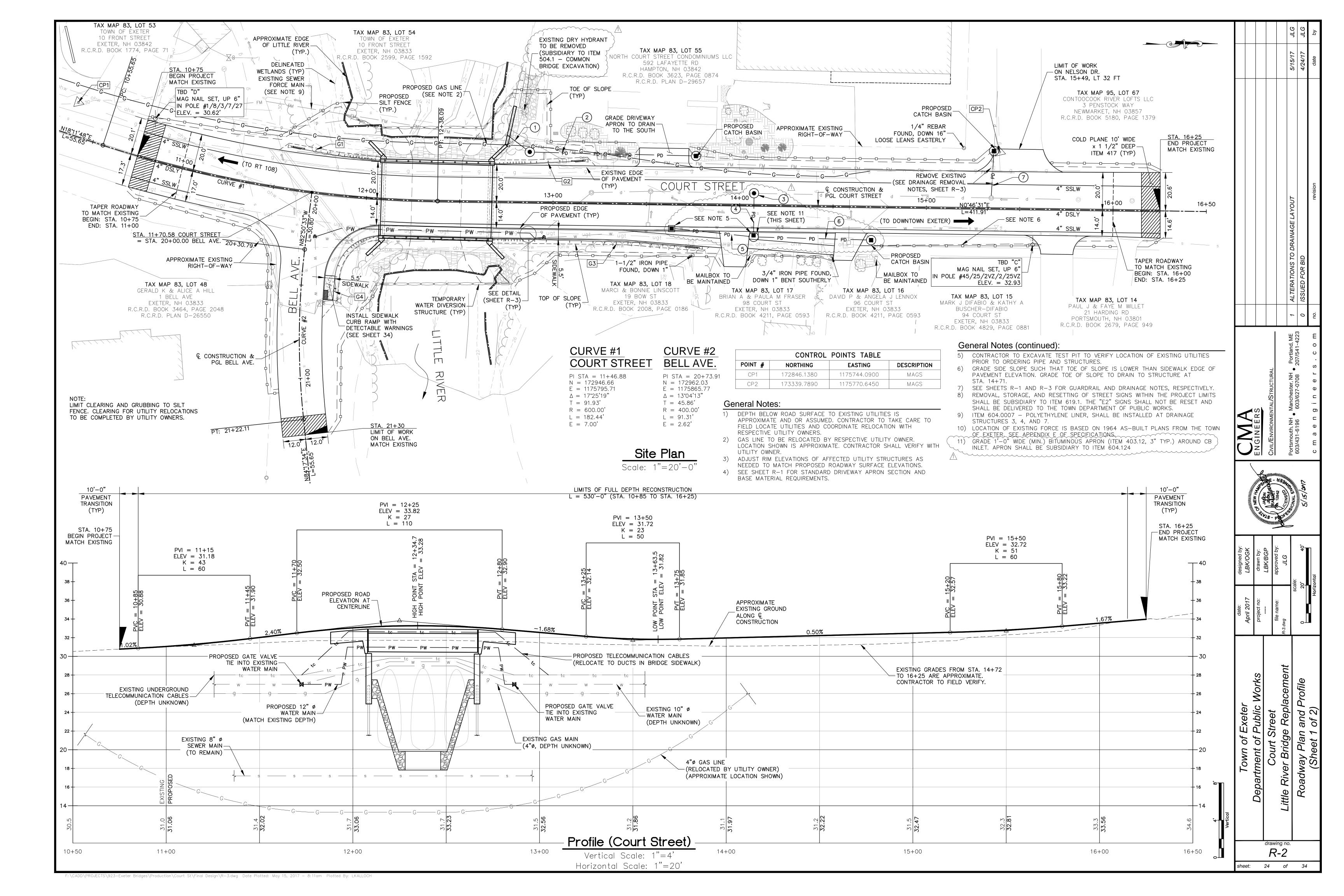
Department of Public Works

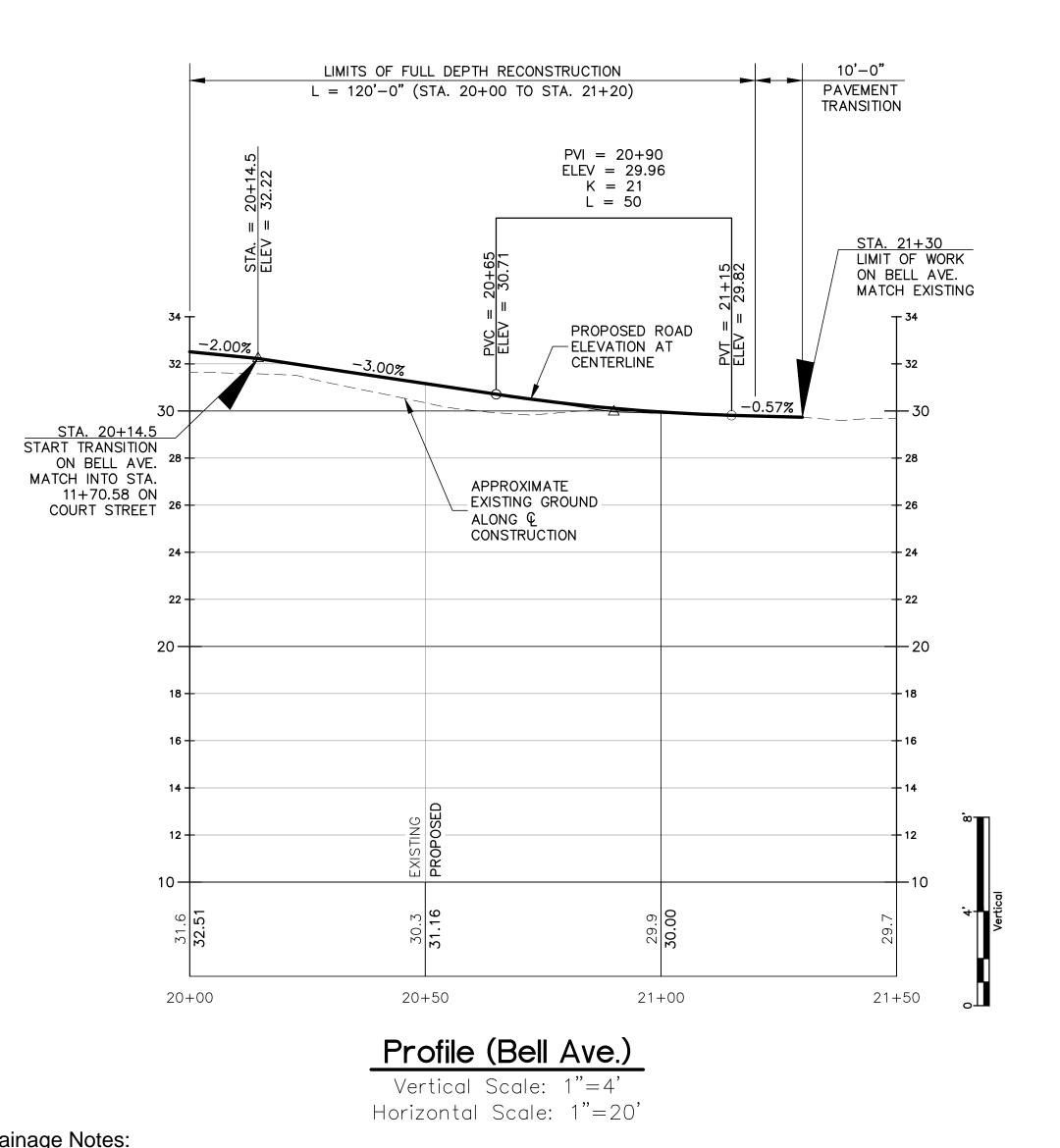
Court Street

Little River Bridge Replacement

General Notes and
Summary of Quantities

\CADD\PROJECTS\923—Exeter Bridges\Production\Court St\Final Design\R—1.dwg Date Plotted: May 15, 2017 — 8:53am Plotted By: LKALLOCH





ø12" CLDI, — 45° BEND MJxMJ START OF PIPE (TYP.) INSULATION -UNCOVER AND SAWCUT A CLEAN, ø12" CLDI (SEE DETAILS R-6) SQUARE END TO RECEIVE WATER MAIN ADAPTER. FOLLOW ALL HEALTH AND SAFETY PRECAUTIONS AND DISPOSE OF CUTTINGS AND A.C. PIPE PROPERLY **PROPOSED** -BRIDGE **ABUTMENT** 10' MIN. B/W ABUTMENT AND PIPE JOINT EXISTING Ø10" A.C. WATER MAIN - ø12" GATE VALVE MJxMJ Ø12" CLDI MJxSTRT ─END CONNECTOR ø10"xø12" HYMAX FLxFL ADAPTER MANUFACTURED -2' LONG MIN. BY TOTAL PIPE SOLUTIONS

Detail A (2 Typ)

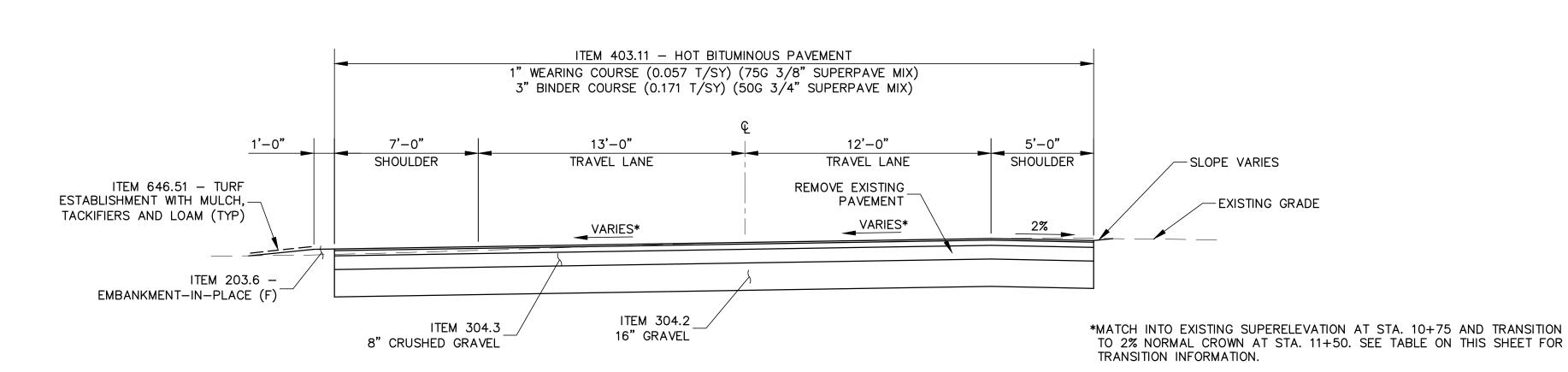
Not to Scale

Q AND PGL -2.0%-2.0%0.0% 1.5% AXIS OF ROTATION VARIABLE **VARIABLE**

Superelevation Break Points

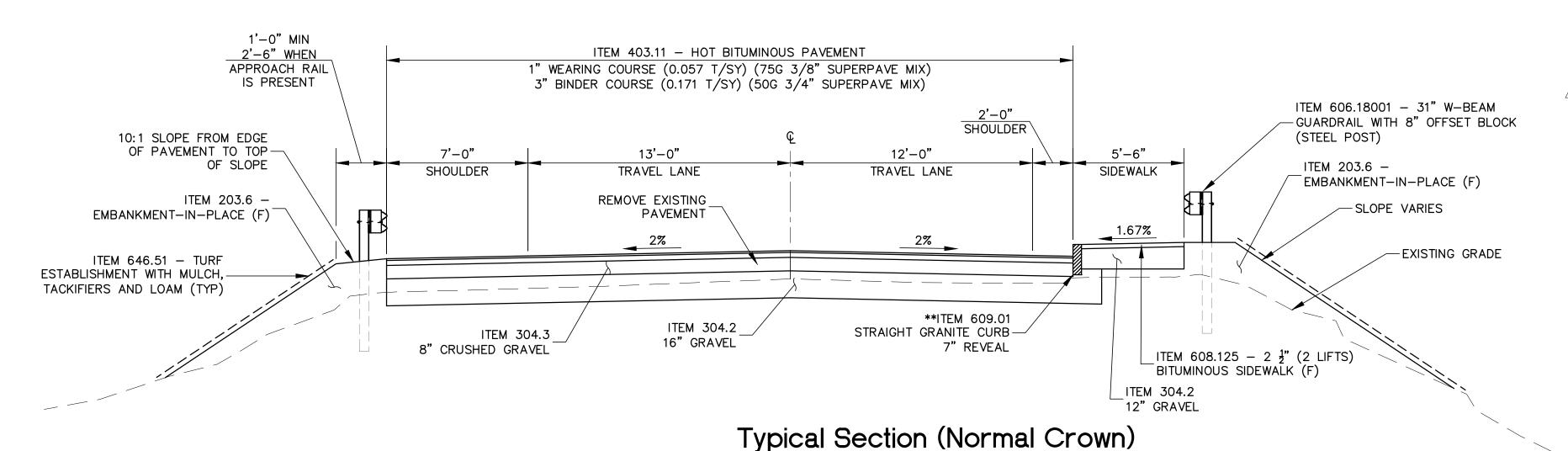
Not to Scale

TABLE OF SUPERELEVATION BREAK POINT LOCATIONS					
CURVE NO.	Α	В	С		
1	10+75	11+07	11+50		



Typical Section (Superelevation)

Not to Scale



Not to Scale

PAVEMENT AT BOTH ENDS INSTALL 45 LF OF GRANITE CURB ALONG A 30'-0" RADIUS FROM: STA. 12+08 RT ON COURT STREET TO STA. 20+44 LT ON BELL AVE.

STA. 20+44 TO STA. 20+57 LT ON BELL AVE.

**INSTALL GRANITE CURBING FROM:

STA. 11+96 TO STA. 12+06 LT

STA. 12+68 TO STA. 12+78 LT

STA. 12+67 TO STA. 13+89 RT

STA. 14+10 TO STA. 14+51 RT

TAPER REVEAL TO BE FLUSH WITH

DRIVEWAY APRON AT STA. 13+89

TAPER REVEAL TO BE FLUSH WITH

Drainage Notes:

- 1) CONTRACTOR TO FIELD VERIFY ELEVATIONS OF EXISTING 30" RCP DRAINAGE LINE WHERE IT IS BEING TIED INTO. ADJUST PROPOSED PIPE INVERTS AND DRAINAGE STRUCTURES AS NEEDED BASED ON ANY DIFFERENCE BETWEEN ACTUAL AND ASSUMED ELEVATIONS.
- 2) INV. IN AND INV. OUT ELEVATIONS SHALL BE SET BASED ON EXISTING PIPE INV. ELEVATIONS WHERE THE PROPOSED STRUCTURE INTERSECTS THE EXISTING PIPE.
- 3) INV. OF PROPOSED 12" RC PIPE SHALL BE SET SUCH THAT THE CROWN EL. IS ABOVE OR MATCHES THE HIGHEST CROWN EL. OF THE 30" RC PIPES PRESENT AT THE SAME MANHOLE.

Drainage Notes:

- (1) STA 12+75, LT 35.8 FT TO STA 12+87, LT 27.0 FT INSTALL 14 FT OF 12" RC PIPE INSTALL 4' I.D. DMH, 12+87, RT 27.0 FT 12" INV. IN: 25.40' 12" INV. OUT: 25.15' RIM: 31.00'
- 2 STA 12+87, LT 27.0 FT TO STA 13+76, LT 26.0 FT INSTALL 86 FT OF 12" RC PIPE INSTALL 4' I.D. CB-B, 13+76, LT 26.0 FT 12" INV. OUT: 26.25' RIM: 30.25'
- 3 INSTALL 5' D.I. DMH, 14+08, LT 6.5 FT 12" INV. IN: 26.25' (SEE DRAINAGE NOTE 3) 30" INV. IN: $23.65' \pm (EX.)$ (SEE DRAINAGE NOTE 2) 30" INV. OUT: $23.65' \pm (\acute{E}X.)$ (SEE DRAINAGE NOTE 2) RIM: 31.85'
- 4 STA 14+08, LT 6.5 FT TO STA 14+08, RT 16.9 FT INSTALL 20 FT OF 12" RC PIPE INSTALL 4' I.D. CB-B, 14+08, RT 16.9 FT (WITH ECCENTRIC TOP, ROTATE PER PLANS) 12" INV. IN: 26.80' (SOUTH) 12" INV. IN: 26.80' (NORTH) 12" INV. OUT: 26.80' RIM: 31.40'
- 5 STA 13+64, RT 13.0 FT TO STA 14+08, RT 16.9 FT INSTALL 41 FT OF 12" RC PIPE INSTALL DROP INLET TYPE D-B, 13+64, RT 13.0 FT 12" INV. OUT: 27.65' RIM: 31.50'
- (6) STA 14+08, RT 16.9 FT TO STA 14+71, RT 17.8 FT INSTALL 60 FT OF 12" RC PIPE INSTALL 4' I.D. CB-B, 14+71, RT 17.8 FT 12" INV. OUT: 27.10' RIM: 30.80'

RIM: 31.45'

7 STA 15+35, LT 7.0 FT TO STA 15+36, LT 30.8 FT INSTALL 21 FT OF 12" RC PIPE (CONNECT TO EX. DMH (SUBSIDIARY)) 12" INV. = 25.45" (SEE DRAINAGE NOTE 3) INSTALL 4' I.D. CB-B, 15+36, LT 30.8 FT 12" INV. IN: $25.95' \pm (EX.)$ (SEE DRAINAGE NOTE 2) 12" INV. OUT: 25.70' (SEE DRAINAGE NOTE 2)

Drainage Removal Notes:

- 1) CONTRACTOR TO HAVE ENGINEER VERIFY ALL DRAINAGE STRUCTURES AND PIPING LISTED BELOW, PRIOR TO REMOVAL.
- 2) DRAINAGE STRUCTURES TO BE REMOVED:
- STA. 13+06 LT 22.4' STA. 13+51 RT 11.0' STA. 14+59 RT 19.2' STA. 15+35 LT 21.8'
- 3) ALL PIPING CONNECTED TO STRUCTURES BEING REMOVED SHALL ALSO BE REMOVED UNLESS PIPING WILL BE RECONNECTED TO A NEW STRUCTURE.

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Street ye Repla nn and F 2 of 2) Bridge by Plan Sheet 2 River R-3 sheet: 25 of

