



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0016

Paul R. LePage  
GOVERNOR

David Bernhardt  
COMMISSIONER

January 9, 2018  
Subject: Highway Reconstruction  
State WIN: 018282.00  
Location: **Standish**  
**Amendment No. 1**

Dear Sir/Ms.:

Please make the following changes to the Bid Documents:

In the Bid Book:

**REMOVE** pages 17 – 22, Proposal Schedule of Items, 6 pages, dated 12/14/2017, and **REPLACE** with the attached, revised Proposal Schedule of Items, 6 pages, dated 1/3/2018.

**ADD** the attached SPECIAL PROVISION - SECTION 401 - HOT MIX ASPHALT PAVEMENT - (Material Transfer Vehicle Option), 1 page, dated February 4, 2016.

**ADD** the attached SPECIAL PROVISION - SECTION 401 - HOT MIX ASPHALT - PAVEMENT - 401 HOT MIX ASPHALT LONGITUDINAL JOINT DENSITY, 1 page, dated December 29, 2016.

**REMOVE** page 62, SPECIAL PROVISION – SECTION 604 – REMOVE AND RESET CATCH BASIN – (Vortechincs Unit), 1 page, dated December 12, 2017, and **REPLACE** with the attached SPECIAL PROVISION – SECTION 604 – REMOVE AND RESET CATCH BASIN – (Downstream Defender), 1 page, dated December 28, 2017.

**REMOVE** pages 63 – 64, SPECIAL PROVISION – SECTION 606 – GUARDRAIL – (Timber Guardrail), 2 pages, dated January 3, 2001, and **REPLACE** with the attached, revised SPECIAL PROVISION – SECTION 606 – GUARDRAIL – (Timber Guardrail), 2 pages, dated January 3, 2018.

In the Plan Set:

On SHEET NUMBER 5 OF 86, ESTIMATED QUANTITIES, Item No. 604.168 Remove and Reset Catch Basin, **REMOVE** “Vortechincs Unit”, and **REPLACE** with “**Downstream Defender**”. Make this change in pen and ink.



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The following questions have been received:

**Question:** Special Provision Cut-In Water Main (page 80) under basis of payment second sentence states "Includes excavation, flagging, ....". Is flagging incidental to this item or will flagging for this item be paid under item 652.38?

**Response:** Flagging will not be incidental and will be paid under Item No. 652.38.

**Question:** Special Provision 403 Hot Mix Asphalt Complementary Note 20 second sentence states "See Special Provision 401 - Material Transfer Vehicle for specifics." We did not find the referenced Special Provision in the documents. Please provide the Special Provision.

**Response:** Please see attached SPECIAL PROVISION - SECTION 401 - HOT MIX ASPHALT PAVEMENT - (Material Transfer Vehicle Option).

**Question:** There are a significant number of existing route marker, regulatory, warning and confirmation signs on this project that will need to be removed and reinstalled or replaced however there are not any 645 pay items in the Schedule of Items. Is any required removal and reinstallation of signs incidental to the project?

**Response:** Removal and replacement of existing signs shall be incidental to the Contract.

**Question:** In Section 403 on both Base and Wearing a Comp. Note 26 is mentioned. I can't seem to find the Special Provision 401- Hot Mix Asphalt Longitudinal Joint Density for this project.

**Response:** See the attached SPECIAL PROVISION - SECTION 401 - HOT MIX ASPHALT - PAVEMENT - 401 HOT MIX ASPHALT LONGITUDINAL JOINT DENSITY.

**Question:** Do you have any details for the Timber Guardrail?

**Response:** See updated Special Provision 606.

**Question:** Is the Chain Link Fence to be re-set in its current location or is it going to be moved further from the road?

**Response:** In all areas that fence is to be reset, it will be further from the road within the construction limits.

**Question:** Could the Department clarify item 604.168 as the plans do not show how much the vortechics unit will have to be moved, elevation or new location. I spoke with the manufacturer and their recommendation is to not move the structure as most of the lifting mechanisms are most likely deteriorated. They believe it was installed in 1999 and you will not be able to move the structure without any damage, the estimated manufactured weight is 45,000 lbs. Would the department consider installing a new Vortechics unit?

**Response:** Our research has indicated that the system is a Downstream Defender, please see updated Special Provision 604. The Contractor shall complete work according to plan; any work that cannot be completed according to plan shall be addressed through a Contract Modification.

**Question:** 825.43- Could the Department give the exact location for item 825.43 which is for the water main location adjustment cut in offset?

**Response:** Item 825.43, water main adjustment cut-in @ STA 84+60

Consider these changes and information prior to submitting your bid on **January 10, 2018**.

Sincerely,



George M. A. Macdougall P.E.  
Contracts & Specifications Engineer

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 018282.00

Project(s): 018282.00

SECTION: 1 PROJECT ITEMS

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0010	201.11 CLEARING	1.700 AC	_____	_____	_____	_____
0020	202.15 REMOVING MANHOLE OR CATCH BASIN	4.000 EA	_____	_____	_____	_____
0030	202.203 PAVEMENT BUTT JOINTS	200.000 SY	_____	_____	_____	_____
0040	203.20 COMMON EXCAVATION	35,000.000 CY	_____	_____	_____	_____
0050	304.10 AGGREGATE SUBBASE COURSE - GRAVEL	20,800.000 CY	_____	_____	_____	_____
0060	403.208 HOT MIX ASPHALT 12.5 MM HMA SURFACE	2,300.000 T	_____	_____	_____	_____
0070	403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	220.000 T	_____	_____	_____	_____
0080	403.211 HOT MIX ASPHALT (SHIMMING)	50.000 T	_____	_____	_____	_____
0090	403.213 HOT MIX ASPHALT 12.5 MM BASE	3,800.000 T	_____	_____	_____	_____
0100	409.15 BITUMINOUS TACK COAT - APPLIED	600.000 G	_____	_____	_____	_____
0110	411.09 UNTREATED AGGREGATE SURFACE COURSE	20.000 CY	_____	_____	_____	_____
0120	603.15 12 INCH CULVERT PIPE OPTION I	20.000 LF	_____	_____	_____	_____

Maine Department of Transportation

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0130	603.16 15 INCH CULVERT PIPE OPTION I	350.000 LF	_____	 _____	_____	 _____
0140	603.169 15 INCH CULVERT PIPE OPTION III RCP	88.000 LF	_____	 _____	_____	 _____
0150	603.17 18 INCH CULVERT PIPE OPTION I	150.000 LF	_____	 _____	_____	 _____
0160	603.179 18 INCH CULVERT PIPE OPTION III RCP	480.000 LF	_____	 _____	_____	 _____
0170	604.072 CATCH BASIN TYPE A1-C	4.000 EA	_____	 _____	_____	 _____
0180	604.168 REMOVE AND RESET CATCH BASIN DOWNSTREAM DEFENDER	1.000 EA	_____	 _____	_____	 _____
0190	606.23 GUARDRAIL TYPE 3C - SINGLE RAIL	620.000 LF	_____	 _____	_____	 _____
0200	606.353 REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	8.000 EA	_____	 _____	_____	 _____
0210	606.611 TIMBER GUARDRAIL	175.000 LF	_____	 _____	_____	 _____
0220	606.79 GUARDRAIL 350 FLARED TERMINAL	2.000 EA	_____	 _____	_____	 _____
0230	606.81 TANGENT GUARDRAIL TERMINAL - ENERGY ABSORBING	2.000 EA	_____	 _____	_____	 _____
0240	607.171 CHAIN LINK FENCE - 6 FOOT HIGH SECURITY FENCING HIGH SECURITY	500.000 LF	_____	 _____	_____	 _____

Maine Department of Transportation

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			Dollars	Cents	Dollars	Cents
0250	607.25 REMOVE AND RESET CHAIN LINK FENCE	2,300.000 LF	_____	 _____	_____	 _____
0260	607.43 SNOW FENCE	2,400.000 LF	_____	 _____	_____	 _____
0270	609.31 CURB TYPE 3	1,690.000 LF	_____	 _____	_____	 _____
0280	610.08 PLAIN RIPRAP	70.000 CY	_____	 _____	_____	 _____
0290	610.18 STONE DITCH PROTECTION	460.000 CY	_____	 _____	_____	 _____
0300	610.46 STONE BERM LEVEL LIP SPREADER	160.000 CY	_____	 _____	_____	 _____
0310	613.319 EROSION CONTROL BLANKET	3,960.000 SY	_____	 _____	_____	 _____
0320	615.07 LOAM	1,400.000 CY	_____	 _____	_____	 _____
0330	618.13 SEEDING METHOD NUMBER 1	6.000 UN	_____	 _____	_____	 _____
0340	618.14 SEEDING METHOD NUMBER 2	206.000 UN	_____	 _____	_____	 _____
0350	619.12 MULCH	212.000 UN	_____	 _____	_____	 _____
0360	619.14 EROSION CONTROL MIX	300.000 CY	_____	 _____	_____	 _____
0370	620.58 EROSION CONTROL GEOTEXTILE	2,200.000 SY	_____	 _____	_____	 _____

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0380	627.733 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	20,200.000 LF	_____	 _____	_____	 _____
0390	627.75 WHITE OR YELLOW PAVEMENT & CURB MARKING	350.000 SF	_____	 _____	_____	 _____
0400	627.78 TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	40,350.000 LF	_____	 _____	_____	 _____
0410	629.05 HAND LABOR, STRAIGHT TIME	50.000 HR	_____	 _____	_____	 _____
0420	631.10 AIR COMPRESSOR (INCLUDING OPERATOR)	25.000 HR	_____	 _____	_____	 _____
0430	631.11 AIR TOOL (INCLUDING OPERATOR)	25.000 HR	_____	 _____	_____	 _____
0440	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	25.000 HR	_____	 _____	_____	 _____
0450	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	50.000 HR	_____	 _____	_____	 _____
0460	631.18 CHAIN SAW RENTAL (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____
0470	631.20 STUMP CHIPPER (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____
0480	631.21 ROAD BROOM (INCLUDING OPERATORS AND HAULER)	10.000 HR	_____	 _____	_____	 _____

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0490	631.22 FRONT END LOADER (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____
0500	631.32 CULVERT CLEANER (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____
0510	639.18 FIELD OFFICE TYPE A	1.000 EA	_____	 _____	_____	 _____
0520	652.33 DRUM	50.000 EA	_____	 _____	_____	 _____
0530	652.34 CONE	90.000 EA	_____	 _____	_____	 _____
0540	652.35 CONSTRUCTION SIGNS	620.000 SF	_____	 _____	_____	 _____
0550	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	220.000 CD	_____	 _____	_____	 _____
0560	652.38 FLAGGER	4,000.000 HR	_____	 _____	_____	 _____
0570	652.41 PORTABLE CHANGEABLE MESSAGE SIGN	3.000 EA	_____	 _____	_____	 _____
0580	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP SUM		 LUMP SUM	_____	 _____
0590	659.10 MOBILIZATION	LUMP SUM		 LUMP SUM	_____	 _____
0600	823.010 NEW VALVE BOX - TOP AND BOTTOM SECTIONS	1.000 EA	_____	 _____	_____	 _____

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0610	824.30 FIRE HYDRANT	1.000 EA	_____	_____	_____	_____
0620	824.31 REMOVE FIRE HYDRANT	1.000 EA	_____	_____	_____	_____
0630	825.348 WATER MAIN LOCATION ADJUSTMENT CUT IN OFFSET	1.000 EA	_____	_____	_____	_____
0640	825.43 1" COPPER SERVICE	140.000 LF	_____	_____	_____	_____
0650	827.33 TRENCH INSULATION	405.000 LF	_____	_____	_____	_____
0660	910.30 SPECIAL WORK REMOVE METER PIT AND 2" WATER SERVICE	1.000 EA	_____	_____	_____	_____
<b>Section: 1</b>			<b>Total:</b>		_____	_____
			<b>Total Bid:</b>		_____	_____

SPECIAL PROVISION  
SECTION 401  
HOT MIX ASPHALT PAVEMENT  
(Material Transfer Vehicle Option)

Description The Contractor may elect to use a material transfer vehicle at their option to transfer hot mix asphalt to the paver on mainline travelways, shoulders, and ramps as denoted in Special Provision 403 - Hot Mix Asphalt Pavement.

Material transfer vehicles shall operate as an independent unit not attached to the paver. It shall be a commercially manufactured unit specifically designed to transfer the hot mix from haul trucks to the paver without depositing the mix on the roadway. A separate hopper with a capacity of 14 ton shall be inserted into the regular paver hopper. The material transfer vehicle or the hopper insert shall be designed so that the mix receives additional internal mixing action either in the material transfer vehicle or the paver hopper.

Method of Measurement Hot mix asphalt pavement transferred by the material transfer vehicle and hopper insert will be measured by the ton.

Basis of Payment The accepted quantities of hot mix asphalt pavement transferred by the material transfer vehicle and hopper insert will be paid for at a price of \$2.00 per ton.

Payments will be made under:

<u>Pay Item:</u>	<u>Pay Unit:</u>
403.40 Material Transfer Vehicle (MTV)	Ton

**SPECIAL PROVISION**  
**SECTION 401**  
**HOT MIX ASPHALT PAVEMENT**

**401 HOT MIX ASPHALT LONGITUDINAL JOINT DENSITY**

401.30 Description The Department will measure the pavement density of longitudinal joints constructed between adjoining travel lanes. Core samples shall be tested according to AASHTO T-166. The Department will randomly determine core locations. The Contractor shall cut 6 in diameter cores at no additional cost to the Department by the end of the working day following the day the pavement is placed, and immediately give them to the Department. The cores will be placed in a transport container provided by the Department and transported by the Contractor to the designated MaineDOT Lab as directed by the Department. Pre-testing of the acceptance cores will not be allowed. At the time of sampling, the Contractor and the Department shall mutually determine if a core is damaged. If it is determined that the core(s) is damaged, the Contractor shall cut new core(s) at the same offset and within 3 ft of the initial sample. At the time the core is cut, the Contractor and the Department will mutually determine if saw cutting of the core is needed, and will mark the core at the point where sawing is needed. The core may be saw cut by the Contractor in the Department's presence onsite, or in a MaineDOT Lab by the Department, without disturbing the layer being tested to remove lower layers of Hot Mix Asphalt Pavement, gravel, or RAP. No recuts are allowed at a test location after the core has been tested.

Cores shall be taken directly over the construction joint. Should the notched wedge joint device be used, the cores shall be cut directly over the center of the taper portion of the wedge (approximately centered 3" from the visible joint).

As part of the project specific QCP, the Contractor shall include details as to methods of construction, rolling and compaction efforts, and action plan to adjust methods or equipment should the Quality level fall below 50 percent within limits. The Contractor shall be required to measure the joint density at randomly selected locations with a minimum frequency of one measurement per 750 linear feet. The Contractor shall have the option to cut calibration/verification cores at a rate not to exceed 1 per day.

If the Quality level for density falls below 50 percent within limits, the Contractor shall cease placement operations and submit a corrective action letter to the Department before proceeding with the Lot or before starting a new Lot. The Department will respond and either accept or reject the Contractor's proposed corrective action. If the Department accepts the corrective action, three stratified verification cores will be taken from the first 1500 foot section of centerline constructed for the purpose of evaluating the corrective action. These cores will be in addition to any Acceptance cores that may be designated in this area. The results from these cores shall be combined with the cores from the Lot in progress. Should the combined Quality level for density show an improvement, the Department will accept the corrective action and normal Acceptance sampling frequency shall resume. If an improvement has not been made to the combined Quality level for density, the Contractor shall cease production and submit an additional corrective action letter for consideration.

401.31 Acceptance This method utilizes Quality Level Analysis and pay factor specifications as described in Section 106. For Hot Mix Asphalt Pavement designated for acceptance under Quality Assurance provisions, the Department will sample once per subplot on a statistically random basis, test, and evaluate in accordance with the following Acceptance Criteria:

Lot size will be the entire length of longitudinal joint for the given HMA layer for the project, or equal Lots of a size agreed upon at the Pre-paving conference. The maximum subplot size shall be 2000 linear feet of longitudinal joint for density and the minimum number of sublots for any Lot shall be five. The Lot will be divided up into sublots of equal length. There shall be a separate Lot for each lift of HMA pavement, and Lots shall not be comprised of results from more than one HMA layer.

The Department will determine a pay factor using acceptance limits from Table 1.

TABLE 1: LONGITUDNAL JOINT DENSITY ACCEPTANCE LIMITS

PROPERTY	LSL
% TMD (In-place density)*	91.0

\* The Theoretical Maximum Density will be determined from the average of the Gmm values used to determine the percent compaction of the nearest acceptance cores on either side of the Centerline Joint Core from each adjacent mat.

The Department will calculate the Pay Adjustment for Centerline Joint Density as follows:

Where

$$PA = (\text{joint density PF} - 1.0)(Q)(P) \times 0.40$$

PA = Pay Adjustment  
 Q = Quantity of traveled way pavement represented by PF in tons  
 P = Contract price per ton  
 PF = Pay Factor

If the joint density Pay Factor is less than 0.88, the Pay Adjustment shall be:

$$PA = (-0.05)(Q)(P)$$

SPECIAL PROVISION  
SECTION 604  
REMOVE AND RESET  
CATCH BASIN  
(Downstream Defender)

Description Remove and Reset Downstream Defender shall consist of removing the existing designated Downstream Defender and reinstalling it in a new location as shown on the plans or directed by the Resident.

The Downstream Defender shall be carefully removed from its existing location and installed in the new location per manufacturer's recommendations. Unit model is a 6 – FT. Downstream Defender. Any damage to the Unit shall be repaired at the Contractor's expense.

The Downstream Defender shall be placed to the required grade on a compacted foundation of uniform density. Inlet and outlet pipe elevations may vary from the elevations shown on the plans depending upon field conditions.

Pipe sections entering the Unit shall be firmly connected to the structure wall with no part of the pipe projecting more than 6 inches inside the wall. When a section of culvert is cut, the end shall be finished in a skillful manner.

Metal frames shall be set as per manufacturer's recommendations.

Upon completion, the Unit shall be cleaned of all accumulation of silt, debris, or foreign matter and shall be kept clean until final acceptance of the work.

Method of Measurement The removal and reinstallation of the Downstream Defender will be measured by the unit fully installed and accepted.

Basis of Payment Remove and Reset Downstream Defender will be paid for at the contract unit bid price each, which price shall include all excavation, backfill, drainage connections, materials, disposal of excavation, labor, equipment, and all incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
604.168 Remove and Reset Catch Basin – Downstream Defender	EA

**SPECIAL PROVISION**  
**SECTION 606**  
**GUARDRAIL**  
**(Timber Guardrail)**

Description This work shall consist of furnishing and installing timber guardrail where shown on the plans or as directed by the Resident.

Materials Materials shall meet the requirements specified in the following subsections of Division 700 - Materials:

Timber Preservative	708.05
Timber Posts and Rails	710.07
Guardrail Hardware	710.08
Gravel Backfill	703.20

Submittal Submit a certificate of compliance for timber components and hardware detailing conformance with the above Subsections.

**CONSTRUCTION REQUIREMENTS**

Posts Posts shall be set at a typical spacing of [8 ft] center to center. The Contractor shall stake the spacing of posts in the field for the approval of the Resident prior to excavating post holes.

Excavate post holes to provide an undisturbed bearing surface. The bottom of the holes shall be thoroughly tamped to grade. Posts shall be set plumb at the required location.

Posts may also be driven if suitable driving equipment is used to prevent battering and distorting the post as determined by the Resident.

Posts holes shall be backfilled with gravel backfill placed in layers and thoroughly compacted.

Post shall be #2 Cedar. Posts dimension shall be 8" x 8" x 6". Top of post shall have a 1" – 45° (Degree) chamfer on all sides.

Rails Rails shall be erected to result in a smooth continuous guardrail conforming to the line and grade as shown on the plans. Rail shall be face mounted. The top of rail shall be flush with the supporting post chamfer and shall be [28 in] above finished grade. Butt adjoining rail sections; maximum separation between adjoining rail sections shall be [1/16 in].

Material damaged due to the Contractor's negligence shall be replaced with new materials at no additional cost.

Wood surface, cut or injured, and field bored holes in wood posts or rails shall be brush treated with two applications using same preservative material as specified above.

Rails shall be #2 Cedar. Rail dimensions shall be 4" x 10" x 16'.

Hardware Each end and center of rail shall be secured with 3 (three) - 1/2" x 9" galvanized lag screws with washers, countersunk flush.

Method of Measurement Timber guardrail will be measured by the [foot] complete in place center to center of end posts along gradient of the rail.

Basis of Payment The accepted quantities of timber guardrail will be paid for at the contract unit price per [foot], complete in place. Payment shall be full compensation for treating, furnishing and assembling all materials, for excavating and backfilling holes, driving of posts, installation of removable posts and sleeves, and for all incidentals to complete the work. Gravel backfill will not be paid for separately, but will be considered incidental.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
606.611 Timber Guardrail	LF