



Janet T. Mills
GOVERNOR

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

Bruce A. Van Note
COMMISSIONER

August 15, 2019
Subject: Large Culvert Replacement
State WIN: 023703.00
Location: **Plymouth**
Amendment No. 1

Dear Sir/Ms.:

Please make the following changes to the Bid Documents:

In the Bid Book:

REMOVE page 30, Construction Notes, 1 page, dated June 3, 2019 and **REPLACE** with the attached, revised Construction Notes, 1 page, date August 12, 2019.

REMOVE pages 73 & 74 SPECIAL PROVISION – SECTION 403 – HOT MIX ASPHALT, 2 pages, dated July 11, 2019 and **REPLACE** with the attached, Special Provision, Section 403, 2 pages, dated August 14, 2019.

The following question has been received:

Question: Please revise or confirm the inlet and outlet elevations of the existing and proposed culverts noted in the special provisions. Notes say centerline elevation of existing road is 100.00, but existing and proposed inlets and outlets seem out of line.

Response: See the attached, revised Construction Notes, dated August 12, 2019 for the correct elevations.

Question: Special Provision 403, Note 17 requires a full Roller Train for HMA paving. The entire paved area will be roughly 30' long x 24' wide. The total quantity of HMA paving per lift will be approx. 11 tons. Would the Department consider removing this minimum equipment requirement?

Response: The Department has amended note 17 of SPECIAL PROVISION – SECTION 403 – HOT MIX ASPHALT, please see the attached, revised SPECIAL PROVISION – SECTION 403 – HOT MIX ASPHALT dated August 14, 2019 for details of the change.

Question: Could the Department please give us the lengths of pipe that MainesDOT will be providing for this installation? Total pipe length is 48', how many pieces and what lengths will be provided for this replacement?

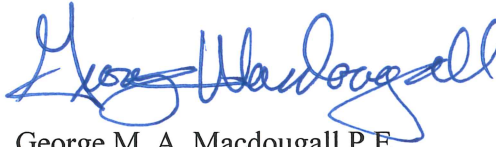
Response: The lengths of pipe that are being supplied by the MaineDOT are 2 sections, 24' each

Question: Could the Department provide specific information on the metal arch culvert that is provided by MaineDOT, (length of pieces, fasteners, weights, etc.)?

Response: The pipe arch was purchased from Contech Engineered Solutions. The pipe arch is a 12-gauge CMP, 2 sections, 24' each weighing 2014 pounds each. It was delivered with a 2 piece 24" wide band, bolts and neoprene gasket roll. All materials have been delivered to the Plymouth Maintenance Lot.

Consider these changes and information prior to submitting your bid on **August 21, 2019**.

Sincerely,



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

Construction Notes

Item 603.390 73 inch Span 55 inch Rise Pipe Arch Option 3

Location: Plymouth, Route 69, XC-923891

GPS coordinates: N 44.7683253, W 69.2039

Existing: 24"x 40' CMP. Centerline Elevation = 106.82

Existing (#2): 48" x 40' CMP.

Proposed: 73" Span x 55" Rise x 48' CMP Pipe Arch

North Side Existing	South Side Existing
Inlet: 20' North of Centerline at Elev. 100.63	Outlet: 20' South of Centerline at Elev. 100.00
North Side Proposed	South Side Proposed
Inlet: 23' North of Centerline at Elev. 99.75	Outlet: 25' South of Centerline at Elev. 99.50

* **CMP**- corrugated metal pipe ***HDPE**- high density polyethylene * **PP**-polypropylene

- The proposed culvert will be supplied by MaineDOT. The culvert shall be picked up at the Plymouth, Maine DOT Maintenance Lot, 2510 Moosehead Trail, @ Rte. 7 and Off Ramp I-95 SB. Coordination of pick up shall be done thru the Resident.
- The Contractor shall provide all Traffic Control Devices for the Rte.69/ Etna Road, and Twitchell Road in Plymouth including flaggers.
- This pipe is located within a wetland. If standing or flowing water is present steel sheeting or steel sheet cofferdams shall be used as required by Special Provision 511 Cofferdams. ***Sand bags are not allowed.***
- The Contractor will be required to handle and pump water such that the stream is always flowing and no dirty water leaves the site.
- The new culvert will be longer than the existing culverts, and must match both inlet and outlet elevations provided.
- The Contractor shall place riprap around each end of the culvert pipe (approximately 2 cubic yards per end). No riprap shall be added into the wetland.
- All road culvert trenches shall have 5" of hot mix asphalt placed in multiple lifts not to Exceed 2.5".
- Clean out existing ditches 25' in either direction of both the inlet and outlet of the culvert pipe.
- Excavated roadway material must be reserved and replaced to best match the adjacent material. Extra excavation material shall be used to flatten the in slopes. Additional borrow material may be required to build slopes to a minimum of 3:1. This additional material shall be provided at no additional cost to the contract, and shall be considered incidental to the Culvert Pipe.

SPECIAL PROVISION
SECTION 403
HOT MIX ASPHALT

Desc. Of Course	Grad Design.	Item Number	Total Thick	No. Of Layers	Comp. Notes
<u>5" HMA Overlay Area – Full Construction Areas</u> <u>Travelway & Shoulders (As Indicated by Typical)</u>					
Base	12.5 mm	403.213	5"	2/more	1,2,4,10,17,31

COMPLEMENTARY NOTES

- All work under this contract shall conform to the most recent Special Provision 400 – Hot Asphalt Pavement; with the following revisions.
- The incentive/disincentive provisions for density shall not apply. Rollers shall meet the requirements of this special provision. The use of an oscillating steel roller shall be required to compact all mixtures pavements placed on bridge decks.
- The design traffic level for mix placed shall be <0.3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **65 gyrations**.
- Section 106.6 Acceptance, (2) Method D - For hot mix asphalt items designated as Method D in Special Provision Section 403 - Hot Mix Asphalt, one sample will be taken from the paver hopper or the truck body per **250** ton, per pay item, per day paving occurs. The mix will be tested for gradation and PGAB content. Disputes will not be allowed. If the mix is within the tolerances listed in Table 9, below the Department will pay the contract unit price.

Table 9

Property	USL and LSL
	Method D
Percent Passing 4.75 mm [No. 4] and larger sieves	Target ± 7
Percent Passing 2.36 mm [No. 8] to 1.18 mm [No. 16] sieves	Target ± 5
Percent Passing 0.60 mm [No. 30]	Target ± 4
Percent Passing 0.30 mm [No. 50] to 0.075 mm [No. 200] sieve	Target ± 3
PGAB Content	Target ± 0.5
In-Place Density	N/A

If the test results for each **250** ton increment are outside these limits the following deductions (Table 9b) shall apply to the HMA quantity represented by the test. A second consecutive failing test shall result in cessation of production

TABLE 9b

PGAB Content	-5%
2.36 mm sieve	-2%
0.30 mm sieve	-1%
0.075 mm sieve	-2%
In-Place Density	- N/A

17. Compaction of the new Hot Mix Asphalt Pavement will be obtained using a minimal roller train consisting of a **10 ton** vibratory, **12 ton** pneumatic, and a **3-5 ton** vibratory roller for roadway work. The Contractor shall utilize the 10 ton roller in both the knockdown and finish position, as well as using the 3-5T in the finish position as required by the QCT. The Contractor shall document the compaction temperature ranges for the Knockdown, Intermediate, and Finish positions in their QCP. A daily paving report, summarizing the mixture type, mixture temperature, equipment used, environmental conditions, temperature zone of rolling, and number of roller passes, shall be recorded and signed by the QCT and presented to the Department's representative by the end of the working day. An approved release agent is required to ensure the mixture does not adhere to hand tools, rollers, pavers, and truck bodies. The use of petroleum based fuel oils, or asphalt stripping solvents will not be permitted.
31. The required PGAB for this mixture will meet a **PG 64-28** grading.

Tack Coat

A tack coat of emulsified asphalt, RS-1, RS-1h, CRS-1 or CRS-1h, Item 409.15 shall be applied to any existing pavement at a rate of approximately 0.030 gal/yd², and on milled pavement approximately 0.05 gal/yd² prior to placing a new course. A fog coat of emulsified asphalt shall be applied between shim /base courses and surface course as well as to any bridge membrane prior to the placement of HMA layers at a rate not to exceed 0.030 gal/yd². Tack used will be considered incidental to Item No. 603.390, 73 Inch Span 55 Inch Rise Pipe Arch, Option III.