



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

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID A. COLE  
COMMISSIONER

October 30, 2007  
Subject: **Dixfield**  
Project No. NH-1001(500)E  
Pin No. 010015.00  
**Amendment No. 2**

Dear Sir/Ms:

Please make the following changes to the Bid Documents:

In the Bid Book, on the "Notice to Contractors" page, in the first paragraph, within the first sentence CHANGE the bid opening date from **October 31, 2007** to **November 14, 2007**. Make this change in pen and ink.

REMOVE the existing Department of Environmental Protection permit, pages 171 thru 177 and REPLACE with the attached updated Department of Environmental Protection permit, eight pages total.

In the Plan Sheets, ADD the attached drawing titled: "Detour", this drawing is intended to show the temporary road rights and approximate proposed detour location.

ADD the following note to the attached drawing titled: "Detour". "The trees cut within the temporary road limits shall be limbed and set aside for the landowner." Make this change in pen and ink.

On sheet two titled: "Typical Sections" within the "Pavement Alternate 2" typical drawing DELETE the existing statement: "150 Foamed Asphalt" and REPLACE with the following: "100 mm PMRAP". Make this change in pen and ink.

On sheet three titled: "Typical Sections" within the "Back-Slope Rounding Detail" drawing DELETE the existing statement: "50 mm Loam" and REPLACE with the following: "50 mm Dirty Borrow". Make this change in pen and ink.

On sheet three titled: "Typical Sections" within the three typical drawings DELETE the existing statement: "Aggregate Subbase Course Gravel (See Pavement Alternate)" and REPLACE with the following: "Type B Gravel (see Pavement Alternate)". Make this change in pen and ink.



PRINTED ON RECYCLED PAPER

The following questions have been received.

**Question:** General notes state: All existing pavement must be removed with milling machine. All millings to MDOT office in Dixfield if alternate #1 is selected. Any excess millings after PMRAP process will be delivered to Dixfield office if alternate #2 is selected. Special provisions 310 – Plant Mixed Recycled Asphalt Pavement, P.54 states in 2<sup>nd</sup> paragraph, last sentence: excess recycled material not used in the PMRAP process will become the property and responsibility of the contractor. Who owns or has responsibility for all millings or excess millings from this project?

**Response:** Refer to note #39A (revised in addendum #1).

**Question:** If contractor owns the hot top – can't the contractor choose not to mill the entire project and pull the pavement?

**Response:** The Department is specifically asking for the existing pavement to be milled off for this project.

**Question:** Please clarify the instream dates. The special provision states different dates than the permit.

**Response:** See change earlier in this amendment replacing the permit.

**Question:** In the surcharge settlement area what is the final elevation that the type E gravel is to be placed to? What is the width of the surcharge area? What are the basis of payment for the placement and the removal of the type E?

**Response:** The embankment as shown on the plans will function as the surcharge. Type E gravel will be used as embankment fill above elevation 149.2 in the surcharge area. It will be placed to the bottom of the B gravel in the pavement section, as shown on the plans. Payment for this material will be incidental to Item 203.20, Common Excavation. It will not be removed. After settlement, additional Type B gravel will be placed as needed to bring the section back to the original elevations and dimensions, paid as Item 304.09.

**Question:** Will the portable message boards be used for the duration of the project (390 calendar days) or just for the duration of the special detour?

**Response:** The Department assumes use of the message boards to be limited to the duration of the special detour.

**Question:** We have laid out the special detour to meet both the requirements of the 7.6 m set back from the stream for the abutments and for the standard specification section 510.03 “geometric design part a) Horizontal Alignment” “Off tracking characteristics of the WB-62 vehicle” It appears that the temporary construction easement taken on the upstation side (North) of the detour may be short by 5 to 10 m. Who will be responsible to acquire this right of way to meet the minimum spec’d requirements of 510?

**Response:** The Department understands the challenge of the special detour. Per special provision 510, “Easements or right-of-way for the special detour structure and approaches will be furnished by the Department and will be shown on the contract plans. The Contractor may obtain additional easements at no cost to the Department.”

**Question:** Is the temporary detour to be paved?

**Response:** A paved detour is not required; however, maintenance of the detour is required.

**Question:** Is the 7.6 m abutments set backs from the stream still a requirement if the installation and removal of the temporary abutments are done inside of the in-water work period?

**Response:** The 7.6 m set backs are related to potential wetland impacts. The in-stream work period is the period in which the Contractor can work within the stream limits.

**Question:** Pay Item 610.212 Stream Channel Sand pay item 100 m<sup>3</sup> – Is this item the granular borrow under the stream rock inside the pipe arch?

**Response:** Item 610.212, Stream Channel Sand is intended for stream channel work at Station 3+510 left.

**Question:** Would a substitute of Hot Stabilized Base be accepted in lieu of PMRAP?

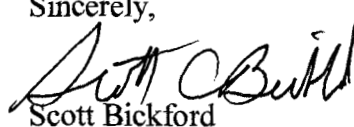
**Response:** All proposals will be considered after the award of the project.

**Question:** Special Provision 107 states that “all lanes” will be open to traffic for the 4<sup>th</sup> of July and Labor Day holiday periods. Is the intent that the special detour, by itself, will not satisfy this requirement and that we have to have 2 lanes open?

**Response:** The special detour satisfies Special Provision 107.

Consider these changes and information prior to submitting your bid on November 14, 2007.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Bickford". The signature is written in a cursive style with a large initial "S".

Scott Bickford

Contracts & Specifications Engineer



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STATE HOUSE STATION 17      AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

MAINE DEPARTMENT OF TRANSPORTATION	) NATURAL RESOURCES PROTECTION
Dixfield, Oxford County	) FRESHWATER WETLAND ALTERATION
ROUTE 2 UPGRADE	) WATER QUALITY CERTIFICATION
L-23389-TH-A-N (Approval)	
*CORRECTED ORDER	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 480-A *et seq.* and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of MAINE DEPARTMENT OF TRANSPORTATION with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes to impact 74,944 square feet (1.72 acres) of riverine, forested and scrub shrub wetlands of special significance to upgrade a 2.74 mile section of Route #2/17. The project includes extending the travel lane width from 11 feet to 12 feet wide, expanding the paved shoulders to 8 feet and removing the unpaved shoulders. The expansion also includes the replacement of a bridge with a pipe arch culvert. After the culvert installation, the applicant intends to replicate the culvert floor to the existing stream substrate to accommodate fish and herptile passage. The applicant will also install stone herptile shelves to facilitate turtle and small mammalian passage through the culvert and monitor the area post-construction for 1 year. The applicant intends to install 890 linear feet of riprap along an eroded section of the Ellis River in Andover and install a 100 foot wide riparian buffer adjacent to the embankment as compensation for the wetland impacts. Approximately 3.49 acres of land adjacent to the Ellis River will be placed in a conservation easement to protect the land in perpetuity. The section of Route #2 selected for upgrading currently has a high crash incidence due to site distance problems. The proposed project is anticipated to alleviate this issue, meet the Federal Highway Commission design standards, and improve the road ditches to efficiently remove stormwater runoff. The project site is located on Route #2/17 in the Town of Dixfield.

B. Current Use of the Site: The proposed 2.74 mile project area currently contains the existing road, culverts, and a bridge spanning Newton Brook.

2. EXISTING SCENIC, AESTHETIC, RECREATIONAL OR NAVIGATIONAL USES:

In accordance with Chapter 315, Assessing and Mitigating Impacts to Scenic and Aesthetic Uses, the applicant submitted a copy of the Department's Visual Evaluation Field Survey Checklist as Appendix A to the application along with a description of the property and the proposed project. The applicant also submitted several photographs of the proposed project site. Department staff visited the project site on May 2, 2006.



The proposed project involves the replacement of the Newton Brook Bridge with a pipe arch culvert. Newton Brook is a scenic resource visited by the general public, in part, for the use, observation, enjoyment and appreciation of its natural and cultural visual qualities. Since the proposed project site contains an existing bridge, the Department has determined that the location and scale of the proposed activity is compatible with the existing visual quality and landscape characteristics found within the viewshed of the scenic resource in the project area.

The Department did not identify any issues involving existing recreational and navigational uses.

The Department finds that the proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses of the protected natural resource.

3. SOIL EROSION:

The Department finds that the activity will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

4. HABITAT CONSIDERATIONS:

The Maine Department of Inland Fisheries & Wildlife (IF&W) Wildlife Division reviewed the proposed project and comment that two Inland Waterfowl & Wading Bird Habitats (WWH #IFW-070671 and WWH #IFW-070674) are currently identified in the project areas. IF&W further comments that the current designs appear to have minimal impact on these habitats. The Wildlife Division further indicated that Spotted Turtles have been identified near the project area. Spotted turtles are a State endangered species and are associated with wetland habitats. IF&W has contacted the applicant and requested the applicant either survey along the project area for the presence of spotted turtles and/or consider culvert designs to allow for wildlife crossings. The applicant has modified the culvert design to address wildlife passage concerns at the Newton Brook crossing, which were found acceptable to IF&W.

In addition, IF&W Fisheries Division has reviewed the proposed project and comments that Newton Brook is a tributary to the Androscoggin River and supports a brook trout population that provides a locally important seasonal sport fishery, based on the preponderance of footpaths both upstream and downstream of the Route 2 picnic area. The following native species have been collected from Newton Brook: slimy sculpins, white suckers, northern redbelly dace, blacknose dace, and creek chub. IF&W notes that they would prefer a new and widened bridge, an open bottomed arch or a boxed-beam structure at Newton Brook. These alternatives would preserve the natural stream bottom and ensure fish passage at all flows. If&W finds the pipe-arch alternative acceptable provided that the structure is embedded, and natural substrates are re-established within



the structure. The applicant has proposed such a plan, but this should be monitored <sup>to</sup> assure this "manufactured bedload" remains intact and continues to function as fish and invertebrate habitat, and fish passage is maintained. IF&W requests all instream work will \*occur between June 15-October 1 to avoid disturbance to migrating adult brook trout.

In addition, the Department's Division of Environmental Assessment (DEA) has reviewed the proposed project and finds the current design and monitoring plan adequate.

Department staff has reviewed the proposed project and request the applicant will submit the 1 year post construction monitoring results including any remedial recommendations to the Department for review.

The Department finds that the activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life.

5. WATER QUALITY CONSIDERATIONS:

The Department does not anticipate that the proposed project will violate any state water quality law, including those governing the classification of the State's waters.

6. WETLANDS AND WATERBODIES PROTECTION RULES:

The applicant proposes to impact 74,944 square feet of wetland, which includes impacting 568 linear feet of stream and 35,275 square feet of forested wetland of special significance to realign and expand Route #2/#17 in Dixfield.

The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, require that the applicant meet the following standards:

A. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. Each application for a

Natural Resource Protection Act permit must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist. The applicant submitted an alternative analysis for the proposed project dated November 30, 2006. The applicant has avoided wetland and stream impacts by utilizing the existing road while still meeting the design criteria. The applicant will install a pipe arch culvert to replace the existing bridge. The pipe arch is expected to have a longer structure lifespan of 50 years with minimal maintenance. The existing bridge, due to its age, is expected to have a 20 year life span, which will eventually require replacement and cause repeated wetland and stream impacts.



B. Minimal Alteration. The amount of wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. The applicant has minimized wetland impacts by expanding the existing road reducing the road side slopes to 1 horizontal foot to 2 vertical feet. The applicant is unable to minimize further due to Federal Highway Commission design standards.

C. Compensation. In accordance with Chapter 310 Section 5 (C), compensation is required to achieve the goal of no net loss of wetland functions and values. The applicant intends to riprap two sections totaling 890 linear feet of the Ellis River shoreline. Two meander bends, which are undercut and eroding, will be stabilized by moving the mid-channel bars and reconstructing the embankment with cobble material. Rock barbs will be installed to move the river's thalweg away from the embankment and into the channel's center. In addition, a 100 foot wide riparian buffer will be planted on the redeveloped embankments and on the adjacent pasture to tie into an existing undisturbed riparian corridor along the Ellis River. The applicant intends to monitor the plantings and structural stability of the reconstructed embankments for 3 years and submit a post-construction monitoring report to the Department no later than March 31 of the following year. In the fourth year, a post-construction assessment will be conducted and the findings including remedial recommendations will be reported to the Department. Finally, the applicant will place the restored areas totaling 3.49 acres in a conservation easement to protect them in perpetuity. The Department finds this plan acceptable as it restores and enhances riverine functions and values.

The Department requests the applicant will monitor the project for 3 years post-construction and the monitoring reports and the fourth year post-construction assessment will be forward to the Department by no later than March 31 of the following year.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project.

7. OTHER CONSIDERATIONS:

The Department did not identify any other issues involving existing scenic, aesthetic, or navigational uses, soil erosion, habitat or fisheries, the natural transfer of soil, natural flow of water, water quality, or flooding.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.



- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided that all instream work \*will occur between June 15-October 1 to avoid disturbance to migrating adult brook trout, the applicant will submit the 1 year post construction monitoring results of the culvert installation including any remedial recommendations to the Department for review, the applicant will monitor the project for 3 years post-construction, and the monitoring reports and the fourth year post-construction assessment will be forwarded to the Department by no later than March 31 of the following year.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A. Section 480-P.

THEREFORE, the Department APPROVES the above noted application of MAINE DEPARTMENT OF TRANSPORTATION to upgrade Route #2, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. Standard Conditions of Approval, a copy attached.
2. The applicant shall take all necessary measures to ensure that its activities or those of its agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.
3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
4. All instream work shall \*occur between June 15-October 1 to avoid disturbance to migrating adult brook trout.
5. The applicant shall submit the 1 year post construction monitoring results of the culvert installation including any remedial recommendations to the Department for review.
6. The applicant shall monitor the project for 3 years post-construction.

7. The monitoring reports and the fourth year post-construction assessment will be forwarded to the Department by no later than March 31 of the following year.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED AT AUGUSTA, MAINE, THIS 15<sup>TH</sup> DAY OF AUGUST, 2007. CORRECTING THE ORDER DATED JULY 13, 2007. The effective date and expiration date remain the same as in the original order.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

By:   
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 5, 2006  
Date of application acceptance: December 13, 2006  
Date of application approval: July 13, 2007

Date filed with Board of Environmental Protection  
DO/ATS#63066/L23389AN







## NATURAL RESOURCE PROTECTION ACT (NRPA) STANDARD CONDITIONS

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. **Approval of Variations From Plans.** The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. **Compliance With All Applicable Laws.** The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. **Erosion Control.** The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. **Compliance With Conditions.** Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. **Initiation of Activity Within Two Years.** If construction or operation of the activity is not begun within two years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits shall state the reasons why the applicant will be able to begin the activity within two years form the granting of a new permit, if so granted. Reapplications for permits may include information submitted in the initial application by reference.
- F. **Reexamination After Five Years.** If the approved activity is not completed within five years from the date of the granting of a permit, the Board may reexamine its permit approval and impose additional terms or conditions to respond to significant changes in circumstances which may have occurred during the five-year period.
- G. **No Construction Equipment Below High Water.** No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- H. **Permit Included In Contract Bids.** A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- I. **Permit Shown To Contractor.** Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

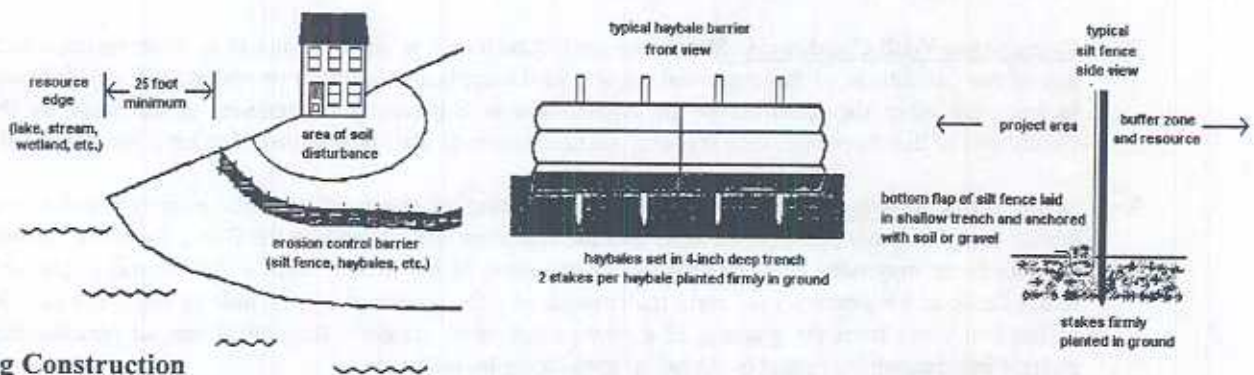




## Erosion Control

### Before Construction

1. If you have hired a contractor, make sure you have discussed your permit with them. Talk about what measures they plan to take to control erosion. Everybody involved should understand what the resource is and where it is located. Most people could identify the edge of a lake or a river. The edges of wetlands, however, are often not obvious. Your contractor may be the person actually pushing dirt around but you are both responsible for complying with the permit.
2. Call around and find sources for your erosion controls. You will probably need silt fence, hay bales and grass seed or conservation mix. Some good places to check are feed stores, hardware stores, landscapers and contractor supply houses. It is not always easy to find hay or straw during late winter and early spring. It may also be more expensive during those times of year. Plan ahead. Purchase a supply early and keep it under a tarp.
3. Before any soil is disturbed, make sure an erosion control barrier has been installed. The barrier can be either a silt fence, a row of staked hay bales, or both. Use the drawings below as a guide for correct installation and placement. The barrier should be placed as close as possible to the activity.
4. If a contractor is installing the barrier, double check it as a precaution. Erosion control barriers should be installed "on the contour", meaning at the same level along the land slope, whenever possible. This keeps stormwater from flowing to the lowest point of the barrier where it builds up and overflows or destroys it.



### During Construction

1. Use lots of hay or straw mulch on disturbed soil. The idea behind mulch is to prevent rain from striking the soil directly. It is the force of raindrops striking the soil that causes a lot of erosion. More than 90% of erosion is prevented by keeping the soil covered.
2. Inspect your erosion control barriers frequently. This is especially important after a rainfall. If there is muddy water leaving the project site, then your erosion controls are not working as intended. In that situation, stop work and figure out what can be done to prevent more soil from getting past the barrier.

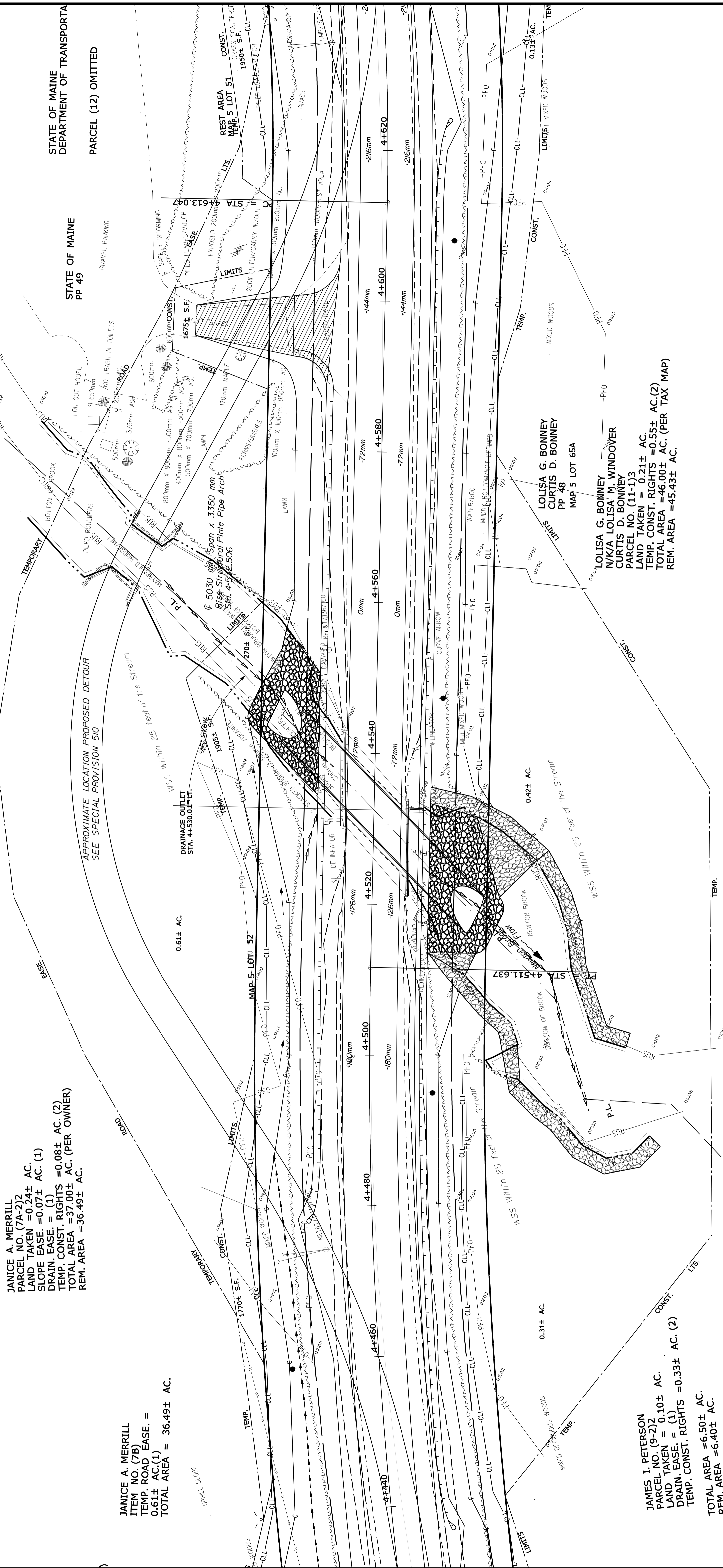
### After Construction

1. After the project is complete, replant the area. All ground covers are not equal. For instance, a mix of creeping red fescue and Kentucky bluegrass is a good choice for lawns and other high maintenance areas. The same mix would not be a good choice for stabilizing a road shoulder or a cut bank that you don't intend to mow.
2. If you finish your project after September 15, then do not spread grass seed. There is a very good chance that the seed will germinate and be killed by a frost before it has a chance to become established. Instead, mulch the site with a thick layer of hay or straw. In the spring, rake off the mulch and seed the area. Don't forget to mulch again to hold in moisture and prevent the seed from washing away.
3. Keep your erosion control barrier up and maintained until the area is permanently stabilized.



<b>METRIC</b>		STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
1	1	MAINE	NH-10015001E	1	1
		REG. NO.	DATE	010015.00	
		1			

1. All dimensions are in millimeters unless otherwise noted.  
 2. All elevations and stations are in meters.



JANICE A. MERRILL  
 PARCEL NO. (7A-2)2  
 LAND TAKEN = 0.24± AC.  
 SLOPE EASE = 0.07± AC. (1)  
 DRAIN. EASE = (1)  
 TEMP. CONST. RIGHTS = 0.08± AC. (2)  
 TOTAL AREA = 37.00± AC. (PER OWNER)  
 REM. AREA = 36.49± AC.

JANICE A. MERRILL  
 ITEM NO. (7B)  
 TEMP. ROAD EASE =  
 0.61± AC.(1)  
 TOTAL AREA = 36.49± AC.

JAMES I. PETERSON  
 PARCEL NO. (9-2)2  
 LAND TAKEN = 0.10± AC.  
 DRAIN. EASE = (1)  
 TEMP. CONST. RIGHTS = 0.33± AC. (2)  
 TOTAL AREA = 6.50± AC.  
 REM. AREA = 6.40± AC.

LOLISA G. BONNEY  
 N/K/A LOLISA M. WINDOVER  
 CURTIS D. BONNEY  
 PARCEL NO. (11-1)3  
 LAND TAKEN = 0.21± AC.  
 TEMP. CONST. RIGHTS = 0.55± AC. (2)  
 TOTAL AREA = 46.00± AC. (PER TAX MAP)  
 REM. AREA = 45.43± AC.

PROJECT DESIGN ENGINEER	DATE
DESIGN-DETALIED	S. BODDE
CHECKED	R. MOUTON
REVISIONS	
FIELD CHANGES	

Filename: ...MSTA\320\_detour sheet.dgn  
 Division: HIGHWAY  
 Username: robe.mouton  
 Date: 10/29/2007

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION

# DETOUR

## DIXFIELD

### RTE. 2

SCALE  
 1" = 40'

SHEET 1 OF 1  
 AUGUSTA, MAINE