

# **SECTION 800**

## **UTILITIES &** **RAILROADS**

# CONSTRUCTION MANUAL

MAINE DEPARTMENT of TRANSPORTATION

Bureau of Project Development

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## UTILITIES & RAILROADS

### 800-1 GENERAL

#### References:

- (1) Special Provisions Section 104
- (2) Construction Plans
- (3) Standard Specifications  
Section 104.4.6  
Section 104.4.8
- (4) MDOT Utility Accommodation Policy (17-229 CMR Chapter 210)
- (5) Code of Federal Regulations (CFR)
- (6) Maine Revised Statutes Annotated (MRSA)
- (7) Manual on Uniform Traffic Control Devices (MUTCD)

### 800-2 BACKGROUND

#### a. Utilities

In order to provide the citizens of Maine with cost effective utility services, laws were passed to authorize utilities to utilize the highway corridors throughout the state. Specific authorization may be found in 35-A MRSA Chapter 23. These rights are provided to utilities subject to the terms and conditions of the licensing authority defined in 35-A MRSA §2502. In the case of state and state-aid highways outside of compact areas, the Maine Department of Transportation is the licensing authority. (Within compact areas, the municipality is normally the licensing authority. However, the Department technically has control within the limits of an active construction project. For this reason, project decisions regarding utilities within the limits of highway projects in compact areas should be made in coordination with the municipality.)

#### (1) Location Permits

The instrument through which the Department authorizes utilities to use the state's highway corridors is the Location Permit. General requirements for obtaining Location Permits are

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specified in 35-A MRSA §2503 and specific MDOT procedures and location requirements are further defined in the MDOT Utility Accommodation Policy.

A Location Permit is a license for a utility to use a portion of the highway corridor for an unspecified period. When those locations are no longer appropriate (for example, as a result of a safety concern or an unavoidable conflict with highway improvements), the utility is directed to relocate their facilities to another permit location. Additional information on Location Permits is provided in 800-4, Construction.

#### (2) Relocation Costs

Since Location Permits convey no property rights, all costs associated with the relocation of utility facilities located by permit are the sole responsibility of the utility. Since any costs to a utility are ultimately passed on to the utility customers (the same customers served by the Department), it is important to assure that these costs are kept to a minimum whenever possible.

However, in some instances, utility work may be either partially or fully reimbursable. This will usually occur under the following circumstances:

- (a) When the utility can provide evidence of its existing plant being located upon property either held in fee by the utility or covered by an easement. (Such rights must be reviewed and verified by the Department's Legal Division)
- (b) When the relocation is made necessary by Interstate-funded highway construction as specified in 23 MRSA §255.

#### b. Railroads

Railroads are considerably different from utilities. While utilities are typically located by permit within state highway corridors, railroads are not. Railroad corridors throughout Maine are owned by several different entities and governed by various federal and state laws. Where such corridors cross highway corridors, prevailing rights can become extremely vague and will often require research through the Department's Legal Division to determine ultimate authority.

To assure the safety of highway and rail traffic, railroad flagging and/or other work is common. In most cases, such work will be reimbursable from the project funds. Agreements will exist on each project where this occurs and should be closely reviewed for specific details.

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#### 800-3 DESIGN-PHASE COORDINATION

At the start of each project, a person is assigned the responsibility to identify existing and proposed utility facilities and to address how conflicts between those facilities, existing railroads, and the proposed project will be resolved. This person is known as the Utility Coordinator. The results of the Utility Coordinator's design-phase coordination efforts will typically include the following components:

List of Contacts: Identification of the primary contact person for each utility and/or railroad having facilities within the project limits.

Utility/Railroad Special Provision: A thorough description of the anticipated utility and/or railroad work that will occur as a result of the project (often informally referred to as the "Utility Spec.").

Certification: A formal statement that Utility Coordination has been properly completed.

Agreements: Formal documents defining how reimbursable issues will be addressed (as applicable).

Each of these items is generally discussed below and further discussed in 800-4, Construction.

##### a. Contacts

Frequently, the Utility Coordinator will work with a different group of utility contacts than those that are needed by the Resident. A Utility Coordinator will typically work with utility engineering personnel, while the Resident will typically work with utility construction personnel. When smaller utilities are involved, these people are often one and the same.

In most cases, the list of contacts will be provided to the Resident at the Preconstruction Meeting. These contacts should be used for day-to-day issues, to assure that there is good communication between all parties and to assure that utility and railroad work is progressing as planned. However, as soon as any unforeseen conflicts arise or utility/railroad work begins to fall behind schedule, it is important to notify the project's Utility Coordinator as soon as possible.

##### b. Special Provisions

The Utility and Railroad Special Provision is the primary work product that summarizes the utility/railroad coordination process. This document is included in Section 104 of the Special Provisions and should include the following information:

A summary of all utilities and railroads involved within the project limits.

A description of the specific work that must occur in conjunction with the project.

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An approximation of how long the utility and railroad work will take to complete.

Any special conditions relating to the utilities or railroads that may affect the Contractor's work.

The utilities' revised Location Permits are processed from the information provided in this specification, so it is important to assure that the Utility Coordinator is aware of any necessary field changes that require utility facilities to be located in different locations than originally specified.

When a project includes work adjacent to an active railroad, the contract documents will also include a section known as the Protection of Railroad Traffic and Structures (PRTS). The PRTS specifies the insurance a Contractor must carry to work near the rail line, and the distance from the tracks within which rail flagging will be necessary. In most cases, an agreement will exist with the railroad whenever a PRTS is in a contract.

#### c. Certification

Upon completion of the Pre-construction coordination process, a formal letter of certification is prepared and filed with the project records. This certification is a final statement that all foreseeable utility and railroad conflicts associated with the proposed project have been identified, and that a strategy has been developed for addressing those conflicts. This certification is required prior to project advertising for any projects utilizing federal funds.

#### d. Agreements

Agreements with utility or railroad companies are frequently necessary for a variety of reasons. Agreement Administration is covered in greater detail in Section 800-4. The two most common reasons for having agreements include:

Specifying the method and amount of reimbursement for any reimbursable utility/railroad work that must occur as a result of the project.

Specifying the terms of including utility work in the project contract. (Such work may be either reimbursable or non-reimbursable as stated in the agreement. Railroads or electric, gas, and communications utilities typically elect to do their own work.)

## 800-4 CONSTRUCTION

### a. Pre-construction Utility Meeting

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A post-award, Pre-construction Utility Meeting, attended by the Contractor, utility personnel, railroad personnel, Utility Coordinator, and the Resident, is often essential to successfully starting the construction phase of a project. Section 104 of the project Special Provisions will state the contractual requirements for this meeting. This meeting is held for the following purposes:

- (1) To bring together personnel representing each party for a discussion of mutual problems.
- (2) To develop an orderly procedure and timing for utility relocations with due consideration of the construction procedures proposed by the Contractor.
- (3) To provide information the Contractor may develop a realistic construction schedule.

The Resident, through consultation with the Contractor, establishes the date and location of the Pre-construction Meeting. The Resident then notifies the Utility Coordinator, so that all utility and railroad contacts can be notified. It is important to assure that the Utility Coordinator is provided enough notice to reasonably assemble the utility/railroad personnel for the meeting.

The Utility Coordinator will act as the chair and secretary for the utility portion of the Pre-construction Meeting. Following the meeting, the Utility Coordinator will write and distribute a report of the discussion and agreements to all who were invited or in attendance. The report is essentially an amendment to the contract documents. In the absence of contradictory evidence, it is the official record of the agreements that were reached at the meeting and outlines the obligations that have been assumed by the contractor, the Department and the utilities/railroad. In some cases, this document may be used by the Contractor as the basis for a claim for damages due to delay/interference by the utilities/railroad. Therefore, as construction progresses, the Resident should keep good records of any pertinent variations from these agreements. When variations are recognized, the Resident should notify the Utility Coordinator and arrange an immediate meeting of the parties involved.

#### b. Ongoing Coordination

On many projects, a single Pre-construction Utility Meeting may not be sufficient to assure that utility/railroad work remains on schedule. On projects that involve extensive utility/railroad work, it is often worthwhile to organize bi-weekly meetings to assure that all parties continue to work together toward a common goal. In the absence of such meetings, delays can frequently arise as a result of poor communication between utilities or conflicting work areas between the utilities/railroad and the Contractor.

In general, day-to-day coordination between the Resident and the utilities should occur through the utility contacts provided at the Pre-construction Meeting. A utility's on-site contractor or consultant engineer should not become a primary contact unless specifically requested by the utility. However, in the case of an immediate safety issue (such as that discussed under Maintenance of Traffic or otherwise) the individuals

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on-site should be immediately directed to correct the issue and the utility contact person and Utility Coordinator should be notified of as soon as practical thereafter.

#### c. Dig Safe Law (23 MRSA §3360-A)

Maine has a law that requires all excavators to provide notice of 3 business days to all owners/operators having facilities in an excavation area prior to the start of any excavation. This law is informally known as the “Dig Safe Law”. The Dig Safe Law derives its name from the call center that receives calls from excavators (contractors) and then routes the details of the proposed excavation to its “member utilities”. Although the Dig Safe “member utilities” include many of the utilities located throughout the State of Maine (and several other states throughout New England), it is important to recognize that many other utilities are not members of the Dig Safe system and, by law, must be notified separately. Water and sewer utilities and individuals that may have privately-owned facilities in the public way are some common examples of those who must be notified separately. Since the presence of privately owned facilities is difficult to determine, it is recommended that whenever notice of a proposed excavation is called-in to the Dig Safe center and water/sewer utilities, abutting property owners should be notified as well. This assures maximum protection from liability for the excavator.

Regardless of whether an individual or utility is a member of Dig Safe, the law requires all who have been notified to mark the horizontal location of their facilities on the surface of the ground within 3 business days. Such marks must be within 450 mm [18 in] of the actual facility location, and they establish who will be liable for any accidents that may occur. Therefore, it is important to be aware of where these initial marks are placed. Although any marks provided as a result of the process set forth in law override the approximate utility locations provided on the construction plans, any recognized conflicts between the two should be verified with the owner of the facility in question.

Contractually, the Department obligates all of its Contractors to be responsible for compliance with the Dig Safe Law for the construction of MDOT projects.

#### d. Right-of-Way

During the design-phase coordination, the Utility Coordinator will normally have worked with the utilities to incorporate their right-of-way needs in the right-of-way acquired for the project. Such accommodation is not only critical to maintaining utility service during the construction of the highway, but it is also critical to achieving the timely relocation of the utilities. In general, the Department will normally acquire enough right-of-way to reasonably accommodate a utility’s main line facilities, not including spot-guying and clearing/trimming that may be necessary. However, in instances where a utility’s clearing/trimming or guying needs become extensive, the project schedule may benefit by acquiring enough right-of-way to accommodate those needs as well.

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When the Department acquires easements for a project, those easements may or may not be written to include utility facilities. If it becomes necessary to locate utility facilities in an easement area, this option must be discussed with both the Utility Coordinator and the project Right-of-Way Agent.

This Department has no control over any utility action that takes place outside of the highway right-of-way limits.

#### e. Clearing/Trimming

Clearing/trimming to accommodate utility facilities within the right-of-way is common on MDOT projects. Clearing/Trimming that is necessary for both the highway construction and the utilities is paid out of the project funds, whereas clearing/trimming that is solely required for the utilities is the responsibility of the respective utility. Before speaking with property owners about what clearing/trimming may be necessary for a project, it is important to fully understand all of the clearing/trimming that will be required for the utility work. The Utility Coordinator will normally have addressed most of these details during the design-phase coordination and should be consulted for information regarding utility clearing/trimming. A property owner should never be promised that a tree is not to be cut until all utility work has been taken into consideration.

When a utility removes a tree, it will usually not remove the stump. However, all other debris shall be removed and the site should be left in a presentable condition. On some projects, agreements may be processed to allow either the Department to perform necessary clearing/trimming for a utility or vice-versa.

#### f. Maintenance of Traffic

In the course of performing construction or maintenance activities within the limits of public roads, utilities and railroads are obligated to protect the traveling public in accordance with the standards set forth in the Manual on Uniform Traffic Control Devices (MUTCD). This obligation is stated in the Code of Federal Regulations and the MDOT's Utility Accommodation Policy. If a utility or railroad does not use proper traffic control while working within the right-of-way limits of a construction project, the Resident and/or prime Contractor should notify them immediately. If corrective action is not taken, the Resident should immediately notify the Utility Coordinator. If the utility/railroad continues to disregard the directives and continues to conduct their work in an unsafe manner, the Department has the authorization to remove them from the public way.

#### g. Permits

There are generally two types of permits issued to utilities by the Department: Location Permits and Highway Opening Permits. Due to differing areas of applicability and administration, these permits are developed separately. However, it is likely that these permits will be combined in the future. At the time of this writing, Location Permits are issued from the Department's central office in Augusta, whereas,



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Highway Opening Permits are issued by the respective Division Offices. In most cases, both permits will be in place prior to the construction phase of a project, however, situations are likely to arise that will require a basic understanding of their purpose.

#### (1) Location Permits:

As discussed in Section 800-2 of this Manual, Background, Location permits are the instruments through which the Department licenses a utility to occupy a defined portion of the right-of-way. A utility typically obtains a Location Permit by submitting an application to the Department. However, when utility relocations occur as a result of a MDOT Project, a Location Permit is assigned through the Utility Coordinator by recording the specifics of the Utility Specification. This is one of the reasons why it is important to keep the Utility Coordinator informed of any necessary field changes in utility locations.

When utility work occurs in conjunction with a MDOT Project, the utility is expected to obtain a Location Permit through the traditional application process. A Resident may obtain a copy of any Location Permit either through the Utility Coordinator or by contacting the Utility Permitting Section directly.

#### (2) Highway Opening Permits:

Highway Opening Permits authorizes a utility to actually begin making an excavation within the right-of-way limits. This permit is not necessary for the installation of utility poles.

If underground utility work will be occurring in conjunction with the construction of a MDOT project, a Highway Opening Permit is not necessary and the Resident will be the Department's agent for assuring that the interests of the Highway are protected. However, if underground utility work is occurring before or after project construction or will extend beyond the project limits, the Division Office must issue a Highway Opening Permit.

#### h. Utility Location Standards

The standards by which utilities are accommodated within the right-of-way of state and state-aid highways are specified in the MDOT's Utility Accommodation Policy. This policy defines requirements for bridge attachment standards, cover depth for underground facilities, and horizontal offsets for aboveground facilities. The Resident may obtain a copy of this policy from the Utility Coordinator, the Utility Permitting Section, or from the web at [www.maine.gov/mdot/utility](http://www.maine.gov/mdot/utility). The Utility Special Provisions for each project are prepared using the standards set forth in this policy.

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#### i. Agreement Administration

It is important to review the terms of each agreement prior to the start of work. An agreement will usually specify responsibilities relating to inspection, documentation and other factors that will affect the relationship between the Resident and the utility/railroad. Utilities/railroads are usually obligated to submit daily or weekly reports to the Resident whenever work covered by an agreement occurs. There is no standard form prescribed for these reports and the Resident should reach an agreement with the utility/railroad regarding how they will be prepared and submitted. These reports must be reviewed and verified as submitted and will serve as a reference for future billing purposes.

Agreements will generally structure pay items in two ways:

##### (1) Unit Price

If work is being done under a unit price contract, the Resident should keep notes of the apparent quantity of work being done. Observations should be periodically checked with the records of the field representative for the utility/railroad. The Resident is not expected to measure or compute quantities; however, if errors in documentation are apparent, the Resident is expected to resolve the error to their satisfaction.

##### (2) Lump Sum

If work is being done under a lump sum contract, the Resident should keep records sufficient to verify that the work has been done substantially according to plan.

Agreement Change Orders are required for any change in the nature of the work covered by an agreement. These Change Orders require the same type of information required for a Change Order to the project contract and must have sign-off from all parties of the original agreement. The Utility Coordinator should be included in any necessary Change Orders to assure that the agreement remains consistent with original discussions and to assure that the necessary documentation is prepared to allow appropriate payment. Major changes must be approved before the work is done.

The Resident and Utility Coordinator must communicate as work covered by agreements is completed. For accounts receivable, the Resident must keep the Utility Coordinator informed as to what work has occurred in the field so that he/she can assure that appropriate billing is sent to the utility/railroad. For accounts Payable, the Utility Coordinator must assure that bills from the utility/railroad are routed to the Resident for verification (based upon the daily/weekly field reports) and that payment is ultimately sent to the utility/railroad.