



Oregon Department of Transportation
Highway Division
Right of Way Section

Highway / Utility Guide



Railroad & Utilities Unit
Right of Way Section

STATEMENT OF PURPOSE

It is important to understand this Utility Project Guide provides a "baseline" model of how utilities are to be recognized and incorporated into the ODOT project development process. The relationships and timing are the important features of the model. It is also important to know that not all projects require exactly all the steps shown, and that each region project development process may have some process element variations that are slightly different.

To a great degree, the success of the Guide depends upon a full commitment by ODOT, utilities, and contractors, each being involved in construction of facilities in, and alongside, the public right of way. The overall Guide will be successful if all parties commit to a partnership among ODOT, utilities, contractors, and all their representatives, and work toward the common interest of the public served by transportation facilities and utility facilities.

CONTENTS

| | |
|--|------------|
| Statement of Purpose | ii |
| Contents..... | iii |
| Introduction | iv |
| Definitions | v |
| Program Review Model | |
| Multiple Projects Planning | 1 |
| Project Development Model | |
| Scoping | 2 |
| Design Development and Right of Way Acquisition | 5 |
| Relocation and Construction..... | 10 |
| APPENDIX | |
| Flow Chart..... | 13 |

INTRODUCTION

There have been, historically, a significant number of problems involved in the relocation and installation of utility facilities in the public right of way during the development and construction of public improvement projects. A close examination of the problems shows clearly that the primary causes of the problems are poor communication and coordination between the key parties involved: governmental agencies, utilities, contractors, and other users and their representatives with utility facilities or construction work in the public right of way.

Some of the more serious, recurring problems that take place by any involved parties include: insufficient time for the utility to perform relocation design; untimely utility relocations; shifting project and utility schedules or priorities; project or utility plans with omissions or errors; inadequate or untimely plan review; late changes to project or utility plans; untimely processing of permits; ODOT or utility change of policies without adequate notification; and insufficient communication of 2-4 year capital improvement programs. The final results of the above problems are substantially increased costs, project design and construction delays, and strained working relationships. Ultimately, the Taxpayer/Ratepayer pays the costs and suffers the delays.

This Guide describes a "system" of communication and coordination elements that, when put in place, will help assure the relocation and installation of facilities in the right of way with minimal problems. It is divided into 3 major parts:

1. Definitions
2. Project Review Model (Planning)
3. Project Development Model (Design)

DEFINITIONS

AGC – Associated General Contractors

DESIGNATE – To indicate, by physically marking on the ground, the presence and approximate horizontal location of subsurface utilities using geophysical prospecting techniques such as electromagnetics and sonics. The marks shall indicate the name, initials or logo of the operator of the underground facility, and the width of the facility if it is greater than two (2) inches.

CAPITAL IMPROVEMENT PROGRAM (CIP) - The Capital Improvement Program represents a plan for short and long range physical development. It provides a framework for identifying capital requirements, scheduling projects over a period of years, coordinating related projects, and developing the proposed financing plan. The Capital Improvement Program is reviewed and updated each year to reflect changing priorities, cost changes, or alternative financing strategies.

NOTICES:

FIRST NOTICE – The first notice, required by the Oregon Administrative Rule (OAR), Chapter 734, Division 55, is a letter to utilities stating that the utility has facilities that conflict with a proposed public project that will require them to remove or relocate their facilities. The letter also requests a relocation plan and the time requirements for accomplishing the directed action.

OAR 734-055-0045(2) “Upon receiving written notice from the Engineer to remove, relocate or repair the said facility, applicant shall within 30 days or within the time frame contained in the notice, provide to the Engineer its time estimated requirements for accomplishing the directed action”.

SECOND NOTICE – The second notice, required by OAR 734-055-0045(4), is a letter directing the utility to complete the action stated in the first notice within a specified time frame. The notice may also state the consequences of not relocating within the specified time frame, per OAR 734-055-0045(6).

OAR 734-055-0045(4) “The Engineer in a second notice shall direct applicant, within a specified time frame and consistent with a coordination plan, to complete the removal, relocation or repair of said facility. The time frame outlined in the notice shall take into consideration the applicant's estimated time requirements to accomplish the directed action. Such removal, relocation, or repair shall be at applicant's sole cost in accordance with said second notice and instructions received from the Engineer. Before commencing said removal, relocation or repair, applicant shall furnish such insurance and post such bond as the Engineer may consider necessary at that time in the manner provided for in OAR 734-055-0035(1) and (2).”

OAR 734-055-0045(6) “If the section of highway in which applicant is required by the Engineer to remove, relocate or repair a facility is or will be under construction or reconstruction or improvement under a contract entered into between the Department and an independent contractor and applicant's failure to remove, relocate or repair said pole line, buried cable, pipe line, sign or miscellaneous facility within the time specified in section (4) of this rule, or such other time as may be specified by the Engineer, results in payment by Department to its contractor of any claim for extra compensation for any work under said contract, applicant shall be liable to the Department for payment of the amount paid to Department's contractor as a direct result of applicant's failure to comply with the time requirements of the Engineer.”

ODOT – Oregon Department of Transportation.

ODOT AREA – Geographically defined area that is managed by ODOT Area Manager.

ONE-CALL CENTER (OCC) – A Statewide system through which a person can notify operators of underground facilities of proposed excavations and can request that the underground facilities be marked.

PERMIT APPLICATION PLAN - A utility plan showing at least plan and profile views and trench details, as applicable.

PLANS - A set of project drawings and/or specifications.

POINT OF CONTACT (POC) - That initial person(s) identified by an organization to be notified concerning design, construction or relocation in the public right of way. The person's business telephone and facsimile number, e-mail address and business address should be provided.

PROJECT SCOPE - A general project overview including type of project, its location, various design and construction aspects, project schedule and special features and requirements.

PRIOR PROPERTY RIGHTS - A prior property right, also referred to as "prior right(s)", refers to a private easement, a deeded parcel of property, a public utility easement or certain other conveyances which constitute a compensatory interest wherein a utility has a right to reimbursement for facility relocation or abandonment costs required by an agency in the course of design and construction of a project for a public purpose.

RUS – Region Utility Specialist

STIP – Statewide Transportation Improvement Program. This is the Oregon Department of Transportation's capitol improvement program. The program prioritizes, schedules and assigns funding to projects.

SUBMITTALS:

CONCEPT PLANS - The first submittal (approximately 30%) is a set of project plans and/or specifications ("plans") in either electronic or hard copy form submitted to utilities in order for them to verify their existing and proposed facilities. This also gives these utilities an opportunity to plan, schedule and budget for possible new or relocation designs.

PRELIMINARY PLANS - The second submittal (approximately 70%) is a set of project plans in either electronic or hard copy form submitted to utilities for review of conflicts and for verification that all of their existing and proposed facilities are shown accurately on the plans. Utilities should already be involved

with their designs for new facilities, abandonment of existing facilities and/or relocation of the facilities that are in conflict.

ADVANCE PLANS & SPECS - The third submittal (approximately 90% - 100%) is a set of project plans in either electronic or hard copy form submitted to utilities for final review to confirm that all existing and proposed facilities and/or relocation work is addressed and shown on the plans. As long as there are no significant changes, these plans may be used as the final plans/specifications for bid advertisement.

TESTHOLE – Means to obtain the accurate horizontal and vertical position of subsurface utilities by excavating a hole to expose the utility to be measured in such a manner that insures the safety of the excavation and the integrity of the utility to be measured.

UTILITY - Denotes an organization that provides one or more of the following: communication, telecommunication, power, gas, cable TV, water, sanitary sewer and/or irrigation services.

PROGRAM REVIEW

MULTIPLE PROJECTS

| PURPOSE: | CONTENT REFERENCE: |
|---|--|
| <ul style="list-style-type: none"> Allows ODOT and utilities to plan multiple projects together | 1.01 ODOT AREA/Utility Program Review Meetings |
| <ul style="list-style-type: none"> Assures conflict-free schedules | 1.02 Internal Communication / Coordination |
| <ul style="list-style-type: none"> Provides long-term planning critical to multiple project coordination | |

PROGRAM REVIEW MODEL

MULTIPLE PROJECTS PLANNING

THE PURPOSE OF THE PROGRAM REVIEW MEETINGS IS TO FACILITATE THE EFFICIENT AND TIMELY DEVELOPMENT, DESIGN, AND CONSTRUCTION OF PUBLIC IMPROVEMENT PROJECTS BY ENSURING THAT ODOT AND UTILITIES PLAN TOGETHER TO DEVELOP CONFLICT-FREE SCHEDULES.

SPONSOR: ODOT Area Manager.

PARTICIPANTS: Utilities, ODOT Project Managers, Project Project leaders, and Utility Specialists.

SUGGESTED FREQUENCY: Monthly in urban areas, quarterly in rural areas.

1.01 ODOT AREA/UTILITY PROGRAM REVIEW MEETINGS

Each ODOT Area Manager will sponsor, hold and conduct a regularly scheduled program review meeting with utilities in their Areas. At this meeting, ODOT will present the Area's Statewide Transportation Improvement Program (STIP), along with projects not currently in the STIP that are under consideration. The topics of the meetings should center around the scope, schedule and budget for each project. This information will be used to improve the current, short and long term planning and coordination between ODOT and the utilities. In addition, it will aid utilities with their budget preparation process.

1.02 INTERNAL COMMUNICATION / COORDINATION

The STIP Review Meeting will generally involve a subset of ODOT and Utility stakeholders. After the STIP Review Meeting, it is essential that both parties communicate relevant information to all internal stakeholders.

PHASE 1 – PROJECT SCOPING

| PURPOSE: | CONTENT REFERENCE: |
|---|--|
| <ul style="list-style-type: none"> • Initiates projects concept design • Provides general scope and nature of project to involved utilities • Identifies unique characteristics of project, improving coordination • Provides adequate and accurate information for the development of specific project plans | <ul style="list-style-type: none"> 1.01 Define General Project Scope – Prepare Draft Prospectus 1.02 Identify Utilities (Existing & Proposed) 1.03 Utility Participation in Scoping Trip (RSVP) 1.04 Scoping Trip with Stakeholders 1.05 Define Project Core Team Members 1.06 Begin Field Survey & Critical Utility Designation 1.07 Refine Project Scope 1.08 Define Level of Utility Involvement (Deliverables & Commitments) 1.09 Complete Field Surveys & Utility Designations |

PROJECT DEVELOPMENT MODEL

PROJECT SPECIFIC SCOPING

PHASE ONE

THE PURPOSE OF THE PROJECT SCOPING PHASE IS TO PROVIDE ALL STAKEHOLDERS WITH THE GENERAL SCOPE AND NATURE OF A PROJECT, INCLUDING KEY DATES. A SPECIAL OBJECTIVE OF THIS PHASE IS TO IDENTIFY EARLY ON THE UNIQUE CHARACTERISTICS REQUIRED TO FACILITATE AND COORDINATE PROJECTS. UPON COMPLETION OF THIS PHASE, THERE SHOULD BE ADEQUATE AND ACCURATE INFORMATION AVAILABLE FOR ODOT TO BEGIN DEVELOPMENT OF THE PROJECT PLANS.

1.01 DEFINE GENERAL SCOPE (PREPARE PROJECT PROSPECTUS)

ODOT will define the individual project scope by describing the physical limits and general scope or overview of the specific project. It should include: the length and width of the project, the existing and proposed right of way information, and what facilities are to be installed; for instance:

- Water
- Sewer
- Storm Drain
- Street Lights
- Irrigation
- Landscaping

Traffic Signals

Type of Sidewalk

- Meandering
- Back of Curb
- Offset from back of curb
- Size

Existing Utilities

Vicinity Maps

Approximate Bid Date and Milestone Dates

Others

1.02 IDENTIFY UTILITIES (EXISTING AND PROPOSED)

The lead designer/chief surveyor, through the use of the One-Call Center (OCC) and other sources, will identify existing and proposed utilities within the limits of the project. The lead designer/chief surveyor shall develop a preliminary utility report. The report shall include: 1) Point of Contact (POC), telephone, and address of each utility, 2) a general description of each utility facility, i.e. type, size, material, and general location, and 3) a statement of proposed utilities to be installed in the near or distant future. The report shall be transmitted to the Region Utility Specialist (RUS).

1.03 UTILITY PARTICIPATION IN SCOPING TRIP (RSVP) (Optional)

The project leader/lead designer will submit a request, in writing, to all affected utilities to participate in a project-scoping trip. The invitation will also request each utility bring to the meeting, or supply, copies of as-built or field installation information records or quarter section drawings of existing facilities. The submittal should also include a copy of the prospectus and preliminary utility report. The Utilities should be asked to respond (RSVP) to the invitation.

Alternatively, ODOT may schedule and host a scoping meeting that utilities and others would be invited to attend. A visit to the project site may take place immediately after the scoping meeting.

1.04 CONDUCT SCOPING TRIP WITH STAKEHOLDERS (Optional)

The project leader will assemble a scoping team then schedule and hold a meeting on the project site with utilities. The purpose of the meeting is for all concerned to present information, which might impact the project scope. Any prior rights information that is available should be discussed. This meeting should allow each utility company to better coordinate its work with other utilities to minimize work activity on the project site. If possible, utility conflicts, which might affect alignment or grade, will be identified for gathering of more specific information by field designation or test holes. All of this information should be taken into consideration in finalizing the preliminary project scope.

Where appropriate or necessary, the affected utilities will provide ODOT with additional comments on the preliminary project scope. This response should be received within an agreed upon time frame and should include the following:

- Any requested As-Builts or Field Installation Information Records
- Prior Rights Information
- Project Scheduling and Time Frames
- Any other information pertinent to the design

1.05 DEFINE PROJECT CORE TEAM MEMBERS

After the scoping trip, the project leader will identify the stakeholders of the project and will form a multidiscipline Project Development Team (PDT).

1.06 BEGIN FIELD SURVEY & CRITICAL UTILITY DESIGNATION

The lead designer/chief surveyor shall discuss the scope of utility field surveying with the RUS prior to initiating the survey. The lead designer/chief surveyor shall then coordinate the marking of the underground utility facilities through the contacts obtained from the One-Call request in section 1.02. A request may be made for test holes of facilities that might affect the project scope.

1.07 REFINE PROJECT SCOPE

The lead designer will incorporate all information that impacts the proposed project into the project scope and finalize a schedule. The updated scope and schedule may then be distributed with the first submittal to all affected parties.

1.08 DEFINE LEVEL OF UTILITY INVOLVEMENT (Optional)

The extent of the utility's involvement in the project development process should be determined and confirmed with each utility by the RUS. The level of involvement is described by A) full membership, B) attendance as necessary, C) minutes only, and D) advisory membership (see ODOT's Utility Coordination Matrix).

1.09 COMPLETE FIELD SURVEYS & UTILITY DESIGNATIONS

The lead designer/chief surveyor, in coordination with the RUS, will review the mapping of utilities for completeness and accuracy. It is important that all utility mapping issues be completed at this time. The work tasks and discussions may include the following:

- Work with utility companies to verify and complete utility mapping for accuracy and completeness.
- Test holes – Additional test holes may be required throughout the project.
- Request for facility records from other utilities.
- Joint use of overhead facilities identification
- Joint use of trench identification
- Installation or easement records from other utilities

PHASE 2 – DESIGN DEVELOPMENT & ROW ACQUISITION

| PURPOSE: | CONTENT REFERENCE: |
|---|---|
| <ul style="list-style-type: none">• Continues development of detailed project plans | 2.01 ODOT Concept Plans (30% Submittal) 2.02 Utility Review & Response / Data Scoping (Team Meeting) |
| <ul style="list-style-type: none">• Integrate utility plans with project plans | 2.03 Begin Right of Way Acquisition |
| <ul style="list-style-type: none">• Initiates utility relocations | 2.04 Review Concept Staging & Drainage (Team Meeting) 2.05 Refine Critical Utility Conflicts with “3D” Data 2.06 First Notice (Utility Conflict Letter) 2.07 Begin Utility Design 2.08 ODOT Preliminary Plans (70% Submittal) 2.09 Utility Review and Response (Team Meeting) 2.10 Complete Utility Design 2.11 Schedule Commitments (Team Meeting) 2.12 Second Notice (Utility Schedule Requirements Letter) 2.13 Utility Permit Applications 2.14 Advance Plans & Spec’s (90%-100% Submittal) 2.15 Plans-In-Hand & Utility Response (Team Meeting) 2.16 Complete Right-of-Way Acquisition |

PROJECT DEVELOPMENT MODEL

**DESIGN DEVELOPMENT &
RIGHT OF WAY ACQUISITION
PHASE TWO**

THE PURPOSE OF THE PROJECT DESIGN PHASE IS FOR BOTH ODOT AND AFFECTED UTILITIES TO DEVELOP THE PROJECT PLANS, INCLUDING KEY DATES, THROUGH A SERIES OF SUBMITTALS AND COORDINATION MEETINGS. UPON COMPLETION OF THE FINAL PLANS, ODOT WOULD BE PREPARED TO GO TO BID FOR CONSTRUCTION OF THE PROJECT. UPON COMPLETION OF THE UTILITY’S FINAL PLANS, THE UTILITY WOULD BE PREPARED TO RELOCATE ITS FACILITIES AS NECESSARY ON THE PROJECT SITE.

2.01 ODOT CONCEPT PLANS (30% SUBMITTAL)

The first submittal (approximately 30%) is a preliminary set of project plans sent to all utilities involved. ODOT staff shall continue design of the proposed project incorporating all information gathered from the various utility companies. This submittal should include at least the following information:

- Vicinity Map
- Existing Topography
- Existing Utilities including size or diameter of facilities
- Existing Right of way, Easements, etc.
- Horizontal and Vertical Geometrics of New Roadway, Utilities, etc.
- Proposed Right of way & Easement Acquisitions
- Proposed Alignments

2.02 UTILITY REVIEW & RESPONSE / DATA SCOPING (TEAM MEETING)

The utilities concerned will review the first submittal plans and return comments to the RUS within a reasonable time frame (typically 4 weeks). Comments from the utilities must include as a minimum:

| | |
|---------------------|---|
| <u>Required:</u> | Verify that existing utilities are shown correctly & completely |
| | Identify potential conflicts |
| <u>If Practical</u> | Identify proposed or new facilities |
| | Identify Prior Land Rights with documentation |
| | Request Utility Easements and/or Right of way |
| | Provide installation and relocation schedules |
| | Request bridge accommodations |

Alternatively, ODOT may schedule and host a Team Meeting to review and discuss comments of the first submittal plans.

2.03 BEGIN RIGHT OF WAY ACQUISITION

ODOT will begin right of way acquisition of the project since this is a time consuming process that affects project scheduling and utility relocation. Utility right of way needs and schedules should be discussed and incorporated into the right of way taking schedule. ODOT may, upon a Utilities request, acquire utility rights of way and easements in conjunction with ODOT right of way acquisition with proper coordination and scheduling. Cost responsibility for this service would be based on Prior Rights.

2.04 REVIEW CONCEPT STAGING AND DRAINAGE (TEAM MEETING)

The Project Team will meet and determine the required staging for construction of the project and will review drainage designs required as a result of staging activities. The staging and related drainage will be designed at approximately 50% completion of the project plans

2.05 REFINE CRITICAL UTILITY CONFLICTS WITH “3D” DATA

The RUS should coordinate testholing of identified potential underground conflicts. It is expected that all utilities will coordinate testhole locations to minimize the number of testholes on the project site. The RUS will order or coordinate the required testholing for which the associated costs are to be determined by “prior rights”. The information should be incorporated into the design to minimize or avoid conflicts without jeopardizing the integrity or purpose of the project. Any location that cannot be modified to eliminate conflicts shall be noted and sent to the appropriate utility.

2.06 FIRST NOTICE (UTILITY CONFLICT LETTER)

The RUS, in accordance with OAR 734-55-0045(2)¹, will prepare and submit a letter, along with highlighted plans, outlining utility conflicts that require removal, relocation or other actions, to the appropriate utilities. The letter will include and request the following information:

- Highlighted Concept plans w/supplements (50% Plans)
- List of utility conflicts and location
- Reimbursement forms if appropriate
- Request utility relocation plans shown on ODOT supplied plans
- Specify due date for relocation plans (60-120 days)
- Utility permit and fee information

2.07 BEGIN UTILITY DESIGN

Once the issues and conflicts are identified and the conflict letters submitted, each utility should begin with their utility relocation design. It is important that this design process be initiated at this time to minimize delays. In addition, it is important to review future and proposed projects to avoid additional potential conflicts. Utilities may request x-sections or other additional information from the RUS to help in their design.

2.08 ODOT PRELIMINARY PLANS (70% SUBMITTAL)

The second submittal (approximately 70%) will be sent to all utilities involved with the project. This submittal will include, at least, the following information:

- All information contained in the first and second submittal
- Construction Staging
- Storm Sewers, etc.
- Existing Utility Information
- Proposed Utility Information, if available or applicable
- Anticipated Right of way and Easement Requirements
- Profiles showing existing and proposed facilities such as Water Mains, Storm

¹ OAR 734-055 applies only to utilities located within state highway right of way. The notification procedure applies to all utilities, however, reference to, and application of the OAR, only applies to those utilities in state highway right of way.

Correspondence included with the second submittal will include a date, time, and location for a Design Presentation and Review Meeting (Optional).

2.09 UTILITY REVIEW & RESPONSE (TEAM MEETING) (Optional)

The project leader/lead designer and RUS will schedule and host a design presentation and review meeting with all utilities involved with the project. The objective of this meeting is to resolve all known design issues and questions. Upon completion of this meeting, the utilities will have discussed design and relocation schedules and ODOT should have discussed and established right of way acquisition schedules. All prior rights issues should be identified and agreements initiated.

2.10 COMPLETE UTILITY DESIGN

At this point in the development of the project, the utility design for any new utility installation or relocation of existing facilities should be complete enough to finalize schedule commitments and to initiate permit applications. If the utility requests to include the relocation into the State's plans, the final utility design should be completed and submitted in order to be incorporated into the Advance Plans and Specs. ODOT and the utilities should have met and resolved any remaining utility conflicts.

2.11 SCHEDULE COMMITMENTS (TEAM MEETING) (Optional)

For each utility installation or relocation of existing facilities, the utility design should be submitted to ODOT at a predetermined date (typically 2 weeks) prior to submittal of Advance Plans & Specs (95%). The utility design should include a tentative construction time frame for all installation or relocation work. Upon receipt of the construction time frames from the utilities, ODOT will confirm its project schedules, which will include right of way acquisition, permit application deadlines, bid dates and construction dates. These dates should allow sufficient time for all utilities to relocate and/or install facilities prior to or during construction (special provision) of the project. This information should be compiled by ODOT staff and distributed to the utilities involved. Any special provisions addressing relocation work, including time frames, which will be done during the construction of ODOT's project shall be addressed in the project bid specifications and agreed upon by ODOT and the utilities involved.

2.12 SECOND NOTICE (UTILITY SCHEDULE REQUIREMENTS LETTER)

The RUS, in accordance with OAR 734-55-0045(4)², will prepare and submit a second notification letter to the appropriate utilities, confirming the utility's relocation and/or construction schedule commitments. The notification may also include language describing the consequences if contractor delays are caused by the utility's failure to meet its schedule commitments.

² OAR 734-055 applies only to utilities located within state highway right of way. The notification procedure applies to all utilities, however, reference to, and application of the OAR, only applies to those utilities in state highway right of way.

2.13 UTILITY PERMIT APPLICATIONS

Each utility will be responsible for obtaining any permits required for the project from all agencies involved. This process usually includes submitting an application, plans and/or specifications. The application must include any information relating to utility relocations and new placements of utilities. The designs from the utilities involved could be incorporated into ODOT's plans prior to the Advance Plans and Specs submittal. The permit processing time should have been planned into the schedule commitments identified in section 2.08.

2.14 ODOT ADVANCE PLANS & SPECS (90% - 100% SUBMITTAL)

The third submittal (approximately 90% to 100%) will be sent to selected utilities involved with the project. As long as there are no significant changes to the Advance Plans and Specs, these plans may be used as the final plans/specifications for bid advertisement. If significant changes occur to the Advance Plans and Specs that impacts the utilities relocation plans, the plans will be distributed to the affected utilities.

2.15 PLANS-IN-HAND & UTILITY RESPONSE (TEAM MEETING)

The Project Team will meet and finalize the advanced plans. Any remaining issues with utilities will be identified and either resolved or included in the bid package for the project as information for the contractor. If significant problems or conflicts develop because of changes to the advance plans, ODOT must notify the utility companies involved immediately. ODOT will then determine, with the input from all involved, what proper course of action must be taken. The following are the minimum actions or options, which should be investigated:

- Adjust project schedules to allow for right of way issues to be resolved
- Adjust or change the proposed right of way which will accommodate ODOT's project and the relocation or installation work of the utilities
- Determine if the utilities will need to change their designs to accommodate the adjustments or changes to the proposed right of way.

One or all of the previously mentioned actions or options may need to be used. It should also be understood that the above actions may cause a financial burden to those involved and possible reimbursement for redesign or relocation may be required. Cost resolution due to redesign or additional relocation work should be agreed upon by all parties involved prior to any redesign work or additional relocation work.

2.16 COMPLETE RIGHT-OF-WAY ACQUISITION

All right of way issues of ODOT, utility companies involved are to be resolved and acquired before beginning the utility installation and relocation work. It is anticipated that major problems in this phase will be rare since all involved should have investigated and analyzed their right of way needs during the Project Development Phase. If problems or conflicts develop during the right of way acquisition process, ODOT must notify the utility companies involved immediately. ODOT will then determine, with the input from all involved, what proper course of action must be taken. The following are the minimum actions or options, which should be investigated:

- Adjust project schedules to allow for right of way issues to be resolved
- Adjust or change the proposed right of way which will accommodate ODOT's project and the relocation or installation work of the utilities
- Determine if the utilities will need to change their designs to accommodate the adjustments or changes to the proposed right of way.

PHASE 3 – RELOCATION AND CONSTRUCTION

| PURPOSE: | CONTENT REFERENCE: |
|---|--|
| <ul style="list-style-type: none"> Facilitates the coordination of all construction activities | 3.01 Pre-Relocation Meeting |
| <ul style="list-style-type: none"> Minimizes conflicting activities which might cause delays | 3.02 Utility Relocation Confirmation |
| <ul style="list-style-type: none"> Minimizes additional costs incurred by either ODOT or utility | 3.03 Pre-Bid Meeting |
| <ul style="list-style-type: none"> Minimizes any inconvenience to public | 3.04 Utility Pre-Construction Meeting (optional) |
| | 3.05 Pre-Construction Meeting |
| | 3.06 Construction Progress Meetings |
| | 3.07 Field Conflict Resolutions Process |
| | 3.08 Post-Construction Meeting (optional) |

PROJECT DEVELOPMENT MODEL

RELOCATION & CONSTRUCTION

PHASE THREE

THE PURPOSE OF THE RELOCATION AND CONSTRUCTION PHASE IS TO FACILITATE THE COORDINATION OF ALL CONSTRUCTION ACTIVITIES BY ODOT AND THE OTHER AFFECTED PARTIES. THIS SHOULD MINIMIZE CONFLICTING ACTIVITIES, WHICH MIGHT CAUSE DELAYS IN THE COMPLETION OF THE PROJECT, ADDITIONAL COSTS TO BE INCURRED BY EITHER ODOT OR OTHER AFFECTED PARTIES, OR ADDED INCONVENIENCE TO THE PUBLIC.

3.01 PRE-RELOCATION MEETING

Prior to any required relocation of utility facilities, ODOT’s Project leader may schedule a Pre-Relocation Meeting with all the affected utilities. At this meeting, the utilities' relocation schedules will be reviewed to (1) eliminate any relocation schedule conflicts, and (2) determine if the relocation work can be facilitated by the utilities using the same contractors and sharing the costs. In addition, delays to the relocation schedules experienced by the utilities will be reviewed. Should additional time frames be necessary for relocations due to such delays, ODOT and the utilities involved will evaluate project timelines and determine if the utility relocation work will affect the project schedule.

3.02 UTILITY RELOCATION CONFIRMATION

After the utilities have completed the relocation of their facilities, they will provide the RUS with confirmation that the facilities have been relocated as per their relocation plans. If the utilities have not submitted their confirmation, ODOT will submit a written request to those utilities requesting confirmation of relocation completions.

3.03 PRE-BID MEETING

After the project bid advertisement and prior to the project bid opening, ODOT's Project Manager may hold a Pre-Bid Meeting to explain and clarify the project plans and/or specifications, and to answer any questions the bidders may have. Affected utilities will conduct a presentation of their relocation project for the prospective bidders if requested. Utility designs and/or as-built records (installation records) for utility relocation work shall be brought to the meeting and made available to the contractor.

The Utility's relocation plans and schedule is based on ODOT's plans, scheduling and staging of the project. Any deviation from ODOT's plans, schedule, and/or staging could have significant impacts on the utility's relocation schedule and plans. The perspective bidders need to take the above into consideration in preparation of their bids.

3.04 UTILITY PRE-CONSTRUCTION MEETING (optional)

After the project bid award and prior to the Pre-Construction meeting, the Contractor will organize, hold and conduct a meeting with all involved utilities. This meeting will provide utilities the opportunity to make a presentation regarding their project involvement, construction coordination, and to answer any questions. Utility designs and/or as-built records (installation records) for utility relocation work shall be brought to the meeting and made available to the Contractor. The Contractor shall incorporate the utilities schedules into the required project schedule, time scaled bar chart, or detailed critical path method network schedule, as required by the contract.

3.05 PRE-CONSTRUCTION MEETING

ODOT's Project Manager will hold a Pre-Construction Meeting with all involved parties including the Contractor and all utilities that have facilities within the contract limits. The meeting will provide for the discussion of the construction schedule, potential problems, and needed coordination. This meeting will provide utilities the opportunity to make a presentation regarding their project involvement, construction coordination, and to answer any questions. Utility designs and/or as-built records (installation records) for utility relocation work shall be brought to the meeting and made available to the Contractor.

3.06 CONSTRUCTION PROGRESS MEETINGS (optional)

The Contractor will conduct Construction Progress Meetings with ODOT on a regular basis (i.e., weekly, monthly, etc.) throughout the project Construction Phase. These meetings will be used to monitor the construction progress and to address any problems that may arise. The involved utilities shall be requested to attend these meetings to provide answers to utility questions. The Contractor will notify the utilities of regularly scheduled Construction Progress Meetings and identify utility conflict concerns and their locations.

3.07 FIELD CONFLICT RESOLUTIONS PROCESS

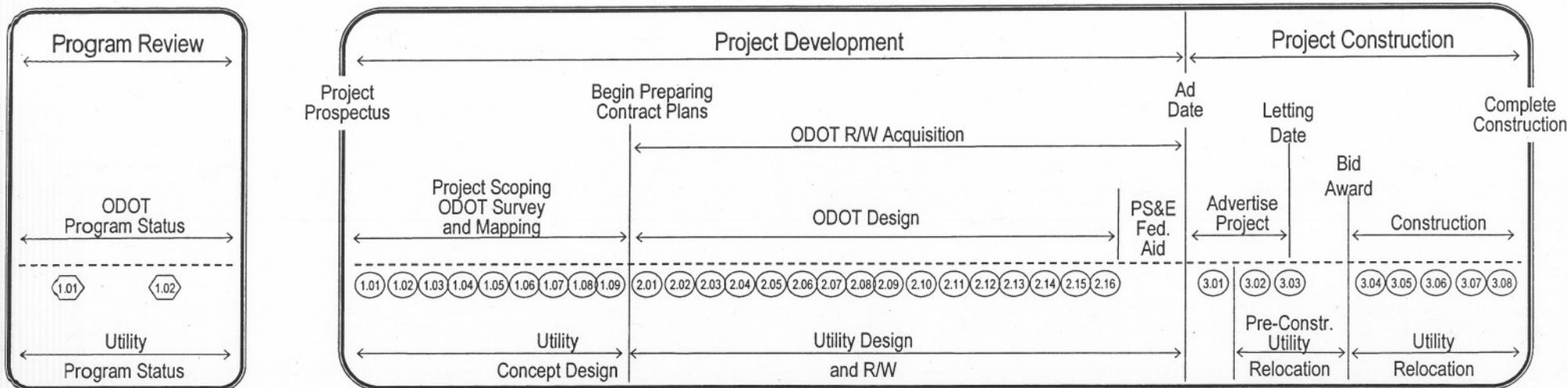
The intent of the Field Conflict Resolution Process is to ensure prompt responses from all affected parties to resolve any unanticipated utility conflicts discovered in the field. The goal is to ensure that all parties cooperate and give their best effort to avoid delays to the project schedule or other problems, which could result in potential claims. Any potential monetary claims shall be identified at the beginning of the Field Conflict Resolution Process.

Upon determining a field conflict which will affect construction, timing of work or require additional facility relocations, ODOT's Project Manager shall be notified immediately and a field meeting with all affected parties will be scheduled as soon as possible. Those attending the field meeting should have sufficient authority to make reasonable decisions regarding changes or modifications to project plans. This meeting should consist of fact finding, seeking prompt and reasonable alternatives and reaching agreements on the course of resolution. ODOT's Project Manager should document the findings/resolutions and record them with the project file.

3.08 POST-CONSTRUCTION MEETING (optional)

A Post-Construction Meeting may be scheduled and hosted by ODOT's Project Manager to critique the project from inception to completion. ODOT's Project Manager will use this meeting to pinpoint those items that made the project successful and those areas where adjustments to increase the efficiency of the project development procedure are needed. Various utilities may be requested to attend. A summary of the Post-Construction Meeting will be submitted by ODOT's Project Manager to ODOT's Railroad & Utility Engineer and all other interested parties.

ODOT PROJECT MODEL WITH UTILITIES



Program Review

- 1.01 ODOT- Area & Utilities Program Status Meetings
- 1.02 Internal Communications & Coordination

Project Development

- 1.01 Define General Scope, Prepare Draft Project Prospectus
- 1.02 Identify Utilities (Existing & Proposed)
- 1.03 Utilities Participation in Scoping Trip
(Standard Letter w/ RSVP)
- 1.04 Scoping Trip with Stakeholders
- 1.05 Define Project Core Team Members
- 1.06 Begin Field Survey & Critical Utility Designation
- 1.07 Refine Project Scope
- 1.08 Define Level of Utility Involvement
(Deliverables & Commitments)
- 1.09 Complete Field Surveys & Utility Designations

Project Development

- 2.01 ODOT's Concept Plans (30% Submittal)
- 2.02 Utility Review & Response / Data Scoping (Team Meeting)
- 2.03 Begin Right-of-Way Acquisition
- 2.04 Concept Staging & Drainage (Team Meeting)
- 2.05 Refine Critical Utility Conflicts with "3D" Data
- 2.06 First Notice (Utility Conflict Letter)
- 2.07 Begin Utility Design
- 2.08 ODOT Preliminary Plans (70% Submittal)
- 2.09 Utility Review and Response (Team Meeting)
- 2.10 Complete Utility Design
- 2.11 Schedule Commitments (Team Meeting)
- 2.12 Second Notice (Utility Schedule Requirements Letter)
- 2.13 Utility Permit Applications
- 2.14 ODOT's Advanced Plans & Specs (95% Submittal)
- 2.15 Plans-In-Hand & Utility Response (Team Meeting)

Project Construction

- 3.01 Pre-Relocation Meeting
- 3.02 Utility Relocation Confirmation
- 3.03 Prebid Meeting
- 3.04 Utility Pre-construction Meeting (Optional)
- 3.05 Pre-construction Meeting
- 3.06 Construction Progress Meetings
- 3.07 Field Conflict Resolution Process
- 3.08 Post-Construction Meeting (Optional)

DRAFT

ODOT's Utility Coordination Matrix (Agreements Summary: Utility Involvement & Date Commitments)

PROJECT NAME _____ COUNTY _____ HWY _____ KEY # _____

AREA _____ AREA MANAGER _____ PROJECT LEADER _____

Legend

| Utility Meeting Involvement | Project Team Involvement | Responsibilities | Frequency of Utility Progress Meetings |
|---|---|--|---|
| Yes = Request to attend this meeting No = Prefers not to attend this meeting Req'd = All utility agreement that attendance is required | A = Full membership B = Attendance as necessary C = Minutes only D = Advisory membership | PL = ODOT Project Lead RUS = ODOT Region Utility Specialist UTIL = Utility Project Lead ODOT = ODOT Designer PM = ODOT Construction Project Manager | Wkly = Weekly MO = Monthly As Needed |

| ID | Task | ODOT Est. complete date | Responsibility | | | | | | |
|------|---|-------------------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | | | | Power | Water | Sewer | Phone | Cable | City/Co. |
| 1.03 | Utilities invited to scoping meeting | (date) | PL | | | | | | |
| 1.04 | Project scoping meeting or trip (prospectus) | (date) | PL | (Req'd) | (Req'd) | (Req'd) | (Req'd) | (Req'd) | (Req'd) |
| 1.05 | Define project team and extent of each utility's meeting involvement. | | PL | (A, B, C, or D) |
| X | Utility maps & facility information from utilities (based on scoping meeting) | | UTIL | (date) | (date) | (date) | (date) | (date) | (date) |
| X | Utility report (analysis of info by RUS) | (date) | RUS | | | | | | |
| 1.06 | Begin survey & critical utility designation | (date) | ODOT, UTIL | | | | | | |
| 1.07 | Scope distribution (utility report & prospectus to all affected utilities) | (date) | RUS | | | | | | |
| X | Concept design presentation meeting | (date) | PL, RUS | Attend (yes, no) |
| 1.08 | Define level of utility involvement, agreement on pre-design utility locating (potholing to develop base map) | (date) | PL, RUS, UTIL | Attend (yes, no) |
| 1.09 | Complete field surveys and utility location | (date) | ODOT, UTIL | | | | | | |
| X | Utility response on project scope | (date) | UTIL | (date) | (date) | (date) | (date) | (date) | (date) |

| ID | Task | ODOT Est. complete date | Re-sponsibility | Power | Water | Sewer | Phone | Cable | City/ Co. |
|------|---|-------------------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | | | | | | | | | |
| X | Final project scope (revised utility report & prospectus) lock-in schedule and budget | (date) | PL | | | | | | |
| 2.01 | First submittal (30% plan) distributed to all utilities | (date) | PL, RUS | | | | | | |
| 2.02 | Meeting for utility response to 30% submittal | (date) | UTIL | Attend (yes, no) |
| 2.05 | Refine critical utility conflicts w. 3D data | (date) | ODOT | | | | | | |
| 2.06 | Utility conflict list sent to utilities (first notice) | (date) | RUS | | | | | | |
| 2.07 | Utilities begin their design | | UTIL | (date) | (date) | (date) | (date) | (date) | (date) |
| 2.09 | Design presentation and review meeting (70% preliminary plans) | (date) | PL | Attend (yes, no) |
| X | Utility response to second submittal meeting at project team meeting | | UTIL | (date) | (date) | (date) | (date) | (date) | (date) |
| 2.10 | Utilities complete their design—to ODOT designer | | UTIL | (date) | (date) | (date) | (date) | (date) | (date) |
| 2.11 | Project team meeting/ schedule commitments | (date) | PL, RUS, UTIL | Attend (yes, no) |
| 2.12 | Confirmation of utility relocation schedule (second notice) | (date) | RUS | | | | | | |
| 2.13 | Utility permit applications | | UTIL | (date) | (date) | (date) | (date) | (date) | (date) |
| 2.14 | Advanced plans & specs submittal (95% plans & specs) | (date) | PL | | | | | | |
| 2.15 | Plans in hand & utility response meeting | (date) | PL, RUS | | | | | | |
| 2.16 | Complete R/W acquisition | (date) | | | | | | | |
| 3.04 | Utility pre-construction meeting | (date) | PL, RUS | (Req'd) | (Req'd) | (Req'd) | (Req'd) | (Req'd) | (Req'd) |
| 3.05 | General pre-construction meeting | (date) | PL, PM, RUS | Attend (yes, no) |
| 3.06 | Utility project progress meetings | | PM | (freq.) | (freq.) | (freq.) | (freq.) | (freq.) | (freq.) |
| | Initials | | | | | | | | |