

January 2015

RICHLAND COUNTY UTILITY COORDINATION MANUAL



RICHLAND COUNTY

UTILITY COORDINATION MANUAL

FOR

RICHLAND COUNTY CONSTRUCTION PROJECTS

EFFECTIVE DATE: JANUARY 2015

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This document was prepared by Hussey, Gay, Bell & DeYoung, Inc.



Section 1 - Introduction

1.1 Abbreviations and Definitions

Betterment – Any upgrading of the utility being relocated that is not attributable to the highway construction and is made solely for the benefit of and at the election of the utility such as increasing the capacity of the utility.

CEIC - Construction Engineering and Inspections Consultant – Person or team of persons responsible for management, inspections, and documentation throughout construction.

CIP - Capital Improvement Project

CTIP – County Transportation Improvement Program

County – Richland County

DC – Design Consultant, Project Development Team, On-Call Engineer or Dirt Road Paving Team.

In-Contract Work – Refers to the inclusion of a utility relocation into the project documents for a County project.

In-kind relocation – Refers to relocating a utility with the same materials, size and generally the same location as the existing utility.

Joint Utility Memorandum of Understanding – Refers to an agreement between two (2) or more Utility Agency Owner's to install new facilities under the same installation and/or by the same contractor.

NIP - Neighborhood Improvement Project

Prior Rights – Proof or evidence that an Utility Agency Owner's facilities were installed prior to the Right of Way being originally purchased.

SCDHEC – South Carolina Department of Health and Environmental Control

SCDOT – South Carolina Department of Transportation

SUE – Subsurface Utility Engineering - Management of certain risks associated with utility mapping at appropriate quality levels.

UAO - Utility Agency Owner – Owner or Owner's agent for a privately, publicly, or cooperatively owned line, facility or system for producing, transmitting, or distributing communications, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, or any other similar commodity, including any fire or police signal system or street lighting system, which directly or indirectly serves the public. The term utility shall also mean the utility company inclusive of any wholly owned or controlled subsidiary.

UC - Utility Coordinator - Consultant designee that is responsible for the performance of all utility coordination procedures contained in this manual.

Utility Conflict – Refers to an area where a utility's location (either existing or proposed) is in close proximity to a proposed improvement making the installation of the proposed improvement unfeasible or eliminating the ability for maintenance on the utility.

1.2 Purpose and Need

This document describes in detail:

- The applicable procedures intended to provide the earliest liaison on a routine basis to ensure that all parties potentially affected by County CTIP, CIP and NIP projects share the same knowledge about these projects. These procedures are to be followed for all County construction projects inside the Rights-of-Way, including "accelerated" projects.
- Provides advanced planning actions necessary to promote exchange of technical data, which can affect choices of alternate schemes that may benefit public users.
- Establishes design practices that facilitate development of a cohesive working relationship between the County, DC's, UC and UAO's, which allows for custom features and design considerations, and helps ensure that all known utility issues are addressed and utilities are relocated properly prior to and during construction.
- Establishes procedures for design, funding, rights-of-way determination and acquisition, bidding, and construction phases. These procedures are intended to result in clarity of bids and commitments between contractors and UAO concerning working schedules.

These procedures are in place to clarify the roles and responsibilities of each party and ensure proper communication, cooperation, and coordination, which is crucial to minimization of utility conflicts and delay claims for County Projects. Minimization of such claims can result in cost savings.

For project control, copies of all correspondence between the UC and every affected UAO's shall be copied to the DC's project manager. In addition, the UC is required to furnish copies of the minutes of all meetings to those attending and to the County and DC.

These procedures are intended to be utilized by all Richland County Departments that are designing and constructing CTIP, CIP and NIP projects within County or SCDOT Rights-of-Way. Although various County departments may have CTIP, CIP and NIP project delivery processes that vary from those contained in this document, or similarly, some portions of these procedures may not apply to a particular project, the overarching intent is for each department to initiate and maintain effective procedures for coordinating the work being done by the County and the UAO for the duration of all CTIP, CIP and NIP projects within the affected Rights-of-Way.

In addition, these procedures are intended for a comprehensive approach to utility coordination and relocation to reduce conflicts with utilities throughout construction. The UC shall determine when sections and/or documentation may not be necessary for a specific project. See [Section 1.5 Accelerated Projects](#).

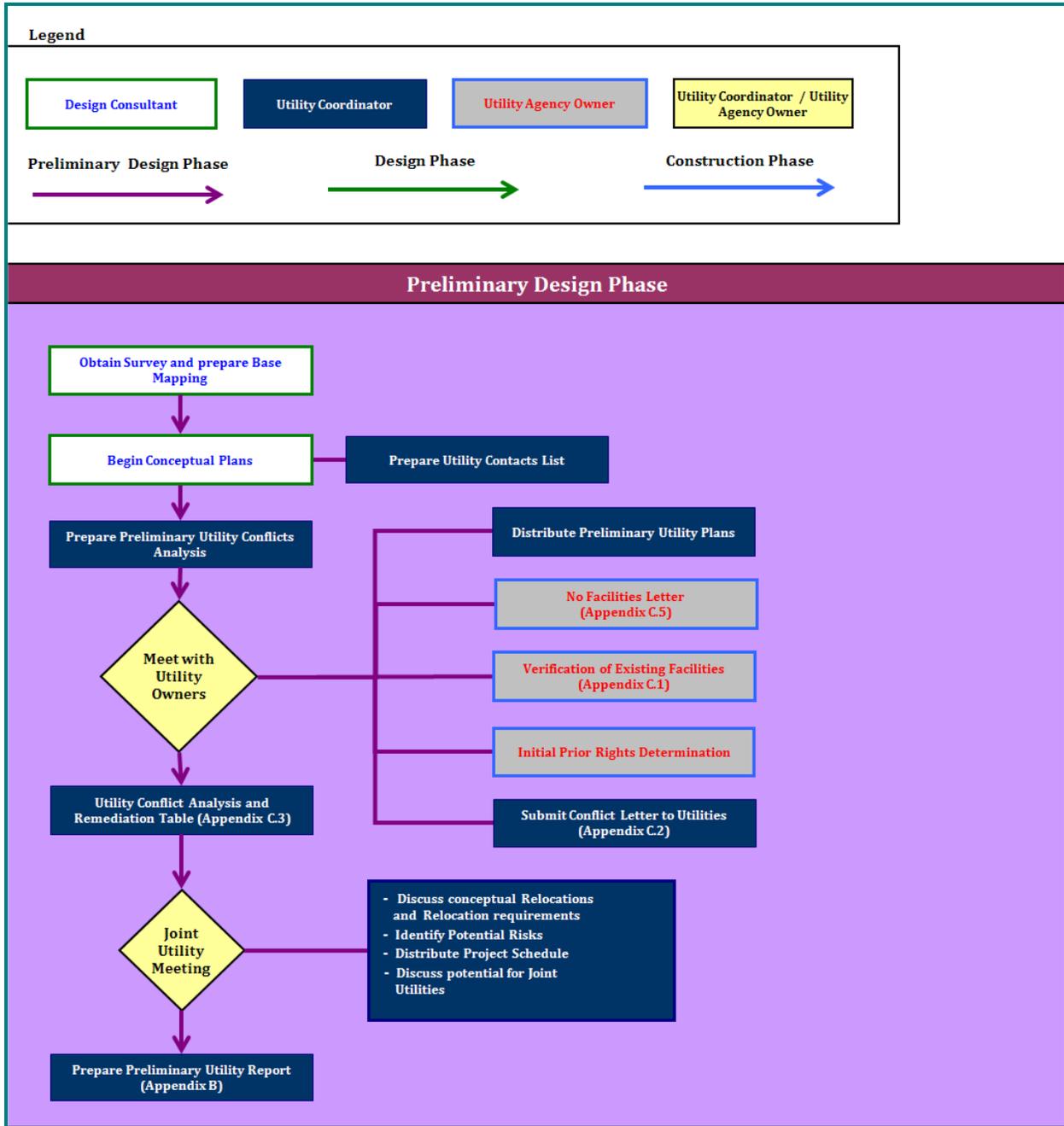
Users of these procedures must be familiar with the SCDOT's Utility Accommodation Guide (See [Section 2.1.3 Local, State and Federal Regulations](#)) which defines the policies and standards of Richland County for accommodation of private and public utilities. The County's Transportation Department is the conduit for information for all UAO's. As such, the Transportation Department shall assist County Departments in resolving disputes, conflicts or claims between the County and the UAO when an impasse develops during the execution of a CTIP, CIP or NIP project within County or SCDOT Right-of-Way.

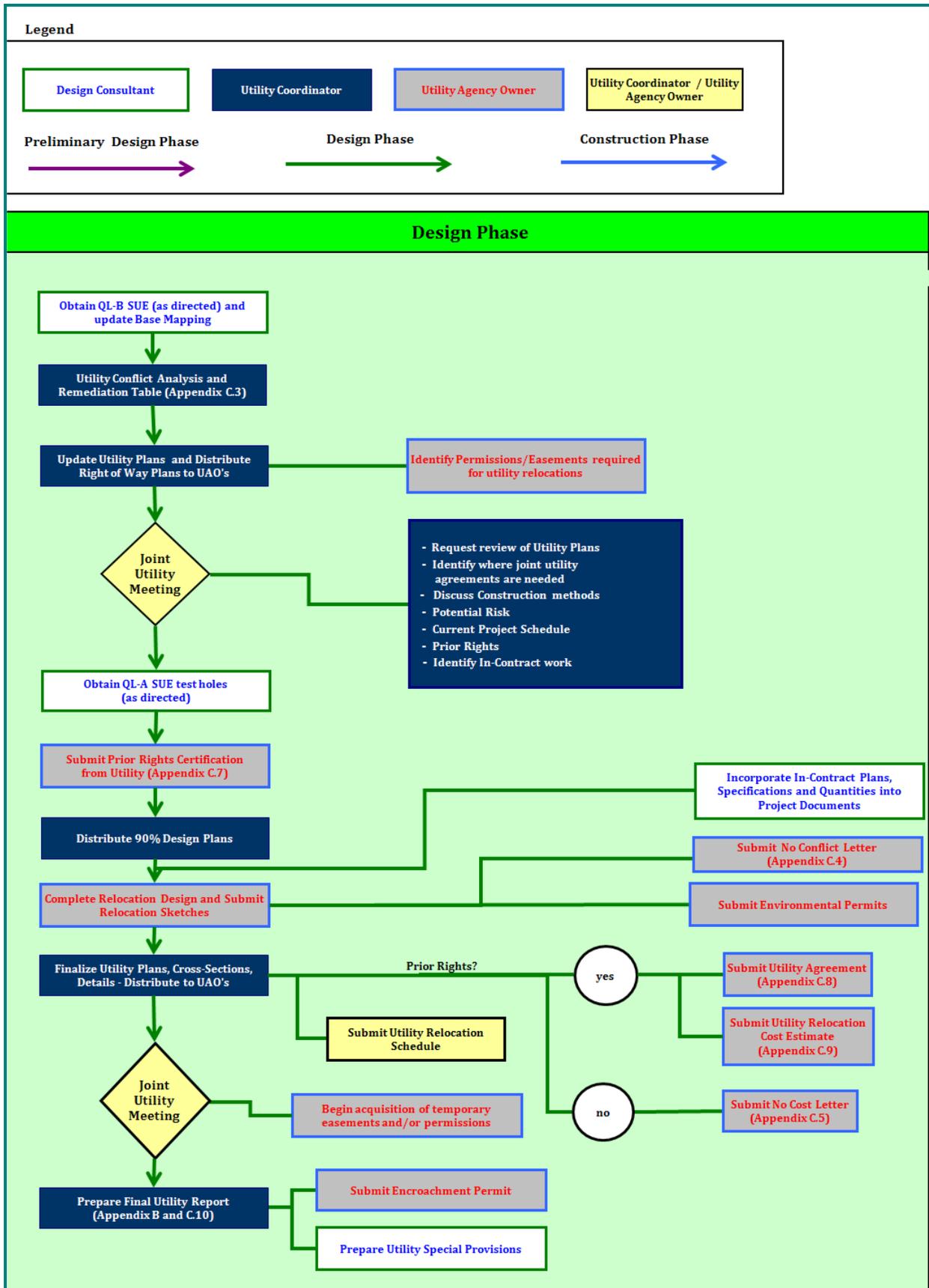
1.3 Utility Coordination Work Flow

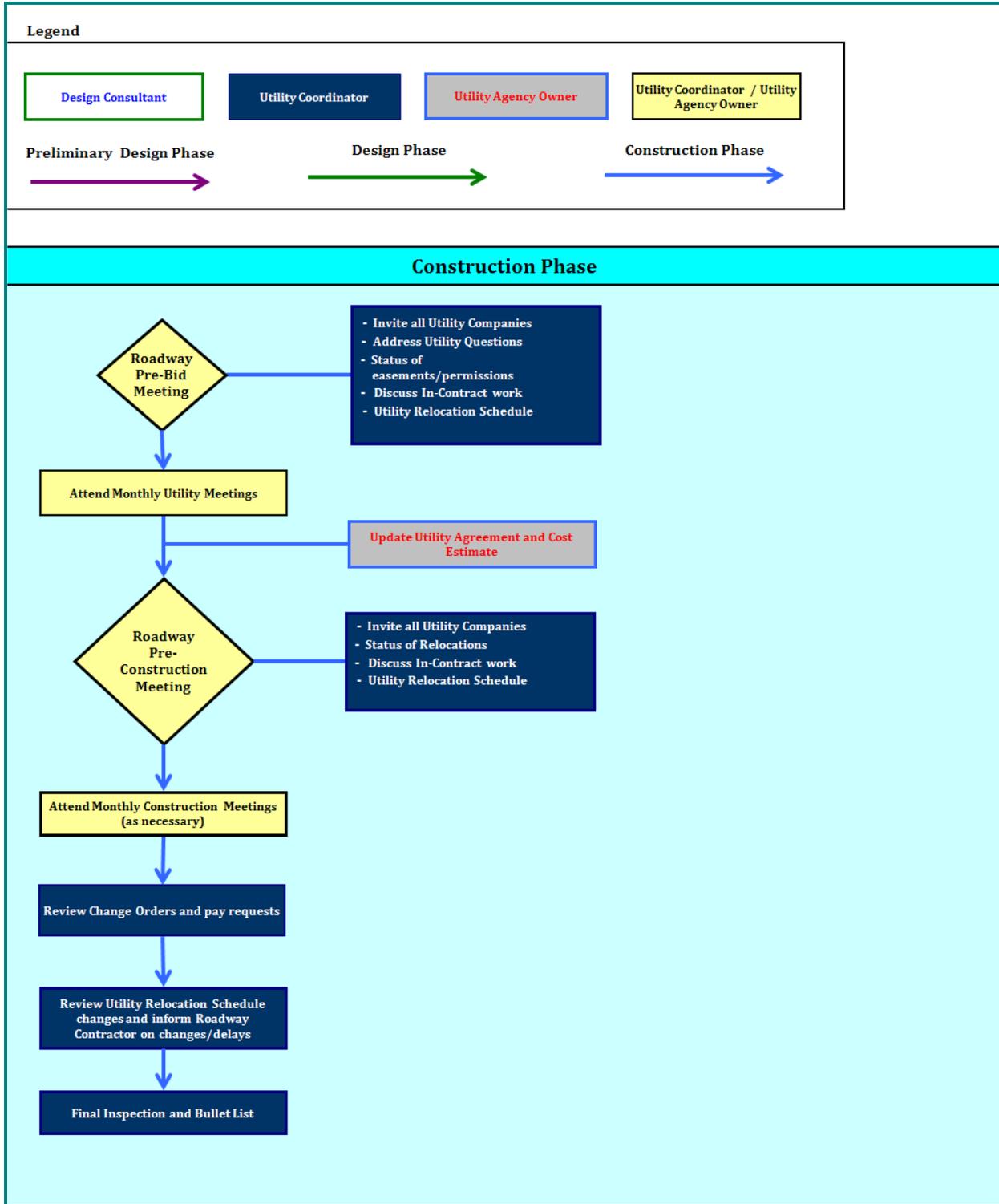
The following Work Flow Diagram provides an overview of the Utility Coordination Process for County projects. The Work Flow Diagram indicates who is responsible for each step during the utility coordination process however is not intended to be all inclusive of the roles and responsibilities of the UC,

DC or UAO. Project-specific issues may arise which require additional information from the UAO's to prevent the delay of the project.

Utility Coordination Workflow Chart







The following checklist is intended to replicate the Work Flow Chart and is to be used by all parties involved with each project. It is the responsibility of each party to ensure their respective checklist items have been completed. The UC will keep record of the checklist and will coordinate with the necessary parties to ensure all items have been completed. The project will not commence construction until all applicable items on the checklist have been completed.

Utility Coordination Checklist

Checklist Item Description		Responsibility
Preliminary Design Phase	<input type="checkbox"/> Obtain Survey and prepare Base Mapping	DC
	<input type="checkbox"/> Prepare Utility Contacts List	UC
	<input type="checkbox"/> Prepare Preliminary Utility Conflicts Analysis	UC
	<input type="checkbox"/> Meet with Utility Owners	UAO / UC
	<input type="checkbox"/> Distribute Preliminary Utility Plans showing existing utilities base mapping	UC
	<input type="checkbox"/> Verification of Existing Facilities (Appendix C.1)	UAO
	<input type="checkbox"/> Submit Conflict Letter to Utilities (Appendix C.2)	UC
	<input type="checkbox"/> Initial Prior Rights determination	UAO
	<input type="checkbox"/> Utility Conflicts Analysis and Remediation Table (Appendix C.3)	UC
	<input type="checkbox"/> Joint Utility Meeting (1)	UAO / UC
	<input type="checkbox"/> Prepare Preliminary Utility Report (Appendix B)	UC
Design Phase	<input type="checkbox"/> Obtain QL-B SUE (as directed) and update Base Mapping	DC
	<input type="checkbox"/> Utility Conflict Analysis and Remediation Table (Appendix C.3)	UC
	<input type="checkbox"/> Update Utility Plans (Appendix A) and Distribute Right of Way Plans to UAO's	UC
	<input type="checkbox"/> Identify Permissions/Easement requirements	UAO
	<input type="checkbox"/> Joint Utility Meeting (2)	UAO / UC
	<input type="checkbox"/> Obtain QL-A SUE test holes (as directed)	DC
	<input type="checkbox"/> Submit Prior Rights Certification from Utility (Appendix C.7)	UAO
	<input type="checkbox"/> Distribute 90% Design Plans	UC
	<input type="checkbox"/> Complete Relocation Design and Submit Relocation Sketches	UAO

Design Phase	<input type="checkbox"/>	Submit No Conflict Letter (Appendix C.4)	UAO
	<input type="checkbox"/>	Submit Environmental Permits	UAO
	<input type="checkbox"/>	Finalize Utility Plans (see Utility Plan Checklist - Appendix A) and Distribute to UAO's	UC
	<input type="checkbox"/>	Submit Utility Relocation Schedule	UAO / UC
	<input type="checkbox"/>	Submit Utility Agreement (Appendix C.8)	UAO
	<input type="checkbox"/>	Submit Utility Relocation Cost Estimate (Appendix C.9)	UAO
	<input type="checkbox"/>	Submit No Cost Letter (Appendix C.5)	UAO
	<input type="checkbox"/>	Joint Utility Meeting (3)	UAO / UC
	<input type="checkbox"/>	Begin acquisition of permissions/easements	UAO
	<input type="checkbox"/>	Prepare Final Utility Report (Appendix B and C.10)	UC
	<input type="checkbox"/>	Submit Encroachment Permit	UAO
	<input type="checkbox"/>	Prepare Utility Special Provisions	DC
Construction Phase	<input type="checkbox"/>	Roadway Pre-Bid Meeting	UAO / UC
	<input type="checkbox"/>	Attend Monthly Utility Meetings	UAO / UC
	<input type="checkbox"/>	Update Utility Agreement and Cost Estimate	UAO
	<input type="checkbox"/>	Roadway Pre-Construction Meeting	UAO / UC
	<input type="checkbox"/>	Attend Monthly Construction Meetings (as necessary)	UAO / UC
	<input type="checkbox"/>	Review Change Orders and Utility Agreement pay requests	UC
	<input type="checkbox"/>	Review Utility Relocation Schedule changes	UC
	<input type="checkbox"/>	Final Utility Inspection and Bullet List	UC

1.4 Accelerated Projects

As mentioned previously, the procedures detailed and illustrated in the Utility Coordination Work Flow are intended to be comprehensive in order to ensure each project has clearly identified where utility conflicts exist and has successfully remediated each conflict without impact to the project schedule. Some County CTIP, CIP or NIP projects may have little to no impact to utilities allowing for an accelerated utility coordination process. Early in design of a project, the UC is to determine the extent of utility coordination required and shall indicate to the DC where specific sections of the Utility Coordination Work Flow may be reduced or eliminated.

Section 2 Standard Procedures

2.1 Preliminary Design:

2.1.1 Base Mapping

The DC's survey crew files a dig locate request with South Carolina 811 (Palmetto Utility Protection Service, Inc.) at three (3) full working days prior to locate services by calling SC811 by dialing 811 or (888) 721-7877. A SC811 representative will record the location of the project site and notify Utility Agency Owner's UAO(s) of requests for locates. Each UAO will then send either one of their employees or a contract locator to the project site to mark the location of their underground facility lines (locates).



South Carolina 811 only notifies those utility companies that are members of the service. It is possible that some utilities will not be located and further research and contacts must be made. An example would be SCDOT or City electrical facilities serving illumination, traffic signals or traffic monitoring devices. If a notified UAO fails to mark their facility within the three (3) business days, the survey crew should contact the utility owner directly. All correspondences should be documented in the event that the UAO fails to mark their facilities.

The UAO is required to provide a response in 360 Positive Response (<http://www.sc1pups.org/homeowners/PositiveResponse.aspx>) prior to the expiration of the required notice period. Survey crews can assure that locates have been completed by checking with South Carolina 811 for Positive Response. By June 7, 2015 360 Positive Response will be a mandatory part of damage prevention in South Carolina. 360 Positive Response is an automated information system that allows excavators, locators, operators, and other interested parties to determine the status of a locate request until excavation is complete.

Once the above-ground features and locates previously described have been surveyed, the Design Consultant's (DC) surveyor will prepare a Base Map (see below for Base Map minimum requirements) for use throughout the project. The DC will provide CAD files as well as signed and sealed PDF copies of the survey to the County and UC. In addition, the DC will provide a list of the UAO's identified through the locates process to the County and UC.

The information gathered and displayed on the base map is dependent upon the type and complexity of the project. The UC should discuss what information they will require for their conflict analysis with the DC prior to the survey if possible. A completed base map should include the following:

- Slope lines
- Existing Road centerlines
- Existing roadbed
- Existing Right of Way and property lines
- Existing utilities that have been marked and located by UAO's
- Utility Legend with corresponding UAO
- Lowest elevation of above ground utility crossings
- Depth of accessible underground structures
- Existing Easements

2.1.2 Verification of Existing Facilities

The UC will meet with UAO's located within the project limits to provide a copy of the base mapping and a letter of request to review and verify existing facilities (**Appendix C.1**). The UC reviews the utility locate information and works with the utility owners to verify completeness and accuracy. Depending on the density of utilities on a project site, any or all of the following actions may be necessary to verify the utility data on the base map:

- Complete a project onsite visit with map to confirm ownership of mapped above ground and underground utility facilities. Above ground confirmation includes noting ownership and joint use on poles and direction of aerial lines. Underground confirmation includes ownership and continuity of underground facilities.
- Meet with utility facility owners to compare base map to their facility maps.
- The County may wish to proceed with additional horizontal and vertical data through Subsurface Utility Engineering (SUE)

Once Base Mapping has been reviewed and verified by the UAO and adjustments made by the DC, Preliminary Design and Engineering and development of a conceptual 30% set of plans will commence. The DC shall design the project considering the location of all utilities and attempt to "design around" utilities when possible.

2.1.3 Local, State and Federal Regulations

All utility relocations associated with County projects need to be compliant with local, state and federal regulations and any open intergovernmental agreements as well as the standards set forth in this document. At the inception of each project, the DC shall prepare a list of the regulations that will affect UAO's and utility relocations for that project. The UC will transmit that list to the UAO's prior to any relocation design or construction work beginning. The intent is to provide guidance to the UAO's however it is the responsibility of the UAO to research and have a full comprehensive understanding of the laws and regulations affecting utility relocations. Below is a list of some of the regulations affecting utilities within Richland County which are to be relocated within roadway rights of way.

All Roadways

- Code of Federal Regulations – Title 23, Chapter I, Subchapter G, Part 645

SCDOT-Owned Roadways

- Utility Accommodations Policy - http://www.scdot.org/doing/permits_Utility.aspx
- 2004 Construction Manual – General Provisions – Chapter 100 – section 105.6 – Cooperation with Utilities
- Highway Design Manual – Chapter 5 – Utility Coordination
- Inter-governmental Agreements and all Supplemental Agreements

Richland County-owned Roadways

- Road Design Standards Chapter 5.0.11 – Trenching requirements in Structural Zone
- County Ordinance 26.103(d)(10)c – Town and Country district. Place utilities underground not to disturb streetscape, planting strip or street trees
- County Ordinance 26.109(d)(9)b.12 – redevelopment district – streetscaping. Place utilities underground not to disturb streetscape, planting strip or street trees

City of Columbia-owned Roadways

- City of Columbia Utilities and Engineering Regulations Manual - <http://www.columbiasc.net/depts/utilities-engineering/docs/engregs/engregmanual.pdf>
- **All other utilities: City Ordinance - Chapter 22: Article V. Utility Installations in Streets**

2.1.4 Utility Conflict Analysis and Conceptual Remediation Table

Upon development of a set of 30% design plans, the UC will review and identify areas where existing utilities conflict with the proposed improvements illustrated on the 30% design plans and document on the Utility Conflict Analysis and Remediation Table (**Appendix C.3**). Utility Conflicts are defined in **Section 1.1 Abbreviations and Definitions**. Once utility conflicts have been identified, the UC shall submit the conflict list to the DC for review and verification. Using the design plans as a template, the UC shall prepare a set of Conceptual Utility Plans illustrating Base Mapping and conceptual improvements. See Utility Plan Checklist (**Appendix A**) for minimum requirements. The intent of the Utility Plans is to convey information provided by the DC and UAO on one (1) document for the purpose of identifying and remediating conflicts. The Utility Plans will be included in the Construction Plans as “For Information Only” and are not to be considered Utility Design Plans. Once Utility Plans have been prepared and the DC provides concurrence of the utility conflicts, the UC will provide a set of plans and the conflict list to each UAO for review as well as a letter to each utility in conflict (**Appendix C.2**). The typical review period for UAO’s is thirty (30) days, however review periods will be determined by the UC on a project-to-project basis.

If a utility responds via e-mail or submits a letter of either, "NO CONFLICT" (**Appendix C.4**) stating that the UAO has facilities within the project limits but will require no relocation or adjustment or "NO FACILITIES" (**see Appendix C.5**) stating that they have no facilities (or planned facilities) in the area, the County may terminate further notification to said UAO unless a plan change presents a need that was not previously addressed. However, it is recommended that updated plans or meeting notices be transmitted throughout the design phase.

Once UAO’s review period is complete, the UC shall meet with all UAO’s to discuss the project in depth. Suggested topics of discussion shall include:

- Description of project
- Utility Conflict Analysis and Conceptual Remediation Table
- Conflicts that present major risk

- Current Project Schedule
- Prior Rights (preliminary discussion but documentation not required at this point)
- Potential for Joint Utility Agreements

The UC shall provide instructions to the UAO to mark up one set of plans as Original Relocation Sketches showing their designs for relocations, adjustments, new installations, and existing utilities to remain, and provide approximate relocation durations for the UC to include on a draft Utility Relocation Schedule. These mark-ups are to be returned to the Designer within thirty (30) days, unless otherwise approved, for more complex projects the review period may be negotiated. Color coding for marked plans are as follows:

- **RED** - Abandon/Removal
- **GREEN** - Facilities to Remain
- **BLUE** - New Installations (Relocations)
- **BLUE DASHED** - Temporary Relocations
- **MAGENTA** – Vertical offsets only but no alignment change

2.1.5 Utility Meetings

It is the responsibility of the UC to determine the timing, frequency and content of Utility Meetings. The UC shall be responsible for coordination of each meeting including scheduling a meeting room and ensuring the appropriate attendees are invited and present. Attendees shall include at a minimum, the County, DC, UC and all UAO's. The UC shall be responsible for drafting Agenda, conducting each Utility Meeting, and distributing notes for review and concurrence. The UC's responsibilities also apply to all Utility Meetings throughout design and construction.

2.1.6 Prior Rights and Utility Relocation Cost

Where UAO's believe some or all of their existing facilities have prior rights on the project, the UAO is to research and provide documentation on the Prior Rights to the UC for review accompanied with a letter of certification (**Appendix C.7**). Prior Rights is defined in **Section 1.1 Abbreviations and Definitions**. In order for a UAO to sufficiently document Prior Rights on a project, the UAO must provide proof of prior rights in the form of a copy of easements, deed and plat information, or other documentation supporting prescriptive rights. The utility does not have to supply the easement documentation for all landowners located on the project but must, as a minimum, supply documentation of at least one easement for land at the beginning and terminus of the project as well two properties in the middle of the project area. However, if a pole location is questioned, the utility must supply the easement documentation for all locations questioned. In addition to the above, the utility must provide prior rights information for each landowner on both sides of the roadway where the utility crosses the roadway. In cases where the typical easement, deed and plat information is not available however the UAO firmly believes the utility was installed prior to the purchase of the roadway right-of-way, the UAO may submit the original roadway plans illustrating the existing utility in question.

Where the UAO has provided sufficient documentation of prior rights, the County will reimburse the utility for all cost associated for the in-kind relocations where the utility has prior rights. The UC shall identify, if possible, any conflicts and relocations that are high risk, which will impact the cost and schedule of the project, such as public or private utility costs that may be reimbursable by the County and any additional rights-of-way or easement costs.

Where deemed necessary, the County may determine some utility relocations can be funded by the County's project budget, regardless of the status of Prior Rights. Where Prior Rights have not been established and are not anticipated, UAO's shall assume all utility relocations required will be funded entirely by the UAO unless the County deems otherwise.

While the County is encouraging cooperation between public and private interests, the private UAO's are to remain responsible for their own utility facilities, including but not limited to rights- of-way and/or easement acquisition, design, re-design, removal, relocation, upgrading, and new facilities, including all associated costs where prior rights are not established.

2.1.7 Preliminary Utility Report

The UC shall prepare a Preliminary Utility Report using the information gathered previously. The Preliminary Utility Report will provide the County with an overview of the potential conflicts and risk resulting from the 30% Design Plans. **Appendix B** provides a sample outline of the Utility Report and should be used as minimum requirements for developing the report.



In summary, the Preliminary Utility Report should include the following items:

- Cover Sheet
- Table of Contents with tables, figures and appendices
- Project Description with Location Map
- List of Utilities within the Project Area with Contact List
- Utility Conflict Analysis and Conceptual Remediation Spreadsheet
- Explanation of Project Impacts and Resolutions
- Prior Rights and No Cost Determination
- Conceptual Utility Plans

2.2 Design Phase

2.2.1 Right of Way Plans

2.2.1.1 Subsurface Utility Engineering (SUE)

As a part of the development of the Right of Way Plans and dependant on the complexity of the project, the County may determine that SUE is necessary to accurately identify where conflicts may exist within the project limits. Any SUE information provided for the project should be **ASCE 38-02 compliant**. Using the conflicts list, the DC shall identify where SUE is required and provide SUE locations to the UC for review. The DC shall obtain SUE information and incorporate into the existing Base Mapping in accordance with SCDOT's SUE CADD Manual (web address below).

www.scdot.org/doing/technicalpdfs/cadd/sue/scdot_sue_cadd_dev_manual.pdf

The revised Base Mapping will be provided to the County and UC in CAD and PDF format for review. In addition, all data on SUE gathered through field work or provided by UAO's (such as mapping, record drawings, etc) shall be provided to the UC for further Utility Conflict Analysis.

2.2.1.2 Utility Conflict Analysis and Remediation

Once the design plans have been approved for Final Right of Way acquisition, the DC will provide a list of utility conflicts based on SUE information and changes to the proposed improvements. The UC will review the utility conflicts and will update the Utility Plans (described in Section 2.1.4) and revise/add utility relocations as necessary based on these changes. The UC will revise Utility Conflict Analysis and Remediation Chart and provide to the DC for review. It is the DC's responsibility to provide all of the necessary plans and supporting information to the UC for conflict analysis.

Once utility conflicts have been identified, the UC shall be responsible for coordinating verification of the conflicts by: 1) DC shall verify the conflict by means of horizontal and vertical locates, including SUE as necessary and as directed by the County; 2) where SUE information does not locate horizontal and vertical information on all conflicts or where SUE is not a part of the scope of the project, the UC will be responsible for coordinating with UAO's to provide mapping, record drawings, field measurements and test holes to locate horizontal and vertical conflicts.

When deemed necessary due to the complexity of utility relocations, the UC shall draft utility relocations on cross sections to assist with the coordination and conflict resolution process. Cross Sections will assist with determining where horizontal and vertical conflicts exist. In addition, the cross sections will assist with developing a Utility Relocation Schedule. See Section 2.2.2.4 on Utility Relocation Schedule.

2.2.1.3 Utility Meeting

The UC will coordinate a Utility Meeting with UAO's and Final Right of Way Plans (including Utility Plans) and Utility Conflict Analysis and Remediation Chart to the UAO's for review. Agenda items for discussion should include:

- Utility Relocation
- Potential required Easement and/or Permissions (See Section 2.2.2.5 below)
- Conflicts that present major impact to schedule
- Current Project Schedule
- Prior Rights
- Joint Utility relocations (when necessary)

Refer to Section 2.1.5 for UC's responsibilities for the coordination of Utility Meetings.

The UAO will review and identify within thirty (30) days (or as otherwise approved) where proposed relocations will not be possible due to unreasonable impacts to the cost of the relocation and/or major impacts to the schedule of the project.

When a project deems necessary for two (2) or more utilities to relocate facilities jointly, the UC to provide a Joint Utility Memorandum of Understanding (MOU) and submit to the utilities for review and signature. Necessity for a Joint Utility MOU may arise when the available space for relocation does not allow for each utility to install their facilities using typical trenching standards and joint utility trenching or duct banks are required. In addition, UAO's may choose to enter into a Joint Utility Agreement for a more cost effective relocation of facilities. The purpose of the MOU is to ensure full consensus from all UAO's that

are interested so there is a full understanding of the intent of each UAO on how their facility is relocated. Details of the MOU will be project-dependant and development of the language within the MOU will be the responsibility of the UAO's.

2.2.1.4 Right of Way, Easements and Permissions

Each UAO is to determine whether existing Rights-of-Way, easements and permissions proposed for the County's portion of the project are sufficient to accommodate utility relocations. This will be accomplished as early as possible during the design phase. The UAO's are responsible for acquiring easements and/or permissions as necessary to facilitate relocation of their facilities. Since acquisition of easements and permissions can be time consuming, the UAO shall commence acquisition early enough in the design process to ensure the overall project schedule is not impacted. When a Utility's proposed easements and/or permissions coincide with new Right of Way or Easements and Permissions being acquired by the County, the County may decide to facilitate the Utility easement and/or permission to accelerate the acquisition process.

2.2.2 Preliminary Construction Plans (90% Design Plans)

2.2.2.1 Subsurface Utility Engineering (SUE)

When necessary and as directed by the County, additional quality level A SUE (test holes) may be necessary as further documentation for accurately identifying utility conflicts within the project limits. The DC shall be responsible for identifying where test holes are needed and warranted. The DC's SUE consultant shall provide test hole information where directed and in accordance with [ASCE 38-02](#). The DC shall update and include the test hole information in the Base Mapping. The revised Base Mapping will be provided to the County and UC in CAD and PDF format.

2.2.2.2 Utility Conflict Analysis and Remediation

Once the Design plans have reached a reasonable level to be considered 90% design, the DC will revise/add Utility Conflicts and provide to the UC for review. The UC will update the Utility Plans and revise/add utility relocations as necessary based on these changes. The UC will revise Utility Conflict Analysis and Remediation Chart and provide to the DC for review.

UC will submit a revised Utility Conflict Analysis and Remediation chart and revised Utility Plans to the UAO for review. The UC will identify for the UAO, where changes have occurred since 60% design. The UAO will review and indentify with thirty (30) days, where changes to proposed relocations have significant risk and cannot be easily mitigated through simple plan revisions.

2.2.2.3 UAO Relocation Design

UAO's will provide revisions to Relocation Sketches to the UC, based on review comments and discussions on the original marked up set to Utility Plans ([See Section 2.1.4 Utility Conflict Analysis and Conceptual Remediation](#)). When a UAO prefers to utilize the Utility Plans as the Relocation Sketch, the UAO will provide the following statement on the Utility Plans, signed and dated. "[Utility Name] has reviewed these Utility Plans and the illustrated [Utility Name] relocations and agrees the relocations will mitigate conflicts with the County's proposed improvements and other utility relocations".



Once Relocation Sketches have been approved by the UC, the UC will provide notice to the UAO to proceed with design of the relocations. The UAO's are responsible for coordinating the design of the relocation of their respective facilities. The UC will be responsible for coordinating with the DC to provide

a copy of the Base Map as well as information on proposed improvements. Data transmitted to UAO's will typically be in PDF and CAD format. The UAO's relocation design shall include sufficient horizontal and vertical information for ensuring new conflicts with existing or proposed facilities are not created. Once relocation design is complete, UAO's shall submit revisions to the Relocation Sketches where necessary. The UC will review the Relocation Sketches and incorporate into the Utility Plans.

For utility relocations being included "In-Contract", the UAO shall ensure their Relocation Design conforms with the DC-prepared Construction Plans and specifications for the project. [See Section 2.2.3.3 for more details.](#)

The UC shall inform the affected utility that if the UAO fails to accomplish this design, the County will resolve the conflict. The cost of this resolution shall be the responsibility of the affected UAO, and the UAO shall reimburse the County for any expenses incurred.

2.2.2.4 Utility Relocation Schedule

Once Relocation Sketches have been received and reviewed, the UAO's are to prepare a Utility Relocation Schedule based on the project schedule, the utility's sequence of construction and UAO's preferences on when utility relocations should occur. The Utility Meetings can serve to facilitate discussion on sequencing relocation of each utility in order to ensure services are maintained and conflicts are not being created. However, it is the UAO's responsibility to discuss and coordinate with other UAO's as necessary to address issues that are not resolved in the Utility Meetings. The Utility Relocation Schedule will assist with coordination between utilities during construction especially where utilities are in close proximity and will possibly impact existing services. If at any time the project schedule is changed from the schedule that was provided to the UAO's, the UC shall inform the UAO of the change.



2.2.2.5 Environmental Permitting

Since environmental permitting is required with most projects, the County's preference is for utility relocations to be included with the project's environmental permitting to avoid delays to the project. When environmental permitting packages are being prepared, the DC should coordinate with the UC to gather information on utility relocations for inclusion in the package. However, the County may choose to exclude any or all utility relocations from the project's permitting. In addition, UAO's are not required to include utility relocations with the project's environmental permitting. If the UAO's preference is to obtain permitting individually, the UAO shall coordinate, fund and acquire the required permits early enough to avoid delays to the project schedule.

2.2.3 Final Construction Plans (100% Design Plans)

2.2.3.1 Final Utility Conflict Analysis and Remediation Chart

Once construction plans are 100% complete, the DC will provide a final list of utility conflicts for UC to review. The UC will make final revisions to the Utility Plans and revise/add utility relocations as necessary based on these changes. The UC will revise Utility Conflict Analysis and Remediation Chart and provide to the DC for review.

UC will submit a revised Utility Conflict Analysis and Remediation chart and revised Utility Plans to the UAO for review. The UC will identify for the UAO, where changes have occurred since 90% design. The UAO will review and make any final adjustments to Relocation Sketches within thirty (30) days.

2.2.3.2 Utility Meeting

The UC will coordinate a Utility Meeting with UAO's to go over the Final documentation that will be required for approval of the relocations. Agenda items for discussion should include:

- UAO Final Documentation (See [Section 2.2.3.3](#) below)
- Status of Easements and/or Permissions
- Current Project Schedule
- Utility Relocation Schedule
- Status of Joint Utility MOU's
- Status of incorporating In-Contract work

Refer to [Section 2.1.5](#) for necessary Attendees and UC's responsibilities for the coordination of Utility Meetings.

2.2.3.3 Final UAO Documentation

Utility Relocation Schedule

The UAO's will provide final Utility Relocation durations to the UC. The UC will develop a Utility Relocation Schedule based on durations, the project schedule, the project's sequence of construction and previous discussions on the utility relocations.

Utility Agreement and Cost Estimate:

For UAO's who have received approval of Prior Rights documentation, UAO to fill out Utility Agreement ([Appendix C.8](#)) and provide (2) original signed copies. In addition, UAO is to provide a detailed cost estimate ([Appendix C.9](#)) to accompany the Utility Agreement. If a UAO has a cost estimating template that has been used with SCDOT projects previously, the UAO should provide a blank copy to the UC for approval prior to submitting with the cost data. The cost estimate is to be used initially for budgeting purposes only. Cost of the relocation will be monitored throughout construction and pay requests approved as installed (See [Section 2.4](#) on construction inspections). As determined by the UC or at the request of the UAO, some utilities may be proposed for upgrade or a "Betterment" (See [Section 1.1 Abbreviations and Definitions](#)). The cost estimate spreadsheet ([Appendix C.9](#)) includes a separate sheet for estimating the cost of the Betterment. The UAO is to include the unit prices of the betterment on this sheet. The County will pay for the in-kind replacement and not the betterment of the utility, unless otherwise approved by the County. Inclusion of the detailed costs of the betterment is to provide the construction manager with sufficient data to compare in-kind vs. betterment quantities when approving pay requests.

For some projects, particularly within City Limits or Neighborhood Improvement Projects, the County may request a cost analysis of relocating above-ground utilities to underground locations. The UC to coordinate with UAO's to provide sufficient detail of cost to determine the feasibility of placing utilities underground.

For In-Contract Work, the UAO shall provide a copy of the Final Construction Plans and Specifications to the UC. Final Construction Plans shall be provided in pdf and CAD format. The UC will provide the utility's Final Construction Plans and Specifications to the DC for incorporation into the County's Project Documents.

No Cost Letter:

For UAO's who have not submitted Prior Rights documentation or Prior Rights were not approved, UAO is to submit a letter (**Appendix C.6**) to the UC indicating their facilities will be relocated at no cost to the County.

Encroachment Permitting:

As soon as all final adjustments have been made to utility relocations and the Utility Plans have been updated and are final (as determined by the DC and UC, the UAO is to prepare and submit an encroachment permit to the appropriate agency. No encroachment shall be submitted until the DC and/or UC have provided written authorization and approval of the utility relocations.



For **SCDOT** roadways, submit using the following link.

http://www.dot.state.sc.us/doing/permits_encroachment.aspx

Below is a link to SCDOT's street finder which can be used to determine if SCDOT currently maintains the roadway.

<http://www.scdot.org/getting/streetFinder.aspx>

For **City of Columbia** roadways, submit using the following link:

<http://www.columbiasc.net/depts/development-inspections/docs/extprod003165.pdf>

For **Richland County** roadways, submit using the following link:

<http://www.rcgov.us/Portals/0/Departments/DevServices/ENGLandDevelopment/Docs/RCEncroachmentPermitApplication.pdf>

2.2.3.4 Final Utility Report

The UC shall prepare a Final Utility Report using all of the information gathered previously. The Final Utility Report will provide the County with a full report of the data gathered from the Utility Coordination process during the design of the project. **Appendix B** provides a sample outline of the Utility Report and should be used as minimum requirements for developing the report. In summary, the Final Utility Report should include the following items:



- Cover Sheet
- Table of Contents with tables, figures and appendices
- Project Description with Location Map
- List of Utilities within the Project Area with Contact List
- Utility Conflict Analysis and Remediation Table
- Explanation of Project Impacts and Resolutions
- Prior Rights and No Cost Determination
- Prior Rights Certification (Appendix C.10)

- Consultant Certification and Recommendation
- Final UAO Documentation

2.2.3.5 Utility Special Provisions

The DC shall draft a set of Special Provisions that are unique for each project. The UC shall make the Final Utility Report available to the DC to use as reference for drafting Special Provisions. The intent of the Special Provisions is to provide information to the contractor on the Utility Coordination processes that have been conducted. In most cases, utility relocations shall occur prior to construction of the project however, some level of utility coordination will be required by the contractor. The County and DC shall determine the level of information provided in the special provisions depending on the complexity of the project and utility relocations and how they affect the project schedule.

For “In-Contract” Work, the UAO’s shall provide a copy of project specifications to the UC for incorporation into the County’s project documents. UAO’s to ensure project specifications meet the local, state and federal regulations as well as the requirements set forth in this manual. See [Section 2.1.3](#) for information on Regulations affecting utility relocations.

2.3 Construction Phase

The UC shall keep UAO’s informed of the progress and schedule of the project on a monthly basis through Utility Coordination meetings and/or memorandums. The UC will invite all affected UAO’s involved to a pre-bid meeting to address questions related to relocation plans and schedules. If questions arise by prospective bidders during the bidding phase that relate to a UAO relocation plans or relocation schedule, the DC will request that the UAO provide information to the County so that the question(s) can be given to the bidders in the form of a bid addendum. Once a bidder is awarded a project, the County will provide written notification of the scheduled project start date and the Notice to Proceed date to all affected UAO’s at a pre-construction meeting.

UAO’s are to be notified when the Utility Relocation Schedule may be revised during the bid or construction phases. During the final design, bid, and construction phases, the Utility Relocation Schedule may be negotiated between the UAO, Contractor, and County. The County will have final approval of the Utility Relocation Schedule.

Once the construction contract is awarded, the County will conduct a pre-construction/partnering meeting. All affected UAO’s involved shall be invited to the pre-construction meeting. Before or during this meeting, UAO’s may propose adjustments to their proposed construction schedules to coincide with the contractor’s proposed schedule. The contractor and the County must agree to said proposed schedule adjustments, provided the adjustments have no impact on the Project’s schedule and result in no additional cost to the County. An approved signed copy of the schedule shall be provided to the UAO by the UC.



The UC shall review the project construction phasing plan that includes all of the proposed utilities relocations and proposed new utilities to ensure all relocations have been scheduled. Once the advanced relocation work has been scheduled the UC will monitor and track all advanced relocation efforts prior to construction. Status reports to the County will be required bi-weekly.

The UC, in conjunction with the contractor and CEIC, shall properly coordinate and schedule with all of the UAO’s to prevent delays to the project. Following Notice to Proceed, the UC and the contractor shall schedule an initial progress meeting. Each UAO involved in the project shall be invited to this meeting to discuss each UAO’s relocation schedule. At that meeting, specific times, dates, and meeting frequency shall be set by the Project Manager for future meetings. Meeting frequency shall depend upon the

complexity of the project. These meetings shall continue until the CEIC, Contractor, and the affected UAO agree that the meetings are no longer warranted.

Prior to the start of any work, the previously submitted Encroachment Permit ([See Section 2.2.3.3 above](#)) must be approved in writing by the regulatory agency (owner of roadway). In addition, all other individual Environmental Permits must be approved and retained onsite at all times during utility relocations.

If the contractor or a UAO requests a construction schedule revision, the requesting party shall notify the UC. The UC shall notify all affected parties, and a meeting shall be held as necessary by the UC to determine what effects the revisions will have on the County, contractor, or UAO's. If any construction schedule revision request results in delays to the project, the UAO and the contractor shall negotiate with the County for said delays, and shall compensate the County, if appropriate, before the CEIC will agree to process a change order permitting the proposed schedule revision. The contractor shall review revisions and is responsible for verifying the location of existing utilities.

Where conflicts with utility relocations arise, the UAO shall submit any proposed changes (and related change orders) to the UC for review to ensure the proposed changes do not result in additional conflicts with the project. In addition, the UAO shall submit pay requests under a utility agreement to the UC prior to submission to the County for payment.

Upon substantial completion of the utility relocations, the UC or CEIC shall perform a final inspection and prepare a final list of items which need to be completed prior to final approval of the utility relocation.

Section 3 Appendices

Appendix A: Utility Plans Checklist

Appendix B: Utility Report Template

Appendix C: Forms

Appendix C.1: Verification of Existing Facilities

Appendix C.2: Conflict Letter to Utilities

Appendix C.3: Conflict Analysis and Remediation Table

Appendix C.4: No Conflict Letter

Appendix C.5: No Facilities Letter

Appendix C.6: No Cost Letter

Appendix C.7: Prior Right Certification from Utility

Appendix C.8: Utility Agreement

Appendix C.9: Utility Relocation Cost Estimates

Appendix C.9a: Utility In-Kind Cost Estimate

Appendix C.9b: Utility Betterment Cost Estimate

Appendix C.9c: Overhead to Underground Cost Analysis

Appendix C.10: Certification of Prior Rights

APPENDIX A

UTILITY PLANS CHECKLIST

Richland County Utility Coordination

Utility Plans Checklist

Richland County Project Number:

Road No.:

Road Name:

The following are minimum requirements of information to be included on Utility Plans:

<input type="checkbox"/>	Legend indicating designation of all utilities (existing and proposed)
<input type="checkbox"/>	Utility Contact List
<input type="checkbox"/>	Parcel numbers
<input type="checkbox"/>	Scale and North Arrow
<input type="checkbox"/>	Project Number, Road Number and Road Name
<input type="checkbox"/>	Existing Survey Data
<input type="checkbox"/>	Existing Utility Mapping
<input type="checkbox"/>	Existing Right of Way and Property Lines
<input type="checkbox"/>	Existing Easements
<input type="checkbox"/>	Road Names
<input type="checkbox"/>	Test Hole Information
<input type="checkbox"/>	Wetland and Environmental Survey
<input type="checkbox"/>	Roadway Centerline with Stationing
<input type="checkbox"/>	Roadway and Drainage Improvements
<input type="checkbox"/>	Proposed Construction Limits
<input type="checkbox"/>	Proposed Utility Relocations with labels
<input type="checkbox"/>	Proposed Right of Way Lines
<input type="checkbox"/>	Proposed Traffic Signal Poles
<input type="checkbox"/>	Proposed Guard Rail, Concrete Barriers and other
<input type="checkbox"/>	Legend indicating designation of all utilities (existing and proposed)

APPENDIX B

UTILITY REPORT TEMPLATE

[Preliminary or Final] Utility Report

Richland County Project No: [insert Project No]

[insert Road Name]

Prepared For:

**Richland County
2020 Hampton Street
PO Box 192
Columbia, SC 29201**

Prepared By:



**Hussey, Gay, Bell & Deyoung
1219 Assembly Street
Columbia, SC 29201**

[insert date]

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EXPLANATION OF PROJECT IMPACTS AND RESOLUTIONS	4
UTILITY RELOCATION SCHEDULE.....	4
PRIOR RIGHTS AND NO-COST DETERMINATION.....	4
CONSULTANT CERTIFICATION AND RECOMMENDATION (SECTION FOR FINAL UTILITY REPORT)	4

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TABLE 1 – UTILITY COORDINATION CHECKLIST

TABLE 2 - UTILITY CONTACTS

TABLE 3 – UTILITY CONFLICT ANALYSIS AND REMEDIATION SPREADSHEET

TABLE 4 – UTILITY RELOCATION SCHEDULE

LIST OF APPENDICES

APPENDIX A –UTILITY PLANS

APPENDIX B – MEETING MINUTES (FOR PRELIMINARY UTILITY REPORT) OR FINAL DOCUMENTATION (FOR FINAL REPORT)

APPENDIX C – PRELIMINARY UTILITY REPORT

INTRODUCTION

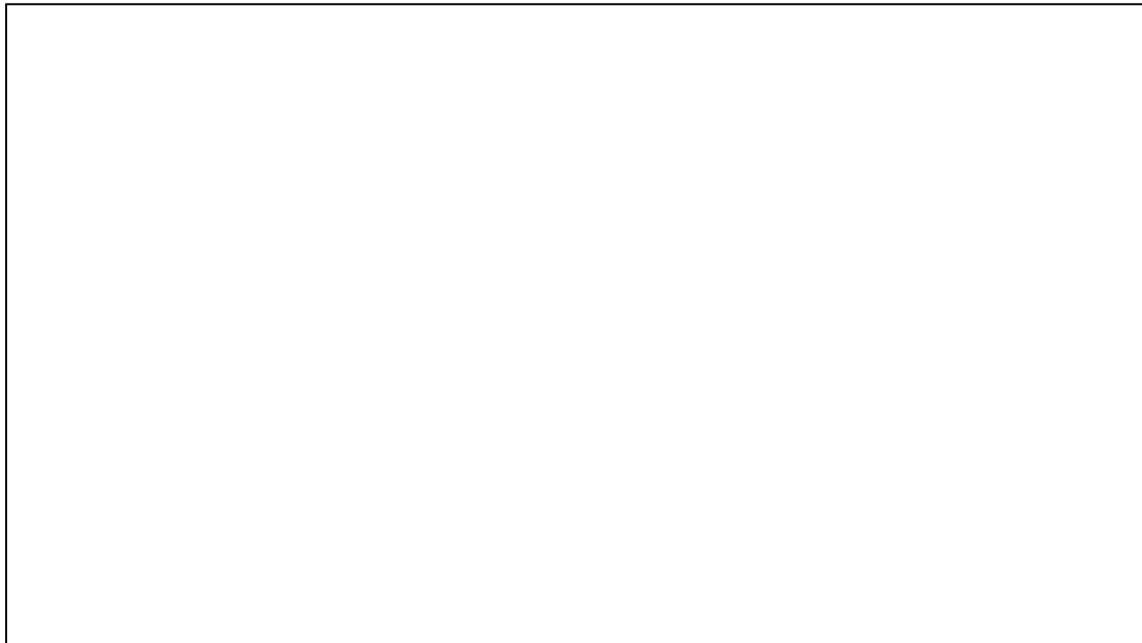
[provide a description of the project]

Table 1 – Utility Coordination Checklist

Each checklist item is indicated as complete by inclusion of a date received. If an item is not applicable, enter N/A.

	Relocation Sketch	Letter of No Cost	Utility Agreement	Cost Estimate	Final Relocation Sketch	Encroachment Permit	Comments
Utility Owner Name (type)	xx.xx.20xx	xx.xx.20xx	xx.xx.20xx	xx.xx.20xx	xx.xx.20xx	xx.xx.20xx	

FIGURE 1: SITE LOCATION MAP



LIST OF UTILITIES WITHIN THE PROJECT AREA

Table 2 - UTILITY CONTACT LIST

Richland County Project No:	Road Name:
Utility Contacts	
Telephone:	
Communication:	
Electric:	
Natural Gas:	
Water and Sewer:	

Table 3 - UTILITY CONFLICT ANALYSIS AND REMEDIATION TABLE

[SEE APPENDIX C.3 OF UTILITY COORDINATION MANUAL]
EXPLANATION OF PROJECT IMPACTS AND RESOLUTIONS

[description of project impacts for each utility. Describe how the impact is being remediated through protection and/or relocation. Describe and illustrate any special details necessary to facilitate the relocations. Include any special requests which have been approved by the County]

UTILITY RELOCATION SCHEDULE

[description, illustration or table of when each utility will be relocating]

PRIOR RIGHTS AND NO-COST DETERMINATION

[summary of prior rights determination for each utility]

CONSULTANT CERTIFICATION AND RECOMMENDATION (SECTION FOR FINAL UTILITY REPORT)

APPENDIX C

FORMS

Appendix C.1
[insert date here]

[Insert Utility Company information and key contact]

Ref: Richland County Project No:
Road No: _____, Road Name: _____

As you should be aware from utility locate requests, you have been identified as having facilities located within the limits of the referenced project. We have enclosed the Base Mapping this project including locations of your existing utilities. Please review base mapping showing the locations of [Utility Company] facilities and indicate where the existing locations are incorrect or inconsistent with your information.

In addition, please fill out the attached informational sheet and return to us promptly. Your attendance at meetings and cooperation throughout the utility coordination process is encourage and expected.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

[Utility Coordinator Contact name]
[Utility Coordinator Contact number]
[Utility Coordinator Contact email]

REQUEST FOR UTILITY INFORMATION

PROJECT NAME: _____

RICHLAND COUNTY PROJECT NUMBER: _____

ROAD NAME: _____ ROAD NUMBER: _____

UTILITY COMPANY: _____

CONTACT PERSON: _____

TITLE: _____ OFFICE PHONE: _____

ADDRESS: _____ MOBILE: _____

_____ FAX: _____

BRIEF DESCRIPTION OF THE UTILITIES IN THE PROJECT AREA:

Does the utility have Prior Rights? YES NO (Encroachment Permit)

IF YES, DOES THE UTILITY HAVE?

FEE SIMPLE

EASEMENT

OTHER: _____

Were you able to read the KMZ file provided with this form? YES NO

IF NO, PLEASE CONTACT US TO COORDINATE VIEWING THE DRAWINGS.

Can you provide as-built drawings for your utility (paper or electronic) and specify? _____

Once the preliminary drawings are available, do you prefer to receive electronic drawings or paper drawings (AutoCad, MicroStation, or PDF)? Please Specify _____

Can the utility feasibly begin relocation of existing utilities prior to the start of construction? _____

IF YES, ARE THERE ANY SPECIAL PROVISIONS? _____

IF NO, STATE REASON _____

Please provide this sheet to the Utility Coordinator via email or fax no later than xx/xx/20xx AND any supporting documentation no later than xx/xx/20xx

[Insert Utility Coordinator Company information and Logo]

Appendix C.2
[insert date here]

[Insert Utility Company information and key contact]

Ref: Richland County Project No:
Road No: _____, Road Name: _____

We have reviewed the Preliminary Design Plans dated [insert date on plans] for the referenced project and have determined that [Utility Company] facilities are in conflict within the project limits. Please find the enclosed preliminary list of conflicts for your review. Additionally we have enclosed the Preliminary Design Plans including locations of existing utilities to aid in your review of conflicts.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

[Utility Coordinator Contact name]
[Utility Coordinator Contact number]
[Utility Coordinator Contact email]

Richland County Transportation Penny

Richland County Project No:
Road Name:

Utility Conflicts Analysis and Remediation Chart

Appendix C.3

Utility Type	Utility Name	Road Name	Station (LT or RT)	Conflict	Remediation	Status
Water						
Sewer						
Power						
Communications						
Gas						

[Insert Utility Company information and Logo]

Appendix C.4
[insert date here]

Mr. Rob Perry
Richland County Penny Sales Tax
Transportation Director
2020 Hampton Street
Columbia, SC 29201

Ref: Richland County Project No:
Road No: _____, Road Name: _____

We have reviewed the Construction Plans dated [insert date on plans] for the referenced project and have determined that no conflicts exist with [Utility Owner name] facilities within the project limits. We do not plan to relocate any facilities as a part of the referenced project.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

[Utility Contact name]
[Utility Contact number]
[Utility Contact email]

[Insert Utility Company information and Logo]

Appendix C.5
[insert date here]

Mr. Rob Perry
Richland County Penny Sales Tax
Transportation Director
2020 Hampton Street
Columbia, SC 29201

Ref: Richland County Project No:
Road No: _____, Road Name: _____

We have reviewed the Construction Plans dated [insert date on plans] for the referenced project and have determined that no [Utility Owner name] facilities exist within the project limits.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

[Utility Contact name]
[Utility Contact number]
[Utility Contact email]

[Insert Utility Company information and Logo]

Appendix C.6
[insert date here]

Mr. Rob Perry
Richland County Penny Sales Tax
Transportation Director
2020 Hampton Street
Columbia, SC 29201

Ref: Richland County Project No:
Road No: _____, Road Name: _____

Brief Summary of Conflicts:

Brief Summary of Proposed Relocations:

[include date of Relocation Sketch]
[include date of Utility Plans and who prepared them]

Prior Rights/No Cost:

[Utility Owner name]'s existing facilities are located within the project limits of the Project Right-of-Way by encroachment only. [Utility Owner name] does not claim prior rights in the proposed project. All relocations of [Utility Owner name] facilities will be at No Cost to Richland County.

Relocation Schedule:

Based on relocations illustrated on the Utility Plans dated [insert date from Utility Plans], we anticipate the [Utility Owner name] relocations to be completed within [insert relocation duration here] days upon receiving written approval from Richland County.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

[Utility Contact name]
[Utility Contact number]
[Utility Contact email]

[Insert Utility Company information and Logo]

Appendix C.7
[insert date here]

Mr. Rob Perry
Richland County Penny Sales Tax
Transportation Director
2020 Hampton Street
Columbia, SC 29201

Ref: Richland County Project No: _____
Road No: _____, Road Name: _____

This is to certify that [Utility Owner Name] has a real property interest in the facilities, the damaging or taking of which is compensable in eminent domain, and that it is on file at the Richland County DB [Insert Deed Book No.] Pages [Insert Page No.] dated [Insert date] evidence of the utility's title to the compensable real property interest.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

[Utility Contact name with signatory authority]
[Utility Contact number]
[Utility Contact email]

UTILITY AGREEMENT

Richland County Project No. _____ Route (or Road No.) _____

This Agreement made this ____ day of _____, 20____, by and between Richland County, hereinafter called "County" and the _____ hereinafter called "Company".

W I T N E S S E T H:

1. The Program Development Team, hereinafter called "County Agent", will act on behalf of the County as the County's agent in managing and administering this agreement.
2. It is mutually agreed by and between the parties hereto that the Company shall perform or cause to be performed, the following work to its utility property facilities as shown on the attached plans and estimate:
General description: _____

3. The Company hereby agrees to relocate its utility facilities in conflict with highway construction in accordance with the provisions set forth in the Federal Highway Administration's FAPG 23 CFR 645A; and also in accordance with Richland County's Utility Coordination Manual in the estimated amount of

\$ _____

Richland County Share \$ _____ Utility Share \$ _____

(a) The Company (does, does not) have the right of occupancy in its existing location by reason of holding the fee, as easement or other real property interest, the damaging or taking of which is compensable in eminent domain. Upon completion of the relocation and submittal of the final invoice as detailed in Number 10, the Company must provide documentation that the portion of the utility easement acquired by the County on behalf of the County as part of the new right of way acquisition for the construction project has been relinquished. The Company must also supply an affidavit stating all legal documents were filed at the County courthouse where the easement is filed. If the Company does not have the right of occupancy in its existing location by reason of holding the fee, an easement or other real property interest, (Explain) _____

Easement for this project is filed in Richland
(County)

(City and State)

- (b) This section of line (for purposes of establishing right-of-way priorities only) has been in service for approximately ____ years or more.
- (c) Such work as is necessary to relocate, alter or maintain the facility will be done in such a manner that it will not in any way interfere with or endanger the safety of the general public in their use of the roads as a highway. Traffic control and signing will be coordinated with the County's contractor and will be in accordance with "The South Carolina Manual on Uniform Traffic Control Devices for Streets and Highways" (SCMUTCD).
4. The Company shall begin said work promptly upon notification in writing by the County or County Agent and dispatch to its completion as promptly as is practicable. The Company shall provide advance notice to the County or County Agent of the date on which work is expected to begin.

5. The Company will perform the work provided for in this agreement by the method checked below, in accordance with the provisions of Sec.645.115 of FAPG 23 CFR 645A:

BY COMPANY'S REGULAR FORCES

BY CONTRACT: (State one of recognized reasons for necessity of performing work in this manner)

The Company, therefore, subject to prior approval, proposes to contract a portion of or all of the work covered by this agreement. The items of work to be accomplished by contract are noted in the estimate. Where the Company elects to solicit competitive bids from a list of qualified contractors rather than through advertising in a publication, the names and addresses of those contractors so circularized shall be noted on the estimate or furnished to the County or County Agent in advance of the Company's solicitation of bids.

BY EXISTING CONTINUING CONTRACT: Subject to prior approval and inspection by the County or County Agent and the prior approval of the contract method by the Federal Highway Administration, the Company proposes to use an existing continuing contract under which it is demonstrated that such work is regularly performed for the Company under such contracts at reasonable costs. The provisions relating to contracts under this paragraph also apply to Contract Engineering.

6. The County will reimburse the utility company for costs incurred in accordance with the agreement as shown and on accurate records supporting all expenditures incurred on account of said work. The method of developing the relocation costs shall be one of the following alternatives.

(a) Actual and related direct costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body.

(b) Unit costs, such as broad gauge units of property, as used in own operations. (This method must have prior approval.)

(c) Lump Sum

The County may not pay for any item of work not provided for in the plan or in the cost estimate except as modified by the County Engineer or County Agent followed by written notification to the County.

7. All work performed by the Company pursuant hereto, shall be performed according to the plans and estimates approved by the County or County Agent.

8. Attached hereto, and by reference made a part hereof, is one copy of plans and estimates of the work to be performed by the Company showing the existing facilities, permanent changes to be made therein, and the stages by which these changes are to be accomplished.

9. Credits for accrued depreciation (expired service life) and/or betterment of the facility have been allowed as outlined in Sec.645.117(h) of FAPG 23 CFR 645A.

10. Periodic progress billings of incurred costs may be made by the Company to the County through the County Agent not to exceed monthly intervals and amounting to at least \$2500.00; however, total progress billing payments shall not exceed the approved nonbetterment estimated amount.

Upon completion of the work and no later than six months thereafter, the Company shall, at the earliest date practicable, furnish the County or County Agent with five (5) copies of its final and complete billing of all

Utility Relocation (In-Kind) Cost Estimate

Project Name:
Project Number:

Utility Name:
Preliminary Engineer's Utility Relocation Cost to Cure Estimate

Appendix C.9a
Date:

Item No.	Richland County Quantity	Utility Quantity	Description	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Richland County Share	Utility Share
1					\$ -		\$ -	\$ -	\$ -
2					\$ -		\$ -	\$ -	\$ -
3					\$ -		\$ -	\$ -	\$ -
4					\$ -		\$ -	\$ -	\$ -
5					\$ -		\$ -	\$ -	\$ -
6					\$ -		\$ -	\$ -	\$ -
7					\$ -		\$ -	\$ -	\$ -
8					\$ -		\$ -	\$ -	\$ -
9					\$ -		\$ -	\$ -	\$ -
10					\$ -		\$ -	\$ -	\$ -
11					\$ -		\$ -	\$ -	\$ -
12					\$ -		\$ -	\$ -	\$ -
13					\$ -		\$ -	\$ -	\$ -
14					\$ -		\$ -	\$ -	\$ -
15					\$ -		\$ -	\$ -	\$ -
16					\$ -		\$ -	\$ -	\$ -
17					\$ -		\$ -	\$ -	\$ -
18					\$ -		\$ -	\$ -	\$ -
19					\$ -		\$ -	\$ -	\$ -
20					\$ -		\$ -	\$ -	\$ -
21					\$ -		\$ -	\$ -	\$ -
22					\$ -		\$ -	\$ -	\$ -
23					\$ -		\$ -	\$ -	\$ -
24					\$ -		\$ -	\$ -	\$ -
25					\$ -		\$ -	\$ -	\$ -
26					\$ -		\$ -	\$ -	\$ -
27					\$ -		\$ -	\$ -	\$ -
28					\$ -		\$ -	\$ -	\$ -
29					\$ -		\$ -	\$ -	\$ -
30					\$ -		\$ -	\$ -	\$ -
31					\$ -		\$ -	\$ -	\$ -
32					\$ -		\$ -	\$ -	\$ -

Total Material Cost	\$	-			
Total Labor Cost	\$	-			
Engineering and Inspections			\$	-	\$ -
Total Betterments				\$	-
Richland County Share			\$	-	
Utility Share				\$	-
Total Project Cost				\$	-

Utility Relocation (Betterment) Cost Estimate

Project Name:
Project Number:

Utility Name:
Preliminary Engineer's Utility Relocation Betterment Estimate

Appendix C.9b
Date:

Item No.	Utility Quantity	Description	Material Unit Cost	Labor Unit Cost	Total
1					\$ -
2					\$ -
3					\$ -
4					\$ -
5					\$ -
6					\$ -
7					\$ -
8					\$ -
9					\$ -
10					\$ -
11					\$ -
12					\$ -
13					\$ -
14					\$ -
15					\$ -
16					\$ -
17					\$ -
18					\$ -
19					\$ -
20					\$ -
21					\$ -
22					\$ -
23					\$ -
24					\$ -
25					\$ -
26					\$ -
27					\$ -
28					\$ -
29					\$ -
30					\$ -

Total Material Cost	\$	-		
Total Labor Cost	\$		-	
10% Engineering and Inspections	\$			-
Total Cost	\$			-

Utility Relocation Cost Estimate

Overhead vs. Underground Cost Analysis

Project Name:
Project Number:

Utility Name:

Appendix C.9c
Date:

Overhead Lines				
Item No.	Quantity	Description	Unit Cost	Total
1	0		\$ -	\$ -
2	0		\$ -	\$ -
3	0		\$ -	\$ -
4	0		\$ -	\$ -
5	0		\$ -	\$ -
6	0		\$ -	\$ -
7	0		\$ -	\$ -
8	0		\$ -	\$ -
9	0		\$ -	\$ -
10	0		\$ -	\$ -
11	0		\$ -	\$ -
12	0		\$ -	\$ -
13	0		\$ -	\$ -
14	0		\$ -	\$ -
15	0		\$ -	\$ -
16	0		\$ -	\$ -
17	0		\$ -	\$ -
18	0		\$ -	\$ -
19	0		\$ -	\$ -
20	0		\$ -	\$ -
21	0		\$ -	\$ -
22	0		\$ -	\$ -
23	0		\$ -	\$ -
24	0		\$ -	\$ -
25	0		\$ -	\$ -
26	0		\$ -	\$ -
27	0		\$ -	\$ -
28	0		\$ -	\$ -
29	0		\$ -	\$ -
30	0		\$ -	\$ -
31	0		\$ -	\$ -
32	0		\$ -	\$ -

Subtotal \$ -

10% Engineering and Inspections \$ -

Total Overhead Construction Cost \$ -

Underground Lines				
Item No.	Quantity	Description	Unit Cost	Total
1				\$ -
2				\$ -
3				\$ -
4				\$ -
5				\$ -
6				\$ -
7				\$ -
8				\$ -
9				\$ -
10				\$ -
11				\$ -
12				\$ -
13				\$ -
14				\$ -
15				\$ -
16				\$ -
17				\$ -
18				\$ -
19				\$ -
20				\$ -
21				\$ -
22				\$ -
23				\$ -
24				\$ -
25				\$ -
26				\$ -
27				\$ -
28				\$ -
29				\$ -
30				\$ -
31				\$ -
32				\$ -

Subtotal \$ -

10% Engineering and Inspections \$ -

Total Underground Construction Cost \$ -

CERTIFICATION OF PRIOR RIGHTS

Richland County Project No. **XXXXXXX**
Road S-40-**XXX (NAME)**
Description: **XXXXXXXXXXXXXXXXXX**

This is to certify that **XXXXXXX** has a real property interest in the facilities, the damaging or taking of which is compensable in eminent domain, and that it is on file at the Richland County DB **XXXXXXX** Pages **XXXXXX** dated **XXXXXXXXXXXXXX**, evidence of the utility's title to the compensable real property interest.

Utility Coordinator
Date:

County Approval
Date:

