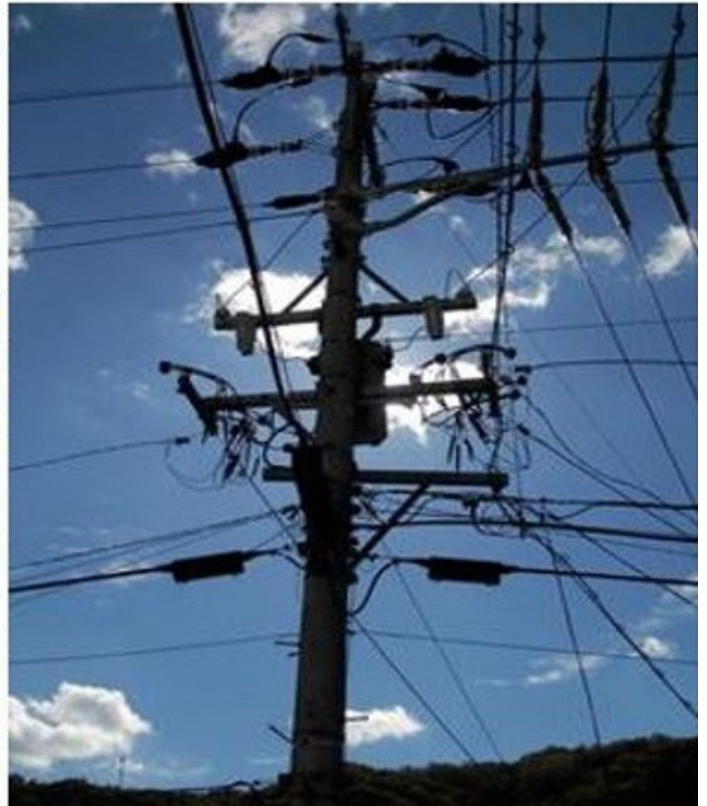




MDOT SHA 2021 Utility Procedures

Issued May 31, 2021



UTILITY PROCEDURE MANUAL
Office of Construction (OOC) – Utilities Section

References:

- MDOT SHA 2021 Utility Manual (Published 05-31-2021)**
- MDOT SHA Project/Utility Coordination Process Flowchart**

Approved:

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Chief Engineer, Deputy Administrator for Hanover Operations

Date

FOREWORD

If at any time during the design and construction process consulting services are utilized to perform any procedure, deliverables are to be submitted and reviewed by the Department or Division that would typically provide oversight.

These procedures are a guide to follow the Utility Coordination Guideline Flowchart: [Utility Coordination Guideline Flowchart](#). ProjectWise, emails notifications, and inter-office mail should be utilized for inter-office requests, sharing of files and documents, plans and reviews, and any other information for the Maryland Department of Transportation State Highway Administration (MDOT SHA) Projects.

The most current updated forms described in this procedure are located internally here: [S:\SHA\OOC\UTILITY\Forms](#) and available online: [Office of Construction Forms and Documents](#)

OOC – Utilities Section are available for assistance and Training PowerPoints may be located internally here: [S:\SHA\OOC\UTILITY\Training](#)

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SECTION 1: PRELIMINARY UTILITY ACTIVITY

- 1-1** The District Utility Engineer (DUE) sends the annual Maryland Department of Transportation's (MDOT) Consolidated Transportation Program (CTP) located on mdot.maryland.gov here: [Capital Programming](#) to Utility Companies in their District annually.
- 1-1A** For District Projects not listed in the CTP, it is the DUE's responsibility to keep the Utilities informed as they develop by way of email or telephone, so that the Utilities can plan their work with minimum interference and damage to MDOT SHA Highways.
- 1-1B** The DUE, or their designee sends the MDOT SHA Monthly Advertisement Schedule to Utility Companies in their District when published.
- 1-2** The Offices of Environmental Design (OED), Highway Development (OHD), Planning & Preliminary Engineering (OPPE), Structures (OOS), and District Engineering Systems Team (EST) periodically request by way of a [Utility Inventory Request Memo](#) (Design Office to District Utilities) utility cost estimates and relocation timelines for worst case scenarios on all projects contained in the Advertisement and Production Schedules from the DUEs. [MDOT SHA Utility Manual 8.05.01](#)

Note: When the MDOT SHA has a potential project, the planning or the design office's Project Manager (PM) shall provide the DUE with the project purpose, scope, and proposed project limits. The PM shall also provide a .dgn file to Statewide Utilities of the project's limits for the ArgGIS Project Sharing Initiative while Utility Owners. Online at maryland.maps.arcgis.com / [Proposed Project Limits](#)

1-2 A The DUE, or their designee research Utility Owners within the proposed project limits.

1. The DUE, or their designee research Aerial Utility Owners facilities in the area by:
 - a) Visiting the Project's Limits of Disturbance (LOD), and performing investigations for all poles observed by differences in ownership, location, and inventory. Take pictures (if warranted) and prepare the [UC-1: Aerial Inventory Form](#).
[Office of Construction Forms and Documents](#)
 - b) The DUE, or their designee prepare the UC-1 and forward the UC-1, a Google Earth .kmz pin of the location, a Google Map screenshot of the pole location(s), and pictures of the poles to the Aerial Utility Owner Representative(s) requesting the contact information for any unidentified lessee(s).
2. The DUE, or their designee research Underground Utility Owners facilities in the area by way of Non-Excavation or forthcoming "No Dig" Miss Utility Ticket(s) for underground facilities from the Miss Utility Internet Ticket Processing ITIC website.

For Maryland's Eastern Shore: <https://de.itic.occinc.com>

For Maryland's Western Shore: <https://md.itic.occinc.com>

1-2B The DUE, or their designee gathers information from field visits, poles inventories, and Non-Excavation Miss Utility Ticket(s) for preparation of the MDOT SHA's [UC-2: Potential Utility Impact Questionnaire](#) internally and located externally here: [Office of Construction Forms and Documents](#) and sends the UC-2 to the Utility Owner Representative(s) that have facilities within the proposed project limits. The Utility Owner Representative shall have 40 business days to provide the requested information.

1-2C The DUE, or their designee compiles all aerial and underground information from all Utility Owner Representative(s) by way of the UC-2, places the information by utility into ProjectWise, and forwards the information to the Project Manager (PM).

1-3 The Design PM requests a Quality Level-B (QL-B) Subsurface Utility Engineering (SUE) work from the Utility Survey Supervisor (USS) in Plats and Surveys Division (PSD). This is typically requested when topography is requested from Surveys and the Right-of-Way Work Map Mosaic is requested from Plats.

Utilities Z-axis shall be displayed at the elevation of the land except for gravity sewer(s) where inverts are acquired. The designation file and SUE consultant gathered As Built are to be placed in ProjectWise/Utilities Existing. The MDOT SHA follows the American Society of Civil Engineers (ASCE) publication - [Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data \(38-02\)](#) located online at www.asce.org

Reference: <https://www.fhwa.dot.gov/design/sue/suebrochure.cfm>

Note: If a project comes out of Office of Preliminary Planning and Engineering (OPPE) before being transitioned to Design, a Quality Level-B (QL-B) designation file may be more cost effective than only obtaining a Quality Level-C (QL-C) file: plotting of records. The time and resources it takes to request, receive, plot, and deliver is comparable to the same cost of the field detection/verified QL-B deliverable. Topography will collect surface features, i.e. poles and pole numbers when available, pedestals, manholes, valves, hydrants, etc.

1-4 The DUE, or their designee gather information from field visits, poles inventories, Miss Utility Internet Ticket Processing (ITIC), and the Utility Companies for the completion of the UC-2 and responds to the **Section 1-2** request from appropriate design Office. The information of cost estimates and relocation timelines help the Design Office develop a realistic timeline for the MDOT SHA project. The PM shall import the utility data on the Form 42 at lines 19, 23, and 35, while placing any additional notes in the Comment Section.

1-5 For each project on the Advertisement and Production Schedules, the DUE or their designee prepares a summary of preliminary engineering, construction costs, and timelines for design, lead, and construction for each utility to the PM. This information is to be included in the Utility Status Report (USR).

1-5A The USRs shall be updated monthly by the 15th of each month for OOC Utilities to update Capitol Financial System (CFS) before the Ad Schedule print date for the following month. The USRs shall be posted on the Intranet (SharePoint) by Statewide Utilities, internally here: OHD Project Support [Utility Status Reports](#) for PMs and Managers to review. Once all Non-3rd Party Utility relocations are shown complete on a USR, a monthly report will no longer be necessary. 3rd Party work is only recorded on the USR until all requirements are fulfilled, i.e. Signed Plans, Special Provisions, MOU, or Master Utility Agreement and Estimate.

1-5B The PM or responsible party prepares and electronically submits the Form 42-25C with all utility preliminary engineering and construction costs received from the DUE. Line 20 should be answered with the Yes or No to Federal Aid, Duration of relocations, and completing Line 35 for Federal Aid information pertaining to the individual utilities. See Section 6

1-6 To facilitate Utility relocation work:

1. When needed for design, the DUEs and/or the Office of Construction (OOC) Utilities Team may conduct meetings and/or conference calls with the appropriate Utility Companies to review current projects and the upcoming projects on the Advertisement Schedule. Typically, these are held quarterly.
2. When needed for construction, the District Utilities Team may conduct quarterly meetings and/or conference calls with the Design Offices, Area Engineers, or any other stakeholder involved, and may include OOC Utilities Team for Issue Resolution on projects actively in construction that require additional coordination efforts for Utility relocations.

Note: For Canceled Projects, the MDOT SHA Manual is one of keeping the utilities whole. The MDOT SHA assumes a responsibility for preliminary engineering design and construction costs accrued by the Utility.

- When the MDOT SHA requests and approves preliminary engineering design the MDOT SHA shall reimburse the Utility 100% provided only that the MDOT SHA District has authorized this preliminary engineering design in writing, i.e. Issued Notice to Proceed (NTP)
- When the MDOT SHA requests and approves construction, the Utility's construction costs will be paid by Prior Rights Percentage provided only that the MDOT SHA District has authorized this construction in writing, i.e. issued NTP
[Refer to MDOT Utility Manual Section 7.06.03 Cancelled Projects](#)

Reference in the 2021 Utility Manual: [Chapter 8 Project Coordination](#)

SECTION 2: MDOT SHA CONSTRUCTION PLANS - 30% DESIGN UTILITY PRELIMINARY INVESTIGATION (UPI)

- 2-1** Whenever possible, the PM and the Project Development Design Team should design around existing utilities to avoid conflicts. The goal is to minimize utility conflicts. Mitigate relocations if necessary. The DUE, or their designee request the Utility Owner Representative to complete a [UC-3: Utility Analysis Report](#) internally, and located externally here: [Office of Construction Forms and Documents](#) prior to the UPI meeting.
- 2-1A** If conflicts are unable to be avoided for the highway purpose or feature, the Utility Conflict Matrix (UCM) is to be initiated by the Design Team, PM, and the District Utilities Team for vertical elevation investigations Quality Level A (QL-A) Test Holes (THs) and proposed relocation of facilities based on unavoidable conflicts.
- 2-1B** This process determines where QL-A THs are warranted for underground design conflicts.
- Note:** Utility Owners shall be permitted to request THs where they need data as well, such as too much Cut or Fill on top of their existing underground facility. See Section 2-2
- 2-2** The PM requests QL-A THs from the USS in PSD as determined by the UCM. The deliverable file and Test Hole Data Forms are to be placed in ProjectWise/Utilities Existing/Test Holes (pdf).
- 2-2A** The Project Development Design Team reviews the results of the THs and determines if potential conflicts may be avoided with their design or able to be “protected in place” (i.e. storm drains and SWM locations), or if in fact the Utility’s facilities need to be relocated.
- 2-2B** The PM submits design plans to Plan Review Division (PRD) for concept approval.
- 2-3** Once the design concept plans are approved by PRD, the plans are distributed to each of the Utility Owners and given 20 business days to review. The DUE calls for a Utility Preliminary Investigation (UPI) meeting with a representative from the Utility Owners within the project limits and revisits [Section 1-2C](#) or initiates the UC-2 process for each utility. This is also where the DUE, or their designee submits the UC-3: [Utility Analysis Report](#) for completion by the Utility Owner Representative and brought to the meeting and/or returned by email.
- 2-3A** The UPI meeting is to discuss the purpose and need of the project. By way of walking the proposed project limits, addressing potential utility impacts, and developing initial timelines for Utilities’ design, lead, and construction.
1. Each Utility Representative will be directed to submit to the DUE preliminary (concept) design plans. These should be included estimated costs, design time, lead time (for ordering materials), and construction timelines.
 2. Each Utility Representative shall be advised that the MDOT SHA may include the necessary utility work in the MDOT SHA construction contract if requested. The MDOT SHA is encouraging this for all utilities when feasible with the Utility Owners and shall be stated at the UPI meeting. The Utility Representative shall submit a letter stating the request for

design and/or construction to be included in the MDOT SHA contract. This is known as 3rd Party Work. See Section 9 for elaboration of 3rd Party work procedures

2-3B All Utility's facilities shall be noted and addressed during the field visit. Facilities shall be the documented on the Utility Tabulation Form RW-57 (there are separate Aerial and Underground forms). *See Appendix for guidance

2-3C The PM updates plans, cross sections, and pipe profiles to show TH results.

2-4 The District Utilities Team and/or Utility Owner Representative populate, and both sign the RW-57 Form with the poles, surface features, or underground locations of utilities that are located within the proposed project limits for each separate utility. Stations and offsets are to be included. The DUE then sends the RW-57 Form to each Utility Owner's Relocation PM for their review and to provide their ownership interest records and/or property deeds back to the DUE. Allow up to 40 business days for reply. Keep records of communication dates and attempts to get replies and ownership interest records from the Utility.

2-5 The DUE forwards the signed RW-57 Form with the design plans to the Public Utility Section of The Office of Real Estate (ORE) Records and Research Section for the determination of cost sharing responsibility.

NOTE: The MDOT SHA shall not design or base the funding of a project's needs of these determinations.

References in the 2021 Utility Manual: [Chapter 7 Utility Relocation](#)
[Chapter 8 Project Coordination](#)

SECTION 3: MDOT SHA CONSTRUCTION PLANS– 65%DESIGN
UTILITY COORDINATION PROCESS

- 3-1** Before the Utility Semi Final (USF) Meeting is held, the DUE or their designee:
- 3-1A** The District Utilities Team requests the PM to place the most current plans and cross sections in the Utilities Proposed folder in PW for the project. If multiple hardcopies are needed, this would be created in the Reproduction Department. The request is to be forwarded to the Print Shop. CDs are to be created at the District if requested by the Utility.
 - 3-1B** The plans shall have existing and proposed ROW Lines, Base Line(s), Stormwater Management Facilities (SWM), drainage, traffic structures, and existing utility locations included.
- 3-2** Upon receipt of the plans and cross sections, the DUE is to forward them along with, the UCM, UC-3, and the Test Hole Data Reports to the Utility Representative and schedule a Utility Semi Final Meeting (approximately 30 business days from this time).
- 3-2A** The Utility Representatives shall be provided a minimum of 20 business days and not more than 30 business days prior to the Utility Semi Final Meeting to review the plans. The Utility Representatives shall update any changes to the UC-3 prior to this meeting.
 - 3-2B** The meeting attendees are to include Utility Representatives, the DUE and/or their designee, PM and their Project Development Design Team Lead, a representative from Office of Traffic and Safety (OOTs), Utility Coordinator (if applicable), and District Right of Way Chief (if applicable).
- 3-3** The DUE, or their designee chairs the USF meeting and shall ensure that any technical limitations, seasonal restraints and/or coordination concerns are discussed and documented.
- 3-3A** If Telecommunication facilities are relative to relocations by the project, it is important to draw attention to certain requirements. Most facilities serving the public will have a Legislative Right to occupy the State rights-of-way and may be exempt from the Resource Sharing law. Facilities are not accommodated longitudinally inside controlled access areas unless there is a Resource Sharing Agreement (RSA) in place. There is an exception review process for approving and/or existing crossings, see Section 10: Utility Permits. Allowed crossings will have limitations relative to installation and maintenance.

Note: Telecommunication facilities, such as Information Technology facilities that are not recognized by the Public Service Commission (PSC) and recognized by the Federal Communications Commission (FCC_ may be accommodated under MDOT SHA “Resource Sharing” Program. See Section 12.

References: [6.04.02 Utility Crossings](#) and [6.05.02 Utility Crossings](#)

- 3-4** The DUE, or his designee prepares the minutes from the USF meeting and shall place them in the Project Wise/Project/"Utilities Proposed" folder and update the USR for the project(s).

References in the 2021 Utility Manual: [Chapter 8 Project Coordination](#)

SECTION 4: MDOT SHA FINAL PLANS – 70% to 90% DESIGN - FINAL UTILITY PROCESS

- 4-1** The Design Division requests an 875 Utility Special Provisions Statement and the 635.309 FHWA required Utility Coordination Certification from the DUE and the DUE requests the PDF and/or ProjectWise Location of the 90% complete full set of construction plans from the Design Division. The Final 875 Section and the Utility Coordination Certification shall be placed in the “Utilities Proposed” folder in ProjectWise.

Note: If hard copies of Final Plans are required, follow the Print Shop procedures to acquire plans.

Reference: <https://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=9>

- 4-2** The DUE sends the construction plans to each Utility Representative and requests the Special Provision Specifications and expected completion dates of any relocations and/or concurrent relocation completion dates from each Utility.
- 4-3** The DUE sends the Utility Special Provisions Statement and the 635.309 FHWA required Utility Coordination Certification to the PM and/or Team Leader.
- 4-4** If the Utility has been granted permission to include its utility work in the MDOT SHA contract:
- a.** If the designs for relocations are done in-house or by MDOT SHA’s consultant designer, they shall create a cost estimate, and provide plans, populate the Trns*Port pay item(s), and prepare the Special Provisions Statement for said utility to the District and to Statewide Utilities.
 - b.** If the utility owner or their design consultant performs designs for relocations, the DUE will obtain their cost estimate, their plans, and their Special Provisions Statement, and provide them to the PM and Statewide Utilities Team. The PM would then create the Trns*Port pay item(s).

Sections by Utility Type:

Section 876 – Water and Sewer

Section 877 – Telephone and Fiber Optic

Section 878 – Electric

Section 879 – Gas

Section 880 – Cable Television (CATV)

Section 881 - Railroads

- 4-5** OOC Utilities then reviews Prior Rights, cost estimate, plans, Trns*Port pay items, MOU (Final), and Special Provisions Statement to prepare and provide an executed UC-10 Form to the Finance and the Agreements Team by way of the UC-11 Memorandum. *OOO Utilities may be involved in the Drafting of a MOU and comments when the Agreements Team circulates them for review and comment. See Section 9

Reference [2.02.06.04 Utility 3rd Party Work Plans](#)

4-6 If the Utility relocations are not included in the MDOT SHA Contract, the Utility owner submits a PS&E package to be reviewed by the DUE in a timeline that is driven by the schedule of the individual project(s). The DUE, or their designee review the utility’s PS&E by way of answering questions on the MDOT SHA UC-7A Form. *See Appendix for guidance

Each relocation PS&E package shall include:

1. A cost estimate (UC-4) can be Company’s own letterhead;
2. An agreement or contract assignment form (UC-5), signed by the Utility Owner Representative and the MDOT SHA District Engineer;
3. A description of the proposed work (UC-6);
4. A ROW statement - Utility Tabulation Form (RW-57); and
5. Relocation Plans with the Top Plan Sheet signed by the MDOT SHA District Engineer.

4-6A The DUE, or their designee reviews the relocation plans to determine if the locations and depths are acceptable, the Prior Rights in accordance with the RW-57 to verify the MDOT SHA cost responsibility and completes the UC-7A. The DUE, or their designee forwards the PS&E to the District Constructability staff for review. Typically, this may be the ADE of Construction, an Area Engineer, or an Independent Construction Engineer. The DUE, or their designee provides the UC-5 (or Letter of Exchange (LOE) and relocation plans to the District Engineer (DE) for signature before submission to the OOC Utilities Team.

Reference: [6.12 HIGH VOLTAGE LINE ACT](#)
[7.06.02.01 Temporary Utility Work](#)

When MDOT SHA does not have a Master Agreement with a Utility; a Letter of Exchange Agreement must be completed. When MDOT SHA does have a Master Agreement with a Utility, a UC-5 is executed. Per the Utility Relocation and Accommodation on Federal-Aid Highway Projects Program Guide, a Letter of Exchange Agreement requires the DOT’s response to the Utility shall be on letterhead and contain the following:

- 1 The basis of the State's authority, obligation, or liability to pay for the relocation (see § 645.107);
2. The scope, description, and location of the work to be undertaken;
3. The method to be used by the Utility for developing relocation costs;
4. The method to be used for performing the relocation work, either by the Utility's forces or by contract; and
5. Assurance that facilities scheduled to be relocated to a position within the highway right-of-way will be accommodated in accordance with the provisions of 23 CFR 645B

Note: The MDOT SHA does not sign Utility Owner’s letterhead. This may be a Project Agreement Letter as well.

The following are Utilities that have Utility Master Agreements with MDOT SHA:

*Note: Newly formed companies are required to enter Utility Master Agreements as part of the criteria to be recognized as a Utility by the MDOT SHA.

UTILITY	MASTER AGREEMENT DATE
American Telephone & Telegraph	July 23, 1968
Baltimore County	July 1, 2012
Baltimore Gas & Electric Company	December 28, 1967
C & P Telephone Company	March 1, 1968
Choptank Electric Cooperative	December 19, 1966
Colonial Pipeline Company	December 29, 1966
Columbia Gas of Maryland, Inc.	April 23, 1969
Columbia Gas Transmission Corporation	December 10, 1980
Conowingo Power Company	January 9, 1967
Delmarva Power & Light Company	March 3, 1967
Southern Maryland Electric Cooperative, Inc.	December 1, 1966
Washington Gas Light Company	January 30, 1967
Washington Sanitary Suburban Commission	January 1, 1958
WSSC/Prince George’s County	April 2, 1969

4-7 The DUE, or their designee should address the cost responsibilities of any elective betterments. If the Utility has elected a betterment or was forced into a betterment (non-elective) such as, aerial to underground, a “Replacement-In-Kind” PS&E will be required. The District Utilities Team will request the actual betterment PS&E and the Replacement-in-Kind PS&E and perform a review. A Replacement-In-Kind PS&E will consist of plans and estimate to reflect a minimum cost relocation with no betterment that is similar to the existing system. The OOC Utilities Team will verify and determine cost responsibility. The OOC Utilities Team may consider other factors such as; minor and major betterments or if a betterment may cost less.

Reference: [7.04 BETTERMENTS](#)
[7.04.02 Replacement in Kind](#)

4-8 The DUE, or their designee places the completed UC-7A Form and the relocation PS&E package in ProjectWise/Utilities Proposed/Utility Owner and notifies the OOC Utilities Team by way of email at OOC_Utilities@sha.state.md.us to review for engineering approval (UC-7B). *See Appendix for guidance

- 4-8A** Each relocation PS&E package shall include:
1. A cost estimate (UC-4)
 2. An agreement or contract assignment form (UC-5), signed by the Utility Owner Representative and the MDOT SHA District Engineer (DE)
 3. A description of the proposed work (UC-6)
 4. A ROW statement - Utility Tabulation Form (RW-57) – if not already in ProjectWise
 5. Relocation Plans with the Top Plan Sheet signed by the MDOT SHA District Engineer

4-9 The OOC Utilities Team is assigned the responsibility of completing the utility plan review by way of

answering the questions on the MDOT SHA Form UC-7B. The form is signed by the OOC Utilities Team Member who performed the review, It shall also be reviewed and signed by the Statewide Utility Engineer or the Assistant Statewide Utility Engineer. *See Appendix for guidance

- 4-9A** The OOC Utilities Team shall color code the existing and proposed utility facilities on the utility plans. RED will be used for existing facilities to be removed or abandoned, GREEN for proposed facilities, and PURPLE for existing poles or facilities to be worked on but not relocated.
- 4-9B** If discrepancies are discovered during the OOC Utilities Team’s UC-7B or UC-10 Form review, the OOC Utilities Team negotiates with Utility Owner’s Relocation PM in a timeline that is driven by the schedule of the individual project(s).
- 4-9C** If the cost sharing responsibility percentage changes as a result of discrepancies and/or negotiations, the Statewide Utility Engineer or their designee may sign a revised UC-5.
- 4-9D** Definitions of the credits listed on the UC-7B are available in Title 23 CFR §645.117 Cost development and reimbursement - e 2. [Electronic Code of Regulations](#)
- 4-10** When the MDOT SHA project qualifies for Federal Aid and chooses to seek the use of Federal Funds on Utility Relocations (typically over the amount of \$100,000.00), the OOC Utilities Team prepares a Utility Relocation PS&E package (two copies) for the submission to the Federal Aid Department. Historically, the Utility’s engineering design costs are not included, unless prior authorization was granted from FHWA. [Reference 7.05.02](#)
- 4-10A** Pre-Authorization for Design Engineering may also be requested.
 - 1. The Utility Owner Representative shall submit a design fee estimate by way of a UC-4 and UC-5 form
 - 2. The District Utility Engineer shall forward the design fee to the OOC Utilities Team
 - 3. The OOC Utilities Team shall submit the design fee to Federal Aid for the pre-approval
- 4-10B** A utility relocation Federal Aid PS&E package will consist of:
 - 1. A Federal Aid Cover Letter
 - 2. A cost estimate (UC-4)
 - 3. A letter of exchange or project agreement or contract assignment form (UC-5)
 - 4. A description of the proposed work (UC-6)
 - 5. A ROW statement (RW-57)
 - 6. The DUE review (UC-7A)
 - 7. The OOC Utilities Team review (UC-7B)
 - *(The above items will be bound together into booklet form with contract number, description of construction work, and space for approval stamp must also be included on the cover.)
 - 8. The plans (The DE signed top plan sheet must contain the name of the Utility, SHA contract number, and FAP number).
 - 9. A memorandum to the Federal Aid Programming Section to route the relocation PS&E to the Federal Aid Programming Section.

- 4-11** The relocation PS&E is sent to the Federal Aid programming section. The Federal Aid programming section checks the relocation PS&E for completeness. PS&E packages are to be verified for certification acceptance. Exempt projects are forwarded to the MDOT SHA Deputy Administrator for approval. All other relocation PS&E packages are sent to the FHWA Administrator for approval, Point of Division Interest (PODI). This should all be done in a timeline that is driven by the schedule of the individual project(s).
- 4-12** If approved, the Deputy Administrator for exempt projects or FHWA Area Engineer for PODI projects signs on the front cover of each relocation PS&E booklet and returns both copies of the relocation PS&E to the Federal Aid programming section with a PR-1240.
- 4-13** The Federal Aid programming section returns one approved copy to the OOC Utilities Team. The OOC Utilities Team places the PR-1240 and UC-7B in ProjectWise and notifies the appropriate DUE and PM.
- 4-13A** The Federal Aid Programming Section submits the Utility relocation PS&E for review and processing to FHWA in a timeline that is driven by the schedule of the individual project(s). The Federal Aid Programming Section request a form PR-1240, Letter of Authorization, or a modification to the existing PR-1240 from the FHWA authorizing the utility work. The form PR-1240 distribution list includes the OOC Utilities Team, the DE, PM, and the DUE.
- 4-14** OOC Utilities communicates the differences in UC-7B approvals and UC-7B Federal Aid Submissions and notifies District Utilities when Federal Aid has been approved for the specific relocation.
- If the project and relocation funds are State, NTP may be issued to the Utility.
 - If the funds are Federal, the DUE and their team must wait for the Federal approval and Form 1240.

Once the UC-7B is received by District Utilities the DUE, or their designee sends the Utility Owner Representative a Notice to Proceed (NTP) letter, utility permit (OOO Utilities copies the Utility Representative on UC-7B approval and notifies them to apply for a Utility Permit), and executed UC-5 or Letter of Exchange, copying OOC Utilities.

Note: The Utility companies are required to notify the DUE 48 hours before they start work in accordance to the District Utility Permit. [See Section 10](#)

- 4-15** The DUE verifies utility relocation costs are on the Form 42. If prior to 25-C (Utilities), the DUE submits a utility relocation estimate to the PM to update the Form 42. Once approved, the DUE submits an electronic Form 30. If the 25-C is final, then the DUE must update the Form 42 and electronically submit for approval. Once approved, the DUE electronically submits the Form 30. See Section 6-1
- 4-16** The PM holds a “Design to Construction” meeting with the District Area Engineer (AE) and the Project Engineer (PE). The DUE is required to deliver the utility relocation plans, utility permits, and any MOUs if applicable. These shall be placed in the appropriate utilities Proposed subfolders by Utility even if the company is not seeking reimbursement.
- 4-17** When applicable, the DUE advises the Utility Companies of the Contractor’s name and address upon award of the contract.
- 4-17A** If a utility’s relocation work is included in the MDOT SHA contract, the DUE notifies the Utility

Owner of the bid amount for their review and approval.

- 4-18** For facility relocations where the Utility Owners will not be submitting a PS&E for reimbursement, the MDOT SHA Utility Permit Applications and plan sets must still be reviewed and placed in ProjectWise in the same as in [Section 4-6](#).

References in the 2021 Utility Manual:

[Chapter 2 General Provisions](#)

[Chapter 3 Utility Permits](#)

[Chapter 4 Utility Construction](#)

[Chapter 7 Utility Relocation](#)

[Chapter 8 Project Coordination](#)

<https://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=9>

**SECTION 5: MDOT SHA UTILITY RELOCATION CONSTRUCTION PHASE,
PROGRESS BILLS, and ANY ADDITIONAL, UNKNOWN, or DELAYED UTILITY WORK**

- 5-1** All inspection work will be arranged for and accomplished in accordance with the most recent revision of construction directive 07220.800.01 online at roads.maryland.gov under Office of Construction's Forms and Documents here: [Directives](#).
- 5-2** The Utility Company shall send progress billing to the DUE, as per Section 7.08.01 in the [MDOT SHA Utility Manual](#).
- 5-2A** The progress bill from the Utility Company shall be accompanied by the following items and must be labeled PROGRESS and contain the sequence number.
1. A copy of the labor hours for the appropriate State contract for the billing period Covered (start and stop date).
 2. A list of the major materials used such as poles, main wire, and ducts.
 3. The billing detail for any sub-contractor billing included in the progress bill.
 4. An estimate of the percentage of work completed during the billing period.
 5. The Prior Rights percentage used in the progress billing.
- 5-3** The DUE submits a copy of each progress bill to the appropriate MDOT SHA inspection staff personnel. This could be the District Utility Inspector, the Construction Inspector assigned to a large project(s) prior to NTP, or the Project Engineer for a project under construction (after NTP) for concurrent work. The submission shall have a request that the Inspector compare the billed project hours to the sum of the daily hours recorded by the Inspector during the billing period and respond in writing to the DUE.
- Note:** The DE may need to assign a full-time inspector on larger projects that would report to the DUE until the NTP of the project. 07220.800.01.
- 5-4** For Progress Billing, if the invoice is correct and in line with the utility plan review, eligible for reimbursement in accordance with the agreement, and the DUE approves of the bill, the DUE is to sign and make a copy of the original bill for vouchers. The DUE, or their designee will process the bill through the Financial Management Information Systems (FMIS) for payment.
1. Statewide Utilities assist Contact Payments Section for proper allocation of line item percentage breakdowns and codes between the responsible parties.
- Note:** The OOC Utilities Team and the External Auditors are not able to verify hours worked by Utility personnel or materials used. These functions can only be performed by the MDOT SHA Utility or Construction field personnel. Inspector's Daily Reports (IDRs) are on file at the Districts for District Utilities' review prior to submission for payment. IDRs shall be store in ProjectWise.
- 5-5** The DUE prepares and places the progress bill package (UC-8) in ProjectWise and notifies OOC Utilities Team by way of emailing at OOC_Utilities@sha.state.md.us. Approval from OOC Utilities is not required at this time.

5-5A The progress bill package uploaded to PW shall include:

1. One copy of the progress bill.
2. A copy of any pertinent communication relative to the appropriate relocation work. This shall include the Utility Inspectors response to the accuracy of the progress bill, but not the IDRs.
3. The District's review of the progress bill review is guided by items 23 through 27 on the MDOT SHA UC-8 Form. *See Appendix for guidance

5-6 For construction change orders from a MDOT SHA Contractor relative to the utility relocation work by the Utility's own forces, the following procedures are required for construction change orders when the MDOT SHA Contractor is seeking additional compensation for Construction delays due to awaiting the completion of any additional, unknown, or delayed utility work within MDOT SHA construction projects *additional work might not lead to a delay claim, but a lengthy coordination may:

1. The MDOT SHA construction Project Engineer (PE) and/or the District Area Engineer (AE) in conjunction with the Utility Company's construction PM will determine and identify any additional, unknown, or delayed utility work required in the MDOT SHA construction project. This shall include a review of the Utility Coordination Certification and what was documented in the Section 875 Utility Statement from the Invitation for Bid (IFB).
2. The Construction Project Engineer (CPE), AE, and/or the Assistant District Engineer (ADE) of Construction shall notify the DUE as soon as possible, by way of phone call and followed by an email regarding the scope of any additional, unknown, or delayed utility work that has affected the critical path in the Critical Path Method (CPM) of the MDOT SHA construction project. The DUE shall review Utility Status Reports, Meeting Minutes, IDRs, and any email communications between the Contractor and Utility Owner Representative. After review and any verbal communications, the DUE shall respond with an email to Construction, the ADE of EST, and Statewide Utilities
3. The DUE shall contact the affected Utility Owner Representative for their acknowledgement of the additional, unknown, or delayed utility work in the project.
 - a. For additional work, the DUE shall conduct a cost responsibility review based of the cost sharing responsibility of the original RW-57 Form. These property reviews are commonly referred to a Prior Rights. If a cost sharing responsibility cannot be determined, the DUE can negotiate with the Utility Company Representative with approval from the Statewide Utilities Section. *Historically, if the additional work was not identified during planning and design the MDOT SHA would be responsible.
 - b. For delayed utility work born from the utility not following the originally stated timeline of relocation completion, the DUE through the ADE of Project Development and/or the DE shall send notification to the Utility Owner representative stating that the Utility may be responsible for a delay claim to the project immediately after all coordination efforts have failed. This provides documentation of the occurrence and the intent of the MDOT SHA to seek reimbursement from the Utility Owner.

- c. For relocation work required from an unknown facility owner, the DUE shall review any early coordination forms, Miss Utility notification list of owner members within the project limits, and minutes from the project's utility PI meeting.

The DUE shall communicate information by way of email to Construction, ADE of EST , and Statewide Utilities. The most common outcomes of the unknown Utility Owner not being involved was there was no knowledge of the facility or the contact representative failed to coordinate with the MDOT SHA.

- i. If the conflict(s) is within the project's limit and the Utility Owner Representative failed to coordinate, the relocation costs and delay claims shall be the responsibility of the Utility Company.
 - ii. If the conflicts were outside the anticipated project limits (i.e. an additional late real estate purchase) the relocation costs and delays claim would be the responsibility of the MDOT SHA.
4. Upon the Utility Company's documented concurrence and/or communicated response that they accept monetary responsibility, the ADE of Construction or Area Engineer shall prepare the change order and issue the DUE a copy. The Statewide Utilities Section may assist with this review and determination. The ADE of Construction or Area Engineer shall transmit a copy of the Change Order to the District Engineer for approval. The District submits the Change Order with a UC-10 to Engineering Support Division within the OOC for review (see Section 9-4). As needed, based on days of delay or dollar amount of change order, a Prior Approval form may also be necessary to execute a Change Order.
Directive 07220.100.23 http://shaintranet/ooc/OOC_Forms_Docs/Forms/Directives.aspx
 - i. If the Utility Owner disagrees and/or does not respond follow the escalation process as described in Chapter 8 – Project Coordination of the MDOT SHA Utility Manual: [8.06.02 Utility Issue Resolution Contact List](#)
 5. For the MDOT SHA to seek reimbursement of the Contractor's delay claim for the unknown or delayed utility work from the Utility Owner, (Section 5-6 3. b.) the delay claim notification must have been previously executed and sent to the Utility Company by way of the Utility Owner Representative. The DUE through the ADE of EST and/or the DE shall prepare a UC-10 Form showing the percentage of the delay claim costs the MDOT SHA is seeking from the Utility Owner. This is required in the change order submission. The Statewide Utilities Section and the Engineering Support Division shall be made aware of the change order prior to the submission for review of entitlement by the Director of OOC and direction. The OOF Accounts Receivable will bill the Utility Company based upon the cost sharing responsibility of the percentage break down of a line item(s) within UC-10 Form.

References in the 2021 Utility Manual: [8.05.07 MDOT-SHA Construction Phase](#)

SECTION 6: FORM 42 and FORM 30

6-1 Form 42:

Form 42 is created when the project is first initiated. The form 42 establishes funding amounts and start and end dates for all phases of the project. Line 20 on the Form 42 is for funding of Utility and Railroad reimbursements, as well as Utility Permit Inspections for relocations by companies not seeking reimbursement. Line 20 sets the start and end dates of the reimbursement for that section. The end date must include time to receive and process all final invoices. Line 35 on the Form 42 is the line where each utility and railroad company is listed with the amount that they will be reimbursed. Sometimes, line 20 and line 35 will not be filled in until coordination with the utility companies has started. If that's the case, changes to the Form 42 will be needed, and the following are the steps on how to make changes:

1. Go into Software Store Client and clicking on “eF42F30 Prod” program
2. Once in the program “Initiate Form 42” will appear
3. Fill in the information for Base Project number
4. SN (Segment number)
5. Check “Change” to bring up original Form 42. Go directly to changes. Revisions are automatically documented
6. District Number
7. County
8. Recommended SHA Fund
9. Fill in line 20 – Federal Aid (Yes or No), Start date, End Date, and Neat Cost
10. Check “Yes” or “No” for line 22
11. Place a description/justification for line 23
12. Click on line 35 to add the utility companies and their amount of reimbursements
13. At the bottom of the page, there is a place to attach documents or files, and a place to make any additional comments (See example below)

Once that is completed, at the top of the page, click on “Submit for Approval” to submit the Form 42 for approval. See Section 4-15. Also see Section 8.

6-2 Form 30:

After the Form 42 has been approved, a Form 30 will need to be created for each utility company that will be reimbursed. The Form 30 establishes the funding source for the BPO in FMIS. The following are the steps on how to fill out the Form 30:

1. Go into “eF42F30 Prod” program, and at the top of the page click on “Form 30”
2. Once clicked on, there will be a drop-down menu. Click on “Initiate Form 30”
3. Fill in the information for New or Supplemental (Supplemental is only for if there is an existing Form 30)
4. County
5. SHA Fund
6. Base Project number
7. PN (Phase number)
8. SN (Segment number)
9. Fill in line 2 – Company name, the amount to be reimbursed, “Yes” for work within the scope of the contract
10. Check “Yes” or “No” for Federal Aid

11. Check “No” for Participation in cost by others
12. At the bottom of the page, there is a place to attach documents or files, and a place to make any comments

Once that is completed, at the top of the page, click on “Submit for Approval” to submit the Form 30 for approval. See Section 4-15. Also see Section 8.

References in the 2021 Utility Manual: [8.03.06 District Utility Engineer](#)

SECTION 7: FINAL BILLING PHASE and RAILROAD INVOICES

7-1 The Utility Owner Representative sends the DUE two copies of the Final Bill, a Summary of Billing (UC-12), two sets of the utility As-Builts, an itemized list of material removed/installed, and the labor/hours. When a Final Bill exceeds 10% or is less than 10% of the original estimated cost (UC-4) and the agreement or contract assignment form (UC-5): a letter of explanation is required to document any changes in the scope of work that resulted in underruns or overruns. Refer to Section 7.08.02.02 of the [MDOT SHA Utility Manual](#).

7-1A COMAR Regulations and Office of Finance (OOF) requirements:

1. Invoice date;
2. Unique invoice number;
3. Payee's name;
4. Remittance address;
5. Bill to person (generally the DUE) and address (generally the District's);
6. The MDOT SHA Project Number and Description;
7. The invoice must clearly describe the details of services; and
8. Prior Rights percentage utilized, labor hours, and material usage for the billing period covered

7-1B Utility Owner Representatives are permitted and encouraged to Progress Bill the MDOT SHA. Utility Progress Bills shall include the list from **7-1A**, as well as:

1. The sequence number of the Utility Progress Bill;
2. Dates for the billing period covered; and
3. An estimate of the percentage of work completed during the billing period

7-1C The District's review of the Progress Bill is guided by answering the questions on the MDOT SHA UC-8 Form. *See Appendix for guidance The DUE, or their designee prepares a UC-8 and places the Progress Bill, the backup information, and the UC-8 in ProjectWise/Utilities Proposed/Utility Owner and notifies the OOC Utilities Team by way of emailing at OOC_Utilities@sha.state.md.us. *See Section 5

Note: Statewide Utilities DOES NOT need to review Progress Billings. The digital records and FMIS investigations we bill completed by Statewide Utilities at the Final Bill (UC-9A and UC-9B) Process.

7-2 The District's review of the Final Bill is guided by answering the questions on the MDOT SHA UC-9A Form. *See Appendix for guidance

7-3 The DUE, or their designee prepares a UC-9A and places a copy of the final bill, the backup information, and the UC-9A in ProjectWise/Utilities Proposed/Utility Owner and notifies the OOC Utilities Team by way of emailing at OOC_Utilities@sha.state.md.us.

7-3A The backup information shall include the following items:

1. Verification of Utility relocations are completed by the Relocation Permit Inspector or the Construction Project Engineer

2. Two sets of the Utility As-Builts or an electronic copy. The Utility is requested to provide Geographic Information System (GIS) coordinates of any of its facilities, infrastructure, and appurtenances installed within the rights-of-way. The GIS coordinates should be provided on “As Constructed” plans, which must be signed and sealed by a Maryland Licensed Surveyor or Professional Engineer. Reference: [Section 2.02.06.05 Utility As-Built](#)
3. If applicable, a letter of explanation is required to document any changes in the scope of work that resulted in underruns or overruns.

7-4 The OOC Utilities Team reviews the final bill from the viewpoint of materials, labor, credits, and Prior Rights by way of answering the questions on the MDOT SHA Form UC-9B. The form is signed by the OOC Utilities Team Member who performed the review and it is also reviewed and signed by the Statewide Utility Engineer or the Assistant Statewide Utility Engineer. *See Appendix for guidance

7-5 The OOC Utilities Team places the UC-9B in ProjectWise and notifies the DUE and their team they approve payment of the final bill.

7-6 The DUE, or their designee processes the bill through FMIS for payment. The DUE signs and sends two copies of the bill and any required forms to the Finance Division’s Vouchers Department in the approved sealed red envelop. See Section 8

7-7 Railroad Invoices occur for two reasons: A MDOT SHA Project or an OOS Contract (Remedial Work). The District Utilities Team, PM, and OOS Administration Staff shall collectively work together. All personnel shall follow the “Railroad Invoices - District Verification and UC-8 Process” found internally on the Shared Drive here: [Railroad Invoice Process](#). until there is a Final Bill and then follow UC-9A/UC-9B process for Final Bills.

7-7A When the Railroad invoice is for a MDOT SHA Project, District Utilities shall follow this Section and Section 5 for Progress Bills and Final Bills. District shall process payments under this scenario.

Note: Statewide Utilities does not need to review Progress Billings. Typically, these are Force Accounts. Any investigations or reviews may be completed by the Statewide Utilities Team when assistance is needed or required.

7-7B When the Railroad invoice is for OOS Contract, such as Remedial Work (cleaning and painting) the OOS shall utilize the UC-8 process for Progress Bills and the UC-9A/UC-9B process for Final Bills. OOS shall process payments under this scenario.

7-8 An External Auditor may audit the final bills along with any backup material.

7-8A The Audit consists of:

1. Check of arithmetic.
2. Review of the itemized list of material removed/installed, labor/hours, and any additives.
3. A check of the final bill and all progress billing.
4. A review to ensure that proper documentation is present.

Note: An Audit may be requested at the Utility Company’s headquarters on a sampling/random basis or if problems are encountered.

- 7-8B** All items received by the DUE are placed in ProjectWise with the UC-9A. Hard copies are available in OOC Utilities for MDOT SHA Office of Audits and FHWA.
- 7-8C** Back-up material will include the following items in addition to the signed copies of the bills:
1. Verification of Utility relocations are completed by the Relocation Permit Inspector or the Construction Project Engineer
 2. A copy of the RW-57.
 3. A copy of the UC-4.
 4. A copy of the Agreement or UC-5.
 5. A copy of the UC-7A and UC-7B.
 6. A copy of the NTP letter.
 7. A copy of the UC-8(s).
 8. A copy of the UC-9A & UC-9B.
- 7-8D** The External Auditor notifies the OOC Utilities Team and the DUE in writing if citations are necessary and sends copies of the correspondence to the OOC Utilities Team.
- 7-8E** The Statewide Utility Engineer and/or the OOC Utilities Team provides the technical liaison necessary to resolve the issue that led to the citation.

References in the 2021 Utility Manual: [Chapter 2 General Provisions](#)
[Chapter 7 Utility Relocation](#)

SECTION 8: FMIS, BPO, and BPO CHANGE ORDERS

8-1 Once the Form 42 and the Form 30 are completed and approved, the BPO in FMIS must be set up. Go into Software Store Client and click on “MDOT FMIS (Thin App)” program. The following are the steps on how to set up a BPO:

1. Login with “CICSFMP”, then hit enter
2. Type in username. Hit tab.
3. Type in password. Hit enter
4. Type FMST. Hit F2 twice
5. Type in 2342. Hit F9
6. On screen 2342, fill in and create (CL123-V) the BPO # (from Form 30), change Purchasing Type to “EB”, fill in Department, Fiscal Eff Date (today’s date) (date on Form 30), Contact (for the utilities), Vendor ID, Effective Date (from the Form 30), Expiration Date (from the Form 42) and Commodity Control is a “F”. When finished, hit F10
7. It will take you to 2348 screen. Then, fill out the Contract Amount. Tab down to the space underneath the space before Commodity, and type in “968-79” (995-95). Tab to the space underneath Description, and type in “0001”. When finished, hit F10
8. Hit “Home” key and type 2343, then hit F9. Fill out the Department (JO2 index #); under User, place 8 “*”, then tab to Amount and enter the reimbursement amount. When finished, hit F10
9. Hit “Home” and type 2353, then hit F9. Fill out the Contract ID, type with “FP” (model – SHA), Fed Ex with “N”, Contract Administer (with DUE’s name), (O_U) Location, Procurement Officer (with DE’s name), Procurement Method with “XMT”, Award Date (from the Form 30), Category of Work with “S”, Award Auth with “E”, Non Visual Access with “N”, Hiring Service with “N”, MBE WVR with “N”, Vet WVR with “N”, Desc, TOT with “0”, SB with “0”, and MBE with “0”. When finished, hit F10
10. Hit “Home” and type 9100, then hit F9. Type “Proper MOU agreement process was followed”. Hit F10
11. Hit “Home” and type 2342, then hit F9
12. Tab down to Action Indicator and type in “P”. Hit F10
13. Print out all the above screen pages and give to the DUE to be approved with the Form 42, the Form 30 & the UC-5 or the Letter of Exchange

Once the BPO is approved by the DUE or a 300 Approver, there is a [Utility Activation Checklist](#) that must be completed. *See Appendix for guidance. Complete the checklist and scan in all pertinent documents to email the information to the MDOT SHA’s FMIS Team for activation. See Section 6.

Note: When there is both Gas and Electric companies or multiple providers under the Phase Code B , that additional companies are submitted as “Supplemental”.

8-2 Invoice Payment Procedure

Once the utilities begin their relocations, they will start to invoice MDOT SHA. After the BPO is setup and the utilities begin to send invoices, this is the process the initiate invoices. Go into Software Store Client and click on “MDOT FMIS (Thin App)” program. The following are the steps on how to process invoices for payment.

1. Login with “CICSFMP”. Hit enter.
2. Type in user name. Hit tab
3. Type in password. Hit enter
4. Type FMST. Hit F2 twice
5. Type in 1800. Hit F9
6. Tab down to BPO ID and insert FMIS BPO# from the Form 30. Then, hit F10
7. Hit F2. This will go to screen 2348. Tab down to the space next to “968-79” and place “S”. Then, hit F6
8. This will go back to screen 1800. Finish filling in the Ven Invoice No, Invoice Date, Invoice Desc, Ivc Recpt Dt, Due Date (Dept), Quantity, Unit Cost, tab to underneath AGY, Yr (fiscal), Index, AOBJ, and Proj/PH. When finished, hit F10
9. Stamp the invoice (amount) with the “Invoice Processing” stamp. Fill out the stamped lines on invoice
10. Tab to Action Ind & insert “P”. Hit F10
11. Print out screen 1800, page and give to the DUE to be approved with the invoice attached
12. Log invoice into the Invoice Payment Log book

Once the invoice is approved by the DUE or a 300 Approver, make two copies of the invoice. An [Invoice Transmittal Log](#) will need to be completed and sent with the invoice to the OOF for payment. *See Appendix for guidance. Complete the checklist, scan in all pertinent documents, and email the information to the MDOT SHA’s FMIS Team for activation. See Section 6.

8-3 BPO Change Orders

When a BPO needs to be revised or updated, i.e. changing funding amounts and/or changing expiration date, these changes are to be made in FMIS. Go into Software Store Client and click on “MDOT FMIS (Thin App)” program. The following are the steps on how to make changes to BPO’s:

1. Login with “CICSFMP”. Hit enter
2. Type in username. Hit tab
3. Type in password. Hit enter
4. Type FMST. Hit F2 twice
5. Type in 8600. Hit F9
6. Tab to Ref, and enter “000”
7. Tab to BPO/PO ID and insert FMIS BPO# from the Form 30
8. Tab to Document Type and enter “06”
9. Tab to the field that is needed to be changed. For funding change, place the new total amount
10. Tab to Reason*, and enter “D” for New Expiration Date, or “F” for New Contract Amount
*never fill out reason
11. When finished, hit F10
12. Hit “Home” key and type 9100 then F9. In 9100 screen, describe the reason for the change.
When finished, hit F10
13. Go back to the 8600 screen by hitting the “+” key
14. Once in the 8600 screen, tab to Action Ind, type in “P”, then hit F10
15. Print out screen 8600 page & screen 9100 page and give to the DUE to be approved with the appropriate documents attached

Once the BPO Change Order is approved by the DUE or a 300 Approver, there is a [Change Order Activation Checklist](#) that must be completed. *See Appendix for guidance. Complete the checklist, scan in all pertinent documents, and email the information to the MDOT SHA’s FMIS Team for activation. See Section 6.

**SECTION 9: 3rd Party Work, MEMORANDUM OF UNDERSTANDING (MOU),
LETTER OF AGREEMENT (LOA) and UC-10 FORM: 3rd Party Plan Reviews**

9-1 Each Utility Representative shall be advised that the MDOT SHA may include the necessary utility work in the MDOT SHA construction contract. The Utility Representative shall submit a letter stating the request for design and/or construction to be included in the MDOT SHA contract. When a utility's relocation project is part of a MDOT SHA's project, an agreement will be needed before the relocation work can start. If the MDOT SHA and Utility Owner have a Master Utility Agreement in place, once relocation design plans are completed and signed, it can be utilized with an authorization letter from the Utility Owner stating the proposed work. Typically, relocation cost sharing responsibilities are based on Prior Rights and Betterment work cost is incurred by the Utility Owner.

When the MDOT SHA and the Utility Owner do not have a Master Utility Agreement in place, the District Utility Office and MDOT SHA's designer will work together on providing the pertinent information to the MDOT SHA's Agreements Team. There are two documents that will need to be completed and sent to the Agreements Team. They are the MOU Activation Checklist and the Chief Engineers Request Letter for MOU. Once these two documents are completed, scan and email SHAdeals@mdot.maryland.gov the information to the MDOT SHA's Agreements Team.

- a. If the Utility is a Governmental Entity, the PM shall request a Memorandum of Understanding (MOU) by way of the MOU checklist and cover letter to the Chief Engineer for approval. The Chief Engineer sends the signed approval to the Office of Regional and Intermodal Planning's Agreements Team. The OOC Utilities Team must be copied on the checklist and cover letter. When warranted, the OOC Utilities Team will assist with negotiations.
- b. If the Utility is a Public/Private Entity, the DUE or their designee requests a Letter of Agreement (LOA) by way of the LOA checklist and cover letter to the Chief Engineer for approval. The Chief Engineer sends the signed approval to the Office of Regional and Intermodal Planning's Agreements Team. The OOC Utilities Team must be copied on the checklist and cover letter. When warranted, the OOC Utilities Team will assist with negotiations.

9-2 UC-10 Form: 3rd Party Plan Reviews are completed by the Statewide Utilities Office. Generally, an Areawide Utility Engineer or Technician is aware of 3rd Party Work being requested when reviewing USRs. The Areawide Utility Engineer or Technician work with the PM, their designer, District Utilities (prepare the RW-57), and the Utility Owner and when applicable their designer to gather the following:

- Signed/Sealed utility (relocation and/or betterment) plans
- Engineer's estimate
- MOU or LOA (assist with drafting of language as required/requested)
- RW-57
- The utility specific Special Provisions (Sections 876-881) for the MDOT SHA Invitation for Bid (IFB) for contract Proposals

- 9-3** Once the review is approved, the Areawide Utility Engineer or Technician prepare the UC-10 Form for distribution through the agency by way of the UC-11 cover letter. Those copied and forwarded the information include:
- OOF
 - Contract Payments, OOC
 - PM
 - Utility Owner's Relocation PM
 - if known, the Project Engineer and the Area Engineer of Construction
- 9-4** When 3rd Party work requires Change Orders during construction, District Utilities completes a revised UC-10 Form (See Section 5-6). The Statewide Utilities Section may assist when needed. Typically, this is the overrun of a line item(s) or the need for additional work not in the original scope. The party who is responsible for payment due to the change must be determined at the time of the change and agreed upon before the additional work is started if possible. This cost determination percentage must be shown on the UC-10 Form signed by both parties. All cases must be documented at the time of occurrence, shared with the applicable offices, and included in the Change Order submission to the Engineering Support Division.

References in the 2021 Utility Manual: [2.02.06.04 Utility 3rd Party Work Plans](#)
[2.03.05 Memorandum of Understanding \(MOU\)](#)
[7.09 UTILITY 3RD PARTY WORK](#)
[7.10 UTILITY SPECIAL PROVISIONS](#)
[8.05.03.03 Plan Development \(30% - 65%\) B](#)
[10.05 ATTACHMENTS TO TRAFFIC STRUCTURES II. 9](#)

SECTION 10: UTILITY PERMITS

10-1 When a Utility Owner requests a Utility Permit to perform utility work within and/or along or through MDOT SHA's ROWs, District Utilities directs them to [Utility Permit Documents and Information](#).

The application is located here: [Utility Permit Application](#)

The instructions are located here: [Utility Permit Application Instructions](#)

10-1A District Utility Permits are required for all utility work within and/or along or through MDOT SHA's ROWs.

Note: For more information on the Annotated Code of Maryland, see Section 8-646 of Title 8: [Permit require for work on highway](#)

10-1B If the Utility Company is newly formed or new to the State, the MDOT SHA must recognize them as a Utility Owner by way of review and approval of required documentation by the Statewide Utilities Office. *See Utility Manual [Section 3.02.02 New Public Utility Application Submittal](#). Requirements are also located on roads.maryland.gov: [Utility Permits Documents & Information](#)

10-1C All applicants must sign and return the Acknowledgement Form accepting the requirement of the MDOT SHA Utility Permit General Provisions.

Here are the Utility Permit [General Provisions](#)

Here is the Utility Permit General Provisions [Acknowledgement Form](#)

Note: For Utility Companies that have service areas in multiple MDOT SHA Districts, one signed and return Acknowledgement Form is acceptable.

10-2 The District Utility Staff Member Shall review the MDOT SHA Utility Permit Applications, not only for completeness and accuracy, but for the following criteria:

10-2A Utility Permit Applications for Information Technology purposes shall be reviewed for possible Resource Sharing requirements as per the Annotated Code of Maryland Articles 3A 301 and 3A 307 State Finance and Procurement. More information can be found online at Mgaleg.maryland.gov or by following these two links:
http://mgaleg.maryland.gov/2019RS/Statute_Google/gsf/3A-301.pdf
http://mgaleg.maryland.gov/2019RS/Statute_Google/gsf/3A-307.pdf

- Macro cells, Micro (Small) cells, and Fiber Optic installation on Controlled Access rights-of-way (ROW) will still require Resource Sharing (RS) or approved Certifications or Waivers
- All Districts still need to “Flag” **Fiber Optic** permit applications for Statewide Utilities review. When Fiber Optic installation(s) on Non-Controlled access ROWs such as Secondary Routes are to support Micro (Small) Cell(s) will possibly be subject to RS requirements. After Statewide review and vetting with CHART and ITS and the MDOT Fiber Coordinator a determination will be made.
*(The build does not need to be exclusively for Small Cell deployment.

- DUPTS Process:
 1. District Flags permit application, status becomes “Flagged”
 2. Statewide Utility staff reviews for RS requirements:
 - (a) Permit stays flagged until a Resource Sharing Agreement (RSA) is in place permit in “RSA” status, or
 - (b) When RS is not applicable and the Statewide Utility Engineer or the Assistant status the permit application Resource Share Not Applicable - “RS_NA”
 3. Permit gets returned to District to approve/issue
- Copper Telephone and Coaxial CATV are not subject to RS, if a company states conduit or cable and not the kind of “cable”, reject the application for incompleteness and have the company representative revise the application appropriately
- Statewide Utility Staff determine if Controlled Access/Through Highway ROW is on the Secondary Maryland Route(s) such as MD or US by reviewing the MDOT SHA [Highway Location Reference](#) (“Mile Point” books)

*MDOT SHA must follow the Maryland Department of Information Technology’s (DoIT) Policy on Resource Sharing found online here: [RSA Programs](#)

*MDOT SHA must follow Federal Highway requirements on Resource Sharing
<https://www.fhwa.dot.gov/reports/utilguid/if03014.pdf>

Note: Please see Section 12 for more information on Resource Sharing. This information is disclosed on roads.maryland.gov or by following this link:
[Communications Resource Sharing](#)

10-2B Utility Permit Applications shall be reviewed against the MDOT SHA Advertisement and Production Schedules. The purpose here is to ensure that any additional utilities will not be permitted into the limits of an active or proposed MDOT SHA project without review and coordination.

Note: Unless the project had been on production for several years, the District Utility Staff should make the current PM aware and the Utility applicant know that there is a project slated that may or may not be constructed. The purpose here is to coordinate with the applicant that the facility may be subject to future relocations and/or provide time to seek an alternate path.

10-2C Utility Permit Applications shall be reviewed against the Office of Environmental Design’s ArcGIS layer to ensure the permitted area is not within the area of environment concerns located here: [GIS Tool Link](#) <https://arcg.is/18aW11>

10-3 For the DUE, or their designee to issue a Utility Permit to the Utility Owner in the MDOT SHA District Utility Permit Tracking System (DUPTS):

10-3A The Utility Permit General Provisions shall be downloaded from the website and the Acknowledgment Form shall be signed and returned to the MDOT SHA by way of fax or email as instructed on the Form to the appropriate District Office from the Public Utility, Municipality, and/or Local Government who are requesting to work on MDOT SHA ROWs. These provisions

govern the work restrictions and requirements as established by the MDOT SHA. The Utility Permit General Provisions must be accessible while performing work within the ROW of the MDOT SHA. These provisions are generally updated every two years.

10-3B There is no permit fee or any charge for the review and preparation of the permit, except as noted below. The MDOT SHA reserves the right to assign inspection forces while work is being accomplished within the rights-of-way at the expense of the Permittee.

Note: When Telecommunication Companies are requesting to install Micro (Small) Cell wireless antennas, there is currently a review fee. More information on this can be found on roads.maryland.gov or by following this link:

[Micro Cell-Small Cell Resource Sharing-FCC Standard Pricing Schedule rev2019](#)

10-4 When the application is to relocate facilities for a MDOT SHA Project and not part of a PS&E submission, the Lead Utility Inspector shall provide a copy of the plan sheet(s) to the Relocation Specialist and/or Utility Coordinator for placement into ProjectWise for said contract. The mandatory dropdown requirement must also be placed on the approved permit: **Relocations and adjustments shall be constructed in a timely fashion as to not alter the agreed upon timeline of the MDOT SHA project's schedule. Any delays caused by the utility owner, by no fault off others shall participate in cost sharing of MDOT SHA contractor delay claims.*

10-5 For Permits that may require Utility Permit Exceptions, refer to Chapter 2 General Provisions subsection 2.07 Exceptions and utilize the "Utility Manual Exception Letter TEMPLATE 3-27-2014" format. See Section 11. [S:\SHA\OOC\UTILITY\Forms](#)

10-5A Submissions to the Statewide Utility Section should include:

1. A letter from the utility stating purpose, reasoning, and explanation of why other options were not available
2. Plans
3. A completed Utility Manual Exception Letter from the DE through District Utilities to OOC Utilities

10-6 District Utility Inspectors shall utilize of the ArcGIS Survey 123 Application for tracking permitted utilities that access the MDOT SHA rights-of-way. As State Employees, we can utilize the impearled ArcGIS system. This is the platform the application was deployed on. Inspectors can obtain logon credentials from the Data Governance Division by way of request through Statewide Utilities. Once credentials are granted, users must sign on from their desktop first, then download the application on their smart device. This is a user-friendly application and training is available from Statewide Utilities. The desktop application allows users to modify data and upload pictures that may be required from time to time.

The purpose is for Data Retention and a tracking supplement to the DUPTS system. The application records the "X" and "Y" GPS Coordinates placement of approved permit applicant's facilities with a "pin". The application utilizes the same color-coded system as the Damage Prevention Authority (Miss Utility) and has also been expanded to collect the placement of Steel Plates (gray) and record failing and/or failed roadway patches (black) from previous utility work.

The Utility is also requested to provide Geographic Information System (GIS) coordinates of any of its facilities, infrastructure, and appurtenances installed within the leased/licensed/permitted area(s) to MDOT SHA's Office of Construction Statewide Utilities Section within Forty-Five (45) calendar days of the completion of the Lessee/Licensee/Permittee's installation. The GIS coordinates should be provided on "As Constructed" plans, which must be signed and sealed by a Maryland Licensed Surveyor or Professional Engineer.

References in the 2021 Utility Manual: [2.03.06 Utility Permits](#)
[Chapter 5 Environmental](#)

SECTION 11: EXCEPTIONS TO MDOT SHA'S UTILITY MANUAL

11-1 When a Utility Owner Representative requests an exception to the Utility Manual.

11-1A The Utility Owner Representative shall provide their design plans and justification for the exception. See the MDOT SHA Utility Manual [Section 2.07 Exceptions](#).

11-1B Requests for an exception to the MDOT SHA Utility Manual must be filed through the DE. For guidance, refer to the MDOT SHA's Utility Manual Section 2.07. The request must be documented to the MDOT SHA's satisfaction as follows:

1. That the accommodation will not adversely affect highway and traffic safety
2. That alternate locations are not available or cannot be implemented without placing a hardship on the Utility or State from a cost standpoint
3. That the accommodation will not adversely affect the design, construction, or maintenance of the highway
4. That the accommodation meets the MDOT SHA's policy for access for construction and/or servicing facilities
5. Submissions of plans showing existing and/or proposed facilities. When the exception is within a MDOT SHA Project, the Utility is required to color code and plot their facilities on the MDOT SHA construction plans

11-2 The DUE reviews the request.

11-2A The DUE prepares a memorandum for the DE's signature forwarding the request to the Statewide Utility Engineer through OOC Utilities. The memorandum will make recommendations as to why the DE is in support or against the exception request. Located internally on the Shared Drive: [S:\SHA\OOC\UTILITY\Forms](#)

11-3 The OOC Utilities Team will review for the Deputy Administrator Chief Engineer for Operations.

If approved:

11-3A The OOC Utilities Team will obtain concurrence from the Federal Highway Administration (FHWA), when applicable i.e. controlled access, Resource Share, or if roadway received any Federal Funds.

11-3B The OOC Utilities Team will prepare a letter of approval from the Deputy Administrator Chief Engineer for Operations to the District Engineer. Once signed, the OOC Utilities Team member forwards the memo and letter to the DE and DUE. The DUE forward the letter to the Utility Owner Representative.

If not approved:

11-3C OOC Utilities Team member prepares a rejection letter.

1. The letter shall state the findings of engineering, safety, or simple denial reasoning from the MDOT SHA, **or**
2. The OOC Utilities Team may suggest an alternate means for negotiation
3. If the Utility chooses to resubmit, go back to 11-1

References in the 2021 Utility Manual: [Section 2.07 EXCEPTIONS](#)
<file:///S:/SHA/OOC/UTILITY/Forms>

SECTION 12: RESOURCE SHARING PROJECTS

Disclaimer on Emerging Technologies:

Technological advancements have shaped the utility industry, with new technologies constantly occurring and making their way into the mainstream. The use of mobile phones and Internet commerce are examples of emerging technologies that are now widespread. These innovations provide enormous benefits, but their success cannot take place in a vacuum. Ensuring that emerging capabilities are implemented in a safe, consistent, and efficient manner within transportation right-of-way is an important part of the MDOT SHA's mission to ensure a fast, safe, efficient, accessible, and convenient transportation system.

12-1 When a Telecommunication Company (Carrier), Provider, or their consulting firm requests to place Macro Antennas on MDOT SHA existing communication towers, monopoles, or proposed new construction of a monopole, Micro Small Cells, and/or Fiber Optic cable facilities within the MDOT SHA ROW, the State of Maryland requires the Carrier to enter a Resource Share Agreement (RSA). For guidance, refer to the MDOT SHA's Utility Manual [Section 6.15 Resource Sharing](#)

DoIT Published Rates, by way of Standard Pricing Schedules by type of facility are located here:

- [Fiber Optic](#),
- [Macro Cellular](#),
- [Small Cell](#) (Micro), and
- [Non-Highway ROW](#)

12-1A For Macro and Small Cell: The Carrier, Provider, or their consulting firm may submit a proposal to the OOC Statewide Utility Engineer or the MDOT Office of Transportation Technology Services (OTTS) for the use of State of Maryland property to place telecommunication facilities.

A preliminary meeting may take place, see the MDOT SHA Utility Manual [Section 6.15.03 Resource Sharing Proposals C\) Field Review](#)

For Fiber Optics: The Company or their consulting firm must submit the path of the requested installation by individual route, A to B location (termini), with estimated linear footage (lf) for Statewide Utilities to submit to MDOT for MDOT to submit to DoIT for valuation determination. Once the value has been determined, DoIT returns the valuation to MDOT and in turn back to MDOT SHA. Statewide Utilities shares the value determination with the Company and/or their consulting firm. Negotiations can begin so the Company can begin to work up a proposal submission. If the proposal is accepted by the MDOT SHA and DoIT, the company will then need to prepare engineered drawings of proposed installation(s).

Note: For installations that need access to multiple routes, the paths need to be submitted collectively, with each route, termini, and estimated lf broken down.

12-1B The OOC Utility team compares the proposal against the published DoIT rates for value determination. If acceptable, or believe negotiations can be pursued (12-4);

12-1C The OOC Statewide Utility Engineer, or their designee submits the proposal to the MDOT Resource Sharing Coordinator to submit to the State Resource Sharing Program Manager form the Department of Information Technologies (DoIT).

Note: The RSA Committee meets regularly, and new proposals are often collectively discussed so all stakeholders are aware.

- 12-2** The MDOT SHA Statewide Utilities Areawide Engineer or Technician keeps a distribution log, initiates the engineering review, and assembles the Resource Share Committee. Reference: [6.15.04 Resource Sharing Process](#)
- 12-3** An OOC Utility team member performs a Google Earth preliminary review for an aerial and street view assessment, and when needed, conducts a field review of the site(s) proposed by the Utility to place their facilities. Reference: [6.15.02 Technical Requirements](#)

For Macro and Small Cell:

- 12-3A** The field review may consist of the OOC Utilities Team member(s), the DUE or designee, a MDOT representative when needed, and the Communication Company Representative(s). A Federal Highway Representative may also be invited to the meeting if FHWA comments are required for the actual site.
- 12-3B** At the field review, the criteria for placement of the proposed utility facilities shall be evaluated as per the MDOT SHA's Utility Manual [Section 6.15.06 C Field Review](#). Additional criteria may be considered depending on the type of facilities proposed and the on-site conditions.
- 12-3C** The OOC Utilities Team member requests the DUE and the FHWA representative (if applicable) to prepare written comments for the Statewide Utility Engineer. The OOC Utilities Team member also prepares a written summary for the Statewide Utility Engineer. MDOT SHA Utility Manual Section 6.15.06 [Technical Review](#)
- 12-3D** If the initial review is unfavorable, the Communication Company Representative may submit an alternate site for review to the OOC Utilities Team.
- 12-4** The MDOT SHA submits the proposal to MDOT for submission to DoIT. DoIT seeks Legislature Policy Committee (LPC) concurrence (when the value is over \$100,000.00). If the LPC the approves or requests to continue negotiations of an agreement to the Company's proposal, the OOC Utilities Team continues the technical review process if the initial review is favorable and requests additional negotiations as requested by the LPC.

For Macro and Small Cell:

- 12-4A** The Statewide Utility Engineer reviews the comments from the DUE, the FHWA, the MDOT representative, and the written summary from the OOC Utilities Team.
- 12-4B** The OOC Utilities Team member requests that ORE, OPPE, OOTS, OHD, OOS, District Engineering Systems Team (EST), Coordinated Highways Action Response Team (CHART), and the appropriate District Office to review and comment on the proposed sites.
- 12-4C** When underground telecommunication facilities (conduit and cable) are involved, the OOC Utilities Team may need to conduct additional coordination/review activities with Surveys, OHD, and OOS. Any attachments to structures must be reviewed and approved by OOS.

12-4D The Statewide Utility Engineer sends a summary of the comments of the initial review to the Company. The Statewide Utility Engineer also informs the Communication Company Representative that they have six (6) months to provide technical plans for review or notify the MDOT SHA of their design timelines for the proposed site.

12-5 The OOC Utilities Team initiates the technical review from the Office of CHART and ITS Development.

For Macro and Small Cell:

12-5A The OOC Utilities Team receives the technical plans from the Communication Company Representative and submits them to CHART and ITS Development, and OOTS for their review and comment for wireless facilities. The OOC Utilities Team will submit the technical plans to the CHART and ITS, OOTS, and OOS and for underground facilities.

12-5B If the CHART and ITS Development, OOTS, or OOS require any changes to the Utility Company's plans, the OOC Utilities Team will have the Communication Company Representative submit revised plans showing the required changes.

For Fiber Optics:

12-5C Statewide Utilities discusses any fiber needs with CHART and ITS as well as the Fiber Coordinator at MDOT for a statewide consensus of any benefits within the proposed installation.

Note: The public notification portion of these procedures described in Section 12-8 may be performed concurrently with the technical review initiated by the OOC Utilities Team.

12-6 The Statewide Utility Engineer reviews the comments from ORE, OPPE, OOTS, OHD, OOS, EST, and CHART and the technical reviews of the OOC Utilities Team. The Statewide Utility Engineer then summarizes the reviews and has the OOC Utilities Team prepare recommendations, by way of memorandum and letter for the Deputy Administrator Chief Engineer for Operations.

12-7 The Deputy Administrator, Chief Engineer of Hanover Operations approves the site from an engineering standpoint and returns the recommendations memorandum and letter to the Statewide Utility Engineer.

12-8 The Communication Company Representative shall notify the Public.

12-8A The Communication Company Representative at DoIT's direction sends letters to Political and Local Officials, and the local community groups notifying them of the proposed placement of the telecommunications facilities.

12-8B The Communication Company Representative schedules and chairs a public meeting to discuss local concerns and provide information on the proposed site. The DoIT and the DUE, or designee will attend the public meeting and the DUE, or designee will provide a written summary of the meeting for the Statewide Utility Engineer. The Statewide Utility Engineer or a OOC Utilities Team member shall attend the meeting when necessary.

12-9 The Communication Company Representative, DoIT, the OOC Utilities Team member, and the DUE or designee will address any issues brought up at the Public Meeting.

- 12-10** The OOC Utilities will request the Company or Consulting Firm to write and assemble the Draft Resource Share Agreement based of off facility type agreement existing templates.
- 12-11** The MDOT SHA - OOC Utilities Team reviews and comments on the Draft Agreement.
- 12-11A** The Statewide Utility Engineer sends a copy of the Draft Agreement to the Office of Attorney General for review and comment.
- 12-11B** If for any reason the MDOT SHA determines that the agreement is not acceptable, the Statewide Utility Engineer will return the Draft Agreement to the Resource Sharing Coordinator along with comments as to what needs to be modified in the Agreement. The Resource Sharing Coordinator will then work with the Utility Company to make the necessary changes.
- 12-12** When all parties have agreed to the final draft of the Agreement, the OOC Utility Team will send it to the Utility Company for signature, two or three Hard Copy originals. **Note:** digital signatures are acceptable for RSA execution. The Communication Company Representative signs the Agreement first, followed by the MDOT SHA.
- 12-13** When over \$100,000.00 in value, the DoIT Resource Sharing Coordinator requests for the signed Agreement to be on the Agenda at the Board of Public Works for final approval.
- 12-13A** If for any reason the Board of Public Works denies the agreement, it will be returned to DoIT for the MDOT SHA to renegotiate with the Company to resolve any issues.
- 12-13B** The DoIT will then send a copy of the executed agreement to the Statewide Utility Engineer.
- 12-13C** The Statewide Utility Engineer forwards a copy of the agreement to the DUE.
- 12-14** The Statewide Utility Engineer, or designee sends a copy of the executed Agreement to the OOF Accounts Receivable to monitor payments.
- 12-14A** The OOF Accounts Receivable will monitor the monthly payments and annual cost increases as per the Agreement. If for any reason, the Utility Company fails to comply with the Agreement, OOF Accounts Receivable will notify the Statewide Utility Engineer. The Statewide Utility Engineer will then contact DoIT and the Utility Company to resolve the matter. The OOF Accounts Receivable will also verify that the payments are placed into the Information Technology Investment Fund as specified in the agreement.
- 12-15** The Communication Company Representative applies for a Utility Permit to install their facilities.
- 12-15A** District Utilities issues a Utility Permit to place the telecommunication facilities within the MDOT SHA ROW upon receipt of all the necessary plans and information from the Company. The District flags the permit application for Statewide Utilities to confirm the RSA is in place and uploaded into DUPTS. The review is submitted back to the District stused, “RSA in place”.
- 12-15B** The Communication Company Representative will construct their system after the Utility Permit has been issued.

For Macro:

12-15C The DUE, or their designee and a representative from the Office of Communications - CHART and ITS Development will be responsible for spot inspections during the construction of the Company's facilities.

12-16 For Macro: The Communication Company is to maintain facilities in accordance with the Agreement and the Permit. The DUE, or their designee and a representative from the Office of Communications - CHART and ITS Development will monitor the Utility and the facilities to ensure compliance with the Agreement and the Permit.

12-16A If for any reason the Communication Company does not comply with the Agreement or the Permit, the MDOT SHA may terminate the Agreement that allows the Company to use the MDOT SHA's ROW.

12-17 At the end of the Agreement period, the DoIT, the MDOT SHA, and/or the Utility Company will decide to either terminate the Agreement or renegotiate the Agreement for another term.

12-18 The Communication Company Representative shall forward a letter to initiate the optional renewals in the original Agreement six months prior to the expiration.

If the renewal options are expired:

12-18A A new Agreement shall be written if the Communication Company wishes to continue occupancy.

12-18B If the Communication Company wishes to not continue, the Agreement is terminated.

1. If the equipment is on a Macro or Micro site, it shall be removed according to the terms of the Agreement
2. If the equipment is fiber optic, it shall be abandoned or removed according to the terms of the Agreement

References in the 2021 Utility Manual: [2.03.07 Resource Sharing Agreements](#)
[6.15 Resource Sharing](#)
[6.15.03 Resource Sharing Proposals](#)

SECTION 13: MISS UTILITY – Miss Utility Ticket Tracking System (MUTTS)

- 13-1** The Annotated Code of Maryland Public Utilities Article Title XII relates to damage prevention of underground facilities and is commonly known as the “Miss Utility Law.”
- 13-2** There are four Offices responsible for responding to and marking the MDOT SHA Utilities within the ROW on Miss Utility Tickets:

Office of Traffic and Safety (OOTs): Responsible for the MDOT SHA traffic signals.

Office of Communications: Responsible for Closed Circuit Television Cameras, Weather Stations, MDOT SHA Fiber Optics and Dynamic Message Boards.

Data Services Engineering Division (DSED): Automated Traffic Recorders (ATRs)

Maintenance: Street Lights on metal poles bases and lighted Direction Signs.

- 13-3** The DUE will have access to SalesForce and will grant their Assistant and at least two of their Utility Team members access. This process is coordinated through the OOC Utilities Team’s by way of Office of Information Technology.

13-3A This access is for assigning tickets to the four Offices mentioned in 13-2.

13-3B Training for staff members may be located here: <S:\SHA\OOC\UTILITY\Training>

- 13-4** The DUE and Assistant DUE are responsible for having a team member and a backup to be responsible for assigning the tickets to the four offices at least two times a day. The Assigner shall review is the Miss Utility Ticket has a MDOT SHA Permit. If the permit number is not correct the District shall direct them to obtain a MDOT SHA Permit or if the internal code (for not billing each other’s offices) is used incorrectly, the code shall be removed immediately. The District can submit the Contractor and ticket number to Statewide Utilities review and education to the Contractor.

References in the 2021 Utility Manual: [CHAPTER 4: UTILITY CONSTRUCTION](#)
[CHAPTER 8: PROJECT COORDINATION](#)
[CHAPTER 10: SIGNALS, SIGNS AND OTHER TRAFFIC STRUCTURES](#)

APPENDIX

All Forms are located online Office of Construction Forms and Documents: [Utilities](#)

UTILITY TABULATION FORM RW-57

The DUE, their designee, or the Utility Owner Representative shall populate the Form for the entire Limits of Disturbance. Stations and Offsets are utilized for the determination of cost sharing responsibilities, known as Prior Rights.

For Aerial facilities: The Poles are the determining factor and shall be listed in an orderly fashion from the beginning of a project to the end. One Form per Plan sheet is acceptable for larger projects. For clarity, side streets shall use a separate form.

For Underground facilities: For the underground, call out surface features and limit mainline “runs” to 100’ segments. Facilities shall be listed in an orderly fashion from the beginning of a project to the end. One Form per Plan sheet is acceptable for larger projects. For clarity, side streets shall use a separate form.

UC-6 DISTRICT STATEMENT IN REGARD TO THE ARRANGEMENTS FOR COORDINATION AND COMPLETION OF UTILITY ADJUSTMENTS

Questions and how to answer:

1. Description of the proposed adjustments: This is answered by stating what the conflicts were that led to the facilities needing to be relocated. Such as widening the road impacted the pole line and number of poles to be relocated or the improved drainage conflicts with the water main from station 100+50 10'R to 150+25 9'R. Shall not be answered, "For roadway improvements".
2. Work to be completed in advance of construction: This is answered by stating if anything is needed before the utility can start construction. Such as the utility needing their own Right of Way; or the request to use the MDOT SHA Right of Way; or any advanced grading and/or clearing and grubbing needs.
3. Work to be coordinated with the physical construction schedule. (Describe need for such items as grading or clearing, necessity for maintaining existing facilities in service, when the work can begin, and durations): This is answered by stating anything that has special needs i.e. customers that cannot lose power, seasonal work, the need for a planned outage, material lead time, or the ability to work concurrent or the necessity to work consecutive.

UC-7A DISTRICT - UTILITY PLAN REVIEW

Questions and how to answer:

1. Agreement Status: This is answered by stating if we have an executed UC-5 when we have a Master Utility Agreement with the utility or we have a Letter of Exchange when we do not have a Master Utility Agreement and the date of the Letter of Exchange. Common response would be the date of the Master Utility Agreement or, that the Letter of Exchanges will be executed and Notice to Proceed will be issued upon OOC Utilities approval.
2. FAP Programming Status: This is answered by stating if the project will be using qualified Federal Funds, and if the MDOT SHA is planning to submit the Utility relocations to Federal Aid. *From time to time a project may utilize Federal Funds for Construction but chose to use State Funds for utility relocations. This is where it should be noted and how that information was communicated. Also, provide the Federal Aid Programming number. If there is no Federal Aid, then state "State Funded".
3. Right-of-Way Report Status: This is stated by answering the RW-57 is included in the PS&E review submission and the date of the Form was executed. *If the relocations are electric poles and would be considered High Voltage Line Act (HVLA) note, "This process was excluded due to HVLA". Additional poles beyond the HVLA must still follow Prior Rights, and the need for a RW-57. Any Betterment shall be addressed separately.
4. Necessity of Utility Work: This is answered by stating what conflicts led to the request for the specific utility relocations. Generally, it shall be the same as the UC-6 unless there were design changes.
5. Safety and Conformance to MDOT SHA/FHWA regulations: this is answered by confirming they have signed the Utility Permit General Provisions and they will comply to the Safety and Conformance regulations.
6. Replacement-in-Kind and/or Betterment(s): This is answered by stating the relocations are Replacement-in-Kind and if the relocations have any portion being a Betterment (forced by MDOT SHA or Elected by the Utility). When replacing older facilities, it may appear betterments such as increased diameter or additional appurtenances are included in the PS&Es. This is answered by stating, "Replacing facilities as per current applicable codes or standards".
7. Sequence of Utility work relative to MDOT SHA work and other Utility Work: This is answered with extensive detail such as, the order by which the utilities shall relocate to avoid relocation construction conflicts with each other, as well as necessities such as advanced grading or tree trimming/removal, etc. This also be answered by stating concurrent work if applicable.
8. Status of other Utility work on this contract: This is answered with extensive detail if there are other Utilities with conflicts and the proposed timelines of their relocations design and construction times. This is for Coordination of sequencing for utility relocations.

9. PS&E Status: This deals with funding, whether we are utilizing State Funds or when applicable, using Federal Funds. When a relocation estimate is over \$100,000, that is the trigger for determining the PS&E package should be submitted to Federal Aid for use of Federal Funds. *Unless it has been determined that the MDOT SHA is using State Funds even if the Project is using Federal Funds for Construction.

Answer by using one of these true statements:

- a. "Relocations are less than \$100,000 therefore using State Funds only"
- b. "Relocations are more than \$100,000 therefore submitting to Federal Aid for approval"
- c. "Relocations are more than \$100,000, although it has been determined the MDOT SHA is using State Funds for utility relocations"
- d. The entire project is State Funded with no Federal Aid involvement

*Ensure the programming is stated correctly on the Form 42, lines 20 and 35.

10. Form 30 Status: This is generally answered that once the OOC Utilities review is complete (or when applicable, Federal Aid is approved), the Form 30 process will be initiated by the District Utility Team.
11. Buy America Steel and Iron Act: Regardless of Funding, all projects shall follow the Federal Buy America Requirement. The UC-5 Form has a disclosure addressing this. It shall be mentioned in any Letter of Exchange as well.

Normally answered by stating:

- a. "Utility owner has material certifications on file for compliance and auditing purposes", or
 - b. "Less than \$2,500.00 or .01% of the total project estimate. Material list or letter of explanation is on file". *When utility companies, especially telecommunication companies provide a material list when less than \$2,500.00 or .01% of the total project estimate. They shall provide said material list, or an email that may be used as a letter of explanation.
 - c. When alternative bidding is requested by the Utility. An exception of CFR 635.410(b)(3) may be submitted.
12. Additional notes: This is a place to document any special circumstance(s) such as, HVLA and/or Utility orchestrated phasing separate from any MDOT SHA Contract phasing, etc.

UC-7B OOC - UTILITY PLAN REVIEW

Questions and how to answer:

13. Materials Removed: document removal of Poles, Wire, and other items by height(s) and description(s) or any abandonment(s).
14. Materials Installed: document installation of Poles, Wire, and other items by height(s) and description(s).
15. Materials Transferred: document when facilities are being transferred by stating, “Yes, there will be transferring of existing facilities” or “Not Applicable”.
16. Replacement-In-Kind: generally answered by stating “Yes, replacing with same or similar material” or “Replacing facilities as per current applicable codes or standards” or “Not Applicable”.
17. Betterment(s): Document any upgrades and improvements to existing facility or facilities or answer, “Not Applicable” when the relocation(s) are Replacement-in-Kind. *Generally, the MDOT SHA does not pay for any betterment.
18. Buy America Iron and Steel: Regardless of Funding, all projects shall follow the Federal Buy America Requirement. The UC-5 Form has a disclosure addressing this. It shall be mentioned in any Letter of Exchange as well.

Normally answered by stating:

- a. “Utility owner has material certifications on file for compliance and auditing purposes”, or
 - b. “Less than \$2,500.00 or .01% of the total project estimate. Material list or letter of explanation is on file”. *When utility companies, especially telecommunication companies provide a material list when less than \$2,500.00 or .01% of the total project estimate. They shall provide said material list, or an email that may be used as a letter of explanation.
 - c. When alternative bidding is requested by the Utility, an exception of CFR 635.410(b)(3) may be submitted.
19. Salvage: Document if the Utility Owner has disclosed, they intend to issue the MDOT SHA a credit on their Final Invoice for materials that are being removed and identify material that could be recycled for salvage. Normally answered by stating, “Any credit for Salvage will be shown on the Final Bill” or when available, state the amount listed on the estimate.

20. PS&E Status: This deals with funding, whether we are utilizing State Funds or when applicable, using Federal Funds. When a relocation estimate is over \$100,000.00, that is the trigger for determining the PS&E package should be submitted to Federal Aid for use of Federal Funds. *unless it has been determined that the MDOT SHA is using State Funds even if the Project is using Federal Funds for Construction.

Answer by using one of these true statements:

- a. "Relocations are less than \$100,000 therefore using State Funds only"
 - b. "Relocations are more than \$100,000 therefore submitting to Federal Aid for approval"
 - c. "Relocations are more than \$100,000, although it has been determined the MDOT SHA is using State Funds for utility relocations"
 - d. The entire project is State Funded with no Federal Aid involvement
21. Field Meeting: This is for when OOC Utilities needs to clarify or address any issues or concerns within the utility's PS&E. It is also a place to document phone calls, emails, and/or conversations at meetings to address anything from changes to negotiations.
22. Additional Notes: This is for documenting any negotiations, changes in the PS&E packages, phasing for the utility's relocations, or Project phasing needs.

UC-8 DISTRICT - PROGRESS BILL REVIEW

Questions and how to answer:

23. Verification of labor hours by MDOT SHA Utility Inspector or MDOT SHA Project Engineer: When utility relocations are being performed before Contract NTP is issued, the District Utility Inspector performs field inspections while completing an Inspector's Daily Report (IDR). The report verifies they witnessed utility crews working or reviewed the Utility Company's partially completed work. These are kept on file at the District Office. When the utility relocations are being performed after the Contract NTP is issued (concurrent work), the DUE, or their designee by way of a memo to the Area Engineer will forward the invoice asking for verification that the utility was on site for said billing period.
24. Date Form 30 sent to Program Control Section: Answer by stating the Date the Form 30 Work Order Request was sent to Program Control Section.
25. Percentages used by Utility for prior rights; work completion, and retention: Answer by stating the cost sharing percentage agreed to by way of the UC-5 or the Letter of Exchange for the work order number that is being invoiced.
26. Comments on material(s) or the percentage of work completed, only if obviously incorrect. The District Utilities Team will review: This would document or call to attention any anomalies or discrepancies of work completed.
27. Additional notes: This is a place to document the time periods in which the Utility is issuing the Progress Bill invoice for. May also be utilized to document invoicing over the phasing of the relocations and/or construction.

UC-9A DISTRICT - UTILITY FINAL BILL REVIEW

Questions and how to answer:

28. As Built Records from Utility: Per the MDOT Utility Manual, the Utility shall provide As Built Records with the Final Bill. From time to time, on aerial project, the PS&E relocation plans serve this purpose. The MDOT SHA shall be provided all underground utility As Built Records when the relocations were underground.
29. Verification of labor hours by MDOT SHA Utility Inspector or MDOT SHA Project Engineer: [See UC-8 Question 23's instructions on how to answer](#)
30. Determination of engineering cost percentage: This is answered by stating the cost sharing responsibility for the work order(s) from the UC-5 or the Letter of Exchange and the approval justification for any applicable additional work that wasn't in the original PS&E. *Additional work may happen from time to time for construction needs that developed in the field after design. [See UC-9A Question 31](#)
31. Documents from the MDOT SHA Project Engineer: [See UC-8 Question 23's instructions on how to answer](#) or this is answered by stating if any additional work occurred for construction needs that developed in the field after design and were verified by the MDOT SHA Project Engineer.
32. Overrun or underrun: This is answered by stating if the total of all invoices and the Final Bill together are over of under the original estimate. *When the overrun or underrun is greater than 10%, the utility shall provide a justification letter stating the reasons for the difference.
33. Progress billing and Form 30 status: This is answered by stating if any Progress Bills were issued by the Utility and paid by the MDOT SHA. The FMIS account must still be open and active and has the remaining funds to complete the billing cycle. *If the project is closed out or if the overrun causes a shortage of funds in the FMIS account, [see Section 8-3 BPO Change Orders](#)
34. Replacement-in-kind: This is answered by stating that Replacement-in-Kind happened to the facilities or if any Betterment were decided upon after the agreed upon relocations we approved.
35. Deletions or Additions to Prior Rights list: This is answered by stating if the need to add or remove any portion of a RW-57 from the work order(s) and the effect it would have on the Prior Rights cost sharing responsibility.
36. Buy America Iron and Steel Documentation: This is generally answered by stating Utility owner has material certifications on file for compliance and auditing purposes or when it was determined the cost of the iron and/or steel items used did not exceed .01% of the project or \$2,500.00 and a Material List was provided in the PS&E submission.
37. Additional notes: State anything that would need additional clarity or approval. HVLA, forced or elected betterment, etc.

UC-9B OOC - UTILITY FINAL BILL REVIEW

Questions and how to answer:

38. Progress billings: The MDOT SHA encourages monthly billings. This is when the utility bills against any work order for partial work completed until all the relocations are completed within the work orders of the PS&E. Typically answered by stating, “Yes, number of progress bills were paid totaling a dollar amount” or “Not Applicable”. This shall be verified by the UC-8 and the Utility’s back-up documentation for the invoices.
39. Materials removed: After review and verification, this is generally answered by stating, “Materials listed as removed are correct” or “Not Applicable”.
40. Materials installed: After review and verification, this is generally answered by stating, “Materials listed as installed are correct” or “Not Applicable”.
41. Materials transferred: When material were transferred: after review and verification, this is generally answered by stating, “Transferring equipment is a part of this relocation work” or “Not Applicable”.
42. Replacement-in-Kind: When the relocations were Replacement-in-Kind: after review and verification, this is generally answered by stating, “Yes, replaced with same or similar material” or “Not Applicable”.
43. Betterment: When the relocations included upgrades or improvements, after review and verification, this is generally answered by stating:
 - a. “The project included Betterment to the Utility’s facilities forced by the MDOT SHA”
 - b. “The project included Betterment to the Utility’s facilities elected by the Utility Company”
 - c. “Not Applicable”
44. Final Documentation for Buy America Iron and Steel requirements met: Generally answered by stating, “Utility owner has material certifications on file for compliance and auditing purposes” or “Less than \$2,500.00 or .01% of the total project estimate. Material list is on file”.
45. Salvage: Document any credit for salvaged material and stating the dollar amount; or answer “none” when not applicable.
46. Plans Review and Utility As Built: Plans should already be on file. When Utility relocations include underground work, the invoicing shall include As Built. Typically, aerial relocations will be the same as the plans.
47. PS&E approval date: State the date the OOC Utilities team approved the UC-7B, or when applicable, the date the Federal Aid was approved for Federal Funds and the 1240 was issued.

48. Prior rights %: State the Prior Right cost sharing responsibility that was used to determine the work orders cost sharing portion to the MDOT SHA. This is located on UC-5 and/or UC-4 that references the Work Order and/or job number and should be on the invoice.
49. Additional notes: State anything that would need additional documentation. Generally, this is used for addressing any overruns or underruns greater than 10% and stating the letter of explanation is included and on file. This is also to confirm any HVLA, forced or elective betterment.

Utility Activation Checklist Instructions

To request for Utility BPO activation, the Office of Procurement and Contract Management has a checklist to guide the user through what shall be included and what forms shall be fully executed. The checklist may be located here: <S:\SHA\OOC\UTILITY\Forms>

Change Order Activation Checklist Instructions

To activate a Change Order or Modification request, the Office of Procurement and Contract Management has a checklist to guide the user through what shall be included and what forms shall be fully executed. The checklist may be located here: <S:\SHA\OOC\UTILITY\Forms>

FMIS Project Number

An example of a project number is **KE827A51**.

The first two characters (**KE**) is the **COUNTY INDICATOR**.

The next three characters (**827**) is a sequential number.

The sixth character (**A**) is the **FUNDING SOURCE**.

The funding source values are: A = State,
B-L = Federal
M-P = Third Party
O-Z and 1-9 = Miscellaneous

The seventh character (**5**) is the **PHASE**.

The Phase Explanation:

- 1 – Project Planning
- 2 – Preliminary Engineering
- 3 – Right-of-Way
- 4 – SPR (Statewide Planning and Research)
- 5 – Construction
- 6 - Maintenance
- 8 – Reimbursements
- 9 – Miscellaneous

UTILITIES: (not in this contract sample)

- A – Telephone
 - B – Gas & Electricity
 - C – Water & Sewage
 - D – Railroads
 - E – Cable
 - F – Oil Pipeline
 - G – Other
 - K – Operations
 - L – Education Training Courses
 - M – Federal/County
- *J - new Funding Funding type for Utility Phase
- Shall be used for Preliminary Investigations and Utility Permit Inspections for inspection of permits when the Utility IS NOT seeking reimbursements

The eighth character (**1**) is a **SEGMENT NUMBER**.

A single project will have segment (sub phase) 1 or A. If that project is split into several smaller projects, the segment (sub phase) values occur in the range 2-9 and B-Z.

Maybe a three box entry, such as:

KE827 **A** **51**