



CASHLESS TOLLING

DESIGN-BUILD PROJECT

TA 19-1, Contract No. D800002

Request for Proposals

Addendum #6

April 17, 2019

Modification to the Request for Proposals

CASHLESS TOLLING

Design-Build Project

TA 19-1, Contract No. D800002

Note to Proposers

Differences between the deleted pages and the revised pages have been identified as follows:

- Brackets have been inserted on the left-hand margin of the pages to indicate where changes have been made to the documents; and
- Text additions have been shown in underlined red font and text deletions have been shown in crossed out red font.

General Instructions

Delete Pages A-8 and A-9 of the Instructions to Proposers, Appendix A, Project Information, and substitute the attached revised Pages A-8 and A-9. Please note, there are no tracked changes on Page A-9 but the page is included due to the shift of text resulting from the additions to Page A-8.

Delete Page B-7 of the Instructions to Proposers, Appendix B, Administrative Submittal Requirements, and substitute the attached revised Page B-7.

Delete Page C-5 of the Instructions to Proposers, Appendix C, Technical Proposal Submittal Requirements, and substitute the attached revised Page C-5.

Delete the Page containing the list of Forms in the Instructions to Proposers, Appendix E, Forms and substitute the attached revised Page containing the list of Forms. Add the attached Kapsch ORT Tolling List Form and ORT Tolling List Form.

Delete Pages 2, 66, 67, 68, 74, 93, 94, 95, 100, 101, 102, 134, 157, 158 and 164 of the DB Contract Documents, Part 3, Project Requirements and substitute the attached revised Pages 2, 66, 67, 68, 74, 93, 94, 95, 100, 101, 102, 134, 157, 158 and 164. Please note, there are no tracked changes on Page 102 but the page is included due to the shift of text resulting from the addition to Page 101.

Delete Pages A-1 and A-2 of the DB Contract Documents, Part 4, Utility Requirements, and substitute the attached revised Pages A-1 and A-2.

Add the attached Toll Plaza Utility Information to Appendix A-2 to the DB Contract Documents, Part 4, Utility Requirements.

Delete Drawing Interchange 23 Concept of the DB Contract Documents, Part 6 – RFP Plans – Indicative/Concept Plans and replace with the attached revised Drawing Interchange 23 Concept.

Note to Design Build Proposers, the following changes have been made to Final RFP Part 7 – Engineering Data since Amendment #4 was posted on April 11, 2019:

Part 7, Section 3 – Tandem Lot Routes: Revised Tandem Route for Exit 19 tandem lot – 4/15/19

Part 7, Section 6 – Asbestos and Hazardous Materials: Added Final HazMat Reports for Exit 19, 20E, 20W, 21, 21B, 22, 26, 27, 28 29, 29A, 30, 31, 32, 33, 34, 35, 37, 38, 40, 41, 42, 43, 44, 48, 48A, 49 - 4/15/19 (Note that all HazMat Reports are now final)

Part 7, Section 2 – ORT Concept Plans – Revised Concept Plan for Exit 48 – 4/17/19

Part 7, Section 5 – Terminus Location Concept Plans: Revised Concept Plan for Ripley – 4/17/19

Part 7, Section 15 –Special Exits: Revised Concept Plan for Exit 35 – 4/17/19

New York State Thruway Authority

Part 7, Section 18 – Existing & Proposed Conditions: Revised Toll Plaza Positive Protection Table – 4/17/19

Part 7, Section 26-Bridge Vertical Clearance: Created new section to include bridge vertical clearance for Interchange 23 Bridge and 219 bridge at Lackawanna – 4/17/19

Part 7, Section 3 – Tandem Lot Routes: Deleted Exit 33 Proposed Tandem Route - 4/17/19

No other provision of the solicitation is otherwise changed or modified.

Orange	17.0
Rensselaer	3.2
Schenectady	3.2
Seneca	5.9
Ulster	17.0

The goal for the participation of women is 6.9%.

These goals are applicable to all the ~~Contractor~~Design-Builder's construction work (whether or not it is Federal or federally assisted). If the ~~Design-Builder~~Contractor performs construction work outside of New York State, it shall apply the goals established for the covered area where the work is actually performed.

A8.0 AUTHORITY'S DESIGNATED REPRESENTATIVE

The Authority's Designated Representative for this Procurement is:

James Chicoine and Michael Doyle
Attention: Cashless Tolling Design-Build Project
Office of Capital and Contracts Management
New York State Thruway Authority
200 Southern Blvd., 2nd Floor
Albany, New York 12209, USA

E-mail: CTDB@thruway.ny.gov

The above named person(s), as the Authority's Designated Representative for this procurement, shall be the Authority's point of contact and source of information for this procurement.

A9.0 ONE-ON-ONE MEETINGS

Prior to and/or after submission of Proposals, the Authority may conduct One-on-One meetings with Proposers as described below. If One-on-One meetings are held, they will be offered to each Proposer. The Authority reserves the right to disclose to all Proposers any issues raised during One-on-One meetings. However, the Authority will not disclose to other Proposers any information pertaining to an individual Proposer's technical concepts, Proposal or ATCs. The Authority will hold One-on-One meetings on matters it deems appropriate.

A9.1 MEETINGS DURING PROPOSAL PERIOD

If the Authority decides that One-on-One meetings should be held, they will be held between the Authority and each Proposer. The period indicated in this ITP Appendix A for these meetings is subject to change. Specific meeting dates will be confirmed in advance of each meeting by the Authority to each Proposer's Representative.

At least five (5) business days prior to the first scheduled meeting each Proposer may submit suggested agenda items for each One-on-One meeting to the Authority's Designated Representative. The Authority will advise the Proposer of the location, final agenda, and the protocol for the meeting at least two (2) business days before the meeting. ATCs may be discussed at One-on-One meetings.

Each Proposer may request One-on-One meeting(s) with the Authority to discuss general concepts for potential ATCs or obtain preliminary feedback from the Authority, to be held prior to the ATC submittal deadline (see ITP Appendix A). Should a One-on-One meeting be scheduled with a Proposer, the Authority will offer the opportunity for a One-on-One meeting with the other Proposers. The Authority may also schedule One-on-One meetings with any Proposer that has submitted ATC(s), to allow the Authority to fully understand the ATC(s) and to request clarifications. At any meeting, the Authority may seek clarifications regarding previously submitted ATCs.

If a Proposer requests additional meetings, or if the Authority considers it desirable or necessary to schedule additional meetings, the Authority may, in its discretion, schedule any such additional meetings.

The Authority may, in its sole discretion, issue one or more Addenda to address any issues raised in the One-on-One meetings.

A9.2 POST-PROPOSAL MEETINGS

The Authority does not currently anticipate the need for post-Proposal discussions, but reserves the right to enter into discussions and request revised Proposals. If interviews or presentations occur, Proposers shall not modify their Proposals or make additional commitments regarding Proposals at such meetings. The Authority anticipates engaging in limited negotiations with the selected Proposer prior to Contract award regarding such matters as are deemed advisable for negotiations by the Authority, as permitted by 23 CFR Section 636.513. The selected Proposer shall have no right to open negotiations on any matter that has not been raised by the Authority. See ITP Section 5.3. Negotiations can delay award of the Contract and subsequently affect end dates which both parties should avoid.

A9.3 STATEMENTS AT MEETINGS

Nothing stated at any meeting will modify the ITP or any other part of the RFP unless it is incorporated in an Addendum issued pursuant to ITP Section 2.3.1 or, in the case of an ATC, approved in writing in accordance with ITP Section A11.1.

A10.0 PROPOSAL STIPEND

Subject to the requirements and limitations set forth in the Stipend Agreement, the Authority shall pay to the Stipend-Eligible Proposer, and the Stipend-Eligible Proposer agrees to accept as full compensation for its Work Product, an amount (the "Stipend Amount") equal to 50% of the Proposer's total Qualified Costs, as substantiated in accordance with Article 4 (D) & (E) of the Stipend Agreement equals the stipend amount, not to exceed the amount listed in Article 4 (H) of the Stipend Agreement. Overhead costs are eligible. For qualified costs see Appendix G, Abbreviations and Definitions. Relative to overhead costs, the engineering firms established and current overhead rates with the Authority and NYSDOT will be used. However should the engineering firms overhead rates not be current or not accepted by the Authority and/or NYSDOT the overhead rate will default to 125%. The Proposer's costs can include a 110% overhead rate.

Table B
Format of Volume 1

Proposal Section No.	Required Information	ITP Reference
Section 1 (Proposer's Offer)	<ul style="list-style-type: none"> · Form FP, Form of Proposal · Form FP(A), Appendix to Form of Proposal 	B2.1
Section 2 (Proposer Information)	<ul style="list-style-type: none"> · Summary of Organization (2 single sided pages) · Changes in Organization (Form RFC)(If applicable) · Licensing Information 	B2.2
Section 3 (Forms and Certificates)	<ul style="list-style-type: none"> · Form AAP-10 MWBE/SDVOB Solicitation Log · Form AR, Acknowledgement of Receipt of RFP, Addenda and Responses to Questions · Form C, Proposer's Representative · Form CR, Commitment to Assign Identified Resources to Project · <u>Form EEO, Equal Employment Opportunity Certification</u> · <u>Form Kapsch Tolling List</u> · Form KP, Key Personnel Information · Form L-3, Authorization to Provide Professional Services in New York State · Form LC, Lobbying Certificate · Form LLL, Disclosure of Lobbying Activities · Form LDB, List of Proposed MWBE/SDVOBs · Form LSI, Letter of Subcontract Intent · <u>Form NC, Non-Collusion Affidavit</u> · <u>Form ORT Tolling List</u> · Form SDU, Schedule of Proposed MWBE/SDVOB Utilization · Form U, Conflict Questionnaire · Surety Commitment Letters 	B2.2
Appendix A	<ul style="list-style-type: none"> · Evidence of Authorization · Joint and Several Liability Statement (If Applicable) · Organizational Documents 	B2.3
Appendix B	<ul style="list-style-type: none"> · Updated Financial Information 	B2.3.4

- D) Plans and Cross Sections of Roadway under the Mainline Gantry and final alignment for the Mainline Gantry locations and terminus locations.. The cross sections should show as a minimum: lanes, shoulders, railings, barriers, Communications Buildings and reduced footprints of the infrastructure at the following locations: between 23 (Boulevard) and 24 (Washington Avenue), between 39 (State Fair) and 40 (Westport), between 34 (Canastota) and 34A (Collamer) and at Terminus location Williamsville;
- E) Plans, elevations and cross sections showing proposed configurations and dimensions of the primary structural elements of the Mainline Gantry structures, the means of accessing Cashless Tolling Equipment on the Mainline Gantries, and the Communication Buildings supporting the Cashless Tolling Systems at the following locations: between 23 (Boulevard) and 24 (Washington Avenue), between 39 (State Fair) and 40 (Westport), Terminus locations, Canaan, Ripley and Williamsville; For the ORT Exit Sites plans, elevations, and cross sections showing proposed configurations and dimensions of the primary structural elements of the mini-gantry structures, and ~~to~~ Communication Buildings supporting the Cashless Tolling Systems at the following: Exit 20W, Exit 31, Exit 49, and Exit 57. Table of minimum vertical clearances to be provided at the following mainline Gantry locations: between 23 (Boulevard) and 24 (Washington Avenue), between 25 (Interchange) and 25A (Duanesburg), between 39 (State Fair) and 40 (Westport) at Terminus locations Canaan, Williamsville, and Ripley ~~for every lane in each direction~~. In addition include in the table of vertical clearances for the mini-gantries at the ORT Exit Sites: Exit 27, Exit 33, Exit 19, and Exit 43. ~~Drawings may be used in combination with or in place of the table~~

C3.3 DESIGN BUILD CONSTRUCTION APPROACH (MEANS AND METHODS)

C3.3.1 Overall Construction Sequence of the Work

Provide a narrative describing the overall construction sequence of the Work in the Contract, including all staging areas, as well as the final permanent footprint of the constructed improvements. The narrative **shall** discuss the logistics and challenges of constructing the project elements while meeting the Work Zone Traffic Control requirements, and shall discuss why the sequence was chosen, how the sequence benefits the Authority, and why it is the best solution for constructing the project elements. The Narrative **shall** also discuss the requirements as stated under ITP, Appendix A, Section A12.1.2.3.

C3.3.2 Work Zone Traffic Control (WZTC)

Provide a narrative describing the proposed WZTC at the following Toll Plaza removal sites; Interchange 23, Terminus location Lackawanna, ORT Exit Sites, Exit 20W, Exit 31, Exit 49, and Special Exit Newburgh (Exit 17 Exit only). Include a description of the Proposer's plan to maintain safety and use of traffic control to minimize disruption to the travelling toll payers and minimize congestion, stemming from the construction work. At a minimum, the Work Zone Traffic Control narrative should:

- A) Describe the major phases of the Work;
- B) Include information regarding maintenance of access and egress. Provide phase notes and details regarding sequence of work activities;
- C) Identify each affected road and access way within the vicinity of the Project site, and describe the potential impacts, mitigation measures, limitations of use, and the number and duration of time that each road and maintenance access way may be impacted in performing the Work, including information regarding detours;

APPENDIX E

Form Designator Form Title

Proposal Form

FP Form of Proposal
 FP(A) Appendix to Form of Proposal

General Forms

AAP-10 MWBE/SDVOB Solicitation Log
 AR Acknowledgement of Receipt of RFP, Addenda and Responses to Questions
 ATC Alternative Technical Concept Submittal Form
 BDEA** Bid Document Escrow Agreement
 C Proposer's Representative
 CR Commitment to Assign Identified Resources to Project
 EEO Equal Employment Opportunity Certification
 G Gantt Chart
 KP Key Personnel Information
 L-3 Authorization to Provide Professional Services in New York State
 LC Lobbying Certificate
 LLL Disclosure of Lobbying Activities
 LDB List of Proposed MWBE/SDVOBs
 LSI Letter of Subcontract Intent
 Kapsch Kapsch Checklist
Kapsch Tolling Kapsch Tolling List
 NC Non-Collusion Affidavit
 ORT ORT Checklist
ORT Tolling ORT Tolling List
 PAB** Form of Payment Bond (Labor and Material Bond)
 PEB** Form of Faithful Performance Bond
 R Summary of Individual's Experience
 RFC Request for Change
 SA* Stipend Agreement
 SCD Schedule of Contract Durations
 SDU Schedule of Proposed MWBE/SDVOB Utilization
 SWPPP SWPPP Checklist
 U Conflict Questionnaire

Price Proposal Forms

AAP-10 MWBE/SDVOB Solicitation Log
LDB List of Proposed MWBE/SDVOBs
LSI Letter of Subcontract Intent
 PP Price Proposal Cover Sheet
SDU Schedule of Proposed MWBE/SDVOB Utilization
 SP Schedule of Prices
 WPS Work Payment Schedule
 PB Proposal Bond

* Included for reference only. Form or Agreement to be submitted after Proposal Due Date

** Included for reference only. Form or Agreement to be submitted after Proposal Due Date by the selected Best Value Proposer

New York State Thruway Authority

The work to be performed varies at each Toll Plaza location with Cashless Tolling to be implemented by demolishing Toll Booths and replacing them with Overhead Gantries on the Thruway Mainline.

The Mainline Tolling are comprised of eleven (11) interchange-to-interchange connections and five (5) terminus points on the current ticketed system and shall involve the strategic cost effective placement of gantries, the removal of toll plazas, the reduction (in most locations) of the infrastructure footprint, positive separation of opposing traffic, signing, striping, design and construction modifications of super elevations to accommodate higher speeds through the gantry areas and modified toll plazas areas, landscaping, electronic work, communication building construction (Communication Buildings), possible tandem lot access modifications or closures or relocations, and/or solutions to provide safe ingress and egress to and from the Thruway System.

Mainline Gantries are required at the following interchange locations: between 22 (Selkirk) and 23 (Boulevard), between 23 (Boulevard) and 24 (Washington Ave.), between 24 (Washington Ave.) and 25 (Schenectady), between 25 (Schenectady) and 25A (Duanesburg), between 25A (Duanesburg) and 26 (Rotterdam), between 34 (Canastota) and 34A (Collamer), between 34A (Collamer) and 35 (Thompson Road), between 35 (Thompson Road) and 36 (Mattydale), between 36 (Mattydale) and 37 (Electronics Parkway), between 38 (Liverpool) and 39 (State Fair), between 39 (State Fair) and 40 (Weedsport), between 43 (Manchester) and 44 (Canandaigua), between 44 (Canandaigua) and 45 (Victor), between 45 (Victor) and 46 (Henrietta), between 46 (Henrietta) and 47 (Leroy), between 47 (Leroy) and 48 (Batavia),

Mainline Gantries are also required at the following Terminus Locations: Woodbury (Approx. MP 45.03), Canaan (Approx. MP 17.83), Williamsville (Approx. MP 419.60); Lackawanna (Approx. MP 430.52), Ripley (Approx. MP 494.51).

Refer to Part 7, Engineering Data, Section 1 for the limits of where Mainline Gantries may be constructed.

The Design-BUILDER shall be responsible for demolition of existing Toll Plaza Communication Buildings (TUBs) at the following Terminus locations: Woodbury (MP 45.03), ~~and~~ Canaan (MP 17.83) and Ripley (MP 494.51). Also, TUB removals are required at the Interchange locations of: Exit 23 (Boulevard), Exit 24 (Washington Ave.), Exit 25 (Schenectady), Exit 25A (Duanesburg), Exit 34A (Collamer), Exit 36 (Mattydale), Exit 39 (State Fair), Exit 44 (Canandaigua), Exit 45 (Victor), Exit 46 (Henrietta), and Exit 47 (Leroy).

The Mainline Tolling Gantries will have equipment provided and installed by Kapsch (Thruway provider).

Toll Plazas shall be demolished at the following terminus locations: 15 (Woodbury, MP 45.03), B3 (Canaan, MP 17.83), Williamsville (MP 419.69, Lackawanna (MP 430.51), Ripley (MP 494.51) and interchange Locations Exit 23 (Boulevard), Exit 24 (Washington Ave.), Exit 25 (Schenectady), Exit 25A (Duanesburg), Exit 34A (Collamer), Exit 36 (Mattydale), Exit 39 (State Fair), Exit 44 (Canandaigua), Exit 45 (Victor), Exit 46 (Henrietta), and Exit 47 (Leroy), along with Exit 35 (Thompson Road).

The Design-BUILDER shall be responsible for modifying the footprint leading into and out of the Toll plazas, which will involve pavement work, positive separation of opposing traffic flow, potential reduction and modification of conflicting traffic moves such as Park and Ride Lots, tandem Lots, Thruway Maintenance vehicles ingress and egress to Maintenance Yards, and State Police

than Authority, and non-standard signs owned by private entities but placed within Authority right-of-way, with the acceptance of the Authority, shall be removed, stored and reinstalled as required.

The Design-Builder shall be responsible for the provision of all signs, posts, frames and other structural components required for the installation and support of the sign panels.

12.3.3.2 Pavement Markings

Pavement markings shall be uniform in type, color, dimensions, location, and reflectivity and shall meet the Thruway Standards and Specifications.

The Design-Builder shall be responsible for the design of all temporary and permanent pavement markings for this Project. Permanent pavement markings for the 5 Terminus Locations and all Mainline Gantry Locations for the new asphalt placed shall use the Thruway's triple drop pavement marking system, specification Item Number 685.17XX-25. For all ORT Sites and Interchange locations, permanent pavement markings on new asphalt placements shall be epoxy pavement markings.

At the ORT Exit Sites, the Design-Builder shall provide solid continuous pavement markings (white and yellow) under the Mini-Gantries (64 feet), for the purposes of preventing vehicles crossing lanes while under the Mini-Gantries to better collect information to reinforce surety of proper toll collection.

All linear roadway and cross hatching pavement markings shall be installed in accordance with the Authority's Specifications.

12.3.3.3 Ground Mounted Sign Structures

All ground mounted sign supports shall include breakaway devices, unless protected by concrete barrier.

12.3.3.4 Traffic Signals

Design-Builder shall comply with NYSDOT Plan Sheets, Notes, Special Notes, Special Specifications and Standard Specifications associated with signal rebuild of #2A and 2.1A at the intersection of Rte 9W and NYS Thruway Exit 23.

Provisions listed below shall apply to the signalized intersections at Interchange 23 constructed as part of this project.

Infrastructure shall be provided to facilitate the addition of traffic signal heads for dedicated protected left turn phases (including red, yellow and green left turn arrow displays) ~~for any signalized intersection approach with or without dedicated left turn lanes.~~

~~Infrastructure shall be provided to facilitate the addition of protected left turn phases (including future heads for green left turn arrow displays) for any signalized intersection approach without a dedicated left turn lane.~~

Loop detectors shall be installed per plans ~~beneath the top course of any dedicated left turn lane at the signalized intersection.~~

New York State Thruway Authority

The Design-Builder will be responsible for maintaining the existing signal until the new signal is activated. No actuated signal shall be left on fixed time operation for more than 30 days. The Contractor shall use new detectors to be installed under the contract to provide detection for the existing signal phases with the approval of the EIC. Any changes in the existing controller to allow the use of these new detectors will be performed only by NYSDOT Traffic Signal Maintenance personnel.

Failure to provide detection at actuated signals beyond the 30-day period shall be considered as noncompliance with the requirements of 619-3.17 of the Standard Specifications and result in the Contractor being ineligible for payment under Items 619.1611 – Maintain Traffic Signal Equipment (Requirement A) or 619.1613 – Maintain Traffic Signal Equipment (Requirement C).

Traffic signal activation shall be done by NYSDOT Traffic Signal Personnel only. The Design-Builder shall pay a liquidated damages charge of \$10,000 if the traffic signal is activated (including flashing operation) without NYS Traffic Signal personnel present. The Design-Builder shall notify the Authority's Project Manager and the Region 1 Traffic Signal Maintenance Supervisor (518-237-3954) two weeks prior to the requested date of activation inspection.

Provisions below apply to the entire project area.

Two weeks prior to beginning any construction work on traffic signals associated with the project, the Design-Builder shall notify the Authority's Project Manager to perform an inspection of the existing traffic signal equipment. After the inspection, the Design-Builder shall submit to the Authority Project Manager a written notification of the date they will assume responsibility for traffic signal maintenance. No construction work shall proceed until traffic signal maintenance is assumed by the Design-Builder. The existing traffic signal shall be maintained by the Design-Builder under the requirements of Section 619 of the Standard Specifications, except for the controller, programming, and timing which shall be maintained by the Authority/NYSDOT Region 1.

12.3.3.5 Microwave~~Loop~~ Detectors

The Design-Builder shall provide microwave detection at all approaches following specifications for NYSDOT Item 680.58010009. Any other detection shall be per plans or as approved by the Authority.~~replace all existing loops on the Thruway exit ramp to 9W. All loops shall have two sets of 6'x20' loop spaced 10' apart installed at the stop bar, centered in the respective lane, with three turns wired in parallel. The Design-Builder shall splice the loop wire to a twisted pair lead cable, which shall in turn be wired to the cabinet. In addition shielded lead in cable shall be run from the new cabinet to the pullbox by any service road point loop detector. A separate lead in shall be run for each loop. These lead-in cables are to be terminated inside their respective controller cabinets.~~

12.3.3.6 Conduit/Cabling Requirements

The following cables shall be utilized during the installation of new signal heads.:

- A) One way signal heads: furnish and install a 5C#14 awg cable;
- B) Two way signal heads: furnish and install a 10C#14 awg cable;
- ~~C) Three way signal heads: furnish and install a 15C#14 awg cable.~~

The Design-Builder shall furnish and install the following conduit as a minimum:

- C) Detection loop conduits shall be 1" Flex between the first junction box and loop including "J-box" in left lanes or far side pullbox.
- D) Conduits under roadway shall be 3" Rigid Plastic (typical)GS.
- ~~E) Conduits between Span or Mast Arm poles and nearest junction box shall include a 2 21-inch RGS and a~~

~~4-inch RGS.~~

~~F)E) ___ Conduits between Pedestrian poles and nearest junction box shall use a 2" RGS.~~

~~G)F) ___ All other underground conduit installations shall be 2" Rigid PlasticGS.~~

12.3.3.7 Signal Heads/ Signal Poles

All signal faces to be installed as part of this Project shall be 12" LED₇. All signal heads shall have 5-inch backplates with 3-inch yellow reflective tape. All signal heads shall be Aluminum.

~~Span Pole Analysis shall be carried out using the latest version of the NYSDOT's Span Wire Analysis Program to determine the signal pole sizes and foundations needed. Span pole sizes identified by the Span Wire Analysis Program shall be increased by a minimum of 15% loading rounded up to the nearest 1000 lb increment. Footing size shall be increased to accommodate the maximum loading of the pole.~~

12.3.3.8 Cabinet/Disconnect Switch

The Design-Builder shall install one NYSDOT Authority supplied microcomputer cabinet ~~at (one cabinet running both signals) each of at~~ the signalized intersections. The NYSDOT will provide the Design-Builder with State compliant traffic signal control equipment (i.e. signal cabinet, signal controller, detector cards, etc.) as specified by New York State Vehicle and Traffic Law, Article 44, Section 1681. At least two weeks prior to construction, the Design-Builder shall request the traffic signal control equipment from the NYSDOT Region 1 Traffic Safety & Mobility Office (518-457-5283) and the Authority's project manager. The programmed Controller and equipped cabinet shall be retrieved by the Design-Builder at the NYSDOT Region 1 Traffic Signal Maintenance Shop (21 9th St, Waterford, NY 12188), when available. The Design-Builder shall also install a meter and disconnect switch on the span pole to which the cabinet has been mounted. At a minimum of 8 feet above ground level. The cabinet and disconnect switch shall meet the requirements of Special Specifications 680.80324515 and 680.94997008, respectively.

12.3.3.9 Pullbox

All ~~other~~ pullboxes required shall be per NYSDOT standard 26"x18" pullboxes. ~~Pullboxes may be either reinforced concrete or reinforced concrete/bituminous fiber.~~

12.3.3.10 Power Supply

Design-Builder shall notify National Grid for an Electric Service Order and provide the meter number to NYSDOT Region 1 Office of Traffic Safety & Mobility as soon as available. Power shall be supplied to the microcomputer cabinet from the currently utilized utility pole. The power supply cable shall be a 2 conductor, 6awg cable conforming to the requirements of Special Specification 680.95020615.

12.3.3.11 Traffic Signal Salvage

Any traffic signal heads, span wires, poles, cabinets and controllers removed as part of the project shall continue to be property of NYSDOT. This signal equipment will be stored by the Design-Builder until picked up by NYSDOT staff within 2 weeks. The contractor shall notify the CQAE when this equipment is available for pick up.

12.4 DELIVERABLES

Section not used.

SECTION 15 WORK ZONE TRAFFIC CONTROL

15.1 SCOPE

The Design-Builder shall be responsible for the planning and provision of Work Zone Traffic Control (WZTC), required to perform the Project Work until Project Completion. This Project Requirement applies to any roads, ramps, cross roads, local streets, maintenance roads, driveways, and active paths within and/or affected by the Project.

The Design-Builder shall provide WZTC for the safe and efficient movement of people, goods, and services through the Project area(s) while maintaining access and minimizing negative impacts to residents, commuters, businesses, toll operations, State Police, and Authority maintenance operations.

Note that, as used in this section, "Work Zone Traffic Control plan" or "WZTC plan" is the equivalent of "Maintenance and Protection of Traffic plan" or "MPT plan" as described in Chapter 16 of the Highway Design Manual (HDM).

As a general rule, when work on the Thruway system is ongoing, the Design-Builder is allowed to reduce the posted speed limit by 10 mph for the safety of the workers and travelers as travelway surfaces or adjacent areas are under construction.

15.2 STANDARDS

The Design-Builder shall perform the work zone traffic control activities in accordance with the Contract Requirements and the applicable Standards, Design Codes and Manuals listed in Section 1.6, unless otherwise stipulated in this Project Requirements, or otherwise applicable to the Project.

15.3 REQUIREMENTS

15.3.1 Work Zone Traffic Control at Gantries

The Design-Builder is required to follow the Standard Sheets found on-line at the Thruway Authority website for each Division. These restrictions listed by time of day and locations on the Thruway Mainline are based on volumes of traffic and shall not be violated. Gantry erection (lifting operations) on the Mainline and at the ORT sites is the only exception for violations of traffic lane restrictions as shown on the Thruway Standard Sheets. For Gantry erection, the Design-Builder shall station portable Variable Message Sign (VMS) to provide advance notice to travelers one week prior to short term closure(s). The placement of the VMS boards shall remain in place (not necessarily activated) until 24 hours after Gantry erection. The number of VMS boards to be used at each Gantry location is two per direction for which the Gantry erection impacts. The placement of the VMS boards shall be coordinated and approved by the Authority, two (2) weeks prior to placement and shall be placed so traffic can opt to use an alternate route outside the Thruway System.

In addition, the Design-Builder shall work with the Authority on a press release to be issued by the Authority one week prior to the short-term closure. The Design-Builder shall submit a draft to the Authority 10 days prior to the intended closure. Any delay in implementing the short-term closure will delay the adjusted closure date by a minimum of three (3) days so follow-up notifications and public outreach can be modified.

For each Gantry erection (Mainline Gantry or ORT Mini-Gantry), the work shall take place and be completed within 20 minutes (the short term closure), and those short term closures shall occur between 1:00 A.M. and 3:00 A.M. If the Design-Builder exceeds that time period allowed, whether it is the 20 minutes or the work occurs outside the 1:00 A.M. to 3:00 P.A.M. required, liquidated

SECTION 20 TANDEM LOTS

20.1 SCOPE

The Design-Builder shall be responsible for the demolition of the Tandem Lot at Toll Exits 23 (Boulevard) and for the design and construction of a new Tandem Lot ~~at~~ the service area (Dewitt) to be located as shown in the RFP Plans. The design and construction of the Tandem Lot at Dewitt service area shall be understood to include the design, furnishing, and construction of all entrances and/or driveways providing access to and from the Tandem Lot(s), road appurtenances, lighting and safety devices not specifically cited in other Project Requirements.

The Design-Builder shall be responsible for the design, construction or reconstruction or modification thereof the driveway entrances and/or exits providing access to and egress from the Tandem Lots at Toll Plazas 17 (Newburgh), 18 (New Paltz), 19 (Kingston), 22 (Selkirk), 23 (Boulevard), 24 (Washington Ave.), 25A (Duanesburg), 27 (Amsterdam), 28 (Fultonville), 29 (Canajoharie), 31 (Utica), 32 (Westmoreland), 33 (Verona), 34 (Canastota), 34A (Collamer), 35 (Thompson Road), 36 (Mattydale), 39 (Statefair), 40 (Weedsport), 42 (Geneva), 43 (Manchester), 45 (Victor), 46 (Henrietta), 47 (Leroy), 48 (Batavia), 57 (Hamburg), 59 (Dunkirk), and 61 (Ripley), and any other entrances/exits or driveways damaged by construction operations, or necessary for permanent operations, all in accordance with the design requirements stated herein. Tandem Lot modifications Tandem Lot driveway design, construction and reconstruction shall be understood to include the design, furnishing, and construction of all road appurtenances, protections, and safety devices not specifically cited in other Project Requirements.

Proposed Tandem Lot routes are included in Part 7, Engineering Data, Section 3 – Tandem Lot Routes.

The proposed legislative routing at Ripley is being removed. However, single axle tractor trailers need to use Shortman Road, the intersection improvements to the Thruway off ramp to Shortman Road, and the improvements to the intersection of Shortman Road to the Thruway on ramp to travel Northeast. These intersections shall be designed to accommodate a design vehicle of WB-67.

20.2 STANDARDS

The Design-Builder shall perform the Work in accordance with the Contract Documents and the Applicable Standards, Design Codes and Manuals listed in Section 1.6, unless otherwise stipulated in this Project Requirement or otherwise applicable to the Project.

20.3 REQUIREMENTS

20.3.1 Design Requirements

Design requirements for the reconstruction of Tandem Lot driveway entrances and exits within the Project Sites shall be as specified below.

20.3.2 Access Gate at Tandem Lot

There are 3 Tandem Lots and one service area (Dewitt) that require access gate control to the local and/or State DOT side of the Tandem Lot. These exits are Exit 24, Exit 46 and Exit 47 with the one service area being the DeWitt service area.

The Design-Builder is responsible for the design; acquiring all equipment, material, hardware and installation of the access gate. In addition, the Design-Builder is responsible for fiber connectivity, and providing electrical power to the access gate location. The location of access gate shall not be located within 100 feet of access drive road/intersection with local and/or State highway.

20.3.3 Cameras at Tandem Lots

The Design-Builder is responsible for purchasing and installing cameras potentially mounting hardware at various Tandem lots and an identified service area (Dewitt). Camera pole design, installation may also be required. Refer to Table 20-1 for the locations, availability of existing poles to mount the cameras and other information that may be of value to the Design-Builder.

New York State Thruway Authority

The cameras required shall be able to view the entire lot including the entering and departure locations. The cameras required for the access gate area shall be mounted so that Thruway TSOC can identify the single trailer seeking backside access to the Tandem Lot. The viewing of the vehicles will allow the Authority to raise and lower the access gate when needed and/or requested. The following specifications apply, Items 651.0201, Item 651.02001525, Item 683.6730-25.

20.3.4 Protections of Existing Utilities at Tandem Lot Locations

The Design-Builder is responsible for ensuring that all existing utility structures, utilities or utility facilities are properly protected by appropriate guiderail systems depending on driveway designs or driving modifications.

Table 20-1

Tandem Locations

INTERCHANGE/LOT	OPEN/CLOSE/ RELOCATE/NEW	<u>ADDITIONAL NEW CAMERA NEEDED (Y/N)</u>	ADD TO EXISTING TRAFFIC CAMERA POLE	ACCESS GATE NEEDED (Y/N)
6A (MP 5.47)	N/A	N/A	N/A	N/A
14 (MP 24.31)	N/A	N/A	N/A	N/A
15 (MP 32.40)	N/A	N/A	N/A	N/A
17 (MP 60.10 S)	OPEN	Y	Y	N
18 (MP 76.01)	OPEN	Y	Y	N
19 (MP 91.37)	OPEN	Y	Y	N
23 (MP 141.92)	CLOSE	N	N/A	N
24 (MP 148.15)	OPEN	Y	Y	Y
25A (MP 158.82)	OPEN	Y	N	N
27 (MP 173.59)	OPEN	Y	N	N
29 (MP 194.10)	OPEN	Y	N	N
31 (MP 232.85)	OPEN	Y	Y	N
32 (MP 243.37)	OPEN	Y	N	N
33 (MP 252.71)	OPEN	Y	N	N
34 (MP 261.50)	OPEN	Y	N	N
34A (MP 276.58)	OPEN	Y	N	N
35 (MP 278.93)	OPEN	Y	Y - Raise Camera/Pole	N
DeWitt Service Area (MP 279.9)	NEW	Y	Currently no camera/structure	Y
36 (MP 282.93)	OPEN	Y	Y	N
39 (MP 289.53)	OPEN	Y	Y	N
40 (MP 304.19)	OPEN	Y	Y	N
42 (MP 327.10)	OPEN	Y	N	N
43 (MP 340.15)	OPEN	Y	N	N
45 (MP 350.99)	OPEN	Y	Y	N

New York State Thruway Authority

46 (MP 362.44)	OPEN	Y	N	Y
47 (MP 378.56)	OPEN	Y	N	Y
48 (MP 390.13)	OPEN	Y	N	N
49 (MP 417.27)	OPEN	Y	N	N
57 (MP 436.22)	OPEN	Y	N	N
59 (MP 467.74)	OPEN	Y	N	N
61 (MP 494.50)	OPEN	Y	Y	N

20.3.5 Tandem Lot Barrier Gate System

The Design-Builder shall provide and install a Barrier Gate System (BGS) to control access into and out of tandem lots at I-90 Interchanges 24, 46, 47, and the DeWitt Service Area. In addition to the BGS, the Design-Builder shall provide a pole so that the Authority can mount a side fired antenna and install a reader and server in a cabinet provided by the Design-Builder. A single lane shall be instrumented with a BGS at each of these locations.

BGS shall include:

- Gate
- Embedded loops
- Controller

BGS System Requirements:

- The BGS shall control access to a single, bi-directional traffic lane 14 feet in width.
- The BGS arm shall be 14 feet in length and constructed of wood.
- The BGS shall be operable in temperatures between -20 to 140 degrees Fahrenheit, and shall include appropriate heaters and/or fans as specified by the manufacturer to meet this range of temperatures.
- The BGS shall include a Vehicular/Pedestrian Detection System that prevents the barrier from coming down if a pedestrian or vehicle is detected under the gate.
- The BGS shall include loops embedded in pavement on either side of the gate as specified by the manufacturer to prevent the gate from closing on vehicles in the path of the gate. The loops shall be connected to the BGS using loop controllers as specified by the manufacturer.
- The BGS shall be operated on 115 VAC, 60 HZ input. The Design-Builder shall provide power to the BGS.
- The BGS shall include a feature to automatically open the gate if power is lost.
- The Design-Builder shall provide a means of gate equipment protection to protect the gate equipment from being damaged from vehicle hits (e.g. guiderail, post, etc.)

Door King Model # 1601 is provided as an example BGS that satisfies these requirements, but the Design-Builder is free to propose other solutions. The Design-Builder must verify that all requirements are met by whatever solution is proposed.

20.3.6 Tandem Lot Equipment Cabinet

The Design-Builder shall provide an equipment cabinet as specified in 680.8020XX25 Cabinets for ITS Equipment. The cabinet provided shall be the one specified for TRANSMIT. The Equipment Cabinet shall be mounted on a 20 foot tall pole, per the following specifications: 670.1120 (20' tall light pole), and 670.0106 (6' pole foundation)

The cabinet shall be mounted on the pole at a height of 3 feet. The cabinet shall be adjacent to the BGS.

- The Design-Builder shall reconstruct the entire pavement shoulders within the reconstruction limits defined above. The shoulders to be reconstructed shall be full depth asphalt to allow for loops to be cut into the asphalt. The Design-Builder is responsible to ensure proper drainage of the shoulder areas and treadle slabs.
- The Mainline Gantries shall be fully completed and conduits from the Communication Building to the Mainline Gantries along with all the mounting hardware, brackets or arms shall be in place so that cameras, antennas, laser scanners and illuminators can be attached by Kapsch and adjusted.
- Cashless Toll lanes and shoulders shall as a minimum match the maximum number of approach lanes and shoulders entering the Cashless Toll Collection Zone;
- Design-Builder shall ensure the slab containing the treadle and trench drain shall be embedded in a minimum of 22 inch of heavily reinforced Portland Cement Concrete (PCC) utilizing fiber reinforced polymer (FRP) reinforcing bars so as not to interfere with the Authority's toll collection system

21.4.1 Woodbury Terminus Location

Terminus location at Woodbury requires the design and construction of a vehicle enforcement area for the State Police. It shall be provided after the mainline gantry as traffic heads South. The required enforcement area shall be constructed utilizing the current available concrete pavement located to the West of the traffic headed South. Proper deceleration and acceleration lanes shall be applied. The vehicle enforcement pertains to all types of vehicles utilizing the Thruway, from tandems to passenger vehicles. Proper pavement striping, signage is required. The Design-Builder is responsible for the full design and construction at this location. Refer to Part 7 – Engineering Data, Section 5 for concept drawings. This particular location does not require a reduction of the overall infrastructure foot print, with the exception of the area specifically designated to be removed involving the deceleration lane and ramp to Exit 16 for traffic heading South, and area heading North as shown on the concept drawings. The Design-Builder shall be aware for traffic heading North that the pavement area is more than required. The Design-Builder based on the design shall be required to properly channelize traffic with, as a minimum proper striping, cross hatching, and signage to ensure the proper and safe passage of traffic heading North to through the mainline gantry or Exit 16.

The design speed at the Woodbury terminus location is 80 mph and is designated a rural/suburban area. The e_{max} in this area shall be 8%.

21.4.2 Williamsville and Lackawanna Terminus Locations

Terminus locations at Williamsville and Lackawanna have design speeds of 70 mph and are designated as urban areas. The e_{max} in these areas shall be 6%.

At Terminus location Lackawanna, the bridge to the east, Route 219 over I-90 BIN 1062961, MP 430.43 current vertical clearances are shown in Part 7, Section 26. The Design-Builder shall provide a minimum vertical clearance of 14'-6" under the Route 219 over I-90 bridge structure.

21.4.3 Canaan and Ripley Terminus Locations

Terminus locations at Canaan and Ripley have design speeds of 80 mph and are designated as rural areas. The e_{max} in these areas shall be 8%.

21.5 KAPSCH REQUIREMENTS

The Authority has selected Kapsch TrafficCom USA Inc. (Kapsch) to supply, install and monitor the Cashless Tolling system at all Mainline Gantries. The Design-Builder shall coordinate activities with Kapsch for installation at each Communication Building site as per the following requirements:

Kapsch will provide a maximum of six (6) teams that will be able to install and test the Cashless Tolling Equipment at each Communication Building site. Kapsch will install all tolling equipment/server/additional racks for each lane/all wiring and cables from the Communication Building to the Mainline Gantry(ies) to the Mainline Gantry(ies) equipment with the exception of the Network rack supplied by the Design-Builder.

Kapsch will complete their installation and test their system in 30 calendar days not including major holiday weekends. The Design-Builder shall notify Kaspch 30 calendar days prior to the expected completion of the Mainline Gantry(ies) associated with the Communication Building so that Kapsch can secure resources for installation. Kapsch will need one (1) week prior to commencement of Kapsch work in order to deliver equipment and supplies for the Communication Building and Mainline Gantry(ies). The Design-Builder shall prepare an area within the Communication Buildings for the delivery of this equipment. Kapsch shall supply the size of the area based on the Design-Builder's design. Each Kapsch Team will need one (1) week after a Communication Building site has been tested, adjusted, and/or modified to re-stage at another requested Communication Building site.

For Kapsch to do this work, and meet the thirty (30) calendar day window, to install the cashless tolling equipment, wiring, Communications Building racks, and test all of the equipment, the following work shall be done prior to Kapsch beginning work at the Communication Building site. The Design-Builder shall ensure that the following work is complete:

Road Surface

- Treadle Frame installed as per specifications and requirements
- Shoulders reconstructed as specified
- 100 ft. of concrete slabs (30 ft. after the treadle slab and 70 ft. before the treadle slab) installed at correct superelevations

Mainline Gantry

- Mainline Gantries, Communications Buildings, Trenching and Conduit Installation fully complete including, but not limited to Mainline Gantry walkways with railings in place, all associated arms and brackets, nVDC access, retractable equipment mechanisms, fiber connecting to the Communications Building, electrical power to the Communications Building, lightning protection, back-up generators, etc.
- Cable lengths shall not exceed 250' which includes service loops from the furthest rack in Communications Building to piece of equipment.
- All equipment shall have overhead access except the antenna.
- Further details are found later in this section and in the confidential information that was provided the Design-Builders that required the nondisclosure agreement to access.

Communications Building

- Purpose is to house specialized computer equipment provided by Kapsch to operate the AET toll system and the Authority's network equipment
- Kapsch to provide computer cabinets
- Design-Builder to provide both vertical and horizontal cable trays within the Communications Building.
- Power outlets to be provided on the ceiling and walls
- Fiber access to a Thruway network rack provided by the Design-Builder is required

Pre-Installation Requirements

Kapsch will install their system when the following conditions have been met:

- Mainline Gantry Installed with brackets, conduit, pull boxes and accessible stairs in place

New York State Thruway Authority

- Concrete slabs with treadle frame and dummy treadle installed
- Shoulder pavement in final condition with shoulder pull box installed
- Conduit from gantry, treadles, shoulder pull box to Communication Building installed
- Communications building operational with permanent power, secondary generator power (backup) and terminated fiber connectivity, HVAC in place and operational.
- Communications building vehicular access and parking area installed

Kapsch shall test each individual site separately. Prior to the AETC “go live” date, Authority shall test the entire system after all individual locations have already been tested. The test of the entire system requires 30 calendar days. The Design-Builder shall provide two weeks’ notice for Authority to commence the testing of the entire system.

21.6 RESPONSIBILITY MATRIX

Item	Design-Builder	Kapsch	Thruway
Install gantry	X		
Install Bracketry	X		
Install Stairway	X		
Gantry-Comm-Bldg Conduit	X		
Communication Bldg	X		
Power	X		
Generator	X		
Fiber Communications	X		
Fiber Connectivity to Network Rack			X
Treadle Frame Installation	X		
HVAC	X		
Lighting Protection	X		
Overhead Access to Equipment			
Install overhead equipment		X	
Cabling		X	
Kapsch Equipment Racks		X	
Network Equipment	X		
Network Rack	X		
MPT	X	X	

22.4 OPEN ROAD TOLLING (ORT) WORK AT EXIT SITES

22.4.1 General Requirements

Directive Requirements for the construction of the Open Road Tolling (ORT) system at each interchange shall be as specified below and elsewhere in this RFP. Refer to the corresponding concept plans for details found in Part 7 – Engineering Data, Section 2:

- ORT Zones shall be installed within the “Potential Tolling Area” locations shown on the concept plans
- Locations for access to the Maintenance Facilities, Tandem Lots, Commuter Parking Lots and State Police Facilities as shown on the concept plans. The locations are directive but the path from Point A to B can be modified. A new location is not allowed without an ATC.
- All TUBs are to remain in place.

General Design Requirement for the construction of the Open Road Tolling (ORT) system at each interchange shall be as specified below (Refer to corresponding concept plans for details):

- Ramp lane widths – 12 ft minimum
- Ramp shoulder widths
- Ramp shoulder widths within the ORT Zones shall be in accordance with the graphics posted.
- Design vehicle for tandem truck movements – WB-109D
- Design vehicle for Thruway Maintenance facility driveways – WB-62 unless shared with tandem truck lot, then use WB-109D
- The alignments shown in Part 7 – Engineering Data, Section 2 and those alignments are conceptual (not engineered) and the Design-Builder is responsible for alignment design but with meeting the requirements below.
- Design Speed of 40 MPH – Semi-direct Connecting Ramp
- The Design-Builder based on design speed stated is responsible for proper superelevation or cross section of highways, within the defined project limits.
- Pavement repairs are required at some ORT sites and can be found in Part 7 – Engineering Data, Section 14.
- All Gantry supports shall be protected with some level of guiderail per current standards. Even if the Gantry supports are outside the clear zones a guiderail protective system is still required to protect the Thruway’s Tolling revenue.
- There currently exist at the ORT Exit sites four (4) foot medians leading from the Thruway into the Toll Plaza area. That median area needs to be carried through the new ORT Exit site alignments. Whether it is positive separation or delineators, a minimum of 1 foot left shoulder shall be required. and no greater than a minimum of four (4) foot left shoulders shall be allowed. Changes to existing four (4) foot median width shall be properly transitioned with required tapers to ramp design speed.

Authority's Project Manager two (2) weeks prior indicating what Toll Booths require closure based on the Design-Builder's work. The details of work and Work Zone Traffic Control shall be complete and reviewed with Released for Construction stamped and dated at that 2 week notification lead time requirement.

Interchange 23 – This is a complicated short interchange area and has a short merge opportunity. Additional signing to enable motorists to properly align with the lanes leading from the Thruway system to 9W South, 9W North and I-787 is a requirement and responsibility of the Design-Builder. This additional signage shall be placed well enough in advance so travelers know they must move left or right to avoid last minute potential non-safe moves attempting to get into the correct lanes to either access 9W North, South or access I-787 North. In addition, the Thruway has accident issues (rear end accidents) at the slip ramp to 9W South after exiting the Thruway. The Thruway is requiring the slip ramp be extended utilizing NYSDOT property and Authority property on the right side of Route 9W South. The salt shed shall be removed so that the Design-Builder has almost a blank slate to design and construct. Lighting, drainage adjustments, curb, striping, stop bars and any other items that may interfere with the Design-Builder designing and constructing the improvements is the responsibility of the Design-Builder. A preliminary layout (see concept plans) revealed no conflict with utilities (exception light poles, and drainage infrastructure). None of Thruway buildings conflict once the Salt Shed is removed which should be completed no later than September 1, 2019, if not sooner. A preliminary investigation into underground utilities revealed utilities should be deep enough to not prevent the construction of this extended slip ramp. In addition, the Thruway is requiring that the ramp leading to 9W North become a two-lane left turn lane as opposed to the one lane that exists now. Tandem Lot is to be closed and the Tandem Lot shall be removed, then top soiled and seeded.

The curve that eventually transitions under the two bridges that carry the Thruway northbound and southbound shall be designed for 30 mph. In the Final Design Report, this will be justified as a non-standard feature. Design-Builder shall be required not to reduce the vertical clearances under the Thruway northbound and southbound bridges to less than 14'-6". The current vertical clearances are found in Part 7, Section 26.

Interchange 23 also requires the installation of an emergency break in concrete barrier to facilitate the "U-turning" of vehicular traffic should the Thruway close and traffic is queued at the interchange site. Refer to Part 8 for the Special Specification Item 606.9575—25 Median Barrier Gate System (installed). The location of this item shall be (on entering the Thruway) as close as possible to the gore area where North and South ramps split, and the location allows enough area for vehicles to essentially U-turn.

At Interchange 23, where the off ramp from the Thruway system meets Route 9W, a new signal system was developed by the NYSDOT for work to be done in 2019. After discussing and the understanding of where this Design-Build project is going to attempt to rectify the potential congestion at this intersection after toll booths get removed, it was decided this work shall be included under this contract. The Design-Builder shall be responsible for the complete build out of the new signal system. The current drawings provided are no longer 100% accurate as they do not account for the double left (new movement) and the adjustment and modification of the slip ramp to Route 9W South. The Design-Builder shall redesign the southern portion of the supplied design drawings taking into account the Design-Builder's design of the double left to Route 9W north and footprint modification of that area. The traffic signal mast arms shall be State supplied, the conduit for the bridge crossing shall be State supplied, and the generator transfer switch shall be State supplied. The mast arm base plate has been drilled and its orientation may change based on the Design-Builder's design of the intersection. The footing shall be designed and constructed to compensate for the potential reorientation of the mast arm. Design-Builder can locate the Controller cabinet beyond the Authority's chain link fence line, if necessary.

All existing mast arms, signal heads, and cabinets shall be salvaged and made available for NYSDOT, Region One Traffic, to pick up from the Albany Division storage area. The storage area for this equipment will be designated after work has begun at the Interchange 23 site. See Engineering Data, Part 7, Section 24 for the signal drawings that were originally designed based on the existing conditions and requires modification by the Design-Builder.

All costs associated with this work is to be included under the misc. item on WPS Form for Interchange 23.

The two lane left turn shall be striped along with performed pavement symbols. These requirements apply only to the exit ramp intersecting with 9W leaving the Thruway system. Striping on the slip ramp to 9W South and a new stop bar placement at Noonan Lane is also required. All work shall meet current standards.

The Design-Builder shall design the double left turn movement to accommodate current required standard vehicles. The right lane of the double left turn movement shall be designed for a WB-67 vehicle. The requirement to accommodate side by side operation of the design vehicle specified will be considered a non-conforming feature. This occasional vehicle will require some encroachment on the island between the double lefts and the slip ramp to Rte. 9W South. The Design-Builder shall allow such opportunity by providing 10' of additional pavement in the island. Although the striping shall be in accordance with current design standards the encroachment shall be via the provision of additional pavement area. The Authority does not expect vehicles of this size for the following two reasons. The first being the closure of the Exit 23 interchange Tandem lot and the second being the only routes available after proceeding further north on Rte. 9W are intersections with City Streets presenting problems for these types of vehicles.

The interchange 23 double left turn installation, the extended slip ramp to Rte. 9W South, and all the traffic signal work shall be completed prior to "AETC Go Live" date to prevent excessive queues and to better manage traffic control while traffic is still stopping at the toll booths and paying tolls.

Interchange 24 – One of the largest Interstate-to-Interstate connections in this project. The uniqueness of this site is the large usage of the Tandem Lot, the necessary legislation proposed to provide safe movement of Tandems to reenter the Thruway system. Due to the anticipated higher speeds through the interchange area the Design-Builder is required to design and construct an acceleration lane for the Tandems so that their entering speeds can be reasonable for entering and merging with I-90 Eastbound traffic. The Design-Builder should pay close attention to the overhead signage and the placement location of the current overhead sign structures. When the interchange is complete of all work the Design-Builder is responsible to ensure the signage is in compliance with the MUTCO. Other Part 3 requirements pertain to this particular Interchange work as well as other Parts of Engineering Data. A gated controlled access is required from the Washington Avenue driveway entrance to the Tandem Lot.

At Exit 23 provisions of Part 3, Section 16.3.1 relative to Route 9W. The scope of work to mill and resurface Route 9W, which is 5 lanes wide and shoulders that are not part of this project, and no cost should be associated with such work. At this location, the slip ramp extension relative to full depth widening is required, along with the requirements for the signal work.

Interchange 24 also requires the installation of an emergency break in concrete barrier to facilitate the "U-turning" of vehicular traffic should the Thruway close and traffic is queued at the interchange site. Refer to Part 8 for the Special Specification Item 606.9575—25 Median Barrier Gate System (installed). The location of this item shall be (on entering the Thruway) as close as possible to the gore area where West and South ramps split, and the location allows enough area for vehicles to essentially U-turn.

Interchange 25 – The Authority expects a low level of service when All Electric Cashless Tolling "goes live" at this location. The Thruway entering the I-890 interstate narrows and the Curry Road ramp onto I-890 presents issues. Once again, the Design-Builder shall design additional signage to attempt to properly alert motorists in advance so that there may be a reduction in merge movements. No Tandem Lot here. Additional work such as crack sealing, pavement repairs, etc., as with all these interchange locations may be required as per of Engineering Data, Part 7 - Section 14.

Interchange 25A – Issues with Tandem Lot access and single trailer trucks accessing the local roads is problematic. As shown on the proposed legislative Tandem routes, this location is different. Due to limited ROW the proposed route shown in Part 7 – Engineering Data, Section 3 is the only avenue to provide access for Tandems to the Tandem Lot. The Design-Builder is responsible for this design and construction. An acceleration lane must be incorporated so that Tandems entering I-88 to enter the Thruway system can merge at reasonable speeds. Also, the Tandem Lot driveway entrance requires modification.

- D. One week prior to the beginning of the removal of the Toll Booths at each location, the Design-Builder shall notify the Authority's Project Manager so that Thruway personnel can remove tolling equipment. It shall take Thruway personnel a maximum of three (3) days to remove the equipment.
- E. If the first Toll Booth removals are not to occur until a time greater than 1 month after the AETC "go live" date than the previous paragraph does not apply as the equipment at all locations shall be removed within that one month period.
- F. Prior to Toll Booth removal, all electric and fiber connected to the Toll Booths shall be appropriately terminated at the existing TUB locations by the Design-Builder.
- G. One week prior to demolition of any TUBs, the Design-Builder shall notify the Authority's Project Manager so that Thruway personnel can remove existing equipment from the TUB. It shall take the Thruway personnel a maximum of two (2) days to remove the equipment.
- G.H. The Demolition of any TUBs involves utilities of many kinds, including gas, water, septic, electric, fiber, etc. The Design-Builder is responsible for the termination or the continued connectivity of the utility. The identified utilities at all the TUB removal facilities and their required disposition is found in Part 4 – Utilities, Appendix A, A2.

25.2.2.1 Exit 17 (Newburgh) Partial Toll Booth Demolition

The only location in this Project that does not require complete Toll Booth removal is Exit 17 (Newburgh). At Newburgh (entry) and Newburgh (exit), one Toll Booth removal per location is required.

Paragraphs A, C, D and E in section 25.2.2 apply for Exit 17 (Newburgh).

25.2.2.2 Exit 16 (Harriman) Partial Toll Booth Demolition

Paragraphs A, C, D, E and F in Section 25.2.2 apply for Exit 16 (Harriman).

25.2.3 Hazardous Materials

The Design-Builder shall ensure the removal and disposal is done in accordance with all applicable laws and standards.

The abatement of all Hazardous Materials shall be completed to the greatest extent possible prior to any demolition taking place unless a legal variation from related laws, rules and regulations can be obtained. If the Hazardous Material has been identified through the Hazardous or Asbestos Screening document and/or the record plans, the Design-Builder is responsible for all costs. Should Hazardous Material or Asbestos be found and information related to its presence was not previously available to the Design-Builder, all costs associated with abatement, containment, removal, and disposal shall be covered under the Fixed Force Account item.

The Design-Builder shall perform all Work with care so that any materials that are to remain in place, or that are to remain the property of the Authority shall not be damaged. If the Design-Builder damages any materials that are to remain in place or which are to become or to remain the property of the Authority, the damaged materials shall be repaired or replaced in a manner satisfactory to the Authority at no cost to the Authority.

The Design-Builder shall ensure that no aspects of the Works have a detrimental effect on public safety or the environment.

The Design-Builder shall assume responsibility for safety and maintenance of all existing structures within the Project Limits, identified for removal in accordance with DB §105-12.

New York State Thruway Authority

APPENDIX A UTILITY REQUIREMENTS

The Authority has reviewed the potential Project limits and has made a preliminary assessment of which utility facilities located within the potential Project limits may be impacted by the Project.

A-1 UTILITY COMPANIES

Table A-1 lists the Electric utility companies and their respective contacts in areas throughout the Project limits with facilities located on, under or above the Project roadways and/or structures:

TABLE A-1

MP Range	Interstate	Electrical service Provider	Contact Name	Telephone	E-mail
Mainline					
45.2 to 51.0	I-87	Orange & Rockland Utilities	FRANK CORKUM	845-783-5505	corkumf@oru.com
51.0 to 76.0	I-87	Central Hudson Gas & Electric	LISA CARVER	845-563-4529	lcarver@cenhud.com
76.0 to 131.0	I-87	Central Hudson Gas & Electric	JASON MALIZIA	845-334-3513	jmalizia@cenhud.com
131.0 to 287.2	I-87 / I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
287.2 to 289.0	I-90	Village of Solvay	JOSEPH HAWKSBY	315-468-6229	jhawksby@solvayny.org
289.0 to 290.6	I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
290.6 to 337.4	I-90	NYS Electric & Gas	KIM LOWREY	585-484-4302	kmlowrey@nyseg.com
337.4 to 370.5	I-90	Rochester Gas and Electric	SHAWN DRISCOLL	585-771-6573	shawn_driscoll@rge.com
370.5 to 410.9	I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
410.9 to 418.2	I-90	NYS Electric & Gas	GEOFFREY S. HALLAM	716-698-0474	gshallam@nyseg.com

New York State Thruway Authority

418.2 to 420.8	I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
420.8 to 430.6	I-90	NYS Electric & Gas	GEOFFREY S. HALLAM	716-698-0474	gshallam@nyseg.com
430.6 to 431.6	I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
431.6 to 439.1	I-90	NYS Electric & Gas	GEOFFREY S. HALLAM	716-698-0474	gshallam@nyseg.com
439.1 to 455.1	I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
455.1 to 460.2	I-90	NYS Electric & Gas	GEOFFREY S. HALLAM	716-698-0474	gshallam@nyseg.com
460.2 to 481.8	I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
481.8 to 489.5	I-90	Town of Westfield Utilities	ANDREW THOMPSON	716-326-2145	athompson@villageofwestfield.org
489.5 to 496.0	I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
Berkshire Spur					
800.00 to 810.0	I-90	National Grid	SCOTT GRAHAM	800-642-4272 315-428-5663	scott.graham@nationalgrid.com
810.0 to 824.0	I-90	NYS Electric & Gas	BILL GALLUP	800-572-1111 518-944-0378	wgallup@nyseg.com

A-2 UTILITY INVENTORY

The types, sizes and approximate locations of utilities present in the immediate project area are shown in Part 7, Engineering Data, Section 9 - Utilities.

Utility Toll Plaza information is provided below along with Design-Builders treatment of those utilities.

Toll Plaza Utility* Information

Plaza Name: Woodbury

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	Orange & Rockland	South Side Of Toll Building	Yes 2 cameras north side of plaza at MP 44.9 SB & 45.2 NB	2 high mast poles, 1 north of plaza & 1 south of plaza	Yes, Overhead Sign at MP 44.9 SB Walk Bridge South Of Plaza	No	
DB Requirement				Maintain	Maintain		n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	Well	N/A	Pressure tank located in tunnel	Cap
Sanitation	No	Septic Tank	N/A	Ejector Pit & Leech Field	ABANDON AND FILL OR REMOVE TANK
Telephone	No	Verizon	N/A	Underground	Disconnect
Heating Type	No	2 Oil Fired Hot Water Boilers	N/A	4,000 Gallon Convault Tank	Remove/Dispose

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: Canaan

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	NYSEG	EAST END OF BUILDING	1	4 HIGH MAST 2WB AND2 EB	2 OVERHEAD SIGNS 1 SOLAR GOING EAST AND 1 ELECTRIC GOING WEST	NO	
DB Requirement				Maintain	Maintain	Remove	n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	SELF		DRILLED WELL	CAP
Sanitation	No	SELF		1,000 GALLON TANK AND LEECH FIELD	ABANDON AND FILL OR REMOVE TANK
Telephone	No	FAIRPOINT		OVER HEAD LINE	DISCONNECT AT POLE NEAR PROPERTY LINE
Heating Type	No	FUEL		500 GALLON CONVAULT TANK	REMOVE AND DISPOSE

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 23

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	NATIONAL GRID	SOUTH OF BLDG	NONE	5 IN TANDEM LOT 2 HIGH MAST POLES	WARNING BEACON NORTH AND SOUTH; LIGHTS ON OVERHEAD GANTRY	NO	
DB Requirement				Maintain	Maintain	Maintain	n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	CITY OF ALBANY	BASEMENT		Cap 5 feet inside property line
Sanitation	No	CITY OF ALBANY			Cap 5 feet inside property line
Telephone	No	VERIZON			DISCONNECT
Heating Type	No	NATURAL GAS	OUTSIDE	BACK OF BLDG SOUTH SIDE BY A/C UNIT	Cap 5 feet inside property line

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 24

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	NATIONAL GRID	EAST END OF BUILDING BY MECHANICAL ROOM DOORS	2	5 HIGH MAST ALL ON WEST SIDE OF PLAZA	2 Warning Beacon Signs, 4 EZ PASS LANE OPEN SIGNS		
DB Requirement				Maintain	Maintain	Maintain Warning Beacons; Remove E-ZPass Lane Open Signs	n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	CITY OF ALBANY	BASEMENT		Cap 5 feet inside property line
Sanitation	No	SELF		1,000 GALLON TANK WITH LEECH FIELD	ABANDON AND FILL OR REMOVE TANK
Telephone	No	VERIZON			DISCONNECT
Heating Type	No	FUEL OIL		1) 6,000 GALLON CONVAULT TANK	REMOVE AND DISPOSE

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 25

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	NATIONAL GRID	WEST END OF BLDG BY ELECTRICAL ROOM DOOR	1	7 STREET LIGHTS			
DB Requirement				Maintain	Maintain	n/a	n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	TOWN WATER	BASEMENT		Cap 5 feet inside property line
Sanitation	No	SELF		1,000 GALLON TANK AND LEECH FIELD	ABANDON AND FILL OR REMOVE TANK
Telephone	No	VERIZON			DISCONNECT
Heating Type	No	FUEL OIL		500 GALLON ABOVE GROUND CONVAULT TANK	REMOVE AND DISPOSE

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 25A

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	NATIONAL GRID	EAST END OF BLDG	1	7 HIGH MAST POLES	None	None	None
DB Requirement				Maintain	Maintain	n/a	n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	TOWN WATER	MECHANICAL ROOM LEFT OF DOOR		Cap 5 feet inside property line
Sanitation	No	SELF		1,000 GALLON SEPTIC TANK WITH LEECH FIELD	ABANDONE AND REMOVE TANK
Telephone	No	VERIZON			DISCONNECT
Heating Type	No	FUEL OIL		1) 4,000 GALLON CONVAULT TANK	REMOVE AND DISPOSE

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 34A

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	National grid	Meter On TUB Fed from transformer pole behind TUB	Yes 1 camera on North West of interchange bridge	Yes 6 poles on Northside of lanes and 6 poles on Southside of lanes	HAR Sign west of TUB	HAR Transmitter on canopy	None
DB Requirement				Maintain	Maintain	Maintain	Maintain	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	OCWA	Basement of TUB		Cap 5 feet inside property line
Sanitation	No	Septic System	N/A	Leech field South of Tub	Remove system
Telephone	No	Verizon	N/A		Disconnect
Heating Type	No	Kerosene	N/A		Remove/ dispose tank

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 36

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	National Grid	On TUB fed underground from northside of plaza	Yes 1 camera southeast of interchange bridge	Yes, 6 on northside of plaza and 3 on southside of plaza. 2 Tandem Light poles.	HAR sign on entrance ramp.	HAR transmit between west bound D-ramp and tandem lot. Badger EZ Pass reader on interchange bridge.	none
DB Requirement				Maintain	Maintain	Maintain	Maintain	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	OCWA	Basement	Fed from northside of plaza through tunnel	Cap 5 feet inside property line
Sanitation	No	Onondaga County	N/A	Fed from northside of plaza	Cap 5 feet inside property line
Telephone	No	Verizon	N/A	Fed from northside of plaza	Disconnect
Heating Type	No	National Grid NG	Northside of plaza near fence	Fed through tunnel	Cap 5 feet inside property line

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 39

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	National Grid	Inside electric room	Yes 1 camera located westside of interchange bridge	Yes 4 high mast poles.	HAR sign on entrance ramp		Abandoned vehicle height detection system
DB Requirement				Maintain	Maintain	Maintain	n/a	Remove if necessary

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	OCWA	Meter located in pit on Jones Road southeast of plaza	Also feeds local fire hydrant	Disconnect and cap at meter pit
Sanitation	No	Onondaga County	N/A	Fed through tunnel	Cap 5 feet inside property line
Telephone	No	Verizon	N/A	Fed from Jones road	Disconnect
Heating Type	No	National Grid NG	Rear of TUB	Fed from Jones road	Cap 5 feet inside property line

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 44

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	RG&E	Rear of TUB	Yes 1 camera located eastside of interchange bridge	Yes 3 located on eastside of lanes.	HAR sign entrance lane		
DB Requirement				Maintain	Maintain	Maintain	n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	Town of Farmington	Pit	Pit located near Loomis Road.	Disconnect and cap at meter pit
Sanitation	No	Septic System	N/A	located behind TUB	ABANDON AND FILL OR REMOVE TANK
Telephone	No	Frontier	N/A		Disconnect
Heating Type	No	Propane	N/A		Remove tank return to supplier

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 45

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	RGE	On building/tub	W.B.D ramp	3- high mast light poles	none powered	no	n/a
DB Requirement				Maintain	Maintain	n/a	n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	n/a	n/a	Well	cap
Sanitation	No	n/a	n/a	Septic system	ABANDON AND FILL OR REMOVE TANK
Telephone	No	verizon	n/a	1800-verizon	Disconnect phone line
Heating Type	No	n/a	n/a	Fuel oil	remove tank

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 46

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	RGE	On building/tub	yes EB A ramp	2-high mast light poles	none powered	no	n/a
DB Requirement				Maintain	Maintain	n/a	n/a	n/a

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	Monroe countywater Authority	Basement	none	Cap 5 feet inside property line
Sanitation	No	Town of Henrietta sewer dept.	n/a	none	Cap 5 feet inside property line
Telephone	No	verizon	n/a	none	disconnect line
Heating Type	No	RGE	on side of building/tub	none	Cap 5 feet inside property line

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: 47

Utility	Necessary after AET	Service Provider	Meter Location	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	National Grid	on pole behind tub	Located between the wb a-ramp and the eb a-ramp	6 light poles	none powered	no	salt barn ,fuel systems and camera,Tandem lot
DB Requirement				Maintain	Maintain	n/a	n/a	Maintain

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	Monroe county Water Authority	basement	none	Cap 5 feet inside property line
Sanitation	No	n/a	n/a	Septic System	ABANDON AND FILL OR REMOVE TANK
Telephone	No	Frontier phone	n/a	1-800-891-8102	disconnect service
Heating Type	No	n/a	n/a	Fuel Oil	remove tank

* - Fiber provide separately

Toll Plaza Utility* Information

Plaza Name: Ripley

Utility	Necessary after AET	Service Provider	Meter Location**	External Feed				
				Camera	Light Poles	Signs	Transmit	Other
Electric	Yes	National Grid	behind building	Located in parking lot of the Tub	2 high mast light poles	n/a	???	Turbine
DB Requirement				Maintain	Maintain	n/a		Maintain

** Meter may have to be relocated based on design

	Necessary after AET	Service Provider	Meter Location	Comments	DB Requirement
Water	No	Ripley Water Dept.	in basement	1-716-736-6000	Cap 5 feet inside property line
Sanitation	No	n/a	n/a	Septic System	ABANDON AND FILL OR REMOVE TANK
Telephone	No	Verizon	n/a	1-800-837-4966	disconnect service
Heating Type	No	n/a	n/a	Fuel Oil	remove tank

* - Fiber provide separately

DESIGNED BY: B. LAGRAVE
 CHECKED BY: K. CZORA
 DRAFTED BY: P. FITZGERALD
 CHECKED BY: K. CZORA
 Plotted By: scdusers
 Design File: sct11e8
 Plot Date: 3/22/19



 NEW YORK STATE OF OPPORTUNITY. Thruway Authority	TITLE OF PROJECT CASHLESS TOLLING ON THE NYS THRUWAY	CONTRACT NUMBER:
	LOCATION OF PROJECT EXITS 16 TO 61	DATE: 3/22/2019
	TITLE OF DRAWING INTERCHANGE 23 CONCEPT	DRAWING NUMBER: