Submitted to:

VDOT
Virginia Department of Transportation

TECHNICAL PROPOSAL VOLUME I

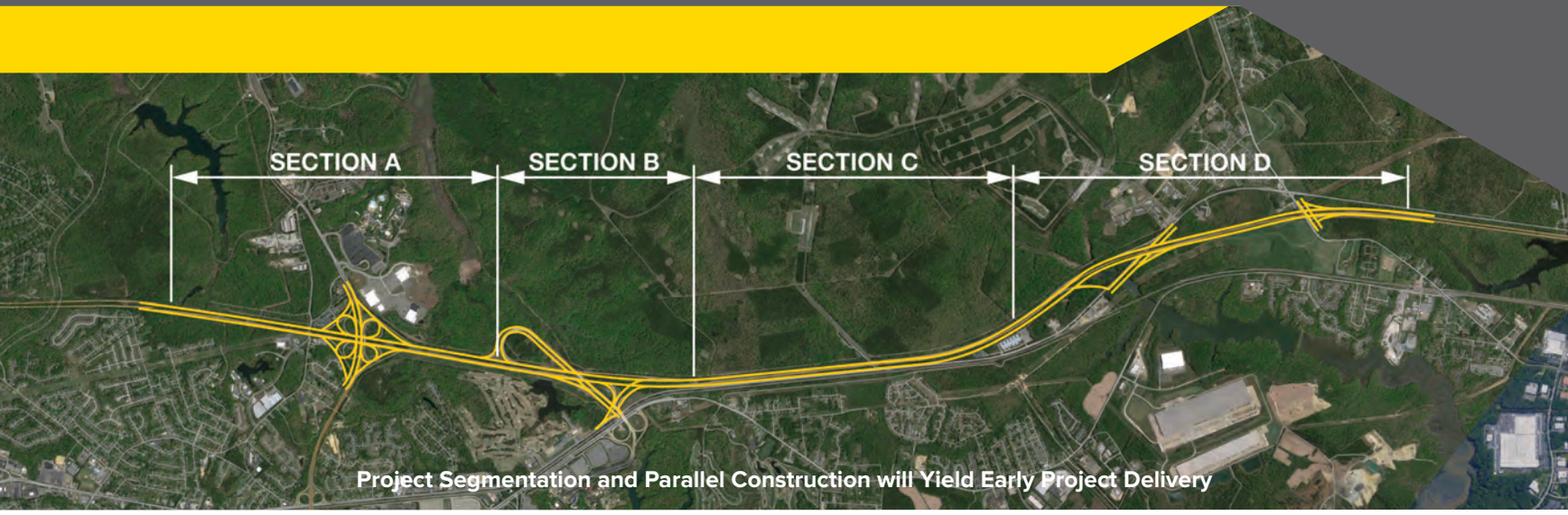
A DESIGN-BUILD PROJECT

I-64 Capacity Improvements – Segment II

From: 1.05 miles west of Route 199 (Humelsine Parkway)
To: 0.54 miles east of Route 238 (Yorktown Road)

Newport News, York County and James City County, Virginia

State Project No.: 0064-965-264, P101, R201, C501, B627, B628, B629, B630, B631, B632, B633, B634, B635, D603, D604, D605, D606, D607, D608
Federal Project No.: IM-965-5 (086)
Contract ID No.: C00106665DB82
Date: November 16, 2015



Project Segmentation and Parallel Construction will Yield Early Project Delivery

ALLAN MYERS + rda

Submitted to:

VDOT
Virginia Department of Transportation

ATTACHMENT 4.0.1.1

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

ALLAN MYERS + rda

ATTACHMENT 4.0.1.1

I-64 CAPACITY IMPROVEMENTS – SEGMENT II

VDOT PROJECT NO.: 0064-965-264

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Technical Proposal Checklist, with the page references added, with the Technical Proposal.

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Technical Proposal Checklist and Contents	Attachment 4.0.1.1	Section 4.0.1.1	no	i -iii
Acknowledgement of RFP, Revisions, and/or Addenda	Attachment 3.6 (Form C-78-RFP)	Sections 3.6, 4.0.1.1	no	iv
Letter of Submittal	NA	Sections 4.1		
Letter of Submittal on Offeror's letterhead	NA	Section 4.1.1	yes	1 - 2
Offeror's official representative information	NA	Section 4.1.1	yes	2
Authorized representative's original signature	NA	Section 4.1.1	yes	2
Declaration of intent	NA	Section 4.1.2	yes	2
120 day declaration	NA	Section 4.1.3	yes	2
Principal Officer information	NA	Section 4.1.5	yes	2
Final Completion Date	NA	Section 4.1.6	yes	2
Proposal Payment Agreement or Waiver of Proposal Payment	Attachment 9.3.1 or 9.3.2	Section 4.1.7	no	Appendix 4.1.7
Certification Regarding Debarment Forms	Attachment 11.8.6(a) Attachment 11.8.6(b)	Section 4.1.8	no	Appendix 4.1.8

ATTACHMENT 4.0.1.1

I-64 CAPACITY IMPROVEMENTS – SEGMENT II

VDOT PROJECT NO.: 0064-965-264

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Offeror's Qualifications	NA	Section 4.2		3 - 5
Confirmation that the information provided in the SOQ submittal remains true and accurate or indicates that any requested changes were previously approved by VDOT.	NA	Section 4.2.1	yes	3
Design Concept	NA	Section 4.3		6-18 & 55-85
Conceptual Roadway Plans and description	NA	Section 4.3.1.1	yes	Vol. II 55-69, Vol. I 9-14
Conceptual Structural Plans and description	NA	Section 4.3.1.2	yes	Vol. II 70-85, Vol. I 15-18
Project Approach	NA	Section 4.4		19 - 38
Environmental Management	NA	Section 4.4.1	yes	19 - 23
Utilities	NA	Section 4.4.2	yes	24 - 28
Geotechnical	NA	Section 4.4.3	yes	29 - 33
Quality Assurance/ Quality Control (QA/QC)	NA	Section 4.4.4	yes	34 - 38

ATTACHMENT 4.0.1.1

I-64 CAPACITY IMPROVEMENTS – SEGMENT II

VDOT PROJECT NO.: 0064-965-264

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Construction of Project	NA	Section 4.5		39 - 53
Sequence of Construction	NA	Section 4.5.1	yes	39 - 45
Transportation Management Plan	NA	Section 4.5.2	yes	46 - 53
Disadvantaged Business Enterprises (DBE)	NA	Section 4.6		
Written statement of percent DBE participation	NA	Section 4.6	yes	54
DBE subcontracting narrative	NA	Section 4.6	yes	54
Proposal Schedule	NA	Section 4.7		
Proposal Schedule (to be included in Volume II)	NA	Section 4.7	no	Tab 4.7 V.II
Proposal Schedule Narrative (to be included in Appendix of Volume I)	NA	Section 4.7	no	Tab 4.7 V.I
Proposal Schedule in electronic format (CD-ROM)	NA	Section 4.7	no	Inside Front Cover, Vol. I Copy 1 of 10

Submitted to:

VDOT
Virginia Department of Transportation

ATTACHMENT 3.6

FORM C-78-RFP

ALLAN MYERS + rda

Form C-78-RFP

ATTACHMENT 3.6

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFP NO. C00106665DB82

PROJECT NO.: 0064-965-264

ACKNOWLEDGEMENT OF RFP, REVISION AND/OR ADDENDA

Acknowledgement shall be made of receipt of the Request for Proposals (RFP) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Letter of Submittal submission date shown herein. Failure to include this acknowledgement in the Letter of Submittal may result in the rejection of your proposal.

By signing this Attachment 3.6, the Offeror acknowledges receipt of the RFP and/or following revisions and/or addenda to the RFP for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of July 21, 2015 – RFP
   (Date)
2. Cover letter of Sept. 15, 2015 – RFP Addendum No.1
   (Date)
3. Cover letter of Sept. 23, 2015 – RFP Addendum No. 2
   (Date)
4. Cover letter of Oct. 23, 2015 – RFP Addendum No. 3
   (Date)

SIGNATURE	November 16, 2015 DATE
Aaron T. Myers PRINTED NAME	Vice President/General Manager TITLE

Submitted to:

VDOT
Virginia Department of Transportation

4.1

LETTER OF SUBMITTAL

ALLAN MYERS + rda

November 16, 2015

Joseph A. Clarke, P.E.
Virginia Department of Transportation
1401 East Broad Street
Annex Building, 8th Floor
Richmond, VA 23219

Letter of Submittal/Technical Proposal:
I-64 Capacity Improvements – Segment II
From: 1.05 miles west of Route 199 (Humelsine Parkway)
To: 0.54 miles east of Route 238 (Yorktown Road)
State Project No.: 0064-965-264, P101, R201, C501, B627, B628, B629, B630, B631, B632, B633, B634, B635, D603, D604, D605, D606, D607, D608
Federal Project No.: IM-965-5 (086)
Contract ID Number: C00106665DB82

Dear Mr. Clarke:

Allan Myers (Myers), in association with Rinker Design Associates, P.C. (RDA) and KCI Technologies, Inc. (Myers Team), have collaboratively developed and are pleased to submit this technical proposal for the I-64 Capacity Improvements – Segment II Project (the Project). We will continue our efforts to provide the Department with the best possible price for the intended scope which will be reflected in our Price Proposal to be submitted on December 15, 2015.

Our design and construction approach is focused on providing the Department, and our collective stakeholders, a Project that is delivered ahead of schedule, meets or exceeds all RFP requirements, and minimizes impacts and maximizes safety. Our approach provides congestion relief east of Exit 243 (Sections B, C & D) through accelerated beneficial occupancy (full use of three lanes in each direction) along I-64 mainline, including the Route 143, Jefferson Avenue and Yorktown Road Interchanges. Early beneficial occupancy will also be realized in the western portion of the Project (Section A) where all work except final paving is expected to be complete by Christmas 2018. To reinforce our efforts, we have included a full and complete CPM schedule supporting the following ***accelerated schedule milestones***:

Notice to Proceed	February 17, 2016
Notice to Commence Construction – Shoulder Strengthening	August 2016
Notice to Commence Construction Sections A through D	December 2016
Beneficial Occupancy – Section D	Memorial Day 2018 (14 months early)
Beneficial Occupancy – Sections B & C	Thanksgiving 2018 (8 months early)
Substantial Completion of the entire Project	Christmas 2018 (7 months early)
Final Completion	May 24, 2019 (2 months early)

To achieve an accelerated schedule, the Myers Team has optimized the RFP conceptual plans, focusing on a design that is efficient and that meets or exceeds VDOT's expectations and implementing logical and systematic construction to minimize potential impacts to the traveling public and stakeholders. We are committed to ***exceeding VDOT's requirements*** through:

- Reconstruction of all project guardrail in lieu of assessing existing guardrail and replacing only degraded and/or substandard segments, thus enhancing safety and minimize maintenance
- Elimination of design conditions that precipitated the Penniman Road design waiver, improving traveler safety along I-64 over Penniman Road following beneficial occupancy of Section A
- Improving the gore recovery areas to meet current standards at all exit ramps

The Myers Team's roadway optimization has resulted in a secondary benefit, ***significant reductions in potential project impacts***. Our Team commits to further evaluations and incorporating the following impact reductions as we progress the design through the development process:

- Reducing the number/amount of right-of-way acquisitions (reduced by 7 parcels and area by 70%)
- Reducing impacts to Section 4(f) properties (approximately 1.54 acres)
- Eliminating six stormwater management facilities
- Eliminating over 700 feet of 72" waterline conflict
- Eliminating the in-line active transmission power pole conflict
- Reducing impacts to waters of the US by 75% for wetlands and 33% for streams

SUBMITTAL REQUIREMENTS

The Myers Team presents the following information as required by Section 4.1 of the RFP:

4.1.1 Recently, all of the companies of American Infrastructure have come together under a unified name – Allan Myers. The legal entity who will execute the Contract with VDOT is as follows:

Allan Myers VA, Inc., 301 Concourse Boulevard Suite 300, Glen Allen, VA 23059

4.1.2 Allan Myers intends to enter into a contract with VDOT for the Project in accordance with the terms of the RFP.

4.1.3 The offer represented by the Technical and Price Proposals will remain in full force and effect for one hundred twenty (120) days after this Technical Proposal is submitted to VDOT.

4.1.4 RCE, Thomas Heil, P.E. will serve as the Point of Contact for the Myers Team.

Thomas Heil, P.E., Responsible Charge Engineer	(571) 485-0387 (Telephone)
301 Concourse Boulevard, Suite 300	(804) 418-7935 (Fax)
Glen Allen, VA 23059	tom.heil@allanmyers.com

4.1.5 Vice President/General Manager, Aaron Myers is the Principal Officer for Allan Myers.

Aaron Myers, Vice President/General Manager	(804) 290-8500 (Telephone)
301 Concourse Boulevard, Suite 300	(804) 418-7935 (Fax)
Glen Allen, VA 23059	aaron.myers@allanmyers.com

4.1.6 The Myers Team commits to a Final Completion date of **May 24, 2019** as represented by our schedule (*Section 4.7*). Further, the Myers Team will provide beneficial occupancy of Segment D by **Memorial Day 2018** and full beneficial occupancy east of Exit 243 by **Thanksgiving 2018**.

4.1.7 An executed Proposal Payment Agreement (*Attachment 9.3.1*) is included in *Appendix 4.1.7*.

4.1.8 Certification Regarding Debarment Forms are included in *Appendix 4.1.8* for Primary and Lower Tier Covered Transactions.

The Myers Team appreciates this opportunity to partner with VDOT on this challenging project. I want to personally convey our commitment to safely deliver the Project to our collective stakeholders early, within budget, and in a safe manner for current and future users.

Respectfully,

Aaron T. Myers, Vice President/General Manager
Allan Myers

ALLAN MYERS

Submitted to:

VDOT
Virginia Department of Transportation

4.2

QUALIFICATIONS

ALLAN MYERS + rda

4.2 QUALIFICATIONS

4.2.1 CONFIRMATION OF SOQ INFORMATION

In accordance with Section 4.2.1 and 11.4 of the RFP, the information contained in our SOQ remains true and accurate. However, since issuance of the RFP document, a change in support personnel listed in the organizational chart was required and the Myers Team have clarified several reporting/communication relationships in our organizational chart. These changes were approved by VDOT prior to this submission and are reflected in the organizational chart and narrative below in red text.

All six of our Key Personnel remain ready to provide the successful and early delivery of this segment of the I-64 Capacity Improvements to VDOT and the traveling public. The Myers Team is committed to keeping these individuals intact throughout the duration of the Project. Early delivery of the Project will be supported by our Key Personnel's past performance on projects of similar scale, their experience working together to manage similar risks on Virginia design-build projects, and their ability to work as a cohesive unit and partner with VDOT and third party stakeholders.

Figure 4.2.1 Key Personnel Experience Highlights

DBPM, Edward Hilferty	QAM, John Vicinski, P.E.	RCE, Thomas Heil, P.E.
▪24 yrs construction exp. ▪Four successful projects as DBPM ▪Over $200M VDOT DB/ DBB projects ▪Interstate widening and MOT expertise	▪25 years of quality and CM/CEI experience ▪QAM for seven completed VDOT DB Projects ▪Developed/maintained 10 VDOT QA/QC Plans	▪17 years as registered VA PE ▪Proven design/construction issue resolution ▪Eight years of VDOT DB projects ▪Key Personnel for Design-Builder on four VDOT DB projects
DM, Darell Fischer, P.E., DBIA	**CM, Jonathan Holt**	**MOT Manager, Richard Clifton, P.E., PTOE**
▪29 yrs exp, with 21 VDOT ▪DM for seven VDOT DB Projects ▪Completed/administered seven VDOT design QA/QC plans ▪22 years of design management	▪23 yrs exp, with past two years on VDOT projects in HR region ▪CM for projects ranging up to $300M ▪Large/complex transportation projects in urban areas	▪29 yrs transportation engineering exp. ▪Registered VA PE and PTOE ▪Four VDOT DB projects ▪Local knowledge with 15 years working in VDOT HR District

4.2.2 ORGANIZATIONAL CHART AND NARRATIVE

The Myers Team is driven to integrate our Team with VDOT, third party stakeholder, government agencies, and the local/general public. As such, the following descriptions, functional relationships, and lines of communication are critical to building trust with all stakeholders and achieving ultimate project success.

VDOT will coordinate directly with our RCE through monthly progress meetings, over-the-shoulder reviews, and bi-weekly updates. VDOT will maintain open communications to the DBPM/RCE for design/ construction oversight, and to the QAM for QA management, QC oversight, and QA/QC plan conformity.

Design-Build Project Manager will supervise design and construction activities, exercise a degree of control over the work (as described in the RFQ), and ensure that Myers meets contractual obligations and requirements while avoiding/resolving disputes. Reporting to the DBPM are our five key staff (described below), our PR, Safety, and Schedule Managers (all value-added positions). The DBPM will maintain direct communication will all key staff and VDOT to ensure transparency to the public and third parties.

Our in-house ***Public Relations Manager, Shannon Moody,*** working closely with VDOT, will develop and implement a public outreach effort similar to the efforts she completed on ***Middle Ground Blvd.***

Quality Assurance – The QAM (independent of the design and construction) will report to our DBPM, with independent oversight by VDOT, and manage the QA inspectors/ laboratory. The QAM will ensure that work and materials, testing, and sampling are performed in conformance with the contract requirements and the "approved for construction" plans and specifications. The QAM will communicate regularly other key staff and participate in regular coordination meetings. The QAM will observe/attest that the QC program is ensuring that work and materials, testing, and sampling is performed in accordance with the "approved for construction" plans, specifications, and contract.

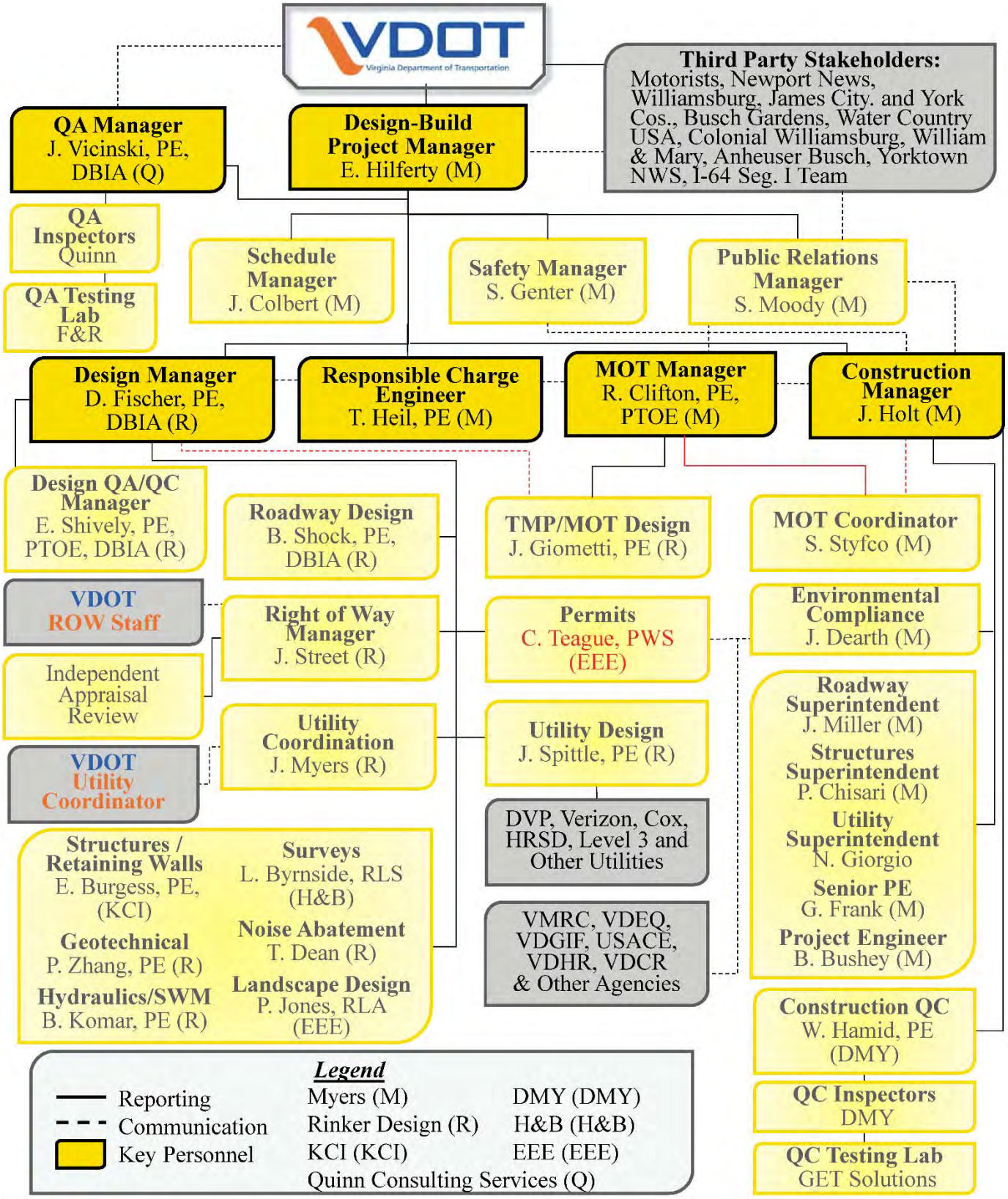
Design – Our DM will report to the DBPM, coordinate with the key staff to develop an efficient and constructible design, and manage a multi-disciplinary design team. Through construction, he will work with the CM to confirm field conditions meet design assumptions and contribute to solving challenges that may occur. Our Team is structured to encourage collaboration and communication between the DM, RCE, MOT Manager, and CM. The DM, with assistance from the Design QA/QC Manager will ensure that "approved for construction" plans and specifications adhere to the VDOT approved QA/QC Plan.

Our in-house ***Schedule Manager, Jessica Colbert,*** reports to the DBPM and communicates with key staff to ensure the team stays focused on the baseline schedule and contract requirements.

Responsible Charge Engineer will be the main point of contact to the Department, report directly to the DBPM, communicate regularly with the QAM, DM, CM, and MOT, Schedule, and PR Managers and integrate fully with all subconsultants and subcontractors. The RCE will fully integrate with both design and construction and have the authority and ability to shut-down the Project, if warranted. This key staff position accepts full professional responsibility for engineering decisions relating to the final work products and will be capable of answering design and construction related questions.

Maintenance of Traffic Manager will report directly to the DBPM, communicate regularly with the key staff and PR Manager. The MOT Manager will be the key point of contact for issues related to MOT in both design and construction and lead development and implementation of the TMP. The MOT Manager, working with the CM, will ensure a seamless construction interface with the I-64 Segment I contractor and with the PR Manger to promote MOT messaging. The TMP/MOT Designer and MOT Coordinator will report directly to the MOT Manager, and will communicate and coordinate traffic design and construction implementation with the DM, design leads, CM, and construction staff.

Construction Manager -will report to the DBPM, communicate directly with the key staff, and manage the construction and QC process to ensure the materials used and work performed meet the contract requirements and the "approved for construction" plans and specifications. Our on-site CM will oversee the entire construction process, including the superintendents; engineers; and the E/SC Inspector. The QC Manager will report directly to the CM and oversee construction for compliance with the "approved for construction" plans and specifications. The CM and his staff will work collaboratively with the design staff to ensure the design is constructible and efficient.


VDOT
Virginia Department of Transportation
Third Party Stakeholders: Motorists, Newport News, Williamsburg, James City. and York Cos., Busch Gardens, Water Country USA, Colonial Williamsburg, William & Mary, Anheuser Busch, Yorktown NWS, I-64 Seg. I Team
QA Manager J. Vicinski, PE, DBIA (Q)
Design-Build Project Manager E. Hilferty (M)
QA Inspectors Quinn
QA Testing Lab F&R
Schedule Manager J. Colbert (M)
Safety Manager S. Genter (M)
Public Relations Manager S. Moody (M)
Design Manager D. Fischer, PE, DBIA (R)
Responsible Charge Engineer T. Heil, PE (M)
MOT Manager R. Clifton, PE, PTOE (M)
Construction Manager J. Holt (M)
Design QA/QC Manager E. Shively, PE, PTOE, DBIA (R)
Roadway Design B. Shock, PE, DBIA (R)
TMP/MOT Design J. Giometti, PE (R)
MOT Coordinator S. Styfco (M)
VDOT ROW Staff
Right of Way Manager J. Street (R)
Permits C. Teague, PWS (EEE)
Environmental Compliance J. Dearth (M)
Independent Appraisal Review
Utility Coordination J. Myers (R)
Utility Design J. Spittle, PE (R)
Roadway Superintendent J. Miller (M)
Structures Superintendent P. Chisari (M)
Utility Superintendent N. Giorgio
Senior PE G. Frank (M)
Project Engineer B. Bushey (M)
VDOT Utility Coordinator
DVP, Verizon, Cox, HRSD, Level 3 and Other Utilities
Structures / Retaining Walls E. Burgess, PE, (KCI)
Geotechnical P. Zhang, PE (R)
Hydraulics/SWM B. Komar, PE (R)
Surveys L. Byrnside, RLS (H&B)
Noise Abatement T. Dean (R)
Landscape Design P. Jones, RLA (EEE)
VMRC, VDEQ, VDGIF, USACE, VDHR, VDCR & Other Agencies
Construction QC W. Hamid, PE (DMY)
QC Inspectors DMY
QC Testing Lab GET Solutions
Legend
Reporting
Communication
Key Personnel
Myers (M)
Rinker Design (R)
KCI (KCI)
Quinn Consulting Services (Q)
DMY (DMY)
H&B (H&B)
EEE (EEE)

Submitted to:

VDOT
Virginia Department of Transportation

4.3

DESIGN CONCEPT

ALLAN MYERS + rda

4.3 DESIGN CONCEPT

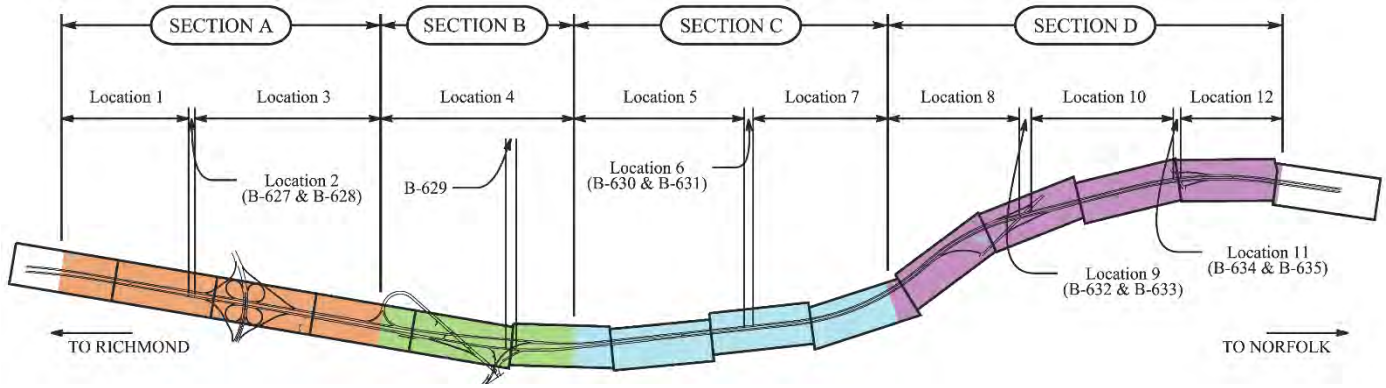
The Myers Team's approach to designing the Project is to exceed the requirements of the RFP while balancing potential cost and schedule implications. Our design efforts have focused on accelerating construction, providing early beneficial occupancy to minimize construction impacts, and optimizing the design to exceed VDOT's requirements and reduce impacts.

Schedule Acceleration
The Myers Team's design optimizations have resulted in a two month acceleration in Final Project Completion and providing Beneficial Occupancy of Section D prior to Memorial Day 2018 (14 months early)

To improve construction efficiency and flexibility while adhering to the VWAPM/RFP requirements, the Project was divided into four sections, as shown in *Figure 4.3.1.* Dividing the Project in this manner allows each of the sections to be constructed independently and provides for logical beneficial occupancy (three travel lanes in each direction) without compromising safety along the corridor. Our complete schedule acceleration is included in Section 4.7 Proposal Schedule and includes in the following key delivery milestones:

- Beneficial occupancy of Section D prior to Memorial Day 2018 (14 month early)
- Beneficial occupancy of Sections B & C prior to Thanksgiving 2018 (8 months early)
- Substantial completion of the entire Project in April 2019 (7 months early)
- Final completion prior to Memorial Day 2019 (2 months early)

Figure 4.3.1 Project Sections



During the preparation of this proposal, including the Part II conceptual plans and details, the design approach continually focused on maintaining current traffic patterns as long as practical (minimizing potential impacts to I-64 users and the local community), exceeding the RFP requirements, and minimizing impacts to the surrounding properties, resources, and environmental features as compared to the RFP Conceptual Plans. A graphical representation of our project enhancements is shown on *Figure 4.3.2 Design Feature Optimization* (page 8) while the following text describes and enumerates these improvements.

As discussed above, our project segmentation maintains current traffic patterns as long as possible while our schedule acceleration returns the traveling public to existing conditions (including one required additional lane) as soon as practical. Design optimization began with the horizontal alignment, shifting both the EB and WB alignment towards the median (approximately two feet for Sections A and B and 1.5 feet for Sections C and D). These shifts provide an increased efficiency in the maintenance of traffic (MOT) approach and significantly reduces (in most cases eliminating) impacts along the existing outside shoulder and slopes.

Through our detailed design assessments and constructability evaluations, the Myers Team commits to exceeding VDOT's RFP requirements in the following ways:

- Reconstruction of all guardrail along the corridor in lieu of assessing existing guardrail and replacing only degraded and/or substandard segments enhances long-term safety and minimizes maintenance.
- Eliminating design conditions that precipitated the need for the Penniman Road design waiver, thus improving traveler safety along I-64 over Penniman Road in the future.
- Improving the gore recover areas to meet current standards at all exit ramps.

The Myers Teams roadway optimizations, as compared to the RFP Conceptual Plans, also resulted in significant reductions in potential Project impacts. The Myers Team commits to further evaluations and incorporating the following impact reductions as we progress with the design development process:

- Reducing the number/amount of right-of-way acquisitions (reduced by 7 parcels and area by 70%)
- Reducing impacts to Section 4(f) properties (approximately 1.54 acres)
- Eliminating six stormwater management facilities
- Eliminating over 700 feet of 72" waterline conflict
- Eliminating the in-line active transmission power pole conflict
- Reducing impacts to waters of the US by 75% for wetlands and 33% for streams

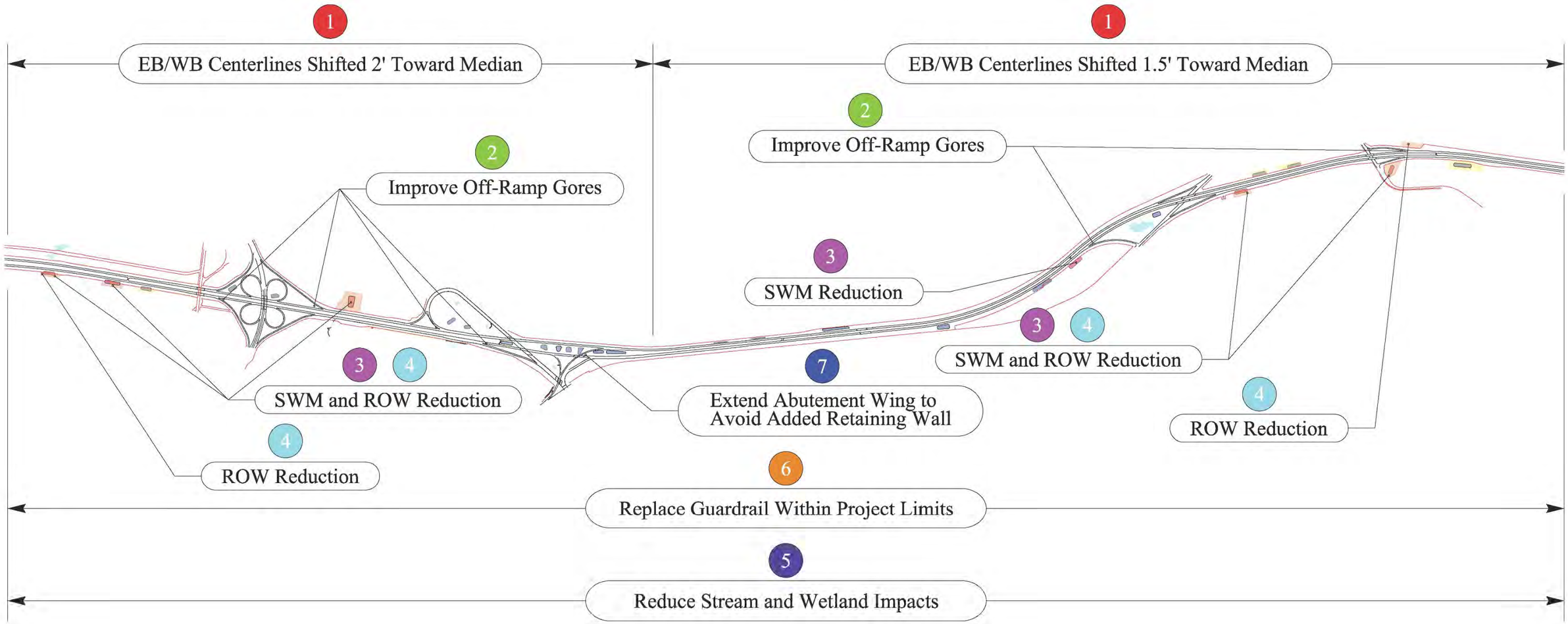
Long-term safety and operations were considerations when electing to improve the existing shoulders and replace all guardrail throughout the Project limits. The need for a design waiver for the outside shoulder width on the bridge over Penniman Road has been eliminated. In addition, our Team will improve gore recovery areas to meet current standards (provided the improvements do not require an IMR) and provide barrier pier protection under the existing/widened bridges to protect the piers located within the clear zone.

The Myers Team fully evaluated the potential bridge replacements versus rehabilitation at Yorktown Road, Jefferson Avenue, Burma Road and Penniman Road. Based on our analysis, including costs implications and reductions in the current schedule acceleration commitments, we have determined and committed to following VDOT's recommendation for bridge rehabilitation. Although this decision did not come lightly, it was made using sound engineering judgment based on the best available information that we have at our disposal. In short, the decision hinged on the bridge replacements effect on the construction schedule and the requirement that all bridge replacements need to adhere to current design standards which limit the new geometry and require profile adjustments to maintain required vertical clearances. Should VDOT wish to revisit this position following Project Award, the Myers Team stands ready to work with VDOT to achieve a solution that is mutually beneficial and serves the best interests of the traveling public and local community.

DESIGN APPROACH

The I-64 Capacity Improvements – Segment II Project will widen I-64 in both directions from 1.05 miles west of Route 199 to 0.54 miles east of Route 238. Design efforts include all disciplines necessary to complete the design per the RFP and supporting documentation. The design will include roadway, structures, drainage, environmental, geotechnical, landscape architecture, traffic engineering, utility coordination, and right of way acquisition services. All work will follow the VDOT Minimum Requirements for Quality Assurance & Quality Control on Design Build and Public-Private Transportation Act Projects, dated January 2012 to ensure that quality requirements are met and exceeded.

Figure 4.3.2 Design Feature Optimization



1 Roadway Alignment
Shifting the roadway centerlines toward the median:
- Improves MOT and construction efficiencies
- Reduces impacts to cut/fill slopes, environmental resources, and utilities/ITS features
- Eliminates extension of major drainage structures

2 Off-Ramp Gores
Improving gore recovery areas to meet current standards (provided the improvements do not require an IMR) exceeds the design requirements and improves public safety

3 SWM
Evaluating the water quality and quantity needs of the Project to maximize the use of 25% offsite Nutrient Credits:
- Eliminates 6 SWM facilities from the RFP concept
- Avoids ROW impacts for 5 parcels

4 Right-of-Way
Eliminating SWM facilities and minimizing fill slopes avoided impacts to 7 parcels and reduced total ROW acquisition by 70%

5 Environmental
Shifting the alignment, eliminating SWM facilities, and eliminating drainage structure extensions:
- Reduces wetland impacts by 75% and stream impacts by 33% from the RFQ Plans.
- Expedites permitting by requiring VWP-3 and SPGP permits instead of an Individual Permit

6 Guardrail
Replacement of all guardrail in the Project limits provides longer service life, reduces maintenance, and improves construction efficiency.

7 Retaining Walls
Extending the median wing wall of Abutment B at Bridge B-629 to avoid encroachment on the I-64 WB Ramp to Route 143 eliminates the need for an additional structure, improves durability, and reduces future maintenance

DESIGN CRITERIA – The design provided by the Myers Team:

- ✓ Meets all requirements established in the Design Criteria Table (Attachment 2.2) and exceeds requirements for vertical curves and shoulder widths.
- ✓ Stays within the proposed right-of-way limits shown in the RFP Conceptual Plans, including SWM facilities, and reduces the required right of way (ROW) by 7 parcels and 70%.
- ✓ Does not require for additional design waivers or exceptions, and eliminates the need for a design waiver for the Penniman Road bridge structure.

DURABILITY AND LONG-TERM ASSET PERFORMANCE – As the Myers Team progressed the design, we considered value-added solutions and design efficiencies that improve durability and long-term asset performance; in other words, they reduce the need for long-term maintenance. These solutions include:

- ***Guardrail Replacement*** – Although we evaluated what guardrail could be saved and what needed to be replaced, our Team decided to replace all guardrail through the corridor to provide a consistent and improved aesthetic perspective and service life.
- ***Shoulder Width*** – Improved shoulder widths on bridges due to centerline shifts provides better guardrail transitions which reduces the risk of impacts from accidents.
- ***Asphalt Paving*** – Asphalt pavement offers advantages both during construction and during the long term maintenance period. Due to constructability and joint locations for rigid pavement, asphalt pavement provides the most flexibility when constructing the Project. Compared to concrete pavement, asphalt pavement can be constructed and maintained quickly and with minimal disruption to traffic for life-cycle patching, repairing or resurfacing.

4.3.1 CONCEPTUAL ROADWAY DESIGN

The Project consists of the addition of one 12-foot through lane and one 12-foot shoulder in each direction meeting the VDOT Road Design Manual (RDM) Standard GS-5 for an Urban Interstate classification. The design speed for the western portion of the Project (west of Route 199) is 75 mph while the eastern portion (east of Route 199) is 70 mph. Although the Project is primarily to improve capacity improvement, many of the existing conditions of the roadway will be improved to better achieve current standards. Improved conditions include: existing pavement replacement, partial widening of outside shoulder, and extension of acceleration and deceleration lanes at interchanges.

VDOT has already approved five design exceptions and waivers for existing features of the Project. The Myers Team's design implements all required mitigation measures indicated in the Design Waivers and Exceptions provided in the RFP Information Package (*Table 4.3.1)*. No additional Design Waivers or Exceptions will be requested and the design waiver at Penniman Road Bridge will not be utilized.

Table 4.3.1 Design Waivers and Exceptions

DW/ DE	PURPOSE
DW	Deck Extension
DW	Bridge Clearance over Jefferson Avenue
~~**DW***~~	~~Outside Bridge Shoulder width over Penniman Road~~
DE	Stopping Sight Distance for WB Exit Ramp to Route 143
DW	Inside Shoulder Cross Slope
**** Design waiver no longer necessary***	

(a) GENERAL GEOMETRY

The general alignment of the roadway is relatively level along the eastern two thirds of the Project and more rolling in the western third of the Project near Busch Gardens. The alignment consists of several long, sweeping curves, including reverse curves between Milepost 246 and 247. The original construction of the road dates back to the 1960s without significant modifications during the intervening decades. As such, some of the existing road features do not meet current design standards. Many of these features will be corrected as part of the Project, such as normal crown cross slopes of the existing roadway.

(b) HORIZONTAL ALIGNMENTS

The proposed design shifts the centerline of I-64 towards the median by one and a half to two (1 ½ - 2) feet as compared to the RFP design, which includes an approximate shift of nine inches. This change has slightly adjusted the horizontal curves as shown in *Table 4.3.2*.

There are six horizontal curves in each direction along the alignment. However, only three of those curves in each direction are concentric between the two directions. Three of the curves do not require superelevation and will be constructed as a normal crown (NC) section; the remaining curves require superelevations ranging from 2.0% to 3.6%. All superelevation determination and design is in accordance with the RFP and TC-5.11 for 70 mph or 75 mph, depending on the location.

Table 4.3.2 Horizontal Curves

Curve No.	EB Radius (Super)	WB Radius (Super)
1	22,918 (NC)	20,000 (NC)
2	24,122 (NC)	17,779 (NC)
3	11,498 (2.0%)	22,903 (NC)
4	61,306 (NC)	7,701 (2.8%)
5	7,160.5 (3.0%)	7,075.5 (3.0%)
6	5,721.5 (3.6%)	5,806.5 (3.6%)
7	10,765 (2.0%)	10,853 (2.0%)

The tangent between curves two and three in the EB direction is significantly small, creating a compound curve. The super transition will be equally split between these curves to transition from 2.0% to 2.8%.

(c) MAXIMUM GRADE

The proposed grades for the mainline are depicted in *Table 4.3.3* and are shown as to how they correlate between EB and WB. The result is that the mainline ranges in grade from 0.32% to 3.27%. In evaluating these grades with respect to each other where the raised median typical section is implemented, a differential up to approximately five feet is created. The grades along each of the connectors, ramps or adjacent roadways will be unaffected by the design.

In general, the proposed profiles are set approximately three inches higher than the existing profiles which provides the greatest efficiency for implementation of the FDR subbase. However, the profiles are refined at each bridge crossing to match the existing elevations on the decks to facilitate structure widenings. Furthermore, there are two sag curves along both the EB and WB alignment near the beginning of the Project that require improvement to meet current standards. At each of these locations, our design has raised the profiles to ensure design criteria compliance.

Table 4.3.3 Mainline Grades

EB	WB
-1.5%	-2.41%
-1.68%	-2.02%
+2.97%	+2.87%
-3.27%	-2.99%
+3.01%	+3.02%
-1.66%	-1.65%
+2.00%	+2.43%
-1.13%	-0.71%
-0.56%	-0.68%
+1.61%	+1.53%
-1.40%	-1.41%
-0.32%	-0.32%
-1.19%	-1.26%
+2.42%	+2.50%
-1.78%	-2.00%
+1.54%	+1.49%
-1.33%	-1.30%
-1.48%	-1.36%

(d) TYPICAL SECTIONS

Generally speaking, there are two typical sections which will be implemented on the Project.

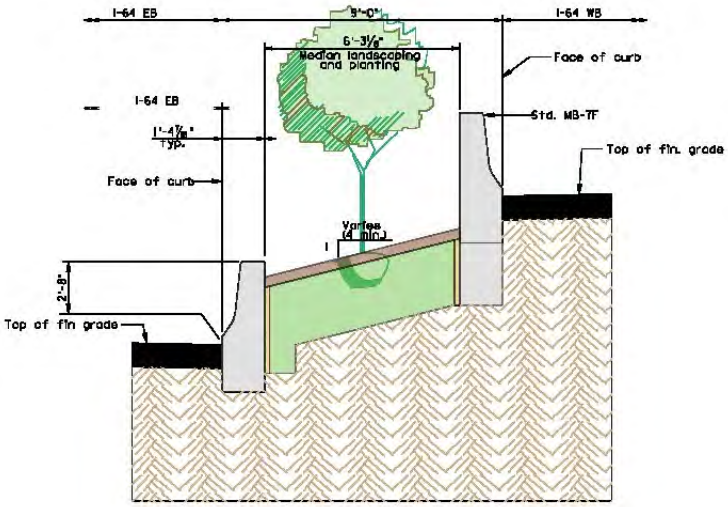
- Depressed grass medians where the proposed median width is greater than 50 feet (may include Stormwater Management Facilities)
- Concrete median barrier with landscaping where the proposed median width is less than or equal to 50 feet.

The depressed grass medians design has several variations which include no guardrail, guardrail, and TL-5 pier protection barrier. Each of these typical sections is shown in Volume II to graphically depict the design intent. The median area within the interchange at Exit 243 (Busch Gardens / Route 60) will require landscaping and reforestation generally keeping with graphics presented to the public and localities and included in the RFP Information Package. Our landscaping plan, prepared by an RLA, will address concerns raised by York County, James City County, and the City of Williamsburg to protect the existing landscaping

to the extent feasible and provide new landscaping where existing landscape features are impacted.

The concrete median barrier typical section will also include landscaping. Based on the RFP, the grading between the high side and low side barrier sections shall be a maximum of 4:1 and tie at a point at least six inches below the barrier top. As a result, the low side barrier will need to be extended higher to achieve this constraint and be designed as a retaining structure. Where the barrier heights do not need adjustment, the standard MB-7F is sufficient from a structural design perspective. Should VDOT elect to consider an alternate typical section between Busch Gardens and the eastern project terminus, we believe the aesthetic appearance of the median would be improved. A 4:1 slope would be maintained from the low side (without any height adjustment) and the landscaping would shield the backside of the high side barrier. This design will allow the median barrier to be constant height in both directions throughout the Project.

Figure 4.3.3 Alternate Median Section



(E) CONCEPTUAL HYDRAULIC AND STORMWATER MANAGEMENT DESIGN

Our Team closely reviewed the provided Pipe Inspection Report to implement a drainage design that is consistent with the intent of the RFP and improves upon the conceptual drainage design. Pipes that are under water, blocked by trees, or otherwise were not evaluated are assumed to be deficient and will be plugged and abandoned, removed, or replaced with adequate structures. We have developed a plan for repairing, rehabbing or replacing all of the remaining structures which have received a less than good rating for any portions of the pipe or structures. Evaluation of the conceptual drainage design and SWM approach has presented the following opportunities to optimize the designs and reduce impacts.

- Shifting the alignment toward the median eliminates culvert extensions to the outside, thereby avoiding impacts to wetlands and streams
- Maximizing the use of proposed SWM facilities within existing ROW eliminates six facilities that would have impacted adjacent properties and required ROW acquisition
- Analyzing the pipe inspection reports to evaluate repair of minor deficiencies, rehabilitation through sleeving or pipe bursting, or replacement through open-cut and jack and bore operations

HYDROLOGIC AND HYDRAULIC ANALYSIS (H&HA) – Our Team will complete the necessary H&HA analysis, both during design and for as-built documentation following construction, for the improvements and widening of major culvert crossings in the I-64 corridor. Our Design Team brings over 30 years of experience with Federal Emergency Management Agency (FEMA) and VDOT for H&HA documentation. Analysis and documentation will consider both H&HA capacity and conveyance requirements, as well as outfall and channel protection considerations for the receiving streams.

There are four major drainage crossings of FEMA and County delineated Floodplains within the project corridor which could be subject to VDOT H&HA (*Table 4.3.4)*. Our approach to analyzing crossings where required consists of the following:

Table 4.3.4 Major Drainage Crossings

CROSSING	LOCATION	ANALYSIS
Whiteman Swamp	Sta 1202+25 EB	FEMA Zone A
Blows Mill Run	Sta 1409+50 EB	FEMA Zone A
Jones Millpond	Sta 1137+75 EB	County
King Creek	Sta 1239+25 EB	FEMA Zone A

- Review and verification of the preliminary analyses provided and new hydrologic studies of the Jones Pond and Kings Creek crossings utilizing a two-step procedure for the step-backwater model.
- Modeling existing conditions with verified information from the preliminary analyses, new models for the unstudied crossings, and field-surveyed stream cross sections to ensure model accuracy.
- Addition of culvert modifications that have not been avoided to the models to evaluate performance and determine if mitigation is required. Reporting will include the VDOT LD-293 and LD-450 forms, HECRAS models, and electronic copies of the hydraulic results utilized in the final design.

STORMWATER MANAGEMENT DESIGN – SWM for the Project will be governed by the new criteria outlined in Part IIB of the State stormwater regulations and the requirements of the Newport News local Reservoir Protection Ordinance and Program. The Runoff Reduction Method developed by DEQ will be applied and will serve as the main tool for compliance with these regulations. The unique challenges presented by the Project include balancing quantity and quality management to meet the project requirements; satisfying the Part IIB stormwater regulations while meeting the criteria of the Reservoir Protection Ordinance and providing equivalent wet pond pollutant removal efficiency; and meeting water quality requirements in four individual Hydraulic Unit Code (HUC) areas. Our Team has developed a SWM configuration that improves upon the RFP conceptual design as described in *Table 4.3.5*.

SWM Design Optimization
Purchasing nutrient credits for 25% of the pollutant removal requirements, as well as the use of LID Dry Swales, eliminated 6 SWM facilities and avoided ROW impacts for 5 parcels.

Table 4.3.5 SWM Configuration Improvements to the RFP Concept

SWM DESIGN OPTIMIZATION	BENEFIT OF DESIGN
Eliminating the SWM Basins at Sta 1129+00 RT and 1145+00 RT by implementing LID techniques and purchasing nutrient credits for water quality	▪ Avoids a jack and bore operation ▪ Reduces the number of ponds in this outfall ▪ Reduces ROW acquisition completely for two parcels with significant reduction on a third parcel
Eliminating the SWM Basin at Sta 2206+00 LT by implementing LID techniques and purchasing nutrient credits for water quality	▪ Avoids a jack and bore operation ▪ Reduces the number of ponds in this outfall ▪ Eliminates ROW acquisition for one parcel ▪ Avoids potential utility, stream and wetland impacts
Relocating the SWM Basin at Sta. 1393+00 RT to Sta. 1405+00 RT to within the existing ROW	▪ Increases effectiveness of the facility, specifically treatment of runoff discharged to the Skiffe's Creek Reservoir
Eliminating the SWM Basin at Sta. 1439+00 RT through consolidation with the Basin located at Sta. 2445+00 LT	▪ Eliminates ROW impacts to one parcel
Eliminating the SWM Basin at Sta. 1477+50 RT through consolidation with the Basin located at Sta. 1496+00 RT	▪ Eliminates project impacts to an identified Cultural Resource Area and eliminates ROW impacts on one parcel.

We recognize that the purchase of nutrient credits is VDOT's preferred option in satisfying the water quality requirements for each of the HUC areas on the Project. Additionally, requirements must be met for the City's Newport News Reservoir Protection Ordinance, which recommends no increases in peak discharges and a preference for wet ponds (or the pollutant removal equivalent) within the reservoir watershed.

We performed a preliminary evaluation of the Runoff Reduction Method on the Project to determine the pollutant removal requirements for each of the HUC areas (*Table 4.3.6)*. The Runoff Reduction Method evaluations for the portion of the Project are the James River-Skiffes Creek (JL35) and Warwick River (JL38) watersheds.

Table 4.3.6 Pollutant Removal Rates

WATERSHED	REMOVAL
Queen Creek (YO67)	11.1 lbs.
York River-Carter Creek (YO68)	35.5 lbs.
James River-Skiffes Creek (JL35)	54.7 lbs.
Warwick River (JL38)	9.2 lbs.
Total	**110.5 lbs.**

Our proposed SWM design for the reservoir areas consists of nine bioretention BMP's for the Skiffe's Creek Reservoir and one bioretention BMP for the Lee Hall Reservoir. Our design satisfies the ordinance and provides sufficient water quality treatment and water quantity detention so that there are no increases in discharges to this water body. Providing BMP ingress/egress off the interstate lowers pollutant removal requirements by minimizing disturbance and shortening access roads.

Widening almost exclusively to the median has allowed preservation of the existing drainage elements to the outside of each side of the highway. The system configuration presented by our Team optimizes the design and exceeds the phosphorous removal requirements for Project and the Newport News Reservoir Protection Ordinance. In order to meet and exceed the SWM requirements for the Project, the Myers Team has implemented three approach strategies as described below:

- ***Purchase of Nutrient Credits*** – Purchasing nutrient credits to the maximum extent feasible (max of 25%) meets the water quality requirements and reduces the number of VDOT maintained facilities.
- ***Bioretention Ponds*** – As depicted in the Volume II plans, we have provided bioretention facilities throughout the corridor utilizing existing ROW as much as possible. Bioretention provides higher pollutant removal efficiency and volume reduction than extended detention while decreasing the overall footprint impacted by SWM facilities.
- ***Dry Swales*** – Several dry swales locations in the median and in the roadside ditches have been integrated into the design to eliminate and downsize several BMPs that impacted right of way.

The western end of the Project will consist largely of open channels and roadside ditches. The proposed median width is greater than 50' and will allow us to modify and utilize much of the existing drainage ideology and components. At the eastern end of the Project, a storm sewer system will be constructed to capture the drainage to the median, which is less than 50' and requires the specified median barrier/landscaping. Using bioretention BMP facilities to treat drainage areas under five acres provides pollutant removal efficiency up to 50%, runoff reduction up to 80%, and allows for use in variable soil conditions. We anticipate using jack and bore methods for installation of 16 pipe crossing where depths are greater than 16 feet to minimize construction impacts and improve safety.

EROSION & SEDIMENT CONTROL – The Myers Team understands the project's environmental sensitivity and all work will be performed in accordance with VDOT requirements and the Virginia Erosion and Sediment Control (ESC) Handbook and Regulations. Temporary measures will be designed for use during construction, including a "Phase One" design plan which conveys offsite runoff through the construction site prior to land disturbance. These areas will have minimal disturbance and will be stabilized prior to the start of the construction work. Subsequent phases will be matched to each phase of construction activities. This will include all onsite measures to include perimeter controls, sediment traps, erosion controls, and permanent stabilization at the conclusion of each phase of work.

ESC designs will be reviewed by an independent, DEQ certified plan reviewer on our team, as well as construction staff to review constructability, ensure conformance of the temporary stormwater controls with the construction phasing, and minimize field changes during construction. Storm water run-off will be directed to temporary sediment basins and sediment-laden water will be treated and discharged in accordance with the Virginia Stormwater Management Program (VSMP) permit and the Stormwater Pollution Prevention Plans (SWPPP) prepared by the Design Team.

(f) PROPOSED RIGHT OF WAY LIMITS

Right-of-way (ROW) reductions have been highlighted on the Volume II Plans as indicated in the RFP. ROW impacts along the corridor are primarily for the construction and maintenance of SWM facilities. By eliminating the SWM BMP included within the conceptual plans, we have reduced impacts to Yorktown Battlefield by approximately 1.54 acres, further minimizing potential impacts to the Section 4(f) properties and supporting the de minimus finding. The approach to SWM described above has reduced the ROW acquisition required by the Project and costs to VDOT as shown in *Table 4.3.7*.

Reduced ROW Impacts
The proposed design reduces the total Fee Simple ROW impacts (by area) by 70% and the number of parcels impacted by the Project from 16 to 9.

Table 4.3.7 ROW Impacts

Impact Type	RFP Impact (AC)	Myers Impact (AC)	Reduction (Ac)	Reduction (%)
ROW	21.03	6.23	14.80	70%
TCE	2.03	1.63	0.40	19%
PDE	0.30	0.31	0.00	0%
Total	23.36	8.17	15.20	65%

Not shown in the parcel count is the ROW needed for BMP D1 (Vol. II, Page 65) which is on Commonwealth of Virginia property.

(g) PROPOSED UTILITY IMPACTS

Utility avoidance has been prioritized by our Team to reduce cost and schedule impacts. Utility impacts based on our evaluation are due to bridge widenings (primarily), vertical clearances, drainage, and undercut. A summary of these impacts is shown in *Table 4.3.8* and discussed in greater detail in *Section 4.4.2* of this proposal.

Table 4.3.8 Utility Impacts

Utility Company	Locations	Impact Status
DVP	Penniman Road	Probable avoidance
	Burma Road	Probable avoidance
	Yorktown Road	Impacted
	Sta. 1463+00	Probable avoidance
	Sta. 1466+50	Probable avoidance
VNG	Penniman Road	Probable avoidance
	Sta. 1142+50	Probable avoidance
	Sta. 1500+00	Probable avoidance
Verizon	Jefferson Avenue	Avoid some/Impact some
	Yorktown Road	Avoid some/Impact some
Metro	Jefferson Avenue	Impacted
NNWW	Sta. 1270+25	Probably avoidance
Cox	Penniman Road	Impacted
	Jefferson Avenue	Avoided
	Yorktown Road	Avoided

Based on schedule alone, Verizon presents the most significant utility schedule risk for the bridge widenings at Jefferson Avenue and Yorktown Road. RDA has on-staff a former Verizon contractor who will be able to assist mitigating these impacts, as his insight and relationships will help resolve potential issues before they arise. Although we have identified these impacts and included activities in the proposal schedule, we fully anticipate many of these impacts will be eliminated through design refinements and construction techniques. Our biggest opportunity to eliminate impacts is at the roadway crossings, or bridge widenings, where we are evaluating options for protecting the various utilities in order to avoid relocations.

(h) NOISE WALL LOCATIONS

The RFP provides a Noise Technical Memorandum (NTM) dated December 2013. The Project will require a draft and final Noise Abatement Design Report (NADR). The findings of the NADR will determine the final configuration of the wall (location, height, alignment – if applicable). Based on the memorandum in the RFP Information Package, a noise wall will be required. Our proposal accounts for the "worst-case scenario" which is 2600 linear feet. The proposed noise wall has an average height of 20 feet and will be ground mounted behind the MSE wall on the EB approach to Exit 243.

4.3.2 CONCEPTUAL STRUCTURAL DESIGN

DESIGN APPROACH – Based on our review of the RFP and supporting documents, we have a full understanding of the design requirements and additional factors affecting the bridges within the Project limits. Loading requirements will be calculated in accordance with the 7th Edition of the AASHTO LRFD Bridge Design and Specifications, and additional loads accounting for future wearing surface and construction tolerances will be considered, in accordance with VDOT I&IM S&B-80. In addition to the new superstructure and substructure widening, the existing structures rehabilitation will include replacement of all existing bearings, retrofitting the structures to be continuous at the pier locations, and retrofitting the abutments. Structural steel repair/recoating and substructure patching/repair will be completed in accordance with VDOT requirements.

Bridge Design Features

- *Corrosion resistant reinforcement*
- *Replacement of elastomeric bearings*
- *Pile support substructures*
- *Continuous deck at pier locations*
- *Buried approach slabs*
- *Crash wall retrofits*
- *Similar beam types and sizes*

EVALUATION OF BRIDGE REPLACEMENTS – During the RFP phase, the Myers Team evaluated cost and schedule implications of bridge replacements at Yorktown Road, Jefferson Avenue, Burma Road and Penniman Road in lieu of widening and rehabilitation. We recognizes that, at several of the sites, full bridge replacements would have a lower life cycle cost to VDOT and would limit future maintenance/replacement. Therefore, our evaluation of bridge replacements focused on utilizing MSE walls to reduce bridge lengths, modifying span lengths, changing superstructure beam types, and adjusting vertical bridge clearance.

Even with these modifications, the Myers Team could not reduce overall costs associated with bridge replacements. In addition, the RFP requires that any new structure must meet all current design standards, which proved to have negative impact on the construction schedule. For these reasons, our Team is proposing bridge widening and rehabilitation in accordance with the RFP at all structures.

While the schedule limitations prevented full replacements from being proposed, they may be of value to VDOT. Should VDOT wish to revisit this position following Project Award, the Myers Team stands ready to work with VDOT to achieve a solution that is mutually beneficial to both parties and serves the best interests of the traveling public and local community. To assist in this potential effort, we have included a summary of our bridge replacement assessment for each studied location:

I-64 (B-627 & B-628) over Route 641/Penniman Road and Inactive Railroad

- Single span bridge with integral abutments and MSE walls
- 45” deep weathering steel plate girders requires raising I-64 profile by approximately 12”
- New structure RR clearance of 23’to be achieved by balancing I-64 and RR profiles

I-64 (B-629) over I-64 WB Off-Ramp to Route 143

- Single span jointless bridge with weathering steel plate girders, and MSE walls
- Ramp sight distance requires a deeper superstructure that may raise I-64 EB profile over 24”

I-64 (B-630 and B-631) over Burma Road and Naval Weapons Station Railroad

- Single span bridge with MSE Walls
- 58” deep weathering steel plate girders requires raising I-64 approach about 24”
- Two span bridge not possible due to current design shoulders and RR clearance

I-64 (B-632 and B-633) over Route 143 (Jefferson Avenue)

- Two span, jointless bridge with MSE Walls
- 45” deep weathering steel plate girders would raise the I-64 EB &WB approach about 15”
- Current curb and gutter and sidewalks section for Jefferson Rd requires a deeper superstructure

I-64 (B-634 and B-635) over Route 238 (Yorktown Road)

- Single span bridge with integral abutments and MSE walls
- 48" deep weathering steel plate girders would raise the I-64 EB &WB approach about 15"
- Current curb and gutter and sidewalks section for Yorktown Rd requires a deeper superstructure
- A single span bridge would also limit the potential to widen Yorktown Rd in the future

BRIDGE WIDENING AND REHABILITATION

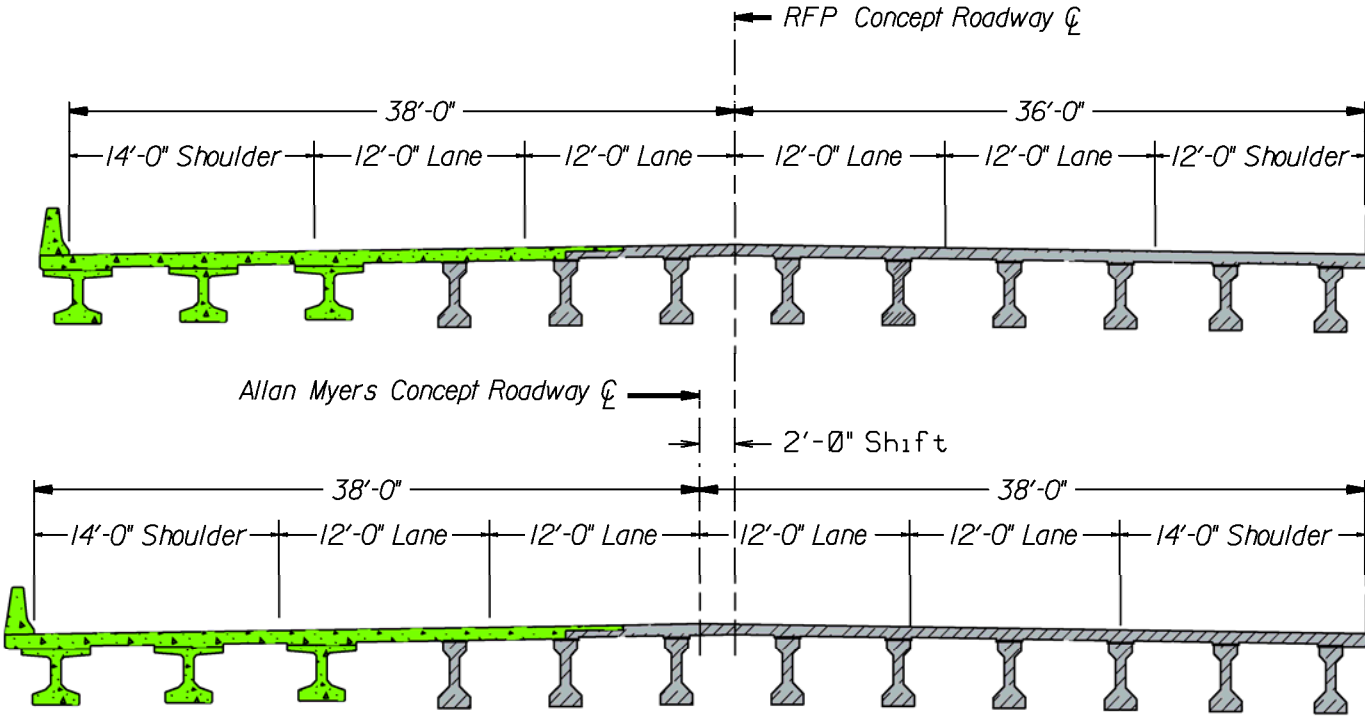
I-64 (B-627 & B-628) over Route 641/Penniman Road and Inactive Railroad

We propose to widen and modify the existing abutments and piers to provide the additional width required while adhering to the additional foundation criteria. The widened piers and abutments will utilize pile support footings with the new piers having two columns. In addition to widening Pier 1, it will also be modified to accommodate a crash wall due to its close proximity to the existing railroad track.

Repair of the existing deck will include removal of existing epoxy overlay and removal of top 0.75" of the existing deck concrete using milling and hydrodemolition. The existing decks will be patched in accordance with VDOT requirements where needed. The new bridge overlay will consist of Latex Modified Concrete. The existing and new bridge decks will be modified to be continuous over the piers and extended over the abutment backwalls to eliminate joints.

Superstructure depth will be designed to maintain the existing low chord elevation avoid encroachment on the vertical clearance requirements over Penniman Road and the inactive railroad. ***The superstructure will be widened an additional 2' from what is shown in the RFP, as shown in Figure 4.3.5***. This was done to accommodate a shift in the crown point of the bridge as well as provide additional outside shoulder. Construction staging will be in accordance with the RFP and maintain three thru lanes for each bridge to accommodate the axillary lane for entrance or exit.

Figure 4.3.5 Penniman Road Bridge Designed for 14' Inside and Outside Shoulders



I-64 (B-629) over I-64 WB Off-Ramp to Route 143

The existing abutments and piers will be widened and modified to provide the additional width required following the additional foundation criteria. The widened piers and abutments will utilize pile support footings with the new piers having two columns.

Repair of the existing deck will include removal of existing rigid overlay and removal of top 0.75" of the existing deck concrete through milling and hydrodemolition. The existing decks will be patched in accordance with VDOT requirements where needed. The new bridge overlay will consist of latex modified concrete. The existing and new bridge decks will be modified to be continuous over the piers and the existing abutments will be modified to provide a variation of the Virginia Alternate Abutment Detail. Superstructure depth will be designed to maintain the 16'-6" vertical clearance requirements over I-64.

The existing structural steel will be retrofitted to eliminate any fatigue prone details and will be recoated in accordance with VDOT guidelines. ***The superstructure will be widened an additional 2' from what is shown in the RFP***. This was done to accommodate a shift in the crown point of the bridge as well as provide additional outside shoulder. Construction staging will be in accordance with the RFP and maintain two thru lanes.

I-64 (B-630 and B-631) over Burma Road and Naval Weapons Station Railroad

We propose to widen and modify the existing abutments and piers to provide the additional width required following the design criteria found in the additional foundation criteria. The widened piers and abutments will utilize pile support footings with the new piers having two columns. Pier 2 and Pier 3 will also be modified to accommodate crash walls due to their close proximity to the existing railroad tracks.

Repair of the existing deck will include removal of existing rigid overlay and removal of top 0.75" of the existing deck concrete using milling and hydrodemolition. The existing decks will be patched in accordance with VDOT requirements where needed. The new bridge overlay will consist of Latex Modified Concrete. The existing and new bridge decks will be modified to be continuous over the piers and extended over the abutment backwalls to eliminate joints.

Superstructure depth will be designed to maintain the existing low chord elevation and avoid encroachment on the vertical clearance requirements over Burma Road and the Navy Railroad. The existing structural steel will be retrofitted to eliminate any fatigue prone details and will be recoated in accordance with VDOT guidelines. ***The superstructure will be widened an additional 1'-6" from what is shown in the RFP.*** This was done to accommodate a shift in the crown point of the bridge as well as provide additional outside shoulder. Construction staging will be in accordance with the RFP and maintain two thru lanes for each bridge.

I-64 (B-632 and B-633) over Route 143 (Jefferson Avenue)

We propose to widen and modify the existing abutments and piers to provide the additional width required following the design criteria found in the additional foundation criteria. The widened piers and abutments will utilize pile support footings with the new piers having three columns.

Repair of the existing deck will include removal of existing rigid and epoxy overlays and removal of the top 0.75" of the existing deck concrete using milling and hydrodemolition. Span 3 of the eastbound bridge is in worse condition than the rest of the bridge and will require additional removal of the deck up to one inch below the existing top mat of reinforcing steel. The existing decks will be patched in accordance with VDOT requirements where needed. The new bridge overlay will consist of Latex Modified Concrete. The existing and new bridge decks will be modified to be continuous over the piers and the existing abutments will be modified to provide a variation of the Virginia Alternate Abutment Detail.

Superstructure depth will be designed to maintain the 16'-0" vertical clearance requirements over Jefferson

Avenue. The existing structural steel will be retrofitted to eliminate any fatigue prone details and will be recoated in accordance with VDOT guidelines. ***The superstructure will be widened an additional 1'-6" from what is shown in the RFP.*** This was done to accommodate a shift in the crown point of the bridge as well as provide additional outside shoulder. Construction staging will be in accordance with the RFP and maintain two thru lanes for each bridge.

I-64 (B-634 and B-635) over Route 238 (Yorktown Rd.)

We propose to widen and modify the existing abutments and piers to provide the additional width required following the design criteria found in the additional foundation criteria. The widened piers and abutments will utilize pile support footings with the new piers having two columns.

Repair of the existing deck will include removal of existing rigid and epoxy overlays and removal of top 0.75" of the existing deck concrete. This will be accomplished using milling and hydrodemolition. The existing decks will be patched in accordance with VDOT requirements where needed. The new bridge overlay will consist of Latex Modified Concrete. The existing and new bridge decks will be modified to be continuous over the piers and extended over the abutment backwalls to eliminate joints.

Superstructure depth will be designed using VDOT/AASHTO I-Beam sections to maintain the 16'-6" vertical clearance requirements over Yorktown Road. ***The superstructure will be widened an additional 1'-1" from what is shown in the RFP.*** This was done to accommodate a shift in the crown point of the bridge as well as provide additional outside shoulder width. Construction staging will be in accordance with the RFP and maintain two thru lanes for each bridge.

RETAINING WALLS

There are three areas where we anticipate retaining walls or structures. The first location is at the I-64 (B-629) over I-64 WB Off-Ramp to Route 143 Bridge, Abutment B, where the abutment wingwall will be extended/modified to capture the median fill that encroaches on the WB off-ramp. The second location is where the low side of the raised median must be raised due to bifurcation to meet the design requirements of the RFP. Finally, the last location where walls may be required are at extension of major culverts. The Myers Team will construct MSE Walls above existing headwalls to avoid culvert extensions, impacts to wetlands/streams, and schedule impacts due to permitting.

MAJOR DRAINAGE STRUCTURES

There are four drainage crossings on the Project which qualify as major structure locations:

- Station 1137+75 EB (D-603/D-604) – drainage to Jones Millpond
- Station 1202+25 EB (D-605/D-608) – crossing of Whiteman Swamp
- Station 1239+25 EB (D-606) – crossing of King Creek
- Station 1409+50 EB (D-607) – crossing of Blows Mill Run (tributary to Skiffes Creek Reservoir)

Our approach to each of these is to avoid extending these structures where feasible. Our first approach to avoidance was to shift our alignments for EB and WB I-64 towards the median where these major structures were intended to be extended or already are. Our second approach was to identify those locations where extension of these structures would be required between the roadway and the existing right of way due to fill limits. For these locations, we intend to provide MSE walls where our final grading would extend beyond the existing headwalls versus extending structures. Based on our current design these locations include D-603/D-604 (downstream), D-606 (upstream), and D-607 (upstream).

Design Optimization to Reduce Project Impacts
Shifting the roadway widening to the median and utilizing retaining walls avoids culvert extensions and associated environmental impacts.

Submitted to:

VDOT
Virginia Department of Transportation

4.4

PROJECT APPROACH

ALLAN MYERS + rda

4.4 PROJECT APPROACH

4.4.1 ENVIRONMENTAL MANAGEMENT

The Myers Team is committed to completing the Project in a manner that avoids and minimizes impacts to the environment; ensures full compliance with applicable laws, regulations, and contract requirements; and honors the environmental commitments for the Project. The proposed design and construction approach minimizes impacts to water resources and streamlines the permitting process as follows:

- Impacts to jurisdictional waters of the U.S. (WOUS) are estimated to be significantly less the potential impacts identified in FEIS, approximately 75% and 33% less than the impacts to wetlands and streams, respectively, based on the RFQ Plans.
- Reduced impacts will streamline permitting and allow VWP-3 and SPGP permits (in lieu of an Individual Permit) and facilitate the Section 7 consultation under the Endangered Species Act.
- Design optimization has reduced ROW acquisition required for the Project by approximately 13 acres and compensation costs for unavoidable impacts to water resources.

EEE Consulting (3e), in conjunction with RDA, will lead our efforts to obtain the necessary environmental permits for the Project. RDA and 3e have successfully secured environmental permits for various transportation projects throughout Virginia, including improvements to Route 1 in Prince William County and Route 3 Improvements in Culpepper. Our Team members have good working relationships with key personnel at the U.S. Army Corps of Engineers (USACE), Virginia Department of Environmental Quality (VDEQ), and U.S. Fish & Wildlife Service (USFWS) and other regulatory agencies involved in the Project.

Familiarity with Resources along the Project Corridor
3e completed significant portions of the natural resource studies for the I-64 FEIS and is completing wetland delineation and T&E species surveys immediately adjacent to the Project area at Fort Eustis

APPROACH TO ENVIRONMENTAL MANAGEMENT

The Myers Team approach to environmental management builds upon successful minimization of environmental impacts for six other VDOT design build projects. Our approach to environmental management will ensure the Project is completed in full compliance with the environmental commitments for the Project as identified in the Final Environmental Impact Statement (FEIS) signed November 26, 2013 and the Record of Decision (ROD) dated June 8, 2015; the Right of Way (RW) Authorization (EQ-201); the Plans, the Specifications, and Estimates (PS&E) Re-evaluation Authorization (EQ-200); and the Environmental Certification/ Commitments Checklist (EQ-103). We will implement the following environmental management strategies:

- Accurately identify and evaluate environmental resources that occur within the Project limits
- Avoid, minimize, and mitigate environmental impacts to the greatest extent practicable
- Partner with regulatory agencies to secure permits without delay and facilitate reasonable permit conditions consistent with construction means and methods
- Incorporate environmental commitments within design processes, plan preparation, preconstruction planning, and construction activities to ensure activities are conducted responsibly
- Maintain an environmental compliance program, including standards, procedures and audits by conducting staff training, site inspections, and records maintenance

EFFORTS TO AVOID/MINIMIZE IMPACTS TO ENVIRONMENTAL RESOURCES

Avoidance and minimization of impacts to environmental resources will be facilitated by our Team's integrated approach to design and construction; clear definition of responsibilities; and training, awareness and communication of environmental commitments to the individuals responsible for the work. *Table 4.4.1* defines environmental management roles and responsibilities of our team members for the Project.

Table 4.4.1 Environmental Management Roles and Responsibilities

ROLE	RESPONSIBILITIES
DBPM *Ed Hilferty*	▪ Ensures the Project compliance with laws and regulations, permits, contract requirements, and "approved for construction" plan and specifications ▪ Ensures adequate allocation of staff to meet environmental commitments ▪ Tracks environmental commitments through design and construction
RCE *Thomas Heil, P.E.*	▪ Verifies that project permits and AFC plans have identical impacts ▪ Confirms that all required mitigation credits have been secured prior to starting work ▪ Verifies that compliance measures are followed and resources impacts are within permit conditions
DM *Darell Fischer, P.E.*	▪ Ensures that the design incorporates all regulatory requirements/commitments ▪ Ensures environmental commitments/requirements are part of the "approved for construction" plans
Permits *Carter Teague, PWS*	▪ Manages water quality permitting efforts, WOUS delineations, T&E species studies and clearances, avoidance and minimization efforts, agency coordination, and compensatory mitigation compliance ▪ Works with the DBPM to facilitate coordination with regulatory agencies and works with the DM to ensure that the design team incorporates environmental requirements/commitments into the plans ▪ Provides QA assurance for water quality permit application and oversight for permit field inspections
CM *Jonathan Holt*	▪ Responsible for oversight of environmental compliance during construction ▪ Ensures proper controls are installed prior to beginning work and maintained throughout construction
Construction Compliance *John Dearth*	▪ Responsible for the day-to-day oversight of environmental compliance during construction ▪ Conducts permit compliance inspections and authorizes implementation of corrective measures ▪ Audits records of permit clearances, "approved for construction" plans, selected materials, and environmental inspections
Project Inspectors and Engineers	▪ Performs environmental inspections and documentation. ▪ Initiates appropriate action as necessary in order to maintain regulatory compliance. ▪ Maintains records and compliance reporting of permit conditions, approved plans, selected materials, solid and hazardous wastes, environmental inspections, and the Project Record Set.

DESIGN AVOIDANCE – In preparation of this proposal, 3e completed a refined desk top mapping and analysis of the water resources within the corridor using the FEIS, site topographic mapping, natural and color infra-red aerial photographs, and data from work on other projects in the area. The significant environmental resources in the corridor are located in the undisturbed areas between the roadway and the existing right of way. By shifting our alignment toward the median in both directions, we have effectively reduced impacts to these resources and the continuity that they provide beyond the right of way limits. The FEIS estimated potential impacts in Segment II to be approximately four acres of wetlands and over 5,500 linear feet of stream. In the May 8, 2015 request for the Segment II ROD, VDOT estimated potential impacts based on the RFQ Concept Plans to be 958 linear feet of stream impacts and 1.18 acres of palustrine forested wetland impacts. ***Our avoidance and minimization efforts have significantly reduced the estimated project impacts to approximately 0.25 acres of wetlands and 650 linear feet of streams.*** In addition, we anticipate no changes in project scope or footprint from that approved in the June 8, 2015 FHWA Record of Decision (ROD). As a result, no additional NEPA environmental studies are anticipated.

CONSTRUCTION COMPLIANCE – Focusing on constructability of the Project and conformance of the temporary stormwater controls to our specific phased approach to construction will minimize field changes and maximize environmental protection measures to the receiving waters. To ensure all work is performed in accordance with VDOT requirements and the Virginia Erosion and Sediment Control (E&SC) Handbook and Regulations, environmental commitments will be incorporate into construction work plans and environmental awareness training will be provided for field personnel prior to commencement of operations.

An environmental commitments/requirements database will be utilized to document compliance during construction. CM Jon Holt will oversee construction compliance, will be supported by our Construction Compliance Engineer Jon Dearth, and coordinate with our Responsible Charge Engineer, Thomas Heil. This structure will make certain that:

- Controls are installed prior to starting construction and the E&S sequence is followed
- Controls remain in place and functional throughout the duration of construction
- Repairs identified by weekly and post-storm event inspections are promptly corrected
- Any deviations to the sequence are approved prior to starting the work

ENVIRONMENTAL CONDITIONS/AREAS OF CONCERN

The Myers Team performed a project environmental risk assessment that considered environmental commitments, natural, cultural, biological, recreational, conservation and public resources. Our risk assessment identified potential environmental impacts and mitigation strategies have been developed to eliminate and/or minimize those identified impacts (*Table 4.4.2).*

Table 4.4.2 Addressing Environmental Conditions/ Areas of Concern

RESOURCE	IMPACT MITIGATION STRATEGIES
Stormwater Management	▪ Strategic design and placement of stormwater management best management practices to maximize pollutant control and minimize right of way acquisition ▪ Purchase of Nutrient Credits for 25% of required reduction ▪ Early preparation of SWPPP, ESC Plans, and Post-Construction Stormwater Management Plans ▪ ESC and SWPPP Training for construction staff
Hazardous Materials	▪ Avoidance of subsurface work proximal to the Yorktown Naval Weapons Station ▪ Prepare a project specific Spill Prevention Control & Countermeasure (SPCC) Plan presenting measures to avoid spillages of fuels, chemicals, and fluids, and emergency response actions ▪ Compliance with Section 411.01 in the 2007 Road and Bridge Specifications for Type B structures and VDOT Special Provisions for asbestos inspection and abatement ▪ Conduct a Phase I ESA in conformance with ASTM Standard E 1527-13 for all right-of-way acquisitions and perform asbestos inspections on structures ▪ Remove and dispose of any discovered hazardous material in compliance with all applicable federal, state, and local regulations.
Wetlands/ Streams	▪ Early coordination/consultation with USACE and VDEQ ▪ Secure Corps Jurisdictional Determination ▪ Evaluate and incorporate avoidance and minimization measures ▪ Develop restoration approaches for temporary impact areas ▪ Early preparation of Joint Permit Application concurrent with ROW Plan development for a VWP 3 & SPGP
Cultural Resources/ Section 4(f)	▪ Avoid diminishing the historic setting, feeling, design, materials, and workmanship of Redoubt #8 ▪ Avoid any impacts to Redoubt #9 located just west of the beginning of Segment II ▪ Avoid any impacts to portion of site 44NN0350 located outside the existing right-of-way ▪ Keep impacts below de minimis levels: Yorktown Battlefield (4.0 acres)/ Newport News Park (4.1 acres)
Noise	▪ Complete and furnish a final Noise Analysis Design Report (NADR) ▪ Conduct final design noise analysis in compliance with the effective VDOT State Noise Abatement Policy, VDOT Highway Traffic Noise Impact Analysis Guidance Manual, and VDOT Noise Report Development and Guidance Document
Threatened & Endangered Species	▪ Mabee's Salamander – coordinate with VDGIF for presence/absence survey and TOYR restrictions ▪ Small Whorled Pogonia – per the RFP addendum, the SWP is not to be considered impacted ▪ Northern Long Eared Bat – Complete Section 7 of ESA consultation with USFWS and implement required Avoidance & Minimization Measures (AMM) per Programmatic Consultation BA ▪ Incorporate activities for performing field studies and developing a protection plan for all three species into the project schedule
Tidewater Fire Ant Quarantine	▪ Restrict the movement of articles capable of transporting fire ants out of the quarantine area ▪ Address quarantine during the identification of borrow source and disposal area for the Project ▪ Address the transportation of soils/materials within the project corridor to comply with the quarantine

THREATENED & ENDANGERED (T&E) SPECIES

Coordination/consultation under Section 7 of the Endangered Species Act will be a critical to the Project. According to the FEIS and ROD, T&E species within or adjacent to the Project corridor include the state-threatened Mabee's salamander, and potentially the small whorled pogonia (SWP). VDOT is in the process of conducting Section 7 consultation for the SWP with USFWS and a final effect determination is pending. In accordance with RFP Addendum 1, we have assumed that there are no SWP habitat areas within the Project Limits. In the event additional SWP studies are required, 3e Senior Scientist Robert Wright, PhD, a certified SWP surveyor, will lead this effort.

On May 4, 2015, the northern long-eared bat (NLEB) was listed as a federally threatened species throughout its range within the eastern and mid-western U.S. In addition, VDOT recently completed a re-evaluation of the SWP habitat for this Project and determined there is a low probability that a SWP habitat will be encountered on the Project.

The USFWS, Federal Highway Administration (FHWA), and Federal Railroad Association (FRA) have developed a standardized Programmatic Consultation Biological Assessment (BA) approach to assessing potential impacts to NLEB from highway and railroad projects. The Programmatic Consultation BA includes specific avoidance and minimization measures (AMMs) that reduce potential impacts to insignificant or discountable levels, and therefore, not likely to have an adverse effect. The USFWS will apply the programmatic approach based on the specific details of each project and local conditions.

Figure 4.4.1
Artificial Bat Roost

Our approach is to incorporate multiple AMMs into our project design and construction practices including full implementation of erosion and sediment control and stormwater pollution prevention practices; minimizing impacts to wetlands, streams, and riparian buffers; minimizing clearing of forested areas that could be potential NLEB roost trees; and conducting bat inspections of all bridges in accordance with Appendix B of the Programmatic Consultation BA and VDOT's recently implemented bridge inspection protocols. Depending on the Section 7 requirements imposed by USFWS, clearing of potential roost trees will occur outside of the Time of Year Restrictions (TOYR) established by USFWS as incorporated into the proposal schedule. In addition, if the NLEB is determined to be roosting under bridges along the corridor, the Myers Team will work with the USFWS to install artificial roosts (*See Fig. 4.4.1*) at appropriate adjacent locations.

CULTURAL RESOURCES/ SECTION 4(F) RESOURCES

Changes are not anticipated to the project scope or footprint approved by the ROD and significant effects to cultural resources are not expected. Our design and construction approach avoids diminishing the historic setting, feeling, design, materials, and workmanship of Redoubt #8; avoids any impacts to Redoubt #9; and to the portion of site 44NN0350 located outside the existing right-of-way.

The ROD documents FHWA de minimis findings on both 4(f) Resources based on acreage impacts to the Yorktown Battlefield of 4.0 acres and impacts to Newport News Park of 4.1 acres. Our Team will continue to avoid and minimize impacts to these resources during design and construction of the Project.

Reduced Section 4(f) Impacts
Impacts to Yorktown Battlefield and Newport News Park have been reduced by 1.54 acres through SWM design optimization.

WATER QUALITY PERMITS AND MITIGATION

Our Team will secure the following water quality permits and authorizations for the Project:

- USACE State Programmatic General Permit
- VDEQ Virginia Water Protection Permit (VWPP)
- VDEQ Virginia Stormwater Management Program (VSMP) Virginia Pollutant Discharge Elimination System (VPDES) Permit for Construction Stormwater Discharges
- VDEQ Coastal Zone Management Area (CZMA) Consistency Determination

Reduced Wetland/Stream Impacts
Our avoidance and minimization efforts incorporated into the proposal design plans resulted in a significant decrease in the project impacts to wetlands and streams.

Our Team is experienced at performing wetlands and WOUS delineations pursuant to the USACE Wetland Delineation Manual, Technical Report Y-87-1 (1987 Manual), 2010 Regional Supplement to the USACE Wetland Delineation Manual: Atlantic and Gulf Coastal Plain, the USM and the Cowardin Classification System. During the agency field review, we will present in-field factors to eliminate or minimize potential stream impacts by appropriately classifying drainage features as non-jurisdictional erosional features which do not require stream compensation mitigation. In addition, we may present parameters that some drainage features are actually linear wetlands. Although linear wetlands require compensation, wetlands compensatory mitigation costs are less than the linear foot project cost of stream compensatory mitigation.

During the permit acquisition process, we will work with the regulatory agencies to further avoid and minimize the impacts to the jurisdictional areas. The Project's mitigation needs will be met through the purchase of mitigation bank credits. Several mitigation banks currently have mitigation credits for both wetland and stream impacts available in the watershed.

SCHEDULE INTEGRATION

To minimize the possibility of delays to the Project due to environmental concerns, a conservative approach has been taken for environmental activities on the Project. The proposal schedule presented in Section 4.7 integrates key environmental permits/approvals, hold points with the design, and construction restrictions, if any, of the Project. For completeness, presence/absence surveys and development of T&E protection plans have been included for the NLEB, Mabee's salamander, and SWP; however, following Agency coordination/consultation, these activities may not be required. TOYR have been incorporated into the proposal schedule for clearing activities, and do not currently show on the critical path of the schedule. Should the TOYR be reduced or eliminated, many clearing activities will be able to advance earlier than shown in the Proposal Schedule.

The proposal schedule includes activities to obtain an Individual Permit through USACE and DEQ. However, preliminary design optimization to date suggests that a SPGP may apply. When the design is progressed and the permit timeline is compressed for the SPGP, the time needed to obtain permits for the project could be reduced by up to four months. Activities related to the preparation, submission and approval of the Individual Wetlands Permit have been incorporated into the schedule including wetland delineations, avoidance and minimization studies, verification of TOY restrictions, and coordination with the permitting agencies. These activities will be reviewed and modified, as appropriate, once avoidance and minimization efforts of the design have been completed, environmental impacts quantified, and confirmation from the Agencies on the application of the SPGP is received. At that time, schedule gains, if any, in this area can be recognized.

Other environmental management activities included in the proposal schedule include submission of a SPCC Plan, inspection and potential abatement of Asbestos in the existing bridges, and activities to address the Fire Ant Quarantine presence on the Project.

4.4.2 UTILITIES

APPROACH TO UTILITY COORDINATION, ADJUSTMENTS, AND RELOCATIONS

The key to successful utility coordination for the Project is early, frequent, and open communication with each utility company with potentially impacted facilities. The Myers Team has engaged utility owners during this RFP phase, including but not limited to those identified in the RFP, to provide a comprehensive evaluation of potential utility conflicts and conflict resolution. This early coordination has assisted to identify utility avoidance strategies and supports timely and cost-effective utility conflict resolution. Our approach to utility coordination, adjustments, and relocations includes the following proven strategies:

- Providing experienced utility coordination experts
- Coordinating early to clearly define impacts and responsibility
- Avoiding and minimizing impacts to the greatest extent feasible
- Facilitating progress and supporting utilities through enabling work
- Sequencing construction to minimize risk associated with relocations
- Monitoring progress and proactively reacting to potential delays

EXPERIENCED UTILITY COORDINATION EXPERTS

RDA has built a respected name in the utility community, through their knowledge of utility policies as well as their approach to avoid impacts to existing utilities. RDA has managed utility coordination on 10 design-build projects in Virginia.

Utility Coordinator John Myers brings 13 years of VDOT experience as the former Regional Utility Coordinator for the NOVA District and has led RDA's utility services section in managing utility coordination projects on county, local, and VDOT projects. John will be assisted by Jeremy Spittle and Bill Suter, who recently joined RDA after over 25 years of service as a design engineer for Verizon. The addition of Bill's Verizon experience has already shown benefits on local and design build projects with determining existing facilities as well as possibilities of lowering copper cable counts and in turn shortening splicing times.

Utility Coordinator, John Myers, has worked with all major utility facilities/owners for the Project

- *Distribution and Transmission power (aerial and underground)*
- *Copper and Fiber Optic communications facilities (aerial and underground)*
- *Distribution and Transmission pressure gas lines*
- *Petroleum and fuel lines*
- *Distribution and Transmission water facilities*
- *Gravity and Force Main Sanitary Sewer Lines*
- *Coaxial and Fiber Optic cable television lines*

UTILITY CONFLICTS AND SOLUTIONS

DEFINING IMPACTS AND RESPONSIBILITY – In pursuit of this Project, John Myers has conducted preliminary coordination with contacts at each of the utility companies with facilities along the corridor and has requested records for their facilities along the corridor. Additionally, his conversations requested input and insight on the potential impacts to any facilities associated with the Project. An in-depth conflict analysis has included analysis of the RFP, utility company records, Miss Utility of Virginia records, and comprehensive site visits by our utility coordination staff to identify all potential utility conflicts. A matrix of this information was developed (*Table 4.4.3*) along with estimated relocation timeframes and costs based on historical data, VDOT's PCES system over the past two years, and information directly from the utility companies. Any betterments requested by the companies will be kept separate of the VDOT contract and negotiated directly with the requesting utility provider.

Table 4.4.3 Utility Conflicts and Resolution

Owner	Utility Type	Location	Quantity	Resolution
DVP	UGE	Penniman Road	100 LF	Test hole needed to verify, but viable candidate to work around in existing location
DVP	UGE	Burma Road	820 LF	Test hole needed to verify -possible adjust in place to mitigate conflict without relocation
DVP	OHE (3-Phase)	1463+00	2 Spans / 3 poles	Flag lines during construction, overhead clearance checked against final grades to try to avoid relocation
DVP	OHE (3-Phase)	1466+50 to 1463+00	2 Spans / 3 poles	Flag lines during construction, check overhead clearance against final grades to try to avoid relocation
DVP	UGE (Streetlights)	Yorktown Road	200 LF	Accounted for in the lighting design/plans
VNG	6" Gas	Penniman Road	100 LF	Test hole needed to verify depth - candidate for working around its existing location
VNG	16" Gas	1142+50	210 LF	Proof roll existing material and explore existing encasement ends, extension may be required
VNG	16" Gas	1500+00	438 LF	Explore existing encasement ends. If possible limit relocation by extending encasements
Verizon	FO	Jefferson Avenue	1000 LF	Test hole needed to confirm slack in cable to see if it can be adjusted in place
Verizon	Copper	Jefferson Avenue	1000 LF	Test hole needed - candidate for work around in existing location
Verizon	Copper/FO	Jefferson Avenue	1000 LF	Test hole needed to confirm slack in cable to see if it can be adjusted in place
Verizon	FO	Yorktown Road	1000 LF	Test hole needed - candidate for work around in existing location
Verizon	FO	Yorktown Road	1000 LF	Test hole needed to confirm slack in cable to see if it can be adjusted in place
Verizon	Copper	Yorktown Road	1000 LF	Test hole needed to confirm slack in cable to see if it can be adjusted in place
Verizon	Copper	Yorktown Road	1000 LF	Test hole needed - candidate for work around in existing location
Verizon	Copper	Yorktown Road	1000 LF	Test hole needed - candidate for work around in existing location
Verizon	Copper	Yorktown Road	1000 LF	Test hole needed - candidate for work around in existing location
Metro	FO	Jefferson Avenue	175 LF	Test hole needed to confirm slack in cable to see if it can be adjusted in place - probable relocation
NNWW	48" Waterline	1270+25	343 LF	Avoid relocation -extend encasement
Cox	Coax	Penniman Road	1000 LF	Relocate
Cox	Coax/FO	Penniman Road	1000 LF	Manipulate line to construct pier
Cox	FO	Jefferson Avenue	1000 LF	Manipulate line to construct pier
Cox	Coax	Yorktown Road	1000 LF	Manipulate line to construct pier
Cox	Coax	Yorktown Road	1000 LF	Manipulate line to construct pier

Impact Avoidance and Minimization – The conflicts identified by our detailed review of the utility information provided in the RFP Information Package and supplemented by the individual utility companies shows that the types of conflicts are primarily due to drainage and pier widening. However, some additional conflicts are caused by vertical clearance and anticipated undercuts. As test pit data is gathered and analyzed, some conflicts may naturally be avoided.

Drainage – Utility impacts associated with drainage have been avoided and minimized by shifting the roadway alignments to minimize impacts along the outside fill/cut areas. As a result, the majority of the drainage for this Project will be installed in the median of I-64, which limits the exposure to utility lines running parallel. The only remaining issues are associated with cross culverts which will be test-pitted and designed around vertically where possible. Avoidance and minimization strategies for these culverts include repairing or sleeving where feasible, and replacing through open cut and jack and bore operations.

Shifting the Alignment Reduces Utility Impacts

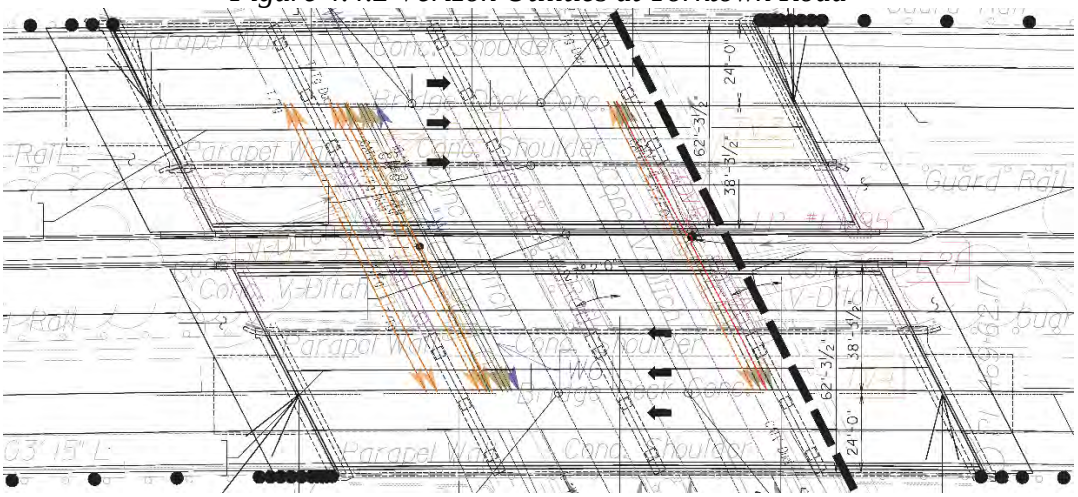
- *Avoided 700+/- LF of 72" Waterline*
- *Avoided 1 Power Transmission Pole*
- *Minimized multiple gas, water, and sewer crossings*
- *Reduced the amount of potential utility encasement extensions (various utilities)*

Moving the drainage to the median of the road helps to avoid major impacts along the outside edges of the roadway for multiple facilities, including water, sewer, gas, and transmission power pole(s). During initial discussions with the listed utility companies on the Project, both AT&T and Sprint reported that they did not foresee any impacts to their existing facilities by the proposed work. To confirm avoidance of impacts, conflict analysis will include plotting of test pit information received on the project cross sections along with design features to avoid unforeseen conflicts.

Pier Widenings – Local phone companies present the biggest risk to the utility relocation schedule due to intensive splicing for copper cables, which is expensive and escalates exponentially for bigger copper cables. John Myers and RDA's work experience and professional relationship with Jim Fulton (Verizon consultant) and Ed Richardson (Verizon Area Engineer) will aide in the open communication as the Project progresses forward and allow for better responsiveness and cooperation with Verizon. Additionally, RDA's recent addition of a recently retired Verizon engineer gives us the ability to speak the same language as Verizon's internal employees, provides the opportunity to find issues before they arise, identify efficient schedule solutions, and assist with engineering tasks to preserve schedule / manage risk.

The potential for extensive conflicts with Verizon copper and fiber optic facilities exists at both Jefferson Avenue and Yorktown Road (as shown in orange in *Figure 4.4.2*). Depending on the offset from the pier and the composition of the utility (rigid vs. flexible), protection and minor manipulation of the utility may be a feasible option to avoid relocations. Reducing copper cable counts (or sizes) may also be a feasible strategy. Test pitting and three-dimensional modeling will be used to check for clearance to avoid impact if at all possible. Trench shoring, conduit support, and adjustment of the lines will all be analyzed and considered before relocation is determined as the only viable solution.

Figure 4.4.2 Verizon Utilities at Yorktown Road



SCHEDULE MITIGATION STRATEGIES

Limited leverage with utility companies to ensure facilities are relocated in a timely manner is further dampened by the recent trend among utility companies to downsize despite the fact that the workload has not decreased. The Myers Team recognizes these challenges and utilizes a two-phase approach to utility relocations, very similar to that which the Northern Region of VDOT has utilized for several years, to minimize the impact that utilities could have on the project schedule.

The Myers Team will assemble a Utility Task Force, comprised of John Myers, Jon Holt (CM), Tom Heil (RCE), and Jessica Colbert (Schedule Manager). This Task Force, led by John Myers, will manage and assist, to the extent possible, with the preliminary engineering and development of the P&Es. They will work with all the involved companies to develop pro-rates, UT-9 documents, and coordinate the relocations with the project design to ensure all conflicts are resolved in the submitted P&E. Each Task Force member will review the P&E's submittal and John will seek approval of each P&E submittal from VDOT before recommending authorization by the RCE. When relocation work begins in the field, The Task Force will be expanded to include Rich Clifton, MOT Coordinator, who will take the lead on coordinating lane closures and work areas with the companies that are performing the utility work. This allows for smoother coordination with construction activities ongoing on the Project.

FACILITATING PROGRESS AND ENABLING WORK – When the Myers Team holds the UFI meeting, we will not only depict the anticipated conflicts but also perform preliminary alignment designs to relocate the impacted facilities. These value-added preliminary alignments will be electronically provided to the utility companies so they can be built upon them to progress the relocation designs. These value-added efforts from our Team saves the utility companies time and money, allowing them to move faster toward P&E submission. If appropriate, our Team will partner with the utility companies, assisting with the preparation of the UT-9s and the P&E packages, in order to expedite utility relocation design, approval, and relocation.

During construction, we anticipate assisting the utility companies with clearing/grubbing; right of way and easement stakeout; access roads/laydown areas; and installing conduits, encasement pipes, and other items to maintain the schedule. Furthermore, we will work with the utility companies to determine if there are elements of their relocation work (i.e. manhole/handhole construction, trenching, etc.) that can be performed by our Team to expedite relocations. Partnering with the utility companies to support relocation construction saves the utility companies from hiring a contractor to do the work, speeds up progress, and removes potential schedule obstacles.

REACTING TO POTENTIAL DELAYS – Maintaining frequent communication with the utility companies will ensure they stay on schedule and give early indications of schedule risks, providing time to react to schedule impacts and adjust operation sequencing. Progress with each utility owner will be tracked by Utility Coordinator, John Myers, using a utility tracking matrix, which will be updated and provided to the DBPM, DM, CM, and VDOT on a bi-weekly basis. The matrix will include all utility milestone events to facilitate design and relocation on a regimented schedule.

Addressing Potential Delays
On the Walney Road DB Project, frequent communication with the utility companies helped resolve issues and generate solutions which led to opening the bridge on schedule despite unavoidable utility relocation delays (beyond Myers control) which negatively affected the schedule

The most significant milestone for utility companies is the submission of Plan & Estimate packages (P&Es). As mentioned previously, the Myers Team will institute a Utility Task Force to streamline the management, review, approval of the P&E's. Further this group will continue to function during the utility relocation construction activities to assist the utility company(s) contractor with execution of the work and resolving issue prior to them becoming critical and potentially affecting the project schedule.

Potential issues with relocations exceeding the prescribed UFI schedule will be flagged, mitigation measures identified and remediation measures implemented to maintain the relocation schedule. If tasks are not completed as planned, they will be flagged for more intensive coordination to maintain or recover schedule. The Myers Team will partner with the utility companies and VDOT regarding any delay or lack of progress and assist in defining a recovery strategy.

Unidentified utilities is always a risk, especially when there are government facilities along the corridor. If an unidentified utility is encountered during construction, our sub-surface investigation partner will be called in and the utility, assuming it is not a dark line, traced back until it reaches a box or other piece of equipment that proves ownership. The facility will be as-built to determine the conflicts, and impacts will be avoided if possible. If relocation is necessary, the potential schedule impact will be identified proactively and incorporated into the project schedule to understand and mitigate potential schedule impacts.

INTEGRATED PROJECT SEQUENCING

SEQUENCING CONSTRUCTION TO MINIMIZE DELAYS – The proposal schedule (*Section 4.7*) accounts for utility coordination, planning, field inspections, development of plans & estimates, and utility relocations in conflict with the final design. The conservative approach to utility relocations in our schedule assumes maximum impact to account for schedule risk. The schedule risk associated with utilities is mitigated by including a placeholder activity to confirm conflicts have been avoided as planned. As engagement with utility companies continues, the durations included in the schedule may be reduced by minimizing or eliminating impacts that have been incorporated.

The Myers Team has divided the Project into four sections for construction phasing. This allows work to begin on areas with minimal utility impacts and utility companies to utilize multiple work orders for concurrent relocation in multiple areas. *Table 4.4.4* summarizes the utility design and construction durations incorporated into the proposal schedule.

Table 4.4.4 Utility Schedule Overview

UTILITY	SECTION A	SECTION B	SECTION C	SECTION D
DVP	100LF UGE 60 Days Design 60 days Construct	820 LF UGE 60 Days Design 60 days Construct	No Conflict	6 poles OHE, 200 LF of UGE 60 Days Design 120 days Construct
VGN	100 LF 6" Gas, 420 LF 16” Gas 60 Days Design 120 days Construct	No Conflict	No Conflict	420 LF 16” Gas 60 Days Design 60 days Construct
VZN	No Conflict	No Conflict	No Conflict	4000 LF FO, 6000 LF Copper 90 Days Design 440 days Construct
METRO	No Conflict	No Conflict	No Conflict	1000 LF FO 60 Days Design 60 days Construct
NEWPORT NEWS	No Conflict	343 LF 48" Waterline Design/ Construct in Contract	No Conflict	No Conflict
COX	2000 LF Coax/FO 60 Days Design 60 days Construct	No Conflict	No Conflict	3000 LF Coax/FO 60 Days Design 120 days Construct

4.4.3 GEOTECHNICAL

Construction within the Virginia Coastal Plain Geologic Region presents challenging geotechnical conditions; specifically the region's soil profiles exhibit soft, compressible, plastic clay soils interbedded with sandier layers of varying fine-grained silt/clay material. The Myers Team has managed similar conditions on other recent VDOT design-build projects by surcharging compressible soils, using calciment soil stabilization, and undercutting/replacing unsuitable soils.

DMY will serve as the Geotechnical Engineer of Record (GE) and provide Quality Control management and inspections following the VDOT approved QA/QC Plan. The Myers Team have implemented this proven approach to take full advantage of the design-build process by integrating geotechnical design concept development with construction practices and means/methods. DMY is providing the same services for Myers/RDA on the Rolling Road and I-95/Temple Ave design-build projects.

GEOTECHNICAL APPROACH

The Myers Team's approach to identifying and mitigating geotechnical risks is to evaluate the existing project data and information, conduct additional geotechnical investigation, establish geotechnical recommendations, and effectively implement design concepts during construction of the Project.

Geotechnical Design and Analysis Practices – Our Team has thoroughly reviewed the three VDOT provided geotechnical documents (collectively referred to as the GDRs) including the Geotechnical Data Report (GDR) by GET Solutions dated June 16, 2014, the Pavement Report by ARA dated April 10, 2015, and the Field and Laboratory Test Results by McCallum dated August 14, 2015 (revised August 20, 2015 and submitted by ARA on August 28, 2015). The total of 120 Standard Penetration Testing (SPT) borings, including five borings in the vicinity of the proposed bridge widening, represent approximately 15% of the borings required by Chapter 3 of the VDOT Manual of Instructions (MOI). A total of 36 CBR tests were performed for roadway pavement and no borings were drilled for potential retaining walls, noise walls, large pipe/culvert structures, or stormwater management (SWM) facilities.

Prior to acquiring additional geotechnical data, a comprehensive review and evaluation of all available data and information regarding the project area and subsurface soils will be completed. Some of the sources of these date will include the USGS geologic maps and soil survey reports, existing as-built roadway and bridge plans, existing soil test borings, and laboratory data. A thorough site reconnaissance will be conducted to confirm the potential geotechnical risks, identify any additional site constraints, and tailor the geotechnical exploration program to address the real geotechnical issues relative to the proposed design.

The supplemental geotechnical investigation program will be developed based on the MOI and all additional exploration, investigation, and testing will be performed in support of the required design level geotechnical engineering report (GER). Since the GDRs suggest that the primary factor for the majority of unsuitable soils on the Project are likely related to CBR, our Team will increase the frequency of CBR testing to define the limits of unsuitable soils. Testing will also focus on obtaining field and laboratory soil data to provide an accurate estimate of the magnitude and time rate of settlement in the median and at bridge abutments.

> ***Supplemental Geotechnical Investigations***
> *To minimize construction schedule risks, our Team will increase the frequency of CBR testing to accurately define the limits of unsuitable soils; specifically where the existing soaked CBR values are less than 5.*

In addition to the conventional SPT drilling and sampling & soil index tests, we plan to perform CPT, PMT, DMT, Shelby tube, pitcher sampling, consolidation tests, direct shear and triaxial shear to support the settlement calculations, global stability analyses, and structure foundation designs. Groundwater monitoring wells are also planned in the potential SWM areas and high fill embankment and slope locations.

Upon completion of the geotechnical field exploration and laboratory testing, the Myers Team will utilize all available geotechnical information (existing VDOT data and additional subsurface exploration) to evaluate soils parameters, perform engineering analyses, and provide geotechnical recommendations for the design and construction of bridge foundations, noise walls, drainage structures, retaining walls, slopes, roadway embankment and subgrade, pavements, and SWM facilities. The design of geotechnical features will be in accordance to the AASHTO LRFD Bridge Design Specifications, 7th Edition.

Construction Methods – To ensure that all geotechnical design recommendations are implemented during construction, the Myers Team have specifically tasked DMY to serve as the GE and lead the Project's QC management, testing, and inspection program. The GE will provide requisite inspections/certifications as stipulated by the VDOT approved QA/QC plan and the VDOT manual, will collaborate with the CM, RCE, and QAM, and ensure that all work progresses only after all quality certification/assurance checks have been completed, logged and accepted by the QAM. The GE will be intimately involved during construction and will play an important role in settlement monitoring of the embankment and bridge abutment fills, implementation of the subgrade remediation measures, and FDR mix design and adjustment.

GEOTECHNICAL RISKS AND CHALLENGES

The following geotechnical risks and challenges were identified based on our understanding of the geologic setting for the Project; review of the existing information provided by VDOT and additionally available soils and geological information for this area; and the potential impacts to quality and schedule.

- Unsuitable subgrade soils
- Settlement in the median
- Down drag of bridge foundations
- Slopes stability
- Corrosion due to low pH soils

Geotechnical Risk Management

- *Incorporate potential design and construction risks into the schedule*
- *Confirm the extent and critical nature of the potential impacts*
- *Select and implement appropriate risk remediation strategies*
- *Efficiently manage construction operations to minimize schedule risk and ensure quality performance*

The recognition and unabated mitigation of these geotechnical risks could impact the overall schedule, project cost, and adversely affect the traveling public due to increases in construction truck traffic. Our proven risk mitigation approach is to identify potential risks early, develop a mitigation action plan, and communicate/ implement the action plan with all appropriate parties. To ensure all appropriate safeguards are taken and the mitigation strategy results in a quality product, significant design and construction coordination is required between the GE, RCE, CM, Construction QC Manager, and QAM. The GE will provide the appropriate expertise and oversight to ensure the geotechnical risk is appropriately managed.

All geotechnical risks have been appropriately accounted for in the proposal schedule in *Section 4.7*. The design section of the schedule includes activities for geotechnical investigation, analysis, and recommendations. In the construction schedule, roadway productions were adjusted to account for remediation of unsuitable soils and settlement of the roadway approaches. Currently, these geotechnical risks do not specifically affect the critical path. Following NTP and as preparation of the GER progresses, the schedule will be revisited to ensure that all geotechnical mitigation measures are accurately incorporated.

Unsuitable Subgrade Soils – Based on review of the provided GDRs, the near surface soils consisting of coarse-grained soils (SC, SM, SC-SM and SP-SM) are generally suitable subgrade materials. Lean clay (CL) with appreciable amount of sands and lower plasticity also has the potential to be suitable subgrade material. However, the majority of lean clay encountered in the borings had less sand and higher plasticity and exhibited CBR values lower than the design CBR value of 5.0. We anticipate that low CBR soils and high plasticity soils (CH/MH) will be the major unsuitable subgrade conditions. Together, these soils could

account for up to 30% of the median widening areas. Some of the suitable types of subgrade soils exhibit very high natural moisture contents; therefore, depending on the time of year, drying through natural and/or chemical processes may be implemented. Potential unsuitable subgrade soils within the proposed widening areas and appropriate soil / subgrade remediation options are summarized in *Table 4.4.5*.

Table 4.4.5 Unsuitable Soils under Proposed Widening Areas

LOCATIONS	TYPE OF UNSUITABLES	SUBGRADE REMEDIATION OPTIONS
EB Median Widening Station Ranges		
1373+00 to 1394+00	High Plasticity (CH/MH)	▪ Undercut up to 3' and replace with compacted suitable materials with CBR ≥5; or ▪ Lime-modify and compact up to 3' of subgrade soils in layers.
1166+00 to 1205+00 1246+00 to 1263+00 1372+00 to 1394+00 1425+00 to 1451+00	Low CBR (<5)	▪ Undercut up to 3' and replace with compacted suitable materials with CBR ≥5; or ▪ Lime-modify and compact up to 3' of subgrade soils in layers.
1140+00 to 1158+00 1451+00 to 1466+00	Loose/Soft Subgrade (N<5)	▪ Compact subgrade soils in-place; and/or ▪ Stabilize with geotextile/geogrid reinforcement.
1218+00 to 1233+00	High Moisture Content	▪ Scarify/Dry and compact in-place; or ▪ Dry with pelletized quicklime and compact in-place; or ▪ Undercut up to 3' and replace with compacted suitable materials with CBR ≥5
WB Median Widening Station Ranges		
2180+00 to 2226+00 2282+00 to 2303+00 2363+00 to 2383+00 2486+00 to 2502+00	Low CBR (<5)	▪ Undercut up to 3' and replace with compacted suitable materials with CBR ≥5; or ▪ Lime-modify and compact up to 3' of subgrade soils in layers.
2402+00 to 2417+00	Loose/Soft Subgrade (N<5)	▪ Compact subgrade soils in-place; and/or ▪ Stabilize with geotextile/geogrid reinforcement.

The data in the GDRs did not indicate unsuitable subgrade soils under the existing pavement which will be reconstructed. The GDRs did indicate high moisture content subgrade condition under approximately 30% and high plasticity/low CBR subgrade condition under approximately 10% of the existing pavement, respectively. These existing pavement subgrade conditions do not specifically require undercut and replacement; however, for the full-depth reclamation (FDR) subbase, multiple mix designs customized for these specific subgrade conditions will be provided. If unsuitable materials (such as high organic content, high swell, and very loose/soft soils) are encountered, the appropriate subgrade remediation as listed in the above table will be implemented prior to the FDR construction.

FDR Remediation of Unsuitable Soils
CH/MH and high moisture content subgrade soils under the existing pavement can be left in place and the FDR mix design can be adjusted to accommodate the inclusion of some CH/MH and high moisture content soils.

Following the design level geotechnical investigation, locations where unsuitable soils are anticipated to be encountered will be delineated on the project drawings (both area and depth) and discussed with the CM and MOT Coordinator. Collectively the GE, CM and MOT Coordinator will develop an unsuitable soils remediation plan that considers constructability, safety, schedule, and cost. The final plan will be shared with the RCE and QAM to ensure its compliance with the project requirements and will show the extents of unsuitable soils, the cause for unsuitability, and availability of multiple viable subgrade treatment options provide to provide maximum construction flexibility.

Settlement in the Median – As noted previously, some median widening areas have the potential for settlement due to highly compressible clays and/or organic soils at relatively shallow depths. As most median widening will required raising the existing median approximately 14 to 18 feet, settlements of underlying soils could reach up to 18 inches.

Since the key to mitigating settlement risk is accurately identifying the location, extent, and magnitude potential settlement, the GER will include a robust investigation program to confirm locations of unsuitable soils and evaluate their potential for settlement. The testing and sampling program may consist of conventional SPT drilling with PMT and/or DMT testing supplemented by CPT with pore pressure dissipation and groundwater monitoring wells. At critical locations, groundwater monitoring wells will be installed to accurately measure long-term groundwater levels, which will be used to analyze the effect of long term consolidation settlement. The in-situ PMT and/or DMT tests along with the consolidation tests will provide the soil parameters to enable accurate estimate of the total settlement, and the consolidation tests paired with the groundwater information will allow the accurate estimate of the time rate of settlement.

With the high quality soil parameters from both the in-situ and laboratory tests as the inputs, the Myers Team plans to utilize the three-dimensional (3D) settlement analysis software to calculate the settlements. The Myers Team is also prepared to use finite element analysis software PLAXIS 3D® to check the settlements at select locations. Based on the results of the settlement analyses and depending on the contributing factors to the settlement, a number of mitigation options or a combination of which are available as summarized in *Table 4.4.6*.

Successful Mitigation of Settlement Schedule Impacts
The Myers Team utilized settlement analysis software on the I-95/Temple Avenue DB project to accurately analyze embankment settlements and down drag forces to eliminate conservative assumptions of a conventional 2D modeling approach.

Table 4.4.6 Settlement Mitigation Options

Settlement Mitigation Option	Areas of Potential Application
Light weight fill material such as LDCF and Geofoam	Bridge abutments and areas with little schedule flexibility
Ground improvements such as aggregate piers or piles to support the proposed embankments	Bridge abutments and areas with little schedule flexibility
Removal and replacement	Areas where compressible soils are shallow
Surcharging (with or without wick drains)	Low areas with high groundwater and high embankment fill and areas with flexible project schedule

Review of the GDRs, conceptual plans, and preliminary calculations indicate predicted maximum road embankment settlement in the median areas up to 18” in areas with 14 to 18 feet of fill, 12” in areas with 8 to 14 feet of fill, and less than 6” in areas with less than 6 to 8 feet of fill. Median areas where the most significant settlement is predicted are listed in *Table 4.4.7*. Recommended mitigation measures to reduce settlement rates while maintaining the project schedule include unsuitable material removal/replacement, surcharging, and wick drains. Settlement monitoring during consolidation will confirm the calculated settlement amount, consolidation rate, optimize potential construction impacts, and manage settlement risks.

Table 4.4.7 Potential Median Settlement

Location	Embankment Height	Unmitigated Maximum Settlement	Unmitigated Settlement Rates	Recommended Mitigation Measures to Expedite Settlement
East Terminus to Sta. 1129+00	18’	12” to 18”	2 / 3 months	Surcharge and monitor
Sta. 1155+00 to 1178+00	13’	12” to 18”	3 / 5 months	Surcharge / monitor, wick drains
Sta. 1202+00 to 1203+00	17’	14” to 18”	4 / 5 months	Surcharge / monitor, wick drains
Sta. 1260+00 to 1262+00	11’	14”	4 / 5 months	Surcharge / monitor, wick drains
Sta. 1265+00 to 1269+00	14’	12”	4 / 5 months	Surcharge / monitor, wick drains
Sta. 1300+00 to 1305+00	10’	14”	4 / 5 months	Surcharge/monitor, possible wick drains
Sta. 1320+00 to 1335+00	11’	12” to 18”	2 / 5 months	Surcharge / monitor, wick drains
Sta. 1337+00 to 1347+00	10’	12” to 18”	4 / 5 months	Surcharge / monitor, wick drains
Sta. 1464+00 to 1472+00	12’	12”	3 / 4 months	Surcharge / monitor, possible wick drains

Bridge Foundation Elements and Downdrag – There are five locations along the proposed widening alignment where widening of the existing I-64 EB and WB bridges are anticipated. As-built bridge plans show that the existing bridge piers and abutments are supported by either driven or cast-in-place concrete piles. The GDRs and the existing VDOT bridge plans indicate that the subsurface profiles along the bridges generally consist of a dense/stiff alluvial crust underlain by softer soils that transition to a deeper crust. It appears that the existing bridge piles extend into the deeper crust. The thickness of the upper crust appears to be inconsistent across the existing bridge and pre-drilling will be assessed to prevent overstressing/ damaging driven piles. Based on the information currently available, we expect to use driven pre-stressed/ pre-cast concrete piles or steel H-piles at the bridge abutments.

Potential settlement of the existing subsurface soils in the vicinity of the existing and proposed bridge abutments could drag (pull) down existing and proposed deep foundation elements. This downdrag is a result of the soil moves downward in relation to the particular foundation element, thereby, creating additional loading on the structure. As the downdrag issue is caused by the settlement of underlying compressible soils, the investigation and mitigation strategies of this risk are similar to the median embankment settlement. Based on our review of the provided GDRs and conceptual plans and our preliminary calculations, *Table 4.4.8* summarizes the potential amount and time rate of settlements at each bridge abutment including potential mitigation measures to manage the settlement risk.

Table 4.4.8 Potential Settlement at the Bridge Abutments

Bridge Abutment Location	Embankment Height	Predicted Maximum Settlement	Unmitigated Settlement Rates	Recommended Mitigation Measures
I-64 over Penniman Road	8’	12”	2-3 months	Surcharge with wick drains
I-64 EB over Route 143	12’	11”	4-6 months	Surcharge with wick drains or designed embankment
I-64 over Burma Road	9’	12”	6-12 months	Light weight fill, surcharge with wick drains, or designed embankment
I-64 over Jefferson Avenue	7’	10”	2-3 months	Surcharge with wick drains
I-64 over Yorktown Road	8’	9”	3-4 months	Surcharge with wick drains

Using the calculated abutment fills settlements, downdrag forces will be calculated on the adjacent existing foundation elements and on the new foundations. If the calculated downdrag forces exceed the structural resistances, mitigation measures in the form of bituminous coatings or jackets will be assessed. To address settlement, mitigation measures such as light weight fills, surcharge, and wick drains will be explored and implemented as needed to minimize construction impacts and manage risk. Existing piers and bridge beams will be protected during construction and construction will be sequenced to ensure global stability of the foundations during construction.

Existing Slopes – Our Team’s approach to shift the alignment toward the median minimizes slope fills required along the outside shoulders. Where fill is required, existing slopes will be benched to allow the proposed slopes to be keyed in and avoid sliver fills. For slopes greater than 10 feet in height, detailed global stability analyses will be performed using site specific soil strength parameters as obtained from laboratory tests. Slope stabilization measures available include geogrid reinforcement, stabilizing berms, ground improvements including undercut, rammed aggregate piers, and deep foundations.

> ***Existing Slopes***
> *Shifting the alignment towards the median reduces slope fills associated with widening I-64.*

Low pH Soils – The provided GDRs indicate that over half of the tested soil samples exhibit a pH value less than 5.0, which suggests widespread presence of acid soils on the Project. Additional soils corrosion testing will be performed at the location of proposed structures and, if low pH soils are encountered, options to mitigate the conditions may could include sacrificial steel or CRR.

4.4.4 QUALITY ASSURANCE / QUALITY CONTROL (QA/QC)

The Myers Team believes that quality is a partnership between design and construction staff, QC inspection technicians, the independent QAM and QA staff, the RCE, and VDOT - driven by the goal of exceeding VDOT's project quality requirements. To accomplish this goal, the quality team, led by the QAM, will prepare, present, obtain approval of, and continually update the I-64 Segment II QA/QC Plan which will be based on the VDOT's Minimum Requirements for QA and QC on Design-Build and PPTA Projects, January 2012. The QA/QC Plan will not only include roles, responsibilities, authorities, and organizational structure; it will provide for mechanisms to address and report nonconforming (NCR) workmanship, materials, and/or equipment and auditing and recovery plans (AR) to control and repair deficient items.

VDOT Recognition of Myers' Quality of Work
"The VDOT Lynchburg District PM Team was impressed with the quality of work performed by Myers …Myers also took their time to ensure they were doing things correctly and safely even when unexpected issues arose." VDOT Tye River DB PM.

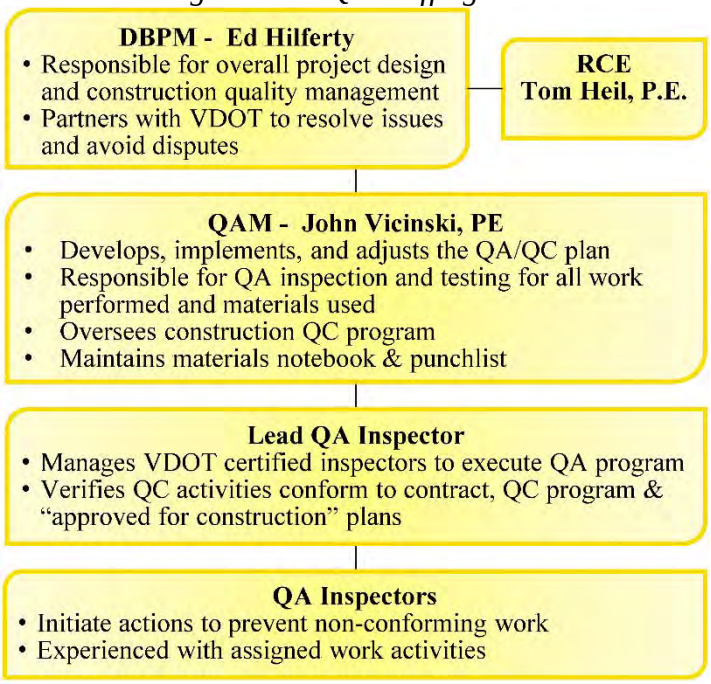
The Myers Team provides this sound approach that has been used by Myers to develop, execute, and update seven individual QA/QC plans for successful VDOT design-build projects. With each successful design-build project, Myers' quality, design, and construction teams have gained additional experience and lessons learned to improve the effectiveness of the next QA/QC Plan. The Myers Team will provide a well-structured, easily audited plan that minimizes the need to expand VDOT's contract administration efforts.

APPROACH TO QA/QC

Our Team's approach to quality management is focused on continuous improvement and ensuring that all levels of the design and construction team obtain, understand, implement, monitor, and document quality procedures. The project QA/QC Plan will include:

- Clear provisions for identifying, notifying, and tracking potential non-conforming work, materials, or equipment and administering a quality assurance auditing and nonconformance recovery plan (AR)
- Clear stipulation that the QAM does not report to production forces, has the authority to stop work, and will communicate daily with the CM / lead inspector
- Clearly identify the roles and responsibilities of the RCE noting his control authority in making and approving engineering decisions during construction.
- A design QA/QC plan which specifies cross-disciplinary and constructability reviews
- A construction QC Plan which requires qualified, VDOT certified, QC inspectors and uses checklists to document inspections

Figure 4.4.3 QA Staffing Plan



The Myers QA Team depicted in *Figure 4.4.3*, overseen by the DBPM (with input from the RCE), and led by the QAM, will implement the Project's QA/QC plan to verify contract requirements are met; work and materials are performed in the manner for which they are intended; and records, materials notebook, and documentation are accurate and complete.

APPROACH TO DESIGN QA/QC – Our approach to design QA/QC is a partnership between the RCE, DM, designers, CM, construction staff, QC inspectors/testers, and the QAM. The Design QA/QC Team depicted in *Figure 4.4.4*, overseen by the DBPM and RCE, will be led by the DM to provide quality designs and plans in accordance with VDOT's QA/QC Guide and minimize VDOT's administrative efforts by:

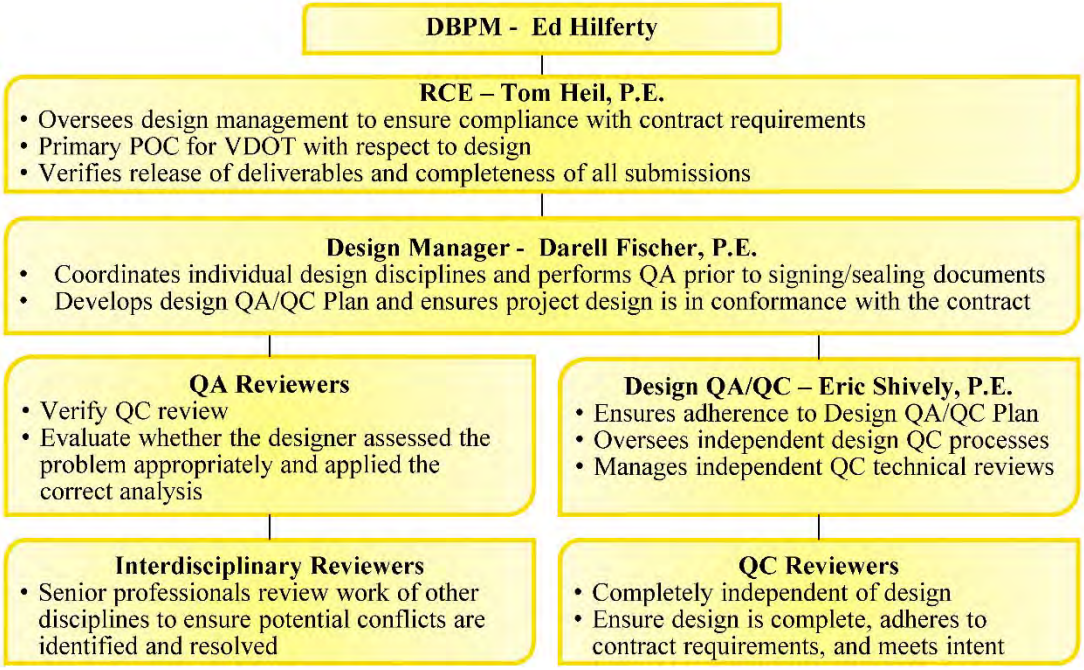
- Designing features that are safe and meet (or exceed) VDOT regulations and Design Manuals
- Conforming to the standards and reference documents in the RFP
- Designing elements that are constructible, durable, economical, and minimize maintenance
- Meeting design schedule, budget, and construction staging requirements
- Providing an organized and indexed set of design calculations, criteria, and assumptions

To kick-off the design QA/QC process, the RCE, DM, lead discipline engineers, and Design QA/QC Manager will establish the design criteria and checklists for each design element, then distribute to assigned staff engineers and subconsultants. Design deliverables will be prepared under the lead discipline engineers and reviewed to ensure completeness and all necessary and appropriate construction requirements/details. The processes/procedures defined in the QA/QC Plan will be strictly enforced and thoroughly documented to minimize VDOT reviews. To ensure well-structured and easily audited documents, forms and certifications will be completed and electronically submitted with each design submittal to digitally track drawing review certifications, calculation review certifications, and release for deliverables.

Weekly design meetings, directed by the RCE and led by the DM, will include the Lead Engineers, MOT Manager, CM, field engineer, and QAM. All plans will be reviewed by the CM and field engineer for constructability and means/methods.

VDOT and key stakeholders will be invited to participate in over-the-shoulder reviews to streamline the review process by citing preferences and clarifications.

Figure 4.4.4 Design QA/QC Staffing Plan



The QAM will certify that all QA/QC efforts are completed in accordance with the required procedures and the DM, RCE, and DBPM will sign-off on their acceptance. For final submissions, deliverables will be signed and sealed by discipline leads and accepted by the RCE prior to submitting to VDOT for acceptance.

Design changes during construction will be reviewed using the same process as the original design; however, the RCE will be directly involved and have control authority when making and approving these changes. Changes, such as field design changes and nonconformance evaluations, will be maintained in a database to track revisions and update the as-built documents.

APPROACH TO CONSTRUCTION QA/QC – The Myers Team will meet VDOT's seven Rs of construction, installing the **r**ight material, in the **r**ight way, at the **r**ight time, in the **r**ight location, in the **r**ight quantity, verified with the **r**ight documentation, resulting in the **r**ight payment. Our Construction QC program will be implemented in accordance with VDOT's QA/QC Guidance and the QA/QC Plan. The Myers Construction QC Staff shown in *Figure 4.4.5* will ensure construction is carried out in accordance with the RFP requirements with minimum VDOT intervention by:

- Incorporating QA/QC procedures and protocols into design and construction planning efforts
- Providing a well-structured, complete Project QA/QC Plan which has been tested and successfully used on previous VDOT design-build projects
- Providing extensive experience with this same scope of work, including multiple MOT phases, phased bridge and roadway construction, crucial geotechnical coordination, critical traffic considerations
- Using set processes for inspections, testing and test reporting, materials documentation, diaries and checklists, safety and environmental monitoring

Myers' philosophy of **Safe Production Done Right** uses a Production System approach that incorporates Quality, Safety, and Production into comprehensive operation planning. The planning process promotes inclusion where the construction team, QC staff, safety manager, and field managers all review and provide feedback into operation plans. Quality and safety related tasks are identified and tracked, and an operation does not begin until each item has been addressed.

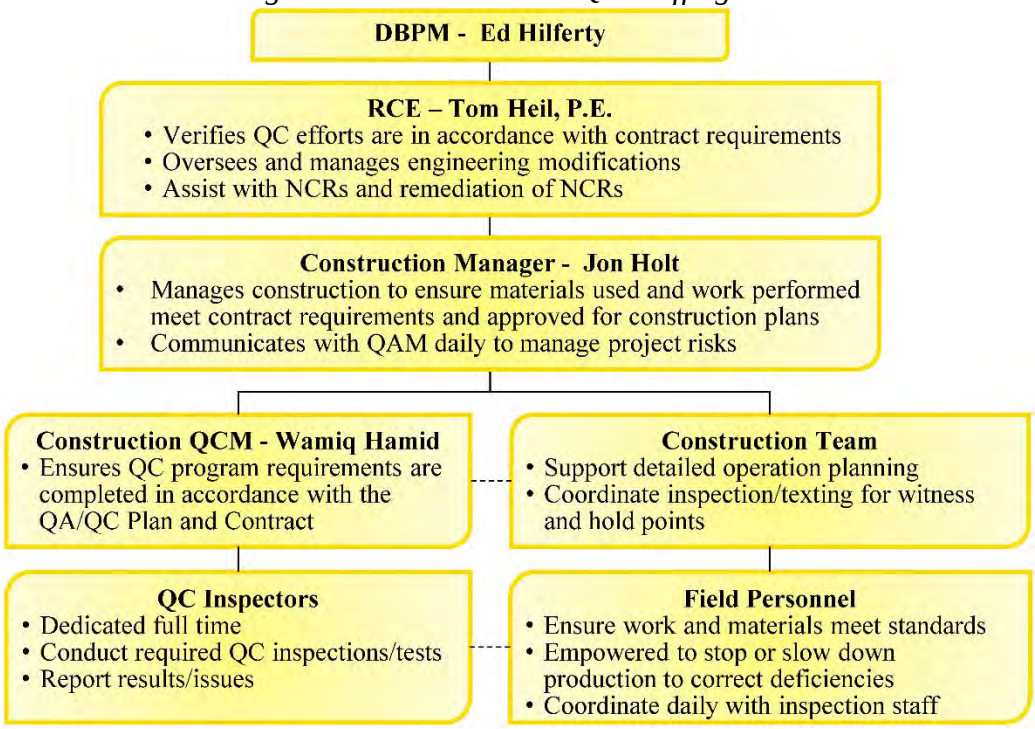
Proactive Correction of Deficiencies

The Myers Team Production System approach focuses on collectively planning for and creating a safe, delay-free work area and empowers employees to stop or slow down production to quickly correct any defects that surface.

The approved QA/QC Plan processes were used to ensure the NCRs were resolved efficiently and accurately. Myers has received zero NCRs on the *Walney Road DB project* and *Rolling Road project*. Our construction team will promptly address any quality concerns while building strong working relationships with QC and QA staff.

Myers' proven construction quality control is evidenced by the successful completion of the *Richmond Airport Connector Road* (2011) and *Route 29 NBL Bridge over the Tye River* (2012). Since completion, there have been no significant warranty issues for either of these projects.

Figure 4.4.5 Construction QC Staffing Plan



QA/QC FOR UNIQUE PROJECT ELEMENT – MAINTENANCE OF TRAFFIC

The Myers Team deems the design and construction implementation for maintenance of traffic the most critical element for both design and construction of the Project. I-64 Segment II is an Urban Freeway with a current ADT (Average Daily Traffic) over 80,000 vehicles per day. The highway has a design speed of 70/75 MPH and a posted speed of 65/70 MPH. Both of these factors will be a major challenge for the contractor to safely execute the different construction activities with minimal disturbance to the traffic flow.

The project scope includes the widening of nine bridges in addition to adding traffic lanes and shoulders with pavement reconstruction on 7.1 miles of highway. In addition, the widening of the existing shoulders from 10 feet to 12 feet west of Exit 243 will be needed where a higher volume of trucks are expected. All these activities will require an effective design and installation of MOT (Maintenance of Traffic) per VDOT requirements.

DESIGN QA/QC FOR MAINTENANCE OF TRAFFIC

There are two distinct effects of a Project in the eyes of the public. The first and most impactful is the MOT which has a lasting impression on travelers and the second is the completed Project, which cannot be realized without a strong MOT. A strong MOT plan begins with a commitment to and flawless execution of the QA/QC process to reap the benefits that it provides in the development of the design. During the initial development (and throughout the life) of the MOT design, our weekly meetings will serve as the impetus to integrate both design and construction personnel to establish the MOT schemes which match the means and methods of construction with the design criteria, design manuals, and traffic needs.

As this integrated design progresses, before submitting to the QC Engineers for review, it will be reviewed by the MOT Manager and other discipline leads for compliance with design criteria. It will then be marked up and revised. Next, the plans will be distributed amongst all the discipline leads for an inter-disciplinary review. This review will focus beyond the criteria and ensure that each discipline's elements of design are integrated for each phase of the MOT. For instance, the Hydraulics/SWM lead will ensure that both permanent and temporary drainage features are appropriately integrated. However, perhaps the most important inter-disciplinary review is that of the construction staff who will ensure that there is safe access into the work area for construction staff, equipment, and material delivery. Furthermore, the construction staff will ensure that the work area defined has adequate area for storage of equipment and materials.

Once these reviews are complete and the design has been revised to reflect all discipline markups, the plans will be submitted to the QC Engineers for review. Given that the QC Engineers have not been involved in the development of the design, their perspective is fresh and uninfluenced by the day to day involvement of the Project. Their review will focus on meeting and exceeding the design criteria for the Project and ensuring that safety related to foreseeable scenarios (i.e. work area access, lane shifts, clear zone protection, etc.) has been addressed and meets expectations. Comments will be generated and submitted back to the MOT Manager and other discipline leads for consideration/implementation.

A revised set of plans with responses to QC comments, where needed, will be provided to the QA Engineer for final inspection. This review ensures that comments have been incorporated or adequately addressed and that the process, procedures, and criteria have been followed. Final comments are then made to the MOT Manager for implementation.

Before releasing the plans for delivery to VDOT for their review, Myers' construction staff will perform one last review. Focus will be on constructability, feasibility, practicality, efficiency, and most importantly safety (of the workers and traveling public). Once this review and changes are complete, the Release for Deliverable form will be executed starting with the QA Engineer and progressing through the MOT Manager, DM, QAM, RCE, and finally the DBPM before being submitted to VDOT as a complete package

containing the plans, calculations, the form, and a statement that the QA/QC Plan has been followed in the implementation and execution of the design.

CONSTRUCTION QA/QC FOR MAINTENANCE OF TRAFFIC

In this heavily traveled corridor, proper implementation of a well-designed MOT plan is the first line of defense to minimize risk to the public, construction staff, and our Team. As with all of our DB projects, MOT design, phasing, and implementation are integral to our QA/QC program; however, for this DB Project the MOT Preconstruction and Construction QA/QC effort will focus on the following:

1. Constructability Reviews will be held with the RCE, DM, CM and MOT Manager to optimize phasing, minimize impacts to traffic, and best suit construction means and methods.
2. As a Hold Point in the schedule prior to initial MOT implementation, a Preparatory Meeting will be held with the Construction Team, MOT Manager, QAM, QCM, and VDOT to review and confirm:
   - Site-specific safety and access concerns
   - Supervisor and crew certifications (VDOT Work Zone Traffic Control Training, at a minimum, as well as ATSSA Traffic Control Technicians/Supervisors)
   - MOT Inspection checklists for installation and maintenance of traffic patterns
   - Approval of the MOT design documents
   - Public outreach has been assigned and is being properly conducted
   - Submittal and approval of C-25 Source of Material for all MOT materials
   - Appropriate MOT materials are on-hand or available to properly implement the plan and address potential contingencies
3. Inspection checklists will be completed for lane closures by the QCM and DMY's QC inspectors for all temporary TCDs, including: signs, pavement markings, Type III barricades, Group II channelizing devices, barrier service, arrow boards, and portable changeable message signs.
4. QC Inspections will include daily maintenance by Myers' MOT Coordinator and daily compliance checks by DMY's QC Inspector. Any deficiencies will be immediately corrected. The QAM designee will verify all QC control functions are occurring and will complete independent inspections.
   - All deficiencies will be logged by the QC team, provided to the QAM and corrected immediately.
   - The QAM will provide VDOT with a copy of all inspections and logs.
5. The MOT Manager and MOT Coordinator will monitor traffic operations throughout the Project and develop appropriate modifications to the MOT plan, as necessary. Modifications will be reviewed with the CM, the QCM and the QAM before implementation. The QA/QC Team will ensure that the work is performed in a safe manner for the workers as well as for the motorists by participating in Myers' daily huddles to help reinforce safety in the work area and to ensure that work crews fully understand the MOT plan in place or proposed for the work day.
6. A specific Quality Assurance Auditing and Nonconformance Recovery Plan that quickly addresses quality concerns will be developed so that the final product meets or exceeds VDOT expectations.

Submitted to:

VDOT
Virginia Department of Transportation

4.5

CONSTRUCTION OF PROJECT

ALLAN MYERS + rda

CONSTRUCTION OF PROJECT

4.5.1 SEQUENCE OF CONSTRUCTION

The project approach and sequence of construction have been developed after careful consideration of a multitude of factors including but not limited to safety during construction, project cost, schedule acceleration, traffic impacts, environmental impacts, ROW required, and project stakeholders. A number of alternative phasing and MOT configurations have been evaluated for delivering the project improvements in compliance with the requirements of the RFP and the VWAPM while minimizing impacts to traffic on I-64.

Each phasing option was assessed based on its ability to meet key project delivery priorities such as safety, schedule, minimizing traffic impacts, compliance with the RFP, and project cost. The selected project approach will enable the Myers Team to achieve final completion of the Project by May 24, 2019, two months prior to the RFP specified final completion date. This approach also enables early beneficial occupancy of the easternmost section (Section D) in May 2018, a year before final completion, and full daily use of the improvements before the end of 2018. *Table 4.5.1* provides a summary of dates that will be achieved for key activities, along with project final completion.

Table 4.5.1 Schedule Overview

MILESTONE	SCHEDULE
Notice to Proceed	February 17, 2016
FI/RW Submittal	May 2016
Notice to Commence ROW Acquisition	July 2016
Commence Construction Prep/Maintenance Activities	August 2016
Permit Application Submission	August 2016
Environmental Permits Issued	November 2016
Notice to Commence Construction Segments A through D	December 2016
Beneficial Occupancy of Section D	May 2018
Beneficial Occupancy of Sections B & C	November 2018
Substantial Completion of All Sections	December 2018
Final Completion	May 24, 2019

Critical elements for achieving these milestones include: obtaining early limited notice to proceed (NTP) for certain work activities; eliminating the need for ROW acquisition prior to Phase 1; avoiding utility conflicts and supporting necessary relocations; and concurrently constructing multiple areas of the Project.

- ***Early Limited NTP*** – The Myers Team will seek early NTP to perform activities that do not require ROW acquisition or environmental permits and are not impacted by the final design, including strengthening of the outside shoulders, limited clearing of the median to avoid TOYR, construction of temporary access points, relocation of overhead sign bridges, and certain repair items on the existing bridges such as the bearing replacements. Early NTP for these activities reduces crew stacking later in the Project and reduces schedule risk by completing potentially critical activities early in the contract time. Early completion of the shoulder strengthening, where applicable, is critical to ensure that construction can begin upon final approval of the plans.
- ***Minimized ROW Acquisition*** –The number of impacted parcels has been reduced from 16 to 9, none of which is needed for Phase 1 construction activities. The storm water management ponds requiring property acquisitions are not proposed to be used as temporary sediment basins so they do not need to be constructed in Phase 1. All other property acquisitions are for temporary construction easements (TCEs) for Phase 2 construction activities.

- ***Utility Conflict Avoidance*** – Our design has eliminated many of the utility conflicts on the Project and the Myers Team will continue to seek complete avoidance of existing utilities as the design progresses. Relocations to resolve the remaining conflicts will be prioritized based on the longest path of the schedule. The Proposal Schedule places relocation priority on the existing Verizon lines at Locations 09 and 11 (Bridges at Jefferson Ave. and Yorktown Rd., respectively). Our Team will perform a thorough constructability review as the bridge design progresses in these two locations to try to avoid relocations. Where beneficial, we may self-perform enabling work such as design, clearing, survey, and conduit installation to reduce the dependency on utility owners' resources.
- ***Concurrently Constructing Multiple Areas*** – Segmenting the Project provides effective work areas which allow for multiple locations to be progressed simultaneously throughout the Project limits. Concurrently working multiple sections compresses the schedule by better utilizing available resources to expedite construction. Since each of the sections can be built independently if necessary, unforeseen impacts in one section should not delay the remainder of the Project.

APPROACH TO CONSTRUCTION PHASING

For the purpose of planning and executing the Project, the length has been broken into four major work sections as shown in *Figure 4.5.1* (Page 41). The Project was further divided into 12 locations consisting of bridges or roadway areas of approximately one mile in length. This segmentation was developed to:

- Provide definable mile long work locations to minimize traffic impacts and improve incident management and emergency access
- Provide individual work locations that can be progressed independently or concurrently
- Optimize sequencing to expedite beneficial occupancy of the Project improvements

More specifically, the chosen segmentation enables greater flexibility in the schedule and allows multiple float paths. The chosen project segmentation, in part, is also derived from the Maintenance of Traffic (MOT) and Sequence of Construction (SOC) concepts that were developed to perform the work in compliance with the requirements of the RFP and the Work Area Protection Manual.

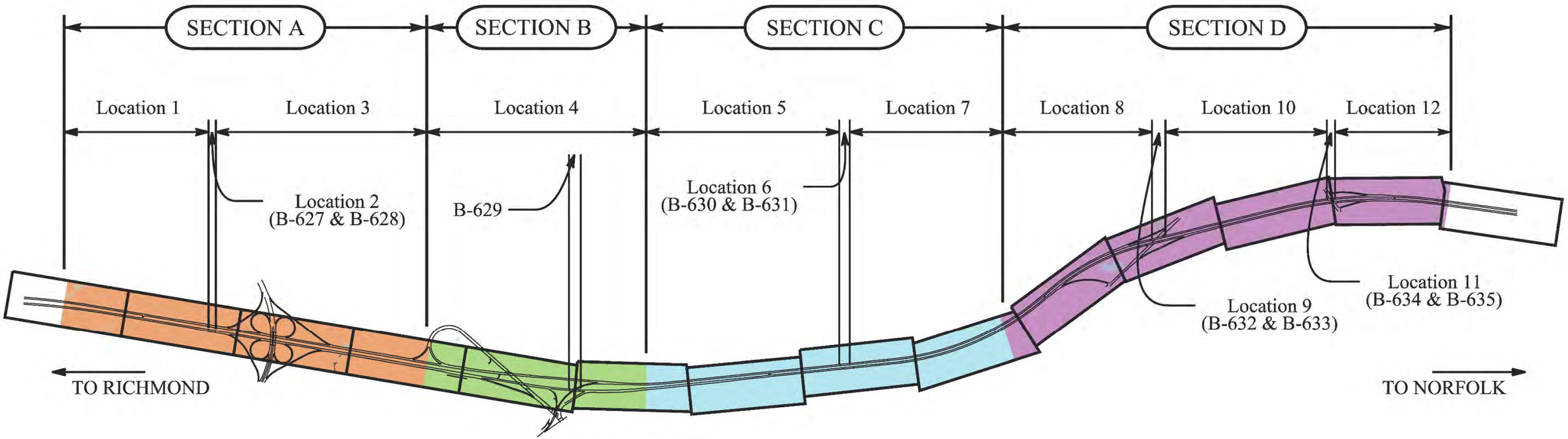
GENERAL SEQUENCE OF ACTIVITIES

The construction sequencing is focused on providing early beneficial occupancy and completing the Project as quickly as possible. Phasing within each area is similar across all four project sections. Preliminary activities include outside shoulder strengthening and bridge maintenance items that do not require permits.

Phase 1 entails constructing the new lanes and shoulders and associated drainage systems within the existing median area while traffic is maintained on the existing pavement. The bridges will also be widened to the inside during this phase. Phase 1 will be performed in two steps in Section B westbound in order to maintain access to Exit 243-B during this work. The drainage system and median construction in Sections C and D will be constructed while maintaining an inside shoulder throughout both sections. Barrier service will be shifted to close the inside shoulder for pavement construction, but travel lanes will not change. This approach provides a shoulder when possible to allow more places for a disabled vehicle to pull out of the travel lanes and to improve access for emergency vehicles.

To begin Phase 2, mainline traffic will be shifted inside onto the newly constructed pavement to reconstruct the existing roadway and bridges on the outside. This phase will be performed in two steps where necessary to maintain interchange access and auxiliary lanes. Appropriate acceleration and deceleration lanes will be maintained at interchanges. A temporary collector-distributor road will be provided for Exits 242 and 243 in step 1 and an auxiliary lane between these intersections will be provided in step 2. As with Phase 1, the barrier service will be shifted to provide a shoulder along inactive or completed Locations but the travel lanes will not be changed until work is complete throughout each Section.

Figure 4.5.1 Construction Sections and Locations



SECTION A	SECTION B	SECTION C	SECTION D
Construction Considerations • Improvements to be performed in two phases and allows for concurrent work with all other Sections • Includes auxiliary lanes between exits 242 and 243 • Shifting alignment toward median minimizes impacts of required outside shoulder widening **Anticipate and Mitigate Potential Delays** • Eliminated impacts to existing in-line transmission pole • Eliminated ROW acquisition on Parcels 001, 002 and 008 • No property acquisition required for Phase 1 of the roadway improvements **Benefits to Construction Sequencing** • Longer work zone improves construction efficiency and resource allocation (reduces schedule risk) • Maintain safe and continuous access to the Route 199 interchange (Exit 242) throughout construction • MOT approach maintains auxiliary lanes between Exits 242 and 243	**Construction Considerations** • Improvements to be performed in two phases and allows for concurrent work with all other sections • Advanced construction and implementation of E/SC and SWM basins • Wide median allows more flexibility in design and construction of proposed improvements **Anticipate and Mitigate Potential Delays** • Short Length (approximately 1 mile) allows for early beneficial occupancy of improvements • No ROW acquisition required for Phase 1 work • Utility relocations will be in-plan & self-performed • Clearing scheduled to address potential T&E issues **Benefits to Construction Sequencing** • Maintain safe and continuous access to Busch Gardens and Route 143 throughout construction • Early implementation allows SWM ponds to serve as temporary sediment basins for E/SC • Improves access to Exit 243 by delivering early beneficial occupancy (November 2018)	**Construction Considerations** • Drainage and barrier construction in median needs to be completed prior to starting new pavement • Improvements to be performed in two phases and allows for concurrent work with all other Sections • Shifting the alignment toward the median reduces outside impacts and provides more space for Phase 1 construction activities **Anticipate and Mitigate Potential Delays** • No ROW acquisition required for Phase 1 work • Close coordination with Yorktown NWS to minimize access impacts on bridge construction **Benefits to Construction Sequencing** • Maintains full width travel lanes and 9' shoulder during median construction • Additional throughput capacity is realized by early beneficial occupancy of Section C (January 2019) • Burma Road utility conflicts do not impact critical path activities	**Construction Considerations** • Drainage and barrier construction in median needs to be completed prior to starting new pavement • Shifting the alignment toward the median reduces outside impacts and provides more space for Phase 1 construction activities **Anticipate and Mitigate Potential Delays** • Eliminated need to extend culvert D-607, minimizing permit risks by reducing impacts • Eliminated ROW acquisition on Parcels 012, 014 and 015. • No ROW acquisition required for Phase 1 work **Benefits to Construction Sequencing** • Maintains full width travel lanes and 9' shoulder during median construction • Proposed MOT configuration for Phase 1 is not dependent on traffic pattern in adjacent project • Additional throughput capacity is realized by early beneficial occupancy of Section D (May 2018) • Maintains safe access to and on Jefferson Avenue and Yorktown Road throughout construction

This two phased approach to the Project construction yields the following benefits:

- The preliminary activities require minimal E&S controls, no additional ROW, and are not affected by the final project design. Our Team anticipates being granted limited NTP to perform this work, based on an early AFC plan set, allowing these activities to start while the project design is finalized.
- Allows a significant amount of new construction to be performed within the median with minimal disruption to traffic operations for much of the project duration.
- Minimizes the number of traffic shifts and reduces confusion for motorists, thereby maximizing traffic throughput during construction.
- Provides for shoulders as much as possible without performing additional widening.
- Starting preliminary activities early with minimal traffic impacts creates a positive perception for motorists and project stakeholders in support of the Project.
- Reduces construction cost and time.
- Enables completion of the improvements within the existing roadway footprint with minimal temporary work.
- Allows sections and locations to be completed independently of each other in order to provide early beneficial occupancy of the improvements wherever possible.

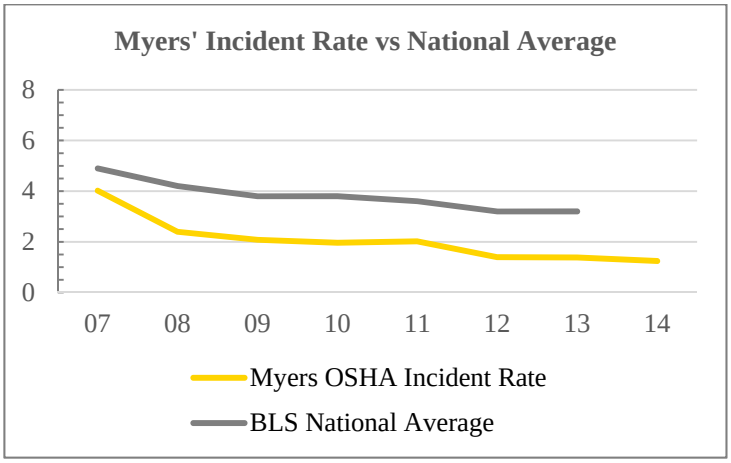
PUBLIC SAFETY

At Myers, safety is an inseparable element of each construction operation. Our safety focus includes the traveling public, construction personnel, inspection staff, VDOT personnel, and any other individuals that enter the work zone. Myers' Home Safe Tonight (HST) initiative is a commitment, both personal and organizational, to create a working environment absent of incident and injury. It is a mindset intolerant of any level, frequency, or severity of injury. Since the implementation of HST in 2008, Myers has reduced its recordable incident rate by 70% to a best in class rate of 1.24 as shown in *Figure 4.5.2*.

While there are inherent risks associated with the undertaking of a Project of this magnitude and with such proximity to existing traffic, we believe that the proposed construction approach preserves this commitment to safety. The construction sequence and phasing were developed to expedite construction while reducing the likelihood of an incident and improving emergency response in the event of an accident. Full width travel lanes will be maintained throughout the project during construction. 9' or wider shoulders will also be provided on one side in areas of construction inactivity and where space permits. Where construction activities require closing shoulders along both sides the work area will typically be a mile long or less. Where work areas are longer than a mile (Locations 3, 4 and 7) emergency pull-off areas will be provided. In addition to outside pull-off areas (where possible), work area access points will be laid out to also function as emergency pull-off areas to further reduce impacts from disabled vehicles or other minor incidents.

Barrier service will be used to separate work areas from open travel lanes. The barrier service will have a 1' or wider bench behind the barrier and a 1'-2' or wider buffer in front of the barrier in full compliance with the WAPM.

Figure 4.5.2 Myers' Incident Rate since 2007



* "Heavy and Civil Engineering Construction" classification.
Source = BLS.gov

The Myers Team will design the MOT plans to match the posted speed limits throughout the project. Based on recent incidents along I-64 within the Phase I project limits, our Team will Partner with VDOT to evaluate the corridor for a potential reduced work zone speed limit to improve safety for both workers and motorists. Further, this partnering will include first responders to ensure that our approved TMP/MOT plan provides emergency access and minimizes response times for emergency vehicles.

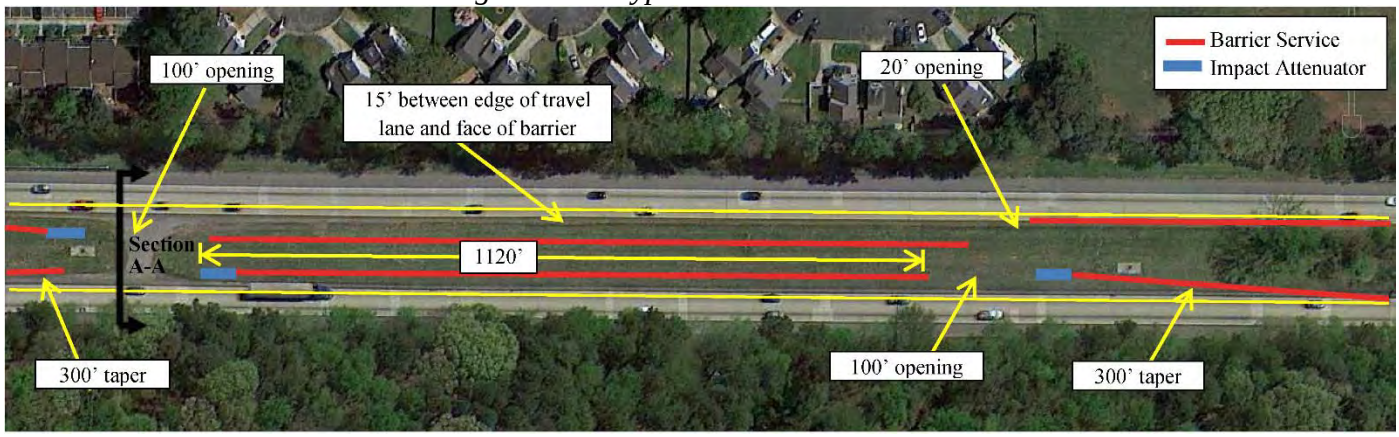
EMERGENCY ACCESS AND INCIDENT RESPONSE

Providing access to emergency vehicles is important to maintaining safety in and through the work zone. *Figure 4.5.3* is an example of how we will incorporate the emergency vehicle crossovers into our construction area access points. This layout allows for emergency vehicles to utilize the construction vehicle acceleration/deceleration lane for safer use of the crossover. This layout also allows for emergency personnel to move minor incidents behind the barrier service to complete paperwork or address minor injuries. This provides a significantly safer environment for the emergency personnel and the motorists involved in the incident. It also helps to clear the traffic space to keep traffic moving to reduce congestion and the likelihood of secondary incidents upstream.

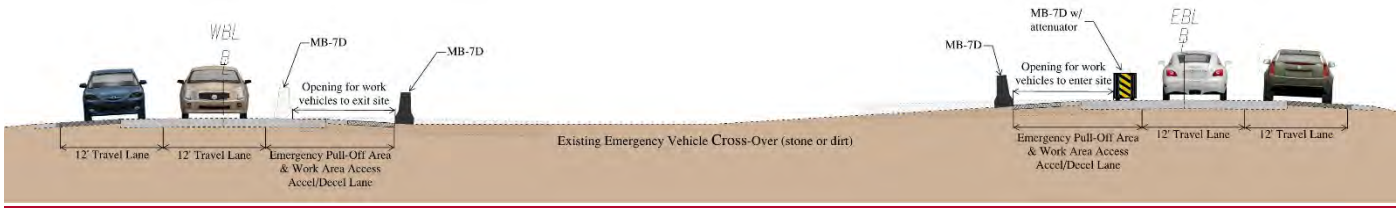
Including median cross-overs at the access points maintains open connections between the two directions of the roadway giving better access to the corridor for emergency responders. If an incident blocks an area with no shoulders such that traffic is completely stopped then the emergency responders can use the opposing direction to travel to the nearest access point and safely cross over the work zone to approach the incident from the clear side. Having access points spaced less than a mile apart minimizes how far emergency responders will need to travel down the blocked roadway from a cross over.

Access points will be designed to also serve as emergency pull-off areas to help maintain safe traffic flow through the Project. On-site towing services will have access to disabled vehicles in the pull-off area from the work zone allowing for quick removal of the disabled vehicle. All access points will include adequate space for acceleration and deceleration of work vehicles entering and exiting the site and will be located to ensure that there is proper sight distance for safe ingress and egress.

Figure 4.5.3 Typical Work Area Access



Section A-A



CONSTRUCTION SEQUENCING CONSIDERATIONS

In developing the sequence of construction, the Myers Team took into consideration the unique challenges presented in each section of the Project with respect to geotechnical constraints, environmental impacts, utilities, ROW acquisition, staging/storage, public involvement, and government approvals.

Geotechnical Constraints – Unsuitable soils on the Project cause concerns related to construction within the median area, as further described in *Section 4.4.3*. Because this area has not previously undergone improvements, it is expected that additional time for settlement of the embankments at the bridge widenings will be needed. For the same reasons, it is expected that unsuitable soils will be encountered throughout the new roadway area for which additional time will be needed to remove and replace or amend the in situ material to attain the required characteristics.

The sequence of construction has been developed by the Myers Team with these challenges in mind. An early and robust geotechnical exploration campaign will ensue shortly after project award that will aid the design effort and influence construction means and methods. Combined with the project segmentation, the above strategy will provide for maximum flexibility in the schedule in order to mitigate potential delays should the actual conditions be found to be different than expected.

Standard earthwork productions were reduced in the proposal schedule to account for uncertainty related to gaps in geotechnical information. Once the geotechnical campaign has been completed in the field, the schedule activities related to performing ground improvements and earthwork will be re-evaluated and potentially revised to accurately reflect the defined scope and expected productions.

Roadway settlement has been accounted for in the schedule using the assumption that a mitigation measure would be utilized to accelerate the settlement periods. Mitigation methods will be finalized once additional geotechnical investigations have been conducted and may include surcharging, installation of wick drains, use of lightweight fill, or in-situ geotechnical improvements.

Environmental Impacts – Several environmental risks have been identified by the Myers Team as further defined in *Section 4.4.1*. Using the RFP documents and other currently available information, we have avoided or minimized potential impacts to wetlands, threatened and endangered species, and cultural resources by minimizing the requirements for SWM basins and ROW. Field surveys will take place immediately following NTP that will further these efforts and allow for obtaining necessary permits.

The environmental section of the schedule takes a conservative approach and assumes acquisition of an Individual Permit from the USACE and DEQ. Preliminary analysis suggests that the Myers Team has optimized the design enough to reduce impacts to below a threshold within which a SPGP would be applicable. This permitting process is expected to be shorter than that represented in the schedule and could provide schedule savings once confirmed.

Utilities – Utility avoidance has been prioritized by our Team to reduce cost and schedule impacts. The utility impacts that have not been already been avoided are due to bridge widenings (primarily), vertical clearances, drainage, and undercut. Our biggest opportunity to eliminate impacts is at the roadway crossings, or bridge widenings, where we are evaluating options for protecting the various utilities in order to manipulate them and avoid relocations. Early test-pitting and coordination with facility owners will investigate options for reducing or eliminating the impact, and allow the results of those discussions to influence our final design. Construction has been sequenced to allow relocations to be done in advance of the other work in areas where impacts to project completion do not occur. Relocations for the existing Verizon lines at Locations 09 and 11 (Bridges at Jefferson Ave. and Yorktown Rd., respectively) have been incorporated into the SOC and a thorough constructability review will be conducted as the bridge design progresses to avoid relocations if feasible.

ROW Acquisition – The Myers Team is sensitive to the desire of VDOT to accelerate construction of the Project. This was one of the driving forces behind our phasing for this Project where the first phase entails the construction of the new lanes within the median area while ROW is acquired for SWM basins and TCEs that will be needed for performing work in Phase 2. Our proposed segmenting of the Project also enables the shifting of resources should anything delay the beginning of Phase 2.

Access to the areas surrounding the cross roads at Penniman Road, Burma Road, Jefferson Avenue, and Yorktown Road will be needed in Phase 1 in order to commence bridge widening and repair work. Close coordination will need to occur with county and local governments to accommodate that work; and in the case of Burma Road, with the NWS. A TCE will be needed in the railroad ROW along Penniman Road to perform the Phase 1 work on those structures. We will focus on this acquisition first since it is needed for Phase 1 work; however, any delay in this acquisition should not have a significant impact on the proposed schedule and will not delay full beneficial occupancy of the other sections of the Project.

Staging and Storage Areas – The need for storage and staging areas close to the work is imperative in order to stockpile, process, and re-deploy over 28 lane miles of existing rigid concrete pavement with the least impact to traffic while also reducing cost. Large areas will also be needed to stockpile RAP and to process the CCPRM required on this project. In consideration of these and other factors, the Myers Team has evaluated the project corridor to determine where opportunities exist to use existing ROW adjacent to the work areas. These areas consist of medians, interchanges, and areas within any given construction stage. Where these areas are not available, off site locations must be utilized.

We anticipate that additional areas outside of the project limits will be necessary for staging of materials and equipment, as well as for the field offices. Locations that limit travel distance to and from work areas, pose the fewest impacts to the environment, and provide sufficient space with access to utility connections are most ideal. Potential staging and storage areas have been identified on the east end of the Project (off of Ft. Eustis Boulevard, Industrial Park Drive and Yorktown Road) as well as the west end of the Project (areas off of Penniman Road and Humelsine Parkway). Commercial office space is available near the Busch Gardens and 199 interchanges for setting up the field office locations for the Project.

Public Involvement/Stakeholder Coordination and Government Approvals – The Myers Team will communicate with stakeholders and government entities continuously and transparently throughout the design and construction of the Project. Feedback on the design concept will be requested through over-the-shoulder reviews to streamline approvals. The participation of VDOT, the City of Newport News, York and James City Counties, Yorktown Navy Weapons Station, and Fort Eustis Army Base, and others will be important as the Project is designed and constructed.

Formal partnering with VDOT will be requested and can be facilitated by our Team. Formal partnering will promote routine and open communication and assist to create an atmosphere of trust between VDOT and the Myers Team. Other key project stakeholders may be involved as deemed necessary. Partnering workshops provide the opportunity to identify and discuss potential schedule impacts as a team and align to an approach that supports the project goals while ensuring the schedule is met. A highly-effective public outreach effort will proactively anticipate and address community issues that may impact the project schedule. *Section 4.5.2* of this proposal further discusses our Team's approach to stakeholder coordination.

The sequence of construction presented in the proposal schedule incorporates activities for management and construction submittals (to both VDOT and NWSRR), as well activities related to the Project's interaction with the public including gaining access to un-acquired properties for project purposes. "Pardon Our Dust" meetings will be held just before construction starts.

4.5.2 TRANSPORTATION MANAGEMENT PLAN (TMP)

The I-64 corridor along the Hampton Roads peninsula is a vital link connecting recreational, commercial and defense activities at the coast with the inland areas of Richmond; Washington, DC; and beyond. The Myers Team understands the essential role of the corridor and has initiated development of the TMP to safely and efficiently handle traffic during construction and preserve access and throughput of the corridor. All work will be performed in accordance with the RFP, the current FHWA Manual of Uniform Traffic Control Devices (MUTCD) and Virginia Work Area Protection Manual (VWAPM).

The TMP will be designed in accordance with VDOT's Instructional and Informational Memorandum (IIM) No. LD-241. Per this IIM, the Project is classified as a Type C, Category V project; meaning that the Project is anticipated to cause ***sustained and substantial*** work zone impacts. The major components of a Type C Project TMP include a Temporary Traffic Control Plan, a Public Information and Communications Plan, and a Transportation Operations Plan.

Our proposed Temporary Traffic Control Plan, referred to as the Maintenance of Traffic plan (MOT) in this document, has been developed collaboratively between our roadway designers, traffic engineers and construction managers and includes the following key features:

- Beneficial occupancy of key improvements to improve throughput prior to substantial completion
- Minimal traffic shifts to help meet driver expectations
- Maintaining 12' wide travel lanes throughout construction and minimizing shoulder closures
- Limited use of nighttime lane closures (9:00 pm to 5:00 am) - for shoulder strengthening and for placement of temporary traffic control devices
- No local street detours are proposed – we intend to maintain access at all interchange ramps for the duration of the Project except for periodic short term closures/stoppages for placement of temporary traffic control devices and final paving
- Physical separation (barrier service) between the work area and the travel lanes

Key elements of the Public Information and Communications Plan (PICP) include:

- Led by a full time, highly experienced public information manager (Shannon Moody)
- Identifies communications partners; target audiences; and key communications challenges
- Provides for proactive communication with stakeholders, close coordination with VDOT, and consistent public engagement
- Ensures that stakeholders can easily and quickly access information regarding the Project through a two-way, open environment of information sharing
- Utilizes temporary and permanent changeable message signs in the corridor to communicate upcoming traffic pattern changes to motorists
- Coordinates with the I-64 Segment I Project Team for public information and outreach activities

Our Traffic Operations Plan (TOP) will be managed by a certified Professional Traffic Operations Engineer (Rich Clifton, PTOE certification # 3131) and includes the following key features:

- HCS analysis of proposed traffic pattern changes to mitigate impacts prior to implementation
- Alternatives analyses to identify the most effective traffic patterns for completing the work
- Monitoring traffic operations throughout the project area, including cross streets and parallel routes to evaluate actual conditions and to mitigate unforeseen impacts
- Provisions for maintaining effective emergency vehicle access and efficiently managing incidents throughout the Project
- A plan for securing the Project should an evacuation plan reversing the EB lanes be implemented

MAINTENANCE OF TRAFFIC

The MOT plan will include full width travel lanes at all times and open shoulders whenever possible. When a full width shoulder cannot be maintained, work area lengths will be limited and emergency pull-off areas will be provided. Full shoulders will be restored as quickly as possible as work progresses. Although tapers and shifts will be designed for the posted speed limit, a reduced speed limit for the work zone will be evaluated to minimize the frequency and severity of work zone incidents.

Our Team will coordinate closely with the Segment I Project to integrate the MOT plans for each project, provide safe and efficient traffic flow across the project boundary, and maintain appropriate work spaces for both projects. We will monitor the implementation and execution of the MOT plan and will coordinate necessary adjustments to ensure that traffic flows as smoothly as possible throughout the corridor.

Our Team also looks forward to an open dialogue with the first responder community to seek input and cooperation on access and response times in case of emergencies. We understand the access challenges of this project and the corridor and will work together to provide a safe work and travel environment.

Detailed descriptions of how traffic will be maintained during both phases of construction are described in *Figures 4.5.4 and 4.5.5* (pages 48 and 49). Our MOT plan includes the following general conditions:

- At least two 12-foot wide travel lanes will be maintained in each direction, except for periodic nighttime lane closures (9:00 pm to 5:00 am), as necessary
- Providing a full shoulder when possible and provisions for emergency pull-offs where adequate shoulders cannot be maintained
- An Incident Management Plan, including emergency vehicle access, detour routing plans and on-site wrecker service, will be developed prior to shifting traffic for each phase of construction
- Provisions will be included for securing the work space in the event that an evacuation plan which reverses the EB lanes is called for in an emergency
- Use of temporary and permanent changeable message signs to communicate traffic pattern changes
- Coordination with stakeholders to mitigate any access issues associated with the construction

Our Team investigated alternative MOT options, including switching all traffic to one side of the interstate to allow for construction in the other direction to be performed free of traffic conflicts. The challenges associated with this option outweighed the benefits of our proposed MOT scheme, specifically with respect to schedule. Challenges also included maintaining access to all of the ramps and the lack of space to provide adequate shoulders or emergency pull-off areas and limited options for incident management. In addition, the crossover concept did not support our approach to provide early occupancy of key project improvements.

OVERVIEW OF TRAFFIC IMPACTS
Closures
▪ Periodic nighttime lane closures ▪ Long term shoulder closures ▪ Lane closures on Yorktown Road and Jefferson Avenue
Temporary Detours
▪ No temporary detours proposed ▪ Alternate route information provided via PCMS
Time of Day Restrictions
▪ Lane closures and stoppages between 9pm and 5am only
Flagging Operations
▪ Overhead sign erection ▪ On cross streets for bridge construction
Minimum Lane Widths
▪ 12’ lanes throughout the Project
Work Zone Speeds
▪ No speed reductions required but will be evaluated for safety

CONSTRUCTION IMPACTS

Our primary goal is to deliver these improvements to VDOT as quickly as possible with minimal disruption to the traveling public during construction. We understand the importance of these improvements and further understand that creating severe impacts to the traveling public during construction of the improvements is not an acceptable tradeoff for early delivery of the Project. The Myers Team has focused on developing an MOT concept that minimizes impacts to the traveling public while still providing adequate space to safely and efficiently construct the proposed improvements on an accelerated schedule.

Figure 4.5.4 – Maintenance of Traffic Concept for Sections A & B (Sta 1128 to Sta 1285)

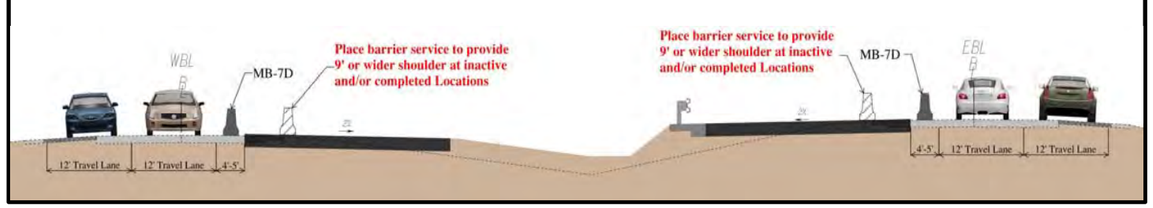
Site Preparation – *Maintain existing travel lanes and shoulders during non-working hours*

- Use nighttime lane closures to perform outside shoulder strengthening throughout the project. Complete milling and paving of the shoulder to within 2" of the existing surface each night.
- Shoulder closures as necessary to adjust guardrail for shifting traffic to outside shoulders.
- Utilize concrete barrier service outside of the existing shoulders as necessary to protect work areas for installation of drainage cross pipes and sign structure foundations.
- Short-term traffic stoppages for installation of overhead sign structures.

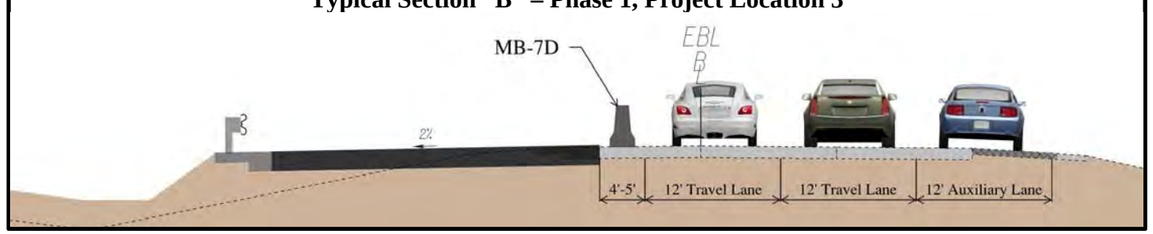
Phase 1 (See Typical Sections "A" and "B") – *Shift traffic onto the strengthened outside shoulder*

- Using nighttime lane closures, place barrier service to protect median work area. Provide 2' buffer between travel lane and barrier service where possible (1' minimum)
  - Maintain access to Ramp 243D including an appropriate deceleration lane (Typical Ramp Access Concept shown on next page shows a right hand exit but can also be applied to this left exit).
  - Place barrier service to provide shoulders at inactive and/or completed Locations
- Provide work area access points at existing median crossovers (near stations: 1149+00, 1243+50 and 1283+00) and on the east side of the Route 199 interchange area (STA 1195+00). Shift access points up or downstream to relocated cross-overs as construction progresses.
  - Construction access points will meet the requirements to also serve as emergency pull-off areas.
  - Temporary cross-over for emergency vehicles will be provided at access point near Route 199
- Provide 12' wide lanes with minimal shoulders on the bridges (B-627, B-628 and B-629) as shown in the RFP plans.
  - Shoulder closures, traffic shifts (on temporary pavement) and short term traffic stoppages on Penniman Road and on the I-64 WB Ramp to Route 143 for bridge widening and rehabilitation.

Typical Section "A" – Phase 1, Project Sections A and B



Typical Section "B" – Phase 1, Project Location 3

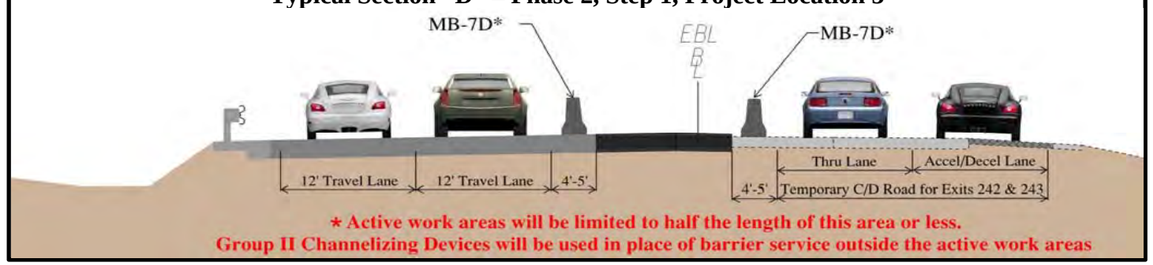


Phase 2 (See Typical Section "C") – *Shift traffic onto the new pavement providing two 12' wide lanes in each direction throughout both sections.*

- Using nighttime lane closures, shift the barrier service as shown in Typical Section "B". Provide 2' buffer between travel lane and barrier service where possible (1' minimum)
  - Close the outside shoulder at active work areas. Provide 9' wide outside shoulders along inactive and/or completed Locations.
  - Maintain access to all ramps, including appropriate acceleration/deceleration lanes.
  - Provide C-D roads (see Typical Section "D") from STA 1172+00 to Ramp 243A (EB) and from STA 2255+00 to STA 2155+00 (WB). Keep active work area length short to provide for better access to the work zone and for incident management.
  - Shift auxiliary lanes to the inside (see Typical Section "E") when full length of work shown in Typical Section "D" is complete.
  - Provide work area access points meeting the requirements for emergency pull-offs at approximately the same locations as in Phase 1.

Typical Section "C" – Phase 2, Project Sections A and B

Typical Section "D" – Phase 2, Step 1, Project Location 3



Typical Section "E" – Phase 2, Step 2, Project Location 3

Figure 4.5.5 – Maintenance of Traffic Concept for Sections C & D (Sta 1285 to Sta 1502)

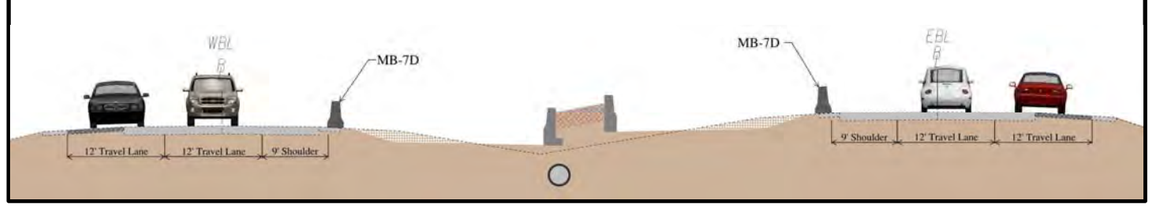
Site Preparation – *Maintain existing travel lanes and shoulders during non-working hours*

- Use nighttime lane closures to perform outside shoulder strengthening throughout both sections. Complete milling and paving of the shoulder to within 2" of the existing surface each night.
- Shoulder closures as necessary to adjust guardrail for shifting traffic to outside shoulders.
- Utilize concrete barrier service outside of the existing shoulders as necessary to protect work areas for installation of drainage cross pipes and sign structure foundations.
- Short-term traffic stoppages for installation of overhead sign structures.

Phase 1 (See Typical Section "F") – *Shift traffic onto the strengthened outside shoulder throughout both Sections*

- Use nighttime lane closures to place barrier service to close the left shoulder. Provide 2' buffer between travel lane and barrier service where possible (1' minimum)
- Provide 12' wide lanes with minimal shoulders on the bridges (B-631through B-635) per the RFP plans.
  - Place temporary pavement as necessary to maintain a single lane in each direction on Yorktown Road and on Jefferson Avenue for bridge widening and rehabilitation.
  - Use temporary signals to maintain two-way, one-lane traffic and short term stoppages on Burma Road.
- After completion of the median, relocate the barrier service to close the left shoulder in the active work areas as shown in Typical Section "G".
  - Maintain a left shoulder along inactive and/or completed Locations.
  - The active work area is expected to be under 2 miles long, progressing from the east to the west.
  - Provide work area access points meeting the requirements to also serve as emergency pull-off areas at existing median crossovers (near stations: 1315+50, 1392+50 and 1489+00) and also near stations1355+00 and 1440+00. Provide temporary crossovers at these two additional access points. Shift access points to relocated cross-overs as construction progresses.

Typical Section "F" – Phase 1 – Step 1, Project Sections C and D

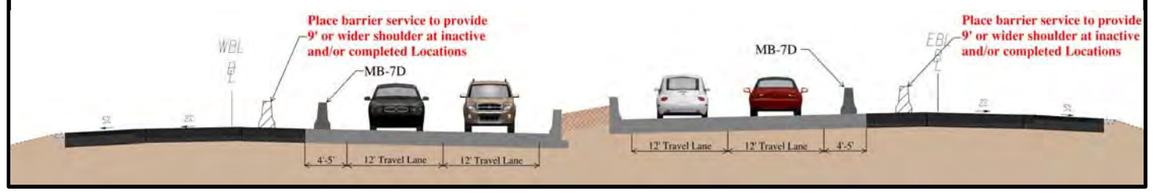


Typical Section "G" – Phase 1 – Step 2, Project Sections C and D

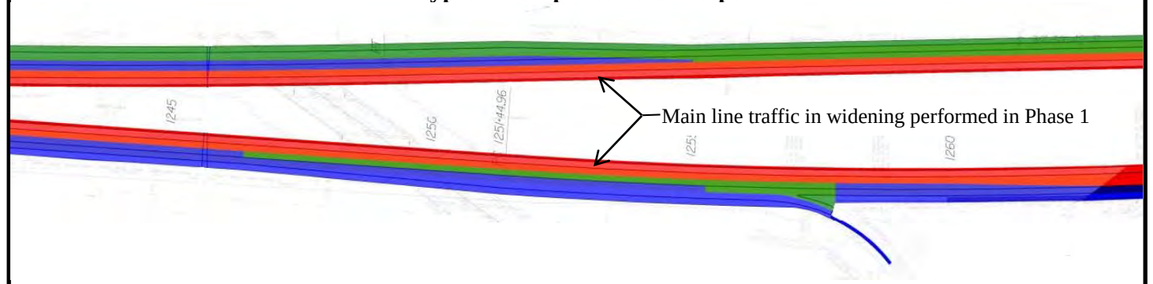
Phase 2 (See Typical Section "H") – *Shift traffic onto the new pavement providing two 12' wide lanes in each direction throughout both Sections.*

- Using nighttime lane closures, shift the barrier service as shown in Typical Section "H".
  - Provide 2' buffer space between barrier service and adjacent travel lane where possible (1' minimum)
  - Close the outside shoulder at active work areas. Provide 9' wide outside shoulders along inactive and/or completed Locations.
  - Maintain access to all ramps, including appropriate acceleration/deceleration lanes.
  - Provide work area access points meeting the requirements for emergency pull-offs at approximately the same locations as in Phase 1.
- The active work areas are expected to be under 2 miles in length, progressing from the east end of the project to the west.
  - Open the third EB travel lane as each Location is completed.
  - Hold shifting the WB merge until work is complete throughout each section.

Typical Section "H" – Phase 2, Project Sections C and D



Typical Ramp Access Concept

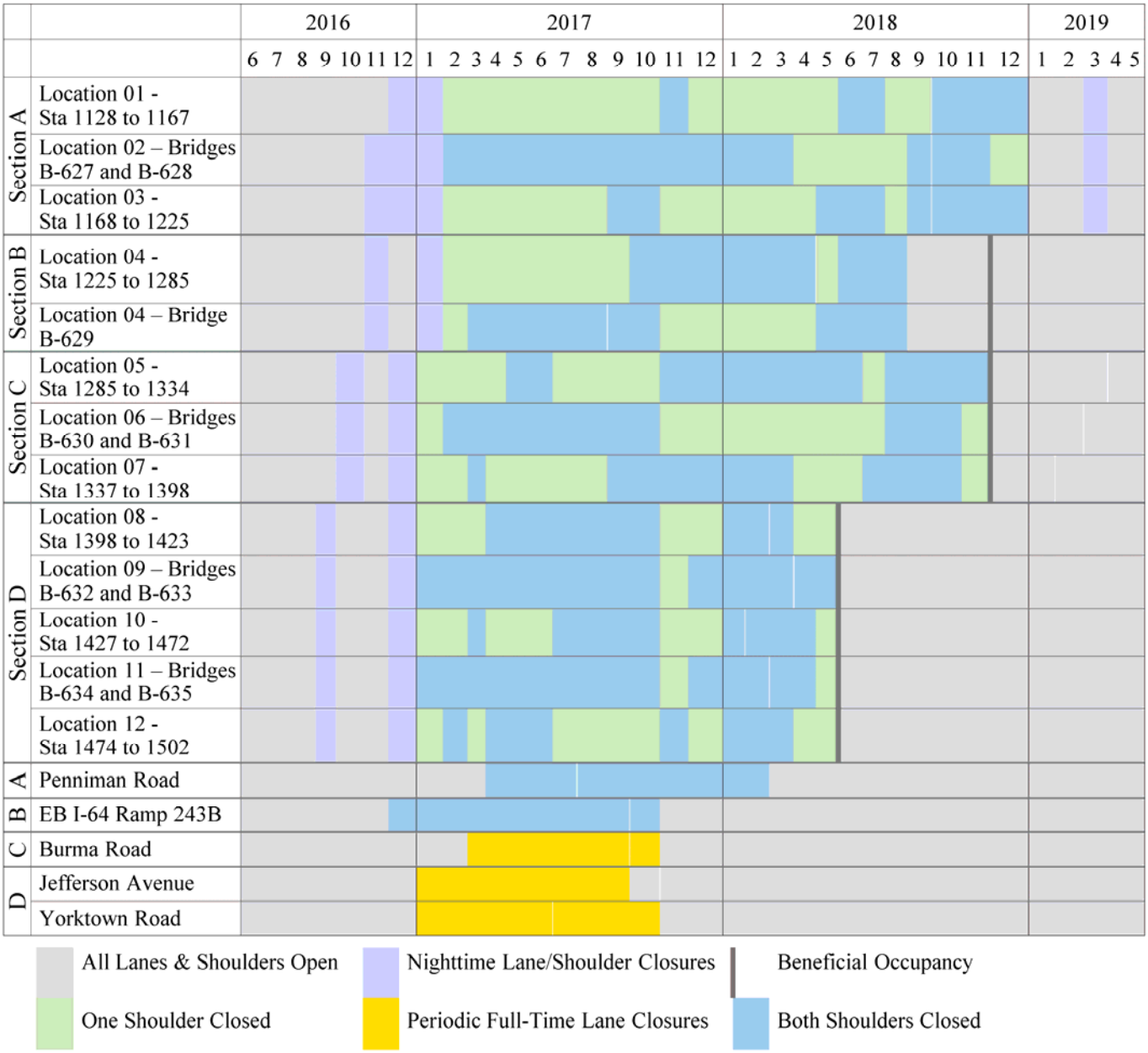


Phase 2, Step 1 – Ramp traffic uses existing pavement shown in green while new pavement shown in blue is built.
Phase 2, Step 2 – Ramp traffic shifted to new pavement shown in blue while new pavement shown in green is built.

Work will commence while maintaining 12’ travel lanes and 9’ shoulders in Sections C & D. When it does become necessary to close the shoulder, we will limit our work areas to minimize the traffic impacts and to allow us to quickly push the work area down the line, providing beneficial occupancy of the proposed improvements as sections of the Project are completed.

We understand the importance of maintaining access at the interchanges and it is our intent to keep all ramps open throughout the Project, except for short-term stoppages for final paving, placement of traffic control devices, or other similar activities. We also understand the importance of minimizing the impacts on mainline traffic so we will investigate potential detours and analyze how ramp closures will affect traffic operations in and around the Project and will consider any ramp closures that may improve the safety and efficiency of the construction and reduce the overall impacts to the project stakeholders. *Figure 4.5.6* shows the estimated duration of the various proposed traffic patterns throughout the Project during construction.

Figure 4.5.6 Impacts to Travel Lanes by Location



STAKEHOLDER IMPACTS

Interstate 64 through this community is a highly congested area, swelling in the summer months. Busch Gardens alone attracts more than 2.8 million visitors per year making it one of the 20 most visited theme parks in the country. Ensuring that commuters, tourists, and visitors are aware of the traffic impacts of this important expansion project is key to the Project's success. Lane closures and traffic shifts must be publicized and promoted so stakeholders can make informed decision regarding travel plans. Access must be maintained through the corridor throughout all phases of construction, and stakeholders must be kept informed of project activities and progress.

As communication with stakeholders is a central value to the Project, our Team members will be trained on communications protocols and procedures. The DBPM and the Public Relations Manager will work in partnership with VDOT to ensure stakeholder needs are tracked and addressed immediately and satisfactorily. Our Team will also coordinate with the I-64 Segment I Project Team on public information and outreach activities as there are shared stakeholders between projects. This coordination will occur early and often during all stages of the Project to ensure seamless communication with motorists.

Our Team's approach outlined below has proven to be successful on many design-build projects, most recently the Middle Ground Boulevard Extension project in the Hampton Roads (HR) District. Ed Hilferty (DBPM) and Shannon Moody (PR Manager) will closely coordinate with VDOT's HR District throughout the Project to deliver accurate and consistent messages to stakeholders and ensure stakeholder needs are addressed immediately and satisfactorily.

Our approach to public information and communication is dependent upon identification of roles, proactive communication with parties and stakeholders, close coordination with VDOT, and consistent public engagement. To ensure that stakeholders remain fully informed throughout the Project, our Team will be committed to maintaining a constant flow of communication to meet the goals listed in *Table 4.5.2*.

Table 4.5.2 Communication Goals for the Project

Maximize public awareness of Project activities, impacts and progress
▪ Facilitating open, early, and frequent communication with Project stakeholders ▪ Coordinating closely with adjacent project, specifically I-64 Segment I and the eventual Segment III team ▪ Tracking customer issues and utilizing web analytics as key measurements
Build a strong and enduring relationship with stakeholders and the community over the life of the Project
▪ Utilizing a proactive approach to community outreach and relationship building. Email lists, customer issue tracking, and multiple presentations, meetings, and visits will serve as measurements for this program ▪ Extending a two-way communications channel offer to enhance trust levels with key stakeholders and maintain a transparent, open environment of information sharing ▪ Implementing a robust advertising program to promote the benefits of the Project and to inform motorists and the community of construction impacts
Maintain a successful partnership and communication between VDOT, key stakeholders and the community
▪ Committing to formal and informal information sharing with Project partners and stakeholders including emergency responders ▪ Ensuring that stakeholders have or can access information regarding the Project easily and quickly
Proactively anticipate and address community issues that may impact the Project schedule
▪ Anticipating challenges and working together to reach a successful solution ▪ Promoting open, transparent communication protocols and practices ▪ Providing multiple opportunities for community input and tracking for trends and key messages

In order to provide a roadmap to reach these important goals, within 90 days of before any traffic impacts or mobilization, the Project team will develop a Public Information and Communications Plan (PICP), in

conjunction with the VDOT Hampton Roads Communications Team, to support the Project. This comprehensive plan will use VDOT's *Policy Manual for Public Participation* as a guide to address roles, protocols, guidelines and responsibilities for handling matters that center around public information and communication.

The PICP will include:

- Communication Plans goals and objectives
- Traffic Management Plan, including alternative routes and potential impacts
- Communication protocols for the Incident Management Plan
- Project key messages (to be updated throughout the Project)
- Identification of key project and communications challenges
- Stakeholder and target audience identification and outreach plans
- Communications partners identification, including adjacent projects
- Crisis Communications/Risk Management Plan, including protocols and key contact information
- Communications tools, tactics, and strategies
    - Community outreach efforts and public information plan including notification programs, traffic advisories, lane closure reports, and paid advertising
    - Stakeholder response protocols, including communication tracking
    - Traffic impacts and notifications
    - Educational programming
    - Media response and outreach protocols, adhering to VDOT protocols and direction
    - Website strategy, providing content to the VDOT project site
    - Social media strategy, providing content for VDOT's robust social media program
    - Collateral materials
- Advertising and marketing plan and budget. This will be broken down by line item and will include TV and print media, radio and billboard advertising, as well as online and interactive media. This advertising plan will be coordinated with and approved by VDOT via Work Order in accordance with Article 9 of RFP Part 4.
- Program monitoring and reporting process

The PICP will be designed to be flexible and responsive to the changing needs and conditions of the Project. The Myers Team will remain mindful of the local environment and work collaboratively with VDOT to amend and update the Plan as needed.

The Myers Team has identified some of the key stakeholders in the project area in order to best address their needs for communication and outreach through all phases of Project construction. These stakeholders include: VDOT; the City of Newport News and it's agencies, James City and York Counties, first responders including police, fire and EMS and the Virginia State Police; national security interests at Yorktown Naval Weapons Station and Ft. Eustis; and business and economic attractions such as Busch Gardens, Water Country USA, Colonial Williamsburg, Anheuser Busch, College of William & Mary, Kingsmill; the Segment I project team; and, the surrounding community. Other important stakeholder groups include the motorists and general traveling public, local elected officials, property owners affected by right-of-way, and local residents and business interests.

A summary of the project stakeholders, potential impacts, communication strategies, and benefits is provided in *Table 4.5.3*.

Table 4.5.3 Stakeholder Coordination Approach

Stakeholder	Potential Impacts	Communication Strategies	Benefits
VDOT	Perceptions and issues raised by residents, motorists, and business owners	▪ Weekly coordination meetings ▪ Notification of traffic impacts	▪ Opportunity to provide valuable input ▪ Most up-to-date information to provide to public and supervisors ▪ Consistent public information
VDOT Maintenance and TOC	Traffic impacts, incident management	▪ Provide routine content for the Lane Closure and Maintenance System	▪ Most up-to-date information to provide to public and supervisors ▪ Consistent public information
City of Newport News, York County, James City Co., Williamsburg	Issues raised by residents, motorists, and/or business owners	▪ Inclusion to provide input to the construction schedule ▪ Cooperatively address outreach and responses to businesses/property owners	▪ Avoidance of significant impacts through close coordination ▪ Consistent public information
First responders (police, fire, and EMS)	MOT, traffic impacts, incident management, changes in traffic patterns, lane closures on I-64 as well as adjacent and connector roadways	▪ Monthly Incident Response Management Forums ▪ Incident Management Guidebook including contact information for key personnel ▪ Notification and coordination of changes in traffic patterns	▪ Timely response ▪ Responder understanding of construction zones, lanes closures, traffic impacts, etc. ▪ Accurate contact information for emergencies ▪ Consistent public safety
Virginia State Police	MOT, traffic impacts, incident management, changes in traffic patterns, lane closures	▪ Monthly Incident Response Management Forums ▪ Contact information for key personnel ▪ Notification and coordination of changes in traffic patterns	▪ Timely response ▪ Responder understanding of construction zones, lanes closures, traffic impacts, etc. ▪ Accurate contact information for emergencies ▪ Consistent public safety
Adjacent Projects Segment I and eventual Segment III teams	Construction activities, lane closures, traffic shifts and stakeholder outreach/coordination	▪ Inclusion in planning sessions to coordinate pre-construction and construction activities including stakeholder communications	▪ Most up-to-date information to provide to public and supervisors ▪ Seamless public information
Busch Gardens, Water Country, Williamsburg, Anheuser Busch, William & Mary, Williamsburg Golf Club , Kingsmill,	Impacts of construction and MOT to access to properties and assets	▪ Stakeholder, design and construction meetings ▪ Identify single point-of-contact ▪ Pardon Our Dust	▪ Close coordination to limit impacts ▪ Increased awareness of lane closures and traffic impacts
Yorktown Navy Weapons Station, Navy Community Plans, Ft. Eustis	Traffic impacts	▪ Stakeholder, design and construction meetings ▪ Identify single point-of-contact	▪ Close coordination to limit impacts ▪ Increased awareness of lane closures and traffic impacts
Property owners affected by ROW	Noise and impacts of MOT to property access	▪ Grassroots communications (mailings, visits, phone calls) ▪ Pardon Our Dust	▪ Awareness of impacts as soon as possible ▪ Understanding of direct construction impacts
Motorists	Impacts of MOT to travel and commute times and quality	▪ VDOT 511 content ▪ Website and social media ▪ Public meetings ▪ Informative outreach materials	▪ Awareness of impacts as soon as possible ▪ Understanding of construction impacts ▪ Community awareness of construction progress and timeline
Elected officials	Feedback from constituents	▪ Website and social media ▪ Stakeholder outreach meetings ▪ Informative outreach materials ▪ Pardon Our Dust	▪ Awareness of impacts as soon as possible ▪ Understanding of construction impacts ▪ Community awareness of construction progress and timeline ▪ Consistent public information

Submitted to:

VDOT
Virginia Department of Transportation

4.6

DISADVANTAGED BUSINESS ENTERPRISES (DBE)

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DISADVANTAGED BUSINESS ENTERPRISES

COMMITMENT TO DBE PARTICIPATION GOAL

The Myers Team is committed to achieving the twelve percent (12%) DBE participation goal for the entire value of the contract. The following DBE subcontracting narrative outlines the procedures we will use to achieve this goal for design and construction.

DBE SUBCONTRACTING NARRATIVE

Myers consistently meets or exceeds the DBE participation goals on our projects. In selecting subconsultants and subcontractors, the Myers Team will select qualified and skilled DBE firms to achieve the project goal. The Myers Team will utilize its standard DBE subcontracting plan for the Project. A summary of the plan is provided below specifying the means of soliciting DBE firms during the pre-construction phase. Our DBE Coordinator will be responsible for assisting our estimating department in solicitation of DBE firms and the compliance to the DBE goals and standards set forth by the Commonwealth.

Overview – To facilitate achieving the DBE goal for the Project, the Myers Team will:

- Determine items which may be subcontracted and quantify based on estimated dollar amounts
- Identify a pool of VDOT certified DBE subcontractors/suppliers
- Validate the qualifications and assess the expertise of certified DBE subcontractors/suppliers to determine if they are capable of performing the scopes of work identified in the contract
- Encourage and assist certified and capable DBE subcontractors/suppliers to complete the Myers subcontractor pre-qualification process if they are not already prequalified through previous projects with Myers
- Solicit price/scope quotes from certified and capable DBE subcontractors/suppliers
- Document the DBE solicitation process for Good Faith purposes including all modes of communication such as phone, fax, email, visits and pre-bid solicitation meetings

The Project's Lead Estimator, in cooperation with the DBE Coordinator, is responsible for:

- Ensuring that DBE participation is solicited, recorded and documented in accordance with DBE compliance and utilization policies and procedures
- Investigating all contract provisions to identify all requirements to satisfy Municipal, County, State or Federal obligations, including training and reporting
- Ensuring Myers' commitment to proactively utilizing certified DBEs and to using all reasonable efforts to meet or exceed mandate DBE requirement is upheld

DBE Solicitation – Myers' estimating team solicits price/scope quotes from certified and capable DBE subcontractors/suppliers while determining pre-qualification status. Certified and capable DBE subcontractors/suppliers have been identified through searching DBE Directory websites, attending project pre-bid meetings, and mass advertisements. The following elements will be included in the solicitation, or in any advertisement placed as a general solicitation to DBEs:

- The company name, address, telephone number, fax number and email address
- The project location and description of the work for which the bid is being solicited
- Our FTP Site for subcontractors to view plans and specifications
- The name of the Lead Estimator and DBE Coordinator who will be available to answer questions about the Project
- How to respond to the solicitation
- The date, time, and location where bids are to be submitted

Submitted to:

VDOT
Virginia Department of Transportation

4.7

PROPOSAL SCHEDULE

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PROPOSAL SCHEDULE

PROPOSAL SCHEDULE

The Proposal Schedule utilizes Primavera software and critical path method scheduling to depict the scope and sequence of work to complete the Project per the RFP requirements. A summary schedule is also provided to depict the longest path of the Project. The Proposal Schedule and Summary Schedule are included in Volume II. A back-up copy of the Proposal Schedule source documents in Primavera version 6.2.1 (XER) is included electronically on CD attached to the inside cover of the original Technical Proposal.

PROPOSAL SCHEDULE NARRATIVE

SEQUENCE OF WORK

To achieve the project milestones, our Team will proactively begin certain design phase activities at our own risk. Following VDOT issuance of the Notice of Intent to Award the contract, we will:

(1) Initiate assessment of existing data and supplemental data requirements, if any

(2) Prepare the Supplemental Boring Plan

(3) Initiate Hazardous Materials and Safety Plan development

(4) Develop the QA/QC and Public Information and Communication Plan

(5) Complete contract agreement with design consultants.

Following CTB approval, the Myers Team will develop the preliminary Utility Status Report. Following Notice to Proceed (NTP) and in addition to all identified schedule activities, we will complete the schedule critical activities including:

(1) Submit to VDOT for review and approval the QA/QC Plan

(2) Submit the Supplemental Boring Plan to VDOT for review and comment

(3) Initiate the Noise Abatement Design Report analysis

(4) Prepare and submit the Property Owner Access Notification Letters to VDOT for review and comment

(5) Distribute final Property Owner Access Notification Letter

(6) Initiate soil borings along all structures and roadways

(7) Prepare and submit Right of Way Acquisition Plans

(8) Update RUMS with Utility Status Report date, initiate development of UT-9's and schedule kick-off meeting with District Utility Engineer

At a high level, post-Notice to Proceed, the priorities are with activities that support design of the structures, and utility relocations. FI/RW plans will also be a focus in order to advance the design to final AFC plans – not because ROW Acquisition is critical.

Construction sequencing is focused on providing early beneficial occupancy of the easternmost portion of the Project and completing the Project as early as possible. The construction phasing within each area is similar across all four project sections. Preliminary activities include outside shoulder strengthening and bridge maintenance items that do not require permits.

Phase 1 entails constructing the new lanes and shoulders and associated drainage systems within the existing median area while traffic is maintained on the existing pavement throughout the length of the Project. The bridges will also be widened to the inside during this phase. Phase 1 will be performed in two steps in

Section B westbound in order to maintain access to Exit 243-B during this work. The drainage system and median construction in Sections C and D will be constructed while maintaining an inside shoulder throughout both sections. The barrier service will be shifted to close the inside shoulder as the median work progresses and construction begins on the new pavement in each location.

To begin Phase 2, mainline traffic will be shifted inside onto the newly constructed pavement to allow the reconstruction of the existing roadway and bridges on the outside. This phase will be performed in two steps where necessary in order to maintain access to all interchange ramps and auxiliary lanes. Appropriate acceleration and deceleration lanes will be maintained at interchanges.

INCENTIVES FOR EARLY COMPLETION

VDOT has provided a "No Excuses" incentive for early Project completion, RFP Attachment to Part 3, Article 5. The provision states that VDOT will pay the Design-Builder if Work under the Contract Documents for the Project is completed on or before May 24, 2019. The amount paid will be reduced for each day Work is not completed until July 26, 2019. Should Work under the Contract Documents extend beyond the Final Completion Date, the Design-Build will be assessed liquid damages.

The Myers Team has developed a design/construction approach which is reinforced by a detailed Project schedule that supports a **Project final completion date of May 24, 2019**. We have committed to this early completion date within *Section 4.1.6* of this Technical Proposal. Further, we have developed project milestones (*Table 4.7.1*) which identifies beneficial use of portions of the Project prior to the final completion date. The term "beneficial occupancy" refers to our ability to deliver three travel lanes in each direction to the traveling public, thus enhancing safety, minimizing traffic impacts, reducing congestion, and increasing throughput with the identified project section.

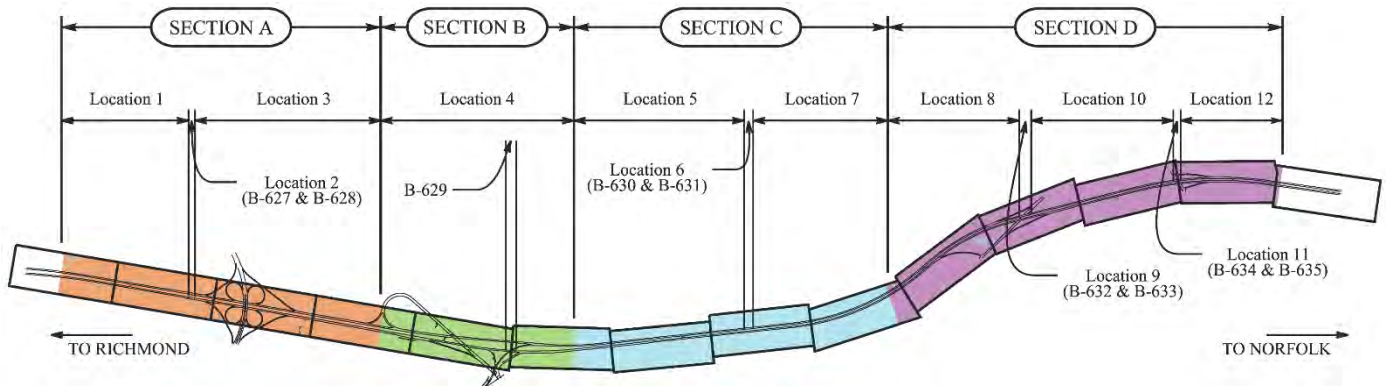
In order to provide early beneficial occupancy of Section D, the most critical elements of the Project are the structures at Yorktown Road and Jefferson Avenue. Driving the ability to start these bridges is the potential relocation of existing Verizon lines. Although the Myers Team has mitigated most of the utility relocation issues on the Project, there are Verizon lines at these two structures that may need to be relocated if the final design indicates that there are still constructability issues related to working around the existing lines. The phasing scheme developed by the Myers Team removes ROW acquisition from the longest path of the Project completely because it does not need to be completed until Phase 1 construction is completed. Phase 1 of the Project can be built without the acquisition of any parcels on the Project. This is a major risk mitigation measure for the schedule.

WORK BREAKDOWN STRUCTURE

The Proposal Schedule is organized using a hierarchical Work Breakdown Structure (WBS) and is broken down by major scopes of work as shown below. For pre-construction scope areas, the WBS further details major work efforts. For construction, the WBS is broken down by geographical segmentation as described in *Section 4.5.1* and shown in *Figure 4.7.1 below*.

To assist in defining the WBS, the Project was divided into four sections and twelve locations (as shown in *Figure 4.7.1*) to provide smaller manageable areas, meet the traffic maintenance requirements, and to provide the greatest flexibility in scheduling possible. Focusing on the goal of providing early beneficial occupancy of the easternmost section, and early completion of the entire Project, Sections C and D, as well as the bridges over Exit Ramp 243-B and Penniman Road will start near concurrently. The locations within each section are prioritized from east to west to support efforts to provide a rolling delivery of beneficial occupancy from east to west. The details of construction sequencing are provided in *Section 4.4 Project Approach* and *Section 4.5 Construction of Project*.

Figure 4.7.1 Project Sections



PROJECT MILESTONES

Project milestones have been established and included in Table 4.7.1 to assist the Myers Team in tracking, monitoring, and meeting our commitment to deliver the final completed project to VDOT and the traveling public in advance of the RFP specified completion date of July 26, 2019 (*reference Section 4.1.6*). These milestones are a result of our detailed project scheduling effort and are represented in *Table 4.7.1 below*.

Table 4.7.1 Schedule Overview

MILESTONE	SCHEDULE
Notice to Proceed	February 17, 2016
FI/RW Submittal	May 2016
Notice to Commence ROW Acquisition	July 2016
Commence Construction Prep/Maintenance Activities	August 2016
Permit Application Submission	August 2016
Environmental Permits Issued	November 2016
Notice to Commence Construction Segments A through D	December 2016
Beneficial Occupancy of Section D	May 2018
Beneficial Occupancy of Sections B & C	November 2018
Substantial Completion of All Sections	December 2018
Final Completion	May 24, 2019

PROJECT ADMINISTRATION

The project administration section includes activities related to the overall management of the Project. Subsections of this WBS are:

- ***Project Startup***: Mobilization activities are included here.
- ***Management Submittals:*** This section includes activities related to project management submittals such as the Project Specific Safety Plan and Hazardous Materials Management Plan.
- ***Quality Assurance/Quality Control (QA/QC):*** This section tracks the submission of the QA/QC Plan and contractually required Hold Points, specifically Preparatory Meetings for each major scope of work and required QA/QC plan approval in advance of submission of design packages.
- ***Construction Submittals:*** This section includes tracking pre-construction working drawings, shop drawings and demolition plans. In addition, there are schedule activities for contractually required post-construction submittals, such as bridge loadings reports and H&HA reports.
- ***Project Closeout:*** This section currently includes punchlist and demobilization items, but will later be used to track any identified project closeout activities.

SCOPE VALIDATION PERIOD

The scope validation period is 120 days and the schedule section includes activities related to scope validation investigations, submittals and negotiations (if necessary).

PUBLIC INVOLVEMENT

The public involvement section includes activities related to the Project's interaction with the public. Subsections of this WBS are:

- ***Public Information and Communications Plan (PICP):*** This section includes activities related to the submission and approval of the PIPC.
- ***Notifications:*** This section includes activities related to properly gaining access to un-acquired properties for project purposes. This includes submission and approval of property notification letters as well as the distribution of said letters. In addition, notification to VCTIR of upcoming OGDL and CCPRM placement is in this section to meet the requirements of the RFP, Part 2, Sec 2.6.2.
- ***Public Information Meetings:*** This section tracks the plans to hold public information meetings. At this stage the only major informational meetings planned is for the "Pardon our Dust" meeting just before construction starts.

DESIGN

The design section includes activities related to the design efforts needed to commence construction understanding that modifications to the Interchange Modification Report is not required. As noted previously, our Team anticipates initiation of administrative activities in advance of NTP. Subsections of this WBS are:

- ***General Design Efforts:*** This section includes design support activities such as reviewing final contract requirements, finalizing any optimization alternatives and assessing additional data requirements that need to be obtained through additional field investigations, borings and evaluations.
- ***Design Survey:*** This section includes activities related to obtaining additional data through field survey and investigations as noted in Part 2 – Addendum No. 2, Section 2.5.
- ***Geotechnical:*** This section includes activities related to performing additional soil borings, laboratory analyses geotechnical analysis and design.
- ***Hydraulic and Hydrologic Analysis:*** This section includes activities related to the performance of the hydraulic and hydrologic modeling and analysis for the existing box culverts on the Project. The H&HA reports will include stream diversion phasing plans, based on calculated design storm flows, to ensure permit conditions are met. These activities will support the completion of the box culvert design and the post-construction H&HA which will be completed following installation of pavement in the respective locations where the box culverts will be modified.
- ***Noise Analysis:*** This section includes activities related to the performance of noise analysis activities to determine the sound wall type, size and location requirements for the Project. These activities will support completion of the sound wall design.
- ***FI/RW Plans:*** This section includes activities related to the preparation, submission and approval of the FI/RW Plans. These plans may be packaged by section to reduce schedule risk and provide flexibility in planning. Initial FI/RW plans submissions include draft drainage and SWM reports per the RFP requirement.
- ***Roadway Design:*** This section includes activities related to the preparation, submission and approval of the Approved for Construction (AFC) Roadway plans. The Myers Team plans to issue

an advanced AFC set for the shoulder strengthening and other activities not requiring permits or ROW acquisition. This package will allow early construction preparation/maintenance activities to take place earlier in the Project without dependency on ROW acquisition or permit issuance. This strategy reduces schedule risk and resource stacking later in the Project. The final roadway AFC plans will be broken down by section to reduce schedule risk and provide flexibility in planning. Final roadway plan submissions will include final drainage and SWM reports and confirmation of purchase of offsite nutrient credit offsets.

- ***Structural Design:*** This section includes activities related to the preparation, submission and approval of the Approved for Construction (AFC) Bridge plans. Demolition and Erection Plans will be included in the Stage 2 Bridge Plans. The Myers Team plans to issue AFC set for the each structure location individually to provide flexibility in planning.
- ***Sound Wall Design:*** This section includes activities related to the preparation, submission and approval of the Approved for Construction (AFC) Sound Wall plans.

PERMITTING/ENVIRONMENTAL

The Permitting/Environmental section includes activities related to the efforts needed to obtain necessary environmental permits for the Project. The activities in this section represent a conservative approach to the environmental activities on the Project. Subsections of this WBS are:

- ***Threatened & Endangered Species Studies:*** This section includes activities related to the protection of the Small Whorled Pogonia, Long Eared Bat, and Mabee Salamander, including presence/absence surveys and development of T&E Protection Plans (if necessary). Sticking with a conservative approach to this portion of the schedule, there are activities for performing field studies and developing a protection plan for all three species. Some of these activities may be deemed unnecessary after engaging the Agencies post-NTP.
- ***Individual Wetlands Permit:*** This section includes activities related to the preparation, submission and approval of the Individual Wetlands Permit. This will include wetland delineations, avoidance and minimization studies, verification of Time of Year restrictions, if any, and coordination with the permitting agencies. This section includes activities for agency public notice, draft permit issuance for review by the Myers Team and procurement of requisite wetland and stream credits. It is important to note that the Proposal Schedule includes activities to obtain an Individual Permit through USACE and DEQ. However, preliminary design optimization to date suggests that a SPGP may apply. If the SPGP is deemed applicable, the time needed to obtain permits for the Project could be reduced by up to four months. To account for appropriate schedule risk, the Myers Team has incorporated the longer process into the Proposal Schedule until such time that it can be confirmed that the shorter SPGP process applies.
- ***Hazardous Materials:*** This section includes activities related to the management of Hazardous Materials that may be present on the Project. This includes submission of a Spill Prevention, Control, and Countermeasure Plan. In addition, there are activities in this section of the WBS to address inspection and potential abatement of Asbestos in the existing bridges. Finally, there is a subsection to address the Fire Ant Quarantine present on the Project.

RIGHT-OF-WAY

The Right-of-Way (ROW) section includes activities related to the efforts needed to acquire ROW and temporary utility and construction easements required to commence construction of the Project. The acquisition of ROW is separated by individual parcels such that all VDOT identified affected parcels (16 in total) are individually addressed within this section. As the proposed design concept anticipates takes at only 10 of these parcels, the schedule includes activities to "confirm" that ROW is not required on the remaining 6 parcels. A major benefit to the chosen phasing on this Project is that ROW acquisition does not affect Phase 1 of Construction at all. ROW acquisition must only be complete before Phase 2. This removes ROW acquisition from the longest path of the Project completely. Subsections of this WBS are:

- ***Management Submittals:*** This section includes activities related to the submission and approval of the Acquisition and Relocation Plan.
- ***Site Assessments/Survey/Research:*** This section includes activities related to site investigations and research for parcels potentially affected by the Project. Since the Myers Team has taken efforts to reduce ROW impacts, many parcels just need confirmation that they will not be affected.
- ***Appraisals:*** This section includes activities related to development of appraisals for parcels that are confirmed to be affected by the project design.
- ***Negotiations:*** This section includes activities related to negotiating the purchase price of the parcel where necessary.
- ***Acquire/Relocation/Condemn:*** This section includes activities related to closing the acquisition process whether it be through acquisition or condemnation. While no relocations are expected, this WBS section provides an area to track such activities should they be needed.
- ***Rights of Entry:*** This section includes activities related to obtaining rights of entry/ROW clearance for construction to commence.

UTILITIES

The Utilities section includes activities related to the efforts needed to relocate utilities in conflict with the final design. Each subsection below is further broken down by Geographical Section or Utility Owner. Where the Myers Team expects to find no conflicts with a particular utility, a placeholder activity has been created to confirm said assumption. Subsections of this WBS are:

- ***Utility Coordination/Planning:*** This section includes activities related to early coordination and issuance of Utility Master Agreements.
- ***Utility Field Inspections:*** This section includes activities related to field investigations, development of Subsurface Utility Exploration Drawings, and Utility Relocation Concept Plans for each segment.
- ***Plan & Estimates:*** This section includes activities related to development and approval of Plan & Estimates and final utility Assemblies. The utility assembly package includes the plan & estimate as well as applicable easement and cost information. In this section, activities have been added as placeholders for all utility companies where no conflict is expected. The placeholder activity is called "Confirm no conflicts – [Utility Owner] – [Segment #]". If the final design and utility field investigations indicate that additional conflicts need to be relocated, these activities will be converted to the Plan & Estimate/Utility Assembly fragnet.
- ***Utility Relocations:*** This section includes activities related to the physical relocation of utilities.

PROCUREMENT

The Procurement section includes activities related to the efforts related to relationships between Myers and its vendors and subcontractors. Subsections of this WBS are:

- ***Vendor Procurement:*** This section includes activities related to procurement of material vendors and subcontractors needed to construct the approved design.
- ***Fabrication:*** This section includes activities related to the lead times of major materials.

CONSTRUCTION

The Construction section includes activities related to the efforts needed to construct the approved design. This WBS section is broken down by geographical segmentation – Section > Location > Direction – as shown below. All stationing is approximate. Subsections of this WBS are:

- **Section A: Station 1128 to 1225**
  - *Section A: General/Entire Segment/All Locations*
    - Sec A WB
    - Sec A EB
  - *Location 01: Roadway Sta 1128 to 1167*
    - Loc 01 General/Median
    - Loc 01 WB: Sta. 2128+53 to 2167+12
    - Loc 01 EB: Sta 1128+00 to 1166+52
  - *Location 02: Bridges over Rte 641 (Penniman Rd)*
    - Loc 02 General/Median
    - Loc 02 WB: Bridge B-627 over Penniman Rd
    - Loc 02 EB: Bridge B-628 over Penniman Rd
  - *Location 03: Roadway Sta 1168 to 1225*
    - Loc 03 General/Median
    - Loc 03 WB: Roadway Sta 2168+94 to 2225+00
    - Loc 03 EB: Roadway Sta 1168+43 to 1224+40
- **Section B: Sta 1225 to 1285**
  - *Section B: General/Entire Segment/All Locations*
    - Sec B WB
    - Sec B EB
  - *Location 04: Roadway Sta 1225 to 1285*
    - Loc 04 General/Median
    - Loc 04 WB: Roadway Sta 2225+00 to 2283+12
    - Loc 04 EB: Roadway Sta 1224+40 to 1262+85
    - Loc 04 EB: Bridge B-629 over Ramp to Rte 143
    - Loc 04 EB: Roadway Sta 1265+34 to 1283+00
- **Section C: Sta 1285 to 1398**
  - *Section C: General/Entire Segment/All Locations*
    - Sec C WB

        - Sec C EB
    - *Location 05: Roadway Sta 1285 to 1334*
        - Loc 05 General/Median
        - Loc 05 WB: Roadway Sta 2283+12 to 2334+43
        - Loc 05 EB: Roadway Sta 1283+00 to 1335+02
    - *Location 06: Bridges over Burma Rd & NWSRR*
        - Loc 06 General/Median
        - Loc 06 WB: Bridge B-630 over Burma Rd & NWSRR
        - Loc 06 EB: Bridge B-631 over Burma Rd & NWSRR
    - *Location 07: Roadway Sta 1337 to 1398*
        - Loc 07 General/Median
        - Loc 07 WB: Roadway Sta 2336+90 to 2379+00
        - Loc 07 EB: Roadway Sta 1337+68 to 1379+20
- **Section D: Sta 1398 to 1502**
    - *Section D: General/Entire Segment/All Locations*
        - Sec D WB
        - Sec D EB
    - *Location 08: Roadway Sta 1398 to 1423*
        - Loc 08 General/Median
        - Loc 08 WB: Roadway Sta 2379+00 to 2424+33
        - Loc 08 EB: Roadway Sta 1379+20 to 1422+81
    - *Location 09: Bridges over Rte 143 (Jefferson Ave)*
        - Loc 09 General/Median
        - Loc 09 WB: Bridge B-632 over Jefferson Ave
        - Loc 09 EB: Bridge B-633 over Jefferson Ave
    - *Location 10: Roadway Sta 1427 to 1472*
        - Loc 10 General/Median
        - Loc 10 WB: Roadway Sta 2427+77 to 2477+97
        - Loc 10 EB: Roadway Sta 1426+25 to 1472+30
    - *Location 11: Bridges over Rte 238 (Yorktown Rd)*
        - Loc 11 General/Median
        - Loc 11 WB: Bridge B-634 over Yorktown Rd
        - Loc 11 EB: Bridge B-635 over Yorktown Road
    - *Location 12: Roadway Sta 1474 to 1502*
        - Loc 12 General/Median
        - Loc 12 WB: Roadway Sta 2473+91 to 2502+16
        - Loc 12 EB: Roadway Sta 1474+25 to 1501+83

CRITICAL PATH

Per VDOT Specifications, the critical path on the Project has been defined as the Longest Path. The Longest Path, as represented by the project schedule, includes the following activities in order of progression from Notice to Proceed (February 17, 2016) through our accelerated Project Completion Date (May 24, 2019) and is as follows:

- Notice to Proceed
- Environmental Field Studies and Permit Issuance
- Installation of Basins in Section B -Median
- Phase 1 Construction of Section B Roadway
- Phase 2 Construction Section B Roadway
- Phase 2 Construction of Section A Roadway
- Installation of Finishes
- Project Closeout

In addition to the full project schedule provided, we have included a print out of the summary longest path layout for the entire Project.

It is important to note that the segmentation of the Project to create individual independent work areas provides the benefits of flexibility in planning and resource allocation. The segmentation also has a tendency to create parallel critical or near critical paths. While currently, the Proposal Schedule shows the permitting process driving commencement of work in Section B and subsequently Section A, there are other near critical paths that the Myers Team expects to take over through the course of revision during the preconstruction phase.

Understanding the parallel near critical paths is crucial to proper schedule risk management. If a team solely focuses on the longest path of a project without understanding the behavior and impacts of the near critical paths, schedule instability is certain. The Myers Team Schedule Manager, Jessica Colbert, is certified through AACE International as a Planning and Scheduling Professional and has vast experience managing schedules for large design-build jobs with multiple near-critical paths. In addition, she will be a key player in coordinating between the DBPM, RCE, DM, CM, MOT manager and QAM to ensure that all contractual hold points are met and schedule risk is mitigated to the greatest extent possible.

MEANS AND METHODS

The durations in the project schedule were calculated based on estimated quantities known at the time of proposal as well as historical average productions experienced on similar projects. As design progresses and quantities are finalized, the construction schedule will be reviewed and monitored. Any major modifications to the design or design quantities will be reviewed with VDOT and reflected in potential revisions to the project schedule.

GEOTECHNICAL IMPROVEMENTS

As reflected by activities in the project schedule, the Myers Team will perform geotechnical investigations and analysis to determine the most cost effective and schedule efficient method of stabilizing unsuitable soils. Where possible, we plan to utilize an in-situ stabilization method. These methods are typically faster which will provide schedule savings. In addition, in-situ stabilization will reduce/eliminate the need for on-road trucks to travel in and out of the work zone under traffic to dispose of the material, increasing safety for the Project and the travelling public.

Drainage – Existing and New

The Myers Team has evaluated the data associated with the existing drainage systems on the Project as well as the overall drainage needs for the final design. For each run of existing pipe, an initial assessment was performed for the replacement/repair method: jack & bore, open cut, or rehab liner. In many areas of the Project, a central trunk line will be installed down the median of the Project. In other areas, it has been determined that median ditch drainage will suffice. The "Install Drainage" activities in the schedule account for all of the above operations: installing new trunk lines, replacing existing runs via jack & bore or open cut, rehabilitating existing runs of pipe, and installing drainage ditches. As the drainage design is finalized, these general "Install Drainage" activities will be further broken down into specific sections or runs of pipe with durations correlating to the specific installation method chosen. The durations currently assigned cover any schedule risk associated with these activities.

Reviews and Approvals

For each major deliverable in the schedule, there are activities for the preparation/submission of the item and the review and comment/approval of said deliverable. In order to further clarify the reviewer's responsibilities, review activities are labeled with either "R/C" or "R/A" to indicate "Review and Comment" or "Review and Approve", respectively. Key submittals that have multiple party approvals, such as submittals related to the bridges over Burma Road and NWSRR, specify the name of the reviewer in the activity name.

Upon award, the Myers Team will utilize the activity code "C00106665DB82 Responsible Stakeholder" to identify the reviewing party on each of the "R/C" and "R/A" activities. This code will be utilized to identify which key stakeholder is responsible for the preparation, submission, and review of each deliverable identified in the Project Schedule. Known stakeholders that will have review and approval responsibilities include, but are not limited to, VDOT, Navy, RDA, City of Newport News and various environmental agencies. Per the RFP, (Part 2, Section 2.7.3), the Myers Team will evaluate which design submittals will need to go to the City of Newport News for review and comment. These reviews will be modeled in the Baseline Schedule.

In addition to standard deliverable reviews and approvals, major hold points have been represented in the schedule – specifically the Preparatory Meetings required by the QA/QC Program. In the Proposal Schedule, there is one Preparatory Meeting shown for each major scope area. Post-award, some of these hold points may be duplicated if major scopes of work are going to stop and start with great gaps of time between. Likewise, the Team may choose to have separate preparatory meetings if different vendors are involved in the operations.

Subcontractors and Suppliers

Lessons learned from schedule management on previous design-build projects have led to the inclusion of a procurement section in the Project Schedule. This section of the WBS captures the activities needed to execute contracts with various subcontractors and suppliers once the design is approved. This section also contains activities for the fabrication and delivery of major materials that typically have longer lead times such as bridge girders, structural rebar, and sound wall materials.

Resource Management

Due to the magnitude of this Project, the Proposal Schedule was partially resource loaded to evaluate resource needs for major scopes of work the Myers Team would potentially self-perform. These resources include excavation crews, pipe crews, stone/paving crews and structures crews. This initial assessment was performed at a high-level to make sure that there were no major busts in the resource needs on the Project and so that Myers can be confident that the schedule is achievable.

Post-award, Primavera's role and resource functions may be used to monitor and track the number of vendor resources needed in the construction phase of the Project. Prior to the procurement phase of the Project, roles would be set up and defined to show what types of subcontractors and suppliers would be needed for each construction activity. Once a specific vendor is procured, a resource would be assigned to that role to represent the specific firm procured. For example, a bridge activity would be assigned the role, "Bridge Contractor" pre-procurement. Post-procurement, the activity would be assigned a specific resource with the firm's name, "ABC Structural Company". These assignments would allow the procurement and construction management staff to strategically plan with all resource availability considerations in mind. This will also help differentiate between work being self-performed by the Myers Team and work being performed by others.

Similarly, the construction management team will need to coordinate with procurement of railroad flaggers. Activities requiring railroad flaggers, such as those associated with the construction of bridges over Burma Road and NWSRR, will be tagged with appropriate activity codes. There are also activities in the Project Schedule that represent the activities needed to obtain the railroad flaggers. These activities are predecessors to the construction activities for which railroad flaggers will be needed.

SCHEDULE ASSUMPTIONS

To properly manage the Project Schedule, it is important to understand the scope of the work and interdisciplinary dependencies for proper management. In addition, it is important to understand the technical capabilities of the schedule management software. Care has been given to the setup of the Primavera Schedule to ease future schedule management and to properly account for schedule risks to reduce potential impacts.

CALENDARS

Project-specific calendars have been set up in Primavera to represent various restrictions and assumptions that must be applied to the project activities.

- Primary Calendars:
  - C00106665DB82 – 5 Day Office:
    - This calendar allows work five days per week except standard state holidays.
    - It is assigned all preconstruction activities that are not dependent on weather and would be primarily performed in an office.
  - C00106665DB82 – 5 Day Field:
    - This calendar allows work five days per week except standard state holidays. It also accounts for normal weather patterns that would affect field activities, such as precipitation histories.
    - It is assigned to all field activities that may be affected by weather or precipitation events.
  - C00106665DB82 – 5 Day Winter:
    - This calendar allows work five days per week except standard state holidays. In addition to accounting for normal weather patterns, as shown in the "5-day Field" calendar. It also does not allow any work from December 15 of each year to March 15 of the following year.
    - It is assigned to all field activities that may be affected by temperatures in order to be installed per specification, such as paving activities.
  - C00106665DB82 – 7 Day:

        - This calendar allows work seven days per week.
        - It is assigned to cure activities and any activity whose duration is based on calendar days, such as review activities.
- Specialty Calendars:
  It is important to note that the Specialty Calendars have been utilized with some conservatism to cover schedule risk until such time that the Agencies can be engaged and confirm the TOYR to which the Project will be held. Once the Agencies have been engaged and initial field studies performed, these calendars may be modified or un-assigned from certain activities in the schedule.
    - C00106665DB82 – Small Whorled Pogonia EN Study:
        - This calendar restricts the time field studies can be performed to only May 25 through July 15 of each year.
        - It is assigned all preconstruction activities related to performing environmental studies to protect the Small Whorled Pogonia.
    - C00106665DB82 – Mabee Salamander EN Study:
        - This calendar restricts the time field studies can be performed to only February 1 through May 31 of each year.
        - It is assigned all preconstruction activities related to performing environmental studies to protect the Mabee Salamander.
    - C00106665DB82 – Long Eared Bat CN Restrict:
        - This calendar restricts the time certain construction activities from being performed between April 15 and September 15 of each year.
        - It is assigned all clearing activities.

CONSISTENCY OF ACTIVITY NAMES AND IDS

Care has been made to maintain consistency throughout the Project Schedule in terms of each activity's name and ID. Each Activity ID is twelve digits long. The first seven digits of the Activity ID mirror the WBS code in which the activity is located. Likewise, activities of similar type are named consistently. Activities for installing asphalt are consistently named "Place Pavement" throughout the schedule rather than "Install Asphalt" in one location or "Place Pavement" in another. In addition, activities that are duplicative in multiple areas of the Project, have a suffix for the specific location or detail that is applicable. For example, there are nine activities in the Project Schedule for "Construct Abutment A". To avoid confusion about the scope of each activity, each of those activities is labeled with the Structure Location Number as well as the specific Bridge Number, i.e. "Construct Abutment A – L02 EB: B-628".

ACTIVITY CODES:

Project-specific activity codes have been set up to provide greater flexibility in future sorting and analysis of the schedule.

- Used in Proposal Schedule
    - C00106665DB82 Phase:
        - The phase codes correspond to the expected phasing described in the project approach.
        - By utilizing activity codes for phasing rather than the WBS, flexibility is added to the schedule. In the case that a more time-effective phasing scheme is developed, the activity coding can be easily modified to model said change.

- C00106665DB82 Section:
  - The section codes correspond to the four geographical sections on the Project.
  - Utilized primarily in construction WBS for custom filters/grouping/sorting.
- C00106665DB82 Location:
  - The location codes correspond to the twelve geographical sections on the Project.
  - Utilized primarily in construction WBS for custom filters/grouping/sorting.
- C00106665DB82 Direction:
  - The direction codes correspond to the longitudinal breakdown of the Project: WB, EB, Median.
  - Utilized primarily in construction WBS for custom filters/grouping/sorting.
- C00106665DB82 New/Reconstructed:
  - The new/reconstructed codes correspond to whether the activity is related to new roadway sections or reconstruction roadway sections.
  - Utilized primarily in construction WBS for custom filters/grouping/sorting.

- Will be added in Baseline Schedule
  - C00106665DB82 Responsible Stakeholder:
    - As previously described, the responsible stakeholder activity code will be used to track and sort activities by reviewing party.
  - C00106665DB82 Type of Work:
    - The type of work code is setup to allow grouping and sorting by major scope sections. Initially, codes will be set up at a macro level such as “Roadway Widening”, “Structure Widening” and “Repairs/Final Paving”. However, as the design progresses, these codes will be able to be broken down into more detail to allow for more efficient management of the Project Schedule.
  - C00106665DB82 Element of Work:
    - The element of work code is setup to allow grouping by specific deliverables or scope items.
    - For example, codes are setup for each ROW Parcel that may be affected by the Project so that activities can be grouped by said code. Likewise, codes have been/will be set up for each major management submittal, such as the QA/QC Plan so that all activities related to said plan can be grouped.

SCHEDULE RISK AND MANAGEMENT

There are several sections of the schedule where adequate information is not yet available to thoroughly define schedule activities at a Baseline Schedule level of detail. In these areas, the Myers Team has drawn from previous Design-Build experience to build a schedule that minimizes the risk of future impact once additional details are known. Examples of known risk areas and risk minimization measure:

- ***Plan packaging:*** The Proposal Schedule shows the design packages being broken down by section and sometimes element of work – in the case of Soundwall #1. This breakdown is designed to mitigate risk of delay from field investigatory studies. As the field studies progress, the Myers Team may decide to combine certain packages or advance packages to expedite the overall delivery of the Project. In addition, the Myers Team is evaluating the feasibility of constructing Soundwall #1 early in the Project to minimize the noise impacts of the construction process on local residents. By having

Soundwall #1 in its own design package, there is more flexibility to track the progression of design for this individual element.

- ***Plan reviews:*** Two cycles are shown for almost every design submittal in the schedule. Utilizing a collaborative approach to resolving comments, this should allow substantial time to get plans approved.
- ***Utility Relocations:*** All potential conflicts known at the time of submission of the Technical Proposal Plans are shown to be relocated in the Proposal Schedule. The Myers Team will continue to strive to minimize or eliminate all conflicts such that relocations shown in the schedule may not be necessary at all – allowing construction to advance earlier than projected in the Proposal Schedule.
- ***ROW Acquisitions:*** All potential parcel impacts known at the time of submission of the Technical Proposal Plans are shown to be acquired in the Proposal Schedule. The Myers Team will continue to strive to minimize or eliminate parcel impacts such that acquisitions shown in the schedule may not be necessary at all – minimizing dependencies on acquisition as much as possible.

Upon Notice of Intent to Award, the Myers Team will cost load the first three months of the Proposal Schedule and make any modifications necessary to meet the Contract Requirements for a Preliminary Schedule, updating any areas where additional information is known. Following submission of the Preliminary Schedule, Myers will work to break down some areas of the schedule to a higher level of detail necessary to properly manage a Baseline Schedule for the Project. Examples of areas to be detailed further:

- "Construct Pier" will be broken down into individual cure elements with separate activities for their cure time: F/R/P footer; cure footer; F/R/P stem; cure stem; F/R/P pier cap; cure cap.
- "Install Drainage" will be broken down further into series of pipe runs and will differentiate between new open-cut runs, new jack and bore runs, rehabilitation/repair of existing lines, and new ditchlines.

This breakdown allows for better management of resources in addition to accurate monitoring of progress.

The CPM schedule will be the driving force behind all long-term and short-term planning. Design work and other preconstruction activities will be closely monitored with the schedule. On a monthly basis, a formal CPM schedule update will be submitted to VDOT and distributed to the appropriate project stakeholders.

In addition to the CPM schedule, the Myers Team will utilize the complete schedule process summarized in *Table 7.2*.

Table 7.2 – Schedule Management Tools

TOOL	DESCRIPTION
CPM schedule	The CPM will be updated monthly (at a minimum) and as needed to track design and construction progress
Design schedule management	Technical work groups will monitor design progress and provide schedule updates.
Delay-free work plans	Using the CPM schedule, operation-specific planning packets will be created for each element of the Project and distributed to field managers.
Project team planner	Schedule based to-do list of management tasks will identify work zone, crew and equipment needs, and remove work operation constraints.
Morning and end-of-shift Huddles	Daily coordination meetings for field operations will provide daily schedule updates to construction management staff.
Look-ahead schedules	Weekly break down of CPM schedule activities into day-to-day operations to coordinate upcoming activities, traffic controls, subcontractors, and submittals.

SCHEDULE ACRONYMS, ABBREVIATIONS, AND DEFINITIONS

AC *or* A/C	Address Comments
AFC	Approved for Construction
BMP	Best Management Practices
BPPS	Bridge Pier Protection System
CCPRM	Cold Central Plant Recycling Material
CD	Calendar Days
CSXT	CSX Transportation
CTA	Cement Treated Aggregate
CTB	Commonwealth Transportation Board
EB	Eastbound
F/R	Form and Reinforce
F/R/P	Form, Reinforce & Pour
FDNAR	Final Design Noise Analysis Report
FHWA	Federal Highway Administration
FI/RW	Field Inspection/Right-of-Way
FM	Force Main
GR	Guardrail
H&HA	Hydraulic and Hydrologic Analysis
HEC	Hydrologic Engineering Center
HMS	Hydrologic Modeling System
ITS	Intelligent Transportation System
L##	Location ##
MOT	Maintenance of Traffic
NADR	Noise Abatement Decision Report
NTP	Notice to Proceed
NWSRR	Naval Weapons Station Railroad
OGDL	Open Graded Drainage Layer
OTSR	Over-the-shoulder Review
PIPC	Public Information and Communications Plan
QA/QC	Quality Assurance/Quality Control
RA *or* R/A	Review and Approve
RAS	River Analysis System
RC *or* R/C	Review and Comment
RFP	Request for Proposal
RR	Railroad
RW *or* ROW	Right-of-way
SFA	Submit for Approval
SFC	Submit for Comment
SFI	Submit for Information
SOE	Support of Excavation
Sta	Station
SUE	Subsurface Utility Exploration
SW	Sound Wall
VDOT	Virginia Department of Transportation
WB	Westbound

Submitted to:

VDOT
Virginia Department of Transportation

APPENDIX 4.1.7

PROPOSAL PAYMENT AGREEMENT

ALLAN MYERS + rda

ATTACHMENT 9.3.1
PROPOSAL PAYMENT AGREEMENT

THIS PROPOSAL PAYMENT AGREEMENT (this "Agreement") is made and entered into as of this 16th day of November, 20 15 by and between the Virginia Department of Transportation ("VDOT"), and Allan Myers VA, Inc. ("Offeror").

WITNESSETH:

WHEREAS, Offeror is one of the entities who submitted Statements of Qualifications ("SOQs") pursuant to VDOT's **April 21, 2015** Request for Qualifications ("RFQ") and was invited to submit proposals in response to a Request for Proposals ("RFP") for the **I-64 Capacity Improvements – Segment II, Project No. 0064-965-264** ("Project"), under a design-build contract with VDOT ("Design-Build Contract"); and

WHEREAS, as part of the procurement process for the Project, Offeror has already provided and/or furnished to VDOT, and may continue to provide and/or furnish to VDOT, certain intellectual property, materials, information and ideas, including, but not limited to, such matters that are: (a) conveyed verbally and in writing during proprietary meetings or interviews; and (b) contained in, related to or associated with Offeror's proposal, including, but not limited to, written correspondence, designs, drawings, plans, exhibits, photographs, reports, printed material, tapes, electronic disks, or other graphic and visual aids (collectively "Offeror's Intellectual Property"); and

WHEREAS, VDOT is willing to provide a payment to Offeror, subject to the express conditions stated in this Agreement, to obtain certain rights in Offeror's Intellectual Property, provided that Offeror submits a proposal that VDOT determines to be responsive to the RFP ("Offeror's Proposal"), and either (a) Offeror is not awarded the Design-Build Contract; or (b) VDOT cancels the procurement or decides not to award the Design-Build Contract to any Offeror; and

WHEREAS, Offeror wishes to receive the payment offered by VDOT, in exchange for granting VDOT the rights set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement and other good and valuable consideration, the receipt and adequacy of which are acknowledged by the parties, the parties agree as follows:

1. **VDOT's Rights in Offeror's Intellectual Property**. Offeror hereby conveys to VDOT all rights, title and interest, free and clear of all liens, claims and encumbrances, in Offeror's Intellectual Property, which includes, without restriction or limitation, the right of VDOT, and anyone contracting with VDOT, to incorporate any ideas or information from Offeror's Intellectual Property into: (a) the Design-Build Contract and the Project; (b) any other contract awarded in reference to the Project; or (c) any subsequent procurement by VDOT. In receiving all rights, title and interest in Offeror's Intellectual Property, VDOT is deemed to own all intellectual property rights, copyrights, patents, trade secrets, trademarks, and service marks in Offeror's Intellectual Property, and Offeror agrees that it shall, at the request of VDOT, execute all papers and perform all other acts that may be necessary to ensure that VDOT's rights, title and interest in Offeror's Intellectual Property are protected. The rights conferred herein to VDOT include, without limitation, VDOT's ability to use Offeror's Intellectual Property without the obligation to notify or seek permission from Offeror.

2. **Exclusions from Offeror's Intellectual Property**. Notwithstanding Section 1 above, it is understood and agreed that Offeror's Intellectual Property is not intended to include, and Offeror does not convey any rights to, the Escrow Proposal Documents submitted by Offeror in accordance with the RFP.

3. **Proposal Payment**. VDOT agrees to pay Offeror the lump sum amount of **Eighty-Five Thousand and 00/100 Dollars ($~~80~~85,000.00)** ("Proposal Payment"), which payment constitutes payment in full to Offeror for the conveyance of Offeror's Intellectual Property to VDOT in accordance with this Agreement. Payment of the Proposal Payment is conditioned upon: (a) Offeror's Proposal being, in the sole discretion of VDOT, responsive to the RFP; (b) Offeror complying with all other terms and conditions of this Agreement; and (c) either (i) Offeror is not awarded the Design-Build Contract, or (ii) VDOT cancels the procurement or decides not to award the Design-Build Contract to any Offeror.

4. **Payment Due Date**. Subject to the conditions set forth in this Agreement, VDOT will make payment of the Proposal Payment to the Offeror within forty-five (45) days after the later of: (a) notice from VDOT that it has awarded the Design-Build Contract to another Offeror; or (b) notice from VDOT that the procurement for the Project has been cancelled and that there will be no Contract Award.

5. **Effective Date of this Agreement**. The rights and obligations of VDOT and Offeror under this Agreement, including VDOT's ownership rights in Offeror's Intellectual Property, vests upon the date that Offeror's Proposal is submitted to VDOT. Notwithstanding the above, if Offeror's Proposal is determined by VDOT, in its sole discretion, to be nonresponsive to the RFP, then Offeror is deemed to have waived its right to obtain the Proposal Payment, and VDOT shall have no obligations under this Agreement.

6. **Indemnity**. Subject to the limitation contained below, Offeror shall, at its own expense, indemnify, protect and hold harmless VDOT and its agents, directors, officers, employees, representatives and contractors from all claims, costs, expenses, liabilities, demands, or suits at law or equity ("Claims") of, by or in favor of or awarded to any third party arising in whole or in part from: (a) the negligence or wilful misconduct of Offeror or any of its agents, officers, employees, representatives or subcontractors; or (b) breach of any of Offeror's obligations under this Agreement, including its representation and warranty under Section 8 hereof. This indemnity shall not apply with respect to any Claims caused by or resulting from the sole negligence or wilful misconduct of VDOT, or its agents, directors, officers, employees, representatives or contractors.

7. **Assignment**. Offeror shall not assign this Agreement, without VDOT's prior written consent, which consent may be given or withheld in VDOT's sole discretion. Any assignment of this Agreement without such consent shall be null and void.

8. **Authority to Enter into this Agreement**. By executing this Agreement, Offeror specifically represents and warrants that it has the authority to convey to VDOT all rights, title, and interest in Offeror's Intellectual Property, including, but not limited to, those any rights that might have been vested in team members, subcontractors, consultants or anyone else who may have contributed to the development of Offeror's Intellectual Property, free and clear of all liens, claims and encumbrances.

9. **Miscellaneous**.

a. Offeror and VDOT agree that Offeror, its team members, and their respective employees are not agents of VDOT as a result of this Agreement.

b. Any capitalized term used herein but not otherwise defined shall have the meanings set forth in the RFP.

c. This Agreement, together with the RFP, embodies the entire agreement of the parties with respect to the subject matter hereof. There are no promises, terms, conditions, or obligations other than those contained herein or in the RFP, and this Agreement shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties hereto.

d. It is understood and agreed by the parties hereto that if any part, term, or provision of this Agreement is by the courts held to be illegal or in conflict with any law of the Commonwealth of Virginia, validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provisions to be invalid.

e. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia.

IN WITNESS WHEREOF, this Agreement has been executed and delivered as of the day and year first above written.

VIRGINIA DEPARTMENT OF TRANSPORTATION

By: _____

Name: _____

Title: _____

[Insert Offeror's Name] **ALLAN MYERS VA, INC.**

By: _____

Name: **Aaron T. Myers**

Title: **Vice President/General Manager**

Submitted to:

VDOT
Virginia Department of Transportation

APPENDIX 4.1.8

CERTIFICATION REGARDING DEBARMENT FORMS

ALLAN MYERS + rda

ATTACHMENT 11.8.6(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

11/10/15 — Vice President/General Manager

Signature Aaron T. Myers — Date — Title

ALLAN MYERS VA, INC.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	Date	Title
	September 25, 2015	Vice President

DMY Engineering Consultants, Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Sharon Ward Harlen Sept 29, 2015 Senior Vice President
Signature Date Title

EEE Consulting, Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	9/16/2015	President
Signature	Date	Title

Froehling & Robertson, Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Camille A. Kattan 10/1/2015 Principal

Signature [Camille A. Kattan, P.E.] Date Title

Geotechnical Environmental and Testing Solutions, Inc. dba GET Solutions, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	September 30, 2015	Vice President
Signature	Date	Title

H & B Surveying and Mapping, LLC

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

09/28/15 Vice President

Signature Date Title

KCI Technologies, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Elizabeth Quinn September 17, 2015 President

Signature Date Title

Quinn Consulting Services, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-965-264
Contract ID: C00106665DB82

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

09/29/15
Signature Date

Assistant Director of Transportation / Principal General Manager, Richmond Office
Title

Rinker Design Associates, P.C.
Name of Firm

ALLAN MYERS
301 CONCOURSE BLVD.
SUITE 300,
GLEN ALLEN, VA 23059
804.290.8500

RINKER DESIGN ASSOCIATES, P.C.
4301 DOMINION BLVD.
SUITE 100,
GLEN ALLEN, VA 23060
804.612.0665

Submitted to:

VDOT
Virginia Department of Transportation

TECHNICAL PROPOSAL VOLUME II

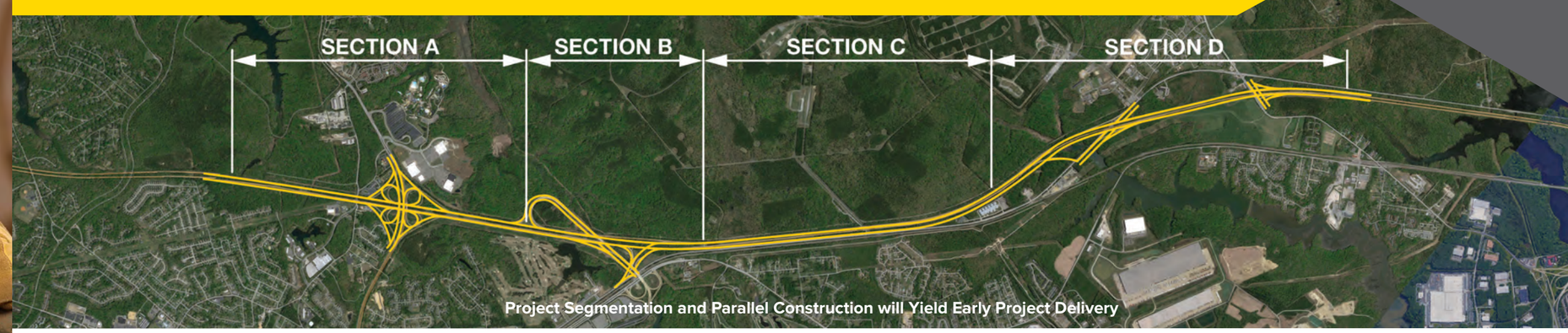
A DESIGN-BUILD PROJECT

I-64 Capacity Improvements – Segment II

From: 1.05 miles west of Route 199 (Humelsine Parkway)
To: 0.54 miles east of Route 238 (Yorktown Road)

Newport News, York County and James City County, Virginia

State Project No.: 0064-965-264, P101, R201, C501, B627, B628, B629, B630, B631, B632, B633, B634, B635, D603, D604, D605, D606, D607, D608
Federal Project No.: IM-965-5 (086)
Contract ID No.: C00106665DB82
Date: November 16, 2015



Project Segmentation and Parallel Construction will Yield Early Project Delivery

ALLAN MYERS + rda

Submitted to:

VDOT
Virginia Department of Transportation

4.3.1

CONCEPTUAL ROADWAY PLANS

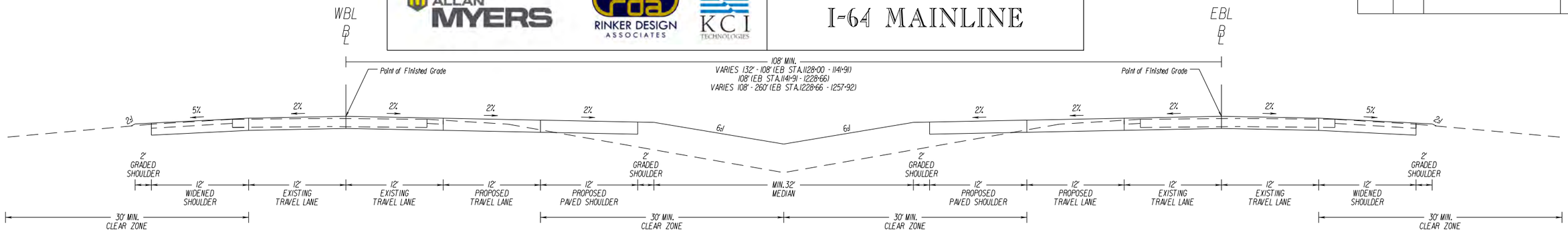
ALLAN MYERS + rda

TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

TYPICAL SECTIONS
I-64 MAINLINE

STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	2

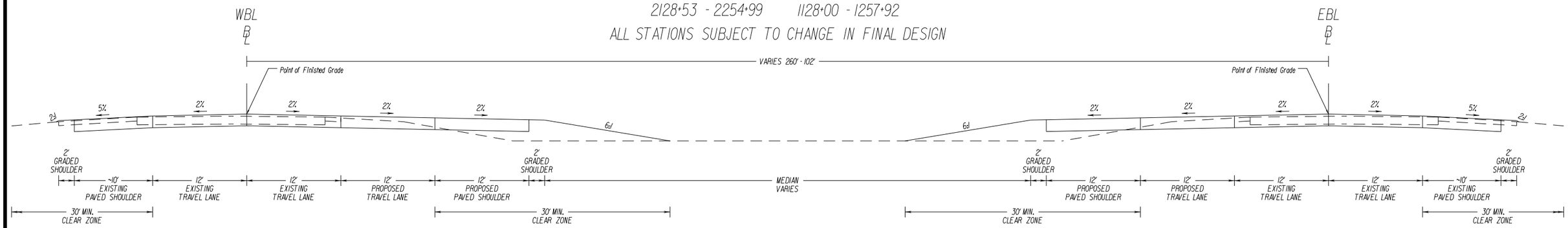


STATION TO STATION (APPROX.)

(I-64 WB) 2128+53 - 2254+99

(I-64 EB) 1128+00 - 1257+92

ALL STATIONS SUBJECT TO CHANGE IN FINAL DESIGN

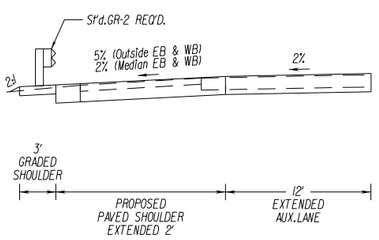


STATION TO STATION (APPROX.)

(I-64 WB) 2254+99 - 2284+20

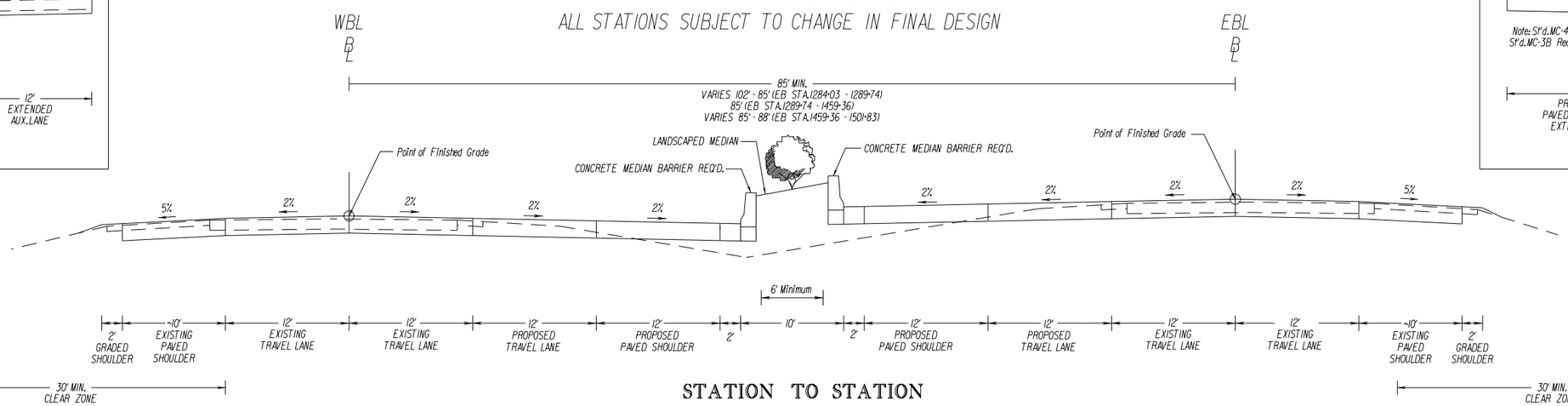
(I-64 EB) 1257+92 - 1284+03

ALL STATIONS SUBJECT TO CHANGE IN FINAL DESIGN



AUX.LANE TREATMENT FOR EB & WB OUTSIDE & MEDIAN. SEE PLANS FOR LOCATIONS*

*LOCATIONS SUBJECT TO CHANGE IN FINAL DESIGN

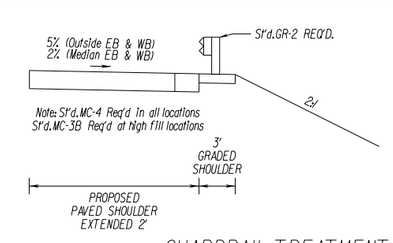


STATION TO STATION

(I-64 WB) 2284+20 - 2502+16

(I-64 EB) 1284+03 - 1501+83

ALL STATIONS SUBJECT TO CHANGE IN FINAL DESIGN



GUARDRAIL TREATMENT FOR EB & WB OUTSIDE & MEDIAN. SEE PLANS FOR LOCATIONS*

*LOCATIONS SUBJECT TO CHANGE IN FINAL DESIGN

NOTE: TYPICAL SECTIONS DEPICT NORMAL CROWN. I-64 EB & WB TO BE SUPERELEVATED WHEN REQUIRED PER VDOT STANDARDS.

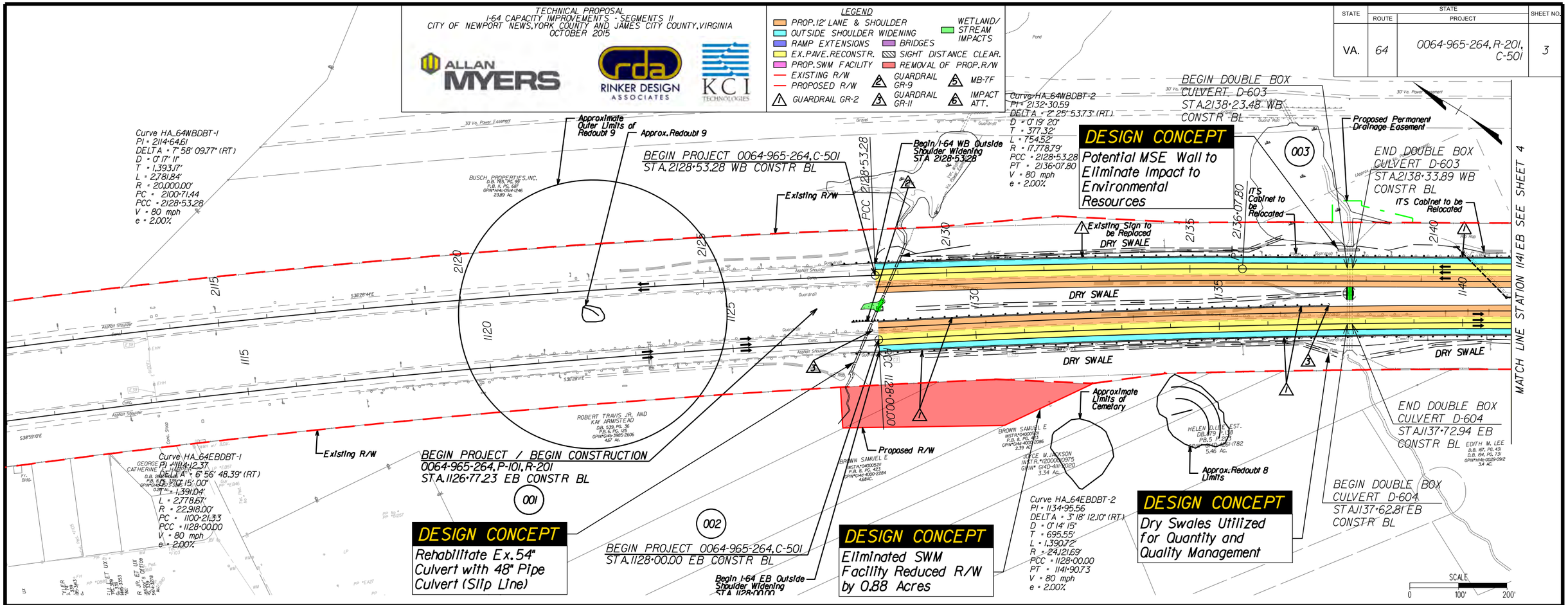
NOTE: PAVEMENT DESIGNS SHALL BE CONSISTENT WITH THE REQUIREMENTS OF RFP PART II.

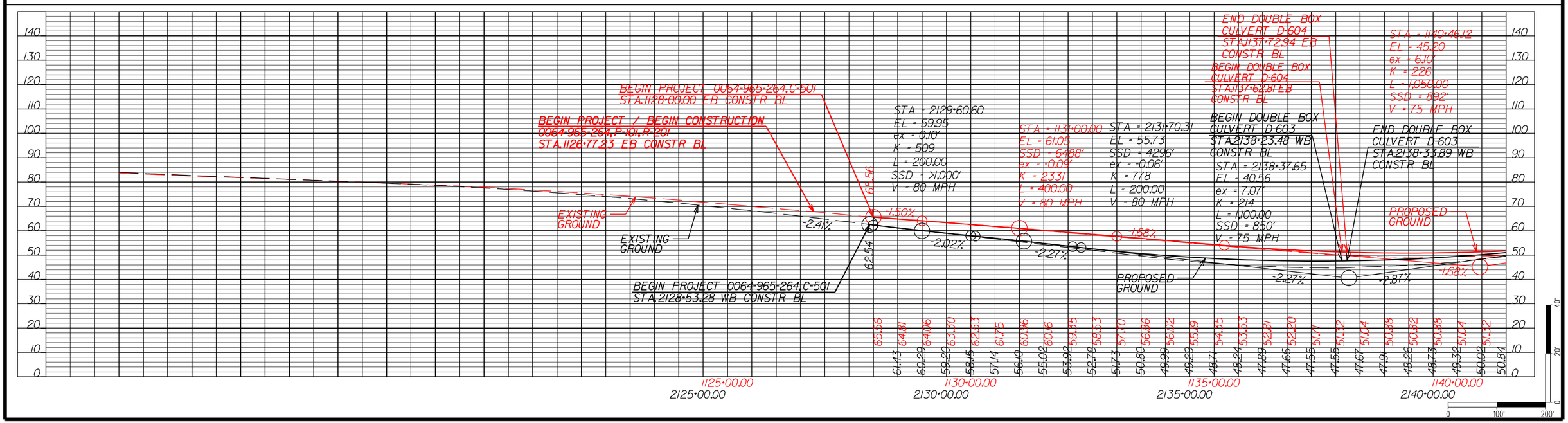
TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS · RINKER DESIGN ASSOCIATES · KCI TECHNOLOGIES

STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	3

LEGEND
- PROP. 12' LANE & SHOULDER
- OUTSIDE SHOULDER WIDENING
- RAMP EXTENSIONS
- EX. PAVE. RECONSTR.
- PROP. SWM FACILITY
- EXISTING R/W
- PROPOSED R/W
- 1 GUARDRAIL GR-2
- 2 GUARDRAIL GR-9
- 3 GUARDRAIL GR-11
- 4 BRIDGES
- SIGHT DISTANCE CLEAR.
- REMOVAL OF PROP. R/W
- 5 MB-7F
- 6 IMPACT ATT.
- WETLAND/ STREAM IMPACTS





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	4

LEGEND
- PROP. 12' LANE & SHOULDER
- OUTSIDE SHOULDER WIDENING
- RAMP EXTENSIONS
- EX. PAVE. RECONSTR.
- PROP. SWM FACILITY
- EXISTING R/W
- PROPOSED R/W
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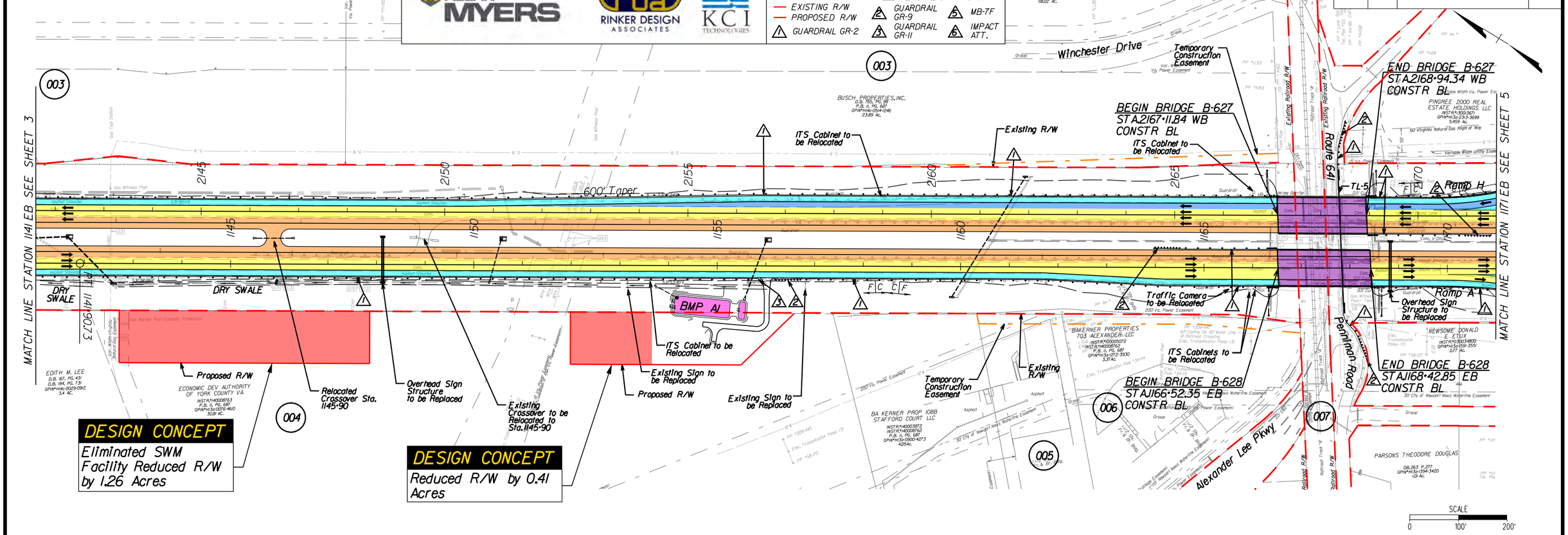
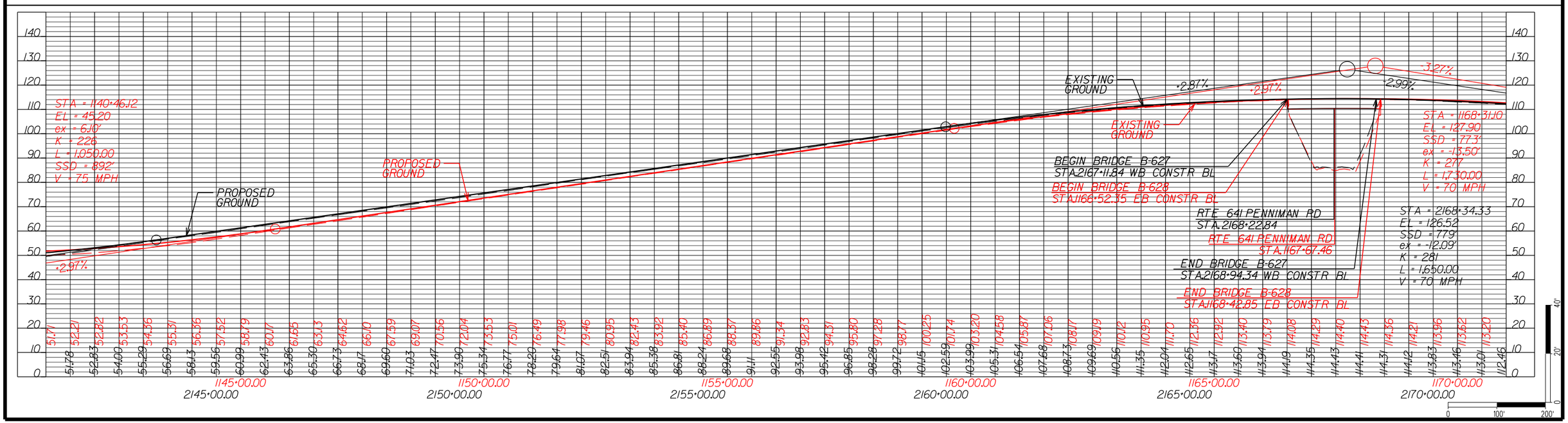
- 4 MB-7F
- 5 IMPACT ATT.
- 6
- BRIDGES
- SIGHT DISTANCE CLEAR.
- REMOVAL OF PROP. R/W
- WETLAND/ STREAM IMPACTS





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	5

LEGEND
- PROP. 12' LANE & SHOULDER
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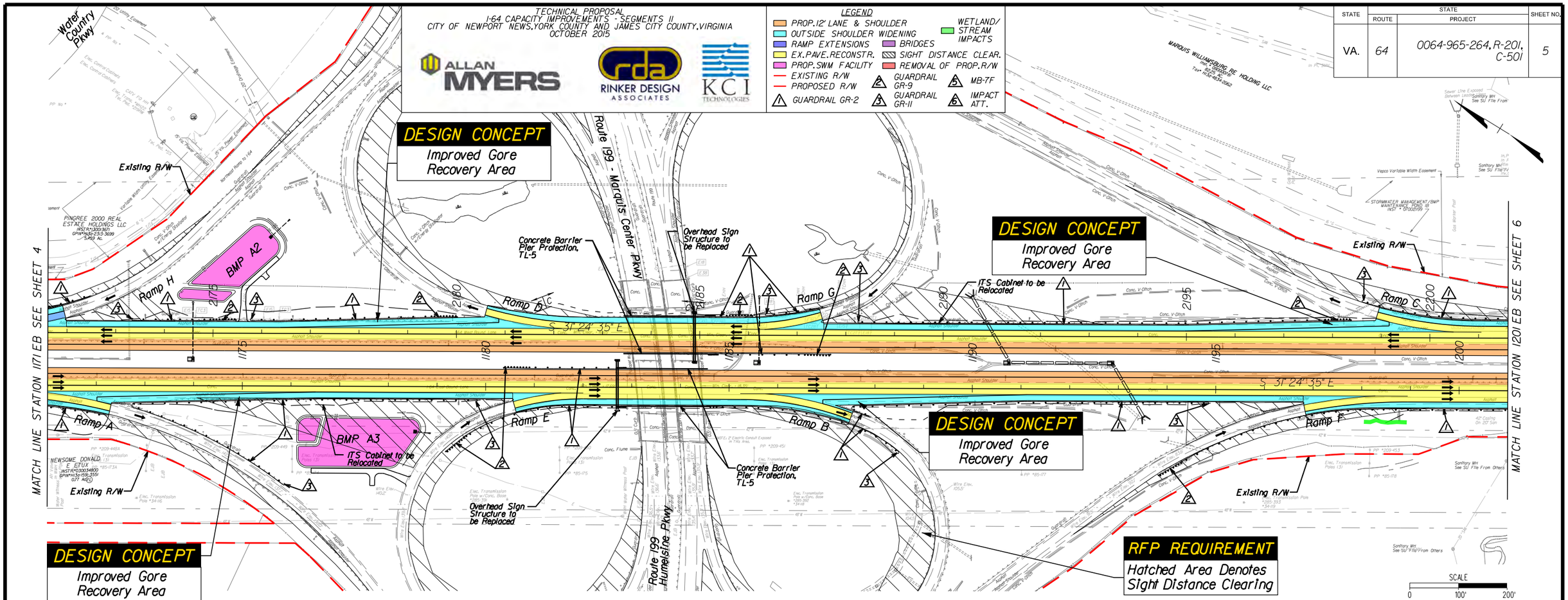
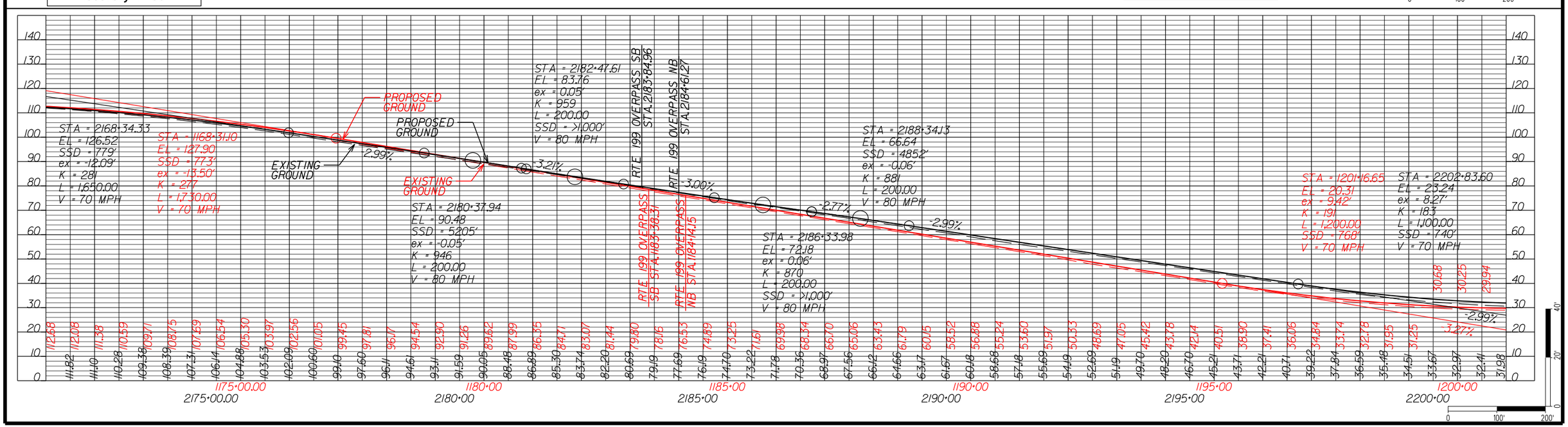
- 6 IMPACT ATT.





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS
RINKER DESIGN ASSOCIATES
KCI TECHNOLOGIES

LEGEND
- PROP. 12' LANE & SHOULDER
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- IMPACT ATT.
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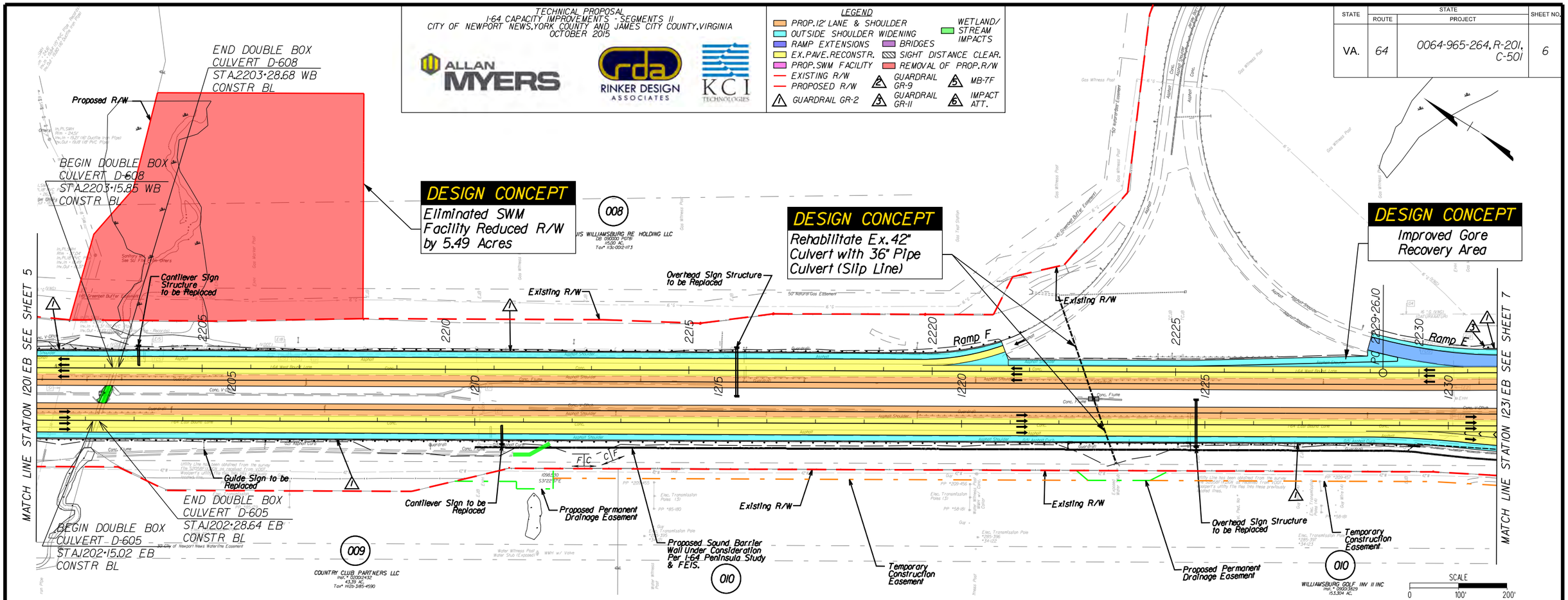
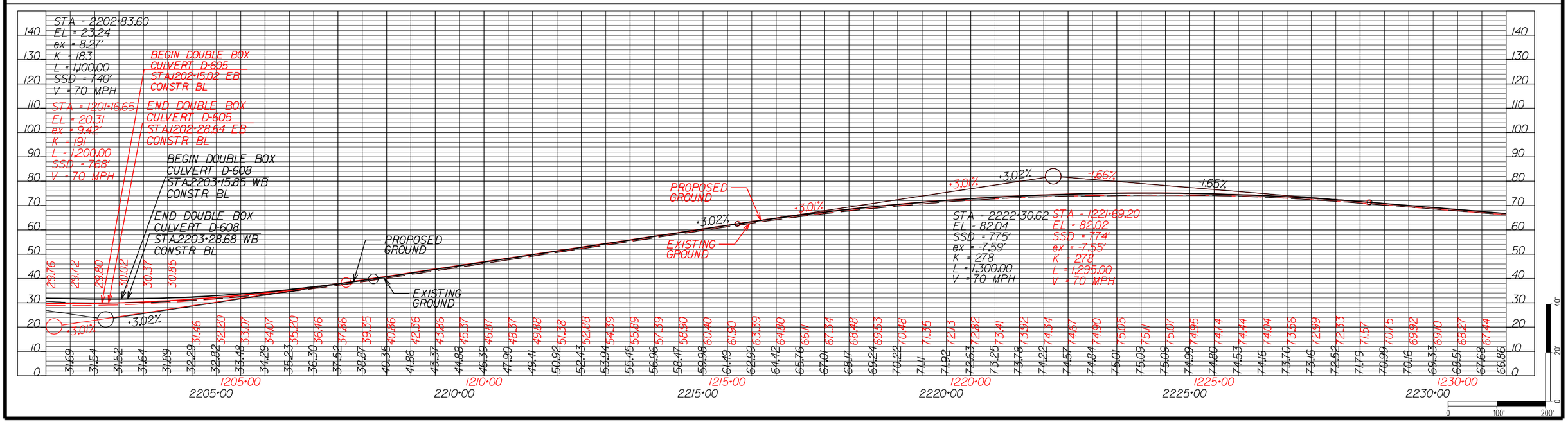
- REMOVAL OF PROP. R/W
- WETLAND/ STREAM IMPACTS

STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	6





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS · RINKER DESIGN ASSOCIATES · KCI TECHNOLOGIES

STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	7

LEGEND
- PROP. 12' LANE & SHOULDER
- OUTSIDE SHOULDER WIDENING
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- EX. PAVE. RECONSTR.
- PROP. SWM FACILITY
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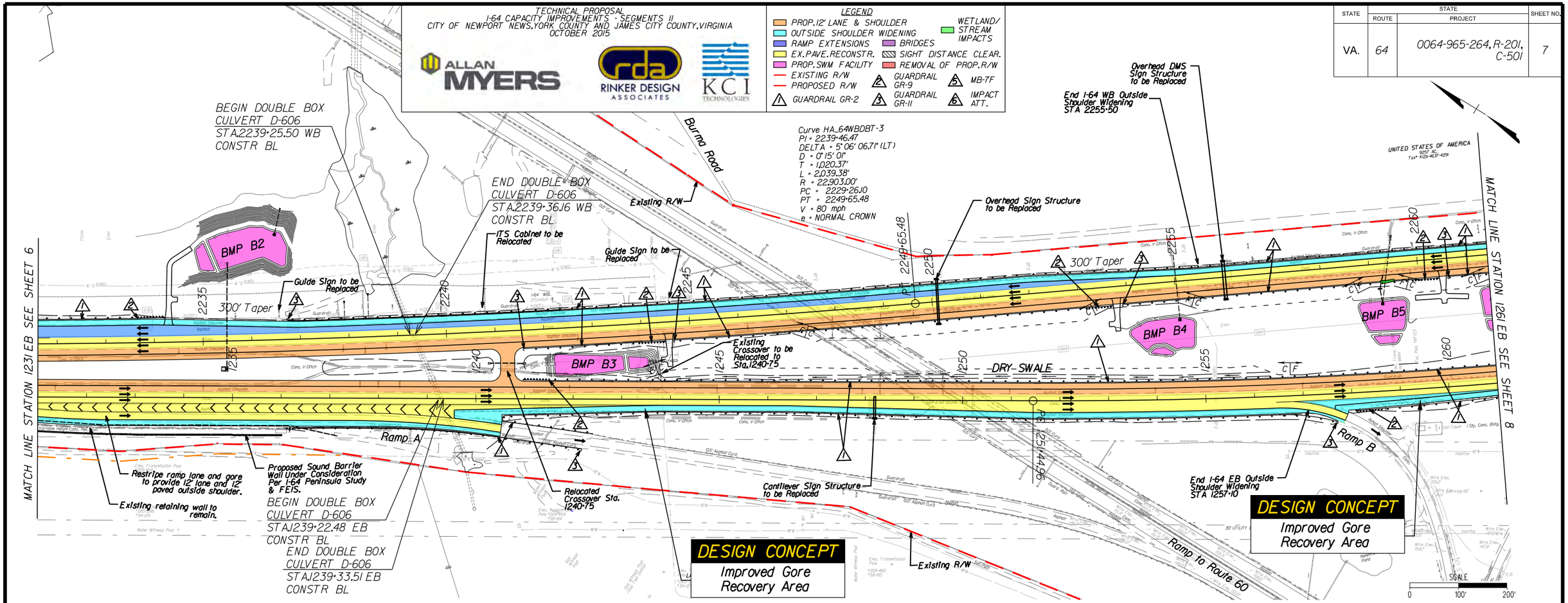
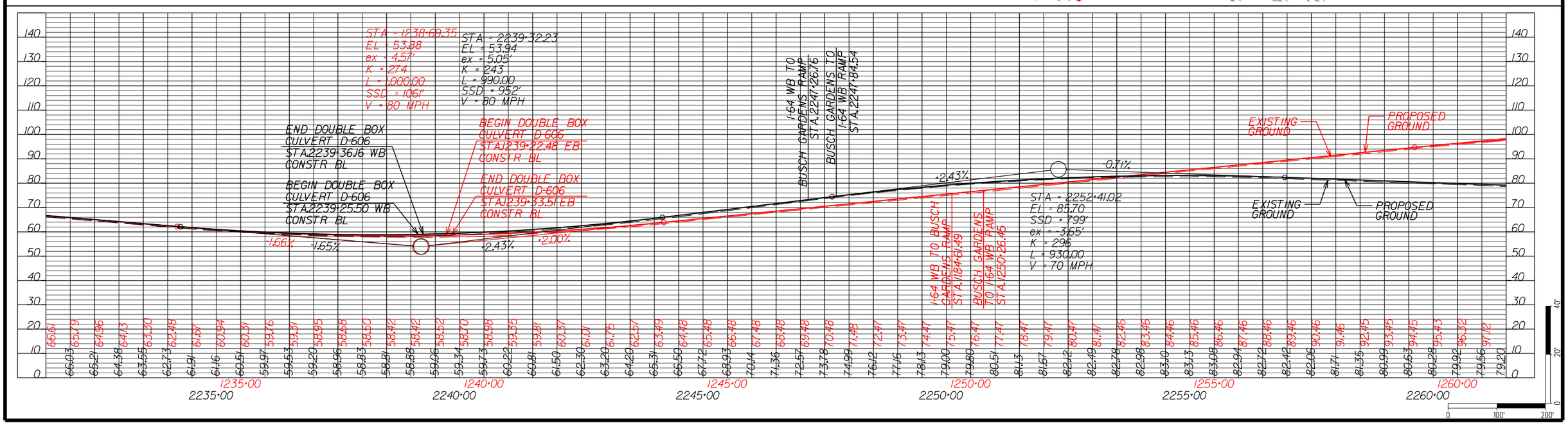
- BRIDGES
- SIGHT DISTANCE CLEAR.
- REMOVAL OF PROP. R/W





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

LEGEND
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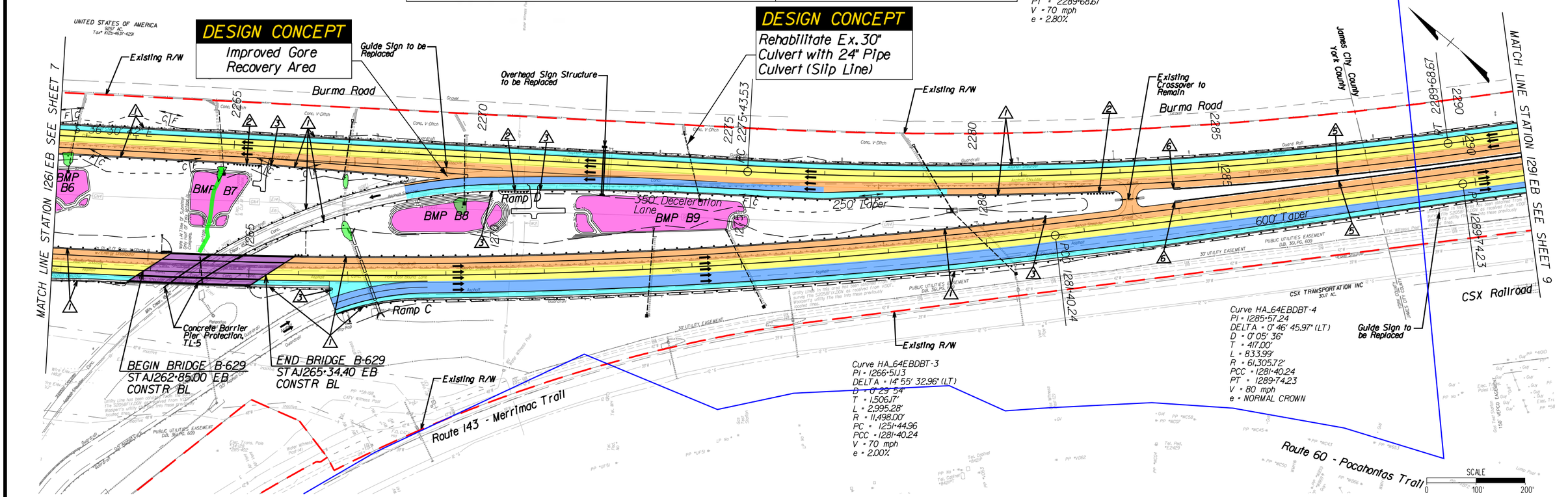
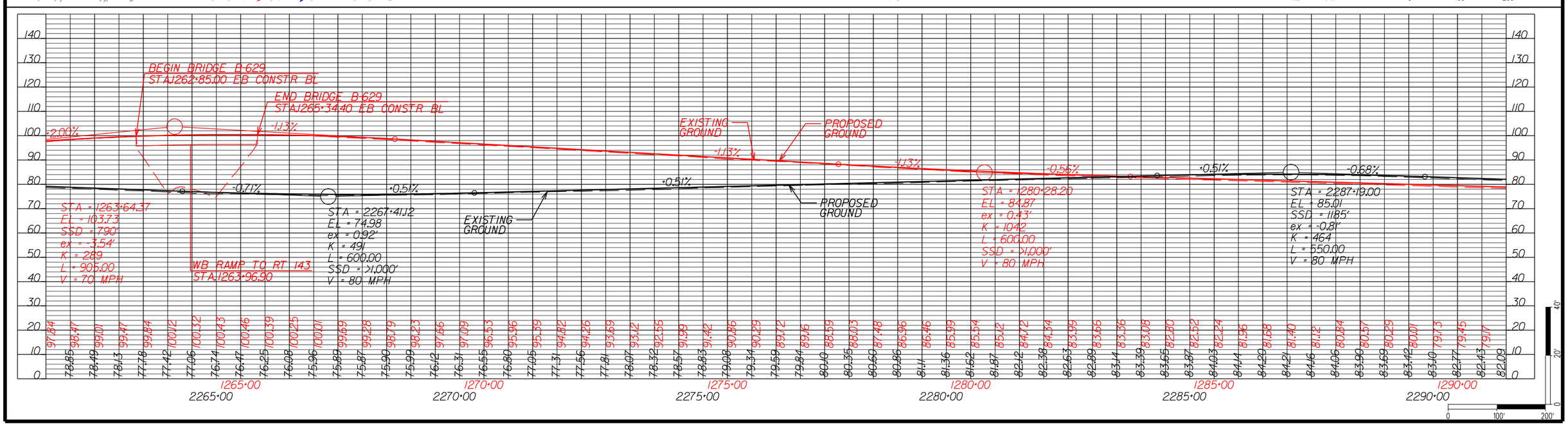
STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	8





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

LEGEND
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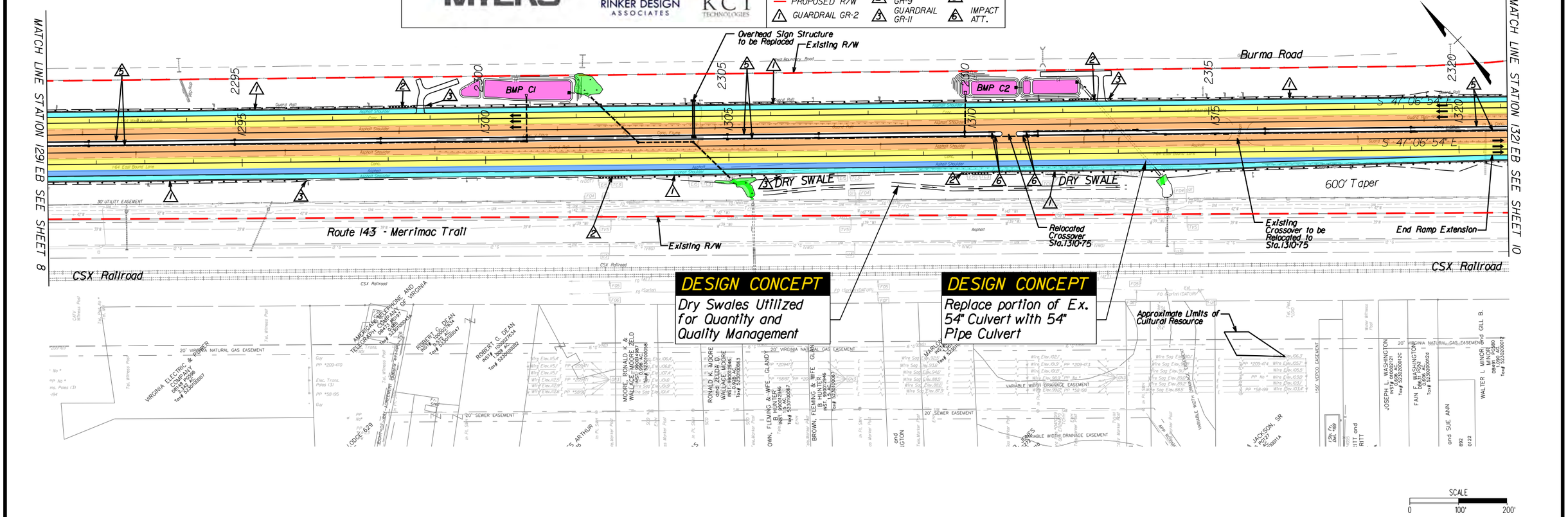
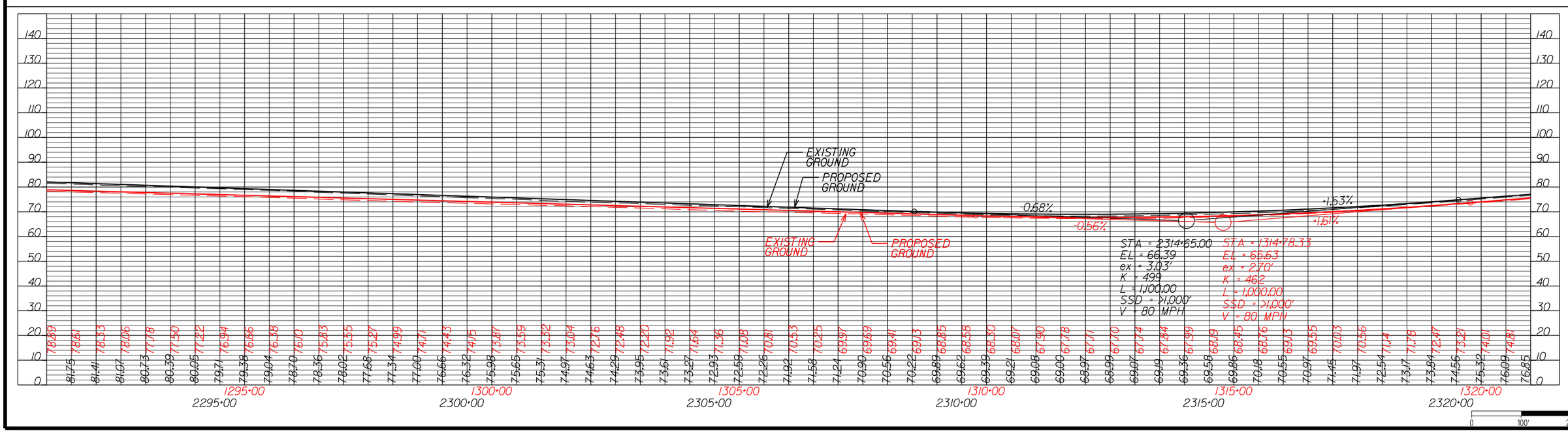
- OUTSIDE SHOULDER WIDENING
- RAMP EXTENSIONS
- EX. PAVE. RECONSTR.
- PROP. SWM FACILITY
- EXISTING R/W
- PROPOSED R/W
- 1 GUARDRAIL GR-2
- 2 GUARDRAIL GR-9
- 3 GUARDRAIL GR-11
- 4 MB-7F
- 5 IMPACT ATT.
- BRIDGES
- SIGHT DISTANCE CLEAR.
- REMOVAL OF PROP. R/W
- WETLAND/ STREAM IMPACTS

STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	9





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

LEGEND
- PROP. 12' LANE & SHOULDER
- OUTSIDE SHOULDER WIDENING
- RAMP EXTENSIONS
- EX. PAVE. RECONSTR.
- PROP. SWM FACILITY
- EXISTING R/W
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- 1 GUARDRAIL GR-2
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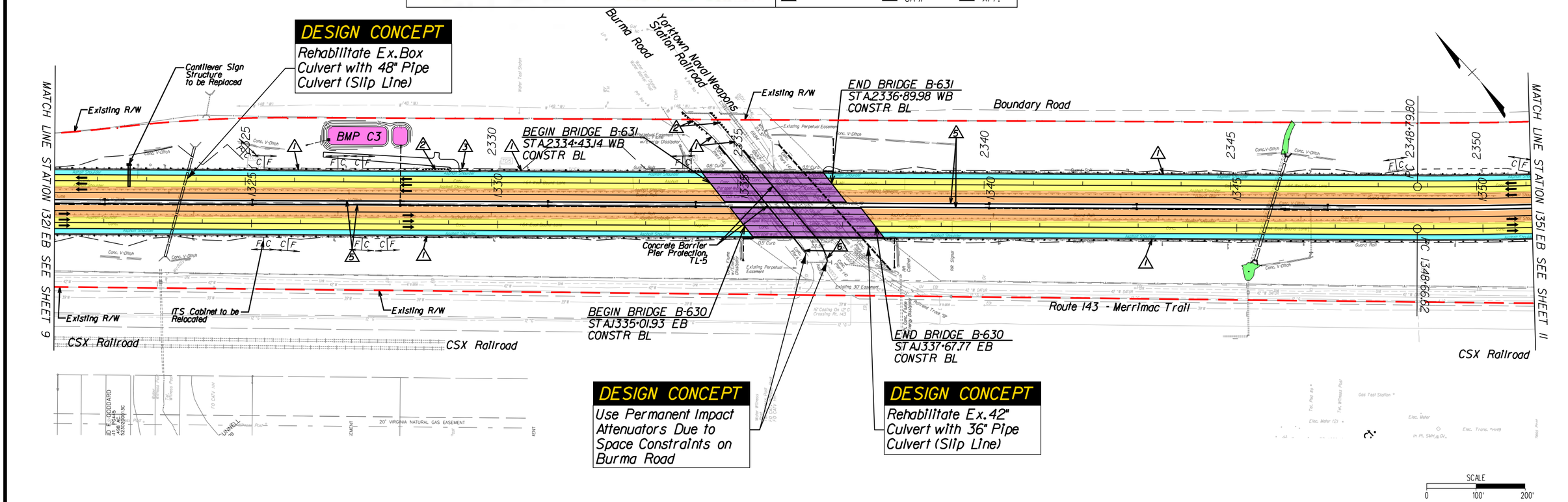
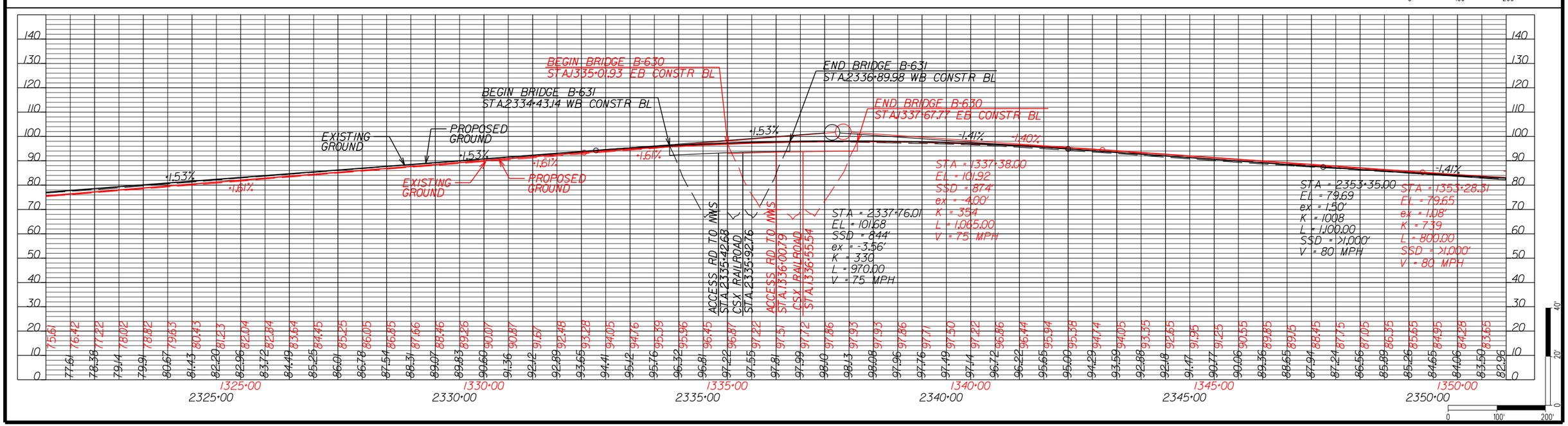
- 3 GUARDRAIL GR-11
- BRIDGES
- SIGHT DISTANCE CLEAR.
- REMOVAL OF PROP. R/W
- WETLAND/ STREAM IMPACTS
- 5 MB-7F
- 6 IMPACT ATT.

STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	10





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS · RINKER DESIGN ASSOCIATES · KCI TECHNOLOGIES

STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	11

LEGEND
- PROP. 12' LANE & SHOULDER
- OUTSIDE SHOULDER WIDENING
- RAMP EXTENSIONS
- EX. PAVE. RECONSTR.
- PROP. SWM FACILITY
- EXISTING R/W
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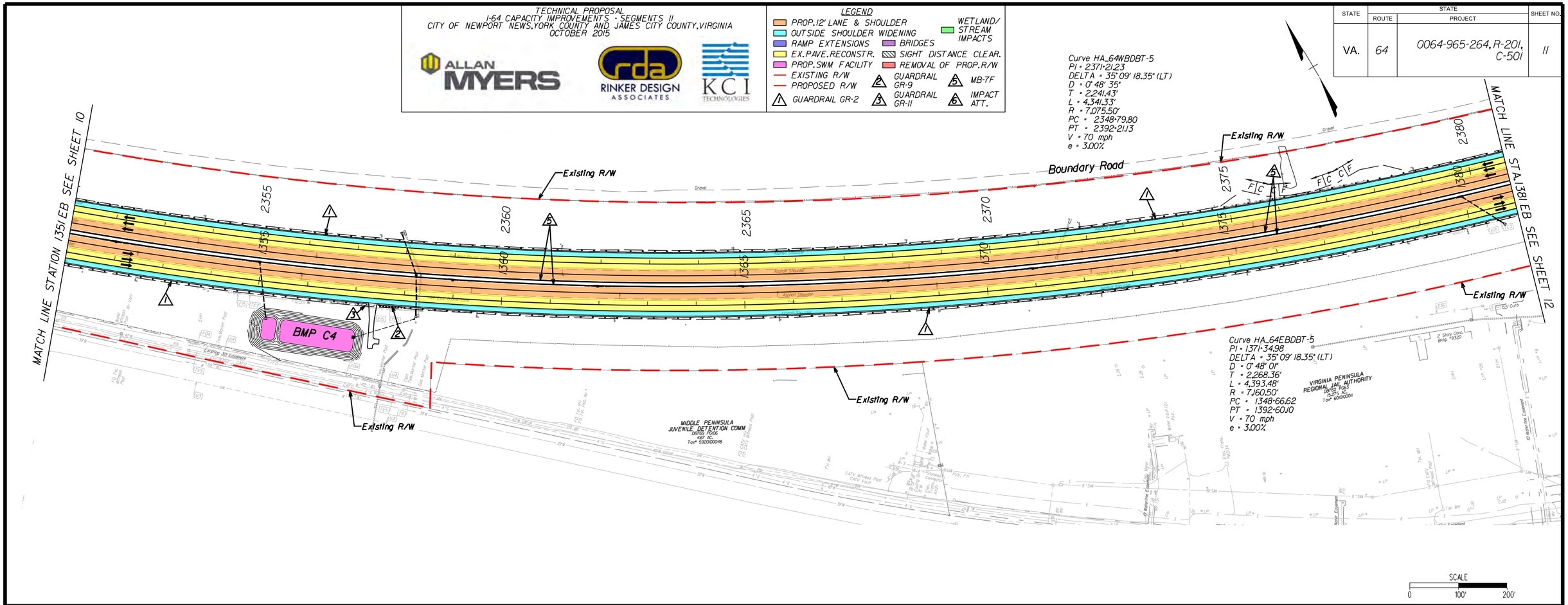
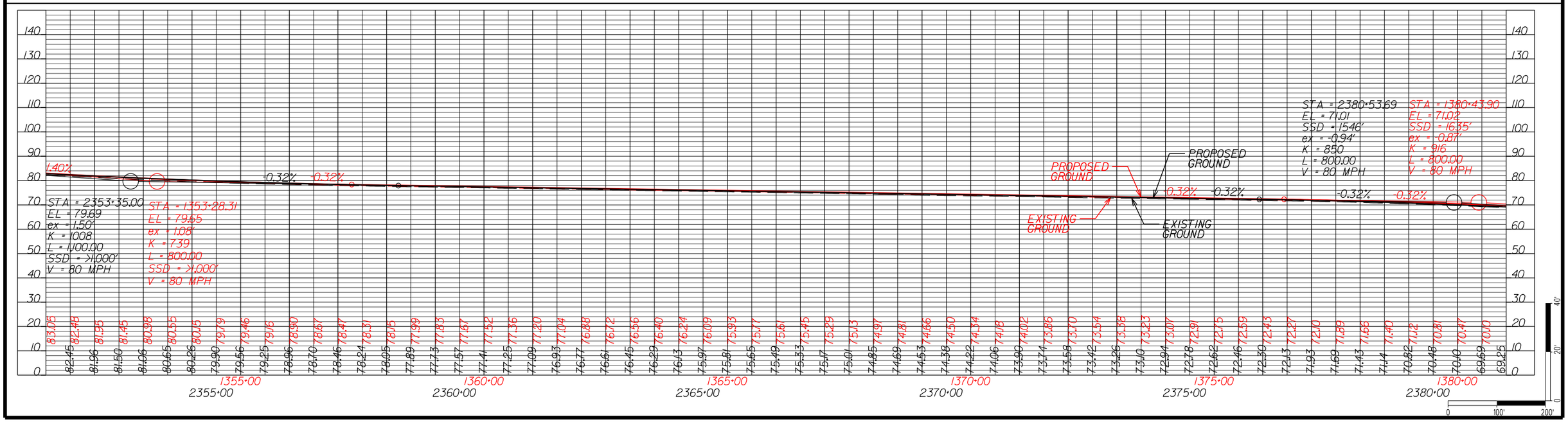
- SIGHT DISTANCE CLEAR.
- REMOVAL OF PROP. R/W
- 5 MB-7F
- 6 IMPACT ATT.
- WETLAND/ STREAM IMPACTS





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	12

LEGEND
- PROP. 12' LANE & SHOULDER
- OUTSIDE SHOULDER WIDENING
- RAMP EXTENSIONS
- EX. PAVE. RECONSTR.
- PROP. SWM FACILITY
- EXISTING R/W
- PROPOSED R/W
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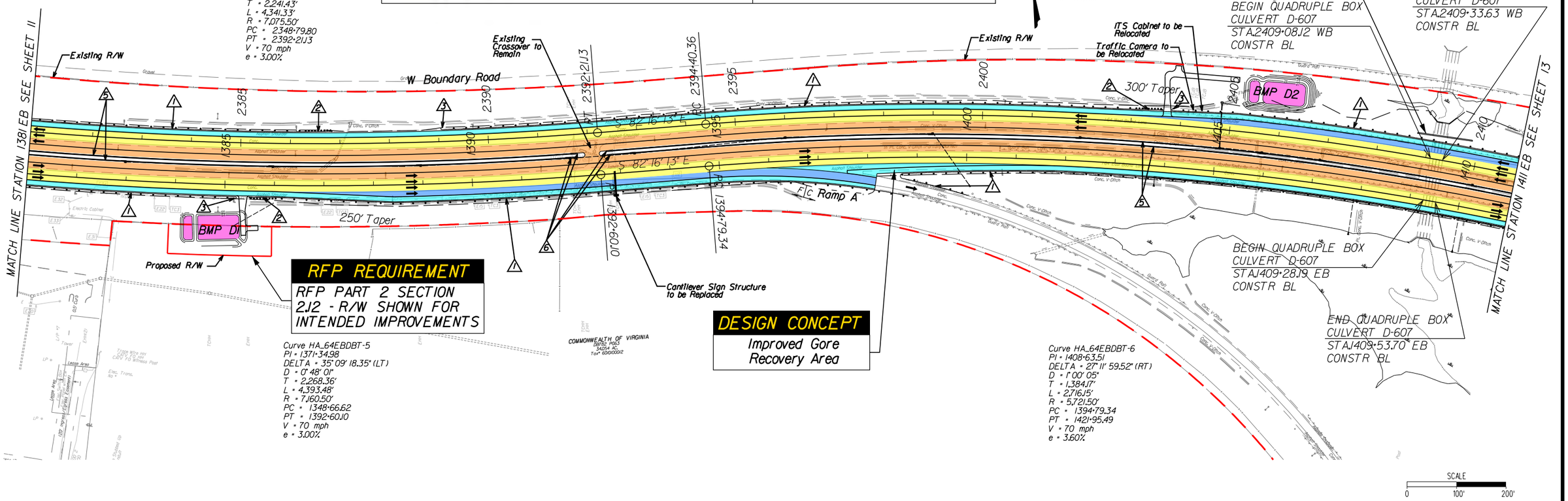
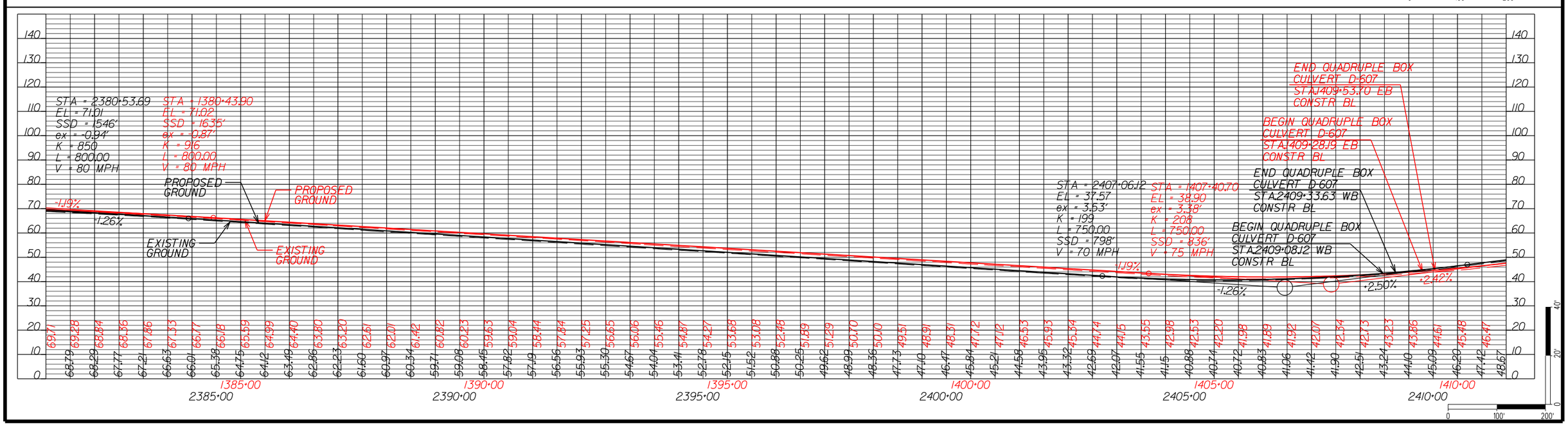
- 4 MB-7F
- 5 IMPACT ATT.
- 6
- WETLAND/ STREAM IMPACTS
- BRIDGES
- SIGHT DISTANCE CLEAR.
- REMOVAL OF PROP. R/W





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS · RINKER DESIGN ASSOCIATES · KCI TECHNOLOGIES

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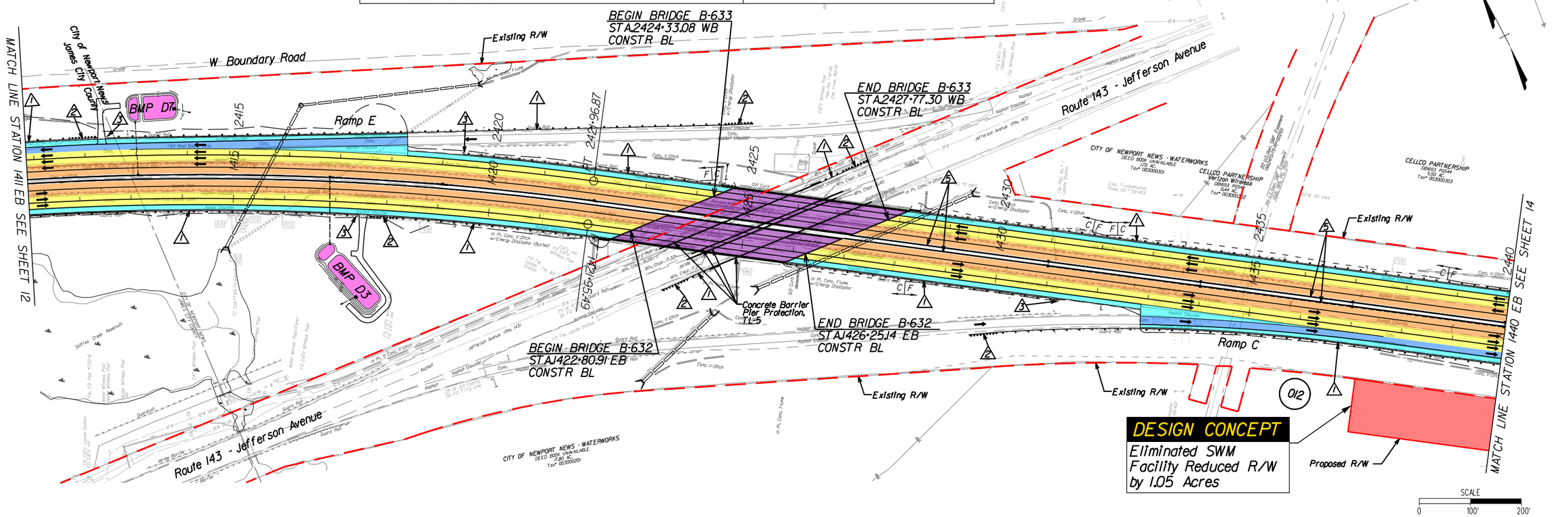
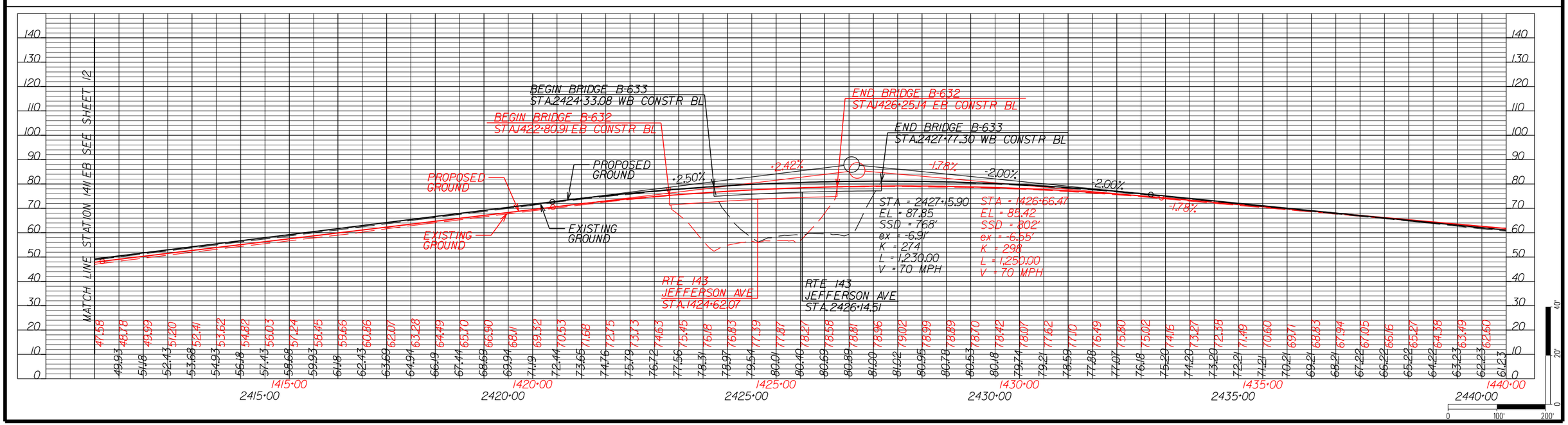
- 6 IMPACT ATT.

STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	13



DESIGN CONCEPT
Eliminated SWM Facility Reduced R/W by 1.05 Acres



TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	14

LEGEND
- PROP. 12' LANE & SHOULDER
- OUTSIDE SHOULDER WIDENING
- RAMP EXTENSIONS
- EX. PAVE. RECONSTR.
- PROP. SWM FACILITY
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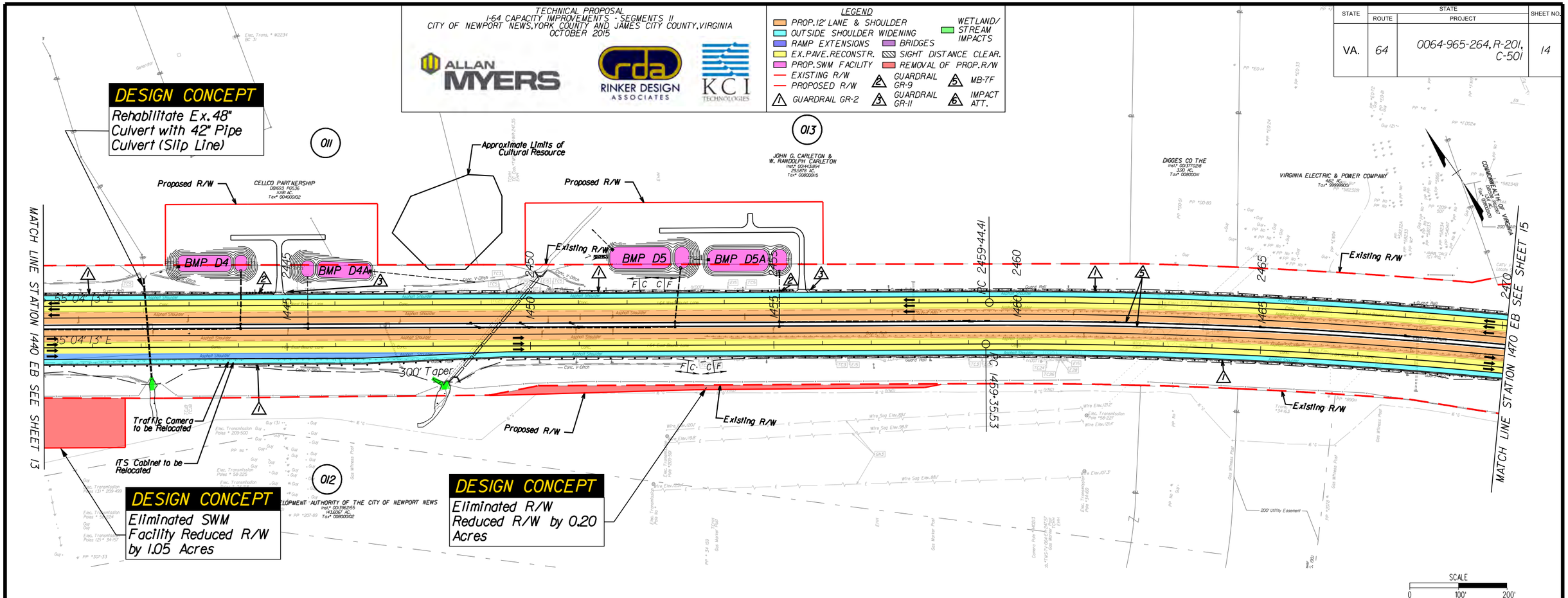
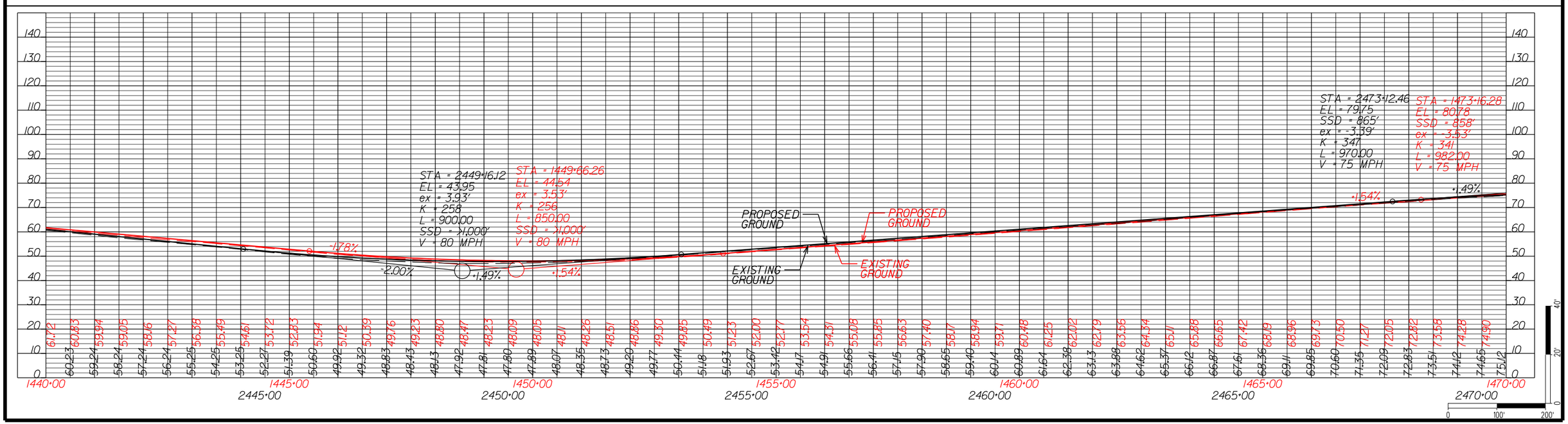
- SIGHT DISTANCE CLEAR.
- REMOVAL OF PROP. R/W
- WETLAND/ STREAM IMPACTS





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS · RINKER DESIGN ASSOCIATES · KCI TECHNOLOGIES

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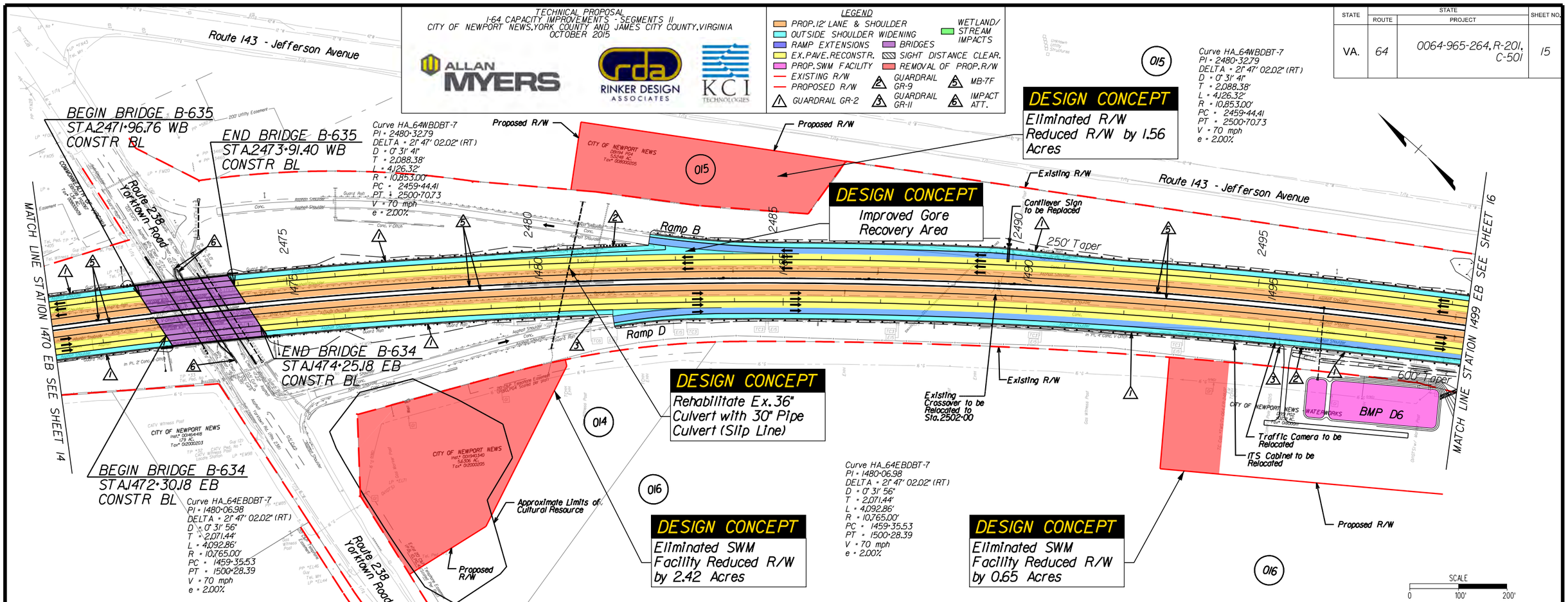
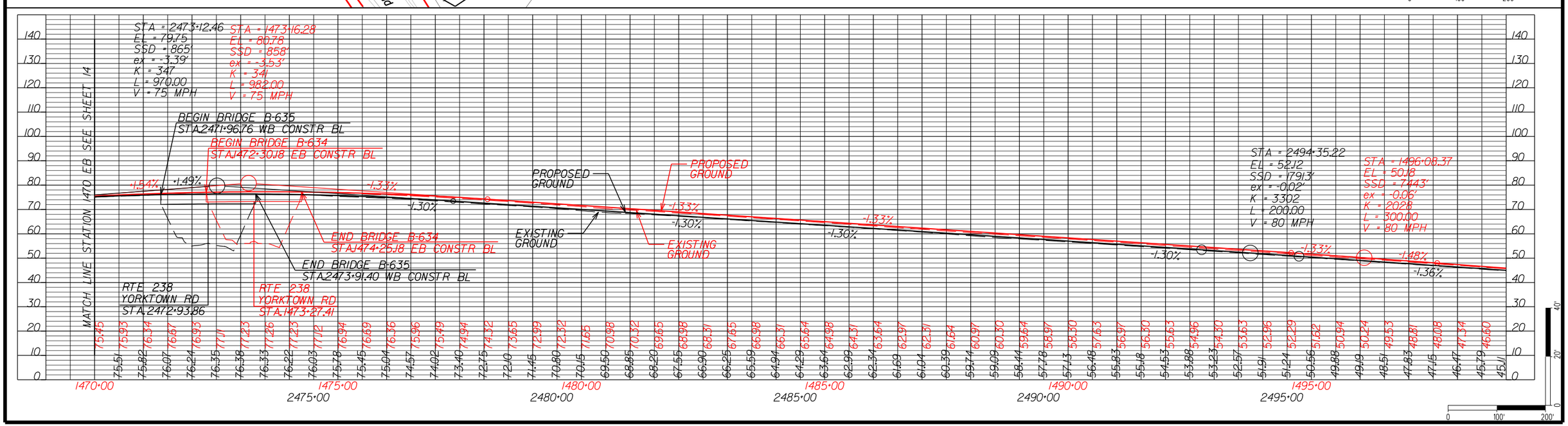
- WETLAND/ STREAM IMPACTS

STATE	ROUTE	PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	15





TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENTS II
CITY OF NEWPORT NEWS, YORK COUNTY AND JAMES CITY COUNTY, VIRGINIA
OCTOBER 2015

ALLAN MYERS
RINKER DESIGN ASSOCIATES
KCI TECHNOLOGIES

LEGEND
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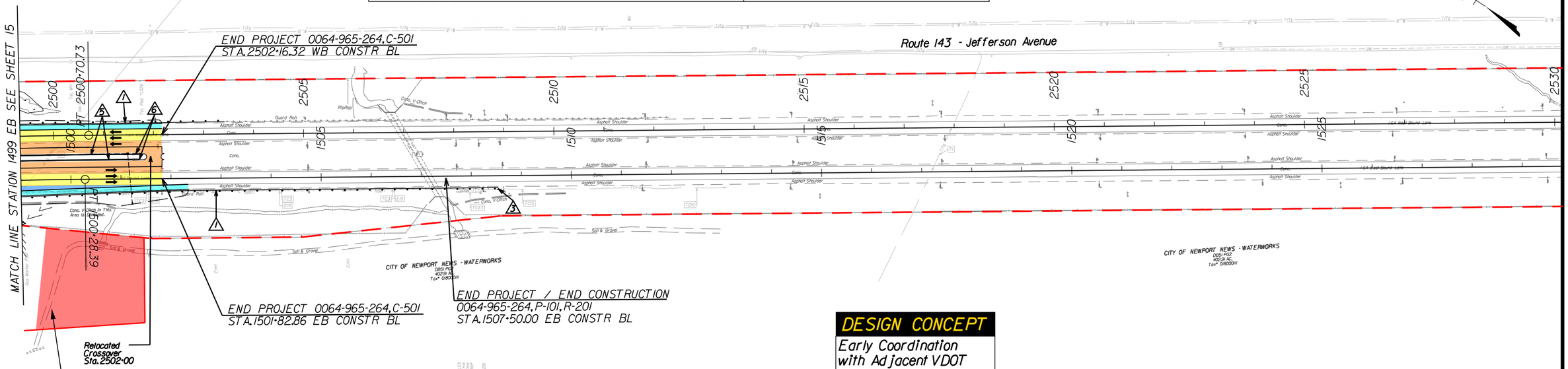
- 6 IMPACT ATT.

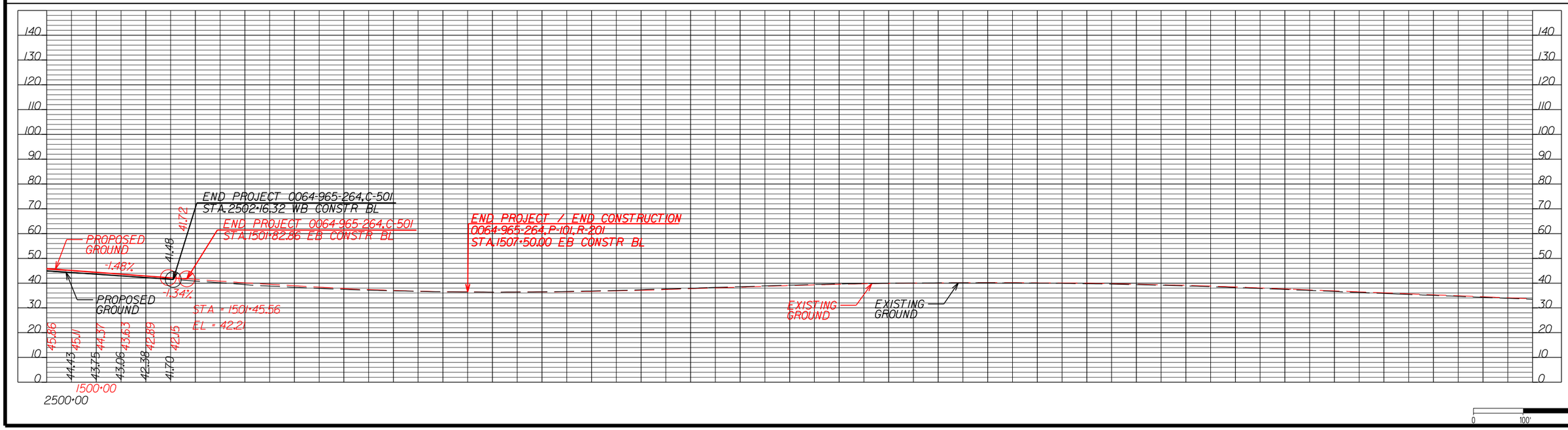
STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	64	0064-965-264, R-201, C-501	16



DESIGN CONCEPT
Eliminated SWM Facility Reduced R/W by 0.89 Acres

DESIGN CONCEPT
Early Coordination with Adjacent VDOT Project I-64 Segment I (UPC 104905)

SCALE
0 100' 200'



Submitted to:

VDOT
Virginia Department of Transportation

4.3.2

CONCEPTUAL STRUCTURAL PLANS

ALLAN MYERS + rda

STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	—	64	0064-965-264, B627, B628	1

NBIS Number: 000000000019828, 000000000019830

UPC No. 106665

Federal Oversight Code: FO

FHWA Construction and Scour Code: X281-SN

DESIGN EXCEPTION(S):

Design waiver for deck slab extensions at the abutments.

GENERAL NOTES:

Width: 76'-0" face-to-face of rails.

Span layout:
EBL: 58'-8" - 76'-4" - 58'-8"
WBL: 54'-8" - 76'-4" - 54'-8"

Capacity: HL-93 loading.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2007.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2008.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

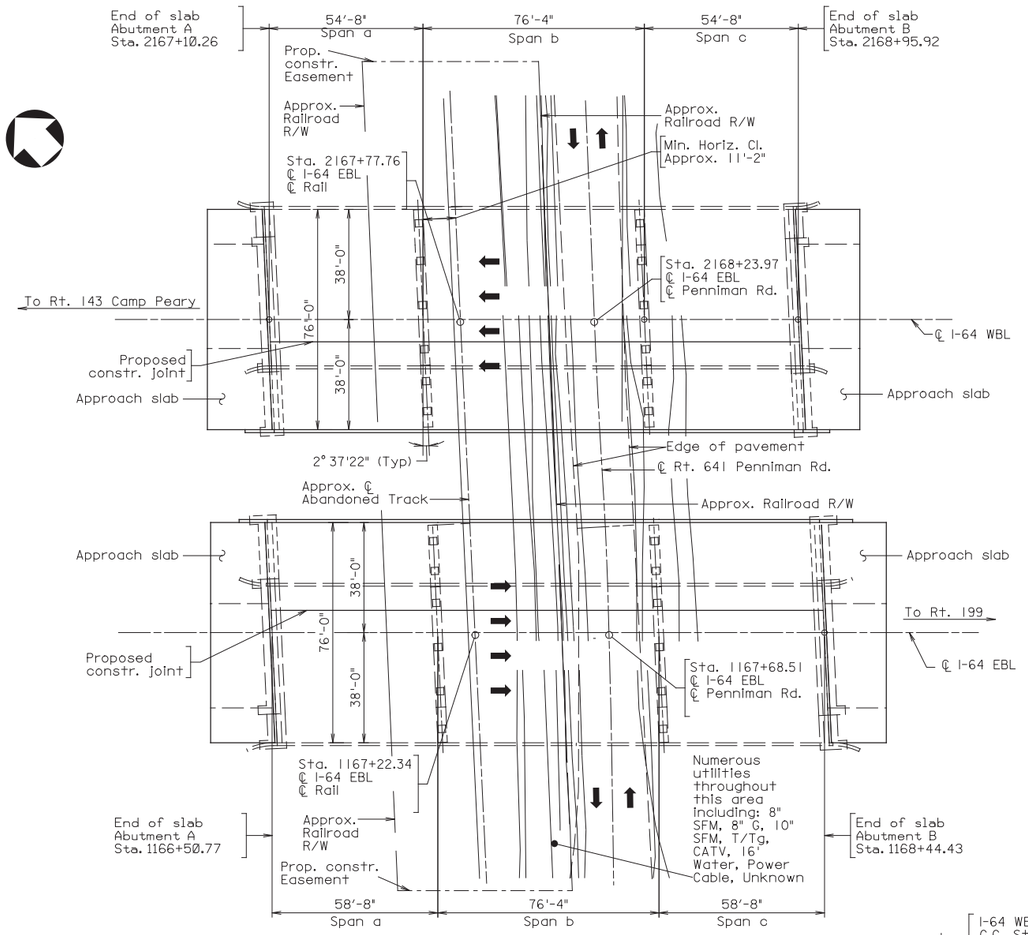
Bridge Nos. of existing bridges are 2000 (EBL) and 2001 (WBL). Plan Nos. are 163-20 and 163-20A.

Corrosion Resistant Reinforcement (CRR) shall be used in accordance with IIM-S&B-81.

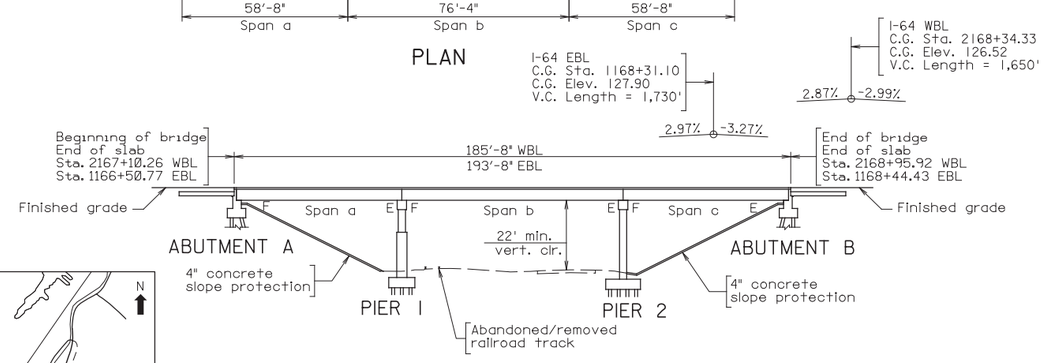
Concrete in superstructure shall be Class A4, concrete in substructure shall be class A3.

SIP forms are permitted only between new beam lines.

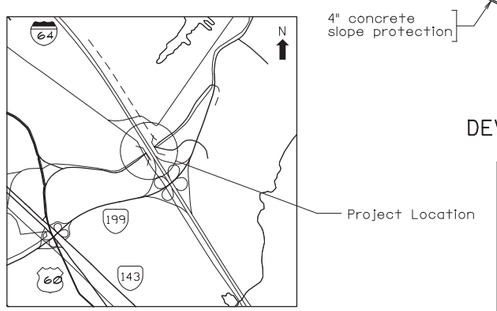
Low permeability concrete shall be used in this project.



PLAN



DEVELOPED SECTION ALONG WIDENING



LOCATION MAP
Not to scale

TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENT II
CITY OF NEWPORT NEWS, YORK AND JAMES CITY COUNTIES, VA
OCTOBER 5, 2015

ALLAN MYERS · RINKER DESIGN ASSOCIATES · KCI TECHNOLOGIES

Scale: 1" = 25'

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
PROPOSED BRIDGE WIDENING ON
RTE. 64 OVER Rt. 641 PENNIMAN RD AND ABANDONED RAILROAD
YORK COUNTY
PROJ. 0064-965-264

11/4/2015 3:40:58 PM
DGN

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
VDOT PROJECT MANAGER
DISTRICT CONSTRUCTION MANAGER

PLANS BY:	Consultant
COORDINATED:	
SUPERVISED:	
DESIGNED:	EA
DRAWN:	DS
CHECKED:	

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.

Recommended for Approval: _____ (Developer's Designee) Date

Approved: _____ Chief Engineer Date

Date: _____

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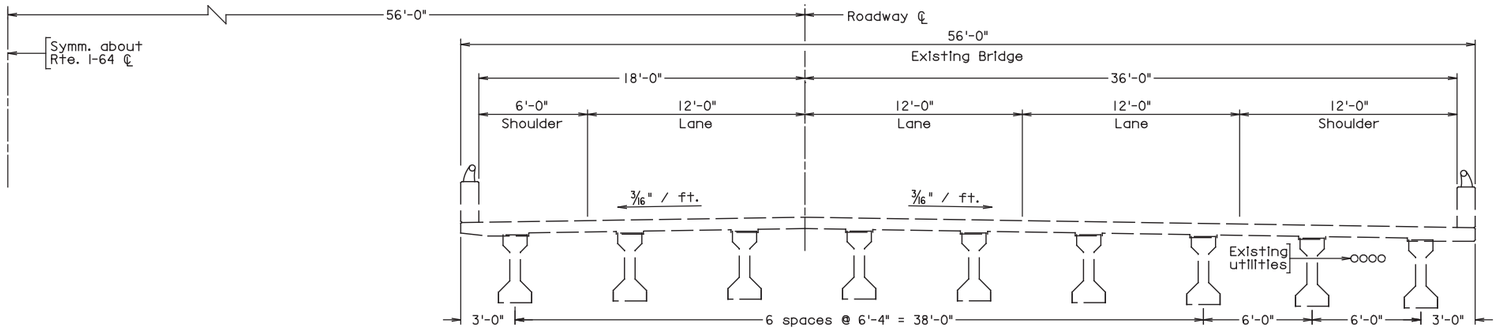
163-20B

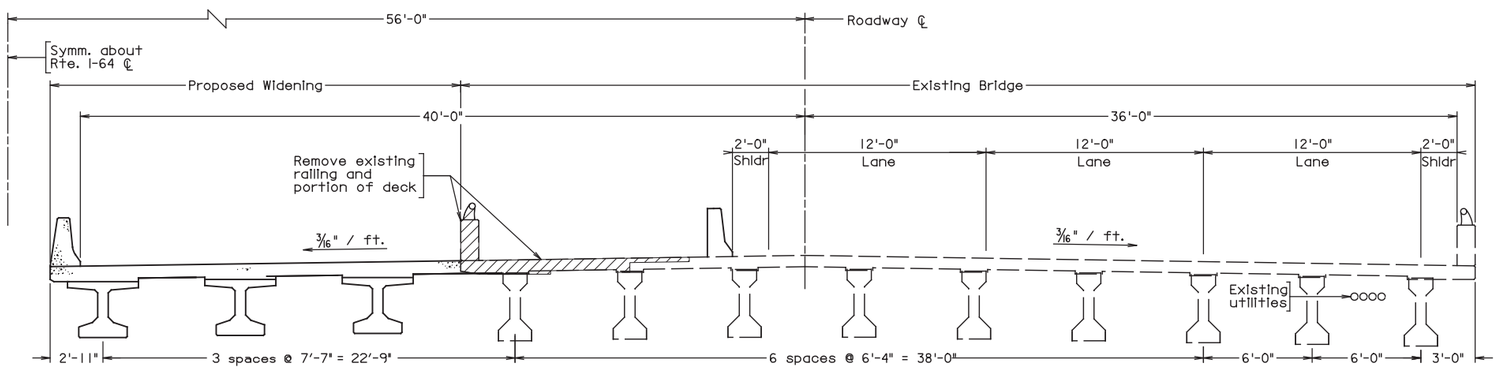
Sheet 1 of 4

STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	————	64	0064-965-264, B627, B628	2



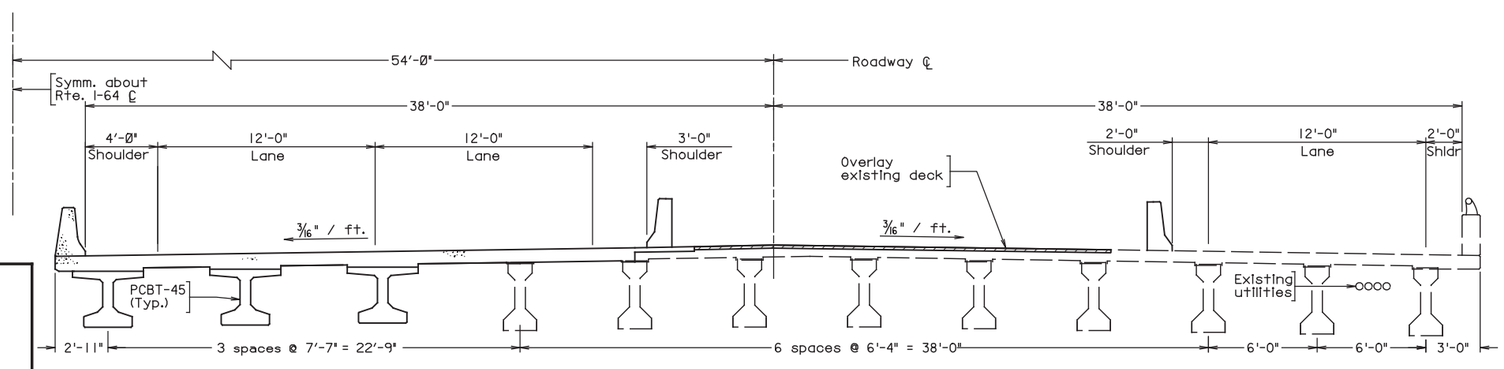
EXISTING BRIDGE - TRANSVERSE SECTION

(EBL shown, WBL opposite hand)



DEMOLITION AND CONSTRUCTION - TRANSVERSE SECTION

(EBL shown, WBL opposite hand)



OVERLAY - TRANSVERSE SECTION STAGE 3

(EBL shown, WBL opposite hand)

Scale: 1/4" = 1'-0"

2015, Commonwealth of Virginia

Notes:

All sections shown looking station-ahead (to the east).

A suggested Sequence of Construction for each bridge is provided below. Actual sequence of construction and maintenance of traffic is to be developed by the Offeror.

Stage 1: Install temporary traffic controls and shift traffic towards the outside of the existing bridge, maintaining two 12'-0" lanes. Remove parapet and portion of deck from median side of existing bridge.

Stage 2: Construct proposed bridge widening. Longitudinal deck construction joint shall be located over an existing beam/girder line.

Stage 3: Shift two lanes of mainline traffic to previously constructed bridge widening. Install temporary traffic controls to maintain single auxiliary lane on existing bridge. Perform deck repairs, close existing joints at piers, extend deck over abutment backwalls, and place deck overlay for portion of existing bridge.

Legend:

Existing structure to be removed.

Tranverse sections showing sequence of construction are continued on the next sheet.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

11/4/2015 3:39:12 PM
DGN

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

TRANSVERSE SECTION (I-64 OVER RTE. 641 PENNIMAN RD AND ABANDONED RAILROAD)

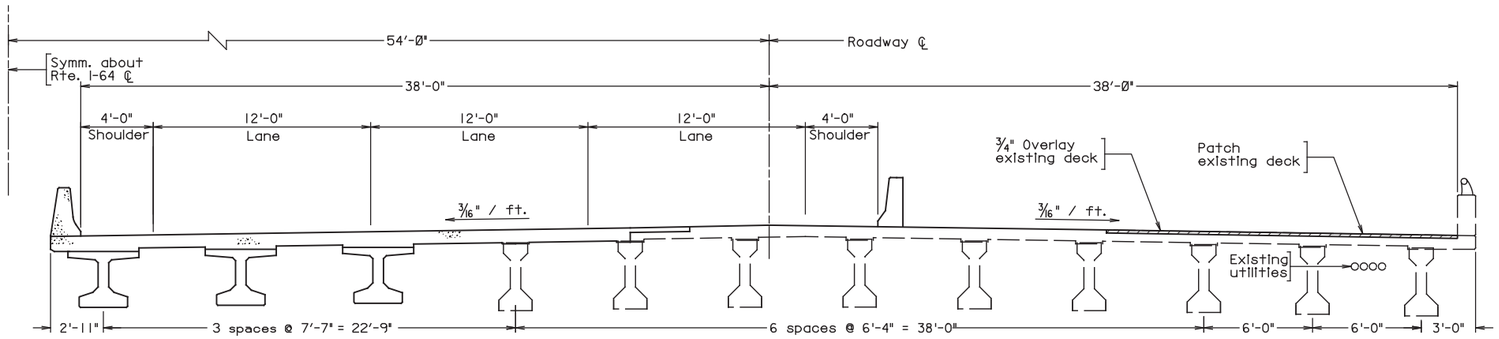
Designed: EA
Drawn: MB
Checked: XXX

Date

Plan No. 163-20B

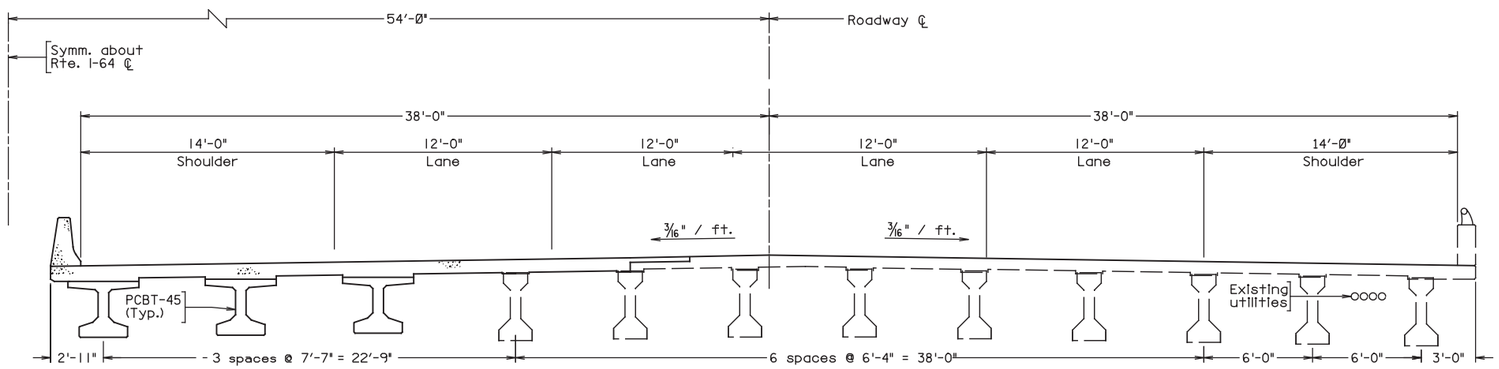
Sheet No. 2 of 4

STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	————	64	0064-965-264, B627, B628	3



OVERLAY - TRANSVERSE SECTION STAGE 4

(EBL shown, WBL opposite hand)



FINAL - TRANSVERSE SECTION

(EBL shown, WBL opposite hand)

Notes:

(continued from previous sheet)

Stage 4: Install temporary traffic controls and shift auxiliary lane to the left side of the bridge with mainline traffic. Perform deck repairs, close existing joints at piers, extend deck over abutment backwalls, and place deck overlay for the remaining portion of the existing bridge.

Stage 5: Remove temporary traffic controls and shift traffic to final alignment.

Legend:

Existing structure to be removed.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

11/4/2015 3:39:14 PM
DGN

Scale: 1/4" = 1'-0"

2015, Commonwealth of Virginia

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

TRANSVERSE SECTION
(I-64 OVER RTE. 641 PENNIMAN RD AND ABANDONED RAILROAD)

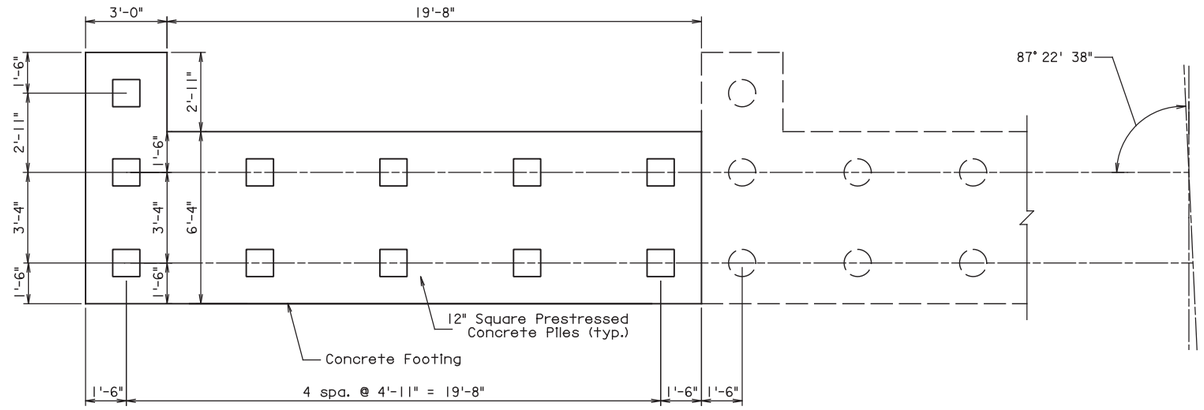
Designed: FA
Drawn: MB
Checked: xxx

Date

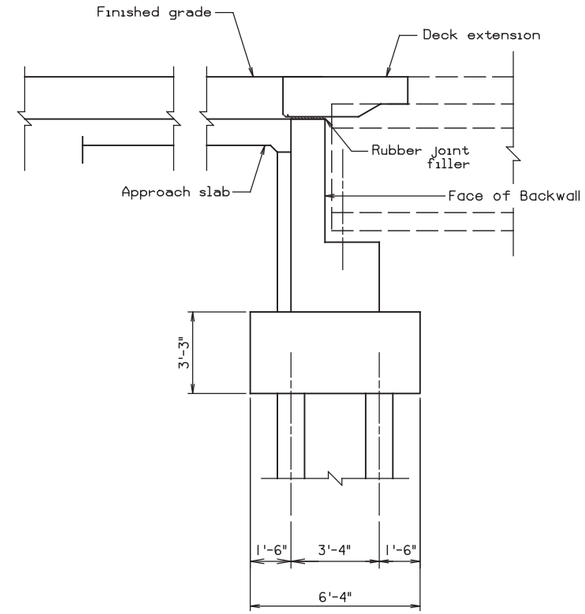
Plan No. 163-20B

Sheet No. 3 of 4

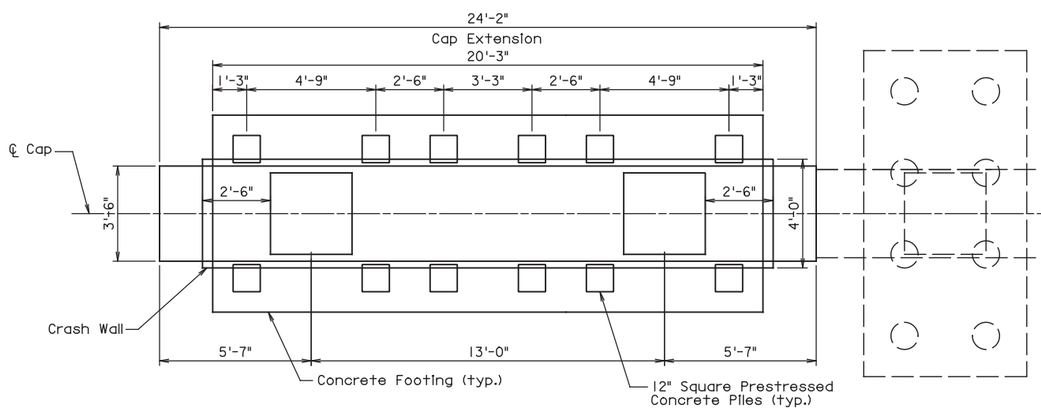
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—		64	0064-965-264 B627, B628	4



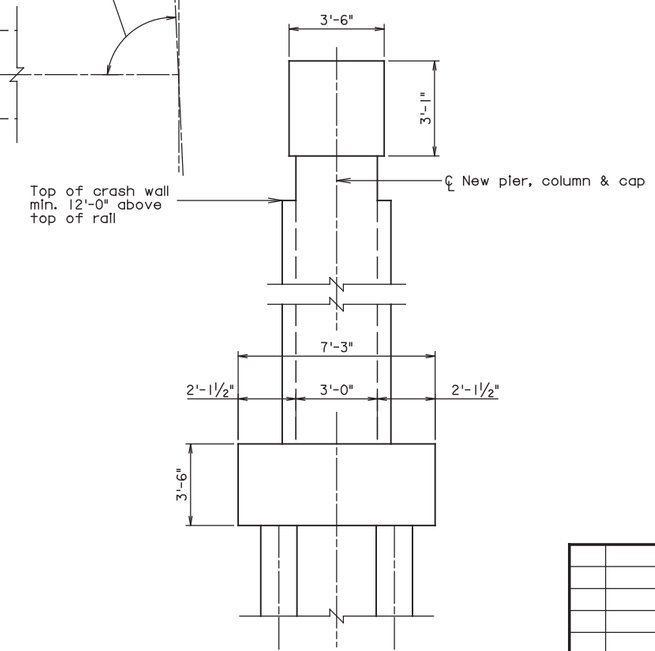
PLAN OF END BENT



ABUTMENT SECTION



PLAN OF INTERIOR BENT



PIER SECTION

Notes:

Existing substructure requires concrete surface patching, crack repairs and concrete slope protection repairs.

Pier 2 protection in accordance with VDOT Standard BPPS-1.

All bearings and bearing assemblies are to be replaced. This includes sole plates, masonry plates, clip angles and anchor bolts. New bearings will be steel reinforced elastomeric bearings.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

11/4/2015 3:39:12 PM
DGN

Scale: (Not to scale)

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

ABUTMENT & PIER (I-64 OVER RR AND RT. 641 PENNIMAN RD.

Designed: .....
Drawn: .....
Checked: .....

Date

Plan No. 163-20B

Sheet No. 4 of 4

STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	—	64	0064-965-264, B629	1

NBIS Number: 000000000019832 - | UPC No. 106665

Federal Oversight Code: FO | FHWA Construction and Scour Code: X231-SN

DESIGN EXCEPTION(S):

None

GENERAL NOTES:

Width: 62'-10½" face-to-face of rails.

Span layout:
EBL: 77'-0½" - 73'-0" - 50'-3" - 54'-3⅞"

Capacity: HL-93 loading.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2007.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2008.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Bridge No. of existing bridge is 2002. Plan Nos. are 163-21, 163-21A, and 163-21B

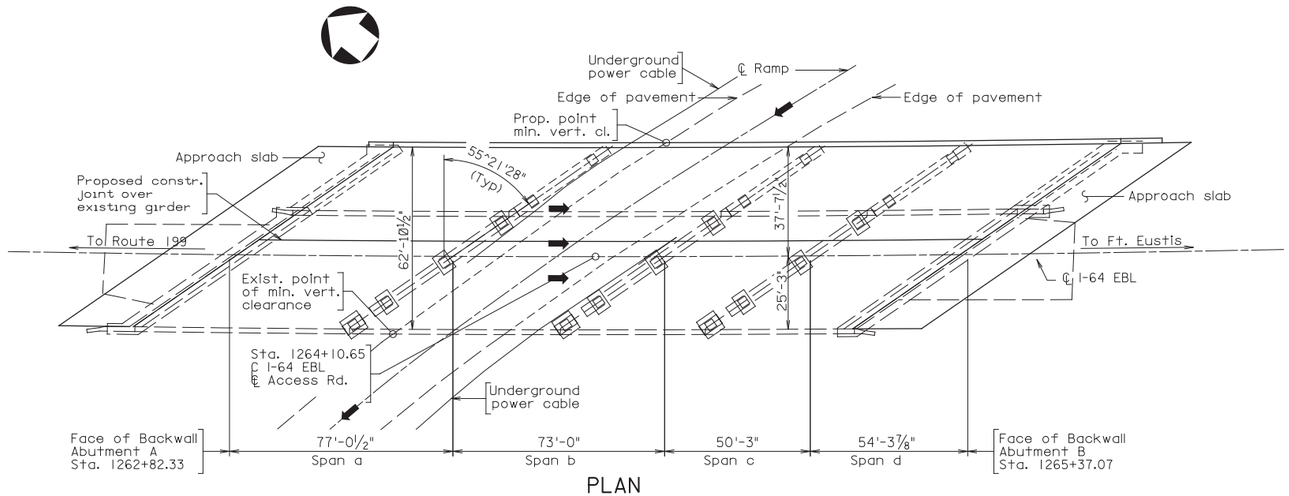
The existing structure is designated a Type B structure in accordance with Sec. 411.

Corrosion Resistant Reinforcement (CRR) shall be used in accordance with IIM-S&B-81.

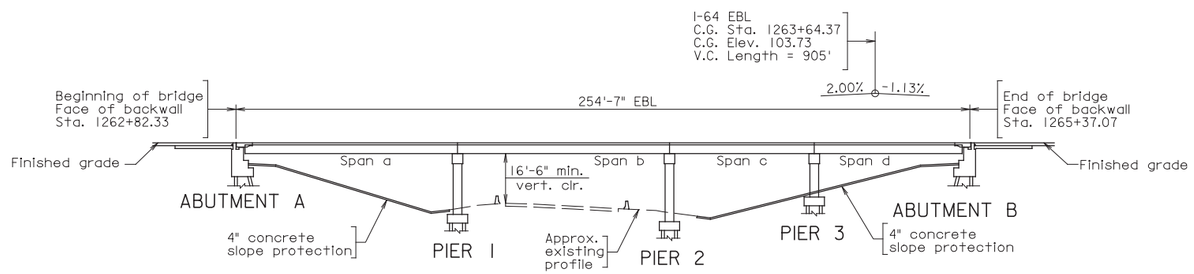
Concrete in superstructure shall be Class A4, concrete in substructure shall be class A3.

SIP forms are permitted only between new beam lines.

Low permeability concrete shall be used in this project.



PLAN



DEVELOPED SECTION ALONG WIDENING

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
PROPOSED BRIDGE WIDENING ON
RTE. 64 EB OVER 64 WB to Rt. 143
YORK COUNTY
PROJ. 0064-965-264

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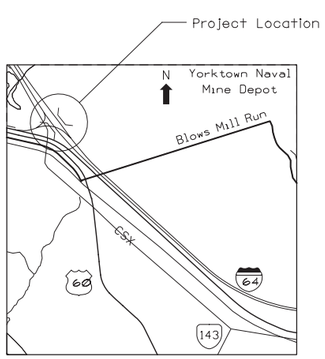
DGN

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
VDOT PROJECT MANAGER
DISTRICT CONSTRUCTION MANAGER



LOCATION MAP
Not to scale

TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENT II
CITY OF NEWPORT NEWS, YORK AND JAMES CITY COUNTIES, VA
OCTOBER 5, 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

Scale: 1" = 25'

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.

PLANS BY:	Consultant
COORDINATED:	
SUPERVISED:	
DESIGNED:	EA
DRAWN:	MB
CHECKED:	

Recommended for Approval: _____ (Developer's Designee) Date

Approved: _____ Chief Engineer Date

Date: _____

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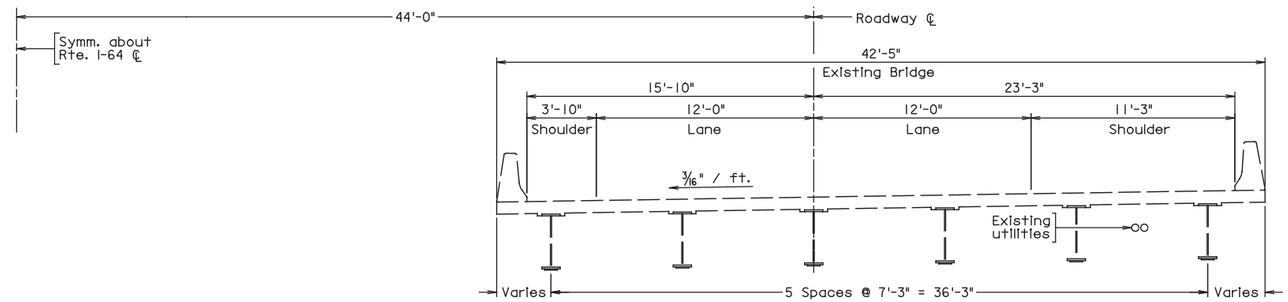
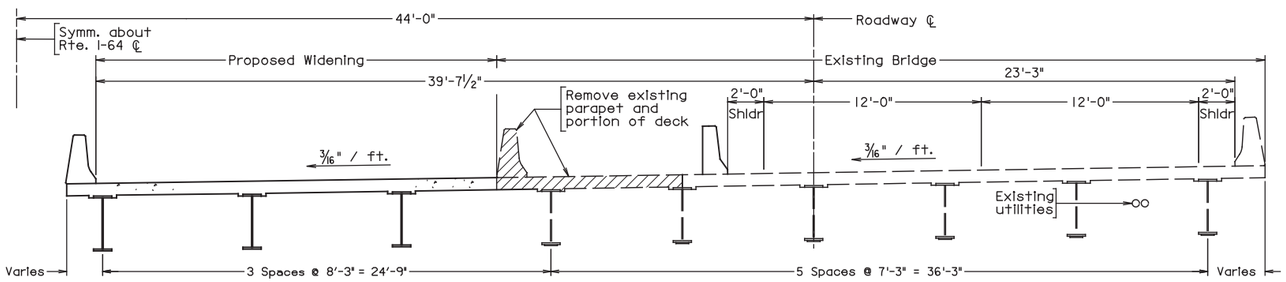
163-21C

Sheet 1 of 3

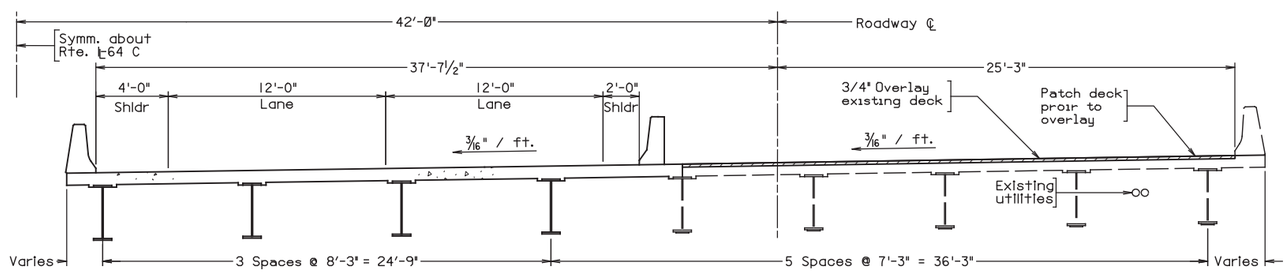
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	————	64	0064-965-264, B629	2



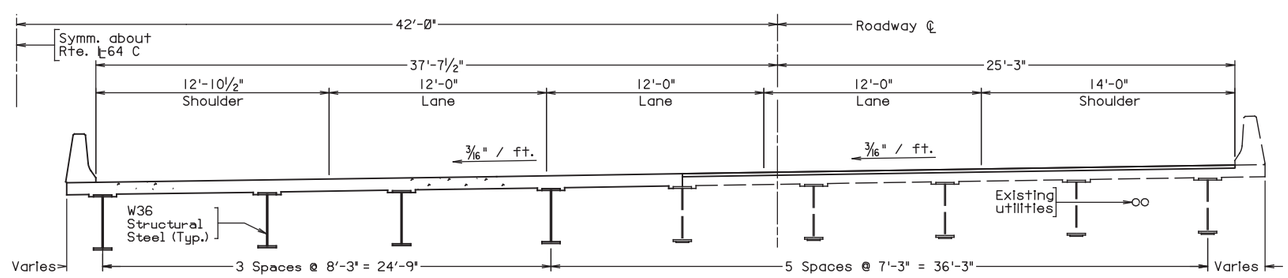
EXISTING BRIDGE - TRANSVERSE SECTION



DEMOLITION AND CONSTRUCTION - TRANSVERSE SECTION



OVERLAY - TRANSVERSE SECTION



FINAL - TRANSVERSE SECTION

Notes:

All sections shown looking station-ahead (to the east).

A suggested Sequence of Construction for each bridge is provided below. Actual sequence of construction and maintenance of traffic is to be developed by the Offeror.

Stage 1: Install temporary traffic controls and shift traffic towards the outside of the existing bridge, maintaining two 12'-0" lanes. Remove parapet and portion of deck from median side of existing bridge.

Stage 2: Construct proposed bridge widening. Longitudinal deck construction joint shall be located over an existing beam/girder line.

Stage 3: Shift traffic to the previously constructed widening, providing two 12'-0" lanes. Perform deck patching as required and place new concrete overlay on existing deck. Close the existing joints over the piers, and retrofit existing abutments

Stage 4: Remove temporary barrier and shift traffic to final alignment.

Existing structural steel category E and E' fatigue prone details shall be retrofitted with Ultrasonic Impact Treatment. Existing structural steel shall be re-coated in accordance with VDOT requirements, including complete removal of the existing coating.

Legend:

Existing structure to be removed.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

9/29/2015 4:46:48 PM
DGN

Scale: ¼" = 1'-0"

2015, Commonwealth of Virginia

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

TRANSVERSE SECTION
(I-64 EB OVER I-64 WB
TO RT. 143)

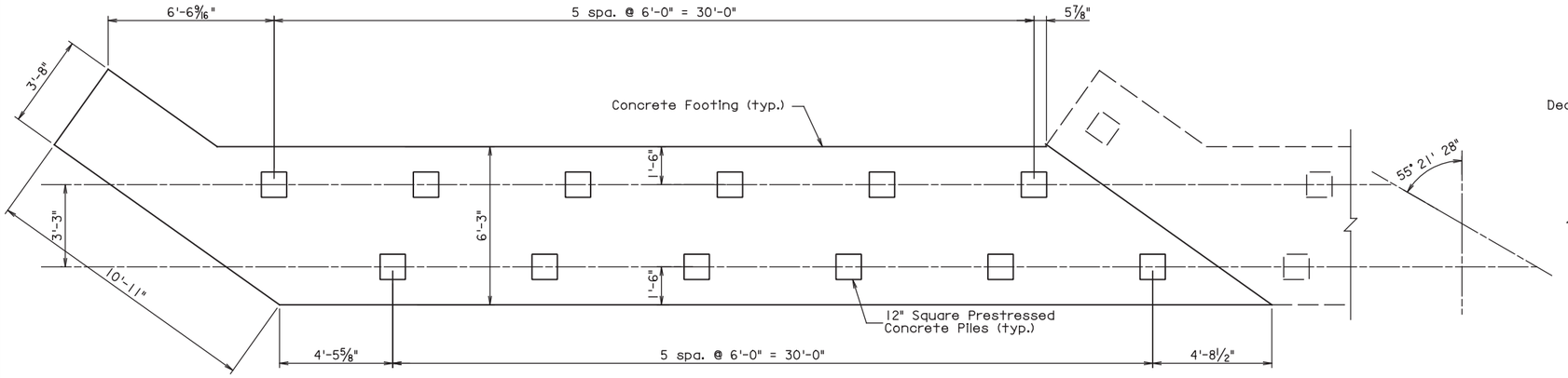
Designed: EA
Drawn: MB
Checked: XXX

Date

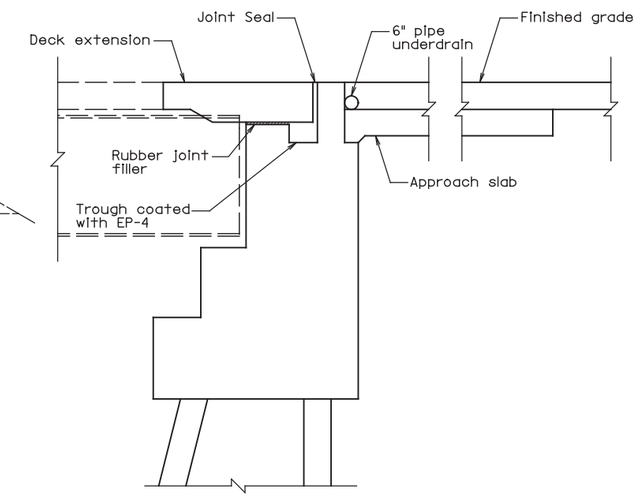
Plan No. 163-21C

Sheet No. 2 of 3

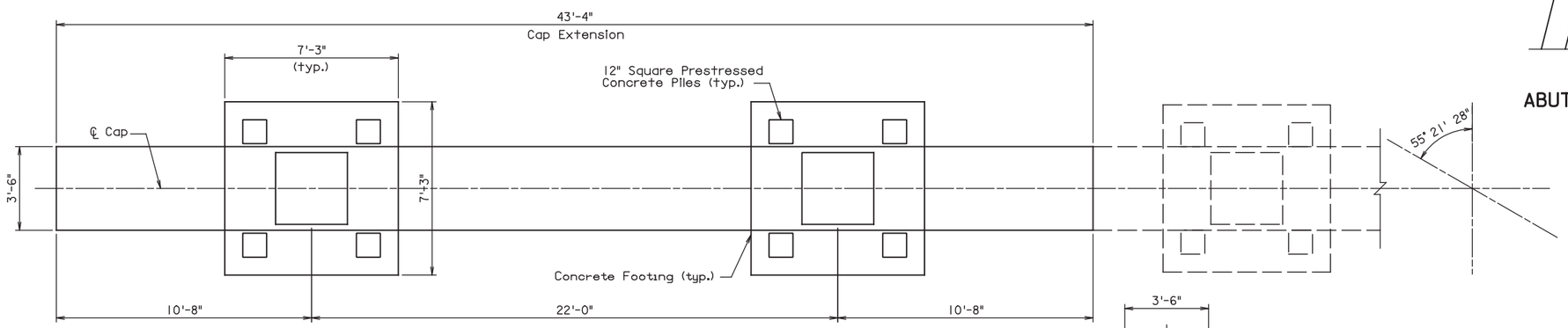
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—		64	0064-965-264 B629	3



PLAN OF ABUTMENT



ABUTMENT SECTION



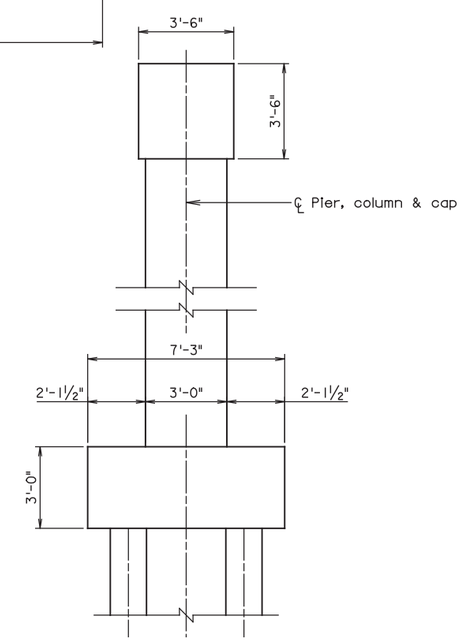
PLAN OF PIER

Notes:

Existing substructure requires concrete surface patching, crack repairs and concrete slope protection repairs.

Pier 1 and 2 protection in accordance with VDOT Standard BPPS-3.

All bearings and bearing assemblies are to be replaced. This includes sole plates, masonry plates, clip angles and anchor bolts. New bearings will be steel reinforced elastomeric bearings.



PIER SECTION

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

Scale: (Not to scale)

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

ABUTMENT & PIER
(I-64 EB OVER 64 WB TO RT. 143)

Designed: .....
Drawn: .....
Checked: .....

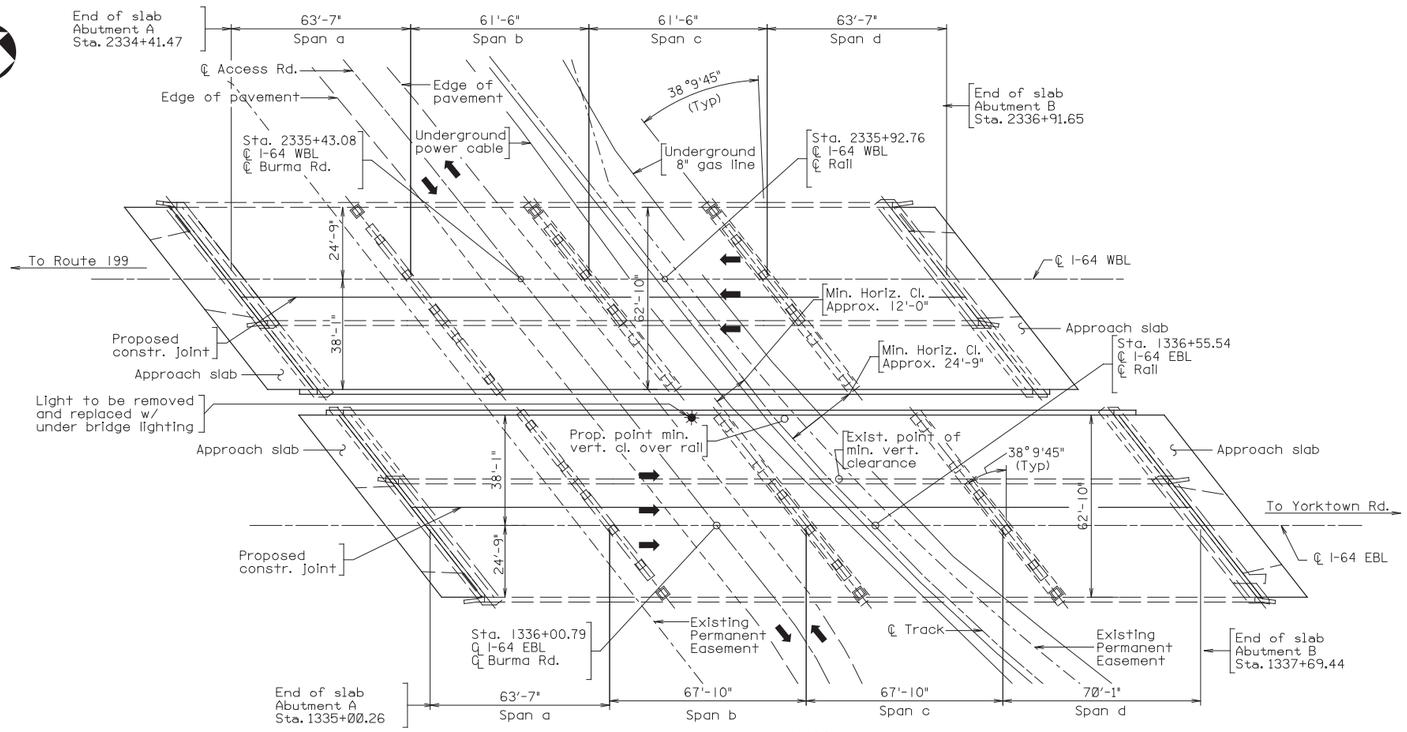
Date

Plan No. 163-21C

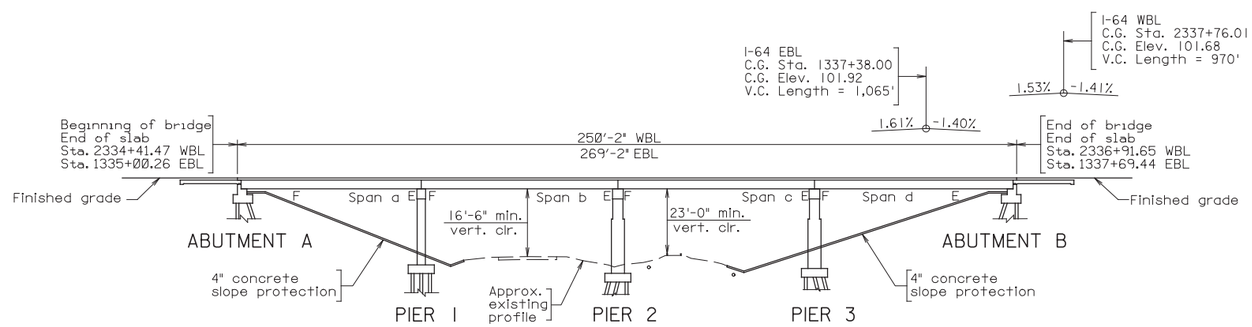
Sheet No. 3 of 3

9/29/2015 4:46:49 PM
DGN

STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	—	64	0064-965-264, B630, B631	1
NBIS Number: 000000000010489 000000000010491			UPC No. 106665		
Federal Oversight Code: FO			FHWA Construction and Scour Code: X531-SN		



PLAN



DEVELOPED SECTION ALONG WIDENING

DESIGN EXCEPTION(S):

Design waiver for deck slab extensions at the abutments.

GENERAL NOTES:

Width: 62'-10" face-to-face of rails.

Span layout:
EBL: 63'-7" - 67'-10" - 67'-10" - 70'-11"
WBL: 63'-7" - 61'-6" - 61'-6" - 63'-7"

Capacity: HL-93 loading.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2007.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2008.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Bridge Nos. of existing bridges are 2000 (EBL) and 2001 (WBL). Plan Nos. are 163-22 and 163-22A.

The existing structure is designated a Type B structure in accordance with Sec. 411.

Corrosion Resistant Reinforcement (CRR) shall be used in accordance with IIM-S&B-81.

Concrete in superstructure shall be Class A4, concrete in substructure shall be class A3.

SIP forms are permitted only between new beam lines.

Low permeability concrete shall be used in this project.

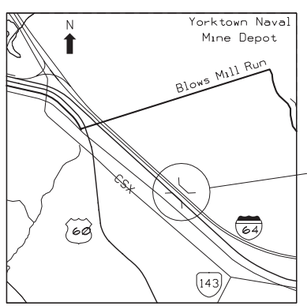
Under bridge lighting required for WB and EB.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

11/4/2015 3:30:58 PM
DGN

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
VDOT PROJECT MANAGER
DISTRICT CONSTRUCTION MANAGER

PLANS BY:	Consultant
COORDINATED:	
SUPERVISED:	
DESIGNED:	EA
DRAWN:	MB
CHECKED:	



LOCATION MAP
Not to scale

TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENT II
CITY OF NEWPORT NEWS, YORK AND JAMES CITY COUNTIES, VA
OCTOBER 5, 2015

ALLAN MYERS · RINKER DESIGN ASSOCIATES · KCI TECHNOLOGIES

Scale: 1" = 25'

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
PROPOSED BRIDGE WIDENING ON
RTE. 64 OVER BURMA ROAD AND RAILROAD
TO NAVAL WEAPONS STATION
JAMES CITY COUNTY
PROJ. 0064-965-264

Recommended for Approval: _____ (Developer's Designee) Date

Approved: _____ Chief Engineer Date

Date: _____

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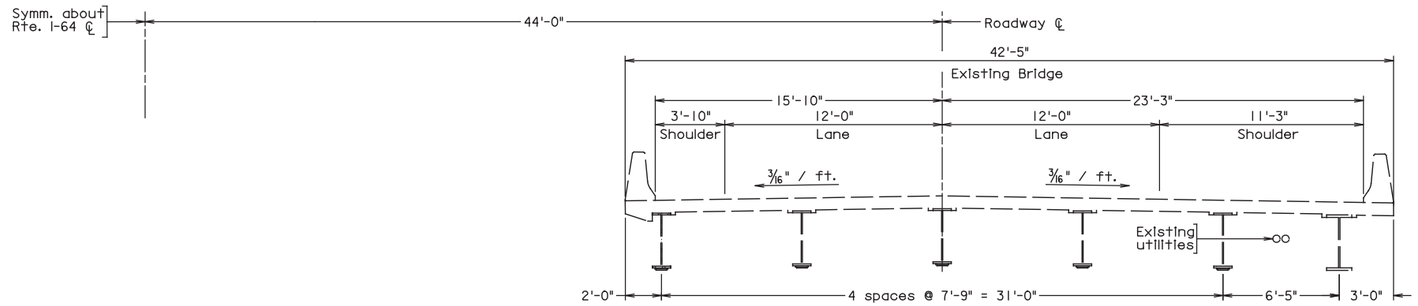
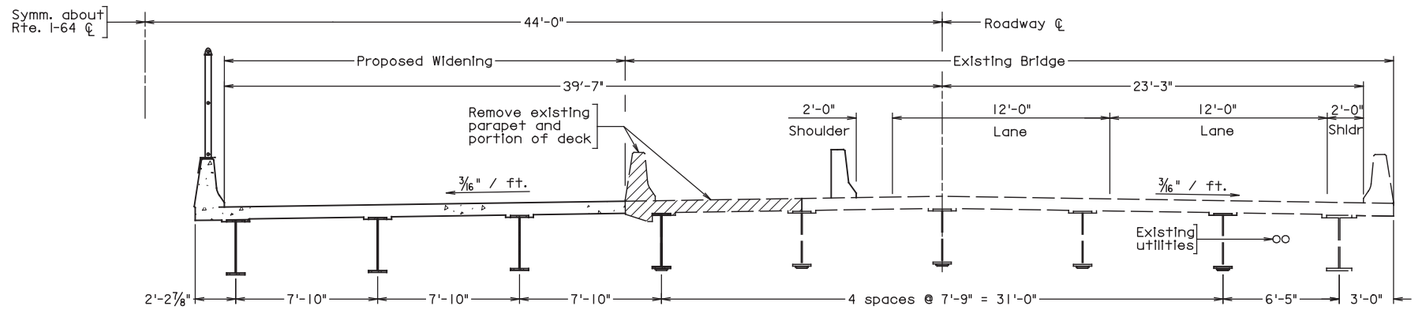
163-22B
Sheet 1 of 3

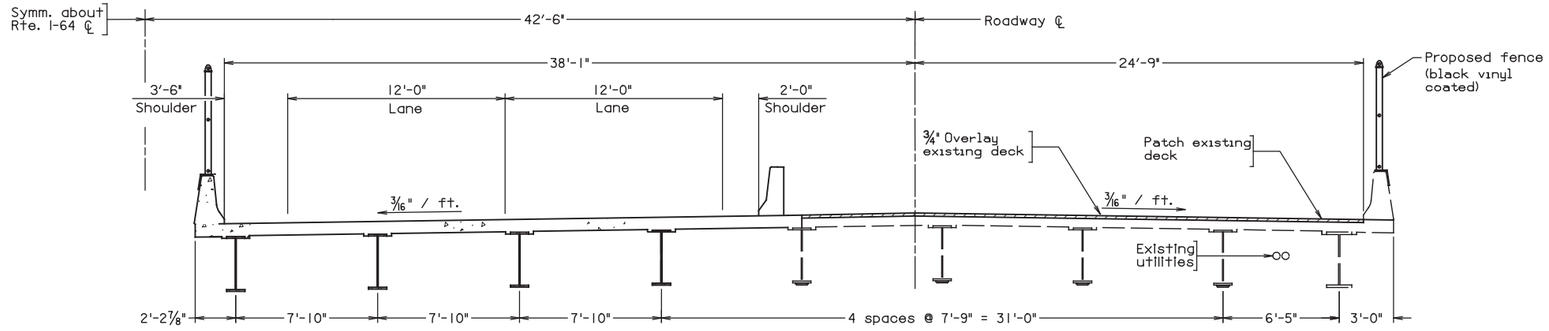
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	————	64	0064-965-264, B630, B631	2



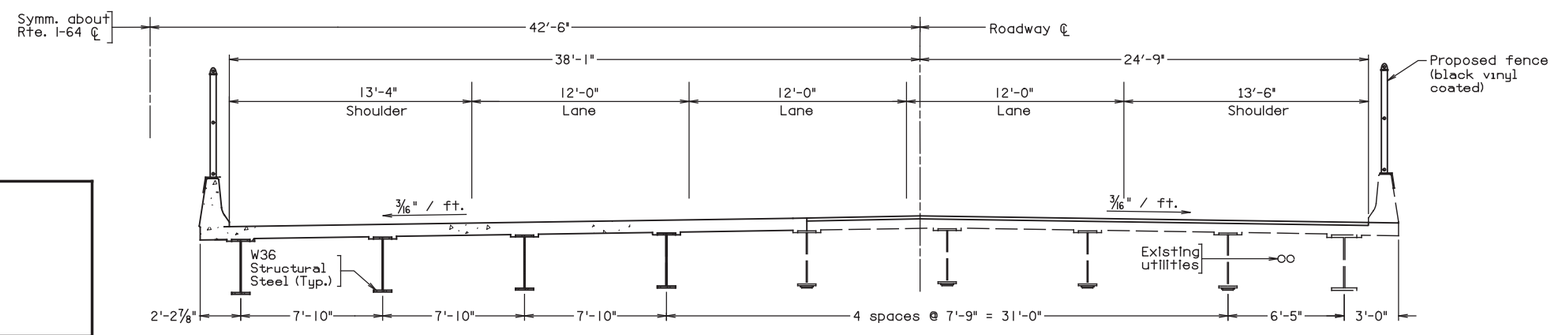
EXISTING BRIDGE - TRANSVERSE SECTION



DEMOLITION AND CONSTRUCTION - TRANSVERSE SECTION



OVERLAY - TRANSVERSE SECTION



FINAL - TRANSVERSE SECTION

Scale: 1/4" = 1'-0"

2015, Commonwealth of Virginia

Notes:

All sections shown looking station-ahead (to the east).

A suggested Sequence of Construction for each bridge is provided below. Actual sequence of construction and maintenance of traffic is to be developed by the Offeror.

Stage 1: Install temporary traffic controls and shift traffic towards the outside of the existing bridge, maintaining two 12'-0" lanes. Remove parapet and portion of deck from median side of existing bridge.

Stage 2: Construct proposed bridge widening. Longitudinal deck construction joint shall be located over an existing beam/girder line.

Stage 3: Shift traffic to the previously constructed widening, providing two 12'-0" lanes. Perform deck patching as required and place new concrete overlay on existing deck. Close the existing joints over the piers, and extend deck slabs over the backwalls. Install pedestrian fence on existing outside parapet.

Stage 4: Remove temporary barrier and shift traffic to final alignment.

Existing Structural Steel beam end repairs required for 10 beam ends WB and 11 beam ends EB. Existing category E and E' fatigue prone details shall be retrofitted with Ultrasonic Impact Treatment. Existing structural steel shall be re-coated in accordance with VDOT requirements, including complete removal of the existing coating.

Legend:

Existing structure to be removed.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

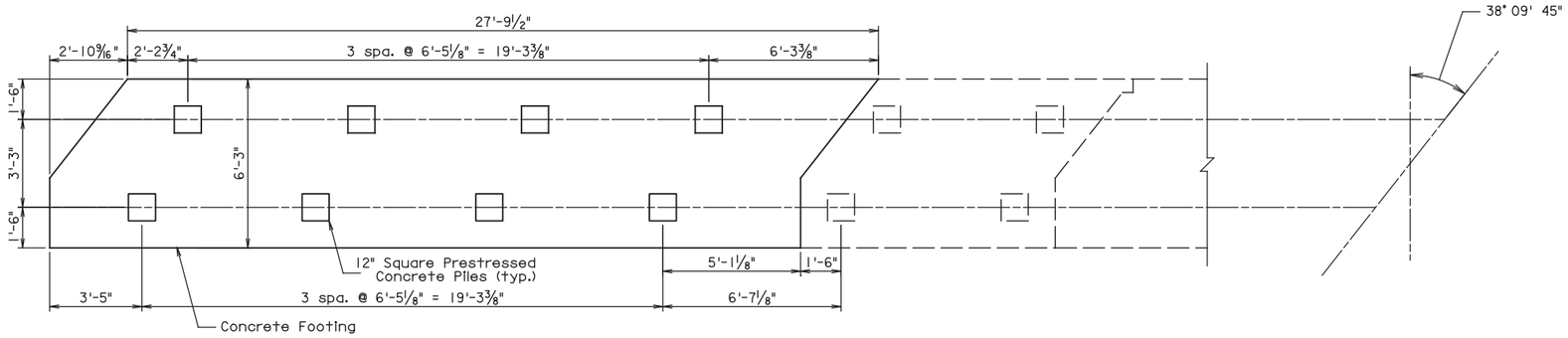
TRANSVERSE SECTION
(I-64 OVER BURMA RD AND RR TO NAVAL WEAPONS STATION)

Designed: FA.....
Drawn: .....MB.....
Checked: .XXX.....

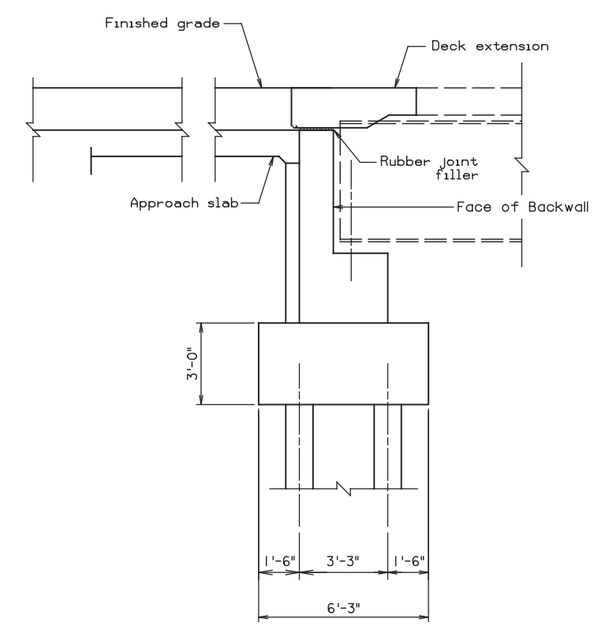
Date	Plan No.	Sheet No.
	163-22B	2 of 3

11/4/2015 3:20:46 PM
DGN

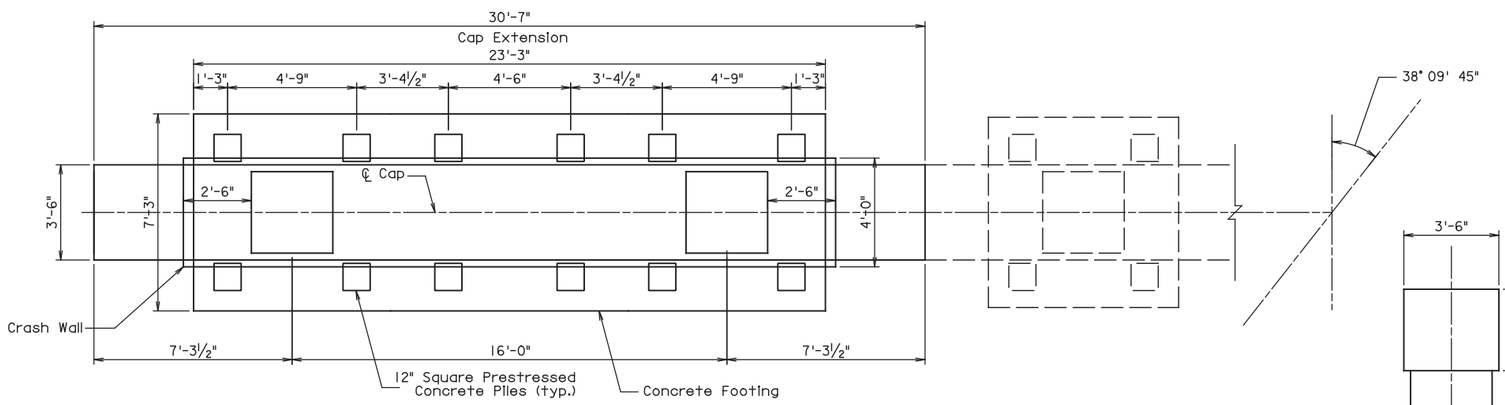
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—		64	0064-965-264 B630, B631	3



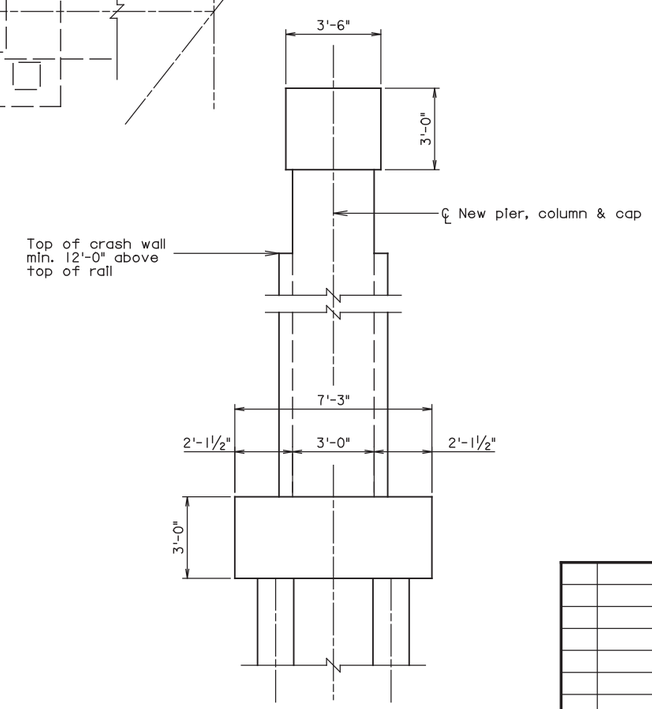
PLAN OF ABUTMENT



ABUTMENT SECTION



PLAN OF PIER



PIER 2 & 3 SECTION

Notes:

Existing substructure requires concrete surface patching, crack repairs and concrete slope protection repairs.

Pier 1 and 2 protection in accordance with VDOT Standard BPPS-3.

All bearings and bearing assemblies are to be replaced. This includes sole plates, masonry plates, clip angles and anchor bolts. New bearings will be steel reinforced elastomeric bearings.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

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DGN

Scale: (Not to scale)

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

ABUTMENT & PIER
(I-64 OVER AC. RD.
AND RR. TO NWS.)

Designed: .....
Drawn: .....
Checked: .....

Date	Plan No.	Sheet No.
	163-22B	3 of 3

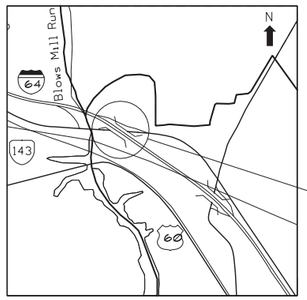
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—		64	0064-965-264, B632, B633	1

NBIS Number: 000000000020698 000000000020700

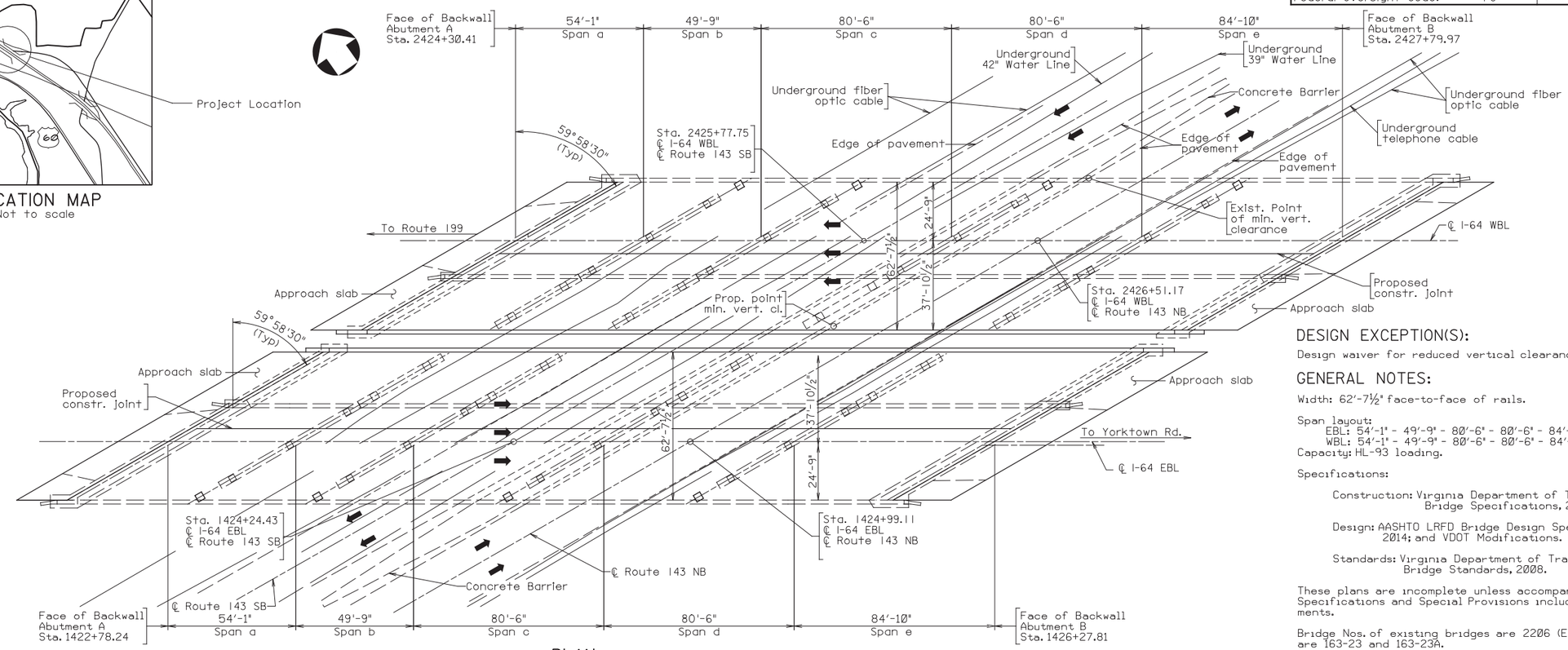
UPC No. 106665

Federal Oversight Code: FO

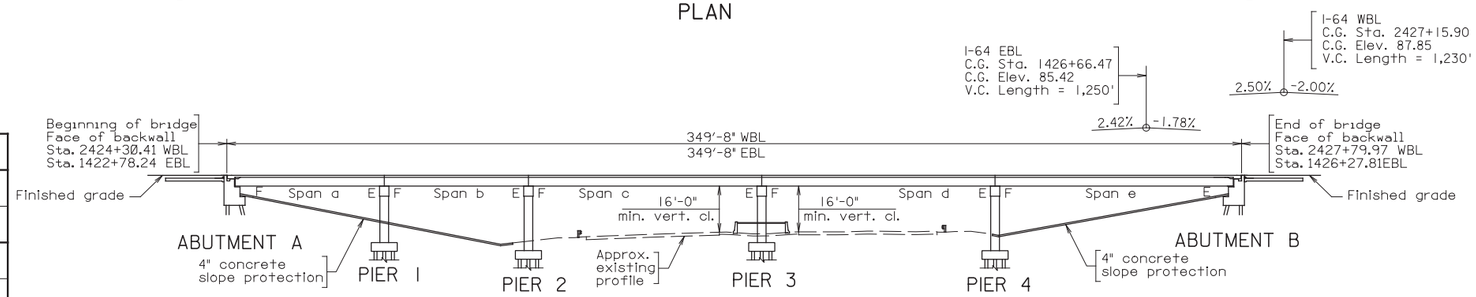
FHWA Construction and Scour Code: X231-SN



LOCATION MAP
Not to scale



PLAN



DEVELOPED SECTION ALONG WIDENING

DESIGN EXCEPTION(S):

Design waiver for reduced vertical clearance.

GENERAL NOTES:

Width: 62'-7½" face-to-face of rails.

Span layout:
EBL: 54'-1" - 49'-9" - 80'-6" - 80'-6" - 84'-10"
WBL: 54'-1" - 49'-9" - 80'-6" - 80'-6" - 84'-10"
Capacity: HL-93 loading.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2007.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2008.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Bridge Nos. of existing bridges are 2206 (EBL) and 2207 (WBL). Plan Nos. are 163-23 and 163-23A.

The existing structure is designated a Type B structure in accordance with Sec. 41I.

Corrosion Resistant Reinforcement (CRR) shall be used in accordance with IIM-S&B-81.

Low permeability concrete shall be used for this project.

SIP forms are permitted only between new beam lines.

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
PROPOSED BRIDGE WIDENING ON
RTE. 64 OVER Rt. 143 / JEFFERSON AVE.
NEWPORT NEWS
PROJ. 0064-965-264

9/29/2015 4:43:17 PM
DGN

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
VDOT PROJECT MANAGER
DISTRICT CONSTRUCTION MANAGER

PLANS BY:	Consultant
COORDINATED:	
SUPERVISED:	
DESIGNED:	EA
DRAWN:	MB
CHECKED:	

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENT II
CITY OF NEWPORT NEWS, YORK AND JAMES CITY COUNTIES, VA
OCTOBER 5, 2015

ALLAN MYERS · RINKER DESIGN ASSOCIATES · KCI TECHNOLOGIES

Scale: 1" = 25'

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.

Recommended for Approval: _____ (Developer's Designee) Date

Approved: _____ Chief Engineer Date

Date: _____

163-23B

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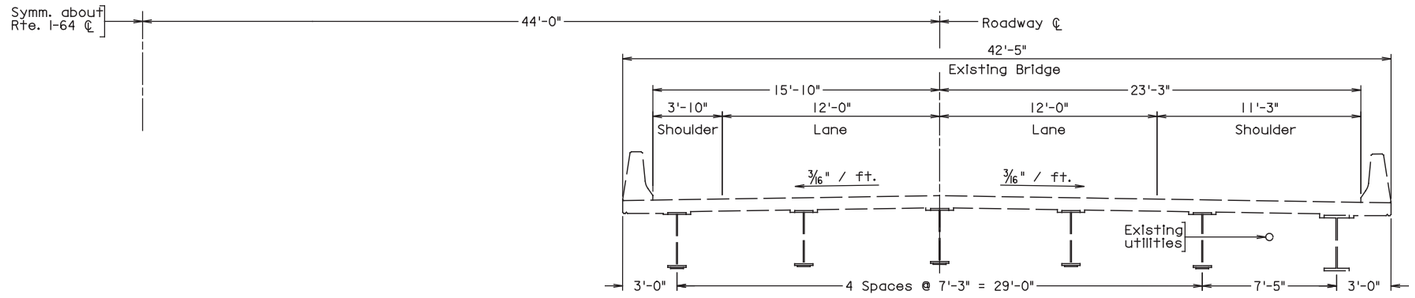
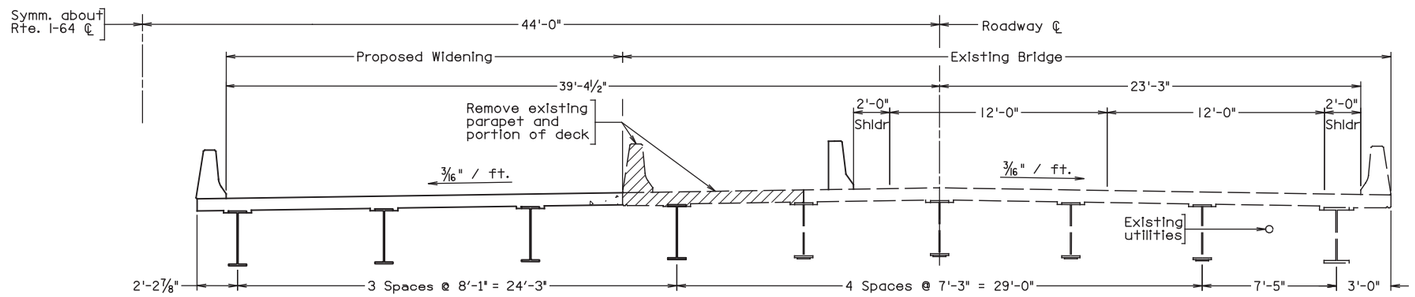
Sheet 1 of 3

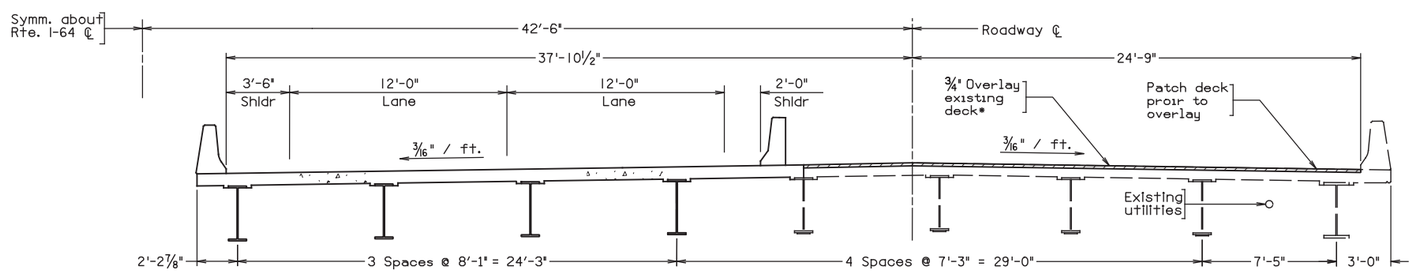
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	————	64	0064-965-264, B632, B633	2



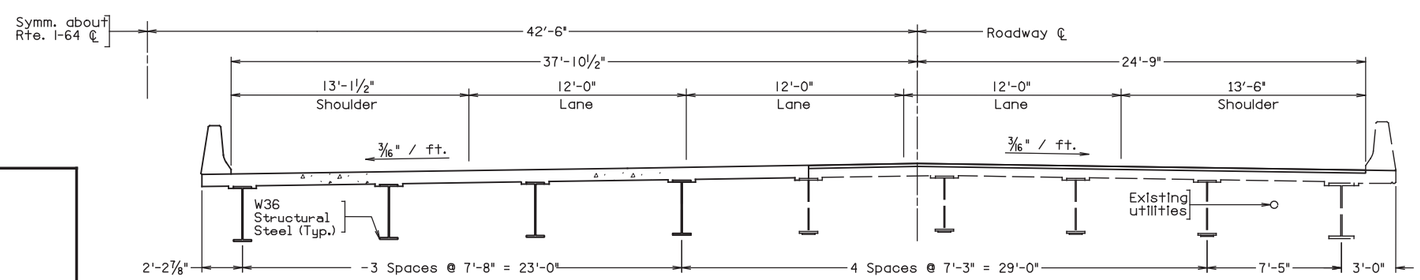
EXISTING BRIDGE - TRANSVERSE SECTION



DEMOLITION AND CONSTRUCTION - TRANSVERSE SECTION



OVERLAY - TRANSVERSE SECTION



FINAL - TRANSVERSE SECTION

Scale: ¼" = 1'-0"

2015, Commonwealth of Virginia

Notes:

All sections shown looking station-ahead (to the east).

A suggested Sequence of Construction for each bridge is provided below. Actual sequence of construction and maintenance of traffic is to be developed by the Offeror.

Stage 1: Install temporary traffic controls and shift traffic towards the outside of the existing bridge, maintaining two 12'-0" lanes. Remove parapet and portion of deck from median side of existing bridge.

Stage 2: Construct proposed bridge widening. Longitudinal deck construction joint shall be located over an existing beam/girder line.

Stage 3: Shift traffic to the previously constructed widening, providing two 12'-0" lanes. Perform deck patching as required and place new concrete overlay on existing deck. Close the existing joints over the piers, and retrofit existing abutments.

Stage 4: Remove temporary barrier and shift traffic to final alignment.

Existing Structural Steel beam end repairs required for 9 beam ends WB and 10 beam ends EB. Existing category E and E' fatigue prone details shall be retrofitted with Ultrasonic Impact Treatment. Existing structural steel shall be re-coated in accordance with VDOT requirements, including complete removal of the existing coating.

Legend:

Existing structure to be removed.

* For span C EB Bridge, top of deck shall be removed to 1" below top mat of reinfocing. New Class A4 concrete to be placed and overlayed w/ Latex modified concrete.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

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DGN

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

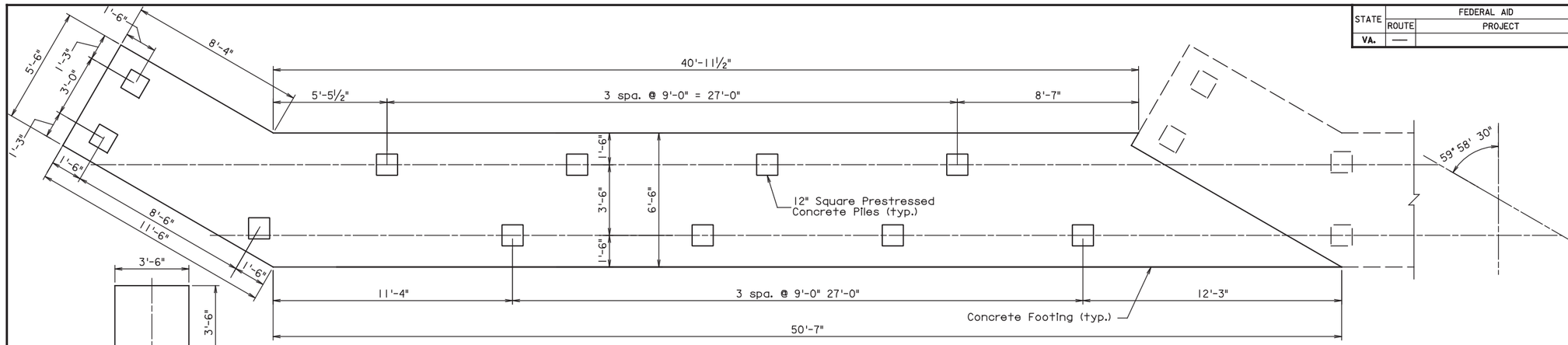
STRUCTURE AND BRIDGE DIVISION

TRANSVERSE SECTION
(I-64 OVER RTE. 143 JEFF AVE.)

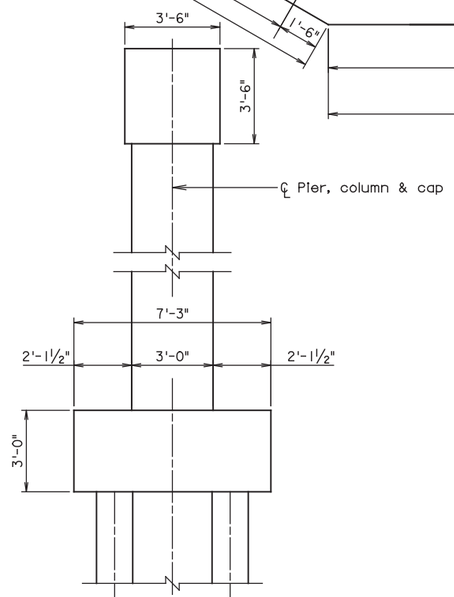
Designed: EA
Drawn: MB
Checked: xxx

Date	Plan No.	Sheet No.
	163-23B	2 of 3

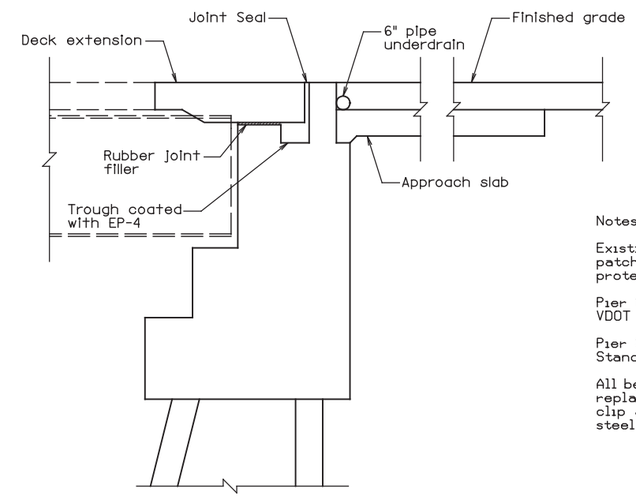
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—		64	0064-965-264 B632, B633	3



PLAN OF ABUTMENT



PIER SECTION



ABUTMENT SECTION

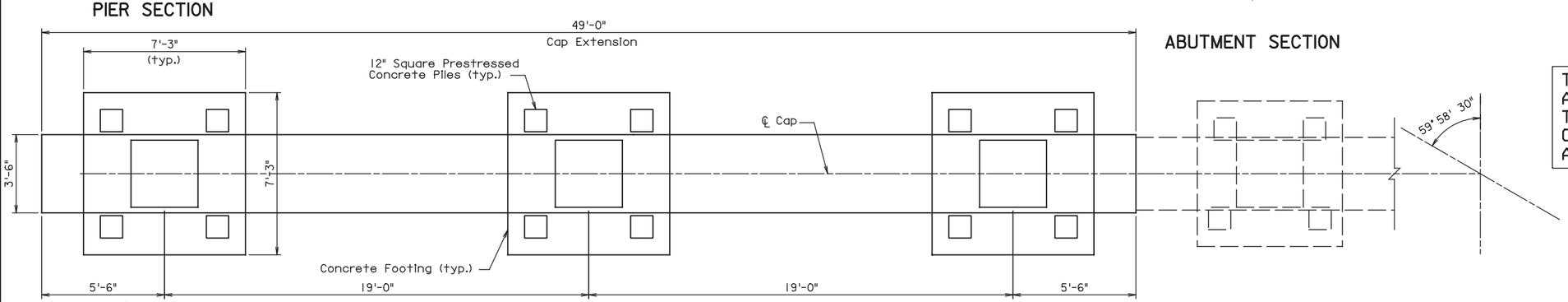
Notes:

Existing substructure requires concrete surface patching, crack repairs and concrete slope protection repairs.

Pier 1 and 3 protection in accordance with VDOT Standard BPPS-3.

Pier 2 protection in accordance with VDOT Standard BPPS-1.

All bearings and bearing assemblies are to be replaced. This includes sole plates, masonry plates, clip angles and anchor bolts. New bearings will be steel reinforced elastomeric bearings.



PLAN OF PIER

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

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DGN

Scale: (Not to scale)

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

ABUTMENT & PIER
(I-64 OVER RT. 143 JEFF.)

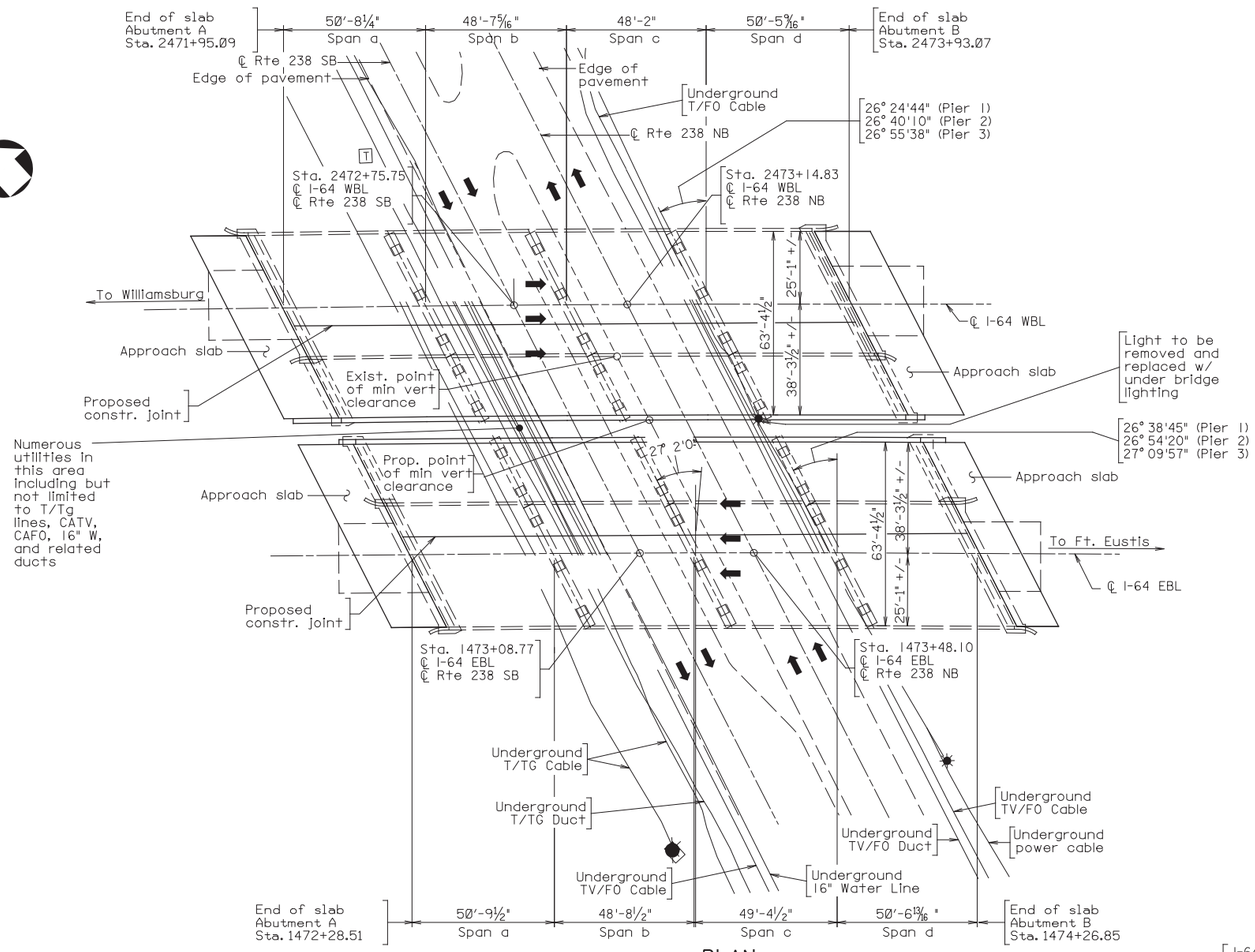
Designed: .....
Drawn: .....
Checked: .....

Date	Plan No.	Sheet No.
	163-23B	3 of 3

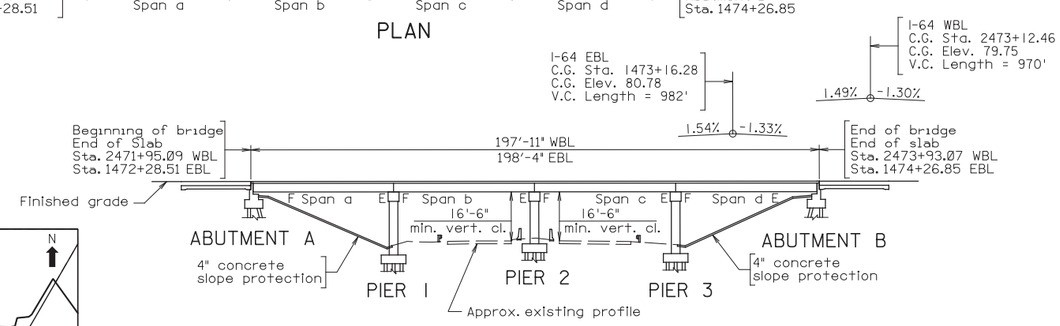
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	—	64	0064-965-264, B634, B635	1

NBIS Number: 000000000020702, 000000000020704 | UPC No. 106665

Federal Oversight Code: FO | FHWA Construction and Scour Code: X281-SN



PLAN



DEVELOPED SECTION ALONG WIDENING

DESIGN EXCEPTION(S):

Design waiver fo deck slab extensions at the abutments.

GENERAL NOTES:

Width: 63'-4½" face-to-face of rails.

Span layout:
EBL: 50'-9½" - 48'-8½" - 48'-9⅞" - 50'-6 13/16"
WBL: 50'-8¼" - 48'-7 5/16" - 48'-8⅝" - 50'-5 9/16"
Capacity: HL-93 loading.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2007.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2008.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Bridge Nos. of existing bridges are 2208 (EBL) and 2209 (WBL). Plan Nos. are 163-24.

Corrosion Resistant Reinforcement (CRR) shall be used in accordance with IIM-S&B-81.

Concrete in superstructure shall be Class A4, concrete in substructure shall be class A3.

SIP forms are permitted only between new beam lines.

Low permeability concrete shall be used in this project.

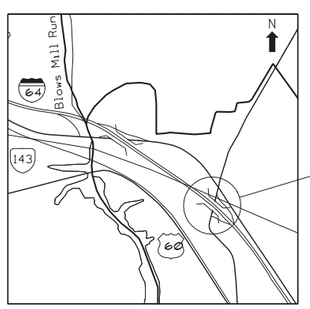
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

VDOT

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE WIDENING ON
RTE. 64 OVER Rt. 238 / YORKTOWN RD.
NEWPORT NEWS
PROJ. 0064-965-264



LOCATION MAP
Not to scale

TECHNICAL PROPOSAL
I-64 CAPACITY IMPROVEMENTS - SEGMENT II
CITY OF NEWPORT NEWS, YORK AND JAMES CITY COUNTIES, VA
OCTOBER 5, 2015

ALLAN MYERS | RINKER DESIGN ASSOCIATES | KCI TECHNOLOGIES

Scale: 1" = 25'

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.

Recommended for Approval: _____ (Developer's Designee) Date

Approved: _____ Chief Engineer Date

Date: _____

163-24A

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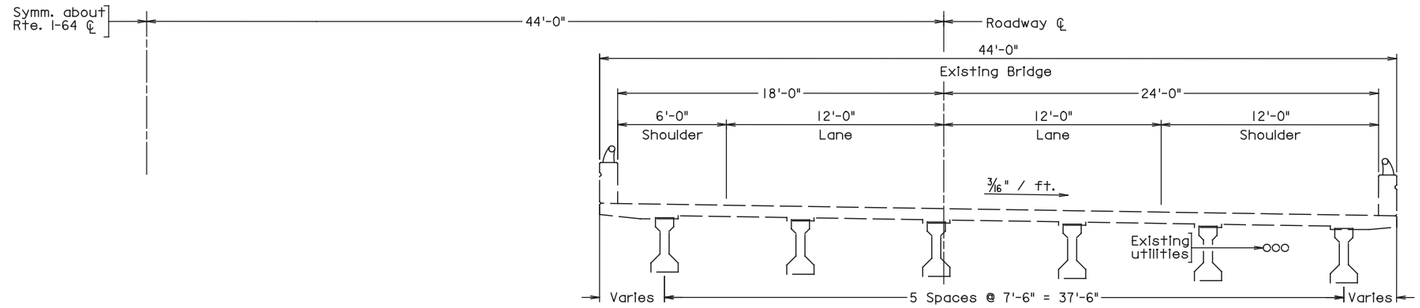
Sheet 1 of 3

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
VDOT PROJECT MANAGER
DISTRICT CONSTRUCTION MANAGER

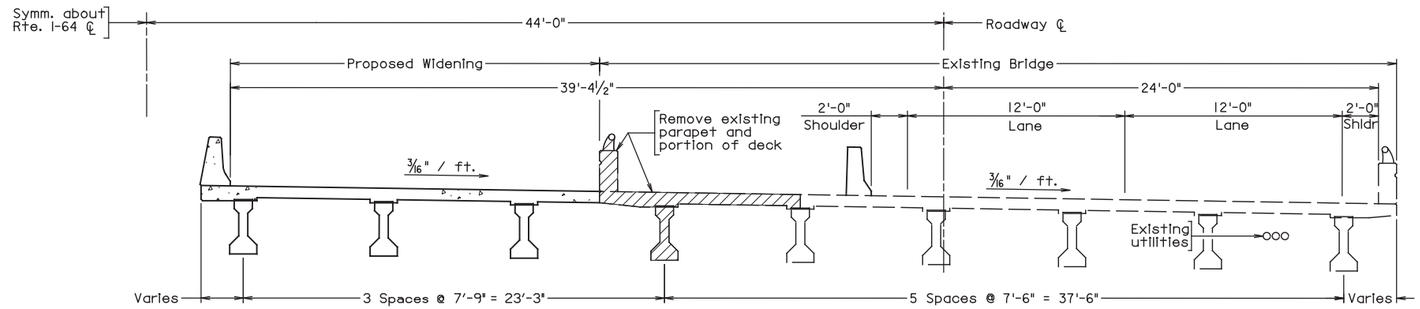
PLANS BY:	Consultant
COORDINATED:	
SUPERVISED:	
DESIGNED:	EA
DRAWN:	MB
CHECKED:	

11/4/2015 3:45:38 PM
DGN

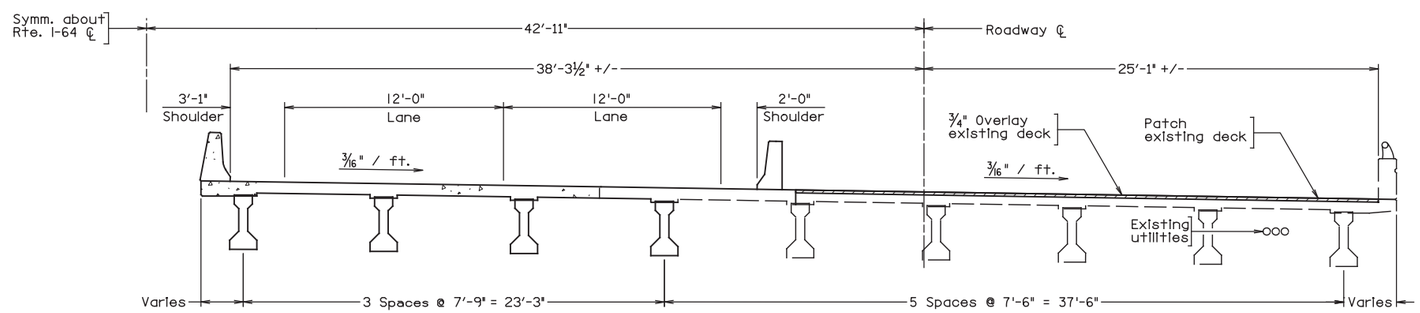
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	————	64	0064-965-264, B634, B635	2



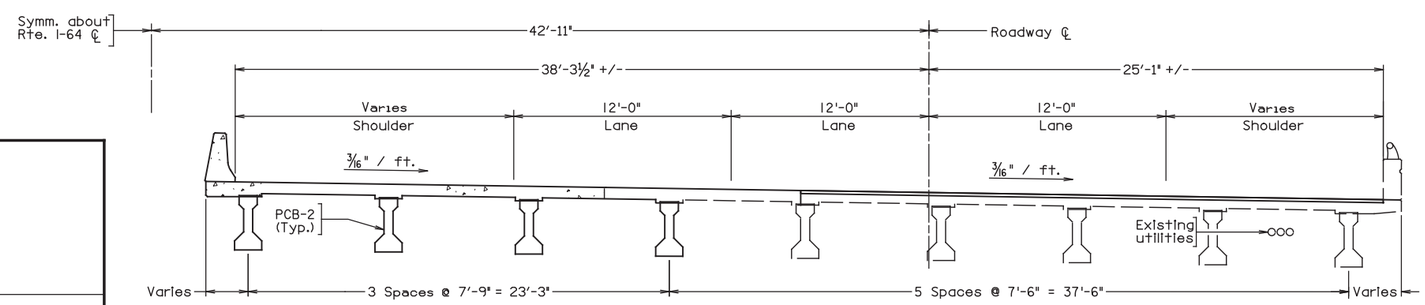
EXISTING BRIDGE - TRANSVERSE SECTION



DEMOLITION AND CONSTRUCTION - TRANSVERSE SECTION



OVERLAY - TRANSVERSE SECTION



FINAL - TRANSVERSE SECTION

Scale: ¼" = 1'-0"

2015, Commonwealth of Virginia

Notes:

All sections shown looking station-ahead (to the east).

A suggested Sequence of Construction for each bridge is provided below. Actual sequence of construction and maintenance of traffic is to be developed by the Offeror.

Stage 1: Install temporary traffic controls and shift traffic towards the outside of the existing bridge, maintaining two 12'-0" lanes. Remove parapet and portion of deck from median side of existing bridge.

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Stage 3: Shift traffic to the previously constructed widening, providing two 12'-0" lanes. Perform deck patching as required and place new concrete overlay on existing deck. Close the existing joints over the piers, and extend deck slabs over the backwalls.

Stage 4: Remove temporary barrier and shift traffic to final alignment.

Legend:

Existing structure to be removed.

Existing prestressed concrete beams require beam repairs. West bound has 84 SF and East bound has 39 SF.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

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DGN

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

TRANSVERSE SECTION
(I-64 OVER RTE. 238
YORKTOWN RD.)

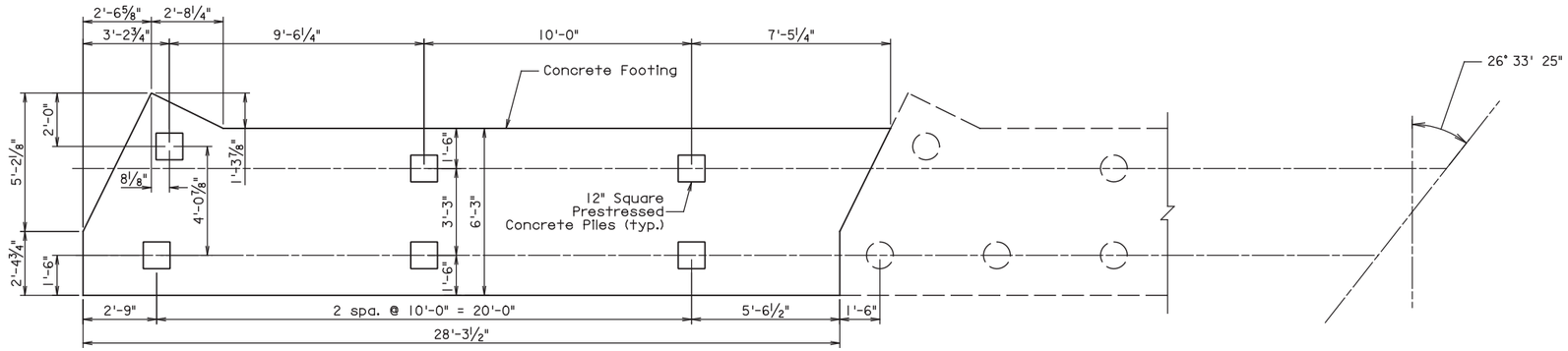
Designed: FA.....
Drawn: .....MG.....
Checked: .XXX.....

Date

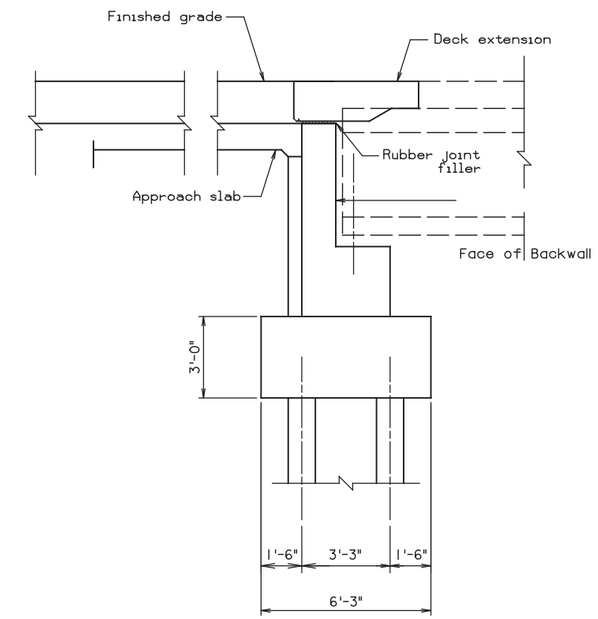
Plan No. 163-24A

Sheet No. 2 of 3

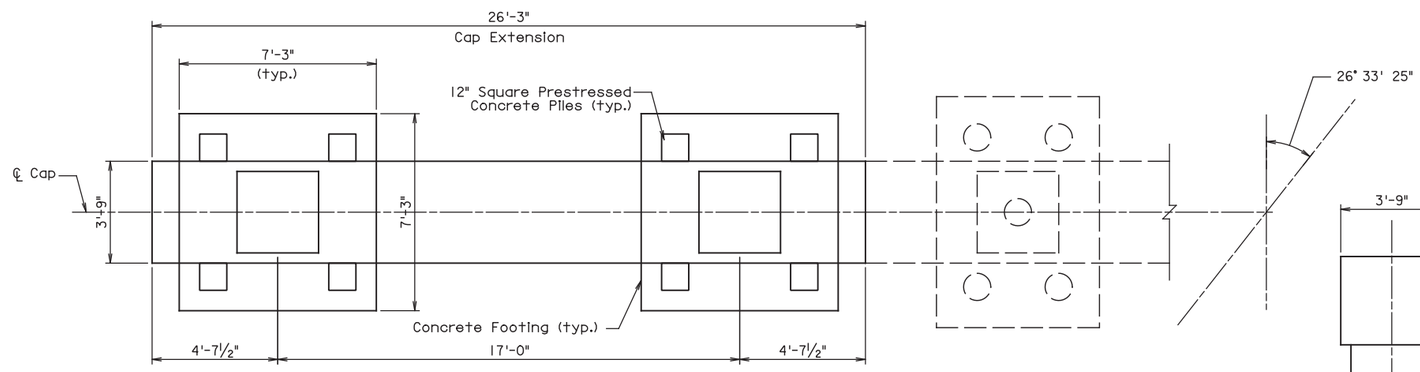
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—		64	0064-965-264 B634, B635	3



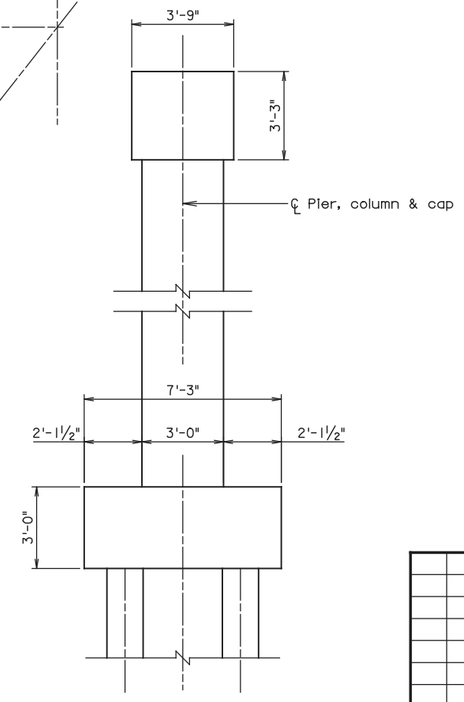
PLAN OF ABUTMENT



ABUTMENT SECTION



PLAN OF PIER



PIER SECTION

Notes:

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Pier 2 protection in accordance with VDOT Standard BPPS-1.

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Scale: (Not to scale)

No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

ABUTMENT & PIER
(I-64 OVER RT. 238 YORKTOWN)

Designed:	Date	Plan No.	Sheet No.
Drawn:		163-24A	3 of 3
Checked:			

11/4/2015 3:44:58 PM
DGN

Submitted to:

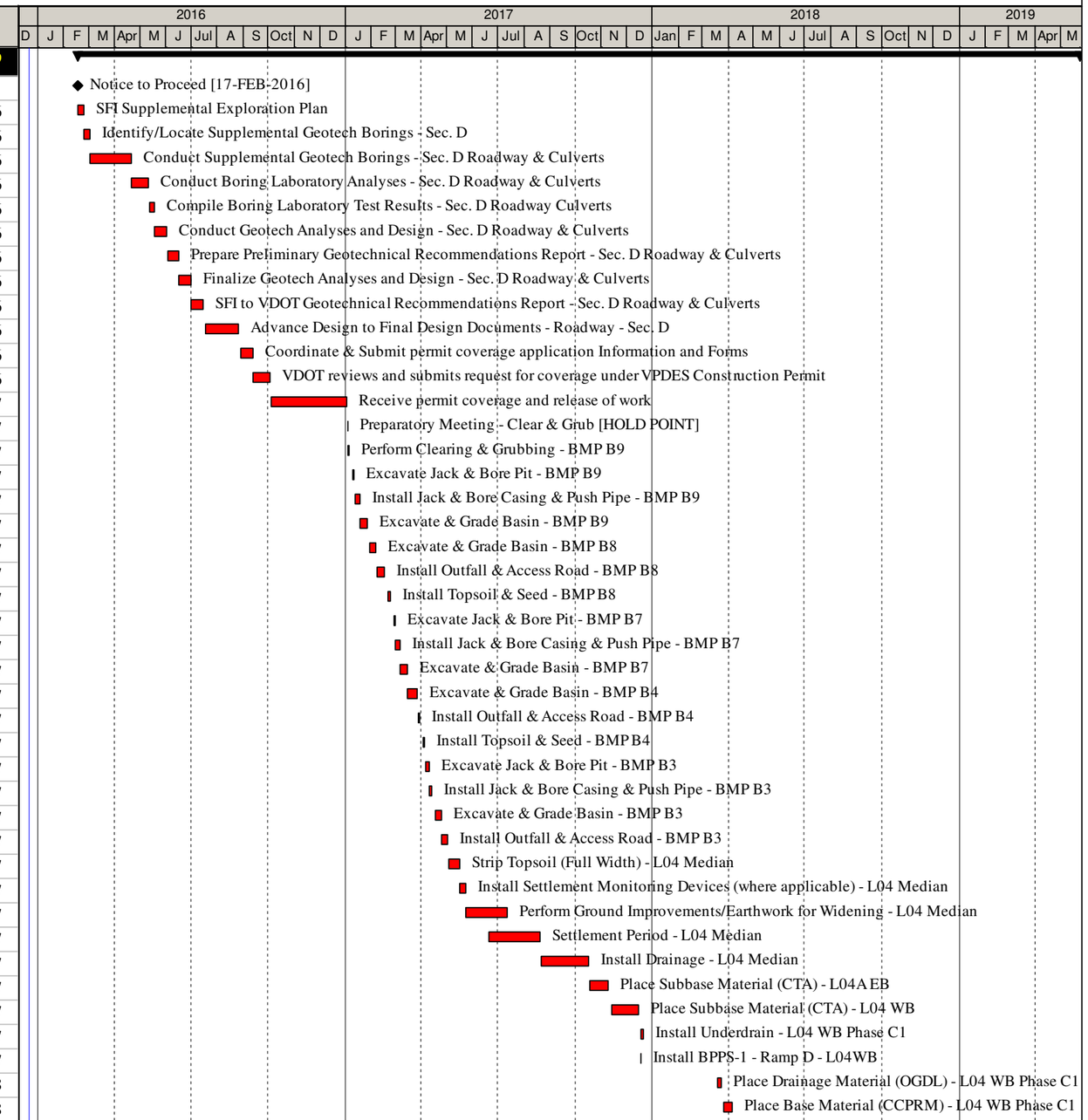
VDOT
Virginia Department of Transportation

4.7

PROPOSAL SCHEDULE

ALLAN MYERS + rda

Activity ID	Activity Name	Original Duration	Start	Finish
I-64 Capacity Improvements - Segment II [1527040]		815	02-18-16	05-24-19
MS0000001000	Notice to Proceed [17-FEB-2016]	0	02-18-16*	
DSGEA0000050	SFI Supplemental Exploration Plan	5	02-18-16	02-24-16
DSGEA0004010	Identify/Locate Supplemental Geotech Borings - Sec. D	5	02-25-16	03-02-16
DSGEA0004110	Conduct Supplemental Geotech Borings - Sec. D Roadway & Culverts	25	03-03-16	04-20-16
DSGEB0004110	Conduct Boring Laboratory Analyses - Sec. D Roadway & Culverts	15	04-21-16	05-11-16
DSGEB0004120	Compile Boring Laboratory Test Results - Sec. D Roadway Culverts	5	05-12-16	05-18-16
DSGEC0004110	Conduct Geotech Analyses and Design - Sec. D Roadway & Culverts	10	05-19-16	06-02-16
DSGEC0004120	Prepare Preliminary Geotechnical Recommendations Report - Sec. D Roa...	10	06-03-16	06-16-16
DSGEC0004130	Finalize Geotech Analyses and Design - Sec. D Roadway & Culverts	10	06-17-16	06-30-16
DSGEC0004140	SFI to VDOT Geotechnical Recommendations Report - Sec. D Roadway &...	10	07-01-16	07-15-16
DSRDD0000010	Advance Design to Final Design Documents - Roadway - Sec. D	30	07-18-16	08-26-16
ENVSA0000010	Coordinate & Submit permit coverage application Information and Forms	10	08-29-16	09-12-16
ENVSA0000020	VDOT reviews and submits request for coverage under VPDES Constructi...	21	09-13-16	10-03-16
ENVSA0000030	Receive permit coverage and release of work	90	10-04-16	01-01-17
PAQAB0000010	Preparatory Meeting - Clear & Grub [HOLD POINT]	1	01-03-17	01-03-17
CNBL04G00680	Perform Clearing & Grubbing - BMP B9	2	01-04-17	01-05-17
CNBL04G00690	Excavate Jack & Bore Pit - BMP B9	2	01-09-17	01-10-17
CNBL04G00700	Install Jack & Bore Casing & Push Pipe - BMP B9	3	01-12-17	01-17-17
CNBL04G00710	Excavate & Grade Basin - BMP B9	5	01-18-17	01-26-17
CNBL04G00640	Excavate & Grade Basin - BMP B8	5	01-30-17	02-06-17
CNBL04G00650	Install Outfall & Access Road - BMP B8	6	02-07-17	02-16-17
CNBL04G00660	Install Topsoil & Seed - BMP B8	3	02-20-17	02-23-17
CNBL04G00520	Excavate Jack & Bore Pit - BMP B7	2	02-27-17	02-28-17
CNBL04G00530	Install Jack & Bore Casing & Push Pipe - BMP B7	3	03-01-17	03-06-17
CNBL04G00540	Excavate & Grade Basin - BMP B7	5	03-07-17	03-15-17
CNBL04G00240	Excavate & Grade Basin - BMP B4	5	03-16-17	03-27-17
CNBL04G00250	Install Outfall & Access Road - BMP B4	3	03-28-17	03-30-17
CNBL04G00260	Install Topsoil & Seed - BMP B4	3	04-03-17	04-05-17
CNBL04G00120	Excavate Jack & Bore Pit - BMP B3	2	04-06-17	04-10-17
CNBL04G00130	Install Jack & Bore Casing & Push Pipe - BMP B3	3	04-11-17	04-13-17
CNBL04G00140	Excavate & Grade Basin - BMP B3	5	04-18-17	04-24-17
CNBL04G00150	Install Outfall & Access Road - BMP B3	5	04-25-17	05-02-17
CNBL04G00030	Strip Topsoil (Full Width) - L04 Median	9	05-03-17	05-16-17
CNBL04G00180	Install Settlement Monitoring Devices (where applicable) - L04 Median	5	05-17-17	05-23-17
CNBL04WM0010	Perform Ground Improvements/Earthwork for Widening - L04 Median	33	05-24-17	07-12-17
CNBL04G00190	Settlement Period - L04 Median	60	06-21-17	08-19-17
CNBL04G00040	Install Drainage - L04 Median	39	08-21-17	10-17-17
CNBL04EM0020	Place Subbase Material (CTA) - L04A EB	14	10-18-17	11-09-17
CNBL04WM0020	Place Subbase Material (CTA) - L04 WB	21	11-13-17	12-15-17
CNBL04WM0330	Install Underdrain - L04 WB Phase C1	3	12-18-17	12-20-17
CNBL04F10070	Install BPPS-1 - Ramp D - L04WB	1	12-18-17	12-18-17
CNBL04WM0060	Place Drainage Material (OGDL) - L04 WB Phase C1	5	03-19-18	03-23-18
CNBL04WM0070	Place Base Material (CCPRM) - L04 WB Phase C1	8	03-26-18	04-05-18



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Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | Milestone

Activity ID	Activity Name	Original Duration	Start	Finish
CNBL04WM0080	Place Intermediate Material (SMA 19.0) - L04 WB Phase C1	5	04-06-18	04-12-18
CNBL04G01050	Grade Slopes and Respread Topsoil - L04 Median	12	04-13-18	04-30-18
CNBL04G01060	Seed & Mulch - L04 Median	12	04-18-18	05-03-18
CNBGESW00110	Install Temp Striping to Push Traffic to Inside - Sec B WB	2	05-07-18	05-08-18
CNBGESW00120	Push Traffic to Inside - Sec B WB	1	05-09-18	05-09-18
CNBGESW00130	Reset Temp Concrete Barrier - Sec B WB	3	05-10-18	05-14-18
CNBL04WG0030	Install ESC Measures Outside - L04 WB	12	05-15-18	06-04-18
CNBL04WM0110	Demo existing Paved Shoulder - L04 WB	2	06-05-18	06-06-18
CNBL04WM0120	Demo existing Concrete Pavement - L04 WB	8	06-07-18	06-18-18
CNBL04WM0130	Perform Full Depth Reclamation of existing Subbase Material - L04 WB	5	06-19-18	06-25-18
CNBL04WM0390	Install Underdrain - L04 WB Phase C2	3	06-26-18	06-28-18
CNBL04WM0140	Place Drainage Material (OGDL) - L04 WB Phase C2	5	06-29-18	07-06-18
CNBL04WM0150	Place Base Material (CCPRM) - L04 WB Phase C2	9	07-09-18	07-19-18
CNBL04WM0160	Place Intermediate Material (SMA 19.0) - L04 WB Phase C2	5	07-20-18	07-26-18
CNBL04WM0200	Install GR-2 - Sta. 2283+12 to 2249+82 Outside - L04 WB Phase C2	6	07-27-18	08-03-18
CNBL04WM0190	Install GR-2 - Sta. 2246+03 to 2236+75 Outside - L04 WB Phase C2	2	08-06-18	08-07-18
CNBL04WM0180	Install GR-2 - Sta. 2234+51 to 2231+34 Outside - L04 WB Phase C2	1	08-08-18	08-08-18
CNBL04WM0170	Install GR-2 - Sta. 2226+39 to 2225+02 Outside - L04 WB Phase C2	1	08-09-18	08-09-18
CNBL04WG0040	Place Surface Material (SMA 12.5) - L04 WB	7	08-10-18	08-20-18
CNBL04WG0050	Install Permanent Striping to Switch to Final Configuration - L04 WB	2	08-21-18	08-22-18
CNBL04WG0060	Install Rumble Strips - L04 WB	3	08-23-18	08-27-18
CNBL04WG0070	Switch Traffic to Final Configuration - L04 WB	1	08-28-18	08-28-18
CNBL04WG0080	Reset Temp Concrete Barrier to Inside Shoulder - L04 WB	3	08-29-18	08-31-18
CNAGESW00110	Install Temp Striping to Push Traffic to Inside - Sec A WB	3	09-04-18	09-06-18
CNAGESW00120	Push Traffic to Inside - Sec A WB	2	09-07-18	09-10-18
CNAGESW00130	Reset Temp Concrete Barrier - Sec A WB	5	09-11-18	09-18-18
CNAL03WG0030	Install ESC Measures Outside - L03 WB	12	09-19-18	10-04-18
CNAL03WM0110	Demo existing Paved Shoulder - L03 WB Phase C2	2	10-08-18	10-09-18
CNAL03WM0120	Demo existing Concrete Pavement - L03 WB Phase C2	8	10-10-18	10-22-18
CNAL03WM0130	Perform Full Depth Reclamation of existing Subbase Material - L03 WB P...	5	10-23-18	10-30-18
CNAL03WM0380	Install Underdrain - L03 WB Phase C2	3	10-31-18	11-02-18
CNAL03WM0140	Place Drainage Material (OGDL) - L03 WB Phase C2	5	11-05-18	11-12-18
CNAL03WM0150	Place Base Material (CCPRM) - L03 WB Phase C2	9	11-13-18	11-28-18
CNAL03WM0160	Place Intermediate Material (SMA 19.0) - L03 WB Phase C2	5	11-29-18	12-06-18
CNAL03WM0240	Install GR-2 - Sta. 2221+93 to 2214+85 Outside - L03 WB Phase C2	2	12-07-18	12-10-18
CNAL03WM0230	Install GR-2 - Sta. 2207+03 to 2199+29 Outside - L03 WB Phase C2	2	12-11-18	12-12-18
CNAL03WM0220	Install GR-2 - Sta. 2199+17 to 2188+27 Outside - L03 WB Phase C2	3	12-13-18	12-17-18
CNAL03WM0210	Install GR-2 - Sta. 2188+94 to 2185+11 Outside - L03 WB Phase C2	1	12-18-18	12-18-18
CNAL03WM0190	Install GR-2 - Sta. 2182+89 to 2173+35 Outside - L03 WB Phase C2	2	12-19-18	12-20-18
CNAL03WM0180	Install GR-2 - Sta. 2180+53 to 2173+35 Outside - L03 WB Phase C2	2	12-21-18	12-24-18
CNAL03WM0170	Install GR-2 - Sta. 2172+48 to 2168+93 Outside - L03 WB Phase C2	1	01-02-19	01-02-19
CNAL03WG0040	Place Surface Material (SMA 12.5) - L03 WB	8	03-18-19	03-28-19
CNAL03WG0050	Install Permanent Striping to Switch to Final Configuration - L03 WB	2	04-01-19	04-02-19
CNAL03WG0060	Install Rumble Strips - L03 WB	2	04-03-19	04-04-19

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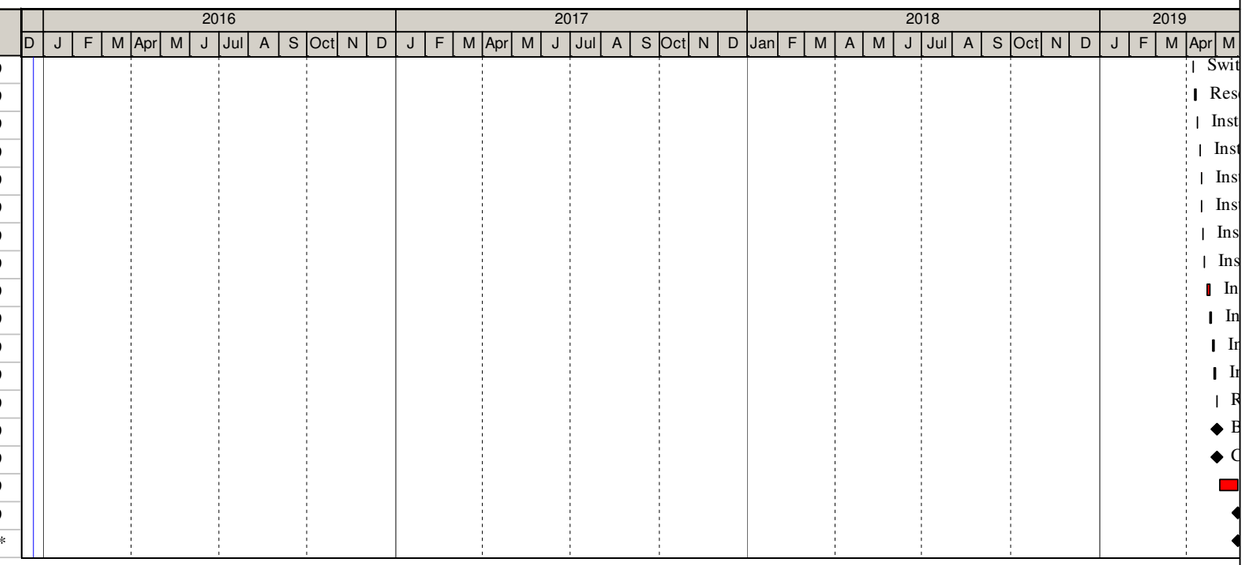
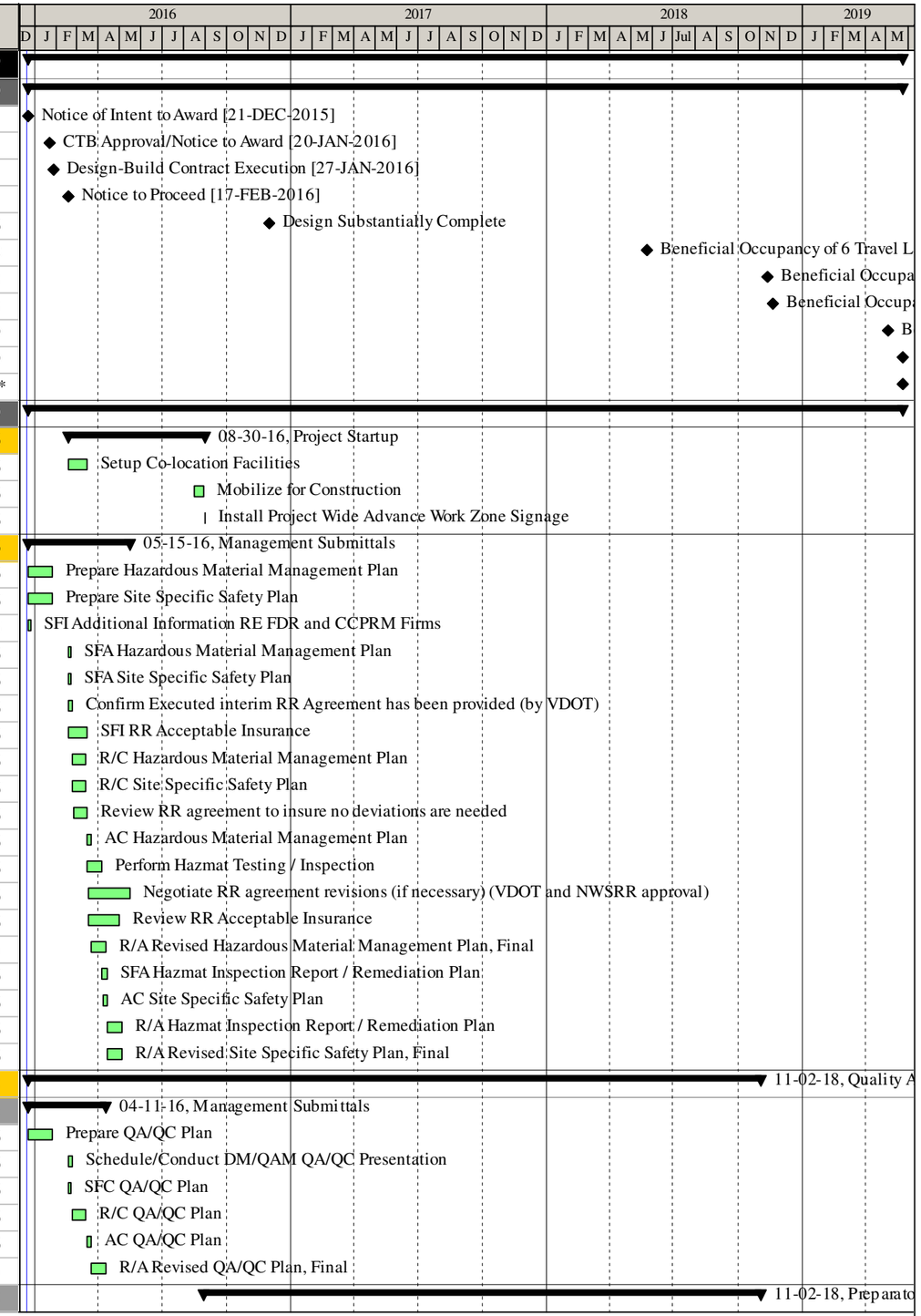
Remaining Level of Effort | Actual Work | Critical Remaining Work
Actual Level of Effort | Remaining Work | ◆ Milestone

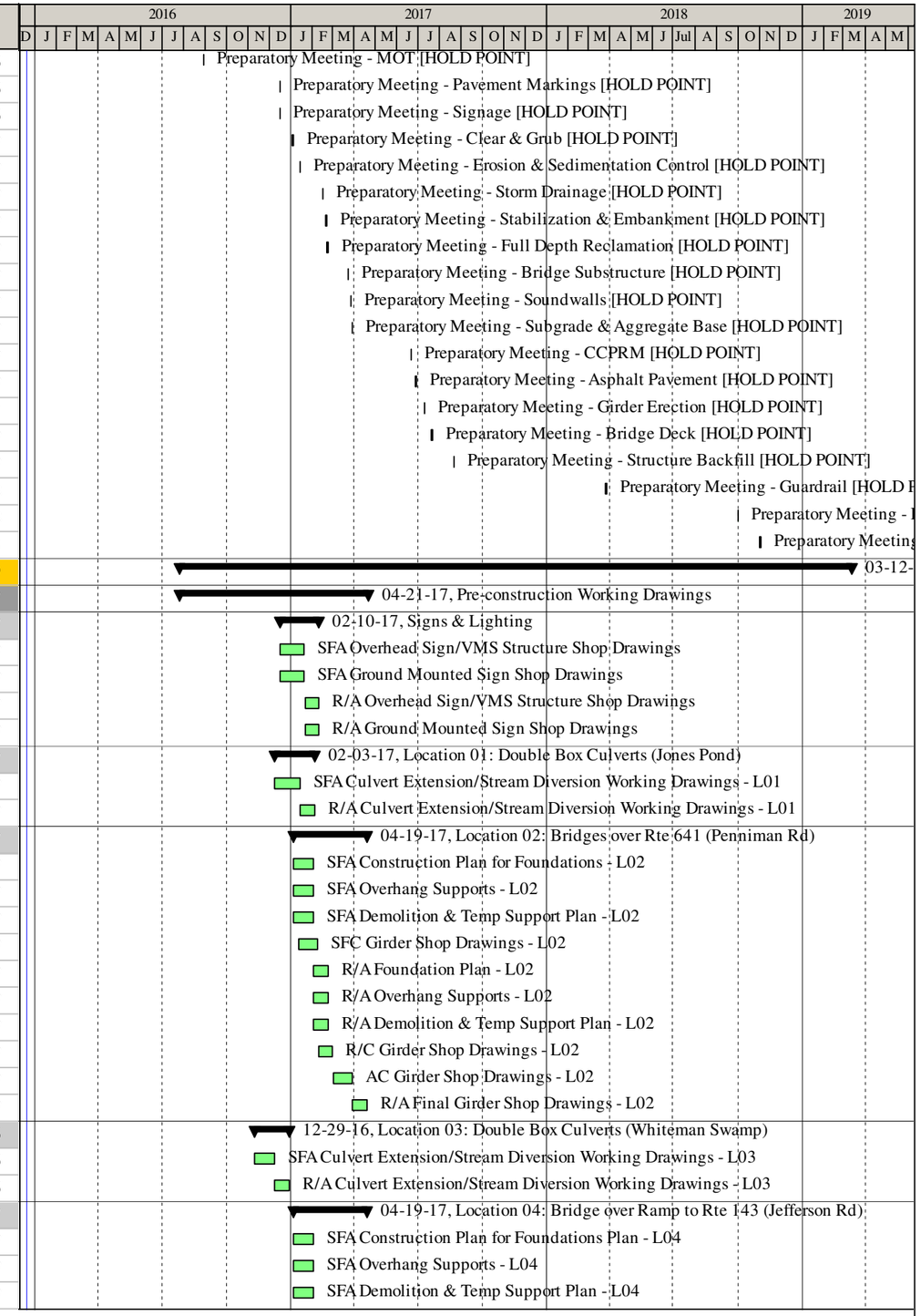
Activity ID	Activity Name	Original Duration	Start	Finish
CNAL03WG0070	Switch Traffic to Final Configuration - L03 WB	1	04-08-19	04-08-19
CNAL03WG0080	Reset Temp Concrete Barrier to Inside Shoulder - L03 WB	3	04-09-19	04-11-19
CNAL03G00050	Install GR-2 - EB Sta. 1168+41 to 1168+67 - L03 Median	1	04-12-19	04-12-19
CNAL03G00060	Install GR-2 - EB Sta. 1180+39 to 1182+90 - L03 Median	1	04-15-19	04-15-19
CNAL03G00080	Install GR-2 - EB Sta. 1184+56 to 1184+81 - L03 Median	1	04-16-19	04-16-19
CNAL03G00120	Install GR-2 - WB Sta. 2187+67 to 2185+17 - L03 Median	1	04-17-19	04-17-19
CNAL03G00100	Install GR-2 - WB Sta. 2182+89 to 2183+19 - L03 Median	1	04-18-19	04-18-19
CNAL03G00090	Install GR-2 - WB Sta. 2171+48 to 2168+96 - L03 Median	1	04-19-19	04-19-19
CNAL01G00050	Install GR-2 - EB Sta. 1120+47 to 1137+25 - L01 Median	3	04-23-19	04-25-19
CNAL01G00060	Install GR-2 - EB Sta. 1163+99 to 1166+51 - L01 Median	1	04-26-19	04-26-19
CNAL01G00080	Install GR-2 - WB Sta. 2167+14 to 2166+88 - L01 Median	1	04-29-19	04-29-19
CNAL01G00070	Install GR-2 - WB Sta. 2131+04 to 2124+78 - L01 Median	2	04-30-19	05-01-19
CNAL01WG0090	Remove Temp Concrete Barrier - L01 WB	2	05-02-19	05-03-19
MS0000019960	Beneficial Occupancy of 6 Travel Lanes - Sec. A	0		05-03-19
CNAL01G20020	Complete Work - Location 01 - Roadway Sta X128 to X167	0		05-03-19
PAPC00000010	Punchlist / De-mobilization	15	05-06-19	05-24-19
MS0000100000	Early Completion/ "No Excuse" Incentive [24-MAY-2019]	0		05-24-19
MS0000099990	Final Completion [RFP = 26-JUL-2019]	0		05-24-19*



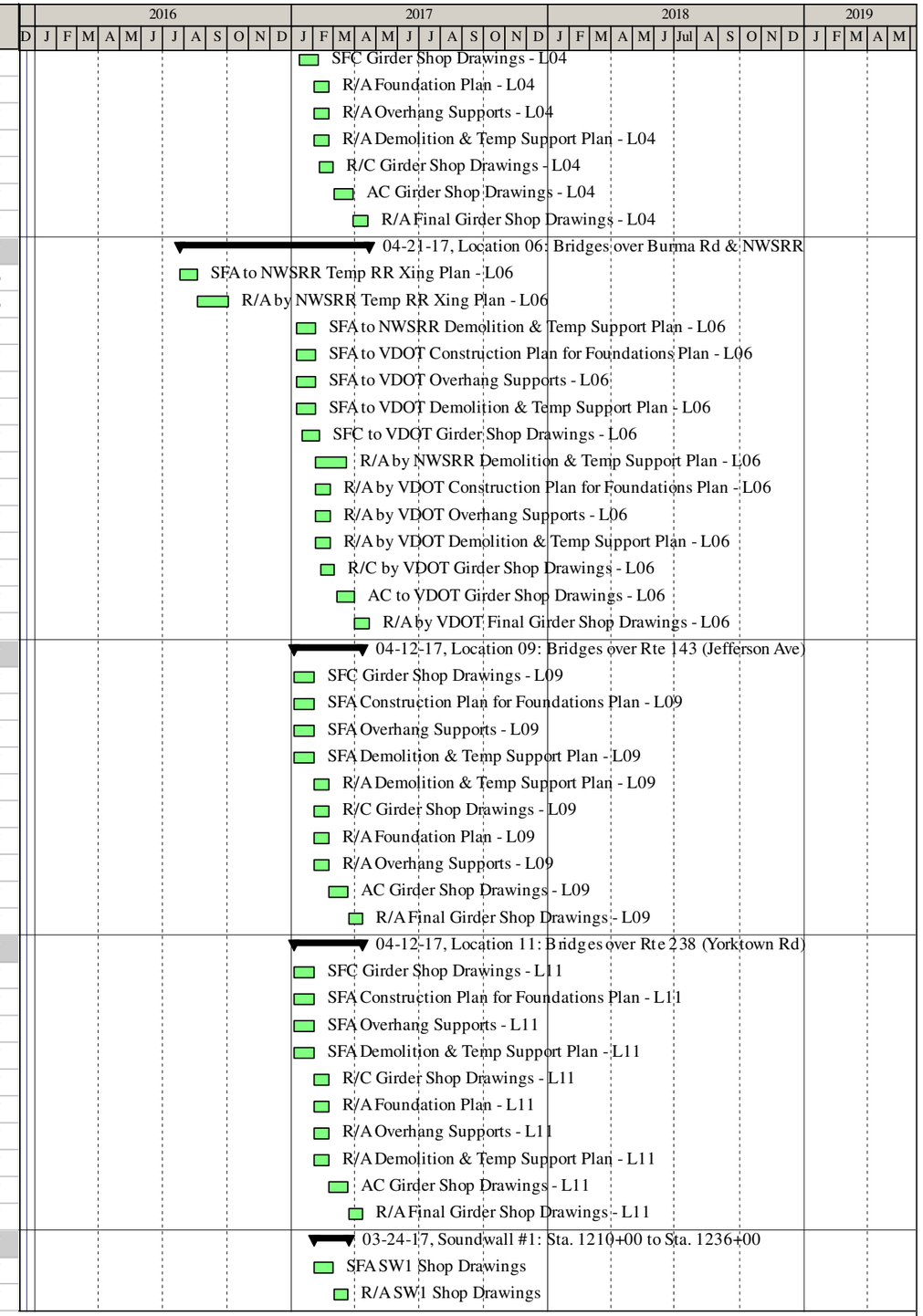
Activity ID	Activity Name	Original Duration	Start	Finish
I-64 Capacity Improvements - Segment II [1527040]		851	12-22-15	05-24-19
Project Milestones		851	12-22-15	05-24-19
MS0000001030	Notice of Intent to Award [21-DEC-2015]	0	12-22-15*	
MS0000001010	CTB Approval/Notice to Award [20-JAN-2016]	0	01-21-16*	
MS0000001020	Design-Build Contract Execution [27-JAN-2016]	0	01-28-16*	
MS0000001000	Notice to Proceed [17-FEB-2016]	0	02-18-16*	
MS0000002090	Design Substantially Complete	0		12-01-16
MS0000019930	Beneficial Occupancy of 6 Travel Lanes - Sec. D	0		05-24-18
MS0000019950	Beneficial Occupancy of 6 Travel Lanes - Sec. B	0		11-13-18
MS0000019940	Beneficial Occupancy of 6 Travel Lanes - Sec. C	0		11-20-18
MS0000019960	Beneficial Occupancy of 6 Travel Lanes - Sec. A	0		05-03-19
MS0000100000	Early Completion/ "No Excuse" Incentive [24-MAY-2019]	0		05-24-19
MS0000099990	Final Completion [RFP = 26-JUL-2019]	0		05-24-19*
Project Administration		851	12-22-15	05-24-19
Project Startup		136	02-18-16	08-30-16
PAPS00001010	Setup Co-location Facilities	20	02-18-16	03-16-16
PAPS00001020	Mobilize for Construction	10	08-16-16	08-29-16
PAPS00001030	Install Project Wide Advance Work Zone Signage	1	08-30-16	08-30-16
Management Submittals		97	12-22-15	05-15-16
PAMS00000140	Prepare Hazardous Material Management Plan	20	12-22-15	01-26-16
PAMS00000350	Prepare Site Specific Safety Plan	20	12-22-15	01-26-16
PAMS00001010	SFI Additional Information RE FDR and CCPRM Firms	5	12-22-15	12-26-15
PAMS00000100	SFA Hazardous Material Management Plan	3	02-18-16	02-22-16
PAMS00000310	SFA Site Specific Safety Plan	3	02-18-16	02-22-16
PAMS00000430	Confirm Executed interim RR Agreement has been provided (by VDOT)	5	02-18-16	02-24-16
PAMS00000410	SFI RR Acceptable Insurance	20	02-18-16	03-16-16
PAMS00000110	R/C Hazardous Material Management Plan	21	02-23-16	03-14-16
PAMS00000320	R/C Site Specific Safety Plan	21	02-23-16	03-14-16
PAMS00000440	Review RR agreement to insure no deviations are needed	15	02-25-16	03-16-16
PAMS00000120	AC Hazardous Material Management Plan	5	03-15-16	03-21-16
PAMS00000210	Perform Hazmat Testing / Inspection	15	03-15-16	04-05-16
PAMS00000450	Negotiate RR agreement revisions (if necessary) (VDOT and NWSRR approval)	60	03-17-16	05-15-16
PAMS00000420	Review RR Acceptable Insurance	45	03-17-16	04-30-16
PAMS00000130	R/A Revised Hazardous Material Management Plan, Final	21	03-22-16	04-11-16
PAMS00000220	SFA Hazmat Inspection Report / Remediation Plan	5	04-06-16	04-12-16
PAMS00000330	AC Site Specific Safety Plan	5	04-07-16	04-13-16
PAMS00000230	R/A Hazmat Inspection Report / Remediation Plan	21	04-13-16	05-03-16
PAMS00000340	R/A Revised Site Specific Safety Plan, Final	21	04-14-16	05-04-16
Quality Assurance/Quality Control (QA/QC)		715	12-22-15	11-02-18
Management Submittals		73	12-22-15	04-11-16
PAQAA0000450	Prepare QA/QC Plan	20	12-22-15	01-26-16
PAQAA0000460	Schedule/Conduct DM/QAM QA/QC Presentation	5	02-18-16	02-24-16
PAQAA0000410	SFC QA/QC Plan	3	02-18-16	02-22-16
PAQAA0000420	R/C QA/QC Plan	21	02-23-16	03-14-16
PAQAA0000430	AC QA/QC Plan	5	03-15-16	03-21-16
PAQAA0000440	R/A Revised QA/QC Plan, Final	21	03-22-16	04-11-16
Preparatory Meetings		545	08-29-16	11-02-18



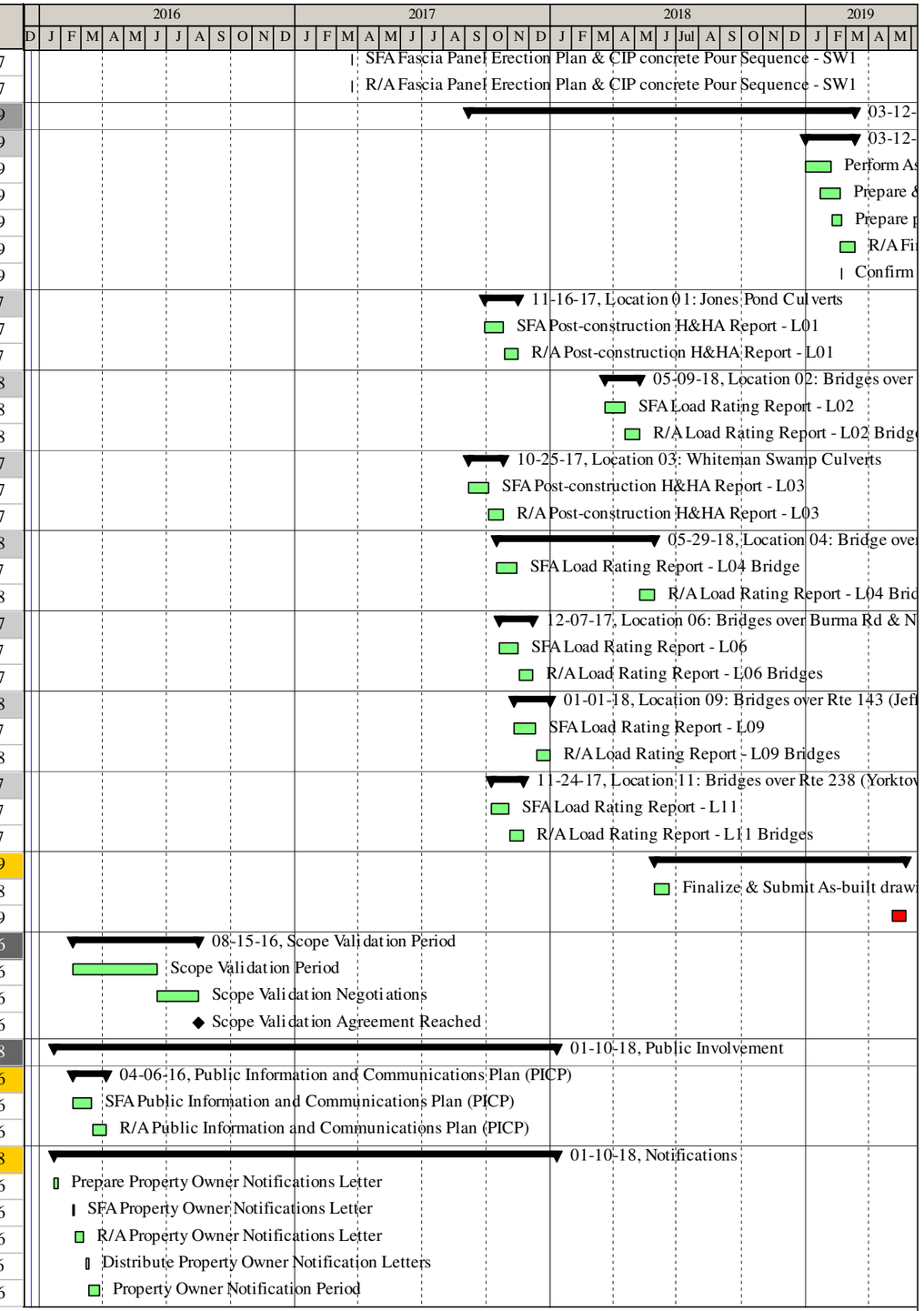
Activity ID	Activity Name	Original Duration	Start	Finish
PAQAB0000020	Preparatory Meeting - MOT [HOLD POINT]	1	08-29-16	08-29-16
PAQAB0000150	Preparatory Meeting - Pavement Markings [HOLD POINT]	1	12-16-16	12-16-16
PAQAB0000170	Preparatory Meeting - Signage [HOLD POINT]	1	12-16-16	12-16-16
PAQAB0000010	Preparatory Meeting - Clear & Grub [HOLD POINT]	1	01-03-17	01-03-17
PAQAB0000000	Preparatory Meeting - Erosion & Sedimentation Control [HOLD POINT]	1	01-13-17	01-13-17
PAQAB0000040	Preparatory Meeting - Storm Drainage [HOLD POINT]	1	02-15-17	02-15-17
PAQAB0000050	Preparatory Meeting - Stabilization & Embankment [HOLD POINT]	1	02-20-17	02-20-17
PAQAB0000070	Preparatory Meeting - Full Depth Reclamation [HOLD POINT]	1	02-22-17	02-22-17
PAQAB0000100	Preparatory Meeting - Bridge Substructure [HOLD POINT]	1	03-24-17	03-24-17
PAQAB0000200	Preparatory Meeting - Soundwalls [HOLD POINT]	1	03-27-17	03-27-17
PAQAB0000060	Preparatory Meeting - Subgrade & Aggregate Base [HOLD POINT]	1	03-30-17	03-30-17
PAQAB0000130	Preparatory Meeting - CCPRM [HOLD POINT]	1	06-21-17	06-21-17
PAQAB0000080	Preparatory Meeting - Asphalt Pavement [HOLD POINT]	1	06-28-17	06-28-17
PAQAB0000120	Preparatory Meeting - Girder Erection [HOLD POINT]	1	07-11-17	07-11-17
PAQAB0000110	Preparatory Meeting - Bridge Deck [HOLD POINT]	1	07-21-17	07-21-17
PAQAB0000030	Preparatory Meeting - Structure Backfill [HOLD POINT]	1	08-22-17	08-22-17
PAQAB0000140	Preparatory Meeting - Guardrail [HOLD POINT]	1	03-27-18	03-27-18
PAQAB0000090	Preparatory Meeting - Drilled Shafts [HOLD POINT]	1	10-02-18	10-02-18
PAQAB0000160	Preparatory Meeting - Topsoil & Seeding [HOLD POINT]	1	11-02-18	11-02-18
Construction Submittals		654	07-25-16	03-12-19
Pre-construction Working Drawings		185	07-25-16	04-21-17
Signs & Lighting		35	12-16-16	02-10-17
PACNAA000010	SFA Overhead Sign/VMS Structure Shop Drawings	20	12-16-16	01-20-17
PACNAA000110	SFA Ground Mounted Sign Shop Drawings	20	12-16-16	01-20-17
PACNAA000020	R/A Overhead Sign/VMS Structure Shop Drawings	21	01-21-17	02-10-17
PACNAA000120	R/A Ground Mounted Sign Shop Drawings	21	01-21-17	02-10-17
Location 01: Double Box Culverts (Jones Pond)		35	12-09-16	02-03-17
PACNAB000010	SFA Culvert Extension/Stream Diversion Working Drawings - L01	20	12-09-16	01-13-17
PACNAB000020	R/A Culvert Extension/Stream Diversion Working Drawings - L01	21	01-14-17	02-03-17
Location 02: Bridges over Rte 641 (Penniman Rd)		74	01-05-17	04-19-17
PACNAC000110	SFA Construction Plan for Foundations - L02	20	01-05-17	02-01-17
PACNAC000310	SFA Overhang Supports - L02	20	01-05-17	02-01-17
PACNAC000210	SFA Demolition & Temp Support Plan - L02	20	01-05-17	02-01-17
PACNAC000010	SFC Girder Shop Drawings - L02	20	01-12-17	02-08-17
PACNAC000120	R/A Foundation Plan - L02	21	02-02-17	02-22-17
PACNAC000320	R/A Overhang Supports - L02	21	02-02-17	02-22-17
PACNAC000220	R/A Demolition & Temp Support Plan - L02	21	02-02-17	02-22-17
PACNAC000020	R/C Girder Shop Drawings - L02	21	02-09-17	03-01-17
PACNAC000030	AC Girder Shop Drawings - L02	20	03-02-17	03-29-17
PACNAC000040	R/A Final Girder Shop Drawings - L02	21	03-30-17	04-19-17
Location 03: Double Box Culverts (Whiteman Swamp)		31	11-09-16	12-29-16
PACNAD000010	SFA Culvert Extension/Stream Diversion Working Drawings - L03	20	11-09-16	12-08-16
PACNAD000020	R/A Culvert Extension/Stream Diversion Working Drawings - L03	21	12-09-16	12-29-16
Location 04: Bridge over Ramp to Rte 143 (Jefferson Rd)		74	01-05-17	04-19-17
PACNAF000110	SFA Construction Plan for Foundations Plan - L04	20	01-05-17	02-01-17
PACNAF000310	SFA Overhang Supports - L04	20	01-05-17	02-01-17
PACNAF000210	SFA Demolition & Temp Support Plan - L04	20	01-05-17	02-01-17



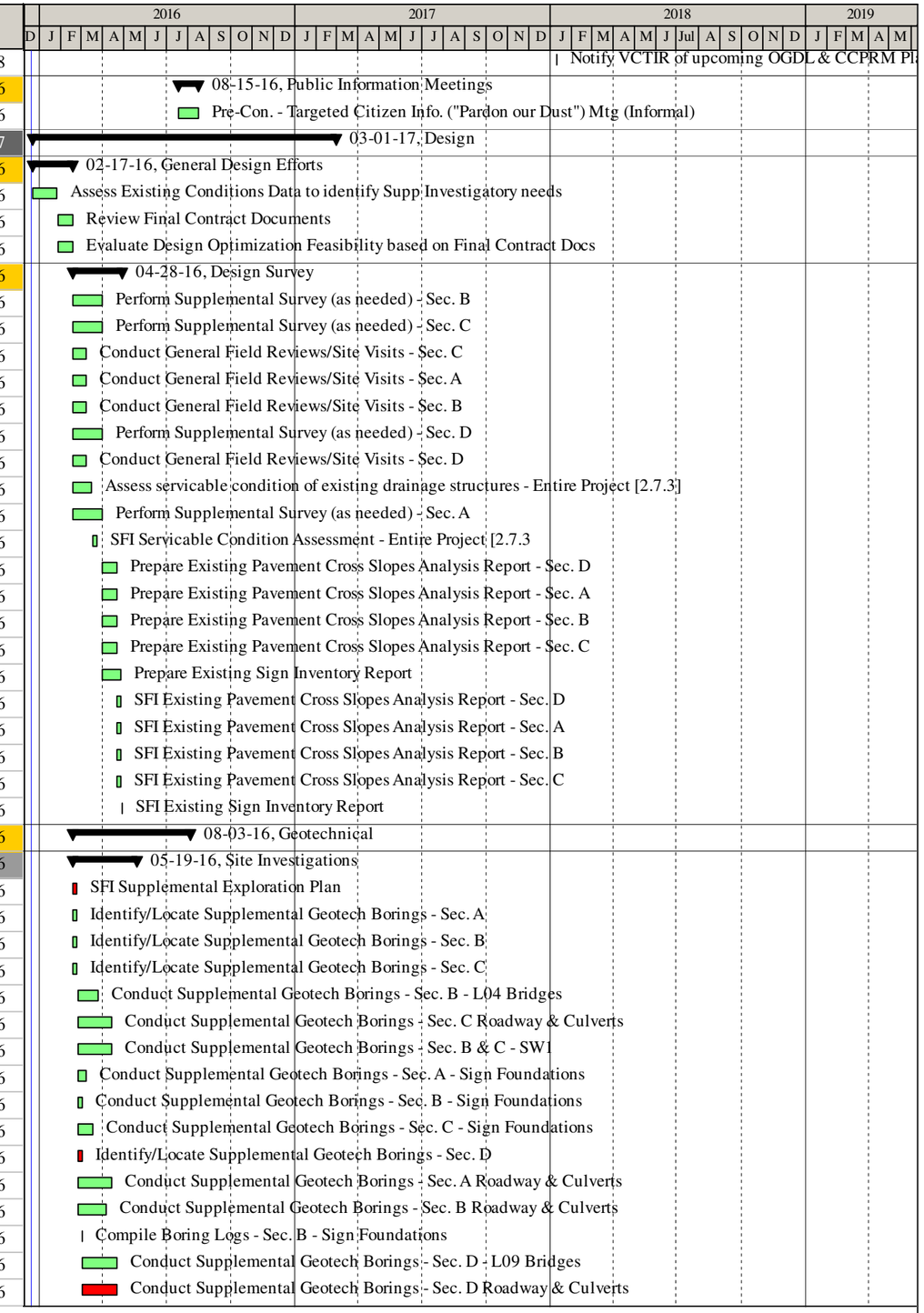
Activity ID	Activity Name	Original Duration	Start	Finish
PACNAF000010	SFC Girder Shop Drawings - L04	20	01-12-17	02-08-17
PACNAF000120	R/A Foundation Plan - L04	21	02-02-17	02-22-17
PACNAF000320	R/A Overhang Supports - L04	21	02-02-17	02-22-17
PACNAF000220	R/A Demolition & Temp Support Plan - L04	21	02-02-17	02-22-17
PACNAF000020	R/C Girder Shop Drawings - L04	21	02-09-17	03-01-17
PACNAF000030	AC Girder Shop Drawings - L04	20	03-02-17	03-29-17
PACNAF000040	R/A Final Girder Shop Drawings - L04	21	03-30-17	04-19-17
Location 06: Bridges over Burma Rd & NWSRR		185	07-25-16	04-21-17
PACNAG000130	SFA to NWSRR Temp RR Xing Plan - L06	20	07-25-16	08-19-16
PACNAG000140	R/A by NWSRR Temp RR Xing Plan - L06	45	08-20-16	10-03-16
PACNAG000230	SFA to NWSRR Demolition & Temp Support Plan - L06	20	01-09-17	02-03-17
PACNAG000110	SFA to VDOT Construction Plan for Foundations Plan - L06	20	01-09-17	02-03-17
PACNAG000310	SFA to VDOT Overhang Supports - L06	20	01-09-17	02-03-17
PACNAG000210	SFA to VDOT Demolition & Temp Support Plan - L06	20	01-09-17	02-03-17
PACNAG000010	SFC to VDOT Girder Shop Drawings - L06	20	01-16-17	02-10-17
PACNAG000240	R/A by NWSRR Demolition & Temp Support Plan - L06	45	02-04-17	03-20-17
PACNAG000120	R/A by VDOT Construction Plan for Foundations Plan - L06	21	02-04-17	02-24-17
PACNAG000320	R/A by VDOT Overhang Supports - L06	21	02-04-17	02-24-17
PACNAG000220	R/A by VDOT Demolition & Temp Support Plan - L06	21	02-04-17	02-24-17
PACNAG000020	R/C by VDOT Girder Shop Drawings - L06	21	02-11-17	03-03-17
PACNAG000030	AC to VDOT Girder Shop Drawings - L06	20	03-06-17	03-31-17
PACNAG000040	R/A by VDOT Final Girder Shop Drawings - L06	21	04-01-17	04-21-17
Location 09: Bridges over Rte 143 (Jefferson Ave)		70	01-05-17	04-12-17
PACNAJ000010	SFC Girder Shop Drawings - L09	20	01-05-17	02-01-17
PACNAJ000110	SFA Construction Plan for Foundations Plan - L09	20	01-05-17	02-01-17
PACNAJ000310	SFA Overhang Supports - L09	20	01-05-17	02-01-17
PACNAJ000210	SFA Demolition & Temp Support Plan - L09	20	01-05-17	02-01-17
PACNAJ000220	R/A Demolition & Temp Support Plan - L09	21	02-02-17	02-22-17
PACNAJ000020	R/C Girder Shop Drawings - L09	21	02-02-17	02-22-17
PACNAJ000120	R/A Foundation Plan - L09	21	02-02-17	02-22-17
PACNAJ000320	R/A Overhang Supports - L09	21	02-02-17	02-22-17
PACNAJ000030	AC Girder Shop Drawings - L09	20	02-23-17	03-22-17
PACNAJ000040	R/A Final Girder Shop Drawings - L09	21	03-23-17	04-12-17
Location 11: Bridges over Rte 238 (Yorktown Rd)		70	01-05-17	04-12-17
PACNAK000010	SFC Girder Shop Drawings - L11	20	01-05-17	02-01-17
PACNAK000110	SFA Construction Plan for Foundations Plan - L11	20	01-05-17	02-01-17
PACNAK000310	SFA Overhang Supports - L11	20	01-05-17	02-01-17
PACNAK000210	SFA Demolition & Temp Support Plan - L11	20	01-05-17	02-01-17
PACNAK000020	R/C Girder Shop Drawings - L11	21	02-02-17	02-22-17
PACNAK000120	R/A Foundation Plan - L11	21	02-02-17	02-22-17
PACNAK000320	R/A Overhang Supports - L11	21	02-02-17	02-22-17
PACNAK000220	R/A Demolition & Temp Support Plan - L11	21	02-02-17	02-22-17
PACNAK000030	AC Girder Shop Drawings - L11	20	02-23-17	03-22-17
PACNAK000040	R/A Final Girder Shop Drawings - L11	21	03-23-17	04-12-17
Soundwall #1: Sta. 1210+00 to Sta. 1236+00		37	02-02-17	03-24-17
PACNAL000010	SFA SW1 Shop Drawings	20	02-02-17	03-01-17
PACNAL000020	R/A SW1 Shop Drawings	21	03-02-17	03-22-17



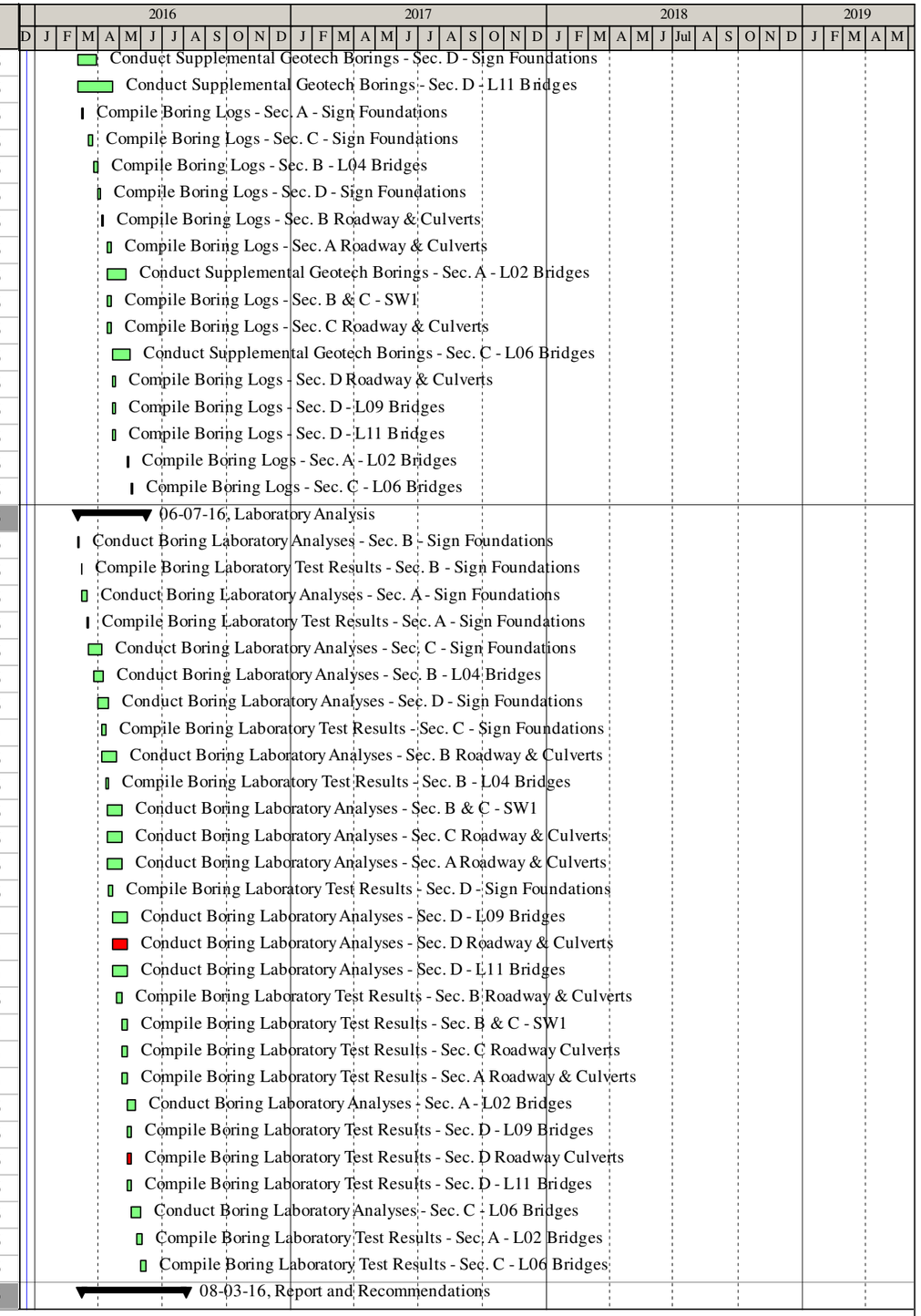
Activity ID	Activity Name	Original Duration	Start	Finish
PACNAL000110	SFA Fascia Panel Erection Plan & CIP concrete Pour Sequence - SW1	1	03-23-17	03-23-17
PACNAL000120	R/A Fascia Panel Erection Plan & CIP concrete Pour Sequence - SW1	1	03-24-17	03-24-17
Post-construction Submittals		374	09-07-17	03-12-19
General/Entire Project		50	01-02-19	03-12-19
PACNBA000110	Perform As-Built Surveys of BMPs to verify volumes	20	01-02-19	02-07-19
PACNBA000010	Prepare & Submit Final post-construction ESC and SWM Plan Cert Pkg	20	01-23-19	02-19-19
PACNBA000120	Prepare post-construction Permit Closeout Documents	10	02-08-19	02-21-19
PACNBA000020	R/A Final post-construction ESC and SWM Plan Cert Pkg	21	02-20-19	03-12-19
PACNBA000130	Confirm closeout of permits	1	02-22-19	02-22-19
Location 01: Jones Pond Culverts		35	09-29-17	11-16-17
PACNBB000010	SFA Post-construction H&HA Report - L01	20	09-29-17	10-26-17
PACNBB000020	R/A Post-construction H&HA Report - L01	21	10-27-17	11-16-17
Location 02: Bridges over Rte 641 (Penniman Rd)		35	03-21-18	05-09-18
PACNBC000010	SFA Load Rating Report - L02	20	03-21-18	04-18-18
PACNBC000020	R/A Load Rating Report - L02 Bridges	21	04-19-18	05-09-18
Location 03: Whiteman Swamp Culverts		35	09-07-17	10-25-17
PACNBD000010	SFA Post-construction H&HA Report - L03	20	09-07-17	10-04-17
PACNBD000020	R/A Post-construction H&HA Report - L03	21	10-05-17	10-25-17
Location 04: Bridge over Ramp to Rte 143 (Jefferson Rd)		151	10-17-17	05-29-18
PACNBF000010	SFA Load Rating Report - L04 Bridge	20	10-17-17	11-13-17
PACNBF000020	R/A Load Rating Report - L04 Bridge	21	05-09-18	05-29-18
Location 06: Bridges over Burma Rd & NWSRR		33	10-20-17	12-07-17
PACNBG000010	SFA Load Rating Report - L06	20	10-20-17	11-16-17
PACNBG000020	R/A Load Rating Report - L06 Bridges	21	11-17-17	12-07-17
Location 09: Bridges over Rte 143 (Jefferson Ave)		29	11-10-17	01-01-18
PACNBJ000010	SFA Load Rating Report - L09	20	11-10-17	12-11-17
PACNBJ000020	R/A Load Rating Report - L09 Bridges	21	12-12-17	01-01-18
Location 11: Bridges over Rte 238 (Yorktown Rd)		33	10-09-17	11-24-17
PACNBK000010	SFA Load Rating Report - L11	20	10-09-17	11-03-17
PACNBK000020	R/A Load Rating Report - L11 Bridges	21	11-04-17	11-24-17
Project Closeout		247	05-30-18	05-24-19
PAPC00000910	Finalize & Submit As-built drawings	15	05-30-18	06-19-18
PAPC00000010	Punchlist / De-mobilization	15	05-06-19	05-24-19
Scope Validation Period		125	02-18-16	08-15-16
SV0000001000	Scope Validation Period	120	02-18-16	06-16-16
SV0000002000	Scope Validation Negotiations	60	06-17-16	08-15-16
SV0000003000	Scope Validation Agreement Reached	0		08-15-16
Public Involvement		491	01-21-16	01-10-18
Public Information and Communications Plan (PICP)		34	02-18-16	04-06-16
PICP00000010	SFA Public Information and Communications Plan (PICP)	20	02-18-16	03-16-16
PICP00000020	R/A Public Information and Communications Plan (PICP)	21	03-17-16	04-06-16
Notifications		491	01-21-16	01-10-18
PIPN00000010	Prepare Property Owner Notifications Letter	5	01-21-16	01-27-16
PIPN00000020	SFA Property Owner Notifications Letter	2	02-18-16	02-19-16
PIPN00000030	R/A Property Owner Notifications Letter	10	02-22-16	03-04-16
PIPN00000040	Distribute Property Owner Notification Letters	5	03-07-16	03-11-16
PIPN00000050	Property Owner Notification Period	15	03-12-16	03-26-16



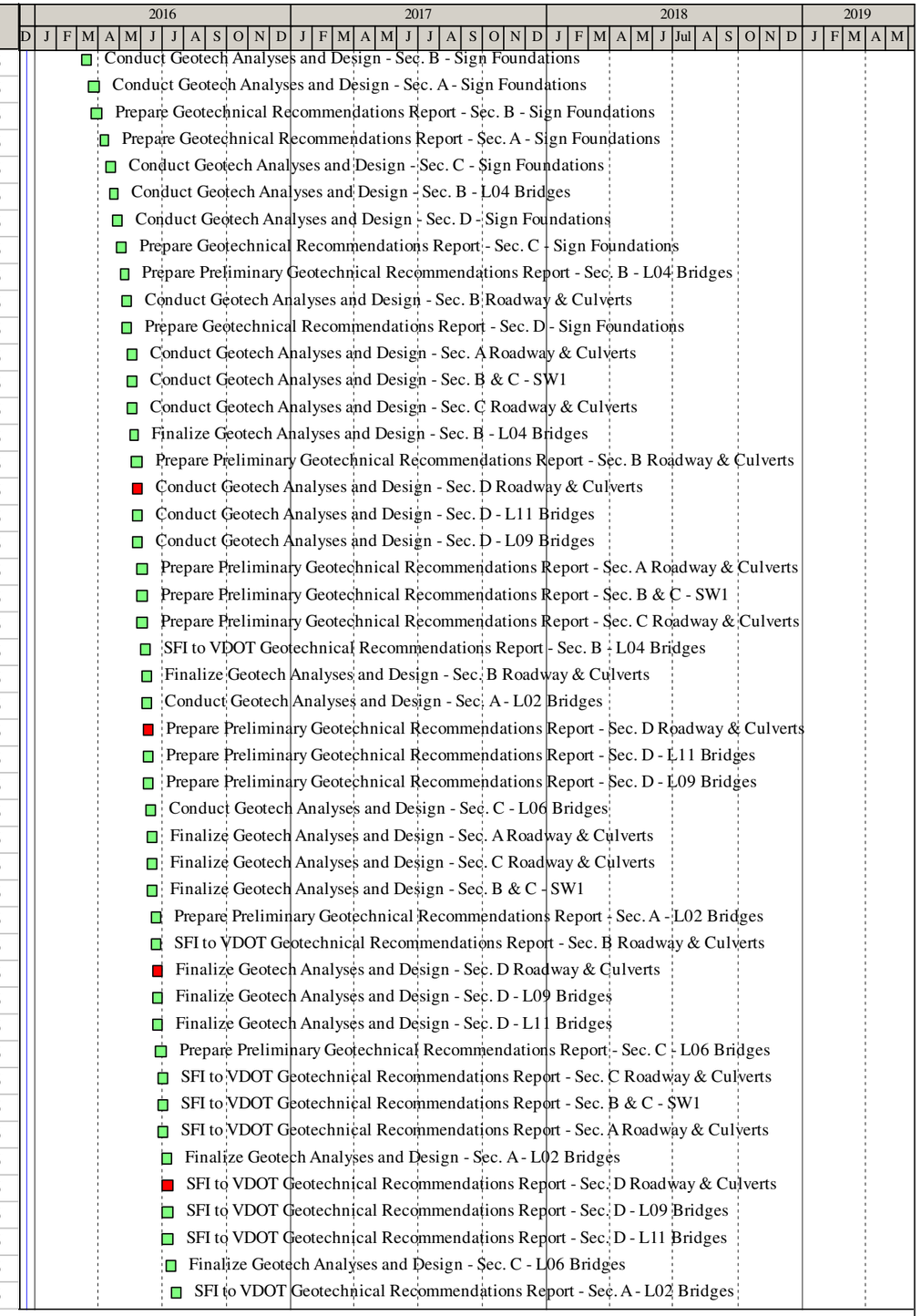
Activity ID	Activity Name	Original Duration	Start	Finish
PIPN00001010	Notify VCTIR of upcoming OGDL & CCPRM Placement [2.6.2]	1	01-10-18	01-10-18
Public Information Meetings		21	07-17-16	08-15-16
PIPM00000070	Pre-Con. - Targeted Citizen Info. ("Pardon our Dust") Mtg (Informal)	30	07-17-16	08-15-16
Design		294	12-22-15	03-01-17
General Design Efforts		36	12-22-15	02-17-16
DSGN00000030	Assess Existing Conditions Data to identify Supp Investigatory needs	20	12-22-15	01-26-16
DSGN00000010	Review Final Contract Documents	15	01-28-16	02-17-16
DSGN00000020	Evaluate Design Optimization Feasibility based on Final Contract Docs	15	01-28-16	02-17-16
Design Survey		50	02-18-16	04-28-16
DSSR00002010	Perform Supplemental Survey (as needed) - Sec. B	20	02-18-16	03-30-16
DSSR00003010	Perform Supplemental Survey (as needed) - Sec. C	20	02-18-16	03-30-16
DSSR00003020	Conduct General Field Reviews/Site Visits - Sec. C	10	02-18-16	03-08-16
DSSR00001020	Conduct General Field Reviews/Site Visits - Sec. A	10	02-18-16	03-08-16
DSSR00002020	Conduct General Field Reviews/Site Visits - Sec. B	10	02-18-16	03-08-16
DSSR00004010	Perform Supplemental Survey (as needed) - Sec. D	20	02-18-16	03-30-16
DSSR00004020	Conduct General Field Reviews/Site Visits - Sec. D	10	02-18-16	03-08-16
DSSR00000030	Assess servicable condition of existing drainage structures - Entire Project [2.7.3]	20	02-18-16	03-16-16
DSSR00001010	Perform Supplemental Survey (as needed) - Sec. A	20	02-18-16	03-30-16
DSSR00000040	SFI Servicable Condition Assessment - Entire Project [2.7.3	5	03-17-16	03-23-16
DSSR00004110	Prepare Existing Pavement Cross Slopes Analysis Report - Sec. D	15	03-31-16	04-20-16
DSSR00001110	Prepare Existing Pavement Cross Slopes Analysis Report - Sec. A	15	03-31-16	04-20-16
DSSR00002110	Prepare Existing Pavement Cross Slopes Analysis Report - Sec. B	15	03-31-16	04-20-16
DSSR00003110	Prepare Existing Pavement Cross Slopes Analysis Report - Sec. C	15	03-31-16	04-20-16
DSSR00000010	Prepare Existing Sign Inventory Report	20	03-31-16	04-27-16
DSSR00004120	SFI Existing Pavement Cross Slopes Analysis Report - Sec. D	5	04-21-16	04-27-16
DSSR00001120	SFI Existing Pavement Cross Slopes Analysis Report - Sec. A	5	04-21-16	04-27-16
DSSR00002120	SFI Existing Pavement Cross Slopes Analysis Report - Sec. B	5	04-21-16	04-27-16
DSSR00003120	SFI Existing Pavement Cross Slopes Analysis Report - Sec. C	5	04-21-16	04-27-16
DSSR00000020	SFI Existing Sign Inventory Report	1	04-28-16	04-28-16
Geotechnical		117	02-18-16	08-03-16
Site Investigations		65	02-18-16	05-19-16
DSGEA0000050	SFI Supplemental Exploration Plan	5	02-18-16	02-24-16
DSGEA0001010	Identify/Locate Supplemental Geotech Borings - Sec. A	5	02-18-16	02-24-16
DSGEA0002010	Identify/Locate Supplemental Geotech Borings - Sec. B	5	02-18-16	02-24-16
DSGEA0003010	Identify/Locate Supplemental Geotech Borings - Sec. C	5	02-18-16	02-24-16
DSGEA0002210	Conduct Supplemental Geotech Borings - Sec. B - L04 Bridges	15	02-25-16	03-24-16
DSGEA0003110	Conduct Supplemental Geotech Borings - Sec. C Roadway & Culverts	25	02-25-16	04-13-16
DSGEA0002410	Conduct Supplemental Geotech Borings - Sec. B & C - SW1	25	02-25-16	04-13-16
DSGEA0001510	Conduct Supplemental Geotech Borings - Sec. A - Sign Foundations	6	02-25-16	03-07-16
DSGEA0002510	Conduct Supplemental Geotech Borings - Sec. B - Sign Foundations	3	02-25-16	03-01-16
DSGEA0003510	Conduct Supplemental Geotech Borings - Sec. C - Sign Foundations	12	02-25-16	03-17-16
DSGEA0004010	Identify/Locate Supplemental Geotech Borings - Sec. D	5	02-25-16	03-02-16
DSGEA0001110	Conduct Supplemental Geotech Borings - Sec. A Roadway & Culverts	25	02-25-16	04-13-16
DSGEA0002110	Conduct Supplemental Geotech Borings - Sec. B Roadway & Culverts	20	02-25-16	04-05-16
DSGEA0002520	Compile Boring Logs - Sec. B - Sign Foundations	1	03-02-16	03-02-16
DSGEA0004410	Conduct Supplemental Geotech Borings - Sec. D - L09 Bridges	25	03-03-16	04-20-16
DSGEA0004110	Conduct Supplemental Geotech Borings - Sec. D Roadway & Culverts	25	03-03-16	04-20-16



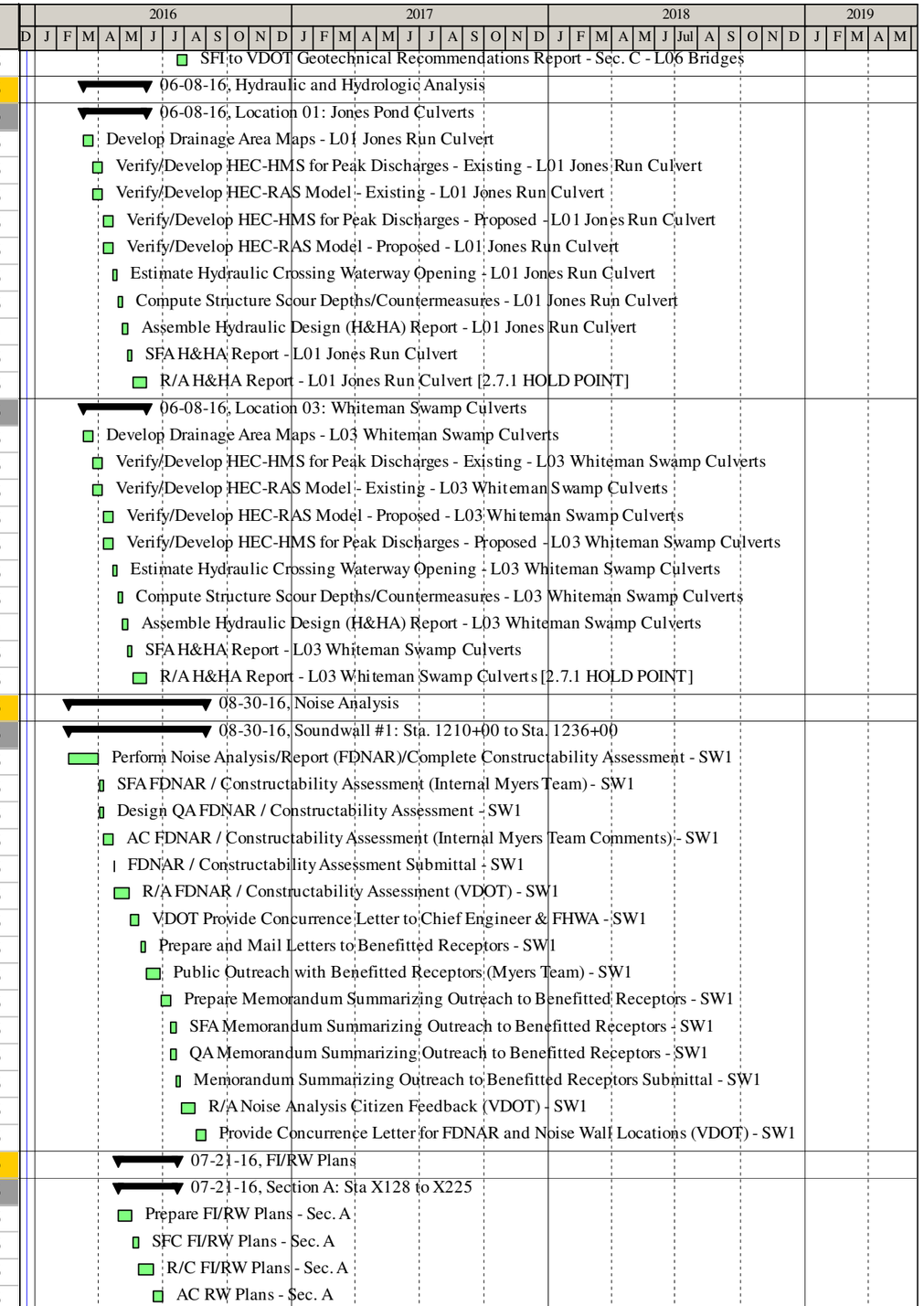
Activity ID	Activity Name	Original Duration	Start	Finish
DSGEA0004510	Conduct Supplemental Geotech Borings - Sec. D - Sign Foundations	12	03-03-16	03-29-16
DSGEA0004430	Conduct Supplemental Geotech Borings - Sec. D - L11 Bridges	25	03-03-16	04-20-16
DSGEA0001520	Compile Boring Logs - Sec. A - Sign Foundations	2	03-08-16	03-09-16
DSGEA0003520	Compile Boring Logs - Sec. C - Sign Foundations	4	03-18-16	03-23-16
DSGEA0002220	Compile Boring Logs - Sec. B - L04 Bridges	3	03-25-16	03-30-16
DSGEA0004520	Compile Boring Logs - Sec. D - Sign Foundations	4	03-30-16	04-04-16
DSGEA0002120	Compile Boring Logs - Sec. B Roadway & Culverts	3	04-06-16	04-08-16
DSGEA0001120	Compile Boring Logs - Sec. A Roadway & Culverts	3	04-14-16	04-18-16
DSGEA0001210	Conduct Supplemental Geotech Borings - Sec. A - L02 Bridges	15	04-14-16	05-10-16
DSGEA0002420	Compile Boring Logs - Sec. B & C - SW1	3	04-14-16	04-18-16
DSGEA0003120	Compile Boring Logs - Sec. C Roadway & Culverts	3	04-14-16	04-18-16
DSGEA0003210	Conduct Supplemental Geotech Borings - Sec. C - L06 Bridges	15	04-21-16	05-16-16
DSGEA0004120	Compile Boring Logs - Sec. D Roadway & Culverts	3	04-21-16	04-25-16
DSGEA0004420	Compile Boring Logs - Sec. D - L09 Bridges	3	04-21-16	04-25-16
DSGEA0004440	Compile Boring Logs - Sec. D - L11 Bridges	3	04-21-16	04-25-16
DSGEA0001220	Compile Boring Logs - Sec. A - L02 Bridges	3	05-11-16	05-13-16
DSGEA0003220	Compile Boring Logs - Sec. C - L06 Bridges	3	05-17-16	05-19-16
Laboratory Analysis		68	03-02-16	06-07-16
DSGEB0002510	Conduct Boring Laboratory Analyses - Sec. B - Sign Foundations	3	03-02-16	03-04-16
DSGEB0002520	Compile Boring Laboratory Test Results - Sec. B - Sign Foundations	1	03-07-16	03-07-16
DSGEB0001510	Conduct Boring Laboratory Analyses - Sec. A - Sign Foundations	6	03-08-16	03-15-16
DSGEB0001520	Compile Boring Laboratory Test Results - Sec. A - Sign Foundations	2	03-16-16	03-17-16
DSGEB0003510	Conduct Boring Laboratory Analyses - Sec. C - Sign Foundations	12	03-18-16	04-05-16
DSGEB0002210	Conduct Boring Laboratory Analyses - Sec. B - L04 Bridges	10	03-25-16	04-08-16
DSGEB0004510	Conduct Boring Laboratory Analyses - Sec. D - Sign Foundations	12	03-30-16	04-14-16
DSGEB0003520	Compile Boring Laboratory Test Results - Sec. C - Sign Foundations	4	04-06-16	04-11-16
DSGEB0002110	Conduct Boring Laboratory Analyses - Sec. B Roadway & Culverts	15	04-06-16	04-26-16
DSGEB0002220	Compile Boring Laboratory Test Results - Sec. B - L04 Bridges	5	04-11-16	04-15-16
DSGEB0002410	Conduct Boring Laboratory Analyses - Sec. B & C - SW1	15	04-14-16	05-04-16
DSGEB0003110	Conduct Boring Laboratory Analyses - Sec. C Roadway & Culverts	15	04-14-16	05-04-16
DSGEB0001110	Conduct Boring Laboratory Analyses - Sec. A Roadway & Culverts	15	04-14-16	05-04-16
DSGEB0004520	Compile Boring Laboratory Test Results - Sec. D - Sign Foundations	4	04-15-16	04-20-16
DSGEB0004410	Conduct Boring Laboratory Analyses - Sec. D - L09 Bridges	15	04-21-16	05-11-16
DSGEB0004110	Conduct Boring Laboratory Analyses - Sec. D Roadway & Culverts	15	04-21-16	05-11-16
DSGEB0004430	Conduct Boring Laboratory Analyses - Sec. D - L11 Bridges	15	04-21-16	05-11-16
DSGEB0002120	Compile Boring Laboratory Test Results - Sec. B Roadway & Culverts	5	04-27-16	05-03-16
DSGEB0002420	Compile Boring Laboratory Test Results - Sec. B & C - SW1	5	05-05-16	05-11-16
DSGEB0003120	Compile Boring Laboratory Test Results - Sec. C Roadway Culverts	5	05-05-16	05-11-16
DSGEB0001120	Compile Boring Laboratory Test Results - Sec. A Roadway & Culverts	5	05-05-16	05-11-16
DSGEB0001210	Conduct Boring Laboratory Analyses - Sec. A - L02 Bridges	10	05-11-16	05-24-16
DSGEB0004420	Compile Boring Laboratory Test Results - Sec. D - L09 Bridges	5	05-12-16	05-18-16
DSGEB0004120	Compile Boring Laboratory Test Results - Sec. D Roadway Culverts	5	05-12-16	05-18-16
DSGEB0004440	Compile Boring Laboratory Test Results - Sec. D - L11 Bridges	5	05-12-16	05-18-16
DSGEB0003210	Conduct Boring Laboratory Analyses - Sec. C - L06 Bridges	10	05-17-16	05-31-16
DSGEB0001220	Compile Boring Laboratory Test Results - Sec. A - L02 Bridges	5	05-25-16	06-01-16
DSGEB0003220	Compile Boring Laboratory Test Results - Sec. C - L06 Bridges	5	06-01-16	06-07-16
Report and Recommendations		104	03-08-16	08-03-16



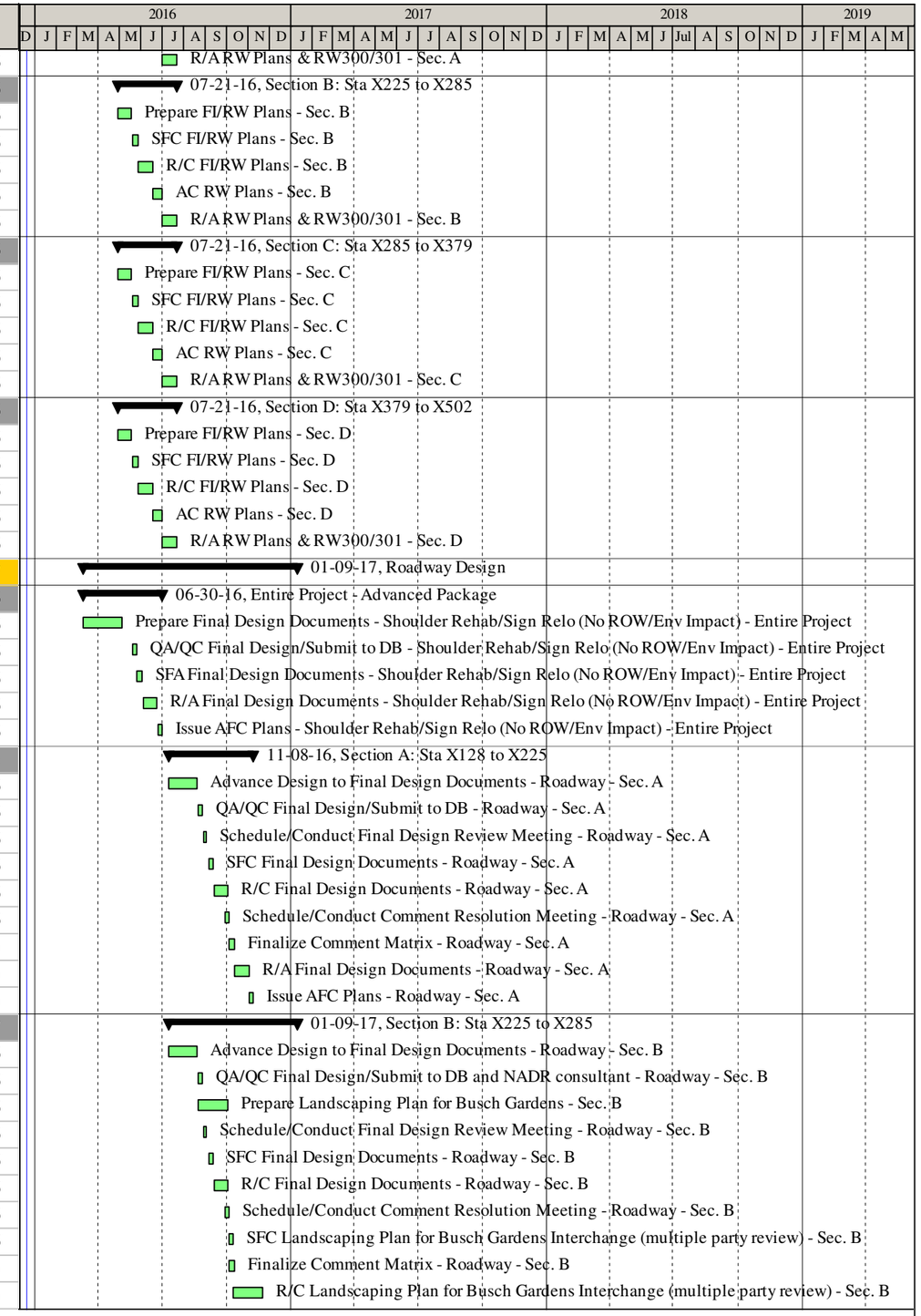
Activity ID	Activity Name	Original Duration	Start	Finish
DSGEC0002410	Conduct Geotech Analyses and Design - Sec. B - Sign Foundations	10	03-08-16	03-21-16
DSGEC0001410	Conduct Geotech Analyses and Design - Sec. A - Sign Foundations	10	03-18-16	04-01-16
DSGEC0002420	Prepare Geotechnical Recommendations Report - Sec. B - Sign Foundations	10	03-22-16	04-05-16
DSGEC0001420	Prepare Geotechnical Recommendations Report - Sec. A - Sign Foundations	10	04-04-16	04-15-16
DSGEC0003410	Conduct Geotech Analyses and Design - Sec. C - Sign Foundations	10	04-12-16	04-25-16
DSGEC0002210	Conduct Geotech Analyses and Design - Sec. B - L04 Bridges	10	04-18-16	04-29-16
DSGEC0004610	Conduct Geotech Analyses and Design - Sec. D - Sign Foundations	10	04-21-16	05-04-16
DSGEC0003420	Prepare Geotechnical Recommendations Report - Sec. C - Sign Foundations	10	04-26-16	05-09-16
DSGEC0002220	Prepare Preliminary Geotechnical Recommendations Report - Sec. B - L04 Bridges	10	05-02-16	05-13-16
DSGEC0002110	Conduct Geotech Analyses and Design - Sec. B Roadway & Culverts	10	05-04-16	05-17-16
DSGEC0004620	Prepare Geotechnical Recommendations Report - Sec. D - Sign Foundations	10	05-05-16	05-18-16
DSGEC0001110	Conduct Geotech Analyses and Design - Sec. A Roadway & Culverts	10	05-12-16	05-25-16
DSGEC0002310	Conduct Geotech Analyses and Design - Sec. B & C - SW1	10	05-12-16	05-25-16
DSGEC0003110	Conduct Geotech Analyses and Design - Sec. C Roadway & Culverts	10	05-12-16	05-25-16
DSGEC0002230	Finalize Geotech Analyses and Design - Sec. B - L04 Bridges	10	05-16-16	05-27-16
DSGEC0002120	Prepare Preliminary Geotechnical Recommendations Report - Sec. B Roadway & Culverts	10	05-18-16	06-01-16
DSGEC0004110	Conduct Geotech Analyses and Design - Sec. D Roadway & Culverts	10	05-19-16	06-02-16
DSGEC0004510	Conduct Geotech Analyses and Design - Sec. D - L11 Bridges	10	05-19-16	06-02-16
DSGEC0004310	Conduct Geotech Analyses and Design - Sec. D - L09 Bridges	10	05-19-16	06-02-16
DSGEC0001120	Prepare Preliminary Geotechnical Recommendations Report - Sec. A Roadway & Culverts	10	05-26-16	06-09-16
DSGEC0002320	Prepare Preliminary Geotechnical Recommendations Report - Sec. B & C - SW1	10	05-26-16	06-09-16
DSGEC0003120	Prepare Preliminary Geotechnical Recommendations Report - Sec. C Roadway & Culverts	10	05-26-16	06-09-16
DSGEC0002240	SFI to VDOT Geotechnical Recommendations Report - Sec. B - L04 Bridges	10	05-31-16	06-13-16
DSGEC0002130	Finalize Geotech Analyses and Design - Sec. B Roadway & Culverts	10	06-02-16	06-15-16
DSGEC0001210	Conduct Geotech Analyses and Design - Sec. A - L02 Bridges	10	06-02-16	06-15-16
DSGEC0004120	Prepare Preliminary Geotechnical Recommendations Report - Sec. D Roadway & Culverts	10	06-03-16	06-16-16
DSGEC0004520	Prepare Preliminary Geotechnical Recommendations Report - Sec. D - L11 Bridges	10	06-03-16	06-16-16
DSGEC0004320	Prepare Preliminary Geotechnical Recommendations Report - Sec. D - L09 Bridges	10	06-03-16	06-16-16
DSGEC0003210	Conduct Geotech Analyses and Design - Sec. C - L06 Bridges	10	06-08-16	06-21-16
DSGEC0001130	Finalize Geotech Analyses and Design - Sec. A Roadway & Culverts	10	06-10-16	06-23-16
DSGEC0003130	Finalize Geotech Analyses and Design - Sec. C Roadway & Culverts	10	06-10-16	06-23-16
DSGEC0002330	Finalize Geotech Analyses and Design - Sec. B & C - SW1	10	06-10-16	06-23-16
DSGEC0001220	Prepare Preliminary Geotechnical Recommendations Report - Sec. A - L02 Bridges	10	06-16-16	06-29-16
DSGEC0002140	SFI to VDOT Geotechnical Recommendations Report - Sec. B Roadway & Culverts	10	06-16-16	06-29-16
DSGEC0004130	Finalize Geotech Analyses and Design - Sec. D Roadway & Culverts	10	06-17-16	06-30-16
DSGEC0004330	Finalize Geotech Analyses and Design - Sec. D - L09 Bridges	10	06-17-16	06-30-16
DSGEC0004530	Finalize Geotech Analyses and Design - Sec. D - L11 Bridges	10	06-17-16	06-30-16
DSGEC0003220	Prepare Preliminary Geotechnical Recommendations Report - Sec. C - L06 Bridges	10	06-22-16	07-06-16
DSGEC0003140	SFI to VDOT Geotechnical Recommendations Report - Sec. C Roadway & Culverts	10	06-24-16	07-08-16
DSGEC0002340	SFI to VDOT Geotechnical Recommendations Report - Sec. B & C - SW1	10	06-24-16	07-08-16
DSGEC0001140	SFI to VDOT Geotechnical Recommendations Report - Sec. A Roadway & Culverts	10	06-24-16	07-08-16
DSGEC0001230	Finalize Geotech Analyses and Design - Sec. A - L02 Bridges	10	06-30-16	07-14-16
DSGEC0004140	SFI to VDOT Geotechnical Recommendations Report - Sec. D Roadway & Culverts	10	07-01-16	07-15-16
DSGEC0004340	SFI to VDOT Geotechnical Recommendations Report - Sec. D - L09 Bridges	10	07-01-16	07-15-16
DSGEC0004540	SFI to VDOT Geotechnical Recommendations Report - Sec. D - L11 Bridges	10	07-01-16	07-15-16
DSGEC0003230	Finalize Geotech Analyses and Design - Sec. C - L06 Bridges	10	07-07-16	07-20-16
DSGEC0001240	SFI to VDOT Geotechnical Recommendations Report - Sec. A - L02 Bridges	10	07-15-16	07-28-16



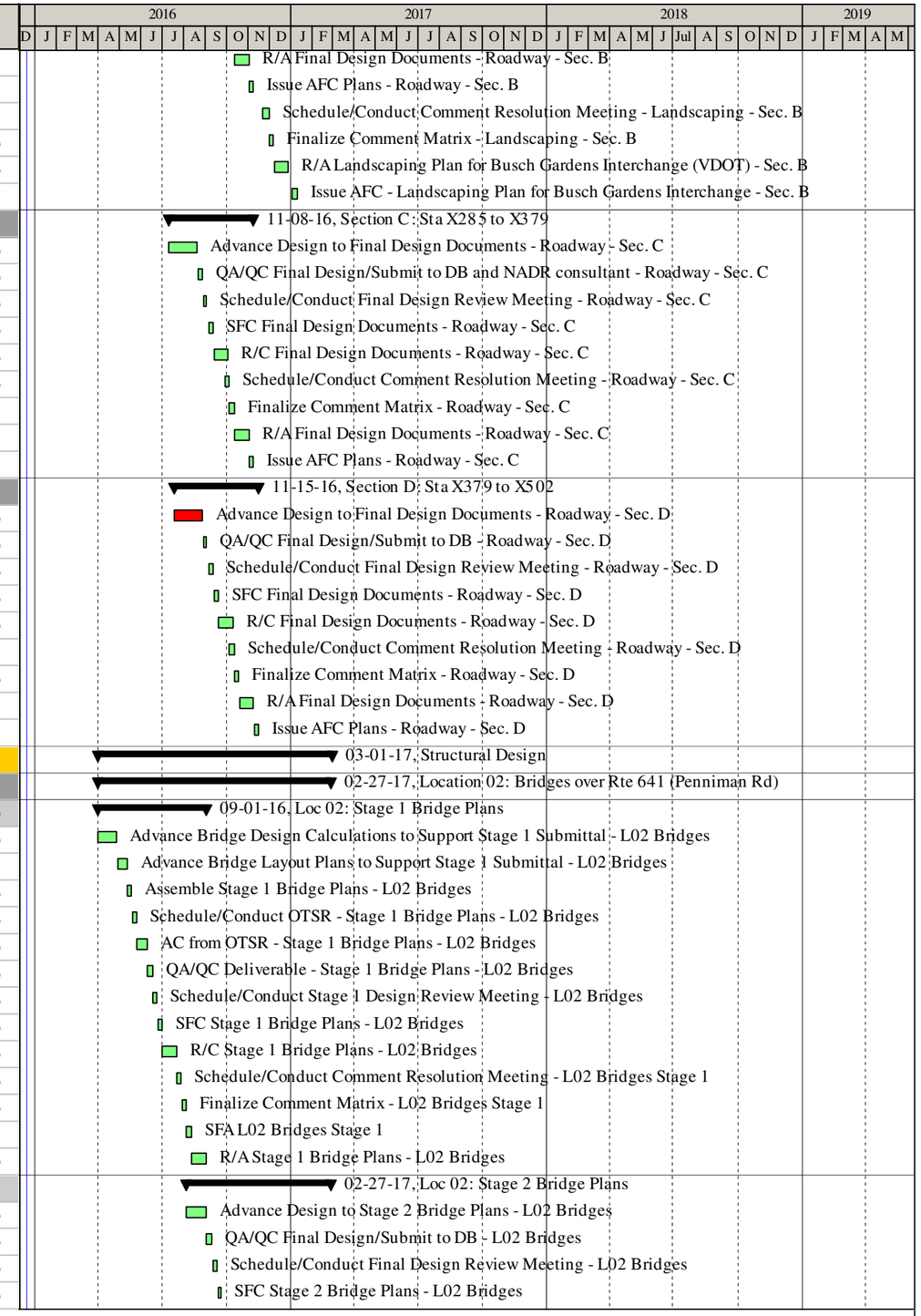
Activity ID	Activity Name	Original Duration	Start	Finish
DSGEC0003240	SFI to VDOT Geotechnical Recommendations Report - Sec. C - L06 Bridges	10	07-21-16	08-03-16
Hydraulic and Hydrologic Analysis		**64**	**03-09-16**	**06-08-16**
Location 01: Jones Pond Culverts		**64**	**03-09-16**	**06-08-16**
DSHHA0000010	Develop Drainage Area Maps - L01 Jones Run Culvert	10	03-09-16	03-22-16
DSHHA0000020	Verify/Develop HEC-HMS for Peak Discharges - Existing - L01 Jones Run Culvert	10	03-23-16	04-06-16
DSHHA0000040	Verify/Develop HEC-RAS Model - Existing - L01 Jones Run Culvert	10	03-23-16	04-06-16
DSHHA0000030	Verify/Develop HEC-HMS for Peak Discharges - Proposed - L01 Jones Run Culvert	10	04-07-16	04-20-16
DSHHA0000050	Verify/Develop HEC-RAS Model - Proposed - L01 Jones Run Culvert	10	04-07-16	04-20-16
DSHHA0000060	Estimate Hydraulic Crossing Waterway Opening - L01 Jones Run Culvert	5	04-21-16	04-27-16
DSHHA0000070	Compute Structure Scour Depths/Countermeasures - L01 Jones Run Culvert	5	04-28-16	05-04-16
DSHHA0000080	Assemble Hydraulic Design (H&HA) Report - L01 Jones Run Culvert	5	05-05-16	05-11-16
DSHHA0000090	SFA H&HA Report - L01 Jones Run Culvert	5	05-12-16	05-18-16
DSHHA0000100	R/A H&HA Report - L01 Jones Run Culvert [2.7.1 HOLD POINT]	21	05-19-16	06-08-16
Location 03: Whiteman Swamp Culverts		**64**	**03-09-16**	**06-08-16**
DSHHB0000010	Develop Drainage Area Maps - L03 Whiteman Swamp Culverts	10	03-09-16	03-22-16
DSHHB0000020	Verify/Develop HEC-HMS for Peak Discharges - Existing - L03 Whiteman Swamp Culverts	10	03-23-16	04-06-16
DSHHB0000040	Verify/Develop HEC-RAS Model - Existing - L03 Whiteman Swamp Culverts	10	03-23-16	04-06-16
DSHHB0000050	Verify/Develop HEC-RAS Model - Proposed - L03 Whiteman Swamp Culverts	10	04-07-16	04-20-16
DSHHB0000030	Verify/Develop HEC-HMS for Peak Discharges - Proposed - L03 Whiteman Swamp Culverts	10	04-07-16	04-20-16
DSHHB0000060	Estimate Hydraulic Crossing Waterway Opening - L03 Whiteman Swamp Culverts	5	04-21-16	04-27-16
DSHHB0000070	Compute Structure Scour Depths/Countermeasures - L03 Whiteman Swamp Culverts	5	04-28-16	05-04-16
DSHHB0000080	Assemble Hydraulic Design (H&HA) Report - L03 Whiteman Swamp Culverts	5	05-05-16	05-11-16
DSHHB0000090	SFA H&HA Report - L03 Whiteman Swamp Culverts	5	05-12-16	05-18-16
DSHHB0000099	R/A H&HA Report - L03 Whiteman Swamp Culverts [2.7.1 HOLD POINT]	21	05-19-16	06-08-16
Noise Analysis		**136**	**02-18-16**	**08-30-16**
Soundwall #1: Sta. 1210+00 to Sta. 1236+00		**136**	**02-18-16**	**08-30-16**
DSNAA0010010	Perform Noise Analysis/Report (FDNAR)/Complete Constructability Assessment - SW1	30	02-18-16	03-31-16
DSNAA0010030	SFA FDNAR / Constructability Assessment (Internal Myers Team) - SW1	5	04-01-16	04-07-16
DSNAA0010020	Design QA FDNAR / Constructability Assessment - SW1	5	04-01-16	04-07-16
DSNAA0010040	AC FDNAR / Constructability Assessment (Internal Myers Team Comments) - SW1	10	04-08-16	04-21-16
DSNAA0010050	FDNAR / Constructability Assessment Submittal - SW1	1	04-22-16	04-22-16
DSNAA0010060	R/A FDNAR / Constructability Assessment (VDOT) - SW1	21	04-23-16	05-13-16
DSNAA0010070	VDOT Provide Concurrence Letter to Chief Engineer & FHWA - SW1	10	05-16-16	05-27-16
DSNAA0010080	Prepare and Mail Letters to Benefitted Receptors - SW1	5	05-31-16	06-06-16
DSNAA0010090	Public Outreach with Benefitted Receptors (Myers Team) - SW1	15	06-07-16	06-27-16
DSNAA0010100	Prepare Memorandum Summarizing Outreach to Benefitted Receptors - SW1	10	06-28-16	07-12-16
DSNAA0010110	SFA Memorandum Summarizing Outreach to Benefitted Receptors - SW1	5	07-13-16	07-19-16
DSNAA0010120	QA Memorandum Summarizing Outreach to Benefitted Receptors - SW1	5	07-13-16	07-19-16
DSNAA0010130	Memorandum Summarizing Outreach to Benefitted Receptors Submittal - SW1	5	07-20-16	07-26-16
DSNAA0010140	R/A Noise Analysis Citizen Feedback (VDOT) - SW1	21	07-27-16	08-16-16
DSNAA0010150	Provide Concurrence Letter for FDNAR and Noise Wall Locations (VDOT) - SW1	10	08-17-16	08-30-16
FI/RW Plans		**59**	**04-28-16**	**07-21-16**
Section A: Sta X128 to X225		**59**	**04-28-16**	**07-21-16**
DSRWA0000010	Prepare FI/RW Plans - Sec. A	15	04-28-16	05-18-16
DSRWA0000020	SFC FI/RW Plans - Sec. A	5	05-20-16	05-26-16
DSRWA0000030	R/C FI/RW Plans - Sec. A	21	05-27-16	06-16-16
DSRWA0000040	AC RW Plans - Sec. A	10	06-17-16	06-30-16



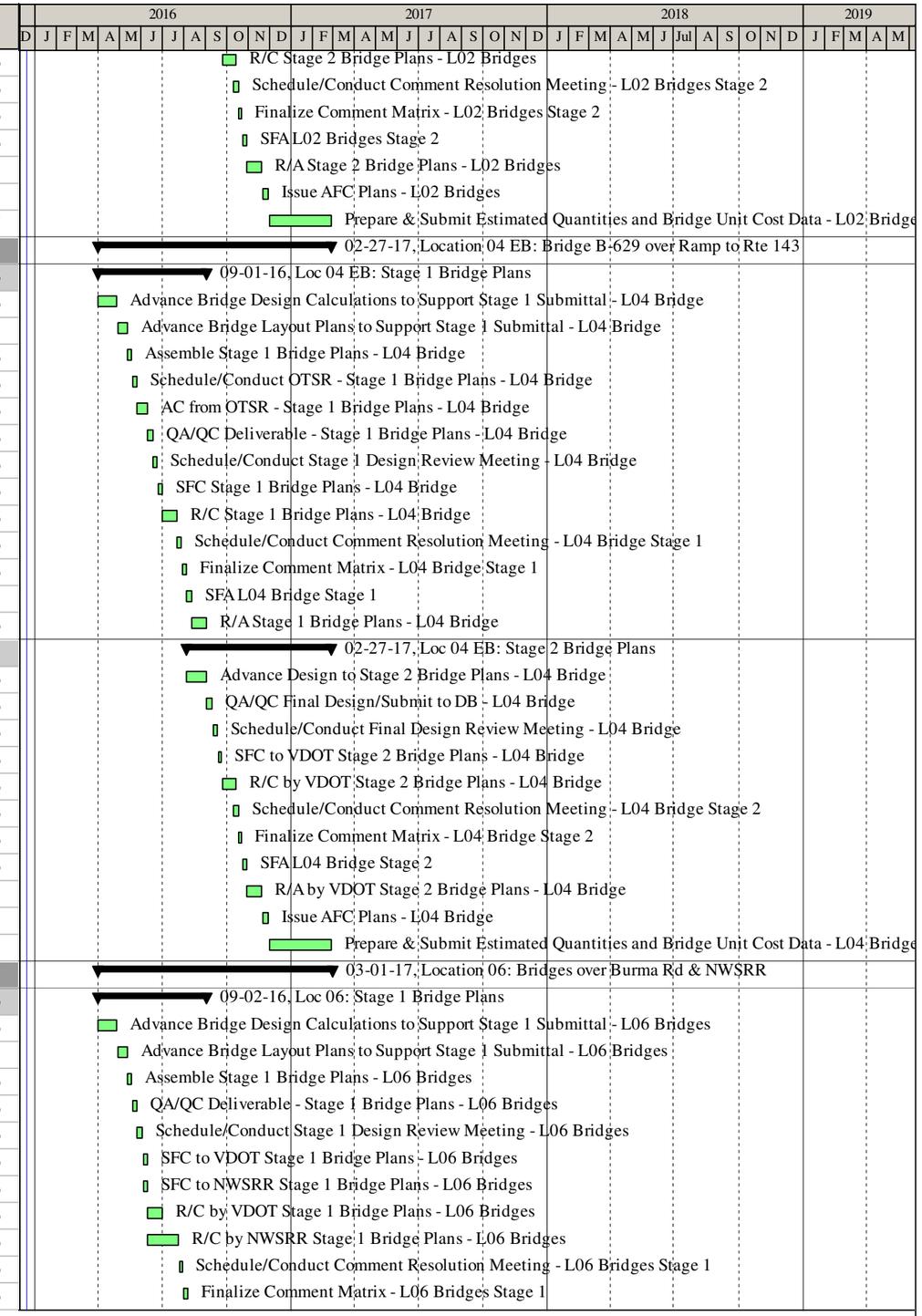
Activity ID	Activity Name	Original Duration	Start	Finish
DSRWA0000050	R/A RW Plans & RW300/301 - Sec. A	21	07-01-16	07-21-16
Section B: Sta X225 to X285		59	04-28-16	07-21-16
DSRWB0000010	Prepare FI/RW Plans - Sec. B	15	04-28-16	05-18-16
DSRWB0000020	SFC FI/RW Plans - Sec. B	5	05-20-16	05-26-16
DSRWB0000030	R/C FI/RW Plans - Sec. B	21	05-27-16	06-16-16
DSRWB0000040	AC RW Plans - Sec. B	10	06-17-16	06-30-16
DSRWB0000050	R/A RW Plans & RW300/301 - Sec. B	21	07-01-16	07-21-16
Section C: Sta X285 to X379		59	04-28-16	07-21-16
DSRWC0000010	Prepare FI/RW Plans - Sec. C	15	04-28-16	05-18-16
DSRWC0000020	SFC FI/RW Plans - Sec. C	5	05-20-16	05-26-16
DSRWC0000030	R/C FI/RW Plans - Sec. C	21	05-27-16	06-16-16
DSRWC0000040	AC RW Plans - Sec. C	10	06-17-16	06-30-16
DSRWC0000050	R/A RW Plans & RW300/301 - Sec. C	21	07-01-16	07-21-16
Section D: Sta X379 to X502		59	04-28-16	07-21-16
DSRWD0000010	Prepare FI/RW Plans - Sec. D	15	04-28-16	05-18-16
DSRWD0000020	SFC FI/RW Plans - Sec. D	5	05-20-16	05-26-16
DSRWD0000030	R/C FI/RW Plans - Sec. D	21	05-27-16	06-16-16
DSRWD0000040	AC RW Plans - Sec. D	10	06-17-16	06-30-16
DSRWD0000050	R/A RW Plans & RW300/301 - Sec. D	21	07-01-16	07-21-16
Roadway Design		207	03-09-16	01-09-17
Entire Project - Advanced Package		80	03-09-16	06-30-16
DSRDE0000010	Prepare Final Design Documents - Shoulder Rehab/Sign Relo (No ROW/Env Impact) - Entire Pr...	40	03-09-16	05-04-16
DSRDE0000040	QA/QC Final Design/Submit to DB - Shoulder Rehab/Sign Relo (No ROW/Env Impact) - Entire ...	5	05-19-16	05-25-16
DSRDE0000060	SFA Final Design Documents - Shoulder Rehab/Sign Relo (No ROW/Env Impact) - Entire Project	5	05-26-16	06-02-16
DSRDE0000070	R/A Final Design Documents - Shoulder Rehab/Sign Relo (No ROW/Env Impact) - Entire Project	21	06-03-16	06-23-16
DSRDE0000110	Issue AFC Plans - Shoulder Rehab/Sign Relo (No ROW/Env Impact) - Entire Project	5	06-24-16	06-30-16
Section A: Sta X128 to X225		86	07-11-16	11-08-16
DSRDA0000010	Advance Design to Final Design Documents - Roadway - Sec. A	30	07-11-16	08-19-16
DSRDA0000040	QA/QC Final Design/Submit to DB - Roadway - Sec. A	5	08-22-16	08-26-16
DSRDA0000050	Schedule/Conduct Final Design Review Meeting - Roadway - Sec. A	5	08-29-16	09-02-16
DSRDA0000060	SFC Final Design Documents - Roadway - Sec. A	5	09-06-16	09-12-16
DSRDA0000070	R/C Final Design Documents - Roadway - Sec. A	21	09-13-16	10-03-16
DSRDA0000080	Schedule/Conduct Comment Resolution Meeting - Roadway - Sec. A	5	09-28-16	10-04-16
DSRDA0000090	Finalize Comment Matrix - Roadway - Sec. A	5	10-05-16	10-11-16
DSRDA0000100	R/A Final Design Documents - Roadway - Sec. A	21	10-12-16	11-01-16
DSRDA0000110	Issue AFC Plans - Roadway - Sec. A	5	11-02-16	11-08-16
Section B: Sta X225 to X285		122	07-11-16	01-09-17
DSRDB0000010	Advance Design to Final Design Documents - Roadway - Sec. B	30	07-11-16	08-19-16
DSRDB0000040	QA/QC Final Design/Submit to DB and NADR consultant - Roadway - Sec. B	5	08-22-16	08-26-16
DSRDB0000120	Prepare Landscaping Plan for Busch Gardens - Sec. B	30	08-22-16	10-03-16
DSRDB0000050	Schedule/Conduct Final Design Review Meeting - Roadway - Sec. B	5	08-29-16	09-02-16
DSRDB0000060	SFC Final Design Documents - Roadway - Sec. B	5	09-06-16	09-12-16
DSRDB0000070	R/C Final Design Documents - Roadway - Sec. B	21	09-13-16	10-03-16
DSRDB0000080	Schedule/Conduct Comment Resolution Meeting - Roadway - Sec. B	5	09-28-16	10-04-16
DSRDB0000130	SFC Landscaping Plan for Busch Gardens Interchange (multiple party review) - Sec. B	5	10-04-16	10-10-16
DSRDB0000090	Finalize Comment Matrix - Roadway - Sec. B	5	10-05-16	10-11-16
DSRDB0000140	R/C Landscaping Plan for Busch Gardens Interchange (multiple party review) - Sec. B	30	10-11-16	11-21-16



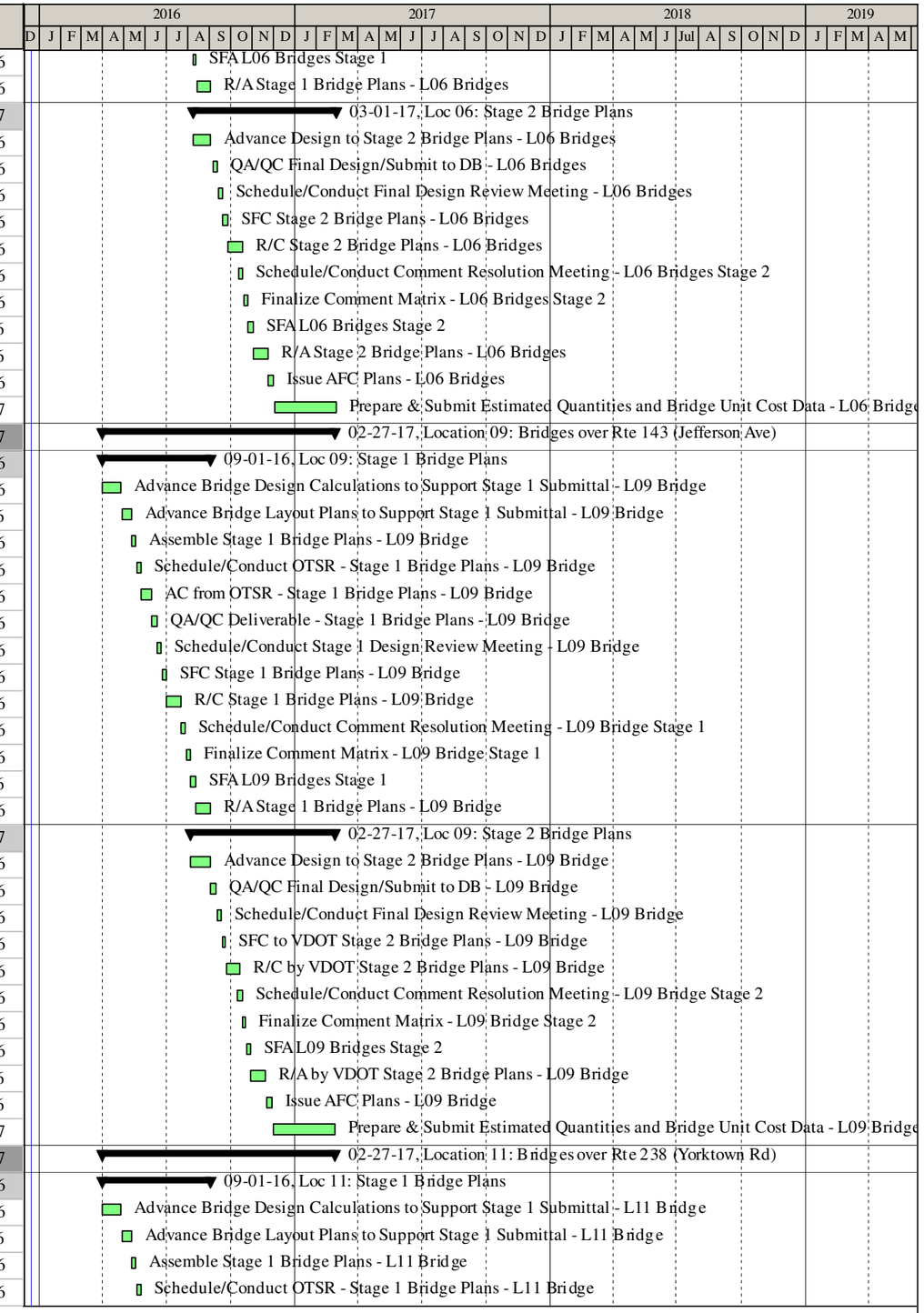
Activity ID	Activity Name	Original Duration	Start	Finish
DSRDB0000100	R/A Final Design Documents - Roadway - Sec. B	21	10-12-16	11-01-16
DSRDB0000110	Issue AFC Plans - Roadway - Sec. B	5	11-02-16	11-08-16
DSRDB0000150	Schedule/Conduct Comment Resolution Meeting - Landscaping - Sec. B	5	11-22-16	11-30-16
DSRDB0000160	Finalize Comment Matrix - Landscaping - Sec. B	5	12-01-16	12-07-16
DSRDB0000170	R/A Landscaping Plan for Busch Gardens Interchange (VDOT) - Sec. B	21	12-08-16	12-28-16
DSRDB0000180	Issue AFC - Landscaping Plan for Busch Gardens Interchange - Sec. B	5	01-03-17	01-09-17
Section C: Sta X285 to X379		86	07-11-16	11-08-16
DSRDC0000010	Advance Design to Final Design Documents - Roadway - Sec. C	30	07-11-16	08-19-16
DSRDC0000040	QA/QC Final Design/Submit to DB and NADR consultant - Roadway - Sec. C	5	08-22-16	08-26-16
DSRDC0000050	Schedule/Conduct Final Design Review Meeting - Roadway - Sec. C	5	08-29-16	09-02-16
DSRDC0000060	SFC Final Design Documents - Roadway - Sec. C	5	09-06-16	09-12-16
DSRDC0000070	R/C Final Design Documents - Roadway - Sec. C	21	09-13-16	10-03-16
DSRDC0000080	Schedule/Conduct Comment Resolution Meeting - Roadway - Sec. C	5	09-28-16	10-04-16
DSRDC0000090	Finalize Comment Matrix - Roadway - Sec. C	5	10-05-16	10-11-16
DSRDC0000100	R/A Final Design Documents - Roadway - Sec. C	21	10-12-16	11-01-16
DSRDC0000110	Issue AFC Plans - Roadway - Sec. C	5	11-02-16	11-08-16
Section D: Sta X379 to X502		86	07-18-16	11-15-16
DSRDD0000010	Advance Design to Final Design Documents - Roadway - Sec. D	30	07-18-16	08-26-16
DSRDD0000040	QA/QC Final Design/Submit to DB - Roadway - Sec. D	5	08-29-16	09-02-16
DSRDD0000050	Schedule/Conduct Final Design Review Meeting - Roadway - Sec. D	5	09-06-16	09-12-16
DSRDD0000060	SFC Final Design Documents - Roadway - Sec. D	5	09-13-16	09-19-16
DSRDD0000070	R/C Final Design Documents - Roadway - Sec. D	21	09-20-16	10-10-16
DSRDD0000080	Schedule/Conduct Comment Resolution Meeting - Roadway - Sec. D	5	10-05-16	10-11-16
DSRDD0000090	Finalize Comment Matrix - Roadway - Sec. D	5	10-12-16	10-18-16
DSRDD0000100	R/A Final Design Documents - Roadway - Sec. D	21	10-19-16	11-08-16
DSRDD0000110	Issue AFC Plans - Roadway - Sec. D	5	11-09-16	11-15-16
Structural Design		229	03-31-16	03-01-17
Location 02: Bridges over Rte 641 (Penniman Rd)		227	03-31-16	02-27-17
Loc 02: Stage 1 Bridge Plans		109	03-31-16	09-01-16
DSSDAA000010	Advance Bridge Design Calculations to Support Stage 1 Submittal - L02 Bridges	20	03-31-16	04-27-16
DSSDAA000020	Advance Bridge Layout Plans to Support Stage 1 Submittal - L02 Bridges	10	04-28-16	05-11-16
DSSDAA000030	Assemble Stage 1 Bridge Plans - L02 Bridges	5	05-12-16	05-18-16
DSSDAA000040	Schedule/Conduct OTSR - Stage 1 Bridge Plans - L02 Bridges	5	05-19-16	05-25-16
DSSDAA000050	AC from OTSR - Stage 1 Bridge Plans - L02 Bridges	10	05-26-16	06-09-16
DSSDAA000060	QA/QC Deliverable - Stage 1 Bridge Plans - L02 Bridges	5	06-10-16	06-16-16
DSSDAA000070	Schedule/Conduct Stage 1 Design Review Meeting - L02 Bridges	5	06-17-16	06-23-16
DSSDAA000080	SFC Stage 1 Bridge Plans - L02 Bridges	5	06-24-16	06-30-16
DSSDAA000090	R/C Stage 1 Bridge Plans - L02 Bridges	21	07-01-16	07-21-16
DSSDAA000100	Schedule/Conduct Comment Resolution Meeting - L02 Bridges Stage 1	5	07-22-16	07-28-16
DSSDAA000110	Finalize Comment Matrix - L02 Bridges Stage 1	5	07-29-16	08-04-16
DSSDAA000130	SFA L02 Bridges Stage 1	5	08-05-16	08-11-16
DSSDAA000120	R/A Stage 1 Bridge Plans - L02 Bridges	21	08-12-16	09-01-16
Loc 02: Stage 2 Bridge Plans		138	08-05-16	02-27-17
DSSDAB000010	Advance Design to Stage 2 Bridge Plans - L02 Bridges	20	08-05-16	09-01-16
DSSDAB000040	QA/QC Final Design/Submit to DB - L02 Bridges	5	09-02-16	09-09-16
DSSDAB000050	Schedule/Conduct Final Design Review Meeting - L02 Bridges	5	09-12-16	09-16-16
DSSDAB000060	SFC Stage 2 Bridge Plans - L02 Bridges	5	09-19-16	09-23-16



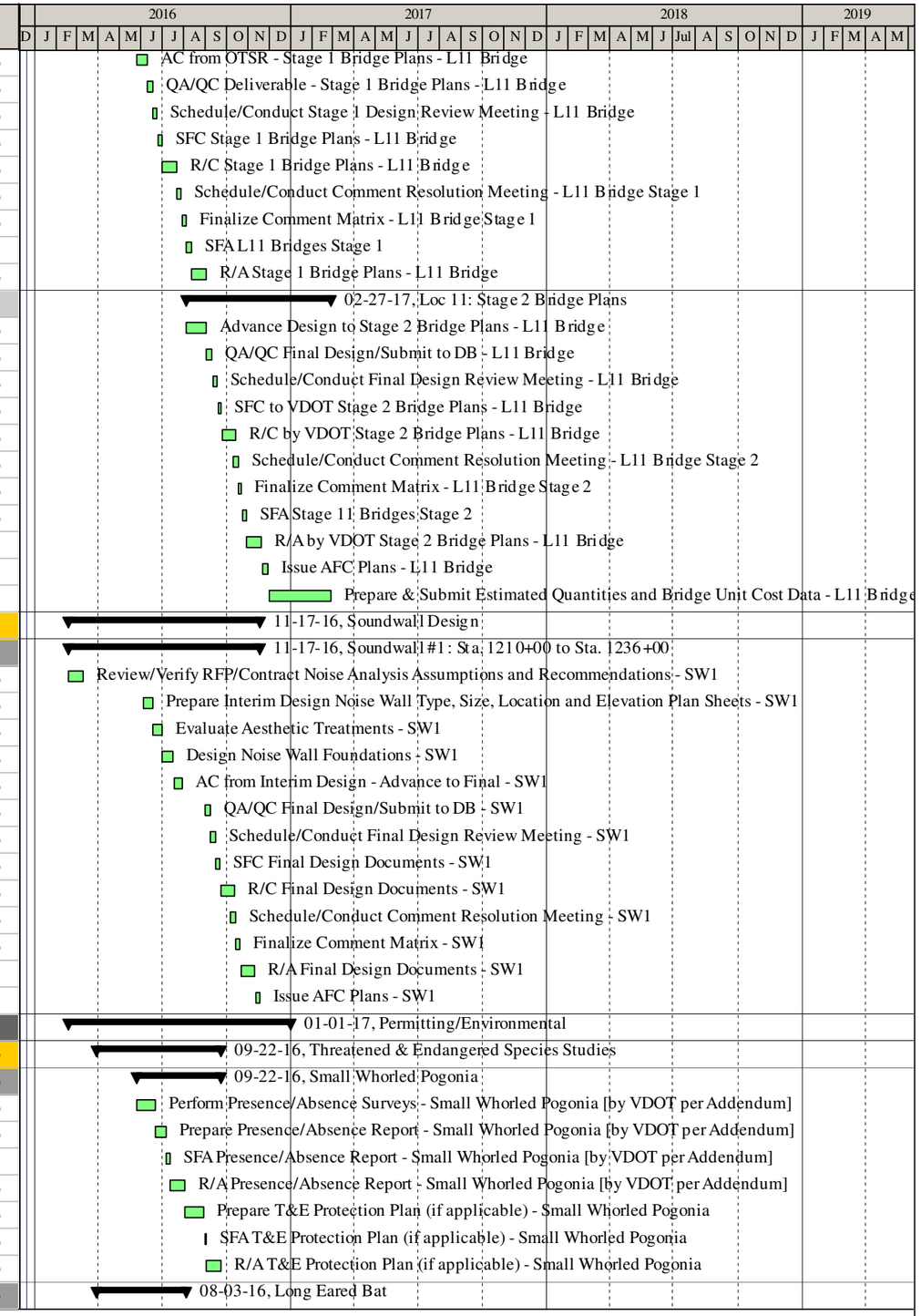
Activity ID	Activity Name	Original Duration	Start	Finish
DSSDAB000070	R/C Stage 2 Bridge Plans - L02 Bridges	21	09-24-16	10-14-16
DSSDAB000080	Schedule/Conduct Comment Resolution Meeting - L02 Bridges Stage 2	5	10-10-16	10-17-16
DSSDAB000090	Finalize Comment Matrix - L02 Bridges Stage 2	5	10-17-16	10-21-16
DSSDAB000130	SFA L02 Bridges Stage 2	5	10-24-16	10-28-16
DSSDAB000100	R/A Stage 2 Bridge Plans - L02 Bridges	21	10-29-16	11-18-16
DSSDAB000110	Issue AFC Plans - L02 Bridges	5	11-21-16	11-29-16
DSSDAB000120	Prepare & Submit Estimated Quantities and Bridge Unit Cost Data - L02 Bridges [2.3.9]	90	11-30-16	02-27-17
Location 04 EB: Bridge B-629 over Ramp to Rte 143		227	03-31-16	02-27-17
Loc 04 EB: Stage 1 Bridge Plans		109	03-31-16	09-01-16
DSSDBA000010	Advance Bridge Design Calculations to Support Stage 1 Submittal - L04 Bridge	20	03-31-16	04-27-16
DSSDBA000020	Advance Bridge Layout Plans to Support Stage 1 Submittal - L04 Bridge	10	04-28-16	05-11-16
DSSDBA000030	Assemble Stage 1 Bridge Plans - L04 Bridge	5	05-12-16	05-18-16
DSSDBA000040	Schedule/Conduct OTSR - Stage 1 Bridge Plans - L04 Bridge	5	05-19-16	05-25-16
DSSDBA000050	AC from OTSR - Stage 1 Bridge Plans - L04 Bridge	10	05-26-16	06-09-16
DSSDBA000060	QA/QC Deliverable - Stage 1 Bridge Plans - L04 Bridge	5	06-10-16	06-16-16
DSSDBA000070	Schedule/Conduct Stage 1 Design Review Meeting - L04 Bridge	5	06-17-16	06-23-16
DSSDBA000080	SFC Stage 1 Bridge Plans - L04 Bridge	5	06-24-16	06-30-16
DSSDBA000090	R/C Stage 1 Bridge Plans - L04 Bridge	21	07-01-16	07-21-16
DSSDBA000100	Schedule/Conduct Comment Resolution Meeting - L04 Bridge Stage 1	5	07-22-16	07-28-16
DSSDBA000110	Finalize Comment Matrix - L04 Bridge Stage 1	5	07-29-16	08-04-16
DSSDBA000130	SFA L04 Bridge Stage 1	5	08-05-16	08-11-16
DSSDBA000120	R/A Stage 1 Bridge Plans - L04 Bridge	21	08-12-16	09-01-16
Loc 04 EB: Stage 2 Bridge Plans		138	08-05-16	02-27-17
DSSDBB000010	Advance Design to Stage 2 Bridge Plans - L04 Bridge	20	08-05-16	09-01-16
DSSDBB000040	QA/QC Final Design/Submit to DB - L04 Bridge	5	09-02-16	09-09-16
DSSDBB000050	Schedule/Conduct Final Design Review Meeting - L04 Bridge	5	09-12-16	09-16-16
DSSDBB000060	SFC to VDOT Stage 2 Bridge Plans - L04 Bridge	5	09-19-16	09-23-16
DSSDBB000070	R/C by VDOT Stage 2 Bridge Plans - L04 Bridge	21	09-24-16	10-14-16
DSSDBB000080	Schedule/Conduct Comment Resolution Meeting - L04 Bridge Stage 2	5	10-10-16	10-17-16
DSSDBB000090	Finalize Comment Matrix - L04 Bridge Stage 2	5	10-17-16	10-21-16
DSSDBB000130	SFA L04 Bridge Stage 2	5	10-24-16	10-28-16
DSSDBB000100	R/A by VDOT Stage 2 Bridge Plans - L04 Bridge	21	10-29-16	11-18-16
DSSDBB000110	Issue AFC Plans - L04 Bridge	5	11-21-16	11-29-16
DSSDBB000120	Prepare & Submit Estimated Quantities and Bridge Unit Cost Data - L04 Bridge [2.3.9]	90	11-30-16	02-27-17
Location 06: Bridges over Burma Rd & NWSRR		229	03-31-16	03-01-17
Loc 06: Stage 1 Bridge Plans		110	03-31-16	09-02-16
DSSDCA000010	Advance Bridge Design Calculations to Support Stage 1 Submittal - L06 Bridges	20	03-31-16	04-27-16
DSSDCA000020	Advance Bridge Layout Plans to Support Stage 1 Submittal - L06 Bridges	10	04-28-16	05-11-16
DSSDCA000030	Assemble Stage 1 Bridge Plans - L06 Bridges	5	05-12-16	05-18-16
DSSDCA000060	QA/QC Deliverable - Stage 1 Bridge Plans - L06 Bridges	5	05-19-16	05-25-16
DSSDCA000065	Schedule/Conduct Stage 1 Design Review Meeting - L06 Bridges	5	05-26-16	06-02-16
DSSDCA000070	SFC to VDOT Stage 1 Bridge Plans - L06 Bridges	5	06-03-16	06-09-16
DSSDCA000090	SFC to NWSRR Stage 1 Bridge Plans - L06 Bridges	5	06-03-16	06-09-16
DSSDCA000080	R/C by VDOT Stage 1 Bridge Plans - L06 Bridges	21	06-10-16	06-30-16
DSSDCA000100	R/C by NWSRR Stage 1 Bridge Plans - L06 Bridges	45	06-10-16	07-24-16
DSSDCA000110	Schedule/Conduct Comment Resolution Meeting - L06 Bridges Stage 1	5	07-25-16	07-29-16
DSSDCA000120	Finalize Comment Matrix - L06 Bridges Stage 1	5	08-01-16	08-05-16



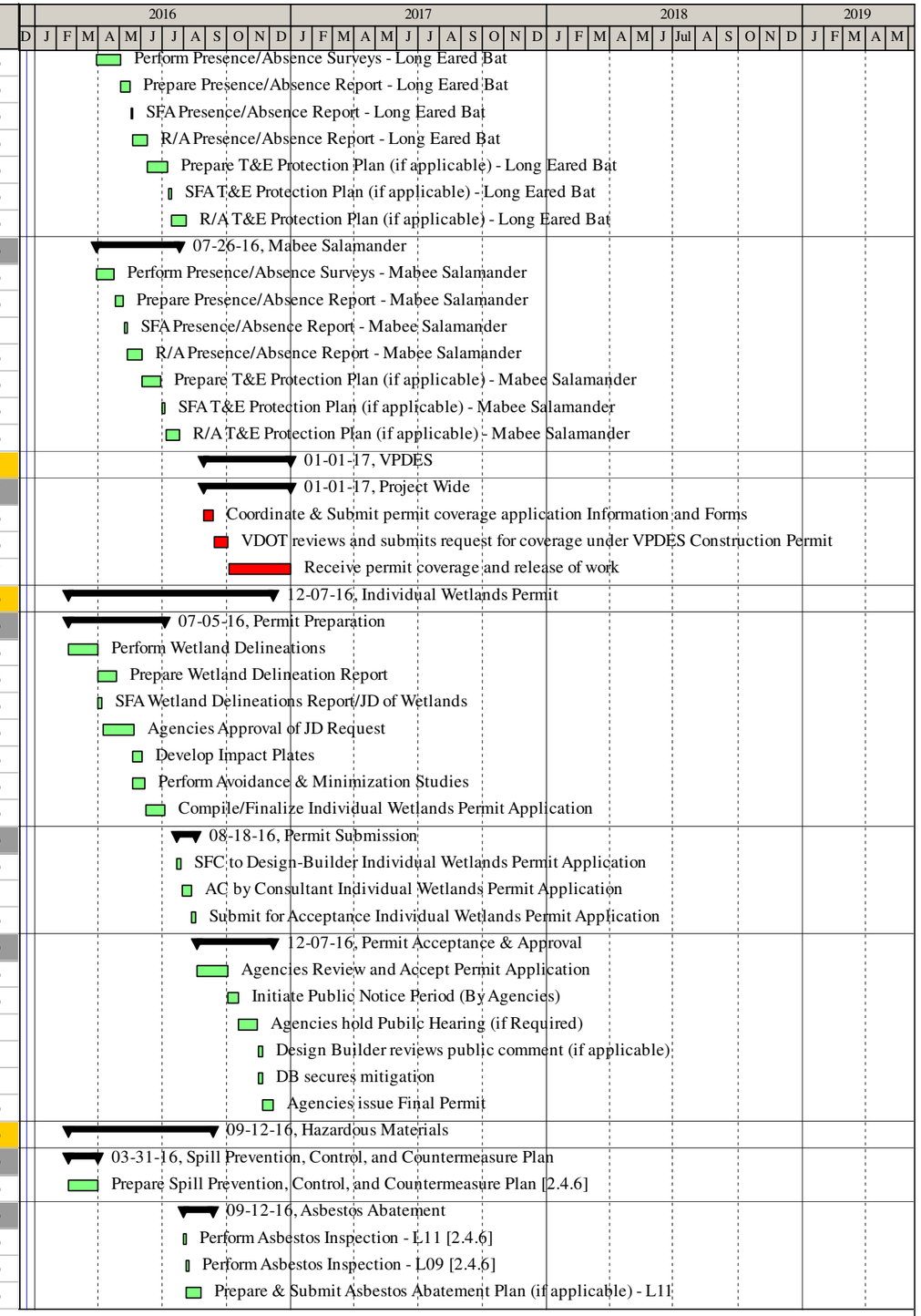
Activity ID	Activity Name	Original Duration	Start	Finish
DSSDCA000140	SFA L06 Bridges Stage 1	5	08-08-16	08-12-16
DSSDCA000130	R/A Stage 1 Bridge Plans - L06 Bridges	21	08-13-16	09-02-16
Loc 06: Stage 2 Bridge Plans		139	08-08-16	03-01-17
DSSDCB000010	Advance Design to Stage 2 Bridge Plans - L06 Bridges	20	08-08-16	09-02-16
DSSDCB000040	QA/QC Final Design/Submit to DB - L06 Bridges	5	09-06-16	09-12-16
DSSDCB000050	Schedule/Conduct Final Design Review Meeting - L06 Bridges	5	09-13-16	09-19-16
DSSDCB000060	SFC Stage 2 Bridge Plans - L06 Bridges	5	09-20-16	09-26-16
DSSDCB000070	R/C Stage 2 Bridge Plans - L06 Bridges	21	09-27-16	10-17-16
DSSDCB000080	Schedule/Conduct Comment Resolution Meeting - L06 Bridges Stage 2	5	10-12-16	10-18-16
DSSDCB000090	Finalize Comment Matrix - L06 Bridges Stage 2	5	10-19-16	10-25-16
DSSDCB000130	SFA L06 Bridges Stage 2	5	10-26-16	11-01-16
DSSDCB000100	R/A Stage 2 Bridge Plans - L06 Bridges	21	11-02-16	11-22-16
DSSDCB000110	Issue AFC Plans - L06 Bridges	5	11-23-16	12-01-16
DSSDCB000120	Prepare & Submit Estimated Quantities and Bridge Unit Cost Data - L06 Bridges [2.3.9]	90	12-02-16	03-01-17
Location 09: Bridges over Rte 143 (Jefferson Ave)		227	03-31-16	02-27-17
Loc 09: Stage 1 Bridge Plans		109	03-31-16	09-01-16
DSSDDA000010	Advance Bridge Design Calculations to Support Stage 1 Submittal - L09 Bridge	20	03-31-16	04-27-16
DSSDDA000020	Advance Bridge Layout Plans to Support Stage 1 Submittal - L09 Bridge	10	04-28-16	05-11-16
DSSDDA000030	Assemble Stage 1 Bridge Plans - L09 Bridge	5	05-12-16	05-18-16
DSSDDA000040	Schedule/Conduct OTSR - Stage 1 Bridge Plans - L09 Bridge	5	05-19-16	05-25-16
DSSDDA000050	AC from OTSR - Stage 1 Bridge Plans - L09 Bridge	10	05-26-16	06-09-16
DSSDDA000060	QA/QC Deliverable - Stage 1 Bridge Plans - L09 Bridge	5	06-10-16	06-16-16
DSSDDA000070	Schedule/Conduct Stage 1 Design Review Meeting - L09 Bridge	5	06-17-16	06-23-16
DSSDDA000080	SFC Stage 1 Bridge Plans - L09 Bridge	5	06-24-16	06-30-16
DSSDDA000090	R/C Stage 1 Bridge Plans - L09 Bridge	21	07-01-16	07-21-16
DSSDDA000100	Schedule/Conduct Comment Resolution Meeting - L09 Bridge Stage 1	5	07-22-16	07-28-16
DSSDDA000110	Finalize Comment Matrix - L09 Bridge Stage 1	5	07-29-16	08-04-16
DSSDDA000130	SFA L09 Bridges Stage 1	5	08-05-16	08-11-16
DSSDDA000120	R/A Stage 1 Bridge Plans - L09 Bridge	21	08-12-16	09-01-16
Loc 09: Stage 2 Bridge Plans		138	08-05-16	02-27-17
DSSDDB000010	Advance Design to Stage 2 Bridge Plans - L09 Bridge	20	08-05-16	09-01-16
DSSDDB000040	QA/QC Final Design/Submit to DB - L09 Bridge	5	09-02-16	09-09-16
DSSDDB000050	Schedule/Conduct Final Design Review Meeting - L09 Bridge	5	09-12-16	09-16-16
DSSDDB000060	SFC to VDOT Stage 2 Bridge Plans - L09 Bridge	5	09-19-16	09-23-16
DSSDDB000070	R/C by VDOT Stage 2 Bridge Plans - L09 Bridge	21	09-24-16	10-14-16
DSSDDB000080	Schedule/Conduct Comment Resolution Meeting - L09 Bridge Stage 2	5	10-10-16	10-17-16
DSSDDB000090	Finalize Comment Matrix - L09 Bridge Stage 2	5	10-17-16	10-21-16
DSSDDB000130	SFA L09 Bridges Stage 2	5	10-24-16	10-28-16
DSSDDB000100	R/A by VDOT Stage 2 Bridge Plans - L09 Bridge	21	10-29-16	11-18-16
DSSDDB000110	Issue AFC Plans - L09 Bridge	5	11-21-16	11-29-16
DSSDDB000120	Prepare & Submit Estimated Quantities and Bridge Unit Cost Data - L09 Bridges [2.3.9]	90	11-30-16	02-27-17
Location 11: Bridges over Rte 238 (Yorktown Rd)		227	03-31-16	02-27-17
Loc 11: Stage 1 Bridge Plans		109	03-31-16	09-01-16
DSSDEA000010	Advance Bridge Design Calculations to Support Stage 1 Submittal - L11 Bridge	20	03-31-16	04-27-16
DSSDEA000020	Advance Bridge Layout Plans to Support Stage 1 Submittal - L11 Bridge	10	04-28-16	05-11-16
DSSDEA000030	Assemble Stage 1 Bridge Plans - L11 Bridge	5	05-12-16	05-18-16
DSSDEA000040	Schedule/Conduct OTSR - Stage 1 Bridge Plans - L11 Bridge	5	05-19-16	05-25-16



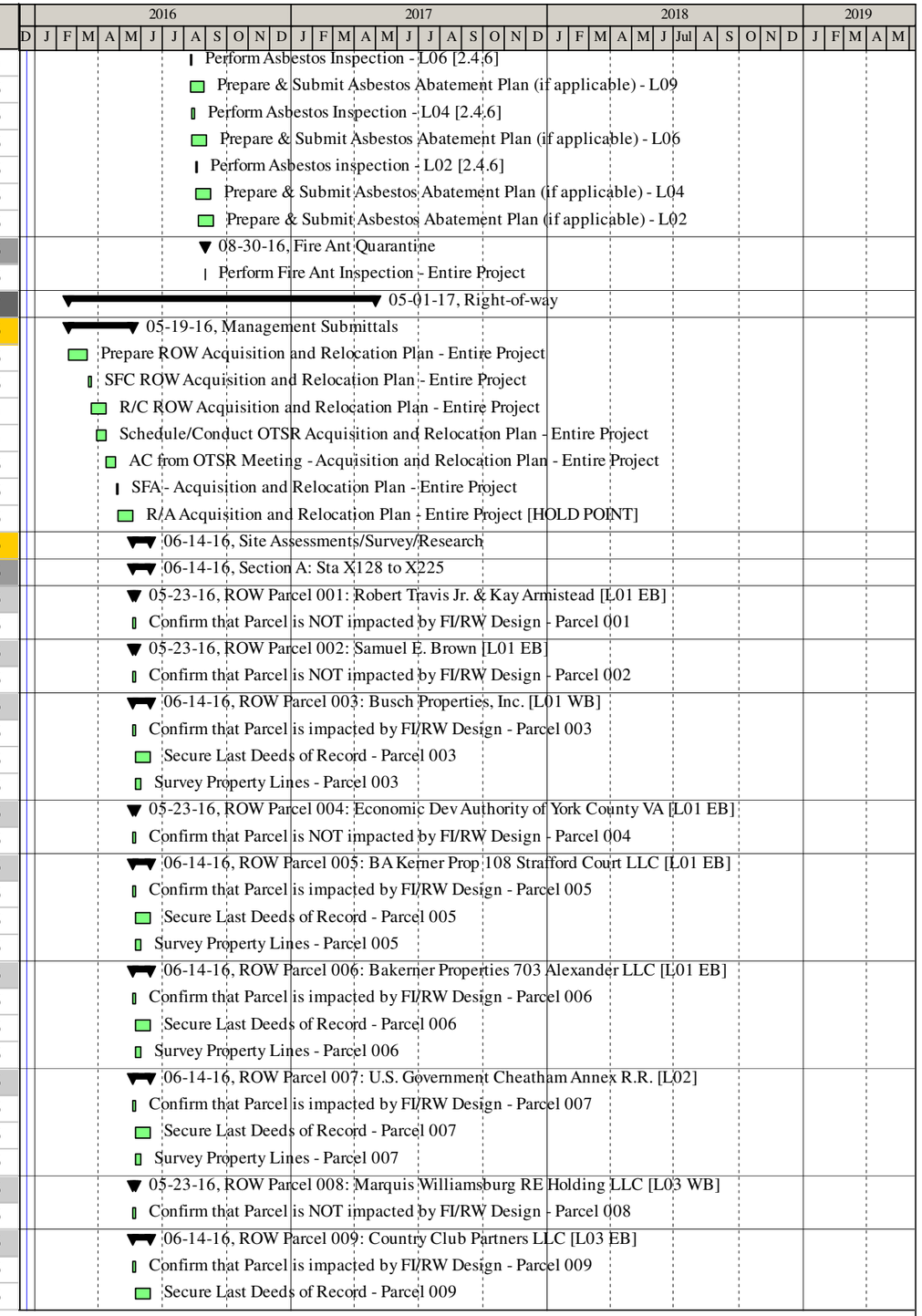
Activity ID	Activity Name	Original Duration	Start	Finish
DSSDEA000050	AC from OTSR - Stage 1 Bridge Plans - L11 Bridge	10	05-26-16	06-09-16
DSSDEA000060	QA/QC Deliverable - Stage 1 Bridge Plans - L11 Bridge	5	06-10-16	06-16-16
DSSDEA000070	Schedule/Conduct Stage 1 Design Review Meeting - L11 Bridge	5	06-17-16	06-23-16
DSSDEA000080	SFC Stage 1 Bridge Plans - L11 Bridge	5	06-24-16	06-30-16
DSSDEA000090	R/C Stage 1 Bridge Plans - L11 Bridge	21	07-01-16	07-21-16
DSSDEA000100	Schedule/Conduct Comment Resolution Meeting - L11 Bridge Stage 1	5	07-22-16	07-28-16
DSSDEA000110	Finalize Comment Matrix - L11 Bridge Stage 1	5	07-29-16	08-04-16
DSSDEA000130	SFA L11 Bridges Stage 1	5	08-05-16	08-11-16
DSSDEA000120	R/A Stage 1 Bridge Plans - L11 Bridge	21	08-12-16	09-01-16
Loc 11: Stage 2 Bridge Plans		138	08-05-16	02-27-17
DSSDEB000010	Advance Design to Stage 2 Bridge Plans - L11 Bridge	20	08-05-16	09-01-16
DSSDEB000040	QA/QC Final Design/Submit to DB - L11 Bridge	5	09-02-16	09-09-16
DSSDEB000050	Schedule/Conduct Final Design Review Meeting - L11 Bridge	5	09-12-16	09-16-16
DSSDEB000060	SFC to VDOT Stage 2 Bridge Plans - L11 Bridge	5	09-19-16	09-23-16
DSSDEB000070	R/C by VDOT Stage 2 Bridge Plans - L11 Bridge	21	09-24-16	10-14-16
DSSDEB000080	Schedule/Conduct Comment Resolution Meeting - L11 Bridge Stage 2	5	10-10-16	10-17-16
DSSDEB000090	Finalize Comment Matrix - L11 Bridge Stage 2	5	10-17-16	10-21-16
DSSDEB000130	SFA Stage 11 Bridges Stage 2	5	10-24-16	10-28-16
DSSDEB000100	R/A by VDOT Stage 2 Bridge Plans - L11 Bridge	21	10-29-16	11-18-16
DSSDEB000110	Issue AFC Plans - L11 Bridge	5	11-21-16	11-29-16
DSSDEB000120	Prepare & Submit Estimated Quantities and Bridge Unit Cost Data - L11 Bridges [2.3.9]	90	11-30-16	02-27-17
Soundwall Design		192	02-18-16	11-17-16
Soundwall #1: Sta. 1210+00 to Sta. 1236+00		192	02-18-16	11-17-16
DSSWA0000010	Review/Verify RFP/Contract Noise Analysis Assumptions and Recommendations - SW1	15	02-18-16	03-09-16
DSSWA0000020	Prepare Interim Design Noise Wall Type, Size, Location and Elevation Plan Sheets - SW1	10	06-03-16	06-16-16
DSSWA0000040	Evaluate Aesthetic Treatments - SW1	10	06-17-16	06-30-16
DSSWA0000030	Design Noise Wall Foundations - SW1	10	07-01-16	07-15-16
DSSWA0000050	AC from Interim Design - Advance to Final - SW1	10	07-18-16	07-29-16
DSSWA0000080	QA/QC Final Design/Submit to DB - SW1	5	08-31-16	09-07-16
DSSWA0000090	Schedule/Conduct Final Design Review Meeting - SW1	5	09-08-16	09-14-16
DSSWA0000100	SFC Final Design Documents - SW1	5	09-15-16	09-21-16
DSSWA0000110	R/C Final Design Documents - SW1	21	09-22-16	10-12-16
DSSWA0000120	Schedule/Conduct Comment Resolution Meeting - SW1	5	10-07-16	10-13-16
DSSWA0000130	Finalize Comment Matrix - SW1	5	10-14-16	10-20-16
DSSWA0000140	R/A Final Design Documents - SW1	21	10-21-16	11-10-16
DSSWA0000150	Issue AFC Plans - SW1	5	11-11-16	11-17-16
Permitting/Environmental		216	02-18-16	01-01-17
Threatened & Endangered Species Studies		125	03-28-16	09-22-16
Small Whorled Pogonia		84	05-25-16	09-22-16
ENTEA0000010	Perform Presence/Absence Surveys - Small Whorled Pogonia [by VDOT per Addendum]	20	05-25-16	06-21-16
ENTEA0000020	Prepare Presence/Absence Report - Small Whorled Pogonia [by VDOT per Addendum]	10	06-22-16	07-06-16
ENTEA0000030	SFA Presence/Absence Report - Small Whorled Pogonia [by VDOT per Addendum]	3	07-07-16	07-11-16
ENTEA0000040	R/A Presence/Absence Report - Small Whorled Pogonia [by VDOT per Addendum]	21	07-12-16	08-01-16
ENTEA0000050	Prepare T&E Protection Plan (if applicable) - Small Whorled Pogonia	20	08-02-16	08-29-16
ENTEA0000060	SFA T&E Protection Plan (if applicable) - Small Whorled Pogonia	3	08-30-16	09-01-16
ENTEA0000070	R/A T&E Protection Plan (if applicable) - Small Whorled Pogonia	21	09-02-16	09-22-16
Long Eared Bat		90	03-29-16	08-03-16



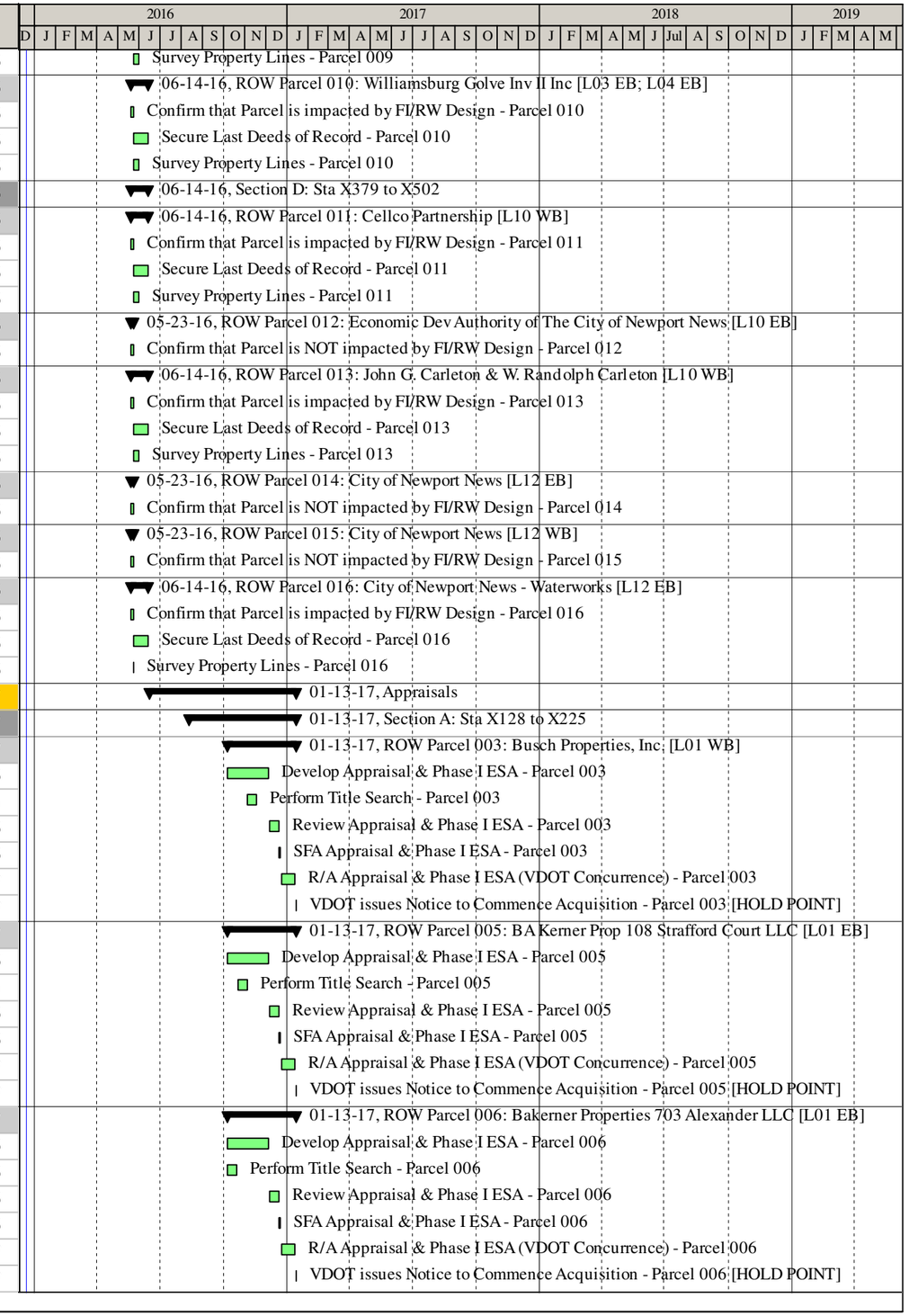
Activity ID	Activity Name	Original Duration	Start	Finish
ENTEB0000010	Perform Presence/Absence Surveys - Long Eared Bat	20	03-29-16	05-02-16
ENTEB0000020	Prepare Presence/Absence Report - Long Eared Bat	10	05-03-16	05-16-16
ENTEB0000030	SFA Presence/Absence Report - Long Eared Bat	3	05-17-16	05-19-16
ENTEB0000040	R/A Presence/Absence Report - Long Eared Bat	21	05-20-16	06-09-16
ENTEB0000050	Prepare T&E Protection Plan (if applicable) - Long Eared Bat	20	06-10-16	07-08-16
ENTEB0000060	SFA T&E Protection Plan (if applicable) - Long Eared Bat	3	07-11-16	07-13-16
ENTEB0000070	R/A T&E Protection Plan (if applicable) - Long Eared Bat	21	07-14-16	08-03-16
Mabee Salamander		84	03-28-16	07-26-16
ENTEC0000010	Perform Presence/Absence Surveys - Mabee Salamander	20	03-28-16	04-22-16
ENTEC0000020	Prepare Presence/Absence Report - Mabee Salamander	10	04-25-16	05-06-16
ENTEC0000030	SFA Presence/Absence Report - Mabee Salamander	3	05-09-16	05-11-16
ENTEC0000040	R/A Presence/Absence Report - Mabee Salamander	21	05-12-16	06-01-16
ENTEC0000050	Prepare T&E Protection Plan (if applicable) - Mabee Salamander	20	06-02-16	06-29-16
ENTEC0000060	SFA T&E Protection Plan (if applicable) - Mabee Salamander	3	06-30-16	07-05-16
ENTEC0000070	R/A T&E Protection Plan (if applicable) - Mabee Salamander	21	07-06-16	07-26-16
VPDES		82	08-29-16	01-01-17
Project Wide		82	08-29-16	01-01-17
ENVSA0000010	Coordinate & Submit permit coverage application Information and Forms	10	08-29-16	09-12-16
ENVSA0000020	VDOT reviews and submits request for coverage under VPDES Construction Permit	21	09-13-16	10-03-16
ENVSA0000030	Receive permit coverage and release of work	90	10-04-16	01-01-17
Individual Wetlands Permit		204	02-18-16	12-07-16
Permit Preparation		96	02-18-16	07-05-16
ENWPA0000010	Perform Wetland Delineations	20	02-18-16	03-30-16
ENWPA0000020	Prepare Wetland Delineation Report	20	03-31-16	04-27-16
ENWPA0000060	SFA Wetland Delineations Report/JD of Wetlands	5	03-31-16	04-06-16
ENWPA0000070	Agencies Approval of JD Request	45	04-07-16	05-21-16
ENWPA0000030	Develop Impact Plates	10	05-19-16	06-02-16
ENWPA0000040	Perform Avoidance & Minimization Studies	10	05-19-16	06-06-16
ENWPA0000050	Compile/Finalize Individual Wetlands Permit Application	20	06-07-16	07-05-16
Permit Submission		20	07-22-16	08-18-16
ENWPB0000010	SFC to Design-Builder Individual Wetlands Permit Application	5	07-22-16	07-28-16
ENWPB0000020	AC by Consultant Individual Wetlands Permit Application	10	07-29-16	08-11-16
ENWPB0000060	Submit for Acceptance Individual Wetlands Permit Application	5	08-12-16	08-18-16
Permit Acceptance & Approval		76	08-19-16	12-07-16
ENWPC0000010	Agencies Review and Accept Permit Application	45	08-19-16	10-02-16
ENWPC0000020	Initiate Public Notice Period (By Agencies)	15	10-03-16	10-17-16
ENWPC0000030	Agencies hold Pubilc Hearing (if Required)	20	10-18-16	11-14-16
ENWPC0000040	Design Builder reviews public comment (if applicable)	5	11-15-16	11-21-16
ENWPC0000050	DB secures mitigation	5	11-15-16	11-21-16
ENWPC0000060	Agencies issue Final Permit	10	11-22-16	12-07-16
Hazardous Materials		144	02-18-16	09-12-16
Spill Prevention, Control, and Countermeasure Plan		30	02-18-16	03-31-16
ENHZA0000010	Prepare Spill Prevention, Control, and Countermeasure Plan [2.4.6]	30	02-18-16	03-31-16
Asbestos Abatement		30	08-01-16	09-12-16
ENHZ00000410	Perform Asbestos Inspection - L11 [2.4.6]	3	08-01-16	08-03-16
ENHZ00000310	Perform Asbestos Inspection - L09 [2.4.6]	3	08-04-16	08-08-16
ENHZ00000420	Prepare & Submit Asbestos Abatement Plan (if applicable) - L11	15	08-04-16	08-24-16



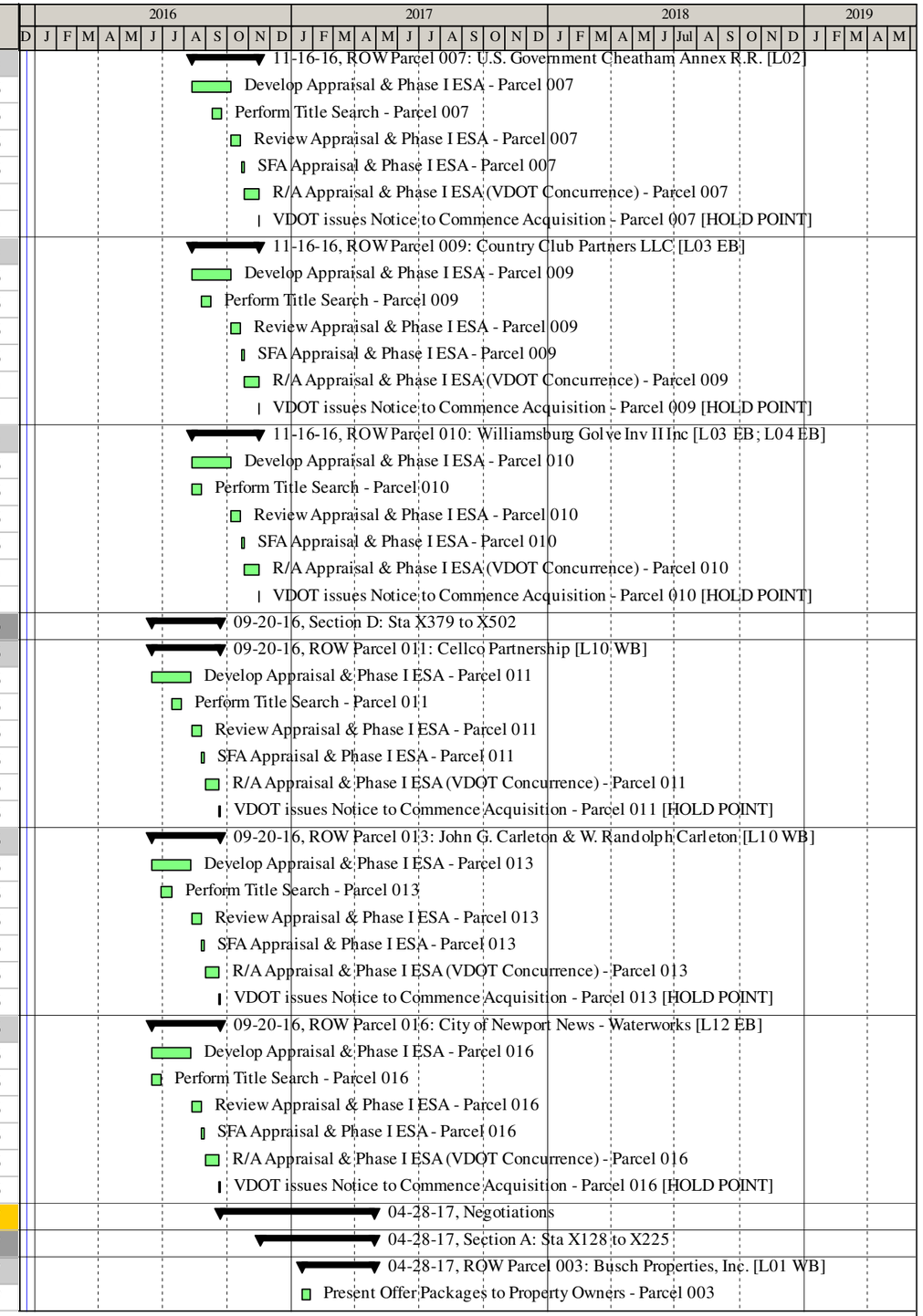
Activity ID	Activity Name	Original Duration	Start	Finish
ENHZ00000210	Perform Asbestos Inspection - L06 [2.4.6]	3	08-09-16	08-11-16
ENHZ00000320	Prepare & Submit Asbestos Abatement Plan (if applicable) - L09	15	08-09-16	08-29-16
ENHZ00000110	Perform Asbestos Inspection - L04 [2.4.6]	3	08-12-16	08-16-16
ENHZ00000220	Prepare & Submit Asbestos Abatement Plan (if applicable) - L06	15	08-12-16	09-01-16
ENHZ00000010	Perform Asbestos inspection - L02 [2.4.6]	3	08-17-16	08-19-16
ENHZ00000120	Prepare & Submit Asbestos Abatement Plan (if applicable) - L04	15	08-17-16	09-07-16
ENHZ00000020	Prepare & Submit Asbestos Abatement Plan (if applicable) - L02	15	08-22-16	09-12-16
Fire Ant Quarantine		1	08-30-16	08-30-16
ENHZ00000030	Perform Fire Ant Inspection - Entire Project	1	08-30-16	08-30-16
Right-of-way		300	02-18-16	05-01-17
Management Submittals		65	02-18-16	05-19-16
RWPM00000010	Prepare ROW Acquisition and Relocation Plan - Entire Project	20	02-18-16	03-16-16
RWPM00000020	SFC ROW Acquisition and Relocation Plan - Entire Project	3	03-17-16	03-21-16
RWPM00000030	R/C ROW Acquisition and Relocation Plan - Entire Project	21	03-22-16	04-11-16
RWPM00000040	Schedule/Conduct OTSR Acquisition and Relocation Plan - Entire Project	10	03-29-16	04-11-16
RWPM00000050	AC from OTSR Meeting - Acquisition and Relocation Plan - Entire Project	10	04-12-16	04-25-16
RWPM00000060	SFA - Acquisition and Relocation Plan - Entire Project	3	04-26-16	04-28-16
RWPM00000070	R/A Acquisition and Relocation Plan - Entire Project [HOLD POINT]	21	04-29-16	05-19-16
Site Assessments/Survey/Research		18	05-19-16	06-14-16
Section A: Sta X128 to X225		18	05-19-16	06-14-16
ROW Parcel 001: Robert Travis Jr. & Kay Armistead [L01 EB]		3	05-19-16	05-23-16
RWSAAA000010	Confirm that Parcel is NOT impacted by FI/RW Design - Parcel 001	3	05-19-16	05-23-16
ROW Parcel 002: Samuel E. Brown [L01 EB]		3	05-19-16	05-23-16
RWSAAB000010	Confirm that Parcel is NOT impacted by FI/RW Design - Parcel 002	3	05-19-16	05-23-16
ROW Parcel 003: Busch Properties, Inc. [L01 WB]		18	05-19-16	06-14-16
RWSAAC000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 003	3	05-19-16	05-23-16
RWSAAC000020	Secure Last Deeds of Record - Parcel 003	15	05-24-16	06-14-16
RWSAAC000030	Survey Property Lines - Parcel 003	5	05-24-16	05-31-16
ROW Parcel 004: Economic Dev Authority of York County VA [L01 EB]		3	05-19-16	05-23-16
RWSAAD000010	Confirm that Parcel is NOT impacted by FI/RW Design - Parcel 004	3	05-19-16	05-23-16
ROW Parcel 005: BA Kerner Prop 108 Strafford Court LLC [L01 EB]		18	05-19-16	06-14-16
RWSAAE000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 005	3	05-19-16	05-23-16
RWSAAE000020	Secure Last Deeds of Record - Parcel 005	15	05-24-16	06-14-16
RWSAAE000030	Survey Property Lines - Parcel 005	5	05-24-16	05-31-16
ROW Parcel 006: Bakerner Properties 703 Alexander LLC [L01 EB]		18	05-19-16	06-14-16
RWSAAF000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 006	3	05-19-16	05-23-16
RWSAAF000020	Secure Last Deeds of Record - Parcel 006	15	05-24-16	06-14-16
RWSAAF000030	Survey Property Lines - Parcel 006	5	05-24-16	05-31-16
ROW Parcel 007: U.S. Government Cheatham Annex R.R. [L02]		18	05-19-16	06-14-16
RWSAAG000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 007	3	05-19-16	05-23-16
RWSAAG000020	Secure Last Deeds of Record - Parcel 007	15	05-24-16	06-14-16
RWSAAG000030	Survey Property Lines - Parcel 007	5	05-24-16	05-31-16
ROW Parcel 008: Marquis Williamsburg RE Holding LLC [L03 WB]		3	05-19-16	05-23-16
RWSAAH000010	Confirm that Parcel is NOT impacted by FI/RW Design - Parcel 008	3	05-19-16	05-23-16
ROW Parcel 009: Country Club Partners LLC [L03 EB]		18	05-19-16	06-14-16
RWSAAJ000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 009	3	05-19-16	05-23-16
RWSAAJ000020	Secure Last Deeds of Record - Parcel 009	15	05-24-16	06-14-16



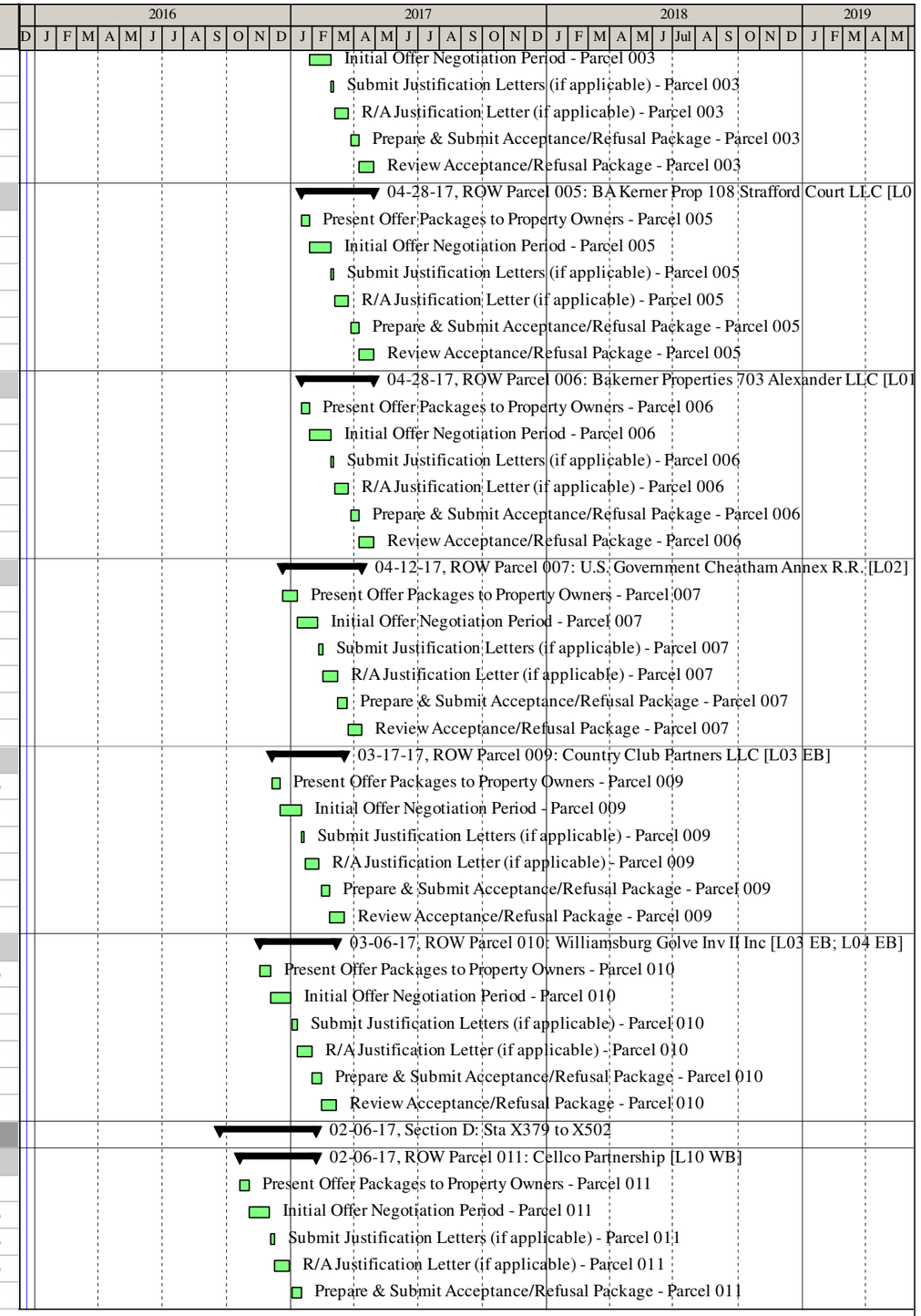
Activity ID	Activity Name	Original Duration	Start	Finish
RWSAAJ000030	Survey Property Lines - Parcel 009	5	05-24-16	05-31-16
ROW Parcel 010: Williamsburg Golve Inv II Inc [L03 EB; L04 EB]		18	05-19-16	06-14-16
RWSAAK000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 010	3	05-19-16	05-23-16
RWSAAK000020	Secure Last Deeds of Record - Parcel 010	15	05-24-16	06-14-16
RWSAAK000030	Survey Property Lines - Parcel 010	5	05-24-16	05-31-16
Section D: Sta X379 to X502		18	05-19-16	06-14-16
ROW Parcel 011: Cellco Partnership [L10 WB]		18	05-19-16	06-14-16
RWSADL000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 011	3	05-19-16	05-23-16
RWSADL000020	Secure Last Deeds of Record - Parcel 011	15	05-24-16	06-14-16
RWSADL000030	Survey Property Lines - Parcel 011	5	05-24-16	05-31-16
ROW Parcel 012: Economic Dev Authority of The City of Newport News [L10 EB]		3	05-19-16	05-23-16
RWSADM000010	Confirm that Parcel is NOT impacted by FI/RW Design - Parcel 012	3	05-19-16	05-23-16
ROW Parcel 013: John G. Carleton & W. Randolph Carleton [L10 WB]		18	05-19-16	06-14-16
RWSADN000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 013	3	05-19-16	05-23-16
RWSADN000020	Secure Last Deeds of Record - Parcel 013	15	05-24-16	06-14-16
RWSADN000030	Survey Property Lines - Parcel 013	5	05-24-16	05-31-16
ROW Parcel 014: City of Newport News [L12 EB]		3	05-19-16	05-23-16
RWSADP000010	Confirm that Parcel is NOT impacted by FI/RW Design - Parcel 014	3	05-19-16	05-23-16
ROW Parcel 015: City of Newport News [L12 WB]		3	05-19-16	05-23-16
RWSADQ000010	Confirm that Parcel is NOT impacted by FI/RW Design - Parcel 015	3	05-19-16	05-23-16
ROW Parcel 016: City of Newport News - Waterworks [L12 EB]		18	05-19-16	06-14-16
RWSADR000010	Confirm that Parcel is impacted by FI/RW Design - Parcel 016	3	05-19-16	05-23-16
RWSADR000020	Secure Last Deeds of Record - Parcel 016	15	05-24-16	06-14-16
RWSADR000030	Survey Property Lines - Parcel 016	1	05-24-16	05-24-16
Appraisals		143	06-15-16	01-13-17
Section A: Sta X128 to X225		103	08-11-16	01-13-17
ROW Parcel 003: Busch Properties, Inc. [L01 WB]		63	10-07-16	01-13-17
RWOPAC000010	Develop Appraisal & Phase I ESA - Parcel 003	40	10-07-16	12-05-16
RWOPAC000020	Perform Title Search - Parcel 003	10	11-04-16	11-17-16
RWOPAC000030	Review Appraisal & Phase I ESA - Parcel 003	10	12-06-16	12-19-16
RWOPAC000040	SFA Appraisal & Phase I ESA - Parcel 003	3	12-20-16	12-22-16
RWOPAC000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 003	21	12-23-16	01-12-17
RWOPAC000060	VDOT issues Notice to Commence Acquisition - Parcel 003 [HOLD POINT]	1	01-13-17	01-13-17
ROW Parcel 005: BA Kerner Prop 108 Strafford Court LLC [L01 EB]		63	10-07-16	01-13-17
RWOPAE000010	Develop Appraisal & Phase I ESA - Parcel 005	40	10-07-16	12-05-16
RWOPAE000020	Perform Title Search - Parcel 005	10	10-21-16	11-03-16
RWOPAE000030	Review Appraisal & Phase I ESA - Parcel 005	10	12-06-16	12-19-16
RWOPAE000040	SFA Appraisal & Phase I ESA - Parcel 005	3	12-20-16	12-22-16
RWOPAE000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 005	21	12-23-16	01-12-17
RWOPAE000060	VDOT issues Notice to Commence Acquisition - Parcel 005 [HOLD POINT]	1	01-13-17	01-13-17
ROW Parcel 006: Bakerner Properties 703 Alexander LLC [L01 EB]		63	10-07-16	01-13-17
RWOPAF000010	Develop Appraisal & Phase I ESA - Parcel 006	40	10-07-16	12-05-16
RWOPAF000020	Perform Title Search - Parcel 006	10	10-07-16	10-20-16
RWOPAF000030	Review Appraisal & Phase I ESA - Parcel 006	10	12-06-16	12-19-16
RWOPAF000040	SFA Appraisal & Phase I ESA - Parcel 006	3	12-20-16	12-22-16
RWOPAF000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 006	21	12-23-16	01-12-17
RWOPAF000060	VDOT issues Notice to Commence Acquisition - Parcel 006 [HOLD POINT]	1	01-13-17	01-13-17



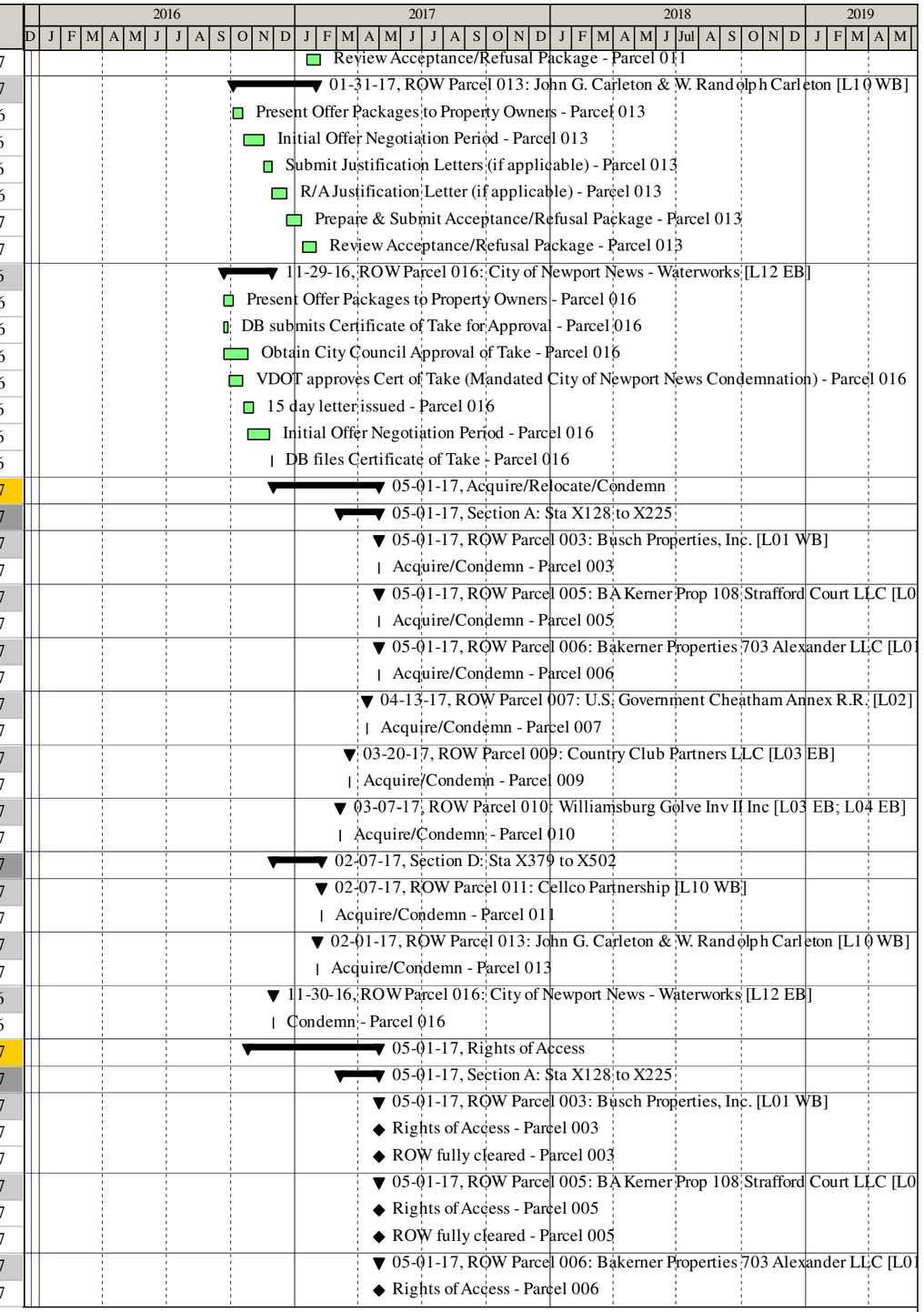
Activity ID	Activity Name	Original Duration	Start	Finish
ROW Parcel 007: U.S. Government Cheatham Annex R.R. [L02]		69	08-11-16	11-16-16
RWOPAG000010	Develop Appraisal & Phase I ESA - Parcel 007	40	08-11-16	10-06-16
RWOPAG000020	Perform Title Search - Parcel 007	10	09-09-16	09-22-16
RWOPAG000030	Review Appraisal & Phase I ESA - Parcel 007	10	10-07-16	10-20-16
RWOPAG000040	SFA Appraisal & Phase I ESA - Parcel 007	3	10-21-16	10-25-16
RWOPAG000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 007	21	10-26-16	11-15-16
RWOPAG000060	VDOT issues Notice to Commence Acquisition - Parcel 007 [HOLD POINT]	1	11-16-16	11-16-16
ROW Parcel 009: Country Club Partners LLC [L03 EB]		69	08-11-16	11-16-16
RWOPAJ000010	Develop Appraisal & Phase I ESA - Parcel 009	40	08-11-16	10-06-16
RWOPAJ000020	Perform Title Search - Parcel 009	10	08-25-16	09-08-16
RWOPAJ000030	Review Appraisal & Phase I ESA - Parcel 009	10	10-07-16	10-20-16
RWOPAJ000040	SFA Appraisal & Phase I ESA - Parcel 009	3	10-21-16	10-25-16
RWOPAJ000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 009	21	10-26-16	11-15-16
RWOPAJ000060	VDOT issues Notice to Commence Acquisition - Parcel 009 [HOLD POINT]	1	11-16-16	11-16-16
ROW Parcel 010: Williamsburg Golve Inv II Inc [L03 EB; L04 EB]		69	08-11-16	11-16-16
RWOPAK000010	Develop Appraisal & Phase I ESA - Parcel 010	40	08-11-16	10-06-16
RWOPAK000020	Perform Title Search - Parcel 010	10	08-11-16	08-24-16
RWOPAK000030	Review Appraisal & Phase I ESA - Parcel 010	10	10-07-16	10-20-16
RWOPAK000040	SFA Appraisal & Phase I ESA - Parcel 010	3	10-21-16	10-25-16
RWOPAK000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 010	21	10-26-16	11-15-16
RWOPAK000060	VDOT issues Notice to Commence Acquisition - Parcel 010 [HOLD POINT]	1	11-16-16	11-16-16
Section D: Sta X379 to X502		68	06-15-16	09-20-16
ROW Parcel 011: Cellco Partnership [L10 WB]		68	06-15-16	09-20-16
RWOPDL000010	Develop Appraisal & Phase I ESA - Parcel 011	40	06-15-16	08-10-16
RWOPDL000020	Perform Title Search - Parcel 011	10	07-14-16	07-27-16
RWOPDL000030	Review Appraisal & Phase I ESA - Parcel 011	10	08-11-16	08-24-16
RWOPDL000040	SFA Appraisal & Phase I ESA - Parcel 011	3	08-25-16	08-29-16
RWOPDL000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 011	21	08-30-16	09-19-16
RWOPDL000060	VDOT issues Notice to Commence Acquisition - Parcel 011 [HOLD POINT]	1	09-20-16	09-20-16
ROW Parcel 013: John G. Carleton & W. Randolph Carleton [L10 WB]		68	06-15-16	09-20-16
RWOPDN000010	Develop Appraisal & Phase I ESA - Parcel 013	40	06-15-16	08-10-16
RWOPDN000020	Perform Title Search - Parcel 013	10	06-29-16	07-13-16
RWOPDN000030	Review Appraisal & Phase I ESA - Parcel 013	10	08-11-16	08-24-16
RWOPDN000040	SFA Appraisal & Phase I ESA - Parcel 013	3	08-25-16	08-29-16
RWOPDN000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 013	21	08-30-16	09-19-16
RWOPDN000060	VDOT issues Notice to Commence Acquisition - Parcel 013 [HOLD POINT]	1	09-20-16	09-20-16
ROW Parcel 016: City of Newport News - Waterworks [L12 EB]		68	06-15-16	09-20-16
RWOPDR000010	Develop Appraisal & Phase I ESA - Parcel 016	40	06-15-16	08-10-16
RWOPDR000020	Perform Title Search - Parcel 016	10	06-15-16	06-28-16
RWOPDR000030	Review Appraisal & Phase I ESA - Parcel 016	10	08-11-16	08-24-16
RWOPDR000040	SFA Appraisal & Phase I ESA - Parcel 016	3	08-25-16	08-29-16
RWOPDR000050	R/A Appraisal & Phase I ESA (VDOT Concurrence) - Parcel 016	21	08-30-16	09-19-16
RWOPDR000060	VDOT issues Notice to Commence Acquisition - Parcel 016 [HOLD POINT]	1	09-20-16	09-20-16
Negotiations		149	09-21-16	04-28-17
Section A: Sta X128 to X225		108	11-17-16	04-28-17
ROW Parcel 003: Busch Properties, Inc. [L01 WB]		74	01-16-17	04-28-17
RWNGAC000010	Present Offer Packages to Property Owners - Parcel 003	10	01-16-17	01-27-17



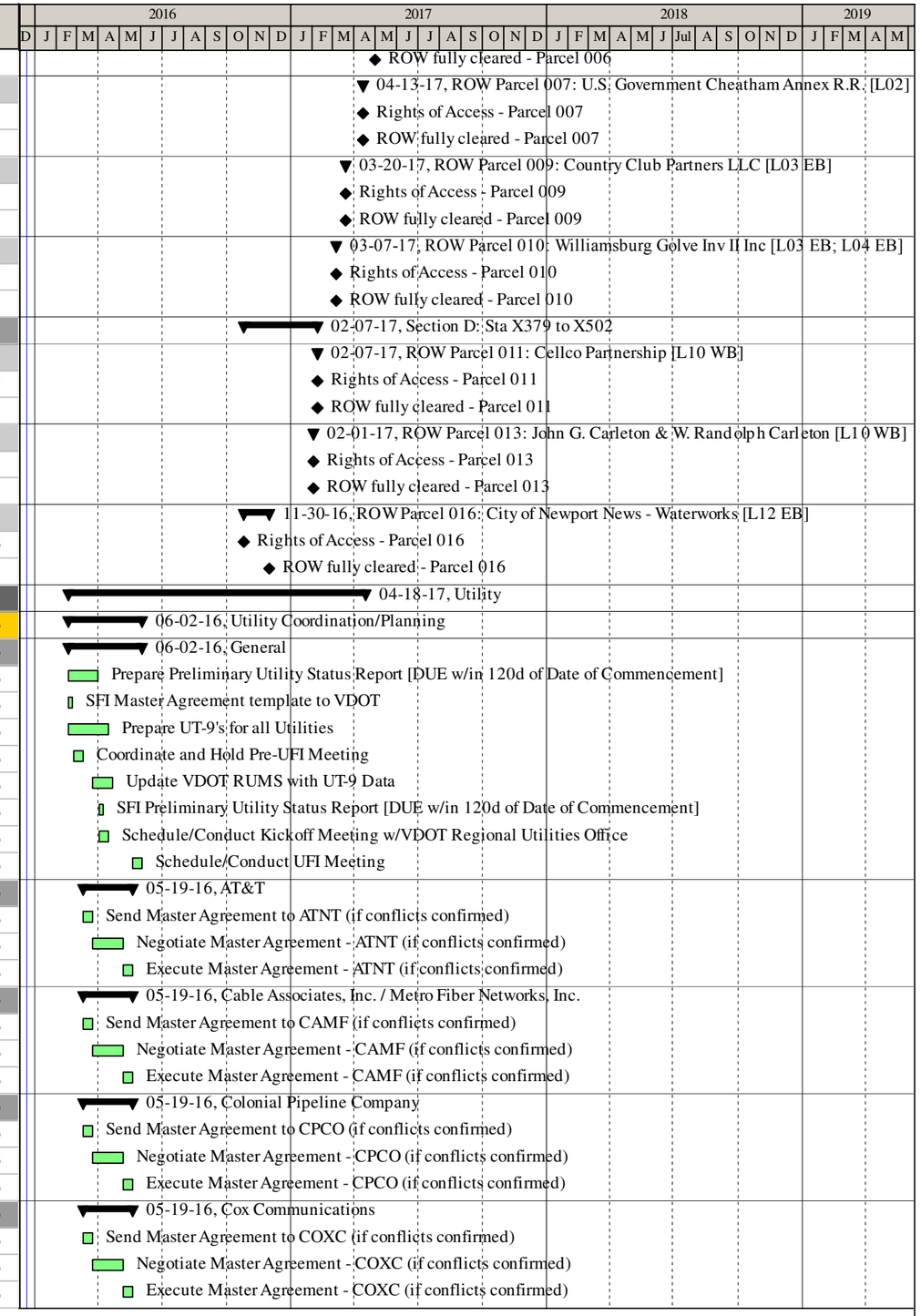
Activity ID	Activity Name	Original Duration	Start	Finish
RWNGAC000020	Initial Offer Negotiation Period - Parcel 003	30	01-28-17	02-26-17
RWNGAC000030	Submit Justification Letters (if applicable) - Parcel 003	5	02-27-17	03-03-17
RWNGAC000040	R/A Justification Letter (if applicable) - Parcel 003	21	03-04-17	03-24-17
RWNGAC000050	Prepare & Submit Acceptance/Refusal Package - Parcel 003	10	03-27-17	04-07-17
RWNGAC000060	Review Acceptance/Refusal Package - Parcel 003	21	04-08-17	04-28-17
ROW Parcel 005: BA Kerner Prop 108 Strafford Court LLC [L01 EB]		74	01-16-17	04-28-17
RWNGAE000010	Present Offer Packages to Property Owners - Parcel 005	10	01-16-17	01-27-17
RWNGAE000020	Initial Offer Negotiation Period - Parcel 005	30	01-28-17	02-26-17
RWNGAE000030	Submit Justification Letters (if applicable) - Parcel 005	5	02-27-17	03-03-17
RWNGAE000040	R/A Justification Letter (if applicable) - Parcel 005	21	03-04-17	03-24-17
RWNGAE000050	Prepare & Submit Acceptance/Refusal Package - Parcel 005	10	03-27-17	04-07-17
RWNGAE000060	Review Acceptance/Refusal Package - Parcel 005	21	04-08-17	04-28-17
ROW Parcel 006: Bakerner Properties 703 Alexander LLC [L01 EB]		74	01-16-17	04-28-17
RWNGAF000010	Present Offer Packages to Property Owners - Parcel 006	10	01-16-17	01-27-17
RWNGAF000020	Initial Offer Negotiation Period - Parcel 006	30	01-28-17	02-26-17
RWNGAF000030	Submit Justification Letters (if applicable) - Parcel 006	5	02-27-17	03-03-17
RWNGAF000040	R/A Justification Letter (if applicable) - Parcel 006	21	03-04-17	03-24-17
RWNGAF000050	Prepare & Submit Acceptance/Refusal Package - Parcel 006	10	03-27-17	04-07-17
RWNGAF000060	Review Acceptance/Refusal Package - Parcel 006	21	04-08-17	04-28-17
ROW Parcel 007: U.S. Government Cheatham Annex R.R. [L02]		77	12-19-16	04-12-17
RWNGAG000010	Present Offer Packages to Property Owners - Parcel 007	10	12-19-16	01-09-17
RWNGAG000020	Initial Offer Negotiation Period - Parcel 007	30	01-10-17	02-08-17
RWNGAG000030	Submit Justification Letters (if applicable) - Parcel 007	5	02-09-17	02-15-17
RWNGAG000040	R/A Justification Letter (if applicable) - Parcel 007	21	02-16-17	03-08-17
RWNGAG000050	Prepare & Submit Acceptance/Refusal Package - Parcel 007	10	03-09-17	03-22-17
RWNGAG000060	Review Acceptance/Refusal Package - Parcel 007	21	03-23-17	04-12-17
ROW Parcel 009: Country Club Partners LLC [L03 EB]		69	12-05-16	03-17-17
RWNGAJ000010	Present Offer Packages to Property Owners - Parcel 009	10	12-05-16	12-16-16
RWNGAJ000020	Initial Offer Negotiation Period - Parcel 009	30	12-17-16	01-15-17
RWNGAJ000030	Submit Justification Letters (if applicable) - Parcel 009	5	01-16-17	01-20-17
RWNGAJ000040	R/A Justification Letter (if applicable) - Parcel 009	21	01-21-17	02-10-17
RWNGAJ000050	Prepare & Submit Acceptance/Refusal Package - Parcel 009	10	02-13-17	02-24-17
RWNGAJ000060	Review Acceptance/Refusal Package - Parcel 009	21	02-25-17	03-17-17
ROW Parcel 010: Williamsburg Golve Inv II Inc [L03 EB; L04 EB]		70	11-17-16	03-06-17
RWNGAK000010	Present Offer Packages to Property Owners - Parcel 010	10	11-17-16	12-02-16
RWNGAK000020	Initial Offer Negotiation Period - Parcel 010	30	12-03-16	01-01-17
RWNGAK000030	Submit Justification Letters (if applicable) - Parcel 010	5	01-03-17	01-09-17
RWNGAK000040	R/A Justification Letter (if applicable) - Parcel 010	21	01-10-17	01-30-17
RWNGAK000050	Prepare & Submit Acceptance/Refusal Package - Parcel 010	10	01-31-17	02-13-17
RWNGAK000060	Review Acceptance/Refusal Package - Parcel 010	21	02-14-17	03-06-17
Section D: Sta X379 to X502		91	09-21-16	02-06-17
ROW Parcel 011: Cellco Partnership [L10 WB]		71	10-19-16	02-06-17
RWNGDL000010	Present Offer Packages to Property Owners - Parcel 011	10	10-19-16	11-01-16
RWNGDL000020	Initial Offer Negotiation Period - Parcel 011	30	11-02-16	12-01-16
RWNGDL000030	Submit Justification Letters (if applicable) - Parcel 011	5	12-02-16	12-08-16
RWNGDL000040	R/A Justification Letter (if applicable) - Parcel 011	21	12-09-16	12-29-16
RWNGDL000050	Prepare & Submit Acceptance/Refusal Package - Parcel 011	10	01-03-17	01-16-17



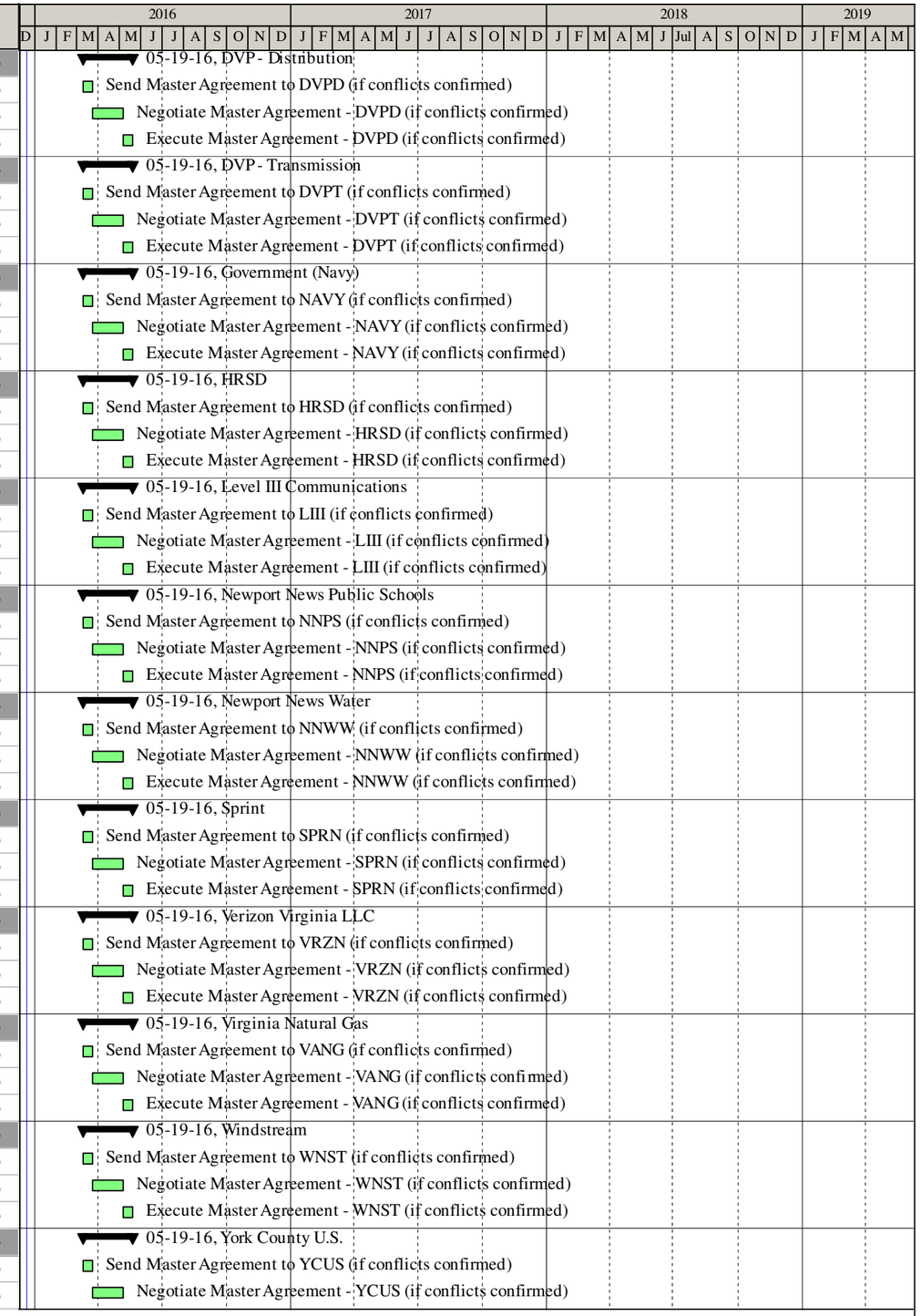
Activity ID	Activity Name	Original Duration	Start	Finish
RWNGDL000060	Review Acceptance/Refusal Package - Parcel 011	21	01-17-17	02-06-17
ROW Parcel 013: John G. Carleton & W. Randolph Carleton [L10 WB]		77	10-05-16	01-31-17
RWNGDN000010	Present Offer Packages to Property Owners - Parcel 013	10	10-05-16	10-18-16
RWNGDN000020	Initial Offer Negotiation Period - Parcel 013	30	10-19-16	11-17-16
RWNGDN000030	Submit Justification Letters (if applicable) - Parcel 013	5	11-18-16	11-28-16
RWNGDN000040	R/A Justification Letter (if applicable) - Parcel 013	21	11-29-16	12-19-16
RWNGDN000050	Prepare & Submit Acceptance/Refusal Package - Parcel 013	10	12-20-16	01-10-17
RWNGDN000060	Review Acceptance/Refusal Package - Parcel 013	21	01-11-17	01-31-17
ROW Parcel 016: City of Newport News - Waterworks [L12 EB]		48	09-21-16	11-29-16
RWNGDR000010	Present Offer Packages to Property Owners - Parcel 016	10	09-21-16	10-04-16
RWNGDR000030	DB submits Certificate of Take for Approval - Parcel 016	5	09-21-16	09-27-16
RWNGDR000070	Obtain City Council Approval of Take - Parcel 016	25	09-21-16	10-25-16
RWNGDR000040	VDOT approves Cert of Take (Mandated City of Newport News Condemnation) - Parcel 016	21	09-28-16	10-18-16
RWNGDR000050	15 day letter issued - Parcel 016	15	10-19-16	11-02-16
RWNGDR000020	Initial Offer Negotiation Period - Parcel 016	30	10-26-16	11-24-16
RWNGDR000060	DB files Certificate of Take - Parcel 016	2	11-28-16	11-29-16
Acquire/Relocate/Condemn		102	11-30-16	05-01-17
Section A: Sta X128 to X225		39	03-07-17	05-01-17
ROW Parcel 003: Busch Properties, Inc. [L01 WB]		1	05-01-17	05-01-17
RWARAC000010	Acquire/Condemn - Parcel 003	1	05-01-17	05-01-17
ROW Parcel 005: BA Kerner Prop 108 Strafford Court LLC [L01 EB]		1	05-01-17	05-01-17
RWARAE000010	Acquire/Condemn - Parcel 005	1	05-01-17	05-01-17
ROW Parcel 006: Bakerner Properties 703 Alexander LLC [L01 EB]		1	05-01-17	05-01-17
RWARAF000010	Acquire/Condemn - Parcel 006	1	05-01-17	05-01-17
ROW Parcel 007: U.S. Government Cheatham Annex R.R. [L02]		1	04-13-17	04-13-17
RWARAG000010	Acquire/Condemn - Parcel 007	1	04-13-17	04-13-17
ROW Parcel 009: Country Club Partners LLC [L03 EB]		1	03-20-17	03-20-17
RWARAJ000010	Acquire/Condemn - Parcel 009	1	03-20-17	03-20-17
ROW Parcel 010: Williamsburg Golve Inv II Inc [L03 EB; L04 EB]		1	03-07-17	03-07-17
RWARAK000010	Acquire/Condemn - Parcel 010	1	03-07-17	03-07-17
Section D: Sta X379 to X502		44	11-30-16	02-07-17
ROW Parcel 011: Cellco Partnership [L10 WB]		1	02-07-17	02-07-17
RWARDL000010	Acquire/Condemn - Parcel 011	1	02-07-17	02-07-17
ROW Parcel 013: John G. Carleton & W. Randolph Carleton [L10 WB]		1	02-01-17	02-01-17
RWARDN000010	Acquire/Condemn - Parcel 013	1	02-01-17	02-01-17
ROW Parcel 016: City of Newport News - Waterworks [L12 EB]		1	11-30-16	11-30-16
RWARDR000010	Condemn - Parcel 016	1	11-30-16	11-30-16
Rights of Access		125	10-25-16	05-01-17
Section A: Sta X128 to X225		38	03-07-17	05-01-17
ROW Parcel 003: Busch Properties, Inc. [L01 WB]		0	05-01-17	05-01-17
RWRAAC000010	Rights of Access - Parcel 003	0		05-01-17
RWRAAC000020	ROW fully cleared - Parcel 003	0		05-01-17
ROW Parcel 005: BA Kerner Prop 108 Strafford Court LLC [L01 EB]		0	05-01-17	05-01-17
RWRAAE000010	Rights of Access - Parcel 005	0		05-01-17
RWRAAE000020	ROW fully cleared - Parcel 005	0		05-01-17
ROW Parcel 006: Bakerner Properties 703 Alexander LLC [L01 EB]		0	05-01-17	05-01-17
RWRAAF000010	Rights of Access - Parcel 006	0		05-01-17



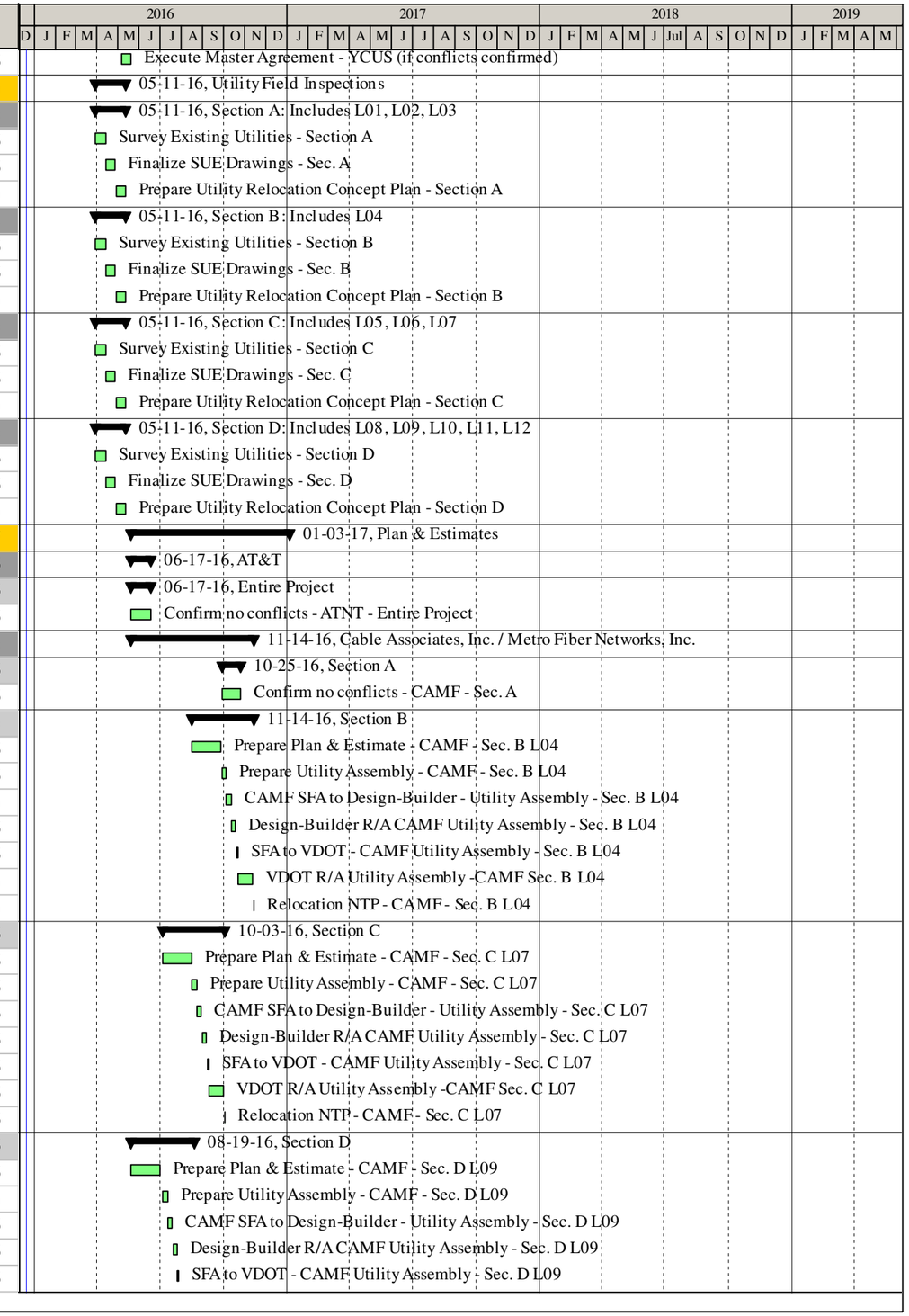
Activity ID	Activity Name	Original Duration	Start	Finish
RWRAAF000020	ROW fully cleared - Parcel 006	0		05-01-17
ROW Parcel 007: U.S. Government Cheatham Annex R.R. [L02]		0	04-13-17	04-13-17
RWRAAG000010	Rights of Access - Parcel 007	0		04-13-17
RWRAAG000020	ROW fully cleared - Parcel 007	0		04-13-17
ROW Parcel 009: Country Club Partners LLC [L03 EB]		0	03-20-17	03-20-17
RWRAAJ000010	Rights of Access - Parcel 009	0		03-20-17
RWRAAJ000020	ROW fully cleared - Parcel 009	0		03-20-17
ROW Parcel 010: Williamsburg Golve Inv II Inc [L03 EB; L04 EB]		0	03-07-17	03-07-17
RWRAAK000010	Rights of Access - Parcel 010	0		03-07-17
RWRAAK000020	ROW fully cleared - Parcel 010	0		03-07-17
Section D: Sta X379 to X502		67	10-25-16	02-07-17
ROW Parcel 011: Cellco Partnership [L10 WB]		0	02-07-17	02-07-17
RWRADL000010	Rights of Access - Parcel 011	0		02-07-17
RWRADL000020	ROW fully cleared - Parcel 011	0		02-07-17
ROW Parcel 013: John G. Carleton & W. Randolph Carleton [L10 WB]		0	02-01-17	02-01-17
RWRADN000010	Rights of Access - Parcel 013	0		02-01-17
RWRADN000020	ROW fully cleared - Parcel 013	0		02-01-17
ROW Parcel 016: City of Newport News - Waterworks [L12 EB]		24	10-25-16	11-30-16
RWRADR000010	Rights of Access - Parcel 016	0		10-25-16
RWRADR000020	ROW fully cleared - Parcel 016	0		11-30-16
Utility		290	02-18-16	04-18-17
Utility Coordination/Planning		74	02-18-16	06-02-16
General		74	02-18-16	06-02-16
UTCPA0000110	Prepare Preliminary Utility Status Report [DUE w/in 120d of Date of Commencement]	30	02-18-16	03-31-16
UTCPA0000010	SFI Master Agreement template to VDOT	5	02-18-16	02-24-16
UTCPA0000040	Prepare UT-9's for all Utilities	40	02-18-16	04-14-16
UTCPA0000030	Coordinate and Hold Pre-UFI Meeting	10	02-25-16	03-09-16
UTCPA0000050	Update VDOT RUMS with UT-9 Data	20	03-24-16	04-21-16
UTCPA0000120	SFI Preliminary Utility Status Report [DUE w/in 120d of Date of Commencement]	5	04-01-16	04-07-16
UTCPA0000000	Schedule/Conduct Kickoff Meeting w/VDOT Regional Utilities Office	10	04-01-16	04-14-16
UTCPA0000060	Schedule/Conduct UFI Meeting	10	05-19-16	06-02-16
AT&T		50	03-10-16	05-19-16
UTCPB0000010	Send Master Agreement to ATNT (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPB0000020	Negotiate Master Agreement - ATNT (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPB0000030	Execute Master Agreement - ATNT (if conflicts confirmed)	10	05-06-16	05-19-16
Cable Associates, Inc. / Metro Fiber Networks, Inc.		50	03-10-16	05-19-16
UTCPC0000010	Send Master Agreement to CAMF (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPC0000020	Negotiate Master Agreement - CAMF (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPC0000030	Execute Master Agreement - CAMF (if conflicts confirmed)	10	05-06-16	05-19-16
Colonial Pipeline Company		50	03-10-16	05-19-16
UTCPD0000010	Send Master Agreement to CPCO (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPD0000020	Negotiate Master Agreement - CPCO (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPD0000030	Execute Master Agreement - CPCO (if conflicts confirmed)	10	05-06-16	05-19-16
Cox Communications		50	03-10-16	05-19-16
UTCPE0000010	Send Master Agreement to COXC (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPE0000020	Negotiate Master Agreement - COXC (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPE0000030	Execute Master Agreement - COXC (if conflicts confirmed)	10	05-06-16	05-19-16



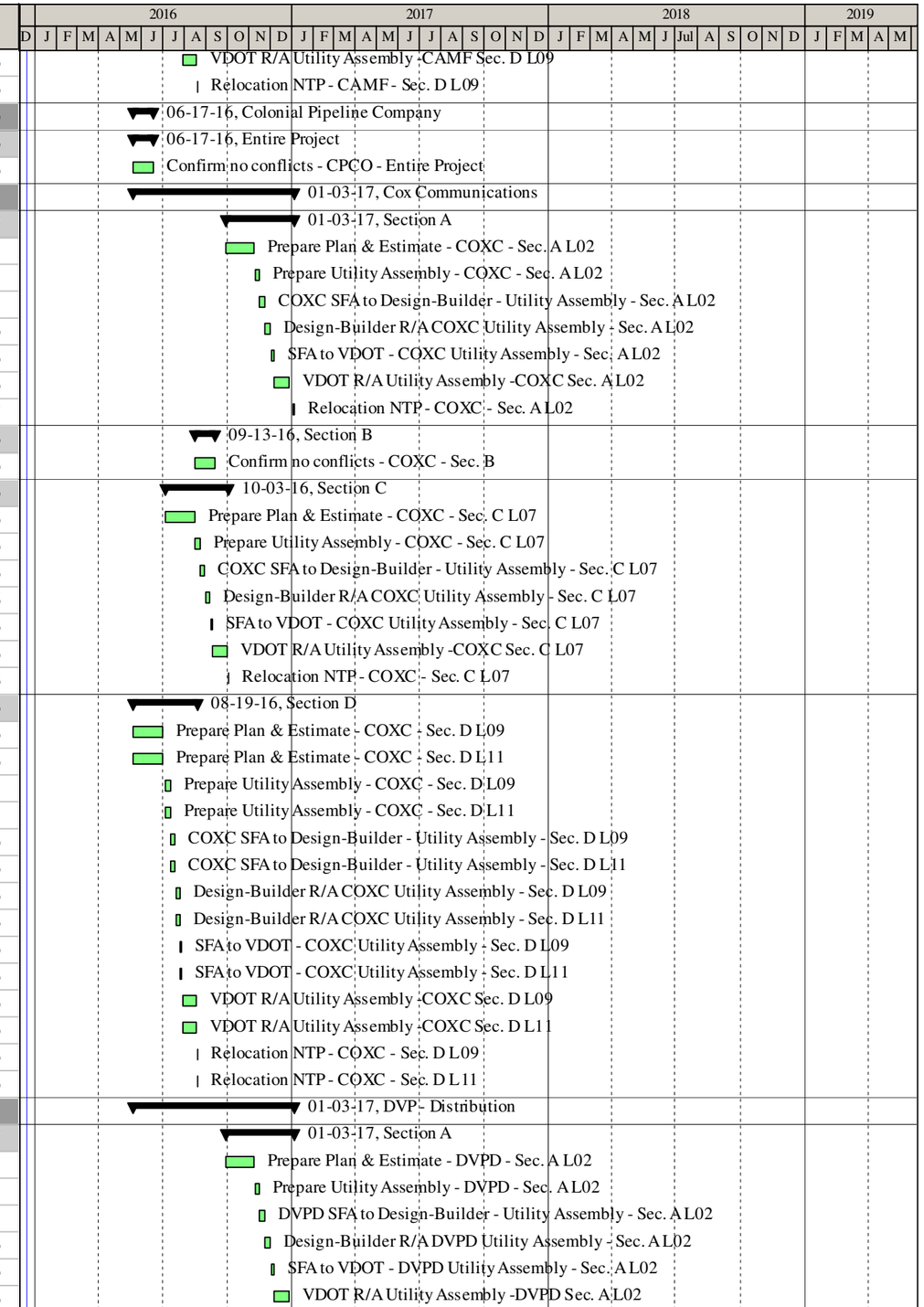
Activity ID	Activity Name	Original Duration	Start	Finish
DVP - Distribution		50	03-10-16	05-19-16
UTCPF0000010	Send Master Agreement to DVPD (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPF0000020	Negotiate Master Agreement - DVPD (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPF0000030	Execute Master Agreement - DVPD (if conflicts confirmed)	10	05-06-16	05-19-16
DVP - Transmission		50	03-10-16	05-19-16
UTCPG0000010	Send Master Agreement to DVPT (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPG0000020	Negotiate Master Agreement - DVPT (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPG0000030	Execute Master Agreement - DVPT (if conflicts confirmed)	10	05-06-16	05-19-16
Government (Navy)		50	03-10-16	05-19-16
UTCPH0000010	Send Master Agreement to NAVY (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPH0000020	Negotiate Master Agreement - NAVY (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPH0000030	Execute Master Agreement - NAVY (if conflicts confirmed)	10	05-06-16	05-19-16
HRSD		50	03-10-16	05-19-16
UTCPJ0000010	Send Master Agreement to HRSD (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPJ0000020	Negotiate Master Agreement - HRSD (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPJ0000030	Execute Master Agreement - HRSD (if conflicts confirmed)	10	05-06-16	05-19-16
Level III Communications		50	03-10-16	05-19-16
UTCPK0000010	Send Master Agreement to LIII (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPK0000020	Negotiate Master Agreement - LIII (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPK0000030	Execute Master Agreement - LIII (if conflicts confirmed)	10	05-06-16	05-19-16
Newport News Public Schools		50	03-10-16	05-19-16
UTCPL0000010	Send Master Agreement to NNPS (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPL0000020	Negotiate Master Agreement - NNPS (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPL0000030	Execute Master Agreement - NNPS (if conflicts confirmed)	10	05-06-16	05-19-16
Newport News Water		50	03-10-16	05-19-16
UTCPM0000010	Send Master Agreement to NNWW (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPM0000020	Negotiate Master Agreement - NNWW (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPM0000030	Execute Master Agreement - NNWW (if conflicts confirmed)	10	05-06-16	05-19-16
Sprint		50	03-10-16	05-19-16
UTCPN0000010	Send Master Agreement to SPRN (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPN0000020	Negotiate Master Agreement - SPRN (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPN0000030	Execute Master Agreement - SPRN (if conflicts confirmed)	10	05-06-16	05-19-16
Verizon Virginia LLC		50	03-10-16	05-19-16
UTCPP0000040	Send Master Agreement to VRZN (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPP0000050	Negotiate Master Agreement - VRZN (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPP0000060	Execute Master Agreement - VRZN (if conflicts confirmed)	10	05-06-16	05-19-16
Virginia Natural Gas		50	03-10-16	05-19-16
UTCPP0000010	Send Master Agreement to VANG (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPP0000020	Negotiate Master Agreement - VANG (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPP0000030	Execute Master Agreement - VANG (if conflicts confirmed)	10	05-06-16	05-19-16
Windstream		50	03-10-16	05-19-16
UTCPP0000070	Send Master Agreement to WNST (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPP0000080	Negotiate Master Agreement - WNST (if conflicts confirmed)	30	03-24-16	05-05-16
UTCPP0000090	Execute Master Agreement - WNST (if conflicts confirmed)	10	05-06-16	05-19-16
York County U.S.		50	03-10-16	05-19-16
UTCPP0000100	Send Master Agreement to YCUS (if conflicts confirmed)	10	03-10-16	03-23-16
UTCPP0000110	Negotiate Master Agreement - YCUS (if conflicts confirmed)	30	03-24-16	05-05-16



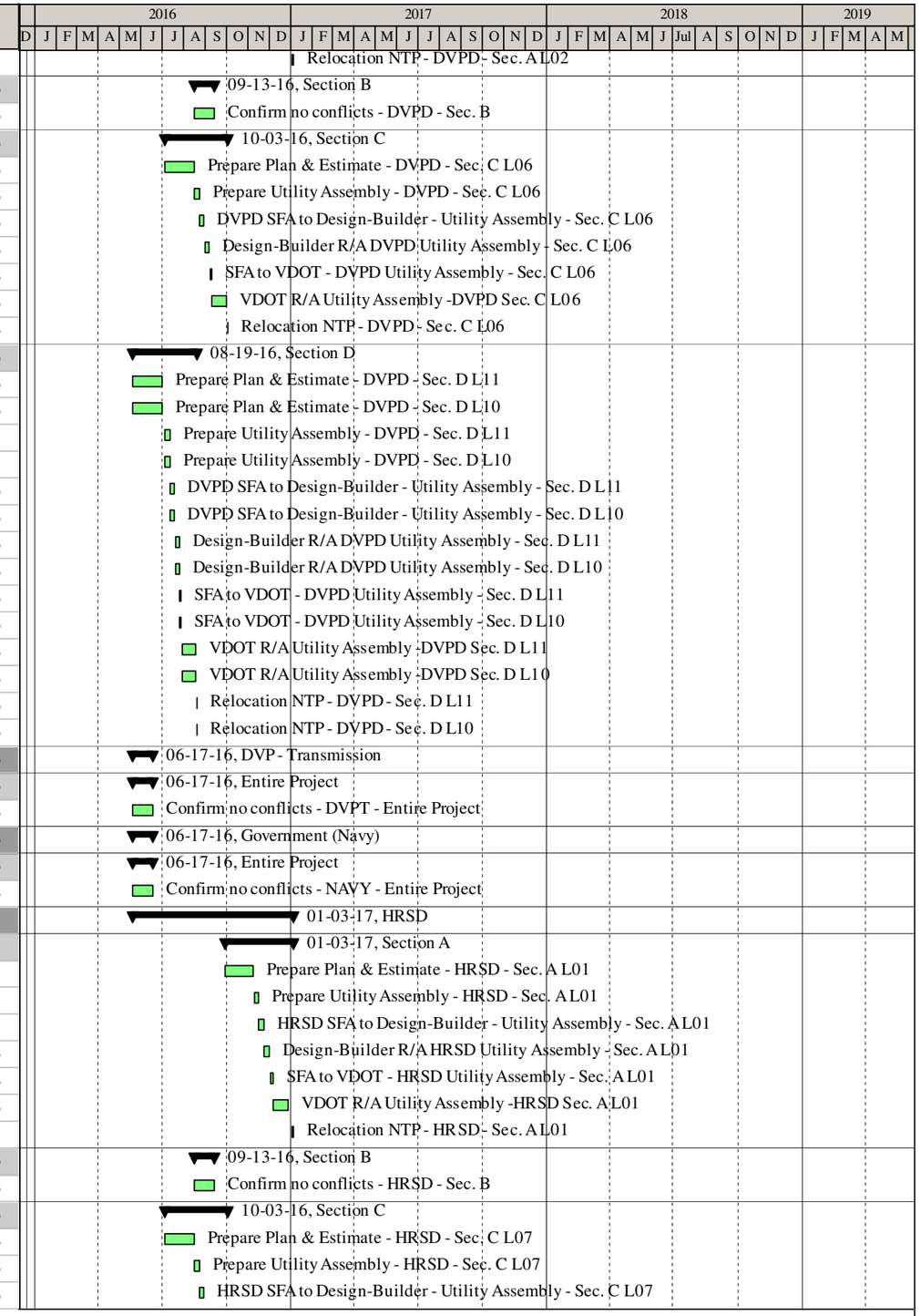
Activity ID	Activity Name	Original Duration	Start	Finish
UTCPP0000120	Execute Master Agreement - YCUS (if conflicts confirmed)	10	05-06-16	05-19-16
Utility Field Inspections		32	03-29-16	05-11-16
Section A: Includes L01, L02, L03		32	03-29-16	05-11-16
UTFIA0000010	Survey Existing Utilities - Section A	10	03-29-16	04-13-16
UTFIA0000020	Finalize SUE Drawings - Sec. A	10	04-14-16	04-27-16
UTFIA0000030	Prepare Utility Relocation Concept Plan - Section A	10	04-28-16	05-11-16
Section B: Includes L04		32	03-29-16	05-11-16
UTFIB0000010	Survey Existing Utilities - Section B	10	03-29-16	04-13-16
UTFIB0000020	Finalize SUE Drawings - Sec. B	10	04-14-16	04-27-16
UTFIB0000030	Prepare Utility Relocation Concept Plan - Section B	10	04-28-16	05-11-16
Section C: Includes L05, L06, L07		32	03-29-16	05-11-16
UTFIC0000010	Survey Existing Utilities - Section C	10	03-29-16	04-13-16
UTFIC0000020	Finalize SUE Drawings - Sec. C	10	04-14-16	04-27-16
UTFIC0000030	Prepare Utility Relocation Concept Plan - Section C	10	04-28-16	05-11-16
Section D: Includes L08, L09, L10, L11, L12		32	03-29-16	05-11-16
UTFIC0000040	Survey Existing Utilities - Section D	10	03-29-16	04-13-16
UTFIC0000050	Finalize SUE Drawings - Sec. D	10	04-14-16	04-27-16
UTFIC0000060	Prepare Utility Relocation Concept Plan - Section D	10	04-28-16	05-11-16
Plan & Estimates		152	05-20-16	01-03-17
AT&T		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPEBE000010	Confirm no conflicts - ATNT - Entire Project	20	05-20-16	06-17-16
Cable Associates, Inc. / Metro Fiber Networks, Inc.		124	05-20-16	11-14-16
Section A		20	09-28-16	10-25-16
UTPECA000010	Confirm no conflicts - CAMF - Sec. A	20	09-28-16	10-25-16
Section B		64	08-16-16	11-14-16
UTPECB000010	Prepare Plan & Estimate - CAMF - Sec. B L04	30	08-16-16	09-27-16
UTPECB000020	Prepare Utility Assembly - CAMF - Sec. B L04	5	09-28-16	10-04-16
UTPECB000030	CAMF SFA to Design-Builder - Utility Assembly - Sec. B L04	5	10-05-16	10-11-16
UTPECB000040	Design-Builder R/A CAMF Utility Assembly - Sec. B L04	5	10-12-16	10-18-16
UTPECB000050	SFA to VDOT - CAMF Utility Assembly - Sec. B L04	3	10-19-16	10-21-16
UTPECB000060	VDOT R/A Utility Assembly -CAMF Sec. B L04	21	10-22-16	11-11-16
UTPECB000070	Relocation NTP - CAMF - Sec. B L04	1	11-14-16	11-14-16
Section C		64	07-05-16	10-03-16
UTPECC000010	Prepare Plan & Estimate - CAMF - Sec. C L07	30	07-05-16	08-15-16
UTPECC000020	Prepare Utility Assembly - CAMF - Sec. C L07	5	08-16-16	08-22-16
UTPECC000030	CAMF SFA to Design-Builder - Utility Assembly - Sec. C L07	5	08-23-16	08-29-16
UTPECC000040	Design-Builder R/A CAMF Utility Assembly - Sec. C L07	5	08-30-16	09-06-16
UTPECC000050	SFA to VDOT - CAMF Utility Assembly - Sec. C L07	3	09-07-16	09-09-16
UTPECC000060	VDOT R/A Utility Assembly -CAMF Sec. C L07	21	09-10-16	09-30-16
UTPECC000070	Relocation NTP - CAMF - Sec. C L07	1	10-03-16	10-03-16
Section D		64	05-20-16	08-19-16
UTPECD000010	Prepare Plan & Estimate - CAMF - Sec. D L09	30	05-20-16	07-01-16
UTPECD000020	Prepare Utility Assembly - CAMF - Sec. D L09	5	07-05-16	07-11-16
UTPECD000030	CAMF SFA to Design-Builder - Utility Assembly - Sec. D L09	5	07-12-16	07-18-16
UTPECD000040	Design-Builder R/A CAMF Utility Assembly - Sec. D L09	5	07-19-16	07-25-16
UTPECD000050	SFA to VDOT - CAMF Utility Assembly - Sec. D L09	3	07-26-16	07-28-16



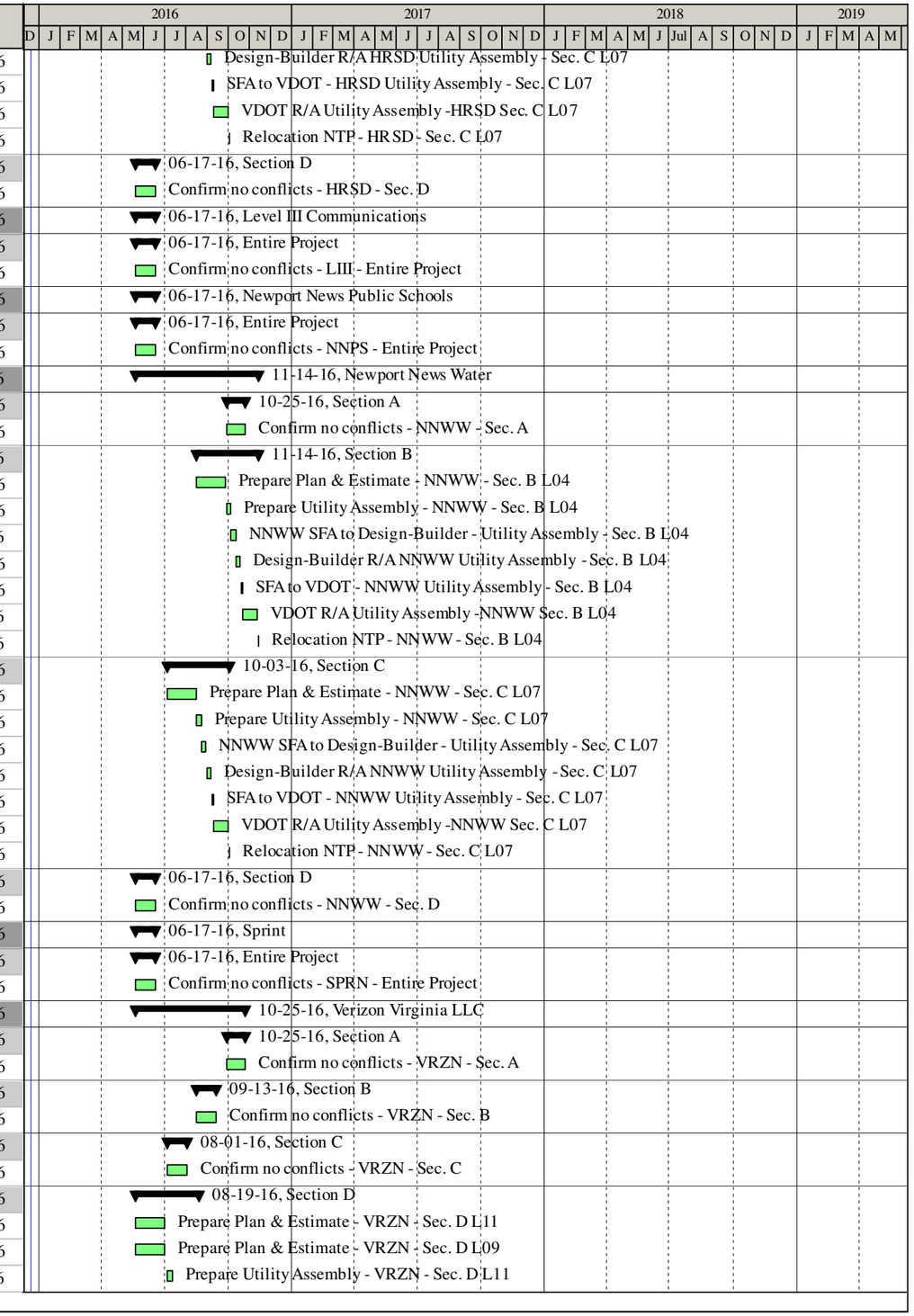
Activity ID	Activity Name	Original Duration	Start	Finish
UTPECD000060	VDOT R/A Utility Assembly -CAMF Sec. D L09	21	07-29-16	08-18-16
UTPECD000070	Relocation NTP - CAMF - Sec. D L09	1	08-19-16	08-19-16
Colonial Pipeline Company		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPEDE000010	Confirm no conflicts - CPCO - Entire Project	20	05-20-16	06-17-16
Cox Communications		152	05-20-16	01-03-17
Section A		62	09-28-16	01-03-17
UTPEEA000010	Prepare Plan & Estimate - COXC - Sec. A L02	30	09-28-16	11-08-16
UTPEEA000020	Prepare Utility Assembly - COXC - Sec. A L02	5	11-09-16	11-15-16
UTPEEA000030	COXC SFA to Design-Builder - Utility Assembly - Sec. A L02	5	11-16-16	11-22-16
UTPEEA000040	Design-Builder R/A COXC Utility Assembly - Sec. A L02	5	11-23-16	12-01-16
UTPEEA000050	SFA to VDOT - COXC Utility Assembly - Sec. A L02	3	12-02-16	12-06-16
UTPEEA000060	VDOT R/A Utility Assembly -COXC Sec. A L02	21	12-07-16	12-27-16
UTPEEA000070	Relocation NTP - COXC - Sec. A L02	1	01-03-17	01-03-17
Section B		20	08-16-16	09-13-16
UTPEEB000010	Confirm no conflicts - COXC - Sec. B	20	08-16-16	09-13-16
Section C		64	07-05-16	10-03-16
UTPEEC000010	Prepare Plan & Estimate - COXC - Sec. C L07	30	07-05-16	08-15-16
UTPEEC000020	Prepare Utility Assembly - COXC - Sec. C L07	5	08-16-16	08-22-16
UTPEEC000030	COXC SFA to Design-Builder - Utility Assembly - Sec. C L07	5	08-23-16	08-29-16
UTPEEC000040	Design-Builder R/A COXC Utility Assembly - Sec. C L07	5	08-30-16	09-06-16
UTPEEC000050	SFA to VDOT - COXC Utility Assembly - Sec. C L07	3	09-07-16	09-09-16
UTPEEC000060	VDOT R/A Utility Assembly -COXC Sec. C L07	21	09-10-16	09-30-16
UTPEEC000070	Relocation NTP - COXC - Sec. C L07	1	10-03-16	10-03-16
Section D		64	05-20-16	08-19-16
UTPEED000010	Prepare Plan & Estimate - COXC - Sec. D L09	30	05-20-16	07-01-16
UTPEED100010	Prepare Plan & Estimate - COXC - Sec. D L11	30	05-20-16	07-01-16
UTPEED000020	Prepare Utility Assembly - COXC - Sec. D L09	5	07-05-16	07-11-16
UTPEED100020	Prepare Utility Assembly - COXC - Sec. D L11	5	07-05-16	07-11-16
UTPEED000030	COXC SFA to Design-Builder - Utility Assembly - Sec. D L09	5	07-12-16	07-18-16
UTPEED100030	COXC SFA to Design-Builder - Utility Assembly - Sec. D L11	5	07-12-16	07-18-16
UTPEED000040	Design-Builder R/A COXC Utility Assembly - Sec. D L09	5	07-19-16	07-25-16
UTPEED100040	Design-Builder R/A COXC Utility Assembly - Sec. D L11	5	07-19-16	07-25-16
UTPEED000050	SFA to VDOT - COXC Utility Assembly - Sec. D L09	3	07-26-16	07-28-16
UTPEED100050	SFA to VDOT - COXC Utility Assembly - Sec. D L11	3	07-26-16	07-28-16
UTPEED000060	VDOT R/A Utility Assembly -COXC Sec. D L09	21	07-29-16	08-18-16
UTPEED100060	VDOT R/A Utility Assembly -COXC Sec. D L11	21	07-29-16	08-18-16
UTPEED000070	Relocation NTP - COXC - Sec. D L09	1	08-19-16	08-19-16
UTPEED100070	Relocation NTP - COXC - Sec. D L11	1	08-19-16	08-19-16
DVP - Distribution		152	05-20-16	01-03-17
Section A		62	09-28-16	01-03-17
UTPEFA000010	Prepare Plan & Estimate - DVPD - Sec. A L02	30	09-28-16	11-08-16
UTPEFA000020	Prepare Utility Assembly - DVPD - Sec. A L02	5	11-09-16	11-15-16
UTPEFA000030	DVPD SFA to Design-Builder - Utility Assembly - Sec. A L02	5	11-16-16	11-22-16
UTPEFA000040	Design-Builder R/A DVPD Utility Assembly - Sec. A L02	5	11-23-16	12-01-16
UTPEFA000050	SFA to VDOT - DVPD Utility Assembly - Sec. A L02	3	12-02-16	12-06-16
UTPEFA000060	VDOT R/A Utility Assembly -DVPD Sec. A L02	21	12-07-16	12-27-16



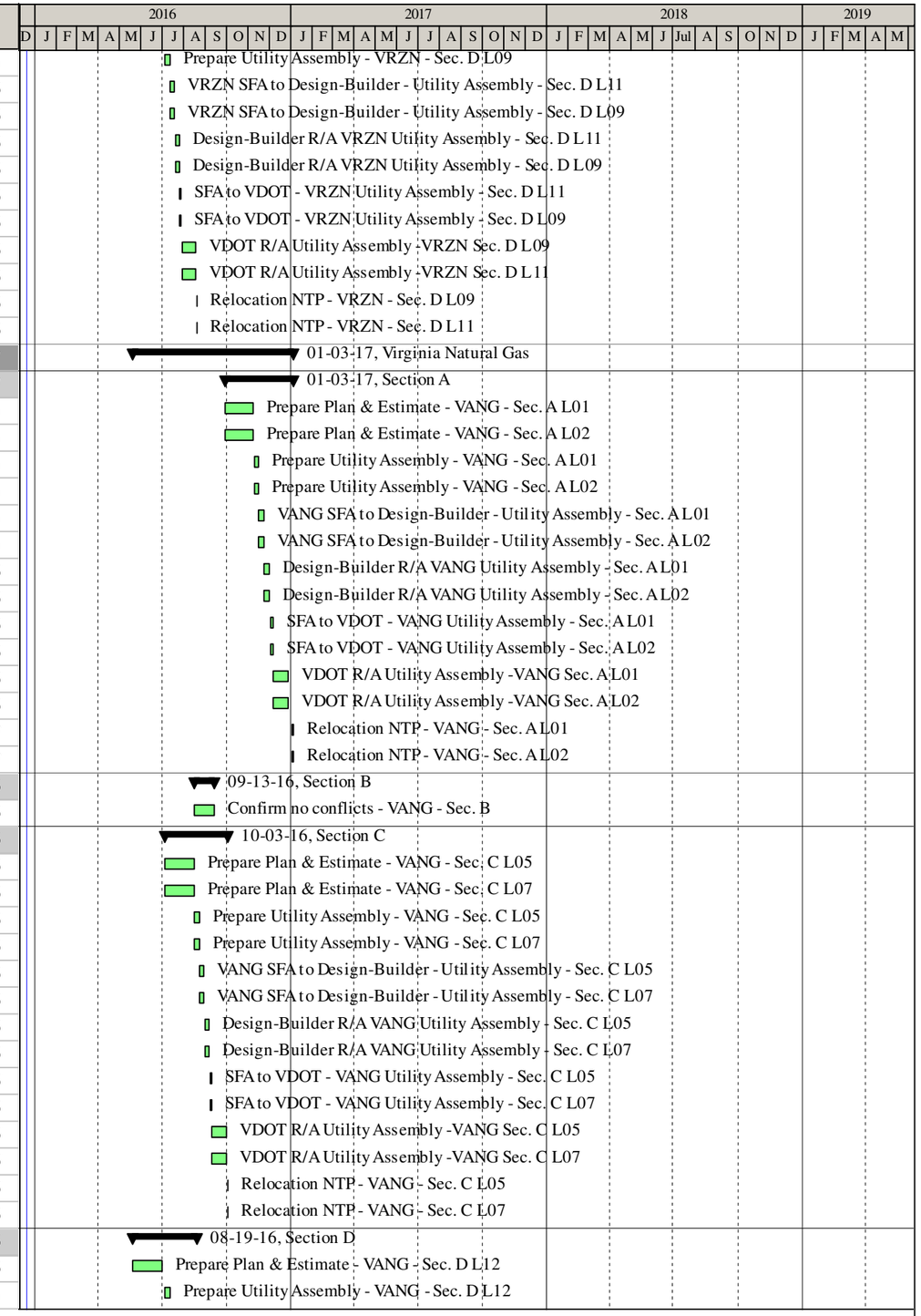
Activity ID	Activity Name	Original Duration	Start	Finish
UTPEFA000070	Relocation NTP - DVPD - Sec. A L02	1	01-03-17	01-03-17
Section B		20	08-16-16	09-13-16
UTPEFB000010	Confirm no conflicts - DVPD - Sec. B	20	08-16-16	09-13-16
Section C		64	07-05-16	10-03-16
UTPEFC000010	Prepare Plan & Estimate - DVPD - Sec. C L06	30	07-05-16	08-15-16
UTPEFC000020	Prepare Utility Assembly - DVPD - Sec. C L06	5	08-16-16	08-22-16
UTPEFC000030	DVPD SFA to Design-Builder - Utility Assembly - Sec. C L06	5	08-23-16	08-29-16
UTPEFC000040	Design-Builder R/A DVPD Utility Assembly - Sec. C L06	5	08-30-16	09-06-16
UTPEFC000050	SFA to VDOT - DVPD Utility Assembly - Sec. C L06	3	09-07-16	09-09-16
UTPEFC000060	VDOT R/A Utility Assembly -DVPD Sec. C L06	21	09-10-16	09-30-16
UTPEFC000070	Relocation NTP - DVPD - Sec. C L06	1	10-03-16	10-03-16
Section D		64	05-20-16	08-19-16
UTPEFD100010	Prepare Plan & Estimate - DVPD - Sec. D L11	30	05-20-16	07-01-16
UTPEFD000010	Prepare Plan & Estimate - DVPD - Sec. D L10	30	05-20-16	07-01-16
UTPEFD100020	Prepare Utility Assembly - DVPD - Sec. D L11	5	07-05-16	07-11-16
UTPEFD000020	Prepare Utility Assembly - DVPD - Sec. D L10	5	07-05-16	07-11-16
UTPEFD100030	DVPD SFA to Design-Builder - Utility Assembly - Sec. D L11	5	07-12-16	07-18-16
UTPEFD000030	DVPD SFA to Design-Builder - Utility Assembly - Sec. D L10	5	07-12-16	07-18-16
UTPEFD100040	Design-Builder R/A DVPD Utility Assembly - Sec. D L11	5	07-19-16	07-25-16
UTPEFD000040	Design-Builder R/A DVPD Utility Assembly - Sec. D L10	5	07-19-16	07-25-16
UTPEFD100050	SFA to VDOT - DVPD Utility Assembly - Sec. D L11	3	07-26-16	07-28-16
UTPEFD000050	SFA to VDOT - DVPD Utility Assembly - Sec. D L10	3	07-26-16	07-28-16
UTPEFD100060	VDOT R/A Utility Assembly -DVPD Sec. D L11	21	07-29-16	08-18-16
UTPEFD000060	VDOT R/A Utility Assembly -DVPD Sec. D L10	21	07-29-16	08-18-16
UTPEFD100070	Relocation NTP - DVPD - Sec. D L11	1	08-19-16	08-19-16
UTPEFD000070	Relocation NTP - DVPD - Sec. D L10	1	08-19-16	08-19-16
DVP - Transmission		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPEGE000010	Confirm no conflicts - DVPT - Entire Project	20	05-20-16	06-17-16
Government (Navy)		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPEH0000010	Confirm no conflicts - NAVY - Entire Project	20	05-20-16	06-17-16
HRSD		152	05-20-16	01-03-17
Section A		62	09-28-16	01-03-17
UTPEJA000010	Prepare Plan & Estimate - HRSD - Sec. A L01	30	09-28-16	11-08-16
UTPEJA000020	Prepare Utility Assembly - HRSD - Sec. A L01	5	11-09-16	11-15-16
UTPEJA000030	HRSD SFA to Design-Builder - Utility Assembly - Sec. A L01	5	11-16-16	11-22-16
UTPEJA000040	Design-Builder R/A HRSD Utility Assembly - Sec. A L01	5	11-23-16	12-01-16
UTPEJA000050	SFA to VDOT - HRSD Utility Assembly - Sec. A L01	3	12-02-16	12-06-16
UTPEJA000060	VDOT R/A Utility Assembly -HRSD Sec. A L01	21	12-07-16	12-27-16
UTPEJA000070	Relocation NTP - HRSD - Sec. A L01	1	01-03-17	01-03-17
Section B		20	08-16-16	09-13-16
UTPEJB000010	Confirm no conflicts - HRSD - Sec. B	20	08-16-16	09-13-16
Section C		64	07-05-16	10-03-16
UTPEJC000010	Prepare Plan & Estimate - HRSD - Sec. C L07	30	07-05-16	08-15-16
UTPEJC000020	Prepare Utility Assembly - HRSD - Sec. C L07	5	08-16-16	08-22-16
UTPEJC000030	HRSD SFA to Design-Builder - Utility Assembly - Sec. C L07	5	08-23-16	08-29-16



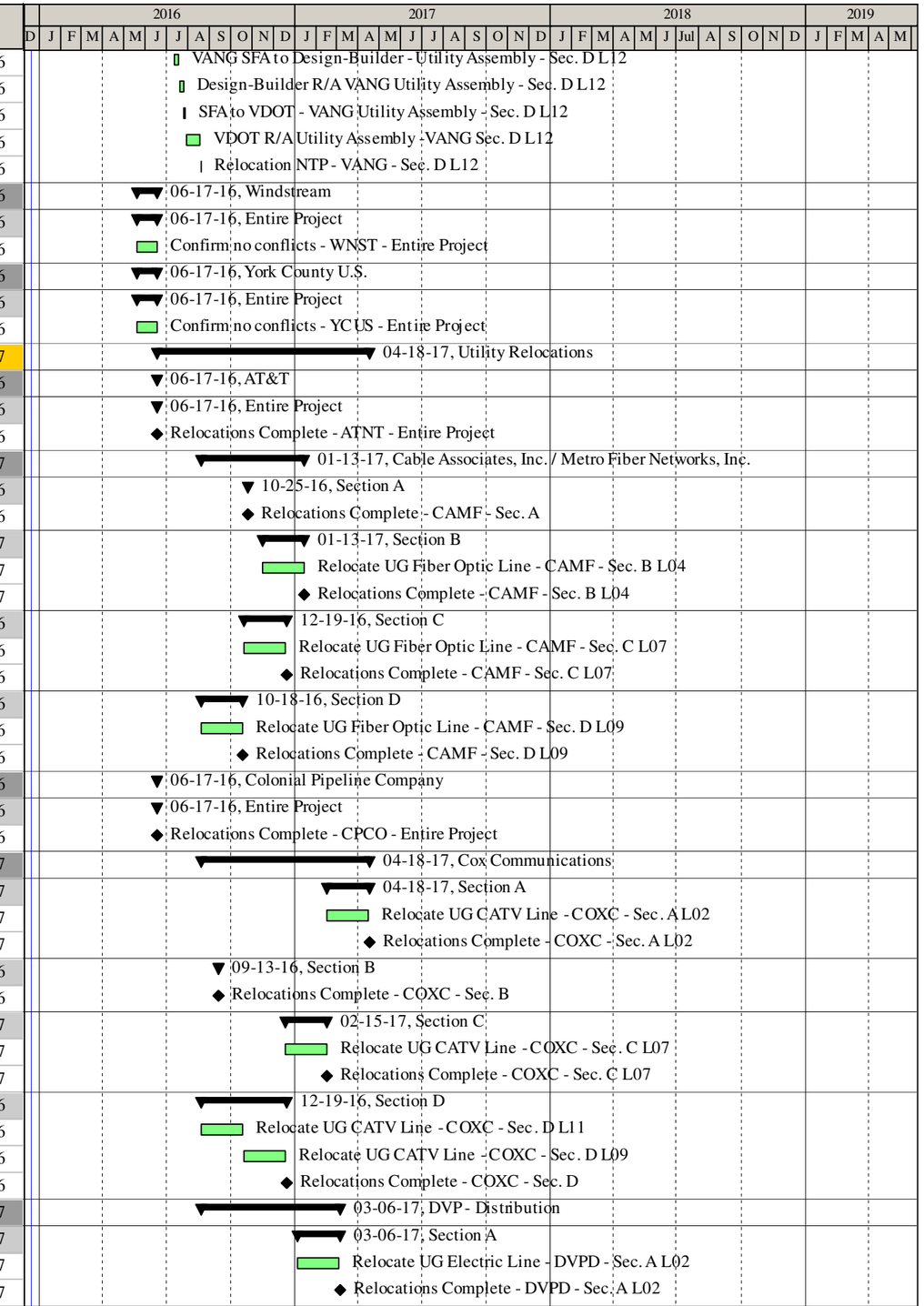
Activity ID	Activity Name	Original Duration	Start	Finish
UTPEJC000040	Design-Builder R/A HRSD Utility Assembly - Sec. C L07	5	08-30-16	09-06-16
UTPEJC000050	SFA to VDOT - HRSD Utility Assembly - Sec. C L07	3	09-07-16	09-09-16
UTPEJC000060	VDOT R/A Utility Assembly -HRSD Sec. C L07	21	09-10-16	09-30-16
UTPEJC000070	Relocation NTP - HRSD - Sec. C L07	1	10-03-16	10-03-16
Section D		20	05-20-16	06-17-16
UTPEJD000010	Confirm no conflicts - HRSD - Sec. D	20	05-20-16	06-17-16
Level III Communications		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPEKE000010	Confirm no conflicts - LIII - Entire Project	20	05-20-16	06-17-16
Newport News Public Schools		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPELE000010	Confirm no conflicts - NNPS - Entire Project	20	05-20-16	06-17-16
Newport News Water		124	05-20-16	11-14-16
Section A		20	09-28-16	10-25-16
UTPEMA000010	Confirm no conflicts - NNWW - Sec. A	20	09-28-16	10-25-16
Section B		64	08-16-16	11-14-16
UTPEMB000010	Prepare Plan & Estimate - NNWW - Sec. B L04	30	08-16-16	09-27-16
UTPEMB000020	Prepare Utility Assembly - NNWW - Sec. B L04	5	09-28-16	10-04-16
UTPEMB000030	NNWW SFA to Design-Builder - Utility Assembly - Sec. B L04	5	10-05-16	10-11-16
UTPEMB000040	Design-Builder R/A NNWW Utility Assembly - Sec. B L04	5	10-12-16	10-18-16
UTPEMB000050	SFA to VDOT - NNWW Utility Assembly - Sec. B L04	3	10-19-16	10-21-16
UTPEMB000060	VDOT R/A Utility Assembly -NNWW Sec. B L04	21	10-22-16	11-11-16
UTPEMB000070	Relocation NTP - NNWW - Sec. B L04	1	11-14-16	11-14-16
Section C		64	07-05-16	10-03-16
UTPEMC000010	Prepare Plan & Estimate - NNWW - Sec. C L07	30	07-05-16	08-15-16
UTPEMC000020	Prepare Utility Assembly - NNWW - Sec. C L07	5	08-16-16	08-22-16
UTPEMC000030	NNWW SFA to Design-Builder - Utility Assembly - Sec. C L07	5	08-23-16	08-29-16
UTPEMC000040	Design-Builder R/A NNWW Utility Assembly - Sec. C L07	5	08-30-16	09-06-16
UTPEMC000050	SFA to VDOT - NNWW Utility Assembly - Sec. C L07	3	09-07-16	09-09-16
UTPEMC000060	VDOT R/A Utility Assembly -NNWW Sec. C L07	21	09-10-16	09-30-16
UTPEMC000070	Relocation NTP - NNWW - Sec. C L07	1	10-03-16	10-03-16
Section D		20	05-20-16	06-17-16
UTPEMD000010	Confirm no conflicts - NNWW - Sec. D	20	05-20-16	06-17-16
Sprint		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPENE000010	Confirm no conflicts - SPRN - Entire Project	20	05-20-16	06-17-16
Verizon Virginia LLC		110	05-20-16	10-25-16
Section A		20	09-28-16	10-25-16
UTPEQA000010	Confirm no conflicts - VRZN - Sec. A	20	09-28-16	10-25-16
Section B		20	08-16-16	09-13-16
UTPEQB000010	Confirm no conflicts - VRZN - Sec. B	20	08-16-16	09-13-16
Section C		20	07-05-16	08-01-16
UTPEQC000010	Confirm no conflicts - VRZN - Sec. C	20	07-05-16	08-01-16
Section D		64	05-20-16	08-19-16
UTPEQD100010	Prepare Plan & Estimate - VRZN - Sec. D L11	30	05-20-16	07-01-16
UTPEQD000010	Prepare Plan & Estimate - VRZN - Sec. D L09	30	05-20-16	07-01-16
UTPEQD100020	Prepare Utility Assembly - VRZN - Sec. D L11	5	07-05-16	07-11-16



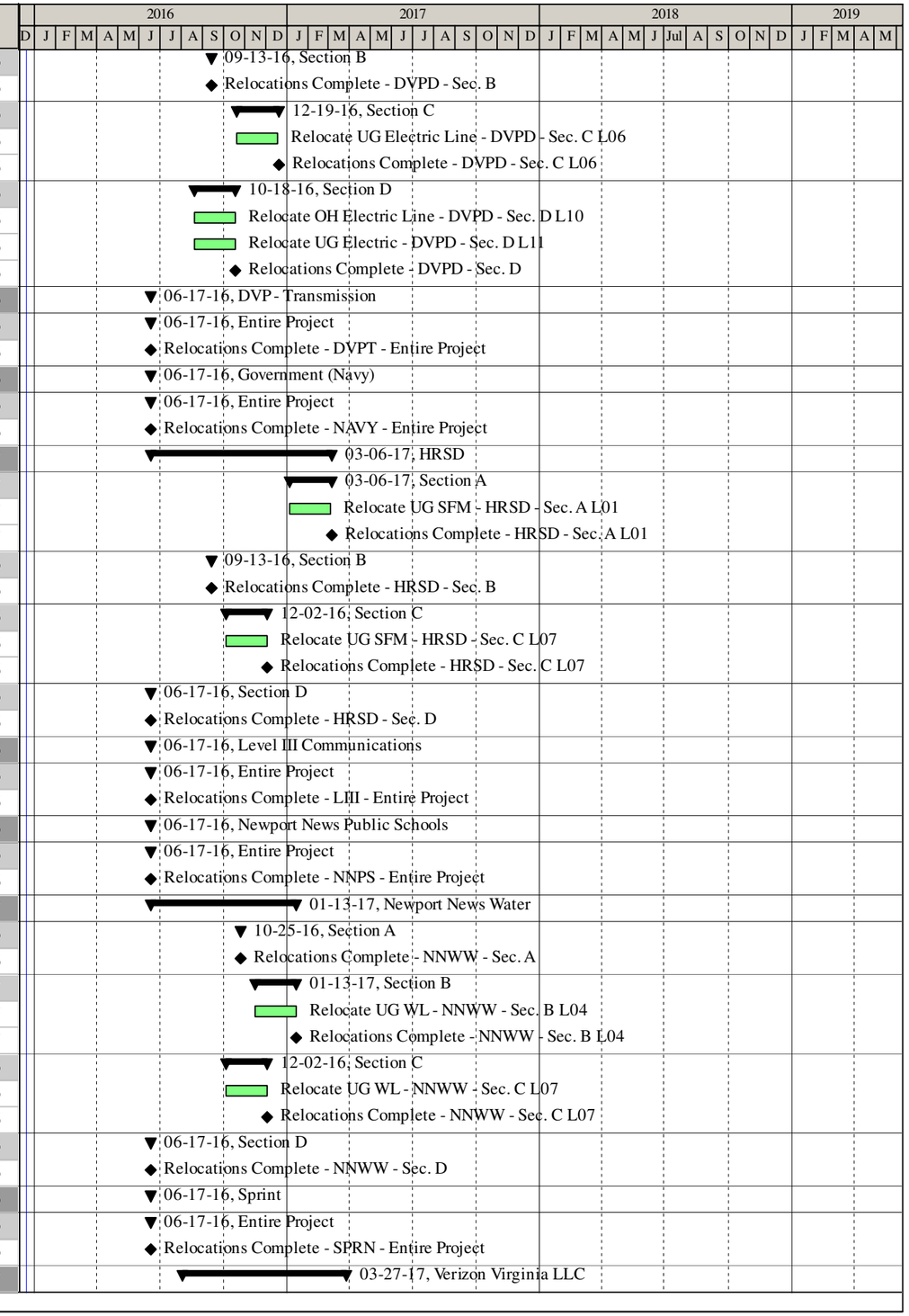
Activity ID	Activity Name	Original Duration	Start	Finish
UTPEQD000020	Prepare Utility Assembly - VRZN - Sec. D L09	5	07-05-16	07-11-16
UTPEQD100030	VRZN SFA to Design-Builder - Utility Assembly - Sec. D L11	5	07-12-16	07-18-16
UTPEQD000030	VRZN SFA to Design-Builder - Utility Assembly - Sec. D L09	5	07-12-16	07-18-16
UTPEQD100040	Design-Builder R/A VRZN Utility Assembly - Sec. D L11	5	07-19-16	07-25-16
UTPEQD000040	Design-Builder R/A VRZN Utility Assembly - Sec. D L09	5	07-19-16	07-25-16
UTPEQD100050	SFA to VDOT - VRZN Utility Assembly - Sec. D L11	3	07-26-16	07-28-16
UTPEQD000050	SFA to VDOT - VRZN Utility Assembly - Sec. D L09	3	07-26-16	07-28-16
UTPEQD000060	VDOT R/A Utility Assembly -VRZN Sec. D L09	21	07-29-16	08-18-16
UTPEQD100060	VDOT R/A Utility Assembly -VRZN Sec. D L11	21	07-29-16	08-18-16
UTPEQD000070	Relocation NTP - VRZN - Sec. D L09	1	08-19-16	08-19-16
UTPEQD100070	Relocation NTP - VRZN - Sec. D L11	1	08-19-16	08-19-16
Virginia Natural Gas		152	05-20-16	01-03-17
Section A		62	09-28-16	01-03-17
UTPEPA000010	Prepare Plan & Estimate - VANG - Sec. A L01	30	09-28-16	11-08-16
UTPEPA100010	Prepare Plan & Estimate - VANG - Sec. A L02	30	09-28-16	11-08-16
UTPEPA000020	Prepare Utility Assembly - VANG - Sec. A L01	5	11-09-16	11-15-16
UTPEPA100020	Prepare Utility Assembly - VANG - Sec. A L02	5	11-09-16	11-15-16
UTPEPA000030	VANG SFA to Design-Builder - Utility Assembly - Sec. A L01	5	11-16-16	11-22-16
UTPEPA100030	VANG SFA to Design-Builder - Utility Assembly - Sec. A L02	5	11-16-16	11-22-16
UTPEPA000040	Design-Builder R/A VANG Utility Assembly - Sec. A L01	5	11-23-16	12-01-16
UTPEPA100040	Design-Builder R/A VANG Utility Assembly - Sec. A L02	5	11-23-16	12-01-16
UTPEPA000050	SFA to VDOT - VANG Utility Assembly - Sec. A L01	3	12-02-16	12-06-16
UTPEPA100050	SFA to VDOT - VANG Utility Assembly - Sec. A L02	3	12-02-16	12-06-16
UTPEPA000060	VDOT R/A Utility Assembly -VANG Sec. A L01	21	12-07-16	12-27-16
UTPEPA100060	VDOT R/A Utility Assembly -VANG Sec. A L02	21	12-07-16	12-27-16
UTPEPA000070	Relocation NTP - VANG - Sec. A L01	1	01-03-17	01-03-17
UTPEPA100070	Relocation NTP - VANG - Sec. A L02	1	01-03-17	01-03-17
Section B		20	08-16-16	09-13-16
UTPEPB000010	Confirm no conflicts - VANG - Sec. B	20	08-16-16	09-13-16
Section C		64	07-05-16	10-03-16
UTPEPC000010	Prepare Plan & Estimate - VANG - Sec. C L05	30	07-05-16	08-15-16
UTPEPC100010	Prepare Plan & Estimate - VANG - Sec. C L07	30	07-05-16	08-15-16
UTPEPC000020	Prepare Utility Assembly - VANG - Sec. C L05	5	08-16-16	08-22-16
UTPEPC100020	Prepare Utility Assembly - VANG - Sec. C L07	5	08-16-16	08-22-16
UTPEPC000030	VANG SFA to Design-Builder - Utility Assembly - Sec. C L05	5	08-23-16	08-29-16
UTPEPC100030	VANG SFA to Design-Builder - Utility Assembly - Sec. C L07	5	08-23-16	08-29-16
UTPEPC000040	Design-Builder R/A VANG Utility Assembly - Sec. C L05	5	08-30-16	09-06-16
UTPEPC100040	Design-Builder R/A VANG Utility Assembly - Sec. C L07	5	08-30-16	09-06-16
UTPEPC000050	SFA to VDOT - VANG Utility Assembly - Sec. C L05	3	09-07-16	09-09-16
UTPEPC100050	SFA to VDOT - VANG Utility Assembly - Sec. C L07	3	09-07-16	09-09-16
UTPEPC000060	VDOT R/A Utility Assembly -VANG Sec. C L05	21	09-10-16	09-30-16
UTPEPC100060	VDOT R/A Utility Assembly -VANG Sec. C L07	21	09-10-16	09-30-16
UTPEPC000070	Relocation NTP - VANG - Sec. C L05	1	10-03-16	10-03-16
UTPEPC100070	Relocation NTP - VANG - Sec. C L07	1	10-03-16	10-03-16
Section D		64	05-20-16	08-19-16
UTPEPD000010	Prepare Plan & Estimate - VANG - Sec. D L12	30	05-20-16	07-01-16
UTPEPD000020	Prepare Utility Assembly - VANG - Sec. D L12	5	07-05-16	07-11-16



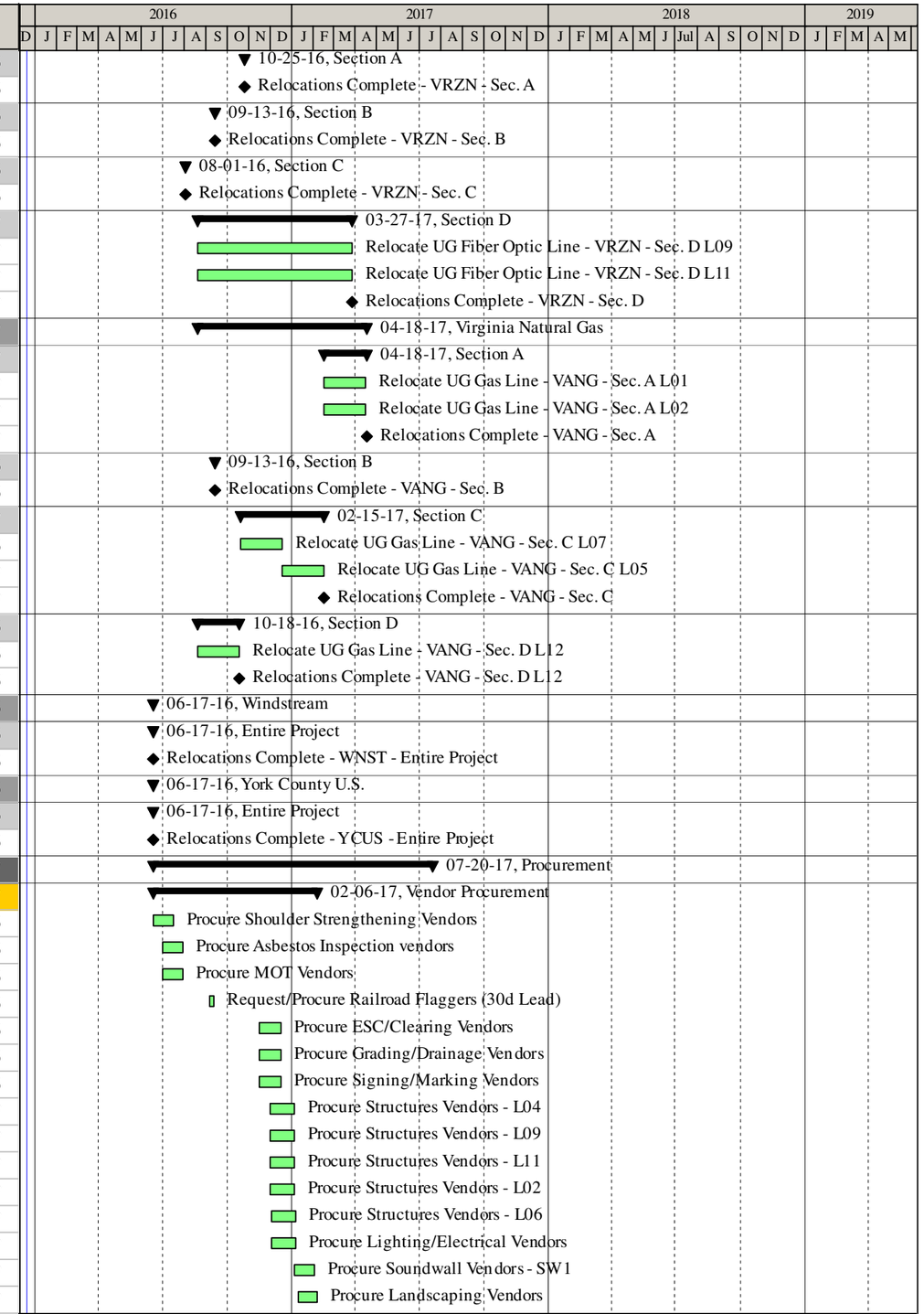
Activity ID	Activity Name	Original Duration	Start	Finish
UTPEPD000030	VANG SFA to Design-Builder - Utility Assembly - Sec. D L12	5	07-12-16	07-18-16
UTPEPD000040	Design-Builder R/A VANG Utility Assembly - Sec. D L12	5	07-19-16	07-25-16
UTPEPD000050	SFA to VDOT - VANG Utility Assembly - Sec. D L12	3	07-26-16	07-28-16
UTPEPD000060	VDOT R/A Utility Assembly -VANG Sec. D L12	21	07-29-16	08-18-16
UTPEPD000070	Relocation NTP - VANG - Sec. D L12	1	08-19-16	08-19-16
Windstream		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPERE000010	Confirm no conflicts - WNST - Entire Project	20	05-20-16	06-17-16
York County U.S.		20	05-20-16	06-17-16
Entire Project		20	05-20-16	06-17-16
UTPESE000010	Confirm no conflicts - YCUS - Entire Project	20	05-20-16	06-17-16
Utility Relocations		205	06-17-16	04-18-17
AT&T		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURBE000090	Relocations Complete - ATNT - Entire Project	0		06-17-16
Cable Associates, Inc. / Metro Fiber Networks, Inc.		96	08-20-16	01-13-17
Section A		0	10-25-16	10-25-16
UTURCA000090	Relocations Complete - CAMF - Sec. A	0		10-25-16
Section B		36	11-15-16	01-13-17
UTURCB000090	Relocate UG Fiber Optic Line - CAMF - Sec. B L04	60	11-15-16	01-13-17
UTURCB000100	Relocations Complete - CAMF - Sec. B L04	0		01-13-17
Section C		41	10-19-16	12-19-16
UTURCC000090	Relocate UG Fiber Optic Line - CAMF - Sec. C L07	60	10-19-16	12-17-16
UTURCC000100	Relocations Complete - CAMF - Sec. C L07	0		12-19-16
Section D		41	08-20-16	10-18-16
UTURCD000090	Relocate UG Fiber Optic Line - CAMF - Sec. D L09	60	08-20-16	10-18-16
UTURCD000100	Relocations Complete - CAMF - Sec. D L09	0		10-18-16
Colonial Pipeline Company		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURDE000090	Relocations Complete - CPCO - Entire Project	0		06-17-16
Cox Communications		161	08-20-16	04-18-17
Section A		42	02-16-17	04-18-17
UTUREA000090	Relocate UG CATV Line - COXC - Sec. A L02	60	02-16-17	04-16-17
UTUREA000100	Relocations Complete - COXC - Sec. A L02	0		04-18-17
Section B		0	09-13-16	09-13-16
UTUREB000090	Relocations Complete - COXC - Sec. B	0		09-13-16
Section C		37	12-18-16	02-15-17
UTUREC000090	Relocate UG CATV Line - COXC - Sec. C L07	60	12-18-16	02-15-17
UTUREC000100	Relocations Complete - COXC - Sec. C L07	0		02-15-17
Section D		82	08-20-16	12-19-16
UTURED100090	Relocate UG CATV Line - COXC - Sec. D L11	60	08-20-16	10-18-16
UTURED000090	Relocate UG CATV Line - COXC - Sec. D L09	60	10-19-16	12-17-16
UTURED100100	Relocations Complete - COXC - Sec. D	0		12-19-16
DVP - Distribution		131	08-20-16	03-06-17
Section A		43	01-04-17	03-06-17
UTURFA000090	Relocate UG Electric Line - DVPD - Sec. A L02	60	01-04-17	03-04-17
UTURFA000100	Relocations Complete - DVPD - Sec. A L02	0		03-06-17



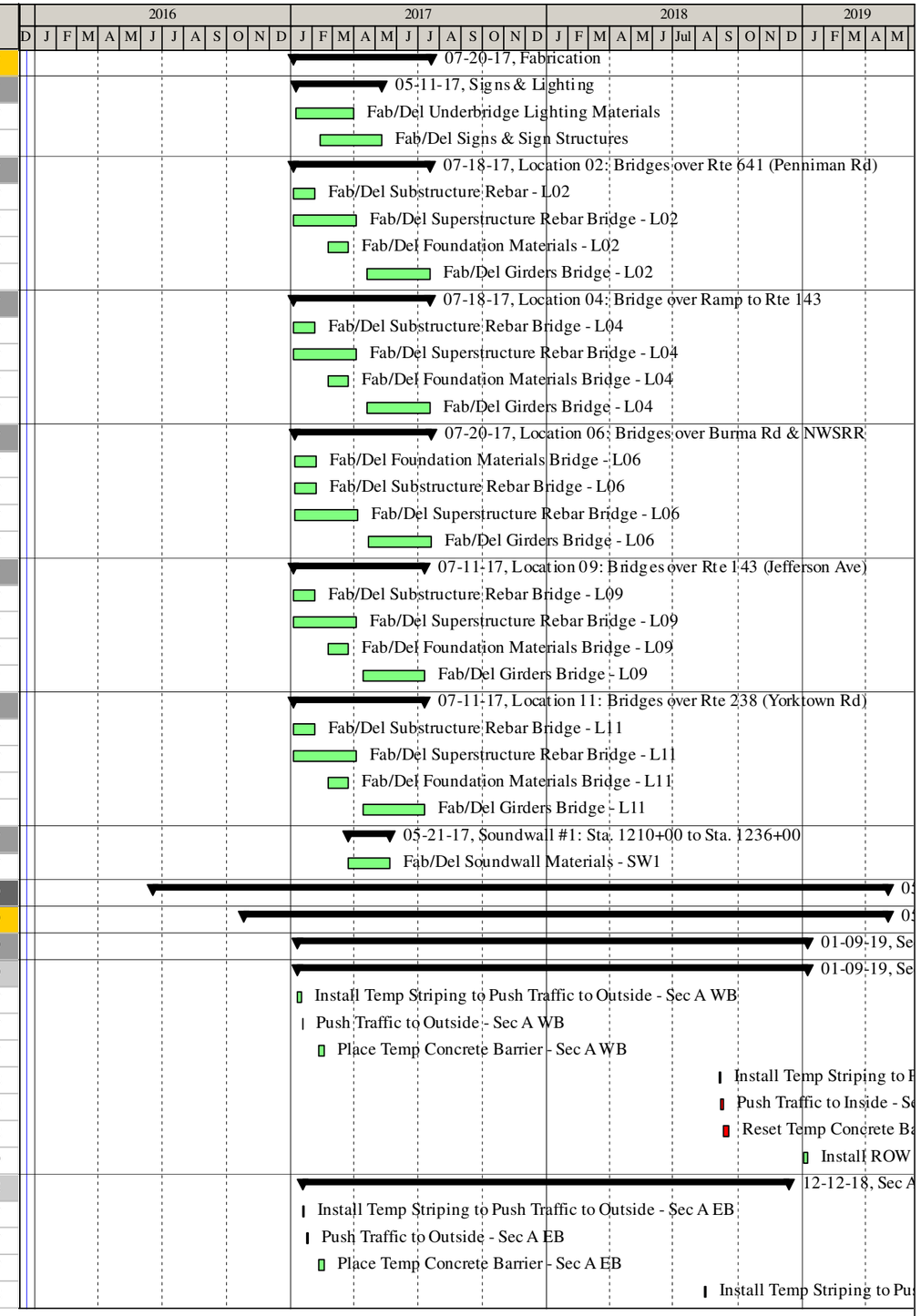
Activity ID	Activity Name	Original Duration	Start	Finish
Section B		0	09-13-16	09-13-16
UTURFB000090	Relocations Complete - DVPD - Sec. B	0		09-13-16
Section C		41	10-19-16	12-19-16
UTURFC000090	Relocate UG Electric Line - DVPD - Sec. C L06	60	10-19-16	12-17-16
UTURFC000100	Relocations Complete - DVPD - Sec. C L06	0		12-19-16
Section D		41	08-20-16	10-18-16
UTURFD000090	Relocate OH Electric Line - DVPD - Sec. D L10	60	08-20-16	10-18-16
UTURFD100090	Relocate UG Electric - DVPD - Sec. D L11	60	08-20-16	10-18-16
UTURFD100100	Relocations Complete - DVPD - Sec. D	0		10-18-16
DVP - Transmission		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURGE000090	Relocations Complete - DVPT - Entire Project	0		06-17-16
Government (Navy)		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURHE000090	Relocations Complete - NAVY - Entire Project	0		06-17-16
HRSD		175	06-17-16	03-06-17
Section A		43	01-04-17	03-06-17
UTURJA000090	Relocate UG SFM - HRSD - Sec. A L01	60	01-04-17	03-04-17
UTURJA000100	Relocations Complete - HRSD - Sec. A L01	0		03-06-17
Section B		0	09-13-16	09-13-16
UTURJB000090	Relocations Complete - HRSD - Sec. B	0		09-13-16
Section C		42	10-04-16	12-02-16
UTURJC000090	Relocate UG SFM - HRSD - Sec. C L07	60	10-04-16	12-02-16
UTURJC000100	Relocations Complete - HRSD - Sec. C L07	0		12-02-16
Section D		0	06-17-16	06-17-16
UTURJD000090	Relocations Complete - HRSD - Sec. D	0		06-17-16
Level III Communications		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURKE000090	Relocations Complete - LIII - Entire Project	0		06-17-16
Newport News Public Schools		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURLE000090	Relocations Complete - NNPS - Entire Project	0		06-17-16
Newport News Water		140	06-17-16	01-13-17
Section A		0	10-25-16	10-25-16
UTURMA000090	Relocations Complete - NNWW - Sec. A	0		10-25-16
Section B		36	11-15-16	01-13-17
UTURMB000090	Relocate UG WL - NNWW - Sec. B L04	60	11-15-16	01-13-17
UTURMB000100	Relocations Complete - NNWW - Sec. B L04	0		01-13-17
Section C		42	10-04-16	12-02-16
UTURMC000090	Relocate UG WL - NNWW - Sec. C L07	60	10-04-16	12-02-16
UTURMC000100	Relocations Complete - NNWW - Sec. C L07	0		12-02-16
Section D		0	06-17-16	06-17-16
UTURMD000090	Relocations Complete - NNWW - Sec. D	0		06-17-16
Sprint		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURNE000090	Relocations Complete - SPRN - Entire Project	0		06-17-16
Verizon Virginia LLC		161	08-01-16	03-27-17



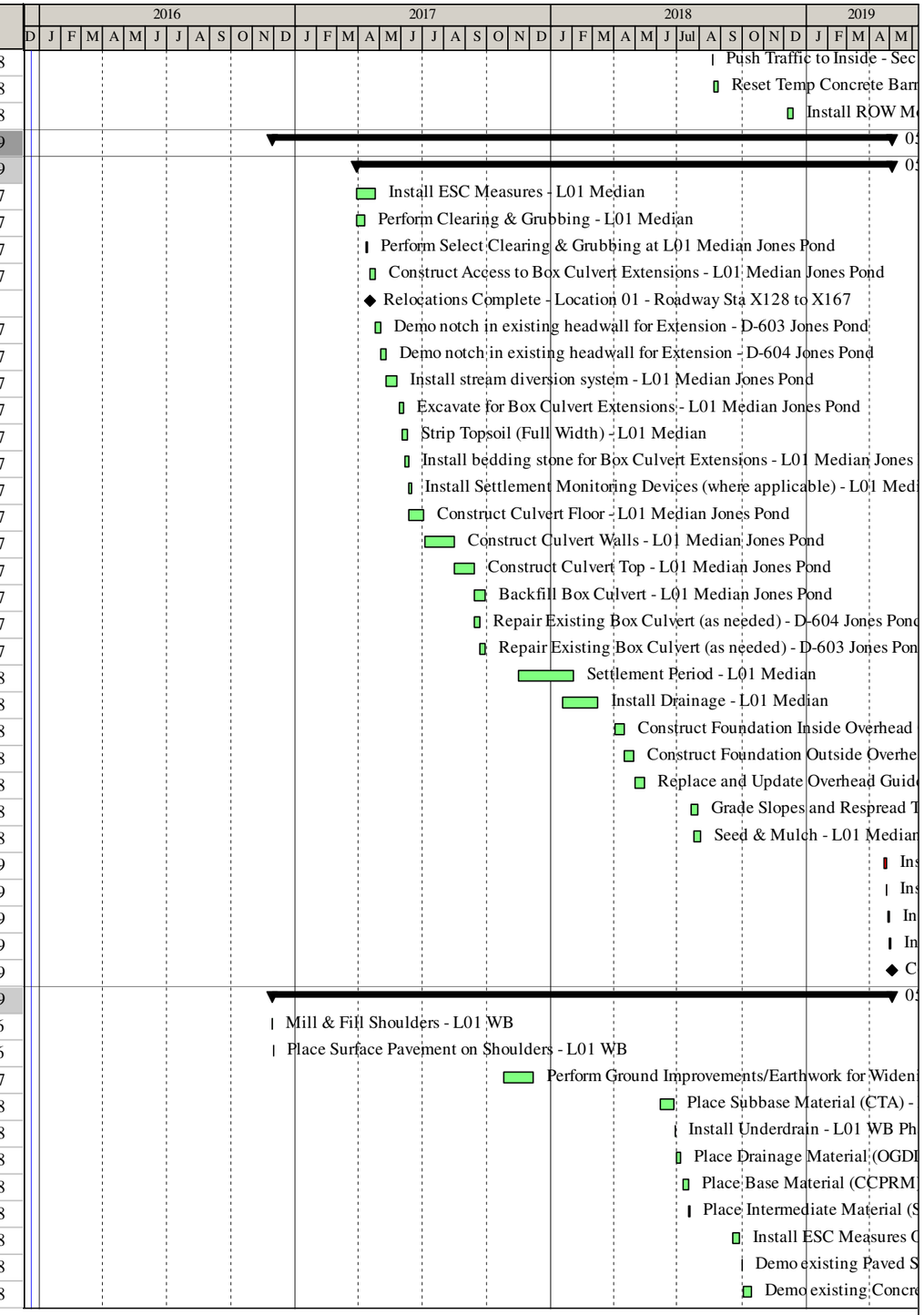
Activity ID	Activity Name	Original Duration	Start	Finish
Section A		0	10-25-16	10-25-16
UTURQA000090	Relocations Complete - VRZN - Sec. A	0		10-25-16
Section B		0	09-13-16	09-13-16
UTURQB000090	Relocations Complete - VRZN - Sec. B	0		09-13-16
Section C		0	08-01-16	08-01-16
UTURQC000090	Relocations Complete - VRZN - Sec. C	0		08-01-16
Section D		147	08-20-16	03-27-17
UTURQD000090	Relocate UG Fiber Optic Line - VRZN - Sec. D L09	220	08-20-16	03-27-17
UTURQD100090	Relocate UG Fiber Optic Line - VRZN - Sec. D L11	220	08-20-16	03-27-17
UTURQD100100	Relocations Complete - VRZN - Sec. D	0		03-27-17
Virginia Natural Gas		161	08-20-16	04-18-17
Section A		42	02-16-17	04-18-17
UTURPA000090	Relocate UG Gas Line - VANG - Sec. A L01	60	02-16-17	04-16-17
UTURPA100090	Relocate UG Gas Line - VANG - Sec. A L02	60	02-16-17	04-16-17
UTURPA100100	Relocations Complete - VANG - Sec. A	0		04-18-17
Section B		0	09-13-16	09-13-16
UTURPB000090	Relocations Complete - VANG - Sec. B	0		09-13-16
Section C		78	10-19-16	02-15-17
UTURPC100090	Relocate UG Gas Line - VANG - Sec. C L07	60	10-19-16	12-17-16
UTURPC000090	Relocate UG Gas Line - VANG - Sec. C L05	60	12-18-16	02-15-17
UTURPC100100	Relocations Complete - VANG - Sec. C	0		02-15-17
Section D		41	08-20-16	10-18-16
UTURPD000090	Relocate UG Gas Line - VANG - Sec. D L12	60	08-20-16	10-18-16
UTURPD000100	Relocations Complete - VANG - Sec. D L12	0		10-18-16
Windstream		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURRE000090	Relocations Complete - WNST - Entire Project	0		06-17-16
York County U.S.		0	06-17-16	06-17-16
Entire Project		0	06-17-16	06-17-16
UTURSE000090	Relocations Complete - YCUS - Entire Project	0		06-17-16
Procurement		272	06-17-16	07-20-17
Vendor Procurement		157	06-17-16	02-06-17
PCVP00005090	Procure Shoulder Strengthening Vendors	20	06-17-16	07-15-16
PCVP00005100	Procure Asbestos Inspection vendors	20	07-01-16	07-29-16
PCVP00005010	Procure MOT Vendors	20	07-01-16	07-29-16
PCVP00005060	Request/Procure Railroad Flaggers (30d Lead)	5	09-06-16	09-12-16
PCVP00005000	Procure ESC/Clearing Vendors	20	11-16-16	12-15-16
PCVP00005030	Procure Grading/Drainage Vendors	20	11-16-16	12-15-16
PCVP00005040	Procure Signing/Marking Vendors	20	11-16-16	12-15-16
PCVP00005120	Procure Structures Vendors - L04	20	11-30-16	01-04-17
PCVP00005140	Procure Structures Vendors - L09	20	11-30-16	01-04-17
PCVP00005150	Procure Structures Vendors - L11	20	11-30-16	01-04-17
PCVP00005020	Procure Structures Vendors - L02	20	11-30-16	01-04-17
PCVP00005130	Procure Structures Vendors - L06	20	12-02-16	01-06-17
PCVP00005070	Procure Lighting/Electrical Vendors	20	12-02-16	01-06-17
PCVP00005050	Procure Soundwall Vendors - SW1	20	01-05-17	02-01-17
PCVP00005110	Procure Landscaping Vendors	20	01-10-17	02-06-17



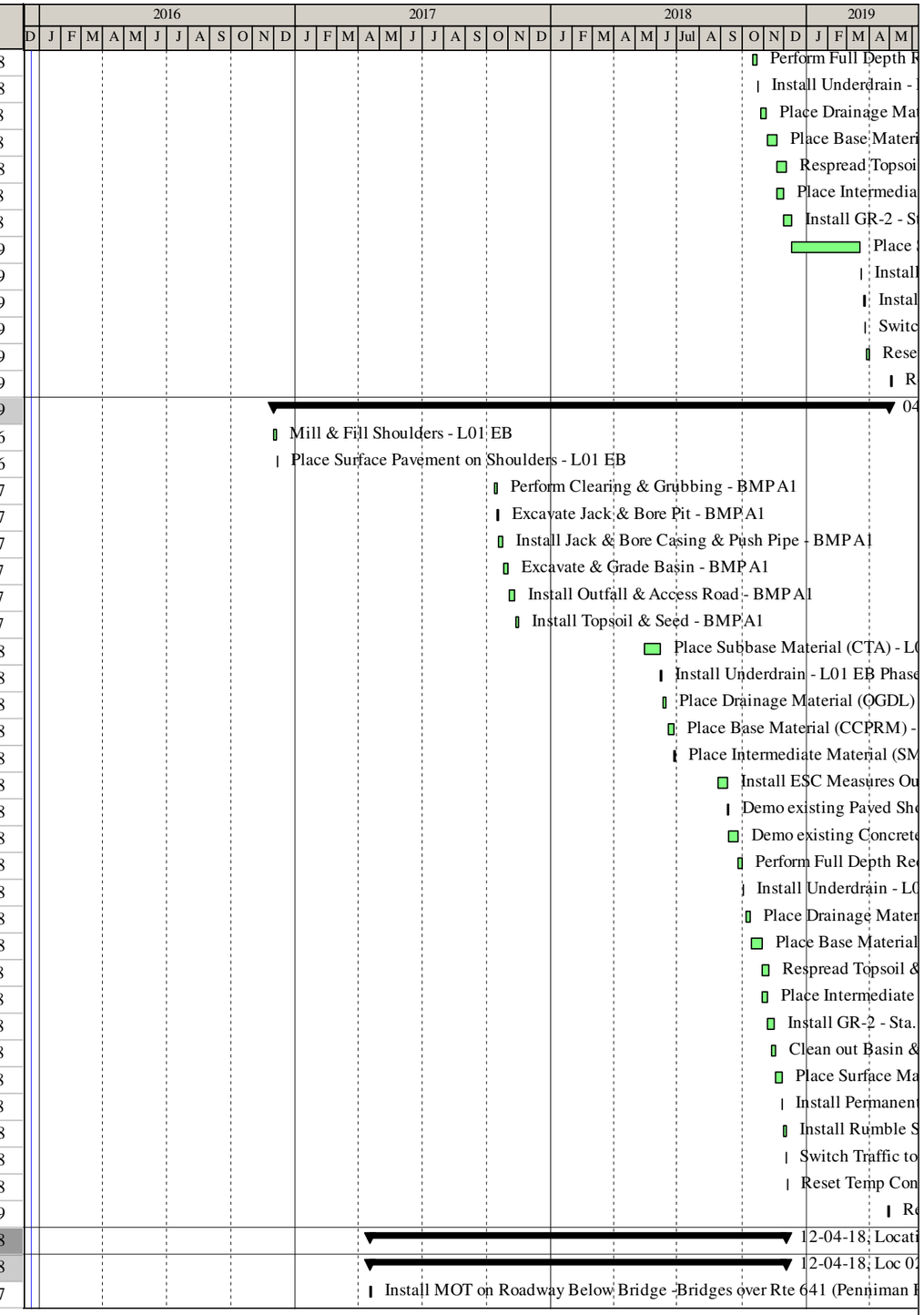
Activity ID	Activity Name	Original Duration	Start	Finish
Fabrication		138	01-05-17	07-20-17
Signs & Lighting		88	01-09-17	05-11-17
PCFBR0006020	Fab/Del Underbridge Lighting Materials	60	01-09-17	03-31-17
PCFBR0006010	Fab/Del Signs & Sign Structures	90	02-11-17	05-11-17
Location 02: Bridges over Rte 641 (Penniman Rd)		136	01-05-17	07-18-17
PCFBS0016110	Fab/Del Substructure Rebar - L02	30	01-05-17	02-03-17
PCFBS0016130	Fab/Del Superstructure Rebar Bridge - L02	90	01-05-17	04-04-17
PCFBS0016100	Fab/Del Foundation Materials - L02	30	02-23-17	03-24-17
PCFBS0016120	Fab/Del Girders Bridge - L02	90	04-20-17	07-18-17
Location 04: Bridge over Ramp to Rte 143		136	01-05-17	07-18-17
PCFBS0026210	Fab/Del Substructure Rebar Bridge - L04	30	01-05-17	02-03-17
PCFBS0026230	Fab/Del Superstructure Rebar Bridge - L04	90	01-05-17	04-04-17
PCFBS0026200	Fab/Del Foundation Materials Bridge - L04	30	02-23-17	03-24-17
PCFBS0026220	Fab/Del Girders Bridge - L04	90	04-20-17	07-18-17
Location 06: Bridges over Burma Rd & NWSRR		136	01-07-17	07-20-17
PCFBS0036240	Fab/Del Foundation Materials Bridge - L06	30	01-07-17	02-05-17
PCFBS0036250	Fab/Del Substructure Rebar Bridge - L06	30	01-07-17	02-05-17
PCFBS0036270	Fab/Del Superstructure Rebar Bridge - L06	90	01-07-17	04-06-17
PCFBS0036260	Fab/Del Girders Bridge - L06	90	04-22-17	07-20-17
Location 09: Bridges over Rte 143 (Jefferson Ave)		131	01-05-17	07-11-17
PCFBS0036290	Fab/Del Substructure Rebar Bridge - L09	30	01-05-17	02-03-17
PCFBS0036310	Fab/Del Superstructure Rebar Bridge - L09	90	01-05-17	04-04-17
PCFBS0036280	Fab/Del Foundation Materials Bridge - L09	30	02-23-17	03-24-17
PCFBS0036300	Fab/Del Girders Bridge - L09	90	04-13-17	07-11-17
Location 11: Bridges over Rte 238 (Yorktown Rd)		131	01-05-17	07-11-17
PCFBS0036330	Fab/Del Substructure Rebar Bridge - L11	30	01-05-17	02-03-17
PCFBS0036350	Fab/Del Superstructure Rebar Bridge - L11	90	01-05-17	04-04-17
PCFBS0036320	Fab/Del Foundation Materials Bridge - L11	30	02-23-17	03-24-17
PCFBS0036340	Fab/Del Girders Bridge - L11	90	04-13-17	07-11-17
Soundwall #1: Sta. 1210+00 to Sta. 1236+00		41	03-23-17	05-21-17
PCFBR0006400	Fab/Del Soundwall Materials - SW1	60	03-23-17	05-21-17
Construction		715	06-18-16	05-03-19
Section A: Sta X128 to X225		625	10-26-16	05-03-19
Section A: General/Entire Segment/All Locations		498	01-10-17	01-09-19
Sec A WB		498	01-10-17	01-09-19
CNAGESW00010	Install Temp Striping to Push Traffic to Outside - Sec A WB	3	01-10-17	01-16-17
CNAGESW00020	Push Traffic to Outside - Sec A WB	2	01-17-17	01-18-17
CNAGESW00030	Place Temp Concrete Barrier - Sec A WB	5	02-09-17	02-16-17
CNAGESW00110	Install Temp Striping to Push Traffic to Inside - Sec A WB	3	09-04-18	09-06-18
CNAGESW00120	Push Traffic to Inside - Sec A WB	2	09-07-18	09-10-18
CNAGESW00130	Reset Temp Concrete Barrier - Sec A WB	5	09-11-18	09-18-18
CNAGESW00140	Install ROW Monuments - Sec A WB	5	01-03-19	01-09-19
Sec A EB		479	01-17-17	12-12-18
CNAGESE00010	Install Temp Striping to Push Traffic to Outside - Sec A EB	3	01-17-17	01-19-17
CNAGESE00020	Push Traffic to Outside - Sec A EB	2	01-23-17	01-24-17
CNAGESE00030	Place Temp Concrete Barrier - Sec A EB	5	02-09-17	02-16-17
CNAGESE00110	Install Temp Striping to Push Traffic to Inside - Sec A EB	3	08-15-18	08-17-18



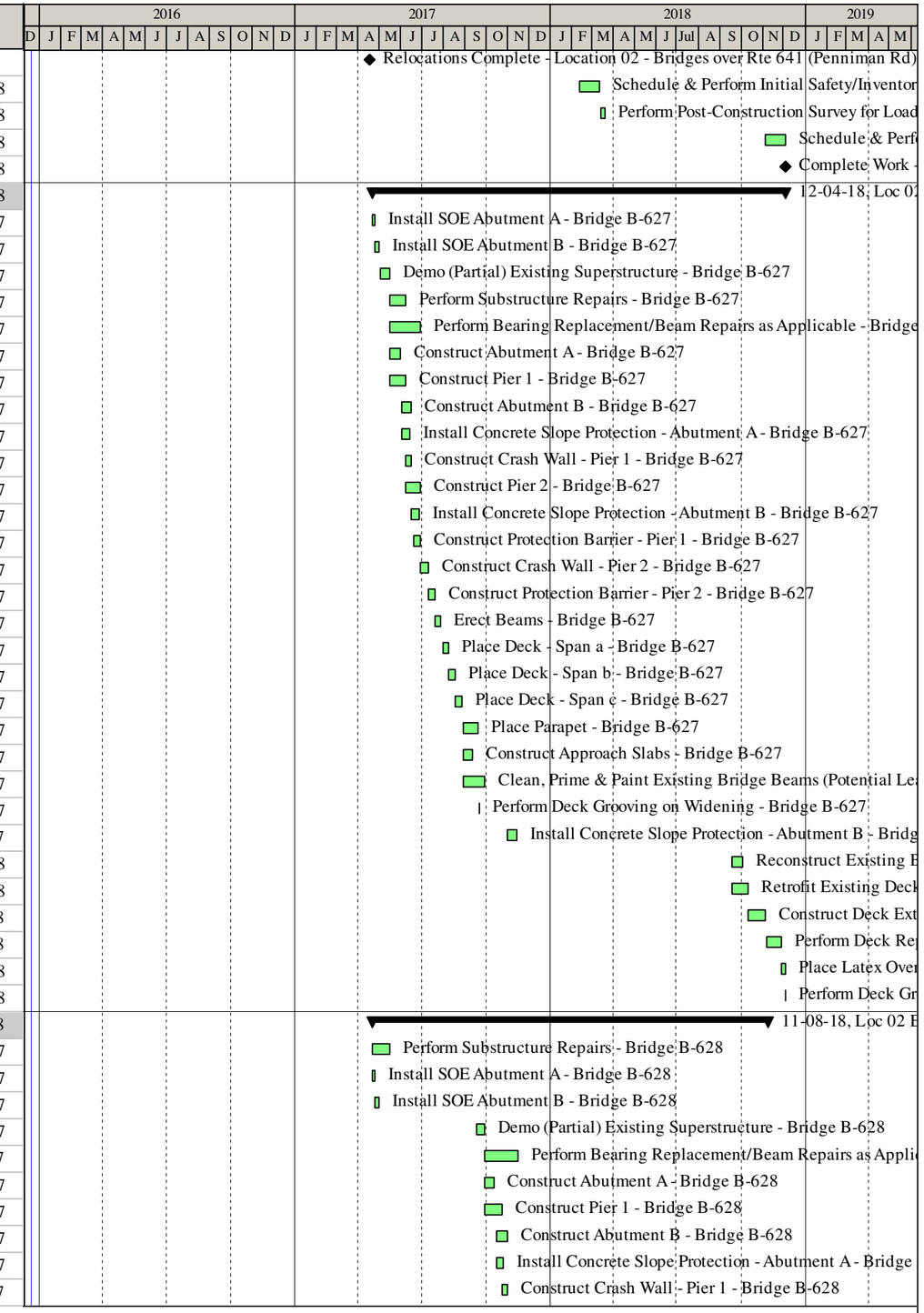
Activity ID	Activity Name	Original Duration	Start	Finish
CNAGESE00120	Push Traffic to Inside - Sec A EB	2	08-20-18	08-21-18
CNAGESE00130	Reset Temp Concrete Barrier - Sec A EB	5	08-22-18	08-28-18
CNAGESE00140	Install ROW Monuments - Sec A EB	5	12-06-18	12-12-18
Location 01: Roadway Sta X128 to X167		**604**	**11-28-16**	**05-03-19**
Loc 01 General/Median		**522**	**03-30-17**	**05-03-19**
CNAL01G00020	Install ESC Measures - L01 Median	14	03-30-17	04-24-17
CNAL01G00010	Perform Clearing & Grubbing - L01 Median	8	03-30-17	04-10-17
CNAL01G10010	Perform Select Clearing & Grubbing at L01 Median Jones Pond	4	04-11-17	04-14-17
CNAL01G10020	Construct Access to Box Culvert Extensions - L01 Median Jones Pond	5	04-18-17	04-24-17
CNAL01G20010	Relocations Complete - Location 01 - Roadway Sta X128 to X167	0	04-18-17	
CNAL01G10030	Demo notch in existing headwall for Extension - D-603 Jones Pond	5	04-25-17	05-02-17
CNAL01G10040	Demo notch in existing headwall for Extension - D-604 Jones Pond	5	05-03-17	05-10-17
CNAL01G10050	Install stream diversion system - L01 Median Jones Pond	10	05-11-17	05-25-17
CNAL01G10060	Excavate for Box Culvert Extensions - L01 Median Jones Pond	5	05-30-17	06-05-17
CNAL01G00030	Strip Topsoil (Full Width) - L01 Median	6	06-02-17	06-09-17
CNAL01G10070	Install bedding stone for Box Culvert Extensions - L01 Median Jones Pond	5	06-06-17	06-12-17
CNAL01G00110	Install Settlement Monitoring Devices (where applicable) - L01 Median	5	06-12-17	06-16-17
CNAL01G10080	Construct Culvert Floor - L01 Median Jones Pond	15	06-13-17	07-03-17
CNAL01G10090	Construct Culvert Walls - L01 Median Jones Pond	30	07-05-17	08-15-17
CNAL01G10100	Construct Culvert Top - L01 Median Jones Pond	20	08-16-17	09-13-17
CNAL01G10110	Backfill Box Culvert - L01 Median Jones Pond	10	09-14-17	09-28-17
CNAL01G10130	Repair Existing Box Culvert (as needed) - D-604 Jones Pond	5	09-14-17	09-21-17
CNAL01G10120	Repair Existing Box Culvert (as needed) - D-603 Jones Pond	5	09-22-17	09-28-17
CNAL01G00120	Settlement Period - L01 Median	80	11-16-17	02-03-18
CNAL01G00040	Install Drainage - L01 Median	26	01-18-18	03-08-18
CNAL01G30010	Construct Foundation Inside Overhead Guide Sign Structure - L01 - Sta. X148+10	10	04-03-18	04-16-18
CNAL01G30020	Construct Foundation Outside Overhead Guide Sign Structure - L01 - Sta. X148+10	10	04-17-18	04-30-18
CNAL01G30030	Replace and Update Overhead Guide Sign Structure - L01 - Sta. X148+10	10	05-01-18	05-14-18
CNAL01G00090	Grade Slopes and Respread Topsoil - L01 Median	8	07-20-18	07-31-18
CNAL01G00100	Seed & Mulch - L01 Median	8	07-25-18	08-03-18
CNAL01G00050	Install GR-2 - EB Sta. 1120+47 to 1137+25 - L01 Median	3	04-23-19	04-25-19
CNAL01G00060	Install GR-2 - EB Sta. 1163+99 to 1166+51 - L01 Median	1	04-26-19	04-26-19
CNAL01G00080	Install GR-2 - WB Sta. 2167+14 to 2166+88 - L01 Median	1	04-29-19	04-29-19
CNAL01G00070	Install GR-2 - WB Sta. 2131+04 to 2124+78 - L01 Median	2	04-30-19	05-01-19
CNAL01G20020	Complete Work - Location 01 - Roadway Sta X128 to X167	0		05-03-19
Loc 01 WB: Roadway Sta 2128+53 to 2167+12		**604**	**11-28-16**	**05-03-19**
CNAL01WM0050	Mill & Fill Shoulders - L01 WB	2	11-28-16	11-29-16
CNAL01WM0090	Place Surface Pavement on Shoulders - L01 WB	1	11-30-16	11-30-16
CNAL01WM0010	Perform Ground Improvements/Earthwork for Widening - L01 WB Phase C1	24	10-26-17	12-07-17
CNAL01WM0020	Place Subbase Material (CTA) - L01 WB Phase C1	14	06-07-18	06-26-18
CNAL01WM0030	Install Underdrain - L01 WB Phase C1	2	06-27-18	06-28-18
CNAL01WM0060	Place Drainage Material (OGDL) - L01 WB Phase C1	5	06-29-18	07-06-18
CNAL01WM0070	Place Base Material (CCPRM) - L01 WB Phase C1	6	07-09-18	07-16-18
CNAL01WM0080	Place Intermediate Material (SMA 19.0) - L01 WB Phase C1	3	07-17-18	07-19-18
CNAL01WG0030	Install ESC Measures Outside - L01 WB	8	09-19-18	09-28-18
CNAL01WM0110	Demo existing Paved Shoulder - L01 WB Phase C2	2	10-01-18	10-02-18
CNAL01WM0120	Demo existing Concrete Pavement - L01 WB Phase C2	8	10-03-18	10-15-18



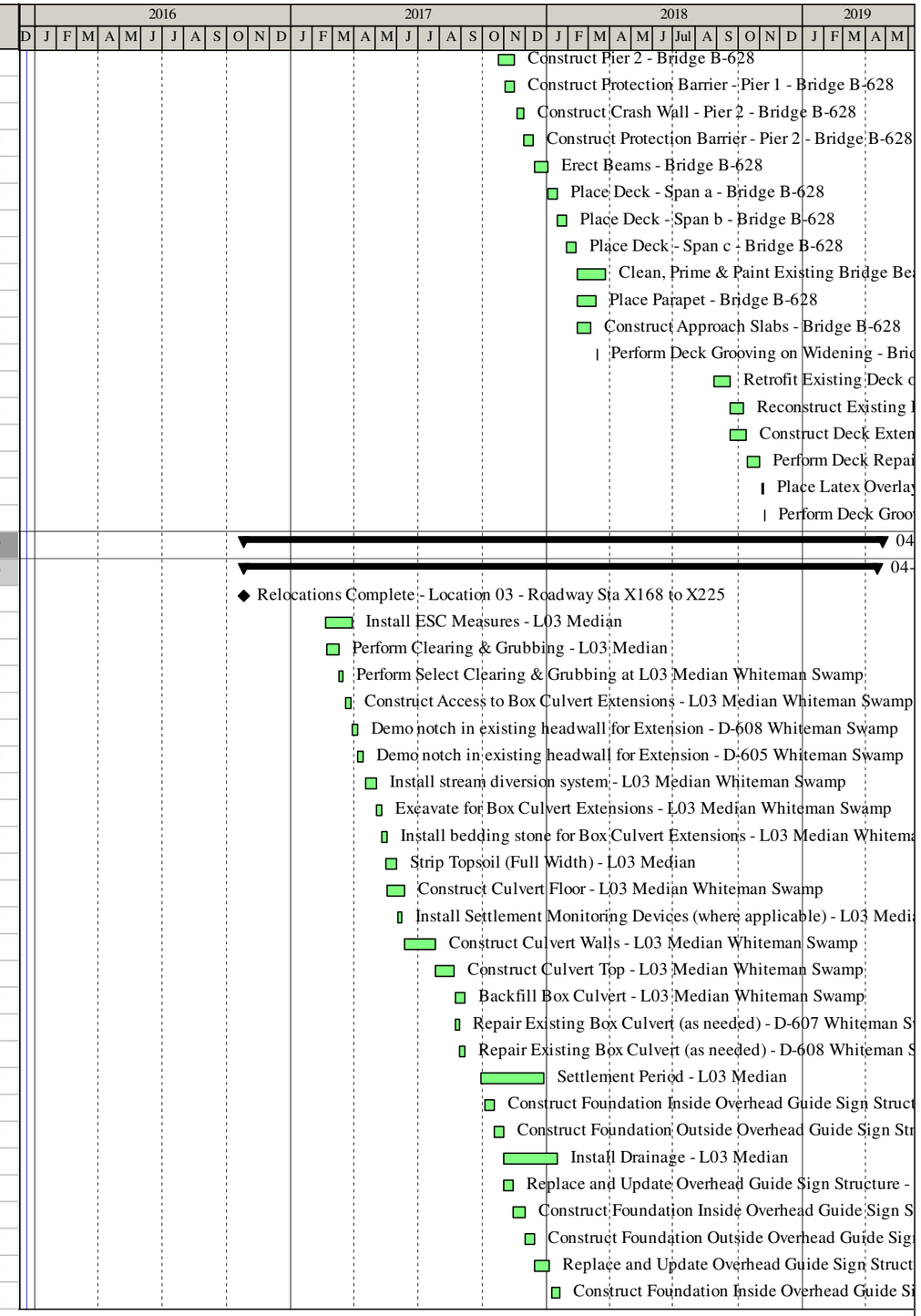
Activity ID	Activity Name	Original Duration	Start	Finish
CNAL01WM0130	Perform Full Depth Reclamation of existing Subbase Material - L01 WB Phase C2	5	10-16-18	10-23-18
CNAL01WM0040	Install Underdrain - L01 WB Phase C2	2	10-24-18	10-25-18
CNAL01WM0140	Place Drainage Material (OGDL) - L01 WB Phase C2	5	10-29-18	11-05-18
CNAL01WM0150	Place Base Material (CCPRM) - L01 WB Phase C2	9	11-06-18	11-20-18
CNAL01WM0180	Respread Topsoil & Seed outside slopes - L01 WB	8	11-21-18	12-04-18
CNAL01WM0160	Place Intermediate Material (SMA 19.0) - L01 WB Phase C2	5	11-21-18	11-29-18
CNAL01WM0170	Install GR-2 - Sta. 2167+10 to 2127+63 Outside - L01 WB Phase C2	8	11-30-18	12-11-18
CNAL01WG0040	Place Surface Material (SMA 12.5) - L01 WB	5	12-12-18	03-19-19
CNAL01WG0050	Install Permanent Striping to Switch to Final Configuration - L01 WB	1	03-21-19	03-21-19
CNAL01WG0060	Install Rumble Strips - L01 WB	2	03-25-19	03-26-19
CNAL01WG0070	Switch Traffic to Final Configuration - L01 WB	1	03-27-19	03-27-19
CNAL01WG0080	Reset Temp Concrete Barrier to Inside Shoulder - L01 WB	2	03-28-19	04-01-19
CNAL01WG0090	Remove Temp Concrete Barrier - L01 WB	2	05-02-19	05-03-19
Loc 01 EB: Roadway Sta 1128+00 to 1166+52		598	12-01-16	04-30-19
CNAL01EG0280	Mill & Fill Shoulders - L01 EB	2	12-01-16	12-05-16
CNAL01EG0290	Place Surface Pavement on Shoulders - L01 EB	1	12-06-16	12-06-16
CNAL01EG0210	Perform Clearing & Grubbing - BMP A1	2	10-13-17	10-16-17
CNAL01EG0220	Excavate Jack & Bore Pit - BMP A1	2	10-17-17	10-18-17
CNAL01EG0230	Install Jack & Bore Casing & Push Pipe - BMP A1	3	10-19-17	10-24-17
CNAL01EG0240	Excavate & Grade Basin - BMP A1	5	10-25-17	11-01-17
CNAL01EG0250	Install Outfall & Access Road - BMP A1	5	11-02-17	11-09-17
CNAL01EG0260	Install Topsoil & Seed - BMP A1	3	11-13-17	11-15-17
CNAL01EM0020	Place Subbase Material (CTA) - L01 EB Phase C1	14	05-15-18	06-06-18
CNAL01EM0050	Install Underdrain - L01 EB Phase C1	2	06-07-18	06-08-18
CNAL01EM0060	Place Drainage Material (OGDL) - L01 EB Phase C1	5	06-11-18	06-15-18
CNAL01EM0070	Place Base Material (CCPRM) - L01 EB Phase C1	6	06-18-18	06-25-18
CNAL01EM0080	Place Intermediate Material (SMA 19.0) - L01 EB Phase C1	3	06-26-18	06-28-18
CNAL01EG0030	Install ESC Measures Outside - L01 EB	8	08-29-18	09-10-18
CNAL01EM0110	Demo existing Paved Shoulder - L01 EB Phase C2	2	09-11-18	09-12-18
CNAL01EM0120	Demo existing Concrete Pavement - L01 EB Phase C2	8	09-13-18	09-25-18
CNAL01EM0130	Perform Full Depth Reclamation of existing Subbase Material - L01 EB Phase C2	5	09-26-18	10-02-18
CNAL01EM0090	Install Underdrain - L01 EB Phase C2	2	10-03-18	10-04-18
CNAL01EM0140	Place Drainage Material (OGDL) - L01 EB Phase C2	5	10-08-18	10-12-18
CNAL01EM0150	Place Base Material (CCPRM) - L01 EB Phase C2	9	10-15-18	10-29-18
CNAL01EM0180	Respread Topsoil & Seed outside slopes - L01 EB	8	10-30-18	11-08-18
CNAL01EM0160	Place Intermediate Material (SMA 19.0) - L01 EB Phase C2	5	10-30-18	11-06-18
CNAL01EM0170	Install GR-2 - Sta. 1127+40 to 1166+54 Outside - L01 EB Phase C2	8	11-07-18	11-16-18
CNAL01EG0270	Clean out Basin & Convert Structure to Perm Config - BMP A1	5	11-12-18	11-19-18
CNAL01EG0040	Place Surface Material (SMA 12.5) - L01 EB	5	11-19-18	11-27-18
CNAL01EG0050	Install Permanent Striping to Switch to Final Configuration - L01 EB	1	11-28-18	11-28-18
CNAL01EG0060	Install Rumble Strips - L01 EB	2	11-29-18	12-03-18
CNAL01EG0070	Switch Traffic to Final Configuration - L01 EB	1	12-04-18	12-04-18
CNAL01EG0080	Reset Temp Concrete Barrier to Inside Shoulder - L01 EB	2	12-05-18	12-06-18
CNAL01EG0090	Remove Temp Concrete Barrier - L01 EB	2	04-29-19	04-30-19
Location 02: Bridges over Rte 641 (Penniman Rd)		409	04-18-17	12-04-18
Loc 02 General/Median		409	04-18-17	12-04-18
CNAL02G00010	Install MOT on Roadway Below Bridge -Bridges over Rte 641 (Penniman Rd)	3	04-18-17	04-20-17



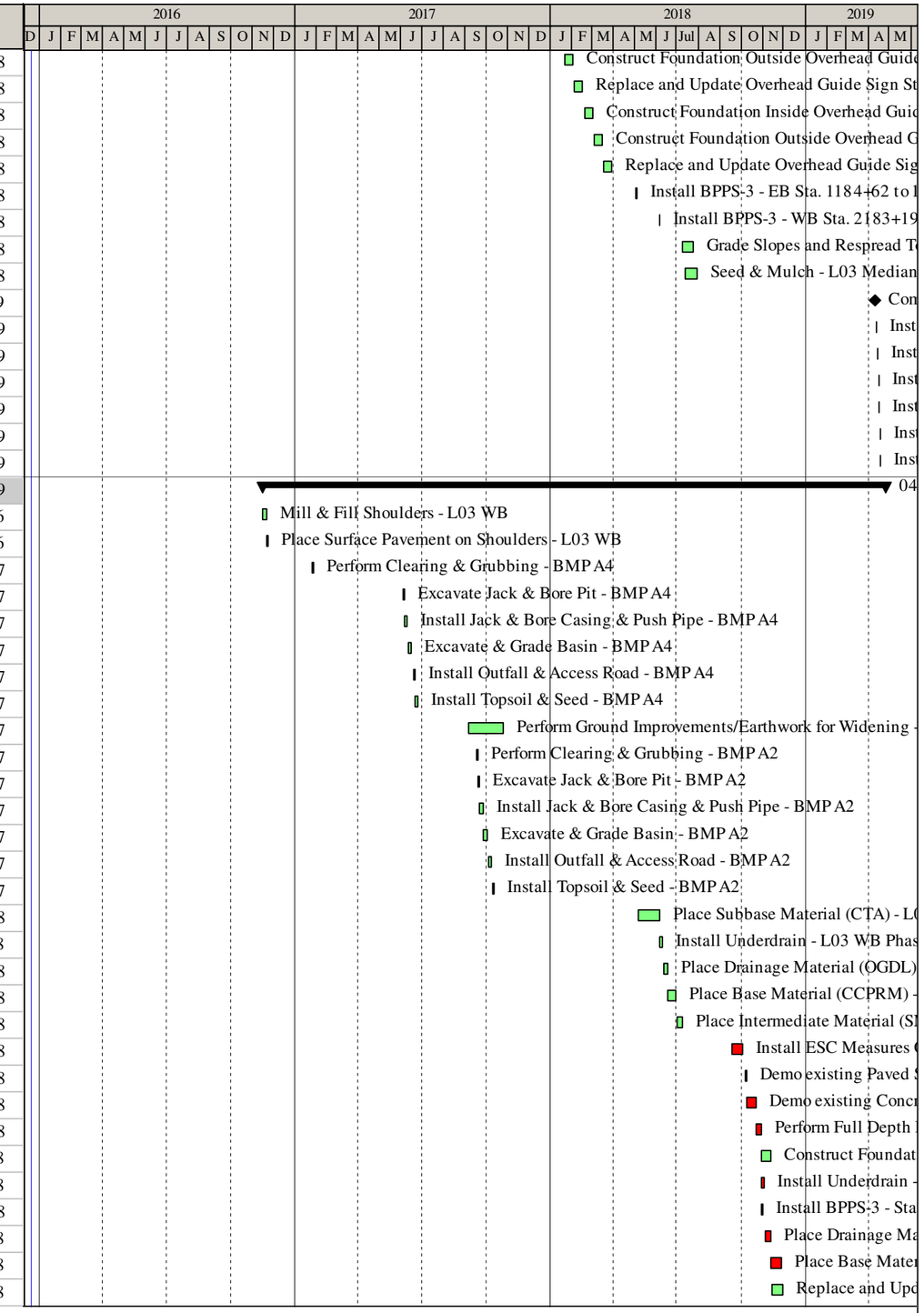
Activity ID	Activity Name	Original Duration	Start	Finish
CNAL02G20010	Relocations Complete - Location 02 - Bridges over Rte 641 (Penniman Rd)	0	04-18-17	
CNAL02G00050	Schedule & Perform Initial Safety/Inventory Inspection - L02 [2.3.10]	30	02-12-18	03-13-18
CNAL02G00030	Perform Post-Construction Survey for Load Ratings - L02	5	03-14-18	03-20-18
CNAL02G00060	Schedule & Perform Final Safety/Inventory Inspection - L02 [2.3.10]	30	11-05-18	12-04-18
CNAL02G20020	Complete Work - Location 02 - Bridges over Rte 641 (Penniman Rd)	0		12-04-18
Loc 02 WB: Bridge B-627 over Penniman Rd		406	04-21-17	12-04-18
CNAL02W01730	Install SOE Abutment A - Bridge B-627	3	04-21-17	04-25-17
CNAL02W01740	Install SOE Abutment B - Bridge B-627	3	04-26-17	05-01-17
CNAL02W01750	Demo (Partial) Existing Superstructure - Bridge B-627	9	05-02-17	05-15-17
CNAL02W00100	Perform Substructure Repairs - Bridge B-627	15	05-16-17	06-08-17
CNAL02W00250	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-627	30	05-16-17	06-29-17
CNAL02W01760	Construct Abutment A - Bridge B-627	10	05-16-17	06-01-17
CNAL02W01770	Construct Pier 1 - Bridge B-627	15	05-16-17	06-08-17
CNAL02W02070	Construct Abutment B - Bridge B-627	10	06-02-17	06-15-17
CNAL02W03120	Install Concrete Slope Protection - Abutment A - Bridge B-627	8	06-02-17	06-13-17
CNAL02W01870	Construct Crash Wall - Pier 1 - Bridge B-627	6	06-09-17	06-16-17
CNAL02W01930	Construct Pier 2 - Bridge B-627	15	06-09-17	06-29-17
CNAL02W03130	Install Concrete Slope Protection - Abutment B - Bridge B-627	8	06-16-17	06-27-17
CNAL02W01880	Construct Protection Barrier - Pier 1 - Bridge B-627	8	06-19-17	06-28-17
CNAL02W02050	Construct Crash Wall - Pier 2 - Bridge B-627	6	06-30-17	07-10-17
CNAL02W02060	Construct Protection Barrier - Pier 2 - Bridge B-627	8	07-11-17	07-20-17
CNAL02W03140	Erect Beams - Bridge B-627	6	07-21-17	07-28-17
CNAL02W03150	Place Deck - Span a - Bridge B-627	7	07-31-17	08-08-17
CNAL02W03160	Place Deck - Span b - Bridge B-627	7	08-09-17	08-17-17
CNAL02W03170	Place Deck - Span c - Bridge B-627	7	08-18-17	08-28-17
CNAL02W03180	Place Parapet - Bridge B-627	15	08-29-17	09-20-17
CNAL02W03190	Construct Approach Slabs - Bridge B-627	10	08-29-17	09-12-17
CNAL02E00250	Clean, Prime & Paint Existing Bridge Beams (Potential Lead) - Bridge B-627	21	08-29-17	09-28-17
CNAL02W03200	Perform Deck Grooving on Widening - Bridge B-627	1	09-21-17	09-21-17
CNAL02E03110	Install Concrete Slope Protection - Abutment B - Bridge B-628	8	11-01-17	11-14-17
CNAL02W00260	Reconstruct Existing Backwall - Bridge B-627	12	09-19-18	10-04-18
CNAL02W03220	Retrofit Existing Deck over Piers - Bridge B-627	15	09-19-18	10-10-18
CNAL02W03230	Construct Deck Extensions - Bridge B-627	15	10-11-18	11-05-18
CNAL02W03240	Perform Deck Repairs - Bridge B-627	12	11-06-18	11-27-18
CNAL02W03250	Place Latex Overlay - Bridge B-627	3	11-28-18	12-03-18
CNAL02W03210	Perform Deck Grooving on Existing - Bridge B-627	1	12-04-18	12-04-18
Loc 02 EB: Bridge B-628 over Penniman Rd		390	04-21-17	11-08-18
CNAL02E00090	Perform Substructure Repairs - Bridge B-628	15	04-21-17	05-15-17
CNAL02E01630	Install SOE Abutment A - Bridge B-628	3	04-21-17	04-25-17
CNAL02E01640	Install SOE Abutment B - Bridge B-628	3	04-26-17	05-01-17
CNAL02E01650	Demo (Partial) Existing Superstructure - Bridge B-628	9	09-18-17	09-28-17
CNAL02E00110	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-628	30	09-29-17	11-16-17
CNAL02E01660	Construct Abutment A - Bridge B-628	10	09-29-17	10-13-17
CNAL02E01670	Construct Pier 1 - Bridge B-628	15	09-29-17	10-23-17
CNAL02E01780	Construct Abutment B - Bridge B-628	10	10-16-17	10-31-17
CNAL02E01810	Install Concrete Slope Protection - Abutment A - Bridge B-628	8	10-16-17	10-26-17
CNAL02E01680	Construct Crash Wall - Pier 1 - Bridge B-628	6	10-24-17	11-01-17



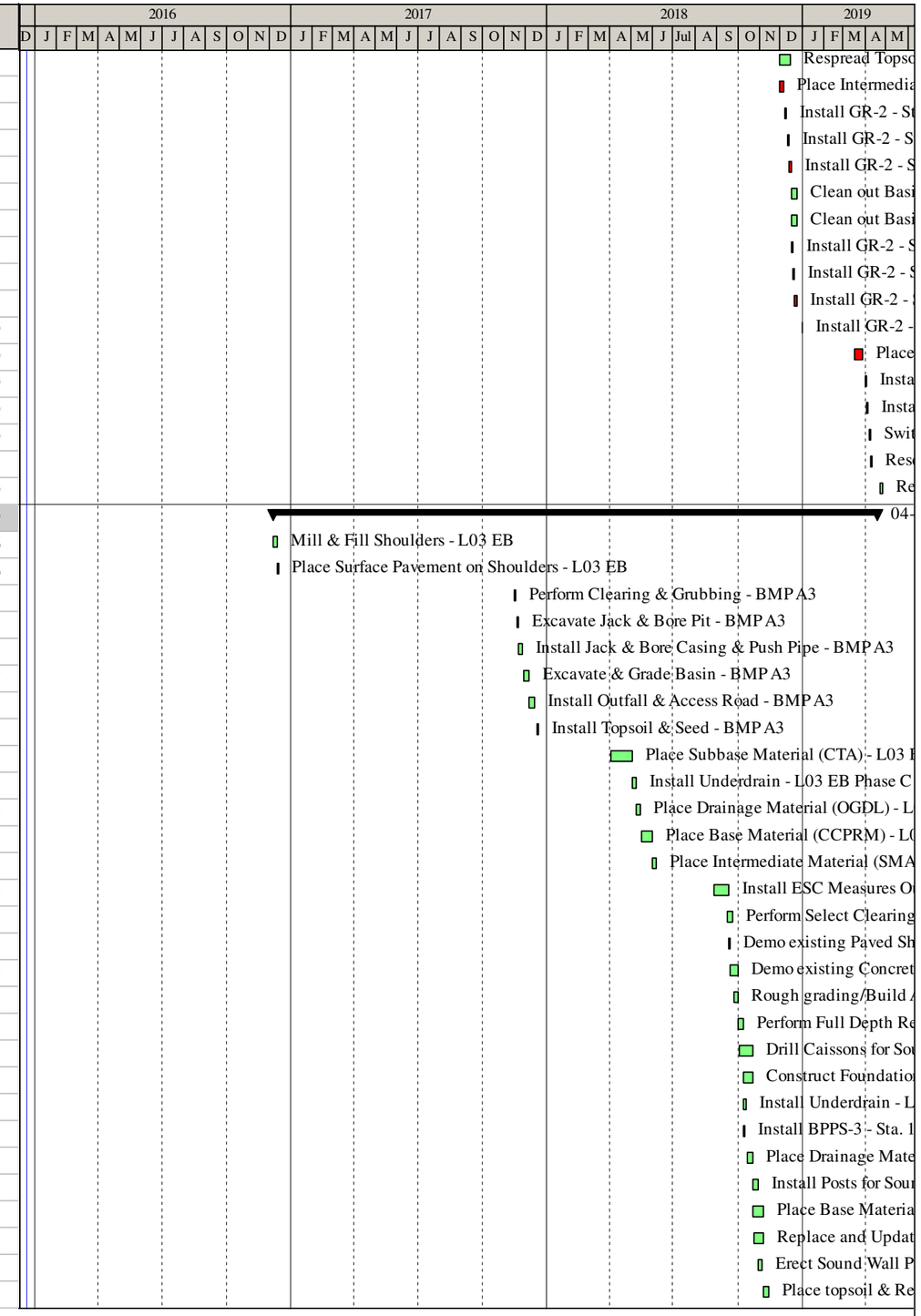
Activity ID	Activity Name	Original Duration	Start	Finish
CNAL02E01700	Construct Pier 2 - Bridge B-628	15	10-24-17	11-16-17
CNAL02E01690	Construct Protection Barrier - Pier 1 - Bridge B-628	8	11-02-17	11-15-17
CNAL02E01710	Construct Crash Wall - Pier 2 - Bridge B-628	6	11-20-17	11-29-17
CNAL02E01720	Construct Protection Barrier - Pier 2 - Bridge B-628	8	11-30-17	12-13-17
CNAL02E01830	Erect Beams - Bridge B-628	6	12-14-17	01-02-18
CNAL02E01840	Place Deck - Span a - Bridge B-628	7	01-03-18	01-15-18
CNAL02E01850	Place Deck - Span b - Bridge B-628	7	01-16-18	01-29-18
CNAL02E01860	Place Deck - Span c - Bridge B-628	7	01-30-18	02-12-18
CNAL02W00350	Clean, Prime & Paint Existing Bridge Beams (Potential Lead) - Bridge B-628	21	02-13-18	03-26-18
CNAL02E01890	Place Parapet - Bridge B-628	15	02-13-18	03-13-18
CNAL02E01900	Construct Approach Slabs - Bridge B-628	10	02-13-18	03-05-18
CNAL02E01910	Perform Deck Grooving on Widening - Bridge B-628	1	03-15-18	03-15-18
CNAL02E02090	Retrofit Existing Deck over Piers - Bridge B-628	15	08-29-18	09-20-18
CNAL02E00120	Reconstruct Existing Backwall - Bridge B-628	12	09-21-18	10-09-18
CNAL02E02100	Construct Deck Extensions - Bridge B-628	15	09-21-18	10-12-18
CNAL02E02110	Perform Deck Repairs - Bridge B-628	12	10-15-18	11-01-18
CNAL02E02120	Place Latex Overlay - Bridge B-628	3	11-05-18	11-07-18
CNAL02E01920	Perform Deck Grooving on Existing - Bridge B-628	1	11-08-18	11-08-18
Location 03: Roadway Sta X168 to X225		619	10-26-16	04-25-19
Loc 03 General/Median		616	10-26-16	04-19-19
CNAL03G20010	Relocations Complete - Location 03 - Roadway Sta X168 to X225	0	10-26-16	
CNAL03G00020	Install ESC Measures - L03 Median	20	02-20-17	03-29-17
CNAL03G00010	Perform Clearing & Grubbing - L03 Median	12	02-22-17	03-09-17
CNAL03G10010	Perform Select Clearing & Grubbing at L03 Median Whiteman Swamp	5	03-10-17	03-16-17
CNAL03G10020	Construct Access to Box Culvert Extensions - L03 Median Whiteman Swamp	5	03-20-17	03-28-17
CNAL03G10030	Demo notch in existing headwall for Extension - D-608 Whiteman Swamp	5	03-29-17	04-05-17
CNAL03G10040	Demo notch in existing headwall for Extension - D-605 Whiteman Swamp	5	04-06-17	04-13-17
CNAL03G10050	Install stream diversion system - L03 Median Whiteman Swamp	10	04-18-17	05-02-17
CNAL03G10060	Excavate for Box Culvert Extensions - L03 Median Whiteman Swamp	5	05-03-17	05-10-17
CNAL03G10070	Install bedding stone for Box Culvert Extensions - L03 Median Whiteman Swamp	5	05-11-17	05-17-17
CNAL03G00030	Strip Topsoil (Full Width) - L03 Median	9	05-17-17	06-01-17
CNAL03G10080	Construct Culvert Floor - L03 Median Whiteman Swamp	15	05-18-17	06-12-17
CNAL03G00150	Install Settlement Monitoring Devices (where applicable) - L03 Median	5	06-02-17	06-08-17
CNAL03G10090	Construct Culvert Walls - L03 Median Whiteman Swamp	30	06-13-17	07-25-17
CNAL03G10100	Construct Culvert Top - L03 Median Whiteman Swamp	20	07-26-17	08-22-17
CNAL03G10110	Backfill Box Culvert - L03 Median Whiteman Swamp	10	08-23-17	09-06-17
CNAL03G10130	Repair Existing Box Culvert (as needed) - D-607 Whiteman Swamp	5	08-23-17	08-29-17
CNAL03G10120	Repair Existing Box Culvert (as needed) - D-608 Whiteman Swamp	5	08-30-17	09-06-17
CNAL03G00160	Settlement Period - L03 Median	90	09-30-17	12-28-17
CNAL03G30100	Construct Foundation Inside Overhead Guide Sign Structure - L03 - Sta. X224+75	10	10-04-17	10-17-17
CNAL03G30110	Construct Foundation Outside Overhead Guide Sign Structure - L03 - Sta. X224+75	10	10-18-17	10-31-17
CNAL03G00040	Install Drainage - L03 Median	38	11-01-17	01-16-18
CNAL03G30120	Replace and Update Overhead Guide Sign Structure - L03 - Sta. X224+75	10	11-01-17	11-14-17
CNAL03G30070	Construct Foundation Inside Overhead Guide Sign Structure - L03 - Sta. X215+50	10	11-15-17	11-30-17
CNAL03G30080	Construct Foundation Outside Overhead Guide Sign Structure - L03 - Sta. X215+50	10	12-01-17	12-14-17
CNAL03G30090	Replace and Update Overhead Guide Sign Structure - L03 - Sta. X215+50	10	12-15-17	01-05-18
CNAL03G30040	Construct Foundation Inside Overhead Guide Sign Structure - L03 - Sta. X182+50	10	01-08-18	01-19-18



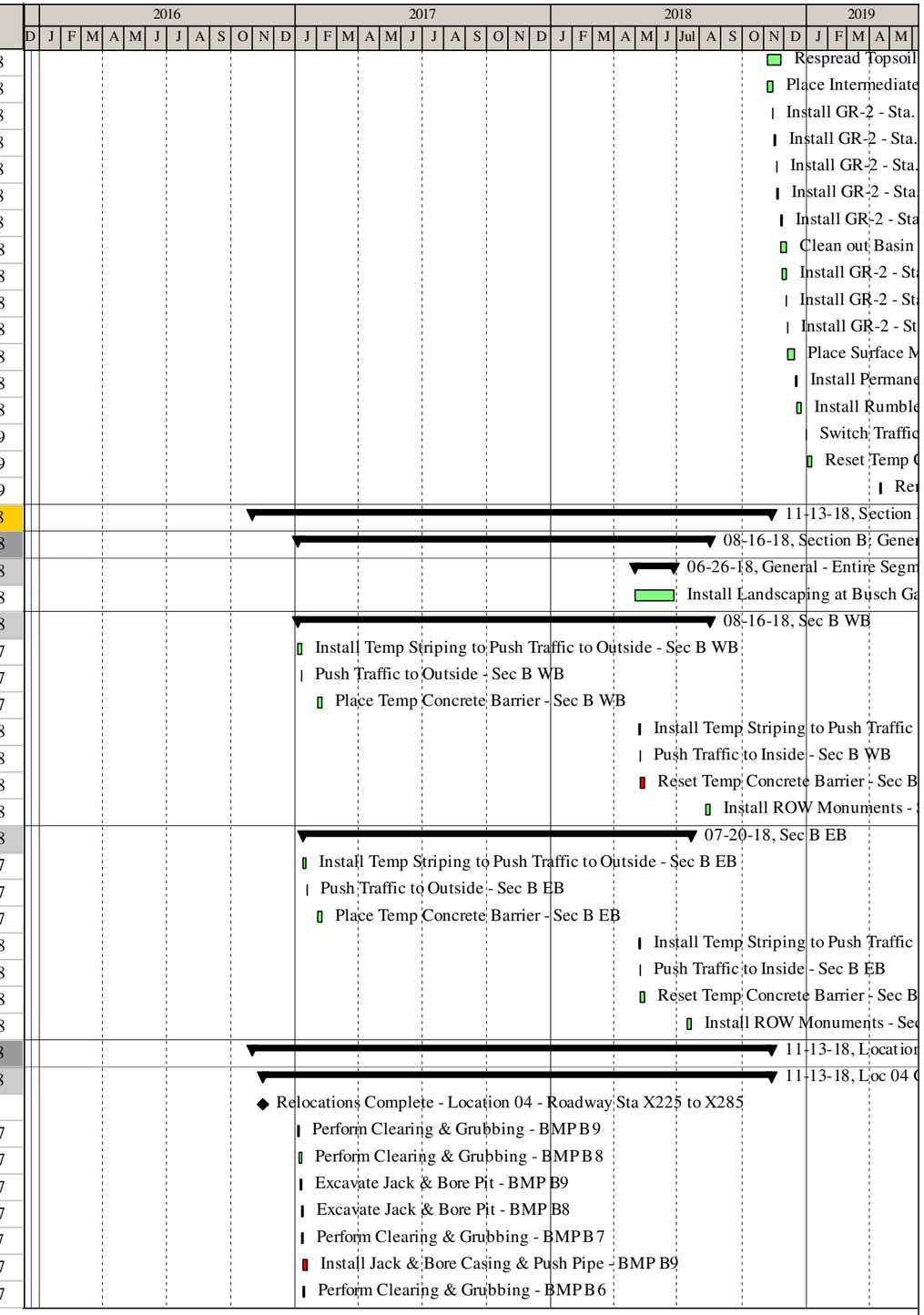
Activity ID	Activity Name	Original Duration	Start	Finish
CNAL03G30050	Construct Foundation Outside Overhead Guide Sign Structure - L03 - Sta. X182+50	10	01-22-18	02-02-18
CNAL03G30060	Replace and Update Overhead Guide Sign Structure - L03 - Sta. X182+50	10	02-05-18	02-16-18
CNAL03G30010	Construct Foundation Inside Overhead Guide Sign Structure - L03 - Sta. X168+80	10	02-19-18	03-02-18
CNAL03G30020	Construct Foundation Outside Overhead Guide Sign Structure - L03 - Sta. X168+80	10	03-05-18	03-16-18
CNAL03G30030	Replace and Update Overhead Guide Sign Structure - L03 - Sta. X168+80	10	03-19-18	03-30-18
CNAL03G00070	Install BPPS-3 - EB Sta. 1184+62 to 1184+56 - L03 Median	1	05-04-18	05-04-18
CNAL03G00110	Install BPPS-3 - WB Sta. 2183+19 to 2183+43 - L03 Median	1	06-07-18	06-07-18
CNAL03G00130	Grade Slopes and Respread Topsoil - L03 Median	12	07-10-18	07-25-18
CNAL03G00140	Seed & Mulch - L03 Median	12	07-13-18	07-30-18
CNAL03G20020	Complete Work - Location 03 - Roadway Sta X168 to X225	0		04-11-19
CNAL03G00050	Install GR-2 - EB Sta. 1168+41 to 1168+67 - L03 Median	1	04-12-19	04-12-19
CNAL03G00060	Install GR-2 - EB Sta. 1180+39 to 1182+90 - L03 Median	1	04-15-19	04-15-19
CNAL03G00080	Install GR-2 - EB Sta. 1184+56 to 1184+81 - L03 Median	1	04-16-19	04-16-19
CNAL03G00120	Install GR-2 - WB Sta. 2187+67 to 2185+17 - L03 Median	1	04-17-19	04-17-19
CNAL03G00100	Install GR-2 - WB Sta. 2182+89 to 2183+19 - L03 Median	1	04-18-19	04-18-19
CNAL03G00090	Install GR-2 - WB Sta. 2171+48 to 2168+96 - L03 Median	1	04-19-19	04-19-19
Loc 03 WB: Roadway Sta 2168+94 to 2225+00		604	11-16-16	04-25-19
CNAL03WG0350	Mill & Fill Shoulders - L03 WB	3	11-16-16	11-21-16
CNAL03WG0360	Place Surface Pavement on Shoulders - L03 WB	2	11-22-16	11-23-16
CNAL03WG0280	Perform Clearing & Grubbing - BMP A4	2	01-26-17	01-27-17
CNAL03WG0290	Excavate Jack & Bore Pit - BMP A4	2	06-05-17	06-06-17
CNAL03WG0300	Install Jack & Bore Casing & Push Pipe - BMP A4	3	06-07-17	06-09-17
CNAL03WG0310	Excavate & Grade Basin - BMP A4	5	06-12-17	06-16-17
CNAL03WG0320	Install Outfall & Access Road - BMP A4	3	06-19-17	06-21-17
CNAL03WG0330	Install Topsoil & Seed - BMP A4	3	06-22-17	06-26-17
CNAL03WM0010	Perform Ground Improvements/Earthwork for Widening - L03 Median Phase C1	32	09-07-17	10-25-17
CNAL03WG0210	Perform Clearing & Grubbing - BMP A2	2	09-18-17	09-19-17
CNAL03WG0220	Excavate Jack & Bore Pit - BMP A2	2	09-20-17	09-21-17
CNAL03WG0230	Install Jack & Bore Casing & Push Pipe - BMP A2	3	09-22-17	09-26-17
CNAL03WG0240	Excavate & Grade Basin - BMP A2	5	09-27-17	10-03-17
CNAL03WG0250	Install Outfall & Access Road - BMP A2	3	10-04-17	10-09-17
CNAL03WG0260	Install Topsoil & Seed - BMP A2	3	10-10-17	10-12-17
CNAL03WM0020	Place Subbase Material (CTA) - L03 WB Phase C1	20	05-07-18	06-06-18
CNAL03WM0100	Install Underdrain - L03 WB Phase C1	3	06-07-18	06-11-18
CNAL03WM0060	Place Drainage Material (OGDL) - L03 WB Phase C1	5	06-12-18	06-18-18
CNAL03WM0070	Place Base Material (CCPRM) - L03 WB Phase C1	9	06-19-18	06-29-18
CNAL03WM0080	Place Intermediate Material (SMA 19.0) - L03 WB Phase C1	5	07-02-18	07-09-18
CNAL03WG0030	Install ESC Measures Outside - L03 WB	12	09-19-18	10-04-18
CNAL03WM0110	Demo existing Paved Shoulder - L03 WB Phase C2	2	10-08-18	10-09-18
CNAL03WM0120	Demo existing Concrete Pavement - L03 WB Phase C2	8	10-10-18	10-22-18
CNAL03WM0130	Perform Full Depth Reclamation of existing Subbase Material - L03 WB Phase C2	5	10-23-18	10-30-18
CNAL03WM0250	Construct Foundation Outside Overhead Cantilever Guide Sign Structure -L03WB - Sta. 2203+80	10	10-31-18	11-13-18
CNAL03WM0380	Install Underdrain - L03 WB Phase C2	3	10-31-18	11-02-18
CNAL03WM0200	Install BPPS-3 - Sta. 2183+43 to 2183+19 Outside - L03 WB Phase C2	1	10-31-18	10-31-18
CNAL03WM0140	Place Drainage Material (OGDL) - L03 WB Phase C2	5	11-05-18	11-12-18
CNAL03WM0150	Place Base Material (CCPRM) - L03 WB Phase C2	9	11-13-18	11-28-18
CNAL03WM0260	Replace and Update Overhead Guide Sign Structure -L03WB - Sta. 2203+80	10	11-14-18	11-29-18



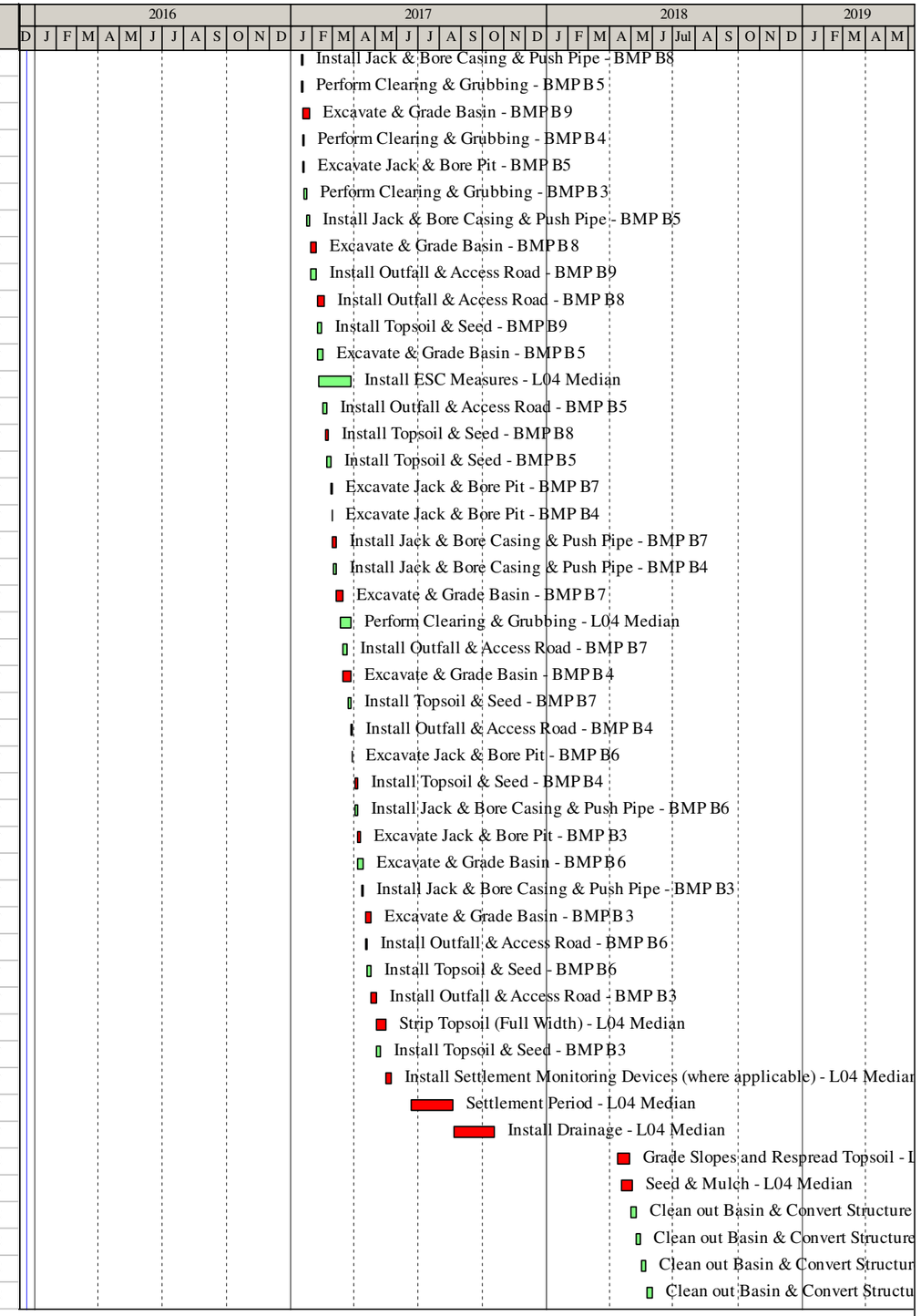
Activity ID	Activity Name	Original Duration	Start	Finish
CNAL03WM0270	Respread Topsoil & Seed outside slopes - L03 WB	12	11-29-18	12-14-18
CNAL03WM0160	Place Intermediate Material (SMA 19.0) - L03 WB Phase C2	5	11-29-18	12-06-18
CNAL03WM0240	Install GR-2 - Sta. 2221+93 to 2214+85 Outside - L03 WB Phase C2	2	12-07-18	12-10-18
CNAL03WM0230	Install GR-2 - Sta. 2207+03 to 2199+29 Outside - L03 WB Phase C2	2	12-11-18	12-12-18
CNAL03WM0220	Install GR-2 - Sta. 2199+17 to 2188+27 Outside - L03 WB Phase C2	3	12-13-18	12-17-18
CNAL03WG0340	Clean out Basin & Convert Structure to Perm Config - BMP A4	5	12-17-18	12-24-18
CNAL03WG0270	Clean out Basin & Convert Structure to Perm Config - BMP A2	5	12-17-18	12-24-18
CNAL03WM0210	Install GR-2 - Sta. 2188+94 to 2185+11 Outside - L03 WB Phase C2	1	12-18-18	12-18-18
CNAL03WM0190	Install GR-2 - Sta. 2182+89 to 2173+35 Outside - L03 WB Phase C2	2	12-19-18	12-20-18
CNAL03WM0180	Install GR-2 - Sta. 2180+53 to 2173+35 Outside - L03 WB Phase C2	2	12-21-18	12-24-18
CNAL03WM0170	Install GR-2 - Sta. 2172+48 to 2168+93 Outside - L03 WB Phase C2	1	01-02-19	01-02-19
CNAL03WG0040	Place Surface Material (SMA 12.5) - L03 WB	8	03-18-19	03-28-19
CNAL03WG0050	Install Permanent Striping to Switch to Final Configuration - L03 WB	2	04-01-19	04-02-19
CNAL03WG0060	Install Rumble Strips - L03 WB	2	04-03-19	04-04-19
CNAL03WG0070	Switch Traffic to Final Configuration - L03 WB	1	04-08-19	04-08-19
CNAL03WG0080	Reset Temp Concrete Barrier to Inside Shoulder - L03 WB	3	04-09-19	04-11-19
CNAL03WG0090	Remove Temp Concrete Barrier - L03 WB	3	04-23-19	04-25-19
Loc 03 EB: Roadway Sta 1168+43 to 1224+40		588	12-07-16	04-19-19
CNAL03EG0290	Mill & Fill Shoulders - L03 EB	3	12-07-16	12-12-16
CNAL03EG0300	Place Surface Pavement on Shoulders - L03 EB	2	12-13-16	12-14-16
CNAL03EG0210	Perform Clearing & Grubbing - BMP A3	2	11-16-17	11-17-17
CNAL03EG0220	Excavate Jack & Bore Pit - BMP A3	2	11-20-17	11-21-17
CNAL03EG0230	Install Jack & Bore Casing & Push Pipe - BMP A3	3	11-22-17	11-28-17
CNAL03EG0240	Excavate & Grade Basin - BMP A3	5	11-29-17	12-06-17
CNAL03EG0250	Install Outfall & Access Road - BMP A3	5	12-07-17	12-14-17
CNAL03EG0260	Install Topsoil & Seed - BMP A3	3	12-18-17	12-20-17
CNAL03EM0020	Place Subbase Material (CTA) - L03 EB Phase C1	20	04-03-18	05-03-18
CNAL03EM0330	Install Underdrain - L03 EB Phase C1	3	05-04-18	05-08-18
CNAL03EM0060	Place Drainage Material (OGDL) - L03 EB Phase C1	5	05-09-18	05-15-18
CNAL03EM0070	Place Base Material (CCPRM) - L03 EB Phase C1	9	05-16-18	05-31-18
CNAL03EM0080	Place Intermediate Material (SMA 19.0) - L03 EB Phase C1	5	06-01-18	06-07-18
CNAL03EG0030	Install ESC Measures Outside - L03 EB	12	08-29-18	09-17-18
CNAL03EM0610	Perform Select Clearing for Sound Walls - SW1A L03EB	6	09-17-18	09-24-18
CNAL03EM0110	Demo existing Paved Shoulder - L03 EB Phase C2	2	09-18-18	09-19-18
CNAL03EM0120	Demo existing Concrete Pavement - L03 EB Phase C2	8	09-20-18	10-01-18
CNAL03EM0620	Rough grading/Build Access and Prep for Sound Wall - SW1A L03EB	6	09-25-18	10-02-18
CNAL03EM0130	Perform Full Depth Reclamation of existing Subbase Material - L03 EB Phase C2	5	10-02-18	10-09-18
CNAL03EM0630	Drill Caissons for Sound Wall - SW1A L03EB Phase C1	12	10-03-18	10-22-18
CNAL03EM0260	Construct Foundation Outside Overhead Cantilever Guide Sign Structure -L03EB - Sta. 1210+20	10	10-10-18	10-23-18
CNAL03EM0390	Install Underdrain - L03 EB Phase C2	3	10-10-18	10-12-18
CNAL03EM0200	Install BPPS-3 - Sta. 1182+90 to 1184+62 Outside - L03 EB Phase C2	2	10-10-18	10-11-18
CNAL03EM0140	Place Drainage Material (OGDL) - L03 EB Phase C2	5	10-15-18	10-22-18
CNAL03EM0640	Install Posts for Sound Wall - SW1A L03EB Phase C1	4	10-23-18	10-29-18
CNAL03EM0150	Place Base Material (CCPRM) - L03 EB Phase C2	9	10-23-18	11-06-18
CNAL03EM0270	Replace and Update Overhead Guide Sign Structure -L03EB - Sta. 1210+20	10	10-24-18	11-06-18
CNAL03EM0650	Erect Sound Wall Panels - SW1A L03EB Phase C1	4	10-30-18	11-05-18
CNAL03EM0690	Place topsoil & Restore area - SW1A L03EB Phase C2	6	11-06-18	11-14-18



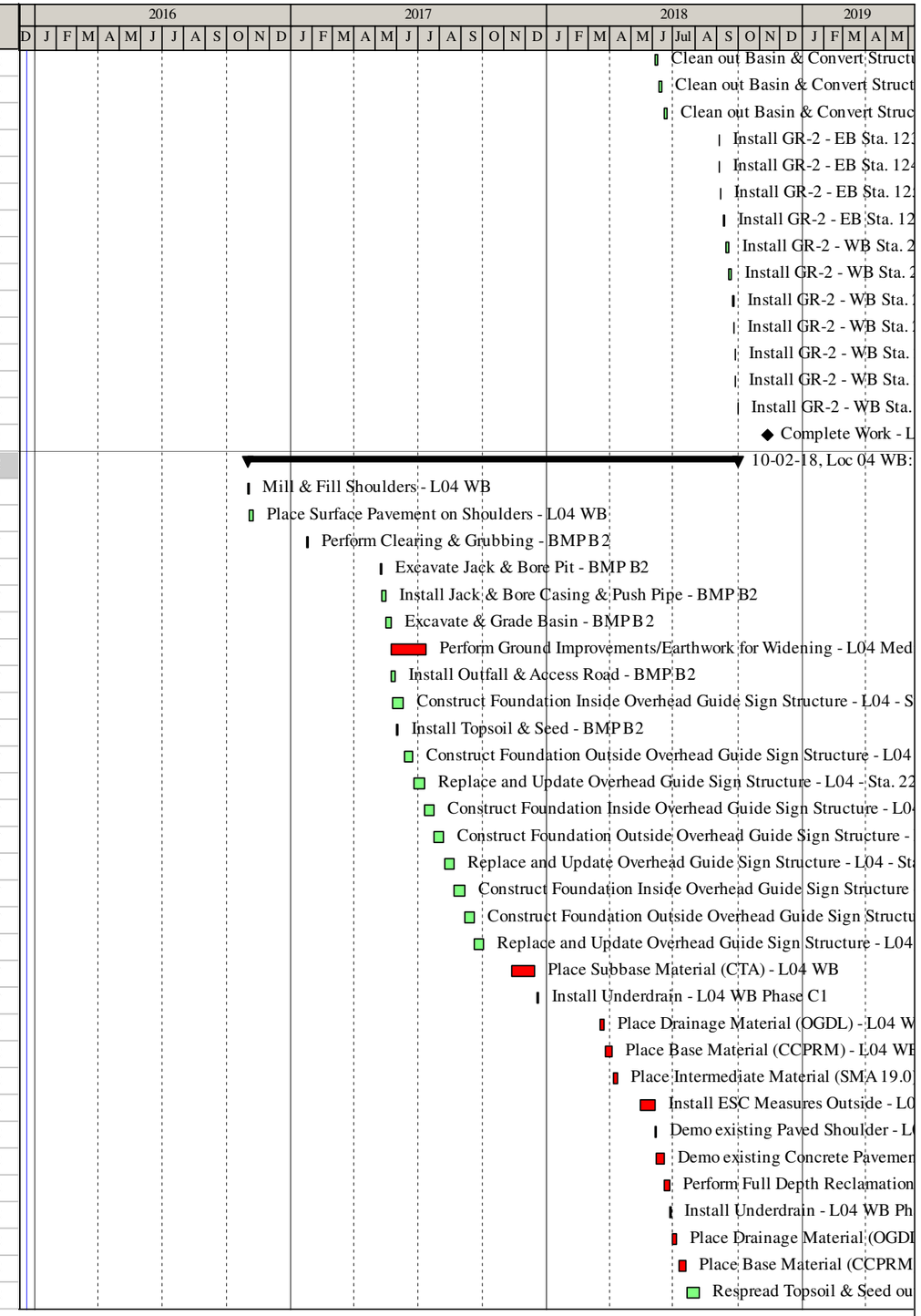
Activity ID	Activity Name	Original Duration	Start	Finish
CNAL03EG0280	Respread Topsoil & Seed outside slopes - L03 EB	12	11-07-18	11-26-18
CNAL03EM0160	Place Intermediate Material (SMA 19.0) - L03 EB Phase C2	5	11-07-18	11-14-18
CNAL03EM0170	Install GR-2 - Sta. 1168+45 to 1172+13 Outside - L03 EB Phase C2	1	11-15-18	11-15-18
CNAL03EM0180	Install GR-2 - Sta. 1172+65 to 1179+81 Outside - L03 EB Phase C2	2	11-16-18	11-19-18
CNAL03EM0190	Install GR-2 - Sta. 1179+20 to 1182+90 Outside - L03 EB Phase C2	1	11-20-18	11-20-18
CNAL03EM0210	Install GR-2 - Sta. 1184+81 to 1188+49 Outside - L03 EB Phase C2	1	11-21-18	11-21-18
CNAL03EM0220	Install GR-2 - Sta. 1187+41 to 1194+84 Outside - L03 EB Phase C2	2	11-26-18	11-27-18
CNAL03EG0270	Clean out Basin & Convert Structure to Perm Config - BMP A3	5	11-27-18	12-04-18
CNAL03EM0230	Install GR-2 - Sta. 1193+84 to 1210+60 Outside - L03 EB Phase C2	4	11-28-18	12-03-18
CNAL03EM0240	Install GR-2 - Sta. 1214+33 to 1215+83 Outside - L03 EB Phase C2	1	12-04-18	12-04-18
CNAL03EM0250	Install GR-2 - Sta. 1223+47 to 1224+96 Outside - L03 EB Phase C2	1	12-05-18	12-05-18
CNAL03EG0040	Place Surface Material (SMA 12.5) - L03 EB	7	12-06-18	12-14-18
CNAL03EG0050	Install Permanent Striping to Switch to Final Configuration - L03 EB	2	12-17-18	12-18-18
CNAL03EG0060	Install Rumble Strips - L03 EB	3	12-19-18	12-24-18
CNAL03EG0070	Switch Traffic to Final Configuration - L03 EB	1	01-02-19	01-02-19
CNAL03EG0080	Reset Temp Concrete Barrier to Inside Shoulder - L03 EB	3	01-03-19	01-08-19
CNAL03EG0090	Remove Temp Concrete Barrier - L03 EB	3	04-17-19	04-19-19
Section B: Sta X225 to X285		508	10-31-16	11-13-18
Section B: General/Entire Segment/All Locations		406	01-05-17	08-16-18
General - Entire Segment		40	05-01-18	06-26-18
CNBGESG00010	Install Landscaping at Busch Gardens Interchange - Sec. B	40	05-01-18	06-26-18
Sec B WB		406	01-05-17	08-16-18
CNBGESW00010	Install Temp Striping to Push Traffic to Outside - Sec B WB	2	01-05-17	01-09-17
CNBGESW00020	Push Traffic to Outside - Sec B WB	1	01-10-17	01-10-17
CNBGESW00030	Place Temp Concrete Barrier - Sec B WB	3	02-02-17	02-07-17
CNBGESW00110	Install Temp Striping to Push Traffic to Inside - Sec B WB	2	05-07-18	05-08-18
CNBGESW00120	Push Traffic to Inside - Sec B WB	1	05-09-18	05-09-18
CNBGESW00130	Reset Temp Concrete Barrier - Sec B WB	3	05-10-18	05-14-18
CNBGESW00040	Install ROW Monuments - Sec B WB	5	08-10-18	08-16-18
Sec B EB		382	01-12-17	07-20-18
CNBGESE00010	Install Temp Striping to Push Traffic to Outside - Sec B EB	2	01-12-17	01-16-17
CNBGESE00020	Push Traffic to Outside - Sec B EB	1	01-17-17	01-17-17
CNBGESE00030	Place Temp Concrete Barrier - Sec B EB	3	02-02-17	02-07-17
CNBGESE00110	Install Temp Striping to Push Traffic to Inside - Sec B EB	2	05-07-18	05-08-18
CNBGESE00120	Push Traffic to Inside - Sec B EB	1	05-09-18	05-09-18
CNBGESE00130	Reset Temp Concrete Barrier - Sec B EB	3	05-10-18	05-14-18
CNBGESE00040	Install ROW Monuments - Sec B EB	5	07-16-18	07-20-18
Location 04: Roadway Sta X225 to X285		508	10-31-16	11-13-18
Loc 04 General/Median		497	11-15-16	11-13-18
CNBL04G20010	Relocations Complete - Location 04 - Roadway Sta X225 to X285	0	11-15-16	
CNBL04G00680	Perform Clearing & Grubbing - BMP B9	2	01-04-17	01-05-17
CNBL04G00610	Perform Clearing & Grubbing - BMP B8	2	01-06-17	01-09-17
CNBL04G00690	Excavate Jack & Bore Pit - BMP B9	2	01-09-17	01-10-17
CNBL04G00620	Excavate Jack & Bore Pit - BMP B8	2	01-10-17	01-12-17
CNBL04G00510	Perform Clearing & Grubbing - BMP B7	2	01-10-17	01-11-17
CNBL04G00700	Install Jack & Bore Casing & Push Pipe - BMP B9	3	01-12-17	01-17-17
CNBL04G00410	Perform Clearing & Grubbing - BMP B6	2	01-12-17	01-13-17



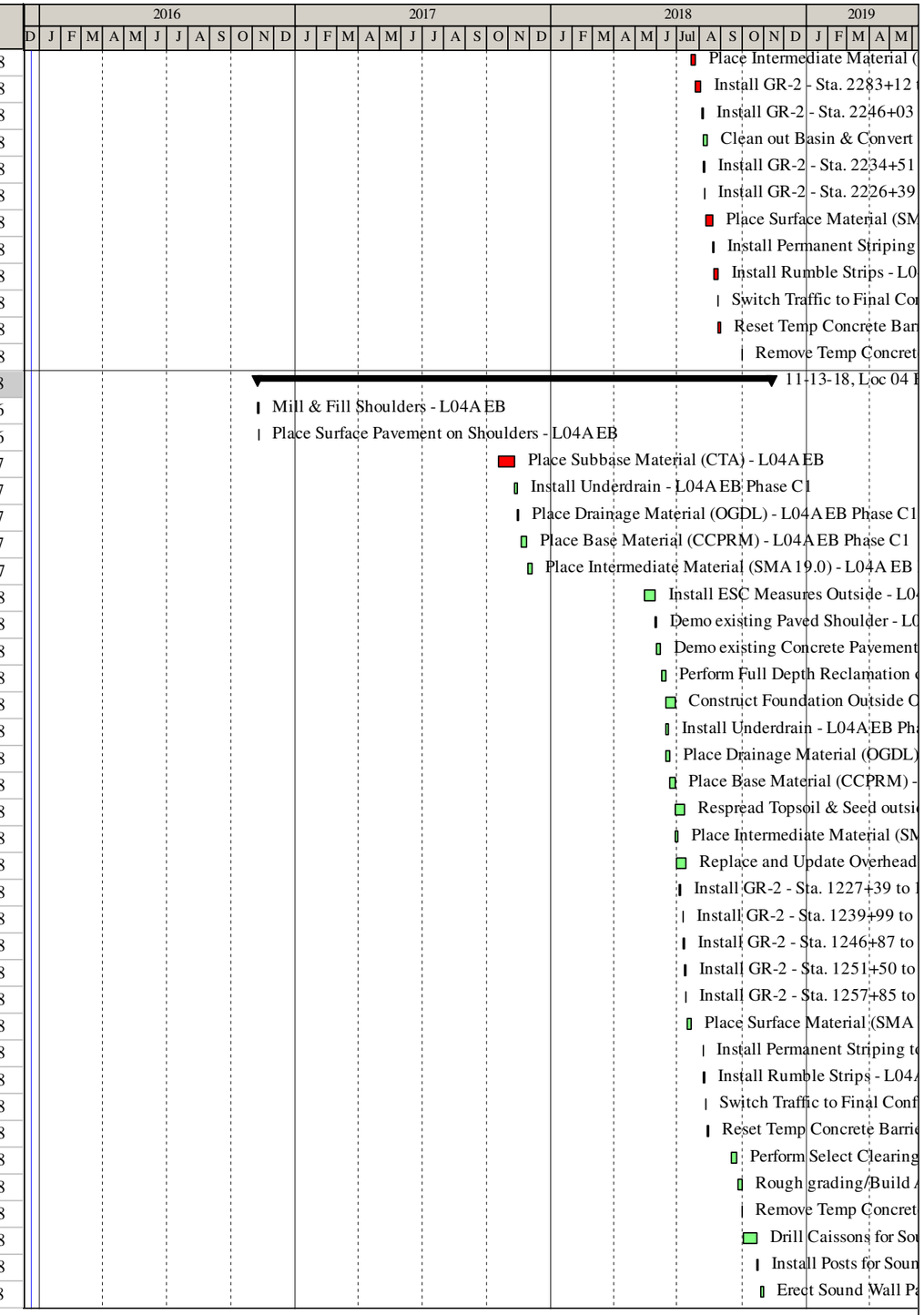
Activity ID	Activity Name	Original Duration	Start	Finish
CNBL04G00630	Install Jack & Bore Casing & Push Pipe - BMP B8	3	01-16-17	01-18-17
CNBL04G00310	Perform Clearing & Grubbing - BMP B5	2	01-16-17	01-17-17
CNBL04G00710	Excavate & Grade Basin - BMP B9	5	01-18-17	01-26-17
CNBL04G00210	Perform Clearing & Grubbing - BMP B4	2	01-18-17	01-19-17
CNBL04G00320	Excavate Jack & Bore Pit - BMP B5	2	01-18-17	01-19-17
CNBL04G00110	Perform Clearing & Grubbing - BMP B3	2	01-20-17	01-23-17
CNBL04G00330	Install Jack & Bore Casing & Push Pipe - BMP B5	3	01-23-17	01-26-17
CNBL04G00640	Excavate & Grade Basin - BMP B8	5	01-30-17	02-06-17
CNBL04G00720	Install Outfall & Access Road - BMP B9	5	01-30-17	02-06-17
CNBL04G00650	Install Outfall & Access Road - BMP B8	6	02-07-17	02-16-17
CNBL04G00730	Install Topsoil & Seed - BMP B9	3	02-07-17	02-13-17
CNBL04G00340	Excavate & Grade Basin - BMP B5	5	02-07-17	02-15-17
CNBL04G00020	Install ESC Measures - L04 Median	24	02-09-17	03-28-17
CNBL04G00350	Install Outfall & Access Road - BMP B5	2	02-16-17	02-20-17
CNBL04G00660	Install Topsoil & Seed - BMP B8	3	02-20-17	02-23-17
CNBL04G00360	Install Topsoil & Seed - BMP B5	3	02-21-17	02-27-17
CNBL04G00520	Excavate Jack & Bore Pit - BMP B7	2	02-27-17	02-28-17
CNBL04G00220	Excavate Jack & Bore Pit - BMP B4	2	02-28-17	03-01-17
CNBL04G00530	Install Jack & Bore Casing & Push Pipe - BMP B7	3	03-01-17	03-06-17
CNBL04G00230	Install Jack & Bore Casing & Push Pipe - BMP B4	3	03-02-17	03-07-17
CNBL04G00540	Excavate & Grade Basin - BMP B7	5	03-07-17	03-15-17
CNBL04G00010	Perform Clearing & Grubbing - L04 Median	12	03-13-17	03-28-17
CNBL04G00550	Install Outfall & Access Road - BMP B7	3	03-16-17	03-21-17
CNBL04G00240	Excavate & Grade Basin - BMP B4	5	03-16-17	03-27-17
CNBL04G00560	Install Topsoil & Seed - BMP B7	3	03-23-17	03-28-17
CNBL04G00250	Install Outfall & Access Road - BMP B4	3	03-28-17	03-30-17
CNBL04G00420	Excavate Jack & Bore Pit - BMP B6	2	03-29-17	03-30-17
CNBL04G00260	Install Topsoil & Seed - BMP B4	3	04-03-17	04-05-17
CNBL04G00430	Install Jack & Bore Casing & Push Pipe - BMP B6	3	04-03-17	04-05-17
CNBL04G00120	Excavate Jack & Bore Pit - BMP B3	2	04-06-17	04-10-17
CNBL04G00440	Excavate & Grade Basin - BMP B6	5	04-06-17	04-13-17
CNBL04G00130	Install Jack & Bore Casing & Push Pipe - BMP B3	3	04-11-17	04-13-17
CNBL04G00140	Excavate & Grade Basin - BMP B3	5	04-18-17	04-24-17
CNBL04G00450	Install Outfall & Access Road - BMP B6	2	04-18-17	04-19-17
CNBL04G00460	Install Topsoil & Seed - BMP B6	3	04-20-17	04-24-17
CNBL04G00150	Install Outfall & Access Road - BMP B3	5	04-25-17	05-02-17
CNBL04G00030	Strip Topsoil (Full Width) - L04 Median	9	05-03-17	05-16-17
CNBL04G00160	Install Topsoil & Seed - BMP B3	3	05-03-17	05-08-17
CNBL04G00180	Install Settlement Monitoring Devices (where applicable) - L04 Median	5	05-17-17	05-23-17
CNBL04G00190	Settlement Period - L04 Median	60	06-21-17	08-19-17
CNBL04G00040	Install Drainage - L04 Median	39	08-21-17	10-17-17
CNBL04G01050	Grade Slopes and Respread Topsoil - L04 Median	12	04-13-18	04-30-18
CNBL04G01060	Seed & Mulch - L04 Median	12	04-18-18	05-03-18
CNBL04G00370	Clean out Basin & Convert Structure to Perm Config - BMP B5	5	05-01-18	05-08-18
CNBL04G00470	Clean out Basin & Convert Structure to Perm Config - BMP B6	5	05-09-18	05-15-18
CNBL04G00570	Clean out Basin & Convert Structure to Perm Config - BMP B7	5	05-16-18	05-23-18
CNBL04G00670	Clean out Basin & Convert Structure to Perm Config - BMP B8	5	05-24-18	06-01-18



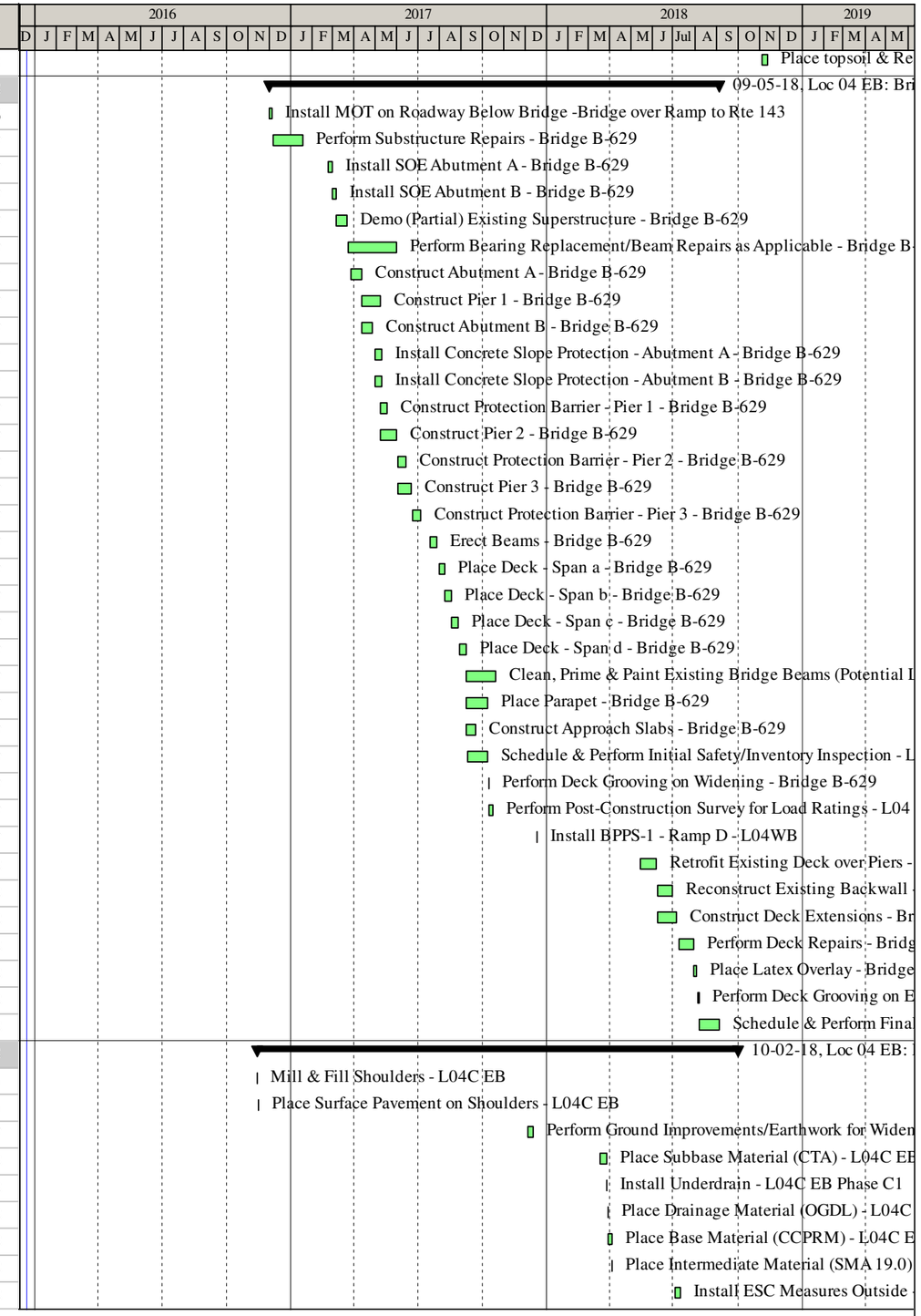
Activity ID	Activity Name	Original Duration	Start	Finish
CNBL04G00740	Clean out Basin & Convert Structure to Perm Config - BMP B9	5	06-04-18	06-08-18
CNBL04G00270	Clean out Basin & Convert Structure to Perm Config - BMP B4	5	06-11-18	06-15-18
CNBL04G00170	Clean out Basin & Convert Structure to Perm Config - BMP B3	5	06-18-18	06-22-18
CNBL04G00050	Install GR-2 - EB Sta. 1234+99 to 1240+49 - L04 Median	1	09-04-18	09-04-18
CNBL04G00060	Install GR-2 - EB Sta. 1240+82 to 1241+25 - L04 Median	1	09-05-18	09-05-18
CNBL04G00070	Install GR-2 - EB Sta. 1255+99 to 1263+42 - L04 Median	2	09-06-18	09-07-18
CNBL04G00080	Install GR-2 - EB Sta. 1265+94 to 1281+25 - L04 Median	4	09-10-18	09-13-18
CNBL04G01040	Install GR-2 - WB Sta. 2293+33 to 2272+36 - L04 Median	3	09-14-18	09-18-18
CNBL04G01030	Install GR-2 - WB Sta. 2282+84 to 2272+36 - L04 Median	3	09-19-18	09-21-18
CNBL04G01020	Install GR-2 - WB Sta. 2268+43 to 2263+25 - L04 Median	2	09-24-18	09-25-18
CNBL04G01010	Install GR-2 - WB Sta. 2257+26 to 2255+86 - L04 Median	1	09-26-18	09-26-18
CNBL04G01000	Install GR-2 - WB Sta. 2250+78 to 2249+80 - L04 Median	1	09-27-18	09-27-18
CNBL04G00100	Install GR-2 - WB Sta. 2243+42 to 2241+40- L04 Median	1	09-28-18	09-28-18
CNBL04G00090	Install GR-2 - WB Sta. 2241+07 to 2237+25 - L04 Median	1	10-01-18	10-01-18
CNBL04G20020	Complete Work - Location 04 - Roadway Sta X225 to X285	0		11-13-18
Loc 04 WB: Roadway Sta 2225+00 to 2283+12		478	10-31-16	10-02-18
CNBL04WG0490	Mill & Fill Shoulders - L04 WB	3	10-31-16	11-02-16
CNBL04WG0500	Place Surface Pavement on Shoulders - L04 WB	2	11-03-16	11-07-16
CNBL04WG0310	Perform Clearing & Grubbing - BMP B2	2	01-24-17	01-25-17
CNBL04WG0320	Excavate Jack & Bore Pit - BMP B2	2	05-09-17	05-10-17
CNBL04WG0330	Install Jack & Bore Casing & Push Pipe - BMP B2	3	05-11-17	05-15-17
CNBL04WG0340	Excavate & Grade Basin - BMP B2	5	05-16-17	05-23-17
CNBL04WM0010	Perform Ground Improvements/Earthwork for Widening - L04 Median	33	05-24-17	07-12-17
CNBL04WG0350	Install Outfall & Access Road - BMP B2	3	05-24-17	05-30-17
CNBL04WG0460	Construct Foundation Inside Overhead Guide Sign Structure - L04 - Sta. 2272+70	10	05-26-17	06-09-17
CNBL04WG0360	Install Topsoil & Seed - BMP B2	3	05-31-17	06-02-17
CNBL04WG0470	Construct Foundation Outside Overhead Guide Sign Structure - L04 - Sta. 2272+70	10	06-12-17	06-23-17
CNBL04WG0480	Replace and Update Overhead Guide Sign Structure - L04 - Sta. 2272+70	10	06-26-17	07-10-17
CNBL04WG0430	Construct Foundation Inside Overhead Guide Sign Structure - L04 - Sta. 2256+10	10	07-11-17	07-24-17
CNBL04WG0440	Construct Foundation Outside Overhead Guide Sign Structure - L04 - Sta. 2256+10	10	07-25-17	08-07-17
CNBL04WG0450	Replace and Update Overhead Guide Sign Structure - L04 - Sta. 2256+10	10	08-08-17	08-21-17
CNBL04WG0400	Construct Foundation Inside Overhead Guide Sign Structure - L04 - Sta. 2250+10	10	08-22-17	09-05-17
CNBL04WG0410	Construct Foundation Outside Overhead Guide Sign Structure - L04 - Sta. 2250+10	10	09-06-17	09-19-17
CNBL04WG0420	Replace and Update Overhead Guide Sign Structure - L04 - Sta. 2250+10	10	09-20-17	10-03-17
CNBL04WM0020	Place Subbase Material (CTA) - L04 WB	21	11-13-17	12-15-17
CNBL04WM0330	Install Underdrain - L04 WB Phase C1	3	12-18-17	12-20-17
CNBL04WM0060	Place Drainage Material (OGDL) - L04 WB Phase C1	5	03-19-18	03-23-18
CNBL04WM0070	Place Base Material (CCPRM) - L04 WB Phase C1	8	03-26-18	04-05-18
CNBL04WM0080	Place Intermediate Material (SMA 19.0) - L04 WB Phase C1	5	04-06-18	04-12-18
CNBL04WG0030	Install ESC Measures Outside - L04 WB	12	05-15-18	06-04-18
CNBL04WM0110	Demo existing Paved Shoulder - L04 WB	2	06-05-18	06-06-18
CNBL04WM0120	Demo existing Concrete Pavement - L04 WB	8	06-07-18	06-18-18
CNBL04WM0130	Perform Full Depth Reclamation of existing Subbase Material - L04 WB	5	06-19-18	06-25-18
CNBL04WM0390	Install Underdrain - L04 WB Phase C2	3	06-26-18	06-28-18
CNBL04WM0140	Place Drainage Material (OGDL) - L04 WB Phase C2	5	06-29-18	07-06-18
CNBL04WM0150	Place Base Material (CCPRM) - L04 WB Phase C2	9	07-09-18	07-19-18
CNBL04WG0380	Respread Topsoil & Seed outside slopes - L04 WB	12	07-20-18	08-06-18



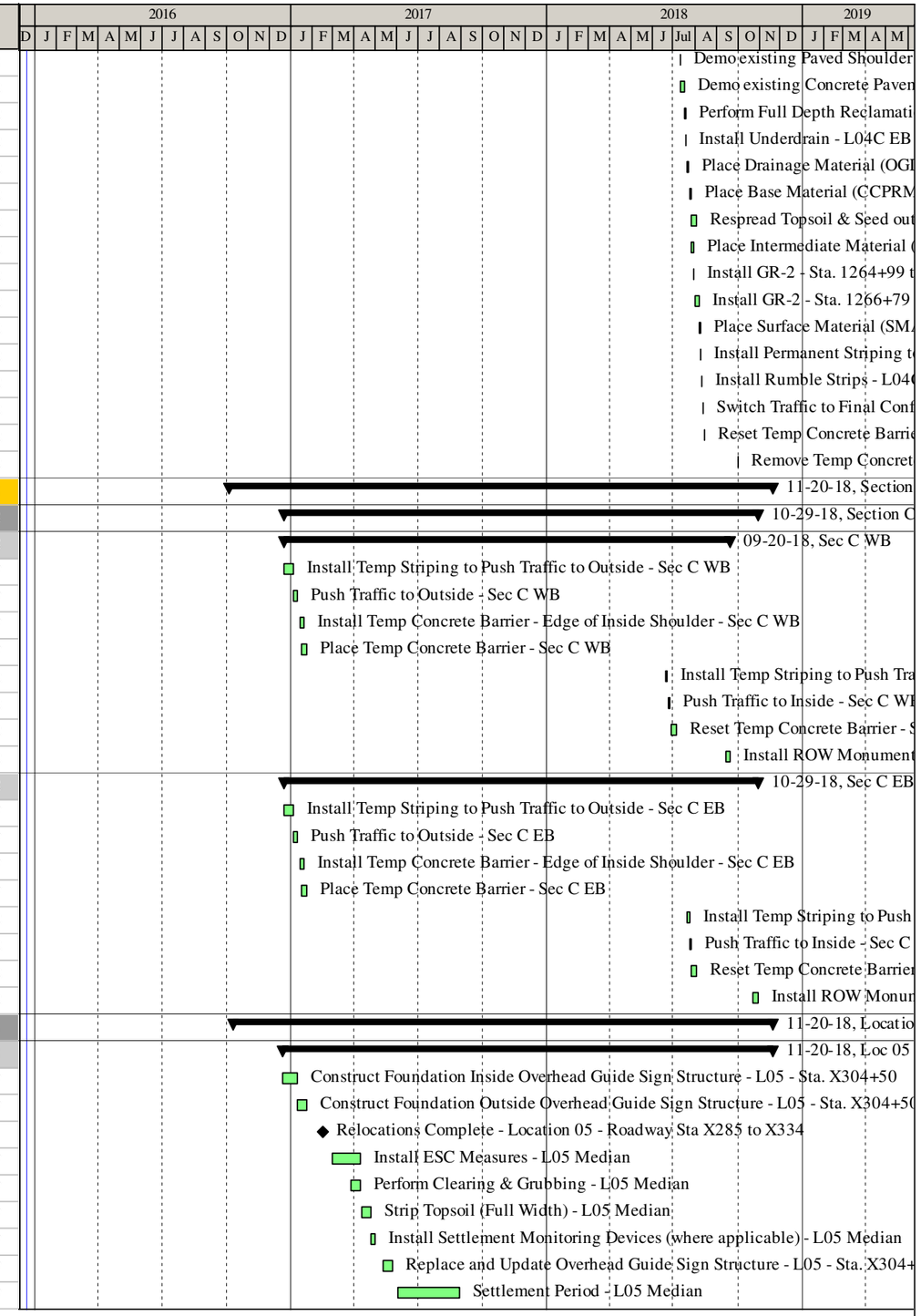
Activity ID	Activity Name	Original Duration	Start	Finish
CNBL04WM0160	Place Intermediate Material (SMA 19.0) - L04 WB Phase C2	5	07-20-18	07-26-18
CNBL04WM0200	Install GR-2 - Sta. 2283+12 to 2249+82 Outside - L04 WB Phase C2	6	07-27-18	08-03-18
CNBL04WM0190	Install GR-2 - Sta. 2246+03 to 2236+75 Outside - L04 WB Phase C2	2	08-06-18	08-07-18
CNBL04WG0370	Clean out Basin & Convert Structure to Perm Config - BMP B2	5	08-07-18	08-13-18
CNBL04WM0180	Install GR-2 - Sta. 2234+51 to 2231+34 Outside - L04 WB Phase C2	1	08-08-18	08-08-18
CNBL04WM0170	Install GR-2 - Sta. 2226+39 to 2225+02 Outside - L04 WB Phase C2	1	08-09-18	08-09-18
CNBL04WG0040	Place Surface Material (SMA 12.5) - L04 WB	7	08-10-18	08-20-18
CNBL04WG0050	Install Permanent Striping to Switch to Final Configuration - L04 WB	2	08-21-18	08-22-18
CNBL04WG0060	Install Rumble Strips - L04 WB	3	08-23-18	08-27-18
CNBL04WG0070	Switch Traffic to Final Configuration - L04 WB	1	08-28-18	08-28-18
CNBL04WG0080	Reset Temp Concrete Barrier to Inside Shoulder - L04 WB	3	08-29-18	08-31-18
CNBL04WG0090	Remove Temp Concrete Barrier - L04 WB	1	10-02-18	10-02-18
Loc 04 EB: Roadway Sta 1224+40 to 1262+85		502	11-08-16	11-13-18
CNBL04EG0110	Mill & Fill Shoulders - L04A EB	2	11-08-16	11-09-16
CNBL04EG0120	Place Surface Pavement on Shoulders - L04A EB	1	11-10-16	11-10-16
CNBL04EM0020	Place Subbase Material (CTA) - L04A EB	14	10-18-17	11-09-17
CNBL04EM0340	Install Underdrain - L04A EB Phase C1	2	11-10-17	11-13-17
CNBL04EM0060	Place Drainage Material (OGDL) - L04A EB Phase C1	3	11-14-17	11-16-17
CNBL04EM0070	Place Base Material (CCPRM) - L04A EB Phase C1	5	11-20-17	11-28-17
CNBL04EM0080	Place Intermediate Material (SMA 19.0) - L04A EB Phase C1	3	11-29-17	12-04-17
CNBL04EG0030	Install ESC Measures Outside - L04A EB	8	05-15-18	05-29-18
CNBL04EM0110	Demo existing Paved Shoulder - L04A EB	2	05-30-18	05-31-18
CNBL04EM0120	Demo existing Concrete Pavement - L04A EB	5	06-01-18	06-07-18
CNBL04EM0130	Perform Full Depth Reclamation of existing Subbase Material - L04A EB	5	06-08-18	06-14-18
CNBL04EM0220	Construct Foundation Outside Overhead Cantilever Guide Sign Structure - L04EB - Sta. 1230+10	10	06-15-18	06-28-18
CNBL04EM0400	Install Underdrain - L04A EB Phase C2	2	06-15-18	06-18-18
CNBL04EM0140	Place Drainage Material (OGDL) - L04A EB Phase C2	3	06-15-18	06-19-18
CNBL04EM0150	Place Base Material (CCPRM) - L04A EB Phase C2	6	06-20-18	06-27-18
CNBL04EG0090	Respread Topsoil & Seed outside slopes - L04A EB	8	06-28-18	07-10-18
CNBL04EM0160	Place Intermediate Material (SMA 19.0) - L04A EB Phase C2	3	06-28-18	07-02-18
CNBL04EM0230	Replace and Update Overhead Guide Sign Structure - L04EB - Sta. 1230+10	10	06-29-18	07-13-18
CNBL04EM0170	Install GR-2 - Sta. 1227+39 to 1242+18 Outside - L04A EB Phase C2	3	07-03-18	07-06-18
CNBL04EM0180	Install GR-2 - Sta. 1239+99 to 1240+79 Outside - L04A EB Phase C2	1	07-09-18	07-09-18
CNBL04EM0190	Install GR-2 - Sta. 1246+87 to 1248+37 Outside - L04A EB Phase C2	1	07-10-18	07-10-18
CNBL04EM0200	Install GR-2 - Sta. 1251+50 to 1257+68 Outside - L04A EB Phase C2	2	07-11-18	07-12-18
CNBL04EM0210	Install GR-2 - Sta. 1257+85 to 1262+49 Outside - L04A EB Phase C2	1	07-13-18	07-13-18
CNBL04EG0040	Place Surface Material (SMA 12.5) - L04A EB	5	07-16-18	07-20-18
CNBL04EG0050	Install Permanent Striping to Switch to Final Configuration - L04A EB	1	08-07-18	08-07-18
CNBL04EG0060	Install Rumble Strips - L04A EB	2	08-08-18	08-09-18
CNBL04EG0070	Switch Traffic to Final Configuration - L04A EB	1	08-10-18	08-10-18
CNBL04EG0080	Reset Temp Concrete Barrier to Inside Shoulder - L04A EB	2	08-13-18	08-14-18
CNBL04EM0610	Perform Select Clearing for Sound Walls - SW1B L04 EB	6	09-17-18	09-24-18
CNBL04EM0620	Rough grading/Build Access and Prep for Sound Wall - SW1B L04 EB	6	09-25-18	10-02-18
CNBL04EG0100	Remove Temp Concrete Barrier - L04A EB	1	10-02-18	10-02-18
CNBL04EM0630	Drill Caissons for Sound Wall - SW1B L04 EB	12	10-03-18	10-22-18
CNBL04EM0640	Install Posts for Sound Wall - SW1B L04 EB	3	10-23-18	10-25-18
CNBL04EM0650	Erect Sound Wall Panels - SW1B L04 EB	4	10-29-18	11-01-18



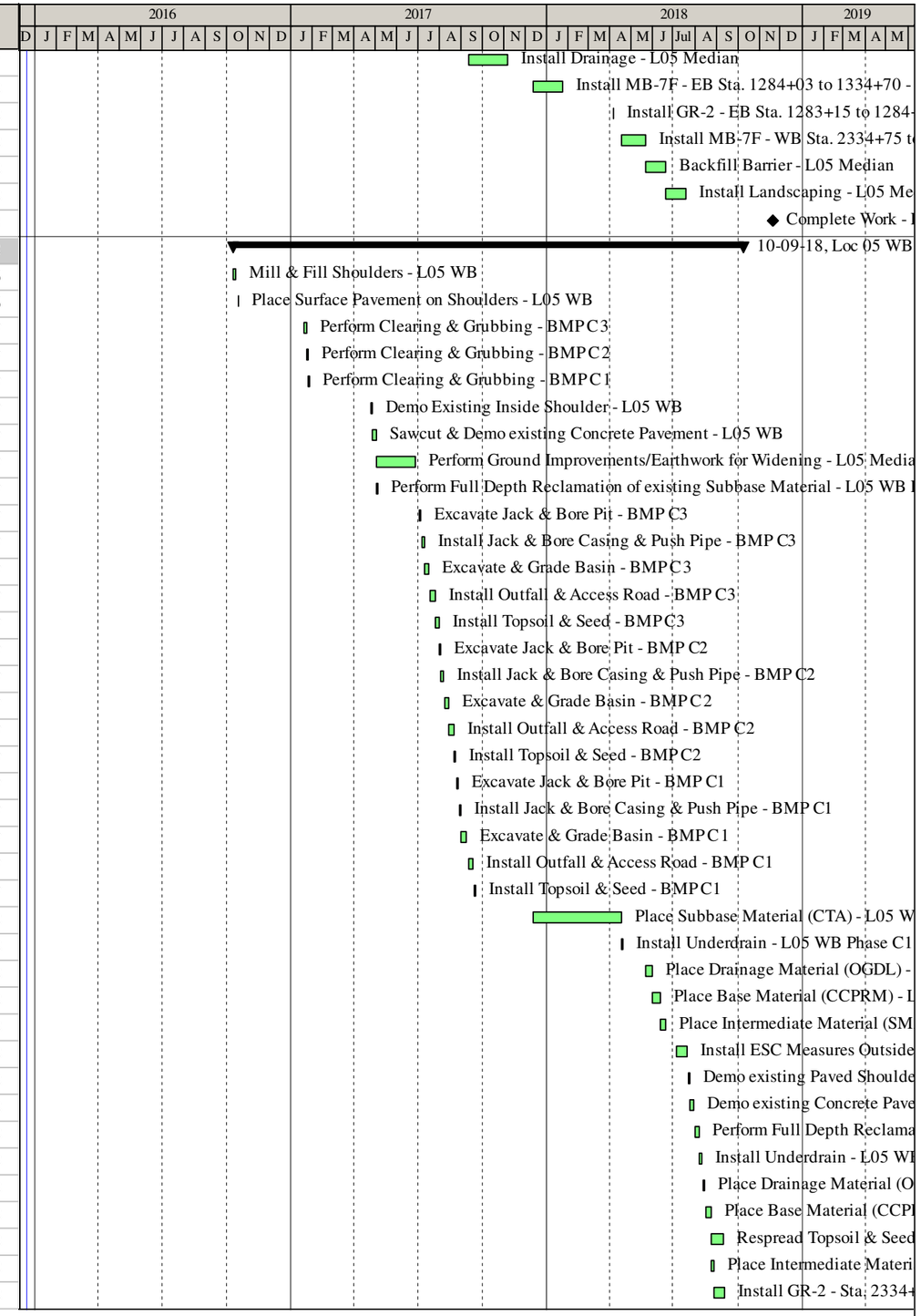
Activity ID	Activity Name	Original Duration	Start	Finish
CNBL04EM0690	Place topsoil & Restore area - SW1B L04 EB	6	11-05-18	11-13-18
Loc 04 EB: Bridge B-629 over Ramp to Rte 143		439	11-30-16	09-05-18
CNBL04F00010	Install MOT on Roadway Below Bridge -Bridge over Ramp to Rte 143	3	11-30-16	12-05-16
CNBL04F00130	Perform Substructure Repairs - Bridge B-629	20	12-06-16	01-18-17
CNBL04F01940	Install SOE Abutment A - Bridge B-629	3	02-23-17	02-28-17
CNBL04F01950	Install SOE Abutment B - Bridge B-629	3	03-01-17	03-06-17
CNBL04F01960	Demo (Partial) Existing Superstructure - Bridge B-629	12	03-07-17	03-22-17
CNBL04F00150	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-629	40	03-23-17	05-31-17
CNBL04F01970	Construct Abutment A - Bridge B-629	10	03-27-17	04-11-17
CNBL04F01980	Construct Pier 1 - Bridge B-629	15	04-12-17	05-08-17
CNBL04F02210	Construct Abutment B - Bridge B-629	10	04-12-17	04-27-17
CNBL04F02240	Install Concrete Slope Protection - Abutment A - Bridge B-629	8	05-01-17	05-11-17
CNBL04F02250	Install Concrete Slope Protection - Abutment B - Bridge B-629	8	05-01-17	05-11-17
CNBL04F02000	Construct Protection Barrier - Pier 1 - Bridge B-629	8	05-09-17	05-18-17
CNBL04F02130	Construct Pier 2 - Bridge B-629	15	05-09-17	06-01-17
CNBL04F02150	Construct Protection Barrier - Pier 2 - Bridge B-629	8	06-02-17	06-13-17
CNBL04F02160	Construct Pier 3 - Bridge B-629	15	06-02-17	06-22-17
CNBL04F02180	Construct Protection Barrier - Pier 3 - Bridge B-629	8	06-23-17	07-05-17
CNBL04F02260	Erect Beams - Bridge B-629	8	07-19-17	07-28-17
CNBL04F02270	Place Deck - Span a - Bridge B-629	7	07-31-17	08-08-17
CNBL04F02280	Place Deck - Span b - Bridge B-629	7	08-09-17	08-17-17
CNBL04F02290	Place Deck - Span c - Bridge B-629	7	08-18-17	08-28-17
CNBL04F02300	Place Deck - Span d - Bridge B-629	7	08-29-17	09-07-17
CNBL04F00140	Clean, Prime & Paint Existing Bridge Beams (Potential Lead) - Bridge B-629	28	09-08-17	10-19-17
CNBL04F02320	Place Parapet - Bridge B-629	20	09-08-17	10-09-17
CNBL04F02330	Construct Approach Slabs - Bridge B-629	10	09-08-17	09-22-17
CNBL04F10060	Schedule & Perform Initial Safety/Inventory Inspection - L04 [2.3.10]	30	09-10-17	10-09-17
CNBL04F02340	Perform Deck Grooving on Widening - Bridge B-629	1	10-10-17	10-10-17
CNBL04F00020	Perform Post-Construction Survey for Load Ratings - L04	5	10-10-17	10-16-17
CNBL04F10070	Install BPPS-1 - Ramp D - L04WB	1	12-18-17	12-18-17
CNBL04F02370	Retrofit Existing Deck over Piers - Bridge B-629	15	05-15-18	06-07-18
CNBL04F00160	Reconstruct Existing Backwall - Bridge B-629	16	06-08-18	06-29-18
CNBL04F02380	Construct Deck Extensions - Bridge B-629	20	06-08-18	07-06-18
CNBL04F02390	Perform Deck Repairs - Bridge B-629	16	07-09-18	07-30-18
CNBL04F02400	Place Latex Overlay - Bridge B-629	4	07-31-18	08-03-18
CNBL04F02350	Perform Deck Grooving on Existing - Bridge B-629	1	08-06-18	08-06-18
CNBL04F20070	Schedule & Perform Final Safety/Inventory Inspection - L04 [2.3.10]	30	08-07-18	09-05-18
Loc 04 EB: Roadway Sta 1265+34 to 1283+00		468	11-14-16	10-02-18
CNBL04HG0110	Mill & Fill Shoulders - L04C EB	1	11-14-16	11-14-16
CNBL04HG0120	Place Surface Pavement on Shoulders - L04C EB	1	11-15-16	11-15-16
CNBL04HM0010	Perform Ground Improvements/Earthwork for Widening - L04C EB	6	12-05-17	12-13-17
CNBL04HM0020	Place Subbase Material (CTA) - L04C EB	7	03-19-18	03-27-18
CNBL04HM0350	Install Underdrain - L04C EB Phase C1	1	03-28-18	03-28-18
CNBL04HM0060	Place Drainage Material (OGDL) - L04C EB Phase C1	1	03-29-18	03-29-18
CNBL04HM0070	Place Base Material (CCPRM) - L04C EB Phase C1	3	03-30-18	04-04-18
CNBL04HM0080	Place Intermediate Material (SMA 19.0) - L04C EB Phase C1	1	04-05-18	04-05-18
CNBL04HG0030	Install ESC Measures Outside - L04C EB	5	07-03-18	07-10-18



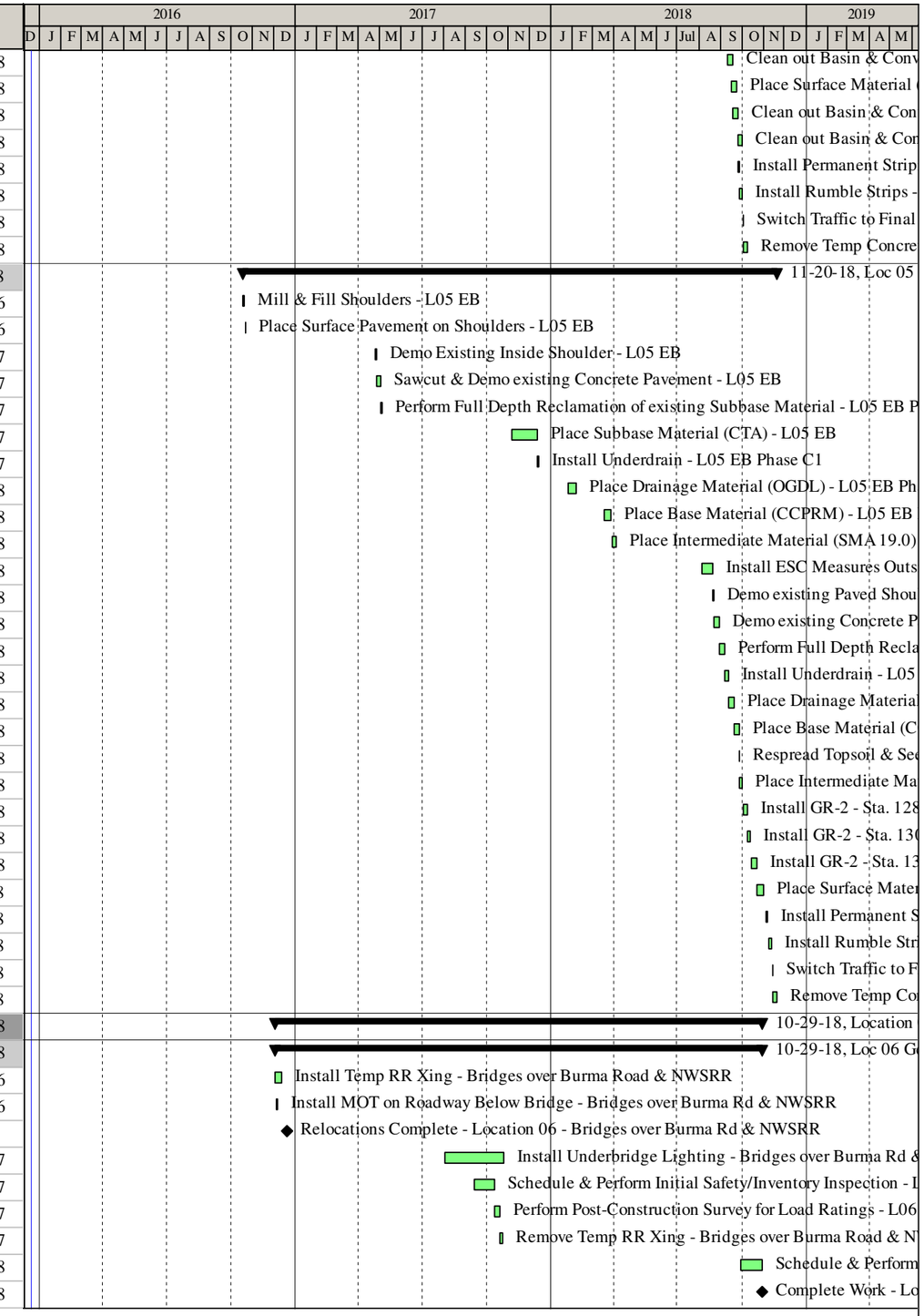
Activity ID	Activity Name	Original Duration	Start	Finish
CNBL04HM0110	Demo existing Paved Shoulder - L04C EB	1	07-11-18	07-11-18
CNBL04HM0120	Demo existing Concrete Pavement - L04C EB	3	07-12-18	07-16-18
CNBL04HM0130	Perform Full Depth Reclamation of existing Subbase Material - L04C EB	2	07-17-18	07-18-18
CNBL04HM0410	Install Underdrain - L04C EB Phase C2	1	07-19-18	07-19-18
CNBL04HM0140	Place Drainage Material (OGDL) - L04C EB Phase C2	2	07-20-18	07-23-18
CNBL04HM0150	Place Base Material (CCPRM) - L04C EB Phase C2	3	07-24-18	07-26-18
CNBL04HG0090	Respread Topsoil & Seed outside slopes - L04C EB	5	07-27-18	08-02-18
CNBL04HM0160	Place Intermediate Material (SMA 19.0) - L04C EB Phase C2	2	07-27-18	07-30-18
CNBL04HM0170	Install GR-2 - Sta. 1264+99 to 1266+68 Outside - L04C EB Phase C2	1	07-31-18	07-31-18
CNBL04HM0180	Install GR-2 - Sta. 1266+79 to 1283+00 Outside - L04C EB Phase C2	4	08-01-18	08-06-18
CNBL04HG0040	Place Surface Material (SMA 12.5) - L04C EB	2	08-07-18	08-08-18
CNBL04HG0050	Install Permanent Striping to Switch to Final Configuration - L04C EB	1	08-09-18	08-09-18
CNBL04HG0060	Install Rumble Strips - L04C EB	1	08-10-18	08-10-18
CNBL04HG0070	Switch Traffic to Final Configuration - L04C EB	1	08-13-18	08-13-18
CNBL04HG0080	Reset Temp Concrete Barrier to Inside Shoulder - L04C EB	1	08-14-18	08-14-18
CNBL04HG0100	Remove Temp Concrete Barrier - L04C EB	1	10-02-18	10-02-18
Section C: Sta X285 to X379		532	10-04-16	11-20-18
Section C: General/Entire Segment/All Locations		461	12-22-16	10-29-18
Sec C WB		434	12-22-16	09-20-18
CNCGESW00010	Install Temp Striping to Push Traffic to Outside - Sec C WB	3	12-22-16	01-04-17
CNCGESW00020	Push Traffic to Outside - Sec C WB	2	01-05-17	01-09-17
CNCGESW00090	Install Temp Concrete Barrier - Edge of Inside Shoulder - Sec C WB	5	01-13-17	01-19-17
CNCGESW00030	Place Temp Concrete Barrier - Sec C WB	5	01-16-17	01-23-17
CNCGESW00110	Install Temp Striping to Push Traffic to Inside - Sec C WB	3	06-20-18	06-22-18
CNCGESW00120	Push Traffic to Inside - Sec C WB	2	06-25-18	06-26-18
CNCGESW00130	Reset Temp Concrete Barrier - Sec C WB	6	06-27-18	07-05-18
CNCGESW00040	Install ROW Monuments - Sec C WB	5	09-14-18	09-20-18
Sec C EB		461	12-22-16	10-29-18
CNCGESE00010	Install Temp Striping to Push Traffic to Outside - Sec C EB	3	12-22-16	01-04-17
CNCGESE00020	Push Traffic to Outside - Sec C EB	2	01-05-17	01-09-17
CNCGESW00100	Install Temp Concrete Barrier - Edge of Inside Shoulder - Sec C EB	5	01-13-17	01-19-17
CNCGESE00030	Place Temp Concrete Barrier - Sec C EB	5	01-16-17	01-23-17
CNCGESE00110	Install Temp Striping to Push Traffic to Inside - Sec C EB	3	07-20-18	07-24-18
CNCGESE00120	Push Traffic to Inside - Sec C EB	2	07-25-18	07-26-18
CNCGESE00130	Reset Temp Concrete Barrier - Sec C EB	6	07-27-18	08-03-18
CNCGESE00040	Install ROW Monuments - Sec C EB	5	10-23-18	10-29-18
Location 05: Roadway Sta X285 to X334		527	10-11-16	11-20-18
Loc 05 General/Median		480	12-19-16	11-20-18
CNCL05G01000	Construct Foundation Inside Overhead Guide Sign Structure - L05 - Sta. X304+50	10	12-19-16	01-09-17
CNCL05G01010	Construct Foundation Outside Overhead Guide Sign Structure - L05 - Sta. X304+50	10	01-10-17	01-23-17
CNCL05G10010	Relocations Complete - Location 05 - Roadway Sta X285 to X334	0	02-16-17	
CNCL05G00020	Install ESC Measures - L05 Median	22	02-28-17	04-10-17
CNCL05G00010	Perform Clearing & Grubbing - L05 Median	11	03-27-17	04-10-17
CNCL05G00030	Strip Topsoil (Full Width) - L05 Median	8	04-11-17	04-24-17
CNCL05G00100	Install Settlement Monitoring Devices (where applicable) - L05 Median	5	04-25-17	05-01-17
CNCL05G01020	Replace and Update Overhead Guide Sign Structure - L05 - Sta. X304+50	10	05-12-17	05-25-17
CNCL05G00110	Settlement Period - L05 Median	90	06-02-17	08-30-17



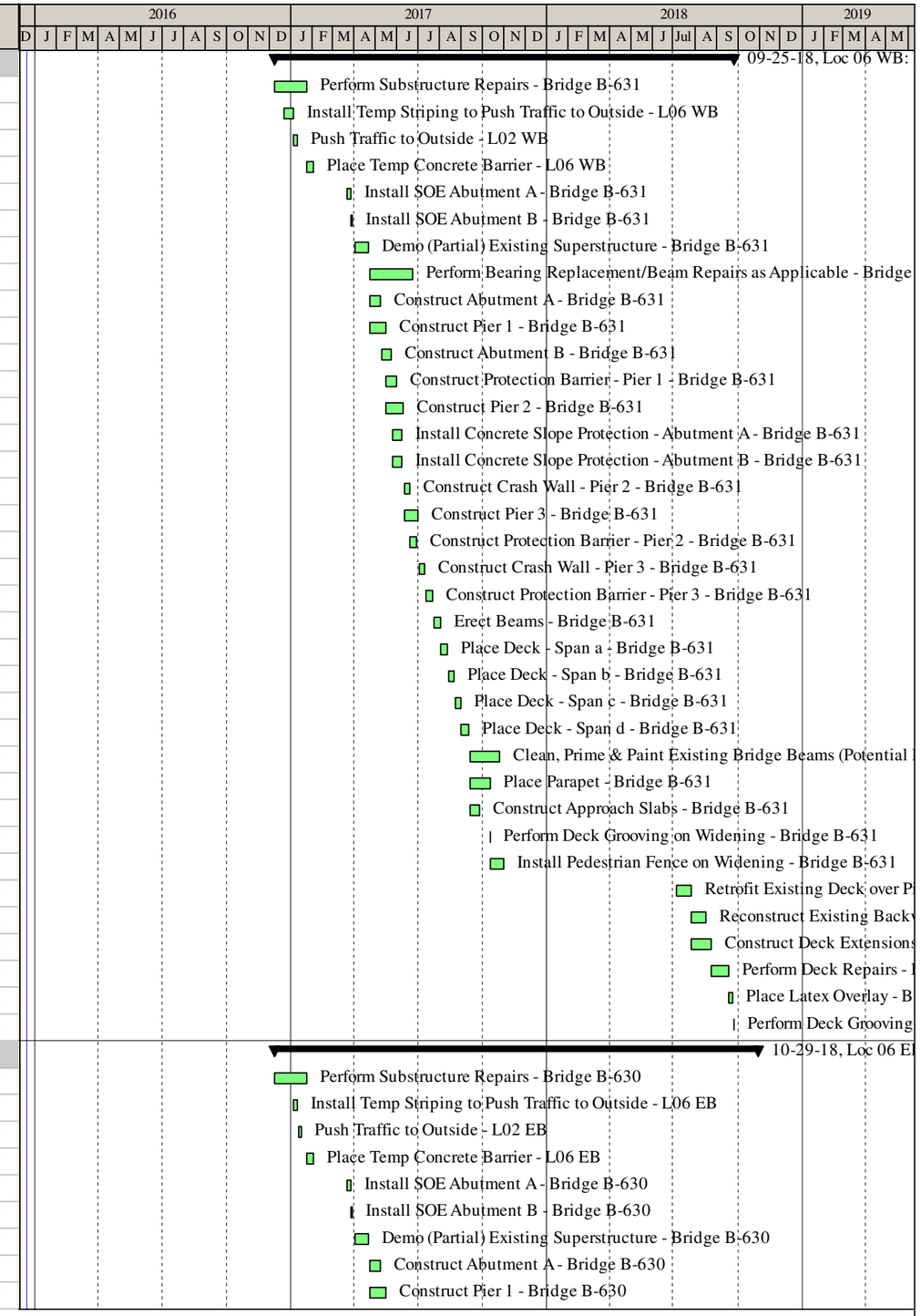
Activity ID	Activity Name	Original Duration	Start	Finish
CNCL05G00040	Install Drainage - L05 Median	35	09-12-17	11-06-17
CNCL05G00060	Install MB-7F - EB Sta. 1284+03 to 1334+70 - L05 Median	25	12-13-17	01-24-18
CNCL05G00050	Install GR-2 - EB Sta. 1283+15 to 1284+03 - L05 Median	1	04-06-18	04-06-18
CNCL05G00070	Install MB-7F - WB Sta. 2334+75 to 2284+20 - L05 Median	25	04-18-18	05-22-18
CNCL05G00080	Backfill Barrier - L05 Median	20	05-23-18	06-20-18
CNCL05G00090	Install Landscaping - L05 Median	20	06-21-18	07-19-18
CNCL05G10020	Complete Work - Location 05 - Roadway Sta X285 to X334	0		11-20-18
Loc 05 WB: Roadway Sta 2283+12 to 2334+43		497	10-11-16	10-09-18
CNCL05WG0010	Mill & Fill Shoulders - L05 WB	3	10-11-16	10-13-16
CNCL05WG0020	Place Surface Pavement on Shoulders - L05 WB	1	10-17-16	10-17-16
CNCL05WG0310	Perform Clearing & Grubbing - BMP C3	2	01-20-17	01-23-17
CNCL05WG0210	Perform Clearing & Grubbing - BMP C2	2	01-24-17	01-25-17
CNCL05WG0110	Perform Clearing & Grubbing - BMP C1	2	01-26-17	01-27-17
CNCL05WM0030	Demo Existing Inside Shoulder - L05 WB	2	04-25-17	04-26-17
CNCL05WM0040	Sawcut & Demo existing Concrete Pavement - L05 WB	3	04-27-17	05-02-17
CNCL05WM0010	Perform Ground Improvements/Earthwork for Widening - L05 Median	36	05-03-17	06-27-17
CNCL05WM0050	Perform Full Depth Reclamation of existing Subbase Material - L05 WB Phase C1	2	05-03-17	05-04-17
CNCL05WG0320	Excavate Jack & Bore Pit - BMP C3	2	07-03-17	07-05-17
CNCL05WG0330	Install Jack & Bore Casing & Push Pipe - BMP C3	3	07-06-17	07-10-17
CNCL05WG0340	Excavate & Grade Basin - BMP C3	5	07-11-17	07-17-17
CNCL05WG0350	Install Outfall & Access Road - BMP C3	7	07-18-17	07-26-17
CNCL05WG0360	Install Topsoil & Seed - BMP C3	3	07-27-17	07-31-17
CNCL05WG0220	Excavate Jack & Bore Pit - BMP C2	2	08-01-17	08-02-17
CNCL05WG0230	Install Jack & Bore Casing & Push Pipe - BMP C2	3	08-03-17	08-07-17
CNCL05WG0240	Excavate & Grade Basin - BMP C2	5	08-08-17	08-14-17
CNCL05WG0250	Install Outfall & Access Road - BMP C2	5	08-15-17	08-21-17
CNCL05WG0260	Install Topsoil & Seed - BMP C2	3	08-22-17	08-24-17
CNCL05WG0120	Excavate Jack & Bore Pit - BMP C1	2	08-25-17	08-28-17
CNCL05WG0130	Install Jack & Bore Casing & Push Pipe - BMP C1	3	08-29-17	08-31-17
CNCL05WG0140	Excavate & Grade Basin - BMP C1	5	09-01-17	09-08-17
CNCL05WG0150	Install Outfall & Access Road - BMP C1	5	09-11-17	09-18-17
CNCL05WG0160	Install Topsoil & Seed - BMP C1	3	09-19-17	09-21-17
CNCL05WM0020	Place Subbase Material (CTA) - L05 WB	23	12-13-17	04-17-18
CNCL05WM0360	Install Underdrain - L05 WB Phase C1	3	04-18-18	04-20-18
CNCL05WM0060	Place Drainage Material (OGDL) - L05 WB Phase C1	5	05-23-18	05-31-18
CNCL05WM0070	Place Base Material (CCPRM) - L05 WB Phase C1	8	06-01-18	06-12-18
CNCL05WM0080	Place Intermediate Material (SMA 19.0) - L05 WB Phase C1	5	06-13-18	06-19-18
CNCL05WG0030	Install ESC Measures Outside - L05 WB	11	07-06-18	07-20-18
CNCL05WM0110	Demo existing Paved Shoulder - L05 WB	2	07-23-18	07-24-18
CNCL05WM0120	Demo existing Concrete Pavement - L05 WB	5	07-25-18	07-31-18
CNCL05WM0130	Perform Full Depth Reclamation of existing Subbase Material - L05 WB Phase C2	5	08-01-18	08-07-18
CNCL05WM0420	Install Underdrain - L05 WB Phase C2	3	08-08-18	08-10-18
CNCL05WM0140	Place Drainage Material (OGDL) - L05 WB Phase C2	3	08-13-18	08-15-18
CNCL05WM0150	Place Base Material (CCPRM) - L05 WB Phase C2	6	08-16-18	08-23-18
CNCL05WG0380	Respread Topsoil & Seed outside slopes - L05 WB	11	08-24-18	09-10-18
CNCL05WM0160	Place Intermediate Material (SMA 19.0) - L05 WB Phase C2	3	08-24-18	08-28-18
CNCL05WM0170	Install GR-2 - Sta. 2334+26 to 2283+12 Outside - L05 WB Phase C2	11	08-29-18	09-13-18



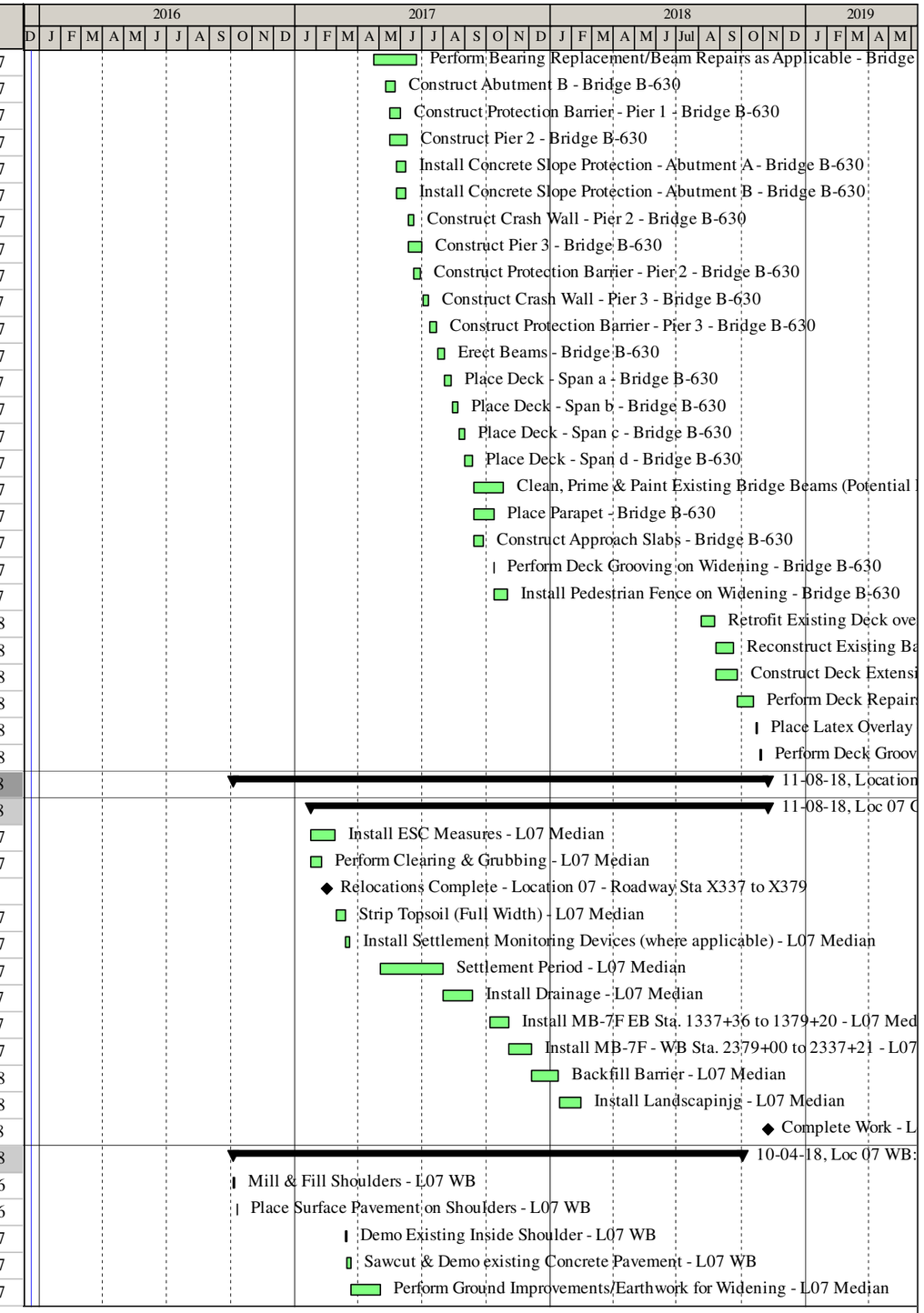
Activity ID	Activity Name	Original Duration	Start	Finish
CNCL05WG0170	Clean out Basin & Convert Structure to Perm Config - BMPC1	5	09-11-18	09-18-18
CNCL05WG0040	Place Surface Material (SMA 12.5) - L05 WB	6	09-17-18	09-24-18
CNCL05WG0270	Clean out Basin & Convert Structure to Perm Config - BMPC2	5	09-19-18	09-25-18
CNCL05WG0370	Clean out Basin & Convert Structure to Perm Config - BMPC3	5	09-26-18	10-02-18
CNCL05WG0050	Install Permanent Striping to Switch to Final Configuration - L05 WB	2	09-26-18	09-27-18
CNCL05WG0060	Install Rumble Strips - L05 WB	3	09-28-18	10-02-18
CNCL05WG0070	Switch Traffic to Final Configuration - L05 WB	1	10-03-18	10-03-18
CNCL05WG0080	Remove Temp Concrete Barrier - L05 WB	3	10-04-18	10-09-18
Loc 05 EB: Roadway Sta 1283+00 to 1335+02		522	10-18-16	11-20-18
CNCL05EG0010	Mill & Fill Shoulders - L05 EB	3	10-18-16	10-20-16
CNCL05EG0020	Place Surface Pavement on Shoulders - L05 EB	1	10-21-16	10-21-16
CNCL05EM0030	Demo Existing Inside Shoulder - L05 EB	2	04-25-17	04-26-17
CNCL05EM0040	Sawcut & Demo existing Concrete Pavement - L05 EB	3	04-27-17	05-02-17
CNCL05EM0050	Perform Full Depth Reclamation of existing Subbase Material - L05 EB Phase C1	2	05-03-17	05-04-17
CNCL05EM0020	Place Subbase Material (CTA) - L05 EB	21	11-07-17	12-12-17
CNCL05WE0270	Install Underdrain - L05 EB Phase C1	3	12-13-17	12-15-17
CNCL05EM0060	Place Drainage Material (OGDL) - L05 EB Phase C1	5	01-25-18	02-05-18
CNCL05EM0070	Place Base Material (CCPRM) - L05 EB Phase C1	8	03-19-18	03-28-18
CNCL05EM0080	Place Intermediate Material (SMA 19.0) - L05 EB Phase C1	5	03-29-18	04-05-18
CNCL05EG0030	Install ESC Measures Outside - L05 EB	11	08-06-18	08-20-18
CNCL05EM0110	Demo existing Paved Shoulder - L05 EB	2	08-21-18	08-22-18
CNCL05EM0120	Demo existing Concrete Pavement - L05 EB	5	08-23-18	08-29-18
CNCL05EM0130	Perform Full Depth Reclamation of existing Subbase Material - L05 EB Phase C2	5	08-30-18	09-06-18
CNCL05WE0330	Install Underdrain - L05 EB Phase C2	4	09-07-18	09-12-18
CNCL05EM0140	Place Drainage Material (OGDL) - L05 EB Phase C2	4	09-13-18	09-19-18
CNCL05EM0150	Place Base Material (CCPRM) - L05 EB Phase C2	6	09-20-18	09-27-18
CNCL05EG0090	Respread Topsoil & Seed outside slopes - L05 EB	1	09-28-18	09-28-18
CNCL05EM0160	Place Intermediate Material (SMA 19.0) - L05 EB Phase C2	3	09-28-18	10-02-18
CNCL05EM0170	Install GR-2 - Sta. 1283+00 to 1296+31 Outside - L05 EB Phase C2	4	10-03-18	10-08-18
CNCL05EM0180	Install GR-2 - Sta. 1302+34 to 1306+05 Outside - L05 EB Phase C2	4	10-09-18	10-12-18
CNCL05EM0190	Install GR-2 - Sta. 1309+80 to 1335+19 Outside - L05 EB Phase C2	6	10-15-18	10-22-18
CNCL05EG0040	Place Surface Material (SMA 12.5) - L05 EB	7	10-23-18	11-01-18
CNCL05EG0050	Install Permanent Striping to Switch to Final Configuration - L05 EB	3	11-05-18	11-07-18
CNCL05EG0060	Install Rumble Strips - L05 EB	3	11-08-18	11-13-18
CNCL05EG0070	Switch Traffic to Final Configuration - L05 EB	1	11-14-18	11-14-18
CNCL05EG0080	Remove Temp Concrete Barrier - L05 EB	3	11-15-18	11-20-18
Location 06: Bridges over Burma Rd & NWSRR		475	12-02-16	10-29-18
Loc 06 General/Median		475	12-02-16	10-29-18
CNCL06G00200	Install Temp RR Xing - Bridges over Burma Road & NWSRR	7	12-02-16	12-12-16
CNCL06G00010	Install MOT on Roadway Below Bridge - Bridges over Burma Rd & NWSRR	3	12-05-16	12-07-16
CNCL06000010	Relocations Complete - Location 06 - Bridges over Burma Rd & NWSRR	0	12-19-16	
CNCL06G00020	Install Underbridge Lighting - Bridges over Burma Rd & NWSRR [2.3.6]	60	08-03-17	10-26-17
CNCL06G10070	Schedule & Perform Initial Safety/Inventory Inspection - L06 [2.3.10]	30	09-13-17	10-12-17
CNCL06G00040	Perform Post-Construction Survey for Load Ratings - L06	5	10-13-17	10-19-17
CNCL06G00210	Remove Temp RR Xing - Bridges over Burma Road & NWSRR	2	10-20-17	10-23-17
CNCL06G10080	Schedule & Perform Final Safety/Inventory Inspection - L06 [2.3.10]	30	09-30-18	10-29-18
CNCL06000020	Complete Work - Location 06 - Bridges over Burma Rd & NWSRR	0		10-29-18



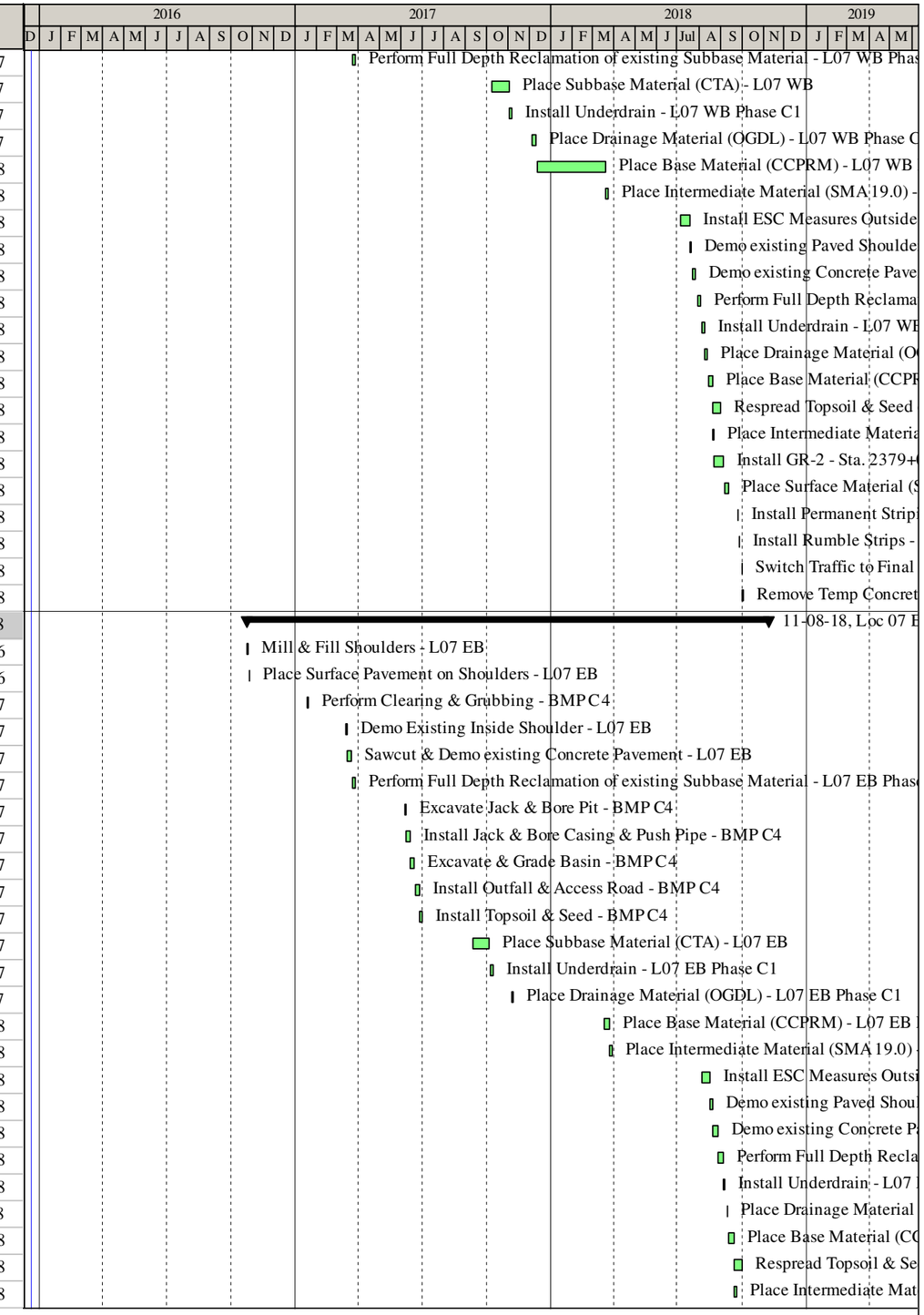
Activity ID	Activity Name	Original Duration	Start	Finish
Loc 06 WB: Bridge B-630 over Burma Rd & NWSRR		447	12-08-16	09-25-18
CNCL06W00170	Perform Substructure Repairs - Bridge B-631	20	12-08-16	01-23-17
CNCL06W10150	Install Temp Striping to Push Traffic to Outside - L06 WB	3	12-22-16	01-04-17
CNCL06W10160	Push Traffic to Outside - L02 WB	2	01-05-17	01-09-17
CNCL06W10170	Place Temp Concrete Barrier - L06 WB	5	01-24-17	02-01-17
CNCL06W02410	Install SOE Abutment A - Bridge B-631	3	03-21-17	03-27-17
CNCL06W02420	Install SOE Abutment B - Bridge B-631	3	03-28-17	03-30-17
CNCL06W02430	Demo (Partial) Existing Superstructure - Bridge B-631	12	04-03-17	04-21-17
CNCL06W00190	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-631	40	04-24-17	06-23-17
CNCL06W02440	Construct Abutment A - Bridge B-631	10	04-24-17	05-09-17
CNCL06W02450	Construct Pier 1 - Bridge B-631	15	04-24-17	05-16-17
CNCL06W02560	Construct Abutment B - Bridge B-631	10	05-10-17	05-24-17
CNCL06W02470	Construct Protection Barrier - Pier 1 - Bridge B-631	8	05-17-17	05-31-17
CNCL06W02480	Construct Pier 2 - Bridge B-631	15	05-17-17	06-09-17
CNCL06W02590	Install Concrete Slope Protection - Abutment A - Bridge B-631	8	05-25-17	06-07-17
CNCL06W02600	Install Concrete Slope Protection - Abutment B - Bridge B-631	8	05-25-17	06-07-17
CNCL06W02490	Construct Crash Wall - Pier 2 - Bridge B-631	6	06-12-17	06-19-17
CNCL06W02510	Construct Pier 3 - Bridge B-631	15	06-12-17	06-30-17
CNCL06W02500	Construct Protection Barrier - Pier 2 - Bridge B-631	8	06-20-17	06-29-17
CNCL06W02520	Construct Crash Wall - Pier 3 - Bridge B-631	6	07-03-17	07-11-17
CNCL06W02530	Construct Protection Barrier - Pier 3 - Bridge B-631	8	07-12-17	07-21-17
CNCL06W02610	Erect Beams - Bridge B-631	8	07-24-17	08-02-17
CNCL06W02620	Place Deck - Span a - Bridge B-631	7	08-03-17	08-11-17
CNCL06W02630	Place Deck - Span b - Bridge B-631	7	08-14-17	08-22-17
CNCL06W02640	Place Deck - Span c - Bridge B-631	7	08-23-17	08-31-17
CNCL06W02650	Place Deck - Span d - Bridge B-631	7	09-01-17	09-12-17
CNCL06W00180	Clean, Prime & Paint Existing Bridge Beams (Potential Lead) - Bridge B-631	28	09-13-17	10-25-17
CNCL06W02670	Place Parapet - Bridge B-631	20	09-13-17	10-12-17
CNCL06W02680	Construct Approach Slabs - Bridge B-631	10	09-13-17	09-27-17
CNCL06W02690	Perform Deck Grooving on Widening - Bridge B-631	1	10-13-17	10-13-17
CNCL06W02710	Install Pedestrian Fence on Widening - Bridge B-631	12	10-13-17	11-01-17
CNCL06W02720	Retrofit Existing Deck over Piers - Bridge B-631	15	07-06-18	07-26-18
CNCL06W00200	Reconstruct Existing Backwall - Bridge B-631	16	07-27-18	08-17-18
CNCL06W02730	Construct Deck Extensions - Bridge B-631	20	07-27-18	08-23-18
CNCL06W02740	Perform Deck Repairs - Bridge B-631	16	08-24-18	09-18-18
CNCL06W02750	Place Latex Overlay - Bridge B-631	4	09-19-18	09-24-18
CNCL06W02700	Perform Deck Grooving on Existing - Bridge B-631	1	09-25-18	09-25-18
Loc 06 EB: Bridge B-631 over Burma Rd & NWSRR		471	12-08-16	10-29-18
CNCL06E00270	Perform Substructure Repairs - Bridge B-630	20	12-08-16	01-23-17
CNCL06E10070	Install Temp Striping to Push Traffic to Outside - L06 EB	3	01-05-17	01-10-17
CNCL06E10080	Push Traffic to Outside - L02 EB	2	01-12-17	01-16-17
CNCL06E10090	Place Temp Concrete Barrier - L06 EB	5	01-24-17	02-01-17
CNCL06E02460	Install SOE Abutment A - Bridge B-630	3	03-21-17	03-27-17
CNCL06E03260	Install SOE Abutment B - Bridge B-630	3	03-28-17	03-30-17
CNCL06E03270	Demo (Partial) Existing Superstructure - Bridge B-630	12	04-03-17	04-21-17
CNCL06E03280	Construct Abutment A - Bridge B-630	10	04-24-17	05-09-17
CNCL06E03290	Construct Pier 1 - Bridge B-630	15	04-24-17	05-16-17



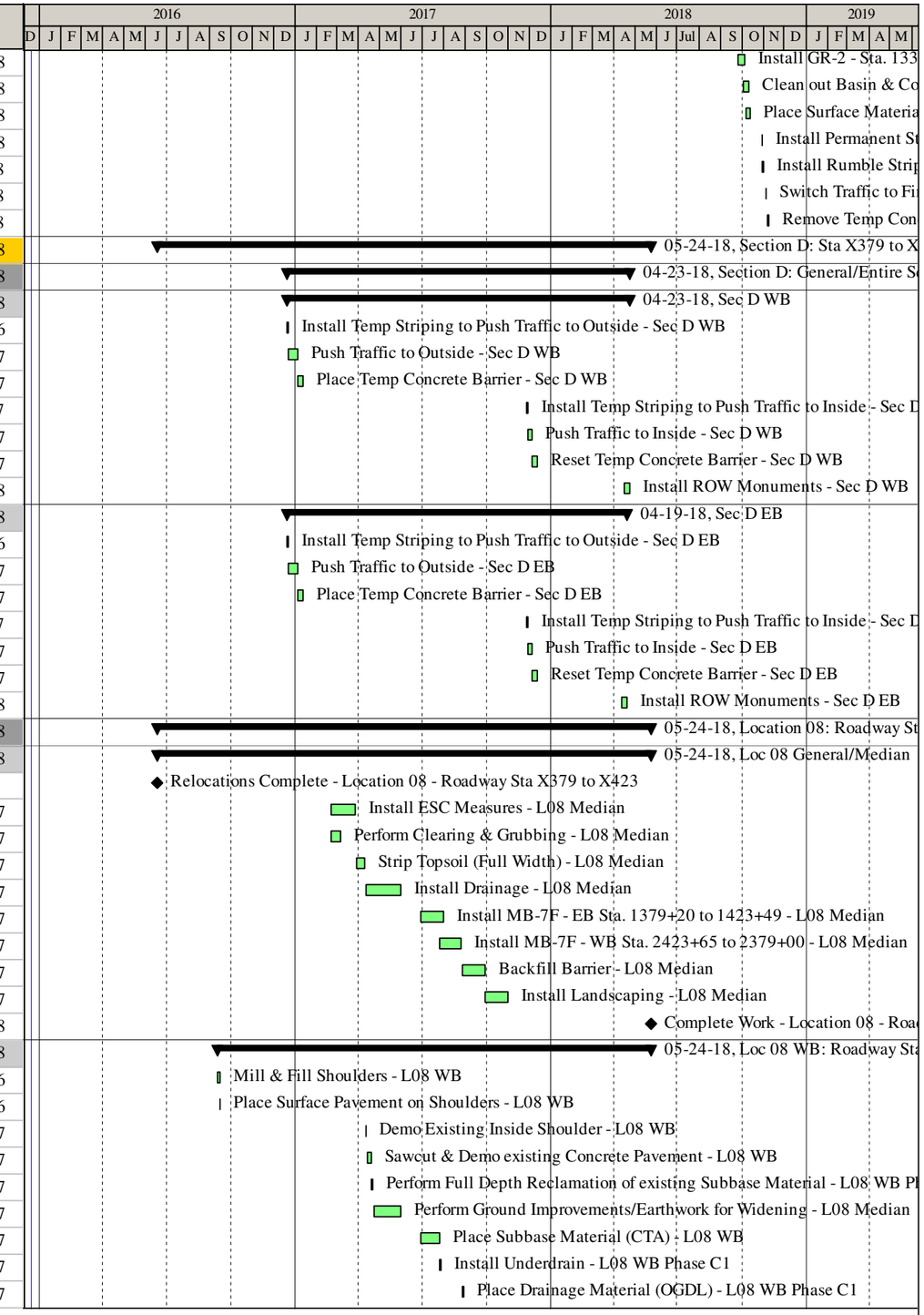
Activity ID	Activity Name	Original Duration	Start	Finish
CNCL06E00290	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-630	40	04-24-17	06-23-17
CNCL06E03390	Construct Abutment B - Bridge B-630	10	05-10-17	05-24-17
CNCL06E03300	Construct Protection Barrier - Pier 1 - Bridge B-630	8	05-17-17	05-31-17
CNCL06E03310	Construct Pier 2 - Bridge B-630	15	05-17-17	06-09-17
CNCL06E03420	Install Concrete Slope Protection - Abutment A - Bridge B-630	8	05-25-17	06-07-17
CNCL06E03430	Install Concrete Slope Protection - Abutment B - Bridge B-630	8	05-25-17	06-07-17
CNCL06E03320	Construct Crash Wall - Pier 2 - Bridge B-630	6	06-12-17	06-19-17
CNCL06E03340	Construct Pier 3 - Bridge B-630	15	06-12-17	06-30-17
CNCL06E03330	Construct Protection Barrier - Pier 2 - Bridge B-630	8	06-20-17	06-29-17
CNCL06E03350	Construct Crash Wall - Pier 3 - Bridge B-630	6	07-03-17	07-11-17
CNCL06E03360	Construct Protection Barrier - Pier 3 - Bridge B-630	8	07-12-17	07-21-17
CNCL06E03440	Erect Beams - Bridge B-630	8	07-24-17	08-02-17
CNCL06E03450	Place Deck - Span a - Bridge B-630	7	08-03-17	08-11-17
CNCL06E03460	Place Deck - Span b - Bridge B-630	7	08-14-17	08-22-17
CNCL06E03470	Place Deck - Span c - Bridge B-630	7	08-23-17	08-31-17
CNCL06E03480	Place Deck - Span d - Bridge B-630	7	09-01-17	09-12-17
CNCL06E00280	Clean, Prime & Paint Existing Bridge Beams (Potential Lead) - Bridge B-630	28	09-13-17	10-25-17
CNCL06E03500	Place Parapet - Bridge B-630	20	09-13-17	10-12-17
CNCL06E03510	Construct Approach Slabs - Bridge B-630	10	09-13-17	09-27-17
CNCL06E03520	Perform Deck Grooving on Widening - Bridge B-630	1	10-13-17	10-13-17
CNCL06E03540	Install Pedestrian Fence on Widening - Bridge B-630	12	10-13-17	11-01-17
CNCL06E03550	Retrofit Existing Deck over Piers - Bridge B-630	15	08-06-18	08-24-18
CNCL06E00300	Reconstruct Existing Backwall - Bridge B-630	16	08-27-18	09-19-18
CNCL06E03560	Construct Deck Extensions - Bridge B-630	20	08-27-18	09-25-18
CNCL06E03570	Perform Deck Repairs - Bridge B-630	16	09-26-18	10-18-18
CNCL06E03580	Place Latex Overlay - Bridge B-630	4	10-22-18	10-25-18
CNCL06E03530	Perform Deck Grooving on Existing - Bridge B-630	1	10-29-18	10-29-18
Location 07: Roadway Sta X337 to X379		524	10-04-16	11-08-18
Loc 07 General/Median		453	01-23-17	11-08-18
CNCL07G00020	Install ESC Measures - L07 Median	18	01-23-17	02-27-17
CNCL07G00010	Perform Clearing & Grubbing - L07 Median	12	01-23-17	02-07-17
CNCL07G10010	Relocations Complete - Location 07 - Roadway Sta X337 to X379	0	02-16-17	
CNCL07G00030	Strip Topsoil (Full Width) - L07 Median	7	02-28-17	03-13-17
CNCL07G00090	Install Settlement Monitoring Devices (where applicable) - L07 Median	5	03-14-17	03-20-17
CNCL07G00100	Settlement Period - L07 Median	90	05-03-17	07-31-17
CNCL07G00040	Install Drainage - L07 Median	29	08-01-17	09-11-17
CNCL07G00050	Install MB-7F EB Sta. 1337+36 to 1379+20 - L07 Median	21	10-06-17	11-03-17
CNCL07G00060	Install MB-7F - WB Sta. 2379+00 to 2337+21 - L07 Median	21	11-03-17	12-05-17
CNCL07G00070	Backfill Barrier - L07 Median	22	12-06-17	01-12-18
CNCL07G00080	Install Landscapinjg - L07 Median	22	01-15-18	02-13-18
CNCL07G10020	Complete Work - Location 07 - Roadway Sta X337 to X379	0		11-08-18
Loc 07 WB: Roadway Sta 2336+90 to 2379+00		499	10-04-16	10-04-18
CNCL07WG0010	Mill & Fill Shoulders - L07 WB	3	10-04-16	10-06-16
CNCL07WG0020	Place Surface Pavement on Shoulders - L07 WB	1	10-10-16	10-10-16
CNCL07WM0030	Demo Existing Inside Shoulder - L07 WB	2	03-14-17	03-15-17
CNCL07WM0040	Sawcut & Demo existing Concrete Pavement - L07 WB	3	03-16-17	03-21-17
CNCL07WM0010	Perform Ground Improvements/Earthwork for Widening - L07 Median	24	03-21-17	05-02-17



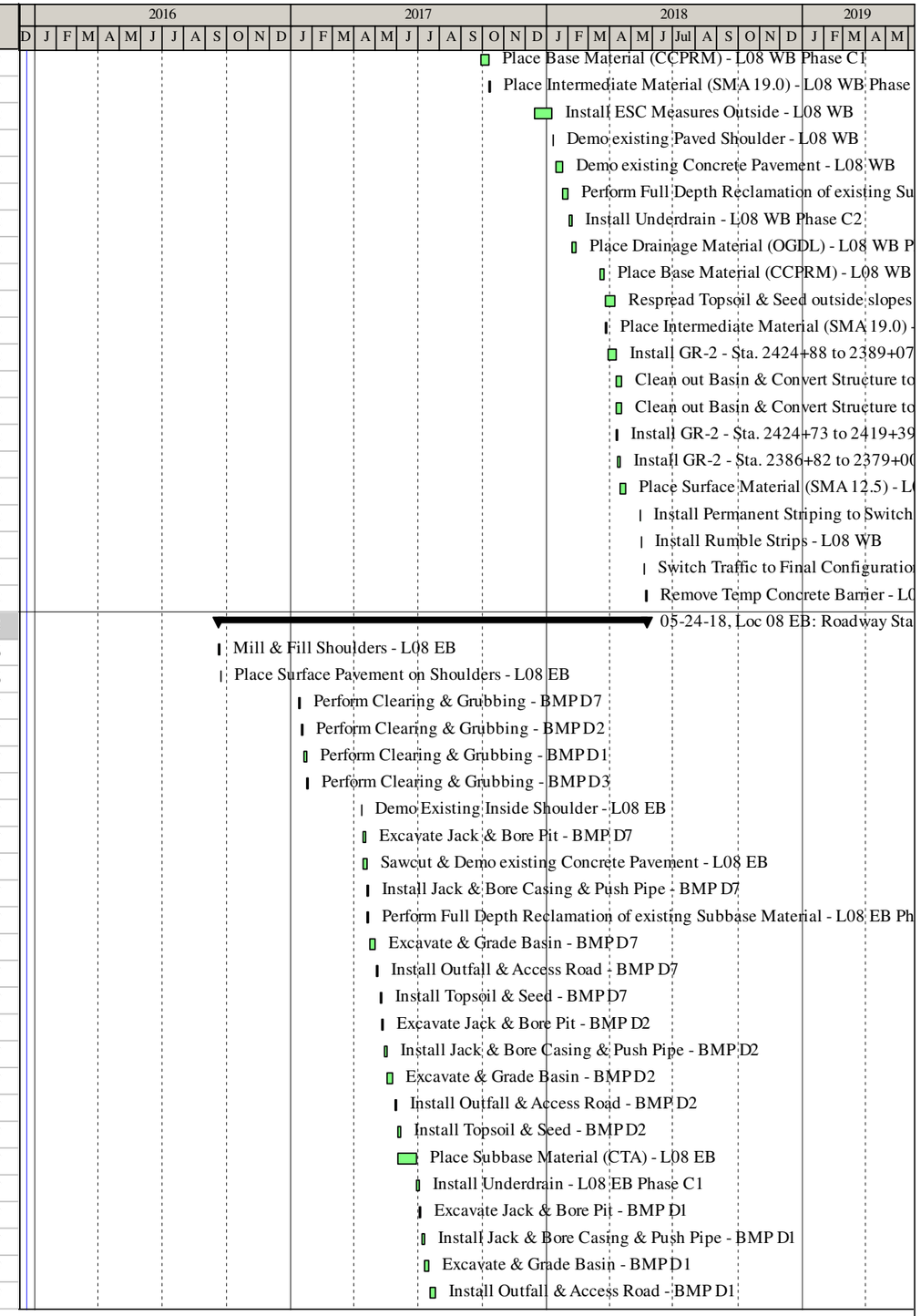
Activity ID	Activity Name	Original Duration	Start	Finish
CNCL07WM0050	Perform Full Depth Reclamation of existing Subbase Material - L07 WB Phase C1	2	03-23-17	03-27-17
CNCL07WM0020	Place Subbase Material (CTA) - L07 WB	17	10-09-17	11-02-17
CNCL07WM0280	Install Underdrain - L07 WB Phase C1	3	11-03-17	11-07-17
CNCL07WM0060	Place Drainage Material (OGDL) - L07 WB Phase C1	3	12-06-17	12-11-17
CNCL07WM0070	Place Base Material (CCPRM) - L07 WB Phase C1	6	12-12-17	03-20-18
CNCL07WM0080	Place Intermediate Material (SMA 19.0) - L07 WB Phase C1	3	03-21-18	03-23-18
CNCL07WG0030	Install ESC Measures Outside - L07 WB	9	07-06-18	07-18-18
CNCL07WM0110	Demo existing Paved Shoulder - L07 WB	2	07-19-18	07-20-18
CNCL07WM0120	Demo existing Concrete Pavement - L07 WB	5	07-23-18	07-27-18
CNCL07WM0130	Perform Full Depth Reclamation of existing Subbase Material - L07 WB Phase C2	5	07-30-18	08-03-18
CNCL07WM0340	Install Underdrain - L07 WB Phase C2	3	08-06-18	08-08-18
CNCL07WM0140	Place Drainage Material (OGDL) - L07 WB Phase C2	3	08-09-18	08-13-18
CNCL07WM0150	Place Base Material (CCPRM) - L07 WB Phase C2	5	08-14-18	08-20-18
CNCL07WG0090	Respread Topsoil & Seed outside slopes - L07 WB	9	08-21-18	08-31-18
CNCL07WM0160	Place Intermediate Material (SMA 19.0) - L07 WB Phase C2	2	08-21-18	08-22-18
CNCL07WM0170	Install GR-2 - Sta. 2379+00 to 2336+73 Outside - L07 WB Phase C2	9	08-23-18	09-05-18
CNCL07WG0040	Place Surface Material (SMA 12.5) - L07 WB	5	09-06-18	09-12-18
CNCL07WG0050	Install Permanent Striping to Switch to Final Configuration - L07 WB	1	09-26-18	09-26-18
CNCL07WG0060	Install Rumble Strips - L07 WB	2	09-27-18	09-28-18
CNCL07WG0070	Switch Traffic to Final Configuration - L07 WB	1	10-01-18	10-01-18
CNCL07WG0080	Remove Temp Concrete Barrier - L07 WB	3	10-02-18	10-04-18
Loc 07 EB: Roadway Sta 1337+68 to 1379+20		510	10-24-16	11-08-18
CNCL07EG0010	Mill & Fill Shoulders - L07 EB	3	10-24-16	10-26-16
CNCL07EG0020	Place Surface Pavement on Shoulders - L07 EB	1	10-27-16	10-27-16
CNCL07EG0110	Perform Clearing & Grubbing - BMP C4	2	01-18-17	01-19-17
CNCL07EM0030	Demo Existing Inside Shoulder - L07 EB	2	03-14-17	03-15-17
CNCL07EM0040	Sawcut & Demo existing Concrete Pavement - L07 EB	3	03-16-17	03-21-17
CNCL07EM0050	Perform Full Depth Reclamation of existing Subbase Material - L07 EB Phase C1	2	03-23-17	03-27-17
CNCL07EG0120	Excavate Jack & Bore Pit - BMP C4	2	06-07-17	06-08-17
CNCL07EG0130	Install Jack & Bore Casing & Push Pipe - BMP C4	3	06-09-17	06-13-17
CNCL07EG0140	Excavate & Grade Basin - BMP C4	5	06-14-17	06-20-17
CNCL07EG0150	Install Outfall & Access Road - BMP C4	5	06-21-17	06-27-17
CNCL07EG0160	Install Topsoil & Seed - BMP C4	3	06-28-17	06-30-17
CNCL07EM0020	Place Subbase Material (CTA) - L07 EB	17	09-12-17	10-05-17
CNCL07EM0290	Install Underdrain - L07 EB Phase C1	3	10-06-17	10-10-17
CNCL07EM0060	Place Drainage Material (OGDL) - L07 EB Phase C1	3	11-06-17	11-08-17
CNCL07EM0070	Place Base Material (CCPRM) - L07 EB Phase C1	6	03-19-18	03-26-18
CNCL07EM0080	Place Intermediate Material (SMA 19.0) - L07 EB Phase C1	3	03-27-18	03-29-18
CNCL07EG0030	Install ESC Measures Outside - L07 EB	9	08-06-18	08-16-18
CNCL07EM0110	Demo existing Paved Shoulder - L07 EB	2	08-17-18	08-20-18
CNCL07EM0120	Demo existing Concrete Pavement - L07 EB	5	08-21-18	08-27-18
CNCL07EM0130	Perform Full Depth Reclamation of existing Subbase Material - L07 EB Phase C2	5	08-28-18	09-04-18
CNCL07EM0350	Install Underdrain - L07 EB Phase C2	3	09-05-18	09-07-18
CNCL07EM0140	Place Drainage Material (OGDL) - L07 EB Phase C2	2	09-10-18	09-11-18
CNCL07EM0150	Place Base Material (CCPRM) - L07 EB Phase C2	5	09-12-18	09-19-18
CNCL07EM0180	Respread Topsoil & Seed outside slopes - L07 EB	9	09-20-18	10-02-18
CNCL07EM0160	Place Intermediate Material (SMA 19.0) - L07 EB Phase C2	3	09-20-18	09-24-18



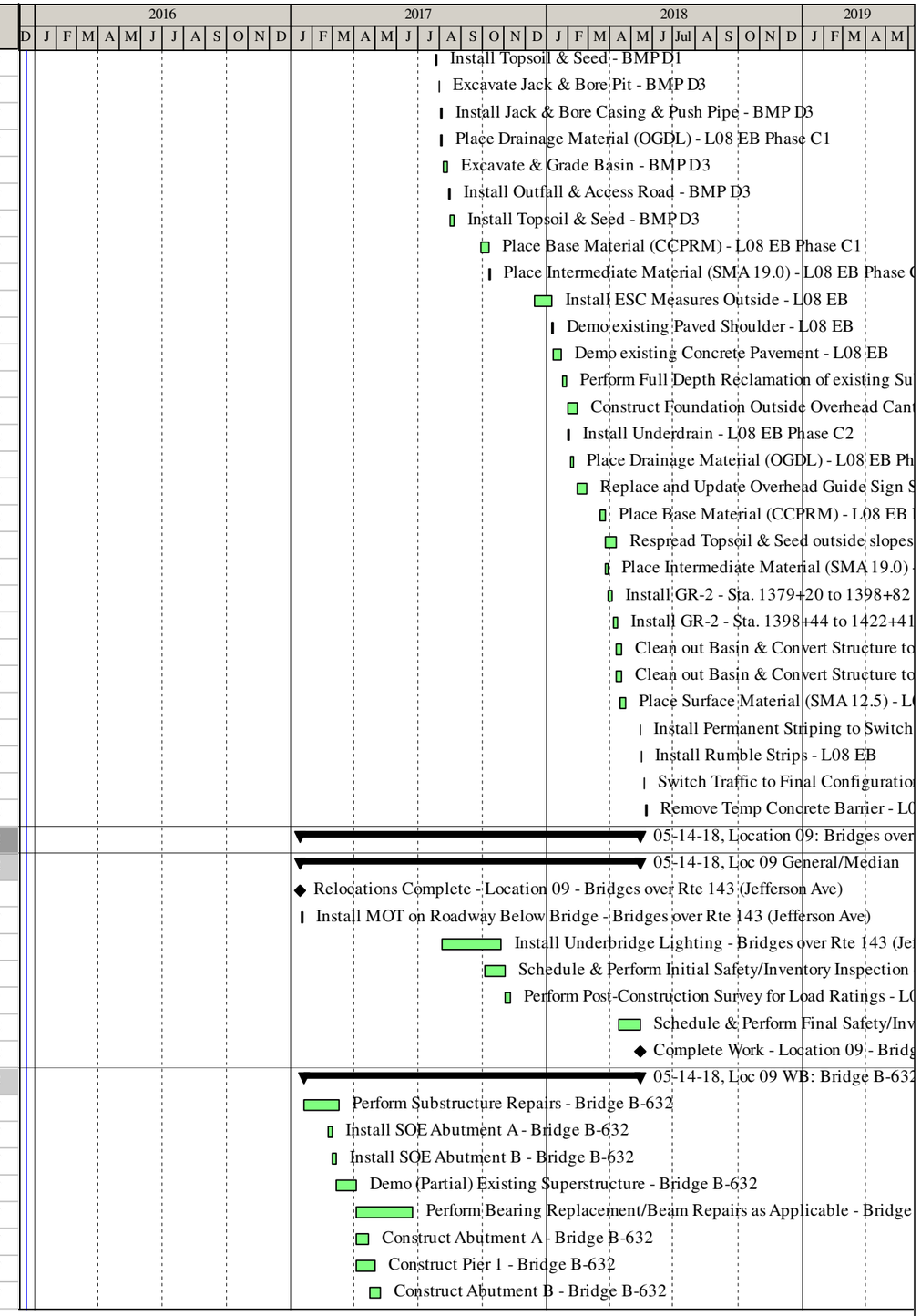
Activity ID	Activity Name	Original Duration	Start	Finish
CNCL07EM0170	Install GR-2 - Sta. 1337+85 to 1379+20 - L07 EB Phase C2	9	09-25-18	10-05-18
CNCL07EG0170	Clean out Basin & Convert Structure to Perm Config - BMPC4	5	10-03-18	10-10-18
CNCL07EG0040	Place Surface Material (SMA 12.5) - L07 EB	5	10-08-18	10-12-18
CNCL07EG0050	Install Permanent Striping to Switch to Final Configuration - L07 EB	1	10-30-18	10-30-18
CNCL07EG0060	Install Rumble Strips - L07 EB	2	10-31-18	11-01-18
CNCL07EG0070	Switch Traffic to Final Configuration - L07 EB	1	11-05-18	11-05-18
CNCL07EG0080	Remove Temp Concrete Barrier - L07 EB	3	11-06-18	11-08-18
Section D: Sta X379 to X502		481	06-18-16	05-24-18
Section D: General/Entire Segment/All Locations		332	12-19-16	04-23-18
Sec D WB		332	12-19-16	04-23-18
CNDGESW00010	Install Temp Striping to Push Traffic to Outside - Sec D WB	3	12-19-16	12-21-16
CNDGESW00020	Push Traffic to Outside - Sec D WB	2	12-22-16	01-03-17
CNDGESW00030	Place Temp Concrete Barrier - Sec D WB	5	01-04-17	01-12-17
CNDGESW00110	Install Temp Striping to Push Traffic to Inside - Sec D WB	3	11-27-17	11-29-17
CNDGESW00120	Push Traffic to Inside - Sec D WB	2	11-30-17	12-04-17
CNDGESW00130	Reset Temp Concrete Barrier - Sec D WB	6	12-05-17	12-13-17
CNDGESW00040	Install ROW Monuments - Sec D WB	5	04-17-18	04-23-18
Sec D EB		330	12-19-16	04-19-18
CNDGESE00010	Install Temp Striping to Push Traffic to Outside - Sec D EB	3	12-19-16	12-21-16
CNDGESE00020	Push Traffic to Outside - Sec D EB	2	12-22-16	01-03-17
CNDGESE00030	Place Temp Concrete Barrier - Sec D EB	5	01-04-17	01-12-17
CNDGESE00110	Install Temp Striping to Push Traffic to Inside - Sec D EB	3	11-27-17	11-29-17
CNDGESE00120	Push Traffic to Inside - Sec D EB	2	11-30-17	12-04-17
CNDGESE00130	Reset Temp Concrete Barrier - Sec D EB	6	12-05-17	12-13-17
CNDGESE00040	Install ROW Monuments - Sec D EB	5	04-13-18	04-19-18
Location 08: Roadway Sta X379 to X423		481	06-18-16	05-24-18
Loc 08 General/Median		481	06-18-16	05-24-18
CNDL08000010	Relocations Complete - Location 08 - Roadway Sta X379 to X423	0	06-18-16	
CNDL08G00020	Install ESC Measures - L08 Median	18	02-21-17	03-28-17
CNDL08G00010	Perform Clearing & Grubbing - L08 Median	10	02-21-17	03-06-17
CNDL08G00030	Strip Topsoil (Full Width) - L08 Median	7	03-29-17	04-10-17
CNDL08G00040	Install Drainage - L08 Median	31	04-11-17	06-01-17
CNDL08G00050	Install MB-7F - EB Sta. 1379+20 to 1423+49 - L08 Median	23	06-29-17	08-01-17
CNDL08G00060	Install MB-7F - WB Sta. 2423+65 to 2379+00 - L08 Median	23	07-26-17	08-25-17
CNDL08G00070	Backfill Barrier - L08 Median	23	08-28-17	09-28-17
CNDL08G00080	Install Landscaping - L08 Median	23	09-29-17	10-31-17
CNDL08000020	Complete Work - Location 08 - Roadway Sta X379 to X423	0		05-24-18
Loc 08 WB: Roadway Sta 2379+00 to 2424+33		423	09-12-16	05-24-18
CNDL08WG0010	Mill & Fill Shoulders - L08 WB	3	09-12-16	09-14-16
CNDL08WG0020	Place Surface Pavement on Shoulders - L08 WB	1	09-15-16	09-15-16
CNDL08WM0030	Demo Existing Inside Shoulder - L08 WB	2	04-11-17	04-12-17
CNDL08WM0040	Sawcut & Demo existing Concrete Pavement - L08 WB	3	04-13-17	04-19-17
CNDL08WM0050	Perform Full Depth Reclamation of existing Subbase Material - L08 WB Phase C1	2	04-20-17	04-21-17
CNDL08WM0010	Perform Ground Improvements/Earthwork for Widening - L08 Median	24	04-24-17	06-01-17
CNDL08WM0020	Place Subbase Material (CTA) - L08 WB	18	06-29-17	07-25-17
CNDL08WM0300	Install Underdrain - L08 WB Phase C1	3	07-26-17	07-28-17
CNDL08WM0060	Place Drainage Material (OGDL) - L08 WB Phase C1	3	08-28-17	08-30-17



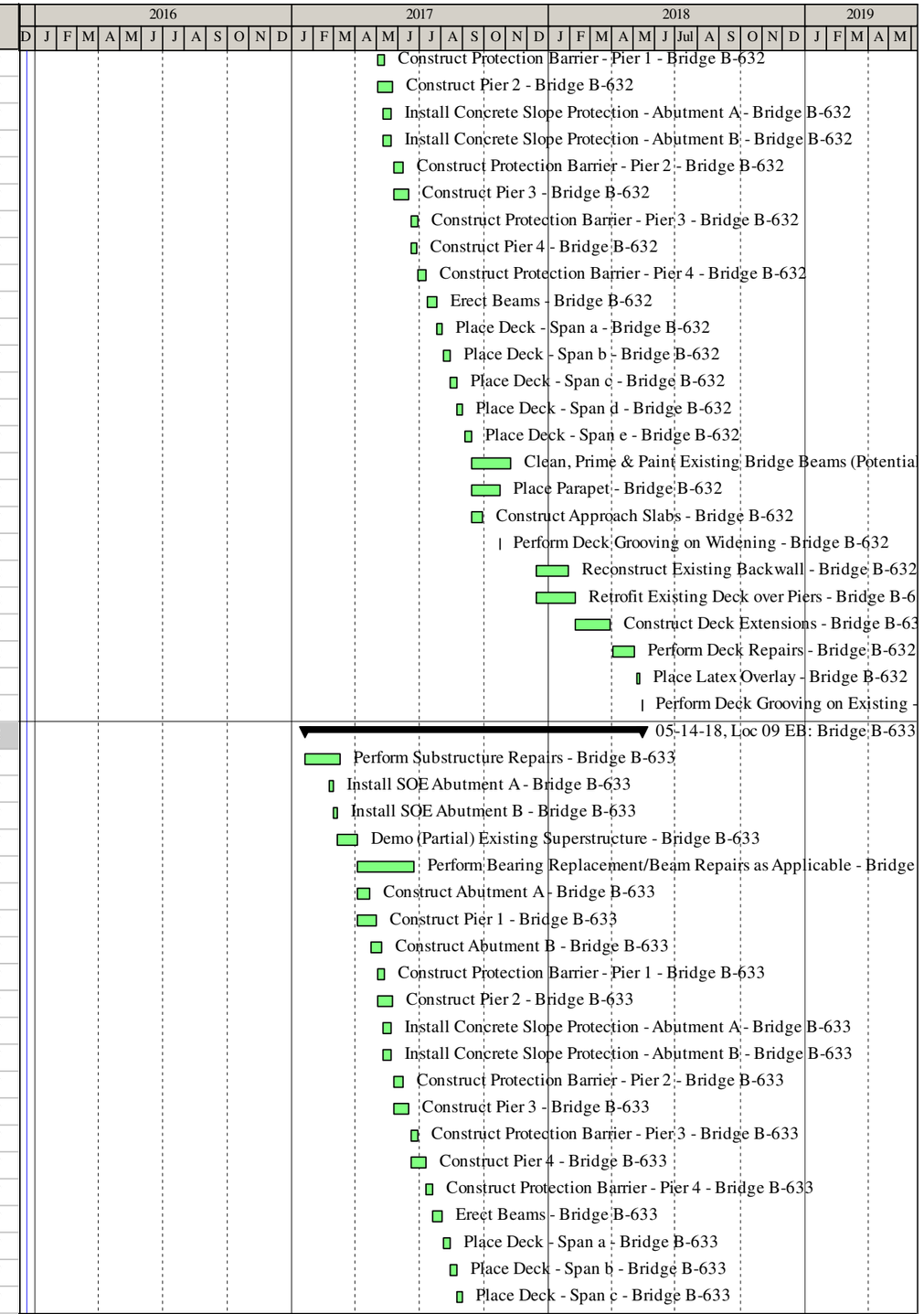
Activity ID	Activity Name	Original Duration	Start	Finish
CNDL08WM0070	Place Base Material (CCPRM) - L08 WB Phase C1	7	09-29-17	10-10-17
CNDL08WM0080	Place Intermediate Material (SMA 19.0) - L08 WB Phase C1	3	10-11-17	10-13-17
CNDL08WG0030	Install ESC Measures Outside - L08 WB	10	12-14-17	01-09-18
CNDL08WM0110	Demo existing Paved Shoulder - L08 WB	2	01-10-18	01-11-18
CNDL08WM0120	Demo existing Concrete Pavement - L08 WB	5	01-15-18	01-23-18
CNDL08WM0130	Perform Full Depth Reclamation of existing Subbase Material - L08 WB Phase C2	5	01-24-18	02-01-18
CNDL08WM0360	Install Underdrain - L08 WB Phase C2	3	02-02-18	02-06-18
CNDL08WM0140	Place Drainage Material (OGDL) - L08 WB Phase C2	3	02-07-18	02-12-18
CNDL08WM0150	Place Base Material (CCPRM) - L08 WB Phase C2	5	03-19-18	03-23-18
CNDL08WG0090	Respread Topsoil & Seed outside slopes - L08 WB	10	03-26-18	04-09-18
CNDL08WM0160	Place Intermediate Material (SMA 19.0) - L08 WB Phase C2	3	03-26-18	03-28-18
CNDL08WM0190	Install GR-2 - Sta. 2424+88 to 2389+07 Outside - L08 WB Phase C2	8	03-29-18	04-10-18
CNDL08WG0270	Clean out Basin & Convert Structure to Perm Config - BMP D2	5	04-10-18	04-17-18
CNDL08WG0340	Clean out Basin & Convert Structure to Perm Config - BMP D7	5	04-10-18	04-17-18
CNDL08WM0180	Install GR-2 - Sta. 2424+73 to 2419+39 Outside - L08 WB Phase C2	2	04-11-18	04-12-18
CNDL08WM0170	Install GR-2 - Sta. 2386+82 to 2379+00 Outside - L08 WB Phase C2	2	04-13-18	04-16-18
CNDL08WG0040	Place Surface Material (SMA 12.5) - L08 WB	5	04-17-18	04-24-18
CNDL08WG0050	Install Permanent Striping to Switch to Final Configuration - L08 WB	1	05-15-18	05-15-18
CNDL08WG0060	Install Rumble Strips - L08 WB	2	05-16-18	05-17-18
CNDL08WG0070	Switch Traffic to Final Configuration - L08 WB	1	05-21-18	05-21-18
CNDL08WG0080	Remove Temp Concrete Barrier - L08 WB	3	05-22-18	05-24-18
Loc 08 EB: Roadway Sta 1379+20 to 1422+81		418	09-19-16	05-24-18
CNDL08EG0010	Mill & Fill Shoulders - L08 EB	3	09-19-16	09-21-16
CNDL08EG0020	Place Surface Pavement on Shoulders - L08 EB	1	09-22-16	09-22-16
CNDL08WG0280	Perform Clearing & Grubbing - BMP D7	2	01-12-17	01-13-17
CNDL08WG0210	Perform Clearing & Grubbing - BMP D2	2	01-16-17	01-17-17
CNDL08EG0110	Perform Clearing & Grubbing - BMP D1	2	01-20-17	01-23-17
CNDL08EG0280	Perform Clearing & Grubbing - BMP D3	2	01-24-17	01-25-17
CNDL08EM0030	Demo Existing Inside Shoulder - L08 EB	2	04-11-17	04-12-17
CNDL08WG0290	Excavate Jack & Bore Pit - BMP D7	2	04-13-17	04-18-17
CNDL08EM0040	Sawcut & Demo existing Concrete Pavement - L08 EB	3	04-13-17	04-19-17
CNDL08WG0300	Install Jack & Bore Casing & Push Pipe - BMP D7	3	04-19-17	04-21-17
CNDL08EM0050	Perform Full Depth Reclamation of existing Subbase Material - L08 EB Phase C1	2	04-20-17	04-21-17
CNDL08WG0310	Excavate & Grade Basin - BMP D7	5	04-24-17	05-01-17
CNDL08WG0320	Install Outfall & Access Road - BMP D7	3	05-02-17	05-04-17
CNDL08WG0330	Install Topsoil & Seed - BMP D7	3	05-08-17	05-10-17
CNDL08WG0220	Excavate Jack & Bore Pit - BMP D2	2	05-11-17	05-12-17
CNDL08WG0230	Install Jack & Bore Casing & Push Pipe - BMP D2	3	05-15-17	05-17-17
CNDL08WG0240	Excavate & Grade Basin - BMP D2	5	05-18-17	05-25-17
CNDL08WG0250	Install Outfall & Access Road - BMP D2	3	05-30-17	06-01-17
CNDL08WG0260	Install Topsoil & Seed - BMP D2	3	06-02-17	06-06-17
CNDL08EM0020	Place Subbase Material (CTA) - L08 EB	19	06-02-17	06-28-17
CNDL08EM0310	Install Underdrain - L08 EB Phase C1	3	06-29-17	07-03-17
CNDL08EG0120	Excavate Jack & Bore Pit - BMP D1	2	07-03-17	07-05-17
CNDL08EG0130	Install Jack & Bore Casing & Push Pipe - BMP D1	3	07-06-17	07-10-17
CNDL08EG0140	Excavate & Grade Basin - BMP D1	5	07-11-17	07-17-17
CNDL08EG0150	Install Outfall & Access Road - BMP D1	6	07-18-17	07-25-17



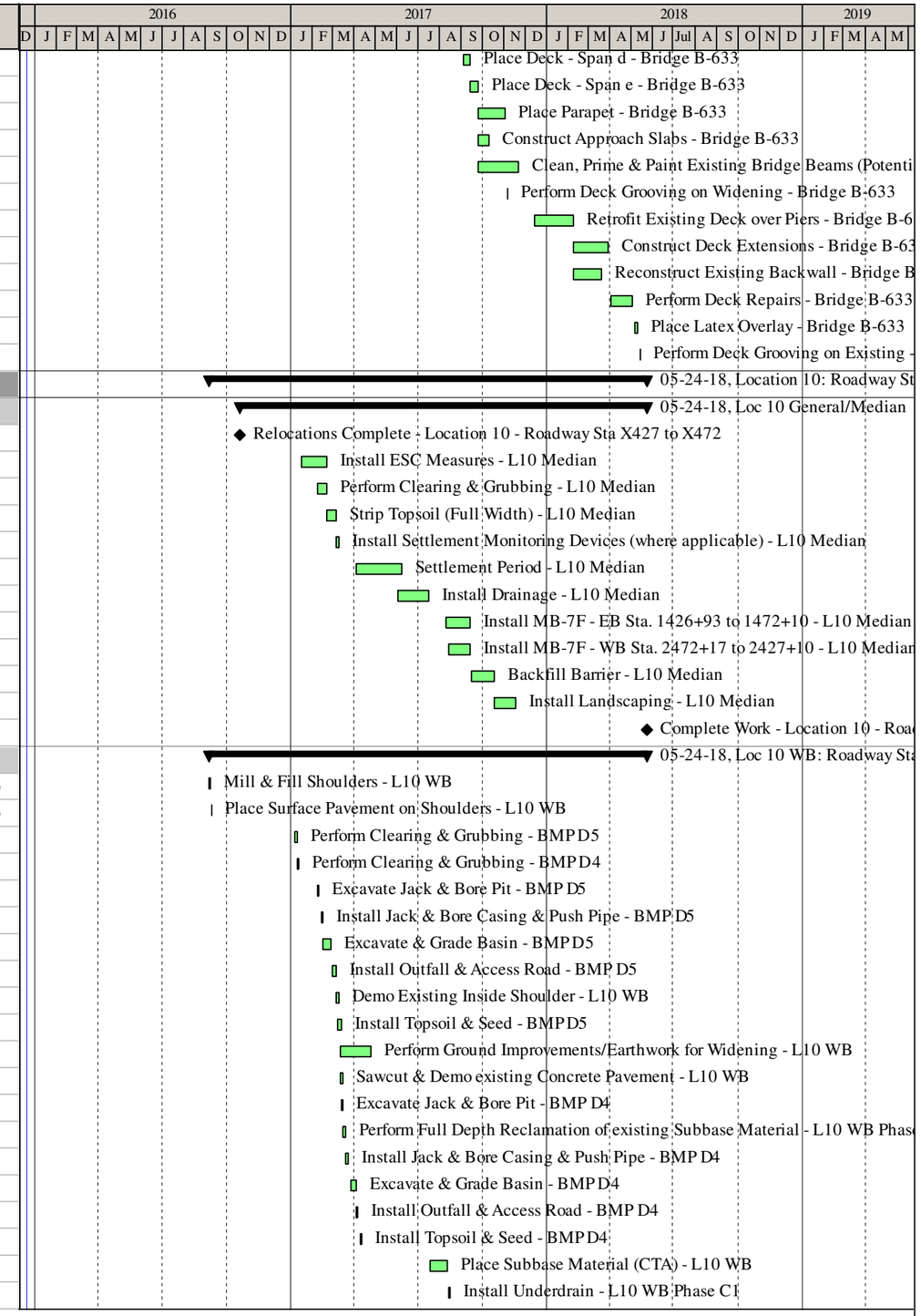
Activity ID	Activity Name	Original Duration	Start	Finish
CNDL08EG0160	Install Topsoil & Seed - BMP D1	3	07-26-17	07-28-17
CNDL08EG0290	Excavate Jack & Bore Pit - BMP D3	2	07-31-17	08-01-17
CNDL08EG0300	Install Jack & Bore Casing & Push Pipe - BMP D3	3	08-02-17	08-04-17
CNDL08EM0060	Place Drainage Material (OGDL) - L08 EB Phase C1	3	08-02-17	08-04-17
CNDL08EG0310	Excavate & Grade Basin - BMP D3	5	08-07-17	08-11-17
CNDL08EG0320	Install Outfall & Access Road - BMP D3	3	08-14-17	08-16-17
CNDL08EG0330	Install Topsoil & Seed - BMP D3	3	08-17-17	08-21-17
CNDL08EM0070	Place Base Material (CCPRM) - L08 EB Phase C1	7	09-29-17	10-10-17
CNDL08EM0080	Place Intermediate Material (SMA 19.0) - L08 EB Phase C1	3	10-11-17	10-13-17
CNDL08EG0030	Install ESC Measures Outside - L08 EB	9	12-14-17	01-08-18
CNDL08EM0110	Demo existing Paved Shoulder - L08 EB	2	01-09-18	01-10-18
CNDL08EM0120	Demo existing Concrete Pavement - L08 EB	5	01-11-18	01-22-18
CNDL08EM0130	Perform Full Depth Reclamation of existing Subbase Material - L08 EB Phase C2	5	01-23-18	01-30-18
CNDL08EM0190	Construct Foundation Outside Overhead Cantilever Guide Sign Structure - L08EB - Sta. 1392+80	10	01-31-18	02-13-18
CNDL08EM0370	Install Underdrain - L08 EB Phase C2	3	01-31-18	02-02-18
CNDL08EM0140	Place Drainage Material (OGDL) - L08 EB Phase C2	3	02-05-18	02-07-18
CNDL08EM0200	Replace and Update Overhead Guide Sign Structure - L08EB - Sta. 1392+80	10	02-14-18	02-27-18
CNDL08EM0150	Place Base Material (CCPRM) - L08 EB Phase C2	6	03-19-18	03-26-18
CNDL08WG0350	Respread Topsoil & Seed outside slopes - L08 EB	10	03-27-18	04-10-18
CNDL08EM0160	Place Intermediate Material (SMA 19.0) - L08 EB Phase C2	3	03-27-18	03-29-18
CNDL08EM0170	Install GR-2 - Sta. 1379+20 to 1398+82 Outside - L08 EB Phase C2	4	03-30-18	04-05-18
CNDL08EM0180	Install GR-2 - Sta. 1398+44 to 1422+41 Outside - L08 EB Phase C2	5	04-06-18	04-12-18
CNDL08EG0170	Clean out Basin & Convert Structure to Perm Config - BMP D1	5	04-11-18	04-18-18
CNDL08EG0340	Clean out Basin & Convert Structure to Perm Config - BMP D3	5	04-11-18	04-18-18
CNDL08EG0040	Place Surface Material (SMA 12.5) - L08 EB	6	04-16-18	04-24-18
CNDL08EG0050	Install Permanent Striping to Switch to Final Configuration - L08 EB	1	05-15-18	05-15-18
CNDL08EG0060	Install Rumble Strips - L08 EB	2	05-16-18	05-17-18
CNDL08EG0070	Switch Traffic to Final Configuration - L08 EB	1	05-21-18	05-21-18
CNDL08EG0080	Remove Temp Concrete Barrier - L08 EB	3	05-22-18	05-24-18
Location 09: Bridges over Rte 143 (Jefferson Ave)		334	01-13-17	05-14-18
Loc 09 General/Median		334	01-13-17	05-14-18
CNDL09000010	Relocations Complete - Location 09 - Bridges over Rte 143 (Jefferson Ave)	0	01-13-17	
CNDL09G00010	Install MOT on Roadway Below Bridge - Bridges over Rte 143 (Jefferson Ave)	3	01-16-17	01-18-17
CNDL09G00030	Install Underbridge Lighting - Bridges over Rte 143 (Jefferson Ave) [2.3.6]	60	08-04-17	10-27-17
CNDL09G10080	Schedule & Perform Initial Safety/Inventory Inspection - L09 [2.3.10]	30	10-04-17	11-02-17
CNDL09G00040	Perform Post-Construction Survey for Load Ratings - L09	5	11-03-17	11-09-17
CNDL09G10090	Schedule & Perform Final Safety/Inventory Inspection - L09 [2.3.10]	30	04-15-18	05-14-18
CNDL09000020	Complete Work - Location 09 - Bridges over Rte 143 (Jefferson Ave)	0		05-14-18
Loc 09 WB: Bridge B-632 over Jefferson Ave		330	01-19-17	05-14-18
CNDL09W00310	Perform Substructure Repairs - Bridge B-632	25	01-19-17	03-09-17
CNDL09W02810	Install SOE Abutment A - Bridge B-632	3	02-23-17	02-28-17
CNDL09W02840	Install SOE Abutment B - Bridge B-632	3	03-01-17	03-06-17
CNDL09W02870	Demo (Partial) Existing Superstructure - Bridge B-632	15	03-07-17	04-04-17
CNDL09W00330	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-632	50	04-05-17	06-23-17
CNDL09W03060	Construct Abutment A - Bridge B-632	10	04-05-17	04-21-17
CNDL09W03590	Construct Pier 1 - Bridge B-632	15	04-05-17	05-01-17
CNDL09W03670	Construct Abutment B - Bridge B-632	10	04-24-17	05-09-17



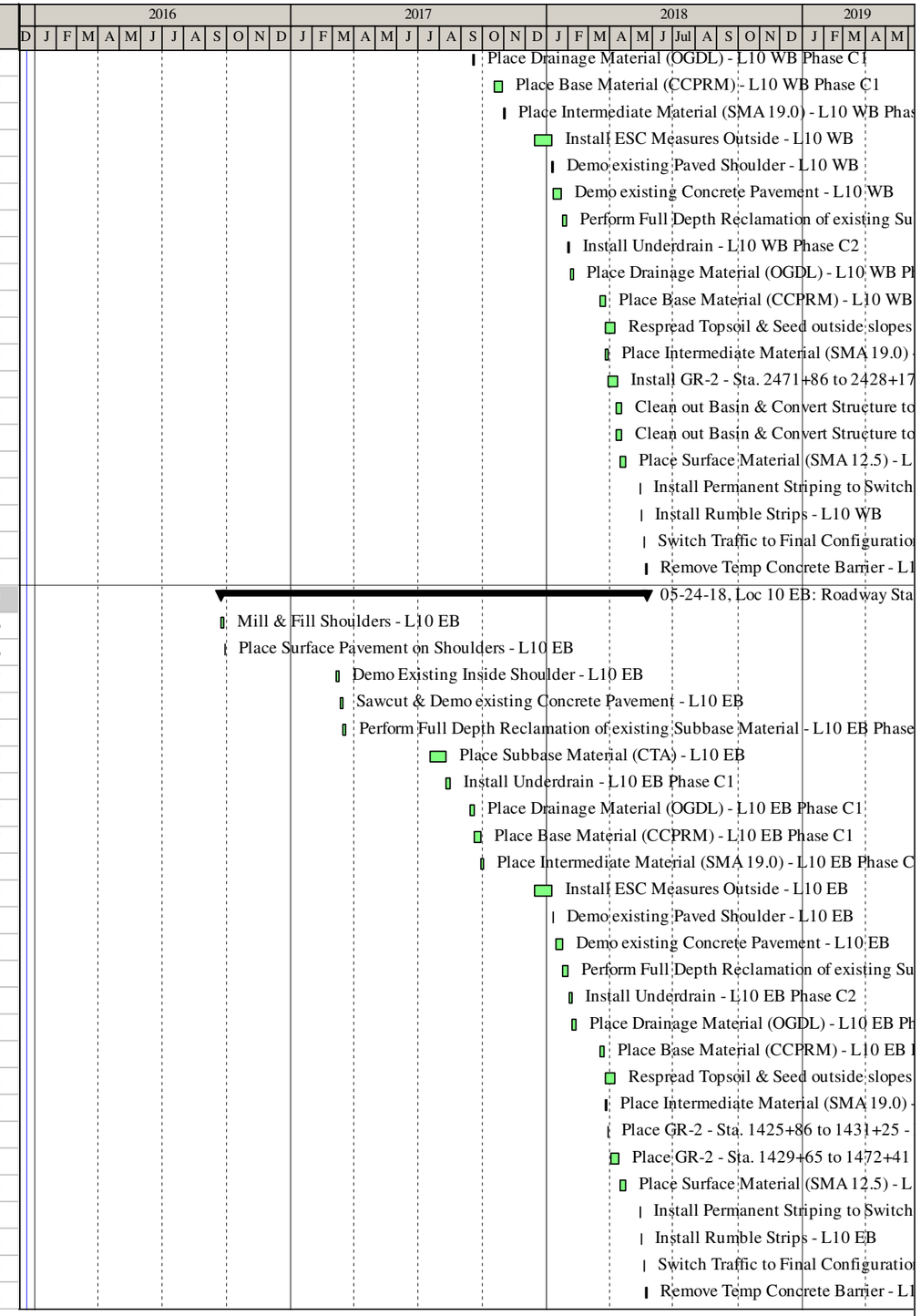
Activity ID	Activity Name	Original Duration	Start	Finish
CNDL09W03600	Construct Protection Barrier - Pier 1 - Bridge B-632	8	05-02-17	05-12-17
CNDL09W03610	Construct Pier 2 - Bridge B-632	15	05-02-17	05-24-17
CNDL09W03700	Install Concrete Slope Protection - Abutment A - Bridge B-632	8	05-10-17	05-22-17
CNDL09W03710	Install Concrete Slope Protection - Abutment B - Bridge B-632	8	05-10-17	05-22-17
CNDL09W03620	Construct Protection Barrier - Pier 2 - Bridge B-632	8	05-25-17	06-07-17
CNDL09W03630	Construct Pier 3 - Bridge B-632	15	05-25-17	06-16-17
CNDL09W03640	Construct Protection Barrier - Pier 3 - Bridge B-632	8	06-19-17	06-28-17
CNDL09W03650	Construct Pier 4 - Bridge B-632	7	06-19-17	06-27-17
CNDL09W03660	Construct Protection Barrier - Pier 4 - Bridge B-632	8	06-29-17	07-11-17
CNDL09W03720	Erect Beams - Bridge B-632	10	07-12-17	07-25-17
CNDL09W03730	Place Deck - Span a - Bridge B-632	7	07-26-17	08-03-17
CNDL09W03740	Place Deck - Span b - Bridge B-632	7	08-04-17	08-14-17
CNDL09W03750	Place Deck - Span c - Bridge B-632	7	08-15-17	08-23-17
CNDL09W03760	Place Deck - Span d - Bridge B-632	7	08-24-17	09-01-17
CNDL09W03770	Place Deck - Span e - Bridge B-632	7	09-05-17	09-13-17
CNDL09W00320	Clean, Prime & Paint Existing Bridge Beams (Potential Lead) - Bridge B-632	35	09-14-17	11-08-17
CNDL09W03780	Place Parapet - Bridge B-632	25	09-14-17	10-23-17
CNDL09W03790	Construct Approach Slabs - Bridge B-632	10	09-14-17	09-28-17
CNDL09W03800	Perform Deck Grooving on Widening - Bridge B-632	1	10-24-17	10-24-17
CNDL09W00340	Reconstruct Existing Backwall - Bridge B-632	20	12-14-17	01-29-18
CNDL09W03820	Retrofit Existing Deck over Piers - Bridge B-632	25	12-14-17	02-07-18
CNDL09W03830	Construct Deck Extensions - Bridge B-632	25	02-08-18	03-29-18
CNDL09W03840	Perform Deck Repairs - Bridge B-632	20	04-03-18	05-03-18
CNDL09W03850	Place Latex Overlay - Bridge B-632	5	05-07-18	05-11-18
CNDL09W03810	Perform Deck Grooving on Existing - Bridge B-632	1	05-14-18	05-14-18
Loc 09 EB: Bridge B-633 over Jefferson Ave		330	01-19-17	05-14-18
CNDL09E00210	Perform Substructure Repairs - Bridge B-633	25	01-19-17	03-09-17
CNDL09E02760	Install SOE Abutment A - Bridge B-633	3	02-23-17	02-28-17
CNDL09E02770	Install SOE Abutment B - Bridge B-633	3	03-01-17	03-06-17
CNDL09E02780	Demo (Partial) Existing Superstructure - Bridge B-633	15	03-07-17	04-04-17
CNDL09E00230	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-633	50	04-05-17	06-23-17
CNDL09E02790	Construct Abutment A - Bridge B-633	10	04-05-17	04-21-17
CNDL09E02800	Construct Pier 1 - Bridge B-633	15	04-05-17	05-01-17
CNDL09E02910	Construct Abutment B - Bridge B-633	10	04-24-17	05-09-17
CNDL09E02820	Construct Protection Barrier - Pier 1 - Bridge B-633	8	05-02-17	05-12-17
CNDL09E02830	Construct Pier 2 - Bridge B-633	15	05-02-17	05-24-17
CNDL09E02940	Install Concrete Slope Protection - Abutment A - Bridge B-633	8	05-10-17	05-22-17
CNDL09E02950	Install Concrete Slope Protection - Abutment B - Bridge B-633	8	05-10-17	05-22-17
CNDL09E02850	Construct Protection Barrier - Pier 2 - Bridge B-633	8	05-25-17	06-07-17
CNDL09E02860	Construct Pier 3 - Bridge B-633	15	05-25-17	06-16-17
CNDL09E02880	Construct Protection Barrier - Pier 3 - Bridge B-633	8	06-19-17	06-28-17
CNDL09E02890	Construct Pier 4 - Bridge B-633	15	06-19-17	07-10-17
CNDL09E02900	Construct Protection Barrier - Pier 4 - Bridge B-633	8	07-11-17	07-20-17
CNDL09E02960	Erect Beams - Bridge B-633	10	07-21-17	08-03-17
CNDL09E02970	Place Deck - Span a - Bridge B-633	7	08-04-17	08-14-17
CNDL09E02980	Place Deck - Span b - Bridge B-633	7	08-15-17	08-23-17
CNDL09E02990	Place Deck - Span c - Bridge B-633	7	08-24-17	09-01-17



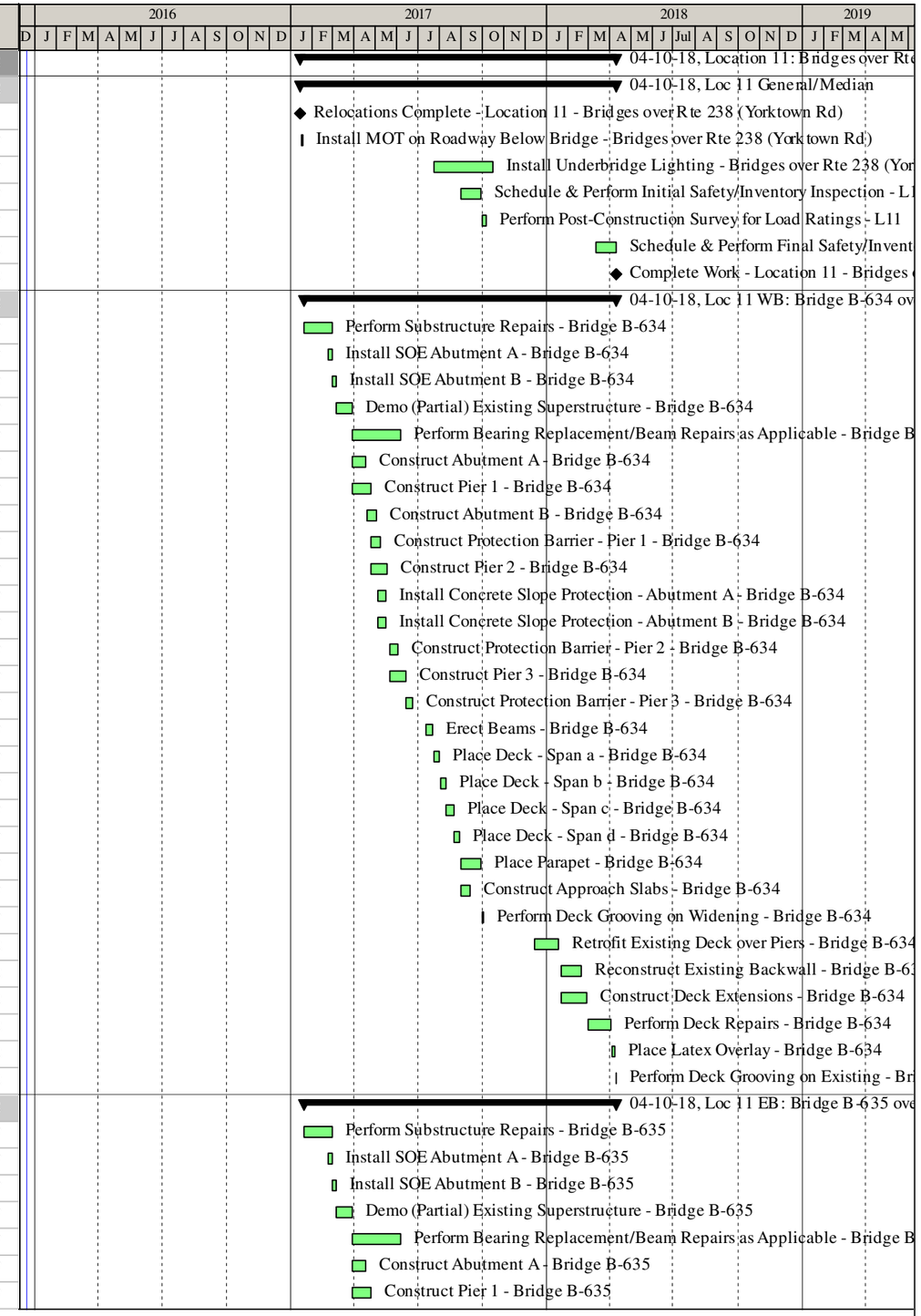
Activity ID	Activity Name	Original Duration	Start	Finish
CNDL09E03000	Place Deck - Span d - Bridge B-633	7	09-05-17	09-13-17
CNDL09E03010	Place Deck - Span e - Bridge B-633	7	09-14-17	09-25-17
CNDL09E03020	Place Parapet - Bridge B-633	25	09-26-17	11-02-17
CNDL09E03030	Construct Approach Slabs - Bridge B-633	10	09-26-17	10-10-17
CNDL09E00220	Clean, Prime & Paint Existing Bridge Beams (Potential Lead) - Bridge B-633	35	09-26-17	11-21-17
CNDL09E03040	Perform Deck Grooving on Widening - Bridge B-633	1	11-06-17	11-06-17
CNDL09E03070	Retrofit Existing Deck over Piers - Bridge B-633	25	12-14-17	02-07-18
CNDL09E03080	Construct Deck Extensions - Bridge B-633	25	02-08-18	03-29-18
CNDL09E00240	Reconstruct Existing Backwall - Bridge B-633	20	02-08-18	03-20-18
CNDL09E03090	Perform Deck Repairs - Bridge B-633	20	04-03-18	05-03-18
CNDL09E03100	Place Latex Overlay - Bridge B-633	5	05-07-18	05-11-18
CNDL09E03050	Perform Deck Grooving on Existing - Bridge B-633	1	05-14-18	05-14-18
Location 10: Roadway Sta X427 to X472		427	09-06-16	05-24-18
Loc 10 General/Median		396	10-19-16	05-24-18
CNDL10G10010	Relocations Complete - Location 10 - Roadway Sta X427 to X472	0	10-19-16	
CNDL10G00020	Install ESC Measures - L10 Median	19	01-16-17	02-20-17
CNDL10G00010	Perform Clearing & Grubbing - L10 Median	10	02-07-17	02-20-17
CNDL10G00030	Strip Topsoil (Full Width) - L10 Median	7	02-21-17	03-06-17
CNDL10G00090	Install Settlement Monitoring Devices (where applicable) - L10 Median	3	03-07-17	03-09-17
CNDL10G00100	Settlement Period - L10 Median	65	04-04-17	06-07-17
CNDL10G00040	Install Drainage - L10 Median	31	06-02-17	07-17-17
CNDL10G00050	Install MB-7F - EB Sta. 1426+93 to 1472+10 - L10 Median	23	08-11-17	09-13-17
CNDL10G00060	Install MB-7F - WB Sta. 2472+17 to 2427+10 - L10 Median	23	08-14-17	09-14-17
CNDL10G00070	Backfill Barrier - L10 Median	23	09-15-17	10-17-17
CNDL10G00080	Install Landscaping - L10 Median	23	10-18-17	11-17-17
CNDL10G10020	Complete Work - Location 10 - Roadway Sta X427 to X472	0		05-24-18
Loc 10 WB: Roadway Sta 2427+77 to 2477+97		427	09-06-16	05-24-18
CNDL10WG0010	Mill & Fill Shoulders - L10 WB	3	09-06-16	09-08-16
CNDL10WG0020	Place Surface Pavement on Shoulders - L10 WB	1	09-09-16	09-09-16
CNDL10WG0210	Perform Clearing & Grubbing - BMP D5	2	01-06-17	01-09-17
CNDL10WG0110	Perform Clearing & Grubbing - BMP D4	2	01-10-17	01-11-17
CNDL10WG0220	Excavate Jack & Bore Pit - BMP D5	2	02-07-17	02-09-17
CNDL10WG0230	Install Jack & Bore Casing & Push Pipe - BMP D5	3	02-13-17	02-15-17
CNDL10WG0240	Excavate & Grade Basin - BMP D5	5	02-16-17	02-27-17
CNDL10WG0250	Install Outfall & Access Road - BMP D5	5	02-28-17	03-07-17
CNDL10WM0030	Demo Existing Inside Shoulder - L10 WB	2	03-07-17	03-09-17
CNDL10WG0260	Install Topsoil & Seed - BMP D5	3	03-09-17	03-14-17
CNDL10G20010	Perform Ground Improvements/Earthwork for Widening - L10 WB	24	03-13-17	04-24-17
CNDL10WM0040	Sawcut & Demo existing Concrete Pavement - L10 WB	3	03-13-17	03-15-17
CNDL10WG0120	Excavate Jack & Bore Pit - BMP D4	2	03-15-17	03-16-17
CNDL10WM0050	Perform Full Depth Reclamation of existing Subbase Material - L10 WB Phase C1	2	03-16-17	03-20-17
CNDL10WG0130	Install Jack & Bore Casing & Push Pipe - BMP D4	3	03-20-17	03-23-17
CNDL10WG0140	Excavate & Grade Basin - BMP D4	5	03-27-17	04-03-17
CNDL10WG0150	Install Outfall & Access Road - BMP D4	3	04-04-17	04-06-17
CNDL10WG0160	Install Topsoil & Seed - BMP D4	3	04-10-17	04-12-17
CNDL10WM0020	Place Subbase Material (CTA) - L10 WB	19	07-18-17	08-11-17
CNDL10WM0200	Install Underdrain - L10 WB Phase C1	3	08-14-17	08-16-17



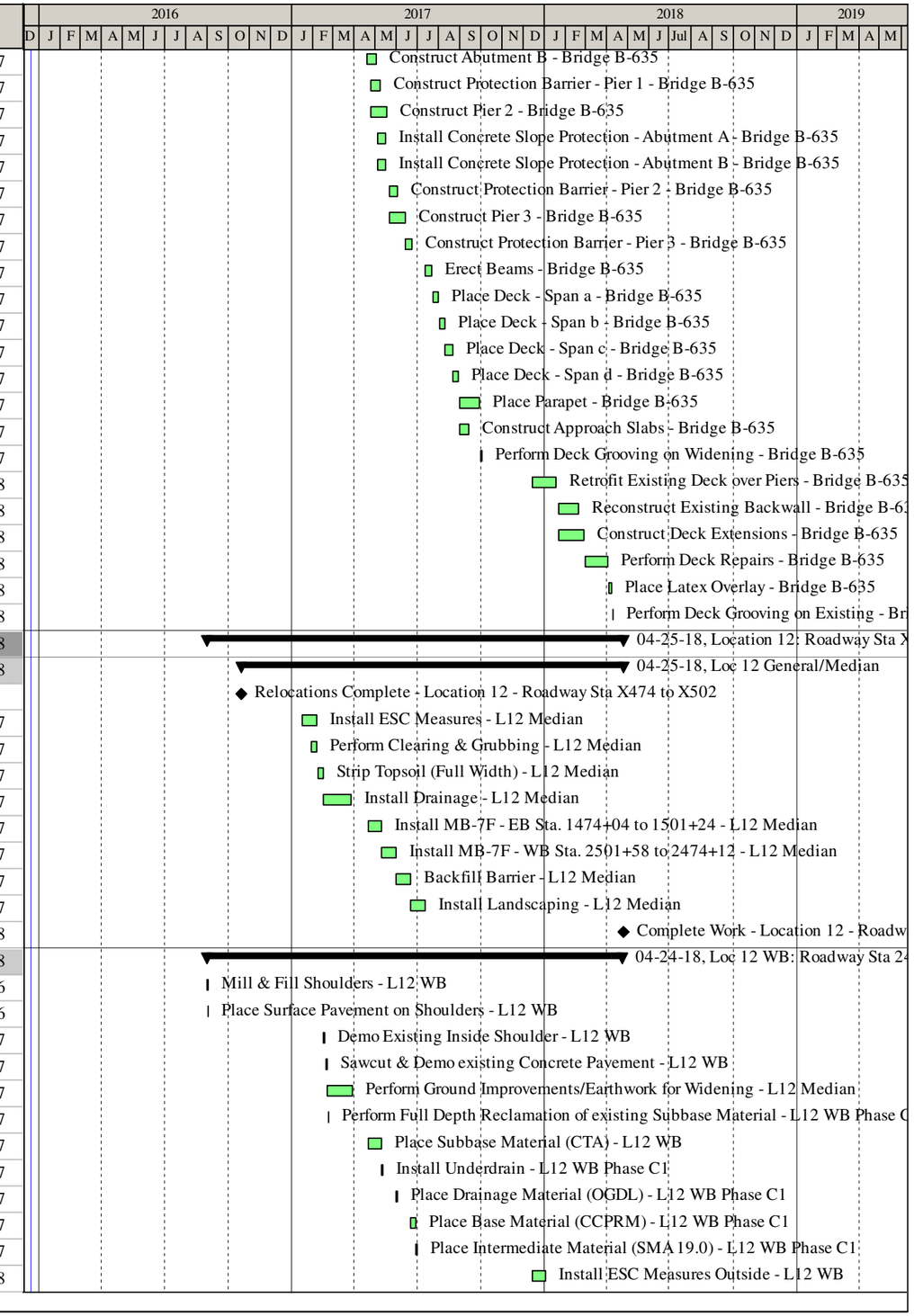
Activity ID	Activity Name	Original Duration	Start	Finish
CNDL10WM0060	Place Drainage Material (OGDL) - L10 WB Phase C1	3	09-18-17	09-20-17
CNDL10WM0070	Place Base Material (CCPRM) - L10 WB Phase C1	7	10-18-17	10-30-17
CNDL10WM0080	Place Intermediate Material (SMA 19.0) - L10 WB Phase C1	3	10-31-17	11-02-17
CNDL10WG0030	Install ESC Measures Outside - L10 WB	9	12-14-17	01-08-18
CNDL10WM0110	Demo existing Paved Shoulder - L10 WB	2	01-09-18	01-10-18
CNDL10WM0120	Demo existing Concrete Pavement - L10 WB	5	01-11-18	01-22-18
CNDL10WM0130	Perform Full Depth Reclamation of existing Subbase Material - L10 WB Phase C2	5	01-23-18	01-30-18
CNDL10WM0210	Install Underdrain - L10 WB Phase C2	3	01-31-18	02-02-18
CNDL10WM0140	Place Drainage Material (OGDL) - L10 WB Phase C2	3	02-05-18	02-07-18
CNDL10WM0150	Place Base Material (CCPRM) - L10 WB Phase C2	6	03-19-18	03-26-18
CNDL10WG0280	Respread Topsoil & Seed outside slopes - L10 WB	9	03-27-18	04-09-18
CNDL10WM0160	Place Intermediate Material (SMA 19.0) - L10 WB Phase C2	3	03-27-18	03-29-18
CNDL10WM0170	Install GR-2 - Sta. 2471+86 to 2428+17 Outside - L10 WB Phase C2	9	03-30-18	04-12-18
CNDL10WG0170	Clean out Basin & Convert Structure to Perm Config - BMP D4	5	04-10-18	04-17-18
CNDL10WG0270	Clean out Basin & Convert Structure to Perm Config - BMP D5	5	04-10-18	04-17-18
CNDL10WG0040	Place Surface Material (SMA 12.5) - L10 WB	6	04-16-18	04-24-18
CNDL10WG0050	Install Permanent Striping to Switch to Final Configuration - L10 WB	1	05-15-18	05-15-18
CNDL10WG0060	Install Rumble Strips - L10 WB	2	05-16-18	05-17-18
CNDL10WG0070	Switch Traffic to Final Configuration - L10 WB	1	05-21-18	05-21-18
CNDL10WG0080	Remove Temp Concrete Barrier - L10 WB	3	05-22-18	05-24-18
Loc 10 EB: Roadway Sta 1426+25 to 1472+30		414	09-23-16	05-24-18
CNDL10EG0010	Mill & Fill Shoulders - L10 EB	3	09-23-16	09-27-16
CNDL10EG0020	Place Surface Pavement on Shoulders - L10 EB	1	09-28-16	09-28-16
CNDL10EM0030	Demo Existing Inside Shoulder - L10 EB	2	03-07-17	03-09-17
CNDL10EM0040	Sawcut & Demo existing Concrete Pavement - L10 EB	3	03-13-17	03-15-17
CNDL10EM0050	Perform Full Depth Reclamation of existing Subbase Material - L10 EB Phase C1	2	03-16-17	03-20-17
CNDL10EM0020	Place Subbase Material (CTA) - L10 EB	18	07-18-17	08-10-17
CNDL10EM0220	Install Underdrain - L10 EB Phase C1	3	08-11-17	08-15-17
CNDL10EM0060	Place Drainage Material (OGDL) - L10 EB Phase C1	3	09-14-17	09-19-17
CNDL10EM0070	Place Base Material (CCPRM) - L10 EB Phase C1	7	09-20-17	09-28-17
CNDL10EM0080	Place Intermediate Material (SMA 19.0) - L10 EB Phase C1	3	09-29-17	10-03-17
CNDL10EG0030	Install ESC Measures Outside - L10 EB	10	12-14-17	01-09-18
CNDL10EM0110	Demo existing Paved Shoulder - L10 EB	2	01-10-18	01-11-18
CNDL10EM0120	Demo existing Concrete Pavement - L10 EB	5	01-15-18	01-23-18
CNDL10EM0130	Perform Full Depth Reclamation of existing Subbase Material - L10 EB Phase C2	5	01-24-18	02-01-18
CNDL10EM0230	Install Underdrain - L10 EB Phase C2	3	02-02-18	02-06-18
CNDL10EM0140	Place Drainage Material (OGDL) - L10 EB Phase C2	3	02-07-18	02-12-18
CNDL10EM0150	Place Base Material (CCPRM) - L10 EB Phase C2	5	03-19-18	03-23-18
CNDL10EM0190	Respread Topsoil & Seed outside slopes - L04 WB	10	03-26-18	04-09-18
CNDL10EM0160	Place Intermediate Material (SMA 19.0) - L10 EB Phase C2	3	03-26-18	03-28-18
CNDL10EM0170	Place GR-2 - Sta. 1425+86 to 1431+25 - L10 EB Phase C2	2	03-29-18	03-30-18
CNDL10EM0180	Place GR-2 - Sta. 1429+65 to 1472+41 - L10 EB Phase C2	9	04-03-18	04-13-18
CNDL10EG0040	Place Surface Material (SMA 12.5) - L10 EB	5	04-16-18	04-23-18
CNDL10EG0050	Install Permanent Striping to Switch to Final Configuration - L10 EB	1	05-15-18	05-15-18
CNDL10EG0060	Install Rumble Strips - L10 EB	2	05-16-18	05-17-18
CNDL10EG0070	Switch Traffic to Final Configuration - L10 EB	1	05-21-18	05-21-18
CNDL10EG0080	Remove Temp Concrete Barrier - L10 EB	3	05-22-18	05-24-18



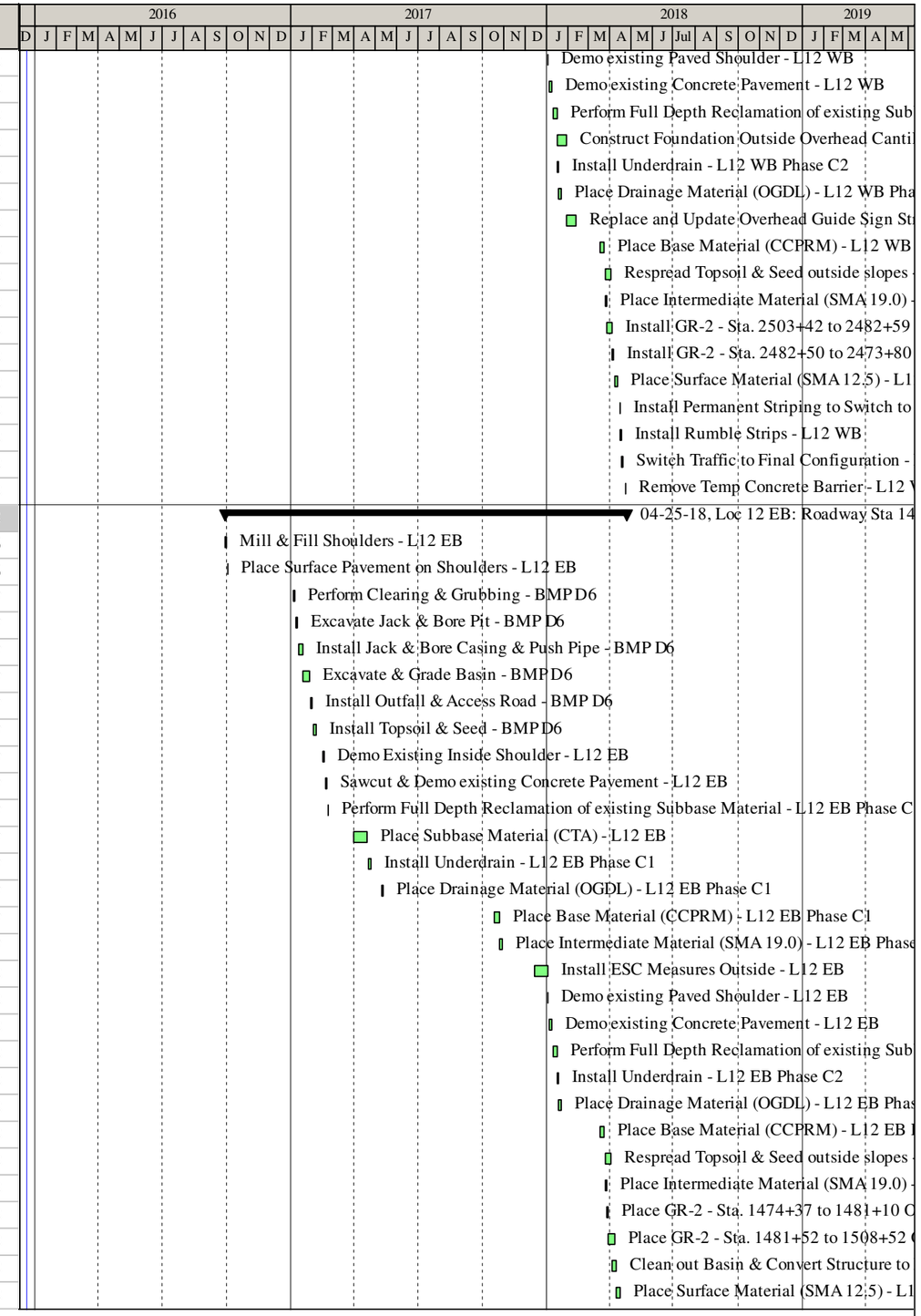
Activity ID	Activity Name	Original Duration	Start	Finish
Location 11: Bridges over Rte 238 (Yorktown Rd)		310	01-13-17	04-10-18
Loc 11 General/Median		310	01-13-17	04-10-18
CNDL11G10010	Relocations Complete - Location 11 - Bridges over Rte 238 (Yorktown Rd)	0	01-13-17	
CNDL11G00010	Install MOT on Roadway Below Bridge - Bridges over Rte 238 (Yorktown Rd)	3	01-16-17	01-18-17
CNDL11G00050	Install Underbridge Lighting - Bridges over Rte 238 (Yorktown Rd) [2.3.6]	60	07-24-17	10-16-17
CNDL11G10090	Schedule & Perform Initial Safety/Inventory Inspection - L11 [2.3.10]	30	08-31-17	09-29-17
CNDL11G00040	Perform Post-Construction Survey for Load Ratings - L11	5	10-02-17	10-06-17
CNDL11G10080	Schedule & Perform Final Safety/Inventory Inspection - L11 [2.3.10]	30	03-12-18	04-10-18
CNDL11G10020	Complete Work - Location 11 - Bridges over Rte 238 (Yorktown Rd)	0		04-10-18
Loc 11 WB: Bridge B-634 over Yorktown Rd		306	01-19-17	04-10-18
CNDL11W00350	Perform Substructure Repairs - Bridge B-634	20	01-19-17	02-28-17
CNDL11W03860	Install SOE Abutment A - Bridge B-634	3	02-23-17	02-28-17
CNDL11W03870	Install SOE Abutment B - Bridge B-634	3	03-01-17	03-06-17
CNDL11W03880	Demo (Partial) Existing Superstructure - Bridge B-634	12	03-07-17	03-29-17
CNDL11W00370	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-634	40	03-30-17	06-06-17
CNDL11W03890	Construct Abutment A - Bridge B-634	10	03-30-17	04-18-17
CNDL11W03900	Construct Pier 1 - Bridge B-634	15	03-30-17	04-25-17
CNDL11W03980	Construct Abutment B - Bridge B-634	10	04-19-17	05-03-17
CNDL11W03910	Construct Protection Barrier - Pier 1 - Bridge B-634	8	04-26-17	05-09-17
CNDL11W03920	Construct Pier 2 - Bridge B-634	15	04-26-17	05-18-17
CNDL11W04010	Install Concrete Slope Protection - Abutment A - Bridge B-634	8	05-04-17	05-16-17
CNDL11W04020	Install Concrete Slope Protection - Abutment B - Bridge B-634	8	05-04-17	05-16-17
CNDL11W03930	Construct Protection Barrier - Pier 2 - Bridge B-634	8	05-22-17	06-02-17
CNDL11W03940	Construct Pier 3 - Bridge B-634	15	05-22-17	06-13-17
CNDL11W03950	Construct Protection Barrier - Pier 3 - Bridge B-634	8	06-14-17	06-23-17
CNDL11W04030	Erect Beams - Bridge B-634	8	07-12-17	07-21-17
CNDL11W04040	Place Deck - Span a - Bridge B-634	7	07-24-17	08-01-17
CNDL11W04050	Place Deck - Span b - Bridge B-634	7	08-02-17	08-10-17
CNDL11W04060	Place Deck - Span c - Bridge B-634	7	08-11-17	08-21-17
CNDL11W04070	Place Deck - Span d - Bridge B-634	7	08-22-17	08-30-17
CNDL11W04090	Place Parapet - Bridge B-634	20	08-31-17	09-29-17
CNDL11W04100	Construct Approach Slabs - Bridge B-634	10	08-31-17	09-14-17
CNDL11W04110	Perform Deck Grooving on Widening - Bridge B-634	1	10-02-17	10-02-17
CNDL11W04130	Retrofit Existing Deck over Piers - Bridge B-634	15	12-14-17	01-18-18
CNDL11W00380	Reconstruct Existing Backwall - Bridge B-634	16	01-22-18	02-20-18
CNDL11W04140	Construct Deck Extensions - Bridge B-634	20	01-22-18	02-27-18
CNDL11W04150	Perform Deck Repairs - Bridge B-634	16	03-01-18	04-03-18
CNDL11W04160	Place Latex Overlay - Bridge B-634	4	04-04-18	04-09-18
CNDL11W04120	Perform Deck Grooving on Existing - Bridge B-634	1	04-10-18	04-10-18
Loc 11 EB: Bridge B-635 over Yorktown Road		306	01-19-17	04-10-18
CNDL11E00390	Perform Substructure Repairs - Bridge B-635	20	01-19-17	02-28-17
CNDL11E03960	Install SOE Abutment A - Bridge B-635	3	02-23-17	02-28-17
CNDL11E03970	Install SOE Abutment B - Bridge B-635	3	03-01-17	03-06-17
CNDL11E04080	Demo (Partial) Existing Superstructure - Bridge B-635	12	03-07-17	03-29-17
CNDL11E00410	Perform Bearing Replacement/Beam Repairs as Applicable - Bridge B-635	40	03-30-17	06-06-17
CNDL11E04170	Construct Abutment A - Bridge B-635	10	03-30-17	04-18-17
CNDL11E04180	Construct Pier 1 - Bridge B-635	15	03-30-17	04-25-17



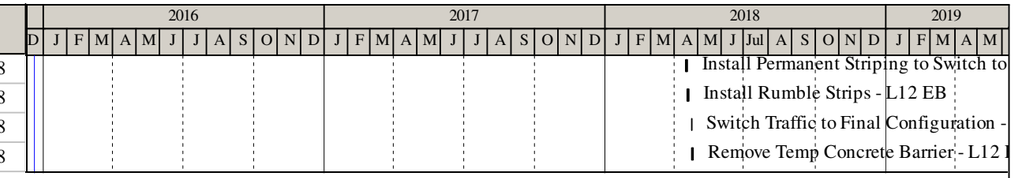
Activity ID	Activity Name	Original Duration	Start	Finish
CNDL11E04240	Construct Abutment B - Bridge B-635	10	04-19-17	05-03-17
CNDL11E04190	Construct Protection Barrier - Pier 1 - Bridge B-635	8	04-26-17	05-09-17
CNDL11E04200	Construct Pier 2 - Bridge B-635	15	04-26-17	05-18-17
CNDL11E04270	Install Concrete Slope Protection - Abutment A - Bridge B-635	8	05-04-17	05-16-17
CNDL11E04280	Install Concrete Slope Protection - Abutment B - Bridge B-635	8	05-04-17	05-16-17
CNDL11E04210	Construct Protection Barrier - Pier 2 - Bridge B-635	8	05-22-17	06-02-17
CNDL11E04220	Construct Pier 3 - Bridge B-635	15	05-22-17	06-13-17
CNDL11E04230	Construct Protection Barrier - Pier 3 - Bridge B-635	8	06-14-17	06-23-17
CNDL11E04290	Erect Beams - Bridge B-635	8	07-12-17	07-21-17
CNDL11E04300	Place Deck - Span a - Bridge B-635	7	07-24-17	08-01-17
CNDL11E04310	Place Deck - Span b - Bridge B-635	7	08-02-17	08-10-17
CNDL11E04320	Place Deck - Span c - Bridge B-635	7	08-11-17	08-21-17
CNDL11E04330	Place Deck - Span d - Bridge B-635	7	08-22-17	08-30-17
CNDL11E04340	Place Parapet - Bridge B-635	20	08-31-17	09-29-17
CNDL11E04350	Construct Approach Slabs - Bridge B-635	10	08-31-17	09-14-17
CNDL11E04360	Perform Deck Grooving on Widening - Bridge B-635	1	10-02-17	10-02-17
CNDL11E04380	Retrofit Existing Deck over Piers - Bridge B-635	15	12-14-17	01-18-18
CNDL11E00420	Reconstruct Existing Backwall - Bridge B-635	16	01-22-18	02-20-18
CNDL11E04390	Construct Deck Extensions - Bridge B-635	20	01-22-18	02-27-18
CNDL11E04400	Perform Deck Repairs - Bridge B-635	16	03-01-18	04-03-18
CNDL11E04410	Place Latex Overlay - Bridge B-635	4	04-04-18	04-09-18
CNDL11E04370	Perform Deck Grooving on Existing - Bridge B-635	1	04-10-18	04-10-18
Location 12: Roadway Sta X474 to X502		409	08-31-16	04-25-18
Loc 12 General/Median		375	10-19-16	04-25-18
CNDL12000010	Relocations Complete - Location 12 - Roadway Sta X474 to X502	0	10-19-16	
CNDL12G00020	Install ESC Measures - L12 Median	12	01-16-17	02-06-17
CNDL12G00010	Perform Clearing & Grubbing - L12 Median	6	01-30-17	02-06-17
CNDL12G00030	Strip Topsoil (Full Width) - L12 Median	5	02-07-17	02-15-17
CNDL12G00040	Install Drainage - L12 Median	19	02-16-17	03-27-17
CNDL12G00050	Install MB-7F - EB Sta. 1474+04 to 1501+24 - L12 Median	14	04-21-17	05-10-17
CNDL12G00060	Install MB-7F - WB Sta. 2501+58 to 2474+12 - L12 Median	14	05-11-17	05-31-17
CNDL12G00070	Backfill Barrier - L12 Median	15	06-01-17	06-21-17
CNDL12G00080	Install Landscaping - L12 Median	15	06-22-17	07-13-17
CNDL12000020	Complete Work - Location 12 - Roadway Sta X474 to X502	0		04-25-18
Loc 12 WB: Roadway Sta 2473+91 to 2502+16		408	08-31-16	04-24-18
CNDL12WG0010	Mill & Fill Shoulders - L12 WB	2	08-31-16	09-01-16
CNDL12WG0020	Place Surface Pavement on Shoulders - L12 WB	1	09-02-16	09-02-16
CNDL12WM0030	Demo Existing Inside Shoulder - L12 WB	1	02-16-17	02-16-17
CNDL12WM0040	Sawcut & Demo existing Concrete Pavement - L12 WB	2	02-20-17	02-21-17
CNDL12G10010	Perform Ground Improvements/Earthwork for Widening - L12 Median	20	02-21-17	03-30-17
CNDL12WM0050	Perform Full Depth Reclamation of existing Subbase Material - L12 WB Phase C1	1	02-23-17	02-23-17
CNDL12WM0020	Place Subbase Material (CTA) - L12 WB	12	04-21-17	05-10-17
CNDL12WM0240	Install Underdrain - L12 WB Phase C1	2	05-11-17	05-12-17
CNDL12WM0060	Place Drainage Material (OGDL) - L12 WB Phase C1	2	06-01-17	06-02-17
CNDL12WM0070	Place Base Material (CCPRM) - L12 WB Phase C1	5	06-22-17	06-28-17
CNDL12WM0080	Place Intermediate Material (SMA 19.0) - L12 WB Phase C1	2	06-29-17	06-30-17
CNDL12WG0030	Install ESC Measures Outside - L12 WB	6	12-14-17	01-02-18



Activity ID	Activity Name	Original Duration	Start	Finish
CNDL12WM0110	Demo existing Paved Shoulder - L12 WB	1	01-03-18	01-03-18
CNDL12WM0120	Demo existing Concrete Pavement - L12 WB	3	01-04-18	01-09-18
CNDL12WM0130	Perform Full Depth Reclamation of existing Subbase Material - L12 WB Phase C2	3	01-10-18	01-15-18
CNDL12WM0190	Construct Foundation Outside Overhead Cantilever Guide Sign Structure - L12WB - Sta. 2489+90	10	01-16-18	01-29-18
CNDL12WM0250	Install Underdrain - L12 WB Phase C2	2	01-16-18	01-17-18
CNDL12WM0140	Place Drainage Material (OGDL) - L12 WB Phase C2	2	01-18-18	01-22-18
CNDL12WM0200	Replace and Update Overhead Guide Sign Structure - L12WB - Sta. 2489+90	10	01-30-18	02-12-18
CNDL12WM0150	Place Base Material (CCPRM) - L12 WB Phase C2	5	03-19-18	03-23-18
CNDL12WM0210	Respread Topsoil & Seed outside slopes - L12 WB	6	03-26-18	04-03-18
CNDL12WM0160	Place Intermediate Material (SMA 19.0) - L12 WB Phase C2	2	03-26-18	03-27-18
CNDL12WM0180	Install GR-2 - Sta. 2503+42 to 2482+59 Outside - L12 WB Phase C2	5	03-28-18	04-04-18
CNDL12WM0170	Install GR-2 - Sta. 2482+50 to 2473+80 Outside - L12 WB Phase C2	2	04-05-18	04-06-18
CNDL12WG0040	Place Surface Material (SMA 12.5) - L12 WB	4	04-09-18	04-12-18
CNDL12WG0050	Install Permanent Striping to Switch to Final Configuration - L12 WB	1	04-16-18	04-16-18
CNDL12WG0060	Install Rumble Strips - L12 WB	2	04-17-18	04-18-18
CNDL12WG0070	Switch Traffic to Final Configuration - L12 WB	1	04-19-18	04-19-18
CNDL12WG0080	Remove Temp Concrete Barrier - L12 WB	2	04-23-18	04-24-18
Loc 12 EB: Roadway Sta 1474+25 to 1501+83		389	09-29-16	04-25-18
CNDL12EG0010	Mill & Fill Shoulders - L12 EB	2	09-29-16	09-30-16
CNDL12EG0020	Place Surface Pavement on Shoulders - L12 EB	1	10-03-16	10-03-16
CNDL12EG0110	Perform Clearing & Grubbing - BMP D6	2	01-04-17	01-05-17
CNDL12EG0120	Excavate Jack & Bore Pit - BMP D6	2	01-09-17	01-10-17
CNDL12EG0130	Install Jack & Bore Casing & Push Pipe - BMP D6	3	01-12-17	01-17-17
CNDL12EG0140	Excavate & Grade Basin - BMP D6	5	01-18-17	01-26-17
CNDL12EG0150	Install Outfall & Access Road - BMP D6	2	01-30-17	01-31-17
CNDL12EG0160	Install Topsoil & Seed - BMP D6	3	02-01-17	02-06-17
CNDL12EM0030	Demo Existing Inside Shoulder - L12 EB	1	02-16-17	02-16-17
CNDL12EM0040	Sawcut & Demo existing Concrete Pavement - L12 EB	2	02-20-17	02-21-17
CNDL12EM0050	Perform Full Depth Reclamation of existing Subbase Material - L12 EB Phase C1	1	02-23-17	02-23-17
CNDL12EM0020	Place Subbase Material (CTA) - L12 EB	12	03-31-17	04-20-17
CNDL12EM0260	Install Underdrain - L12 EB Phase C1	2	04-21-17	04-24-17
CNDL12EM0060	Place Drainage Material (OGDL) - L12 EB Phase C1	2	05-11-17	05-12-17
CNDL12EM0070	Place Base Material (CCPRM) - L12 EB Phase C1	5	10-18-17	10-25-17
CNDL12EM0080	Place Intermediate Material (SMA 19.0) - L12 EB Phase C1	2	10-26-17	10-30-17
CNDL12EG0030	Install ESC Measures Outside - L12 EB	6	12-14-17	01-02-18
CNDL12EM0110	Demo existing Paved Shoulder - L12 EB	1	01-03-18	01-03-18
CNDL12EM0120	Demo existing Concrete Pavement - L12 EB	3	01-04-18	01-09-18
CNDL12EM0130	Perform Full Depth Reclamation of existing Subbase Material - L12 EB Phase C2	3	01-10-18	01-15-18
CNDL12EM0270	Install Underdrain - L12 EB Phase C2	2	01-16-18	01-17-18
CNDL12EM0140	Place Drainage Material (OGDL) - L12 EB Phase C2	2	01-18-18	01-22-18
CNDL12EM0150	Place Base Material (CCPRM) - L12 EB Phase C2	5	03-19-18	03-23-18
CNDL12EG0180	Respread Topsoil & Seed outside slopes - L12 EB	6	03-26-18	04-03-18
CNDL12EM0160	Place Intermediate Material (SMA 19.0) - L12 EB Phase C2	2	03-26-18	03-27-18
CNDL12EM0170	Place GR-2 - Sta. 1474+37 to 1481+10 Outside - L12 EB Phase C2	2	03-28-18	03-29-18
CNDL12EM0180	Place GR-2 - Sta. 1481+52 to 1508+52 Outside - L12 EB Phase C2	6	03-30-18	04-09-18
CNDL12EG0170	Clean out Basin & Convert Structure to Perm Config - BMP D6	5	04-04-18	04-10-18
CNDL12EG0040	Place Surface Material (SMA 12.5) - L12 EB	4	04-10-18	04-16-18



Activity ID	Activity Name	Original Duration	Start	Finish
CNDL12EG0050	Install Permanent Striping to Switch to Final Configuration - L12 EB	1	04-17-18	04-17-18
CNDL12EG0060	Install Rumble Strips - L12 EB	2	04-18-18	04-19-18
CNDL12EG0070	Switch Traffic to Final Configuration - L12 EB	1	04-23-18	04-23-18
CNDL12EG0080	Remove Temp Concrete Barrier - L12 EB	2	04-24-18	04-25-18



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