



Phase 2 Pre-60% Design Submittal Narrative

ODOT | K21401 I-205 Improvements: Stafford Road to
OR 213, Phase 2

ODOTE A: PE003013
HDR Project # 10063137

November 30, 2020

This narrative should be referenced by all Agency reviewers prior to review of plans and other supporting documents. This is intended as a contextual tool for reviewers to provide an overview, per discipline, of Phase 2 design progress since FDAP and the current design status.

Please note: This pre-60% submittal does not represent a complete preliminary design package and should be reviewed accordingly.



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Acronyms

ATM	Active Traffic Management
CIA	Contributing impervious area
CRCP	Continuously reinforced concrete pavement
DEQ	Department of Environmental Quality
DSL	Department of State Lands
FAHP	Federal-Aid Highway Program
FDAP	Final Design Acceptance Package
FHWA	Federal Highway Administration
HCA	Habitat Conservation Area
NB	Northbound
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NTR	Noise Technical Report
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
OSMP	Oregon State Marine Patrol
Project	I-205: I-5 – OR 213
PS&E	Plans, Specifications, & Estimates
ROW	Right-of-Way
SB	Southbound
SHPO	State Historic Preservation Office
USACE	US Army Corps of Engineers
USCG	US Coast Guard
WES	Water Environmental Services



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- NB Main Street Bridge Widening
- Broadway Street Overcrossing Bridge Removal
- West A and Sunset Overcrossing Bridge Replacements
- I-205 NB Rock Blasting Operations (West A to Sunset)
- OR99E Ramp Reconfigurations (All Ramps)
- OR43 Interchange Ramp Reconfiguration and Roundabout installation
- Removal of redundant OR43 NB entrance ramp
- Active traffic management (ATM) improvements at MP 8.25/8.29 SB and NB at Sunset
- Constructing eleven new sign structures (Sign Bridge and Cantilever)
- Installation of new high mast lighting from OR213 to 10th Street

The design and construction of this phase is/will be budgeted under Key# 19786. The Construction Phase is not currently funded, but the current key design work milestones are listed below.

- 60% Plans Submittal – August 3, 2020
- 90% Plans and Specifications Submittal – March 15, 2021
- 98% Plans and Specifications Submittal – August 2, 2021
- 100% Plans Specifications Submittal – October 5, 2021
- Bid Date – December 30, 2021

I-205: I-5 – OR213, Phase 2

Phase 2 begins at the I-205 10th Street Interchange and extends to the I-205 Stafford Road Interchange. From I-205 6.59 to MP 2.73, this phase consists of:

- Adding a third NB and SB Lane to I-205
- Replacing mainline bridge pairs at Borland Road, Tualatin River, and Woodbine Road
- Retrofitting, widening, and raising mainline bridge pairs at Blankenship Road and 10th Street
- Constructing Sound Walls A and B
- Adding ATM improvements at MP 4.1 NB at Johnson
- Constructing six sign structures (Sign Bridge and Cantilever)
- Adding ramp lighting at the I-205 Stafford Road Interchange

The design of this phase is budgeted under Key# 19786 and the construction will be budgeted under Key# 21401. The Construction Phase is not yet funded and further design effort has been halted until further notice by the Agency.



2 Project Management

As noted earlier, the design phase of this project is funded under Key# 19786. Construction funding has yet to be identified for either phase at this time. Phase 1 design efforts will continue in anticipation that construction funding will be secured in 2021. However, Phase 2 design efforts are being halted on November 30, 2020, prior to fully reaching the 60% level of completeness. All Phase 2 efforts, including project management, survey, environmental, public involvement, and utility coordination and design are on hold until further notice.

All Phase 2 plan sheets prepared thus far have been compiled and are being submitted to the Agency at this time for future reference. Many plan sheets that would typically be included in a 60% submittal are not included due to the halt in production. For a detailed sheet list of what is and is not included in this submittal, see Appendix A.

The entire construction cost estimate has been updated with the latest estimated construction quantities and current unit costs based on the latest average bid prices (See Section 15 for details). Inflation has not been included in these numbers and should be factored in when seeking construction funding in the future.

3 Survey

3.1 Survey Control

Control for this Project was established using a fast-static network and digital level loops. Control was incorporated into the record of survey and has been recorded with the Clackamas County Surveyor's Office as SN2019-040. Future work consists of signing the survey control plan sheets, which are completed and awaiting signature.

3.2 Survey Retracement

Centerline and right-of-way (ROW) surveys were completed and recorded as SN2019-040 with the Clackamas County Surveyor's office. No additional work is anticipated.

3.3 Topographic Survey

Topographic surveys were performed using conventional surveying methods for the limits identified in the statement of work for the non-paved surfaces. For the paved surfaces, constrained point clouds provided by ODOT Geometronics were used to extract the line work. Oregon One-Call was used to determine the locations of underground utilities. This task is considered complete.

3.4 ROW Engineering

There are no additional ROW needs for this phase of the project. No additional action is required.



3.5 Future Items to Address

Items not included with this Phase 2 60% submittal that will be addressed in the future include:

- There is a possibility that additional survey data will be needed in support of future design efforts and will be addressed at that time.
- The topographical survey along I-205, between OR43 and Stafford Road only includes ODOT Fiber handholes along the SB shoulders. Fiber conduit line is shown in small patches but is missing for most part due to a lack of field locates. Additional survey is likely needed to confirm the exact location of existing conduit.
- Phase 3 ATM improvements were constructed within the project limits during the summer and fall of 2020. These new improvements, including utility connections to new ATM facilities, should be surveyed prior to final design completion.

4 Environmental Services

4.1 Environmental Permit Summary

National Environmental Policy Act (NEPA) clearance has been obtained for the entire Project. Deviations in design from FDAP to the 60% package are generally consistent with the findings of the NEPA clearance. The following permits and approvals have been obtained for Phase 2:

- National Marine Fisheries Service (NMFS) approval of Federal-Aid Highway Program (FAHP)
- Archaeological and Historic Section 106 approval

The following permits and approvals have yet to be obtained:

- US Army Corps of Engineers (USACE) Section 404 Permit/Department of State Lands (DSL) Fill/removal Permit – Impacts to jurisdictional wetlands and the Tualatin River will necessitate permits from both USACE and DSL. Coordination with these agencies occurred during early project development.
- Department of Environmental Quality (DEQ) 401 Water Quality Certification – The 401 Water Quality Certification will be required to certify the USACE permit. An updated Post-Construction Stormwater Management Plan will be required to obtain this permit.
- Oregon Department of Fish and Wildlife (ODFW) Fish Passage Plan approval – Bridge elements proposed to be placed within the bankful elevation of the Tualatin River will trigger the need for ODFW approval of a Fish Passage Plan.
- NMFS approval of FAHP – NMFS approved Phase 1 and Phase 2 of the project. Design modifications to the Tualatin River Bridges resulted in a reduction of piers below the OHW of the Tualatin River. Additional evaluation is required to determine if the Project Notification Form should be updated or if the change should be captured in the As-Constructed Bridge Supplement form.



- City of West Linn Land Use Approval – A Pre-Application Conference was held in July 2020. The Pre-Application will expire in December 2020. The project will be required to complete another Pre-Application Conference prior to submittal of the Land Use Application.
- Clackamas County Water Environmental Services (WES) – The project will impact Habitat Conversation Areas and Sensitive Area Buffers. Impacts to these features will require authorization from WES.

4.2 Aesthetics/Visual

Opportunities to develop corridor character within Phase 2 have been defined within the “Corridor Character Evaluation and Guidelines” document developed by the design team; however, elements contained within the “Corridor Character Evaluation and Guidelines” have not been fully vetted or implemented into the 60% plans thus far. The Project should consider these guidelines and strive to implement them into future design work as directed by ODOT.

4.3 Wetlands

Wetlands are located within the Phase 2 project limits and will be impacted by the Project. As indicated in the Environmental Permit Summary, permits need to be secured to account for wetland impacts and an updated Post-Construction Stormwater Management Plan will need to be submitted to account for treatment of the contributing impervious area (CIA) of the Project.

4.4 Noise

The “Noise Technical Report” (NTR) found Noise Walls 2 and 4 (included in the plans as Noise Wall A and B, respectively) met the Federal Highway Administration’s (FHWA) reasonable and feasible criteria for noise mitigation within Phase 2. The Project team completed voting among those receptors that would benefit from the construction of Noise Walls 2 and 4 and found that more than half of the participants voted in favor of both walls. These walls have therefore been included in the 60% Plan Set.

Should the year of opening be modified when the project development commences, the NTR should be revisited with the new proposed traffic volumes to validate the findings of the NTR.

4.5 Endangered Species

The Tualatin River contains Endangered Species Act federally listed Upper Willamette River Chinook and Steelhead and Lower Columbia River Chinook, Coho, and Steelhead species. The Project obtained FAHP approval from NMFS on October 30, 2018 for the entire Project. Modifications to the in-water piers of the Tualatin River included in the Phase 2 60% design submittal will likely require the FAHP Notification to be updated. While the stormwater treatment locations within Phase 2 have been modified since FDAP, the amount and extent of treatment from stormwater runoff from the CIA has not been modified. ODOT will need to consider if this Project design modification should be handled through a Post-Construction notification or become part of the modified FAHP Notification update.



4.6 In-Water Work

In the Tualatin River, in-water work is only permitted from July 1 through September 30. All in-water work is proposed to occur during this period.

4.7 Archaeological and Historic

Subsurface archaeological investigations have been completed and the State Historic Preservation Office (SHPO) has concurred with the Section 106 finding of “No-Adverse Effect” for archaeological resources.

There are no buildings determined to be eligible for listing on the National Register of Historic Places. SHPO has concurred the Project will have “No-Adverse Effect on Historic Properties.”

The Project remains consistent with the Section 106 findings.

4.8 River Navigation

The Project is required to maintain safe passage for recreational boat traffic in the Tualatin River. The Project will maintain horizontal and vertical clear zones within the navigation channel to facilitate the passage requirements of Oregon State Marine Patrol (OSMP). Additional coordination with OSMP will be required to review the permanent and temporary configurations to obtain approval and determine if measures to mitigate impacts to boater safety will be required once the construction approach and construction timing is solidified.

4.9 Local Land Use

A public Pre-application Conference with the City of West Linn Planning Department was held on June 20, 2019. The City indicated that the Project will need to demonstrate code compliance as it relates to the designated Habitat Conservation Areas, Water Resource Areas, and floodplain management areas. The Project has not applied for a land use decision for the proposed actions within West Linn.

During early coordination with Clackamas County it was noted the project would be required to comply with WES Habitat Conversation Areas and Sensitive Area Buffers protections. The Project will impact both of these features and will require authorization from WES. The Project has not applied for a land use decision for the proposed actions within Clackamas County.

4.10 Environmental Justice

The Environmental Justice Technical Memorandum did not note any block groups within Phase 2 that contains a minority population that is meaningfully greater than the reference population. The Project is not anticipated to disproportionately adversely affect environmental justice communities. The finding of no disproportionate and adverse effect remain valid.



4.11 4(f) and 6(f) Resources

There are no 4(f) or 6(f) protected resources that would be impacted by this phase of the project. No additional action is required.

4.12 Future Actions

Items not included with this Phase 2 60% submittal that will need to be addressed in the future include:

- Permits and Land Use Approvals to be obtained:
 - City of West Linn Land Use Approval – The land use application is required to demonstrate code compliance as it relates to the designated Habitat Conservation Areas, Water Resource Areas, and floodplain management areas.
 - Water Environmental Services – The land use application is required to demonstrate code compliance as it relates to the designated Habitat Conservation Areas and Sensitive Resource Area Buffers.
 - USACE 401 and DSL Removal/Fill – A Joint Permit Application will be required to obtain permits for impacts to wetlands and the Tualatin River.
 - DEQ 401 Water Quality Certification – Post Construction Water Quality Report will be required to obtain 401 Certification from DEQ.
 - Fish Passage Plan Approval – A fish passage plan application will need to be submitted to ODFW for approval to verify the proposed Tualatin River Bridge will meet state requirements.
- Corridor character: Elements contained with Nodes 1, 2, and 3 of the “Corridor Character Evaluation and Guidelines” have not been fully vetted or implemented into the 60% plans.
- FAHP Notification Update: Modifications to the in-water piers of the Tualatin River Bridge may require an update to the FAHP Notification. ODOT will need to determine whether to seek FAHP Notification update or Post-Construction notification for proposed pier modifications.
- River Navigation: The Project team recommends ODOT continue coordination with the State Marine Board to establish what boater safety elements should be added to the Project.

5 Public Involvement

5.1 Stakeholder Engagement and Communications

Stakeholder engagement has focused on three main areas since August 2018 for Phase 2:

- Sound walls
- RealTime sign construction



5.2 Sound Wall Outreach

From February to April 2019, the Project team completed outreach to inform benefitted residents and property owners of the opportunity to vote for or against four proposed sound walls in West Linn. The initial voting period took place from February 23 to March 23, 2019 for sound walls A, B, C, and D. Because walls C and D did not reach at least 50 percent participation by March 23, a second opportunity to vote was initiated for those two walls, from April 1 to April 19. Walls A and B passed with over 50 percent of the vote, and Walls C and D did not pass. The following activities aimed to encourage voter participation: voting packets, door hangers, postcards, emails, three in-person information meetings, and a detailed webpage on the project website that included visual simulations with and without the walls.

5.3 RealTime Sign Construction Outreach

From late fall 2019 to summer 2020, ODOT installed RealTime Information signs on I-205 between I-5 and OR212 as part of the I-205 Widening and Seismic Improvements Project. The goal of the outreach before and during construction was to proactively communicate with the public regarding the purpose and benefits of RealTime information signs and construction impacts around nighttime closures of I-205. The project team conducted briefings to neighborhood associations and business groups in summer 2019 to let them know the work was coming. At most briefings, questions about the possible tolling of I-205 to fund the project were raised, and general opposition to tolling of I-205 was communicated.

Work required nighttime closures of I-205 at five locations that included one full closure of I-205 and four directional closures. A newsletter was mailed to the project area and the stakeholder database in mid-December to provide information about upcoming construction and guide them to the website for more information. The newsletter included the nighttime noise hotline number. Regular project website updates alerted the public to closure information. Regular email notifications were sent prior to each nighttime closure and included detailed detour maps and directions. Information was also included in City of West Linn and City of Oregon City newsletters, and included on ODOT social media accounts.

5.4 Miscellaneous

- A “Corridor Character Evaluation and Guidelines” memo was developed by the team (NNA Landscape Architecture) that includes guidelines that will influence and guide decisions about required project elements while remaining within the current project budget. ODOT will lead outreach with local jurisdictions around opportunities included in the memo moving forward.

6 Utilities

Since FDAP submittal, the Stormwater design and placement of treatment facilities have been changed and updated, and sound walls have been added to the project.



6.1 Future Items to Address

Items not included with this Phase 2 60% submittal that will need to be addressed in the future include:

- ODOT utilities installed with the Regional Active Traffic Management portion of the Project that has been constructed will need to be updated in the basemap to show as existing infrastructure.
- Updated utility notices, conflict maps, and conflict lists will need to be finalized and sent to the utilities when the project restarts. A complete re-analysis needs to be completed with regards to potential conflicts with the changes to stormwater design, the addition of sound walls, and an analysis of the temporary construction stage impacts on utilities.
- Proposed utility relocation locations have not been assessed, and will still need to be addressed, once received from the utilities.

Information or decisions needed from others include:

- Relocation plans have not been received from the utilities. Most utilities were waiting for the 60% design plans and allocation of construction funding prior to designing their relocations.
- Clarification will be needed regarding the recent installation of the ODOT ITS network, and if it will be handled as a utility, or any impacts handled as part of the design.
- Near the edge of the ROW, most of the utility locations shown are from as-built information and have not been surveyed. With the inclusion of the sound walls in the project, this becomes a more critical area for needing positive location information provided by the utilities, and surveyed and added to the basemap.

7 Geotechnical

7.1 Bridge Replacement and Retrofit

Preliminary geotechnical investigations were performed for the bridges crossing 10th Street, Blankenship Road, Woodbine Road, Tualatin River, and Borland Road. Each location includes two bridges, servicing either the NB or SB travel lanes of I-205. The investigations included an initial phase of subsurface explorations and preliminary geotechnical design recommendations to support structural design and evaluate seismic retrofit and widening or replacement options. Based on the preliminary assessment and cost evaluation, seismic retrofit and widening was selected as the best approach for the bridges crossing 10th Street and Blankenship Road. Bridge replacement was selected as the best option for the structures crossing Woodbine Road, Tualatin River, and Borland Road. Draft geotechnical reports were then developed for each of the five locations to support the Phase 2 60% design submittal. The draft reports were submitted to ODOT on September 24, 2020.



To support bridge widenings at 10th Street and Blankenship Road, driven piles and drilled shaft foundations were evaluated. Driven piles were ultimately selected to support the widened abutments in consultation with the structural designers.

The new bridges crossing Woodbine Road will consist of single-span structures supported on driven pile foundations. A potential liquefaction risk was identified based on the initial explorations. However, additional explorations, laboratory testing, and subsequent analysis completed during the AMD6 phase suggests low risk of liquefaction and associated slope instability.

The new bridges crossing the Tualatin River will be 5-span structures. The abutments may be supported on driven piles or drilled shaft foundations. The interior bents will be supported on large-diameter drilled shafts to help mitigate potential liquefaction risks associated with design-level seismic hazards.

The new bridges crossing Borland Road will consist of single-span structures supported on drilled shaft foundations. Wrap-around MSE walls are also planned at the abutments to accommodate the new bridge length and site grading.

7.2 Sound Walls

Two new sound walls (SW1 and SW2) will be located along the outside shoulder of I-205 SB, with SW1 extending 1,479 feet between 10th Street and Blankenship Road and SW2 extending 2,053 feet northwest of the I-205 crossing at Blankenship Road. A geotechnical investigation was completed for the walls, and the results are provided in a draft report included with the Phase 2 60% design submittal.

The geotechnical explorations identified foundation soils that may be characterized within the range of either "Good" or "Average" soil based on ODOT Standard Drawing BR740. Therefore, it was determined that drilled shaft foundations used to support the walls may be sized based on BR740.

7.3 Traffic Structures

Seven new traffic sign structures are planned within the Phase 2 segment of the Project. Geotechnical explorations were completed at or adjacent to each of the proposed structure locations to document the foundation soils. A draft geotechnical report was prepared that includes a summary of the foundation conditions and design recommendation for the Phase 1 and Phase 2 sign structures. The report was included with the Phase 1 60% design submittal.

The geotechnical explorations encountered both soil and basaltic bedrock, depending on location. The potential for hard rock excavation was addressed in the draft report.



7.4 Future Items to Address

Items not included with this Phase 2 60% submittal that will be addressed in the future include:

- All draft geotechnical reports will be finalized based on ODOT review comments.
- Review will be provided for the final plans and geotechnical related special provisions including drilled shaft and driven piles for bridges, sound wall shaft foundations, and MSE walls.
- Several additional foundation data sheets need to be drafted and added to the plan set once design and drafting activities restart.

8 Striping

Between the FDAP submittal in September 2018 and this preliminary plans submittal the project limits have been adjusted from 10th Street to Stafford Road.

8.1 Future Items to Address

Items not included with this Phase 2 60% submittal that will be addressed in the future include:

- Additional details will be added to the striping plans including callouts for legends, delineators, etc.
- Between 60 and 90 percent, the design team will seek confirmation on the type of striping, if blackout striping will be required on the CRCP sections, and if the ACP and CRCP sections will have the same or different striping types.

9 Hydraulics and Stormwater

9.1 Hydraulics

The design of the Tualatin River Bridges substructures has been revised since FDAP. The sizes and locations of the proposed piers have been revised due to the switch from precast concrete girders to steel girders. Hydraulic models for the floodplain analysis and the scour analysis have been revised to model the latest bridge geometries. The Project still results in a no-rise condition. The modeled maximum scour depths have increased from 13 feet to 32 feet. This increase is attributed to the increased diameters of the pier footings and the new assumption that the two columns that make up each pier are not aligned with the flow of the river, but instead skewed at an angle of 20 degrees.



9.1.1 Future Items to Address

Items not included with this Phase 2 60% submittal that will be addressed in the future include:

- Depending on when the Project resumes, a new effective Federal Emergency Management Agency (FEMA) floodplain may be in effect and the model may need to be revised.
- Modeled pier scour depths need to be incorporated into the bridge stability modeling to verify that scour counter measures are not required.
- Any additional revisions to the bridge substructure may require revisions to the hydraulic models.

9.2 Stormwater

The stormwater design for Phase 2 extends from 10th street to the Stafford Road interchange. It includes design of conveyance, water quality, and detention facilities for the Project improvements. The facilities are located within two local jurisdictions, the City of West Linn and Clackamas WES Surface Water Management Agency of Clackamas County. There are 59.55 acres of CIA within Phase 2. All CIA is treated within the project limits.

9.2.1 West Linn

Eight of the treatment facilities are located within the City of West Linn's jurisdiction. All of these facilities are designed to provide water quality treatment and detention. Facilities are designed to meet City and ODOT requirements.

Bioretention facility #150 is not large enough to provide water quality and detention for all storm events due to constraints of the I-205 embankment and off ramp location. As a result, the facility is designed to provide detention up through the water quality storm and over management for larger storms is provided in bioretention facility #151. Both facilities outfall to the same storm sewer system within 10th Street.

9.2.2 WES

Fourteen of the treatment facilities are located in WES' jurisdiction. All facilities except the four that outfall directly to the Tualatin River provide both water quality treatment and detention. Facilities are designed to meet WES and ODOT requirements. WES is in the process of updating the July 2013 stormwater requirements, as such new regulations may be in place when this phase of the project resumes.

9.2.3 Future Items to Address

Items included with this Phase 2 60% submittal that require refinement prior to the 90% submittal include:

- Storm sewer layout and design will be further developed and refined.



- Maintenance access to stormwater facilities is shown for some facilities. These locations need to be refined and coordinated with the roadway design and vetted with ODOT.
- Outfall structure details need to be developed and updated to match the hydraulic modelling done for each facility.
- Facility #183 and #221 do not meet WES' 2-year detention requirements; the facilities will need to be refined to address this issue.
- ODOT freeboard requirements are not currently met for #152, 183, 222, and 183. Facilities #152, 222, and 232 will need to have the grading further developed to address freeboard requirements. Existing facility #183 will need to be redesigned/regraded to meet current freeboard requirements.
- Stormwater facility side-slopes are steeper than allowable in a few locations; facility grading will need to be revised or a design exception will be required.
- Plan revisions are necessary to more accurately reflect the facility hydraulic modelling and updated storm sewer design.

Items not included with this Phase 2 60% submittal that need to be addressed prior to the 90% submittal include:

- There are a few locations where construction of the facilities will remove a significant number of trees; the impact of this work needs to be vetted with ODOT staff.
- The facilities currently do not meet the infiltration capacity requirements for WES.
- Several facilities are in close proximity to steep slopes; mitigation measures need to be considered and coordinated with ODOT.
- Temporary drainage designs for temporary traffic control cross-overs need to be added. A conceptual evaluation of the design need indicates that culverts in the median at the cross-overs should be adequate.

10 Highway Design

10.1 Overview

Between the FDAP submittal in September 2018 and this Phase 2 60% design submittal, the northern Project limits have been adjusted from OR43 to the new Project limits at the 10th Street Interchange. Phase 2 will pick up at the 10th Street bridge structures and continue west to the Project limits near the Stafford Road Interchange. The bridge retrofits will remain as part of Phase 2. The two interchange ramps on the east side of the interchange have been removed from this package and added to Phase 1.

The pavement design was finalized in April 2019 by ODOT pavements. The sections represented in the Phase 2 60% design submittal have been updated to reflect that final pavement design memo.



Interchange and mainline geometry has been finalized for the Stafford Road interchange, 10th Street interchange, and NB and SB mainline from the Project limits to the tie in with Phase 1. The mainline alignments and profiles follow existing as much as possible. Near the Tualatin River, the NB alignment and profile shift off the existing roadway and into the median to better facilitate staging for the new bridges. The ramp geometry at the interchanges follow existing as much as possible with slight adjustments to the alignments to correct deficiencies and eliminate design exceptions. Variable paving and minor widening will be required at some of the ramps to meet standards.

Existing guardrail will be replaced, and new guardrail will be added in locations where it does not currently exist to protect from drop offs, fixed objects, and drainage features. Guardrail is also being used near the median forest east of the Tualatin River. Using guardrail near these trees will allow for steeper slopes to be used within clearzone thereby reducing required tree removals. There are two locations where existing shoulder barrier is currently being used to retain slopes. The Project will overlay the existing pavement in these locations and then install new barrier in a similar configuration.

No retaining walls will be required as part of the Phase 2 work.

10.1.1 Future Items to Address

Items to be addressed prior to the Phase 2 90% submittal include:

- The topo will need to be updated to include the sign bridge and cantilever sign structures installed as part of the Phase 3 project. Minor pavement widening and new guardrail runs were installed as part of Phase 3 and were designed to be compatible with Phase 2. Those widenings and new guardrail should be surveyed and added to the Phase 2 survey basemap.
- Similar to the Phase 3 work, the Phase 1 widening east of 10th Street should be surveyed and added to the Phase 2 survey basemap should that project be funded and completed before Phase 2. The Phase 2 topo has been updated based on the Phase 1 design files; however, the topo should be updated again with real world data should that project be constructed. This will be necessary to refine the profile at this match location to account for as built grades and not design grades.
- The roadway overlay including a variable depth leveling course has been modeled and is accounted for in the quantities. There are several locations where the proposed superelevation and the existing cross slope vary slightly. While the profile was set to overlay a min of 9 inches, there are some locations where the superelevation needs to be slightly adjusted, as the overlay depth may go below 9 inches and in excess of 14 inches at the shoulders based on the difference in superelevation. These adjustments to the superelevation should be made before advance plans as the electronic surfaces will likely be used during construction for machine control grading.
- Details need to be added at the connections between the interchange ramps and the mainline. At several locations the ramp cross slopes break at the edge of the mainline and require variable overlay. The grades at these ramp/mainline match locations need to be created.



- Contaminated soil disposal locations are not currently shown in the plans. Depending on whether Phase 1 is constructed before or concurrently with Phase 2, the volume of contaminated soil and possible disposal locations may vary. Once the project phasing is determined, the contaminated soil disposal locations need to be confirmed and shown and the details for the stockpiles need to be created.
- Impacts to local streets under the bridge structures have not yet been determined. There may be damage to the existing roadways and repairs may be needed. These local agencies should be contacted to verify that proposed bridge structures and associated roadway openings are adequate for future needs. It is currently assumed none of these roads will require widening or the addition of sidewalks.
- The profile closely matches existing in most locations; however, there are areas with up to 6 inches of additional overlay required to smooth out bumps in the vertical curves and near bridges where approaches have settled. Further discussion with ODOT pavement is required to confirm use of a leveling course under the CRCP which is what has been assumed for the 60% deliverable.
- Specifications will need to be updated to the latest version once the project resumes.

10.2 Traffic Control

The traffic control plans have been updated for the new project match location with Phase 1; however, design on traffic control plans have not been developed further and they are therefore not included in the preliminary plans.

10.2.1 Future Items to Address

Items to be addressed prior to the Phase 2 90% submittal include:

- Staging for work on entrance and exit ramps needs to be detailed out. The team has been directed to keep the ramps open at all times during the construction of the concrete overlays. Plans will be updated to reflect stage construction of the ramps.
- ODOT is considering changing the slide distance for concrete barrier which will have an impact on the current widths for temporary traffic control if implemented. If this requirement takes effect, the design may need to consider temporarily over-widening.
- The crossover on the east end of the project was included in Phase 1 but will now be included with Phase 2. This crossover has not been added to the traffic control plans for Phase 2, but is expected to be similar to what was shown in Phase 1.
- Current models for temporary ramps and crossovers will be refined to account for staging of the ramps.
- Staged erosion control plans will likely be required to account for the major stages rather than showing erosion control for just the final configuration. Similarly, temporary water management plans may need to be created.



- Traffic control plans will be developed for roadways that run under the I-205 bridge structures. Shoulder and/or lane closures will likely be required for widening and replacement of the bridges.
- It is assumed pedestrian access to the freeway will be restricted at the entrance/exit ramps and detours will be used due to the narrow width of existing structures. The design team will confirm this assumption with ODOT and develop the TPARs accordingly for the project.

11 Bridges/Structures

The design status of each set of bridges is discussed in the following sub-sections. The discussion summarizes the current progress in design and future items to address for the design and checking of the respective bridges.

Broadly, the following list of items should be completed for each bridge when the project design continues:

- Address unresolved senior review comments from the fall 2020 Preliminary Plans design submittal
- Designer and checker independently compare each set of SB and NB Bridge plans for the appropriate level of consistency
- Designer and checker independently calculate or confirm elevations and roadway alignments
- Review calculations for completeness, update as necessary, and assemble calculation books
- Complete project specifications according to APWA 2021 Standard Specifications, or whatever version is in effect when design starts again
- Designer and checker independently update quantities, unit prices, and bid items according to the project specifications

11.1 10th Street Bridges

The design status of the NB and SB 10th Street Bridges is discussed in the following sub-sections. The design strategy was to focus first on the NB bridges, then shift priorities to the SB structure. Therefore, the NB Bridge is more developed and further along the design process. Many design and details will be similar between the two structures and so the SB Bridge is currently relying on NB design for its plan set development.

11.1.1 I-205NB over 10th Street Bridge #09728

Generally, the NB superstructure design is complete. The substructure members have not been designed, but preliminary calculations and reinforcing schemes have been developed. The wing walls are placed farther outside to accommodate phased construction, making space for the temporary barrier and 1-foot beyond. Final Roadway clearances will need to be re-checked



as the current vertical clearance of 10th street under I-205 does not meet design standards. Preliminary calculations show that even with raising the bridge, the preferred vertical clearance standard will not be met.

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design:

- Address vertical clearance
- Substructure design
- End panel
- Seismic design

Checking:

- Deck reinforcing
- End panel
- Substructure design
- Seismic design

11.1.2 I-205SB over 10th Street Bridge #09728A

The SB Bridge is longer than the NB Bridge and preliminary analysis showed the reinforcing/post-tensioning from SB will need to be increased. The primary solution is to deepen the section as post-tensioning limits are practically maxed out (design deviation). The wing walls do not need to be pushed for construction consideration and will be similarly reinforced to the NB wings. The final bearing assemblies will be similar to the NB bearings, but do not need the intermediate conditions. Substructure designs will be very similar as well. Seismically, the same passive pressures will be necessary (design deviation). The vertical clearance issues with the NB structure will be a concern with the SB structure as well.

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design

- Address vertical clearance
- Superstructure design
- Substructure design
- Seismic design



Checking

- Superstructure design
- Substructure design
- Seismic design

11.2 Blankenship Bridges

The design status of the NB and SB Blankenship Bridges is discussed in the following sub-sections. The NB Bridge is more developed and further along the design process. The SB Bridge is currently relying on NB design for its plan set development.

11.2.1 I-205NB over Blankenship Bridge #09734

Generally, the design is complete. The wing walls are placed farther outside to accommodate phased construction, making space for the temporary barrier and 1-foot beyond.

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design

- Strut-and-tie model for end beam jacking operations

Checking

- End bent strut-and-tie model
- Seismic pile demands
- Seismic connection (shear keys, bearing assemblies, shear lugs)
- End panel

11.2.2 I-205SB over Blankenship Bridge #09734A

Generally, the design is near exact to the NB Bridge. The superstructure is essentially the same and it is expected the same reinforcing/post-tensioning schemes will work for this bridge (design deviations required). The wing walls do not need to be pushed for construction consideration, but the reinforcing scheme will be near identical. The bearing assemblies will be similar, but will not need the intermediate conditions. Substructure designs will be very similar as well. Seismically, the same passive pressures will be necessary (design deviation).

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design

- Superstructure design



- Substructure design
- Seismic design

Checking

- Superstructure design
- Substructure design
- Seismic design

11.3 Woodbine Bridges

The design status of the NB and SB Woodbine Bridges is discussed in the following sub-sections. The design for both bridges is mostly complete.

11.3.1 Woodbine Road NB Bridge #23865

NB is designed except for the bridge jacking loads. The plan detailing is mostly complete but will require modifications for the next submittal. The following bullet points are items that should be addressed for the next submittal.

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design

- Update the quantities, estimates, and specifications for the sleeper slab, steel reinforcement and concrete volume
- Revise jacking loads
- Investigate adding another sheet to show reinforcement during stage construction
- Confirm materials to be used as compressible on top of shear blocks
- Refine the jacking assembly detail on Sheet JH05
- Partial Elevation on Sheet JH11 to show reinforcing steel connections during stage construction, defining the jacking location (centerline of bents), increasing scale of elevation views
- Modify bridge end panels with the added joint between wingwalls and edge of deck

Checking

- Review jacking loads and details
- Review the other items listed above that are still in process



11.3.2 Woodbine Road SB Bridge #23866

The SB Bridge is designed except for the items noted in the introduction to this section.

11.4 Tualatin River Bridges

The design status of the NB and SB Tualatin River Bridges is discussed in the following subsections. The NB Bridge is more developed and further along the design process. The SB Bridge superstructure design is mostly complete, but the substructure design has not been started.

11.4.1 I-205NB over Tualatin River Bridge #23867

Generally, the superstructure design is complete, with most of the main elements checked. Sheet development does not reflect everything that's been designed.

The substructure and seismic design were started, but several items have not been checked. The bridge is SDC B and SDC C for CSZE and 1000-year respectively. Only SDC D requires a pushover; this bridge passes the displacement capacity check per Guide Spec 4.8.1, modified by ODOT BDM 1.17.3.1. Because foundation flexibility does not need to be included in the displacement demand, foundation springs were not iterated and fixed supports were used at the bottom of column. This should be refined for final design.

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design

- Add USCG navigational requirements to the plans and/or project specifications
- Bearings and expansion joints
- Bent crossframes
- Camber
- Complete seismic model
- Crossbeam design
- End bent cap and shafts
- Wingwall

Checking

- Girder splices
- Bearings and expansion joints
- Interior and bent crossframes
- Camber
- Independent seismic model



- Crossbeam design
- Column and drilled shaft design
- End bent cap and shafts
- Wingwall

11.4.2 Hwy 64 SB over Tualatin River Bridge #23868

SB design is well underway, but it is not as progressed as the NB Bridge. The superstructure design is mostly complete, including steel girder and deck design. The steel girder design has been checked. Steel crossframe design has been started, but not completed. Substructure and foundation design has not been started.

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design

- Add USCG navigational requirements to the plans and/or project specifications
- Interior and bent crossframes
- Bolted splices
- Bearings and expansion joints
- Camber
- Seismic analysis
- Crossbeam design
- Column and drilled shaft design
- End bent cap and shafts
- Wingwall

Checking

- Deck
- Girder splices
- Bearings and expansion joints
- Interior and bent crossframes
- Camber
- Independent seismic model
- Crossbeam design
- Column and drilled shaft design



- End bent cap and shafts
- Wingwall

11.5 Borland Road Bridges

The design status of the NB and SB Borland Road Bridges is discussed in the following subsections. The plan detailing is mostly complete but will require modifications for the next submittal. The following bullet points are items that should be addressed for the next submittal.

11.5.1 Borland Road NB Bridge #23869

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design

- Coordinate with Roadway about the Borland Road fill at Bent 2 and investigate deepening the Bent 2 pile cap if necessary
- Add road clearance diagram sheet
- Complete MSE wall design, revise the wingwall layout to be perpendicular to the MSE walls and update plans accordingly

Checking

- Review MSE wall design, wingwall layout, and plan sheet revisions

11.5.2 Borland Road SB Bridge #23870

Future Items to Address

The following are outstanding tasks required for this structure to achieve 100% completion:

Design

- Add road clearance diagram sheet
- Refine the MSE wall Plan and Elevation sheets and coordinate wall and abutment layout
- Revise the wingwall layout to be perpendicular to the MSE walls and update plans accordingly

Checking

- Review MSE wall plans



11.6 Sound Walls

The soundwalls are planned to be standard ODOT precast post and panel soundwalls with vertical fin finish on the panels, supported by prebored concrete shafts. Some areas are on a slope requiring longer than standard shaft supports.

Two soundwalls are included in the current plans at about a 50% level of completion.

- Soundwall #1 is from “LS2” Station 872 to 887 and approximately 1,500 feet long on the right northeast of I-205. It has a minimum exposed height of 10 feet.
- Soundwall #2 is from “LS2” Station 889 to 909 and approximately 2,000 feet long on the northeast side of I-205. It has a minimum exposed height of 12 feet.

11.6.1 Future Items to Address

Items not included with this Phase 2 60% submittal that will be addressed in the future include:

- Finalizing all panel heights and shaft depths
- Identifying utility interference conflicts
- Soundwall heights to be confirmed with stakeholders

11.7 Sign Structures

Sign Structures have been progressed since FDAP as follows. Designs and plans are at a 60% level of completeness.

11.7.1 New Cantilever Sign Structures

Six new cantilever support structures for new SB and NB guide signs will be added on the mainline at MPs 3.44, 3.91, 4.53, 5.03, 5.61 and 6.07. Spread footing foundations are proposed for each location.

11.7.2 New Cantilever VMS Structure

One new cantilever support structure for a new NB variable message sign will be added on the mainline at MP 4.26. A spread footing foundation is proposed.

11.7.3 Future Items to Address

Items not included with this Phase 2 60% submittal that will be addressed in the future include:

- Moving the signs slightly downstream in order to retain existing cantilevers until the new ones are fully constructed.



12 Traffic Engineering

12.1 Signals

Signal Plans have advanced in accordance with the ODOT Traffic Signal Design Manual and now display the Preliminary PS&E level of details and completeness. In this design package, ramp metering at three locations would be impacted: the I-205 SB entrance ramp meter at the 10th Avenue interchange and the I-205 NB and SB entrance ramp meters at the Stafford Road interchange. The impacted ramp meter systems were modified based on the latest roadway design information. In the existing condition, both loop detection and radar detection are used together on freeway mainline for calibration. The signal design abandons the impacted mainline loops to lower maintenance cost and retains radar detection to optimize dynamic ramp metering rates.

12.1.1 Future Items to Address

Items not included with this Phase 2 60% submittal that will be addressed in the future include:

- Change the proposed entrance ramp detection to radar detection. Abandon queue loops and remove loop feeder cables.
- Determine if temporary ramp meters will be needed due to construction staging. (Construction Staging and Traffic Control Plans were not updated with this abbreviated 60% submittal so the need for temporary ramp meters is not known at this time.)
- Cabinet Prints for ramp meters.

12.2 Signing

Updates have been made to signing sheets since FDAP as follows:

12.2.1 LA Sheets

- New overhead exit guide signs, 1/2-mile and 1-mile advance exit direction guide signs for 10th Street and Stafford Road Interchanges in both directions of I-205 have been added. A new ground-mounted 2-mile advance exit direction sign was added for the Stafford Road Interchange in the SB direction and another one was added for the 10th Street Interchange in the NB direction.
- Three overhead arrow-per-lane guide signs will be installed on existing sign bridges to replace the existing diagrammatic guide signs in the SB direction on I-205 in advance of the major I-5 north/I-5 south bifurcation.
- Variable Advisory Speed (VAS) signs that have been constructed with the Phase 3 project have been added and are shown as existing on the signing plans.
- ODOT's comments from FDAP and regarding the Freeway Guide Sign Roll Map have been addressed.



12.2.2 LB Sheets

- Sign Legend LB sheets have been completed.

12.2.3 LC Sheets

- Sign and Post Data Table sheets are not provided with this abbreviated 60% design package as the size and length of most sign posts have not yet been calculated.

12.2.4 Future Items to Address

Items not included with this abbreviated 60% submittal that will be addressed later include:

- Calculate the post size and lengths of all ground mounted signs. Complete Sign Post and Data Tables on LC sheets.
- Investigate if any of the ground mounted signs with steel supports would have potential utility conflicts.
- Update quantities and cost estimate.
- Develop specifications.

12.3 Illumination

Updates have been made to signing sheets since FDAP as follows:

- Freeway lighting at 10th Street was completed under Phase 1. Under Phase 2, the only lighting modifications include underdeck lighting for the new bridge structures.
- Four lights under each bridge deck have been added.
- Lighting at Stafford Road Interchange will be replaced at the gore areas only. The existing lights, control panel, conduits, and wiring located on Stafford Road and at the Stafford Road NB and SB Ramps will be retained.
- Temporary lighting is not anticipated under Phase 2.

12.3.1 Future Items to Address

Items not included with this Phase 2 abbreviated 60% submittal that will be addressed in the future include:

- Conduit tie in points for Phase 1 vs Phase 2 for the underdeck lighting needs to be better defined. A detail will likely be a good addition to provide clarity. This will be developed after this 60% submittal.



12.4 Intelligent Transportation Systems

12.4.1 Items Changed Since FDAP

Since FDAP, the following changes have occurred:

- ATM site "L" at SW Johnson Rd has been changed from a sign bridge structure to a cantilever structure. The footing of the structure is proposed in the median, hence the impact to existing fiber running along the I-205 SB shoulder is nullified.
- Existing fiber at Borland Rd is outside of bridge work impact zone hence potential fiber relocation, identified in FDAP, is not required.

12.4.2 Outstanding Information

The topographical survey along I-205, between OR43 and Stafford Road only includes ODOT Fiber handholes along the SB shoulders. Fiber conduit line is shown in small patches but is missing for the most part. Additional survey is needed to confirm the exact location of existing conduit.

12.4.3 Future Items to Address

Items not included (placeholder sheets included) with this Phase 2 60% submittal that will be addressed in the future include:

- Communications logical diagrams.
- Fiber splice diagrams.

13 Roadside Development

Since the publication of the FDAP, the Roadside Development plans have been developed to respond to project demands. Various permit requirements have spurred a number of the additions:

- At the Tualatin Bridge, the permit requirements have been identified and a planting approach has been reviewed with ODOT. ODOT is expected to provide more in-depth feedback during the 60% review period and further revisions are expected to come after more coordination with WES. Although planting requirements include tree planting, ODOT requirements preclude planting trees within 25 feet of the bridge or underneath the bridge, so a shrub-only planting mix has been proposed in these locations.
- There are a series of Habitat Conservation Areas (HCAs) with buffers that will be impacted by the project. Further development of the location of the Mitigation Areas will need to be developed as HDR works with WES, and the plant list will be further developed once comments from ODOT are received.



- Plantings at the soundwall are described using a typical planting detail in addition to hand-placed trees in noted locations. As input is received from ODOT on the aesthetic and maintenance of these areas, more specific planting plans may be developed.
- Magnus Bernhardt, ODOT, requested a Site Preparation/Weed Management Detail as well as a Woody Coarse Debris (Downed Log) detail. These are included at a 60% level.

As the demands of planting and establishing for permitting were reviewed and discussed with ODOT staff, the request was made to review some form of irrigation and extend the landscape establishment period to five years to correlate with the observation and reporting requirements of the JPA and for HCA mitigation plantings. It was determined that after Phase 1 and 2 were submitted for 60% review, an effort would be made to separate the Roadside Development into a separate contract for construction that would contract directly with a contractor for installation and establishment of the landscape materials. To support this future effort, known irrigation equipment was added to the survey, but the feasibility and logistics of developing functional irrigation systems remains to be determined and the length of contract established. Where a water source is not available, plans and specifications should allow for a temporary reservoir to be installed.

14 Right-of-Way

There are no additional property rights needed for this phase of the project. No additional action is required.

15 Project Estimate and Specifications

Between the FDAP submittal in September 2018 and this preliminary plans submittal, the Project limits have been adjusted to 10th Street to Stafford Road.

The unit costs included in the estimate were vetted through ODOT estimating staff in February 2020 and were refreshed in late July 2020 prior to this 60% submittal.

15.1 Future Items to Address

- Per the direction of ODOT Management, the Project uses the last iteration of the 2018 Bid Item list. The bid items will be updated to the current version when the project is restarted. Since DVP, the project has used Construction Variability Contingencies for every individual bid items to account uncertainty in the quantity or unit cost. There is also an unknowns contingency carried below the line. This method of estimating is used for this 60% package but will be sunsetted for the 90% submittal in favor of a more traditional below the line contingency only.
- Boilerplate specification markups are not provided at the direction of ODOT Management for the Phase 2 60% submittal. In lieu of boilerplates, the Engineers have compiled an outline of unique specifications that the project will need to prime ODOT counterparts and



spec owners of the special design elements included in the project that are not covered by ODOT specifications.

- Contaminated soil volumes and disposal locations still need to be confirmed. Some of the contaminated soil management volume may need to leave the project if the available stockpile locations are not adequate for disposal of all the materials.
- Traffic control quantities need to be updated based on staging the entrance/exit ramps. Staging the ramps will require additional traffic control not currently shown
- Any required widening or repairs to local agency roadways under the bridge structures will need to be added to the estimate.



Appendix A. Sheet List

Series	Sheet Number	Site Name	Name	Included in 60%
A	01		Title Sheet	Y
A	02		Index	Y
A	03		Index	Y
A	04		Index	Y
A	05		Plan Sheet Layout	Y
A	06		Plan Sheet Layout	Y
A	08		Survey Control Data	Y
A	09		Survey Control Data	Y
BA	01		Typical Sections	Y
BA	02		Typical Sections	Y
BA	03		Typical Sections	Y
BA	04		Typical Sections	Y
BA	05		Typical Sections	Y
BA	06		Typical Sections	Y
BA	07		Typical Sections	Y
BA	08		Typical Sections	Y
BA	09		Typical Sections	Y
BA	10		Typical Sections	Y
BA	11		Typical Sections	Y
BA	12		Typical Sections	Y
BA	13		Typical Sections	Y
BA	14		Typical Sections	Y
BA	15		Typical Sections	Y
BA	16		Typical Sections	Y
BA	17		Typical Sections (New Sheet)	N
BA	18		Typical Sections (New Sheet)	N
BA	19		Typical Sections (New Sheet)	N
BA	20		Typical Sections (New Sheet)	N
BA	21		Typical Sections (New Sheet)	N
BA	22		Typical Sections (New Sheet)	N
BB	01		Details	Y
BB	02		Details	Y
BB	03		Details	Y
BB	04		Details	Y
BB	05		Details	Y
BB	06		Details	Y
BB	07		Details	Y
BB	08		Details	Y
BB	09		Details	Y
BB	10		Details	Y
BB	11		Details	Y
BB	12		Details	Y
BB	13		Details	Y
BB	14		Details	Y
BB	15		Details	Y
BB	16		Details (New Sheet)	N
BB	17		Details (New Sheet)	N
BB	18		Details (New Sheet)	N
BB	19		Details (New Sheet)	N
BB	20		Details (New Sheet)	N
BB	21		Details (New Sheet)	N
BD	01		Pipe Data Sheet	Y
BD	02		Pipe Data Sheet	Y
BD	03		Pipe Data Sheet	Y
BD	04		Pipe Data Sheet	Y
BD	05		Pipe Data Sheet	Y
BD	06		Pipe Data Sheet	Y
C01	01		Alignment	Y
C01	01A		General Construction	Y
C01	01B		General Construction Notes	Y
C01	01C		Drainage & Utilities	Y
C01	01D		Drainage & Utilities Notes	Y
C01	01E		Profile	Y
C01	01F		Profile	Y
C02	02		Alignment	Y
C02	02A		General Construction	Y
C02	02B		General Construction Notes	Y
C02	02C		Drainage & Utilities	Y
C02	02D		Drainage & Utilities Notes	Y
C02	02E		Profile	Y
C02	02F		Profile	Y
C02	02G		Profile	Y
C02	02H		Profile	Y
C03	03		Alignment	Y
C03	03A		General Construction	Y
C03	03B		Drainage & Utilities	Y
C03	03C		Profile	Y
C03	03D		Profile	Y

Series	Sheet Number	Site Name	Name	Included in 60%
C04	04		Alignment	Y
C04	04A		General Construction	Y
C04	04B		General Construction Notes	Y
C04	04C		Drainage & Utilities	Y
C04	04D		Drainage & Utilities Notes	Y
C04	04E		Drainage Profile	Y
C04	04F		Profile	Y
C04	04G		Profile	Y
C05	05		Alignment	Y
C05	05A		General Construction	Y
C05	05B		Drainage & Utilities	Y
C05	05C		Drainage & Utilities Notes	Y
C05	05D		Drainage Profile	Y
C05	05E		Drainage Profile	Y
C05	05F		Profile	Y
C05	05G		Profile	Y
C06	06		Alignment	Y
C06	06A		General Construction	Y
C06	06B		Drainage & Utilities	Y
C06	06C		Drainage & Utilities Notes	Y
C06	06D		Drainage Profile	Y
C06	06E		Profile	Y
C06	06F		Profile	Y
C07	07		Alignment	Y
C07	07A		General Construction	Y
C07	07B		Drainage & Utilities	Y
C07	07C		Drainage & Utilities Notes	Y
C07	07D		Drainage Profile	Y
C07	07E		Profile	Y
C07	07F		Profile	Y
C08	08		Alignment	Y
C08	08A		General Construction	Y
C08	08B		Drainage & Utilities	Y
C08	08C		Drainage & Utilities Notes	Y
C08	08D		Drainage Profile	Y
C08	08E		Drainage Profile	Y
C08	08F		Profile	Y
C08	08G		Profile	Y
C09	09		Alignment	Y
C09	09A		General Construction	Y
C09	09B		Drainage & Utilities	Y
C09	09C		Drainage & Utilities Notes	Y
C09	09D		Drainage Profile	Y
C09	09E		Drainage Profile	Y
C09	09F		Profile	Y
C09	09G		Profile	Y
C10	10		Alignment	Y
C10	10A		General Construction	Y
C10	10B		Drainage & Utilities	Y
C10	10C		Drainage Profile	Y
C10	10D		Profile	Y
C10	10E		Profile	Y
C11	11		Alignment	Y
C11	11A		General Construction	Y
C11	11B		Drainage & Utilities	Y
C11	11C		Drainage Profile	Y
C11	11D		Profile	Y
C11	11E		Profile	Y
C12	12		Alignment	Y
C12	12A		General Construction	Y
C12	12B		Drainage & Utilities	Y
C12	12C		Drainage & Utilities Notes	Y
C12	12D		Drainage Profile	Y
C12	12E		Drainage Profile	Y
C12	12F		Profile	Y
C12	12G		Profile	Y
C13	13		Alignment	Y
C13	A		General Construction	Y
C13	B		Drainage & Utilities	Y
C13	C		Drainage & Utilities Notes	Y
C13	D		Drainage Profile	Y
C13	E		Drainage Profile	Y
C13	F		Profile	Y
C13	G		Profile	Y
C14			Alignment	Y
C14	A		General Construction	Y
C14	B		Drainage & Utilities	Y
C14	C		Drainage & Utilities Notes	Y

Series	Sheet Number	Site Name	Name	Included in 60%
157	C14	D	Drainage Profile	Y
158	C14	E	Drainage Profile	Y
159	C14	F	Profile	Y
160	C14	G	Profile	Y
161	C15		Alignment	Y
162	C15	A	General Construction	Y
163	C15	B	Drainage & Utilities	Y
164	C15	C	Drainage & Utilities Notes	Y
165	C15	D	Drainage Profile	Y
166	C15	E	Profile	Y
167	C15	F	Profile	Y
168	C15	G	Profile	Y
169	C15	H	Profile	Y
170	C16		Alignment	Y
171	C16	A	General Construction	Y
172	C16	B	Drainage & Utilities	Y
173	C16	C	Drainage & Utilities Notes	Y
174	C16	D	Drainage Profile	Y
175	C16	E	Profile	Y
176	C16	F	Profile	Y
177	C17		Alignment	Y
178	C17	A	General Construction	Y
179	C17	B	Drainage & Utilities	Y
180	C17	C	Drainage & Utilities Notes	Y
181	C17	D	Drainage Profile	Y
182	C17	E	Profile	Y
183	C17	F	Profile	Y
184	C18		Alignment	Y
185	C18	A	General Construction	Y
186	C19		Alignment	Y
187	C19	A	General Construction	Y
188	EA	01	Traffic Control Summary	N
189	EA	02	Traffic Control Summary (New Sheet)	N
190	EA	03	Traffic Control Summary (New Sheet)	N
191	EA	04	Traffic Control Summary (New Sheet)	N
192	EA	05	Traffic Control Details	N
193	EA	06	Traffic Control Details	N
194	EA	07	Traffic Control Details	N
195	EA	08	Traffic Control Details (New Sheet)	N
196	EA	09	Traffic Control Details (New Sheet)	N
197	EB	01	Traffic Control Detour Plan	N
198	EB	02	Traffic Control Detour Plan	N
199	EB	03	Traffic Control Detour Plan	N
200	EB	04	Traffic Control Detour Plan	N
201	EB	05	Traffic Control Detour Plan	N
202	EB	06	Traffic Control Detour Plan	N
203	EB	07	Traffic Control Detour Plan	N
204	EB	08	Traffic Control Detour Plan	N
205	EB	09	Traffic Control Detour Plan	N
206	EB	10	Traffic Control Detour Plan	N
207	EB	11	Traffic Control Detour Plan	N
208	EB	12	Traffic Control Detour Plan	N
209	ED	01	Traffic Control Plans Stage I, Phase 1	N
210	ED	02	Traffic Control Plans Stage I, Phase 1	N
211	ED	03	Traffic Control Plans Stage I, Phase 1	N
212	ED	04	Traffic Control Plans Stage I, Phase 1	N
213	ED	05	Traffic Control Plans Stage I, Phase 1	N
214	ED	06	Traffic Control Plans Stage I, Phase 1	N
215	ED	07	Traffic Control Plans Stage I, Phase 1	N
216	ED	08	Traffic Control Plans Stage I, Phase 1	N
217	ED	09	Traffic Control Plans Stage I, Phase 1	N
218	ED	10	Traffic Control Plans Stage I, Phase 2	N
219	ED	11	Traffic Control Plans Stage I, Phase 2	N
220	ED	12	Traffic Control Plans Stage I, Phase 2	N
221	ED	13	Traffic Control Plans Stage I, Phase 2	N
222	ED	14	Traffic Control Plans Stage I, Phase 2	N
223	ED	15	Traffic Control Plans Stage I, Phase 2	N
224	ED	16	Traffic Control Plans Stage I, Phase 2	N
225	ED	17	Traffic Control Plans Stage I, Phase 2	N
226	ED	18	Traffic Control Plans Stage I, Phase 2	N
227	ED	19	Traffic Control Plans Stage I, Phase 3	N
228	ED	20	Traffic Control Plans Stage I, Phase 3	N
229	ED	21	Traffic Control Plans Stage I, Phase 3	N
230	EE	01	Traffic Control Plans Stage II, Phase 1	N
231	EE	02	Traffic Control Plans Stage II, Phase 1	N
232	EE	03	Traffic Control Plans Stage II, Phase 1	N
233	EE	04	Traffic Control Plans Stage II, Phase 1	N
234	EE	05	Traffic Control Plans Stage II, Phase 1	N

Series	Sheet Number	Site Name	Name	Included in 60%
235	EE	06	Traffic Control Plans Stage II, Phase 1	N
236	EE	07	Traffic Control Plans Stage II, Phase 1	N
237	EE	08	Traffic Control Plans Stage II, Phase 1	N
238	EE	09	Traffic Control Plans Stage II, Phase 1	N
239	EE	10	Traffic Control Plans Stage II, Phase 1 (New Sheet)	N
240	EE	11	Traffic Control Plans Stage II, Phase 1 (New Sheet)	N
241	EE	12	Traffic Control Plans Stage II, Phase 2	N
242	EE	13	Traffic Control Plans Stage II, Phase 2	N
243	EE	14	Traffic Control Plans Stage II, Phase 2	N
244	EE	15	Traffic Control Plans Stage II, Phase 2	N
245	EE	16	Traffic Control Plans Stage II, Phase 2 (New Sheet)	N
246	EE	17	Traffic Control Plans Stage II, Phase 2 (New Sheet)	N
247	EF	01	Stage III, Phase 1	N
248	EF	02	Stage III, Phase 1	N
249	EF	03	Stage III, Phase 1	N
250	EF	04	Stage III, Phase 1	N
251	EF	05	Stage III, Phase 1	N
252	EF	06	Stage III, Phase 1	N
253	EF	07	Stage III, Phase 1	N
254	EF	08	Stage III, Phase 1	N
255	EF	09	Stage III, Phase 1	N
256	EF	10	Stage III, Phase 1 (New Sheet)	N
257	EF	11	Stage III, Phase 1 (New Sheet)	N
258	EF	12	Stage III, Phase 2	N
259	EF	13	Stage III, Phase 2	N
260	EF	14	Stage III, Phase 2	N
261	EF	15	Stage III, Phase 2 (New Sheet)	N
262	EF	16	Stage III, Phase 2 (New Sheet)	N
263	FA	01	Roadside Development General Notes	Y
264	FA	02	Roadside Development Plant Schedule	Y
265	FA	03	Roadside Development Plant Schedule	Y
266	FA	04	Roadside Development Details	Y
267	FA	05	Roadside Development Details	Y
268	FA	06	Roadside Development Details	Y
269	FA	07	Roadside Development Details	Y
270	FA	08	Roadside Development Planting Plan	Y
271	FA	09	Roadside Development Planting Plan	Y
272	FA	09A	Roadside Development Planting Plan Detail	Y
273	FA	10	Roadside Development Planting Plan	Y
274	FA	11	Roadside Development Planting Plan	Y
275	FA	12	Roadside Development Planting Plan	Y
276	FA	13	Roadside Development Planting Plan	Y
277	FA	14	Roadside Development Planting Plan	Y
278	FA	15	Roadside Development Planting Plan	Y
279	FA	16	Roadside Development Planting Plan	Y
280	FA	17	Roadside Development Planting Plan	Y
281	FA	17A	Roadside Development Planting Plan Detail	Y
282	FA	18	Roadside Development Planting Plan	Y
283	FA	FA19	Roadside Development Planting Plan	Y
284	FA	19A	Roadside Development Planting Plan Detail	Y
285	FA	19B	Roadside Development Planting Plan Detail	Y
286	FA	19C	Roadside Development Planting Plan Detail	Y
287	FA	19D	Roadside Development Planting	Y
288	FA	20	Roadside Development Planting Plan	Y
289	FA	21	Roadside Development Planting Plan	Y
290	FA	22	Roadside Development Planting Plan	Y
291	FA	23	Roadside Development Planting Plan	Y
292	FA	24	Roadside Development Planting Plan	Y
293	FA	25	Roadside Development Planting Plan	Y
294	FB	01	Erosion and Sediment Control	Y
295	FB	02	Erosion and Sediment Control	Y
296	FB	03	Erosion and Sediment Control	Y
297	FB	04	Erosion and Sediment Control	Y
298	FB	05	Erosion and Sediment Control	Y
299	FB	06	Erosion and Sediment Control	Y
300	FB	07	Erosion and Sediment Control	Y
301	FB	08	Erosion and Sediment Control	Y
302	FB	09	Erosion and Sediment Control	Y
303	FB	10	Erosion and Sediment Control	Y
304	FB	11	Erosion and Sediment Control	Y
305	FB	12	Erosion and Sediment Control	Y
306	FB	13	Erosion and Sediment Control	Y
307	FB	14	Erosion and Sediment Control	Y
308	FB	15	Erosion and Sediment Control	Y
309	FB	16	Erosion and Sediment Control	Y
310	FB	17	Erosion and Sediment Control	Y
311	FB	18	Erosion and Sediment Control	Y
312	FB	19	Erosion and Sediment Control	Y

Series	Sheet Number	Site Name	Name	Included in 60%
313	FB	20	Erosion and Sediment Control	Y
314	GC	101	Sound Walls-SW1	Y
315	GC	102	Sound Walls-SW1	Y
316	GC	103	Sound Walls-SW1	Y
317	GC	104	Sound Walls-SW1	Y
318	GC	105	Sound Walls-SW1	Y
319	GC	201	Sound Walls-SW2	Y
320	GC	202	Sound Walls-SW2	Y
321	GC	203	Sound Walls-SW2	Y
322	GC	204	Sound Walls-SW2	Y
323	GC	205	Sound Walls-SW2	Y
324	GC	206	Sound Walls-SW2	Y
325	GC	207	Sound Walls-SW2	Y
326	HA	01	Stormwater Facility Plan	Y
327	HA	02	Stormwater Facility Plan	Y
328	HA	03	Stormwater Facility Plan	N
329	HA	04	Stormwater Facility Plan	Y
330	HA	05	Stormwater Facility Plan	N
331	HA	06	Stormwater Facility Plan	N
332	HA	07	Stormwater Facility Plan	Y
333	HA	08	Stormwater Facility Plan	N
334	HA	09	Stormwater Facility Plan	Y
335	HA	10	Stormwater Facility Plan	Y
336	HA	11	Stormwater Facility Plan	Y
337	HA	12	Stormwater Facility Plan	Y
338	HA	13	Stormwater Facility Plan	N
339	HA	14	Stormwater Facility Plan	N
340	HA	15	Stormwater Facility Plan	Y
341	HA	16	Stormwater Facility Plan	N
342	HA	17	Stormwater Facility Plan	N
343	HA	18	Stormwater Facility Plan	Y
344	HA	19	Stormwater Facility Plan	N
345	HA	20	Stormwater Facility Plan	N
346	HA	21	Stormwater Facility Plan	Y
347	HA	22	Stormwater Facility Plan	N
348	HA	23	Stormwater Facility Plan	N
349	HA	24	Stormwater Facility Plan	N
350	HA	25	Stormwater Facility Plan	Y
351	HA	26	Stormwater Facility Plan	N
352	HA	27	Stormwater Facility Plan	N
353	HA	28	Stormwater Facility Plan	Y
354	HA	29	Stormwater Facility Plan	N
355	HA	30	Stormwater Facility Plan	N
356	HA	31	Stormwater Facility Plan	Y
357	HA	32	Stormwater Facility Plan	N
358	HA	33	Stormwater Facility Plan	N
359	HA	34	Stormwater Facility Plan	Y
360	HA	35	Stormwater Facility Plan	N
361	HA	36	Stormwater Facility Plan	N
362	HA	37	Stormwater Facility Plan	Y
363	HA	38	Stormwater Facility Plan	N
364	HA	39	Stormwater Facility Plan	N
365	HA	40	Stormwater Facility Plan	Y
366	HA	41	Stormwater Facility Plan	N
367	HA	42	Stormwater Facility Plan	N
368	HA	43	Stormwater Facility Plan	Y
369	HA	44	Stormwater Facility Plan	N
370	HA	45	Stormwater Facility Plan	N
371	HA	46	Stormwater Facility Plan	Y
372	HA	47	Stormwater Facility Plan	N
373	HA	48	Stormwater Facility Plan	N
374	HA	49	Stormwater Facility Plan	Y
375	HA	50	Stormwater Facility Plan	N
376	HA	51	Stormwater Facility Plan	N
377	HA	52	Stormwater Facility Plan	Y
378	HA	53	Stormwater Facility Plan	N
379	HA	54	Stormwater Facility Plan	N
380	HA	55	Stormwater Facility Plan	Y
381	HA	56	Stormwater Facility Plan	N
382	HA	57	Stormwater Facility Plan	N
383	HA	58	Stormwater Facility Plan	Y
384	HA	59	Stormwater Facility Plan	N
385	HA	60	Stormwater Facility Plan	N
386	HA	61	Stormwater Facility Plan	Y
387	HA	62	Stormwater Facility Plan	N
388	HA	63	Stormwater Facility Plan	N
389	JC	01	10th Street - SB Plan and Elevation	Y
390	JC	02	10th Street - SB General Notes	Y

Series	Sheet Number	Site Name	Name	Included in 60%
391	JC	03	10th Street - SB Typical Section	Y
392	JC	04	10th Street - SB Construction Sequence	Y
393	JC	05	10th Street - SB Geotechnical Data	Y
394	JC	06	10th Street - SB Construction Sequence	Y
395	JC	07	10th Street - SB Foundation Data Sheet	Y
396	JC	08	10th Street - SB Foundation Layout	N
397	JC	09	10th Street - SB Deck Plan	Y
398	JC	10	10th Street - SB Typical Section	N
399	JC	11	10th Street - SB Typical Section	Y
400	JC	12	10th Street - SB Girder Elevation Details	Y
401	JC	12	10th Street - SB Girder Details	Y
402	JC	13	10th Street - SB Girder Details	N
403	JC	14	10th Street - SB Post Tension Detail-2	N
404	JC	15	10th Street - SB Bent 2 Plan and Elevation Staged Condition	N
405	JC	16	10th Street - SB Bent 1 Plan and Elevations Staged Condition	N
406	JC	17	10th Street - SB Bent Details Staged Condition-1	N
407	JC	18	10th Street - SB Bent Details Staged Condition-2	N
408	JC	19	10th Street - SB Bent 2 Plan and Elevation Final Condition	N
409	JC	20	10th Street - SB Bent 1 Plan and Elevations Final Condition	N
410	JC	21	10th Street - SB Bent Details Final Condition-1	N
411	JC	22	10th Street - SB Bent Details Final Condition-2	N
412	JC	23	10th Street - SB Wing Wall Details	N
413	JC	24	10th Street - SB Shear Block Details	N
414	JC	25	10th Street - SB Bearing Assembly Details	N
415	JC	26	10th Street - SB Miscellaneous Details-1	N
416	JC	27	10th Street - SB Miscellaneous Details-2	N
417	JC	28	10th Street - SB End Panel Details	N
418	JC	29	10th Street - SB Rail Retrofit Deck Strengthening	N
419	JD	01	10th Street - NB Plan and Elevation	Y
420	JD	02	10th Street - NB General Notes	Y
421	JD	03	10th Street - NB Construction Staging Sequence	Y
422	JD	04	10th Street - NB Construction Sequence -1	Y
423	JD	05	10th Street - NB Construction Sequence -2	Y
424	JD	06	10th Street - NB Geotechnical Data	Y
425	JD	07	10th Street - NB Foundation Plan and Details	Y
426	JD	08	10th Street - NB Deck Plan	N
427	JD	09	10th Street - NB JD09 Typical Section	N
428	JD	10	10th Street - NB Typical Section	N
429	JD	11	10th Street - NB Girder Elevation Details	N
430	JD	12	10th Street - NB Post Tension Detail-1	N
431	JD	13	10th Street - NB Post Tension Detail-2	N
432	JD	14	10th Street - NB Bent 2 Plan and Elevation Staged Condition	N
433	JD	15	10th Street - NB Bent 1 Plan and Elevations Staged Condition	N
434	JD	16	10th Street - NB Bent Details Staged Condition-1	N
435	JD	17	10th Street - NB Bent Details Staged Condition-2	N
436	JD	18	10th Street - NB Bent 2 Plan and Elevation Final Condition	N
437	JD	19	10th Street - NB Bent 1 Plan and Elevations Final Condition	N
438	JD	20	10th Street - NB Bent Details Final Condition-1	N
439	JD	21	10th Street - NB Bent Details Final Condition-2	N
440	JD	22	10th Street - NB Wing Wall Details	N
441	JD	23	10th Street - NB Shear Block Details	N
442	JD	24	10th Street - NB Bearing Assembly Details	N
443	JD	25	10th Street - NB Miscellaneous Details-1	N
444	JD	26	10th Street - NB Miscellaneous Details-2	N
445	JD	27	10th Street - NB End Panel Details	N
446	JD	28	10th Street - NB Rail Retrofit Deck Strengthening	N
447	JE	01	Blankenship - SB Plan and Elevation	Y
448	JE	02	Blankenship - SB General Notes	Y
449	JE	03	Blankenship - SB Construction Sequence	Y
450	JE	04	Blankenship - SB Construction Sequence-1	N
451	JE	05	Blankenship - SB Construction sequence-2	N
452	JE	06	Blankenship - SB Geotechnical Data	Y
453	JE	07	Blankenship - SB Foundation Layout	N
454	JE	08	Blankenship - SB Deck Plan	N
455	JE	09	Blankenship - SB Typical Section	Y
456	JE	10	Blankenship - SB Typical Section - 2	N
457	JE	11	Blankenship - SB Girder Elevation Details	N
458	JE	12	Blankenship - SB Post Tension Details -1	N
459	JE	13	Blankenship - SB Post Tension Details -2	N
460	JE	14	Blankenship - SB Bent 2 P & E Staged Condition	N
461	JE	15	Blankenship - SB Bent 1 P & E Staged Condition	N
462	JE	16	Blankenship - SB Bent Details - Staged Condition -1	N
463	JE	17	Blankenship - SB Bent Details - Staged Condition -2	N
464	JE	18	Blankenship - SB Bent 2 P & E Final Condition	N
465	JE	19	Blankenship - SB Bent 1 P & E Final Condition	N
466	JE	20	Blankenship - SB Bent Details - Final Condition -1	N
467	JE	21	Blankenship - SB Bent Details - Final Condition -2	N
468	JE	22	Blankenship - SB Wing Wall Details	N

Series	Sheet Number	Site Name	Name	Included in 60%
469	JE	Blankenship - SB	Shear Block details	N
470	JE	Blankenship - SB	Bearing Assembly Details-1	N
471	JE	Blankenship - SB	Bearing Assembly Details-2	N
472	JE	Blankenship - SB	Misc. Details	N
473	JE	Blankenship - SB	End Panel Details	N
474	JE	Blankenship - SB	Rail Retrofit & Deck Strengthening	N
475	JF	Blankenship - NB	Plan and Elevation	Y
476	JF	Blankenship - NB	General Notes	Y
477	JF	Blankenship - NB	Construction Sequence	Y
478	JF	Blankenship - NB	Construction Sequence -1	Y
479	JF	Blankenship - NB	Construction Sequence -2	Y
480	JF	Blankenship - NB	Geotechnical Data	Y
481	JF	Blankenship - NB	Foundation Layout	Y
482	JF	Blankenship - NB	Deck Plan	Y
483	JF	Blankenship - NB	Typical Section	Y
484	JF	Blankenship - NB	Typical Section - 2	Y
485	JF	Blankenship - NB	Longitudinal Girder Details	Y
486	JF	Blankenship - NB	Post Tension Details -1	Y
487	JF	Blankenship - NB	Post Tension Details -2	Y
488	JF	Blankenship - NB	Bent 2 Plan and Elevation Staged Condition	Y
489	JF	Blankenship - NB	Bent 1 Plan and Elevation Staged Condition	Y
490	JF	Blankenship - NB	Bent Details Staged Condition - 1	Y
491	JF	Blankenship - NB	Bent Details Staged Condition - 2	Y
492	JF	Blankenship - NB	Bent 2 Plan and Elevation Final Condition	Y
493	JF	Blankenship - NB	Bent 1 Plan and Elevation Final Condition	Y
494	JF	Blankenship - NB	Bent Details Final Condition - 1	Y
495	JF	Blankenship - NB	Bent Details Final Condition -2	Y
496	JF	Blankenship - NB	Wingwall Details	Y
497	JF	Blankenship - NB	Shear Block Details	Y
498	JF	Blankenship - NB	Bearing Assembly Details - 1	Y
499	JF	Blankenship - NB	Miscellaneous Details - 1	Y
500	JF	Blankenship - NB	Miscellaneous Details - 2	Y
501	JF	Blankenship - NB	End Panel Details	Y
502	JF	Blankenship - NB	Rail and Deck Retrofitting	Y
503	JG	Woodbine - SB	Plan and Elevation	Y
504	JG	Woodbine - SB	General Notes	Y
505	JG	Woodbine - SB	Construction Sequence	Y
506	JG	Woodbine - SB	Geotechnical Data	Y
507	JG	Woodbine - SB	Soil Improvements	Y
508	JG	Woodbine - SB	Foundation Plan and Details	Y
509	JG	Woodbine - SB	Deck Plan	Y
510	JG	Woodbine - SB	Typical Sections & Deck Reinforcement	Y
511	JG	Woodbine - SB	Girder Schedule	Y
512	JG	Woodbine - SB	Bent 2 Plan and Elevation	Y
513	JG	Woodbine - SB	Bent 2 Details (Bent 1 Similar)	Y
514	JG	Woodbine - SB	Wingwall Details	Y
515	JG	Woodbine - SB	Reinforced Concrete Bridge End Panels	N
516	JG	Woodbine - SB	Miscellaneous Details	Y
517	JH	Woodbine - NB	Plan and Elevation	Y
518	JH	Woodbine - NB	General Notes	Y
519	JH	Woodbine - NB	Construction Sequence -1	Y
520	JH	Woodbine - NB	Construction Sequence -2	Y
521	JH	Woodbine - NB	Construction Sequence - 3	Y
522	JH	Woodbine - NB	Soil Improvements	Y
523	JH	Woodbine - NB	Foundation Plan and Details	Y
524	JH	Woodbine - NB	Deck Plan	Y
525	JH	Woodbine - NB	Typical Sections & Deck Reinforcement	Y
526	JH	Woodbine - NB	Girder Schedule	Y
527	JH	Woodbine - NB	Bent 2 Temporary Condition Plan and Elevation (Bent 1 Similar)	Y
528	JH	Woodbine - NB	Bent 2 Details Temporary Condition (Bent 1 Similar)	Y
529	JH	Woodbine - NB	Bent 2 Plan and Elevation (Bent 1 Similar)	Y
530	JH	Woodbine - NB	Bent 2 Final Conditions (Bent 1 Similar)	Y
531	JH	Woodbine - NB	Wingwall Details	Y
532	JH	Woodbine - NB	Reinforced Concrete Bridge End Panels	Y
533	JH	Woodbine - NB	Miscellaneous Details	Y
534	JK	Tualatin River - NB	Plan and Elevation	Y
535	JK	Tualatin River - NB	General Notes - 1	Y
536	JK	Tualatin River - NB	General Notes - 2	Y
537	JK	Tualatin River - NB	Construction Sequence & Deck Repair	Y
538	JK	Tualatin River - NB	Staging	Y
539	JK	Tualatin River - NB	Geotechnical Data - 1	N
540	JK	Tualatin River - NB	Geotechnical Data - 2	N
541	JK	Tualatin River - NB	Geotechnical Data - 3	N
542	JK	Tualatin River - NB	Geotechnical Data - 4	N
543	JK	Tualatin River - NB	Foundation Data - 1	N
544	JK	Tualatin River - NB	Foundation Data - 2	N
545	JK	Tualatin River - NB	Staging Details	N

Series	Sheet Number	Site Name	Name	Included in 60%
546	JK	Tualatin River - NB	Footing Plan - 1	N
547	JK	Tualatin River - NB	Footing Plan - 2	Y
548	JK	Tualatin River - NB	Deck Plan - 2	Y
549	JK	Tualatin River - NB	Deck Plan - 3	Y
550	JK	Tualatin River - NB	Deck Plan - 4	Y
551	JK	Tualatin River - NB	Typical Sections	Y
552	JK	Tualatin River - NB	Steel Framing Plan - 1	Y
553	JK	Tualatin River - NB	Steel Framing Plan - 2	Y
554	JK	Tualatin River - NB	Steel Framing Plan - 3	Y
555	JK	Tualatin River - NB	Steel Framing Plan - 4	Y
556	JK	Tualatin River - NB	Girder Details - Span 1	N
557	JK	Tualatin River - NB	Girder Details - Span 2	N
558	JK	Tualatin River - NB	Girder Details - Span 3	N
559	JK	Tualatin River - NB	Miscellaneous Girder Details	Y
560	JK	Tualatin River - NB	Field Splice Details	N
561	JK	Tualatin River - NB	Field Splice Schedule	N
562	JK	Tualatin River - NB	Camber Schedule and Details	N
563	JK	Tualatin River - NB	Camber Schedule and Details	N
564	JK	Tualatin River - NB	Camber Schedule and Details	N
565	JK	Tualatin River - NB	Cross Frame Details - 1	Y
566	JK	Tualatin River - NB	Cross Frame Details - 2	N
567	JK	Tualatin River - NB	Cross Frame Details - 3	Y
568	JK	Tualatin River - NB	Cross Frame Details - 4	N
569	JK	Tualatin River - NB	Stiffener and Connection Plate Details	N
570	JK	Tualatin River - NB	Bent 1 Plan and Elevation	N
571	JK	Tualatin River - NB	Bent 1 Typical Section (Bent 5 Similar)	N
572	JK	Tualatin River - NB	Bent 1 End Block Sections (Bent 5 Similar)	N
573	JK	Tualatin River - NB	Bent 1 Wingwall Details	N
574	JK	Tualatin River - NB	Bent 2 Plan and Elevation (Bent 4 Similar)	N
575	JK	Tualatin River - NB	Bent 2 Column and Drilled Shaft Details (Bent 4 Similar)	N
576	JK	Tualatin River - NB	Bent 2 Crossbeam Details (Bent 4 Similar)	N
577	JK	Tualatin River - NB	Bent 3 Plan and Elevation	N
578	JK	Tualatin River - NB	Bent 3 Column and Drilled Shaft Details	N
579	JK	Tualatin River - NB	Bent 3 Crossbeam Details	N
580	JK	Tualatin River - NB	Bent 5 Plan & Elevation	N
581	JK	Tualatin River - NB	Bent 5 Wingwall Details	N
582	JK	Tualatin River - NB	Miscellaneous Interior Bent Details	N
583	JK	Tualatin River - NB	Bearing Details - 1	N
584	JK	Tualatin River - NB	Bearing Details - 2	N
585	JK	Tualatin River - NB	Bearing Details - 3	N
586	JK	Tualatin River - NB	Modular Joint Details	N
587	JK	Tualatin River - NB	Bridge Rail Elevations	N
588	JK	Tualatin River - NB	Bridge Rail Details	N
589	JK	Tualatin River - NB	Drainage Details - 1	N
590	JK	Tualatin River - NB	Drainage Details - 2	N
591	JK	Tualatin River - NB	Miscellaneous Details	N
592	JJ	Tualatin River - SB	Plan and Elevation	Y
593	JJ	Tualatin River - SB	General Notes - 1	Y
594	JJ	Tualatin River - SB	General Notes - 2	Y
595	JJ	Tualatin River - SB	Construction Sequence and Deck Pour	Y
596	JJ	Tualatin River - SB	Geotechnical Data	Y
597	JJ	Tualatin River - SB	Geotechnical Data - 1	N
598	JJ	Tualatin River - SB	Geotechnical Data - 2	N
599	JJ	Tualatin River - SB	Geotechnical Data - 3	N
600	JJ	Tualatin River - SB	Geotechnical Data - 4	N
601	JJ	Tualatin River - SB	Staging	N
602	JJ	Tualatin River - SB	Foundation Data - 2	N
603	JJ	Tualatin River - SB	Staging Details	N
604	JJ	Tualatin River - SB	Footing Plan - 1	N
605	JJ	Tualatin River - SB	Footing Plan - 2	N
606	JJ	Tualatin River - SB	Deck Plan	Y
607	JJ	Tualatin River - SB	Deck Plan - 2	Y
608	JJ	Tualatin River - SB	Deck Plan - 3	Y
609	JJ	Tualatin River - SB	Deck Plan - 4	Y
610	JJ	Tualatin River - SB	Typical Deck Section	Y
611	JJ	Tualatin River - SB	Steel Girder Details - Span 1	Y
612	JJ	Tualatin River - SB	Steel Girder Details - Span 2	Y
613	JJ	Tualatin River - SB	Steel Girder Details - Span 3	Y
614	JJ	Tualatin River - SB	Steel Girder Details - Span 4	Y
615	JJ	Tualatin River - SB	Miscellaneous Girder Details	Y
616	JJ	Tualatin River - SB	Girder Details - Span 2	N
617	JJ	Tualatin River - SB	Girder Details - Span 3	N
618	JJ	Tualatin River - SB	Miscellaneous Welding and Shop Splice Details	N
619	JJ	Tualatin River - SB	Field Splice Details	N
620	JJ	Tualatin River - SB	Field Splice Schedule	N
621	JJ	Tualatin River - SB	Camber Schedule and Details	N
622	JJ	Tualatin River - SB	Camber Schedule and Details	N
623	JJ	Tualatin River - SB	Camber Schedule and Details	N

Series	Sheet Number	Site Name	Name	Included in 60%
624	JJ	Tualatin River - SB	Cross Frame Details - 1	N
625	JJ	Tualatin River - SB	Cross Frame Details - 2	N
626	JJ	Tualatin River - SB	Cross Frame Details - 3	N
627	JJ	Tualatin River - SB	Cross Frame Details - 4	N
628	JJ	Tualatin River - SB	Stiffener and Connection Plate Details	N
629	JJ	Tualatin River - SB	Bent 1 Plan and Elevation	N
630	JJ	Tualatin River - SB	Bent 1 Typical Section (Bent 5 Similar)	N
631	JJ	Tualatin River - SB	Bent 1 End Block Sections (Bent 5 Similar)	N
632	JJ	Tualatin River - SB	Bent 1 Wingwall Details	N
633	JJ	Tualatin River - SB	Bent 2 Plan and Elevation (Bent 4 Similar)	N
634	JJ	Tualatin River - SB	Bent 2 Column and Drilled Shaft Details (Bent 4 Similar)	N
635	JJ	Tualatin River - SB	Bent 2 Crossbeam Details (Bent 4 Similar)	N
636	JJ	Tualatin River - SB	Bent 3 Plan and Elevation	N
637	JJ	Tualatin River - SB	Bent 3 Column and Drilled Shaft Details	N
638	JJ	Tualatin River - SB	Bent 3 Crossbeam Details	N
639	JJ	Tualatin River - SB	Bent 5 Plan & Elevation	N
640	JJ	Tualatin River - SB	Bent 5 Wingwall Details	N
641	JJ	Tualatin River - SB	Miscellaneous Interior Bent Details	N
642	JJ	Tualatin River - SB	Bearing Details - 1	N
643	JJ	Tualatin River - SB	Bearing Details - 2	N
644	JJ	Tualatin River - SB	Bearing Details - 3	N
645	JJ	Tualatin River - SB	Modular Joint Details	N
646	JJ	Tualatin River - SB	Bridge Rail Elevations	N
647	JJ	Tualatin River - SB	Bridge Rail Details	N
648	JJ	Tualatin River - SB	Drainage Details - 1	N
649	JJ	Tualatin River - SB	Drainage Details - 2	N
650	JJ	Tualatin River - SB	Miscellaneous Details	N
651	JL		Plan and Elevation	Y
652	JL		General Notes	Y
653	JL		Construction Sequence	Y
654	JL		Geotechnical Data	Y
655	JL		Foundation Plan and Details	Y
656	JL		Deck Plan	Y
657	JL		Typical Sections & Deck Reinforcement	Y
658	JL		Girder Schedule	Y
659	JL		Bent 2 Plan and Elevation (Bent 1 Similar)	Y
660	JL		Bent 2 Details (Bent 1 Similar)	Y
661	JL		Wingwall Details	Y
662	JL		Reinforced Concrete Bridge End Panels	Y
663	JL		Miscellaneous Details	Y
664	JL		MSE Wall General Notes & Details	Y
665	JL		Retaining Wall, MSE, Walls "A" and "B" Plan and Elevation	Y
666	JL		Retaining Wall, MSE, Walls "C" and "D" Plan and Elevation	Y
667	JL		MSE Retaining Wall	Y
668	JM		Plan and Elevation	Y
669	JM		General Notes	Y
670	JM		Construction Sequence	Y
671	JM		Geotechnical Data	Y
672	JM		Foundation Plan and Details	Y
673	JM		Deck Plan	Y
674	JM		Typical Sections & Deck Reinforcement	Y
675	JM		Girder Schedule	Y
676	JM		Bent 2 Plan and Elevation (Bent 1 Similar)	Y
677	JM		Bent 2 Details (Bent 1 Similar)	Y
678	JM		Wingwall Details	Y
679	JM		Reinforced Concrete Bridge End Panels	Y
680	JM		Miscellaneous Details	Y
681	KA		Intelligent Transportation Systems	Y
682	KA		Intelligent Transportation Systems	Y
683	KA		Intelligent Transportation Systems	Y
684	KA		Intelligent Transportation Systems	Y
685	KB		Intelligent Transportation Systems	Y
686	KB		Intelligent Transportation Systems	Y
687	KB		Intelligent Transportation Systems	Y
688	KB		Intelligent Transportation Systems	Y
689	KB		Intelligent Transportation Systems	Y
690	KB		Intelligent Transportation Systems	Y
691	KB		Intelligent Transportation Systems	Y
692	KB		Intelligent Transportation Systems	Y
693	KB		Intelligent Transportation Systems	N
694	KB		Intelligent Transportation Systems	N
695	KC		Plan and Elevation	Y
696	LA		Permanent Signing	Y
697	LA		Permanent Signing	Y
698	LA		Permanent Signing	Y

Series	Sheet Number	Site Name	Name	Included in 60%
699	LA	04	Permanent Signing	Y
700	LA	05	Permanent Signing	Y
701	LA	06	Permanent Signing	Y
702	LA	07	Permanent Signing	Y
703	LA	08	Permanent Signing	Y
704	LA	09	Permanent Signing	Y
705	LA	10	Permanent Signing	Y
706	LA	11	Permanent Signing	Y
707	LA	12	Permanent Signing	Y
708	LA	13	Permanent Signing	Y
709	LA	14	Permanent Signing	Y
710	LA	15	Permanent Signing	Y
711	LA	16	Permanent Signing	Y
712	LA	17	Permanent Signing	Y
713	LA	18	Permanent Signing	Y
714	LA	19	Permanent Signing	Y
715	LA	20	Permanent Signing	Y
716	LA	21	Permanent Signing	Y
717	LA	22	Permanent Signing	Y
718	LA	23	Permanent Signing	Y
719	LA	24	Permanent Signing	Y
720	LA	25	Permanent Signing	Y
721	LA	26	Permanent Signing	Y
722	LA	27	Permanent Signing	Y
723	LB	01	Permanent Signing	Y
724	LB	02	Permanent Signing	Y
725	LB	03	Permanent Signing	Y
726	LB	04	Permanent Signing	Y
727	LB	05	Permanent Signing	Y
728	LC	01	Sign and Post Data Table	Y
729	LC	02	Sign and Post Data Table	N
730	LC	03	Sign and Post Data Table	N
731	LD	01	Plan and Elevation	Y
732	LD	02	Plan and Elevation	Y
733	LD	03	Plan and Elevation	Y
734	LD	04	Plan and Elevation	Y
735	LD	05	Plan and Elevation	Y
736	LD	06	Plan and Elevation	Y
737	MA	01	Signal Legend	Y
738	MB	01	Ramp Meter Removal Plan	Y
739	MB	02	Ramp Meter Removal Plan	Y
740	MB	03	Ramp Meter Plan	Y
741	MB	04	Ramp Meter Plan	Y
742	MB	05	Existing Utilities	Y
743	MB	06	Existing Utilities	Y
744	MC	01	Ramp Meter Removal Plan	Y
745	MC	02	Ramp Meter Removal Plan	Y
746	MC	03	Ramp Meter Removal Plan	Y
747	MC	04	Ramp Meter Plan	Y
748	MC	05	Ramp Meter Plan	Y
749	MC	06	Ramp Meter Plan	Y
750	MC	07	Existing Utilities	Y
751	MC	08	Existing Utilities	Y
752	MC	09	Existing Utilities	Y
753	MD	01	Ramp Meter Removal Plan	Y
754	MD	02	Ramp Meter Removal Plan	Y
755	MD	03	Ramp Meter Plan	Y
756	MD	04	Ramp Meter Plan	Y
757	MD	05	Existing Utilities	Y
758	MD	06	Existing Utilities	Y
759	ME	01	Pole Entrance Chart	N
760	ME	02	Pole Entrance Chart	N
761	PA	01	Illumination Legend	Y
762	PA	02	Illumination Details	Y
763	PA	03	Illumination Removal Plan	Y
764	PA	04	Illumination Removal Plan	Y
765	PA	05	Illumination Removal Plan	Y
766	PA	06	Illumination Removal Plan	Y
767	PB	01	Illumination Plan	Y
768	PB	02	Illumination Plan	Y
769	PB	03	Illumination Plan	Y
770	PB	04	Illumination Plan	Y
771	PC	01	Illumination Details	Y
772	PC	02	Illumination Details	Y
773	QA	1	Pavement Marking Details	Y
774	QB	01	Pavement Marking Plan	Y
775	QB	02	Pavement Marking Plan	Y
776	QB	03	Pavement Marking Plan	Y

	Series	Sheet Number	Site Name	Name	Included in 60%
777	QB	04		Pavement Marking Plan	Y
778	QB	05		Pavement Marking Plan	Y
779	QB	06		Pavement Marking Plan	Y
780	QB	07		Pavement Marking Plan	Y
781	QB	08		Pavement Marking Plan	Y
782	QB	09		Pavement Marking Plan	Y
783	QB	10		Pavement Marking Plan	Y
784	QB	11		Pavement Marking Plan	Y
785	QB	12		Pavement Marking Plan	Y
786	QB	13		Pavement Marking Plan	Y
787	QB	14		Pavement Marking Plan	Y
788	QB	15		Pavement Marking Plan	Y
789	QB	16		Pavement Marking Plan	Y
790	QB	17		Pavement Marking Plan	Y
791	QB	18		Pavement Marking Plan	Y
792	QB	19		Pavement Marking Plan	Y
793	QB	20		Pavement Marking Plan	Y
794	QB	21		Pavement Marking Plan	Y
795	0			Geotechnical Data Sheet Index	Y