# I-205 Improvements: Stafford Road to OR 213



Contractor 1:1 Meetings November 18, 2021

I-205 IMPROVEMENTS Stafford Road to OR 213

## Agenda

- Introductions
- Review updated project information and address questions submitted during previous 1:1s
- DBE and Workforce goals
- Procurement schedule and bid process
- Q&A



## Temporary Work Structures

**Contractor Question**: For trestle pile and drilled shaft installation, is there a ground motion limit that can't be exceeded? Will this be provided in the specifications?

**ODOT Response**: ODOT is not providing ground motion limits. Trestle pile requirements and restrictions on vibratory methods are provided in Section 00252.40. Environmental protections associated with pile installation are provided in Section 00290.34(c)6.

**Contractor Question**: Does ODOT have a pile count for temporary work structure and reaction frame?

**ODOT Response**: 740 piles in total of which up to 120 may consist of 36" for lateral stability. They may not be driven to bedrock.

**Contractor Comment**: Recommendation is for ODOT to provide parameters of what is allowable within the permits/in-water work windows and let the industry determine the best methods to complete the work with Contractors controlling temporary work structure engineering and planning.

**ODOT Response**: Deformation limitations are not included in the contract documents however, deformation monitoring of the work bridges is included in Section 00252.



## **Temporary Work Structures**

**Contractor Comment**: Recommend analyzing the existing structure to determine if there is additional capacity to brace temporary supports off of?

**ODOT Response**: There is limited capacity in the existing structure and a robust analysis will be required to utilize the substructure. The design criteria for Falsework Construction Loading are provided on sheet JBA-16. The Contractor will be responsible for analyzing the impacts of any additional loading.

**Contractor Comment**: Clarify restrictions on temporary work structure sub-surface installation (i.e., vibration, impact).

**ODOT Response**: Trestle pile requirements and restrictions on vibratory methods are provided in Section 00252.40. Environmental protections associated with pile installation are provided in Section 00290.34(c)6.

**Contractor Question**: Will it be a requirement to remove temporary work at and/or below mud line? If so, what limits of removal are required?

**ODOT Response**: Piles are to be removed if feasible, where not feasible, they should be cut off as stated in Section 00290.34(c)9a.



## Environmental Protection / Permitting

**Contractor Question**: Is there a set of environmental restrictions that can be made available?

**ODOT Response**: Environmental restrictions are included in the bid documents and permits are available as bid reference documents. A list of restrictions will not be provided.

**Contractor Question**: Would it be allowable to perform in-water work with containment, such as over-sized casing or bubble curtain, outside of the in-water work window?

**ODOT Response**: Current permits do not allow pile driving outside of the in-water work period, even with bubble curtains. The Contractor may request a deviation from the permit.

**Contractor Question**: If cofferdams are installed prior to drilled shaft casing installation and drilled shaft casings are installed within cofferdams, can drilled shaft casing installation occur during periods other than in-water work periods? If yes, does this apply to follow on activities?

**ODOT Response**: Current permits do not allow drilled shaft installation outside of the inwater work period. The Contractor may request a deviation from the permit.



## Environmental Protection / Permitting

**Contractor Question**: Will the permit allow ground disturbing work activities within the limits of the Regulated Work Area during periods of time outside the defined regulated in-water work periods if water is not present within the Regulated Work Area?

**ODOT Response**: The existing permits do not allow for work within the regulated work area outside the defined in-water work periods except as noted in Section 002934(a).



## Environmental Protection / Permitting

**Contractor Comment**: Provide permits and/or applications so the Contractor can understand the conditions for the temporary work structure installation.

**ODOT Response**: Permits will be available as bid reference documents. Permits received for the project are listed below:

Permit	Agency		
Land Use Approval	City of Oregon City		
Land Use Approval	City of West Linn		
Bridge permit	US Coast Guard		
Removal/Fill	DSL		
Section 404	USACE		
401 WQ Cert	DEQ		
Section 7/ESA	NMFS		
Section 106	SHPO		
Section 4(f) - Oregon City	FHWA		
Section 4(f) - West Linn	FHWA		
ODFW Fish Passage Approval	ODFW		
Noise Variance	Oregon City		



I-205 IMPROVEMENTS Stafford Road to OR 213

Contractor Questions regarding drilling equipment:

- Is an oscillator required to install casing on all drilled shafts or just the 12-foot drilled shafts?
- Will other methods besides oscillation be allowed for installed casing on drilled shafts (i.e., vibratory, impact)?
- Clarify what the restrictions are on vibrating in the permanent casing for drilled shafts.

**ODOT Response**: Section 00512.43 states, "...Use non-vibratory equipment to install temporary casing, permanent casing and permanent structural casing to the dimensions shown in the Plans. Casing installation by impact hammer is not allowed..."

**Contractor Comment**: Reconsider the required tip embedment with the potential side resistance contribution in the uncased weathered basalt. A prototype load test could be included to support this minor design change with a major potential cost savings.

**ODOT Response**: No change. Shaft tip elevations will remain as designed and shown on plans.



**Contractor Question**: Recommend pulling the bottom of the column up from the mud line. Can drilled shafts be pulled up 5' above the mud line?

**ODOT Response**: Most of the bottom of the columns are above the mud line however, there are a couple that are below. Final distance from mud line are shown in the plans.

**ODOT Question**: There are several drilled shafts where geotechnical explorations were unable to sample the subsurface within the planned shaft footprint and considered adding exploratory drilling prior to drilled shaft.

**ODOT Response**: ODOT assessed the subsurface conditions using new explorations as well as explorations from previous projects. ODOT will not perform additional exploratory investigations for drilled shafts and will not include additional exploratory investigations for drilled shafts.

**Contractor Question**: Reconsider the need for permanent casing below elevation -30ft.

**ODOT Response**: No change. The permanent casing is intended to minimize the risk of hole collapse and increase the likelihood of having a clean bottom shaft.



**Contractor Comment**: Reconsider the use of permanent structural casing.

**ODOT Response**: No change. The design team recommends continuing with the current approach.

**Contractor Comment**: If permanent structural casing is considered essential, reduce the required embedment of the permanent casing to only that depth needed to satisfy the structural strength requirement.

**ODOT Response**: The design team has assessed the locations and elevations for permanent casing and permanent structural casing and maintains direction to install permanent casing and permanent structural casing to the dimensions shown in the plans.

**Contractor Comment**: Eliminate the requirement to grout around the casing because there will not be a significant annular space outside an oscillator installed casing.

**ODOT Response**: The requirement for grouting around the casing for the drilled shafts has been removed.



**Contractor Comment**: Consider allowing alternative methods of casing installation such as vibratory or impact hammers and avoid risks to the owner related to prescriptive specifications with respect to the contractors means and methods.

**ODOT Response**: No change. The design team expressed concerns about the uncertainty about the impacts that vibratory or impact hammers might have on the soils supporting the existing foundations. The risks are hard to quantify but are likely to occur to some degree or another. The risk can be mitigated by advancing casing using an oscillator and the team has identified viable mitigation options to the key risks associated with the oscillator.

**Contractor Comment**: Permit the advancement of a relief hole or pilot hole for a limited depth (perhaps one or two diameters) below the casing with the provision that a support fluid such as polymer slurry be used to maintain stability.

**ODOT Response**: The design team expressed concerns about this approach on some of the alluvial deposits that could cave and create difficult drilling conditions. This could be considered as a viable approach if obstructions are encountered. This approach could be proposed by the Contractor and approved by the ODOT Construction office.



## **Geotechnical Data**

**Contractor Question**: Does ODOT intend to issue a baseline geotechnical report? We recommend this as a risk sharing effort to reduce conflict.

**ODOT Response**: ODOT will not provide a baseline geotechnical report. Geotechnical Engineering Reports and Geotechnical Data Reports will be provided as bid reference documents. Geotechnical Data Sheets have been included in the contract plans.

**Contractor Question**: Are ODOT borings going to be reference documents or contract documents? We recommend that borings be a part of the contract documents.

**ODOT Response**: ODOT will not provide borings in the contract documents. Boring logs will be included in the Geotechnical Engineering Reports and Geotechnical Data Reports and will be provided as bid reference documents. Geotechnical Data Sheets have been included in the contract plans.

**Contractor Comment**: Contractor recommends that an effort be made to identify the location of existing foundation elements.

**ODOT Response**: As-constructed plans for the Abernethy Bridge will be provided as bid reference documents.



## **Geotechnical Data**

**Contractor Question**: Will there be a differing site conditions specification that differs from the standard specifications?

**ODOT Response**: No, the standard specification will be used.

**Contractor Question**: Will there be a relief mechanism for items that are encountered during the subsurface work?

**ODOT Response**: ODOT revised the Drilled Shaft Obstruction clause in Section 00512.



## Improved Soil Mass work

**Contractor Question**: Pier 3 ground improvements appear to be required to complete within the first 5 months, is this correct? If so, this does not appear feasible. It is likely that the design timeline for this work will take 5 months.

**ODOT Response**: The ground improvements at Pier 3 can be done at any time during the project as long as completed during the in-water work period.

**Contractor Question**: You can't get to half of the ground improvements for Pier 3 until 2023. Why the limitation?

**ODOT Response**: Ground improvements at Pier 3 were shown to occur after the work bridge was removed, which created this limitation. This is not a contractual requirement or restriction; just one way of progressing work. Note that in order to do the ground improvement work, the existing sewer line must first be relocated in that zone. Beyond that, the work can be done at any time prior to relocating Abernethy Creek and during the in-water work period.



## Improved Soil Mass work

**Contractor Question**: What is the plan for seepage containment for ISM work?

**ODOT Response**: Section 00345.40 states, "Protect the existing utilities, structures and foundations during the ISM construction. Prevent the construction spoils and grout from entering the No Work Areas and Regulated Work Areas according to 00290.34(a), including Abernethy Creek, the Willamette River, and McLoughlin Creek." Means and methods are part of the submittals in Section 00345.41(d).



### Structures

**Contractor Question**: Are there going to be provisions for differential shrinkage regarding the crossbeams?

**ODOT Response**: No provisions for differential shrinkage are required.

**Contractor Comment**: 3D integrated shop drawings would assist in preparing the thermal control plan.

**ODOT Response**: The contract specifications will require 3D integrated shop drawings.

**Contractor Question**: Is the Contractor allowed to close the bridge during deck pours?

**ODOT Response**: Yes, allowable closures are specified in Section 00220.

**Contractor Question**: Will the Contractor be required to demonstrate that the translation system works on paper or with a load test?

**ODOT Response**: A trial run will be required per Section 00507.



### Structures

**Contractor Question**: Where does the jacking system attach, to the box or the bearing?

**ODOT Response**: The jacking system could be attached to the box girder. Details are included in the contract plans.

**Contractor Question**: Will the Contractor be required to analyze allowable deflection during the translation or has this been analyzed by ODOT?

**ODOT Response**: Allowable deflections are specified in Section 00507.

**Contractor Question**: Regarding the modular joint at pier 6, currently it's showing constructed after the translation? How does that work? Is there a splice?

**ODOT Response**: The joint seal assembly comes in segments that can be spliced to accommodate staging or traffic control conditions.

**Contractor Question**: Is there going to be a shutdown of the waterline? Does the waterline need to be maintained?

**ODOT Response**: A 4-month shutdown over the winter is allowed.



### Structures

**Contractor Question**: Does the contract require structural steel members to be de-leaded (if the existing paint does contain lead) and painted? The draft contract documents do not seem to be very clear regarding this work.

**ODOT Response**: The paint on the Abernethy Bridge contains lead. Paint that needs to be removed must be contained and handled per Section 00296.

**Contractor Question**: Regarding the modular joint at pier 6, currently it's showing constructed after the translation? How does that work? Is there a splice?

**ODOT Response**: The joint seal assembly comes in segments that can be spliced to accommodate staging or traffic control conditions.

**Contractor Comment**: Historically, EPS has not accepted Contractor's purchase orders and standard commercial language flow down from the prime contract. EPS will only accept their commercial terms which have not reflected the terms of the Contract since they are the sole source for the triple pendulum bearings.

**ODOT Response**: ODOT will investigate modifying the specifications to align with EPS technical specifications. Any modifications will be addressed via addendum.



### **Diversity Goals**

#### **Proposed DBE Construction Goal** – 14%

#### On the Job Training/Apprenticeship – 20%, 15% Operators

#### Aspirational Targets – Minority 20% & Female 14%

#### **TERO** – 5%

**Contractor Question**: The TERO fee is a significant \$ amount (more than \$800k). Will ODOT provide a separate pay item for the TERO fee within the bid schedule?

**ODOT Response**: The TERO fee is a dollar amount payable directly to the Confederated Tribes of the Grand Rhonde TERO and not a pay item. The fee is between the Contractor and the TERO and that TERO is/has provided payment plans.



## **Priority Hiring Zip Codes**

**Zip Code Priority Hiring** – 8%

		Wa	ashington	Portland Multnomah Gresham	
I-205 Work	force Priority Hiring Z	ip Codes		12/25 A	~ /
97003	97222	97204	nh	Clackamas	
97005	97227	97205		Clackallias	
97024	97230	97206			1
97026	97233	97211			
97030	97236	97214			
97038	97266	97216			~
97078	97305	97217			L
97116	97317	97218			$\rightarrow$
97202	97362	97220	>-175	Marion	2
97203	97383				5
					(



### A+C+D Procurement

Qualifications: Bidders Experience

- Similar bridge/overall project experience within 10 years
- Similar drilled shaft construction project experience within 15 years
- Similar ground improvements construction project experience within 10 years

#### Qualifications: Key Staff (sample, more listed in Section 00125)

- Project Manager 15 years
- Superintendent 15 years
- Drilled Shaft Superintendent 10 years
- Drill Operator 5 years
- Ground Improvement Superintendent 10 years
- Bridge Translation Superintendent 10 years
- Diversity Manager 5 years



#### A+C+D Procurement

**Technical Approach**:

- 1. Schedule
- 2. Work Zone Traffic Management
- 3. Quality Control and Materials
- 4. Site Access
- 5. Drilled Shaft Construction
- 6. River Pier Construction
- 7. Abernethy Bridge Translation
- 8. Ground Improvements
- 9. Environmental Protection / Permitting Requirements
- 10. Coordination with Adjacent and Regional Projects



### **Project Procurement Timeline**

Advertise 12/02/21

Technical Component Due 02/01/22

Price Component Due 03/01/22

Notice to Proceed 04/21/22



## Anticipated Addenda

Dock Removal

Waterline support system on Abernethy Bridge

Waterline inspection platform

Sanitary Sewer inspection platform

Monitoring Wells for Ground Improvements

Full depth reconstruction of existing shoulders w/in project limits



# Questions/Comments

#### For more information, contact:

Allen Hendy, PE – ODOT Resident Engineer Consultant Projects Phone: 971-235-3861 Email: Allen.Hendy@odot.state.or.us



