



PBOT

PORTLAND BUREAU OF TRANSPORTATION

Quality Control Plan For Federal Aid Certification

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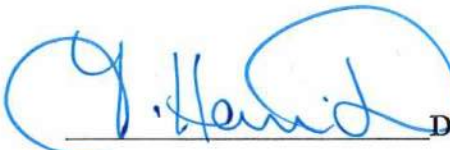
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ACRONYMS

AASHTO	American Association of State Highway Transportation Officials
ADA	Americans with Disabilities Act
BAS	Bridges and Structures Section
BGS	Bureau of General Services
BES	Bureau of Environmental Services
CFR	Code of Federal Regulations
CDS	Civil Design Section
CLA	Certified Local Agency
CM	Contract Manager
CON	Construction Section
CPC	Certification Program Coordinator
CPM	Certification Program Manager
EOR	Engineer-of-Record
ESD	Engineering Services Division
FC	Functional Classification
FHWA	Federal Highway Administration
IA	Independent Assurance
LACM	Local Agency Certification Manager
LAG	Local Agency Guidelines
LAL	Local Agency Liaison
MFTP	Manual of Field Test Procedures
NACTO	National Association of City Transportation Officials
NHS	National Highway System
ODOT	Oregon Department of Transportation
OMF	Office of Management and Finance
PCC	Portland City Code
PS&E	Plans, Specifications & Estimate
PM	Project Manager
QA	Quality Assurance
QC	Quality Control
QCS	Quality Compliance Specialist
QCC	Quality Control Coordinator
PBOT	Portland Bureau of Transportation
PPR	Portland Parks & Recreation Bureau
PWB	Portland Water Bureau
SSL	Signals & Street Lighting Section
SUR	Survey Section
TOP	Traffic Operations

1.0 INTRODUCTION

This is the 2016 Edition of the “PBOT Quality Control Plan for Federal Aid Certification” as part of the City of Portland, Bureau of Transportation, [Certified Local Agency Program](#). This document is an update to the 2008 Edition of the PBOT “Construction Guidelines for Capital Improvements” and replaces the original document in its entirety.

This document is intended to be a working plan where procedures and processes will need to be modified to reflect changes that occur over time. An electronic version of this document will be posted on the Portland Bureau of Transportation Web Site at:

<https://www.portlandoregon.gov/transportation/article/662800>

In order to view the document, you must register at: <http://www.portlandoregon.gov>

The purpose of this Quality Control (QC) Plan is to ensure that the City of Portland (City) successfully completes the Federal Highway Administration (FHWA) projects in compliance with federal laws and regulations, and the requirements of the current Local Agency Certification Program Master Agreement #30890 that was fully executed on September 18, 2015 with the Oregon Department of Transportation (ODOT). PBOT was first awarded formal ODOT Certification in the “Advertise, Bid, Award, Design and Contract Administration” phases of work and passed by City Council on June 29, 2011 under Ordinance 184710.

In addition to FHWA requirements, the QC Plan describes the practices and procedures needed to administer Certified Projects that meet ODOT’S Local Agency Guidelines (LAG) Manual and PBOT’S Standard Construction Specifications. Nothing in this Plan changes any provision or specification within the Contract, or any applicable laws, ordinances or regulations.

This plan describes Quality Control practices which require the City of Portland to administer Federal Aid Contracts in a consistent and uniform manner throughout the City. As the Master Certification Agreement with ODOT states, only the Portland Bureau of Transportation has met all certification criteria. The City’s Quality Control Plan addresses how PBOT will provide oversight acceptable to ODOT on all transportation FHWA Federal-Aid projects.

PBOT is Certified in the following phases:

- Design
- Advertise / Bid / Award
- Construction Contract Administration

PBOT is actively pursuing Certification in the following phase:

- Bridge Design (SE 122nd Avenue Bridge) Cameron Glasgow
- Consultant Selection (Formal) Dan Layden, PM

PBOT's ADA Design Exception and ADA Inspection Processes have been reviewed and approved by ODOT and FHWA for use on federal-aid projects.

Other City bureaus receiving federal funds as reimbursement must also comply with the ODOT Certification requirements. Since the practices described in this Plan are the accepted policies and procedures of PBOT, the Project Manager and team must adhere to these described practices unless prior concurrence of the ODOT and PBOT has been received and agreed to a different practice.

The Project Manager and the project staff must be familiar with all applicable requirements of the City of Portland Standard Construction Specifications, the PBOT Quality Control Plan and the contract requirements for Certified Local Agency projects. They must also be familiar with the manuals, technical references, and instructions which apply to other portions of the work not covered in this Plan.

The ODOT [Project Manager's Checklist](#) and [PBOT's Certified Project Tracking Worksheet](#) include listings of typical milestone events associated with PBOT construction projects. The Certified Project Tracking Worksheet is PBOT's version of the ODOT LAG Manual spreadsheet used in Chapter 8. Readers will notice that some PBOT requirements are duplicative of ODOT requirements. This is to ensure consistency where possible as ODOT is responsible to administer Federal Highway funds and carries the responsibility to ensure compliance of FHWA policies and requirements.

The following summarizes the major components of the City's Quality Control Plan.

- Background and Responsibilities
- Oversight by the Portland Bureau of Transportation
- Preliminary Engineering (aka. PS&E or Design Phase)
- Advertise, Bid & Award Phase
- Construction Contract Administration Phase
- Project Closeout

1.1 BACKGROUND

The Federal-Aid Highway Program is a Federal Highway Administration (FHWA) sponsored cost-based reimbursement mechanism for transportation related projects. Federal-Aid

funds are distributed to the various States through their respective transportation agencies. In Oregon, these funds are distributed through the State's Department of Transportation, (ODOT). Local Agencies like the City of Portland (City) can submit transportation-related projects to qualify for and leverage these funds. In the past, all qualified projects were bid and contracted through ODOT. Through a stewardship and oversight agreement, FHWA allows ODOT to delegate the administrative authority for managing these contracts to a local public agency. ODOT remains responsible and accountable for local public agency compliance with all applicable Federal laws and requirements. Now, FHWA is allowing States to grant program responsibility to qualified local agencies through an approved Certification program.

The City, through its various Offices' and Bureau's, has the qualifications, experience, and staff to be a Certified Local Agency (CLA). This document outlines the process by which the City has agreed to assemble, advertise, award, and execute construction contracts under the Federal Certification Acceptance program.

Under certification, ODOT remains responsible for program oversight and for ensuring that all Federal requirements are met by approving the local agency's processes. ODOT and/or FHWA will provide technical assistance as needed along with periodic program reviews and project specific reviews on a yearly basis.

The benefits of Certification include:

- Savings in time and money since the City has the authority to develop, advertise, award, and manage its own Federal-Aid projects.
- Greater flexibility in delivering projects since ODOT's role would be less focused on approval and administration.
- A cohesive partnership between ODOT and the City that allows ODOT to redistribute and redirect limited resources to other high-priority projects.
- ODOT can focus on training and technical assistance without also having to deal with project administration.
- Establishes the City as qualified to perform federal projects thus lowering the risk of losing federal funds as well as increasing the likelihood of meeting scope, schedule, and budget objectives.

The City of Portland's Bureau of Transportation (PBOT), Bureau of Parks and Recreation (Parks), and Bureau of General Services (BGS), have projects and programs that enable the City to receive funding through the Federal-Aid Highway Program. **PBOT is the only City bureau certified to administer Federal-Aid projects.** A requirement of this plan is to ensure that proper contract administration training is achieved and the Quality Control Plan is followed to promote consistency, quality and accountability in the documentation and reporting requirements. Other City bureaus will need to show how they meet this

standard and the requirements of this QC Plan prior to performing as the lead contract administrator on federally funded projects.

Oversight of the Quality Control Plan is a joint responsibility of the Project Manager and the Contract Manager. The City Engineer has the final authority on the project for those areas of project delivery delegated to the City from ODOT. This final authority should be consistent with the requirements of the ODOT-City of Portland Master Certification Agreement, ODOT LAG manual and FHWA policies.

Other City bureaus and offices assist PBOT in administering both the Certification Program as well as individual projects:

- The **Bureau of Purchases** has the responsibility of Solicitations and Fair Contracting Programs. Guidelines that City Bureaus use to contract for Construction Services are contained in the [City of Portland Purchasing Manual \(Rev. January 2014\)](#).
- The **Office of Management and Finance's** Grants compliance section interfaces between the individual Bureau finance sections and ODOT. They forward project invoices to ODOT and manage receipt of all grant funds from ODOT.
- The **Auditor's Office** issues City construction contracts and contract payments. The Auditor's Office, through the Council Clerk, is also responsible for preparing the Council agenda, processing City Ordinances and Resolutions, and transcribing the official summary minutes of the Council meetings. The City Recorder Division of the Auditor's Office develops, maintains, and provides accurate and objective documentation of City business and acts as an information clearinghouse for City Council, individual Bureaus, and the public.

Through the City Recorder Division, the Auditor is responsible for maintaining the official copy of the Portland City Code.

The City Recorder Division also receives accounting documents, contracts, and data from other bureaus and provides this information to the public, other City Bureaus, and to various financial institutions, as requested. Through this Division, the City Auditor gives the final approval to all claims for payment against the City, disburses payments, and maintains current files of all City contracts.

The City Recorder Division of the Auditor's Office is responsible for developing and distributing records retention and disposal schedules for all City agencies and negotiating records retention schedules with the Oregon Secretary of State, Archives Division. The City Recorder Division is responsible for semi-current and inactive City records, and it provides storage, retrieval, and destruction services for those records. The Division

operates the Stanley Parr Archives and Records Center (SPARC) located at Chimney Park, 9360 N. Columbia Blvd.

1.2 CERTIFICATION MANAGER

PBOT has established a Local Agency Certification Manager, who is responsible for oversight of Local Agency FHWA/ODOT certified projects managed by the City of Portland. This position is responsible for coordination with ODOT, with other Bureaus, and within PBOT, to provide quality control of FHWA funded projects managed by City staff under the master certification agreement. Dan Layden is the PBOT CIP Capital Project Manager with lead oversight of the PBOT Certification Program. Todd Liles, who is the PBOT Construction Supervisor, also assists in the facilitation of the Certification program as he is intimately involved in the Ad/Bid/Award and Contract Administration procedures.

2.0 FHWA, ODOT AND CLA RESPONSIBILITIES

2.1 FHWA RESPONSIBILITIES

FHWA has the authority and responsibility for implementing and monitoring federal laws, regulations and executive orders affecting highway transportation projects undertaken with federal funding. When a project involves FHWA funding, FHWA is involved according to these responsibilities, delegations of authority and FHWA's Stewardship Agreement with ODOT. For local agency projects involving federal funding, FHWA's responsibilities typically involve project implementation and process review activities.

SEE ► FHWA's Contract Administration Core Curriculum Manual

SEE ► The approval authority for various phases of work is indicated in the [Approval Authority Matrix](#), located in the Appendix of Chapter 2 of the LAG manual.

2.2 ODOT RESPONSIBILITIES

ODOT is responsible to FHWA for administering the successful implementation of Federal-Aid programs and projects.

As part of ODOT's obligation to ensure compliance with state and federal laws, ODOT outlines the basic requirements for local agency policy and procedures. In this way, ODOT supports local agencies as they develop their own procedures that comply with state and

federal requirements. By doing this, ODOT avoids prescribing uniform policies and procedures upon local agencies which allows for greater flexibility for individual agencies. ODOT collaborates with FHWA to interpret federal and state laws and provide guidance through training and manuals to assist agencies with planning, designing and constructing transportation systems.

Federal funding allocations are distributed to local agencies to meet program goals. ODOT also has responsibility to ensure that budget authority is not exceeded, and include guidance to ensure that projects are implemented in a timely manner.

The following are some of the key project responsibilities that ODOT cannot delegate; PBOT must comply with ODOT's process within these specific project areas:

- Civil Rights activities including DBE, EEO and OJT/Apprenticeship
- Environmental Processes including certain activities within NEPA
- Right of Way Certification
- Project Final Acceptance
- Pre-award audit review of consultant contracts over \$250,000;
- Approval of Utility Relocation Agreements involving federal reimbursements; Utility Certification
- Approval of payments from ODOT to local agencies;
- Right of Way Certification;
- Issuance of rail grade crossing orders

Consult the [ODOT LAG Manual](#) chapters covering these topics. Where FHWA has not delegated final approval, ODOT monitors local agency activities, reviews or prepares documents and makes recommendation to FHWA. As an example, ODOT will review all environmental documents for completeness before ODOT submits them to FHWA for approval.

Within ODOT's Local Government Section, ODOT is available and provides technical assistance to agencies requesting help in areas such as environmental issues, right of way, hazardous waste, labor compliance, EEO, Title VI and DBE issues when needed.

2.3 CERTIFIED LOCAL AGENCY (CLA) RESPONSIBILITIES

Within the Federal-Aid Guidelines and Working Agreement between the Association of Oregon Counties and the League of Oregon Cities, Cities and Counties certified to administer Federal-Aid projects that are not on the NHS shall follow the guidelines set forth in the individual Master Certification Agreements entered into at the start of the

certification process. All non-certified cities and counties are required to follow the guidelines set forth in the Working Agreement and must contract with the STATE or other certified agency to secure services to perform plans, specifications and estimates (PS&E), contract advertisement, bid, award, contractor payments and contract administration.

Local agencies are responsible for utilizing federal funding in accordance with federal laws and program requirements. Local agencies shall ensure staff members, consultants and contractors comply with these requirements and procedures in developing and constructing projects.

SEE ► The approval authority for various phases of work is indicated in the [Approval Authority Matrix](#), located in the Appendix of Chapter 2 of the LAG manual.

2.4 FEDERAL FUNCTIONAL CLASSIFICATION

Federal Functional Classification (FC) is the system by which roads are grouped into functional systems according to the type of service and amount of traffic the facility carries. Functional Classification is used to determine design standards of roads and determines Federal-Aid funding eligibility. Federal Functional Classification is assigned to all public roads using federal guidelines and is approved by FHWA.

SEE ► [ODOT Federal Functional Classification for Federal Aid Eligibility](#).

2.5 FEDERAL AID ELIGIBILITY

These maps show the official Federal Functional Classification:

<http://www.oregon.gov/ODOT/TD/TDATA/gis/docs/Citymaps/Portland.pdf>

Federal-Aid-eligible roads include roads federally designated as:

- Major collector
- Minor arterial
- Principal arterial
- Interstate

Among the many changes in MAP-21, signed into law on July 6, 2012, is a new definition of the National Highway System (NHS). As of October 1st, 2012, the NHS was automatically expanded to include all roads that had both a federal functional

classification (FC) of principal arterial, and connected to an existing or new NHS route on at least one end.

Oregon Impact: About 600 miles of principal arterials, including many local roads, were added to the NHS. These routes are now subject to AASHTO design standards as the result of this designation. In addition, a number of new federal performance measures are required on all NHS routes. Local governments may want to consider reviewing FC designation of some marginal principal arterial routes. ODOT continues to work with FHWA to refine Oregon’s NHS network.

To determine which agency (ODOT or CLA) carries the authority for Design Exceptions, Design Reviews and Audit Procedures, refer to [Table Q-1: Map-21 NHS Roles/Responsibilities Matrix](#) in the 2012 ODOT Highway Design Manual.

Refer to this link for updates on Oregon NHS state-owned and NHS non-state-owned routes: <http://www.oregon.gov/ODOT/Data/Pages/Functional-Class.aspx#NHS>

2.6 CITY ORGANIZATIONAL STRUCTURE

PORTLAND CITY GOVERNMENT

The City of Portland has the last remaining Commission form of government among large cities in the United States. The Mayor, four Commissioners and the Auditor comprise the City's six elected officials. The Mayor and the Commissioners together make up the City Council.

The commission form of government differs from most other municipal governments in that its members have legislative, administrative and quasi-judicial powers.

LEGISLATIVE

The City Council meets weekly in the Council Chambers to conduct the City's legislative business. The Council adopts the City budget and passes laws, policies and regulations that govern the City.

The City executes agreements via ordinances. Ordinances are formal documents passed by Council quorum and carry the binding effect of law.

ADMINISTRATIVE

The Mayor and Commissioners also serve as administrators of City bureaus, individually overseeing bureaus and carrying out policies approved by the Council. The assignment of bureaus is determined by the Mayor and may be changed at his or her discretion.

QUASI-JUDICIAL

Council members also act in a quasi-judicial capacity when hearing land-use and other types of appeals. Council serves as forum for public hearings, including public testimony.

2.7 PORTLAND BUREAU OF TRANSPORTATION (PBOT) ORGANIZATION

The Portland Bureau of Transportation (PBOT) is a community partner in shaping a livable City. We plan, build, manage and maintain an effective and safe transportation system that provides people and businesses access and mobility. We keep Portland moving.

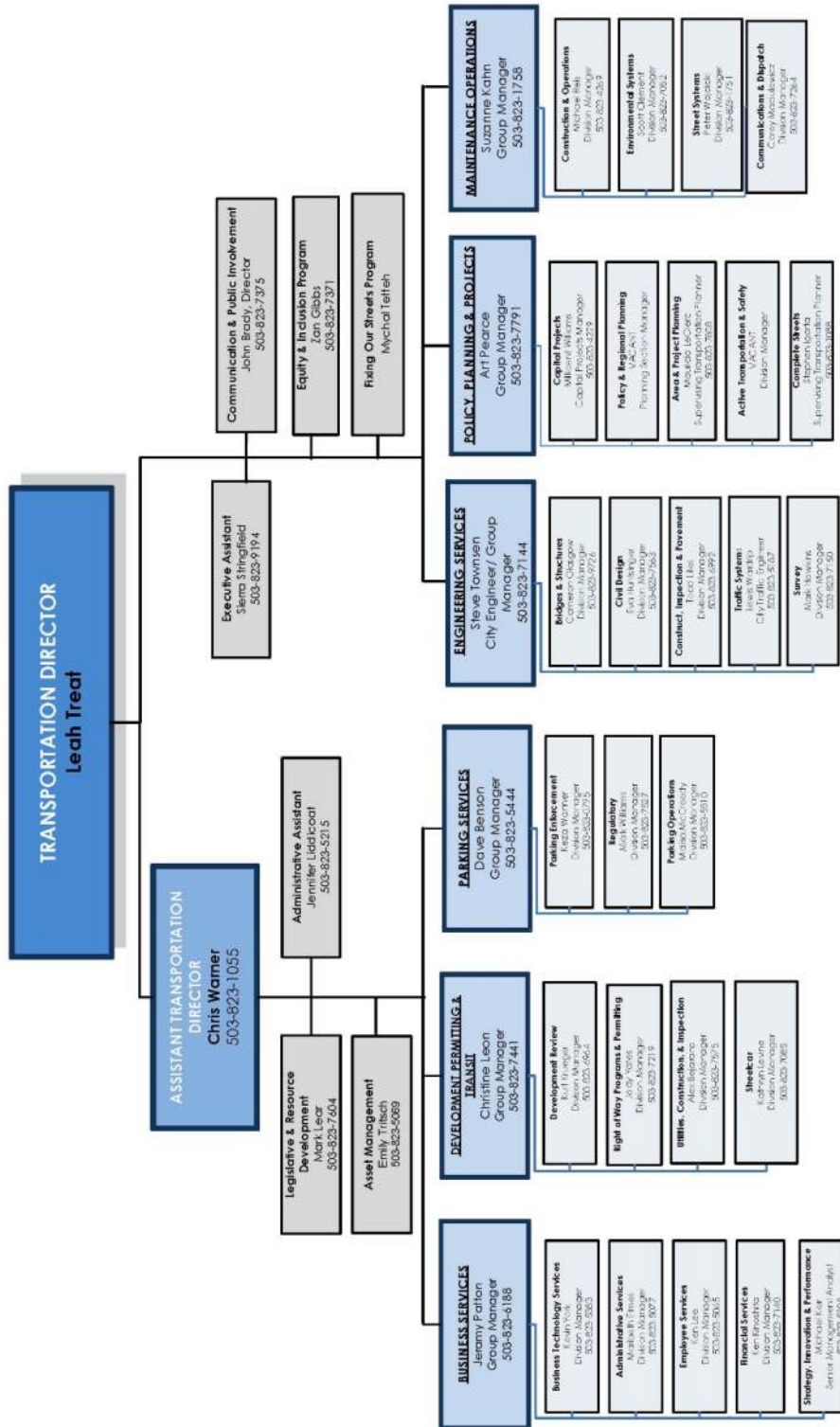
The Portland Bureau of Transportation manages transportation assets with a replacement value of \$8.4 billion. Paved streets, the sidewalk system, bridges, traffic signals (signal hardware), and streetlights make up the majority of the dollar value (\$8 billion). In addition to these key assets, the City of Portland owns other assets that ensure the safety and movement of people and goods: streetcars, an aerial tram, various support facilities, traffic calming devices, signs, parking meters, parking garages, pavement markings, bikeways, guardrails, retaining walls, the Harbor Wall, stairways, and traffic signal computer controllers.

As the state's largest urban area, protection of our way of life requires creativity in order to balance the competing uses, complexity, age, and size of the transportation system.

Portland stands as a national leader in innovative transportation solutions. Planning and constructing solutions to meet the demands of a growing City and region, while maintaining our economic vitality and neighborhood character, requires Transportation to leverage its limited resources. Stewardship of Portland's mobility and livability is our primary responsibility.

PBOT ORG CHART

PBOT Quality Control Plan for Federal Aid Certification 2018



2.7.1 POLICY, PLANNING & PROJECTS DIVISION

The Policy, Planning & Projects (PPP) Division manages capital projects within the Transportation Capital Improvement Program. Successfully managing multi-modal, high-quality, customer-oriented projects delivered in a timely manner is our goal. Our objective: Develop project managers who implement transportation projects serving a variety of transportation modes and who are responsive to the requirements of land use and urban design objectives in the community. Key to the success of program is the use of "lifecycle" or "cradle-to-grave" project management. Many of the projects managed in this program use Lifecycle project management.

2.7.2 ENGINEERING SERVICES DIVISION

The Engineering Services Division (ESD) provides engineering support for transportation projects that enhance neighborhood access and livability, preserve and rehabilitate facilities, and support land use through improvements to the City street and structures system. Eight sections comprise the Engineering Services Division.

2.7.3 CIVIL DESIGN

The Civil Design Section (CDS) provides civil engineering and construction management services for capital improvement projects. The Section specializes in the delivery of all surface transportation modes: vehicular, pedestrian, bicycle, freight, and rail. Additionally, CDS provides ADA expertise for all City bureaus, digital terrain modelling, designs of flexible and rigid pavements, utility and railroad coordination, and guardrail designs. CDS designs storm water management facilities and drainage facilities to compliment pedestrian, bicycle features and traffic calming techniques throughout the City. CDS designs, drafts, and prepares construction contract plans, specifications, and estimates for PBOT's Capital Improvement Program and Local Improvement District (LID) projects, and oversees engineering work provided by consultants and others performing work for and within the City's right-of-way. CDS coordinates, maintains, and updates the City's Standard Construction Specifications and the Standard Drawings used on all City CIP and Permit projects.

2.7.4 BRIDGES & STRUCTURES

The Bridge & Structures Section (BAS) provides technical support, structural engineering design and construction contract administration and management of capital bridge improvement projects. This program is also responsible for inspecting PBOT's 157 Bridges, 557 Retaining Walls, 188 Public Stairways, as well as miscellaneous assets such as the China Gate and the Harbor Wall. Bridges are inspected on a bi-annual basis. All other assets are inspected on a priority basis determined by need. Each inspection generates a report which is used as the basis by the program's engineers to design and prioritize repairs for these assets. Bridges and Structures engineers meet routinely with Maintenance Operations Supervisors to assist them in prioritizing maintenance needs for these assets, as well as inspecting the critical repairs during construction. The program also responds to critical landslides and when required can design, mitigate and repair landslide hazards in the Right of Way.

2.7.5 TRAFFIC ENGINEERING

The Traffic Engineering (TE) Section provides Traffic Design & Engineering services for planning, development, and construction of Capital Projects to address operational /safety /mobility needs of the City's multi-modal transportation system. Work includes safety evaluations, capacity analyses, geometric design, participation in public meetings and technical advisory committees, development of traffic elements for inclusion in construction plans/specifications, approval and monitoring of construction traffic control plans and submittals, and implementation of pavement marking and signing plans.

2.7.6 TRAFFIC OPERATIONS

Traffic Operations Section provides traffic engineering for safety and operational improvements to the transportation system. Responsible for the 823-SAFE Traffic Safety hotline providing customer service to citizen concerns about transportation issues. Traffic Operations also provides traffic engineering services for a wide range of permits issued for use of the right-of-way and for both BES and PWB capital projects. Traffic Operations manages Special Event permitting and provides traffic engineering services for all major special events City wide. Traffic Operations also includes the Data Collection section responsible for traffic data collection and management. Data Collection also responds to sign and intersection visibility issues.

2.7.7 SURVEY

The Survey (SUR) Section provides design and construction services to all Portland City bureaus. Topographic surveys and right-of-way resolutions are used by engineers to create PS&E documents for the design and development of roadways, bridges, water and sewer improvement projects. The Survey group provides construction staking to contractors during the construction phase of the project. Additionally, the Section provides property/boundary surveys, deed research, as-built mapping, settlement monitoring, and survey control as needed. The Section is responsible for updating and maintaining the City-wide vertical benchmark system. The established benchmarks are used by the City and private Surveyors, Engineers and Contractors, to provide elevation control for their projects. When needed, the Survey group also manages flexible services contracts for Surveying and Aerial Mapping by Consultants.

2.7.8 CONSTRUCTION

The Construction (CON) Section provides quality assurance, contract administration, inspection, and technical services on City permit and City capital improvement projects (CIP). Field staff inspects the construction of structures, streets, sidewalks, driveways, drainage, stormwater facilities, signing, striping and curbs to assure they are built to appropriate City standards and specifications. This group has responsibility for ensuring proper contractor payments, labor compliance, civil rights, and quality and quantity documentation on capital improvement projects. In addition, CON provides project management of the City's large paving projects.

2.7.9 PAVEMENT MANAGEMENT

The Pavement Management (PVMT) Section identifies and prioritizes street maintenance and capital improvement projects based on visual inspection, sampling and testing of City streets. Inspectors collect street condition data, enter it into a computer model, and generate a database that constitutes the Pavement Management System (PMS). The PMS is one of several indicators that help to identify streets that are ready to implement the most appropriate and cost-effective maintenance technique based on its pavement condition rating. The analysis is part of the basis for the City's annual pavement maintenance and street repair plan.

2.7.10 SIGNALS & STREET LIGHTING

The Signals and Street Lighting (SSL) Section promotes pedestrian, bicycle and motorist safety and mobility through the efficient operation, monitoring and improvements to the City's traffic signal and street lighting systems. This group provides for the development, design and review of new capital improvements along with the monitoring and maintenance to over 28,000 street lights and over 1,100 signalized intersections within the City limits. SSL participates in the regional Intelligent Transportation System (ITS) technical advisory committee, Transport, to foster improved regional coordination of transportation operations.

2.7.11 BUSINESS SERVICES

Business Services Group (external to Engineering Services), provides accounting and budget/finance services for the Bureau of Transportation. Business Services leads Transportation financial planning, forecasting, budgeting, accounting, and revenue policy development. The program manages the three Transportation Funds (Operating, Reserve, and Debt) and assists in monitoring all Transportation financial resources.

Responsibilities include:

- Leading the preparation of the Transportation financial plan and budget;
- Coordinating the Capital Improvement Program (CIP) budget development process;
- Documenting the repair, preservation, operating, and maintenance needs of transportation capital facilities;
- Identifying the construction and expansion needs of the transportation network and proposing funding options for transportation activities;
- Providing billing and payment services;
- Providing financial and management information reporting services;
- Upholding professional standards and principles of fiscal responsibility throughout Transportation by providing advice to groups on financial matters;
- Maintaining data integrity in financial management services;
- Leading major new revenue development initiatives and assisting bureaus to expand existing revenue sources;

- Implementing continuous improvement in efficiency and effectiveness in Business Services through the use of business performance indicators and other tools;
- Serving as the Transportation financial spokesperson to OMF and City Council;
- Providing Transportation management analyst services;
- Monitoring, developing, initiating, and responding to federal, state, and regional transportation legislation and policies;
- Coordinating and overseeing Human Resources, Contract Services & Payroll, Information Management, and Asset Management.

Business Services in PBOT along with the City's Office of Management and Finance (OMF) has the responsibility for ensuring compliance with the Federal Single Audit OMB Circular A-133 for Federal Grant Recipients.

2.8 TEAM STRUCTURE, RESPONSIBILITY AND AUTHORITY

The typical project team structure in PBOT includes a Project Manager (PM), the supervising professional engineer referred to as the Engineer of Record (EOR) or Senior Engineer, a Construction Contract Manager (CM), an Engineering Technician (Tech), and an Inspector. Team members are not assigned solely to one project therefore the project team makeup does not remain the same from one project to the next. The Quality Compliance Specialist (QCS) plays a role on all project teams and is responsible for Material Quality Compliance and verification of Quality Control procedures related to construction. PBOT uses a matrix project organization to delivery projects with Engineering Services Division responsible for the technical and engineering functions and a Project Manager responsible for the administrative part of the project.

2.8.1 PROJECT MANAGER

Project Managers (PM) are staff members of the Policy, Planning and Projects Group. The Project Manager is the lead representative on the project team from initial inception through construction closeout. The Project Manager has the following responsibilities:

- Managing the overall project scope and any changes;
- Managing the overall budget for the life of the project;
- Public Involvement and external stakeholder Coordination
- Managing the overall project schedule;
- Ensuring Right-of-Way authorization, permits, and Environmental documentation is ready prior to construction;
- Ensuring Anticipated Items and Public Interest Findings are in place prior to construction;
- Obtain Easements prior to construction;
- Ensure final PAE Estimate is sent to ODOT after contract award;

- Review and approval of consultant contract invoices and PBOT billings for reimbursement;
- Ensure final billing is sent to ODOT;
- Filling out prospectus/charter and responding to comment from ODOT.

Project Managers hold decision-making authority during Project Development and Design Phases while Contract Managers are responsible for scope, schedule and construction budget during the Construction Phase. Contract Managers must get approval from Project Managers for all Change Orders and Requests for Increase in Project Authorization during the Construction Phase.

2.8.2 PROJECT DESIGNER

Designers are staff members of the Civil Design Section (CDS) or the Bridges and Structures (BAS) Section, working under the direct supervision and control of the Engineer of Record (EOR), responsible for producing the technical design and creation of the contract bid documents including the plans, specifications and engineer's cost estimate. Designers have the following responsibilities:

- Initiating design survey requests;
- Producing the engineering design of contract plans at 30-60-90 and final;
- Creation and section coordination of the contract technical specifications;
- Development of the contract engineer's cost estimate;
- Ensuring the appropriate jurisdictional design standards are met;
- Ensuring the ODOT PS&E design checklist is completed;
- Ensuring the PBOT City Engineer's Design Checklist is completed;
- Initiating the PBOT Utility Coordination Notification steps 1, 2, 3 and 4.
- Bid Analysis and preparing City Engineer's recommendation for contract award.

2.8.3 CADD TECHNICIAN

CADD Technicians are staff members of the Civil Design Section (CDS) who are experienced CADD operators and work closely with the Designers to draft the engineering technical requirements of the contract plans. CADD Technicians may be assigned several projects at once and belong to multiple project teams. CADD Technicians have the following responsibilities:

- Draft contract plans according to recognized PBOT drafting standards;
- Send out PBOT four-step Utility Notifications upon request by the Designer or Engineer-of-Record;
- Draft 30-60-90 and 100% plans as scheduled and send out for review and comment;
- Prepare as-built record drawings after completion of the work.

2.8.4 ENGINEER OF RECORD (EOR)

The Engineer-Of-Record is a staff member within CDS, CON, BAS or SSL and holds qualifications as a registered licensed Professional Engineers in the State of Oregon. The EOR provides direct supervision and control of the engineering aspects of the project and attests that Quality Assurance on the contract plans, specifications and estimate has been met. EOR's have the following responsibilities:

- Stamping Engineer of the contract plans and specifications for the work prepared under the EOR's direct supervision and control;
- Ensures the contract plans, specifications and estimates receive quality control reviews, commenting and editing at 30-60-90 percent and 100% Final Plans stage;
- Has approval authority in meeting the ODOT Federal Aid Certification Checklist;
- Ensures the Quality Control aspects for the project meeting the scope, schedule and budget during project design;
- Has approval authority in authorizing contract change orders which may increase cost or affect the project's budget and/or schedule;
- Initiates and ensures completion of the four-step utility notification process when the project is designed by consultant.

2.8.5 TRAFFIC ENGINEER

Traffic Engineers are staff members of the Traffic Engineering (TE) group who operate under the direction and authority of the City Traffic Engineer. Traffic Engineers have the following responsibilities:

- Stamping Engineer for the Traffic Control plan and detail sheets of the contract plans;
- Stamping Engineer for the Traffic Control specifications;
- City approval authority for traffic control lane restrictions, lane configurations, detours and lane closures;
- Coordination and approval of traffic control plans /permits when working on a State-owned facility;
- Provide estimate recommendations for the contract Traffic Control bid items;
- Approval authority for the contractor-provided traffic control plan submittals during construction.

2.8.6 SIGNAL AND STREET LIGHTING ENGINEER

Signal and Street Lighting Engineers are staff members of the Signals & Street Lighting (SSL) group who operate under the direction and authority of the City Traffic Engineer. SSL Engineers perform design and construction services related to traffic Signal and intersection operation, and street lighting design. SSL Engineers have the following responsibilities:

- Design Engineer for traffic signals and traffic signal operation;

- Design Engineer for City street light function and operation;
- Stamping Engineer for the street lighting, traffic signal plans and detail sheets of the contract plans;
- Stamping Engineer for the Traffic Signal and street light specifications;
- Approval authority for traffic signal and street light changes during construction;
- Approval authority for traffic signal and street lighting material submittals.

2.8.7 STRUCTURAL ENGINEER

Structural Engineers are staff members of the Bridges and Structures (BAS) group who are registered Professional Structural Engineer's in the State of Oregon. Structural Engineers perform design services and act as the EOR for structures that may be impacted or are made part of the work in construction contracts. Structural Engineering staff may also perform the role as Contract Managers on bridge and structure related projects. Structural Engineers have the following responsibilities:

- Hold the same responsibilities as the Contract Manager when acting in that role;
- Approval authority for all structural submittals including evaluation of shoring and cribbing;
- Act as the EOR for structural plans, specifications and cost estimates.

2.8.8 CONTRACT MANAGER

Contract Managers may be staff members of CDS, CON, BAS or SSL groups within the Engineering & Technical Services Division, all of which are authorized representatives of the City Engineer to administer the contract. The Contract Manager has responsibility to manage the scope, schedule, budget, change orders and Construction Authorization during the Construction phase. Contract Managers have the following additional responsibilities during Construction:

- Construction Project team lead and facilitator;
- Oversee construction contract authorized budget;
- Oversee construction engineering budget;
- Facilitate, negotiate and document all payments, changes and claims to the contract;
- Perform Plan checks at 60 and 95 percent;
- Perform Bid Evaluations & Analysis and makes recommendation to City Engineer;
- Facilitate Construction Responsibilities Meeting;
- Coordinate survey requests;
- Initiate the PBOT 4th Utility Notification procedure and oversee the contractor's utility coordination throughout construction;
- Issue Notice-To-Proceed;
- Review Construction Schedule;
- Run weekly meetings and prepare minutes;
- Approve submittals;

- Review survey requests and contractor's survey work;
- Ensure the testing of Field and Non-Field-Tested items are being tested;
- Authorize progress payment;
- Facilitate and document RFI's, RFP's, Field Orders and Change Orders;
- Ensure proper erosion control reporting requirements;
- Review General Daily Progress Reports for accuracy;
- Monitor and ensure compliance of [EEO, OJT and DBE documentation](#) including DBE Goals, Work Plan Proposal (3A) and CUF Reports (3B);
- Oversee MEUR and Paid Summary Report documentation and distribution;
- Monitor and ensure compliance of Environmental documentation;
- Monitor and approve subcontracts and labor compliance documentation;
- Oversee all contractor correspondence and inspection responsibilities;
- Facilitate project meetings with the contractor, stakeholders, agency and the public;
- Ensure compliance with Right of Entry Permits;
- Ensure material quality and quantity documentation and testing compliance;
- Submit Certified LPA Quarterly Reports to ODOT ([Form 734-2590](#));
- Issue Substantial Completion;
- Issue Punch List;
- Issue Final Project Acceptance;
- Resolve Claims;
- Prepare Construction Contract Administration checklist;
- Prepare, update and transmit the Project Tracking Worksheet to ODOT;
- Review and signoff on closeout package;
- Ensure completion, receipt, and submission of as-builts to ODOT;
- Monitor and authorize payment for Plant Establishment;
- Coordinate Private Development work within the project limits;
- Ensure compliance with Tree Removal Policy;
- Ensure compliance with Contaminated Media and Hazardous Materials testing, removal and disposal;
- Oversee the approval of all contract closeout documentation;
- Facilitate Audit reviews and ODOT Documentation Review Report resolution;
- Ensure quality control procedures during Construction.

Contract managers have the authority to withhold payments for outstanding quality, quantity or labor documentation and to suspend work if necessary.

The CM has the responsibility to assign personnel to the various inspection phases of the work and will delegate authority to them according to their area of expertise and capabilities.

2.8.9 INSPECTOR

Project Inspectors are staff members within the Construction (CON) group with the primary responsibility to ensure that all materials incorporated into a project meet the specifications and that work is performed in accordance with the contract documents. PBOT requires that all staff inspectors and contract personnel be certified in the ODOT General Inspection classification. If an Inspector is not certified or certification has elapsed, they will be required to register and take the next available certification class. Other ODOT Inspection Certifications including Drilled Shafts, Bridges, Traffic Signals, Erosion Control and HMAC, PBOT Inspectors maintain individual certification categories for the types of projects assigned.

Project Inspectors are required to follow the guidelines, principles and procedures outlined in the [PBOT Street Construction Inspector's Manual](#). In general, Inspectors have the following responsibilities during Construction:

- Ensure the project is constructed according to approved plans and specifications;
- Receive and verify quality documentation for materials delivered to be incorporated into the project;
- Ensure that materials incorporated into the project are properly sampled and tested and verify the material meets approved quality certifications;
- Request and coordinate Quality Assurance testing;
- Observe and report on the daily progress and activities of the contractor's work;
- Ensure compliance with approved Pollution, Erosion and Traffic Control plans;
- Reject materials or workmanship not in conformance with contract documents;
- Observe that the contractor is employing safety in their means and methods of performing the work and that the site is safe for pedestrians and travelling public;
- Communicate and advise the Construction Manager of potential problems, issues or changes that may impact the cost or schedule of the work;
- Verify EEO posters are posted on the job site and in clear view;
- Conduct wage rate interviews of contractor personnel;
- Document whether or not DBE subcontractors are performing a Conditional Useful Function using ODOT Forms;
- Ensure BOLI-required job posting are posted on the construction site.

2.8.10 ENGINEERING TECHNICIAN

Engineering Technicians are staff members of the Construction (CON) group who have the general responsibility for reviewing, organizing, facilitating and tracking the project documentation. Technicians stay familiar with current policies by attending annual training put on by ODOT in various areas of Construction Contract Administration. Engineering Technicians have the following responsibilities:

- Checking bid items, bid quantities and contract specifications for consistency at 90% design review;

- Reporting, filing and distribution of Quality Documentation;
- Prepare the Contract Administration Plan (CAP Report);
- Maintain the bid schedule test summaries A and B;
- Verify calculations and quantities on installation sheets;
- Facilitate the reporting, tracking and distribution of project submittals;
- Prepare contractor progress payments in the SHARPE payment system;
- Track and verify certified payroll and report on Labor Compliance;
- Receive and prepare subcontracts for CM approval;
- Maintain and organize project hard-copy folders and binders;
- Receive, verify and approve Monthly Employment Utilization Reports (MUERs);
- Receive, verify and distribute Subcontractor Paid Summary Reports;
- File documents in accordance with the City's retention schedule.

2.8.11 QUALITY COMPLIANCE SPECIALIST

The Quality Compliance Specialist (QCS) is a member of the Construction and Pavement Management (CON) group within the Engineering & Technical Services Division. The QCS ensures that field-tested materials comply with contract specifications. The QCS coordinates, schedules, and oversees a collection of field-test samples; trains and advises staff on materials testing standards and procedures, and conducts field inspections on construction projects related to testing. The QCS ensures all field-tested materials are used as specified in the ODOT Manual of Field Test Procedures (MFTP). The QCS oversees the contractor's quality control procedures and ensures they follow the contract and meet all requirements. The QCS reviews submittal documents for field-tested materials, reports on construction quality control activities, and has the authority to reject materials and suspend work for noncompliance. The QCS has responsibility for ensuring materials testing on the NHS for the appropriate products and quantity verification.

The PBOT QCS is ODOT-Certified in Materials Testing procedures including:

CAgT - Aggregate
CAT-1 - Asphalt
CEBT - Embankment
CDT - Density
QCT – Concrete

Internally to PBOT, the QCS is responsible for the review and compliance of the Quality and Quantity documentation for the project. The QCS reviews project records quarterly, writes a summary of missing documentation and provides to the CM for correction. In addition, the QCS and/or Technician will plan to meet with the ODOT RAS to go over missing documentation during RAS project reviews.

2.8.12 OTHER BUREAU INVOLVEMENT IN PBOT PROJECTS

The Portland Water Bureau (PWB), the Bureau of Environmental Services (BES), and Portland Parks and Recreation (PPR), are often involved in PBOT Capital Improvement Projects. As designated by Ordinance No. 184710, when design or construction services are performed by other bureaus, a Memorandum of Understanding (MOU) is executed and signed between the bureau's Chief Engineers. MOUs are executed to establish the staff roles and responsibilities, the federal aid certification requirements and cost share responsibilities of each bureau on the project. The PBOT Certification Manager still holds overall responsibility for ensuring work by other bureaus meets federal aid requirements according to PBOT's Master Certification Agreement.

3.0 COMMUNICATION AND QUALITY CONTROL

PBOT has developed a [Project Delivery Responsibilities Matrix](#) which is used to identify Project Development Tasks, who the lead person is for accomplishing the task, and who has Approval Authority when signature authorization is required.

In addition, PBOT has developed a second matrix called [PBOT Construction Responsibilities for Capital Improvement Projects](#). This version drills down into the activities more specific to the contract administration process during construction.

PBOT follows the [ODOT Local Agency Guidelines Manual](#) process for delivering Capital Improvement Projects, including the checklists included in the manual. The [PBOT Certified Project Tracking Worksheet](#) is PBOT's more comprehensive version of the ODOT LAG Manual [Civil Rights Project Tracking Log](#).

The Master Certification Agreement States "Agency's Certification Program Liaison shall provide quality control, oversight, and have final approval authority for all such federal-aid projects and ensure that rules, regulations, and processes outlined in this agreement are followed."

The following individuals have approval authority for signing off on the checklists as “Quality Control and Sufficiency Reviewers”. Original signed documents shall be kept on file within PBOT.

Checklist Approval Authority

Task	Authorization
PS&E Checklist (LAG Sec. C., Ch. 11 Appendix)	EOR and LACM
AD, Bid & Award Checklist (LAG Sec. C., Ch. 15 Appendix)	LACM
Construction Contract Admin Checklist (LAG Sec. C., Ch. 16 Appendix)	CM and LACM
PBOT Certified Project Tracking Worksheet (PBOT Version of ODOT Civil Rights Tracking Log (LAG Sec. C., Ch. 8))	PM During PS&E, CM During Construction

PM – Project Manager, LACM – Local Agency Certification Manager
 CM – Contract Manager, EOR – Engineer of Record

3.1 PS&E COMMENT TRACKING & RESPONSE LOG

PBOT uses a [Comment Tracking & Response Log](#) when performing 30-60-90 and Final PS&E reviews both internally and from ODOT. The response log is used to track the reviewers’ comments and allow the engineer to ensure that all comments are addressed or provided a response as to the disposition. The comment log will be provided to ODOT included in the distribution of plan review documents.

4.0 CONSULTANT SELECTION

PBOT is not currently certified in the LPA Consultant Selection process. IF PBOT requires the need for consultant design services on federal aid projects, one will be selected from ODOT’s list of available vendors.

5.0 PRELIMINARY ENGINEERING

Plans, specifications and estimates (PS&E) are prepared by engineering consultants or the PBOT Civil Design Section team. The design team may include:

General oversight of PS&E preparation is provided by PBOT's project manager, the Engineer of Record, and the Supervising Engineer of the Civil Design Section. The PS&E Checklist found in section C, chapter 11 of the LAG Manual is used to document each project's compliance with ODOT/FHWA requirements. The PS&E checklist is required to be submitted by the certified LPA to ODOT for all FHWA projects prior to advertisement of bids.

Project plan reviews occur at 30/60/90 percent during the development of plans, specifications, and estimates. Additionally, a site review occurs at 60% with the construction inspector, and a "Constructability Review" occurs at 90% with the Project Designer, Inspector, Engineering Technician and Construction Manager.

PBOT reviews monthly changes to the Oregon Standard Specifications General Conditions (Section 100's) and determines if any of the changes need to be modified in PBOT's boilerplate Section 100 General Conditions as required by state and federal regulations. All changes to the Specifications will be sent to ODOT for review prior to final PS&E.

- 30 Percent – 1st Utility Notification process occurs. Peer review and management review if major scope or budget changes. ODOT review as required.
- 60 Percent – 2nd Utility Notification process occurs. Peer review and Constructability review performed by Design and Construction Section. Management review if major scope or budget changes. ODOT review as required.
- 90 Percent – 3rd Utility Notification process occurs. Peer Review and Constructability review performed by Design and Construction Section. Management review if major scope or budget changes. PS&E sent to ODOT for review.
- 100 Percent – Engineer of Record and the City Engineer complete an independent review, sign and stamp the plans and specifications.
- 4th Utility Notification process occurs after contract has been awarded and a schedule of work has been determined.

At each level of review, a comment tracking log is produced and utilized to ensure all review comments are addressed and responded. For consultant-designed projects, PBOT reviews formal submittals from the consultant at 30/60/90 percent design completion levels. PBOT's consultant contract documents also require the consultant to maintain their own quality control documents.

5.1 DESIGN EXCEPTIONS

Design Exceptions are required when a proposed design element varies from established design guidelines. PBOT requires design exception approval for variances from the following publications:

- Portland Pedestrian Design Guide
- Portland Design Guide for Public Street Improvements
- Manual on Uniform Traffic Control Devices (MUTCD)
- NACTO Urban Bikeway Design Guide
- AASHTO – A Policy on Geometric Design of Highways and Streets Manual
- FHWA Designing Sidewalks and Trails for Access, Parts I and II
- 2010 ADA Standards for Accessible Design (and Supplements)
- ODOT Highway Design Manual (State Highways and Roads within ODOT access control)

PBOT has a written design exception process which describes the condition, justification and approval authority for design exceptions. Design exceptions are prepared as soon as the need becomes necessary and is transmitted along with the design documentation package. For design exceptions regarding elements located on or along ODOT controlled right-of-way and roadways, the ODOT Design Exception Process applies.

SEE ► [PBOT Design Exception Process Instructions](#)

► [PBOT Design Exception Form](#)

► [ODOT Design Exception Request Form and Instructions](#)

5.1.1. AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE

PBOT's Americans with Disabilities Act (ADA)-related design exception and curb ramp inspection processes are approved for use on federally funded projects. The terms of ODOT's approval and are memorialized in letters dated August 3, 2017 with links below. Therefore, PBOT is authorized to use its approved ADA-related processes in the design and construction of federal-aid projects that are on locally-owned facilities, including locally-owned portions of the National Highway System (NHS).

For any portions of a project that are **on or along** the State Highway System, the Agency shall follow ODOT's design exception and curb ramp inspection process.

SEE ► [ODOT-PBOT ADA Design and Inspection Approval Letter](#)

SEE ► [FHWA-PBOT ADA Design and Inspection Approval Letter](#)

(A) CURB RAMP ASSESSMENTS

During the initial phase of the project design phase, field assessments of existing curb ramps within the project area are conducted to ascertain existing curb ramps that do not comply with current ADA standards and require remediation. See PBOT Curb Ramp Field Review form at:

<https://www.portlandoregon.gov/transportation/article/644856>.

(B) ADA DESIGN EXCEPTIONS (VARIANCES)

Completed PBOT ADA Curb Ramp Design Reports are required for all PBOT projects, with a written justification of variances to the criteria listed under ‘Design Criteria for New Ramps’ section. Such variances require approval by a PBOT ADA Technical Advisor, who is not the requesting EOR for the project. ADA Technical Advisors are delegated by the City Engineer, reside within PBOT, are professional engineers, hold the position of Senior Engineer (or higher), and serve as experts in designing and construction of ADA facilities within the public right of way. Approved ADA variances serve as approved ADA design exceptions.

In the situation where a curb ramp design does not meet the design criteria given on the PBOT ADA Ramp Report, an approved variance is required. Technical infeasibility is the review standard applied by the ADA Technical Advisor to approve a variance. See ADA Curb Ramp Design Report form at:

<https://www.portlandoregon.gov/transportation/article/642921>

(C) CURB RAMP INSPECTIONS

PBOT inspects all newly constructed curb ramps. Curb ramps must meet the criteria given in the PBOT Curb Ramp Inspection Form prior to payment to contractor for said ramp is authorized. See PBOT Curb Ramp Inspection Form at:

<https://www.portlandoregon.gov/transportation/article/635845>

For curb ramps on or along ODOT roadway, ODOT inspection forms are used in lieu of the PBOT Curb Ramp Inspection Form. ODOT inspection forms are to be submitted to ODOT prior to issuing Substantial Completion.

(D) CITY ENGINEER DIRECTIVES

City Engineer Directives providing clarification regarding ADA criteria within the City are found under the City Engineer Directives page on the PBOT website, See <https://www.portlandoregon.gov/transportation/article/642939>.

As of the time of the writing of this document, two City Engineer Directives have been issued regarding ADA.:

- [ST 001](#) Traffic Signal Improvements and Americans with Disabilities Act (ADA)
- [ST 002](#) City of Portland ADA Curb Ramp Design Criteria and Approvals

(E) WORK ZONE ACCESSIBILITY REQUIREMENTS

The City requires accessible construction zones on all CIP and City permitted projects. Safe accommodation for pedestrians and cyclists in and around work zones are required by Administrative Rule TRN-8.12, as amended. See <https://www.portlandoregon.gov/citycode/article/595633>.

For work on or along ODOT roadways, ODOT standards for providing accessible work zones apply. This includes, but is not limited to, providing temporary accessible routes through or around the work zones along with directional and informational signage, along with advance notification of any temporary pedestrian route on or along the ODOT roadway. This advance notification is provided in an accessible format to people with disabilities and disability organizations at least 10 days prior to the start of construction in accordance with ODOT standards and processes

(F) ON-GOING MAINTENANCE RESPONSIBILITIES

The City ensures that any portions of the work under the City's maintenance jurisdiction are maintained in compliance with the ADA throughout the useful life of the Project. This includes, but is not limited to, ensuring that:

- Pedestrian access is maintained as required by the ADA.
- Any complaints received by the City identifying sidewalk, curb ramp, or pedestrian activated signal safety or access issues are promptly evaluated and addressed,
- Any repairs or removal of obstructions needed to maintain Project features in compliance with the ADA requirements that were in effect at the time of the Project construction are completed by the City or abutting property owner pursuant to applicable local code provisions.
- Any future alteration work on the Project or Project features during the useful life of the project complies with the ADA requirements in effect at the time the future alteration work is performed, and
- Applicable permitting and regulatory actions are consistent with ADA requirements.

5.2 ENVIRONMENTAL COORDINATION

The Project Manager will coordinate and submit all environmental documentation to ODOT starting with prospectus through the NEPA close out documents since ODOT retains the approval authority over the NEPA environmental documentation. Federal reimbursement for right of way and final design work is not available or eligible until after the environmental NEPA phase is approved by FHWA and ODOT. The final PS&E will be

sent to ODOT to assure the environmental requirements are met and incorporated into the contract documents.

5.3 UTILITIES AND RIGHT OF WAY

The PBOT Right of Way Section is responsible for the administration of the bureau's eminent domain program and policies. The Right of Way Section abides by ORS 35 which is based upon Public Law 91-646, the Uniform Relocation Assistance and Real Properties Acquisition Policies Act of 1970, as amended. The Section provides necessary training and guidance to staff of State and Federal eminent domain policy. The Right of Way Section is responsible for oversight of all Bureau Right of Way activities, including real property appraisal, property acquisition and owner/occupant relocation. It is charged with ensuring compliance with federal and state laws and regulations and maintaining quality assurance. PBOT's Quality Compliance procedures include meeting the requirements of the ODOT PS&E checklist.

Right of way and utilities are addressed as provided by the project's IGA with ODOT. Utility relocations, adjustments and reimbursement policy requirements are defined in the Code of Federal Regulations 23 CFR 645A. The City of Portland follows these regulations on projects receiving federal-aid or State Funding.

ODOT is not allowing self-certification by any local agencies in right of way. Therefore, PBOT Right of Way (R/W) shall conform to the requirements of the non-certified local agency Chapter 6 in Section B of the [ODOT LAG Manual](#) and [ODOT R/W Manual](#).

As a part of ODOT's obligation set by FHWA to ensure compliance, PBOT is required to follow all state and federal laws, and policies within the ODOT LAG and R/W Manuals.

Each specific local assistance program provides funding which requires distribution, management and oversight control to ensure that the funds are expended to meet the program goals and that allocations and budget authority are not exceeded. ODOT distributes both state and federal fund allocations to local agencies as specified by law and program requirements.

5.4 LETTERS OF PUBLIC INTEREST FINDING (LPIF)

A LPIF is a written document showing why it is in the public's best interest to not follow a Code of Federal Regulations (CFR) or State Statute.

The Federal Highway Administration guidance document, 23 CFR 635.411, explains why and under what conditions ODOT is required to process LPIF's:

Under 23 USC 112(a), "In all cases where the construction is to be performed by a State transportation department, or under its supervision, a request for submission of bids shall be made by advertisement unless some other method is approved by the Secretary. The Secretary shall require such plans and specifications and such methods of bidding as shall be effective in securing competition"

FHWA has interpreted this clause to require competition not only for the award of the contract but to also require competition for the various materials and processes involved in the work. Whenever competition for materials or processes is reduced or eliminated, a LPIF is required.

The guidance on LPIF requirements closely follows the guidance in the [FHWA Contract Administration Core Curriculum Guide, Section II.C](#). The federal requirements apply to any ODOT project containing federal or state funds, and may only be waived under specific conditions if it is found to be in the Public interest or cost effective.

These conditions include:

- a) Publicly Owned Equipment – [CACC Sec II.C.4.a](#)
- b) Contractor Purchased Equipment for State Ownership – [CACC Sec II.C.4.b](#)
- c) Patented / Proprietary Products including Sole Source – CACC Sec II.C.5.b, [ORS 279C.345](#), and [23 CFR 635.411](#)

Refer to the ODOT Letter of Public Interest Finding (LPIF) Guidance Document for the latest patented or proprietary products, including when and how to submit an LPIF.

SEE ► [ODOT Letter of Public Interest Finding \(LPIF\) Guidance Document](#)

6.0 CONSTRUCTION AUTHORIZATION

6.1 CITY PROCUREMENT SERVICES

The City of Portland Procurement Services (PS) is a Division of the Bureau of Revenue and Financial Services under the City's Office of Management and Finance. Procurement Services is responsible for making sure the procurement process is fair, efficient, effective and accountable to everyone.

Procurement Services carries responsibilities in all phases of Project Development. Some of the responsibilities Procurement Services performs on Federal Aid projects include:

- Bid Book Preparation;
- Project Advertisement;

- Project Bid Letting;
- Bid Analysis and Recommendation (PBOT);
- Low Bid Award;
- Contract Review approval;
- Ensuring Contractor Requirements are met for Public Works Contracting.

6.2 PREPARATION OF BID BOOK

After the 90% PS&E review, the Design Engineer sends the construction specifications and Engineer's Estimate to the Procurement Services Purchasing Agent (Buyer), who then assembles the draft bid book.

The Buyer performs the following tasks in preparation of the bid book:

- Schedules a Pre-bid date;
- Identifies the Class(es) of work for the project;
- Includes the General Bidding Requirements;
 - a. Notice to Bidders
 - b. Contacts
 - c. Instructions to Bidders
 - d. Bid Form
 - e. Bid Bond
 - f. Non-Collusion Affidavit
 - g. Assignment of Anti-Trust Rights
 - h. State of Oregon First-Tier Subcontractor Disclosure Requirements
- Includes Federal Aid Contract Requirements, FHWA-1273 Contract Provisions
 - a. Equal Employment Opportunity Provisions
 - b. Equal Employment Opportunity Aspirational Target Provisions
 - c. Title VI Nondiscrimination Statement
- Onsite workforce affirmative action requirements for women and minorities on Federal-aid contracts
- Includes Disadvantaged Business Enterprise (DBE) Requirements
 - a. ODOT Policy Statement for the DBE Program
 - b. DBE supplemental Required Contract Provisions
 - c. Assigned DBE Contract Goal
 - d. DBE Commitment Requirements
 - e. DBE Commitment, Certification and Utilization Form
 - f. DBE Information Sheet
 - g. Subcontractor / Supplier Solicitation and Utilization (Form #2533)
 - h. Committed DBE Breakdown and Certification (Form #2531)
- Includes Project Prevailing Wages
 - a. Prevailing Wage Rates for Public Works Contracts in Oregon incorporated by references

- b. Davis-Bacon Rates for Oregon
 - Includes Project Summary & Special Provisions
 - a. Special Provisions Signature Pages
 - b. Special Provisions

Procurement Services will return a completed draft version of the bid book to the Design Engineer. The Design Engineer will forward the draft bid book to ODOT for a final review before printing. PBOT has assigned a Design Engineer the responsibility of updating boilerplate special provisions when a new ODOT monthly update has been issued. Upon completion of the review and receipt of the Notice-To-Proceed to Advertise from ODOT, the Engineer will send final PS&E documents to the printer to produce bid-ready documents. At this point, the Buyer is ready to advertise the Project.

6.3 BUY AMERICA AND CARGO PREFERENCE ACT PROVISIONS

The City of Portland Standard Construction Specifications (SCS) includes a provision regarding preference for materials in [Section 00160.20](#) when Federal Highway funds are included on a project. Buy America provision shall not be waived by Letters of Public Interest Finding and apply to all phases of work including Utility Relocation and Construction.

The City of Portland Boilerplate Special Provisions (BPSP) includes a provision regarding the Cargo Preference Act in [Section 00160.21](#) when Federal Highway funds are included on a project.

6.4 CONTRACTOR REQUIREMENTS FOR PUBLIC WORKS CONTRACTING

6.4.1 PREQUALIFICATION OF BIDDERS

The City of Portland requires prequalification of all prime construction contractors on public improvement contracts with an estimated value of \$250,000 or greater, per ORS 279C.430(1) which allows public agencies the option to adopt their own rules for mandatory prequalification of contractors desiring to bid for public improvement contracts let by that agency. The Chief Procurement Officer has the authority to require Prequalification for public improvement contracts \$250,000 or less. The City shall not consider a Bid from a Bidder that is not prequalified, if the City required Prequalification

Contractors interested in bidding a City construction project that are not currently prequalified must complete and submit the City of Portland Construction Prequalification Program Prime Contractor Application with all required attachments for the Prequalification Board's evaluation of qualifications and determination of bidding limits.

Portland City Code states that contractors must demonstrate to the City's satisfaction that they are a responsible Offeror before being awarded a contract on public improvement projects. The City makes this determination through the Prequalification process, where contractors demonstrate that they meet the Standards of Responsibility pursuant to City Code 5.34.500.

6.4.2 GENERAL PREQUALIFICATION

A contractor may submit a request for Prequalification at any time by completing and submitting the City of Portland Construction Prequalification Program Prime Contractor Application. The date on which all required information has been received by Procurement Services will be considered the receipt date of the prequalification application. For more information see the Application Instructions.

All applications will be evaluated and prequalification limits determined by a Prequalification Board. Once prequalified, a contractor's bidding limits are in effect for two (2) years.

6.4.3 PROJECT SPECIFIC PREQUALIFICATION OR INCREASE REQUEST

If currently prequalified with the City of Portland in one or more classes of work and the applicant is seeking prequalification to meet the requirements of a specific Invitation to Bid currently advertised, the applicant must complete the Project Specific Prequalification Request or Increase Request Form. The deadline for receipt by the City is usually ten (10) calendar days prior to bid opening. However, it is important to review each set of bid documents to determine the specific requirement for that project's Special Prequalification

There are some construction projects that require specific expertise, prior experience, special equipment, or are of high risk and are outside of the criteria necessary for prequalification in one of the City's general classes of work. For these projects, a Special Prequalification application will be included in the bid documents. Contractors intending to be specially prequalified to bid on that project must complete the Special Prequalification application and submit it by the date and time stated within the solicitation.

Prequalification application forms and instructions may be obtained from Procurement Services, 1120 SW Fifth Ave, Room 750, Portland, Oregon 97204, or by download at the following internet site:

PREQUALIFICATION FORMS ► <http://www.portlandoregon.gov/brfs/44700>

6.4.4 CONSTRUCTION CONTRACTOR BOARD LICENSE

Construction contractors must be licensed with the State of Oregon [Construction Contractors Board](#) or licensed by the State [Landscape Contractors Board](#) prior to submitting a bid/proposal to the City.

6.4.5 PERMITS

Construction code regulations affect all construction and most site development activity. For more information, visit the City's [Development Services Permit](#) website.

6.4.6 CURRENT PORTLAND BUSINESS LICENSE TAX ACCOUNT

In order to do business with the City, your Portland Business License Tax Account must be current. This applies to both resident and non-resident vendors. Access a copy of your certificate of compliance or manage your business tax account (or register if you don't have an account) on the [Revenue Bureau Business Taxes website](#) or call their office at 503-823-5157.

6.4.7 EQUAL EMPLOYMENT OPPORTUNITY (EEO) CERTIFICATION

The City of Portland [requires EEO certification](#) of all vendors and contractors doing business with the City in excess of \$2,500 annually, and of all construction project sub-contractors.

In order to be EEO certified, firms must fill out the online form at our online procurement center, called "[Buyspeed](#)", stating that the firm does not discriminate against any employee or applicant on the basis of race, religion, color, sex, marital status, national origin, age, mental or physical disability, sexual orientation, gender identity or source of income. The company must also take steps to ensure equal opportunity in all aspects of employment. These aspects include, but are not limited to, hiring, promotion, transfer, advertising, layoff, termination, rates of pay, training (including apprenticeship), and terms and conditions of employment.

6.4.8 EQUAL BENEFITS CERTIFICATION

City contractors are required to provide benefits to their employees with domestic partners equivalent to those provided to employees with spouses. Vendors use PBOT's online procurement center, called "[Buyspeed](#)" to register their Equal Benefits status. Per the City's [Equal Benefits Ordinance](#), registration is required for contracts that meet or exceed the "formal" [dollar threshold](#).

6.4.9 INSURANCE AND WORKERS COMPENSATION

Insurance is required and varies depending on the nature of the contract. If a contractor will be working on City owned property, contractor will need to provide a Certificate of Insurance before the contract is executed. More information is available on the City's [vendor insurance requirements](#) page.

7.0 AD, BID AND AWARD

PBOT utilizes the ODOT [Ad, Bid and Award checklist](#) from the LAG manual on Federal Aid Certification projects. The approval authority for the checklist is stated in the Communication Section above.

7.1 FIRST TIER SUBCONTRACTOR DISCLOSURE

Contractors shall comply with [PCC 5.34.493](#) regarding first tier subcontractor disclosure and substitution.

Required Disclosure: Within two working hours after the Bid Closing on an invitation to bid for a Public Improvement having a Contract Price estimated by the City to exceed \$100,000, all Bidders shall submit to the City a disclosure form as described by ORS 279C.370(2), identifying any first-tier Subcontractors that will be furnishing labor or labor and materials on the Contract, if Awarded, whose subcontract value would be equal to or greater than:

1. Five percent of the total Contract Price, but at least \$15,000; or
2. \$350,000, regardless of the percentage of the total Contract Price.

7.2 NONRESIDENT BIDDER FORM

Nonresident bidders that are awarded a contract that exceeds \$10,000 in value must report the award to the [Oregon Department of Revenue on a Non-Resident Bidder Form](#). Contractors then must forward a copy to the City. This requirement must be met before the City issues final payment on the contract.

7.3 ADVERTISEMENT

Notice and Advertising requirements shall comply with [PCC 5.34.310](#). The Advertisement will not begin until PBOT has received the Notice to Proceed for Advertisement from ODOT.

7.4 SUBMISSION OF BIDS

Submission of Bids shall comply with [PCC 5.34.450](#)

7.5 ADDENDUMS

Notice of Bid Addenda shall comply with [PCC 5.33.430](#). Addendums along with inserted contract bid prices are included in the contents of the final bid book for Construction. The Engineer will send eight copies of the final bid book for Construction to ODOT after contract award and prior to the Preconstruction Meeting.

7.6 BID EVALUATION AND AWARD

Bid Evaluation and Award shall comply with [PCC 5.33.610](#). Bid Analysis as described below is made a part of the PBOT Bid Evaluation process. DBE goal review is checked by the Project Manager, and the Chief Procurement Officer before a recommendation is made to ODOT Procurement.

See ► [ODOT Civil Rights Forms](#)

7.7 BID ANALYSIS

Title 23 CFR 635.114(a) requires that Federal-Aid contracts be awarded only on the basis of the lowest responsive bid submitted by a bidder meeting the criteria for responsibility. FHWA has stressed that estimates should be accurate and credible, based on realistic current data, and that they are kept confidential.

There are two types of unbalanced bids – mathematical and material.

SEE ► [ODOT Construction Manual Chapter 7](#) for unbalanced bid evaluation definitions and criteria.

PBOT uses the following guidelines when evaluating Bids to identify materially unbalanced bids:

After bid opening, the CM will evaluate all bid item prices as submitted by the apparent low bidders, for unreasonable deviations from the Engineer's Estimate. Evaluation using an Excel spreadsheet of Bid Tabulations will include the % of Engineer's Estimate and average unit pricing of the remaining unsuccessful bidders.

If bid item prices deviate more than a reasonable amount from the Engineer's Estimate, the CM will request a re-evaluation of bid item quantities from the Design Engineer.

Factors that contribute to unbalancing of bids by the contractor include:

- Front-end loading of bid items
- Anticipated bid quantity over/under runs
- Token Bids that are disproportionate to the real value of the work

After evaluation, the Engineer-of-Record makes a recommendation to the PBOT Chief Engineer regarding the presence or absence of a materially unbalanced bid. The recommendation will include:

- Memorandum of Bid Analyses Summary Report to the City Engineer which indicates the presence of a mathematical or material unbalanced bid. This document is kept confidential to PBOT;
- [The Bid Tabulations Report](#) which indicates bid prices, the percent of Engineer's Estimate, percent of Average Bid and percent of Total Bid;
- [Bid Analysis Summary Report](#) which indicates bidders and bid amount;
- [Bid Error Report](#) (if present) indicates any mathematical errors in the bid submission;
- [Memorandum to the Chief Procurement Officer](#) providing disposition for the [Bid Analysis Summary Report](#) by the City Engineer along with items above.

The Chief Engineer will make a final recommendation to the Chief Procurement Officer whether to accept or reject the bid. If an unbalanced bid becomes awarded, the CM is made aware of the unbalancing so as to administer the contract with proper knowledge.

PBOT and the Chief Procurement Officer will be responsible for reviewing and making an award or rejection of bids on federal aid projects unless the project has full federal oversight in which FHWA would then make those determinations.

7.8 NOTICE OF INTENT TO AWARD

Procurement Services will post the Notice of Intent to Award at least 7 days before the award of a contract. Notice of Intent to Award shall comply with [PCC 5.34.650](#).

7.9 CONTRACT AWARD

At the close of the 7-day Notice of Intent to Award, and unless the Chief Procurement Officer determines that a compelling governmental interest existing, such as a loss of

funding, safety, public inconvenience or loss of taxpayer or ratepayer funds, then the City will proceed with a prompt execution of the contract.

Procurement Services will issue to the contractor, an Award Notification letter along with a copy of the contract for signature. The contract for signature will include a copy of the Davis-Bacon Wage rates as required by 23CFR 635.309 and the [FHWA Core Curriculum manual FHWA-NHI-134077](#). The City considers the contract fully executed once the contractor and the City have all signed the contract document. Procurement Services will send a copy of Award Notification Letter and the ODOT Notification of Award (Form 734-2849) to the Office of Civil Rights, the ODOT LAL, and the Contract Manager as shown in the [PBOT Certified Project Tracking Worksheet](#).

8.0 CONSTRUCTION CONTRACT ADMINISTRATION

City of Portland Local Agency projects must adhere to the 2010 City of Portland Standard Construction Specifications when administering the contract. The Standard Specifications also refer to the ODOT Manual of Field Test Procedures. For contract administration procedures, PBOT follows the ODOT Local Agency Guidelines Manual in conjunction with Intergovernmental Agreements and Chapters 12, 14 and 16 in the ODOT Construction Manual. PBOT will use ODOT forms for Civil Rights and Labor Compliance reporting. Refer the chapter on ADA for reporting procedures on local and state-owned roadways.

The City's goal is to become 100% paperless. To achieve this goal, the City is implementing a software called E-builder, that will be used for both local and federally funded Certified projects. E-builder will be used for submittals, payments, inspection reports, change orders, and for all aspects of contract administration with the exception of Civil Rights on certified projects.

8.1 BEFORE ONSITE WORK CAN BEGIN

The Contractor shall not begin On-Site Work until it has, as specified in 00180.40(b):

- Received Notice to Proceed; (assuming ODOT/FHWA has provided NTP to City of Portland after PS&E approval)
- Filed the required public works bond with the Construction Contractors Board (CCB) See 00130.80(a)(2);
- An approved Project Work Schedule;
- An approved Traffic Control Plan;
- An approved Pollution Control Plan;

- An approved Erosion and Sediment Control Plan;
- Met with the Agency at the required Preconstruction Conference, and provided information required by the Contract Documents;
- An approved Site-Specific Safety and Health Plan
- Provide a Quality Control Plan as stated in 00165.30 and the MFTP;
- An approved shoring plan (if applicable);
- A Migratory Bird Treaty Act plan (if applicable).

PBOT will not issue a Notice to Proceed until the Roles & Responsibilities meeting and the Formal Preconstruction meetings have occurred.

Refer to the ODOT Construction Manual for additional topics to be discussed at the Preconstruction Conference, project schedules and submittals listed above.

SEE ► [ODOT Construction Manual Chapter 11](#)

8.2 NOTICE TO PROCEED

The Notice to Proceed will not be given until the Contractor provides Owner with all documentation necessary for Contract performance, including signatures on contract documents, a Performance and Payment Bond, and proof of required insurance. After receipt of all required submittal and contract documents, the City will review for conformance with Contract Requirements. If acceptable, the owner will issue Notice to Proceed within 30 days after receipt. If unacceptable, the contractor will be notified as soon as possible to resubmit specified items. The Contract Manager is responsible for issuing Notice to Proceed.

8.3 ROLES & RESPONSIBILITIES MEETING

Prior to the Formal Preconstruction Meeting with the contractor, PBOT will hold an informal Roles and Responsibilities meeting for internal staff facilitated by the Contract Manager. The purpose of the meeting is to review contract documents, schedule, budget, bid items and specifications, and discuss each team member's responsibility. Specific items addressed are included in the link below:

SEE ► [Roles and Responsibilities Agenda](#)

8.4 OFFICE OF CIVIL RIGHTS PRECON

On a Local Agency Certified project, PBOT will hold a meeting prior to the Precon with the contractors' office management staff and the ODOT Office of Civil Rights Field Coordinator. This meeting is also referred to as the "OCR Precon". The purpose of this meeting is to:

1. Meet the contractor's office personnel and civil rights coordinator;
2. Review all contract requirements related to civil rights and DBE reporting
3. Review plan and specification requirements that may be unclear to the contractor, including measurement and payment of bid items;
4. Go over submittal requirements prior to authorizing Notice to Proceed
5. Review subcontracting requirements

8.5 ENVIRONMENTAL

As set forth in LAG Manual Section C Chapter 6, the National Environmental Policy Act (NEPA) cannot be delegated, so ODOT will provide support and oversight on all Environmental aspects of the project. The City will assure the Contractor meets requirements specified in Standard Specification Sections 00280, 00290, 00291 and the Special Provisions.

8.5.1 SUBMITTALS

The following submittals (and any other Environmental concerns) will be sent to the ODOT Regional Local Liaison from the Construction Manager for review and approval:

- The Erosion and Sediment Control Plan (ESCP) is found in Standard Specification 00280.02. The Contractor must submit an ESCP for review to the Construction Manager no less than 10 Calendar Days prior to the Pre-Con.
- The Pollution Control Plan (PCP) is found in Standard Specification 00290.30(b). The Contractor must submit a PCP for review to the Construction Manager no less than 10 Calendar Days prior to the Pre-Con.
- The Contaminated Media Disposal Plan (CMDP) is found in Standard Specification 00291.08. If contaminated media is known to be present, on-site excavation work cannot begin until the CMDP has been approved. If contaminated media is found during construction, a Contract Change Order will be issued requiring a CMDP to be approved prior to further excavation.

Depending on the nature of the project, other environmental submittals may be required and will be sent ODOT for review and approval. These may include, but are not limited to:

- Temporary Water Management Plan (TWMP)
- Work Containment Plan and System (WCP/WCS)
- Weed Control Work Plan (WCWP)

- Migratory Bird Protection Plan (MBBP)
- Fish Passage Plan (FPP)

8.5.2 MONITORING

As stated in Standard Specifications Section 00280.01, PBOT Erosion Control Permit falls under DEQ's NPDES 1200CA permit application and is available by request.

Erosion Control - The Contractor is required in 00280.62 to perform and document site inspections. Completed [Erosion Control Monitoring, Form 734-2361](#) for each inspection must be submitted to the Construction Manager on a weekly basis.

The minimum monitoring requirements for all Projects are:

- Inspection of all erosion control facilities at least once every seven (7) Calendar Days for active sites and every 14 Calendar Days for inactive sites.
- Inspection within 24 hours after more than 0.5 inches of rain within a 24-hour period.
- Daily inspection during stormy periods or periods of snow melt when runoff occurs daily.

Contaminated Media – The Contractor shall prepare reports on the same day in which any Contaminated Media management activity occurs and submit to the Construction Manager by 9:00 the next business day. Standard Section 00291.40(a) specifies what is required to be in the report.

The Construction Manager may consider withholding payment or suspension of work for noncompliance issues (i.e. missing erosion control monitoring or contaminated media reports and deviations from the ESCP, PCP, MBTA, CMDP, etc.) If a discrepancy or an issue arises on the Project, the Construction Manager will inform the Regional Local Liaison.

8.5.3 ENVIRONMENTAL INSPECTIONS

As required in the [LAG Manual Section C Chapter 6 \(4.2.2\)\(b\)](#), for projects that used the Federal-Aid Highway Program - Endangered Species Act Programmatic Biological Opinion (FAHP ESA Programmatic) for ESA compliance, the City will conduct at least one environmental construction inspection site visit. The Construction Manager will be responsible for submitting a copy of the [environmental construction inspection reports \(form 734-2902\)](#) to the ODOT Local Agency Liaison and ODOT region environmental coordinator (REC).

Inspections will be performed by an ODOT Region Environmental Unit (REU) employee, a biologist qualified by ODOT for Endangered Species Act compliance, or a certified

Environmental Construction Inspector. These reports do not replace the inspection reports required by any project related NPDES permits or other contract requirements.

8.6 FORMAL PRECONSTRUCTION CONFERENCE

Prior to the Pre-construction Conference, the Construction Manager will submit eight copies of the final plans and specifications to the ODOT Regional Local Liaison for distribution to the appropriate ODOT personnel.

The Preconstruction Conference will be held prior to work beginning as specified in Standard Specification Section 00180.42. The Construction Manager will invite the inspector, technician, contractor, utilities, ODOT Region 1 LAL, ODOT Civil Rights Field Coordinator, ODOT Environmental Coordinator and any other person relevant to the project. The Construction Manager will provide ODOT with a [Pre-Con Agenda](#) with the invite.

The Contractor will be required to submit the following items at the pre-con or within the timeframe set forth in the item's specification:

- Training Program
- Safety Questionnaire
- DBE Work Plan
- The names and telephone numbers of its Project Manager, Superintendent and Office Manager and a list of personnel authorized to sign change orders and receive progress payments;
- The name, address and telephone numbers of two or more persons employed by the Contractor who can be reached at any time of the day or night to handle emergency matters;
- A list of all subcontractors that will work on the project, a description of work they will perform, and a contact list for each subcontractor with phone numbers and address;
- An overall project schedule and a detailed schedule of the first 2 weeks;
- Traffic Control Plan (00225.05);
- Erosion and Sediment Control Plan (00280.02, 00280.03);
- A list of materials suppliers and products;
- A list of all labor classes and equipment (year, make, model) to be used on the project;
- A detailed breakdown of all lump sum bid items, except Mobilization and Temporary Protection and Direction of Traffic;
- Copies of all subcontracts between the Prime Contractor and Subcontractor;
- Site Safety Plan (00170.60(f));
- Utility Protection Plan (00405.41(f));

- Pollution Control Plan (00290.30(b));
- Labor Burdens Information for Force Account Work; and
- Shoring Plan (if applicable).

The Contractor shall invite a representative from each subcontractor to attend the pre-construction conference. The Construction Manager will record meeting minutes and distribute to all attendees in a timely manner.

On large complex projects, a pre-construction conference should be held before each construction phase. It may be desirable to hold separate conferences for some specialized construction items such as paving, bridge work, or electrical work.

8.7 CONTRACTOR UTILITY COORDINATION MEETING

Before meeting with the owner's representative at the Preconstruction Conference, the contractor is required to hold a group utility coordination meeting with representatives from the utility companies involved on the project. The contractor shall incorporate the utilities time needs into the contractor's schedule submitted at the preconstruction conference as stated in 00180.42(a).

8.8 SUBCONTRACTS

The City will follow the requirements of [LAG Manual Section C, Chapter 16, Section 10](#) and ORS 279C.580 when subcontracting any portion of the Work. Some of the required elements include:

- Bidders submits Subcontractor/Supplier Solicitation and Utilization Form;
- Contractor submits all written subcontracts for all tiers for review;
- No contract work is subcontracted except by written consent of City;
- Prime Contractor is performing no less than 30% of total original contract price on federally funded projects.

Bidders will provide information requested in the Subcontractor/Supplier Solicitation and Utilization Form to the City. This form will be forwarded to ODOT OCR within 10 days of bid opening.

Contractor is required to submit written request and written agreement to the City to subcontract any portion of the work. The written request will be submitted on the ODOT's "Contractor's Request for Subcontract Consent" form. Consent must be approved prior to any subcontractor working on the project and the City will track the percentage of work performed by subcontractors.

The City will verify subcontracts meet all requirements shown on ODOT's 'Subcontractor Consent Checklist' form. The City will also ensure the Subcontractor's name and/or the signer's name is not on the BOLI Contractor De-Barred List. Consent will be given only after the City has verified that each subcontract is submitted in writing and that it contains all pertinent provisions and requirements. The City will complete ODOT's 'Report on Contractor's Request for Subcontract Consent' for every Contractor's Request for Subcontract Consent.

All DBE Subcontracts will be sent in their entirety to LAL, OCR Field Coordinator and ODOT Contract Administration Office. Upon request, all other subcontracts will be submitted to ODOT OCR or LAL. All Contractors Request for Subcontract Consent and Report on Contractor's Request for Subcontract Consent forms will be sent to LAL, OCR Field Coordinator and ODOT Contract Administration Office.

Contractors will submit ODOT's [Summary Reports of Subcontractors Paid \(form 734-2722\)](#) to the City. The forms will be reviewed to ensure all subcontracts are approved, reflecting correct prices, and are in compliance with DBE requirements. The City will then forward the reports to OCR Field Coordinator and LAL on a monthly basis.

Substitution of Subcontracts will be in accordance with 279C.585. The Contractor will provide the Owner with a written notification that identifies the name of the proposed new Subcontractor and the reason for the substitution. Substitution of Committed DBEs requires the Contractor to have "good cause" and to notify ODOT in writing to obtain permission before termination and/or substitution. As required in the LAG Manual Section C, Chapter 8, Section 4a the City will:

- First consult with the OCR Field Coordinator before providing written concurrence with a DBE termination and/or substitution and copy the OCR Field Coordinator and the DBE Program Manager on the correspondence.
- Consider the DBE's response under the DBE Provision Section 10.00(b) of the Contract documents prior to concurrence of DBE terminations and/or substitutions.
- Be aware that self-performance by the Prime Contractor of Work committed to the DBE is considered a termination or a partial termination of the DBE and would require prior written consent.

8.9 PAYMENTS TO CONTRACTORS AND RETAINAGE

[City Standard Specification Section 00195](#) "PAYMENT" and [Chapter 12](#) of the ODOT Construction Manual establishes the requirements for payments to the contractor. These include:

- Progress Payments (**Paynotes**)
- Quality and Quantity Documentation
- Materials on Hand
- Withholding Payment
- Interest

Progress payments will be made according to City Standard Specification Section 00195.51. Twice-monthly payments will be made to the Prime Contractor by the City according to the cutoff dates being the 15th and the last day of the month. Twice-monthly payments shall be made by the Prime Contractor to the Subcontractor within ten calendar days of receiving payment by the City.

PBOT has payment terms of net-15 days after the City Engineer has authorized the progress payment. PBOT considers the mid-month progress payment to be “estimated” quantities and the month-end payment to be “actual” quantities installed. Late payments shall receive statutory interest as required in [ORS 279.435](#) only on the month-end progress payment. The City has discretion not to pay the mid-month estimate if it is less than \$1500 or exceeds the remaining amount due. If payment is withheld for reasons listed in Standard Specifications section 00195.54(c), interest on payment does not apply. Interest is calculated based on ORS, Chapter 279.435 “Public Contracts and Purchasing”.

PBOT prepares progress payments using inspector’s field measurements and does not accept contractor prepared invoices. Payments are made to the contractor based on verified paynote quantities. The contractor can request clarification or dispute payment quantities at any time throughout the contract up until final quantity approval during the closeout process. Final quantities are approved by the contractor by signing the final progress payment. No changes will be made to final quantities or closeout documents after signature approval has occurred.

Using guidelines provided in [Chapter 12-D](#) of the ODOT Construction Manual, field measurements are recorded by the inspector onto Paynotes. The Paynotes, along with the material quality documents, are submitted to the office within 3 working days of the measurement cutoff date. Paynotes are checked by the Technician for completeness, math formulas and verification of quality documentation received. Installed quantities are entered into the Sharpsoft[®] payment system to create a pay estimate. The Construction Manager reviews the paynotes and pay estimate before approving the pay estimate as final.

Measurement and payment specifications shall comply with City Standard Specification Sections 00190 through 00199. Payment for “materials-on-hand” is made according to

City Standard Specification [Section 00195.53](#), “Advance Payment and Materials”. The Construction Manager may pay up to 85% of the cost of materials that will be incorporated into the project, and the value of the materials or equipment must be greater than \$5,000. The Contractor must submit bills of sale or other documentation showing proof of payment and title to the materials. The contractor must provide required material certifications as specified and shall give written authorization for City personnel to enter private property for inspection purposes.

8.10 LABOR COMPLIANCE

The City will follow the requirements of LAG Manual Section C, Chapter 16, Section 8, and [ORS 279C.845](#) for all labor compliance throughout the construction and closeout phases of the project.

Requirements include:

- Reviewing Contractor’s and the Subcontractor’s certified payrolls
- Monitoring timely submissions of certified payrolls
- Conducting wage interviews

Prior to the Pre-Construction Meeting, the City will prepare a Prevailing Wage Worksheet using the [ODOT Project Wages Website](#). This worksheet will compare both BOLI and Davis Bacon Prevailing Wages to determine the higher rate.

The City uses the ODOT Form [Certified Payroll Checklist for Project Managers and Contractors](#) to assist in review of certified payroll to ensure employees are being paid correctly. Completeness and the inclusion of the certification statements of compliance will be verified along with base wage rates, fringe benefit contributions, zone pay, and overtime calculations.

The Contractor will be made aware of any errors or concerns and asked for clarification, correction or revision. The City will follow up to make a sure the Contractor submits a revised or supplemental certified payroll report with all corrections made. The revised report will include a new signed certification statement of compliance page, and if warranted, proof of payment.

If the Contractor does not submit certified payrolls as required in [ORS 279C.845](#), the City will withhold 25% of any amount earned by the Contractor. The City will remind the Prime Contractor of their obligation to withhold 25% of their Subcontractor’s payments for non-submission of certified payrolls at the Pre-Construction Meeting.

The City Inspector will verify all required postings are posted somewhere on the jobsite that is accessible to all workers.

The City Inspector will conduct wage interviews with the Contractor's and Subcontractor's employees. These interviews will be compared against certified payrolls to validate classifications and wage rates.

Upon project completion, the City will complete the ODOT [Labor Compliance Certification Form](#) and email to the ODOT Contract Services, OCR and the LAL.

All certified payrolls for the Contractor and Subcontractors will be turned into the City Auditors Office. The Engineering Technician also submits the final close-out documents for retention purposes.

8.11 CIVIL RIGHTS

The City will follow the requirements of the Civil Rights program as specified in the ODOT LAG Manual, Section C, [Chapter 7](#), [Chapter 8](#) and the Civil Rights Section of the Master Certification Agreement. ODOT's Office of Civil Rights (OCR) will manage the entire program which includes goal setting and goal responsiveness. ODOT OCR will have oversight for contract award recommendation, civil rights compliance, and project tracking. The City will comply with ODOT's Civil Rights programs, including submissions, monitoring and reporting activities for construction projects.

Components of ODOT OCR program used on a federally funded Certified Project are:

- Affirmative Action (EEO)
- Disadvantaged Business Enterprise (DBE)
- On-the-job Training/ Apprenticeship Training Program (OJT/ATP)

ODOT OCR will act as an agent on behalf of City regarding all civil rights contract administration activities. The City maintains the responsibility for contractor compliance and program communications with the contractor.

8.12 TITLE II AND TITLE VI

The Portland Bureau of Transportation fully complies with Title VI of the Civil Rights Act of 1964, the ADA Title II, and related statutes and regulations in all programs and activities. All local public agencies (LPAs), Metropolitan Planning Organizations (MPO's), or Transportation Management Areas (TMA's) that receive federal funds through ODOT are considered sub-recipients. As sub-recipients, they are also required to assure non-discrimination in all their programs and activities, submit to ODOT Title VI assurances, and have in-place an approved Title VI Program Plan. For accommodations and additional information, contact the Title II and Title VI Coordinator at Room 1204, 1120 SW 5th

Avenue, Portland, OR 97204, or by telephone at 503-823-5185. More information about the City of Portland's Title II and Title VI program can be found [on this City Website](#).

8.13 EQUAL EMPLOYMENT OPPORTUNITY (EEO)

The City will forward the bid book to ODOT OCR for confirmation that civil rights goals and provisions have been correctly incorporated. See LAG Manual, Section C, Chapter 8, Section C8.

By the 5th of each month the Contractor and all Subcontractors with subcontracts of \$10,000 or more must complete and electronically submit the [Electronic Monthly Employment Utilization Report \(MEUR\), Form 731-0668](#) as required by the Special Provisions. The Prime Contractor and each Subcontractor must complete and submit the form for each calendar month whether or not Work was performed. The City will review all MEURs submitted by the prime Contractor and its subcontractors monthly. The City will review all forms for completeness and accuracy and must verify that the following items are correct:

- Contractor's and Subcontractor's name.
- The ODOT Contract number.
- Subcontract number.
- Report month and year.

The City will also review whether the report is new or revised. If the "No Work performed" box is checked, verify that no work was performed by the Contractor for that month. If acceptable, PBOT will approve the electronic MEUR by forwarding the electronic Form to the FC.

If unacceptable, PBOT will return the original email and attachment (MEUR pdf file) to the prime Contractor. Once the revised electronic MEUR is submitted and accepted the City will forward it to the ODOT FC.

8.14 DISADVANTAGED BUSINESS ENTERPRISE (DBE)

ODOT OCR will assign project goals with input from the City. The City will incorporate ODOT's DBE Commitment Requirements and DBE Supplemental Required Contract Provisions into the bid book.

The DBE Work Plan Proposal – Form 3A is required for all DBEs participating as Subcontractors on the Project, including non-committed DBEs. The [DBE Work Plan Proposal Form \(3A\) 734-2165A \(Form 3A\)](#) is completed by the DBE and submitted to the City. The Contractor is required under the DBE Provision, Section 8.00 to submit the DBE Work Plan Proposal to the City at the pre-con meeting, for all known and committed DBE(s).

The City will:

- Review the Form 3A for all DBEs (committed and non-committed) for completeness, including supporting documentation.
- Review and compare the Form 3A for committed DBEs, for consistency with the Committed DBE Breakdown and Certification Form 734-2531.
- Verify that the subcontract is consistent with the Form 3A and Committed DBE Breakdown and Certification Form 734-2531, as appropriate.
- Send a copy of all documents to the FC. The ODOT FC will review Form 3A and any supporting documentation for compliance.
- Send a copy of the reviewed Form 3A to the Contractor.
- Coordinate with the FC if CUF compliance issues are identified.
- If the ODOT FC or PM determines corrective action is needed, provide written comments to the Contractor.

The inspector will perform a [Commercially Useful Function \(CUF\) Review – Form 3B](#) evaluation of each DBE performing work on the Project, including committed and non-committed DBEs. The Inspector will complete and sign the CUF Report and submit to the Construction Manager. The Construction Manager will review, sign and send to the ODOT FC. The City will perform at least one CUF review per DBE and:

- Whenever a significant change in the operation of the DBE occurs (when new Equipment is used or work crews change).
- Whenever a replacement or substitution of a DBE occurs (for the new DBE).
- Whenever a significant Change Order changes or affects the Work to be accomplished by the DBE (when a new type of Work is added).

CUF Reports shall be performed at least once every 12 months for every DBE subcontractor.

8.15 ON-THE-JOB TRAINING (OJT) / APPRENTICESHIP TRAINING PROGRAM (ATP)

ODOT OCR will determine whether the OJT/ATP provisions apply to a project and if applicable, will provide support and oversight for the OJT/ATP program. The City will include Reimbursable Federal On-The-Job and Apprenticeship Training in the Special Provisions, and will monitor and collect information and forms. The City will forward to ODOT to track workforce utilization. The City will enforce the “disincentive” clause as required in the LAG Manual, Section C, Chapter 8, Section D6.

The Contractor and each Subcontractor with an OJT Program shall complete and submit the following reports to the Engineer according to the instructions on their respective forms:

- The training program forecast using the "Training Program Approval Request (TPAR)" ([Form 734-2880](#)) shall be submitted prior to or at the preconstruction conference.
- Before the trainee begins work, an "Apprentice/Trainee Approval Request (ATAR)" ([Form 734-2878](#)) shall be submitted. Attach a copy of the "Training Program Approval Request (TPAR)" (Form 734-2880) to the "Apprentice/Trainee Approval Request (ATAR)" (Form 734-2878). The Contractor and trainee must sign and return a copy of the training program that will be utilized. The Contractor shall provide certification to the trainee upon completion of the OJT Program and also submit a copy to OCR. Upon completion of the Contract, a certification shall be given to each trainee and to the Agency to document the number of hours and training completed by the individual.
- Each month the Contractor shall submit the "Monthly Employment Utilization Report" ([Form 731-0668](#)). This report is required of the Contractor and Subcontractors (for contracts that require certified payrolls), regardless of their participation in the Apprenticeship or On-the-Job Training programs.
- Each month the Contractor shall submit an "Apprentice/Trainee Monthly Progress Report (MPR)" ([Form 734-2879](#)) for each trainee. This form is used to report Qualified Hours for trainees and will be the source document for estimated monthly progress payments to the Contractor.

If, at the Substantial Completion, the Contractor has not achieved the Training Goal there will be no payment (disincentive) to the Contractor and no qualified hours regardless of all prior partial payments for the Bid Item. A correction equal to 100% of the Bid Item goal times the Bid Item price will be subtracted from the final payment due the Contractor. Previously paid qualified hours will remain as paid.

The City will submit required forms identified in Section C, Chapter 8 of the LAG Manual to ODOT OCR within the required timelines and copy Regional Local Agency Liaison on each submission. All forms will be tracked on the [City of Portland Certified Project Tracking Worksheet](#) and sent to the ODOT Regional Local Agency Liaison upon request.

8.16 FORMS, REQUIREMENTS AND PROCEDURES

A comprehensive list of Civil Rights forms are listed in [Chapter 8](#) of the LAG Manual and also the [City of Portland Certified Project Tracking Worksheet](#). All information from the Contractor will be sent directly to the City Construction Manager (CM). The CM will forward all required forms and information to ODOT OCR.

The CM shall submit all required forms to ODOT OCR within the required timelines and copy Regional Local Agency Liaison on each submission. All forms will be tracked on the

City of Portland Certified Project Tracking Worksheet and sent to the ODOT Regional Local Agency Liaison upon request.

8.16.1 PBOT CHANGE ORDER PROCEDURE

1. General

The purpose of this procedure is to provide guidance, in conjunction with the 2010 City of Portland Standard Construction Specifications (SCS), when there is a change in the contract scope of work and a construction Contract Change Order (CCO amending the contract between the City and the Contractor ([SCS Section 00196.10](#)).

The Construction Manager (CM) is responsible for specifying the changed work, authorizing additional contract time if necessary, and identifying the measurement and payment terms. These decisions are made with the approval of the Construction Section Manager and the City Engineer.

A CCO is initiated as a written request by either the City or the Contractor and managed from start to finish by the CM. It is the responsibility of the CM to determine validity of the CCO according to the terms of the contract ([SCS Section 00140.30](#)). If valid, the CM negotiates with the Contractor to reach agreement on the terms of the CCO.

- a. **CCO Initiated by the City** – CM uses:
 - Request For Proposal ([RFP](#)) form requesting a price quote from the contractor
 - Construction Change Directive ([CCD](#)) form directing the contractor to perform the work;
 - [Change Order Cover Sheet](#) –Justification Attachment (for internal use only);
 - Change Order ([CCO](#)) plus any plan attachments
 - Independent Cost Estimate

- b. **CCO Initiated by the Contractor** – Contractor uses:
 - Request for Information ([RFI](#)) form requesting information from the Owner;
 - CM responds to RFI and either initiates an RFP or denies the request;
 - Construction Change Directive ([CCD](#)) form directing the contractor to perform the changed work;
 - [Change Order Cover Sheet](#) –Justification Attachment (for internal use only);
 - Change Order ([CCO](#)) plus any plan attachments
 - Independent Cost Estimate

All Change Orders are executed using a CCO form. Unilateral Change Orders do not require the contractor's signature since the contractor disagrees with terms. A Unilateral Change Order will have the words "Unilateral" inserted into the contractor signature line.

CM will track and monitor the progress of all changed or potential changes of work. CM will notify the PM of all potential changes and monitor the Construction Authorization budget so as to ensure sufficient funds are available. The CM shall apply for additional Construction Authorization funds and receive approval from ODOT prior to authorizing unbudgeted work.

All CCO's must be logged, tracked, and responded to in a timely manner. Prompt decisions are necessary to avoid stand-by costs and project delays.

The CM in consultation with the PM has approval authority for changes that do not increase the total contract amount by more than 125%, and are within the original scope and funding for the project. All Change Orders above 125% of the original contract amount must be approved by City Council.

The Capital Change Management Group (CCM) within PBOT is set up to review major proposed changes to scope, schedule and/or budget of capital projects. The CCM is made up of Group Managers from Engineering & Technical Services, Policy Planning & Projects, Project Controls, and Business Services. The CM or PM shall bring the following items to the CCM group for approval:

- Proposed project schedule changes which increase contract duration by more than 60 days;
- Proposed project cost increases greater than existing total project funding;
- Project scope changes which result in major schedule and/or cost increases;
- All Project Change Orders that result in total changes > 25% of the original contract.

City cannot exceed any state or federal funding authorization without following State's process, and obtaining approval for an increase in project authorization.

FHWA retains approval authority over:

- a) Waiver for "Buy America" provisions;
- b) Any sensitive or controversial change, or any change for which FHWA review and approval is specifically requested; and
- c) Work not already approved by FHWA if approval is questionable.

State retains approval authority over certain changes to the project. The notification of proposed changes must be sent to State's Regional Local Agency Liaison for approval prior to the City approving a Contract Change Order in any of the following areas:

- a) Changes which affect environmental mitigation classification or commitments;
- b) Right of way access control on or impacting State's facilities;
- c) Changes in the scope of work or extension of the contract limits shown in the project documents approved by State and FHWA;
- d) Any contract change altering the DBE goals or requirements;
- e) Any impact or changes to traffic mobility including width, height, weight, length, access to the route or additional travel delay on or impacting State's facilities;
and
- f) Any change(s) resulting in less than AASHTO Design Standards for projects on the NHS.

Changes requiring the approval of ODOT or FHWA will be forwarded to the ODOT LAL for initial approval.

2. Writing a Change Order

The CM shall compose the CCO carefully to avoid conflicts, unintended consequences, and revisions.

- Write the description of the CCO to be clear and concise.
- Write the directive in the imperative mood and only include what the work is, and where the work is located.
- Specifications must address measurement, payment, contract time, testing and any other requirements necessary to approve the work.
- Attach plans and standard details that are referenced in the changed work, if applicable, showing location and limits of the proposed work.
- Multiple changes can be included into a single change order provided there is a clear distinction between the required changes including the change order cover sheet.
- Changes in excess of 25% of the original contract amount require City council approval before execution.
- Payment made as a result of a claim settlement can be made using a Change Order as long as the contract has not been closed out. Claims in excess of 125% of the original contract amount must also be approved by City council.

3. Force Account Work

Force Account Work is used to equitably compensate the Contractor on a time and materials basis for Extra Work when a negotiated price cannot be reached. The Extra Work is paid according to [SCS Section 00197](#). The CM is responsible for directing Force Account Work including all labor, equipment and materials used to perform the work.

The following circumstances can require Force Account Work:

- The work is necessary and must proceed without delay;
- The scope is not fully defined;
- The CM and Contractor do not agree on price or time before the work starts.

Force Account Daily Records shall be kept daily and include all labor, equipment and materials used to perform the work. Records shall be signed by the inspector and contractor at the end of each day. The daily records are used as justification in preparing the cost reimbursement to the contractor. Daily Records shall be attached and referenced to the Change Order.

4. Change Order Approval

- (1) CM prepares the draft CCO and Cover Sheet package including all supporting documentation;
- (2) CM routes draft package to Construction Supervisor for review of content and format;
- (3) CM routes final package to Project Manager for approval;
- (4) PM get approval from Change Management Group (if necessary);
- (5) PM takes Change Order to City Council for approval (if necessary);
- (6) CM routes final package to Engineer-of-Record for approval;
- (7) CM routes final package to Construction Manager for final approval;
- (8) CM routes final package to City Engineer for final approval

The Change Order is considered executed upon final approval by the City Engineer. Payment will be made within 15 days.

5. Supporting Documentation

The CM will provide supporting documentation to show the basis for scope, price and time adjustments. Supporting documentation must include the following:

- Change Order
- Change Order Cover Sheet

- CM's Independent Cost Estimate
- Contractor's price proposal
- Schedule showing effect on contract time
- Force Account Records and invoices

8.16.2 CLAIMS

Refer to the City of Portland [SCS Section 00199](#) for the claims procedure. In addition, refer to the ODOT LAG Manual Section 10 of Chapter 16, "Contractor Disputes and Claims". The Contract Manager is responsible for keeping ODOT informed of all claims early in the process and shall get written approval from the Local Agency Liaison prior to any settlement.

9.0 PROJECT CLOSEOUT

The project enters the "Closeout" phase of the contract when the construction bid item work is complete and the contractor has been issued the Substantial Completion Notification (ODOT 2nd Notification). This is the point in which the Engineer will verify completion and let the contractor know if any work remains by issuing a Punch List. The Construction Manager ensures all required contract quality and quantity documentation is on file, and upon acceptance of the work by ODOT, will issue the Final Project Acceptance to the contractor.

If it is determined there is missing quality or quantity documentation that cannot be retrieved, the Construction Manager will prepare a written Quality Assurance Exception statement to the project file identifying the missing quality or quantity documentation. The PBOT Quality Compliance Specialist will review the QA Exception and recommend a process for corrective action, if necessary. The Construction Manager will complete the City's Supporting Documentation: [CM Exception Explanation Form](#). The Construction Manager must also obtain, and attach to this form, written concurrence from the applicable Engineer of Record (EOR) the City Engineer. In addition, this form must be signed by both the Construction Manager and Quality Compliance Specialist. This form will be signed off by the Construction Section Manager at the time of final documentation acceptance and project close-out.

9.1 SUBSTANTIAL COMPLETION AND ACCEPTANCE OF THE WORK

As the contract work nears completion, the Inspector and CM work with the contractor to identify deficient items of work. A "Deficiency List" may be prepared and delivered to the contractor notifying them of work that remains to be performed in order for the contract to be considered Substantially Complete. Once the deficient list of items is

complete, the contractor shall issue written notification to the City requesting Substantial Completion as stated in [SCS 00195.90\(a\)](#).

Within 15 days of receipt of the notice, the CM will carry out a final inspection and take one of the following actions:

- (1) Determine the work is complete, prepare and forward: The Certificate of Completion, Acknowledgement, Release & Certification Statement (ARC) and the Final Progress Payment for review and agreement on final quantities.
- (2) Determine that work is Substantially Complete and provide the Contractor with a Punch List of items that remain to be corrected and complete. The Contractor shall complete the Punch List within 30 days or such other time as may be allowed.

For certified projects, the CM will notify ODOT to be present during the Final Inspection of the work. In order to prevent multiple final inspections with ODOT, PBOT will perform an Advance Final Inspection to determine if work remains. If all punch list work is complete, PBOT will notify ODOT and schedule a joint Final Inspection before the 15-day notification period has elapsed, otherwise interest on retainage may accrue.

ODOT will document the Final Inspection by issuing to PBOT the Recommendation of Project Acceptance using [Form 5063](#). If Punch List items remain the Final Inspection process will be repeated.

If the contractor fails to complete the Work and provide notification within the established contract time, as stated in the Special Provisions Section 00180.50(d), liquidated damages will be applied. The CM provides written notification that liquidated damages apply starting at the contract end date stated in the specifications and continuing until the point at which the Substantial Completion notice is received from the contractor. Liquidated damages will be deducted from the next progress payment or the final progress payment whichever applies.

9.2 FINAL PROJECT ACCEPTANCE

At the point at which all on-site work is complete including the punch list and final inspection, the CM will ensure that all contract documentation is complete and approved including:

- Final Materials Certification*
- Certified Payroll for Prime and all Subs
- Project Manager's Labor Compliance Certification Form 734-1734*
- Subcontractor Paid Summary Reports
- Monthly Employment Utilization Reports
- Foreign Steel Summary Report*

- State Force Orders*
- Request for Increase in Project Authorization*
- Quality Documentation
- ADA Curb Ramp Inspection Forms*
- Test summaries and test results
- Quantity Documentation
- Change Orders*
- ODOT Documentation Review Report (DRR) Acceptance*
- As-Constructed Plans on or affecting ODOT facilities*
- ODOT Quarterly Reports*
- DBE Work Plan Proposal Forms (Form 3A) CUF Reports*
- PBOT Civil Rights Tracking Worksheet*
- Final Progress Payment approved by the Prime*
- Acknowledgement, Release and Certification Statement (ARC)
- PBOT Certificate of Completion*
- PBOT Letter of Project Final Acceptance*
- 2-Year Warranty Bond (Non-Certified Projects only)
- Final Report to the Chief Procurement Officer

The Contract Manager ensures that documentation marked with an asterisk * above is transmitted to the ODOT LAL as detailed in the [ODOT Local Agency Guidelines Manual Chapter 17](#). PBOT has a goal to close out projects within 120 days of the Substantial Completion notification date.

Once the above documentation is complete, the Contract Manager will submit the “closeout package” consisting of the ARC, COC, Final Progress Payment and Final Report to the Chief Procurement Officer to Procurement Services for a final review and approval authorization for final payment.

9.3 FINAL PAYMENT

The Chief Procurement Officer (CPO) receives the final closeout package from the CM. After ensuring that all documentation is completed, accepted and on file, and that the contract terms have been satisfied, the CPO signs the Final Report and returns copies back to the Contract Manger. This process can take up to two weeks to complete all of the reviews.

The Contract Manager shall then transmit the Final Report to the Accounts Payable department and request release of all retainage on the projects. A/P will verify retainage amounts with the final progress payment and initiate the final check-run and release final payment.

Final payment must be made to the contractor within 30 days of the City Engineer's signature on the Final Progress Payment otherwise interest may accrue. Once final payment has been made to the contractor, the project is considered complete. This is also the point at which Accounts Payable, along with the Project Manager, review the final Project Charges and issue final billing to ODOT for reimbursement. The final billing to ODOT shall occur within 90 days of project closeout (ODOT's 3rd Notification).

9.4 AS-CONSTRUCTED PLANS

Throughout the project, the Inspector prepares a set of red-line as-constructed plans documenting any changes on the contract plan set. At the completion of the project, the Inspector submits the final red lined drawings to the CM for final approval. The red lined set is then transmitted to the project drafter who then makes changes to the final record drawings. The CM will transmit a record set of as-constructed drawings to ODOT after final acceptance of the project.

9.5 ARCHIVING AND RECORDS RETENTION

The City of Portland Charter ([Section 2-504](#)) authorizes the Office of the City Auditor's Archives and Records Management Division to function as a public records administrator, ensuring the management of the City record complies with the state law and administrative rules ([ORS 192](#) and [OAR 166](#)). The City of Portland's retention schedule is more stringent than that of ODOT's retention schedule. PBOT holds the following documents for the period shown:

Hold permanently (9010-12):

- Contract Administration
 - Change Orders
 - Claims
 - Contracts and Insurance

- Project Close Out
 - PBOT Certificate of Completion (COC)
 - PBOT Acknowledgement, Release and Certification (ARC)
 - PBOT Letter of Final Acceptance
 - PBOT Final Payment
 - Bonds
 - ODOT Foreign Steel Summary Report
 - ODOT Final Documentation Review Report (DRR)
 - ODOT Labor Compliance Certification
 - ODOT Material Acceptance Certification
 - ODOT Final Project Acceptance

- ODOT / Permits
 - ODOT Correspondence
 - All Permits
- Environmental
 - Erosion Control Reports
 - Contaminated Media
 - Hazmat

Hold for 10 years (9010-13)

- Submittals
- Financial
 - Price Adjustments
 - Installation Sheets
 - Progress Payments
 - Purchase Orders
 - Tickets / Scale Certifications
- Request for Information (RFI)
- Reports
 - Daily Progress Reports
 - Project Diary
 - TP&DT Reports
 - Bid Analysis Documents
 - ADA Curb Ramp Inspection Reports
- Quality Documents
 - Field Tested Results
 - Certificate of Material Origin (CMO)
 - Test Summary Certificates
- Meetings
 - Pre-Bid Conference
 - Pre-Construction Meeting
 - Weekly Meeting Minutes
- Labor Compliance
 - Certified Payrolls (Deliver to Auditor's Office Separately)
 - ODOT Electronic Monthly Employment Utilization Reports – MEUR
 - PBOT Monthly Utilization Report – MUR
 - PBOT Monthly Employment Report – MER
 - Subcontracts
- PBOT Contract Administration Document Tracking Worksheet

After the project has closed out, the documents are boxed up and sent to the Portland Archives and Records Center (PARC) for storage. PARC manages the retention schedules of all documents and automatically performs the purging of documents after retention schedules are met. The Construction Manager holds the responsibility for ensuring all documents are filed according to the proper retention schedules and that boxes are sent off to PARC in a timely manner.

9.6 WARRANTIES

Manufacturer and Material Warranties shall be submitted by the Contractor and will be on file prior to Final Project Acceptance.

There is no performance or workmanship warranty on Federal Aid projects. Final Acceptance of the contract relieves the contractor of any future maintenance need that is not covered by the Manufacturer or Material Warranty.

10.0 MATERIAL QUALITY ASSURANCE PLAN

The Material Quality Assurance Plan defines the responsibilities of the Contractor and the City of Portland in order to successfully incorporate quality materials on Capital Improvement Projects. This Plan is currently used for all Federally Funded construction projects administered by the City of Portland.

PBOT uses the ODOT Manual of Field-Test Procedures (MFTP). Terms used in this Section are defined in the ODOT MFTP.

For projects that are located entirely on NHS routes or where projects intersect NHS routes, the City of Portland will use ODOT's Manual of Field Test Procedures (MFTP) for their Quality Assurance. The person and lab performing the Material Quality Assurance shall be certified thru ODOT. A dispute resolution process will be using a third party certified lab and personal. Where federally-funded capital improvement projects intersect NHS routes at grade, Independent Assurance requirements shall apply to the portion of work that intersects NHS routes. If a significant portion of the work intersects with NHS routes, the Engineer should consider applying Independent Assurance requirements to the whole project. The Engineer will prepare project-specific criteria such as design standards, materials acceptance and testing criteria, which will be reviewed with ODOT during preparation of the PS&E documentation.

Projects will be evaluated during the PS&E phase on a project-by-project basis to determine and specify the type of testing required and incorporated into the Special

Provisions. This includes following the Quality Assurance Program identified in Section 2 of the Manual of Field Test Procedures.

The Material Quality Assurance Plan is made up of three separate programs; Quality Control, Verification, and Independent Assurance.

10.1 QUALITY CONTROL

Quality Control material testing is the responsibility of the contractor. The Contractor provides both the sampling and the testing for the material. The contractor's QC Certified Technician must observe and perform testing operations, properly document test results, and sign the documentation. The Quality Control tests performed by the contractor will be used if verified by PBOT's Quality Assurance process. The ODOT Manual of Field Test Procedures is used to outline the specific procedures for sampling and testing materials for construction projects. Any modifications to sampling and testing requirements in the MFTP will be identified in the Contract Special Provisions.

10.2 VERIFICATION TESTING

Verification is the responsibility of PBOT. PBOT will ensure that both the lab and the technicians are ODOT certified. PBOT will either use its own ODOT Certified Materials Testing Laboratory (MTL) or hire a consultant with an ODOT certified lab and technicians. The lab performing Quality Control material testing for the project shall not be the same lab that does verification testing. Quality Control material samples cannot be used for verification. Agency Verification Testing is run on a frequency as designated in the Manual of Field Test Procedures.

10.3 INDEPENDENT ASSURANCE

Independent Assurance (IA) testing is the responsibility of PBOT. PBOT will either use its own QCS or hire an ODOT certified consultant to perform Independent Assurance testing. The person performing the Independent Assurance must be independent from the Verification and Quality Control labs. The contractor's test results of split verification samples are compared to (IA Test Results) for compliance using ODOT IA parameters. The PBOT QCS performs random inspections of QC labs and technicians for compliance. The purpose of the testing is to determine that the contractor-provided testing is accurate. The method of choosing the frequency and quantity of the split samples varies and is outlined in the MFTP.

PBOT may use the ODOT Materials Testing Lab (if available and agreed to by ODOT), or will use an independent certified lab as the neutral 3rd party dispute resolution testing lab.

11.0 USEFUL LINKS

[FHWA 1273 Specifications](#) – as revised May 1, 2012

[Electronic Code of Federal Regulations e-CFR](#)

[PBOT Design Documents Web Page](#)

[PBOT Construction Documents Web Page](#)

[ODOT Construction Forms Web Page](#)

[ODOT Civil Rights Web Page](#)