

PROJECT DEVELOPMENT

CHAPTER 5

Introduction

This chapter references procedures detailed in the *CDOT Project Development Manual*, found at: https://www.codot.gov/business/designsupport/bulletins_manuals/project-development-manual. The *Project Development Manual* refers to responsibilities of the Resident Engineer. When the Local Agency is administering the design of the project, the Local Agency will typically assume the responsibilities of the Resident Engineer. Questions and clarification of responsibilities should be directed to the CDOT Project Manager.

5.1 Prepare Design Data - CDOT Form 463

The Form 463, which is completed in the CDOT database, is used on all projects to document important design information and provide uniform information during the project development process.

Design data on the Form 463 includes, but is not limited to:

Traffic volumes	Structural road parameters
Geometric standards	Major structures
Project characteristics	Highway classification
Right-of-way issues	Utilities
Railroad crossings	Environmental category
Agency coordination	Construction information
Entities involved	

The Form 463 is filled out cooperatively between the Local Agency and CDOT. See 2.05, "Design Data," of the *CDOT Project Development Manual* for further explanation.

5.2 Prepare Local Agency / CDOT Inter-Governmental Agreement

CDOT will prepare a project inter-governmental agreement (IGA) detailing the responsibilities for the completion of the project. The agreement shall be developed in cooperation with the Local Agency and shall cover all phases of project work for which funding is approved. See Chapter 3 of this *Manual* for further explanation.

5.3 Conduct Consultant Selection / Execute Consultant Agreement

The Local Agency may hire a consultant to design and/or administer the construction of its project. To obtain Federal reimbursement, the Local Agency shall use CDOT's consultant selection process or, with the prior approval of CDOT's Contracts & Market Analysis Branch, use its own consultant selection process. In order to obtain this prior approval, the Local Agency must have its attorney certify that the Local Agency RFP and Consultant Selection Process is in conformance with federal and state laws. The IGA's Attachment #1 lists the procedures that Local Agencies shall use for agreements with professional consultant services and lists the pertinent federal and state laws.

A written Request for Proposal (RFP) is prepared by the local agency to solicit proposals from the consultants. For purposes of this manual requests for proposals (RFP) and Requests for qualifications (RFQ) are considered equivalent.

If the local agency does not want reimbursement for consulting services, it may use its own consultant selection process without CDOT approval. For consultants performing right of way services, see Chapter 8 of the CDOT Right of Way Manual.

Title 23 CFR Part 172, Administration of Engineering and Design Related Service Contracts requires the state highway agency to insure that procurement actions by local agencies comply with this regulation. Consultant contracts shall be reviewed by CDOT prior to approval.

The Agreements Unit of the Contracts and Market Analysis Branch can be contacted for a copy of CDOT's *Professional Consultant Contracting Manual: A Guide to CDOT's Policies, Procedures, Rules, Regulations and Guidelines, for Professional Service Contracts with Architects, Industrial Hygienists, Engineers, Landscape Architects, and Land Surveyors*.

Because the regulations and laws are lengthy, the subsequent steps serve as a guide for a Local Agency obtaining professional consultant services. This guidance follows the format of *Title 23 CFR Part 172*. This information is also located in Attachment 1 of the CDOT/Local Agency Inter-Governmental Agreement.

1. The contracting Local Agency shall document the need for obtaining professional services.
2. Prior to solicitation for consultant services, the contracting Local Agency shall develop a detailed scope of work and a list of evaluation factors and their relative importance. The evaluation factors are those identified in *Colorado Revised Statute 24-30-1403, Professional services - listings - preliminary selections*. Also, a detailed cost estimate shall be prepared for use during negotiations.
3. The contracting agency must advertise for consultant contracts if the basic construction cost of the project is expected to exceed \$1 million or if the fee for engineering or surveying services is expected to exceed \$100,000. The advertisement period must be a minimum of 15 days prior to the selection of the three most qualified firms, and the advertising should be done in one or more daily newspapers of general circulation. If the cost is expected to be less than \$100,000, advertisement is not necessary. In those instances, contact the CDOT Project Manager for direction.
4. The request for proposals shall include the scope of work, the evaluation factors and their relative importance, the method of payment, and the goal for Disadvantaged Business Enterprise (DBE) participation set by CDOT. Contact the Civil Rights & Business Resource Center (CRBRC) for any questions pertaining to CDOT's DBE requirements and forms.

The draft RFP shall be reviewed by the CDOT Project Manager prior to solicitation.

5. The evaluation and selection of the consultants are done in accordance with *Colorado Revised Statutes 24-30-1403*. This section of the regulation identifies the criteria to be used in the evaluation of consultants and their team. It also

shows which criteria are used to short-list and make a final selection. The selection process is qualification-based and cost shall not be considered a factor.

Selection is based on the following evaluation factors:

- Project team
- Firm capability
- Past performance on similar projects
- Work location
- Capacity
- Project goals
- Project Control
- Project concept
- Project critical issues

Optionally, the top firms (minimum of 3) can be short-listed and invited to participate in a presentation and interview phase. Final selection will then be made after the presentation and interview score is added.

Under *Colorado Revised Statute 24-30-1401, Legislative Declaration*, cost shall not be considered a factor in the evaluation of professional consultant services.

6. After a consultant is selected, the Local Agency enters into negotiations with the consultant to obtain a fair and reasonable price for the anticipated work. Pre-negotiation audit evaluations are prepared for contracts expected to be greater than \$50,000. For audit assistance, contact the CDOT Consultant Audit Unit of the Contracts and Market Analysis Branch.

Federal reimbursement is limited to those items allowable under the cost principles in *Title 48 CFR 15, Contracting by Negotiation (subpart 15.404-4 Profit)*. Fixed fees (profits) are determined with consideration given to such items as project size, complexity, duration, qualifications of contractors, and degree of risk involved in the work. Profit is not to exceed 15 percent of the total allowable direct and indirect costs. Costs-plus-percent-of-cost contracts are not permissible.

The Draft Consultant Contract shall be reviewed by the CDOT Project Manager to ensure the contract contains the necessary federal requirements.

If the Consultant Contract includes or is solely for construction contract administration services, the applicable CDOT construction and inspection manuals shall be incorporated by reference in the contract between the Local Agency and the Consultant. For example, if the Consultant was providing Quality Assurance inspections of fabricated items such as girders, the *CDOT Bridge Fabrication Inspection Manual* should be incorporated by reference in the Consultant Contract and the Consultant required to follow the procedures outlined in the *Manual*.

A Consultant Contract for federally reimbursable consulting services cannot be signed until the CDOT/Local Agency Inter-governmental agreement has been signed and made effective by the CDOT Controller.

7. A qualified Local Agency employee shall be responsible and in charge of the project to ensure that the work being done is complete, accurate, and consistent with terms, conditions, and specifications of the contract. At the end of the project, the Local Agency prepares a performance evaluation on the consultant (see CDOT Form 313 in Appendix A) and forwards it to the CDOT Project Manager.
8. Each of the steps listed above is documented in accordance with the provisions of *Title 2 CFR 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, (subpart D, 200.333 Retention requirements for records)*, which provide for records to be kept at least three years from the date that the Local Agency submits its final expenditure report. Records of projects under litigation shall be kept at least three years after the case has been settled.

Colorado Revised Statutes 24-30-1401 through 24-30-1408, Title 23 CFR Part 172, and CDOT Procedural Directive 400.1 - Obtaining and Modifying Professional Services Contracts, provide additional details for complying with the eight steps discussed above.

Appendix II to Part 200 (Title 2 CFR 200) – Contract Provisions for Non-Federal Entity Contracts Under Federal Awards also requires:

It is also the responsibility of the Consultant to comply with the federal statutes and regulations cited in 2 CFR 200, Appendix II specifically (1) Administrative, contractual, or legal remedies, (2) Termination for cause and for convenience, (3) "Equal Employment Opportunity," (4) Copeland "Anti-Kickback" Act, (5) Davis-Bacon Act, (6) Contract Work Hours and Safety Standards Act, (7) regulations pertaining to reporting, (8) Patent rights, (9) Copyrights and rights in data, (10) Access by CDOT and FHWA to documents, (11) Retention of documents, (12) Clean Air Act, Clean Water Act, EPA regulations, and (13) energy efficiency conservation.

See http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl for the complete 2CFR200.

5.4 Conduct Design Scoping Review Meeting

The Design Scoping Review (DSR) creates an early, on-site review of a project prior to preliminary design. This enables developing a scope of work that will be consistent with the planning and design characteristics. See 2.01 of the *CDOT Project Development Manual*.

Determining the limits of the project and a draft survey request should be one product of the DSR (See 2.01.02 and 2.14 of the PDM). For right of way acquisition and plans, the accuracy of the survey increases, as listed in 5.5.2, "Minimum Horizontal Accuracy Tolerances," and 5.5.3, "Minimum Horizontal Accuracy Tolerance Table" of the *CDOT Survey Manual*.

The project scope shall address the CDOT policy for Americans with Disabilities Act Accessibility Guidelines. See *CDOT Procedural Directive 605.1, ADA Accessibility Requirements in CDOT Transportation Projects*.

Whenever possible it is desirable to conduct the DSR after the local agency selects its consultant, but before it completes the consultant contract. This enables all parties to ensure that all task items assigned to the consultant are properly addressed in the consultant contract. The consultant will not receive any compensation for activities that precede the Notice to Proceed. Following the DSR the CDOT Project Manager will

issue a letter to the local agency that identifies items needed to clear the project for construction.

5.5 Conduct Public Involvement

It is recommended that Local Agencies involve the public throughout the project development. Project information can be provided via flyers, news releases, or the local agency web site. Local Agencies should use CDOT's Public Participation Guidelines or adopt their own. Local Agencies should coordinate with CDOT to determine whether there are disproportionately adverse impacts to minority and low income populations. See Title VI Assurances in Appendix B. For guidance contact your CDOT Project Manager or review the public participation guidelines in Chapter 7 of the *CDOT NEPA Manual*, found at: <https://www.codot.gov/programs/environmental/nepa-program/nepa-manual>.

Public meetings can include door to door visits, homeowner group meetings, business surveys or stakeholder meetings, open houses, or formal public meetings and comment periods. It is in the best interest to have a wide range of public involvement early in the project. The elected officials, planners, design engineers and right-of-way agents should attend to get some public feedback on the project. Context sensitive solutions should be considered when designing and constructing the improvement.

When a significant number or proportion of the affected community needs information in a language other than English to participate in the process, the Local Agency shall provide notices of public meetings and project information in the other languages and take any other reasonable steps, including providing an interpreter, appropriate for the scope of the program and the size and concentration of the limited English proficiency population.

Announcement on the Local Agency's web site of the design of the transportation improvement project and its corresponding public meeting is also effective.

5.6 Conduct Field Inspection Review (FIR)

The Field Inspection Review (FIR) is the on-site review of preliminary construction plans and cost estimate that signifies the end of the preliminary design phase. FIR plans are

preliminary in nature, but still must contain applicable required items and details of all salient features. The FIR is held to conclude all unresolved issues identified during preliminary design and to establish the specific criteria and direction that are to be used in the final design. See 2.17, “Field Inspection Review,” of the *CDOT Project Development Manual* for further explanation.

During CDOT’s transition from paper to electronic information, the Local Agency should contact the CDOT Project Manager to determine the number of FIR plans CDOT needs for Specialty staff involved with the review of the project. The Local Agency should provide prints or an electronic copy of the FIR plans to the CDOT Project Manager at least 14 calendar days in advance of the meeting.

5.7 Conduct Environmental Processes

The Local Agency must ensure that the environmental consequences of its transportation project have been adequately considered and that required mitigation measures can be completed within the time frame and budget described in the application. An environmental clearance is required before final design, right-of-way acquisition and construction funds are authorized. Contact the CDOT Project Manager for guidance concerning the environmental requirements. Among those requirements, Environmental Justice considerations should be analyzed and documented, if applicable. For more information see Chapter 9.15 of the *CDOT NEPA Manual*, found at: <https://www.codot.gov/programs/environmental/nepa-program/nepa-manual> .

Also see Chapter 3 of the *FHWA Project Development and Design Manual*, found at: <http://flh.fhwa.dot.gov/resources/manuals/pddm/> .

5.8 Acquire Right-of-Way

All right-of-way needed in connection with Local Agency projects must be acquired in compliance with Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended¹, commonly called the Uniform

¹ As amended by Public Law 100-17, Apr. 2, 1987, Title IV, Uniform Relocation Act Amendments of 1987; As amended by Public Law 102-240, Dec. 19, 1991, Sec. 1055, Relocation Assistance Regulations Relating to the

Act. The rules are reprinted each year in *Title 49CFR Part 24*. See http://www.fhwa.dot.gov/real_estate/uniform_act/.

Before Federal funding can be authorized for right-of-way purposes, CDOT must review and approve a set of right-of-way (ROW) plans. The ROW plans shall include legal descriptions and topographic features for all land acquisitions. An approved relocation plan, if applicable, and cost estimates for right of way acquisition need to be submitted with the ROW plans in the packet requesting approval prepared for the project. See the CDOT Regional ROW Manager for the extent of ROW plans needed to obtain approval.

The Uniform Act applies when Federal dollars are utilized in any phase of the project. The Uniform Act applies even when Federal dollars are not used specifically for property acquisition or relocation activities, but are used elsewhere in the project, such as planning, environmental assessments or construction. The Uniform Act also applies when right of way is acquired for projects that modify state highways where no Federal dollars are used in any phase (100% local funded projects).

The Uniform Act is divided into three major sections or titles. Title I, General Provisions, covers definitions. Title II, Uniform Relocation Assistance, contains provisions relating to the displacement of persons or businesses by Federal or federally assisted programs or projects. Title III, Uniform Real Property Acquisition Policy, pertains to the acquisition of real property for Federal or federally assisted programs or projects.

CDOT must provide assurance to the FHWA that it can fully comply with the Uniform Act. The Local Agency must certify that it has followed the Uniform Act when acquiring real property. Pursuant to *Title 23 CFR 710.311 Construction Advertising*, no project can be advertised until local agency has provided written certification that all right of way has been cleared and CDOT has accepted that certification. See Appendix B for two example right-of-way certification letters. All right-of-way shall be purchased and taken into possession prior to concurrence to advertise for bids. See Chapter 8 of the ROW manual, found at: <https://www.codot.gov/business/manuals/right-of-way/Chapter%208%20-%20Local%20Public%20Agencies>.

Rural Electrification Administration; As amended by Public Law 105-117, Nov. 21, 1997, Sec. 104, an Alien not lawfully present in the United States.

The Local Agency may accept, as part of a Federal or federally assisted project, a parcel that a developer has dedicated through the local planning and zoning approval process. Dedication is the process in which a local government directly appropriates property for a future public use in the planning and zoning approval process. Dedications are usually consummated at the time of subdivision approval. Dedications must be completed and enforceable before the Local Agency requests a right of way clearance.

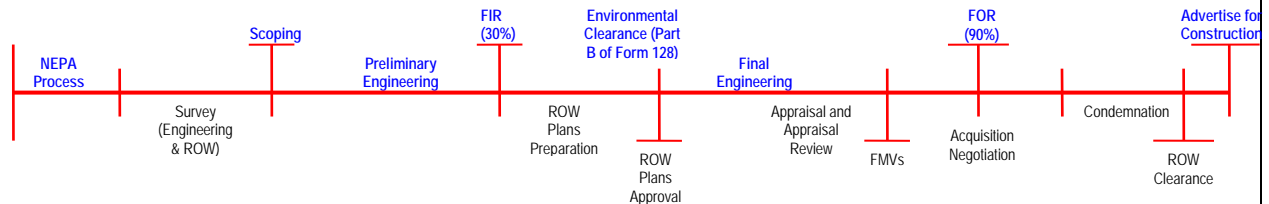
Real property obtained through normal zoning, or through subdivision procedures requiring dedication of strips of land in the normal exercise of police power, is not considered to be a taking in the constitutional sense and does not call for payment of just compensation or compliance with the Uniform Act. Land acquired in this manner may be incorporated into a federally assisted project without jeopardizing participation in other project costs.

Property owners whose real property is to be acquired for a project may make a gift or donation of the land, or any part of it, or of any of the compensation paid for it, to the acquiring agency. The owner-donors must be fully informed of the right to receive just compensation for the acquisition of the property if it is desired. The owners must also be fully informed that they are entitled to have an appraisal made of the property along with an offer of just compensation. The owners may release the Local Agency from either or both of these obligations. This release must be acquired in writing and cannot be obtained through coercion.

The Local Agency shall work closely with the CDOT Project Manager and the CDOT Right-of-Way Manager during the entire acquisition process, both to expedite acquisition and to assure that all Federal and State requirements are met.

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Right of Way Acquisition Pursuant to the Uniform Act



Observations:

- ROW Process is a system of handoffs
- ROW Process interacts with other disciplines, e.g.: Engineering, Environmental, Utilities, etc.

The above illustration shows that the Right-of-Way timetable threads its way through the environmental clearance and design process. NEPA clearance (without corresponding permits) is required before ROW plans are approved by CDOT. Thus the notice to proceed with the owner interaction and appraisals period is dependent upon the ROW plans approval. See Chapter 8 of the ROW Manual for in-depth instructions and further regulations at: <https://www.codot.gov/business/manuals/right-of-way/Chapter%208%20-%20Local%20Public%20Agencies> .

The local agency shall use appraisers and acquisition agents selected from CDOT's RFP list or CDOT's Qualification List in accordance with section 8.4.1 of CDOT's Right of Way Manual. Once the appraisal is completed, it should be sent to the CDOT regional ROW office for review. This review may require the LA's appraiser to adjust the appraisal. It is about a 3 to 4 week process. It is wise to also obtain the owner's appraisal at about the same time, as this can generally be used for setting or adjusting the Fair Market Value (FMV) by the CDOT regional office.

Negotiations between the LA and the property owner can begin when the FMVs are established. If the LA decides to compensate the owner more than the FMV for some reason, the CDOT ROW Manager shall be informed of this decision. All possession and use and final closing documents must be copied to the regional ROW manager

CDOT forms must be used for ROW acquisition, since it streamlines the process and provides a very easy way for CDOT to concur with these actions. The property must be free of all liens and encumbrances to avoid endangering the integrity of the federally funded facility.

5.9 Obtain Utility and Railroad Agreements

Utilities

It is the Local Agency's responsibility to coordinate with all affected utility owners to identify existing facilities, determine where conflicts exist, and negotiate relocation requirements and payment terms.

Pursuant to *Title 23 CFR 635.309(b) Authorization*, no project can be advertised until CDOT has provided written certification that all conflicts with the utility companies have been resolved. The Region Utilities Engineer will issue a Utility Clearance for the project.

The Region Utilities Engineer provides guidance to the Local Agency Project Manager in identifying and addressing all utilities affected by the project.

The Local Agency Project Manager shall:

1. Identify, verify, and locate known utilities and conflicts within project limits.
2. Coordinate necessary utility relocations and negotiate the agreements and/or permits.
3. Draft project utility specifications, and ensure that existing utility lines and any relocation requirements are accurately shown and identified on the project plans, specifications and estimates.
4. Submit the project Utility Clearance letter in electronic format to the Region Utilities Engineer.

5. Process utility billings.

Railroads

The Local Agency may encounter railroad involvement in one of two contexts:

1. On projects specifically for the installation of safety devices at highway/rail at-grade crossings, or
2. When the transportation project will encroach upon railroad property and/or impact railroad facilities.

On Local Agency projects with railroad involvement, an agreement between the railroad and the Local Agency is required. An application may need to be submitted to and approved by the Colorado Public Utilities Commission. The CDOT Railroad Program Office in the Traffic and Safety Engineering Branch can furnish guidance and support at the Local Agency's request.

5.10 Conduct Final Office Review (FOR)

The Final Office Review plans and specifications shall be final in nature. The Final Office Review (FOR) is a final review of construction plans, specifications and cost estimates for completeness and accuracy. See 2.28, "Final Office Review," of the *CDOT Project Development Manual* for further information.

The Local Agency should contact the CDOT Project Manager to determine the number of FOR plan sets CDOT needs for Specialty staff involved with the review of the project. The Local Agency should provide prints or an electronic copy of the FOR plans to the CDOT Project Manager and allow a minimum of two weeks for CDOT staff review, although a month is preferable.

5.11 Justify Force Account Work by the Local Agency

In accordance with Policy Directive 387.0 actual construction of a project shall be performed under a contract awarded to the lowest responsible bidder. However, under limited circumstances, subject to CDOT's approval, it may be in the public interest for a

Local Agency to construct a portion of a project on a force account basis. In this context,

the term "force account construction method" means the direct performance of project work by the Local Agency using labor, equipment and materials furnished by it and used under its direct control.

It may be found in the public interest and cost effective for a Local Agency to undertake a construction project by the force account construction method when a situation arises in which the rights and responsibilities of the community at large are so affected as to require a special course of action. Situations that may justify a request for a Force Account Construction Method – Finding in the Public Interest (FIPI) are listed in CDOT Form 895.

See 1.11, "Force Account Construction Method," of the *CDOT Project Development Manual* for more details and the instructions on the cost effectiveness determination for this approval. The latest revision of section 1.11 can be found at:

https://www.codot.gov/business/designsupport/bulletins_manuals/project-development-manual/05-pdm-sect-1-scoping.pdf/view .

The CDOT Region Program Engineer must approve the FIPI justification before a Local Agency is authorized to perform any work on a project by the force account construction method. Upon receipt of the FIPI justification, the CDOT Region Program Engineer will prepare the CDOT Form 895 – Region Certification – Force Account Construction Method –and Finding in the Public Interest (see Appendix A).

5.12 Justify Proprietary, Sole Source, or Local Agency Furnished Items

When the use of a patented or proprietary (trade name), sole source, or local agency furnished item is essential for a project, a Finding in the Public Interest shall be prepared which documents that no equally suitable alternative exists.

See 2.24, "Proprietary Items," of the *CDOT Project Development Manual* for further information.

5.13 Document Design Exceptions – CDOT Form 464

The Form 464 – Design Exception Variance Request is used to document a project design exception (variance). This form documents important decisions, mitigation and safety information required when minimum design standards, as identified on the CDOT Form 463 – Design Data cannot be met. If Form 464 is completed for a bridge or structure on a local agency project, the CDOT Project Manager should file a smart scanned, ISO compliant copy of the form in ProjectWise Explorer in accordance with PD 21.1 and CDOT Record File Plans. See 2.06, “Design Exception (Variance),” from the *CDOT Project Development Manual* for information on preparing a variance letter.

5.14 Prepare Plans, Specifications, Construction Cost Estimates and Submittals

Plans and specifications of a project describe the location and design features with all the construction items in sufficient detail to facilitate construction. The estimate reflects the anticipated costs in detail to permit an effective review and comparison of bids received.

A complete plans, specifications and estimate package (PS&E) shall include:

1. *CDOT Standard Specifications for Road and Bridge Construction* as supplemented by CDOT Standard Special Provisions (SSP), CDOT Project Special Provisions (PSP), and approved Local Agency specifications.
2. Plans in the form of detailed drawings.
3. Detailed cost estimate of bid and force account items (by the Local Agency). CDOT's review of the final cost estimate prior to completion of the bid package will be at the discretion of the Project Manager. Bid item information is available on the CDOT web site at: <https://www.codot.gov/business/eema> .

See 2.30, “Plans, Specifications and Estimate Approval,” of the *CDOT Project Development Manual* for further information.

For all projects that require the preparation of design or engineering plans, the Local Agency is required to have professional personnel on its staff or under contractual agreement to be in charge of the project. As appropriate, this professional may be an architect certified by the Colorado Board of Examiners of Architects, an historian, an architectural historian, or a Professional Engineer certified by the State Board of Professional Engineers and Land Surveyors. All projects involved with the rehabilitation or preservation of historic buildings, structures or sites are coordinated with and receive written approval from the State Historic Preservation Officer.

Construction plans are required to be electronically sealed by the Professional Engineer according to 4 CCR 730-1, *Architects, Engineers and Land Surveyors Rules and Regulations* and *CDOT Procedural Directive 508.1 – Requirements for the Use of the Professional Engineer’s Seal*. Adobe Sign is the electronic professional sealing software selected by CDOT which facilitates the routing of construction plans for acknowledgement and electronic sealing. The Local Agency's project manager is responsible for coordinating all project-related activities with CDOT, including the status of the project plans. CDOT has final approval authority for plans and specifications submitted for advertisement and construction.

The Local Agency completes the project plans and specifications in conformance with CDOT requirements during the project development process. CDOT reviews the final set of construction plans and specifications.

Additional Submittals Required for Off- and On-System Bridges and other Structural Work

Prior to advertising Local Agency projects with major or minor structures, design information must be submitted to CDOT Staff Bridge for review and archiving according to Subsection 19.1 of the *CDOT Bridge Design Manual*. Unless otherwise noted, all documents shall be submitted in accordance with Technical Memorandum “Final Design Submittal in Electronic Format” dated March 09, 2015 (found at <https://www.codot.gov/library/bridge/miscbridgedocs/techmemos/design-memos/15-03-tm-final-design-submittal-in-electronic-format/view>) with files clearly labeled to facilitate the archival process. The following items shall be submitted by the Local Agency or the

Local Agency's Consultant to the CDOT Project Manager for forwarding to Staff Bridge (Items should be received and reviewed prior to final payment for the design phase.):

1. Design notes and independent check notes, a complete and final set, in electronic format, for each major and minor structure on the project.
2. Structure Selection Report, a finalized copy for each major structure.
3. A rating package for each new or rehabilitated structure prepared in accordance with the current *CDOT Bridge Rating Manual*. AASHTOWare BrR bridge model file in xml format, or in a separate file format if the rating is performed using another software, shall be provided with the package. AASHTOWare can be made available to the Local Agency or the Local Agency's Consultant. Contact Staff Bridge for additional details.
4. Final Geotechnical Report.
5. Final Hydraulics Report.
6. Final bid documents, including plans and specs, in PDF format for Staff Bridge archives.
7. Electronic files, MicroStation DGN files and related reference files for each structure in the bid package.
8. Field Information Packages, one hard copy delivered to the project engineer and one electronic copy for each structure being built on the project (The Field Information Package shall be prepared in accordance with *CDOT Bridge Design Manual* Subsection 19.1, paragraph 19.1.4D, including a record set of quantities, the Geotechnical Report, and the as-built plans for existing structures that are to be removed).
9. A notification from the Region if final inspection by Staff Bridge will be required.

10. A statement that, to the best of the consultant's knowledge, all of the work on this project has been done in accordance with the latest CDOT standards and FHWA regulations (This statement may be included in the letter of transmittal).

If the Consultant performs QA for the project, the following shall also be submitted:

1. If the Consultant performs QA for the project, a Final Detail Letter (FDL) in Microsoft Word format. This document will be used to prepare the "official" FDL for internal distribution.

The *CDOT Bridge Design Manual* is updated periodically through the issuance of "Bridge Design Manual Technical Memorandums" which can be found at the following link: <https://www.codot.gov/library/bridge/miscbridgedocs/techmemos/design-memos/15-04-final-submittal-checklist-2015-04-1/view>

5.15 Ensure Authorization of Funds for Construction

Authority to spend funds for preliminary engineering through final design, right-of-way, utilities, and construction is authorized in phases. The CDOT Project Manager submits a CDOT Form 1180 – Standard Certification and Project PS&E Approval to authorize construction funds when the project is ready for advertisement.

The following documents must be submitted prior to federal authorization:

1. Form 1180
2. Final Form 463 – Design Data*
3. Right of Way Certification*
4. Utility Certification*
5. Environmental Clearance – Form 128, or FONSI or ROD*
6. Form 859 – Project Control Data*

*Identified as Project Records per CDOT Construction Engineering Record File Plans. The CDOT Project Manager should file a smart scanned, ISO compliant copy of these documents in ProjectWise Explorer per PD 21.1.

CDOT will prepare the necessary paperwork to verify the federal funds are authorized for the construction (C) phase. The C phase is authorized through the Federal-Aid Program Data (Form 418). Authorization must be granted before advertisement. The CDOT project manager should check encumbrance before construction work begins. A funding letter may be necessary at this point. Funds spent by the Local Agency before CDOT authorization are not eligible for reimbursement.

5.16 Electronic Signatures

PD 508.1, *Requirements for the Use of the Professional Engineer's Seal*, requires that Adobe Sign be the software used for electronic signature on those Project Records which require signatures. Adobe Sign facilitates automated workflows including the ability to route Project Records for acknowledgement and electronic signing.

5.17 Records Management

Project Records on Local Agency projects will be retained according to retention periods described in the Construction Engineering Record File Plan (Record File Plan). The Record File Plan also indicates the archive location for any documents with a permanent retention period. Record File Plans are maintained by CDOT's Records Management Program.

Bentley ProjectWise Explorer is the Electronic Document Management System (EDMS) for archiving all electronic Project Records set forth in the Record File Plan. Project Share is a cloud-based software tool hosted in the Bentley / Microsoft Azure Cloud used for document collaboration. Project Share connects to and synchronizes with ProjectWise Explorer.

The Local Agency is required to file applicable Project Records and supporting documents on an ongoing basis in Project Share after being provided access to the site by the CDOT Project Manager.

The CDOT Project Manager is responsible for moving permanent Project Records, on an ongoing basis, into ProjectWise Explorer once Local Agency personnel have placed the applicable records in Project Share. The CDOT Project Manager must complete

project attribute fields and ensure that Project Records have been smart scanned and made ISO compliant before moving them to ProjectWise Explorer.

An electronic signature is voided by smart scanning and making a document ISO compliant. Therefore, permanent Project Records containing electronic signatures will need to be filed twice in ProjectWise Explorer, first as the original document with a valid electronic signature, and second, as a smart scanned and ISO compliant copy of the document.

Records maintained by CDOT with a short retention period (3.5 years or less) may be retained electronically or in paper format until they have met their retention period, then destroyed. At the end of the retention period, documents retained by CDOT should only be destroyed after a destruction form has been approved by the Region Local Agency Program Manager or Resident Engineer.

PROJECT DEVELOPMENT CIVIL RIGHTS AND LABOR COMPLIANCE CHAPTER 6

EQUAL EMPLOYMENT OPPORTUNITY

Local Agencies administering Federal-Aid projects are required to adhere to and monitor contractor compliance with federal civil rights programs including Title VI, Equal Employment Opportunity (EEO), On-the-Job Training (OJT), and Disadvantaged Business Enterprise (DBE). Federal policy requires that all Federal-Aid construction contracts include specific requirements to implement the Title VI program, related civil rights laws, and regulations. These requirements are included in the FHWA Form 1273 – Required Contract Provisions Federal-Aid Construction Contract Provisions and apply to contractors, subcontractors and suppliers. CDOT is responsible for oversight of the EEO program for Federal-Aid projects and construction contracts. CDOT will monitor the Local Agency and its contractors for compliance as part of the normal project management reviews.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

The Disadvantaged Business Enterprise (DBE) program seeks to create a level playing field on which DBEs can compete fairly for Department of Transportation (DOT) - assisted contracts, help remove barriers to the participation of DBEs in DOT-assisted contracts, promote the use of DBEs in all types of federally-assisted contracts and procurement activities conducted by recipients, and assist the development of firms that can compete successfully in the marketplace outside the DBE program.

The CDOT DBE Program applies to all Federal-Aid projects. CDOT's Civil Rights and Business Resource Center (CRBRC) administers the program and its implementation. Regional civil rights offices conduct reviews during construction to determine compliance.

Local Agencies that have their own DOT-approved DBE programs should contact the CDOT CRBRC in order to enter into a Memorandum of Agreement with CDOT pertaining to DBE oversight and administration.

6.1 Set Disadvantaged Business Enterprise Goals for Consultant and Construction Contracts

For any project containing federal funds, or for any project that will seek reimbursement with federal funds, a goal for Disadvantaged Business Enterprise (DBE) participation must be established and the contractor must make good faith efforts to meet such goal. The CDOT Project Manager will contact the Region Civil Rights Office at least two weeks before the scheduled advertisement date, for both consultant and construction contracts, to have the project evaluated for potential DBE participation and a DBE goal set for the project. Project goals vary depending on the nature of the work and the availability of DBE firms capable of performing such work. There are instances when the goal may be zero percent.

Set Consultant Goals

The Local Agency must submit a scope of work, services to be provided, and estimated cost of the total services in electronic format to the CDOT Project Manager. For projects requiring advertisement, the Request for Proposal (RFP) must contain a goal in order to be advertised, even if the Region Civil Rights Office establishes a goal of zero percent. The Local Agency must ensure that the selected consultant either meets the DBE goal or makes good faith efforts to do so.

Set Construction Goals

The Local Agency must submit an engineer's construction estimate in electronic format to the CDOT Project Manager. The estimate must show the item quantities and costs of the project. The project must contain a goal in order to be advertised, even if the Region Civil Rights Manager establishes a goal of zero percent.

The DBE Contract Goal Recommendation is completed by the CDOT Region Civil Rights Manager based on the following criteria:

1. The dollar amount of the contract to ensure that it is large enough to permit efficient subcontracting.
2. The work content of the project that can be subcontracted.
3. The availability of DBE firms in the project area having the potential to do the required work.

After the goal has been determined, a CDOT Project Special Provision, *Disadvantaged Business Enterprise (DBE) Contract Goal* and the CDOT Standard Special Provision, *Disadvantaged Business Enterprise (DBE) Definitions and Requirements* shall be included in the Plans, Specifications and Estimates. All bidders should include CDOT Forms 1413 - Bidders List, and if the Contract Goal is greater than zero, Form 1414 - Anticipated DBE Participation Plan in the bid package. Each bid will be reviewed to determine if the bid is responsive. Failure to complete the CDOT Forms 1413 and 1414 (if applicable) is considered as evidence that the proposal is unresponsive and therefore is not eligible for award.

LABOR COMPLIANCE

6.2 Determine Applicability of Davis-Bacon Act

The Davis-Bacon Act applies to contractors and subcontractors performing on federally funded or assisted contracts in excess of \$2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. The Davis-Bacon Act dictates that mechanics and laborers working on the site of Federal-Aid construction projects must be paid according to the wage decision that is part of the *Standard Special Provisions* for the project. The U.S. Department of Labor defines mechanics and laborers as those employees who perform manual labor on the site of work.

With the exception of those projects funded under the Transportation Alternatives Program, the Davis-Bacon Act requirements may be excluded from Federal-Aid, Local Agency matched transportation projects only if they meet one of the following project categories:

1. Any projects fully located on or within the existing right-of-way of a roadway that is functionally classified as a local road or rural minor collector, or that is not within the right-of-way of any roadway whatsoever. This determination will be made by CDOT.
2. Force account work performed solely by Local Agency employees. See Section 5.11 for more information on force account work performed by the Local Agency.

For projects requiring Davis-Bacon wages, as soon as the Local Agency establishes the project bid opening date and is ready to advertise the project for bidding, the Local Agency's Project Manager must check with the CDOT Project Manager or Region Civil Rights Manager to assure that the latest modification of the wage decision is in the *Standard Special Provisions*.

The U.S. Department of Labor requires that a current wage decision be included in Federal-Aid construction contracts, if appropriate. Wage decisions may be modified frequently; wage decisions published in the Federal Register ten or more days prior to the bid opening must be incorporated into the contract by addendum to the advertisement with notification to all plan holders.

6.3 Set On-the-Job Training Goals

Training goals are established by CDOT on selected Federal-Aid construction contracts. The goals are set based on the dollar amount and scope of work of the project as well as some additional factors described in the OJT Standard Special Provisions that are considered when setting the OJT goal. The Project Special Provisions include the minimum total training hours to be provided on the project.

On all federally funded projects, a force account item must be added for the On-the-Job Training Colorado Program, even if the On-the-Job Training goal is zero. This force account is necessary in the event the contractor on the project participates in the Colorado Program. The dollar amount required for this force account is listed in the CDOT Project Special Provision, *Force Account Items*. Contact the CDOT Project Manager for further information.

6.4 Title VI Assurances

The applicable appendix of the current Title VI assurance issued by USDOT and signed by CDOT must be included in the contract with the selected consultant or contractor.

The current Title VI assurance can be found at the following link:

<https://www.codot.gov/business/civilrights/accessibility/titlevi/title-vi-subrecipients> .

Contact CDOT's Civil Rights and Business Resource Center for further information.

The Local Agency must also have a Title VI assurance with CDOT.

ADVERTISE, BID AND AWARD OF CONSTRUCTION PROJECTS

CHAPTER 7

CDOT is transitioning toward accepting all submittals, forms, Project Records and supporting documents in electronic format. During the transition period from paper to electronic medium, unless specifically stated, documents and forms listed in this Chapter will be accepted from the Local Agency in paper or electronic format, although the latter is preferred and may be required by the CDOT Engineering Region where the project is located. Adobe Sign shall be the software used for electronic signature on Project Records which require signature.

The approved bid package (without cost estimate) is prepared by the local agency for advertisement. The contractors responding to the advertisement are required to submit sealed bids in competition with other contractors to win the right to construct a project. Documents that must be included in the bid package are:

- CDOT Form 606 – Anti-Collusion Affidavit
- CDOT Form 1413 – Bidders List
- CDOT Form 1414 – Anticipated DBE Participation Plan
- Bid schedule

Documents due to the Local Agency by the low responsible bidder by 4:30 p.m. on the fifth calendar day after bid opening are:

- CDOT Form 605 – Contractors Performance Capability Statement
- CDOT Form 621 – Assignment of Anti-Trust Claims
- CDOT Form 1415 – Commitment Confirmation (For each DBE listed in the Form 1414)
- CDOT Form 1416 – Good Faith Effort Report (If the DBE goal has not been met)

7.1 Obtain Approval for Advertisement Period of Less Than Three Weeks

The minimum advertisement period is three weeks. A shorter advertisement period must be authorized in conformance with 23 CFR 635. The Local Agency shall contact the CDOT Project Manager for approval.

7.2 Advertise for Bids

The Local Agency shall include the following in the bidding and advertising documents package (see Appendix A for copies of the forms):

- CDOT Form 606 – Anti-Collusion Affidavit
- CDOT Form 1413 – Bidders List
- CDOT Form 1414 – Anticipated DBE Participation Plan
- DBE Project Special Provision
- DBE Standard Special Provision
- OJT Standard Special Provision
- Davis Bacon Wage Determination
- FHWA Form 1273 – Required Contract Provisions, Federal-Aid Construction Contracts (A reference to this form is acceptable in the bidding and advertisement package.)

The advertisement for bids should include the following language:

“An EEO-1 Report must be submitted to the Joint Reporting Committee if the contractor and subcontractors meet the eligibility requirements (29CFR 1602.7). For additional information regarding these federal requirements, please refer to: <http://www.eeoc.gov/employers/eo1survey/faq.cfm> .”

and:

“The [insert local agency name], in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 US.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.”

The Local Agency bonding requirements or procedures may be used if approved by the CDOT Agreements Unit of the Contracts and Market Analysis Branch.

The specifications shall provide for the Local Agency's Contractor to name CDOT as an "additional insured" on its general liability and automobile liability policies.

Specifications or bidding procedures cannot provide preference to local contractors.

The bid package is sent in electronic format to the CDOT Project Manager for coordination and review. The Project Manager will forward a copy to the Resident Engineer if requested. Upon approval, the Project Manager submits the Concurrence to Advertise in electronic format to the Local Agency.

The Local Agency must receive the concurrence prior to advertising the project. The CDOT Project Manager will send copies to the following:

- Resident Engineer
- Region Project Engineer
- Region Materials Engineer
- Region Civil Rights Manager
- Office of Financial Management and Budget
- Business Programs Office
- Contracts and Market Analysis Branch, Agreements Unit
- Center for Accounting, Projects and Grants
- CDOT's Electronic Data Management System (ProjectWise Explorer)

Note the following public notice (advertisement) requirements:

1. The advertisement period will be for a minimum of three weeks.
2. The advertisement can either be published in a newspaper of general circulation, the official county paper where the work is being done, or electronically on a bidding website of widespread knowledge to the contractors (as approved by CDOT). If the advertisement is by official county paper, in the instances where a project spans several counties, the advertisement should be placed in the official newspaper of each county. It is highly recommended that advertisement be made once in a newspaper of statewide circulation. CDOT uses the *Daily Journal* and occasionally the *Denver Post* and *La Voz*.

3. If the Local Agency has established a project number different from the State's, the advertisement and bidding documents should show both project numbers.
4. The advertisement must show the Disadvantaged Business Enterprise (DBE) goal that has been established for the project.
5. Projects on CDOT right of way require CDOT contractor prequalification. For roadway projects not within CDOT right of way, prequalification is recommended. The advertisement shall state prequalification requirements. The CDOT prequalified contractor list is available at <https://www.codot.gov/business/bidding/Prequalified%20Contractors> .

The Local Agency may use the CDOT proposal package and contract that include the above information. A copy of this information may be obtained from the Project Manager.

7.3 Distribute “Advertisement Set” of Plans and Specifications

The Local Agency must provide the plans and specifications to the person responsible for showing the project. For Local Agency projects that include the construction of a major or minor structure, one set of plans and specifications shall be forwarded to Staff Bridge in electronic format as per the *Bridge Design Manual*, Policies and Procedures, Section J.2.

7.4 Review Worksite and Plan Details with Prospective Bidders While Project Is Under Advertisement

To ensure competitive bidding, the person responsible for showing the project must provide all bidders with an equal opportunity to view the proposed construction site and should conduct each of the project showings in a similar manner. It is important to provide each prospective bidder with identical information. This helps to avoid favoring one company over the other. It is preferable that the same person conducts each of the project showings; however, if that is not practical, ensure that identical information is communicated to each attendee.

7.5 Open Bids

Bids will be opened in accordance with Section 103 of the *CDOT Standard Specifications*.

Immediately after bid opening, the Local Agency shall provide to the apparent low bidder the following CDOT forms (see Appendix A):

- Form 605 – Contractors Performance Capability Statement
- Form 621 – Assignment of Antitrust Claims, required on all projects
- Form 1415 – Commitment Confirmation, if DBE goals are greater than zero, or if the bidder has voluntarily made commitments
- Form 1416 – Good Faith Effort Report, if DBE goals are not met

The apparent low bidder must submit these completed forms to the Local Agency by 4:30 p.m. on the fifth calendar day after the date of bid opening. A Form 1415 shall be obtained from each DBE listed on Form 1414. The bidder shall complete Section 1 and the DBE shall complete Section 2 of Form 1415.

With CDOT concurrence, the Local Agency may reject any or all bids depending upon a number of factors.

7.6 Process Bids for Compliance

Submittals to the Local Agency by All Bidders

The following CDOT forms must be submitted by all bidders with their bids:

- Form 606 – Anti-Collusion Affidavit
- Form 1413 – Bidders List
- Form 1414 – Anticipated DBE Participation plan (if DBE contract goal is greater than zero)

If these forms are not submitted, the bid is considered non responsive and shall be rejected.

Submittals to the Local Agency by Apparent Low Bidder

The apparent low bidder must submit the following CDOT forms:

- Form 605
- Form 621
- Form 1414 (If the Bidder has not obtained any DBE commitments, it shall still submit Form 1414 documenting zero anticipated participation.)

If a DBE goal greater than zero has been set for the contract or if the bidder has voluntarily made commitments, the apparent low bidder must submit:

- Form 1415
- Form 1416, only if commitments do not meet contract goal

If a DBE goal greater than zero has been set for the contract, the award is contingent upon approval of the Contractor's DBE participation (or good faith effort) by the CDOT Civil Rights and Business Resource Center (CRBRC).

The Form 1415 and Form 1416 must be submitted by 4:30 p.m. the fifth calendar day following bid opening by the apparent low bidder. All other forms must be submitted prior to CDOT concurrence to award.

Submittals by the Local Agency to CDOT CRBRC

The Local Agency shall submit all Form 1413s and Form 1414s to the CRBRC, email to CDOT_hq_dbeforums@state.co.us along with a copy of the Project Special Provision identifying the goal. The CRBRC will issue a determination of the good faith efforts of the Contractor within two weeks of the receipt of all fully completed DBE documentation. If the CRBRC determines a Contractor has not made good faith efforts, CDOT will seek to hold the appeal hearing within one week of receipt of the hearing request and issue a determination within two business days thereafter.

The Local Agency shall also submit Forms 1415 and Form 1416 for the apparent low bidder and the bid result sheet, which contains the bidders, the amount of their bids and the percentage of DBE participation.

The documents shall be submitted to the CRBRC (at the email above) at the time the request is made for CDOT Award concurrence.

Review of Commitment Submittals

CDOT will review the Form 1414 – Anticipated DBE Participation Plan, and each Form 1415 – Confirmation Commitment, submitted by the apparent low bidder to the Local Agency to ensure that the commitment is valid and has been properly calculated. CDOT may investigate or request additional information from the Local Agency in order to confirm the accuracy of a commitment. If the total estimated eligible participation of the commitments does not meet the contract goal, CDOT may request a Form 1416 from the bidder.

Review of Good Faith Effort

If the total eligible participation of Form 1414 and all supporting Form 1415s does not meet the contract goal, CDOT will review the Form 1416 – Good Faith Effort Report and all supporting documentation submitted by the apparent low bidder to the Local Agency in order to determine whether good faith efforts to obtain DBE participation have been demonstrated. CDOT will use 49 CFR Part 26, Appendix A as a guide for determining whether good faith efforts have been made to meet the contract goal. If the Civil Rights and Business Resource Center determines that the bidder did not make good faith efforts, the bidder is entitled to administrative reconsideration with CDOT's Chief Engineer.

The process for reconsideration is set forth in the Good Faith Effort Appeal Process, which is an Appendix I to the DBE Program Manual found at: <https://www.codot.gov/business/civilrights/dbe/dbe-documents/dbe-program-manual>. A copy of the Good Faith Effort Appeal Process will be included in the written notice from CDOT.

If the chief engineer determines that a good faith effort to achieve the contract goal was not demonstrated, he or she will issue a written notice of the finding and direct the Local Agency to work with the next low bidder.

Form 1417 – Approved DBE Participation Plan

If CDOT finds that the apparent low bidder has met the contract goal or made good faith efforts to do so, CDOT CRBRC will issue Form 1417 to the Local Agency and to the bidder documenting the approved commitments and copy the CDOT PM.

Submit Required Documentation for CDOT Award Concurrence

The Local Agency must review bids for reasonable conformance with estimate and unbalancing prior to award. The Local Agency must obtain CDOT concurrence before the project can be awarded (contact the CDOT Award Officer in the Agreements Unit of the Contracts and Market Analysis Branch). The Local Agency letter to the Agreements Unit must document its review of the bids, address the budget status of the project and the means of resolving any budget deficits, specify which bidder it is recommending for award of the project, and state what documentation has been sent to the CRBRC.

The Local Agency must send the bid review letter and the following documents in electronic format to the Agreements Unit (see Appendix A):

- Form 605
- Form 606
- Form 621
- Form 1413
- Form 1414 (from all bidders)
- Form 1415
- Form 1416 (if goal is not met)
- Financial Statement
- Bid Tabulation

A copy of the bid review letter should be sent to the CDOT Project Manager.

7.7 Concurrence From CDOT to Award

The Local Agency will make the final decision on award; however, Federal participation in such award will require coordination with and concurrence of CDOT. The Local Agency shall document all decisions concerning bidding and award.

The Agreements Unit will issue a letter to the Local Agency of concurrence or non-concurrence in the award of the project when the Local Agency has complied with the requirements in 7.6. The Agreements Unit will send copies in electronic format to the following CDOT personnel and file a copy with the Inter-Governmental Agreement in accordance with the CFO Record File Plan:

- Project Manager
- Resident Engineer
- Region Program Engineer/Finals Engineer
- Civil Rights and Business Resource Center (CRBRC)
- Region Civil Rights Program and Project Analysis Office
- Records Management Manager
- Center for Accounting, Projects and Grants
- Contracts and Market Analysis Branch

ProjectWise Explorer / Project Share is the repository for project documents during the project. The CDOT Project Manager will provide ProjectWise Explorer / Project Share access to the Local Agency. The Local Agency is responsible for filing submittals, forms, Project Records and supporting documents in ProjectWise Explorer / Project Share on an ongoing basis in accordance with the location identified on the Construction Engineering Record File Plan.

7.8 Approve Rejection of Low Bidder

With CDOT concurrence, the Local Agency may reject the low bidder.

7.9 Award Contract

Following the concurrence of the CDOT Award Officer in the Agreements Unit of Contracts and Market Analysis Branch, the Local Agency sends a letter to the Contractor issuing the Notice of Award and the invitation to the Preconstruction Conference. Electronic copies are sent to the CDOT Project Manager and Resident Engineer.

Once the local agency receives the concurrence letter of award from the Agreements Unit, the local agency shall draft a contract for the project work. If the local agency used the *CDOT Standard Specifications for Road and Bridge Construction*, performance and payment bonds should also be obtained from the successful bidder by the local agency. Each bond shall be in a penal sum equal to the nearest integral one hundred dollars in excess of the sum of the original bid items plus all force account items specified by an asterisk in the project special provisions to be included in the payment and performance bonds. In addition, the successful bidder shall provide a certificate of insurance indicating coverage in the types and limits described in subsection 107.15 of the Standard Specifications.

The Contract shall be signed and returned by the successful bidder together with the contract bonds and insurance certification (if using CDOT specifications). The Contract will not be considered effective until it has been fully executed by all of the parties to the Contract.

An executed original Contract should be retained by the local agency and another executed original should be provided to the Contractor. An electronic copy should also be sent to CDOT, usually the Project Manager or Resident Engineer and a copy placed in ProjectWise Explorer / Project Share.

Notify Office of Federal Contract Compliance Programs of Award

In accordance with 41 CFR 60-4.2, the prime contractor and all subcontractors are required to give written notice to the Office of Federal Contract Compliance Programs within 10 working days of award of a construction contract or subcontract in excess of

\$10,000. Additional information is provided at the following link:

<http://www.dol.gov/ofccp/regs/compliance/preaward/cnstnote.htm> .

7.10 Provide “Award” and “Record” Sets of Plans and Specifications

The Local Agency provides the award sets of plans and specifications in electronic format to the CDOT Project Manager for distribution. The distribution within CDOT is as follows:

- Region Program Engineer/Finals Engineer
- Region Project Files
- Project Manager
- Specialty Units

The Local Agency shall place into ProjectWise Explorer / Project Share an 11” x 17” record set electronically sealed by a Colorado Registered Professional Engineer within 45 days of award. The CDOT Project Manager will move the original record set to ProjectWise Explorer and ensure the record set is copied, smart scanned and made ISO compliant before placing the second copy in ProjectWise Explorer.

Finalize Project Construction Administration Checklist

If the Local Agency Contract Administration Checklist is revised, signed copies shall be distributed as shown on the checklist.

CONSTRUCTION MANAGEMENT

CHAPTER 8

Introduction

If the Local Agency is identified for construction management responsibilities in the CDOT/Local Agency IGA, then the Local Agency may fulfill this responsibility with qualified staff or may contract with a consultant for these services. Construction management consists of inspection and testing services, including Quality Assurance inspections during the fabrication process. The Local Agency Project Manager should refer to the latest version of the *CDOT Construction Manual*, the *CDOT Bridge Fabrication Inspection Manual*, and *CDOT Field Materials Manual* for more detailed information on construction management, fabrication inspection, and materials testing. Section 122 of the *CDOT Construction Manual* contains information specific to the administration of Local Agency projects.

Upon CDOT authorization to proceed, the Local Agency is able to charge eligible costs to the project.

CDOT is transitioning from paper to accepting all submittals, forms, Project Records and supporting documents in electronic format on Local Agency projects. During the transition period from paper to electronic medium, unless specifically stated, documents and forms listed in this Chapter will be accepted from the Local Agency in paper or electronic format, although the latter is preferred and may be required by the CDOT Engineering Region where the project is located. Adobe Sign shall be the software used for electronic signature on Project Records which require signature.

ProjectWise Explorer / Project Share is the repository for project documentation during the project. The CDOT Project Manager will provide ProjectWise Explorer / Project Share access to the Local Agency. The Local Agency should place submittals, forms, Project Records and supporting documents in ProjectWise Explorer / Project Share in accordance with the location identified on the Construction Engineering Record File Plan. In the event any Project Records are submitted in paper format, the CDOT

Project Manager will smart scan, ISO compliant and file in ProjectWise Explorer in accordance with the Construction Engineering Record File Plan.

8.1 Issue Notice to Proceed to the Contractor

The Local Agency shall issue a Notice to Proceed to the Contractor. The Contractor may not commence work prior to receiving the Notice to Proceed. Follow the *Project Special Provisions* and the *CDOT Standard Specifications*, subsection 108.02, to ensure this notice contains the correct information. The Resident Engineer shall be copied on the Notice to Proceed. (NTP) A sample Notice to Proceed is in Appendix B of this *Manual*.

8.2 Project Safety

Before construction commences on the project, the Contractor must submit a Project Safety Management Plan in electronic format compliant with Section 107.06 of the *CDOT Construction Manual*. The Contractor is expected to comply with the Plan at all times. Safety is of the highest priority on CDOT projects, which includes Local Agency projects.

8.3 Conduct Conferences

Preconstruction Conference

The Local Agency shall conduct the Preconstruction Conference and shall invite CDOT, usually the Project Manager or Resident Engineer. The FHWA should also be invited to the conference if the project is under its oversight. See the *CDOT Construction Manual* and the Preconstruction Conference Agenda Form (Appendix A and https://www.codot.gov/business/designsupport/bulletins_manuals/cdot-construction-manual/agenda-forms) for information on conducting the conference and for the required Contractor Submittals. Following the conference, a completed copy of the agenda and minutes in electronic format should be sent to each attendee. One copy should also be sent to the FHWA for all federal oversight projects.

Posters for the Contractor's bulletin board can be accessed on CDOT's web site at <https://www.codot.gov/business/bidding/bulletin-board-postings>.

It is recommended the Local Agency require submittals in electronic format be turned in at least three working days prior to the Preconstruction Conference. Submittals can then be reviewed and any deficiencies discussed at the conference. The following submittals are required from the Contractor (see Appendix A of this *Manual* for copies of the forms):

1. List of Contractor's representatives identified in the Preconstruction Conference agenda in electronic format (see Appendix B of this *Manual*).
2. CDOT Form 205 – Sublet Permit Application. If the Contractor is subcontracting any work, this form must be submitted in electronic format and approved before the subcontractor can begin work. The Contractor needs to complete a separate Form 205 for each subcontractor. This includes professional services and trucking companies.

The Local Agency shall check each form and either submit the original signed forms to the CDOT Project Manager who will forward them to the Region Civil Rights Manager or route the form in Adobe Sign for electronic signatures. The subcontractor cannot begin work until the Form 205 has been reviewed by the CDOT Region Civil Rights Manager, approved by the Project Manager or Project Engineer, and the subcontract has been fully executed between the Contractor and the subcontractor. Physical subcontracts may be requested by CDOT or the Local Agency.

3. CDOT Form 1425 - Suppliers List. The list must include all material sources and suppliers. Include the item to be supplied, company name, address, telephone number, contact person, and minority/non-minority status. See the "Special Notice to Contractors" in the *CDOT Field Materials Manual*, and subsection 106.01 of the *CDOT Standard Specifications*. The Local Agency shall check the form and either submit the original signed form to the CDOT Project Manager who will forward it to the Region Civil Rights Manager or route the form for electronic signatures in Adobe Sign.

4. Letter in electronic format to the Project Manager or Local Agency stating names, trades, and approved programs to be used for required trainees on this project. This is needed if trainees are required on the project.
5. Procedure for handling EEO complaints. The procedure needs to detail who, what, when, where, and how an employee can file a complaint within the Contractor's organization and also a means for filing a complaint outside of the company.
6. Method of monitoring subcontractor EEO compliance. The Contractor needs to outline its process to monitor subcontractor compliance with all the regulations.
7. CDOT Form 465 – Non-discrimination in Employment Notice (Labor Unions or other Worker's Organizations). If the Form 465 is being used for recruitment, it should be addressed to the recruitment source. If the form is not being used to recruit applicants, it should be addressed to Employees/Applicants.
8. Contractor Supervisory EEO Meeting minutes and attendance roster in electronic format. The Local Agency is responsible for ensuring that a meeting was conducted in the past year, all EEO issues were addressed, and the supervisor/superintendent for the project is on the list of attendees. According to the 23 CFR Appendix A to Subpart A of Part 230 – Periodic meetings of supervisory and personnel office employees will be conducted before start of work and then not less often than once every 6 months.
9. An agenda and tentative date for the Contractor's First Project EEO Meeting. This meeting must be conducted as soon as a representative workforce is on the project. After the meeting is held, the Contractor must submit the minutes and the attendance roster in electronic format to the Local Agency showing that a majority of the workforce attended the meeting. Subcontractors who are not present for the initial meeting must conduct their own EEO meeting and documentation of the meetings must be provided to the Local Agency..
10. Contractor's Method of Handling Traffic. A different Method of Handling Traffic (MHT) must be submitted in hard copy or electronic format for each traffic

situation as detailed by the traffic control plan in the Contract. The Local Agency must review the MHT and either approve or return it for revisions. Once the Method of Handling Traffic is approved, the Contractor, traffic control supervisor, and the Local Agency Professional Engineer must sign it.

11. Work schedule bar chart or Critical Path Method schedule, and a methods statement in electronic format. The statements are required at least ten working days prior to the start of work. Schedules and methods statements are described in subsection 108.03 of the *CDOT Standard Specifications*.
12. Certificate of Insurance (subsection 107.15 of the *CDOT Standard Specifications*) in electronic format. The Local Agency shall obtain the Certificate of Insurance from the Contractor prior to the Notice to Proceed or commencement of work. The Local Agency must check the expiration date on this document to make sure that insurance coverage does not expire prior to project completion. The policy shall name the Local Agency as primary insured and CDOT as an additional insured. Should coverage expire, the Local Agency must receive from the Contractor a renewal certificate.
13. Concrete and asphalt mix designs in electronic format.

Other Conferences

One or more of the following conferences may be required depending upon the nature of the project: Presurvey, Construction Staking, Monumentation, Partnering, Structural Concrete Pre-Pour, Concrete Pavement Pre-Paving, and Hot Mix Asphalt Pre-Paving. See the *CDOT Construction Manual* for further information and sample agendas.

8.4 Develop and Distribute Public Notice of Planned Construction to the Media and Local Residents

The Local Agency should distribute a public notice announcing the project to affected parties such as adjacent property owners or businesses. This can be accomplished with a newspaper item, fliers distributed by hand, email, city or county website, and/or other means of mass communication.

8.5 Supervise Construction

The Local Agency shall notify the Resident Engineer prior to commencement of work, and shall update the Resident Engineer when issues arise on the project. The Local Agency shall notify the Resident Engineer, CDOT Local Agency Coordinator, and CDOT Bridge Inspection Unit prior to fabrication of structural items and identify the inspectors responsible for Quality Assurance during fabrication. Notices shall be in electronic format.

A Professional Engineer registered in Colorado shall be “in responsible charge of construction supervision.” See the Local Agency Contract Administration Checklist.

The Local Agency shall provide competent, experienced staff that will ensure the contract work is constructed in accordance with the plans and specifications.

CDOT’s Construction Inspector Qualification Program and training requirements are described in the *CDOT Construction Manual*, Section 101.103.7. Certain Local Agency projects require inspectors to have successfully completed training and certification. For projects that are constructed partially or entirely within CDOT right of way, within any roadway template, that add lanes, or have other work activities as determined by the CDOT Resident Engineer, this certification is required. See the *CDOT Construction Manual* for additional details.

Construction Inspection and Documentation Responsibilities

The Local Agency shall be responsible for inspecting and documenting the Contractor’s work. The *CDOT Construction Manual* gives guidelines on how each item should be inspected and documented.

The Local Agency shall have written documentation to support all Contractor payments. Section 100 of the *CDOT Construction Manual* contains guidelines on how to document pay quantities. Item documentation shall include project number, item number, work description, date, specific location on the project, method of measurement, quantity paid, and signature of inspector.

Force Account Work

For force account work by the Contractor, Federal funds cannot be used for equipment rental rates that exceed those in The Rental Rate Blue Book for Construction Equipment. Rates for owned or long-term leased equipment that exceed the Blue Book rates are not eligible for Federal participation. Actual rental rates may be reimbursed at rental rate invoice cost for that specific task. CDOT can assist with providing rental rate information. Work that will be paid by Force Account must be carefully tracked using CDOT Form 10 – Inspector’s Report for Force Account Work. Certified payrolls must be submitted in electronic format for force account work performed by the Contractor.

Maintain Diaries

The Local Agency should keep daily diaries of all activities on the project in electronic format. Refer to Section 100 of the *CDOT Construction Manual*. Diaries assist Local Agencies in cases of disputes, claims and lawsuits.

Time Counts

Refer to the Contract documents for time count requirements. Most contracts require the Local Agency to furnish a weekly statement to the Contractor showing the days charged. A weekly statement may not be required on a completion date project. The CDOT Form 262 – Weekly Time Count Report – Work Days and CDOT Form 263 – Weekly Time Count Report – Calendar Days are presented in Appendix A of this *Manual*. Refer to subsection 108.08 of the *CDOT Standard Specifications*, and Section 100 and Appendix B of the *CDOT Construction Manual* for a more thorough explanation of time counts.

Submit Project Schedule and Conduct Progress Meetings

The Contractor must submit a project schedule in electronic format to the Local Agency before the project begins, and monthly schedule updates before payments are made. It is recommended that weekly progress meetings be conducted to monitor progress and plan effectively. Refer to the Contract and also Section 100 of the *CDOT Construction*

Manual for more information. Accurate, realistic schedules and updates are critical to evaluating disputes and claims.

Utility/Railroad Coordination

Contact involved utility and railroad representatives to schedule the performance of the work as set forth in the project plans and specifications. Coordinate the work with the construction activities.

Monitor Construction/Civil Rights Compliance

See Chapter 10 of this *Manual* for monitoring requirements.

8.6 Approve Shop Drawings

“Shop drawing” is a general term that includes drawings, diagrams, illustrations, samples, schedules, calculations and other data that provide details of the construction of the work and details to be used for inspection. Shop drawings are Project Records submitted in electronic format by the Contractor for formal review and returned for action. Subsection 105.02 of the *CDOT Standard Specifications* defines which items require shop drawings. The Local Agency will review and mark the shop drawings, and return them to the Contractor in accordance with the CDOT Standard Specifications.

The drawings shall be marked with one of the following:

MARK	MEANING
Reviewed, no exception taken	Shop drawings have been reviewed and do not require resubmittal
Reviewed, revise as noted	Shop drawings have been reviewed and the Contractor shall incorporate the comments noted in the shop drawings into the work. The shop drawings do not require resubmittal.
Resubmit, revise as noted	Shop drawings require correction or redrawing and shall be resubmitted for review. If shop drawings are returned for correction or redrawing, corrections shall be made and the shop drawings shall be resubmitted by the Contractor in the same manner as the first submittal. Specific notation shall be made on the shop drawing to indicate the revisions

8.7 Perform Traffic Control Inspections

All Methods of Handling Traffic shall be reviewed and approved by the Local Agency Project Engineer prior to use. The Local Agency shall verify that all traffic control is in accordance with the *Manual on Uniform Traffic Control Devices (MUTCD)* and Contract requirements. If a Method of Handling Traffic shows that a vertical or horizontal clearance will be restricted by construction activities (see subsection 630.10, items (8) and (9) of the CDOT Standard Specifications for Road and Bridge Construction), the Local Agency Project Engineer must use the notification procedures described in the *CDOT Construction Manual*, subsection 630.2.4, Review of Method of Handling Traffic.

If a speed limit reduction is specified in an MHT, a Form 568, *Authorization and Declaration of Temporary Speed Limits*, must be executed.

The Local Agency Project Engineer and the CDOT Project Manager/Resident Engineer shall make joint Traffic Control Reviews once each calendar year for each active construction project, including Local Agency projects. See Section 630 of the *CDOT Construction Manual* for more information. A copy of the Traffic Control Review Form is included in Appendix B. The Local Agency may use this form as a reference when checking traffic control

8.8 Perform Construction Surveying

Construction survey work consists of performing surveying, related computations, and staking necessary for the construction of all elements of the project.

8.9 Monument Right-of-Way

Final monumentation shall be done after the right-of-way is purchased. Right-of-way monuments shall be set at each point designated on the right-of-way plans and in accordance with the Colorado Revised Statutes. This work shall be performed under the direct supervision of a Professional Land Surveyor, registered in the State of Colorado.

8.10 Prepare and Approve Interim and Final Contractor Pay Estimates

The Local Agency Project Engineer shall certify, on each Contractor estimate or billing, that the work has been completed in reasonably close conformity with the plans and specifications.

The Local Agency is responsible for all estimate payments to the Contractor. The Local Agency shall review quantities with the Contractor, and the billing shall address required retainage or securities. Retainage or securities amount will not be less than those required by CDOT contracts. Before payment is made, the Contractor shall submit suitable schedule updates and materials certifications in the same manner as the original submittal in accordance with the *CDOT Standard Specifications*.

Contractors are required to pay subcontractors for the items included in the estimate within 7 days of receipt of the payment according to the prompt payment law, CRS 24-91-103(2). The Local Agency shall ensure prompt payment to subcontractors by collecting and reviewing on a monthly basis CDOT Form 1418 - Monthly Payment Summary or by using a similar method of oversight.

8.11 Prepare and Approve Interim and Final Utility and Railroad Billings

Verify that the work was performed as stated in the Contract and that the billing is for actual work performed. Refer to the project agreement for billing and payment arrangements.

8.12 Prepare and Authorize Change Orders

Change orders, also called Minor Contract Revisions (MCRs) and Contract Modification Orders (CMOs), are needed for changes to: specifications, design, contract time, scope of work, project limits, and typical section, as detailed in Section 120.7 of the *CDOT Construction Manual*. See Appendix C of the *CDOT Construction Manual* for example change orders.

The Local Agency shall discuss all change orders with the CDOT Project Manager/Resident Engineer (and with FHWA on full oversight projects), and receive written approval prior to commencing any work, as there are certain Federal Aid requirements that apply to the entire contract (such as Buy America), regardless of the funding source. On full oversight projects where FHWA determines that the FHWA Operations Engineer needs to sign the Form 90, this signature must be obtained before the work starts. See Section 120.7.5 of the *CDOT Construction Manual* for the procedure. Use of the contingency money (MCR dollars) typically budgeted into the project also requires CDOT Project Manager/Resident Engineer approval. Change orders where work is incorporated into the project prior to CDOT or FHWA approval are subject to a non-reimbursement determination.

The Local Agency may use its own form or CDOT's Form 90 for a change order. Change orders are Project Records and are required to be routed for electronic signature in Adobe Sign. The change order must provide enough information for the contractor to build the work directed in the change order and establish how the work will be measured and paid.

The following statement, included in the body of the Form 90 (or equivalent), must be signed by a qualified representative of the Local Agency for all change orders that involve the expenditure of Federal or state funds before the work covered by the change order commences

Should Federal funds not be available to cover these additional costs, or the FHWA decides not to participate in these costs, the Local Agency agrees to provide the required funds.

The _____
(Name of Local Agency)

approves this Change Order No. _____ by signing below.

Authorized Signature

Title

Date

8.13 Submit Change Order Package to CDOT

The Local Agency will submit the complete and final change order package, consisting of the Form 90 (or equivalent), along with the letter of explanation detailing background, the reason for the change order, price and time justifications, any budgetary implications, and any attachments, for review and electronic signature in Adobe Sign by CDOT. This final change order package must be in compliance with Section 120.7 of the *CDOT Construction Manual*. (See the Form 90 and Explanation Letter Checklists in Appendix A.) Review time by CDOT will vary depending upon the complexity of the change order.

It is the responsibility of the Local Agency to follow up with the CDOT Project Manager/Resident Engineer and FHWA, if applicable, to obtain the electronic signatures on the original change order.

Once all signatures are completed, the CDOT Project Manager/Resident Engineer will distribute approved change orders as follows:

- Local Agency, electronic original;
- CDOT ProjectWise Explorer / Project Share, electronic original;
- Region Program Engineer/Region Finals Engineer, and
- Contracts and Market Analysis Area Engineer, electronic copy

The Local Agency shall forward an electronic copy to the Contractor.

8.14 Prepare Local Agency Reimbursement Requests

Billing charges are submitted once a month or less frequently to the CDOT Project Manager during project construction and at completion. Billing procedures and required documentation will be established during CDOT/Local Agency Agreement negotiations. It will take approximately 30 days for CDOT to review, approve and pay proper project billings submitted by the Local Agency.

The final bill shall be marked “**FINAL**.” The Local Agency shall bill for 100 percent of eligible costs noting the percentage of local funding share. CDOT’s Resident Engineer will verify the reimbursement according to the established matching ratio specified in the

Inter-Agency Government Agreement. If applicable, there shall be an itemized list of other miscellaneous project charges; i.e., utility relocation or construction engineering. These charges shall be substantiated by the supporting documentation.

See Appendix B of this *Manual* for a sample Local Agency billing package.

8.15 Monitor Project Financial Status

The Local Agency shall continually monitor the financial status of the project. If additional funds are needed, the Local Agency is responsible for assuring the funds are available in as timely a manner as possible. The Local Agency shall provide the additional funding unless Federal participation has been approved. See Chapter 3 for additional information on financial responsibility.

8.16 Prepare and Submit Monthly Progress Reports

By the first of every month, the Local Agency shall prepare and submit in electronic format to the CDOT Project Manager/Resident Engineer an update for every active construction project. The update should include work progress over the past month, percent completed, time charged, outstanding issues, and projected completion date of the project

8.17 Resolve Contractor Claims and Disputes

The Local Agency shall follow the claims procedure established and contained in the construction Contract. The Local Agency can use the CDOT Disputes and Claims procedure. Resolution of claims that involve federal participation must be coordinated with CDOT.

All claim payments made shall be documented on a properly executed change order.

8.18 Conduct Routine and Random Project Reviews

CDOT will conduct routine and random project reviews to ensure the project is being administered in accordance with the terms of the Contract and the approved project specific agreement between CDOT and the Local Agency. FHWA may participate in these reviews, or conduct their own separate reviews.

8.19 Ongoing Oversight of DBE Participation

The Local Agency is responsible for monitoring the day to day DBE participation and notifying the CDOT Project Manager if it appears that a DBE is not performing in accordance with Form 1417 – Approved DBE Participation Plan. The Local Agency should understand the concepts of eligible participation and commercially useful function as they apply to DBE participation. If any fraud or misrepresentation of DBE participation is suspected, the Local Agency should contact the CDOT Project Manager and Region Civil Rights Manager.

Refer to the standard special provision, “Disadvantaged Business Enterprise (DBE) Requirements” dated December 26, 2013, or latest version thereof, for additional information.

Form 1419 - DBE Participation Report

The Local Agency shall forward the Contractor’s quarterly submittal of Form 1419-DBE Participation Report (January 15, April 15, July 15 and October 15) in electronic format to the CDOT Project Manager and the Region Civil Rights Project Manager. The Local Agency shall also forward the final Form 1419 – DBE Participation Report in electronic format, which summarizes all participation on the contract, to the CDOT Project Manager and the Region Civil Rights Manager.

Form 1420-DBE Participation Plan Modification Request

During the performance of the contract, the Contractor shall use Form 1420-DBE Participation Plan Modification Request to communicate to the Local Agency all requests for termination, reduction, substitution and waivers. The CDOT Region Civil Rights Manager, CDOT Project Manager and the Local Agency should work together to resolve any concerns regarding the Form 1420s. No commitment shall be terminated or reduced without the CDOT Region Civil Rights Manager approval. The Local Agency should forward a copy of the signed, approved Form 1420 in electronic format to the CDOT Project Manager and the Region Civil Rights Manager.

MATERIALS

CHAPTER 9

The CDOT Project Manager will submit an electronic copy of the award set of plans and specifications to the Region Materials Engineer.

Guidance on activities before, during, and after construction, as well as proper completion of CDOT Forms 250 and 379, and the Letter of Materials Certification can be found in the documentation chapter of the current *CDOT Field Materials Manual*.

9.1 Conduct Materials Preconstruction Meeting

The CDOT Project Manager and the Local Agency determine if a meeting is needed with the CDOT Region Materials Engineer to discuss and define material issues concerning the project and review the LA Contract Administration Checklist, Section 9.

Prior to the meeting, the Local Agency should study the plans to review its involvement in the project materials process. The award set of plans will be reviewed for specifications and budget; e.g., funds availability for pre-inspection, charges for independent assurance sampling and testing, laboratory check tests, and mix designs. The review will also include materials that should be tested but are not identified in a particular bid item.

9.2 Complete CDOT Form 250 – Materials Documentation Record

The CDOT Form 250 is used to track materials used on a project, the number of tests needed, and to identify the forms used to record test results. The form designates test frequencies for project acceptance testing and laboratory check testing.

Prior to Construction

The initial Form 250 should be developed from the award set of plans and specifications. The Form 250 in Appendix A presents the major bid items from a typical project. Based on the Local Agency Contract Administration Checklist, either CDOT will provide the form 250 or the CDOT project manager will provide a computer program to develop the Form 250.

During Construction

The Local Agency shall update the CDOT Form 250 as work progresses.

After Construction

Complete and distribute the Form 250 in accordance with subsection 9.10.

9.3 Perform Project Acceptance Samples and Tests

Project acceptance samples and tests are used to determine the quality and acceptability of the material being sampled and workmanship that have been or are being incorporated into a construction project. The samples and tests are taken and performed by CDOT, Local Agency, or Local Agency approved personnel.

Prior to Construction

Identify any items that require pre-inspection.

During Construction

Acceptance testing and documentation shall be performed on the project. Acceptance testing and documentation will follow the applicable *CDOT Field Materials Manual* or approved equivalent and the project specifications.

Non-Specification Material

If specification material is not being produced or provided, the Local Agency shall take appropriate action as defined in the specifications; i.e., price reduction, rejection, or non-payment. For further direction, refer to Section 105 of the *CDOT Standard Specifications*. See subsections 8.12 and 8.13 of this *Manual* if a change order is required.

9.4 Perform Laboratory Verification Tests

Random representative samples should be submitted to the approved laboratory of the Local Agency to verify acceptability of field-produced material. The laboratory will perform tests that generally are not within the capabilities of the project acceptance testers' equipment.

Prior to Construction

Laboratory verification tests and/or acceptance test methods should be defined; e.g., AASHTO, ASTM (American Society for Testing and Materials), Colorado Procedures, Colorado Procedures – Laboratory, or Marshall vs. Superpave Gyratory compactor.

The *CDOT Field Materials Manual*, CP 13, gives guidance in the “Procedure for Check Testing.” With CDOT’s concurrence, the Local Agency approves the laboratory to perform check tests.

During Construction

The Local Agency approved laboratory will perform the laboratory verification tests (refer to the Central Lab column in the *CDOT Field Materials Manual* quality assurance (QA) schedule) at the frequency in the *Field Materials Manual* and/or in the specifications. The purpose of verification tests is to assure that all materials incorporated into the project meet the design and specifications. The tests performed by the approved laboratory generally require specialized equipment that is not available to field acceptance testers such as asphalt cement tests for dynamic shear, R values of soils, or hot mix asphalt stability.

9.5 Accept Manufactured Products

Manufactured products are typically accepted based on Pre-Inspection (PI), Certified Test Reports (CTR), Certificates of Compliance (COC), Pre-Approval (APL, listed on CDOT’s approved products list website), or a combination thereof. In specific industries the Manufacturers must be first listed on the Qualified Manufacturers List (QML) before product acceptance can be considered. Refer to the Special Notice to Contractors in the applicable *Field Materials Manual*.

If CDOT is responsible for pre-inspection, the CDOT Project Manager should verify that the Staff Bridge Fabrication Inspectors, (303) 757-9192, have a copy of the award set of plans and specifications, a suppliers list, and funding for pre-inspection in the project budget. Inspection of structural components will include, but not be limited to, the following:

- Fabrication of structural steel and pre-stressed concrete structural components
- Bridge modular expansion devices (0" to 6" or greater)
- Fabrication of bearing devices

9.6 Approve Sources of Materials

The Contractors list of material sources and suppliers will be reviewed and approved.

9.7 Independent Assurance Testing

The Independent Assurance Testing Program defines the tests required to provide an independent check on the reliability of project acceptance samples and tests. The Independent Assurance Testing Program is defined in the *CDOT Field Materials Manual*, QA Program and Independent Assurance Schedule sections. Testing requirements are determined by planned quantity.

Prior to Construction

For projects on the NHS:

Federal law requires Independent Assurance Testing on projects on the NHS. The Local Agency may, under the direction and approval of the Region Materials Engineer, administer the Independent Assurance Testing Program on projects, provided it uses an AASHTO Accredited Laboratory, that is independent from the project acceptance testing lab, uses qualified personnel for testing and observations, performs the calibration equipment checks, and follows all applicable sections of *CDOT Field Materials Manual* chapters on the "QA Program" and "Frequency Schedule for Independent Assurance Evaluation".

The initial CDOT Form 379 – Project Independent Assurance Sampling Schedule (see Appendix A), developed from the award set of plans and specifications, will be prepared by the Local Agency or the CDOT Region Materials Engineer as established on the Local Agency Contract Administration Checklist. It will be distributed to the:

- Project file of entity managing construction, original
- Local Agency
- Project Manager
- Region Materials Engineer
- Materials and Geotechnical Branch, Documentation Unit

For projects not on the NHS:

CDOT requires Independent Assurance Testing. The Local Agency shall use its established, documented procedures to independently verify the adequacy of testing equipment and personnel.

Independent Assurance Test Notification

If CDOT performs the Independent Assurance Testing, the Local Agency is responsible for notifying the CDOT Region Independent Assurance Tester a minimum of one week prior to the start of work on the project and a minimum of one week prior to the need for the Independent Assurance Tester as defined on the CDOT Form 379.

During Construction

For projects on the NHS:

The Independent Assurance Testing laboratory or the CDOT Region Materials Laboratory will perform Independent Assurance Testing and sampling as described on the CDOT Form 379 as the work progresses. The Independent Assurance Tester will update the CDOT Form 379 as the assurance tests are performed. The Independent Assurance Tester in partnership with the Local Agency will address discrepancies in test values. Assurance test results will be distributed to the Local Agency through the Project Manager and the Region Materials Engineer when CDOT performs the Independent Assurance Testing

For projects not on the NHS:

Independent Assurance Testing shall be performed as defined by the Local Agency's policies and procedures.

9.8 Approve Mix Designs

All mix designs for concrete and hot mix asphalt will be reviewed for acceptance. Mix design approval is required prior to the use of any paving material.

Local Agency Responsibility for Approving Concrete and Hot Mix Asphalt

If the Local Agency is responsible for approving concrete and hot mix asphalt mix designs and if required by the Region, the Local Agency will submit the approval of the designs in electronic format to the Region Materials Engineer through the Project Manager. The Local Agency may ask the Region Materials Engineer to concur on the design mix. For approval of hot mix asphalt items, a form similar to CDOT Form 43 – Job-Mix Formula (see Appendix A) should be used. The test results used to establish the job mix formula and the project specifications with the approved mix design submittal should be included. See CP 52 from the current Field Materials Manual for guidelines.

CDOT Responsibility for Approving Concrete and Hot Mix Asphalt

If CDOT is responsible for approving concrete and hot mix asphalt mix designs, the Local Agency shall submit all mix design information to the Region Materials Engineer through the CDOT Project Manager.

A CDOT Form 43 – Job Mix Formula, will be issued by the Region Materials Engineer.

Asphalt Content Correlation Samples

When CDOT performs the Independent Assurance Test, the Local Agency is responsible for submitting hot mix asphalt content correlation or ignition oven correction samples to the Region Materials Laboratory prior to placement of hot mix asphalt on the project. This submittal shall be a minimum of one week before placement of hot mix

asphalt. The asphalt content correlation or correction samples are necessary for assurance tests as well as laboratory check tests.

9.9 Check Final Materials Documentation

All project materials shall be in compliance prior to final project acceptance.

An independent check of the final materials documentation should be performed by an individual not directly involved in the project. The final review will follow a reasonable procedure, such as that described in the *CDOT Field Materials Manual*, “Documentation” section.

9.10 Complete and Distribute Final Materials Documentation

The Local Agency shall prepare and submit to the CDOT Project Manager a “Letter of Materials Certification” that has been electronically signed using Adobe Sign. The letter shall certify that the material incorporated into the construction work is in reasonably close conformity with the approved plans and specifications. The following documents, or similar, shall be attached to the letter (see Appendix A for copies of these forms):

1. Letter of Materials Certification, page 2, Explanation of Exceptions with all supporting documentation that addresses any exceptions or deviations.
2. A copy of the completed CDOT Form 379 – Project Independent Assurance Sampling Schedule.
3. The completed CDOT Form 250, checked and electronically signed by the Local Agency.

The CDOT Project Manager will distribute as follows:

- Project file of entity managing construction, original
- Resident Engineer
- Region Materials Engineer

- Materials and Geotechnical Branch, Documentation Unit
- CDOT's electronic document management system, ProjectWise Explorer / Project Share

Distribute Final Independent Assurance Testing Results

For Projects on the NHS:

The Independent Assurance Testing Laboratory or the CDOT Region Materials Laboratory will complete and distribute the CDOT Form 379 and the explanation of deviations concerning the Independent Assurance Testing Program as follows:

- Project file of entity managing construction, original
- Local Agency
- Resident Engineer
- Region Materials Engineer
- Materials and Geotechnical Branch, Documentation Unit

For Projects not on the NHS:

| Distribute to CDOT Project Manager only.

CONSTRUCTION CIVIL RIGHTS AND LABOR COMPLIANCE CHAPTER 10

Introduction

The Local Agency shall monitor the Contractor's day-to-day conformity to EEO, Title VI and labor compliance contract requirements. CDOT's Region Civil Rights Manager may perform an EEO Project Compliance Review. The Region Civil Rights Manager is available to the Local Agency as a resource. The Title VI Coordinator is also available as a resource on Title VI and Environmental Justice issues.

10.1 Fulfill Project Bulletin Board and Preconstruction Packet Requirements

After the Local Agency has awarded the project, the Local Agency's Project Manager must contact the CDOT Project Manager, Resident Engineer or Region Civil Rights Manager to obtain the preconstruction packet. See subsection 8.2 of this *Manual* or the *CDOT Construction Manual* for information on conducting the Preconstruction Conference and for required Contractor submittals. A sample Preconstruction Agenda is included in Appendix B of this *Manual*.

The packet will include forms, a checklist of submittals required from the Contractor, and the information the Contractor must post on the project bulletin board. In accordance with FHWA Form 1273, the bulletin board must be located in an accessible and conspicuous place on the project. All employees must be informed as to the location of this information. A notebook, by itself, is not acceptable. If there is no tool yard or project field area for the project, the contractor may produce a "sandwich" type board with the appropriate posters. The board must be near the active work site.

Additional forms will be included in the packet depending on the requirements for each project. The forms may be submitted in paper format or may be routed electronically for signature and approval in Adobe Sign. The following forms, if required, shall be submitted to the Region Civil Rights Manager (see Appendix A for copies of the forms):

1. CDOT Form 118 – Contract Wage Compliance Statement. This form is used on projects requiring Davis-Bacon wages and must be submitted with every weekly payroll from the Contractor and subcontractors.
2. CDOT Form 280 – EEO and Labor Compliance Verification. This form is used to interview Contractor/subcontractor employees on the project to monitor EEO/Labor compliance. The Project Engineer completes the form. Instructions for completion and an example of this form can be found in the Appendix B of the *CDOT Construction Manual*.
3. On-the-Job Training Program to include:
 - Form 200 – OJT Training Questionnaire.
 - Form 832 – Trainee Status and Evaluation Report,
 - Form 838 – On-the-Job Trainee/Apprentice Record, and
 - Form 1337 – Contractor Commitments to meet OJT Requirements
4. CDOT Form 1419 – DBE Participation Report – This report is used to summarize all DBE participation on the contact.
5. CDOT Form 1418 – Monthly Payment Summary – This form is used to record all payments due to subcontractors and suppliers.
6. CDOT Form 1420 – DBE Participation Plan Modification Request – This form is used to request changes to the approved DBE Participation Plan.

The Local Agency must document that the bulletin board has been checked for compliance.

10.2 Process CDOT Form 205 – Sublet Permit Application

The Contractor shall complete and submit an original Form 205 to the Local Agency for each subcontractor on the project. The Contractor may electronically route the form for signature and approval using Adobe Sign. The subcontractor may not begin work until

the Form 205 has been approved by CDOT. The Local Agency will review each Form 205 for accuracy prior to signing and forwarding the form to the Region Civil Rights Office for approval.

To expedite a subcontractor's start date, the Contractor may email a signed copy of the Form 205 to the Project Engineer for signature approval. If this method is used, the Contractor must not delay in forwarding the signed original Form 205 to the Project Engineer. Refer to the *CDOT Construction Manual* for instructions on completing and checking the Form 205.

The CDOT Region Civil Rights Manager is a resource for all questions relating to compliance with EEO, DBE, On-the-Job Training and Davis-Bacon Act. The Region Civil Rights Managers are listed in Appendix D. For Title VI, LEP and Environmental Justice questions or complaints, please contact the CDOT CRBRC. The Discrimination Complaint Form is available on the CDOT website at <https://www.codot.gov/business/civilrights/accessibility/titlevi/title-vi-assets/discrimination-complaint-form>.

10.3 Conduct Equal Employment Opportunity and Labor Compliance Verification Employee Interviews

These interviews shall be conducted with Contractor and subcontractor employees on the project to monitor EEO/labor compliance. The CDOT Form 280 - Equal Employment Opportunity and Labor Compliance Verification shall be used. The Local Agency Project Engineer or designee will complete the form. The interview provides verification of compliance and knowledge with Equal Employment Opportunity requirements and confirms that the Contractor or subcontractor is paying the correct contract wage rate. The Local Agency shall compare the information received regarding wage compliance to the certified payroll upon its receipt. The interviews shall be conducted monthly throughout the life of the project; the number required monthly is based on the size of the contract. Please refer to section 107.1.3.3 of the *CDOT Construction Manual* for the number of interviews required.

Completed Form 280s shall be submitted in paper or electronically routed to the CDOT Project Manager or Region Civil Rights Office. See Appendix A for a copy of the form.

10.4 Monitor Disadvantaged Business Enterprise Participation to Ensure Compliance with the “Commercially Useful Function” Requirements

A DBE is expected to perform a commercially useful function; i.e., the DBE is responsible for execution of the work of the Contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. If the Project Manager has concerns about the DBE subcontractor's performance in this or in any other area, the Project Manager is encouraged to consult with the CDOT Region Civil Rights Manager immediately for assistance.

10.5 Conduct Interviews When Project Utilizes On-the-Job Trainees

Interviews shall be conducted with registered trainees on the project to provide verification of compliance and knowledge with Equal Employment Opportunity requirements. Forms may be submitted in original format or routed electronically for signature and approval using Adobe Sign.

The contractor shall complete and submit the Form 1337 - Contractor Commitment to Meet OJT Requirements prior to starting work. The Form 1337 must also be submitted by the Local Agency to the CDOT Region Civil Rights office. The Local Agency will forward a copy of the contractor's OJT plan to the CDOT Project Manager who forwards to the CDOT Region Civil Rights office. The contractor shall complete and submit Form 838(s) - OJT Trainee / Apprentice Record to the Local Agency. An incomplete Form 838 will not be accepted. The Local Agency will forward the Form 838(s) to the CDOT Project Manager who forwards to the CDOT Region Civil Rights office for review and approval. The Region Civil Rights office will return the approved or rejected copy to the CDOT Project Manager and Local Agency. The Local Agency shall not make payment or give credit toward the OJT goal for trainee hours until an approved Form 838 has been received by the Region Civil Rights office.

The CDOT Form 200 – OJT Training Questionnaire is utilized when On-the-Job Trainees are on the project. The form shall be completed and submitted to the CDOT Project Manager or Region Civil Rights Manager. The Local Agency is responsible for verifying the trainee wage.

10.6 Check Certified Payrolls

The Local Agency shall verify the Contractor's and subcontractor's compliance with Davis-Bacon Act Contract requirements. Certified payrolls are required to be checked by on-site personnel who have attended the certified payroll checking class.

Prior to the beginning of construction, the Local Agency must contact the CDOT Project Manager or Region Civil Rights Manager to schedule a meeting to obtain detailed payroll monitoring training. The Local Agency is responsible for monitoring activities throughout the course of the project. If the Contractor is not complying with the requirements, the Local Agency must take appropriate action to obtain compliance. If there is no training scheduled, the CDOT Project Manager is available to assist with payroll questions.

10.7 Submit FHWA Form 1391 - Federal-Aid Highway Construction Contractor's Annual EEO Report

The Contractor and all active subcontractors must submit the completed FHWA Form 1391 to the Local Agency. The Local Agency shall forward the reports to the CDOT Project Manager by August 15 for all construction projects active during the last complete week of July.

The Form 1391 reflects only workers for the designated week that are working on site.

See Appendix A for a copy of the form.

FINALS

CHAPTER 11

See Appendix F, Construction Documentation, for the required final construction documentation.

11.1 Conduct Final Project Inspection

The Local Agency shall notify the Resident Engineer two to three weeks prior to the completion of the project to schedule the final inspection of the project. The Resident Engineer will schedule the final inspection with the Local Agency. Local Agency attendance is mandatory.

11.2 Write Final Project Acceptance Letter

Upon acceptance of the project, the Local Agency shall submit an electronically signed project acceptance letter to the Contractor and send an electronic copy to the Resident Engineer. Standard requirements for the acceptance letter are in Section 100 of the *CDOT Construction Manual*. The letter should identify any documents that need to be submitted by the Contractor. The Contractor's retainage may be reduced in accordance with subsection 109.06 of the *CDOT Standard Specifications*.

Distribution by the Resident Engineer of the acceptance letter will be as follows:

- CDOT's Electronic Document Management System (ProjectWise Explorer)
- CDOT Projects and Grants
- Region Finals Engineer
- Region Civil Rights Manager
- Contracts & Market Analysis
- Region Business Office

11.3 Advertise for Final Settlement

Immediately after project acceptance the Local Agency shall advertise the project for final settlement. The notice shall be published at least twice in a public newspaper of general circulation published in the counties where the work was contracted for and performed, or electronically on the website where the project was originally advertised. The final settlement date is the first business day at least ten days after the second publication date (refer to *Colorado Revised Statute 38-26-107, Supplier may file statement – notice – withholding funds*). The Local Agency shall send an electronic copy of the final settlement notice to the Resident Engineer.

11.4 Prepare and Distribute Final Plans

The Local Agency shall prepare As-Constructed plans in accordance with Section 100 of the *CDOT Construction Manual* and shall place an electronic original of the plans in ProjectWise Explorer / Project Share. If the project is on the NHI, State Highway system, or State right-of-way, the CDOT Project Manager should move the electronic original to ProjectWise Explorer along with a smart scanned, ISO compliant electronic copy of the plans. The As-Constructed plans should include the location of underground obstructions, removals, and all utility locations.

The as-constructed plans shall be distributed electronically as follows:

- CDOT's electronic data management system (ProjectWise Explorer)
- Right of Way
- Resident Engineer

For Local Agency projects that include construction of a major or minor structure, one set of As-Constructed plans and specifications shall be submitted electronically to Staff Bridge per Section 19.6 of the *Bridge Design Manual*.

11.5 Prepare EEO Certification and Collect EEO Forms

The Local Agency shall assure that certified payrolls were received from all contractors for all personnel on the project. The certified payrolls must be checked for Davis-Bacon compliance by an individual who has attended the Certified Payroll training. Monthly interviews shall be conducted and CDOT Forms 280, Interview Form, kept in the project records. The Local Agency Project Engineer shall assure that approved CDOT Forms 205, Sublet Permit Applications, are in the file, along with CDOT Form 1418 and the final CDOT Form 1419. The EEO certification letter must be completed and electronically signed by the Local Agency and submitted to CDOT. The Local Agency should place a copy in ProjectWise Explorer / Project Share.

11.6 Check Final Quantities, Plans, and Pay Estimate; Check Project Documentation; and Submit Final Certifications

The Local Agency shall designate one individual to be responsible for reviewing and processing final documentation as outlined in Section 100 of the *CDOT Construction Manual* and shall notify the Resident Engineer, electronically, of this designation. All project documentation will be checked and electronically signed by the Local Agency using Adobe Sign. The Local Agency shall prepare the final pay estimate. The Local Agency's licensed Professional Engineer will complete the Local Agency Final Construction Acceptance Certification (see samples in Appendix F) and submit them with an electronic signature to CDOT with the required forms designated in the certification.

11.7 Check Material Documentation and Accept Final Material Certification

The CDOT Project Manager will review the materials documentation listed in section 9.10 of this manual. The CDOT Project Manager will complete Form 1199, Finals Materials Documentation Review and Audit Checklist.

11.8 Obtain CDOT Form 1419 from the Contractor and Submit to the CDOT Project Manager

The Contractor shall complete CDOT Form 1419-DBE Participation Report and submit originals or electronically route the form in Adobe Sign for electronic signatures to the

Local Agency. The Local Agency shall check the Form 1419 for completeness, attach copies of all supporting (approved) Form 1420s and forward the original, or electronically route, to the CDOT Project Manager. The final Form 1419 must summarize all participation on the contract. The CDOT Project Manager will submit the original form or electronically route to the CDOT Civil Rights and Business Resource Center (CRBRC) with an electronic copy to the Region Civil Rights Manager. Form 1419 needs to be completed even if the DBE goal is zero or there are no DBEs used on the project. (See Appendix A for a link to Form 1419.) The Local Agency is responsible for evaluating progress toward the contract goal throughout the project.

The CDOT Project Manager and the Region Civil Rights Manager will review the submittal from the Local Agency. If the Contractor fails to fulfill the commitments or fails to meet the contract goal, the CDOT Project Manager and the Region Civil Rights Manager shall determine the applicable payment reduction and inform the Local Agency. The Local Agency shall subject the Contractor to a payment reduction at the end of the project, either by reduced payment or by held retainage.

If the payment reduction results in the Local Agency not meeting its matching portion of the contract in accordance with the term of the IGA, the Local Agency will issue a credit memo to CDOT/FHWA, with a copy to the CDOT Project Manager and the Region Civil Rights Manager. The credit memo shall only be to the extent required to ensure the matching portion is met. In the alternative, CDOT will short pay the final Request for Reimbursement to the Local Agency to withhold the payment reduction due to noncompliance.

Refer to the Standard Special Provision, *Disadvantaged Business Enterprise (DBE) Program Requirements*, dated December 26, 2013 (or latest version thereof) for additional information.

11.9 FHWA Form 47 – Statement of Materials and Labor Used ...– Discontinued

11.10 Complete and Submit CDOT Form 1212 - Final Acceptance Report (by CDOT)

Upon completion of the final inspection, and receipt of the Final Construction Acceptance Certification (see Project Finals Documents in this chapter), the Resident

Engineer will complete the Form 1212 (see Appendix A). The Resident Engineer will verify that all items shown in the remarks section have been addressed. The Resident Engineer will distribute the form as follows:

- Federal Highway Administration (FHWA), original
- Local Agency
- CDOT Projects and Grants
- CDOT's Electronic Document Management System (ProjectWise Explorer)
- Region Finals Engineer
- Resident Engineer
- CDOT Contracts and Market Analysis Branch

11.11 Process Final Payment

The Local Agency shall resolve all liens, claims and disputes for Contract adjustments before processing final payment to the Contractor.

The Local Agency shall review final pay quantities with the Contractor. It is recommended that the Contractor approve final pay quantities by an electronically signed statement. The Local Agency should place a copy of the statement in ProjectWise Explorer / Project Share.

The CDOT Form 96 - Contractor Acceptance of Final Estimate may be used for a signed statement (see Appendix A for a copy of the form).

When all project costs have been established, the Local Agency shall submit an electronically-signed final project billing and route to the Resident Engineer using Adobe Sign. The Local Agency shall submit the final bill within six months after project acceptance or prior to the approved project end date, whichever is shorter. If a time extension is needed, the Local Agency shall submit a letter of explanation to the Resident Engineer. The letter must be submitted to the Resident Engineer prior to the expiration of the six-month period or a minimum of 60 days prior to the project end date. See Section 100 of the *CDOT Construction Manual* for more information.

The Local Agency's final billing to the Resident Engineer shall include an electronically-signed letter requesting project closure and a statement indicating there will be no

further billings. The Resident Engineer will forward copies to the Region Business Manager and the Finals Engineer.

11.12 Complete and Submit CDOT Form 950

CDOT is responsible for CDOT Form 950- Project Closure. The local agency should have the final billing request paid before the Form 950 is completed. The CDOT Project Manager should distribute an electronic copy of Form 950 to the Local Agency.

11.13 Retain Project Records

On federally-funded projects, in accordance with 2 CFR 200.333, *Retention requirements for records*, the Local Agency is required to retain project documentation and records for a period of three years following the date of submission of the final expenditure report. This is known as the Record Retention Period and this date is listed in SAP ZJ40LA. The CDOT Project Manager should provide this date to the Local Agency at project close.

For records for real property and equipment, the Record Retention Period shall extend three years following final disposition of such property. If any litigation, claim or audit related to a project starts before expiration of the Record Retention Period, the Record Retention Period extends until all litigation, claims or audit findings have been resolved and final action is taken by CDOT or FHWA. See 2 CFR.333 for additional exceptions. A Local Agency may have additional retention requirements on federally-funded projects specific to its organization.

On state-funded projects, the Local Agency is required to retain project documentation and project records for 3.5 years from the Form 950 project closure date in accordance with Procedural Directive (PD) 21.1, *Requirements for the Retention of Records for Specified Design, Construction, Engineering, and Specialty Groups (Paper and Electronic)*. A Local Agency may have additional retention requirements on state-funded projects specific to its organization in addition to the 3.5 years.

The Local Agency and / or its representative shall file applicable Project Records and supporting documents on an ongoing basis in ProjectWise Explorer / Project Share after being provided access by CDOT.

Documentation and records retained by CDOT will be kept in accordance with Record File Plans as defined in *PD 21.1*. CDOT's Record Retention Period and the Local Agency Record Retention Period may be different. CDOT requires project records retained for a retention period greater than 3.5 years to be properly archived in ProjectWise Explorer, which includes completion of project attribute fields in SAP, smart scanning and ISO compliance. The CDOT Record File Plan retention periods are extended to at least 7 years from the Form 950 closure date if the project is: (a) a CMGC, DB, PE or other innovative contract projects, (b) subject to an internal or external audit, (c) subject to a litigation hold, or (d) funded with emergency funding.

11.14 Retain Final Version of Local Agency Contract Administration Checklist

Copies should be kept as shown on the Checklist.