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Letting January 17, 2025

Notice to Bidders, Specifications and Proposal



**Contract No. 61K53
COOK County
Section 22-00094-00-LT (North Riverside)
Route FAU 2759 (DeS Plaines Avenue)
Project WL3A-619 ()
District 1 Construction Funds**

Prepared by	
Checked by	F

(Printed by authority of the State of Illinois)



- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. January 17, 2025 at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 61K53
COOK County
Section 22-00094-00-LT (North Riverside)
Project WL3A-619 ()
Route FAU 2759 (DeS Plaines Avenue)
District 1 Construction Funds**

Install decorative street and pedestrian lighting on Des Plaines Avenue from Cermak Road to 26th Street in North Riverside.

- 3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to re-advertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Omer Osman,
Secretary

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FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2025

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-22) (Revised 1-1-25)

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BDE SPECIAL PROVISIONS

The following special provisions indicated by an "X" are applicable to this contract. An * indicates a new or revised special provision for the letting.

<u>File Name</u>	<u>Pg.</u>	<input type="checkbox"/>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099		<input type="checkbox"/>	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
80274		<input type="checkbox"/>	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
80192		<input type="checkbox"/>	Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
80173		<input type="checkbox"/>	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80426		<input type="checkbox"/>	Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
80241		<input type="checkbox"/>	Bridge Demolition Debris	July 1, 2009	
50531		<input type="checkbox"/>	Building Removal	Sept. 1, 1990	Aug. 1, 2022
50261		<input type="checkbox"/>	Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
* 80460	66	<input checked="" type="checkbox"/>	Cement, Finely Divided Minerals, Admixtures, Concrete, and Mortar	Jan. 1, 2025	
80384	77	<input checked="" type="checkbox"/>	Compensable Delay Costs	June 2, 2017	April 1, 2019
80198		<input type="checkbox"/>	Completion Date (via calendar days)	April 1, 2008	
80199		<input type="checkbox"/>	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
* 80461		<input type="checkbox"/>	Concrete Barrier	Jan. 1, 2025	
80453		<input type="checkbox"/>	Concrete Sealer	Nov. 1, 2023	
* 80261	81	<input checked="" type="checkbox"/>	Construction Air Quality – Diesel Retrofit	June 1, 2010	Jan. 1, 2025
* 80029	83	<input checked="" type="checkbox"/>	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2025
80229		<input type="checkbox"/>	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80452		<input type="checkbox"/>	Full Lane Sealant Waterproofing System	Nov. 1, 2023	
80447		<input type="checkbox"/>	Grading and Shaping Ditches	Jan 1, 2023	
80433		<input type="checkbox"/>	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
* 80456		<input type="checkbox"/>	Hot-Mix Asphalt	Jan. 1, 2024	Jan. 1, 2025
80446		<input type="checkbox"/>	Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
80438		<input type="checkbox"/>	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
80450		<input type="checkbox"/>	Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	
80441		<input type="checkbox"/>	Performance Graded Asphalt Binder	Jan 1, 2023	
80459		<input type="checkbox"/>	Preformed Plastic Pavement Marking	June 2, 2024	
34261	86	<input checked="" type="checkbox"/>	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80455	87	<input checked="" type="checkbox"/>	Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2024
80445		<input type="checkbox"/>	Seeding	Nov. 1, 2022	
80457		<input type="checkbox"/>	Short Term and Temporary Pavement Markings	April 1, 2024	April 2, 2024
* 80462		<input type="checkbox"/>	Sign Panels and Appurtenances	Jan. 1, 2025	
80448	89	<input checked="" type="checkbox"/>	Source of Supply and Quality Requirements	Jan. 2, 2023	
80340		<input type="checkbox"/>	Speed Display Trailer	April 2, 2014	Jan. 1, 2022
80127		<input type="checkbox"/>	Steel Cost Adjustment	April 2, 2004	Jan. 1, 2022
80397	90	<input checked="" type="checkbox"/>	Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	91	<input checked="" type="checkbox"/>	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
* 80463	92	<input checked="" type="checkbox"/>	Submission of Bidders List Information	Jan. 2, 2025	
80437	93	<input checked="" type="checkbox"/>	Submission of Payroll Records	April 1, 2021	Nov. 2, 2023
80435		<input type="checkbox"/>	Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
20338		<input type="checkbox"/>	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80429		<input type="checkbox"/>	Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80439	95	<input checked="" type="checkbox"/>	Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
80458		<input type="checkbox"/>	Waterproofing Membrane System	Aug. 1, 2024	
* 80302	96	<input checked="" type="checkbox"/>	Weekly DBE Trucking Reports	June 2, 2012	Jan. 2, 2025
80454		<input type="checkbox"/>	Wood Sign Support	Nov. 1, 2023	
* 80427	97	<input checked="" type="checkbox"/>	Work Zone Traffic Control Devices	Mar. 2, 2020	Jan. 1, 2025
80071	99	<input checked="" type="checkbox"/>	Working Days	Jan. 1, 2002	

GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: November 8, 2024 Letting

Pg #	√	File Name	Title	Effective	Revised
	<input type="checkbox"/>	GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	April 1, 2016
	<input type="checkbox"/>	*GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	June 28, 2024
	<input type="checkbox"/>	GBSP 14	Jack and Remove Existing Bearings	April 20, 1994	April 13, 2018
	<input type="checkbox"/>	GBSP 16	Jacking Existing Superstructure	Jan 11, 1993	April 13, 2018
	<input type="checkbox"/>	GBSP 18	Modular Expansion Joint	May 19, 1994	Oct 27, 2023
	<input type="checkbox"/>	GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	Oct 23, 2020
	<input type="checkbox"/>	GBSP 25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	April 15, 2022
	<input type="checkbox"/>	GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	Apr 22, 2016
	<input type="checkbox"/>	GBSP 28	Deck Slab Repair	May 15, 1995	Feb 2, 2024
	<input type="checkbox"/>	GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	April 30, 2021
	<input type="checkbox"/>	GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	April 30, 2021
	<input type="checkbox"/>	GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	April 30, 2021
	<input type="checkbox"/>	GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Oct 27, 2023
	<input type="checkbox"/>	GBSP 34	Concrete Wearing Surface	June 23, 1994	Oct 4, 2016
	<input type="checkbox"/>	*GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	June 28, 2024
	<input type="checkbox"/>	GBSP 53	Structural Repair of Concrete	Mar 15, 2006	Aug 9, 2019
	<input type="checkbox"/>	GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
	<input type="checkbox"/>	GBSP 59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	April 15, 2022
	<input type="checkbox"/>	GBSP 60	Containment and Disposal of Non-Lead Paint Cleaning Residues	Nov 25, 2004	Apr 22, 2016
	<input type="checkbox"/>	GBSP 61	Slipform Parapet	June 1, 2007	April 15, 2022
	<input type="checkbox"/>	GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	Oct 5, 2015
	<input type="checkbox"/>	GBSP 71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 15, 2011
	<input type="checkbox"/>	GBSP 72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	April 30, 2021
	<input type="checkbox"/>	GBSP 78	Bridge Deck Construction	Oct 22, 2013	Dec 21, 2016
	<input type="checkbox"/>	GBSP 79	Bridge Deck Grooving (Longitudinal)	Dec 29, 2014	Mar 29, 2017
	<input type="checkbox"/>	GBSP 81	Membrane Waterproofing for Buried Structures	Oct 4, 2016	March 1, 2019
	<input type="checkbox"/>	GBSP 82	Metallizing of Structural Steel	Oct 4, 2016	Oct 20, 2017
	<input type="checkbox"/>	*GBSP 83	Hot Dip Galvanizing for Structural Steel	Oct 4, 2016	June 28, 2024
	<input type="checkbox"/>	GBSP 85	Micropiles	Apr 19, 1996	Oct 23, 2020
100	<input checked="" type="checkbox"/>	GBSP 86	Drilled Shafts	Oct 5, 2015	Oct 27, 2023
	<input type="checkbox"/>	GBSP 87	Lightweight Cellular Concrete Fill	Nov 11, 2001	Apr 1, 2016
	<input type="checkbox"/>	GBSP 88	Corrugated Structural Plate Structures	Apr 22, 2016	April 13, 2018
	<input type="checkbox"/>	GBSP 89	Preformed Pavement Joint Seal	Oct 4, 2016	March 24, 2023
	<input type="checkbox"/>	GBSP 90	Three Sided Precast Concrete Structure (Special)	Dec 21, 2016	March 22, 2024
	<input type="checkbox"/>	GBSP 91	Crosshole Sonic Logging Testing of Drilled Shafts	Apr 20, 2016	March 24, 2023
	<input type="checkbox"/>	GBSP 92	Thermal Integrity Profile Testing of Drilled Shafts	Apr 20, 2016	March 24, 2023
	<input type="checkbox"/>	*GBSP 93	Preformed Bridge Joint Seal	Dec 21, 2016	June 28, 2024
	<input type="checkbox"/>	GBSP 94	Warranty for Cleaning and Painting Steel Structures	Mar 3, 2000	Nov 24, 2004
	<input type="checkbox"/>	GBSP 96	Erection of Bridge Girders Over or Adjacent to Railroads	Aug 9, 2019	
	<input type="checkbox"/>	GBSP 97	Folded/Formed PVC Pipeliner	April 15, 2022	
	<input type="checkbox"/>	GBSP 98	Cured-in-Place Pipe Liner	April 15, 2022	
	<input type="checkbox"/>	GBSP 99	Spray-Applied Pipe Liner	April 15, 2022	
	<input type="checkbox"/>	GBSP 100	Bar Splicers, Headed Reinforcement	Sept 2, 2022	Oct 27, 2023
	<input type="checkbox"/>	*GBSP 101	Noise Abatement Wall, Ground Wall	Dec 9, 2022	June 28, 2024
	<input type="checkbox"/>	*GBSP 102	Noise Abatement Wall, Structure Mounted	Dec 9, 2022	June 28, 2024
	<input type="checkbox"/>	GBSP 103	Noise Abatement Wall Anchor Rod Assembly	Dec 9, 2022	

An * indicates a new or revised special provision.

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following special Provisions supplement the “Standard Specifications for Road and Bridge Construction,” adopted January 1, 2022, the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways,” and the “Manual of Test Procedures for Materials” in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAU 2759 (Des Plaines Avenue, Project WL3A(619), Section 22-00094-00-LT in North Riverside, Cook County, Contract No. 61K53; and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Route: FAU 2759 (Des Plaines Avenue, Project WL3A(619))
Project WL3A(619)
Section 22-00094-00-LT
Cook County
Contract No. 61K53

Location of Project:

This project is located on Des Plaines Avenue from 26th Street to Cermak Road (22nd Street) within the Village o North Riverside, County of Cook, Illinois.

Description of Project:

Installation of decorative Street & Pedestrian Light Standards; concrete foundations; unit duct assembly, directionally bored; removal of existing street light poles & foundations; pavement & parkway restoration; and all incidental and collateral work necessary to complete the project as shown on the plans and described herein along Des Plaines Avenue.

GENERAL ELECTRICAL PROVISIONS

The work required for the satisfaction of the requirements of this Specification will not be paid for separately, but will be considered incidental to the Contract's electrical work.

DEFINITION OF TERMS:

Abbreviations: Wherever the following abbreviations are used in these Special Provisions or on the Plans, they are to be construed the same as the respective expressions represented in Article 101.01. In addition, FM shall stand for "Factory Mutual".

Key Definitions:

Standard Specifications:

Where used in these Special Provisions, this term shall mean the "Standard Specifications for Road and Bridge Construction", published by the Illinois Department of Transportation.

Provide:

Where used in these Special Provisions, unless otherwise indicated, this term shall mean "furnish and install, complete, including any required electrical connection and testing".

Owner:

Where used in these Special Provisions, unless otherwise indicated, this term shall mean the party other than the Contractor who is a party to this Contract.

Equipment:

Where used in these Special Provisions, this term shall mean material, fittings, devices, appliances, fixtures, apparatus, and the like used as part of, or in connection with, an electrical installation.

GENERAL ELECTRICAL PROVISIONS, Continued

REFERENCED SPECIFICATIONS AND STANDARDS:

The following Specifications and standards are incorporated, by reference, in these Special Provisions and shall apply to the work as though fully written herein:

NATIONAL ELECTRICAL CODE

NATIONAL ELECTRICAL SAFETY CODE

SAFETY CODE, a publication of the Illinois Department of Transportation.

STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, a publication of American Association of State Highways and Transportation Officials.

AN INFORMATIONAL GUIDE FOR ROADWAY LIGHTING, a publication of American Association of State Highways and Transportation Officials.

AMERICAN NATIONAL STANDARD PRACTICE FOR ROADWAY LIGHTING, ANSI/IES RP-8, published by Illuminating Engineering Society, approved by American National Standards Institute.

ELECTRICAL MAINTENANCE CONTRACT, an "Agreement" between the Owner and an electrical Contractor of its choosing, who is called upon to perform routine repairs or services on electrical systems.

Where reference is made to a standard or Standard Specification, such reference shall be to the latest edition current at the bid date, including all revisions.

Scope of Work:

Clean-up and Public Safety: The work site shall be maintained in a clean condition, free of hazards to the work force and the public, all in conformance with the requirements of Article 107 of the Standard Specifications. Special care shall be taken to assure that electrical systems are not left in an exposed or otherwise hazardous condition. All electrical boxes, cabinets, pole handholes, etc., which contain wiring, either energized or non-energized, shall be closed or shall have their covers in place and shall be locked when possible, during off-work hours.

Responsibility for Operating Lighting: The scope of work shall include the assumption of responsibility for the continuing operation of existing, temporary or other lighting systems

GENERAL ELECTRICAL PROVISIONS, Continued

affected by the work as may be specified elsewhere herein. Existing lighting systems, when depicted on the Plans, are intended only to indicate the general nature of the systems involved and shall not be construed as an exact representation of the field conditions. It remains the Contractor's responsibility to visit the site to confirm and ascertain the exact nature of systems to be maintained.

Cooperation Between Contractors: The Contractor shall perform the work in full compliance with Article 105.08 of the Standard Specifications. This shall especially extend to any affected maintenance forces work and electrical systems work adjacent to the specific project limits.

CONTROL OF WORK:

The Contractor shall comply with the requirements of Sections 105 and 108 of the Standard Specifications, and any Supplements thereto and shall, in addition, comply with the requirements for control of work specified herein.

Maintenance Preconstruction Inspection

General: Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall initiate a request for a maintenance preconstruction inspection, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting and/or traffic control systems which may be affected by the work. The request for the maintenance preconstruction inspection shall be made no less than seven (7) calendar days prior to the desired inspection date. The maintenance preconstruction inspection shall:

- Establish the details of any formal transfers of maintenance responsibility required for the construction period.
- Establish approximate locations of known lighting and/or traffic control systems which may be affected by the work.
- Establish the condition of lighting and/or traffic control systems which may be affected by the work.

Marking of Existing Cable Systems: The party responsible for maintenance of any existing lighting and/or traffic control systems at the project site will, at the Contractor's or Owner's request, mark and/or stake, once per location, all underground cable routes owned or maintained by the respective party. A project may involve multiple "locations" where separated electrical systems are involved (i.e. different controllers). Such markings shall be taken to have a horizontal tolerance of at least one foot (1') to either side. The markings may be made prior to the preconstruction inspection date. The Contractor shall exercise

GENERAL ELECTRICAL PROVISIONS, Continued

extreme caution where existing buried cable runs are involved. The markings of existing systems are made strictly for assistance to the Contractor and this does not relieve the Contractor of responsibility for the repair or replacement of any cable run damaged in the course of his work, as specified elsewhere herein. These services will be done at the Owner's expense.

NOTE THAT THE CONTRACTOR SHALL BE ENTITLED TO ONLY ONE REQUEST FOR LOCATION MARKING OF EXISTING SYSTEMS AND THAT MULTIPLE REQUESTS MAY ONLY BE HONORED AT THE CONTRACTOR'S EXPENSE.

Damage to Electrical Systems: Should damage occur to any of the Owner's electrical systems through the Contractor's operations, the Owner reserves the right to designate whether the repairs are of an emergency or non-emergency nature.

Emergency Repairs: The Owner may designate that emergency repairs be performed by the Owner's Electrical Maintenance Contractor or another maintenance entity. The cost of these emergency repairs shall be the responsibility of the Contractor and no additional compensation will be allowed for such charges.

Non-Emergency Repairs: Non-emergency repairs shall be performed by the Contractor as specified herein and to the satisfaction of the Engineer. All repairs shall be performed in an expeditious manner and shall be conducted in a manner to assure that all lighting units are in service between 4:00 p.m. and 8:00 a.m. Temporary aerial multi-conductor cable, with grounded messenger cable, will be permitted if it does not interfere with traffic or other operations and does not require unacceptable modification to existing equipment as determined by the Engineer.

Permanent Repairs: Regardless of whether damaged electrical systems are restored to service by means of emergency or non-emergency repairs, if such repairs are temporary in nature, permanent repairs shall be made by the Contractor at his own expense. No additional compensation and no extension of time will be allowed to effect the permanent repairs. Replacement of damaged duct or other raceways may be only for the damaged section, with suitable duct splices or raceway fittings made to form a water-tight like-new raceway. Damaged cable shall be replaced in complete spans and no permanent underground splices will be allowed. All permanent repairs must meet the approval of the Engineer. Repairs to underground runs must be inspected and approved by the Engineer before backfilling.

Proposed locations: The Engineer shall mark or stake the proposed locations of all poles, cabinets, junction boxes, pull boxes, handholes, cable routes, pavement crossings and other such items pertinent to the work. The Contractor shall request an inspection by

GENERAL ELECTRICAL PROVISIONS, Continued

the Engineer at proposed locations where there are conflicts with existing utilities that were not located at the time of the proposed layout, or discovered during construction.

On projects having complex staging, multiple requests can be made. Work installed without location approval is subject to corrective revisions at the Contractor's expense.

Protection of the Work: Electrical work, equipment and appurtenances shall be protected from damage during construction until final acceptance. Electrical raceway or duct openings, except for conduit sleeves, shall be capped or otherwise sealed from the entrance of water and dirt. Wiring shall be protected from mechanical injury. Equipment shall be protected from physical damage and from exposure to the weather and dirt. Equipment such as luminaires, control cabinets and tower lighting lowering mechanisms shall be stored indoors until installation.

Standards of Installation: Electrical work shall be installed in a neat and workmanlike manner in accordance with the best practices of the trade. Unless otherwise indicated, materials and equipment shall be installed in accordance with the manufacturer's recommendations.

Inspection During Construction: Unless otherwise indicated, all splices, taps and ground connections shall be made available for inspection by the Engineer before the wiring is permanently trained in hand holes, junction boxes, light poles or other enclosures. The Contractor shall notify the Engineer when such wiring is ready for inspection.

MATERIALS AND EQUIPMENT:

Except as specified elsewhere herein, materials and equipment shall be in conformance with the requirements of Article 106 of the Standard Specifications. UNLESS OTHERWISE SPECIFICALLY INDICATED, ALL MATERIALS AND EQUIPMENT SHALL BE NEW.

Procurement: Materials and equipment shall be the products of established manufacturers, and shall be suitable for the service required. The Contractor is obligated to conduct his own search into the timely availability of the specified equipment and to ensure that all materials and equipment are in strict conformance with the Contract Documents and that delivery schedules are compatible with project time constraints. Materials or equipment items which are similar or identical shall be the product of the same manufacturer. The cost of submittals, certifications, any required samples and similar costs shall not be paid for extra but shall be included in the pay item bid price for the respective material or work.

GENERAL ELECTRICAL PROVISIONS, Continued

UL Label: Unless otherwise indicated, materials and equipment shall bear the UL label whenever such labeling is available for the type of material or equipment being furnished.

RESPONSIBILITY FOR OPERATING LIGHTING:

The Contractor shall be responsible for the repair of any damaged electrical cable caused by construction operations during the course of this project, so that the existing street lighting systems shall stay in service until the proposed lighting systems become operational. There will be no additional payment made to the Contractor for labor and materials required for this repair work.

The Engineer or the Town Electrical Department may direct the Contractor to troubleshoot the existing lighting systems that are experiencing outages that may be related to the construction of the new lighting systems. If these outages are determined by the Engineer not to be the result of any proposed construction work, the extra work required to troubleshoot and repair the existing lighting system will be paid for as specified in Article 109.04 of the Standard Specifications.

RECORD DRAWINGS:

Alterations and additions to the electrical installation depicted on the complete set of Contract drawings made during the execution of the work shall be neatly and plainly marked in red on a full-size set of Record Drawings kept at the Contractor's field office for the project. These drawings shall be **UPDATED ON A DAILY BASIS** and shall be available for inspection by the Engineer during the course of the work.

When the work is complete, and before the request for a final acceptance inspection, a full-size set of Record Drawings shall be submitted to the Engineer for review and acceptance. The set may be a set of reproducible drawings. The drawings shall each be stamped "RECORD DRAWING", and shall be marked with the Contractor's stamp, the date, and the signature of the Contractor's supervising engineer or electrician. The Resident Engineer shall review and sign the record drawing to verify the accuracy of the record drawings prior to submittal for formal review and acceptance. Upon request, a full-size set of reproducible drawings of the lighting work will be made available to the Contractor for the purpose of compliance with these requirements.

The Record Drawings shall be complete, neat, and shall be consistent with the method of representation on the Contract drawings. The Record Drawings shall include all Plans, details, notes, schedules, single line diagrams, etc. applicable to the electrical work. In particular, the Record Drawings shall provide stationing and dimensioned

GENERAL ELECTRICAL PROVISIONS, Continued

references for lighting controllers, underground wiring runs, system ground fields, conduit sleeves below pavement, manholes, handholes and electrical service supplies, and other information which would be useful to locate and maintain the electrical system. The Lighting Inventory form contained elsewhere herein shall be completed by the Contractor and submitted along with the Record Drawings. The Record Drawings must be submitted and must be acceptable to the Engineer seven (7) days prior to final acceptance.

GPS COORDINATES RECORDING:

Contractor shall record GPS coordinates of the following electrical components being installed on State Right-of-way, modified or being affected in other ways by this contract:

- Last light pole on each circuit
- Conduit roadway crossings and handholes
- Controllers and electric service locations
- Structures with electrical connections, i.e. DMS, lighted signs

Datum to be used shall be North American 1983.

Data shall be provided electronically and in print form. The electronic format shall be compatible with MS Excel and ESRI ArcMap. Latitude and Longitude shall be in decimal degrees with a minimum of 6 decimal places. Each coordinate shall have the following information:

- Description of item
- Designation or approximate station if the item is undesignated
- Latitude
- Longitude

Prior to the collection of data, the contractor shall provide a sample data collection of at least six data points of known locations to be reviewed and verified by the Engineer

to be accurate within 100 feet. Upon verification, data collection can begin. Data collection can be made as construction progresses, or can be collected after all items are installed. If the data is unacceptable the contractor shall make corrections to the data

GENERAL ELECTRICAL PROVISIONS, Continued

collection equipment and or process and submit the data for review and approval as specified.

Accuracy. Data collected is to be mapping grade. A handheld mapping grade GPS device shall be used for the data collection. The receiver shall support differential correction and data shall have a minimum 5 meter accuracy after post processing.

GPS receivers integrated into cellular communication devices, recreational and automotive GPS devices are not acceptable.

The GPS shall be the product of an established major GPS manufacturer having been in the business for a minimum of 6 years.

TESTING:

Before final acceptance, the electrical equipment, material and work provided under this Contract shall be tested. Tests may be made progressively as parts of the work are completed or may be made when the work is complete. Tests shall be made in the presence of the Engineer. Items that fail to test satisfactorily shall be repaired or replaced.

Tests shall include checks of control operation, system voltages, cable insulation and ground resistance and continuity. Tests shall be made prior to the Final Acceptance Inspection specified herein to facilitate the correction of defects prior to the inspection.

FINAL ACCEPTANCE INSPECTION:

When the work is complete, tested and fully operational, the Contractor shall schedule a Final Acceptance Inspection with the Engineer. The Contractor shall request the inspection no less than seven (7) working days prior to the desired inspection date.

The Contractor shall furnish the necessary manpower and equipment to make the Final Acceptance Inspection. The Engineer may designate the type of equipment required for the inspection tests.

The equipment shall have the minimum ranges and accuracies indicated in Table 9.1.

GENERAL ELECTRICAL PROVISIONS, Continued

Test	Type of Meter	Accuracy
Voltage	Multimeter	± 2% of reading
Insulation Resistance	Megohmmeter	± 1% of reading
Current	Ammeter	± 1% of reading
Ground Continuity	Low Ohm Meter	± ¼% of reading +1 least significant digit

Table 9.1

The following readings shall be taken:

Voltage Measurements: Voltages in the cabinet from phase-to-phase and phase-to-neutral at no load and at full load. Also, voltage readings at the last pole/splice of each circuit.

Insulation Resistance: Insulation resistance to ground of each circuit at the cabinet, with all loads connected. On tests of new cable runs provided under this Contract, the readings shall exceed 100 megohms for circuits carrying over 20 amperes and shall exceed 100 megohms for circuits carrying less than 20 amperes. On tests of cable runs which include cables which were existing in service prior to this Contract, the resistance readings shall demonstrate to the satisfaction of the Engineer that the cable runs are of adequate dielectric strength given the condition and proportionate length of existing cable and that the system is free from shorts and grounds. Measurements shall be taken with a megohm meter approved by the Engineer.

Loads: The current of each circuit, phase, main, and neutral. The Engineer may direct reasonable circuit rearrangement to achieve system balance at no additional cost. The current readings shall be within 10% of the connected load based on equipment ratings.

Ground Continuity: Resistance to ground of the service grounding electrode (disconnect from the extending grounding system) and resistance of the ground system as taken from the farthest extension of each circuit run from the controller (i.e.: a check of equipment ground continuity for each circuit). Measurements shall be made with a ground tester and low-range ohmmeter, as applicable, as approved by the Engineer. Readings shall not exceed 2.0 Ohms regardless of the length of the circuit.

GENERAL ELECTRICAL PROVISIONS, Continued

A written record of the Final Acceptance Inspection test readings shall be made during the tests and a copy shall be given to the Engineer. The Contractor shall request test forms from the Engineer for the purpose of documenting the tests and test results shall be recorded on these forms. Examples of these forms are included in these Special Provisions.

Any part or parts of the installation that are missing, broken, defective, or not functioning properly during the Final Acceptance Inspection shall be noted and shall be adjusted, repaired, or replaced as directed by the Engineer and another inspection shall be made at another date. ONLY UPON SATISFACTION OF ALL POINTS WILL THE INSTALLATION BE ACCEPTABLE.

The Contractor shall furnish a written guarantee for all materials, equipment and work performed under the Contract for a period of not less than one (1) year from the date of final acceptance. In case of acceptance of a part of the work for use or occupancy prior to final acceptance of the entire work, the guarantee for the part so accepted shall be for a period of one (1) year from the date of such partial acceptance by the Engineer.

Final acceptance will not be made until after the delivery of acceptable Record Drawings, specified certifications, and the required guarantees.

Electrical Cable Insulation Resistance Test

Route, Common Name	Limits
Section	Controller Number
Contract	Megger Model
County	Date

Resistance Measurements (Megohms)

	Contractor Measurement	Owner Measurement	Circuit	Contractor Measurement	Owner Measurement
A			B		
C			D		
E			F		
G			H		
I			J		
K			L		
M			N		
O			P		
Q			R		
S			T		
U			V		
W			X		
Y			Z		
Service Cable Measurements					
Phase	Contractor Measurement	Owner Measurement	Phase	Contractor Measurement	Owner Measurement
A			B		

Representatives Present

Resident Engineer

Contractor Representative

Owner Representative

Signature

Signature

Signature

Electrical Loading Test

Route, Common Name	Limits
Section	Controller Number
Contract	Ampmeter Model
County	Date

Controller Load Measurements (Amperes)

Phase A Circuit	Contractor Measurement	Owner Measurement	Phase B Circuit	Contractor Measurement	Owner Measurement
A			B		
C			D		
E			F		
G			H		
I			J		
K			L		
M			N		
O			P		
Q			R		
S			T		
U			V		
W			X		
Y			Z		
TOTAL			TOTAL		
Service Cable Measurements					
Phase	Contractor Measurement	Owner Measurement	Phase	Contractor Measurement	Owner Measurement
A			B		
Neutral					

Representatives Present

Resident Engineer

Contractor Representative

Owner Representative

Signature

Signature

Signature

Electrical Voltage Test

Route, Common Name	Limits
Section	Controller Number
Contract	Voltmeter Model
County	Date

Last Pole Circuit Phase To Neutral Voltage Measurements (Volts)

Phase A Circuit	Contractor Measurement	Owner Measurement	Phase B Circuit	Contractor Measurement	Owner Measurement
A			B		
C			D		
E			F		
G			H		
I			J		
K			L		
M			N		
O			P		
Q			R		
S			T		
U			V		
W			X		
Y			Z		
No Load Phase To Neutral Measurements					
Phase	Contractor Measurement	Owner Measurement	Phase	Contractor Measurement	Owner Measurement
A			N		
Full Load Phase To Neutral Measurements					
Phase	Contractor Measurement	Owner Measurement	Phase	Contractor Measurement	Owner Measurement
A			B		

Representatives Present

Resident Engineer

Contractor Representative

Owner Representative

Signature

Signature

Signature

Electrical Continuity Test

Route, Common Name	Limits
Section	Controller Number
Contract	Ohmmeter Model
County	Date

Resistance Measurements (Ohms)

Contractor Measurements				Owner Measurements			
Circuit	Forward	Reverse	Average	Circuit	Forward	Reverse	Average
A - B				A - B			
C - D				C - D			
E - F				E - F			
G - H				G - H			
I - J				I - J			
K - L				K - L			
M - N				M - N			
O - P				O - P			
Q - R				Q - R			
S - T				S - T			
U - V				U - V			
W - X				W - X			
Y - Z				Y - Z			

Representatives Present

Resident Engineer

Contractor Representative

Owner Representative

Signature

Signature

Signature

Lighting Inventory

Location		LAMP			Controller Number	BASE		MAST ARM		Date	
Pole Num	Fixture Type	Type	Wattage	Quant	Found Type	Type	Cover	Length	Quant	Mtg Height	Comments

TABLE LEGEND

Fixture Type: T = Tower, U = Underpass, P = Poles	Base: TB = T-Base, C = Couplings, NF = Non-Frangible
Lamp Type: HPS, LPS, MH, MV	Cover: SK = AL Skirt, SH = Fiberglass Shroud, L = Leafs
Lamp Wattage: 55, 80, 100, 150, 250, 310, 400, 750, 1000	Mounting Height = Distance from pole base to luminaire
Foundation Type: C = Concrete, BM = Bridge Mount, WM = Wall Mount, H = Metal Helix	

BASIC MATERIALS AND METHODS – ELECTRICAL

General: Basic materials and methods specified herein shall be provided as specified or required for the work and shall be paid for as part of the associated unit price items specified for the work. No additional compensation will be allowed. Electrical work shall conform to these Specifications unless specifically indicated otherwise.

All basic materials and methods items specified herein which apply to the project in any way shall be submitted for review and approval by the Engineer. They need only be submitted as "Basic Materials and Methods" even though they may be incidental to a number of various separate pay items. Submittal information shall include complete catalog literature and other information required to demonstrate compliance with specified requirements.

Splicing and Terminating of Electrical Cables: Splices in electrical cables shall be made with materials which are compatible with conductors, insulations and any jackets of the associated cables.

Unless otherwise indicated or approved by the Engineer splices shall be made using compression type copper compression joints (sleeves) of the size and configuration required for the splice involved. The sleeves shall be made of tin plated copper and shall be UL listed for 600-volt applications and shall be of the type suitable for a range of conductor combinations. The sleeves shall be installed with tools and methods recommended by the sleeve manufacturer.

Unless otherwise indicated, individual conductors, including ground conductors, shall be terminated with compression terminals sized appropriately for the given connection. The connectors shall be copper, UL Listed for 600-volt applications and comply with UL Standard 486A. The terminals shall be clearly marked with the wire size and die index. All compression terminals shall be installed with the proper tool and die for crimping. Ground wires at light poles shall be terminated with UL listed mechanical grounding connectors.

Splices above grade, such as in poles and junction boxes, shall have a waterproof sealant and a heat-shrinkable plastic cap. The cap shall be of a size suitable for the splice and shall have a factory-applied sealant within. Additional seal of the splice shall be assured by the application of sealant tape or the use of a sealant insert prior to the installation of the cap. Either method shall be assured compatible with the cap sealant.

BASIC MATERIALS AND METHODS – ELECTRICAL, Continued

Tape sealant shall be applied in not less than one half-lapped layer for a length at least a quarter inch ($\frac{1}{4}$ ") longer than the cap length and the tape shall also be wrapped into the crotch of the splice. Insert sealant shall be placed between the wires of the splice and shall be positioned to line up flush or extend slightly past the open base of the cap. The end caps shall be UL listed and shall have a post-shrink wall thickness not less than the values shown in Table 2.1.

Splices below grade shall be made only upon specific approval of the Engineer. Below-grade splices shall be sealed with epoxy encapsulation kits approved by the Engineer which shall be installed in strict conformance with the kit manufacturer's recommendations.

Initial Inside Diameter Inches	Post-Shrink Wall Thickness Inches
0.50	0.070
0.75	0.080
1.00	0.095
1.15	0.095
1.5	0.100
2.00	0.105

Table 2.1
Post-Shrink Wall Thickness

Electrical Tape: Electrical tape shall be UL listed all weather vinyl plastic tape which is resistant to abrasion, puncture, flame, oil, acids, alkalis and weathering. It shall conform to Federal Specification HH-I-595. Thickness shall not be less than 8.5 mils and width shall not be less than three-quarter inch ($\frac{3}{4}$ "). NOTE THAT THE STANDARD 7-mil THICKNESS TAPE IS NOT ALLOWED.

BASIC MATERIALS AND METHODS – ELECTRICAL, Continued

Fuses: Unless otherwise indicated, fuses for installation within fuse holders for protection of lighting branch circuits shall be small-dimension cylindrical fuses of the fast-acting type with current limiting characteristics. They shall be UL listed. Unless otherwise indicated, the fuses shall be rated for 600 volts AC and shall have a UL-listed interrupting rating of not less than 10,000 rms symmetrical amperes at rated voltage. They shall be sized at 300 percent of the starting or operating current, whichever is greater, but in no case greater than 50 percent of the branch circuit conductor ampacity.

Fuse Holders:

Standard Fuse Holders: Each fuse holder shall consist of a two-section unit with a molded plastic housing designed to hold small-dimension cylindrical fuses of the type required. Each section shall be permanently etched with line and load side designations. A captive nut on one section shall mate a threaded portion of the other section and the unit shall have an "O" ring which shall provide a water and vapor-tight seal when the sections are joined.

The terminals and the contacts in the fuseholder shall be made of tinned copper. The contacts shall be spring loaded to exert contact pressure on mating parts. Fuse holders shall be rated for 30 amperes at 600V at 167° F (75° C) operation.

Fuse holders shall have a molded plastic, neoprene rubber, or impact resistant polymer housing. Wires shall attach to the fuse holder by a crimping operation except that connection of No. 2 wires to breakaway fuseholder receptacles may be via a set screw connection. Each fuse holder shall be of a size proper for the wires to be attached. The assembly shall be provided with insulating boots.

Fuse holders for neutral conductors shall have a permanently installed solid neutral conductor and a white plastic coupling nut and screw section.

Fuse holders used in multi-pole applications, up to 30-ampere size, such as a 240-volt phase-to-phase feed to a 240-volt load, shall be of the multi-pole type so that all phase conductors are disconnected at the same time.

Two Pole Quick Disconnect Fuse Holders: Quick disconnect type fuse holders shall be as specified for standard fuse holders with the following features:

BASIC MATERIALS AND METHODS – ELECTRICAL, Continued

The fuse holder shall be capable of disconnecting upon sufficient tension in the connected wires (as in the case of a pole knock-down).

The fuse shall remain enclosed in the de-energized portion of the fuse holder upon disconnection. The fuse shall not be utilized as the disconnection means, a separate plug and receptacle shall be utilized for the disconnection means.

The fuse holder assembly shall mate a line-side quick disconnect receptacle.

Installation: Unless otherwise indicated, standard fuse holders shall be used on non-frangible (non-breakaway) light pole installations and two pole quick-disconnect fuse holders shall be used on frangible (breakaway) light pole installations.

Wires shall be carefully stripped only as far as needed for connection to the device. Over-stripping shall be avoided. An oxide inhibiting lubricant shall be applied to the wire for minimum connection resistance before the terminals are crimped-on.

Crimping shall be performed in accordance with the fuse holder manufacturer's recommendations. The exposed metal connecting portion of the assembly shall be taped with two half-lapped wraps of electrical tape and then covered by the specified insulating boot.

Phase to phase circuit applications shall be designed so that both phase conductors are disconnected at the same time.

Phase to neutral circuit applications shall be designed so that both phase and neutral conductors are disconnected at the same time.

Blanks shall be used instead of fuses for the neutral conductor and they shall be clearly marked with white bands to designate a neutral plug.

The fuse holder shall be installed such that the fuse side is connected to the pole wire (load side) and the receptacle side of the holder is connected to the line side.

Wiring Identification Markers: Unless otherwise indicated, each wire installed shall be identified with its complete circuit number at each termination, splice, junction box or other location where the wire is accessible. Wire identification markers shall be either cloth tape or if cables do not provide a suitable adhesive surface due to cable pulling lubrication compounds used, clip on markers shall be used as described below.

BASIC MATERIALS AND METHODS – ELECTRICAL, Continued

Cloth tape wire markers: Wire identification shall be made by the application of self-sticking wire markers, wrapped around the wire. The markers shall have black characters not less than five-sixteenths inches (5/16") high on a white or yellow background. Markers shall be in strips not less than one and one-half inches (1-1/2") long and shall be made of a high-tack cloth tape with printing protected by a clear, permanent overcoating.

Clip-on wire markers: Clip-on wire markers shall be white with black lettering. The individual letters shall interlock to keep the letters aligned. Wire markers shall meet Military Specifications MIL-H-5606 and MIL-L-7808. The proper size of wire markers shall be used to prevent slipping of the markers on the cable.

Pole Wire: Unless otherwise indicated, each luminaire installed shall be provided with pole wire extending from fusing at the base of its respective pole to the luminaire. Two wires shall be extended for each luminaire. Pole wire shall also be provided for pole top mounted photocells at the locations shown on the Plans.

Unless otherwise indicated pole wire shall be sized No. 10.

Unless otherwise indicated pole wire shall have copper conductors, stranded in conformance with ASTM B8.

Unless otherwise indicated pole wire shall be insulated with cross-linked polyethylene, (XLP) insulation or ethylene propylene (EPR) insulation with a chlorosulfanated polyethylene jacket.

Pole wire shall be rated 600 volts, RHW/USE and shall be UL listed.

Pole wire shall be color coded via insulation color. EPR wire may be color-coded via painting. Unless otherwise indicated, neutral wires shall be white and phase conductors shall be color-coded red or black as appropriate to match the associated branch circuit conductors. Cable identification marking shall be visible in a contrasting color.

Grounding: All electrical systems, equipment and appurtenances shall be properly grounded in strict conformance with the NEC, even though every detail of the requirements is not specified or shown. Good ground continuity throughout the electrical system shall be assured. All electrical circuit runs shall have a continuous equipment grounding conductor. IN NO CASE SHALL THE EARTH BE CONSIDERED AS AN ADEQUATE EQUIPMENT GROUNDING PATH.

BASIC MATERIALS AND METHODS – ELECTRICAL, Continued

Where connections are made to painted surfaces, the paint shall be scraped to fully expose metal at the connection point and serrated connectors or washers shall be used.

Where metallic conduit is utilized as the equipment grounding conductor, extreme care shall be exercised to assure continuity at joints and termination points. No wiring run shall be installed without a suitable equipment ground conductor. Where no equipment ground conductor is provided for in the Plans and associated specified pay item, the Contractor is obligated to bring the case to the attention of the Engineer who will direct the Contractor accordingly. Work which is extra to the Contract will be paid extra.

Unless otherwise indicated, grounding conductors shall be copper and shall be insulated in a manner as specified for the associated phase conductors. Insulation for ground wires shall be green.

Unless otherwise indicated, ground rods shall be copper-clad steel rods not less than five-eighths inch (5/8") in diameter and ten feet (10') long, driven so that tops of the rods are twenty-four inches (24") below finished grade. Where indicated, ground wells shall be included to permit access to the rod connections.

Unless otherwise indicated, all connections to ground rods, structural steel, reinforcing steel or fencing shall be made with exothermic welds. Where such connections are made to insulated conductors, the connection shall be wrapped with at least four (4) layers of electrical tape extended six inches (6") onto the conductor insulation.

BASIC MATERIALS AND METHODS – ELECTRICAL, Continued

Where a ground field of "made" electrodes is provided, the exact locations of the rods shall be documented by dimensioned drawings as part of the Record Drawings.

Equipment ground wires shall be bonded, using a splice and pigtail connection, to all boxes and other metallic enclosures throughout the wiring system.

The grounding system shall be fully tested. This testing shall include continuity tests of all equipment grounding using a low-range ohmmeter and a test of the system ground via measurements using a suitable bridge or by other means approved by the Engineer.

Fasteners and Hardware: Fasteners used to mount conduit supports, boxes and other items attached to the structure shall be suitable for the weight supported and shall be compatible with the structure material, i.e. wood screws shall be used for wood, toggle bolts shall be used for hollow masonry, expansion bolts or power-set studs shall be used for solid masonry or concrete and clamps shall be used for structural steel.

Expansion anchors shall not be less than one-quarter inch (1/4") trade size and shall extend at least two inches (2") into the masonry or concrete.

Power-set anchors shall not be less than one-quarter inch (1/4") trade size and shall extend at least two inches (2") into the masonry or concrete.

Unless otherwise indicated, all steel hardware (nuts, bolts and the like) shall be galvanized.

Unless otherwise indicated, screws for the attachment of pole handhole covers, covers on cast metal boxes, doors on transformer bases and other such applications shall be nylon-coated stainless steel.

Unless otherwise indicated, hardware for stainless steel boxes and other stainless steel items shall be stainless steel.

POLYETHYLENE DUCT, 1-1/4”DIA.

Description: This work shall consist of furnishing and installing empty unit duct at locations where existing foundations are removed and have created a gap between the existing duct and the proposed foundation. This item shall also include a “water-tight” coupling to connect the new unit duct to the existing unit duct. All work and material shall meet the requirements of Section 816 of the Standard Specifications and the details provided on the Plans.

Method of Measurement: Measurement will be paid in accordance with Article 816.04 of the Standard Specifications.

Basis of Payment: This work will be paid for at the Contract unit price for **POLYETHYLENE DUCT, 1-1/4”DIA.**, which price shall be payment for all work as specified herein, including any necessary splices to the exiting unit duct.

DECORATIVE LIGHT POLE, TYPE A

Description: This work shall consist of furnishing and installing a smooth round tapered 30-foot aluminum pole complete with an 8-foot roadway mast arm, a pedestrian fixture mast arm, a 15amp GFI receptacle, two (2) aluminum banner arms, decorative base, and all required hardware. The proposed mounting heights and mast arm lengths and configurations are specified in the bidding schedule and detailed in the Plans. All work and materials shall meet the requirements of Section 830 of the Standard Specifications and the details shown on the Plans and as modified.

Warranty: The manufacturer shall warrant its factory-applied powder coatings against cracking, peeling or excessive fading due to normal climatic exposure for a period of five (5) years from the date of shipment. Damage to the finish coating caused by mechanical abuse, such as rough handling installation or by vandalism, is not covered by this warranty. This warranty shall apply to the repair or replacement (at the manufacturer's discretion) of the material involved and shall not include reimbursement of consequential expenses such as installation or removal of equipment or transportation costs.

Materials: The light pole shall be manufactured by:

Sternberg Lighting
555 Lawrence Avenue
Roselle, IL 60172
847-588-3400

Model No. 480PM/CAS8/CH2230T64-.250/RCC/BDBA/BK

Contact the following representative for more details:

Jeff First
The Lighting Digest
1 W State Street, Suite 100
Geneva, IL 60134
630-566-2274

Basis of Payment: This work will be paid for at the contract unit price per each for **DECORATIVE LIGHT POLE, TYPE A**, of the mounting height, mast arm length, and Type, which price shall be payment in full for all work as specified.

DECORATIVE LIGHT POLE, TYPE B

Description: This work shall consist of furnishing and installing a smooth round tapered 16-foot aluminum pole complete with a 15amp GFI receptacle, dual hanging planter baskets decorative base, and all required hardware. The proposed mounting heights and mast arm lengths and configurations are specified in the bidding schedule and detailed in the Plans. All work and materials shall meet the requirements of Section 830 of the Standard Specifications and the details shown on the Plans and as modified.

Warranty: The manufacturer shall warrant its factory-applied powder coatings against cracking, peeling or excessive fading due to normal climatic exposure for a period of five (5) years from the date of shipment. Damage to the finish coating caused by mechanical abuse, such as rough handling installation or by vandalism, is not covered by this warranty. This warranty shall apply to the repair or replacement (at the manufacturer's discretion) of the material involved and shall not include reimbursement of consequential expenses such as installation or removal of equipment or transportation costs.

Materials: This item shall be manufactured by:

Sternberg Lighting
555 Lawrence Avenue
Roselle, IL 60172
847-588-3400
Model No. CH1715P5-GFI LPIUC/2-LBPM/BK
Contact the following representative for more details:
Jeff First
The Lighting Digest
1 W State Street, Suite 100
Geneva, IL 60134
630-566-2274

Basis of Payment: This work will be paid for at the contract unit price per each for **DECORATIVE LIGHT POLE, TYPE B**, of the mounting height, mast arm length, and Type, which price shall be payment in full for all work as specified.

LUMINAIRE INSTALLATION, TYPE 1

Description: This work shall consist of furnishing and installing a 240 volt 118 watt equivalent luminaire, including branch circuit/extension pole wire as applicable, lamp, fuseholders, mounting hardware and fusing. All work shall meet the requirements of Section 821 of the Standard Specifications except as modified herein.

Manufacturer: This item shall be manufactured by:

Sternberg Lighting
555 Lawrence Avenue
Roselle, IL 60172
847-588-3400
Model No. 1A-1531LED-R-32L40T3-MDL014-FG-HSHB
Contact the following representative for more details:
Jeff First
The Lighting Digest
1 W State Street, Suite 100
Geneva, IL 60134
630-566-2274

Finish: The luminaire housing shall be powder coat painted to match the proposed black powder coat steel pole and mast arm installations.

Basis of Payment: This work shall be paid for at the Contract unit price per each for **LUMINAIRE INSTALLATION, TYPE 1**, of the wattage indicated, which price shall be payment in full for all work as specified.

LUMINAIRE INSTALLATION, TYPE 2
LUMINAIRE INSTALLATION, TYPE 3

Description: This work shall consist of furnishing and installing a 240 volt, 34 & 91 watt equivalent luminaire, including branch circuit/extension pole wire as applicable, lamp, fuseholders, mounting hardware and fusing. All work shall meet the requirements of Section 821 of the Standard Specifications except as modified herein.

Manufacturer: This item shall be manufactured by:

Sternberg Lighting
555 Lawrence Avenue
Roselle, IL 60172
847-588-3400

Post Mount Model No. PT-E450LED-R3-32L40T3-MDL011-FL
Combo Mid-Mount Model No. 1AM-E450LED-R3-16L4-T2-MDL008-FL

Contact the following representative for more details:

Jeff First
The Lighting Digest
1 W State Street, Suite 100
Geneva, IL 60134
630-566-2274

Finish: The luminaire housing shall be powder coat painted to match the proposed black powder coat steel pole and mast arm installations.

Basis of Payment: This work shall be paid for at the Contract unit price per each for **LUMINAIRE INSTALLATION, TYPE 2** and **LUMINAIRE INSTALLATION, TYPE 3**, of the wattage indicated, which price shall be payment in full for all work as specified.

LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET

Description: This item shall consist of the construction of a steel reinforced concrete offset foundation, of the diameter indicated, with offset construction as indicated and complete with raceways, at locations indicated on the plans or as directed by the Engineer where existing utility conflicts do not permit the construction of a standard foundation. A detail of this type of foundation is as shown on the Plans. All work and material shall meet the requirements of Section 836 of the Standard Specifications except as modified herein.

The foundation shall include all excavation, reinforcement, concrete, anchor bolts, nuts, washers grounding elect and raceways.

Materials: Concrete shall be Class "SI" complying with Article 1020 of the Standard Specifications, adopted January 1, 2012.

Reinforcement bars shall comply with Article 1006.10 of the Standard Specifications.

Unless otherwise indicated, anchor bolts shall comply with the requirements of Article 1006.09. Nuts shall be hexagon nuts. All nuts and washers shall be in accordance with Article 1006.08. A detail of the anchor bolts is shown on the Plans.

The entire length of the anchor bolts as well as the nuts and washers shall be hot dip galvanized in accordance with the requirements of ASTM Designation A15.

Unless otherwise indicated, conduit raceways shall be heavy wall rigid polyvinyl chloride (PVC) conduit, (Schedule 40) UL listed and in conformance with NEMA TC2 and Federal Specification WC-1094A. Raceways shall be of the number and size as indicated.

Grounding electrodes shall be installed in accordance with Section 806 of the Standard Specifications.

Construction Requirements: The foundation depths shall be as directed by the Engineer based upon evaluation of the soil report and in accordance with the "Light Pole Foundation Depth Table" found in the Plans.

LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET, Cont'd.

The hole for the foundation shall be made by drilling with an auger, of the same diameter as the foundation. The foundation shall be cast-in-place and allowed to cure for 10 days minimum before the light pole is erected. If soil conditions require the use of a liner to form the hole, the liner shall be withdrawn as the concrete is deposited. The top of the foundation shall be constructed level so that no shims or other leveling device will be needed to set the light standard plumb on the foundation. A liner or form shall be used to produce a uniform smooth side to the top of the foundation. Foundation top shall be chamfered 19.05 mm (3/4-inch) unless otherwise indicated.

Extreme care shall be used in establishing the top elevation of concrete foundations, especially when foundations are installed before final grading is complete. Foundations shall not protrude above grade more than the limits indicated on the plans, except for specifically indicated locations, and where not otherwise indicated, foundation shall not protrude above grade more than three inches (3") above a sixty-inch (60") chord centered at the foundation, at any point around the circumference. Where foundation heights extend beyond specified limits, the Engineer may direct replacement of the foundation and the incorrect foundation will not be measured for payment.

The steel reinforcement, the raceway conduits and the anchor bolts shall be secured in place to each other and properly positioned in the augured hole so that at the time of pouring of concrete mixture in place, the above said components retain their proper positions. Special attention shall be paid to the positioning of the anchor bolts. It is of utmost importance that the anchor bolt projections on top of the foundation, after placement of the concrete, remain in a perfectly vertical position.

Method of Measurement: The foundation shall be measured for payment in feet of foundation in place, with the measurement to be taken along the vertical and horizontal centerline of the foundation except that the total depth shall be not greater than indicated on the Plans and directed by the Engineer, i.e., extra foundation depth, set.

Basis of Payment: This work will be paid for at the contract unit price per foot for **LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET**, which shall be payment in full for the work as shown on the Drawings and described herein.

BREAKAWAY DEVICES, COUPLING, SPECIAL

Description: This work shall consist of furnishing and installing pole to base couplings to make the lighting standards frangible upon vehicular impact. All work and material shall meet the requirements of Section 838 of the "Standard Specifications", except as modified herein.

Method of Measurement: Breakaway couplings used for breakaway devices will be measured for payment for each pole the breakaway device is installed at, not for each individual coupling used at an individual pole and will include the fiberglass shroud.

Basis of Payment: This work will be paid for at the Contract unit price per each for **BREAKAWAY DEVICE, COUPLING, SPECIAL**, which price shall be payment in full for all work as specified.

ELECTRIC CABLE IN CONDUIT, 600 VOLT (XLP-TYPE USE)

Description: This work shall consist of furnishing materials and labor for installation of electric cables in conduit and unit duct as shown on the Plans, complete with all splicing, identification, terminating and testing.

Materials:

General: The cable shall be rated 600 volts and shall be UL listed Type RHH/RHW/XLP/USE.

The cable shall be rated 90°C dry and 75°C wet and shall be suitable for installation in wet and dry locations, exposed to the weather, and shall be resistant to oils and chemicals.

The cable shall be in conformance with ICEA Standard S-66-524, NEMA Standard Publication No. WC-8 and UL Standard 44.

The U.L. listing mark, cable voltage, insulation type and ratings, as well as the cable size shall all be clearly printed on the cable in a color contrasting with the insulation color.

Conductors: Conductors shall be uncoated or coated copper.

Uncoated conductors shall meet the applicable requirements of ASTM Designation B-3, ASTM Designation B-8, ICEA S-68-516, NEMA Standard Publication No. WC-8 and UL Standard 44. Coated conductors shall meet the applicable requirements of ASTM Designation B-33, ASTM Designation B-8, ICEA S-68-615, NEMA Standard Publication No. WC-8 and UL Standard 44.

Unless otherwise indicated, all-conductors shall be stranded. Stranding shall meet the requirements of ASTM Designation B-8 (or may be compact ASTM Designation B-496 for conductors larger than No. 2 AWG), ICEA S-68-516, NEMA Standard Publication No. WC-8 and UL Standard 44.

Insulation: Cable insulation shall incorporate cross-linked polyethylene (XLP) as specified and the insulation shall meet or exceed the requirements of ICEA S-66-524, NEMA Standard Publication No. WC-8, UL Standard 44.

ELECTRIC CABLE IN CONDUIT, 600 VOLT (XLP-TYPE USE)
Cont'd.

Cables sized No. 2 AWG and smaller shall be solid color coded as specified via insulation color and shall be insulated with XLP insulation over the conductor with average thickness as indicated in Table 5.

Conductor Size, AWG	Average Insulation Thickness
No. 10 and Smaller	45 mils
No. 8 Through No. 2	60 mils

Table 5
Insulation Thickness

COLOR CODING BY STRIPING WILL NOT BE ACCEPTABLE.

Unless otherwise indicated, cables sized larger than No. 2 AWG shall be color coded as specified having not less than twelve inches (12") of cable ends length field-taped with half-lapped color tape or by other means approved by the Engineer. Cables No. 2 AWG and larger shall be insulated by XLP insulation over the conductor with average thicknesses as indicated in Table 6.

Conductor Size, AWG	Average Insulation Thickness
No. 1 Through No. 4/0	80 mils
250 MCM thru 500 MCM	95 mils

Table 6
Insulation Thickness

Minimum insulation thickness at any point shall not be less that 90% of the average insulation thickness listed in Tables 5 and 6.

ELECTRIC CABLE IN CONDUIT, 600 VOLT (XLP-TYPE USE)

Cont'd.

All electric cables installed on this Contract shall be color coded. Unless otherwise indicated, neutral wires shall be color coded white. Unless otherwise indicated, single phase 3-wire runs of cable shall be color coded one black, one red and one white and single phase 2-wire runs shall be similarly color coded based on the applicable phase(s) and neutral. Insulated ground wires, where applicable, shall be green. COLORED STRIPING OF CABLES WILL NOT BE ACCEPTABLE IN LIEU OF SPECIFIED COLOR CODING MEANS.

Quality Control: Cables shall be the product of an established, reputable manufacturer and shall be manufactured and tested in accordance with Insulated Cable Engineers Association (ICEA) Publication S-68-516, otherwise referenced as NEMA Standard Publication No. WC-8.

Submittal information shall include demonstration of compliance with all specified requirements.

All cables shall be new, having been manufactured within the time period indicated in Table 7, preceding the date of delivery to the site. A certification from the cable manufacturer attesting to compliance with this requirement shall accompany the submittal.

Plan Quantity	Time Period
Less than 2000 ft.	30 months
2000 ft. and Greater	18 months

Table 7
Maximum Cable Age

All cable shall be delivered to the site in full reels. Cable on the reels shall be protected from damage during shipment and handling by wood lagging or other means acceptable to the Engineer. Reels shall be tagged or otherwise identified to show the UL listing.

Installation: Wires and cables shall be carefully installed to avoid damage to insulation.

ELECTRIC CABLE IN CONDUIT, 600 VOLT (XLP-TYPE USE)

Cont'd.

Wire lubricant shall be used when pulling wires into conduit or unit duct. The lubricant shall be non-injurious to conduits, conductors, insulations or jackets and the lubricant shall be UL listed.

Each run of cable shall have sufficient slack.

Where a number of wires are trained through a box, manhole or handhole, they shall be grouped by circuit where applicable and bundled using appropriate cable ties and supported to minimize pressure or strain on cable insulation.

Wire and cable shall not be bent to a radius less than the manufacturer's recommended bending radius, either in permanent placement or during installation.

Cable pulling apparatus shall have no sharp edges or protrusions which could damage cables or raceways.

Splices, identification and terminations, as required, shall be incidental to this item and shall be in conformance with Basic Materials and Methods, elsewhere herein.

Testing: After installation, including any backfill operations, the cable shall be field tested as specified under Final Acceptance Inspection in the Special Provisions. Cable failing to Pass the field test shall be replaced with new cable at no additional cost.

Measurement: The cable shall be measured for payment per foot, in place. Measurements shall be made in straight lines between changes in direction and to the centers of light standards and control cabinets. All vertical cable and permissible cable slack shall be measured for payment. A total of twelve feet (12') slack shall be allowed for the end of a run terminating at a light pole installed nominally at grade (with or without a breakaway device) and six feet (6') will similarly be allowed when terminating at a controller. Six feet (6') of slack shall be allowed at pull boxes, junction boxes and similar locations.

Basis of Payment: This item will be paid for at the Contract unit price per foot installed for **ELECTRIC CABLE IN CONDUIT, 600 VOLT (XLP-TYPE USE)**, of the size and number of conductors indicated, which shall be payment in full for the work as described herein.

**UNIT DUCT, 600 VOLT (XLP-TYPE USE), 1-½" DIA., POLYETHYLENE,
DIRECTIONALLY BORED**

Description: This work shall include furnishing and installing a cable-duct assembly with the number and size conductor indicated on the Plans and as specified herein. It shall also include a green insulated conductor inside the unit duct to be used specifically as a ground wire. All workmanship and materials shall be in accordance with the requirements of the Standard Specifications, except as modified herein.

All cable, conductor, and conduit shall be new having been manufactured within eighteen (18) months of the date of the Contract. The cable-duct assembly of conductors, cables, and conduit shall be made at the factory in continuous lengths that will permit installation of the longest spans shown in the Plans without splicing or cutting either conduit or cable. Splices of cable or conduit will not be permitted in the trench. Both conduit and cable shall be continuous from pole to pole and pole to handhole. All cables within the unit duct shall be color coded.

Materials: Conductors shall be stranded copper conductors and meet the requirements of the Standard Specifications. Conductor insulation shall be heat and moisture resistant, cross linked polyethylene suitable for use at 75°C in dry or wet locations at 600 volts. It shall conform to Underwriters Laboratories' Standards for XLP. Insulated conductors shall be readily identified by permanent marking indicating the type of insulation and all other information required by Underwriters Laboratories' Standard for XLP insulated conductors. All conductors will be color coded.

Duct shall be of black polyethylene flexible enough for easy coiling and uncoiling, but rigid enough to maintain its shape over its entire life when applied as shown herein. It shall be permanently marked at ten foot (10') intervals on the outside with the manufacturer's name or trademark. The duct shall be flexible enough for easy coiling or uncoiling at -10°C.

The duct shall conform to the requirements of ASTM D-3485 and NEMA Standard Publication No. TC-7. The duct shall be made of high density polyethylene which shall meet the requirements of ASTM D-1248, Type III, Class C and the requirements listed in Table 2-1 of NEMA Standard Publication No. TC-7. Submittal information shall demonstrate compliance with the details of these requirements.

**UNIT DUCT, 600 VOLT (XLP-TYPE USE), 1-1/2" DIA., POLYETHYLENE,
DIRECTIONALLY BORED, Cont'd.**

Installation: The unit duct shall be directionally bored & pulled in accordance with Section 810.04(c) of the Standard Specifications. Unit duct shall be installed so that it is possible to withdraw a conductor and pull in a new one without any excavation. Under no circumstances shall bends be less than 24" radius.

The unit duct shall extend into a below grade handhole and controller foundations not less than six inches (6"). The conductors shall be exposed and the ends shall be neatly trained around the handhole on the cable supports. Unit duct shall be installed intact in steel conduit.

Where unit duct terminates in an anchor base pole, the duct shall terminate at a point halfway between the aperture of the pole and the handhole of the pole. The cables and conductors shall extend eighteen inches (18") out of the pole. It is intended that the duct can be pulled to the opening in the handhole for pulling in a replacement conductor or cable.

All unit ducts which are underground shall be directional bored or placed in conduit at a minimum depth of thirty inches (30"), unless otherwise indicated on the Plans. The unit duct shall be laid loosely on the bottom of the trench. The Contractor shall not attempt to pull the slack out of the duct.

All splices shall be made using compression-type copper compression joints of the size and configuration required for the splice involved. Splices on insulated cables shall be insulated and finished in such a manner as to be moisture proof and in conformance with the Standard Specifications.

Method of Measurement: Unit duct shall be measured in feet along the centerline of the trench to the center of the light standard, control cabinet, or handhole. All vertical cable in structures and slack cable in excess of the lengths allowed in the following table will not be measured for payment. Slack will be paid for as follows:

Junction Box	6 feet of slack
Controllers	6 feet of slack
Base of Standards	12 feet of slack per span

**UNIT DUCT, 600 VOLT (XLP-TYPE USE), 1-1/2" DIA., POLYETHYLENE,
DIRECTIONALLY BORED, Cont'd.**

Provided the cable is in accordance with all of the above Specifications and the Engineer approves, the Contractor may:

- A) Substitute larger stranded copper conductor.
- B) Substitute higher voltage insulation.
- C) Use unit duct containing extra conductors or cables.

No other substitutions will be permitted and no extra compensation will be allowed for substitutions permitted above.

Basis of Payment: Electric cable in duct will be paid for at the Contract unit price per foot for **UNIT DUCT, 600 VOLT (XLP-TYPE USE), 1-1/2" DIAMETER, POLYETHYLENE, DIRECTIONALLY BORED,** of the number and size conductors indicated in the "Bidding Schedule", which price shall include the cost of directionally boring, cable, conductors, including the green ground wire, and polyethylene duct as shown on the Plans and as specified herein, but does not include the cost of any steel conduit, which will all be paid for separately. It shall also include all splicing and testing as described elsewhere in these Specifications.

STAMPED COLORED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

General: This work shall consist of the construction of integrally colored stamped P.C. Concrete Sidewalk with a random stone to match existing pattern at locations shown and detailed on the plans. The contractor shall submit a Brick Red color and random stone pattern stamp mock up to the Engineer for approval before this work is begun. All sidewalk construction under this item shall conform to Section 424 of the Standard Specifications, except modified herein.

Materials: All concrete materials to be used shall be Class "SI" concrete, with the addition of an integrally colored additive.

"The pay item's use shall determine the class of concrete in accordance with Section 1020 of the Standard Specifications, with the exception that the minimum cement factor shall be 6.05 cwt. The coarse aggregate to be used shall contain no more than two percent by weight (mass) of deleterious materials. Deleterious materials shall include substances whose disintegration is accompanied by an increase in volume which may cause spalling of the concrete.

The Contractor shall provide a 2 foot by 2 foot field mock up to demonstrate color of integrally-colored cement concrete sidewalk to be approved by Engineer prior to construction of the proposed sidewalk. The cost of this work shall be included in the unit price of this pay item.

Colored concrete mixes for the entire project are to be consistent. If additional water is added to the colored concrete once a truck is on site, this concrete will be rejected. Cover and protect adjacent construction and concrete from discoloration and spillage during placement and curing of colored concrete. Remove and replace discolored concrete as Engineer directs. The change in any material ingredient in the concrete may require a new mock-up be constructed for the Engineer's approval.

Random Stone Stamping Process: The surface of the finished sidewalk shall be textured by means of placing a mat on the finished surface of the concrete after its initial set, and tapping or pressing a stone pattern in the surface of the concrete. The color for the release agent shall be deep charcoal. All finishing of the concrete shall be done prior to the final pattern being pressed in. Care shall be taken to align the rubber mat-type stencil evenly with the last pressed in section. The final appearance of the finished surface shall appear to be a uniform pattern.

Surface Curing and Sealing: An approved cure and sealer shall be used on the surface of the concrete. The application rate shall be 300 S.F./GAL. by means of a fine mist application sprayer. After slab has cured sufficiently than it can withstand foot traffic, surface curing and sealing shall follow the recommended methods of the manufacturer. The Contractor is required

to submit the Manufacturer's Specification Sheet to the Engineer for review before beginning the cure & seal application.

The Contractor will be responsible for the protection from damage or vandalism of all sidewalk so constructed under this project through the time of the concrete setting up and curing. Any damaged sidewalk shall be replaced as required by the Engineer and at no cost to the Owner.

Basis of Payment: This work will be paid for at the Contract unit prices per square foot for **STAMPED COLORED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH**, which price shall be payment in full for all work as specified herein.

SERVICE INSTALLATION, TYPE C MODIFIED

Description: The ComEd Company will furnish adequate power service, of the voltage specified, single phase, two (2) or three (3) wire, as indicated on the Plans at their service pole. The Contractor's work under this item shall include utility coordination with ComEd, furnishing and installation of a service drop on the ComEd pole, as required by ComEd, detailed on the Plans, or required by this Special Provision, and in accordance with the applicable portions of Section 804 of the Standard Specifications.

Construction: A ten foot (10') length of two inch (2") galvanized steel conduit shall be securely attached to the ComEd pole, and extended down the pole and terminated with a standard two-inch (2") conduit elbow not less than two feet (2') underground. At approximately eight feet (8') above grade, a weatherproof, tamperproof cast aluminum junction box shall be installed in the conduit line with an appropriate-sized circuit breaker installed in the box. The box shall be only as large as will provide sufficient room for the breaker and the wiring. The top of the two-inch (2") conduit shall be fitted with a reducer and subsequently sealed to prevent the entry of moisture into the junction box below. A sufficient length of electric cable shall be provided for ComEd to connect the cable to their transformer terminals or cables above. Where applicable, the existing 2" conduit, cable, and other equipment on the existing lighting service installation pole can be revised.

Basis of Payment: This work will be paid for at the Contract unit price per each for **SERVICE INSTALLATION, TYPE C MODIFIED**, which price shall be payment in full for the furnishing and installing or reusing of all metallic conduit, conduit elbow, galvanized pipe hooks, junction box, conduit reducer, weather-tight connector, pipe couplings, and all vertical electric cable required, as detailed on the Plans, or otherwise conforming to ComEd's standards. Cable and conduit from the service pole to the controller foundation will be paid for under a separate item of the Contract.

STL.10

REMOVE EXISTING JUNCTION BOX

Description: This work shall consist of removing and disposing of existing junction boxes. At the locations shown on the Plan.

The Contractor shall exercise care not to damage the controller or other equipment during the removal process.

Basis of Payment: This work shall be paid for at the Contract unit price per each for **REMOVE EXISTING JUNCTION BOX**, which price shall be payment in full for all work required to remove and dispose of the junction box, and backfill excavated areas with suitable backfill material.

RAILROAD FLAGGING (CC&P)

Description. This work shall be performed as in accordance with Sections 107.12 and 109.05 of the Standard Specifications.

General Requirements. The flagging costs incurred for the work associated at the location of the Des Plaines Avenue and the Chicago, Central & Pacific Railroad (CC&P) grade crossing will be reimbursed by IDOT in accordance with Section 109.05 of the Standard Specifications. The Contractor is responsible for prepaying the CN in advance for flagging services provided. The Contractor shall deposit the cost of flagging services for twenty (20) days with the CN. If the Contractor uses less than 20 days, then the Contractor will be charged for the days used and the balance will be reimbursed back to the Contractor. The Contractor will then be reimbursed by IDOT for the actual number of flagging days used. The Contractor is required to conduct operations at all times in full compliance with the rules, regulations and requirements of the CC&P Special Provisions contained in the Contract Specifications and as described below.

The Contractor shall give thirty (30) days advance written notice to the Engineering Superintendent of the Railroad or his authorized representative prior to commencement of any construction work on the Improvement affecting the railroad property. The Contractor shall notify the Railroad sufficiently in advance of when the protective services are required. The Contractor shall make every effort to notify the Railroad in advance if a previously requested flagger will not be needed for any reason. Any costs for flagging protection provided by the Railroad at the Contractor's request for those days when the Contractor does not work shall be borne by the Contractor.

Basis of Payment. RAILROAD FLAGGING (CC&P) will be paid for according to Article 109.05 of the Standard Specifications.

File: P-12304

LICENSE FOR UNDERGROUND PIPELINES, CABLES AND CONDUITS

THIS AGREEMENT made in duplicate this 24th day of October 2024 between CHICAGO, CENTRAL & PACIFIC RAILROAD COMPANY, party of the first part, hereinafter called the Railroad, and

Village of North Riverside
2401 Des Plaines Avenue
North Riverside, IL. 60546

Party or parties of the second part, hereinafter called the Licensee,

WITNESSETH:

1. In consideration of a one-time fee of **\$4,800.00** in hand paid by the Licensee to the Railroad, the receipt whereof is hereby acknowledged and the faithful performance by the Licensee of the covenants herein contained, the Railroad, insofar as it lawfully may, hereby grants to the Licensee license and permission to remove one (1) existing street light pole and foundation and install two (2) new poles with concrete foundations, unit duct and cable, maximum voltage of 240, inside an existing 36" conduit (whether one or more pipes, cables or conduits hereinafter referred to as the "pipeline") across, along and underneath the property of the Railroad at Mile Post 12.85, Freeport Subdivision in North Riverside, IL., said pipeline being more particularly shown upon the exhibits hereto attached and made a part hereof, subject to the following conditions and specifications:
2. The license and permission herein granted to Licensee are subject and subordinate; however, to the rights in Railroad, its successors and assigns, its grantees, lessees and licensees, to construct, reconstruct, operate, use, maintain, repair and renew on, beneath or above the property covered hereby, any structures, improvements or facilities of similar or different character as are now or in the future may be located on, beneath or above said properties.
3. Licensee shall, except in emergencies, give not less than 72 hours written notice to Railroad of the day, hour and location that it proposes to undertake any construction or maintenance work and in the event of an emergency shall notify Railroad as soon as possible.

File: P-12304

Licensee shall require each of its contractors and subcontractors to observe and conform to the conditions and requirements specified herein; and for the purposes of the safety, protective and indemnification provisions hereof, such contractors and subcontractors, their agents, servants and employees, and other persons on the Railroad property at the invitation of the Licensee, its contractors or subcontractors, shall be deemed the agents or employees of the Licensee.

4. Licensee shall, at no expense to Railroad, obtain all permits and approvals required to exercise this license and Licensee shall install, maintain and operate its facilities in accordance with all requirements of lawful public authority. Licensee shall be responsible for any taxes, assessments and charges made against the pipeline or other of Licensee's facilities on Railroad's property or the operation of any of them.
5. The pipeline shall be installed at least 36" feet below the tracks (of the Railroad, measured from base of rail to top of pipeline or, if no tracks are located on the property, at least 36" below natural ground. Said pipeline shall be constructed of such material and in such a manner as will assure the safety of Railroad. Railroad's authorized representative shall have the right, but not the duty, to require certain materials or procedures to be used or to supervise the construction, maintenance, restoration or other work on Railroad's property. If in the opinion of Railroad's authorized representative casing of the pipeline is required at the time of installation or at any time subsequent thereto, Licensee shall promptly arrange for such casing at its own risk and expense.
6. If, in the opinion of the authorized representative of Railroad the work to be done by the Licensee pursuant to this agreement will make necessary or desirable any change in the Railroad's facilities, or those of the Railroad's tenants or licensees, on the Railroad's property, the Railroad shall have the right, but not the duty, to make such changes, the expense thereof to be borne by the Licensee.

Railroad shall have the right, but not the duty, to furnish flagging or other protection or to perform work to support its tracks or otherwise protect its property or facilities at any time, at Licensee's sole risk and expense.

7. Licensee agrees at any time, or from time to time, at its own risk and expense, upon request of the authorized representative of the Railroad, to make such change or changes as may be necessary in the opinion of said representative to accommodate any change or improvements which Railroad may desire to make in or upon its property. In case Licensee shall fail within thirty (30) days after notice from Railroad to make such change or changes, Railroad shall have the right, but not the duty, to make such change or changes, or remove Licensee's facilities from said property at the risk and expense of Licensee.

File: P-12304

8. Licensee shall at its expense take such measures as may be necessary and adequate in connection with its property or the property of railroad to protect facilities of Railroad and those of others using Railroad's property from interference by induction, conduction, physical contact or otherwise attributable to the exercise by Licensee of the license granted to it.

In the event Railroad advises Licensee to take any action to protect Railroad, its facilities or facilities on Railroad's property, Licensee shall promptly take the indicated action, including, but not limited to, stopping the operation of the pipeline. If Licensee fails to do so, Railroad shall have the right, but not the duty, to perform on behalf of Licensee at the sole risk and expense of Licensee.

9. In the event Railroad elects to renew, replace, repair or alter any tracks or other facilities or to construct new facilities or to make other use of the property covered by this license, and in connection therewith requires the removal of any facilities placed by Licensee on Railroad's property or should any facilities of Licensee need renewal or repair, Licensee shall, within 30 days of receipt of notice, arrange for such removal, renewal or repair at Licensee's risk and expense. In the event removal is required, the facilities shall be relocated at such location on Railroad's property as is designated by Railroad, provided that Railroad's authorized representative determines that a location is reasonably available. Renewal or repair shall be to such condition as is indicated by Railroad's authorized representative. If Licensee fails to comply with the foregoing, Railroad shall have the right, but not the duty, to remove, renew or repair such facilities at the sole risk and expense of Licensee.
10. Cost and expense for work performed by the Railroad pursuant to this agreement shall consist of the direct cost of labor and material plus Railroad's standard additives in effect at the time the work is performed. All payments required of Licensee under this agreement shall be made promptly upon presentation of a bill.
11. Licensee, as a further consideration and as a condition without which this license would not have been granted, agrees to indemnify and save harmless Railroad, its officers, employees and agents and to assume all risk, responsibility and liability for death of, or injury to, any persons, including, but not limited to, officers, employees, agents, patrons and licensees of the parties hereto, and for loss, damage or injury to any property, including but not limited to, that belonging to the parties hereto (together with all liability for any expense, attorneys' fees and costs incurred or sustained by the Railroad, whether in defense of any such claims, demands, actions and causes of action or in the enforcements of the indemnification rights hereby conferred) arising from, growing out of, or in any manner or degree directly or indirectly caused by, attributable to, or resulting

File: P-12304

from the grant or exercise of this license or the construction, maintenance, repair, renewal, alteration, change, relocation, existence, presence, use, operation, or removal of any structure incident thereto, or from any activity conducted on or occurrence originating on the area covered by the license regardless of the negligence of Railroad, its officers, employees and agents. Licensee further agrees to release and indemnify and save harmless Railroad, its officers, employees, agents, patrons or invitees from all liability to Licensee, its officers, employees, agents or patrons, resulting from railroad operations at or near the area in which the license is to be granted whether or not the death, injury or damage resulting therefrom may be due to the negligence of the Railroad, its officers, employees or agents or otherwise. At the election of Railroad, the Licensee, upon receipt of notice to that effect, shall assume or join in the defense of any claim based upon allegations purporting to bring said claim within the coverage of this section.

12. Licensee shall secure, and maintain in place so long as this agreement is in effect, Commercial General Liability Insurance (Occurrence Form) in an amount not less than \$5,000,000 per occurrence, with an aggregate of not less than \$10,000,000 per annual period. The policy must name Railroad and its parent company, Canadian National Railway Company, as additional insureds in the following form:

Chicago, Central & Pacific Railroad Company, and its Parent
Corporation, Canadian National Railway Company
17641 South Ashland Avenue
Homewood, IL 60430

The policy must not contain any provisions excluding coverage for injury, loss or damage arising out of or resulting from (a) doing business on, near, or adjacent to railroad track or facilities, or (b) surface or subsurface pollution, contamination or seepage, or from handling, treatment, disposal or dumping of waste materials or substances. Before commencing work, Licensee shall deliver to Railroad a certificate of insurance evidencing the foregoing coverage's and true and complete copies of the policies described above. Each policy shall include a waiver by the insurer of any right of subrogation against any recovery by or on behalf of any insured. Each policy shall provide for not less than thirty days prior written notice to Railroad of cancellation of or any material change in that policy.

13. If a contractor is to be employed by the Licensee for the installation of Facilities pursuant to this License, then, before commencing work, the contractor shall provide and maintain the following insurance, in form and amount and with companies satisfactory to, and as approved by, the RAILROAD.
 - A. Statutory Workers' Compensation and Employer's Liability insurance.

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- B. Automobile Liability in an amount not less than \$1,000,000 dollars combined single limit.
 - C. An Occurrence Form Railroad Protective Policy with limits of not less than \$5,000,000 dollars per occurrence for Bodily Injury Liability, Property Damage Liability and Physical Damage to Property with \$10,000,000 dollars aggregate for the term of the policy with respect of Bodily Injury Liability, Property Damage Liability and Physical Damage to Property. The Policy must name the appropriate RAILROAD as the insured, and shall provide for not less than ten (10) days prior written notice to the RAILROAD'S as cancellation of, or any material change in the policy.
14. It is expressly understood Railroad does not warrant title to the premises and Licensee accepts the grant of privileges contained herein subject to all lawful outstanding existing liens and superior rights. Licensee agrees it shall not have to make any claim against Railroad for damages on account of any deficiency in title and agrees that in the event of failure or insufficiency of such title the sole remedy of Licensee shall be the right to return of the consideration paid in advance, provided for herein, or a proportionate part thereof in the event of a partial deficiency or insufficiency of title. Licensee further agrees to indemnify and save harmless the Railroad and to assure all risk, responsibility and liability (including any expenses, attorneys' fees and costs incurred or sustained by Railroad) arising from, growing out of, or in any manner or degree directly or indirectly attributable to or resulting from any deficiency or insufficiency of its title affecting the right of the Railroad to make this grant.
15. This agreement shall continue in force indefinitely from and after the date hereof, subject, however, to the right of either party to terminate this agreement as to the entire pipeline and all of the facilities of Licensee, or any part thereof, at any time or from time to time, as it may require, upon giving the other party ninety (90) days notice in writing of its desire to terminate this agreement, and indicating in said notice the extent of said line and facilities to which such termination shall apply. When this agreement shall be terminated as to the entire line and all of the facilities of Licensee or as to any part thereof, Licensee within thirty (30) days after the expiration of the time stated in said notice, agrees at its own risk and expense to remove said facilities from the property of Railroad, or such portion thereof as Railroad shall require removed, and to restore the railroad premises to a neat and safe condition, and if Licensee shall fail to do so within said time, Railroad shall have the right, but not the duty, to remove and restore the same, at the risk and expense of Licensee. Nothing herein contained shall be construed as conferring any property right on Licensee.
16. In case Railroad shall at any time, or from time to time, require the removal of only a portion of said pipeline, this agreement shall continue in force and be

File: P-12304

applicable to the portion of portions of said pipeline and other facilities remaining from time to time until said entire pipeline has been removed and the rental shall be adjusted accordingly.

17. Nothing in this agreement shall be construed to place any responsibility on Railroad for the quality of the construction, maintenance or other work performed on behalf of Licensee hereunder or for the condition of any of Licensee's facilities.

Any approval given or supervision exercised by Railroad hereunder, or failure of Railroad to object to any work done, material used or method of construction, reconstruction or maintenance, shall not be construed to relieve Licensee of its obligations under this Agreement.

18. This Agreement shall not be binding on either party hereto until all parties have executed the space provide below.


19. This agreement shall be binding on the successors and assigns of the parties hereto, but no assignment hereof by the Licensee, its successors, legal representatives or assigns, shall be binding upon the Railroad without its written consent in each instance.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed in duplicate, the day and year first above written.

CHICAGO, CENTRAL & PACIFIC RAILROAD COMPANY

By: 
James V. Fountain - Senior Manager, Real Estate

VILAGE OF NORTH RIVERSIDE

By:  Susan Scaepiniti
Name and Title Village Administrator 11/7/24



CN System Engineering

Matthew Arflin
Design and Construction
Field Engineer
[FE Address]
[FE City], [FE State] [FE Zip]
T [FE Phone]

October 24, 2024

Sue Scarpiniti
Village Administrator
Village of North Riverside
2401 Desplaines Ave
North Riverside, IL 60546

Subject: P-12304: Chicago, Central & Pacific Railroad Company, FREEPORT Subdivision, MP 12.85 - 12.85

CN Engineering Design & Construction has reviewed the request for New Underground Fiber / removal of old . There are no engineering objections provided the following occurs:

- 1.) CN Utility Locate Required.
- 2.) CN's operations are not to be impaired or effected by any of the described work.
- 3.) A flagman, railroad representative is to be present during any and all work on, over, under or near railroad property.
- 4.) All employees of contractors not hired by CN that will work on, over, under or near CN property are required to have, at a minimum, safety certification with www.contractororientation.com and the railroad representative will be responsible for verifying and documenting said certifications.
- 5.) Installer must monitor top of rail elevations via daily surveying for borings greater than 6 in. in size and that occur under CN tracks. A log of top of rail elevations may be requested at any time throughout the duration work.
- 6.) Any work that involves temporary traffic control plans or railroad grade crossings should follow the requirements of the current edition of MUTCD Section 8A.08 Temporary Traffic Control Zones and MUTCD Section 6. Traffic plan to be presented and discussed with Railroad Flagman / Railroad representative during every briefing.



CN System Engineering

Matthew Arflin
Design and Construction
Field Engineer
[FE Address]
[FE City], [FE State] [FE Zip]
T [FE Phone]

This letter shall be valid for a period of two (2) years from the date herein. If the work has not been completed by then, the application will need to be reviewed again to ensure it is in accordance with all applicable regulatory requirements and standards.

Sincerely,

Matthew Arflin
CN Field Engineer

CN Request for Flagging Services and Cable Location

Project Information:	
Please fill in each cell for processing	
Is this a new project?	Select answer
List CN Project # (Example SO# 123456, Network# R1234, PSC-132):	
Contractor's Right of Entry (ROE), License, Permit #:	
Date of Agreement for ROE, License or Permit:	
Termination Date of Agreement for ROE, License or Permit (If Applicable):	
Does the scope of work include underground, pile driving, excavation or other activities which would require a Railroad Cable Locate? Note: railroad cables and fibers are not part of any state utility locate programs. If a contractor shows up on site to perform work that requires a cable locate and it was not requested, the flagger will shut down the project	Select answer
Does your project require vehicular traffic to be shifted out of its intended lane against the current of traffic at a railroad grade crossing?	Select answer
Railroad Subsidiary (listed on your agreement):	Select Railroad Subsidiary
<p>Licensee and/or their contractor shall request, prepay, and secure Railroad Company signal facility locates by written notice to Railroad Company along with submission of CN's "Request for Flagging Services" form at least, 10 business days in advance of proposed performance of any work or access to Railroad Company property. Dates requested are subject to Flagging's availability. Notice to Railroad Company does not fulfill or satisfy any other notification requirements for utility locates for non-railroad facilities.</p> <p><i>You must have an agreement with a CN railroad subsidiary, such as a Right of Entry, Permit, License or Formal Agreement in addition to any necessary flagging before you may enter CN property.</i></p>	
Flagging Protection Schedule:	
Requested Dates for Flagger Protection: Dates requested are subject to Flagging Co. availability and any project needing a cable locate will need 10 days minimum advance notice. This should be considered when requesting dates for flagging.	
Estimated Duration (in days) for Flagger:	
Estimated Work Schedule (example Mon. – Sat.)	
Daily Start Time / End Time (example 0700 to 1700 etc.): (Flagger start and end time may vary based on type of protection required)	
Flagging Protection Location:	
Railroad Mile Post (MP):	
Railroad Subdivision:	
Project's Location (Street location/intersection):	
Project - City / State:	
Project Description (example HDD, Jack and Bore, Encroachment, Underground or Overhead Pipeline / Wireline crossing, etc.):	
Location for flagger to report:	
Field Contact Person(s):	1 st Alternate
Mobile Phone Number(s):	1 st Alternate
Email Address(s):	

CN Request for Flagging Services and Cable Location

Billing Information:			
Company Name:			
Contact Name:			
E-Mail:			
Billing Address:			
City/State:			
ZIP Code:			
Company Phone:			
Electronic Payment Instructions		Payment Information	
Financial Institution	HARRIS TRUST AND SAVINGS BANK 311 WEST MONROE, CHICAGO, IL	Customer Number (if available)	
Account Name	Grand Trunk Western	CN Contact	
Account	274-733-5	Service Requested (Flagging MP, Request Date)	
US ROUTING (ABA)	071 000 288		
Remittance Details	nfcashmanagement@cn.ca	Prepayment Amount	
Please send payment remittance details and copy of this flagging request to nfcashmanagement@cn.ca			

Before Flagging Service is provided:
CN required online training must be completed before Flagging Protection will be scheduled.
Prepayment must be received before Flagging Protection will be scheduled.
There is an 8-hour minimum per day. The base rate for Flagging Protection is \$2,500 for 11 hours. Additional overtime hours must be prepaid at the rate of \$275.00 per hour. Weekends and Holidays must be prepaid at the overtime rate of \$3,025 / 11 hour minimum. (Rates Effective October 1, 2023.)
If additional days of flagging protection are required, they must be prepaid in advance.
Any prepayment not used can be refunded.
Railroad Cable Location must be prepaid, the cost is \$975.00 per locate.

This completed form must be sent with a map, confirmation of electronic prepayment, and proof of insurance to US_Flagging@cn.ca.

CN Flagging Department

US Flagging
 T: 248-914-9695
 17641 South Ashland Ave.
 Homewood, IL 60430
US_Flagging@cn.ca

I, _____, agree to pay for flagging and/or cable locate services as requested _____
 Print Name Signature

TRAFFIC CONTROL PLAN

Effective: September 30, 1985

Revised: January 1, 2007

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS: 701101-05
 701427-05
 701601-09
 701606-10
 701701-10
 701801-06
 701901-10

SPECIAL PROVISIONS: Maintenance of Roadways
Public Convenience and Safety (D-1)

BDE SPECIAL PROVISIONS: Vehicle and Equipment Warning Lights
Work Zone Traffic Control Devices

DETAILS: TC-10 Traffic Control and Protection for Side Roads,
 Intersections and Driveways
 TC-22 Arterial Road Information Sign

MAINTENANCE OF ROADWAYS (D1)

Effective: September 30, 1985 Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

PUBLIC CONVENIENCE AND SAFETY (D1)

Effective: May 1, 2012

Revised: July 15, 2012

Add the following to the end of the fourth paragraph of Article 107.09:

“If the holiday is on a Saturday or Sunday, and is legally observed on a Friday or Monday, the length of Holiday Period for Monday or Friday shall apply.”

Add the following sentence after the Holiday Period table in the fourth paragraph of Article 107.09:

“The Length of Holiday Period for Thanksgiving shall be from 5:00 AM the Wednesday prior to 11:59 PM the Sunday After”

Delete the fifth paragraph of Article 107.09 of the Standard Specifications:

“On weekends, excluding holidays, roadways with Average Daily Traffic of 25,000 or greater, all lanes shall be open to traffic from 3:00 P.M. Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical.”

STATUS OF UTILITIES (D-1)

Effective: June 1, 2016

Revised: January 1, 2020

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information regarding their facilities and the proposed improvements. The tables below contain a description of specific conflicts to be resolved and/or facilities which will require some action on the part of the Department's contractor to proceed with work. Each table entry includes an identification of the action necessary and, if applicable, the estimated duration required for the resolution.

UTILITIES TO BE ADJUSTED

Conflicts noted below have been identified by following the suggested staging plan included in the contract. The company has been notified of all conflicts and will be required to obtain the necessary permits to complete their work; in some instances, resolution will be a function of the construction staging. The responsible agency must relocate, or complete new installations as noted below; this work has been deemed necessary to be complete for the Department's contractor to then work in the stage under which the item has been listed.

PRE-STAGE

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	DURATION OF TIME
DesPlaines Ave. Sta. 11+00, RT to Sta. 16+00, RT	Gas Line	Existing Gas Main Conflicts with proposed Light Poles & Conduit	Nicor	To be relocated prior to the beginning of construction if in conflict.

UTILITIES TO BE WATCHED AND PROTECTED

The areas of concern noted below have been identified. The information provided is not a comprehensive list of all remaining utilities, but those which during coordination were identified as ones which might require the Contractor to take into consideration when making the determination of the means and methods that would be required to construct the proposed improvement. In some instances, the contractor will be responsible for notifying the owner in advance of the work to take place so necessary staffing on the owner's part can be secured.

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER
Parkways throughout project	Gas	Gas Main - no conflicts anticipated – Crossings likely – Contractor to call JULIE and protect any utility.	<u>NiCor</u> Utility Coordinator 1844 Ferry Road, Floor 3W Naperville, IL 60563 Attn: Ms. Constance Lane Phone: 630-983-8676 ext 2361
Parkways throughout Project	Phone	Underground Cable - no conflicts anticipated	<u>AT&T</u> 1000 Commerce Drive, 2nd Fl Oak Brook, IL 60523 Attn: Mr. Robert Hacker Phone: 630-941-2565
Parkways throughout Project	Cable	Underground Cable- no conflicts anticipated.	<u>Comcast</u> Drafting & Design Department 668 Industrial Drive Elmhurst, IL 60126-1022 Attn: Ms. Martha Gieras Phone: 630-600-6346
Parkways throughout Project	Electric	Overhead and Underground Power Lines - no conflicts anticipated,	<u>ComEd</u> 1N423 Swift Road Lombard, IL 60148 Attn: Mr. Joe Stacho Phone: 630-424-5704
Parkways throughout Project	Street Lighting	Underground – Contractor to uncover and maintain utility.	<u>Village of North Riverside</u> Public Works 2401 S. Des Plaines Avenue North Riverside, IL 60546 Mr. Vince Ranieri, Director Phone: 708-762-5885
Beneath pavement throughout project, as	Water Main	All utilities shall be exposed and protected.	<u>Village of North Riverside</u>

shown on the plans.			Public Works 2401 S. Des Plaines Avenue North Riverside, IL 60546 Mr. Vince Ranieri, Director Phone: 708-762-5885
Beneath pavement throughout project, as shown on the plans.	Combined Sewer	All utilities shall be exposed and protected.	<u>Village of North Riverside</u> Public Works 2401 S. Des Plaines Avenue North Riverside, IL 60546 Mr. Vince Ranieri, Director Phone: 708-762-5885

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address
AT&T	Tom Laskowski / Rober Hacker	630-573-5643/630-941-2565	g05256@att.com / tl7895@att.com
ComEd	Joe Stacho	630-424-5704	plansubmittalsandmaprequests@exeloncorp.com
Comcast	Thomas Munar / Martha Gieras	630-600-6347 / 630-600-6346	Thomas_Munar@comcast.com
Nicor	Michal Ann Beyke/Constance Lane	630-388-2761/630-983-8676	MBeyke@southernco.com >
Verizon	Joe Chaney	855-387-4648 (General No.)	joe.chaney@oneverizon.com

The above represents the best information available to the Department and is included for the convenience of the bidder. The days required for conflict resolution should be considered in the bid as this information has also been factored into the timeline identified for the project when setting the completion date. The applicable portions of the Standard Specifications for Road and Bridge Construction shall apply.

Estimated duration of time provided above for the first conflicts identified will begin on the date of the executed contract regardless of the status of the utility relocations. The responsible agencies will be working toward resolving subsequent conflicts in conjunction with contractor activities in the number of days noted.

The estimated relocation duration must be part of the progress schedule submitted by the contractor. A utility kickoff meeting will be scheduled between the Department, the Department's contractor and the utility companies when necessary. The Department's contractor is responsible for contacting J.U.L.I.E. prior to all excavation work.

AVAILABLE REPORTS (D1 LR)

Effective: July 1, 2021

No project specific reports were prepared.

When applicable, the following checked reports and record information is available for Bidders' reference upon request:

- Record structural plans
- Preliminary Site Investigation (PSI) (IDOT ROW)
- Preliminary Site Investigation (PSI) (Local ROW)
- Preliminary Environmental Site Assessment (PESA) (IDOT ROW)
- Preliminary Environmental Site Assessment (PESA) (Local ROW)
- Soils/Geotechnical Report
- Boring Logs
- Pavement Cores
- Location Drainage Study (LDS)
- Hydraulic Report
- Noise Analysis
- Other: Uncontaminated Soil Certification (LPC-663)

Those seeking these reports should request access from:

John E. Fitzgerald, P.E.
Novotny Engineering
Cell: 630-878-1820
Office: 630-887-8640
Email: jfitzgerald@novotnyengineering.com

TEMPORARY INFORMATION SIGNING (D1)

Effective: November 13, 1996

Revised: January 29, 2020

Description.

This work shall consist of furnishing, installing, maintaining, relocating for various states of construction and eventually removing temporary informational signs. Included in this item may be ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

Materials.

Materials shall be according to the following Articles of Section 1000 - Materials:

	<u>Item</u>	<u>Article/Section</u>
a.)	Sign Base (Note 1)	1090
b.)	Sign Face (Note 2)	1091
c.)	Sign Legends	1091
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 3)	1090.02

Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.

Note 2. The sign face material shall be in accordance with the Department's Fabrication of Highway Signs Policy.

Note 3. The overlay panels shall be 0.08 inch (2 mm) thick.

GENERAL CONSTRUCTION REQUIREMENTS

Installation.

The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

The attachment of temporary signs to existing bridges, sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs and/or structures due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

Method of Measurement.

This work shall be measured for payment in square feet (square meters) edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs will be included as part of this pay item.

Basis Of Payment.

This work shall be paid for at the contract unit price per square foot (square meter) for TEMPORARY INFORMATION SIGNING.

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION
FOR
INSURANCE

Effective: February 1, 2007
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

VILLAGE OF NORTH RIVERSIDE

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Lighting Improvements Office Phone Number, if available: _____

Physical Site Location (address, including number and street):

DesPlaines Avenue - Cermak Road to 26th Street

City: North Riverside State: IL Zip Code: 60546

County: Cook Township: Riverside

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.84621 Longitude: - 87.82309

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): _____ Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): _____

II. Owner/Operator Information for Source Site

Site Owner

Name: Village of North Riverside

Street Address: 2401 S DesPlaines Ave

PO Box: _____

City: North Riverside State: IL

Zip Code: 60546 Phone: (708) 762-5885

Contact: Vince Ranieri

Email, if available: _____

Site Operator

Name: Village of North Riverside

Street Address: 2401 S DesPlaines Ave

PO Box: _____

City: North Riverside State: IL

Zip Code: 60546 Phone: (708) 762-5885

Contact: Vince Ranieri

Email, if available: _____

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: Lighting Improvements Latitude: 41.84621 Longitude: - 87.82309

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

Sampled at 8 locations & chemical laboratory testing was performed on representative sample from each as all were adjacent to PIPs per PESA. Materials certified herewith as CCDD material must be free of rebar, garbage, odors etc. and any said materials must be segregated from CCDD materials and disposed of in other legal means.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

SEECO screened all sample points for volatile organics using a Photo Ionization Detector. No readings indicated the presence of volatile organics associated with contamination at the locations tested. Laboratory analysis tests were within the MAC range set forth by the IEPA and soil pH range is acceptable (results attached).

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

- I, Garrett Gray, PE (name of licensed professional engineer or geologist)

certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

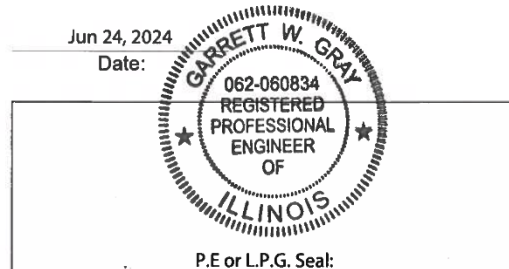
Company Name: SEECO Environmental Services, Inc.
Street Address: 7350 Duvan Drive
City: Tinley Park State: IL Zip Code: 60477
Phone: 708-429-1685

Garrett Gray, PE
Printed Name: _____



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Jun 24, 2024
Date:



CEMENT, FINELY DIVIDED MINERALS, ADMIXTURES; CONCRETE, AND MORTAR (BDE)

Effective: January 1, 2025

Revise the first paragraph of Article 285.05 of the Standard Specifications to read:

“285.05 Fabric Formed Concrete Revetment Mat. The grout shall consist of a mixture of cement, fine aggregate, and water so proportioned and mixed as to provide a pumpable slurry. Fly ash or ground granulated blast furnace (GGBF) slag, and concrete admixtures may be used at the option of the Contractor. The grout shall have an air content of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The mix shall obtain a compressive strength of 2500 psi (17,000 kPa) at 28 days according to Article 1020.09.”

Revise Article 302.02 of the Standard Specifications to read:

“302.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Hydrated Lime	1012.01
(d) By-Product, Hydrated Lime	1012.02
(e) By-Product, Non-Hydrated Lime	1012.03
(f) Lime Slurry	1012.04
(g) Fly Ash	1010
(h) Soil for Soil Modification (Note 1)	1009.01
(i) Bituminous Materials (Note 2)	1032

Note 1. This soil requirement only applies when modifying with lime (slurry or dry).

Note 2. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250.”

Revise Article 312.07(c) of the Standard Specifications to read:

“(c) Cement1001”

Add Article 312.07(i) of the Standard Specifications to read:

“(i) Ground Granulated Blast Furnace (GGBF) Slag1010”

Revise the first paragraph of Article 312.09 of the Standard Specifications to read:

“312.09 Proportioning and Mix Design. At least 60 days prior to start of placing CAM II, the Contractor shall submit samples of materials to be used in the work for proportioning and testing.

The mixture shall contain a minimum of 200 lb (120 kg) of cement per cubic yard (cubic meter). Cement may be replaced with fly ash or ground granulated blast furnace (GGBF) slag according to Article 1020.05(c)(1) or 1020.05(c)(2), respectively, however the minimum cement content in the mixture shall be 170 lbs/cu yd (101 kg/cu m). Blends of coarse and fine aggregates will be permitted, provided the volume of fine aggregate does not exceed the volume of coarse aggregate. The Engineer will determine the proportions of materials for the mixture according to the "Portland Cement Concrete Level III Technician Course" manual. However, the Contractor may substitute their own mix design. Article 1020.05(a) shall apply, and a Level III PCC Technician shall develop the mix design."

Revise Article 352.02 of the Standard Specifications to read:

"352.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement (Note 1)	1001
(b) Soil for Soil-Cement Base Course	1009.03
(c) Water	1002
(d) Bituminous Materials (Note 2)	1032

Note 1. Bulk cement may be used for the traveling mixing plant method if the equipment for handling, weighing, and spreading the cement is approved by the Engineer.

Note 2. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250."

Revise Article 404.02 of the Standard Specifications to read:

"404.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.08
(d) Bituminous Material (Tack Coat)	1032.06
(e) Emulsified Asphalts (Note 1) (Note 2)	1032.06
(f) Fiber Modified Joint Sealer	1050.05
(g) Additives (Note 3)	

Note 1. When used for slurry seal, the emulsified asphalt shall be CQS-1h according to Article 1032.06(b).

Note 2. When used for micro-surfacing, the emulsified asphalt shall be CQS-1hP according to Article 1032.06(e).

Note 3. Additives may be added to the emulsion mix or any of the component materials to provide the control of the quick-traffic properties. They shall be included as part of the mix design and be compatible with the other components of the mix.

Revise the last sentence of the fourth paragraph of Article 404.08 of the Standard Specifications to read:

“When approved by the Engineer, the sealant may be dusted with fine sand, cement, or mineral filler to prevent tracking.”

Revise Note 2 of Article 516.02 of the Standard Specifications to read:

“Note 2. The sand-cement grout mix shall be according to Section 1020 and shall be a 1:1 blend of sand and cement comprised of a Type I, IL, or II cement at 185 lb/cu yd (110 kg/cu m). The maximum water cement ratio shall be sufficient to provide a flowable mixture with a typical slump of 10 in. (250 mm).”

Revise Note 2 of Article 543.02 of the Standard Specifications to read:

“Note 2. The grout mixture shall be 6.50 hundredweight/cu yd (385 kg/cu m) of cement plus fine aggregate and water. Fly ash or ground granulated blast furnace (GGBF) slag may replace a maximum of 5.25 hundredweight/cu yd (310 kg/cu m) of the cement. The water/cement ratio, according to Article 1020.06, shall not exceed 0.60. An air-entraining admixture shall be used to produce an air content, according to Article 1020.08, of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The Contractor shall have the option to use a water-reducing or high range water-reducing admixture.”

Revise Article 583.01 of the Standard Specifications to read:

“**583.01 Description.** This work shall consist of placing cement mortar along precast, prestressed concrete bridge deck beams as required for fairing out any unevenness between adjacent deck beams prior to placing of waterproofing membrane and surfacing.”

Revise Article 583.02(a) of the Standard Specifications to read:

“(a) Cement1001”

Revise the first paragraph of Article 583.03 of the Standard Specifications to read:

“**583.03 General.** This work shall only be performed when the air temperature is 45 °F (7 °C) and rising. The mixture for cement mortar shall consist of three parts sand to one part cement by volume. The amount of water shall be no more than that necessary to produce a workable, plastic mortar.”

Revise Note 2/ in Article 1003.01(b) of the Standard Specifications to read:

“2/ Applies only to sand. Sand exceeding the colorimetric test standard of 11 (Illinois Modified AASHTO T 21) will be checked for mortar making properties according to Illinois Modified ASTM C 87 and shall develop a compressive strength at the age of 14 days when using Type I, IL, or II cement of not less than 95 percent of the comparable standard.

Revise the second sentence of Article 1003.02(e)(1) of the Standard Specifications to read:

“The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) of 0.90 percent or greater.”

Revise the first sentence of the second paragraph of Article 1003.02(e)(3) of the Standard Specifications to read:

“The ASTM C 1293 test shall be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) of 0.80 percent or greater.”

Revise the second sentence of Article 1004.02(g)(1) of the Standard Specifications to read:

“The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) of 0.90 percent or greater.”

Revise Article 1017.01 of the Standard Specifications to read:

“**1017.01 Requirements.** The mortar shall be high-strength according to ASTM C 387 and shall have a minimum 80.0 percent relative dynamic modulus of elasticity when tested by the Department according to Illinois Modified AASHTO T 161 or AASHTO T 161 when tested by an independent lab. The high-strength mortar shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the high-strength mortar shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the high-strength mortar shall be according to the manufacturer’s specifications. The Department will maintain a qualified product list.”

Revise the fourth sentence of Article 1018.01 of the Standard Specifications to read:

“The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department.”

Revise Article 1019.02 of the Standard Specifications to read:

“**1019.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002

- (c) Fine Aggregate for Controlled Low-Strength Material (CLSM) 1003.06
- (d) Fly Ash 1010
- (e) Ground Granulated Blast Furnace (GGBF) Slag..... 1010
- (f) Admixtures (Note 1)

Note 1. The air-entraining admixture may be in powder or liquid form. Prior to approval, a CLSM air-entraining admixture will be evaluated by the Department. The admixture shall be able to meet the air content requirements of Mix 2. The Department will maintain a qualified product list.”

Revise Article 1019.05 of the Standard Specifications to read:

“**1019.05 Department Mix Design.** The Department mix design shall be Mix 1, 2, or 3 and shall be proportioned to yield approximately one cubic yard (cubic meter).

Mix 1	
Cement	50 lb (30 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2900 lb (1720 kg)
Water	50-65 gal (248-322 L)
Air Content	No air is entrained

Mix 2	
Cement	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (173-248 L)
Air Content	15-25 %

Mix 3	
Cement	40 lb (24 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (179-248 L)
Air Content	15-25 %”

Revise Article 1020.04, Table 1, Note (8) of the Standard Specifications to read:

“(8) In addition to the Type III portland cement, 100 lb/cu yd of ground granulated blast-furnace slag and 50 lb/cu yd of microsilica (silica fume) shall be used. For an air temperature greater than 85 °F, the Type III portland cement may be replaced with Type I, IL, or II portland cement.”

Revise Article 1020.04, Table 1 (Metric), Note (8) of the Standard Specifications to read:

“(8) In addition to the Type III portland cement, 60 kg/cu m of ground granulated blast-furnace slag and 30 kg/cu m of microsilica (silica fume) shall be used. For an air temperature greater than 30 °C, the Type III portland cement may be replaced with Type I, IL, or II portland cement.”

Revise the second paragraph of Article 1020.05(a) of the Standard Specifications to read:

“For a mix design using a portland-pozzolan cement, portland blast-furnace slag cement, portland-limestone cement, or replacing portland cement with finely divided minerals per Articles 1020.05(c) and 1020.05(d), the Contractor may submit a mix design with a minimum portland cement content less than 400 lbs/cu yd (237 kg/cu m), but not less than 375 lbs/cu yd (222 kg/cu m), if the mix design is shown to have a minimum relative dynamic modulus of elasticity of 80 percent determined according to AASHTO T 161. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete.”

Revise the first sentence of the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

“Corrosion inhibitors and concrete admixtures shall be according to the qualified product lists.”

Delete the fourth and fifth sentences of the second paragraph of Article 1020.05(b) of the Standard Specifications.

Revise the third sentence of the second paragraph of Article 1020.05(b)(5) of the Standard Specifications to read:

“The qualified product lists of concrete admixtures shall not apply.”

Revise second paragraph of Article 1020.05(b)(10) of the Standard Specifications to read:

“When calcium nitrite is used, it shall be added at the rate of 4 gal/cu yd (20 L/cu m) and shall be added to the mix immediately after all compatible admixtures have been introduced to the batch. Other corrosion inhibitors shall be added per the manufacturer’s specifications.”

Delete the third paragraph of Article 1020.05(b)(10) of the Standard Specifications.

Revise Article 1020.15(b)(1)c. of the Standard Specifications to read:

“c. The minimum portland cement content in the mixture shall be 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone addition exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). For a drilled shaft, foundation, footing, or substructure, the

minimum portland cement may be reduced to as low as 330 lbs/cu yd (196 kg/cu m) if the concrete has adequate freeze/thaw durability. The Contractor shall provide freeze/thaw test results according to AASHTO T 161, and the relative dynamic modulus of elasticity of the mix design shall be a minimum of 80 percent. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. Freeze/thaw testing will not be required for concrete that will not be exposed to freezing and thawing conditions as determined by the Engineer.”

Revise Article 1021.01 of the Standard Specifications to read:

“**1021.01 General.** Admixtures shall be furnished in liquid or powder form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer, the date of manufacture, and trade name of the material. Containers shall be readily identifiable as to manufacturer, the date of manufacture, and trade name of the material they contain.

Concrete admixtures shall be on one of the Department's qualified product lists. Unless otherwise noted, admixtures shall have successfully completed and remain current with the AASHTO Product Eval and Audit Concrete Admixture (CADD) testing program. For admixture submittals to the Department; the product brand name, manufacturer name, admixture type or types, an electronic link to the product's technical data sheet, and the NTPEP testing number which contains an electronic link to all test data shall be provided. In addition, a letter shall be submitted certifying that no changes have been made in the formulation of the material since the most current round of tests conducted by AASHTO Product Eval and Audit. After 28 days of testing by AASHTO Product Eval and Audit, air-entraining admixtures may be provisionally approved and used on Departmental projects. For all other admixtures, unless otherwise noted, the time period after which provisionally approved status may be earned is 6 months.

The manufacturer shall include the following in the submittal to the AASHTO Product Eval and Audit CADD testing program: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range established by the manufacturer shall be according to AASHTO M 194. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, 1021.07, and 1021.08, the pH allowable manufacturing range established by the manufacturer shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass) as determined by an appropriate test method. To verify the test result, the Department will use Illinois Modified AASHTO T 260, Procedure A, Method 1.

Prior to final approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.”

Revise Article 1021.03 of the Standard Specifications to read:

“**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall be according to the following.

- (a) Retarding admixtures shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) Water-reducing admixtures shall be according to AASHTO M 194, Type A.
- (c) High range water-reducing admixtures shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).”

Revise Article 1021.05 of the Standard Specifications to read:

“**1021.05 Self-Consolidating Admixtures.** Self-consolidating admixture systems shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

High range water-reducing admixtures shall be according to AASHTO M 194, Type F.

Viscosity modifying admixtures shall be according to AASHTO M 194, Type S (specific performance).”

Revise Article 1021.06 of the Standard Specifications to read:

“1021.06 Rheology-Controlling Admixture. Rheology-controlling admixtures shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. Rheology-controlling admixtures shall be according to AASHTO M 194, Type S (specific performance).”

Revise Article 1021.07 of the Standard Specifications to read:

“1021.07 Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.

- (a) Calcium Nitrite. Corrosion inhibitors shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution and shall comply with either the requirements of AASHTO M 194, Type C (accelerating) or the requirements of ASTM C 1582. The corrosion inhibiting performance requirements of ASTM C 1582 shall not apply.
- (b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582.

For submittals requiring testing according to ASTM M 194, Type C (accelerating), the admixture shall meet the requirements of the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01.

For submittals requiring testing according to ASTM C 1582, a report prepared by an independent laboratory accredited by AASHTO re:source for portland cement concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, ASTM G 109 test information specified in ASTM C 1582 is not required to be from an independent accredited lab. All other information in ASTM C 1582 shall be from an independent accredited lab. Test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall instead be submitted directly to the Department.”

Add Article 1021.08 of the Standard Specifications as follows:

“1021.08 Other Specific Performance Admixtures. Other specific performance admixtures shall, at a minimum, be according to AASHTO M 194, Type S (specific performance). The Department also reserves the right to require other testing, as determined by the Engineer, to show evidence of specific performance characteristics.

Initial testing according to AASHTO M 194 may be conducted under the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01, or by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. In either case, test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall also be submitted directly to the Department. The independent accredited lab report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications.”

Revise Article 1024.01 of the Standard Specifications to read:

“1024.01 Requirements for Grout. The grout shall be proportioned by dry volume, thoroughly mixed, and shall have a minimum temperature of 50 °F (10 °C). Water shall not exceed the minimum needed for placement and finishing.

Materials for the grout shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.02
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag.....	1010
(f) Concrete Admixtures	1021”

Revise Note 1 of Article 1024.02 of the Standard Specifications to read:

“Note 1. Nonshrink grout shall be according to Illinois Modified ASTM C 1107.

The nonshrink grout shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the grout shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the nonshrink grout shall be according to the manufacturer’s specifications. The Department will maintain a qualified product list.”

Revise Article 1029.02 of the Standard Specifications to read:

“1029.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement.....	1001
(b) Fly Ash	1010
(c) Ground Granulated Blast Furnace (GGBF) Slag	1010
(d) Water.....	1002
(e) Fine Aggregate.....	1003
(f) Concrete Admixtures	1021
(g) Foaming Agent (Note 1)	

Note 1. The manufacturer shall submit infrared spectrophotometer trace and test results indicating the foaming agent meets the requirements of ASTM C 869 in order to be on the Department’s qualified product list. Submitted data/results shall not be more than five years old.”

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

“The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures.”

Revise the first two sections of Check Sheet #11 of the Supplemental Specifications and Recurring Special Provisions to read:

“Description. This work shall consist of filling voids beneath rigid and composite pavements with cement grout.

Materials. Materials shall be according to the following Articles of Division 1000 - Materials of the Standard Specifications:

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fly Ash	1010
(d) Ground Granulated Blast Furnace (GGBF) Slag.....	1010
(e) Admixtures	1021
(f) Packaged Rapid Hardening Mortar or Concrete	1018”

Revise the third paragraph of Materials Note 2 of Check Sheet #28 of the Supplemental Specifications and Recurring Special Provisions to read:

“The Department will maintain a qualified product list of synthetic fibers, which will include the minimum required dosage rate. For the minimum required fiber dosage rate based on the Illinois Modified ASTM C 1609 test, a report prepared by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete shall be provided. The report shall show results of tests conducted no more than five years prior to the time of submittal.”

80460

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

Revised: April 1, 2019

Revise Article 107.40(b) of the Standard Specifications to read:

“(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.

- (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
- (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
- (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days.”

Revise Article 107.40(c) of the Standard Specifications to read:

“(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

- (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

- (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the

Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

- (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13.”

Revise Article 108.04(b) of the Standard Specifications to read:

“(b) No working day will be charged under the following conditions.

- (1) When adverse weather prevents work on the controlling item.
- (2) When job conditions due to recent weather prevent work on the controlling item.
- (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
- (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
- (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
- (6) When any condition over which the Contractor has no control prevents work on the controlling item.”

Revise Article 109.09(f) of the Standard Specifications to read:

“(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead

other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited.”

Add the following to Section 109 of the Standard Specifications.

“109.13 Payment for Contract Delay. Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
 - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to \$5,000,000	One Project Superintendent
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, One Engineer, and

	One Clerk
Over \$50,000,000	One Project Manager, Two Project Superintendents, One Engineer, and One Clerk

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

When an extended traffic control adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

80384

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: January 1, 2025

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term “equipment” refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted according to the table below.

Horsepower Range	Model Year and Older
50-99	2003
100-299	2002
300-599	2000
600-749	2001
750 and up	2005

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: January 2, 2025

1. OVERVIEW AND GENERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory. Award of the contract is conditioned on meeting the requirements of 49 CFR Part 26, and failure by the Contractor to carry out the requirements of Part 26 is a material breach of the contract and may result in the termination of the contract or such other remedies as the Department deems appropriate.
2. CONTRACTOR ASSURANCE. All assurances set forth in FHWA 1273 are hereby incorporated by reference and will be physically attached to the final contract and all subcontracts.
3. CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. The Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies and that, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 0.00 % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work in accordance with the requirements of 49 CFR 26.53 and SBE Memorandum No. 24-02.
4. IDENTIFICATION OF CERTIFIED DBE. Information about certified DBE Contractors can be found in the Illinois UCP Directory. Bidders can obtain additional information and assistance with identifying DBE-certified companies at the Department's website or by contacting the Department's Bureau of Small Business Enterprises at (217) 785-4611.
5. BIDDING PROCEDURES. Compliance with this Special Provision and SBE Policy Memorandum 24-02 is a material bidding requirement. The following shall be included with the bid.
 - (a) DBE Utilization Plan (form SBE 2026) documenting enough DBE participation has been obtained to meet the goal, or a good faith effort has been made to meet the goal even though the efforts did not succeed in obtaining enough DBE participation to meet the goal.

(b) Applicable DBE Participation Statement (form SBE 2023, 2024, and/or 2025) for each DBE firm the bidder has committed to perform the work to achieve the contract goal.

The required forms and documentation shall be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a bid if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. A bidder declared non-responsive for failure to meet the bidding procedures will not give rise to an administrative reconsideration. In the event the bid is declared non-responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

6. UTILIZATION PLAN EVALUATION. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate, and adequately document the bidder has committed to DBE participation sufficient to meet the goal, or that the bidder has made good faith efforts to do so, in the event the bidder cannot meet the goal, in order for the Department to commit to the performance of the contract by the bidder.

The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the Department determines, based upon the documentation submitted, that the bidder has made a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A and the requirements of SBE 2026.

If the Department determines that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan of that determination in accordance with SBE Policy Memorandum 24-02.

7. CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work the bidder commits to have performed by the specified DBEs and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE firms. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific guidelines for counting goal credit are provided in 49 CFR Part 26.55. In evaluating Utilization Plans for award the Department will count goal credit as set forth in Part 26 and in accordance with SBE Policy Memorandum 24-02.
8. CONTRACT COMPLIANCE. The Contractor must utilize the specific DBEs listed to perform the work and supply the materials for which each DBE is listed in the Contractor's approved Utilization Plan, unless the Contractor obtains the Department's written consent to

terminate the DBE or any portion of its work. The DBE Utilization Plan approved by SBE is a condition-of-award, and any deviation to that Utilization Plan, the work set forth therein to be performed by DBE firms, or the DBE firms specified to perform that work, must be approved, in writing, by the Department in accordance with federal regulatory requirements. Deviation from the DBE Utilization Plan condition-of-award without such written approval is a violation of the contract and may result in termination of the contract or such other remedy the Department deems appropriate. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan.

- (a) **NOTICE OF DBE PERFORMANCE.** The Contractor shall provide the Engineer with at least three days advance notice of when all DBE firms are expected to perform the work committed under the Contractor's Utilization Plan.
- (b) **SUBCONTRACT.** If awarded the contract, the Contractor is required to enter into written subcontracts with all DBE firms indicated in the approved Utilization Plan and must provide copies of fully executed DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (c) **PAYMENT TO DBE FIRMS.** The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goal has been paid to the DBE. The Contractor shall document and report all payments for work performed by DBE certified firms in accordance with Article 109.11 of the Standard Specifications. All records of payment for work performed by DBE certified firms shall be made available to the Department upon request.
- (d) **FINAL PAYMENT.** After the performance of the final item of work or trucking, or delivery of material by a DBE and final payment to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement (form SBE 2115) to the Engineer. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (g) **ENFORCEMENT.** The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

RAILROAD PROTECTIVE LIABILITY INSURANCE (BDE)

Effective: December 1, 1986

Revised: January 1, 2022

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
CN Railroad 17641 South Ashland Ave. Homewood, IL 60430-1345	0	12 @ 30 mph
DOT/AAR No.: 289 831L RR Division: EASTERN	RR Mile Post: 12.85 RR Sub-Division: CHICAGO	
For Freight/Passenger Information Contact:	Diane Lewis	Phone: (513) 853-1221
For Insurance Information Contact:	Richard Shepard	Phone: 904-359-1782

Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

3426I

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2024

Revised: April 1, 2024

Revise the first paragraph of Article 669.04 of the Standard Specifications to read:

“669.04 Regulated Substances Monitoring. Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities. The excavated soil and groundwater within the work areas shall be managed as either uncontaminated soil, hazardous waste, special waste, or non-special waste.

As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 “Regulated Substances Monitoring Daily Record (RSM DR)”.

Revise the first two sentences of the nineteenth paragraph of Article 669.05 of the Standard Specifications to read:

“The Contractor shall coordinate waste disposal approvals with the disposal facility and provide the specific analytical testing requirements of that facility. The Contractor shall make all arrangements for collection, transportation, and analysis of landfill acceptance testing.”

Revise the last paragraph of Article 669.05 of the Standard Specifications to read:

“The Contractor shall select a permitted landfill facility or CCDD/USFO facility meeting the requirements of 35 Ill. Admin. Code Parts 810-814 or Part 1100, respectively. The Department will review and approve or reject the facility proposed by the Contractor based upon information provided in BDE 2730. The Contractor shall verify whether the selected facility is compliant with those applicable standards as mandated by their permit and whether the facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected facility shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.”

Revise the first paragraph of Article 669.07 of the Standard Specifications to read:

“669.07 Temporary Staging. Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. All other soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Topsoil for re-use as final cover which has been field screened and found not to exhibit PID readings over daily background readings as documented on the BDE 2732, visual staining or

odors, and is classified according to Articles 669.05(a)(2), (a)(3), (a)(4), (b)(1), or (c) may be temporarily staged at the Contractor's option."

Add the following paragraph after the sixth paragraph of Article 669.11 of the Standard Specifications.

"The sampling and testing of effluent water derived from dewatering discharges for priority pollutants volatile organic compounds (VOCs), priority pollutants semi-volatile organic compounds (SVOCs), or priority pollutants metals, will be paid for at the contract unit price per each for VOCS GROUNDWATER ANALYSIS using EPA Method 8260B, SVOCs GROUNDWATER ANALYSIS using EPA Method 8270C, or RCRA METALS GROUNDWATER ANALYSIS using EPA Methods 6010B and 7471A. This price shall include transporting the sample from the job site to the laboratory."

Revise the first sentence of the eight paragraph of Article 669.11 of the Standard Specifications to read:

"Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) to be managed and disposed of, if required and approved by the Engineer, will be paid according to Article 109.04."

80455

SOURCE OF SUPPLY AND QUALITY REQUIREMENTS (BDE)

Effective: January 2, 2023

Add the following to Article 106.01 of the Standard Specifications:

“The final manufacturing process for construction materials and the immediately preceding manufacturing stage for construction materials shall occur within the United States. Construction materials shall include an article, material, or supply that is or consists primarily of the following.

- (a) Non-ferrous metals;
- (b) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- (c) Glass (including optic glass);
- (d) Lumber;
- (e) Drywall.

Items consisting of two or more of the listed construction materials that have been combined through a manufacturing process, and items including at least one of the listed materials combined with a material that is not listed through a manufacturing process shall be exempt.”

80448

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

“109.14 Subcontractor and Disadvantaged Business Enterprise Payment Reporting.
The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor’s submitted DBE utilization plan.

The report shall be made through the Department’s on-line subcontractor payment reporting system within 21 days of making the payment.”

80397

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017

Revised: April 1, 2019

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

“This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor’s work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%”

80391

SUBMISSION OF BIDDERS LIST INFORMATION (BDE)

Effective: January 2, 2025

In accordance with 49 CFR 26.11(c) all bidders for federally assisted contracts shall submit bidders list information with their bid or initial response to a procurement solicitation. Submission of the bidders list information is a material bidding requirement, and failure to comply with this requirement may render the bid non-responsive.

The bidders list information shall be provided for each firm from whom the bidder receives any bid as a subcontractor. This requirement is not limited to DBE subcontractor bids but applies to all DBE and non-DBE firms from whom the bidder has received a quote or bid to work as a subcontractor, whether or not the bidder has relied upon that bid in placing its bid as the prime contractor. The bidders list information shall contain the following.

- (a) Firm name;
- (b) Firm address including ZIP code;
- (c) Firm's status as a DBE or non-DBE;
- (d) Race and gender information for the firm's majority owner;
- (e) NAICS code applicable to each scope of work the firm sought to perform in its bid;
- (f) Age of the firm; and
- (g) The annual gross receipts of the firm (this may be provided by indicating whether the firm's annual gross receipts are less than \$1 million; \$1-3 million; \$3-6 million; \$6-10 million; etc.).

The bidders list information shall be submitted with the bid using the link provided within the "Integrated Contractor Exchange (iCX)" application of the Department's "EBids System".

80463

SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021

Revised: November 2, 2023

FEDERAL AID CONTRACTS. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

“STATEMENTS AND PAYROLLS

The payroll records shall include the worker’s name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit certified payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers, last known addresses, telephone numbers, and email addresses shall not be included on weekly submittals. Instead, the payrolls need only include an identification number for each employee (e.g., the last four digits of the employee’s social security number). The submittals shall be made using LCPTracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option (“No Work”, “Suspended”, or “Complete”) selected.”

STATE CONTRACTS. Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

- “3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx>. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee’s social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPTracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>.

When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option (“No Work”, “Suspended”, or “Complete”) selected.”

80437

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021

Revised: November 1, 2022

Add the following paragraph after the first paragraph of Article 701.08 of the Standard Specifications:

“The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. In accordance with 625 ILCS 5/12-215, the lights may only be in operation while the vehicle or equipment is engaged in construction operations.”

80439

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: January 2, 2025

The following applies to all Disadvantaged Business Enterprise (DBE) trucks on the project, whether they are utilized for DBE goal credit or not.

The Contractor shall notify the Engineer at least three days prior to DBE trucking activity.

The Contractor shall submit a weekly report of DBE trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

80302

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Revised: January 1, 2025

Add the following to Article 701.03 of the Standard Specifications:

“(q) Temporary Sign Supports 1106.02”

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

“For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer’s specifications.”

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

“**701.15 Traffic Control Devices.** For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer’s self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device.”

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

“**1106.02 Devices.** Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices shall be MASH compliant.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices shall be MASH compliant.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant

with NCHRP 350, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as sign supports, speed feedback displays, arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH compliant is available, an NCHRP 350 compliant device may be used, even if manufactured after December 31, 2019.”

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

“(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.

(k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.

(l) Movable Traffic Barrier. The movable traffic barrier shall be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis.”

80427

WORKING DAYS (BDE)
Effective: January 1, 2002

The Contractor shall complete the work within **forty (40)** working days.

80071

DRILLED SHAFTS

Effective: October 5, 2015

Revised: October 27, 2023

Revise Section 516 of the Standard Specifications to read:

“SECTION 516. DRILLED SHAFTS

516.01 Description. This work shall consist of constructing drilled shaft foundations.

516.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Portland Cement Concrete (Note 1)	1020
(b) Reinforcement Bars	1006.10
(c) Grout (Note 2).....	1024.01
(d) Permanent Steel Casing.....	1006.05(d)
(e) Slurry (Note 3)	

Note 1. When the soil contains sulfate contaminates, ASTM C 1580 testing will be performed to assess the severity of sulfate exposure to the concrete. If the sulfate contaminate is >0.10 to < 0.20 percent by mass, a Type II (MH) cement shall be used. If the sulfate contaminate is >0.20 to < 2.0 percent by mass, a Type V cement shall be used. If the sulfate contaminate is ≥ 2.0 percent by mass, refer to ACI 201.2R for guidance.

Note 2. The sand-cement grout mix shall be according to Section 1020 and shall be two to five parts sand and one part Type I or II cement. The maximum water cement ratio shall be sufficient to provide a flowable mixture with a typical slump of 10 in. (250 mm).

Note 3. Slurry shall be bentonite, emulsified polymer, or dry polymer, and shall be approved by the Engineer.

516.03 Equipment. Equipment shall be according to the following.

Item	Article/Section
(a) Concrete Equipment	1020.03
(b) Drilling Equipment (Note 1)	
(c) Hand Vibrator	1103.17(a)
(d) Underwater Concrete Placement Equipment	1103.18

Note 1. The drilling equipment shall have adequate capacity, including power, torque and down thrust, to create a shaft excavation of the maximum diameter specified to a depth of 20 percent beyond the depths shown on the plans.

516.04 Submittals. The following information shall be submitted on form BBS 133.

(a) Qualifications. At the time of the preconstruction conference, the Contractor shall provide the following documentation.

(1) References. A list containing at least three projects completed within the three years prior to this project's bid date which the Contractor performing this work has installed drilled shafts of similar diameter, length, and site conditions to those shown in the plans. The list of projects shall contain names and phone numbers of owner's representatives who can verify the Contractor's participation on those projects.

(2) Experience. Name and experience record of the drilled shaft supervisor, responsible for all facets of the shaft installation, and the drill operator(s) who will be assigned to this project. The supervisor and operator(s) shall each have a minimum of three years experience in the construction of drilled shafts.

(b) Installation Procedure. A detailed installation procedure shall be submitted to the Engineer for acceptance at least 28 days prior to drilled shaft construction and shall address each of the following items unless otherwise directed by the Engineer in writing.

(1) Equipment List. List of proposed equipment to be used including cranes, drill rigs, augers, boring tools, casing, vibratory hammers, core barrels, bailing buckets, final cleaning equipment, slurry equipment, tremies, or concrete pumps, etc.

(2) General Sequence. Details of the overall construction operation sequence, equipment access, and the sequence of individual shaft construction within each substructure bent or footing group. The submittal shall address the Contractor's proposed time delay and/or the minimum concrete strength necessary before initiating a shaft excavation adjacent to a recently installed drilled shaft.

(3) Shaft Excavation. A site specific step by step description of how the Contractor anticipates the shaft excavation to be advanced based on their evaluation of the subsurface data and conditions expected to be encountered. This sequence shall note the method of casing advancement, anticipated casing lengths, tip elevations and diameters, the excavation tools used and drilled diameters created. The Contractor shall indicate whether wet or dry drilling conditions are expected and if groundwater will be sealed from the excavation.

- (4) Slurry. When the use of slurry is proposed, details on the types of additives to be used and their manufacturers shall be provided. In addition, details covering the measurement and control of the hardness of the mixing water, agitation, circulation, de-sanding, sampling, testing, and chemical properties of the slurry shall be submitted.
- (5) Shaft Cleaning. Method(s) and sequence proposed for the shaft cleaning operation.
- (6) Reinforcement Cage and Permanent Casing. Details of reinforcement placement including rolling spacers to be used and method to maintain proper elevation and location of the reinforcement cage within the shaft excavation during concrete placement. The method(s) of adjusting the reinforcement cage length and permanent casing if rock is encountered at an elevation other than as shown on the plans. As an option, the Contractor may perform soil borings and rock cores at the drilled shaft locations to determine the required reinforcement cage and permanent casing lengths.
- (7) Concrete Placement. Details of concrete placement including proposed operational procedures for free fall, tremie or pumping methods. The sequence and method of casing removal shall also be stated along with the top of pour elevation, and method of forming through water above streambed.
- (8) Mix Design. The proposed concrete mix design(s).
- (9) Disposal Plan. Containment and disposal plan for slurry and displaced water. Containment and disposal plan for contaminated concrete pushed out of the top of the shaft by uncontaminated concrete during concrete placement.
- (10) Access and Site Protection Plan. Details of access to the drilled shafts and safety measures proposed. This shall include a list of casing, scaffolding, work platforms, temporary walkways, railings, and other items needed to provide safe access to the drilled shafts. Provisions to protect open excavations during non-working hours shall be included.

The Engineer will evaluate the drilled shaft installation procedure and notify the Contractor of acceptance, need for additional information, or concerns with the installation's effect on the existing or proposed structure(s).

CONSTRUCTION REQUIREMENTS

516.05 General. Excavation for drilled shaft(s) shall not proceed until written authorization is received from the Engineer. The Contractor shall be responsible for verification of the dimensions and alignment of each shaft excavation as directed by the Engineer.

Unless otherwise approved in the Contractor's installation procedure, no shaft excavation, casing installation, or casing removal with a vibratory hammer shall be made within four shaft diameters center to center of a shaft with concrete that has a compressive strength less than 1500 psi (10,300 kPa). The site-specific soil strengths and installation methods selected will determine the actual required minimum spacing, if any, to address vibration and blow out concerns.

Lost tools shall not remain in the shaft excavation without the approval of the Engineer.

Blasting shall not be used as a method of shaft excavation.

516.06 Shaft Excavation Protection Methods. The construction of drilled shafts may involve the use of one or more of the following methods to support the excavation during the various phases of shaft excavation, cleaning, and concrete placement dependent on the site conditions encountered. Surface water shall not flow uncontrolled into the shaft excavation, however water may be placed into the shaft excavation in order to meet head pressure requirements according to Articles 516.06(c) and 516.13.

The following are general descriptions indicating the conditions when these methods may be used.

- (a) Dry Method. The dry construction method shall only be used at sites where the groundwater and soil conditions are suitable to permit the drilling and dewatering of the excavation without causing subsidence of adjacent ground, boiling of the base soils, squeezing, or caving of the shaft side walls. The dry method shall consist of drilling the shaft excavation, removing accumulated water, cleaning the shaft base, and placing the reinforcement cage and concrete in a predominately dry excavation.
- (b) Slurry Method. The slurry construction method may be used at sites where dewatering the excavation would cause collapse of the shaft sidewalls or when the volume and head of water flowing into the shaft is likely to contaminate the concrete during placement resulting in a shaft defect. This method uses slurry, or in rare cases water, to maintain stability of the shaft sidewall while advancing the shaft excavation. After the shaft excavation is completed, the slurry level in the shaft shall be kept at an elevation to

maintain stability of the shaft sidewall, maintain stability of the shaft base, and prevent additional groundwater from entering the shaft. The shaft base shall be cleaned, the reinforcement cage shall be set, and the concrete shall be discharged at the bottom of the shaft excavation, displacing the slurry upwards.

- (c) Temporary Casing Method. Temporary casing shall be used when either the dry or slurry methods provide inadequate support to prevent sidewall caving or excessive deformation of the shaft excavation. Temporary casing may be used with slurry or be used to reduce the flow of water into the excavation to allow dewatering and concrete placement in a dry shaft excavation. Temporary casing shall not be allowed to remain permanently without the approval of the Engineer.

During removal of the temporary casing, the level of concrete in the casing shall be maintained at a level such that the head pressure inside the casing is a minimum of 1.25 times the head pressure outside the casing, but in no case is less than 5 ft (1.5 m) above the bottom of the casing. Casing removal shall be at a slow, uniform rate with the pull in line with the shaft axis. Excessive rotation of the casing shall be avoided to limit deformation of the reinforcement cage. In addition, the slump requirements during casing removal shall be according to Article 516.12.

When called for on the plans, the Contractor shall install a permanent casing as specified. Permanent casing may be used as a shaft excavation support method or may be installed after shaft excavation is completed using one of the above methods. After construction, if voids are present between the permanent casing and the drilled excavation, the voids shall be filled with grout by means of tremie(s) or concrete pump which shall be lowered to the bottom of the excavation. The contractor's means and methods for grout placement shall fill the annular void(s) between the permanent casing and the surrounding earth material to restore and provide lateral earth resistance to the shaft. Grout yield checks shall be performed by the contractor for submittal to the Engineer. Permanent casing shall not remain in place beyond the limits shown on the plans without the specific approval of the Engineer.

When the shaft extends above the streambed through a body of water and permanent casing is not shown, the portion above the streambed shall be formed with removable casings, column forms, or other forming systems as approved by the Engineer. The forming system shall not scar or spall the finished concrete or leave in place any forms or casing within the removable form limits as shown on the plans unless approved as part of the installation procedure. The forming system shall not be removed until the concrete has attained a minimum compressive strength of 2500 psi (17,200 kPa) and cured for a minimum of 72 hours. For shafts extending through water, the concrete shall be protected from water action after placement for a minimum of seven days.

516.07 Slurry. When slurry is used, the Contractor shall provide a technical representative of the slurry additive manufacturer at the site prior to introduction of the slurry into the first shaft where slurry will be used, and during drilling and completion of a minimum of one shaft to adjust the slurry mix to the specific site conditions. During construction, the level of the slurry shall be maintained a minimum of 5 feet (1.5 m) above the height required to prevent

caving of the shaft excavation. In the event of a sudden or significant loss of slurry in the shaft excavation, the construction of that foundation shall be stopped and the shaft excavation backfilled or supported by temporary casing, until a method to stop slurry loss, or an alternate construction procedure, has been approved by the Engineer.

- (a) General Properties. The material used to make the slurry shall not be detrimental to the concrete or surrounding ground. Mineral slurries shall have both a mineral grain size that remains in suspension and sufficient viscosity and gel characteristics to transport excavated material to a suitable screening system. Polymer slurries shall have sufficient viscosity and gel characteristics to transport excavated material to suitable screening systems or settling tanks. The percentage and specific gravity of the material used to make the slurry shall be sufficient to maintain the stability of the excavation and to allow proper concrete placement.

If approved by the Engineer, the Contractor may use water and excavated soils as drilling slurry. In this case, the range of acceptable values for density, viscosity and pH, as shown in the following table for bentonite slurry shall be met.

When water is used as the slurry to construct rock sockets in limestone, dolomite, sandstone or other formations that are not erodible, the requirements for slurry testing shall not apply if the entire fluid column is replaced with fresh water after drilling. To do so, fresh water shall be introduced at the top of the shaft excavation and existing water used during drilling shall be pumped out of the shaft excavation from the bottom of the shaft excavation until the entire volume of fluid has been replaced.

- (b) Preparation. Prior to introduction into the shaft excavation, the manufactured slurry admixture shall be pre-mixed thoroughly with clean, fresh water and for adequate time in accordance with the slurry admixture manufacturer's recommendations. Slurry tanks of adequate capacity shall be used for slurry mixing, circulation, storage and treatment. No excavated slurry pits will be allowed in lieu of slurry tanks without approval from the Engineer. Adequate desanding equipment shall be provided to control slurry properties during the drilled shaft excavation in accordance with the values provided in Table 1.
- (c) Quality Control. Quality control tests shall be performed on the slurry to determine density, viscosity, sand content and pH of freshly mixed slurry, recycled slurry and slurry in the shaft excavation. Tests of slurry samples from within two feet of the bottom and at mid-height of the shaft excavation shall be conducted in each shaft excavation during the excavation process to measure the consistency of the slurry. A minimum of four sets of tests shall be conducted during the first eight hours of slurry use on the project. When a series of four test results do not change more than 1% from the initial test, the testing frequency may be decreased to one set every four hours of slurry use. Reports of all tests, signed by an authorized representative of the Contractor, shall be furnished to the

Engineer upon completion of each drilled shaft. The physical properties of the slurry shall be as shown in Table 1.

The slurry shall be sampled and tested less than 1 hour before concrete placement. Any heavily contaminated slurry that has accumulated at the bottom of the shaft shall be removed. The contractor shall perform final shaft bottom cleaning after suspended solids have settled from the slurry. Concrete shall not be placed if the slurry does not have the required physical properties.

Table 1 – SLURRY PROPERTIES				
	Bentonite	Emulsified Polymer	Dry Polymer	Test Method
Density, lb/cu ft (kg/cu m) (at introduction)	65.2 ± 1.6 ¹ (1043.5 ± 25.6)	63 (1009.0) max.	63 (1009.0) max.	ASTM D 4380
Density, lb/cu ft (kg/cu m) (prior to concrete placement)	67.0 ± 3.5 ¹ (1073.0 ± 56.0)	63 (1009.0) max.	63 (1009.0) max.	ASTM D 4380
Viscosity ² , sec/qt (sec/L)	46 ± 14 (48 ± 14)	38 ± 5 (40 ± 5)	65 ± 15 (69 ± 16)	ASTM D 6910
pH	9.0 ± 1.0	9.5 ± 1.5	9.0 ± 2.0	ASTM D 4972
Sand Content, percent by volume (at introduction)	4 max.	1 max.	1 max.	ASTM D 4381
Sand Content, percent by volume (prior to concrete placement)	10 max.	1 max.	1 max.	ASTM D 4381
Contact Time ³ , hours	4 max.	72 max.	72 max.	

Note 1. When the slurry consists of only water and excavated soils, the density shall not exceed 70 lb/cu ft (1121 kg/cu m).

Note 2. Higher viscosities may be required in loose or gravelly sand deposits.

Note 3. Contact time is the time without agitation and sidewall cleaning.

516.08 Obstructions. An obstruction is an unknown isolated object that causes the shaft excavation method to experience a significant decrease in the actual production rate and requires the Contractor to core, break up, push aside, or use other means to mitigate the obstruction. Subsurface conditions such as boulders, cobbles, or logs and buried infrastructure such as footings, piling, or abandoned utilities, when shown on the plans, shall not constitute an obstruction. When an obstruction is encountered, the Contractor shall notify the Engineer immediately and upon concurrence of the Engineer, the Contractor shall mitigate the obstruction with an approved method.

516.09 Top of Rock. The top of rock will be considered as the point where rock, defined as bedded deposits and conglomerate deposits exhibiting the physical characteristics and difficulty of rock removal as determined by the Engineer, is encountered which cannot be drilled with augers and/or underreaming tools configured to be effective in the soils indicated in the contract documents.

516.10 Design Modifications. If the top of rock elevation differs from that shown on the plans by more than 10 percent of the length of the drilled shaft above the rock, the Engineer shall be contacted to determine if any drilled shaft design changes may be required. In addition, if the type of soil or rock encountered is not similar to that shown in the subsurface exploration data, the Contractor may be required to extend the drilled shaft length(s) beyond those specified in the plans. In either case, the Engineer will determine if revisions are necessary and the extent of the modifications required.

516.11 Excavation Cleaning and Inspection. Materials removed or generated from the shaft excavations shall be disposed of according to Article 202.03.

After excavation, each shaft shall be cleaned. For a drilled shaft terminating in soil, the depth of sediment or debris shall be a maximum of 1 1/2 in. (38 mm). For a drilled shaft terminating in rock, the depth of sediment or debris shall be a maximum of 1/2 in. (13 mm).

A shaft excavation shall be overreamed when, in the opinion of the Engineer, the sidewall has softened, swelled, or has a buildup of slurry cake. Overreaming may also be required to correct a shaft excavation which has been drilled out of tolerance. Overreaming may be accomplished with a grooving tool, overreaming bucket, or other approved equipment. Overreaming thickness shall be a minimum of 1/2 in. (13 mm) and a maximum of 3 in. (75 mm).

516.12 Reinforcement. This work shall be according to Section 508 and the following.

The shaft excavation shall be cleaned and inspected prior to placing the reinforcement cage. The reinforcement cage shall be completely assembled prior to drilling and be ready for adjustment in length as required by the conditions encountered. The reinforcement cage shall be lifted using multiple point sling straps or other approved methods to avoid reinforcement

cage distortion or stress. Cross frame stiffeners may be required for lifting or to keep the reinforcement cage in proper position during lifting and concrete placement.

The Contractor shall attach rolling spacers to keep the reinforcement cage centered within the shaft excavation during concrete placement and to ensure that at no point will the finished shaft have less than the minimum concrete cover(s) shown on the plans. The rolling spacers or other approved non-corrosive spacing devices shall be installed within 2 ft (0.6 m) of both the top and bottom of the drilled shaft and at intervals not exceeding 10 ft (3 m) throughout the length of the shaft to ensure proper reinforcement cage alignment and clearance for the entire shaft. The number of rolling spacers at each level shall be one for each 1.0 ft (300 mm) of shaft diameter, with a minimum of four rolling spacers at each level. For shafts with different shaft diameters throughout the length of the excavation, different sized rolling spacers shall be provided to ensure the reinforcement cage is properly positioned throughout the entire length of the shaft.

When a specific concrete cover between the base of the drilled shaft and the reinforcement cage is shown on the plans, the bottom of the reinforcement cage shall be supported so that the proper concrete cover is maintained.

If the conditions differ such that the length of the shaft is increased, additional longitudinal bars shall be either mechanically spliced or lap spliced to the lower end of the reinforcement cage and confined with either hoop ties or spirals. The Contractor shall have additional reinforcement available or fabricate the reinforcement cages with additional length as necessary to make the required adjustments in a timely manner as dictated by the encountered conditions. The additional reinforcement may be non-epoxy coated.

516.13 Concrete Placement. Concrete work shall be performed according to the following.

Throughout concrete placement the head pressure inside the drilled shaft shall be at least 1.1 times the head pressure outside the drilled shaft.

Concrete placement shall begin within 1 hour of shaft cleaning and inspection. The pour shall be made in a continuous manner from the bottom to the top elevation of the shaft as shown on the contract plan or as approved in the Contractor's installation procedure. Concrete placement shall continue after the shaft excavation is full and until 18 in. (450 mm) of good quality, uncontaminated concrete is expelled at the top of shaft. Vibration of the concrete will not be allowed when the concrete is displacing slurry or water. In dry excavations, the concrete in the top 10 ft (3 m) of the shaft shall be vibrated.

When using temporary casing or placing concrete under water or slurry, a minimum of seven days prior to concrete placement, a 4 cu yd (3 cu m) trial batch of the concrete mixture shall be

performed to evaluate slump retention. Temporary casing shall be withdrawn before the slump of the concrete drops below 6 in. (150 mm). For concrete placed using the slurry method of construction, the slump of all concrete placed shall be a minimum of 6 in. (150 mm) at the end of concrete placement.

Devices used to place concrete shall have no aluminum parts in contact with concrete.

When the top of the shaft is at the finished elevation and no further concrete placement above the finished elevation is specified, the top of the shaft shall be level and finished according to Article 503.15(a).

Concrete shall be placed by free fall, tremie, or concrete pump subject to the following conditions.

- (a) Free Fall Placement. Concrete shall only be placed by free fall when the rate of water infiltration into the shaft excavation is less than 12 in. (300 mm) per hour and the depth of water in the shaft excavation is less than 3 in. (75 mm) at the time of concrete placement.

Concrete placed by free fall shall fall directly to the base without contacting the reinforcement cage, cross frame stiffeners, or shaft sidewall. Drop chutes may be used to direct concrete to the base during free fall placement.

Drop chutes used to direct placement of free fall concrete shall consist of a smooth tube. Concrete may be placed through either a hopper at the top of the tube or side openings as the drop chute is retrieved during concrete placement. The drop chute shall be supported so that free fall does not exceed 60 ft (18.3 m) for conventional concrete or 30 ft (9.1 m) for self-consolidating concrete. If placement cannot be satisfactorily accomplished by free fall in the opinion of the Engineer, either a tremie or pump shall be used to accomplish the pour.

- (b) Tremie and Concrete Pump Placement. Concrete placement shall be according to Article 503.08, except the discharge end of the steel pipe shall remain embedded in the concrete a minimum of 10 ft (3.0 m) throughout concrete placement when displacing slurry or water.

516.14 Construction Tolerances. The following construction tolerances shall apply to all drilled shafts.

- (a) Center of Shaft. The center of the drilled shaft shall be within 3 in. (75 mm) of the plan station and offset at the top of the shaft.

- (b) Center of Reinforcement Cage. The center of the reinforcement cage shall be within 1 1/2 in. (40 mm) of plan station and offset at the top of the shaft.
- (c) Vertical Plumbness of Shaft. The out of vertical plumbness of the shaft shall not exceed 1.5 percent.
- (d) Vertical Plumbness of Reinforcement Cage. The out of vertical plumbness of the shaft reinforcement cage shall not exceed 0.83 percent.
- (e) Top of Shaft. The top of the shaft shall be no more than 1 in. (25 mm) above and no more than 3 in. (75 mm) below the plan elevation.
- (f) Top of Reinforcement Cage. The top of the reinforcement cage shall be no more than 1 in. (25 mm) above and no more than 3 in. (75 mm) below the plan elevation.
- (g) Bottom of shaft. Excavation equipment and methods used to complete the shaft excavation shall have a nearly planar bottom. The cutting edges of excavation equipment used to create the bottom of shafts in rock shall be normal to the vertical axis of the shaft within a tolerance of 6.25 percent.

516.15 Method of Measurement. This work will be measured for payment in place and the volume computed in cubic yards (cubic meters). The volume will be computed using the plan diameter of the shaft multiplied by the measured length of the shaft. The length of shaft in soil will be computed as the difference in elevation between the top of the drilled shaft shown on the plans, or as installed as part of the Contractor's installation procedure, and the bottom of the shaft or the top of rock (when present) whichever is higher. The length of shaft in rock will be computed as the difference in elevation between the measured top of rock and the bottom of the shaft.

When permanent casing is specified, it will be measured for payment in place, in feet (meters). Permanent casing installed at the Contractor's option will not be measured for payment.

Reinforcement furnished and installed will be measured for payment according to Article 508.07.

516.16 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for DRILLED SHAFT IN SOIL, and/or DRILLED SHAFT IN ROCK.

Permanent casing will be paid for at the contract unit price per foot (meter) for PERMANENT CASING.

Reinforcement furnished and installed will be paid for according to Article 508.08.

Obstruction mitigation will be paid for according to Article 109.04.”

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants /

Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:

The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA- 1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.*

Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDLegacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) Use of Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention*. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents*. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers*. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements*. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures*. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits*. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio*. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates*. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity*. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

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

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY
SYSTEM OR APPALACHIAN LOCAL ACCESS**

ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.