

# STATE OF DELAWARE

This Copy is for information only.  
You must purchase the Proposal  
in order to submit a Bid.



## DEPARTMENT OF TRANSPORTATION

### BID PROPOSAL

for

### CONTRACT T201408302.01

### LARGE GUIDE SIGN CONTRACT, STATEWIDE, OPEN-END

STATEWIDE

ADVERTISEMENT DATE: August 3, 2015

COMPLETION TIME: 1,095 Calendar Days

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION  
DELAWARE DEPARTMENT OF TRANSPORTATION  
AUGUST 2001

Bids will be received in the Bidder's Room at the Delaware Department of Transportation's Administration Building, 800 Bay Road, Dover, Delaware until 2:00 P.M. local time August 25, 2015

**Contract No.T201408302.01**  
**Federal Aid Project No. T201408302**

**LARGE GUIDE SIGN CONTRACT, STATEWIDE, OPEN-END**  
**STATEWIDE**

**GENERAL DESCRIPTION**

LOCATION

These improvements are located in STATEWIDE more specifically shown on the Location Map(s) of the enclosed Plans.

DESCRIPTION

The improvements consist of furnishing all labor and materials for this project. This contract provides for the supply, installation and maintenance of highway signs and their structures, both overhead and large ground-mounted signs Statewide. The specific work sites are not listed herein, but will be assigned by the Engineer throughout the contract, and other incidental construction in accordance with the location, notes and details shown on the plans and as directed by the Engineer.

COMPLETION TIME

All work on this contract must be complete within 1,095 Calendar Days. It is the Department's intent to issue a Notice to Proceed such that work starts on or about November 16, 2015.

PROSPECTIVE BIDDERS NOTES:

1. BIDDERS MUST BE REGISTERED with DelDOT and request a cd of the official plans and specifications in order to submit a bid. Contact DelDOT at [dot-ask@state.de.us](mailto:dot-ask@state.de.us), or (302) 760-2031.
2. QUESTIONS regarding this project are to be e-mailed to [dot-ask@state.de.us](mailto:dot-ask@state.de.us) no less than six business days prior to the proposal opening date in order to receive a response. Please include T201408302.01 in the subject line. Responses to inquiries are posted on-line at <http://www.bids.delaware.gov>.
3. This project incorporates the electronic bidding system **Expedite, version 5.9a**. Bidders wishing to use the electronic bidding option will find the installation file on the plan holders bid file disk. The installation file and instructions are also available on DelDOT's Website at: [http://www.deldot.gov/information/business/bids/const\\_proj\\_bid\\_info.shtml](http://www.deldot.gov/information/business/bids/const_proj_bid_info.shtml).
4. Each proposal must be accompanied by a deposit of either surety bond or security for a sum equal to at least 10% of the bid.
5. No retainage will be withheld on this contract.
6. The Department's External Complaint Procedure can be viewed on DelDOT's Website at: <http://www.deldot.gov/information/business/>, or you may request a copy by calling (302) 760-2555.
7. **SPECIFICATIONS:** New Supplemental Specifications to the August 2001 Standard Specifications were issued November 24, 2014 and apply to this project. They can be [viewed here](#). The Department is currently updating the August 2001 Specifications for Road and Bridge Construction. Through this update, some Divisions were renumbered and some new ones were created and added. The *Specifications Note* document is for the use by the bidders to reference the new numbers to the past numbers used for bidding purposes on previous Department contracts.
8. **PLEASE NOTE** the requirements of special provision 'Changes to Project Documents During Advertisement' have moved to Supplemental Specifications, the special provision is no longer needed.
9. **PLEASE NOTE** federal requirements for the DBE program under [49CFR §26.53\(b\)\(3\)\(i\)\(B\)](#) have changed effective November 3, 2014. Submission of DBE participation information is now required from the lowest apparent bidder no later than seven (7) days after bid opening (*formerly 10 days*).
10. **BREAKOUT SHEETS MUST** be submitted either with your bid documents; or within seven (7) calendar days following the bid due date by the lowest apparent bidder. Refer to instructions adjacent to the Breakout Sheets in this document.
11. No utility relocation involvement is anticipated. Should any conflicts be encountered during construction requiring adjustment and/or relocation of the agencies' existing facilities, the necessary relocation work

shall be accomplished by the respective agencies' forces, as directed by the District Engineer. Any adjustments and/or relocations of municipally owned facilities shall be done by the State's contractor in accordance with the respective agencies' standard specifications as directed by the District Engineer.

12. No environmental permits are required for this work provided no jurisdictional wetlands or waters are impacted. If there is any question as to whether or not a water or wetland is jurisdictional, contact the DelDOT Environmental Section at 302-760-2264.
13. It is anticipated that all work will occur within DelDOT's existing right of way or easement areas. Should the need occur to trespass onto private property; it will be the responsibility of the Project manager to secure such trespass needs.
14. It is anticipated that all work will occur within DelDOT's right of way. Should the need occur to trespass onto railroad property, including the highway-rail crossing; it will be the responsibility of the project manager to contact the railroad chief engineer and obtain written authorization before entering.
15. The project manager shall be responsible for coordinating with the Traffic Section relating to any impacts to Traffic Section facilities (including but not limited to traffic loops, junction wells etc.) at least 4 weeks in advance of the start of the activity. Prior to initiating any work on this contract (or sites), the Project Manager shall be responsible for preparing and submitting for approval of the Safety Section, a Maintenance of Traffic Plan. Sufficient time shall be provided for the review and approval of the plan. The Maintenance of Traffic Plan shall include proposed time restrictions on the closure of travel lanes subject to the approval of the Safety Section.
16. The Project Manager is responsible for ensuring any required documents and analysis as part of the adopted Work Zone Safety and Mobility Procedures and Guidelines has been completed prior to any work starting on this contract.

Contract No.T201408302.01  
CONSTRUCTION ITEMS UNITS OF MEASURE

English Code	English Description	Multiply By	Metric Code	Metric Description	Suggested CEC Metric Code
ACRE	Acre	0.4047	ha	Hectare	HECTARE
BAG	Bag	N/A	Bag	Bag	BAG
C.F.	Cubic Foot	0.02832	m <sup>3</sup>	Cubic Meter	M3
C.Y.	Cubic Yard	0.7646	m <sup>3</sup>	Cubic Meter	M3
EA-DY	Each Day	N/A	EA-DY	Each Day	EA-DY
EA-MO	Each Month	N/A	EA-MO	Each Month	EA-MO
EA/NT	Each Night	N/A	EA-NT	Each Night	EA/NT
EACH	Each	N/A	EA	Each	EACH
GAL	Gallon	3.785	L	Liter	L
HOUR	Hour	N/A	h	Hour	HOUR
INCH	Inch	25.4	mm	Millimeter	MM
L.F.	Linear Foot	0.3048	m	Linear Meter	L.M.
L.S.	Lump Sum	N/A	L.S.	Lump Sum	L.S.
LA-MI	Lane Mile	1.609	LA-km	Lane-Kilometer	LA-KM
LB	Pound	0.4536	kg	Kilogram	KG
MFBM	Thousand Feet of Board Measure	2.3597	m <sup>3</sup>	Cubic Meter	M3
MGAL	Thousand Gallons	3.785	kL	Kiloliter	KL
MILE	Mile	1.609	km	Kilometer	KM
S.F.	Square Foot	0.0929	m <sup>2</sup>	Square Meter	M2
S.Y.	Square Yard	0.8361	m <sup>2</sup>	Square Meter	M2
SY-IN	Square Yard-Inch	0.8495	m <sup>2</sup> -25 mm	Square Meter-25 Millimeter	M2-25 MM
TON	Ton	.9072	t	Metric Ton (1000kg)	TON
N.A.*	Kip	4.448	kN	Kilonewton	N.A.*
N.A.*	Thousand Pounds per Square Inch	6.895	MPa	Megapascal	N.A.*

\*Not used for units of measurement for payment.

TABLE OF CONTENTS

**GENERAL DESCRIPTION**..... [i](#)  
    LOCATION..... [i](#)  
    DESCRIPTION..... [i](#)  
    COMPLETION TIME..... [i](#)  
    PROSPECTIVE BIDDERS NOTES..... [i](#)  
    CONSTRUCTION ITEMS UNITS OF MEASURE..... [iii](#)

**GENERAL NOTICES**..... [1](#)  
    SPECIFICATIONS..... [1](#)  
    CLARIFICATIONS..... [1](#)  
    ATTESTING TO NON-COLLUSION..... [1](#)  
    QUANTITIES..... [1](#)  
    PREFERENCE FOR DELAWARE LABOR..... [1](#)  
    EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS..... [1](#)  
    TAX CLEARANCE..... [2](#)  
    LICENSE..... [2](#)  
    DIFFERING SITE CONDITIONS..... [2](#)  
    CONFLICT WITH FEDERAL STATUTES OR REGULATIONS..... [3](#)  
    FEDERAL LABOR AND EMPLOYMENT REQUIREMENTS..... [3](#)  
    CONVICT PRODUCED MATERIALS:..... [3](#)  
    TO REPORT BID RIGGING ACTIVITIES..... [4](#)  
    NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION..... [5](#)  
    STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY..... [6](#)  
    TRAINING SPECIAL PROVISIONS..... [9](#)  
    INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT..... [10](#)  
    DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM SPECIFICATION..... [10](#)  
    CRITICAL DBE REQUIREMENTS..... [12](#)  
    GUIDANCE FOR GOOD FAITH EFFORT..... [13](#)

**REQUIRED CONTRACT PROVISIONS - FEDERAL-AID CONSTRUCTION CONTRACTS**.... [15](#)  
    I. GENERAL..... [15](#)  
    II. NONDISCRIMINATION..... [15](#)  
    III. NONSEGREGATED FACILITIES..... [19](#)  
    IV. DAVIS-BACON AND RELATED ACT PROVISIONS..... [19](#)  
    VI. SUBLETTING OR ASSIGNING THE CONTRACT..... [24](#)  
    VII. SAFETY: ACCIDENT PREVENTION..... [25](#)  
    VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS..... [26](#)  
    X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY..... [26](#)  
    XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING..... [29](#)  
    APPENDICES TO THE TITLE VI ASSURANCE..... [30](#)

**PREVAILING WAGES**..... [32](#)  
    PREVAILING WAGE REQUIREMENTS..... [32](#)  
    APPLICABILITY OF DAVIS-BACON LABOR STANDARD PROVISIONS TO FLAGGERS..... [37](#)  
    ALL AGENCY MEMORANDUM NO. 130..... [37](#)

**SUPPLEMENTAL SPECIFICATIONS**..... [38](#)

**SPECIAL PROVISIONS**..... [39](#)  
    CONSTRUCTION ITEM NUMBERS..... [40](#)  
    401502 - ASPHALT CEMENT COST ADJUSTMENT..... [41](#)  
    743538 - WOODEN SIGN SUPPORTS, 4" x 4"..... [42](#)  
    743539 - WOODEN SIGN SUPPORTS, 4" x 6"..... [42](#)  
    743540 - WOODEN SIGN SUPPORTS, 6" x 6"..... [42](#)  
    743541 - WOODEN SIGN SUPPORTS, 6" x 8"..... [42](#)  
    746501 - INSTALLATION OF DOWN GUY AND ANCHOR..... [44](#)  
    746708 - INSTALLATION OF SIDEWALK GUY AND ANCHOR..... [44](#)  
    746504 - FURNISH & INSTALL SPAN WIRES, 7/16"..... [45](#)  
    746505 - FURNISH & INSTALL SPAN WIRES, 3/8"..... [45](#)

746506 - FURNISH & INSTALL SPAN WIRES, 1/4"	<u>45</u>
746507 – INSTALLATION OF STEEL POLE (LESS THAN 40’)	<u>47</u>
746528 - INSTALLATION OF STEEL POLE (EQUAL TO OR GREATER THAN 40’)	<u>47</u>
746704 - ADJUSTMENT OF SPAN OR MESSENGER WIRE	<u>50</u>
746710 - REMOVAL OF DOWN GUY AND ANCHOR	<u>51</u>
746739 - REMOVAL OF SIDEWALK GUY AND ANCHOR	<u>51</u>
746711 - INSTALLATION OF OVERHEAD GUY	<u>52</u>
746733 - REMOVAL OF STEEL POLE (EQUAL TO OR GREATER THAN 17' AND LESS THAN 40')	<u>53</u>
746734 - REMOVAL OF STEEL POLE (EQUAL TO OR GREATER THAN 40')	<u>53</u>
746740 - SPAN WIRE ATTACHMENT BETWEEN POLES	<u>54</u>
746741 - REMOVAL OF SPAN WIRE ATTACHMENT	<u>56</u>
746842 - TRANSFER OF SPAN WIRE	<u>57</u>
749513 – INSTALLATION OF SIGN OVERLAY 16 S.F. OR LESS	<u>59</u>
749514 – INSTALLATION OF SIGN OVERLAY OVER 16 S.F.	<u>59</u>
749516 – REINFORCED CONCRETE SIGN FOUNDATION, W-6	<u>60</u>
749517 – REINFORCED CONCRETE SIGN FOUNDATION, W-8	<u>60</u>
749518 – REINFORCED CONCRETE SIGN FOUNDATION, W-10	<u>60</u>
749519 – REINFORCED CONCRETE SIGN FOUNDATION, W-12	<u>60</u>
749520 – REINFORCED CONCRETE SIGN FOUNDATION, W-14	<u>60</u>
749521 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-6	<u>61</u>
749522 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-8	<u>61</u>
749523 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-10	<u>61</u>
749524 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-12	<u>61</u>
749525 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-14	<u>61</u>
749563 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-4	<u>61</u>
749527 - SIGN BASE EXTENSION	<u>63</u>
749528 - STRUCTURAL CONCRETE	<u>64</u>
749529 - INSTALLATION OF SIGN BASE SHEETING	<u>65</u>
749530 - REMOVAL OR GRADING OF MASONRY	<u>66</u>
749579 - SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE XI RETROREFLECTIVE SHEETING	<u>67</u>
749580 - SUPPLY OF EXTRUDED ALUMINUM SIGN PANEL TYPE XI RETROREFLECTIVE SHEETING	<u>67</u>
749535 - SUPPLY AND INSTALLATION OF BOLT KIT FOR BREAK AWAY COUPLING	<u>73</u>
749536 - SUPPLY AND INSTALLATION OF HINGE PLATE FOR BREAK AWAY COUPLING	<u>73</u>
749537 - SUPPLY AND INSTALLATION OF BREAK AWAY COUPLING SYSTEM	<u>73</u>
749540 - REMOVAL OF OVERHEAD I-BEAM	<u>75</u>
749541 - INSTALLATION OF OVERHEAD I-BEAM	<u>75</u>
749542 - RELOCATION OF OVERHEAD I-BEAM	<u>75</u>
749544 - CUTTING OF OVERHEAD I-BEAM	<u>75</u>
749543 - REMOVAL OF LIGHTING UNIT	<u>76</u>
749545 – INSTALLATION OR REMOVAL OF STANDARD GROUND MOUNTED METAL SIGN POST	<u>77</u>
749546 – REMOVAL OF GROUND MOUNTED WOOD POST	<u>78</u>
749547 - SUPPLY AND INSTALLATION OF DRY CONCRETE	<u>79</u>
749548 – SUPPLY OF OVERHEAD I-BEAM, W-6	<u>80</u>
749549 – NIGHT TIME, EMERGENCY, OR WEEKEND WORK SURCHARGE	<u>81</u>
749550 - INSTALLATION OF BREAKAWAY I-BEAM SIGN POSTS	<u>82</u>
749551 -REMOVAL OF BREAKAWAY I-BEAM SIGN POSTS	<u>82</u>
749552– INSTALLATION OF SIGN ON OVER HIGHWAY STRUCTURE	<u>83</u>
749553- REMOVAL OF SIGN ON OVER HIGHWAY STRUCTURE	<u>83</u>
749554– INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM	<u>83</u>
749555 - REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM	<u>83</u>
749556 – INSTALLATION OF SIGN ON GROUND MOUNT POSTS	<u>83</u>
749557 - REMOVAL OF SIGN ON GROUND MOUNT POSTS	<u>83</u>
749558 - MEASUREMENT OF OVERHEAD SIGNS	<u>85</u>
749559 - SUPPLY OF JERSEY BARRIER MOUNTED I-BEAM	<u>86</u>
749560 - INSTALLATION OF JERSEY BARRIER MOUNTED I-BEAM	<u>87</u>
749561 - INSTALLATION OF SIGN ON JERSEY BARRIER MOUNTED I-BEAM	<u>88</u>

749562 - REMOVAL OF SIGN FROM JERSEY BARRIER MOUNTED I-BEAM. ....	<u>88</u>
749587 – SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE XI REFLECTIVE SHEETING (SINGLE SIDED). ....	<u>89</u>
749588 – SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE XI REFLECTIVE SHEETING (DOUBLE SIDED). ....	<u>89</u>
749688 - INSTALLATION OF 4” DIAMETER HOLE, LESS THAN OR EQUAL TO 6” IN DEPTH .....	<u>93</u>
749689 - INSTALLATION OF 4” DIAMETER HOLE, GREATER THAN 6” IN DEPTH. ....	<u>93</u>
749693 – STRAIGHTENING OF SIGN POST. ....	<u>94</u>
763507 - EMERGENCY MOBILIZATION. ....	<u>95</u>
763563 - PERFORMANCE AND PAYMENT BOND. ....	<u>96</u>
763643 - MAINTENANCE OF TRAFFIC – ALL INCLUSIVE. ....	<u>97</u>
<b>BID PROPOSAL FORMS. ....</b>	<u>102</u>
BREAKOUT SHEET. ....	<u>112</u>
<b>CERTIFICATION. ....</b>	<u>115</u>
<b>BID BOND. ....</b>	<u>117</u>

**GENERAL NOTICES**

SPECIFICATIONS:

The specifications entitled "Delaware Standard Specifications for Road and Bridge Construction, August, 2001", hereinafter referred to as the Standard Specifications; Supplemental Standard Specifications; the Special Provisions; notes on the Plans; this Bid Proposal; and any addenda thereto, shall govern the work to be performed under this contract.

CLARIFICATIONS:

Under any Section or Item included in the Contract, the Contractor shall be aware that when requirements, responsibilities, and furnishing of materials are outlined in the details and notes on the Plans and in the paragraphs preceding the "Basis of Payment" paragraph in the Standard Specifications or Special Provisions, no interpretation shall be made that such stipulations are excluded because reiteration is not made in the "Basis of Payment" paragraph.

ATTESTING TO NON-COLLUSION:

The Department requires as a condition precedent to acceptance of bids a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract. The form for this sworn statement is included in the proposal and must be properly executed in order to have the bid considered.

QUANTITIES:

The quantities shown are for comparison of bids only. The Department may increase or decrease any quantity or quantities without penalty or change in the bid price.

PREFERENCE FOR DELAWARE LABOR:

Delaware Code, Title 29, Chapter 69, Section 6962, Paragraph (d), Subsection (4)b

"In the construction of all public works for the State or any political subdivision thereof, or by firms contracting with the State or any political subdivision thereof, preference in employment of laborers, workmen or mechanics shall be given to bona fide legal citizens of the State who have established citizenship by residence of at least 90 days in the State. Each public works contract for the construction of public works for the State or any political subdivision thereof shall contain a stipulation that any person, company or corporation who violates this section shall pay a penalty to the Secretary of Finance equal to the amount of compensation paid to any person in violation of this section."

EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS:

Delaware Code, Title 29, Chapter 69, Section 6962, Paragraph (d), Subsection (7)

"a. As a condition of the awarding of any contract for public works financed in whole or in part by State appropriation, such contracts shall include the following provisions:

During the performance of this contract, the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, sexual orientation or natural origin. The contractor will take positive steps to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, sex, sexual orientation or national origin. Such action shall include, but not be limited to, the following: 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. The contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided by the contracting agency setting forth this nondiscrimination clause.

2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex or national origin.'

TAX CLEARANCE:

As payments to each vendor or contractor aggregate \$2,000, the Division of Accounting will report such vendor or contractor to the Division of Revenue, who will then check the vendor or contractor's compliance with tax requirements and take such further action as may be necessary to insure compliance.

LICENSE:

A person desiring to engage in business in this State as a contractor shall obtain a license upon making application to the Division of Revenue. Proof of said license compliance to be made prior to, or in conjunction with, the execution of a contract to which he has been named.

SUBCONTRACTOR LICENSE: 29 DEL. C. §6967:

(c) Any contractor that enters a public works contract must provide to the agency to which it is contracting, within 30 days of entering such public works contract, copies of all occupational and business licenses of subcontractors and/or independent contractors that will perform work for such public works contract. However, if a subcontractor or independent contractor is hired or contracted more than 20 days after the contractor entered the public works contract the occupational or business license of such subcontractor or independent contractor shall be provided to the agency within 10 days of being contracted or hired.

DIFFERING SITE CONDITIONS,

SUSPENSIONS OF WORK and SIGNIFICANT CHANGES IN THE CHARACTER OF WORK:

Differing site conditions: During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the engineer will investigate the conditions, and if he/she determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of his/her determination whether or not an adjustment of the contract is warranted. No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice. No contract adjustment will be allowed under their clause for any effects caused on unchanged work.

Suspensions of work ordered by the engineer: If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The engineer will notify the contractor of his/her determination whether or not an adjustment of the contract is warranted.

No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.

No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of this contract.

Significant changes in the character of work: The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the work under the contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.

The term "significant change" shall be construed to apply only to the following circumstances:

- (A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or
- (B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

CONFLICT WITH FEDERAL STATUTES OR REGULATIONS:

Delaware Code, Title 29, Chapter 69, Section 6904, Paragraph (a):

"If any provision of this subchapter conflicts or is inconsistent with any statute, rule or regulation of the federal government applicable to a project or activity, the cost of which is to be paid or reimbursed in whole or in part by the federal government, and due to such conflict or inconsistency the availability of federal funds may be jeopardized, such provision shall not apply to such project or activity."

FEDERAL LABOR AND EMPLOYMENT REQUIREMENTS

Federal Regulation 23 CFR § 635.117(b) Labor and employment, states:

"No procedures or requirement shall be imposed by any State which will operate to discriminate against the employment of labor from any other State, possession or territory of the United States, in the construction of a Federal-aid project."

CONVICT PRODUCED MATERIALS:

- (a) Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:
  - (1) Produced by convicts who are on parole, supervised release, or probation from a prison or
  - (2) Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.
- (b) Qualified prison facility means any prison facility in which convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-aid highway construction projects.

TO REPORT BID RIGGING ACTIVITIES:

The U. S. Department of Transportation (DOT) operates the below toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

TO REPORT BID RIGGING ACTIVITIES  
CALL 1-800-424-9071

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION  
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
(EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals for Minority Participation In  
Each Trade

12.3% (New Castle County)  
14.5% (Kent & Sussex Counties)

Goals for Female Participation In  
Each Trade

6.9% (Entire State)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is STATEWIDE.

REV. 11-3-80

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY  
CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
  - d. "Minority" includes:
    - i. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - ii. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - iii. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - iv. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Program Office or from the Federal procurement contracting offices. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
  - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
  - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
  - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
  - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
  - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
  - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
  - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
  - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
  - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
  - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - o. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
  - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participating, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
  9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).
  10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
  11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
  12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Order of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
  13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
  14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate

of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

\* \* \* \* \*

#### TRAINING SPECIAL PROVISIONS

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities", (Attachment 1), and is in implementation of 23 U.S.C. 140(a). As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved.

The number of trainees to be trained under the special provision will be 0. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year apprenticeship or training.

The number of trainees shall be distributed among the work classification on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Department of Highways and Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Department of Highways and Transportation and the Federal Highway Administration. The Department of Highways and Transportation and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment

obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work the classification covered by the program. It is the intention of these provisions that the training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other sources does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for off-site training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training; provides the instruction of the trainee; or pays the trainee's wages during the off-site training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainees as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid a least 60 percent of the appropriate minimum journeymen's rate specified in the contract for the first half of the of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees is an approved existing program are enrolled as trainees on this project. In fact case, the appropriate rates approved by the Department of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provisions.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training.

The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

\* \* \* \* \*

#### INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT & TRANSPORTATION EQUITY ACT

Recipients of Federal-aid highway funds authorized under Titles I (other than Part B) and V of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), or Titles I, III, and V of the Transportation Equity Act for the 21st Century (TEA-21) are required to comply with the regulations of 49 Code of Federal Regulations (CFR) Part 26 - Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

#### DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM SPECIFICATION

The U.S. Department of Transportation (DOT) requires that the Delaware Department of Transportation continue the established Disadvantaged Business Enterprise (DBE) Program for participation in U.S. DOT programs and that the program follow the final rules as stated in 49 CFR Part 26 and the Department's approved DBE Program plan.

The following definitions apply to this subpart:

Disadvantaged Business Enterprise or DBE means a for-profit small business concern (1) that is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and, (2) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

DOT-assisted contract means any contract between a recipient and a contractor (at any tier) funded in whole or in part with DOT financial assistance, including letters of credit or loan guarantees, except a contract solely for the purchase of land.

Good Faith Efforts means efforts to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.

Joint Venture means an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

Race-conscious measure or program is one that is focused specifically on assisting only DBEs, including women-owned DBEs.

Race-neutral measure or program is one that is, or can be, used to assist all small businesses. For the purposes of this part, race-neutral includes gender neutrality.

Small Business concern means, with respect to firms seeking to participate as DBEs in DOT-assisted contracts, a small business concern as defined pursuant to section 3 of the Small Business Act and Small Business Administration regulations implementing it (13 CFR part 121) that also does not exceed the cap on average annual gross receipts specified in 49 CFR §26.65(b).

Socially and economically disadvantaged individuals means any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is - (1) any individual who a recipient finds to be a socially and economically disadvantaged individual on a case-by-case basis; (2) any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:

- (i) Black Americans which includes persons having origins in any of the Black racial groups of Africa;
- (ii) Hispanic Americans which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- (iii) Native Americans which includes persons who are American Indians, Eskimos, Aluets, or Native Hawaiians;
- (iv) Asian-Pacific Americans which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
- (v) Subcontinent Asian Americans which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (vi) Women;
- (vii) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

DelDOT will establish specific goals for each particular DOT-assisted project which will be expressed as a percentage of the total dollar amount of contract bid. The specific contract goals for this contract are:

### **Disadvantaged Business Enterprise 0 % Percent**

DelDOT continues to reserve the right to approve DBE subcontractors and all substitutions of DBE subcontractors prior to award and during the time of the contract.

Bidders are required to submit with their bids the completed DBE Program Assurance portion of the Certification document which will state the bidders intent of meeting the goals established for this contract; or in the instance where a contractor cannot meet the assigned DBE Goals for this contract, he/she shall at the time of bid submit documentation required to verify that he/she has made a Good Faith Effort to meet the DBE Goals. Guidance for submitting a Good Faith Effort is identified in the next section and in the DBE Program Plan. Further, the apparent low bidder must submit to DelDOT within seven (7) calendar days after

the bid opening, executed originals of each and every DBE subcontract to satisfy contract goals consistent with the DBE Program Assurance submitted as part of the bid package.

No contract work shall be performed by a DBE subcontractor until the executed DBE subcontract is approved in writing by DelDOT and the Department has issued the required Notice to Proceed. Any DBE subcontract relating to work to be performed pursuant to this contract, which is submitted to DelDOT for approval, must contain all DBE subcontractor information, the requirements contained in this contract, and must be fully executed by the contractor and DBE subcontractor.

Each contract between the prime contractor and each DBE subcontractor shall at the minimum include the following:

1. All pertinent provisions and requirements of the prime contract.
2. Description of the work to be performed by the DBE subcontractor.
3. The dollar value of each item of work to be completed by the DBE subcontractor and the bid price of each item of work to be completed by the DBE subcontractor.

\* \* \* \* \*

#### CRITICAL DBE REQUIREMENTS

A bid may be held to be non-responsive and not considered if the required DBE information is not provided. In addition, the bidder may lose its bidding capability on Department projects and such other sanctions as the Department may impose. It is critical that the bidder understands:

1. In the event that the bidder cannot meet the DBE goal as set forth in this specification, he/she shall at the time of bid submit to the Department that percentage of the DBE Goal that will be met, if any, on the written and notarized assurance made a part of this contract. The contractor shall also at the time of bid submit all documentation that the contractor wishes to have the Department consider in determining that the contractor made a Good Faith Effort to meet contract DBE Goals. The Department will not accept Good Faith Effort documentation other than on the scheduled date and time of the bid opening. However, the Department may ask for clarification of information submitted should the need arise.
2. A bid which does not contain either a completely executed DBE Program Assurance and/or Good Faith Effort documentation, where appropriate, shall be declared non-responsive and shall not be considered by the Department.
3. Failure of the apparent low bidder to present originals of all DBE subcontracts to substantiate the volume of work to be performed by DBE's as indicated in the bid within seven (7) calendar days after the bid opening shall create a rebuttable presumption that the bid is not responsive.
4. Bidders are advised that failure to meet DBE Goals during the term of the contract may subject them to Department sanctions as identified in the DBE Program Plan.
5. In the execution of this contract, the successful bidder agrees to comply with the following contract clauses:

**Prompt Payment:** The prime contractor/consultant receiving payments shall, within 30 days of receipt of any payment, file a statement with the Department on a form to be determined by the Department that all subcontractors furnishing labor or material have been paid the full sum due them at the stage of the contract, except any funds withheld under the terms of the contract as required by Chapter 8, Title 17 of the Delaware Code, annotated and as amended. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of DelDOT. This clause applies to both DBE and non-DBE subcontractors.

**Retainage:** The prime contractor agrees to return retainage to each subcontractor within 15 calendar days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of DelDOT. This clause covers both DBE and non-DBE subcontractors. As guidance, once a subcontractor has satisfactorily completed the physical work, and has given to the prime contractor a certified statement that all laborers, lower tier contractors, and materialmen who have furnished labor and materials to the subcontractor have been paid all monies due them, the prime contractor shall return retainage to the subcontractor within 15 calendar days.

6. In the execution of this contract, the successful bidder agrees to comply with the following contract assurance and will include this same language in each subcontractor contract:

"The contractor 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 remedy as the recipient deems appropriate." 49 CFR Section 26.13

7. In addition to this specification, bidders must comply with all provisions of the rules and regulations adopted by the U.S. Department of Transportation for DBE participation in U.S. DOT and DeIDOT Programs (49 CFR Part 26) and the Delaware Department of Transportation Disadvantaged Business Enterprise Program Plan; each of which is hereby incorporated and made part of this specification. Bidders are also reminded that they must be responsible and responsive bidders in all other aspects aside from the DBE Program in order to be awarded the contract.
8. In accordance with 49 CFR 26.53(f)(1), DeIDOT requires that a prime contractor not terminate a DBE subcontractor without prior written consent from the DeIDOT Civil Rights Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

\* \* \* \* \*

#### GUIDANCE FOR GOOD FAITH EFFORT

When the DBE Goals established for a contract by DeIDOT are not met, the contractor shall demonstrate good faith efforts to meet the DBE contract goals. The contractor shall demonstrate that the efforts made were those that a contractor actively and aggressively seeking to meet the goals established by DeIDOT would make, given all relevant circumstances. Evidence of this good faith effort will be submitted with the bid at the time of the bid opening.

The contractor is expected to demonstrate good faith efforts by actively and aggressively seeking out DBE participation in the project to the maximum extent, given all relevant circumstances. Following are the kinds of efforts that may be taken but are not deemed to be exclusive or exhaustive and DeIDOT will consider other factors and types of efforts that may be relevant:

1. Efforts made to select portions of the work proposed to be performed by DBEs in order to increase the likelihood of achieving the stated goal. Selection of portions of work are required to at least equal the goal for DBE utilization specified in this contract.
2. Written notification at least ten (10) calendar days prior to the opening of a bid soliciting DBE interest in participating in the contract as a subcontractor or supplier and for specific items of work.
3. Efforts made to obtain and negotiate with DBE firms for specific items of work:
  - a. Description of the means by which firms were solicited (i.e. by telephone, e-mail, written notice, advertisement).
  - b. The names, addresses, telephone numbers of DBE's contacted, the dates of initial contact; and whether initial solicitations of interest were followed-up by contacting the DBEs to determine with certainty whether the DBEs were interested.
  - c. A description of the information provided to DBE firms regarding the plans, specifications and estimated quantities for portions of the work to be performed.
  - d. A statement of why additional agreements with DBE's were not reached in order to meet the projected goal.
  - e. Listing of each DBE contacted but not contracted and the reasons for not entering a contract.
4. Efforts made to assist DBEs that need assistance in obtaining bonding, insurance, or lines of credit required by the contractor.
5. Reasons why certified DBEs are not available or not interested.
6. Efforts to effectively use the services of available disadvantaged community organizations; disadvantaged contractor's groups; local, state and federal DBE assistance offices; and other organizations that provide assistance in recruitment and placement of DBEs.

The following are examples of actions that may not be used as justification by the contractor for failure to meet DBE contract goals:

1. Failure to contract with a DBE solely because the DBE was unable to provide performance and/or payment bonds.
2. Rejection of a DBE bid or quotation based on price alone.

3. Rejection of a DBE because of its union or non-union status.
4. Failure to contract with a DBE because the contractor normally would perform all or most of the work in the contract.

Administrative reconsideration:

Within five (5) days of being informed by DelDOT that it is not responsive because it has not documented sufficient good faith efforts, a bidder may request administrative reconsideration. Bidder should make this request in writing to the following reconsideration official: Director of Administration, DelDOT, P. O. Box 778, Dover, Delaware 19903. The reconsideration official will not have played any role in the original determination that the bidder did not document sufficient good faith efforts.

As part of this reconsideration, the bidder will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. The bidder will have the opportunity to meet in person with the reconsideration official, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. The final decision made by the reconsideration official will be communicated to the bidder in writing. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

\* \* \* \* \*

**REQUIRED CONTRACT PROVISIONS - FEDERAL-AID CONSTRUCTION CONTRACTS**  
(Exclusive of Appalachian Contracts)

FHWA-1273 -- Revised May 1, 2012 <http://www.fhwa.dot.gov/programadmin/contracts/1273/1273.docx>

- I. General
- II. Nondiscrimination
- III. Nonsegregated 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. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

**I. GENERAL**

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (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).

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.

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). 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 bid proposal or request for proposal 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).

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.
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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

**II. NONDISCRIMINATION**

The provisions of this section related to 23 CFR Part 230 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 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as

amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, 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 230, 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 (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 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 35 and 29 CFR 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.
  - 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, 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 who 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.
  - 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, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure 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. 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, 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, 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 there under. 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, 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 and 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. Assurance Required by 49 CFR 26.13(b):
  - a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
  - b. The contractor 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 contracting agency deems appropriate.

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 \$10,000 or more.

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, 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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**

- a. All laborers and mechanics employed or working upon the site of the work, 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 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.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. 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 shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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 classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall 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. (1) The contracting officer shall 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 shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore 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 utilized 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) 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 shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. 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.
  - (3) 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 shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour 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.
  - (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall 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.
- c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
  - d. 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, 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.

## 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, 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.

## 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, 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 section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) 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 section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall 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. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
- (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed 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 Regulations, 29 CFR part 3;

- (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 of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

##### a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed 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 Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall 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 the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall 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, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- d. 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. 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 journeymen 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.
6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 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.
9. Disputes concerning labor standards. 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 he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

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 watchmen 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.
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. 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 watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 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.
3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or 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, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

**VI. SUBLETTING OR ASSIGNING THE CONTRACT**

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

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” 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:
    - (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.
2. 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. 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.
  5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## **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 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.
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 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).

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 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 1, 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**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

### **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.

**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.
- 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.
- 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.
- 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 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.
- 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.
- 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. 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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- 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. 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) 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;
  - (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; 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.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**2. 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)

- a. By signing and submitting this proposal, the prospective lower tier 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.
- 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 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 grantee or subgrantee 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 grantee or subgrantee 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.

- 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.
- 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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- 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.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall 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 20).

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.

\* \* \* \* \*

## **APPENDICES TO THE TITLE VI ASSURANCE**

### **APPENDIX A**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, (Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) ), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts and the Regulations, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA), as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) may determine to be appropriate, including, but not limited to:
  - withholding payments to the contractor under the contract until the contractor complies;
  - and/or cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through five in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts and the Regulations . The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

### **APPENDIX E**

During the performance of this contract, the contractor or consultant, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970,(42 U.S.C. § 460 I), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);

Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part27;

The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);

Airport and Airway Improvement Act of 1982,(49 USC §471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);

The Civil Rights Restoration Act of 1987,(PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964,The AgeDiscrimination Act of 1975and Section 504 of the Rehabilitation Act of 1973,by expanding the defrnition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 - 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;

The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. S 41123) (prohibits discrimination on the basis of race, color, national origin, and sex);

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs; policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

**PREVAILING WAGES**

Included in this proposal are the minimum wages to be paid various classes of laborers and mechanics as determined by the Department of Labor of the State of Delaware in accordance with Title 29 Del.C. §6960, relating to wages and the regulations implementing that Section.

**REQUIREMENT BY DEPARTMENT OF LABOR FOR SWORN PAYROLL INFORMATION**

Title 29 Del.C. §6960 stipulates;

(b) Every contract based upon these specifications shall contain a stipulation that the employer shall pay all mechanics and laborers employed directly upon the site of the work, unconditionally and not less often than once a week and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the specifications, regardless of any contractual relationship which may be alleged to exist between the employer and such laborers and mechanics. The specifications shall further stipulate that the scale of wages to be paid shall be posted by the employer in a prominent and easily accessible place at the site of the work, and that there may be withheld from the employer so much of accrued payments as may be considered necessary by the Department of Labor to pay to laborers and mechanics employed by the employer the difference between the rates of wages required by the contract to be paid laborers and mechanics on the work and rates of wages received by such laborers and mechanics to be remitted to the Department of Labor for distribution upon resolution of any claims.

(c) Every contract based upon these specifications shall contain a stipulation that sworn payroll information, as required by the Department of Labor, be furnished weekly. The Department of Labor shall keep and maintain the sworn payroll information for a period of 6 months from the last day of the work week covered by the payroll.

Bidders are specifically directed to note the Department of Labor's prevailing wage regulations implementing §6960 relating to the effective date of the wage rates, at Part VI., Section C., which in relevant part states:

"Public agencies (covered by the provisions of 29 Del.C. §6960) are required to use the rates which are in effect on the date of the publication of specifications for a given project. In the event that a contract is not executed within one hundred twenty (120) days from the date the specifications were published, the rates in effect at the time of the execution of the contract shall be the applicable rates for the project."

**PREVAILING WAGE REQUIREMENTS**

It is DelDOT's understanding that the Davis-Bacon Act is not a preemptive statute in the broad sense, and does not preempt or displace State of Delaware prevailing wage requirements.

When a contract for a project contains both Federal Davis-Bacon and State of Delaware prevailing wage standards because of concurrent Federal and State coverage, the employer's minimum wage obligations are determined by whichever standards are higher.

STATE OF DELAWARE  
 DEPARTMENT OF LABOR  
 DIVISION OF INDUSTRIAL AFFAIRS  
 OFFICE OF LABOR LAW ENFORCEMENT  
 PHONE: (302) 451-3423

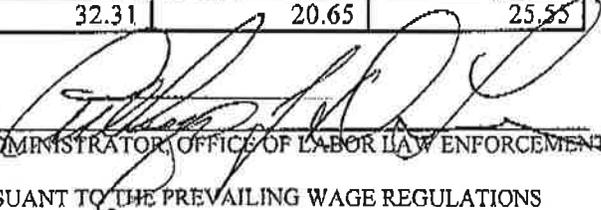
Mailing Address:  
 225 CORPORATE BOULEVARD  
 SUITE 104  
 NEWARK, DE 19702

Located at:  
 225 CORPORATE BOULEVARD  
 SUITE 104  
 NEWARK, DE 19702

**PREVAILING WAGES FOR HIGHWAY CONSTRUCTION**  
 EFFECTIVE MARCH 13, 2015 - AMENDED JULY 15, 2015

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
BRICKLAYERS	49.39	49.39	14.51
CARPENTERS	42.55	51.86	41.22
CEMENT FINISHERS	31.06	30.92	19.65
ELECTRICAL LINE WORKERS	22.50	22.50	21.25
ELECTRICIANS	63.60	63.60	63.60
IRON WORKERS	42.20	23.87	25.35
LABORERS	31.10	34.12	37.75
MILLWRIGHTS	16.11	15.63	13.49
PAINTERS	63.14	63.14	63.14
PILEDRIVERS	66.42	23.75	26.95
POWER EQUIPMENT OPERATORS	39.15	32.92	29.04
SHEET METAL WORKERS	22.75	20.31	18.40
TRUCK DRIVERS	32.31	20.65	25.55

CERTIFIED: 7/29/15

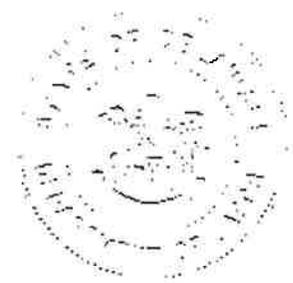
BY:   
 ADMINISTRATOR, OFFICE OF LABOR LAW ENFORCEMENT

NOTE: THESE RATES ARE PROMULGATED AND ENFORCED PURSUANT TO THE PREVAILING WAGE REGULATIONS ADOPTED BY THE DEPARTMENT OF LABOR ON APRIL 3, 1992.

CLASSIFICATIONS OF WORKERS ARE DETERMINED BY THE DEPARTMENT OF LABOR. FOR ASSISTANCE IN CLASSIFYING WORKERS, OR FOR A COPY OF THE REGULATIONS OR CLASSIFICATIONS, PHONE (302) 451-3423.

NON- REGISTERED APPRENTICES MUST BE PAID THE MECHANICS RATE.

Project: T201408302.01 Large Guide Sign Contract, Statewide, Open End, Multiple Counties



State: DELAWARE

Construction Type: HIGHWAY

COUNTY: New Castle County in Delaware

HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rates listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	06/26/2015

---

SUDE2015-002	04/23/2015
--------------	------------

	Rates	Fringes
Bricklayer	49.39	
Carpenter	42.55	
Cement Mason/Concrete Finisher	31.06	
ELECTRICIAN		
Electrician	63.60	
Line Worker	22.50	
Ironworker	42.20	
Laborer	31.10	
Millwright	16.11	
Power Equipment Operator:		
Piledriver	66.42	
Power Equipment Operator	39.15	
Sheet Metal Worker	22.75	
Truck Driver	32.31	

---

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

---

State: DELAWARE

Construction Type: HIGHWAY

COUNTY: Kent County in Delaware

HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rates listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	06/26/2015

---

SUDE2015-001	04/23/2015	Rates	Fringes
Bricklayer		49.39	
Carpenter		51.86	
Cement Mason/Concrete Finisher		30.92	
ELECTRICIAN			
Electrician		63.60	
Line Workers		22.50	
Ironworker		23.87	
Laborer		34.12	
Millwright		15.63	
Power Equipment Operator:			
Piledriver		23.75	
Power Equipment Operators		32.92	
Sheet Metal Worker		20.31	
Truck Driver		20.65	

---

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

---

FEDERAL DAVIS-BACON WAGE RATES 06/26/2015 DE12

General Decision Number: DE150012

STATE: Delaware

Construction Type: Highway

COUNTY: Sussex County in Delaware

HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rates listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	06/26/2015

-----

SUDE2015-003	04/23/2015
--------------	------------

	Rates	Fringes
Bricklayer	14.51	
Carpenter	41.22	
Cement Mason/Concrete Finisher	19.65	
ELECTRICIAN		
Electrician	63.60	
Line Worker	21.25	
Ironworker	25.35	
Laborer	37.75	
Millwright	13.49	
Power Equipment Operator:		
Piledriver	26.95	
Power Equipment Operators	29.04	
Sheet Metal Worker	18.40	
Truck Driver	25.55	

-----

WELDERS: Receive rate prescribed for craft performing operation to which welding is incidental.

-----

APPLICABILITY OF DAVIS-BACON LABOR STANDARD PROVISIONS TO FLAGGERS

The U.S. Department of Labor has established that the duties of flaggers working on contracts covered by the Davis-Bacon Act, are manual and physical in nature. Accordingly, all employees performing the work of flaggers on Davis-Bacon covered contracts shall be entitled to receive applicable prevailing wage rates.

\* \* \* \* \*

ALL AGENCY MEMORANDUM NO. 130  
U.S. DEPARTMENT OF LABOR  
EMPLOYMENT STANDARDS ADMINISTRATION  
WAGE AND HOUR DIVISION  
WASHINGTON, DC 20210

GUIDELINES

HIGHWAY CONSTRUCTION

Highway projects include the construction, alteration, or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.

EXAMPLES: Alleys, Base Courses, Bituminous treatments, Bridle Paths, Concrete pavement, Curbs, Excavation and embankment (for road construction), Fencing (highway), Grade crossing elimination (overpasses and underpasses), Guard rails on highway, Highway signs, Highway bridges (overpasses, underpasses, grade separation), Medians, Parking lots, Parkways, Resurfacing streets and highways, Roadbeds, Roadways, Runways, Shoulders, Stabilizing courses, Storm sewers incidental to road construction, Street paving, Surface courses, Taxiways, and Trails.

ANY QUESTIONS REGARDING THE APPLICATION OF THE GUIDELINES ABOVE TO A PARTICULAR PROJECT OR ANY DISPUTES REGARDING THE APPLICATION OF THE WAGE SCHEDULES ARE TO BE REFERRED TO THE WAGE AND HOUR DIVISION, U.S. DEPARTMENT OF LABOR FOR RESOLUTION, AND THE INSTRUCTIONS OF THE WAGE AND HOUR DIVISION ARE TO BE OBSERVED IN ALL INSTANCES.

\* ALL AGENCY MEMORANDUM NO. 130  
U.S. DEPARTMENT OF LABOR  
EMPLOYMENT STANDARDS ADMINISTRATION  
WAGE AND HOUR DIVISION  
WASHINGTON, DC 20210

**SUPPLEMENTAL SPECIFICATIONS  
TO THE  
AUGUST 2001  
STANDARD SPECIFICATIONS**

**EFFECTIVE AS OF THE ADVERTISEMENT  
DATE OF THIS PROPOSAL  
AND INCLUDED BY REFERENCE**

**The Supplemental Specifications can be viewed and printed from  
the Department's Website.**

To access the Website;

- in your internet browser, enter; <http://www.deldot.gov>
- on the left side of the page under 'INFORMATION', Click; 'Publications'
- scroll down under 'MANUALS' and Click; "Standard Specifications 2001"

The full Website Link is;

[http://www.deldot.gov/information/pubs\\_forms/manuals/standard\\_specifications/index.shtml](http://www.deldot.gov/information/pubs_forms/manuals/standard_specifications/index.shtml)

Printed copies of the Supplemental Specifications are available upon request. A printed copy of the above referenced Supplemental Specifications will be included in the final contract documents upon award.

**The Contractor shall make himself aware of these revisions and corrections (Supplemental Specifications), and apply them to the applicable item(s) of this contract.**

# **SPECIAL PROVISIONS**

**CONSTRUCTION ITEM NUMBERS**

All construction pay items are assigned a six (6) digit number, shown as Item Number on the Plans and/or in the Special Provisions, and shall be interpreted in accordance with the following:

**Standard Item Number:**

The first three digits of the construction item numbers indicates the Section number as described in the Standard Specifications, and all applicable requirements of the Section shall remain effective unless otherwise modified by the Special Provisions. The last three digits of the construction item identifies the item by sequential number under that Section. Sequential numbers for all items covered under Standard Specifications range from 000 to 499. A comprehensive list of construction item numbers begins on page 421 of the Standard Specifications. Additions to this list will be made as required.

**Special Provisions Item Number:**

The first three digits of the construction items, covered under Special Provisions, indicates the applicable Section number of the Standard Specifications, and shall be governed fully by the requirements of the Special Provisions. The last three digit of the items covered under Special Provisions identifies the item by sequential number. Sequential numbers for Special Provision items, range from 500 to 999.

Examples

**Standard Item Number - 202000 Excavation and Embankment**

202 Indicates Section Number

000 Indicates Sequential Number

**Special Provision Item Number - 202500 Grading and Reshaping Roadway**

202 Indicates Section Number

500 Indicates Sequential Number

**NOTE:**

**PLEASE NOTE** revised Supplemental Specifications to the August 2001 Standard Specifications were issued November 24, 2014 and apply to this project. They can be [viewed here](#) and at [www.deldot.gov](http://www.deldot.gov).

**SPECIFICATIONS:** The Department is currently updating the August 2001 Specifications for Road and Bridge Construction. Through this update, some Divisions were renumbered and some new ones were created and added. The *Specifications Note* document is for the use by the bidders to reference the new numbers to the past numbers used for bidding purposes on previous Department contracts.

**401502 - ASPHALT CEMENT COST ADJUSTMENT**

For Sections 304, 401, 402, 403, 404, and 405, payments to the Contractor shall be adjusted to reflect increases or decreases in the Delaware Posted Asphalt Cement Price when compared to the Project Asphalt Cement Base Price, as defined in these Special Provisions.

The Delaware Posted Asphalt Cement Price will be issued monthly by the Department and will be the industry posted price for Asphalt Cement, F.O.B. Philadelphia, Pennsylvania. The link for the posting is [http://www.deldot.gov/information/business/bids/asphalt\\_cement\\_english.shtml](http://www.deldot.gov/information/business/bids/asphalt_cement_english.shtml).

The Project Asphalt Cement Base Price will be the Delaware Posted Asphalt Cement Price in effect on the date of advertisement.

All deviations of the Delaware Posted Asphalt Cement Price from the Project Asphalt Cement Base Price are eligible for cost adjustment. No minimum increases or decreases or corresponding percentages are required to qualify for cost adjustment.

Actual quantity of asphalt cement qualifying for any Asphalt Cement Cost Adjustment will be computed using the weight of eligible asphalt that is shown on the QA/QC pay sheets as a percentage for the delivered material.

If the mix was not inspected and no QA/QC pay sheet was generated, then the asphalt percentage will be obtained from the job mix formula for that mix ID.

The asphalt percentage eligible for cost adjustment shall only be the virgin asphalt cement added to the mix.

There shall be no separate payment per ton cost of asphalt cement. That cost shall be included in the various unit prices bid per ton for those bid items that contain asphalt cement (mentioned above).

The Asphalt cement cost adjustment will be calculated on grade PG 64-22 asphalt regardless of the actual grade of asphalt used. The Project Asphalt Cement Base Price per ton for the project will be the Delaware Posted Asphalt Cement Price in effect on the date of project advertisement.

If the Contractor exceeds the authorized allotted completion time, the price of asphalt cement on the last authorized allotted work day, shall be the prices used for cost adjustment during the time liquidated damages are assessed. However, if the industry posted price for asphalt cement goes down, the asphalt-cement cost shall be adjusted downward accordingly.

**NOTE:**

Application of Asphalt Cement Cost Adjustment requirements as indicated above shall apply only to those contracts involving items related to bituminous base and pavements, and with bitumen, having a total of 1,000 tons or more of hot-mix bid quantity in case of Sections 401, 402 and 403; and 15,000 gallons or more in case of Sections 304, 404 and 405.

5/05/15

- 743538 - WOODEN SIGN SUPPORTS, 4" x 4"**
- 743539 - WOODEN SIGN SUPPORTS, 4" x 6"**
- 743540 - WOODEN SIGN SUPPORTS, 6" x 6"**
- 743541 - WOODEN SIGN SUPPORTS, 6" x 8"**

**Description:**

This work consists of furnishing and placing wooden sign support(s) of the size required by the Contract and the size of the Sign Panel (Item 749574) to be placed on it and in accordance with these Specifications and in reasonably close conformity with the lines, grades, dimensions, and locations shown on the Plans or established by the Engineer. Wooden sign support(s) shall be of the size, type, and installed in such a manner so to break off when hit by a vehicle. The item(s) shall also include, but not be limited to, excavation of the foundation, furnishing and placing Class C concrete, and placing of foundation backfill, as may be required to complete the work as indicated on the Plans or as directed by the Engineer.

**Materials:**

Wooden sign support(s) shall range in size from a minimum nominal size of 4" x 4" (100 mm x 100 mm), to a maximum nominal size of 6" x 8" (150 mm x 200 mm). All wooden sign support(s) shall meet or exceed the requirements of Section 601 - Timber Structures and comply with the preservative treatment of timber as found in Section 814 of the Standard Specification, and AASHTO Standard Specification Section M 133.

The size of the wooden sign support(s) in relation to the size of the sign panel can be found on the following chart:

**MAXIMUM SIGN PANEL / POST SIZES**

<b>MAXIMUM SIZE OF SIGN PANEL</b>	<b>POST SIZE (NOMINAL)</b>
18" x 24" (450 x 600 mm)	4" x 4" (100 x 100 mm)
30" x 30" (750 x 750 mm)	4" x 6" (100 x 150 mm)
36" x 48" (900 x 1200 mm)	6" x 6" (150 x 150 mm)
> 36" x 48" (900 x 1200 mm)	6" x 8" (150 x 200 mm)

Sign panels 36" x 48" (900 mm x 1200 mm) or greater may require multiple 6" x 6" (150 mm x 150 mm) or 6" x 8" (150 mm x 200 mm) supports.

**Construction Methods:**

Wooden sign support(s) larger than 4" x 4" (100 mm x 100 mm), nominal size, shall be supplied with drilled breakaway holes adjacent to the post base. The breakaway hole may be either pre-drilled or field-drilled and centered on the support with the first hole located 4" (100 mm) and the second hole located 18" (450 mm) from the proposed finished grade and perpendicular to the travelway.

The breakaway hole size may be found for that sized post on the following chart:

**BREAKAWAY HOLE SIZE CHART**

<b>POST SIZE</b>	<b>HOLE DIAMETER</b>
4" x 4" (100 mm x 100 mm)	NOT REQUIRED
4" x 6" (100 mm x 150 mm)	1 1/2" (38 mm)
6" x 6" (150 mm x 150 mm)	2" (50 mm)
6" x 8" (150 mm x 200 mm)	3" (75 mm)

Wooden Sign Supports found protected by physical traffic barriers and located beyond the proper minimum deflection distance of the traffic barrier may not require drilled breakaway holes at the direction of the Engineer.

Wooden Sign Supports shall be placed in pre-excavated foundation holes of the width and depth found on the following chart:

**FOUNDATION WIDTH AND DEPTH**

<b>SUPPORT SIZE</b>	<b>MINIMUM WIDTH</b>	<b>MINIMUM DEPTH</b>
4" x 4" (100 x 100 mm)	14" (350 mm)	5' (1.5 m)
4" x 6" (100 x 150 mm)	14" (350 mm)	5' (1.5 m)
6" x 6" (150 x 150 mm)	18" (450 mm)	6' (1.8 m)
6" x 8" (150 x 200 mm)	18" (450 mm)	6' (1.8 m)

The support shall be installed plumb and true in the foundation and backfilled with material meeting the requirements of Borrow, Type C. When backfilling the Wooden Sign Supports, borrow shall be placed in six (6) inch (150 mm) lifts and compacted thoroughly in order to achieve maximum compaction. It is important to provide a rigid subsurface condition around the support to facilitate the breakage of the support when hit by a vehicle. Therefore, supports placed in non-excavated foundation holes, driven supports, or supports placed in loose or non-compacted fill shall not be allowed.

6" x 6" (150 x 150 mm) and 6" x 8" (150 x 200 mm) Wooden Sign Supports shall be installed in Class C Portland Cement Concrete Masonry. The diameter of the foundation shall remain the same, however, allowances shall be made to include a minimum of four (4) inches (100 mm) of concrete between the bottom of the post and the hole.

Before the support is placed in the foundation and prior to pouring concrete, the post shall be wrapped in 1/2 inch (12 mm) thick sheet styrofoam. The styrofoam shall cover all areas of the wooden support that will be exposed to the concrete.

With sign attached, the distance from the finished grade to the bottom of the sign panel shall be a minimum of seven (7) feet (2.10 m). When a smaller secondary warning sign is used below the main or regulatory sign, the minimum distance from the finished grade to the bottom of the sign panel shall be four (4) feet (1.20 m).

**Method of Measurement:**

The quantity of wooden sign supports will be measured as the actual number of each wooden support placed and accepted.

**Basis of Payment:**

The quantity of wooden sign supports will be paid for at the Contract unit price each. Price and payment will constitute full compensation for the excavation and preparation of the foundation; for furnishing and installing all materials including Wooden Sign Supports; Borrow, Type C; Portland Cement Concrete Masonry, Class C; and styrofoam, if applicable; and for all labor, equipment, tools and incidentals necessary to complete the work.

04/02/04

**746501 - INSTALLATION OF DOWN GUY AND ANCHOR**  
**746708 - INSTALLATION OF SIDEWALK GUY AND ANCHOR**

**Description:**

This work consists of installing a down guy or a sidewalk guy between an anchor and a pole. The installation of a down guy or a sidewalk guy shall include a strain insulator and guy protector. The location of the anchor shall be in accordance with the appropriate cable installation practices.

**Materials:**

Screw Anchors with Forged-Eye Anchor Rods: Nominal rating of 8,000 pounds (36 kN) in average soil, diameter 8" (203 mm), pitch of 2" (51 mm), rod diameter 1" (25 mm), length of rod 5-1/2" (140 mm).

Guy Clamps: Suitable for 7/16" (11 mm) stranded guy wire, 6 inches (152 mm) long with three 5/8" (16 mm) galvanized nuts and bolts.

Guy Attachments.

Galvanized Machine Bolt: Rod diameter of 5/8" (16 mm) minimum, length to suit the pole it is to be used on.

Full Round and Half Round Guy Wire Protector: 7 feet (2.1 m) in length, yellow plastic material.

Flat washer 3" x 3" x 1/4" (76 mm x 76 mm x 6 mm) with an 11/16" (17 mm) hole for 5/8" (16 mm) bolt or flat washer 3" x 3" x 1/4" (76 mm x 76 mm x 6 mm) with a 13/16" (21 mm) hole for 3/4" (19 mm) bolt, as appropriate.

Sidewalk guy fittings.

Pipe for sidewalk guys.

3 feet (0.9 m) of #6 solid copper wire.

2 parallel groove connectors {Blackburn #K2 - jumper clamp} or equal.

#4 plated split bolt connector {Blackburn #4HPS}.

Strain Insulator, minimum rated strength of 20,000 pounds (90 kN).

Stranded guy wire, 7/16" (11 mm), if supplied by the Contractor, will be paid for under supply of span wire.

**Construction Methods:**

The installation of the anchor will consist of driving the anchor into firm and undisturbed ground to a point whereby no more than 6 inches (152 mm) of the rod including the eye is exposed above ground level.

The down guy or sidewalk guy wire shall be attached to the anchor end of the pole at the appropriate location on the pole to provide guying for the cable installed for DelDOT's use. The guy shall be installed according to all applicable electrical and safety codes. The strain insulator shall be installed based on field conditions and as designated by the Engineer. The strain insulator shall be not less than 8 feet (2.4 m) above the ground if the guy is broken below the insulator.

A guy wire protector will be installed with the bottom at ground level and properly anchored to the guy wire.

**Method of Measurement:**

The quantity of anchors and down guys or sidewalk guys will be measured as the number of anchors and down guys or sidewalk guys installed as specified, complete in place, and accepted. Guy wire, if supplied by the Contractor, will be paid for under supply of span wire. The bonding of the guys shall be coincidental to this item.

**Basis of Payment:**

The quantity of anchors and down guys or sidewalk guys will be paid for at the Contract unit price for each installation. Price and payment shall include full compensation for all materials, labor, tools, equipment, and incidentals necessary to complete the item.

01/29/03

**746504 - FURNISH & INSTALL SPAN WIRES, 7/16"**  
**746505 - FURNISH & INSTALL SPAN WIRES, 3/8"**  
**746506 - FURNISH & INSTALL SPAN WIRES, 1/4"**

**Description:**

This work consists of furnishing and attaching a new span wire, with two strain insulators, at the proper roadway clearance between two poles (wood or metal).

**Materials:**

Unless otherwise specified, all hardware shall meet ASTM 153, Class C requirements

**Span wire, 7/16"** - Galvanized Steel Extra High-Strength Grade meeting ASTM A-475 and shall have a minimum of 7 wires, 7/16" in diameter and a minimum strength of 20,800 pounds.

**Span wire, 3/8"** - Galvanized Steel Extra High-Strength Grade, 7 wires, 3/8" in diameter and have a minimum strength of 15,400 pounds (68 kN).

**Span Wire, 1/4"** - Galvanized Steel meeting ASTM A-475 requirements, and shall have a minimum of 7 wires, 1/4" in diameter and a minimum strength of 6,650 pounds.

**Two service sleeves** - to anchor the loose ends of the span wire

**Two strain insulators** - minimum rated strength of 20,000 pounds

**Four galvanized guy clamps** - six 6 inches in length, each complete with three 5/8" galvanized bolts and nuts, meeting ASTM 153 Class C, and suitable for use on 7/16" to 1/2" span wire

**Tensioning device** - minimum capacity of 6,000 pounds pull

**Additional materials for wood pole installation:**

Four strain plates  
16 galvanized screws, 1/4" x 2-1/2"  
Four guy hooks  
Four 5/8" x 4" lag screws

Additional hardware may be required for span-to-span attachments, such as "H" span and "Suspended Box" span installations.

**Construction Methods:**

The tension of the installed span wire and the attachment height will be specified by the Engineer. Tension shall be applied to the span wire using a tensioning device with a minimum capacity of 6,000 pounds pull.

No preparation is required for attaching a span wire between metal poles.

The wood poles shall be prepared as follows:

1. Install two strain plates on each pole, one on the front and one on the backrear, each secured with four ea. 1/4" x 2-1/2" galvanized screws.
2. On each pole, two guy hooks shall be installed, one on each side of the pole, using 5/8" x 4" lag screws.

The span wire shall be installed according to all applicable electrical and safety codes. The strain insulators shall be installed based on field conditions and as designated by the Engineer. Each span shall contain two strain insulators unless otherwise directed by the Engineer. The strain insulator shall be not less than 8 feet above the ground if the span wire is broken below the insulator.

The span wire shall be attached to the poles and strain insulators in the following manner:

1. Starting at the pole nearest the strain insulator, the span wire shall be wrapped one and one half times around the pole with the end of the span wire extending back parallel with the span. The span wire shall not be allowed to cross over or overlap itself on the pole.
2. Two galvanized guy clamps shall be placed on the span wire end-to-end so that the guy clamp nearest the pole is 2.5 feet from the pole. The other guy clamp shall have a 1" separation from the guy clamp nearest the pole.
3. The loose end of the span wire shall extend at least 3 feet from the last clamp and shall be properly secured to the span wire with a service sleeve.
4. A strain insulator shall be placed by doubling back the span wire through the appropriate hole in the insulator. The doubled back span wire shall be attached to the other span wire using two galvanized guy clamps placed end-to-end at a distance of 1 foot from the strain insulator. The loose end of the span wire shall extend at least 3 feet from the end of the last clamp and shall be properly secured to the span wire with a service sleeve.
5. A span wire shall be attached to the other side of the strain insulator in the same manner as in Step 4 above.
6. The span wire shall be wrapped around the far pole thereby completing the span. The span wire shall be tensioned in an appropriate manner to achieve the tension as specified by the Engineer. The tensioning device shall be used on the end of the span farthest from the strain insulator. The wire shall be wrapped and clamped in the same manner as described above in steps 1 and 2. The loose end shall extend at least 3 feet from the last clamp and shall be secured with a service sleeve.

**Measurement and Payment:**

The quantity of 7/16" or 1/4" span wire cable installed between poles shall be measured per linear foot from center of pole or structure to center of pole or structure (wood or metal), set at the proper tension and height, installed, complete in place, and accepted.

No separate payment shall be made for wood pole preparation.

No separate payment shall be made for labor and materials necessary to attach span wire between poles for "H", "Suspended Box" or other types of span installations.

No separate measurement or payment shall be made for span wire wrapped around the pole or structure. This work and material shall be incidental to the item.

Price and payment will constitute full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

3/1/12

**746507 – INSTALLATION OF STEEL POLE (LESS THAN 40’)**  
**746528 - INSTALLATION OF STEEL POLE (EQUAL TO OR GREATER THAN 40’)**  
**746697 - INSTALLATION OF WOOD POLE**  
**746815 - INSTALLATION OF LUMINAIRE**  
**746831 - INSTALLATION OF PEDESTAL POLE**  
**746928 – INSTALLATION OF STEEL MAST ARM POLE WITH SINGLE OR TWIN MAST  
ARM UP TO 70’**  
**746942 - INSTALLATION OF LIGHTING POLE WITH ARM AND LUMINAIRE**

**Description:**

This work consists of installing the specified type of pole on an existing pole base (or ground mounted for wood pole) in accordance with the locations, notes, and details on the Plans and as directed by the Engineer.

**Materials:**

Unless specified otherwise, the steel mast arm(s), steel pole, pedestal pole, wood pole, lighting pole, luminaire, and all necessary hardware shall be furnished by the Department. These materials can be obtained from the Department's Dover Sign Shop. The Contractor shall inform the Department two working days prior to picking up the pole, and other related hardware. Where pole installation is part of the work of relocating an existing pole on a project, the pole and related hardware shall be that which is removed from the existing pole site.

**Construction Methods:**

**General -**

Prior to erecting a pole, the Contractor shall be sure that there is a sufficient length of anchor bolt to permit the anchor bolt to extend at least flush with the top of the top nut when that nut is tightened in place. If this condition does not exist, the Contractor shall not erect the pole and shall notify and await instructions from the Engineer.

Connection of the mast arm(s) or other required assembly shall be performed by the Contractor according to his selected installation methods.

The Contractor shall make special note of any aerial utilities within the area and coordinate his work accordingly.

All conduit caps or knockouts are to be removed from the conduit, which extends from the pole base and grounding insulated bushings installed. A #6 Copper ground wire shall be installed between the 3/4" ground rod clamp and the grounding insulated bushings, and to the lug or stud in the metal pole or pedestal. On the multi-section steel camera poles, the #6 copper ground wire shall continue up to the top of the upper section of the pole from the grounding insulated bushing to a bonding lug attached to the camera mounting bolts. At no time shall the #6 wire be installed between the leveling nut and the pole.

**Steel Mast Arm Pole or Steel Pole –**

The steel pole shall be erected by a suitable hoisting device as approved by the Engineer. The Contractor shall insure that the hoisting device is rated for the weight and reach necessary. The Contractor shall use the equipment to raise the pole into position, place the pole on the anchor bolts, and shall hold the pole in place until the nuts have been installed and tightened on the anchor bolts in accordance with the applicable Plan sheets or Standard Construction Details.

On all steel pole installations a proper nut as shown on the plan details shall be used under the base of the pole and a proper nut shall be used above the base of the pole. Once the pole is set, the anchor bolt nuts shall be adjusted and tightened to properly position the pole as indicated on the applicable Plan sheets or Standard Construction Details. Once the pole is set in place, properly canted, and the nuts tightened, and the ground wire connected, the area between the base of the pole and the top of the foundation shall be formed and

grouted as indicated on the applicable Plan sheets or Standard Construction Details. The anchor bolt covers and hand hole cover shall be placed on the pole after the pole has been erected in place.

**Pedestal Pole -**

The pedestal pole shall be erected by hand. Once the pedestal is set in place, properly plumbed, the nuts tightened, and the ground wire connected, the contractor shall place the hand hole cover on the pedestal.

**Wood Pole –**

This work consists of installing wood poles with a butt plate and #6 bare copper ground wire from the butt plate to the top of the pole. A ground rod may be used in place of the butt plate. The pole shall be located as shown on the Plans and as directed by the Engineer.

The pole shall be erected in a hole at least 6 feet deep or the height of the pole divided by 6, whichever is larger. The hole shall be dug in such a manner as to preclude over-sizing the diameter.

Sufficient earth shall be placed in the hole to fill it completely and provide a ridge around the hole after it has been properly filled. During refill, the earth shall be placed in layers not to exceed one foot and shall be well tamped with a power tamper.

The pole shall be set vertically in all directions, unless otherwise specified.

Copper coated fasteners shall be placed not more than 3 feet apart on the ground wire.

The ground rod, if utilized, shall be driven vertically into the ground, shall extend 4 inches above ground level and shall be fastened to ground wire with ground clamp. Ground rods shall be a minimum of 10 feet in length. Butt plates and/or ground rods will be incidental to this bid item.

The Ground Wire will be paid for under its respective item.

**Lighting Pole with Arm and Luminaire –**

This work consists of installing lighting poles, arms and luminaires on an existing base.

Electrical connection of the luminaire is also included. To make the connection, the Contractor shall furnish the following materials:

- Connector kits shall be of waterproof, molded synthetic rubber suitable for burial in the ground or exposure to sunlight. The cable connection shall be compression type, applied by means of a compression tool. Connectors shall be 600-volt, fabricated from high strength copper alloy, quick disconnect, in-line connectors, fused for ungrounded conductor and non-fused for neutral at each pole.
- #8 AWG wire
- Split bolt connectors
- Electrical tape

These materials, other than the #8 wire, are to be included in the price bid for this item. The wire will be paid under its respective item. The unit shall be attached to the existing service cable and tested. On wood poles, if the service cable is not available, a 5 foot tail shall be left at the pole end of the mast arm. On metal poles, the electrical connections and grounding of pole will be made in the base. If the service cable is not available, a 5 foot tail shall be left in the pole base.

Installation of the pole and arm shall be as specified under **Steel Mast Arm Pole** above.

**Installation of Luminaire –**

This item includes picking up the luminaire unit at the DelDOT sign shop, transporting it to the specified location and installing it on an existing pole to provide a fully functioning overhead light. The materials for connecting the luminaire (as listed above under “**Lighting Pole with Arm and Luminaire**”) are also to be furnished as part of this item. These materials, other than the #8 wire, are to be included in the price bid for this item. The wire will be paid under its respective item. The unit shall be attached to the existing service

cable and tested. On wood poles, if the service cable is not available, a 5 foot tail shall be left at the pole end of the mast arm. On metal poles, the electrical connections and grounding of pole will be made in the base. If the service cable is not available, a 5 foot tail shall be left in the pole base.

**Method of Measurement:**

The quantity of poles will be measured on a per each basis as the number of poles installed as specified, complete and accepted under the applicable bid item listed above. "Installation of Luminaire" will also be paid on a per each basis if the unit is being installed as a replacement or on a previously installed existing pole.

**Basis of Payment:**

**General** - Price and payment per each pole type shall include full compensation for picking up the materials at the DelDOT Sign Shop, transporting and setting the poles, and for all labor, tools, equipment, and incidentals necessary to complete the item.

**Steel Mast Arm Pole or Steel Pole** – In addition to the general statement, note that #6 Ground Wire will be paid for separately under its respective item. Any required fasteners for the ground are considered incidental to the Steel Pole being installed.

**Pedestal Pole** – As noted in general above

**Wood Pole** – In addition to the general statement, payment includes excavating the hole, furnishing and installing the butt plate or ground rod, and furnishing and installing fasteners for the ground wire.

**Lighting Pole with Arm and Luminaire** – In addition to the general statement, payment includes furnishing the listed materials, connecting, and testing the luminaire to result in a fully functioning light pole assembly. #8 wire will be paid for separately under its respective item.

**Installation of Luminaire** – This item includes picking up a luminaire, furnishing the listed materials, transporting, installing, and testing each luminaire. The item will be used for payment only when the luminaire is being installed as a replacement and/or on a previously installed pole. Luminaires installed as part of an entire light pole assembly are included for payment under the item titled "**Lighting Pole with Arm and Luminaire**" (Item 746942).

2/29/12

**746704 - ADJUSTMENT OF SPAN OR MESSENGER WIRE**

**Description:**

This work consists of adjusting existing span or messenger wire between existing poles. This could include tightening, raising and tightening, loosening, or other and shall be done only as directed by the Engineer. This does not include new installations under construction.

**Materials:**

Tensioning device, with a minimum capacity of 6,000 pounds pull.

**Construction Methods:**

**Loosen existing span or messenger wire:**

Attach a tensioning device between the pole and span or messenger wire beyond the strain insulator. Loosen or remove the two 3-bolt guy clamps. Adjust the span bonding jumper as required.

**Tighten or raise and tighten existing span or messenger wire:**

To tighten the span or messenger wire, attach another tensioning device between the loose end of the span or messenger wire and tighten. When the desired tension is reached, re-tighten the 3-bolt guy clamps and remove tensioning devices. Adjust the span bonding jumper as required. Adjustment may need to be made on both ends of one span to tighten or raise and tighten the span or messenger wire at the direction of the Engineer and will be paid as one (1) "Adjustment of Span or Messenger Wire."

**Measurement and Payment:**

The quantity of wires adjusted will be paid per each number of span or messenger wires adjusted, complete and accepted. No payment shall be made for removal or installation of tape on span to clear a path for tensioning devices. No payment shall be made for tightening span or messenger wires on new installations made by the Contractor. Price and payment shall constitute full compensation for raising, raising and tightening, or loosening the span or messenger wire including labor, tools, equipment, and incidentals necessary to complete the work.

10/25/12

**746710 - REMOVAL OF DOWN GUY AND ANCHOR**  
**746739 - REMOVAL OF SIDEWALK GUY AND ANCHOR**

**Description:**

This work consists of removing anchor(s), down guy(s) or sidewalk guy(s), and guy wire protector(s).

**Materials:**

As necessary to properly remove screw or expanding anchors and guys. The Contractor shall salvage as much of the removed material as possible.

**Construction Methods:**

The Contractor shall submit the method of removal of the anchor and the down guy or the sidewalk guy for the approval of the Engineer. All salvaged material shall be coiled up and/or taped as appropriate and returned to the Department at the Dover Sign Shop.

**Method of Measurement:**

The quantity of anchors and down guys or sidewalk guys removed will be measured as the number of anchors and down guys or sidewalk guys removed and returned to the Department at the Dover Sign Shop.

**Basis of Payment:**

The quantity of anchors and down guys or sidewalk guys removed will be paid for at the Contract unit price per each. Price and payment will constitute full compensation for all labor, equipment, tools, and incidentals required to complete the work.

01/15/03

**746711 - INSTALLATION OF OVERHEAD GUY**

**Description:**

This work consists of installing a pole-to-pole overhead guy.

**Materials:**

Galvanized thimbleye bolts or machine bolts and galvanized thimbleye nuts.

Galvanized square washers.

Galvanized square nuts.

Strain insulator, minimum rated strength of 20,000 pounds (89 kN).

Galvanized guy clamps, 6" (152 mm) in length, complete with three 5/8" (16 mm) galvanized bolts and nuts, suitable for use on 1/4" (6 mm) to 1/2" (13 mm) guy wire.

For each end of the overhead guy:

3 feet (0.9 m) of #6 solid copper wire

Two parallel groove connectors, Blackburn #K2 - Jumper Clamp or approved equal.

Stranded guy wire, if supplied by the Contractor, will be paid under supply of span or messenger wire in this contract.

**Construction Methods:**

The guy wire shall be attached to the pole at the appropriate location on the pole to provide guying for the cable installed for DeIDOT's use. The guy shall be installed according to all applicable electrical and safety codes. A strain insulator shall be installed based on field conditions and as designated by the Engineer. The strain insulator shall be not less than 8 feet (2.4 m) above the ground if the guy wire is broken below the insulator. Bond each end of the guy to the wood pole ground.

**Method of Measurement:**

The quantity of overhead guys will be measured as the number of overhead guys installed as specified, and accepted.

Guy wire, if supplied by the Contractor, will be paid under supply of span or messenger wire in this contract.

The bonding of the guy(s) shall be considered incidental.

**Basis of Payment:**

The quantity of overhead guys will be paid for at the Contract unit price per each. Price and payment shall include full compensation for all materials and labor, tools, equipment, and incidentals necessary to complete the item.

01/31/03

**746733 - REMOVAL OF STEEL POLE (EQUAL TO OR GREATER THAN 17' AND LESS THAN 40')**  
**746734 - REMOVAL OF STEEL POLE (EQUAL TO OR GREATER THAN 40')**  
**746735 - REMOVAL OF PEDESTAL POLE**

**Description:**

This work consists of removing a steel or pedestal pole from a pole base. The steel poles may include a camera lowering device. The salvaging of all parts, transportation of the pole and all parts to the Department at the Dover Sign Shop, and the reassembly of the nuts, nut covers, etc., shall be included in this item.

**Construction Methods:**

The pole with related hardware assemblies shall be carefully removed from the pole base. Steel poles shall be removed with a suitable hoisting device as approved by the Engineer. The Contractor shall insure that the hoisting device is rated for the weight and reach necessary. Pedestal poles may be removed by any means necessary and as approved by the Engineer.

If the pole base is to be reused, the top of the pole base shall be cleaned of grout or other materials and the conduit shall be capped using a galvanized threaded conduit plug to prevent entry of any water or materials. Tape is NOT an approved method of capping a conduit. If the pole base is not immediately reused, it shall be adjusted or protected to prevent injury to pedestrians.

The pole with related hardware shall be transported to the Department's Dover Sign Shop.

**Method of Measurement:**

The quantity of poles removed will be measured as the number of poles removed as specified and materials returned to the Department at the Dover Sign Shop.

**Basis of Payment:**

The quantity of poles removed will be paid for at the Contract unit price per each pole. Price and payment shall include full compensation for removing and transporting the pole with hardware and pedestal, for removal and disposal of concrete base, for grading, topsoil and topsoiling, seeding and mulching, and for all labor, equipment, tools, and necessary incidentals to complete the work.

01/15/03

**746740 - SPAN WIRE ATTACHMENT BETWEEN POLES**

**Description:**

This work consists of attaching a new span wire, with two strain insulators, at the proper roadway clearance between two poles (wood or metal).

**Materials:**

Span wire, 7/16" (11 mm), shall be supplied under another item in this contract.

Two service sleeves to anchor the loose ends of the span wire

Two strain insulators, minimum rated strength of 20,000 pounds (89 kN)

Four galvanized guy clamps, six inches (152 mm) in length, complete with three 5/8" (16 mm) galvanized bolts and nuts, suitable for use on 7/16" (11 mm) to 1/2" (13 mm) span wire

Tensioning device, with a minimum capacity of 6,000 pounds (27 kN) pull

**Additional materials for wood pole installation:**

Four strain plates, McGraw #402810 or approved equal

16 galvanized screws, 1/4" x 2-1/2" (6 mm x 64 mm)

Four guy hooks, McGraw #401680 or approved equal

Four 5/8" x 4" (16 mm x 100 mm) lag screws

**Construction Methods:**

The tension of the installed span wire and the attachment height will be specified by the Engineer.

No preparation is required for attaching a span wire between metal poles.

The wood poles shall be prepared as follows (see details in these specifications):

1. On each pole two strain plates shall be installed, one on the front and one on the back, each secured with four 1/4" x 2-1/2" (6 mm x 64 mm) galvanized screws.
2. On each pole two guy hooks shall be installed, one on each side of the pole, using 5/8" x 4" (16 mm x 102 mm) lag screws.

The span wire shall be installed according to all applicable electrical and safety codes. The strain insulators shall be installed based on field conditions and as designated by the Engineer. Each span shall contain two strain insulators unless otherwise directed by the Engineer. The strain insulator shall be not less than 8 feet (2.4 m) above the ground if the span wire is broken below the insulator.

The span wire shall be attached to the poles and strain insulators in the following manner:

1. Starting at the pole nearest the strain insulator, the span wire shall be wrapped one and one half times around the pole with the end of the span wire extending back parallel with the span. The span wire shall not be allowed to cross over or overlap itself on the pole.
2. Two galvanized guy clamps shall be placed on the span wire end-to-end so that the guy clamp nearest the pole is 2.5 feet (0.8 m) from the pole. The other guy clamp shall have a 1" (25 mm) separation from the guy clamp nearest the pole.
3. The loose end of the span wire shall extend at least 3 feet (0.9 m) from the last clamp and shall be properly secured to the span wire with a service sleeve.

4. A strain insulator shall be placed by doubling back the span wire through the appropriate hole in the insulator. The doubled back span wire shall be attached to the other span wire using two galvanized guy clamps placed end-to-end at a distance of 1 foot (0.3 m) from the strain insulator. The loose end of the span wire shall extend at least 3 feet (0.9 m) from the end of the last clamp and shall be properly secured to the span wire with a service sleeve.
5. A span wire shall be attached to the other side of the strain insulator in the same manner as in Step 4 above.
6. The span wire shall be wrapped around the far pole thereby completing the span. The span wire shall be tensioned in an appropriate manner to achieve the tension as specified by the Engineer. The tensioning device shall be used on the end of the span farthest from the strain insulator. The wire shall be wrapped and clamped in the same manner as described above in steps 1 and 2. The loose end shall extend at least 3 feet (0.9 m) from the last clamp and shall be secured with a service sleeve.

**Method of Measurement:**

The quantity of span wire attachments between poles shall be measured as the number of spans set at the proper height between two poles, wood or metal, which are installed, complete in place, and accepted.

No separate payment shall be made for wood pole preparation.

**Basis of Payment:**

The quantity of span wire attachments between poles will be paid for at the Contract unit price per each. Price and payment will constitute full compensation for all materials, labor, equipment, tools, and incidentals required to complete the work.

02/03/03

**746741 - REMOVAL OF SPAN WIRE ATTACHMENT**

**Description:**

This work consists of the removal of span wire presently in place between poles and returning it to the Department at the Dover Sign Shop.

**Construction Methods:**

A tensioning device shall be used to remove the tension from the clamps before their release. Under no circumstances shall the span wire be cut while under tension. The span wire shall be lowered to the ground by hand or hand-line after removing the clamps and backing off all the tension.

Any electrical cable or equipment attached to the span wire will be detached as directed by the Engineer. The span wire and electrical cable will be rolled up separately and returned with all associated hardware to the Department at the Dover Sign Shop.

**Method of Measurement:**

The quantity of span wires removed will be measured as the number of span wires removed between poles, in accordance with these special provisions, complete, and accepted.

Removal of electrical cable and any equipment shall be paid for under other items.

**Basis of Payment:**

The quantity of span wires removed will be paid for at the Contract unit price per each. Price and payment will constitute full compensation for all labor, equipment, tools, and incidentals required to complete the work.

02/03/03

**746842 - TRANSFER OF SPAN WIRE**

**Description:**

This work consists of the removal of a span wire and associated hardware from an existing pole and installing the same span wire and hardware on a pre-selected pole. This may also include extending the existing span wire.

**Materials:**

Span wire, 7/16" (11 mm) for extending an existing span wire, shall be supplied under other item of this contract. Tensioning device, with a minimum capacity of 6,000 pounds (27 kN) pull

Existing hardware to be used on wood or metal pole:

Strain insulators, minimum rated strength of 20,000 lbs (89 kN)

Service sleeves sized to the span wire

Galvanized guy clamps, 6 inches (152 mm) in length, complete with three 5/8" (16 mm) galvanized bolts and nuts, suitable for use on 7/16" (11 mm) to 1/2" (12 mm) span wire

Additional hardware for attachment on a wood pole:

Four strain plates, McGraw #402810, A.B. Chance/HUBBEL #6675, or approved equal

Eight 1/4" x 2-1/2" (6 mm x 64 mm) galvanized screws

Four guy hooks, McGraw #401680, Joslyn #PB354, or approved equal

Four 5/8" x 4" (16 mm x 102 mm) lag screws

**Construction Methods:**

The method to be used shall consist of five steps.

1. Metal poles require no preparation. For wood pole, install two strain plates, one on the front and one on the back, each secured with four 1/4" x 2-1/2" (6 mm x 64 mm) galvanized screws. Install two guy hooks one on each side of the pole using 5/8" x 4" (16 mm x 102 mm) lag screws. See details in these specifications for span wire attachment between wood poles.
2. Loosen and remove span wire from old pole. Attach a tensioning device between the pole and span wire and relieve the strain. Remove the clamps, service sleeve and span wire from pole.
3. Extend and install span wire on new pole. Attach strain insulator to end of span wire just removed from pole. The two pieces of the span wire will be run through the appropriate holes in the strain insulator and then doubled back. Four 3-bolt guy clamps will be used; two clamps back to back with 1 inch (25 mm) between them on each side of the insulator, allowing 1 foot (0.3 m) between the first clamp and the strain insulator. The two loose ends of the span wire shall be 3 feet (0.9 m) in length and anchored with service sleeves.
4. The other end of the span wire is wrapped one and one-half times around the new pole and a tension is applied. As tension is taken up on span wire around the new pole, tension will be let off on the device holding the span wire on the old pole. When the tension and the span wire are transferred to the new pole, the 3-bolt clamps and service sleeve are replaced. The loose end of the span wire shall extend at least 3 feet (0.9 m) from the end of the last clamp.
5. If the center of the span wire is electrically isolated, one strain insulator shall be electrically bridged using a section of span wire and two 3-bolt clamps.

**Method of Measurement:**

The quantity of span wires transferred will be measured as the number of span wire transfers made complete, in place, and accepted.

Payment for span wire, if needed to extend existing span wire, shall be made under other items of these specifications.

No payment shall be made for removal of tape on the span to clear a path for tensioning devices or movement of the span.

Replacement of existing hardware that is damaged shall be considered incidental and shall be supplied as part of this item at no additional cost.

**Basis of Payment:**

The quantity of span wire transfers will be paid for at the Contract unit price per each. Price and payment will constitute full compensation for all materials, labor, equipment, tools, and incidentals required to complete the work.

02/02/03

**749513 – INSTALLATION OF SIGN OVERLAY 16 S.F. OR LESS**  
**749514 – INSTALLATION OF SIGN OVERLAY OVER 16 S.F.**

**Description:**

This work consists of installing a new sign face overlay on an existing sign. The sign overlay may be assembled in panels to make a complete sign. Sign overlays may be installed on signs that are mounted to mast arms, span wires, roadside posts, or over-highway structures.

**Materials:**

The sign overlays are to be supplied by the Contractor as a separate item of these specifications or may be supplied by the Department. The Contractor shall supply all mounting hardware.

**Construction Methods:**

The overlays shall be lifted to the mounting area by a suitable lifting device. Any old small overlays, such as route markers, arrows, etc., must be removed before installing the new overlay. The removal of old overlays is to be considered as part of this item. The new sign overlay is to be mounted by drilling 3/8" holes directly through the new overlay and existing sign as directed by the Engineer.

It is not anticipate that there will be any sign panels which are required to be mounted whose messages will be inappropriate to the guiding of traffic at the time of sign erection. However, in the event that the Engineer determines that certain sign messages are inappropriate, the panels of such signs shall be covered by an opaque material, until such time as the sign messages become appropriate. The covering material and the manner of securing the material to the sign panel(s), shall meet with the approval of the Engineer and shall be included as part of this item and no separate payment will be made. The Engineer will indicate to the Contractor which signs, if any, must be covered, and when to remove the covers.

Sign Covers: Sign cover shall be 10 ounce cotton duck conforming to ASTM D320- Army Duck, and dyed to a dark green approximating the green for sign backgrounds.

**Method of Measurement:**

The quantity of sign overlays is to be measured as the number of complete sign overlays installed under this item complete, in place and accepted.

**Basis of Payment:**

The quantity of sign overlays will be paid for at the contract unit price per each. Price and payment will constitute full compensation for all mounting hardware, sign covers, labor, equipment, tools, and incidentals required to complete the work.

**749516 – REINFORCED CONCRETE SIGN FOUNDATION, W-6**  
**749517 – REINFORCED CONCRETE SIGN FOUNDATION, W-8**  
**749518 – REINFORCED CONCRETE SIGN FOUNDATION, W-10**  
**749519 – REINFORCED CONCRETE SIGN FOUNDATION, W-12**  
**749520 – REINFORCED CONCRETE SIGN FOUNDATION, W-14**

**Description:**

This work consists of furnishing all material and installing sign foundations.

**Materials:**

Bar Reinforcement shall conform to the requirements of Subsection 603.02 of the Standard Specifications.

Portland Cement Concrete shall be Class B and shall conform to the requirements of Section 812 of the Standard Specifications.

Anchors shall be fabricated from 304 Stainless Steel for the threaded ferrule portion, and 1058 steel rod and coil for cage portion of anchor.

Nuts, Bolts and Cap Screws shall meet AASHTO M 164 (m 164M). All nuts, bolts and cap screws shall be within a hardness range of Rockwell C23 to C31 prior to hot dip galvanizing per AASHTO M232/M 232M.

**Construction Methods:**

The bases shall conform to the dimensions and details as indicated on the Plans.

Excavation for the foundation may not exceed the dimension of the foundation by more than 1 foot (300 mm) in any one direction. If a form is used in the excavation more than 18 inches (460 mm) below the ground surface, it is necessary that the excavation be filled and tamped on all sides in layers not to exceed 6 inches (150 mm).

The excavated material shall be disposed of and the area shall be properly graded. After grading, the area shall be returned to its original condition around the supports with mulching, seeding or other landscaping as necessary or as directed by the Engineer.

Anchor bolts shall be set to template for alignment and elevation and shall be secured in position to prevent displacement while concrete is being placed. The steel reinforcement and conduit elbows shall have been placed and secured before the placing of concrete.

**Method of Measurement:**

The quantity of sign foundations will be measured as the number of foundations for the specified size of beam constructed in accordance with these specifications, complete in place, and accepted.

**Basis of Payment:**

The quantity of sign foundations will be paid for at the contract unit price per each foundation of the type specified. Price and payment will constitute full compensation all materials and sign foundation installation complete in place and for all labor, equipment, tools, and incidentals required to complete the work. Payment will also include returning the area around the sign post to its original conditions by mulch, seeding or other landscaping necessary.

10/27/2009

**749521 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-6**  
**749522 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-8**  
**749523 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-10**  
**749524 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-12**  
**749525 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-14**  
**749563 - SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-4**

**Description:**

This work consists of furnishing all materials for ground mount breakaway type sign posts and breakaway assemblies to the job order site in conformance with the details and notes shown on the Plans, and as directed by the Engineer.

**Materials:**

Structural Steel shall meet the applicable requirements of Subsection 605.02 of the Standard Specifications and AASHTO M 270/M 270M, GR36 (GR250), GR50 (GR345), or GR50W (GR 345W) as detailed on the plans. Steel posts shall be galvanized in accordance with the requirements of AASHTO M 111/M 11M.

Breakaway Couplings shall be made from alloy steel which conforms to AISI 4340, 4130 or an equivalent material, and shall have a minimum tensile yield stress of 175,000 psi (1200 MPa). The Rockwell C hardness shall be 26 minimum. The couplings shall have tensile breaking strength ranges as noted below; and shall be of the type as shown on the Plans:

Type A	17,000 – 21,000 lb (75 – 93 kN)
Type B	47,000 – 57,000 lb (209 – 253 kN)

This steel shall conform to the requirements of the current ASTM designation A-370.

The couplings shall be clean, dry and free from any foreign material and shall be primed and coated with a suitable paint which shall be baked or fused with a polyurethane additive. The color of the coating shall be as follows:

Type A	Yellow
Type B	Red

Chipped areas on the coating surface shall be repaired. All threaded surfaces, after coating, shall be cleaned to all them to function properly.

Brackets shall be made from aluminum alloy 6061 T-6 or an equivalent material. Upper brackets shall incorporate the load concentrating member or bass which shall be made from the following material:

Type A	Aluminum alloy 6061 T-6 or equivalent as part of brackets
Type B	Stainless steel 416 or equivalent ASTM A582-Rockwell C35-C45

The type of bass shall be as shown on the Plans.

Location holes for the breakaway coupling shall be accurately positioned relative to the load concentrating member in accordance with the Engineer's requirements. All Brackets shall be permanently labeled with bracket number to reflect the hole positioning.

Hinge Plates shall be made from alloy steel which conforms to AISI 4340, 4130 or an equivalent material and shall have a minimum tensile yield stress of 90,000 psi (620 MPa). The hinge plates shall have tensile breaking strength ranges as follows:

HI-10	11,450 – 13,900 lb (50.9 – 61.8 kN)
HI-1	16,400 – 19,700 lb (72.9 – 87.6 kN)
HI-2	6,700 – 8,100 lb (29.8 – 36.0 kN)

Nuts, Bolts and Cap Screws shall meet AASHTO M 164 (m 164M). All nuts, bolts and cap screws shall be within a hardness range of Rockwell C23 to C31 prior to hot dip galvanizing per AASHTO M232/M 232M.

**Construction Methods:**

Working Drawings. Working drawings shall be submitted in accordance with subsection 105.04 of the Standard Specifications. Minor variations in details may be permitted; however, any major departure from the design will not be accepted.

Fabrications. Loading, transporting, unloading and erection of structural materials shall be done so that the metal will be kept clean and free from injury in handling.

Structural materials shall be stored above the ground upon platforms, skid or other supports and shall be kept free from accumulation of dirt, oil, acids or other foreign matter.

Structural material which has been deformed shall be straightened before being laid out, punched, drilled or otherwise worked upon in the shop. Sharp kinks or bends will be cause for rejection.

When sign support structures are subcontracted, the subcontract shall be in accordance with Subsection 108.01 of the Standard Specifications except that the value of the subcontract will be based on the value of the work for fabrication.

Repair Galvanizing. Galvanized areas damaged during shipping or erection shall be repaired by any of the three methods specified under ASTM A780. In all cases, the repair shall achieve the minimum coating thickness specified.

Erection. Material shall not be dropped, thrown or dragged over the ground. The Contractor shall supply detailed, written instructions and drawings for the erection of all sign structure components.

**Method of Measurement:**

The quantity of supplying ground mount breakaway type sign posts and breakaway assemblies will be measured as linear feet for the length and size of ground mount breakaway sign post furnished as specified and accepted.

**Basis of Payment:**

The quantity of supplying ground mount breakaway type sign posts and breakaway assemblies will be paid for at the Contract unit price per linear feet for the length and size of ground mount breakaway sign post specified. Price and payment will constitute full compensation for furnishing hinge plates, breakaway couplings, nuts, bolts and cap screws and all other materials for the sign posts and breakaway assemblies in accordance with the details and notes shown on the Plans, and as directed by the Engineer; and for all labor, equipment, tools and incidentals necessary to complete the work.

3/6/08

**749527 - SIGN BASE EXTENSION**

**Description:**

This item provides for the increase in the vertical dimension of sign bases installed under another item in this contract. The extension includes reinforcement bars.

**Materials:**

Portland Cement Concrete, Class B

Bar Reinforcement as per Subsection 603.02 of the Standard Specifications.

**Construction Methods:**

Where sign bases require a greater vertical dimension than shown on the Standard Sheet, they shall be extended as directed by the Engineer. The reinforcing bars shall be extended in a pattern matching that of the sign bases being extended.

After grading, the area shall be returned to its original condition around the sign posts with mulching, seeding or other landscaping as necessary or as directed by the Engineer.

**Method of Measurement:**

The quantity of sign base extension will be measured as cubic feet of concrete foundation constructed in accordance with these specifications, complete in place, and accepted. Excavation and backfilling around the base is included in this item.

**Basis of Payment:**

The quantity of sign base extension will be paid for at the contract unit price per cubic feet of concrete foundation. Price and payment will constitute full compensation for all materials and installation of the foundation complete in place and for all labor, equipment, tools, and incidentals required to complete the work. Payment will also include returning the area around the sign posts to its original conditions by mulch, seeding or other landscaping necessary.

3/6/08

**749528 - STRUCTURAL CONCRETE**

**Description:**

This item consists of placement of Portland Cement Concrete such as installing 4” sidewalk, or small retaining walls around sign bases or other miscellaneous needs.

**Materials:**

Portland Cement Concrete shall conform to the requirements of Section 812, Class B.

Preformed Expansion Joint Material shall conform to the requirements of Subsection 808.06.

Curing Materials shall conform to the requirements of Subsection 812.02 (i).

Wire mesh reinforcement shall conform to the requirements of AASHTO M 55.

**Construction Methods:**

Excavation as needed with a well tamped base shall be provided. Where conduit or other underground utility is to be expected, digging shall be by hand.

Forms shall conform to the requirements of Subsection 705.06.

Sidewalk: The contractor shall install the P.C.C. sidewalk with reinforcing mesh to a depth equal to the existing surrounding sidewalk or depth of 4” whichever is greater. Any damage done to surrounding sidewalk shall be removed and replaced at the sole cost of the contractor. While the concrete is still moist, it shall be floated with an approved float of either wood or metal to ensure that all irregularities or depressions are filled. The final finish shall be obtained by either a wood float or hair broom. Concrete shall be finished in accordance with Subsection 501.11. If concrete is permitted to be placed during cold weather, it shall be placed in accordance with Section 501.

Expansion joints shall conform to the requirements of Subsection 705.08.

Concrete shall be cured according to Section 501 for a period of five days. The sidewalk shall not be opened to pedestrian and vehicular traffic until the end of the curing period.

Miscellaneous: Any small retaining barriers, swales or extensions around sign bases shall be installed as directed by the Engineer. This item may also be used to modify a sign base where a unique size or shape is required and reinforcing bars are not needed.

Immediately at the end of the curing period, the sidewalk shall be backfilled with approved material. After grading, the area shall be returned to its original condition around the work area with mulching, seeding or other landscaping as necessary or as directed by the Engineer.

Method of Measurement:

The quantity of the Structural Concrete measured under this item shall be the number of cubic feet of concrete placed in accordance with these specifications, complete in place and accepted. Concrete forms shall be included as part of this item.

**Basis of Payment:**

The quantity of Structural Concrete placed will be paid for at the contract unit price per cubic feet of concrete. Price and payment will constitute full compensation for all materials and placement of concrete in place and for all labor, equipment, tools, and incidentals required to complete the work. Payment will also include returning the area around the work area to its original conditions by mulch, seeding or other landscaping necessary.

3/6/08

**749529 - INSTALLATION OF SIGN BASE SHEETING**

**Description:**

This item consists of driving steel pipe pile shells prior to excavation for a sign base in areas where extremely poor soil conditions are encountered. The installation of a well-point system is an alternative. This item may be used at any time the contractor desires, however, payment for this item will be made only when the contractor has been given prior written approval.

**Materials:**

Steel pipe pile shells shall conform to the requirements of Subsection 618.09.

**Construction Methods:**

When soil conditions are encountered that prohibit the construction of a sign base by normal methods using wood or plywood sheeting, the steel pipe pile shells or well point system will be installed. The sign base will then be constructed as outlined under the specifications for sign bases.

All sheeting material must be left in place and shall be cut off at least 6 inches below the surface of the ground.

After grading and completion of work, the area shall be returned to its original condition around the work area with mulching, seeding or other landscaping as necessary or as directed by the Engineer.

In addition, the installation of steel pipe pile shells shall conform to the requirements of Section 619.

**Method of Measurement:**

The quantity of installations of sign base sheeting to be measured under this item shall be the number of sign bases requiring sheeting placed in accordance with these specifications, complete in place and accepted.

The sign base will be paid for under a separate item.

**Basis of Payment:**

The quantity of sign base sheeting placed will be paid for at the contract unit price per each sign base. Price and payment will constitute full compensation all materials and placing sheeting and for all labor, equipment, tools, and incidentals required to complete the work. Payment will also include returning the area around the work area to its original conditions by mulch, seeding or other landscaping necessary.

No payment will be made unless the contractor is given written permission to use this item.

3/6/08

**749530 - REMOVAL OR GRADING OF MASONRY**

**Description:**

This item consists of the removal of masonry or the grading of existing masonry. The masonry shall consist of foundations for sign bases.

This item does not include the removal of any sidewalks, curbs, pavement material or other items which are incidental to the installation or removal of other items in this contract.

**Materials:**

As necessary to match the area surrounding the removed or graded masonry. Seeding and mulching shall be included where applicable.

**Construction Methods:**

The masonry shall be removed either completely or graded to the depth of 12" below ground line. This item shall include adjustment of all anchor bolts, conduit and other hardware that is an integral part of the masonry to be removed or graded.

If the resulting hole is to be refilled to match the surrounding area, all of the items necessary to complete the match shall be supplied and put in place by the contractor.

If the resulting hole is to be used to install other items under this contract, the specifications for that item shall prevail.

**Method of Measurement:**

The quantity of removal of masonry to be measured under this item shall be cubic feet of masonry removed in accordance with these specifications, complete in place and accepted.

Masonry or other materials moved or removed, not a part of the item being removed, shall not be measured for the purpose of payment under this item.

Removing or grading anchor bolts and conduit and reinforcing bars are included in this item.

**Basis of Payment:**

The quantity of removal of masonry will be paid for at the contract unit price of cubic feet of masonry removed. Price and payment will constitute full compensation for all labor, equipment, tools, and incidentals required to complete the work. Payment will also include returning the area around the work area to its original conditions by mulch, seeding or other landscaping necessary.

3/6/08

**749532 - SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE IX  
RETROREFLECTIVE SHEETING**  
**749534 - SUPPLY OF EXTRUDED ALUMINUM SIGN PANEL TYPE IX RETROREFLECTIVE  
SHEETING**  
**749579 - SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE XI  
RETROREFLECTIVE SHEETING**  
**749580 - SUPPLY OF EXTRUDED ALUMINUM SIGN PANEL TYPE XI RETROREFLECTIVE  
SHEETING**

**Description:**

This work shall include fabrication and furnishing new sign panels constructed of either flat sheet aluminum panels OR extruded aluminum sign panels as specified in the job order. Supply of sign overlays will be part of flat sheet aluminum panels. The sign panels shall have a reflective sheeting background, and all complete with demountable copy or direct applied or silk screened copy. Included with the sign panel will be connections to supports, and other incidentals shown on the Plans or as described in the special provisions. Installation of flat sheet aluminum panels and extruded aluminum panels are paid for under other items in this contract.

The removing and transporting of the existing sign panels before fabricating and erecting new sign panels, if such requirement is specified shall be paid for under other items in this contract.

**Design:**

Sign panels and their connections to supports shall be designed for applicable loadings and allowable stresses specified for supports. All panels, stiffeners and subframing shall conform with any pertinent requirements set forth in the 1985 AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals" with subsequent revisions. The Contractor shall submit working drawings showing the details for fabrications of the panels and support connections for prior approval.

**Fasteners and Backing Strips:** Sign panel sections shall be provided with suitable fastenings, as shown on the Plans, to permit easy attachment to the supporting frames and these fastenings shall be so designed as to carry the full design load with a factor of safety of 1.6 against the minimum yield stress of the materials.

Sign panel sections shall be provided with backing strips at the joints, held firmly in place to keep the abutting panel sections in proper alignment. All sign panel fastenings and backing strips, accepting the fastening of letters, symbols and border to the sign face, shall be applied without causing visible projections or indentations of the sign face. Each sign panel section shall be designed to engage and hang from two or more horizontal structural members of the supporting frame. The method of fastening to obtain secure close butt joints between panels may vary as recommended by the fabricator. Shop drawings will be required showing proposed method of attachment for approval of the Engineer.

**Supporting Frame:** The supporting sign frame shall consist of horizontal and vertical stringers as shown on the plans. The horizontal members of the supporting sign frame shall be fabricated of new material in one piece. Where large signs necessitate splicing the stringers, such splices shall be located at points of contraflexure and shall be held to a minimum, but splice must develop full section of member.

**Sign Panel Size:** Sizes of sign panels having demountable copy shall be based on the manufacturer's spacing charts. All letters shall be placed in accordance with manufacturer's spacing charts. Overall horizontal and vertical dimensions shall be in six-inch increments.

**Aluminum Flat Sheet Panels:** Sign panel sections shall be fabricated of standard width, readily available, aluminum sheets not less than 3'-0" wide and not more than 5'-6" wide, except that not more than one sheet of 2'-0" minimum width will be permitted.

Sign panel sections including those twelve (12) feet in height shall run from the top edge to the bottom edge of the sign face without horizontal joints in the aluminum sheets.

Sign panel sections over twelve (12) feet in height shall be fabricated of two or more sheets with horizontal joints which butt and fasten securely together and may be disassembled for simplified handling and erection in the field. Each horizontal joint in sign panel sheets shall be located at point of contraflexure in the sign face.

**Extruded Aluminum Sign Panels:** Multiple panel signs may be made of extruded sections. All extruded sections shall be 12 inches {300 mm} wide mounted horizontally and shall have no vertical joints. All panels shall be flat and straight. Exceptions will be made to allow 6 inch {150 mm} wide extruded sections in cases where the height of a sign or exit panel dictates. There shall not be more than one 6 inch {150 mm} wide panel allowed per individual sign or exit panel.

**Materials:**

**Aluminum Flat Sheet Panels:** Sign panels shall be of aluminum sheet type conforming to ASTM Designation B209 (alloy 6061-T6 or 5052-H38). The minimum panel sheet thickness shall be 0.125 inches. Stringers or horizontal structural sign supporting members and vertical connections shall be fabricated of 6061-T6 or 6062-T6 ASTM B221 aluminum alloy. All sign panels shall be fully reflectorized unless otherwise indicated on the Plans.

All sign hardware shall be stainless steel or galvanized steel or 2024-T4 aluminum alloy ASTM B211 or ASTM B221. Hardware for attachment to overhead members shall be Type 304 passivated stainless steel, except that stainless steel lock washers shall be Type 302 stainless steel alloy. Connections to the sign support structure shall be of steel conforming to the requirements of ASTM Designation A36 and galvanized to the requirements of ASTM Designation A123.

**Extruded Aluminum Sign Panels:** Extruded aluminum sign panels and edge strips shall conform to B 221, alloy 6063 T6. (See Extruded Aluminum Detail Sheets)

**Hardware:** Hardware shall be clear anodized, conforming to one of the following: ASTM B 209, alloy 2024 T4; B 211, alloy 2024 T4, 6262 T9, 6061 T6, 7075 T6 or 2017 T4.

**Sheeting:** The sheeting shall consist of prismatic lens elements with a distinctive interlocking pattern visible from the face of a smooth surface, unless otherwise specified on the plans. The sheeting shall have a precoated adhesive protected by an easily removable liner.

Retroreflective properties will be measured in:

Minimum Coefficient of Retroreflection Ra  
(cd/lux/m<sup>2</sup>)

- All measurements shall be made after sign cleaning according to sheeting manufacturer's recommendations.
- The coefficients of retroreflection observation angles shall be 0.2°, 0.5°, 1.0°.
- The coefficients of retroreflection entrance angles shall be -4° and 30°.

**Letter of Certification**

The contractor shall send a letter of certification stating that the sign sheeting materials meet the required Minimum Coefficient of Retroreflection described in the charts below. The letter shall be sent to:

Delaware Department of Transportation  
Signs and Markings Section  
Attn: Traffic Operations Manager  
P.O. Box 778  
Dover, Delaware 19901

**Warranty**

The sheeting manufacturer shall submit with each lot or shipment, a certification that states the material supplied will meet all the requirements listed herein.

**Type IX Retro-Reflective Sheeting**

White	-4	30
0.2	380	215
0.5	240	135
1	80	45

Blue	-4	30
0.2	17	10
0.5	11	6
1	3.6	2

Yellow	-4	30
0.2	285	162
0.5	180	100
1	60	34

FYG	-4	30
0.2	300	170
0.5	190	110
1	64	36

Red	-4	30
0.2	76	43
0.5	48	275
1	16	9

FY	-4	30
0.2	230	130
0.5	145	81
1	48	27

Green	-4	30
0.2	38	22
0.5	24	145
1	8	4.5

FO	-4	30
0.2	115	65
0.5	72	41
1	24	14

**Type XI Retro-Reflective Sheeting**

White	-4	30
0.2	570	215
0.5	400	150
1	120	45

Blue	-4	30
0.2	26	10
0.5	18	6.8
1	5	2

Yellow	-4	30
0.2	425	160
0.5	300	110
1	90	34

FYG	-4	30
0.2	455	170
0.5	320	120
1	96	36

Red	-4	30
0.2	87	33
0.5	63	23
1	18	7

FY	-4	30
0.2	340	130
0.5	240	90
1	72	27

Green	-4	30
0.2	57	21
0.5	40	15
1	12	4.5

FO	-4	30
0.2	170	64
0.5	120	45
1	36	14

**Sheeting Manufacturer’s Replacement Obligation:**

shown to be unsatisfactory during the period listed below. Standard Colors where it can be shown that retroreflective signs supplied and used according to the sheeting manufacturer’s recommendations, have not met the performance requirements of this specification the sheeting manufacturer shall cover restoration costs as follows for sheeting shown to be unsatisfactory during the period listed below.

80% of the values listed in the tables for 12 years.

Non-reflective black material that is used on the signs will carry the same warranty period and replacement obligation. This material will be considered unsatisfactory if it has deteriorated due to natural causes to the extent that it is visibly cracked or has experienced shrinkage of more than a 1/8” from the edge of the metal it is applied.

For temporary signing, fluorescent orange, where it can be shown that the retroreflective sheeting fails to conform to the performance requirements of this section, the sheeting manufacturer shall cover restoration costs as follows for sheeting

80% of the values listed in the tables for 3 years.

The remedy to any failure will be:

The sheeting manufacturer will replace the sign in it's entirety inclusive of the sign panel, sign sheeting, labor, and M.O.T required to restore the sign surface to its original effectiveness.

**Government Obligation**

The agency shall be responsible for requiring the dating of all signs at the time of application. That date constitutes the start of the field performance obligation period.

All measurements shall be made after sign cleaning according to the sheeting manufacturer’s recommendations.

Natural causes include effects of exposure to weather. Natural causes exclude (without limitation) damage from exposure to chemicals, abrasion and other mechanical damage (such as from fasteners used to mount the sign, collisions or mishandling), vandalism, or malicious mischief.

**Applicable Documents**

The following documents, of the issues in effect on the date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

ASTM Standards

D 4956 Standard Specification for Retroreflective Sheeting for Traffic Control

E 810 Standard Test Method for Coefficient of Retroreflection of Retroreflective Sheeting

AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals

**Construction Methods:**

**Sign Face Finishing:** All reflective sheeting, backgrounds, letters, numerals, symbols, and borders shall be clean-cut and sharp, and the messages on all signs shall be as indicated on the plans. Application of reflective sheeting to aluminum panels shall be in accordance with sheeting manufacturer's recommendations. Reflective sheeting shall be color matched and marked. The height of characters and the alphabet series to be employed for the signs shall conform to the Plans and their references. The alphabet series used on the sign panels shall conform to the Plans and the "Standard Alphabets for Highways Signs" of the Federal Highway Administration.

The working drawings prepared by the Contractor shall clearly indicate the proposed spacing of the letters and the locations and arrangements of symbols and borders.

Sheeting applications shall meet ambient temperature requirements as specified by the manufacturer.

Whenever it is necessary to construct the background of a sign face with two or more pieces of reflective sheeting, they must be carefully matched for color prior to application and sign fabrication, to provide uniform appearance and brilliance, day and night. Each full width section of reflective sheeting mounted adjacent to another full width section taken consecutively from the same roll shall be rotated and mounted 180 degrees with respect to that adjacent section. This rule shall also be observed as a guide when partial width sheets of reflective sheeting are used.

Non-conformance may result in non-uniform shading and an undesirable contrast between adjacent widths of applied sheeting which will render signs unacceptable. The entire background of each sign shall be uniform in color, brilliance, texture, and general appearance as seen in the daytime and under typical automobile illumination at night. No more sections of reflective sheeting shall be used for backgrounds than is necessary; remnants, scraps, and odd sized pieces of sheeting shall not be used in the fabrication of any signs manufactured for this contract. Joints between reflective sheeting sections shall either butt or overlap no more than 3/8 of an inch.

**Transporting Sign Panel:** Signs shall be slip-sheeted, packed, and shipped in such manner as to ensure arrival at their respective places of erection in an undamaged condition. All signs arriving at the erection site(s) in a condition which in the opinion of the Engineer, renders them unsuitable for use, shall be removed and replaced by the Contractor at his sole expense.

**Identification Tags:** The Contractor shall furnish and place identification tags or decals which state the contract number, month and year of erection on the lower reverse side of the panel, near the point closest to the roadway shoulder.

**Method of Measurement:**

The quantity of sign panels is to be measured as the square footage of front sign face installed for the type and sheeting grade specified under this item complete and accepted. The area will be computed from the maximum width and height dimensions of each sign panel, as shown on the Plans, or on the approved sign panel working drawings, (verified by field measurements). All sign panels will be considered either square or rectangular in shape, as the case may be, and no area deductions will be made for rounding corners.

**Basis of Payment:**

The quantity of sign panels will be paid for at the unit price per square foot for the type and sheeting grade specified. Price and payment shall constitute full compensation for furnishing, fabricating, and delivering sign panels complete in place and accepted, with reflective materials, copy, symbols, borders, connections to supports, degreasing, etching, and for all labor, materials, tools, equipment, and incidentals required to complete the item.

7/15/15

**749535 - SUPPLY AND INSTALLATION OF BOLT KIT FOR BREAK AWAY COUPLING**  
**749536 - SUPPLY AND INSTALLATION OF HINGE PLATE FOR BREAK AWAY COUPLING**  
**749537 - SUPPLY AND INSTALLATION OF BREAK AWAY COUPLING SYSTEM**

**Description:**

This work consists of the supply and installation of bolt kit, hinge plate or a break away coupling system to be used on I-beam sign structures previously installed or installed under other items in this contract.

**Materials:**

Breakaway Couplings shall be made from alloy steel which conforms to AISI 4340, 4130 or an equivalent material, and shall have a minimum tensile yield stress of 175,000 psi (1200 MPa). The Rockwell C hardness shall be 26 minimum. The couplings shall have tensile breaking strength ranges as noted below; and shall be of the type as shown on the Plans:

Type A	17,000 - 21,000 lb (75 - 93 kN)
Type B	47,000 - 57,000 lb (209 - 253 kN)

This steel shall conform to the requirements of the current ASTM designation A-370.

The couplings shall be clean, dry and free from any foreign material and shall be primed and coated with a suitable paint which shall be baked or fused with a polyurethane additive. The color of the coating shall be as follows:

Type A	Yellow
Type B	Red

Chipped areas on the coating surface shall be repaired. All threaded surfaces, after coating, shall be cleaned to all them to function properly.

Brackets shall be made from aluminum alloy 6061 T-6 or an equivalent material. Upper brackets shall incorporate the load concentrating member or bass which shall be made from the following material:

Type A	Aluminum alloy 6061 T-6 or equivalent as part of brackets
Type B	Stainless steel 416 or equivalent ASTM A582-Rockwell C35-C45

The type of bass shall be as shown on the Plans.

Location holes for the breakaway coupling shall be accurately positioned relative to the load concentrating member in accordance with the Engineer's requirements. All Brackets shall be permanently labeled with bracket number to reflect the hole positioning.

Hinge Plates shall be made from alloy steel which conforms to AISI 4340, 4130 or an equivalent material and shall have a minimum tensile yield stress of 90,000 psi (620 MPa). The hinge plates shall have tensile breaking strength ranges as follows:

HI-10	11,450 - 13,900 lb (50.9 - 61.8 kN)
HI-1	16,400 - 19,700 lb (72.9 - 87.6 kN)
HI-2	6,700 - 8,100 lb (29.8 - 36.0 kN)

Nuts, Bolts and Cap Screws shall meet AASHTO M 164 (m 164M). All nuts, bolts and cap screws shall be within a hardness range of Rockwell C23 to C31 prior to hot dip galvanizing per AASHTO M232/M 232M.

**Construction Methods:**

None.

**Method of Measurement:**

The quantity of installation, removal, relocation and cutting of overhead I-beams will be measured as the number of overhead I-beams installed, removed, relocated and cut as specified, complete and in place, or removed and returned to the Department at the Dover Sign Shop.

**Basis of Payment:**

The quantity of installation, removal, relocation or cutting of overhead I-beams will be paid for at the contract unit price per each. Price and payment will constitute full compensations for all labor, equipment, tools, and incidentals required to complete the work.

10/26/05

**749540 - REMOVAL OF OVERHEAD I-BEAM**  
**749541 - INSTALLATION OF OVERHEAD I-BEAM**  
**749542 - RELOCATION OF OVERHEAD I-BEAM**  
**749544 - CUTTING OF OVERHEAD I-BEAM**

**Description:**

This work consists of installing, removing, relocating or cutting an overhead I-beam on sign structures previously installed or installed under other items in this contract.

**Materials:**

Steel I-beams and all mounting hardware to be used will be paid for under other items of this contract or may be furnished by the Department. The supply of the material will be designated in the job order. All I-beams will be cut to the correct length and marked for the area they are to be installed.

**Construction Methods:**

The I-beams are to be contacted in a manner as not to damage or interfere with overhead utility lines or the integrity of the structure.

**Method of Measurement:**

The quantity of installation, removal, relocation and cutting of overhead I-beams will be measured as the number of overhead I-beams installed, removed, relocated and cut as specified, complete and in place, or removed and returned to the Department at the Dover Sign Shop.

**Basis of Payment:**

The quantity of installation, removal, relocation or cutting of overhead I-beams will be paid for at the contract unit price per each. Price and payment will constitute full compensations for all labor, equipment, tools, and incidentals required to complete the work.

10/26/05

**749543 - REMOVAL OF LIGHTING UNIT**

**Description:**

This item consists of the removal of overhead luminaires (i.e. light units) and the necessary electrical and hardware components.

**Materials:**

None.

**Construction Methods:**

The removal of these units will be in a manner which will not impact the structural integrity of the structure. All electric shall be terminated at the point of fused power supply.

**Method of Measurement:**

The quantity of removal will be measured as the number of lighting units removed and returned to the Department at the Dover Sign Shop.

**Basis of Payment:**

The quantity of removal will be paid for at the contract unit price per each. Price and payment will constitute full compensations for all labor, equipment, tools, and incidentals required to complete the work.

3/6/08

**749545 – INSTALLATION OR REMOVAL OF STANDARD GROUND MOUNTED METAL SIGN POST**

**Description:**

Install or remove standard sign posts, square tube or u-channel, previously installed or installed under other items in this contract as noted on the Plans and/or as directed by the Engineer.

**Materials:**

Provide materials in accordance with:

Topsoil	Section 732
Seed	Section 734

The Department Sign Shop will provide all sign posts to be used on this project.

**Construction Methods:**

**Installation:**

1. Obtain necessary utility clearances prior to sign post installation;
2. Pick up sign posts, hardware and extensions from the Department Sign Shop;
3. Install sign post at locations shown on the Plans and/or as directed by the Engineer;
  - a. Install in accordance with the DE MUTCD

**Removal:**

1. Remove sign post.
  - a. Fill hole with topsoil and level area.
  - b. Seed.
2. Transport, deliver and unload sign posts to the Department Sign Shop.

**Method of Measurement:**

The quantity of installation or removal of standard ground mounted metal sign post will be measured as each.

**Basis of Payment:**

The quantity of installation or removal of standard ground mounted metal sign post will be paid for as each. Price and payment will constitute full compensation for obtaining necessary utility clearances, installing or removing sign posts, pick up of sign posts and incidentals from the Department Sign Shop and transporting to the project location(s), installation and/or removal of the sign posts, grading and seeding disturbed areas, transport, delivery and unloading of the removed posts to the Department Sign Shop, and for all labor, equipment, tools, and incidentals required to complete the work.

5/16/2011

**749546 – REMOVAL OF GROUND MOUNTED WOOD POST**

**Description:**

Remove ground mounted wood post previously installed or installed under other items in this contract as shown on the Plans and/or as directed by the Engineer.

**Materials:**

Provide material as specified in:

Topsoil	Section 732
Seed	Section 734

**Construction Methods:**

1. Remove ground mounted wood post.
2. Fill hole with topsoil.
  - a. Compact.
3. Transport, deliver and unload ground mounted wood posts to the Department Sign Shop.

**Method of Measurement:**

The quantity of removal of ground mounted wood post will be measured as each.

**Basis of Payment:**

The quantity of removal of ground mounted wood post will be paid for as each. Price and payment will constitute full compensation for removal of the ground mounted wood post, transport, delivery and unloading of the post to the Department Sign Shop, for all labor, equipment, tools, and incidentals required to complete the work.

6/15/2011

**749547 - SUPPLY AND INSTALLATION OF DRY CONCRETE**

**Description:**

This work consists of the supply and installation of an 80 lb bag of concrete.

**Materials:**

The concrete shall be equal to or greater than Sakrete concrete mix and conform to a minimum of 3000 psi.

**Construction Methods:**

Each bag shall be installed as foundation support for wood post installations.

**Method of Measurement:**

The quantity of supply and installation of concrete will be measured by the number of each 80 lb bag of concrete used.

**Basis of Payment:**

The quantity of supply and installation of concrete will be will be paid for at the contract unit price per each.

3/6/08

**749548 – SUPPLY OF OVERHEAD I-BEAM, W-6**

**Description:**

This work consists of furnishing all overhead I-beam(s) to the job order site in conformance with the details and notes shown on the Plans, and as directed by the Engineer.

**Materials:**

Structural Steel shall meet the applicable requirements of Subsection 605.02 of the Standard Specifications and AASHTO M 270/M 270M, GR36 (GR250), GR50 (GR345), or GR50W (GR 345W) as detailed on the plans. Steel posts shall be galvanized in accordance with the requirements of AASHTO M 111/M 11M.

Nuts, Bolts and Cap Screws shall meet AASHTO M 164 (m 164M). All nuts, bolts and cap screws shall be within a hardness range of Rockwell C23 to C31 prior to hot dip galvanizing per AASHTO M232/M 232M.

**Construction Methods:**

Working Drawings. Working drawings shall be submitted in accordance with subsection 105.04 of the Standard Specifications. Minor variations in details may be permitted; however, any major departure from the design will not be accepted.

Fabrications. Loading, transporting, unloading and erection of structural materials shall be done so that the metal will be kept clean and free from injury in handling.

Structural materials shall be stored above the ground upon platforms, skid or other supports and shall be kept free from accumulation of dirt, oil, acids or other foreign matter.

Structural material which has been deformed shall be straightened before being laid out, punched, drilled or otherwise worked upon in the shop. Sharp kinks or bends will be cause for rejection.

When sign support structures are subcontracted, the subcontract shall be in accordance with Subsection 108.01 of the Standard Specifications except that the value of the subcontract will be based on the value of the work for fabrication.

Repair Galvanizing. Galvanized areas damaged during shipping or erection shall be repaired by any of the three methods specified under ASTM A780. In all cases, the repair shall achieve the minimum coating thickness specified.

Erection. Material shall not be dropped, thrown or dragged over the ground. The Contractor shall supply detailed, written instructions and drawings for the erection of all sign structure components.

**Method of Measurement:**

The quantity of supplying overhead I-beam posts will be measured as linear feet for the length and size as specified and accepted.

**Basis of Payment:**

The quantity of supplying overhead I-beam posts will be paid for at the Contract unit price per linear feet for the length and size of overhead I-beam posts specified. Price and payment will constitute full compensation for furnishing, nuts, bolts and cap screws and all other materials for the sign posts in accordance with the details and notes shown on the Plans, and as directed by the Engineer; and for all labor, equipment, tools and incidentals necessary to complete the work.

10/26/05

**749549 – NIGHT TIME, EMERGENCY, OR WEEKEND WORK SURCHARGE**

**Description:**

The intent of this item is to compensate for Typical Applications mobilizations performed outside the core hours of 8:00 am – 5:00 pm Monday through Friday.

**Method of Measurement:**

The quantity of Night Time, Emergency, or Weekend Work Surcharge will be measured on a per each basis for typical applications mobilizations performed outside the core hours of 8:00 am – 5:00 pm, Monday through Friday.

**Basis of Payment:**

The quantity of Night Time, Emergency, or Weekend Work Surcharge will be paid for at the contract unit price per each. Price and payment will constitute full compensation for all labor, equipment, tools, and incidentals required to mobilize outside of the core hours of 8:00 am – 5:00 pm Monday through Friday

Typical Applications (TA's) within the Contract will be paid for at the unit bid price. This item will be Night Time, Emergency, or Weekend Work Surcharge.

10/27/11

**749550 - INSTALLATION OF BREAKAWAY I-BEAM SIGN POSTS**  
**749551 -REMOVAL OF BREAKAWAY I-BEAM SIGN POSTS**

**Description:**

This work consists of installing or removing breakaway I-beam sign posts and breakaway assemblies on sign bases previously installed or installed under other items in this contract.

**Materials:**

Steel I-beams and all mounting hardware to be used will be paid for under other items of this contract or may be furnished by the Department. The supply of the material will be designated in the job order. All I-beams will be cut to the correct length and marked for the area they are to be installed.

**Construction Methods:**

The I-beams are to be installed in a manner as not to damage the base that the I-beam is to be installed on and care taken to not interfere with overhead utility lines.

When re-installing an existing sign post and breakaway assemblies, removal of broken couplings and bolts in existing I-beams and removal of broken anchor bolts in existing bases shall be considered part of this item.

Where an existing sign has been knocked down, this item will pay for the repair of breakaway couplings and standing up the existing sign. No additional compensation will be made for removal or installation of sign unless a new sign is required.

In the removal of the I-beams, all hardware is to be returned to the Department at the Dover Sign Shop.

**Method of Measurement:**

The quantity of installation or removal of breakaway posts and breakaway assemblies will be measured as the number of breakaway posts and breakaway assemblies installed as specified, complete and in place, or removed and returned to the Department at the Dover Sign Shop.

**Basis of Payment:**

The quantity of installation or removal of breakaway posts and breakaway assemblies will be paid for at the contract unit price per each. Price and payment will constitute full compensations for all labor, equipment, tools, and incidentals required to complete the work.

10/26/05

**749552– INSTALLATION OF SIGN ON OVER HIGHWAY STRUCTURE**  
**749553- REMOVAL OF SIGN ON OVER HIGHWAY STRUCTURE**  
**749554– INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM**  
**749555 - REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM**  
**749556 – INSTALLATION OF SIGN ON GROUND MOUNT POSTS**  
**749557 - REMOVAL OF SIGN ON GROUND MOUNT POSTS**

**Description:**

This item consists of installing or removing a sign on ground mount posts, an over highway structure, span wire, or mast arm. The sign may be mounted to existing supports or ones installed under this contract.

**Materials:**

All materials shall be either supplied by the Contractor or by the Department as indicated in the job order.

There are no materials required for the removal of overhead signs. All existing materials under this section will be returned to the Department.

**Construction Methods:**

Sign installation shall be performed as specified by the Engineer. Care shall be taken to prevent any damage to the sign panel, over highway structure, roadside I-beam and wood posts, span wire, mast arm, or any electrical cable attached to the above structures, or any lights attached to the sign panel.

Sign installation on over-highway structures or roadside I-beam and wood posts may require the sign to be assembled in panels. The sign may be made from several panels to make one complete sign. Signs on roadside I-beam and wood posts shall be installed at a height of 7 feet (2.1 m) from the bottom of the sign to the near edge of the pavement.

It is not anticipated that there will be any sign panels that are required to be mounted whose messages will be inappropriate to the guiding of traffic at the time of sign erection. However, in the event that the Engineer determines that certain sign messages are inappropriate, the panels of such signs shall be covered by an opaque material, until such time as the sign messages become appropriate. The covering material and the manner of securing the material to the sign panel(s) shall meet the approval of the Engineer and shall be included as part of this item and no separate payment will be made. The Engineer will indicate to the Contractor which signs, if any, must be covered, and when to remove the covers.

Sign Cover: Sign covers shall be 10 ounce cotton duck conforming to ASTM D-320, Army Duck, and dyed to a dark green approximating the green for sign backgrounds.

Sign removal shall be performed as specified by the Engineer. Care shall be taken to prevent any damage to the sign panel, over highway structure, roadside I-beam and wood posts, span wire, mast arm, any electrical wire attached to the above structures or any lights attached to the sign panel. If the panel has lights attached to the sign panel, the Contractor will be required to disconnect the wiring prior to removing the sign panel. Removal of the wiring that operates the lights will be at the direction of the Engineer and will be included as part of this item and no separate payment will be made.

Installation and removal of supplemental sign panels and sign plaques, removal of wood posts, tubular and square steel posts, telspar, u-channel, and other small posts will be at the direction of the Engineer and will be included as part of this item and no separate payment will be made. All materials removed shall be returned to the Department at the Dover Sign Shop.

**Method of Measurement:**

The quantity of installation or removal of overhead and ground mount signs will be measured as the actual number of signs installed or removed for the type of posts or structure specified as per these specifications, complete, in place and accepted or removed and returned to the Department at the Dover Sign Shop.

**Basis of Payment:**

The quantity of installation or removal of overhead and ground mount signs will be paid for at the contract unit price per each sign per the type of structure or posts specified. The cost of furnishing, installing and removing sign covers, removal of wiring that operates the lights, installation and removal of supplemental sign panels and sign plaques, removal of wood posts, tubular and square steel posts, telspar, u-channel, and other small posts shall be considered incidental to the cost of installation or removal of signs. Price and payment will constitute full compensation for all labor, equipment, tools, and incidentals required to complete the work.

9/11/07

**749558 - MEASUREMENT OF OVERHEAD SIGNS**

**Description:**

This item consists of obtaining the length and width measurements of signs which are located on overhead structures.

**Materials:**

None.

**Construction Methods:**

None.

**Method of Measurement:**

The quantity will be measured by square footage.

**Basis of Payment:**

The quantity will be paid for at the contract unit price per square foot of the signs measured as as specified per job order. Price and payment will constitute full compensations for all labor, equipment, tools, and incidentals required to complete the work.

3/6/08

**749559 - SUPPLY OF JERSEY BARRIER MOUNTED I-BEAM**

**Description:**

This work consists of furnishing all jersey barrier mounted I-beam post (i.e. safety barrier sign connection) to the job order site in conformance with the details and notes shown on the Plans, and as directed by the Engineer.

**Materials:**

All prefabricated square tubing shall conform to ASTM A500 grade C with Fy minimum - 50 KSI.  
All miscellaneous plate material for base plates shall conform to ASTM A709 grade 50 with Fy minimum - 50 KSI.

Anchor bolts shall conform to ASTM A709 grade 50 with 50 KSI minimum yield strength and be hot-dipped galvanized. Welding to high strength anchor bolts will not be permitted.

All structural steel shall be hot-dipped galvanized in accordance with AASHTO M III (ASTM A-123).

**Construction Methods:**

Working Drawings. Working drawings shall be submitted in accordance with subsection 105.04 of the Standard Specifications. Minor variations in details may be permitted; however, any major departure from the design will not be accepted.

Fabrications. Loading, transporting, unloading and erection of structural materials shall be done so that the metal will be kept clean and free from injury in handling.

Structural materials shall be stored above the ground upon platforms, skid or other supports and shall be kept free from accumulation of dirt, oil, acids or other foreign matter.

Structural material which has been deformed shall be straightened before being laid out, punched, drilled or otherwise worked upon in the shop. Sharp kinks or bends will be cause for rejection.

When sign support structures are subcontracted, the subcontract shall be in accordance with Subsection 108.01 of the Standard Specifications except that the value of the subcontract will be based on the value of the work for fabrication.

Repair Galvanizing. Galvanized areas damaged during shipping or erection shall be repaired by any of the three methods specified under ASTM A780. In all cases, the repair shall achieve the minimum coating thickness specified.

Erection. Material shall not be dropped, thrown or dragged over the ground. The Contractor shall supply detailed, written instructions and drawings for the erection of all sign structure components.

**Method of Measurement:**

The quantity of supplying jersey barrier posts will be measured as per each as specified and accepted.

**Basis of Payment:**

The quantity of supplying jersey barrier posts will be paid for at the Contract unit price per each. Price and payment will constitute full compensation for furnishing, nuts, bolts and cap screws and all other materials for the sign posts in accordance with the details and notes shown on the Plans, and as directed by the Engineer; and for all labor, equipment, tools and incidentals necessary to complete the work.

3/6/08

**749560 - INSTALLATION OF JERSEY BARRIER MOUNTED I-BEAM**

**Description:**

This work consists of furnishing all jersey barrier mounted I-beam post and the (i.e. safety barrier sign connection) to the job order site in conformance with the details and notes shown on the Plans, and as directed by the Engineer. This is inclusive of the mounting plates, hardware and necessary adhesives.

**Materials:**

All prefabricated square tubing shall conform to ASTM A500 grade C with Fy minimum - 50 KSI.  
All miscellaneous plate material for base plates shall conform to ASTM A709 grade 50 with Fy minimum - 50 KSI.

Anchor bolts shall conform to ASTM A709 grade 50 with 50 KSI minimum yield strength and be hot-dipped galvanized. Welding to high strength anchor bolts will not be permitted.

All structural steel shall be hot-dipped galvanized in accordance with AASHTO M III (ASTM A-123).

The adhesive anchor bolt system shall be capable of providing the following unfactored load capacity simultaneously:

Tension = 4 kips/ BOLT MIN.

Shear = 0.7 kips/BOLT MIN.

Minimum number of bolts, diameter and embedment depths shown on the plans shall be maintained.

**Construction Methods:**

Working Drawings. Working drawings shall be submitted in accordance with subsection 105.04 of the Standard Specifications. Minor variations in details may be permitted; however, any major departure from the design will not be accepted.

**Method of Measurement:**

The quantity will be measured per each as specified and accepted.

**Basis of Payment:**

The quantity of supply will be paid for at the contract unit price per each. Price and payment will constitute full compensation for all labor, equipment, tools, and incidentals required.

3/6/08

**749561 - INSTALLATION OF SIGN ON JERSEY BARRIER MOUNTED I-BEAM**  
**749562 - REMOVAL OF SIGN FROM JERSEY BARRIER MOUNTED I-BEAM**

**Description:**

This item consists of installing or removing a sign on jersey barrier mounted posts. The sign may be mounted to existing supports or ones installed under this contract.

**Materials:**

All materials shall be either supplied by the Contractor or by the Department as indicated in the job order.

**Construction Methods:**

Sign installation shall be performed as specified by the Engineer.

**Method of Measurement:**

The quantity of installation or removal of signs will be measured by the square footage of the signs installed or removed as per these specifications, complete, in place and accepted or removed and returned to the Department at the Dover Sign Shop.

**Basis of Payment:**

The quantity of installation or removal of signs will be paid for at the contract unit price per square each sign. Price and payment will constitute full compensation for all labor, equipment, tools, and incidentals required to complete the work.

3/6/08

**749587 – SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE XI REFLECTIVE SHEETING (SINGLE SIDED)**  
**749588 – SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE XI REFLECTIVE SHEETING (DOUBLE SIDED)**

**Description:**

This work shall include fabrication and furnishing new sign panels constructed of flat sheet aluminum panels as specified in the job order. The sign panels shall have a reflective sheeting background, and all complete with demountable copy or direct applied or silk screened copy. Installation of flat sheet aluminum panels are paid for under other items in this contract. The removing and transporting of the existing sign panels before fabricating and erecting new sign panels, if such requirement is specified shall be paid for under other items in this contract.

**Design:**

All letters shall be placed in accordance with the “Standard Alphabets for Highway Signs” of the Federal highway Administration. The Contractor shall submit working drawings showing the details of the panels for prior approval.

**Materials:**

**Aluminum Flat Sheet Panels:** Sign panels shall be of aluminum sheet type conforming to ASTM Designation B209 (alloy 6061-T6 or 5052-H38). Thermally flattened if alloy 5052-H38. The panels shall be chemically coated. Free of burred edges, nicks and gouges. Square and true to size. The minimum panel sheet thickness shall be 0.100 inches. All sign panels shall be fully reflectorized unless otherwise indicated on the Plans.

**Sheeting:** The sheeting shall consist of prismatic lens elements with a distinctive interlocking pattern visible from the face of a smooth surface, unless otherwise specified on the Plans. The sheeting shall have a precoated adhesive protected by an easily removable liner.

Retroreflective properties will be measured in:

Minimum Coefficient of Retroreflection Ra  
(cd/lux/m<sup>2</sup>)

- All measurements shall be made after sign cleaning according to sheeting manufacturer’s recommendations.
- The coefficients of retroreflection observation angles shall be 0.2°, 0.5°, 1.0°.
- The coefficients of retroreflection entrance angles shall be -4° and 30°.

**Letter of Certification**

The contractor shall send a letter of certification stating that the sign sheeting materials meet the required Minimum Coefficient of Retroreflection described in the charts below. The letter shall be sent to:

Delaware Department of Transportation  
Signs and Markings Section  
Attn: Traffic Operations Manager  
P.O. Box 778  
Dover, Delaware 19901

**Warranty**

The sheeting manufacturer shall submit with each lot or shipment, a certification that states the material supplied will meet all the requirements listed herein.

**Type XI Retro-Reflective Sheeting**

White	-4	30
0.2	570	215
0.5	400	150
1	120	45

Blue	-4	30
0.2	26	10
0.5	18	6.8
1	5	2

Yellow	-4	30
0.2	425	160
0.5	300	110
1	90	34

FYG	-4	30
0.2	455	170
0.5	320	120
1	96	36

Red	-4	30
0.2	87	33
0.5	63	23
1	18	7

FY	-4	30
0.2	340	130
0.5	240	90
1	72	27

Green	-4	30
0.2	57	21
0.5	40	15
1	12	4.5

FO	-4	30
0.2	170	64
0.5	120	45
1	36	14

**Sheeting Manufacturer's Replacement Obligation:**

Standard Colors where it can be shown that retroreflective signs supplied and used according to the sheeting manufacturer's recommendations, have not met the performance requirements of this specification the sheeting manufacturer shall cover restoration costs as follows for sheeting shown to be unsatisfactory during the period listed below.

80% of the values listed in the tables for 12 years.

Non-reflective black material that is used on the signs will carry the same warranty period and replacement obligation. This material will be considered unsatisfactory if it has deteriorated due to natural causes to the extent that it is visibly cracked or has experienced shrinkage of more than a 1/8" from the edge of the metal it is applied.

For temporary signing, fluorescent orange, where it can be shown that the retroreflective sheeting fails to conform to the performance requirements of this section, the sheeting manufacturer shall cover restoration costs as follows for sheeting shown to be unsatisfactory during the period listed below.

80% of the values listed in the tables for 3 years.

The remedy to any failure will be:

The sheeting manufacturer will replace the sign in its entirety inclusive of the sign panel, sign sheeting, labor, and M.O.T required to restore the sign surface to its original effectiveness.

### **Government Obligation**

The agency shall be responsible for requiring the dating of all signs at the time of application. That date constitutes the start of the field performance obligation period.

All measurements shall be made after sign cleaning according to the sheeting manufacturer's recommendations.

Natural causes include effects of exposure to weather. Natural causes exclude (without limitation) damage from exposure to chemicals, abrasion and other mechanical damage (such as from fasteners used to mount the sign, collisions or mishandling), vandalism, or malicious mischief.

### **Applicable Documents**

The following documents, of the issues in effect on the date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

ASTM Standards

D 4956 Standard Specification for Retroreflective Sheeting for Traffic Control

E 810 Standard Test Method for Coefficient of Retroreflection of Retroreflective Sheeting

AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals

### **Construction Methods:**

**Sign Face Finishing:** All reflective sheeting, backgrounds, letters, numerals, symbols, and borders shall be clean-cut and sharp, and the messages on all signs shall be as indicated on the Plans. Application of reflective sheeting to aluminum panels shall be in accordance with sheeting manufacturer's recommendations. Reflective sheeting shall be color matched and marked. The height of characters and the alphabet series to be employed for the signs shall conform to the Plans and their references. The alphabet series used on the sign panels shall conform to the Plans and the "Standard Alphabets for Highways Signs" of the Federal Highway Administration.

The working drawings prepared by the Contractor shall clearly indicate the proposed spacing of the letters and the locations and arrangements of symbols and borders.

Sheeting applications shall meet ambient temperature requirements as specified by the manufacturer.

Whenever it is necessary to construct the background of a sign face with two or more pieces of reflective sheeting, they must be carefully matched for color prior to application and sign fabrication, to provide uniform appearance and brilliance, day and night. Each full width section of reflective sheeting mounted adjacent to another full width section taken consecutively from the same roll shall be rotated and mounted 180 degrees with respect to that adjacent section. This rule shall also be observed as a guide when partial width sheets of reflective sheeting are used.

Non-conformance may result in non-uniform shading and an undesirable contrast between adjacent widths of applied sheeting which will render signs unacceptable. The entire background of each sign shall be uniform in color, brilliance, texture, and general appearance as seen in the daytime and under typical automobile illumination at night. No more sections of reflective sheeting shall be used for backgrounds than is necessary;

remnants, scraps, and odd sized pieces of sheeting shall not be used in the fabrication of any signs manufactured for this contract. Joints between reflective sheeting sections shall either butt or overlap no more than 3/8 of an inch.

**Transporting Sign Panel:** Signs shall be slip-sheeted, packed, and shipped in such manner as to ensure arrival at their respective places of erection in an undamaged condition. All signs arriving at the erection site(s) in a condition which in the opinion of the Engineer, renders them unsuitable for use, shall be removed and replaced by the Contractor at his sole expense.

**Identification Tags:** The Contractor shall furnish and place identification tags or decals which state the contract number, month and year of erection on the lower reverse side of the panel, near the point closest to the roadway shoulder.

**Method of Measurement:**

The quantity of sign panels is to be measured as the square footage of front sign face installed for the type and sheeting grade specified under this item complete and accepted. The area will be computed from the maximum width and height dimensions of each sign panel, as shown on the Plans, or on the approved sign panel working drawings, (verified by field measurements). All sign panels will be considered either square or rectangular in shape, as the case may be, and no area deductions will be made for rounding corners.

**Basis of Payment:**

The quantity of sign panels will be paid for at the unit price per square foot for the type and sheeting grade specified. Price and payment shall constitute full compensation for furnishing, fabricating, and delivering sign panels complete in place and accepted, with reflective materials, copy, symbols, borders, connections to supports, degreasing, etching, and for all labor, materials, tools, equipment, and incidentals required to complete the item.

4/22/14

**749688 - INSTALLATION OF 4" DIAMETER HOLE, LESS THAN OR EQUAL TO 6" IN DEPTH**  
**749689 - INSTALLATION OF 4" DIAMETER HOLE, GREATER THAN 6" IN DEPTH**

**Description:**

This work consists of boring a hole 4" in diameter averaging 6" in depth into bituminous concrete or P.C.C. surfaces for installing single or multiple sign posts at the locations indicated on the Plans or as directed by an Engineer.

**Materials:**

The Contractor shall provide the equipment necessary to bore a 4" hole into paved surfaces, while maintaining the stability of the surrounding paved or P.C.C. surfaces. The depth of the bored hole shall be to the top of the subbase material.

**Construction Methods:**

The holes shall be bored into pavement or P.C.C. islands, medians, or sidewalk using a mechanical hole borer for such work or other methods approved by the Engineer. The hole shall be 4" in diameter. Holes bigger or smaller than 4" shall be corrected at the Contractor's expense.

**Method of Measurement:**

The number of 4" holes in diameter bored will be measured as the actual number of holes bored and accepted.

**Basis of Payment:**

The quantity of holes bored as required above will be paid for at the Contract unit price per each. Price and payment will constitute full compensation for boring holes at the required depth, and for all labor, equipment, tools, and incidentals required to complete the work.

**Note:**

The cost for installing holes and PVC sleeves for sign posts in newly constructed P.C.C. islands, medians, or sidewalks shall be incidental to the P.C.C. item.

3/23/09

**749693 – STRAIGHTENING OF SIGN POST**

**Description:**

This work consists of straightening previously installed sign posts (i.e. square tube or u-channel) that are no longer standing upright and level.

**Materials:**

N/A

**Construction Methods:**

The Contractor shall straighten the sign post and check with a level to assure compliance in all directions. The disturbed ground shall be backfilled, tamped and graded accordingly.

**Method of Measurement:**

The quantity of sign posts straightened will be measured as Each.

**Basis of Payment:**

The quantity of sign posts straightened will be paid for at the Contract unit price per Each. Price and Payment will constitute full compensation for straightening and leveling the sign post, backfilling and grading disturbed areas, and for all labor, equipment, tools, and incidentals required to complete the work.

7/7/11

**763507 - EMERGENCY MOBILIZATION**

**Description:**

The work under this item shall require the Contractor to appear in full readiness for emergency repair or removal of damaged overhead sign structures within 10 hours of notification using a crane. In a telephone conversation the contractor shall be advised of the approximate location, extent of the damage and size crane needed.

**Materials and Construction Methods:**

Materials and construction methods for the type of work to be done, shall be a crane (up to 6 axles) and the ability to have the crane at the designated location within 10 hours of notification. It is the contractor's responsibility to be aware of all state, federal and local regulations pertaining to the movement of oversized vehicles.

**Method of Measurement:**

There shall be no measurement of this item, and the payment shall be a fixed amount for each emergency mobilization.

**Basis of Payment:**

The payment for the item shall be made for at the Contract unit price bid per Each for "Emergency Mobilization", which price and payment shall be full compensation for the Contractor to appear in full readiness to perform the directed work within 10 hours as indicated above.

7/14/15

**763563 - PERFORMANCE AND PAYMENT BOND**

**Description:**

Performance and Payment Bond shall be paid to compensate the cost of bonding the Contract in accordance with Subsection 103.05 of the Standard Specification.

**Method of Measurement:**

The Contractor shall be paid the total cost of bond necessary for the contract once the Contract is executed.

**Basis of Payment:**

The payment for the item shall be made for at the Contract unit price per Lump Sum bid for "Performance and Payment Bond", which price and payment shall be full compensation. The payment for the Performance and Payment Bond will be included on the first estimate following the Contractor's submission of acceptable verification of actual cost.

6/12/98

**763643 - MAINTENANCE OF TRAFFIC – ALL INCLUSIVE**

**Description:**

This item shall consist of furnishing, installing, maintaining and/or relocating the necessary temporary traffic control devices used to maintain vehicular, bicycle and pedestrian traffic, including persons with disabilities in accordance with the Americans with Disabilities Act, as amended. All work shall be performed in a manner that will provide reasonably safe passage with the least practicable obstruction to all users, including vehicular, bicycle and pedestrian traffic.

All requirements of the Delaware Manual on Uniform Traffic Control Devices (MUTCD), Part 6, herein referred to as the Delaware MUTCD. (latest edition with all revisions made up to the date of Advertisement of this project) shall apply for all temporary traffic control devices. Any, and all, control, direction, management and maintenance of traffic shall be performed in accordance with the requirements of the Delaware MUTCD, notes on the Plans, this specification, and as directed by the Engineer.

The Contractor shall be aware that the Case Diagrams and safety measures outlined in the Delaware MUTCD are for common construction situations and modifications may be warranted based on the complexity of the job. The Contractor shall submit justification for modifications to the Temporary Traffic Control Plan (TTCP) to the Engineer for approval prior to implementation.

The Department reserves the right to impose additional restrictions, as needed, for the operational movement and safety of the traveling public. The Department reserves the right to suspend the Contractor's operations until compliance with the Engineer's directive for remedial action, based on but not limited to the following reasons:

1. The Contractor's operations are not in compliance with the Delaware MUTCD, the specifications or the Plans.
2. The Contractor's operations have been deemed unsafe by the Traffic Safety Engineer or District Safety Officer.

**Materials and Construction Methods:**

The Contractor shall submit a Temporary Traffic Control Plan (TTCP) or a Letter of Intent to use the Plan recommended Delaware MUTCD Case Diagram(s) at or prior to the pre-construction meeting. The Contractor shall submit the TTCP for all Contractor and subcontractor work to be performed on the project for the Department's approval before the start of work.

When specified by a note in the Plans, the Contractor shall be required to have an American Traffic Safety Services Association (ATSSA) certified Traffic Control Supervisor on the project. The authorized designee must be assigned adequate authority, by the Contractor, to ensure compliance with the requirements of the Delaware MUTCD and provide remedial action when deemed necessary by the Traffic Safety Engineer or the District Safety Officer. The ATSSA certified Traffic Control Supervisor's sole responsibility shall be the maintenance of traffic throughout the project. This responsibility shall include, but is not limited to, the installation, operations, maintenance and service of temporary traffic control devices. Also required is the daily maintenance of a log to record maintenance of traffic activities, i.e., number and location of temporary traffic control devices; and times of installation, changes and repairs to temporary traffic control devices. The ATSSA Traffic Control Supervisor shall serve as the liaison with the Engineer concerning the Contractor's maintenance of traffic. The name, contact number and certification for the designated Traffic Control Supervisor shall be submitted at or prior to the pre-construction meeting. The cost of the ATSSA certified Traffic Control Supervisor shall be incidental to this item.

Temporary traffic control devices shall be maintained in good condition in accordance with the brochure entitled "Quality Guidelines for Temporary Traffic Control Devices", published by the American Traffic Safety Services Association (ATSSA). Any temporary traffic control devices that do not meet the quality guidelines shall be removed and replaced with acceptable devices. Failure to comply will result in work stoppage with time charges continuing to be assessed.

Any existing signs that conflict with any temporary or permanent construction signs shall be covered as needed or as directed by the Engineer. The cost for temporarily covering conflicting signs shall be incidental to this item.

Access to all transit stops located within the project limits shall be maintained unless otherwise directed by the Plans or the Engineer. Maintaining access shall include maintaining an area for the transit vehicle and also an accessible path for pedestrians to safely access the transit stop.

The Contractor shall notify the Engineer, in writing, no less than fourteen (14) calendar days prior to the start of any detour(s) and road closures. The Engineer will notify the following entities:

- Local 911 Center
- Local School Districts
- Local Post Offices
- DelDOT's Transportation Management Center (TMC)
- Town Managers
- Local Police
- DelDOT's Public Relations
- Delaware Transit Corporation (DTC)

Immediately prior to the implementation of any lane or road closures, the Engineer shall notify the DelDOT TMC at (302) 659-4600. Notifications shall also be provided when the closures are lifted. The Engineer shall notify TMC and the District Safety Officer if any lane closures cannot be removed prior to the end of the allowable work hours.

The Contractor shall notify the local 911 center if access to a fire hydrant is temporarily restricted. The Contractor shall provide written confirmation to the Engineer that the local 911 center has been notified.

If a detour is required during any part or the entire period of this Contract, an approved detour plan shall be obtained from the Department's Traffic Safety Section. All signs, barricades and other temporary traffic control devices required as part of the approved detour plan shall be installed and maintained by the Contractor on the route that is closed and on the detour route. Road closures without an approved detour plan shall not be allowed. If a road is closed without an approved detour plan, the Contractor's operations shall be stopped immediately.

The Contractor shall provide and maintain ingress and egress for each property abutting the construction area and each property located between the diversion points of any detour and the actual construction site. Construction activities which may temporarily or otherwise interfere with property access shall be coordinated in advance with the affected property owners.

The Contractor shall conduct construction operations in a manner which will minimize delays to traffic, and shall meet the following requirements:

1. If work is being performed within 200 feet in any direction of an intersection that is controlled by a traffic signal, the flagger(s) shall direct the flow of traffic in concert with the traffic signals in construction areas to avoid queuing, unless active work prohibits such action. The flagger shall direct traffic to prevent traffic from queuing through an intersection (i.e., blocking an intersection). Only a Traffic Officer may direct traffic against the operation of a traffic signal and only until the operation occurring within the intersection is completed.

2. When a lane adjacent to an open lane is closed to travel, the temporary traffic control devices shall be set 2 feet (0.61 m) into the closed lane from the edge of the open lane, unless an uncured patch exists or actual work is being performed closer to the open lane with minimum restriction to traffic.
3. Except for “buffer lanes” on high volume and/or high speed roadways, lanes shall not be closed unless construction activity requiring lane closure is taking place, or will take place within the next hour. Lanes shall be reopened immediately upon completion of the work. Moving operations will require the lane closures be shortened as the work progresses and as traffic conditions warrant to minimize the length of the closure. The Contractor shall conduct construction operations in a manner so as to minimize disruption to traffic during peak hours and periods of heavy flow. The Department reserves the right to stop or change the Contractor's operations, if in the opinion of the Engineer, such operations are unnecessary at that time or the operations are unnecessarily impeding traffic.
4. Work in the vicinity of traffic signals, shall be scheduled to minimize the time during which the signal is operated without detectors, and prior approval from the Engineer shall be required. TMC shall be notified in advance of cutting a loop detector, and be immediately notified once the loop detector has been reinstalled. The Contractor shall provide sufficient advance notice of the loop detector work with the Engineer to ensure the aforementioned requirements are met.

It is required that all temporary traffic control work and related items shall either be performed entirely by the Contractor's own organization, or totally subcontracted. Maintenance of equipment shall not be subject to this requirement.

Any deficiencies related to temporary traffic control that are reported to the Contractor in writing shall be corrected within 24 hours or as directed by the Engineer. Failure to comply will result in non-payment for those devices that are found to be deficient for the duration of the deficiency. Serious deficiencies that are not corrected immediately shall result in suspension of work until items identified are brought back into compliance.

At the end of each day's work, the Contractor shall correct all pavement edge drop-offs in accordance with Table 6G-1 in the Delaware MUTCD. This corrective work shall be accomplished with Temporary Roadway Material (TRM) unless an alternate method is specified in the Plans. All ruts and potholes shall be filled with TRM as soon as possible but no later than the end of each work day. Placement and Payment of TRM shall be completed in accordance with Section 402 of the Standard Specifications. If temporary elimination of a drop-off hazard cannot be accomplished, then the area should be properly marked and protected with temporary traffic control devices such as temporary barricades, warning signs, flashing lights, etc. as required by Section 6G.21 of the Delaware MUTCD.

All open trench excavation accessible by vehicular traffic must be backfilled prior to the end of each working day. Steel plates shall not be used except in emergency situations and only with prior written approval from the Engineer unless otherwise directed by the Plans.

The Contractor shall submit, at or prior to the preconstruction meeting, detailed drawings including but not limited to existing striping lengths, lane and shoulder widths, turn lane lengths, locations of stop bars, turn arrows, crosswalks and railroad crossings. The drawings shall depict the existing pavement markings for each project location. These drawings will be reviewed by the Department's Traffic Section to determine the need for modification(s) for compliance with the Delaware MUTCD. Temporary pavement markings, on the final pavement surface, shall match the Plan dimensions and layout or the approved drawings of the permanent markings in compliance with Section 3 of the Delaware MUTCD. All conflicting or errant striping shall be removed as directed by the Engineer in compliance with the specifications for Item 748530 (Removal of Pavement Striping).

At the end of each day's operation and before traffic is returned to unrestricted roadway use, temporary striping shall be utilized when the existing pavement is milled and hot mix will not be placed the same day or more than a single course of hot mix is to be placed or permanent roadway striping cannot be placed on the same

day as the placement of the final course of hot mix. Placement of temporary striping shall receive prior approval from the Engineer and the contractor shall apply temporary pavement markings in accordance with the requirements of Section 748 of Delaware Standard specifications and the Delaware MUTCD. Payment for temporary pavement striping shall be made at the unit price bid for item 748 - Temporary Striping. Payment for final striping will be included in the applicable striping item.

The Contractor shall have temporary striping/delineating materials (such as raised markers, tape, and other approved materials) available at the job site for verification by the Department prior to starting the hot-mix paving operation on roads to be immediately opened to traffic. These materials shall be used by the Contractor for temporary markings if he/she fails to apply temporary marking paint, etc., as required by the Delaware MUTCD. No paving operations on roads to be immediately opened to traffic will be allowed unless such verification has been made for the availability of the materials at the job site.

Travel lane and ramp closings on multilane highways and Interstates shall not be permitted during the following holiday periods:

- December 24 through December 27 (Christmas Day)
- December 31 through January 3 (New Years Day)
- Friday prior to Easter through Easter Sunday
- Thursday prior to Memorial Day through the Tuesday following Memorial Day
- Dover International Speedway Race Weekends (Thursday prior to the race event through the day after the race event)
- July 3 through July 5 (Independence Day)
- Thursday prior to Labor Day through the Tuesday following Labor Day
- Wednesday prior to Thanksgiving Day through the Monday following Thanksgiving Day

Additional time restrictions may apply as noted in the project plans or as directed by the Engineer. Any requests to waive any restrictions must be made in writing to the Engineer for review and approval. A copy of the request shall be provided to the District Safety Officer for review.

**Certification:**

Temporary traffic control devices used on all highways open to the public in this State shall conform to the Delaware MUTCD. All devices shall be crashworthy in accordance with the National Cooperative Highway Research Program (NCHRP) Report 350, the memorandum issued August 28, 1998 by The USDOT Federal Highway Administration, and/or in accordance with the latest edition of the Manual for Assessing Safety Hardware (MASH), published by the American Association of State Highway and Transportation Officials (AASHTO).

The Contractor shall submit certification for temporary traffic control devices or vendors used specifically on this project at or prior to the pre-construction meeting.

Certification of compliance with NCHRP report 350 and/or MASH is required for the following categories of temporary traffic control devices:

**Category I** contains small and lightweight channelizing and delineating control devices which includes cones, tubular markers, flexible delineator post and drums, all without any accessories or attachments.

**Category II** includes temporary traffic control devices that are not expected to produce significant vehicular velocity changes to impacting vehicles. These devices which shall weigh 45 kg or less, include Type I, II and III barricades, portable sign supports with signs, and intrusion alarms. Also included are drums, cones, and vertical panels with accessories or attachments.

**Category III** includes temporary traffic control devices that are expected to cause significant vehicular velocity changes to impacting vehicles. These devices which weigh more than 45 kg include temporary barrier, temporary impact attenuators, and truck-mounted attenuators.

**Category IV** includes portable or trailer-mounted devices such as arrow panels, variable message signs, temporary traffic signals and temporary area lighting.

For Category I devices, the manufacturer or Contractor may self-certify that the devices meet the NCHRP-350 and/or MASH criteria. The Contractor shall supply the Federal Highway Administration's NCHRP-350 and/or MASH acceptance letter for each type of device that falls under Category II and III devices.

**Basis of Payment:**

Payment will be made at the Lump Sum price for "Maintenance of Traffic", for which price and payment constitutes full compensation for all maintenance of traffic activities accepted by the Engineer, which shall include the cost of furnishing and relocating permanent and temporary traffic control signs, traffic cones or drums, submission of temporary traffic control plan(s), submission of existing pavement marking drawings, submission of all required certifications, labor, equipment and incidentals necessary to complete the item. Payment to furnish and maintain other temporary traffic control devices including but not limited to Portable P.C.C. Safety Barrier, Truck Mounted Attenuators, Portable Changeable Message Signs, Arrow Panels and Portable Light Assemblies will be made at the contract unit price for each item.

**NOTE**

If the Contractor does not complete the Contract work within the Contract completion time (including approved extension time), the Contractor shall be responsible for providing the necessary temporary traffic control devices that are required to complete any remaining work. The costs of such temporary traffic control shall be borne by the Contractor. No additional payment will be made to the Contractor to maintain traffic in accordance with the Delaware MUTCD, contract plans and specifications. Temporary traffic control items include, but not be limited to, warning lights, warning signs, barricades, plastic drums, P.C.C. safety barrier, flaggers, traffic officers, arrow panels, message boards, and portable impact attenuators.

A breakout sheet is attached to the Proposal that lists the locations for Maintenance of Traffic. The Contractor shall specify a cost for each location. The lump sum price for Item 763643 shall be the sum of the cost for all locations listed. The completed breakout sheet shall be attached to the Bid Proposal. Failure to submit the breakout sheet with the Bid Proposal will result in it being declared non responsive and rejected.

The Department reserves the right to delete from the Contract one or more of the locations listed and the lump sum price to be paid will be reduced in accordance with the Contractor's cost listed for that/those location(s). There will be no extra compensation to the Contractor if such deletion is made.

6/21/2011

**BID PROPOSAL FORMS**  
CONTRACT   T201408302.01

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
---------	------------------	----------------------------	------------------------	------------------------

SECTION 0001 GUIDE SIGNS

0010	743005 FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	50.000 EADY		
0020	743007 TRAFFIC OFFICERS	10.000 HOUR	75.00000	750.00
0030	743010 FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	26.000 EADY		
0040	743050 FLAGGER, NEW CASTLE COUNTY, STATE	40.000 HOUR		
0050	743051 FLAGGER, KENT COUNTY, STATE	40.000 HOUR		
0060	743052 FLAGGER, SUSSEX COUNTY, STATE	40.000 HOUR		
0070	743062 FLAGGER, NEW CASTLE COUNTY, STATE, OVERTIME	6.000 HOUR		
0080	743063 FLAGGER, KENT COUNTY, STATE, OVERTIME	6.000 HOUR		
0090	743064 FLAGGER, SUSSEX COUNTY, STATE, OVERTIME	6.000 HOUR		

CANNOT BE USED FOR BIDDING

DELAWARE DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF ITEMS

PAGE: 2  
 DATE:

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0100	743538 WOODEN SIGN POSTS, 4" X 4"	1.000 EACH				
0110	743539 WOODEN SIGN POSTS, 4" X 6"	1.000 EACH				
0120	743540 WOODEN SIGN POSTS, 6" X 6"	1.000 EACH				
0130	743541 WOODEN SIGN POSTS, 6" X 8"	1.000 EACH				
0140	746501 FURNISH & INSTALL DOWN GUY AND ANCHOR	3.000 EACH				
0150	746504 FURNISH & INSTALL SPAN WIRES, 7/16"	1000.000 LF				
0160	746505 FURNISH & INSTALL SPAN WIRE, 3/8"	125.000 LF				
0170	746506 FURNISH & INSTALL SPAN WIRE, 1/4"	125.000 LF				
0180	746507 INSTALLATION OF STEEL POLE (LESS THAN 40')	5.000 EACH				
0190	746528 INSTALLATION OF STEEL POLE (EQUAL TO OR GREATER THAN 40')	1.000 EACH				

CANNOT BE USED FOR BIDDING

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0200	746704 ADJUSTMENT OF SPAN OR MESSENGER WIRE	10.000 EACH				
0210	746708 INSTALLATION OF SIDEWALK GUY AND ANCHOR	3.000 EACH				
0220	746710 REMOVAL OF DOWN GUY AND ANCHOR	3.000 EACH				
0230	746711 INSTALLATION OF OVERHEAD GUY	3.000 EACH				
0240	746733 REMOVAL OF STEEL POLE (EQUAL TO OR GREATER THAN 17' AND LESS THAN 40')	5.000 EACH				
0250	746734 REMOVAL OF STEEL POLE (EQUAL TO OR GREATER THEN 40')	1.000 EACH				
0260	746739 REMOVAL OF SIDEWALK GUY AND ANCHOR	3.000 EACH				
0270	746740 SPAN WIRE ATTACHMENT BETWEEN POLES	10.000 EACH				
0280	746741 REMOVAL OF SPAN WIRE ATTACHMENT	10.000 EACH				
0290	746842 TRANSFER OF SPAN WIRE	3.000 EACH				

CANNOT BE USED FOR BIDDING

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0300	749513 INSTALLATION OF SIGN OVERLAY 16 S.F. OR LESS	50.000 EACH				
0310	749514 INSTALLATION OF SIGN OVERLAY OVER 16 S.F.	5.000 EACH				
0320	749516 REINFORCED CONCRETE SIGN FOUNDATION, W-6	50.000 EACH				
0330	749517 REINFORCED CONCRETE SIGN FOUNDATION, W-8	7.000 EACH				
0340	749518 REINFORCED CONCRETE SIGN FOUNDATION, W-10	5.000 EACH				
0350	749519 REINFORCED CONCRETE SIGN FOUNDATION, W-12	5.000 EACH				
0360	749520 REINFORCED CONCRETE SIGN FOUNDATION, W-14	5.000 EACH				
0370	749521 SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-6	888.000 LF				
0380	749522 SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-8	100.000 LF				
0390	749523 SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-10	31.000 LF				

CANNOT BE  
USED FOR  
BIDDING

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0400	749524 SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-12	31.000 LF				
0410	749525 SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-14	100.000 LF				
0420	749527 SIGN BASE EXTENSION	1.000 CF				
0430	749528 STRUCTURAL CONCRETE	1.000 CF				
0440	749529 INSTALLATION OF SIGN BASE SHEETING	1.000 EACH				
0450	749530 REMOVAL OR GRADING OF MASONRY	25.000 CF				
0460	749535 SUPPLY & INSTALLATION OF BOLT KIT FOR BREAKAWAY COUPLING	75.000 EACH				
0470	749536 SUPPLY & INSTALLATION OF HINGE PLATE FOR BREAKAWAY COUPLING	40.000 EACH				
0480	749537 SUPPLY & INSTALLATION OF BREAKAWAY COUPLING SYSTEM	25.000 EACH				
0490	749540 REMOVAL OF OVERHEAD I-BEAM	10.000 EACH				

CANNOT BE  
USED FOR  
BIDDING

DELAWARE DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF ITEMS

PAGE: 6  
 DATE:

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0500	749541 INSTALLATION OF OVERHEAD I-BEAM	5.000 EACH				
0510	749542 RELOCATION OF OVERHEAD I-BEAM	5.000 EACH				
0520	749543 REMOVAL OF LIGHTING UNIT	25.000 EACH				
0530	749544 CUTTING OF OVERHEAD I-BEAMS	25.000 EACH				
0540	749545 REMOVAL OF STANDARD GROUND MOUNTED METAL SIGN POST	400.000 EACH				
0550	749546 REMOVAL OF GROUND MOUNTED WOOD POST	2.000 EACH				
0560	749547 SUPPLY AND INSTALLATION OF DRY CONCRETE	2.000 EACH				
0570	749548 SUPPLY OF OVERHEAD I-BEAM, W-6	3.000 LF				
0580	749549 NIGHT, EMERGENCY, WEEKEND WORK	25.000 EADY				
0590	749550 INSTALLATION OF BREAKAWAY I-BEAM SIGN POSTS	75.000 EACH				

CANNOT BE  
 USED FOR  
 BIDDING

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0600	749551 REMOVAL OF BREAKAWAY I-BEAM SIGN POSTS	50.000 EACH				
0610	749552 INSTALLATION OF SIGN ON/OVER HIGHWAY STRUCTURE	7500.000 SF				
0620	749553 REMOVAL OF SIGN ON/OVER HIGHWAY STRUCTURE	7500.000 SF				
0630	749554 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM	20.000 SF				
0640	749555 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM	20.000 SF				
0650	749556 INSTALLATION OF SIGN ON GROUND MOUNT POSTS	2500.000 SF				
0660	749557 REMOVAL OF SIGN ON GROUND MOUNT POSTS	1000.000 SF				
0670	749558 MEASUREMENT OF OVERHEAD SIGNS	251.000 SF				
0680	749559 SUPPLY OF JERSEY BARRIER MOUNTED I-BEAM	1.000 EACH				
0690	749560 INSTALLATION OF JERSEY BARRIER MOUNTED I-BEAM	1.000 EACH				

CANNOT BE  
 USED FOR  
 BIDDING

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0700	749561 INSTALLATION OF SIGN ON JERSEY BARRIER MOUNTED I-BEAM	20.000 SF				
0710	749562 REMOVAL OF SIGN FROM JERSEY BARRIER MOUNTED I-BEAM	20.000 SF				
0720	749563 SUPPLY OF BREAKAWAY I-BEAM SIGN POSTS, W-4	100.000 LF				
0730	749579 SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL, TYPE XI RETROREFLECTIVE SHEETING	49.000 SF				
0740	749580 SUPPLY OF EXTRUDED ALUMINUM SIGN PANEL, TYPE XI RETROREFLECTIVE SHEETING	6008.000 SF				
0750	749587 SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE XI REFLECTIVE SHEETING (SINGLE SIDED)	3700.000 SF				
0760	749588 SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL TYPE XI REFLECTIVE SHEETING (DOUBLE SIDED)	3700.000 SF				
0770	749688 INSTALLATION OF 4" DIAMETER HOLE, LESS THAN OR EQUAL TO 6" DEPTH	100.000 EACH				

CANNOT BE USED FOR BIDDING

CONTRACT ID: T201408302.01 PROJECT(S): T201408302

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0780	749689 INSTALLATION OF 4" DIAMETER HOLE, GREATER THAN 6" DEPTH	10.000 EACH				
0790	749693 STRAIGHTENING OF SIGN POSTS	100.000 EACH				
0800	763507 EMERGENCY MOBILIZATION	3.000 EACH				
0810	763563 PERFORMANCE AND PAYMENT BOND, OPEN-END MOT CONTRACT	LUMP	LUMP			
0820	763643 MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LUMP	LUMP			
	SECTION 0001 TOTAL					
	TOTAL BID					

CANNOT BE  
 USED FOR  
 BIDDING

# **BREAKOUT SHEET INSTRUCTIONS**

**BREAKOUT SHEET(S) MUST BE SUBMITTED EITHER WITH YOUR BID DOCUMENTS; OR WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE BID DUE DATE BY THE LOWEST APPARENT BIDDER.**

BREAKOUT SHEETS ARE TO BE SUBMITTED TO DELDOT'S CONTRACT ADMINISTRATION AS SHOWN BELOW. BREAKOUT SHEETS CANNOT BE CHANGED AFTER AWARD. THE DEPARTMENT WILL REVIEW THE FIGURES SUBMITTED ON THE BREAKOUT SHEET(S) TO ENSURE THEY MATCH THE RESPECTIVE LUMP SUM BID AMOUNT(S). MATHEMATICALLY INCORRECT BREAKOUT SHEETS WILL BE RETURNED FOR IMMEDIATE CORRECTION.

BREAKOUT SHEETS MAY BE SUBMITTED;

VIA E-MAIL TO: [DOT-ASK@STATE.DE.US](mailto:DOT-ASK@STATE.DE.US)  
SUBJECT: **T201408302.01** Breakout Sheet

OR MAILED TO: DELDOT  
CONTRACT ADMINISTRATION  
PO BOX 778, DOVER, DE 19903

'BREAKOUT SHEET' AND THE PROJECT NUMBER  
MUST APPEAR ON THE ENVELOPE.

**BREAKOUT SHEET - 1****CONTRACT NO. T201408302****ITEM 763643 - Maintenance of Traffic- All Inclusive**

Location No.	Location - Description	Qty of Possible Locations	Primary MOT Case Set-ups	UOM	Unit Price
1	Two-Lane, Two-Way Traffic Shoulder Closure - Within 10 feet of Travelway	64	TA-3	L.S.	\$
2	Multi-Lane, Divided, Nonaccess Controlled Highways - Shoulder Closure	66	TA-3A	L.S.	\$
3	Multilane, Access Controlled Highways and Interstates Shoulder Work - Off Shoulder	15	TA-5A	L.S.	\$
4	Multilane, Access Controlled Highways and Interstates Shoulder Work - On Shoulder	58	TA-5B	L.S.	\$
5	Two-Lane, Two-Way Traffic Lane Closure	20	TA-10	L.S.	\$
6	Multilane, Divided Highways and Interstates - Lane Closure	45	TA-33	L.S.	\$
7	Multilane, Divided Highways and Interstates - Lane Closure	23	TA-37	L.S.	\$
8	Multilane, Divided Highways - Work in the Vicinity of an Exit Ramp	5	TA-42	L.S.	\$
9	Partial Ramp Closure	10	TA-43	L.S.	\$
10	Multilane, Divided Highways - Work in The Vicinity of an Entrance Ramp	5	TA-44	L.S.	\$
Total Lump Sum Bid for Item No. 763643 - Maintenance of Traffic - All Inclusive \$					(LS Bid Price for 763643)

# "ATTENTION"

# TO BIDDERS

**BREAKOUT SHEET(S) MUST BE SUBMITTED EITHER WITH YOUR BID DOCUMENTS; OR WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE BID DUE DATE BY THE LOWEST APPARENT BIDDER.**

BREAKOUT SHEETS ARE TO BE SUBMITTED TO DELDOT'S CONTRACT ADMINISTRATION AS SHOWN BELOW. BREAKOUT SHEETS CANNOT BE CHANGED AFTER AWARD. THE DEPARTMENT WILL REVIEW THE FIGURES SUBMITTED ON THE BREAKOUT SHEET(S) TO ENSURE THEY MATCH THE RESPECTIVE LUMP SUM BID AMOUNT(S). MATHEMATICALLY INCORRECT BREAKOUT SHEETS WILL BE RETURNED FOR IMMEDIATE CORRECTION.

BREAKOUT SHEETS MAY BE SUBMITTED;

VIA E-MAIL TO: [DOT-ASK@STATE.DE.US](mailto:DOT-ASK@STATE.DE.US)  
SUBJECT: **T201408302.01** Breakout Sheet

OR MAILED TO: DELDOT  
CONTRACT ADMINISTRATION  
PO BOX 778, DOVER, DE 19903

'BREAKOUT SHEET' AND THE PROJECT NUMBER  
MUST APPEAR ON THE ENVELOPE.

**CERTIFICATION**

Contract No. T201408302.01  
Federal Aid Project No. T201408302

The undersigned bidder, \_\_\_\_\_  
whose address is \_\_\_\_\_  
and telephone number is \_\_\_\_\_ hereby certifies the following:

I/We have carefully examined the location of the proposed work, the proposed plans and specifications, and will be bound, upon award of this contract by the Department of Transportation, to execute in accordance with such award, a contract with necessary surety bond, of which contract this proposal and said plans and specifications shall be a part, to provide all necessary machinery, tools, labor and other means of construction, and to do all the work and to furnish all the materials necessary to perform and complete the said contract within the time and as required in accordance with the requirements of the Department of Transportation, and at the unit prices for the various items as listed on the preceding pages.

**Bidder's Certification Statement [US DOT Suspension and Debarment Regulation (49 CFR 29)]:**

**NOTICE:** All contractors who hold prime contracts (Federal Aid) with DelDOT are advised that the prime contractor and subcontractors are required to submit to DelDOT a signed and notary attested copy of the Bidder Certification Statement for each and every subcontract that will be utilized by the prime contractor. This Certification **must** be filed with DelDOT prior to written approval being granted for each and every subcontractor. Copies of the Certification Form are available from the appropriate District Construction Office.

Under penalty of perjury under the laws of the United States, that I/We, or any person associated therewith in the capacity of (owner, partner, director, officer, principal, investigator, project director, manager, auditor, or any position involving the administration federal funds):

- a. am/are not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- b. have not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;
- c. do not have a proposed debarment pending; and,
- d. have not been indicted, convicted, or had a civil judgement rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate below to whom it applies, initiating agency, and dates of action. Providing false information may result in criminal prosecution or administrative sanctions.

---

---

(Insert Exceptions)

**DBE Program Assurance:**

**NOTICE:** In accordance with 49 CFR Part 26 the undersigned, a legally authorized representative of the bidder listed below, must complete this assurance.

By its signature affixed hereto, assures the Department that it will attain DBE participation as indicated:

**Disadvantaged Business Enterprise \_\_\_\_\_ percent (blank to be filled in by bidder)**

The foregoing quantities are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the amount of any item or portion of the work as may be deemed necessary or expedient. Any such increase or decrease in the quantity for any item will not be regarded as a sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided in the contract.

Accompanying this proposal is a surety bond or a security of the bidder assigned to the Department of Transportation, for at least ten (10) percentum of total amount of the proposal, which deposit is to be forfeited as liquidated damages in case this proposal is accepted, and the undersigned shall fail to execute a contract with necessary bond, when required, for the performance of said contract with the Department of Transportation, under the conditions of this proposal, within twenty (20) days after date of official notice of the award of the contract as provided in the requirement and specifications hereto attached; otherwise said deposit is to be returned to the undersigned.

I/We are licensed, or have initiated the license application as required by Section 2502, Chapter 25, Title 30, of the Delaware Code.

By submission of this proposal, each person signing on behalf of the bidder, certifies as to its own organization, under penalty of perjury, that to the best of each signer's knowledge and belief:

1. The prices in this proposal have been arrived at independently without collusion, consultation, communication, or Agreement with any other bidder or with any competitor for the purpose of restricting competition.
2. Unless required by law, the prices which have been quoted in this proposal have not been knowingly disclosed and will not knowingly be disclosed by the bidder, directly or indirectly, to any other bidder or competitor prior to the opening of proposals.
3. No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a proposal for the purpose of restricting competition.

I/We acknowledge receipt and incorporation of addenda to this proposal as follows:

No.	Date								
-----	------	-----	------	-----	------	-----	------	-----	------

**BIDDERS MUST ACKNOWLEDGE RECEIPT OF ALL ADDENDA**

**MUST INSERT DATE OF FINAL QUESTIONS AND ANSWERS ON WEBSITE:** \_\_\_\_\_

Sealed and dated this \_\_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two thousand \_\_\_\_\_ (20\_\_\_\_).

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal

By: \_\_\_\_\_  
Authorized Signature

Attest \_\_\_\_\_

\_\_\_\_\_  
Title

SWORN TO AND SUBSCRIBED BEFORE ME this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

Notary  
Seal

\_\_\_\_\_  
Notary

**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_  
of \_\_\_\_\_ in the County of \_\_\_\_\_ and State of \_\_\_\_\_ as  
**Principal**, and \_\_\_\_\_ of \_\_\_\_\_ in the County of  
\_\_\_\_\_ and State of \_\_\_\_\_ as **Surety**, legally authorized to do business in the State of  
Delaware ("**State**"), are held and firmly unto the **State** in the sum of \_\_\_\_\_  
Dollars (\$ \_\_\_\_\_), or \_\_\_\_\_ percent not to exceed \_\_\_\_\_  
Dollars (\$ \_\_\_\_\_) of amount of bid on Contract  
No. T201408302.01, to be paid to the **State** for the use and benefit of its Department of Transportation  
("**DeIDOT**") for which payment well and truly to be made, we do bind ourselves, our and each of our heirs,  
executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden **Principal** who  
has submitted to the **DeIDOT** a certain proposal to enter into this contract for the furnishing of certain  
materiel and/or services within the **State**, shall be awarded this Contract, and if said **Principal** shall well and  
truly enter into and execute this Contract as may be required by the terms of this Contract and approved by the  
**DeIDOT**, this Contract to be entered into within twenty days after the date of official notice of the award  
thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and  
remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_\_ day of \_\_\_\_\_ in the year of our Lord  
two thousand and \_\_\_\_\_ ( 20\_\_\_\_ ).

SEALED, AND DELIVERED IN THE  
presence of

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal

By: \_\_\_\_\_  
Authorized Signature

Attest \_\_\_\_\_  
Title

\_\_\_\_\_  
Name of **Surety**

Witness: \_\_\_\_\_ By: \_\_\_\_\_  
\_\_\_\_\_  
Title