

Company Name: \_\_\_\_\_

## REQUEST FOR RESPONSE

SIDEWALK REPLACEMENT FOR VARIOUS LOCATIONS BID  
PACKAGE #'s 1, 2, 3, 4, 5, 6



Construction Manager: 7Summits Construction, LLC  
36 John Street, Hartford, CT 06106  
(860) 756-5577

Engineer: Freeman Companies, LLC  
36 John Street, Hartford, CT 06106  
(860) 251-9550

BID DUE DATE: June 5, 2020 / 2:00 PM

---

## PROJECT SUMMARY

**Introduction:** The City of Hartford was awarded an Urban Act Grant of \$5,000,000 as a grant-in-aid from the State Department of Economic and Community Development to finance the replacement / repair of sidewalks, driveway aprons and ADA non-compliant ramps and curbs at various locations within the City public right-of-way. Approximately \$3,000,000 of these funds are being allocated by the City toward the Construction Management ("CM") services and for the replacement of the sidewalks, as more particularly described below.

The City of Hartford has retained the services of 7 Summits Construction, LLC; 36 John Street, Hartford CT 06106 as the Construction Manager at Risk.

The Construction Manager - 7 Summits Construction, LLC will execute contracts with the contractors.

Bids are due Friday, June 5, 2020 at 2:00 PM.

Pre-Bid Meeting will be held in the DPW parking lot on Thursday May 21, 2020 at 10:00 AM.  
Address: 50 Jennings Road, Hartford CT 06120

Questions are to be sent in by Friday, May 29, 2020 at 4:00 PM.

**Project Goals:** A specific goal of the project is to maximize the participation of Hartford based companies, neighborhood residents, and MWBE firms, and to utilize Hartford based companies and individuals with particular skills and experience in performing sidewalk work. The selection of qualified subcontractors will be based on achieving these stated goals.

The CM has broken the project into six (6) bid packages, 1 - 6.

Bid Package 1 is an open bid and all qualified contractors can bid on it with standard City of Hartford registered 15% MWBE requirements.

Bid Packages 2 – 6 are smaller projects and bid in accordance with the City of Hartford Set Aside Program. Contractors responding to this portion must be certified with the City of Hartford as MWBE's at the time of Bid Submission.

Bid Package 1: All contractors shall provide a 10% Bid Bond, Performance Bond, and Labor and Material Bond.

Bid packages 2 – 6: No Bid Bond, Performance Bond, Labor and Material Bond is required by MWBE contractors for these Bid Packages.

All Bids shall be a Lump Sum Price.

**Project Scope and Available Dollars:** The total dollars available for this initial phase of construction is approximately \$3,000,000. A list of neighborhood streets where the concrete sidewalks, driveway aprons and ADA non-compliant handicap ramps and curbs as listed below. Per the requirements of the State of Connecticut DECD, the Construction Manager is prohibited from self-performing any of the work.

**Bid Packages:**

- |                                  |        |  |
|----------------------------------|--------|--|
| 1. BP # 1 -                      | Street | <u>Arnold and Catherine</u>              |
| 2. BP # 2 (Set Aside COH MWBE) - | Street | <u>Nepaug</u>                            |
| 3. BP # 3 (Set Aside COH MWBE) - | Street | <u>Stanwood</u>                          |
| 4. BP # 4 (Set Aside COH MWBE) - | Street | <u>Waterford</u>                         |
| 5. BP # 5 (Set Aside COH MWBE) - | Street | <u>Goshen - Stanwood to Waterford</u>    |
| 6. BP # 6 (Set Aside COH MWBE) - | Street | <u>Goshen – Waterford to New Britain</u> |

**BID PACKAGES:**

**Bid Package #1:**

Bid Bond; Performance Bond; Labor and Material Bonds required; City of Hartford 15% MWBE Requirements.

**Bid Packages #2 - #6:**

**NO BONDING**

**CITY OF HARTFORD SET ASIDE PROGRAM;** must be certified at time of bid;

**CONTRACT AWARDS:** The maximum of two bid packages will be awarded to one MWBE Contractor of each Phase. 7 Summits reserves the right to negotiate with the other bidders if one contractor is the low bidder on more than two Bid Packages.

**PAYMENTS:** Contractors will provide supporting documentation including waivers of lien of payment to their vendors. 7 Summits retains the right to pay the contractors' vendors directly if nonpayment has occurred.

**BID FORM:** Submit one Bid form for each Bid Package and indicate on the top of BID FORM the Bid package section and Street.

**UNIT PRICES:**

A Unit Price form is included in the manual to be filled out and submitted with the Bid. The prices are complete in place and include all cost including overhead and profit.

These unit prices will be for additions or deletions to the scope of work

Items not covered in the unit prices for the change in scope of work that during the construction will be processed as a change order with detail breakdown of labor and material cost.

Overhead and Profit will be 15%

No traffic police. 7 Summits will provide.

# STANDARD INSTRUCTIONS:

- **Questions & Addenda**

Questions related to this project must be submitted at [www.hartford.gov/procurement/purchasing](http://www.hartford.gov/procurement/purchasing) (click on current solicitations and then bid opportunities) within seventy-two (72) hours in advance of the response submittal deadline. Responses to such questions will be posted electronically within twenty-four (24) hours of the response submittal deadline. Respondents are responsible for obtaining all addenda related to this RFR and thus advised to check for any addenda a minimum of twenty-four (24) hours in advance of the response deadline.

- **Taxpayer's Identification Number**

- Respondents must provide their Taxpayer Identification number on the response form (Tax ID#). Award recipients, whether an individual, proprietor, partnership or a non-profit corporation or organization must file the Internal Revenue Service Form W-9, Request for Taxpayer Identification Number and Certification with the City.

- **Responsible Candidate**

- Respondent must not have any delinquent taxes or financial obligations due
- Respondent must execute an affidavit to comply with all federal and state requirements
- Respondent must be certified as an Equal Opportunity Employer

- **Calendar days allowed for contract work / Substantial completion date:**

Section 1 & 2 -140 Section 3 - 84
--------------------------------------

- **Liquidated damages for late completion:**

\$1,000 Per Day
-----------------

- **Bid Bond / Performance & Payment bonds (*required if checked on invitation to respond*)**

- [10%](#) bid bond, cashiers or certified check with your response. The City of Hartford provides contractors with the option of submitting an electronic Bid Bond through the Surety2000 website. Surety 2000 is an Internet-based surety processing, verification and security system, developed in cooperation with the surety industry. You may contact Surety 2000 at 1-800-660-3263 or [www.surety2000.com](http://www.surety2000.com), for more information.
- Performance and payment bonds for 100% of the project upon award if the contract value exceeds \$50,000.00.(Exclude from Section 3 )

- **DAS prequalification program (*construction / infrastructure projects only*)**

- The DAS Contractor Prequalification Program, Connecticut General Statutes Section 4a-100, requires all contractors to prequalify "before they can bid on any construction, alteration, remodeling, repair or demolition of any public building (does not apply to road construction), for work by the state or a municipality, estimated to cost more than \$500,000 and which is funded in whole or in part with state funds.

- **In addition to your electronic response, submit #**

**hard-copies to:**



## INVITATION TO RESPOND

Dear Sir/Madam:

The City of Hartford (the City) invites responses for:

<b>RFR #:</b>	<b>SOLICITATION DATE:</b>
<b>SOLICITATION TITLE: SIDEWALK REPLACEMENTS FOR VARIOUS LOCATIONS</b>	
<b>SOLICITATION DESCRIPTION:</b>	
<b>SITE LOCATION (if applicable):</b>	
<b>RESPONSE DATE : June 5, 2020</b>	<b>RESPONSE TIME: 2:00 PM</b>
<b>DEPT. ASSIGNED CONTRACT #:</b>	<b>EST. COST OF CONSTRUCTION: VARIES (See Bid Packages)</b>

A PRE-BID / RESPONSE CONFERENCE HAS BEEN SCHEDULED FOR TBD  
(Date / Time ; Thursday, May 21, 2020 - 10:00 AM)

(Location :DPW parking Lot  
50 Jennings Road Hartford, CT

This pre-bid conference

- Mandatory** (All prospective bidders are REQUIRED to attend to discuss specifications)  
 **Non-mandatory** (All prospective bidders are encouraged to attend to discuss

This solicitation contains the following sections:

### Invitation to Respond

### Standard Instructions

**Project Site Location** – (for construction projects only)

**Table of Contents** – (for construction projects only)

### Section 1 – Response Forms

#### 6.1 Response Information & Signature Form

##### Contract Compliance

- Affirmative Action / Equal Employment Opportunity Requirements – See Section 3.6  
 Surety Bond Requirements       Bid Bond       Performance & Payment Bonds  
 Insurance Requirements – see exhibits below  
 Set Aside – Ord. Section 2-660       MWBE       Small Contractor  
 City-Based Small Business Bid Preference – Ord. Section 2-661  
 15% Minority Utilization (City of Hartford Certified MWBE) – Ord. Section 2-682  
 State of Connecticut DAS Prequalification (Public Construction Project > \$500,000)  
 OSHA Compliance (Public Works Project > \$100,000)  
 Wage Requirements – Complete & attach Wage Certification Form

#### 6.2 Response Pricing

#### 6.3 Statement of Qualifications

#### 6.4 Subcontractor Information

### Section 2 – Specifications/Scope of Services

- Special Instructions / Conditions included

### Section 3 – General Information for Preparation and Delivery of a Response

### Section 4 – Terms and Conditions / Labor Compliance

**Exhibits**  A – Insurance Requirements (City of Hartford and State of Connecticut must be included as an additional insured Contractor must provide statement agreeing to hold harmless the City of Hartford and State of Connecticut.

- Plans & Drawings included

Sincerely,

Susan Sheppard  
Procurement Specialist

Companies interested in doing business with the City are able to register and maintain their registration via the Internet at:  
[www.Hartford.gov/procurement/purchasing](http://www.Hartford.gov/procurement/purchasing) (click on current solicitations and bid opportunities)





**Hartford Affirmative Action Plan (HAAP) /  
Equal Employment Opportunity  
Agreement & Affidavit**

**Project # & Title: \_\_\_\_\_**

*Each contractor, subcontractor and supplier subject to the provisions of Article XII, Section 2-680, et seq. of the Hartford Municipal Code, must execute this Agreement & Affidavit, prior to the execution of any binding agreements with the City of Hartford. This agreement shall form a part of and be deemed attached to all contracts or purchase orders between the City of Hartford (the City) or its Agent and the undersigned.*

During the performance of this contract, the Contractor agrees to comply with the following:

1. Each Contractor will comply with all provisions of Executive Order No. 11246, Executive Order No. 11375 and Executive Order No. 11063, Connecticut Fair Employment Act, the Vocational Rehabilitation Act of 1973, including all standards and regulations which are promulgated by the government authorities which established such acts in said requirements, and all standards, and regulations incorporated herein by reference.
2. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, age, sex or national origin or physical or mental handicap, religion and sexual orientation. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated, during employment, without regard to their race, creed, color, age, sex, national origin or physical or mental handicap, religion and sexual orientation. Such actions shall include, but not be limited to, the following Employment, Upgrading, Promotion, Demotion, or Transfer, Recruitment or Recruitment Advertising, Layoff, or Termination; Rates of Pay or other forms of compensation; and Selection for Training, including Apprenticeship.
3. The Contractor will designate a person to handle affirmative action matters for the company who will have the responsibility for assuring compliance.
4. The Contractor will submit their company's written Affirmative Action / EEO policy statement to the City of Hartford as part of the EEO Certification.
5. 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 considerations for employment without regard to race, creed, color, age, sex, national origin or physical or mental handicap, religion and sexual orientation.
6. Contractor certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained. As used in this Agreement, the terms "segregated facilities" means any waiting rooms, work areas, restrooms, and wash rooms, restaurants, and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, creed, color, age, national origin or physical or mental handicap, religion and sexual orientation because of habit, local custom otherwise.
7. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the contractor's commitments.
8. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the compliance officer setting forth the provisions of this nondiscrimination clause.
9. The Contractor will furnish and submit all documents, information and reports required by the City of Hartford, Executive Order No. 11246, as amended, the Vocational Rehabilitation Act of 1973, and by the rules, regulations and orders of the Secretary of Labor, pursuant thereto, and will permit access to their books, records and accounts by the Contracting Agency, the City and the Secretary of



Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders. Contractor further agrees to submit periodic reports of employment and subcontracting practices in such a form, in such a manner and at such time as required by the City

of Hartford. All records must be retained for a period of 3 years following the completion of work and shall be available at reasonable times and places for inspection by authorized representative of the City. The contractor will also permit its employees to participate in on-site interviews conducted by City staff for the purpose of assuring wage compliance.

10. The Contractor will include the provisions of paragraphs (1) through (10) in every subcontract or purchase order and it is the responsibility of the contractor to assure subcontractor compliance with all of the above terms. These provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Owner may direct as a means of enforcing such provisions.
11. The Contractor shall set aside 15% of the total project costs for certified Minority & Women Business Enterprises.
12. Prior to awards of subcontractors or purchase orders for this work, the Contractor will conduct informal meetings with interested MBE/WBE suppliers and contractors for the scope of the work to be awarded. Contractor will inform associations and consortia of minority and female contractors of bid specifications well in advance of the closing date for bid submission. Contractors and subcontractors must document and maintain records of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations. Copies of MBE/WBE contracts must be provided to the City prior to the execution of contract with the City.
13. The Contractor assures that no less than 15% of the total project work hours, by trade, will be worked by minority trades-workers.
14. The Contractor assures that no less than 30% of the total project work hours will be worked by Hartford Residents.
15. The Contractor will contact the business agent for the labor unions with whom he has an agreement and request minority persons and Hartford residents be referred for work on this project.
16. The Contractor and its subcontractors shall notify the City of Hartford of all job openings located within the Hartford Labor Market Area and shall require their subcontractors or vendors to advise the Contract Compliance Officer as to the opportunities for employment within the vendor's or subcontractor's organization, for the duration of this project. Notification of job openings shall include criteria and minimum qualifications, rates of pay, hours of work, duration of employment, work to be performed, job skills and type of training required for each position.
17. The Contractor shall make all good faith efforts to comply with the Affirmative Action goals of the City by consulting with the City of Hartford's Contract Compliance Manager, regarding specific affirmative steps to undertake and by maintaining documentation of all communication, advertising, recruiting and training efforts. The contractor shall notify the City of Hartford immediately shall any problems arise in meeting any of these requirements.
18. In the event of the Contractor's noncompliance with the nondiscrimination and equal employment clauses of this contract, this contract may be canceled, terminated or suspended, in whole or in part, without penalty to the City or its Agent.

**My organization hereby agrees to comply with all the terms noted above in the Hartford Affirmative Action Plan / Equal Employment Opportunity Agreement.**

---

(Signature of authorized agent)

---

(Date)

Project # & Title: \_\_\_\_\_

**AFFIDAVIT FOR BECOMING SIGNATORY TO THE "HARTFORD AFFIRMATIVE ACTION PLAN"**

I, \_\_\_\_\_, being duly sworn do depose and say: (Insert name and title of authorized agent

1. I am an official of the following organization and I am authorized to submit this affidavit for and on behalf of my organization, thereby binding it to the terms and statements contained herein.
2. My organization hereby acknowledges its agreement with the intent; purpose and scope of the Hartford Affirmative Action Plan adopted pursuant to Section 2-680 et seq. of the Municipal Code of the City of Hartford, and will make all good faith efforts to comply with its provisions.
3. My organization hereby agrees and certifies as a condition of participating on construction projects of the City of Hartford that it will not practice discrimination in regard to minority group individuals and women and will eliminate any continuing effects, if any, of past discrimination.
4. My organization hereby agrees to comply with the contractual responsibilities regarding Minority Business Utilization, Minority & Female trades-worker participation and Hartford Residency requirements of City of Hartford.

\_\_\_\_\_  
(Insert name of company)

\_\_\_\_\_  
(Signature of authorized agent)

Subscribed to and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

(Check appropriate box)

( ) Commissioner of Superior Court

( ) Notary Public, my commission expires:

**BIDDERS EEO REPORT**


**Part I – IDENTIFICATION OF VENDOR**

1. NAME & ADDRESS (As shown on BID)	
--	--

2. CHIEF EXECUTIVE OFFICER FOR ABOVE BIDDER(NAME)

4. ADDITIONAL LOCATIONS IN CONNECTICUT	ADDRESS	TELEPHONE #

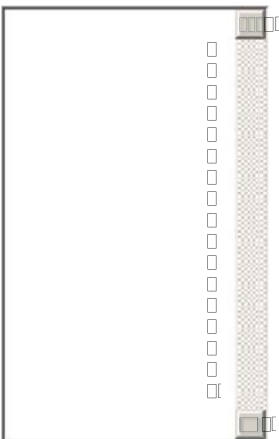
**Part II: NONDISCRIMINATION POLICIES AND PRACTICES**

<p>1a. Have you put into effect a company wide equal opportunity program to promote nondiscrimination? Yes No <input type="checkbox"/> <input type="checkbox"/></p>	<p>3c. Do all your employee recruitment advertisements state a nondiscrimination policy? Yes No <input type="checkbox"/> <input type="checkbox"/></p>
<p>1b. If "Yes" have all your employees been informed of this in writing? Yes No <input type="checkbox"/> <input type="checkbox"/></p>	<p>4a. Do you have a collective bargaining agreement or other contract or understanding with a labor union representing the employee employed by you? Yes No <input type="checkbox"/> <input type="checkbox"/></p>
<p>2a. Do you sponsor or promote any educational or training programs for your employees or prospective employees? Yes No <input type="checkbox"/> <input type="checkbox"/></p>	<p>4b. If "Yes" does each such agreement assure full compliance nondiscrimination requirements? Yes No <input type="checkbox"/> <input type="checkbox"/></p>
<p>2b. If "Yes" are all such persons given the opportunity to participate in accordance with your nondiscrimination statement? Yes No <input type="checkbox"/> <input type="checkbox"/></p>	<p>4c. If "No" check here, and explain on a separate attached sheet. Yes No <input type="checkbox"/> <input type="checkbox"/></p>
<p>3a. Have all your recruitment sources been notified that all qualified applicants will be considered without discrimination? Yes No <input type="checkbox"/> <input type="checkbox"/></p>	<p>5a. Is there a person in your employ who is responsible for assuring equal employment opportunities? Yes No <input type="checkbox"/> <input type="checkbox"/></p>
<p>3b. Has this been done in writing? Yes No <input type="checkbox"/> <input type="checkbox"/></p>	<p>5b. If "Yes" give Name and Title Yes No <input style="width: 100%;" type="text"/></p>

**Part III-HIRING AND RECRUITMENT**

<p>1. Which of the following recruitment sources are used by you? (Check "Yes" or "No")</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">SOURCE</th> <th style="width: 15%;">of " No" Estimate known)</th> <th style="width: 15%;">% if not</th> <th style="width: 45%;">% of all applicants provided by this source.</th> </tr> </thead> <tbody> <tr> <td>State Employment Service</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Private Employment Agencies</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	SOURCE	of " No" Estimate known)	% if not	% of all applicants provided by this source.	State Employment Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Private Employment Agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>2. Check any of the following that you use as hiring qualifications.</p> <p>(x)</p> <p><input type="checkbox"/> Work experience</p> <p><input type="checkbox"/> Ability to speak or write English c</p> <p><input type="checkbox"/> Written test</p>	<p>3a. Describe any other practice which show that you hire, train and promote employees without discrimination.</p>
SOURCE	of " No" Estimate known)	% if not	% of all applicants provided by this source.											
State Employment Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
Private Employment Agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											

Schools and Colleges			<input type="checkbox"/>	<input type="checkbox"/> High School Diploma
Newspaper Advertisements			<input type="checkbox"/>	<input type="checkbox"/> College Degree
Walk-ins			<input type="checkbox"/>	<input type="checkbox"/> Union Ref
Present Employees			<input type="checkbox"/>	<input type="checkbox"/> Personal Recommendation
Labor Organizations			<input type="checkbox"/>	<input type="checkbox"/> Car
Minority/Community Organizations			<input type="checkbox"/>	
Employment Resource Development Agency			<input type="checkbox"/>	
OTHER (Specify)			<input type="checkbox"/>	



**PART IV – STATISTICS** – Employment at bidder’s location (as shown on bid submittal). In lieu of completing this section, bidder may submit copy of its most recent Federal EEO-1 report for the reporting location or a copy of its consolidated report for the total organization, if filed within the last year.

EMPLOYMENT FIGURES WERE OBTAINED FROM								CLOSING DATE OF REPORT PERIOD			
<input type="checkbox"/> Visual <input checked="" type="checkbox"/> Employment Record <input type="checkbox"/> Other								<input type="checkbox"/>			
JOB CATEGORIES	OVERALL TOTALS (Sum of all columns A-E Male & Female)	A WHITE (Not of Hispanic Origin)		B BLACK (Not of Hispanic Origin)		C HISPANIC		D ASIAN or Pacific Islander		E AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	Female	Male
Officials and Managers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professionals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales Workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Office and Clerical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Craft Workers (Semi-Skilled)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operatives (Semi-Skilled)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laborers (Unskilled)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service Workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOTALS ABOVE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOTALS ONE YEAR AGO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ON THE JOB TRAINEES (Enter figures for the same categories as shown above)											
Apprentices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trainees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PART V- DOCUMENTATION AND COMMITMENT REQUIRED

1. Please submit as part of this EEO report, a copy of your Company Policy Statement of Equal Employment Opportunity.

2. For companies employing more than 10 persons, please submit as part of this EEO report a written commitment to hire minority and female workers if your work force statistics are not representative of the minority and female work force availability in your labor market area.

3. If your company is not located in Connecticut, please submit a copy of your local labor market area statistics.

---

**AFFIDAVIT**

The Bidder understands and agrees that its failure to meet the equal opportunity requirements established by section 2-573 of the Code will preclude such bid from being considered. The bidder agrees to the procedures set forth in section 2-573 of the Code in regard to the determination of whether such bidder is an equal opportunity employer. The Bidder also understands and agrees that the equal opportunity documents will become a part of the contract, and that a breach of the provision of the equal opportunity documents will constitute a breach of the contract subject to such remedies as provided by law.

NAME OF PERSON SUBMITTING BID	TITLE	DATE SIGNED	TELEPHONE NO. <i>(Include Area Code)</i>
X <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

## Section 1 RESPONSE FORMS

**1.1 RESPONSE INFORMATION & SIGNATURE FORM ; BID PACKAGE #      Section #      Street**

<b>Vendor Name -</b>				
<b>Trade Name -</b>				
<b>Address -</b>				
<b>Phone # -</b>		<b>Fax # -</b>		<b>Email Address -</b>
<b>Contact Person -</b>			<b>Tax ID# -</b>	
Delivery / Service Start Date:			# Calendar days after receipt of executed contract:	
Bid Surety - 10%	For electronic bonds enter bond number, otherwise check the appropriate box	Electronic Bond #	<input type="checkbox"/> Bond (hard copy)	<input type="checkbox"/> Cashiers / Certified Check
Cost of Performance Bond included in base bid (if applicable)			\$	Per thousand
EEO Certification Status (check one) See General Information for Preparing a Response paragraph 3.6.3			<input type="checkbox"/> Current & on file	<input type="checkbox"/> EEO form attached
DAS Prequalified Contractor? (non highway construction projects >\$500,000) <a href="http://das.ct.gov/cr1.aspx?page=10">http://das.ct.gov/cr1.aspx?page=10</a>			<input type="checkbox"/> Certificate attached	<input type="checkbox"/> Update Statement attached
Insurance Agent Name		Phone #		
Insurance Agent Address				

Vendor acknowledges receipt of all addenda issued during the bidding period (if applicable) and understands that they are a part of the bidding documents.

The undersigned hereby declares that he/she or they are thoroughly familiar with the specifications, the various sites, the City's requirements, and the objectives for each element of the project item or service and understands that in signing this proposal all right to plead any misunderstanding regarding the same is waived. The undersigned further understands and agrees that he will furnish and provide all the necessary material, machinery, implements, tools, labor, services, and other items of whatever nature, and to do and perform all the work necessary under the aforesaid conditions, to carry out the contract and to accept in full compensation therefore the amount of the contract as agreed to by the Contractor and the City.

The undersigned hereby declares that no reason or persons other than those named herein are interested in this proposal, which is made without any connection with any other person or persons making any proposal for the same work and is in all respects fair and without collusion or fraud; that no person acting for or employed by the City of Hartford is directly or indirectly interested therein, or in the supplies or works to which it relates, or will receive any part of the profit or any commission there from in any manner which is unethical or contrary to the best interest of said City of Hartford.

The undersigned additionally declares that they are not debarred or suspended, or otherwise excluded from, or ineligible for, participation in City of Hartford, State of Connecticut or federally funded projects (Executive Order 12549).

**The undersigned certifies under penalty of false statement that the information provided in this response is true.**

<b>Submitted by (<i>Signature</i>)</b>			
<b>Printed name and title</b>		<b>Date</b>	

**(Authorized Agent of Company)**

**1.2 RESPONSE PRICING**

Pricing shall be submitted electronically at [www.hartford.gov/procurement/purchasing](http://www.hartford.gov/procurement/purchasing) (click on current solicitations and then bid opportunities) Base or Lump Sum Bid and, if called for in the documents, Alternates and Unit Pricing

The City of Hartford is exempt from all sales and use tax; therefore bid prices shall not incorporate such taxes. Upon request by the successful respondent, a sales tax exemption certificate will be issued.

**A. BASE BID / LUMP SUM (Includes \$2,000 Allowance for TRAFFIC POLICE OFFICERS) and ALTERNATES**

BASE BID / LUMP SUM as shown on the contract drawings & specifications	
Bid in words (if submitting a handwritten response)	
<b>Alternate #1</b> as shown on the contract drawings and in the specifications	\$
	\$
	\$
	\$
	\$

**1.3 STATEMENT OF QUALIFICATIONS**

Please complete the following information. Failure to respond to all items may result in the rejection of your response.

1. Number of years in business -                      D-U-N-S Number:

2. Number of personnel employed Part time -                      , Full time -                      ,

3. List up to six past contracts of this type/size your firm has completed within the last three (3) years:

Project	Date	Contact Person	Phone No.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

<p><b>4. DAS CONTRACTOR PREQUALIFICATION</b> (required for construction / infrastructure projects only)</p> <p>DAS prequalified? <input type="checkbox"/> Yes   <input type="checkbox"/> No</p>	<p>You certify that there has been no substantial change in your financial position or corporate structure since your most recent prequalification certificate was issued or renewed, other than those changes noted in the update statement (attached).</p>	YES	NO
		<input type="checkbox"/>	<input type="checkbox"/>



5. ORGANIZATIONAL STRUCTURE OF BUSINESS ENTITY (select one)	<input type="checkbox"/>	General partnership (GP)
	<input type="checkbox"/>	Limited partnership (LP)
	<input type="checkbox"/>	Limited liability corporation (LLC)
	<input type="checkbox"/>	Limited liability partnership (LLP)
	<input type="checkbox"/>	Corporation
	<input type="checkbox"/>	Individual doing business under a trade name (sole proprietor)
	<input type="checkbox"/>	other (specify)

6. CITY OF HARTFORD TAX STATUS / OTHER FINANCIAL OBLIGATIONS	<b>Hartford Businesses</b> – All City of Hartford taxes & financial obligations (real, motor & personal property) are current and paid in full or subject to a current and approved payment plan. Please attach RFR Affidavit.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	<b>Non-Hartford Businesses</b> - All City of Hartford financial obligations are current and paid in full or subject to a current and approved payment plan. Please attach RFR Affidavit.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
7. STATUS OF THE BUSINESS AND ITS CURRENT STANDING WITH THE SECRETARY OF STATE'S OFFICE	<b>Connecticut businesses</b> - Are all required filings current with the Secretary of State and will the Secretary of State be able to issue a Certificate of Legal Existence?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	<b>Out-of-State (foreign) businesses</b> – Have you filed a Certificate of Authority / Application of Registration with the Connecticut Secretary of State? If so, submit a copy of your filing with your response. If not, submit a copy of your Certificate of Good Standing from your state of incorporation.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

8. Is your local organization an affiliate of a Parent company? If so, Indicate the principal place of business of the parent company and the name of agent for service.				
Business Name	.			
Address	.			
City	.	State	.	Zip
Name of Agent	.			

**9. List all Affiliated Businesses (attach additional sheets as necessary):**

<b>Business Name</b>	<b>Address</b>	<b>Ownership Interest %</b>
.	.	.
.	.	.
.	.	.
.	.	.

**10.** Based on the organizational structure of your business, provide a current listing of all corporate officers, principals, general or managing partners, limited partners, managers and members. If sole proprietorship or general partnership, attach trade name certificate filed with the town clerk's office.

**11.** Submit copies of all required business (trade & occupational) licenses with your response.

**12.** Your company may be asked to submit information relative to your company's financial statements and/or a Dun & Bradstreet report may be obtained prior to receiving an award. This information will be protected to the fullest extent required by law.

**13.** Additional information/documentation may be requested subsequent to your responding to this solicitation.

**1.4 SUBCONTRACTOR UTILIZATION**

Forms labeled Section 1.4 are provided below to accommodate the Base Bid (or Lump Sum) and alternates (if called for) in this Request for Response (RFR).

The information provided below applies to: (Check one box as appropriate)

Base Bid	Alternate 1	Alternate 2	Alternate 3	Alternate 4	Alternate 5

**1.4 SUBCONTRACTOR UTILIZATION**

If subcontractors are to be used, indicate the firm name, address, portion or section of work the subcontractor will be performing, the subcontract value, percentage of base bid and if the subcontractor is a City certified (MWBE).

Respondent agrees to subcontract the portion of the work stipulated below to (MWBE) businesses. A copy of the contract between the respondent and the subcontractor will be required prior to execution of contract.

**Note:** Connecticut General Statutes Section 4a-100, Prequalification now applies to subcontractors also.

Trade or Nature of Work	BUSINESS NAME AND ADDRESS	CITY OF HARTFORD CERTIFIED MWBE	% of Base Bid	Subcontract \$ Value
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		
<b>TOTAL SUBCONTRACT VALUE</b>				
<b>TOTAL (MWBE) SUBCONTRACT VALUE</b>				

*Subcontract % to total project* %

*MWBE Subcontract % to total project*

Additional information may be requested subsequent to your responding to this bid request.

The information provided below applies to: (Check one box as appropriate)

Base Bid	Alternate 1	Alternate 2	Alternate 3	Alternate 4	Alternate 5

**1.4 SUBCONTRACTOR UTILIZATION**

If subcontractors are to be used, indicate the firm name, address, portion or section of work the subcontractor will be performing, the subcontract value, percentage of base bid and if the subcontractor is a City certified (MWBE).

Respondent agrees to subcontract the portion of the work stipulated below to (MWBE) businesses. A copy of the contract between the respondent and the subcontractor will be required prior to execution of contract.

**Note:** Connecticut General Statutes Section 4a-100, Prequalification now applies to subcontractors also.

Trade or Nature of Work	Business Name and Address	CITY OF HARTFORD CERTIFIED MWBE	% of Base Bid	Subcontract \$ Value
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		
<b>TOTAL SUBCONTRACT VALUE</b>				
<b>TOTAL (MWBE) SUBCONTRACT VALUE</b>				

*Subcontract % to total project* %

*MWBE Subcontract % to total project* %

Additional information may be requested subsequent to your responding to this bid request.



**CONTRACT**  
**FOR PUBLIC WORKS PROJECTS**

**CONTRACT**

This agreement, made by and between 7 Summits Construction, with principal Address of 36 John Street, Hartford, CT 06106,  
And the (the “Contractor”)

---

1. a) Contract Work: Contractor shall and will, at his, it’s or their own proper charge, cost and expense do and perform all the work and furnish all materials and labor necessary or proper, and build in a good, firm and workmanlike manner, in accordance with the Contract Documents which are a part hereof, and in accordance with such further plans and directions as have been made or may be made from time to time as the work referred to in the information for bidders, accompanying this contract, vis.:

**Request for Response  
Sidewalk Replacement for Various  
Locations Hartford, Connecticut**

**Contract Number DPW RFR # 5919**

All to be in accordance with the terms of the proposal for said work submitted to the Procurement Manager of the City of Hartford, accepted by the Committee of Award and made part of this contract.

- 
- (b) Contract Sum: The Construction Manager 7 Summits shall pay the Contractor the Contract Sum for the Contractor’s performance of the Contract. The Contract Sum is \_\_\_\_\_ **Dollars** and \_\_\_\_\_ **Cents** (\$\_\_\_\_\_).

- 
- 
2. Engineer To Be Judge: The City Engineer (“Engineer”) of the City of Hartford and his duly authorized representatives, shall be the judge of the character, nature and fitness of all work done and materials furnished under this contract, and of the amount, quality, and classification of the several kinds of work for which payment is made, and he shall decide as to the meaning, intent, and performance of this contract. The entire work shall be done under his supervision and to his satisfaction, and his estimates and his decisions upon all questions relating to said work shall be a condition precedent to the right of said Contractor to payments under this agreement. Inspectors, so-called, shall not be deemed authorized to accept notices or waive any of the provisions hereof or modify any order or orders of said Engineer.

3. Changes and Extra Work: The Engineer may, in writing, and without notice to surety, alter and change the line, grade, plan, form, position, dimensions or materials of the work herein contemplated, or any part thereof, in a manner not inconsistent with the general layout of said improvement, either before or after its commencement, or may order in writing any extra work which he may deem necessary in connection therewith. If such alterations diminish the quantity of work to be done they shall not be made the basis of a claim for damages, or for anticipated profits on the work that may be dispensed with; if they increase the amount of work, such increase shall be paid for according to the quantity actually done, and at the price established for such work under this contract; or in case there is no price established, it shall be paid for at its actual reasonable cost, as determined by the Engineer, plus 15 percent of said cost, plus also the actual cost of insurance and special taxes figured on labor payrolls which the Contractor is required to pay, or at unit prices mutually agreed upon before commencing said work; provided, however, that no payment for extra work done or materials furnished shall be made unless such extras shall have been ordered in writing by the Engineer.

Should alterations in the character of the work be, in the opinion of the Engineer, productive of increased cost or result in decreased cost to the Contractor, a fair and equitable sum therefore, to be agreed upon in writing by the Contractor and the Engineer before such work is begun, shall be added to or deducted from the contract price, as the case may be.

4. Extra Claims To Be Made Promptly: No claim for payment in addition to the amount so awarded, on account of extra work done or materials furnished or damaged sustained, shall be considered unless the Contractor shall make the same to the Engineer, in writing, within twenty days after the date of the estimate when such award is made - or in case there is no award, then within twenty days after the date of the estimate next following the doing of the work or the sustaining of the damages for which said compensation is claimed - and shall, when requested, file with the Engineer an itemized statement of, and vouchers for, the quantities and prices of such work, materials, or damages; and it is agreed that the filing of said claim as above specified (together with said statement and vouchers when requested) shall be a condition precedent to the right of the Contractor to receive an additional compensation under this contract.
5. a. Contractor's Control of Work-Assignment: The Contractor shall perform with its own organization Contract work with a value of at least **50%** of the original total Contract value. The Contractor shall not assign this contract or any interest therein, nor sublet any part of the work contemplated hereunder, nor part with control or charge thereof, without the written consent of the Engineer. Any such attempted assignment or subletting shall, at the option of the Engineer, forthwith work an avoidance of this contract, or may be treated by the Engineer as null and void.



The Contractor may, with the consent of and subject to the approval of the Engineer in each case, employ sub-contractors to supply material and perform parts of the work required herein. But the Engineer shall be notified in advance and his written approval secured before sub-contractors are employed on the work. The employment of sub-contractors will not relieve the Contractor of full responsibility for all parts of the work.

- b. Contractor To Have Superintendent: The Contractor shall keep a competent superintendent on the job premises whenever any work is being done who shall receive orders in the Contractor's absence, and the Contractor shall obey them as if received by him personally.
6.
  - a. Contractor Responsible For Whole Work: The Contractor shall be responsible for the entire work until its final acceptance, and any unfaithful or imperfect work or defective material that may be discovered at any time before said final acceptance shall be immediately corrected or removed by said Contractor on requirement of the Engineer.
  - b. Defects: In case the nature of the defects is such that it is not expedient to have them corrected, the Engineer shall have the right to deduct from the amount due the Contractor on the final settlement of the accounts such sum of money as he considers a proper equivalent for the difference between the value of the materials or work specified and that furnished, or a proper equivalent for the damage.
  - c. Examinations: The Contractor shall at any time make such openings, and to such extent, to or through such part or parts of the said structures as the Engineer shall direct, and he shall restore the part of the work so disturbed to the satisfaction of the Engineer. Should the work or materials be found defective in any respect, the whole of the expense incurred thereby shall be defrayed by the Contractor, but, if otherwise, by the City.
  - d. Partial Payment Does Not Constitute Acceptance: It is also agreed that this is an entire contract for one whole and complete work, and that no partial payments on account by the City, nor the presence of the Engineer or inspectors, or their supervision or inspection of work or materials, nor the use of parts of the proposed structure shall constitute an acceptance of any part of the work before its entire completion and final acceptance.
7. May Be Used Before Completion: The City shall have the right to use any of the work or structures herein described or may grant permission to any person or persons to use or make connections therewith during the progress of the work herein contracted for, and the Contractor shall not interfere with nor obstruct such use. No extra allowance shall be made to said Contractor on this account, nor

shall such use be construed to constitute approval or acceptance by the City of any part of the work.

If repair or replacement of any portion of the project becomes necessary because the Engineer has directed that said portion be opened to travel or occupancy prior to completion of the Contract work, the Contractor shall perform that repair or replacement. The Contractor shall perform such work at its own expense, unless the City or an arbiter of competent jurisdiction shall determine definitely that the damage necessitating the repair or replacement was caused by equipment operated by a City employee while controlling snow or ice, or by routine City maintenance operations. In the latter cases, the City shall reimburse the Contractor for the cost of the repair or replacement. If the damage was caused by a traffic accident involving only a vehicle or vehicles that were not owned by the City and were not operated by an agent of the City, the Contractor may seek recovery from the responsible parties, but not from the City.

8. a. Commencement And Completion of Work: The Contractor shall commence work on the date stated in the Special Conditions issued pursuant to this contract and shall prosecute the same in such sections and in such order as the Engineer may direct, and shall complete the said structures and all work connected therewith by the date stated in the Special Conditions issued pursuant to this Contract.
- b. Extension Of Time: If the Contractor is delayed in the prosecution or completion of the work by or on account of any act or omission of the City, or by strikes or causes beyond control of the Contractor, he shall be entitled to such reasonable extension of time for the completion of the work as may be decided upon by the Engineer, provided, however, that no claim for an extension of time for any reason shall be allowed unless, within three days after such delay occurs, notice in writing of the fact of said delay, its causes, and the extension claimed, shall be given by the Contractor to the Engineer.
- c. Liquidated Damages: The Contractor agrees that the City may retain **\$1,000** per calendar day from the amount of the compensation to be paid the Contractor as liquidated damages. Liquidated damages shall be assessed for each calendar day that the work remains incomplete in excess of the number of calendar days stipulated for either (but not simultaneously) substantial completion or final completion as set forth in the Special Conditions issued pursuant to this Contract. This amount is agreed upon as the proper measure of liquidated damages which the City will sustain per day by failure of the Contractor to complete the work within the number of calendar days stipulated.

9. a. Maintenance: The Contractor agrees to keep and maintain the work in good repair for such period and in such manner as may be set forth and defined in Section 15 of the General Conditions.
- b. Engineer May Make Repairs: Whenever, before the expiration of the above specified maintenance period, the Engineer shall give written notice, postage prepaid, to the business address of the Contractor, to make any repairs so required, and if the Contractor shall fail to make such repairs to the satisfaction of the Engineer within ten days from the date of mailing of said notice, then the Engineer shall have the right to employ such other person or persons as he may deem proper to make the same, and the City shall pay the expense thereof out of any money otherwise due to the Contractor. It is however, mutually agreed that the Engineer, at his discretion, and at the Contractor's expense, may make repairs without notice to the Contractor in cases where, in his opinion, public safety requires such work to be done at once.
10. a. Contractor's Duties and Liabilities: The Contractor shall comply with all local, state, and national laws and regulations, and with all City ordinances in the prosecution of the work, and shall secure all necessary permits and licenses.
- b. Insurance Requirements:
  1. Insurance requirements shall be per City of Hartford Document #1007 – “Construction Insurance Requirements” as referenced in Section 3 - General Information for Preparation and Delivery of a Response for Construction Projects or as specified in Section 1.03.07 of the *State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction Form 817*, whichever limits are greater. Insurance coverage shall remain full force for the duration of the contract, including any and all extensions. All renewal certificates shall be furnished at least 30 days prior to policy expiration. The City of Hartford and the Greater Hartford Transit District must be named as an additional insured.
    - The insurance requirements shall apply to all subcontractors.
    - All policy forms shall be on the occurrence form. Exceptions must be authorized by the City's Risk Manager unless the coverage is not for Professional Liability where the common form is claims made.
    - Acceptable evidence of coverage will be on the ACCORD form or a form with the same format.
    - Each certificate shall contain a 30 day notice of cancellation.

- Insurance shall be issued by an insurance company licensed to conduct business in the State of Connecticut.
  - c. Contractor Shall Protect the Public: The Contractor shall execute the work in such a manner as to interfere as little as possible with public travel, shall provide railings or suitable barricades to exclude persons and animals from trenches and obstructions, and to prevent accident or injury to workmen, other persons, vehicles, or animals; shall cause a sufficient number of lights to be kept burning on or near the work from twilight in the evening until sunrise, shall furnish, set and maintain such "street closed", "dangerous," detour," or other signs as may be necessary for the convenience of traffic or as may be directed by the Engineer, and shall employ a watchman or additional safeguards when and as necessary, or when required by the Engineer.
11. a. Avoidance of Contract: If the work to be done under this agreement shall be abandoned, or at any time suspended for three days without reasonable cause, or if this contract shall be assigned without the written consent of the City Manager, or if at any time the Engineer shall be of the opinion that the said work is unnecessarily or unreasonably delayed, or that the Contractor is willfully violating any of the conditions or agreements of this contract, or that the progress of the work is, in his opinion, being so delayed that said work cannot be completed within the required time, the Engineer may give notice, postage prepaid, to the Contractor, at his business address, to that effect. If the Contractor shall not, within ten days after the mailing of such notice, take such measures as will, in the judgment of the Engineer, insure the satisfactory completion of the work, he may notify the Contractor, in writing, to discontinue all work under this contract; and it is hereby agreed that the Contractor shall thereupon at once stop work and cease to have any right or claim to possession of the ground, or such part thereof as the Engineer may designate; and the City may, by means of such other agents or contractors as shall to it seem advisable, complete the work herein described, or such part thereof as it may deem necessary, and may take possession of and use such implements, tools, and materials or facilities used for or in connection with the operations or the fulfillment of this contract, except as otherwise provided. The Contractor shall not remove any portion of the plant or any materials after receiving such notice as aforesaid. And said City is hereby authorized and empowered to apply sums of money due or to become due to said Contractor under this contract by way of reduction in damages, and as part payment of such additional expense incurred by the City as aforesaid.
- b. Engineer May Protect Work: It is, however, mutually agreed that the Engineer, at his discretion and at the Contractor's expense, may immediately, upon the cessation of work or thereafter, take measures to

protect the work under construction, the adjacent ground, pipes, and other structures where in his opinion safety requires such work to be done at once.

12. a. Payments: The City will pay and the Contractor will receive, as full compensation for furnishing all materials, labor and equipment for doing all work, assuming all duties, risks, and liabilities, and all obligations required by this contract, the amount stated in the proposal, or the sums of money computed at the several unit prices stated in the proposal submitted by the Contractor to the Purchasing Agent. A copy of the proposal is made part of this contract. The City may make such deductions from these sums as provided for in this contract.

No advance payment will be made to the Contractor for construction materials purchased in advance and stored by the Contractor. All materials will be paid for complete and accepted in-place according to the contract bid prices.

- b. Monthly Estimate: The Engineer may, once in each calendar month, make an estimate in writing of the total amount of work done and an allowance for the value of materials delivered to the time of such estimate. The City may retain five (5) percent of such estimated value as part security for the fulfillment of this contract by the Contractor, and shall monthly, or as nearly monthly as the practices of the disbursing officers of the City permit, pay to the Contractor, while carrying on the work, the balance, not retained as aforesaid, after deducting therefrom all previous payments and all sums to be kept or retained under the provisions of such of this contract. But is understood that estimates are approximate only, are subject to adjustment on the final estimate, and that they shall be made only when the work progresses in accordance with the provisions of this contract.
- c. Final Estimates: The Engineer shall, as soon as practical after completion of all work under this contract, make a final determination of the amount of work done thereunder and the value of such work. The City shall within sixty (60) days after such final determination is so made and is approved by the Director of Public Works, pay to the Contractor the balance, after deducting all previous payments and all sums to be kept or retained under the provisions of this contract. No interest is to be allowed or paid by the City upon any moneys retained under the provisions of this contract.
- d. Money Retained: The City may, at its discretion and at any time, withhold so much of any payments due to the Contractor, or to become due under this contract, as it may deem necessary to settle all claims against the Contractor which may arise under this contract, including all claims for labor or materials furnished to the Contractor, notice of which shall have been filed in the office of said City Engineer, and may retain the same until the

Engineer shall be satisfied that the said City, its agents and servants will be fully protected from any loss and indemnified for all damage for which the Contractor may become liable, and that all parties who may have claims against the Contractor for work done or materials furnished on account of this contract have been fully paid.

13. Contract Documents: The Contract Documents consist of this Contract, including the Special Conditions, State and Federal Requirements (if applicable), General Conditions, Special Provisions, Supplemental Conditions Technical Specifications, Project Manual, Contractor's Proposal, Addendum (No addenda was issued for this project), plans and drawings referenced in the Request For Response and documents referenced in the *Contract Documents* Section of the Special Conditions. The general features of said work are shown on the drawing on file in the office of the City Engineer, referred to in the proposal for this work which are made a part of this contract. The Engineer shall furnish the Contractor with such additional plans as may be necessary to show the details of construction, which are to be considered as illustrating the requirements set for in this contract and specifications and are to be followed by the Contractor in carrying out the work done hereunder.
14. Authority And Duties Of Inspector: An Inspector is a representative (but not a duly authorized representative as referred to in Article 2 of this Contract) of the Engineer assigned to make any and all necessary inspections of the work performed and materials furnished by the Contractor. Inspectors shall be authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work and to the preparation or manufacture of the materials to be used. In case of dispute arising between the Contractor and the Inspector as to materials furnished or the manner of performing the work, the Inspector shall have the authority to reject material or suspend the work until the question at issue can be referred to and decided by the Engineer. The Inspector shall not be authorized to revoke, alter, enlarge, relax or release any requirements of the specifications nor to approve or accept any portion of the work, nor to issue instruction contrary to the plans and specifications, nor will he act as foreman or perform other duties of the Contractor. Any advice which the Inspector may give the Contractor will in no way be construed as binding the Engineer or City in any way nor releasing the Contractor from the fulfillment of the terms of the said Contract.
15. Fair Employment Practices: The Contractor hereby agrees that neither he nor his subcontractors will refuse to hire or employ or to bar or to discharge from employment an individual or to discriminate against him in compensation or in terms, conditions or privilege of employment because of race, color, religious creed, age, sex, marital status, national origin, ancestry, present or past history of mental disorder, mental retardation, learning disability or physical disability,

including, but not limited to, blindness, except in the case of bona fide occupational qualification or need.

The Contractor further agrees that neither he nor his sub-contractors will discharge, expel otherwise discriminate against any person because he has opposed any discriminatory employment practice or because he has filed a complaint or testified or assisted in any proceeding under Section 46a-82, 46a-83 or 46a-84 of the Connecticut General Statutes. The advertisement of employment opportunities will be carried out in such manner as not to restrict such employment so as to discriminate against individuals because of their race, color, religious creed, age, sex, marital status, national origin, ancestry, present or past history of mental disorder, mental retardation, learning disability or physical disability, including, but not limited to, blindness, except in the case of a bona fide occupational qualification or need.

The terms stated above are taken from Section 46a-60 of the Connecticut General Statutes, "Discriminatory Employment Practices Prohibited."

16. Payment of Sub-Contractors and Material Suppliers: The Contractor, within 10 days after payment to such Contractor by the City, shall pay any amounts due sub-contractors and material suppliers, whether for labor performed or materials furnished, when such labor or materials have been included in a requisition submitted by such Contractor and paid by the City.
  
17. Indemnification & Hold Harmless: Contractor shall indemnify, defend and hold harmless the City and the State of Connecticut, and its agents, officials, employees, successors and assigns (collectively, the "Indemnitees") from and against any and all loss and liability (statutory or otherwise), claims, demands, actions, causes of action, suits, judgments, costs, executions, interest and expense whatsoever (hereinafter, individually and collectively, a "Claim" or "Claims"), in law or in equity, which arise from or in connection with Contractor's performance or failure to perform hereunder and/or any other act, error or omission which occurs or fails to occur on the part of Contractor or any of its directors, officers, partners, members, agents or employees under or in connection with this Contract or the Project during the term hereof. Contractor's obligations to defend, indemnify and hold harmless the Indemnitees as aforesaid shall include, but not be limited to, protecting the Indemnitees from all Claims for or arising from (i) any failure by Contractor to pay for any goods or services obtained by it hereunder, (ii) any negligent act, error or omission on the part of Contractor or any of its directors, officers, partners, members, agents or employees in the acquisition or provision of any goods or services hereunder, and (iii) any injury (including death) to persons, or damage to real or personal property (including the loss of use thereof and environmental contamination), which results from any act, error or omission on the part of Contractor or any of its directors, officers, partners, members, agents or employees under or in connection with this Agreement. In case any action or

proceeding is brought against any of the Indemnitees by reason of any matter which is the subject of the foregoing indemnity, Contractor shall pay all costs of investigation and defense (including, but not limited to, all court costs, reasonable attorneys' fees, and out-of-pocket expenses), and all losses and liabilities which result therefrom. The provisions of this Section shall survive the expiration or earlier termination of this Contract.

18. Claims For Consequential Damages: The Contractor and City waive claims against each other for consequential damages arising out of or relating to this Contract. This waiver includes, but is not limited to, damages incurred by Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the work required by the Contract Documents.
19. Default by Contractor: Any of the following events constitutes a default under this Contract.
  - a) If the Contractor fails to comply with one or more of the provisions of the Contract Documents;
  - b) If the Contractor made any misrepresentation in any affidavits, disclosures, certifications, statements and representation in the Contractor's submission;
  - c) If the Contractor does not comply with the Equal Employment Opportunity requirements of the City of Hartford Municipal Code;
  - d) If the Contractor does not maintain its certification with the City of Hartford;
20. Compliance With Laws: Contractor shall perform all work in accordance with and subject to all applicable federal, state and local laws, statutes, regulations, ordinances, orders and permits.
21. Americans With Disabilities Act (ADA) Of 1990: Contactor agrees to abide by the provisions of the Americans with Disabilities Act (the "Act") of 1990; Public Law 101-336, as applicable.

In compliance with this law, Contactor shall not discriminate against a qualified individual with a disability because of the disability of such individual in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training, and other terms, conditions, and privileges of employment. No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of services, programs, or activities of Contactor, or be subjected to discrimination by Contactor. No individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages or accommodations provided by Contactor.



Any television public service announcement that is produced or funded in whole or in part under this Agreement shall include closed captioning of the verbal content of such announcement. Contactor shall not discriminate against any individual because such individual has opposed any act or practice made unlawful by the Act or because such individual made a charge, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing under the Act.

Contacto shall not permit coercion, intimidation or threatening of, or interference with, any individual in the exercise or enjoyment of, or on account of his or her having exercised or enjoyed, or on account of his or her having aided or encouraged any other individual in the exercise or enjoyment of, any right granted or protected by the Act.

22. Delinquency In Obligations: Contactor hereby agrees that throughout the period of this Agreement, all taxes, contractual obligations and audit responsibilities owed to the City of Hartford shall be and remain current.
23. Non-Waiver: Any failure by City to insist upon the strict performance by the other of any of the terms and provisions hereof shall not constitute a waiver of that or any other of said other party's obligations hereunder, and each party hereto, notwithstanding any such failure, shall have the right thereafter to insist upon the strict performance by the other, of any and all of the terms and provisions of this Contract.
24. Non-Assignability By Contractor: This Agreement shall not be transferable or assignable by Contactor, by operation of law or otherwise, without prior written consent of City, which consent may be withheld in its sole and absolute discretion.
25. Severability: If any provision of this Agreement is held invalid, the remainder of this Agreement shall not be affected thereby if such remainder would then continue to conform to the terms and requirements of applicable law.

IN WITNESS WHEREOF, The parties hereto have hereunto set their hands and seal this \_\_\_\_\_ day of 2019.

Signed in presence of:

\_\_\_\_\_  
\_\_\_\_\_

**7 Summits Construction**

By \_\_\_\_\_  
Rohan Freeman, President

Signed in presence of:

\_\_\_\_\_  
\_\_\_\_\_

**CONTRACTOR**

By Name:  
Its:

**CITY OF HARTFORD SPECIAL CONDITIONS**

## **CITY OF HARTFORD SPECIAL CONDITIONS**

### **DESCRIPTION OF THE WORK**

This is a **UNIT PRICE** project. Work under this project shall entail the construction of new concrete sidewalk and landscaping on Park Street in accordance with the plans and specifications.

### **In general the Contractor is to complete the following work:**

### **Basis of Payment**

This work shall be paid for at the Contract percent complete and provide a schedule of values, complete in place, and include materials, tools, equipment, and labor incidental to the work.

### **HOURS OF WORK**

Work under this contract will be performed in accordance with the Maintenance and Protection of Traffic plans and special provisions included herein on Monday through Friday. Work on State or Federal Holidays or other specific non-holiday events as identified on the plans or within the specifications will not be allowed. The contractor is notified that all streets in this project are considered "Critical Streets" and any work that interferes with traffic shall be limited to **9:00am – 3:00 pm**. These work hours may be limited further to maintain traffic during certain peak hours or special events. These work hours may only be adjusted upon advance written approval of the Engineer. The Engineer reserves the right to periodically adjust the work hours in the interest of public safety.

### **SCHEDULING THE WORK**

The contractor shall start work not more than ten (10) calendar days from the date of written Notice to Begin Work, unless such notice specifically instructs the contractor to begin work at a later date. All work under this contract shall be completed within **days** (Substantial Completion) with the exception punch list items. The punch list work shall be completed within **days** (Final Completion).

Calendar days in this contract shall mean each consecutive day including Saturdays, Sundays and Legal Holidays. In this case "Legal Holiday" shall be defined per the City of Hartford's Holiday Schedule, available from the Director of Human Resources & Labor Relations. The calendar days between December 1 and April 1 will be considered as "winter shutdown" and will

not be included in computing the substantial or final completion dates. No extensions of time will be allowed for adverse weather conditions unless the number of days of inclement weather is substantially greater or conditions more severe than average for the calendar period as recorded by a recognized weather observation agency and the Contractor provides documentation at the end of each calendar month identifying these weather delays. Work on this project shall not be performed on Saturdays, Sundays or Legal Holidays except by written consent and direction of the Owner.

Work shall proceed in an orderly fashion to minimize inconvenience to the abutting property owners. All contract work, including punch list items, shall reach final completion within **days**.

**In the event the contractor requests to work extended work hours, work on “non-working days” (i.e. Saturdays, Sundays or Legal Holidays) or if the project goes beyond the final completion date the City shall recover from the contractor, all costs of doing business associated with this work. The City also has the right to recover its costs of doing business if the engineer orders the contractor to perform work outside of normal working hours or during “non-working days” in order to correct deficient work.** The City’s costs of doing business include, but are not limited to DPW staff time (i.e. the inspector, engineer, etc.) and private duty police officers. The City’s costs associated with working extended work hours, working on “non-working days” or working after the final completion date will be calculated by the engineer on a monthly basis and this amount will be deducted directly from the contractor’s next receiving report. The contractor will not be required to compensate the City for its costs of doing business under the following conditions: 1) Work is required during extended hours, Saturdays, Sundays or Legal Holidays, in order to make the area safe and passable due to no fault of the contractor, and this work is specifically ordered by the engineer. 2) The engineer allows the contractor to work during the winter shut down period as long as the work hours are in accordance with the *Hours of Work* section above.

**Note: Paving will not be allowed during the winter shut down period (Dec 1 – April 1) unless specifically authorized by the Engineer.**

### **AS-BUILT DRAWINGS**

During the course of construction activities the Contractor shall record as-built information and changes made in the field on a set of Contract Drawings. Upon project completion the Contractor shall furnish to the owner a complete set of Electronic and Mylar as-built drawings which accurately record all "As-Built" conditions neatly showing above and below ground facilities. The drawings shall be stamped by a certified licensed surveyor (L.S.) registered in the State of Connecticut. Electronic and Mylar drawings shall be turned over to the Engineer prior to final payment of the project. Electronic drawings shall be in DWG format. As-built drawings are considered part of the general work of this contract and are not considered a pay item.

### **ADDITIONAL CONTRACT DOCUMENTS**

The State of Connecticut "Standard Specifications for Roads, Bridges, and Incidental Construction" (Form 817), 2016, are hereby made part of this contract. Plans showing the location of work to be done under this contract will be provided to the Contractor and shall be considered part of the contract. All construction activities shall conform to the "City of Hartford Rules and Specifications Regulating Curb and Walk Layers and Street Excavation," 1997 revision.

Note: any references to previous editions of the State of Connecticut "Standard Specifications for Roads, Bridges, and Incidental Construction" shall be taken to mean Form 817.

### **PERMITS**

The Contractor (or his designated sub-contractor) shall be required to secure and pay for all appropriate permits. The Contractor may also be required to secure encroachment permits from the State of Connecticut Department of Transportation for work on or adjacent to State roadways.

### **TESTING OF MATERIALS**

All materials on the project shall be subject to the requirements of Section 1.06 of the State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction Form 817. The contractor is advised to carefully read the contract documents along with each individual item specification and pay particular attention to the material requirements, testing requirements and submittal requirements (i.e. materials certificates, PC-1's etc.) for each contract item. The contractor shall make every effort to assist the Engineer/Inspector in gathering material samples and shall supply the Engineer/Inspector with the required submittals (i.e. materials certificates, PC-1's etc.) prior to placing any material. Please note that payment may not be made for any material placed prior to obtaining a satisfactory test result from the DOT. The contractor runs the risk of having to remove and replace, at his own expense, any work which was completed with materials that were not tested or that have failing test results.

**DPW ENGINEERING PROJECTS, GENERAL CONDITIONS**

## Table of Contents - General Conditions

1	General
2	Definition of Terms
3	Contractor to Submit Plans
4	Contractor to Submit Schedule
5	Review of Pay Quantities and Invoice
6	Weights and Measurement
7	Basis of Payment
8	Contractor's Responsibility
9	Sanitary Conveniences
10	Drinking Water
11	Workers
12	Work in Inclement Weather
13	Protection of the Work
14	Dust Control and Cleanup
15	Maintenance
16	Quality of Materials / Defective Materials
17	Certified Test Reports, Materials Certificate and Certificate of Compliance
18	Construction Materials
19	Coordination
20	Discrepancies
21	Construction Staking, Line and Grade
22	Licensing of Curb and Walk Work and Street Excavation Work
23	Permits
24	Time of Completion
25	Work Procedure
26	Prompt Completion of Work
27	Work Interruptions
28	Temporary Suspension of Work
29	Urgent Work
30	Emergency Action
31	Mobilization and Demobilization
32	Inspection of the Work
33	Manholes and Utility Cuts
34	Paving Tools
35	Signs and Traffic Detours
36	Maintenance and Protection of Vehicular and Pedestrian Traffic
37	Noise
38	Operation of Equipment in City Streets
39	Clearance of Vital Structures
40	Relocation and Protection of Utilities
41.	Protection of Adjoining Property
42.	Excavation
43.	Trenches
44.	Excavated Material
45.	Disposal of Excavated Material
46.	Use of Areas Behind Curb Line



## 1. **GENERAL**

These specifications are intended to apply to the execution of the work stated on the title page of this contract.

## 2. **DEFINITION OF TERMS**

Whenever in these specifications the following terms are used, the intent and meaning shall be as follows:

- a. *"City"* City of Hartford, Connecticut
- b. *"Public Works"* Department of Public Works and the City of Hartford
- c. *"Engineering"* Bureau of Engineering Services of the City of Hartford
- d. *"Municipal Building"* Executive Offices of the City of Hartford, 550 Main Street
- e. *"Director"* Director of Public Works or his authorized representative
- f. *"Engineer"* City Engineer or his authorized representative
- g. *"Inspector"* A representative of the Director, through the Engineer assigned to make the following:
  - All necessary inspections of condition of all sidewalks and curbs within the City accepted street and to recommend necessary repair work. All necessary inspections of repair, construction and materials of sidewalk and curbs, and street excavations.
- h. *"Street"* The word "street" shall be constructed to embrace streets, avenues, boulevards, highways, roads, alleys, lanes, viaducts, bridges, and the approaches thereto and all the other public thoroughfares in the City and shall mean all that part thereof from street line to street line of the premises abutting thereon.
- i. *"Laboratory"* The testing laboratory of the Bureau of Engineering or a commercial testing laboratory designated by the Engineer.
- j. *"Contractor"* A licensed curb and walk Contractor, performing work covered by these specifications under permit issued through the Department of Public Works, acting directly or through his agents or employees.
- k. *"Sub-Contractor"* Any other licensed curb and walk contractor to whom the contractor sublets or assigns any part or parts of the work covered by a permit, with the approval of the director.
- l. *"Curb"* The vertical edging of the paved portion of a street and installed in conformance with these specifications and accepted by the City for future maintenance.
- m. *"City Accepted Sidewalk"* Paved Laid Out walkway between curb and street line of five (5) inch thick Portland cement concrete or eight (8) inch thick reinforced Portland cement concrete (as hereinafter described under eight (8) inch walk) and constructed in conformance with these specifications, and accepted by the City for future maintenance.
- n. *"Non-City Accepted Sidewalk"* Paved walkway between curb and street line at driveways shall not be accepted for City maintenance and will remain the responsibility of abutting owner.
- o. *"City-Owned Sidewalk"* Paved walkway between curb and street line adjacent to City-owned property of five (5) inch thick or eight (8) inch thick reinforced Portland cement concrete and constructed in conformance with these specifications.
- p. *"Portland Cement Concrete Driveway Ramp"* Paved access way for vehicles from curb to back of sidewalk constructed of eight (8) inch thick reinforced Portland cement concrete and constructed in conformance with these specifications, and to remain the responsibility of the owner for future maintenance.

- q. *"Bituminous Concrete Driveway Ramps"* Paved access way for vehicles from curb to front edge of existing cement concrete sidewalks constructed of three (3) inch thick bituminous concrete and constructed in conformance with these specifications and to remain the responsibility of the owner for future maintenance.
- r. *"Eight-Inch Walk"* In such locations as may be determined by the Director, at all driveways and in business and industrial zones and non-conforming areas of residential zones, sidewalks constructed in accordance with City Standards shall be eight (8) inch thick reinforced Portland cement concrete, constructed in conformance with these specifications.
- s. *"Laid Out Walk"* The legally laid out sidewalk width and location with respect to the street line as recorded by the Bureau of Engineering Services.
- t. *"Paving Outside the Laid Out Walk"* With the approval of the Director, bituminous concrete or cement concrete paving may be constructed between the curb and laid out walk and back of the laid out walk to the street line. Two-inch bituminous concrete shall be constructed in accordance with these specifications. Cement concrete shall be of the same construction as the laid out walk and in accordance with these specifications and a longitudinal one-half (½) inch or expansion joint shall be placed adjacent to the laid out walk.
- u. *"Non-Accepted Construction"* Construction of curbing of any material other than granite or of laid out sidewalk of any material other than Portland cement concrete without written approval of the Director is not allowed.
- v. *"Areaways"* Any vault, cellar way or areaway or any cover, grating or door above the same within any street lines.
- w. *"Sidewalk Ramp"* A paved access way from the curb to or thorough the sidewalk.
- x. *"Authorized Representative"* An employee of the Contractor responsible to the Contractor for accepting written and oral orders on the job from the Director (or his representative) and with the authority to take action on said orders in the Contractor's absence.
- y. *"Roadway"* The paved portion of the street right-of-way between the curbs and/or the vehicular travel portion of the street right-of-way.
- z. *"Repair"* Shall mean work on a utility which restores the utility to its original working state without changing the character, location or size of the utility.
- aa. *"Clean Catch Basins"* All existing catch basins damaged or filled with sedimentation as a result of the construction process, shall be cleaned and flushed at the Contractor's expense.
- bb. *"Substantial Completion"* When construction is sufficiently complete, in accordance with the contract documents, so that the City of Hartford can occupy or utilize Street, or designated portion thereof, for the use for which it is intended. As a minimum the following items as applicable to the contract drawings or subsequent City authorized contract changes, are to be completed in their entirety to the satisfaction of the City of Hartford.
  - ! Sidewalk and driveway work
  - ! **Curbing**
  - ! Utility/drainage work
  - ! Pavement markings
  - ! Loaming and seeding
  - ! Pedestrian ramps
  - ! Guide rail
  - ! **Paving**

- cc. *"Final Completion"* When all contract items, including punch list items, and all City authorized changes, deletions, additions or revisions to the contract are completed in their entirety and accepted for payment by the City of Hartford.
- dd. *"Excavation"* A trench or any other opening of a surface dug for the purpose of performing work on the project site. This includes, but is not limited to, drainage trenches, openings for concrete sidewalks, sidewalks ramps, granite or concrete curbing, and driveway aprons.

**3. CONTRACTOR TO SUBMIT PLANS**

When so requested by the Engineer, the Contractor shall furnish the Engineer with plans or written statements of the methods which he proposes to use, which methods shall be subject to the approval of the Engineer before the work proceeds.

**4. CONTRACTOR TO SUBMIT SCHEDULE**

Before commencement of construction, the Contractor shall submit a written schedule showing starting dates and completion dates for each pay item on each street, outlining critical steps. The critical path method is the preferred format. This written schedule shall be submitted at the preconstruction conference if any and shall be revised and resubmitted at the beginning of each calendar month or as requested by the Engineer.

**5. REVIEW OF PAY QUANTITIES AND INVOICE**

The Contractor shall meet with the Inspector on a weekly basis for a review of the pay item quantities. Any discrepancies shall be resolved or quantities field measured at this time. The Contractor shall submit an invoice describing the items and quantity of work done, on a monthly basis. This invoice shall be approved by the Engineer before being processed for payment.

**6. WEIGHTS AND MEASUREMENT**

For each bid item, the Engineer will measure and pay for the actual quantities of materials installed on the finished job, except that, when the Contractor installs a greater quantity of a material than was ordered by the Engineer or than is determined to be necessary by the Engineer, the extra material will not be paid for. The Engineer may use truck delivery slips to compute quantity of material. The Engineer shall be furnished with a copy of each delivery slip showing the weights and/or the cubic measure of material in each delivery for materials so delivered.

**7. BASIS OF PAYMENT**

The basis of payment for each item shall be the unit price or lump sum price bid and listed on Exhibit A for each particular item. The price bid shall include all work listed in the item's specification and any other part of the Contract and all labor, material and equipment use incidental thereto. Measurement for payment of work done shall be as specified in WEIGHTS AND MEASUREMENT, Paragraph 6 above.

**8. CONTRACTOR'S RESPONSIBILITY**

- a. The Contractor shall be responsible for notifying the owner of any utility appurtenance he may encounter, above or below ground, that he may have damaged or that may require adjustment or relocation. The Contractor shall cooperate with the owner of said utility and schedule and conduct his work so as not to interfere with or hinder the completion of their work.
- b. The Contractor shall conduct the work at all times in such a manner as to ensure the safety and least possible obstruction to traffic. The convenience and safety of the general public and of the residents along and adjacent to the street shall be provided for in an adequate and satisfactory manner. Materials stored within the street shall be placed so as to cause as little obstruction to the public as possible under the conditions. No street or section of the street shall be closed without written permission of the Director. The safety provisions of applicable laws, building and construction codes and safety codes approved by the State Labor Commissioner shall be observed. The Contractor shall provide sufficient suitable barricades to exclude and prevent injury to pedestrians, vehicles and animals. He shall also provide a sufficient number of red warning lights on or near the work from twilight in the evening until sunrise. If required by the Director, the Contractor shall provide and maintain temporary signs for the control of traffic and flag men or uniformed policemen to supplement traffic control.

**9. SANITARY CONVENIENCES**

Sanitary conveniences, properly secluded from public observation, shall be provided by the Contractor for the use of the laborers on the work site.

**10. DRINKING WATER**

Drinking water for the men on the job shall be provided by the contractor from an approved source, so piped or transported as to keep it safe and fresh. It shall be served in single service paper containers. Drinking water shall be furnished in strict accordance with existing health regulations.

**11. WORKERS**

The Contractor shall employ only competent, faithful and skilled persons to do the work required of them, and whenever the Engineer shall notify the Contractor that any person on the work site is, in his opinion, incompetent or unfaithful, such person shall be discharged from the work and shall not again be employed on it.

**12. WORK IN INCLEMENT WEATHER**

Whenever, in the opinion of the Engineer, weather conditions are such as to make impracticable the performance of satisfactory work under these specifications, he may designate such additional specifications as will, in his opinion, result in satisfactory work, or he may order the work suspended.

**13. PROTECTION OF THE WORK**

The Contractor shall protect all work done under this contract, and all work done by other contractors within the limits of this contract during the progress of the work and until completion, from injury by reason of any work under this contract, or by reason of any negligence on his part, or by reason of weather conditions. The method to be employed for protection shall be at the contractor's discretion, but shall be subject to the approval of the Engineer, who may order the work or any portion of it suspended when he considers conditions to be not favorable for first-class work.

The Contractor shall protect all work including but not limited to bituminous pavement, concrete walk, playground apparatus, grass areas, etc., from all traffic and use until it is suitable for use or until completion of the Contract.

**14. DUST CONTROL AND CLEANUP**

Upon suspension or completion of the work or of any section thereof, the Contractor shall remove all materials, equipment and rubbish, and shall leave the premises in a neat and orderly condition. The premises shall, during the progress of the work, be kept clean, presentable and satisfactory to the Engineer, and shall be so left at the completion of the Contract.

As the work progresses, all streets shall be thoroughly cleaned of all rubbish, excess earth, rock, and other debris. The Contractor shall take necessary precautions to prevent and avoid dust and to keep the streets clean each day. All clean-up operations shall be accomplished at the expense of the Contractor and shall be carried out to the satisfaction of the Director of Public Works.

**15. MAINTENANCE**

The Contractor shall keep and maintain the constructed work in good repair for a period of one (1) year from the date the final payment is released by the City. This payment release is contingent on the timely receipt of the required final payment forms from the Contractor.

The Contractor must submit a written request to the City Engineer for a final inspection by the Engineer and the Engineer will make such inspection not more than seven (7) days after the date the City Engineer received the request.

It is agreed and understood that the Contractor will at any time during this one (1) year period, upon notification in writing from the City Engineer and without expense to the City, immediately execute all repairs which may be necessitated, as determined by the Engineer, by reason of any defective materials used therein, or by defective workmanship or by reason of the normal use or functioning of all facilities constructed under this contract.

**16. QUALITY OF MATERIALS/DEFECTIVE MATERIALS**

All work done and materials furnished shall be new and of the best quality customarily used in or furnished for installations of the character of that herein proposed. Many features of the proposed work are described in detail herein, but the failure to so describe any part of the proposed work or

any detail or appurtenance thereof shall not be an exception to the above rule. The absence of requirements in contract or specifications covering details usually included in first-class installations of this kind shall not excuse the Contractor for their omission in this work. All new material furnished on the project site must be accompanied by a batch slip or invoice, and a copy of this slip or invoice must be given to the job inspector.

The Engineer will reject any or all defective or damaged material or any material not, in his opinion, in conformity with the specifications.

Material which may at any time be rejected shall be set aside at a considerable distance from all acceptable material of like nature and, when ordered, shall be promptly removed. If the Contractor does not remove defective material promptly after written notice, the Engineer may cause such removal by such means as he shall select and at the Contractor's expense. All defective material shall be conspicuously marked by the Contractor. No defective or damaged material shall be used in the work.

#### **17. CERTIFIED TEST REPORTS, MATERIALS CERTIFICATE AND CERTIFICATE OF COMPLIANCE**

For such items and materials as the contract documents may specify, or the Engineer may designate, the Contractor shall furnish a Certified Test Report and Materials Certificate shall be forwarded to the job site.

These documents shall be forwarded to the Engineer; and in addition, a copy of the Certified Test Report and Materials Certificate shall be forwarded to the job site.

Materials requiring such documentation may be conditionally incorporated in the work prior to receipt of a Certified Test Report and a Materials Certificate; however, payment for such incorporated materials will not be made prior to receipt of the Certified Test Report and Materials Certificate which show that the material meets the requirements of the specifications.

If the reports and certificates show the material conditionally incorporated in the work does not meet the requirements of the specifications, such material shall be removed and replaced with material which does meet the requirements.

Final acceptance of the material shall be subject to the requirements of project approval and the issuance of a Certificate of Compliance.

A Certified Test Report is a document containing a list of the dimensional, chemical, metallurgical, electrical and physical results obtained from an actual test of the materials involved, and shall certify that the materials meet the requirements of the plans and specifications, and shall also include the following information:

- a. Item number and description of material
- b. Date of manufacture
- c. Date of testing
- d. Name of organization to which the material is consigned

- e. Quantity of material represented, such as batch, lot, group, etc.
- f. Means of identifying the consignment, such as label, marking, lot number, etc.
- g. Date and method of shipment
- h. Name of organization performing tests

The Certified Test Report shall be signed by an authorized and responsible agent for the organization manufacturing the material and it shall be notarized.

A Materials Certificate is a document certifying that the materials, components and equipment furnished, conform to all requirements of the plans and specifications. The document shall also include the following information:

- a. Project to which the material is consigned
- b. Name of Contractor to whom material is supplied
- c. Item number and description of material
- d. Quantity of material represented by the certificate
- e. Means of identifying the consignment, such as label, marking, lot numbers, etc.
- f. Date and method of shipment

The Materials Certificate shall be signed by an authorized and responsible agent for the organization supplying the material and it shall be notarized.

A Certificate of Compliance is a document certifying that the materials, components and equipment covered by the previously submitted Certified Test Report and Materials Certificate have been installed in the work and that they conform to all the requirements of the plans and specifications. The following information shall also be required on the document:

- a. Project number
- b. Item Number and description of material
- c. Quantity represented by the certificate
- d. Name of Manufacturer

The Certificate of Compliance shall be signed by an authorized and responsible agent for the Contractor and shall be notarized.

## **18. CONSTRUCTION MATERIALS**

Construction materials on the site shall be limited in quantity and place occupying area so as to not hinder and block the use of the street, in accordance with the third paragraph of Section 40 of the General Requirements.

No advance payment will be made to the Contractor for construction materials purchased in advance and stored by the Contractor. All materials will be paid for each item complete and accepted in place according to the contract bid price.

## **19. COORDINATION**

Coordination of plans, specifications, and special provisions; any requirement on the plans or in these specifications, the special conditions shall be equally binding on the Contractor.

In case of conflict, the order of governance among those requirements, in order of descending authority, shall be as follows:

1. Environmental Permits
2. Environmental Permit Applications
3. Special Provisions
4. Plans other than Standard Sheets (enlarged details on plans, used to clarify construction, shall take precedence over smaller details of the same area; and information contained in schedules or tables, titled as such, shall take precedence over other data on the plans)
5. Standard Sheets
6. Supplemental Specifications
7. Standard Specifications and other Contract Requirements

On all plans, the figure dimensions shall govern in case of discrepancy between the scales and figures. Neither party to the contract shall take advantage of any obvious error or omission in the Contract. The Engineer shall make such corrections and interpretations as may be deemed necessary for the completion of the work in a satisfactory and acceptable manner.

## **20. DISCREPANCIES**

All discrepancies or items requiring further clarification shall be resolved through written communication to the Engineer.

## **21. Construction Staking, Line, and Grade**

- a) The Contractor's surveyor shall be responsible for supplying line and grade at least 48 hours prior to beginning any work that may require line and grade.
- b) The Contractor shall be responsible for transferring all line and grade from the offset line and establishing and maintaining string lines for grading and paving operations, both at the gutter line and the centerline of the road.
- c) The Contractor shall exercise extreme care not to damage, disturb or bury any City merestones which have been set at street corners or at angles in the street lines. The Contractor will furnish an appropriate form which shall be set in the sidewalk for the purpose of providing an opening for access to such merestones. A cover will be provided for such openings to be set flush with the sidewalk. It is the Contractor's responsibility to acquire merestone covers from the Commercial Foundry Company (New Britain Foundry) (860) 224- 1794. If any merestones are disturbed, damaged or covered over, the Contractor will repair or remove and reset these merestones to the correct finished grade at his own expense.



- d) The Contractor shall complete all work to within 1/4 inch of line and grade as established by the Engineer, except where otherwise specified.

**22. LICENSING OF CURB AND WALK WORK AND STREET EXCAVATION WORK**

The Contractor must have a valid license issued for curb & walk construction and/or street excavation.

**23. PERMITS**

- a. A licensed Contractor who proposes to do any curb construction or repair, cement concrete walk or driveway construction or repair and/or street reconstruction or other miscellaneous work within the street shall first obtain a permit from the Department of Public Works Office at 50 Jennings Road.
- b. No work shall commence until the permit is on the job in the hands of the Contractor's authorized representative. The permit shall be on the job at all times work is being performed and shall be presented for inspection to the Director or the Engineer, their authorized representatives, or Inspectors assigned to the work, if so requested.

**NOTE: The Contractor is cautioned that any work to be undertaken on State Highways, including intersection work to be completed adjacent City owned and maintained streets may require a permit from the Connecticut Department of Transportation. The Contractor is responsible to also secure any permit/approval from the Connecticut Department of Transportation, Bureau of Highways District office if required.**

**24. TIME OF COMPLETION**

The Contractor shall complete all work contemplated by this Contract in a timely and orderly fashion as outlined in the Special Conditions section of this document, "SCHEDULING OF THE WORK." Approval to deviate from this schedule must be requested and obtained from the Engineer in writing.

The count of calendar days used will start on the day the Contractor begins work except that the count shall in no case start later than the tenth (10th) calendar day after the date of written notice to begin work.

The count may be interrupted by the Engineer if the Engineer determines it necessary to halt work on the entire job. The dates of stopping the count and resuming the count shall be specified to the Contractor in writing by the Engineer.

**25. WORK PROCEDURE**

Under this Contract, the Contractor will start and complete all paving on one section of the street at a time, scheduling his operations so that vehicular traffic will not be unduly hindered. Each section of paving shall be approved by the Engineer prior to beginning work.

The Contractor shall not excavate on more than two (2) streets at a time unless approved by the Engineer in writing. The Contractor shall notify homeowners 48 hours in advance when access to private property (e.g. driveways) is to be hindered or denied. Excavations for concrete sidewalks and sidewalk ramps shall not be open for more than 72 hours, at which time the Contractor shall complete this work or backfill the excavation completely, at no extra cost to the City.

Access to local properties shall be maintained at all times except when actual work is being done in front of a driveway to a property and except for the normal cooling period after the bituminous concrete has been laid.

**26. PROMPT COMPLETION OF WORK**

After an excavation is commenced, the Contractor shall prosecute with diligence and expedition work covered by the excavation permit and shall promptly complete such work and restore the street to its original condition or as near as may be, so as not to obstruct the street or travel thereon more than is reasonably necessary.

**27. WORK INTERRUPTIONS**

There may be some occasions where utility companies will be involved in the relocation of their existing facilities. The Contractor should be able to work in another location until the utility completes its work. No additional compensation will be made for delays or inconvenience sustained by him due to interference by the utility companies.

**28. TEMPORARY SUSPENSION OF WORK**

The Engineer shall have the authority to suspend the work wholly or in part, for such period or periods as he considers necessary in the best interest of the City, or in the interest of public necessity, convenience or safety.

If it should become necessary to stop work for an identified period, the Contractor shall store all materials and equipment in such manner that they will not obstruct or impede the traveling public unnecessarily nor allow the material to become damaged in anyway; and he shall take every precaution to prevent damage to the work already completed, and to erect temporary structures where necessary.

The Contractor shall maintain the roadway in safe condition for travel and shall maintain all barricades, signs and lights during the period of suspension; and the payment of the work shall be included in each of the appropriate bid items required.

**29. URGENT WORK**

If, in his judgment, traffic conditions, the safety or convenience of the traveling public or the public interest require that the excavation would be performed as emergency work, the Director of Public Works shall have full power to order that a crew of men and adequate facilities be employed by the Contractor up to 24 hours a day to the end that such excavation work may be completed as soon as possible.

**30. EMERGENCY ACTION**

Nothing in these rules shall be construed to prevent the making of such excavations as may be necessary for the preservation of life or property or for the location of trouble in conduit or pipe, or for making necessary repairs, provided that the person making such excavation shall apply to the Director of Public Works for such a permit on his first working day after such work is commenced.

The person engaged in emergency action shall notify the Department of Public Works, the Police Department, and the Fire Department at the start of the emergency work.

**31. MOBILIZATION AND DEMOBILIZATION**

The Contractor shall include mobilization and demobilization costs in the unit prices offered in the proposal. No separate payment shall be made for this work.

**32. INSPECTION OF THE WORK**

The Director of Public Works and/or his duly-authorized representatives shall be the judge of the character, nature and fitness of all the work done and all the material furnished; he shall decide as to the meaning, intent and performance of these specifications. The entire work shall be done under his supervision and to his satisfaction and his decisions upon all questions relating to said work shall be binding upon the Contractor.

**33. MANHOLES AND UTILITY CUTS**

All manhole frames and covers, gate boxes and similar structures in the area of the work will be reset to the proper line and grade by the Contractor or their respective owners. Repairs of all cuts in the pavement base will be the responsibility of the Contractor. The Contractor shall cooperate with all utility owners to facilitate this work.

**34. PAVING TOOLS**

The Contractor shall have sufficient hand tools and equipment in good operating condition, on the job and in use at all times that bituminous concrete binder and surface courses are being placed.

**35. SIGNS AND TRAFFIC DETOURS**

When necessary, the City will determine all traffic detours. The Contractor shall cooperate in placing the signs where ordered by the Engineer.

The Contractor shall place and maintain barricades as needed and as ordered by the City. He shall place barricades on all side streets at the next intersection away from the street being resurfaced. He shall place barricades where needed for City "Detour" and other such signs. Any barricades left at night must have lights and reflectors.

The Contractor shall furnish all warning signs as shown on the drawings as well as any and all additional barricades, traffic drums, detour signs and the like, including illumination of same as well as any obstacles in the roadway, using flares, battery powered flashers, or strings or electric light bulbs, as directed by the Engineer. All signs shall be in accordance with the Manual of Uniform Traffic Control Devices for Streets and Highways as published by the U.S. Department of Transportation, Federal Highway Administration, latest issue. Payment for said signs and traffic control devices shall be in accordance with the contract unit price shown in the Bid Proposal for each of the individual traffic signs and traffic control devices required.

**36. MAINTENANCE AND PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC**

The Chief of Transportation (Traffic Engineer) shall prescribe all conditions for maintenance and protection of traffic for each project. In general, if the excavation procedures expose utility frames for manholes, gate boxes, catch basins, etc. more than 2 inches, then a ramped section of processed stone or traffic control devices such as drums, cones and barricades shall be provided around these structures to prevent damage to vehicular traffic.

Ramped sections and traffic control devices shall be to such dimensions as shown in the contract drawings and at such locations as directed by the Engineer.

Equipment and material left within the street lines overnight shall be protected by barricades or traffic drums equipped with flashing lights, as directed by the Engineer, at the contractor's own expense. Failure to comply with this requirement will result in the revocation of the contractor's permission to stock material and equipment within the street lines overnight.

**37. NOISE**

Each Contractor shall conduct and carry out excavation work in such manner as to avoid unnecessary inconvenience and annoyance to the general public and occupants of neighboring property. During the hours of 10:00 p.m. and 7:00 a.m. he shall not use, except with the express written permission of the Director or in case of an emergency as herein otherwise provided, any tool, appliance or equipment producing noise of sufficient volume to disturb the sleep or repose of occupants of the neighboring property.

**38. OPERATION OF EQUIPMENT IN CITY STREET**

No equipment shall be operated with any metal surfaces, steel pads and cleats on backhoe outriggers and stabilizers and on crawler mounted equipment, etc., in direct contact with the surface of any pavement, curb or walk. The Contractor shall use suitable wood, plywood or rubber blocks under outriggers and stabilizers or shall use rubber or fiber pads manufactured for the purpose and fastened to the steel pads. Suitable planning shall be used under crawler mounted equipment.

All pavements, curbs and walks damaged by the Contractor during his operations and not scheduled for repair or replacement under this contract shall be repaired at the Contractor's own expense and without cost to the City.

**39. CLEARANCE OF VITAL STRUCTURES**

The excavation work shall be performed and conducted so as not to interfere with access to fire hydrants, fire stations, fire escapes, water gates, underground vaults, catch basins and all other vital equipment as designated by the Director of Public Works.

The Contractor shall maintain all gutters free and unobstructed for the full depth of the adjacent curb and for at least one (1') foot in width from the face of such curb at the gutter line. Catch basins shall be kept clear and serviceable.

The Contractor shall make provisions to take care of all surplus water, muck, silt, slickings, or other run-off pumped from excavations and shall be responsible for any damage resulting from his failure to so provide.

**40. RELOCATION AND PROTECTION OF UTILITIES**

Notice is hereby given that the Contractor must familiarize himself with applicable State Statutes regarding his duties and responsibilities with respect to excavating, discharging explosives on demolition in proximity to public utility underground facilities.

In case any said purpose pipe crossing or other encasement should be damaged, and for this purpose pipe crossing or other encasement or devices are to be considered as part of a substructure, they shall be repaired by the agency or person owning them and the expense of such repairs borne by the Contractor. The Contractor shall be responsible for any damage done to any public or private property by reason of the breaking of any water pipes, sewer, gas pipe, electric conduit or other utility. The Contractor shall inform itself as to the existence and location of all underground utilities prior to the commencement of excavation and protect the same against damage.

**41. PROTECTION OF ADJOINING PROPERTY**

The Contractor shall at all times and at his own expense preserve and protect from injury any adjoining property by providing proper foundations and taking other measures suitable for one purpose. The Contractor shall, at his own expense, shore up and protect all buildings, walls,

fences or other property likely to be damaged during the progress of the excavation work and shall be responsible for all damage to public or private property or highways resulting from its failure to properly protect and carry out said work. The Contractor shall not disturb, cut or remove (even temporarily) any trees, bushes, shrubs or flowers on City or private property. Any trees, bushes, shrubs or flowers which have been disturbed, removed or cut by the Contractor shall be the sole responsibility of the Contractor including replacement, should any of the trees, bushes, shrubs or flowers die as a result of the Contractor's work.

#### **42. EXCAVATION**

- a. **Curbs and Walks:** The term excavation as used in this contract for curbs and walks shall mean the removal to line and grade and the satisfactory disposal of all materials encountered, including the cutting and removal of tree roots, existing walk, driveways, curbs, gutters, and other obstructions as necessary to the preparation of the subgrade for all proposed improvements. All such material excavated during the course of the work and not reusable shall become the property of the Contractor and it shall be his responsibility to legally dispose of the material.

Excavations of curb shall be completely backfilled at the end of each workday. Excavations for sidewalks and sidewalk ramps shall not remain open for more than 72 hours, at which time the Contractor shall pour the concrete or completely backfill the excavation at no extra cost to the City.

- b. **Roadway and Driveway Ramps:** The excavation of roadways and driveway ramps shall conform to the first paragraph of (a) above. The excavation of roadways and driveway ramps must be completely backfilled and open for vehicular traffic at the end of each day.

#### **43. TRENCHES**

The maximum length of open trench permissible at any time shall be in accordance with existing ordinances or regulations or as may be specified by the City and no greater length shall be open for pavement removal, excavation, construction, backfilling, patching and all other operations without written permission of the City. The Contractor shall be required to backfill and protect all trenches before the close of any working day. However, at the discretion of the Engineer, the Contractor may utilize steel plates measuring approximately 1" thick by 5' wide by 10' long to cover the open trench. Utilization of steel plates will generally be used only for overnight protection of trenches to allow completion of work the following work day. Steel plates will not be used to keep trenches open more than one night. Trenches to be left open for more than one night will be backfilled.

#### **44. EXCAVATED MATERIAL**

All material excavated from trenches or excavations shall be removed from the site of the work except in rare cases where material is suitable for part of the backfill, however, permission must be granted by the Director prior to placement of any such material.

**45. DISPOSAL OF EXCAVATED MATERIAL**

Road grinding and excavated materials (Radius granite curbs, catch basin frames, etc.) that are reusable shall if, requested by the Engineer, be delivered to and unloaded at the location designated by the City, at no extra cost to the City. The delivery will be coordinated by the Engineer. All other materials excavated that are not reusable and not wanted by the City of Hartford shall become the property of the Contractor and it shall be his responsibility to legally dispose of the material.

**46. USE OF AREAS BEHIND CURB LINE**

The Contractor shall not store any material or park any equipment used on this contract behind the curb line or in the road, without written permission from the Engineer. Should any area back of curb become damaged during construction, the Contractor shall be responsible for restoring the area to its original condition as directed by the Engineer.

END OF SECTION

## **CITY OF HARTFORD STANDARD TECHNICAL SPECIFICATIONS**

The latest revision of the City of Hartford's "Standard Technical Specifications for Streets and Roads, Traffic, and Streetscape Construction," are herein made part of this contract (Including Standard details). In this case "latest revision" is defined as the "Standard Technical Specifications for Streets and Roads, Traffic, and Streetscape Construction," in use by the City at the time this project was advertised. These Specifications and Details can be accessed at [www.hartford.gov](http://www.hartford.gov) – Specifications and Manuals

END OF SECTION



**STATE OF CONNECTICUT, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATION FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, FORM 817**

The latest revision of the " State of Connecticut Standard Specification for Roads, Bridges, and incidental Construction (Form 817) are herein made part of this contract (Including Standard Details). Any references to 816, Article, or related nomenclature shall be meant to reference Form 817 as amended.

END OF SECTION

## **SPECIAL PROVISIONS - TECHNICAL SPECIFICATIONS**

### **DIVISION I**

### **NOTICES TO CONTRACTOR**

#### **SECTION NO.**

NOTICE TO CONTRACTOR – USE OF FORM 817

NOTICE TO CONTRACTOR – CONTRACTOR TRAINING REQUIREMENT FOR  
10-HOUR OSHA CONSTRUCTION SAFETY AND  
HEALTH COURSE

NOTICE TO CONTRACTOR – REQUIREMENTS OF TITLE 49, CODE OF FEDERAL  
REGULATIONS PART 26

NOTICE TO CONTRACTOR – BID RIGGING AND/OR FRAUDS

NOTICE TO CONTRACTOR – PRE-CONSTRUCTION DOCUMENTATION

NOTICE TO CONTRACTOR – VEHICLE EMISSIONS

NOTICE TO CONTRACTOR – SECTION M.04 BITUMINOUS CONCRETE MATERIALS

NOTICE TO CONTRACTOR – SECTION 4.06 BITUMINOUS CONCRETE

NOTICE TO CONTRACTOR – EXISTING UTILITIES

NOTICE TO CONTRACTOR – ROAD CLOSURE

NOTICE TO CONTRACTOR – UTILITY SPECIFICATIONS

NOTICE TO CONTRACTOR – PROTECTION OF EXISTING TRAFFIC SIGNALS

NOTICE TO CONTRACTOR – CONTROL OF THE WORK

NOTICE TO CONTRACTOR – PERMITS AND PERMIT FEES

NOTICE TO CONTRACTOR – REMOVAL OF CONCRETE FROM EXIST. UTILITIES

NOTICE TO CONTRACTOR – COORDINATION WITH OTHERS

NOTICE TO CONTRACTOR – UTILITY NOTIFICATION & COORDINATION

NOTICE TO CONTRACTOR – LEGAL RELATIONS AND RESPONSIBILITIES

NOTICE TO CONTRACTOR – SECTION 1.08 PROSECUTION AND PROGRESS

NOTICE TO CONTRACTOR – PARKED VEHICLES

**DIVISION II****SPECIAL PROVISIONS**

<u>Item No.</u>	<u>Description</u>
0100101A	NEW STRAIGHT GRANITE CURB ON NEW FOUNDATION
0100601A	NEW RADIUS GRANITE CURB
0102101A	5" CONCRETE WALK ON NEW FOUNDATION
0102101A	5" CONCRETE WALK ON EXIST. FOUNDATION
0102341A	5" STAMPED & COLORED CONCRETE WALK ON EXIST. FOUNDATION
0102321A	8" REINFORCED CONCRETE SIDEWALK RAMP
0103011A	LONGITUDINAL DOWELED EXP JOINT
0106201A	TOPSOIL
0106401A	SEEDING & FERTILIZING
0107701A	TRAFFIC POLICE OFFICER
0125001A	MAINTENANCE AND PROTECTION OF TRAFFIC

**DIVISION III****CITY STANDARD TECHNICAL SPECIFICATIONS\***

<u>Item No.</u>	<u>Description</u>
0102401	2" BITUMINOUS CONCRETE SURFACE ON NEW FOUNDATION
0102402	3" BITUMINOUS CONCRETE SURFACE ON NEW FOUNDATION
0102501	2" BITUMINOUS CONCRETE SURFACE ON EXISTING FOUNDATION
0102502	3" BITUMINOUS CONCRETE SURFACE ON EXISTING FOUNDATION
0102601	GALVANIZED DOWEL
0103702	MEDIUM PROCESSED TRAPROCK BASE
0104201	RECONSTRUCT CONCRETE PAVEMENT BASE AT CURB
0106001	TEMPORARY CONSTRUCTION FENCE

\* All City Standard Specifications can be found on  
[www.hartford.gov/dpw/specifications-and-manuals](http://www.hartford.gov/dpw/specifications-and-manuals)

**NOTICE TO THE CONTRACTOR - USE OF FORM 817**

The Contractor shall substitute all references to Form 816 to mean “State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 817, 2016”, including all applicable supplemental specifications.

**NOTICE TO CONTRACTOR – CONTRACTOR TRAINING REQUIREMENT FOR 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE**

In accordance with Connecticut General Statute 31-53b and Public Act No. 08-83, the Contractor is required to furnish proof that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53, has completed a course of at least ten hours in duration in construction safety and health approved by the Federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

Proof of compliance with the provisions of the statute shall consist of a student course completion card issued by the federal Occupational Safety and Health Administration, or other such proof as deemed appropriate by the Commissioner of the Connecticut Department of Labor, dated no earlier than five years prior to the commencement of the project. Each employer shall affix a copy of the construction safety course completion card for each applicable employee to the first certified payroll submitted to the Department of Transportation on which the employee's name first appears.

Any employee required to complete a construction safety and health course as required that has not completed the course, shall have a maximum of fourteen (14) days to complete the course. If the employee has not been brought into compliance, they shall be removed from the project until such time as they have completed the required training.

This section does not apply to employees of public service companies, as defined in section 16-1 of the 2008 supplement to the General Statutes, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

The internet website for the federal Occupational Safety and Health Training Institute is <http://www.osha.gov/fso/ote/training/edcenters>.

Additional information regarding this statute can be found at the Connecticut Department of Labor website, <http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm>.

Any costs associated with this notice shall be included in the general cost of the contract. In addition, there shall be no time granted to the contractor for compliance with this notice. The contractor's compliance with this notice and any associated regulations shall not be grounds for claims as outlined in Section 1.11 – "Claims".

**NOTICE TO CONTRACTOR - REQUIREMENTS OF TITLE 49, CODE OF FEDERAL REGULATIONS PART 26**

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

**NOTICE TO CONTRACTOR – BID RIGGING AND/OR FRAUDS**

The Connecticut Department of Transportation is cooperating with the U.S. Department of Transportation and the Justice Department in their investigation into highway construction contract bid rigging and/or frauds.

A toll-free "HOT LINE" telephone number 800-424-9071 has been established to receive information from contractors, subcontractors, manufacturers, suppliers or anyone with knowledge of bid rigging and/or frauds either past or current. The "HOT LINE" telephone number will be manned during normal working hours (8 A.M. - 5 P.M. EST.), and information will be treated confidentially, and anonymity respected.

## **NOTICE TO CONTRACTOR – PRE-CONSTRUCTION DOCUMENTATION**

The Contractor is hereby notified and advised that as a condition of this project he shall provide pre-construction documentation of the project site. Ground photography shall consist of color video taping of surface features taken along the entire length of the project and including all work and storage areas and all intersecting roadways. Prior to audio-video taping of the project, all areas to be inventoried shall be investigated visually with notations made of items not readily visible by taping methods.

The Contractor shall submit the following for approval in accordance with Conditions of Contract:  
Video equipment specifications

### **A. Pre-Construction Recording**

Prior to the delivery of any equipment, materials or supplies to the site of any work, or to the beginning of any of the construction work, the Contractor shall provide pre-construction photography as specified herein for the purpose of establishing the surface conditions existing in all of the areas to be affected by the construction.

Purpose of Video Taping: The purpose of the color audio-video taping of the project is to provide the necessary information for restoration of surface features after completion of the project. The Contractor shall be responsible for repairing any damage or defect not documented as existing prior to construction.

### **B. Video Photography**

Coverage of Taping: Such coverage shall include, but not be limited to, all existing driveways, sidewalks, curbs, streets, signs, landscaping, trees, catch basins, fences, visible utilities and all buildings located within the zone of influence. Of particular concern are any existing faults, fractures, defects or other features. Audio description shall be made simultaneously with and support the video coverage.

Streets – shall be recorded by audio-video tape for the full width of the right-of-way, except where specifically noted otherwise by the City Engineer.

Work Agreement Areas – shall be recorded by audio-video DVD including all adjacent areas lying within the zone of influence of construction as directed by the City Engineer. The size and locations of all areas to be taped will be shown on the Plans or otherwise supplied by the City Engineer.

Front and/or Side Yard Areas – of residential homes within the zone of influence of construction shall be recorded.



### **C. Equipment**

Video – Color audio-video shall be DVD format.

### **D. Location Information**

All DVD's shall be properly identified by number, location and project name in a manner acceptable to the City of Hartford.

A record of the contents of each DVD shall be supplied on a run sheet identifying each segment in the tape by location, i.e., street viewing side, traveling direction, engineering stationing, and all referenced by tape counter numbers.

All video recordings shall begin with the date and time of recording, the project name, the sheet numbers of engineering stationing as shown on the plans, the name of the street, area or building being taped, the direction of travel and the viewing side. Houses and buildings shall be identified visually by house or building address, when possible, in such manner that the progress of the taping and the proposed system may be located by reference to the houses and buildings.

### **E. Entering Private Property**

If it becomes necessary to enter onto private property, notify the owner of such property at least 24 hours in advance of the planned entry to obtain his permission to do so. Should the owner of the property refuse to give his permission for said entry, notify the City Engineer.

The contractor is advised that he shall not enter any private property before permission is granted to do so, or the City Engineer notified by the Contractor that he has gained the legal right to do so. The Contractor shall be held liable for entry made other than stated herein.

### **F. Ownership of Recordings**

All DVD's produced will become the permanent property of the City of Hartford. The Contractor shall deliver all tapes to the City of Hartford prior to the beginning of any construction work.

Any portion of the DVD coverage deemed unacceptable by the City Engineer must be re-taped by the Contractor at no additional charge to the City of Hartford.

### **G. Site Recording Conditions**

All taping shall be done during times of good visibility. No outside taping shall be done during periods of visible precipitation or when the ground area is covered with snow, leaves or debris, unless otherwise authorized by the City Engineer.

In order to produce the proper detail and perspective, adequate auxiliary lighting will be required to fill in shadow areas caused by trees, utility poles, road signs and other such objects, as well as other conditions requiring artificial illumination.

The average rate of speed in the general direction of travel of the conveyance used during taping shall not exceed 60 feet per minute. Planning rates and zoom-out rates shall be controlled sufficiently so that playback will produce adequate clarity of the object being viewed.

When conventional wheeled vehicles are used as conveyances for the taping, the distance from the camera lens to the ground shall be such as to ensure proper perspective. In instances where tape coverage will be required in areas not accessible to conventional wheeled vehicles, such coverage shall be obtained by walking or by special conveyance approved by the City Engineer but with the same requirements for tape quality and content as specified herein, except as may be specifically exempted by the City Engineer.

## **NOTICE TO CONTRACTOR - VEHICLE EMISSIONS**

All motor vehicles and/or construction equipment (both on-highway and non-road) shall comply with all pertinent State and Federal regulations relative to exhaust emission controls and safety.

The contractor shall establish staging zones for vehicles that are waiting to load or unload at the contract area. Such zones shall be located where the emissions from the vehicles will have minimum impact on abutters and the general public.

Idling of delivery and/or dump trucks, or other equipment shall not be permitted during periods of non-active use, and it should be limited to three minutes in accordance with the Regulations of Connecticut State Agencies Section 22a-174-18(b)(3)(c):

No mobile source engine shall be allowed “to operate for more than three (3) consecutive minutes when the mobile source is not in motion, except as follows:

- (i) When a mobile source is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control,
- (ii) When it is necessary to operate defrosting, heating or cooling equipment to ensure the safety or health of the driver or passengers,
- (iii) When it is necessary to operate auxiliary equipment that is located in or on the mobile source to accomplish the intended use of the mobile source,
- (iv) To bring the mobile source to the manufacturer’s recommended operating temperature,
- (v) When the outdoor temperature is below twenty degrees Fahrenheit (20 degrees F),
- (vi) When the mobile source is undergoing maintenance that requires such mobile source be operated for more than three (3) consecutive minutes, or
- (vii) When a mobile source is in queue to be inspected by U.S. military personnel prior to gaining access to a U.S. military installation.”

All work shall be conducted to ensure that no harmful effects are caused to adjacent sensitive receptors. Sensitive receptors include but are not limited to hospitals, schools, daycare facilities, elderly housing and convalescent facilities. Engine exhaust shall be located away from fresh air intakes, air conditioners, and windows.

A Vehicle Emissions Mitigation plan will be required for areas where extensive work will be performed in close proximity (less than 50 feet (15 meters)) to sensitive receptors. No work will proceed until a sequence of construction and a Vehicle Emissions Mitigation plan is submitted in writing to the Engineer for review and all comments are addressed prior to the commencement of any extensive construction work in close proximity (less than 50 feet (15 meters)) to sensitive receptors. The mitigation plan must address the control of vehicle emissions from all vehicles and construction equipment.

If any equipment is found to be in non-compliance with this specification, the contractor will be issued a Notice of Non-Compliance and given a 24-hour period in which to bring the equipment into compliance or remove it from the project. If the contractor then does not comply, the Engineer shall withhold all payments for the work performed on any item(s) on which the non-conforming equipment was utilized for the time period in which the equipment was out of compliance.

Any costs associated with this “Vehicle Emissions” notice shall be included in the general cost of the contract. In addition, there shall be no time granted to the contractor for compliance with this notice. The contractor’s compliance with this notice and any associated regulations shall not be grounds for claims as outlined in Section 1.11 –“Claims”.

## **NOTICE TO CONTRACTOR**

### **SECTION M.04 - BITUMINOUS CONCRETE MATERIALS**

Section M.04 is being deleted in its entirety and replaced with the following:

#### **M.04.01—Bituminous Concrete Materials and Facilities**

#### **M.04.02—Mix Design and Job Mix Formula (JMF)**

#### **M.04.03—Production Requirements**

**M4.1 —Bituminous Concrete Materials and Facilities:** Each source of material, Plant, and laboratory used to produce and test bituminous concrete must be qualified on an annual basis by the Engineer. AASHTO or ASTM Standards noted with an (M) have been modified and are detailed in Table M.04.03-5.

Aggregates from multiple sources of supply must not be blended or stored in the same stockpile.

**1. Coarse Aggregate:** All coarse aggregate shall meet the requirements listed in M.01.

**2. Fine Aggregate:** All fine aggregate shall meet the requirements listed in M.01.

**3. Mineral Filler:** Mineral filler shall conform to the requirements of AASHTO M 17.

#### **4. Performance Graded (PG) Asphalt Binder:**

##### **(a) General:**

- i. PG asphalt binder shall be uniformly mixed and blended and be free of contaminants such as fuel oils and other solvents. Binder shall be properly heated and stored to prevent damage or separation.
- ii. The binder shall meet the requirements of AASHTO M 332 and shall be graded or verified in accordance with AASHTO R 29. The Contractor shall submit a Certified Test Report and bill of lading representing each delivery in accordance with AASHTO R 26(M). The Certified Test Report must also indicate the binder specific gravity at 77°F; rotational viscosity at 275°F and 329°F; and the mixing and compaction viscosity-temperature chart for each shipment.
- iii. The Contractor shall submit the name(s) of personnel responsible for receipt, inspection, and record keeping of PG binder. Contractor Plant personnel shall document specific storage tank(s) where binder will be transferred and stored until used and provide binder samples to the Engineer upon request. The person(s) shall assure that each shipment is accompanied by a statement certifying that the transport vehicle was inspected before loading was found acceptable for the material shipped and that the binder is free of contamination from any residual material, along with 2 copies of the bill of lading.
- iv. The blending or combining of PG binders in 1 storage tank at the Plant from different suppliers, grades, or additive percentages is prohibited.

**(b) Basis of Approval:** The request for approval of the source of supply shall list the location where the material will be manufactured, and the handling and storage methods, along with necessary certification in accordance with AASHTO R 26(M). Only suppliers/refineries that have an approved “Quality Control Plan for Performance Graded Binders” formatted in accordance with AASHTO R 26(M) may supply PG binders to Department projects.

(c) Standard Performance Grade (PG) Binder:

- i. Standard PG binder shall be defined as “Neat.” Neat PG binders shall be free from modification with: fillers, extenders, reinforcing agents, adhesion promoters, thermoplastic polymers, acid modification and other additives such as re-refined motor oil, and shall indicate such information on each bill of lading and Certified Test Report.
- ii. The standard asphalt binder shall be PG 64S-22.

(d) Modified Performance Grade (PG) Binder: The modified asphalt binder shall be Performance Grade PG 64E-22 asphalt modified solely with a Styrene-Butadiene-Styrene (SBS) polymer. The polymer modifier shall be added at either the refinery or terminal and delivered to the bituminous concrete production facility as homogenous blend. The stability of the modified binder shall be verified in accordance with ASTM D7173 using the Dynamic Shear Rheometer (DSR). The DSR  $G^*/\sin(\delta)$  results from the top and bottom sections of the ASTM D7173 test shall not differ by more than 10%. The results of ASTM D7173 shall be included on the Certified Test Report. The binder shall meet the requirements of AASHTO M 332 (including Appendix X1) and AASHTO R 29.

(e) Warm Mix Additive or Technology:

- i. The warm mix additive or technology must be listed on the North East Asphalt User Producer Group (NEAUPG) Qualified Warm Mix Asphalt (WMA) Technologies List at the time of bid, which may be accessed online at <http://www.neaupg.uconn.edu>.
- ii. The warm mix additive shall be blended with the asphalt binder in accordance with the manufacturer’s recommendations.
- iii. The blended binder shall meet the requirements of AASHTO M 332 and shall be graded or verified in accordance with AASHTO R 29 for the specified binder grade. The Contractor shall submit a Certified Test Report showing the results of the testing demonstrating the binder grade. In addition, it must include the grade of the virgin binder, the brand name of the warm mix additive, the manufacturer’s suggested rate for the WMA additive, the water injection rate (when applicable), and the WMA Technology manufacturer’s recommended mixing and compaction temperature ranges.

**5. Emulsified Asphalts:**

(a) General:

- i. The emulsified asphalt shall meet the requirements of AASHTO M 140(M) or AASHTO M 208 as applicable.
- ii. The emulsified asphalts shall be free of contaminants such as fuel oils and other solvents.
- iii. The blending at mixing Plants of emulsified asphalts from different suppliers is prohibited.

(b) Basis of Approval:

- i. The request for approval of the source of supply shall list the location where the material is manufactured, the handling and storage methods, and certifications in accordance with AASHTO R 77. Only suppliers that have an approved “Quality Control Plan for Emulsified Asphalt” formatted in accordance with AASHTO R 77 and that submit monthly split samples per grade to the Engineer may supply emulsified asphalt to Department projects.
- ii. Each shipment of emulsified asphalt delivered to the Project site shall be accompanied with the corresponding Certified Test Report listing Saybolt viscosity, residue by

evaporation, penetration of residue, and weight per gallon at 77°F and Material Certificate.

- iii. Anionic emulsified asphalts shall meet the requirements of AASHTO M-140. Materials used for tack coat shall not be diluted and meet grade RS-1 or RS-1h. When ambient temperatures are 80°F and rising, grade SS-1 or SS-1h may be substituted if permitted by the Engineer.
- iv. Cationic emulsified asphalt shall meet the requirements of AASHTO M-208. Materials used for tack coat shall not be diluted and meet grade CRS-1. The settlement and demulsibility test will not be performed unless deemed necessary by the Engineer. When ambient temperatures are 80°F and rising, grade CSS-1 or CSS-1h may be substituted if permitted by the Engineer.

**6. Reclaimed Asphalt Pavement (RAP):**

(a) General: RAP is a material obtained from the cold milling or removal and processing of bituminous concrete pavement. RAP material shall be crushed to 100% passing the 1/2-inch sieve and free from contaminants such as joint compound, wood, plastic, and metals.

(b) Basis of Approval: The RAP material will be accepted on the basis of one of the following criteria:

- i. When the source of all RAP material is from pavements previously constructed on Department projects, the Contractor shall provide a Materials Certificate listing the detailed locations and lengths of those pavements and that the RAP is only from those locations listed.
- ii. When the RAP material source or quality is not known, the Contractor shall request approval from the Engineer at least 30 calendar days prior to the start of the paving operation. The request shall include a Material Certificate and applicable test results stating that the RAP consists of aggregates that meet the specification requirements of M.04.01-1 through M.04.01-3 and that the binder in the RAP is substantially free of solvents, tars and other contaminants. The Contractor is prohibited from using unapproved material on Department projects and shall take necessary action to prevent contamination of approved RAP stockpiles. Stockpiles of unapproved material shall remain separate from all other RAP materials at all times. The request for approval shall include the following:
  - 1. A 50-lb. sample of the RAP to be incorporated into the recycled mixture.
  - 2. A 25-lb. sample of the extracted aggregate from the RAP.

**7. Crushed Recycled Container Glass (CRCG):**

(a) Requirements: The Contractor may propose to use clean and environmentally acceptable CRCG in an amount not greater than 5% by weight of total aggregate.

(b) Basis of Approval: The Contractor shall submit to the Engineer a request to use CRCG. The request shall state that the CRCG contains no more than 1% by weight of contaminants such as paper, plastic, and metal and conforms to the following gradation:

<b>CRCG Grading Requirements</b>	
<u>Sieve Size</u>	<u>Percent Passing</u>
3/8 inch	100
No. 4	35-100
No. 200	0.0-10.0

The Contractor shall submit a Material Certificate to the Engineer stating that the CRCG complies with all the applicable requirements in this Section.

**8. Joint Seal Material:** Joint seal material must meet the requirements of ASTM D6690 - Type 2. The Contractor shall submit a Material Certificate in accordance with 1.06.07 certifying that the joint seal material meets the requirements of this Section.

**9. Recycled Asphalt Shingles (RAS):** RAS shall consist of processed asphalt roofing shingles from post-consumer asphalt shingles or from manufactured shingle waste. The RAS material under consideration for use in bituminous concrete mixtures must be certified as being asbestos-free and shall be entirely free of whole, intact nails. The RAS material shall meet the requirements of AASHTO MP 23.

The Producer shall test the RAS material to determine the asphalt content and the gradation of the RAS material. The Producer shall take necessary action to prevent contamination of RAS stockpiles.

The Contractor shall submit a Material Certificate to the Engineer stating that the RAS complies with all the applicable requirements in this Section.

**10. Plant Requirements:**

(a) General: The Plant producing bituminous concrete shall comply with AASHTO M156.

(b) Storage Silos: The Contractor may use silos for short-term storage with the approval of the Engineer. A storage silo must have heated cones and an unheated silo cylinder if it does not contain a separate internal heating system. When multiple silos are filled, the Contractor shall discharge 1 silo at a time. Simultaneous discharge of multiple silos for the same Project is not permitted.

Type of silo cylinder	Maximum storage time for all classes (hr)	
	<u>HMA</u>	<u>WMA/PMA</u>
Open Surge	4	Mfg Recommendations*
Unheated - Non-insulated	8	Mfg Recommendations*
Unheated - Insulated	18	Mfg Recommendations*
Heated - No inert gas	TBD by the Engineer	TBD by the Engineer

\*Not to exceed HMA limits

(c) Documentation System: The mixing Plant documentation system shall include equipment for accurately proportioning the components of the mixture by weight and in the proper order, controlling the cycle sequence, and timing the mixing operations. Recording equipment shall monitor the batching sequence of each component of the mixture and produce a printed record of these operations on each Plant ticket, as specified herein.

If recycled materials are used, the Plant tickets shall include their dry weight, percentage, and daily moisture content.

If a WMA Technology is added at the Plant, the Plant tickets shall include the actual dosage rate.

For drum Plants, the Plant ticket shall be produced at 5-minute intervals and maintained by the



vendor for a period of 3 years after the completion of the Project.

For batch Plants, the Plant ticket shall be produced for each batch and maintained by the vendor for a period of 3 years after the completion of the Project. In addition, an asterisk (\*) shall be automatically printed next to any individual batch weight(s) exceeding the following tolerances:

Each Aggregate Component	±1.5% of individual or cumulative target weight for each bin
Mineral Filler	±0.5% of the total batch
Bituminous Material	±0.1% of the total batch
Zero Return (Aggregate)	±0.5% of the total batch
Zero Return (Bituminous Material)	±0.1% of the total batch

The entire batching and mixing interlock cut-off circuits shall interrupt and stop the automatic batching operations when an error exceeding the acceptable tolerance occurs in proportioning. The scales shall not be manually adjusted during the printing process. In addition, the system shall be interlocked to allow printing only when the scale has come to a complete rest. A unique printed character (m) shall automatically be printed on the truck and batch plant printout when the automatic batching sequence is interrupted or switched to auto-manual or full manual during proportioning.

(d) **Aggregates:** Aggregate stockpiles shall be managed to prevent segregation and cross contamination. For drum Plants only, the percent moisture content, at a minimum prior to production and half way through production, shall be determined.

(e) **Mixture:** The dry and wet mix times shall be sufficient to provide a uniform mixture and a minimum particle coating of 95% as determined by AASTO T 195(M).

Bituminous concrete mixtures shall contain no more than 0.5% moisture when tested in accordance with AASHTO T 329.

(f) **RAP:** RAP moisture content shall be determined a minimum of twice daily (prior to production and halfway through production).

(g) **Asphalt Binder:** A binder log shall be submitted to the Department’s Central Lab on a monthly basis.

(h) **Warm mix additive:** For mechanically foamed WMA, the water injection rate shall be monitored during production and not exceed 2.0% by total weight of binder. For additive added at the Plant, the dosage rate shall be monitored during production.

(i) **Testing Laboratory:** The Contractor shall maintain a laboratory to test bituminous concrete mixtures during production. The laboratory shall have a minimum of 300 s.f., have a potable water source and drainage in accordance with the CT Department of Public Health Drinking Water Division, and be equipped with all necessary testing equipment as well as with a PC, printer, and telephone with a dedicated hard-wired phone line. In addition, the PC shall have a high-speed internet connection and a functioning web browser with unrestricted access to <https://ctmail.ct.gov>. This equipment shall be maintained in working order at all times and be made available for use by the Engineer.

The laboratory shall be equipped with a heating system capable of maintaining a minimum temperature of 65°F. It shall be clean and free of all materials and equipment not associated with the laboratory. Sufficient light and ventilation must be provided. During summer months adequate cooling or ventilation must be provided so the indoor air temperature shall not exceed the ambient outdoor temperature.

The laboratory testing apparatus, supplies, and safety equipment shall be capable of performing all the applicable tests in their entirety that are referenced in AASHTO R 35 and AASHTO M 323. The Contractor shall ensure that the Laboratory is adequately supplied at all times during the course of the Project with all necessary testing materials and equipment.

The Contractor shall maintain a list of laboratory equipment used in the acceptance testing processes including, but not limited to, balances, scales, manometer/vacuum gauge, thermometers, and gyratory compactor, clearly showing calibration and/or inspection dates, in accordance with AASHTO R 18. The Contractor shall notify the Engineer if any modifications are made to the equipment within the laboratory. The Contractor shall take immediate action to replace, repair, or recalibrate any piece of equipment that is out of calibration, malfunctioning, or not in operation.

#### **M4.2 —Mix design and Job Mix Formula (JMF)**

##### **1. Curb Mix:**

(a) Requirements: The Contractor shall use bituminous concrete that meets the requirements of Table M.04.02-1. RAP may be used in 5% increments by weight up to 30%.

(b) Basis of Approval: Annually, an approved JMF based on a mix design for curb mix must be on file with the Engineer prior to use.

The Contractor shall test the mixture for compliance with the submitted JMF and Table M.04.02-1. The maximum theoretical density (Gmm) will be determined by AASHTO T 209. If the mixture does not meet the requirements, the JMF shall be adjusted within the ranges shown in Table M.04.02-1 until an acceptable mixture is produced.

An accepted JMF from the previous operating season may be acceptable to the Engineer provided that there are no changes in the sources of supply for the coarse aggregate, fine aggregate, recycled material (if applicable) and the Plant operation had been consistently producing acceptable mixture.

Any change in component source of supply or consensus properties must be approved by the Engineer. A revised JMF shall be submitted prior to use.

**TABLE M.04.02-1:  
Control Points for Curb Mix Mixtures**

Mix	Curb Mix	Production Tolerances from JMF Target
<b>Grade of PG Binder content %</b>	<b>PG 64S-22 6.5 - 9.0</b>	<b>0.4</b>
<b>Sieve Size</b>		
No. 200	3.0 - 8.0 (b)	2.0
No. 50	10 - 30	4
No. 30	20 - 40	5
No. 8	40 - 70	6
No. 4	65 - 87	7
1/4 inch		
3/8 inch	95 - 100	8
1/2 inch	100	8
3/4 inch		8
1 inch		
2 inch		
<b>Additionally, the fraction of material retained between any 2 consecutive sieves shall not be less than 4%.</b>		
<b>Mixture Temperature</b>		
<b>Binder</b>	325°F maximum	
<b>Aggregate</b>	280-350°F	
<b>Mixtures</b>	265-325°F	
<b>Mixture Properties</b>		
<b>Air Voids (VA) %</b>	0 – 4.0 (a)	
<b>Notes:</b> (a) Compaction Parameter 50 gyrations (N <sub>des</sub> ) (b) The percent passing the No. 200 sieve shall not exceed the percentage of bituminous asphalt binder.		

**2. Superpave Design Method – S0.25, S0.375, S0.5, and S1:**

(a) **Requirements:** All designated mixes shall be designed using the Superpave mix design method in accordance with AASHTO R 35. A JMF based on the mix design shall meet the requirements of Tables M.04.02-2 to M.04.02-5. Each JMF and component samples must be submitted no less than 7 days prior to production and must be approved by the Engineer prior to use. All JMFs expire at the end of the calendar year.

All aggregate component consensus properties and tensile strength ratio (TSR) specimens shall be tested at an AASHTO Materials Reference Laboratory (AMRL) by NETTCP Certified Technicians.

All bituminous concrete mixes shall be tested for stripping susceptibility by performing the TSR test procedure in accordance with AASHTO T 283(M) at a minimum every 36 months. The compacted specimens may be fabricated at the Plant and then tested at an AMRL accredited facility. A minimum of 45000 grams of laboratory or plant blended mixture and the

corresponding complete Form MAT-412s shall be submitted to the Division of Material Testing (DMT) for design TSR testing verification. The mixture submitted shall be representative of the corresponding mix design as determined by the Engineer.

- i. Superpave Mixtures with RAP: RAP may be used with the following conditions:
    - RAP amounts up to 15% may be used with no binder grade modification.
    - RAP amounts up to 20% may be used provided a new JMF is approved by the Engineer. The JMF submittal shall include the grade of virgin binder added. The JMF shall be accompanied by a blending chart and supporting test results in accordance with AASHTO M 323 Appendix X1, or by testing that shows the combined binder (recovered binder from the RAP, virgin binder at the mix design proportions, warm mix asphalt additive and any other modifier if used) meets the requirements of the specified binder grade.
    - Two (2) representative samples of RAP shall be obtained. Each sample shall be split, and 1 split sample shall be tested for binder content in accordance with AASHTO T 164 and the other in accordance with AASHTO T 308.
    - RAP material shall not be used with any other recycling option.
  - ii. Superpave Mixtures with RAS: RAS may be used solely in HMA S1 mixtures with the following conditions:
    - RAS amounts up to 3% may be used.
    - RAS total binder replacement up to 15% may be used with no binder grade modification.
    - RAS total binder replacement up to 20% may be used provided a new JMF is approved by the Engineer. The JMF submittal shall include the grade of virgin binder added. The JMF shall be accompanied by a blending chart and supporting test results in accordance with AASHTO M 323 Appendix X1, or by testing that shows the combined binder (recovered binder from the RAP, virgin binder at the mix design proportions, warm mix asphalt additive and any other modifier if used) meets the requirements of the specified binder grade.
    - Superpave Mixtures with RAS shall meet AASHTO PP 78 design considerations.
  - iii. Superpave Mixtures with CRCG: CRCG may be used solely in HMA S1 mixtures. One percent (1%) of hydrated lime, or other accepted non-stripping agent, shall be added to all mixtures containing CRCG. CRCG material shall not be used with any other recycling option.
- (b) Basis of Approval: The following information must be included in the JMF submittal:
- i. Gradation, consensus properties and specific gravities of the aggregate, RAP or RAS.
  - ii. Average asphalt content of the RAP or RAS by AASHTO T 164.
  - iii. Source of RAP or RAS and percentage to be used.
  - iv. Warm mix Technology, manufacturer's recommended additive rate and tolerances, and manufacturer recommended mixing and compaction temperatures.
  - v. TSR test report and anti-strip manufacturer and recommended dosage rate if applicable.
  - vi. Mixing and compaction temperature ranges for the mix with and without the warm-mix technology incorporated.
  - vii. JMF ignition oven correction factor by AASHTO T 308.

With each JMF submittal, the following samples shall be submitted to the Division of Materials Testing:

- 4 - one (1) quart cans of PG binder, with corresponding Safety Data Sheet (SDS)
- 1 - 50 lbs. bag of RAP
- 2 - 50 lbs. bags of Plant-blended virgin aggregate

A JMF may not be approved if any of the properties of the aggregate components or mix do not meet the verification tolerances as described in the Department's current QA Program for Materials, Acceptance and Assurance Testing Policies and Procedures.

Any material based on a JMF, once approved, shall only be acceptable for use when it is produced by the designated Plant, it utilizes the same components, and the production of material continues to meet all criteria as specified in Tables M.04.02-2, M.04.02-3 and M.04.02-4. A new JMF must be submitted to the Engineer for approval whenever a new component source is proposed.

Only 1 mix with 1 JMF will be approved for production at a time. Switching between approved JMF mixes with different component percentages or sources of supply is prohibited.

**TABLE M.04.02-2: Superpave Master Range for Bituminous Concrete Mixture Design Criteria**

Sieve	S0.25		S0.375		S0.5		S1	
	Control Points		Control Points		Control Points		Control Points	
inches	Min (%)	Max (%)	Min (%)	Max (%)	Min (%)	Max (%)	Min (%)	Max (%)
2.0	-	-	-	-	-	-	-	-
1.5	-	-	-	-	-	-	100	-
1.0	-	-	-	-	-	-	90	100
3/4	-	-	-	-	100	-	-	90
1/2	100	-	100	-	90	100	-	-
3/8	97	100	90	100	-	90	-	-
No. 4	72	90	-	72	-	-	-	-
No. 8	32	67	32	67	28	58	19	45
No. 16	-	-	-	-	-	-	-	-
No. 30	-	-	-	-	-	-	-	-
No. 50	-	-	-	-	-	-	-	-
No. 100	-	-	-	-	-	-	-	-
No. 200	2.0	10.0	2.0	10.0	2.0	10.0	1.0	7.0
VMA (%)	16.5 ± 1		16.0 ± 1		15.0 ± 1		13.0 ± 1	
VA (%)	4.0 ± 1		4.0 ± 1		4.0 ± 1		4.0 ± 1	
Gse	JMF value		JMF value		JMF value		JMF value	
Gmm	JMF ± 0.030		JMF ± 0.030		JMF ± 0.030		JMF ± 0.030	
Dust / effective binder	0.6 - 1.2		0.6 - 1.2		0.6 - 1.2		0.6 - 1.2	
TSR	≥ 80%		≥ 80%		≥ 80%		≥ 80%	
T-283 Stripping	Minimal as determined by the Engineer							

(c) **Mix Status:** Each facility will have each type of bituminous concrete mixture rated based on the results of the previous year of production. Mix status will be provided to each bituminous concrete Producer prior to the beginning of the paving season.

The rating criteria are based on compliance with Air Voids and Voids in Mineral Aggregate (VMA) as indicated in Table M.04.03-4 and are calculated as follows:

Criteria A: Percentage of acceptance test results with compliant air voids.

Criteria B: The average of the percentage of acceptance results with compliant VMA and the percentage of acceptance results with compliant air voids.

The final rating assigned will be the lower of the rating obtained with Criteria A or Criteria B.

Mix status is defined as:

“A” – Approved: Assigned to each mixture type from a production facility with a current rating of 70% or greater, or to each mixture type completing a successful PPT.

“PPT” – Pre-Production Trial: Temporarily assigned to each mixture type from a production facility when:

1. there are no compliant acceptance production test results submitted to the Department from the previous year;
2. there is a source change in one or more aggregate components;
3. there is a component percentage change of more than 5% by weight;
4. there is a change in RAP percentage;
5. the mixture has a rating of less than 70% from the previous season;
6. it is a new JMF not previously submitted; or
7. the average of 10 consecutive acceptance results for VFA, Density to  $N_{ini}$  or dust to effective binder ratio does not meet the criteria in tables M.04.02-2 and M.04.02-4.

Bituminous concrete mixtures rated with a “PPT” status cannot be used on Department projects. Testing shall be performed by the Producer with NETTCP certified personnel on material under this status. Test results must confirm that specification requirements in Tables M.04.02-2 through M.04.02-4 are met and the binder content (Pb) meets the requirements in Table M.04.03-2 before material can be used. One of the following methods must be used to verify the test results:

Option A: Schedule a day when a Department Inspector can be at the facility to witness testing

Option B: When the Contractor or their representative performs testing without being witnessed by an Inspector, the Contractor shall submit the test results and a split sample including 2 gyratory molds, 5,000 grams of boxed bituminous concrete, and 5,000 grams of cooled loose bituminous concrete for verification testing and approval

Option C: When the Contractor or their representative performs testing without being witnessed by a Department Inspector, the Engineer may verify the mix in the Contractor’s laboratory

Witnessing or verifying by the Department of compliant test results will change the mix’s status to “A”

The differences between the Department’s test results and the Contractor’s must be within the “C” tolerances included in the [Department’s QA Program for Materials, Acceptance and Assurance Testing Policies and Procedures](#) in order to be verified.

“U” – Not Approved: Status assigned to a type of mixture that does not have an approved JMF. Bituminous concrete mixtures with a “U” status cannot be used on Department projects.

**TABLE M.04.02-3:  
Superpave Consensus Properties Requirements for Combined Aggregate**

Traffic Level	Design ESALs (80kN) Millions	Coarse Aggregate Angularity <sup>(1)</sup>	Fine Aggregate Angularity AASHTO T 304, Method A Minimum %	Flat and Elongated Particles <sup>(2)</sup> ASTM D4791, Maximum %	Sand Equivalent AASHTO T 176, Minimum %
		ASTM D5821, Minimum %			
1	< 0.3	55/- -	40	10	40
2	0.3 to < 3.0	75/- -	40	10	40
3	≥ 3.0	95/90	45	10	45

Notes:  
<sup>(1)</sup> 95/90 denotes that a minimum of 95% of the coarse aggregate, by mass, shall have one fractured face and that a minimum of 90% shall have two fractured faces.  
<sup>(2)</sup> Criteria presented as maximum Percent by mass of flat and elongated particles of materials retained on the No. 4 sieve, determined at 5:1 ratio.

**TABLE M.04.02-4: Superpave Traffic Levels and Design Volumetric Properties**

Traffic Level	Design ESALs (million)	Number of Gyration by Superpave Gyrotory Compactor			Percent Density of Gmm from HMA/ WMA Specimen			Voids Filled with Asphalt (VFA) Based on Nominal Mix Size - Inch			
		N <sub>ini</sub>	N <sub>des</sub>	N <sub>max</sub>	N <sub>ini</sub>	N <sub>des</sub>	N <sub>max</sub>	0.25	0.375	0.5	1
1	<0.3	6	50	75	≤91.5	96.0	≤98.0	70-80	70-80	70-80	67-80
2	0.3 to <3.0	7	75	115	≤90.5	96.0	≤98.0	65-78	65-78	65-78	65-78
3	≥3.0	7	75	115	≤90.0	96.0	≤98.0	65-77	65-76	65-75	65-75



**TABLE M.04.02-5:  
Superpave Minimum Binder Content by Mix Type and Level**

Mix Type	Level	Binder Content Minimum
S0.25	1	5.80
S0.25	2	5.70
S0.25	3	5.70
S0.375	1	5.70
S0.375	2	5.60
S0.375	3	5.60
S0.5	1	5.10
S0.5	2	5.00
S0.5	3	5.00
S1	1	4.60
S1	2	4.50
S1	3	4.50

**M43 —Production Requirements:**

**1. Standard Quality Control Plan (QCP) for Production:** The QCP for production shall describe the organization and procedures, which the Contractor shall use to administer quality control. The QCP shall include the procedures used to control the production process, to determine when immediate changes to the processes are needed, and to implement the required changes. The QCP must detail the inspection, sampling and testing protocols to be used, and the frequency for each.

Control Chart(s) shall be developed and maintained for critical aspect(s) of the production process as determined by the Contractor. The control chart(s) shall identify the material property, applicable upper and lower control limits, and be updated with current test data. As a minimum, the following quality characteristics shall be included in the control charts:

- percent passing No. 4 sieve
- percent passing No. 200 sieve
- binder content
- air voids
- Gmm
- Gse
- VMA

The control chart(s) shall be used as part of the quality control system to document variability of the bituminous concrete production process. The control chart(s) shall be submitted to the Engineer the first day of each month.

The QCP shall also include the name and qualifications of a Quality Control Manager. The Quality Control Manager shall be responsible for the administration of the QCP, including compliance with the plan and any plan modifications.

The Contractor shall submit complete production testing records to the Engineer within 24 hours in a manner acceptable to the Engineer.

The QCP shall also include the name and qualifications of any outside testing laboratory performing any QC functions on behalf of the Contractor. The QCP must also include a list of sampling and testing methods and frequencies used during production, and the names of all Quality Control personnel and their duties.

Approval of the QCP does not imply any warranty by the Engineer that adherence to the plan will result in production of bituminous concrete that complies with these specifications. The Contractor shall submit any changes to the QCP as work progresses.

## **2. Acceptance Requirements:**

### **(a) General:**

For those mixes with a total estimated project tonnage over 500 tons, a NETTCP HMA Paving Inspector certified Contractor representative shall obtain a field sample of the material placed at the project site in accordance with AASHTO T 168 using the procedure indicated in Section 5.2.3 or an alternate procedure approved by the Engineer. Sampling from the truck at the Plant in accordance with AASHTO T 168 using the procedure indicated in Section 5.2.2 will be allowed for those mixes with a total estimated project tonnage equal to or less than 500 tons. Regardless of sampling location, the sample shall be quartered by the Contractor in accordance with AASHTO R 47 and placed in an approved container. The container shall be sealed with a security tape provided by the Department and labelled to include the project number, date of paving, mix type, lot and subplot numbers and daily tonnage. The minimum weight of each quartered sample shall be 14000 grams. The Contractor shall transport one of the containers to the Department's Central Laboratory in Rocky Hill, retain one of the sealed containers for potential use in dispute resolution and test the remaining samples for acceptance in accordance with past practice.

The Contractor shall submit all acceptance test results to the Engineer within 24 hours or prior to the next day's production. All acceptance test specimens and supporting documentation must be retained by the Contractor and may be disposed of with the approval of the Engineer. All quality control specimens shall be clearly labeled and separated from the acceptance specimens. Contractor personnel performing QC and acceptance testing must be present at the facility prior to, during, and until completion of production, and be certified as a NETTCP HMA Plant Technician or Interim HMA Plant Technician and be in good standing. Production of material for use on State projects must be suspended by the Contractor if such personnel are not present. Technicians found by the Engineer to be non-compliant with NETTCP policies and procedures or Department policies may be removed by the Engineer from participating in the acceptance testing process for Department projects until their actions can be reviewed.

Verification and dispute resolution testing will be performed by the Engineer in accordance with the Department's QA Program for Materials.

Should the Department be unable to validate the Contractor's acceptance test result(s) for a lot of material, the Engineer will use results from verification testing and re-calculate the pay adjustment for that lot. The Contractor may request to initiate the dispute resolution process in writing within 24 hours of receiving the adjustment and must include supporting documentation or test results to justify the request.

**(b) Curb Mix Acceptance Sampling and Testing Procedures:** Curb Mixes shall be tested by the Contractor at a frequency of 1 test per every 250 tons of cumulative production, regardless of the day of production.

When these mix designs are specified, the following acceptance procedures and AASHTO test methods shall be used:

**TABLE M.04.03-1: Curb Mix Acceptance Test Procedures**

<b>Protocol</b>	<b>Reference</b>	<b>Description</b>
<b>1</b>	<b>AASHTO T 30(M)</b>	Mechanical Analysis of Extracted Aggregate
<b>2</b>	<b>AASHTO T 168</b>	Sampling of Bituminous Concrete
<b>3</b>	<b>AASHTO T 308</b>	Binder Content by Ignition Oven Method (adjusted for aggregate correction factor)
<b>4</b>	<b>AASHTO T 209(M)<sup>(2)</sup></b>	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
<b>5</b>	<b>AASHTO T 312<sup>(2)</sup></b>	<sup>(1)</sup> Superpave Gyrotory Molds Compacted to N <sub>des</sub>
<b>6</b>	<b>AASHTO T 329</b>	Moisture Content of Hot-Mix Asphalt (HMA) by Oven Method

**Notes:** <sup>(1)</sup> One (1) set equals 2 each of 6-inch molds. Molds to be compacted to 50 gyrations.

<sup>(2)</sup> Once per year or when requested by the Engineer.

i. Determination of Off-Test Status:

1. Curb Mix is considered “off test” when the test results indicate that any single value for bitumen content or gradation are not within the tolerances shown in Table M.04.02-1 for that mixture. If the mix is “off test,” the Contractor must take immediate actions to correct the deficiency and a new acceptance sample shall be tested on the same day or the following day of production.
2. When multiple silos are located at 1 site, mixture supplied to 1 project is considered as coming from 1 source for the purpose of applying the “off test” status.
3. The Engineer may cease supply from the Plant when test results from 3 consecutive samples are not within the JMF tolerances or the test results from 2 consecutive samples not within the control points indicated in Table M.04.02-1 regardless of production date.

ii. JMF Revisions

1. If a test indicates that the bitumen content or gradation are outside the tolerances, the Contractor may make a single JMF revision as allowed by the Engineer prior to any additional testing. Consecutive test results outside the requirements of Table M.04.02-1 JMF tolerances may result in rejection of the mixture.
2. Any modification to the JMF shall not exceed 50% of the JMF tolerances indicated in Table M.04.02-1 for any given component of the mixture without approval of the Engineer. When such an adjustment is made to the bitumen, the corresponding production percentage of bitumen shall be revised accordingly.

(c) Superpave Mix Acceptance:

i. Sampling and Testing Procedures

Production Lot: The lot will be defined as one of the following types:

- Non-PWL Production Lot for total estimated Project quantities per mixture less than 3500 tons: All mixture placed during a single continuous paving operation.
- PWL Production Lot for total estimated Project quantities per mixture of 3500 tons or more: Each 3500 tons of mixture produced within 30 calendar days.

Production Sub Lot:

- For Non-PWL: As defined in Table M.04.03-2
- For PWL: 500 tons (The last sub lot may be less than 500 tons.)

**Partial Production Lots (For PWL only):** A Lot with less than 3500 tons due to:

- completion of the course;
- a Job Mix Formula revision due to changes in:
  - o cold feed percentages over 5%,
  - o target combined gradation over 5%,
  - o target binder over 0.15%,
  - o any component specific gravity; or
- a lot spanning 30 calendar days.

The acceptance sample(s) location(s) shall be selected using stratified - random sampling in accordance with ASTM D3665 based on:

- the total daily estimated tons of production for non-PWL lots, or
- the total size for PWL lots.

One (1) acceptance sample shall be obtained and tested per sub lot with quantities over 125 tons. The Engineer may direct that additional acceptance samples be obtained. For non-PWL lots, one (1) acceptance test shall always be performed in the last sub lot based on actual tons of material produced.

For non-PWL lots, quantities of the same mixture per Plant may be combined daily for multiple State projects to determine the number of sub lots.

The payment adjustment will be calculated as described in 4.06.

**TABLE M.04.03-2:**

**Superpave Acceptance Testing Frequency per Type/Level/Plant for Non-PWL Lots**

<b>Daily Quantity Produced in Tons (Lot)</b>	<b>Number of Sub Lots/Tests</b>
0 to 125	0, Unless requested by the Engineer
126 to 500	1
501 to 1,000	2
1,001 to 1,500	3
1,500 or greater	1 per 500 tons or portions thereof

The following test procedures shall be used for acceptance:

**TABLE M.04.03-3: Superpave Acceptance Testing Procedures**

Protocol	Procedure	Description
1	AASHTO T 168	Sampling of bituminous concrete
2	AASHTO R 47	Reducing samples to testing size
3	AASHTO T 308	Binder content by ignition oven method (adjusted for aggregate correction factor)
4	AASHTO T 30(M)	Gradation of extracted aggregate for bituminous concrete mixture
5	AASHTO T 312	<sup>(1)</sup> Superpave gyratory molds compacted to $N_{des}$
6	AASHTO T 166	<sup>(2)</sup> Bulk specific gravity of bituminous concrete
7	AASHTO R 35	<sup>(2)</sup> Air voids, VMA
8	AASHTO T 209(M)	Maximum specific gravity of bituminous concrete (average of 2 tests)
9	AASHTO T 329	Moisture content of bituminous concrete

**Notes:** <sup>(1)</sup> One (1) set equals 2 each of 6-inch molds. Molds to be compacted to  $N_{max}$  for PPTs and to  $N_{des}$  for production testing. The first sub lot of the year shall be compacted to  $N_{max}$ .

<sup>(2)</sup> Average value of 1 set of 6-inch molds.

If the average ignition oven corrected binder content differs by 0.3% or more from the average of the Plant ticket binder content in 5 consecutive tests regardless of the production date (moving average), the Contractor shall immediately investigate, determine an assignable cause, and correct the issue. When 2 consecutive moving average differences are 0.3% or more and no assignable cause has been established, the Engineer may require a new ignition oven aggregate correction factor to be performed or to adjust the current factor by the average of the differences between the corrected binder content and production Plant ticket for the last 5 acceptance results.

The Contractor shall perform TSR testing within 30 days after the start of production for all design levels of HMA- and PMA- S0.5 Plant-produced mixtures, in accordance with AASHTO T 283(M). The TSR test shall be performed at an AMRL certified laboratory by NETTCP certified technicians. The compacted specimens may be fabricated at the Plant and then tested at an AMRL accredited facility. A minimum of 45000 grams of plant blended mixture and the corresponding complete Form MAT-412s shall be submitted to the DMT for production TSR testing verification. The mixture submitted shall be representative of the corresponding mix design as determined by the Engineer. Additionally, the TSR test report and tested specimens shall be submitted to the Engineer for review. Superpave mixtures that require anti-strip additives (either liquid or mineral) shall continue to meet all requirements specified herein for binder and bituminous concrete. The Contractor shall submit the name, manufacturer, percent used, technical datasheet and SDS for the anti-strip additive (if applicable) to the Engineer.

i. Determination of Off-Test Status:

1. Superpave mixes shall be considered “*off test*” when any control point sieve, binder content, VA, VMA, and Gmm value is outside of the limits specified in Table M.04.03-4 or the target binder content at the Plant is below the minimum binder

content stated in Table M.04.02-5. Note that further testing of samples or portions of samples not initially tested for this purpose cannot be used to change the status.

2. Any time the bituminous concrete mixture is considered off-test:
  - A. The Contractor shall notify the Engineer when the Plant is “*off test*” for any mix design that is delivered to the Project in any production day. When multiple silos are located at 1 site, mixture supplied to 1 project is considered as coming from 1 source for the purpose of applying the “*off test*” determination.
  - B. The Contractor must take immediate actions to correct the deficiency, minimize “*off test*” production to the Project, and obtain an additional Process Control(PC) test after any corrective action to verify production is in conformance with the specifications. A PC test will not be used for acceptance and is solely for the use of the Contractor in its quality control process.

ii. Cessation of Supply for Superpave Mixtures in Non-PWLLots:

A mixture **shall not be used** on Department projects when it is “off test” for:

1. four (4) consecutive tests in any combination of VA, VMA or Gmm, regardless of date of production, or
2. two (2) consecutive tests in the control point sieves in 1 production shift.

As a result of cessation of supply, the mix status will be changed to PPT

iii. JMF revisions:

JMF revisions are only permitted prior to or after a production shift. A JMF revision is effective from the time it was submitted and is not retroactive to the previous test(s). JMF revisions shall be justified by a documented trend of test results.

Revisions to aggregate or RAP specific gravities are only permitted when testing is performed at an AMRL certified laboratory by NETTCP certified technicians.

A JMF revision is required when the Plant target RAP or bin percentage deviates by more than 5% or the Plant target binder content deviates by more than 0.15% from the active JMF.

**TABLE M.04.03-4: Superpave Mixture Production Requirements**

	<b>S0.25</b>		<b>S0.375</b>		<b>S0.5</b>		<b>S1</b>		Tolerances
Sieve	Control Points		Control Points		Control Points		Control Points		From JMF Targets <sup>(2)</sup>
inches	Min (%)	Max (%)	Min (%)	Max (%)	Min (%)	Max (%)	Min (%)	Max (%)	+/- Tolerance
1.5	-	-	-	-	-	-	100	-	
1.0	-	-	-	-	-	-	90	100	
3/4	-	-	-	-	100	-	-	90	
1/2	100	-	100	-	90	100	-	-	
3/8	97	100	90	100	-	90	-	-	
No. 4	72	90	-	72	-	-	-	-	
No. 8	32	67	32	67	28	58	19	45	
No. 16	-	-	-	-	-	-	-	-	
No. 200	2.0	10.0	2.0	10.0	2.0	10.0	1.0	7.0	
Pb	JMF value		JMF value		JMF value		JMF value		0.3 <sup>(3)</sup>
VMA (%)	16.5		16.0		15.0		13.0		1.0 <sup>(4)</sup>
VA (%)	4.0		4.0		4.0		4.0		1.0 <sup>(5)</sup>
Gmm	JMF value		JMF value		JMF value		JMF value		0.030
Mix Temp. – HMA <sup>(6)</sup>	265-325°F <sup>(1)</sup>		265-325°F <sup>(1)</sup>		265-325°F <sup>(1)</sup>		265-325°F <sup>(1)</sup>		
Mix Temp. – PMA <sup>(6)</sup>	285-335°F <sup>(1)</sup>		285-335°F <sup>(1)</sup>		285-335°F <sup>(1)</sup>		285-335°F <sup>(1)</sup>		
Prod. TSR	N/A		N/A		≥80%		N/A		
T-283 Stripping	N/A		N/A		Minimal TBD by the Engineer		N/A		

**Notes:** <sup>(1)</sup> 300°F minimum after October 15.

<sup>(2)</sup> JMF tolerances shall be defined as the limits for production compliance.

<sup>(3)</sup> 0.4 for PWL lots

<sup>(4)</sup> 1.3 for all PWL lots except S/P 0.25 mixes. 1.1 for S/P 0.25 Non-PWL lots. 1.4 for S/P 0.25 PWL lots

<sup>(5)</sup> 1.2 for PWL lots

<sup>(6)</sup> Also applies to placement

**Table M.04.03-5:  
Modifications to Standard AASHTO and ASTM Test Specifications and Procedures**

<b>AASHTO Standard Method of Test</b>	
<b>Reference</b>	<b>Modification</b>
<b>T 30</b>	Section 7.2 through 7.4 Samples are not routinely washed for production testing
<b>T 209</b>	Section 7.2 The average of 2 bowls is used proportionally in order to satisfy minimum mass requirements. 8.3 Omit Pycnometer method.
<b>T 283</b>	When foaming technology is used, the material used for the fabrication of the specimens shall be cooled to room temperature, and then reheated to the manufacturer's recommended compaction temperature prior to fabrication of the specimens.
<b>AASHTO Standard Recommended Practices</b>	
<b>Reference</b>	<b>Modification</b>
<b>R 26</b>	<p>All laboratory technician(s) responsible for testing PG binders shall be certified or Interim Qualified by NETTCP as a PG Asphalt Binder Lab Technician.</p> <p>All laboratories testing binders for the Department are required to be accredited by the AMRL.</p> <p>Sources interested in being approved to supply PG binders to the Department by use of an "in-line blending system" must record properties of blended material and additives used.</p> <p>Each source of supply of PG binder must indicate that the binders contain no additives used to modify or enhance their performance properties. Binders that are manufactured using additives, modifiers, extenders, etc., shall disclose the type of additive, percentage and any handling specifications or limitations required.</p> <p>All AASHTO M 320 references shall be replaced with AASHTO M 332.</p> <p>Once a month, 1 split sample and test results for each asphalt binder grade and each lot shall be submitted by the PG binder supplier to the Department's Central Lab. Material remaining in a certified lot shall be re-certified no later than 30 days after initial certification. Each April and September, the PG binder supplier shall submit test results for 2 BBR tests at 2 different temperatures in accordance with AASHTO R 29.</p>



## **NOTICE TO CONTRACTOR**

### **SECTION 4.06 - BITUMINOUS CONCRETE**

Section 4.06 is being deleted in its entirety and replaced with the following:

#### **4.6.1 —Description 4.06.02—**

#### **Materials 4.06.03—**

#### **Construction Methods**

- 1. Material Documentation**
- 2. Transportation of Mixture**
- 3. Paving Equipment**
- 4. Test Section**
- 5. Transitions for Roadway Surface**
- 6. Spreading and Finishing of Mixture**
- 7. Longitudinal Joint Construction Methods**
- 8. Contractor Quality Control (QC) Requirements**
- 9. Temperature and Seasonal Requirements**
- 10. Field Density**
- 11. Acceptance Sampling and Testing**
- 12. Density Dispute Resolution Process**
- 13. Corrective Work Procedure**
- 14. Protection of the Work**
- 15. Cut Bituminous Concrete Pavement**

#### **4.06.04—Method of Measurement 4.06.05—**

#### **Basis of Payment**

**461 —Description:** Work under this Section shall include the production, delivery, placement and compaction of a uniform textured, non-segregated, smooth bituminous concrete pavement to the grade and cross section shown on the plans.

The following terms as used in this specification are defined as:

**Bituminous Concrete:** A composite material consisting of prescribed amounts of asphalt binder and aggregates. Asphalt binder may also contain additives engineered to modify specific properties and/or behavior of the composite material. References to bituminous concrete apply to all of its forms, such as those identified as hot-mix asphalt (HMA) or polymer-modified asphalt (PMA).

**Bituminous Concrete Plant (Plant):** A structure where aggregates and asphalt binder are combined in a controlled fashion into a bituminous concrete mixture suitable for forming pavements and other paved surfaces.

**Course:** A continuous layer (a lift or multiple lifts) of the same bituminous concrete mixture placed as part of the pavement structure.

**Density Lot:** The total tonnage of all bituminous concrete placed in a single lift which are:

PWL density lots = When the project total estimated quantity per mixture is larger than 3,500 tons

Simple Average density lots = When the project total estimated quantity per mixture is

3,500 tons or less

Disintegration: Erosion or fragmentation of the pavement surface which can be described as polishing, weathering-oxidizing, scaling, spalling, raveling, or formation of potholes.

Dispute Resolution: A procedure used to resolve conflicts between the Engineer and the Contractor's results that may affect payment.

Hot Mix Asphalt (HMA): A bituminous concrete mixture typically produced at 325°F.

Job Mix Formula (JMF): A recommended aggregate gradation and asphalt binder content to achieve the required mixture properties.

Lift: An application of a bituminous concrete mixture placed and compacted to a specified thickness in a single paver pass.

Percent Within Limits (PWL): The percentage of the lot falling between the Upper Specification Limit (USL) and the Lower Specification Limit (LSL).

Polymer Modified Asphalt (PMA): A bituminous concrete mixture containing a polymer-modified asphalt binder and using a qualified warm mix technology.

Production Lot: The total tonnage of a bituminous concrete mixture from a single source that may receive an adjustment.

Production Sub Lot: Portion of the production lot typically represented by a single sample.

Quality Assurance (QA): All those planned and systematic actions necessary to provide CTDOT the confidence that a Contractor will perform the work as specified in the Contract.

Quality Control (QC): The sum total of activities performed by the vendor (Producer, Manufacturer, and Contractor) to ensure that a product meets contract specification requirements.

Superpave: A bituminous concrete mix design used in mixtures designated as "S\*" Where "S" indicates Superpave and \* indicates the sieve related to the nominal maximum aggregate size of the mix.

Segregation: A non-uniform distribution of a bituminous concrete mixture in terms of gradation, temperature, or volumetric properties.

Warm Mix Asphalt (WMA) Technology: A qualified additive or technology that may be used to produce a bituminous concrete at reduced temperatures and/or increase workability of the mixture.

**462 —Materials:** All materials shall meet the requirements of Section M.04.

**1. Materials Supply:** The bituminous concrete mixture must be from one source of supply and originate from one Plant unless authorized by the Engineer.

**2. Recycled Materials:** Reclaimed Asphalt Pavement (RAP), Crushed Recycled Container Glass (CRCG), Recycled Asphalt Shingles (RAS), or crumb rubber (CR) from recycled tires may be incorporated in bituminous concrete mixtures in accordance with Project Specifications.

**463 —Construction Methods**

**1. Material Documentation:** All vendors producing bituminous concrete must have Plants with automated vehicle-weighing scales, storage scales, and material feeds capable of producing a delivery ticket containing the information below.

- a. State of Connecticut printed on ticket.
- b. Name of Producer, identification of Plant, and specific storage silo if used.
- c. Date and time.

- d. Mixture Designation mix type and level. Curb mixtures for machine-placed curbing must state "curb mix only."
- e. If WMA Technology is used, "-W" must be listed following the mixture designation.
- f. Net weight of mixture loaded into the vehicle. (When RAP and/or RAS is used, the moisture content shall be excluded from mixture net weight.)
- g. Gross weight (equal to the net weight plus the tare weight or the loaded scale weight).
- h. Tare weight of vehicle (daily scale weight of the empty vehicle).
- i. Project number, purchase order number, name of Contractor (if Contractor other than Producer).
- j. Vehicle number - unique means of identification of vehicle.
- k. For Batch Plants: individual aggregate, recycled materials, and virgin asphalt max/target/min weights when silos are not used.
- l. For every mixture designation: the running daily and project total delivered and sequential load number.

The net weight of mixture loaded into the vehicle must be equal to the cumulative measured weights of its components.

The Contractor must notify the Engineer immediately if, during production, there is a malfunction of the weight recording system in the automated Plant. Manually written tickets containing all required information will be allowed for no more than 1 hour.

The State reserves the right to have an Inspector present to monitor batching and/or weighing operations.

**2. Transportation of Mixture:** The mixture shall be transported in vehicles that are clean of all foreign material, excessive coating or cleaning agents, and that have no gaps through which material might spill. Any material spilled during the loading or transportation process shall be quantified by re-weighing the vehicle. The Contractor shall load vehicles uniformly so that segregation is minimized. Loaded vehicles shall be tightly covered with waterproof covers acceptable to the Engineer. Mesh covers are prohibited. The cover must minimize air infiltration. Vehicles found not to be in conformance shall not be loaded

Vehicles with loads of bituminous concrete being delivered to State projects must not exceed the statutory or permitted load limits referred to as gross vehicle weight (GVW). The Contractor shall furnish a list and allowable weights of all vehicles transporting mixture. The State reserves the right to check the gross and tare weight of any vehicle. If the gross or tare weight varies from that shown on the delivery ticket by more than 0.4%, the Engineer will recalculate the net weight. The Contractor shall correct the discrepancy to the satisfaction of the Engineer.

If a vehicle delivers mixture to the Project and the delivery ticket indicates that the vehicle is overweight, the load may not be rejected but a "Measured Weight Adjustment" will be taken in accordance with Article 4.06.04.

Vehicle body coating and cleaning agents must not have a deleterious effect on the mixture. The use of solvents or fuel oil, in any concentration, is prohibited for the coating of vehicle bodies.

For each delivery, the Engineer shall be provided a clear, legible copy of the delivery ticket.

**3. Paving Equipment:** The Contractor shall have the necessary paving and compaction equipment at the Project Site to perform the work. All equipment shall be in good working order and any equipment that is worn, defective, or inadequate for performance of the work shall be repaired or replaced by the Contractor to the satisfaction of the Engineer. During the paving

operation, the use of solvents or fuel oil, in any concentration, is strictly prohibited as a release agent or cleaner on any paving equipment (i.e., rollers, pavers, transfer devices, etc.).

Refueling or cleaning of equipment is prohibited in any location on the Project where fuel or solvents might come in contact with paved areas or areas to be paved. Solvents used in cleaning mechanical equipment or hand tools shall be stored clear of areas paved or to be paved. Before any such equipment and tools are cleaned, they shall be moved off of areas paved or to be paved.

**Pavers:** Each paver shall have a receiving hopper with sufficient capacity to provide for a uniform spreading operation and a distribution system that places the mix uniformly, without segregation. The paver shall be equipped with and use a vibratory screed system with heaters or burners. The screed system shall be capable of producing a finished surface of the required evenness and texture without tearing, shoving, or gouging the mixture. Pavers with extendible screed units as part of the system shall have auger extensions and tunnel extenders as necessary. Automatic screed controls for grade and slope shall be used at all times unless otherwise authorized by the Engineer. The controls shall automatically adjust the screed to compensate for irregularities in the preceding course or existing base. The controls shall maintain the proper transverse slope and be readily adjustable and shall operate from a fixed or moving reference such as a grade wire or floating beam (minimum length 20 feet).

**Rollers:** All rollers shall be self-propelled and designed for compaction of bituminous concrete. Roller types shall include steel wheeled, pneumatic, or a combination thereof. Rollers that operate in a dynamic mode shall have drums that use a vibratory or oscillatory system or combination. Vibratory rollers shall be equipped with indicators for amplitude, frequency, and speed settings/readouts to measure the impacts per foot during the compaction process. Oscillatory rollers shall be equipped with frequency indicators. Rollers can operate in the dynamic mode using the oscillatory system on concrete structures such as bridges and catch basins if at the lowest frequency setting.

Pneumatic tire rollers shall be equipped with wide-tread compaction tires capable of exerting an average contact pressure from 60 to 90 psi uniformly over the surface. The Contractor shall furnish documentation to the Engineer regarding tire size, pressure and loading to confirm that the proper contact pressure is being developed and that the loading and contact pressure are uniform for all wheels.

**Lighting:** For paving operations which will be performed during hours of darkness the paving equipment shall be equipped with lighting fixtures as described below or with an approved equal. Lighting shall minimize glare to passing traffic. The lighting options and minimum number of fixtures are listed in Tables 4.06-1 and 4.06-2.

**TABLE 4.06-1: Minimum Paver lighting**

Option	Fixture Configuration	Fixture Quantity	Requirement
1	Type A	3	Mount over screed area
	Type B (narrow) or Type C (spot)	2	Aim to auger and guideline
	Type B (wide) or Type C (flood)	2	Aim 25feet behind paving machine
2	Type D Balloon	2	Mount over screed area

**TABLE 4.06-2: Minimum Roller Lighting**

Option	Fixture Configuration	Fixture Quantity	Requirement
1	Type B (wide)	2	Aim 50 feet in front of and behind roller
	Type B (narrow)	2	Aim 100 feet in front of and behind roller
2	Type C (flood)	2	Aim 50 feet in front of and behind roller
	Type C (spot)	2	Aim 100 feet in front of and behind roller
3	Type D Balloon	1	Mount above the roller

\*All fixtures shall be mounted above the roller.

Type A: Fluorescent fixture shall be heavy duty industrial type. Each fixture shall have a minimum output of 8,000 lumens. The fixtures shall be mounted horizontally and be designed for continuous row installation.

Type B: Each floodlight fixture shall have a minimum output of 18,000 lumens.

Type C: Each fixture shall have a minimum output of 19,000 lumens.

Type D: Balloon light – each balloon light fixture shall have minimum output of 50,000 lumens and emit light equally in all directions.

**Material Transfer Vehicle (MTV):** An MTV shall be used when placing bituminous concrete surface course (a lift or multiple lifts) as indicated in the Contract except as noted on the plans or as directed by the Engineer. In addition, continuous paving lengths of less than 500 feet may not require the use of an MTV as determined by the Engineer.

The MTV must be a vehicle specifically designed for the purpose of delivering the bituminous concrete mixture from the delivery vehicle to the paver. The MTV must continuously remix the bituminous concrete mixture throughout the placement process.

The use of an MTV will be subject to the requirements stated in Article 1.07.05 Load Restrictions. The Engineer may limit the use of the vehicle if it is determined that the use of the MTV may damage highway components, utilities, or bridges. The Contractor shall submit to the Engineer at time of pre-construction the following information:

1. The make and model of the MTV.
2. The individual axle weights and axle spacing for each piece of paving equipment (haul vehicle, MTV and paver).
3. A working drawing showing the axle spacing in combination with all pieces of equipment that will comprise the paving echelon.
4. **Test Section:** The Engineer may require the Contractor to place a test section whenever the requirements of this specification or Section M.04 are not met.

The Contractor shall submit the quantity of mixture to be placed and the location of the test section for review and approval by the Engineer. The same equipment used in the construction of a passing test section shall be used throughout production.

If a test section fails to meet specifications, the Contractor shall stop production, make necessary adjustments to the job mix formula, Plant operations, or procedures for placement and compaction. The Contractor shall construct test sections, as allowed by the Engineer, until all

the required specifications are met. All test sections shall also be subject to removal as set forth in Article 1.06.04.

**5. Transitions for Roadway Surface:** Transitions shall be formed at any point on the roadway where the pavement surface deviates, vertically, from the uniform longitudinal profile as specified on the plans. Whether formed by milling or by bituminous concrete mixture, all transition lengths shall meet the criteria below unless otherwise specified.

Permanent Transitions: Defined as any gradual change in pavement elevation that remains as a permanent part of the work.

A transition shall be constructed no closer than 75 feet from either side of a bridge expansion joint or parapet. All permanent transitions, leading and trailing ends shall meet the following length requirements:

Posted Speed Limit	Permanent Transition Length Required
> 35 mph	30 feet per inch of elevation change
35 mph or less	15 feet per inch of elevation change

In areas where it is impractical to use the above-described permanent transition lengths, the use of a shorter permanent transition length may be permitted when approved by the Engineer.

Temporary Transitions: Defined as a transition that does not remain a permanent part of the work.

All temporary transitions shall meet the following length requirements:

Posted Speed Limit	Temporary Transition Length Required
> 50 mph	Leading Transition: 15 feet per inch of vertical change (thickness) Trailing Transition: 6 feet per inch of vertical change (thickness)
40, 45 or 50 mph	Leading and Trailing: 4 feet per inch of vertical change (thickness)
35 mph or less	Leading and Trailing: 3 feet per inch of vertical change (thickness)

**Note:** Any temporary transition to be in place over the winter shutdown period or during extended periods of inactivity (more than 14 calendar days) shall meet the greater than 50 mph requirements shown above.

**6. Spreading and Finishing of Mixture:** Prior to the placement of the mixture, the underlying base course shall be brought to the plan grade and cross section within the allowable tolerance. Immediately before placing a bituminous concrete lift, a uniform coating of tack coat shall be applied to all existing underlying pavement surfaces and on the exposed surface of a wedge joint. Such surfaces shall be clean and dry. Sweeping or other means acceptable to the Engineer shall be used.

The mixture shall not be placed whenever the surface is wet or frozen.

Tack Coat Application: The tack coat shall be applied by a pressurized spray system that

results in uniform overlapping coverage at an application rate of 0.03 to 0.05 gal./s.y. for a non-milled surface and an application rate of 0.05 to 0.07 gal./s.y. for a milled surface. For areas where both milled and un-milled surfaces occur, the tack coat shall be an application rate of 0.03 to 0.05 gal /s.y. The Engineer must approve the equipment and the method of measurement prior to use. The material for tack coat shall be heated to 160°F ± 10°F and shall not be further diluted.

Tack coat shall be allowed sufficient time to break prior to any paving equipment or haul vehicles driving on it.

The Contractor may request to omit the tack coat application between bituminous concrete layers that have not been exposed to traffic and are placed during the same work shift. Requests to omit tack coat application on the upper and lower surfaces of a wedge joint will not be considered.

**Placement:** The mixture shall be placed and compacted to provide a smooth, dense surface with a uniform texture and no segregation at the specified thickness and dimensions indicated in the plans and specifications.

When unforeseen weather conditions prevent further placement of the mixture, the Engineer is not obligated to accept or place the bituminous concrete mixture that is in transit from the Plant. In advance of paving, traffic control requirements shall be set up, maintained throughout placement, and shall not be removed until all associated work including density testing is completed.

The mixture temperature will be verified by means of a probe or infrared type of thermometer. The placement temperature range shall be listed in the quality control plan (QCP) for placement and meet the requirements of Table M.04.03-4. Any HMA material that falls outside the specified temperature range as measured by a probe thermometer may be rejected.

The Contractor shall inspect the newly placed pavement for defects in mixture or placement before rolling is started. Any deviation from standard crown or section shall be immediately remedied by placing additional mixture or removing surplus mixture. Such defects shall be corrected to the satisfaction of the Engineer.

Where it is impracticable due to physical limitations to operate the paving equipment, the Engineer may permit the use of other methods or equipment. Where hand spreading is permitted, the mixture shall be placed by means of suitable shovels and other tools, and in a uniformly loose layer at a thickness that will result in a completed pavement meeting the designed grade and elevation.

**Placement Tolerances:** Each lift of bituminous concrete placed at a specified thickness shall meet the following requirements for thickness and area. Any pavement exceeding these limits shall be subject to an adjustment or removal. Lift tolerances will not relieve the Contractor from meeting the final designed grade. Lifts of specified non-uniform thickness, i.e. wedge or shim course, shall not be subject to thickness and area adjustments.

- a) Thickness: Where the average thickness of the lift exceeds that shown on the plans beyond the tolerances shown in Table 4.06-3, the Engineer will calculate the thickness adjustment in accordance with Article 4.06.04.

**TABLE 4.06-3: Thickness Tolerances**

<b>Mixture Designation</b>	<b>Lift Tolerance</b>
S1	+/- 3/8 inch
S0.25, S0.375, S0.5	+/- 1/4 inch

Where the thickness of the lift of mixture is less than that shown on the plans beyond the tolerances shown in Table 4.06-3, the Contractor, with the approval of the Engineer, shall take corrective action in accordance with this Section.

- b) Area: Where the width of the lift exceeds that shown on the plans by more than the specified thickness, the Engineer will calculate the area adjustment in Article 4.06.04.
- c) Delivered Weight of Mixture: When the delivery ticket shows that the truck exceeds the allowable gross weight for the vehicle type, the Engineer will calculate the weight adjustment in accordance with Article 4.06.04.

Transverse Joints: All transverse joints shall be formed by saw-cutting to expose the full thickness of the lift. Tack coat shall be applied to the sawn face immediately prior to additional mixture being placed.

Compaction: The Contractor shall compact the mixture to meet the density requirements as stated in Article 4.06.04 and eliminate all roller marks without displacement, shoving cracking, or aggregate breakage.

When placing a lift with a specified thickness less than 1 1/2 inches, or a wedge course, the Contractor shall provide a minimum rolling pattern as determined by the development of a compaction curve. The procedure to be used shall be documented in the Contractor's QCP for placement and demonstrated on the first day of placement.

The use of the vibratory system on concrete structures is prohibited. When approved by the Engineer, the Contractor may operate a roller using an oscillatory system at the lowest frequency setting.

If the Engineer determines that the use of compaction equipment in the dynamic mode may damage highway components, utilities or adjacent property, the Contractor shall provide alternate compaction equipment.

Rollers operating in the dynamic mode shall be shut off when changing directions. These allowances will not relieve the Contractor from meeting pavement compaction requirements.

Surface Requirements:

Each lift of the surface course shall not vary more than 1/4 inch from a Contractor-supplied 10-foot straightedge. For all other lifts of bituminous concrete, the tolerance shall be 3/8 inch. Such tolerance will apply to all paved areas.

Any surface that exceeds these tolerances shall be corrected by the Contractor at its own expense.

**7. Longitudinal Joint Construction Methods:** The Contractor shall use Method I - Notched Wedge Joint (see Figure 4.06-1) when constructing longitudinal joints where lift thicknesses are 1 1/2 inches to 3 inches. S1.0 mixtures shall be excluded from using Method I. Method II - Butt Joint (see Figure 4.06-2) shall be used for lifts less than 1 1/2 inches or greater than 3 inches. Each longitudinal joint shall maintain a consistent offset from the centerline of the roadway along its entire length. The difference in elevation between the two faces of any completed longitudinal joint shall not exceed 1/4 inch at any location.

**Method I - Notched Wedge Joint:**

A notched wedge joint shall be constructed as shown in Figure 4.06-1 using a device that is attached to the paver screed and is capable of independently adjusting the top and bottom vertical notches. The device shall have an integrated vibratory system. The top vertical notch must be located at the centerline or lane line in the final lift. The requirement for paving full width "curb



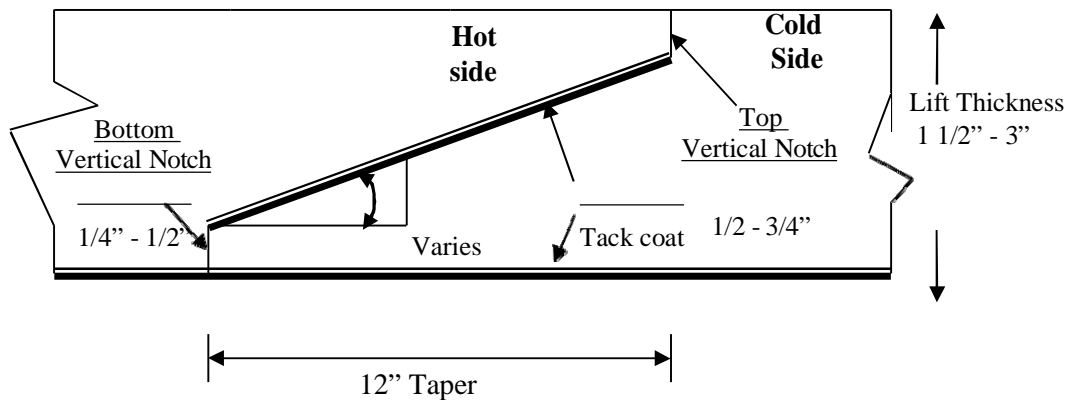
to curb” as described in Method II may be waived if addressed in the QC plan and approved by the Engineer.

The taper portion of the wedge joint shall be evenly compacted using equipment other than the paver or notch wedge joint device. The compaction device shall be the same width as the taper and not reduce the angle of the wedge or ravel the top notch of the joint during compaction.

When placed on paved surfaces, the area below the sloped section of the joint shall be treated with tack coat. The top surface of the sloped section of the joint shall be treated with tack coat prior to placing the completing pass.

The taper portion of the wedge joint shall not be exposed to traffic for more than 5 calendar days.

**Figure 4.06-1: Notched Wedge Joint (Not to Scale)**



Any exposed wedge joint must be located to allow for the free draining of water from the road surface.

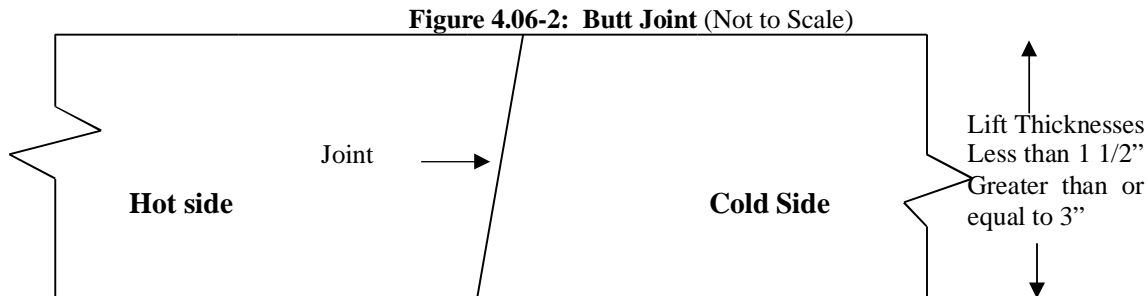
The Engineer reserves the right to define the paving limits when using a wedge joint that will be exposed to traffic.

If Method I cannot be used on those lifts which are 1 ½ inches to 3 inches, Method III may be substituted according to the requirements below for “Method III - Butt Joint with Hot Poured Rubberized Asphalt Treatment.”

**Method II - Butt Joint:**

When adjoining passes are placed, the Contractor shall use the end gate to create a near vertical edge (refer to Figure 4.06-2). The completing pass (hot side) shall have sufficient mixture so that the compacted thickness is not less than the previous pass (cold side). During placement of multiple lifts, the longitudinal joint shall be constructed in such a manner that it is located at least 6 inches from the joint in the lift immediately below. The joint in the final lift shall be at the centerline or at lane lines. The end gate on the paver should be set so there is an overlap onto the cold side of the joint.

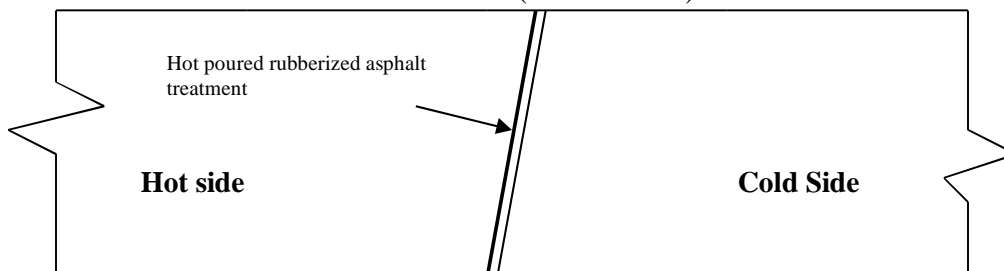
The Contractor shall not allow any butt joint to be incomplete at the end of a work shift unless otherwise allowed by the Engineer. When using this method, the Contractor is not allowed to leave a vertical edge exposed at the end of a work shift and must complete paving of the roadway full width “curb to curb.”



**Method III - Butt Joint with Hot Poured Rubberized Asphalt Treatment:**

If Method I cannot be used due to physical constraints in certain limited locations, the Contractor may submit a request in writing for approval by the Engineer to use Method III as a substitution in those locations. There shall be no additional measurement or payment made when Method III is substituted for Method I. When required by the Contract or approved by the Engineer, Method III (see Figure 4.06-3) shall be used.

**Figure 4.06-3: Butt Joint with Hot Poured Rubberized Asphalt Treatment**  
(Not to Scale)



All of the requirements of Method II must be met with Method III. In addition, the longitudinal vertical edge must be treated with a rubberized joint seal material meeting the requirements of ASTM D6690, Type 2. The joint sealant shall be placed on the face of the “cold side” of the butt joint as shown above prior to placing the “hot side” of the butt joint. The joint seal material shall be applied in accordance with the manufacturer’s recommendation so as to provide a uniform coverage and avoid excess bleeding onto the newly placed pavement.

8. **Contractor Quality Control (QC) Requirements:** The Contractor shall be responsible for maintaining adequate quality control procedures throughout the production and placement operations. Therefore, the Contractor must ensure that the materials, mixture, and work provided by Subcontractors, Suppliers, and Producers also meet Contract specification requirements.

This effort must be documented in Quality Control Plans (QCP) and must address the actions, inspection, or sampling and testing necessary to keep the production and placement operations in control, to determine when an operation has gone out of control and to respond to correct the situation in a timely fashion.

The Standard QCP for production shall consist of the quality control program specific to the

production facility.

There are 3 components to the QCP for placement: a Standard QCP, a Project Summary Sheet that details Project-specific information, and, if applicable, a separate Extended Season Paving Plan as required in 4.06.03-9 “Temperature and Seasonal Requirements.”

The Standard QCP for both production and placement shall be submitted to the Department for approval each calendar year and at a minimum of 30 days prior to production or placement.

Production or placement shall not occur until all QCP components have been approved by the Engineer.

Each QCP shall include the name and qualifications of a Quality Control Manager (QCM). The QCM shall be responsible for the administration of the QCP, and any modifications that may become necessary.

The QCM shall have the ability to direct all Contractor personnel on the Project during paving operations.

The QCPs shall also include the name and qualifications of any outside testing laboratory performing any QC functions on behalf of the Contractor. The QC Technician performing in-place density testing shall be NETTCP certified as a paving inspector.

Approval of the QCP does not relieve the Contractor of its responsibility to comply with the Project specifications. The Contractor may modify the QCPs as work progresses and must document the changes in writing prior to resuming operations. These changes include but are not limited to changes in quality control procedures or personnel. The Department reserves the right to deny significant changes to the QCPs.

QCP for Production: Refer to M.04.03-1.

QCP for Placement: The Standard QCP, Project Summary Sheet, and Extended Season Paving Plan shall conform to the format provided by the Engineer. The format is available at

[http://www.ct.gov/dot/lib/dot/documents/dconstruction/pat/qcp\\_outline\\_hma\\_placement.pdf](http://www.ct.gov/dot/lib/dot/documents/dconstruction/pat/qcp_outline_hma_placement.pdf)  
The Contractor shall perform all quality control sampling and testing, provide inspection, and exercise management control to ensure that bituminous concrete placement conforms to the requirements as outlined in its QCP during all phases of the work. The Contractor shall document these activities for each day of placement.

The Contractor shall submit complete field density testing and inspection records to the Engineer within 48 hours in a manner acceptable to the Engineer.

The Contractor may obtain 1 mat core and 1 joint core per day for process control, provided this process is detailed in the QCP. The results of these process control cores shall not be used to dispute the Department’s determinations from the acceptance cores. The Contractor shall submit the location of each process control core to the Engineer for approval prior to taking the core. The core holes shall be filled to the same requirements described in Subarticle 4.06.03-10.

**9. Temperature and Seasonal Requirements:** Paving, including placement of temporary pavements, shall be divided into 2 seasons, “In-Season” and “Extended-Season.” In-Season paving occurs from May 1 to October 14, and Extended Season paving occurs from October 15 to April 30. The following requirements shall apply unless otherwise authorized or directed by the Engineer:

- Mixtures shall not be placed when the air or subbase temperature is less than 40°F regardless of the season.
- Should paving operations be scheduled during the Extended Season, the Contractor must submit an Extended Season Paving Plan for the Project that addresses minimum delivered

mix temperature considering WMA, PMA, or other additives; maximum paver speed; enhanced rolling patterns; and the method to balance mixture delivery and placement operations. Paving during Extended Season shall not commence until the Engineer has approved the plan.

10. **Field Density** The Contractor shall obtain cores for the determination of mat and longitudinal joint density of bituminous concrete pavements. Within five calendar days of placement, mat and joint cores shall be extracted on each lift with a specified thickness of 1 1/2 inches or more. Joint cores shall not be extracted on HMA S1.0 lifts.

The Contractor shall extract cores from random locations determined by the Engineer in accordance with ASTM D3665. Four (4) or six (6) inch diameter cores shall be extracted for S0.25, S0.375 and S0.5 mixtures; 6-inch diameter cores shall be required for S1.0 mixtures. The Contractor shall coordinate with the Engineer to witness the extraction, labeling of cores, and filling of the core holes.

Each lift will be separated into lots as follows:

- a. Simple Average Density Lots: For total estimated quantities below 2,000 tons, the lift will be evaluated in one lot which will include the total paved tonnage of the lift and all longitudinal joints between the curb lines.  
For total estimated quantities between 2,000 and 3,500 tons, the lift will be evaluated in two lots in which each lot will include approximately half of the total tonnage placed for the full paving width of a lift including all longitudinal joints between the curb lines.
- b. PWL Density Lots: Mat density lots will include each 3,500 tons of mixture placed within 30 calendar days. Joint density lots will include 14,000 linear feet of constructed joints. Bridge density lots will always be analyzed using simple average lot methodology.
- c. Partial Density Lot (For PWL only): A mat density lot with less than 3,500 tons or a joint density lot with less than 14,000 linear feet due to:
  - completion of the course; or
  - a lot spanning 30 calendar days.

Prior to paving, the type and number of lot(s) will be determined by the Engineer.

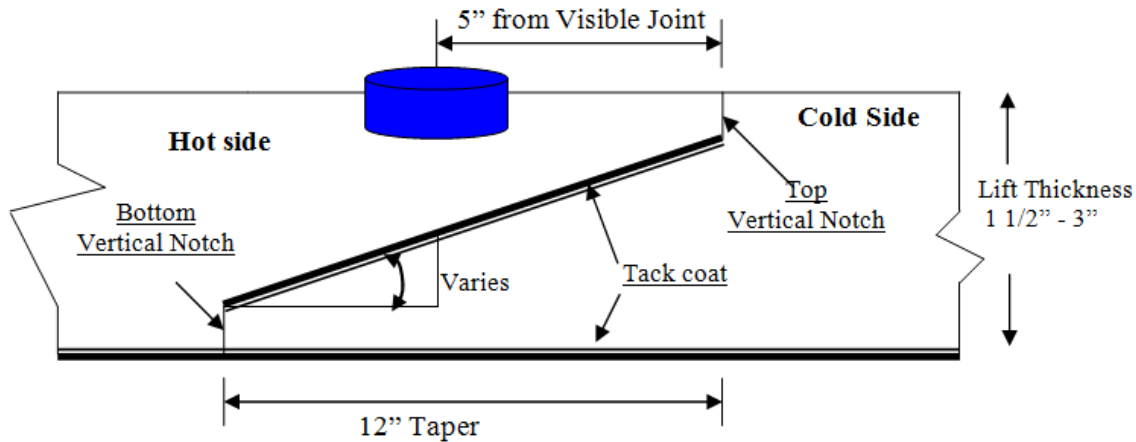
Noncontiguous areas such as highway ramps may be combined to create one lot.

After the lift has been compacted and cooled, the Contractor shall cut cores to a depth equal to or greater than the lift thickness and shall remove them without damaging the lift(s) to be tested. Any core that is damaged or obviously defective while being obtained will be replaced with a new core from a location within 2 feet measured in a longitudinal direction.

A mat core shall not be located any closer than 1 foot from the edge of a paver pass. If a random number locates a core less than 1 foot from any edge, the location will be adjusted by the Engineer so that the outer edge of the core is 1 foot from the edge of the paver pass.

Method I, Notched Wedge Joint cores shall be taken so that the center of the core is 5 inches from the visible joint on the hot mat side (Figure 4.06-4).

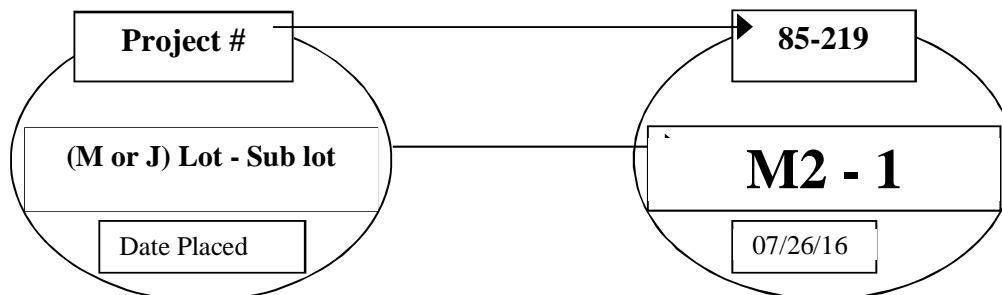
**Figure 4.06-4: Notched Wedge Joint Cores (Not to Scale)**



When Method II or Method III Butt Joint is used, cores shall be taken from the hot side so the edge of the core is within 1 inch of the longitudinal joint.

The cores shall be labeled by the Contractor with the Project number, date placed, lot number, and sub-lot number. The core's label shall include "M" for a mat core and "J" for a joint core. For example, a mat core from the first lot and the first sub-lot shall be labeled with "M1 - 1." A mat core from the second lot and first sub-lot shall be labeled "M2-1" (see Figure 4.06-5). The Engineer shall fill out a MAT-109 to accompany the cores. The Contractor shall deliver the cores and MAT-109 to the Department's Central Lab. The Contractor shall use a container approved by the Engineer. The container shall have a lid capable of being locked shut and tamper proof. The Contractor shall use foam, bubble wrap, or another suitable material to prevent the cores from being damaged during handling and transportation. Once the cores and MAT-109 are in the container the Engineer will secure the lid using security seals at the removable hinges(s) and at the lid opening(s). The security seals' identification number must be documented on the MAT-109. All sealed containers shall be delivered to the Department's Central Lab within two working days from time of extraction. Central Lab personnel will break the security seal and take possession of the cores.

**Figure 4.06-5: Labeling of Cores**



Each core hole shall be filled within 4 hours upon core extraction. Prior to being filled, the hole shall be prepared by removing any free water and applying tack coat using a brush or other

means to uniformly cover the cut surface. The core hole shall be filled using a bituminous concrete mixture at a minimum temperature of 240°F containing the same or smaller nominal maximum aggregate size and compacted with a hand compactor or other mechanical means to the maximum compaction possible. The bituminous concrete shall be compacted to 1/8 inch above the finished pavement.

**Simple Average Density Lots:**

A standard simple average density lot is the quantity of material placed within the defined area excluding any bridge decks.

A combo simple average density lot is the quantity of material placed within the defined area including bridge decks less than or equal to 500 feet long.

A bridge simple average density lot is the quantity of material placed on a bridge deck longer than 500 feet.

The number of cores per lot shall be determined in accordance with Table 4.06-4. If a randomly selected mat or joint core location is on a bridge deck, the core is to be obtained on the bridge deck in addition to the core(s) required on the bridge deck.

The number of cores per lot shall be determined in accordance with Table 4.06-5. Multiple bridge decks can be combined into one lot if the paving and underlying conditions are comparable. If multiple bridge decks are combined into a single bridge lot, at least one mat and joint core shall be obtained on each bridge.

The longitudinal locations of mat cores within a standard, combo, or bridge lot containing multiple paving passes will be determined using the combined length of the paving passes within the lot.

**TABLE 4.06-4: Number of Cores per Lot (Simple Average)**

Lot Type	No. of Mat Cores		No. of Joint Cores	
Standard Lot < 500 Tons	3		3	
Standard Lot ≥ 500 Tons	4		4	
Combo Lot < 500 Tons	2 plus	1 per bridge (≤ 300')	2 plus	1 per bridge (≤ 300')
Combo Lot ≥ 500 Tons <sup>(1)</sup>	4 plus	2 per bridge (301' – 500')	4 plus	2 per bridge (301' – 500')

**TABLE 4.06-5: Number of Core per Bridge Density Lot (Simple Average)**

Length of Bridge(s) (Feet)	Minimum No. of Mat Cores	Minimum No. of Joint Cores
< 500	2	2
501 – 1,500	3	3
1,501 – 2,500	4	4
2,501 and greater	5	5

**PWL Density Lots:**

A PWL mat density lot is 3,500 tons of material placed within the defined area excluding any bridges. One mat core will be obtained per every 500 tons placed.

A PWL joint density lot is 14,000 linear feet of longitudinal joint excluding any joints on bridge decks. One joint core will be obtained per every 2,000 linear feet of joint.

Bridge density lots will always be analyzed as using the simple average lot methodology. The number of cores per lot shall be determined in accordance with Table 4.06-5. Multiple bridge decks can be combined into one lot if the paving and underlying conditions are comparable. If multiple bridge decks are combined into a single bridge lot, at least one mat and joint core shall be obtained on each bridge.

**11. Acceptance Sampling and Testing:** Sampling shall be performed in accordance with ASTM D3665 or a statistically based procedure of stratified random sampling approved by the Engineer.

**Plant Material Acceptance:** The Contractor shall provide the required sampling and testing during all phases of the work in accordance with M.04. The Department will verify the Contractor's acceptance test results. Should any test results exceed the specified tolerances in the Department's current QA Program for Materials, the Contractor's test results for a subject lot or sub lot may be replaced with the Department's results for the purpose of calculating adjustments. The verification procedure is included in the Department's current QA Program for Materials.

**Density Acceptance:** The Engineer will perform all acceptance testing in accordance with AASHTO T 331. The density of each core will be determined using the daily production's average maximum theoretical specific gravity (Gmm) established during the testing of the parent material at the Plant. When there was no testing of the parent material or any Gmm exceeds the specified tolerances in the Department's current QA Program for Materials, the Engineer will determine the maximum theoretical density value to be used for density calculations.

**12. Density Dispute Resolution Process:** The Contractor and Engineer will work in partnership to avoid potential conflicts and to resolve any differences that may arise during quality control or acceptance testing for density. Both parties will review their sampling and testing procedures and results and share their findings. If the Contractor disputes the Engineer's test results, the Contractor must submit in writing a request to initiate the Dispute Resolution Process within five calendar days of the notification of the test results. No request for dispute resolution will be allowed unless the Contractor provides quality control results from samples taken prior to and after finish rolling, and within the timeframe described in 4.06.03-8 supporting its position. No request for dispute resolution will be allowed for a density lot in which any core was not taken within the required 5 calendar days of placement. Should the dispute not be resolved through evaluation of existing testing data or procedures, the Engineer may authorize the Contractor to obtain a new core or set of core samples per disputed lot. The core samples must be extracted no later than seven calendar days from the date of the Engineer's authorization. All such core samples shall be extracted and the core hole filled using the procedure outlined in 4.06.03-10.

a) **Simple Average Lots:** The Contractor may only dispute any simple average lot that is adjusted at or below 95 percent payment. The number and location (mat, joint, or structure) of the cores taken for dispute resolution must reflect the number and location of the original cores. The location of each core shall be randomly located within the respective original sub lot. The dispute resolution results shall be combined with the original results and averaged for determining the final in-place density value.

b) **PWL Lots:** The Contractor may dispute any PWL subplot when the PWL falls below 50%

calculated in accordance with section 4.06.04.2.b. An additional random core in the subplot may be taken to validate the accuracy of the core in question. The Department will verify the additional core test result and may average the original test result with the additional core result for purpose of calculating adjustments.

**13. Corrective Work Procedure:**

If pavement placed by the Contractor does not meet the specifications, and the Engineer requires its replacement or correction, the Contractor shall:

- a) Propose a corrective procedure to the Engineer for review and approval prior to any corrective work commencing. The proposal shall include:
  - Limits of pavement to be replaced or corrected, indicating stationing or other landmarks that are readily distinguishable.
  - Proposed work schedule.
  - Construction method and sequence of operations.
  - Methods of maintenance and protection of traffic.
  - Material sources.
  - Names and telephone numbers of supervising personnel.
- b) Any corrective courses placed as the final wearing surface shall match the specified lift thickness after completion.

14. **Protection of the Work:** The Contractor shall protect all sections of the newly finished pavement from damage that may occur as a result of the Contractor’s operations for the duration of the Project.

15. **Cut Bituminous Concrete Pavement:** Work under this item shall consist of making a straight-line cut in the bituminous concrete pavement to the lines delineated on the plans or as directed by the Engineer. The cut shall provide a straight, clean, vertical face with no cracking, tearing or breakage along the cut edge.

**464 —Method of Measurement:**

**1. HMA S\* or PMA S\*:** Bituminous concrete will be measured for payment as the amount of material in tons placed as determined by the net weight on the delivered tickets and adjusted by area, thickness and weight as follows:

Quantity Adjustments: Adjustments may be applied to the placed bituminous concrete quantities that will be measured for payment using the following formulas:

**Yield Factor** for Adjustment Calculation = 0.0575 tons/SY/inch

**Actual Area (SY)** = [(Measured Length (ft)) x (Avg. of width measurements (ft))]÷9 s.f./SY

**Actual Thickness (t)** = Total tons delivered / [Actual Area (SY) x 0.0575 tons/SY/inch]

- a) Area: If the average width exceeds the allowable tolerance, an adjustment will be made using the following formula. The tolerance for width is equal to the specified thickness (inch) of the lift being placed.

**Quantity Adjusted for Area (T<sub>A</sub>)** = [(L x W<sub>adj</sub>)/9] x (t) x 0.0575 Tons/SY/inch = (-) tons

Where: L = Length (ft)

(t) = Actual thickness (inches)

W<sub>adj</sub> = (Designed width (ft) + tolerance /12) - Measured Width)



- b) Thickness: If the actual average thickness is less than the allowable tolerance, the Contractor shall submit a repair procedure to the Engineer for approval. If the actual thickness exceeds the allowable tolerance, an adjustment will be made using the following formula:

$$\text{Quantity Adjusted for Thickness (T}_T\text{)} = A \times t_{\text{adj}} \times 0.0575 = (-) \text{ tons}$$

Where: A = Area =  $\{[L \times (\text{Design width} + \text{tolerance (lift thickness)/12})] / 9\}$   
 $t_{\text{adj}}$  = Adjusted thickness =  $[(Dt + \text{tolerance}) - \text{Actual thickness}]$   
 Dt = Designed thickness (inches)

- c) Weight: If the quantity of bituminous concrete representing the mixture delivered to the Project is in excess of the allowable gross vehicle weight (GVW) for each vehicle, an adjustment will be made using the following formula:

$$\text{Quantity Adjusted for Weight (T}_w\text{)} = \text{GVW} - \text{DGW} = (-) \text{ tons}$$

Where: DGW = Delivered gross weight as shown on the delivery ticket or measured on a certified scale

## 2. Bituminous Concrete Adjustment Cost:

- a) Production Lot Adjustment: An adjustment may be applied to each production lot as follows:
- i. Non-PWL Production Lot (less than 3,500 tons):  
 The adjustment values in Tables 4.06-6 and 4.06-7 will be calculated for each sub lot based on the Air Void (AV) and Asphalt Binder Content (PB) test results for that sub lot. The total adjustment for each day's production (lot) will be computed as follows:

$$\text{Tons Adjusted for Superpave Design (T}_{\text{SD}}\text{)} = [(\text{AdjAV}_t + \text{AdjPB}_t) / 100] \times \text{Tons}$$

Where: AdjAV<sub>t</sub>: Percent adjustment for air voids  
 AdjPB<sub>t</sub>: Percent adjustment for asphalt binder  
 Tons: Weight of material (tons) in the lot adjusted by 4.06.4-1

$$\text{Percent Adjustment for Air Voids} = \text{AdjAV}_t = [\text{AdjAV}_1 + \text{AdjAV}_2 + \text{AdjAV}_i + \dots + \text{AdjAV}_n] / n$$

Where: AdjAV<sub>t</sub> = Total percent air void adjustment value for the lot  
 AdjAV<sub>i</sub> = Adjustment value from Table 4.06-6 resulting from each sub lot or the average of the adjustment values resulting from multiple tests within a sub lot, as approved by the Engineer.  
 n = number of sub lots based on Table M.04.03-2

**TABLE 4.06-6: Adjustment Values for Air Voids**

Adjustment Value (AdjAV <sub>i</sub> ) (%)	S0.25, S0.375, S0.5, S1 Air Voids (AV)
+2.5	3.8 - 4.2
+3.125*(AV-3)	3.0 - 3.7
-3.125*(AV-5)	4.3 - 5.0
20*(AV-3)	2.3 - 2.9
-20*(AV-5)	5.1 - 5.7
-20.0	≤ 2.2 or ≥ 5.8

Percent Adjustment for Asphalt Binder = AdjPB<sub>t</sub> = [(AdjPB<sub>1</sub> + AdjPB<sub>2</sub> + AdjPB<sub>i</sub> + ... + AdjPB<sub>n</sub>)] / n

Where: AdjPB<sub>t</sub> = Total percent liquid binder adjustment value for the lot

AdjPB<sub>i</sub> = Adjustment value from Table 4.06-7 resulting from each sub lot

n = number of binder tests in a production lot

**TABLE 4.06-7: Adjustment Values for Binder Content**

Adjustment Value (AdjAV <sub>i</sub> ) (%)	<u>S0.25, S0.375, S0.5, S1</u> Pb
0.0	JMF Pb ± 0.3
- 10.0	≤ JMF Pb - 0.4 or ≥ JMF Pb + 0.4

ii. PWL Production Lot (3500 tons or more):

For each lot, the adjustment values will be calculated using PWL methodology based on AV, VMA, and PB test results. The results will be considered as being normally distributed and all applicable equations in AASHTO R 9 and AASHTO R 42 Appendix X4 will apply.

Only one test result will be considered for each sub lot. The specification limits are listed in M.04.

For AV, PB, and voids in mineral aggregate (VMA), the individual material quantity characteristic adjustment (Adj) will be calculated as follows:

For PWL between 50 and 90%: Adj(AV<sub>t</sub> or PB<sub>t</sub> or VMA<sub>t</sub>) = (55 + 0.5 PWL) - 100

For PWL at and above 90%: Adj(AV<sub>t</sub> or PB<sub>t</sub> or VMA<sub>t</sub>) = (77.5 + 0.25 PWL) - 100

Where: AdjAV<sub>t</sub> = Total percent AV adjustment value for the lot

AdjPB<sub>t</sub> = Total percent PB adjustment value for the lot

AdjVMA<sub>t</sub> = Total percent VMA adjustment value for the lot

A lot with PWL less than 50% in any of the 3 individual material quality characteristics will be evaluated under 1.06.04.

The total adjustment for each production lot will be computed using the following formula:

**Tons Adjusted for Superpave Design (T<sub>SD</sub>)** = [(0.5AdjAV<sub>t</sub> + 0.25AdjPB<sub>t</sub> + 0.25 AdjVMA<sub>t</sub>) / 100] X Tons

Where Tons: Weight of material (tons) in the lot adjusted by 4.06.4-1

iii. Partial Lots:

Lots with less than 4 sub lots will be combined with the prior lot. If there is no prior lot with equivalent material or if the last test result of the prior lot is over 30 calendar days old, the adjustment will be calculated as indicated in 4.06.04-2.a)i.

Lots with 4 or more sub lots will be calculated as indicated in 4.06.04-2.a)ii.

**Production Lot Adjustment:  $T_{SD} \times \text{Unit Price} = \text{Est. (Pi)}$**

Where: Unit Price = Contract unit price per ton per type of mixture

Est. (Pi)= Pay Unit in dollars representing incentive or disincentive per lot

b) Density Lot Adjustment: An adjustment may be applied to each density lot as follows:

i. Simple Average Density Lot (less than 3500 tons) and Bridge Lots:

The final lot quantity shall be the difference between the total payable tons for the Project and the sum of the previous lots. If either the Mat or Joint adjustment value is “remove and replace,” the density lot shall be removed and replaced (curb to curb).

No positive adjustment will be applied to a density lot in which any core was not taken within the required 5 calendar days of placement.

**Tons Adjusted for Density ( $T_D$ )** =  $[\{(P_{AM} \times 0.50) + (P_{AJ} \times 0.50)\} / 100] \times \text{Tons}$

Where:  $T_D$  = Total tons adjusted for density for each lot

$P_{AM}$  = Mat density percent adjustment from Table 4.06-8

$P_{AJ}$  = Joint density percent adjustment from Table 4.06-9

Tons: Weight of material (tons) in the lot adjusted by 4.06.4-1

**TABLE 4.06-8: Adjustment Values for Pavement Mat density**

Average Core Result Percent Mat Density	Percent Adjustment (Bridge and Non-Bridge) <sup>(1)(2)</sup>
97.1 - 100	-1.667*(ACRPD-98.5)
94.5 – 97.0	+2.5
93.5 – 94.4	+2.5*(ACRPD-93.5)
92.0 – 93.4	0
90.0 – 91.9	-5*(92-ACRPD)
88.0 – 89.9	-10*(91-ACRPD)
87.0 – 87.9	-30
86.9 or less	Remove and Replace (curb to curb)

**Notes:**

<sup>(1)</sup> ACRPD = Average Core Result Percent Density

<sup>(2)</sup> All Percent Adjustments to be rounded to the second decimal place; for example round 1.667 to 1.67.

**TABLE 4.06-9: Adjustment Values for Pavement Joint Density**

Average Core Result	Percent Adjustment (Bridge and Non-Bridge) <sup>(1)(2)</sup>
Percent Joint Density	
97.1 – 100	-1.667*(ACRPD-98.5)
93.5 – 97.0	+2.5
92.0 – 93.4	+1.667*(ACRPD-92)
91.0 – 91.9	0
89.0 – 90.9	-7.5*(91-ACRPD)
88.0 – 88.9	-15*(90-ACRPD)
87.0 – 87.9	-30
86.9 or less	Remove and Replace (curb to curb)

**Notes:**

<sup>(1)</sup> ACRPD = Average Core Result Percent Density

<sup>(2)</sup> All Percent Adjustments to be rounded to the second decimal place; for example, round 1.667 to 1.67

Additionally, any subplot with a density result below 87% will be evaluated under 1.06.04.

ii. PWL Density Lot (3,500 tons or more):

For each lot, the adjustment values will be calculated using PWL methodology based on mat and joint density test results. Only one result will be included for each subplot. The results will be considered as being normally distributed and all applicable equations in AASHTO R 9 and AASHTO R 42 Appendix X4 will apply.

The specification limits for the PWL determination are as follows:

Mat Density: 91.5-98%

Joint Density: 90-98%

For mat and joint density, the individual percent adjustment (PA) will be calculated as follows:

For PWL between 50 and 90%:  $PA_{(M \text{ or } J)} = 0.25 * PWL - 22.50$

For PWL at and above 90%:  $PA_{(M \text{ or } J)} = 0.125 * PWL - 11.25$

Where:  $PA_M$  = Total percent mat density adjustment value for the PWL mat density lot

$PA_J$  = Total percent joint density adjustment value for the PWL joint density lot

No positive adjustment will be applied to a density lot in which any core was not taken within the required 5 calendar days of placement.

A lot with PWL less than 50% will be evaluated under 1.06.04.

The total adjustment for each PWL mat density lot will be computed as follows:

**Tons Adjusted for Mat Density ( $T_{MD}$ ) =  $(PA_M / 100) \times \text{Tons}$**

Where: Tons = Weight of material (tons) in the lot adjusted by 4.06.4-1.

The total adjustment for each PWL joint density lot will be computed as follows:

**Tons Adjusted for Joint Density ( $T_{JD}$ ) =  $(PA_J / 100) \times J\_Tons$**

Tons Adjusted for Joint Density will be calculated at the end of each project or project phase.

Where:  $J\_Tons = Tons \text{ in project or phase adjusted by } 4.06.4 - 1 \times \frac{\text{Lot joint length}}{\text{Joint length in project or phase}}$

All bridge density lot adjustments will be evaluated in accordance with 4.06.04-2.b)i.

Additionally, any subplot with a density result below 87% will be evaluated under 1.06.04.

iii. Partial Lots:

Lots with less than 4 sub lots will be combined with the prior lot. If there is no prior lot with equivalent material and placement conditions or if the last test result of the prior lot is over 30 calendar days old, the mat and joint individual adjustments will be calculated in accordance with Tables 4.06-8 and 4.06-9.  $T_{MD}$  and  $T_{JD}$  will be calculated as indicated in 4.06.04-2.b)i.

Lots with 4 or more sub lots will be calculated as indicated in 4.06.04-2.b)ii.

**Density Lot Adjustment (Simple Average Lots):  $T_D \times \text{Unit Price} = \text{Est. (Di)}$**

**Density Lot Adjustment (PWL Lots):  $(T_{MD} \text{ or } T_{JD}) \times \text{Unit Price} = \text{Est. (DMi or DJi)}$**

Where: Unit Price = Contract unit price per ton per type of mixture

Est. (Di)= Pay Unit in dollars representing incentive or disincentive per simple average density lot

Est. (DMi)= Pay Unit in dollars representing incentive or disincentive per PWL mat lot

Est. (DJi)= Pay Unit in dollars representing incentive or disincentive per PWL joint lot

Additionally, any subplot with a density result below 87% will be evaluated under 1.06.04.

**3. Transitions for Roadway Surface:** The installation of permanent transitions will be measured under the appropriate item used in the formation of the transition.

The quantity of material used for the installation of temporary transitions will be measured for payment under the appropriate item used in the formation of the transition. The installation and removal of a bond breaker and the removal and disposal of any temporary transition formed by milling or with bituminous concrete pavement is not measured for payment.

**4. Cut Bituminous Concrete Pavement:** The quantity of bituminous concrete pavement cut will be measured in accordance with 2.02.04.

**5. Material for Tack Coat:** The quantity of tack coat will be measured for payment by the number of gallons furnished and applied on the Project and approved by the Engineer. No tack coat material shall be included that is placed in excess of the tolerance described in 4.06.03.

- a. Container Method – Material furnished in a container will be measured to the nearest 1/2 gallon. The volume will be determined by either measuring the volume in the original container by a method approved by the Engineer or using a separate graduated container

capable of measuring the volume to the nearest 1/2 gallon. The container in which the material is furnished must include the description of material, including lot number or batch number and manufacturer or product source.

b. Vehicle Method

- i. Measured by Weight: The number of gallons furnished will be determined by weighing the material on calibrated scales furnished by the Contractor. To convert weight to gallons, one of the following formulas will be used:

Tack Coat (gallons at 60°F) = Measured Weight (pounds) / Weight per gallon at 60°F

Tack Coat (gallons at 60°F) = 0.996 x Measured Weight (pounds) / Weight per gallon at 77°F

- ii. Measured by automated metering system on the delivery vehicle:

Tack Coat (gallons at 60°F) = 0.976 x Measured Volume (gallons).

**6. Material Transfer Vehicle (MTV):** The furnishing and use of an MTV will be measured separately for payment based on the actual number of surface course tons delivered to a paver using the MTV.

**465 —Basis of Payment:**

**1. HMA S\* or PMA S\*:** The furnishing and placing of bituminous concrete will be paid for at the Contract unit price per ton for " HMA S\*" or " PMA S\*."

All costs associated with providing illumination of the work area are included in the general cost of the work.

All costs associated with cleaning the surface to be paved, including mechanical sweeping, are included in the general cost of the work. All costs associated with constructing longitudinal joints are included in the general cost of the work.

All costs associated with obtaining cores for acceptance testing and dispute resolution are included in the general cost of the work.

**2. Bituminous Concrete Adjustment Costs:** This adjustment will be calculated using the formulas shown below if all of the measured adjustments in 4.06.04-2 are not equal to zero. A positive or negative adjustment will be applied to monies due the Contractor.

**Production Lot:  $\Sigma \text{ Est (Pi)} = \text{Est. (P)}$**

**Density Lot (Simple Average Lots):  $\Sigma \text{ Est (Di)} = \text{Est. (D)}$**

**Density Lot (PWL):  $\Sigma \text{ Est (DMi)} + \Sigma \text{ (DJi)} = \text{Est. (D)}$**

**Bituminous Concrete Adjustment Cost= Est. (P) + Est. (D)**

Where: Est. ( )= Pay Unit in dollars representing incentive or disincentive in each production or density lot calculated in 4.06.04-2

The Bituminous Concrete Adjustment Cost item, if included in the bid proposal or estimate, is not to be altered in any manner by the Bidder. If the Bidder should alter the amount shown, the altered figure will be disregarded and the original estimated cost will be used for the Contract.

**3. Transitions for Roadway Surface:** The installation of permanent transitions will be paid under the appropriate item used in the formation of the transition. The quantity of material used for the installation of temporary transitions will be paid under the appropriate pay item used in the formation of the transition. The installation and removal of a bond breaker, and the removal and disposal of any temporary transition formed by milling or with bituminous concrete

pavement is included in the general cost of the work.

4. The cutting of bituminous concrete pavement will be paid in accordance with 2.02.05.
5. Material for tack coat will be paid for at the Contract unit price per gallon at 60°F for "Material for Tack Coat."
6. The Material Transfer Vehicle (MTV) will be paid at the Contract unit price per ton for "Material Transfer Vehicle."

Pay Item	Pay Unit
HMA S*	ton
PMA S*	ton
Bituminous Concrete Adjustment Cost	est.
Material for Tack Coat	gal.
Material Transfer Vehicle	ton

## **NOTICE TO CONTRACTOR - EXISTING UTILITIES**

Existing utilities shall be maintained during construction. The Contractor shall verify the location of underground, structure mounted, and overhead utilities. Construction work within the vicinity of utilities shall be performed in accordance with current safety regulations.

The Contractor shall notify “Call Before You Dig,” telephone: 1-800-922-4455, for the location of public utilities, in accordance with Section 16-345 of the Regulations of the Department of Utility Control.

The Contractor shall be required to dig test pits as shown on the drawings or as ordered by the Engineer. The Contractor shall report the results of the test pits to the Engineer immediately. The Contractor's attention is called to NTC Utility Generated Schedule for additional information with regard to utilities.

Contractors are cautioned that it is their responsibility to verify locations, conditions, and field dimensions of all existing features, as actual conditions may differ from the information shown on the plans or contained elsewhere in the specifications.

Also, refer to “Section 1.07 - Legal Relations and Responsibility to the Public.”



## **NOTICE TO CONTRACTOR - ROAD CLOSURE**

The Contractor will not be allowed to close any roads during the prosecution of work on this contract unless specifically indicated otherwise on the plans or in the specifications. Traffic detours as shown on the plans and contained within the contract documents shall be established. All roads within the project limits shall be open to minimum two-way traffic after work hours. Detours shall not be allowed during any holiday period as specified in the special provision Section 1.08.04-Prosecution and Progress-Limit of Operations.

The Contractor shall notify the City of Hartford, CT Transit, BOE Transportation, and emergency service providers that will be affected by the detour at least two weeks prior to initiating the detour.

**NOTICE TO CONTRACTOR - UTILITY SPECIFICATIONS**

The Contractor is hereby notified that all utility specifications contained elsewhere herein shall be made a part of this contract, and that the contractor shall be bound to comply with all requirements of such specifications. The requirements and conditions set forth in the subject specifications shall be binding on the Contractor just as any other specification would be

**NOTICE TO CONTRACTOR – REMOVAL OF CONCRETE FROM UTILITIES**

The Contractor is hereby notified that numerous manholes, gate boxes and related utilities within the area of work have a concrete collar around the perimeter of the frame and cover. Under the scope of this project, the contractor is required to carefully remove this collar as part of the work. The cost for this work will not be measured for payment but shall be included in the item New 5" Concrete Sidewalk on Existing Foundation.

**NOTICE TO THE CONTRACTOR - PERMITS AND PERMIT FEES**

It is the Contractor's responsibility to obtain and pay for all required Federal, State, City and Utility permits applicable to this project.

## **NOTICE TO THE CONTRACTOR - COORDINATION WITH OTHERS**

The Contractor is hereby notified and advised that construction operations by other contractor(s) and or utilities may occur within and/or in close proximity to the project limits identified on the plans for this project. The construction phasing has been developed to minimize interference in operations between contractors and utilities however, it is expected that in some cases the work of other contractors or utilities may overlap and/or occur simultaneously to the operation(s) conducted under this project.

The Contractor shall coordinate his work with the work of others in such a manner that allows for construction to proceed in an expeditious manner in accordance with the contract plans and as directed by the Engineer. Some delays and/or rescheduling of work can be expected during the prosecution of work as a result of coordination with others. No claim for additional compensation will be allowed for the work required to or that results from work to coordinate with others.

## **NOTICE TO CONTRACTOR - SECTION 1.08 - PROSECUTION AND PROGRESS**

### **Article 1.08.04 - Limitation of Operations - Add the following:**

#### **Time Restrictions**

In order to provide for traffic operations as outlined in the Special Provision "Maintenance and Protection of Traffic," the Contractor will not be allowed to perform any work that will interfere with existing traffic operations on all project roadways as follows:

#### **Allowable Work Periods**

The Contractor shall be allowed to work on the project between 7:00AM and 5:00PM Monday thru Friday. Work will not be allowed after 3:00PM unless authorized by the Engineer. Work shall not be performed on Weekends or Holidays unless authorized in advance by the Engineer. The Contractor will not be allowed to disrupt any traffic operation before 9:00AM or after 3:00PM without the written consent of the City. Disruptions to traffic will be limited in accordance with the Special Provision "Maintenance and Protection of Traffic".

#### **All Roadways**

Refer to the Special Provision "Maintenance and Protection of Traffic".

#### **Sidewalk Construction**

During the allowable period, the Contractor shall excavate a reasonable length of existing sidewalk, re-grade, install, adjust utilities and install new concrete sidewalks. Work shall only be conducted on one side of the street at a time. Simultaneous operations on both sides of the street will not be allowed. The Contractor shall coordinate with and make provisions with property owners to ensure access to existing buildings when work occurs at an entrance. The contractor may be required to provide temporary surfaces, and/or ramps. If these items are required, no additional payment will be made and the cost of such work shall be considered as part of this items.

#### **Curb Construction**

Granite curb work will be required at several curb corners to replace ADA sidewalk ramps. This work will be conducted so that not more than one lane of traffic is disturbed at any one time. ADA ramps may be installed simultaneously at multiple locations, but the work must not adversely impact pedestrian or vehicular traffic as determined by the Engineer.

The areas where the roadway has been excavated, the Contractor shall stage his construction operations in such as manner as to insure satisfactory completion at the end of the day (3:00PM) such that the roadway may be opened to a minimum of 2-12' travel lanes in each direction. The Contractor may choose to provide 24-hour high early strength concrete to facilitate work however no additional payment will be made for this material if used. The Contractor shall provide a paved surface for all roads being used by traffic. If approved by the City, temporary pavement will not be measured for payment but included in the cost of this item.

All temporary connections to abutting driveways and existing roadways must be completed in a satisfactory manner prior to the end of the work day/night. Excavation and installation of all conduit and repairs to concrete road base must be completed and backfilled at the full width for the proposed roadway. Opening trenches and excavations will not be permitted over-night. Steel plates shall only be used in an emergency situation. No payment will be made to the contractor for the use of steel plates.

On the next to last day of the work week the Contractor shall ensure that all work has been completed from the previous three workdays and all sidewalks are ready for the placement temporary pavement.

On the last day of the work week (usually considered to be Friday), the Contractor shall install a sufficient number of intermediate courses of bituminous concrete pavement for that length of roadway that was prepared during the past four workdays. The final course of pavement shall not be installed at this time. Temporary pavement markings shall be installed on the intermediate course of bituminous concrete pavement as mentioned above in accordance with the Special Provision "Maintenance and Protection of Traffic".

#### **Other Limitations**

The field installation of a signing pattern shall constitute interference with existing traffic operations and shall not be allowed except during the allowable periods.

#### **Construction Staking**

For roadways where the existing pavement markings are to be reestablished in their original locations, the Contractor shall establish control points from the existing pavement markings in accordance with ConnDOT form 816, Section 9.80 Construction Staking. This work will be paid for under the Item "Construction Staking".

**NOTICE TO CONTRACTOR – PARKED VEHICLES**

The Contractor is hereby notified that parked vehicles may be present within the limit(s) of work along Park Street. The Contractor shall place No Parking signs and be responsible to coordinate and work with the Police Department and property owners to facilitate the work. The Contractor may be required to schedule his operations to minimize impact(s) to parking within certain locations. No additional compensation will be made for this work and all costs shall be included in the overall cost of the work.



## **NOTICE TO CONTRACTOR – UTILITY NOTIFICATION AND COORDINATION**

The Contractor is required to coordinate and notify all utilities of his proposed scheduling and construction activities. The Contractor shall utilize and incorporate information obtained from utilities in preparing his project schedule in compliance with the project requirements.

After award, the Contractor shall conduct a utility coordination meeting or meetings to obtain contemporaneous scheduling information from the utilities prior to submitting its baseline schedule to the City in accordance with the requirements of the Contract.

The Contractor shall incorporate the contemporaneous utility scheduling information into its baseline schedule submittal. The baseline schedule shall include Contractor predecessor and successor activities to the utility work in such detail as acceptable to the Engineer.

**ITEM NO. 0100101A – NEW STRAIGHT GRANITE CURB ON NEW FOUNDATION**

This work shall be constructed in accordance with Item No. 0100101 of the City of Hartford Standard Technical Specifications which is supplemented as follows:

**DESCRIPTION**

Add the following:

Where the City requests ownership of the removed curb, the Contractor shall load the curb, transport it to a site designated by the City within the City limits and unload the curb at the site and area designated by the City.

This item shall also include trimming damaged ends of existing curb stones and cutting existing curb stones to a shorter length, both trimming and cutting to produce a new end which is square with the planes of the top and face of the curb. This item shall also include cutting curb stones horizontally in locations where the depth of curb stones must be reduced to clear obstacles or utilities

**REFERENCED ITEMS**

Add the following:

Item 0104021

**MATERIALS**

3. CONCRETE

Delete the entire section and replace with the following:

All concrete for this work shall be Class “C” cement concrete conforming to the requirements of Section M.03 of the State of Connecticut Standard Specifications for Roads, Bridges, and Incidental Construction Form 817 included with these special provisions.

Add the following:

5. Joint Sealant

Joint sealant shall conform to the material requirements of Item 0104021.

## **CONSTRUCTION METHODS**

### 4. PAVEMENT

REPAIR Delete the first sentence.

Add the following:

All Pavement Repairs shall meet the requirements of Section 4.06 of these Special Provisions. Add the following:

### 6. Joint Sealant

Joint Sealant shall be placed in conformance with the construction methods of Item 0104021.

## **BASIS OF PAYMENT**

Add the following:

There will be no direct payment for loading, transporting and unloading of salvageable curb, but the cost shall be considered as included in the cost of the curbing installed based on the lump sum price.

There will be no direct payment for trimming or cutting of existing curb stones or trimming or cutting new curb installed to accommodate existing conditions, but the cost of these cuts shall be considered as included in the cost of the curbing installed.

The cost for repair of concrete pavement base and processed traprock subbase is included in the lump sum bid price.

END OF SECTION

**ITEM NO. 0100601A – NEW RADIUS GRANITE CURB**

This work shall be constructed in accordance with Item No. 0100601 of the City of Hartford Standard Technical Specifications which is supplemented as follows:

**DESCRIPTION**

Add the following:

Where the City requests ownership of the removed curb, the Contractor shall load the curb, transport it to a site designated by the City within the City limits and unload the curb at the site and area designated by the City.

This item shall also include trimming damaged ends of existing curb stones and cutting existing curb stones to a shorter length, both trimming and cutting to produce a new end which is square with the planes of the top and face of the curb. This item shall also include cutting curb stones horizontally in locations where the depth of curb stones must be reduced to clear obstacles or utilities.

**REFERENCED ITEMS**

Add the following:

Item 0104021

**MATERIALS**

2. CONCRETE

Delete the entire section and replace with the following:

All concrete for this work shall be Class “C” cement concrete conforming to the requirements of Section M.03 of the State of Connecticut Standard Specifications for Roads, Bridges, and Incidental Construction Form 816 included with these special provisions.

Add the following:

5. Joint Sealant

Joint sealant shall conform to the material requirements of Item 0104021

**CONSTRUCTION METHODS**

4. PAVEMENT REPAIR

Delete the first sentence.

Add the following:

All pavement repairs shall meet the requirements of Section 4.06 of these Special Provisions.

Add the following:

6. Joint Sealant

Joint Sealant shall be placed in conformance with the construction methods of Item 0104021.

**BASIS OF PAYMENT**

Add the following:

There will be no direct payment for loading, transporting and unloading of salvageable curb, but the cost shall be considered as included in the cost of the curbing installed.

There will be no direct payment for trimming or cutting of existing curb stones or trimming or cutting new curb installed to accommodate existing conditions, but the cost of these cuts shall be considered as included in the cost of the curbing installed.

Where the entire roadway is being resurfaced, there will be no direct payment for bituminous concrete pavement repairs including replacement of intermediate and temporary surface courses. The costs shall be considered as included in the cost of the curbing installed.

Where the entire roadway is not being resurfaced, the cost of the bituminous concrete intermediate course and the cost of sealing the pavement joint shall be considered as included in the cost of the curbing installed. The cost of the three-foot-wide mill and overlay will be paid for and included in the lump sum bid price

END OF SECTION

**ITEM NO. 0102101A – 5” CONCRETE WALK ON NEW FOUNDATION**

This work shall be constructed in accordance with Item No. 0102101 of the City of Hartford Standard Technical Specifications which is supplements as follows:

**DESCRIPTION**

Add the following:

This item shall also include the saw cutting of any material required to install the new concrete walk adjacent to an existing surface.

**BASIS OF PAYMENT**

Add the following:

There will be no direct payment for saw cutting. The cost shall be considered as included in the lump sum bid price.

END OF SECTION

**ITEM 0102201A**

**5" CONCRETE WALK ON EXISTING FOUNDATION**

**DESCRIPTION**

This item shall include excavation and removing the existing concrete sidewalk, pavers, bituminous setting bed and/or other materials including trees not scheduled to remain, fine grading and compacting the existing foundation to 5" below finished grade, furnishing material for and constructing new 5" thick one course concrete sidewalk to line and grade, backfilling along the edges for the sidewalk and seeding, where necessary. This item shall also include the following work:

- Adjusting existing electrical hand holes and other private and public utility structures, frames and grates scheduled to remain to proper line and grade.
- Removal and disposal of existing concrete material, "collars" around the frames and covers of existing utilities including manholes, and gate valves, etc.
- Removal and disposal of all existing metal tree grates and existing trees not scheduled to remain where new sidewalk is proposed.
- Removal and disposal of existing polymer handholes not remain.
- Removal and replacement of existing clamshell bases on light pole as necessary to construct new sidewalk.
- All saw cutting to remove existing sidewalk, pavers or to trim the concrete sidewalk where new sidewalk meets existing walk.
- Removal and re-installation of existing bus shelters as required to construct new sidewalk.
- All scoring as detailed on the drawings and expansion joint at buildings and fixed structures.

Longitudinal doweled expansion joints, if shown on the drawings will be paid for under a separate item.

**REFERENCED ITEMS**

Item 0102101

**REQUIRED SUBMITTALS**

Material Certificate of Compliance:

Submit 5 copies of material certificate of compliance for concrete and expansion joint material in accordance with the contract general requirements.

**MATERIALS**

All material requirements of Item 0102101 shall apply to this Item.

**CONSTRUCTION METHODS**

The Engineer shall determine the areas in which concrete walk will be constructed on existing foundation only after the Contractor has excavated the existing concrete walk. At this time, if, in the opinion of the Engineer, the existing foundation is determined to be suitable for construction, the Contractor will proceed to construct the walk without having to replace the foundation and will be paid for under this item. If, however, the Engineer determines that the foundation needs to be replaced, then the Contractor will proceed in accordance with all of the provisions of Item 0102101 and will be paid for under Item 0102101A.

All other construction methods of Item 0102101 shall apply to this item except that the walk will be built on existing foundation.

**METHOD OF MEASUREMENT**

This work will be measured by the lump sum of completed and accepted concrete walk.

**BASIS OF PAYMENT**

This work will be paid for based on lump sum, price shall include all excavation as specified above, utility adjustments, expansion joints, backfill, disposal of surplus material, equipment, tools, materials and labor incidental thereto.



**ITEM NO. 0102321A – 8” REINFORCED CONCRETE SIDEWALK RAMP**

This work shall be constructed in accordance with Item No. 0102321 of the City of Hartford Standard Technical Specifications which is supplemented as follows:

**DESCRIPTION**

Replace the paragraph with the following:

This item shall include saw-cutting and removal of existing curb and walk, if required, furnishing material and labor for the construction of an 8" monolithic reinforced concrete sidewalk ramp (of the Type specified), see standard details on a new 12" processed traprock foundation all in accordance with the plans and these specifications and making all necessary pavement repairs in front of the ramp, backfilling along the edges, and restoration of grassed areas disturbed by this work.

**REFERENCED ITEMS**

Add the following:

Item 0104021

**MATERIALS**

Delete the first sentence and insert the following:

1. FOUNDATION

All foundation material and construction methods shall conform to those specified in Item 0102101A, however, the completed foundation shall be 8" below and parallel of the finished grade.

2. CONCRETE

Concrete shall conform to the requirements as specified under Item 0102101A.

3. Wire Mesh Reinforcing

Wire mesh reinforcing shall be welded steel, No. 8 wire spaced 6" x 6".

4. Joint Sealant

Joint sealant shall conform to the material requirements of Item 0104021

**CONSTRUCTION METHODS**

Add the following:

1. EXCAVATION

Removal of existing street pavement and base shall be as specified in Item 0100101A under excavation.

2. Pavement Repair

All pavement repairs shall meet the requirements of the City of Hartford standard specifications and details.

3. Joint Sealant

Joint Sealant shall be placed in conformance with the construction methods of Item 0104021.

**BASIS OF PAYMENT**

Add the following:

Where the entire roadway is not being resurfaced, the cost of the bituminous concrete intermediate course and the cost of sealing the pavement joint shall be considered as included in the lump sum bid price. The cost of the three-foot-wide mill and overlay will be included in the lump sum bid price.

END OF SECTION

## **ITEM 0102701A**

### **LONGITUDINAL DOWELED EXPANSION JOINT IN CONCRETE WALK**

#### **DESCRIPTION**

This item shall include forming, furnishing materials for, and constructing doweled 1/2" longitudinal doweled expansion joints in concrete walks being built under other bid items where ordered by the Engineer.

#### **REFERENCED ITEMS**

Item 0102101, 0102601

#### **REQUIRED SUBMITTALS**

Material Certificate of Compliance:

Submit 2 copies of material certificate of compliance for dowels and expansion joint material in accordance with the contract general requirements.

#### **MATERIALS**

All material requirements of Item 0102101 and 0102601 shall apply to this item except that the expansion material shall be 1/2" thick and the dowels shall be 5/8" round by 24" long and spaced a maximum of 24" apart.

Expansion joint material shall consist of preformed strips made of cane or other suitable fibers of a cellular nature securely bound together and then uniformly saturated with asphalt, or strips formed from clean granulated cork securely bound together by a suitable asphalt binder and encased between two layers of saturated felt or two layers of glass-fiber felt.

Expansion material shall meet ASTM Specification D-1752-04 Type II.

Dowels shall conform to the requirements of ASTM A-615-04 for plain bars and shall be Grade 60. Dowels shall be hot dipped galvanized in accordance with AASHTO M232m/m.

#### **CONSTRUCTION METHODS**

The Contractor shall employ suitable methods of bracing the expansion joint material and placing the concrete so that the expansion joint will remain vertical and true to line and grade during and after the construction. The Contractor shall submit his proposed method of construction to the Engineer for approval before any concrete is placed.

Where the joint is being constructed on a line two feet back of the curb line, the coated or free end of the dowels shall be on the curbside of the joint.

**BASIS OF PAYMENT**

This work will be paid for by lump sum bid price, constructed and accepted, including all equipment, materials, tools, labor and incidental expenses.

END OF SECTION

## **ITEM NO. 0104201A - RECONSTRUCT CONCRETE PAVEMENT BASE AT CURB**

### **Description:**

This item shall include excavating existing concrete base pavement, including any bituminous concrete pavement thereon, and sub-base materials for a minimum width of 12" in front of curb to be reset or replaced as required for the reconstruction of reinforced concrete pavement base on a processed traprock base.

The thickness of the concrete pavement base shall be minimum 8" or match existing concrete pavement thickness whichever is greater. In addition, this item includes furnishing and installing welded wire mesh reinforcement and/or drilling and grouting dowels into the existing concrete pavement base. The item does not include restoration of the bituminous concrete pavement. The restoration of the bituminous concrete pavement shall be included under granite curb items 0100101 and 0100601.

### **Reference Items:**

0102601 Galvanized Dowel

0104101 Reconstruct Reinforced Concrete Pavement Base

### **Required Submittals:**

Material Certificate of Compliance:

Submit 5 copies of material certificate of compliance for concrete in accordance with the contract general requirements.

### **Materials:**

#### **1. Cement Concrete**

Cement concrete shall conform to the requirements of Item 0104101 for Repair or Reconstruct Concrete Pavement base.

#### **2. Dowels**

Dowels used for this item shall be 5/8" dia. X 24" and shall conform to the material requirements of Item 0102601.

#### **3. Processed Traprock**

All foundation material shall be processed traprock conforming to the material requirements of Item 0103702.

**Construction Methods:**

The existing concrete pavement base shall be cut by a concrete saw and shall extend only to the top of the reinforcing wire mesh. Concrete saw cutting shall not be paid for separately but is included in the cost for the new granite curb to be installed. The concrete below this reinforcement shall be removed with a pavement breaker. The existing reinforcing wire mesh shall be tied to the newly placed reinforcing wire mesh. In cases where this is not possible, a 5/8" x 12" dowel shall be provided to be drilled to the existing concrete base at 2-foot spacing.

Construction methods shall conform to the requirements of Item 0104101.

**Basis of Payment:**

This work will be paid for by the lump sum bid price completed and accepted, including all equipment, materials, tools, labor and incidental expenses.

END OF SECTION

**ITEM NO. 0106201A- TOPSOIL**

**DESCRIPTION**

This item supplements City of Hartford standard item #0106201 as follows. This item shall include preparation of the bed; furnishing, spreading, and grading topsoil and to a depth necessary as required on the plans or as ordered by the engineer. This work shall be completed in advance of seeding or sod operations.

**REFERENCED ITEMS**

None

**REQUIRED SUBMITTALS**

Certified Test Report:

Submit 2 copies of certified test reports for topsoil in accordance with the contract general requirements.

**MATERIALS**

The term topsoil used herein shall mean that portion of the soil profile defined technically as the "A" horizon by the Soil Science of America. It shall contain not less than 3%, nor more than 20% organic matter as determined by loss-on-ignition of oven-dried samples drawn by the Engineer.

The following textural classes, as determined on the basis of material passing the 20-mesh sieve and subjected to partial mechanical analysis shall be acceptable: Loamy sand, with not more than 80% sand; sandy loam; loam; sandy clay loam, with not more than 30% clay; silt loam; with not more than 60% silt.

The topsoil to be furnished by the Contractor shall be loose, friable, reasonably free of admixtures of sub-soil, free from refuse, stumps, roots, brush, weeds, rocks, and stones 1/2" maximum in over-all dimensions. The topsoil shall also be free from any material, which will prevent the formation of a suitable seedbed or prevent seed germination and plant growth.

**CONSTRUCTION METHODS**

The Contractor shall notify the Engineer of the location from which the Contractor proposes to furnish topsoil to the project at least 15 calendar days prior to delivery.

The topsoil and its source shall be inspected and approved by the Engineer before the material is delivered to the project. Any material delivered to the project which

does not meet specifications, or which has become mixed with undue amounts of sub-soil during any operation at the source or during placing or spreading, will be rejected and shall be replaced with suitable material by the Contractor.

**BASIS FOR PAYMENT**

This work will be paid by the lump sum bid price, completed and accepted, including all equipment, material, tools, labor and incidental expenses thereto.

<b><u>PAY ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
0106201A	TOPSOIL	CY

END OF SECTION



**ITEM NO. 0106401A – SEEDING & FERTILIZING**

This work shall be constructed in accordance with Item No. 0106401 of the City of Hartford Standard Technical Specifications which is supplemented as follows:

**MATERIALS**

Delete the second to the last paragraph in its entirety.

**CONSTRUCTION METHODS**

Delete the third and fourth paragraphs in their entirety.

**BASIS OF PAYMENT**

This work will be paid for included in the lump sum bid price, complete in place, which price shall include all preparation of soil, fertilizing, seeding, maintenance, equipment, tools, and labor incidental thereto.

END OF SECTION

## **ITEM #0125001A MAINTENANCE AND PROTECTION OF TRAFFIC**

Advise the owner at least 48 hours in advance and make alternate and or temporary means for access.

The hours of work for all stages shall be 7:00am to 5:00pm. No work shall be performed on legal holidays or weekends unless authorized in writing by the City.

The Contractor shall start work at Stage 1 and progress in an easterly direction. Work shall be substantially completed within each stage before moving to the next Stage. The Contractor will not be allowed to work on more than 2 Stages simultaneously. The Contractor will NOT be allowed to work simultaneously on adjacent sides of Park Street at any time. Adjustments to this procedure may be made by the City in the interest of public safety.

The duration of construction operations shall be in accordance with the requirements and limitations as specified within and as supplemented and limited in the Special Provision "Prosecution and Progress" and/or the contract documents. The Contractors schedule shall be organized in a manner to mimic construction stage progression.

### **Commercial and Residential Driveways**

The Contractor shall maintain access to and egress from all commercial and residential driveways throughout the project limits. The Contractor will be allowed to close said driveways to perform the required work during those periods when the businesses are closed, unless permission is granted from the business owner to close the driveway during business hours. If a temporary closure of a residential driveway is necessary, the Contractor shall coordinate with the owner to determine the time period of the closure.

Item 0125001 - **Construction Method is supplemented as follows:**

### **General**

Unpaved travel paths will not be permitted for areas requiring full depth and full width roadway reconstruction. In these cases, the Contractor will be required set up the appropriate traffic control to maintain traffic on existing paved roadways until full depth roadway reconstruction is fully paved.

The Contractor is required to delineate any raised structures of 2" or more within the travel lanes, so that the structures are visible day and night, unless there are specific contract plans and provisions to temporarily lower these structures prior to the completion of work.

The Contractor shall schedule operations so that pavement removal and roadway resurfacing shall be completed full width across a roadway (bridge) section by the end of a workday (work night), or as directed by the Engineer. Temporary paving may be used with the approval of the Engineer.

When the installation of all intermediate courses of bituminous concrete pavement is completed for the entire roadway, the Contractor shall install the final course of bituminous concrete pavement.

When the Contractor is excavating adjacent to the roadway, the Contractor shall provide a 3-foot shoulder between the work area and travel lanes, with traffic drums spaced every 50 feet. At the end of the workday, if the vertical drop-off exceeds 3 inches, the Contractor shall provide a temporary traversable slope of 4:1 or flatter that is acceptable to the Engineer.

The Contractor, during the course of active construction work on overhead signs and structures, shall close the lanes directly below the work area for the entire length of time overhead work is being undertaken. At no time shall an overhead sign be left partially removed or installed.

If applicable, when an existing sign is removed, it shall be either relocated or replaced by a new sign during the same working day.

The Contractor shall not store any material on-site which would present a safety hazard to motorists or pedestrians (e.g. fixed object or obstruct sight lines).

The field installation of a signing pattern shall constitute interference with existing traffic operations and shall not be allowed, except during the allowable periods.

Construction vehicles entering travel lanes at speeds less than the posted speed are interfering with traffic and shall not be allowed without a lane closure. The lane closure shall be of sufficient length to allow vehicles to enter or exit the work area at posted speeds, in order to merge with existing traffic.

### **Existing Signing**

The Contractor shall maintain all existing overhead and side-mounted signs throughout the project limits during the duration of the project. The Contractor shall temporarily relocate signs and sign supports as many times as deemed necessary, and install temporary sign supports if necessary and as directed by the Engineer.

### **Requirements for Winter**

The Contractor shall schedule a meeting with representatives from the Department including the offices of Maintenance and Traffic, and the City to determine what interim traffic control measures the Contractor shall accomplish for the winter to provide safety to the motorists and permit adequate snow removal procedures. This meeting shall be held prior to October 31 of each year and will include, but not be limited to, discussion of the status and schedule of the following items: lane and shoulder widths, pavement restoration, traffic signal work, pavement markings, and signing.

### Signing Patterns

The Contractor shall erect and maintain all signing patterns in accordance with the traffic control plans contained herein. Proper distances between advance warning signs and proper taper lengths are mandatory.

### **Pavement Markings -Non-Limited Access Multilane Roadways Secondary and Local Roadways**

During construction, the Contractor shall maintain all pavement markings on paved surfaces on all roadways throughout the limits of the project.

### **Interim Pavement Markings**

If applicable, the Contractor shall install painted pavement markings, which shall include centerlines, edge lines, lane lines (broken lines), lane-use arrows, and stop bars, on each intermediate course of bituminous concrete pavement and on any milled surface by the end of the work day/night. If the next course of bituminous concrete pavement will be placed within seven days, edge lines are not required. The painted pavement markings will be paid under the appropriate items.

If the Contractor will install another course of bituminous concrete pavement within 24 hours, the Contractor may install Temporary Plastic Pavement Marking Tape in place of the painted pavement markings by the end of the work day/night. These temporary pavement markings shall include centerlines, lane lines (broken lines) and stop bars; edge lines are not required. Centerlines shall consist of two 4-inch-wide yellow markings, 2 feet in length, side by side, 4 to 6 inches apart, at 40-foot intervals. No passing zones should be posted with signs in those areas where the final centerlines have not been established on two-way roadways. Stop bars may consist of two 6-inch-wide white markings or three 4 inch wide white markings placed side by side. The Contractor shall remove and dispose of the Temporary Plastic Pavement Marking Tape when another course of bituminous concrete pavement is installed. The cost of

furnishing, installing and removing the Temporary Plastic Pavement Marking Tape shall be at the Contractor's expense.

If an intermediate course of bituminous concrete pavement will be exposed throughout the winter, then Epoxy Resin Pavement Markings should be installed unless directed otherwise by the Engineer.

### **TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS**

The following guidelines shall assist field personnel in determining when and what type of traffic control patterns to use for various situations. These guidelines shall provide for the safe and efficient movement of traffic through work zones and enhance the safety of work forces in the work area.

### **TRAFFIC CONTROL PATTERNS**

Traffic control patterns shall be used when a work operation requires that all or part of any vehicle or work area protrudes onto any part of a travel lane or shoulder. For each situation, the installation of traffic control devices shall be based on the following:

- Speed and volume of traffic
- Duration of operation
- Exposure to hazards

Traffic control patterns shall be uniform, neat and orderly so as to command respect from the motorist.

In the case of a horizontal or vertical sight restriction in advance of the work area, the traffic control pattern shall be extended to provide adequate sight distance for approaching traffic.

If a lane reduction taper is required to shift traffic, the entire length of the taper should be installed on a tangent section of roadway so that the entire taper area can be seen by the motorist.

Any existing signs that are in conflict with the traffic control patterns shall be removed, covered, or turned so that they are not readable by oncoming traffic.

When installing a traffic control pattern, a Buffer Area should be provided, and this area shall be free of equipment, workers, materials and parked vehicles.

Although each situation must be dealt with individually, conformity with the typical traffic control plans contained herein is required. In a situation not adequately covered by the typical traffic control plans, the Contractor must contact the Engineer for assistance prior to setting up a traffic control pattern.

### **PLACEMENT OF SIGNS**

Signs must be placed in such a position to allow motorists the opportunity to reduce their speed prior to the work area. Signs shall be installed on the same side of the roadway as the work area. On multi-lane divided highways, advance warning signs shall be installed on both sides of the highway. On directional roadways (on-ramps, off-ramps, one-way roads), where the sight distance to signs is restricted, these signs should be installed on both sides of the roadway.

### **ALLOWABLE ADJUSTMENT OF SIGNS AND DEVICES SHOWN ON THE TRAFFIC CONTROL PLANS**

The traffic control plans contained herein show the location and spacing of signs and devices under ideal conditions. Signs and devices should be installed as shown on these plans whenever possible.

The proper application of the traffic control plans and installation of traffic control devices depends on actual field conditions.

Adjustments to the traffic control plans shall be made only at the direction of the Engineer to improve the visibility of the signs and devices and to better control traffic operations. Adjustments to the traffic control plans shall be based on safety of work forces and motorists, abutting property requirements, driveways, side roads, and the vertical and horizontal curvature of the roadway.

The Engineer may require that the traffic control pattern be located significantly in advance of the work area to provide better sight line to the signing and safer traffic operations through the work zone.

Table I indicates the minimum taper length required for a lane closure based on the posted speed limit of the roadway. These taper lengths shall only be used when the recommended taper lengths shown on the traffic control plans cannot be achieved.

**TABLE I – MINIMUM TAPER LENGTHS**

POSTED SPEED LIMIT MILES PER HOUR	MINIMUM TAPER LENGTH IN FEET FOR A SINGLE LANE CLOSURE
30 OR LESS	180
35	250
40	320
45	540
50	600
55	660
65	780

**SECTION 1. WORK ZONE SAFETY MEETINGS**

- 1.a) Prior to the commencement of work, a work zone safety meeting will be conducted with representatives of the City, Municipal Police, the Contractor (Project Superintendent) and the Traffic Control Subcontractor (if different than the prime Contractor) to review the traffic operations, lines of responsibility, and operating guidelines which will be used on the project. Other work zone safety meetings during the course of the project should be scheduled as needed.
  
- 1.b) A Work Zone Safety Meeting Agenda shall be developed and used at the meeting to outline the anticipated traffic control issues during the construction of this project. Any issues that can't be resolved at these meetings will be brought to the attention of the District Engineer and the Office of Construction. The agenda should include:
  - Review Project scope of work and time
  - Review Section 1.08, Prosecution and Progress
  - Review Section 0125001A, Maintenance and Protection of Traffic
  - Review Contractor's schedule and method of operations.
  - Review areas of special concern: ramps, turning roadways, medians, lane drops, etc.
  - Open discussion of work zone questions and issues
  - Discussion of review and approval process for changes in contract requirements as they relate to work zone areas

**SECTION 2. GENERAL**

- 2.a) If the required minimum number of signs and equipment (i.e. one High Mounted Internally Illuminated Flashing Arrow for each lane closed, two TMAs, Changeable Message Sign, etc.) are not available; the traffic control pattern shall not be installed.
- 2.b) The Contractor shall have back-up equipment (TMAs, High Mounted Internally Illuminated Flashing Arrow, Changeable Message Sign, construction signs, cones/drums, etc.) available at all times in case of mechanical failures, etc. The only exception to this is in the case of sudden equipment breakdowns in which the pattern may be installed but the Contractor must provide replacement equipment within 24 hours.
- 2.c) Failure of the Contractor to have the required minimum number of signs, personnel and equipment, which results in the pattern not being installed, shall not be a reason for a time extension or claim for losstime.
- 2.d) In cases of legitimate differences of opinion between the Contractor and the Inspection staff, the Inspection staff shall err on the side of safety. The matter shall be brought to the City for resolution immediately or, in the case of work after regular business hours, on the next business day.

### **SECTION 3. INSTALLING AND REMOVING TRAFFIC CONTROL PATTERNS**

- 3.a) Lane Closures shall be installed beginning with the advance warning signs and proceeding forward toward the work area.
- 3.b) Lane Closures shall be removed in the reverse order, beginning at the work area, or end of the traffic control pattern, and proceeding back toward the advance warning signs.
- 3.c) Stopping traffic may be allowed:
  - As per the contract for such activities as blasting, steel erection, etc.
  - During paving, milling operations, etc. where, in the middle of the operation, it is necessary to flip the pattern to complete the operation on the other half of the roadway and traffic should not travel across the longitudinal joint or difference in roadway elevation.
  - To move slow moving equipment across live traffic lanes into the work area.



- 3.d) The Contractor must adhere to using the proper signs, placing the signs correctly, and ensuring the proper spacing of signs.
- 3.e) Additional devices are required on entrance ramps, exit ramps, and intersecting roads to warn and/or move traffic into the proper travel path prior to merging/exiting with/from the main line traffic. This shall be completed before installing the mainline pattern past the ramp or intersecting roadway.
- 3.f) Prior to installing a pattern, any conflicting existing signs shall be covered with an opaque material. Once the pattern is removed, the existing signs shall be uncovered.
- 3.g) On limited access roadways, workers are prohibited from crossing the travel lanes to install and remove signs or other devices on the opposite side of the roadway. Any signs or devices on the opposite side of the roadway shall be installed and removed separately.

**SECTION 4. USE OF HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW**

- 4.a) On limited access roadways, one Flashing Arrow shall be used for each lane that is closed. The Flashing Arrow shall be installed concurrently with the installation of the traffic control pattern and its placement shall be as shown on the traffic control plan. For multiple lane closures, one Flashing Arrow is required for each lane closed. If conditions warrant, additional Flashing Arrows should be employed (i.e.: curves, major ramps, etc.).
- 4.b) On non-limited access roadways, the use of a Flashing Arrow for lane closures is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to use the Flashing Arrow.
- 4.c) The Flashing Arrow shall not be used on two lane, two-way roadways for temporary alternating one-way traffic operations.
- 4.d) The Flashing Arrow board display shall be in the "arrow" mode for lane closure tapers and in the "caution" mode (four corners) for shoulder work, blocking the shoulder, or roadside work near the shoulder. The Flashing Arrow shall be in the "caution" mode when it is positioned in the closed lane.
- 4.e) The Flashing Arrow shall not be used on a multi-lane roadway to laterally shift all lanes of traffic, because unnecessary lane changing may result.

## **SECTION 5. USE OF TRAFFIC DRUMS AND TRAFFIC CONES**

- 5.a) Traffic drums shall be used for taper channelization on limited-access roadways, ramps, and turning roadways and to delineate raised catch basins and other hazards.
- 5.b) Traffic drums shall be used in place of traffic cones in traffic control patterns that are in effect for more than a 36-hour duration.
- 5.c) Traffic Cones less than 42 inches in height shall not be used on limited-access roadways or on non-limited access roadways with a posted speed limit of 45 mph and above.
- 5.d) Typical spacing of traffic drums and/or cones shown on the Traffic Control Plans in the Contract are maximum spacings and may be reduced to meet actual field conditions as required.

## **SECTION 6. USE OF MUNICIPAL POLICE OFFICERS**

- 6.a) Police may be utilized only on City roadways under their primary jurisdiction. One Officer may be used per critical sign pattern. Shoulder closures and right lane closures can generally be implemented without the presence of a Police Officer. Likewise, in areas with moderate traffic and wide, unobstructed medians, left lane closures can be implemented without Police presence. Under some situations it may be desirable to have Police presence, when one is available. Examples of this include: nighttime lane closures; left lane closures with minimal width for setting up advance signs and staging; lane and shoulder closures on turning roadways/ramps or mainline where sight distance is minimal; and closures where extensive turning movements or traffic congestion regularly occur, however they are not required.
- 6.b) Once the pattern is in place, the Police Officer should be positioned in a non-hazardous location in advance of the pattern. If traffic backs up beyond the beginning of the pattern, then the Police Officer shall be repositioned prior to the backup to give warning to the oncoming motorists. The Police Officer and TMA should not be in proximity to each other.

- 6c) Other functions of the Police Officer(s) may include:
- Assisting entering/exiting construction vehicles within the work area.
  - Enforcement of speed and other motor vehicle laws within the work area, if specifically requested by the project.
- 6d) Police Officers assigned to a work site are to only take direction from the Engineer.

## NOTES FOR TRAFFIC CONTROL PLANS

1. IF A TRAFFIC STOPPAGE OCCURS IN ADVANCE OF SIGN (A), THEN AN ADDITIONAL SIGN (A) SHALL BE INSTALLED IN ADVANCE OF THE STOPPAGE.
2. SIGNS (AA), (A), AND (D) SHOULD BE OMITTED WHEN THESE SIGNS HAVE ALREADY BEEN INSTALLED TO DESIGNATE A LARGER WORK ZONE THAN THE WORK ZONE THAT IS ENCOMPASSED ON THIS PLAN.
3. SEE TABLE 1 FOR ADJUSTMENT OF TAPERS IF NECESSARY.
4. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN TRAFFIC DRUMS SHALL BE USED IN PLACE OF TRAFFIC CONES.
5. ANY LEGAL SPEED LIMIT SIGNS WITHIN THE LIMITS OF A ROADWAY / LANE CLOSURE AREA SHALL BE COVERED WITH AN OPAQUE MATERIAL WHILE THE CLOSURE IS IN EFFECT, AND UNCOVERED WHEN THE ROADWAY / LANE CLOSURE IS RE-OPENED TO ALL LANES OF TRAFFIC.
6. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN ANY EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ERADICATED OR COVERED, AND TEMPORARY PAVEMENT MARKINGS THAT DELINEATE THE PROPER TRAVELPATHS SHALL BE INSTALLED.
7. DISTANCES BETWEEN SIGNS IN THE ADVANCE WARNING AREA MAY BE REDUCED TO 100' ON LOW-SPEED URBAN ROADS (SPEED LIMIT < 40 MPH).
8. IF THIS PLAN IS TO REMAIN IN OPERATION DURING THE HOURS OF DARKNESS, INSTALL BARRICADE WARNING LIGHTS - HIGH INTENSITY ON ALL POST-MOUNTED DIAMOND SIGNS IN THE ADVANCE WARNING AREA.
9. A CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE HALF TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.
10. SIGN (P) SHALL BE MOUNTED A MINIMUM OF 7 FEET FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN.

TABLE 1 - MINIMUM TAPER LENGTHS

POSTED SPEED LIMIT (MILES PER HOUR)	MINIMUM TAPER LENGTH FOR A SINGLE LANE CLOSURE
30 OR LESS	180' (55m)
35	250' (75m)
40	320' (100m)
45	540' (165m)
50	600' (180m)
55	660' (200m)
65	780' (240m)

METRIC CONVERSION CHART (1" = 25mm)

ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC
12"	300mm	42"	1050mm	72"	1800mm
18"	450mm	48"	1200mm	78"	1950mm
24"	600mm	54"	1350mm	84"	2100mm
30"	750mm	60"	1500mm	90"	2250mm
36"	900mm	66"	1650mm	96"	2400mm



SCALE - NONE

CONSTRUCTION TRAFFIC CONTROL PLAN

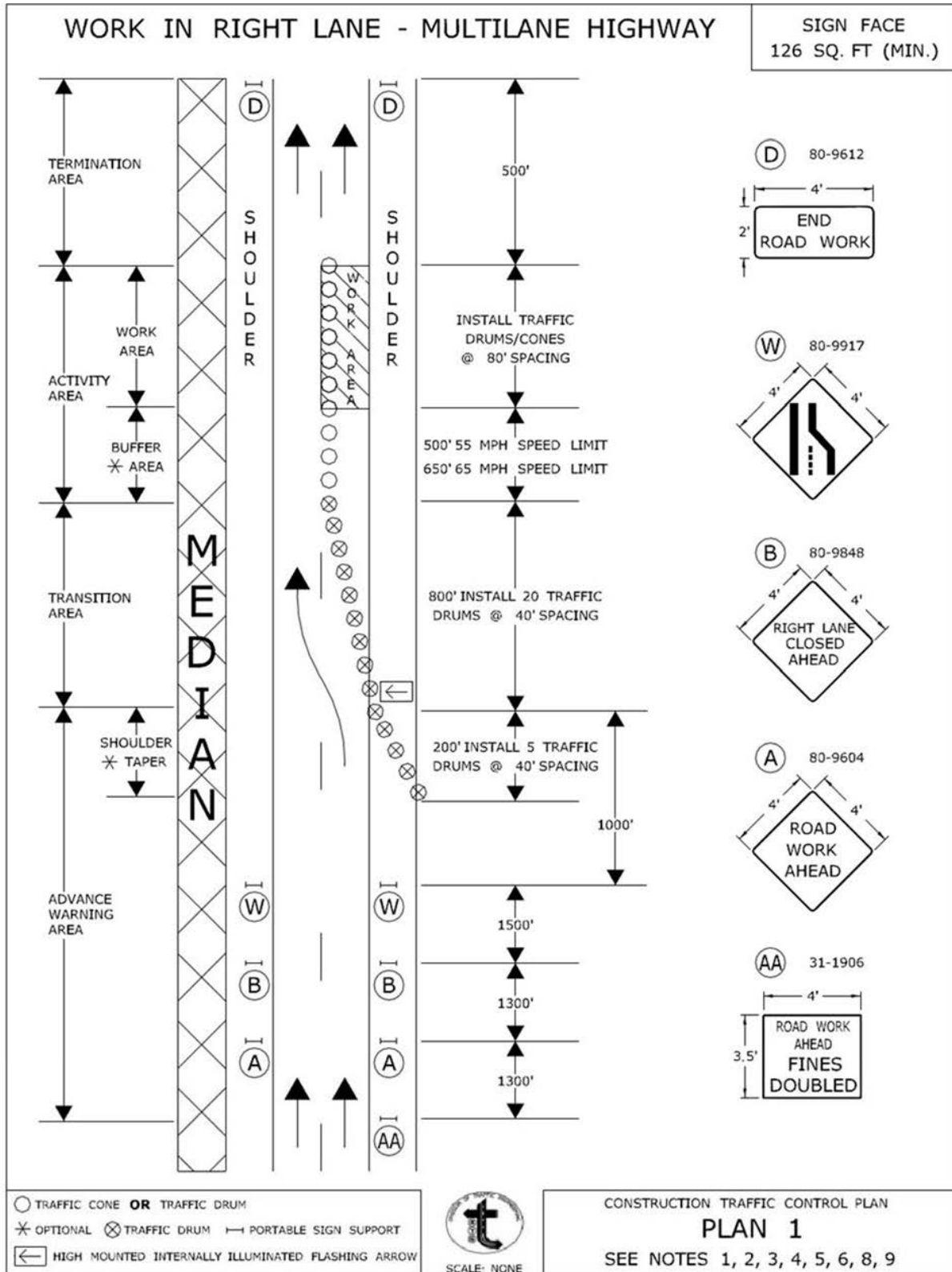
### NOTES

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

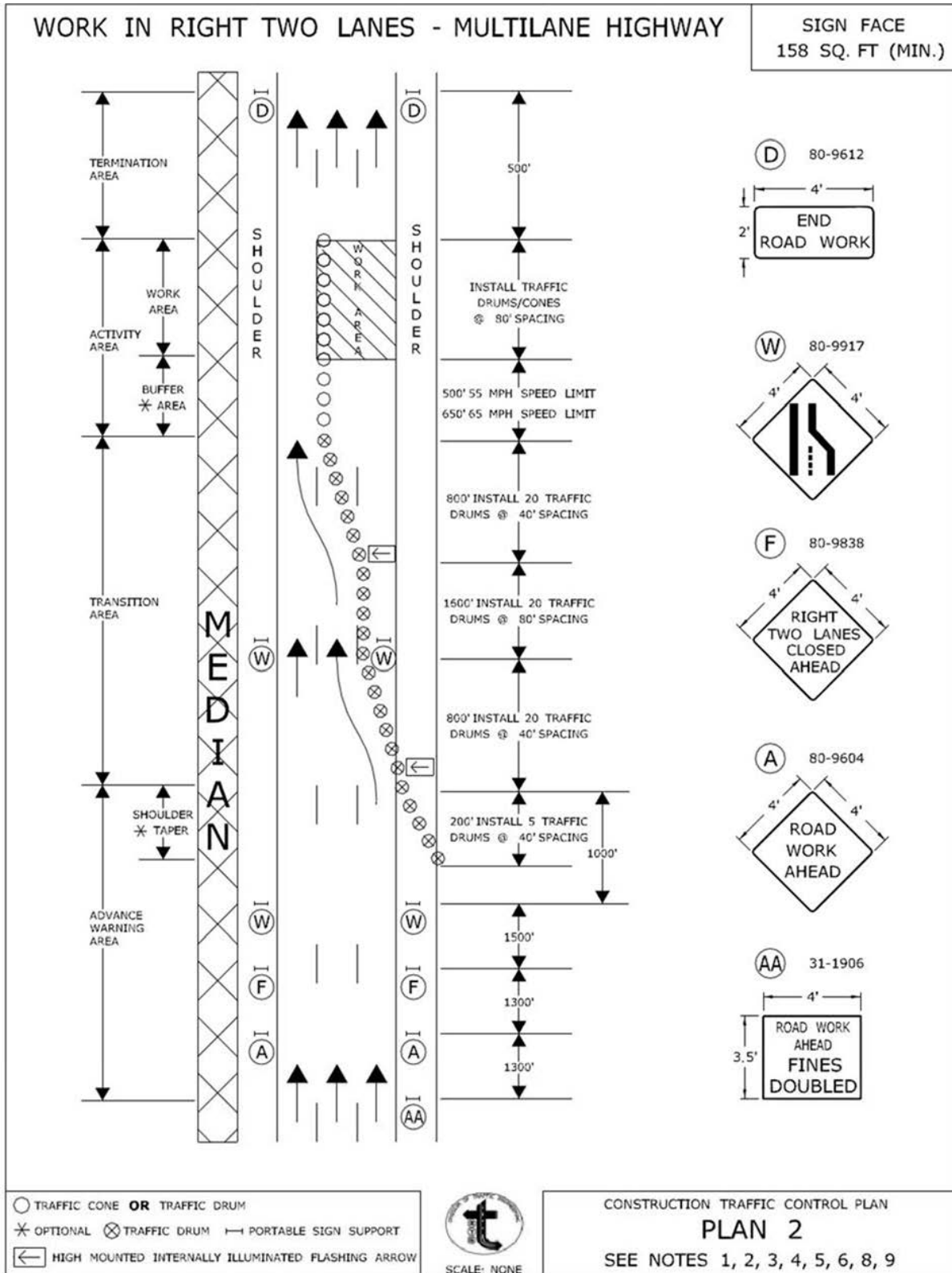
APPROVED

*Charles S. Harlow*  
PRINCIPAL ENGINEER

Charles S. Harlow  
2012.06.05 15:50:35-0400

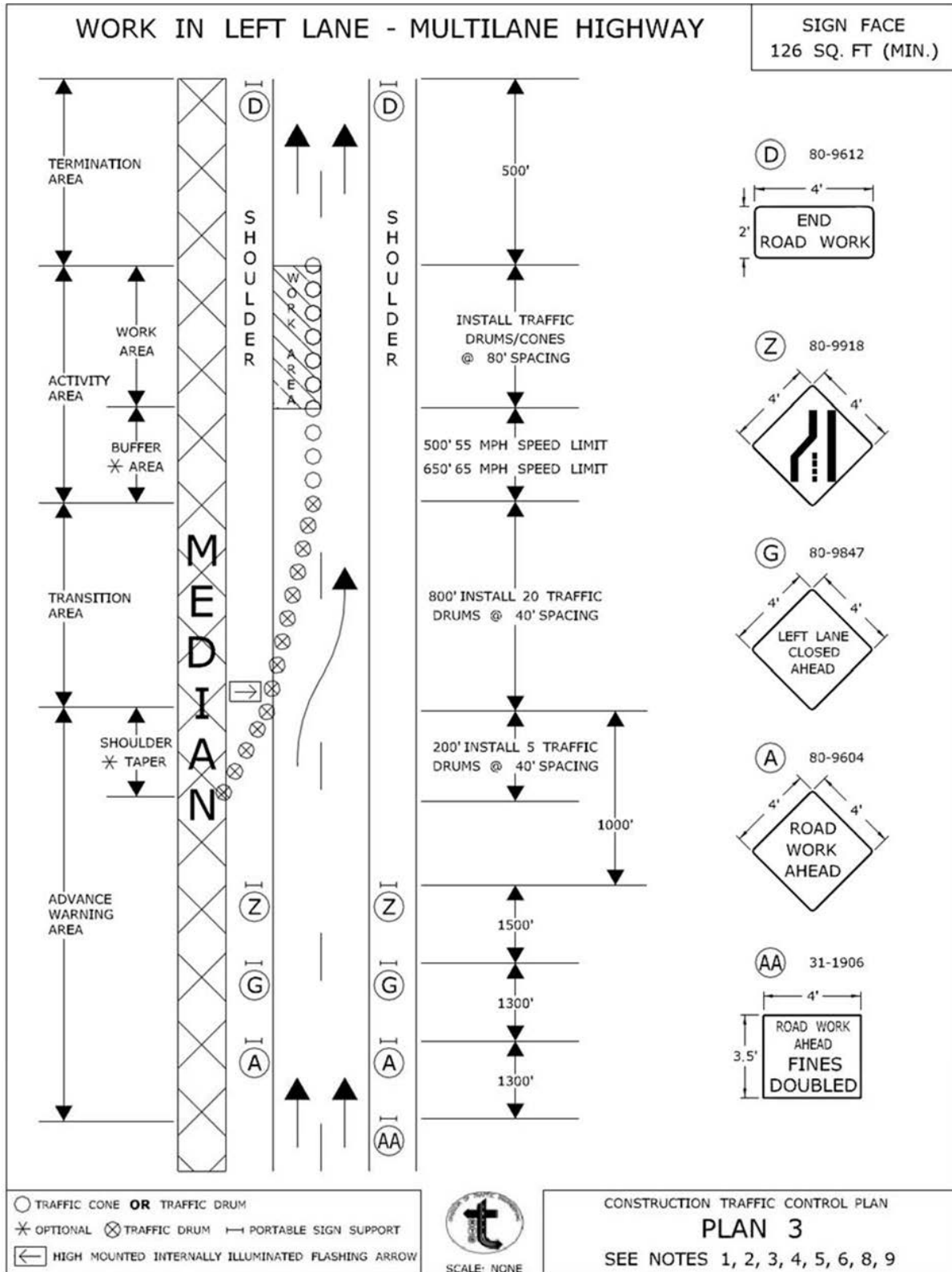


CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION



CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

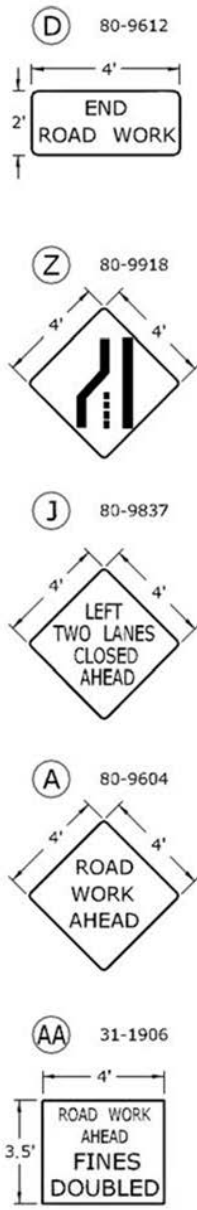
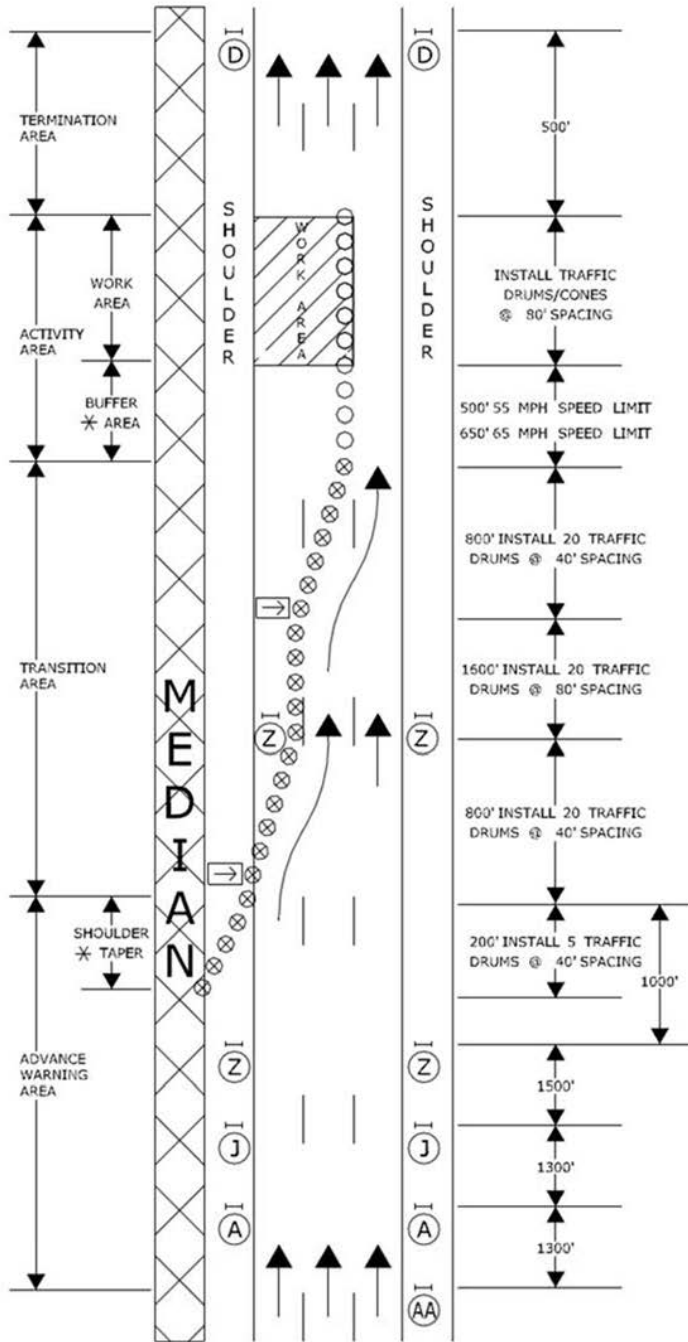
APPROVED: *Charles S. Harlow*  
Charles S. Harlow  
2012.06.05 15:51:23-04'00'  
PRINCIPAL ENGINEER



CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

# WORK IN LEFT TWO LANES - MULTILANE HIGHWAY

SIGN FACE  
158 SQ. FT (MIN.)



- TRAFFIC CONE OR TRAFFIC DRUM
- ✱ OPTIONAL ✕ TRAFFIC DRUM → PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 4**  
SEE NOTES 1, 2, 3, 4, 5, 6, 8, 9

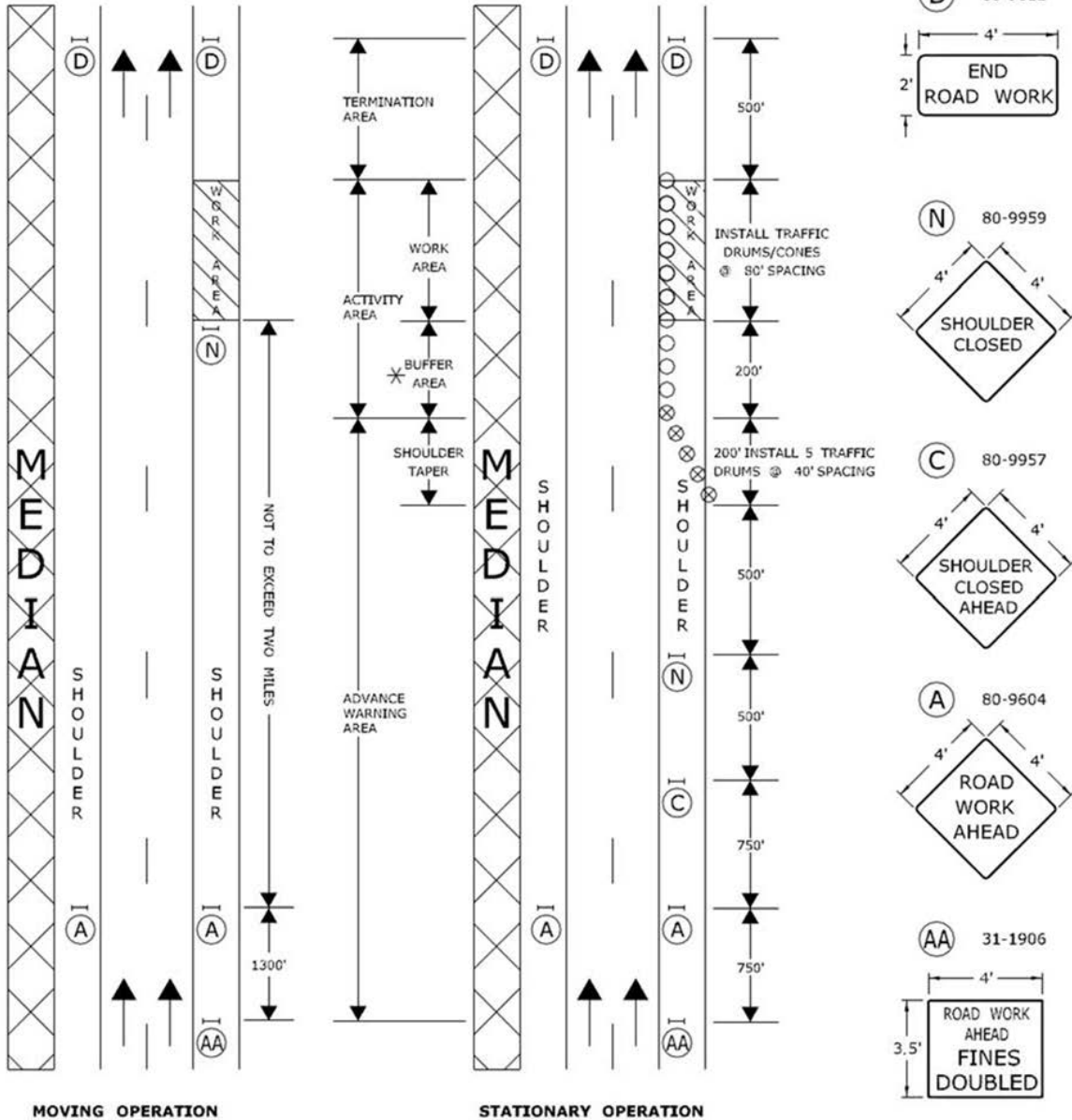
CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED: *Charles S. Harlow*  
Charles S. Harlow  
2012.06.05 15:52:10-0400  
PRINCIPAL ENGINEER



**WORK IN SHOULDER AREA - MULTILANE HIGHWAY**

**SIGN FACE  
94 SQ. FT (MIN.)**



- TRAFFIC CONE OR TRAFFIC DRUM
- \* OPTIONAL ⊗ TRAFFIC DRUM — PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN

**PLAN 6**

SEE NOTES 1, 2, 4, 8

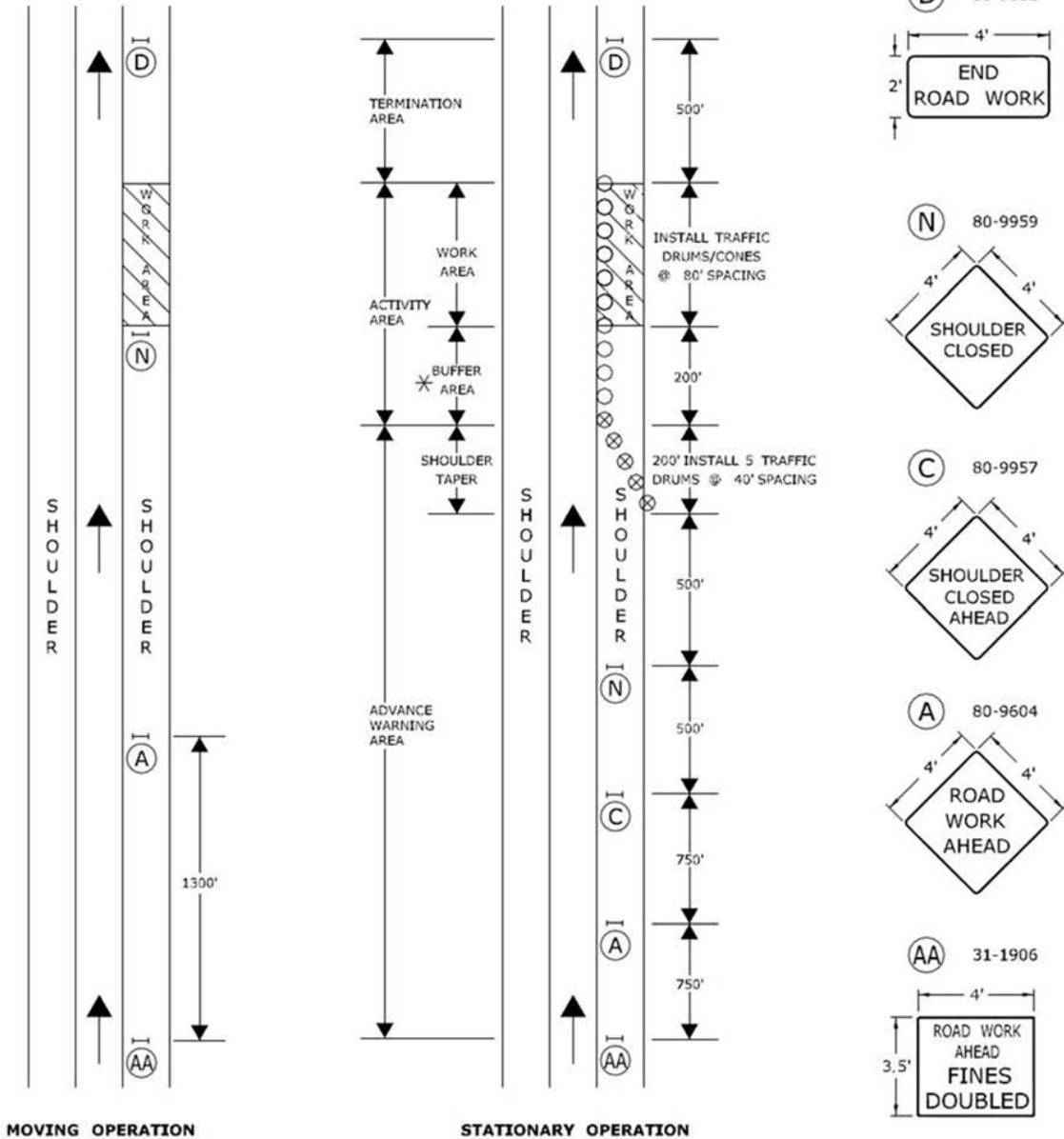
APPROVED

*Charles S. Harlow*  
Charles S. Harlow  
2012.06.05 15:52:38-04'00"  
PRINCIPAL ENGINEER

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

WORK IN SHOULDER AREA - TURNING ROADWAYS / RAMP

SIGN FACE  
70 SQ. FT (MIN.)



- TRAFFIC CONE OR TRAFFIC DRUM
- \* OPTIONAL ⊗ TRAFFIC DRUM — PORTABLE SIGN SUPPORT
- ◀ HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN

**PLAN 9**

SEE NOTES 1, 2, 4, 8

APPROVED

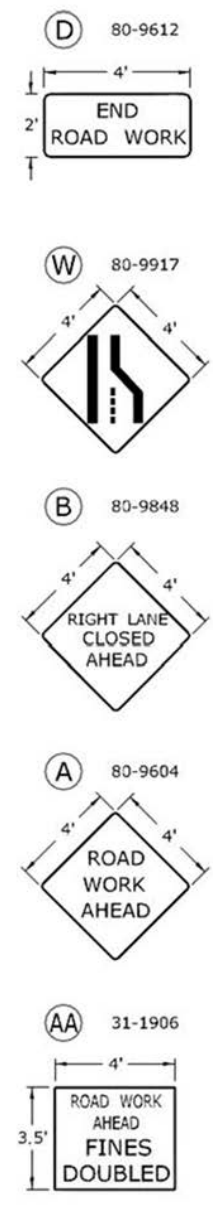
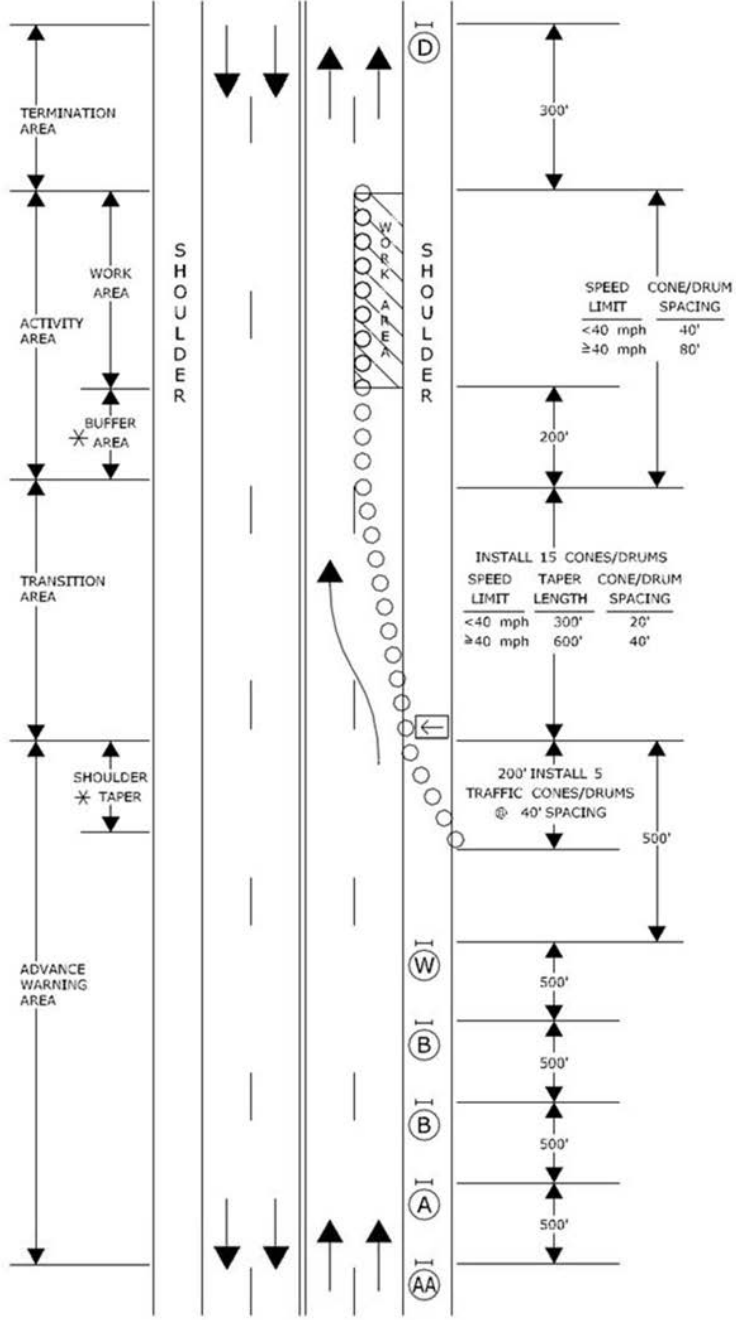
*Charles S. Harlow*  
PRINCIPAL ENGINEER

Charles S. Harlow  
2012.06.05 15:53:53-0400

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

**WORK IN RIGHT LANE - 4 LANE UNDIVIDED HIGHWAY**

SIGN FACE  
86 SQ. FT (MIN.)



SPEED LIMIT	CONE/DRUM SPACING
<40 mph	40'
≥40 mph	80'

SPEED LIMIT	TAPER LENGTH	CONE/DRUM SPACING
<40 mph	300'	20'
≥40 mph	600'	40'

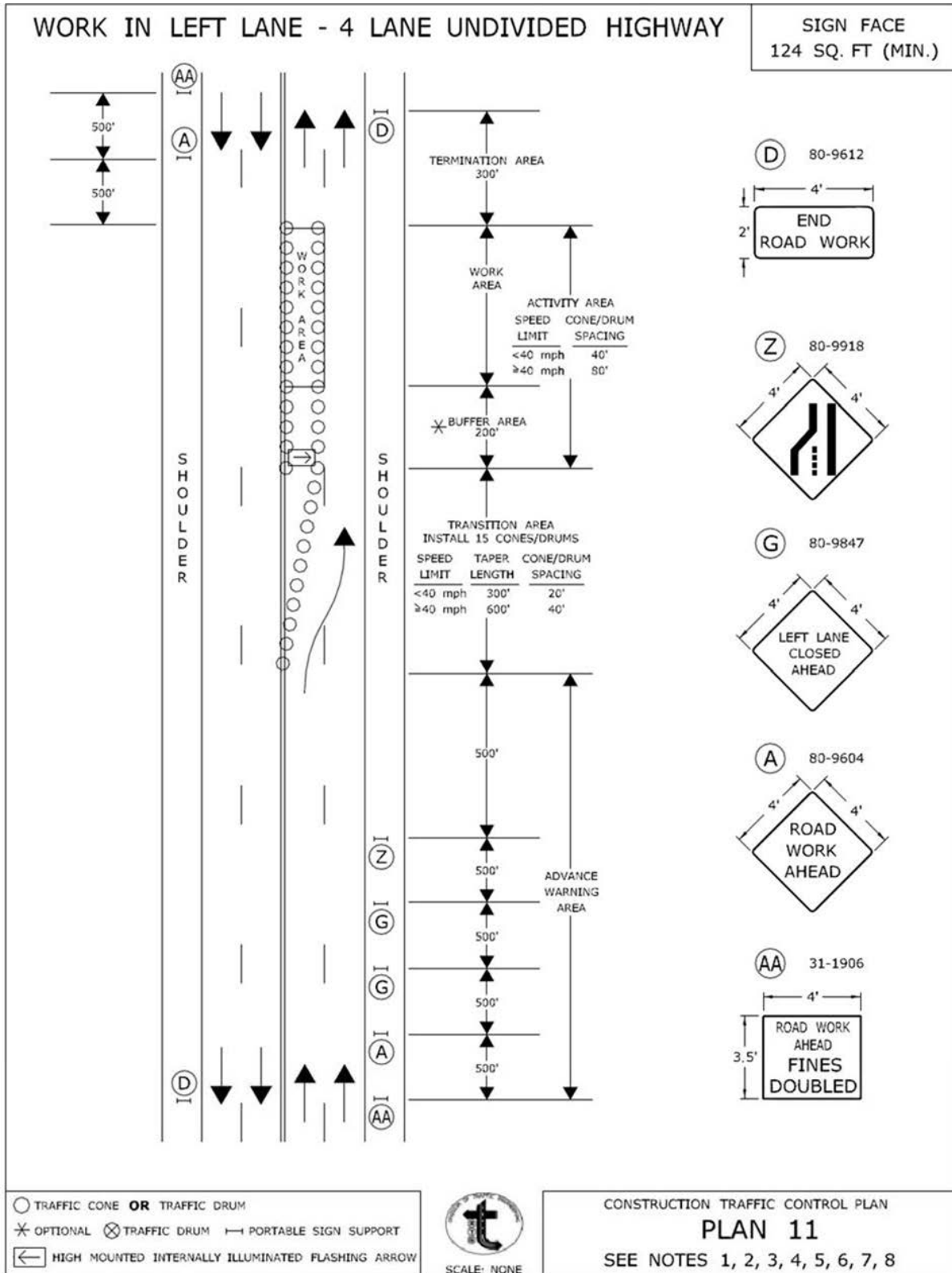
- TRAFFIC CONE OR TRAFFIC DRUM
- \* OPTIONAL ⊗ TRAFFIC DRUM → PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 10**  
SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED *Charles S. Harlow* Charles S. Harlow  
2012.06.05 15:54:15-0400  
PRINCIPAL ENGINEER



○ TRAFFIC CONE **OR** TRAFFIC DRUM  
 ✱ OPTIONAL ⊗ TRAFFIC DRUM ⇨ PORTABLE SIGN SUPPORT  
 HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



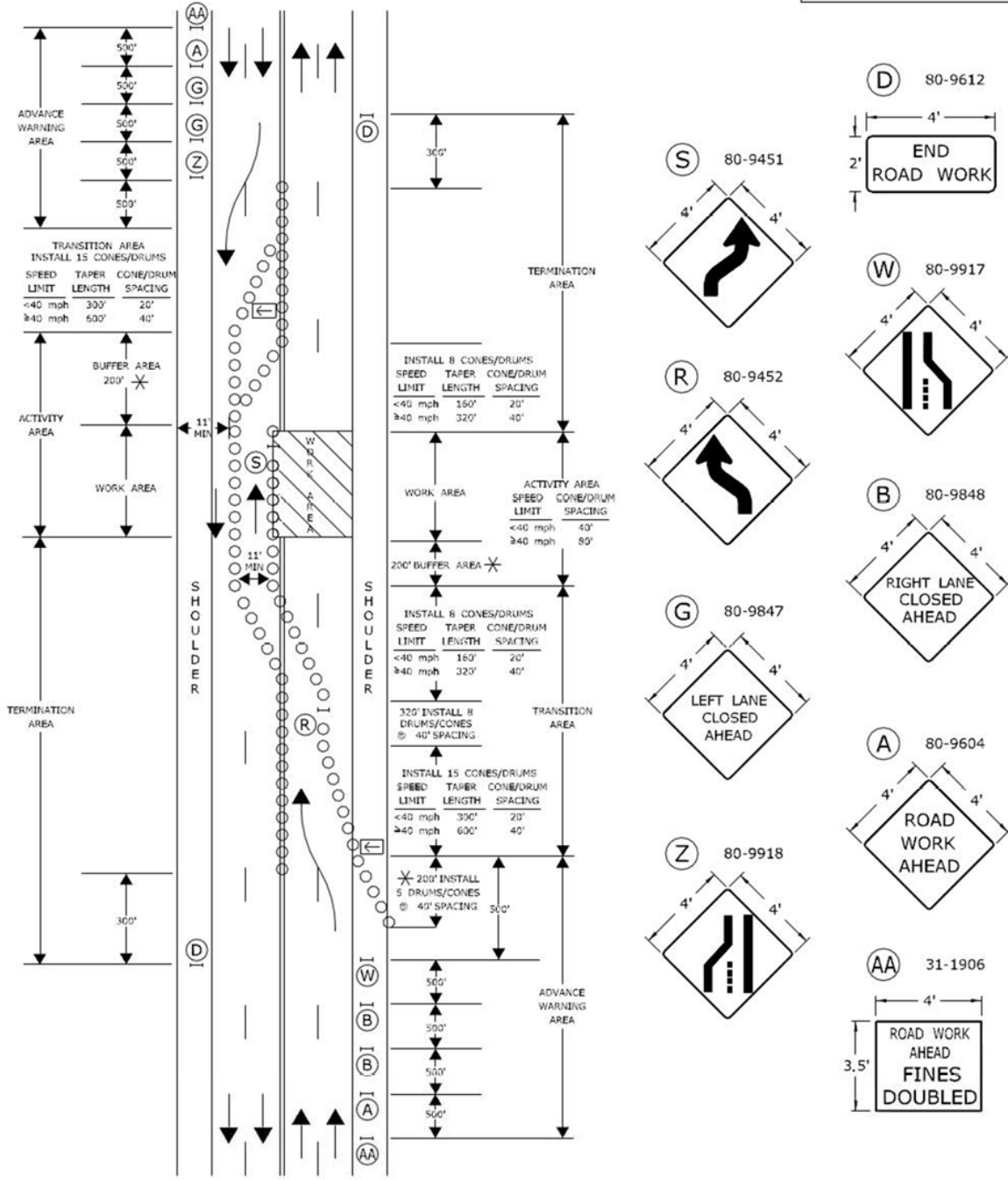
CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 11**  
 SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
 BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED: Charles S. Harlow  
 2012.06.05 15:54:36-0400  
 PRINCIPAL ENGINEER

# WORK IN BOTH LANES - 4 LANE UNDIVIDED HIGHWAY

SIGN FACE  
204 SQ. FT (MIN.)



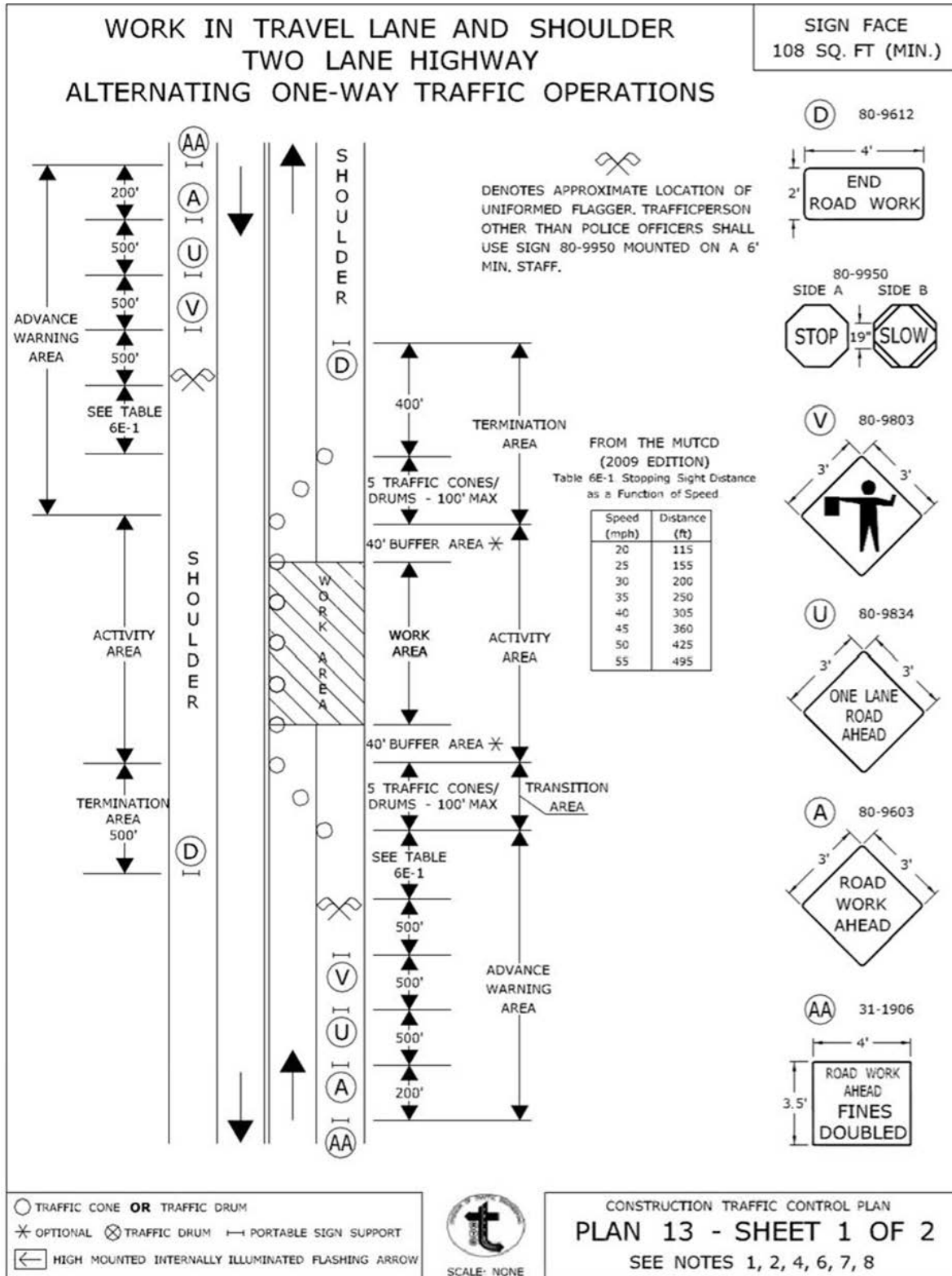
- TRAFFIC CONE OR TRAFFIC DRUM
- ✱ OPTIONAL ⊗ TRAFFIC DRUM — PORTABLE SIGN SUPPORT
- ⬅ HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

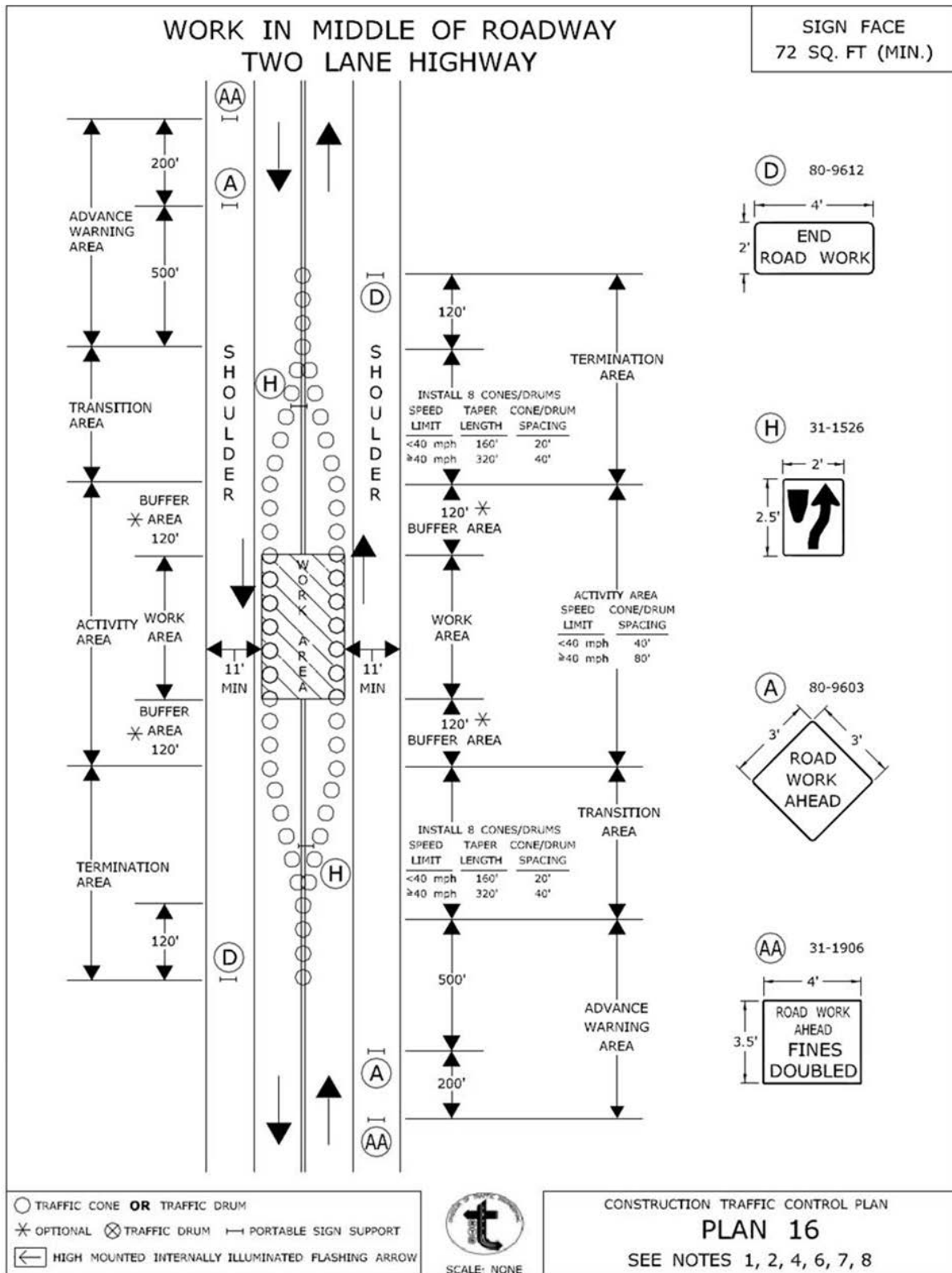


CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 12**  
SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED *Charles S. Harlow*  
PRINCIPAL ENGINEER  
Charles S. Harlow  
2012.06.05 15:55:01-0400'





CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED

*Charles S. Harlow*  
 Charles S. Harlow  
 2012.06.05 15:56:51-04:00  
 PRINCIPAL ENGINEER

## **ITEM NO. 0102601 - GALVANIZED DOWEL**

### **DESCRIPTION**

This item shall consist of 5/8" diameter by 24" long steel dowel. This material shall be furnished and placed in accordance with these specifications or as ordered by the Engineer.

### **REFERENCED ITEMS**

None

### **REQUIRED SUBMITTALS**

Material Certificate of Compliance:

Submit 5 copies of material certificate of compliance for dowels and grout in accordance with the contract general requirements.

### **MATERIALS**

Dowels shall conform to the requirements of ASTM A615/A for plain bars and shall be grade 60. The dowels shall be hot dipped galvanized in accordance with AASHTO M232m/m.

Grout shall be non-shrink, non-staining and shall consist of a mixture of hydraulic cement, water, fine aggregates, and expansive mixture approved by the Engineer. The grout mix shall conform to the following requirements:

1. The grout mix shall have an unrestrained volumetric expansion of not less than 3% or more than 8%;
2. The grout mix shall have a minimum seven (7) day compressive strength of 3,000p.s.i. when tested by methods conforming to the requirements of ASTM C-109-02.
3. The water content of the grout shall be kept as low as possible for proper grouting. However, it shall not exceed five (5) gallons per sack of cement.

With the approval of the Engineer, the Contractor may substitute a non-shrink-premixed mortar, provided the Contractor submits samples of the grout mix for testing and approval.

### **CONSTRUCTION METHODS**



This item shall apply only where new concrete sidewalk slabs or driveway and wheelchair ramps are constructed adjacent to an existing concrete slab. A 3/4" +/- 1/16" diameter hole must be drilled into the existing concrete and the dowel set 12" into the existing concrete.

The length of the dowel to be embedded in the new slab shall be dipped or painted with hot 60-70 penetration asphalt cement, viscosity Grade AC-20, conforming to the requirements of AASHTO M20-70. The length of dowel to be embedded in the existing slab shall remain uncoated. If the diameter of the drilled hole into the existing concrete exceeds 13/16", the dowel is to be set and grouted 12" into the existing concrete.

Dowels shall be spaced 24" on center and located 12" from the edge of a concrete slab.

### **BASIS OF PAYMENT**

Payment will be made by the lump sum method for the work required for the project as complete in place, which price shall include the furnishing and placing the materials, all equipment, tools and labor necessary thereto.

END OF SECTION

**ITEM NO. 0103700**

**ITEM NO. 0103701 - LARGE PROCESSED TRAPROCK BASE**

**ITEM NO. 0103702 - MEDIUM PROCESSED TRAPROCK BASE**

**ITEM NO. 0103703 - SMALL PROCESSED TRAPROCK BASE**

**DESCRIPTION**

This item shall include furnishing material for, placing, and constructing a traprock foundation in courses not to exceed 6 inches in thickness on a prepared base or sub-base in accordance with these specifications and in conformity with the lines, grades and compacted thickness as shown on the plans, details, or as ordered by the engineer.

**REFERENCED ITEMS**

None

**REQUIRED SUBMITTALS**

Material Certificate of Compliance:

Certified Test Report:

Submit 2 copies of certified test reports for process traprock in accordance with the contract general requirements.

**MATERIALS**

Course and fine aggregates shall be combined and mixed by approved methods so that the resulting material shall conform to the following gradation requirements:

**Large 2" Process Traprock:**

Square Mesh Sieves	% Passing by Weight
Pass 2 1/2"	100
Pass 1 1/2"	90-100
Pass 3/4"	60-80
Pass 1/4"	40-55
Pass #40	5-20
Pass #100	2-12
Pass #200	0-5

**Medium 1 1/4" Process Traprock:**

Square Mesh Sieves	% Passing by Weight
Pass 2"	100
Pass 1 1/2"	90-100
Pass 3/4"	50-75
Pass 1/4"	25-45
Pass #40	5-20
Pass #100	2-12
Pass #200	0-5

**Small 3/4" Process Traprock:**

Square Mesh Sieves	% Passing by Weight
Pass 1"	100
Pass 3/4"	90-100
Pass 3/8"	50-90
Pass #4	35-70
Pass #10	15-55
Pass #100	2-12
Pass #200	0-5

Coarse aggregate shall consist of sound, tough, durable fragments of rock of uniform quality throughout. It shall be free from soft disintegrated pieces, mud, dirt, organic or other injurious material. When tested by means of the Los Angeles abrasion machine using AASHTO method T-96-02, it shall not have a loss of more than 50 percent. When the fraction of the dry sample passing the No. 100, sieve is greater than 8% by weight, the sample shall be washed and the amount obtained by washing shall be added to the amount obtained by dry sieving. The resultant total amount of material passing the No. 100 sieve shall meet the above range.

Fine aggregate shall be natural sand, stone sand, screenings or any combination thereof. The fine aggregate shall be limited to material 95 percent of which passes a No. 4 sieve. The material shall be free from clay, loam and deleterious materials. Fine aggregate shall meet the material requirements of article M.05.01 of the State of Connecticut, Department of Transportation, Standard Specification for Roads, Bridges and Incidental Construction, Form 816, 2004.

**CONSTRUCTION METHODS**

The processed traprock shall be uniformly spread upon the prepared sub-grade directly from an approved stone spreader or box to such depths that each course will have a depth of 6" after compaction unless otherwise ordered. Dumping material on sub-grade from trucks and spreading with power graders and bulldozers will not be permitted except with the permission of the Engineer and except in areas inaccessible to the approved stone spreader.

The processed traprock shall be compacted by use of a power roller weighing at least 10 tons. Water shall be applied during rolling to obtain proper compaction. Rolling and wetting shall be continued until the voids in the material have been reduced to a minimum and until the course is thoroughly compacted to firm and uniform surface satisfactory to the Engineer. The compaction of each layer shall be at least 97 percent of the maximum dry density as obtained by the AASHTO Test T- 180-01, Method D.

Should the base course material become churned up or mixed with the sub-grade material at any time, the Contractor shall, without additional compensation, remove the mixture, reshape and re-compact the sub-base, and replace the material removed with clean coarse material which shall be compacted and wetted until thoroughly compacted to firm uniform surface. Sand or stone dust shall be added to the surface during rolling to fill voids that may occur in the coarse aggregate.

When compaction of the bottom course has been completed, the aggregate for the top course shall be spread over it to such depth that, after final compaction, the total depths will equal the depth specified for the completed base.

Should any irregularities of surface develop during or after the compacting of either course, they shall be remedied by loosening the material already in place and removing or adding course aggregate as required after which the entire area, including the surrounding surface, shall be compacted, and the compacting continued until it is compacted satisfactorily to a uniform surface.

**BASIS OF PAYMENT**

This work will be paid for by the lump sum price complete in place, which price shall include all materials, tools, equipment, labor and work incidental thereto.

END OF SECTION

**ITEM NO. 0106001 - TEMPORARY CONSTRUCTION FENCE**

**DESCRIPTION**

This item shall include furnishing and installing a temporary four (4) foot fence, end posts, line posts, all necessary attachment components, maintenance of such fence and posts during construction and removal and disposal of fence, posts and components at the completion of the project.

**REFERENCED ITEMS**

None

**REQUIRED SUBMITTALS**

Material Certificate of Compliance:

Submit 5 copies of material certificate of compliance for construction fence in accordance with the contract general requirements.

**MATERIALS**

Fence fabric is to be of U.V. stabilized polyethylene, orange in color, with an approximate mesh size not to exceed 3" X 2.25". The fabric is to have a minimum breaking strength of 300 lb./ft.

**CONSTRUCTION METHODS**

End posts and line posts shall be of wood, metal or fiberglass and must be of sufficient length to prevent easy removal during construction. Line posts are to be spaced according to the manufacturer's recommendation.

**BASIS OF PAYMENT**

This work shall be paid for by the lump sum price erected, maintained and removed, including all equipment, materials, tools, labor and incidental expenses thereto.

END OF SECTION

**ITEM NO. 0106201- TOPSOIL**

**DESCRIPTION**

This item shall include preparation of the bed; furnishing, spreading, and grading topsoil and to a depth necessary as required on the plans or as ordered by the engineer. This work shall be completed in advance of seeding or sod operations

**REFERENCED ITEMS**

None

**REQUIRED SUBMITTALS**

Certified Test Report:

Submit 5 copies of certified test reports for topsoil in accordance with the contract general requirements.

**MATERIALS**

The term topsoil used herein shall mean that portion of the soil profile defined technically as the "A" horizon by the Soil Science of America. It shall contain not less than 3%, nor more than 20% organic matter as determined by loss-on-ignition of oven-dried samples drawn by the Engineer.

The following textural classes, as determined on the basis of material passing the 20-mesh sieve and subjected to partial mechanical analysis shall be acceptable: Loamy sand, with not more than 80% sand; sandy loam; loam; sandy clay loam, with not more than 30% clay; silt loam; with not more than 60% silt.

The topsoil to be furnished by the Contractor shall be loose, friable, reasonably free of admixtures of sub-soil, free from refuse, stumps, roots, brush, weeds, rocks, and stones 1 1/4" maximum in over-all dimensions. The topsoil shall also be free from any material, which will prevent the formation of a suitable seedbed or prevent seed germination and plant growth.

**CONSTRUCTION METHODS**

The Contractor shall notify the Engineer of the location from which the Contractor proposes to furnish topsoil to the project at least 15 calendar days prior to delivery.

The topsoil and its source shall be inspected and approved by the Engineer before the material is delivered to the project. Any material delivered to the project which does not meet specifications, or which has become mixed with undue amounts of

sub-soil during any operation at the source or during placing or spreading, will be rejected and shall be replaced with suitable material by the Contractor.

**BASIS FOR PAYMENT**

This work will be included in the lump sum bid price completed and accepted, including all equipment, material, tools, labor and incidental expenses thereto.

END OF SECTION

### SECTION 3

#### GENERAL INFORMATION FOR PREPARATION AND DELIVERY OF A RESPONSE

Rev. 06/04/12

#### Definitions:

Request for Response (RFR) refers to any form of solicitation the City may use, such as a Request for Bids (RFB), Request for Proposal (RFP), Request for Information (RFI) or Request for Quotation (RFQ).

Candidate or Respondent refers to an individual or company who is considering or has submitted a response to a solicitation. This is also commonly referred to as “bidder.”

City refers to the City of Hartford, the Hartford Public Schools and any other governmental entity participating in the RFR process and/or resulting award(s).

Provider refers to the Candidate or Candidates who receive an award and who enter into a contract with the City.



## TABLE OF CONTENTS

<b>3.1</b>	<b>How to Respond</b>
<b>3.2</b>	<b>Questions &amp; Addenda</b>
<b>3.3</b>	<b>Qualifications of Candidates Offering a Response</b>
<b>3.4</b>	<b>Obligations of the Candidate</b>
<b>3.5</b>	<b>Non-Discrimination</b>
<b>3.6</b>	<b>Affirmative Action Requirements</b>
<b>3.7</b>	<b>Response Development</b>
<b>3.8</b>	<b>Time Provisions</b>
<b>3.9</b>	<b>Correction or Withdrawal of Responses, Cancellation of Awards</b>
<b>3.10</b>	<b>Quantities and/or Usages</b>
<b>3.11</b>	<b>Acceptable Brands</b>
<b>3.12</b>	<b>Samples</b>
<b>3.13</b>	<b>Site Inspection</b>
<b>3.14</b>	<b>Contracting</b>
<b>3.15</b>	<b>Contract Documents</b>
<b>3.16</b>	<b>Retainage <i>(Construction/Infrastructure projects only)</i></b>
<b>3.17</b>	<b>Insurance</b>
<b>3.18</b>	<b>Bid Bonds</b>
<b>3.19</b>	<b>Performance and Payment Bonds</b>
<b>3.20</b>	<b>Prevailing Wages <i>(Construction/Infrastructure projects only)</i></b>
<b>3.21</b>	<b>Subcontractors</b>
<b>3.22</b>	<b>Minority Business Utilization Commitment <i>(Construction/Infrastructure projects only)</i></b>
<b>3.23</b>	<b>Set-Aside Program</b>
<b>3.24</b>	<b>City-Based Small Contractor Preference</b>
<b>3.25</b>	<b>Criteria for Award</b>
<b>3.26</b>	<b>Notice of Award</b>
<b>3.27</b>	<b>Performance Evaluation</b>

**3.1 HOW TO RESPOND:** Supply the required information on and along with the response forms. An officer or explicit agent of your organization must sign the response form and any supplementary proposal document.

If this request has a "Specification Offered" column opposite the specifications, complete as follows and return these pages with your pricing sheet(s):

In the "specification offered" column type in:

- a) "As specified"
- b) "Exceeds specifications" - Identify what exceeds the specification and why
- c) "Exception to specifications" - Identify the substitute and define its effect

Failure to follow these guidelines may be just cause for rejection of the response.

**3.2 QUESTIONS & ADDENDA:** Questions related to this project must be received electronically at [www.hartford.gov/procurement/purchasing](http://www.hartford.gov/procurement/purchasing) (click on current solicitations and then bid opportunities) 72 hours in advance of the response submittal deadline. Candidates are responsible for obtaining all addenda related to this RFR and thus advised to check for any addenda a minimum of twenty-four hours in advance of the response deadline.

The bids submitted for the work must be based upon the text of this document including the Standard instructions, Special Instructions, Specifications, all Addenda, and any referenced plans, and no oral or informal statement or representation by any representative or employee of the City of Hartford or the Architect shall be considered an amendment to or waiver of any statements in or requirement of such bidding or proposed contract documents and no claim or right of action shall accrue in favor of any respondent as a result of or founded on such oral or informal statements or representations. The City or its agents shall not be responsible for any oral instructions or interpretations given to a Candidate.

**Note:** All communications related to this project are to be directed to buyer noted on the invitation to respond. Candidates found to be communicating with City or School staff outside of the Procurement Services Unit will have their response rejected.

**3.3 QUALIFICATIONS OF CANDIDATES OFFERING A RESPONSE:** The City may make such investigations as deemed necessary to determine the ability of the Candidate to perform the work and the degree to which any Candidate meets the criteria for award listed herein. Each Candidate agrees to furnish the City any additional information requested.

**3.4 OBLIGATIONS OF THE CANDIDATE:** At the time of the opening of proposals, each Candidate will be presumed to be thoroughly familiar with the City's requirements, and the objectives for each element of the project, item or service. A plea of mistake in the accepted response shall not be available to the Candidate for the recovery of the bid surety or as a defense to any action based upon an accepted response.

**3.5 NON-DISCRIMINATION:** The candidate agrees and warrants that in the performance of the contract such candidate will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, mental or physical disability, in any manner prohibited by the laws of the United States or of the State of Connecticut.

**3.6 AFFIRMATIVE ACTION REQUIREMENTS:**

3.6.1 No Contract or Purchase Order, regardless of how procured, shall be awarded to any Person or Candidate that is not an equal opportunity employer. The successful respondent, as a condition of being awarded this contract shall agree to comply with all contractual Equal Employment Opportunity/Affirmative Action performance requirements as outlined herein.

3.6.2 The successful respondent, as a requirement of final contract execution will additionally agree to comply with the following provisions:

- a. Submit a report of current company employment statistics on the EEO Certification Form and a copy of the company Affirmative Action / Equal Employment Opportunity Policy Statement, properly signed by Company official on company letterhead, in accordance with paragraph 3.6.3 below.
- b. Sign and submit the document entitled "Hartford Affirmative Action Plan / Equal Employment Opportunity Agreement and Affidavit". (*Construction/Infrastructure projects only*)

3.6.3 Candidate's EEO Report: As a condition of doing business with the City the selected respondent must be certified by the City as an Equal Employment Opportunity Employer. Certifications must be renewed annually. Submit completed EEO Certification forms and EEO Policy Statement with your response. To check the current status of your EEO certification contact Concha Lawrence at 860.757.9613, fax 860.722.6607 or email: [LAWRC001@hartford.gov](mailto:LAWRC001@hartford.gov).

3.6.4 The candidate agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated, when employed, without regard to race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, mental or physical disability. The advertisement of employment opportunities shall be carried out in such manner as not to restrict such employment.

3.6.5 The successful respondent shall agree that neither he/she nor any subcontractors will discharge, expel or otherwise discriminate against any person because he/she has opposed any unfair employment practice or because he/she has filed a complaint or testified or assisted in any proceeding under Section 31-127 of the Connecticut General State Statutes.

3.6.6 (*Construction/Infrastructure projects only*) During the Performance of this contract, the contractor agrees to permit authorized City of Hartford staff to perform on-site project monitoring related to the contractual equal employment opportunity/affirmative action performance requirements. The prime contractor additionally agrees on behalf of his/her company and all subcontractors to submit the following compliance reports, available at <http://purchasing.hartford.gov>, while performing under this contract:

- a. Payroll Certification Form within 10 working days of end of reporting month
- b. Minority/Women Business Enterprise (MWBE) Monthly Payment Status Reports
- c. Minority/Women Business Enterprise (MWBE) Final Payment Status Reports
- d. Monthly Employment Utilization Report
  1. Minimum of 15% of the total project hours by trade shall be allocated to minority workers.
  2. Hartford resident employment goal of 30% by trade.
- e. Status reports as to special training and/or employment residency requirements

3.6.7 The successful respondent further agrees that the requirements as noted in paragraphs 3.5 and 3.6 shall likewise apply to all construction sub-contractors.

**3.7 RESPONSE DEVELOPMENT:** Candidates are responsible for all costs and expenses incurred in the preparation of a response and for any subsequent work on the response that is required by the City of Hartford. Any submittal is the property of the City of Hartford and will not be returned.

**3.8 TIME PROVISIONS:** The content of any response submitted is to remain valid and available to the City for ninety (90) days from the day proposals are due.

**3.9 CORRECTION OR WITHDRAWAL OF RESPONSES, CANCELLATION OF AWARDS.** Correction or withdrawal of inadvertently erroneous bids, including corrections to pricing must be submitted to the Procurement Agent prior to the bid response deadline. Corrections before or after award, or cancellation of awards of Contracts or Purchase Orders based on such mistakes, may also be permitted with the approval, in writing, of the Procurement Agent, otherwise withdrawal of bid by respondent shall be cause for forfeiture of bid surety to the City.

**3.10 QUANTITIES AND/OR USAGES:** Quantities and/or usages are estimates only and in no way represent a commitment and/or intent to purchase the estimated amount. Actual quantities and delivery locations may vary. The City reserves the right to order all quantities that may be needed, at the contract price, during the contract term regardless of the estimates provided in this RFR.

**3.11 ACCEPTABLE BRANDS:** The RFR specifications are not intended to limit consideration to the particular service organization or manufacturer from which they were developed. References to brand names or numbers are to be interpreted as establishing a standard of quality, unless specifically limited by the term "no substitute", otherwise brand names used within these specifications shall be presumed to be followed by the words "or approved equal". Burden of proving a product and/or material as equal to a specific product and/or material by brand name is the responsibility of the Provider. Final determination as to what is an "or equal" product will be made by the Procurement Agent in conjunction with other City staff. The City will award on the basis of the criteria stated herein, and reserves the right to waive or require compliance with any element of the specifications.

**3.12 SAMPLES:** Samples are furnished free of charge and may be held for comparison with deliveries. Candidate must arrange for their return if desired. Samples are assumed to meet, at a minimum, City specifications for quality. All deliveries shall have at least the same quality as the accepted proposal sample. Latent deficiencies will be remedied by the contractor at no additional cost, or loss of service, to the City.

**3.13 SITE INSPECTION:** Information contained in these documents is provided in good faith only that all Candidates may have access to the same information utilized by the City, and is not intended as a substitute for personal investigations, interpretations and judgment of the Candidate. As information may be approximated or incomplete, Candidates should conduct a thorough inspection, review of existing conditions/equipment, examination of the site and compare it to the specifications and drawings. Any discrepancies or needs for clarifications must be brought to the attention of the department managing the RFR prior to the bid opening.

Pre-bid / Response conferences are noted on the invitation to respond. Submission of a bid shall be evidence that respondent has examined the site, compared it with the drawings and specifications and satisfied itself of the conditions existing at the site, the storage and handling of materials, and all other matters incidental to the work under this contract. No additional compensation will be allowed for difficulties which the respondent could have discovered or reasonably anticipated prior to bidding.

**3.14 CONTRACTING:** The City reserves the right to require the successful Candidate to execute a contract in a format supplied by the City. The terms and conditions of the contract to be signed upon the award of the RFR will supersede any inconsistent provision of the RFR documents.

The award of any contract is subject to the following conditions and contingencies:

- (1) The approval of such governmental agencies as may be required by law.

- (2) The appropriation of adequate funds by the proper agencies.
- (3) Compliance with all applicable laws, regulations, ordinances and codes of the United States, the State of Connecticut and the City of Hartford.
- (4) The selected Candidate must be current in all tax or any other monetary obligation owed to the City of Hartford.
- (5) The selected Candidate must have a current EEO certification on file with the City.

Unless otherwise indicated the duration of the Contract will be one (1) year. Further, Contract terms may be negotiated on award anniversaries. City Ordinance Sec 2-588 (C) allows for a maximum of three Contract extensions provided that the funds are available, approved by the City for this purpose and that the Provider has established a satisfactory performance record.

Notwithstanding the failure of City to exercise any option to renew this contract for an additional year, the Managing Authority reserves the right to unilaterally extend this contract on a month to month basis for a period not to exceed three (3) months under the same terms and conditions applicable to the preceding contract period.

**3.15 CONTRACT DOCUMENTS:** The Contract documents consist of the Agreement between Owner and Contractor (hereinafter the Agreement), this Request for Response (RFR) and its referenced documents, General and Supplementary Conditions, drawings, any Addenda issued, the Contractor's response to the RFR, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a Minor change in the Work issued by the Design Professional on behalf of the City; the Contract Documents do include other documents such as bidding requirements.

**3.16 RETAINAGE** (*Construction/Infrastructure projects only*): When progress payments are being made for items being built or designed, the City may withhold at least 5% of the total project cost, or as otherwise specified in the contract for this project.

**3.17 INSURANCE:** Refer to the exhibit noted on the Invitation to Respond for specific insurance requirements. List the name and address of the respondent's insurance agent on the response form. The successful candidate shall be required to furnish a Certificate of Insurance (Accord Form), acceptable to the City, within ten (10) days from notice of award and must name the City as an additional insured on the face of the document. The insurance certificate and coverage requested must be updated and kept current throughout the life of the contract, including any extensions. If at any time during the term of the contract or any extension thereof, any required policies of insurance should renew, expire, or be cancelled, it will be the responsibility of the Provider to furnish to the City a Certificate of Insurance indicating renewal or an acceptable replacement of the expiring policy prior to the expiration or cancellation, so that there will be no lapse in any coverage. The candidate shall obtain and maintain such required insurance at its own cost and expense.

**3.18 BID BONDS:** A Bid bond, cashiers or certified check may be required with your response. The City of Hartford provides contractors with the option of submitting an electronic Bid Bond through the Surety2000 website. Surety 2000 is an Internet-based surety processing, verification and security system, developed in cooperation with the surety industry. You may contact Surety 2000 at 1-800-660-3263 or [www.surety2000.com](http://www.surety2000.com), for more information.

Certified checks will be returned to all unsuccessful Candidates upon the awarding of the contract. If your response is not accompanied by a bond, certified check or proof that a valid bond has been obtained at the RFR opening it may be rejected.

If you manage a **small business** and have difficulty obtaining bonds help is available from the Small Business Administration (SBA) through "The Surety Bond Guarantee Program. For more information go to [www.sba.gov](http://www.sba.gov), choose "Services." Then select "Financial Assistance" and click on "Surety Bond."

**3.19 PERFORMANCE BOND AND PAYMENT BOND:** If requested, the successful contractor will be required to submit a Performance Bond and Payment (Labor & Material) Bond in the amount of 100% of contract award within 10 days of award if the contract value exceeds \$50,000. Said bonds shall be issued by an insurance company and said surety companies must be listed on the current Federal Register, licensed in the State of Connecticut with an underwriting limitation exceeding the value of the project with no more than 5% of capital in surplus tied to any one risk. Banks must have a branch office in Connecticut with insurance provided by the FDIC. The bonds must be signed by an officer of the company and of the surety company above their official titles and their corporate seals must be affixed over the signatures.

Indicate the cost for these bonds, to be added to the contract sum, on the response form.

**3.20 PREVAILING WAGES** (*Construction/Infrastructure projects only*): Pursuant to Section 2-559 (B), Required Provisions. Each Agreement for the construction, remodeling or repair of any Infrastructure Facilities shall contain both of the following provisions:

(1) "The wages paid to any mechanic, laborer or workman employed upon the work herein contracted to be done shall be at a rate equal to the prevailing wage rate in the State of Connecticut and or federal government, whichever is applicable, for the same work in the same trade or occupation."

(2) "Each contractor and subcontractor, or an authorized officer or employee, responsible for supervision of the payment of wages shall submit, on a weekly basis within seven (7) days after the regular payment date of the payroll period, to the Procurement Services Unit, a "Weekly Certified Statement of Compliance." Due and timely compliance with this provision shall be a condition precedent to the approval and transmittal of the next and succeeding payments by the city or its authorized officers or agents to the contractor under the terms of this agreement."

**3.21 SUBCONTRACTORS:** The respondent shall not subcontract any portion of the project to be performed unless the prior consent of the City is given for both the work to be subcontracted and the subcontractor to perform the same. The terms and conditions of the underlying contract between the City and Contractor will become part and parcel of the terms and conditions of each subcontract. Respondents are required to provide subcontractor information in the space provided in 1.4 "Subcontractor Utilization" of the response forms. Complete a separate form for the Base Bid and each Alternate. MWBE's must certified with the City of Hartford at the time of response submission.

**3.22 MINORITY BUSINESS UTILIZATION** (*Construction/Infrastructure projects only*): Respondents are required to set-aside for Minority Businesses 15% of the construction work. Respondents are encouraged to exceed the set-aside requirement specified. The City's Minority Business listing as further described in paragraph 3.23.3 shall be used by respondents in selecting minority business contractors.

The sum of all minority business subcontracts shall be equal to or greater than 15% regardless of how the bid is awarded (base only or base plus one or more alternates). Failure to comply with the required percentage of minority business utilization will be cause for rejection of bid.

#### 3.22.1 City Certification Required

Respondents shall utilize Minority subcontractors who hold a current MWBE certificate with the City of Hartford at the time of response submission. Certifications by any other government entity shall not be sufficient to qualify the subcontractor to participate in the City of Hartford's minority business utilization preference program. In selecting its minority subcontractors, respondent is cautioned to seek documented proof that its subcontractors hold valid certification by the City. Failure to identify City certified Minority Business subcontractors will be cause for rejection of bid.

#### 3.22.2 Percentage of Work to be Performed

Designated MWBE's shall perform at least 70% of the work with their own forces and as part of their own operations excluding the manufacture or purchase of proprietary products.

### 3.22.3 Minority Business Listing

A listing of Minority Businesses holding certification by the City of Hartford is available at <http://purchasing.hartford.gov> or in the Procurement Services Unit, Room 100, 550 Main Street, Hartford, CT 06103. The City's listing of minority businesses is comprised of companies whereby at least 51% of the company is owned and operated by one or more of the following group persons: Black Americans, Hispanic Americans, Women, Asian Pacific Americans, Pacific Islanders, American Indians and descendants from the Iberian Peninsula. It should be understood that such listings are made available to assist respondents in satisfying bid requirements; however, respondent's selection of a subcontractor is its sole responsibility and all work performed under the contract shall be respondent's sole responsibility. The City does not sponsor or recommend the selection of any one vendor. Certification by the City of Hartford as a minority business does not imply that the business is qualified to perform the work specified in this bid. The City reserves the right to request alternate minority subcontractors for whatever reason.

### 3.22.4 Proof of Minority Business Utilization Required

Prior to execution of contract, the successful respondent shall be required to file with the City Engineer the actual form of subcontract with subcontractor(s) named in at least the minimum dollar value as stated in the "Subcontractor Utilization" form. The subcontract shall state the percentage of work which will be performed by the MWBE with its own forces and as part of its operation. Failure to comply with proof of subcontract within 10 days of notification may result in the rejection of bid and may be cause for forfeiture of respondents' bid surety. Further, the City reserves the right to monitor the performance and payment of such subcontracts; therefore, upon request by the City, the successful respondent shall be required to furnish proof of payment to its subcontractors. Failure to comply with such monitoring requirements within ten days of written request will result in withholding of payment to respondent.

### 3.22.5 Changes in Subcontractors after Award

The successful respondent may not change subcontractor(s) after the contract has been let unless and until it has received written approval from the City of Hartford. Any such approval shall be based upon a written request by the Contractor or City, which details performance and/or other issues related to the subcontractor(s).

**3.23 SET-ASIDE PROGRAM:** If this RFR is set-aside for award to a small, minority or women owned business enterprise you must receive a City of Hartford SC/MWBE certification prior to submission of bid response. This program is described in Sec. 2-660 of the Hartford Municipal Code.

**3.24 CITY-BASED SMALL CONTRACTOR PREFERENCE:** Any City-based SC/MWBE Certified Small Business which has submitted a bid not more than fifteen (15) percent higher than the low bid, provided such respondent agrees to accept the award at the amount of the low bid, shall be selected as the lowest responsible candidate. If more than one City-based SC/MWBE Certified Small Business has submitted bids not more than fifteen (15) percent higher than the low bid, the City shall select the lowest Responsible candidate among such respondents which submitted the lowest bid.

**3.25 CRITERIA FOR AWARD:** This Request for Response does not necessarily contemplate an award based solely on price. Rather, the City reserves its rights to accept or reject any or all responses or any portion thereof that it may determine to be in its own best interests, for whatever reason.

**3.26 NOTICE OF AWARD:** The selected vendor will be provided with a written Notice of Award which shall be contingent upon the submission by the respondent of all documents required of the successful candidate, including, but not limited to, proper insurance certificates, performance and payment bonds, verification of MWBE percentage contribution to the work and execution of contract within 10 days of the notice of award.

**3.27 PERFORMANCE EVALUATION:** The Contractor understands that during the course of and at the conclusion of the project that the City will evaluate his/her overall performance. Based on information gathered from the City's project management team, the Procurement Agent will assess factors including, but not limited to, quality of work or service, completion record, job supervision, working relationship with other providers, bills for extras, organization, cooperation, worksite cleanliness and compliance with City MBE requirements. This evaluation will be considered in the issuance of future awards. The contractor further understands and agrees that this record will be available for public scrutiny for a minimum of two years.

**END OF SECTION**



**COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES**  
**CONTRACT COMPLIANCE REGULATIONS**  
**NOTIFICATION TO BIDDERS**

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by [Sections 4a-60 and 4a-60a](#) of the Connecticut General Statutes; and, when the awarding agency is the State, [Sections 46a-71\(d\) and 46a-81i\(d\)](#) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at [Section 46a-68j-21 through 43](#) of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by [Sections 4a-60 and 46a-71\(d\)](#) of the Connecticut General Statutes.

According to [Section 46a-68j-30\(9\)](#) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” “Minority business enterprise” is defined in [Section 4a-60](#) of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: “(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of [Section 32-9n](#).” “Minority” groups are defined in [Section 32-9n](#) of the Connecticut General Statutes as “(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . .” An individual with a disability is also a minority business enterprise as provided by [Section 4a-60g](#) of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of [Section 46a-68j-21\(11\)](#) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder’s qualifications under the contract compliance requirements:

- (a) the bidder’s success in implementing an affirmative action plan;
- (b) the bidder’s success in developing an apprenticeship program complying with [Sections 46a-68-1 to 46a-68-17](#) of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder’s promise to develop and implement a successful affirmative action plan;
- (d) the bidder’s submission of employment statistics contained in the “Employment Information Form”, indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder’s promise to set aside a portion of the contract for legitimate minority business enterprises. [See Section 46a-68j-30\(10\)\(E\)](#) of the Contract Compliance Regulations.

---

**INSTRUCTIONS AND OTHER INFORMATION**

The following [BIDDER CONTRACT COMPLIANCE MONITORING REPORT](#) must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to [Sections 4a-60 and 4a-60a](#) CONN. GEN. STAT., and [Sections 46a-68j-23](#) of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) **Definition of Small Contractor**

[Section 4a-60g](#) CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision [4a-60g](#) CONN. GEN. STAT.

2) Description of Job Categories (as used in Part IV Bidder Employment Information) (Page2)

**MANAGEMENT:** Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

**BUSINESS AND FINANCIAL OPERATIONS:** These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

**MARKETING AND SALES:** Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

**LEGAL OCCUPATIONS:** In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

**COMPUTER SPECIALISTS:** Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

**ARCHITECTURE AND ENGINEERING:** Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

**OFFICE AND ADMINISTRATIVE SUPPORT:** All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file)

**BUILDING AND GROUNDS CLEANING AND MAINTENANCE:** This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

**CONSTRUCTION AND EXTRACTION:** This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category.

**INSTALLATION, MAINTENANCE AND REPAIR:** Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

**MATERIAL MOVING WORKERS:** The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and off bearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

**PRODUCTION WORKERS:** The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

<p><u>White</u> (not of Hispanic Origin)-All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.</p> <p><u>Black</u> (not of Hispanic Origin)-All persons having origins in any of the Black racial groups of Africa.</p> <p><u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p>	<p><u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.</p> <p><u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.</p>
--	---

### BIDDER CONTRACT COMPLIANCE MONITORING REPORT

**PART 1 – Bidder Information**

<p>Company Name: Street Address: City &amp; State: Chief Executive:</p>	<p>Bidder Federal Employer Identification Number: Or Social Security Number:</p>
<p>Major Business Activity: (brief description)</p>	<p>Bidder Identification (response optional/definitions on page 1)</p> <p>-Bidder is a small contractor? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>-Bidder is a minority business enterprise? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(If yes, check ownership category)</p> <p>Black <input type="checkbox"/> Hispanic <input type="checkbox"/> Asian American <input type="checkbox"/></p> <p>American Indian/Alaskan Native <input type="checkbox"/> Iberian Peninsula <input type="checkbox"/></p> <p>Individual(s) with a Physical Disability <input type="checkbox"/> Female <input type="checkbox"/></p> <p>-Bidder is certified as above by State of CT? Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>Bidder Parent Company: (If any)</p>	
<p>Other Locations in CT: (If any)</p>	

**PART II - Bidder Nondiscrimination Policies and Procedures**

<p>1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 &amp; 4a-60a Conn. Gen.Stat.? Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>9. Does your company have a mandatory retirement age for all employees? Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p>
<p>5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/></p>
<p>6. Does your company have a collective bargaining agreement with workers? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of CT? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>12. Does your company have a written affirmative action Plan? Yes <input type="checkbox"/> No <input type="checkbox"/> If no, please explain.</p> <p>13. Is there a person in your company who is responsible for equal employment opportunity? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, give name and phone number:</p>

1. Will the work of this contract include subcontractors or suppliers? Yes  No

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above? Yes  No

**PART IV - Bidder Employment Information**

Date:

JOB CATEGORY *	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

\*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

## City of Hartford

### Construction Insurance Requirements

Document 1007 rev. 6/4/12

#### **Insurance: (Scope and Limits)**

Note: The term "City of Hartford" or "City" is to be taken to mean "City of Hartford and the Hartford Board of Education when the project includes work for the Board of Education.

At least ten days before the Contract is executed and prior to commencement of work thereunder, the Contractor will be required to file with the Purchasing Agent a certificate of insurance, executed by an insurance company or authorized representative satisfactory to the Purchasing Agent and in an acceptable form. The policy shall name the City of Hartford as Additional Insured and state that, with respect to the award, the Contractor carries insurance in accordance with the following requirements:

- 1) Commercial General Liability: With respect to the operations he performs and also those performed by him for sub-contractors, the contractor shall carry Commercial General Liability insurance in the amount of \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. Coverage shall include Premises and Operations, Independent Contractors, Products and Completed Operations, Contractual Liability and Broad Form Property Damage coverage. Additionally, when necessary because of the scope of the project, the policy shall include explosion, collapse and underground coverage. If a general aggregate is used, the general aggregate limit shall apply separately to the project or the general aggregate limit shall be twice the occurrence limit.
- 2) Workers' Compensation and Employers' Liability: With respect to all contractor operations and all those performed for him by sub-contractors, the contractor shall carry statutory coverage in compliance with the Workers' Compensation laws of the State of Connecticut. Coverage shall include Employer's Liability with minimum limits of \$100,000 each accident, \$500,000 Policy Disease Limit, \$100,000 each employee.
- 3) Owners and Contractors Protective Liability Insurance: With respect to the operations the contractor performs, the contractor shall carry for and in behalf of the City of Hartford an Owners and Contractors Protective Liability insurance policy for a limit of not less than \$1,000,000 for all damages arising out of injury to or destruction of property in any one accident or occurrence and subject to that limit per accident an aggregate limit of \$2,000,000 for all damages arising out of injury or destruction of property during the policy period.
- 4) Automobile Liability: The operation of all motor vehicles, including those owned, hired or non-owned, used in connection with the contract shall be covered by Automobile Liability insurance in the amount of not less than \$1,000,000 for all damages arising out of any one accident or occurrence. If a vehicle is not used in execution of this contract then automobile coverage is not required.
- 5) Builders' Risk Insurance: At its sole cost and expense, the contractor shall carry Builders' Risk insurance including but not limited to, Fire, Vandalism, Theft, Lightning, Wind and All risk coverage in the amount of the estimated value of improvement to the existing structure and/or new building, but, at a minimum, no less than the value of the contract. Such insurance should include coverage for materials stored on the site but not yet made a permanent part of the structure and property in transit. All deductibles or retentions will be the sole responsibility of the contractor. The City of Hartford is listed as a Loss Payee on the coverage.

6) Pollution Liability: For operations involving a risk of environmental pollution, contractors shall provide Contractor's Pollution Liability coverage for Bodily Injury, Property Damage and Clean-up cost arising from pollution conditions caused by the operations of the contractor for limits of \$1,000,000. Coverage may be on a claims-made form and should include contractual liability coverage for claims arising out of liability of sub-contractors and non-owned disposal site coverage.

7) Railroad Protective Liability: When the contract involves work on or under the right of way of any railroad company and the railroad company requires evidence of coverage, the Contractor shall furnish evidence to the City that with respect to operations performed by him or for him by subcontractors, he carries Railroad Protective Liability insurance providing for a limit of not less than \$2,000,000 per occurrence and \$6,000,000 policy aggregate.

### **Insurance Provisions**

1) The City of Hartford shall be named as Additional Insured. The coverage shall contain no special limitations on the scope of protection afforded to the City.

2) Contractor shall be responsible for any and all deductibles in the described insurance policies including payment thereof and indemnification of the City/Board of Education with regard thereto.

3) The contractor's insurers shall have no right of recovery or subrogation against the City. The Contractor's insurance shall be primary insurance as respects the City. Any insurance or self-insurance maintained by the City shall be excess and non-contributory to the contractor's insurance.

4) Termination or change of insurance: Each insurance policy shall be endorsed to provide that the insurance company shall notify the Purchasing Agent by certified mail at least thirty (30) days in advance of any termination of or any change in the policy. No change shall be made without said prior notice and without prior written approval of the Purchasing Agent

5) Claims: Each insurance policy, shall state that the insurance company shall agree to investigate and defend the insured against all claims for damages even if groundless.

6) Compensation: There shall be no direct compensation allowed to the Contractor on account of any premium or other charge necessary to take out and maintain all insurance or bonds, but the costs thereof shall be considered included in the general cost of the work.

7) Waiver of requirements: The Purchasing Agent, may vary the above requirements in his/her sole discretion; if he/she determines that the City's interests will be adequately protected without meeting all state requirements.

8) Except for Pollution Liability, "Claims Made" coverage is unacceptable. All coverage is to be written on an "Occurrence" policy form.

9) Unless requested otherwise by the City of Hartford, the Contractor and his insurer shall waive governmental immunity as defense and shall not use the defense of governmental immunity in the adjustment of claims or in the defense of any suit brought against the City. The Contractor shall assume and pay all costs and billings for premiums and audit charges earned and payable under the required insurance.

10) Policies must be effective prior to the commencement of work and must remain in force until termination of work under this contract. In the event of interruption of coverage for any reason, all work under the contract shall cease and shall not resume until coverage has been restored.

**STATE OF CONNECTICUT WAGE RATES**

## Heavy Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Hartford	Granby	**NOTE: SEE BELOW		
Hartford	Granby	----LINE CONSTRUCTION----(Railroad Construction and Maintenance)----		
Hartford	Granby	20) Lineman, Cable Splicer, Technician	\$48.19	6.5% + 22.00
Hartford	Granby	21) Heavy Equipment Operator	\$42.26	6.5% + 19.88
Hartford	Granby	22) Equipment Operator, Tractor Trailer Driver, Material Men	\$40.96	6.5% + 19.21
Hartford	Granby	23) Driver Groundmen	\$26.50	6.5% + 9.00
Hartford	Granby	23a) Truck Driver	\$40.96	6.5% + 17.76
Hartford	Granby	----LINE CONSTRUCTION----		
Hartford	Granby	24) Driver Groundmen	\$30.92	6.5% + 9.70
Hartford	Granby	25) Groundmen	\$22.67	6.5% + 6.20
Hartford	Granby	26) Heavy Equipment Operators	\$37.10	6.5% + 10.70
Hartford	Granby	27) Linemen, Cable Splicers, Dynamite Men	\$41.22	6.5% + 12.20
Hartford	Granby	28) Material Men, Tractor Trailer Drivers, Equipment Operators	\$35.04	6.5% + 10.45
Hartford	Hartford	1) Boilermaker	\$33.79	34% + 8.96
Hartford	Hartford	1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	\$34.72	32.15
Hartford	Hartford	2) Carpenters, Piledrivermen	\$33.53	25.66
Hartford	Hartford	2a) Diver Tenders	\$33.53	25.66
Hartford	Hartford	3) Divers	\$41.99	25.66
Hartford	Hartford	03a) Millwrights	\$34.04	26.09

As of: July 1, 2019



## Heavy Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Hartford	Hartford	4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	\$49.75	21.05
Hartford	Hartford	4a) Painters: Brush and Roller	\$33.62	21.05
Hartford	Hartford	4b) Painters: Spray Only	\$36.62	21.05
Hartford	Hartford	4c) Painters: Steel Only	\$35.62	21.05
Hartford	Hartford	4d) Painters: Blast and Spray	\$36.62	21.05
Hartford	Hartford	4e) Painters: Tanks, Tower and Swing	\$35.62	21.05
Hartford	Hartford	5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	\$40.00	27.67+3% of gross wage
Hartford	Hartford	6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	\$36.67	35.77 + a
Hartford	Hartford	7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)	\$43.62	32.06
Hartford	Hartford	---LABORERS---		
Hartford	Hartford	8) Group 1: Laborer (Unskilled), Common or General, acetylene burner, concrete specialist	\$30.75	20.84
Hartford	Hartford	9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen	\$31.00	20.84
Hartford	Hartford	10) Group 3: Pipelayers	\$31.25	20.84
Hartford	Hartford	11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block paver, curb setter and forklift operators	\$31.25	20.84
Hartford	Hartford	12) Group 5: Toxic waste removal (non-mechanical systems)	\$32.75	20.84
Hartford	Hartford	13) Group 6: Blasters	\$32.50	20.84
Hartford	Hartford	Group 7: Asbestos/lead removal, non-mechanical systems (does not include leaded joint pipe)	\$31.75	20.84
Hartford	Hartford	Group 8: Traffic control signalmen	\$18.00	20.84
Hartford	Hartford	Group 9: Hydraulic Drills	\$29.30	18.90

As of: July 1, 2019

## Heavy Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Hartford	Hartford	----LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air.----		
Hartford	Hartford	13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	\$32.98	20.84 + a
Hartford	Hartford	13b) Brakemen, Trackmen	\$32.01	20.84 + a
Hartford	Hartford	14) Concrete Workers, Form Movers, and Strippers	\$32.01	20.84 + a
Hartford	Hartford	15) Form Erectors	\$32.34	20.84 + a
Hartford	Hartford	----ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:----		
Hartford	Hartford	16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers	\$32.01	20.84 + a
Hartford	Hartford	17) Laborers Topside, Cage Tenders, Bellman	\$31.90	20.84 + a
Hartford	Hartford	18) Miners	\$32.98	20.84 + a
Hartford	Hartford	----TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR: -		
Hartford	Hartford	18a) Blaster	\$39.47	20.84 + a
Hartford	Hartford	19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge Tenders	\$39.27	20.84 + a
Hartford	Hartford	20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	\$37.29	20.84 + a
Hartford	Hartford	21) Mucking Machine Operator	\$40.06	20.84 + a
Hartford	Hartford	----TRUCK DRIVERS----(*see note below)		
Hartford	Hartford	Two axle trucks	\$29.51	24.52 + a
Hartford	Hartford	Three axle trucks; two axle ready mix	\$29.62	24.52 + a
Hartford	Hartford	Three axle ready mix	\$29.67	24.52 + a
Hartford	Hartford	Four axle trucks, heavy duty trailer (up to 40 tons)	\$29.72	24.52 + a

As of: July 1, 2019

## Heavy Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Hartford	Hartford	Four axle ready-mix	\$29.77	24.52 + a
Hartford	Hartford	Heavy duty trailer (40 tons and over)	\$29.98	24.52 + a
Hartford	Hartford	Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	\$29.77	24.52 + a
Hartford	Hartford	----POWER EQUIPMENT OPERATORS----		
Hartford	Hartford	Group 1: Crane handling or erecting structural steel or stone, hoisting engineer (2 drums or over), front end loader (7 cubic yards or over), Work Boat 26 ft. & Over, Tunnel Boring Machines. (Trade License Required)	\$40.97	24.80 + a
Hartford	Hartford	Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	\$40.64	24.80 + a
Hartford	Hartford	Group 3: Excavator/Backhoe under 2 cubic yards; Cranes (under 100 ton rated capacity), Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade License Required)	\$39.88	24.80 + a
Hartford	Hartford	Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper)	\$39.48	24.80 + a
Hartford	Hartford	Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24	\$38.87	24.80 + a
Hartford	Hartford	Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	\$38.87	24.80 + a
Hartford	Hartford	Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	\$38.55	24.80 + a
Hartford	Hartford	Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24	\$38.20	24.80 + a
Hartford	Hartford	Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	\$37.79	24.80 + a

As of: July 1, 2019

## Heavy Rates

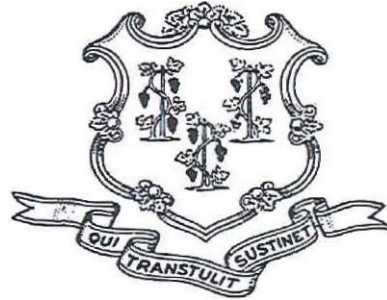
County	Town	Classification	Hourly Rate	Hourly Benefit
Hartford	Hartford	Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder).	\$37.34	24.80 + a
Hartford	Hartford	Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	\$35.24	24.80 + a
Hartford	Hartford	Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	\$35.24	24.80 + a
Hartford	Hartford	Group 12: Wellpoint Operator.	\$35.18	24.80 + a
Hartford	Hartford	Group 13: Compressor Battery Operator.	\$34.58	24.80 + a
Hartford	Hartford	Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	\$33.41	24.80 + a
Hartford	Hartford	Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	\$32.99	24.80 + a
Hartford	Hartford	Group 16: Maintenance Engineer/Oiler	\$32.32	24.80 + a
Hartford	Hartford	Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	\$36.76	24.80 + a
Hartford	Hartford	Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	\$34.26	24.80 + a
Hartford	Hartford	**NOTE: SEE BELOW		
Hartford	Hartford	----LINE CONSTRUCTION----(Railroad Construction and Maintenance)----		
Hartford	Hartford	20) Lineman, Cable Splicer, Technician	\$48.19	6.5% + 22.00
Hartford	Hartford	21) Heavy Equipment Operator	\$42.26	6.5% + 19.88
Hartford	Hartford	22) Equipment Operator, Tractor Trailer Driver, Material Men	\$40.96	6.5% + 19.21
Hartford	Hartford	23) Driver Groundmen	\$26.50	6.5% + 9.00
Hartford	Hartford	23a) Truck Driver	\$40.96	6.5% + 17.76
Hartford	Hartford	----LINE CONSTRUCTION----		
Hartford	Hartford	24) Driver Groundmen	\$30.92	6.5% + 9.70

As of: July 1, 2019

## Heavy Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Hartford	Hartford	25) Groundmen	\$22.67	6.5% + 6.20
Hartford	Hartford	26) Heavy Equipment Operators	\$37.10	6.5% + 10.70
Hartford	Hartford	27) Linemen, Cable Splicers, Dynamite Men	\$41.22	6.5% + 12.20
Hartford	Hartford	28) Material Men, Tractor Trailer Drivers, Equipment Operators	\$35.04	6.5% + 10.45
Hartford	Hartland	1) Boilermaker	\$33.79	34% + 8.96
Hartford	Hartland	1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	\$34.72	32.15
Hartford	Hartland	2) Carpenters, Piledrivermen	\$33.53	25.66
Hartford	Hartland	2a) Diver Tenders	\$33.53	25.66
Hartford	Hartland	3) Divers	\$41.99	25.66
Hartford	Hartland	03a) Millwrights	\$34.04	26.09
Hartford	Hartland	4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	\$49.75	21.05
Hartford	Hartland	4a) Painters: Brush and Roller	\$33.62	21.05
Hartford	Hartland	4b) Painters: Spray Only	\$36.62	21.05
Hartford	Hartland	4c) Painters: Steel Only	\$35.62	21.05
Hartford	Hartland	4d) Painters: Blast and Spray	\$36.62	21.05
Hartford	Hartland	4e) Painters: Tanks, Tower and Swing	\$35.62	21.05
Hartford	Hartland	5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	\$39.62	27.25+3% of gross wage
Hartford	Hartland	6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	\$36.67	35.77 + a
Hartford	Hartland	7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)	\$43.62	32.06

As of: July 1, 2019



Opportunity\* Guidance \* Support



**THIS IS A PUBLIC WORKS PROJECT**

Covered by the

**PREVAILING WAGE LAW**

CT General Statutes Section 31-53

---

**If you have QUESTIONS regarding your wages  
CALL (860) 263-6790**

---

Section 31-55 of the CT State Statutes requires every contractor or subcontractor performing work for the state to post in a prominent place the prevailing wages as determined by the Labor Commissioner.

---

**Sec. 31-53b. Construction safety and health course. New miner training program. Proof of completion required for mechanics, laborers and workers on public works projects. Enforcement. Regulations. Exceptions.** (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (g) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of tele communications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

(b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day *after* the date *the* person is found to be in noncompliance. *The* Labor Commissioner or said commissioner's designee shall enforce this section.

(c) Not later than January 1, 2009, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project.

(d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

(P.A. 06-175, S. 1; P.A. 08-83, S. 1.)

History: P.A. 08-83 amended Subsec. (a) by making provisions applicable to public works project contracts entered into on or after July 1, 2009, replacing provision re total cost of work with reference to Sec. 31-53(g), requiring proof in certified payroll form that new mechanic, laborer or worker has completed a 10-hour or more construction safety course and adding provision re new miner training program, amended Subsec. (b) by substituting "person" for "employee" and adding "or program", amended Subsec. (c) by adding "or in accordance with Federal Mine Safety and Health Administration Standards" and setting new deadline of January 1, 2009, deleted former Subsec. (d) re "public building", added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective January 1, 2009.



# **Informational Bulletin**

## **THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE**

(applicable to public building contracts entered into *on or after July 1, 2007*, where the total cost of all work to be performed is at least \$100,000)

- (1) This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- (2) The course is required for public building construction contracts (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- (3) It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- (4) The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- (5) The internet website for the federal OSHA Training Institute to [http://www.osha.gov/fso/ote/training/edcenters/fact\\_sheet.html](http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html);
- (6) The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- (7) Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- (8) Proof of completion may be demonstrated through either: (a) the presentation of a *bona fide* student course completion card issued by the federal OSHA Training Institute; *or* (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- (9) Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;

- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of <http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm>; or by telephone at (860)263-6790.

**THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETATIONS WHICH MAY ULTIMATELY ARISE CONCERNING THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.**

November 29, 2006

**Notice**  
**To All Mason Contractors and Interested Parties**  
**Regarding Construction Pursuant to Section 31-53 of the**  
**Connecticut General Statutes (Prevailing Wage)**

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

**Forklift Operator:**

- **Laborers (Group 4) Mason Tenders** - operates forklift solely to assist a mason to a maximum height of nine feet only.

- **Power Equipment Operator (Group 9)** - operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

*Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.*

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

## STATUTE 31-SSa

### - SPECIAL NOTICE -

**To: All State and Political Subdivisions, Their Agents, and Contractors**

**Connecticut General Statute 31-SSa - Annual adjustments to wage rates by contractors doing state work.**

*Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54 of the general statutes, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section 31-53 of the general statutes shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.*

- The prevailing wage rates applicable to any contract or subcontract awarded on or after October 1, 2002 are subject to annual adjustments each July 1st for the duration of any project which was originally advertised for bids on or after October 1, 2002.
- Each contractor affected by the above requirement shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.
- It is the **contractor's** responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's Web Site. The annual adjustments will be posted on the Department of Labor Web page: [www.ctdol.state.ct.us](http://www.ctdol.state.ct.us). For those without internet access, please contact the division listed below.
- The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project. All subsequent annual adjustments will be posted on our Web Site for contractor access.

**Any questions should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at (860)263-6 79 0.**

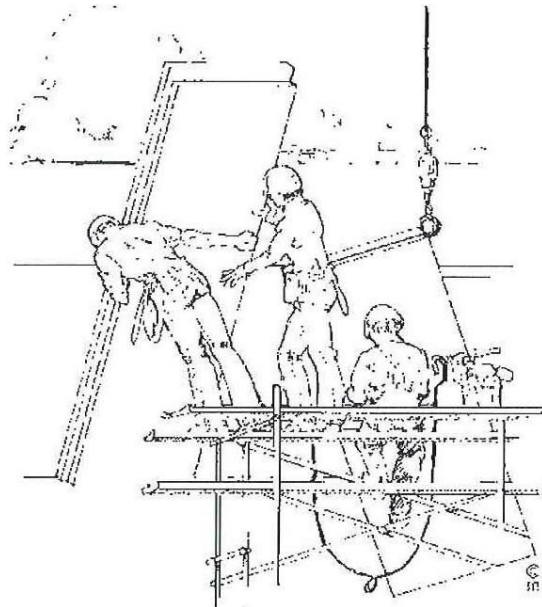
# NOTICE

TO ALL CONTRACTING AGENCIES

Please be advised that Connecticut General Statutes Section 31-53, requires the contracting agency to certify to the Department of Labor, the total dollar amount of work to be done in connection with such public works project, regardless of whether such project consists of one or more contracts.

Please find the attached "contracting Agency Certification Form." to be completed and returned to the Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit.

Inquiries can be directed to (860)263-6543.



CONNECTICUT DEPARTMENT OF LABOR  
WAGE AND WORKPLACE STANDARDS  
DIVISION  
Contract COMPLIANCE UNIT

*CONTRACTING AGENCY CERTIFICATION FORM*

I, \_\_\_\_\_, acting in my official capacity as \_\_\_\_\_  
authorized representative \_\_\_\_\_ title

for \_\_\_\_\_, located at \_\_\_\_\_  
contracting agency \_\_\_\_\_ address

do hereby certify that the total dollar amount of work to be done in connection with  
\_\_\_\_\_, located at \_\_\_\_\_  
project name and number \_\_\_\_\_ address

shall be \$ \_\_\_\_\_ which includes all work, regardless of whether such project  
consists of one or more contracts.

*CONTRACTOR INFORMATION*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Authorized Representative: \_\_\_\_\_

Approximate Starting Date: \_\_\_\_\_

Approximate Completion Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Return To: Connecticut Department of Labor  
Wage & Workplace Standards Division  
Contract Compliance Unit  
200 Folly Brook Blvd.  
Wethersfield, CT 06109

Date Issued: \_ \_ \_ \_ \_

---

CONNECTICUT DEPARTMENT OF LABOR  
WAGE AND WORKPLACE STANDARDS DIVISION

**CONTRACTORS WAGE CERTIFICATION FORM**  
**Construction Manager at Risk/General Contractor/Prime Contractor**

I, \_\_\_\_\_ of \_\_\_\_\_

Officer, Owner, Authorized Rep.

Company Name

do hereby certify that the \_\_\_\_\_

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Street

\_\_\_\_\_  
City

and all of its subcontractors will pay all workers on the \_\_\_\_\_

\_\_\_\_\_  
Project Name and Number

\_\_\_\_\_  
Street and City

the wages as listed in the schedule of prevailing rates required for such project (a copy of which is attached hereto). \_\_\_\_\_

Signed

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Notary Public

Return to:

Connecticut Department of Labor  
Wage & Workplace Standards Division  
200 Folly Brook Blvd.  
Wethersfield, CT 06109

*Rate Schedule Issued (Date):* \_\_\_\_\_

---



[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

In accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance Shall be submitted monthly to the contracting agency.	<b>PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS</b>  <b>WEEKLY PAYROLL</b>	Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109
--	---	---

CO-TRACTOR NAME AND ADDRESS:	SUBCONTRACTOR NAME & ADDRESS	WORKER'S COMPENSATION INSURANCE CARRIER
		POLICY #
		Effective DATE:
		EXPIRATION DATE:

PERSON/WORKER ADDRESS and SECTION	APPR RATE % AM)	MALE/ FEMALE	WORK CLASSIFICATION	DAY AND DATE							To 131 ST Hours	BASE HOURLY RATE	TYPE OF FRINGE BENEFITS	GROSS PAY FOR ALL WORK	TOTAL DEDUCTIONS			GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND > JET PAY
				S	M	T	W	TH	F	S					FEDERAL	STATE	LIST OTHER		

PERSON/WORKER ADDRESS and SECTION	APPR RATE % AM)	MALE/ FEMALE	WORK CLASSIFICATION	DAY AND DATE							To 131 ST Hours	BASE HOURLY RATE	TYPE OF FRINGE BENEFITS	GROSS PAY FOR ALL WORK	TOTAL DEDUCTIONS			GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND > JET PAY	
				S	M	T	W	TH	F	S					FEDERAL	STATE	LIST OTHER			
			Trade License Type & Number. OSHA 10 Certification								Total	CASH	Per Hour 1 through 6 (see back)	PERFORMED THIS WEEK	FICA	WITH- HOLDING	WITH- HOLDING			
													1. \$							
													2. \$							
													3. \$							
													4. \$							
													5. \$							
													6. \$							
													1. \$							
													2. \$							
													3. \$							
													4. \$							
													5. \$							
													6. \$							
													1. \$							
													2. \$							
													3. \$							
													4. \$							
													5. \$							
													6. \$							

12/9/2013 \*IF REQUIRED

**OSHA 10 - ATTACH CARD TO 1ST CERTIFIED PAYROLL**



**\*FRINGE BENEFITS EXPLANATION (P):**

13 on a fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits provided:

- 1) Medical or hospital care \_ \_ \_ \_ \_ 4) Disability \_\_\_\_\_
- 2) Pension or retirement \_ \_ \_ \_ \_ 5) Vacation, holiday \_\_\_\_\_
- 3) Life Insurance \_ \_ \_ \_ \_ 6) Other (please specify) \_ \_ \_ \_ \_

**CERTIFIED STATEMENT OF COMPLIANCE**

For the week ending date of \_ \_ \_ \_ \_

I, \_\_\_\_\_ of \_\_\_\_\_, (hereafter known as \_\_\_\_\_

Employer) in my capacity as \_\_\_\_\_ (title) do hereby certify and state:

**Section A:**

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:

- a) The records submitted are true and accurate;
- b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;
- c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-54 if applicable for state highway construction);
- d) Each such person is covered by a worker's compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;
- e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and
- f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.

2. OSHA-The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such persons name first appears.

\_\_\_\_\_  
 (Signature) (Title) Submitted on (Date)



[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to their certified payroll on the project.

In accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance

**PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS**

Connecticut Department of Labor  
Wages and Workplace Standards Division

shall be submitted monthly to the contracting agency.

**WEEKLY PAYROLL**

200 Folly Brook Blvd  
Westport, CT 06109

CONTRACTOR NAME AND ADDRESS Landon Corporation, 15 Connecticut Avenue, Northford, CT 06472			SUBCONTRACTOR NAME & ADDRESS XYZ Corporation 2 Main Street Yantic, CT 06389			WORKER'S COMPENSATION INSURANCE CARRIER Travelers Insurance Company POLICY# #BAC8888928		
PAYROLL NUMBER	Week-Ending Date	PROJECT NAME & ADDRESS	EFFECTIVE DATE: 1/1/09			EXPIRATION DATE: 12/31/09		
1	9/26/09	DOT 105-296, Route 82						

PERSON/WORKER	APPR	MALE/FEMALE	WORK CLASSIFICATION	DAY AND DATE							Total Hours	BASE HOURLY RATE	TYPE OF FRINGE BENEFITS	GROSS PAY FOR ALL WORK	TOTAL DEDUCTIONS			GROSS PAY FOR TIME PREVALING CHECK OFF AND RATE JOB	Is ET PAY
				M	T	W	TH	F	S	FEDERAL					STATE	OTHER			
Robert Craft			Electrical Lineman	8	8	8	8	8		40	\$ 30.75	2.5 S	\$1,582.80				P-xxx	\$1,582.80	#123
OSHA 123456				HOURS WORKED EACH DAY							S.TIME		CASH		WJTB		HOLDING		
OSHA 123456											O-TIME		CASH		HOLDING				
Ronald Jones	65%	MIS	Electrical Apprentice	8	8	8	8	8		40	\$ 19.99	2.5 S	\$1,464.80	XX.XX	XXX.XX	XX.XX	G-xxx	\$1,464.80	#124
OSHA 234567											S.TIME		CASH		HOLDING				
OSHA 234567											O-TIME		CASH		HOLDING				
Franklin T. Smith		M/H	Project Manager						6	8	\$	3.5 S	\$1,500.00	XX.XX	XXX.XX	XX.XX	M-xx.x		#125
OSHA 234567											S.TIME		CASH		HOLDING				
OSHA 234567											O-TIME		CASH		HOLDING				
SECTION 5											S.TIME		CASH		HOLDING				
SECTION 5											O-TIME		CASH		HOLDING				

7/13/2009 WW S-CPJ • If REQUIRED

\*SEE REVERSE SIDE



**\*RINGF. RENEFITS EXPLANAT ION (P) :**

Unafide benefit s paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment lax, worker' s compensation, income taxes , e tc.).

Pk ase s pecify l h e type of benefits provided :

- 1) Medical or hospital care Dec 055 \_\_\_\_\_ 4) Disability \_\_\_\_\_
- 2) Pension or retirement \_\_\_\_\_ 5) Vacatio n, holid a y \_\_\_\_\_
- 3) Life Ins umncc Utopia \_\_\_\_\_ 6) Other (plense specify) \_\_\_\_\_

**CERTIF IED STATEMENT OF COMP LIANCE**

For the week ending date of 9/26/ 09 \_\_\_\_\_

I, Robert Craft \_\_\_\_\_ of XYZ Corporation \_\_\_\_\_ (hereca nter known as Employer) in my capacity as, Officer \_\_\_\_\_ (title) do hereby certify and state:

**Section A:**

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:

- a) The records submitted are true and accurate;
- b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such employee to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such employee to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and, said wages and benefits are not less than those which may also be required by contract;
- c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-5 if applicable for state highway construction);
- d) Each such employee of the Employer is covered by a worker's compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;
- e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to my prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and
- f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.

2. OSHA - The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such employee's name first appears.

Robert Craft (Signature) \_\_\_\_\_ (Title) \_\_\_\_\_ Submitted on (Date) 10/2/09

**Section B: Applies to CONNDOT Projects ONLY**

That pursuant to CONNDOT contract requirements for reporting purposes only, oil employees listed under Section H who performed work on this project are not covered under the prevailing wage requirements defined in Connecticut General Statutes Section 31-53.

Robert Craft (Signature) \_\_\_\_\_ (Title) \_\_\_\_\_ Submitted on (Date) 10/2/09

Note: CT DOL will assume all hours worked were performed under Section A unless clearly delineated in Section B \VWS-CP I as such. Should an employee perform work under both Section A and Section 13, the hours worked and wages paid must be segregated for reporting purposes.

**\*\*\* THIS IS A PUBLIC DOCUMENT \*\*\***  
**\*\*\*DO NOT INCLUDE SOCIAL SECURITY NUMBERS\*\*\***

# Information Bulletin

## *Occupational Classifications*

The Connecticut Department of Labor has the responsibility to properly determine "job classification" on prevailing wage projects covered under C.G.S. Section 31-53(d).

**Note: This information is intended to provide a sample of some occupational classifications for guidance purposes only. It is not an all-inclusive list of each occupation's duties. This list is being provided only to highlight some areas where a contractor may be unclear regarding the proper classification. If unsure, the employer should seek guidelines for CTDOL.**

**Below are additional clarifications of specific job duties performed for certain classifications:**

- **ASBESTOS WORKERS**

Applies all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.

- **ASBESTOS INSULATOR**

Handle, install apply, fabricate, distribute, prepare, alter, repair, dismantle, heat and frost insulation, including penetration and fire stopping work on all penetration fire stop systems.

- **BOILERMAKERS**

Erects hydro plants, incomplete vessels, steel stacks, storage tanks for water, fuel, etc. Builds incomplete boilers, repairs heat exchanges and steam generators.

- **BRICKLAYERS. CEMENT MASONS. CEMENT FINISHERS. MARBLE MASONS. PLASTERERS. STONE MASONS. PLASTERERS. STONE MASONS. TERRAZZO WORKERS. TILE SETTERS**

Lays building materials such as brick, structural tile and concrete cinder, glass, gypsum, terra cotta block. Cuts, tools and sets marble, sets stone, finishes concrete, applies decorative steel, aluminum and plastic tile, applies cements, sand, pigment and marble chips to floors, stairways, etc.



- **CARPENTERS, MILLWRIGHTS, PILED RIVERMEN, LATHERS, RESILIENT FLOOR LAYERS, DOCK BUILDERS, DIKERS, DIVER TENDERS**

Constructs, erects, installs and repairs structures and fixtures of wood, plywood and wallboard. Installs, assembles, dismantles, moves industrial machinery. Drives piling into ground to provide foundations for structures such as buildings and bridges, retaining walls for earth embankments, such as cofferdams. Fastens wooden, metal or rockboard lath to walls, ceilings and partitions of buildings, acoustical tile layer, concrete form builder. Applies firestopping materials on fire resistive joint systems only. Installation of curtain/window walls only where attached to wood or metal studs. Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings. Assembly and installation of modular furniture/furniture systems. Free-standing furniture is not covered. This includes free standing: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.

- **LABORER, CLEANING**

- The clean-up of any construction debris and the general (heavy/light) cleaning, including sweeping, wash down, mopping, wiping of the construction facility and its furniture, washing, polishing, and dusting.

- **DELIVERY PERSONNEL**

- If delivery of supplies/building materials is to one common point and stockpiled there, prevailing wages are not required. If the delivery personnel are involved in the distribution of the material to multiple locations within the construction site then they would have to be paid prevailing wages for the type of work performed: laborer, equipment operator, electrician, ironworker, plumber, etc.

- An example of this would be where delivery of drywall is made to a building and the delivery personnel distribute the drywall from one "stockpile" location to further sub-locations on each floor. Distribution of material around a construction site is the job of a laborer or tradesman, and not a delivery personnel.

- **ELECTRICIANS**

Install, erect, maintenance, alteration or repair of any wire, cable, conduit, etc., which generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes, including the installation or maintenance of telecommunication, LAN wiring or computer equipment, and low voltage wiring. **\*License required per Connecticut General Statutes: E-1, 2L-5, 6C-5, 6T-1, 2L-1, 2V-1, 2, 7, 8, 9.**

- **ELEVATOR CONSTRUCTORS**

Install, erect, maintenance and repair of all types of elevators, escalators, dumb waiters and moving walks. \**License required by Connecticut General Statutes: R-1,2,5,6.*

- **FORKLIFTOPERATOR**

Laborers Group 4) Mason Tenders - operates forklift solely to assist a mason to a maximum height of nine (9) feet only.

Power Equipment Operator Group 9 - operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

- **GLAZIERS**

Glazing wood and metal sash, doors, partitions, and 2 story aluminum store fronts. Install glass windows, skylights, store fronts and display cases or sur faces such as building fronts, interior walls, ceilings and table tops and metal store fronts. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers, which require equal composite workforce.

- **IRONWORKERS**

Erection, installation and placement of structural steel, precast concrete, miscellaneous iron, ornamental iron, metal curtain wall, rigging and reinforcing steel. Handling, sorting, and installation of reinforcing steel (rebar). Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and iron workers which require equal composite workforce.

- **INSULATOR**

- Installing fire stopping systems/materials for "Penetration Firestop Systems": transit to cables, electrical conduits, insulated pipes, sprinkler pipe penetrations, ductwork behind radiation, electrical cable tray s, fire rated pipe penetrations, natural polypropylene, HVAC ducts, plumbing bare metal, telephone and communication wires, and boiler room ceilings.

- **LABORERS**

Acetylene burners, asphalt rakers, chain saw operators, concrete and power buggy operator, concrete saw operator, fence and guard rail erector (except metal bridge rail (traffic), decorative security fence (non-metal).

installation.), hand operated concrete vibrator operator, mason tenders, pipelayers (installation of storm drainage or sewage lines on the street only), pneumatic drill operator, pneumatic gas and electric drill operator, power men and wagon drill operator, air track operator, block paver, curb setters, blasters, concrete spreaders.

- **PAINTERS**

Maintenance, preparation, cleaning, blasting (water and sand, etc.), painting or application of any protective coatings of every description on all bridges and appurtenances of highways, roadways, and railroads. Painting, decorating, hardwood finishing, paper hanging, sign writing, scenic art work and drywall hhg for any and all types of building and residential work.

- **LEAD PAINT REMOVAL**

- Painter's Rate

1. Removal of lead paint from bridges.
2. Removal of lead paint as preparation of any surface to be repainted.
3. Where removal is on a Demolition project prior to reconstruction.

- Laborer's Rate

1. Removal of lead paint from any surface NOT to be repainted.
2. Where removal is on a *TOTAL* Demolition project only.

- **PLUMBERS AND PIPEFITTERS**

Installation, repair, replacement, alteration or maintenance of all plumbing, heating, cooling and piping. *\*License required per Connecticut General Statutes: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2 S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4.*

- **POWER EQUIPMENT OPERATORS**

Operates several types of power construction equipment such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers or motor graders, etc. Repairs and maintains equipment. *\*License required, crane operators only, per Connecticut General Statutes.*

- **ROOFERS**

Covers roofs with composition shingles or sheets, wood shingles, slate or asphalt and gravel to waterproof roofs, including preparation of surface. (demolition or removal of any type of roofing and or clean-up of any and all areas where a roof is to be relaid.)

- **SHEETMETAL WORKERS**

Fabricate, assembles, installs and repairs sheet metal products and equipment in such areas as ventilation, air-conditioning, warm air heating, restaurant equipment, architectural sheet metal work, sheet metal roofing, and aluminum gutters. Fabrication, handling, assembling, erecting, altering, repairing, etc. of coated metal material panels and composite metal material panels when used on building exteriors and interiors as soffits, fascia, louvers, partitions, canopies, cornice, column covers, awnings, beam covers, cladding, sunshades, lighting troughs, spires, ornamental roofing, metal ceilings, mansards, copings, ornamental and ventilation hoods, vertical and horizontal siding panels, trim, etc. The sheet metal classification also applies to the vast variety of coated metal material panels and composite metal material panels that have evolved over the years as an alternative to conventional ferrous and non-ferrous metals like steel, iron, tin, copper, brass, bronze, aluminum, etc. Fabrication, handling, assembling, erecting, altering, repairing, etc. of architectural metal roof, standing seam roof, composite metal roof, metal and composite bathroom/toilet partitions, aluminum gutters, metal and composite lockers and shelving, kitchen equipment, and walk-in coolers. To include testing and air-balancing ancillary to installation and construction.

- **SPRINKLER FITTERS**

Installation, alteration, maintenance and repair of fire protection sprinkler systems.

*\*License required per Connecticut General Statutes: F-1,2,3,4.*

- **TILE MARBLE AND TERRAZZO FINISHERS**

Assists and tends the tile setter, marble mason and terrazzo worker in the performance of their duties.

- **TRUCK DRIVERS**

-How to pay truck drivers delivering asphalt is under REVISION-

Truck Drivers are required to be paid prevailing wage for time spent "working" directly on the site. These drivers remain covered by the prevailing wage for any time spent transporting between the actual construction location and facilities (such as fabrication, plants, mobile factories, batch plant, borrow pits, job headquarters, tool yards, etc.) dedicated exclusively, or nearly so, to performance of the contract or project, which are so located in proximity to the actual construction location that it is reasonable to include them. *\*License required, drivers only, per Connecticut General Statutes.*

***For example:***

- Material men and deliverymen are not covered under prevailing wage as long as they are not directly involved in the construction process. If, they unload the material, they would then be covered by prevailing wage for the classification they are performing work in: laborer, equipment operator, etc.
- Hauling material off site is not covered provided they are not dumping it at a location outlined above.
- Driving a truck on site and moving equipment or materials on site would be considered covered work, as this is part of the construction process.

*Any questions regarding the proper classification should be directed to:*

*Public Contract Compliance Unit  
Wage and Workplace Standards Division  
Connecticut Department of Labor  
200 Folly Brook Blvd, Wethersfield, CT 06109  
(860) 263-6543.*

**Connecticut Department of Labor**  
**Wage and Workplace Standards Division**  
**FOOTNOTES**

Please Note: If the "Benefits" listed on the schedule for the following occupations includes a letter(s) (+ a or+ a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the "Benefits" section for the occupation lists only a dollar amount, disregard the information below.

**Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers, Stone Masons**  
(Building Construction) and  
(Residential- Hartford, Middlesex, New Haven, New London and Tolland Counties)

- a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

**Elevator Constructors: Mechanics**

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

**Glaziers**

- a. Paid Holidays: Labor Day and Christmas Day.

**Power Equipment Operators**

(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year's Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

**Ironworkers**

- a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

**Laborers (Tunnel Construction)**

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular work day preceding the holiday or the regular work day following the holiday.

**Roofers**

- a. Paid Holidays: July 4<sup>th</sup>, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

**Sprinkler Fitters**

- a. Paid Holidays: Memorial Day, July 4<sup>th</sup>, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

**Truck Drivers**

(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification  (X)		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source			
State Employment Service	<input type="checkbox"/>	<input type="checkbox"/>			Work Experience	
Private Employment Agencies	<input type="checkbox"/>	<input type="checkbox"/>			Ability to Speak or Write English	
Schools and Colleges		<input type="checkbox"/>			Written Tests	
Newspaper Advertisement	<input type="checkbox"/>	<input type="checkbox"/>			High School Diploma	
Walk Ins	<input type="checkbox"/>	<input type="checkbox"/>			College Degree	
Present Employees	<input type="checkbox"/>	<input type="checkbox"/>			Union Membership	
Labor Organizations	<input type="checkbox"/>	<input type="checkbox"/>			Personal Recommendation	
Minority/Community Organizations	<input type="checkbox"/>	<input type="checkbox"/>			Height or Weight	
Others (please identify)	<input type="checkbox"/>	<input type="checkbox"/>			Car Ownership	
	<input type="checkbox"/>	<input type="checkbox"/>			Arrest Record	
	<input type="checkbox"/>	<input type="checkbox"/>			Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
-------------	---------	---------------	-------------