

## Special Provisions

### Table of Contents

| Article | Description  | Page # |
|---------|--|--------|
| 1.      | General.....   | 2      |
| 2.      | Scope of Work.....   | 2      |
| 3.      | Prosecution and Progress.....  | 2      |
| 4.      | Lane Rental Fee Assessment.....  | 4      |
| 5.      | Traffic. ....  | 5      |
| 6.      | Traffic Control.....   | 5      |
| 7.      | Holiday Work Restrictions. ....  | 6      |
| 8.      | Work Zone Ingress - Egress. ....   | 6      |
| 9.      | Hauling Restrictions. ....   | 7      |
| 10.     | Erosion Control. ....  | 7      |
| 11.     | Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit..... | 8      |
| 12.     | Environmental Protection, Aquatic Exotic Species Control. ....               | 8      |
| 13.     | Nighttime Work Lighting-Stationary. ....                                     | 8      |
| 14.     | Material and Equipment Staging.....  | 10     |
| 15.     | Available Documents. ....  | 10     |
| 16.     | Contractor Notification.....   | 10     |
| 17.     | Information to Bidders, Use of Recovered Materials. ....                     | 10     |
| 18.     | Notice to Contractor – Airport Operating Restrictions.....                   | 11     |
| 19.     | Dust Control Implementation Plan. ....                                       | 11     |
| 20.     | Maintaining Drainage. ....   | 12     |
| 21.     | Abatement of Asbestos Containing Material B-67-0059, Item 203.0210.S ....    | 13     |
| 22.     | Removing Old Culverts and Bridges.....                                       | 14     |
| 23.     | Concrete Maturity Testing.....   | 15     |
| 24.     | Fence Woven Wire (4.5 FT).....   | 15     |
| 25.     | Covering Signs.....  | 16     |
| 26.     | Stone or Rock Ditch Checks, Item 628.7515.S. ....                            | 16     |
| 27.     | Removing Sand Barrels & Concrete Pad, Item SPV.0060.01. ....                 | 17     |
| 28.     | Temporary Sign Support, SPV.0060.02.....                                     | 18     |
| 29.     | Traffic Control Full Freeway Closure, Item SPV. 0060.03 ....                 | 18     |
| 30.     | Pavement Cleanup Project 1060-10-70, Item SPV.0075.01. ....                  | 19     |
| 31.     | Heavy Duty Silt Fence Item SPV.0090.01. ....                                 | 20     |
| 32.     | Survey Project 1060-10-70, Item SPV.0105.01.....                             | 21     |
| 33.     | Removing Concrete Channel, Item SPV.0180.01. ....                            | 22     |

**SPECIAL PROVISIONS**

**1. General.**

Perform the work under this construction contract for Project 1060-10-70, East West Freeway, Elmhurst Road Overpass B67-0059 (old), B-67-0369 (new), Waukesha County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2020 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

100-005 (20191121)

**2. Scope of Work.**

The work under this contract shall consist of bridge replacement, base aggregate dense, HMA pavement, storm sewer, guardrail and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

**3. Prosecution and Progress.**

Begin work within ten calendar days after the engineer issues a written notice to do so.

Provide the start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the approved start date.

Provide the time frame for construction of the project within the 2019 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved time frame.

To revise the time frame, submit a written request to the engineer at least two weeks before the beginning of the intended time frame. The engineer will approve or deny that request based on the conditions cited in the request and its effect on the department's scheduled resources.

Completion of the work may require work on Saturdays, Sundays and work at night.

Be advised that there may be multiple mobilizations and/or remobilizations to complete construction operations, for example, such items as: paving, traffic control, pavement marking, bridge deck concrete overlay, finishing items and other incidental items. No additional payment will be made, by the department, for additional mobilizations.

**Advance Notification**

Provide the following advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS).

**TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION**

| <b>Closure type with height, weight, or width restrictions<br/>(available width, all lanes in one direction &lt; 16')</b> | <b>MINIMUM NOTIFICATION</b> |
|---|-----------------------------|
| Lane and shoulder closures  | 7 calendar days             |
| Full roadway closures   | 7 calendar days             |
| Ramp closures   | 7 calendar days             |
| Detours   | 7 calendar days             |
| <b>Closure type without height, weight, or width restrictions<br/>(available width, all lanes in one direction ≥16')</b>  | <b>MINIMUM NOTIFICATION</b> |
| Lane and shoulder closures  | 3 business days             |
| Ramp closures   | 3 business days             |
| Modifying all closure types   | 3 business days             |

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

Obtain prior acceptance from the engineer and the Traffic Management Center for Full Freeway Closures. Notify local emergency and police agencies seven calendar days prior to freeway closure.

## **Lane Closure Definitions**

### **Definitions**

The following definitions apply to this contract for freeway work restrictions:

|                                   |  |
|-----------------------------------|--|
| <b>System Ramps</b>               | Freeway to freeway ramps   |
| <b>Service Ramps</b>              | Freeway to/from local road ramps   |
| <b>Weekday Peak Hours</b>         |  |
| 6:00 AM – 7:00 PM                 | Monday, Tuesday, Wednesday, Thursday, and Friday   |
| <b>Weekend Peak Hours</b>         |  |
| 8:00 AM – 8:00 PM                 | Saturday, Sunday   |
| <b>Weekend Off-Peak Hours</b>     |  |
| 8:00 PM – 8:00 AM                 | Friday to Saturday, Saturday to Sunday   |
| <b>Weekday Off-Peak Hours</b>     |  |
| 7:00 PM – 6:00 AM                 | (Sunday PM to Monday AM, Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM) |
| <b>Night Time Hours</b>           |  |
| 7:00 PM – 6:00 AM                 | (Sunday PM to Monday AM, Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM) |
| <b>Full Freeway Closure/Hours</b> |  |
| 9:00 PM – 5:00 AM                 | Sunday through Thursday nights   |
| 11:00 PM – 7:00 AM                | Friday and Saturday nights   |

## **Freeway Work Restrictions**

No weekday off-peak two-lane closures are allowed. No weekday peak hour lane closures are allowed.

Provide a minimum of three lanes in each direction of the freeways and ensure that the freeways are entirely clear for traffic during Weekday Peak Hours, Weekend Peak Hours, and during Weekday Off-Peak Hours, except as shown in the traffic control plans. Provide a minimum of two lanes in each direction of the freeways and ensure that the freeways are entirely clear for traffic during Weekend Off-Peak Hours. Provide

a minimum of one lane in each direction of the freeway and ensure that the freeways are entirely clear for traffic during Night Time Hours except as allowed during full closure.

Full closure and detouring of freeway roads will be restricted to Full Freeway Closure Hours. The freeway may be closed to facilitate the removal of structures and erection of girders and to perform work related to major traffic shifts. Provide signed detour routes, as the plans show that are fully open and free of construction during all full freeway and system ramp closures.

sef-107-035 (20170406)

Follow plan details for closures. Lane restrictions of the freeway beyond that shown on the traffic control plans are subject to lane rental assessments and must be approved by the engineer. If plan details are not provided in the traffic control plan, furnish plans for review by the engineer and the WisDOT Statewide Traffic Operations Center, (414) 227-2142.

Beyond that shown on the traffic control plans, do not simultaneously conduct constructions operations in the median area and adjacent outside shoulder area of the freeway without obtaining prior permission of the engineer.

Restrict work on freeway roads to working in closed shoulders or closed lanes as allowed by the plans or engineer. Provide and utilize temporary access roads and ramps to access the work zones. Construct temporary access incidental to other items of work. Exiting the workzones directly onto freeway roads is permitted only when operations do not obstruct or slow traffic on the freeway.

### **Rolling Closure**

Short term freeway mainline rolling closures may be allowed for a maximum of 15 minutes for the removal and erection of sign structures, equipment moves across the road, or other required work as determined by the engineer. The department will allow short term rolling closures only between 2 AM and 4 AM, and they may only be performed by freeway law enforcement.

Obtain approval from the engineer before coordinating these closures with freeway law enforcement. Coordinate 14 calendar days before closure. Present the scheduled time for the short term rolling closure at the weekly traffic meeting a minimum of one week before the closure.

sef-108-031 (20170406)

## **4. Lane Rental Fee Assessment.**

### **A General**

The contract designates some lane closures to perform the work. The contractor will not incur a Lane Rental Fee Assessment for closing lanes during the allowable lane closure times. The contractor will incur a Lane Rental Fee Assessment for each lane closure outside of the allowable lane closure times. If a lane is obstructed at any time due to contractor operations, it is considered a closure. The purpose of lane rental is to enforce compliance of lane restrictions and discourage unnecessary closures.

The allowable lane closure times are shown in the Traffic article.

Submit the dates of the proposed lane, ramp, and roadway restrictions to the engineer as part of the progress schedule.

*If you don't have another project in the vicinity of this project, the following paragraph may be deleted:*

Coordinate lane, ramp, and roadway closures with any concurrent operations on adjacent roadways within 3 miles of the project. If other projects are in the vicinity of this project, coordinate lane closures to run concurrent with lane closures on adjacent projects when possible. When lane closures on adjacent projects extend into the limits of this project, Lane Rental Fee Assessments will only occur if the closure facilitates work under this contract.

### **B Lane Rental Fee Assessment**

The Lane Rental Fee Assessment incurred for each lane closure, each ramp closure, and each full closure of a roadway, per direction of travel, is as follows:

- \$Lane Rental Dollar Amount per lane, per direction of travel, per hour broken into 15 minute increments

The Lane Rental Fee Assessment represents a portion of the cost of the interference and inconvenience to the road users for each closure. All lane, roadway, or ramp closure event increments 15 minutes and less will be assessed as a 15-minute increment.

The engineer, or designated representative, will be the sole authority in determining time period length for the Lane Rental Fee Assessment.

Lane Rental Fee Assessments will not be assessed for closures due to crashes, accidents, or emergencies not initiated by the contractor.

The department will assess Lane Rental Fee Assessment by the dollar under the administrative item Failing to Open Road to Traffic. The total dollar amount of Lane Rental Fee Assessment will be computed by multiplying the Lane Rental Assessment Rate by the number of 15-minute increments of each lane closure event as described above.

Lane Rental Fee Assessment will be in effect from the time of the Notice to Proceed until the department issues final acceptance. If interim completion time or contract time expires before the completion of specified work in the contract, additional liquidated damages will be assessed as specified in standard spec 108.11 or as specified within this contract.

stp-108-065 (20161130)

## **5. Traffic.**

### **A General**

Elmhurst Road will be detoured for the duration of this project. The freeway will be impacted by full freeway closures

### **B Residential and Business Property Access**

Maintain access to properties along Elmhurst Road for local residents, businesses and emergency vehicles.

### **C Schedule of Operations**

Traffic shifts shown in a given stage may occur at different times during that stage depending on the controlling elements for a given traffic movement. The department anticipates that the schedule for each stage will be as follows:

Single lane closures on IH-94 as needed for temporary barrier replacement and removal.

Stage 1 Traffic:

- Elmhurst Road is detoured
- Traffic on IH 94 will remain in the current lanes with barrier along the inside and outside shoulders to separate the work zone from traffic.

## **6. Traffic Control**

*Supplement standard spec 643.3.1 with the following:*

Provide the Waukesha County Sheriff's Department, the Wisconsin State Patrol, Town of Delafield Police Department, Fire Department and the project engineer a current telephone number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

Do not park or store equipment, contractor's and personal vehicles or construction materials within the clear zone or on any roadway carrying traffic during working and non-working hours except at locations and periods of time approved by the engineer.

Do not permit construction or personnel equipment or vehicles to directly cross the live traffic lanes of IH 94. Yield to all through traffic at all locations. Equip all vehicles or equipment operating in the live traffic lanes with a hazard identification beam (flashing yellow signal light) that is visible from 360 degrees. Operate the flashing yellow beam only when merging or exiting live traffic lanes or when parked or operating on shoulders, except when parked behind barrier wall. Do not park personal vehicles within the access control limits of the freeway. Do not cross live traffic lanes of IH 94 with equipment or vehicles.

Obtain prior approval from the engineer for the locations of egress or ingress for construction vehicles to prosecute the work.

Do not disturb, remove or obliterate any traffic control signs, advisory signs, sand barrel array, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer.

Ensure that Flagging operations conform to standard spec 104.6.1.(4) and chapter 6E of the WMUTCD.

*Replace standard spec 643.3.1.(7) with the following:*

Provide equipment, forces, and materials to promptly restore any traffic control devices or pavement markings damaged or disturbed within 2 hours of being contacted.

SER-643-001 (20170808)

## **7. Holiday Work Restrictions.**

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying IH 94 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 28<sup>th</sup>, 2021 to 6:00 AM Tuesday, June 1<sup>st</sup> 2021
- From noon Friday, July 2<sup>nd</sup>, 2021 to 6:00 AM Monday, July 5<sup>th</sup> 2021
- From noon Friday, September 3<sup>rd</sup>, 2021 to 6:00 AM Tuesday, September 7<sup>th</sup>, 2021.

stp-107-005 (20050502)

## **Local Street Work Restrictions**

Comply with all local ordinances that apply to local street work operations, including those pertaining to working during night time hours. Furnish any ordinance variance issued by the municipality or required permits to the engineer in writing three days prior to performing such work.

Existing trees, street light poles, hydrants and other utility poles are to remain in place during construction unless otherwise noted in the plan. Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between the trees, hydrants and poles and the paving equipment.

Inform property owners and tenants at least 48 hours prior to removing a driveway approach that serves that property. Schedule driveway approach removal and replacement so that the time lapse between removal and replacement is seven days.

Do not close residential approaches or remove from service without giving five day notice to the occupants of the premises to remove their vehicles prior to driveway removal or closing of the driveway approach access. If necessary, make other access arrangements, agreed to in writing and signed by the contractor and the property owner serviced by the driveway. Obtain approval from the engineer prior to alternating construction sequencing.

## **8. Work Zone Ingress - Egress.**

Submit Work Zone Ingress – Egress construction details a minimum of 10 working days before use for approval by the engineer and the Southeast Region Work Zone Engineer.

## **9. Hauling Restrictions.**

*Replace standard spec 107.2 with the following:*

- (1) Approved local street haul routes are shown on the Local Road Haul Routes Overview Plan.
- (2) Present to the department, five business days before proposed hauling, a proposed haul route plan detailing haul routes that are not part of the state trunk highway system. Include the months, days of the week, time of day, number of trucks, types of trucks and maximum loads of trucks anticipated to accomplish the project work in the haul route submittal.
- (3) The department will review the submittal and either approve or provide a letter with comments and proposed revisions to the contractor within five business days of its receipt. If approved, the department will subsequently survey the existing condition of that haul route to establish a baseline for assessing damage that the contractor's hauling operations might cause.
- (4) At all times, conduct operations in a manner that will cause a minimum of disruption to traffic on existing roadways.

sef-107-015 (20170310)

## **10. Erosion Control.**

*Add the following to standard spec 107.20 as paragraphs nine through fifteen:*

- (9) Erosion control best management practices (BMP's) the plans show are at suggested locations. The actual locations shall be determined by the contractor's ECIP and by the engineer. Include each dewatering (mechanical pumping) operation in the ECIP submittal. The ECIP shall supplement information the plans show and not reproduce it. The ECIP shall identify how to implement the project's erosion control plan. ECIP shall demonstrate timely and diligently staged operations, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-application of top soil to minimize the exposure to possible erosion.
- (10) Provide the ECIP 14 days before the pre-construction conference. Provide 1 copy of the ECIP to the department and 1 copy of the ECIP to the WDNR Liaison Craig Webster, [craig.webster@wisconsin.gov](mailto:craig.webster@wisconsin.gov), 262-574-2141. Do not implement the ECIP until department approval, and perform all work conforming to the approved ECIP.
- (11) Maintain Erosion Control BMP's until permanent vegetation is established or until the engineer determines that the BMP is no longer required.
- (12) Stockpile excess materials or spoils on upland areas away from wetlands, floodplains, and waterways. Install perimeter silt fence protection around stockpiles within a timeframe acceptable to the engineer. If stockpiled materials will be left for more than 14 days, install temporary seed and mulch or other temporary erosion control measures the engineer orders.
- (13) Re-apply topsoil on graded areas, as designated by the engineer, within a timeframe acceptable to the engineer after grading is completed within those areas. Seed, fertilize, and mulch/erosion mat top-soiled areas, as designated by the engineer, within 5 days after placement of topsoil. If graded areas are left not completed and exposed for more than 14 days, seed those areas with temporary seed and mulch.
- (14) Do not allow excavation for; structures, utilities, grading, maintaining drainage that requires dewatering (mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Before each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate BMP for sediment removal, conforming to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection.
- (15) Dewatering is incidental.

## **11. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.**

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Brenda Ruenger at (262) 548-6709.

stp-107-054 (20080901)

## **12. Environmental Protection, Aquatic Exotic Species Control.**

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

<http://dnr.wi.gov/topic/invasives/disinfection.html>

Use the following inspection and removal procedures:

1. Before leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can before leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
  - 4.1. Washing with ~212 F water (steam clean), or
  - 4.2. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
  - 4.3. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104° F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

stp-107-055 (20130615)

## **13. Nighttime Work Lighting-Stationary.**

### **A Description**

This special provision describes furnishing portable lighting as necessary to complete nighttime work. Nighttime operations consist of work specifically scheduled to occur after sunset and before sunrise.

### **B (Vacant)**

### **C Construction**

#### **C.1 General**



This provision shall apply when providing, maintaining, moving, and removing portable light towers and equipment-mounted lighting fixtures for nighttime stationary work operations, for the duration of nighttime work on the contract.

At least 14 days before the nighttime work, furnish a lighting plan to the engineer for review and acceptance. Address the following in the plan:

1. Layout, including location of portable lighting – lateral placement, height, and spacing. Clearly show on the layout the location of all lights necessary for every aspect of work to be done at night.
2. Specifications, brochures, and technical data of all lighting equipment to be used.
3. The details on how the luminaires will be attached.
4. Electrical power source information.
5. Details on the louvers, shields, or methods to be employed to reduce glare.
6. Lighting calculations. Provide illumination with average to minimum uniformity ratio of 5:1 or less throughout the work area.
7. Detail information on any other auxiliary equipment.

## **C.2 Portable Lighting**

Provide portable lighting that is sturdy and free standing and does not require any guy wires, braces, or any other attachments. Furnish portable lighting capable of being moved as necessary to keep up with the construction project. Position the portable lighting and trailers to minimize the risk of being impacted by traffic on the roadway or by construction traffic or equipment. Provide lightning protection for the portable lighting. Portable lighting shall withstand up to 60 mph wind velocity.

If portable generators are used as a power source, furnish adequate power to operate all required lighting equipment without any interruption during the nighttime work. Provide wiring that is weatherproof and installed according to local, state, federal (NECA and OSHA) requirements. Equip all power sources with a ground-fault circuit interrupter to prevent electrical shock.

## **C.3 Light Level and Uniformity**

Position (spacing and mounting height) the luminaires to provide illumination with an average to minimum uniformity ratio of 5:1 or less throughout the work area.

Illuminate the area as necessary to incorporate construction vehicles, equipment, and personnel activities.

## **C.4 Glare Control**

Design, install, and operate all lighting supplied under these specifications to minimize or avoid glare that interferes with all traffic on the roadway or that causes annoyance or discomfort for properties adjoining the roadway. Locate, aim, and adjust the luminaires to provide the adequate level of illumination and the specified uniformity in the work area without the creation of objectionable glare.

Provide louvers, shields, or visors, as needed, to reduce any objectionable levels of glare. As a minimum, ensure the following requirements are met to avoid objectionable glare on the roadways open to traffic in either direction or for adjoining properties:

1. Aim tower-mounted luminaires, either parallel or perpendicular to the roadway, so as to minimize light aimed toward approaching traffic.
2. Aim all luminaires such that the center of beam axis is no greater than 60 degrees above vertical (straight down).

If lighting does not meet above-mentioned criteria, adjust the lighting within 24 hours.

## **C.5 Continuous Operation**

Provide and have available sufficient fuel, spare lamps, generators, and qualified personnel to ensure that the lights will operate continuously during nighttime operation. In the event of any failure of the lighting system, discontinue the operation until the adequate level of illumination is restored. Move and remove lighting as necessary.

## **D (Vacant)**

## **E Payment**

Costs for furnishing a lighting plan, and for providing, maintaining, moving, and removing portable lighting, tower mounted lighting, and equipment-mounted lighting required under this special provision are incidental to the contract.

#### **14. Material and Equipment Staging.**

Submit a map showing all proposed material stockpile or equipment storage locations to the Engineer 14 days before either preconstruction or proposed use, whichever comes first. Identify the specific purposes for the location. Obtain written permits from the property owner, and submit two copies to the Engineer before use. Do not stockpile or store materials or equipment on wetlands.

sef-999-020 (20170310)

#### **15. Available Documents.**

The department will make its information available to bidding contractors. The list of documents that are available for contractors' information includes:

- Design Study Report
- Environmental Document
- Geotechnical Information
- As-Built Drawings
- Preconstruction survey
- Traffic Management Plan

These documents are available from Scott Anderson at 141 NW Barstow Street, Waukesha, WI 53187 [scottm.anderson@dot.wi.gov](mailto:scottm.anderson@dot.wi.gov), or (262) 548-6894.

Reproduction costs will be applied to all copies requested.

sef-102-005 (20170310)

#### **16. Contractor Notification.**

*Replace standard spec 104.2.2.2(2) with the following:*

- (2) If the contractor discovers the differing condition, provide a written notice, as specified in 104.3.3, of the specific differing condition before further disturbing the site and before further performing the affected work.

*Replace standard specs 104.3.2 and 104.3.3 with the following:*

##### **104.3.2 (Vacant)**

##### **104.3.3 Contractor Initial Written Notice**

- (1) If required by 104.2, or if the contractor believes that the department's action, the department's lack of action, or some other situation results in or necessitates a contract revision, promptly provide a written notice to the engineer. At a minimum, provide the following:
1. A written description of the nature of the issue.
  2. The time and date of discovering the problem or issue.
  3. If appropriate, the location of the issue.
- (2) Provide the additional information specified in 104.3.5 as early as possible to assist the engineer in the timely resolution of an identified issue. The engineer will not require, in subsequent submissions, duplication of information already provided.

sef-104-005 (20141211)

#### **17. Information to Bidders, Use of Recovered Materials.**

The department encourages the use of waste materials and recovered industrial byproducts as material substitutions (106.2.1), provided they meet standard specification gradation requirements, conform to NR 538 requirements, and follow standard engineering practice for their intended use.

sef-106-005 (20141211)

## **18. Notice to Contractor – Airport Operating Restrictions**

Fill out the FAA Notice Criteria tool for all permanent structure (bridge, light pole, etc.) or equipment (crane, etc.) used during construction.

<https://oeaaa.faa.gov/oeaaa/external/portal.jsp>

If required by the Notice Criteria tool, and for all crane or construction equipment higher than 200 feet above the ground, submit completed form 7460-1 (Notice of Proposed Construction or Alteration) to The Federal Aviation Administration (FAA) at least 45 days before starting construction.

Contact Levi Eastlick (608-267-5018), WisBOA airspace/tall structure manager for assistance submitting forms.

sef-107-020 (20171004)

## **19. Dust Control Implementation Plan.**

### **A Description**

This special provision describes developing, updating, and implementing a detailed Dust Control Implementation Plan (DCIP) for all land-disturbing construction activities and associated impacts both within the project site boundaries and outside the project site boundaries. Incorporate contract bid items that this article specifies into the DCIP.

### **B (Vacant)**

### **C Construction**

#### **C.1 General**

Control dust on the project as specified in standard spec 107.18. Minimize dust emissions resulting from land disturbing activities. Do not generate excessive air borne particulate matter (PM) or nuisance dust conditions. Control dust at all times during the contract.

Submit a DCIP to the engineer for review at least 14 calendar days before the preconstruction conference. Coordinate with the department, if requested, to resolve DCIP related issues before the preconstruction conference. The department will either approve the DCIP or request revisions. Do not initiate land-disturbing activities without the department's approval of the DCIP.

#### **C.2 DCIP Contents**

Develop a DCIP tailored to the specific needs of the project. Consider potential impacts to businesses and residences adjacent to the job site. Describe in detail all land disturbing, dust generating activities. Identify strategies to prevent, mitigate, and collect excess dust. Establish clear lines of communication with the engineer to ensure that all dust control issues can be dealt with promptly.

Include all of the following:

1. A single contact person with overall responsibility for the DCIP development as well as surveillance and remediation of job related dust. Provide:
  - Name, firm, address, and working-hours phone number.
  - Non-working-hours phone number.
  - Email address.
2. A site map locating project features, the job site boundaries, all ingress and egress points, air intakes and other dust-sensitive areas, and all public and private paved surfaces within and adjacent to the job site. Show where specific land disturbing, dust generating activities will occur and, to the extent possible, where employing various dust control or prevention strategies.
3. A matrix, or plan, for each anticipated land disturbing, dust generating activity, showing the following:
  - Preventive measures that shall be employed.
  - The applicable contact person.
  - The contractor's timetable and surveillance measures used to determine when remediation is required.
  - The specific dust control and remediation measures that shall be employed. Identify the specific contract bid items that shall be used for payment. Indicate costs and practices that are incidental to the contract.

- Both maintenance and cleanup schedules and procedures.
  - Excess and waste materials disposal strategy.
4. A description of monitoring and resolving off-site impacts.

### **C.3 Updating the DCIP**

Update the DCIP during the contract or as the engineer directs. Obtain the engineer's approval for all DCIP alterations. Also obtain the engineer's approval for routine DCIP adjustments for weather, job conditions, or emergencies that will have an impact on payment under the bid items listed in the approved DCIP.

### **C.4 Dust Control Deficiencies**

Coordinate with engineer to determine deadlines for resolving dust control deficiencies. Deficiencies include actions or lack of actions resulting in excessive dust, non-compliance with the contractor's DCIP or associated special provisions, and not properly maintaining equipment.

### **D Measurement**

The department will measure the various bid items associated with dust control as specified in the applicable measurement subsections of either the standard specs or other contract special provisions. The department will not measure work performed under a DCIP alteration unless the engineer specifically approves that alteration.

Measurement under the DCIP includes the contract bid items listed in this special provision:

623.0200 Dust Control Surface Treatment  
 624.0100 Water  
 628.7560 Tracking Pads  
 SPV.0075.01 Pavement Cleanup Project 1060-10-70

The department will measure work completed under other existing contract bid items if approved as a part of the DCIP. The department will consider new bid items to the contract if proposed under the DCIP. The department will not measure work required under the DCIP that is not included in contract bid items.

### **E Payment**

All costs associated with the development and updating of the DCIP are incidental to the contract. The department will pay separately for the work required to implement the actions approved in the DCIP under the contract bid items approved as a part of the DCIP. All other costs associated with work approved under the DCIP are incidental to the contract.

sef-107-005 (20170323)

## **20. Maintaining Drainage.**

Maintain drainage at and through worksite during construction conforming to standard specs 107.22, 204, 205 and 520.

Use existing storm sewers, existing culvert pipes, existing drainage channels, temporary culvert pipes, or temporary drainage channels to maintain existing surface and pipe drainage. Pumps may be required to drain the surface, pipe, and structure discharges during construction. Costs for furnishing, operating, and maintaining the pumps is considered incidental to the project.

To maintain drainage south of the interstate along eastbound IH-94 install the proposed storm sewer after removal of the pier but prior to beginning construction on the abutment.

### **Dewatering (Mechanical Pumping) for Bypass Water (sediment-free) Operations**

If dewatering bypass operations are required from one pipe structure to another downstream pipe structure or from the upstream to downstream end of a culvert and the bypass flow is not transporting sediments (sand, silt, and clay particles) from a tributary work site area, bypass pumping operations will be allowed provided that the department has been made aware of and approves operation. When pumping bypass flows, the discharge location will need to be stable and not produce erosion from the discharge velocity that would cause release of sediment downstream.

### **Dewatering (Mechanical Pumping) for treatment Water (sediment-laden) Operations**

If dewatering operations require pumping of water containing sediments (sand, silt, and clay particles), the discharge will not be allowed to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Refer to the Erosion Control article in these special provisions for additional requirements.

sef-107-016 (20170310)

## **21. Abatement of Asbestos Containing Material B-67-0059, Item 203.0210.S**

### **A Description**

This special provision describes abating asbestos containing material on structures.

### **B (Vacant)**

### **C Construction**

John Roelke, License Number All-119523, inspected Structure B-67-0059 for asbestos on September 2, 2014 Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: The gasket located under the railing attachment plates on the concrete parapet tested positive for Asbestos.

The RACM on this structure must be abated by a licensed abatement contractor. A copy of the inspection report is available from Scott Anderson, 262-548-6894. In accordance with NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form and the abatement report to Andrew Malsom, WisDOT SE Region Hazmat & Environmental Engineer, (262) 548-6705 and DOT BTS-ESS attn: Hazardous Materials Specialist PO Box 7965, Madison, WI. 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113:

- Site Name: Structure B-67-0059 Elmhurst Rd over IH 94
- Site Address: 0.1 mile N Jct CTH G, 2.6 Mile East Jct STH 83
- Ownership Information: WisDOT Transportation SE Region, 141 NW Barstow St, Waukesha, 53187
- Contact: Enter Regional construction project engineer's name
- Phone: Enter Regional construction project engineer's phone
- Age: 60 years. This structure was constructed in 1962
- Area: 7238 SF of deck

Insert the following paragraph in Section 6.g.:

- If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at 608-266-1476 for an emergency response as specified in standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

### **D Measurement**

The department will measure Abatement of Asbestos Containing Material (Structure), completed in according to the contract and accepted, as a single complete unit of work.

### **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

| ITEM NUMBER | DESCRIPTION  | UNIT |
|-------------|--|------|
| 203.0210.S  | Abatement of Asbestos Containing Material B-67-059 | LS   |

Payment is full compensation for submitting necessary forms; removing all asbestos; properly disposing of all waste materials; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

stp-203-005 (20120615)

## 22. Removing Old Culverts and Bridges.

*Add the following to standard spec 203.3.1:*

### 203.3.1.1 Structure Removal Site Safety Plan

- (1) Prepare a Structure Removal Site Safety Plan covering all structure removal work included in the contract. Maintain posted copies of the Structure Removal Site Safety Plan at the site in the project field office. Provide two copies of the Structure Removal Site Safety Plan to the engineer at least four weeks before beginning removal work.

### 203.3.1.2 Structure Removal Plans

- (1) Prepare a structure specific removal plan for each of the following existing structures indicating the methods and sequence of demolition:

|           |                              |               |       |
|-----------|------------------------------|---------------|-------|
| B-40-0059 | 4 Span Prestressed<br>Girder | Elmhurst Road | IH 94 |
|-----------|------------------------------|---------------|-------|

- 2) This table does not include all the structure removals included in the contract. It is a list of existing structure removals included in the contract for which a structure specific detailed removal plan is required to be submitted.

- (3) Examine the existing structure plans and visit the site before preparing and submitting the structure removal plan(s). The contractor is responsible for the methods and sequence of demolition, including effects on the overall stability of each structure being removed. At a minimum, each removal plan shall include:
  1. The name of the professional engineer, registered in the state of Wisconsin who will be on site and monitoring the removal of existing structures as required in this specification.
  2. The name of the contractor's on-site-employee designated in responsible charge of all removal operations.
  3. The removal method and sequence of removal for each individual structure, including the staging of bridge removals.
  4. Analysis of the stability of the structure based on the methods and sequence of demolition proposed, to ensure that the structure is demolished in a safe and controlled manner. The analysis computations shall be prepared, signed and sealed by a professional engineer registered in the State of Wisconsin.
  5. Design and details of temporary supports, shoring or temporary bracing, if required to stabilize portions of partially remaining structures during the removal sequence or support partially remaining structures after staged removals. Include design computations and detail drawings for all temporary supports, shoring and bracing that indicate the exact placement of the temporary supports, shoring or bracing; verification of design loads; attachment details; and methods for the safe transfer of loads from existing structural elements to be removed to the temporary supports, shoring, or bracing. Temporary support, shoring, or bracing design computations and drawings details are to be prepared, signed and sealed by a professional engineer registered in the State of Wisconsin.
  6. Design and details of temporary support foundations. Include in the foundation design the evaluation of expected foundation settlement and the effect that this will have on the structure being supported. Temporary support foundation design computations and drawing details are to be prepared, signed and sealed by a professional engineer registered in the State of Wisconsin.
  7. Equipment type and locations of equipment on the structure(s) or adjacent roadways during the removal operations
  8. Locations and type of work to be performed directly adjacent to traffic.
  9. Details and locations of protective covers and other measures to ensure that people, property and improvements will not be endangered or damaged as a result of the removal operations. Include methods for protecting any pavement surfaces including shoulders, concrete barriers, and other highway features.
  10. Methods of removal, hauling and disposal, including haul routes and disposal destination.
  11. A schedule of anticipated roadway and lane closures to accommodate removal operations. Include the timing of individual lane or temporary roadway closures and the nature of removal operations that will be performed during the lane or roadway closures.
  12. Acknowledgement that the contractor and removal design engineer responsible for preparing the removal plan have visited the site and reviewed the existing structure plans in preparing the removal plan.

### 203.3.1.3 Structure Pre-Removal Meetings

- (1) After submission of the Structure Removal Site Safety Plan and required Structure Removal Plan(s), schedule and conduct structure pre-removal meetings at a time agreed to by the engineer. Hold structure pre-removal meetings at least three working days before beginning structure removal activities. If the engineer agrees before, multiple structure removals can be combined and discussed at one structure pre-

removal meeting. Otherwise, schedule and conduct a separate structure pre-removal meeting for each structure to be removed.

*Add the following to standard spec 203.3.2.1 as paragraph four:*

- (4) Perform structure removals conforming to the submitted Structure Removal Site Safety Plan and applicable Structure Removal Plan(s).

*Add the following to standard spec 203.5.1(2):*

Payment includes preparation and submittal of a Structure Removal Site Safety Plan; preparation and submittal of Structure Removal Plan(s) and performing all structure removal work conforming to the submitted plans.

sef-203-005 (20180104)

## **23. Concrete Maturity Testing.**

### **A Description**

This special provision requires using concrete maturity testing to determine strength for project control of concrete pavement, falsework removal, and structural concrete under the designated standard specs as follows:

|  |            |
|--|------------|
| Duration of the curing period.....                   | 415.3.12   |
| Duration of the cold weather protection period ..... | 415.3.13   |
| Opening to service.....                              | 415.3.15   |
| Removing falsework.....                              | 502.3.4.2  |
| Duration of the required curing period .....         | 502.3.8    |
| Duration of the cold weather protection period ..... | 502.3.9    |
| Opening to service.....                              | 502.3.10.1 |

The requirement for determining strength by the concrete maturity testing method supersedes all provisions for strength determination by other methods or provisions based on equivalent days within those designated subsections. The concrete maturity testing requirement also applies to all other provisions referencing strength determination under these designated subsections.

### **B Materials**

Provide a maturity testing system that uses data-encrypted sensor devices permanently embedded in the field-placed concrete. Data-encrypted sensors have a chip that records both temperature and time information that can be downloaded to a reading device not permanently attached to those sensors.

Provide the department with a maturity reading device for each maturity testing system used on the project. Devices provided for the department use will become department property under the contract.

### **C Construction**

Perform concrete maturity testing conforming to standard specification 502.3.10.1.3.3. Develop a strength/maturity relationship for each concrete mix design used under the contract. Base that relationship on strength results of cylinders from pavement, appurtenant construction, ancillary concrete, or structural masonry units incorporated into the work and using those same mixes.

### **D (Vacant)**

### **E Payment**

No additional payment will be made by the department for maturity testing.

sef-502-005 (20170310)

.

## **24. Fence Woven Wire (4.5 FT).**

### **A Description**

This special provision describes construction of woven wire fence that does not include barbed wire. Conform to standard spec 616 except as follows.

## **B Materials**

*Delete standard spec 616.2.2.2.*

## **C Construction**

*Replace standard spec 616.3.2.1 with the following:*

Erect woven wire fencing fabric on preservative treated wood posts. Place all end, corner, pull, and vertical angle posts at the locations staked or as the engineer directs.

*Replace standard spec 616.3.2.3 (1), (2) with the following:*

Attach the woven wire to the posts so that the bottom wire is approximately 2 inches, but at most 4 inches, above the ground at the posts, except on abrupt grade changes as the plans show.

Secure the woven wire to all end and corner posts by wrapping each line of wire around the post and tying the wire back on itself with at least 1 1/2 twists tightly wrapped with tools designed for the purpose, and supplement with staples driven into the posts. Stretch the wire until no slack exists, longitudinal wires are tight, and approximately 50 percent of the factory fabricated fence crimp is removed. Apply tension with an engineer-approved stretcher designed to produce a uniform amount of tension in each wire.

## **D (Vacant)**

## **E (Vacant)**

sef-616-005 (20160606)

## **25. Covering Signs.**

*Replace standard spec 643.2.3.3(2) with the following:*

- (2) Ensure that covers are flat black, blank, and opaque.

*Add the following to standard spec 643.3.4.1 as paragraph four:*

- (4) If multiple messages on a single sign are required to be covered, minimize the number of holes created by covering the sign with a single rectangular shaped covering. Multiple coverings on a single sign is only permissible where necessary to avoid covering necessary content or as directed by the engineer. Submit sign covering plans to the engineer for single signs requiring multiple coverings 3 days before performing work. Obtain engineer approval before covering signs. Remove sign coverings before placing fixed messages signs unless otherwise directed by the engineer.

sef-643-005 (20180104)

## **26. Stone or Rock Ditch Checks, Item 628.7515.S.**

### **A Description**

This special provision describes furnishing and installing stone or rock ditch checks as the plans show or as the engineer directs.

### **B Materials**

Provide materials conforming to size requirements for size no. 2 coarse aggregate for concrete masonry or riprap according to the standard spec 501.2.5.4.5. Railroad ballast or breaker run stone conforming to the following applicable gradations may also be used:



| Railroad Ballast |                           |
|------------------|---------------------------|
| Sieve Size       | Percent by Weight Passing |
| 2 Inch           | 100                       |
| 1 Inch           | 20 – 55                   |
| 3/8 Inch         | 0 -5                      |

| Breaker Run Stone |                           |
|-------------------|---------------------------|
| Sieve Size        | Percent by Weight Passing |
| 5 Inch            | 100                       |
| 1½ Inch           | 0 – 50                    |
| 3/8 Inch          | 0 - 5                     |

Incorporate stone or rock in the ditch checks that is hard, sound, and durable, and meets the approval of the engineer.

### C Construction

Place stone or rock ditch checks immediately after shaping of the ditches or slopes is completed. Place stone or rock ditch checks at right angles to the direction of flow and construct to the dimensions and according to the details the plans show.

Remove sediment from behind the stone or rock ditch checks when it has accumulated to one half of the original height of the dam.

### D Measurement

The department will measure Stone or Rock Ditch Checks in volume by the cubic yard of material incorporated in the work.

### E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

| ITEM NUMBER | DESCRIPTION                | UNIT |
|-------------|----------------------------|------|
| 628.7515.S  | Stone or Rock Ditch Checks | CY   |

Payment is full compensation for furnishing, producing, crushing, loading, hauling, placing, and shaping and maintaining Stone or Rock Ditch Check.

The quantity of sediment removed shall be multiplied by a factor of ten and paid for as Excavation Common.

stp-628-050 (20170615)

## 27. Removing Sand Barrels & Concrete Pad, Item SPV.0060.01.

### A Description

This special provision describes removing Sand Barrels & Concrete Pad.

### B Materials

(Vacant).

### C Construction

Remove Sand Barrels & Concrete Pad at the location the plans show. Use methods that conform to Section 204 of the standard specs.

### D Measurement

The department will measure Remove Sand Barrels & Concrete Pad as each location acceptably completed.

## **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

| ITEM NUMBER  | DESCRIPTION                          | UNIT |
|--------------|--------------------------------------|------|
| SPV.0060.01. | Removing Sand Barrels & Concrete Pad | EACH |

Payment is full compensation for Removing and disposing of sand barrels, hauling and disposing of materials, breaking down and removing concrete and restoring the roadway cross section.

## **28. Temporary Sign Support, SPV.0060.02.**

### **A Description**

This special provision describes the construction of temporary sign supports for traffic control signs, as the plans show.

### **B Materials**

Use lumber and hardware conforming to standard spec 634.2.1.

### **C Construction**

Construct the Temporary Sign Support as the plans show. Remove at the completion of the work.

### **D Measurement**

The department will measure Temporary Sign Support as each location acceptably completed.

### **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item.

| ITEM NUMBER | DESCRIPTION            | UNIT |
|-------------|------------------------|------|
| SPV.0060.02 | Temporary Sign Support | EACH |

Payment is full compensation for providing, maintaining, and removing fixed message sign special portable supports.

sef-634-000 (20180417)

## **29. Traffic Control Full Freeway Closure, Item SPV. 0060.03**

### **A Description**

This special provision describes closing and re-opening a freeway or expressway.

### **B (Vacant)**

### **C Construction**

Install or reposition traffic control devices required for a full freeway closure. Remove or return traffic control devices to their previous configuration when the full closure is no longer required.

### **D Measurement**

The department will measure Traffic Control Full Freeway Closure by each individual freeway closure that is set up and later removed in each traffic direction acceptably completed.

### **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

| ITEM NUMBER  | DESCRIPTION                          | UNIT |
|--------------|--------------------------------------|------|
| SPV. 0060.03 | Traffic Control Full Freeway Closure | EACH |

Payment is full compensation for closing, and re-opening the freeway. Traffic Control devices will be paid separately.

sef-643-003 (20180627)

### **30. Pavement Cleanup Project 1060-10-70, Item SPV.0075.01.**

#### **A Description**

This special provision describes cleanup of dust and debris from pavements within and adjacent to the job site. Pavement Cleanup includes surveillance and reporting of all active haul routes.

#### **B Materials**

##### **B.1 Pavement Cleanup**

Furnish a vacuum-type street sweeper equipped with a power broom, water spray system, and a vacuum collection system.

Use vacuum equipment with a self-contained particulate collector capable of preventing discharge from the collection bin into the atmosphere.

Use a vacuum-type sweeper as the primary sweeper, except as specified in this special provision or approved by the engineer.

#### **C Construction**

##### **C.1 Surveillance**

Provide daily surveillance of active haul routes to identify if material is being tracked from the jobsite. Document the condition of the roads and all sweeping recommendations in a daily report. Submit reports to the engineer daily, including hourly metered tickets for that day's sweeping activities.

##### **C.2 Pavement Cleanup**

Keep all pavements, sidewalks, driveways, curb lanes and gutters within the project boundaries, free of dust and debris generated from all activity under the contract. Keep all pavements, sidewalks, driveways, curb lanes, and gutters adjacent to the project free of dust and debris that are caused by land disturbing, dust generating activities, as defined in the contractor's Dust Control Implementation Plan (DCIP).

Provide routine sweeping of all pavements, sidewalks, driveways, curb lanes and gutters on local-street active haul routes as defined in the DCIP or as directed by the engineer. Include the following roadways for routine sweeping:

- IH 94 EB & WB
- And all other roadways approved by the department

In addition to routine sweeping, conduct sweepings as the engineer directs or approves, to eliminate dust problems that might arise during off-work hours or emergencies. Provide the engineer with a contact person available at all times to respond to requests for emergency sweeping. Coordinate with engineer to determine deadlines for responding to emergency sweeping requests and cleaning up spillage and material tracked to/from the project.

Skid steers with mechanical power brooms may only be used on sidewalks and driveways whose pavements will not support the weight of a street sweeper, unless otherwise approved by the engineer. Do not dry sweep. Ensure all broomed equipment used for sweeping has a functioning water bar.

#### **D Measurement**

The department will measure Pavement Cleanup (Project 1060-10-70 by the hour acceptably completed.

Tickets shall include:

- Date
- Company
- Operator name
- Equipment make/model
- Routes swept
- Total hours.

Total hours shall be to the nearest 0.25 hour that work under this item was performed.

#### **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

| ITEM NUMBER  | DESCRIPTION                         | UNIT |
|--------------|-------------------------------------|------|
| SPV. 0075.01 | Pavement Cleanup Project 1060-10-70 | HR   |

Payment is full compensation for daily surveillance; preparing and submitting the daily surveillance report with hourly metered tickets; mobilization; sweeping; and disposing of materials.

sef-104-006 (20170323)

### 31. Heavy Duty Silt Fence Item SPV.0090.01.

#### A Description

This special provision describes the delivery, installation, maintenance and removal of Heavy Duty Silt Fence. Install fence as directed by the engineer. Do not remove fence until directed by the engineer. If so directed by the engineer, remove silt at no additional costs. Silt shall be removed before the removal of the fence.

#### B Materials

Provide Heavy Duty Silt Fence consisting of a composite of woven wire fence fabric, posts, geotextile, sand bags and fasteners to be assembled by the contractor. Woven wire fence fabric shall be a standard field fence type a minimum of 4 feet high, a maximum mesh spacing of 6-inches and minimum 14-<sup>1</sup>/<sub>2</sub> gauge wire.

Provide "studded tee" or "U" type metal posts with a minimum length of 8 feet –3 inches and a minimum weight of 1.3 lb/ft.

Provide geotextile fabric meeting the following requirements

| Property                      | Unit                    | Test Method | Minimum Average Roll Value |
|-------------------------------|-------------------------|-------------|----------------------------|
| Grab Tensile Strength         | LB.                     | ASTM D4632  | 380                        |
| Grab Tensile Elongation       | %                       | ASTM D4632  | 50                         |
| Puncture Strength             | LB.                     | ASTM D4833  | 240                        |
| Trapezoid Tear Strength       | LB.                     | ASTM D4533  | 145                        |
| Apparent Opening Size         | U.S. Standard Sieve     | ASTM D4751  | 170 (0.09 mm)              |
| Permittivity                  | sec <sup>-1</sup>       | ASTM D4491  | 0.7                        |
| Water Flow Rate               | Gal/min/ft <sup>2</sup> | ASTM D4491  | 50                         |
| UV Resistance after 500 hours | % strength retained     | ASTM D4355  | 70                         |

Furnish a manufacturer's Certified Report of Test or Analysis that the geotextile fabric delivered for use in the work meets the above requirements to the engineer at least 15 days prior to use in the work. Provide geotextile fabric bearing markings to clearly identify it with the applicable test report furnished to the engineer.

Supply material in 15'9" wide rolls and cut in half.

#### C Construction

Install the Heavy Duty Silt Fence as directed by the engineer. Space ties and anchors to adequately resist wave action.

**D Measurement**

The department will measure Heavy Duty Silt Fence by the linear foot along the fence.

**E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

| ITEM NUMBER | DESCRIPTION           | UNIT |
|-------------|-----------------------|------|
| SPV.0090.01 | Heavy Duty Silt Fence | L.F. |

Payment is full compensation for all furnishing, assembling, erecting, maintaining, and removing the silt fence.

**32. Survey Project 1060-10-70, Item SPV.0105.01.****A Description**

This special provision describes modifying standard specs 105.6 and 650 to define the requirements for construction staking for this contract. Conform to sections 105.6 and 650 and as follows.

The department will not perform any construction staking for this contract. Obtain engineer's approval before performing all survey required to lay out and construct the work under this contract.

*Replace standard spec 650.1 with the following:*

This section describes the contractor-performed construction staking required under individual contract bid items to establish the horizontal and vertical position for all aspects of construction including:

- storm sewer
- subgrade
- base
- pipe culverts
- drainage structures
- structure layout
- bridges
- all retaining wall layout
- pavement
- pavement markings (temporary and permanent)
- barriers (temporary and permanent)
- overhead signs
- freeway and local street lighting
- electrical installations
- supplemental control
- slope stakes
- traffic signals
- ITS
- FTMS
- utilities
- conduit
- landscaping elements
- installation of community sensitive design elements
- traffic control items
- fencing

**B (Vacant)****C Construction**

*Add the following to standard spec 650.3.1 (5):*

Confirm with engineer before using global positioning methods to establish the following:

1. Structure layout horizontal or vertical locations.
2. Concrete pavement vertical locations.
3. Curb, gutter, and curb & gutter vertical locations.
4. Concrete barrier vertical locations.
5. Storm Sewer layout horizontal or vertical locations, including structure centers, offsets, access openings, rim and invert elevations.

*Replace standard spec 650.3.1(6) with the following:*

- (6) Maintain neat, orderly, and complete survey notes, drawings, and computations used in establishing the lines and grades. This includes:
- Raw data files
  - Digital stakeout reports
  - Control check reports
  - Supplemental control files (along with method used to establish coordinates and elevation)
  - Calibration report

Make the survey notes and computations available to the engineer within 24 hours as the work progresses unless a longer period is approved by the engineer.

*Replace standard spec 650.3.3.1 with the following:*

Under the Survey Project bid item, global positioning system (GPS) machine guidance for conventional subgrade staking on all or part of the work may be substituted. The engineer may require reverting to conventional subgrade staking methods for all or part of the work at any point during construction if the GPS machine guidance is producing unacceptable results.

*Replace standard spec 650.3.3.3.4.1 with the following:*

The department will provide the contractor staking packet as described in the Construction and Materials Manual (CMM) 7.10. At any time after the contract is awarded, the available survey and design information may be requested. The department will provide that information within 5 business days of receiving the contractor's request. The department incurs no additional liability beyond that specified in standard spec 105.6 or standard spec 650 by having provided this additional information.

*Add the following to standard spec 650.3.3.3.6.2 as paragraph four:*

Record all subgrade elevation checks and submit a hard copy to the engineer within 24 hours or as requested by the engineer.

## **D Measurement**

*Replace standard spec 650.4 with the following:*

- (1) The department will measure Survey Project 1060-10-70 as a separate single lump sum unit acceptably completed.

## **E Payment**

*Replace standard spec 650.5 with the following:*

The department will pay for measured quantities at the contract unit price under the following bid item:

| ITEM NUMBER | DESCRIPTION               | UNIT |
|-------------|---------------------------|------|
| SPV.0105.01 | Survey Project 1060-10-70 | LS   |

Payment is full compensation for performing all survey work required to lay out and construct all work under this contract and for adjusting stakes to ensure compatibility with existing field conditions. The department will not make final payment for this item until the contractor submits all survey notes and computations used to establish the required lines and grades to the engineer within 24 hours of completing this work. Re-staking due to construction disturbance and knock-outs will be performed at no additional cost to the department.

sef-650-005 (20180404)

## **33. Removing Concrete Channel, Item SPV.0180.01.**

### **A Description**

This special provision describes removing Concrete Channel.

**B Materials**

(Vacant).

**C Construction**

Remove Concrete Channel at the location the plans show. Use methods that conform to Section 204 of the standard specs.

**D Measurement**

The department will measure Concrete Channel by the SY acceptably completed.

**E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

| ITEM NUMBER | DESCRIPTION               | UNIT |
|-------------|---------------------------|------|
| SPV.0180.01 | Removing Concrete Channel | SY   |

Payment is full compensation for Removing and disposing of concrete, hauling and disposing of materials, breaking down and removing concrete and restoring the roadway cross section.