Special Provisions

Table of Contents

STSP'S Revised January 8, 2025

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project Tower Avenue Reconfiguration and Pavement Rehabilitation, N 28th Street to Belknap Street, Douglas 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, 2025 Edition, as published by the department, and these special provisions.

In case of conflict, the first listed standard shall take precedence.

1. Comply with all applicable Sections of "Standard Specifications for Sewer & Water Construction in Wisconsin, Sixth Edition with Addendum No.1 and No.2". Requests for copies of the "Standard Specifications" should be forwarded to: Public Works Industry Improvement Program, 2835 North Mayfair Road, Milwaukee, Wisconsin 53222 or requested by telephone at (414) 778-1050.

2. Comply with all applicable Sections of "State of Wisconsin, Department of Transportation (WI DOT), Standard Specifications for Highway and Structure Construction, 2025 Edition.

3. Comply with all applicable Sections of Wisconsin Administrative Code.

4. Comply with all applicable Sections of City of Superior Administrative Code.

All references to "Owner" or "Department" in these documents and all references to State of Wisconsin and Department of Transportation within the Wisconsin Standard Specifications shall mean the City of Superior.

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.

2. Scope of Work.

The work under this contract shall consist of removing pavement, base aggregate dense, concrete pavement, HMA pavement, continuous diamond grinding concrete pavement, concrete sidewalk, concrete curb and gutter, storm sewer, curb ramp detectable warning fields, pavement marking, landscaping, restoration work 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 10 calendar days after the engineer issues a written notice to do so.

Provide the start date to the engineer in writing 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.

To revise the start date, submit a written request to the engineer at least two weeks before the intended start date. 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.

Requests for changes to the timeline must be submitted in writing to the Engineer as soon as circumstances are known; the Engineer will approve or deny the request based on the conditions cited in the request and its effect on the City's schedule.

The Contractor shall contact and coordinate the access needs of property owners. Contact property owners in regard to the elimination of vehicular access, allowing the property owner at least twenty-four (24) hours in advance of such access closure.

The project completion date is October 17, 2025. It is possible there will be mutual agreement to complete vegetation installation and maintenance in the following growing season. Should this be desirable, there will be no adjustment to payment associated with this change.

4. Traffic.

Submit a traffic control plan for approval by the Engineer no less than ten (10) days prior to implementing traffic controls.

Tower Avenue will be open to traffic during construction operations.

Tower Avenue will remain open to a minimum of one lane of traffic in each direction at all times.

Side Street Access

Side streets will be closed during construction operations at the bump out reconstruction locations. Maintain vehicular traffic to businesses with accesses only on Tower Avenue, when this is not possible, notify property owners 48 hours in advance of closure and provide pedestrian access to the properties.

The intersections on the east side of Tower Avenue and 16th Street, 17th Street, 18th Street, 19th Street and 20th Street will be closed during construction operations. Maintain through traffic during construction when possible.

Re-open the Side Streets to through traffic when reconstruction is complete at the intersection.

Alley Access

Maintain alley access at all times during construction at 16th Street, 17th Street, 18th Street, 19th Street and 20th Street.

Perform work in such a manner to ensure pedestrian access to adjacent residences and businesses at all times. At the direction of the engineer, construct temporary crushed aggregate base course walks to replace removed concrete sidewalks.

Use Drums and/or barricades to protect hazards in the work zone - such as exposed manholes, inlets, or drop-offs for pedestrians and vehicles.

5. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 8:00 PM until the following 6:00 AM, unless prior written approval is obtained from the engineer.

stp-107-001 (20060512)

6. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying Hammond Avenue 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 and special event periods:

- From noon Friday, May 23, 2025, to 6:00 AM Tuesday, May 27, 2025, for Memorial Day;
- From noon Thursday July 3, 2025, to 6:00 AM, Monday July 7, 2025, for Independence Day;
- From noon Friday, August 29, 2025 to 6:00 AM Tuesday, September 2, 2025 for Labor Day.

stp-107-005 (20210113)

7. Hauling Restrictions

Use only City of Superior designated truck routes for material haul roads. City of Superior designated truck routes are available on the city of Superior website: http://www.ci.superior.wi.us/

8. Dewatering

Any dewatering required during construction shall be properly treated before it is allowed to enter any wetlands or surface waters. Prepare a dewatering plan as part of the Erosion Control Implementation Plan (ECIP) and provide to the engineer for review and approval prior to starting dewatering operations. The plan shall include a description of the proposed dewatering methods and maps or drawings indicating the location of the dewatering facilities and points of discharge of the water.

Use the Wisconsin Department of Natural Resources Technical Standard on Dewatering (standard number 1061) as found on their website at http://dnr.wi.gov/ for the appropriate best management practice and proper application and sizing of such to the maximum extent possible. As part of the Erosion

Control Implementation Plan (ECIP) submittal, supply all pertinent information and calculations used to determine the best management practice for dewatering at each location it is required. Prior to construction, obtain approval from the engineer for the proposed method of treatment including supporting calculations.

Work under this item shall include all work, materials, equipment, permitting and incidentals required to dewater the site during construction or to work with the water on-site in a manner that allows the project to be constructed in accordance to the plans and specifications. This provision includes the dewatering of groundwater and surface water runoff, and trench dewatering. The contractor is responsible for all work, materials and equipment required to comply with permit conditions to dewater the site.

Any polymers or other materials included in the dewatering plan for sediment coagulation are incidental to the dewatering and shall be on the Wisconsin Department of Natural Resource approved list for these projects.

Dewatering will be incidental to the contract. Dewatering will include all work necessary for constructing temporary settling basins, pumping, settling, and discharging water; for any permit fees required; and for furnishing all labor, tools, equipment, and incidentals necessary to complete work.

9. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.

The Contractor shall be responsible to notify any affected utility companies in order to complete the work described. Special attention shall be paid to Superior Water Light and Power (SWLP).

Any utility facility locations (stations, offsets, elevations, depths) listed in this article are approximate.

City of Superior

The City has light poles located in the bump out reconstruction areas. Light poles, bases and pull boxes are to remain at their existing locations. Conflicts are anticipated.

Superior Water Light and Power (SWL&P)

SWL&P has underground and overhead electric throughout the project.

Conflicts are not anticipated.

SWL&P has watermain throughout the project. Water service valves will be adjusted by SWL&P.

SWL&P has a hydrant located on the northwest corner of Tower Avenue and 16th Street at approximately Station 689+98 LT. SWL&P will adjust hydrant.

SWL&P has an underground gas line crossing Tower Avenue along the south side of 18th Street at approximately Station 680+91. The line continues along the south side 18th Street to the alley and continues north up the east side of the alley. Storm sewer lines cross the line at Tower Avenue and at the alley. Conflicts are not anticipated. Contact SWL&P before working in these locations.

10. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and businesspeople to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week before the start of work under this contract and hold one meeting per month thereafter. The contractor shall arrange for a suitable location for meetings that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for meetings. The contractor shall schedule meetings with at least 2 weeks' prior notice to the engineer to allow for these notifications.

stp-108-060 (20141107)

11. Coordination

The Contractor shall be responsible for the coordination of the contract and scheduling with the utility companies, the City's Contractor, City of Superior personnel, and emergency services.

The City's Contractor shall coordinate all utility tie-ins (storm sewer and watermain) with the City. The Contractor shall be responsible for coordinating all service connections to existing service with individual property owners, or their plumbers.

The Contractor shall be responsible for contacting the City's Contractor and coordinating utility activities.

The Contractor shall be responsible for contacting and coordinating access needs of property owners. The Contractor shall contact property owner in regard to the elimination of vehicular access for more than twelve (12) consecutive hours. The property owner shall be contacted at least twenty-four (24) hours in advance of such access closure.

Prior to the preconstruction conference, the Contractor shall submit a written plan for providing and maintaining contract supervision through the life of the contract. This plan shall include names and phone numbers of the individuals responsible for the work as well as after-hours or emergency contacts.

12. Disposal of Waste Materials

The City of Superior has the City Municipal Services Building site at 2301 Hill Avenue where asphaltic and concrete (without rebar) materials may be disposed of by the Contractor at no cost. For materials submitted to the City at this location, concrete and asphalt must be clean and free of contamination and both must be separated and placed in different piles. Advanced notice of one day must be given; other arrangements may be made in advanced with the City's Municipal Service Building at (715) 394-0244. Materials will be accepted at the City's sole discretion; any loads not accepted shall be disposed by the Contractor at his sole cost and expense in accordance with all applicable laws and regulations. The City does not have sites available for disposal of common excavation. All sites to be used for the disposal of earthen materials must be reviewed by the city and approved prior to the placement of the material.

13. Removing Pavement, Curb & Gutter, and Concrete Sidewalk

Supplement section 204 of the standard specifications as follows:

Do not use existing concrete pavement, curb and gutter, or concrete sidewalks removed under this contract as base aggregate dense, base aggregate open graded or select crushed material.

During the concrete removal, take extreme care to not damage the adjacent light poles or buildings.

14. Sealing Pipes, Item 204.0280

Complete the work in accordance with the requirements of Section 204 of the WI DOT Standard Specifications except as hereinafter provided:

Unless otherwise specified, bulkheads shall be constructed to form a watertight eight (8) inch thick wall of mortar and of either clay brick or concrete brick.

15. Concrete Pavement Partial Depth Repair Joint Repair, Item 416.0750.S; Concrete Pavement Partial Depth Repair Crack Repair, Item 416.0752.S; Concrete Pavement Partial Depth Repair Surface Repair, Item 416.0754.S; Concrete Pavement Partial Depth Repair Edge Repair, Item 416.0756.S;

A Description

This special provision describes removing deteriorated concrete; furnishing, placing and curing concrete to the original slope and grade; and reestablishing cracks or joints at areas the plans show and as the engineer directs.

The item Concrete Pavement Partial Depth Repair Joint Repair consists of removing deteriorated concrete at the areas designated in the plans, furnishing, placing, and curing concrete to the original slope and grade, and reestablishing joints.

The item Concrete Pavement Partial Depth Repair Crack Repair consists of removing deteriorated concrete at the areas designated in the plans, furnishing, placing, and curing concrete to the original slope and grade, and reestablishing cracks.

The item Concrete Pavement Partial Depth Repair Surface Repair consists of removing deteriorated concrete at the areas designated in the plans, furnishing, placing, and curing concrete to the original slope and grade.

The item Concrete Pavement Partial Depth Repair Edge Repair consists of removing deteriorated concrete at the areas designated in the plans, furnishing, placing, and curing concrete to the original slope and grade.

A.1 General

Before starting the rehabilitation operation, establish traffic control for rehabilitation surveys and marking of locations.

Any removal and replacement of existing asphaltic concrete pavement in conjunction with the concrete pavement operations shall be incidental work for which no direct payment will be made unless otherwise shown in the plan.

Perform the removal operation in a manner that precludes damage to the remaining pavement. Any damage to the in-place concrete pavement by the contractor's operations, shall be repaired before acceptance as the engineer directs.

Milling is generally completed with one pass of the milling machine. The nominal width of Joint Repair or Crack Repair shall not exceed 12 inches (305) mm). Any repair area required, beyond the nominal 12 inch (305 mm) width will be paid for as Surface Repair. The length of Full Depth Adjustment, along the transverse joint, from the nearest longitudinal joint, shall not be greater than 18 inches (458 mm).

If during removal operations it is determined that a full-lane width, full-depth repair its required, the contractor will receive partial payment for a measured quantity of the intended repair item, and the work shall be completed under the item of Concrete Pavement Repair, Item 416.0710. If after milling a transverse joint deteriorated concrete exists greater than 4 inches wide and 6 feet in length, the joint shall be converted to a full-depth Concrete Pavement Repair.

Do not place repair concrete when the ambient air temperature is below 50° F (10° C), except as permitted by the engineer. When the ambient air temperature is below 50° F (10° C) the engineer may require covering during the initial curing period.

Partial depth repair areas should be inspected for possible debonding, by chain dragging or other suitable procedure, before opening to public traffic. De-bonded repairs must be removed and replaced.

Opening of pavement repairs to traffic will be controlled by cylinder tests, as set forth in standard spec 415.3.15.

Replace any area of the asphaltic shoulder damaged during the pavement removal operations under this item with a commercially produced asphaltic patching material to the elevation of the adjacent shoulder.

At no expense to the department, remove and replace any areas of failure that appear within one month of the original repair, or any subsequent repair, including traffic control. Failures include but may not be limited to loss of bonding to the in-place concrete, spalling, or crack apparent in the repair other than the desired crack in the newly constructed joint or reestablished crack.

A.2 Equipment

Use only concrete milling machines that are equipped with a device for stopping at preset depths to prevent damage to dowel bars. Additionally, shroud the equipment to prevent discharge of any loosened material into adjacent work areas or live traffic lanes.

Use air chippers or breakers for chipping the old concrete surface that have a total weight not exceeding 30 lb. (13.6 kg) and are equipped with flat, chisel-type points that have cutting edges not less than.75 inch (19 mm) or greater than 3 inches (76.2 mm) wide.

Use concrete mixing equipment that provides material of uniform consistency. Do not prepare site-mixed concrete more than ½ hour before placement. Do not prepare ready-mixed concrete more than 1 hour before placement.

Use mechanical vibrators that are capable of operating at frequencies sufficient to achieve thorough and uniform consolidation, but not less than 7000 impulses per minute. Have available at least one spare vibrator, in working order and of sufficient frequency, on the work site before concrete placement is started.

B Materials

All materials used in the work shall conform to the requirements specified for the class of material named.

B.1 Concrete

The replacement concrete shall comply with the standard specifications except as modified below. It shall be furnished, placed, and cured according to the provisions in the plans, specifications, and contract.

Use the following proportions, assuming a specific gravity of 2.65, for 1 cubic yard (cubic meter) of concrete:

850 lb. (505 kg) Portland Concrete	(Type 1 or Type III)
1338 lb. (794 kg) Fine Aggregate	(Per standard specifications except max P200=2.5%)
1338 lb. (794 kg) Coarse Aggregate	(See table below for gradation)

Coarse Aggregate Gradation

SIEVE SIZE	PERCENT PASSING (by weight)
3/8 (9.5 mm)	100
#4 (4.75 mm)	55-95
#50 (300 µm)	0-5
#200 (75 µm)	0-1.0

Maximum slump shall be 1 inch (25 mm).

Air Content shall be 6% ±1.5%

ASTM C494 Type A admixture shall be used, unless Type E is used.

ASTM C494 Type E admixture may be used, according to the manufacturer's recommendations, to achieve the required opening strength in the desired time period. Dosage will vary with ambient temperature and desired opening time.

The use of more than 50% of the maximum manufacturer's recommended dosage of Type E admixture will require the concrete to be sprayed with curing compound and covered with wet burlene.

B.2 Compression Relief Material

Provide compression relief material that is made of a rigid, compressible, non-absorbent material.

B.3 Bonding Agent

Use bonding grout that consists of equal portions of Portland cement and sand, mixed with sufficient water to form a slurry having the consistency of thick cream.

B.4 Concrete Curing Agent

Provide a concrete curing agent that is a resin of 100 percent poly-alpha-methylstyrene type curing compound meeting ASTM C309, Type 2, Class B specifications and conforming to all requirements according to the following table:

Properties	Minimum	Maximum
Total Solids, % by weight of compound	42	
Reflectance in 72 hours (ASTM E1347	65	
Loss of Water, kg/m2 in 24 hours (ASTM C156)		0.15
Loss of water, kg/m2 in 72 hours (ASTM C156)		0.40
Settling Test, ml/100 ml in 72 hours [1]		2
V.O.C. Content, g/L		350
Infrared Spectrum, Vehicle [2]	100% alpha-methylstyrene	

[1] Test Method on file at the department's Materials Testing Lab.

[2] The infrared scan for the dried vehicle from the curing compound shall match the infrared scan on file at the department's Materials Testing Lab.

Shelf life of the product shall be six months from date of manufacture. The product may be re-tested by the department's Materials Testing Lab and re-approved, if the physical and chemical properties have not changed, for an additional six months. However, the maximum shelf life shall not exceed one year from manufacture date.

C Construction

Remove the concrete by milling to the depths and dimensions as shown on the plan or as determined by the engineer, or both.

Milling may be accomplished either longitudinally or transversely to the joint, crack, or edge. The removal process must not damage dowel bars. In the event a dowel bar exhibits excessive corrosion, cut, or burn-off the bar.

The removal of the concrete surface in the designated repair areas shall have a minimum depth of 2 inches (50.8 mm) with all deteriorated concrete removed to a maximum depth of one-half the pavement thickness, or the top of the dowel bars. Using air chippers, remove all cracked or deteriorated concrete exposed after milling to sound concrete. Chipping at the milled surface of the crack or joint shall be a minimum 2 inches wide and shall be at a 1:1 slope.

When dowel bars are present, take precaution not to disturb unsound concrete below the tops of the dowels. If some of this unsound material is accidentally blown out during the cleaning process, fill in the voids with clean, dry sand.

Use air chippers only for final preparation of the repair area.

Storage of the removed material on the roadway will only be permitted in conjunction with a continuous removal and pick-up operation. During non-working hours, clear the roadway of all materials and equipment.

The removed pavement shall become the property of the contractor and disposed of as specified in standard spec 204.3.1.3.

Install pavement ties conforming to standard spec 416.3.6.

Sandblast all exposed surfaces within 24 hours before concrete placement. If it rains before concrete placement, sandblast the repair areas again. Additionally, clean the repair areas of loose material by air blasting before applying the bonding grout.

Coat exposed surfaces of dowel bars to prevent bonding between the bar and the repair concrete. Take precaution to prevent contamination of existing concrete in the repair area.

Place compression relief material to maintain the continuity of the existing crack or to reestablish the joint in a full-depth adjustment. Install compression relief material such that it remains in position and is tight to all edges during placement of the repair concrete. During concrete placement and vibrating, keep the compression relief material in contact with the bottom of the repair area. To ensure that cracks are reestablished in their original locations, scribe their locations on the adjoining pavement outside the removal area, before removal operations.

Reestablish cracks and joints to a 1/4 inch width, or to the existing crack or joint width, whichever is greater.

Immediately before placing the concrete, coat the repair surface with bonding grout. The surface shall be completely dry for at least one-half hour before coating with bonding grout. If the surface isn't completely dry, dry the surface using heat to remove all moisture from the repair surface. Mix the grout by mechanical means and thoroughly brush it over the prepared concrete surface to ensure that all parts receive an even coating. No excess grout shall be permitted to collect in pockets. Place grout within one and a half hours of mixing. If the grout whitens, sandblast, and re-grout.

Vibrate concrete as necessary to uniformly and thoroughly consolidate the entire mass of fresh concrete without causing segregation of the aggregates or the formation of localized areas of grout.

Concrete repairs shall not protrude beyond the original cross-section of the pavement by more than 3/8 inch (9.5 mm). The edges shall be formed or sawn full-depth.

Strike-off the surface of the repaired area flush with the adjacent concrete and finish the surface to a uniform texture, true to grade and cross section and free from porous areas. As a final finishing operation, float the concrete toward the edges of the repair.

While the concrete is still plastic, the repair shall be tested for trueness with a straightedge.

Reestablish cracks using compression relief material to or beyond the surface of the repair. Initially reestablish joints in plastic concrete by using a jointing tool. Establish tooled joints to a minimum depth of 2 inches. Tooled edges shall be provided, adjacent to all compression relief material, in fresh concrete. Complete the removal of excess compression relief material above the pavement surface without damage to the repair area. The method of removal will be reviewed and approved by the engineer before any removal.

Surface texturing, if required by the engineer, shall consist of a broomed finish in the long dimension direction of the repair.

Apply curing compound to the fresh concrete as soon as possible. Apply the compound uniformly, at a minimum rate of one gallon per 100 square feet (0.41 L/m^2).

Restore joints by sawing. Saw the joints in a single cut, to the width and depth the plans show, and conforming to standard spec 415.3.9.

Thoroughly clean the joint or crack after sawing to remove loose compressible material.

D Measurement

The department will measure Concrete Pavement Partial Depth Repair Joint Repair; Concrete Pavement Partial Depth Repair Crack Repair; and Concrete Pavement Partial Depth Repair Edge Repair by the linear foot, acceptably completed.

The department will measure Concrete Pavement Partial Depth Repair Surface Repair and Concrete Pavement Partial Depth Repair Full Depth Adjustment in area by the square foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
416.0750.S	Concrete Pavement Partial Depth Repair Joint Repair	LF
416.0752.S	Concrete Pavement Partial Depth Repair Crack Repair	LF
416.0754.S	Concrete Pavement Partial Depth Repair Surface Repair	SF
416.0756.S	Concrete Pavement Partial Depth Repair Edge Repair	LF

If a Partial Depth Repair item is changed, by the project engineer, to a full-depth repair, the contractor shall be paid at a measured quantity of 40 percent of the intended repair plus the full cost for Full Depth Repair.

Payment for Concrete Pavement Partial Depth Repair Joint Repair; Concrete Pavement Partial Depth Repair Crack Repair, and Concrete Pavement Partial Depth Repair Edge Repair, is full compensation for removing the concrete; disposing of materials; furnishing and placing sand where required; furnishing and placing compression relief material where required; furnishing and placing preformed joint filler where required; placement and curing of the concrete; and for reestablishing cracks or joints.

Payment for Concrete Pavement Partial Depth Repair Surface Repair and Concrete Pavement Partial Depth Repair Full Depth Adjustment, is full compensation for removing the concrete; for disposing of materials; furnishing and installing pavement ties where necessary; furnishing and placing preformed joint filler where required; furnishing and placing compression relief material where required; replacing the concrete; and reestablishing joints. The item Partial Depth Repair, Full Depth Adjustment will be paid for as a separate item at locations where it is necessary to extend the repair through the full remaining concrete pavement thickness.

stp-416-015 (20210708)

16. Asphaltic Surface, Item 465.0105.

Perform this work according to standard spec 465 and as hereinafter provided.

Supplement standard spec 465.2 with the following:

Under the Asphaltic Surface bid items, submit a mix design. Furnish asphaltic mixture meeting the requirements specified for HMA Pavement 4 MT 58-34 S or higher for the upper layer and 3 MT 58-28 S or higher for the lower layer under 460.2.

17. Traffic Signals, Light poles, Conduit, Conductor and Pull boxes.

Traffic signal poles and pull boxes/manholes are located in the median island on the north side of N 28th Street, and on the north and south side of N 21st Street. The median island will be reconstructed at the same locations in these areas. Protect, support and work around the existing signals bases and boxes. Protection is incidental to sidewalk and curb items. Adjusting Pull Boxes item is included for box / casting adjustment required.

Existing light poles, lighting conduit, and pull boxes exist in bump out reconstruction locations at 20th, 19, 18, 17, and 16th. Before construction, coordinate with the City of Superior and Superior Water Light and Power. Light poles and bases are to remain in the existing locations. Protect and work around poles located within reconstruction zone. Protection is incidental to sidewalk and curb items.

18. Inlets and Manholes

Complete work in accordance with the requirements of Section 611 of the WI DOT Standard Specifications, except as hereinafter supplemented:

When connecting an existing storm sewer or pipe underdrain to a catch basin or manhole, cut, or extend the existing pipe or new underdrain to fit into the new structure. Cutting the structure or pipe or underdrain, any additional pipe length or connections required are considered incidental to the new structure.

Elastomeric waterproofing sealer shall be applied to the frame and chimney of all inlets and storm manholes as per the following specifications. Elastomeric waterproofing sealer is considered incidental to the new structure.

Elastomeric waterproofing sealer shall be a single component moisture curing polyurethane applied to form a continuous membrane, as detailed in Section 8.42.1 of the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition with Addendum No.1 and No.2.

All masonry work shall be cured a minimum of twenty-four (24) hours prior to applying an elastomeric waterproofing seal. All surfaces shall be cleaned and primed in accordance with the manufacturer's recommendation.

Elastomeric waterproofing sealer shall be applied so that it forms a continuous membrane, 100-mil thick, extending from a point four (4) inches below the chimney to a point two (2) inches above the frame flange. The Engineer reserves the right to require bond breaker (duct tape) be placed completely around the manhole circumference and centered over the mortar joint between the frame and chimney or cone.

Manhole covers to be 24-inch as detailed in the plans on the City of Superior Standard Storm and Sanitary Frame detail. Note that this modifies the pay items listed (Type J shall be Superior Standard in place of WisDOT standard.

19. Manhole Covers Type J, Item 611.0530

Complete work in accordance with the requirements of Section 611 of the WI DOT Standard Specifications except as hereinafter supplemented:

611.2 Materials

Manhole covers to be 24-inch as detailed in the plans on the City of Superior Standard Storm and Sanitary Frame detail.

20. Pipe Underdrain

Subsection 611.3.2, Connections, is supplemented as follows:

When connecting pipe underdrain to a manhole, catch basin, or existing pipe underdrain, cut or extend the underdrain into the new structure. Cutting the structure or underdrain, any additional underdrain length or connections required are considered incidental to the new structure or underdrain.

21. Landscape Planting Surveillance and Care Cycles.

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of $750 to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.

The plant establishment period shall be two growing seasons.

22. Planting Mixture, Item SPV.0035.01.

A Description

This special provision describes providing Furnish and install Planting Mixture at the locations shown on the plans and in accordance to section 632 of the standard specifications, and as hereinafter provided.

B Materials

B.1 Planting Mixture
The planting mixture consists of the following bled by volume.

a. 2 parts topsoil. Topsoil shall conform to section 625 of the standard specifications
b. 2 parts sand. Obtain the engineers approval for the sand. The sand is to have at least 95 percent of the material passing the No. 8 sieve and a maximum of 10% passed through the No. 200 sieve.

c. 1 part compost. Compost shall be either well-rotted shredded leaf mulch, free of disease; or well rotted, unbleached stable or cattle manure containing no more than 25 percent by volume straw, sawdust, or other bedding materials and free of toxic substances. Either shall be free of stones, sticks, soil, weed seeds, debris and other material harmful to plant growth.
d. 1 part peat moss. Peat moss shall conform to section 632 of the standard specifications.

C Construction

C.1 Construction Planting Mixture
Ensure proper excavation of planting areas for all areas to receive Planting Mixture.

Prepare Planting beds by removing any construction materials, stone, or other debris larger than 2" in length or diameter for entire area of planting bed and to depths indicated on plans.

Provide planting mixture over entire planting bed areas and fine grade to match grades as indicated on plans or to adjacent back of curb or other hardscape surface as indicated on plans and account for settling. Place Planting Mixture in 6-inch lifts, watering in or tamping to reduce settling potential. Provide a minimum of 12" depth in all locations; depth varies see plans.

Obtain approval of Planting Mixture depths, locations and elevations by supervising engineer.

Submit soil test, including particle distribution test, to the Landscape Architect or engineer in the field two weeks prior to using the material. The planting mixture is subject to acceptance and/or soil amendments as directed by the Landscape Architect or engineer in the field following soil testing.

D Measurement

The department will measure Planting Mixture by the CY successfully 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.0035.01	Planting Mixture	CY

Payment is full compensation for furnishing and installing all materials, excavating and backfilling where necessary; and for furnishing all labor, tools, equipment, testing and incidentals necessary to complete the contact work.

23. Connect To Existing Storm Sewer, Item SPV.0060.01.

A Description

This special provision describes connecting new storm sewer to the existing storm sewer at the location as shown on the plans and as provided for by these specifications.

B Materials

Furnish joint sealing materials conforming to standard spec 608.2

C Construction

Cut into the existing storm sewer and construct connections according to standard spec 608.3. Existing Storm Sewer elevations are to be field verified, and any discrepancies are to be reported to the engineer.

Trim the storm sewer pipe inside of the storm sewer structure to match the interior wall of the existing storm sewer structure.

Excavation of objectionable or unstable material under the storm sewer pipe being connected shall be as directed by the engineer and will be incidental to the storm sewer pipe.

D Measurement

The department will measure Connect to Existing Storm Sewer as each, 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	Connect to Existing Storm Sewer	Each

Payment is full compensation for connecting to existing storm sewer including making a clean cut on the existing pipe, adding concrete collars, and adding any necessary bends and watertight fittings, trimming storm sewer pipe flush with interior of the existing storm sewer, cleaning any materials, removal of all materials dropped into existing storm sewer.

24. Concrete Curb & Gutter 6-inch sloped 20-Inch Type G Modified, Item SPV.0090.01; Concrete Curb & Gutter 6-inch sloped 44-Inch Type G Integral, Item SPV.0090.02

This special provision describes constructing concrete curb and concrete curb & gutter in accordance with the requirements of section 601 of the standard specifications, the details shown in the plans, and as hereinafter provided.

Provide concrete that conforms to the requirements for concrete in accordance with section 501 of the standard specifications.

Modify the gutter width to 12-inches for the median island concrete curb and gutter 6-Inch sloped 20-inch type G.

Modify the curb and gutter Type G integral as shown in the plan details and at the plan sheet locations to facilitate drainage from the median island.

25. Sewer Field Quality Control – Televising, Item SPV.0090.04

A Description

This special provision describes the process for performing televising on sewer pipe for field quality control.

Televising shall be completed on all installed storm sewer piping.

B Materials

Televising pipe shall be free of dirt and foreign materials prior to testing.

All services performed and products delivered shall comply with the standards of the Pipeline Assessment and Certification Program (PACP) as administrated by National Association of Sewer Service Companies (NASSCO). All inspections performed require submittal of digital video, televising report, and database output in PACP format. Field inspection personnel shall be NASSCO PACP certified.

1. Digital video and a televising report shall be submitted for each inspection. Analog video is not acceptable under this specification. Black and white video does not meet the requirements of this specification.
2. The video shall be produced such that the display indicates the date of televising, line number, direction of travel, and relative position (footage count) of the camera for the duration of televising.
3. The video shall be produced with a “crawler” or “tractor” type camera, or other device approved by the City of Superior, so that the camera retains a generally vertical alignment.
4. The device shall maintain the camera near the center of the pipe being inspected.
5. The resolution, lighting, and contrast shall be adequate to capture details within the pipe.
6. The use of “pan and tilt” is required for all inspections.
7. Inspection videos shall be saved in a video format supported by Windows Media Player or VLC Media Player.
8. An electronic report (.pdf) of the pipe inspection report shall be submitted for each inspection.
9. A database containing the PACP inspection data shall be submitted.
10. All materials described in numbers 7-9 shall be submitted on a portable hard drive, compact disc or other means as approved by Owner.

C Vacant

D Measurement

Sewer Field Quality Control – Televising will be measured by lineal foot successfully completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	Sewer Field Quality Control – Televising	LF

Payment is full compensation for all materials and personnel to complete the testing. The Contractor will receive no additional compensation for corrective work necessary to correct defects found during televising.

26. Cure and Seal Treatment, Concrete Curb and Gutter, Item SPV.0090.03; Cure and Seal Treatment, Concrete Sidewalk, Item SPV.0165.01; Cure and Seal Treatment, Concrete Median Sloped Nose, Item SPV.0165.02

A Description

This special provision describes treating all newly constructed concrete curb and gutter, concrete sidewalk, and concrete median sloped nose with a surface cure and seal treatment as shown on plans, and as hereinafter provided.

B Materials

Materials shall conform to a clear treating material listed on the current approved WISDOT product list for "Cure and Seal Compounds for Non-Trafficked Surfaces on Structural Masonry".

C Construction

Application rates for the treating material shall be according to the manufacturer's specifications

D Measurement

The department will measure the Cure and Seal Treatment, Concrete Curb and Gutter by the linear foot, acceptably completed.

The department will measure the Cure and Seal Treatment: Concrete Sidewalk by the square foot, acceptably completed.

The department will measure the Cure and Seal Treatment: Concrete Median Sloped Nose by the square foot, 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.0090.03	Cure and Seal Treatment, Concrete Curb and Gutter	LF
SPV.0165.01	Cure and Seal Treatment, Concrete Sidewalk	SF
SPV.0165.02	Cure and Seal Treatment, Concrete Median Sloped Nose	SF

Payment is full compensation for cure and seal treatment for concrete sidewalk, concrete curb and gutter and concrete median sloped nose.

27. Concrete Apron 24-Inch, Item SPV.0165.03.

A Description

This special provision describes constructing Concrete Apron 24-Inch in accordance to the requirements of standard spec 601 and 602, the details shown in the plans, and as hereinafter provided.

B Materials

Furnish concrete that conforms to the pertinent requirements for concrete in accordance to standard spec 501.

C Construction

Modify standard spec 601.3.4 (5) to require that contraction joints be sawed.

Provide a thickness as shown in the plan details.

D Measurement

The department will measure Concrete Apron 24-Inch by the square foot, acceptably completed in accordance to the pertinent standard spec of 601.4 and 602.4.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.03	Concrete Apron 24-Inch	SF

Payment is full compensation furnishing all foundation excavation and preparation; providing all materials, including concrete, expansion joints, and reinforcement tie bars unless specified otherwise; for placing, finishing, protecting, and curing; sawing joints; for disposing of surplus excavation material and restoring the work site.