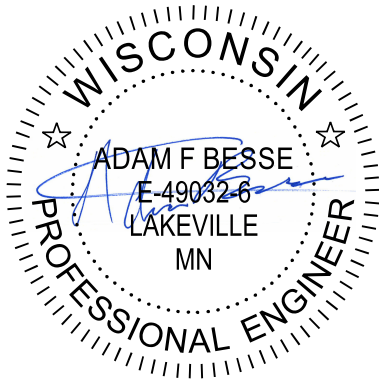
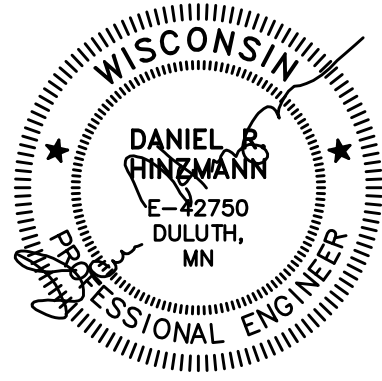


12. ENGINEER CERTIFICATION



03-31/2026

Engineer for private-side /
City Design



03-31/2026

Engineer for utility-side /
SWL&P Design

Special Provisions

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STSP'S Revised January 1, 2026

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Lead Service Line Midtown Phase 1 Project 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.

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 (20260101)

2. Scope of Work.

The work under this contract shall consist of replacing 306 lead or galvanized iron water service lines with new HDPE or copper service lines in the Midtown 1 Neighborhood of Superior, Wisconsin and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract. Water service replacements may be from the curb stop to the building or both from the main to the curb stop and from the curb stop to the building. Work will take place in the right of way as well as on private property and within private buildings. Restoration of all public and private property is required, including but not limited to concrete and bituminous surfaces, vegetation and landscaping.

The Contractor shall furnish all labor, materials, equipment, and incidentals required to construct lead water service line replacements as shown in the Plans. The Contractor shall provide an adequate workforce including service replacement crews, restoration crews, plumbers, and subcontractors to complete the Work to make continuous progress and meet the project completion dates.

The City of Superior has conducted outreach to all property owners identified in the Plans and has attempted to obtain signed lead water service replacement agreements allowing for the Work to be carried out on private property. Upon award of the Contract, the City will furnish to the Contractor copies of all lead water service replacement agreement forms signed by property owners to date.

The Contractor agrees to comply with all terms and conditions of the lead water service replacement agreement between the City and the property owner, as applicable to the Contractor's scope of work. However, nothing in the lead water service replacement agreement between the City and the property owner shall be construed as relieving the Contractor from any of its obligations, duties, or responsibilities under this Contract. In the event of any conflict between the terms of the lead water service replacement agreement and this Contract, the Contractor shall adhere to the more stringent or comprehensive requirement.

The Work to be performed by the Contractor includes, but is not necessarily limited to, the following:

1. Notification, coordination, and scheduling of work on private property with property owners, residents, tenants, and businesses. This work will require phone calls, emails, mailings, door-knocks, and posting notices or door hangers as necessary to achieve compliance with these special provisions. This work is considered incidental.
2. Pavement and concrete removal, including saw cutting, as required. This work shall be considered included for payment under the applicable bid items provided in the Plans.
3. Excavation, backfilling, and compaction. This work shall be considered included for payment under the applicable bid items provided in the Plans.
4. Furnishing and installing new service piping, valves, adapters, and fittings of the necessary size required to remove and replace the water service in conformance with the Plans, WisDOT Standard Specifications, these Special Provisions, applicable City/SWL&P details, applicable City / State plumbing codes, applicable State / National electrical codes, and City and SWL&P standard specifications. This work shall be considered included for payment under the applicable bid items provided in the Plans.
5. Removal, adjustment, or construction of new internal building plumbing to accommodate and connect to the new water service connection. This work shall be considered included for payment under the applicable bid items provided in the Plans.

6. Removal and proper, legal disposal of lead or galvanized iron/steel service lines, concrete, asphalt, vegetation, construction waste and debris, and excavation materials. This work shall be considered included for payment under the applicable bid items provided in the Plans.
7. All required construction dewatering and excavation support and protection to complete the Work. This work shall be considered incidental.
8. Disinfection, leakage testing, and flushing of all new service lines. This work shall be considered incidental.
9. Photographic documentation of pre- and post-construction conditions and activities by the Contractor. This includes, but is not limited to, taking multiple photos (at the outside of the building from the water main to the house, along the service line alignment, inside of the building, conditions at service line penetration and at meters/valves) to fully document the pre- and post-construction condition and activities of the Contractor. The Contractor shall document any existing wet or leak conditions inside the homes. Photos and documentation shall be included and submitted to the City using a City-provided single page form or other approved format. The documentation shall identify and be sorted by the site number and building address and include the checklist and photo documentation listed above. This work shall be considered incidental.
10. Final surface restoration work to restore all areas disturbed by construction to conditions equal to or better than pre-construction conditions and according to all plans, specifications, and details. This includes coordination of the scope of Work with property owners to achieve final surface restoration work. This work shall be considered included for payment under the applicable bid items provided in the Plans.
11. The following certifications are required:
 - a. The following work shall be performed by a licensed plumber:
 - i. All required building internal piping modifications overhead or otherwise.
 - ii. Final connections to the existing indoor plumbing including connections to, or relocation of the existing water meter.
 - iii. The licensed plumber shall be available during the Contractor's normal operating hours or until 7 p.m. (whichever is later) to complete interior water service connections at the end of each working day.
 - b. Buried water service pipe outside of buildings shall be installed by a certified pipe layer or a licensed plumber.
 - c. Buried water service pipes shall be installed by a contractor properly licensed in accordance with Wisconsin Statutes Chapter 145 and Wisconsin Administrative Code SPS 305, as administered by the Wisconsin Department of Safety and Professional Services.
 - d. Person(s) performing HDPE pipe fusion must be certified to do so by SWL&P. SWL&P may be contacted for additional details on these requirements.
 - e. Ensure presence of at least one employee onsite who holds current ACI Concrete Field Testing Technician—Grade I certification, or an equivalent ACI certification approved by the Engineer, for all concrete pours in excess of 5 cubic yards, pours involving curb ramps, approaches, or other ADA facilities, or pours involving street or roadway surfaces.
12. Protect all public and private property on and adjacent to any Site of the Work. Unless specifically designated for removal, the Contractor shall use every precaution necessary to prevent damage to in-place features to remain including, but not limited to, buildings, structures, streets, drives, curbs, sidewalks, driveways, trees, shrubs, plantings, landscaping, sod, water features, lighting fixtures, mailboxes, fences, gates, steps, decks, patios, irrigation features, play structures, retaining walls, interior finishes, interior furnishings, interior fixtures, utilities, and electrical grounding and bonding. When or where any direct or indirect damage or injury is done to public or private property features to remain by or on account of any act, omission, neglect or misconduct in the execution of the Work, or in consequence of the non-execution thereof on the part of the Contractor, the Contractor shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done.
13. Coordinate required material testing with the department's designated materials testing personnel according to the WisDOT Construction and Materials Manual. Provide a minimum of 24 hours advance notice to the Engineer or designated materials testing personnel prior to placement of

any material requiring testing. All coordination, scheduling, and notifications required by this provision shall be incidental to the Contract Work. No separate payment will be made. Material placed without the required advance notice may be rejected, or may require additional testing, or removal at the Contractor's expense, as directed by the Engineer.

104-005 (20090901)

3. Prosecution and Progress.

Prior to beginning operations under this contract, submit in writing the proposed schedule of operations to the engineer for approval.

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

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.

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.

Progress Schedule and Milestones

Create and submit a work plan detailing the schedule and sequence of the Work throughout the project area. The Contractor shall divide the project area into at least 4 and no more than 10 sub-areas and outline the sequencing and schedule of the work within each sub-area. The work plan shall include the following:

1. Map of project sub-areas.
2. Number of service replacements and main extensions within each sub-area.
3. Estimated start date, duration, and completion date of each sub-area.
4. Schedule for work on each "Arterial Road" identified in the Plan.
5. Crew and equipment deployment plan and anticipated production rates for each sub-area.

Submit a weekly look ahead schedule. This schedule shall include a list of specific site numbers, addresses, and main extensions planned each week for the following 4 weeks. Include any planned traffic control and street impacts.

The Contractor shall coordinate operations, utility locates, property access, and materials to minimize crew and equipment standby time. Standby time attributable to the Contractor's operations, including but not limited to scheduling inefficiencies, lack of coordination, or failure to secure access, shall not be compensable.

Standby time exceeding two (2) hours in a workday for any crew or operation shall be considered avoidable delay unless otherwise approved by the Engineer. The Engineer may require the Contractor to revise operations, sequencing, or resource allocation to reduce standby time. Repeated occurrences of excessive standby time may be considered noncompliance with the progress schedule.

Milestone 1 – All services on Tower Avenue shall be completed by July 2, 2026.

Substantial Completion – All work shall be substantially complete on or before October 15th, 2026. For this project, Substantial Completion shall be deemed to include ALL work in the Contract, except final turf establishment.

Final Completion – ALL work required under this Contract shall be complete on or before June 29th, 2027.

Contractor shall understand that concurrent project work is anticipated along Tower Avenue. This work includes storm sewer, curb and gutter bumpouts, curb and gutter median, concrete milling, and bituminous paving. The Contractor shall work to minimize disruption to adjacent construction operations. Note that all milling and bituminous is planned following Milestone 1.

Individual Site Completion Requirement

Each individual site shall be completed in its entirety, including final restoration, no more than 60 calendar days after beginning work at said site. Failure to complete the work within 60 days will constitute non-compliance with the contract and may result in non-payment for the entire site. Sites constructed within

60 days of the Substantial Completion deadline must complete final restoration by the Final Completion date.

Working Restrictions

No work shall be performed on legal holidays without written approval of the Engineer.

No work shall be performed on private property or within buildings on Sundays or legal holidays without written permission from the property owner.

No work that restricts or interferes with traffic shall be performed between 12:00 PM on the day preceding and 7:00 AM on the day following any consecutive combination of a Saturday, Sunday, or legal holiday without approval of the Engineer:

1. If the Contractor elects not to work on the day preceding the holiday period, no calendar day charges will be assessed.
2. If work is performed prior to 12:00 PM or with approval after 12:00 PM, calendar day charges will apply only for the period worked.

Basis for Contract Time

Contract time has been established considering estimated quantities, typical weather conditions, and project constraints. Extensions of time will be allowed only for delays determined by the Engineer to be excusable in accordance with WisDOT standard specification 108.10.

Seasonal Limitations and Temporary Restoration

If work extends beyond the seasonal availability of hot-mix asphalt:

1. Areas requiring asphalt restoration may be temporarily restored with cold-mix asphalt. The Contractor shall maintain temporary patches until permanent restoration is completed. Final restoration shall be completed prior to June 1 of the following year. No additional compensation will be provided.
2. Adjacent curb and gutter areas may also be temporarily restored with cold-mix asphalt under the same conditions.
3. The Contractor is responsible for maintaining all temporary patches. Any damage due to weather, snow removal, or other causes shall be repaired promptly at no additional cost to the City.
4. The City may assess a deduction of \$500 per day for each temporary patch area not properly maintained.

4. Contact Information.

Direct questions regarding this project to: Adam Besse, Project Manager, LHB,
Adam.Besse@LHBcorp.com.

5. Disqualification of Bidders.

Contractors who are debarred or suspended under Wisconsin Administrative Code Trans 504 will not be eligible for award of this contract or to act as a subcontractor to any contractor under this contract.

6. Contract Revisions / Changes in the Work.

Added to WisDOT 104 and 109:

1. Variations in bid item quantities from those shown in the plans are anticipated.
2. No adjustment to contract unit prices will be made due to increases or decreases in quantities of bid items, regardless of the magnitude of the variation.
3. Such quantity variations, including substantial or material variations in quantity, shall not, by themselves, constitute a change in the character of the work or a differing site condition.
4. Payment for all work shall be made in accordance with WisDOT 109 at the contract unit prices for actual quantities installed.
5. Claims for additional compensation based solely on variations in estimated quantities will not be considered.

Modification to WisDOT 104.2 (Changes in the Work):

1. Notwithstanding WisDOT 104.2, adjustments to contract unit prices will not be made due to increases or decreases in quantities of bid items.

Modification to WisDOT 109.1 (General):

1. For this contract, payment for quantity variations shall be made strictly at the contract unit prices with no adjustment for overruns or underruns.

Added to WisDOT 104.2 (Deletion of Work):

1. The City reserves the right to delete work from the contract, in whole or in part, at any time, when determined to be in the best interest of the City.
2. In such cases, the Contractor will be compensated only for work satisfactorily completed, with payment determined in accordance with WisDOT 109.1.
3. Materials ordered by the Contractor prior to written notice of deletion may, at the City's option, become the property of the City. The City will pay the actual cost of such materials and any reasonable handling costs.
4. If materials are returnable and the City directs their return, the Contractor will be paid only for actual vendor charges associated with the return, including restocking fees.

Added to WisDOT 104.2 (Site Additions, Deletions, and Substitutions):

1. The City reserves the right to delete individual work sites from the project due to non-responsive property owners, discovery of non-lead service materials, or other project considerations.
2. The City may add or substitute work sites within one mile of an original site, provided the substituted site has substantially similar construction characteristics and accessibility.

Modification to WisDOT 105.3 (Prosecution and Progress of Work):

1. The City reserves the right to prioritize work at sites identified as actively leaking.
2. Upon written notification, the Contractor shall complete the water service replacement work at such prioritized sites within 14 calendar days.
3. Failure to complete prioritized work within the specified timeframe shall constitute failure to prosecute the work under WisDOT 105.3.
4. All work at prioritized sites shall be completed at the contract unit bid prices.
5. No additional compensation will be provided for work performed under prioritized scheduling.

7. Restrictions on Movement and Storage of Heavy Loads and Equipment.

Conform to WisDOT 107 and as follows:

Do not operate equipment mounted on steel crawler tracks or steel-tired wheels on or across new concrete, or bituminous surfacing, or existing surfaces to remain, without adequate means to protect the pavement surface, or written permission from the Engineer. Protect pavement surfaces from equipment, settlement, lateral movement, undermining, washout, and other hazards created by the Contractor's operations.

The use of temporary cribbing, mats, metal plates, etc. to protect new or in-place surfaces to remain shall be considered incidental. Any damage to in-place surfaces to remain shall be fully restored by the Contractor at no expense to the City.

8. Laws to Be Observed (Prompt Pay and Retainage).

The provisions of WisDOT Standard Specifications Section 109 are supplemented with the following:

Prompt payment of subcontractors is required by Wisconsin Statutes §779.135.

The Contractor shall pay each subcontractor no later than ten (10) days after receipt of payment from the City for undisputed work properly completed by that subcontractor. If the Contractor fails to make timely payment, the Contractor shall pay interest to the subcontractor on the unpaid amount at the rate of 1.0% per month, calculated from the date payment was due.

Wisconsin Statutes §779.135 further provides that a subcontractor may recover interest due in a civil action, and if the subcontractor prevails, the court may award costs and reasonable attorney fees as allowed by law.

Withholding of retainage is governed by Wisconsin Statutes §779.135(5).

The Contractor may withhold retainage from subcontractors; however, such retainage shall not exceed five percent (5%) of the amount due. If the City reduces or eliminates retainage, the Contractor shall apply the same reduction to retainage withheld from subcontractors.

State law does not require retainage to be withheld.

9. Licenses, Permits and Approvals.

The Contractor is responsible for paying for and obtaining all required permits on the project.

The Contractor will need the following permits:

- City of Superior Land Disturbing Activity/Right of Way permit. Information on completing and submitting the LDA/ROW permit can be found at the City of Superior’s website: <https://www.superiorwi.gov/574/Stormwater-Management-Permitting-Program>
- LDA/ROW permit fee shall be waived.
- Plumbing Permits. Plumbing permits shall be required and paid by the Contractor according to the following schedule:

Permit	Fee
Plumbing Permit (Exterior Water Line Into House)	Waived
Plumbing Permit (Interior Water Meter and Line Connection)	Waived
Separate plumbing permits are required if the Contractor removes a sanitary sewer house trap for any reason	Waived
Separate plumbing permits are required if the Contractor replaces the sanitary sewer for any reason	Waived
Credit Card Pass Through Fees will be collected when paying permit fees by credit card.	Percentage of permit purchase amount

- Electrical Permits are required. Request and obtain through City of Superior. Typical permit fees shall apply.
 - The Contractor is responsible for all permits associated with the service line replacement.
 - Additional permits may be required.

10. Air, Land and Water Pollution.

Conform to WisDOT 107.18 (Environmental Protection) and as follows:

Copper water service material is included as a contract bid item and shall be used in areas of potential or discovered soil contamination according to the direction of the Engineer. No separate measurement or payment will be made for coordination and installation of copper water service material.

The Contractor remains responsible for complying with all applicable cultural resource protection and environmental laws and regulations, including those governing management of contaminated soil or groundwater, dewatering discharges, erosion control, and waste disposal, regardless of whether the City’s previously identifies potential contamination.

11. Property Owner & Resident Coordination.

The Contractor shall contact and coordinate with property owners and residents when water construction activities will take place on private property or when construction will disrupt the water supply to a property. The Contractor shall schedule their own work and coordinate with property owners and

residents as to schedule changes. The Engineer will send an initial informational mailing to the property owners and residences. The Engineer will supply a list of contact information to the Contractor. This list was compiled during 2026 and may or may not be up to date or complete for each address.

Most property owners have signed a work agreement allowing the Contractor to enter onto private property, except the buildings on the property, between the hours of 7:00 AM and 7:00 PM Monday through Friday and 8:00 AM and 6:00 PM on Saturdays for work outside the buildings for the purposes of replacing the water service line. Obtain homeowner and Engineer approval for work outside of these stated hours. For work inside the buildings, additional coordination by the Contractor is required. The Contractor shall coordinate with the Engineer to ensure a valid work agreement is in place prior to work on any individual property. If an agreement is outstanding, the Contractor shall aid the Engineer's efforts to secure outstanding agreements by supplying updated contact information collected by the contractor, communicating the need for the agreement to the owner, and/or collecting the signed work agreement and delivering it to the Engineer.

1. Where water construction activities will require work on private property, the Contractor shall notify the residents in person or by phone at least 10 Calendar days prior to said work to allow the resident to clear the work area in the building. The specific work area and clearing requirements shall be clearly communicated to the owner, which may require meeting with the owner inside the property. With this first notification, the Contractor shall give the residents the estimated day(s) of construction activity so they can plan to grant access to the Contractor and be present during the Work. The Contractor shall then re-notify the residents 2 days before the planned Work to confirm the day(s) of construction activities. If the residents cannot be reached by phone or in person, a contractor-supplied door flyer shall be affixed to the primary entrance with the aforementioned information, including a call-back phone number.

If the property owner does not live at the residence, the owner or property manager shall be contacted at least once by phone 10 days prior to the planned Work; notification requirements of the residents at that property remain the same.

If the owner, manager or resident cannot grant access to the Contractor at the time specified, the Contractor shall confer with the owner and the Engineer to find a mutually agreeable time for the Work.

The Contractor shall document outreach to owners and property managers. The documentation shall be organized by address and outreach type and provided to the Engineer. Outreach, at a minimum, must include multiple methods of contact including AM and PM contact attempts, weekday and weekend contact attempts, phone calls, emails, door knocking, and posting door hangers/letters over a minimum 10-day period. If access cannot be arranged after 5 outreach attempts by the Contractor, the documented outreach attempts shall be provided to the Engineer and City who will perform additional outreach. No site may be removed from the scope of work without authorization by the City.

The Contractor shall not request or receive a key for any building, either directly or through use of a lock box, without also receiving an agreement signed by the property owner identifying the terms and duration of key possession. Copies of said agreements shall be provided to the Engineer.

2. Where water construction activities will not occur within a residence but will interrupt water supply, the Contractor shall provide notice to the affected residents at least 24 hours in advance of the planned outage. If the resident cannot be contacted directly, a door flyer shall be affixed to the primary entrance stating the date and time of the scheduled service interruption and providing a call-back phone number.
3. All communication and coordination with property owners and residents shall be considered incidental.

12. Coordination for the Replacement of Water Meters.

New water meters will be furnished by SWLP and replaced by the Contractor at sites indicated on the plans. Coordinate with SWLP 7 days prior to the initiation of work at these indicated sites, as well as identifying these sites within the 4 week lookahead. This item is incidental to the following bid items and will not be paid for separately:

Connect to Existing Indoor Plumbing, Item SPV.0060.07

Connect to Existing Indoor Plumbing, Crawlspace, SPV.0060.08

13. Traffic.

The Contractor shall be responsible for all temporary traffic control (TTC) plans, labor, materials, equipment, and maintenance required to maintain traffic and complete the Work. TTC requests shall be submitted, reviewed, and approved prior to the installation of any TTC, road closures, or detours. The Contractor shall coordinate with TTC for other construction projects and attend any scheduled traffic control coordination meetings with the City, and potentially other roadway authorities or contractors, as determined necessary.

General Requirements

1. All traffic control devices and signs shall conform to the current Manual on Uniform Traffic Control Devices (MUTCD) including "Temporary Traffic Control Zone Layouts".
2. The Contractor shall use the Manual on Uniform Traffic Control Devices and select the appropriate temporary traffic control zone layout.
3. The Contractor shall furnish, install, adjust, maintain and remove all necessary traffic control signs and devices in the appropriate temporary traffic control zone layout.
4. Field conditions will require modifications to standard layouts to ensure pedestrian and vehicle safety and the maintenance of traffic. It is the Contractor's responsibility to make any layout modifications required by the Engineer and/or due to field conditions. All such modifications shall be considered included for payment under the lump sum Traffic Control pay item, with no additional compensation therefor.
5. The Contractor shall implement any additional signs, traffic control devices, or alternate layouts required as a result of the Contractor's operations. All such work shall be considered included in the lump sum Traffic Control pay item, with no additional compensation therefor.
6. The Contractor is responsible for protecting any work areas near traffic in accordance with the MUTCD.
7. All traffic control devices on roads open to traffic that are not consistent with traffic operation, shall be covered, removed or revised as directed by the Engineer.
8. All devices shall be moved or covered as soon as they are no longer required or appropriate.
9. TTC shall include appropriate pedestrian control. Work sites shall be kept safe for pedestrians. Sidewalk closures devices shall conform to the MUTCD. When sidewalks are closed, the Contractor shall plan a safe alternate route for pedestrians around the Work.
10. The Contractor shall not unnecessarily block intersections, cross streets, driveways or alleys.
11. The Contractor shall coordinate with residents to allow moving vehicles prior to blocking driveways and alleys.
12. The Contractor shall open roads to local traffic and parking as soon as it is safe to do so, even if the road must remain closed to through traffic.
13. TTC devices shall be removed from the right of way within 7 days of final completion of the Work on any individual city block or street segment.
14. The Contractor, sub-contractors, equipment, and crew shall abide by all parking laws.
15. Upon completion of the Work, the Contractor shall relay to the City that a particular street, or portion thereof, has been reopened for use. TTC devices shall either be removed from the site or organized and staged for subcontractor removal. Any signs with direction, such as detour, road closed or similar, shall be faced away from traffic to eliminate confusion. Any staged signs for removal shall be removed within three (3) business days. Failure to remove said signs will be met with a warning to remove devices within five (5) additional business days. Failure to remove the devices shall be considered abandonment of such devices and City may remove the abandoned material. The City reserves the right to remove the devices and reduce the Contractor's retainage any effort undertaken to address abandoned traffic control devices.
16. Work performed without appropriate traffic control in place may be considered unauthorized work and may be subject to nonpayment.
17. A deduction of \$500 will be assessed for each incident of unauthorized work, missing or improperly maintained traffic control devices, or failure to comply with the approved traffic control layout.

18. Prior to closing roads, the Contractor shall contact the following authorities a minimum of 48 hours in advance of closure. A contact list will be provided at the preconstruction meeting.

Local Road Requirements

1. Temporary Traffic Control Request – Prior a lane closure or road closure on local roads the Contractor shall submit a temporary traffic control request. This request shall be submitted 72 hours prior to installation of TTC. This request shall contain a completed TTC request form (supplied by the City) and a map clearly identifying the work area, road closures, and expected the duration of the Work. The contractor shall work through the project area in a systematic order, grouping several of lead replacements sites together, and submitting a TTC request for local road closures for groups of replacements at an interval of no more than every 4 weeks or at significant changes in work type or location.
2. The Contractor may not close or limit parking on more than 2 contiguous blocks. Multiple work sites, of up to 2 contiguous blocks each, shall be separated by at least one parallel street that is fully open to traffic and parking. Exemptions may only be permitted if granted in writing by the Engineer.
3. The effectiveness of TTC on local roads shall be monitored by the Contractor and adjusted if required by site conditions or instructions from the Engineer.

Tower Avenue Requirements

4. No closure of Tower Avenue shall be permitted. All work shall be done utilizing lane shifts.
5. The Contractor may coordinate traffic control with the Contractor completing the Tower Avenue Rehabilitation Project, but no assumption shall be made that the traffic control associated with this separate project shall be sufficient for this work.

14. Utilities.

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

Any utility facility locations (stations, offsets, elevations, depths) listed in this article are approximate. Contractor is responsible to locate all utilities and be prepared to adjust field operations based on field markings.

15. Insulation Board Polystyrene, 4-Inch, Item 612.0902.S.

A Description

This special provision describes furnishing and placing polystyrene insulation board.

B Materials

Provide polystyrene insulation board that conforms to the requirements for Extruded Insulation Board, AASHTO Designation M230 as modified in this special provision.

B.1 Certification

Before installation, obtain from the manufacturer a certification indicating compliance and furnish it to the project engineer.

C Construction

Vacant

D Measurement

The department will measure Insulation Board Polystyrene, 4-Inch by area in square yards of work, completed and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
612.0902.S	Insulation Board Polystyrene, 4-Inch	SY

Payment is full compensation for all excavation; and for furnishing and placing the insulation board.

16. Fence Safety, Item 616.0700.S.

A Description

This special provision describes providing plastic fence at locations where excavation trenches will be exposed and left unattended for periods of time.

B Materials

Furnish notched conventional metal "T" or "U" shaped fence posts.

Furnish fence fabric meeting the following requirements.

- Color:** International orange (UV stabilized)
- Roll Height:** 4 feet
- Mesh Opening:** 1 inch min to 3 inch max
- Resin/Construction:** High density polyethylene mesh
- Tensile Yield:** Avg. 2000 lb per 4 ft. width (ASTM D638)
- Ultimate Tensile Strength:** Avg. 3000 lb per 4 ft. width (ASTM D638)
- Elongation at Break (%):** Greater than 100% (ASTM D638)
- Chemical Resistance:** Inert to most chemicals and acids

C Construction

Drive posts into the ground 12 to 18 inches. Space posts at 7 feet.

Use a minimum of three wire ties to secure the fence at each post. Weave tension wire through the top row of strands to provide a top stringer that prevents sagging.

Overlap two rolls at a post and secure with wire ties.

D Measurement

No measurement will be made for this item.

E Payment

All work under this item, including all materials, equipment, and labor, shall be considered incidental to the following bid items and will not be paid for separately:

- HDPE Water Service Pipe X-Inch, Item SPV.0090.07-12
- Copper Water Service Pipe 1-Inch, Item SPV.0090.13-14
- stp-616-030 (20160607)

17. Clearing Special, Item SPV.0060.01.

A Description

This special provision describes the removal of an existing tree to accommodate the installation of a new water service.

B Materials

Vacant

C Construction

Perform surface level removal operations to an existing tree located within the construction limits that will be impacted by the trench excavation.

Dispose of tree and debris to an off-site location.

D Measurement

The department will measure Clearing Special by the 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
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Payment is full compensation removing an existing tree and surface debris; and hauling debris to an off-site location to accommodate the installation of a new water service.

18. Grubbing Special, Item SPV.0060.02.

A Description

This special provision describes the removal of an existing tree stump to accommodate the installation of a new water service.

B Materials

Vacant

C Construction

Perform below ground removal operations to an existing tree stump located within the construction limits that will be impacted by the trench excavation.

Ensure the foundation has all roots, debris, and organic matter removed.

Dispose of stump and debris to an off-site location.

D Measurement

The department will measure Grubbing Special by the 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.0060.02	Grubbing Special	EACH

Payment is full compensation for removing an existing tree stump, root system, organic matter, and below ground debris; and hauling debris to an off-site location to accommodate the installation of a new water service.

19. Tree Preservation and Protection, Item SPV.0060.03

A Description

The City of Superior acknowledges the importance of trees to the community's health, safety, welfare, and tranquility. Trees increase property values, provide visual continuity, provide shade and cooling, decrease wind velocities, control erosion, conserve energy, reduce stormwater runoff, filter airborne pollutants, reduce noise, provide privacy, provide habitat and food value, and release oxygen. **No trees will be removed within the project limits without the approval of the engineer.**

Definition of Terms

- Tree Protection Zone:

A specified area above and below ground and at a given distance from the trunk set aside for the protection of a tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development. Tree Protection Zone shall be determined to be the diameter of the tree trunk measured in inches at chest height multiplied by 1.5 and expressed as feet.

That distance is measured from the trunk of the tree creating a radius around the tree, as shown in the details within the Tree Protection Zone Details.

B Materials

Trees and other vegetation are to be protected and preserved during construction. Trees and other vegetation will be properly protected during construction to maximize their survival rate. In order to achieve an appropriate balance between protecting trees and allowing necessary construction, the practices that follow will be employed.

All trees within and adjacent to the project limits shall be protected and maintained against damage during construction. All workers on the site shall be educated in tree preservation practices. Tree protection devices shall be placed before material deliveries, excavation, or grading begins and is to be

maintained in good repair for the duration of the construction work, unless otherwise directed. Tree protection shall remain until the landscape restoration work begins.

C Construction

C.1 General

Protection of existing trees will be accomplished with the establishment of the Tree Protection Zone (TPZ) for each tree and using tools such as fencing placed along the construction limits, carefully choosing the style of machinery the specifications allow to travel behind the existing curb and gutter, shoring, construction boxes, and protective ground sheeting.

However, it will not be limited to just these tools. The Contractor can use other tools to protect the trees and landscaping at their discretion and as approved by the Engineer, such as hiring a commercial arborist to advise how to best protect the trees. If this arborist should contest a damage assessment performed by the Engineer, the City will consider the arborist's argument, but the Engineer's ultimate decision will prevail.

Handheld operating tools, air-excitation or other non-mechanical methods are encouraged to be used for removal or construction activities within the Tree Protection Zone.

Prior to any site work, all trees to be preserved must be protected, and maintained, in accordance with the Tree Protection Zone Details.

C.2 Tree Protection

Trees in the area of disturbance and in the vehicle access route are to be protected by fencing in the following manner:

- No material or construction equipment shall be stored within the tree protection zone.
- No protective devices, signs, utility boxes or other objects shall be nailed to the trees on the site.
- Tree protection fencing shall be erected and approved by the Engineer at least 24 hours before construction begins.

C.3 Grade Changes

Grade cuts shall be minimized or eliminated within the tree protection zone.

Areas within the tree protection zone disturbed by construction activity shall be mulched with a 2- 3" deep layer of shredded bark mulch as temporary protection of roots. Mulching shall be done within 4 hours of disturbance.

C.4 Trenching and Tunneling

Trenching shall be done outside the tree protection zone. Trenchless techniques shall be employed within the tree protection zone.

C.5 Pruning

Pruning of branches shall be done under the requirements and direction of the engineer.

C.6 Bridging Roots

One option for working near trees with large root issues is to bridge over the existing roots. This is done by either supporting the raised section with concrete pillars near the roots or increasing the base layer over the root growth area. When increasing the base course material; course sand or pea gravel must be used along with a thin layer of foam board. Any bridged sections must still maintain ADA allowed slopes of 1:20. It is anticipated bridging roots will be required behind the sidewalks and on side streets.

C.7 Root Grinding

When dealing with a larger root (2" diameter or larger) it is better to grind the root rather than fully sever the root. This is done by either a stump/root grinder, chainsaw or debarking tool. Roots must maintain at least 1/3 of their original diameter when grinding roots. When possible, apply a layer or ridged foam or pipe insulation between the shaved root and the new concrete surface to allow for roots to callus. Any work on a root with a diameter greater than 2" must be approved by the Engineer prior to commencement. No root grinding or cutting is permitted within 4 feet from the face of the tree.

C.8 Clean Root Cutting

Root cutting shall be a **LAST RESORT** option when doing construction around trees .Where a trees root systems interfere with the construction of curb and gutter, drain tile, or other utilities; Contractor may address the roots in accordance with the following:

- Cleanly cut tree roots as directed by the Engineer.
- Immediately and cleanly cut damaged and exposed roots. Cut back damaged roots of trees designated for protection to sound healthy tissue and immediately place topsoil over the exposed roots. Immediately cover root ends exposed by excavation activities with 6 inches of topsoil as measured outward from the cut root ends No cutting of roots larger than 2" will be allowed unless approved by the Engineer. No root grinding or cutting is permitted withing 4 feet from the face of the tree.

D Measurement

The department will measure Tree Preservation and Protection by the Each regardless of tree protection zone size. Measurement will be considered complete when excavations in the Tree Protection Zone are 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	Tree Preservation and Protection	EACH

Payment is full compensation for providing all labor, equipment, and materials necessary to protect the trees and roots to the level as specified in the plans and specifications. Payment will include protective construction fencing for each tree. All protection shall be inspected by the Engineer prior to start of construction.

F Schedule of Damages

Damages to trees will be measured according to the following table.

SCHEDULE OF DAMAGES (PER TREE OR PRIVATE LANDSCAPING FEATURE)			
TYPE OF DAMAGE	LEVEL OF DAMAGE		
	LOW	MODERATE	SEVERE
Trees			
Above Ground			
<i>Canopy</i>			
Branches			
Less than 2 inches diameter	Each		
Greater than 2 inches and less than 4 inches diameter.		Each	
Greater than 4 inches diameter			Each
<i>Trunk Stem Circumference Damage</i>			
\$200/sf bark loss			
Below Ground			
<i>Root Zone</i>			
Construction within TPZ			
Material storage	Each		
Equipment storage	Each		
Soil Compaction	Each		
<i>Root Cutting or Grinding</i>			

Unapproved grinding or damage to 2/3 or more of a root within 4 feet from the face of the tree.			Each
Unapproved grinding or damage to 2/3 or more of a root with a diameter of 2" or greater.			Each

G Schedule of Deductions

Deductions from the amount due to the Contractor for the tree and private landscaping protection item will be calculated in accordance with the following table.

Level of Damage	Damage Fee ¹
Trees	
Low of all Types	\$200
Moderate of all Types	\$325
Severe of all Types	Greater of 100 times the diameter of the tree in inches expressed in dollars or \$1000

Should the Contractor accrue damages; the engineer will maintain a running account of those damage fees throughout the project. Damage fees will be assessed against the contractor in the last application for payment. The Engineers running damage account will be available to the Contractor for review upon request.

20. Service Pipe Location Verification, Item SPV.0060.04.

A Description

This special provision describes televising and locating underground private sanitary service laterals. Work includes inserting an inspection camera fitted with a locatable transducer into the pipe to document the location and condition of the sanitary service pipe pre- and post-construction of water service construction.

B Materials

Use an inspection camera system equipped with a locatable transmitter and a digital video recorder with a real-time footage counter.

For pipe repairs necessitated by access, provide materials conforming to PVC pipe and fittings, specification 612.

C Construction

C.1 General

Televise and locate all sanitary services expected to be within 8-ft of the proposed water service installation excavation. Determination of proximity of sanitary service laterals shall be made in cooperation between the Contractor, the department, and the Engineer. Televise all portions of the service within 8 feet of the construction zone. Complete televising before and after construction to document the conditions of the sanitary service.

C.2 Equipment and Execution

Use skilled personnel and functional equipment.

An inspection camera fitted with a locatable transmitter will be inserted into the sanitary service pipe. Insert the camera into the service via:

1. The cleanout inside of the building
2. The cleanout outside of the building
3. A lateral launch camera from inside the sewer main
4. A service pipe exposed in an excavation

Track the camera above ground with a receiver. Mark the location and depth with spray paint at maximum 10-foot intervals and at every bend or fitting.

If removing a house trap, acquire the appropriate plumbing permit and perform work according to all applicable plumbing codes.

If you access the pipe via excavation, repair VCP by removing non-competent or cracked sections and replacing with PVC and flexible couplings. Repair existing PVC with PVC material and flued joints or flexible couplings. Do not use fabric, concrete, or grout repairs.

C.3 Camera Footage

Track the distance inserted and record all televising in a running footage counter from the starting point of televising, which is documented in relation to the connection point to the house. The video must record the full lateral from the house access point to the mainline sewer connection. The pipe must be clean enough to ensure all defects, features, and observations are recorded and logged. Footage is supplied to the department and the Engineer. Additionally, a copy of the video footage is supplied to the property owner along with a transmittal form describing the televising access point, general pipe characteristics, and major defects. All pre-existing sewer defects are brought to the attention of the property owner.

C.4 Pre Construction Televising

Perform pre-construction televising no more than 30 days prior to water construction work at a given address. Provide light cleaning (snaking/flushing) as required to ensure all defects and features are visible. The department will pay for heavy cleaning (jetting/root cutting) under a separate bid item. Notify the property owner and the Engineer immediately of any pre-existing sewer defects. Failure to provide the recorded televising, documentation, and notification of sewer defects to the property owner will result in non-payment of this item.

C.5 Post-Construction Televising

Perform post-construction televising within 1 week of completing water service construction at a given site. The recorded footage must conform to the requirements of the pre-construction televising and again be recorded and submitted to the property owner, the department, and the Engineer. Televising videos, both pre- and post-construction, are transmitted to the Engineer within 2 weeks of the completed televising via a single storage device or other agreed upon digital delivery method. Deliver videos to homeowners via digital device or made available via download.

C.6 Sanitary Repair

If the sewer lateral was not fully televised and documented, the Contractor is responsible for the investigation and repair of any sewer lateral damage, settlement, and sewer backup.

D Measurement

The department will measure Service Pipe Location Verification as each individual sanitary service is successfully televised and located, acceptable completed. The department will not measure unsuccessful attempts or located inaccurate by more than 2 feet in any direction.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Service Pipe Location Verification	EACH

Payment is full compensation for pre- and post-construction televising; for locating and marking the pipe; for obtaining permits and inspections; for light cleaning; for accessing the pipe (including house trap removal or excavation); for pipe repairs; and for furnishing all videos and documentation. Failure to provide the recorded televising footage results in non-payment of this item.

21. Pothole Water Service for Material Identification, Item SPV.0060.05.

A Description

This special provision describes excavating to locate and confirm the material type of an existing water service pipes at locations the plans show or the engineer directs.

B Materials

Furnish 0.75-inch-thick plywood for temporary covers. Use sandbags and traffic cones to secure and mark the covers. Inspect the covers daily to ensure they remain secure and do not present a tripping hazard.

For restoration, furnish materials listed below.

SPV.0060.05 MATERIALS

MATERIAL	REQUIREMENTS	REFERENCE	NOTES
Topsoil	Spread to a uniform depth of 4-inches. Ensure the soil is free of debris and toxic substances.	WisDOT 625	Match the surrounding grade of the lawn.
Hydroseed		WisDOT 630	
Base Aggregate Dense	Place in layers no thicker than 6 inches. Compact each layer using mechanical compaction equipment. Ensure it meets gradation requirements.	WisDOT 305	Maintain the temporary surface to a smooth, firm condition at the proper grade.

C Construction

C.1 General

Perform potholing before any work at a replacement site. The department will not pay for work performed at a site before potholing if the department later discovers non-lead material.

Notify the Engineer a minimum of one week before potholing to allow for filter pitcher distribution by others. Notify the Engineer in advance of potholing to allow for material inspection, verification, and documentation.

Follow all applicable utility locate laws. Use electronic locating equipment or other means to locate private water service lines. The City will not locate any private utilities.

C.2 Execution

Locate the curb stop valve and begin pothole excavation adjacent to the curb stop standpipe. Minimize surface impacts while providing an opening large enough for thorough inspection. Vacuum excavation is an acceptable method. Ensure excavation is at least 18 inches wide by 18 inches long.

If the service pipe material at the curb stop is non-lead, continue the excavation 18 inches wide away from the curb stop to verify the presence of repairs, couplings, or tailpieces. Terminate the pothole when one of the following occurs:

1. Lead is positively identified
2. The excavation reaches a distance of 48 inches from the curb stop
3. The Engineer directs the excavation to stop

The department will pay for engineer-approved excavations exceeding 48 inches in length under other applicable bid items.

C.3 Temporary Restoration

Immediately after verification, cover potholes with 0.75-inch plywood overlapping the adjacent ground by at least 6-inches in all directions. Secure the plywood with sandbags and mark with a traffic cone.

Backfill and restore potholes within 48 hours regardless of the service replacement schedule.

For turf areas, restore with topsoil and hydroseed.

For sidewalk and street areas (to be replaced under this contract), restore with compacted base aggregate dense ¾-inch to grade. Maintain the surface until service replacement occurs.

For sidewalk and street areas (not replaced under this contract), the department will pay for permanent restoration under separate contract bid items.

D Measurement

The department will measure Pothole Water Service for Material Identification as each water service pothole for material identification, acceptably completed. The department will not measure failed attempts to locate or identify material. Identifying two or more pipes within the same excavation constitutes as a single unit of measurement.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV. 0060.05	Pothole Water Service for Material Identification	EACH

Payment is full compensation for all excavation (including vacuum excavation); for locating and identifying pipe material; for notifications and coordination; for temporary plywood covers, sandbags, and cones; for backfilling the excavation; for topsoil and hydroseed in turf areas; and for temporary base aggregate in paved areas. The department will not adjust payment for site-specific conditions or excavation depth unless directed by the Engineer.

22. Water Service Ground, Item SPV.0060.06.

A Description

This special provision describes furnishing and installing grounding electrode systems on buildings where a replacement of the private water service line with HDPE pipe will disrupt the existing electrical service ground.

B Materials

Furnish grounding electrodes, grounding conductors, and bonding conductors conforming to the National Electrical Code (NEC) and applicable local electrical and plumbing codes.

C Construction

C.1 Prior to Installation

Before installing the electrical service ground, confirm the service ground is necessary by:

1. Completing any private water service material verification required in the plan (potholing for material verification, visual verification inside buildings, etc.)
2. Confirming that the plan calls for installation of an HDPE service (not copper)
3. Confirming with the Engineer that the owner has signed the work agreement.
4. Reviewing the building for the presence of existing supplemental grounding of any kind. If existing grounding is found, stop work immediately and notify the Engineer.

The department will not pay for electrical service grounding installed unnecessarily.

C.2 Requirements

Install the electrical service ground before replacing the lead or galvanized water service.

Use a licensed electrician to perform all electrical work. The electrician must obtain and pay for a state electrical permit, perform the work in accordance with the National Electrical Code, and coordinate with the State electrical inspector(s) for inspection(s).

Provide all necessary grounding electrode(s), grounding conductor(s), and bonding conductors to comply with all applicable electrical and plumbing codes. Verify the continuity of electrical grounding/bonding and restore bonding where required.

Do not eliminate existing grounding or bonding without otherwise replacing such grounding or bonding to an equal or enhanced condition.

D Measurement

The department will measure Water Service Ground by each individual building where a grounding system is successfully furnished and installed, 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. 0060.06	Water Service Ground	EACH

Payment is full compensation for furnishing and installing the grounding electrode system; for providing a licensed electrician' for obtaining and paying for permits and inspections; and for verifying existing conditions and continuity. The department will not pay for electrical service grounding installed unnecessarily.

23. Connect to Existing Curb Stop, Item SPV.0060.07.

A Description

This special provision describes connecting a replaced water service pipe to an existing curb stop valve.

B Materials

Furnish all necessary fittings and materials to complete the connection.

Furnish manufactured concrete block for the curb stop foundation. Provide coarse filter aggregate for backfill immediately around the curb stop.

C Construction

C.1 Inspection, Verification, and Protection

Excavate and locate the existing curb stop. If the exposed water service is non-lead material, immediately notify the Engineer and await further direction.

If the existing curb stop has lead-wipe joints or lead-type threads (non-flare fittings), notify the Engineer. The department will treat this as a curb stop replacement and pay for that work under separate bid items.

For private-only replacements, the Contractor is responsible to protect the curb stop and utility-side line so as not to damage these items or create a leak. If these items are damaged or begin to leak, the Contractor shall repair or replace these items with no measurement being made.

C.2 Installation

Operate the existing curb stop to ensure functionality before cutting the service. Close the curb stop, disconnect the existing service, and connect the new service pipe to the existing curb stop.

Ensure all connections are water-tight. Place the curb stop on top of consolidated bedding and a manufactured concrete block. Backfill the immediate area around the curb stop with consolidated coarse filter aggregate.

C.3 Abandonment and Backfill

Cap or plug the disconnected portion of the existing service pipe to prevent groundwater migration toward the building.

Backfill the excavation with select grading material found on-site. If the Engineer determines on-site material is unsuitable, the department will pay for imported material under separate bid items.

C.4 Final Testing

After final restoration, operate the curb stop in the presence of the Engineer to verify proper placement, alignment, and function.

D Measurement

The department will measure Connect to Existing Curb Stop as each individual connection to existing curb stop is successfully completed and tested, 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. 0060.07	Connect to Existing Curb Stop	EACH

Payment is full compensation for excavating and locating the stop; for verifying material type and functionality; for disconnecting and capping old lines; for sealing abandoned gas lines; for connecting the new service; for furnishing and placing concrete blocks and coarse filter aggregate; and for backfilling with select on-site material.

The department will pay for surface restoration and imported backfill under separate contract bid items.

24. Connect to Existing Indoor Plumbing, Item SPV.0060.08.

A Description

This special provision describes providing all work to connect a new or replaced water service to the existing premise plumbing. Work includes obtaining permits, coordinating with owners, protecting surfaces, modifying internal piping, and final flushing.

B Materials

Furnish plumbing pipes, valves, and fittings that match existing pipe diameters and comply with the Wisconsin Plumbing Code. If the building has multiple meters and downstream valves require replacement, furnish lockable valves.

For floor repairs, furnish concrete conforming to specification 601.

C Construction

C.1 Administrative and Coordination

Obtain an appropriate plumbing permit for all plumbing work at each work site and schedule plumbing inspections with the City of Superior Building Inspection Department, or the Engineer, as applicable.

Communicate and coordinate with the building owner in advance of the scheduled Work to ensure the work area is cleared in advance of the Work. This may require meeting with the owner at the work location to describe the work area and necessary clearing extents. Notify any residents present immediately before turning off the water on the day of the Work.

Complete all Work within buildings within 48 hours of initiating service line replacement unless otherwise approved in writing by the Engineer.

C.2 Installation

Protect all existing building surfaces and clean the work area and access route to pre-existing conditions. Concrete floor patches shall be smooth-troweled and watertight but need not be painted to match existing floor paint.

The Work includes, but is not limited to:

- Removing and disposing of existing plumbing pipe
- Removing and repairing concrete (smooth-troweled and watertight finish)
- Connecting to, salvaging, and reinstalling or replacing the water meter set and tailpieces
- Testing, salvaging, and reinstalling existing pressure-reducing valves
- Relocating the water meter vertically or up to 5-feet horizontally if required by the new service location
- Replacing piping to the next joint or fitting (assume the basement ceiling) to ensure a sound connection

Where buildings possess more than one water meter and valves downstream of the water meter are required to be replaced, provide lockable valves. Perform all Work according to these provisions and all applicable plumbing and electrical codes.

C.3 Abandonment and Electrical Bonding

Check the existing lead water service to ensure it is depressurized, capped or plugged, and either buried in the access pit for the new service or abandoned in place. Remove and cap remaining unused premise plumbing to the branch for the next utilized fixture. Evaluate the electrical bonding of the existing interior premise plumbing and maintain or re-establish bonding if existing bonding is interrupted by the Work.

C.4 Flushing

Flush the new sewer for 15 minutes after replacement. Perform flushing at the point of water meter connection or the nearest fixture downstream without an aerator (laundry tub, hose bib, or bathtub).

D Measurement

The department will measure Connect to Existing Indoor Plumbing as each existing indoor plumbing connection, 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.0060.08	Connect to Existing Indoor Plumbing	EACH

Payment is full compensation for obtaining and paying for permits and inspections; for owner coordination; for protecting existing building surfaces; for concrete removal and repair; for accessing the building crawlspace; for wooden subfloor repair; for removal and disposal of plumbing pipe; for connecting to, salvaging and reinstalling or replacing the water meter set and tailpieces; for testing, salvaging, and reinstalling an existing pressure reducing valve; for meter modifications or relocations; for electrical bonding verification; and for flushing the new water service.

25. Connect to Existing Indoor Plumbing, Crawlspace, Item SPV.0060.09. 8.

A Description

This special provision describes providing all work to connect a new or replaced buried water service to existing premise plumbing at a building with no basement (crawlspace access). Work includes obtaining permits, coordination, crawlspace access, subfloor repair, and freezing protection.

B Materials

Furnish materials conforming to the requirements specified in the special provision for “Connect to Existing Indoor Plumbing”.

In addition, furnish lumber and fasteners for subfloor repair. Ensure materials match the existing subfloor type and strength. Also, furnish pipe insulation as directed by the Engineer to prevent freezing in unconditioned spaces.

C Construction

C.1 General

Perform work in accordance with the construction requirements specified in the special provision for “Connect to Existing Indoor Plumbing”.

C.2 Crawlspace Specifics

Coordinate and perform all work required to access the building crawlspace. Protect existing building surfaces and clean the access route to pre-existing conditions.

Ensure the replaced water service enters the crawlspace at the same location as the existing service to prevent a change in conditions or increase the potential for freezing.

Perform the following additional tasks:

1. Salvage any existing heat tape and provide it to the property owner.
2. Repair wooden subfloors and flooring disturbed by the work to a safe and functional condition.
3. Replace piping to the next joint or fitting to ensure a sound connection.
4. Install lockable valves where buildings possess more than one water meter and downstream valves require replacement.

C.3 Abandonment and Electrical Bonding

Perform work in accordance with the construction requirements specified in the Construction article for “Connect to Existing Indoor Plumbing”.

C.4 Flushing

Perform work in accordance with the construction requirements specified in the Construction article for “Connect to Existing Indoor Plumbing”.

D Measurement

The department will measure Connect to Existing Indoor Plumbing, Crawlspace as each existing crawlspace indoor plumbing connection, 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.0060.09	Connect to Existing Indoor Plumbing, Crawlspace	EACH

Payment is full compensation for all requirements specified in the "Connect to Existing Indoor Plumbing" payment article; and for accessing crawlspaces, repairing wooden subfloors, salvaging heat tape, and ensuring freeze protection.

26. Prepare Finished Basement for Water Service Replacement, Item SPV.0060.10.

A Description

This special provision describes protecting, cleaning, deconstructing, and salvaging wall and floor finishes to access and replace a lead water service.

B Materials

Furnish protective floor and wall coverings (e.g., plastic sheeting, ram board, or padded blankets) to protect in-place finishes from dust, debris, and mechanical damage.

C Construction

C.1 Definition and Eligibility

Finished basements are those with floor and wall finishes, beyond standard paint, within the work area that require extra effort to access the water service entrance or protect existing surfaces. Moving stored materials or portable shelving does not constitute a finished basement and does not qualify for payment under this item.

The department will not pay for this item unless the contractor demonstrates and documents the extra effort required to protect or salvage basement finishes.

C.2 Coordination

Investigate alternative water service entrance locations, such as unfinished areas or closets, to minimize impacts to finished spaces. Discuss these alternatives with the owner and Engineer before disturbing any finishes.

When entrance locations cannot be moved to unfinished areas, provide all labor, tools, and expertise to minimize disturbance. Work with the Engineer and owner to ensure movable items are relocated before service installation.

C.3 Execution

Provide and place protective coverings over floor and wall finishes. If the service entrance is enclosed, remove finishes using care to minimize the extent of the opening. Remove finishes in a manner that allows the homeowner to salvage and store them for future reinstallation.

Protect all surrounding finishes that remain in place to prevent damage during construction. Complete all work within buildings within 48 hours of initiating service line replacement unless directed otherwise by the Engineer.

D Measurement

The department will measure Prepare Finished Basement for Water Service Replacement as each individual basement where the contractor performs the work as described, 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. 0060.10	Prepare Finished Basement for Water Service Replacement	EACH

Payment is full compensation for investigating alternate routes; for providing and placing protective coverings; for carefully deconstructing and salvaging finishes; and for all coordination with owners and the Engineer.

27. Salvage & Reinstall Signs Type I, Item SPV.0060.11.

A Description

This special provision describes removing, salvaging, and reinstalling existing street signs at the locations shown on the plans or as the engineer directs.

B Materials

Furnish all necessary hardware (bolts, nuts, washers) and mounting materials required for reinstallation. If the existing post foundation is damaged or cannot be reused, furnish a new foundation matching the requirements of standard specification 638.

C Construction

C.1 Preparation

Before removing any signs, record the precise location and orientation of each sign. Provide a method to ensure the sign is reinstalled in the same location and at the correct height and offset.

C.2 Removal and Storage

Carefully remove signs and posts. Store salvaged signs and hardware in a secure location that prevents damage, theft, or weathering.

Remove and dispose of any foundation material or structures that cannot be salvaged.

C.3 Site Safety

Immediately backfill and compact any holes or excavations resulting from the removal to eliminate safety hazards for pedestrians or vehicles. Use on-site material for backfill unless the Engineer directs otherwise.

C.4 Reinstallation

Reinstall the sign at its original location or as the plans show. Ensure the sign is level, plumb, and at the proper height according to standard specification 638.3. Replace any post foundations as required to ensure a stable and permanent installation.

Repair or replace any signs or posts damaged during the removal, storage, or reinstallation process at no additional cost to the department.

D Measurement

The department will measure Salvage & Reinstall Signs Type I as each Type I sign salvage and reinstallation, 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. 0060.11	Salvage & Reinstall Signs Type I	EACH

Payment is full compensation for recording existing locations; for removing, storing, and protecting signs; for removing and disposing of old foundations; for backfilling holes; and for reinstalling signs including new hardware and foundations.

28. Abandon Water Service at Curb Stop in Separate Excavation, Item SPV.0060.12.

A Description

This special provision describes locating, excavating, and abandoning an existing curb stop on an existing water service. This typically applies when a new main tap is being provided at a different location, and the existing service line includes a shared service with a portion of the shared service planned to remain.

B Materials

Vacant

C Construction

Follow the requirements of "Connect to Existing Corporation Stop" except as modified below.

Replace reference to "corporation stop" with "curb stop". Upon exposure of the existing curb stop, disconnect the private water service and furnish and install the appropriate cap or slug.

D Measurement

The department will measure Abandon Water Service at Curb Stop in Separate Excavation by 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. 0060.12	Abandon Water Service at Curb Stop in Separate Excavation	EACH

Payment is full compensation for all labor, equipment, and materials required to complete the Work.

Surface restoration associated with this item shall be paid under separate bid items.

29. Abandon Water Service At Corporation Stop in Separate Excavation, Item SPV.0060.13.

A Description

This special provision describes locating, excavating, and abandoning an existing corporation stop on an existing water main where no other water construction activity is planned. This typically applies when a new main tap is being provided at a different location than the existing corporation stop.

B Materials

Vacant

C Construction

Follow the requirements of "Connect to Existing Corporation Stop" except as modified below.

Upon exposure of the existing corporation stop, disconnect the water service and furnish and install the appropriate cap or slug.

D Measurement

The department will measure Abandon Water Service At Corporation Stop in Separate Excavation by 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.0060.13	Abandon Water Service At Corporation Stop in Separate Excavation	Each

Payment is full compensation for all labor, equipment, and materials required to complete the Work.

Surface restoration associated with this item shall be paid under separate bid items.

30. Provide Excavation for Hot Tap by SWLP Employees, Item SPV.0060.14.

A Description

This special provision describes providing an excavation over and around the existing water main for access by SWL&P crews to install a corporation stop by the hot tap method.

B Materials

Vacant

C Construction

The Contractor shall contact SWL&P and schedule tapping work three working days before the Work is to occur. The excavation shall be prepared before the scheduled time for tapping and be aligned between pipe joints as shown in plans. A contractor-owned trench box and ladder shall be provided to ensure trench safety in accordance with all state and federal laws and a stable, dry trench bottom shall be prepared. The Contractor shall coordinate and communicate with the SWL&P crew and Engineer to plan the exact location and angle of the corporation stop. The Contractor shall provide support for the new corporation stop, service or main pipe and service or main valve. This support shall include aggregate and blocking, if necessary, based on site conditions.

SWL&P will provide the materials for the tap up to the new corporation stop. The Contractor shall provide all material and labor to complete connection(s) to a new or replaced water service or main to the newly installed corporation stop.

If a SWL&P crew mobilizes to the Site and the excavation and trench are not prepared as specified, SWL&P will send an invoice to the contractor for the monetary amount of the lost time of the crew mobilized. Alternatively, this may be deducted from the contract total if this invoice remains unpaid.

D Measurement

The department will measure Provide Excavation for Hot Tap by SWLP Employees by each unit 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.0060.14	Provide Excavation for Hot Tap by SWLP Employees	Each

Payment is full compensation for all labor, equipment, and materials required to complete the Work. This item includes connecting any proposed service piping to the installed corporation stop.

Surface restoration associated with this item shall be paid under separate bid items.

31. 2" x 1" Tapping Tee W/ Electrofusion Saddle, Item SPV.0060.15.

A Description

This special provision describes providing a new electrofusion tap to a proposed 2" HDPE main extension.

B Materials

The tapping tee with electrofusion saddle shall be manufactured by Central Plastics Company or equal and shall conform to the requirements for HDPE pipe and fittings as specified.

C Construction

The HDPE water service pipe shall be butt fused, socket fused, or electrofused to the tapping tee with electrofusion saddle as required.

D Measurement

The department will measure 2" x 1" Tapping Tee W/ Electrofusion Saddle by each unit 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.0060.15	2" x 1" Tapping Tee W/ Electrofusion Saddle	Each

Payment is full compensation for all labor, equipment, and materials required to complete the Work.

32. Connect to Existing Corporation Stop, Item SPV.0060.16.

A Description

This special provision describes connecting a new or replaced water service pipe to an existing corporation stop.

B Materials

Existing corporation stops are anticipated to be either ¾" or 1" and typically come out of the top of the main. Service fitting connections shall be A.Y. McDonald 74776S or approved equal prior to transitioning to HDPE.

C Construction

The Contractor shall excavate and locate the existing corporation stop. If the exposed water service is found to be non-lead material, the Contractor shall immediately notify the Engineer and await further

direction. Using care and caution, the Contractor shall operate the existing corporation stop to ensure functionality prior to cutting the existing water service.

If the curb stop is damaged or not properly functioning upon exposure, the Contractor shall immediately notify the Engineer and await further direction. If the damage is a result of Contractor operations, the Contractor must repair or replace the damaged portions to provide a fully functional curb stop. In the case work is required by SWL&P (such as a new hot tap), SWL&P will send an invoice to the contractor for the monetary amount of the remedy. Alternatively, this may be deducted from the contract total if this invoice remains unpaid.

Following closing of the corporation stop, the Contractor shall disconnect the existing service and connect new service pipe to the existing corporation stop. All fittings and materials shall be provided by the Contractor. The Contractor shall confirm the corporation stop is not leaking at the packing. If leakage is evident, the Contractor shall tighten the packing nut. The remaining disconnected service pipe shall be capped or plugged to prevent conduction of groundwater toward the building.

D Measurement

The department will measure Connect to Existing Corporation Stop by each unit 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.0060.16	Connect to Existing Corporation Stop	Each

Payment is full compensation for all labor, equipment, and materials required to complete the Work.

Surface restoration associated with this item shall be paid under separate bid items.

33. Blow-Off, Item SPV.0060.17.

A Description

This special provision describes providing a blowoff for the end of a 2" main extension. This item is only expected to be utilized for 2" main extensions.

B Materials

As shown in the plans.

C Construction

As shown in the plans and referenced elsewhere in these special provisions.

D Measurement

The department will measure Blow-Off by each unit acceptably completed.

Measurement include all items after the end of the 2" main measured as a single unit. This includes all fittings, piping, block, valve box, and any other items required or shown in the Blow-Off detail.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.17	Blow-Off	Each

Payment is full compensation for all labor, equipment, and materials required to complete the Work.

Surface restoration associated with this item shall be paid under separate bid items.

34. Replace/Install X-Inch Curb Stop and Box, Item SPV.0060.18-25.

A Description

This special provision describes providing new curb stops and boxes for both private service lines as well as for 2" main extensions.

Replace shall be used when the curb stop is within the general alignment (within 10' horizontally) of the original service line. The measurement does not apply if the curb stop is moving along the alignment (i.e. moving the curb stop closer to the property line).

Install shall be used when the curb stop is being installed at a new location such as a connection that is from a different street than the original service. Most frequently install will be utilized on new main taps or main extensions.

B Materials

All Curb Stops and Boxes shall meet the requirements of Chapter 8.31.0, *Wisconsin Water and Sewer Specifications* and the following requirements:

Curb stop: Shall be A.Y. McDonald 76104 or approved equal.

1. Must be BABA compliant
2. 1" in size with male flare x flare

Boxes for lines smaller than 2": Shall be A.Y. McDonald 5623a or approved equal.

1. Must be BABA compliant
2. Minneapolis pattern

Boxes for lines 2" or larger:

SWLP Name	Description	Manufacture
Lid	COVER, VALVE BOX, 5-1/4 IN SHAFT, MFR TYLER ITEM CODE 145325	Tyler
Top Piece	TOP, VALVE BOX, 5-1/4 IN SHAFT, 26 IN LONG, SCREW TYPE, MFR TYLER SERIES 6850-60 26T	Tyler
Middle Section	EXTENSION, VALVE BOX, 5 1/4 IN SHAFT, 18 IN LONG, SCREW TYPE, MFR TYLER SERIES 6850/60 60 18EXT	Tyler
Bottom Section	BOTTOM, VALVE BOX, 5 1/4 IN SHAFT, 36 IN LONG, SCREW TYPE, MFR TYLER SERIES 6860 36B	Tyler
Bottom Bell	BASE, VALVE BOX, 5 1/4 IN SHAFT, MFR TYLER SERIES 6860-65 NO. 6	Tyler
Bottom Bell Rubber Base	BASE ADAPTOR, VALVE BOX, RUBBER, #6 BASE, MFR ADAPTOR INC PART # 60070001 OR BINGHAM & TAYLOR PART # ADP5001006S	BINGHAM & TAYLOR
		ADAPTOR, INC.

C Construction

Install curb stops in accordance with Chapter 5.5.0 *Wisconsin Water and Sewer Specifications*, except as modified herein.

Disinfect each curb stop by immersing it into a 50 parts per million chlorine solution. Remove all concrete splashes or other debris from the box top.

For areas where the install item is used, removal of the remaining curb stop box may be required. This will be executed by removing the top section of the curb stop box and abandoning the remainder in place. This removal is included in this bid item, however restoration quantities associated with this will be measured separately.

For replacements of curb stops where the utility side service is planned to remain (primarily under circumstances of private only replacement with a leaking curb stop), the Contractor shall furnish equipment and labor to freeze the utility side service line to allow for replacement without excavation at the corporation stop. Freezing (or other suitable method) shall be incidental.

D Measurement

The department will measure Replace/Install X-Inch Curb Stop and Box by each unit acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.18	Replace 1-Inch Curb Stop and Box	Each
SPV.0060.19	Replace 1.25-Inch Curb Stop and Box	Each
SPV.0060.20	Replace 1.5-Inch Curb Stop and Box	Each
SPV.0060.21	Replace 2-Inch Curb Stop and Box	Each
SPV.0060.22	Install 1-Inch Curb Stop and Box	Each
SPV.0060.23	Install 1.25-Inch Curb Stop and Box	Each
SPV.0060.24	Install 1.5-Inch Curb Stop and Box	Each
SPV.0060.25	Install 2-Inch Curb Stop and Box	Each

Payment is full compensation for all labor, equipment, and materials required to complete the Work.

Surface restoration associated with this item shall be paid under separate bid items.

35. Exploratory Excavation, Item SPV.0075.01.

A Description

This special provision describes providing exploratory excavation via mechanical trench excavation for the purpose of:

1. Locating unmarked or mis-marked water services or water mains beyond the extent of the maximum pay limit details.
2. Excavation planned to include lead replacement, but where non-lead material is discovered and no replacement occurs.
3. Extending a pothole excavation beyond 48", at the direction or approval of the Engineer.
4. Excavation at the direction of approval of the Engineer that is not included in other bid items.

Exploratory excavation under this item is intended only for special circumstances requiring true subsurface exploration beyond normal and anticipated construction conditions and shall not be used for routine excavation, standard service locating, or work otherwise incidental to other bid items.

B Materials

Furnish all materials, equipment, and incidentals necessary to perform exploratory digging. This includes conventional power-driven excavation equipment and non-destructive excavation equipment suitable for locating existing utilities without causing damage. Provide any materials required to properly support and protect exposed utilities during the Work.

C Construction

Perform exploratory digging at locations in the plans or as directed by the Engineer. Follow State of Wisconsin utility locate laws for all excavations. The City does not locate private utilities, including private water services. Provide all equipment, labor, and methods typically used by the on-site crew for water construction activities. Use both power excavation equipment and non-destructive methods, as necessary, to avoid damaging existing utilities. Properly support and protect all exposed utilities and promptly report them to the Engineer. Document the location of each utility, including depth and horizontal offset measurements.

D Measurement

Exploratory excavation will be measured only when authorized in advance by the Engineer as work beyond normal construction operations and not otherwise covered by other bid items.

The department will measure Exploratory Excavation by the hour acceptably completed.

Measurement of time will begin the moment excavation beyond the scope of other covered construction activities begins and shall be immediately communicated and agreed upon between the Contractor and the Engineer. Pothole excavations up to 48-inches for the purpose of water service material identification will be measured and paid for under other bid items.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
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Payment is full compensation for all labor, equipment, and materials required to complete the Work. No payment will be made under this item for locating private utilities, private water service lines or other non-water utilities.

36. **Exploratory Excavation (Hydro-Excavating), Item SPV.0075.02.**

A Description

This special provision describes providing exploratory excavation via hydro-excavation for the purpose of:

1. Locating unmarked or mis-marked water services or water mains beyond the extent of the maximum pay limit details.
2. Extending a pothole excavation beyond 48", at the direction or approval of the Engineer.
3. Excavation at the direction of approval of the Engineer that is not included in other bid items.

Exploratory excavation under this item is intended only for special circumstances requiring true subsurface exploration beyond normal and anticipated construction conditions and shall not be used for routine excavation, standard service locating, or work otherwise incidental to other bid items.

B Materials

Furnish all materials, equipment, and incidentals necessary to perform hydro-excavation. This includes a hydro-excavation truck and all associated equipment required to safely expose existing utilities. Provide any materials needed to properly support and protect exposed utilities during the Work.

C Construction

Perform exploratory excavation using hydro-excavation at the locations shown in the plans or at locations the Engineer directs. Follow State of Wisconsin utility locate laws for all excavations. The City does not locate private utilities, including private water services. Use both power excavation equipment and non-destructive methods, as necessary, to avoid damaging existing utilities. Properly support and protect all exposed utilities and promptly report them to the Engineer. Document the location of each utility, including depth and horizontal offset measurements.

D Measurement

Exploratory excavation will be measured only when authorized in advance by the Engineer as work beyond normal construction operations and not otherwise covered by other bid items.

The department will measure Exploratory Excavation (Hydro-Excavation) by the hour acceptably completed.

Time the equipment is standing by, idle time, or time the equipment is off-site to fill or empty will not be measured or paid. Measurement of time will begin the moment excavation extends beyond the scope of other covered construction activities and shall immediately be communicated and agreed upon between the Contractor and the Engineer. Pothole excavations up to 48-inches for the purpose of water service material identification will be measured and paid for under other bid items.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV. 0075.02	Exploratory Excavation (Hydro-Excavating)	HOUR

Payment is full compensation for all labor, equipment, and materials required to complete the Work. No payment will be made under this item for locating private utilities, private water service lines or other non-water utilities. No payment will be made for idle time or time the equipment is offsite.

37. **Indoor Plumbing to Relocate Water Meter, Item SPV.0090.01.**

A Description

This special provision describes providing interior plumbing required due to a water meter relocation greater than 5 feet horizontally from the in-place meter location.

B Materials

Furnish plumbing pipes, valves, and fittings that match existing interior pipe diameters and comply with the Wisconsin Plumbing Code. If the building has multiple meters and downstream valves require replacement, furnish lockable valves.

C Construction

Complete work in addition to applicable item SPV.0060.09 “Connect to Existing Indoor Plumbing” or SPV.0060.10 “Connect to Existing Indoor Plumbing, Crawlspace”.

Install interior piping to relocate water meter from the existing plumbing to new location specified or approved by the Engineer.

Complete all Work within buildings within 48 hours of initiating service line replacement unless otherwise approved in writing by the Engineer.

D Measurement

The department will measure Indoor Plumbing to Relocate Water Meter in length by the linear 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.0090.01	Indoor Plumbing to Relocate Water Meter	LF

Payment is full compensation for all labor, equipment, and materials for water meter relocation.

The department will not make separate payment for failed installation attempts.

38. Remove & Replace Concrete Curb & Gutter Type A, Item SPV.0090.02.

A Description

This special provision describes removing existing concrete curb and gutter and constructing new concrete curb and gutter, including base materials and tie bars, at the locations shown on the plans.

B Materials

Furnish materials conforming to the following:

SPV.0090.02 MATERIALS

MATERIAL	REQUIREMENTS	REFERENCE	NOTES
Concrete		WisDOT 601	
Base Aggregate Dense 3/4-Inch		WisDOT 305	
Tie Bars		WisDOT 505.2.4	
Grout	Use a department-approved high-strength, non-shrink grout		

C Construction

C.1 Removal

Remove the minimum amount of curb and gutter necessary to complete water construction Work. Sawcut the existing curb and gutter to match the width of the trench excavation according to the "Remove & Replace HMA Pavement" and "Remove & Replace Concrete Pavement" details.

If the remaining curb is less than 18 inches from an existing contraction or construction joint, remove and replace the curb to that joint. Perform removals in a manner that protects the in-place curb and gutter to remain. Dispose of all excavated materials off the project right-of-way.

C.2 Installation

Place and compact a minimum 8.5-inch thick layer of Base Aggregate Dense 3/4-Inch.

Drill and grout two tie bars into the adjacent remaining curb and gutter at each longitudinal joint. Construct the new unit to match the WisDOT Standard Detail Drawing (SDD) for Type A Curb and Gutter, matching the existing adjacent profile and grade.

D Measurement

The department will measure Remove and Replace Concrete Curb and Gutter Type A by the lineal foot, acceptably completed. The maximum payment length per location is 8 feet unless the plans show otherwise or the engineer directs a longer length.

The department will not measure or pay for construction impacts beyond the identified pay limits, regardless of the lead service line replacement methods used.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.02	Remove & Replace Concrete Curb & Gutter Type A	LF

Payment is full compensation for saw cutting, removing, and disposing of existing curb, gutter, and excavated materials; for providing and compacting granular sub-base and aggregate base; for drilling and grouting tie bars; and for furnishing and placing new concrete.

The department will not provide additional compensation for failed installation attempts or work resulting in only partial replacement of a lead service line.

39. Remove & Replace Concrete Curb & Gutter Type D, Item SPV.0090.03.

A Description

This special provision describes removing existing integrant concrete curb and constructing new integrant curb, including base materials and tie bars, at the locations shown on the plans.

B Materials

Conform to the requirements specified in the special provision for “Remove & Replace Concrete Curb and Gutter Type A”.

C Construction

Perform work according to the construction requirements specified in the special provision for “Remove & Replace Concrete Curb and Gutter Type D”, except drill and grout one tie bar into the adjacent remaining curb head at each joint. Additionally, if the curb was separated from the roadway slab during removal, drill and grout tie bars into the edge of the pavement slab to restore the integral connection.

D Measurement

The department will measure Remove & Replace Concrete Curb Type D by the lineal foot, acceptably completed, according to the measurement requirements specified in the special provision for “Remove & Replace Concrete Curb and Gutter Type D”.

The department will not measure or pay for construction impacts beyond the identified pay limits, regardless of the lead service line replacement methods used.

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	Remove & Replace Concrete Curb & Gutter Type D	LF

Payment is full compensation according to the payment requirements specified in the special provision for “Remove and Replace Concrete Curb & Gutter Type A”.

The department will not provide additional compensation for failed installation attempts or work resulting in only partial replacement of a lead service line.

40. HDPE Water Service Pipe X-Inch, Item SPV.0090.04-11.

A Description

This special provision describes furnishing and installing HDPE water service pipe from the main to the curb stop, and from the curb stop to the building interior meter connection. Work includes trenching or trenchless installation; boring and receiving pits; sheeting and shoring; core drilling and waterproofing foundation penetrations; disconnecting existing services; flushing and testing.;

B Materials

B.1 Water Service

All water service tubing shall meet the requirements of Chapter 8.24.0, *Wisconsin Water and Sewer Specifications* and the requirements herein:

1. HDPE Pipe and Fittings

- a. Water service pipe 3” and smaller shall be polyethylene pipe conforming to the requirements of AWWA C901, current edition, Polyethylene (PE) Pressure Pipe and Tubing, ½ inch through 3 inch for water service and ASTM D2239 or D3035. Pipe shall be PE 4710 compound conforming to ASTM D3350 minimum cell classification 445574C-CC3, DR 9, shall have a minimum working pressure of 250 psi at 73 degrees F and have outside diameters similar to iron pipe size. Joints shall be butt heat fusion type, ASTM F2620. Joints may be socket fused type for services 3 inches and smaller. Ends shall be plain for butt fusion joining.
- b. Couplings used for branch services shall be electrofusion or socket type. Couplings used for tap services may be electrofusion or socket type.
- c. Pipe shall be new or stored for a period of time that does not exceed the manufacturer’s recommended maximum period of exposure, regardless of the method of storage.
- d. Shop drawings for HDPE pipe must specify minimum allowable pipe deflection radius.

B.2 Restoration Materials

SPV.0090.07-09 MATERIALS 2

MATERIAL	REQUIREMENTS	REFERENCE	NOTES
Topsoil		WisDOT 625	
Hydroseed		WisDOT 630	

C Construction

C.1 General

Install water services at the locations shown on the plans or as directed by the Engineer. Maintain minimum cover depths as specified. The engineer may direct the placement of polystyrene insulation for freeze protection.

C.2 Installation Methods

Use any of the following methods or a combination thereof:

- 1. Trenchless (New Route): Directional drilling or pneumatic/hydraulic boring.
- 2. Trenchless (Existing Route): Pipe splitting, pipe bursting, or pipe pulling.
- 3. Open Trench: Direct excavation.

C.3 Restoration and Utilities

Protect all existing utilities, including private sewer services. Restore all construction impacts within and outside the right-of-way to a "like-new" condition.

On private property, restoration includes but is not limited to: ground surfaces, turf, vegetation, yards, walks, stairs, porches, structures, retaining walls, and landscaping. Turf restoration must include at least 4-inches of topsoil and hydroseed.

C.4 Tracer Wire and Anodes

Locating (tracer) wire shall be constructed on all plastic water mains and services per MN Rural Water Tracer Wire Spec Guide. Locating wire shall be connected to existing metal pipes at watermain connection points.

MN Rural Water Tracer Wire Spec Guide can be found here:

Anodes shall be provided as shown in the plans.

D Measurement

For (private) pay items, the department will measure HDPE Water Service Pipe X-INCH in length by the linear foot, acceptably completed, measured once along the final pipe alignment from the curb stop to the meter connection in the house.

For (Utility) pay items, the department will measure HDPE Water Service Pipe X-INCH in length by the linear foot, acceptably completed, measured once along the final pipe alignment from the water main to the curb stop.

All fittings, tracer wire, tracer boxes, anodes, and associated work shall be incidental. Note this applies to all fittings, tracer wire, tracer boxes, and anodes on the project, not only those associated with this item.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	HDPE Water Service Pipe 1-Inch (Private)	LF
SPV.0090.05	HDPE Water Service Pipe 1-Inch (Utility)	LF
SPV.0090.06	HDPE Water Service Pipe 1.25-Inch (Private)	LF
SPV.0090.07	HDPE Water Service Pipe 1.25-Inch (Utility)	LF
SPV.0090.08	HDPE Water Service Pipe 1.5-Inch (Private)	LF
SPV.0090.09	HDPE Water Service Pipe 1.5-Inch (Utility)	LF
SPV.0090.10	HDPE Water Service Pipe 2-Inch (Private)	LF
SPV.0090.11	HDPE Water Service Pipe 2-Inch (Utility)	LF

Payment is full compensation for all labor, equipment, and materials for water service installation; for all trenchless or open-trench work; for sanitary service replacement (when required); for all permits and inspections; for core drilling and waterproofing.

The department will not make separate payment for failed installation attempts or for the sanitary sewer pipe and fittings used during pipe bursting.

41. Copper Water Service Pipe 1-Inch, Item SPV.0090.12-13 13-14.

Replace section B.1 Water Service of special provision HDPE Water Service Pipe X-Inch with the following:

B.1 Water Service

Furnish 1-inch Type K copper service pipe and fittings..

Replace bid item list in section E Payment of special provision HDPE Water Service Pipe X-Inch with the following:

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.12	Copper Water Service Pipe 1-Inch (Private)	LF
SPV.0090.13	Copper Water Service Pipe 1-Inch (Utility)	LF

All other provisions of special provision HDPE Water Service Pipe X-Inch remain in effect.

42. HDPE Water Service Main 2-Inch, Item SPV.0090.14.

A Description

This special provision describes providing new 2" HDPE water main.

B Materials

Provide materials as identified in HDPE Water Service Pipe section.

C Construction

Prior to executing any 2" extension efforts, conduct any prework as required (such as potholing or exploratory excavation to confirm the need to replace a private service.

For any 2" main extensions, first schedule an onsite review with the Engineer to confirm the preferred route. Excavation shall not commence until both the Engineer and the Contractor have agreed to the proposed route and allowable restoration pay limits. Allowable excavation and restoration limits shall match those provided in the Plans for private service lines. Notes are provided in the bidding documents for the assumed route, but these may be adjusted based on the onsite review and quantities will be adjusted accordingly.

Any work associated with a main extension that does not follow this process will not be eligible for payment.

D Measurement

The department will measure HDPE Water Service Main 2-Inch by the linear foot acceptably completed.

There will be separate measurement for excavation for the hot tap with the associated bid item.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.14	HDPE Water Service Main 2-Inch	LF

Payment is full compensation for all labor, equipment, and materials required to complete the Work

43. Erosion Control, Item SPV.0105.01.

A Description

This special provision describes providing materials, installation, maintenance, adjustments, relocation, and removal of erosion and sediment control best management practice (BMP) devices necessary for water service replacement work and practices applicable to the Work as performed. Erosion control requirements will be contingent upon the schedule and operations of the contractor.

B Materials

Furnish all necessary materials according to standard specification 628 including, but not limited to silt fence, inlet protection, erosion mat or erosion control blanket, geotextile fabric, plastic sheeting, approved flocculants.

C Construction

C1. General

The Contractor is solely responsible for erosion and sediment control planning and implementation. The necessity, type, location, and sequencing of BMPs shall be determined by the Contractor based on construction operations.

Ensure all erosion and sediment control measures are appropriate for the means and methods used.

C2. Phasing and Stabilization

Sequence operations to minimize the area and duration of exposed soil.

Stabilize disturbed areas not actively worked within three calendar days. If permanent stabilization cannot be completed, install temporary stabilization.

Protect all disturbed slopes within three calendar days of disturbance.

Stabilize all exposed soil prior to forecasted rainfall events occurring during non-working periods, including evenings and weekends.

Complete final restoration as soon as practicable to reduce erosion potential.

C3. Inlet and Perimeter Protection

When work at a site extends beyond three calendar days, or when rainfall is forecast within twenty-four hours:

- Install inlet protection immediately downstream of the work area.

- Install perimeter sediment control along the downstream limits of disturbance.

Install perimeter control around soil stockpiles remaining in place longer than three calendar days or when rainfall is forecast within twenty-four hours.

C4. Dewatering

Filter water pumped or otherwise discharged from excavations in accordance with standard specification 628. Discharge of sediment-laden water to storm sewer systems, waterways, or adjacent properties will not be permitted. Use of flocculants shall require approval of the Engineer.

C5. Maintenance and Inspection

Prevent tracking of soil onto paved surfaces and remove all soil, mud, or debris deposited on roadways prior to the end of each workday.

Inspect BMP devices at least once every seven days and within twenty-four hours after a rainfall event of one-half inch or greater, or as directed by the Engineer.

Repair, replace, or clean nonfunctional BMPs immediately.

Failure to implement or maintain adequate erosion control measures may result in suspension of work until corrective measures are completed. Work performed without appropriate BMPs in place may be considered unacceptable and subject to nonpayment.

D Measurement

The department will measure Erosion Control by the lump sum, 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.0105.01	Erosion Control	LUMP SUM

Payment is full compensation for furnishing all labor, materials, equipment, planning, installation, maintenance, adjustment, relocation, removal, cleanup, dewatering filtration, inspections, and incidentals necessary to complete the Work.

44. Remove & Replace Concrete Sidewalk X-Inch, Item SPV.0165.01-02.

A Description

This special provision describes removing existing concrete sidewalks and constructing new concrete sidewalk, including the required base aggregate, at the locations shown on the plans.

B Materials

Furnish materials conforming to the following:

SPV.0165.01-02 MATERIALS

MATERIAL	REQUIREMENTS	REFERENCE	NOTES
Concrete		WisDOT 602	
Base Aggregate Dense ¾-Inch		WisDOT 305	

C Construction

C.1 Removal

Remove the minimum amount of sidewalk necessary to complete water construction activities. Remove only the panels intersecting the 8-foot trench section. Do not exceed a total removal width of 15 feet measured perpendicular to the trench centerline.

Sawcut the sidewalk full-depth at the removal limits or remove to the nearest adjacent contraction joint. Perform removals in a manner that protects the remaining sidewalk. Dispose of all excavated materials off the project right-of-way.

C.2 Installation

Cut roots and perform necessary grading to prepare the subgrade. Place and compact a 4-inch thick layer of Base Aggregate Dense 3/4-Inch.

Construct a new concrete walk to match the location and width of the removed walk. Ensure construction, including jointing and finishing, conforms to standard specification 602.3.

D Measurement

The department will measure Remove and Replace Concrete Walk X-INCH by the square foot, acceptably completed. The department will only measure work within the pay limits shown in the plans. The department will not measure or pay for construction impacts beyond these limits, regardless of the lead service line replacement methods used.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Remove & Replace Concrete Sidewalk 4-INCH	SF
SPV.0165.01	Remove & Replace Concrete Sidewalk 7-INCH	SF

Payment is full compensation for saw cutting and removing existing sidewalk; for root cutting, excavation, and disposal of materials; for grading and subgrade preparation; for furnishing, placing, and compacting 4 inches of base aggregate; and for furnishing, placing, and finishing the concrete.

The department will not pay for removals or restoration resulting from failed service installation attempts or work that results in only partial replacement of a lead service line.

45. Remove & Replace Concrete Steps, Item SPV.0165.03.

A Description

This special provision describes removing existing concrete steps and railings and constructing new concrete steps, including subgrade preparation, base materials, and railing reinstallation at the locations shown on the plans.

B Materials

Furnish materials conforming to the following:

SPV.0165.03 MATERIALS

MATERIAL	REQUIREMENTS	REFERENCE	NOTES
Concrete		WisDOT 501	
Expansion Joint Filler		WisDOT 415.2.3	
Base Aggregate Dense 3/4-Inch		WisDOT 305	
Railing			Match existing material or furnish new as specified in the plans.

C Construction

C.1 Removal

Sawcut and remove existing concrete steps within the limits shown on the plans or as directed by the Engineer. Dispose of all waste materials off the project right-of-way.

The contractor is responsible for any damage or disturbance beyond the identified limits. Repair or replace damaged areas to the Engineer's satisfaction at no additional cost to the department.

C.2 Installation

Prepare the subgrade soils and place a 6-inch layer of compacted Base Aggregate Dense 3/4-Inch.

Construct new steps in accordance with standard specification 604.3 and the most current edition of the ADA Standards for Accessible Design. Ensure the following:

- Uniform riser heights and tread depths.

- Proper drainage slope on treads (1% to 2%).
- Smooth-troweled finish on all exposed surfaces with a light broom finish for slip resistance.

D Measurement

The department will measure Remove & Replace Concrete Steps by the cubic yard, acceptably completed, based on the dimensions shown on the plans or as directed by the engineer.

The department will measure and pay for railing removal and reinstallation separately under the “Salvage & Reinstall Railing” bid item.

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	Remove & Replace Concrete Steps	SF

Payment is full compensation for saw cutting, removing, and disposing of existing concrete; for subgrade preparation; for furnishing and compacting base aggregate; and for furnishing all concrete masonry.

46. Pavement Marking Special, Item SPV.0165.04.

A Description

This special provision describes removal and reinstallation of pavement markings to match in place markings.

B Materials

Furnish epoxy paint in accordance with WisDOT 646. Color to match existing for areas of disturbance.

C Construction

Replace pavement markings as directed by the Engineer. Match adjacent

Exact scope of pavement marking replacement will be determined in the field based on actual excavation locations. Assume a single mobilization will be required.

D Measurement

The department will measure Pavement Marking Special by the square yard acceptably completed.

For linear striping, 1 linear feet of 4” striping will constitute one square foot of measurement.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.04	Pavement Marking Special	Square Foot

Payment is full compensation for all labor, equipment, and materials required to complete the Work. Adequate preparation of the surface is included in this item.

47. Remove & Replace HMA Pavement, Item SPV.0180.01.

A Description

This special provision describes saw cutting, removing, and replacing the existing bituminous pavement and underlying materials. Construct the street section with HMA pavement, crushed aggregate base, and select granular subgrade to match existing in-kind section.

B Materials

Furnish materials conforming with the “Remove & Replace HMA Pavement” detail and the specifications listed below.

SPV.0180.01 MATERIALS

MATERIAL	REQUIREMENTS	REFERENCE	NOTES
HMA Pavement	Approve mixtures before placing.	WisDOT 460	Match pavement thickness to existing in-kind pavement.
Aggregate Base	Conforms with the gradation requirements.	WisDOT 301, WisDOT 305	Ensure that there is adequate moisture in the aggregate during placing, shaping, and compacting to prevent segregation. Match layer thickness to adjacent pavement base.
Select Granular Subgrade	Conforms with the gradation requirements.	WisDOT 211, WisDOT 310	Match layer thickness to adjacent pavement subgrade.

C Construction

C1. Removal

Remove the minimum amount of pavement necessary to accomplish the water construction activities.

The maximum removal width is 8 feet unless directed otherwise by the Engineer.

The maximum removal height is 2 feet unless directed otherwise by the Engineer.

C2. Existing Conditions

Protect existing pavements to remain. Damage to existing pavements designated to remain beyond the pay limits are repaired at the Contractor's expense.

Use trench excavation methods to prevent undermining of in-place curbs and pavements to remain. Undermined curbs or pavements designated to remain beyond the pay limits are repaired at the Contractor's expense.

Protection or repair/replacement of existing roadway subdrain pipe is incidental.

C3. Placement

Construct the replacement sections to match the thickness and grades of the surrounding in-kind pavement layers.

Install and compact select granular subbase according to standard specification 310.

Install and compact crushed aggregate base according to standard specification 305.

Place HMA pavement patch according to standard specification 460.

Match the final surface elevation with the adjacent pavement to ensure a smooth transition.

D Measurement

The department will measure Remove & Replace HMA Pavement by the square yard, 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	Remove & Replace HMA Pavement	SY

Payment is full compensation for saw cutting existing bituminous pavement; removing and disposing of existing pavement and its layers; preparing and compacting the subgrade and base layers; placing HMA pavement; and matching existing conditions. The maximum removal width is 8 feet, and the maximum removal height is 2 feet. There is no separate payment for any pavement construction impacts or repairs beyond the maximum pay limits.

48. Remove & Replace Concrete Pavement, Item SPV.0180.02.

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A Description

This special provision describes saw cutting, removing, and replacing the existing bituminous pavement and underlying materials. Construct the street section with concrete pavement, crushed aggregate base, and select granular subgrade to match existing in-kind section.

B Materials

Furnish materials conforming with the "Remove & Replace Concrete" detail and the specifications listed below.

TABLE 1

MATERIAL	REQUIREMENTS	REFERENCE	NOTES
Concrete Pavement	Approve mixtures before placing.	WisDOT 415	Match pavement thickness to existing in-kind pavement.
Reinforcement Bars (If Necessary)	Clean and free of rust	WisDOT 415, SDD 13C09-18b	
Aggregate Base	Conforms with the gradation requirements.	WisDOT 301, WisDOT 305	Ensure that there is adequate moisture in the aggregate during placing, shaping, and compacting to prevent segregation. Match layer thickness to adjacent pavement base.
Select Granular Subgrade	Conforms with the gradation requirements.	WisDOT 211, WisDOT 310	Match layer thickness to adjacent pavement subgrade.

C Construction

C1. Removal

Remove the minimum amount of pavement necessary to accomplish the water construction activities.

The maximum removal width is 8 feet unless directed otherwise by the Engineer.

The maximum removal height is 2 feet unless directed otherwise by the Engineer.

C2. Existing Conditions

Protect existing pavements to remain. Damage to existing pavements designated to remain beyond the pay limits are repaired at the Contractor's expense.

Use trench excavation methods to prevent undermining of in-place curbs and pavements to remain. Undermined curbs or pavements designated to remain beyond the pay limits are repaired at the Contractor's expense.

Protection or repair/replacement of existing roadway subdrain pipe is incidental.

C3. Placement

Construct the replacement sections to match the thickness and grades of the surrounding in-kind pavement layers.

Install and compact select granular subbase according to standard specification 310.

Install and compact crushed aggregate base according to standard specification 305.

Place Concrete pavement patch according to standard specification 415.

The department will pay separately for reinforcement bars, when called out in the plan. Place #4 epoxy-coated reinforcement bars, 30 inches long, placed 36 inches maximum on center on the longitudinal joint (parallel with roadway centerline) of the concrete repair.

Match the final surface elevation with the adjacent pavement to ensure a smooth transition. Allow pavement to properly cure.

D Measurement

The department will measure Remove & Replace Concrete Pavement by the square yard, 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.0180.02	Remove & Replace Concrete Pavement	SY

Payment is full compensation for saw cutting existing concrete pavement; removing and disposing of existing pavement and its layers; preparing and compacting the subgrade and base layers; pouring concrete pavement; placing reinforcement bars if necessary; and matching existing conditions. The maximum removal width is 8 feet, and the maximum removal height is 2 feet. There is no separate payment for any pavement construction impacts or repairs beyond the maximum pay limits.

49. Remove & Replace Asphaltic Surface, Item SPV.0180.03.

A Description

This special provision describes providing removal and replacement of asphaltic (bituminous) surfaces such as driveways including base and pavement, within the right-of-way.

B Materials

Furnish materials in accordance with WisDOT standard specifications 305 (Dense Graded-Base) and 460 (HMA Pavement).

C Construction

Remove only the minimum driveway area required. Limit removal width to 10 feet unless otherwise shown or approved.

Saw cut pavement full depth or remove to the nearest joint to provide a neat edge.

Perform removal to avoid damage to adjacent improvements.

Place dense graded base to match existing thickness or a minimum of 6 inches, whichever is greater.

Place HMA pavement to match existing thickness or a minimum of 3 inches.

Construct the driveway to match the original alignment, width, and cross slope.

This work includes saw cutting, root cutting, excavation, disposal, grading, base placement, and HMA placement and compaction.

D Measurement

The department will measure Remove & Replace Asphaltic Surface by the square yard, 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.0180.03	Remove & Replace Asphaltic Surface	SY

Payment is full compensation for all labor; materials; equipment; saw cutting; base; HMA pavement.

No additional payment will be made for work outside the defined pay limits. Restore all areas disturbed as a result of removing and replacing asphaltic surfaces within the right-of-way to equal or better condition at no additional cost.

No payment will be made for failed construction methods or service installation attempts or work resulting in partial completion of associated service line replacement.

50. Remove & Replace Concrete Driveway Pavement 8-Inch, Item SPV.0180.04.

A Description

This special provision describes providing removal and replacement of concrete driveways, including base and pavement, within the right-of-way.

B Materials

Furnish in accordance with WisDOT standard specifications 305 (Dense Graded-Base) and 415 (Concrete Pavement).

C Construction

Remove only the minimum driveway area necessary. Limit removal width to 10 feet unless otherwise shown or approved.

Saw cut full depth or remove to the nearest joint to provide a clean edge.

Perform removal to prevent damage to adjacent improvements.

Place dense graded base to match existing thickness or a minimum of 6 inches.

Construct concrete pavement to match existing thickness or a minimum of 8 inches.

Match existing driveway alignment, width, and grade. Provide joints consistent with adjacent driveway sections.

This work includes saw cutting, root cutting, excavation, disposal, grading, base placement, concrete placement, finishing, and curing.

D Measurement

The department will measure Remove & Replace Concrete Driveway Pavement 8-Inch by the square yard, 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.0180.04	Remove & Replace Concrete Driveway Pavement 8-Inch	SY

Payment is full compensation for all labor; materials; equipment; base; concrete pavement; finishing; and curing.

No additional payment will be made for work outside the defined pay limits. Restore all areas disturbed as a result of removing and replacing concrete driveway within the right-of-way to equal or better condition at no additional cost.

No payment will be made for failed construction methods or service installation attempts or work resulting in partial completion of associated service line replacement.

51. Remove & Replace Gravel Surface, Item SPV. 0180.05.

A Description

This special provision describes providing removal and replacement of existing gravel driveways within the right-of-way as shown on the plans or as directed by the engineer.

B Materials

Furnish materials in accordance with WisDOT standard specification 305 (Dense-Graded Base).

C Construction

Remove only the minimum portion of driveway required to complete the work. Limit removal width to a maximum of 10 feet unless otherwise shown on the plans or approved by the engineer.

Perform removals in a manner that prevents damage to adjacent driveway, curb, or sidewalk remaining in place.

Place and compact dense graded base to match the existing thickness or a minimum of 6 inches, whichever is greater.

Construct the driveway to match the original location, width, and cross section.

This work includes all excavation, disposal of materials, grading, root cutting, furnishing, placing, and compacting base aggregate.

D Measurement

The department will measure Remove & Replace Gravel Surface by the square yard, 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.0180.05	Remove & Replace Gravel Surface	SY

Payment is full compensation for removing existing driveway; excavation; disposal; base aggregate; compaction; and grading.

No additional payment will be made for work outside the defined pay limits. Restore all areas disturbed as a result of removing and replacing gravel surfaces within the right-of-way to equal or better condition at no additional cost.

No payment will be made for failed construction methods or service installation attempts or work resulting in partial completion of associated service line replacement.

52. Salvage & Reinstall Landscape Garden, Item SPV.0180.06.

A Description

This special provision describes salvaging and reinstalling an existing landscape garden that will be disturbed during construction.

B Materials

Furnish materials conforming with the specifications listed below.

SPV.0180.06 MATERIALS

MATERIAL	REQUIREMENTS	REFERENCE	NOTES
Salvaged Plants	Carefully remove and protect the roots of existing plants. Maintain moisture during storage. Reinstall to original locations.	WisDOT 632	
Topsoil	Clean and free of debris or invasive species. Spread evenly on disturbed area.	WisDOT 625	Reused or imported topsoil. Match texture of existing topsoil.
Mulch	Shredded hardwood mulch or equivalent. Spread evenly on disturbed area.	WisDOT 627	Match color and texture of existing mulch.
Replacement Plants (If Necessary)	Same species and approximate size as originals.		Coordinate with homeowners for plant identification.

C Construction

Coordinate the level of work with the property owner and Engineer.

Perform salvage operations that prevent damage to existing plant materials, root systems, and garden features. Carefully excavate plants within the construction limits and preserve them in a shaded, protected location to maintain moisture.

Reinstall salvaged plants in their original locations unless directed otherwise by the Engineer. Restore garden beds to pre-construction conditions, including topsoil replacement, mulch replacement, and any decorative features disturbed during construction. Replace plants that cannot be salvaged or do not survive handling with the same species and approximate size.

Dispose of unsuitable or invasive materials off-site.

D Measurement

The department will measure Salvage & Reinstall Landscape Garden by the square foot including all labor, equipment, and materials necessary to remove, coordinate with the property owner, and reinstall garden to the Engineer's satisfaction.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.06	Salvage & Reinstall Landscape Garden	SF

Payment is full compensation salvaging an existing garden; coordinating with the property owner; storing and protecting existing plantings; replanting existing garden vegetation; and placing topsoil, mulch, and replacement plans as necessary.

53. Turf Establishment - Hydroseeding, Item SPV.0180.07.

A Description

This special provision describes providing preparation of soil surface and establishing turf by hydraulic seeding (hydroseeding) for areas of lawn restoration.

Conform to the requirements of standard specification 630.

B Materials

Furnish seed and fertilizer conforming to standard specification 630.2. Provide hydraulic mulch consisting of wood fiber, paper fiber, or other approved mulch suitable for hydroseeding. Provide a biodegradable tackifier and clean water free from substances harmful to plant growth.

C Construction

Prepare the soil surface before hydroseeding:

- Shape and finishing the area.
- Remove all debris and stones larger than 3 inches.
- Loosen the top 2 inches of the soil surface.

Apply the hydroseeding mixture uniformly using equipment capable of maintaining continuous agitation of the slurry.

Apply mulch and tackifier at the manufacturer's recommended rate.

Do not perform hydroseeding during high winds, rainfall events, or when soil conditions prevent proper placement or establishment.

Protect seeded areas from erosion and damage. Maintain seeded areas until 70% establishment not exceeding one growing season. Repair or reseed areas that fail to establish due to the contractor's operations.

D Measurement

The department will measure Turf Establishment - Hydroseeding by the square yard, 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.0180.07	Turf Establishment - Hydroseeding	SY

Payment is full compensation for preparing the ground surface; furnishing and applying seed, fertilizer, mulch, tackifier, and water.