This special provision describes preparation of foundation for asphaltic paving over a surface milled HMA surface in accordance to section 211 of the standard specifications and as hereinafter provided.

B Materials. (Vacant)

C Construction Methods.

Supplement section 211.3.5 of the standard specifications as follows:

After the surface mill, remove all surplus crack sealing, joint sealing, and asphalt patching materials to a minimum depth of 2 inches below the surface milled pavement. Completely remove unstable patches of asphaltic materials used to fill localized areas of pits, potholes, depressions, badly spalled areas, or disintegrated areas of old pavement. Remove any loose material with incipient spalling within or contiguous to such areas. Prior to refilling, all removal areas shall be cleaned by air blasting or other engineer approved methods.

Prior to placement of the HMA pavement or any wedging or leveling layers, refill these areas of removal, as described above, to the level of the milled surface. Payment for refilling these areas is paid for under bid item 465.0110 Asphaltic Surface Patching.

D Measurement.

The Department will measure Preparation for Foundation for Asphaltic Paving Special as a single complete unit of work.

E Payment.

Omit and replace subsection 211.5.1 (4) with the following:

This payment will be full compensation for all work under this item including brooming, air blasting, cleaning, crack fill removal, asphaltic material removal, and disintegrated pavement removal.

The department will pay separately for the following work associated with refilling the removal areas under the following contract items:

-Asphaltic Surface Patching for all mix placed under this item

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Preparation of Foundation for Asphaltic Paving Special	LS

25. Salt Storage Building, Item SPV.0105.04 and Accessory Storage Building, Item SPV.0105.05.

A.1 Description

This special provision describes designing, providing and erecting a wooden salt storage building and a wooden accessory storage building on a concrete foundation and electrical system as shown in the plans and as hereinafter provided. Provide a five year warranty on the roof. Include labor and materials in the warranty.

Obtain and pay for all permits, including but not limited to building and electrical, necessary to complete the work.

A.2 Warranty

The necessary warranty bond for the warranted roof items will be in effect for the entire five-year warranty period beginning when the Salt Storage and Storage Buildings are completed and opened. The bonding company must have an A.M. Best rating of "A-"or better and the contractor will provide proof of a five-year bond commitment before execution of the contract.

The warranty bond will be $12,000 for the warranted roof. The bond will insure the proper and prompt completion of required warranty work for the duration of the warranty period, including payments for furnishing all labor, equipment and materials used according to this specification.

The contract bond, which remains in effect for one year beyond the completion of the project, will also include warranty work as described in Section C.9 Warranty Work of this article. For the remaining four-year warranty period, provide documentation that the warranty bond will remain in effect for the portion of the warranty period after expiration of the contract bond.

If a subcontractor places the warranted roof, the subcontractor may provide the warranty bond for the remaining four-year warranty period after expiration of the contract bond. If the subcontractor does provide the bond, it shall be a dual obligee bond, naming the contractor and the Wisconsin Department of Transportation as obligees. The subcontractor shall provide documentation that the warranty bond will remain in effect for the portion of the warranty period after expiration of the contract bond.

Failure of the contractor, subcontractor or its surety to issue or renew the warranty bond will be considered a default and will result in forfeiture of the face amount of the bond to the department.

All warranty work will be as prescribed in Section C.9 Warranty Work of this article. At the end of the warranty period, the contractor will be relieved of the responsibility to perform further warranty work, provided all previous warranty work has been completed. Maintain insurance, in the course of performing warranty work, as specified in subsection 107.26 of the standard specifications throughout the five-year warranty period.

B Materials

B.1 General

Provide all pertinent shop drawings, structural design information and submittals to the engineer and representative of the Jackson County Highway Department prior to ordering and installing any materials required for the work. The engineer and representative of the Jackson County Highway Department must review all materials, design information and submittals prior to the contractor ordering and installing any materials required for the work. The required shop drawings include, but are not limited to:

- Concrete Footings
- Concrete floor
- Steel Reinforcement
- Structural-framing system
- Flashing and trim
- Doors
- Electrical Components

B.2 Floor
Furnish floating concrete mat floor to provide a minimum permissible soil bearing pressure of 3000 psf and that is in accordance to the pertinent requirements of sections 305 and 460 of the standard specifications.

B.3 Roofing
The asphalt shingle shall be a standard 3-tab shingle and provide a minimum manufacturer's prorated warranty as stated in the specifications. Install the shingles with large head, galvanized roofing nails as per the manufacturer's recommendations. Material for underlayment of shingle shall be non-perforated, 30 Ibs. per 100 sq. ft. asphalt saturated felt, 36 or 32 inches in width conforming to A.S.T.M. designation D-226-68. Provide samples of the shingle to the engineer and representative of the Jackson County Highway Department for approval of the color of the shingle. Do not order or install any shingles until the engineer and representative of the Jackson County Highway Department approves the color of the shingle.

The roofing material shall be interlocking shingles carrying a minimum manufacturer's warranty of 25 years. On areas with a pitch less than 3/ 12, rolled roofing shall be used with felt underlayment per local code requirements.

B.4 Finishes
The stain shall be a top quality solid color stain as approved by the engineer and representative of the Jackson County Highway Department. The color of the stain shall be as selected by the owner or the authorized representative. Provide a 2' x 2' mock up of the finished stain for the examination and approval of the engineer and representative of the Jackson County Highway Department prior to beginning the stain work.

B.5 Cast in Place Concrete
Assumed soil bearing of 3,000 lbs/s.f. All concrete used for footings and pier or post supports below and above grade shall have a minimum compressive strength of 3,500 psi at 28 days and in accordance to the pertinent sections of 502 of the standard specifications. Mix design shall be reviewed by the engineer within five working days of submittal. All concrete above shall be air entrained. Testing will be completed and paid for by the contractor. All holes to be backfilled to maximum density.

Steel reinforcement shall be in accordance to the pertinent requirements of sections 505 of the standard specifications. Metal shall be clean and free from loose rust, scale, or coatings that will reduce bond.

Anchor Bolts Shall be unfinished grade A.S.T.M. 5/8 inch minimum diameter designation A307 with minimum yield strength Fy = 36 ksi. Use hot dipped galvanized anchor bolts.

Include all spacers, chairs, ties and other devices necessary for the proper spacing, supporting and fastening of the reinforcing steel in place.

Portland cement shall be in accordance to the pertinent sections of 501 of the standard specifications.

Mixing water shall be clean and free from oil, acid and injurious amounts of vegetable matter, alkalis and other salts.

B.6 Timber

All timber below roof trusses shall be copper naphthenate pressure treated as per current state and/or AASHTO specifications.

All timber to be graded as per nfpa 1991 national design specifications for wood construction.

All timber to be cut to the exact length, dressed to size required and all practical framing to be done prior to treatment.

All 3" wall plank to be douglas fir-larch, no.1.

All 2" wall plank to be douglas fir-larch, no.1.

All posts to be douglas fir-larch, no.1.

Balance of timber to be douglas fir-larch/ponderosa pine in accordance with design requirements.

All timber is rough unless otherwise noted.

All timber cut in field shall be treated with 3 coats of and approved treating preservative.

B.7 Connections

All hardware to be galvanized as per current state specifications and/or asshto specification m232.

All bold threads to be set with a center punch after tightening.

All metal gusset plates on trusses and truss tie-downs shall be painted with asphalt paint.

3/4" dia. Cable to be zinc coated structural wire rope (asshto m-30)

All holes drilled in field where spikes are used are to be 1/16" smaller than spike size.

Holes drilled for bolts are to be 1/16" larger than bolt size.

Any nut or machine bolt head in direct contact with timber to have one plate washer between nut and timber, or bolt head and timber.

Any not or machine bolt head in direct contact with steel to have one cut washer between nut and steel or bolt head and steel.

B.8 Rolling Door (Salt Storage Building)

Rolling door shall be sized per manufacturer's recommendations, including curtain with galvanized steel slats, malleable iron end locks on alternate slats, wind locks as required to meet wind load (minimum 20 psf), structural steel angle guides, hot rolled steel brackets to support the barrel, counterbalance and hood. Counterbalance is helical torsion springs house in a steel pipe and adjustable be means of an external tension wheel. All no galvanized, exposed ferrous surfaces receive one coat of rust inhibitive primer. I HP operator, left hand drive with auxiliary hand chain and motor cover and includes hot dipped galvanized guides and bottom bar.

B.9 Sectional Overhead Door (Accessory Storage Building)

Sectional Steel Overhead Door

Based upon the products of EZ Glide commercial overhead doors or approved equal.
24ga. Uninsulated Ribbed steel.
Color - White

Door Operator

Industrial-duty jackshaft operator Liftmaster Logic 3.0 with remote controls (or approved equal)

C Construction

C.1 General

Construction requirements shall conform to WISDOT specifications. It will be the responsibility of the contractor to make minor adjustments necessary in the footings and foundation to accomplish a vertical building axis and level horizontal foundation lines. Any shoring required for the construction of the structure shall be included in the cost. Grade the interior of the buildings to maintain drainage away from the interior and positive drainage to the entrance. 25-year manufacturer's warranty shingles roofing.

C.2 Base Wall

Construct the base wall and foundation in accordance to the manufacturer's recommendations and the pertinent sections of 502 of the standard specifications. Excavation for the footing/ foundations shall be in accordance to the pertinent sections of 206 of the standard specifications.

C.3 Roofing
Surface to be covered with asphalt shingling shall be smooth and free from defects of every description, all such surfaces, shall be dry and clean from dirt, rubbish and other foreign materials before the roofing is started. Set flush to the roofing sheathing all projecting nails.

Installed roofing in accordance to the manufacturer's recommendations in the conventional manner after the completed building has been erected. Roofing felt or shingles will not be stored or applied on the building until all internal bracing has been installed. Install flashings where called for on the approved drawings with a minimum of 0.017 inch aluminum material. Apply the roofing shingles with large head galvanized roofing nails, the number and location of the nails to be as governed by the manufacturer's recommendations. Install roof vents and other openings in the roof in such a manner to prevent leakage.

C.4 Structure
Provide all labor, materials and equipment necessary to complete all carpentry work and related work under this section. All carpentry must be installed by skilled carpenters working under proper supervision. The work shall be carried out in a thoroughly high grade and workmanlike manner. Assembly and erection of structure and all related work must be done in accordance to drawings and specifications. Adjustments may be made on site if found to be necessary and shall be carried out in a workmanlike manner conforming to good building practices. Surfaces to be stained shall be free of all dust and dirt and must be completely dry. Apply two coats of stain based on the manufacturer's recommendations.

C.5 Concrete Reinforcing
Place reinforcement accurately in position as shown on the drawings; securely fasten and support to prevent displacement before and during pouring. Cleaning, bending and placing of reinforcement shall be done in accordance to the requirements of the American Concrete Institute codes and in accordance to the manufacturer's recommendations and the pertinent requirements of section 505 of the standard specifications.

C.6 Cast in Place Concrete
It shall be the contractor's responsibility to check all dimensions and accuracy of the form-work and reinforcing steel prior to placing the concrete. Place and protect the concrete in accordance to the pertinent sections of 502 of the standard specifications.

C.7 Doors
Install doors based on the manufacturer's recommendations. After completing installation, test and adjust doors to operate easily, free of warp, twist, and distortion.

C.8 Electrical
Perform all electrical work per applicable codes and shall be inspected and approved by

the local building department. Coordinate the power supply to the salt shed and storage building. Place electrical underground conduit prior to commencement of concrete pad construction.

The electrical work shall consist of the following:
The power to the site shall be 208 Volt, 3- phase 60 hertz unless otherwise approved by the engineer. Extend power from existing out building on site. Route 60AMP 3Ø feeder in PVC conduit and 60AMP 3Ø breaker in existing panel on site. Contractor shall confirm power supply with engineer prior to beginning work. On the outside of the entryway, the electrical contractor shall install a heavy duty rated 100 AMP/120 -240 V NEMA 4x panel with 12 circuits and 60AMP main breaker and PVC wiring to power the following:

Install two electrical outlets next to the electrical breaker panel and one on the interior of the accessory building near the door, in accordance to local code requirements. Install fixtures with all necessary switches and wiring to the fixtures. Light fixtures shall be positioned as follows on the appropriate location:
Installation shall include four LED light fixtures equally spaced in salt shed structure and two LED light fixtures equally spaced in accessory storage building. The fixtures shall be industrial moisture-proof types for use of this environment with LED exterior fixture mounted over the canopy of each entranceway. Install the interior fixtures so as not to be hidden or obstructed by any building construction and aligned to completely illuminate the full interior of the building. Exterior fixture shall have photo-cell switch. All exterior conduits shall be galvanized metal. All interior conduits to be P.V.C. schedule 40. All pull boxes and junction boxes inside the structure shall be PVC, weatherproof and corrosion resistant. They shall be firmly attached to the walls of the structure. The contractor shall install a flush-mounted switch for controlling interior lights. The contractor shall install a lockable NEMA 4x panel with a main and circuit breakers to control lighting and outlet. Mount the panel firmly to the exterior of the wall near the entrance and door. Place all electrical underground conduits prior to commencement of pad construction.

C.9 Warranty Work
Perform warranty work during the five-year warranty period at no additional cost to the department or county. Warranty work consists of remedial work and elective/preventive maintenance. Maintain insurance for performing warranty work as specified in Subsection 107.26 of the standard specifications throughout the warranty period. During warranty work operations, traffic control will be as specified in section 643 of the standard specifications and all will conform to Part 6 of the Wisconsin Manual on Uniform Traffic Control Devices. The contractor shall document all warranty work performed and annually provide this information to the county. If warranty work causes damage to the Buildings and all associated components, repair or replacement of the damage will be the responsibility of the contractor. Use replacement materials of the same kind specified in the original contract unless mutually agreed otherwise by the engineer and the contractor. All warranty work including, but not limited to, remedial work and elective/preventive maintenance shall require a permit from the county. The county will provide contact information for obtaining a permit to the contractor. Document all warranty work

performed. Use the departments form DT2305 to provide this information to the county each time work is performed on a warranty project.

C.10 Remedial Work

Remedial work will be based on the result of manual surveys or evaluations. Perform remedial work in the same calendar year that the distresses were recorded. Remedial work to be performed and materials to be used will be the joint decision of the contractor and the engineer. The contractor will have the first option to perform the remedial work. If, in the opinion of the engineer, the problem requires immediate attention for the safety of the public, and the contractor cannot perform the remedial work within eight hours, the engineer may have the remedial work performed by other forces and at the contractor's expense. Remedial work performed by other forces will not alter the requirements, responsibilities, or obligations of the warranty. If remedial action work or elective/preventive action work performed by the contractor necessitates a corrective action to other components of the Salt Storage Building, then such corrective action will be the responsibility of the contractor.

D Measurement

The department will measure Salt Storage Building as a single lump sum unit, acceptably completed.

The department will measure Accessory Storage Building as a single lump sum unit, acceptably completed.

Plan sheets say salt shed building + storage shed. Consistency?

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Salt storage building	LS
SPV.0105.05	Accessory Storage Building	LS

Payment is full compensation for excavating footings; soil borings and geotechnical data; providing all items in this special provision, including, but not limited to the footing/foundation, steel reinforcement, structure, roofing, doors, all electrical materials and components, including underground wiring and conduit; for fabricating, including all cutting, preparing, welding and coating; for installing, transporting, erecting and testing all necessary items; for obtaining all necessary permits; for providing electrical service; for the warranty and warranty bond; for performing warranty work; and for furnishing all labor, tools, equipment and incidentals necessary to complete the contract work.

26. Construction Staking Salt Storage Building, Item SPV.0105.06.

what about accessory building?

A Description

This item describes contractor-performed construction staking for the salt storage building and all associated staking including the subgrade, base, slope stakes, foundation, wall, door and utilities, including electrical components, for the storage building, parking lot,

accessory building,

access drive and all other associated items. This work shall be in accordance to the pertinent requirements of standard spec 650 and the details shown in the plans.

B (Vacant)

C Construction
Perform work in accordance to the pertinent requirements of standard spec 650.

D Measurement
The department will measure Construction Staking Salt Storage Building as a single lump sum unit of work, 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.0105.06	Construction Staking Salt Storage Building	LS

Payment is full compensation for performing all survey work required to layout and construct all work associated with the salt storage building including the subgrade, base, slope stakes, foundation, wall, door and utilities, including electrical components, for the salt storage building, parking lot, and all other associated items. No additional payments will be made for re-staking due to construction disturbance and knock-outs.

accessory building,

27. Reheating HMA Pavement Longitudinal Joints Special, Item SPV.0170.01.

A Description
This special provision describes reheating the abutting edge of the previously compacted upper layer in the adjacent lane while paving mainline asphalt pavements.

B (Vacant)

C Construction
C.1 Equipment
Provide a self-contained heating unit that heats by convection only. Do not use forced air to enhance the flame. Provide a fireproof barrier between the flame and the heater's fuel source. The heater must produce a uniform distribution of heat within the heat box. Provide automatic controls to regulate the heater output and shutoff the heater when the paver stops or the heater control system loses power.

Mount the heater on the paver inside the paver's automatic leveling device.

C.2 Reheating Joints
Evenly reheat at least an 8 inch (200 mm) wide strip of the previously compacted surface layer in the adjacent lane as follows: