6.1 Title Sheet

Title sheets for SHRM Projects shall contain the designation State Highway Rehabilitation-Maintenance Project in the project description area. The designation of State Highway Rehabilitation-Maintenance Project shall be deleted from title sheets used for Highway Maintenance Projects and Traffic Maintenance Projects. The only portion of the design designation on the title sheet that needs to be included is that pertaining to average daily traffic for the construction year. Coordinates are not required. Log distance measured to the nearest one hundredth of a mile may be used in lieu of linear feet as the basis for measuring net centerline length.

The signature block shall be revised to provide for the proper authorizing signature as shown in FDM 15-1 Attachment 10.1.

Title sheets for improvement projects shall be prepared in accordance with FDM 15-1-10.

Maintenance Resurfacing projects will have a net centerline length while Maintenance Bridge Rehabilitation and Maintenance Roadway projects will not have a net centerline length. Highway Maintenance Projects and Traffic Maintenance Projects will not have a net centerline length.

6.2 Details

Special details are not normally required since intersections, guardrail, etc., will typically not be upgraded. If any such work is incorporated in the contract, the details should be included.

6.3 Estimate of Quantities

The Estimate of Quantities Sheet is computer generated by Proposal Development Unit following the submittal of the P.S.& E.

6.4 Plan Sheets

When plan sheets are necessary, they may be prepared as conventional plan sheets or as line diagrams. The plan sheets should include the centerline stationing, structure notations, stationing of exceptions and equations and side road locations. Log distance may be used in lieu of centerline stationing on highways where centerline stationing cannot be established from existing plans or surveys.

Superelevations are typically not revised with a maintenance overlay so curve and superelevation data is not required unless changes to the superelevation rate are proposed.

LIST OF ATTACHMENTS

Attachment 6.1	Sample Title Sheet-Abbreviated Plan
Attachment 6.2	Sample Typical Section Sheet -Abbreviated Plan
Attachment 6.3	Estimate of Quantities
Attachment 6.4	Sample Plan Sheet -Abbreviated Plan

FDM 15-1-10 Title Sheets *March 4, 2013*

A Title Sheet is required on all contract plans. An example is illustrated in FDM 15-1, Attachment 5.1 and FDM 15-1, Attachment 6.1.

10.1 Project Title

The project title on the title sheet must be consistent with that shown on the Project Summary Screen in FIIPS. If FIIPS does not reflect the desired title, the region planning section can change it or request the Bureau of State Highway Programs in central office to do so.

Urban project titles typically give the name of the road being improved (e.g., West Brown Deer Road) along with the town, village, or city name when applicable; followed by a subtitle that defines the general limits of the work (e.g., N. 92nd Street-N. 68th Street).

Rural project titles typically identify the project location by giving its termini (at or beyond the construction limits) using the names of municipalities, highways, rivers, county lines, etc. (e.g., Cedarburg-Grafton Road, South County Line-S.T.H. 76 Road).

These termini should be identifiable on an ordinary state highway map. If the terms "beltline" or "bypass" are used in the title, it should be recognized that "beltline" applies to a circumferential route. The term "bypass" should be used with discretion, as to some communities this may have a negative connotation. Subtitles are used if the project limits need further definition. The titles and subtitles should be based on the cardinal direction

Multidivisional
FIIPS - Production

FIIPS - Project Summary

File | Project | Summaries | Report | Quantities | Tools | Help | Logout

DOTSVC

Project ID / Rev cntl / Date	Leg sub / WisDOT prog	Funct / Impt cncp / Title	Rt / Co / St / Org
2788 00 71 Go	303	CONSTRUCTION	USH 018E
A - INITIALIZE PRO	STATE HIGHWAY REHAB	RECSTE - RECONSTRUC	WAUKESHA
02/05/2010	STATE 3R - Allocate 100%	WAUKESHA BYPASS	Active
		SUMMIT AVE TO GENES	1022/1022 (SE/SE)

Group Type(s)
MST----2788-01-00 WAUK BYPASS, STH 59 TO IH 94
DES----2788-00-01 WAUKESHA BYPASS, SUMMIT AVE TO GENESEE RD

Title/limit/concept
WAUKESHA BYPASS
SUMMIT AVE TO GENESEE RD
CONST/RECONSTRUCT, PAVING

County(ies)
WAUKESHA 100%(length) 100%(estimate)

Primary organization
10-22-32-10-00 - SE PDS UNIT 4

Supervisor
ERUCHALU, BENEDICT C - DOTBCE

Manager
CAIN, DOUGLAS A - DOTD2C

Project leader

Legislative subprogram
303 -STATE HIGHWAY REHABILITATION

WisDOT program
STATE 3R - Allocated

Total without delivery Percent
[redacted]

Improvement concept
RECSTE - RECONSTRUCTION, EXPANSION

Federal oversight
Full Oversight/State Administered

Federal ID

Accounting stage
1 - INITIALIZED

Accounting stage date
02/05/2010

Original authorization date

Total estimate
[redacted]

Delivery percent
[redacted]

Primary component type
LET - CONTRACT VIA BID LETTING

Schedule date
08/09/2016

Due date/PS&E
05/01/2016

Life cycle stage
11 - PROGRAM LEVEL SCOPING

Tied bid(s)
Project is not checked out.

W3072 -- Warning! STN import not run since last GIS update.

Contact: Help Desk, (800)362-3050

PROJECT ID: 3082-00-71
WITH: 3082-01-71

COUNTY: JEFFERSON

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS =

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

JEFFERSON - SULLIVAN ROAD ① Title

(EAST CITY LIMITS - CTH F) ③ Limit

USH 18 ② Route

JEFFERSON COUNTY ② County

STATE PROJECT NUMBER
3082-00-71 ②

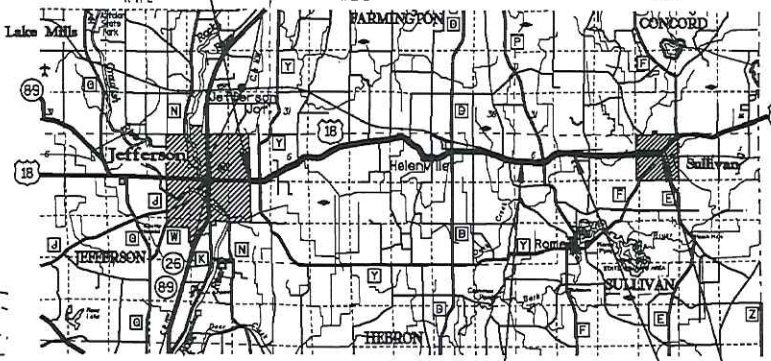
③	STATE PROJECT	FEDERAL PROJECT	
		PROJECT	CONTRACT
	3082-00-71		

LETTERING SIZES
(LEROY GUIDE OR EQUIVALENT)

LINE	GUIDE NO.	HEIGHT (INCHES)	PEN NO.	WIDTH (INCHES)
①	500	0.50	6-8	.067-.098
②	350	0.35	4-6	.043-.067
③	200	0.20	3	.035
④	140	0.14	1	.021
⑤	120	0.12	0	.015

NOTE: THESE TEXT SIZES ARE BASED ON A FULL SIZE PLAN, FOR OTHER SIZE PLANS, REDUCE THE TEXT SIZE ACCORDINGLY.

③ BEGIN PROJECT
STA. 58+29
④ Y = 368,609.14
X = 2,324,100.89



EQUATION
STA. 454+36.85 BK.=
STA. 1113+98.89 AH. ④

EQUATION
STA. 1178+90.20 BK.=
STA. 2109+95.00 AH. ④

END PROJECT ③
STA. 2220+43

LAYOUT
SCALE 0 1 MI.

⑤ TOTAL NET LENGTH OF CENTERLINE = 10.802 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM, JEFFERSON COUNTY, NAD83 (1997) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES. ⑤

DESIGN DESIGNATION ④

	(JEFFERSON-HELENVILLE)	(HELENVILLE-SULLIVAN)
A.A.D.T. (1991)	= 2,500	1,360
A.A.D.T. (2011)	= 3,160	1,660
D.H.V.	= 448	235
D.D.	= 60-40	60-40
T.	= 10.5%	10.5%
DESIGN SPEED	= 55 MPH	55 MPH
ESALS	= 226,300	118,800

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

ACCEPTED FOR
COUNTY of JEFFERSON
Date: _____ (Signature & Title of Official)

ACCEPTED FOR
VILLAGE of SULLIVAN
Date: _____ (Signature & Title of Official)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PREPARED BY
Surveyor
Designer
Project Manager
Regional Examiner
Regional Supervisor
C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: _____ Signature

E

FILE NAME : C:\Users\dot11h\Desktop\FDM Updates Ch12-15\Chapter 15 updates\FM1501A510.DGN
PLOT DATE : 25-APR-2013 15:15 PLOT BY : ##...plotuser...## PLOT NAME :
PLOT SCALE : 206.428465:1.000000
WISDOT/CADDS SHEET 10

first sheet should provide an index to all typical section/detail sheets. See FDM 15-1-1 for guidance on indexing typical section sheets.

Additional typical sections may be put on either the first sheet, on subsequent typical section sheets, or combined with construction details. A pavement boring log shall be provided on the typical section sheet for projects containing the item Salvaged Asphaltic Pavement.

A Typical Section Sheet is illustrated in FDM 15-1 Attachment 5.2, FDM 15-1 Attachment 5.3, and FDM 15-1 Attachment 6.2.

Each typical section sheet shall have a title block along the bottom edge of the sheet. The title block shall include the State Project Number(s), space for a sheet number and title.

15.1 Typical Section

An existing typical section shall be shown when work is being done on the pavement or shoulder, the pavement is being removed or the pavement or shoulder is being used to carry traffic.

A main line typical section shall be shown for all applicable projects. Additional typical sections shall be shown for side roads, frontage roads, ramps, driveways and temporary roads where applicable. Ultimate typical sections are required for all stage construction projects.

Each typical section shall utilize the following:

- Scale: The width of section shall be selected to provide clarity of detail. A horizontal scale of one-inch equals five feet is often used on plan sheets. The vertical scale is normally exaggerated such as one-inch equals two feet.
- Slopes: This is expressed as a ratio of horizontal distance to vertical distance. All slopes between edges of shoulder and original ground, and those between edge of shoulders in the median should be labeled. Where slopes are variable, maximum and minimum should be labeled also. A typical section should illustrate both cut and fill sections.
- Cross Slope: This is the amount of rise or fall indicated in percent. The gradient of the finished surface, shoulders and subgrade should be indicated.
- Width: The width of lanes, shoulders, roadbed, ditches, clear zone and median should be shown to the nearest tenth of a foot.
- Material Identification and Thickness: The thickness and type of materials constituting the pavement structure such as 3" HMA Pavement Type E-1 or 6" Base Aggregate Dense 1 1/4-Inch shall be shown. For urban sections other elements such as sidewalk and curb and gutter shall also be shown. Material thicknesses shall be shown to the nearest one-quarter inch (not decimals).
- The limits of topsoiling, salvaged topsoiling, fertilizing, seeding or sodding shall be shown.
- Where variations in material thickness are proposed, these may be shown in tabular form indicating thickness and station limits.
- Pavement ties, tie bars, underdrains, geotextile fabrics, islands, concrete barriers, removals, etc. shall be shown when they are required in the construction.
- Location Limits: Typical sections shall be titled and stationing limits indicated. Minor equations may be omitted. Station limits need not be shown where there is only one typical section per roadway.
- Vertical and Horizontal Reference: All typical sections shall show the relationship between the typical section and the grade line profile shown on the Plan and Profile Sheet with a point referred to on profile note. The vertical relationship between the typical section and the cross sections shall also be shown by a point referred to on cross section note unless indicated on the Cross Section Sheets. Typical sections should also show their relationship to the horizontal alignment reference line.
- Doweled Concrete Pavements: All doweled concrete pavements shall have a notation indicating that dowels are required. An example of such a notation is: Concrete Pavement 10-inch (Doweled).
- Tined Concrete Pavements: All concrete pavements to be tined shall include a notation indicating that tining is required. An example of such a notation is: Concrete Pavement 10-inch (Doweled and Tined).

15.2 General Notes

Information contained in the General Notes is intended to supplement, but should not duplicate, the Special Provisions, Supplemental Specifications, or Standard Specifications. General notes should not contain material that is properly a part of the Standard Specifications, the Special Provisions, a typical section, a detail, the miscellaneous quantity sheets or the plan sheets. They should be kept to an absolute minimum and should not duplicate information contained elsewhere in the plans, proposal or standard specifications. The following is a sample list of general notes that are commonly used:

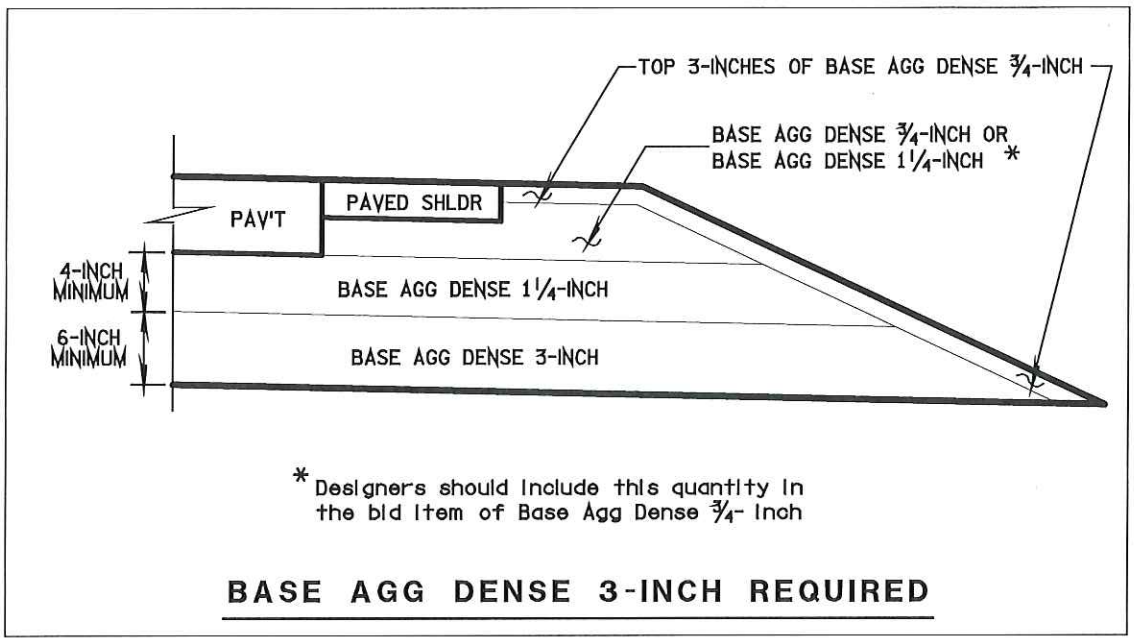
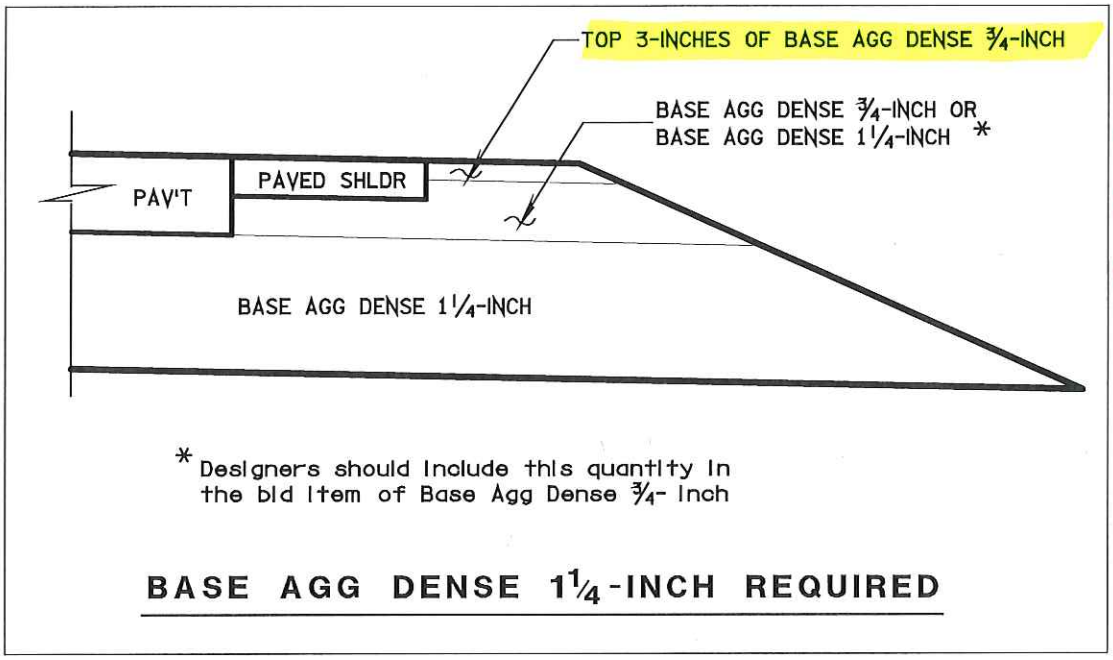


Figure 1.2. Base Aggregate Dense 3-Inch Required

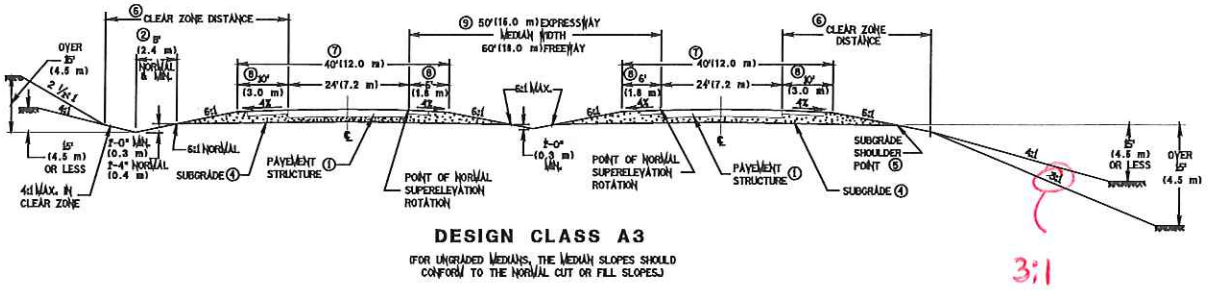


When paving a 4" Asphalt Shoulder, Match 4" Shoulder Thickness

Figure 1.3. Base Aggregate Dense 1 1/4 - Inch Required

The designer may choose to require 3-inch base in the typical section under these conditions.

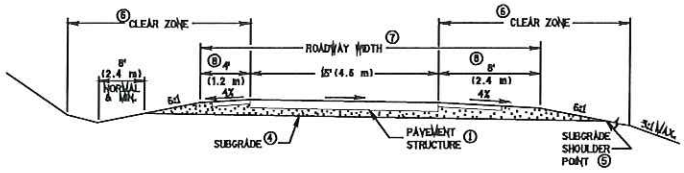
1. The total thickness of the base layer under the pavement is 10 inches or more. Given the required 4-inch minimum layer of 1 1/4 - inch base, 6 inches or more of the 3-inch base course would be required.
2. The project is located in an area where quarries are the normal source of aggregates. The region soils engineer can provide guidance on specific projects, but the limestone regions that form an arc through the western, southern, and eastern portions of the state would have the most potential for economic production of 3-inch base. This would include most of the SW and SE regions and parts of the NW and NE regions.
3. A project contains items for the removal and the disposal of relatively large volumes of concrete



DESIGN CLASS A3

(FOR UNGRADED MEDIANS, THE MEDIAN SLOPES SHOULD CONFORM TO THE NORMAL CUT OR FILL SLOPES)

TYPICAL SECTION FOR FOUR LANE DIVIDED HIGHWAY



TYPICAL SECTION ONE-LANE RAMP

Notes

1. The elements of the pavement structure for flexible and rigid pavements will vary according to the individual pavement design.
2. When a special ditch grade or greater ditch capacity is necessary for longitudinal drainage, it may be accomplished by varying the width or slope of the ditch.
3. Earth cuts - backslopes in earth cuts should be blended into the natural topography by using a combination of flat slopes and rounding, special attention should be given to the design of the transitions from cuts to fills to ensure that slopes are gradually steepened to produce a natural and aesthetically pleasing cross section.
4. Subgrade slope is parallel to pavement structure.
5. Constant width subgrade dimensions should be determined from the typical tangent section. This constant width should generally be carried throughout the project. Exceptions include widening on new construction and reconstruction for steel plate beam guard or in superelevated segments to avoid foreslopes steeper than 4:1.
6. See FDM 11-15 Attachment 1.9 or FDM 11-15 Attachment 1.10 for clear zone distance.
7. Widen the roadway by 3 ½ ft where steel plate beam guard is required (see FDM 11-15 Attachment 1.6 for illustration). Additional roadway and shoulder widening is required to accommodate buried end terminal and energy absorbing terminal end (see SDD's for appropriate terminal earthwork requirements.)
8. See FDM 11-15 Attachment 1.5 and text for paved shoulder width requirements. If the mainline pavement structure is PC concrete 2 foot monolithic shoulders are required on the right. (excluding ramps.)
9. The median width shall be 60 ft. on expressways with a posted speed greater than 55 mph.