North Dakota Department of Transportation

Grant Levi, P.E.
Director

Jack Dalrymple
Governor

December 8, 2016

ADDENDUM 2 – JOB 20

TO: All prospective bidders on project SS-NH-1-049(027)067, Job No. 20 scheduled for the December 16, 2016 bid opening.

The following plan and request for proposal revisions shall be made:

Plan Revisions:
Remove and replace sheet 4-1, 6-1, 6-2, 8-1, 10-3, 11-2 to 8, 30-8 and 80-1 with the enclosed sheets revised 12/5/16 or 12/7/16.

Sheet 4-1:
Revised label at ADA ramp in Glen Ullin to state "Remove flashing beacons" and "Do not restore crosswalk".

Sheet 6-1:
Revised note 261-P01 TEMPORARY EROSION CONTROL.
Add note 411-P01 MILLING.
Add note 430-P02 SUPERPAVE FAA 45

Sheet 6-2:
Notes shifted due to added notes on sheet 6-1.

Sheet 8-1:
Item 216 0100 WATER; quantity increased from 4424 to 4458 M GAL.
Item 261 0112 FIBER ROLLS 12IN; quantity increased from 6678 to 6778 LF.
Item 261 0113 REMOVE FIBER ROLLS 12IN; quantity increased from 2598 to 2698 LF.
Item 302 0120 AGGREGATE BASE COURSE CL 5; quantity increased from 39,904.7 to 40,333.7 TON.
Item 401 0050 TACK COAT; quantity increased from 28,801 to 28,875 GAL.
Item 401 0060 PRIME COAT; quantity increased from 9125.1 to 9492.6 GAL.
Item 430 0045 SUPERPAVE FAA 45; quantity increased from 56,374.3 to 56,584.6 TON.
Item 430 5828 PG 58-28 ASPHALT CEMENT; quantity increased from 3327 to 3369 TON.

Sheet 10-3:
Added table for work at guardrail locations.

Sheet 11- 2 to 8:
Tables updated.

Sheet 30-8:
Updated table.

Sheet 80-1:
3" was added to the note about mill and overlay between the railroad tracks.

Request for Proposal Revisions:
Remove and replace page 5 and 6 of 13 of the Proposal pages located at the beginning of the Request for Proposal, with the enclosed pages revised 12/8/2016.

Page 5 of 13:
Item 216 0100 WATER; quantity increased from 4424 to 4458 M GAL.

Page 6 of 13:
Item 261 0112 FIBER ROLLS 12IN; quantity increased from 6678 to 6778 LF.
Item 261 0113 REMOVE FIBER ROLLS 12IN; quantity increased from 2598 to 2698 LF.
Item 302 0120 AGGREGATE BASE COURSE CL 5; quantity increased from 39,904.7 to 40,333.7 TON.
Item 401 0050 TACK COAT; quantity increased from 28,801 to 28,875 GAL.
Item 401 0060 PRIME COAT; quantity increased from 9125.1 to 9492.6 GAL.
Item 430 0045 SUPERPAVE FAA 45; quantity increased from 56,374.3 to 56,584.6 TON.
Item 430 5828 PG 58-28 ASPHALT CEMENT; quantity increased from 3327 to 3369 TON.

This addendum is to be incorporated into the bidder's proposal for this project.

AASHTOWare Project Bids files should be updated by downloading the addendum file from the Bid Express on-line bidding exchange at http://www.bidx.com/ and load it into the AASHTOWare Project Bids program.

For CAL J. GENDREAU – CONSTRUCTION SERVICES ENGINEER
80:plm
Enclosure

Project: SS-NH-1-049(027)067 (PCN-20677)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

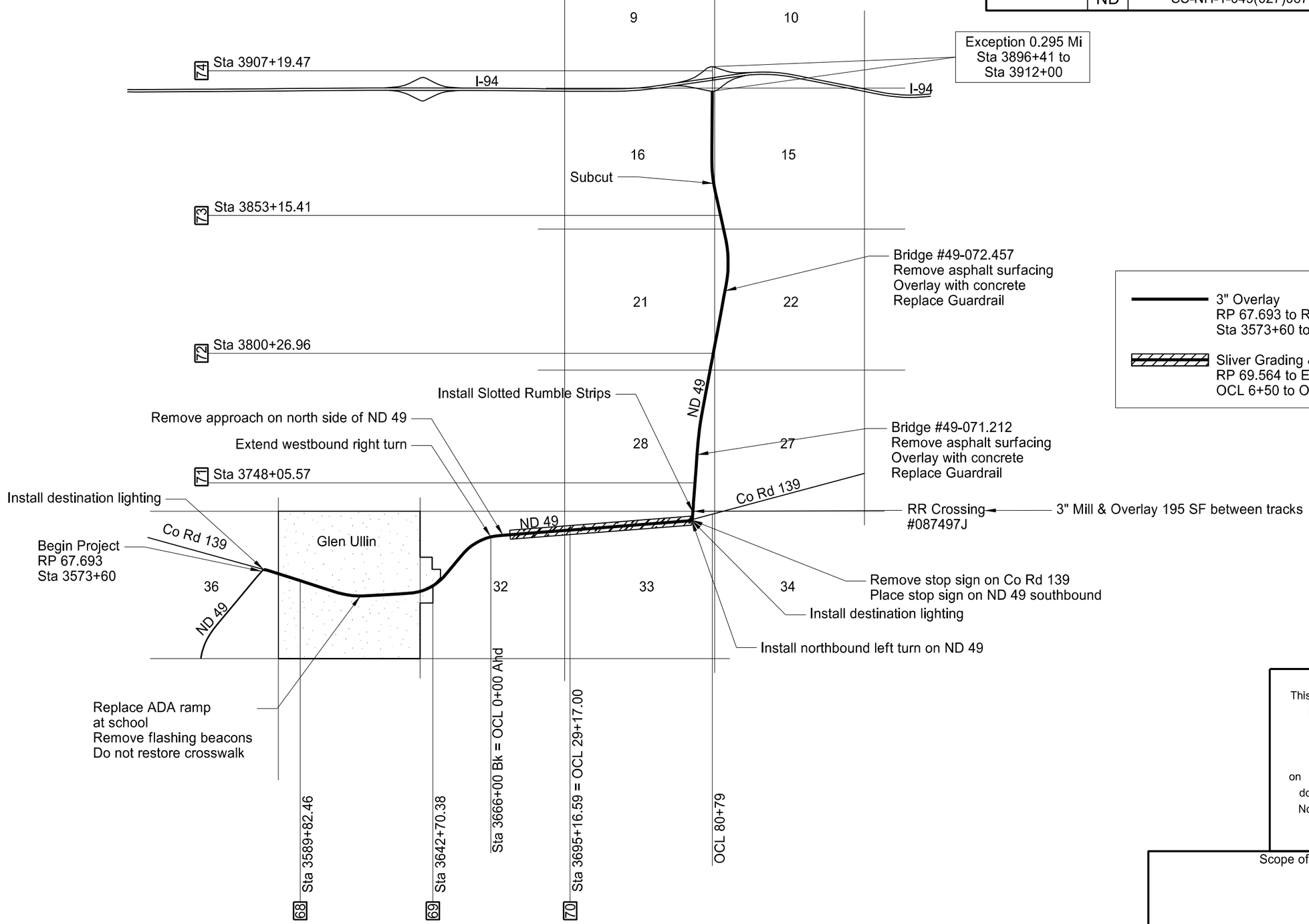
Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
001	103	0100	CONTRACT BOND	L SUM	1.				
002	107	0103	RAILWAY PROTECTION INSURANCE-SITE 1	EA	1.				
003	202	0101	REMOVAL OF CONCRETE	EA	1.				
004	202	0136	REMOVAL OF PAVEMENT	TON	3,175.				
005	202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	46.				
006	202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	276.				
007	203	0101	COMMON EXCAVATION-TYPE A	CY	155.				
008	203	0103	COMMON EXCAVATION-TYPE C	CY	293.				
009	203	0109	TOPSOIL	CY	51,144.				
010	203	0122	TOPSOIL-DEPT OPTION BORROW AREA	CY	24,402.				
011	203	0138	COMMON EXCAVATION-SUBCUT	CY	2,816.				
012	203	0140	BORROW-EXCAVATION	CY	150,974.				
013	216	0100	WATER	M GAL	4,458.				
014	230	0125	SHOULDER PREPARATION	MILE	4.800				
015	251	0200	SEEDING CLASS II	ACRE	112.600				
016	251	2000	TEMPORARY COVER CROP	ACRE	164.600				

Project: SS-NH-1-049(027)067 (PCN-20677)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
017	253	0101	STRAW MULCH	ACRE	194.900				
018	255	0102	ECB TYPE 2	SY	1,406.				
019	260	0200	SILT FENCE SUPPORTED	LF	11,371.				
020	260	0201	REMOVE SILT FENCE SUPPORTED	LF	11,371.				
021	261	0112	FIBER ROLLS 12IN	LF	6,778.				
022	261	0113	REMOVE FIBER ROLLS 12IN	LF	2,698.				
023	265	0100	STABILIZED CONSTRUCTION ACCESS	EA	3.				
024	265	0101	REMOVE STABILIZED CONSTRUCTION ACCESS	EA	3.				
025	302	0120	AGGREGATE BASE COURSE CL 5	TON	40,333.700				
026	302	0318	AGGREGATE SURFACE COURSE CL 4	TON	8,221.				
027	401	0050	TACK COAT	GAL	28,875.				
028	401	0060	PRIME COAT	GAL	9,492.600				
029	411	0105	MILLING PAVEMENT SURFACE	SY	127,634.				
030	430	0045	SUPERPAVE FAA 45	TON	56,584.600				
031	430	1000	CORED SAMPLE	EA	310.				
032	430	5828	PG 58-28 ASPHALT CEMENT	TON	3,369.				

Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	4	1



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Scope of Work

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line

NOTES

100-P01 FIBER OPTIC LINE PROTECTION: Protect in place the fiber optic line at the cattle pass extension at OCL2 Sta 3972+84 Rt.

107-115 RAILROAD PROTECTIVE LIABILITY INSURANCE: This project crosses the BNSF Railway Company at RP 70.894. The type of work that will be performed within the railroad right of way is milling and bituminous paving. Direct inquiries regarding protective liability insurance to:

Rosa Martinez
Marsh USA Inc.
4400 Comerica Bank Tower
1717 Main Street
Dallas, TX 75201-7357, USA
214-303-8519
Rosa.M.Martinez@marsh.com

Obtain information regarding crossing number 087497J from the Federal Railroad Administration website: http://safetydata.fra.dot.gov/Officeofsafety/

202-P01 REMOVAL OF PAVEMENT: Cut and remove the existing bituminous and aggregate material, as shown on the proposed typical sections.

Include all cost for the removal of the existing aggregate material in the unit price bid for “Removal of Pavement.” The quantity includes the bituminous surfacing and aggregate base.

203-010 SHRINKAGE: 25 percent additional volume is included for shrinkage in earth embankment.

203-P01 COMMON EXCAVATION-TYPE C: The Engineer will measure Common Excavation-Type C at plan quantity.

255-P01 EROSION CONTROL BLANKET (ECB): 178 SY of ECB Type 2 has been provided for use on the 2:1 proposed slope at the cattle pass extension at OCL2 3972+27 Left.

261-P01 TEMPORARY EROSION CONTROL: It is assumed that the contractor will use the existing topsoil to create an earthen berm at the bottom of the foreslope in widened areas. The earthen berm, along with the grass remaining in the ditch and fiber rolls will serve as the temporary erosion control. The earthen berm is not a separate pay item, all costs associated with creating, maintaining, and dismantling the berm are included in the unit cost for “Topsoil”.

The berm will have a minimum height of 12 inches and be uniformly shaped in such a way that it will not fail when pressure from stormwater is applied. When the foreslope has reached final grade, the earthen berm shall be removed and the soil spread on the foreslope before the permanent seeding and mulching work is commenced. To allow stormwater to drain through the berm, weirs may be placed intermittently as needed throughout the length of the berm. These weirs shall be no more than 5 feet wide and have fiber rolls installed across the weir on the downslope side of the berm. If a weir must be made during conditions that would allow stormwater to flow through immediately, the fiber roll must be installed before the weir is made in the earthen berm. Fiber rolls for this purpose are included in the “Fiber Rolls 12in” pay item; 100 LF have been provided.

261-P02 TEMPORARY EROSION CONTROL WITHIN WETLANDS: Fiber rolls and Silt Fence have been provided for placement at the back-side of the earthen berm at the perimeter of the work area at wetlands. If there is no standing water within the adjacent wetland, immediate seeding and mulching of the earthen berm may replace the fiber roll. If seed/mulch is not immediately applied, fiber rolls are required. Fiber rolls will still be required at the weirs within the berm. Temporary seed mix and mulch for this use will be paid for as “Temporary Cover Crop” and “Straw Mulch”.

411-P01 MILLING: “Milling Pavement Surface” is paid at plan quantity. The quantity shown includes the entire length of roadway between Sta 3912+00 and the end of project at a width of 24 ft even when no milling is required for cross-slope correction as shown in Section 11. Other milling, such as transitions, is also included as detailed.

430-P01 SUPERPAVE FAA 45 - BLADE LEVELING: In the area from the project beginning to RP 73.796, use approximately 1/4" of the 3” overlay for blade leveling before the overlay is applied. Place the blade leveling in a single motor grader pass across the full width of the lane and shoulder. Compact the material with a pneumatic roller prior to the overlay. Include all costs associated with blade leveling in the bid price for "Superpave FAA 45” and “PG 58-28 Asphalt Cement”

430-P02 SUPERPAVE FAA 45: For tangent sections between Sta 3912+00 to end of project only; an additional 115 Ton of Superpave FAA 45 and 6.8 Ton of PG 58-28 Asphalt Cement have been included for cross slope correction. Use ordinary compaction for any additional lift of superpave FAA 45 required to correct the cross slope before placing the final two lifts of hot bituminous pavement. The additional lift may be blade laid and the lift thickness can be less than 1 ½” in depth.

Do not consider super-elevation correction on curves as leveling courses or patching (see Sheet 8 of Section 30 for locations).

704-200 PRECAST CONCRETE MEDIAN BARRIERS – STATE FURNISHED: Obtain 18 barriers from the District Storage Yard at Belfield. Return barriers to the District Storage Yard at Belfield.

Some 4 inch x 4 inch boards are available at the return location. Provide any additional 4 inch x 4 inch boards necessary to stack barriers. The boards will become property of the Department. Include the cost for boards in the contract unit price for "Precast Concrete Median Barrier - State Furnished".

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NOTES

704-255 TRAFFIC CONTROL FOR SHOULDER DROP-OFF: If the shoulder and adjacent driving lane are not even at the end of the day, the following criteria will apply:

Place the following sign assembly at the locations listed below.

Sign Assembly: Sign No. W8-9a-48 "Shoulder Drop Off" and supplemental plate Sign No. W20-52-54 to identify the distance.

Locations:
- In advance of the drop off;
- Spaced at each mile from the advance sign; and
- At major intersections (CMC routes, state and US highways, and Interstate Ramps).

If the difference in elevation between the shoulder and the driving lane is 2" or greater, construct a slough on the driving lane that is 4:1 or flatter.

If the difference in elevation between the shoulder and driving lane is less than 2", no slough is required.

Sign assemblies will be measured and paid for according to Section 704 "Temporary Traffic Control".

704-450 LANE CLOSURE - SIGNAL CONTROL/FLAGGING CONTROL: Install either the signal controlled lane closure on Standard D-704-16 or the flagging controlled lane closure on Standard D-704-17.

Obtain an electrical source for traffic signals. Solar powered signals may be used. Place generators a minimum of 60 feet from the roadway centerline, unless the generator and signal are part of a trailer mounted unit.

Place utility poles and equipment a minimum of 60 feet from the roadway centerline and place power conductors a minimum of 6 inches below the ground surface. Remove poles after they are no longer necessary.

The Engineer will measure individual traffic control devices, other than the signal system and flaggers, shown on the standards. Payment will be made at the respective contract unit price.

Include the cost of either a traffic signal system or flaggers in the contract unit price for "Lane Closure – Signal Control/Flagging Control".

704-P01 TRAFFIC CONTROL FOR BITUMINOUS PAVEMENT: Provide traffic control consisting of a temporary road closure, flagging, and a pilot car.

Traffic control device quantities are based on a 6 mile limitation and the list below. Provide additional devices at no additional cost to the Department.

1. Standard D-704-12;
2. Standard D-704-15, layout A;
3. Standard D-704-16,
4. Standard D-704-17,
5. Standard D-704-20, layout G;
6. Standard D-704-22, layouts K and L;
7. Standard D-704-24, layouts R and S (use delineator drums in place of cones);
8. Standard D-704-26, layouts BB, EE, GG, and KK;
9. Standard D-704-27;
10. Standard D-704-30; and
11. Standard D-704-56.

When installing layout G from Standard D-704-20, move sign W-3-5-48 and the sign assembly containing signs R2-1-48 and R2-1a-24 with the work area as it progresses through the construction zone. Place the R2-1-48 assembly a minimum of 500 feet in advance of flagging signs.

Place flaggers and traffic control devices as shown on Standard D-704-15, layout A at the following intersections when the lane closure spans across them:
1. West Jct County Road 139 and ND 49
2. East Jct 41st St and ND 49
3. East Jct County Road 139 and ND 49
4. East and West Jct County Road 140

714-P01 PIPE CLEANOUT: Clean out all centerline culverts designated in the plans for extension before extending them. When necessary, remove material 50 feet beyond the end of the pipe. Include the cost of cleaning the pipes in the bid price for centerline pipe.

752-P01 TEMPORARY SAFETY FENCE: Use temporary safety fence at cattle passes when removing and resetting existing fence as necessary. A quantity of 50 LF has been provided.

752-P02 FENCE REMOVE & RESET: Remove and reset fence at cattle pass extensions as necessary. Existing fence includes 4-strand barbed wire, stockgates, and woven fencing. A quantity of 120 LF has been provided.

754-P01 STOP SIGNS - REFLECTIVE STRIPS: Install 2 inch wide red reflective strip on the side that faces the same direction as the sign.

Use reflective material that meets the requirements of Section 894.02 C, "Type IV Retroreflective Sheeting".

Install the strips on STOP signs at the following locations:
- RP 70.860 Lt

Include the cost of furnishing and installing retroreflective strips in the contract unit price for "Steel Galvanized Posts – Telescoping Perforated Tube".

770-P01 DESTINATION LIGHT LUMINAIRE: Provide the following destination light luminaire:

American Electric Autobahn ATBS LED Luminaire with drop refractor. Catalog Number: ATBS H MVOLT D3, no photo control on luminaire.

Include all cost associated with the destination light LED luminaire in the bid price for “Destination Lighting”.

885-001 CAST IRON DETECTABLE WARNING PANELS: If cast iron detectable warning panels are used, provide cast iron panels with a minimum thickness of 0.2 inches.

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ESTIMATE OF QUANTITIES

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SS-NH-1-049(027)067	8	1

REVISED 12/07/2016

SPEC	CODE	ITEM DESCRIPTION	UNIT	MAINLINE	TOTAL
103	0100	CONTRACT BOND	L SUM	1	1
107	0103	RAILWAY PROTECTION INSURANCE-SITE 1	EA	1	1
202	0101	REMOVAL OF CONCRETE	EA	1	1
202	0136	REMOVAL OF PAVEMENT	TON	3,175	3,175
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	46	46
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	276	276
203	0101	COMMON EXCAVATION-TYPE A	CY	155	155
203	0103	COMMON EXCAVATION-TYPE C	CY	293	293
203	0109	TOPSOIL	CY	51,144	51,144
203	0122	TOPSOIL-DEPT OPTION BORROW AREA	CY	24,402	24,402
203	0138	COMMON EXCAVATION-SUBCUT	CY	2,816	2,816
203	0140	BORROW-EXCAVATION	CY	150,974	150,974
216	0100	WATER	M GAL	4,458	4,458
230	0125	SHOULDER PREPARATION	MILE	4.8	4.8
251	0200	SEEDING CLASS II	ACRE	112.6	112.6
251	2000	TEMPORARY COVER CROP	ACRE	164.6	164.6
253	0101	STRAW MULCH	ACRE	194.9	194.9
255	0102	ECB TYPE 2	SY	1,406	1,406
260	0200	SILT FENCE SUPPORTED	LF	11,371	11,371
260	0201	REMOVE SILT FENCE SUPPORTED	LF	11,371	11,371
261	0112	FIBER ROLLS 12IN	LF	6,778	6,778
261	0113	REMOVE FIBER ROLLS 12IN	LF	2,698	2,698
265	0100	STABILIZED CONSTRUCTION ACCESS	EA	3	3
265	0101	REMOVE STABILIZED CONSTRUCTION ACCESS	EA	3	3
302	0120	AGGREGATE BASE COURSE CL 5	TON	40,333.7	40,333.7
302	0318	AGGREGATE SURFACE COURSE CL 4	TON	8,221	8,221
401	0050	TACK COAT	GAL	28,875	28,875
401	0060	PRIME COAT	GAL	9,492.6	9,492.6
411	0105	MILLING PAVEMENT SURFACE	SY	127,634	127,634
430	0045	SUPERPAVE FAA 45	TON	56,584.6	56,584.6
430	1000	CORED SAMPLE	EA	310	310
430	5828	PG 58-28 ASPHALT CEMENT	TON	3,369	3,369
602	0130	CLASS AAE-3 CONCRETE	CY	1	1

BASIS OF ESTIMATE

HBP Cored Samples							
	A	B	C	D			
Specification Section	Lanes	Lifts	Distance (Feet)	Sublots (A × B × C)÷2000	Quantity (D × 2)	Quantity (1 per mile)	Unit
430.04 I.2.b(1), "General"	2	2	75,435	151	302	N/A	EA
430.04 I.2.b(2), "Pavement Thickness Determination Cores"					N/A	8	EA
				Total	302	8	EA

Geosynthetic Material - Type G		
Location		SY
Slope Stabilization @ Cattle Pass Extension	OCL2 3971+13 to 3971+53 Lt	1113.0
Subcut	OCL2 4165+67.7 to 4167+04.3	822.6
Subcut	Sta 4215+99.7 to 4220+36.3	2629.3
Subcut	Sta 4222+99.7 to 4227+66.3	2810.0

Geosynthetic Material - Type R1		
Location		SY
Subcut	OCL 3863+90 to 3866+90	2,904.0

		Locations
		Big Muddy & Haymarsh Creeks
		Both Ends Each
		4 locations Totaled
Material additional to Mainline at guardrail	Unit	Quantity
Water @ 20 Gal/Ton of Aggregate	MGal	34.3
Prime Coat @ 0.25 Gal/SY	Gal	367.5
Tack Coat @ 0.05 Gal/SY	Gal	73.5
Superpave FAA 45 @2 Ton/CY	Ton	163.3
PG 58-28 Asphalt Cement @ 5.9%	Ton	38.5
Class 5 Aggregate @1.50 Ton/CY +25%	Ton	429
Removal of existing material will be treated as "Topsoil"	CY	Approx. 245

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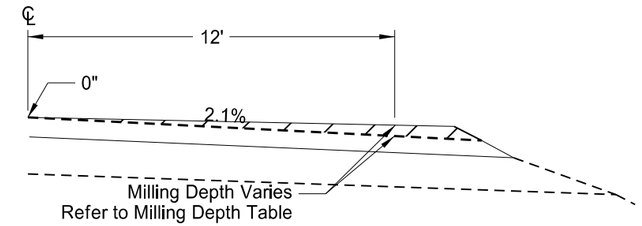
Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	11	2

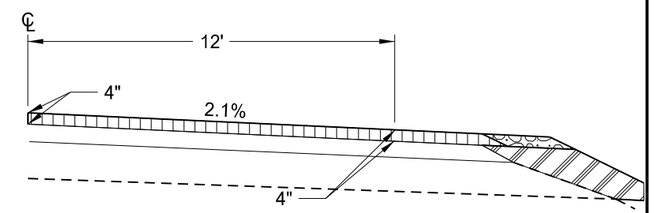
Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
3912+00	0.00	0.00	0.47	0.89
3912+50	0.00	0.00	0.94	0.79
3913+00	0.00	0.00	0.71	0.58
3913+50	0.00	0.00	0.74	0.61
3914+00	0.00	0.00	0.80	0.55
3914+50	0.00	0.00	0.80	0.57
3915+00	0.00	0.00	0.61	0.61
3915+50	0.00	0.01	0.49	0.33
3916+00	0.04	0.02	0.33	0.33
3916+50	0.00	0.00	0.66	0.56
3917+00	0.00	0.00	0.61	0.52
3917+50	0.00	0.00	0.59	0.48
3918+00	0.00	0.00	0.62	0.57
3918+50	0.00	0.00	0.55	0.51
3919+00	0.00	0.00	0.69	0.57
3919+50	0.00	0.00	0.61	0.36
3920+00	0.00	0.06	0.35	0.33
3920+50	0.00	0.17	0.37	0.33
3921+00	0.00	0.08	0.35	0.33
3921+50	0.02	0.18	0.33	0.33
3922+00	0.00	0.12	0.42	0.33
3922+50	0.00	0.07	0.47	0.33
3923+00	0.05	0.05	0.33	0.33
3923+50	0.00	0.20	0.35	0.33
3924+00	0.00	0.20	0.54	0.33
3924+50	0.00	0.10	0.51	0.33
3925+00	0.00	0.13	0.36	0.33
3925+50	0.15	0.19	0.33	0.33
3926+00	0.11	0.12	0.33	0.33
3926+50	0.00	0.20	0.33	0.33
3927+00	0.00	0.11	0.50	0.33
3927+50	0.00	0.02	0.45	0.33
3928+00	0.00	0.06	0.45	0.33
3928+50	0.00	0.08	0.42	0.33
3929+00	0.00	0.08	0.40	0.33
3929+50	0.00	0.14	0.55	0.33
3930+00	0.00	0.17	0.41	0.33
3930+50	0.00	0.09	0.48	0.33
3931+00	0.00	0.07	0.53	0.33
3931+50	0.00	0.33	0.44	0.33
3932+00	0.00	0.08	0.48	0.33
3932+50	0.04	0.10	0.33	0.33
3933+00	0.02	0.14	0.33	0.33

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
3933+50	0.00	0.09	0.34	0.33
3934+00	0.00	0.09	0.39	0.33
3934+50	0.00	0.11	0.41	0.33
3935+00	0.00	0.08	0.42	0.33
3935+50	0.01	0.14	0.33	0.33
3936+00	0.00	0.00	0.43	0.40
3936+50	0.00	0.13	0.42	0.33
3937+00	0.00	0.20	0.37	0.33
3937+50	0.00	0.16	0.43	0.33
3938+00	0.00	0.05	0.48	0.33
3938+50	0.00	0.06	0.56	0.33
3939+00	0.00	0.03	0.54	0.33
3939+50	0.00	0.11	0.45	0.33
3940+00	0.00	0.13	0.46	0.33
3940+50	0.00	0.08	0.46	0.33
3941+00	0.00	0.09	0.52	0.33
3941+50	0.00	0.15	0.43	0.33
3942+00	0.00	0.12	0.42	0.33
3942+50	0.00	0.00	0.70	0.37
3943+00	0.00	0.09	0.60	0.33
3943+50	0.00	0.17	0.52	0.33
3944+00	0.00	0.21	0.49	0.33
3944+50	0.00	0.12	0.45	0.33
3945+00	0.00	0.19	0.45	0.33
3945+50	0.00	0.15	0.51	0.33
3946+00	0.00	0.00	0.66	0.38
3946+50	0.00	0.07	0.51	0.33
3947+00	0.00	0.16	0.43	0.33
3947+50	0.00	0.18	0.45	0.33
3948+00	0.00	0.01	0.41	0.33
3948+50	0.00	0.00	0.53	0.52
3949+00	0.00	0.00	0.86	0.41
3949+50	0.00	0.00	0.75	0.42
3950+00	0.00	0.04	0.60	0.33
3950+50	0.00	0.00	0.76	0.43
3951+00	0.00	0.00	0.65	0.45
3951+50	0.00	0.02	0.64	0.33
3952+00	0.00	0.00	0.74	0.40
3952+50	0.00	0.00	0.59	0.53
3953+00	0.07	0.00	0.33	0.35
3953+50	0.00	0.00	0.37	0.50
3954+00	0.00	0.00	0.54	0.43
3954+50	0.00	0.00	0.56	0.34

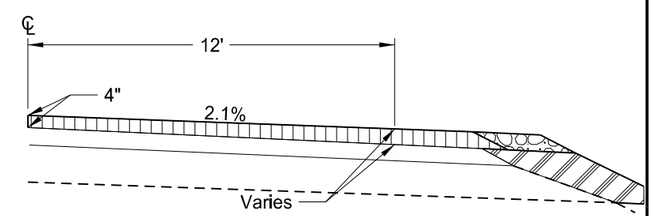
Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
3955+00	0.00	0.00	0.86	0.35
3955+50	0.00	0.00	0.48	0.43
3956+00	0.00	0.00	0.87	0.54
3956+50	0.00	0.00	1.25	0.50
3957+00	0.00	0.00	0.58	0.36
3957+50	0.00	0.00	0.99	0.44
3958+00	0.00	0.00	0.65	0.50
3958+50	0.00	0.00	0.77	0.74
3959+00	0.00	0.17	0.47	0.33
3959+50	0.00	0.18	0.67	0.33
3960+00	0.00	0.25	0.60	0.33
3960+50	0.00	0.18	0.68	0.33
3961+00	0.00	0.23	0.67	0.33
3961+50	0.00	0.29	0.43	0.33
3962+00	0.00	0.00	0.66	0.34
3962+50	0.00	0.00	0.72	0.55
3963+00	0.00	0.00	0.67	0.43
3963+50	0.00	0.01	0.85	0.33
3964+00	0.00	0.00	0.71	0.40
3964+50	0.00	0.06	0.57	0.33
3965+00	0.00	0.16	0.71	0.33
3965+50	0.00	0.03	0.52	0.33
3966+00	0.00	0.00	0.61	0.38
3966+50	0.00	0.00	0.73	0.45
3967+00	0.00	0.01	0.76	0.33
3967+50	0.00	0.00	0.64	0.44
3968+00	0.00	0.02	0.72	0.33
3968+50	0.00	0.00	0.81	0.43
3969+00	0.00	0.02	0.83	0.33
3969+50	0.00	0.00	0.59	0.36
3970+00	0.00	0.00	0.37	0.50
3970+50	0.00	0.03	0.45	0.33
3971+00	0.00	0.05	0.41	0.33
3971+50	0.00	0.11	0.49	0.33
3972+00	0.00	0.18	0.41	0.33
3972+50	0.00	0.28	0.38	0.33
3973+00	0.00	0.16	0.36	0.33
3973+50	0.10	0.28	0.33	0.33
3974+00	0.00	0.13	0.33	0.33
3974+50	0.00	0.05	0.53	0.33
3975+00	0.00	0.25	0.48	0.33
3975+50	0.00	0.34	0.46	0.33
3976+00	0.00	0.18	0.56	0.33



Milling Typical



Paving Typical @ Milling Locations



Paving Typical @ Locations Requiring Additional Thickness

NOTE: All depths and thicknesses in table shown in feet.

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Milling Depths

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line

Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	11	3

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
3976+50	0.00	0.14	0.52	0.33
3977+00	0.00	0.20	0.40	0.33
3977+50	0.00	0.11	0.36	0.33
3978+00	0.00	0.34	0.34	0.33
3978+50	0.00	0.07	0.44	0.33
3979+00	0.00	0.18	0.56	0.33
3979+50	0.00	0.07	0.37	0.33
3980+00	0.19	0.21	0.33	0.33
3980+50	0.00	0.11	0.39	0.33
3981+00	0.00	0.00	0.42	0.35
3981+50	0.00	0.14	0.34	0.33
3982+00	0.01	0.18	0.33	0.33
3982+50	0.00	0.02	0.52	0.33
3983+00	0.00	0.14	0.41	0.33
3983+50	0.00	0.10	0.38	0.33
3984+00	0.00	0.17	0.36	0.33
3984+50	0.00	0.19	0.36	0.33
3985+00	0.00	0.15	0.37	0.33
3985+50	0.00	0.00	0.60	0.85
3986+00	0.00	0.00	0.68	0.64
3986+50	0.00	0.00	0.48	0.56
3987+00	0.00	0.00	0.55	0.82
3987+50	0.00	0.00	0.59	0.73
3988+00	0.00	0.00	0.56	0.52
3988+50	0.00	0.00	0.72	0.75
3989+00	0.00	0.00	0.59	0.53
3989+50	0.01	0.00	0.33	0.55
3990+00	0.00	0.00	0.45	0.36
3990+50	0.00	0.00	0.50	0.49
3991+00	0.00	0.00	0.60	0.50
3991+50	0.00	0.00	0.57	0.52
3992+00	0.00	0.00	0.44	0.43
3992+50	0.00	0.00	0.65	0.60
3993+00	0.00	0.00	0.47	0.66
3993+50	0.00	0.00	0.47	0.50
3994+00	0.00	0.00	0.45	0.47
3994+50	0.00	0.00	0.37	0.52
3995+00	0.08	0.00	0.33	0.51
3995+50	0.00	0.00	0.55	0.45
3996+00	0.00	0.00	0.40	0.45
3996+50	0.00	0.00	0.52	0.43
3997+00	0.00	0.04	0.37	0.33
3997+50	0.00	0.00	0.70	0.51

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
3998+00	0.00	0.00	0.76	0.47
3998+50	0.00	0.00	0.64	0.47
3999+00	0.00	0.00	0.47	0.59
3999+50	0.00	0.00	0.41	0.49
4000+00	0.00	0.00	0.53	0.73
4000+50	0.00	0.00	0.56	0.75
4001+00	0.00	0.00	0.38	0.67
4001+50	0.00	0.00	0.36	0.76
4002+00	0.00	0.00	0.60	0.69
4002+50	0.00	0.00	0.64	0.61
4003+00	0.00	0.04	0.48	0.33
4003+50	0.00	0.00	0.98	0.61
4004+00	0.00	0.00	0.43	0.71
4004+50	0.14	0.00	0.33	0.63
4005+00	0.15	0.00	0.33	0.54
4005+50	0.00	0.00	0.40	0.84
4006+00	0.03	0.00	0.33	0.82
4006+50	0.00	0.00	0.38	0.98
4007+00	0.00	0.00	0.37	0.86
4007+50	0.00	0.00	0.49	0.71
4008+00	0.00	0.00	0.73	0.93
4008+50	0.00	0.00	0.64	0.80
4009+00	0.05	0.00	0.33	0.72
4009+50	0.00	0.00	0.40	0.73
4010+00	0.00	0.00	0.34	0.60
4010+50	0.00	0.00	0.33	0.60
4011+00	0.00	0.00	0.46	0.55
4011+50	0.00	0.11	0.46	0.33
4012+00	0.51	0.02	0.33	0.33
4012+50	0.00	0.14	0.51	0.33
4013+00	0.22	0.20	0.33	0.33
4013+50	0.11	0.00	0.33	0.54
4014+00	0.00	0.00	0.68	0.34
4014+50	0.09	0.05	0.33	0.33
4015+00	0.00	0.00	0.34	0.39
4015+50	0.00	0.00	0.39	0.54
4016+00	0.00	0.00	0.75	0.65
4016+50	0.00	0.00	0.44	0.40
4017+00	0.00	0.01	0.48	0.33
4017+50	0.00	0.00	0.41	0.60
4018+00	0.00	0.00	0.43	0.52
4018+50	0.23	0.18	0.33	0.33
4019+00	0.00	0.10	0.35	0.33

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4019+50	0.00	0.00	0.41	0.38
4020+00	0.00	0.00	0.43	0.58
4020+50	0.07	0.00	0.33	0.48
4021+00	0.11	0.00	0.33	0.61
4021+50	0.00	0.07	0.37	0.33
4022+00	0.00	0.19	0.54	0.33
4022+50	0.00	0.03	0.38	0.33
4023+00	0.00	0.10	0.33	0.33
4023+50	0.33	0.00	0.33	0.50
4024+00	0.20	0.00	0.33	0.39
4024+50	0.22	0.21	0.33	0.33
4025+00	0.34	0.15	0.33	0.33
4025+50	0.10	0.05	0.33	0.33
4026+00	0.33	0.21	0.33	0.33
4026+50	0.23	0.23	0.33	0.33
4027+00	0.37	0.25	0.33	0.33
4027+50	0.04	0.28	0.33	0.33
4028+00	0.00	0.00	0.53	0.33
4028+50	0.18	0.24	0.33	0.33
4029+00	0.00	0.08	0.38	0.33
4029+50	0.20	0.02	0.33	0.33
4030+00	0.20	0.31	0.33	0.33
4030+50	0.00	0.00	0.52	0.36
4031+00	0.03	0.17	0.33	0.33
4031+50	0.00	0.05	0.36	0.33
4032+00	0.00	0.00	0.58	0.51
4032+50	0.00	0.11	0.47	0.33
4033+00	0.00	0.18	0.43	0.33
4033+50	0.03	0.06	0.33	0.33
4034+00	0.00	0.02	0.39	0.33
4034+50	0.00	0.00	0.52	0.48
4035+00	0.00	0.25	0.61	0.33
4035+50	0.00	0.04	0.55	0.33
4036+00	0.00	0.06	0.48	0.33
4036+50	0.00	0.00	0.39	0.41
4037+00	0.00	0.12	0.46	0.33
4037+50	0.00	0.01	0.61	0.33
4038+00	0.00	0.16	0.36	0.33
4038+50	0.00	0.00	0.57	0.42
4039+00	0.00	0.05	0.59	0.33
4039+50	0.00	0.00	0.72	0.55
4040+00	0.00	0.00	0.40	0.44
4040+50	0.00	0.00	0.33	0.57

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Milling Depths

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North

Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	11	4

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4041+00	0.00	0.00	0.34	0.43
4041+50	0.00	0.00	0.38	0.41
4042+00	0.00	0.00	0.36	0.48
4042+50	0.08	0.00	0.33	0.43
4043+00	0.00	0.00	0.64	0.63
4043+50	0.00	0.00	0.62	0.70
4044+00	0.00	0.00	0.51	0.62
4044+50	0.00	0.00	0.54	0.55
4045+00	0.00	0.00	0.43	0.46
4045+50	0.00	0.00	0.47	0.37
4046+00	0.00	0.00	0.57	0.56
4046+50	0.00	0.00	0.48	0.40
4047+00	0.00	0.00	0.56	0.63
4047+50	0.00	0.00	0.51	0.54
4048+00	0.00	0.00	0.63	0.52
4048+50	0.00	0.00	0.61	0.65
4049+00	0.00	0.00	0.70	0.73
4049+50	0.00	0.00	0.64	0.69
4050+00	0.00	0.00	0.63	0.59
4050+50	0.00	0.00	0.47	0.64
4051+00	0.00	0.00	0.53	0.51
4051+50	0.00	0.00	0.50	0.66
4052+00	0.01	0.00	0.33	0.68
4052+50	0.00	0.00	0.33	0.71
4053+00	0.00	0.00	0.43	0.76
4053+50	0.00	0.00	0.47	0.65
4054+00	0.00	0.00	0.37	0.60
4054+50	0.00	0.00	0.46	0.65
4055+00	0.00	0.00	0.37	0.75
4055+50	0.00	0.00	0.60	0.74
4056+00	0.00	0.00	0.44	0.70
4056+50	0.06	0.00	0.33	0.48
4057+00	0.00	0.00	0.40	0.40
4057+50	0.06	0.06	0.33	0.33
4058+00	0.13	0.10	0.33	0.33
4058+50	0.11	0.18	0.33	0.33
4059+00	0.04	0.17	0.33	0.33
4059+50	0.22	0.11	0.33	0.33
4060+00	0.11	0.11	0.33	0.33
4060+50	0.06	0.00	0.33	0.38
4061+00	0.00	0.00	0.41	0.33
4061+50	0.00	0.04	0.34	0.33
4062+00	0.04	0.00	0.33	0.39

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4062+50	0.14	0.04	0.33	0.33
4063+00	0.14	0.11	0.33	0.33
4063+50	0.36	0.01	0.33	0.33
4064+00	0.17	0.00	0.33	0.34
4064+50	0.12	0.02	0.33	0.33
4065+00	0.08	0.15	0.33	0.33
4065+50	0.00	0.00	0.39	0.39
4066+00	0.00	0.02	0.33	0.33
4066+50	0.07	0.06	0.33	0.33
4067+00	0.00	0.12	0.40	0.33
4067+50	0.00	0.09	0.37	0.33
4068+00	0.01	0.13	0.33	0.33
4068+50	0.10	0.09	0.33	0.33
4069+00	0.23	0.15	0.33	0.33
4069+50	0.01	0.00	0.33	0.44
4070+00	0.01	0.00	0.33	0.61
4070+50	0.00	0.00	0.48	0.35
4071+00	0.08	0.13	0.33	0.33
4071+50	0.04	0.00	0.33	0.37
4072+00	0.05	0.00	0.33	0.53
4072+50	0.06	0.00	0.33	0.58
4073+00	0.12	0.00	0.33	0.59
4073+50	0.07	0.00	0.33	0.63
4074+00	0.09	0.00	0.33	0.45
4074+50	0.12	0.00	0.33	0.52
4075+00	0.00	0.00	0.41	0.61
4075+50	0.00	0.00	0.37	0.50
4076+00	0.16	0.02	0.33	0.33
4076+50	0.14	0.00	0.33	0.36
4077+00	0.12	0.00	0.33	0.36
4077+50	0.20	0.00	0.33	0.39
4078+00	0.07	0.00	0.33	0.53
4078+50	0.00	0.00	0.38	0.67
4079+00	0.00	0.00	0.38	0.60
4079+50	0.00	0.00	0.46	0.85
4080+00	0.10	0.00	0.33	0.48
4080+50	0.18	0.00	0.33	0.57
4081+00	0.00	0.00	0.36	0.63
4081+50	0.00	0.00	0.39	0.66
4082+00	0.00	0.00	0.44	0.52
4082+50	0.00	0.00	0.66	0.69
4083+00	0.00	0.00	0.61	0.80
4083+50	0.00	0.00	0.48	0.72

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4084+00	0.00	0.00	0.64	0.73
4084+50	0.00	0.00	0.80	0.76
4085+00	0.00	0.00	0.72	0.84
4085+50	0.00	0.00	0.79	0.72
4086+00	0.00	0.00	0.74	0.75
4086+50	0.00	0.02	0.40	0.33
4087+00	0.00	0.00	0.50	0.44
4087+50	0.01	0.04	0.33	0.33
4088+00	0.00	0.07	0.46	0.33
4088+50	0.00	0.00	0.55	0.39
4089+00	0.00	0.00	0.56	0.48
4089+50	0.00	0.09	0.55	0.33
4090+00	0.00	0.17	0.65	0.33
4090+50	0.00	0.00	0.80	0.44
4091+00	0.00	0.23	0.56	0.33
4091+50	0.00	0.00	0.67	0.49
4092+00	0.00	0.00	0.61	0.54
4092+50	0.00	0.00	0.40	0.53
4093+00	0.00	0.09	0.67	0.33
4093+50	0.00	0.09	0.58	0.33
4094+00	0.00	0.00	0.65	0.48
4094+50	0.00	0.00	0.71	0.61
4095+00	0.00	0.00	0.53	0.41
4095+50	0.00	0.00	0.56	0.42
4096+00	0.00	0.00	0.47	0.39
4096+50	0.00	0.00	0.65	0.39
4097+00	0.00	0.01	0.62	0.33
4097+50	0.00	0.11	0.37	0.33
4098+00	0.02	0.21	0.33	0.33
4098+50	0.11	0.14	0.33	0.33
4099+00	0.13	0.03	0.33	0.33
4099+50	0.14	0.12	0.33	0.33
4100+00	0.02	0.22	0.33	0.33
4100+50	0.01	0.12	0.33	0.33
4101+00	0.17	0.08	0.33	0.33
4101+50	0.14	0.00	0.33	0.38
4102+00	0.03	0.00	0.33	0.47
4102+50	0.04	0.05	0.33	0.33
4103+00	0.05	0.23	0.33	0.33
4103+50	0.02	0.21	0.33	0.33
4104+00	0.00	0.09	0.39	0.33
4104+50	0.23	0.21	0.33	0.33
4105+00	0.12	0.00	0.33	0.33

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Milling Depths

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line

Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	11	5

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4105+50	0.00	0.00	0.40	0.42
4106+00	0.10	0.00	0.33	0.34
4106+50	0.06	0.03	0.33	0.33
4107+00	0.00	0.05	0.39	0.33
4107+50	0.13	0.11	0.33	0.33
4108+00	0.01	0.07	0.33	0.33
4108+50	0.00	0.04	0.35	0.33
4109+00	0.00	0.00	0.40	0.37
4109+50	0.00	0.00	0.41	0.34
4110+00	0.03	0.09	0.33	0.33
4110+50	0.05	0.06	0.33	0.33
4111+00	0.00	0.11	0.41	0.33
4111+50	0.10	0.08	0.33	0.33
4112+00	0.04	0.11	0.33	0.33
4112+50	0.02	0.08	0.33	0.33
4113+00	0.07	0.06	0.33	0.33
4113+50	0.09	0.06	0.33	0.33
4114+00	0.15	0.00	0.33	0.38
4114+50	0.04	0.00	0.33	0.34
4115+00	0.01	0.00	0.33	0.50
4115+50	0.04	0.00	0.33	0.54
4116+00	0.15	0.00	0.33	0.42
4116+50	0.07	0.00	0.33	0.34
4117+00	0.02	0.00	0.33	0.42
4117+50	0.12	0.00	0.33	0.35
4118+00	0.11	0.00	0.33	0.38
4118+50	0.17	0.05	0.33	0.33
4119+00	0.12	0.02	0.33	0.33
4119+50	0.11	0.05	0.33	0.33
4120+00	0.09	0.02	0.33	0.33
4120+50	0.14	0.12	0.33	0.33
4121+00	0.07	0.04	0.33	0.33
4121+50	0.06	0.13	0.33	0.33
4122+00	0.01	0.00	0.33	0.34
4122+50	0.04	0.00	0.33	0.34
4123+00	0.08	0.00	0.33	0.40
4123+50	0.09	0.00	0.33	0.38
4124+00	0.00	0.00	0.44	0.40
4124+50	0.00	0.02	0.33	0.33
4125+00	0.00	0.05	0.37	0.33
4125+50	0.00	0.00	0.41	0.39
4126+00	0.00	0.00	0.43	0.36
4126+50	0.00	0.03	0.36	0.33

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4127+00	0.06	0.11	0.33	0.33
4127+50	0.00	0.00	0.34	0.34
4128+00	0.01	0.00	0.33	0.38
4128+50	0.05	0.00	0.33	0.40
4129+00	0.03	0.00	0.33	0.33
4129+50	0.03	0.00	0.33	0.39
4130+00	0.00	0.00	0.34	0.42
4130+50	0.06	0.04	0.33	0.33
4131+00	0.05	0.00	0.33	0.36
4131+50	0.00	0.00	0.41	0.37
4132+00	0.00	0.07	0.43	0.33
4132+50	0.00	0.00	0.46	0.37
4133+00	0.00	0.16	0.34	0.33
4133+50	0.00	0.06	0.33	0.33
4134+00	0.06	0.04	0.33	0.33
4134+50	0.13	0.06	0.33	0.33
4135+00	0.16	0.13	0.33	0.33
4135+50	0.08	0.00	0.33	0.34
4136+00	0.13	0.15	0.33	0.33
4136+50	0.08	0.00	0.33	0.39
4137+00	0.04	0.02	0.33	0.33
4137+50	0.10	0.07	0.33	0.33
4138+00	0.15	0.13	0.33	0.33
4138+50	0.20	0.20	0.33	0.33
4139+00	0.12	0.13	0.33	0.33
4139+50	0.15	0.14	0.33	0.33
4140+00	0.04	0.00	0.33	0.40
4140+50	0.00	0.08	0.40	0.33
4141+00	0.00	0.16	0.36	0.33
4141+50	0.05	0.15	0.33	0.33
4142+00	0.00	0.10	0.49	0.33
4142+50	0.00	0.18	0.54	0.33
4143+00	0.00	0.11	0.34	0.33
4143+50	0.14	0.09	0.33	0.33
4144+00	0.00	0.00	0.33	0.36
4144+50	0.00	0.00	0.45	0.50
4145+00	0.00	0.00	0.42	0.47
4145+50	0.00	0.09	0.41	0.33
4146+00	0.01	0.05	0.33	0.33
4146+50	0.00	0.01	0.43	0.33
4147+00	0.00	0.00	0.33	0.38
4147+50	0.11	0.05	0.33	0.33
4148+00	0.10	0.00	0.33	0.34

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4148+50	0.01	0.00	0.33	0.47
4149+00	0.00	0.00	0.34	0.38
4149+50	0.04	0.00	0.33	0.43
4150+00	0.00	0.01	0.35	0.33
4150+50	0.00	0.00	0.35	0.34
4151+00	0.00	0.00	0.46	0.40
4151+50	0.00	0.00	0.46	0.54
4152+00	0.00	0.00	0.38	0.45
4152+50	0.05	0.00	0.33	0.35
4153+00	0.03	0.00	0.33	0.40
4153+50	0.09	0.00	0.33	0.41
4154+00	0.00	0.00	0.35	0.55
4154+50	0.00	0.00	0.39	0.47
4155+00	0.00	0.00	0.36	0.40
4155+50	0.00	0.02	0.34	0.33
4156+00	0.00	0.00	0.41	0.37
4156+50	0.00	0.00	0.41	0.47
4157+00	0.00	0.00	0.49	0.46
4157+50	0.00	0.00	0.41	0.43
4158+00	0.00	0.00	0.52	0.45
4158+50	0.00	0.00	0.52	0.41
4159+00	0.00	0.00	0.43	0.37
4159+50	0.00	0.00	0.37	0.42
4160+00	0.03	0.00	0.33	0.38
4160+50	0.13	0.00	0.33	0.41
4161+00	0.03	0.01	0.33	0.33
4161+50	0.00	0.00	0.42	0.42
4162+00	0.00	0.00	0.42	0.52
4162+50	0.06	0.00	0.33	0.42
4163+00	0.00	0.01	0.34	0.33
4163+50	0.05	0.00	0.33	0.40
4164+00	0.13	0.00	0.33	0.38
4164+50	0.00	0.00	0.38	0.40
4165+00	0.05	0.02	0.33	0.33
4165+50	0.00	0.00	0.50	0.47
4166+00	0.00	0.00	0.52	0.37
4166+50	0.00	0.00	0.35	0.52
4167+00	0.03	0.00	0.33	0.45
4167+50	0.00	0.00	0.34	0.37
4168+00	0.00	0.00	0.46	0.38
4168+50	0.00	0.00	0.37	0.34
4169+00	0.00	0.00	0.36	0.53
4169+50	0.10	0.00	0.33	0.39

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Milling Depths

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line

Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	11	6

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4170+00	0.04	0.00	0.33	0.43
4170+50	0.00	0.00	0.36	0.42
4171+00	0.16	0.04	0.33	0.33
4171+50	0.00	0.00	0.34	0.49
4172+00	0.17	0.00	0.33	0.37
4172+50	0.13	0.00	0.33	0.34
4173+00	0.07	0.00	0.33	0.36
4173+50	0.15	0.00	0.33	0.37
4174+00	0.19	0.00	0.33	0.34
4174+50	0.00	0.00	0.36	0.50
4175+00	0.09	0.06	0.33	0.33
4175+50	0.23	0.15	0.33	0.33
4176+00	0.00	0.00	0.45	0.37
4176+50	0.18	0.00	0.33	0.40
4177+00	0.08	0.00	0.33	0.38
4177+50	0.13	0.02	0.33	0.33
4178+00	0.13	0.05	0.33	0.33
4178+50	0.20	0.00	0.33	0.43
4179+00	0.03	0.00	0.33	0.47
4179+50	0.02	0.00	0.33	0.63
4180+00	0.11	0.00	0.33	0.69
4180+50	0.17	0.00	0.33	0.77
4181+00	0.17	0.00	0.33	0.67
4181+50	0.16	0.00	0.33	0.54
4182+00	0.01	0.00	0.33	0.52
4182+50	0.00	0.00	0.35	0.42
4183+00	0.01	0.00	0.33	0.56
4183+50	0.00	0.00	0.38	0.51
4184+00	0.11	0.00	0.33	0.46
4184+50	0.00	0.00	0.45	0.54
4185+00	0.00	0.00	0.39	0.58
4185+50	0.00	0.00	0.41	0.73
4186+00	0.08	0.00	0.33	0.54
4186+50	0.00	0.00	0.38	0.65
4187+00	0.00	0.00	0.37	0.58
4187+50	0.05	0.00	0.33	0.64
4188+00	0.37	0.00	0.33	0.42
4188+50	0.00	0.00	0.36	0.69
4189+00	0.00	0.00	0.33	0.59
4189+50	0.00	0.00	0.33	0.58
4190+00	0.00	0.00	0.37	0.40
4190+50	0.18	0.00	0.33	0.47
4191+00	0.15	0.00	0.33	0.39

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4191+50	0.15	0.01	0.33	0.33
4192+00	0.00	0.00	0.33	0.39
4192+50	0.00	0.00	0.39	0.45
4193+00	0.00	0.00	0.42	0.55
4193+50	0.00	0.00	0.43	0.44
4194+00	0.00	0.00	0.39	0.56
4194+50	0.00	0.00	0.55	0.51
4195+00	0.00	0.00	0.60	0.42
4195+50	0.00	0.00	0.50	0.40
4196+00	0.00	0.00	0.47	0.52
4196+50	0.00	0.00	0.51	0.55
4197+00	0.00	0.00	0.51	0.66
4197+50	0.00	0.00	0.35	0.49
4198+00	0.28	0.07	0.33	0.33
4198+50	0.16	0.19	0.33	0.33
4199+00	0.00	0.00	0.44	0.48
4199+50	0.00	0.00	0.42	0.34
4200+00	0.27	0.31	0.33	0.33
4200+50	0.09	0.06	0.33	0.33
4201+00	0.00	0.00	0.50	0.49
4201+50	0.03	0.00	0.33	0.44
4202+00	0.01	0.00	0.33	0.85
4202+50	0.00	0.00	0.35	0.60
4203+00	0.00	0.00	0.37	0.75
4203+50	0.18	0.00	0.33	0.58
4204+00	0.43	0.00	0.33	0.42
4204+50	0.00	0.00	0.37	0.84
4205+00	0.00	0.00	0.40	0.85
4205+50	0.00	0.00	0.46	0.62
4206+00	0.06	0.00	0.33	0.49
4206+50	0.37	0.00	0.33	0.63
4207+00	0.25	0.00	0.33	1.05
4207+50	0.04	0.00	0.33	1.02
4208+00	0.19	0.00	0.33	0.64
4208+50	0.03	0.00	0.33	0.69
4209+00	0.04	0.21	0.33	0.33
4209+50	0.12	0.27	0.33	0.33
4210+00	0.14	0.01	0.33	0.33
4210+50	0.00	0.00	0.36	0.37
4211+00	0.00	0.00	0.52	0.66
4211+50	0.00	0.01	0.40	0.33
4212+00	0.00	0.00	0.35	0.60
4212+50	0.23	0.00	0.33	0.54

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4213+00	0.14	0.00	0.33	0.57
4213+50	0.37	0.00	0.33	0.74
4214+00	0.00	0.00	0.68	0.52
4214+50	0.00	0.00	0.57	0.50
4215+00	0.00	0.00	0.48	0.35
4215+50	0.00	0.00	0.43	0.48
4216+00	0.00	0.00	0.55	0.63
4216+50	0.00	0.00	0.59	0.61
4217+00	0.00	0.00	0.51	0.38
4217+50	0.00	0.03	0.65	0.33
4218+00	0.00	0.10	0.55	0.33
4218+50	0.00	0.00	0.33	0.42
4219+00	0.00	0.00	0.49	0.41
4219+50	0.00	0.00	0.47	0.43
4220+00	0.00	0.00	0.34	0.39
4220+50	0.00	0.00	0.52	0.42
4221+00	0.00	0.06	0.54	0.33
4221+50	0.00	0.08	0.54	0.33
4222+00	0.00	0.01	0.46	0.33
4222+50	0.00	0.03	0.55	0.33
4223+00	0.00	0.00	0.74	0.51
4223+50	0.00	0.00	0.72	0.66
4224+00	0.00	0.00	0.65	0.67
4224+50	0.00	0.00	0.63	0.77
4225+00	0.00	0.00	0.73	0.74
4225+50	0.00	0.00	0.47	0.57
4226+00	0.00	0.00	0.69	0.49
4226+50	0.00	0.00	0.72	0.47
4227+00	0.00	0.00	0.58	0.36
4227+50	0.01	0.00	0.33	0.44
4228+00	0.00	0.00	0.57	0.56
4228+50	0.00	0.00	0.66	0.53
4229+00	0.00	0.00	0.60	0.41
4229+50	0.00	0.08	0.53	0.33
4230+00	0.00	0.00	0.34	0.33
4230+50	0.00	0.00	0.62	0.58
4231+00	0.00	0.00	0.57	0.49
4231+50	0.00	0.00	0.50	0.43
4232+00	0.00	0.00	0.62	0.42
4232+50	0.00	0.00	0.59	0.43
4233+00	0.00	0.00	0.56	0.43
4233+50	0.00	0.00	0.63	0.49
4234+00	0.00	0.00	0.40	0.50

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Milling Depths

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line

Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	11	7

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4234+50	0.00	0.00	0.50	0.53
4235+00	0.00	0.00	0.56	0.59
4235+50	0.00	0.00	0.66	0.50
4236+00	0.00	0.00	0.55	0.34
4236+50	0.00	0.00	0.58	0.49
4237+00	0.00	0.00	0.54	0.51
4237+50	0.00	0.00	0.55	0.39
4238+00	0.00	0.00	0.51	0.38
4238+50	0.00	0.04	0.47	0.33
4239+00	0.00	0.00	0.36	0.39
4239+50	0.00	0.00	0.37	0.42
4240+00	0.00	0.00	0.51	0.46
4240+50	0.00	0.00	0.47	0.42
4241+00	0.00	0.00	0.51	0.44
4241+50	0.00	0.00	0.54	0.35
4242+00	0.00	0.00	0.64	0.55
4242+50	0.00	0.00	0.58	0.47
4243+00	0.00	0.00	0.60	0.41
4243+50	0.00	0.05	0.55	0.33
4244+00	0.00	0.04	0.68	0.33
4244+50	0.00	0.00	0.53	0.41
4245+00	0.00	0.06	0.55	0.33
4245+50	0.00	0.06	0.34	0.33
4246+00	0.11	0.13	0.33	0.33
4246+50	0.09	0.15	0.33	0.33
4247+00	0.00	0.00	0.37	0.34
4247+50	0.00	0.00	0.39	0.44
4248+00	0.01	0.00	0.33	0.43
4248+50	0.00	0.06	0.40	0.33
4249+00	0.00	0.00	0.34	0.36
4249+50	0.07	0.03	0.33	0.33
4250+00	0.00	0.10	0.35	0.33
4250+50	0.00	0.01	0.33	0.33
4251+00	0.03	0.00	0.33	0.33
4251+50	0.10	0.04	0.33	0.33
4252+00	0.00	0.13	0.37	0.33
4252+50	0.06	0.12	0.33	0.33
4253+00	0.01	0.00	0.33	0.37
4253+50	0.00	0.00	0.47	0.34
4254+00	0.00	0.07	0.39	0.33
4254+50	0.00	0.00	0.48	0.47
4255+00	0.00	0.00	0.43	0.42
4255+50	0.00	0.00	0.40	0.40

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4256+00	0.00	0.08	0.42	0.33
4256+50	0.11	0.19	0.33	0.33
4257+00	0.00	0.00	0.43	0.46
4257+50	0.00	0.00	0.75	0.50
4258+00	0.00	0.10	0.42	0.33
4258+50	0.17	0.40	0.33	0.33
4259+00	0.12	0.18	0.33	0.33
4259+50	0.30	0.30	0.33	0.33
4260+00	0.00	0.04	0.47	0.33
4260+50	0.00	0.00	0.45	0.38
4261+00	0.09	0.03	0.33	0.33
4261+50	0.14	0.19	0.33	0.33
4262+00	0.17	0.16	0.33	0.33
4262+50	0.00	0.00	0.37	0.39
4263+00	0.06	0.03	0.33	0.33
4263+50	0.06	0.08	0.33	0.33
4264+00	0.12	0.08	0.33	0.33
4264+50	0.21	0.23	0.33	0.33
4265+00	0.17	0.04	0.33	0.33
4265+50	0.08	0.03	0.33	0.33
4266+00	0.00	0.18	0.36	0.33
4266+50	0.00	0.00	0.63	0.43
4267+00	0.00	0.08	0.37	0.33
4267+50	0.00	0.00	0.47	0.41
4268+00	0.04	0.00	0.33	0.39
4268+50	0.00	0.00	0.42	0.34
4269+00	0.01	0.14	0.33	0.33
4269+50	0.00	0.00	0.58	0.45
4270+00	0.00	0.00	0.38	0.42
4270+50	0.00	0.13	0.40	0.33
4271+00	0.00	0.06	0.46	0.33
4271+50	0.00	0.08	0.47	0.33
4272+00	0.00	0.00	0.39	0.34
4272+50	0.01	0.11	0.33	0.33
4273+00	0.06	0.21	0.33	0.33
4273+50	0.32	0.25	0.33	0.33
4274+00	0.18	0.01	0.33	0.33
4274+50	0.03	0.00	0.33	0.35
4275+00	0.03	0.04	0.33	0.33
4275+50	0.05	0.04	0.33	0.33
4276+00	0.00	0.00	0.42	0.47
4276+50	0.00	0.00	0.60	0.67
4277+00	0.00	0.00	0.40	0.56

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4277+50	0.06	0.00	0.33	0.60
4278+00	0.12	0.02	0.33	0.33
4278+50	0.11	0.00	0.33	0.36
4279+00	0.03	0.06	0.33	0.33
4279+50	0.00	0.00	0.46	0.33
4280+00	0.19	0.39	0.33	0.33
4280+50	0.04	0.11	0.33	0.33
4281+00	0.09	0.08	0.33	0.33
4281+50	0.21	0.17	0.33	0.33
4282+00	0.00	0.13	0.34	0.33
4282+50	0.00	0.09	0.35	0.33
4283+00	0.11	0.31	0.33	0.33
4283+50	0.02	0.24	0.33	0.33
4284+00	0.06	0.12	0.33	0.33
4284+50	0.07	0.15	0.33	0.33
4285+00	0.10	0.10	0.33	0.33
4285+50	0.06	0.00	0.33	0.56
4286+00	0.15	0.03	0.33	0.33
4286+50	0.24	0.15	0.33	0.33
4287+00	0.00	0.00	0.33	0.37
4287+50	0.03	0.00	0.33	0.38
4288+00	0.14	0.13	0.33	0.33
4288+50	0.03	0.13	0.33	0.33
4289+00	0.00	0.08	0.36	0.33
4289+50	0.00	0.05	0.44	0.33
4290+00	0.00	0.07	0.39	0.33
4290+50	0.00	0.07	0.35	0.33
4291+00	0.00	0.11	0.38	0.33
4291+50	0.00	0.18	0.39	0.33
4292+00	0.00	0.19	0.37	0.33
4292+50	0.02	0.07	0.33	0.33
4293+00	0.04	0.11	0.33	0.33
4293+50	0.01	0.09	0.33	0.33
4294+00	0.00	0.03	0.41	0.33
4294+50	0.00	0.06	0.40	0.33
4295+00	0.00	0.07	0.35	0.33
4295+50	0.00	0.09	0.36	0.33
4296+00	0.09	0.06	0.33	0.33
4296+50	0.02	0.05	0.33	0.33
4297+00	0.19	0.10	0.33	0.33
4297+50	0.11	0.11	0.33	0.33
4298+00	0.00	0.00	0.35	0.36
4298+50	0.11	0.09	0.33	0.33

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Milling Depths

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line

Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	11	8

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4299+00	0.14	0.29	0.33	0.33
4299+50	0.01	0.15	0.33	0.33
4300+00	0.22	0.13	0.33	0.33
4300+50	0.05	0.11	0.33	0.33
4301+00	0.00	0.00	0.35	0.33
4301+50	0.03	0.09	0.33	0.33
4302+00	0.14	0.08	0.33	0.33
4302+50	0.08	0.04	0.33	0.33
4303+00	0.03	0.07	0.33	0.33
4303+50	0.09	0.14	0.33	0.33
4304+00	0.07	0.03	0.33	0.33
4304+50	0.00	0.03	0.38	0.33
4305+00	0.00	0.00	0.43	0.37
4305+50	0.00	0.06	0.38	0.33
4306+00	0.00	0.05	0.36	0.33
4306+50	0.00	0.00	0.48	0.47
4307+00	0.01	0.00	0.33	0.34
4307+50	0.00	0.00	0.37	0.38
4308+00	0.15	0.13	0.33	0.33
4308+50	0.00	0.09	0.41	0.33
4309+00	0.00	0.10	0.37	0.33
4309+50	0.00	0.00	0.54	0.38
4310+00	0.00	0.00	0.39	0.36
4310+50	0.00	0.11	0.43	0.33
4311+00	0.00	0.17	0.44	0.33
4311+50	0.00	0.23	0.36	0.33
4312+00	0.00	0.07	0.40	0.33
4312+50	0.06	0.00	0.33	0.38
4313+00	0.00	0.00	0.41	0.36
4313+50	0.00	0.13	0.48	0.33
4314+00	0.00	0.02	0.38	0.33
4314+50	0.00	0.10	0.38	0.33
4315+00	0.00	0.18	0.41	0.33
4315+50	0.00	0.05	0.40	0.33
4316+00	0.00	0.04	0.34	0.33
4316+50	0.00	0.00	0.33	0.39
4317+00	0.00	0.00	0.37	0.34
4317+50	0.00	0.20	0.36	0.33
4318+00	0.00	0.07	0.58	0.33
4318+50	0.00	0.00	0.37	0.43
4319+00	0.00	0.08	0.34	0.33
4319+50	0.00	0.00	0.37	0.35
4320+00	0.00	0.10	0.42	0.33

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4320+50	0.00	0.00	0.60	0.66
4321+00	0.12	0.00	0.33	0.36
4321+50	0.00	0.00	0.37	0.61
4322+00	0.00	0.00	0.43	0.50
4322+50	0.00	0.00	0.71	0.64
4323+00	0.00	0.01	0.54	0.33
4323+50	0.00	0.01	0.61	0.33
4324+00	0.00	0.16	0.35	0.33
4324+50	0.00	0.00	0.58	0.50
4325+00	0.00	0.00	0.50	0.40
4325+50	0.00	0.00	0.56	0.46
4326+00	0.00	0.00	0.38	0.39
4326+50	0.00	0.00	0.34	0.62
4327+00	0.10	0.18	0.33	0.33
4327+50	0.14	0.24	0.33	0.33
4328+00	0.10	0.00	0.33	0.45
4328+50	0.00	0.00	0.49	0.38
4329+00	0.00	0.09	0.35	0.33
4329+50	0.05	0.04	0.33	0.33
4330+00	0.12	0.00	0.33	0.35
4330+50	0.24	0.00	0.33	0.35
4331+00	0.31	0.06	0.33	0.33
4331+50	0.20	0.08	0.33	0.33
4332+00	0.00	0.00	0.33	0.33
4332+50	0.00	0.00	0.43	0.42
4333+00	0.00	0.00	0.41	0.41
4333+50	0.00	0.00	0.43	0.40
4334+00	0.00	0.05	0.37	0.33
4334+50	0.02	0.12	0.33	0.33
4335+00	0.02	0.15	0.33	0.33
4335+50	0.08	0.31	0.33	0.33
4336+00	0.00	0.14	0.41	0.33
4336+50	0.00	0.07	0.53	0.33
4337+00	0.00	0.07	0.53	0.33
4337+50	0.00	0.05	0.51	0.33
4338+00	0.00	0.03	0.36	0.33
4338+50	0.03	0.04	0.33	0.33
4339+00	0.13	0.08	0.33	0.33
4339+50	0.19	0.11	0.33	0.33
4340+00	0.12	0.11	0.33	0.33
4340+50	0.00	0.09	0.44	0.33
4341+00	0.00	0.03	0.44	0.33
4341+50	0.00	0.00	0.46	0.35

Station	mill depth (ft) @ 12' Lt	mill depth (ft) @ 12' Rt	overlay thickness (ft) @ 12' Lt	overlay thickness (ft) @ 12' Rt
4342+00	0.00	0.00	0.47	0.36
4342+50	0.00	0.00	0.46	0.47
4343+00	0.02	0.00	0.33	0.39
4343+50	0.13	0.00	0.33	0.36
4344+00	0.09	0.13	0.33	0.33
4344+50	0.00	0.06	0.37	0.33
4345+00	0.00	0.00	0.44	0.35
4345+50	0.07	0.21	0.33	0.33
4346+00	0.00	0.12	0.48	0.33
4346+50	0.00	0.04	0.51	0.33
4347+00	0.00	0.00	0.36	0.59

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Milling Depths

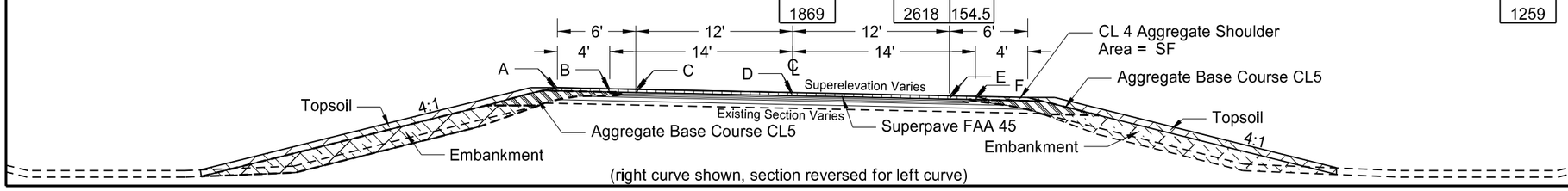
Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line

Note: Variable "A" represents the high side of both left and right curves and variable "F" represents the low side of both left and right curves.

Sheet Revised 12/7/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	30	8

Location	Curve Direction	Left Curve: Superelevation (%) Existing Slope Left	Existing Slope Right	Proposed Slope Left	Proposed Slope Right	Total Depth of Superpave FAA 45 A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Additional Quantities Tack (gal)	Area (sf)	FAA 45 (ton)	PG (ton)	Right Curve: Superelevation (%) Existing Slope Left	Existing Slope Right	Proposed Slope Left	Proposed Slope Right	Total Depth of Superpave FAA 45 A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Additional Quantities Tack (gal)	Area (sf)	FAA 45 (ton)	PG (ton)
PC-118' Station 3947+37.09																-2.3	-0.7	-2.1	-2.1	4.0	4.3	5.3	4.0	4.0	4.0	4.9	0.7833	3.6	0.21
PC-59' Station 3947+96.09																-0.4	-1.9	0.0	-2.1	4.0	7.2	5.0	4.0	4.0	4.0	13.9	0.8500	9.3	0.55
PC Station 3948+55.09																0.1	-3.7	2.0	-2.1	4.0	7.1	6.7	4.0	6.3	6.7	7.1	3.4000	7.3	0.43
PC+25' Station 3948+80.09	Right															-0.8	-3.6	3.0	-3.0	4.0	11.4	9.5	4.0	5.0	5.2	475.8	4.5083	623.0	36.76
PT-25 Station 3969+19.04																-0.8	-2.6	3.0	-3.0	4.0	10.4	9.5	4.0	4.0	4.0	4.4	3.7417	5.6	0.33
PT Station 3969+44.04																-0.4	-2.4	2.0	-2.1	4.0	8.0	7.4	4.0	4.0	4.0	6.9	2.3167	8.4	0.50
PT+59' Station 3970+03.04																-0.1	-3.4	0.0	-2.1	4.0	4.2	4.4	4.0	5.9	6.2	2.5	1.5417	5.0	0.29
PT+118' Station 3970+62.04																-2.3	-1.8	-2.1	-2.1	4.0	4.3	5.2	4.0	4.0	4.0		0.7250		
PC-118' Station 3984+84.87		-2.4	0.0	-2.1	-2.1	4.0	4.0	4.0	4.0	4.4	4.5		0.2979																
PC-59' Station 3985+43.87		-4.1	-3.4	-2.1	0.0	4.0	9.7	8.9	4.0	6.9	7.4	12.5	6.0041	13.8	0.81														
PC Station 3986+02.87		-4.9	-0.5	-2.1	2.0	4.0	8.2	7.6	4.0	8.0	8.7	20.6	5.8262	25.8	1.52														
PC+25' Station 3986+27.87	Left	-4.6	0.3	-3.0	3.0	4.0	8.5	7.2	4.0	6.3	6.7	8.0	4.6194	9.7	0.57														
PT-25' Station 4009+84.14		-2.7	-0.1	-3.0	3.0	4.0	9.2	8.5	4.0	6.3	6.4	602.2	3.4162	701.3	41.37														
PT Station 4010+09.14		-2.3	-0.2	-2.1	2.0	4.0	7.2	7.2	4.0	4.3	4.3	4.9	2.5450	5.5	0.33														
PT+59' Station 4010+68.14		-2.5	-1.8	-2.1	0.0	4.0	7.0	6.8	4.0	4.6	4.7	10.5	2.2999	10.6	0.62														
PT+118' Station 4011+27.14		-3.1	-1.8	-2.1	-2.1	4.0	4.0	5.3	4.0	5.5	5.6	7.0	1.0247	7.3	0.43														
PC-108' Station 4039+15.41		-4.6.	-1.8	-2.1	-2.1	4.0	4.0	5.1	4.0	7.6	8.2		2.7502																
PC-49' Station 4039+74.41		-4.1	-1.1	-2.1	0.0	4.0	5.8	5.6	4.0	6.9	7.4	11.3	3.2752	13.2	078														
PC Station 4040+23.41		-2.6	0.3	-2.1	1.7	4.0	6.4	6.0	4.0	4.7	4.8	9.1	1.9488	9.5	0.56														
PC+21' Station 4040+44.41	Left	-2.5	0.4	-2.5	2.5	4.0	7.5	6.7	4.0	4.0	4.0	3.0	2.2281	3.2	0.19														
PT-21' Station 4055+77.54		-3.8	-1.2	-2.5	2.5	4.0	10.2	8.6	4.0	5.9	6.2	396.1	5.5418	441.2	26.03														
PT Station 4055+98.54		-3.0	-1.4	-2.1	1.7	4.0	9.2	8.5	4.0	5.3	5.5	6.7	4.3552	7.7	0.45														
PT+49' Station 4056+47.54		-1.6	-1.1	-2.1	0.0	4.0	5.8	5.8	4.0	4.0	4.0	8.0	1.1276	10.0	0.59														
PT+108' Station 4057+06.54		-2.5	-1.9	-2.1	-2.1	4.0	4.0	4.6	4.0	4.6	4.7	1.6	0.3990	3.3	0.20														
PC-118' Station 4080+48.16																0.0	-4.1	-2.1	-2.1	4.0	4.0	4.0	4.0	6.8	7.4	8.8	1.9167	9.9	0.59
PC-59' Station 4081+07.16																0.0	-4.6	0.0	-2.1	4.0	4.0	4.3	4.0	7.6	8.2	8.8	2.6250	12.5	0.74
PC Station 4081+66.16																1.5	-4.9	2.0	-2.1	4.0	4.0	5.0	4.0	7.7	8.7	4.6	3.0750	5.1	0.30
PC+25' Station 4081+91.16	Right															2.0	-4.6	3.0	-3.0	4.0	5.7	5.2	4.0	6.3	6.7	212.6	2.4083	225.9	13.33
PT-25' Station 4095+82.42																1.6	-3.5	3.0	-3.0	4.0	6.4	6.0	4.0	4.9	5.0	2.7	1.9750	3.2	0.19
PT Station 4096+07.42																1.6	-3.4	2.0	-2.1	4.0	4.7	5.7	4.0	4.7	4.8	7.9	1.5250	8.6	0.51
PT+59' Station 4096+66.42																-0.4	-2.8	0.0	-2.1	4.0	4.7	7.6	4.0	4.4	4.5	3.9	2.4333	7.7	0.46
PT+118' Station 4097+25.42																-1.0	-1.6	-2.1	-2.1	4.0	4.0	5.9	4.0	4.0	4.0		1.1083		
PC-157' Station 4178+38.39		0.9	-0.6	-2.1	-2.1	4.0	4.0	4.7	4.0	4.0	4.0		0.0000																
PC-98' Station 4178+97.39		-1.0	-0.2	-2.1	0.0	4.0	4.3	5.5	4.0	4.0	4.0	1.0	0.1976	0.4	0.02														
PC Station 4179+95.39		-2.3	0.0	-3.0	3.0	4.0	9.0	8.3	4.0	4.0	4.0	9.0	3.2928	12.7	0.75														
PC+42' Station 4180+37.39	Left	-3.5	0.1	-4.5	4.5	4.0	11.4	8.9	4.0	4.0	4.0	7.5	5.0679	13.0	0.77														
PT-42' Station 4207+05.8		-2.0	-1.6	-4.5	4.5	4.0	14.4	12.5	4.0	4.0	4.0	711.6	7.6928	1261.1	74.41														
PT Station 4207+47.8		-2.4	-2.8	-3.0	3.0	4.0	13.9	12.2	4.0	4.0	4.0	12.8	7.3256	23.4	1.38														
PT+98' Station 4208+45.8		-1.5	-2.8	-2.1	0.0	4.0	8.9	8.2	4.0	4.0	4.0	21.2	3.2149	38.3	2.26														
PT+157' Station 4209+04.8		-1.0	0.8	-2.1	+2.1	4.0	4.0	4.0	4.0	4.0	4.0	4.4	0.0000	7.0	0.41														
PC-139' Station 4211+89.32																-1.3	-2.8	-2.1	-2.1	4.0	4.0	4.4	4.0	5.7	5.8	3.9	1.3750	7.5	0.44
PC-80' Station 4212+48.32																0.7	-2.9	0.0	-2.1	4.0	4.0	4.0	4.0	7.1	7.2	9.3	2.0750	14.4	0.85
PC Station 4213+28.32																1.0	-4.1	2.7	-2.7	4.0	6.8	4.0	4.0	7.8	7.9	7.3	2.7750	8.4	0.49
PC+35' Station 4213+63.32	Left															1.6	-4.8	4.1	-4.1	4.0	8.2	5.9	4.0	7.3	7.4	63.4	3.6667	68.5	4.04
Beg Subcut Station 4216+18																													
End Subcut Station 4227+48																										392.0	0.0000	399.9	23.60
PT-35' Station 4244+05.63																1.0	-3.4	4.1	-4.1	4.0	9.2	8.0	4.0	4.0	4.0	6.2	2.7667	6.5	0.38
PT Station 4244+40.63																0.8	-2.9	2.7	-2.7	4.0	7.2	6.7	4.0	4.6	4.7	9.3	2.2500	9.5	0.56
PT+80' Station 4245+20.63																-1.0	-1.5	0.0	-2.1	4.0	5.7	5.4	4.0	4.0	4.0	2.5	0.9583	2.1	0.12
PT+139' Station 4245+79.63																-1.0	-1.2	-2.1	-2.1	4.0	4.0	4.0	4.0	4.0	4.0		0.0000		
												1869		2618	154.5											1259		1452	85.7



(right curve shown, section reversed for left curve)

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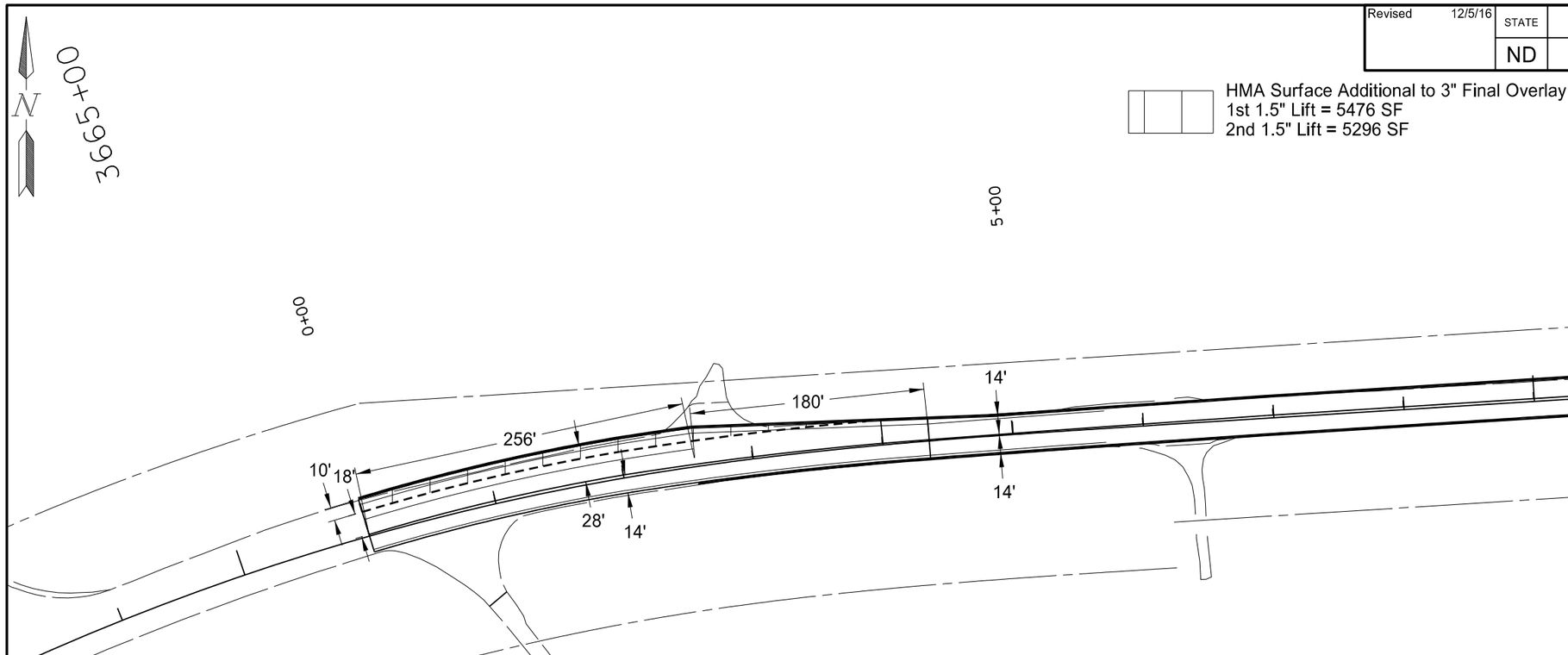
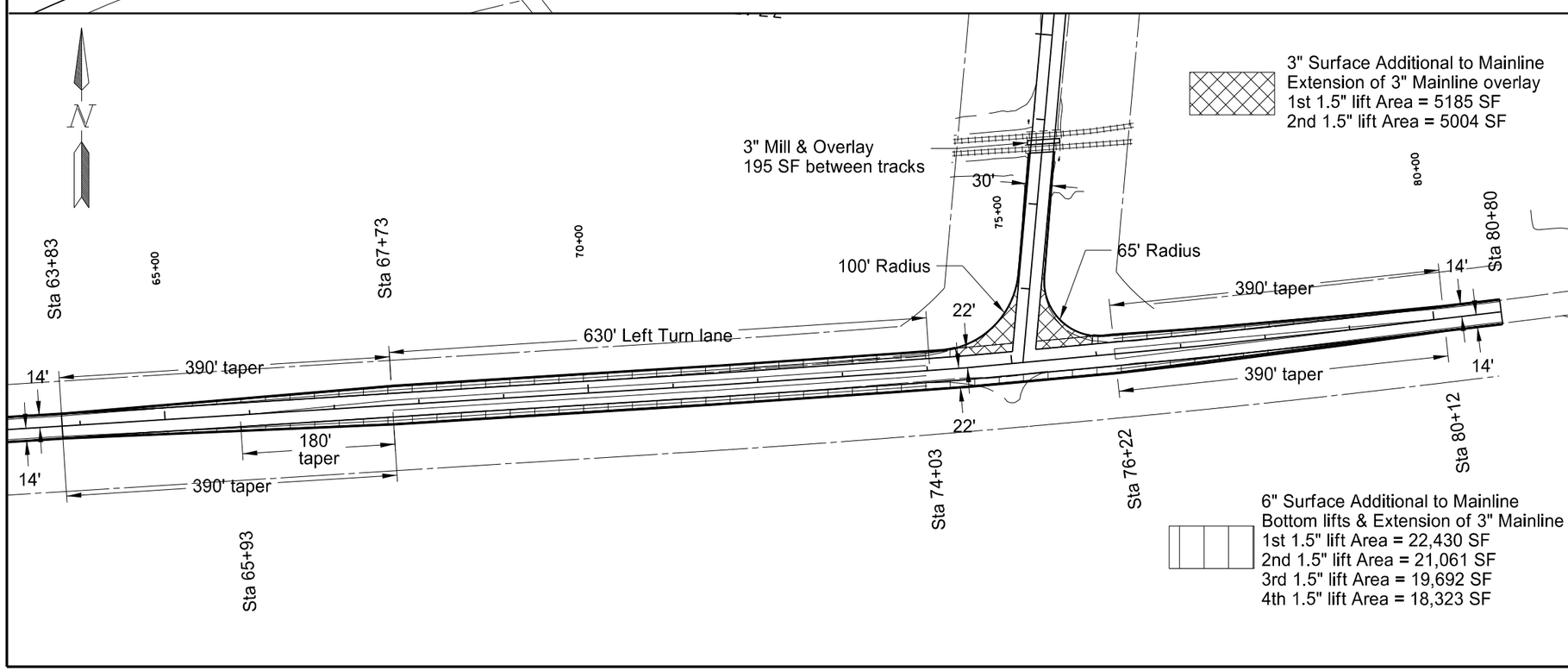
Proposed Curve Superelevation Correction Typical Sections

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line

Revised 12/5/16	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SS-NH-1-049(027)067	80	1





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Turn Lane Layouts

Right Turn Lane Extension East side of Glen Ullin
Left Turn Lane Addition at Jct with County Road139

Widening, Sliver Grading, HBP Overlay, and Guardrail

Glen Ullin East & North to County Line