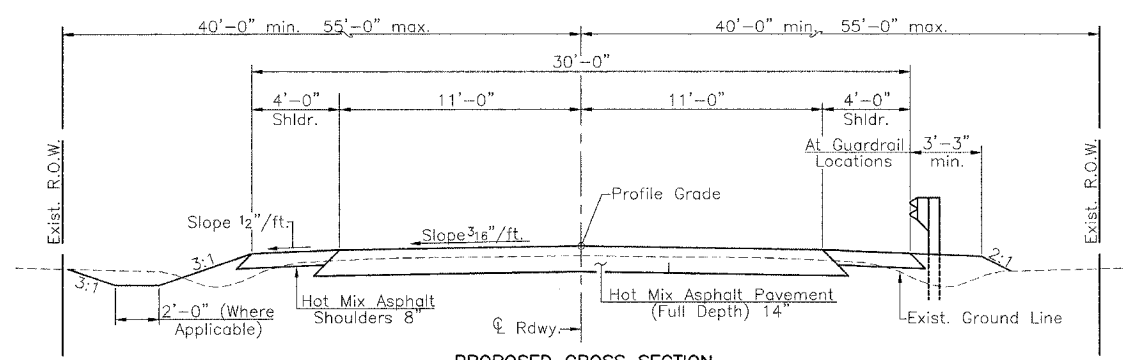
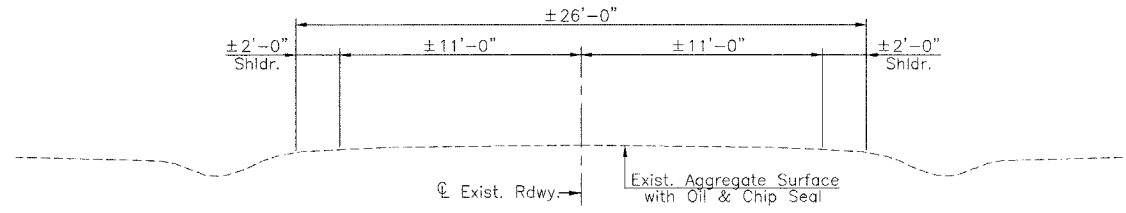


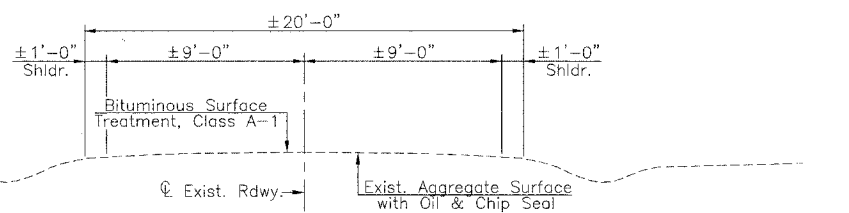
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 731	*	GREENE	30	2
FEDERAL AID PROJECT				
* 01-00071-00-BR				
CONTRACT NO. 97289				



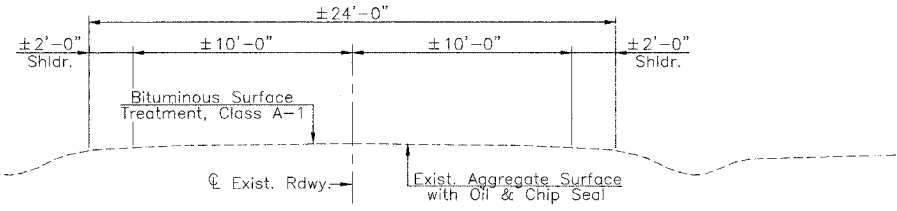
PROPOSED CROSS SECTION



EXISTING CROSS SECTION (F.A.S. 731 - C.H. 2)

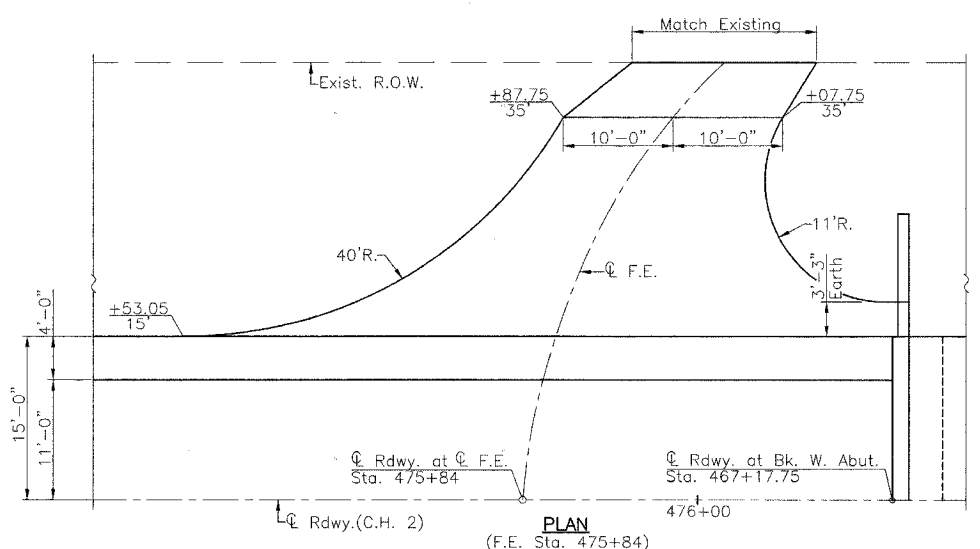


EXISTING CROSS SECTION (DETOUR ROAD) (C.R. 16)



EXISTING CROSS SECTION (DETOUR ROAD) (Athensville Blacktop)

When the project is complete, the detour road (1.25 miles C.R. 16 & 1.0 miles Athensville Blacktop) shall have a Bituminous Surface Treatment Class A-1 applied to it. Estimated quantities for this application are shown in the Summary of Quantities as Seal Coat Aggregate and Bituminous Materials (Cover and Seal Coats.)



PLAN (F.E. Sta. 475+84)

GENERAL NOTES
 Where section or subsection stones are encountered, the Engineer shall be notified before such stones are removed. The contractor shall protect and preserve all properly markers and monuments until the owner, authorized surveyor, or agent has witnessed or referenced their location.
 Areas to be seeded shall consist of all disturbed earth surfaces within the right-of-way as directed by the Engineer.
 The Contractor shall be responsible for maintaining the detour route, including bituminous patching, and any other work as directed by the Engineer. This work will be paid for in accordance with Section 109.04 of the Standard Specifications.

The following rates of application have been used to calculate the plan quantities:
 Bituminous Materials (Cover and Seal Coats) 0.3 Gal/Sq. Yd. (On Exist. Pavement)
 Bituminous Materials (Prime Coat) 0.1 Gal/Sq. Yd. (On Bituminous)
 Hot Mix Asphalt Surface 0.056 Ton/Sq. Yd. Per 1"
 Aggregate Material 2.05 Ton/Cu. Yd.
 Riprap 1.35 Ton/Sq. Yd.
 Mulch Method 2 2.0 Ton/Acre
 Agricultural Ground Limestone 2.0 Ton/Acre
 Nitrogen Fertilizer Nutrient 90 Lbs./Acre
 Phosphorus Fertilizer Nutrient 90 Lbs./Acre
 Potassium Fertilizer Nutrient 90 Lbs./Acre
 Seal Coat Aggregate 0.0125 Ton/Sq. Yd.

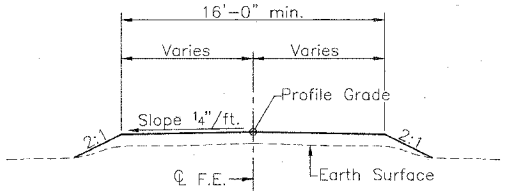
HOT MIX ASPHALT MIXTURE REQUIREMENTS

Mixture Use	Full Depth Pav't.	H. M. A. Shoulder
AC/PG	PC64-22	* PG64-22
RAP % (MAX.)	15	15
Design Air Voids (Gradation Mixture)	4% @ Ndes = 50	4% @ Ndes = 50
Friction Agg.	Mixture C	IL-19.0
		N/A

* (PG 58-22) Required when greater than 20% RAP is utilized.

PAVEMENT DESIGN

Structural Design Traffic (S.D.T.): 806 (2017): P.V.=686, S.U.=60, M.U.=60
 Class III Road
 Minimum Soil Support: I.B.R. = 3.0
 Percent of S.D.T. in Design Lane: P=50% S=50% M=50%
 T.F. = 0.24
 Pavement Structural Material:
 Typical Proposed Roadway Cross Section:
 Proposed Hot Mix Asphalt Pavement (Full Depth) (Min. M.S. 1500) — 14"



TYPICAL FIELD ENTRANCE (F.E. Sta. 475+84 Lt.)

SUMMARY OF QUANTITIES

Item	Unit	Quantity
20100500	Tree Removal, Acres	0.2
20200100	Earth Excavation	Cu. Yd. 1294
20300100	Channel Excavation	Cu. Yd. 821
25001000	Seeding Class 2 (Special)	Acres 1.6
28000250	Temporary Erosion Control Seeding	Pound 160
28000300	Temporary Ditch Checks	Each 6
28000400	Perimeter Erosion Barrier	Foot 1700
28100809	Stone Dumped Riprap, Class A5	Ton 1166
28200200	Filter Fabric	Sq. Yd. 890
40300300	Bituminous Materials (Cover and Seal Coats)	Gallon 7480
40300600	Seal Coat Aggregate	Ton 312
40600100	Bituminous Materials (Prime Coat)	Gallon 139
40701961	Hot Mix Asphalt Pavement (Full Depth) 14"	Sq. Yd. 1442
48203029	Hot Mix Asphalt Shoulders, 8"	Sq. Yd. 484
50100100	Removal of Existing Structures	Each 1
50200100	Structure Excavation	Cu. Yd. 427
50200300	Cofferdam Excavation	Cu. Yd. 607
50200700	Cofferdam (Pier 2)	Each 1
50200800	Cofferdam (Pier 3)	Each 1
50300225	Concrete Structures	Cu. Yd. 298.6
50300255	Concrete Superstructure	Cu. Yd. 409.7
50300260	Bridge Deck Grooving	Sq. Yd. 1639
50300265	Seal Coat Concrete	Cu. Yd. 82.6
50300300	Protective Coat	Sq. Yd. 1639
50500105	Furnishing and Erecting Structural Steel	L. Sum 1
50500505	Stud Shear Connectors	Each 4935
50800205	Reinforcement Bars (Epoxy Coated)	Pound 141130
50900500	Steel Baling T.Y. Sm	Foot 992
51201400	Furnishing Steel Piles HP10x42	Foot 810
51201600	Furnishing Steel Piles HP12x53	Foot 1880
51202305	Driving Piles	Foot 2690
51203400	Test Pile, Steel HP10x42	Each 2
51203600	Test Pile, Steel HP12x53	Each 4
51500100	Name Plates	Each 1
52000110	Preformed Joint Strip Seal	Foot 60
52100020	Elastomeric Bearing Assembly, Type II	Each 10
52100030	Elastomeric Bearing Assembly, Type III	Each 10
58700300	Concrete Sealer	Sq. Ft. 195
* 63000000	Steel Plate Beam Guardrail, Type A	Foot 400
* 63100087	Traffic Barrier Terminal, Type 6A	Each 3
* 63100167	Traffic Barrier Terminal, Type 1 Special (Tangent)	Each 1
63200310	Guardrail Removal	Foot 530
67100100	Mobilization	L. Sum 1
70101700	Traffic Control And Protection	L. Sum 1
* 78008210	Polyurea Pavement Marking Type 1- Line 4"	Foot 2430
* 78201000	Terminal Marker - Direct Applied	Each 1
X5020501	Underwater Structure Excavation Protection Location 1	Each 1
X5020502	Underwater Structure Excavation Protection Location 2	Each 1
Z0013798	Construction Layout	L. Sum 1

* Specialty Items

Construction Type Code: X071-2A

**SUMMARY OF QUANTITIES
 DETAILS & TYPICAL SECTIONS
 F.A.S. 731 - C.H. 2
 OVER APPLE CREEK
 SECTION 01-00071-00-BR
 GREENE COUNTY**