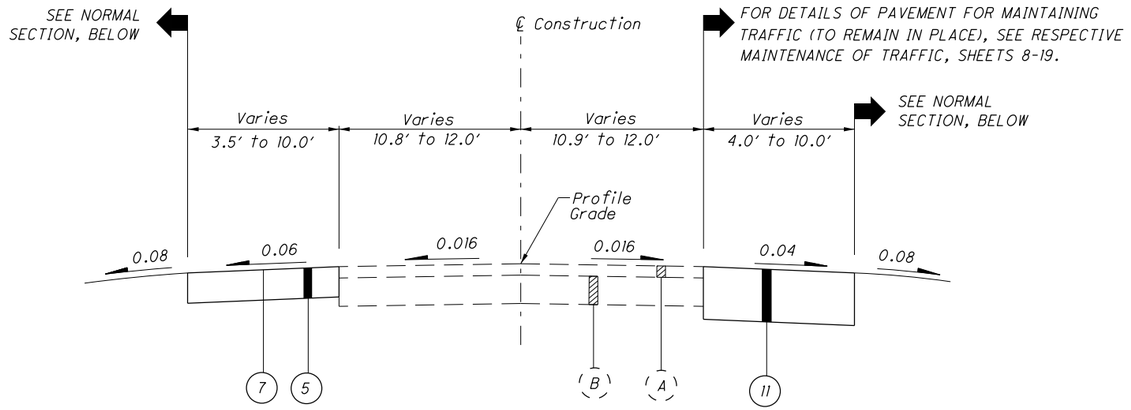
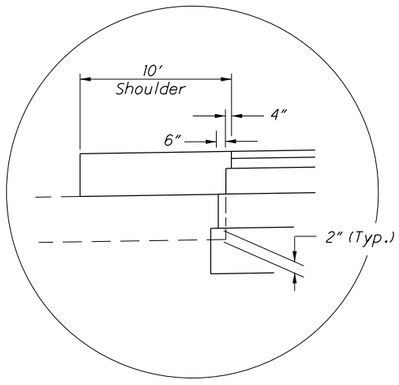


NORMAL SECTION - U.S. 46

Sta. 634+00.00 to Sta. 635+75.00



BASE AND SUBBASE STEP DETAIL

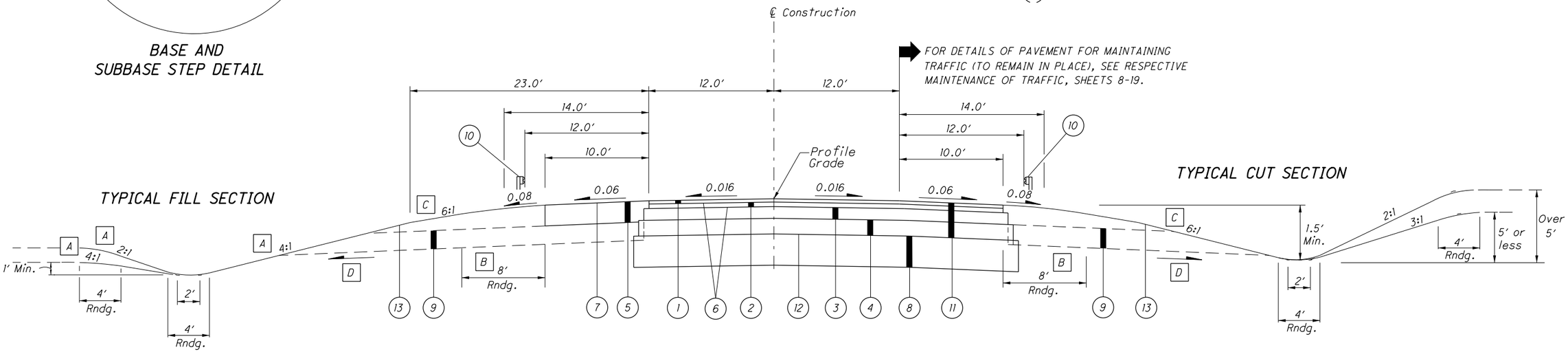
- [A] Unless otherwise shown on Cross Sections
- [B] No rounding is required when foreslope is 6:1 or flatter. 4′ Rounding when guardrail is required.
- [C] Foreslope may vary in pavement transition areas at extreme ends of pavement work and adjacent to Structure PIC-46-1209; see cross sections.
- [D] 0.04 Min., 0.08 Desirable

LEGEND

1. ITEM 442 - 1½″ ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (448)
2. ITEM 442 - 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, Type A (448)
3. ITEM 301 - 5″ ASPHALT CONCRETE BASE, PG64-22
4. ITEM 304 - 6″ AGGREGATE BASE
5. ITEM 304 - 8″ AGGREGATE BASE
6. ITEM 407 - TACK COAT
7. ITEM 408 - PRIME COAT (APPLIED AT A RATE OF 0.40 GAL./SQ. YD.)
8. ITEM 206 - LIME STABILIZED SUBGRADE, 18 INCHES DEEP
9. ITEM 605 - AGGREGATE DRAINS
10. ITEM 606 - GUARDRAIL, MGS
11. ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN (SEE RESPECTIVE MAINTENANCE OF TRAFFIC DETAILS)
12. ITEM 204 - SUBGRADE COMPACTION
13. ITEM 659 - SEEDING AND MULCHING
14. ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15″)
15. NOT USED
16. ITEM 605 - 6″ SHALLOW PIPE UNDERDRAINS

(A) 3″ ± ASPHALT CONCRETE

(B) 8″ ± CONCRETE PAVEMENT

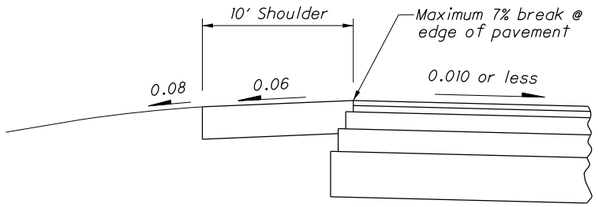


NORMAL SECTION - U.S. 46

Sta. 635+75.00 to Sta. 642+81.37
Sta. 638+22.44 to Sta. 640+48.86

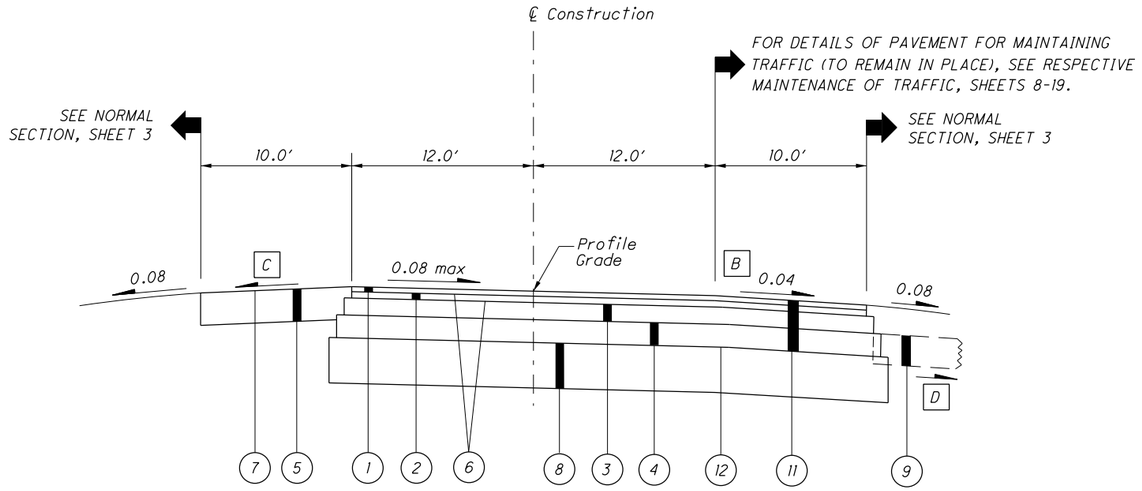
TYPICAL SECTIONS - U.S. 46

PIC-46-12.01



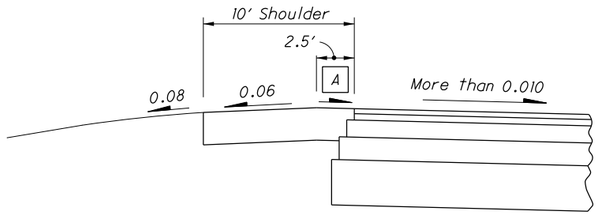
SHOULDER DETAIL

For pavement slopes of 0.010 or less



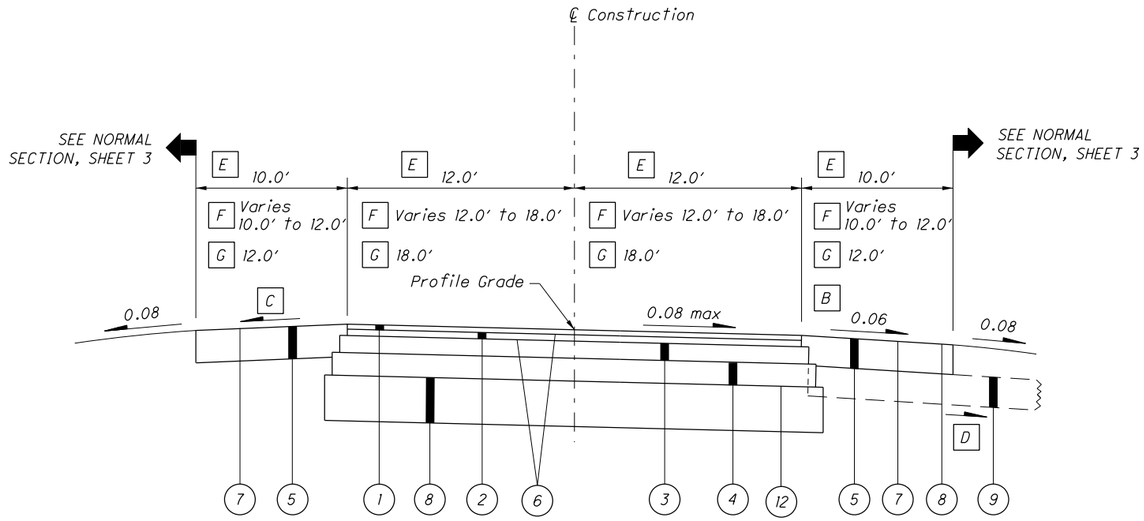
SUPERELEVATED SECTION - U.S. 46

Sta. 642+81.37 to Sta. 649+00.00



SHOULDER DETAIL

For pavement slopes greater than 0.010



SUPERELEVATED SECTION - U.S. 46

A *Same slope as pavement*

B *Or pavement slope whichever is greater*

C *For high side shoulder slopes on superelevated sections see shoulder details, this sheet.*

D *0.04 Min., 0.08 Desirable*

E *Sta. 649+00.00 to Sta. 651+45.03*

F *Sta. 651+45.03 to Sta. 654+75.03*

G *Sta. 654+75.03 to Sta. 658+77.85*

STA. 656+57.63 TO STA. 658+77.85, SEE INTERSECTION DETAIL ON SHEET 39.

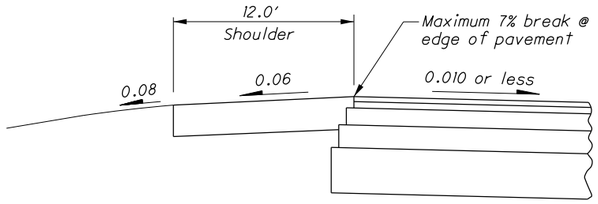
SEE INTERSECTION DETAIL, SHEET 39.

FOR PAVEMENT LEGEND, SEE SHEET 3.

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 3.

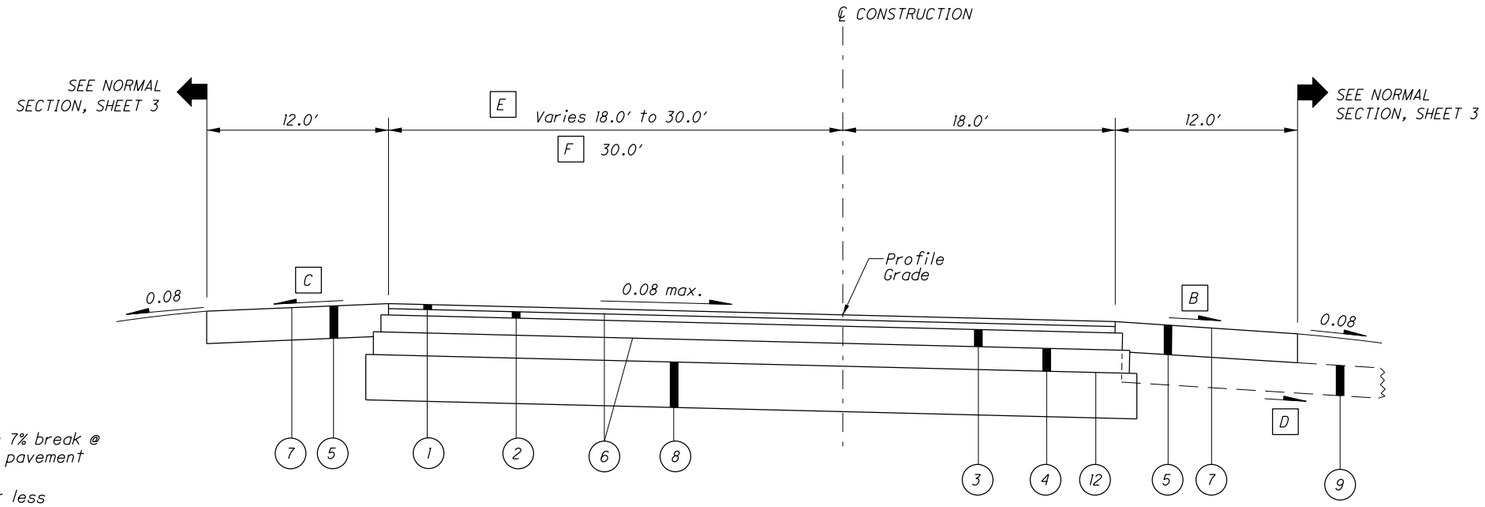
TYPICAL SECTIONS - U.S. 46

PIC-46-12.01



SHOULDER DETAIL

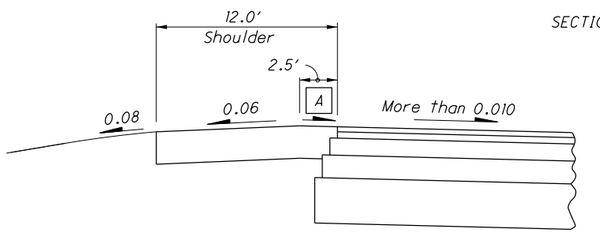
For pavement slopes of 0.010 or less



SUPERELEVATED SECTION - U.S. 46

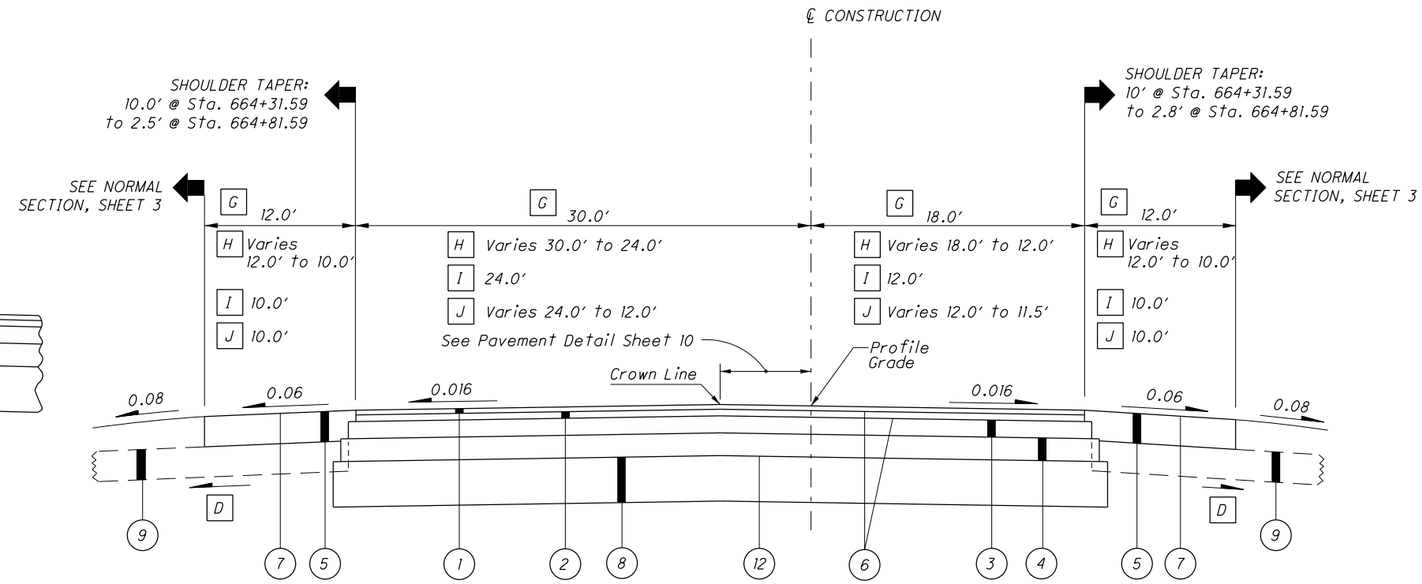
E STA. 658+77.85 TO STA. 659+27.03

F STA. 659+27.03 TO STA. 660+20.37



SHOULDER DETAIL

For pavement slopes of more than 0.010



NORMAL SECTION - U.S. 46

G STA. 660+20.37 TO STA. 660+51.59

H STA. 660+51.59 TO STA. 663+81.59

I STA. 663+81.59 TO STA. 664+31.59

J STA. 664+31.59 TO STA. 664+81.59

A SAME SLOPE AS PAVEMENT

B 0.06 OR SAME SLOPE AS PAVEMENT WHICHEVER IS GREATER

C FOR HIGH SIDE SHOULDER SLOPES ON SUPERELEVATED SECTIONS SEE SHOULDER DETAILS, THIS SHEET.

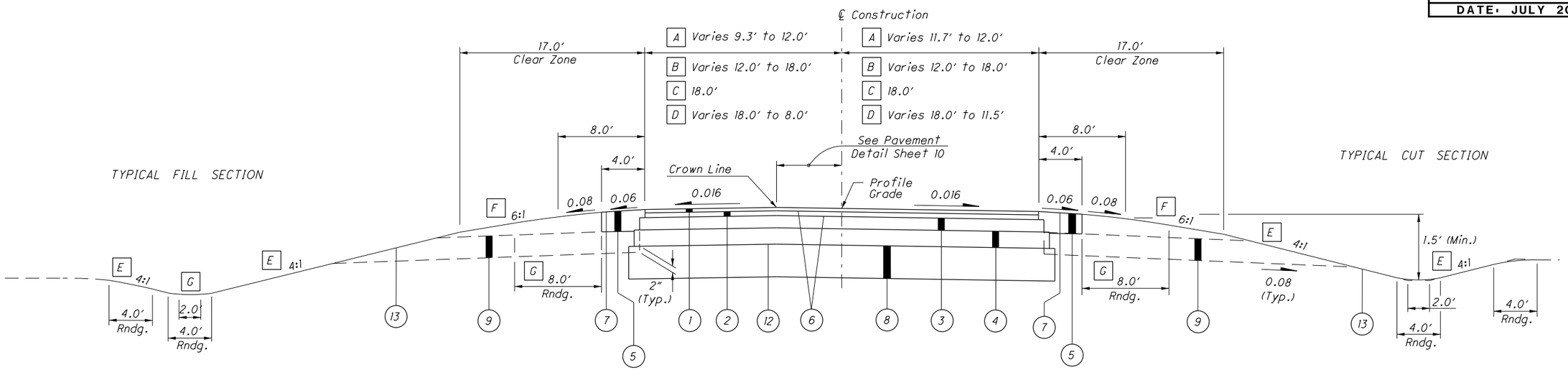
D 0.04 MIN., 0.08 DESIRABLE

FOR PAVEMENT LEGEND SEE SHEET 3.

FOR BASE AND SUBBASE STEP DETAIL SEE SHEET 3.

TYPICAL SECTIONS - U.S. 46

PIC-46-12.01



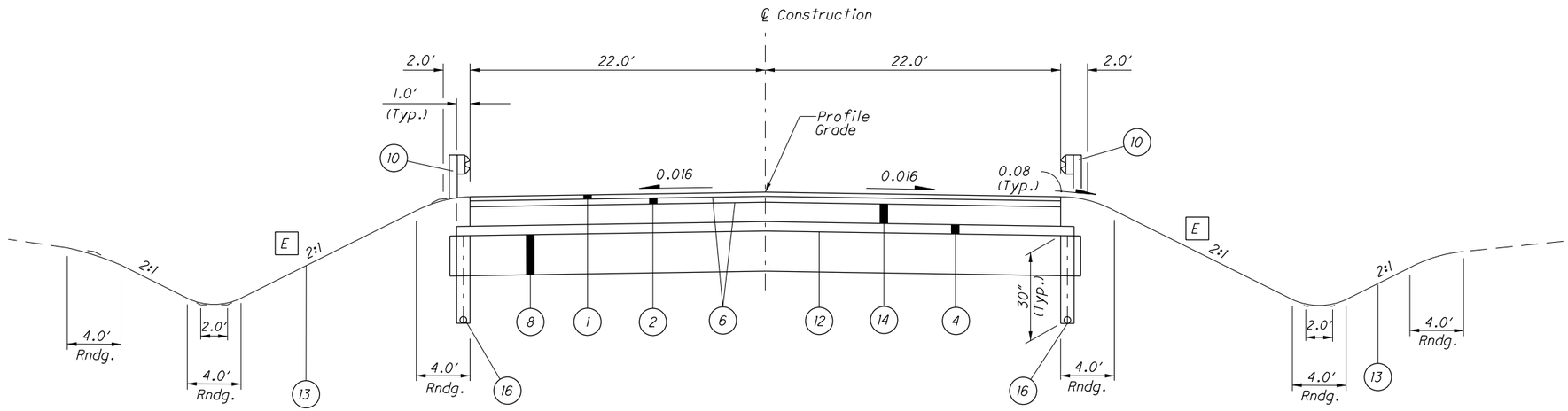
NORMAL SECTION - ARLINGTON ROAD

A Sta. 21+00.00 to Sta. 21+37.83

B Sta. 21+37.83 to Sta. 24+37.83

C Sta. 24+37.83 to Sta. 29+05.61
Sta. 31+26.68 to Sta. 31+44.41

D Sta. 31+44.41 to Sta. 34+25.00



APPROACH SLAB TYPICAL SECTION - U.S. 46

STRUCTURE PIC-46-1209 = Sta. 638+22.44 to Sta. 640+48.86
Sta. 638+47.44 to Sta. 640+23.86

E Unless otherwise shown on Cross Sections

F Foreslope may vary in pavement transition areas at extreme ends of pavement work; See Cross Sections.

G No rounding is required when foreslope is 6:1 or flatter.

FOR PAVEMENT LEGEND SEE SHEET 3.

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 3.

TYPICAL SECTIONS - U.S. 46 AND ARLINGTON ROAD

PIC-46-12.01

LEGEND

(1) ITEM 441 - 1¼" Asphalt Concrete Surface Course, Type 1, (448) PG64-22

(2) ITEM 441 - 1¾" Asphalt Concrete Intermediate, Course, Type 2, (448)

(3) ITEM 254 - Pavement Planing, Asphalt Concrete (See Note "A")

(4) ITEM 441 - 0" Min. Asphalt Concrete Intermediate Course, Type 1, (448) (See Note "C")

(5) ITEM 301 - 5" Asphalt Concrete Base, PG64-22

(6) ITEM 301 - 6" Asphalt Concrete Base, PG64-22

(7) ITEM 304 - 6" Aggregate Base

(8) ITEM 407 - Tack Coat

(9) Not Used

(10) ITEM 605 - 6" Shallow Pipe Underdrains

(11) ITEM 608 - 4" Concrete Walk

(12) ITEM 609 - Combination Curb and Gutter, Type 2

(13) ITEM 659 - Seeding and Mulching

(14) ITEM 660 - Sodding Unstaked

(15) ITEM 204 - Subgrade Compaction

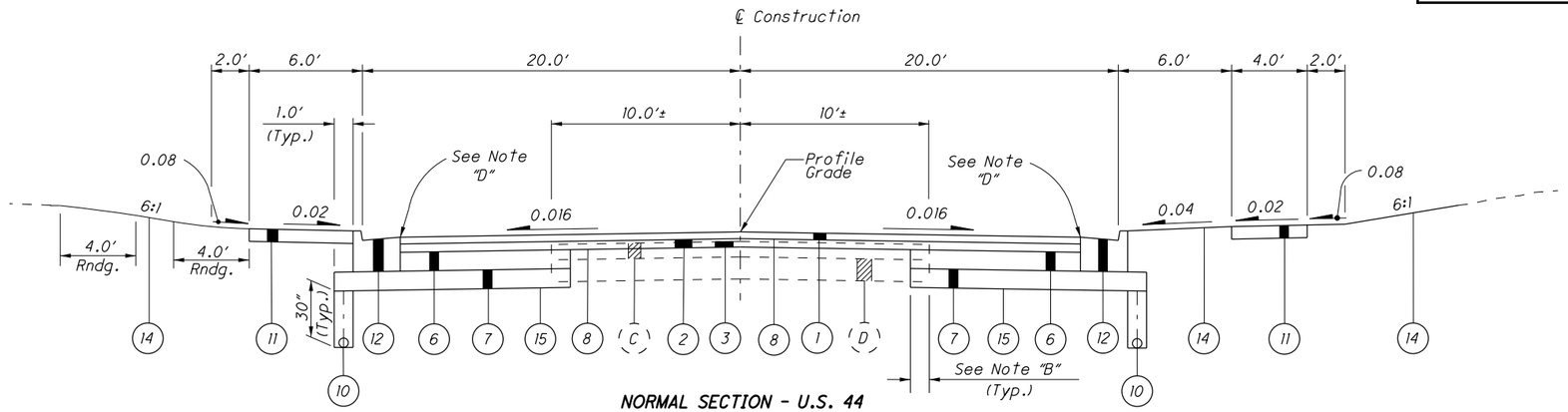
(16) ITEM 606 - Guardrail, MGS

(A) 5"± Asphalt Concrete

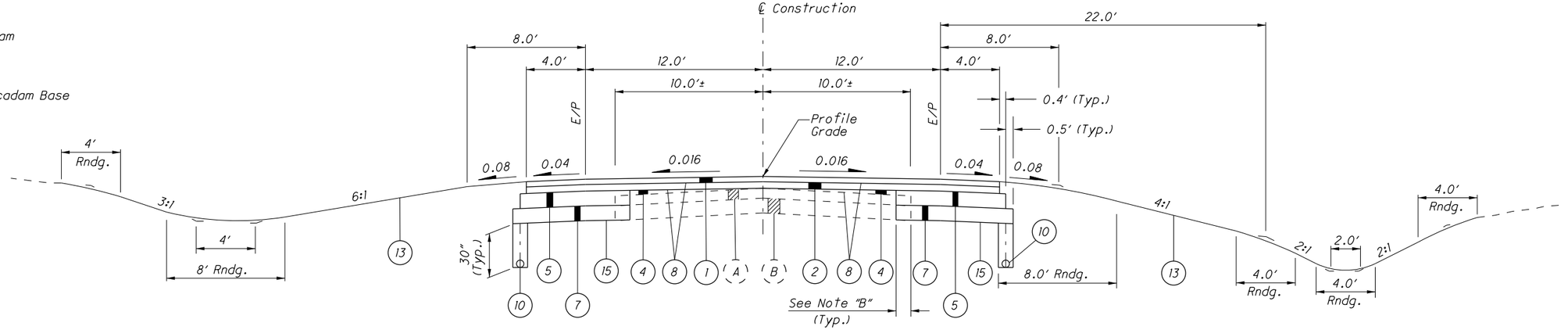
(B) 5"± Waterbound Macadam

(C) 4"± Asphalt Concrete

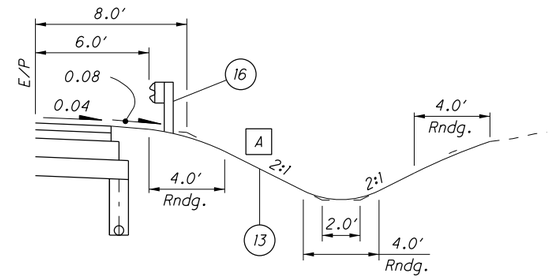
(D) 6"± Dense Asphalt Macadam Base



NORMAL SECTION - U.S. 44
STA. 300+00 TO STA. 318+50



NORMAL SECTION - S.R. 106
STA. 621+35 TO STA. 640+50



GUARDRAIL DETAIL - S.R. 106

SECTION APPLIES :
Sta. 635+50 to Sta. 637+75 Rt.

[A] Unless otherwise shown on the cross sections

NOTE "A"
Pavement planing shall be a constant depth of 1" at the ℄ of Construction with a uniform cross slope of 0.016 established. Maximum depth of planing at the outside edges of existing pavement has been calculated to be 2½".

NOTE "B"
The existing pavement edges shall be saw cut to locate a sound pavement edge per Sec. 203.04(E) of the CMS. For estimating purposes, pavement calculations included in the plan indicate an average width of 1 ft. of existing pavement being replaced.

NOTE "C"
Item 441, Asphalt Concrete Intermediate Course, Type 1 (448), is to be used as a leveling course to establish a 0.016 cross slope. Estimated quantities have been calculated based on exaggerated cross-sections shown on sheets 51-58.

NOTE "D"
Item 441, Asphalt Concrete Surface Course, Type 1, (448) PG64-22, is to be ¼" above gutter plate.

TYPICAL SECTIONS - U.S. 44 AND S.R. 106

GRE-44-9.00

LEGEND

(1) ITEM 441 - 1¼" Asphalt Concrete Surface Course, Type 1, (448) PG64-22

(2) ITEM 441 - 1¾" Asphalt Concrete Intermediate Course, Type 2, (448)

(3) ITEM 305 - 9" Concrete Base, As Per Plan

(4) ITEM 304 - 6" Aggregate Base

(5) ITEM 254 - Pavement Planing, Asphalt Concrete (Max. Depth=3")

(6) ITEM 301 - 9" Asphalt Concrete Base, PG64-22

(7) ITEM 304 - 9" Aggregate Base

(8) ITEM 301 - 4" Asphalt Concrete Base, PG64-22

(9) ITEM 304 - Aggregate Base, Depth as shown

(10) ITEM 408 - Prime Coat (Applied At The Rate Of 0.4 Gal/Sq. Yd.)

(11) ITEM 407 - Tack Coat

(12) ITEM 609 - Curb, Type 6

(13) ITEM 660 - Sodding Unstaked

(14) ITEM 605 - 6" Shallow Pipe Underdrains

(15) ITEM 204 - Subgrade Compaction

(16) ITEM 609 - Curb, Type 2-B

(A) 12" ± Asphalt

(B) 8" ± Subbase

(C) Curb & Gutter

(D) 4" Concrete Sidewalk

(E) 3" ± Asphalt

(F) 9" ± Reinforced Concrete

(G) 6" ± Subbase

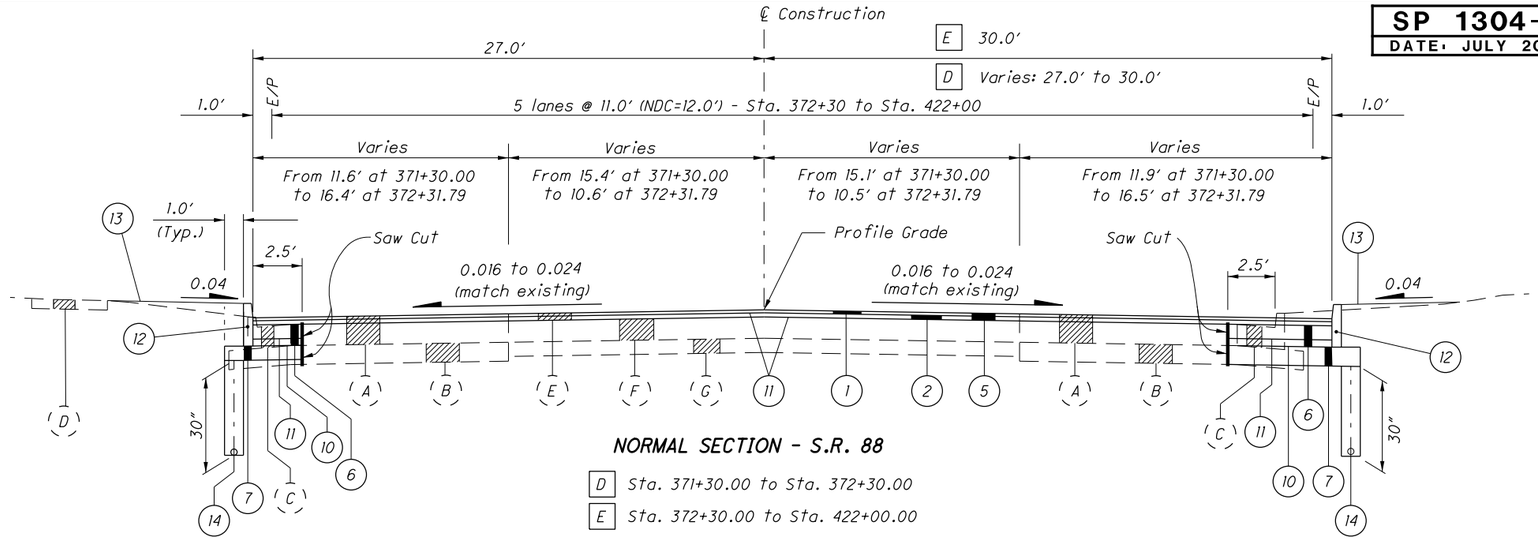
(H) 10" ± Asphalt

(J) 4" ± Subbase

[A] 25'-0" From Sta. 0+84 to Sta. 3+50
Varies: 25'-0" @ Sta. 3+50 to 12' @ Sta. 4+00

[B] 12'-0" From Sta. 0+84 to Sta. 3+50
Varies: 12'-0" @ Sta. 3+50 to 11'-0" @ Sta. 4+00

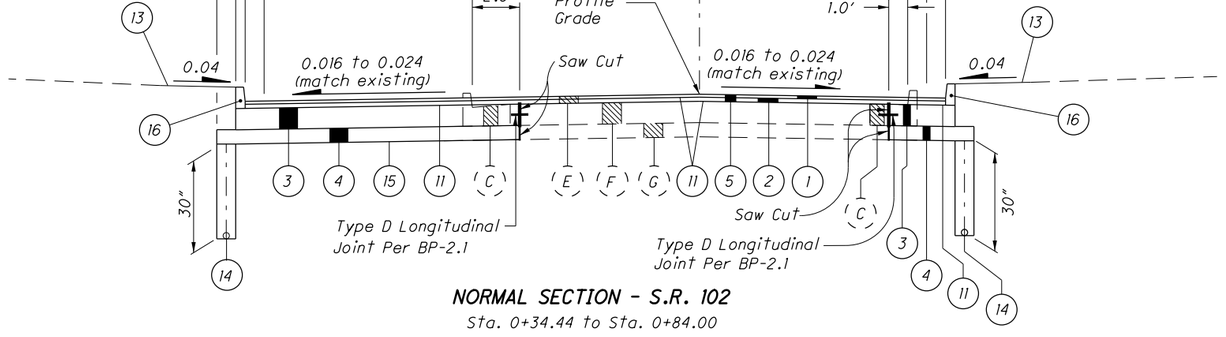
[C] Varies: 4' @ Sta. 3+50 to 2' @ Sta. 4+00



NORMAL SECTION - S.R. 88

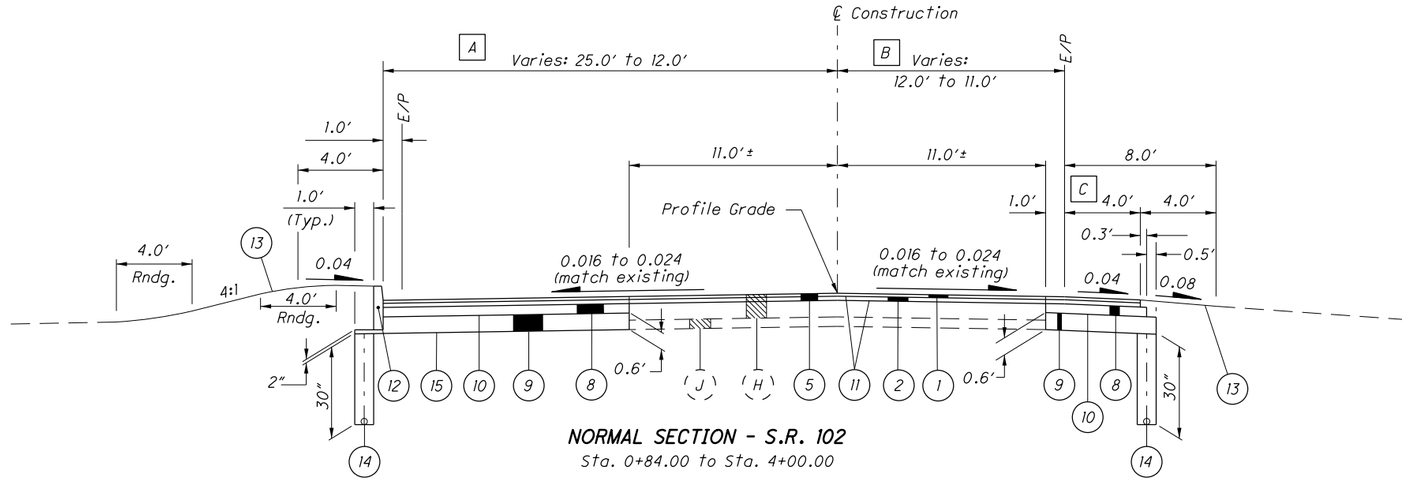
[D] Sta. 371+30.00 to Sta. 372+30.00

[E] Sta. 372+30.00 to Sta. 422+00.00



NORMAL SECTION - S.R. 102

Sta. 0+34.44 to Sta. 0+84.00

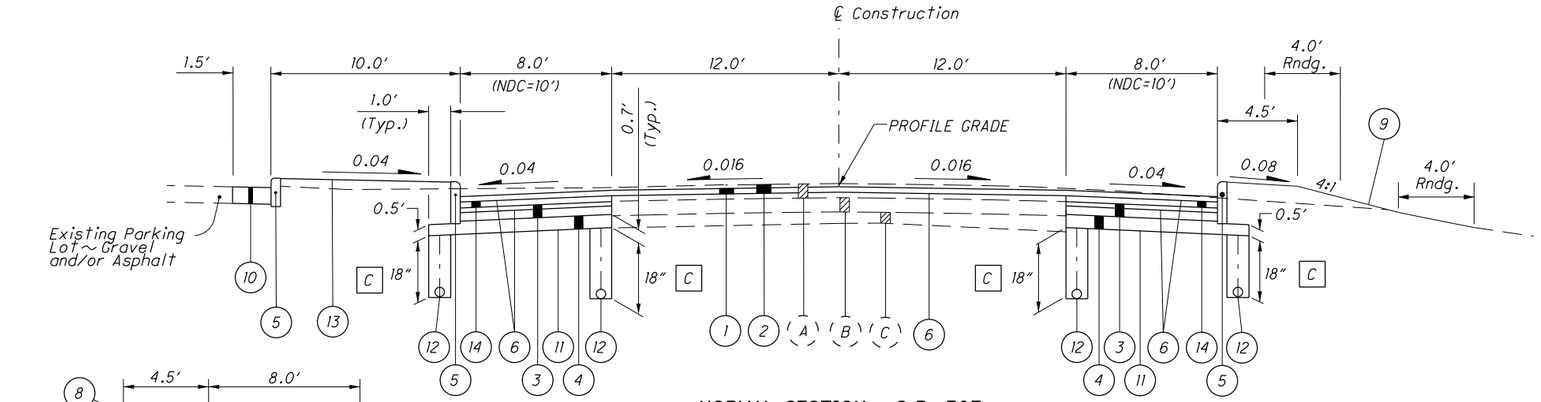


NORMAL SECTION - S.R. 102

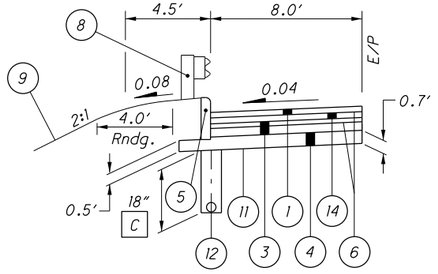
Sta. 0+84.00 to Sta. 4+00.00

TYPICAL SECTIONS - S.R. 88 AND S.R. 102

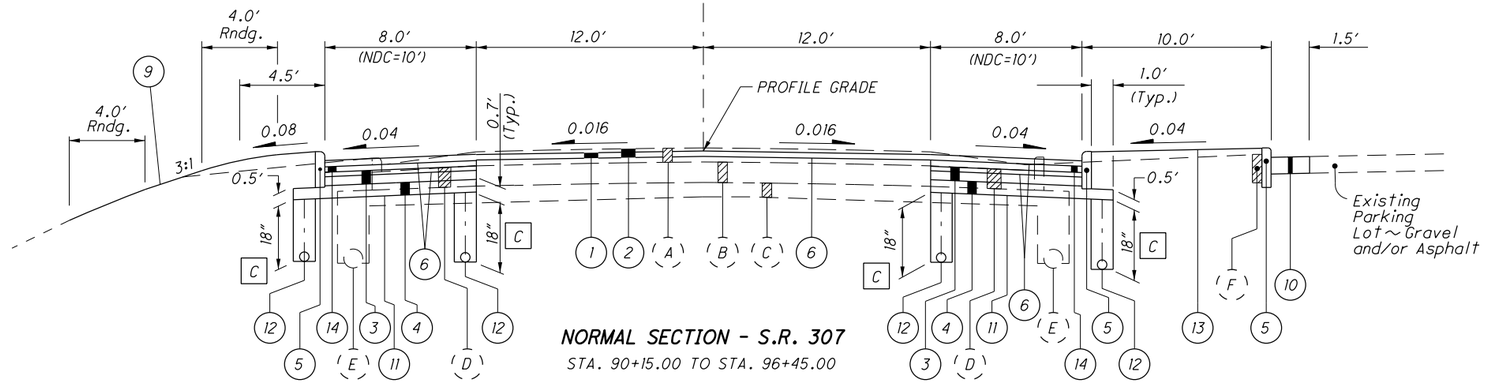
SEN-88-5.35



NORMAL SECTION - S.R. 307
STA. 88+75.00 TO STA. 90+15.00



GUARDRAIL SECTION
STA. 93+75 TO STA. 95+25 (Lt.)



NORMAL SECTION - S.R. 307
STA. 90+15.00 TO STA. 96+45.00

S.R. 307 PAVEMENT PLANING TABLES

STATION	PROPOSED PROFILE ELEVATION	PLANING DEPTH (FEET) @ ℄	STATION	PROPOSED PROFILE ELEVATION	PLANING DEPTH (FEET) @ ℄
88+50	1094.08	0.17	92+75	1095.26	0.27
88+75	1094.17	0.15	93+00	1095.28	0.19
89+00	1094.26	0.16	93+25	1095.32	0.20
89+25	1094.34	0.19	93+50	1095.36	0.21
89+50	1094.43	0.20	93+75	1095.41	0.22
89+75	1094.52	0.19	94+00	1095.46	0.24
90+00	1094.61	0.21	94+25	1095.51	0.28
90+25	1094.69	0.20	94+50	1095.56	0.38
90+50	1094.78	0.18	94+75	1095.61	0.34
90+75	1094.87	0.18	95+00	1095.66	0.26
91+00	1094.96	0.18	95+25	1095.71	0.17
91+25	1095.04	0.17	95+50	1095.69	0.16
91+50	1095.13	0.17	95+75	1095.67	0.15
91+75	1095.16	0.18	96+00	1095.65	0.14
92+00	1095.18	0.20	96+25	1095.63	0.15
92+25	1095.21	0.23	96+50	1095.61	0.16
92+50	1095.23	0.28			

LEGEND

(1) ITEM 441 - 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) PG64-22
(2) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE [A]
(3) ITEM 301 - 9″ ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 304 - AGGREGATE BASE, DEPTH AS SHOWN
(5) ITEM 609 - CURB, TYPE 6
(6) ITEM 407 - TACK COAT
(7) ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL./SQ.YD.)
(A) 6″ ASPHALT SURFACE
(B) 9″ REINFORCED CONCRETE BASE
(C) 6″ MIN. CLASSIFIED EMBANKMENT BLANKET COURSE
(8) ITEM 606 - GUARDRAIL, TYPE MGS
(9) ITEM 659 - SEEDING AND MULCHING (SEE GENERAL NOTE)
(10) SEE PAVEMENT BUILDUP NOTE, THIS SHEET [B]
(11) ITEM 204 - SUBGRADE COMPACTION
(12) ITEM 605 - 6″ BASE PIPE UNDERDRAINS
(13) ITEM 660 - SODDING UNSTAKED
(14) ITEM 441 - 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
(D) CURB & GUTTER (TO BE REMOVED)
(E) ROADWAY DRAINAGE, 12″ (TO BE REMOVED)
(F) CURB (TO BE REMOVED)

NOTES

S.R. 307 - THE CROWN SHALL BE WORKED OUT OF THE PAVEMENT BETWEEN STA. 92+57.25 AND STA. 92+97.25.

- THE PAVEMENT BETWEEN STA. 92+97.25 AND STA. 94+02.25 SHALL BE BUILT WITHOUT CROWN.
- THE CROWN SHALL BE WORKED INTO THE PAVEMENT BETWEEN STA. 94+02.25 AND STA. 94+42.25.

[A] IN AN EFFORT TO REMOVE EXISTING PARABOLIC CROWN AND ESTABLISH A SMOOTH AND CONSISTENT PROFILE THROUGHOUT THE PROJECT, THE PAVEMENT SHALL BE PLANED TO A DEPTH INDICATED IN THE PAVEMENT PLANING TABLE ON THIS SHEET. A 0.016 NORMAL CROSS SLOPE SHALL BE ESTABLISHED FROM THE CENTERLINE TO THE EXISTING EDGE OF PAVEMENT.

[B] THE PAVEMENT BUILD-UP WHEN ADJOINING AN EXISTING ASPHALT PAVEMENT SHALL BE AS FOLLOWS:

ITEM 441 - 1¼″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) PG64-22

ITEM 441 - 1¾″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)

ITEM 304 - 8″ AGGREGATE BASE

THE PAVEMENT BUILD-UP WHEN ADJOINING AN EXISTING GRAVEL OR SLAG PARKING AREA SHALL BE AS FOLLOWS:

ITEM 304 - 11″ AGGREGATE BASE

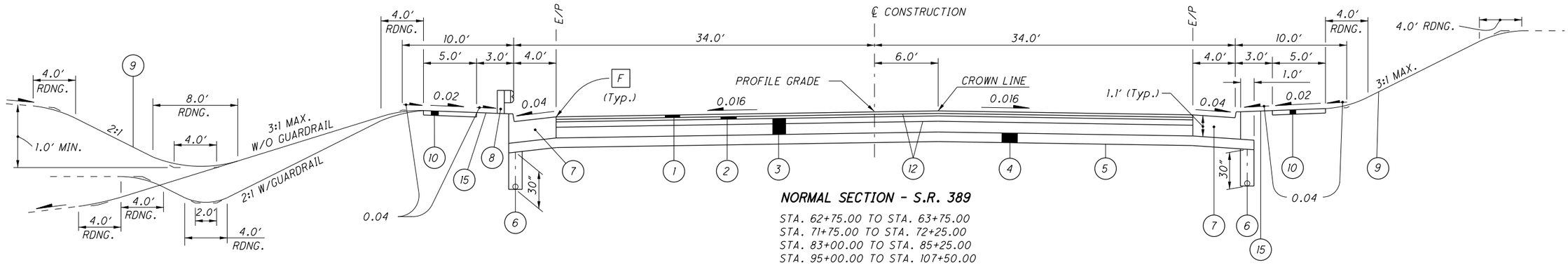
[C] UNCLASSIFIED UNDERDRAIN LIMITS:

STA. 88+75 TO STA. 91+25 AND

STA. 95+25 TO STA. 96+27.25

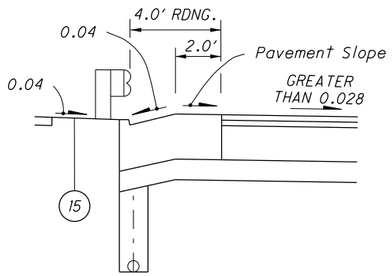
TYPICAL SECTIONS - S.R. 307

HOL-307-16.54

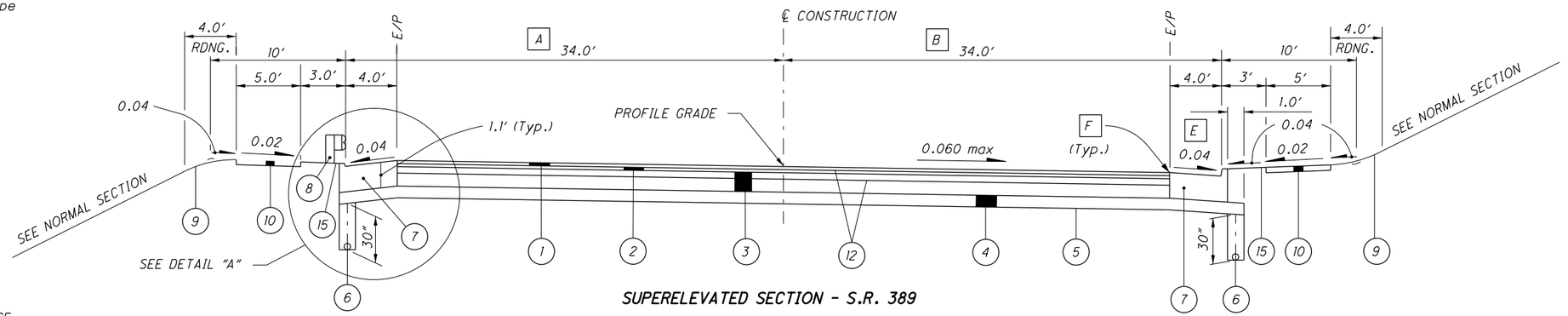


NORMAL SECTION - S.R. 389

STA. 62+75.00 TO STA. 63+75.00
STA. 71+75.00 TO STA. 72+25.00
STA. 83+00.00 TO STA. 85+25.00
STA. 95+00.00 TO STA. 107+50.00

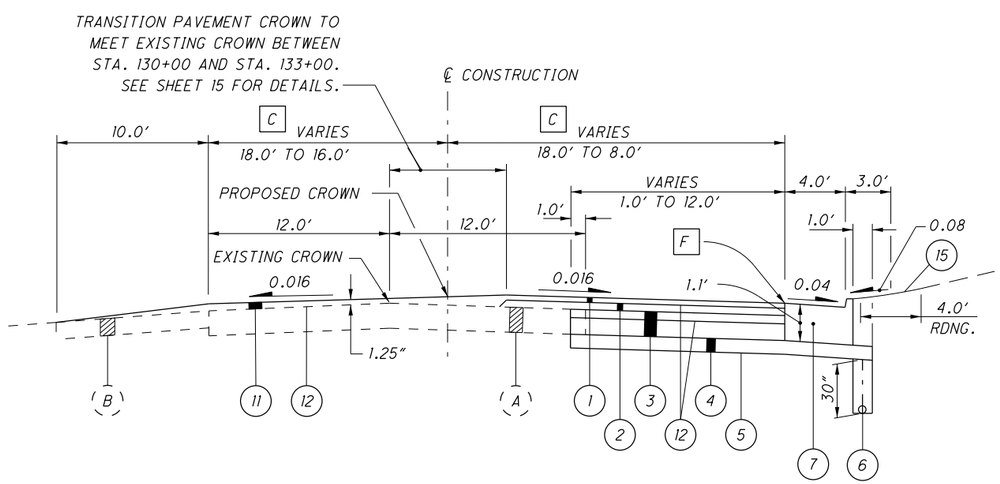


HIGH-SIDE CURB DETAIL "A"



SUPERELEVATED SECTION - S.R. 389

STA. 55+60.00 TO STA. 62+75.00
STA. 63+75.00 TO STA. 71+75.00
STA. 72+25.00 TO STA. 78+13.66
STA. 78+13.66 TO STA. 83+00.00 (SUPERELEVATION DIRECTION REVERSED)
STA. 85+25.00 TO STA. 95+00.00
STA. 107+50.00 TO STA. 130+00.00 (SUPERELEVATION DIRECTION REVERSED)



WIDENING AND RESURFACING - S.R. 389

STA. 130+00.00 TO STA. 133+00.00

LEGEND

(1) ITEM 441 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446) PG64-22
(2) ITEM 441 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)
(3) ITEM 301 - 10" ASPHALT CONCRETE BASE, PG64-22
(4) ITEM 304 - 6" AGGREGATE BASE
(5) ITEM 204 - SUBGRADE COMPACTION
(6) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS [D]
(7) ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN (SEE SHEET 9)
(8) ITEM 606 - GUARDRAIL, TYPE 5
(9) ITEM 659 - SEEDING AND MULCHING
(10) ITEM 608 - 4" CONCRETE WALK
(11) ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (446) PG64-22 (VARIABLE THICKNESS)
(12) ITEM 407 - TACK COAT
(13) ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.)
(14) NOT USED
(15) ITEM 660 - SODDING UNSTAKED
(A) 3" ± ASPHALT PAVEMENT OVER 10" ± AGGREGATE SUBBASE
(B) 8" ± DENSE ASPHALT

NOTES:

FOR VARIABLE PAVEMENT WIDTHS AND SIDEWALK LIMITS, SEE PAVEMENT DETAILS, SHEETS 15 - 18.

[A] WIDTH VARIES FROM 34'-0" @ STA. 129+50 TO 22'-0" @ STA. 130+00 DUE TO RIGHT TURN LANE TAPER FROM 12' TO 0'

[B] WIDTH VARIES FROM 34'-0" @ STA. 124+60 TO 22'-0" @ STA. 130+00 DUE TO RIGHT THRU LANE TAPER FROM 12' TO 0'

[C] PAVEMENT WIDTH VARIES FROM 18'-0", LT. & RT. @ STA. 130+00 TO 16'-0" LT. AND 8'-0", RT. @ STA. 133+00 DUE TO LEFT TURN LANE TRANSITION

[D] EXCEPT IN AREAS OF GUARDRAIL SECTIONS, PIPE UNDERDRAINS SHALL BE LOCATED IMMEDIATELY BEHIND THE CURB.

[E] OR PAVEMENT SLOPE, IF GREATER

[F] ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446) PG64-22, IS TO BE ¼" ABOVE GUTTER PLATE.

TYPICAL SECTIONS - S.R. 389

GUE-389-17.63

SHEET NUMBER															ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	11	82	83	84	85	86	87	88	89	91	105	157	255	259						
																			ROADWAY	
	LS														201	11000	LS		CLEARING AND GRUBBING	
32738															202	23000	32738	SY	PAVEMENT REMOVED	
1503															202	23500	1503	SY	WEARING COURSE REMOVED	
											1953				202	32000	1953	FT	CURB REMOVED	
											927				202	32001	927	FT	CURB REMOVED, AS PER PLAN	105
							12687.5								202	38000	12687.5	FT	GUARDRAIL REMOVED	
							34								202	38700	34	EACH	GUARDRAIL POST REMOVED	
						3									202	58500	3	EACH	CATCH BASIN ABANDONED	
	185	8423	20657	6224	169				188	479	153	331		2870	203	10000	39679	CY	EXCAVATION	
		1067	2189	7148	1069				225	1144	50	62			203	20000	12954	CY	EMBANKMENT	
71464															204	10000	71464	SY	SUBGRADE COMPACTION	
							11650								606	15050	11650	FT	GUARDRAIL, TYPE MGS	
							175								606	15150	175	FT	GUARDRAIL, TYPE MGS HALF POST SPACING	
							12								606	25550	12	EACH	ANCHOR ASSEMBLY, MGS TYPE A	
							12								606	26150	12	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
							23								606	26550	23	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
							36								606	35002	36	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
							4								606	35102	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
	10														623	38500	10	EACH	MONUMENT ASSEMBLY	
																			EROSION CONTROL	
													50		601	32200	50	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
	2														659	00100	2	EACH	SOIL ANALYSIS TEST	
	1773														659	00300	1773	CY	TOPSOIL	
	15970														659	10000	15970	SY	SEEDING AND MULCHING	
	799														659	14000	799	SY	REPAIR SEEDING AND MULCHING	
	799														659	15000	799	SY	INTER-SEEDING	
	2.23														659	20000	2.23	TON	COMMERCIAL FERTILIZER	
	3.30														659	31000	3.30	ACRE	LIME	
	86														659	35000	86	MGAL	WATER	
															832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
															832	30000	15000	EACH	EROSION CONTROL	
																			DRAINAGE	
						8680									605	05100	8680	FT	4" SHALLOW PIPE UNDERDRAINS	
						63317									605	05101	63317	FT	4" SHALLOW PIPE UNDERDRAINS, AS PER PLAN	116
						3196									611	01500	3196	FT	6" CONDUIT, TYPE F	
						215									611	04600	215	FT	12" CONDUIT, TYPE C	
						105									611	06100	105	FT	15" CONDUIT, TYPE C, 706.02	
						246									611	08900	246	FT	21" CONDUIT, TYPE B, 706.02	
						138									611	11700	138	FT	27" CONDUIT, TYPE A, 706.02; OR 30", 707.01	
						350									611	27001	350	FT	78" CONDUIT, TYPE A, AS PER PLAN, 706.02	11
						96									611	52500	96	FT	24" X 38" CONDUIT, TYPE A, 706.04	
						183									611	96600	183	FT	CONDUIT, BORED OR JACKED (6", TYPE B)	
						3									611	98230	3	EACH	CATCH BASIN, NO. 4	
						1									611	98301	1	EACH	CATCH BASIN, NO. 5, AS PER PLAN	116
						4									611	98630	4	EACH	CATCH BASIN ADJUSTED TO GRADE	

SP 1307-3(a)
DATE: JULY 2018

CALCULATED JKP
CHECKED FGW

GENERAL SUMMARY

TRU-99-13.48

SHEET NUMBER												PARTICIPATION		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
		16		18		23		55		192	262								
																		RETAINING WALLS OPTION A: REINFORCED EARTH WALL	
										1710				203	20000	1710	CY	EMBANKMENT	
										3474				203	35000	3474	CY	GRANULAR EMBANKMENT	
										LS				503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
										1124				503	21101	1124	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	108
										4766				SPECIAL	61050010	4766	SF	RETAINING WALL, MISC.: REINFORCED EARTH WALL SYSTEM	190
																		RETAINING WALLS OPTION B: RETAINED EARTH WALL	
										1636				203	20000	1636	CY	EMBANKMENT	
										3584				203	35000	3584	CY	GRANULAR EMBANKMENT	
										LS				503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
										1150				503	21101	1150	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	108
										4738				SPECIAL	61050010	4738	SF	RETAINING WALL, MISC.: RETAINED EARTH WALL SYSTEM	190
																		BUILDING DEMOLITION	
											LS			202	56000	LS		BUILDING DEMOLISHED: PARCEL NO. 11-WD-1, 1 STORY BRICK BUILDING	
											LS			202	56000	LS		BUILDING DEMOLISHED: PARCEL NO. 13-T, 1 STORY BLOCK BUILDING	
											LS			202	56000	LS		BUILDING DEMOLISHED: PARCEL NO. 13-WL, 2 STORY BRICK BUILDING	
											LS			202	56000	LS		BUILDING DEMOLISHED: PARCEL NO. 19-T, 1 STORY METAL BUILDING	
																		STRUCTURES OVER 20 FOOT SPAN	
																		STRUCTURE TRU-99-1924 GENERAL SUMMARY	229
																		STRUCTURE TRU-99-2056 GENERAL SUMMARY	236
										878				SPECIAL	51272000	878	SY	EPOXY WATERPROOFING OVERLAY (1/4" THICK)	190
																		MAINTENANCE OF TRAFFIC	
		10												614	11110	10	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		5												614	12460	5	EACH	WORK ZONE MARKING SIGN	
				38										614	12470	38	EACH	WORK ZONE SPEED LIMIT SIGN	
		100												614	12500	100	EACH	REPLACEMENT SIGN	
		200												614	12600	200	EACH	REPLACEMENT DRUM	
								1528						614	12800	1528	EACH	WORK ZONE RAISED PAVEMENT MARKER	
						1201								614	13310	1201	EACH	BARRIER REFLECTOR, TYPE I (BIDIRECTIONAL)	
		14.00												614	20300	14.00	MILE	WORK ZONE LANE LINE, CLASS I, 4", 740.06, TYPE II	
						0.11								614	21300	0.11	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE II	
		0.26												614	21700	0.26	MILE	WORK ZONE CENTER LINE, CLASS II, 740.06, TYPE II	
						4.33								614	22000	4.33	MILE	WORK ZONE EDGE LINE, CLASS I, 4"	
						7.34								614	22300	7.34	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE II	
						48								614	26600	48	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE II	
		5692												614	28600	5692	FT	WORK ZONE GORE MARKING, CLASS II, 740.06, TYPE II	
						LS								615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
						944								615	20001	944	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	17
		30												616	10000	30	M GAL	WATER	
		10												616	20000	10	TON	CALCIUM CHLORIDE	
						30280								622	41001	30280	FT	PORTABLE BARRIER, 32", AS PER PLAN	58
																		INCIDENTALS	
														614	11000	LS		MAINTAINING TRAFFIC	
														619	16020	8	MNTH	FIELD OFFICE, TYPE C	
														623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
														624	10000	LS		MOBILIZATION	

SP. 1307-3(c)
DATE: JULY 2018

CALCULATED JKP
CHECKED FGW

GENERAL SUMMARY

TRU-99-13.48

SHEET NUMBER							PARTICIPATION			ALT (X)	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS		64	68	97	165	175	01/NHS/PV/COLS	02/NHS/PV	03/STR/PV							
															ROADWAY	
1000								1000			202	23000	1000	SY	PAVEMENT REMOVED	
		12							12		202	58700	12	EACH	MANHOLE ABANDONED	
						225		225			202	75000	225	FT	FENCE REMOVED	
						1		1			202	75250	1	EACH	GATE REMOVED	
															ROADWAY ALTERNATES	
				500				500		X	606	98000	500	FT	GUARDRAIL, MISC.: TENSIONED CABLE (BRIFEN) (ALTERNATE 1)	9
				20				20		X	606	98100	20	EACH	GUARDRAIL, MISC.: TENSIONED CABLE ANCHOR TERMINAL (BRIFEN) (ALTERNATE 1)	9
				500				500		X	606	98000	500	FT	GUARDRAIL, MISC.: TENSIONED CABLE (TRINITY) (ALTERNATE 2)	9
				2				2		X	606	98100	2	EACH	GUARDRAIL, MISC.: TENSIONED CABLE ANCHOR TERMINAL (TRINITY) (ALTERNATE 2)	9
				500				500		X	606	98000	500	FT	GUARDRAIL, MISC.: TENSIONED CABLE (MARION STEEL) (ALTERNATE 3)	9
				2				2		X	606	98100	2	EACH	GUARDRAIL, MISC.: TENSIONED CABLE ANCHOR TERMINAL (MARION STEEL) (ALTERNATE 3)	9
															EROSION CONTROL	
					2				2		659	00100	2	EACH	SOIL ANALYSIS TEST	
					44				44		659	00300	44	CY	TOPSOIL	
					400				400		659	10000	400	SY	SEEDING AND MULCHING	
					20				20		659	14000	20	SY	REPAIR SEEDING AND MULCHING	
					20				20		659	15000	20	SY	INTER-SEEDING	
					0.05				0.05		659	20000	0.05	TON	COMMERCIAL FERTILIZER	
					0.08				0.08		659	31000	0.08	ACRE	LIME	
					2.2				2.2		659	35000	2.2	MGAL	WATER	
					0.9				0.9		659	40000	0.9	MSF	MOWING	
											832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
											832	30000	5000	EACH	EROSION CONTROL	
															PAVEMENT	
1844									1844		254	01000	1844	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1½)	
1265									1265		301	46000	1265	CY	ASPHALT CONCRETE BASE, PG64-22	
50									50		301	48000	50	CY	ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)	
2627								986	1641		304	20000	2627	CY	AGGREGATE BASE	
5333								5333			305	12010	5333	SY	8" CONCRETE BASE, CLASS QC1	
5695								3647	2048		407	10000	5695	GAL	TACK COAT	
18									18		441	50400	18	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), (DRIVEWAYS)	
415								226	189		442	10000	415	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446)	
497								268	229		442	10100	497	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A, (446)	
4000								4000			609	12000	4000	FT	COMBINATION CURB AND GUTTER, TYPE 2	
															WATER WORK	
			896				896				SPECIAL	63820184	896	FT	12" WATER MAIN DIP CLASS 54 MECHANICAL JOINTS AND FITTINGS (COL. 801)	
			14				14				SPECIAL	63820538	14	EACH	6" GATE VALVE WITH VALVE BOX (COL. 802)	
			260				260				SPECIAL	63820750	260	EACH	6" FIRE HYDRANT (COL. 809)	
			8				8				SPECIAL	63820844	8	FT	INSTALL 1½ COPPER WATER SERVICE CONNECTION (COL. 805)	
			4				4				SPECIAL	63820902	4	EACH	SERVICE BOX ADJUSTED TO GRADE (COL. 807)	
															SANITARY SEWER	
		200							200		611	00900	200	FT	6" CONDUIT, TYPE B, 706.01 OR 706.08 WITH 706.11 OR 706.12 JOINTS	
		284							284		611	02000	284	FT	8" CONDUIT, TYPE C, 706.08 WITH 706.12 JOINTS	
		273							273		611	04400	273	FT	12" CONDUIT, TYPE B, 706.03 WITH 706.11 JOINTS	
		28							28		611	05900	28	FT	15" CONDUIT, TYPE B, 706.03 WITH 706.11 JOINTS	
		230							230		611	07400	230	FT	18" CONDUIT, TYPE B, 706.03 WITH 706.11 JOINTS	
		5							5		611	99574	5	EACH	MANHOLE, NO. 3 WITH 706.11 JOINTS	
		8							8		611	99654	8	EACH	MANHOLE ADJUSTED TO GRADE	
			3						3		611	99660	3	EACH	MANHOLE RECONSTRUCTED TO GRADE	

CALCULATED DMK
CHECKED CML

SP 1307-4
DATE: JULY 2018

GENERAL SUMMARY

FRA-11-26.48

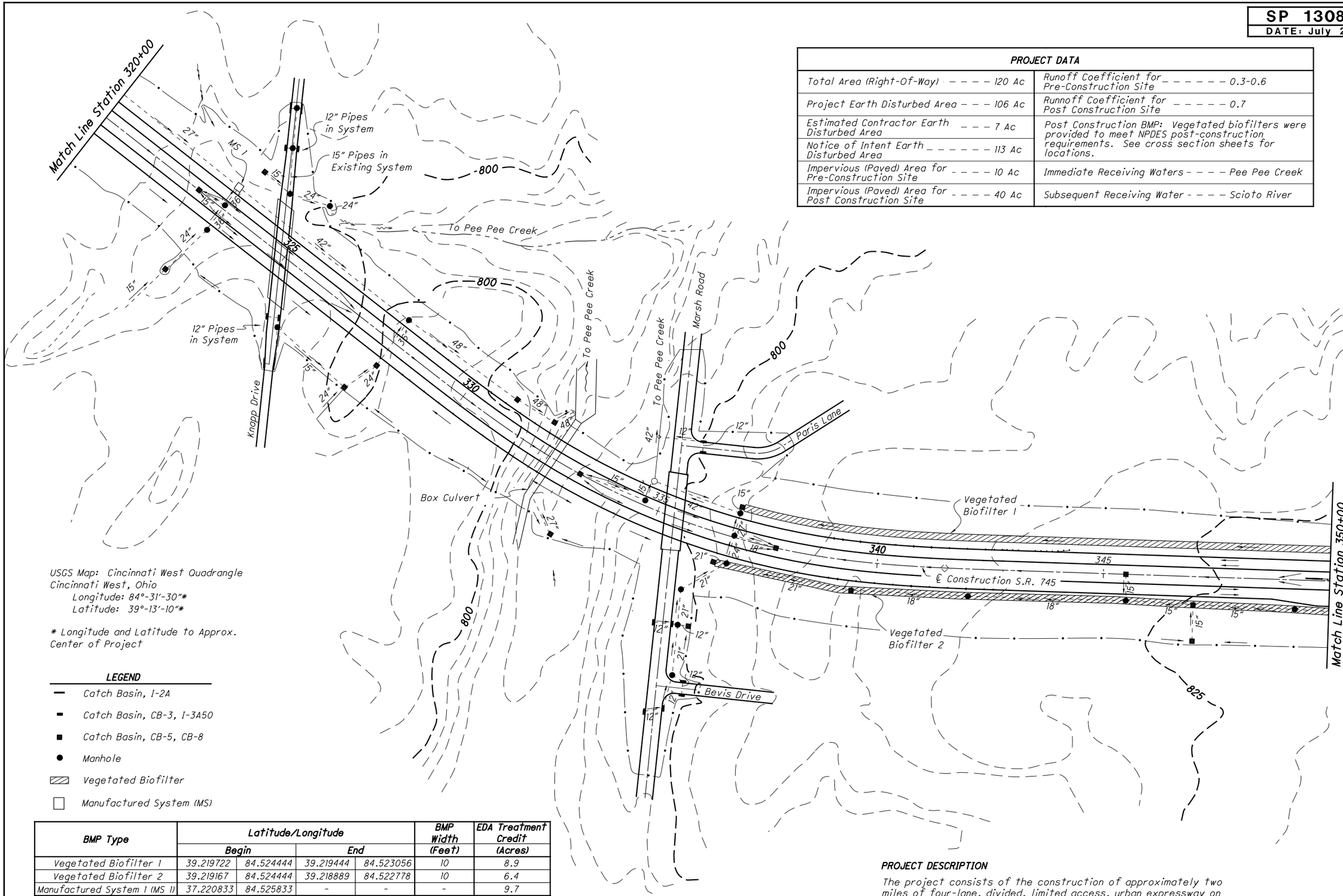
SHEET									ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
GEN	DEL	MRW	FRA1	FRA2	MAD	MRW	PIC	UNI						
5	15	16	17	18	19	20	21	22						
													TRAFFIC CONTROL	
	209.9	48.6	12.2	12.6	34.2	152.7	100.6	120.2	642	00090	691	MILE	EDGE LINE, 4"	
	113.0	33.3	369.9	298.0	29.9	59.8	94.3		642	00094	885.2	MILE	EDGE LINE, 6"	
	70.0	32.7	273.0	314.1	22.2	30.6	59.6		642	00194	732	MILE	LANE LINE, 6"	
	106.0	23.4	8.4	6.7	17.4	79.7	50.1		642	00290	185.7	MILE	CENTER LINE	
	9201.0	3171.0	8512.0	4512.0	528.0		7548.0		642	00394	24271	FT	CHANNELIZING LINE, 12"	
		106.0	7689.0	5459.0	897.0		950.0		642	01508	14995	FT	DOTTED LINE, 6"	
LS									642	20000	LS		TWO WAY RADIO EQUIPMENT	
													MAINTENANCE OF TRAFFIC	
240									614	11110	240	HOUR	LAW ENFORCEMENT WITH PATROL CAR FOR	
													ASSISTANCE	
													INCIDENTALS	
LS									614	11000	LS		MAINTAINING TRAFFIC	
LS									614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	4
LS									624	10001	LS		MOBILIZATION, AS PER PLAN	4

Calculated by: JJD

Checked by: DAC

SP 1308-1
DATE: July 2018

PROJECT DATA	
Total Area (Right-Of-Way) – – – – 120 Ac	Runoff Coefficient for Pre-Construction Site – – – – – – 0.3-0.6
Project Earth Disturbed Area – – – 106 Ac	Runnoff Coefficient for Post Construction Site – – – – – 0.7
Estimated Contractor Earth Disturbed Area – – – 7 Ac	Post Construction BMP: Vegetated biofilters were provided to meet NPDES post-construction requirements. See cross section sheets for locations.
Notice of Intent Earth Disturbed Area – – – – – – 113 Ac	
Impervious (Paved) Area for Pre-Construction Site – – – – 10 Ac	Immediate Receiving Waters – – – – Pee Pee Creek
Impervious (Paved) Area for Post Construction Site – – – – 40 Ac	Subsequent Receiving Water – – – – Scioto River



USGS Map: Cincinnati West Quadrangle
Cincinnati West, Ohio
Longitude: 84°-31'-30"*
Latitude: 39°-13'-10"*

* Longitude and Latitude to Approx. Center of Project

LEGEND

- Catch Basin, I-2A
- Catch Basin, CB-3, I-3A50
- Catch Basin, CB-5, CB-8
- Manhole
- Vegetated Biofilter
- Manufactured System (MS)

BMP Type	Latitude/Longitude Begin		End		BMP Width (Feet)	EDA Treatment Credit (Acres)
Vegetated Biofilter 1	39.219722	84.524444	39.219444	84.523056	10	8.9
Vegetated Biofilter 2	39.219167	84.524444	39.218889	84.522778	10	6.4
Manufactured System 1 (MS 1)	37.220833	84.525833	-	-	-	9.7
				Treatment Provided		**25.0**
				Treatment Required*		**24.4**

* Calculated per L&D Vol. 2, Sec. 1115.7

PROJECT DESCRIPTION

The project consists of the construction of approximately two miles of four-lane, divided, limited access, urban expressway on new alignment in central Hamilton County in the Cincinnati Metropolitan area. The highway has an east-west orientation beginning 300 feet west of Clovernoll Drive, and ending 2,800 feet east of Sawmill Road. There is one interchange at Sawmill Road.

HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED JOH
CHECKED JDH

PROJECT SITE PLAN
STA. 320+00 TO STA. 350+00

HAM-745-18.36

SEEDING END WIDTH	SEEDING SQ. YDS.
55	309
56	337
65	387
	1033

SP 1312-8

DATE: JULY 2018

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
40	14	63	24
28	11	63	27
40	18	63	46
		189	97

CALCULATED RJG

CHECKED HAG

CROSS SECTIONS - MINK STREET STA. 22+00 TO STA. 23+00

LIC-161-1.83