

#### STANDARD BAR SPLICER ASSEMBLY PLAN

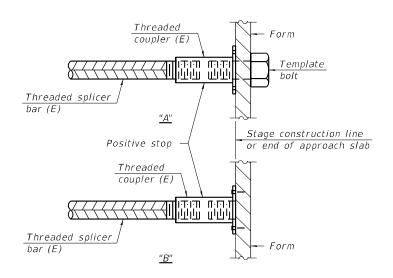
(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length +  $1\frac{1}{2}$ " + thread length

\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

SN 072-0252 (EB)									
Location	Bar	No. assemblies	Minimum						
Location	size	required	lap length						
Deck	#5	867	3'-6"						
N. Diaphragm	#6	7	4'-0"						
S. Diaphragm	#6	7	4'-0"						
N. Appr. Slab	#5	41	3'-4"						
N. Appr. Slab	#8	54	4'-9"						
N. Appr. Footing	#5	40	3'-2"						
S. Appr. Slab	#5	41	3'-4"						
S. Appr. Slab	#8	54	4'-9"						
S. Appr. Footing	#5	40	3'-2"						
N. Abut.	#7	10	5'-0"						
S. Abut.	#7	10	5'-0"						
Pier 1 Cap	#9	8	6'-5"						
Pier 1 Cap	#6	6	4'-4"						
Pier 1 Crashwall	#5	29	3'-7"						
Pier 1 Footing	#5	18	3'-7"						
Pier 2 Cap	#9	8	6'-5"						
Pier 2 Cap	#6	6	4'-4"						
Pier 2 Crashwall	#5	27	3'-7"						
Pier 2 Footing	#5	18	3'-7"						

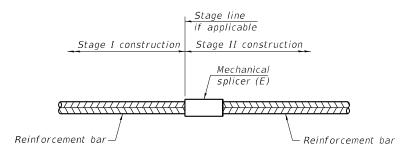
SN 072-0253 (WB)									
Location	Bar	No. assemblies	Minimum						
Location	size	required	lap length						
Deck	#5	753	3'-6"						
Diaphragm	#6	14	4'-0"						
N. Appr. Slab	#5	41	3'-4"						
N. Appr. Slab	#8	54	4'-9"						
N. Appr. Footing	#5	40	3'-2"						
S. Appr. Slab	#5	41	3'-4"						
S. Appr. Slab	#8	54	4'-9"						
S. Appr. Footing	#5	40	3'-2"						
N. Abut.	#7	10	5'-0"						
S. Abut.	#7	10	5'-0"						
Pier 1 Cap	#9	12	6'-5"						
Pier 1 Cap	#6	6	4'-4"						
Pier 1 Crashwall	#5	27	3'-7"						
Pier 1 Footing	#5	18	3'-7"						
Pier 2 Cap	#9	12	6'-5"						
Pier 2 Cap	#6	6	4'-4"						
Pier 2 Crashwall	#5	23	3'-7"						
Pier 2 Footing	#5	18	3'-7"						



#### INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



#### STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020

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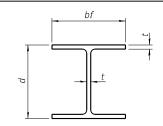
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

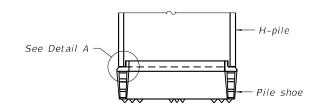
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 072-0252 (EB) & 072-0253 (WB)

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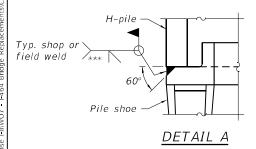


#### STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14×117	141/4"	14 <sup>7</sup> / <sub>8</sub> "	13/ <sub>16</sub> "	30"
x102	14"	14¾"	<sup>1</sup> ½16"	30"
x89	137/8"	14¾"	5/8"	30"
x73	13%"	145/8"	1/2"	30"
HP 12x84	121/4"	121/4"	11/ <sub>16</sub> "	24"
x74	12½"	121/4"	5/8"	24"
x63	12"	121/8"	1/2"	24"
x53	11¾"	12"	<sup>7</sup> / <sub>16</sub> "	24"
HP 10x57	10"	10½"	%16"	24"
x42	9¾"	101/8"	<sup>7</sup> / <sub>16</sub> "	24"
HP 8x36	8"	8½"	7/ <sub>16</sub> "	18"



#### ELEVATION

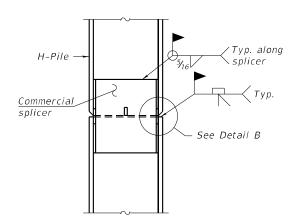


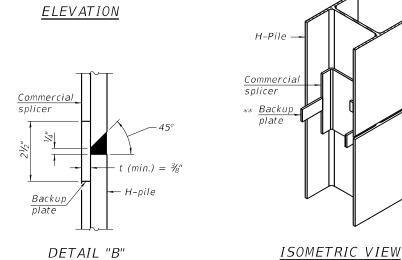
#### SHOE ATTACHMENT

1-1-2020

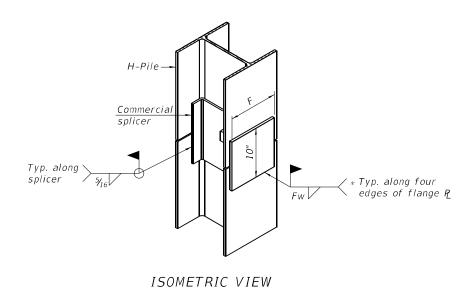
Note:

The steel H-piles shall be according to AASHTO M270 Grade 50.



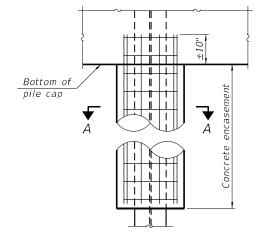


#### WELDED COMMERCIAL SPLICE



#### WELDED COMMERCIAL SPLICE ALTERNATE

- $_*$  Interrupt welds  $\frac{1}{4}$ " from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer ( $\frac{5}{16}$ " min.).



Welded wire fabric 6 x 6-W4.0 x W4.0 weighing 58#/100 sq. ft. Bend as required to fit into wall.

Forms for encasement may be omitted when soil conditions permit.

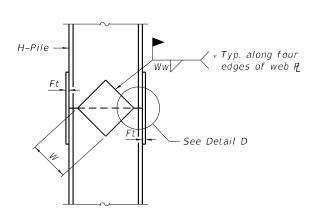
H-pile

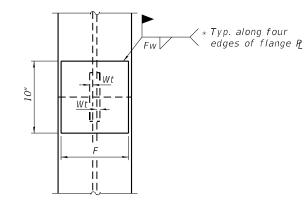
<u>ELEVATION</u>

SECTION A-A

#### INDIVIDUAL PILE CONCRETE ENCASEMENT

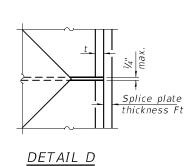
(when specified)





<u>ELEVATION</u>

END VIEW



Designation	F	Ft	Fw	W	Wt	Ww
HP 14×117	12½"	1"	7/8"	7¾"	5/8"	1/2"
x102	12½"	7/8"	3/4"	73/4"	5/8"	1/2"
x89	121/2"	3/4"	<sup>1</sup> ½ <sub>16</sub> "	73/4"	5/8"	1/2"
x73	121/2"	5/8"	%16"	73/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1½ <sub>16</sub> "	6½"	5/8"	1/2"
x74	10"	7/8"	<sup>1</sup> ½16"	6½"	5/8"	1/2"
x63	10"	5/8"	1/2"	6½"	1/2"	3/8"
x53	10"	5/8"	1/2"	6½"	1/2"	3/8"
HP 10x57	8"	3/4"	%16"	5½"	1/2"	3/8"
x42	8"	5/8"	%16"	5½"	1/2"	3/8"
HP 8x36	7"	5/8"	7/ <sub>16</sub> "	41/4"	1/2"	3/8"

#### WELDED PLATE FIELD SPLICE

 $F_-HP$ 

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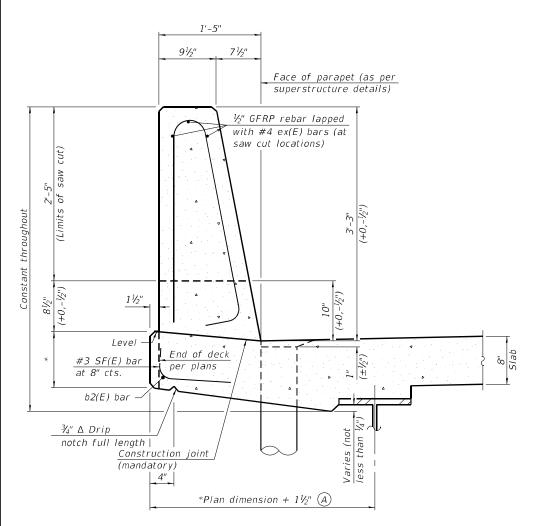
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 072-0252 (EB) & 072-0253 (WB)

SHEET 53 OF 65 SHEETS

QUIGG ENGINEERING INC

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1'-0"

#3 (E) BAR

1-1-2020

*39" CONSTANT-SLOPE* PARAPET SECTION

(Showing dimensions, d(E), and  $\frac{1}{2}$ "  $\emptyset$  GFRP rebar)

\*See Superstructure Details.

8½",

Level

per plans

Construction joint

4"\_

(mandatory)

#3 SF(E) bar

b2(E) bar

notch full length |

at 8" cts.

¾" ∆ Drip

*44" CONSTANT-SLOPE* PARAPET SECTION

\*Plan dimension +  $1\frac{1}{2}$ " (A)

Face of parapet (as per

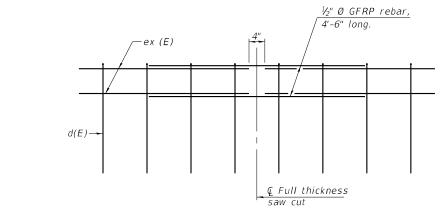
superstructure details)

1/2" GFRP rebar lapped

with #4 ex(E) bars (at

saw cut locations)

(Showing dimensions, d(E), and  $\frac{1}{2}$ " Ø GFRP rebar)



1'-5"

8½"

81/2"

#### GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

SFP 39-44

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**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

**CONCRETE PARAPET SLIPFORMING OPTION** STRUCTURE NO. 072-0252 (EB) & 072-0253 (WB) SHEET 54 OF 65 SHEETS

Notes:

All dimensions shall remain the same as shown on

superstructure details, except dimension A which is

Place full depth aluminum sheets as shown on

Replace all cork joint filler locations with a full

Steel superstructure shown. Other superstructure

to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft.

for 39" and 44" parapets.

superstructure details.

thickness saw cut.

types similar.

SECTION COUNTY 474 (72-3HB-2)BR PEOR**I**A 126 104 CONTRACT NO. 68884

QUIGG ENGINEERING INC

DESIGNED - RPW REVISED -

Page  $\underline{1}$  of  $\underline{2}$ 

**Date** <u>7/15</u>/19

FAI 474 (I-474) DESCRIPTION Structure boring for bridge replacement LOGGED BYBI (Terracon) 73-3HB-2 LOCATION I-474 over IL 116 (Plank Rd), SEC. 11, TWP. 8N, RNG. 7E, 4th PM, **SECTION** Latitude 40°41'18.74"N, Longitude 89°40'33.41"W Solid Stem/ Rotary HAMMER TYPE AUTO SPT Hammer Peoria **DRILLING METHOD** COUNTY 072-0121 & 0122 EX В М **STRUCT. NO.** 072-0252 & 0253 PR U В Surface Water Elev. L С 0 E О С 223+71 (CL median) Station Stream Bed Elev. 0 P S 0 S W Т W S BORING NO. Groundwater Elev.: Н S Qu Т Н S Qu Т 222+95 First Encounter Station Offset 100.5 ft RT **Upon Completion** ft | (ft) | (/6") (tsf) (%) <u>581.2</u> ft <u></u> | (ft) | (/6") (tsf) (%) Ground Surface Elev. 596.28 After 96 Hrs. TOPSOIL SILTY CLAY LOAM: gray, moist, very stiff, with traces of gravel 595 28 CLAY LOAM: brown, moist, very stiff, with traces of sand and 13 3.5 19 11 50/4 Р 573.28 MUDSTONE: gray, moist, 35 completely weathered, soft 50/5 13 3 Borehole continued with rock coring. CLAY LOAM: brown, moist, very soft to soft, with traces of sand 23 0.2 and gravel 16 5 0.4 22 4 586.28 -10 CLAY LOAM: brown and grayish brown, moist, medium stiff, with traces of sand and gravel 26 8.0 4 0.8 31 5 22 0.5 6 578.28 CLAY LOAM: grayish brown, moist, stiff, with sand and gravel 22 1.2 576.28 -20

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



### **ROCK CORE LOG**

Page  $\underline{2}$  of  $\underline{2}$ **Date** \_\_7/15/19

FAI 474 (I-474) DESCRIPTION \_ Structure boring for bridge replacement LOGGED BY BI (Terracon) LOCATION I-474 over IL 116 (Plank Rd), SEC. 11, TWP. 8N, RNG. 7E, 4<sup>th</sup> PM, Latitude 40°41'18.74"N, Longitude 89°40'33.41"W SECTION 73-3HB-2 CORE S COUNTY Peoria CORING METHOD Rotary Wash R Е 072-0121 & 0122 EX С R **STRUCT. NO.** 072-0252 & 0253 PR **CORING BARREL TYPE & SIZE** NX-2 С 0 Q Ε 223+71 (CL median) Station 0 Ν Core Diameter R Ε D Ε G Top of Rock Elev. \_ 573.28 **BORING NO.** Е R Т 571.28 Begin Core Elev. \_ 222+95 Station Н Offset 100.5 ft RT (ft) (#) (%) (%) (min/ft) (tsf) Ground Surface Elev. 596.28 ft MUDSTONE: gray, moist, completely weathered, soft (continued) RUN 72 43 -30 Mosture Content: 6.7%; Dry Density: 135.9 pcf 3.5 SHALE: gray, moist, highly weathered, soft Mosture Content: 4.8%; Dry Density: 142.6 pcf 71.7 -35 RUN 92 78 47.9 Mosture Content: 4%; Dry Density: 147.0 pcf Mosture Content: 2.8%; Dry Density: 153.4 pcf 132.3 -40 Mosture Content: 2.4%; Dry Density: 151.4 pcf 168.0 554.28 LIMESTONE: gray, weak RUN 69 72 289.4 Mosture Content: 0.7%; Dry Density: 151.4 pcf 551.28 -45

End of Boring Color pictures of the cores Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY **SOIL BORING LOGS (SB-1)** (72-3HB-2)BR PEORIA STRUCTURE NO. 072-0252 (EB) & 072-0253 (WB) CONTRACT NO. 68884 SHEET 55 OF 65 SHEETS

Page  $\underline{1}$  of  $\underline{2}$ 

**Date** 7/15/19

FAI 4<u>74 (I-474)</u> DESCRIPTION Structure boring for bridge replacement LOGGED BYBI (Terracon) LOCATION I-474 over IL 116 (Plank Rd), SEC. 11, TWP. 8N, RNG. 7E, 4<sup>th</sup> PM, Latitude 40°41'17.35"N, Longitude 89°40'30.96"W 73-3HB-2 SECTION Solid Stem/ Rotary HAMMER TYPE AUTO SPT Hammer COUNTY Peoria **DRILLING METHOD** 072-0121 & 0122 EX В **STRUCT. NO.** <u>072-0252 & 0253 PR</u> U Surface Water Elev. L С О E С О 223+71 (CL median) Station Stream Bed Elev. 0 S 0 S W S BORING NO. Groundwater Elev.: Н S Qu Т S Qu Т 224+30.5 572.4 **ft**▼ Station First Encounter Offset 85.5 ft LT **Upon Completion** (ft) (/6") (tsf) (%) Ground Surface Elev. 582.38 After \_ \_ Hrs. ASPHALT PAVEMENT: about 6 581.88 CLAY LOAM: brown, moist, stiff, with traces of sand and gravel (continued) FILL - CLAY LOAM: brown and dark gray, moist, medium stiff, 580.38 27 34 with traces of sand and gravel 3 SILTY CLAY LOAM: brown, moist, 559.38 stiff, with traces of sand and MUDSTONE: gray, moist, gravel completely weathered, soft 50/5 Borehole continued with rock 6 18 9 21 4 572.38**▼**-10 CLAY LOAM: brown, moist, stiff, with traces of sand and gravel 25 1.2 4 1.2 27 4 0.8 21 6 35 brownish gray 3 28 0.7

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

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FAI 474 (I-474)

DESCRIPTION

## **ROCK CORE LOG**

Structure boring for bridge replacement

Page <u>2</u> of <u>2</u>

LOGGED BY BI (Terracon)

SECTION	73-31	HB-2	LOCATION _ -474	over IL 110	6 (Plank Rd), <b>SEC</b> '17.35"N, <b>Longitu</b>	. 11,	TWP.	8N, <b>R</b>	NG. 7	E, 4 <sup>th</sup> PM	l,
COUNTY	Peoria	CORIN	G METHOD Rotary Wa		17.55 N, Longita	ue o	3 40 0	R		CORE	S
STRUCT. NO. Station BORING NO. Station	072-0121 & 072-0252 & 223+71 (CL	0122 EX 0253 PR median)	CORING BARREL TYPI  Core Diameter  Top of Rock Elev.  Begin Core Elev.	1.9 558.38 558.38		D E P T H	C O R E	E C O V E R Y	R . Q . D .	T I M E	T R E N G T H
Offset Ground Surfa	85.5 ft		ft			( ft)	(#)	(%)	(%)	(min/ft)	(tsf)
	gray, moist, c	completely w	veathered, soft <i>(continued</i> 39.3 pcf	)		-25 —	RUN 1	82	79		4.2
SHALE: gray, Mosture Conte					555.38		-				14.4
LIMESTONE: Mosture Conte	0 ,	y Density: 16	63.9 pcf		550.88		-				645.
Mosture Conte	ent: 0.2%; Dry	v Density: 16	64.5 pcf		546.38		RUN 2	93	73		640.
COAL: black, r	moist, highly v	weathered									
			trace sand seams		542.38	-40 -	-				4.0
Mosture Conte			·				-				1.9 0.9
					538.38	_	1				

End of Boring
Color pictures of the cores
Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

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Page  $\underline{1}$  of  $\underline{2}$ 

Date \_\_\_7/17/19

FAI 474 (I<u>-474)</u> DESCRIPTION Structure boring for bridge replacement LOGGED BYBI (Terracon) LOCATION I-474 over IL 116 (Plank Rd), SEC. 11, TWP. 8N, RNG. 7E, 4<sup>th</sup> PM, Latitude 40°41'19.12"N, Longitude 89°40'32.23"W 73-3HB-2 SECTION Solid Stem/ Rotary HAMMER TYPE AUTO SPT Hammer COUNTY Peoria DRILLING METHOD 072-0121 & 0122 EX В **STRUCT. NO.** <u>072-0252 & 0253 PR</u> U Surface Water Elev. L С О E С 223+71 (CL median) Station Stream Bed Elev. 0 S 0 S W S BORING NO. Groundwater Elev.: 222+53 н S Qu Т Н S Qu Т Station First Encounter Offset 11.0 ft RT **Upon Completion** Ground Surface Elev. 618.31 ft (ft) (/6") (tsf) (%) (ft) (/6") (tsf) (%) After \_ \_\_ Hrs. **TOPSOIL** CLAY LOAM: brown, moist, stiff, with traces of sand and gravel 617.31 (continued) FILL - CLAY LOAM: dark brown, brown 18 moist, medium stiff to stiff, with 1.5 20 4 0.9 traces of sand and gravel 6 brownish gray 20 8 18 1.9 19 0.9 610.31 POSSIBLE FILL - CLAY LOAM: brown and dark gray, moist, very with silt seams 28.5 to 30 feet stiff, with traces of sand and 1.4 23 1.2 30 8 gravel 12 7 6 1.5 24 5 605.81 CLAY LOAM: brown, moist, stiff, with traces of sand and gravel reddish brown 12 5 2.0 28 1.1 21 7 10 17 brownish gray 1.4 28 5 23 1.4 22 5 8 1.6 23 13

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

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## **SOIL BORING LOG**

Page  $\underline{2}$  of  $\underline{2}$ 

Date \_\_\_7/17/19

ROUTE	FAI 474 (I	l-474)	_ DES	SCRI	PTION	I	Struc	ure boring for bridge replacemen	: L0	OGG	ED BY	BI (Te	rracon)
SECTION	73	-3HB-2		LOCATION _			-474 c	over IL 116 (Plank Rd), <b>SEC.</b> 11, 7 de 40°41'19.12"N, <b>Longitude</b> 89	<b>WP.</b> 8N,	RNG	. 7E, 4	th PM,	
COUNTY	Peoria	DR	RILLING	ME	THOD			id Stem/ Rotary HAMME			TO SF	T Han	nmer
STRUCT. NO. Station	072-0252 223+71 (	CL media	rR	D E P	B L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	ft	D E P T	B L O	U C S	M 0 1
BORING NO. Station Offset	S 222 11.0	B-4 2+53 ) ft RT	<u> </u>	H	S S	Qu	S T	Groundwater Elev.: First Encounter Upon Completion	ft	H	W S	Qu	S T
Ground Surf	ace Elev	618.31	ft	(ft)	(/6")	(tsf)	(%)	After Hrs.	ft	(ft)	(/6")	(tsf)	(%)
CLAY LOAM: with traces of (continued)								SHALE: gray, weak, highly weathered					
				_	4					_	50/1		
				-45	11 16	1.4	26 20			-65			18
										_			
					10						50/1		
				-50	8 11	0.5	22 16		548.31	-70			8
				_				End of Boring		_			
				_						_			
										_			
				_	6	4.0	0.5			_			
				-55	10 18	1.3	65			-75			
										_			
				_						_			
				_						_			
LIMESTONE	FRAGEMF	NTS:	560.31										
gray					50/5		18			_			
			558.31	-60			10			-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

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Page  $\underline{1}$  of  $\underline{2}$ 

Date \_\_\_7/17/19

FAI 4<u>74 (I-474)</u> Structure boring for bridge replacement LOGGED BY BI (Terracon) DESCRIPTION 73-3HB-2 LOCATION I-474 over IL 116 (Plank Rd), SEC. 11, TWP. 8N, RNG. 7E, 4th PM, SECTION Latitude 40°41'16.73"N, Longitude 89°40'32.09"W Solid Stem/ Rotary HAMMER TYPE AUTO SPT Hammer COUNTY Peoria **DRILLING METHOD** 072-0121 & 0122 EX В **STRUCT. NO.** 072-0252 & 0253 PR U Surface Water Elev. L С 0 E С О 223+71 (CL median) Station Stream Bed Elev. 0 S 0 S W Т W S BORING NO. Groundwater Elev.: Н S Qu Т Н S Qu Т 225+02 Station First Encounter Offset 0.0 ft **Upon Completion** ft | (ft) | (/6") | (tsf) (%) Ground Surface Elev. 617.10 After <u>108</u> Hrs. 22 CLAY LOAM: brown, moist, **TOPSOIL** medium stiff to stiff, with traces of 616.10 sand and gravel (continued) CLAY LOAM: brown, moist, medium stiff to stiff, with traces of 25 20 0.7 sand and gravel 6 15 12 28 24 0.8 6 29 592.10 -25 SILTY CLAY LOAM: brownish gray, moist, medium stiff to very stiff, with traces gravel 14 1.2 34 22 0.7 21 36 28 5 0.9 22 21 2.4 17 6 50/4 -30 reddish brown 19 1.5 5 5 0.7 27 1.6 17 19 6 29 25 1.4 6 579.10 SHALE: gray, weak, highly weathered 25 brown 50/5 3.2 21 11 0.7

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



### **SOIL BORING LOG**

Page  $\underline{2}$  of  $\underline{2}$ 

Date \_\_7/17/19

ROUTE	FAI 474 (I-474)	DESCI	RIPTION	١	Struc	ture boring for bridge re	placement L	OGGED BY BI (Terracon
SECTION	73-3HB-2		LOCAT	TION	I-474 d	over IL 116 (Plank Rd),	SEC. 11, TWP. 8N,	RNG. 7E, 4 <sup>th</sup> PM,
00111171	Danie BBU					ide 40°41'16.73"N, Long		
COUNTY	Peoria DRIL		ETHOD		50	lid Stem/ Rotary	HAMMER TYPE	AUTU SPT Hammer
Station	072-0121 & 0122 EX 072-0252 & 0253 PR 223+71 (CL median)	D	L	U C S	M O I S	Surface Water Elev Stream Bed Elev	ft ft	
Station	SB-5 225+02 0.0 ft	<u> </u>		Qu	T	Groundwater Elev.: First Encounter	ft	
Ground Surf	face Elev. 617.10	ft (ft	) (/6")	(tsf)	(%)	Upon Completion _ After _108 _ Hrs.		
SHALE: gray, weathered (co	weak, highly ontinued)							
		-	-					
		_	-					
		_						
		-						
		_	50/2		18			
	57	- 2.10 -4	5					
End of Boring		-						
		_	1					
		_						
		-	-					
			-					
		_						
		5						
		5	<u> </u>					
		_						
		-	_					
			+					
		-						
		_	-					
		-5	5					
		_						
			_					
		-	+					
		_	_					
		-	$\dashv$					
		_	$\dashv$					
		-6	0					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



 USER NAME
 =
 zdavidson
 DESIGNED
 RPW
 REVISED

 0720252\_0720253-68884-058-BoringSB5.dgn
 CHECKED
 KWB
 REVISED

 PLOT SCALE
 =
 0:2,0000 '." / in.
 DRAWN
 LMC
 REVISED

 PLOT DATE
 =
 CHECKED
 MDC
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 SOIL BORING LOGS (SB-5)
 F.A.I. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 STRUCTURE NO. 072-0252 (EB) & 072-0253 (WB)
 474
 (72-3HB-2)BR
 PEORIA
 126
 108

 SHEET
 58
 0F
 65
 SHEETS
 ILLINOIS FED. AID PROJECT

Page  $\underline{1}$  of  $\underline{3}$ 

Date <u>12/29/21</u>

FAI 4<u>74 (I-474)</u> DESCRIPTION Structure boring for bridge replacement LOGGED BYMC (Terracon) LOCATION I-474 over IL 116 (Plank Rd), SEC. 11, TWP. 8N, RNG. 7E, 4<sup>th</sup> PM, Latitude 40°41'18.27"N, Longitude 89°40'32.12"W 73-3HB-2 Hollow Stem Auger Peoria DRILLING METHOD HAMMER TYPE 072-0121 & 0122 EX В В U **STRUCT. NO.** <u>072-0252 & 0253 PR</u> U Surface Water Elev. L С 0 223+71 (CL median) Station Stream Bed Elev. 0 S S 0 W BORING NO. Groundwater Elev.: Qu Т H S S Qu Т 223+52 First Encounter 563.0 **ft**▼ Station **Upon Completion** Offset 0.0 ft 563.0 **ft**∑ Ground Surface Elev. <u>586.00</u> ft | (ft) | (/6") | (tsf) | (%) (ft) (/6") (tsf) (%) ft \_\_ Hrs. ASPHALT GRAVELLY CLAY, trace sand, 585.30 grayish brown, stiff GRAVELLY SANDY CLAY, brown, stiff 1.6  $\nabla$ 1.2 559.25 SANDY LOAM, gray, moist, very dense 50/3" RIMAC not tested due to 3 presence of large gravels -30 1 -10 574.25 554.25 SANDY CLAY, trace gravel, CLAYEY SHALE, gray, very grayish brown, very stiff 50/2" 552.00 2.0 Borehole continued with rock 5 coring. 2.3 6 566.00 -20

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



## **ROCK CORE LOG**

Page  $\underline{2}$  of  $\underline{3}$ 

Date 12/29/21

ROUTE FAI 474 (I-474) DESCRIPTION Structure boring for bridge replace	emer	nt	_ LO	GGED	BYMC (	Terracor
SECTION         73-3HB-2         LOCATION         I-474 over IL 116 (Plank Rd), SEC.           Latitude         40°41'18.27"N, Longitu	. 11,	TWP.	8N, <b>R</b>	NG. 7	E, 4 <sup>th</sup> PM	,
COUNTY Peoria CORING METHOD	ue		R E	R	CORE	S T
STRUCT. NO.       072-0121 & 0122 EX 072-0252 & 0253 PR 223+71 (CL median)       CORING BARREL TYPE & SIZE NX-2         Station       072-0252 & 0253 PR 223+71 (CL median)       Core Diameter 2 in	D E	c o	0 0	Q Q	T I M	R E N
BORING NO.         SB-6         Top of Rock Elev.         552.00         ft           Station         223+52         Begin Core Elev.         552.00         ft	P T H	R E	E R Y	D	E	G T H
Offset 0.0 ft Ground Surface Elev. 586.00 ft	( ft)	(#)	(%)	(%)	(min/ft)	(tsf)
SHALE, gray, moderately to completely weathered, weak rock, very closely fractured, 552.00 laminated  Moisture Content = 5.1%; Dry Density = 147.3 pcf	-35	1	100	67		89.6
	_	2	90	85		
	-40					
			10	20		
544.00	_	3	40	20		
COAL, black, highly weathered, very weak, very closely fractured						
540.50	-45					
LIMESTONE, gray, slightly weathered, medium strong, moderately fractured, thin Moisture Content = 1.3%; Dry Density = 162.9 pcf		4	70	42		470.5
Total Control of the	-50		165			
E 1474 OVER P		5	100	0		
ACC COLOR CO	_					

Color pictures of the cores Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)



DESIGNED - RPW REVISED -0720252 0720253-68884-059-BoringSB6 1of2.dgn CHECKED - KWB REVISED -REVISED PLOT DATE = CHECKED - MDC REVISED .

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SECTION SOIL BORING LOGS (SB-6) (1 OF 2) (72-3HB-2)BR STRUCTURE NO. 072-0252 (EB) & 072-0253 (WB) SHEET 59 OF 65 SHEETS

PEORIA 126 109 CONTRACT NO. 68884



## **ROCK CORE LOG**

Page  $\underline{3}$  of  $\underline{3}$ 

Date <u>12/29/21</u>

ROUTE	FAI 474 (I-474)	DESCRIPTION	Structure boring f	or bridge repla	cemer	nt	_ LO	GGED	BYMC (	Terraco
SECTION	73-3HB-2	LOCATION	I-474 over IL 116 ( Latitude 40°41'1	Plank Rd), SE	C. 11,	TWP.	8N, <b>R</b>	NG. 7	E, 4 <sup>th</sup> PM	l,
COUNTY	Peoria COR	ING METHOD	Latitude 40 411		uae a	39 40	R E	R	CORE	S T
STRUCT. NO. Station	072-0121 & 0122 EX 072-0252 & 0253 PR 223+71 (CL median)	CORING BARRE	EL TYPE & SIZE	NX-2	- D	c o	C O V	Q .	T I M	R E N
BORING NO. Station Offset	SB-6 223+52 0.0 ft	Top of Rock E Begin Core Ele	lev. 552.00	 _ ft _ ft	P T H	R E	E R Y	D	E	G T H
Ground Surfa	ace Elev. 586.00				( ft)	(#)	(%)	(%)	(min/ft)	(tsf)
LIMESTONE,	gray, completely weath	nered, very weak <i>(coi</i>	ntinued)							
					_	6	97	63		
						Ü	"			
LIMESTONE	gray, moderately weath	nered weak rock clo	ose to moderately fra	528.0	0					
thin	gray, moderately weath	iorea, weak rook, ole	obe to moderately me	iotarea,	_					
Moisture Cont	ent = 6.0%; Dry Density	v = 147 8 ncf			_	7	100	100		99.1
Wolstare cont	on = 0.070, biy benon	y 147.0 poi			_	•	100	100		05.1
					_					
					_					
					 -65					
End of Boring				520.5	0					
					_					
1 00 1 00 1 00 1 0 0 0 0 0 0 0 0 0 0 0					_					
					_					
					-70					
					_					
<u> </u>					_		ļ			
ROUN CORE 14/4 OVER FLANK RU.										
					_					

Color pictures of the cores Yes

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)



USER NAME = zdavidson	DESIGNED	-	RPW	REVISED -
0720252_0720253-68884-060-BoringSB6 2of2.dg	n CHECKED	-	KWB	REVISED -
PLOT SCALE = 0:2.0000 ':" / in.	DRAWN	-	LMC	REVISED -
PLOT DATE =	CHECKED	-	MDC	REVISED -

Page  $\underline{1}$  of  $\underline{3}$ 

Date <u>12/29/21</u>

FAI 4<u>74 (I-474)</u> DESCRIPTION Structure boring for bridge replacement LOGGED BYMC (Terracon) LOCATION I-474 over IL 116 (Plank Rd), SEC. 11, TWP. 8N, RNG. 7E, 4<sup>th</sup> PM, Latitude 40°41'17.75"N, Longitude 89°40'32.16"W 73-3HB-2 Hollow Stem Auger Peoria DRILLING METHOD HAMMER TYPE 072-0121 & 0122 EX В **STRUCT. NO.** <u>072-0252 & 0253 PR</u> U U Surface Water Elev. L С 0 E 223+71 (CL median) Station Stream Bed Elev. 0 S S 0 W BORING NO. Groundwater Elev.: H S Qu Т S Qu Т 223+92 563.0 ft**⊻** Station First Encounter Offset 3.0 ft RT **Upon Completion** <u>563.0</u> **ft**∑ Ground Surface Elev. <u>586.00</u> ft | (ft) | (/6") | (tsf) | (%) (ft) (/6") (tsf) (%) After \_\_\_ \_\_\_ Hrs. ASPHALT SILT, trace gravel, gray and brown, moist, medium dense SILTY LOAM, light brown, dry, (continued) loose 564.25 SANDY LOAM, with gravel, grayish brown, moist, very dense  $\nabla$ 50/5" 3 579.25 SILTY LOAM, trace gravel, light brown, dry, loose 50/1" 557.00 Borehole continued with rock 4 coring. 574.25 SILTY CLAY, light brown to brown, very soft WOH WOH 569.25 SILT, trace gravel, gray and brown, moist, medium dense 10

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



## **ROCK CORE LOG**

Page  $\underline{2}$  of  $\underline{3}$ 

Date 12/29/21

ROUTE	FAI 474 (I-474)	DESCRIPTION	Structure boring for bridge	e replacem	ent	LC	GGED	BYMC (	Terracor
SECTION	73-3HB-2	LOCATION	I-474 over IL 116 (Plank R	d), <b>SEC.</b> 1	, <b>TW</b>	P. 8N, F	RNG. 7	E, 4 <sup>th</sup> PM	,
COUNTY	Peoria COR		Latitude 40°41'17.75"N,	Longitude	89°4	10'32.16 R E	R	CORE	S T
Station BORING NO.	072-0121 & 0122 EX 072-0252 & 0253 PR 223+71 (CL median) SB-7	CORING BARRE  Core Diameter  Top of Rock E	lev. <u>557.00</u> ft	2 C	OR	C O V E	Q . D	T I M E	R E N G T
Station Offset	223+92 3.0 ft RT	Begin Core Ele	ev. <u>557.00</u> ft	F		Y	•		Ĥ
Ground Surfa	ace Elev. 586.00	ft		(1	t) (#	) (%)	(%)	(min/ft)	(tsf)
	highly to moderately we ent = 7.4%; Dry Density		, very closely fractured, thin		1	93	67		88.1
					-				
					2	100	83	_	
					∃	100	05		
					-				
				3	35				
					-				
				_	-				
Moisture Cont	ent = 11.1%; Dry Densi	ity = 141.2 pcf			3	98	62		74.7
					-				
					10				
					+0				
				_	4				
				_					
					4	93	38		
					╡ ๋				
	highly weathered, very	weak, verv closelv fr	ractured	542.00	+				
				541.00 -	15				
LIMESTONE,	gray, highly weathered	, extremely weak			+				
					+				
LIMESTONE,				_	5	97	0		
					+				

Color pictures of the cores

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)



USER NAME = zdavidson	DESIGNED	-	RPW	REVISED -
0720252_0720253-68884-061-BoringSB7 1of2.dg	n CHECKED	-	KWB	REVISED -
PLOT SCALE = 0:2.0000 ':" / in.	DRAWN	-	LMC	REVISED -
PLOT DATE =	CHECKED	-	MDC	REVISED -



## **ROCK CORE LOG**

Page  $\underline{3}$  of  $\underline{3}$ 

Date <u>12/29/21</u>

	ROUTE	FAI 474 (I-474)	DESCRIPTION	Structure boring	for bridge replace	mer	nt	_ LO	GGED	BYMC (	Terracon)
	SECTION	73-3HB-2	LOCATION	I-474 over IL 116	(Plank Rd), SEC.	11,	TWP.	8N, <b>R</b>	<b>NG.</b> 7	E, 4 <sup>th</sup> PM	1
				Latitude 40°41	'17.75"N, <b>Longitu</b>	de 8	39°40	'32.16	"W		
	COUNTY	Peoria COR	NG METHOD					R E	R	CORE	S T
	STRUCT. NO. Station	072-0121 & 0122 EX 072-0252 & 0253 PR 223+71 (CL median)	CORING BARRE	L TYPE & SIZE _		D E	c o	00>	2 · Q ·	T I M	R E N
	DODING NO	SD 7	Top of Rock El			Р	R	Ε	D	E	G
	Station	SB-7 223+92	Begin Core Ele		ft	Т	Е	R			Т
	Offset	3.0 ft RT	<b></b>			Н		Υ			н
	Ground Surfa		ft			( ft)	(#)	(%)	(%)	(min/ft)	(tsf)
	LIMESTONE,	gray, highly weathered,	extremely weak (cor	ntinued)							
						-50					
						_					
						_					
-	LIMESTONE	gray, slightly weathered	l wook rook modore	staly fractured	533.50	_	6	100	80		
	LINESTONE,	gray, slightly weathered	i, weak rock, modera	itely iractured			U	100	00		
						_					
						-55					
	Moisture Conte	ent = 5.3%; Dry Density	r = 149.5 pcf				7	100	88		89.6
						_					
						-60					
						_					
					524.50						
3/22	End of Boring				02-1.00	_					
GPJ IL_DOT.GDT 2/9/22	J										
8											
="											
						_					
읾						-65					
Ż						_					
RP											
2						_					
-474											
빏						_					
ROCK CORE 1-474 OVER PLANK RD											
S						_					
1											

Color pictures of the cores Yes

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)



	USER NAME = zdavidson	DESIGNED	-	RPW	REVISED -
ı	0720252_0720253-68884-062-BoringSB7 2of2.dg	n CHECKED	-	KWB	REVISED -
ı	PLOT SCALE = 0:2.0000 ':" / in.	DRAWN	-	LMC	REVISED -
	PLOT DATE =	CHECKED	-	MDC	REVISED -

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Page  $\underline{1}$  of  $\underline{2}$ 

**Date** \_\_\_7/6/20

	ROUTE	FAI 474 (I-474)	DES	SCRI	PTION	I		Rock probe boring	L0	OGGI	ED BY	3 <u>T (Te</u>	rracon)
	SECTION _	73-3HB-2		_ L	OCAT	ION _	1-474	over Plank Road, SEC. 11, TWP. 8N	RNG.	7E, 4	th PM,		
	COUNTY	Peoria DRIL	LING	ME	THOD			de 40d 41' 17" N, Longitude 89d 4 id Stem/ Rotary HAMMER			TO SP	T Han	nmer
	Station BORING NO. Station	072-0121 & 0122 EX 072-0252 & 0253 PR 223+71 RP-1 224+58	- -	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.  Groundwater Elev.: First Encounter	 _ ft _ ft	D E P T H	B L O W S	U C s	M O I S T
	Ground Sur	68.0 ft RT face Elev. 618.51	ft	(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	_ ft _ ft	(ft)	(/6")	(tsf)	(%)
JIL BORING WO 50 PLANK RD RCCK PROBES GPJ IL_DOT.GDT 7/17/20		LED TO 33.5 FEET		-10 -15				BLANK DRILLED TO 33.5 FEET (continued)  COAL: black, moist, completely weathered, soft  SILTY CLAY LOAM: gray, moist, very stiff, with sand	585.2° 583.5°	-35	53 50 37 8 10 17		37
BORING				_				SHALE: gray, completely weathered, exteremely weak			22 100/3		13
$\exists$				_		l	1						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



## **SOIL BORING LOG**

Page <u>2</u> of <u>2</u>

Date \_\_\_7/6/20

ROUTE	FAI 474 (I-474)	DE	SCR	IPTION	ı		Rock probe boring	<u>.                                    </u>	OGGED BYBT (Terracon)
						Latitu	over Plank Road, <b>SEC.</b> de 40d 41' 17" N, <b>Lon</b>	11, TWP. 8N, RNG.	7E, 4 <sup>th</sup> <b>PM</b> ,
COUNTY	Peoria	DRILLING	S ME	THOD		Sol			AUTO SPT Hammer
STRUCT. NO.	072-0121 & 012 072-0252 & 025 223+71	2 EX 3 PR	D E P	B L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	ft ft	
Station Offset	RP-1 224+58 68.0 ft RT		H	W S	Qu	S T	Upon Completion	ft	
Ground Sur	face Elev. 618.	51 <b>ft</b>	(ft)	(/6")	(tsf)	(%)	After Hrs.	ft	
SHALE: gray, weathered, ex (continued)	completely kteremely weak			40 100/2		18			
			-	100		14			
End of Boring		573.5°	1 -45						
SUL BORING WO SU PLANK KD RCCK -RUBES.GFJ IL_DOI.GD] //1/20									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



USER NAME = zdavidson	DESIGNED - RPW	REVISED -
0720252_0720253-68884-063-BoringRP1.dgn	CHECKED - KWB	REVISED -
PLOT SCALE = 0:2.0000 ':" / in.	DRAWN - LMC	REVISED -
PLOT DATE =	CHECKED - MDC	REVISED -



Page  $\underline{1}$  of  $\underline{2}$ 

Date \_\_\_\_7/7/20

ROUTE	FAI 474 (I-474)	DESCR	IPTION	ı		Rock probe boring	L	OGGI	ED BY	В <u>Т (Те</u>	rracon)
SECTION _	73-3HB-2		_OCAT	ION _	I-474 c	over Plank Road, SEC. 11, TWP. 8N,	RNG.	7E, 4	th PM,		
COUNTY	Peoria DRIL	LING ME	THOD			de 40d 41' 16" N, Longitude 89d 40 lid Stem/ Rotary HAMMER			TO SF	T Han	nmer
STRUCT. NO Station BORING NO.	072-0121 & 0122 EX 072-0252 & 0253 PR 223+71 RP-2 225+52 62.0 ft LT		B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.  Groundwater Elev.: First Encounter	 _ ft _ ft	D E P T H	B L O W S	U C s Qu	M O I S T
Offset Ground Sur	face Elev. 619.39	_ ft (ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	_π _ft	(ft)	(/6")	(tsf)	(%)
	LED TO 38.5 FEET					BLANK DRILLED TO 38.5 FEET (continued)  CLAY LOAM: brown and light		-25 -30 -35 -35 -	2		19
SCIL B		-20				gray, moist, stiff, with traces of sand and gravel	579.39	9 -40	4 6		21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



## **SOIL BORING LOG**

Page  $\underline{2}$  of  $\underline{2}$ 

Date \_\_\_7/7/20

	ROUTE	FAI 474 (I	-474)	DES	CRII	PTION	l		Rock probe boring	g L	OGGED BYBT (Terracon)
	SECTION	73-	-3HB-2		L	OCAT	ION	I-474 d	over Plank Road, <b>SEC.</b>	11. <b>TWP.</b> 8N. <b>RNG.</b>	7E. 4 <sup>th</sup> <b>PM</b> .
								Latitu	de 40d 41' 16" N, Lon	gitude 89d 40' 31" \	V
	COUNTY	Peoria	DRI	LLING	MET	THOD		Sol	id Stem/ Rotary	_ HAMMER TYPE	AUTO SPT Hammer
	STRUCT. NO. Station	072-0252 223	P-2	<u> </u>	D E P T	B L O W	U C S	M O I S	Surface Water Elev. Stream Bed Elev. Groundwater Elev.:	ft	
	Station Offset	225	5+52	_	н	S	Qu	Т	First Encounter	ft	
	Offset	62.0	ft LT		/E4\	(/C!!\	/4of\	(0/)	Upon Completion	ft	
	Ground Surfa	ace Elev	619.39	_ ft	(π)	(/6")	(tsf)	(%)	After Hrs.	ft	
	CLAY LOAM: medium stiff, v and gravel			-		1					
				_		2		19			
					-45	7					
	- gray 48.5 to 9	53.5 feet		-		3					
	- with shale fra	agments 48	.5 to 50	_		3		23			
IL_DOT.GDT 7/17/20	feet			- - 565.89	-50 —	2					
.GPJ	SHALE: gray,	completely		_		50/1					
BES.	weathered, ex	teremely we	eak		$\perp$			7			
SCIL BORING WO 50 PLANK RD RCCK PRCBES.GPJ IL_DOT.GDT 7/17/20				-	-55	100/3					
Ň				-							
RIN				_		50/3					
CIL BO				- 559.39	-60			18			

End of Boring
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form

BBS, form 137 (Rev. 8-99)

QUIGG ENGINEERING INC

DESIGNED - RPW REVISED -0720252\_0720253-68884-064-BoringRP2.dgn CHECKED - KWB REVISED -PLOT SCALE = 0:2.0000 ':" / in. DRAWN - LMC REVISED CHECKED - MDC PLOT DATE = REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION SOIL BORING LOGS (RP-2) (72-3HB-2)BR STRUCTURE NO. 072-0252 (EB) & 072-0253 (WB) SHEET 64 OF 65 SHEETS

PEORIA 126 114 CONTRACT NO. 68884



Page  $\underline{1}$  of  $\underline{1}$ 

Date \_\_\_\_7/6/20

FAI 474 (I-474) DESCRIPTION Rock probe boring LOGGED BYBT (Terracon) **SECTION** 73-3HB-2 LOCATION I-474 over Plank Road, SEC. 11, TWP. 8N, RNG. 7E, 4th PM, Latitude 40d 41' 18" N, Longitude 89d 40' 32" W Solid Stem/ Rotary HAMMER TYPE AUTO SPT Hammer COUNTY Peoria **DRILLING METHOD** 072-0121 & 0122 EX D В **STRUCT. NO.** <u>072-0252 & 0253 PR</u> Surface Water Elev. 0 L О 223+71 Station Stream Bed Elev. 0 0 S S W W BORING NO. Groundwater Elev.: 223+94 н S Qu Т S Qu Т Station First Encounter Offset 2.0 ft LT **Upon Completion** ft (ft) (/6") (tsf) (%) (ft) (/6") (tsf) (%) Ground Surface Elev. 586.79 After \_\_\_ \_\_ Hrs. BLANK DRILLED TO 23.5 FEET BLANK DRILLED TO 23.5 FEET (continued) 100/4 SHALE: light gray, completely weathered, extremely weak 100/3 15 42 13 74 556.79 -30 26/3 End of Boring

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



DESIGNED - RPW REVISED -0720252\_0720253-68884-065-BoringRP3.dgn CHECKED - KWB REVISED -DRAWN -REVISED PLOT DATE = CHECKED - MDC REVISED .

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SECTION SOIL BORING LOGS (RP-3) COUNTY (72-3HB-2)BR PEORIA STRUCTURE NO. 072-0252 (EB) & 072-0253 (WB) CONTRACT NO. 68884 SHEET 65 OF 65 SHEETS

# BRIDGE PLANS PAGE HOLDER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

# BRIDGE PLANS PAGE HOLDER

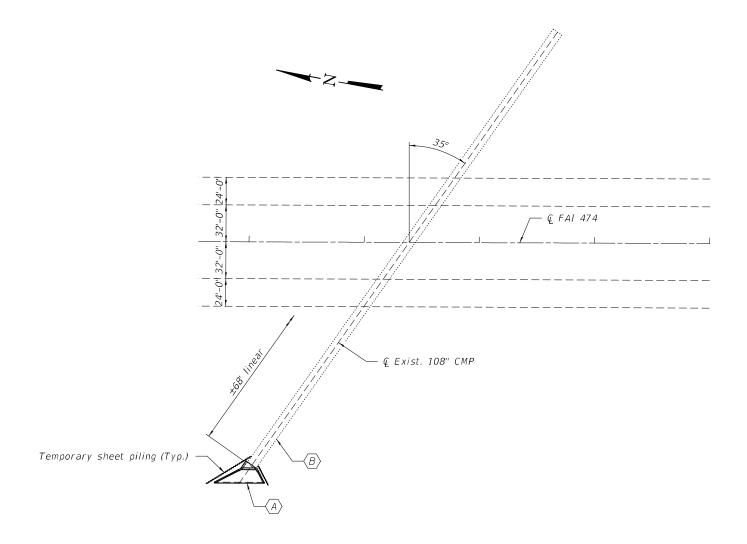
 USER NAME
 = \$USER\$
 DESIGNED
 REVISED

 DRAWN
 REVISED

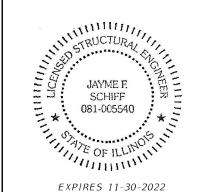
 PLOT SCALE
 = 1:100
 CHECKED
 REVISED

 PLOT DATE
 = 7/1/2022
 DATE
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



- $\langle A \rangle$  Remove and replace existing concrete end section and replace with a new cast in place concrete end section. (West end only)
- $\langle B \rangle$  Install a new culvert liner. Per material properties and installation requirements, see Art. 543 of the Standard Specifications. Estimated fill height = 50'-0".



#### EXPIRES 11-30-2022

DESIGNED - Victor H. Veliz	EXAMINED	Tim A Dat	DATE -
CHECKED - Jeffrey S. Burke		ENGINEER OF STRUCTURAL SERVICES	
DRAWN - daburdell	PASSED	tayn T- Achyff	REVISED
CHECKED - VHV JSB		ENGINEER OF BRIDGES AND STRUCTURES	REVISED

## AUGUST 19, 2022

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

## GENERAL PLAN FAI 474 OVER PIPE CULVERT SN 072-1008 SHEET NO. 1 OF 5 SHEETS

for the work.

F.A.I. RTE.	SECTI	ON		COUNTY	TOTAL SHEETS	SHEET NO.
474	(72-3HB-	-2)BR		PEORIA	126	118
				CONTRACT	NO. 688	884
	1	LLINOIS	FED. Al	D PROJECT		

Foot Cu. Yd.

Cu. Yd.

Pound

Foot

22.8

42.6

12850

660

BILL OF MATERIAL UNIT QUANTITY

**GENERAL NOTES** 

additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid

Insertion Culvert Liner 108"

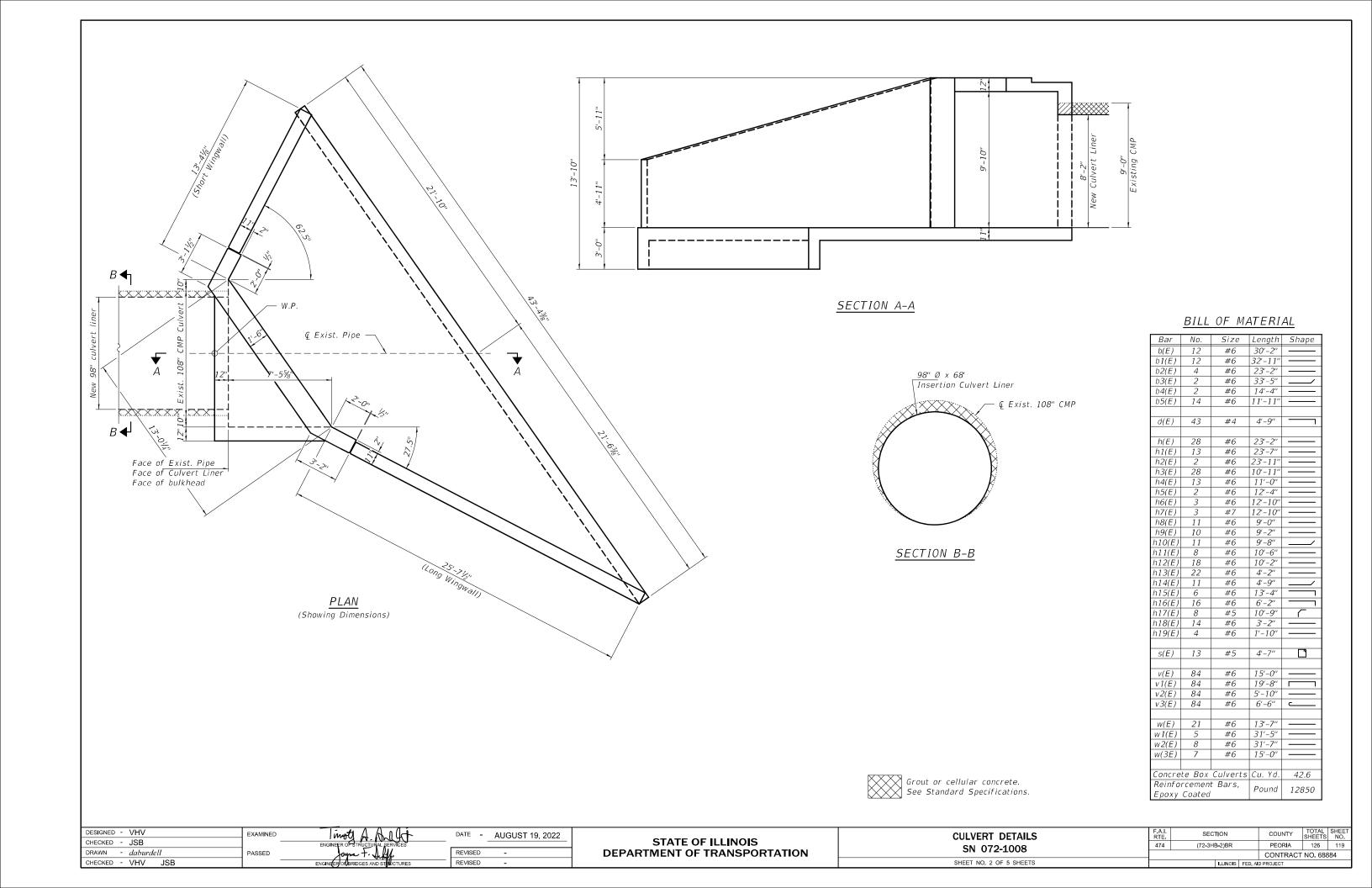
Reinforcent Bars, Epoxy Coated

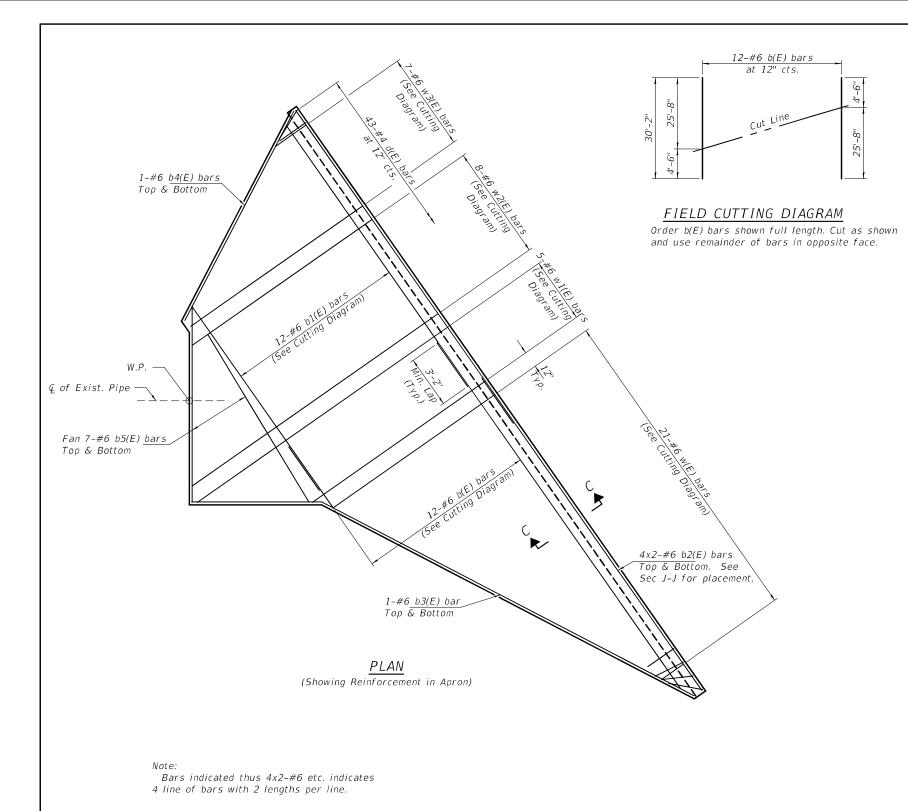
Concrete Removal Concrete Box Culvert

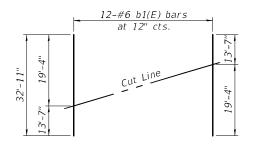
Temporary Sheet Piling

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for

Reinforcement bars designated (E) shall be epoxy coated.

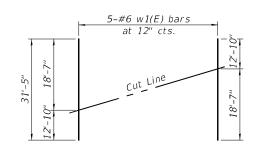






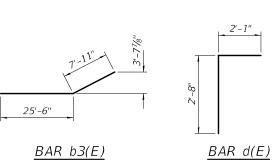
#### FIELD CUTTING DIAGRAM

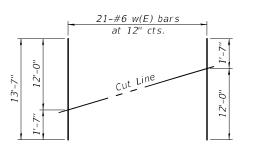
Order b1(E) bars shown full length. Cut as shown and use remainder of bars in opposite face.



#### FIELD CUTTING DIAGRAM

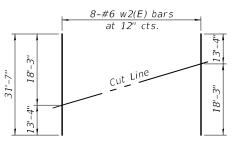
Order w1(E) bars shown full length. Cut as shown and use remainder of bars in opposite face.





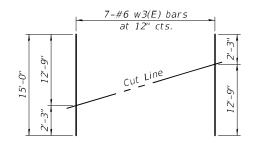
#### FIELD CUTTING DIAGRAM

Order w(E) bars shown full length. Cut as shown and use remainder of bars in opposite face.



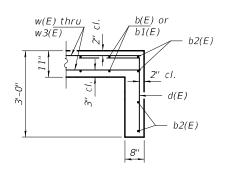
#### FIELD CUTTING DIAGRAM

Order w2(E) bars shown full length. Cut as shown and use remainder of bars in opposite face.



#### FIELD CUTTING DIAGRAM

Order w3(E) bars shown full length. Cut as shown and use remainder of bars in opposite face.



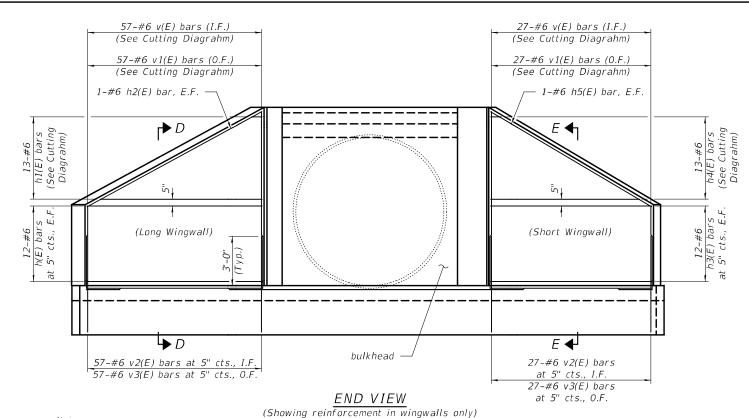
SECTION C-C

#### MIN. BAR LAP #6 - 3'-2"

DESIGNED - VHV	EXAMINED	Timoti A A I at	DATE -	AUGUST 19, 2022
CHECKED - JSB		ENGINEER OF STRUCTURAL SERVICES		7,10,000,100,100,100,100,100
DRAWN - daburdell	PASSED	Jayne F. Jeff	REVISED	-
CHECKED - VHV JSB	-	ENGINEER OF BRIDGES AND STANCTURES	REVISED	-

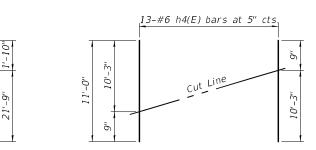
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

CULVERT DETAILS - APRON	F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SN 072-1008	474	(72-3HB-2)BR	PEORIA	126	119A
314 072-1000			CONTRACT	NO 688	384
CHEET NO 3 OF E CHEETS					



Note:

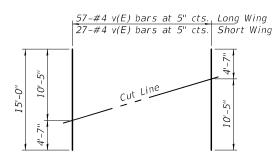
For bulkhead reinforcement, see End View on sheet 5 of 5.



#### FIELD CUTTING DIAGRAM

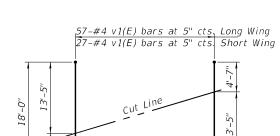
Order h(E) bars shown full length. Cut as shown and use remainder of bars in opposite face.

13-#6 h(E) bars at 5" cts.



#### FIELD CUTTING DIAGRAM

Order v(E) bars shown full length. Cut as shown and use remainder of bars in opposite face.



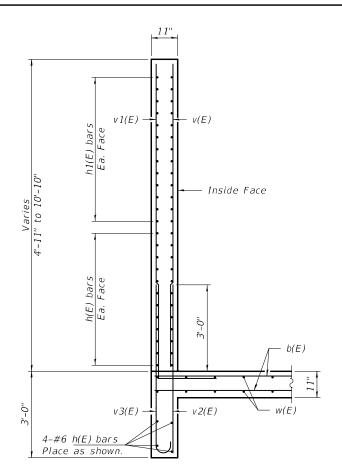
FIELD CUTTING DIAGRAM

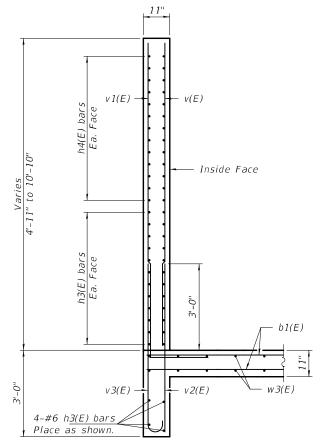
Order h4(E) bars shown full length. Cut as shown

and use remainder of bars in opposite face.

#### FIELD CUTTING DIAGRAM

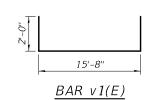
Order v1(E) bars shown full length. Cut as shown and use remainder of bars in opposite face.

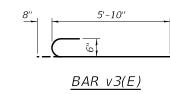




SECTION D-D (Long Wingwall)



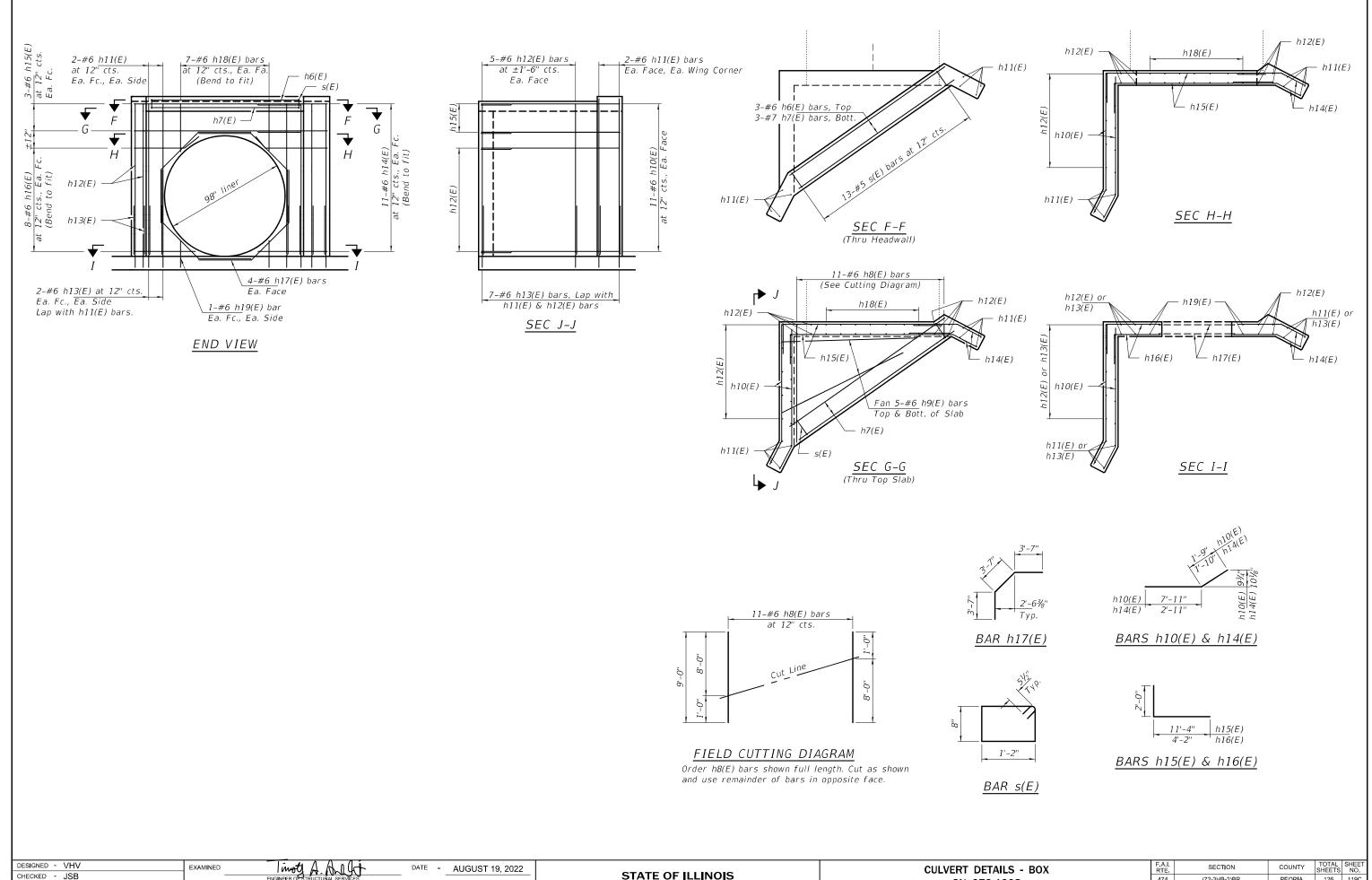




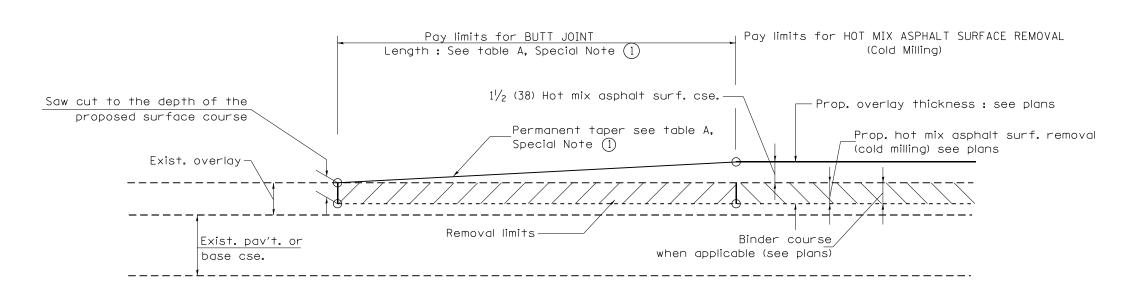
DESIGNED - VHV	EXAMINED	Timoty A. All Git	DATE -	AUGUST 19, 2022
CHECKED - JSB		ENGINEER OF STRUCTURAL SERVICES		7,0000, 10, 2022
DRAWN - daburdell	PASSED	Jayne F. Jeff	REVISED	-
CHECKED - VHV JSB	1	ENGINEER OF BRIDGES AND STANCTURES	REVISED	_

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS - WINGWALLS	F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SN 072-1008	474	(72-3HB-2)BR	PEORIA	126	119B
314 072-1000			CONTRACT	NO. 688	384
CHEET NO 4 OF 5 CHEETS		NUMBER SEE	MD DDG (FOT		



DESIGNED - VHV	EXAMINED	mot A. All 4	DATE - AUGUST 19, 2022	CTATE OF ULINOIS	CULVERT DETAILS - BOX	RTE.	SECTION	COUNTY	SHEETS NO.
CHECKED - JSB	_	ENGINEER OF STRUCTURAL SERVICES		STATE OF ILLINOIS	SN 072-1008	474	(72-3HB-2)BR	PEORIA	126 119C
DRAWN - daburdell	PASSED	Jayne +. Jeliff	REVISED -	DEPARTMENT OF TRANSPORTATION	314 072-1000			CONTRACT	NO 68884
CHECKED - VHV JSB		ENGINEER OF BRIDGES AND STAUCTURES	REVISED -		SHEET NO. 5 OF 5 SHEETS		ILLINOIS FED.	AID PROJECT	



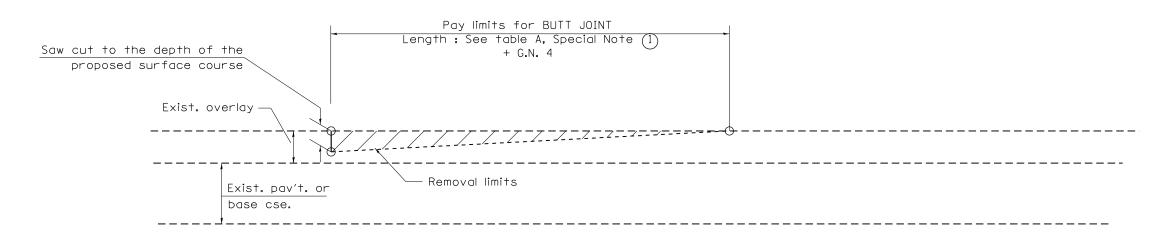
#### CASE 1: WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

#### TABLE A TAPER RATES

SPECIAL NOTE	ELEMENT	MAINLINE INTERSTATES &	ALL
NUMBER		4-LANE EXPRESSWAYS	OTHERS
(1)	BUTT JOINT	1:480	1:240
	TAPER RATE		
(2)	TEMPORARY RAMP	1:80	1:40
	TAPER RATE		

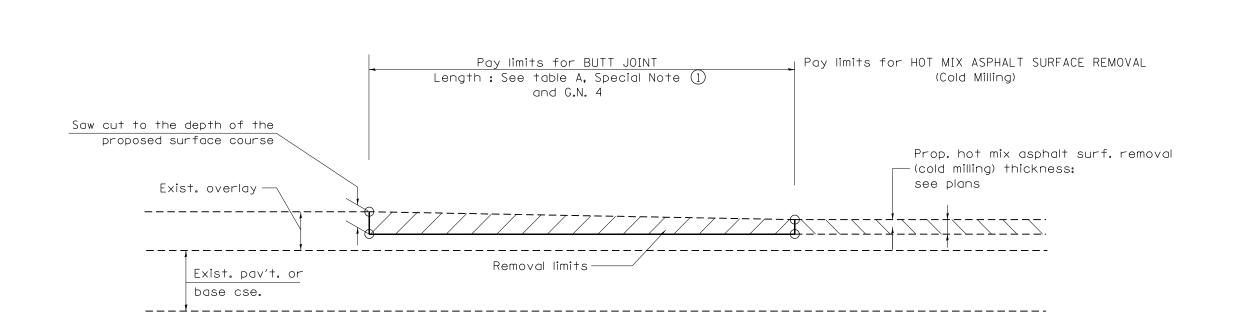
#### GENERAL NOTES

- 1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
- 2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
- 3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
- 4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.
- 5. Temporary ramps are paid for separately and not included in the cost of the butt joints.

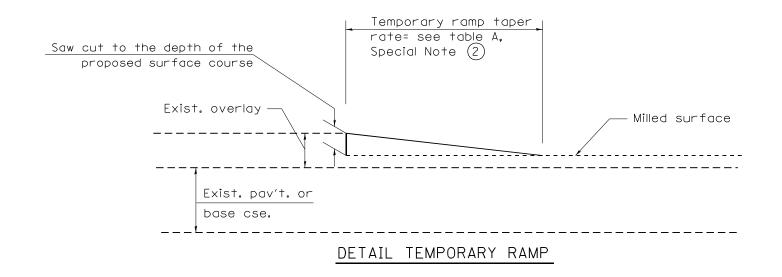


#### CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

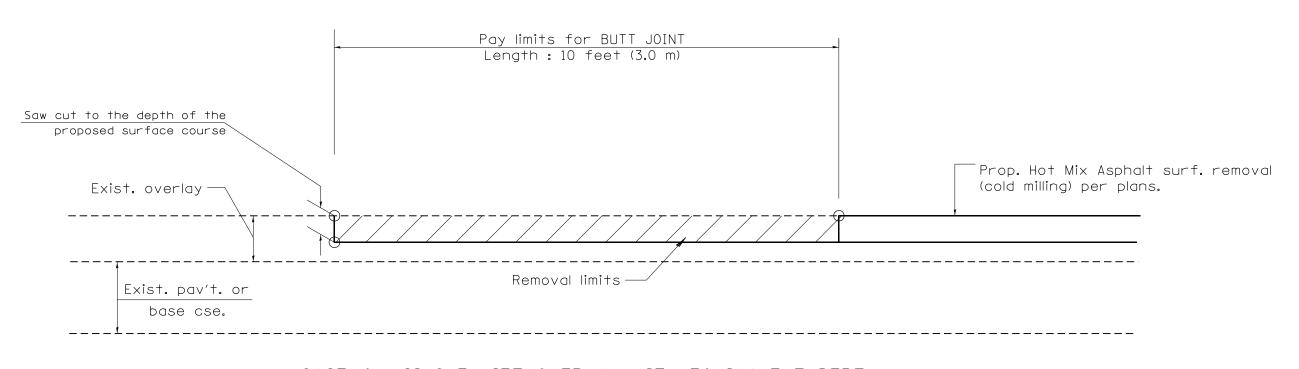
01-0	-97 RENUM. C-23.01, NEW REVISION BOX	T.P.	08-21-13 MAJOR MODIFICATIONS	R.D.				RTE.	SECTION	COUNTY	SHEETS NO.
04-0	-97 CORRECTION TO DEPTH	J.A.	04-12-16 MINOR CORRECTIONS	R.D.	STATE OF ILLINOIS	BUTT JOINTS		474	(72-3HB-2)BR	PEORIA	126 120
09-15	-05 REVISED DESIGNER NOTE	M.M.A.	02-14-17 ADDED NOTE 5	R.D.	DEPARTMENT OF TRANSPORTATION		SHT. 1 OF 3			CONTRACT	NO. 68884
10-16	-06 REVISED TO 2007 SPEC.	M.A.	07-16-19 Wording and Spelling corrections	R.D.		NOT TO SCALE	CADD STD. 406101-D4	FED. ROAD DIST.	NO. ILLINOIS FED.		



## CASE 3: HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



	OTATE OF HANNOIS	DUTT JOINTS		F.A.I. SECTION	COUNTY TOTAL SHEETS	SHEET NO.
	STATE OF ILLINOIS	BUTT JOINTS		474 (72-3HB-2)BR	PEORIA 126	121
	DEPARTMENT OF TRANSPORTATION	NOT TO SCALE	SHT. 2 OF 3		CONTRACT NO. 688	884ر
		NOT TO SCALE	CADD STD. 406101-D4	FED. ROAD DIST. NO. ILLINOIS FED.	AID PROJECT	

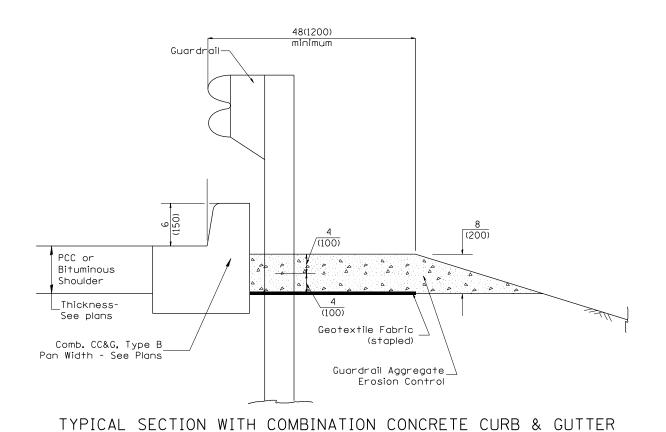


CASE 4 : SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH

HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TIE-IN TO EXISTING BITUMINOUS TAPER

	OTATE OF HUNDIO	DUTT JOINTS		RTE. SECTION	COUNTY TOTAL SHEET NO.
	STATE OF ILLINOIS	BUTT JOINTS		474 (72-3HB-2)BR	PEORIA 126 122
	DEPARTMENT OF TRANSPORTATION		SHT. 3 OF 3		CONTRACT NO. 68884
		NOT TO SCALE	CADD STD. 406101-D4	FED. ROAD DIST. NO.   ILLINOIS FED.	AID PROJECT



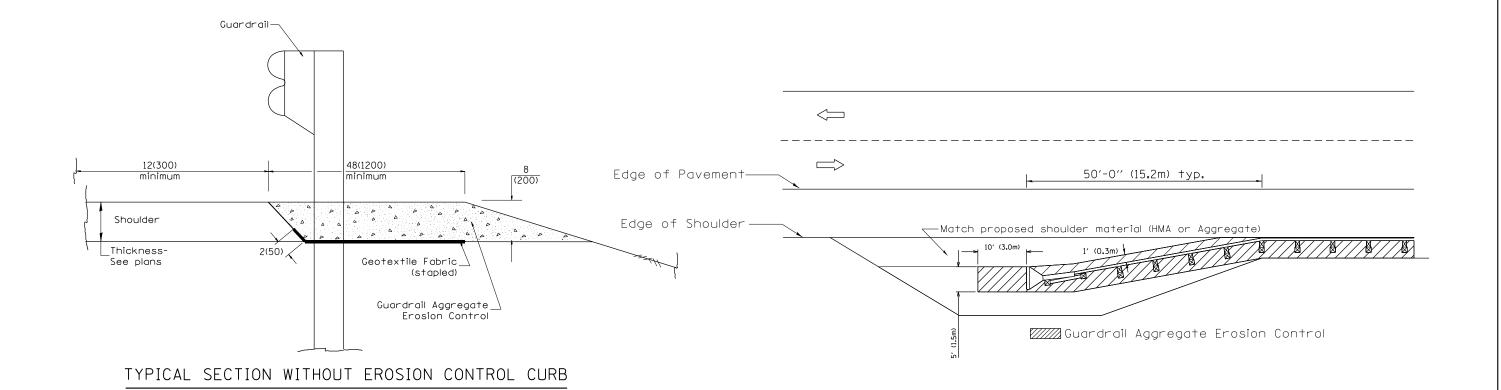
#### GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

- 1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
- 2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
- 3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
- 4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
- 5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

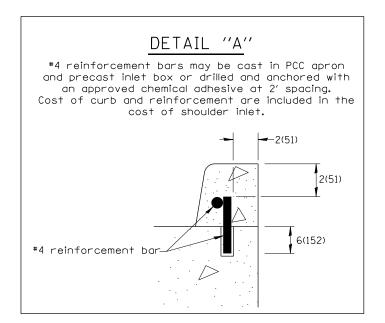
All dimensions are in inches (millimeters)

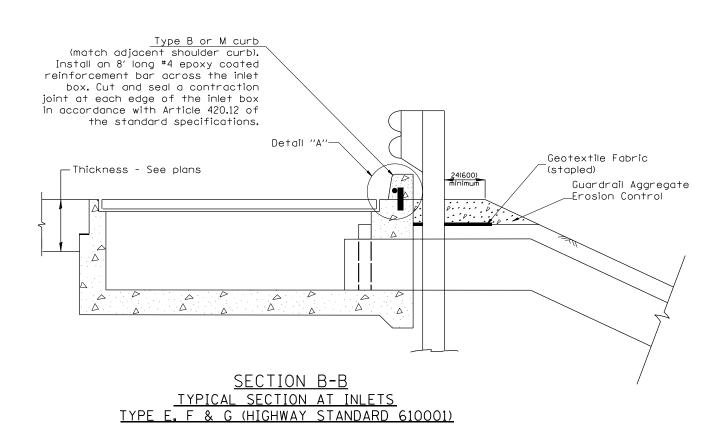
unless otherwise noted.

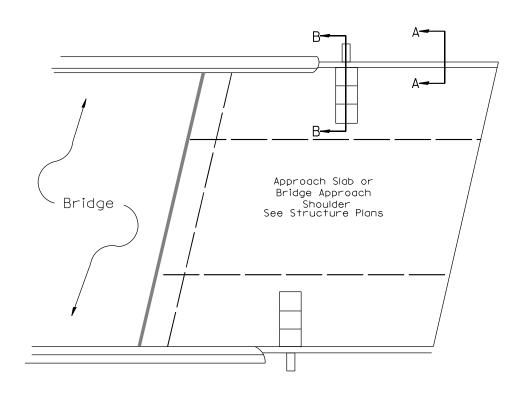
- 6. Materials shall meet the following requirements:
- A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
- B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



03-07-11 ADDED DETAIL SHOWING PLAN VIEW 5-30-18 CHANGE B CURB TO CC&G SECTION COUNTY **GUARDRAIL EROSION CONTROL TREATMENTS** STATE OF ILLINOIS 08-10-12 REVISED CURB "B" AND AGGREGATE R.D. 07-16-19 SPELLING CORRECTIONS R.D. (72-3HB-2)BR PEORIA 126 123 07-15-15 ADDRESSED SHOULDER INLET CURB R.D. **DEPARTMENT OF TRANSPORTATION** SHT. 1 OF 2
CADD STD. 630101-D4
FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT CONTRACT NO. 68884 01-26-17 REVISED R.D. NOT TO SCALE

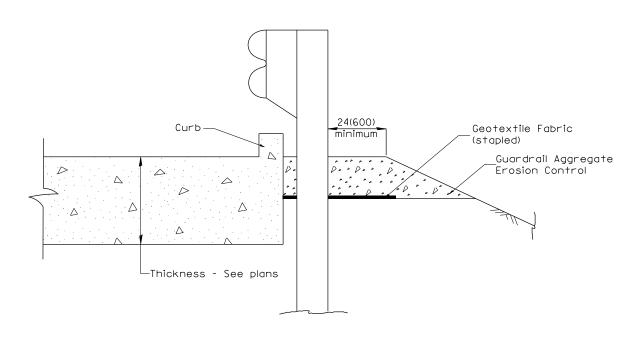






PLAN VIEW

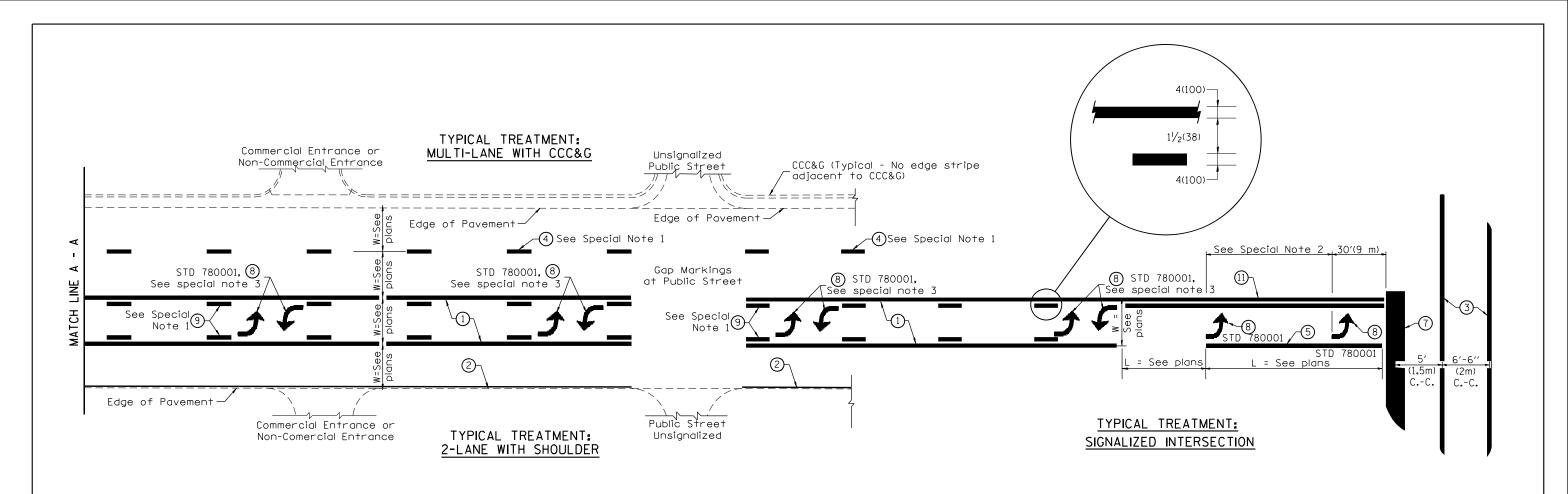
APPROACH SLAB OR SHOULDER PLACEMENT



SECTION A-A

TYPICAL SECTION WITH BRIDGE APPROACH CURB

			OTATE OF HUNDIO	OUADDRAIL FROMING CONTROL TREATMENTS	F.A.I. RTE.	SECTION	COUNTY	SHEETS	S SHEET
			STATE OF ILLINOIS	GUARDRAIL EROSION CONTROL TREATMENTS	474	(72-3HB-2)BR	PEORIA	126	124
			DEPARTMENT OF TRANSPORTATION	SHT. 2 0	2		CONTRAC	CT NO. 6	68884
				NOT TO SCALE CADD STD. 630101	D4 FED. ROAD D	IST. NO.   ILLINOIS FED.	. AID PROJECT		



## FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

#### TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- 1) 4(100) Solid (Yellow)
- (2) 4(100) Solid (White)
- 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
  2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
- 4 6(150) Skip-Dash (White) 10' (3.05m) (9.14m) (3.05m) (See Special Note 1)
- 5) 8(200) Solid (White)
- (6) 12(300) Diagonal (White) (Item (6) is shown on Std. 780001)
- (7) 24(600) Stop Bar (White)
- 8 Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- 9 4(100) Skip-Dash (Yellow) 10' 30' 10' (See Special Note 1)
- 10 12(300) Diagonal (Yellow) (See Table A) 45° 10 45° 10 45° 10 4(100) Double Solid (Yellow) 11(280) C.-C. See Table A

#### SPECIAL NOTES

- Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
- 2. The following shall apply to arrows located in one-way left turn lanes:
  - A. A minimum of two (2) arrows is required.
  - B. The maximum spacing between arrows is 80′ (24 m).
  - C. Arrows shall be evenly spaced if three (3) or more are required.
- 3. The following shall apply to arrow pairs located in two-way left turn lanes:
  - A. A minimum of two (2) arrow pairs is required. B. The maximum spacing between arrow pairs
  - C. Arrow pairs shall be evenly spaced if three (3) or more are required.

NOT TO SCALE

D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

#### GENERAL NOTES

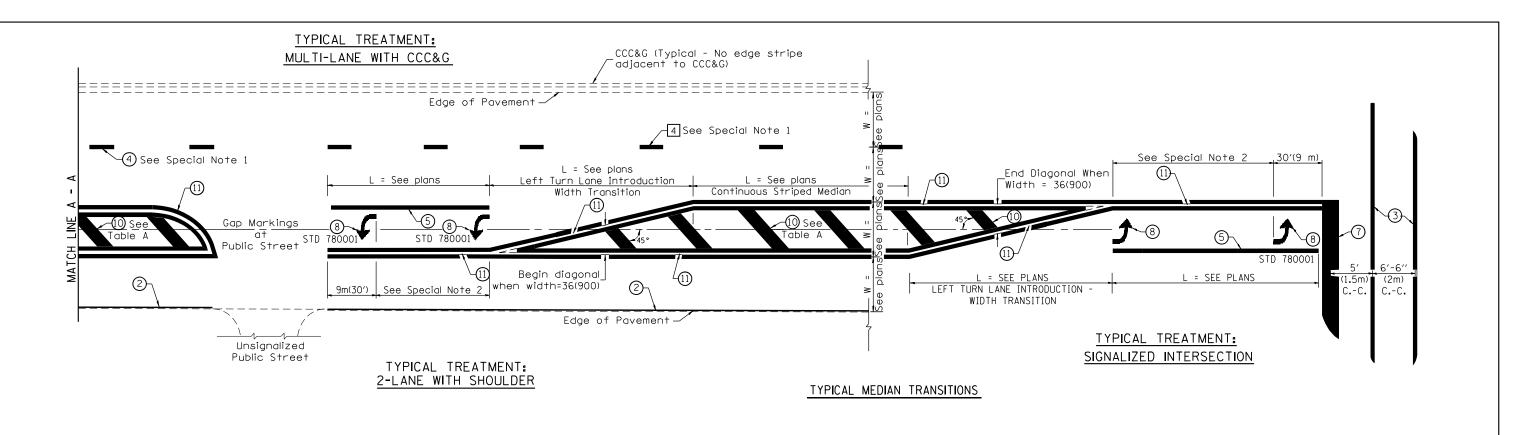
- Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
- See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.
- 3. Refer to Article 780.13 for letter, number and symbol areas (sq. ft.)
- 4. Areas are grooved 1" beyond each edge for the following symbols: Through Arrow= 14.8 sq. ft.
  Large Left or Right Arrow= 21.9 sq. ft.
  2 Arrow Combination Left (or Right) and Through= 34.9 sq. ft.
  Wrong Way Arrow= 29.5 sq. ft.
  Railroad Crossing Symbol= 69.8 sq. ft.
  (For further information, refer to BDE Special Provision: Grooving for Recessed Pavement Markings)

#### 

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

is 200' (61 m).

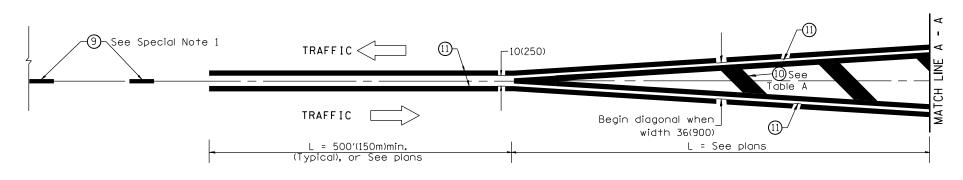
TYPICAL PAVEMENT MARKINGS



#### FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

# TABLE A RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15′ (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



#### MEDIAN INTRODUCTION - WIDTH TRANSITIONS

	-		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEE SHEETS NO.
	STATE OF ILLINOIS	TYPICAL PAVEMENT MARKINGS	474	(72-3HB-2)BR	PEORIA	126 126
	DEPARTMENT OF TRANSPORTATION	SHT. 2 OF	<b>4</b>		CONTRAC	T NO. 68884
		NOT TO SCALE CADD STD. 780001-	D4 FED. RO	DAD DIST. NO.   ILLINOIS	FED. AID PROJECT	