

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE. VAR.	SECTION #	COUNTY	TOTAL SHEETS	SHEET NO.
		VARIOUS	20	1
		ILLINOIS	CONTRACT NO. 66J51	
DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20				

INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES
- 3 - 6. SUMMARY OF QUANTITIES
7. HTC LOCATIONS
8. HTC CABLE TENSION CHARTS AND LOGS
9. TERMINAL MARKER PLACEMENT AND REFLECTOR DETAIL
10. TIMBER CURB & BITUMINOUS CURB REPAIR & GUARD POST DETAIL & IMPACT ATTENUATOR PLAN
- 11-13. TUBULAR THRIE BEAM RETROFIT RAIL FOR BRIDGES
14. TRAFFIC BARRIER TERMINAL TYPE 8
15. TRAFFIC BARRIER TERMINAL TYPE 9
16. TRAFFIC BARRIER TERMINAL TYPE 12
- 17-20. PRE-MGS STEEL PLATE BEAM GUARDRAIL STANDARD 630001-06 EFFECTIVE APRIL 1, 2006

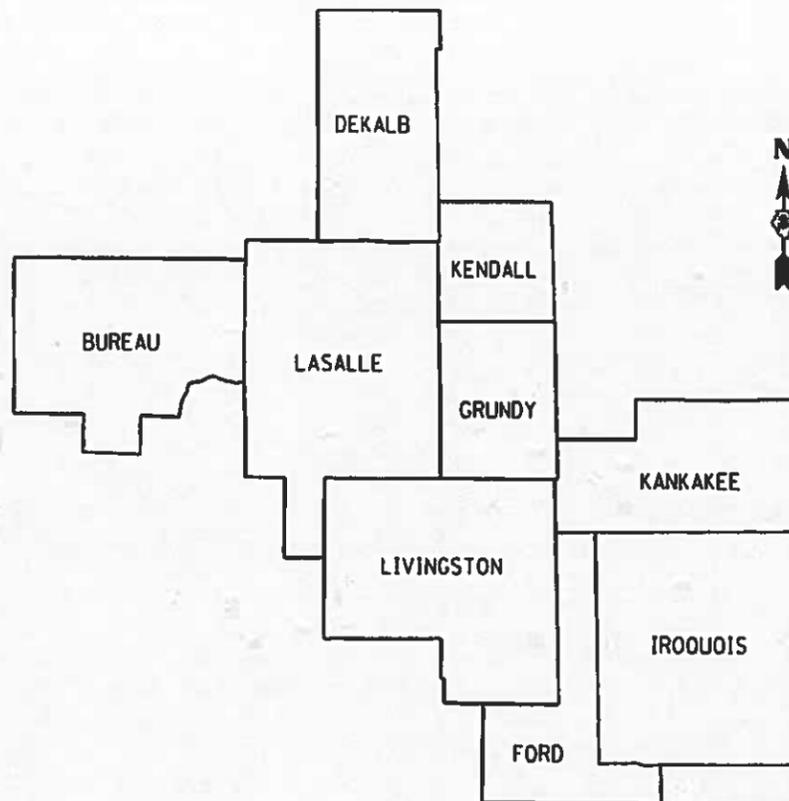
**PROPOSED
HIGHWAY PLANS**

VARIOUS ROUTES
D3 HWY DAMAGE REPAIR FY 20
VARIOUS COUNTIES

HIGHWAY STANDARDS

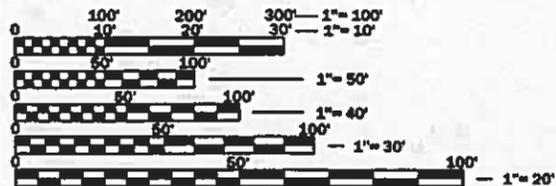
SEE PAGE 2 FOR LIST OF HIGHWAY STANDARDS

C-93-030-19
REPAIRING MOTORIST CAUSED DAMAGE TO HIGHWAY FACILITIES



DISTRICT 3

LOCATION MAP
NOT TO SCALE



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-882-0123
OR 811

PROJECT ENGINEER: BRAD DUNCAN, PE
UNIT CHIEF: DARCY CARPENTER
DISTRICT 3 NO. (815) 434-6131
CONTRACT NO. 66J51

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 3-19-2019
Maubel
REGIONAL ENGINEER

May 10 2019
EA
ENGINEER OF DESIGN AND ENVIRONMENT

May 10 2019
Paul P. Ch...
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

630001-12	STEEL PLATE BEAM GUARDRAIL
630006	NON-BLOCKED STEEL PLATE BEAM GUARDRAIL
630101-10	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630106-02	LONG-SPAN GUARDRAIL OVER CULVERT
630111	WEAK POST GUARDRAIL ATTACHED TO CULVERT
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631006-08	TRAFFIC BARRIER TERMINAL, TYPE 1B
631011-10	TRAFFIC BARRIER TERMINAL, TYPE 2
631026-06	TRAFFIC BARRIER TERMINAL, TYPE 5
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
631033-07	TRAFFIC BARRIER TERMINAL, TYPE 6B
631046-04	TRAFFIC BARRIER TERMINAL, TYPE 10
643001-02	SAND MODULE IMPACT ATTENUATORS
664001-02	CHAIN LINK FENCE
665001-02	WOVEN WIRE FENCE
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS FOR SPEEDS ≥ 45 MPH
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-12	LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-12	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP FOR SPEEDS ≥ 45 MPH
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701423-10	LANE CLOSURE, MULTILANE, WITH BARRIER, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701427-05	LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
701428-01	TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY
701451-05	RAMP CLOSURE FREEWAY/EXPRESSWAY
701456-05	PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE CONTRACTOR IS ADVISED THAT THERE MAY BE PRESENCE OF DEPARTMENT-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE ILLINOIS DEPARTMENT OF TRANSPORTATION IN OTTAWA (815-434-8417) TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE DEPARTMENT IS NOT A MEMBER OF THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) SYSTEM.

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE WILL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

THE CONTRACTOR IS REMINDED TO CAREFULLY EXAMINE THIS CONTRACT FOR NEW OR CHANGED CONDITIONS FROM ANY PREVIOUS VERSION HE MAY HAVE EXAMINED.

THE REMOVAL OF DAMAGED GUARDRAIL, DAMAGED HIGH-TENSION CABLE, AND DAMAGED POSTS SHALL NOT BE PAID FOR SEPERATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE VARIOUS REPLACEMENT PAY ITEMS.

THE TRAFFIC CONTROL REQUIRED FOR THE REPAIRS OR INSTALLATION OF GUARDRAIL, HIGH-TENSION CABLE, OR FENCE SHALL BE INCLUDED IN THE CALLOUT TRAFFIC CONTROL PAY ITEMS AS DESCRIBED IN THE SPECIAL PROVISIONS, AND SHALL BE IN ACCORDANCE WITH THE TRAFFIC CONTROL STANDARDS INCLUDED HEREIN.

ALL HARDWARE (NUTS, BOLTS, WASHERS, STAPLES, WIRES, TIES, ETC.) REQUIRED FOR THE REPAIRS TO OR INSTALLATION OF GUARDRAIL, HIGH-TENSION CABLE, AND FENCE SHALL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS OF WORK IN THIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS 1-800-892-0123. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED.

CONTRACTOR SHALL PROVIDE A FIELD OFFICE IN LASALLE OR BUREAU COUNTY.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

SUPERVISING CONSTRUCTION FIELD ENGINEER

RESIDENT ENGINEER / TECHNICIAN

START & END DATES
OF CONSTRUCTION: _____

INSPECTORS: _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: *Don Benoit*
DISTRICT STUDIES & PLANS ENGINEER

DATE: 03-19-19

EXAMINED BY: *AGS*
DISTRICT CONSTRUCTION ENGINEER

M. J. Aguiar
DISTRICT MATERIALS ENGINEER

Jim McLaughlin
DISTRICT OPERATIONS ENGINEER

DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20

FILE NAME =	USER NAME = plr1schr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
part\11_064E81D\INTEG. Illnois.gov\PW\DOT\Documents\DOT Office\District 3\Projects\0366J51\CAD\Drawn\0366J51.dwg	DRAWN -	REVISED -	VAR.			•	VARIOUS	20	2	
Plot Scale = 100.0000 1/16"	CHECKED -	REVISED -	CONTRACT NO. 66J51							
Plot Date = 2/19/2019	DATE -	REVISED -	SCALE: _____			SHEET _____	OF _____	SHEETS	STA _____	TO STA _____

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				MCHD 100% MCHD ROADWAY	CONST MAIN 100% STATE ROADWAY	HTC BARRIER 100% STATE ROADWAY
				0021	0021	0021
				RURAL 07M0	RURAL 07E0	RURAL 07A0
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2		
63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1	1		
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1		
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	1	1		
63100089	TRAFFIC BARRIER TERMINAL, TYPE 6B	EACH	1	1		
63100095	TRAFFIC BARRIER TERMINAL, TYPE 8	EACH	1	1		
63100101	TRAFFIC BARRIER TERMINAL, TYPE 9	EACH	1	1		
63100105	TRAFFIC BARRIER TERMINAL, TYPE 10	EACH	1	1		
63100115	TRAFFIC BARRIER TERMINAL, TYPE 12	EACH	1	1		
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	35	30	5	
63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	8	5	3	
63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	250		250	
63301215	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE B	FOOT	250		250	
64300260	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1		

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY20

FILE NAME =	USER NAME = pletschr	DESIGNED - _____	REVISED - _____
pw\01\084EB\INTEG\Illinois.gov\PWIDOT\Documents\DOT Offices\District 3\Projects\D366J51\CADDData\D366J51-shk\	DRAWN - _____	CHECKED - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	DATE - _____	REVISED - _____
	PLOT DATE = 3/6/2019		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: _____ SHEET _ OF _ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	VARIOUS	20	3
CONTRACT NO. 66J51				
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				MCHD 100% MCHD ROADWAY	CONST MAIN 100% STATE ROADWAY	HTC BARRIER 100% STATE ROADWAY
				0021	0021	0021
				RURAL 07M0	RURAL 07E0	RURAL 07A0
66400105	CHAIN LINK FENCE, 4'	FOOT	100	100		
66400305	CHAIN LINK FENCE, 6'	FOOT	100	100		
66500105	WOVEN WIRE FENCE, 4'	FOOT	5500	5000	500	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12			12
67100100	MOBILIZATION	L SUM	1	0.5	0.5	
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	150	50	100	
X0320057	REPAIR IMPACT ATTENUATORS (FULLY REDIRECTIVE)	EACH	2	2		
X0321563	REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL	EACH	30	20	10	
X0322878	TIMBER CURB	FOOT	32	32		
X0326126	WOOD TERMINAL POST	EACH	2	1	1	
X0327278	REPAIR HIGH TENSION CABLE	FOOT	1000	500		500
X0327279	REPLACE HIGH TENSION CABLE END SECTION	EACH	2	1		1
X0327281	REMOVE AND REPLACE HIGH TENSION CABLE POST	EACH	650	300		350
X0327282	REMOVE AND REPLACE HTC POST (HEAVY DUTY)	EACH	500	200		300

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20

FILE NAME =	USER NAME = pletschr	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\01\084EB\INTEG\Illinois.gov\PWIDOT\Documents\DOT Offices\District 3\Projects\D366J51\CADDData\D366J51-ehk\	DRAWN - _____	REVISED - _____	REVISED - _____					VAR.	*		20	4
Default	PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISED - _____		SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 66J51				
	PLOT DATE = 3/6/2019	DATE - _____	REVISED - _____		ILLINOIS FED. AID PROJECT							

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				MCHD 100% MCHD ROADWAY	CONST MAIN 100% STATE ROADWAY	HTC BARRIER 100% STATE ROADWAY
				0021	0021	0021
				RURAL 07M0	RURAL 07E0	RURAL 07A0
X0327307	REPAIR HIGH TENSION BARRIER TERMINAL	EACH	11	10		1
X6300215	RAIL ELEMENT PLATES	EACH	250	200	50	
X6300230	STEEL POSTS	EACH	300	200	100	
X6331101	TUBULAR THRIE BEAM	FOOT	50	25	25	
X6331105	STEEL POSTS, MODIFIED	EACH	5	2	3	
X6331110	STEEL POSTS, SPECIAL	EACH	10	5	5	
X6432110	REPLACE IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3	EACH	60	50	10	
X6610200	HOT-MIX ASPHALT CURB REPAIR	FOOT	50	50		
X6640502	CHAIN LINK FENCE POST	EACH	15	10	5	
X7011834	TRAFFIC CONTROL AND PROTECTION, CALL OUT WORK	EACH	45	25	20	
X7011836	TRAFFIC CONTROL AND PROTECTION, FREEWAY/EXPRESSWAY, CALL OUT WORK	EACH	115	50	15	50
Z0008760	EMERGENCY WORK CALL OUT	EACH	90	50	10	30
Z0012752	CONCRETE STRUCTURE REPAIR	CU FT	15	15		
Z0020210	PULL POST ARRANGEMENT	EACH	20	10	10	

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY20

FILE NAME =	USER NAME = pletschr	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL084EB\INTEG\Illinois.gov\PWIDOT\Documents\DOT Offices\District 3\Projects\0366J51\CADD\0366J51-ehk\dwg\0366J51-ehk.dwg	DRAWN - _____	REVISED - _____	REVISED - _____					VAR.	*	VARIOUS	20	5
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____		SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 66J51				
	PLOT DATE = 3/6/2019	DATE - _____	REVISED - _____		ILLINOIS FED. AID PROJECT							

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				MCHD 100% MCHD ROADWAY	CONST MAIN 100% STATE ROADWAY	HTC BARRIER 100% STATE ROADWAY
				0021	0021	0021
				RURAL 07M0	RURAL 07E0	RURAL 07A0
Z0029657	HIGH TENSION CABLE SYSTEM MAINTENANCE	EACH	750	325		425
Z0029660	FURNISH AND DRIVE METAL SOCKET WITH POST	EACH	20	10		10
Z0029665	REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - RAIL ELEMENT PLATE	FOOT	25		25	
Z0052600	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2		
Z0053200	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2		
Z0053210	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	2	2		
Z0053220	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6B	EACH	2	2		
Z0053400	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 8	EACH	2	2		
Z0053500	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 9	EACH	2	2		
Z0053575	REPAIR TRAFFIC BARRIER TERMINAL, TYPE 12	EACH	2	2		

FILE NAME =	USER NAME = pletschr	DESIGNED - _____	REVISED - _____
pw:\IL084EB\INTEG\Illinois.gov\PWIDOT\Documents\DOT Offices\District 3\Projects\0366J51\CADD\0366J51-ehk\0366J51-ehk.dwg		DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = 3/6/2019	DATE - _____	REVISED - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY20

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	VARIOUS	20	6
			CONTRACT NO. 66J51	
		ILLINOIS	FED. AID PROJECT	

HIGH TENSION CABLE BARRIER REPAIR SYSTEM SCHEDULE											
LOCATION	COUNTY	SYSTEM	SYSTEM TYPE	REPAIR HTC	REPAIR HTC BARRIER TERMINAL	REPLACE HTC END SECTION	HTC SYSTEM MAINTENANCE	REMOVE & REPLACE HTC POST	REMOVE & REPLACE HTC POST (HD)	FURNISH & DRIVE METAL SOCKET with POST	CONTACT INFORMATION
IL 47, 6029+00 TO 6265+00	GRUNDY/KENDALL	TRINITY	DRIVEN (HD)	1	2	3	4		6		SCOTT MYERS (817)437-9023 RICHARD FIGLEWICZ (847)638-4611
I-55, MP 227-233	GRUNDY	BRIFEN	SOCKETED	1	2	3	4	5		7	RICHARD BUTLER (904)707-2728
I-55, MP 216-227	GRUNDY & LIVINGSTON	GIBRALTAR	DRIVEN	1	2	3	4	5			BEN DVORAK (815)288-2343
I-55, MP 207-210.5	GRUNDY	GIBRALTAR	DRIVEN	1	2	3	4	5			BEN DVORAK (815)288-2343
I-55, JUST INSIDE WILL CO		GIBRALTAR	DRIVEN	1	2	3	4	5			BEN DVORAK (815)288-2343
I-57, MP 322-324	KANKAKEE	GIBRALTAR	DRIVEN	1	2	3	4	5			BEN DVORAK (815)288-2343
I-57, MP 306.1-310.1	KANKAKEE	TRINITY	DRIVEN (HD)	1	2	3	4		6		SCOTT MYERS (817)437-9023 RICHARD FIGLEWICZ (847)638-4611
I-57, MP 293-302.5	IROQUOIS/KANKAKEE	GIBRALTAR	DRIVEN	1	2	3	4	5			BEN DVORAK (815)288-2343
I-57, MP 290.5-293	IROQUOIS	TRINITY	DRIVEN (HD)	1	2	3	4		6		SCOTT MYERS (817)437-9023 RICHARD FIGLEWICZ (847)638-4611
I-57, MP 285-290.5	IROQUOIS	TRINITY	DRIVEN (HD)	1	2	3	4		6		SCOTT MYERS (817)437-9023
I-57, MP 277-279	IROQUOIS	NUCOR	DRIVEN	1	2	3	4	5			Jeremy Knerndchild (913)744-8054
I-80, MP 97-105	LASALLE & GRUNDY	TRINITY	DRIVEN (HD)	1	2	3	4		6		SCOTT MYERS (817)437-9023 RICHARD FIGLEWICZ (847)638-4611
I-80, MP 92.5-97.1	LASALLE	TRINITY	DRIVEN (HD)	1	2	3	4		6		SCOTT MYERS (817)437-9023 RICHARD FIGLEWICZ (847)638-4611
I-80, MP 80.5-92.5	LASALLE	TRINITY	DRIVEN (HD)	1	2	3	4		6		SCOTT MYERS (817)437-9023 RICHARD FIGLEWICZ (847)638-4611
I-80, MP 74.3-80.2	LASALLE	GIBRALTAR	DRIVEN	1	2	3	4	5			BEN DVORAK (815)288-2343
I-80, MP 64-70.1	BUREAU	GIBRALTAR	DRIVEN	1	2	3	4	5			BEN DVORAK (815)288-2343
I-80, MP 41.5-48.1	BUREAU	GIBRALTAR	DRIVEN	1	2	3	4	5			BEN DVORAK (815)288-2343

TABLE SHOWS EACH SYSTEM AND IT'S CORRESPONDING PAY ITEMS

REPAIR PAY ITEMS

- 1 = REPAIR HIGH TENSION CABLE
- 2 = REPAIR HIGH TENSION BARRIER TERMINAL
- 3 = REPLACE HIGH TENSION CABLE END SECTION
- 4 = HIGH TENSION CABLE SYSTEM MAINTENANCE
- 5 = REMOVE AND REPLACE HIGH TENSION CABLE POST
- 6 = REMOVE AND REPLACE HIGH TENSION CABLE POST (HEAVY DUTY)
- 7 = FURNISH AND DRIVE METAL SOCKET WITH POST

MODEL: Default
 FILE NAME: p:\u0008\B08E1D01\TEC\Illinois\gov\PI\DOT\Documents\DOT Office\District 3\Projects\0366\51\CAD\BarrID366\51_rht-cover.dgn

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20

USER NAME = pletschr	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HIGH TENSION CABLE LOCATIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISED - _____					VAR.	*	VARIOUS	20	7
PLOT DATE = 3/6/2019	DATE - _____	REVISED - _____		SCALE: _____	SHEET ____ OF ____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 66J51				
						ILLINOIS FED. AID PROJECT					

TRINITY CABLE TENSIONS		
TEMPERATURE	PRE-STRETCHED CABLE TENSION	STANDARD CABLE TENSION
°F	LBS	LBS
-15	7500	8800
-10	7300	8600
-5	7100	8400
0	7000	8200
5	6800	8000
10	6600	7800
15	6500	7600
20	6300	7400
25	6100	7200
30	6000	7000
35	5800	6800
40	5600	6600
45	5500	6400
50	5300	6200
55	5100	6000
60	5000	5800
65	4800	5600
70	4600	5400
75	4500	5200
80	4300	5000
85	4100	4800
90	4000	4600
95	3800	4400
100	3600	4200
105	3500	4000
110	3300	3800

TOLERANCE: -200 TO +800 POUNDS

NUCOR CABLE TENSION		
CABLE TEMPERATURE	INITIAL TENSION	EXPECTED TENSION
°F	W/15%	
-30	13706	11918
-20	12979	11286
-10	12252	10654
0	11525	10022
10	10800	9391
20	10073	8759
30	9346	8127
40	8619	7495
50	7894	6864
60	7167	6232
70	6440	5600
80	6077	5284
90	5713	4968
100	5350	4652
110	4986	4336
120	4624	4021

TENSION CHECK REQUIREMENTS

CHECKING AND CORRECTING THE TENSION IN EACH CABLE SHALL BE PERFORMED EACH TIME A CABLE IS SPICED AND HTC SYSTEM MAINTENANCE IS SPECIFIED. THE RECOMMENDED TENSIONS FOR EACH SYSTEM ARE SHOWN IN THE CHARTS. THE RESULT OF EACH CHECK SHALL BE RECORDED ON A COPY OF THE TENSION LOG SHEET SHOWN ON THIS SHEET. THE COMPLETED LOG SHALL BE SUBMITTED ALONG WITH WORK ORDER BILLINGS.

GIBRALTAR CABLE TENSIONS	
CABLE TEMPERATURE	CABLE TENSION
°F	LBS
-30	
-20	
-10	8000
0	7600
10	7200
20	6800
30	6400
40	6000
50	5600
60	5200
70	4800
80	4400
90	4000
100	3600
110	3200

BRIFEN CABLE TENSIONS	
ROPE TEMPERATURE	TENSION
F°	LBS
0	7300
8	7000
16	6700
24	6400
32	6100
40	5800
48	5500
56	5200
64	4800
72	4500
76	4400
80	4200
88	3900
96	3600
100	3500
104	3300
108	3200
112	3000



Illinois Department of Transportation

TENSION LOG SHEET
FOR
High Tension Cable Barrier

System	
Brifen	
USHTCS (Nucor)	
Gibraltar	
Trinity (CASS)	

Date / Time: _____

Contract / Work Order No. _____

County: _____

Route: _____

Milepost/ GPS: _____

Ambient Temp: _____

Rope Temp: _____

3 or 4 Cable System	Location 1 Actual Load kN/LB	Location 2 Actual Load kN/LB	Location 3 Actual Load kN/LB	Average Load (L1+L2+L3/3) kN/LB	Design Load kN/LB (see charts)
Top Cable					
Cable 2					
Cable 3 (If Applicable)					
Bottom Cable					

Note: Readings should be taken at 3 separate places along each cable, moving the tension meter at least 4" between readings. The average load is compared to design load for tolerance.

Number of splices made to the cable: _____

Were tensioning adjustments made to the cable: _____

Is 1" (minimum) of thread exposed in all turnbuckle windows: _____

Splice Type & Location (s): _____

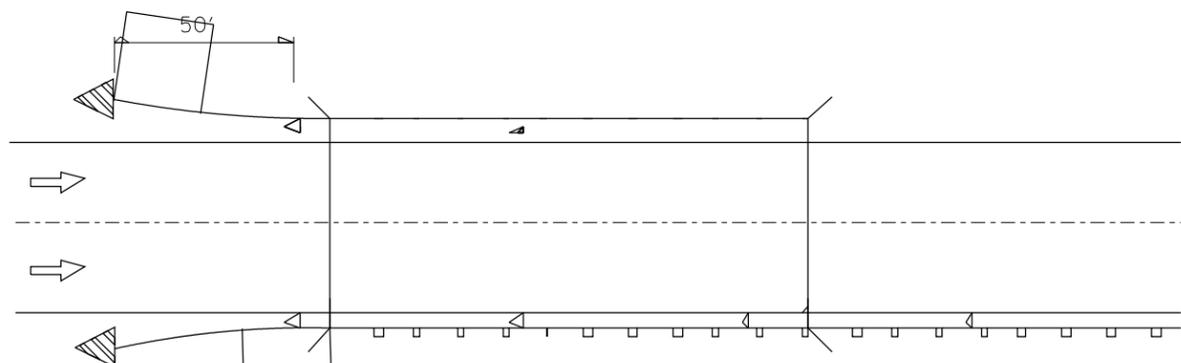
Testing Equipment Used: _____

Printed Name & Signature of Tester: _____

Other Notes: _____

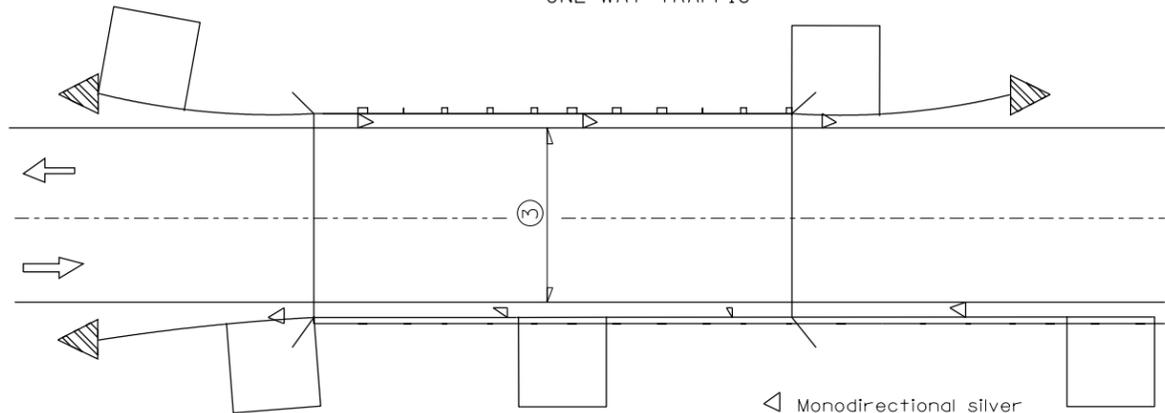
IDOT Inspector Initials (if Present): _____

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20



Reflectors are not to be placed on Terminal End Sections.
(min. 3 reflectors regardless of length).
After 400 ft transition, match existing delineator spacing.

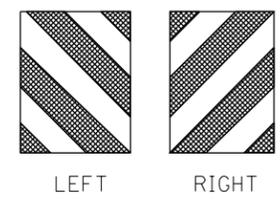
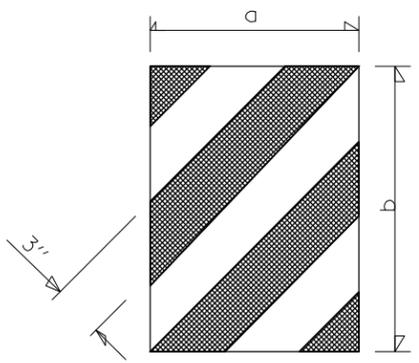
ONE-WAY TRAFFIC



③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the pavement is less than 24" wider than the pavement approaching the bridge.

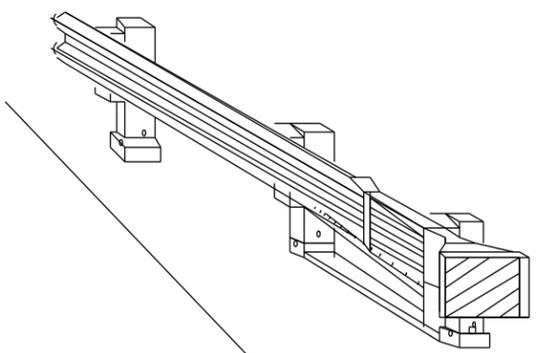
- ◁ Monodirectional silver
- ◁ Monodirectional amber
- ◁ Terminal Marker - Black/Yellow Left or Right as appropriate

TWO-WAY TRAFFIC



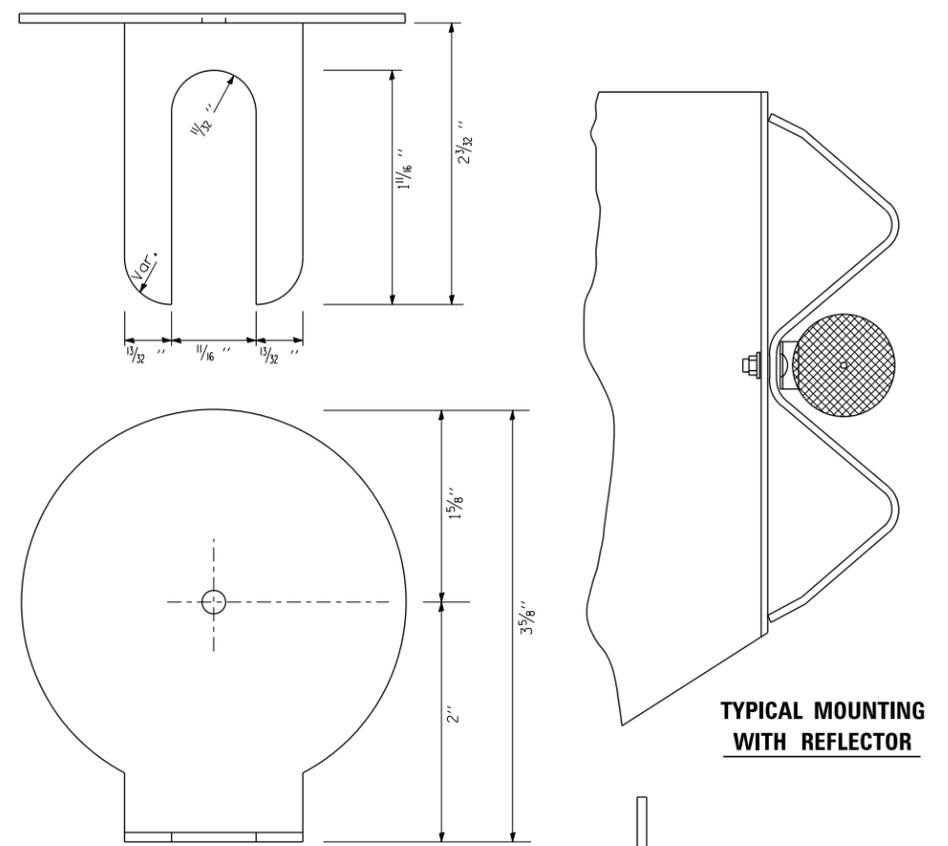
DIMENSION	CASE I	CASE II
a	*	450 (18)
b	*	406 (16)

* The width and height (a, b) of the terminal marker shall be within approximately 25 mm (1 inch) of the outer edge of the terminal end, with a minimum reflective area of 0.18 m² (288 sq. in.)



TERMINAL MARKER DETAILS
Color: Black / Yellow reflectorized

REFLECTOR AND TERMINAL MARKER PLACEMENT

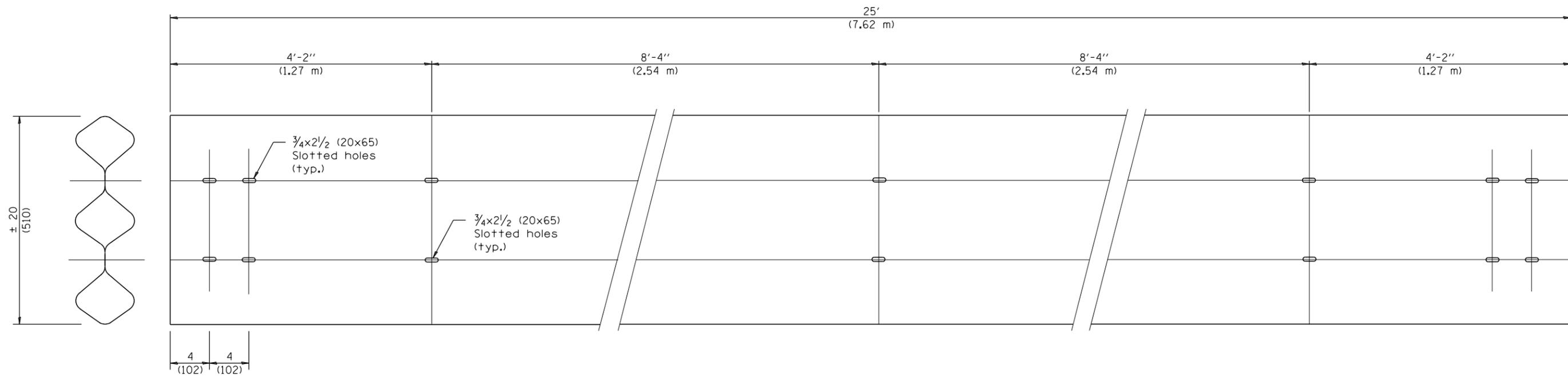


REFLECTOR MARKER TYPE A

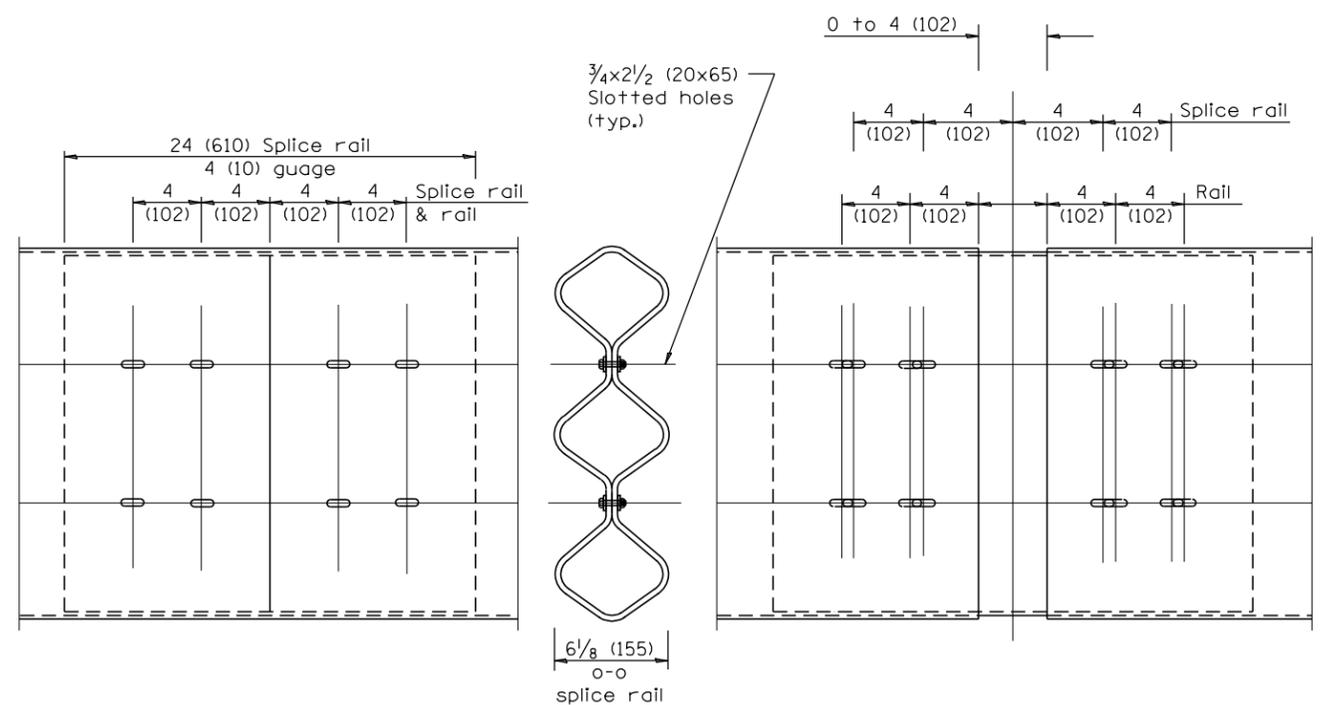
- NOTES:**
- BRACKET IS TO BE FABRICATED FROM 12 GA. (MIN) STEEL GALVANIZED IN ACCORDANCE WITH AASHTO M III.
 - MIN. 3 REFLECTORS PER SIDE.
 - BRACKET "FOOT" SHALL BE PLACED BETWEEN THE BOLT HEAD AND THE PLATE WASHER (IF PRESENT).
 - ON THRIE BEAM RAIL, THE BRACKETS SHALL BE ATTACHED TO THE UPPER SPLICE BOLTS.
 - USE CRYSTAL COLOR, BI-DIRECTIONAL REFLECTORS USE AMBER (LEFT) AND CRYSTAL (RIGHT), MONODIRECTIONAL REFLECTORS ON INTERSTATES
 - ALL DIMENSIONS SHOWN ARE MINIMUM

REFLECTOR DETAIL

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20



TUBULAR THRIE BEAM FOR INTERNAL SPLICE JOINT



INTERNAL SPLICE JOINT

INTERNAL EXPANSION SPLICE JOINT

BOTTOM VIEW OF INTERNAL EXPANSION SPLICE JOINT

GENERAL NOTES

Plate Washers B are to be placed under both heads and nuts of splicing bolts for internal splice and internal expansion splice joint.

Plate Washers C are to be placed under both heads and nuts of splicing bolts for lap expansion and internal lap splice joint.

See Standard 630001 for details of guardrail not shown.

All dimensions are in inches (millimeters) unless otherwise shown.

MODEL: Default
 FILE: \\nas0101\B&E\BID\NTEC\Illinois\gov\PIWDOT\Documents\BID\Office\BID\refct_3\proj\cts\0366\51\CA\000\00\03\xxxx-ctf-draw\llg.dgn

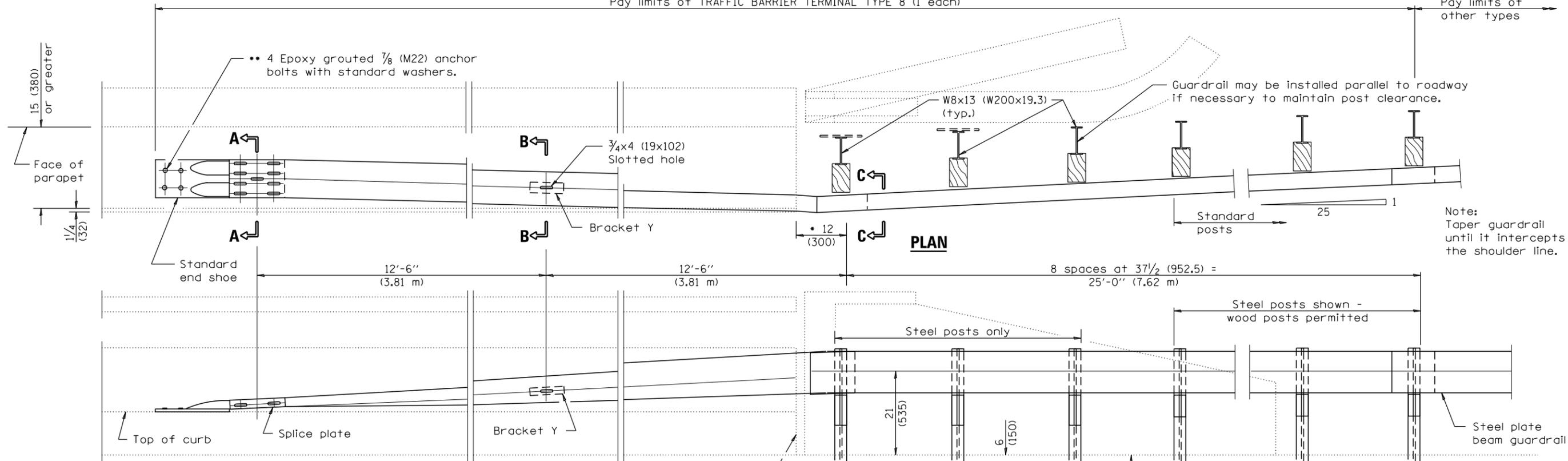
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DRAWN - _____	REVISOR - _____	
PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISOR - _____
PLOT DATE = 2/19/2019	DATE - _____	REVISOR - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

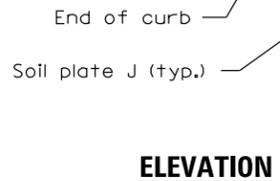
**TUBULAR THRIE BEAM
RETROFIT RAIL FOR BRIDGES**

SCALE: _____ SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

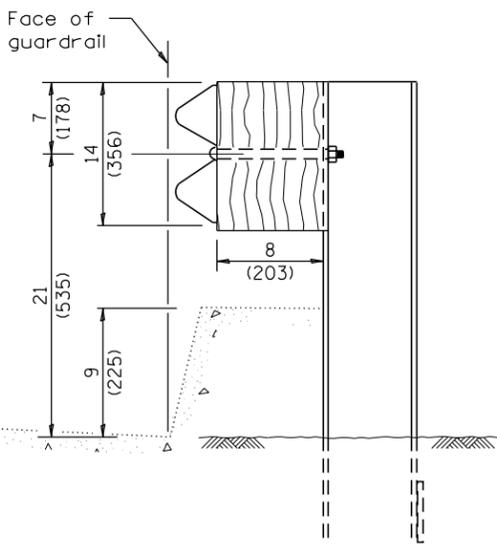
* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	VARIOUS	20	11
			CONTRACT NO. 66J51	
ILLINOIS FED. AID PROJECT				



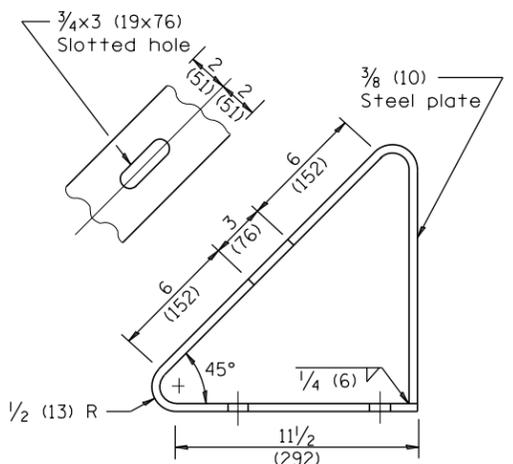
Note: Taper guardrail until it intercepts the shoulder line.



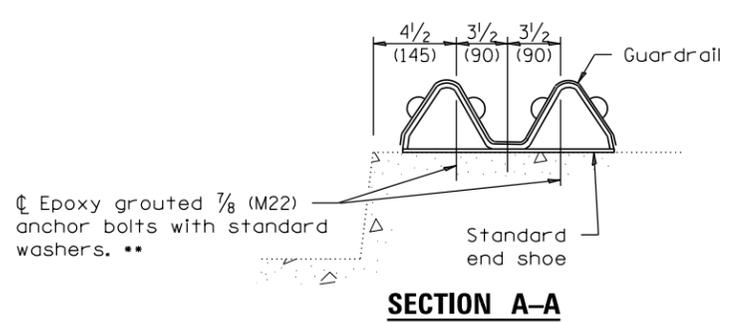
ELEVATION



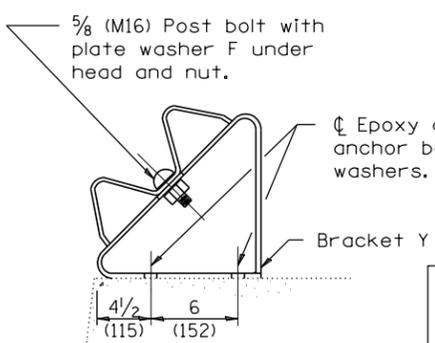
SECTION C-C



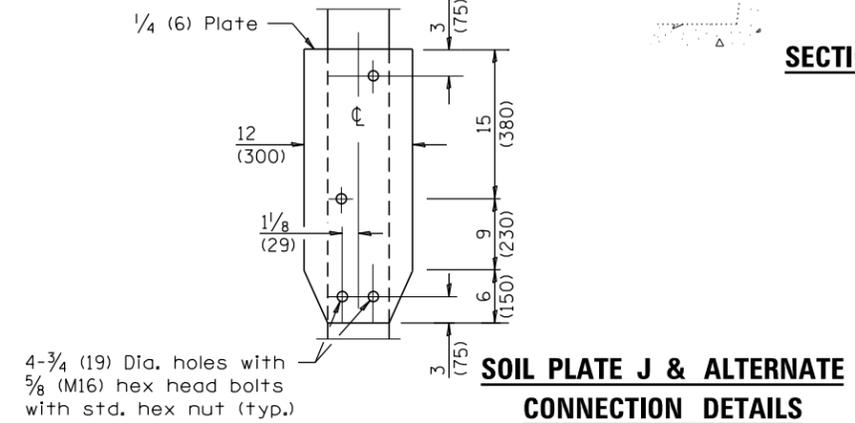
BRACKET Y



SECTION A-A



SECTION B-B



SOIL PLATE J & ALTERNATE CONNECTION DETAILS

FOR INFORMATION ONLY

GENERAL NOTES

- See Standard 630001 for details of guardrail not shown.
 - This dimension may be increased to fit field conditions. This post shall be located first. The layout of the terminal shall be determined by its location.
 - After tightening, cut the anchor bolts flush with nuts, and damage the bolt head to prevent them from loosening.
- All dimensions are in inches (millimeters) unless otherwise shown.

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20

MODEL: Default
FILE: Model - 3x11ULB&EIDNITEC Illinois.gov:PWIDOT:Documents\DOT - Office\BIDirect 3\Projects\036615\ICAD\BarrID3xxxx-eh-drawk.dgn

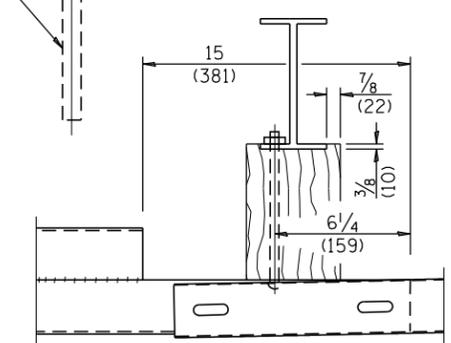
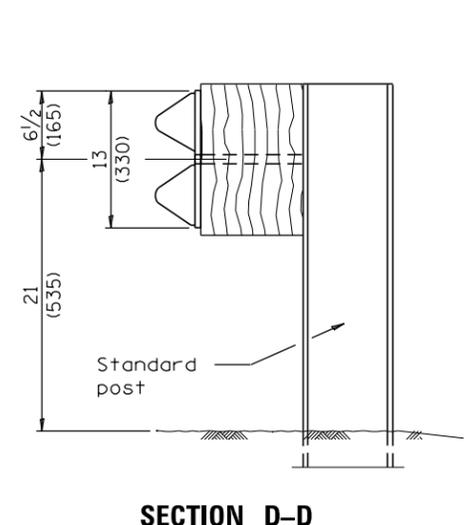
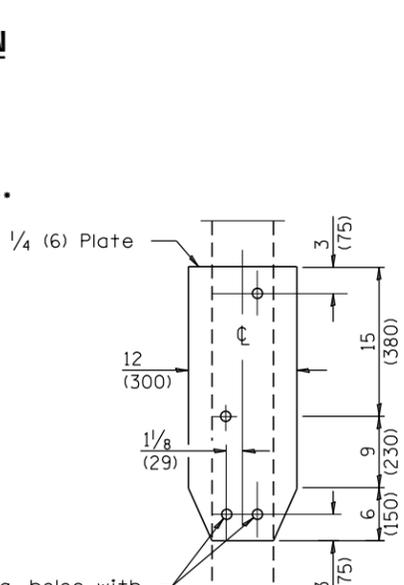
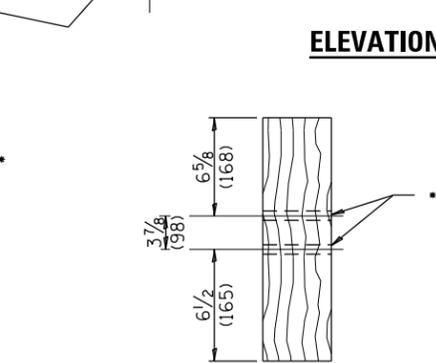
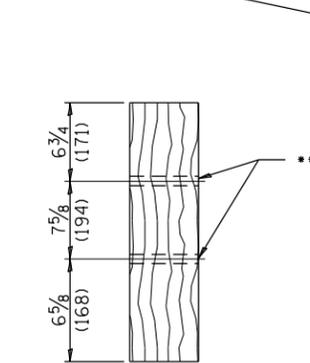
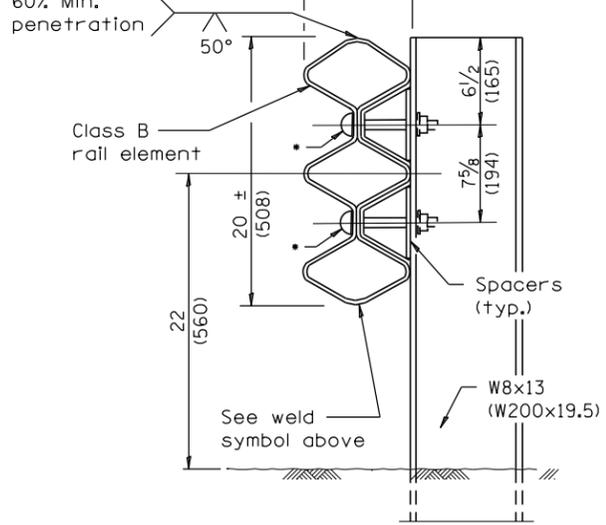
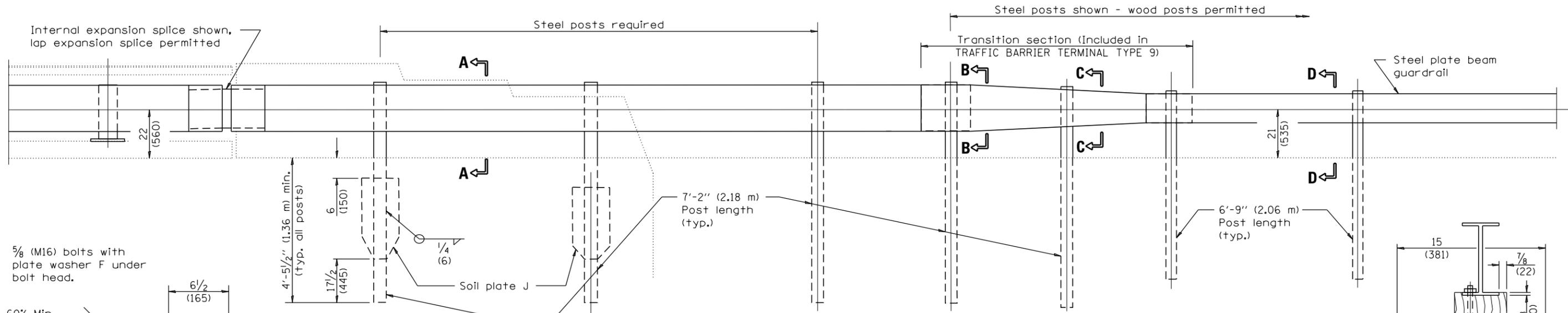
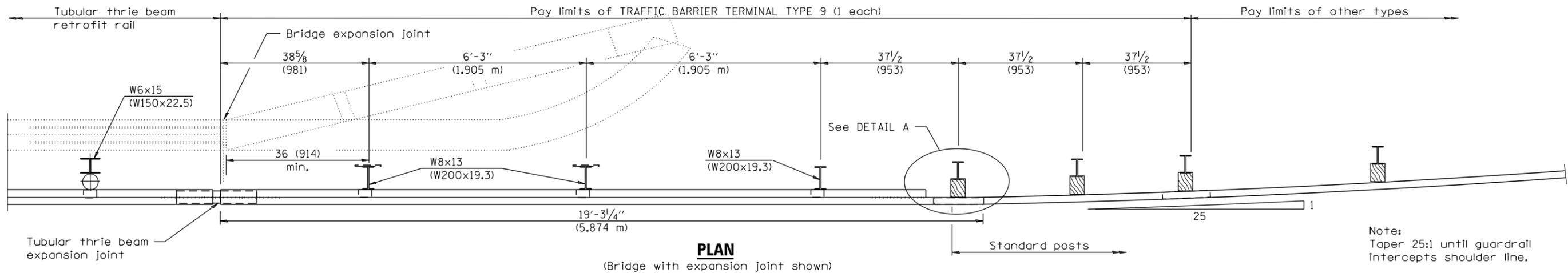
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DRAWN - _____	REVISIONS - _____	REVISIONS - _____
PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISIONS - _____
PLOT DATE = 2/19/2019	DATE - _____	REVISIONS - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC BARRIER TERMINAL TYPE 8

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	VARIOUS	20	14
CONTRACT NO. 66J51				
ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

GENERAL NOTES

See Standards 509001 and 630001 for details of guardrail elements not shown.

The Type 9 terminal shall be installed after the posts for the bridge retrofit rail have been located as shown on Standard 509001.

All dimensions are in inches (millimeters) unless otherwise shown.

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20

MODEL: Default
FILE: Model: P:\ILLINOIS\B&E\BID\TEC\Illinois\pwr\RIDOT\Documents\BIDOT_Offices\BIDOT\3\Projects\036615\ICAD\Barr\03xxxx-eh-detail.dgn

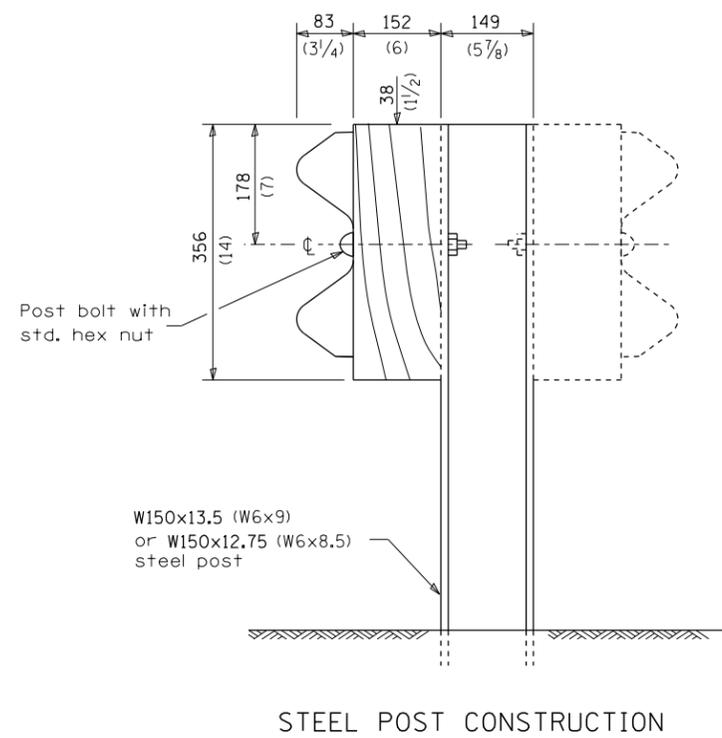
USER NAME = pletschr	DESIGNED - _____	REVISED - _____
DRAWN - _____	REVISIONS - _____	
PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISIONS - _____
PLOT DATE = 2/19/2019	DATE - _____	REVISIONS - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

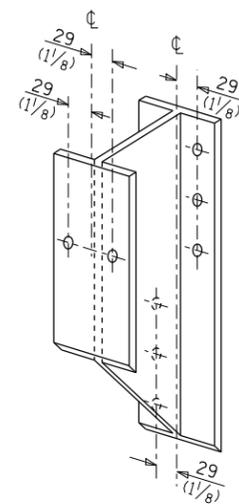
TRAFFIC BARRIER TERMINAL TYPE 9

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

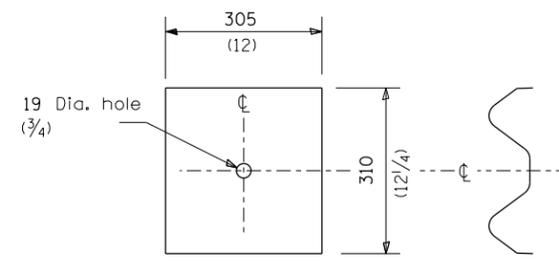
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	VARIOUS	20	15
CONTRACT NO. 66J51				
ILLINOIS FED. AID PROJECT				



STEEL POST CONSTRUCTION



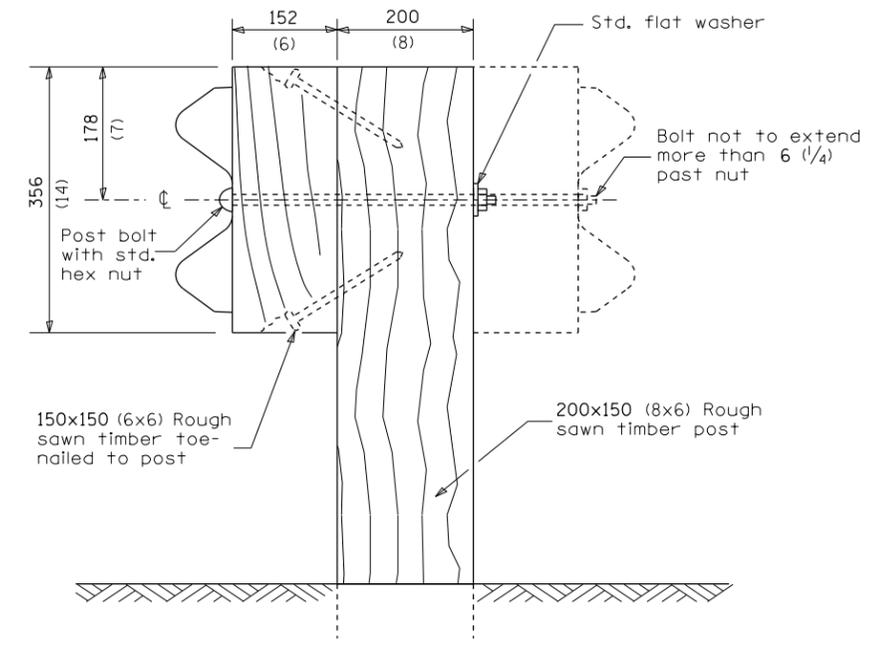
STEEL BLOCK-OUT DETAIL



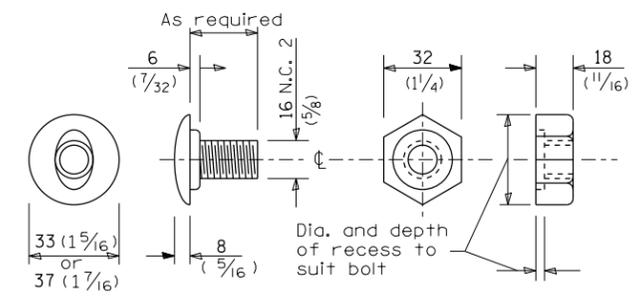
NOTE

Plate A shall be placed between rail element and block-out at non-splice mounting points only when steel block-outs are used.

PLATE A



WOOD POST CONSTRUCTION



POST OR SPLICE BOLT & NUT

MODEL: Default
FILE NAME: p:\1108\B&E\BID\ITEC\Illinois.gov\FWIDOT\Documents\BIDOT_Offices\BID\BIDOT_3\Project\310366151\CD\B&E\BID\3xxxx-cte-detail.dgn

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DRAWN - _____	REVISIONS - _____	REVISIONS - _____
PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISIONS - _____
PLOT DATE = 2/19/2019	DATE - _____	REVISIONS - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

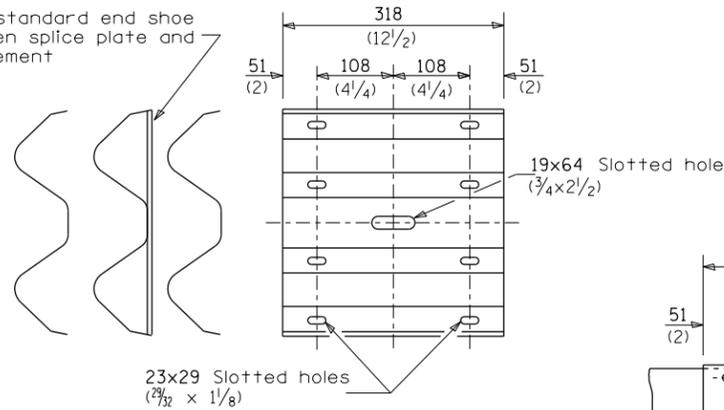
PRE-MGS EFFECTIVE 4-1-06
STEEL PLATE BEAM GUARDRAIL STANDARD 630001-06

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

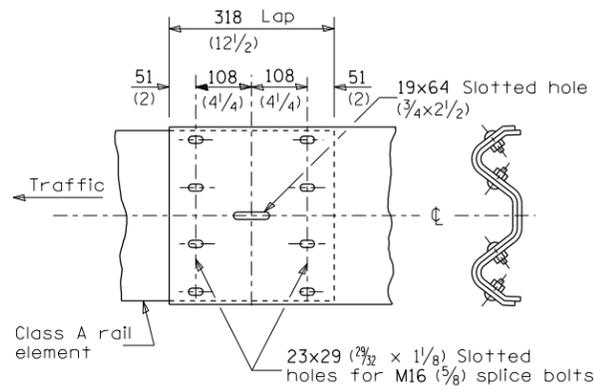
* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 66J51	
		ILLINOIS FED. AID PROJECT		

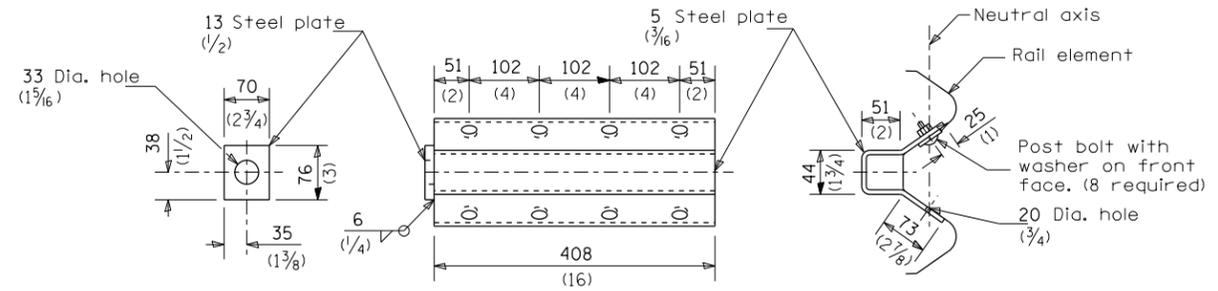
Place standard end shoe between splice plate and rail element



SPLICE PLATE



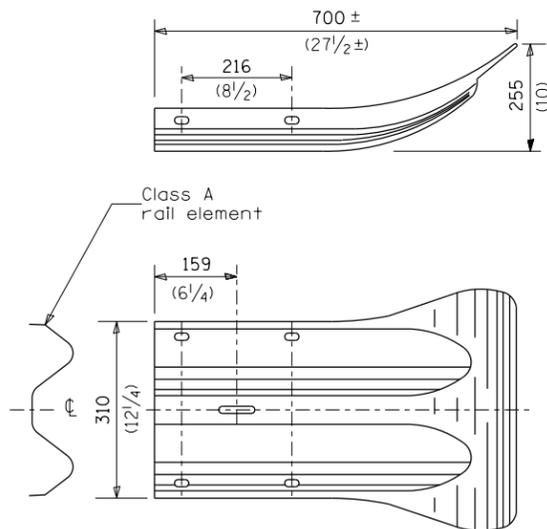
RAIL ELEMENT SPLICE



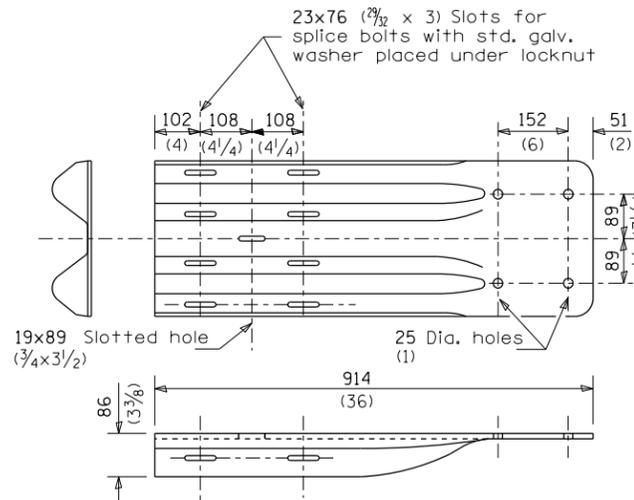
NOTE

Anchor plate T shall be used to attach cable assembly to guardrail when required on traffic barrier terminals.

ANCHOR PLATE T DETAILS



END SECTION



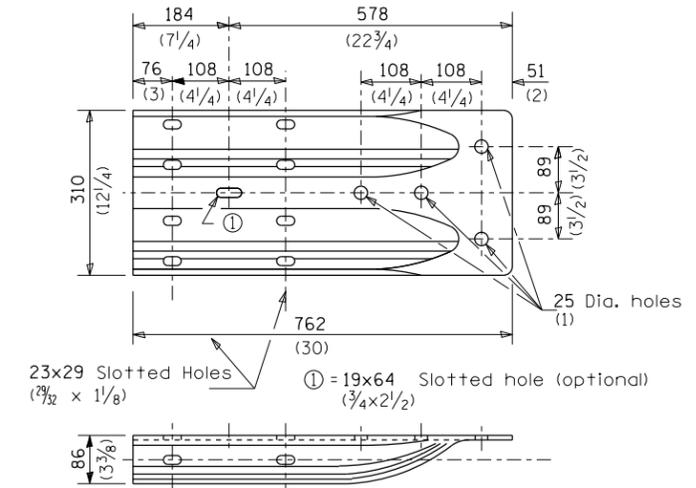
NOTE

When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

Externally threaded studs protruding from the surface of the concrete will not be permitted.

END SHOE



ALTERNATE END SHOE

MODEL: Default
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DRAWN - _____	REVISED - _____	REVISED - _____
PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = 2/19/2019	DATE - _____	REVISED - _____

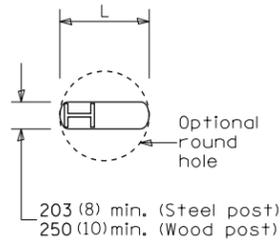
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PRE-MGS EFFECTIVE 4-1-06
STEEL PLATE BEAM GUARDRAIL STANDARD 630001-06**

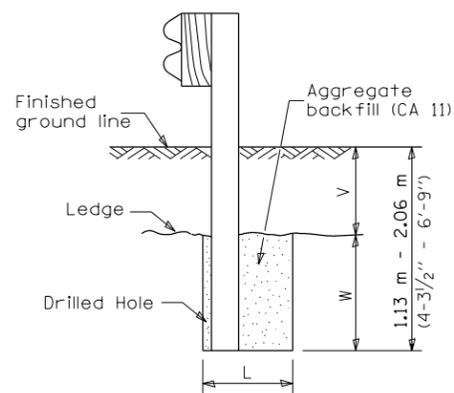
SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	VARIOUS	20	19
			CONTRACT NO. 66J51	
		ILLINOIS	FED. AID PROJECT	



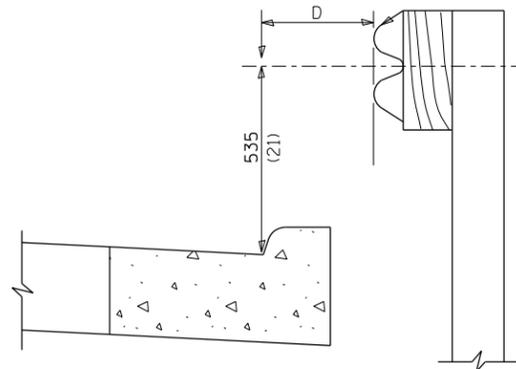
PLAN



Note:
Ledge line is top of rock ledge or hard slag fill.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



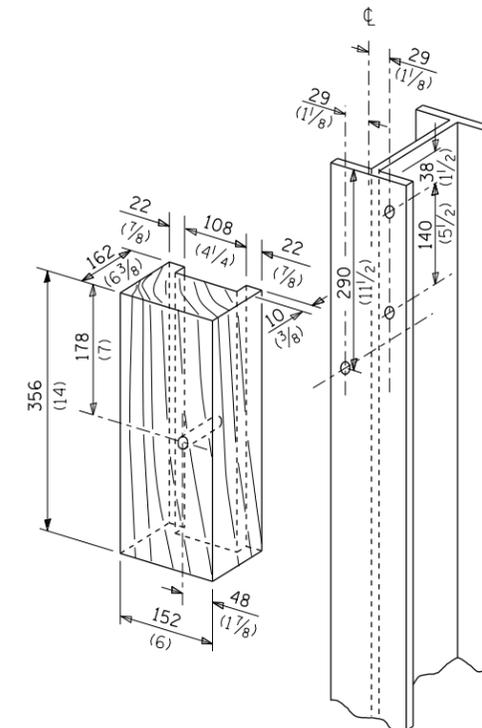
Note:

If it is necessary for D to be more than 300 (12) and less than 3.0 m (10'-0") type M-5 (M-2) curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

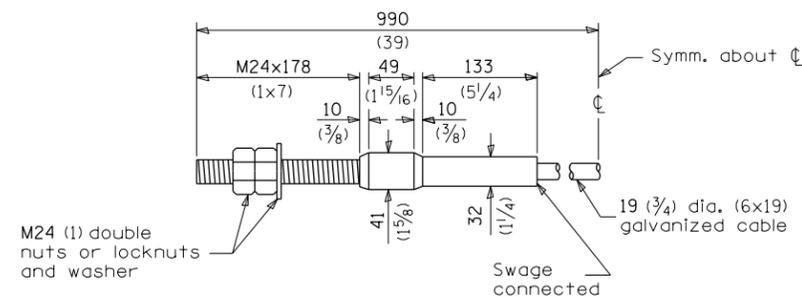
GUARDRAIL PLACED BEHIND CURB

(D = 0 desirable to 300 (12) maximum)

V	W	L	
		Steel Post	Wood Post
0 - 460 (0 - 18)	610 (24)	530 (21)	580 (23)
>460 - 825 (>18 - 41.5)	305 (12)	203 (8)	250 (10)
>825 - 1.13 m (>41.5 - 53.5)	305 - 0 (12 - 0)	203 (8)	250 (10)



WOOD BLOCK-OUT AND STEEL POST DETAILS



CABLE ASSEMBLY

(18,100 kg (40,000 lbs.) min. breaking strength)
Tighten to taut tension.

MODEL: Default
FILE NAME: p:\u0000\B&E\BID\NTEC\Illinois\gov\PIWDOT\Documents\DOT Office\District 3\Projects\0366\51\CD\0366\03\xxxx-std-detailed.dgn

USER NAME = pletschr	DESIGNED - _____	REVISED - _____
PLOT SCALE = 100,0000 ' / in.	DRAWN - _____	REVISED - _____
PLOT DATE = 2/19/2019	CHECKED - _____	REVISED - _____
	DATE - _____	REVISED - _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PRE-MGS EFFECTIVE 4-1-06
STEEL PLATE BEAM GUARDRAIL STANDARD 630001-06**

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

* DISTRICT 3 HIGHWAY DAMAGE REPAIR FY 20

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	VARIOUS	20	20
			CONTRACT NO. 66J51	
			ILLINOIS FED. AID PROJECT	