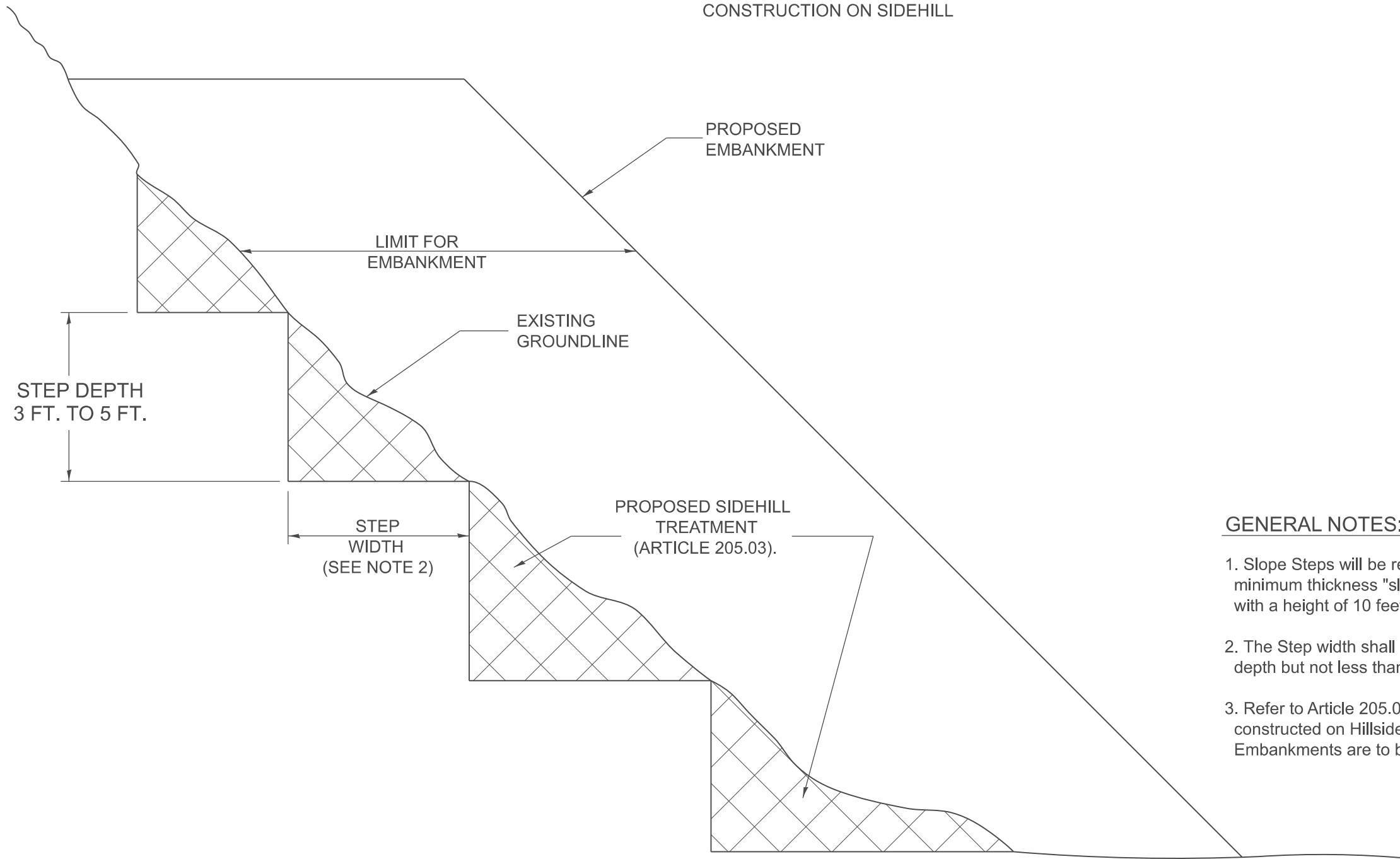


SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT
CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12 minimum thickness "sliver fills" and on all fills with a height of 10 feet or greater.
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:



STANDARD EMBANKMENT
(IN ACCORDANCE WITH ARTICLE
205 OF THE STANDARD SPECIFICATIONS).

All dimensions are in inches
unless otherwise noted.

DESIGNER NOTE:

1. EACH PROJECT SHOULD BE REVIEWED INDEPENDENTLY FOR TREATMENT REQUIRED.
2. REFER TO THIS DETAIL WITH NOTE ON APPLICABLE TYPICAL SECTIONS.

MODEL: D4-205001
FILE NAME: c:\p\work\pav\detail\illinois.gov\thomas.cox\illinois.gov\td055944\D4-205001.dgn

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

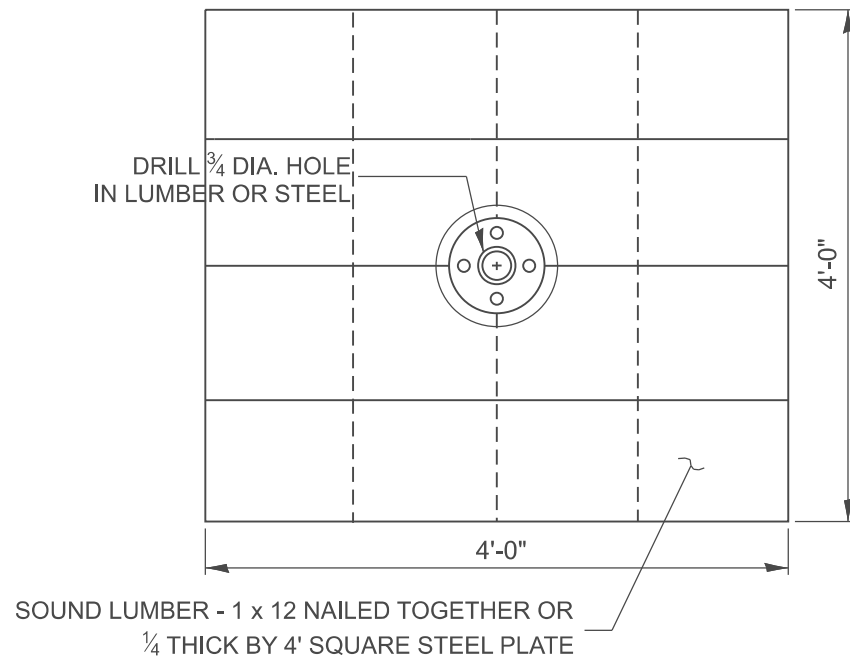
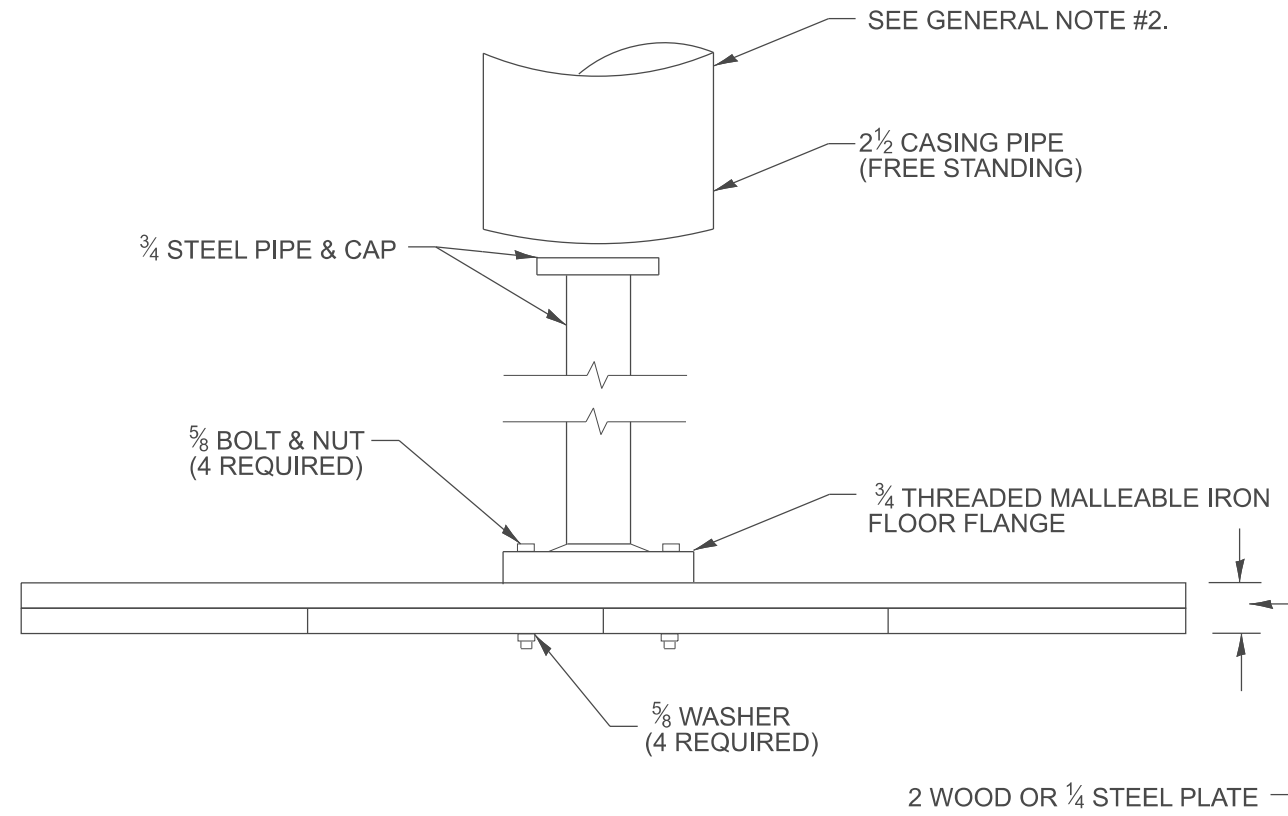
SLOPE STEPS DETAIL

SCALE: NOT TO SCALE SHEET 000 OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 205001			CONTRACT NO.	
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:
 1. SEE SOILS REPORT AND BUREAU OF MATERIALS FOR USAGE, LOCATIONS, AND SETTLEMENT RATES.
 2. CONSIDER USE ON BRIDGE EMBANKMENT AND OTHER SETTLEMENT SENSITIVE FILLS.
 3. THIS DRAWING ALLOWS FOR WOODBASE PLATE OPTION.

MODEL: D4-205101
 FILE NAME: c:\pwworking\illinois.gov\thomas.cox\illinois.gov\td0559441D4-205101.dgn



GENERAL NOTES:

1. Settlement Platform shall be in accordance with the applicable portions of Article 204.06 of the Standard Specifications.
2. Do not install casing pipe until after one section of 3/4" has been covered with earth. The casing pipe should not rest on platform.

All dimensions are in inches unless otherwise noted.

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

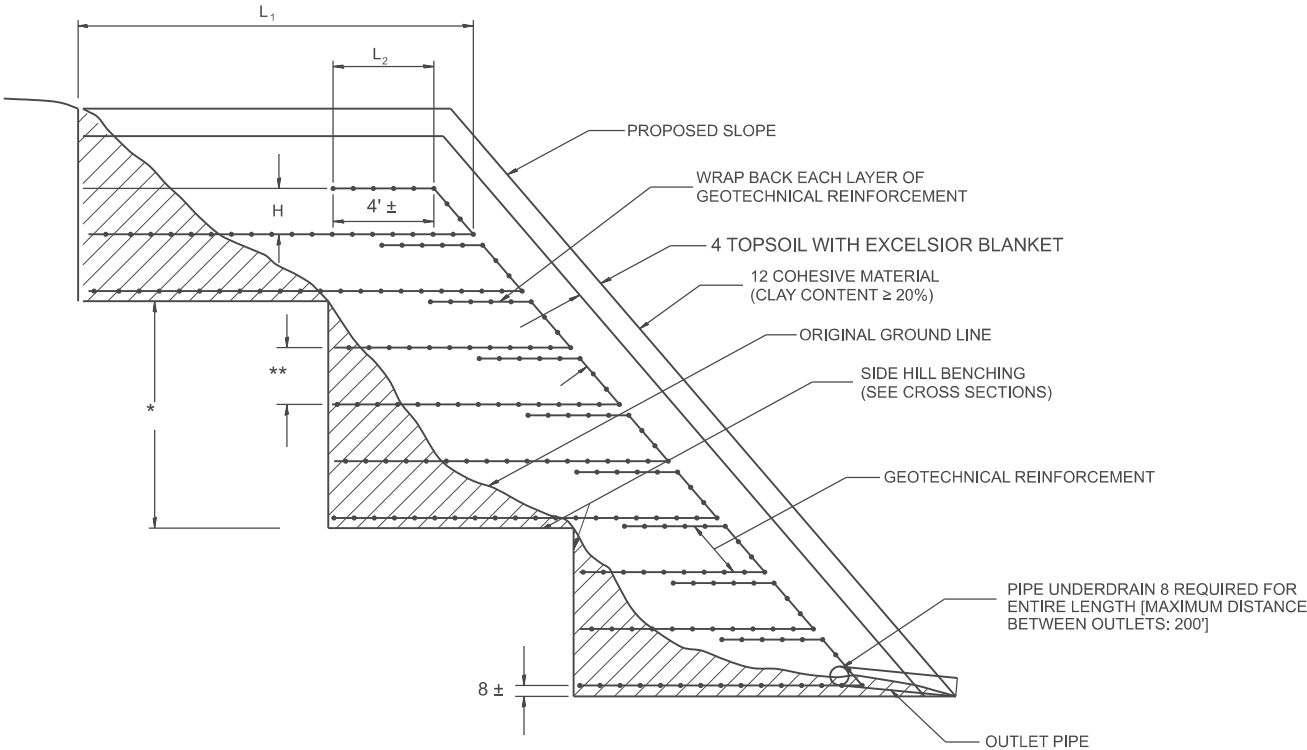
SETTLEMENT PLATFORM

SCALE: NOT TO SCALE SHEET 000 OF SHEETS STA. TO STA.

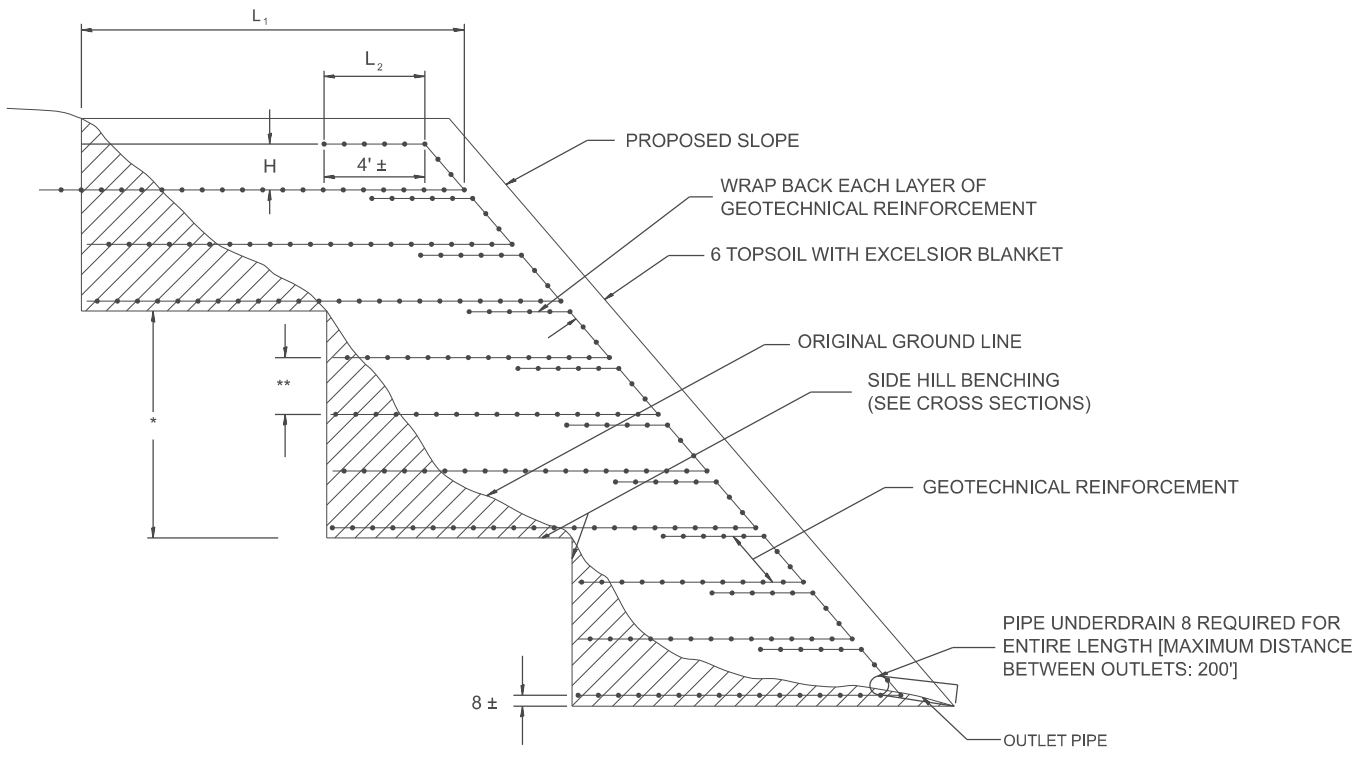
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 205101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES: 1. CHECK WITH THE DISTRICT GEOTECHNICAL ENGINEER FOR USE OF THIS DRAWING AND FOR * AND ** VALUES IF NOT PROVIDED OR SHOWN IN PROJECT SOILS REPORT.
 2. USE DISTRICT SPECIAL PROVISION "GEOTECHNICAL REINFORCEMENT".
 3. ASSURE TREATMENT AREAS ARE SHOWN IN PLANS AND ON CROSS SECTIONS.
 4. INCLUDE SOIL BORINGS FOR TREATED AREAS.
 5. INCLUDE DISTRICT STANDARD DRAWING "SLOPE BENCHING DETAIL"

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\granite\sh-3\shd01_3.dwg



ALTERNATE I: BACKFILL WITH GRANULAR MATERIAL



ALTERNATE II: BACKFILL WITH COHESIVE MATERIAL

GEOTECHNICAL REINFORCEMENT LOCATIONS

STATION TO STATION	SIDE	SQ YDS
TOTAL QUANTITY		

GENERAL NOTES:

- BENCHING:**
Shall be performed to the dimensions as shown on the plans and in accordance with the applicable portions of article 205.03 of the Standard Specifications.
- GEOTECHNICAL REINFORCEMENT:**
Shall be lapped up to and just below the next higher Geogrid Layer.

MEASUREMENT FORMULA
 $(L_1 + L_2 + H) \times \text{LENGTH CONSTRUCTED} = \text{PAYMENT AREA PER LAYER}$

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

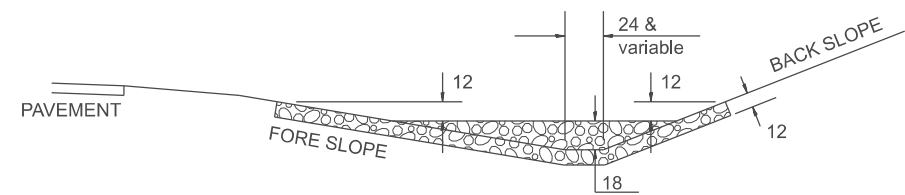
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL REINFORCEMENT FOR SIDE SLOPES				
SCALE: NOT TO SCALE	SHEET	OF	SHEETS	STA.
				TO STA.

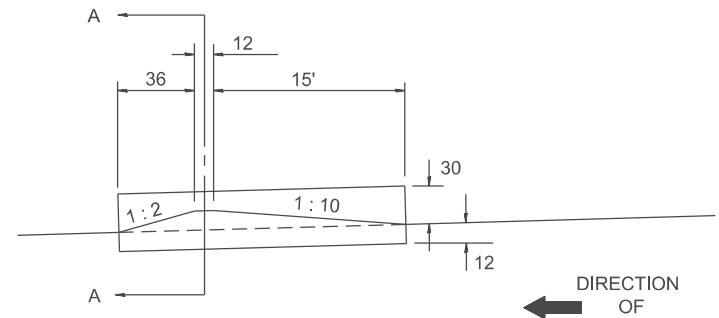
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 210001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. Designer to modify this detail Special Detail Sheet, as needed, for inclusion in plans.
 2. Determine the required clear zone in order to select the berm slopes.
 3. Include State Standard 280001.

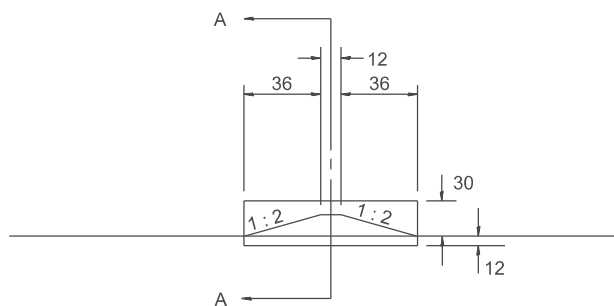
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SECTION A - A

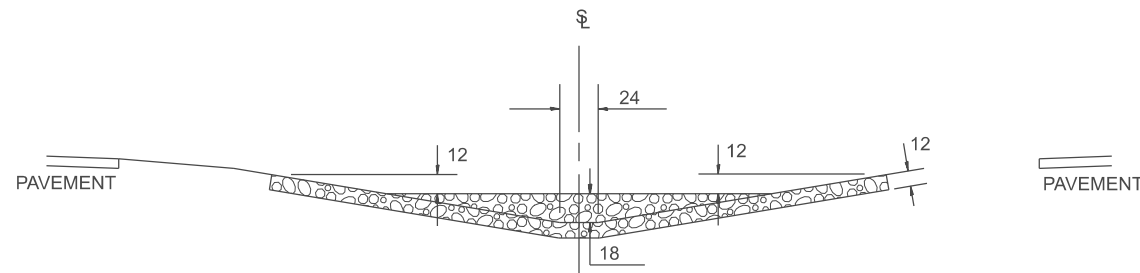


SIDE VIEW
(WITHIN CLEAR ZONE)

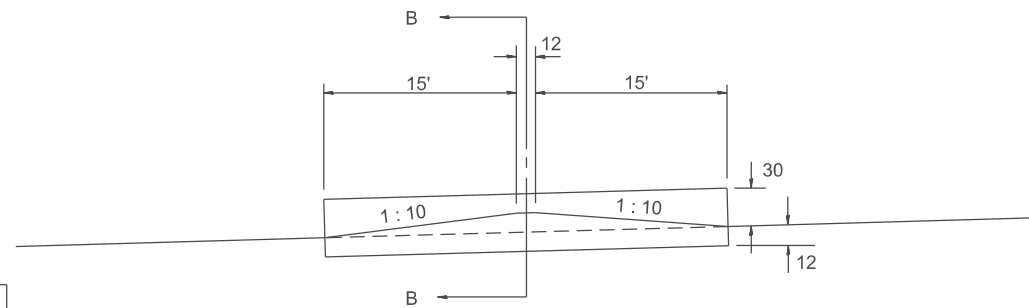


SIDE VIEW
(OUTSIDE OF CLEAR ZONE)

SIDE DITCH AGGREGATE DITCH CHECK



SECTION B - B



SIDE VIEW

MEDIAN AGGREGATE DITCH CHECK

NOTES:

- FOR DITCH BOTTOM PROTECTED BY EROSION CONTROL BLANKET, USE 400' SPACING. FOR SEEDED DITCH BOTTOM, USE 200' SPACING.
- THIS WORK CONSISTS OF THE COMPLETE INSTALLATION OF EROSION CONTROL DITCH CHECK AT LOCATIONS AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. THE AGGREGATE GRADATION SHALL BE RR3 WITH A MINIMUM QUALITY OF CLASS B.

STATION	LOCATION		NUMBER OF DITCH CHECKS	FORE SLOPE	DITCH BOTTOM WIDTH	BACK SLOPE	BERM SLOPE
	MEDIAN	SIDE DITCH (LEFT / RIGHT)					

ESTIMATE QUANTITIES

	FORE SLOPE	DITCH BOTTOM	BACK SLOPE	BERM SLOPE	AGGREGATE DITCH CHECK EROSION CONTROL TON
MEDIAN DITCH	1:6	24	—	1:10	95
SIDE DITCH	1:6	24	1:4	1:10 & 1:2	50
SIDE DITCH	1:6	24	1:4	1:2 & 1:2	19
SIDE DITCH	1:4	24	1:3	1:10 & 1:2	18
SIDE DITCH	1:4	24	1:3	1:2 & 1:2	14

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
 All dimensions are in inches unless otherwise noted.

QUANTITIES

CALC. BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EROSION CONTROL AGGREGATE DITCH CHECK

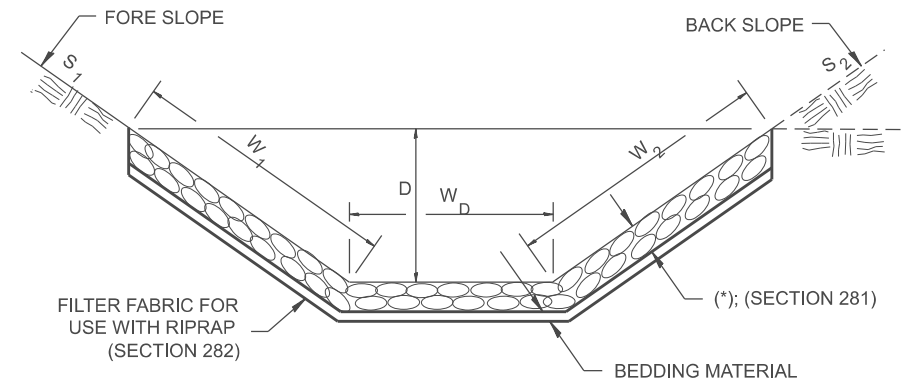
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 280101			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

Designer Notes:
 1. Designer to modify this Special Detail Sheet, as needed for inclusion in plans.
 2. (*) Designer to specify pay item including material, quality, and gradation.
 3. Include District Special Provision if needed.

MODEL: D4-281001
 FILE NAME: c:\pwworking\illinois.gov\thomas.cox\illinois.gov\d1055944\D4-281001.dgn

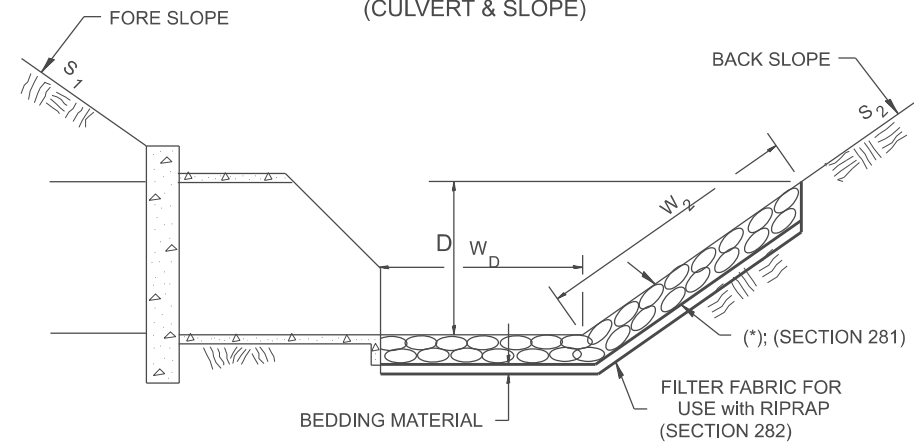
CASE 1
(DITCH)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft	lin ft	tons	sq yds
TOTAL				

(1) WIDTH = $W_1 + W_2 + W_D$

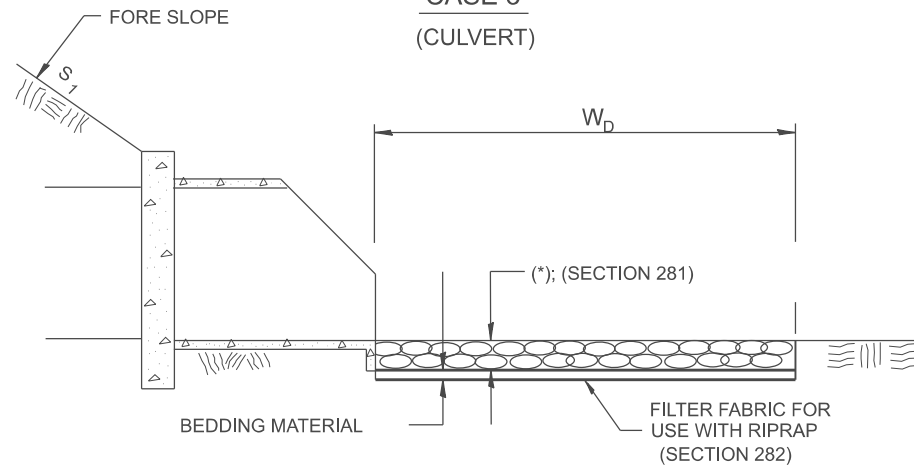
CASE 2
(CULVERT & SLOPE)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft	lin ft	tons	sq yds
TOTAL				

(1) WIDTH = $W_2 + W_D$

CASE 3
(CULVERT)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft	lin ft	tons	sq yds
TOTAL				

(1) WIDTH = W_D

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIPRAP DITCH FOR EROSION PROTECTION

SCALE: NOT TO SCALE SHEET 000 OF SHEETS STA. TO STA.

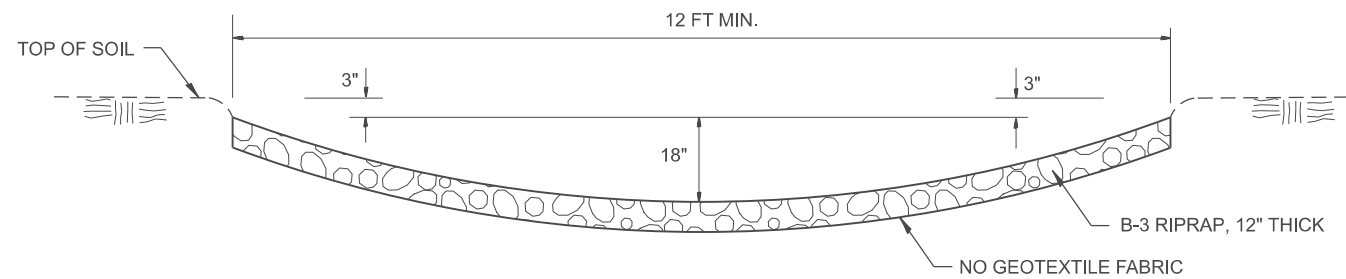
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 281001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:

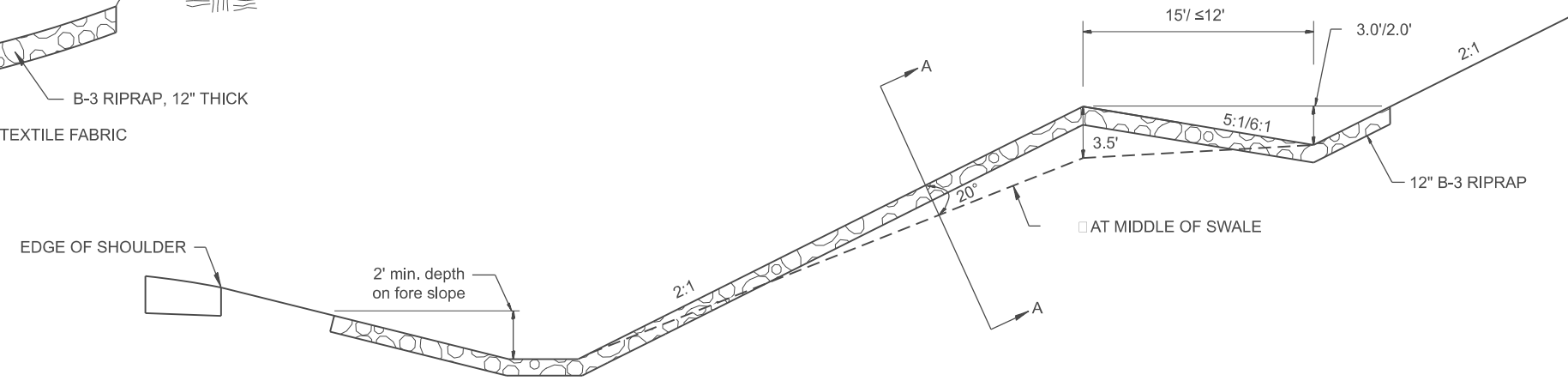
1. Consider use on back and foreslopes greater than 35' tall.
2. Discuss use with Geotech Engineer and Project Engineer.
3. Foreslope and backslope ratios may be changed to fit conditions.
4. Install section B-B outlets every 300' +/- depending on terrain.

MODEL: D4-281002
 FILE NAME: c:\pwworking\illinois\projects\106594410\281002.dwg

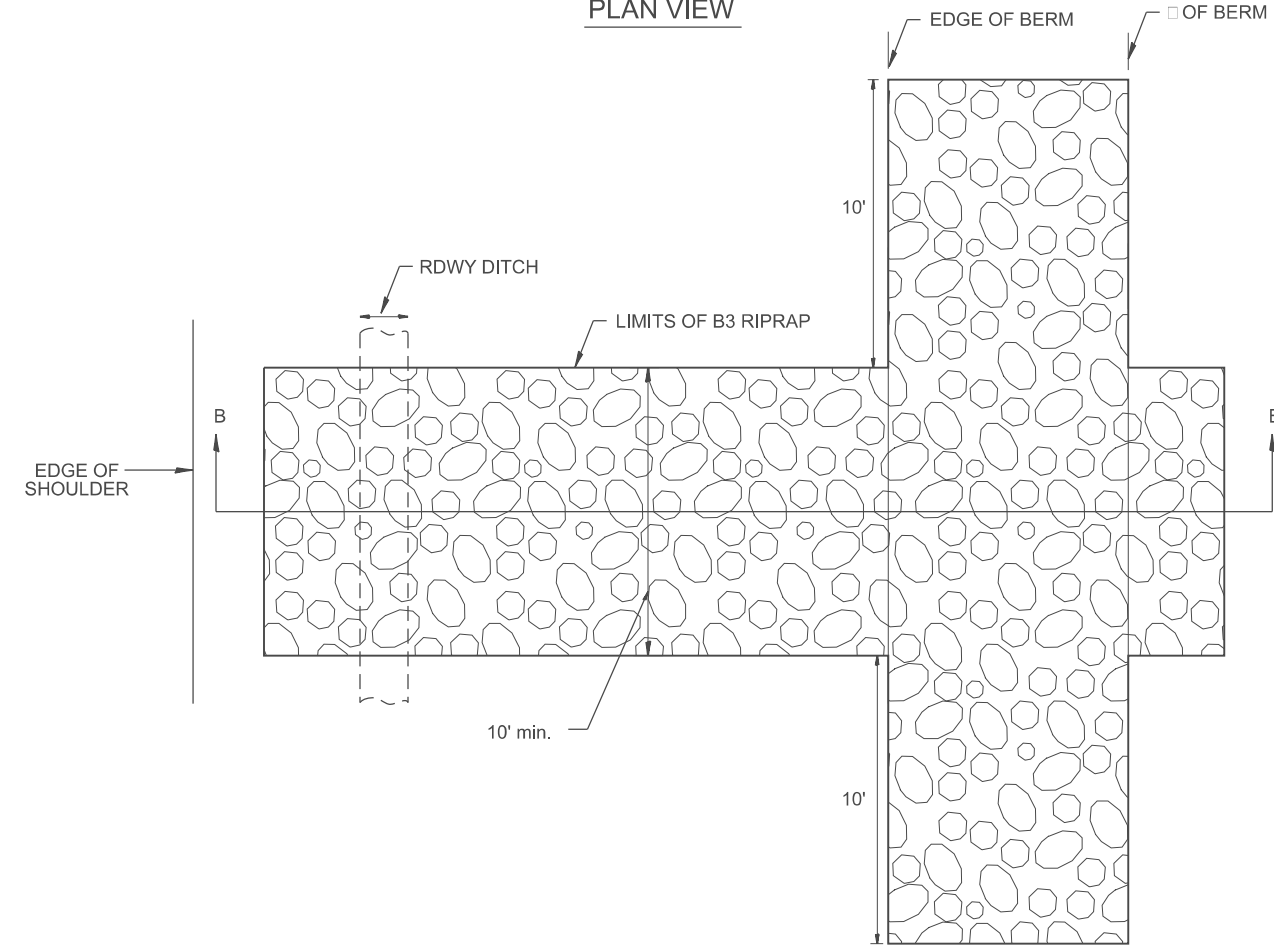
SECTION A-A



SECTION B-B



PLAN VIEW



NOTES:

1. This work shall be performed in accordance with Section 281 of the Standard Specifications and will be paid for as STONE RIPRAP, CLASS B3.
2. When berm width is 15', use a 5:1 slope and 3' minimum depth. When berm width is $\leq 12'$, use a 6:1 slope and 2' minimum depth.
3. No bedding material is required.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
 All dimensions are in inches unless otherwise noted.

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SLOPE BERMS AND DRAINAGE WAYS

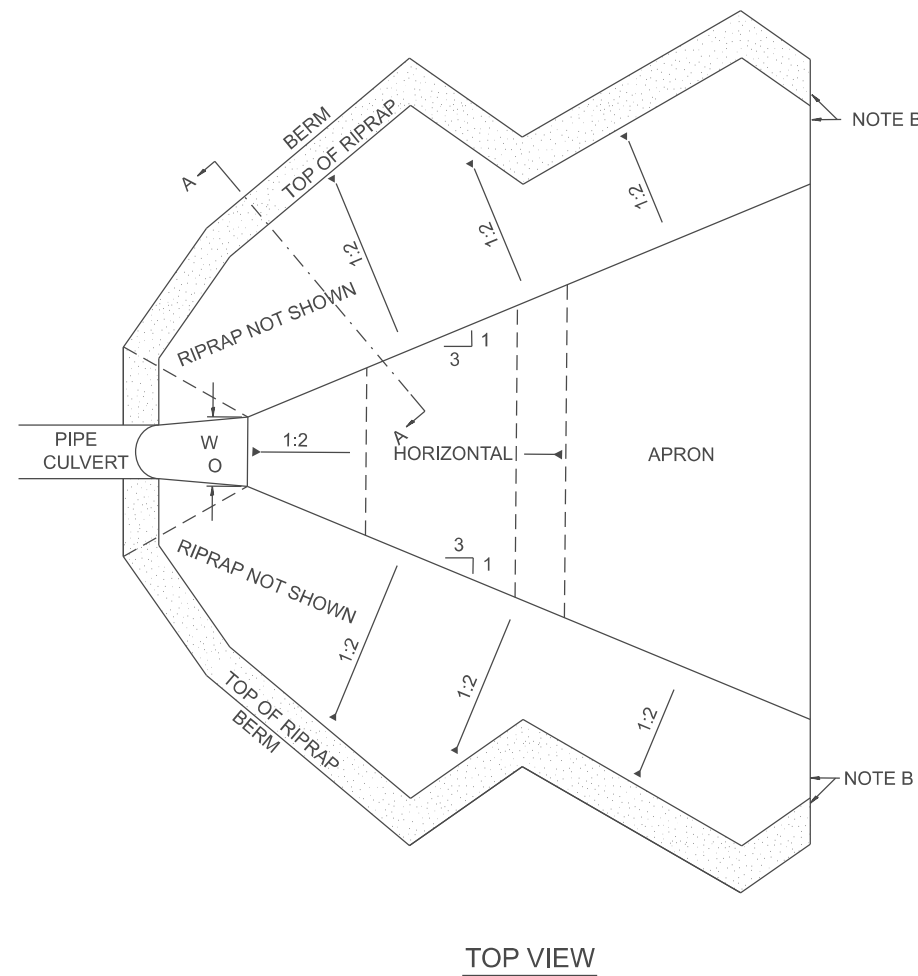
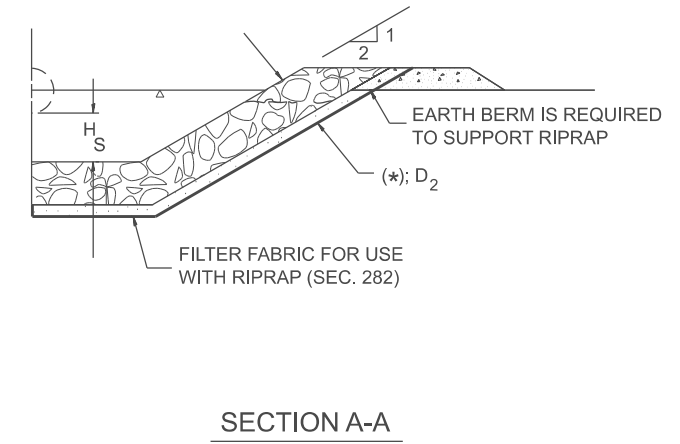
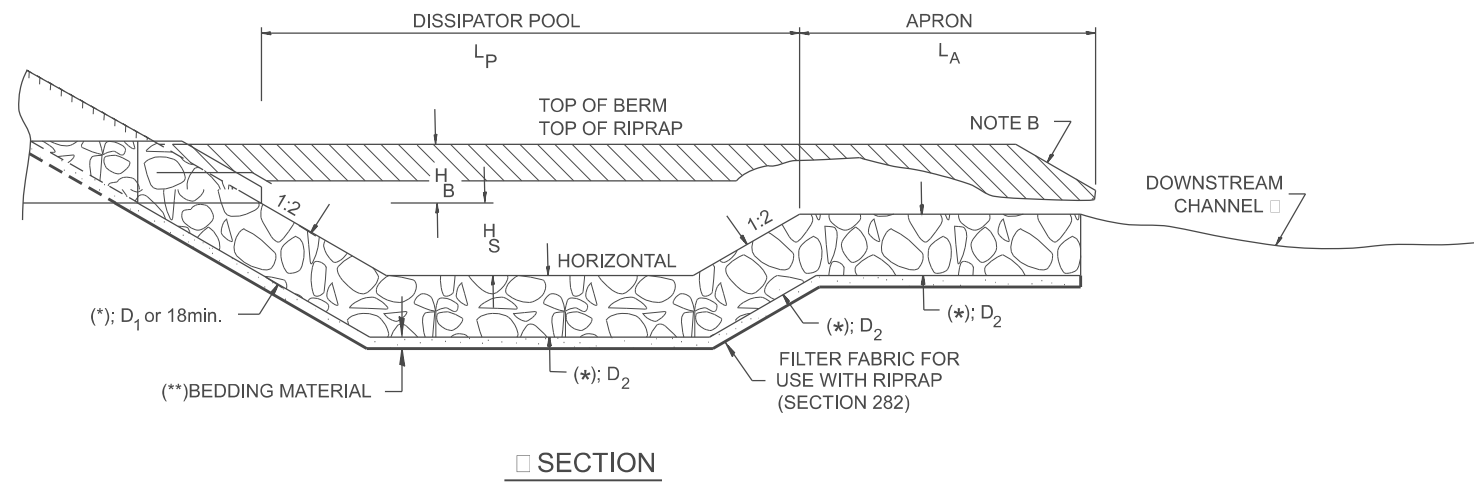
SCALE: NOT TO SCALE SHEET 000 OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 281002		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

Designer Notes:

1. Designer to modify this Special Detail Sheet, as needed for inclusion in plans.
2. (*) Designer to specify pay item including material, quality, and gradation.
3. (**) Designer to specify thickness of bedding material.
4. Include District Special Provision if needed.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\pgr\msharsh\Chil\DOT_Summary\Callout_Sheets.dwg



STATION	W O	L P	L A	H S	H B	(*) (*) (**)		
						D 1	D 2	D 3

NOTE B: WARP BASIN TO CONFORM TO NATURAL STREAM CHANNEL

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIPRAP ENERGY DISSIPATOR

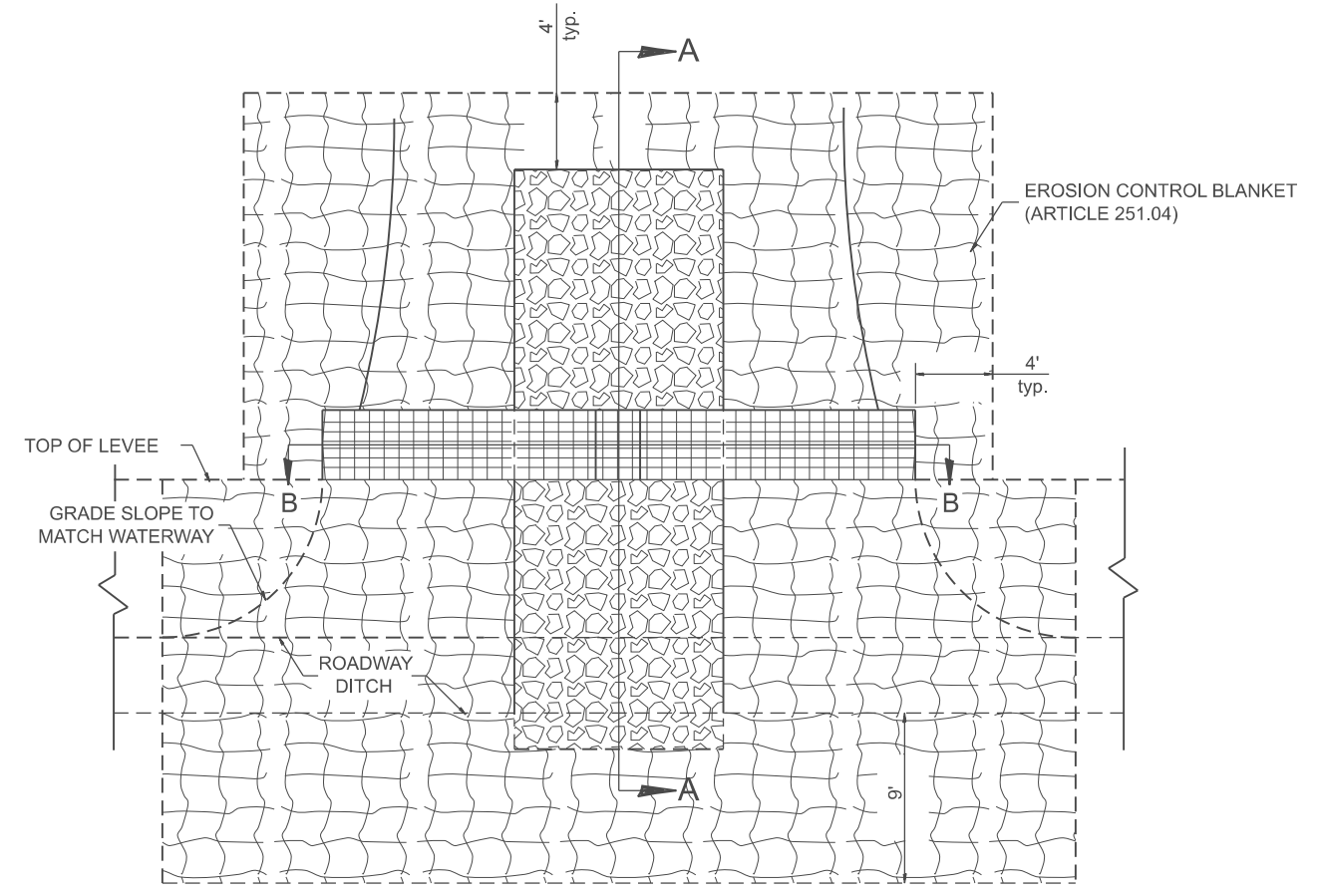
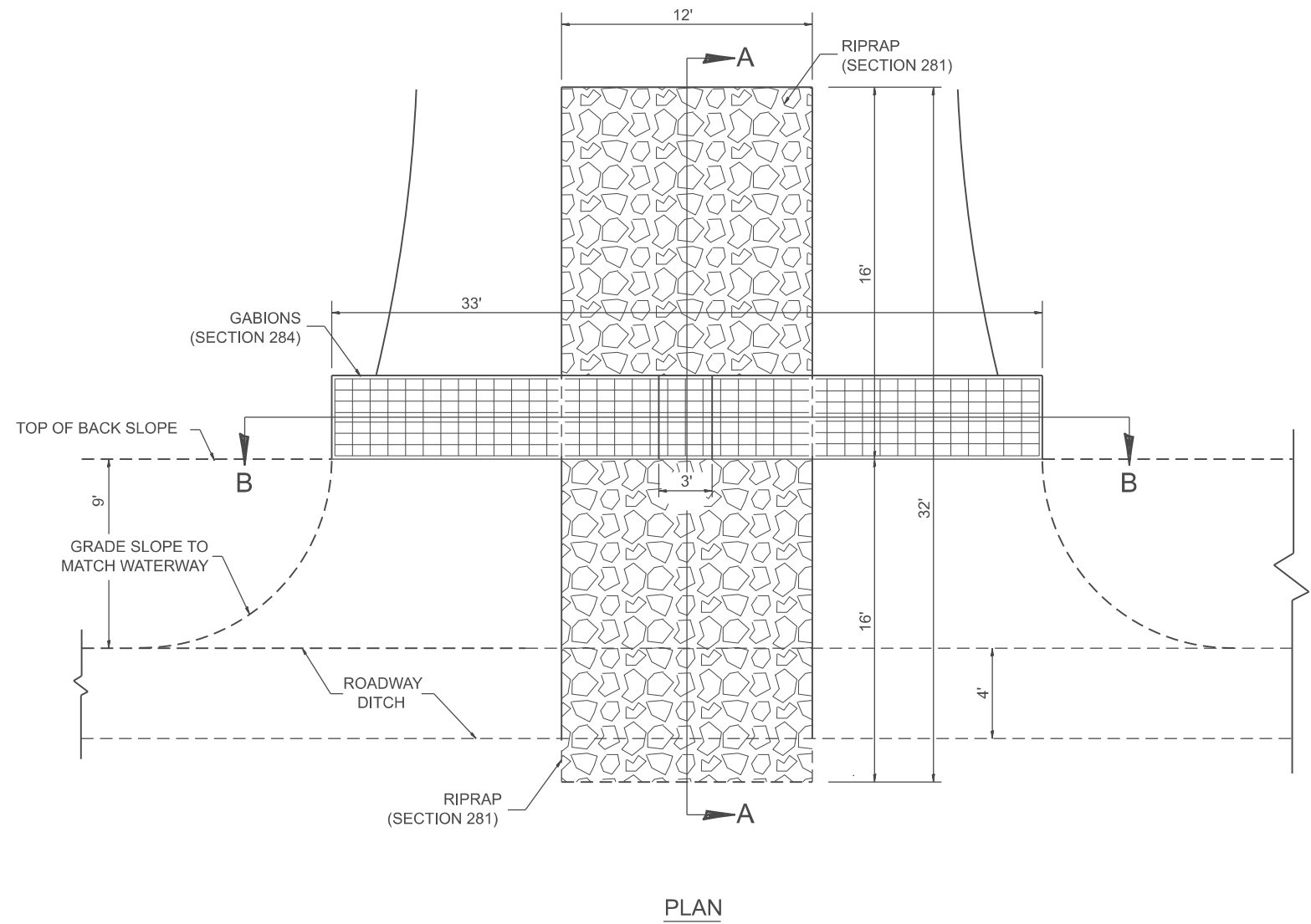
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 281101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

Designer Notes:

1. Designer to modify this Special Detail sheet, as needed, for inclusion in plans.
2. This treatment is recommended for large waterways: $\geq 30'$ in width.
3. Include District CADD Detail for RIPRAP Ditch for Erosion Protection.
4. Designer to add Drainage Structure Details as needed. The CULVERT flowline should be located such that CULVERT siltation is minimized.

MODEL: D4-284001.dgn
 FILE NAME: c:\pwworking\illinois.gov\thomas.cox\illinois.gov\d1055944\D4-284001.dgn



EROSION CONTROL BLANKET DETAILS

GENERAL NOTES

1. GABIONS SHALL CONFORM TO SECTION 284. MANUFACTURERS NOMINAL SIZES SHALL BE USED.
2. RIPRAP SHALL CONFORM TO SECTION 281.
3. EROSION CONTROL BLANKET SHALL CONFORM TO SECTION 281.
4. FILTER FABRIC USED WITH RIPRAP SHALL CONFORM TO SECTION 282 AND ARTICLE 1080.03.

All dimensions are in inches unless otherwise noted.

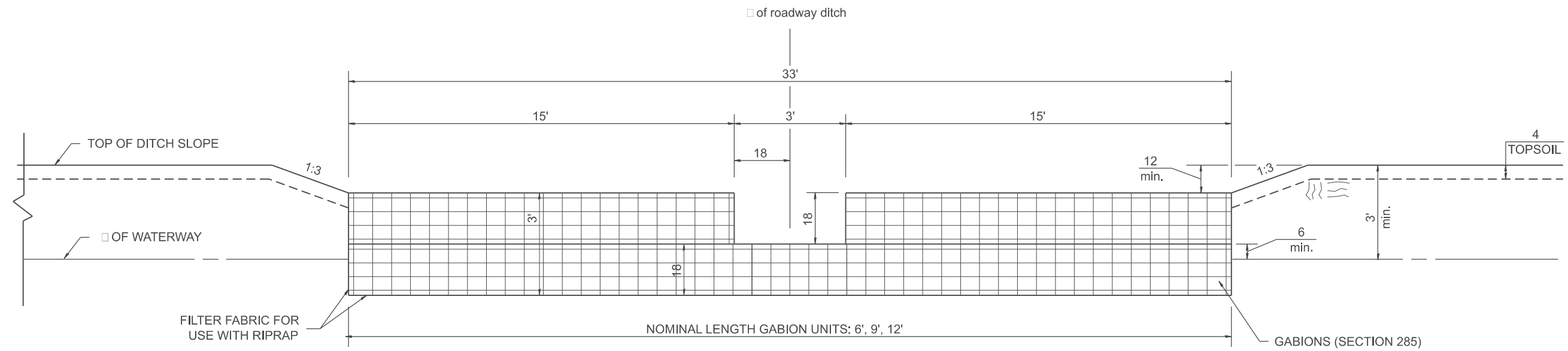
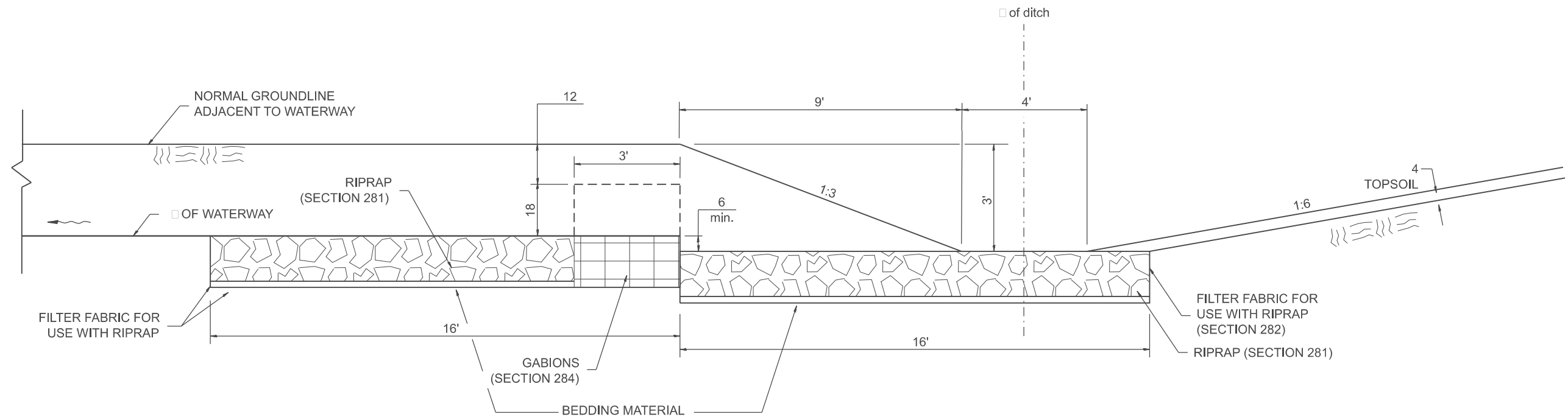
USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WATERWAY EROSION CONTROL,
 DOWNSTREAM TREATMENT, GABION WEIR**

SCALE: NOT TO SCALE SHEET 0001 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 284001			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
 All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\1011\Organization\Chilidiot_Standards\Cell\DOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

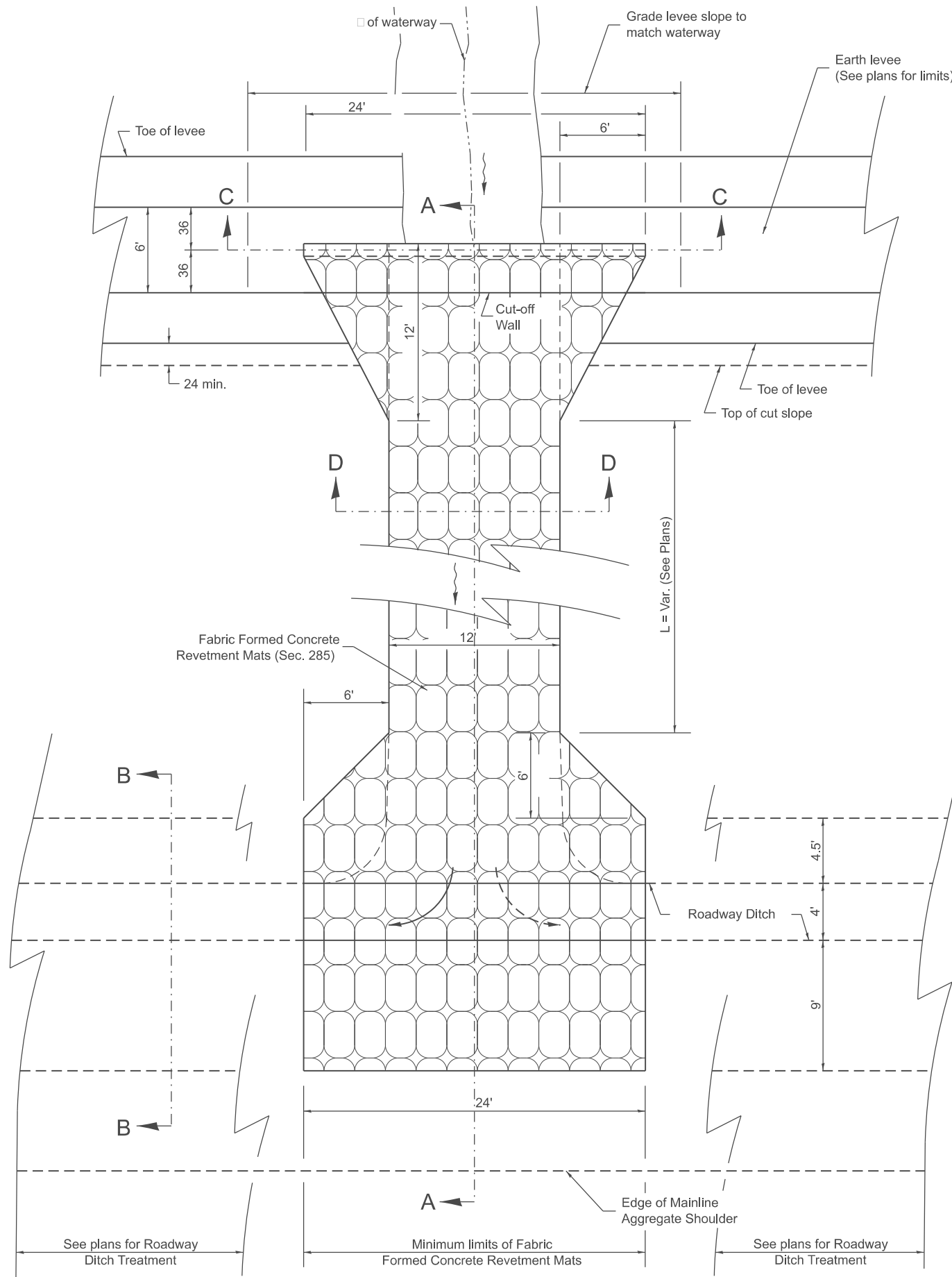
**WATERWAY EROSION CONTROL,
 DOWNSTREAM TREATMENT, GABION WEIR**

SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

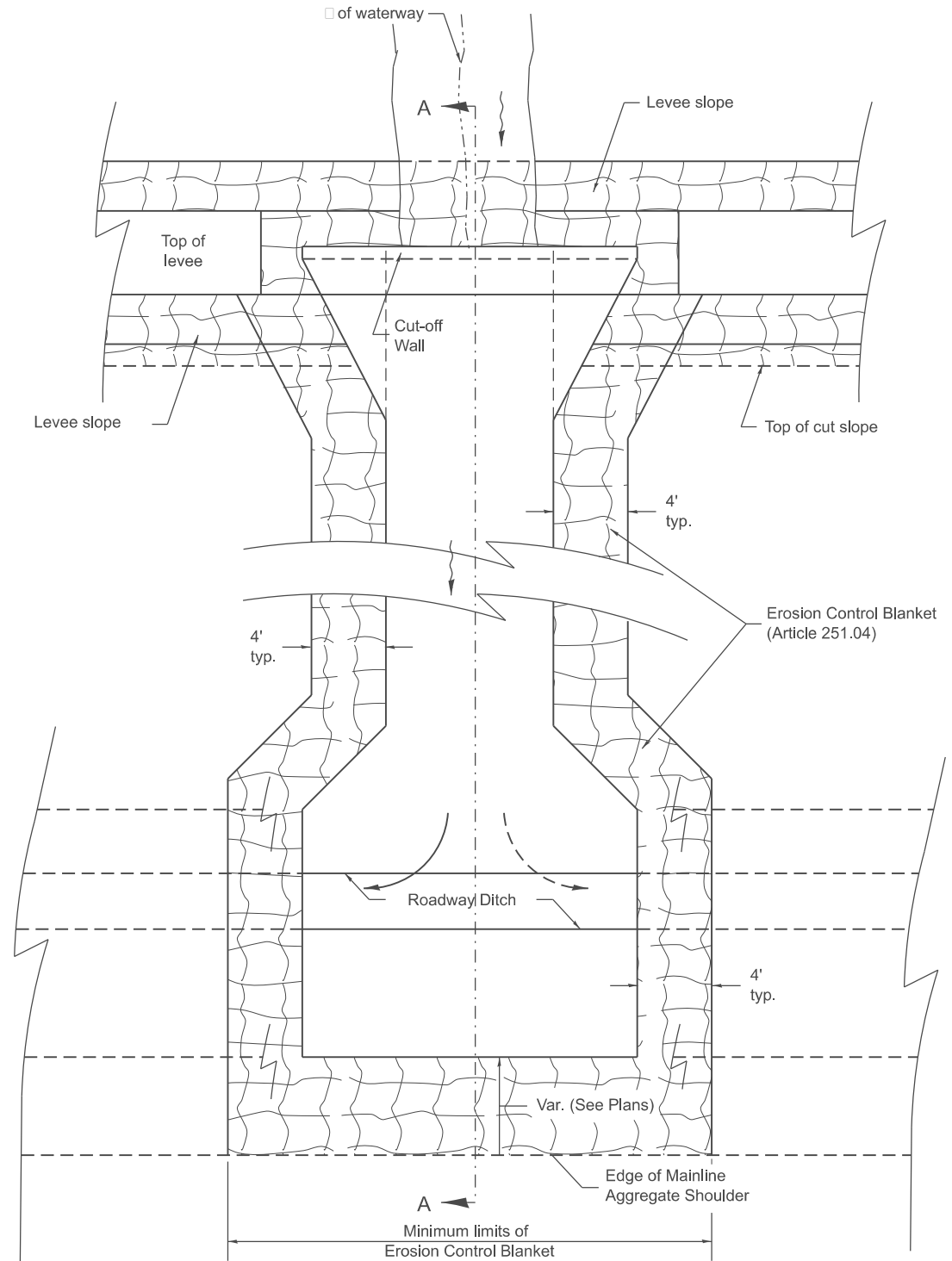
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 284001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

Designer Notes:
 1. Designer to modify this Special Detail sheet, as needed, for inclusion in plans.
 2. Include District CADD Detail for Fabric Formed Concrete Revetment Mats.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT10110\organization\ChilIDOT_Standards\CallIDOT_Sheets.cad



PLAN



EROSION CONTROL BLANKET DETAILS

General Notes:

1. Fabric Formed Concrete Revetment Mats shall conform to SECTION 285.
2. Erosion Control Blanket shall conform to Article 251.04.

All dimensions are in inches unless otherwise noted.

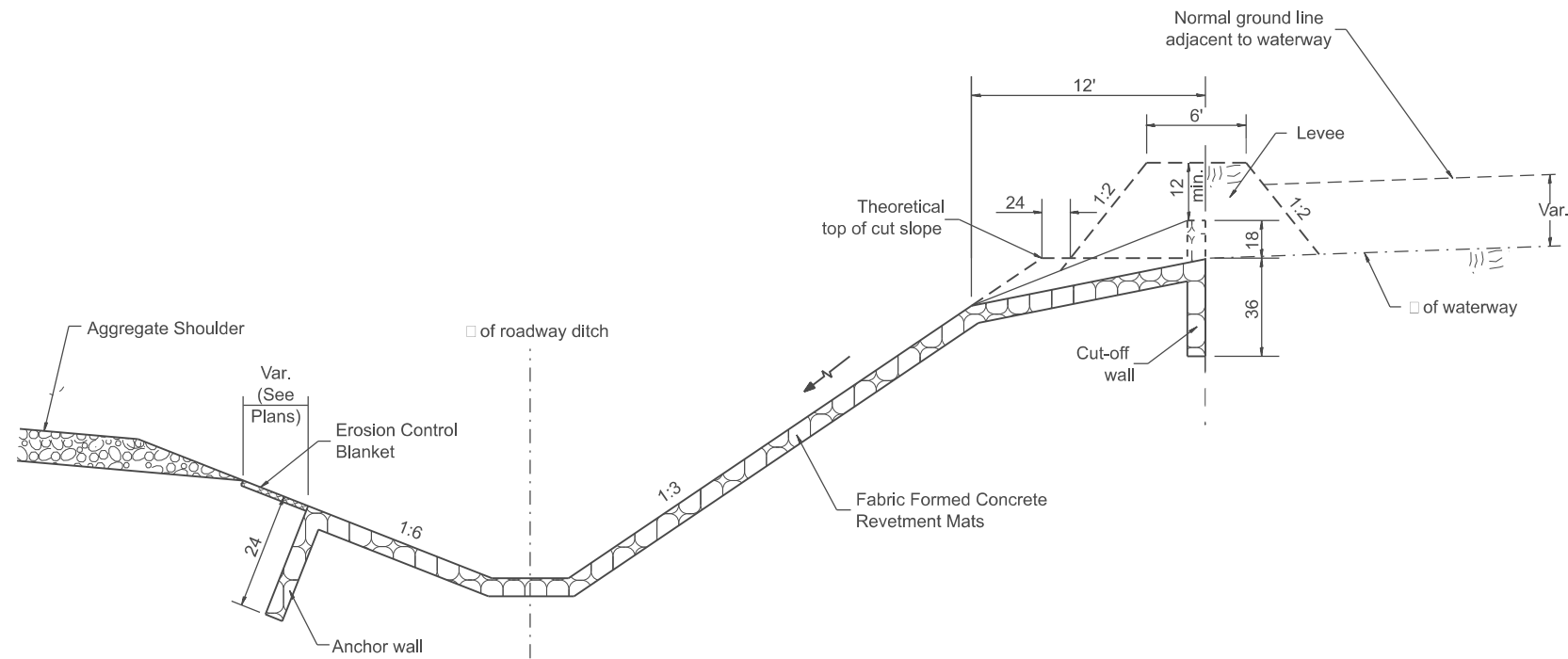
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

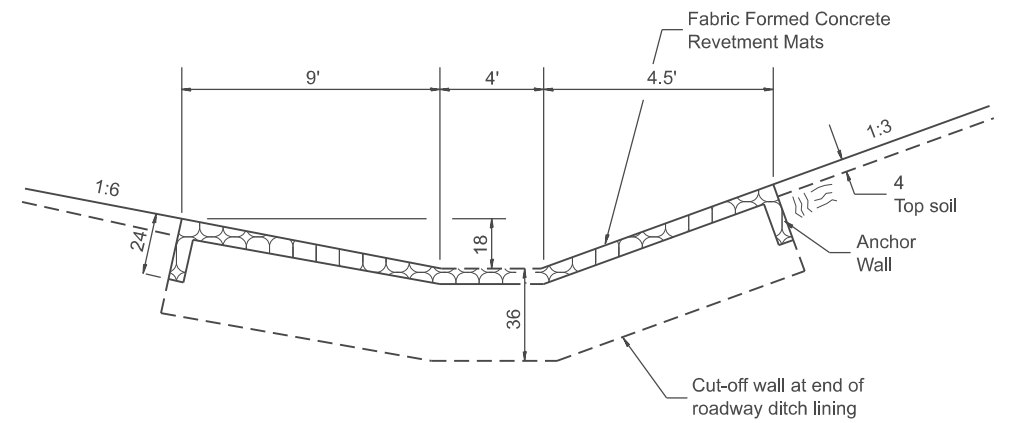
WATERWAY EROSION CONTROL, UPSTREAM TREATMENT,
 FABRIC FORMED CONCRETE REVETMENT MATS

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

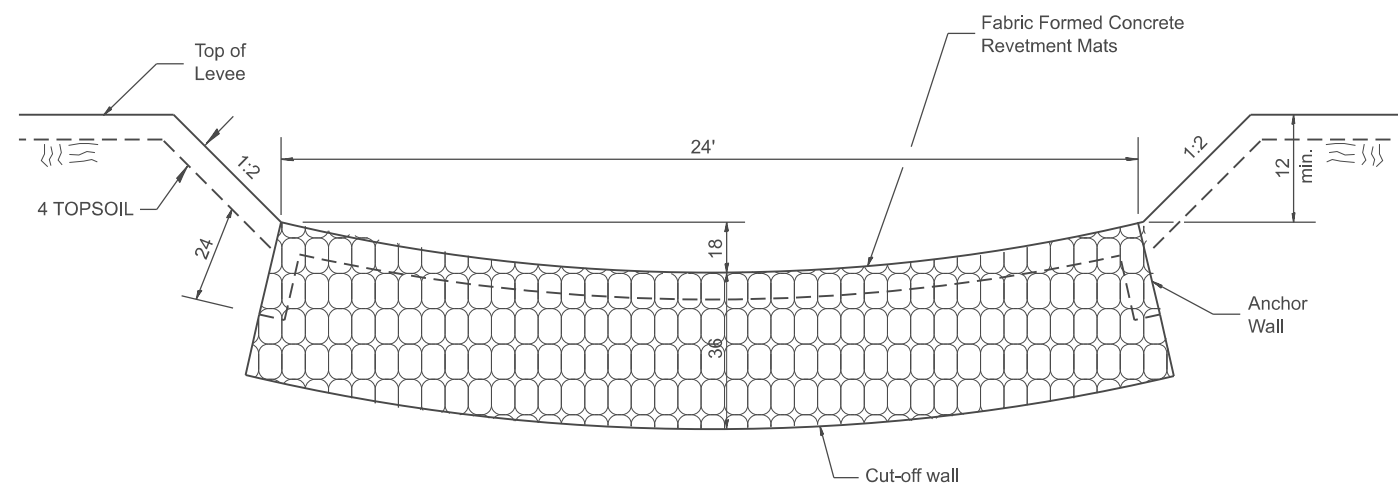
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 285101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



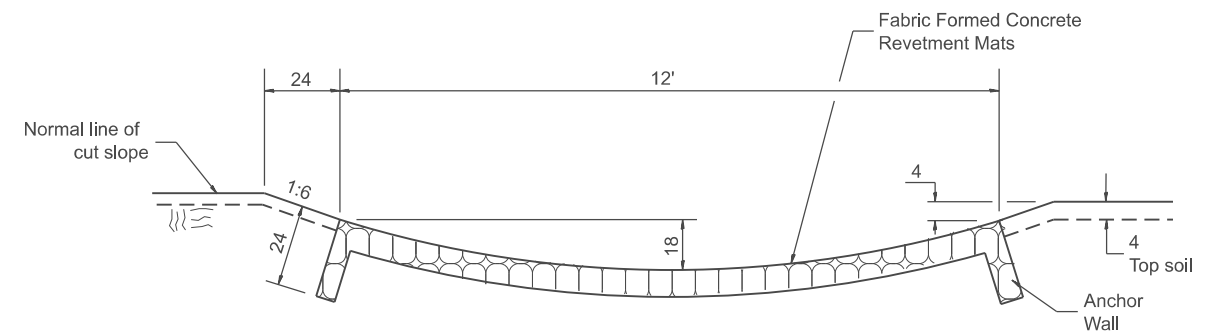
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

MODEL: D4-285101-02
FILE NAME: c:\p\work\water\illinois.gov\thomas.cox\illinois.gov\10559441D4-285101.dgn

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

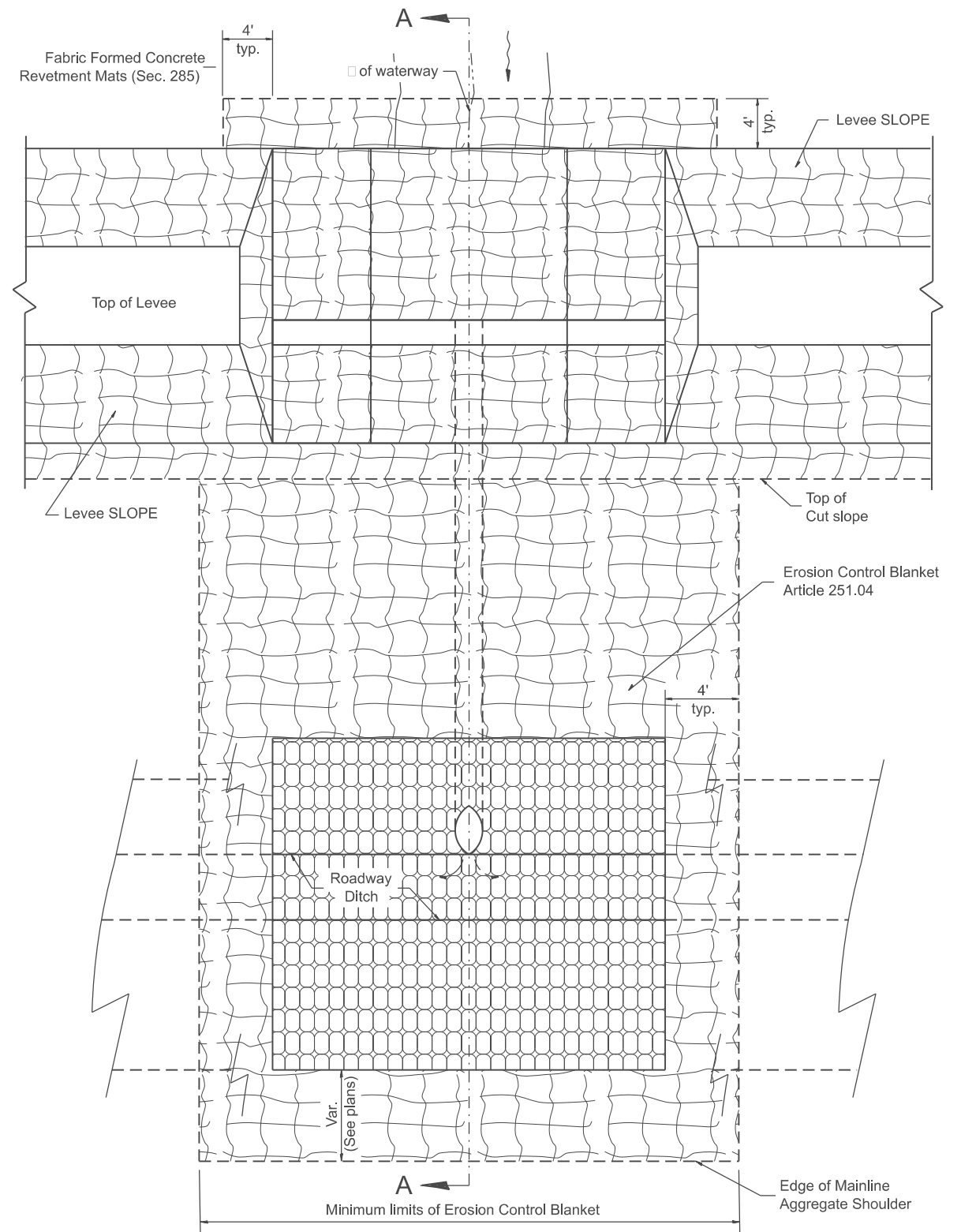
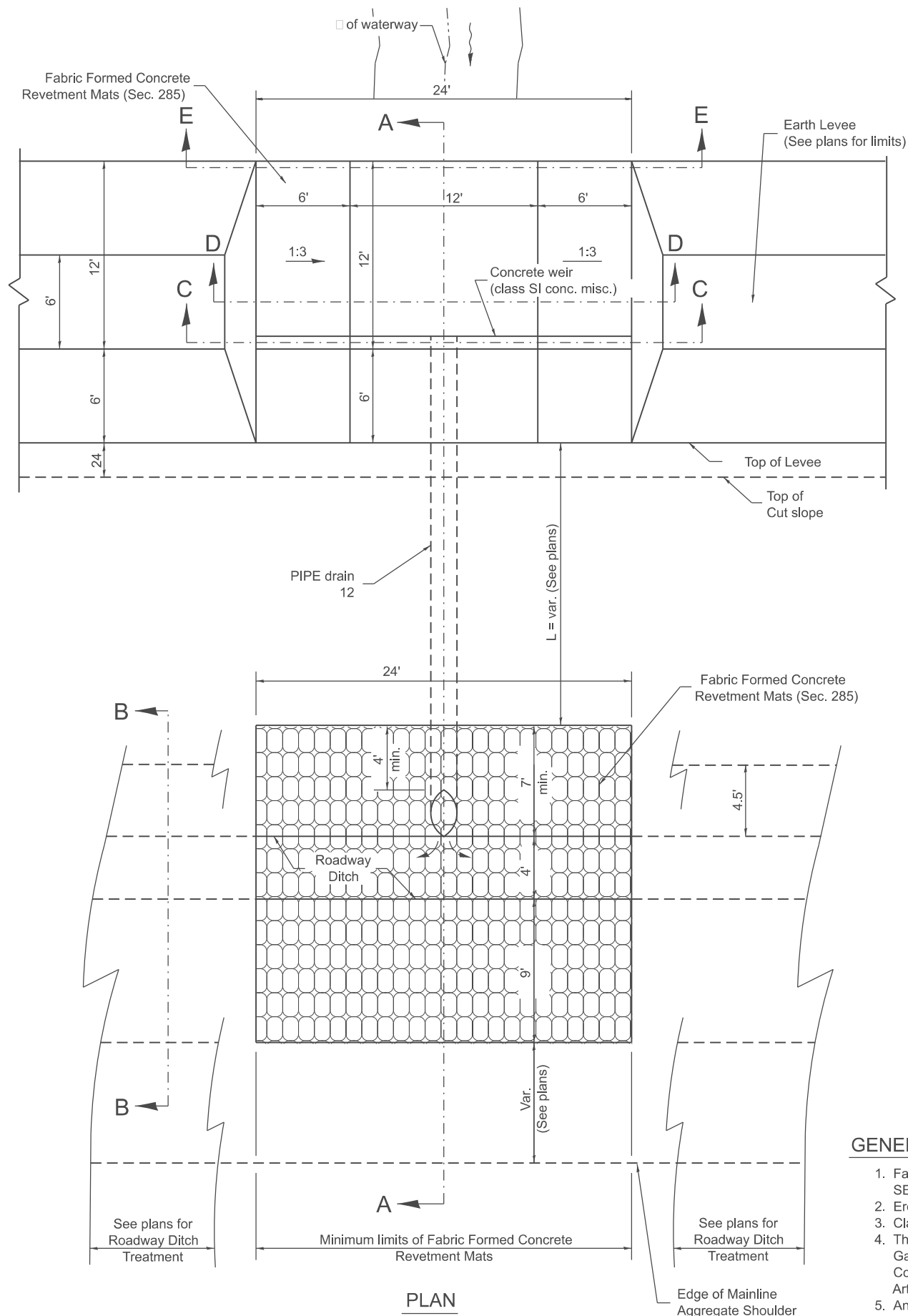
**WATERWAY EROSION CONTROL, UPSTREAM TREATMENT,
FABRIC FORMED CONCRETE REVETMENT MATS**

SCALE: NOT TO SCALE SHEET 0002 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 285101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

Designer Notes:
 1. Designer to modify this Special Detail Sheet, as needed for inclusion in plans.
 2. Include District Cadd Details for Fabric Formed Concrete Revetment Mats, Type 37 Grate and PIPE Elbow.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\organization\chill\DOT_Standards\Cadd\DOT_Sheets.cat



EROSION CONTROL BLANKET DETAILS

GENERAL NOTES

1. Fabric Formed Concrete Revetment Mats shall conform to SECTION 285.
2. Erosion Control Blanket shall conform to Article 251.04.
3. Class SI Concrete shall conform to SECTION 503.
4. The material for Pipe Drains shall be Bituminous Coated Galvanized Corrugated Steel Culvert Pipe or Bituminous Coated Corrugated Aluminum Alloy Pipe in accordance with Article 601.02(f) of 601.02(i).
5. An approved Mastic Material (Article 755.01) shall be applied to the inside of the connecting bands.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

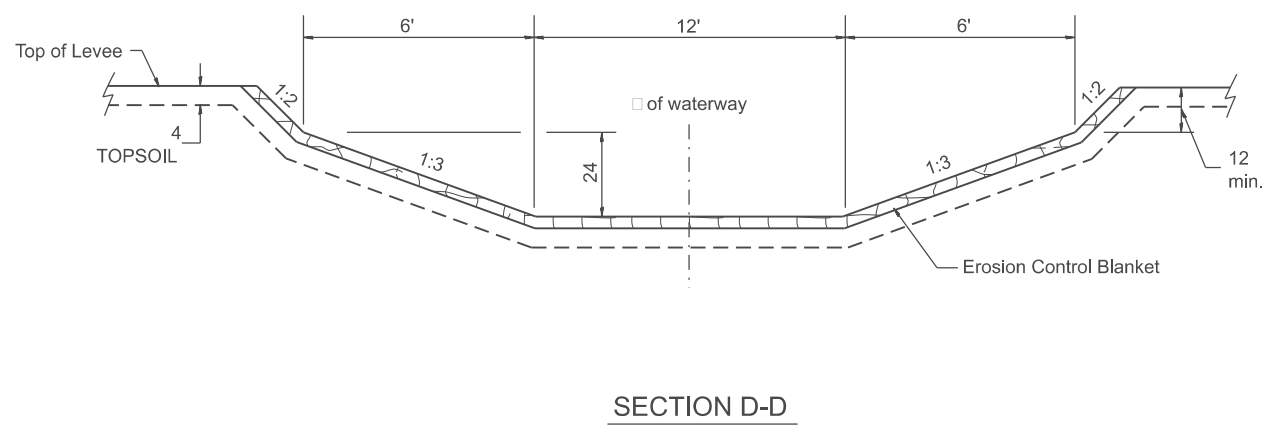
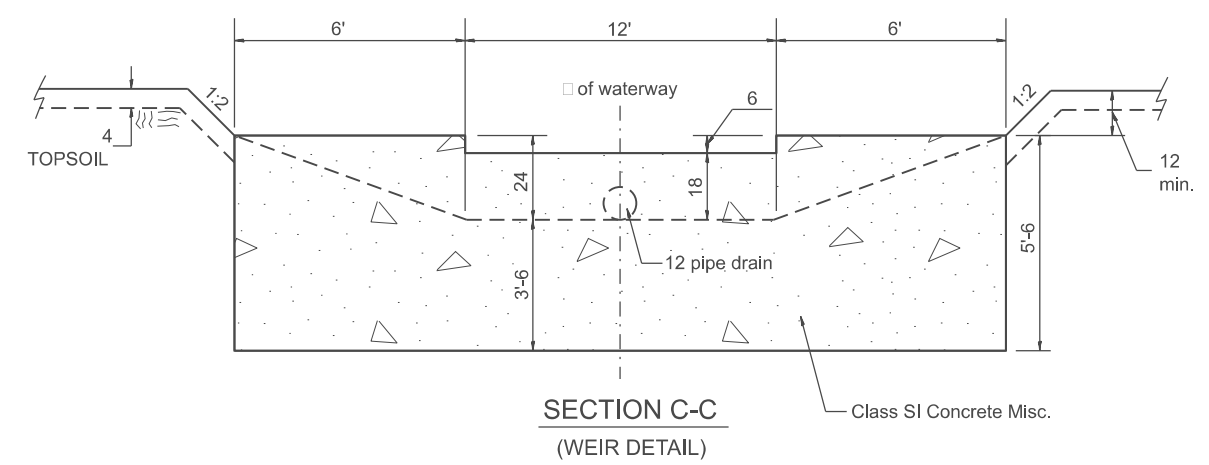
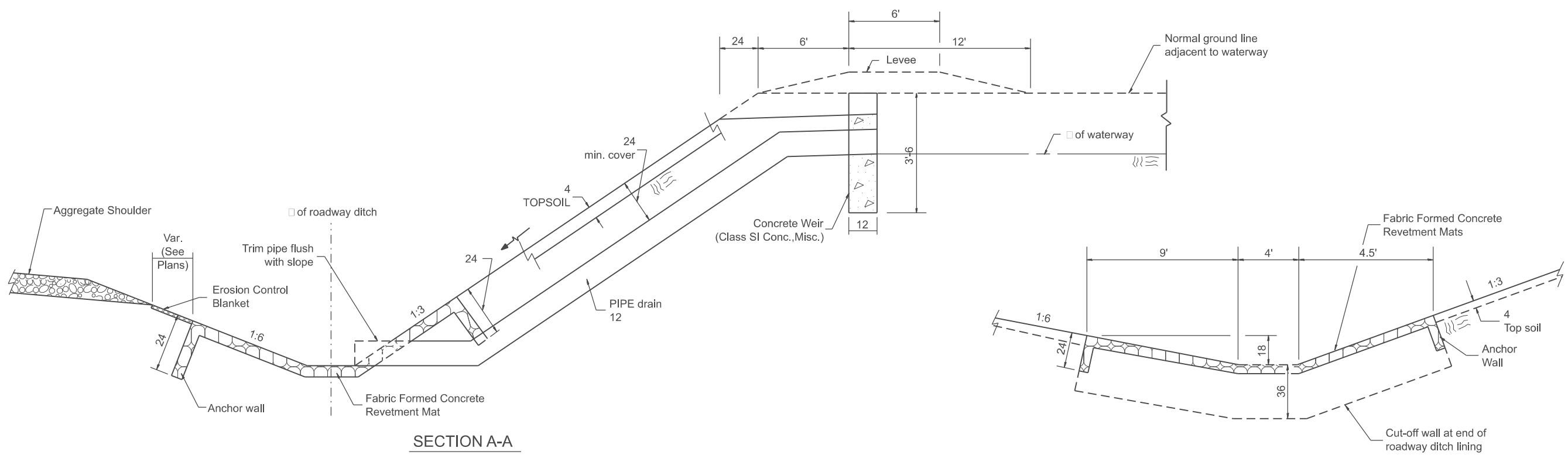
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WATERWAY EROSION CONTROL, UPSTREAM TREATMENT,
 PIPE DRAIN WITH CONCRETE WEIR**

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 285106		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

MODEL: D4-285106-02
FILE NAME: c:\pwworking\illinois.gov\thomas.cox\illinois.gov\d10559441D4-285106.dgn

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

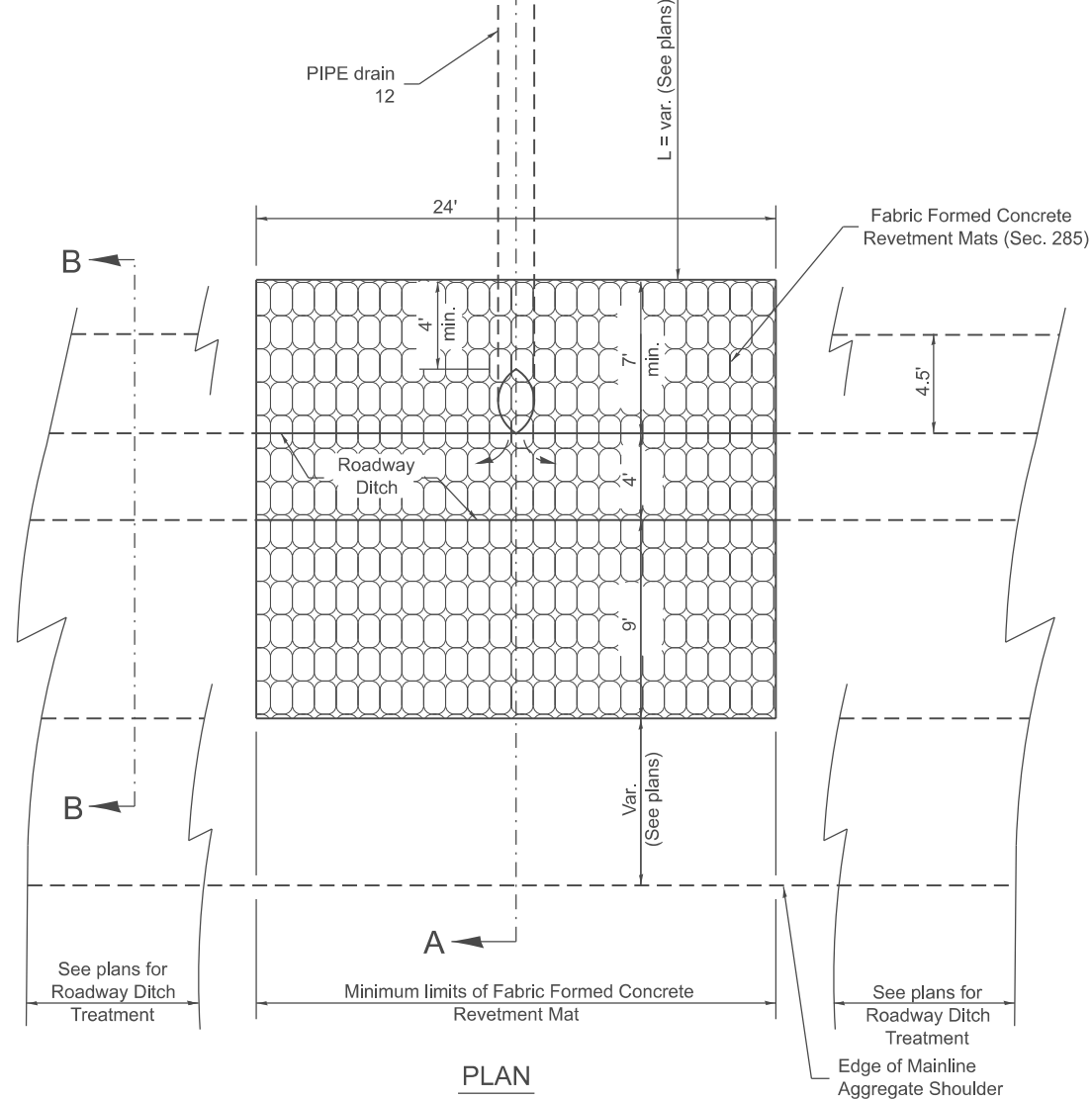
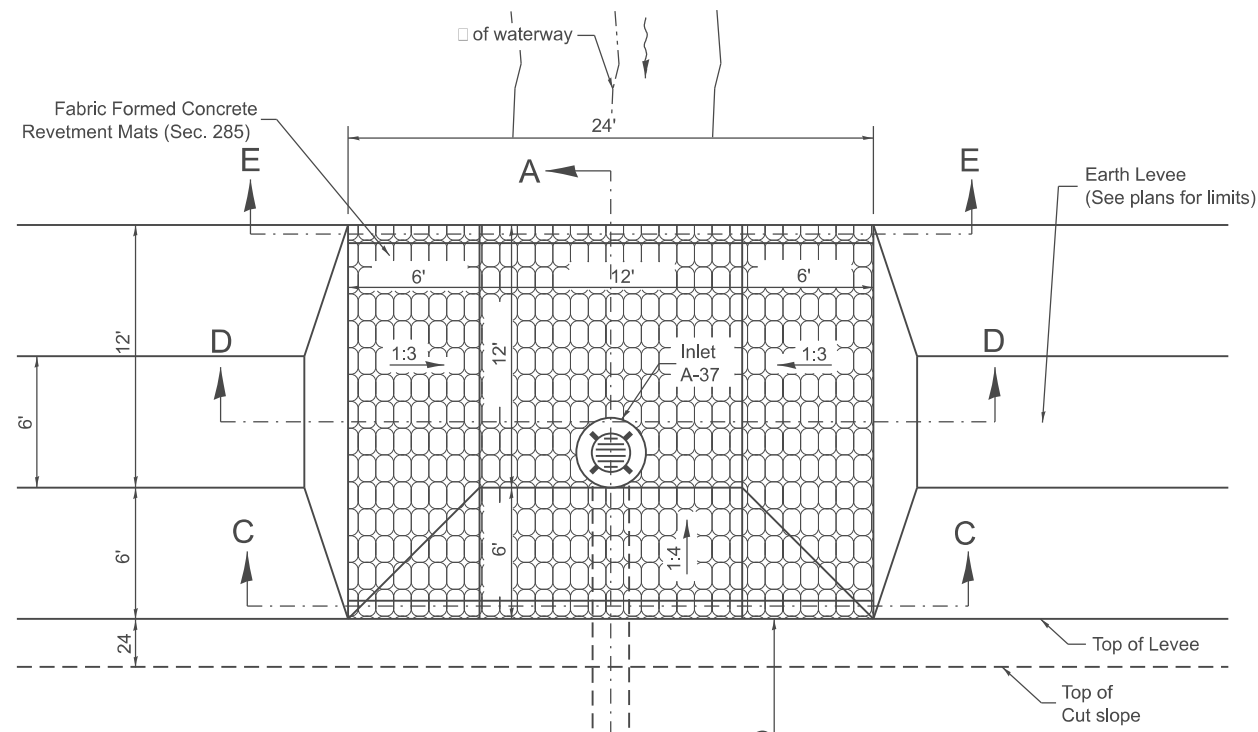
**WATERWAY EROSION CONTROL, UPSTREAM TREATMENT,
PIPE DRAIN WITH CONCRETE WEIR**
SCALE: NOT TO SCALE SHEET 000 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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DISTRICT 4 DETAIL NO. 285106		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

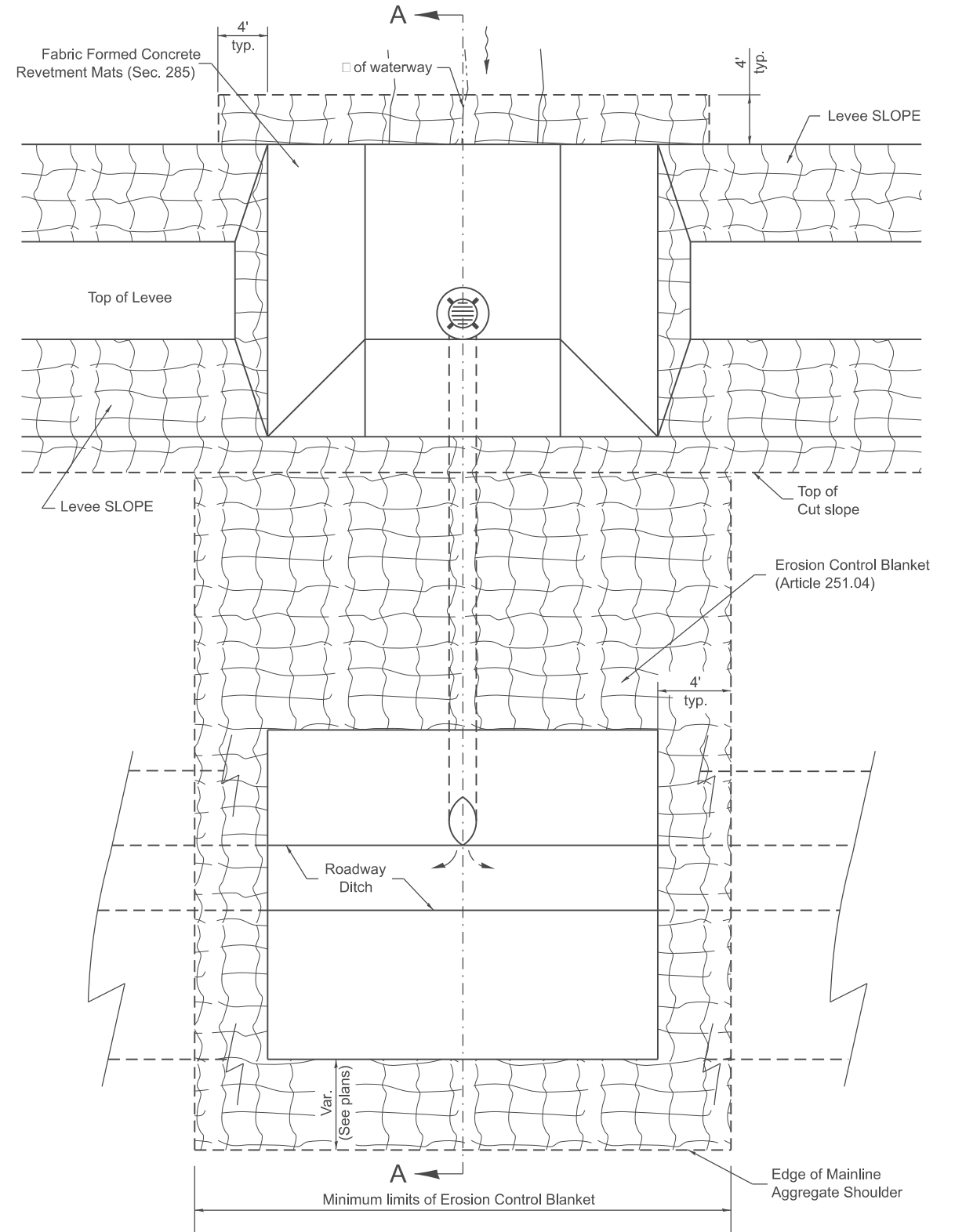
Designer Notes:

1. Designer to modify this Special Detail Sheet, as needed for inclusion in plans.
2. Include State Standard 602301 (Inlet Type A)
3. Include District Cadd Details for Fabric Formed Concrete Revetment Mats, Type 37 Grate and PIPE Elbow.

MODEL: D4-2851-01
FILE NAME: c:\pwworking\tdc\illinois\project\1055944\02-2851.dgn



PLAN



EROSION CONTROL BLANKET DETAILS

GENERAL NOTES

1. Fabric Formed Concrete Revetment Mats shall conform to SECTION 285.
2. Erosion Control Blanket shall conform to Article 251.04.
3. The material for Pipe Drains shall be Bituminous Coated Galvanized Corrugated Steel Culvert Pipe or Bituminous Coated Corrugated Aluminum Alloy Pipe in accordance with Article 601.02(f) or 601.02(i).
4. An approved Mastic Material (Article 1055.01) shall be applied to the inside of the Connecting Bands.

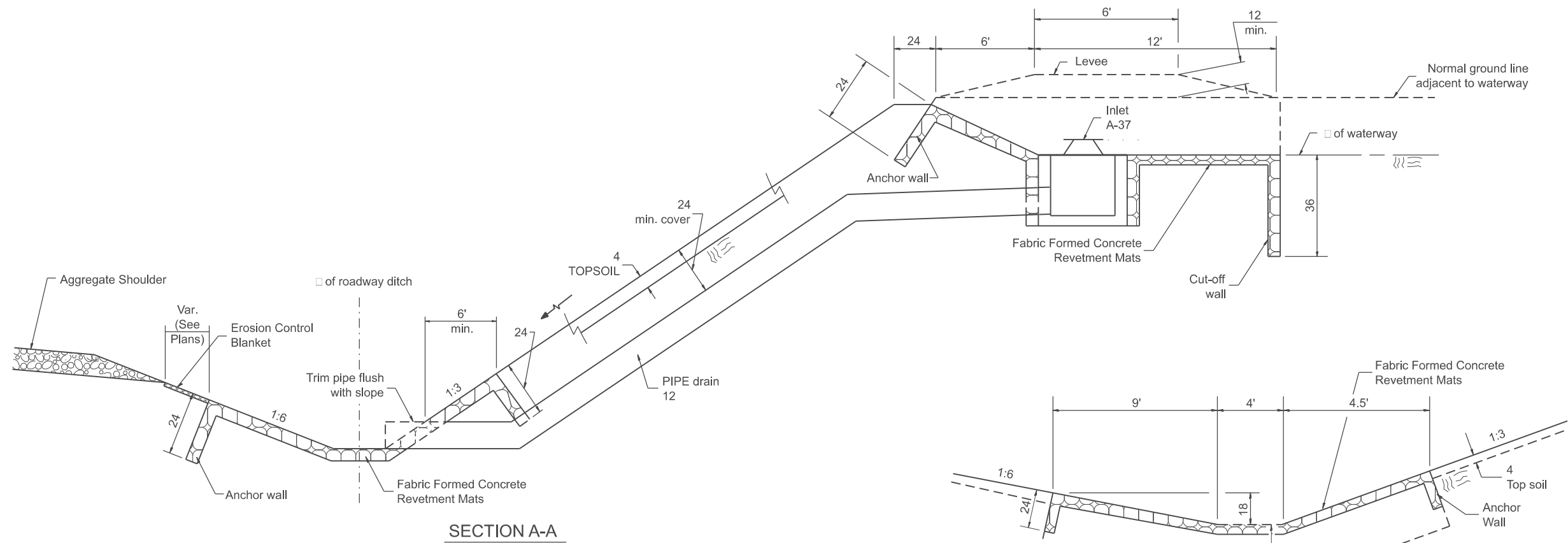
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
All dimensions are in inches unless otherwise noted.

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
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PLOT DATE = 11/11/2024	DATE -	REVISED -

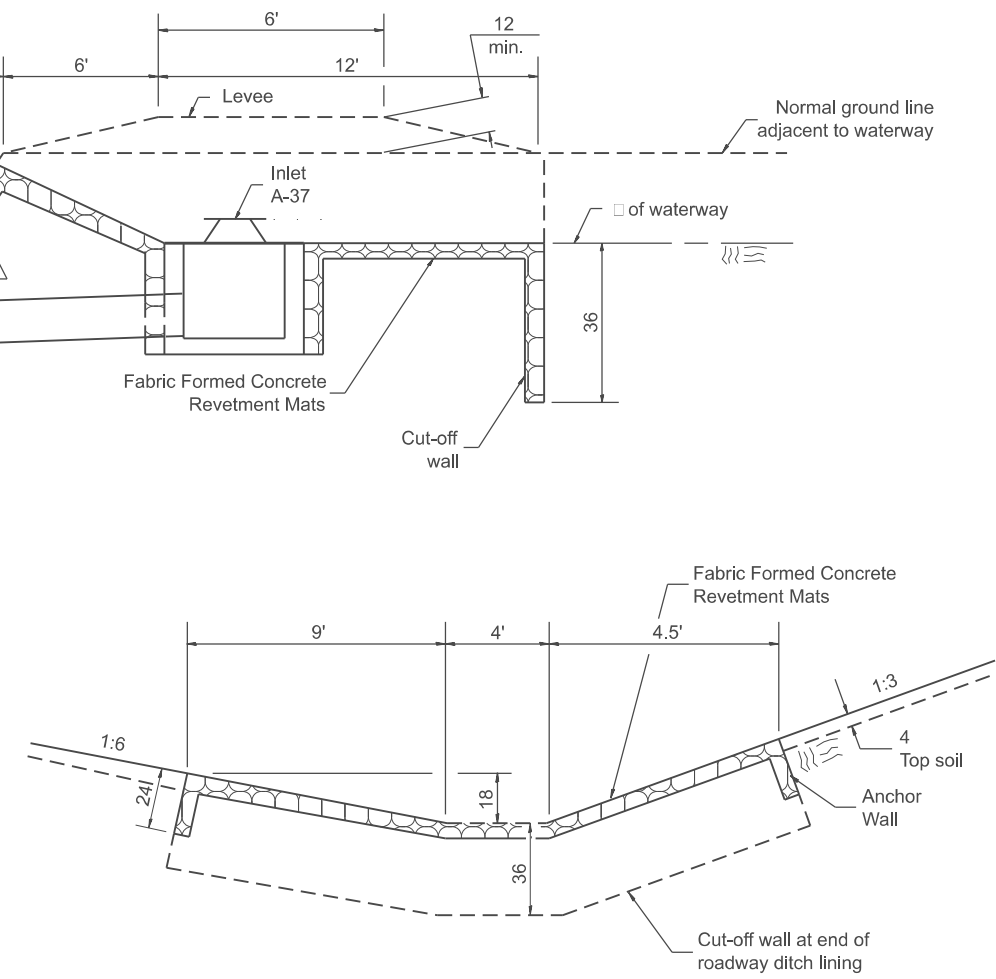
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WATERWAY EROSION CONTROL, UPSTREAM TREATMENT, PIPE DRAIN WITH INLET			
SCALE: NOT TO SCALE	SHEET 000 1	OF 2 SHEETS	STA. TO STA.

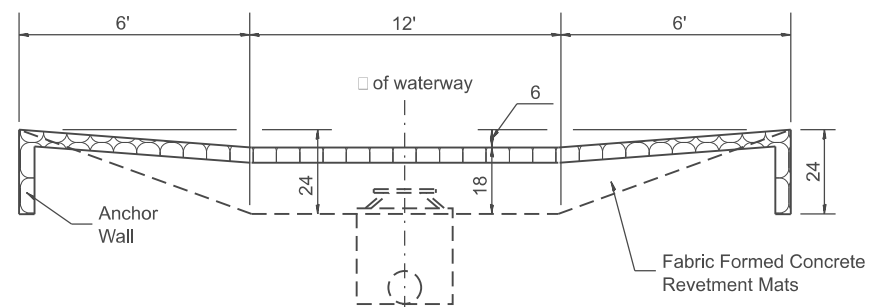
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DISTRICT 4 DETAIL NO. 285111		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



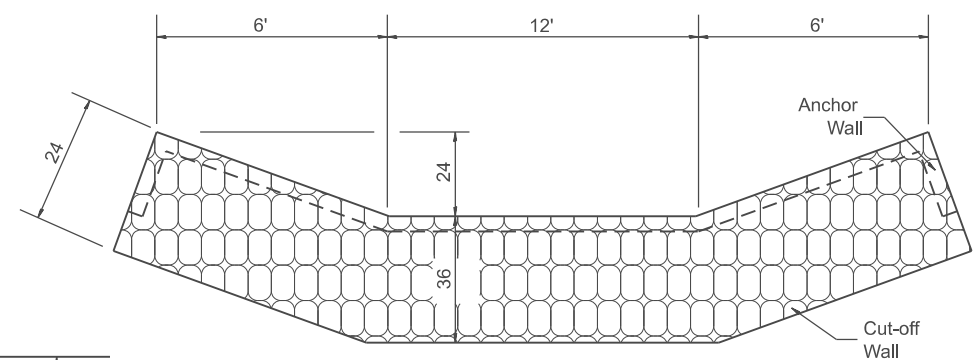
SECTION A-A



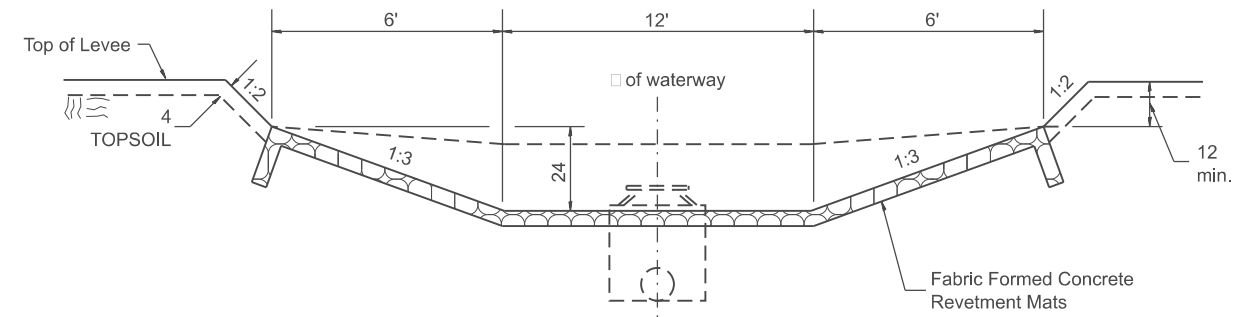
SECTION B-B



SECTION C-C
(WEIR DETAIL)



SECTION E-E
(CUT-OFF WALL)



SECTION D-D

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
All dimensions are in inches unless otherwise noted.

MODEL: D4-28511-02
FILE NAME: c:\pwworking\illinois.gov\thomas.cox\illinois.gov\10559441D4-28511.dgn

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

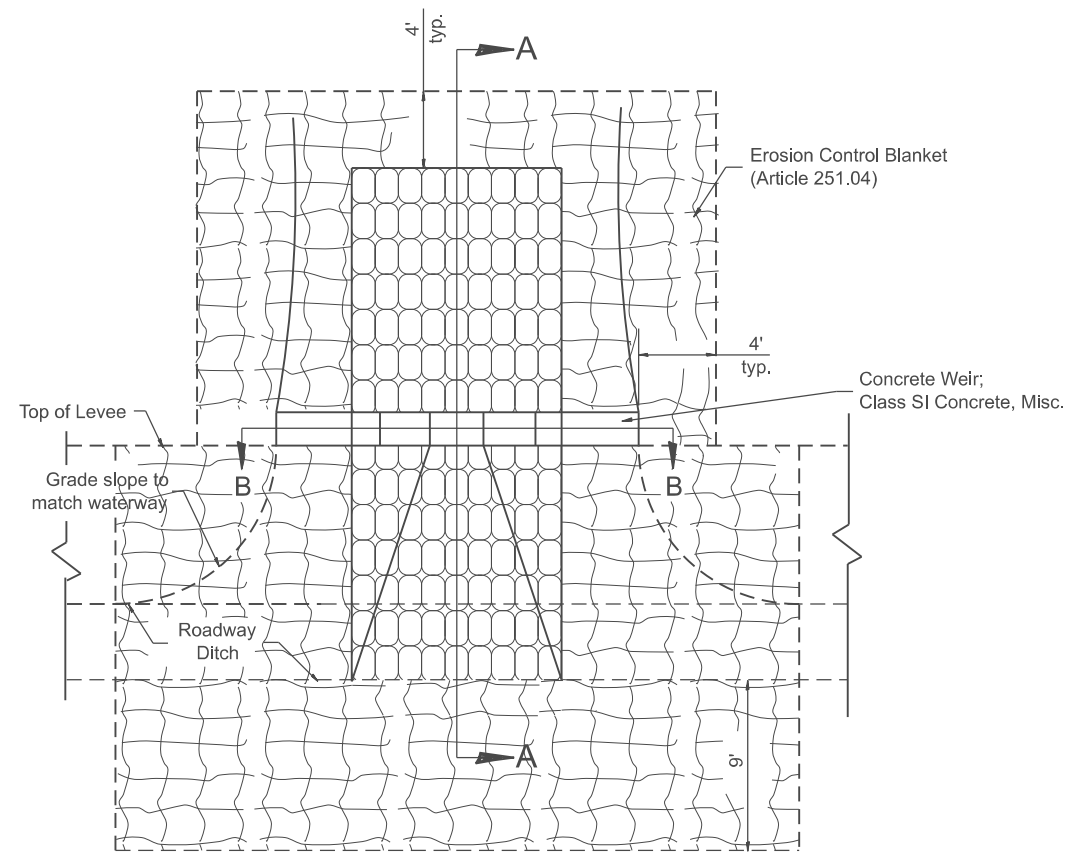
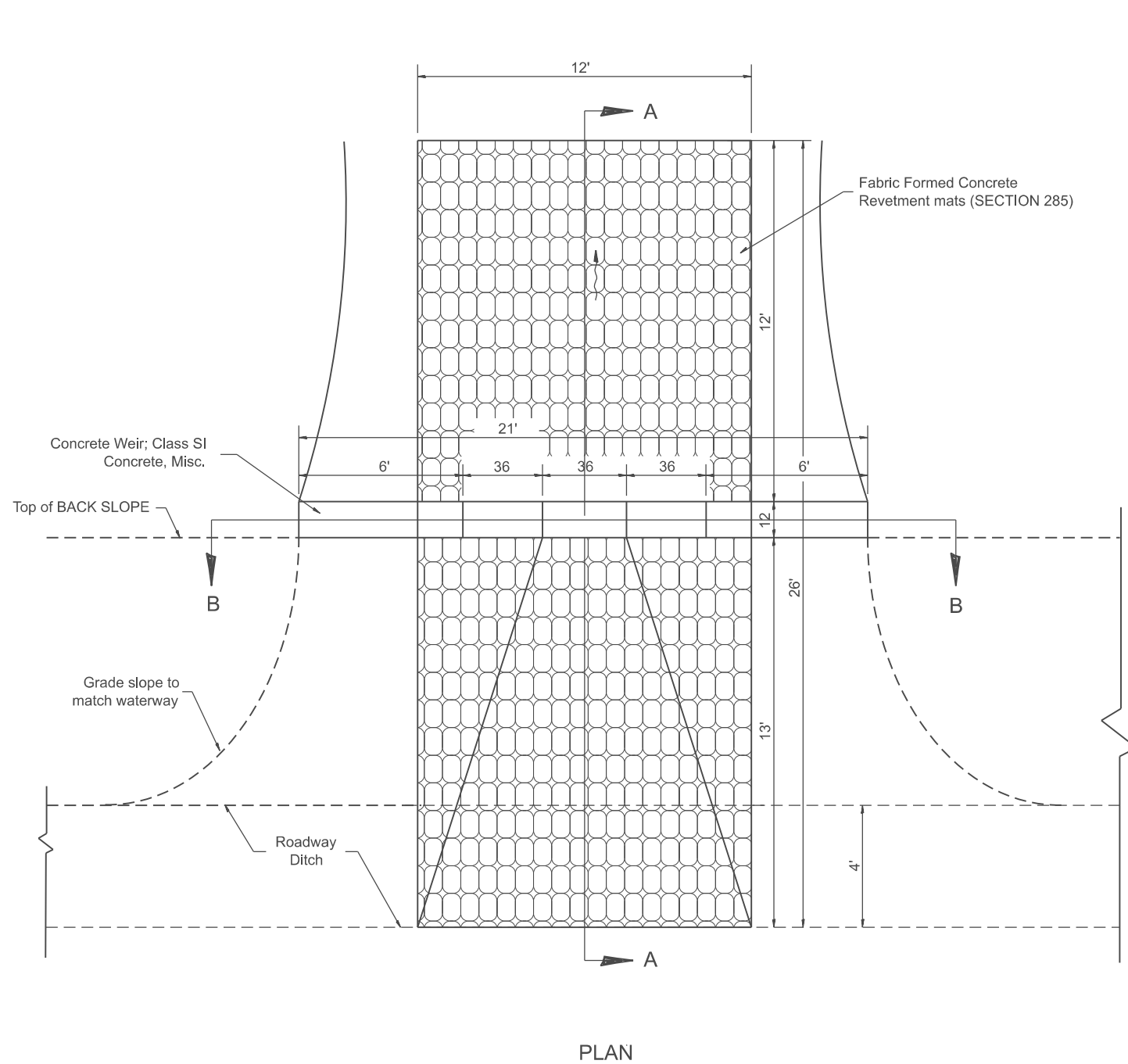
WATERWAY EROSION CONTROL, UPSTREAM TREATMENT, PIPE DRAIN WITH INLET			
SCALE: NOT TO SCALE	SHEET 0002	OF 2 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 285111		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

Designer Notes:

1. Designer to modify this Special Detail sheet, as needed, for inclusion in plans.
2. This treatment is recommended for small waterways; < 30' in width.
3. Include District CADD Detail for Fabric Formed Concrete Revetment mats.
4. Designer to add Drainage Structure Details as needed. The CULVERT flowline should be located such that CULVERT siltation is minimized.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\Organization\ChilIDOT_Standards\CivilIDOT_Sheets.dwg



EROSION CONTROL BLANKET DETAILS

GENERAL NOTES

1. Fabric Formed Concrete Revetment Mats shall conform to Section 285.
2. Erosion Control Blanket shall conform to Article 251.04.
3. Class SI Concrete shall conform to Section 503.

All dimensions are in inches unless otherwise noted.

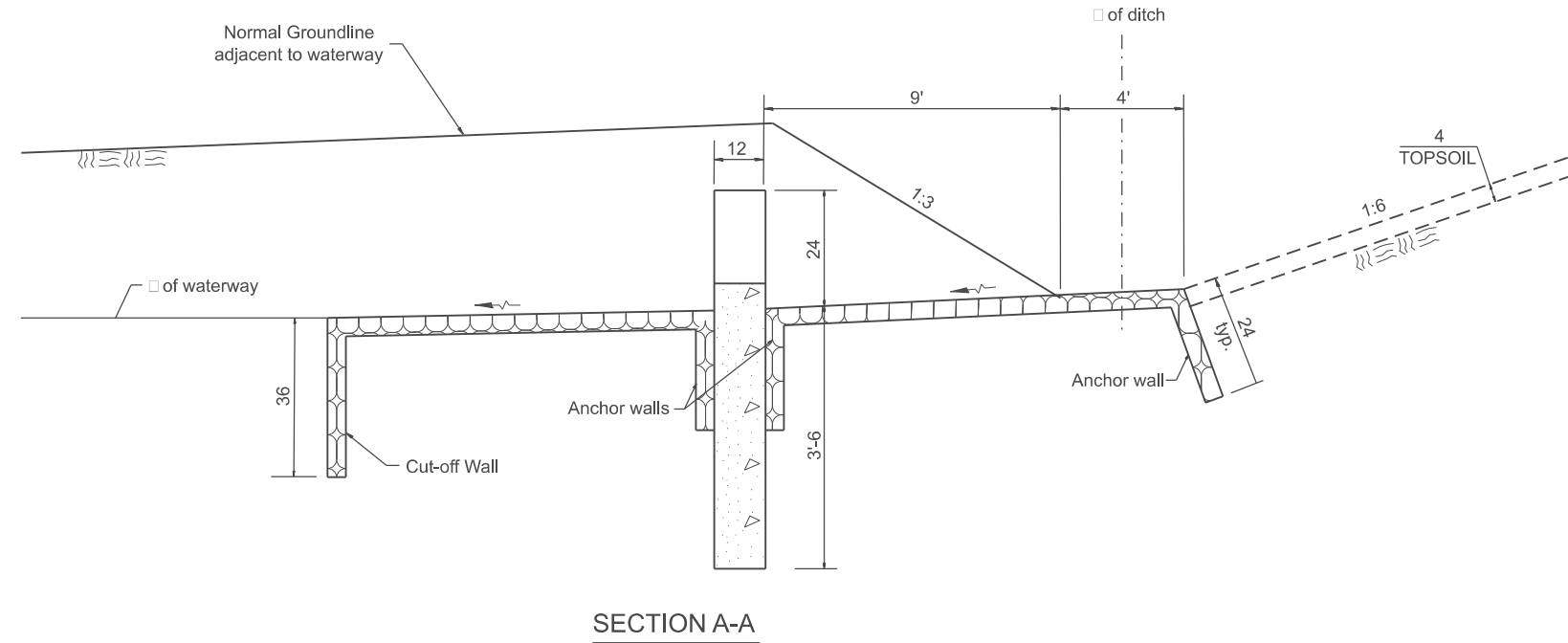
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

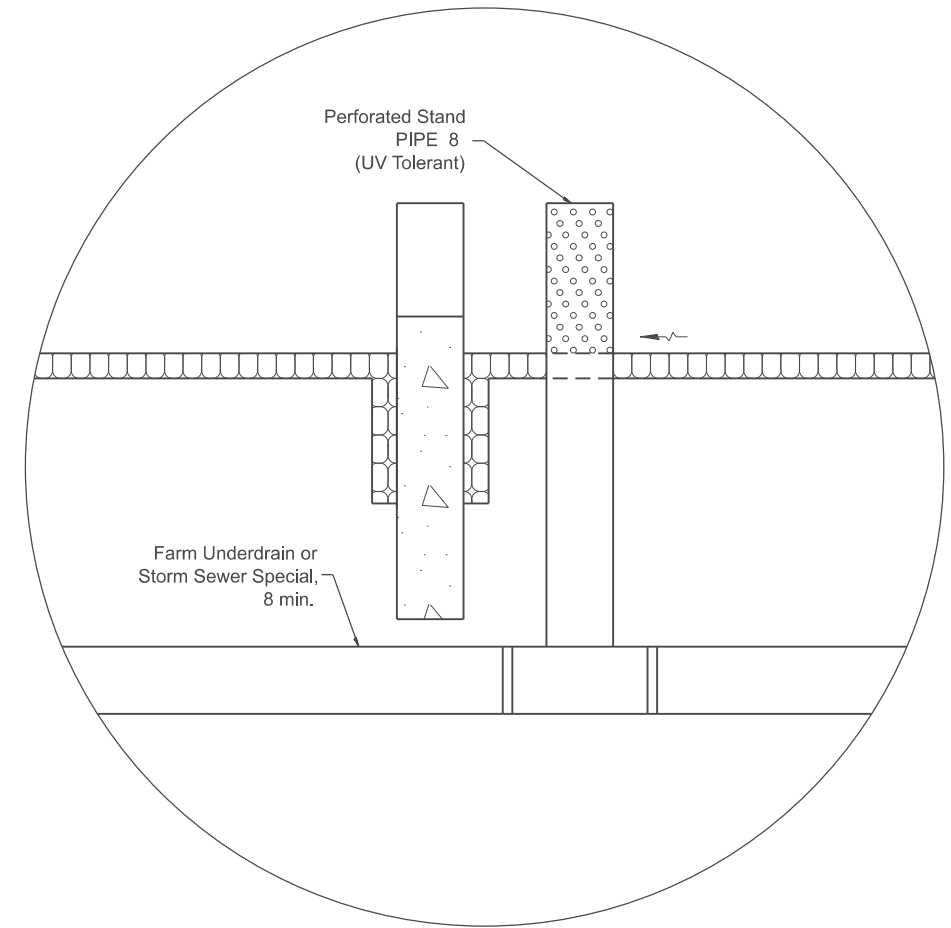
**WATERWAY EROSION CONTROL,
DOWNSTREAM TREATMENT, CONCRETE WEIR**

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 285116		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

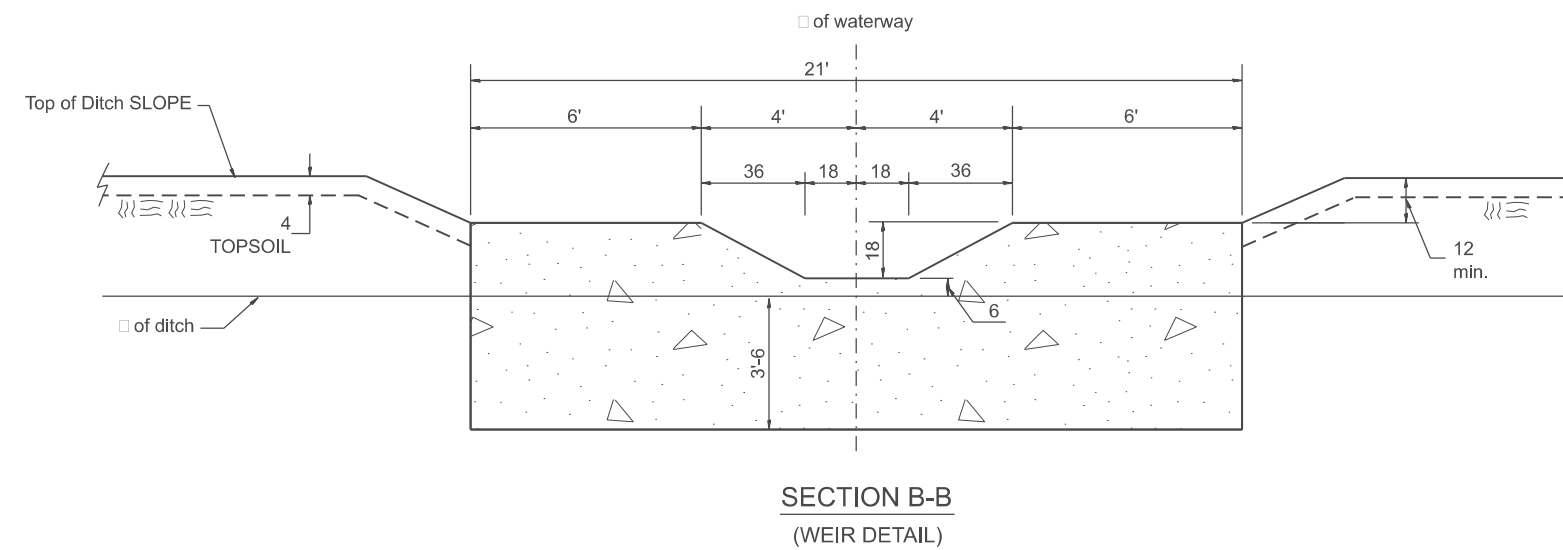


SECTION A-A



ALTERNATE TREATMENT
(WITH EXISTING FARM UNDERDRAIN)

NOTE
If the alternate treatment is utilized, then a formal agreement should be executed between the Department and the property owner, that defines future maintenance responsibility. The agreement should be recorded on the property documents at the county courthouse, and should be executed as early in the contract as possible.



SECTION B-B
(WEIR DETAIL)

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\1011\Organization\Chil\DOT_Standards\Cell\DOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**WATERWAY EROSION CONTROL,
DOWNSTREAM TREATMENT, CONCRETE WEIR**

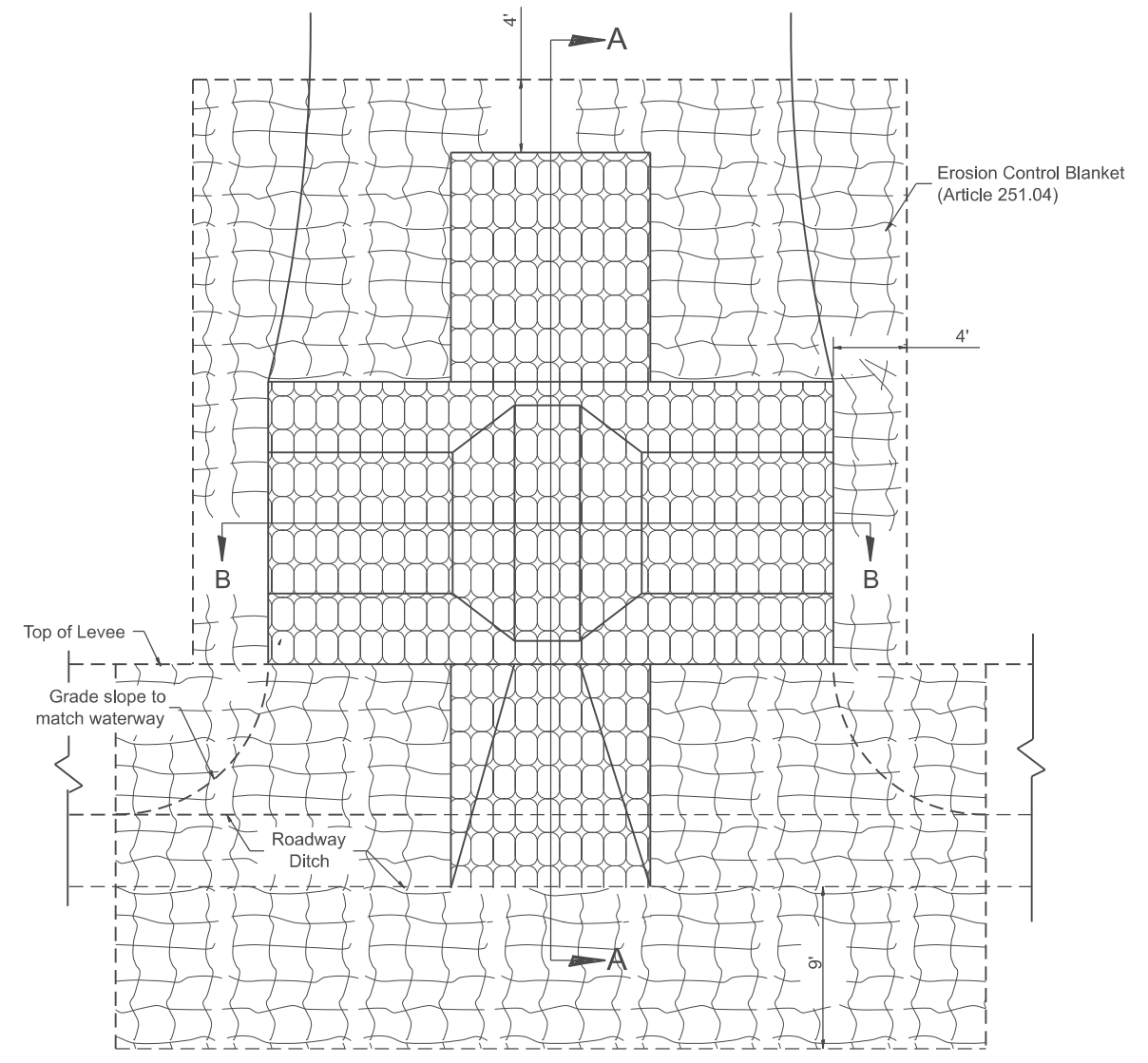
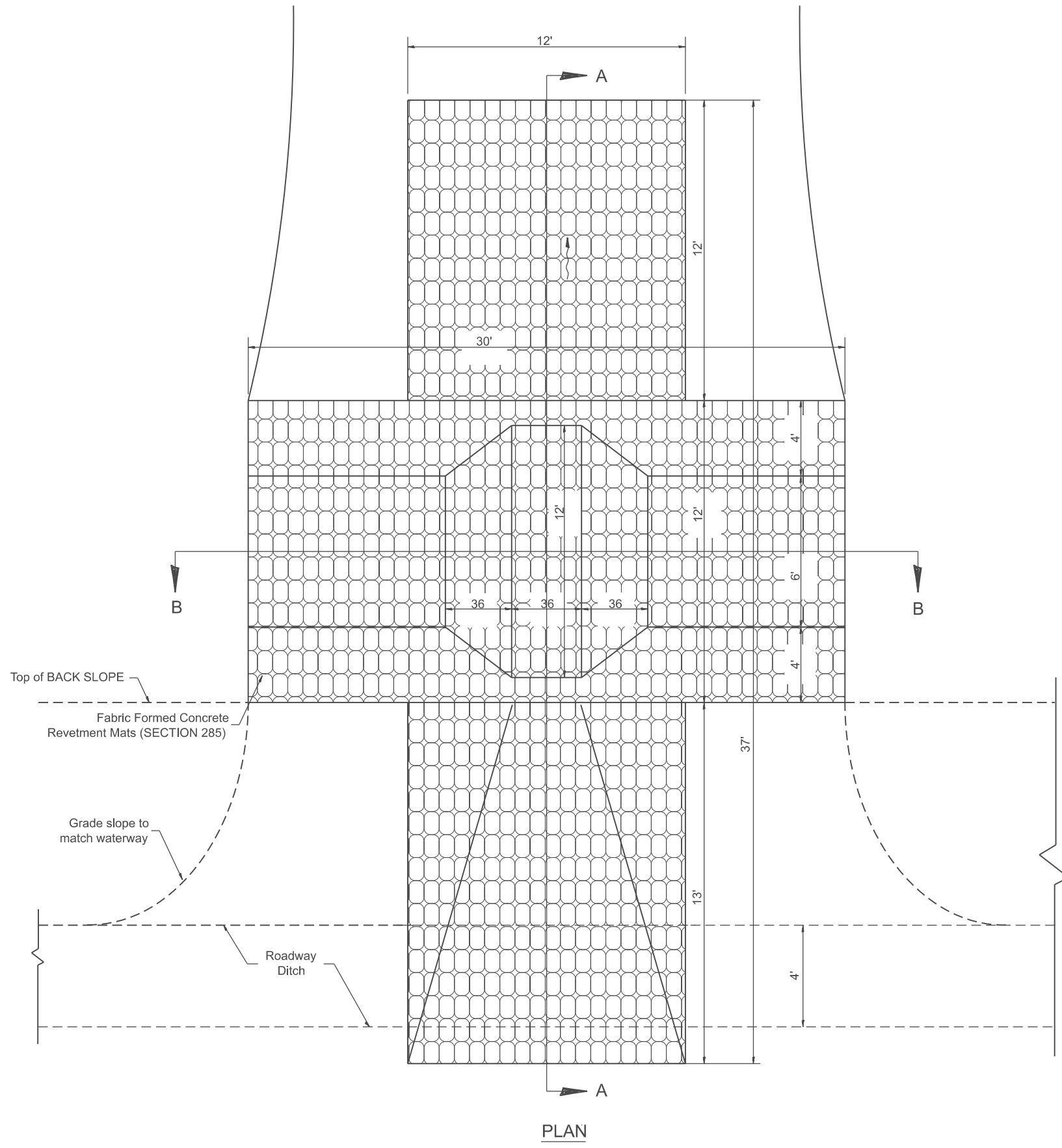
SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 285116		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

Designer Notes:

1. Designer to modify this Special Detail sheet, as needed, for inclusion in plans.
2. This treatment is recommended for large waterways; > 30' (9.0 m) in width.
3. Include District CADD Detail for Fabric Formed Concrete Revetment Mats.
4. Designer to add Drainage Structure Details as needed. The CULVERT flowline should be located such that CULVERT siltation is minimized.

MODEL: D4-285121-01
 FILE NAME: c:\pwworking\illinois.gov\thomas.cox\illinois.gov\10559441\04-285121.dgn



GENERAL NOTES

1. Fabric Formed Concrete Revetment Mats shall conform to Section 285.
2. Erosion Control Blanket shall conform to Article 251.04.

All dimensions are in inches unless otherwise noted.

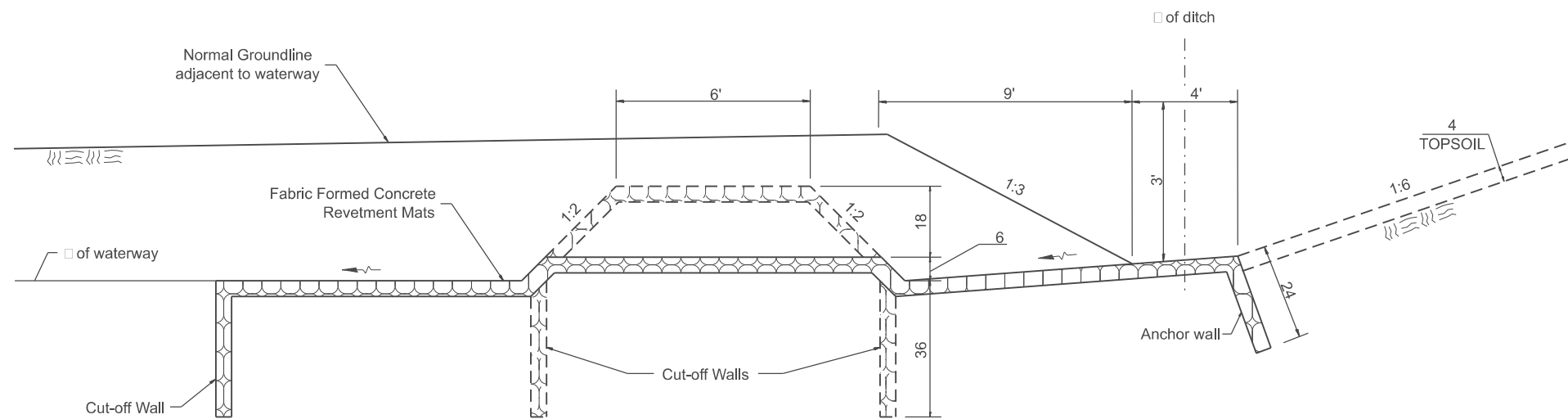
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

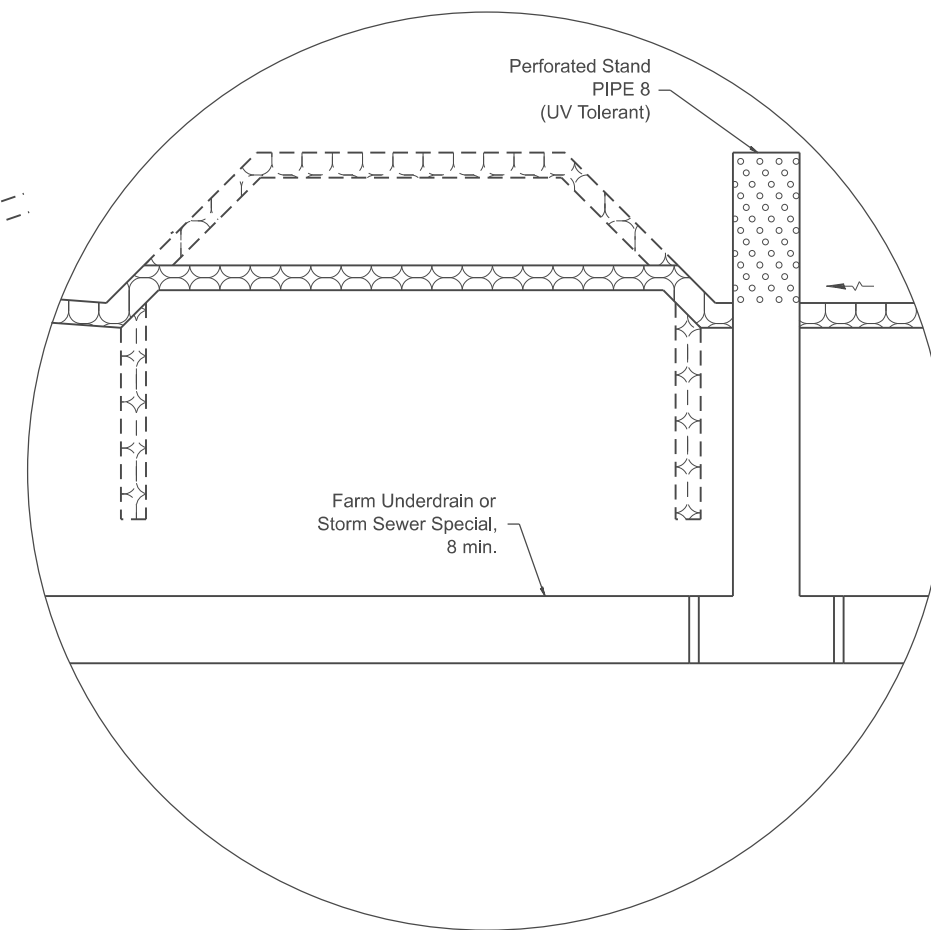
**WATERWAY EROSION CONTROL, DOWNSTREAM TREATMENT,
 FABRIC FORMED CONCRETE REVETMENT MATS**

SCALE: NOT TO SCALE SHEET 0001 OF 2 SHEETS STA. TO STA.

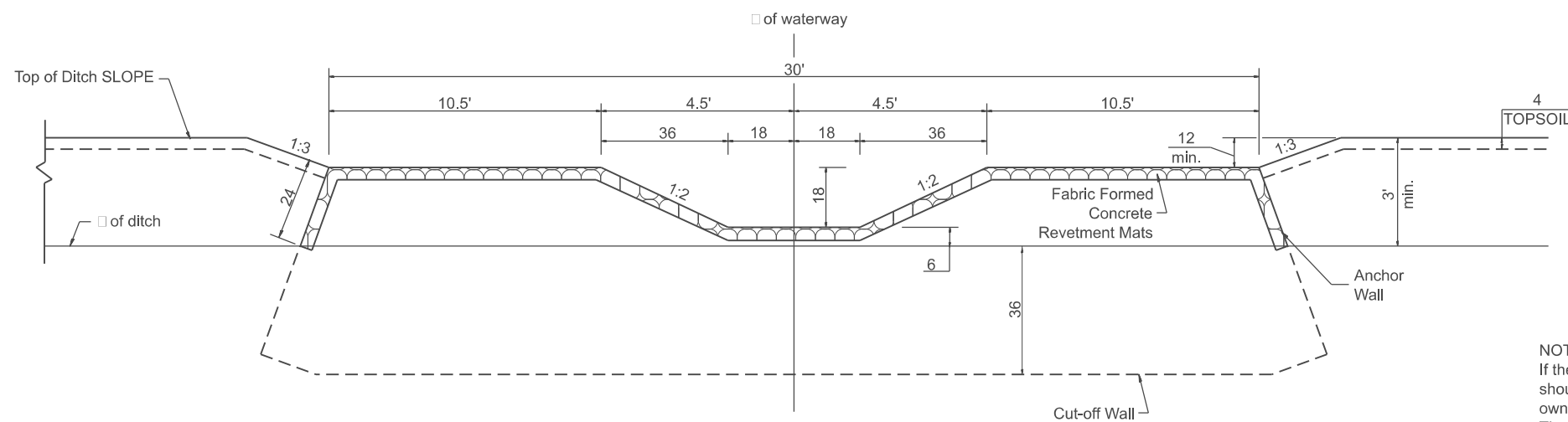
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DISTRICT 4 DETAIL NO. 285121			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



SECTION A-A



ALTERNATE TREATMENT
(WITH EXISTING FARM UNDERDRAIN)



SECTION B-B

NOTE
If the alternate treatment is utilized, then a formal agreement should be executed between the Department and the property owner, that defines future maintenance responsibility. The agreement should be recorded on the property documents at the county courthouse, and should be executed as early in the contract as possible.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\1011\Organization\Chil\DOT_Standards\Cell\DOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

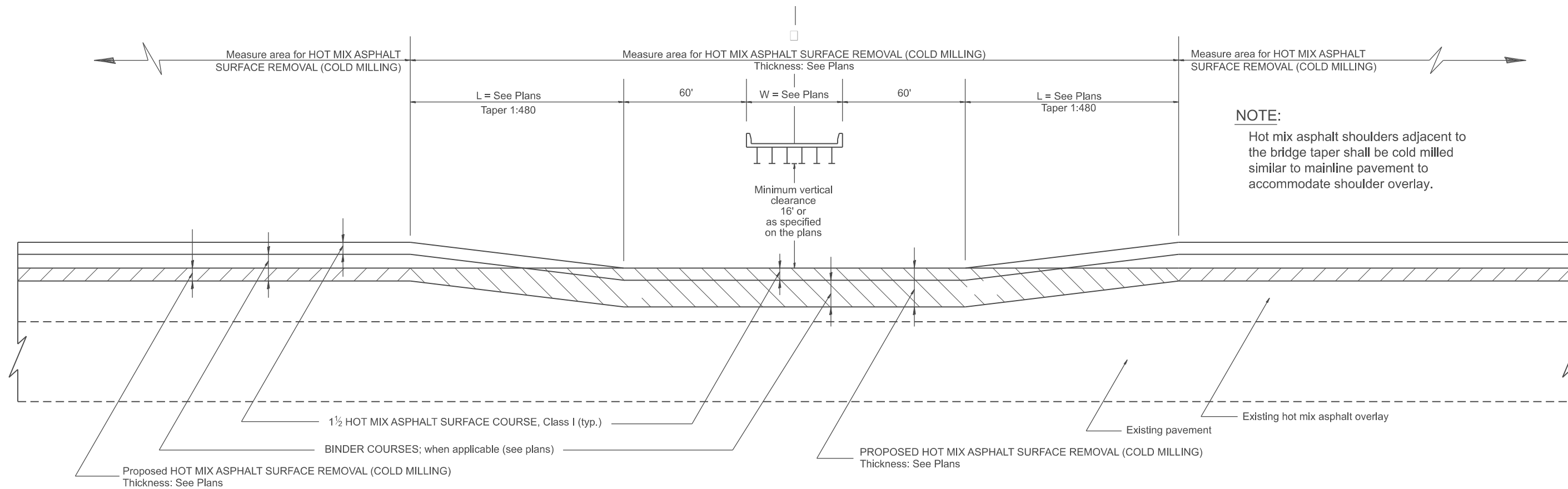
**WATERWAY EROSION CONTROL, DOWNSTREAM TREATMENT,
FABRIC FORMED CONCRETE REVETMENT MATS**

SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 285121		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

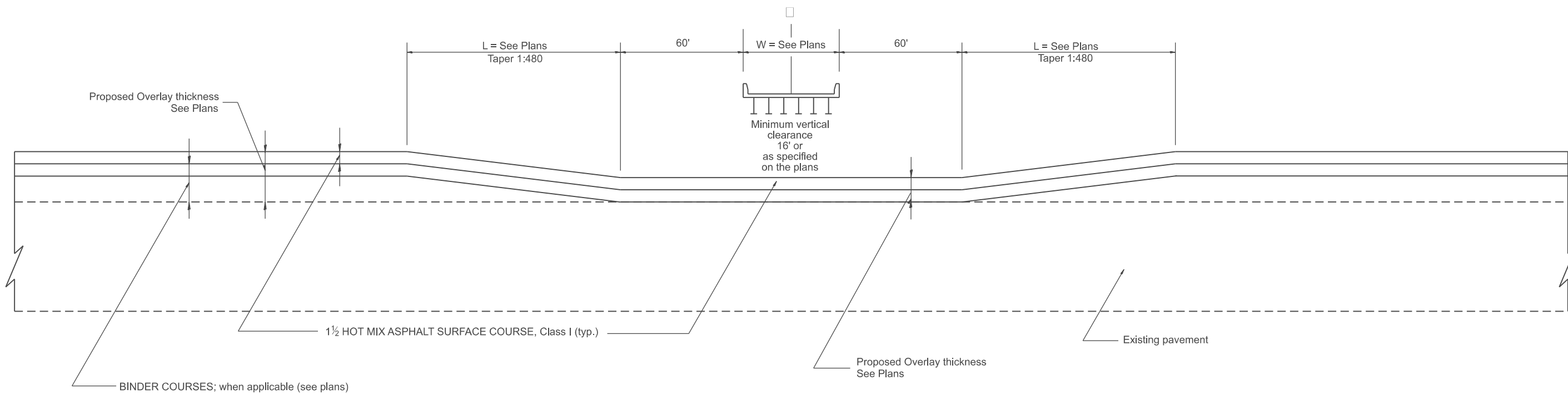
DESIGNER NOTES:
 1. THIS TREATMENT SHOULD ONLY BE USED WHERE NECESSARY TO MAINTAIN MINIMUM VERTICAL CLEARANCE.
 THE PREFERRED TREATMENT IS FULL DEPTH OVERLAY. CHECK WITH YOUR PROJECT ENGINEER PRIOR TO USING.
 INCLUDE DISTRICT SPECIAL PROVISION FOR HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING).

MODEL: SHT_PLA4
 FILE NAME: C:\Bentley\CONNECT101\Organization-Chilidot_Standards\CallIDOT_Sheets.dwg



NOTE:
 Hot mix asphalt shoulders adjacent to the bridge taper shall be cold milled similar to mainline pavement to accommodate shoulder overlay.

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



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

All dimensions are in inches unless otherwise noted.

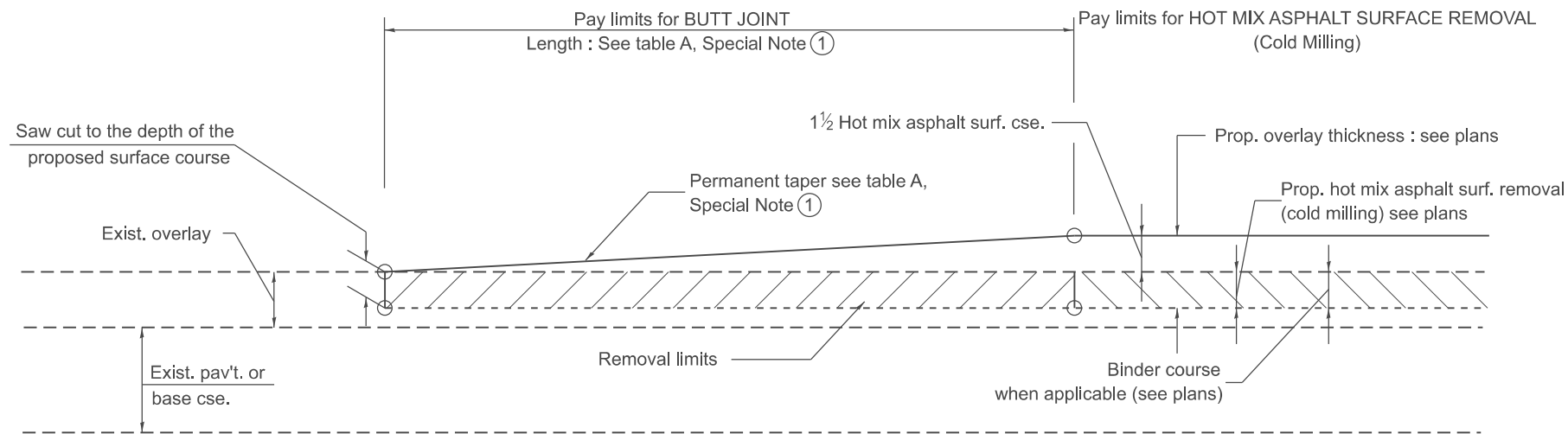
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT OVERLAY UNDER STRUCTURES
 SPECIAL TREATMENT

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 STANDARD NO. 406001		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		



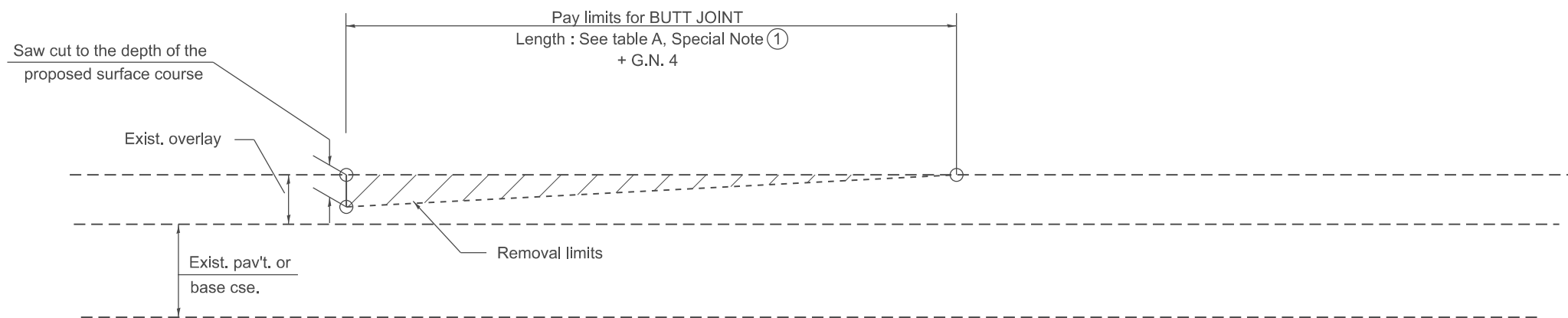
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

**TABLE A
TAPER RATES**

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

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)

All dimensions are in inches unless otherwise noted.

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FILE NAME: C:\Bentley\CONNECT\1011\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

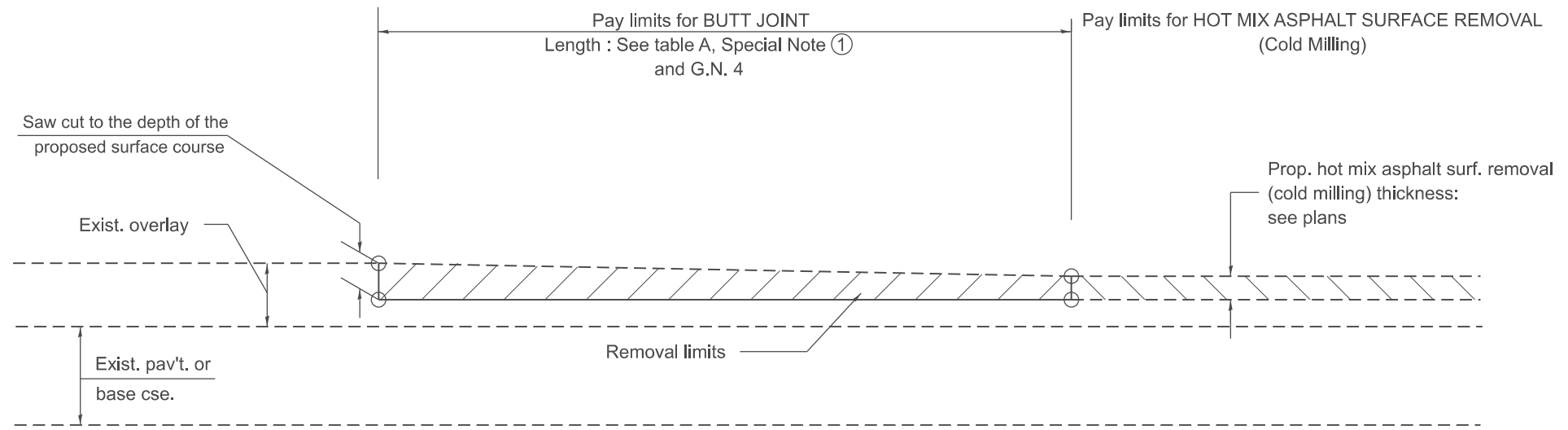
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	DRAWN -	REVISED -
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PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

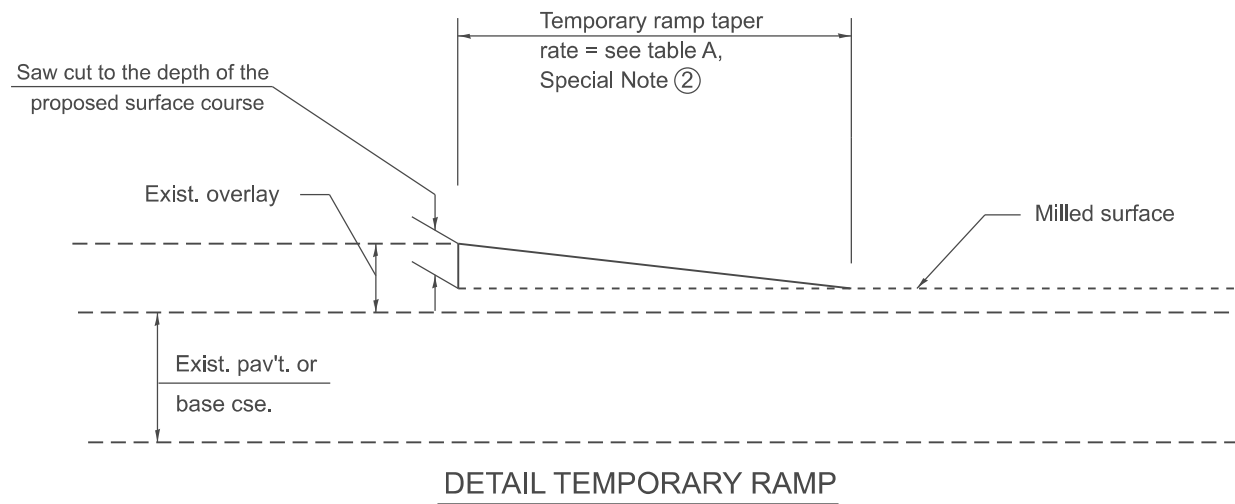
BUTT JOINTS

SCALE: NOT TO SCALE SHEET 1 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 STANDARD NO. 406101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



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



All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
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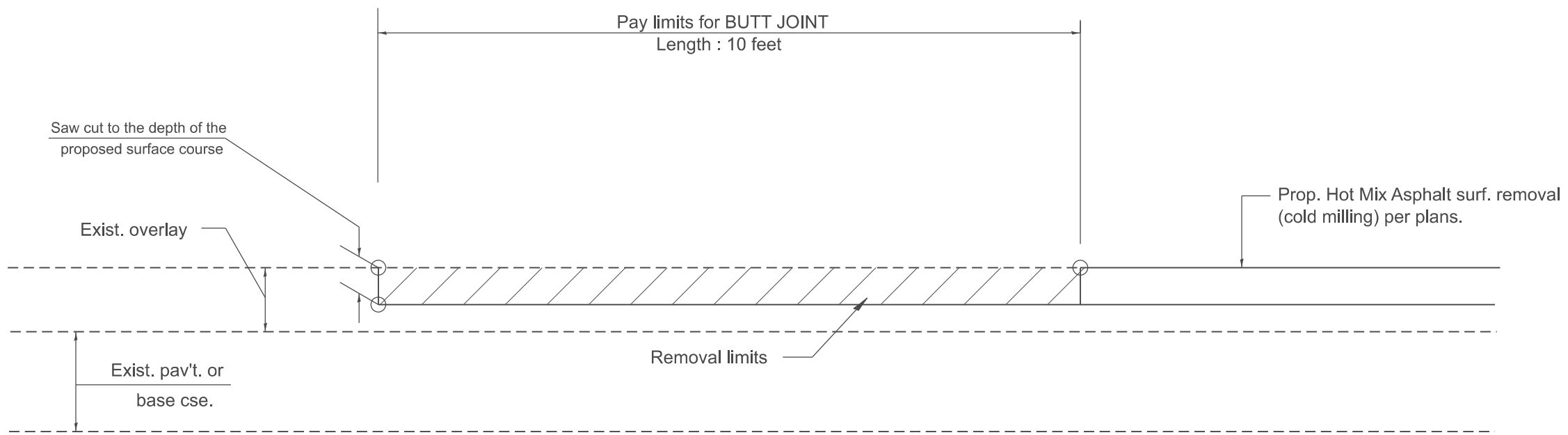
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BUTT JOINTS

SCALE: NOT TO SCALE SHEET 2 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 STANDARD NO. 406101		CONTRACT 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

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\organization\Chil\IDOT_Standards\Cell\IDOT_Sheets.cel

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

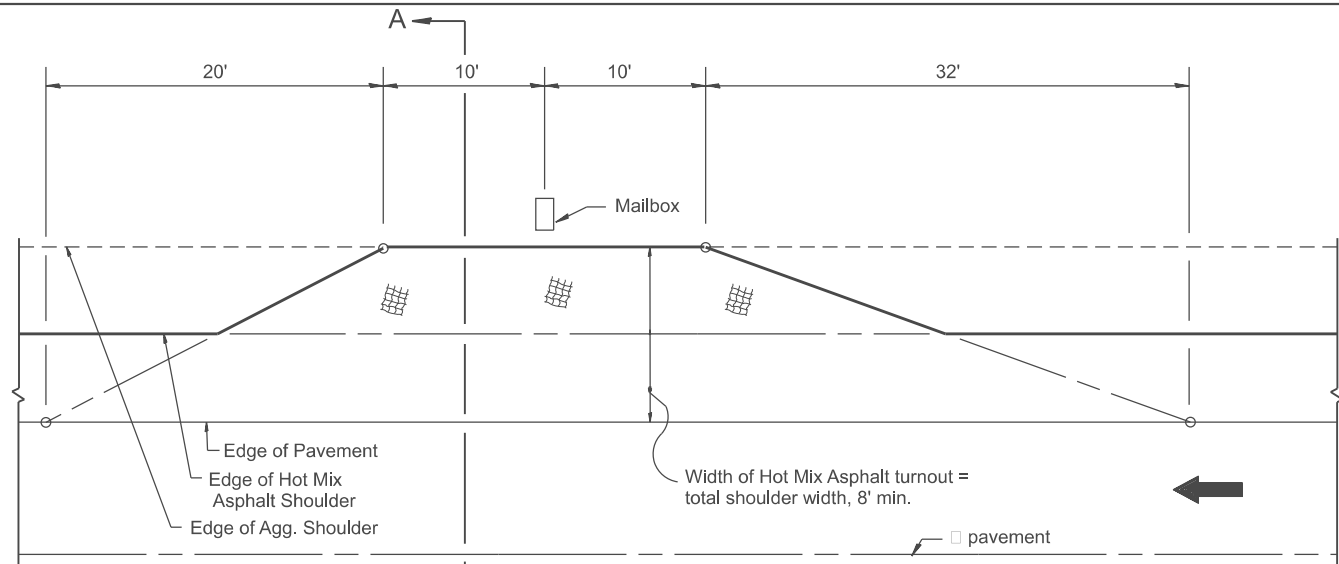
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

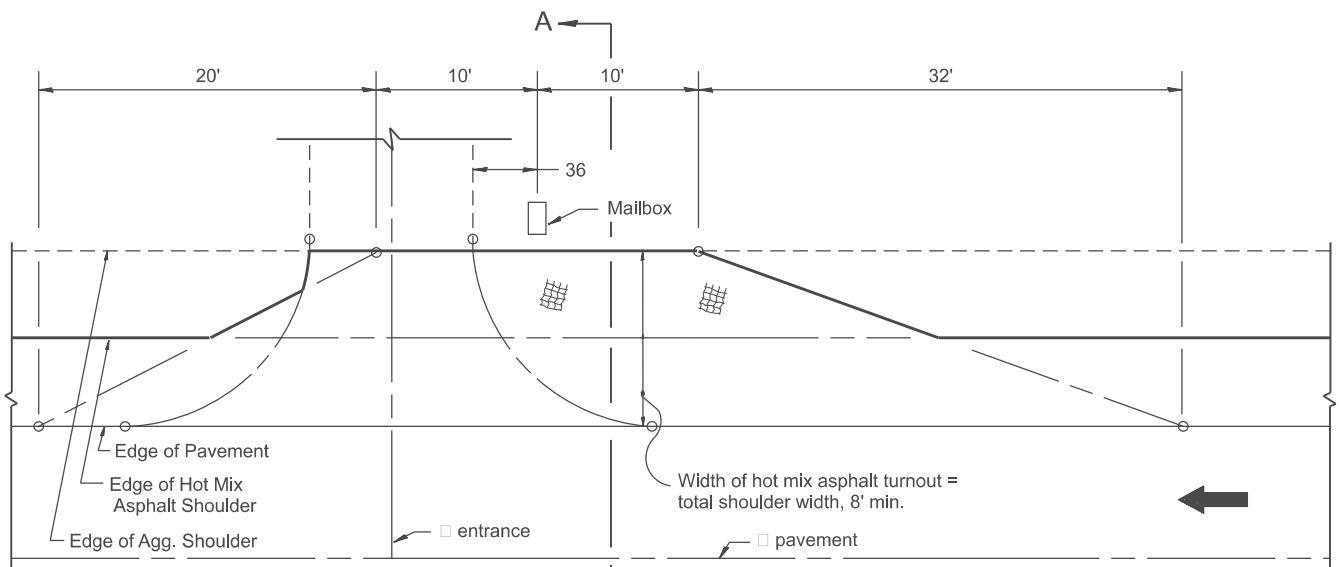
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 STANDARD NO. 406101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

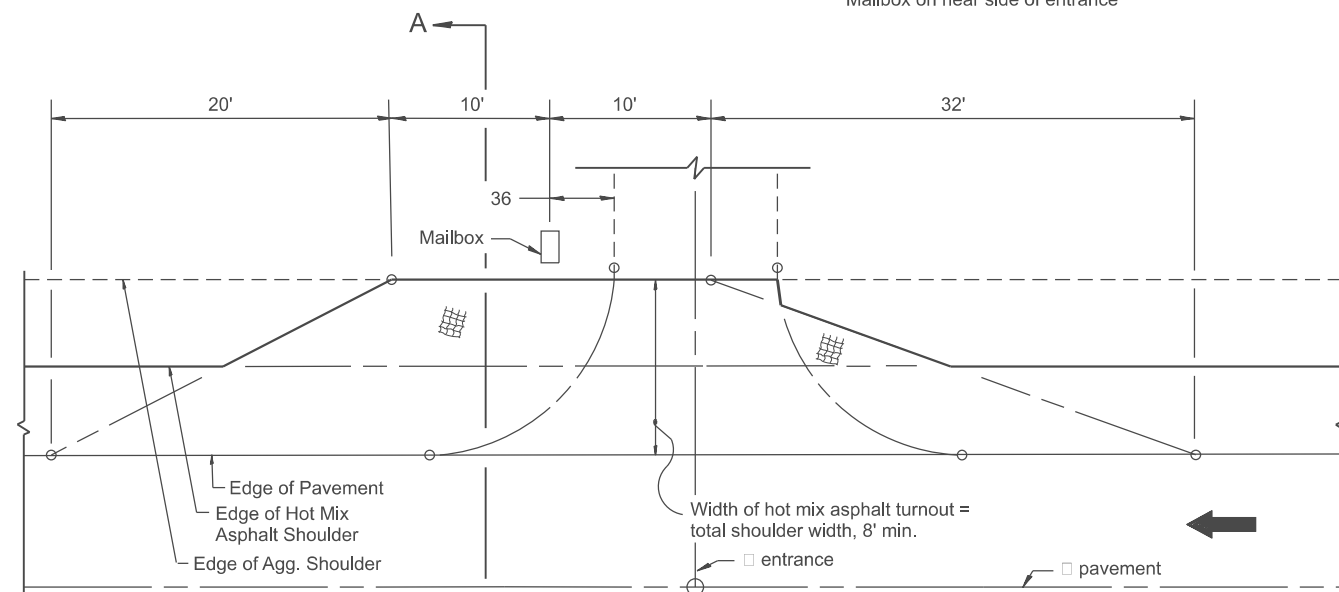
DESIGNER NOTES:
 1. THIS DRAWING REPLACES STATE STANDARD 406201
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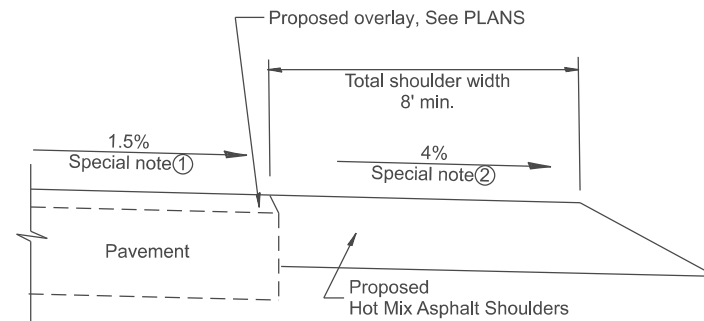
METHOD "T"
 Typical Application



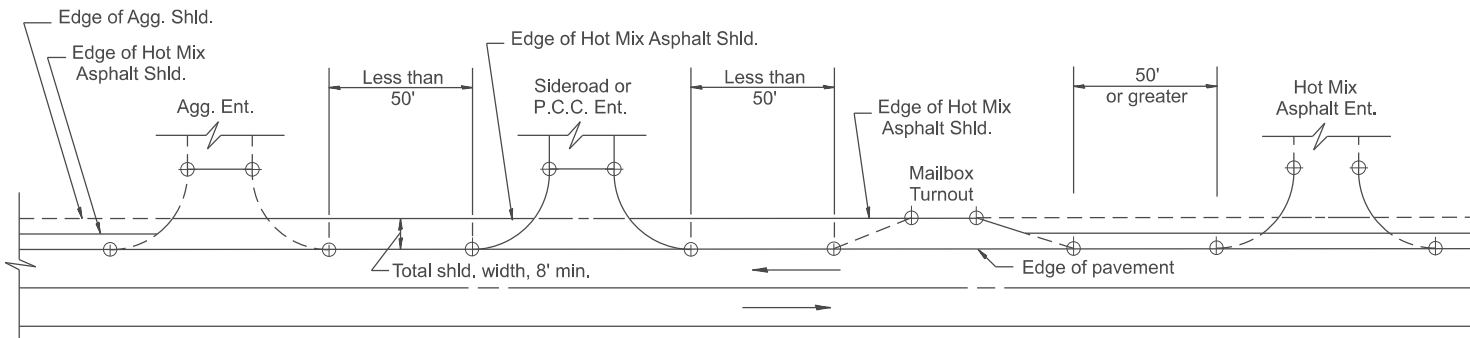
METHOD "N"
 Mailbox on near side of entrance



METHOD "F"
 Mailbox on far side of entrance



SECTION A-A



DETAIL A

SHOULDER TREATMENT FOR CLOSELY SPACED SIDEROADS, ENTRANCES, AND/OR MAILBOX TURNOUTS

GENERAL NOTES

- Mailbox turnouts shall slope away from the pavement edge at a rate equal to the shoulder slope. See SECTION A-A.
- The total shoulder width, 8' minimum, shall be paved between sideroads entrances and/or mailbox turnouts at locations where the distance between radius or taper control points is less than 50'. See DETAIL A.
- Mailboxes shall be mounted such that the face of the mailbox is 6 to 12 and the post a minimum of 24 from the edge of the turnout surfacing.

SPECIAL NOTES

- The mainline pavement cross-slope is 1.5% for tangent alignment. See PLANS for cross-slope on super-elevated horizontal curves.
- The shoulder slope shall control the turnout slope. The standard cross-slope is 4% for tangent alignment. Through super-elevated curves, the maximum pavement-shoulder breakover should not be greater than 10% for shoulders 6' and wider and 12% for shoulders 4' and less. Where 12 paved shoulders are provided, the breakover should be at the edge of the paved shoulder rather than at the pavement edge.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

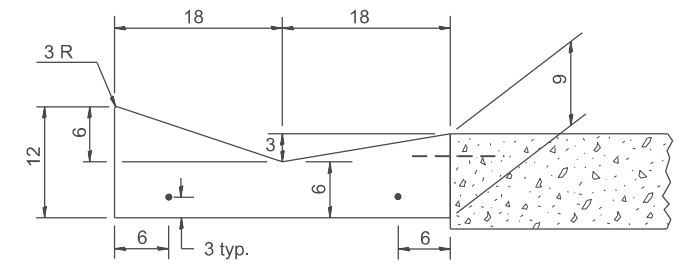
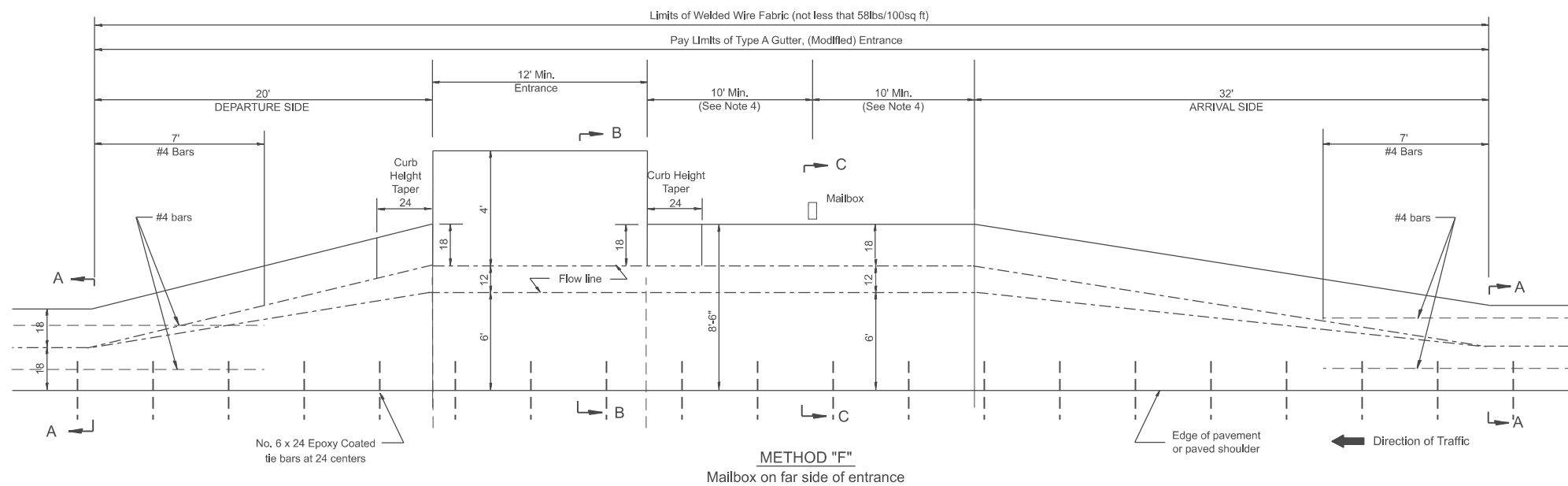
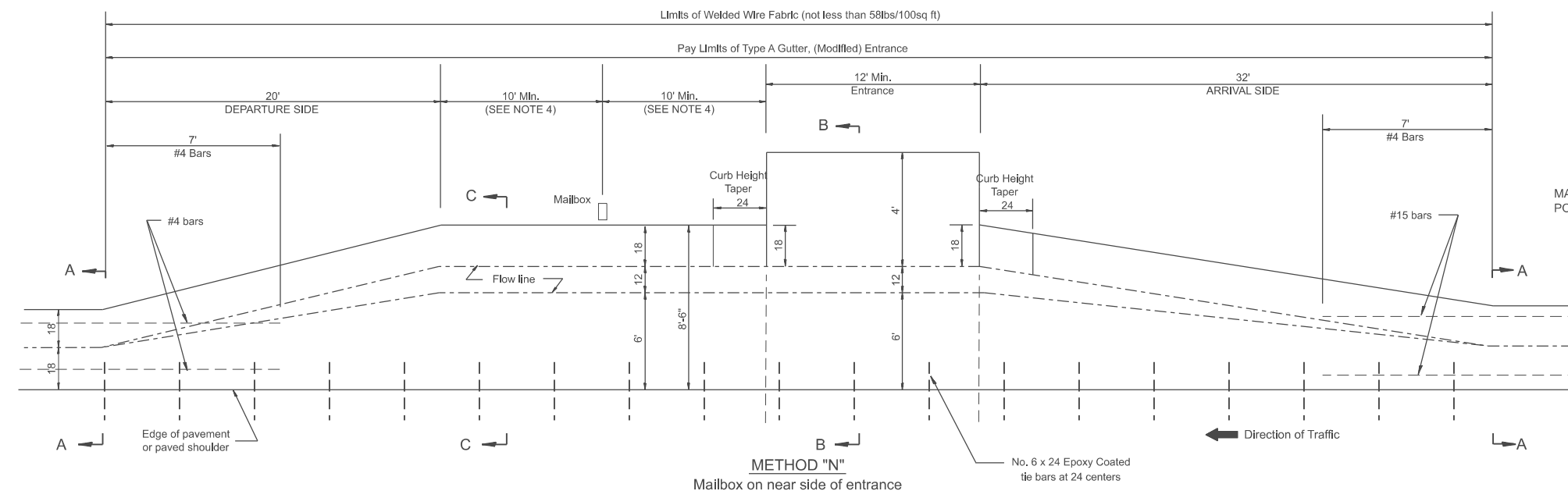
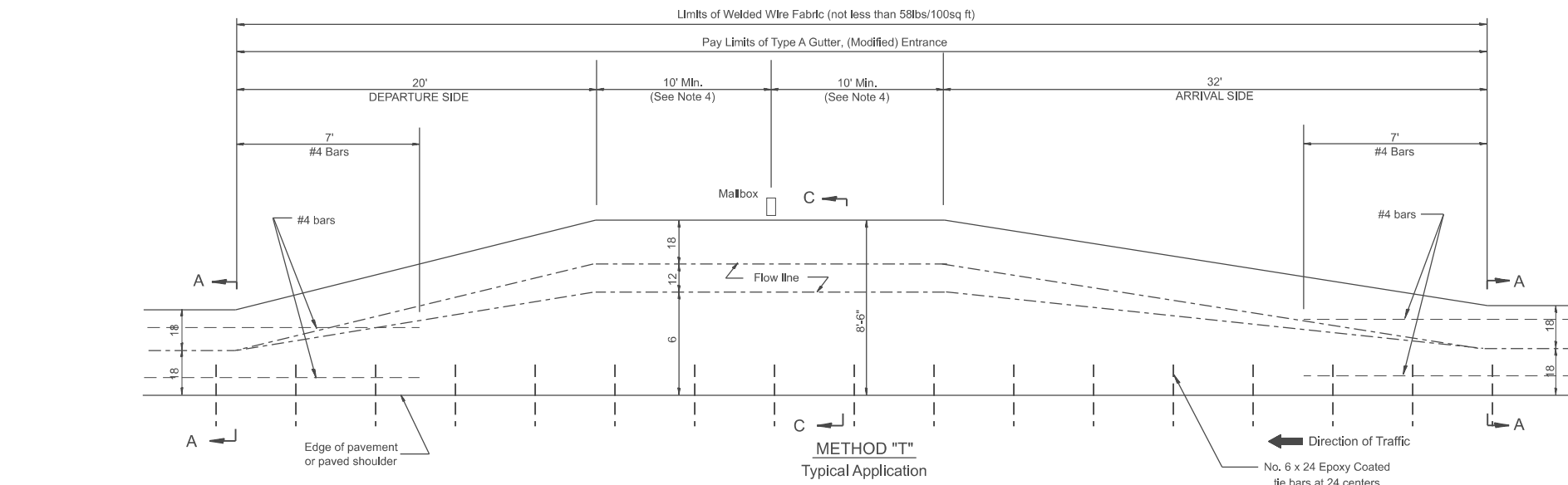
MAILBOX TURNOUTS FOR "3R" PROJECTS

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

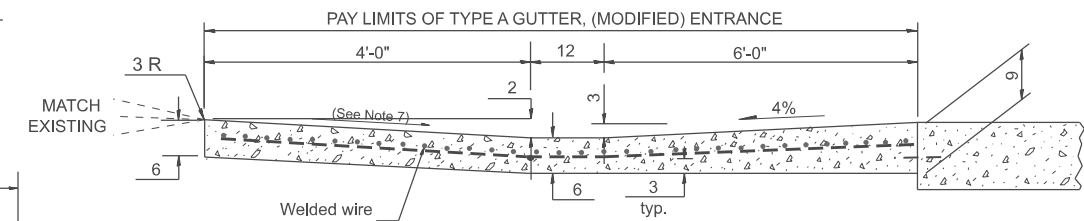
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 STANDARD NO. 406201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. CONSIDERATION SHOULD BE GIVEN TO CONTINUOUS PAVING OF TURNOUTS AT LOCATIONS WHERE THE DISTANCE BETWEEN TURNOUT CONTROL POINTS IS LESS THAN 50'.
 2. THIS DRAWING SHOULD BE USED IF THERE IS NOT A PAVED SHOULDER OR IF THE PAVED SHOULDER IS LESS THAN 6'.

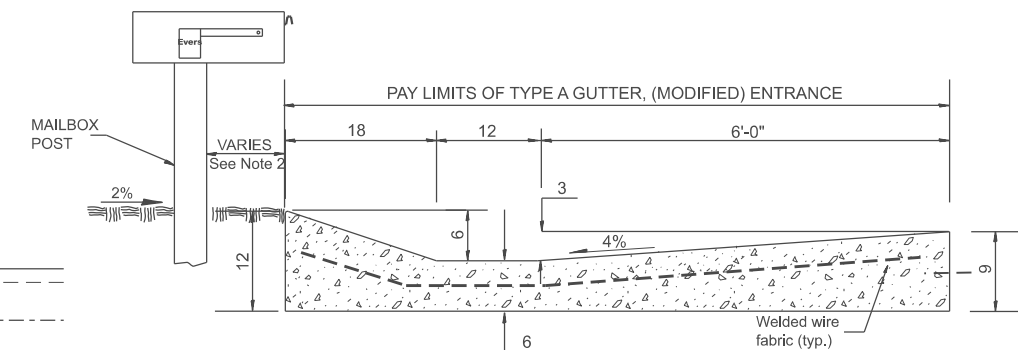
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SECTION A-A



SECTION B-B



SECTION C-C

QUANTITY CALCULATION		
LOCATION	LENGTH	CU YD / FT
Arrival Side	32 ft	0.14
Section B-B	12 ft Min.	0.23
Section C-C	20 ft Min.	0.20
Departure Side	20 ft	0.14

GENERAL NOTES

- See plans for turnout slopes on super elevated horizontal curves.
- Mailboxes shall be mounted such that the face of the mailbox is vertically above the back of the gutter.
- The mailbox turnout shall be saw cut at approximately 10'-0" centers.
- If more than one mailbox is present, this dimension shall be measured from the end box in each direction.
- Refer to the plans for entrance width, length and surface type.
- The cross slope is to be constructed as given in the plans from back of turnout to where driveway matches existing.
- Slope may be increased from 4% (min.) to 6% (max.) in order to match the existing.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAILBOX TURNOUTS IN TYPE A GUTTER,
(MODIFIED) SECTION**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 406211	CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

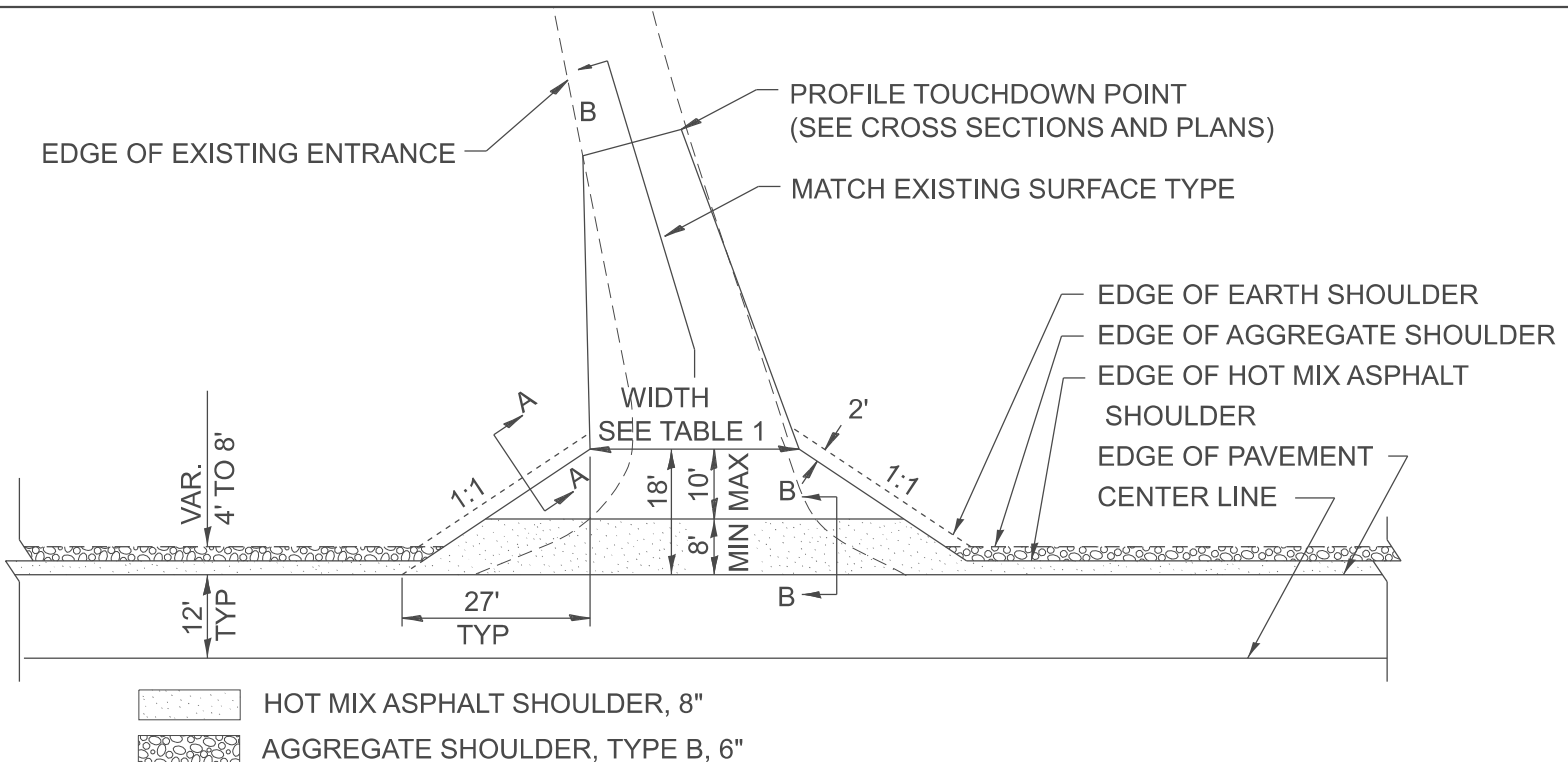
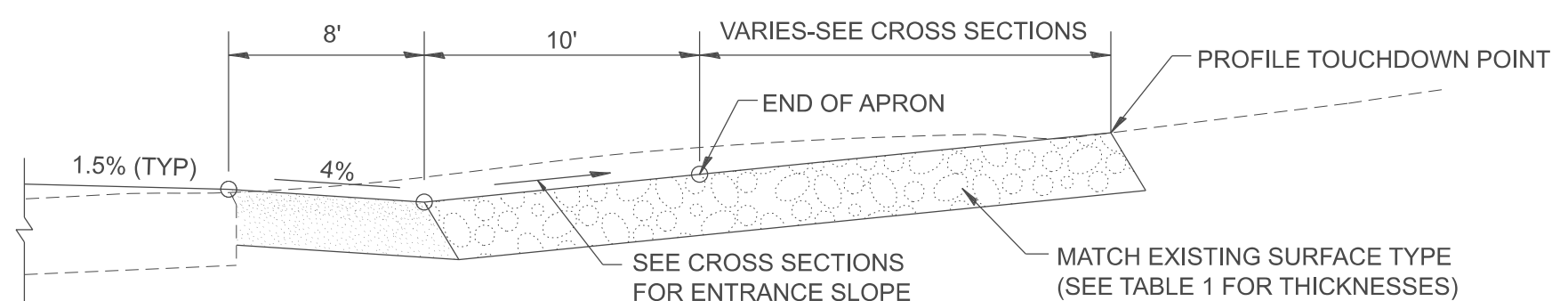


TABLE 1							
RURAL ENTRANCE DESIGN							
ELEMENT	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT		COMMERCIAL		
	12' Min.	24' Max.	20' Min.	30' Max.	1-WAY OPERATION		2-WAY OPERATION
WIDTH (W)					14' Min.	24' Max.	24' Min. 35' Max.
FLARE	1:1.5						
MAX. GRADE (G)	12%		12%		10%		

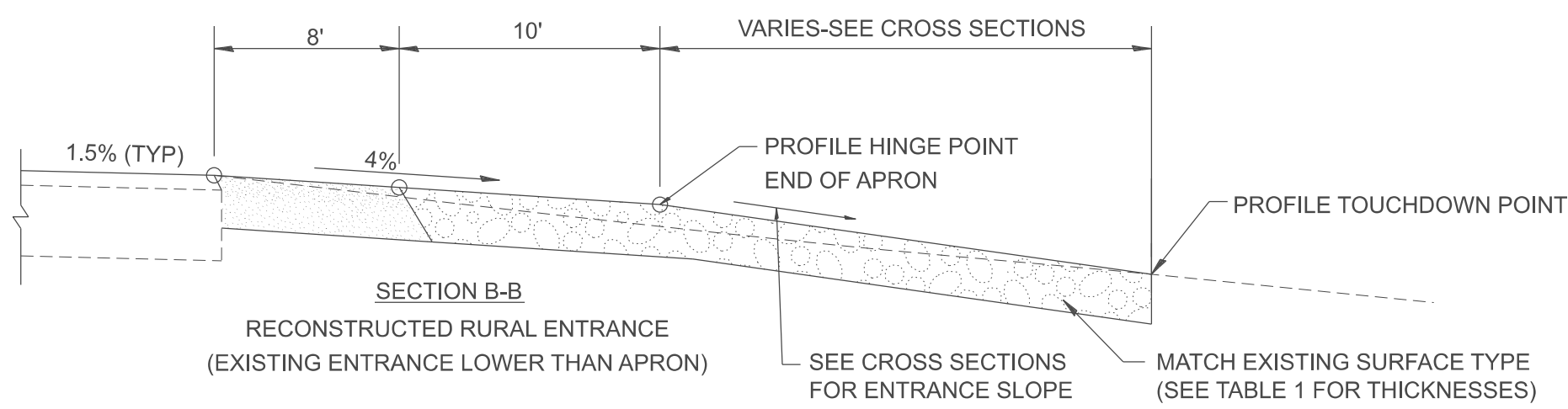
SURFACE TYPE			
INCIDENTAL HOT MIX ASPHALT SURFACING	6"	—	8"
AGGREGATE SURFACE COURSE	6"	8"	—
PCC DRIVEWAY PAVEMENT	6"	—	7"

PLAN

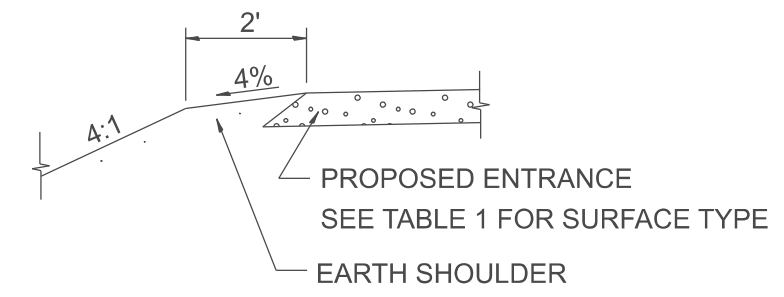
COMMERCIAL / FARM-RELATED ENTRANCE



**SECTION B-B
RECONSTRUCTED RURAL ENTRANCE
(EXISTING ENTRANCE HIGHER THAN APRON)**



**SECTION B-B
RECONSTRUCTED RURAL ENTRANCE
(EXISTING ENTRANCE LOWER THAN APRON)**



**SECTION A-A
SHOULDER TREATMENT FOR RURAL ENTRANCES**

GENERAL NOTES

- ENTRANCES SHALL SLOPE AWAY FROM THE PAVEMENT AT A RATE EQUAL TO THE SHOULDER SLOPE FOR A MINIMUM DISTANCE OF 8'.
- A MINIMUM 8' PAVED SHOULDER SHALL BE CONSTRUCTED BETWEEN LOCATIONS WHERE THE RURAL ENTRANCE IS LESS THAN 50' FROM AN ADJACENT SIDEROAD, ENTRANCE OR MAILBOX TURNOUT.
- A TAPER RATE OF 5:1 IS DESIRABLE WHEN TRANSITING FROM THE RURAL ENTRANCE WIDTH SHOWN IN TABLE 1, TO THE EXISTING ENTRANCE WIDTH.

All dimensions are in inches unless otherwise noted.

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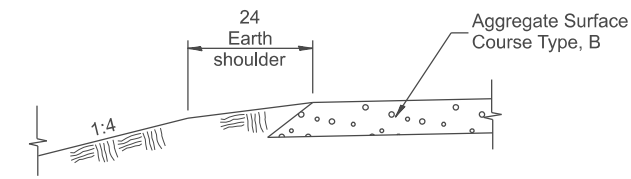
USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

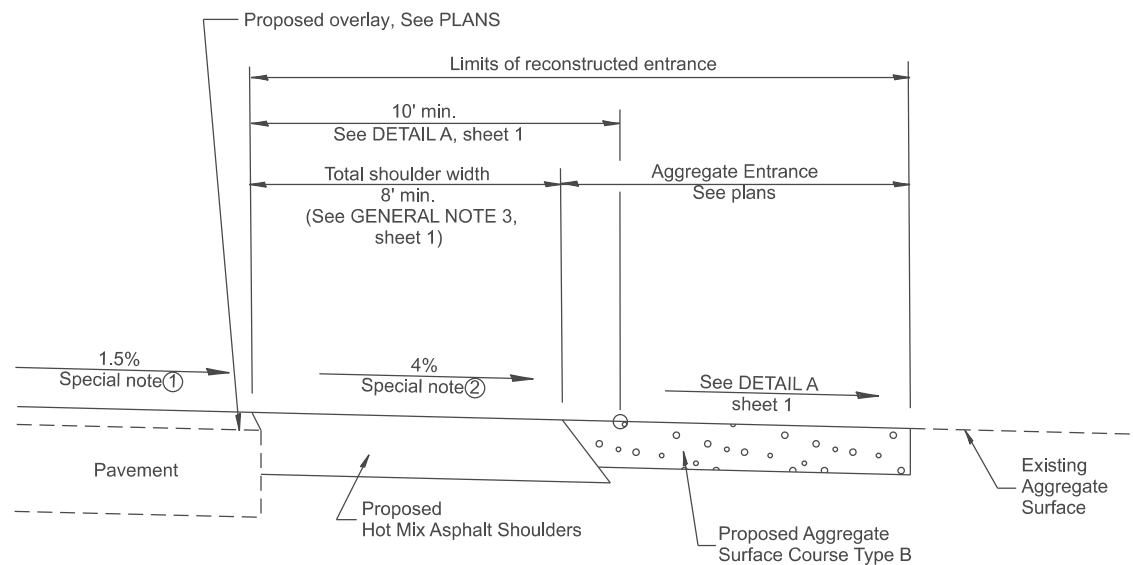
RURAL ENTRANCES FOR "3R" PROJECTS

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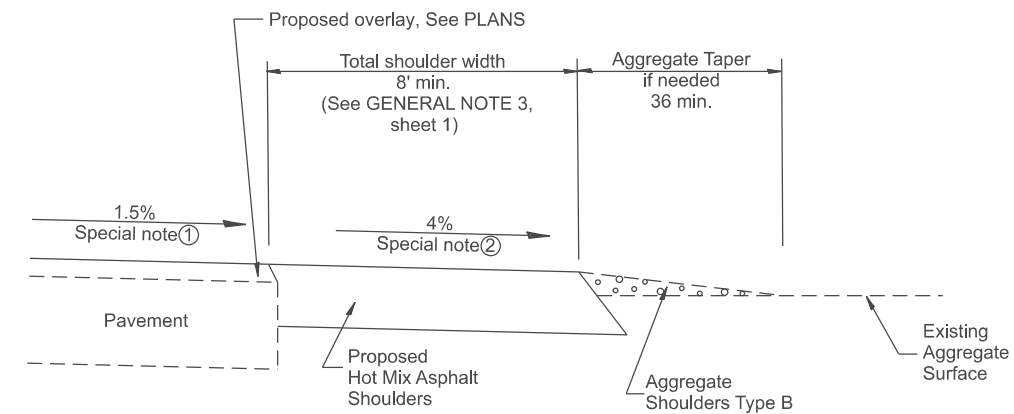
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 406301		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



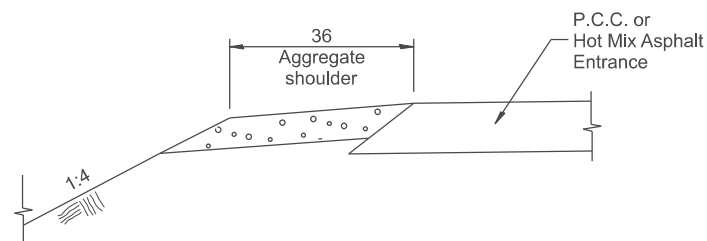
SECTION A-A
SHOULDER TREATMENT FOR AGGREGATE ENTRANCES



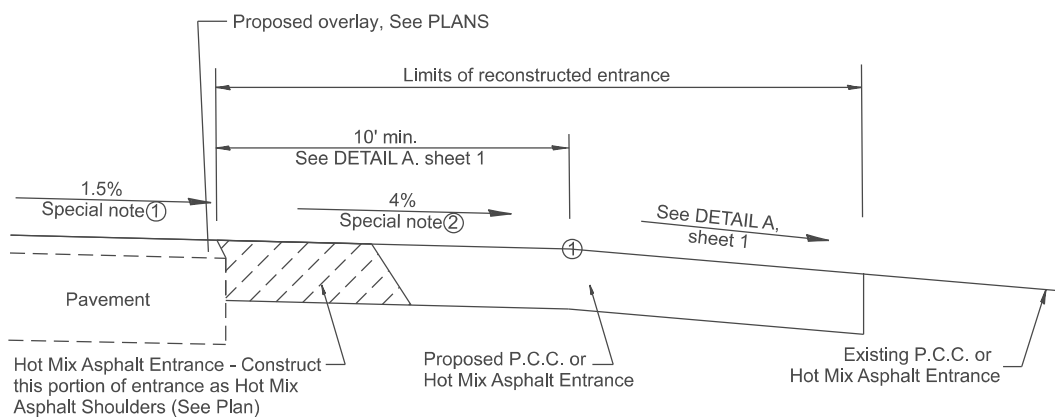
SECTION B-B
RECONSTRUCTED AGGREGATE ENTRANCE



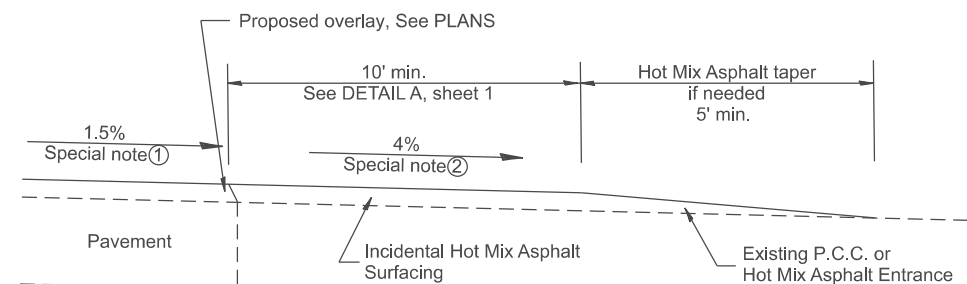
SECTION B-B
EXISTING AGGREGATE ENTRANCE



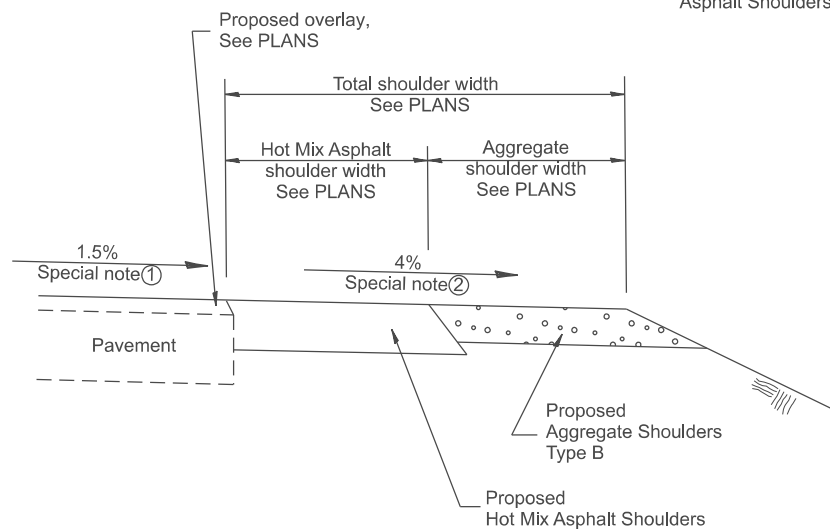
SECTION C-C
SHOULDER TREATMENT FOR P.C.C. OR HOT MIX ASPHALT ENTRANCES



SECTION D-D
RECONSTRUCTED P.C.C. OR HOT MIX ASPHALT ENTRANCE



SECTION D-D
EXISTING P.C.C. OR HOT MIX ASPHALT ENTRANCE



SECTION E-E
MAINLINE SHOULDER TREATMENT

SPECIAL NOTES

- ① The mainline pavement cross-slope is 1.5% for tangent alignment. See PLANS for cross-slope on superelevated horizontal curves.
- ② The shoulder slope shall control the entrance profile for a distance of 10' minimum from the pavement edge. The shoulder cross-slope is 4% for tangent alignment. Through superelevated curves, the maximum pavement-shoulder breakover should not be greater than 10% for shoulders 6' and wider and 12% for shoulders 4' and less. Where 12' paved shoulders are provided, the breakover should be at the edge of the paved shoulder rather than at the pavement edge.

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\Organization\ChilIDOT_Standards\CellIDOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

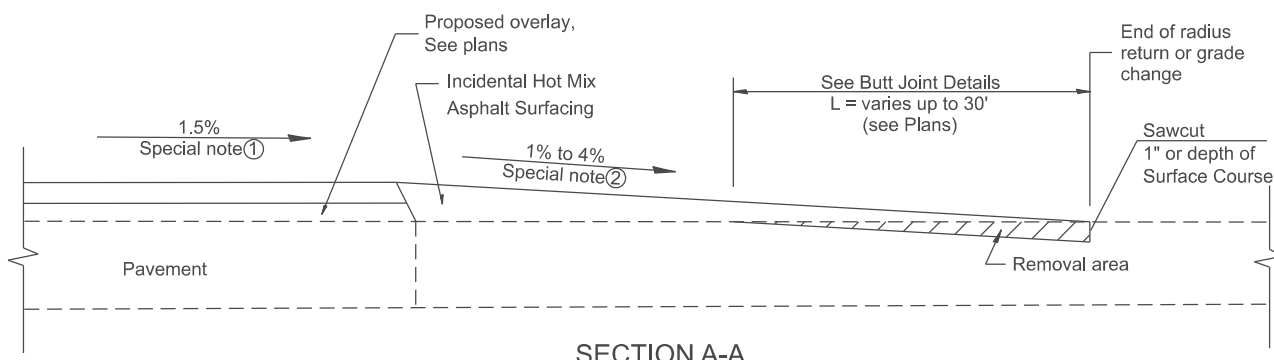
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

RURAL ENTRANCES FOR "3R" PROJECTS

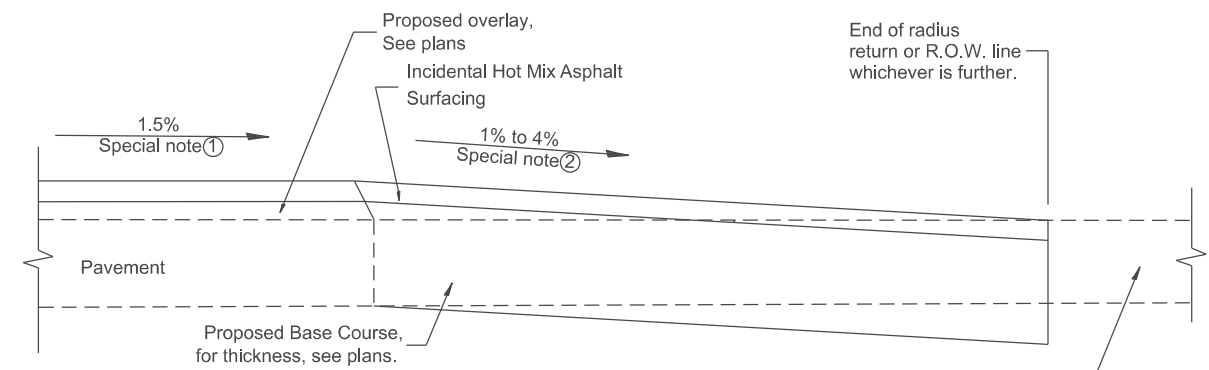
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 406301		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

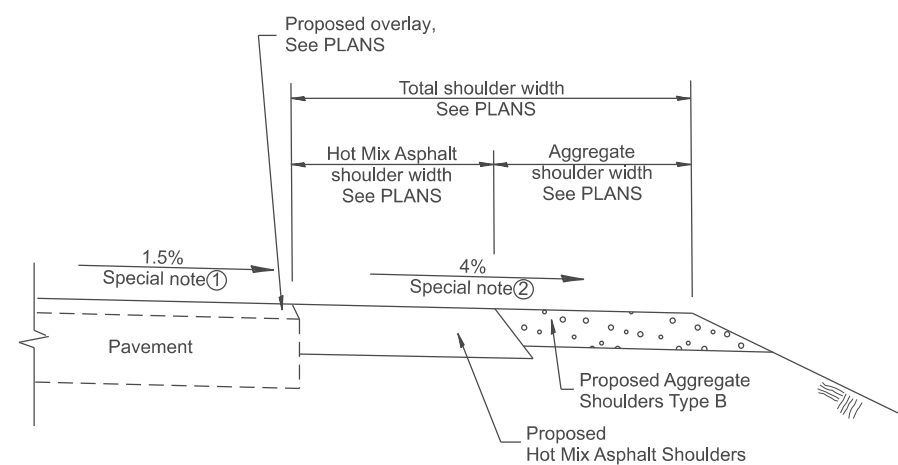
DESIGNER NOTES:
 1. DESIGNER SHOULD CONSULT CHAPTER 49 OF THE BDE MANUAL.
 MODEL: SHT_PLANS; THIS CADD STANDARD IS FOR 3R PROJECTS AND NOT REALLY INTENDED FOR SMART OR 3P.
 FILE NAME: C:\Bentley\CONNECT\10110\Organization-Civil\DOT_Standards\Civil\DOT_Sheets.ctb



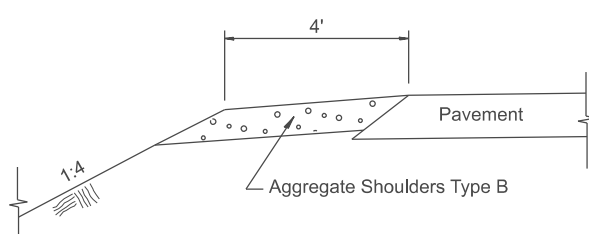
SECTION A-A
EXISTING PCC OR HOT MIX ASPHALT SIDEROAD



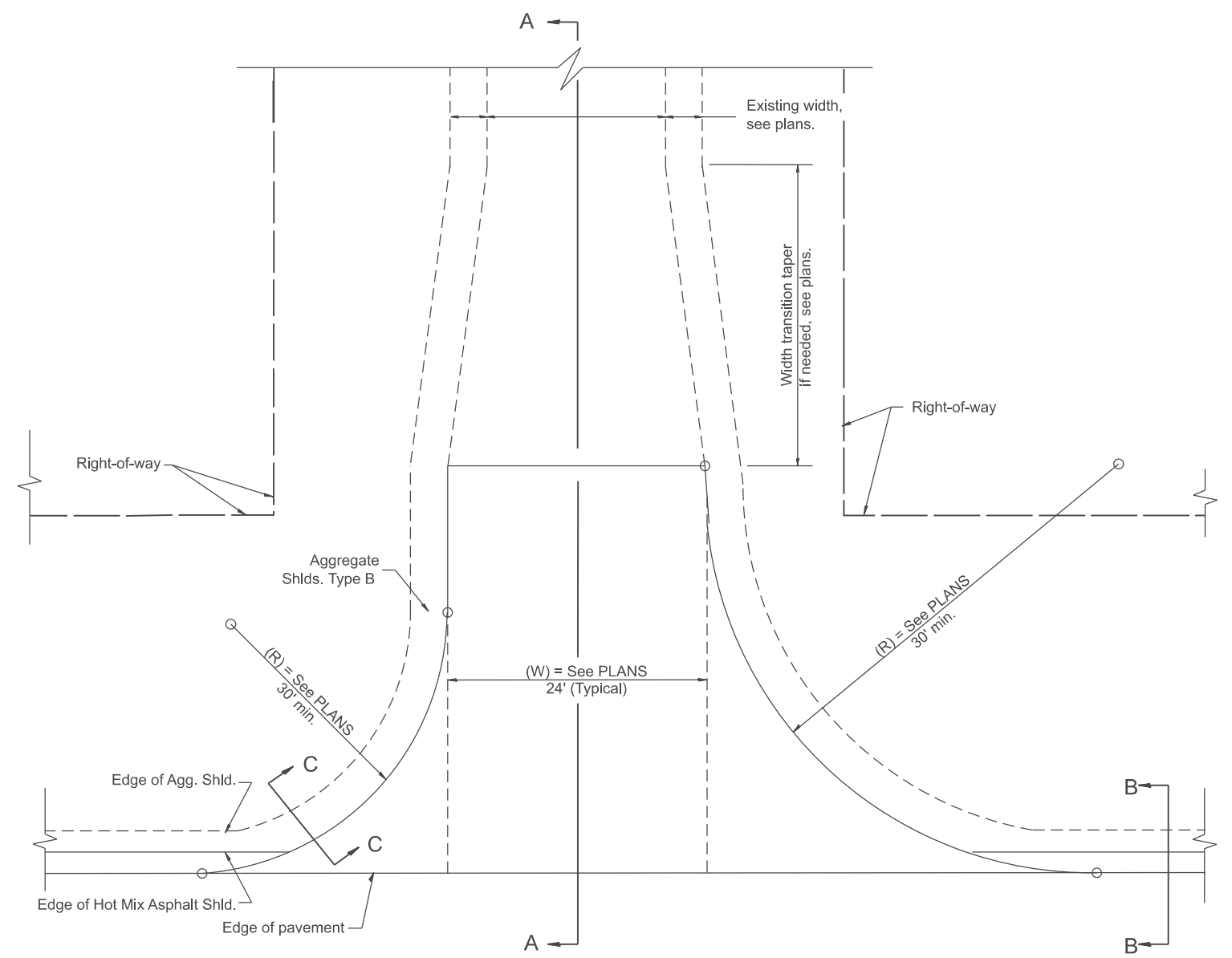
SECTION A-A
EXISTING AGGREGATE OR SEAL COAT SIDEROAD



SECTION B-B
MAINLINE SHOULDER TREATMENT



SECTION C-C
SIDEROAD SHOULDER TREATMENT



PLAN

SPECIAL NOTES

- ① The mainline pavement cross-slope is 1.5% for tangent alignment. See Plans for cross-slope on superelevated horizontal curves.
- ② The sideroad profile should drain away from the mainline at 1% to 4% for 50' to 100', or as a minimum to the end of the radius return. When the sideroad is on the high side of a mainline superelevated curve, -2% maximum should be provided in order to minimize breakover at the pavement edge. See plans for sideroad profiles.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

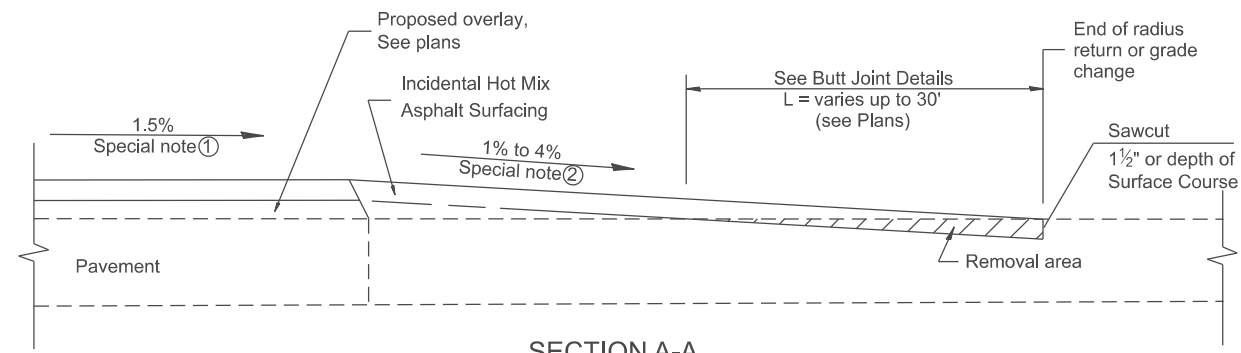
RURAL SIDEROADS FOR "3R" PROJECTS

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

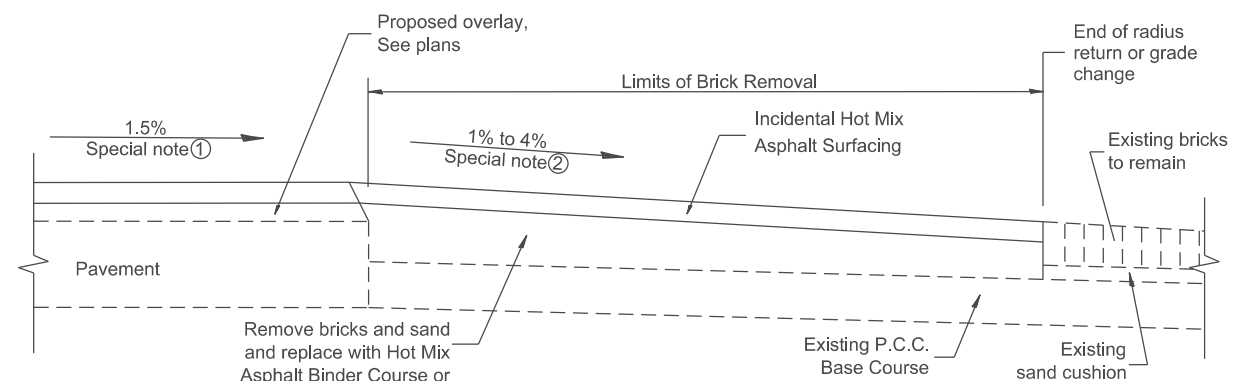
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 406401		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. DESIGNER SHOULD CONSULT CHAPTER 49 OF THE BDE FOR 3R POLICY.
 2. DESIGNER SHOULD REVIEW CHAPTER 38 FOR ADA
 3. STATE STANDARD 424001 SHOULD BE INCLUDED IN THE PLANS TO SUPPLEMENT THIS DRAWING, IF SIDEWALKS ARE TO BE CONSTRUCTED INITIALLY.
 4. THIS CADD STANDARD IS FOR 3R PROJECTS AND NOT INTENDED FOR SMART OR 3P.

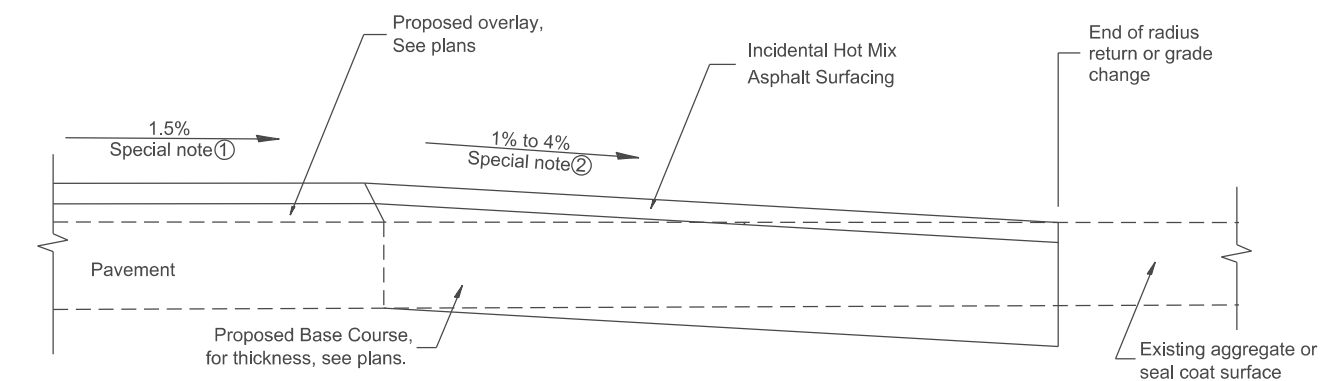
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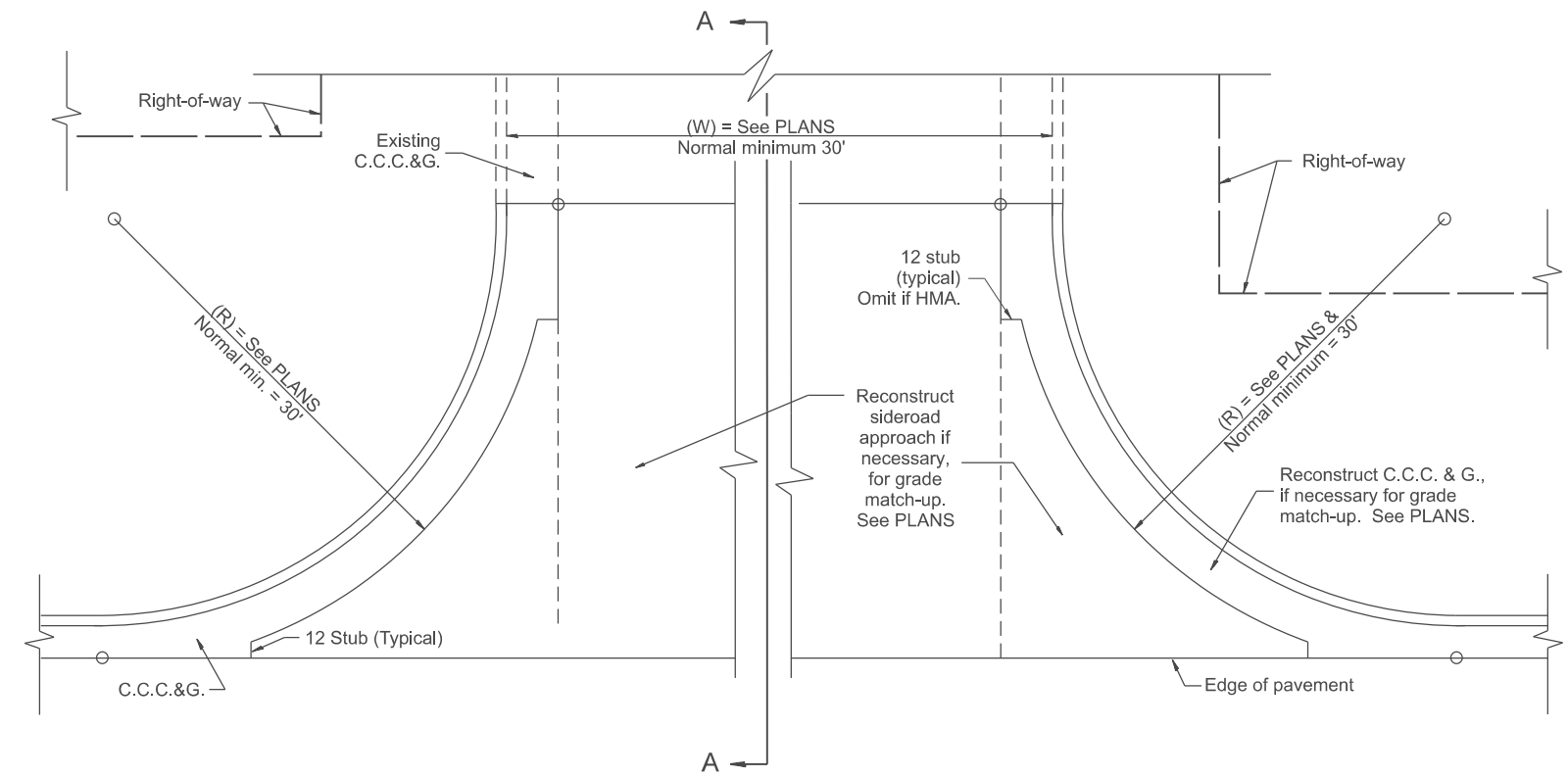
SECTION A-A
EXISTING PCC OR HOT MIX ASPHALT SIDEROAD



SECTION A-A
EXISTING BRICK SIDEROAD



SECTION A-A
EXISTING AGGREGATE OR SEALCOAT SIDEROAD



PLAN

SPECIAL NOTES

- ① The mainline pavement cross-slope is 1.5% for tangent alignment. See Plans for cross-slope on superelevated horizontal curves.
- ② The sidewalk profile should drain away from the mainline at 1% to 4% for 50' to 100', or as a minimum to the end of the radius return. When the sidewalk is on the high side of a mainline superelevated curve, - 2% maximum should be provided in order to minimize breakover at the pavement edge. See plans for sidewalk profiles.

All dimensions are in inches unless otherwise noted.

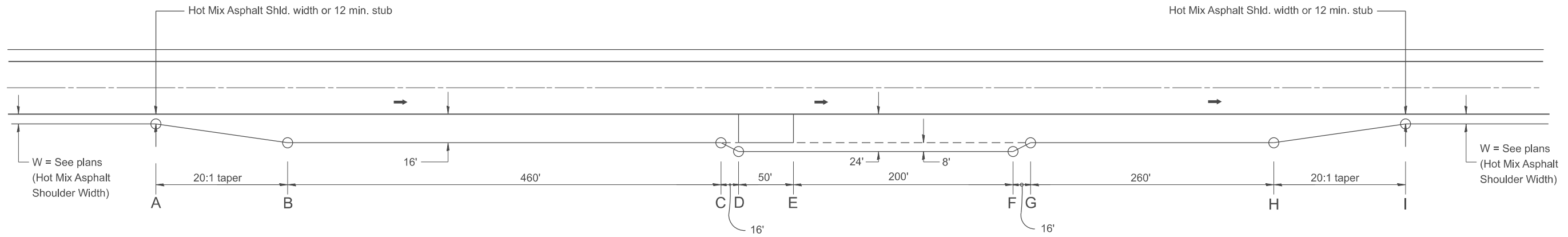
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

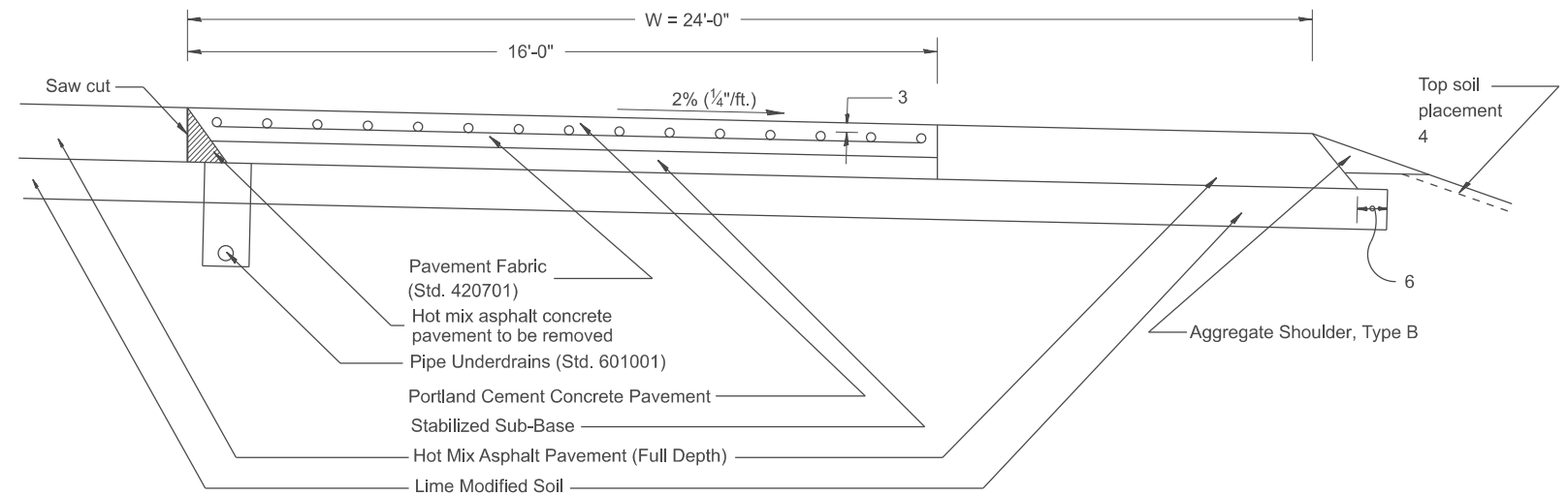
URBAN SIDEROADS FOR "3R" PROJECTS

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

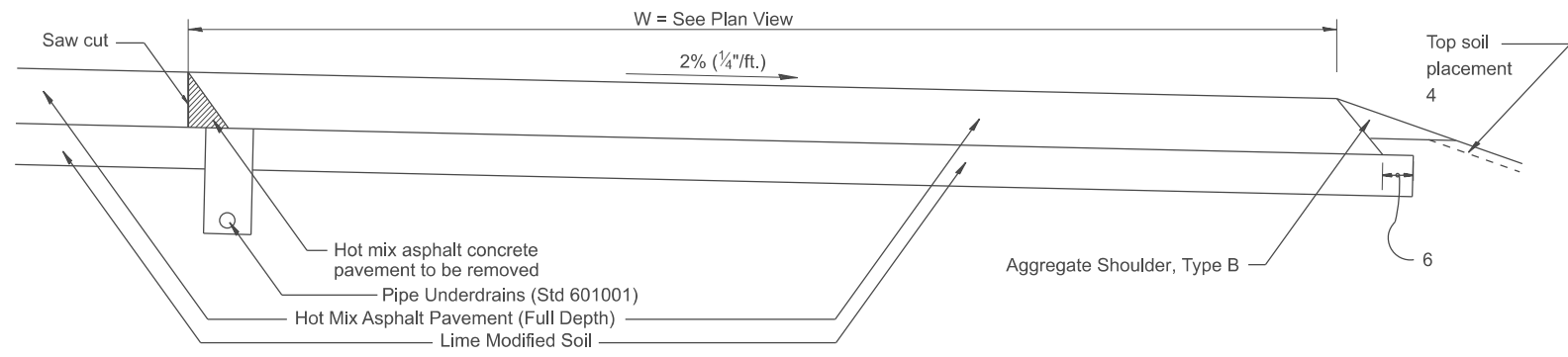
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 406501		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



PLAN



TYPICAL SECTION @ P.C.C. PAD
LOCATION D TO E
(See General Note 3)



TYPICAL SECTION
LOCATION A TO D
LOCATION E TO I
(See General Note 3)

GENERAL NOTES

1. The P.C.C. Pavement shall be constructed without any joints.
2. The maximum longitudinal grade of P.C.C. Pad shall be $\pm 2\%$.
3. See plans for size and thicknesses.

All dimensions are in inches unless otherwise noted.

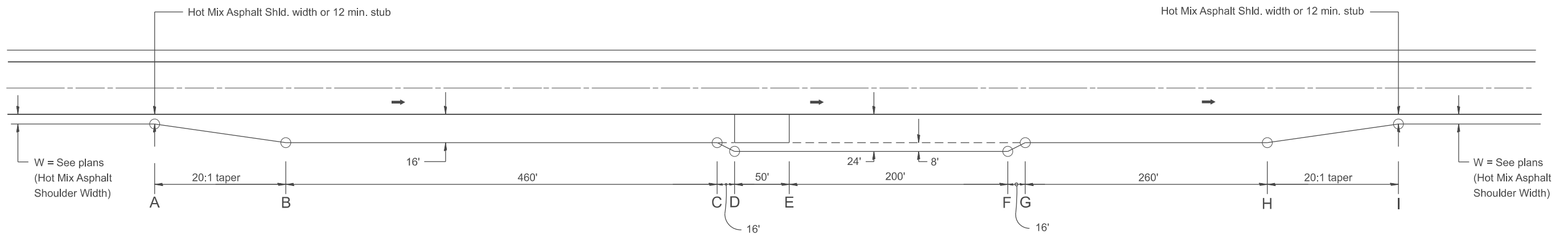
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USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

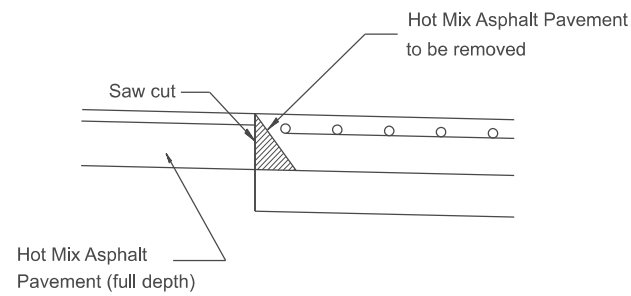
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PORTABLE SCALE TURNOUT FOR NEW HOT MIX ASPHALT CONSTRUCTION			
SCALE: NOT TO SCALE	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 420101			
ILLINOIS		FED. AID PROJECT		

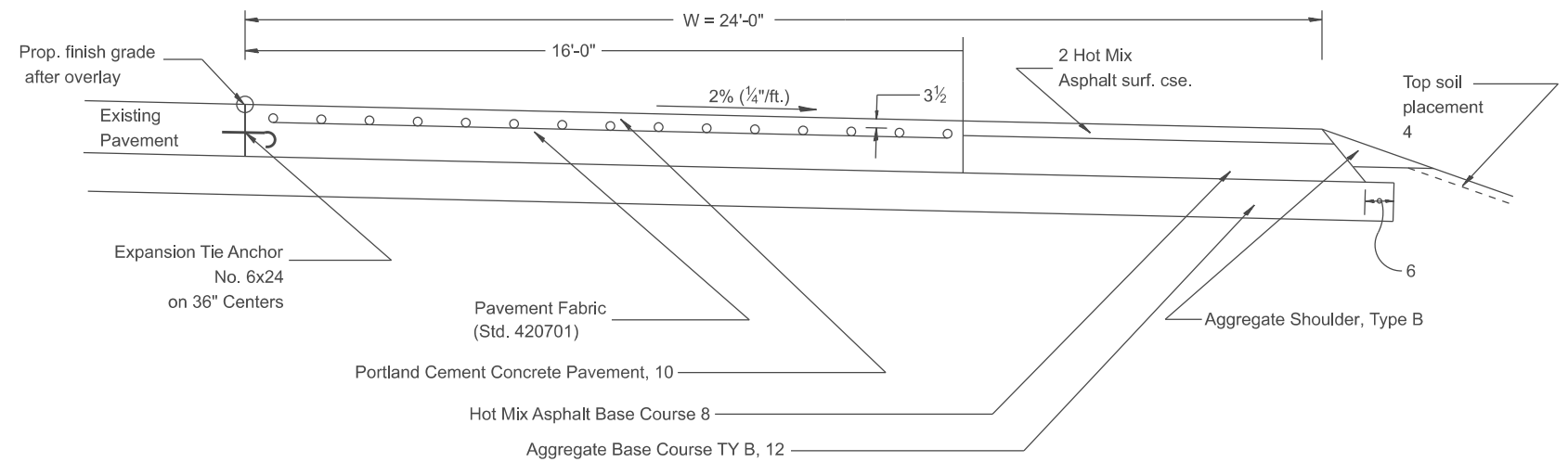


PLAN



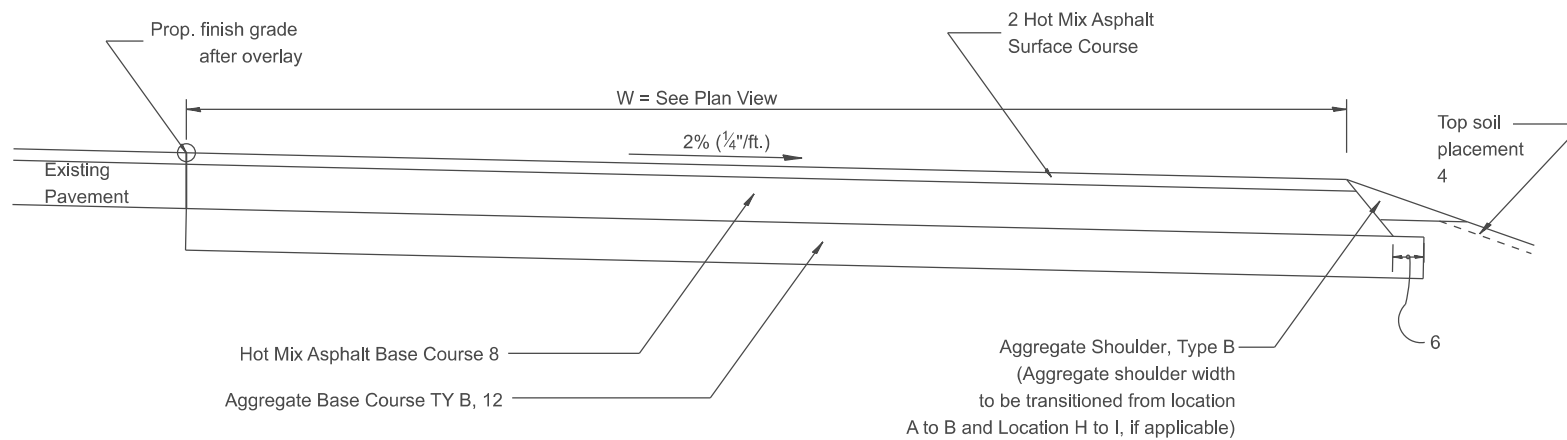
SPECIAL DETAIL

(Saw cut @ P.C.C. Pad, if applicable)



TYPICAL SECTION @ P.C.C. PAD

LOCATION D TO E



TYPICAL SECTION

LOCATION A TO D
LOCATION E TO I

GENERAL NOTES

1. The P.C.C. pavement shall be constructed without any joints.
2. The maximum longitudinal grade of P.C.C. pad shall be ± 2%.

All dimensions are in inches unless otherwise noted.

DESIGNER NOTE:
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\organization\Chilidiot_Standards\CallIDOT_Sheets.cad
 1. INCLUDE STANDARD 420701 IN PLANS.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PORTABLE SCALE TURNOUT FOR WIDENING & RESURFACING
AND RESURFACING PROJECTS

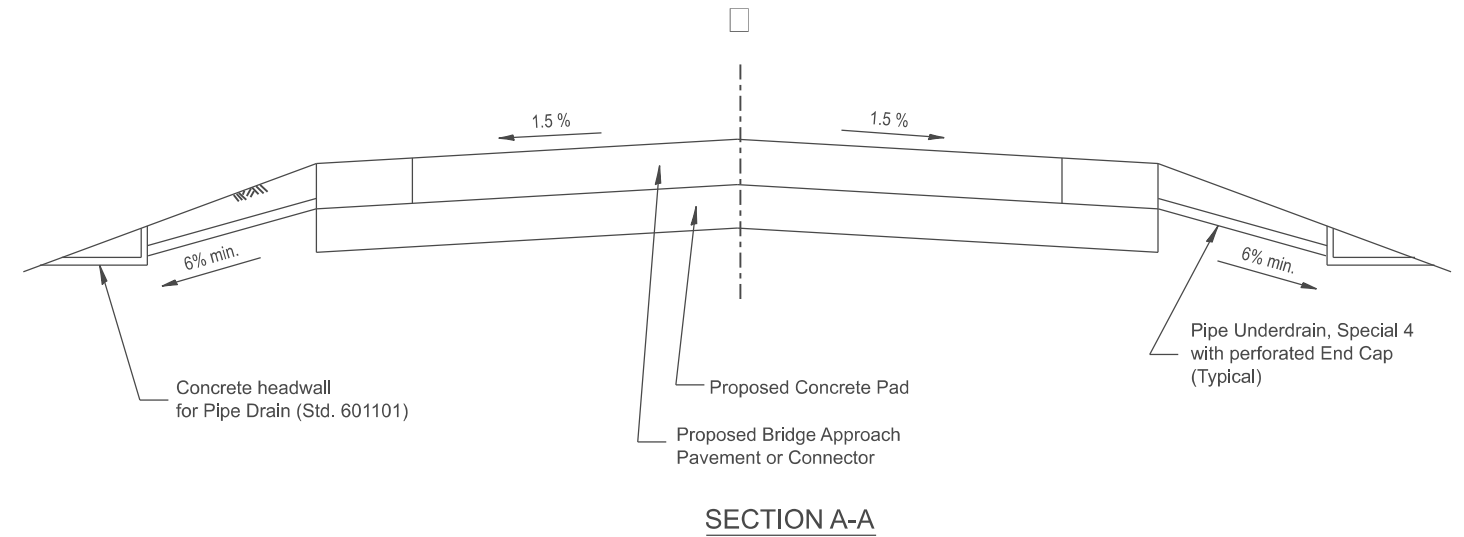
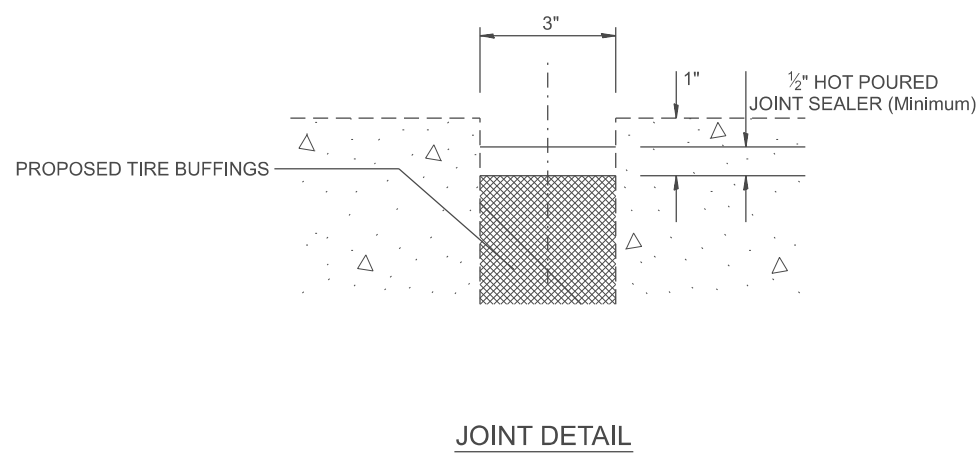
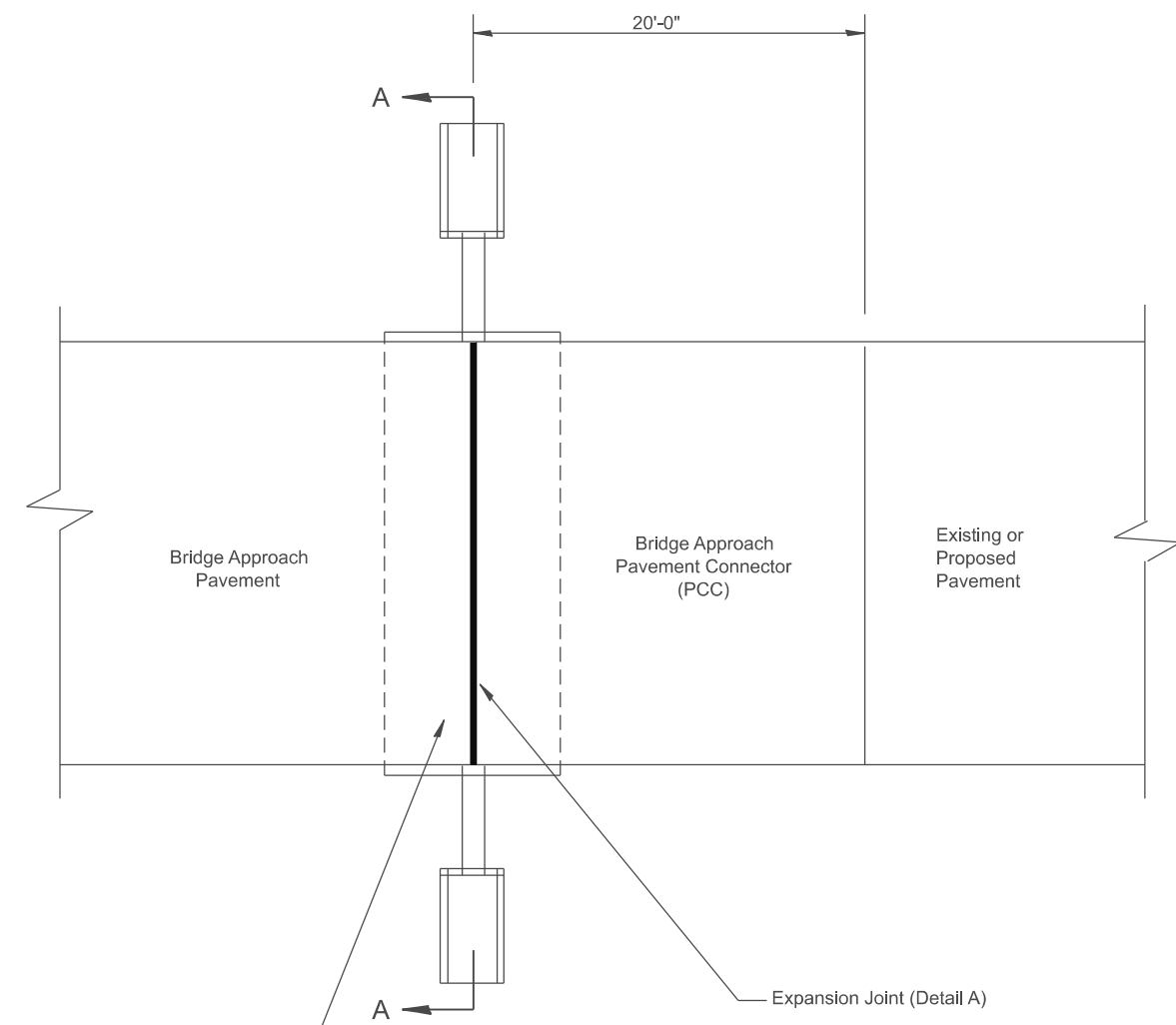
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 420201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTE:

1. Include Standards 420001, 601101 and 420401 in plans.
2. Use on bridge projects with PCC connector.
3. Pay for headwalls and UD (sp) 4".

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization-Chil\DOT_Standards\Civil\DOT_Sheets.dwg



GENERAL NOTES:

1. All work shall be done as directed by the Engineer.
2. All work shall be done in accordance with Standard 420401 except as shown herein.
3. The concrete headwalls and pipe underdrain special will be in accordance with Section 601.
4. The bridge approach pavement connector (pcc) shall be constructed similar to section G-G for existing construction rigid pavement as shown Standard 420401. Adjacent to PCC base course or pavement deformed bars will be required. Adjacent to bituminous pavement deformed bars will not be required. Use buffings from the tire retreading industry.
5. This work will be paid for in feet of PIPE UNDERDRAIN, SPECIAL, 4", and each of CONCRETE HEADWALL FOR PIPE DRAIN. The cost of providing and installing the tire buffings and hot-poured joint sealer is included in the cost of the Approach Pavement Connector.
6. Use buffings from the tire retreading industry.
7. Ensure tire buffings are clean, dry, and without any contamination.
8. Remove existing material and replace tire buffings.
9. Place loose buffings and strike off level.
10. Compact buffings by spading with a square-nose shovel.
11. Use hot-poured joint sealer that meets the requirement of Article 1050.02 and according to the applicable section of Article 420.12 of the Standard Specifications.
12. Avoid guardrail posts when constructing shoulders.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

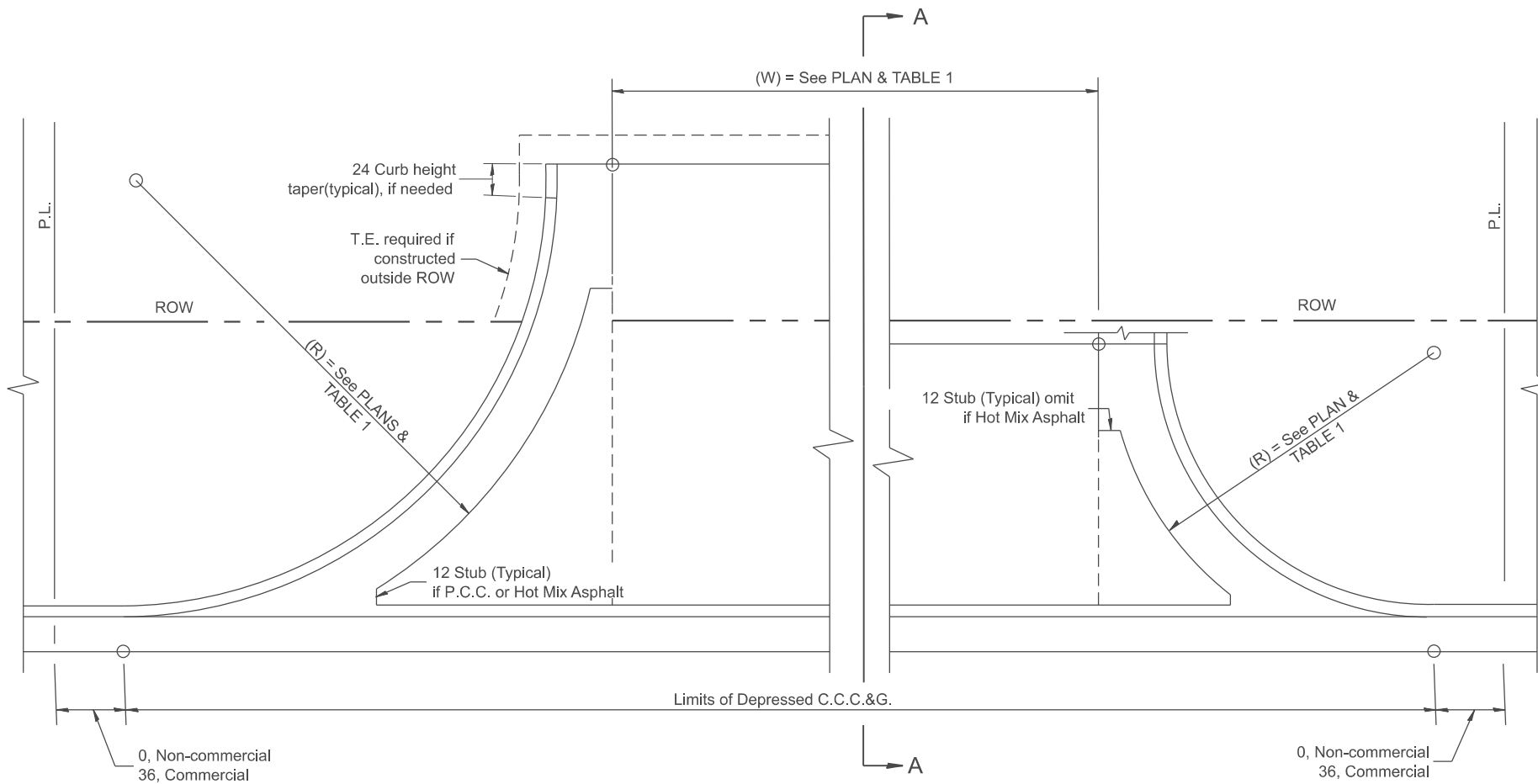
BRIDGE APPROACH DETAIL

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 420401		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:
 1. DESIGNER SHOULD REVIEW "HANDBOOK FOR THE POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS"
 2. DESIGNER SHOULD REVIEW CHAPTER 58 OF THE BDE FOR ADA REQUIREMENTS
 3. INCLUDE STATE STANDARD 424001 IF SIDEWALKS ARE TO BE CONSTRUCTED INITIALLY.
 4. INCLUDE STATE STANDARD 606001.

MODEL: SHT_PLN_A
 FILE NAME: C:\Bentley\CONNECT\10110\Organization-Chillicothe\Standards\Cell\DOT_Sheets.dwg



GENERAL NOTES

- C.C.C.&G. will be measured for pavement as specified in Article 606.13 of the Standard Specifications.
- C.C.C.&G. Construction Joints will be as shown on Standard 606001.

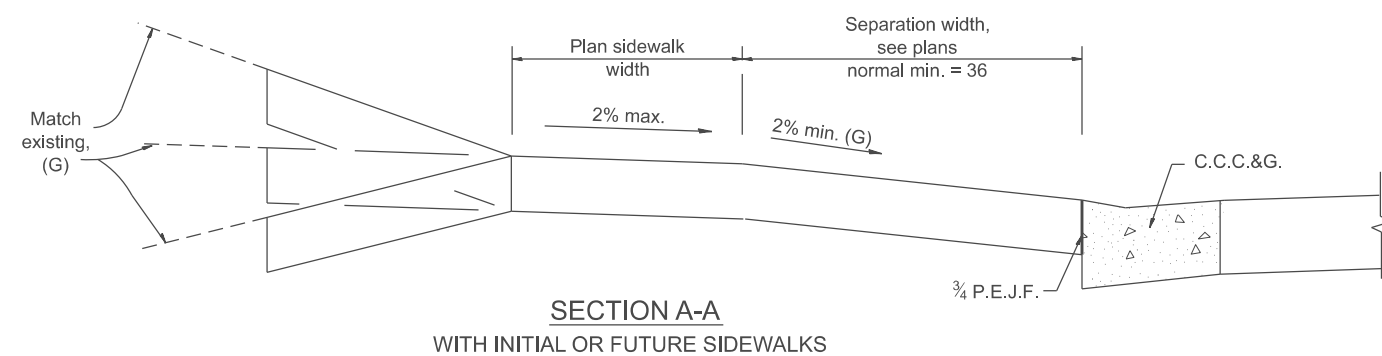
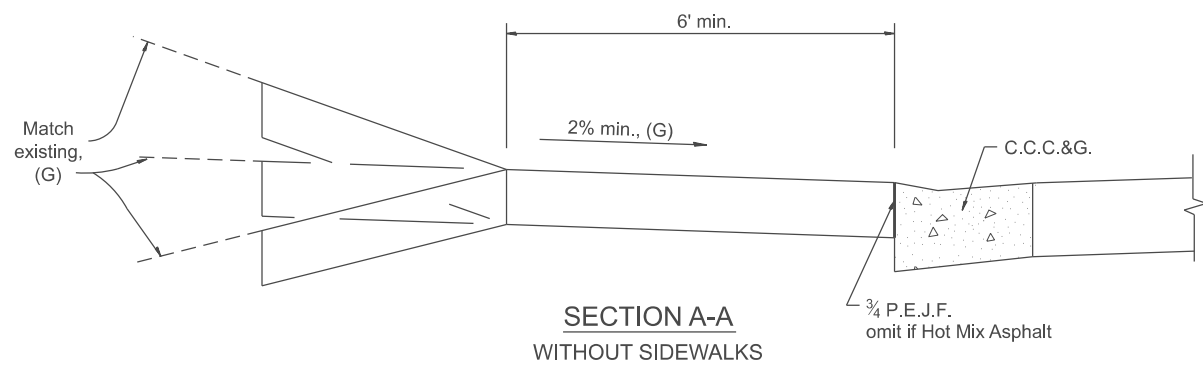


TABLE 1						
URBAN ENTRANCE DESIGN CONTROLS						
ELEMENT	NON-COMMERCIAL		COMMERCIAL			
			1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12' MIN.	24' MAX.	14' MIN.	24' MAX.	24' MIN.	35' MAX.
RADIUS EQUIVALENT 1:1 FLARE (F)	5' MIN.	25' MAX.	15' MIN.	40' MAX.	15' MIN.	40' MAX.
MAX. GRADE (G)	8%		6%			

All dimensions are in inches unless otherwise noted.

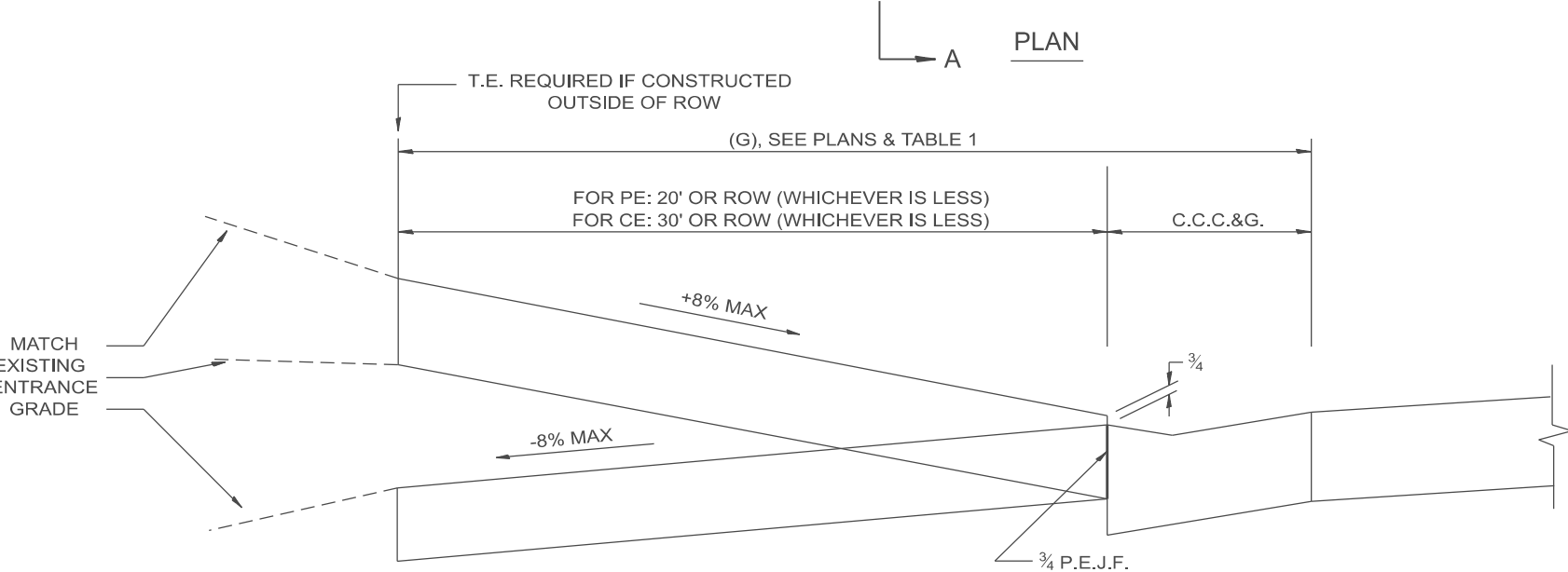
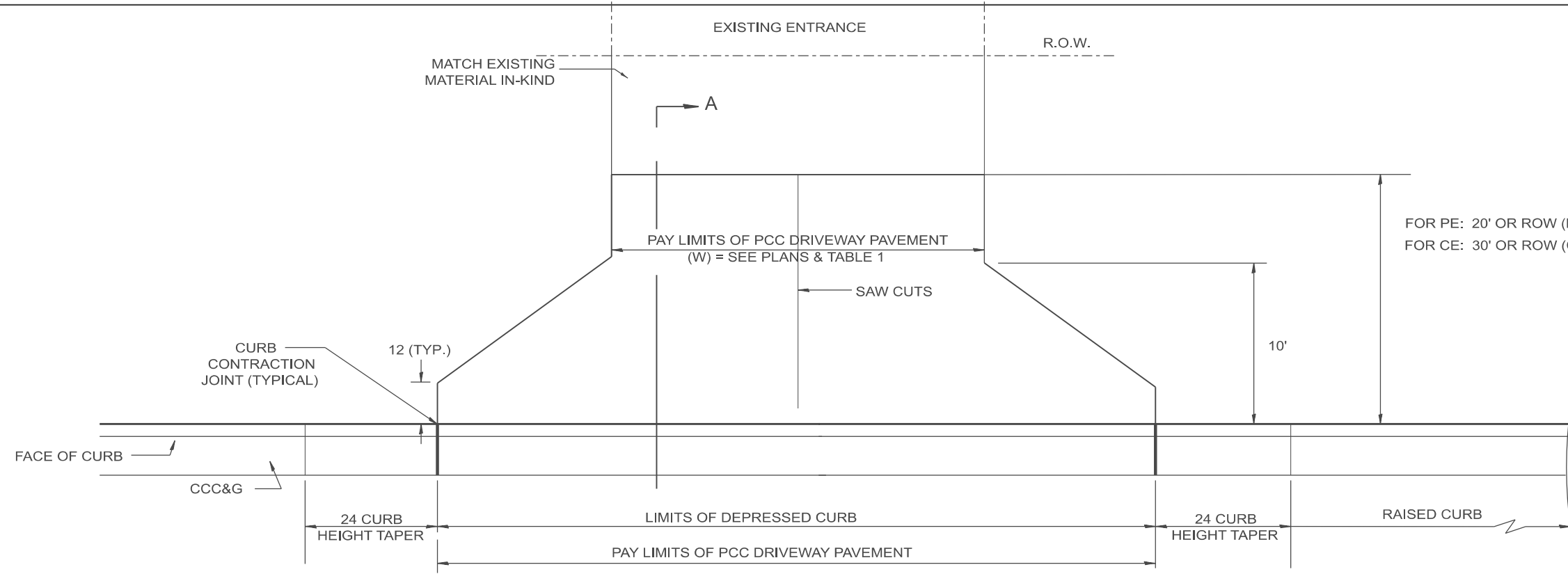
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUBURBAN ENTRANCES WITH CURBED RADII

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



GENERAL NOTES

1. COMBINATION CONCRETE CURB & GUTTER SHALL BE DEPRESSED IN ACCORDANCE WITH STANDARD 606001.
2. C.C.C. & G. WILL BE MEASURED FOR PAYMENT AS SPECIFIED IN ARTICLE 606.13 OF THE STANDARD SPECIFICATIONS.
3. C.C.C. & G. CONSTRUCTION JOINTS WILL BE AS SHOWN ON STANDARD 606001.
4. EXCEPTIONS TO THE RADIUS FLARE/PROPERTY LINE RELATIONSHIP ARE AS SHOWN IN THE PLANS FOR COMMON ENTRANCES, WITH JOINTLY EXECUTED ACCESS PERMITS.

TABLE 1

URBAN ENTRANCE DESIGN CONTROLS						
ELEMENT	NON-COMMERCIAL		COMMERCIAL			
			1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12' MIN.	24' MAX.	14' MIN.	24' MAX.	24' MIN.	35' MAX.
RADIUS EQUIVALENT 1:1 FLARE (F)	5' MIN.	25' MAX.	15' MIN.	40' MAX.	15' MIN.	40' MAX.
MAX. GRADE (G)	8%		6%			

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
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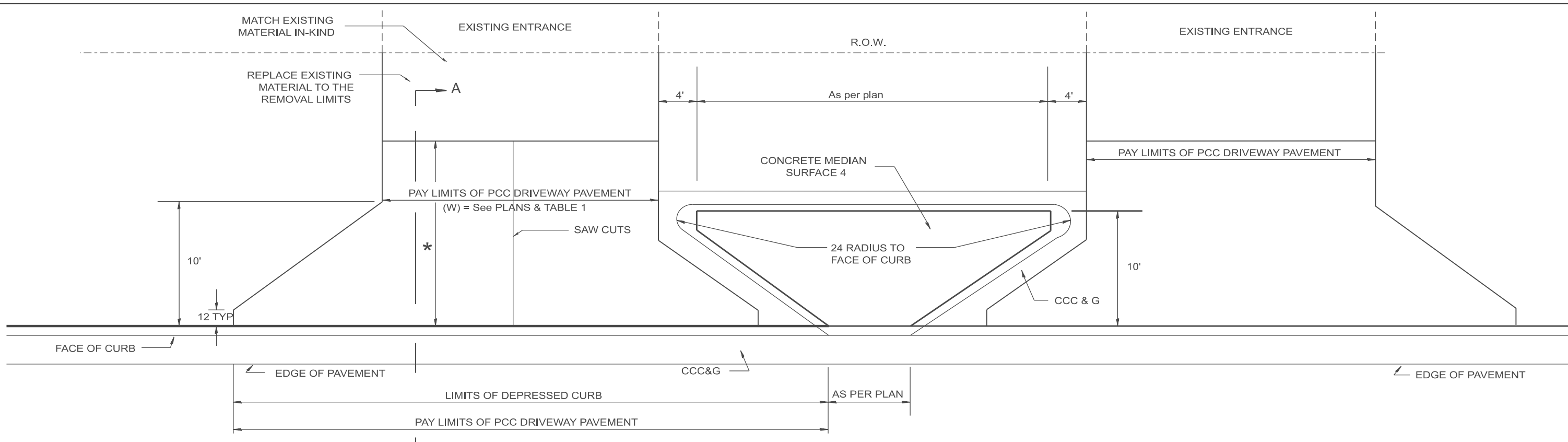
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

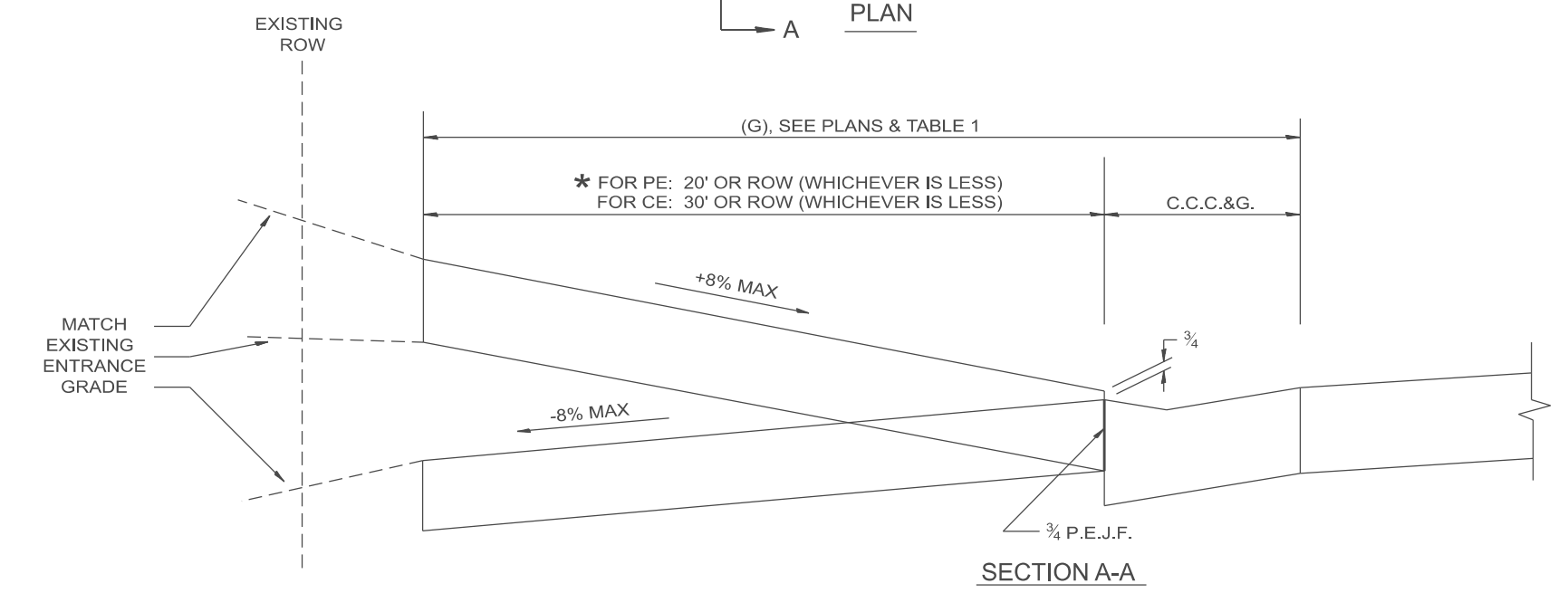
URBAN ENTRANCES WITHOUT SIDEWALKS

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423002		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



PLAN



GENERAL NOTES

1. COMBINATION CONCRETE CURB & GUTTER SHALL BE DEPRESSED IN ACCORDANCE WITH STANDARD 606001.
2. CONCRETE MEDIAN SURFACE 4 SHALL BE PLACED IN ACCORDANCE WITH STANDARD 606301.
3. C.C.C. & G. AND CONCRETE MEDIAN SURFACE 4 WILL BE 606.13 OF STANDARD SPECIFICATIONS.
4. C.C.C. & G. CONSTRUCTION JOINTS WILL BE AS SHOWN ON STANDARD 606001.
5. REFER TO STATE STANDARD 424001 FOR TEXTURING AND OTHER DISABLED ACCESSIBILITY DESIGN ELEMENTS.
6. EXCEPTIONS TO THE RADIUS FLARE/PROPERTY LINE RELATIONSHIP ARE AS SHOWN IN THE PLANS FOR COMMON ENTRANCES, WITH JOINTLY EXECUTED ACCESS PERMITS.

TABLE 1						
URBAN ENTRANCE DESIGN CONTROLS						
ELEMENT	NON-COMMERCIAL		COMMERCIAL			
			1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12' MIN.	24' MAX.	14' MIN.	24' MAX.	24' MIN.	35' MAX.
RADIUS EQUIVALENT 1:1 FLARE (F)	5' MIN.	25' MAX.	15' MIN.	40' MAX.	15' MIN.	40' MAX.
MAX. GRADE (G)	8%		6%			

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT101\Organizer\Chil\IDOT_Standards\Cell\IDOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

URBAN ENTRANCES CLOSELY SPACED WITHOUT SIDEWALKS
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423003		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. DESIGNER SHOULD REVIEW "HANDBOOK FOR THE POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS"
 1:1 FLARES ARE RECOMMENDED FOR CURBLINE SIDEWALKS.
 2. DESIGNER SHOULD REVIEW CHAPTER 58 OF BDE FOR THE ADA REQUIREMENTS.
 3. INCLUDE STATE STANDARD 606001 AND APPLICABLE SIDEWALK STANDARDS.

MODEL: SHT_PLAN
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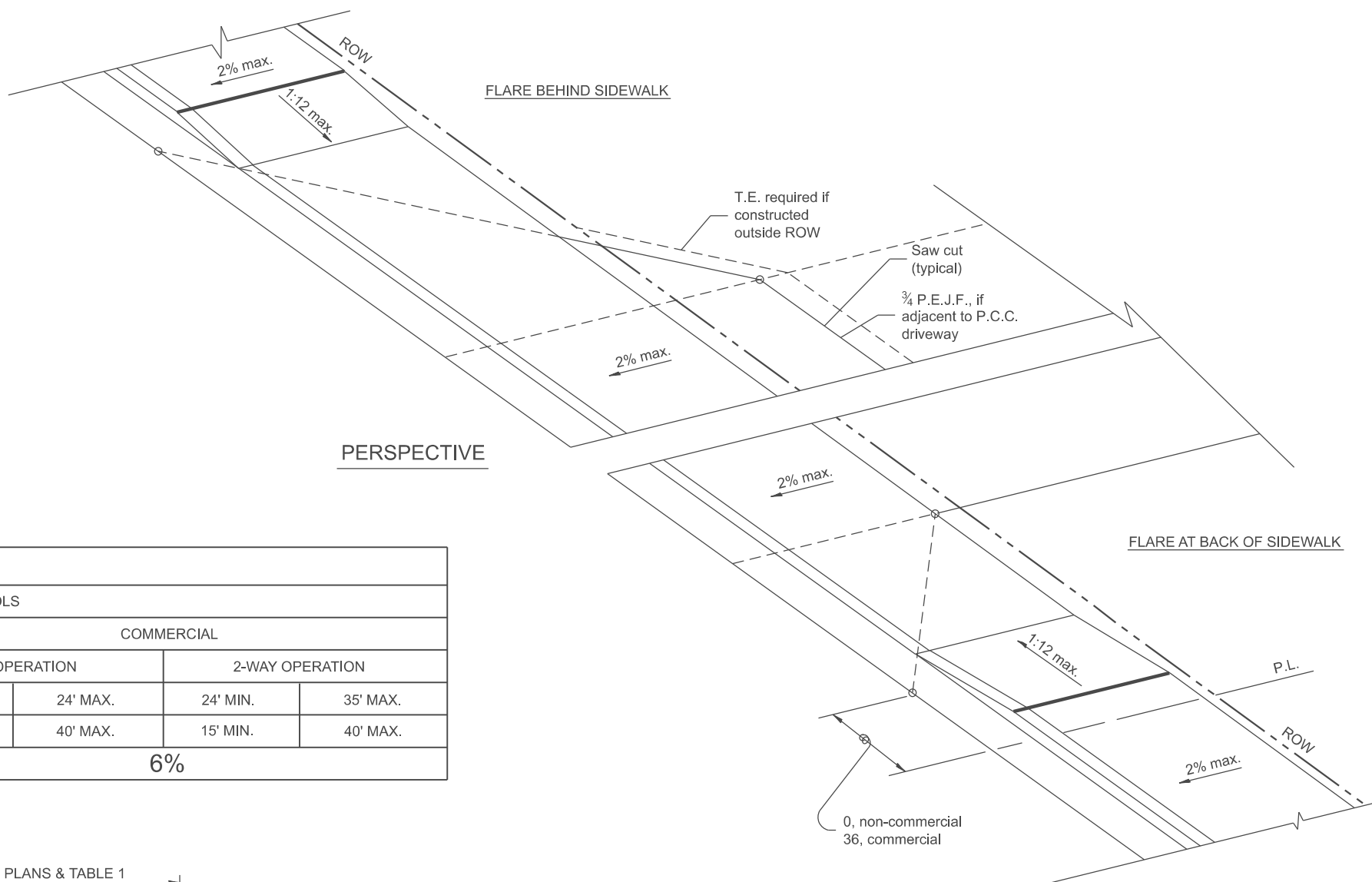
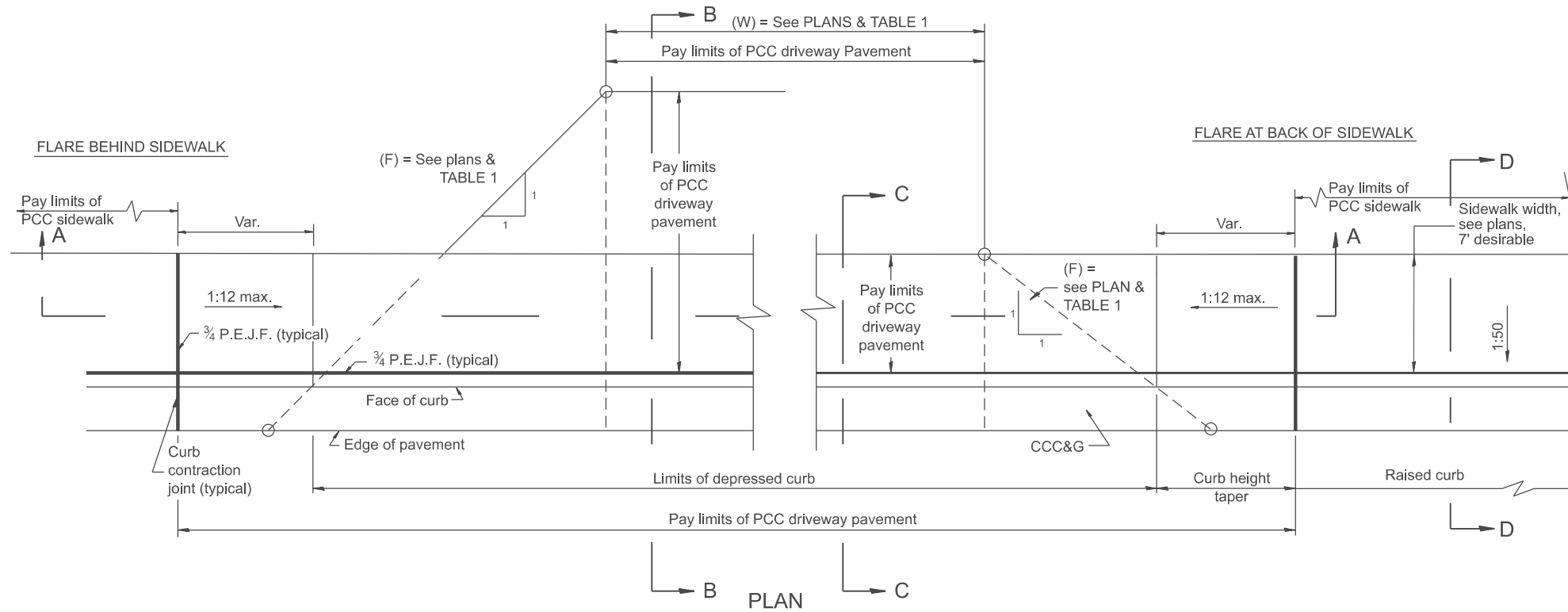


TABLE 1						
URBAN ENTRANCE DESIGN CONTROLS						
ELEMENT	NON-COMMERCIAL		COMMERCIAL			
			1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12' MIN.	24' MAX.	14' MIN.	24' MAX.	24' MIN.	35' MAX.
RADIUS EQUIVALENT 1:1 FLARE (F)	5' MIN.	25' MAX.	15' MIN.	40' MAX.	15' MIN.	40' MAX.
MAX. GRADE (G)	8%		6%			



GENERAL NOTES

1. The sidewalk area located within the pay limits of P.C.C. Driveway Pavement will be of the same thickness and construction as the P.C.C. Driveway Pavement.
2. Combination Concrete Curb & Gutter shall be depressed in accordance with Standard 606001.
3. Exceptions to the radius flare/property line relationship are as shown in the plans for common entrances, with jointly executed access permits.
4. Refer to State Standard 424026 for detectable warnings at busy commercial entrances.

All dimensions are in inches unless otherwise noted.

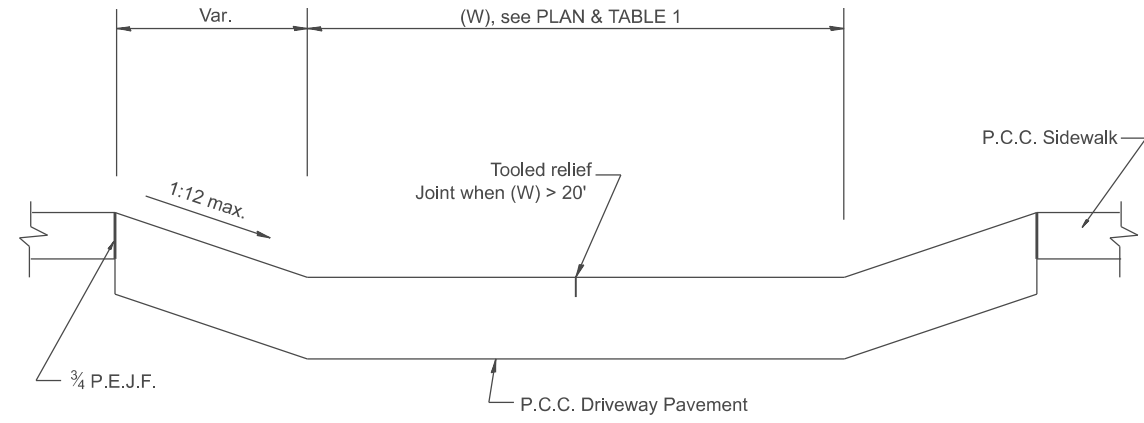
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	DRAWN -	REVISED -
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PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

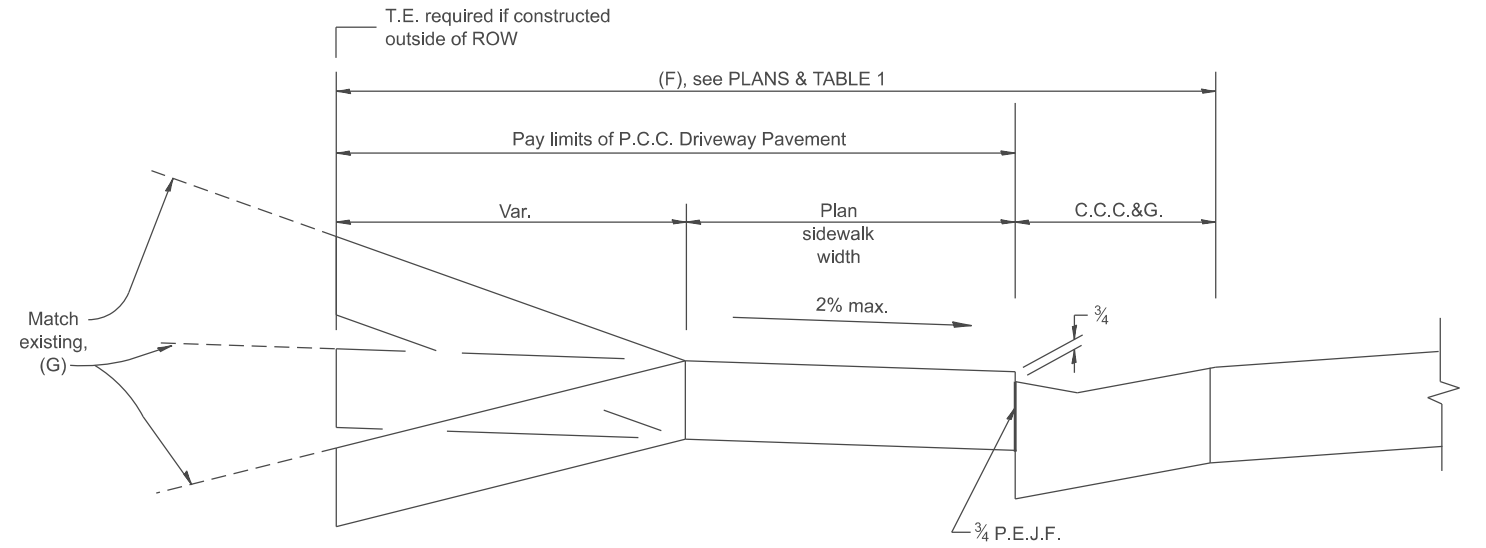
**URBAN ENTRANCES, ACCESSIBLE TO THE DISABLED,
 FOR CURBLINE SIDEWALKS**

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

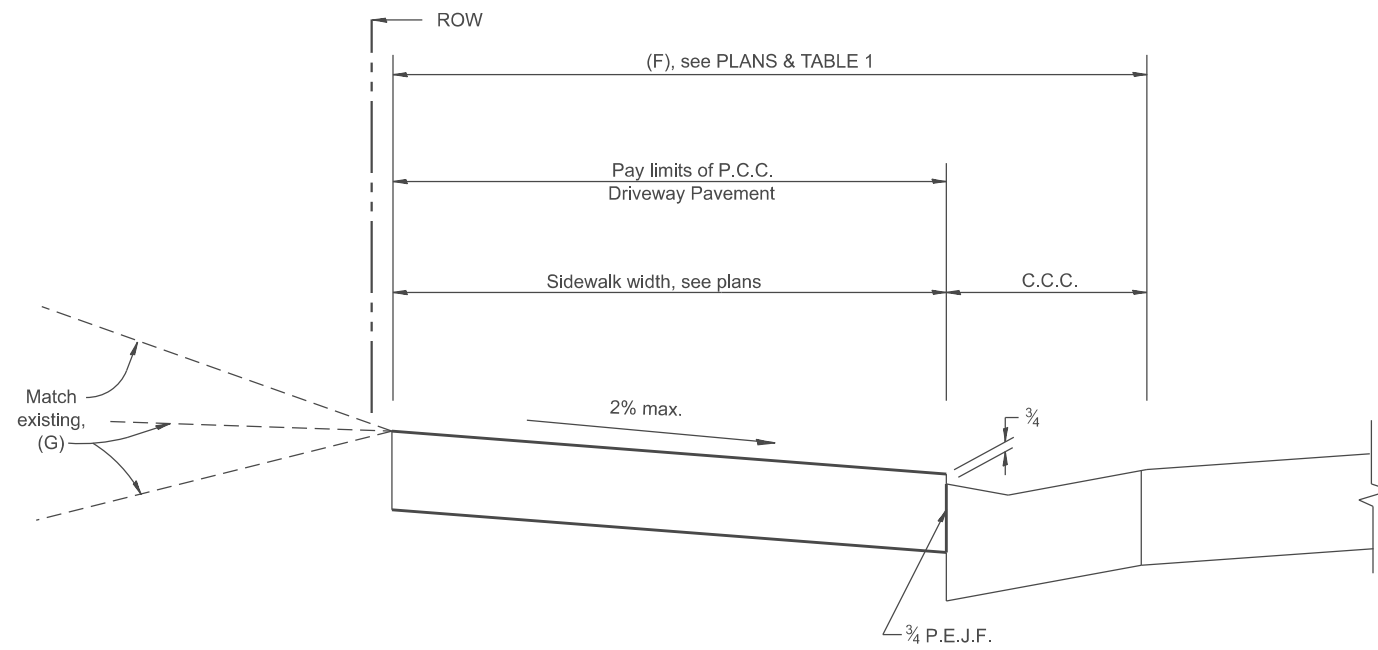
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



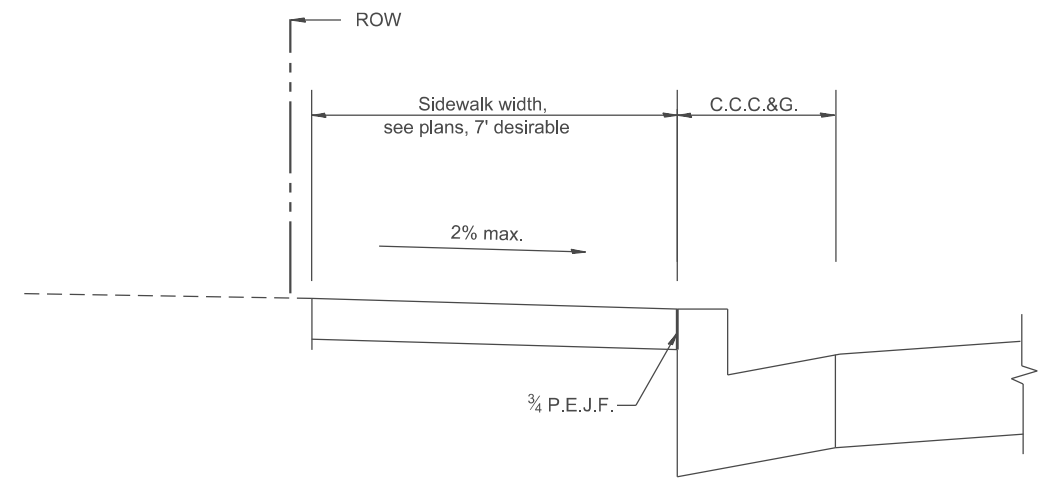
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\organizer-Chil\IDOT_Standards\Cell\IDOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

URBAN ENTRANCES, ACCESSIBLE TO THE DISABLED,
FOR CURBLINE SIDEWALKS

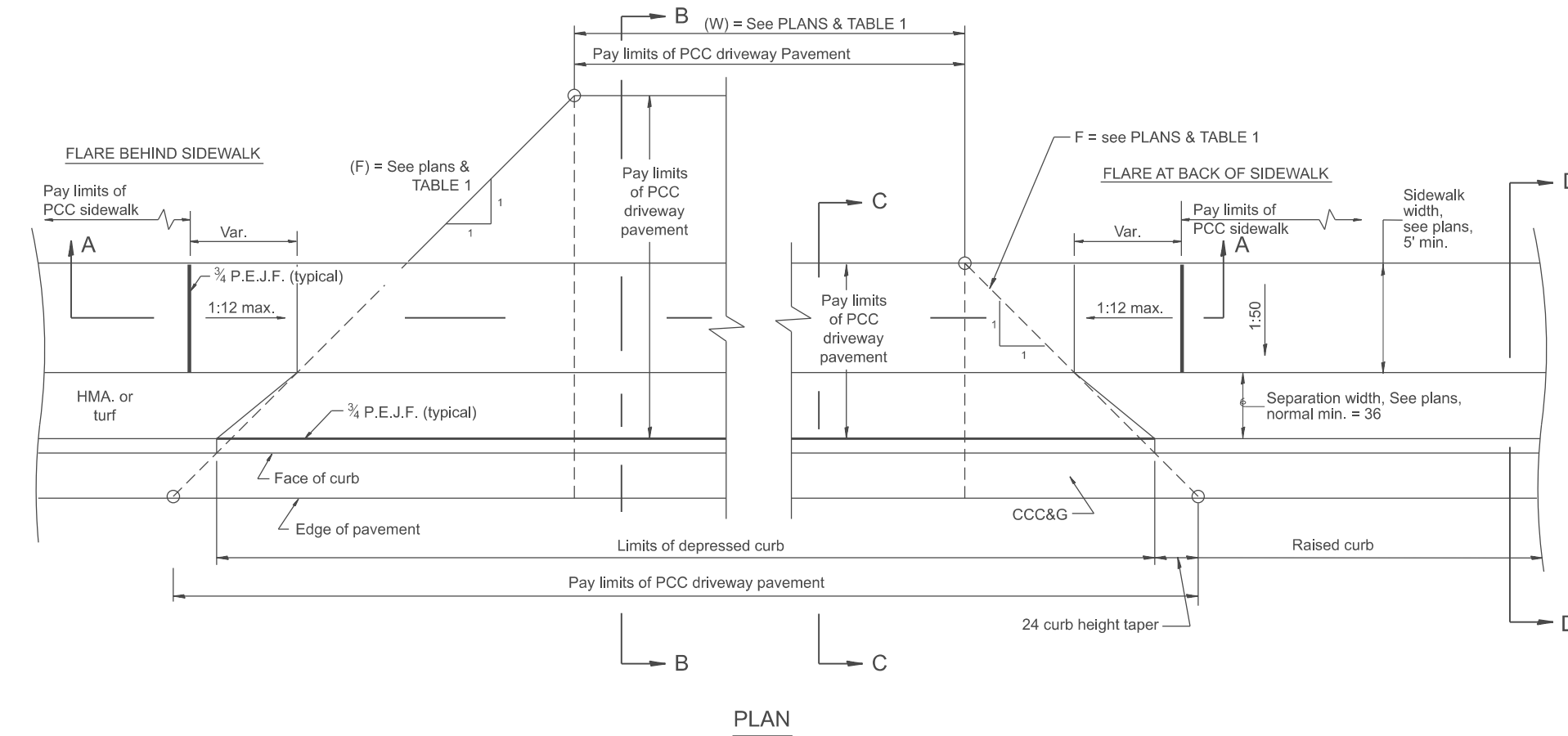
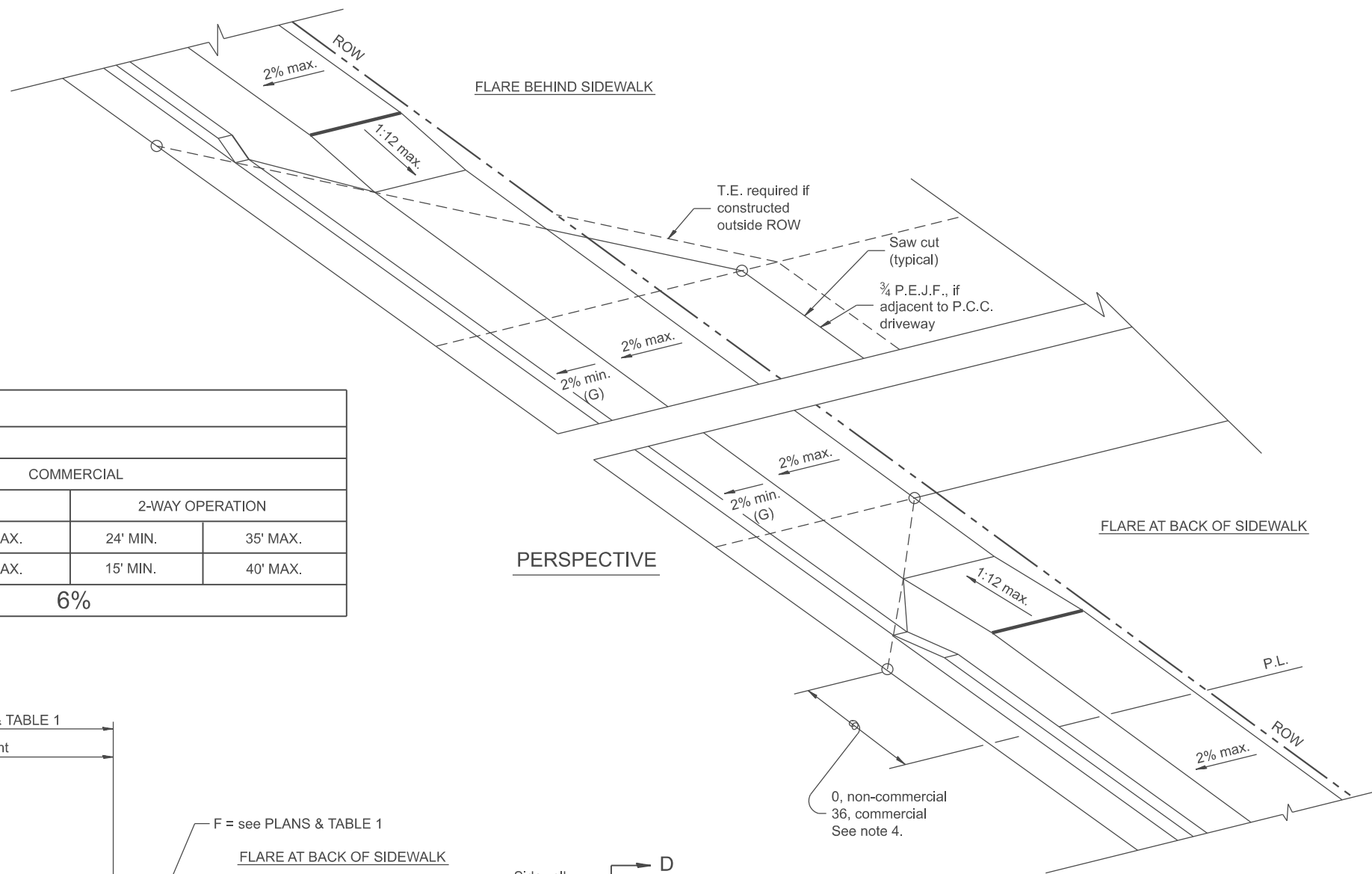
SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. DESIGNER SHOULD REVIEW "HANDBOOK FOR THE POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS"
 1:1 FLARES ARE RECOMMENDED FOR SIDEWALKS WITH NARROW SEPARATIONS.
 2. DESIGNER SHOULD REVIEW BDE CHAPTER 58.
 3. STATE STANDARD 606001 AND APPLICABLE SIDEWALK STANDARDS SHOULD BE INCLUDED IN THE PLANS TO SUPPLEMENT THIS DRAWING.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chilid\DOT_Standards\Civil\DOT_Sheets.dwg

TABLE 1						
URBAN ENTRANCE DESIGN CONTROLS						
ELEMENT	NON-COMMERCIAL		COMMERCIAL			
			1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12' MIN.	24' MAX.	14' MIN.	24' MAX.	24' MIN.	35' MAX.
RADIUS EQUIVALENT 1:1 FLARE (F)	5' MIN.	25' MAX.	15' MIN.	40' MAX.	15' MIN.	40' MAX.
MAX. GRADE (G)	8%		6%			



GENERAL NOTES

1. The sidewalk area located within the pay limits of P.C.C. Driveway Pavement will be of the same thickness and construction as the P.C.C. Driveway Pavement.
2. Combination Concrete Curb & Gutter shall be depressed in accordance with Standard 606001.
3. Exceptions to the radius flare/property line relationship are as shown in the plans for common entrances, with jointly executed access permits.
4. Refer to State Standard 424026 for detectable warnings at busy commercial entrances.

All dimensions are in inches unless otherwise noted.

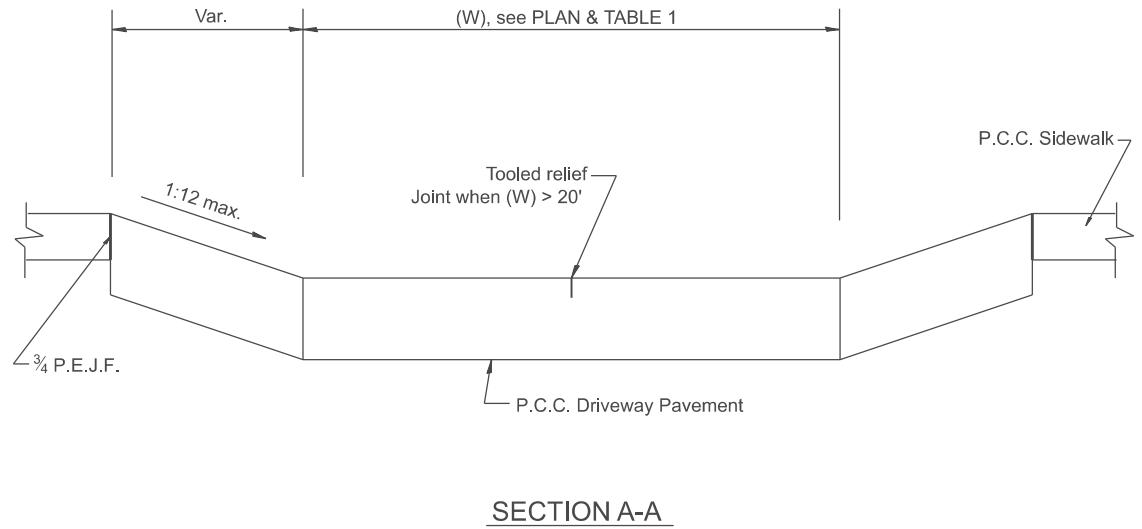
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

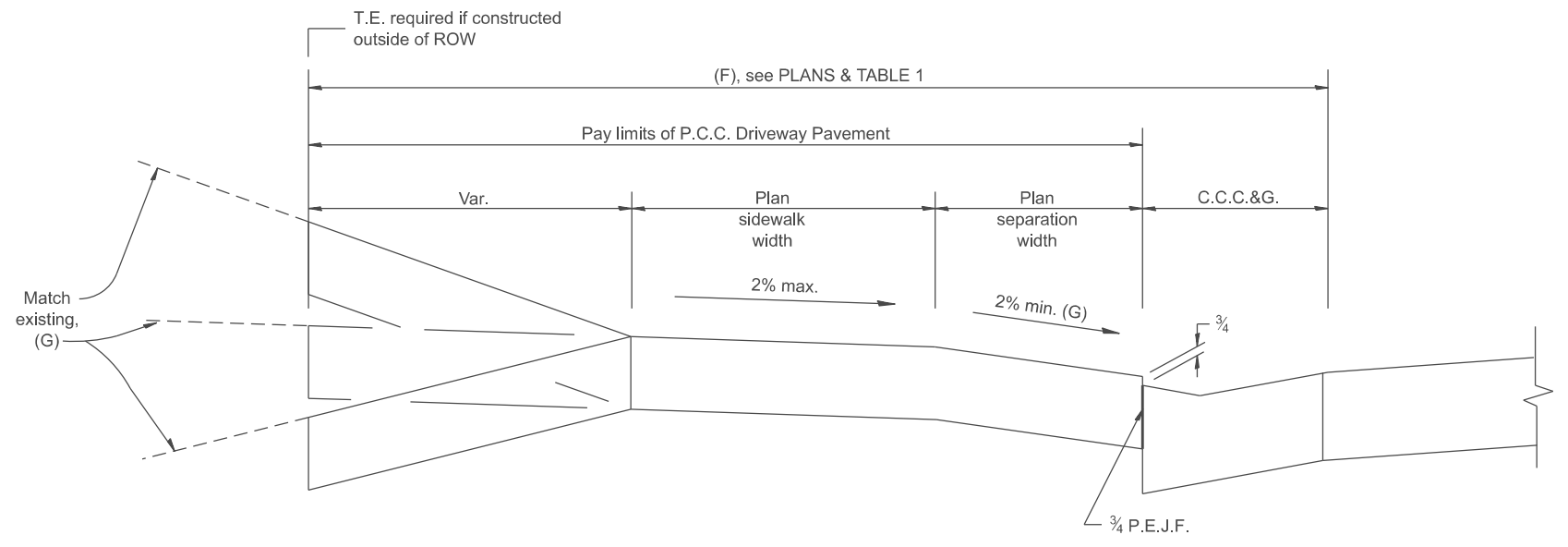
**URBAN ENTRANCES, ACCESSIBLE TO THE DISABLED,
 FOR SEPARATED SIDEWALKS**

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

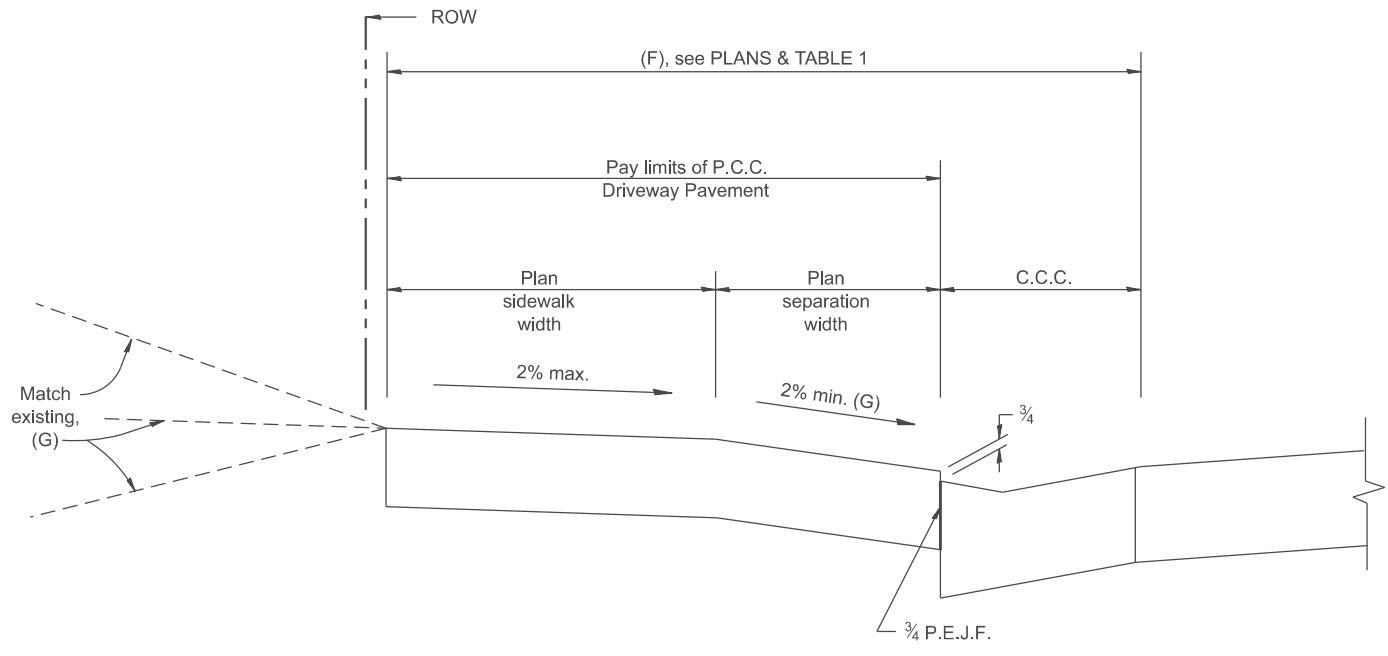
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423106		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



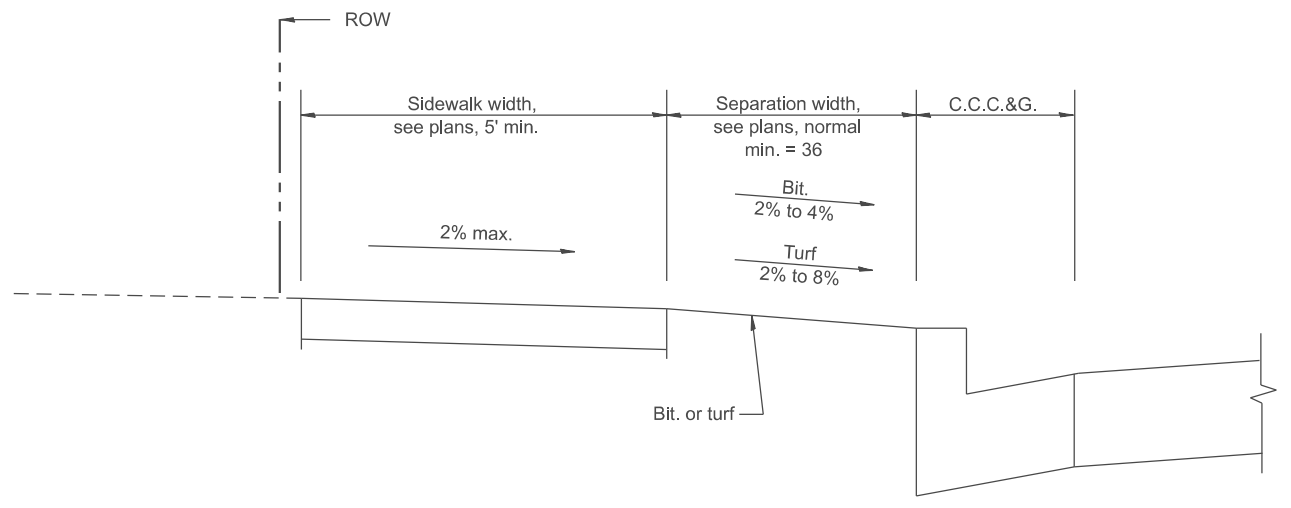
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT1011\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**URBAN ENTRANCES, ACCESSIBLE TO THE DISABLED,
FOR SEPARATED SIDEWALKS**

SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423106		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. DESIGNER SHOULD REVIEW "HANDBOOK FOR THE POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS"
 1:1 FLARES ARE RECOMMENDED FOR CURBLINE SIDEWALKS.
 2. DESIGNER SHOULD REVIEW CHAPTER 58 OF BDE FOR THE ADA REQUIREMENTS.
 INCLUDE STATE STANDARD 606001 AND APPLICABLE SIDEWALK STANDARDS.
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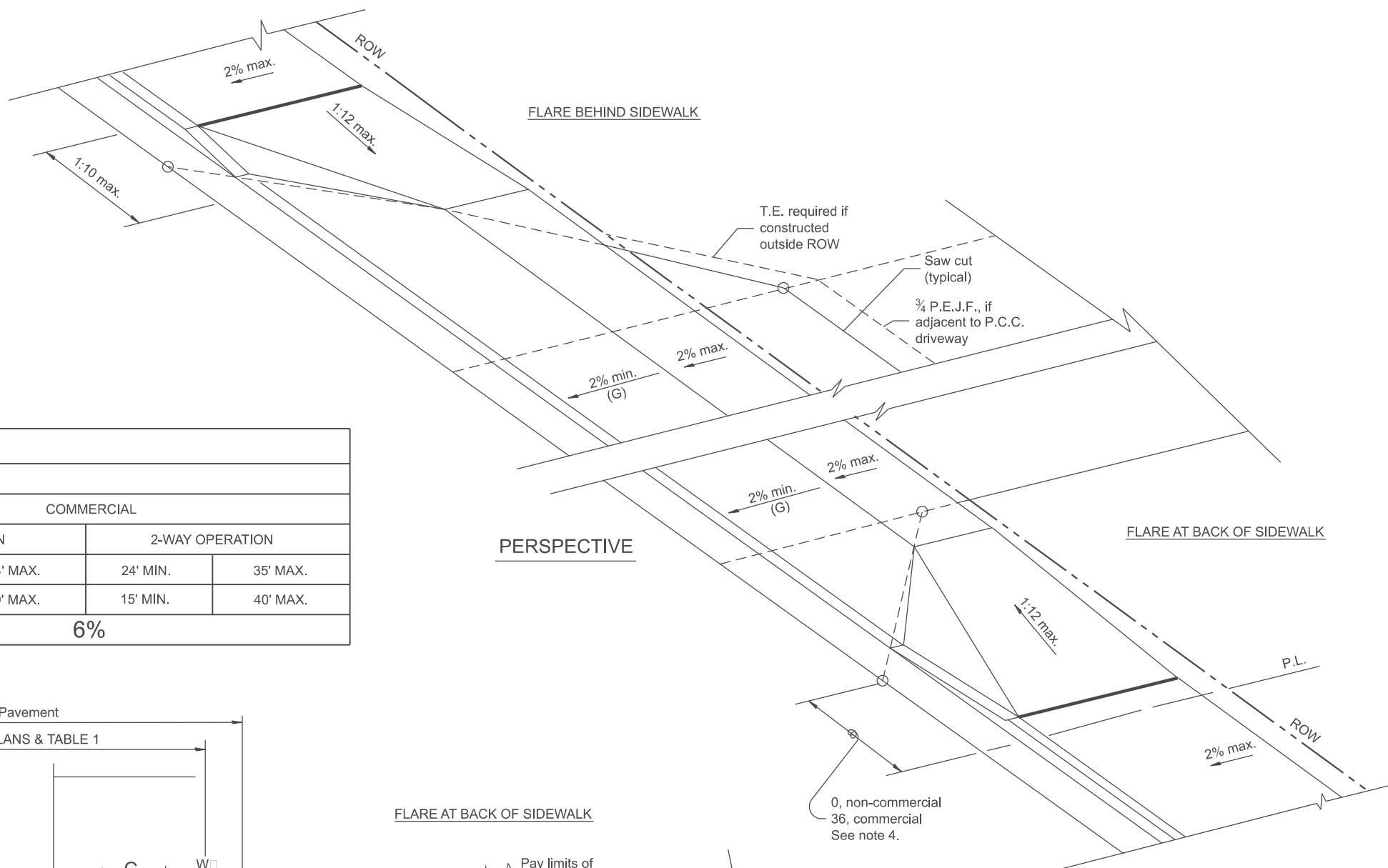
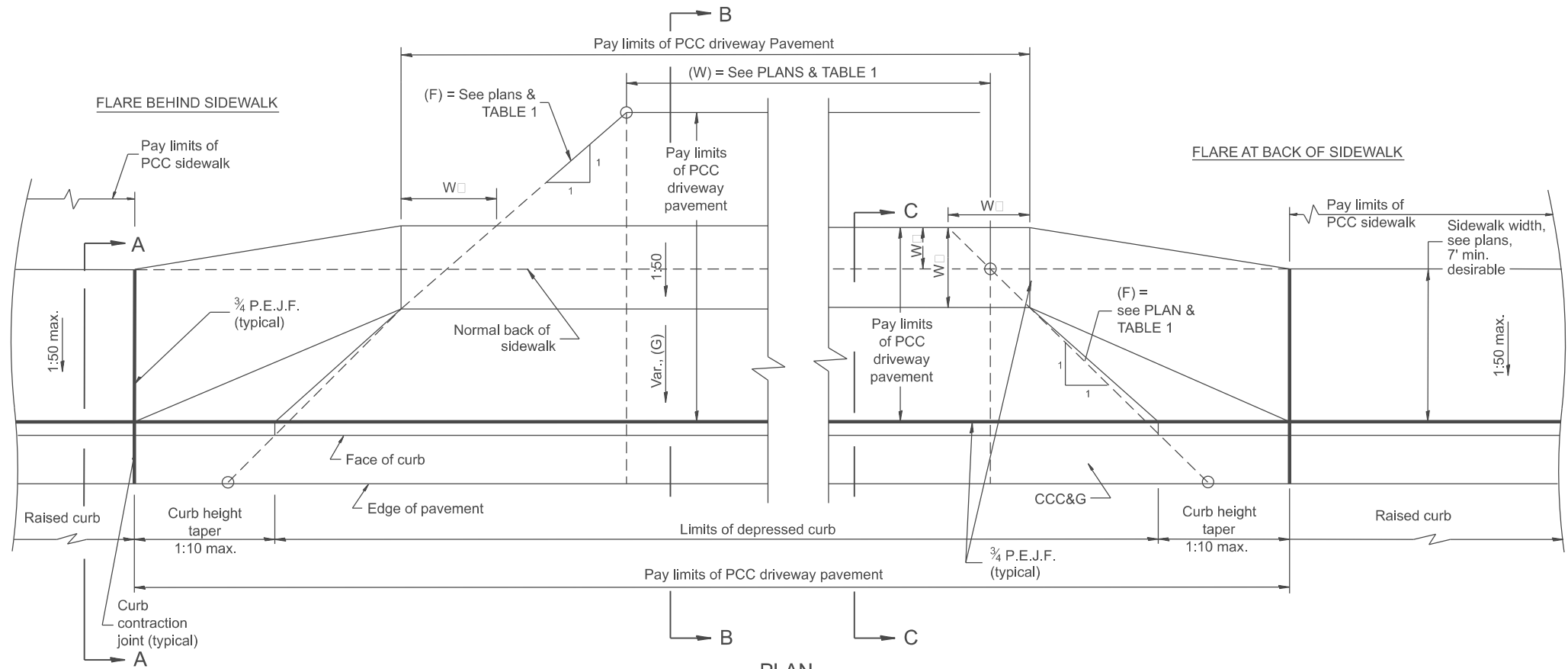


TABLE 1
URBAN ENTRANCE DESIGN CONTROLS

ELEMENT	NON-COMMERCIAL		COMMERCIAL			
			1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12' MIN.	24' MAX.	14' MIN.	24' MAX.	24' MIN.	35' MAX.
RADIUS EQUIVALENT 1:1 FLARE (F)	5' MIN.	25' MAX.	15' MIN.	40' MAX.	15' MIN.	40' MAX.
MAX. GRADE (G)	8%		6%			



GENERAL NOTES

- The sidewalk area located within the pay limits of P.C.C. Driveway Pavement will be of the same thickness and construction as the P.C.C. Driveway Pavement.
- Combination Concrete Curb & Gutter shall be depressed in accordance with Standard 606001.
- Exceptions to the radius flare/property line relationship are as shown in the plans for common entrances, with jointly executed access permits.
- Refer to State Standard 424026 for detectable warnings at busy commercial entrances.

All dimensions are in inches unless otherwise noted.

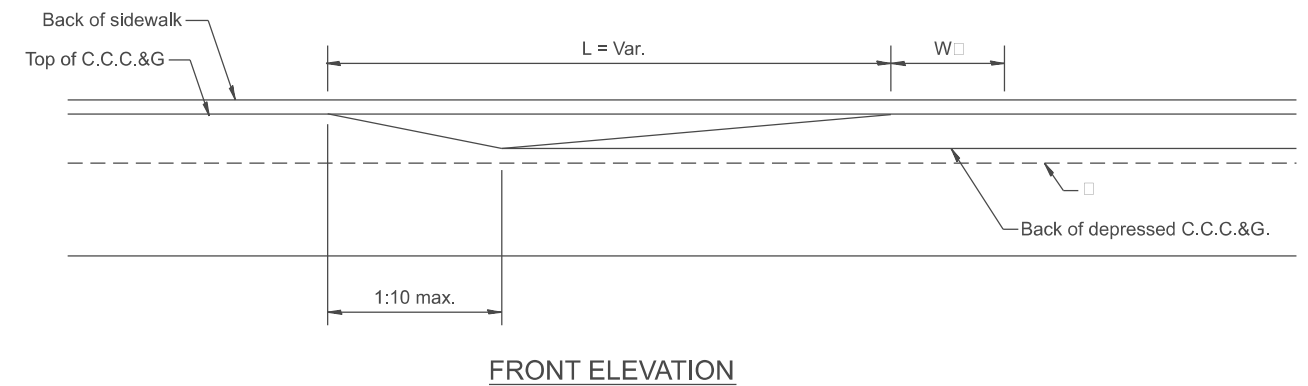
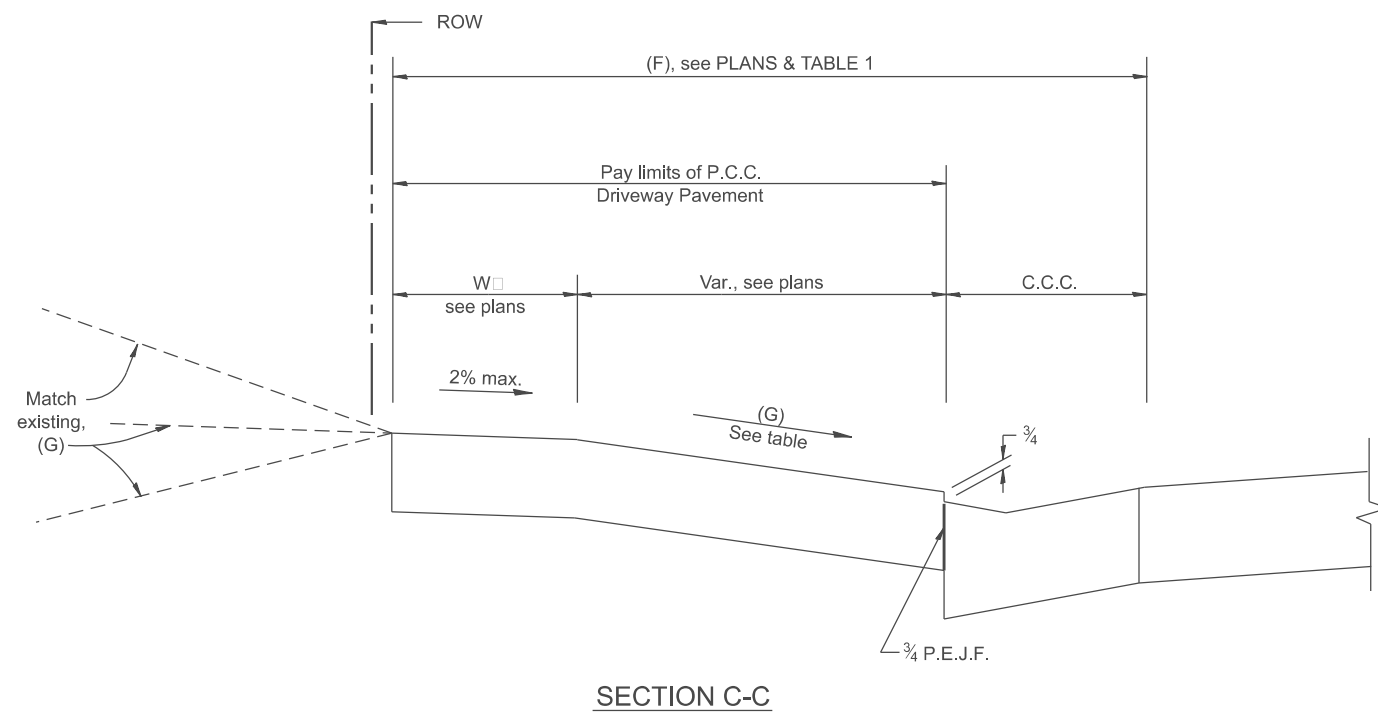
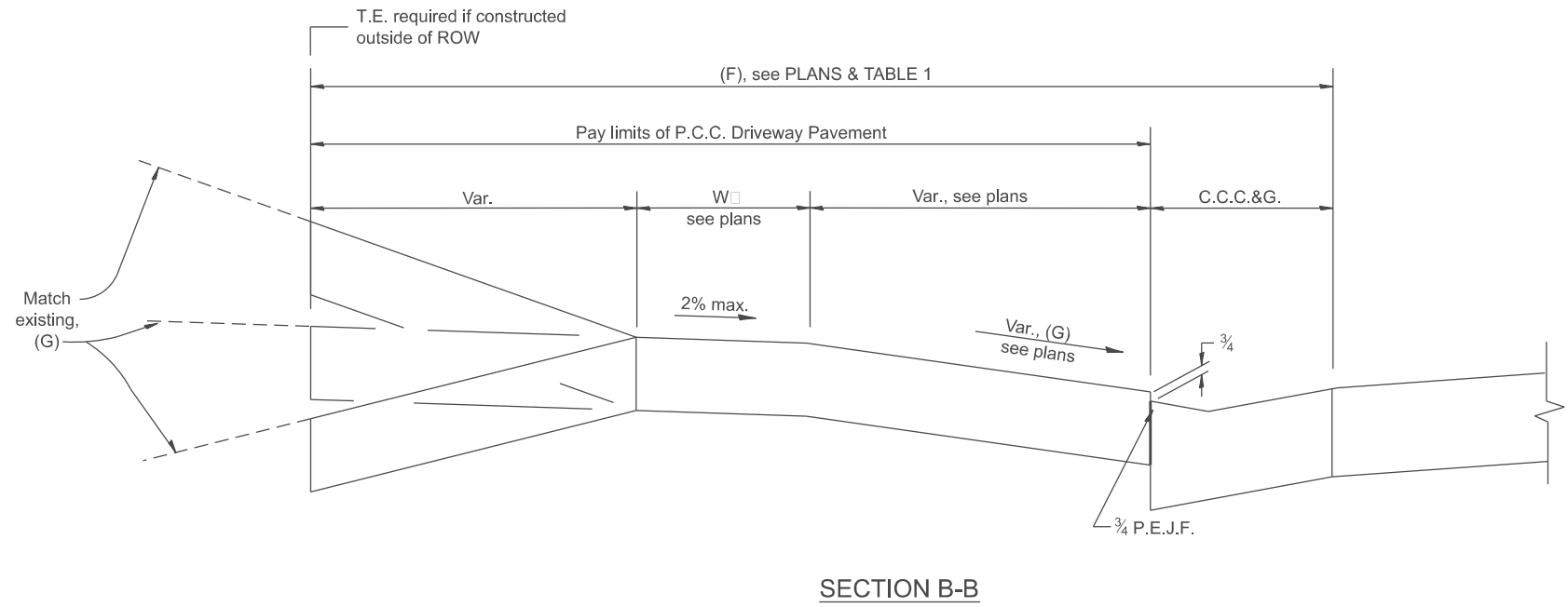
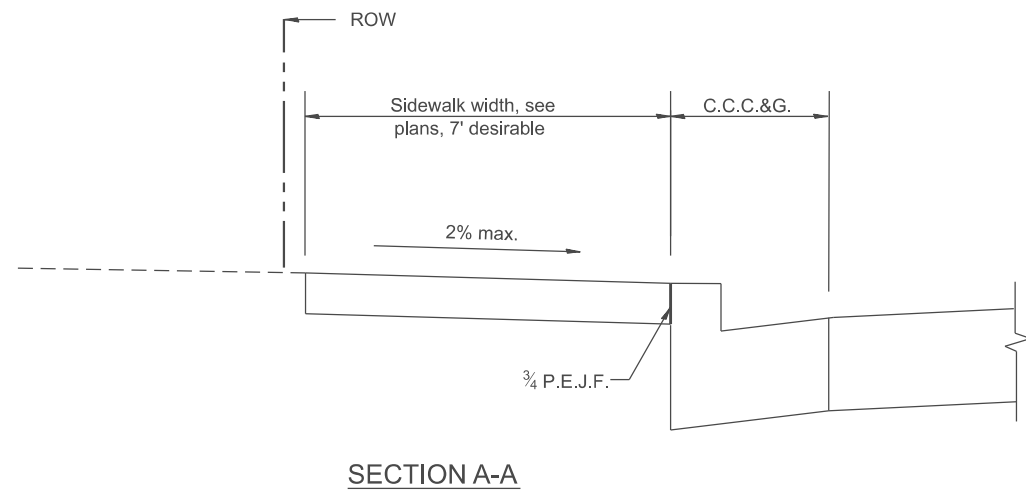
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**URBAN ENTRANCES, ACCESSIBLE TO THE DISABLED,
SPECIAL DESIGN FOR CURBLINE SIDEWALKS**

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423111		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chil\IDOT_Standards\Cell\IDOT_Sheets.cel

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

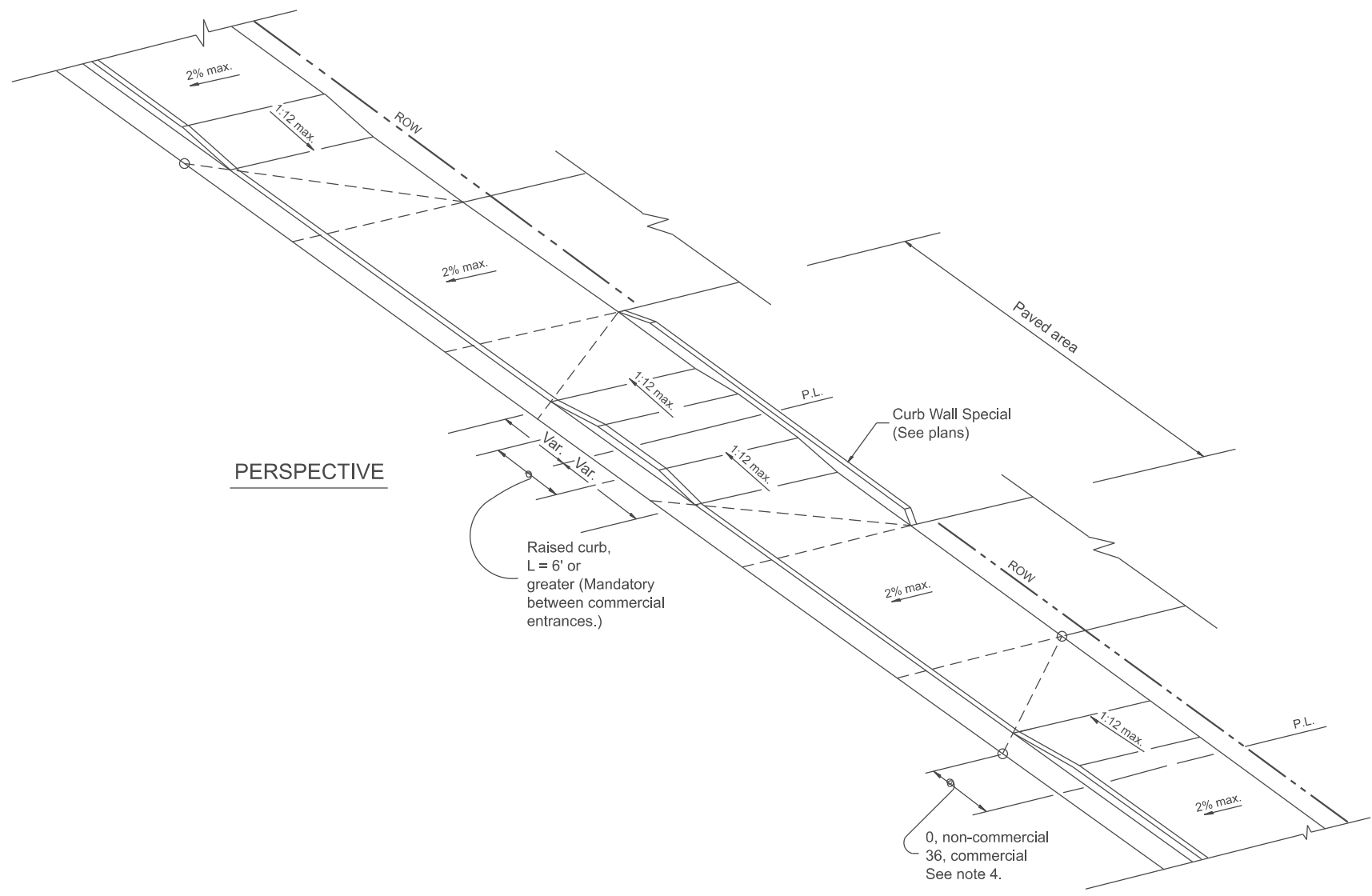
**URBAN ENTRANCES, ACCESSIBLE TO THE DISABLED,
SPECIAL DESIGN FOR CURBLINE SIDEWALKS**

SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423111		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH DISTRICT CADD STD. "URBAN ENTRANCES, ACCESSIBLE TO THE DISABLED, FOR CURBLINE SIDEWALKS."
 2. THIS DRAWING IS FOR USE WHEN A LENGTH OF RAISED CURB OF L = 6' OR GREATER CAN BE OBTAINED BETWEEN ENTRANCES.

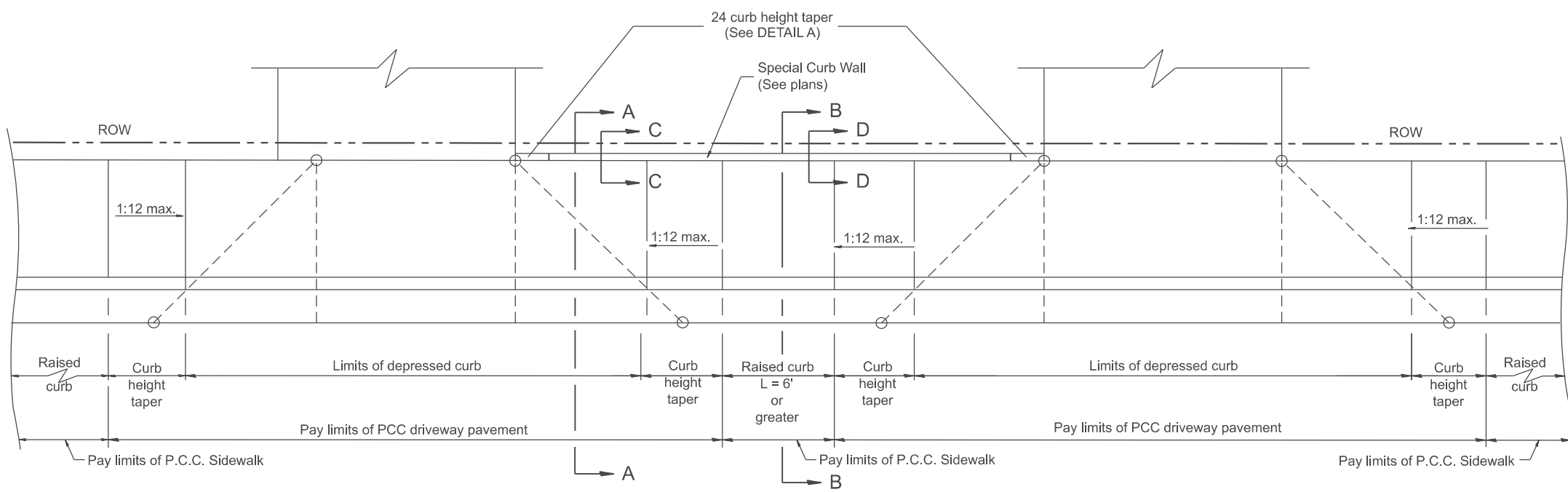
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PERSPECTIVE

GENERAL NOTES

1. The sidewalk area located within the pay limits of P.C.C. Driveway Pavement will be of the same thickness and construction as the P.C.C. Driveway Pavement.
2. Combination Concrete Curb & Gutter shall be depressed in accordance with Standard 606001.
3. Exceptions to the radius flare/property line relationship are as shown in the plans for common entrances, with jointly executed access permits.
4. Refer to State Standard 424026 for detectable warnings at busy commercial entrances.



PLAN

All dimensions are in inches unless otherwise noted.

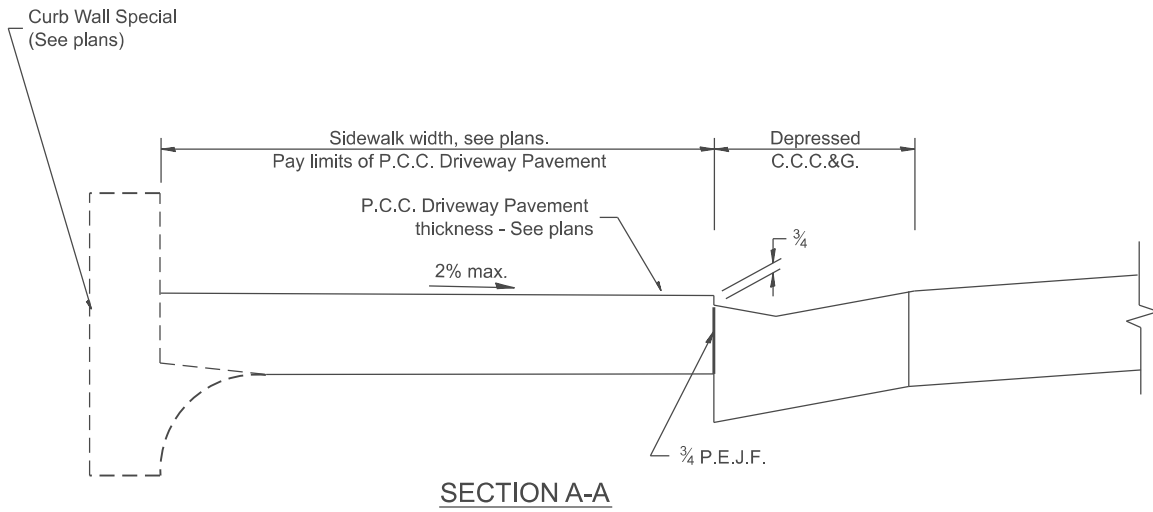
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

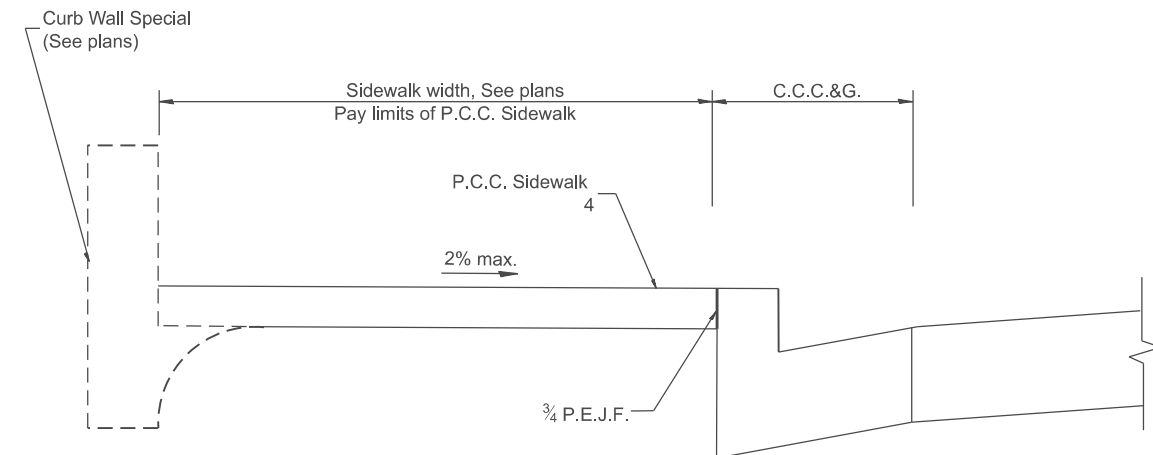
**URBAN ENTRANCES, SPECIAL DESIGN FOR CLOSELY SPACED ENTRANCES
(WITH PAVEMENT EDGE CURB BETWEEN ENTRANCES)**

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

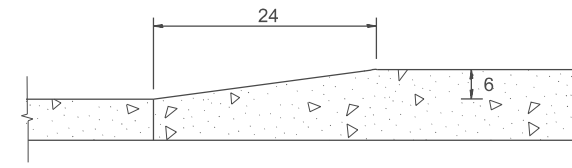
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423116		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



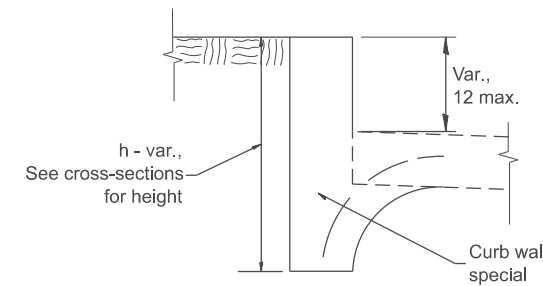
SECTION A-A



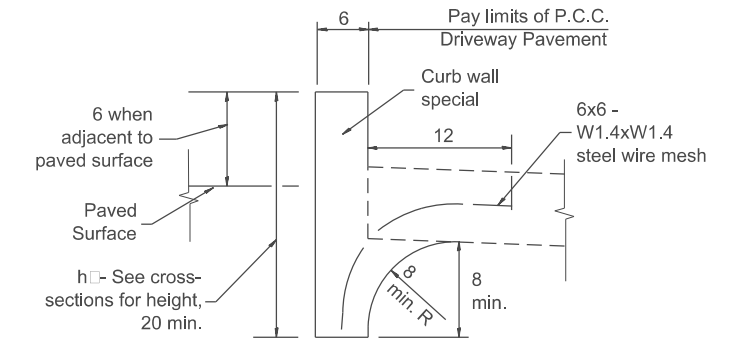
SECTION B-B



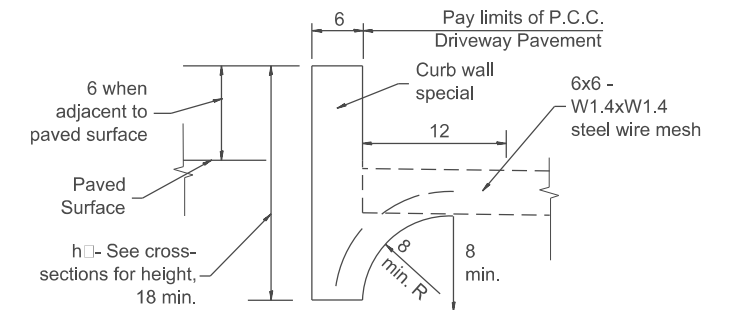
DETAIL 'A'
Curb Height Taper Detail



ALTERNATE TREATMENT
WITH TURF BORDER



SECTION C-C
TYPICAL APPLICATION
BETWEEN DRIVEWAYS



SECTION D-D
TYPICAL APPLICATION
BETWEEN DRIVEWAYS

CURB WALL - SPECIAL

Measurement formula: $h \times \text{length constructed} =$
Payment area in square feet

GENERAL NOTES

1. The Curb Wall, Special, shall be poured monolithically with the adjacent P.C.C. Driveway Pavement or P.C.C. Sidewalk.
2. All provisions of Sections 424 and 606 of the Standard Specifications shall apply unless otherwise shown.

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT1011\Organization\ChilIDOT_Standards\CellIDOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

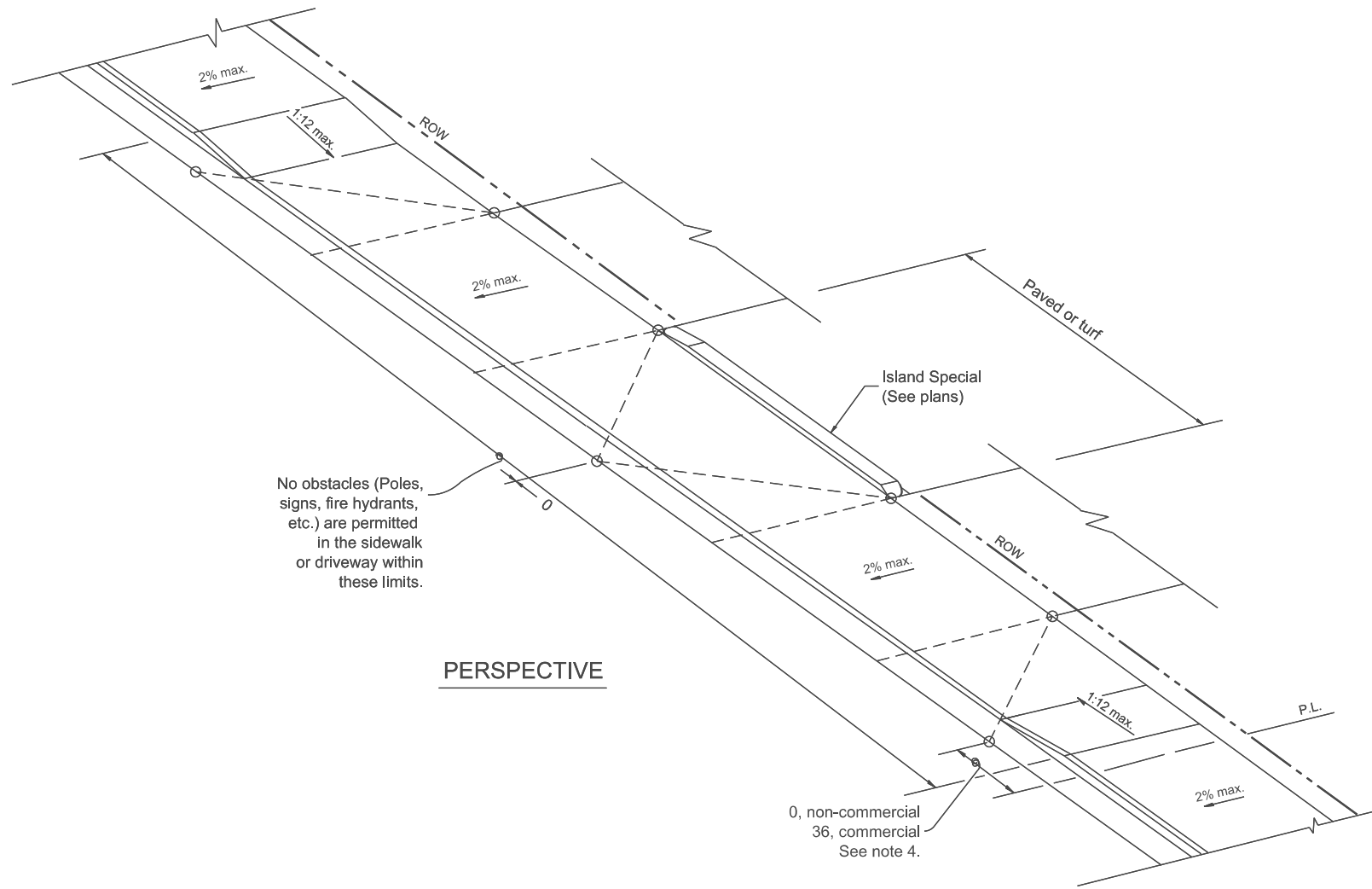
URBAN ENTRANCES, SPECIAL DESIGN FOR CLOSELY SPACED ENTRANCES
(WITH PAVEMENT EDGE CURB BETWEEN ENTRANCES)

SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423116		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

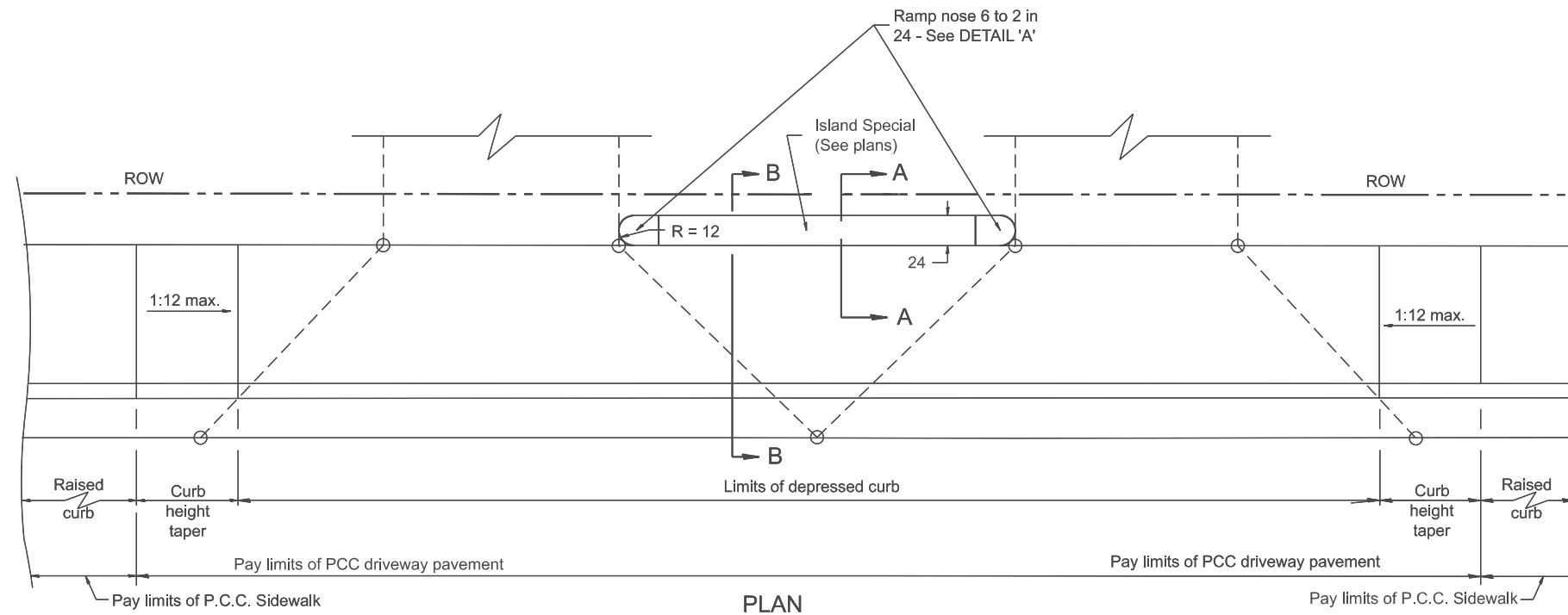
DESIGNER NOTES:
 1. THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH DISTRICT CADD STD. "URBAN ENTRANCES, ACCESSIBLE TO THE DISABLED, FOR CURBLINE SIDEWALKS."
 2. THIS DRAWING IS FOR USE WHEN DISTANCE BETWEEN DRIVEWAY FLARES IS LESS THAN 6'.
 3. INCLUDE STATE STANDARD 606001 AND APPLICABLE SIDEWALK STANDARDS.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT1010\organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg



GENERAL NOTES

1. The sidewalk area located within the pay limits of P.C.C. Driveway Pavement will be of the same thickness and construction as the P.C.C. Driveway Pavement.
2. Combination Concrete Curb & Gutter shall be depressed in accordance with Standard 606001.
3. Exceptions to the radius flare/property line relationship are as shown in the plans for common entrances, with jointly executed access permits.
4. Refer to State Standard 424026 for detectable warnings at busy commercial entrances.



All dimensions are in inches unless otherwise noted.

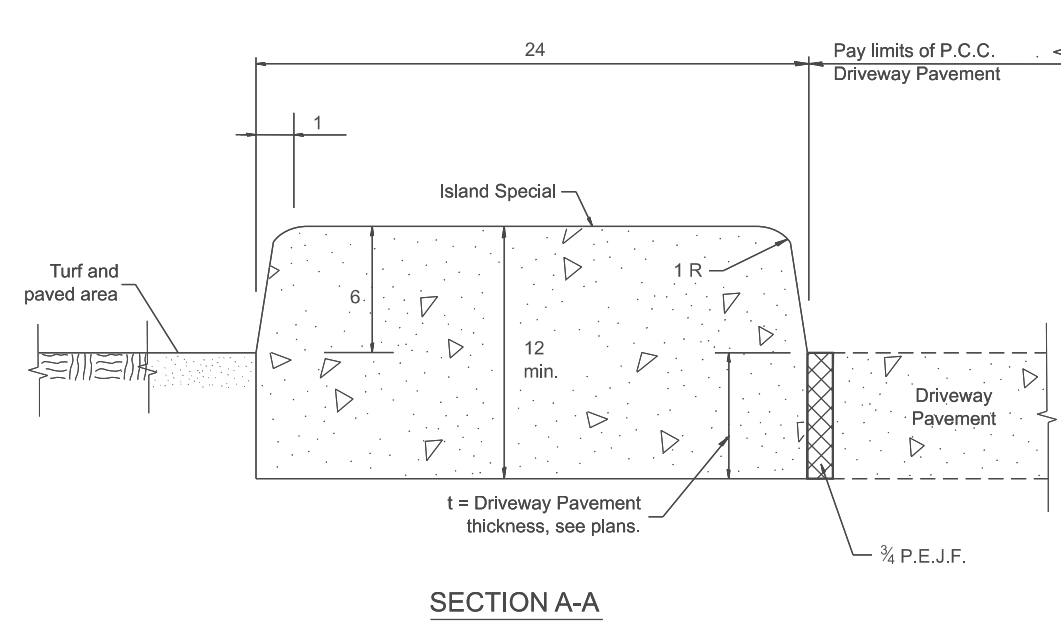
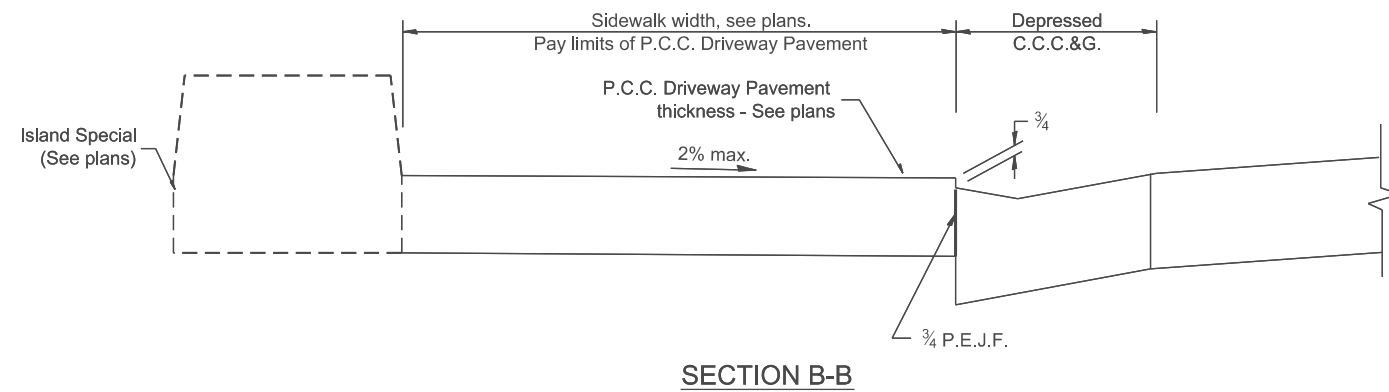
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

URBAN ENTRANCES, SPECIAL DESIGN FOR CLOSELY SPACED ENTRANCES
 (WITHOUT PAVEMENT EDGE CURB BETWEEN ENTRANCES)

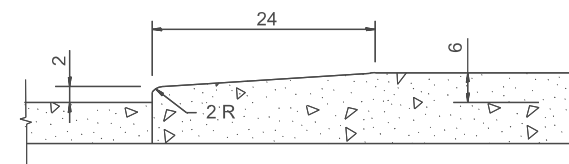
SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423121		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



GENERAL NOTES

1. All provisions in Section 606 of the Standard Specifications shall apply unless otherwise shown.



Nose ramping detail

ISLAND SPECIAL

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chil\IDOT_Standards\Cell\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

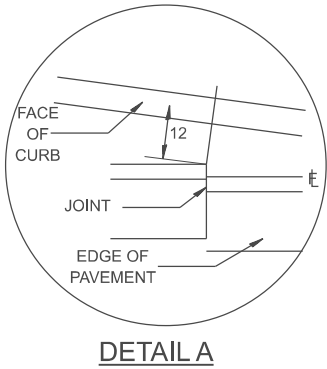
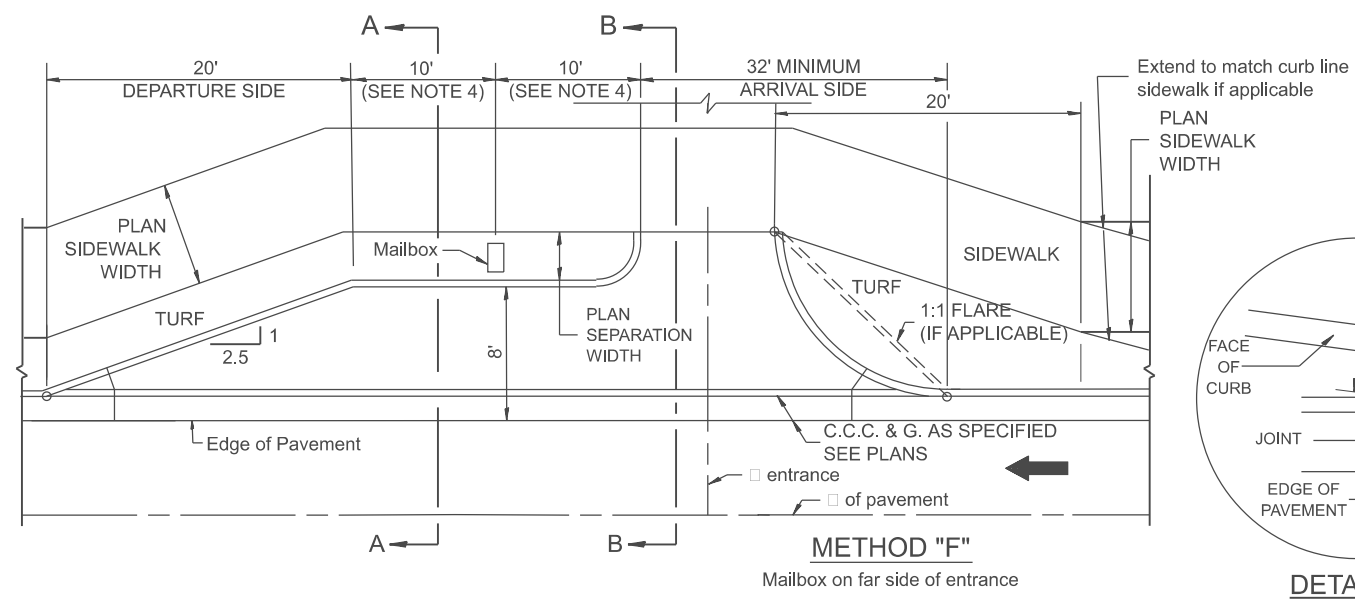
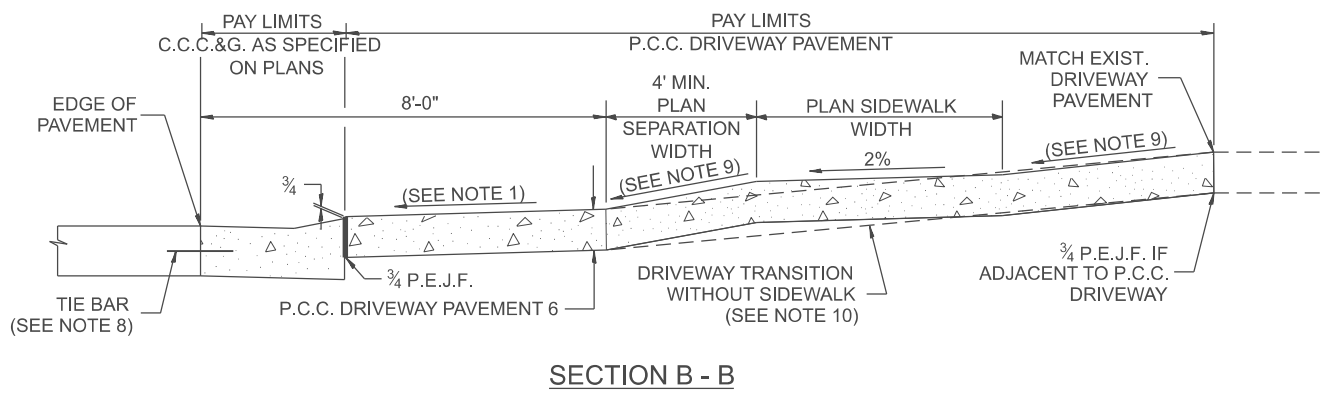
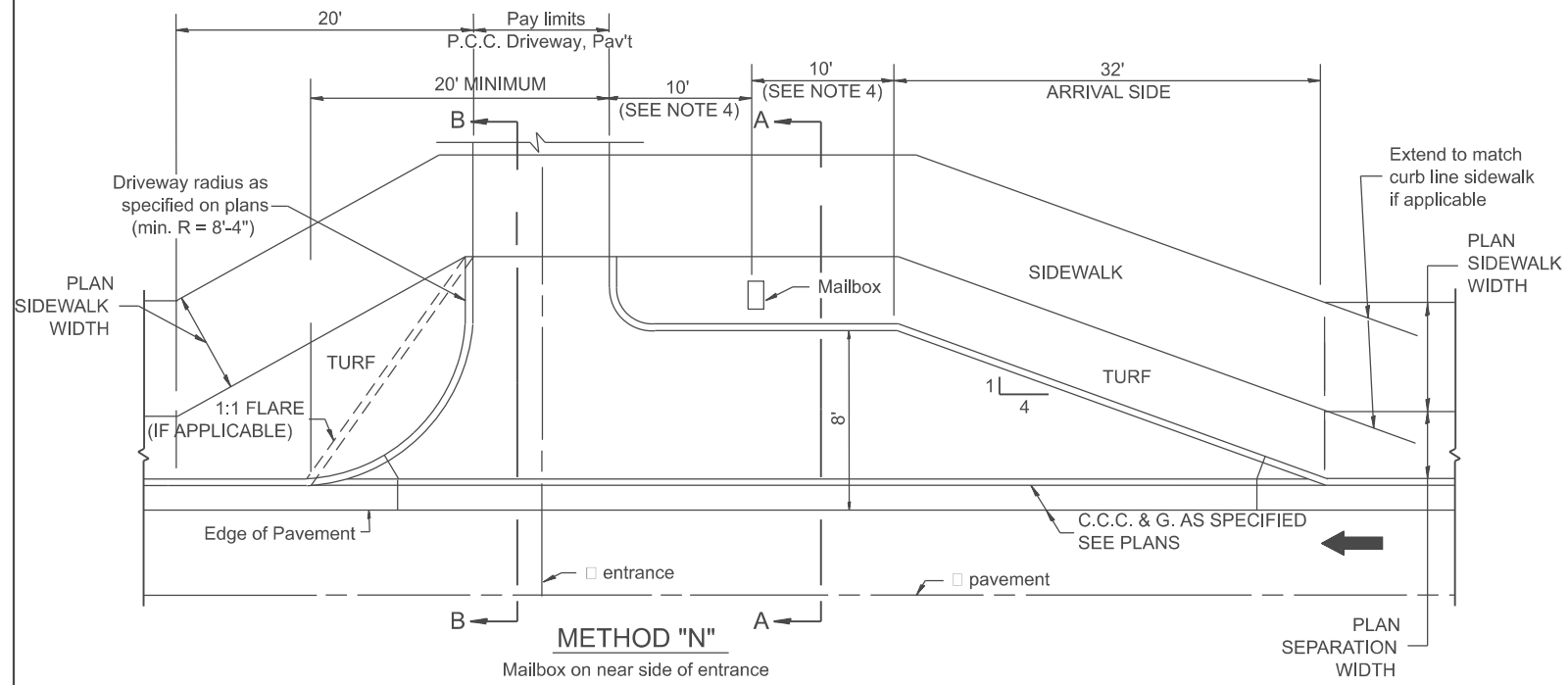
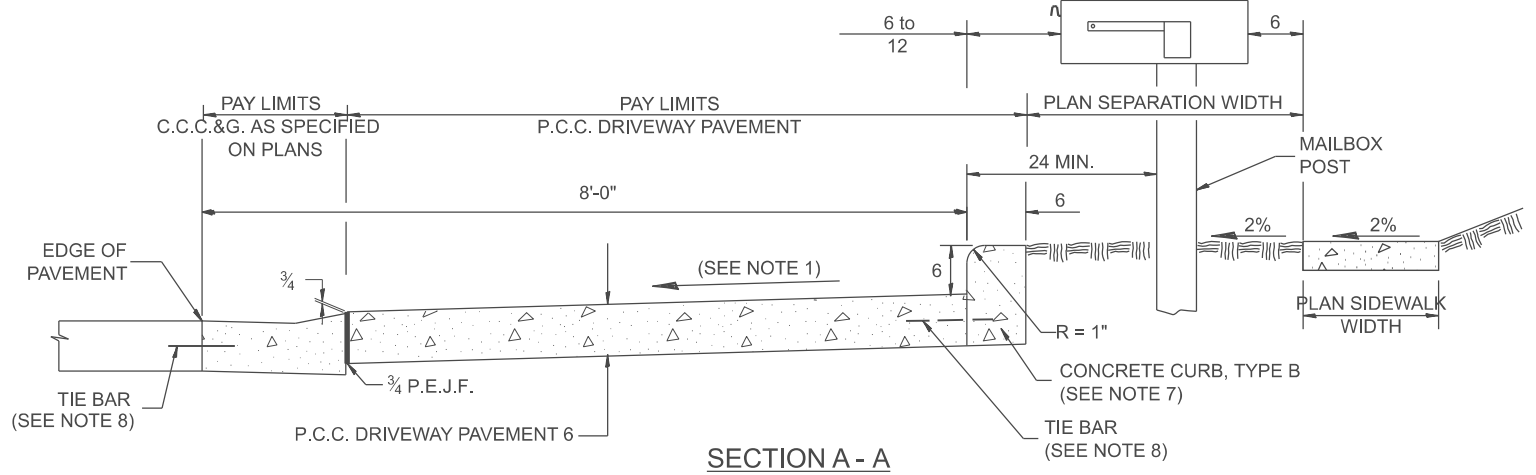
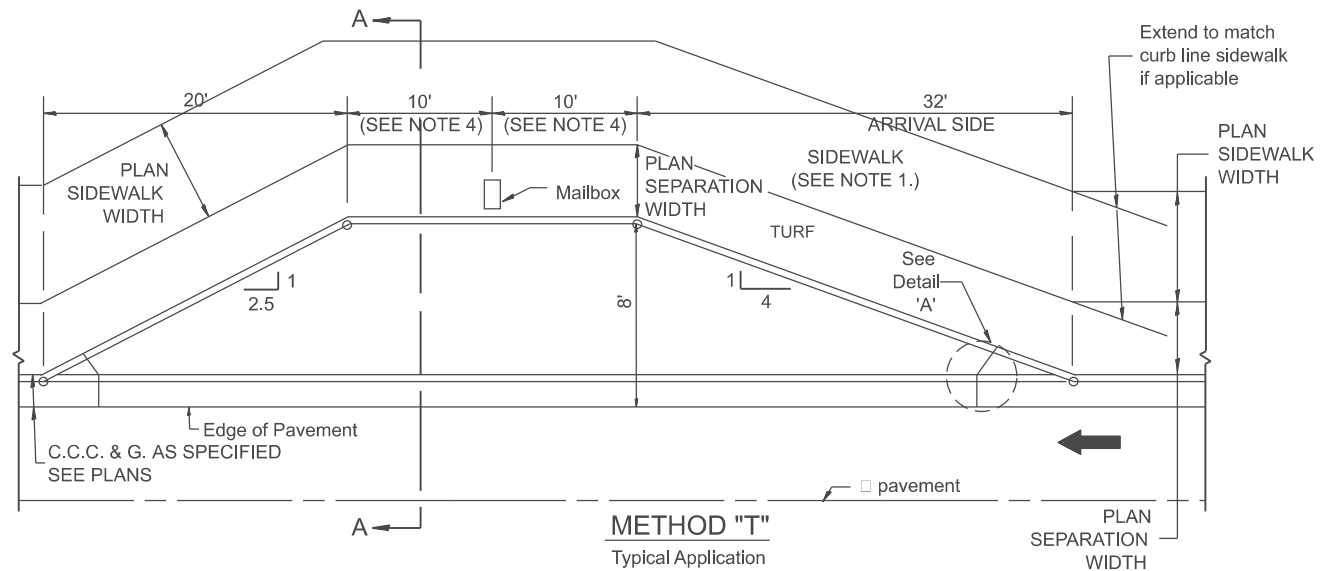
URBAN ENTRANCES, SPECIAL DESIGN FOR CLOSELY SPACED ENTRANCES
(WITHOUT PAVEMENT EDGE CURB BETWEEN ENTRANCES)

SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423121		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:
 1. THIS DRAWING SHOULD BE USED IN URBAN AREAS (CURB & GUTTER) WHEN ALTERNATE METHODS OF MAIL DELIVERY IS NOT AN OPTION (I.E. SIDEROAD DELIVERY; POST OFFICE BOX, WALK ROUTES, ETC) PRIOR TO USE. DISCUSSIONS WITH THE LOCAL POSTMASTER/ MUNICIPALITY SHOULD BE HELD TO DETERMINE APPROPRIATE MAIL DELIVERY OPTION.
 2. CONSIDERATION SHOULD BE GIVEN TO CONTINUOUS PAVING OF TURNOUTS AT LOCATIONS WHERE THE DISTANCE BETWEEN TURNOUT CONTROL POINTS IS LESS THAN 50'.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\ChilidDOT_Standards\Cadd\DOT_Sheets.dwg



GENERAL NOTES

1. Cross slope 2% to 4% (max) adjacent to normal crown roadway. See plans for turnout slopes on super elevated horizontal curves.
2. Mailboxes shall be mounted such that the face of the mailbox is 6 to 12 and the post a minimum of 24 from the face of the turnout curb.
3. The mailbox turnout shall be constructed according to Section 423 of the Standard Specification, with grooves at approximately 10'-0" centers.
4. If more than one mailbox is present, this dimension shall be measured from the end box in each direction.
5. Refer to the plans for entrance width, length and surface type.
6. Driveway curbs shall be tapered from the full height to ground level in a distance of approximately 24 when applicable.
7. The Concrete Curb, Type B shall be included in the cost of P.C.C. Driveway Pavement. It is the contractor's option to pour the Concrete Curb, Type B monolithically with the driveway pavement. If it is poured separately, the Concrete Curb, Type B shall be constructed in accordance with Standard 606001 and connected to the proposed Driveway Pavement with tie bars.
8. Tie bars shall be placed in accordance with Standard 606001 and shall be included in the cost of the specified C.C.C.&G.
9. Cross slope to be constructed as given in the plans and District CADD Standards for urban entrances.
10. Where there is no sidewalk behind proposed turnout, the cross slope is to be constructed as given in the plans from back of turnout to where driveway matches existing.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

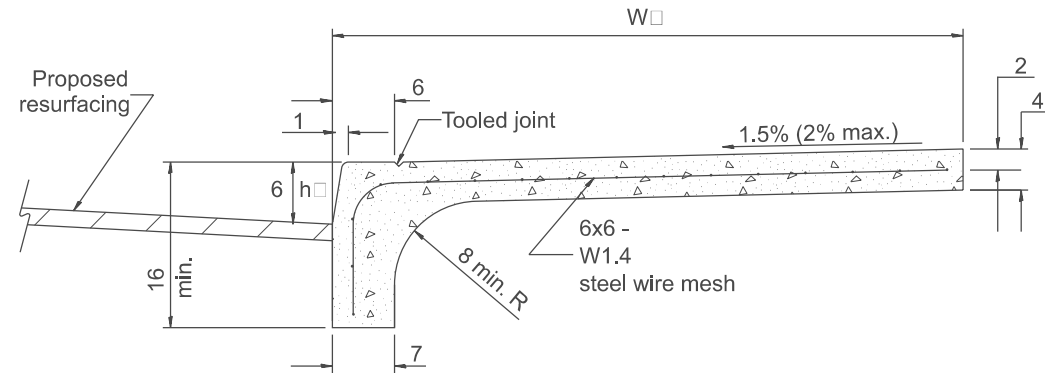
MAILBOX TURNOUTS IN CURB AND GUTTER SECTION

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

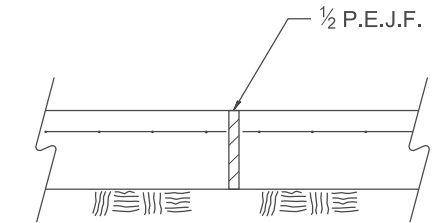
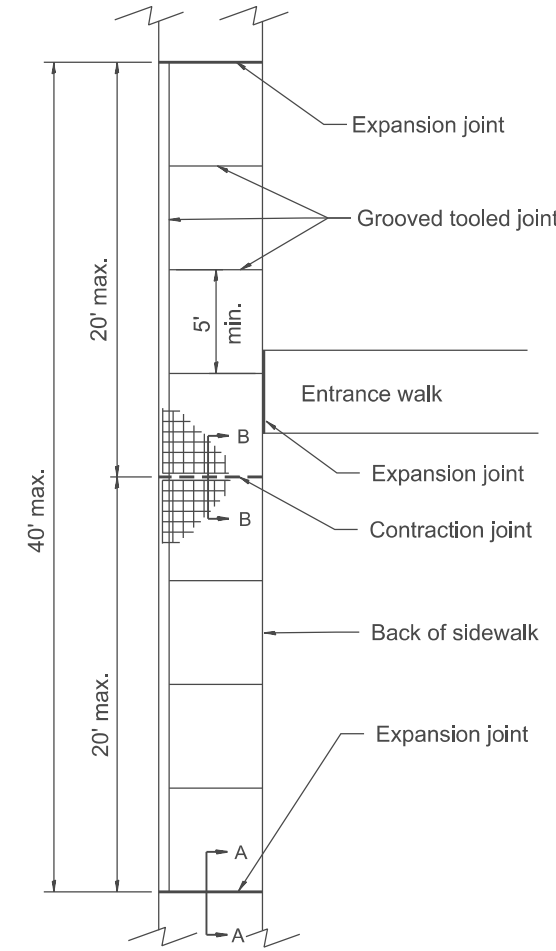
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 423201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH STATE STANDARD 424001 AND DISTRICT CADD std. " CURB RAMPS ACCESSIBLE TO THE DISABLED."

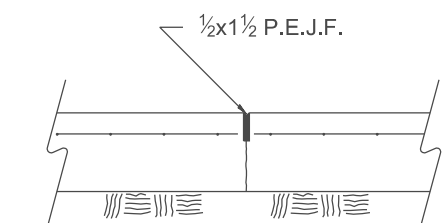
MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT10110\Organization\ChilIDOT_Standards\CivilIDOT_Sheets.dwg



COMBINATION CURB - SIDEWALK 4"
 Measurement Formula: $(W + h) \times \text{length constructed} = \text{Payment area in square feet}$



SEC. A-A
Expansion Joint



SEC. B-B
Contraction Joint

GENERAL NOTES:
 1. All provisions in Section 424 of the Standard Specifications shall apply, unless otherwise shown.

All dimensions are in inches unless otherwise noted.

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PLOT DATE = 12/7/2022	DATE -	REVISED -

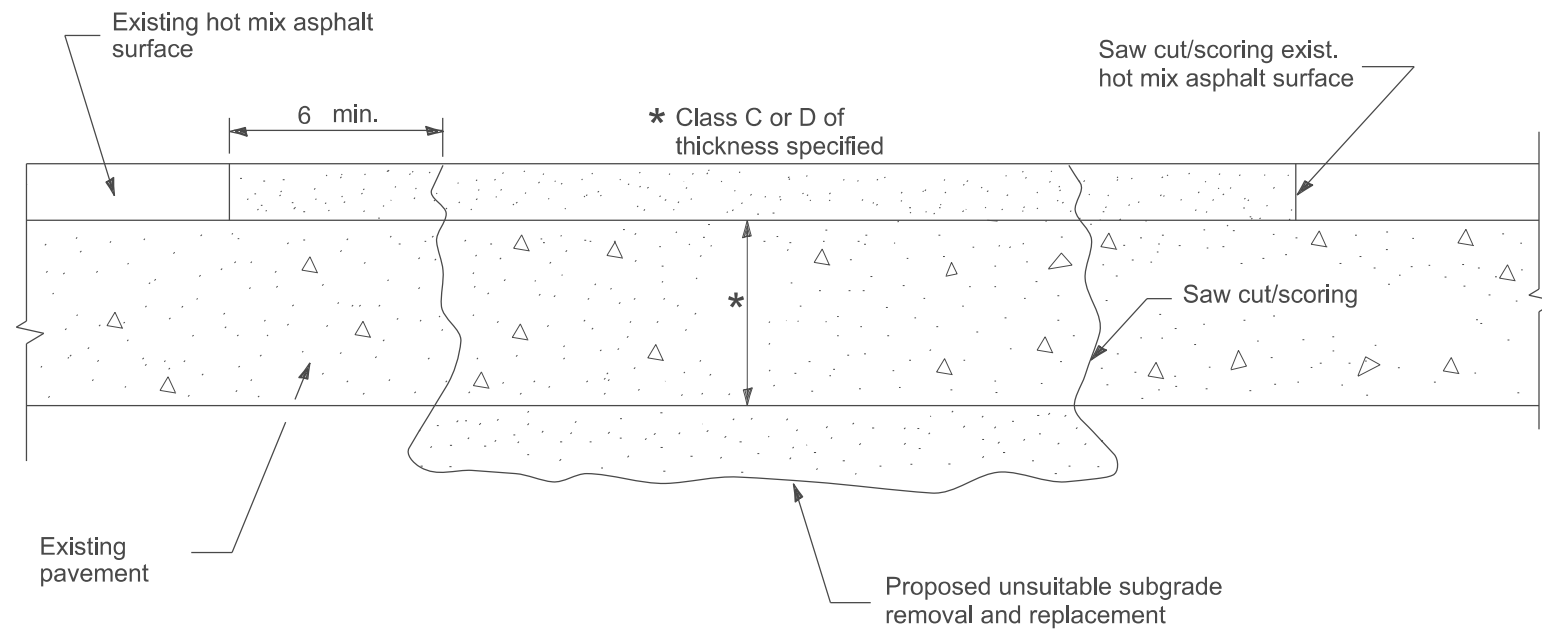
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMBINATION CONCRETE CURB-SIDEWALK 4"

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 424101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTE: INCLUDE CHECK SHEET 16
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\organization\Chil\DOT_Standards\Civil\DOT_Sheets.dwg



SEQUENCE OF CONSTRUCTION

1. Remove the existing hot mix asphalt surface.
2. Remove and replace full depth patches.
3. Replace hot mix asphalt surface.

**PAVEMENT PATCHING FOR
HOT MIX ASPHALT SURFACED PAVEMENT**

GENERAL NOTES

1. The width of the full depth patch over a trench shall be 12 wider on each side of the trench.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

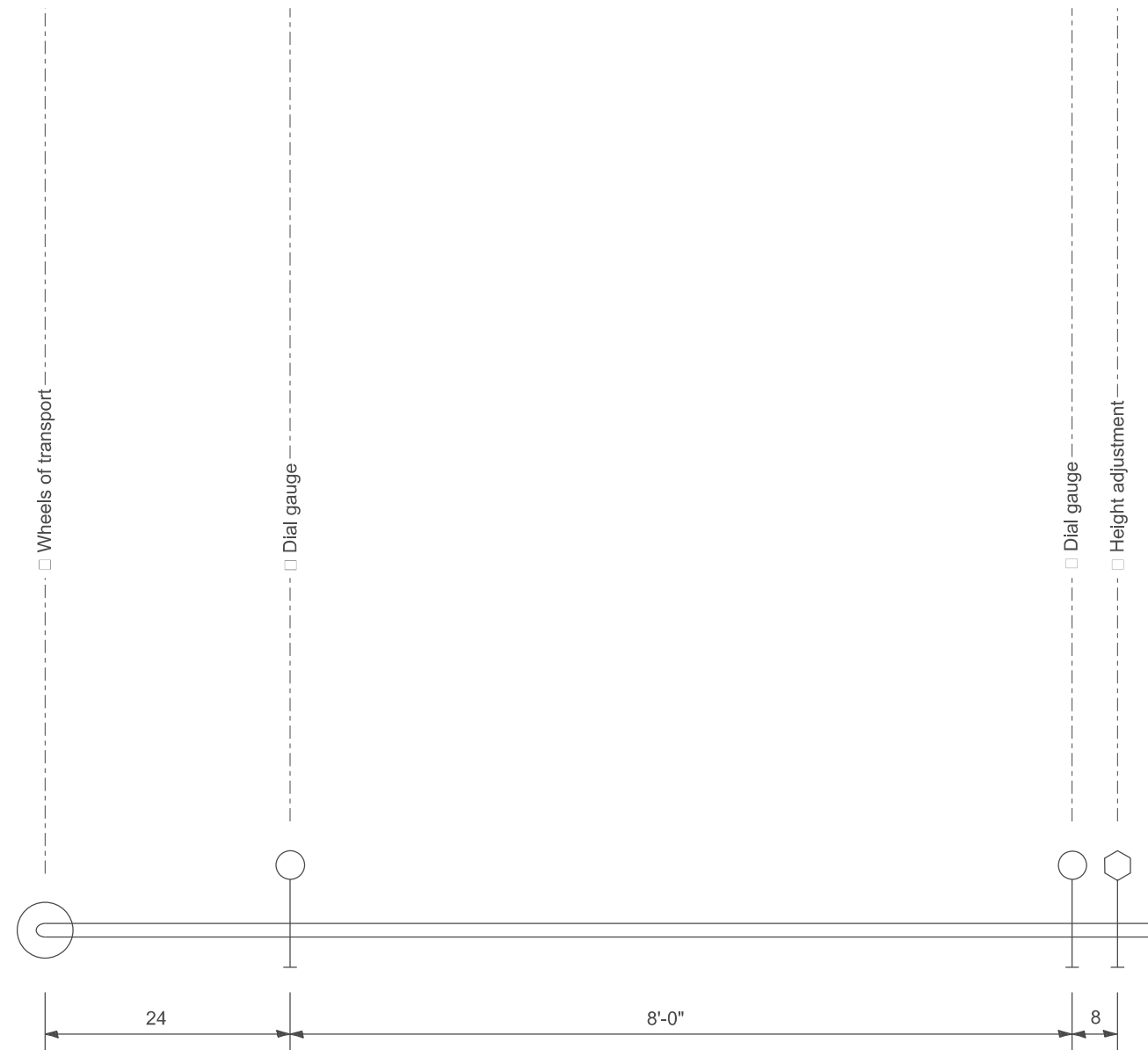
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

HOT MIX ASPHALT SURFACE REMOVAL OVER PATCHES

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 440101		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

SLAB MOVEMENT DETECTION DEVICE



ELEVATION

GENERAL NOTES

- Dial gauges shall be spring loaded in order to measure both extension and compression.

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT1011\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

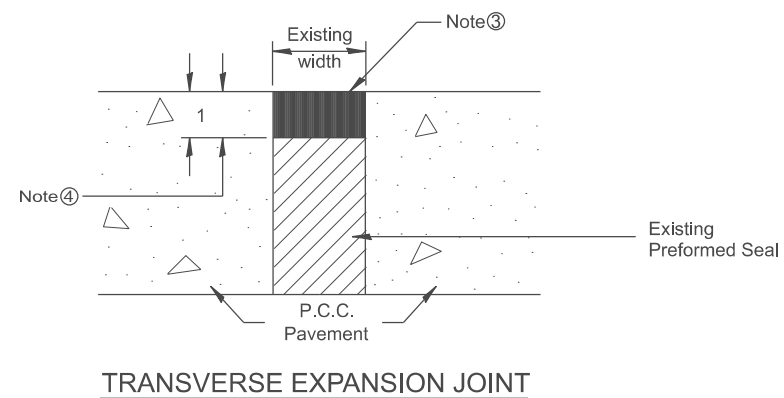
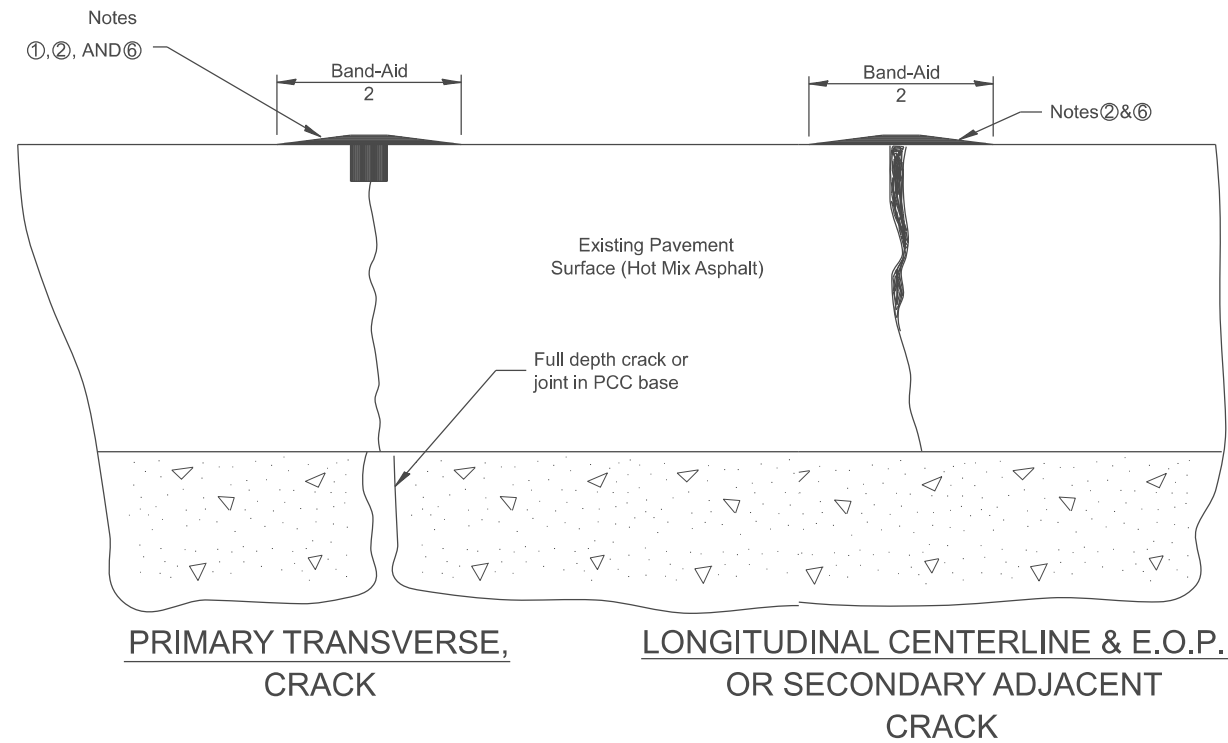
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SLAB MOVEMENT DETECTION DEVICE

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 440201		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		



NOTES

- ① Route or saw to $\frac{3}{4}$ wide by $\frac{3}{4}$ deep; (1:1 ratio).
- ② Overfill with sealant; squeegee to provide 2 wide flush "band-aid" effect; feather edges flush.
- ③ Seal flush without "band-aid" effect.
- ④ Route to 1 depth; clean and reface walls.
- ⑤ Crack and Joint Sealing shall conform to Section 451 and 452.
- ⑥ The "Band Aid" width shall be reduced or eliminated in areas adjacent to existing pavement markings as directed by the Engineer.

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT1011\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

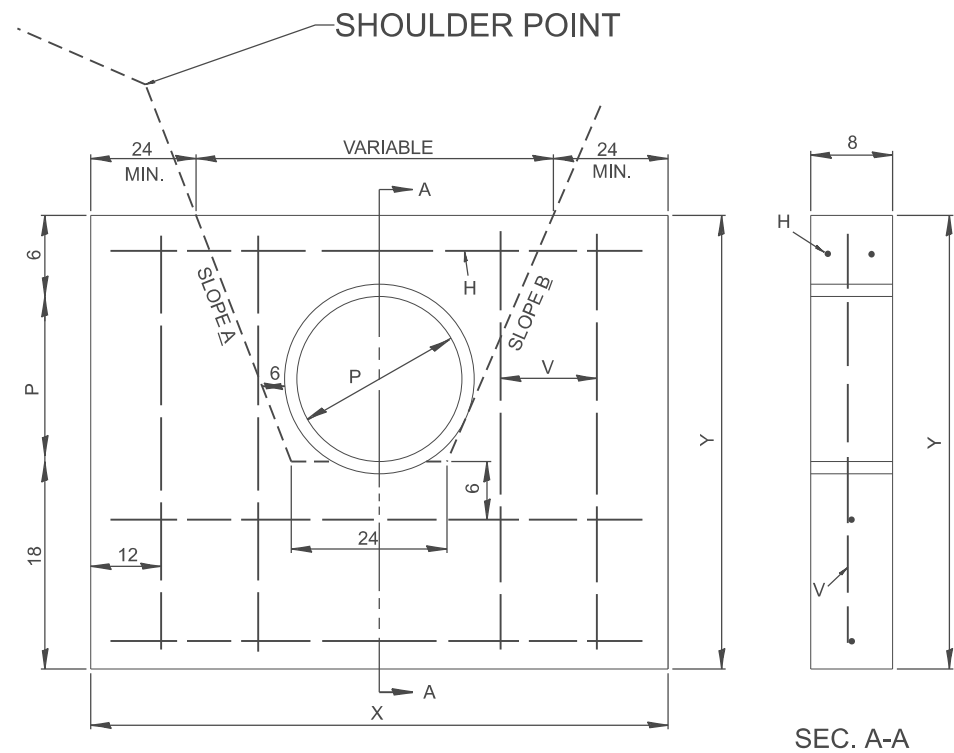
CRACK AND JOINT SEALING

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 452001		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:
1. INCLUDE DISTRICT CADD STANDARDS FOR CONCRETE THRUST BLOCKS AND PIPE ELBOW.

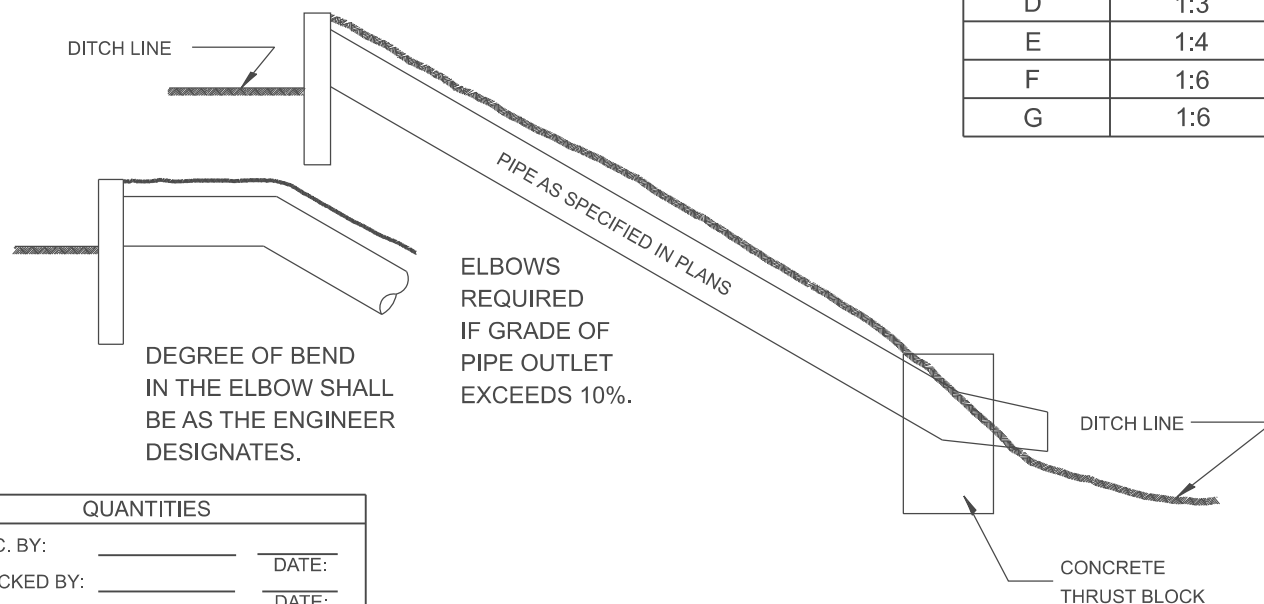
MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT101\Organization\Chillicothe\Standards\Cadd\DOT_Sheets.cad



General Notes

1. PAY FOR CAST IN PLACE CONCRETE WALL AS CLASS SI CONCRETE (MISC.) AT THE CONTRACT UNIT PRICE PER CUBIC YARD.
2. ALL REINFORCING BARS ARE #4, TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND AS REINFORCEMENT BARS.
3. LENGTH, SIZE AND TYPE OF PIPE AS SHOWN ON PLANS
4. TOP OF WALL TO BE BELOW ELEVATION OF SHOULDERS

DESIGN	SLOPE A	SLOPE B
A	1:2	1:2
B	1:3	1:2
C	1:4	1:2
D	1:3	1:3
E	1:4	1:3
F	1:6	1:4
G	1:6	1:3



DESIGN	P	X	Y	CONCRETE CU. YDS	REINFORCING BARS lb	H	
						H	V
12-A	12	12'-0"	36	0.9	37	11'-6"	30
12-B	12	13'-0"	36	1.0	41	13'-0"	30
12-C	12	15'-0"	36	1.1	45	14'-6"	30
12-D	12	15'-0"	36	1.1	45	14'-6"	30
12-E	12	16'-6"	36	1.2	49	16'-0"	30
15-A	15	13'-0"	39	0.9	41	12'-6"	33
15-B	15	14'-9"	39	1.2	45	14'-3"	33
15-C	15	16'-6"	39	1.3	50	16'-0"	33
15-D	15	16'-6"	39	1.3	50	16'-0"	33
15-E	15	18'-3"	39	1.4	55	17'-9"	33
15-F	15	23'-0"	39	1.9	69	23'-0"	33
15-G	15	21'-9"	39	1.7	64	21'-3"	33
18-A	18	14'-4"	3'-6"	1.2	44	13'-6"	36
18-B	18	16'-0"	3'-6"	1.3	49	15'-6"	36
18-C	18	18'-0"	3'-6"	1.5	55	17'-6"	36
18-D	18	18'-0"	3'-6"	1.5	55	17'-6"	36
18-E	18	20'-0"	3'-6"	1.7	60	19'-6"	36
18-F	18	26'-0"	3'-6"	2.2	76	25'-6"	36
18-G	18	24'-0"	3'-6"	2.0	71	23'-6"	36
24-A	24	16'-0"	4'-0"	1.5	51	15'-6"	3'-6"
24-B	24	18'-6"	4'-0"	1.7	57	18'-0"	3'-6"
24-C	24	21'-0"	4'-0"	2.0	64	20'-6"	3'-6"
24-D	24	21'-0"	4'-0"	2.0	64	20'-6"	3'-6"
24-E	24	23'-6"	4'-0"	2.2	71	23'-0"	3'-6"
30-A	30	18'-0"	4'-6"	1.9	57	17'-6"	4'-0"
30-B	30	21'-0"	4'-6"	2.0	65	20'-6"	4'-0"
30-C	30	24'-0"	4'-6"	2.6	73	23'-6"	4'-0"
30-D	30	24'-0"	4'-6"	2.6	73	23'-6"	4'-0"
30-E	30	27'-0"	4'-6"	2.9	81	26'-6"	4'-0"

QUANTITIES

CALC. BY: _____ DATE: _____

CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

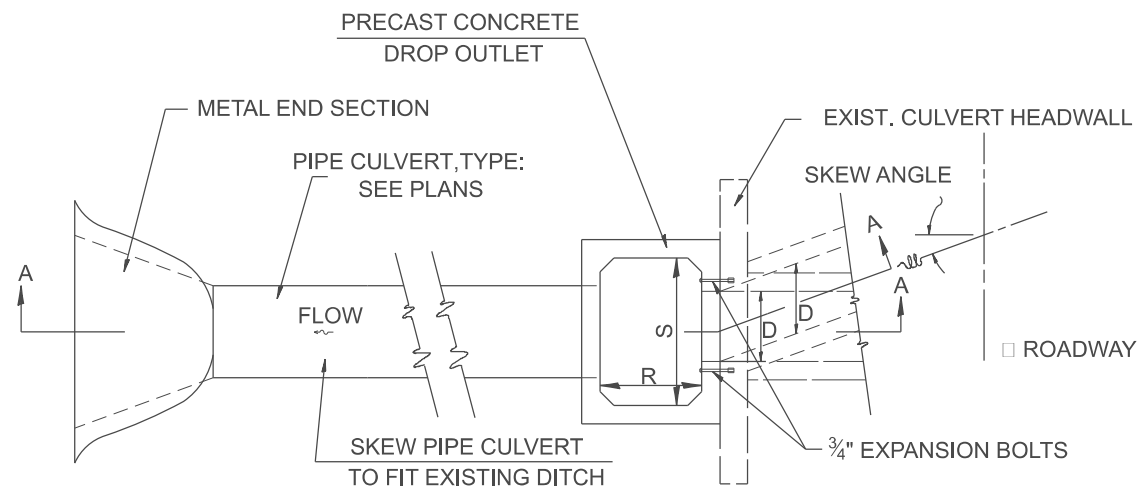
CONCRETE DITCH CHECK

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

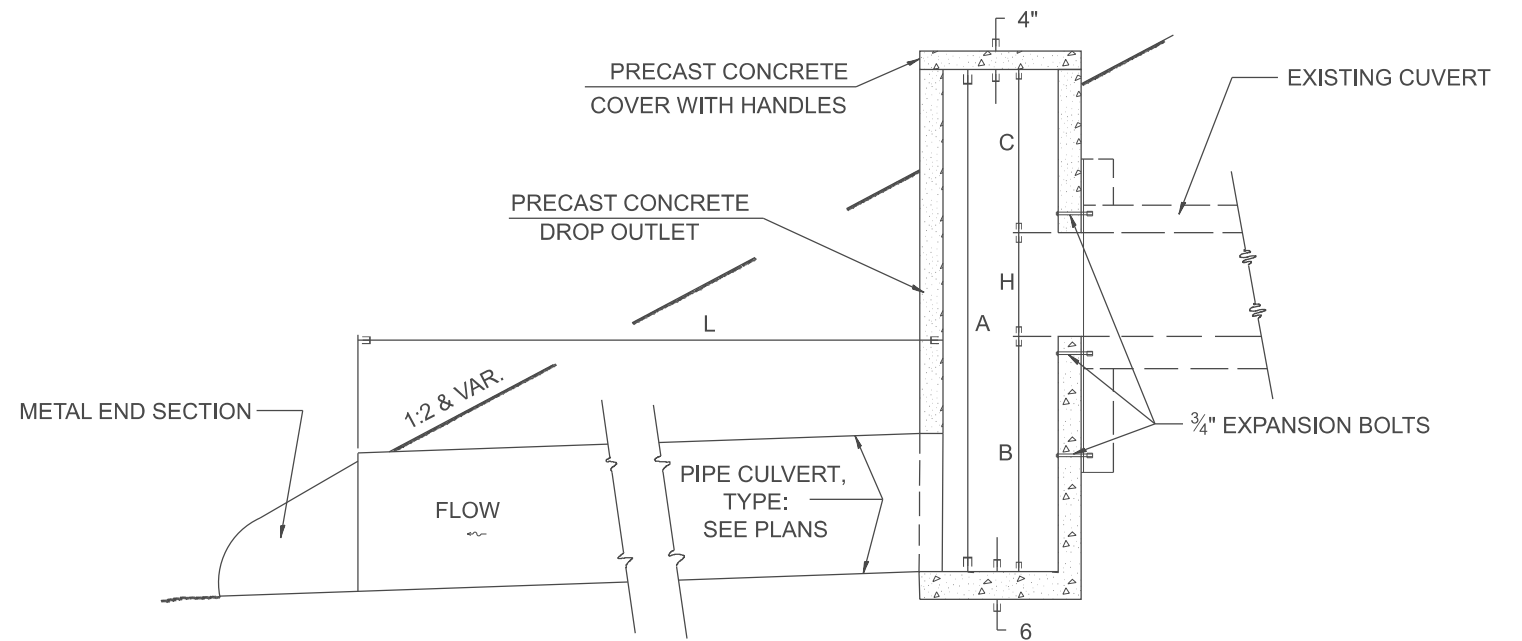
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

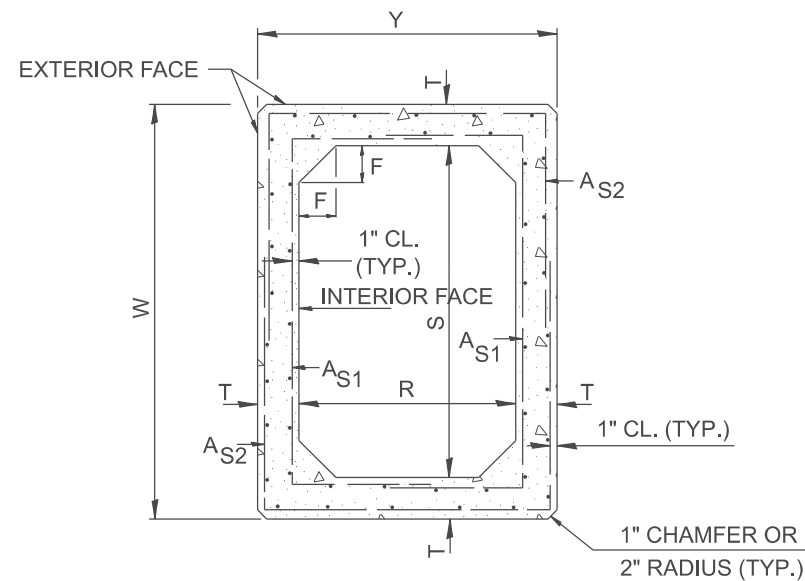
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 503001			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



PLAN



SECTION A-A



SECTION THRU DROP OUTLET

DIMENSIONS

S x R ft	T	W	Y	F	A _{S1}	A _{S2}
3' x 3'	4"	3'-8"	3'-8"	4"	0.10	0.10
4' x 4'	5"	4'-10"	4'-10"	5"	0.12	0.12

GENERAL NOTES

1. This work shall be performed in accordance with Section 503 of the Standard Specification.
2. The terms AS1 & AS2 denotes the minimum required steel areas for reinforcement as specified in ASTM C 789. Reinforcement shall be welded wire fabric conforming to ASTM Specifications A185.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\organizer\ChilIDOT_Standards\CivilIDOT_Sheets.cad

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

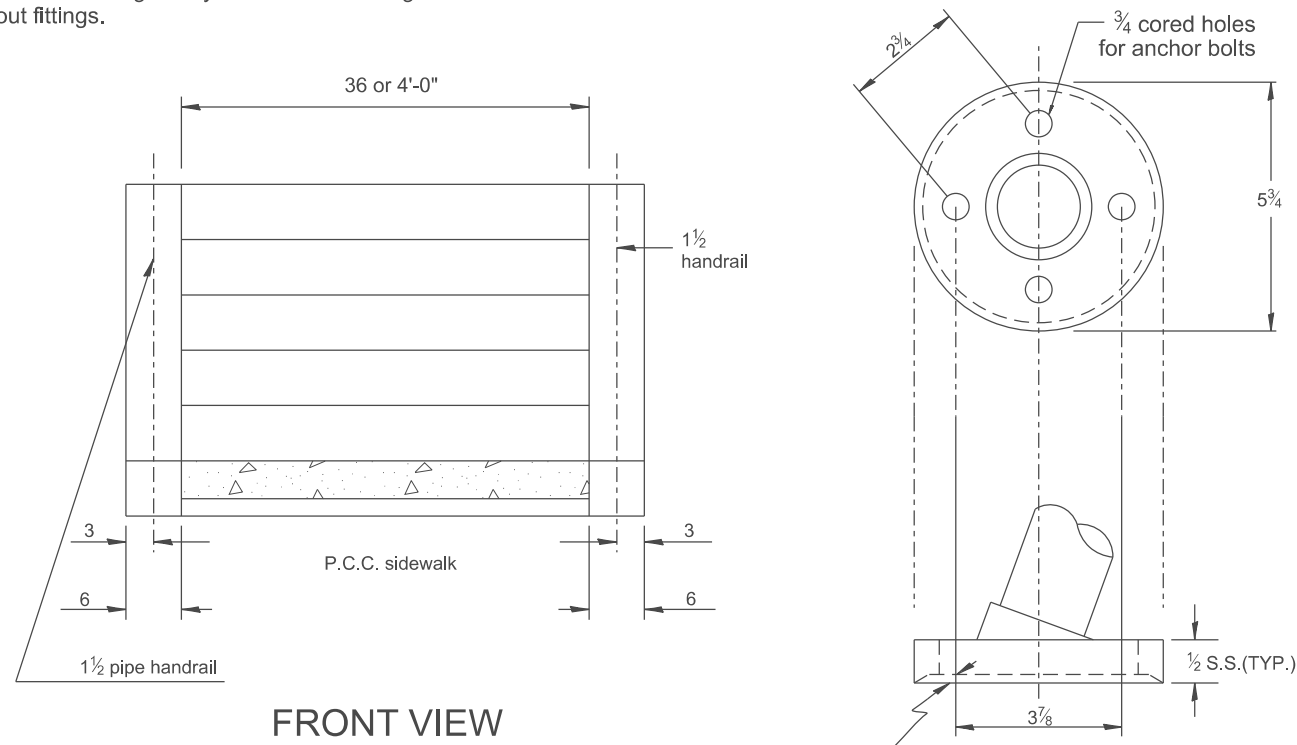
SPECIAL DROP OUTLET DETAIL

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 503101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

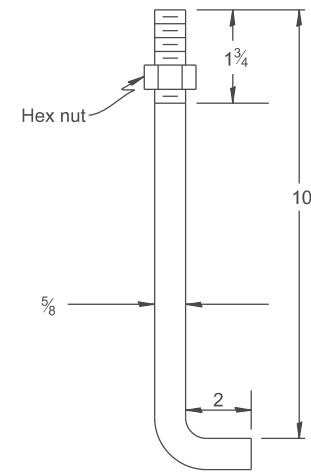
Connection of railings to posts may be made either by the use of fittings or by continuous welding without fittings.

Article 509.04 of the Standard Specifications apply.

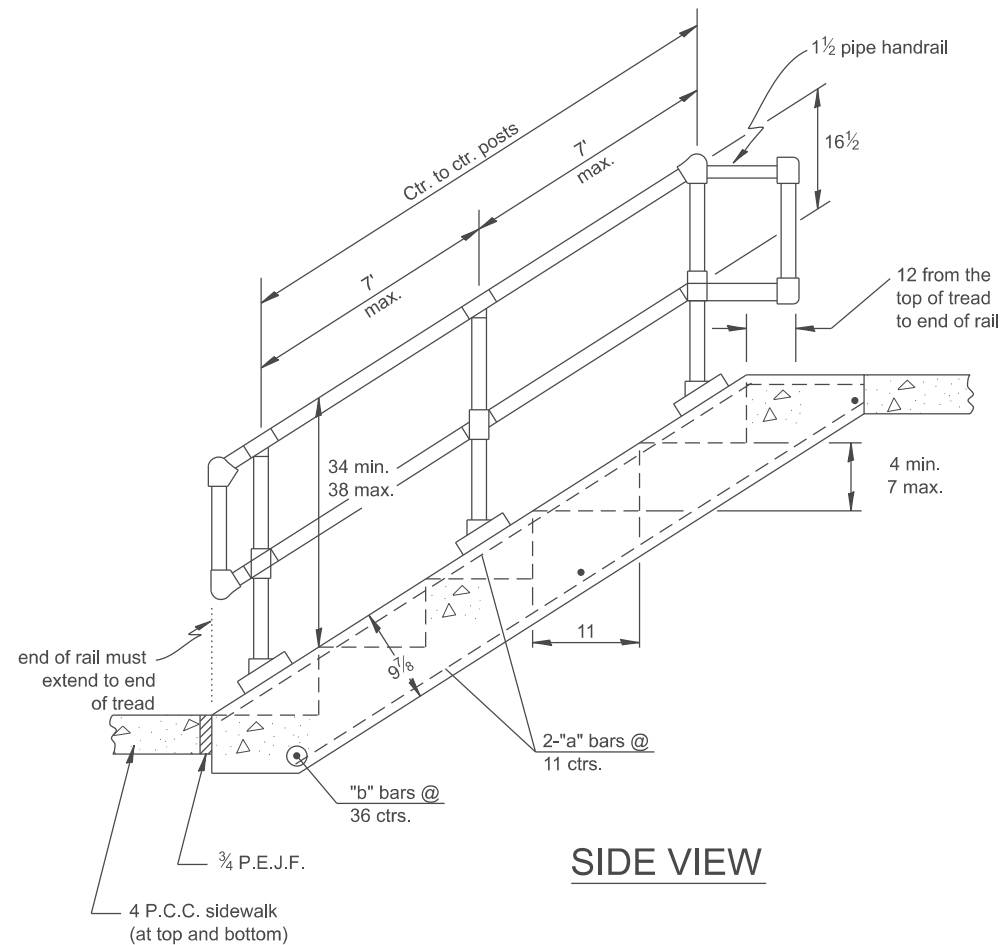


FRONT VIEW

SPECIAL CAST IRON OR STRUCTURAL STEEL FITTING



BUILT-IN ANCHOR BOLT
5/8" DIA., 12 LONG
(SEE GENERAL NOTE 3)



SIDE VIEW

GENERAL NOTES:

1. Pipe handrail shall be used only when there are 4 or more steps to be constructed. P.C. CONCRETE CLASS SI shall be used throughout. 1/4 drop at end of tread for drainage.
2. When 8 or more steps are to be constructed, an intermediate post shall be used.
3. An equivalent epoxy anchor stud can be used in place of anchor shown. Anchor bolt holes shall be 3/4 in diameter and 5 deep. They shall be pre-drilled with an electric hammer drill to a depth of 1 prior to use of pneumatic drill for the remaining 4. A two component encapsulated epoxy such as "parabond" or an equivalent shall be used. Installation shall be according to manufacturer's recommendations. The pipe handrail shall be galvanized by the hot dip process.

NO. OF STEPS	WIDTH IN.	CLASS "SI" CONCRETE CU. YDS.	#4 REINFORCEMENT BARS				PIPE HANDRAIL LENGTH
			BAR	NO.	LGTH.	lbs	
1	36	0.17	a	7	24	14	---
			b	2	3'-9"		
1	4'-0"	0.21	a	8	24	16	---
			b	2	4'-9"		
2	36	0.26	a	7	36	20	---
			b	2	3'-9"		
2	4'-0"	0.33	a	8	36	22	---
			b	2	4'-9"		
3	36	0.35	a	7	4'-0"	26	---
			b	3	3'-9"		
3	4'-0"	0.45	a	8	4'-0"	31	---
			b	3	4'-9"		
4	36	0.44	a	7	5'-0"	31	3'-4"
			b	3	3'-9"		
4	4'-0"	0.57	a	8	5'-0"	36	3'-4"
			b	3	4'-9"		
5	36	0.53	a	7	6'-0"	38	4'-5"
			b	4	3'-9"		
5	4'-0"	0.69	a	8	6'-0"	45	4'-5"
			b	4	4'-9"		
6	36	0.62	a	7	7'-0"	43	5'-6"
			b	4	3'-9"		
6	4'-0"	0.81	a	8	7'-0"	50	5'-6"
			b	4	4'-9"		
7	36	0.71	a	7	8'-0"	49	6'-7"
			b	5	3'-9"		
7	4'-0"	0.93	a	8	8'-0"	59	6'-7"
			b	5	4'-9"		
8	36	0.80	a	7	9'-0"	55	7'-8"
			b	5	3'-9"		
8	4'-0"	1.05	a	8	9'-0"	64	7'-8"
			b	5	4'-9"		
9	36	0.89	a	7	10'-0"	62	8'-9"
			b	6	3'-9"		
9	4'-0"	1.17	a	8	10'-0"	72	8'-9"
			b	6	4'-9"		
10	36	0.98	a	7	11'-0"	66	9'-10"
			b	6	3'-9"		
10	4'-0"	1.29	a	8	11'-0"	78	9'-10"
			b	6	4'-9"		

QUANTITIES	
CALC. BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES: DETAIL FOR PRIVATE RESIDENCE, NOT COMMERCIAL USE. COMMERCIAL MUST FIT ADA REQUIREMENTS. MODEL: SHT_C:\Bentley\CONNECT10110\organizer-ChillIDOT_Standards\CallIDOT_Sheets.ctb FILE NAME: C:\Bentley\CONNECT10110\organizer-ChillIDOT_Standards\CallIDOT_Sheets.ctb

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

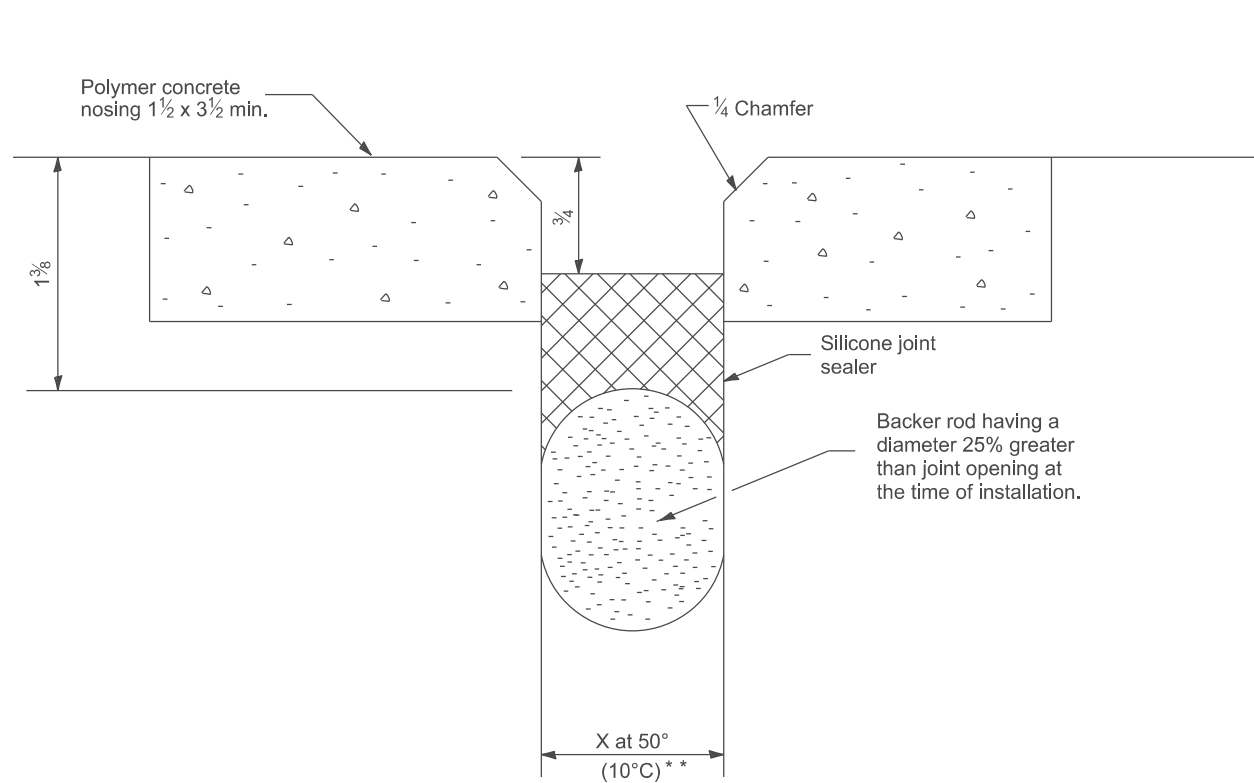
**DETAIL OF CONCRETE STEPS AND PIPE HANDRAIL
7 RISER 11 TREAD**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

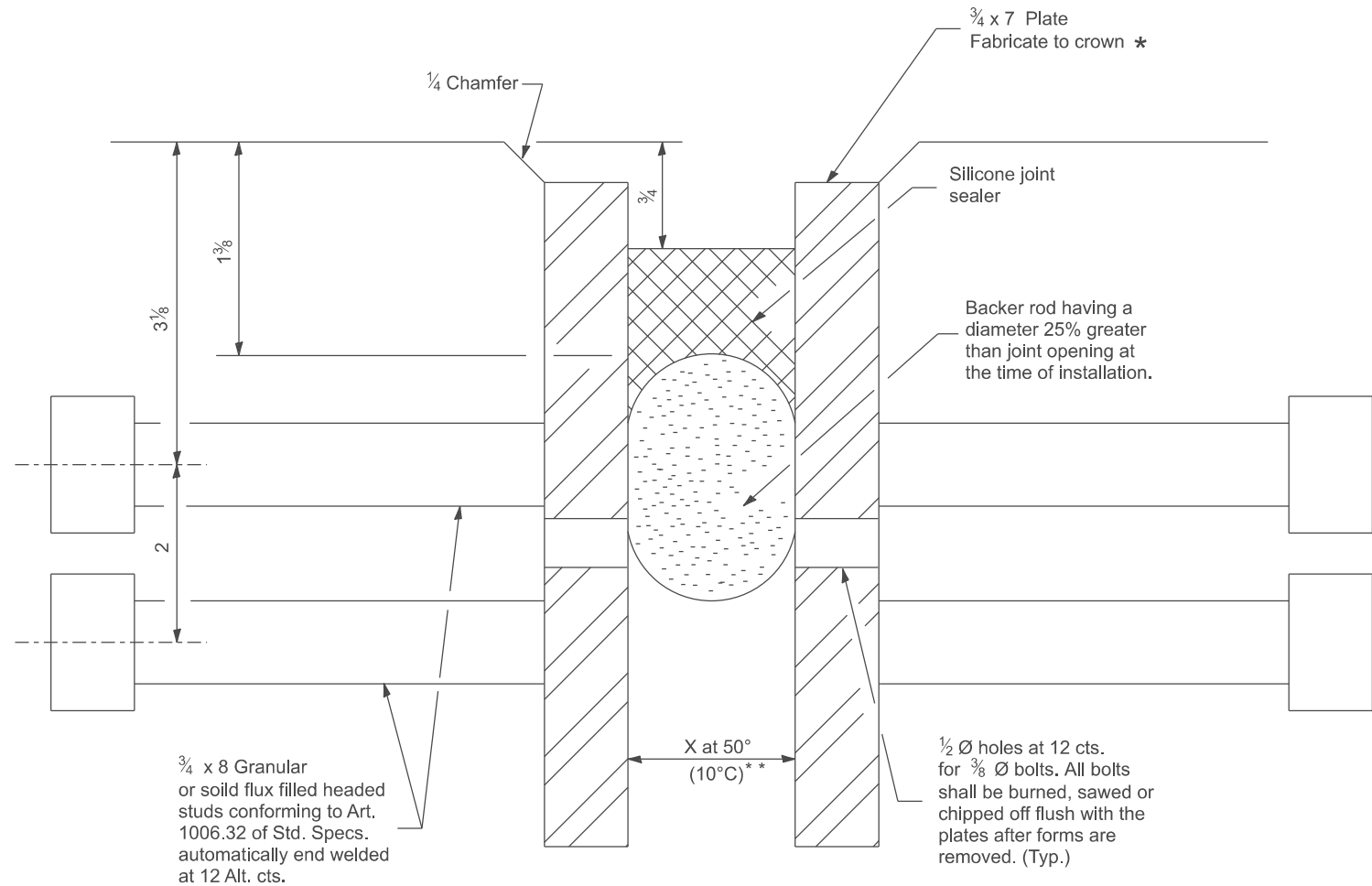
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 503201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES: CHECK GBSP
 1. Include Special Provision's for Silicone Bridge Joint Sealer and Recurring Special (Check Sht. 17) 'Polymer Concrete' (If using Concrete Detail).

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organizer\Chill\DOT_Standards\Civil\DOT_Sheets.dwg



**SILICONE JOINT SEAL
(CONCRETE DETAILS)**



- * Furnish in segments of 20' maximum length. Maximum space between installed segments shall be 1/4. Seal space with Silicone Sealant suitable for Structural Steel.
- * * See Silicone Joint Seal Design Chart for Joint Opening (X).

**SILICONE JOINT SEAL
(STEEL DETAILS)**

SILICONE JOINT SEAL DESIGN CHART			
Joint Opening at 50° F. (10° C)		Length Contributing to Expansion	
inch	mm	feet	meter
1	25	0 - 40	0 - 12
1 1/2	38	40 - 80	12 - 24
2	51	80 - 120	24 - 37
2 1/2	64	120 - 160	37 - 49

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SILICONE JOINT SEAL

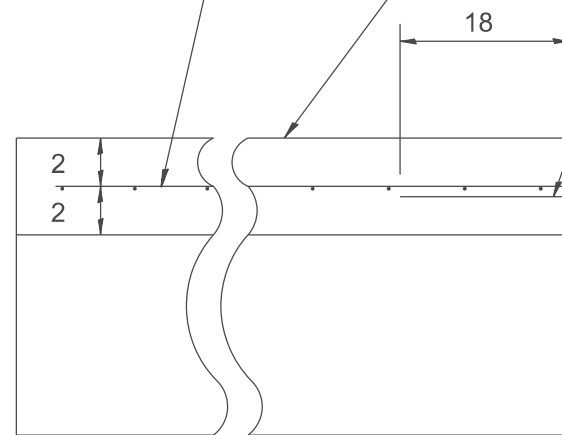
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 503301		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

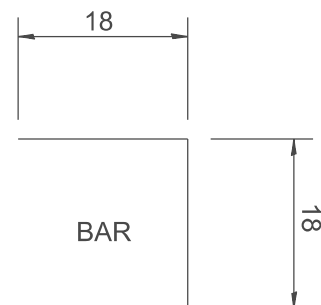
DESIGNER NOTES:
 MODEL: SHT_PLAN_1 INCLUDE DISTRICT SPECIAL PROVISIONS FOR BRIDGE DECK WEARING SURFACE REMOVAL.
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\ChillIDOT_Standards\CallIDOT_Sheets.dwg

PROPOSED CONCRETE WEAR SURFACE 4

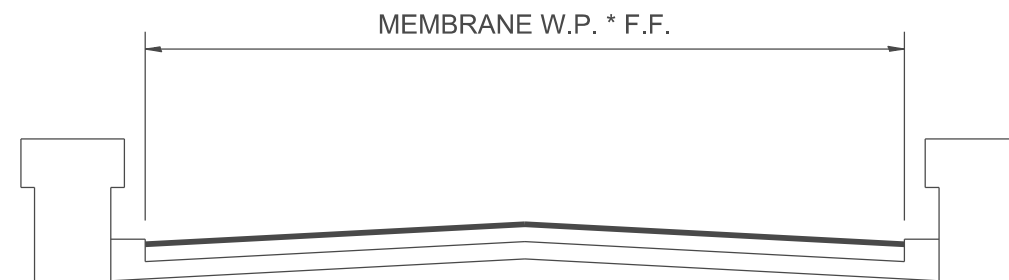
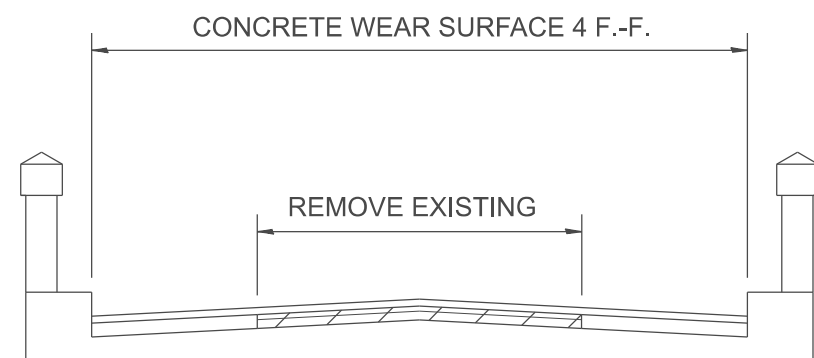
6x6
W 1.4
STEEL WIRE MESH



NEW CENTER BARS @ □ OF ROADWAY
#4 BARS @ 36 CENTERS 36 LENGTH



BRIDGE STATION	BRIDGE WEAR SURF. REM. SQ. YD.	CONCRETE WEAR SURFACE 4 SQ. YD.	MEMBRANE WATERPROOFING SQ. YD.	HOT MIX ASPH. SURF. REM. SQ. YD.



* EXTEND MEMBRANE WATERPROOFING 2 UP CURBS
L= W=

STATION

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF CONCRETE DECK WEARING SURFACE AND QUANTITIES

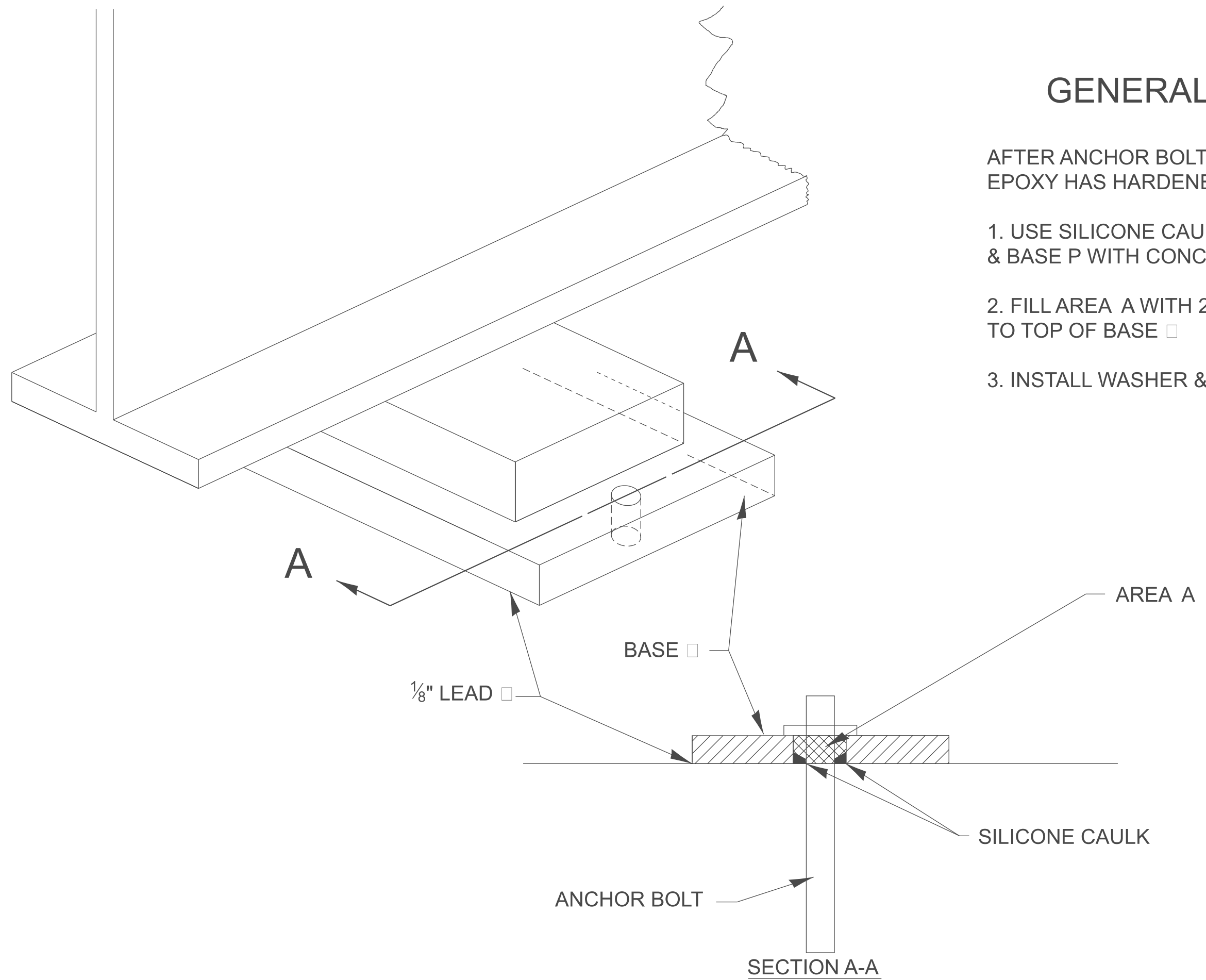
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 503401		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

GENERAL NOTES

AFTER ANCHOR BOLT IS INSTALLED & EPOXY HAS HARDENED

1. USE SILICONE CAULK TO SEAL LEAD □ & BASE P WITH CONCRETE
2. FILL AREA A WITH 2 PART EPOXY, TO TOP OF BASE □
3. INSTALL WASHER & NUT



All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.cad

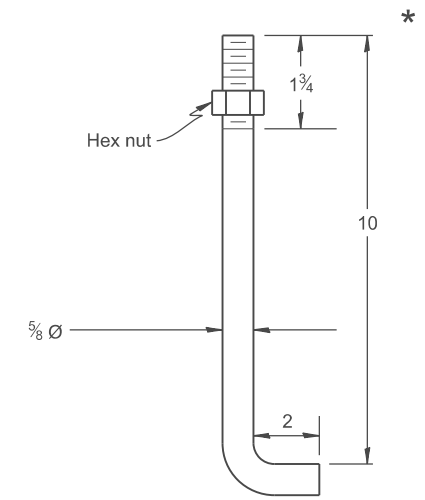
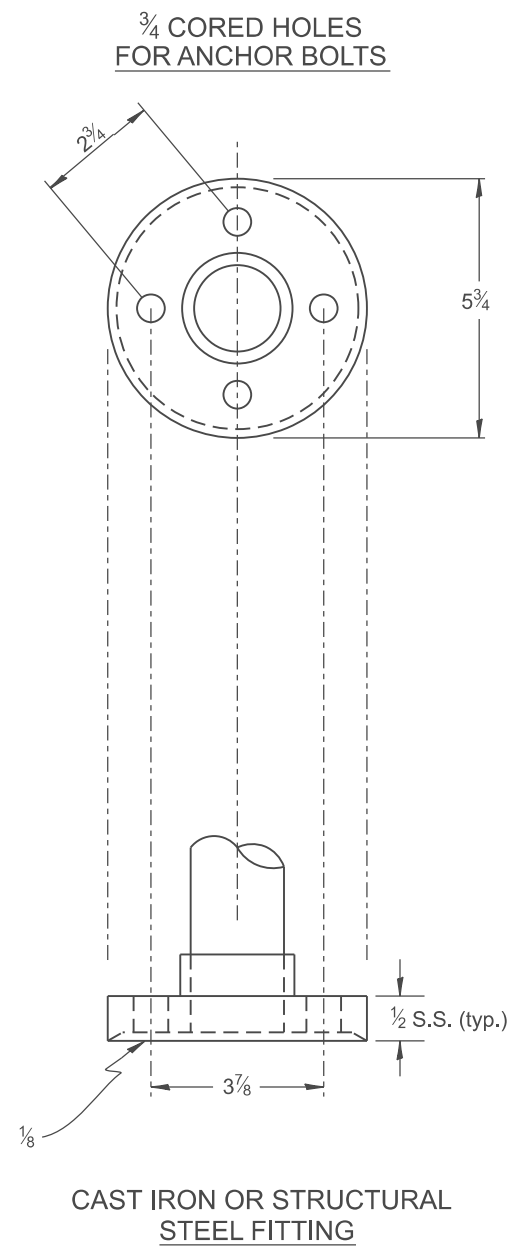
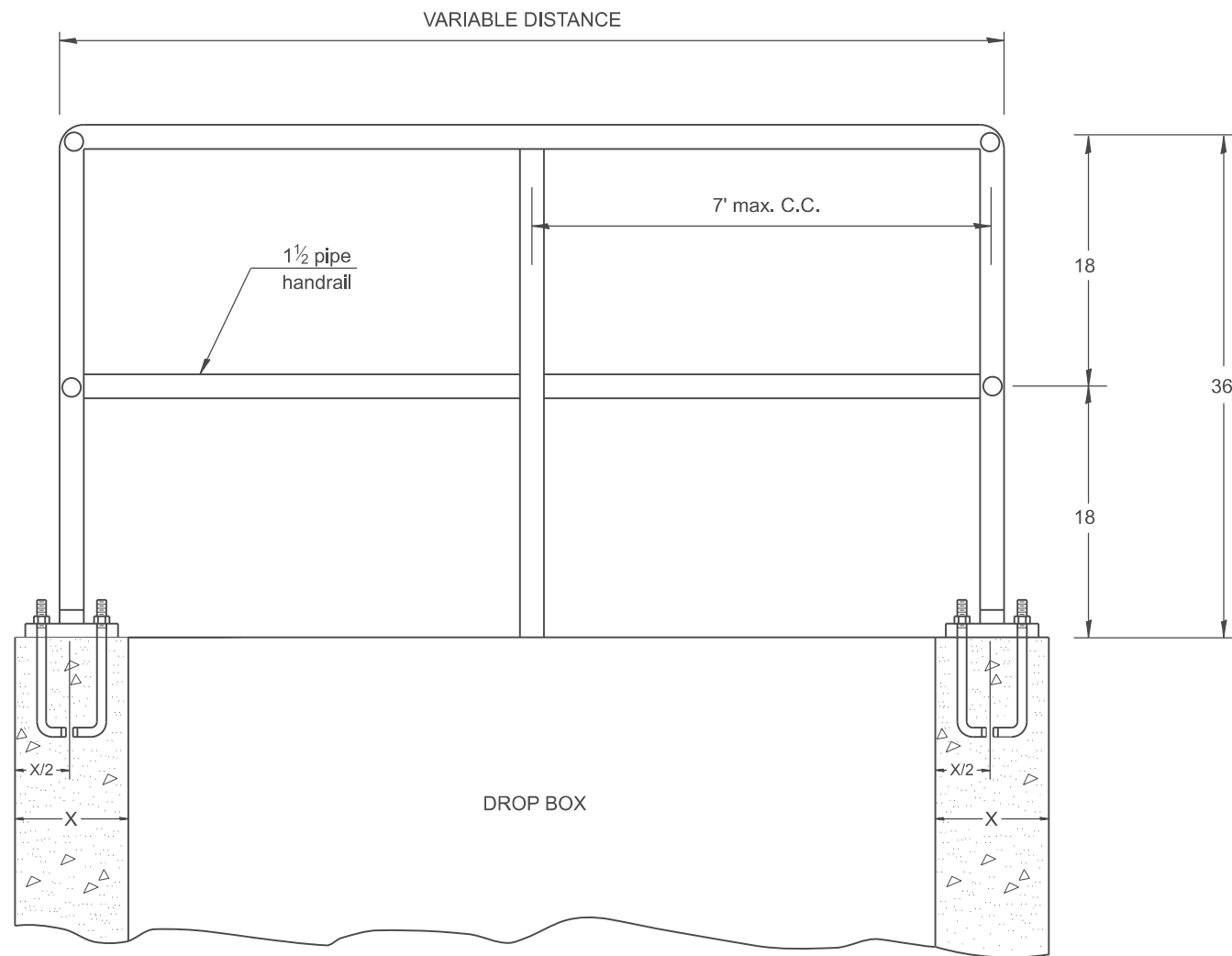
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BEARING PLATE DETAIL

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 505001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



BUILT-IN ANCHOR BOLT
 $\frac{5}{8}$ Ø, 12 LONG
 (SEE GENERAL NOTE 3)

GENERAL NOTES:

- Article 509.04 of the Standard Specifications shall apply.
- Connection of railing to posts shall be made by continuous welding or with using standard pipe fitting.
- An equivalent epoxy anchor stud can be used in place of anchor shown. Anchor bolt holes shall be $\frac{3}{4}$ in diameter and 5 deep. They shall be predrilled with an electric hammer drill to a depth of 4 prior to use of a pneumatic drill for the remaining 1. A two component encapsulated epoxy such as "Parabond" or an equivalent shall be used. Installation shall be according to Manufacturer's recommendations.
- The pipe handrail shall be galvanized by the hot dip process.

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT1011\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

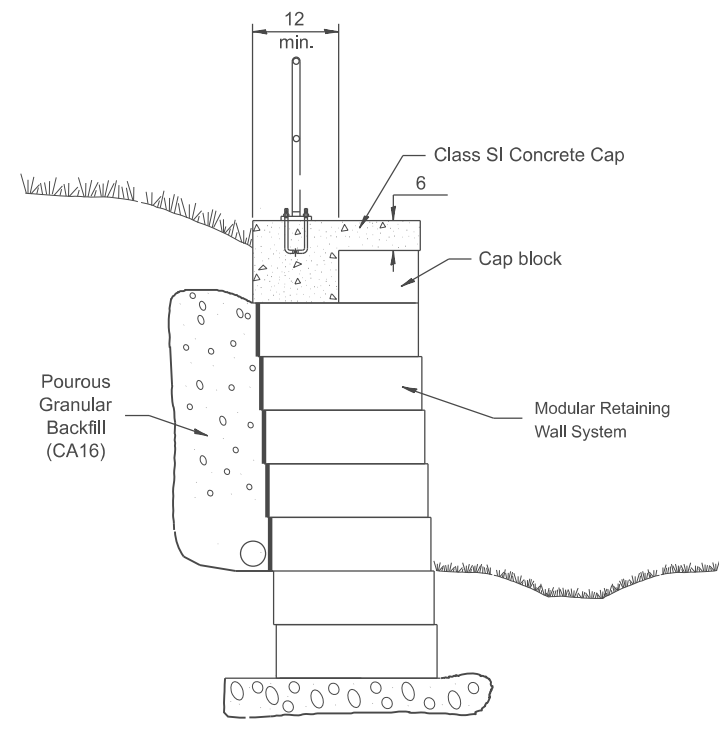
DETAIL OF PIPE HANDRAIL FASTENING

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

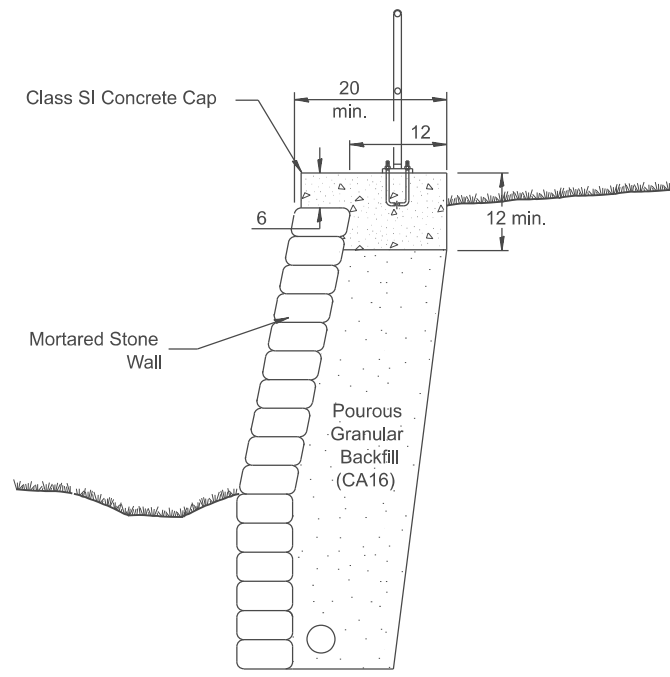
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 510001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTE:
 1. TO BE USED WITH CADD DRAWINGS: "MORTARED STONE WALL", AND/OR "MODULAR RETAINING WALL".
 2. INCLUDE DISTRICT SPECIAL PROVISION. THE UNIT PRICE FOR PIPE HANDRAIL INCLUDES THE CONCRETE CAP, EXPANSION DEVICES, ETC.

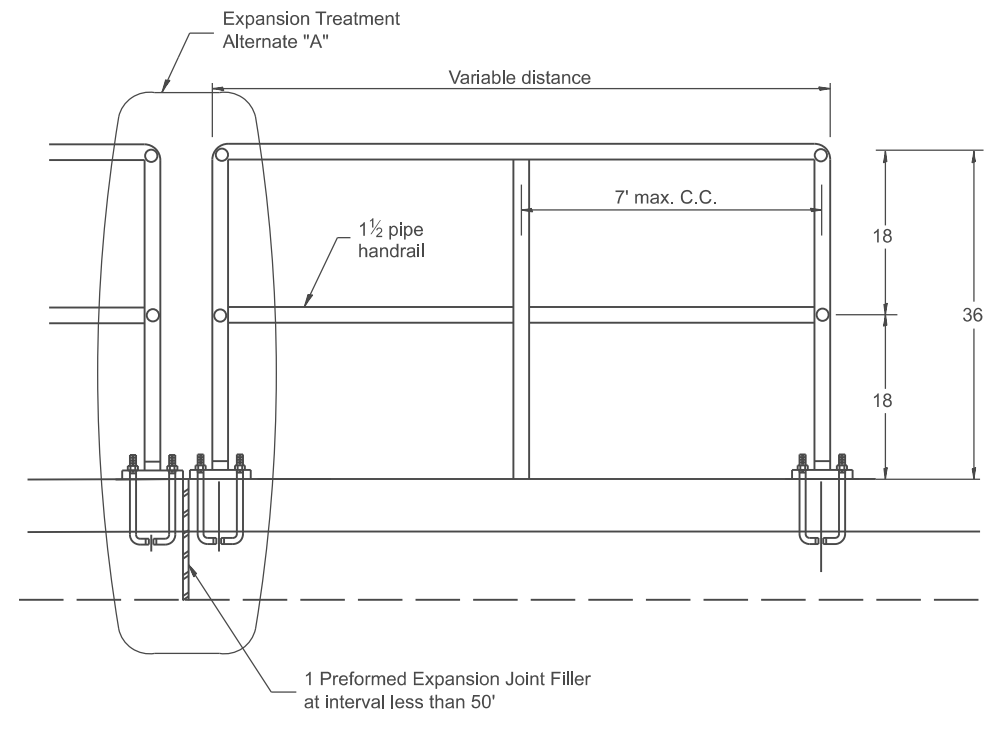
MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization-ChilIDOT_Standards\CallIDOT_Sheets.cad



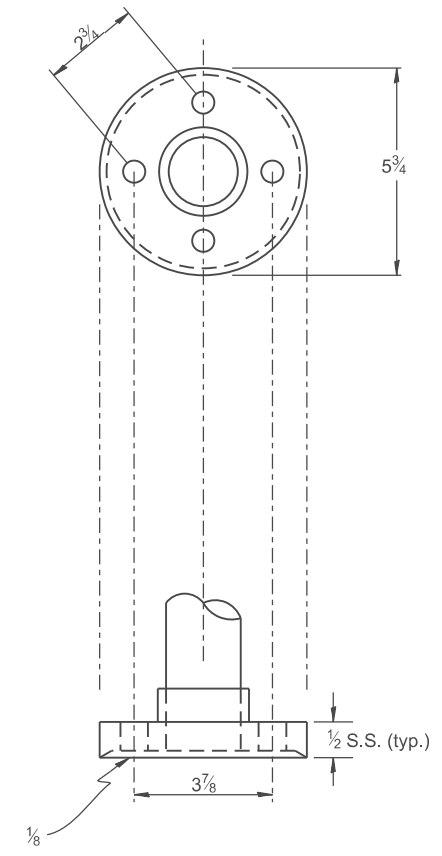
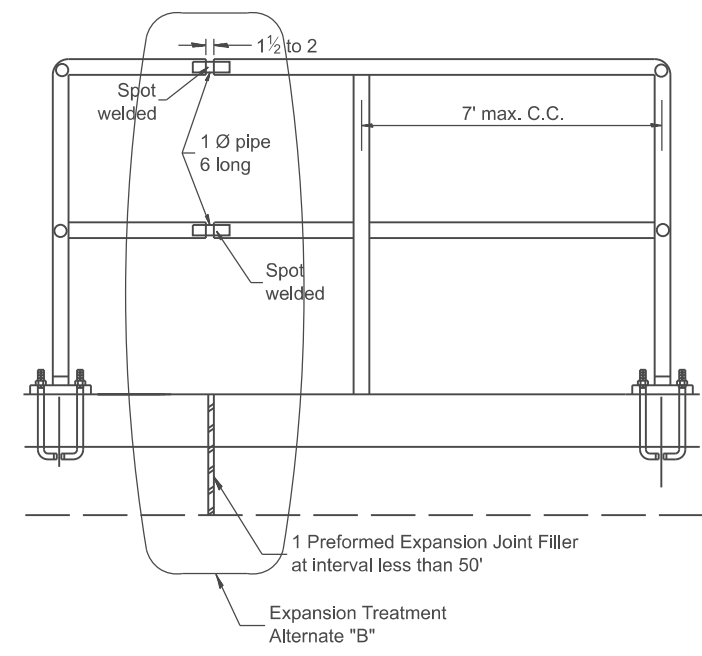
**INSTALLATION AT
 MODULAR RETAINING WALL**



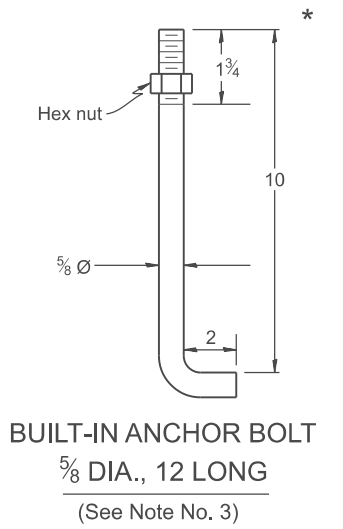
**INSTALLATION AT
 MORTARED STONE WALL**



PIPE HANDRAIL



**CAST IRON OR STRUCTURAL
 STEEL FITTING**



BUILT-IN ANCHOR BOLT
 5/8 DIA., 12 LONG
 (See Note No. 3)

GENERAL NOTES

- Article 509.04 of the Standard Specifications shall apply.
- Connection of railing to posts shall be made by continuous welding or with using standard pipe fitting.
- An equivalent epoxy anchor stud can be used in place of anchor shown. Anchor bolt holes shall be 5 deep x 3/4 Ø to be pre-drilled with an electric hammer drill to a depth of 1 prior to use of a pneumatic drill for the remaining 4. A two component encapsulated epoxy such as "Parabond" or an equivalent shall be used. Installation shall be according to Manufacturer's recommendations.
- The pipe handrail shall be galvanized by the hot dip process.
- It is Contractor's option to choose the expansion treatment "A" or "B". The spot welded area shall be painted to the satisfaction of the Engineer. This work shall be included in the contract unit price for Pipe Handrail.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

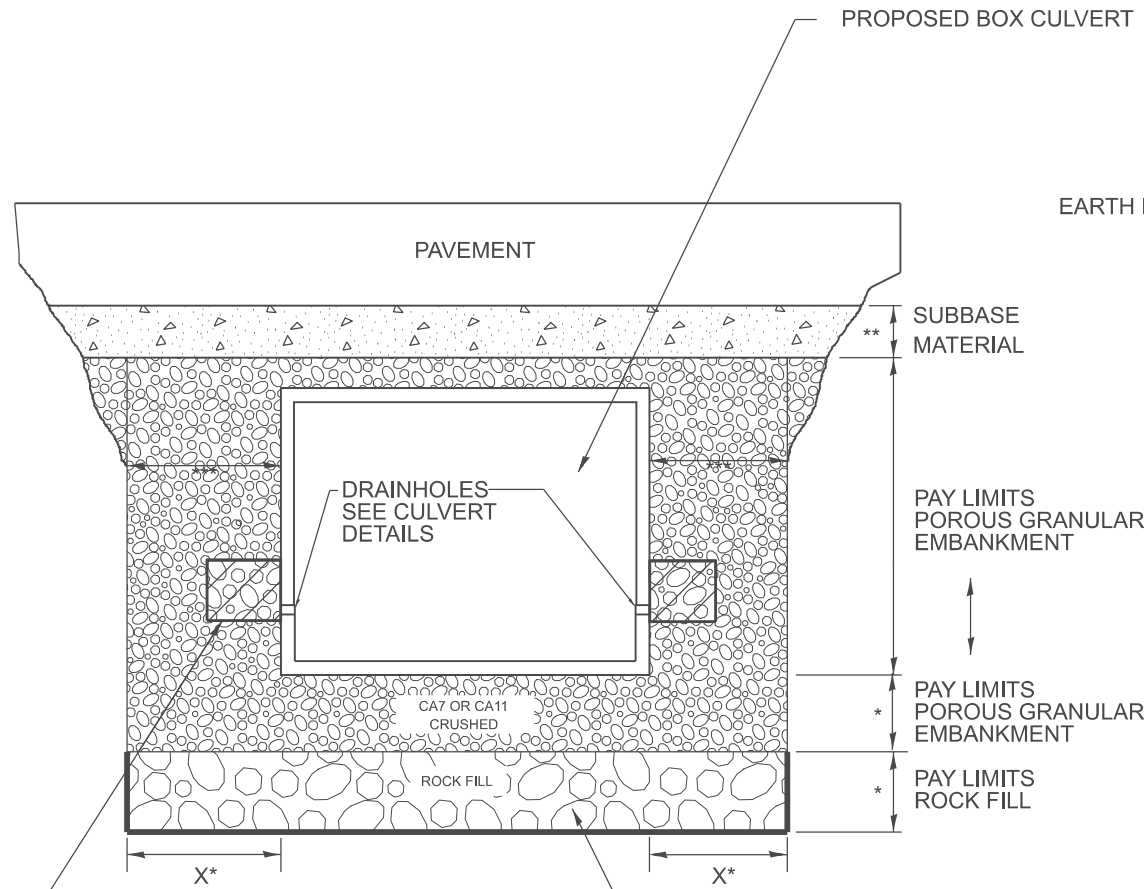
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DETAIL OF PIPE HANDRAIL FOR MORTARED STONE WALL AND
 MODULAR RETAINING WALL**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 510101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

ROADWAY PROFILE VIEW

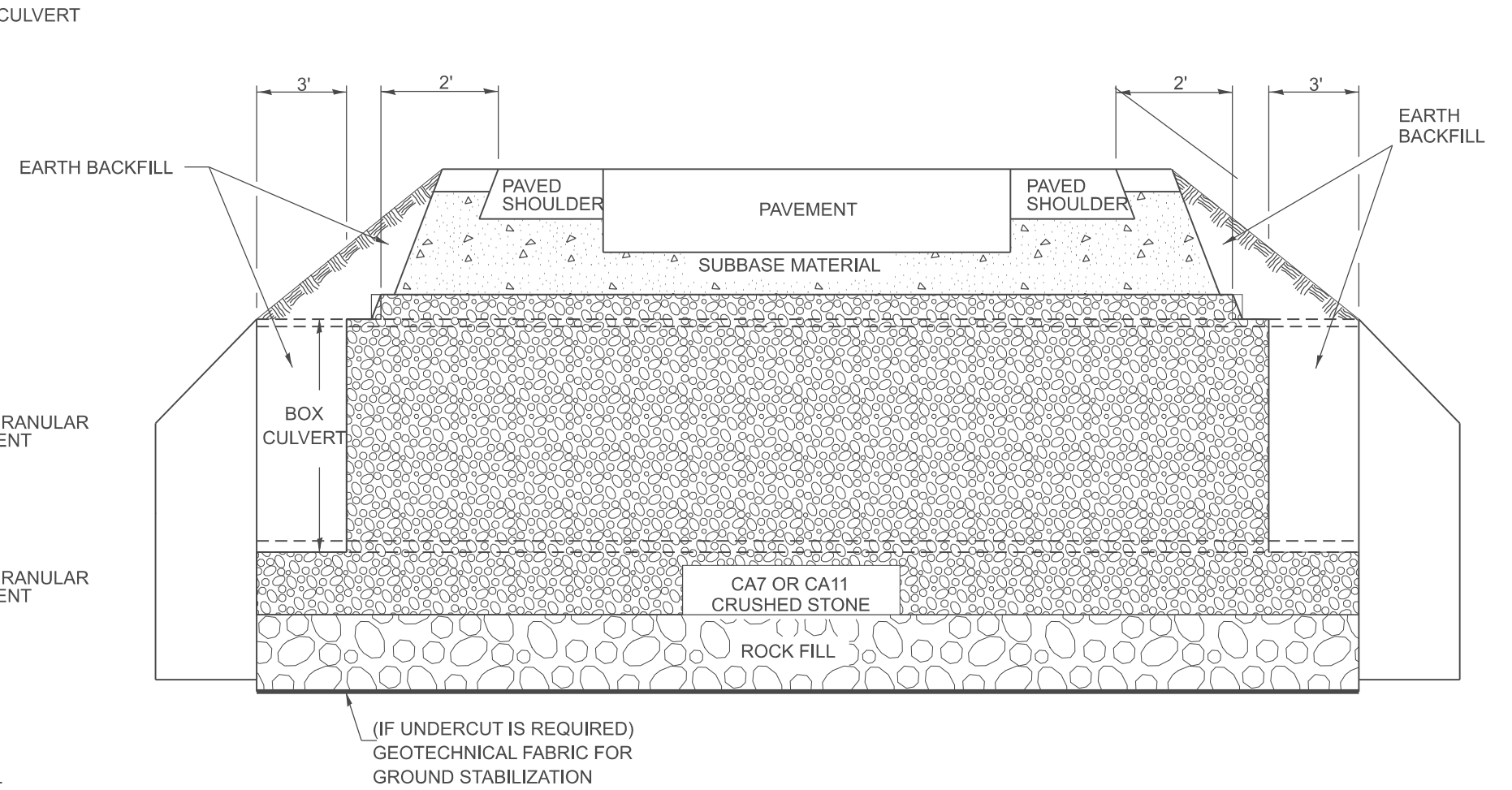


2' x 2' x 2' DEPOSIT OF CA 5, 7, OR 11 IN FABRIC ENVELOPE IN ACCORDANCE WITH ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS (TYPICAL)

(IF UNDERCUT IS REQUIRED) PROPOSED REMOVAL & DISPOSAL OF UNSUITABLE, AND REPLACE WITH ROCK FILL WITH GEOTECHNICAL FABRIC FOR GROUND STABILIZATION. PAID FOR BY RESPECTIVE PAY ITEMS.

- * IF APPLICABLE, SEE UNDERCUT DETAIL FOR DEPTHS AND WIDTHS. IF THERE IS NO UNDERCUT, X = 2 FEET AND SEE NOTE 3 THIS SHEET.
- ** SUBBASE SHALL BE 6" MINIMUM LAYER OF CA6 CRUSHED STONE OR OTHER MATERIAL AS SPECIFIED IN THE PLANS.
- *** PAY LIMITS OF POROUS GRANULAR EMBARKMENT SHALL BE 2 FEET UNLESS OTHERWISE SHOWN IN THE PLANS.

ROADWAY CROSS SECTION VIEW



- NOTES:
1. EXCEPT AS SPECIFIED IN THIS DETAIL, THE PLACEMENT AND COMPACTION OF BACKFILL SHALL BE IN ACCORDANCE WITH ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS.
 2. POROUS GRANULAR EMBARKMENT SHALL BE PLACED IN ACCORDANCE WITH SECTION 207 OF THE STANDARD SPECIFICATIONS.
 3. IF NO UNDERCUT IS REQUIRED, A 6" MINIMUM LAYER OF POROUS GRANULAR EMBARKMENT SHALL BE PLACED BELOW THE ELEVATION OF THE BOTTOM OF BOX CULVERT.

All dimensions are in inches unless otherwise noted.

1. IF DESIGN FILL IS < 2 FEET, CONTINUE PGE UP TO THE SUBBASE.
 2. IF DESIGN FILL IS ≥ 2 FEET AND ≤ 8 FEET OR DEPTH OF FILL ≤ SPAN OF LARGEST BOX IN CONFIGURATION, CONTINUE BACKFILLING WITH PGE.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization-Chil\IDOT_Standards\CallIDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

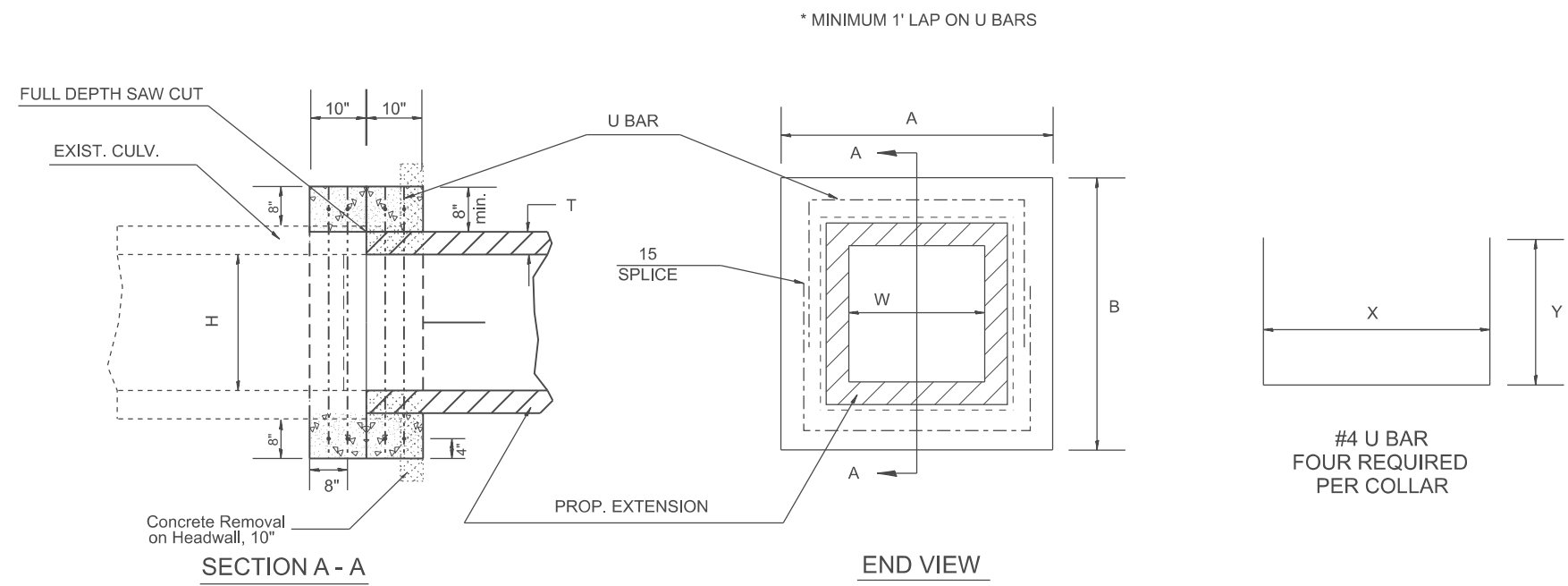
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAIL OF EXCAVATION AND BACKFILL FOR BOX CULVERTS			
SCALE: NOT TO SCALE	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 540000		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. IF REMOVING EXISTING HEAD WALL AND DETERIORATED PORTION OF EXISTING CULVERT PAY FOR REMOVAL AS CUBIC YARDS OF CONCRETE REMOVAL.
 2. IF ONLY REMOVING EXISTING HEADWALL THE DESIGNER HAS THE OPTION TO PAY AS CUBIC YARDS OF CONCRETE REMOVAL OR AS AN EACH FOR CONCRETE HEADWALL REMOVAL.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chil\DOT_Standards\Cul\DOT_Sheets.dwg



GENERAL NOTES

1. The collar shall be constructed entirely of class SI concrete and in accordance with the applicable portions of section 503 of the Standard Specifications. Reinforcement bars shall conform to section 508.
2. Expansion bolts shall consist of approved expansions anchors, and 3/4" hook bolts which conform to Section 1006.09. These bolts shall extend at least 8" into the new concrete.
3. This work will be paid for by the cubic yard for CONCRETE COLLAR, by the pound for REINFORCEMENT BARS, and by Each for EXPANSION BOLTS of the size indicated.
4. Class SI quantity is only an estimate. Revise based on thickness of existing box wall thickness.

DIMENSIONS

EXISTING BOX		A	B	T	EACH COLLAR			
W ft	H ft				CL SI CU YD	REINFORCEMENT X	BARS Y	POUNDS
2	2	4'-0"	4'-0"	4	0.27	3'-4"	27.5	21
3	2	5'-0"	4'-0"	4	0.32	4'-4"	27.5	24
3	2.5	5'-0"	4'-6"	4	0.34	4'-4"	30.5	25
3	3	5'-0"	5'-0"	4	0.36	4'-4"	33.5	26.5
3	4	5'-2"	6'-2"	5	0.41	4'-6"	40.5	30
4	3	6'-2"	5'-2"	5	0.41	5'-6"	34.5	30
4	4	6'-2"	6'-2"	5	0.45	5'-6"	40.5	33
4	5	6'-4"	7'-4"	6	0.51	5'-8"	3'-11.5"	36
5	4	7'-4"	6'-4"	6	0.51	6'-8"	3'-4.5"	36
5	5	7'-4"	7'-4"	6	0.55	6'-8"	3'-11.5"	39
5	6	7'-6"	8'-6"	7	0.60	6'-10"	4'-6.5"	42.5
6	4	8'-6"	6'-6"	7	0.56	7'-10"	3'-6.5"	40
6	5	8'-6"	7'-6"	7	0.60	7'-10"	4'-0.5"	42.5
6	6	8'-6"	8'-6"	7	0.64	7'-10"	4'-6.5"	45
6	8	8'-8"	10'-8"	8	0.74	8'-0"	5'-7.5"	51.5
8	8	10'-8"	10'-8"	8	0.82	10'-0"	5'-7.5"	57

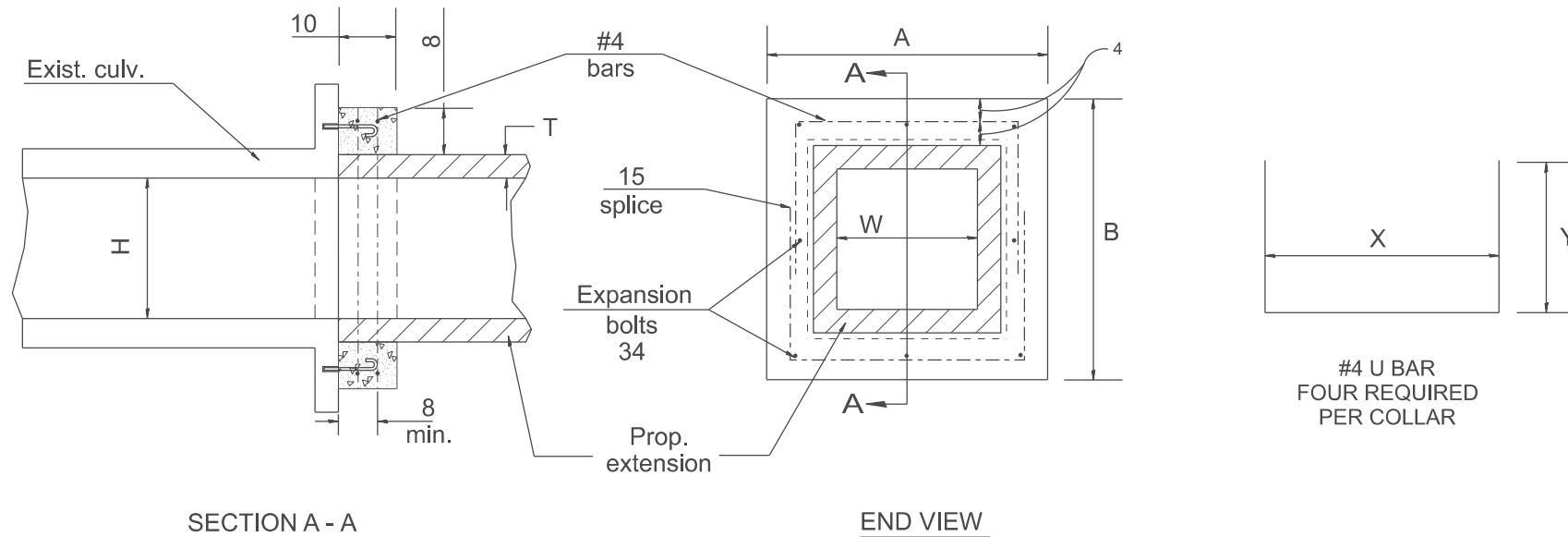
QUANTITIES

CALC. BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON
 FILE AT THE DISTRICT 4 OFFICE;
 BUREAU OF PROJECT IMPLEMENTATION;
 DOCUMENTATION SECTION

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COLLAR FOR BOX CULVERT EXTENSIONS WITH HEADWALL REMOVAL	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	DRAWN -	REVISED -			DISTRICT 4 DETAIL NO. 540002		CONTRACT NO.				
	CHECKED -	REVISED -			SCALE: NOT TO SCALE	SHEET	OF	SHEETS	STA.	TO	STA.
PLOT DATE = 12/7/2022	DATE -	REVISED -			ILLINOIS FED. AID PROJECT						



- GENERAL NOTES**
1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of section 503 of the Standard Specifications. REINFORCEMENT BARS shall conform to section 508.
 2. Expansion bolts shall consist of approved expansion anchors, and 3/4 hook bolts which conform to Section 1006.09. These bolts shall extend at least 8 into the new concrete.

EXIST. BOX		PROP. BOX		CLASS SI CONCRETE			REBARS			EXPANSION BOLTS EACH	EXT. LENGTH		END SEC.
W	H	W'	H'	CU. YD.	A	B	T	X	Y		LBS.	LT.	

QUANTITIES

CALC. BY: _____ DATE: _____

CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

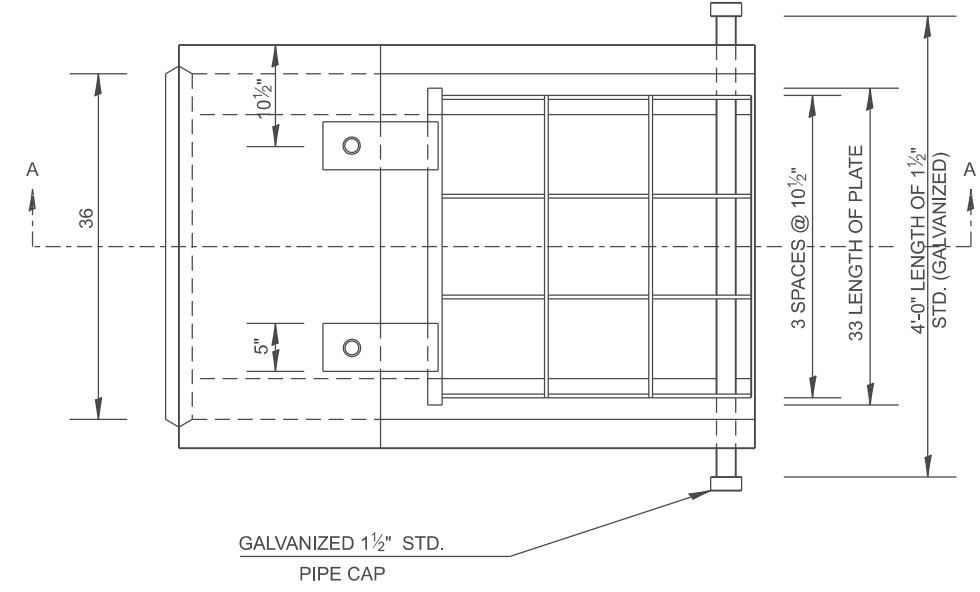
PRECAST BOX CULVERT EXTENSION COLLAR

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

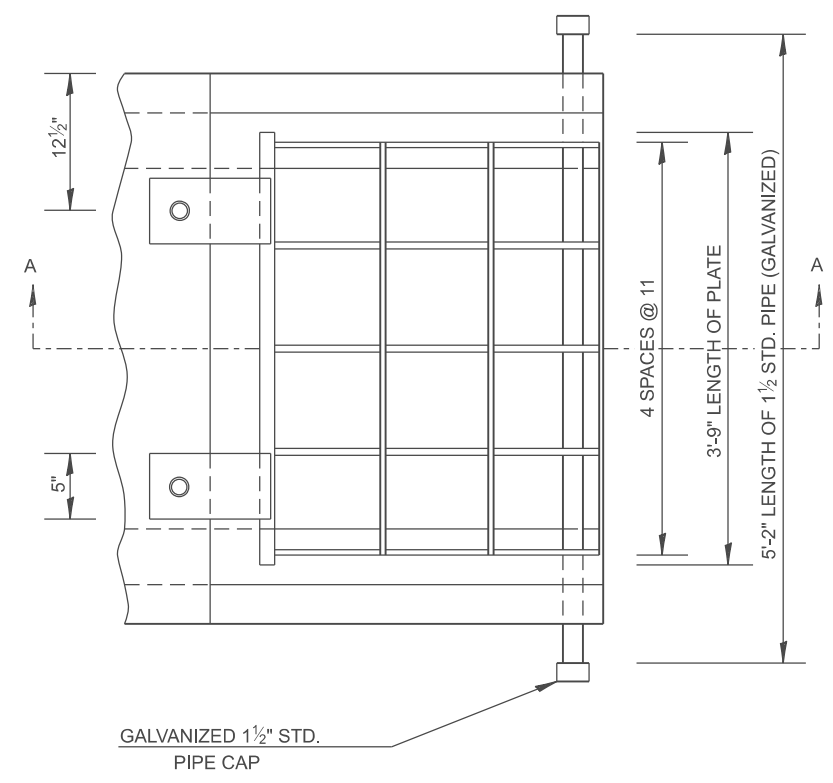
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 540101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. ADD DISTRICT SPECIAL PROVISION: THE CONTRACT UNIT PRICE "EACH" FOR GRATING FOR PRECAST CONCRETE CONCRETE BOX CULVERT END SECTION OF THE SIZE INDICATED SHALL INCLUDE FABRICATION AND INSTALLATION OF THE GRATING AS DETAILED HEREON, IT SHOULD ALSO INCLUDE THE FABRICATION OF THE NECESSARY MOUNTING HOLES IN THE END SECTION. THE COST OF THE PRECAST CONCRETE BOX CULVERT END SECTION SHALL BE PAID FOR SEPARATELY.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chiril D. S. Santos\Callout\Shred.ctb

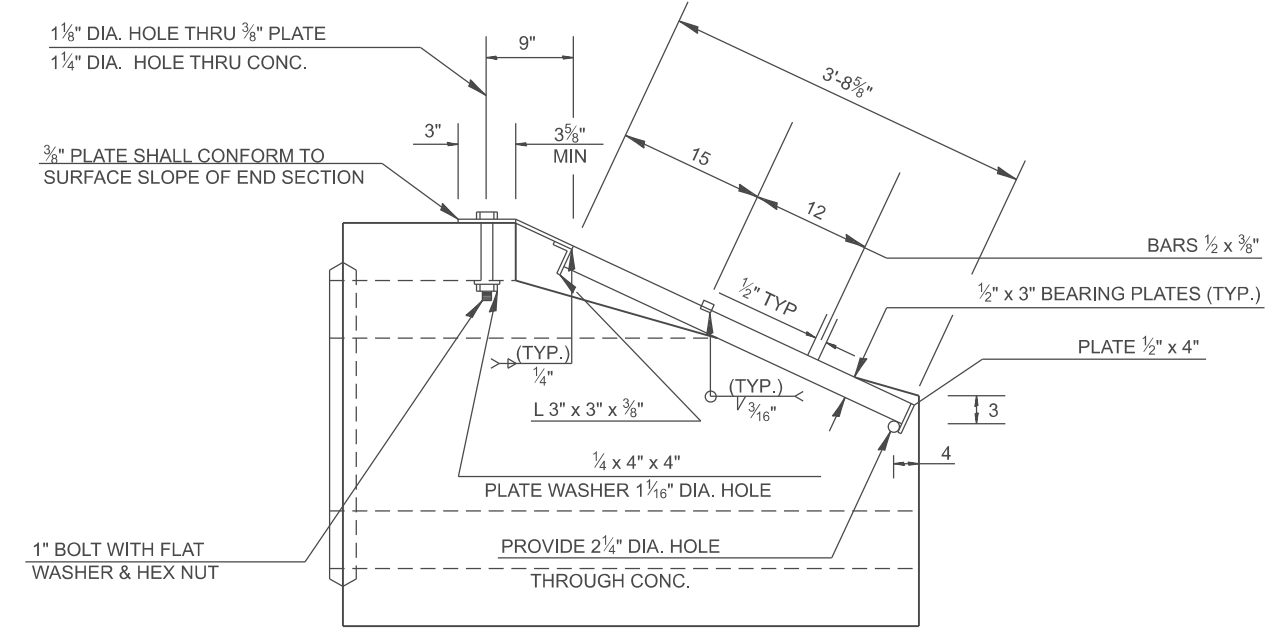


PLAN 36 x 36

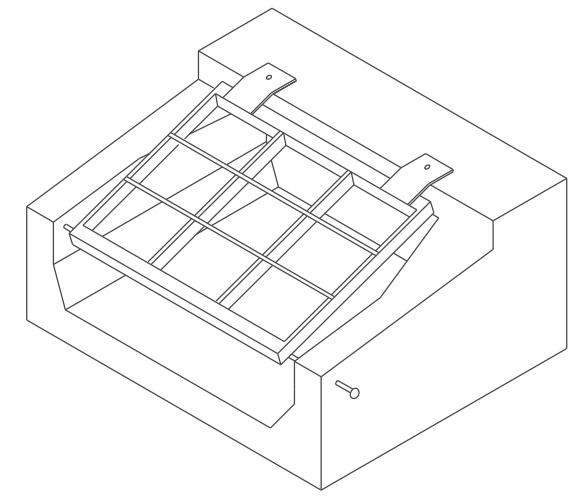


PLAN 4' x 4'

- GENERAL NOTES:
1. Grating details shown are intended for use with particular sizes of Precast Concrete Box Culvert End Sections.
 2. Structural Steel Shapes and Plates shall be in accordance with Article 1006.04 of the Standard Specifications. Galvanized Steel Pipe shall be in accordance with Article 1006.27 (b) of the Standard Specifications.
 3. Bolts, Nuts, and Washers shall be in accordance with Article 1006.27 (f) of the Standard Specifications. All Fabrication shall be completed and ready for assembly before galvanizing.
 4. Holes in the Precast Concrete Box Culvert End Section shall be cored to the diameter noted. If cone-out on the other end of the hole occurs, the hole shall be filled with Grout to correct the diameter of the hole.



SECTION A - A



ISOMETRIC VIEW

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

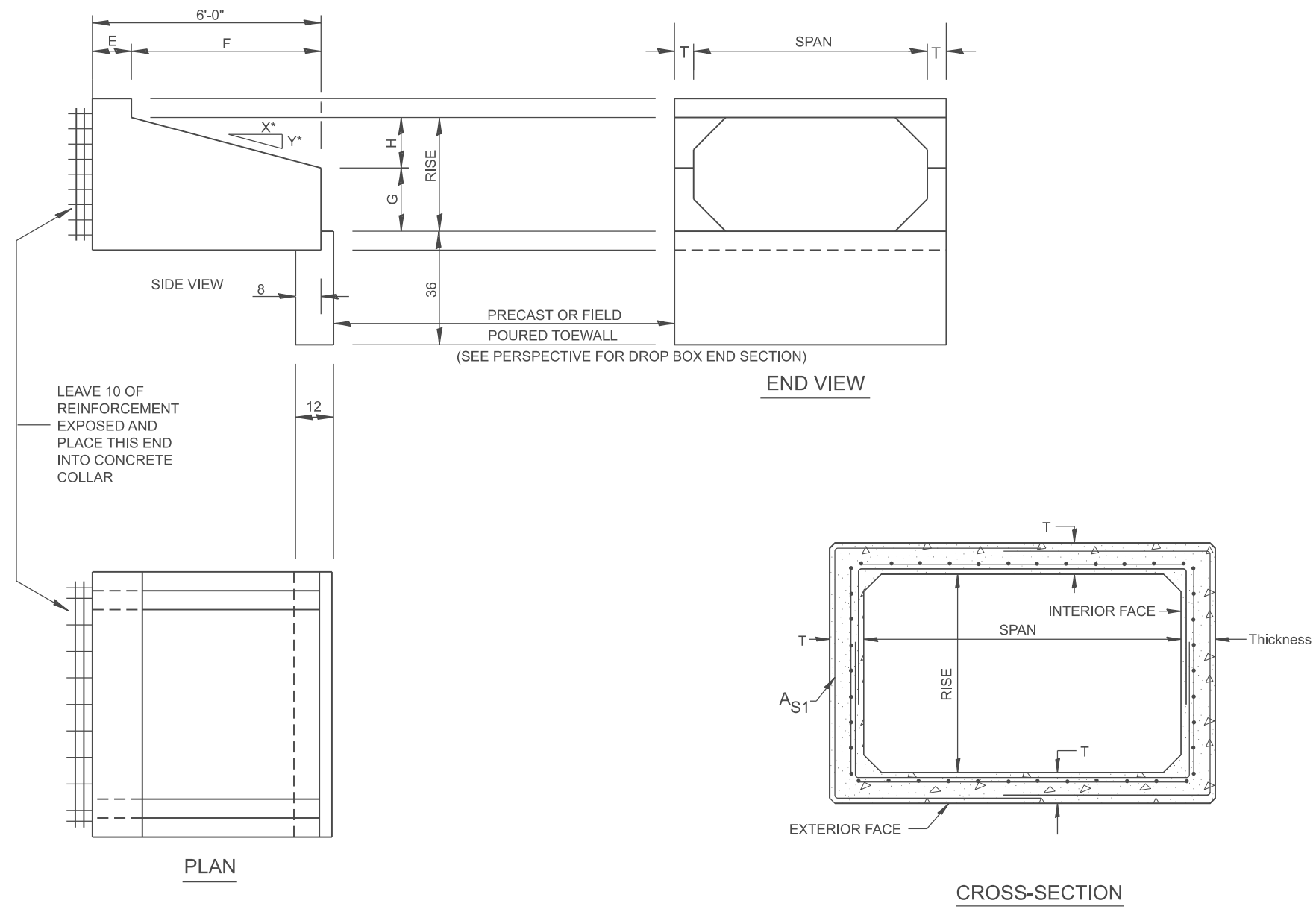
GRATING FOR PRECAST BOX CULVERT END SECTION FOR
 36 X 36 & 4' X 4' BOXES

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 540301		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. INSERT DISTRICT SPECIAL PROVISION.
 2. TO BE USED IN CONJUNCTION WITH CONCRETE COLLAR.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT10110\organization\Chri\IDOT_Standards\Cell\IDOT_Sheets.dwg



GENERAL NOTES:

1. The Box Culvert Sections shall conform to ASTM C1577.
2. The External Sealing Band shall conform to ASTM C 877. The appropriate portions of Articles 550.02(I) and 1057.01 of the Standard Specifications shall apply.
3. Shop plans for the Precast Reinforced Box Culvert Sections, End Sections and Drop Box End Sections shall be submitted in accordance with Article 540.06 of the Standard Specifications.
4. All dimensions shall be verified with the Supplier.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

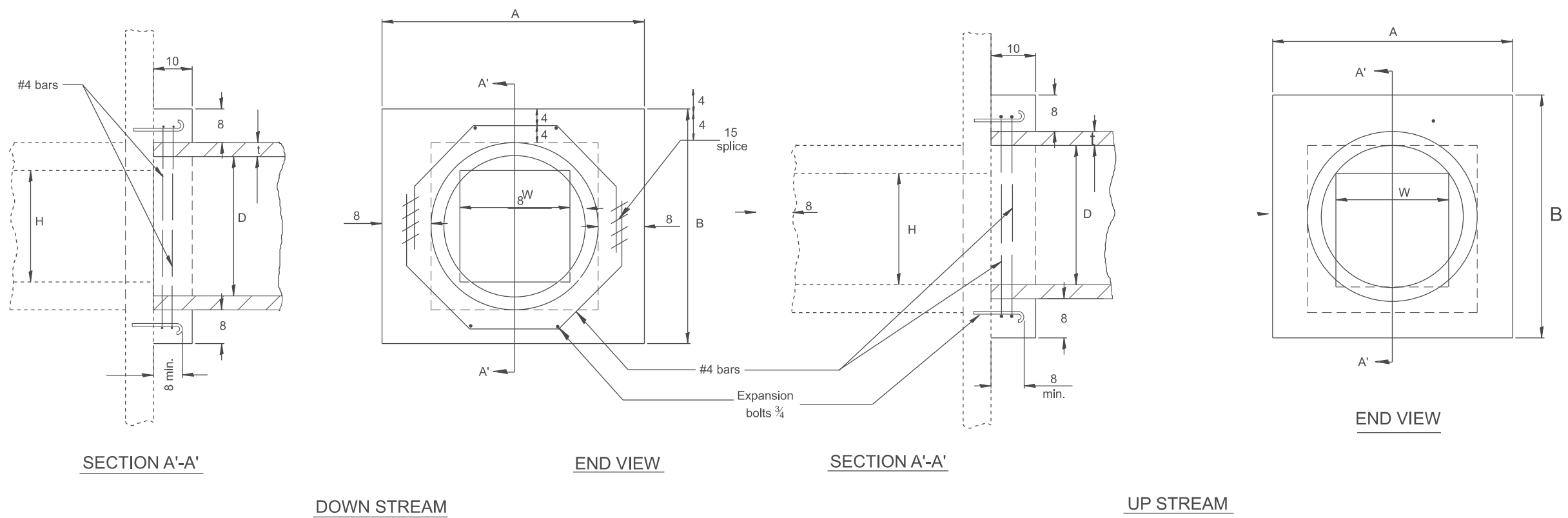
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PRECAST CONCRETE BOX CULVERTS (SPECIAL),
 END SECTION (SPECIAL), &
 DROP BOX END SECTIONS (SPECIAL)**

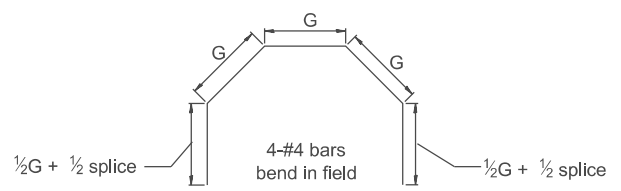
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

All dimensions are in inches unless otherwise noted.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 540401		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		



EXISTING BOX		A	B	D	t	EACH COLLAR				EXPANSION BOLT EACH
W	H					REINFORCEMENT BARS				
						CONC. COLLAR CU. YD.	g	L	LBS.	
12 PIPE		32	32	12	2	0.18	10	4'-7"	12	4
18 PIPE		39	39	18	2½	0.24	12¾	5'-6"	15	4
24 PIPE		3'-10"	3'-10"	24	3	0.30	15¾	6'-6"	17	4
24	24	4'-5"	4'-5"	30	3½	0.37	18¾	7'-6"	20	4
30	30	5'-0"	5'-0"	36	4	0.45	21½	8'-5"	22.5	8
36	36	5'-7"	5'-7"	42	4½	0.50	24½	9'-5"	25	10
42	42	6'-2"	6'-2"	48	5	0.61	27¼	10'-4"	28	10
48	48	6'-9"	6'-9"	54	5½	0.80	30¼	11'-4"	30	10



GENERAL NOTES

1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of Section 503 of the Standard Specifications. Reinforcement Bars shall conform to Section 508.
2. Expansion Bolts shall consist of approved Expansion Anchors, and ¾ Hook Bolts which conform to Section 1006.09. These Bolts shall extend at least 8 into the new Concrete.
3. This work will be paid for by the cubic yard (cubic meter) for CONCRETE COLLAR, by the pound for REINFORCEMENT BARS, and by Each for EXPANSION BOLTS of the size indicated.

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\Organization\ChilidDOT_Standards\Civil\DOT_Sheets.cad

QUANTITIES

CALC. BY: _____ DATE: _____

CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

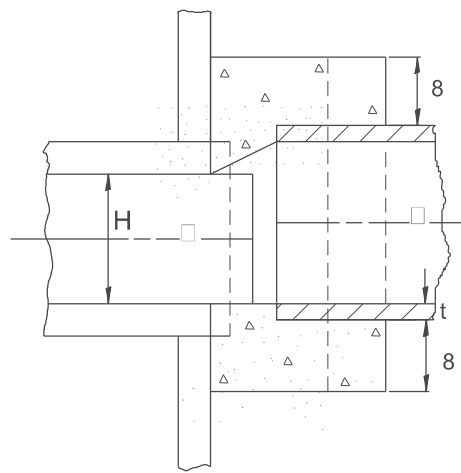
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

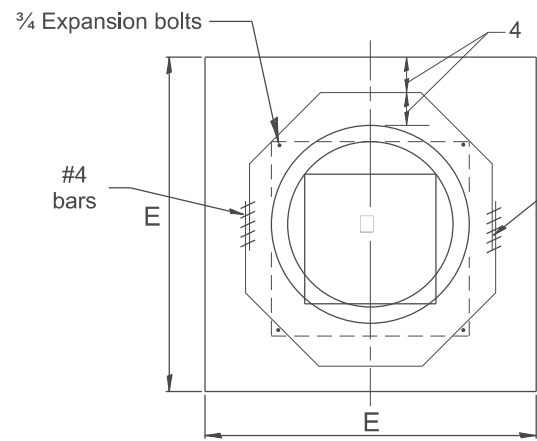
PIPE CULVERT EXTENSION COLLAR (WITH END SECTION)

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

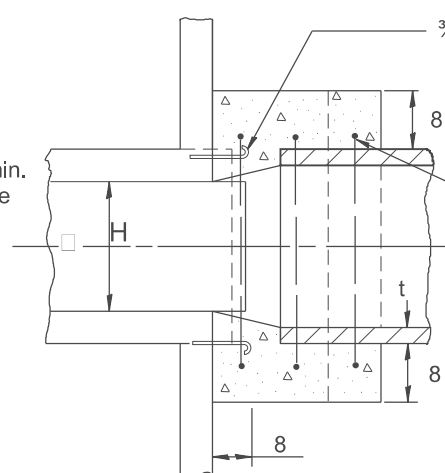
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 542001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



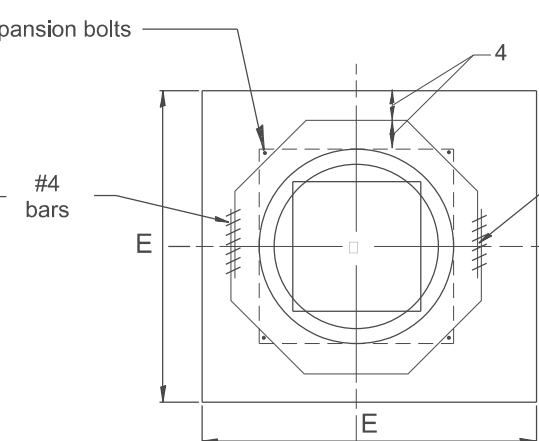
SECTION A-A



END VIEW



SECTION A-A



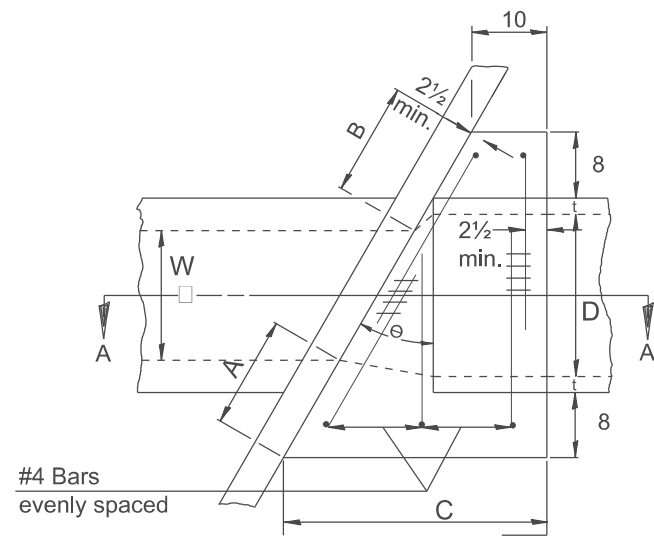
END VIEW

$$A = B = \frac{D - W}{2} + t + 8$$

$$C = \tan \theta [D + 2t + 16] + 10$$

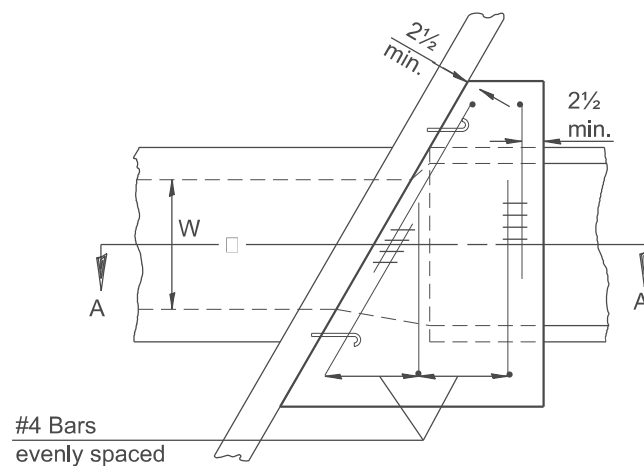
$$G = \frac{D + 2t + 8}{2.4142 [\cos \theta]}$$

(Note: 'G' is based upon maximum skewed length)

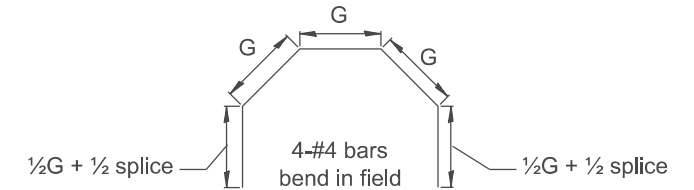


PLAN VIEW UP STREAM

NOTE:
Dimensions are shown in Plan View of Up Stream End while Reinforcement is shown in plan view of Down Stream End.



PLAN VIEW DOWN STREAM



GENERAL NOTES

1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of section 503 of the Standard Specifications. Reinforcement bars shall conform to section 508.
2. Expansion bolts shall consist of approved expansion anchors, and 3/4 hook bolts which conform to section 1006.09. These bolts shall extend at least 8 into the new concrete.
3. This work will be paid for by the cubic yard for CONCRETE COLLAR, by the pound for REINFORCEMENT BARS, and by Each for EXPANSION BOLTS of the size indicated.

EXISTING BOX		EACH COLLAR								CONCRETE		REINFORCEMENT BARS			EXPAN. BOLTS
		θ	A	B	C	D	E	t	CU. YD.	G	L	LBS.	EACH		
W	H														

QUANTITIES

CALC. BY: _____ DATE: _____

CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

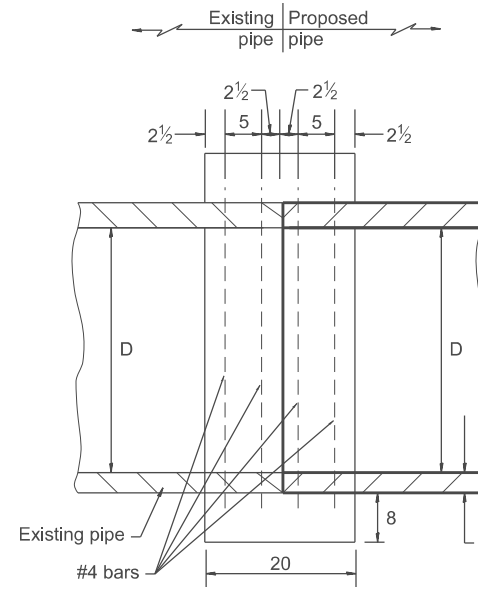
SKewed PIPE CULVERT EXTENSION COLLAR (WITH END SECTION)

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

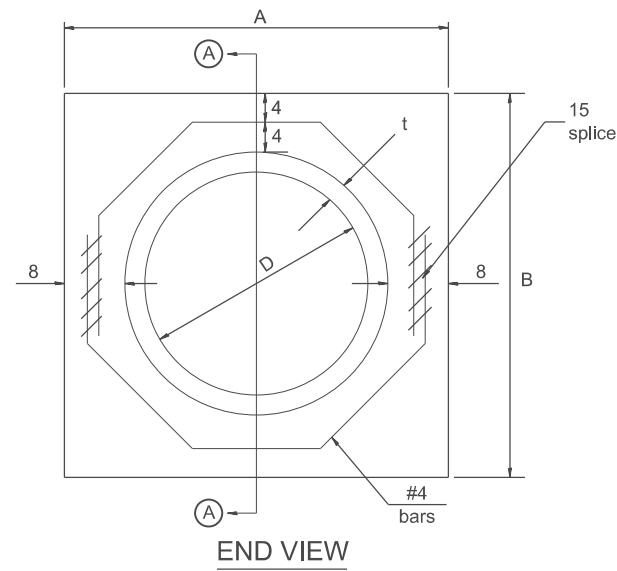
All dimensions are in inches unless otherwise noted.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO.542011			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

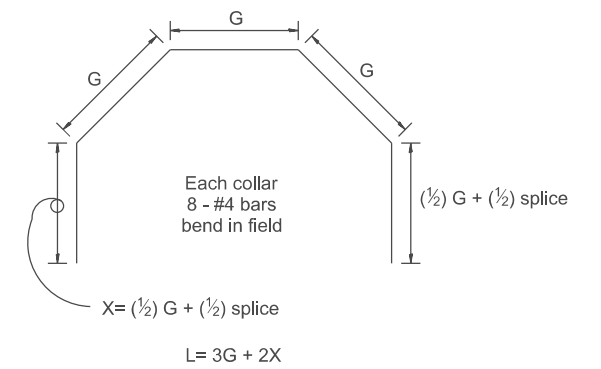
MODEL: SHT_PLAN FILE NAME: C:\Bentley\CONNECT10110\organization\ChilidDOT_Standards\Civil\DOT_Sheets.cad



SECTION A - A



END VIEW



Each Collar								
				Reinforcement Bars				
D in	t in	A ft	B ft	CL. SI CONC. cu.yd.	G in	X in	L ft	Weight lb
12	2.00	2.67	2.67	0.4	9 ¹⁵ / ₁₆	12 ⁷ / ₁₆	4.57	24
15	2.25	2.96	2.96	0.4	11 ³ / ₈	13 ³ / ₁₆	5.05	27
18	2.50	3.25	3.25	0.5	12 ¹³ / ₁₆	13 ⁷ / ₈	5.54	30
21	2.75	3.54	3.54	0.5	14 ¹ / ₄	14 ⁵ / ₈	6.02	32
24	3.00	3.83	3.84	0.6	15 ¹¹ / ₁₆	15 ⁵ / ₁₆	6.51	35
27	3.25	4.13	4.13	0.7	17 ¹ / ₄	16 ¹ / ₁₆	6.99	37
30	3.50	4.42	4.42	0.7	18 ¹¹ / ₁₆	16 ³ / ₄	7.48	40
33	3.75	4.71	4.71	0.8	20 ¹ / ₈	17 ¹ / ₂	7.96	43
36	4.00	5.00	5.00	0.9	21 ⁹ / ₁₆	18 ³ / ₁₆	8.44	45
42	4.50	5.58	5.58	1.0	24 ⁷ / ₁₆	19 ³ / ₄	9.41	50
48	5.00	6.17	6.17	1.2	27 ⁵ / ₁₆	21 ³ / ₁₆	10.38	55

GENERAL NOTES

1. THE COLLAR SHALL BE CONSTRUCTED ENTIRELY OF CLASS SI CONCRETE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 503 OF THE STANDARD SPECIFICATIONS. REINFORCEMENT BARS SHALL CONFORM TO SECTION 508.
2. This work shall be paid for by the cubic yard for CONCRETE COLLAR and by the pound for REINFORCEMENT BARS.

QUANTITIES		
CALC. BY:	R.J.D.	2-2-98 DATE:
CHECKED BY:	R.D.H.	2-6-98 DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION		

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT11\10\Organization\Chilidot_Standards\CollIDOT_Sheets.cad

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

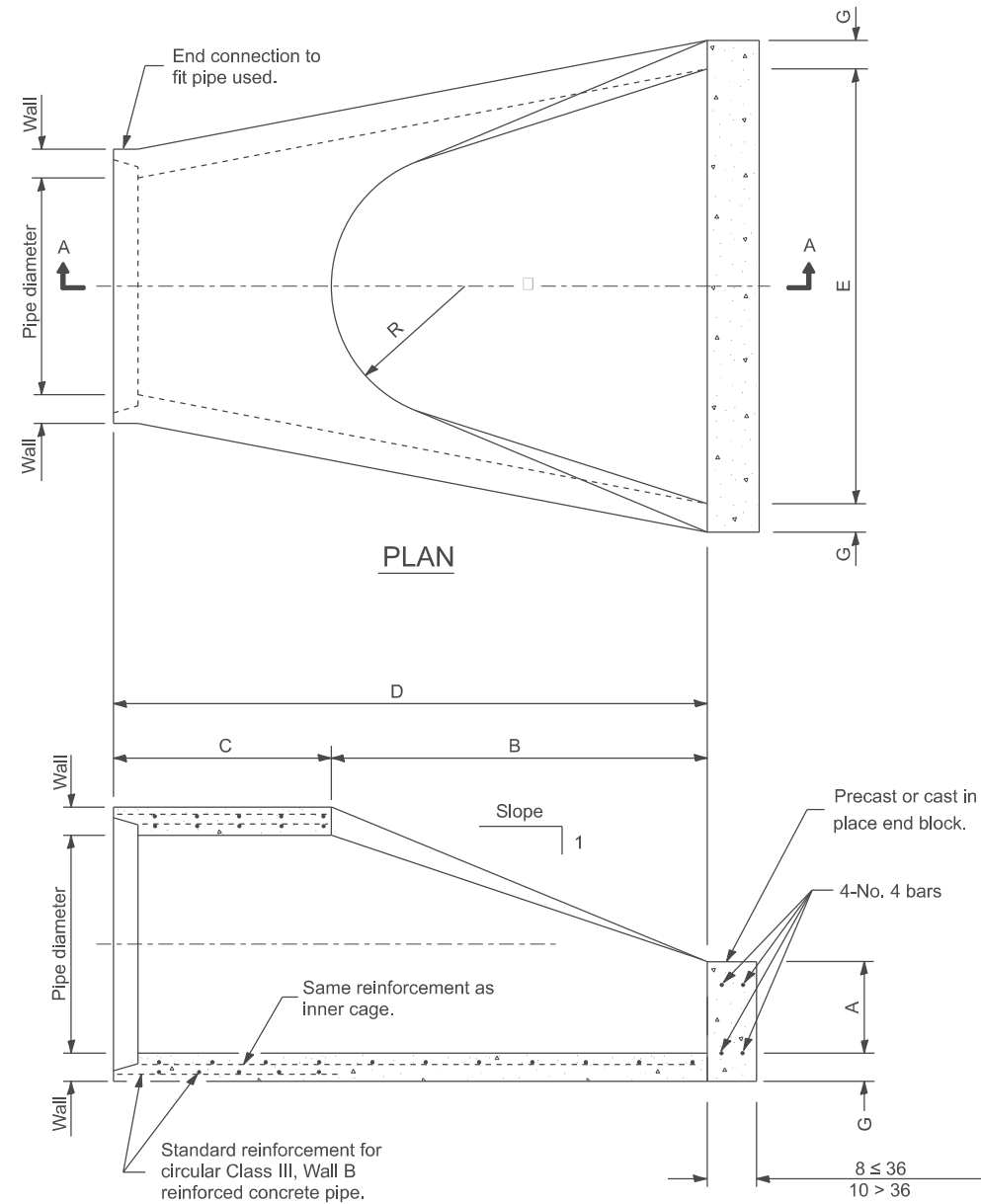
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIPE CULVERT EXTENSION COLLAR (WITHOUT END SECTION)

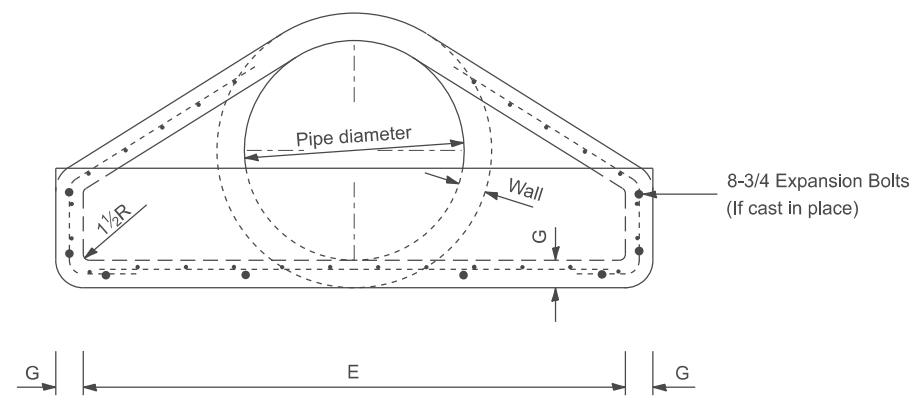
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 542016			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\ChilIDOT_Standards\Civil\IDOT_Sheets.cad



SECTION A-A



END VIEW

PIPE DIA.	APPROX. QTY. lbs	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12	530	2	4	24	4'-0 ⁷ / ₈ "	6'-0 ⁷ / ₈ "	24	2	9	1:2.4
15	740	2 ¹ / ₄	6	27	3'-10"	6'-1"	30	2 ¹ / ₄	11	1:2.4
18	990	2 ¹ / ₂	9	27	3'-10"	6'-1"	36	2 ¹ / ₂	12	1:2.4
21	1280	2 ³ / ₄	9	35	38	6'-1"	3'-6"	2 ³ / ₄	13	1:2.4
24	1520	3	9 ¹ / ₂	3'-7 ¹ / ₂ "	30	6'-1 ¹ / ₂ "	4'-0"	3	14	1:2.5
27	1930	3 ¹ / ₄	10 ¹ / ₂	4'-0"	25 ¹ / ₂	6'-1 ¹ / ₂ "	4'-6"	3 ¹ / ₄	14 ¹ / ₂	1:2.4
30	2190	3 ¹ / ₂	12	4'-6"	19 ³ / ₄	6'-1 ³ / ₄ "	5'-0"	3 ¹ / ₂	15	1:2.5
33	3200	3 ³ / ₄	13 ¹ / ₂	4'-10 ¹ / ₂ "	39 ¹ / ₄	8'-1 ³ / ₄ "	5'-6"	3 ³ / ₄	17 ¹ / ₂	1:2.5
36	4100	4	15	5'-3"	34 ³ / ₄	8'-1 ³ / ₄ "	6'-0"	4	20	1:2.5
42	5380	4 ¹ / ₂	21	5'-3"	35	8'-2"	6'-6"	4 ¹ / ₂	22	1:2.5
48	6550	5	24	6'-0"	26	8'-2"	7'-0"	5	22	1:2.5
54	8240	5 ¹ / ₂	27	5'-5"	35	8'-4"	7'-6"	5 ¹ / ₂	24	1:2.0
60	8730	6	35	5'-0"	39	8'-3"	8'-0"	5	*	1:1.9
66	10710	6 ¹ / ₂	30	6'-0"	27	8'-3"	8'-6"	5 ¹ / ₂	*	1:1.7
72	12520	7	36	6'-6"	21	8'-3"	9'-0"	6	*	1:1.8
78	14770	7 ¹ / ₂	36	7'-6"	21	9'-3"	9'-6"	6 ¹ / ₂	*	1:1.8
84	18160	8	36	7'-6 ¹ / ₂ "	21	9'-3 ¹ / ₂ "	10'-0"	6 ¹ / ₂	*	1:1.6

* Radius as furnished by manufacturer

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

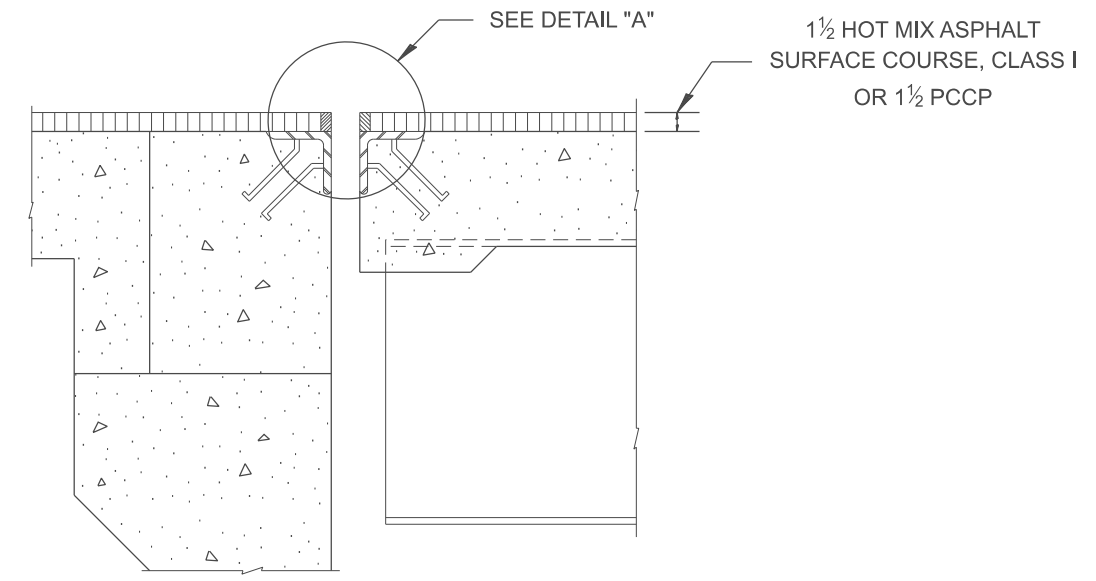
PRECAST REINFORCED CONCRETE FLARED DROP BOX END SECTION

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

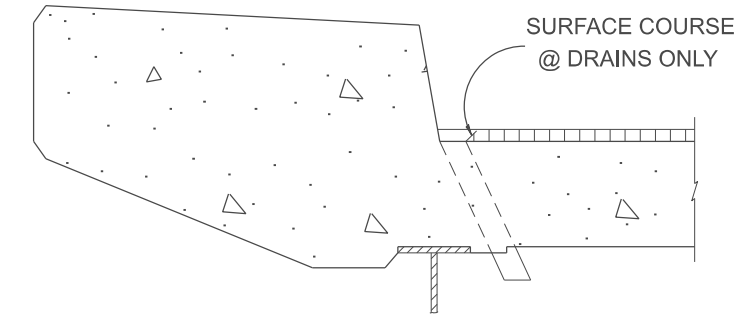
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 542301	CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. INCLUDE DISTRICT SPECIAL PROVISION.
 2. CHECK WITH DISTRICT HYDRAULIC / BRIDGE ENGINEER FOR APPLICATIONS.

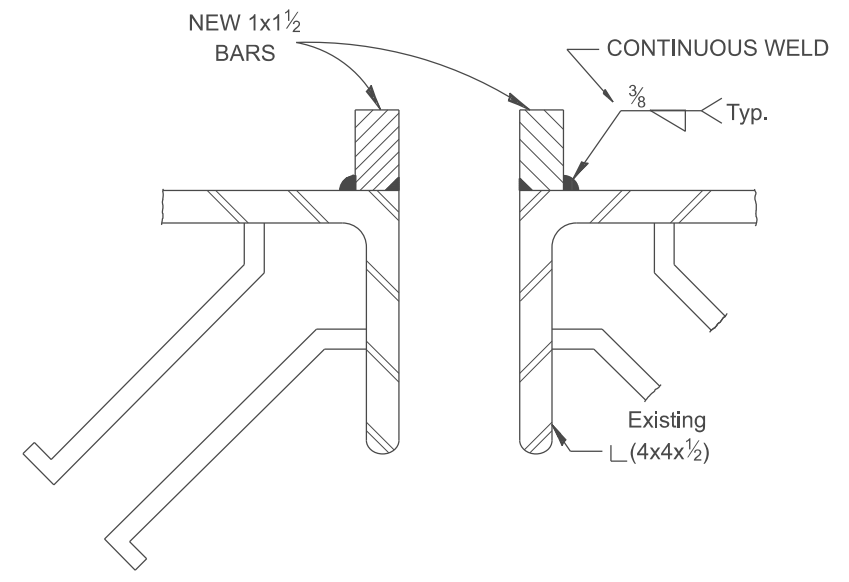
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SECTION AT ABUTMENTS



CURB SECTION



DETAIL "A"

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

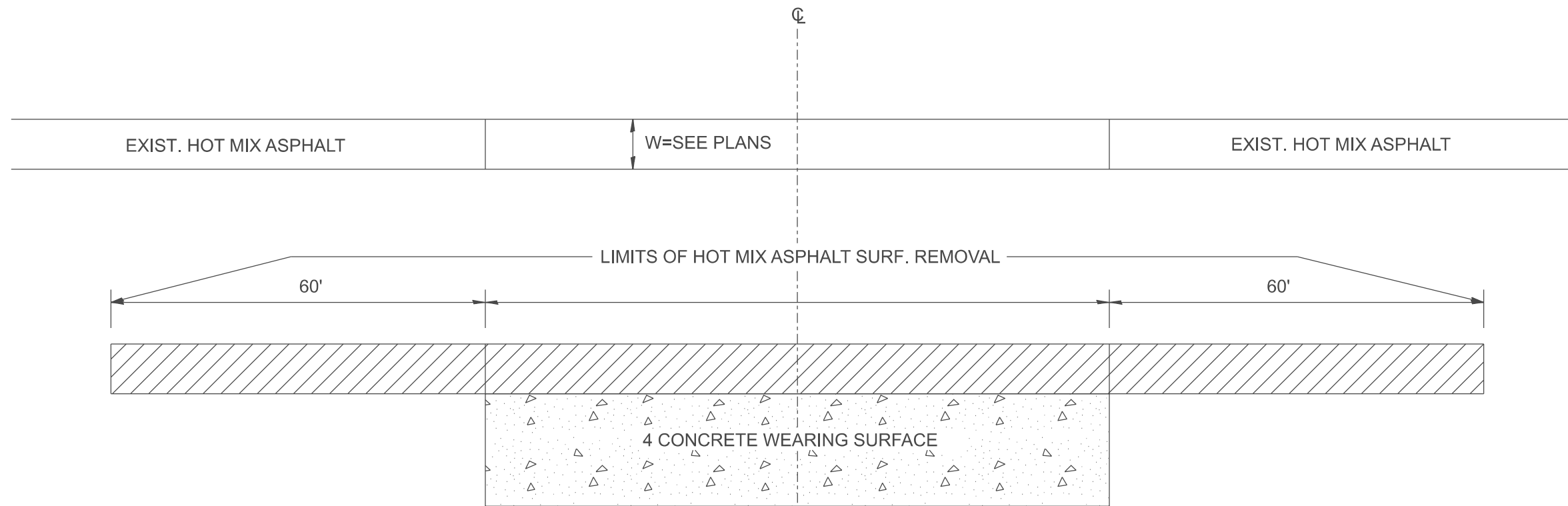
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ABUTMENT JOINT MODIFICATIONS FOR DECK RESURFACING				
SCALE: NOT TO SCALE	SHEET	OF	SHEETS	STA. TO STA.

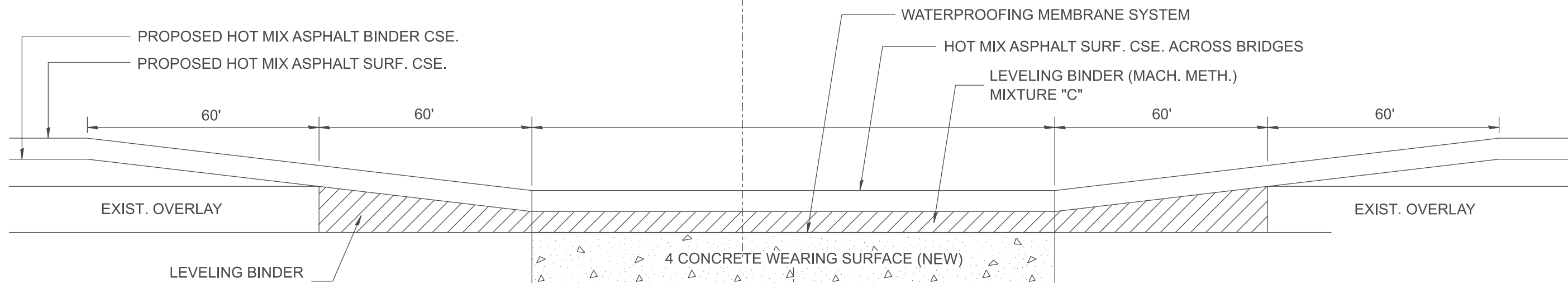
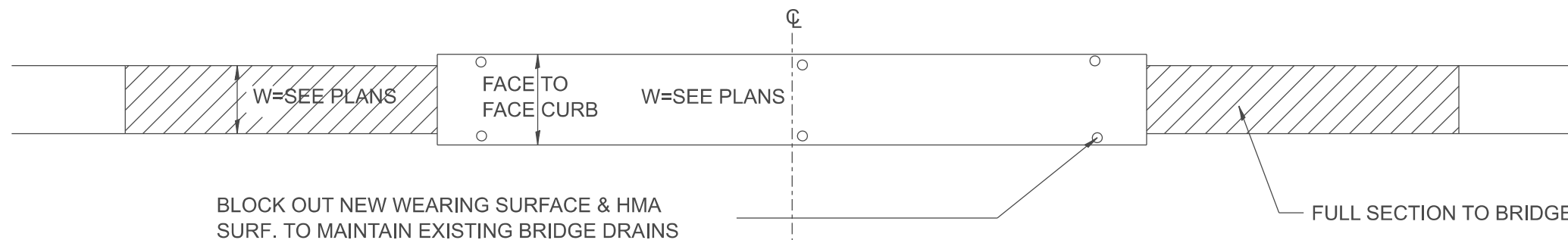
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 582001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTE: 1. CHECK WITH DISTRICT HYDRAULICS / BRIDGE ENGINEER FOR APPLICATIONS.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\organizer\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg



EXISTING PLAN & PROFILE



PROP. PLAN & PROFILE

All dimensions are in inches unless otherwise noted.

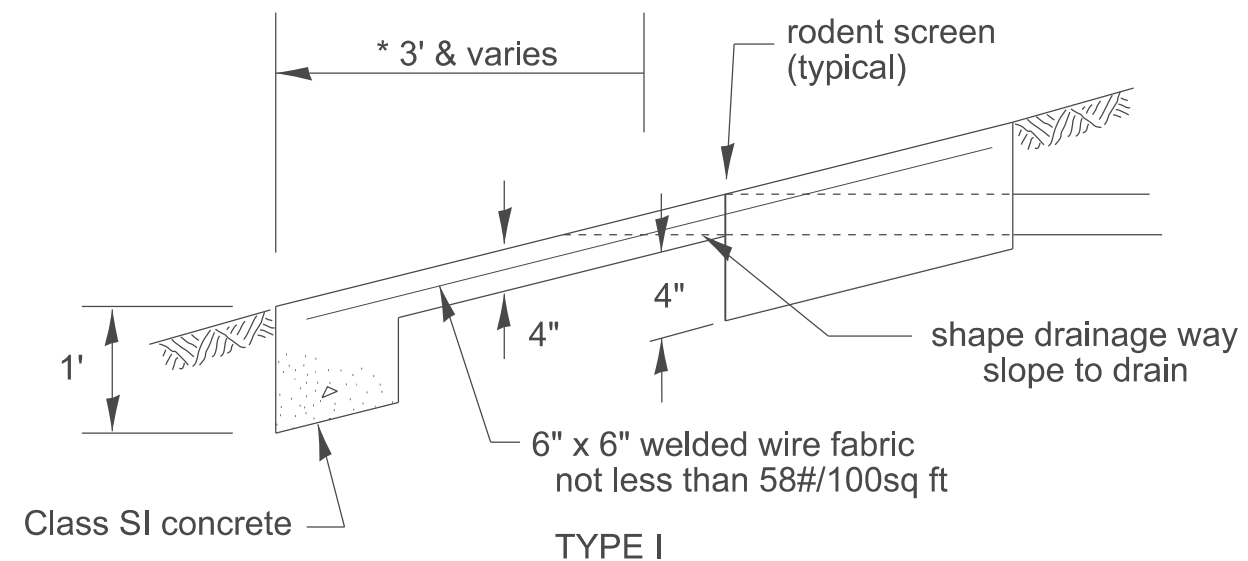
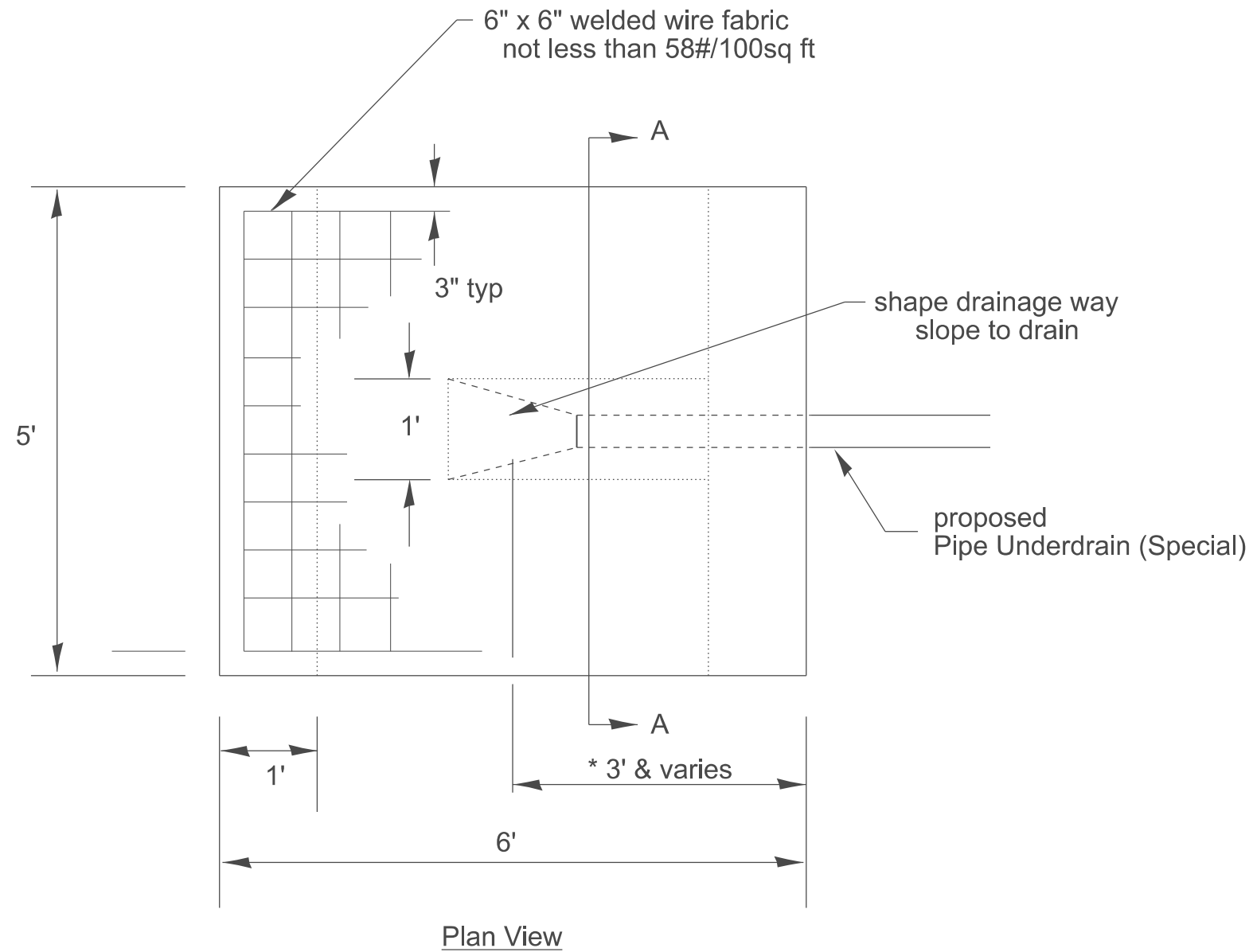
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE WEARING SURFACE BITUMINOUS OVERLAY DETAILS

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 582101		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		



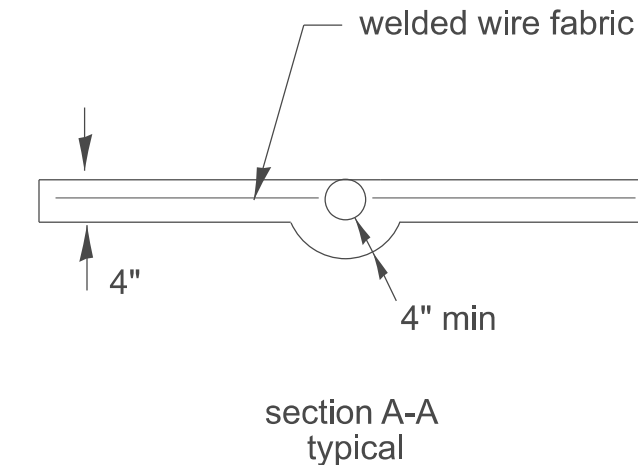
Outlets are to be constructed in accordance with applicable portions of Section 606 of the Standard Specifications.

This work will be measured for payment at the contract unit price per cubic yard for CLASS SI CONCRETE OUTLET PROTECTOR and at the contract unit price per square yard for WELDED WIRE FABRIC 6 X 6.

Excavation and backfill required for this work will not be measured for payment.

Rodent Screens shall be in accordance with Article 601.05 of the Standard Specifications and State Standard 601101.

Quantities for *Standard Protector		
Type	Class SI Cu Yd	WWF Sq Yd
I	.63	2.75
II	.88	3.75
III	1.39	6.75



DESIGNER NOTES:
 1. Consider using this type instead of the precast headwalls.
 2. Discuss with your Project Engineer prior to use.
 3. The intent of this design is to reduce the cleaning required for the precast units and prevent grass from growing at the end of the pipe and blocking flow.
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONCRETE\1\1\10\Signatures\CH11\DOT_Sheets.dwg

All dimensions are in inches unless otherwise noted.

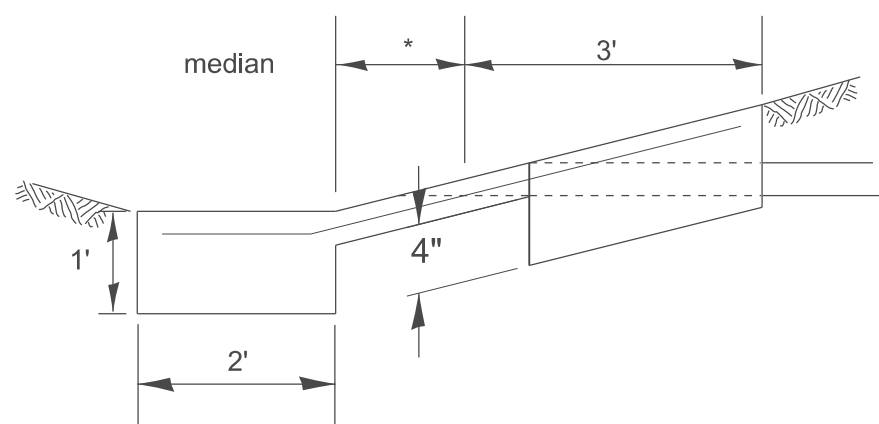
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

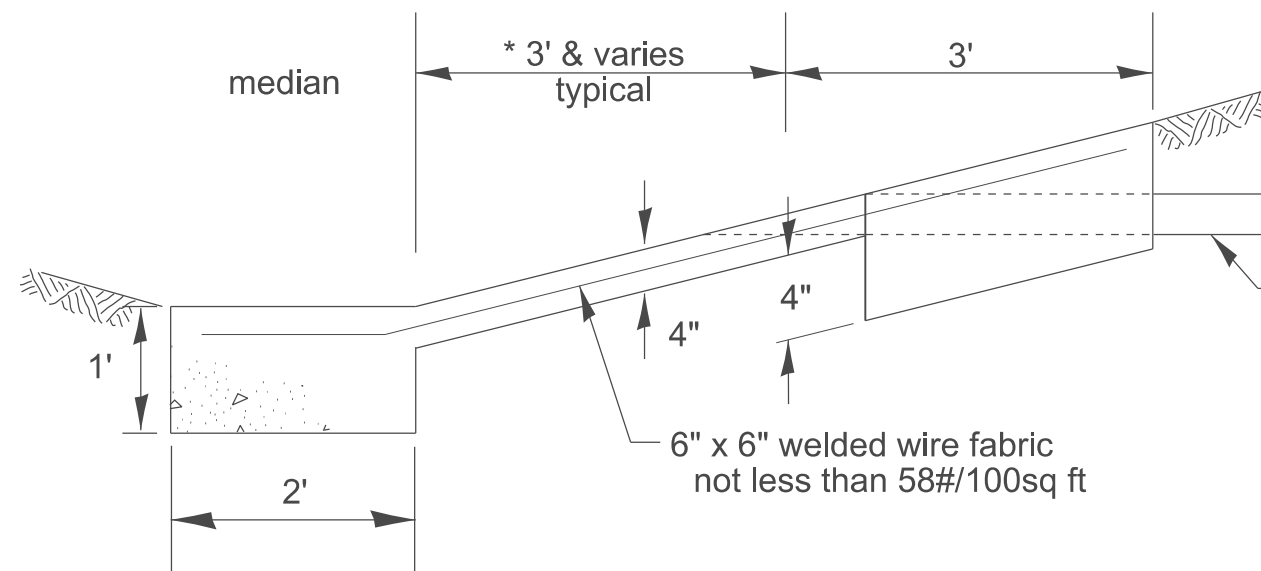
UNDERDRAIN OUTLET PROTECTION

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601001		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		



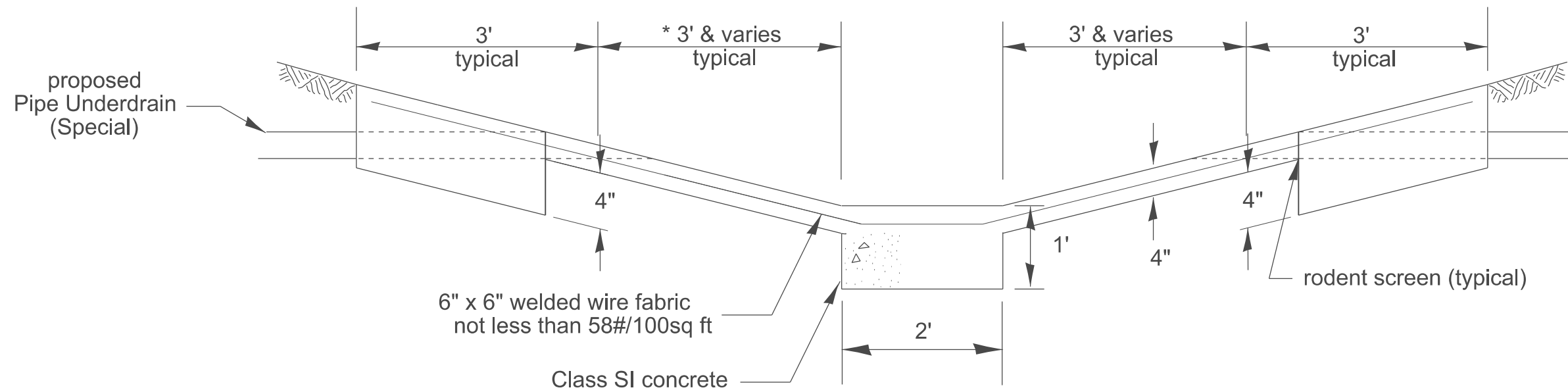
* Varies at all locations where the outlet is within 3 feet of the ditch flow line.



proposed Pipe Underdrain (Special)

6" x 6" welded wire fabric not less than 58#/100sq ft

Type II



proposed Pipe Underdrain (Special)

6" x 6" welded wire fabric not less than 58#/100sq ft

Class SI concrete

rodent screen (typical)

Type III

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT1011\Organization\Chil\DOT_Standards\Cell\DOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

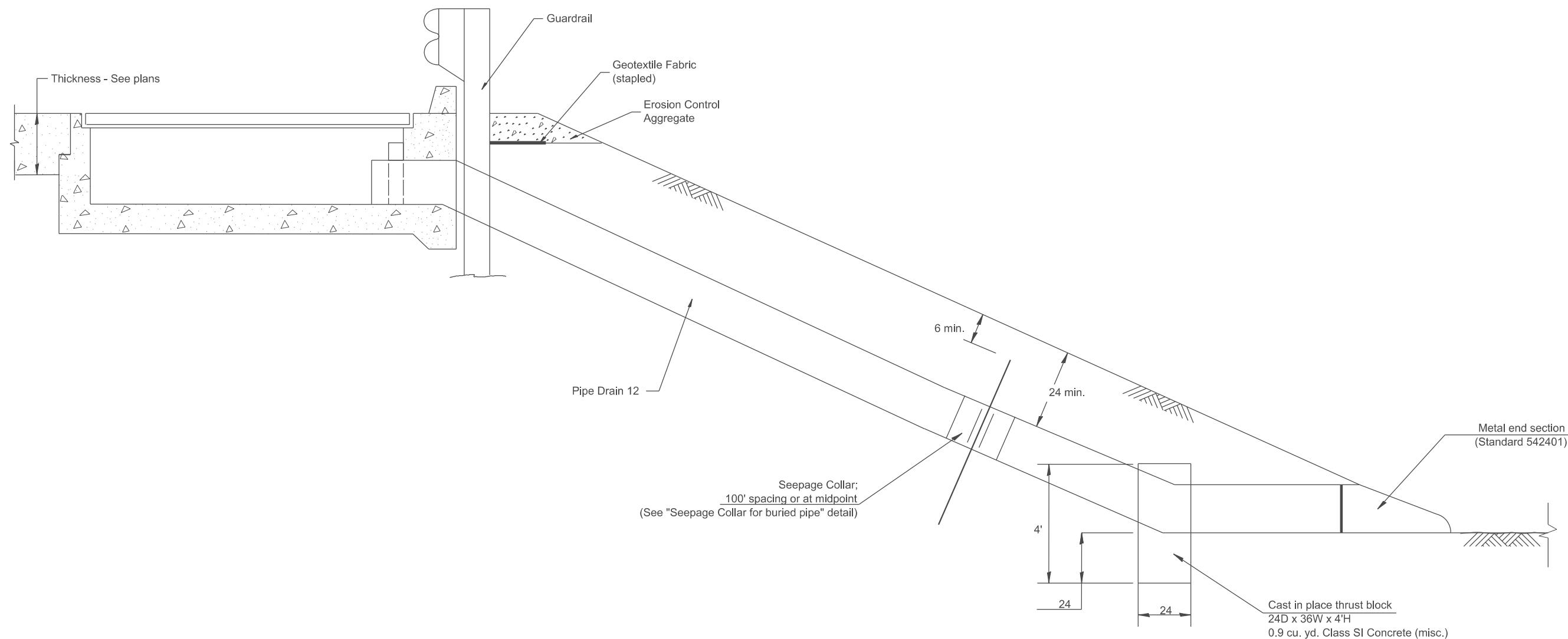
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UNDERDRAIN OUTLET PROTECTION

SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601001			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

SLOPE DRAIN FOR BURIED PIPES



GENERAL NOTES

1. The material for Pipe Drains shall be bituminous coated galvanized corrugated steel culvert pipe or bituminous coated corrugated aluminum alloy pipe in accordance with Article 601.02(b) or 601.02(e) or Polyvinyl Chloride (PVC) pipe in accordance with Article 601.02 (s).
2. An approved mastic material (Article 1055.01) shall be applied to the inside of the connecting bands.

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:
 1. IF USING ON A TALL SLOPE DISCUSS NUMBER OF THRUST BLOCKS NEEDED WITH PROJECT ENGINEER.
 2. INCLUDE STATE STANDARD 610001, IF APPLICABLE
 3. INCLUDE DISTRICT CADD STANDARDS FOR "GUARDRAIL EROSION CONTROL TREATMENTS", "SEEPAGE COLLARS FOR BURIED PIPES", AND "PIPE ELBOW"

QUANTITIES	
CALC. BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SLOPE DRAIN DETAIL FOR BURIED PIPES

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

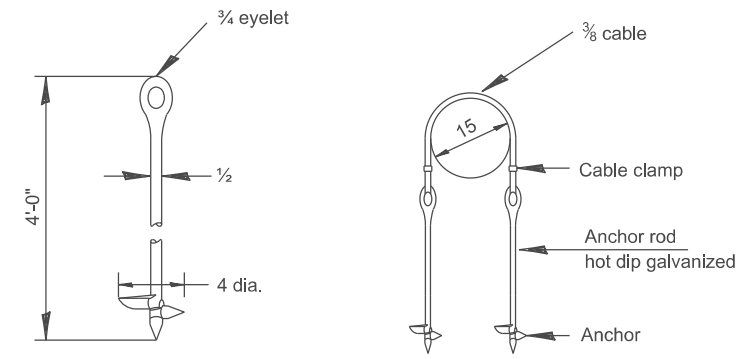
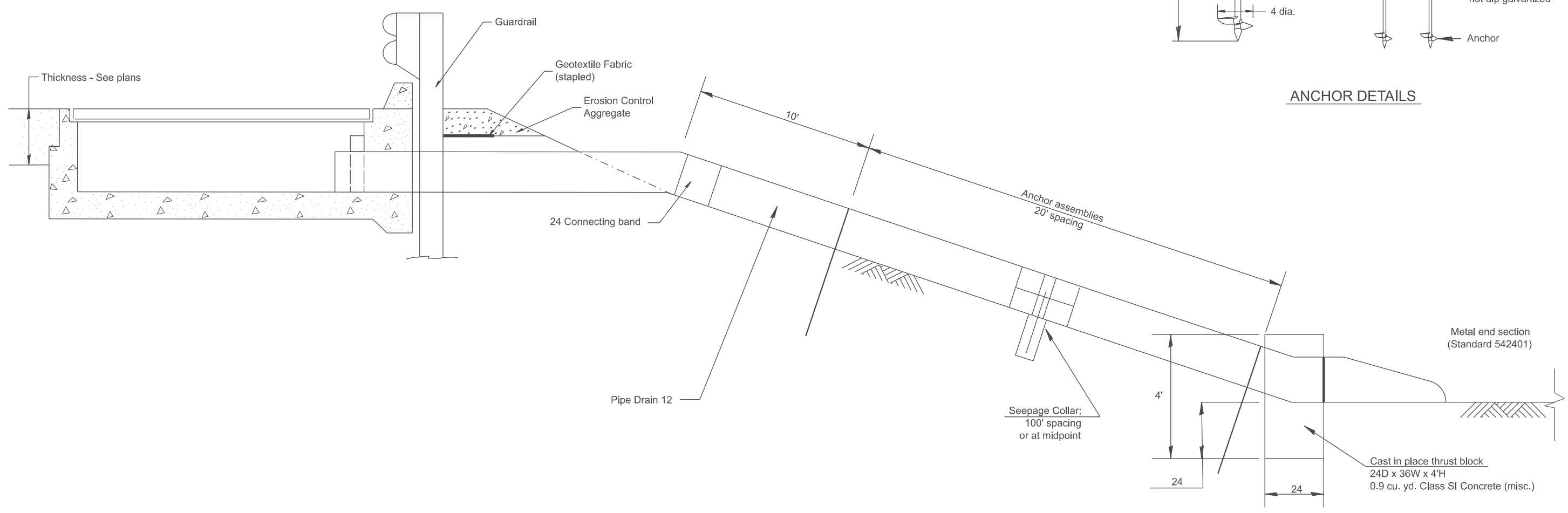
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. IF USING A TALL SLOPE DISCUSS NUMBER OF THRUST BLOCKS & SEEPAGE COLLARS.
 2. INCLUDE STATE STANDARD 610001, IF APPLICABLE.
 3. INCLUDE DISTRICT CADD STANDARDS FOR "GUARDRAIL EROSION CONTROL TREATMENT," "SEEPAGE COLLARS FOR EXPOSED PIPES," AND "PIPE ELBOW."

"SEEPAGE COLLARS FOR EXPOSED PIPES" AND "PIPE ELBOW" ARE FOR SPECIAL USE WHERE AESTHETICS ARE NOT A CONSIDERATION.

MODEL: SHT_PL4N
 FILE NAME: C:\Bentley\CONNEC\10110\organization\Chil\DOT_Standards\Call\DOT_Sheets.dwg

SLOPE DRAIN FOR EXPOSED PIPES



ANCHOR DETAILS

GENERAL NOTES

- The material for Pipe Drains shall be bituminous coated galvanized corrugated steel culvert pipe or bituminous coated corrugated aluminum alloy pipe in accordance with Article 601.02(b) or 601.02(e) or polyvinyl chloride(PVC) pipe in accordance with Article 601.02(s)
- An approved mastic material (Article 1055.01) shall be applied to the inside of the connecting bands.

All dimensions are in inches unless otherwise noted.

QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

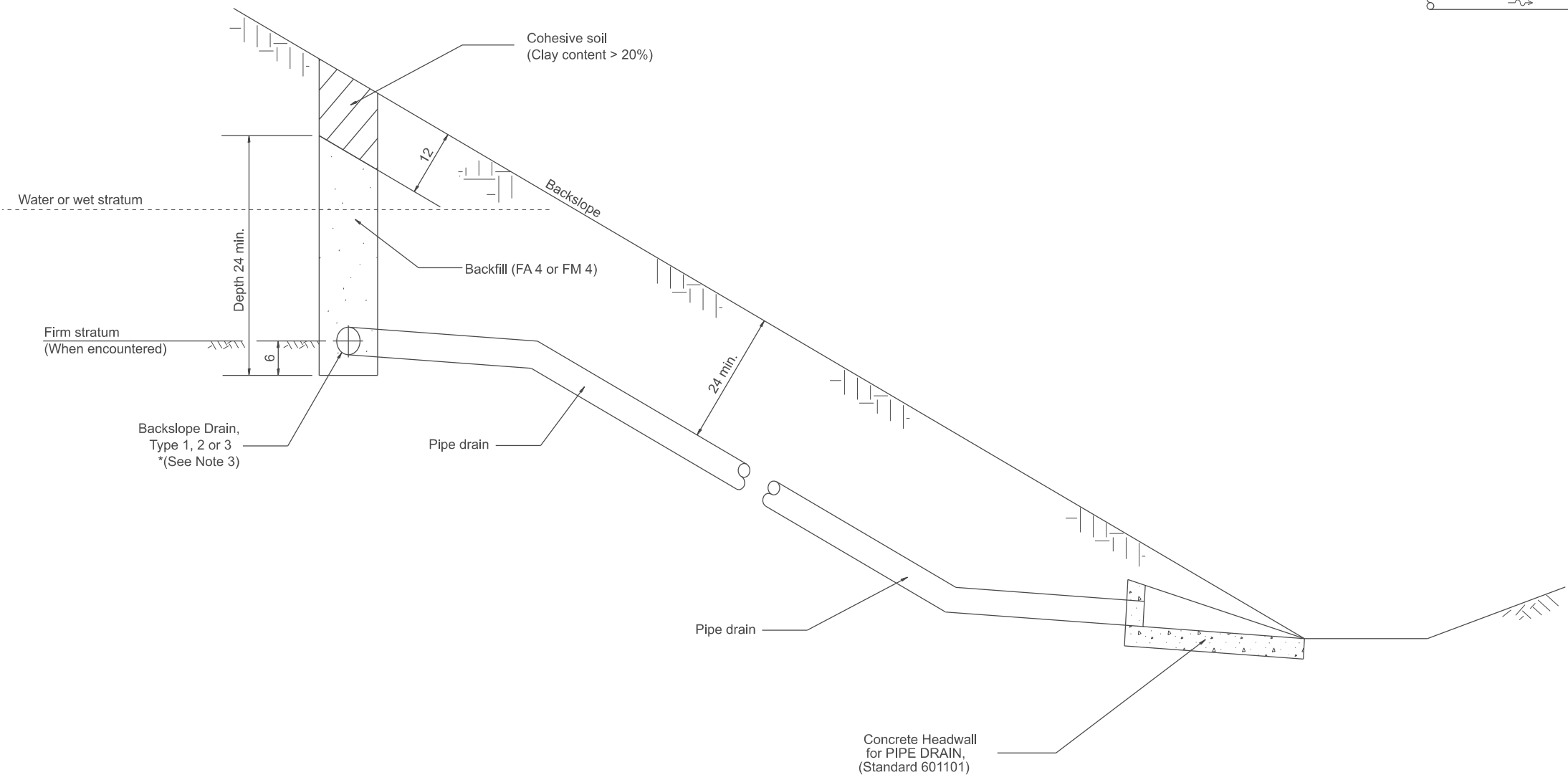
SLOPE DRAIN DETAILS FOR EXPOSED PIPES

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

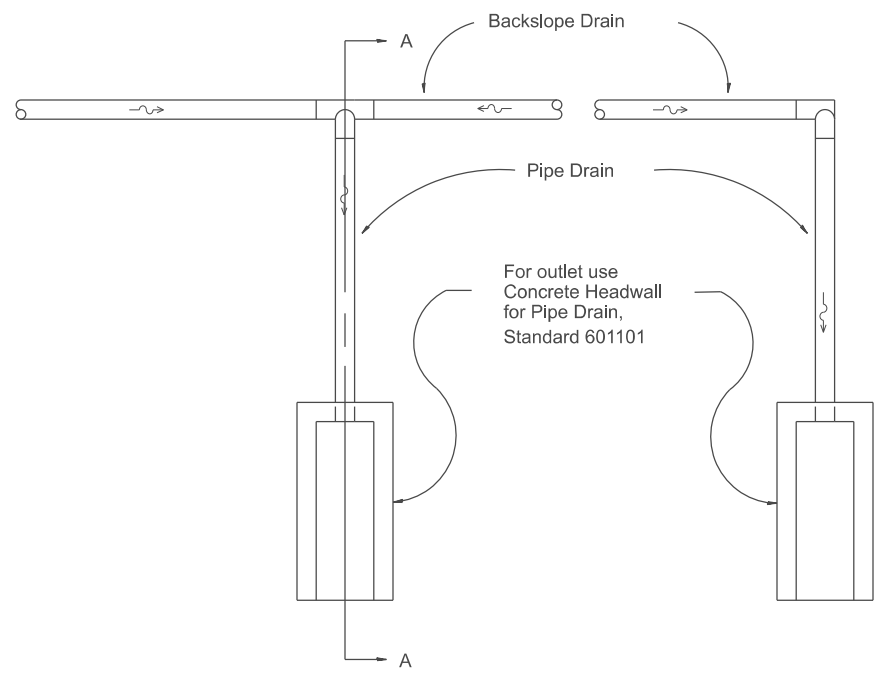
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601106		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. LOCATION AND SIZES OF BACKSLOPE DRAINS DEFINED IN GEOTECHNICAL REPORT OR BY THE GEOTECHNICAL ENGINEER
 2. GENERAL GUIDES FOR SIZES: OVER 500': USE 6. UNDER 500': USE 4.
 3. INCLUDE STANDARD 601101 FOR "CONCRETE HEADWALL FOR PIPE DRAIN".
 4. INCLUDE DISTRICT SPECIAL PROVISIONS.
 5. PVC OR POLYETHYLENE PIPE MATERIALS ARE PREFERRED DUE TO THE CORROSION OF METAL PIPES. CONSIDER
 REQUIRING THESE MATERIALS AS PART OF THE PLAN DETAILS OR SPECIAL PROVISIONS.
 6. DELETE DESIGNER NOTES WHEN INSERTING INTO PLAN FILES.

MODEL: SHT_PLAN.dwg
 FILE NAME: C:\Bentley\CONNECT\10110\organization\ChilIDOT_Standards\CallIDOT_Sheets.dwg



SECTION A-A



PLAN

GENERAL NOTES:

1. The District Geotechnical Engineer will determine the Backslope Drain design, after the backslope has been constructed.
2. This work shall be done in accordance with the applicable portion of Articles 601 and 207 of the Standard Specifications and the District Special Provision for "Pipe Underdrain".
3. * See plans for "Type".

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

BACKSLOPE DRAINS

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES: 1. Use with District CADD Standards: Slope Drains, Buried Pipe and/or Slope Drains, Exposed Pipe

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\organization\Chil\IDOT_Standards\Cadd\IDOT_Sheets.cad

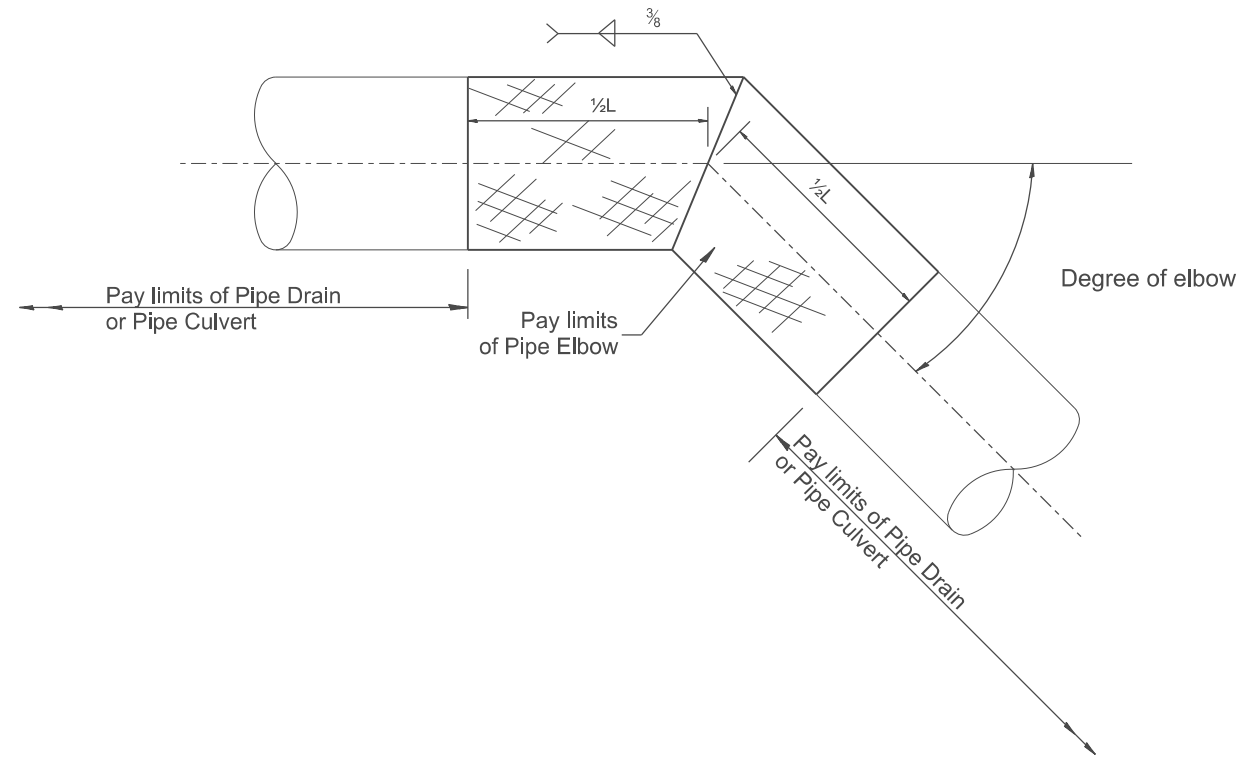
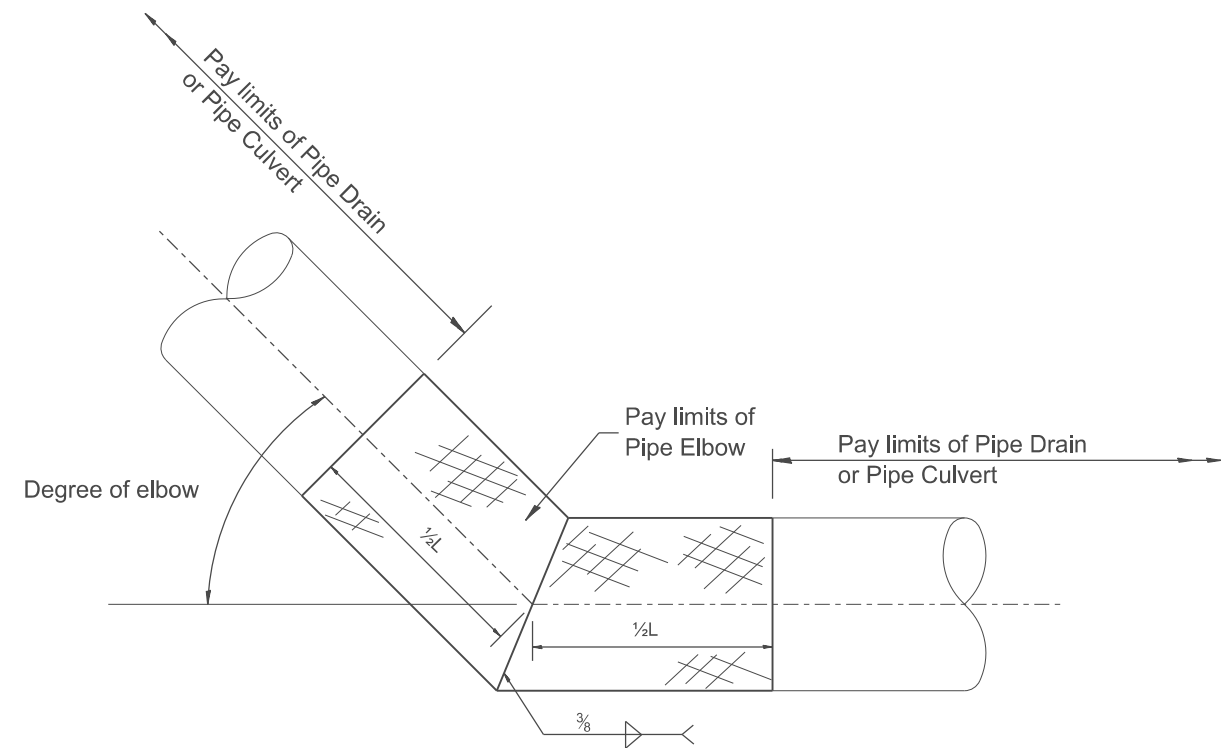


TABLE A		
ELBOW DESIGN CONTROLS		
PIPE DIAMETER	L = Pay limits of Pipe Elbow and minimum length of pipe required for fabrication	
	DEGREE OF ELBOW ≤ 45°	DEGREE OF ELBOW ≥ 46°
12	24	4'
15	24	4'
18	24	4'
21	24	4'
24	4'	4'
30	4'	6'
36	4'	6'

TABLE B	
ELBOW DESIGN CONTROLS	
EARTH SLOPE (V:H)	DEGREE OF ELBOW *
1:6	9°
1:4	14°
1:3	18°
1:2	26°
1:1	33°

* Approximate - based upon 0.5% inlet and outlet flowlines.



All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

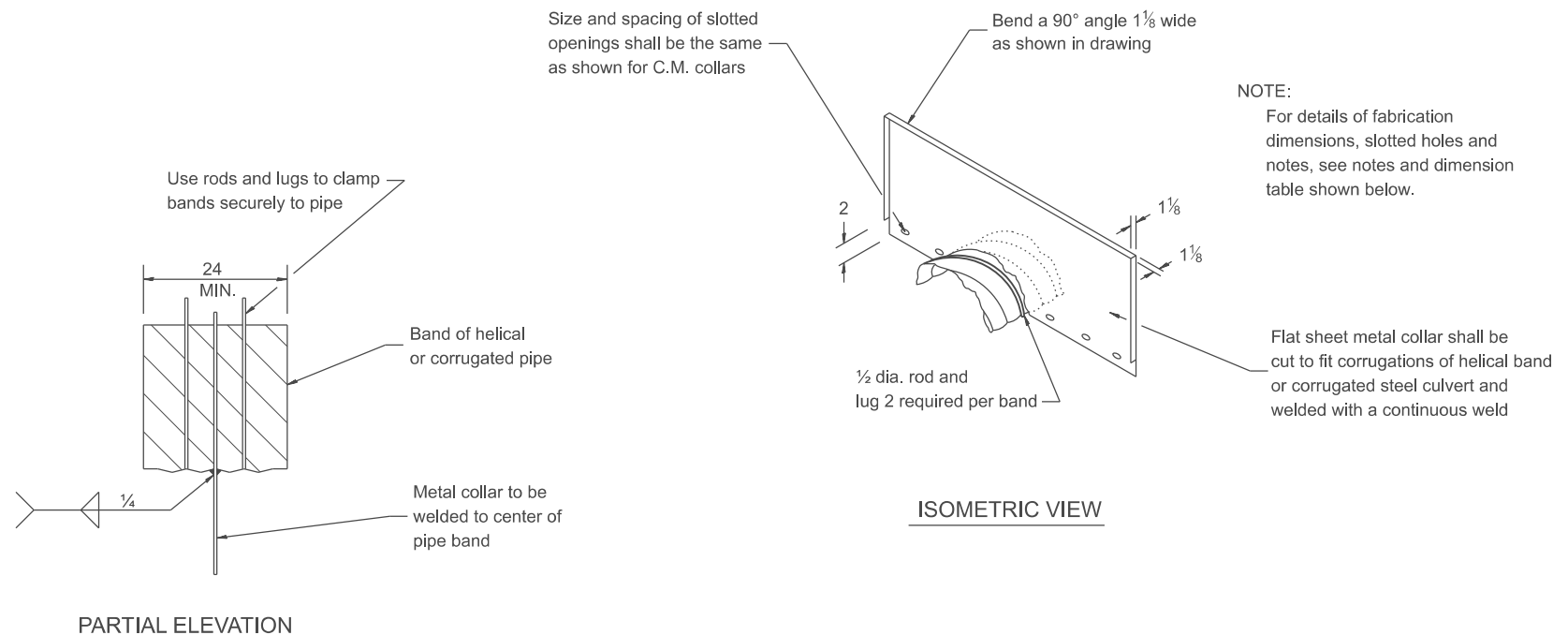
PIPE ELBOW

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

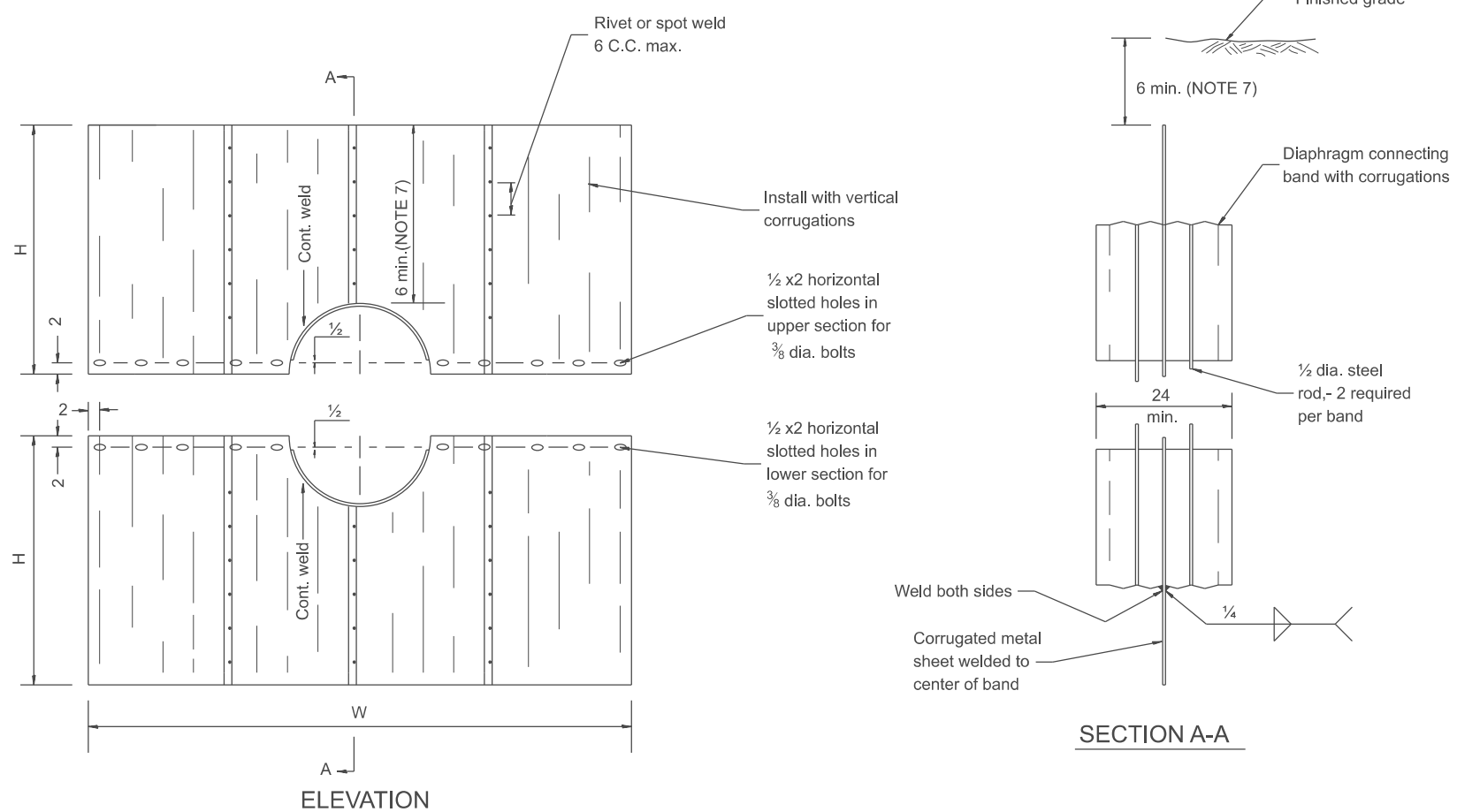
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601301		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:
 1. USE WITH DISTRICT CADD STANDARD: "SLOPE DRAIN FOR BURIED PIPES"
 1. ADD DISTRICT SPECIAL PROVISION

MODEL: SHT_PLAN.dwg
 FILE NAME: C:\Benitez\CONTRACTS\12071014\12071014.dwg
 C:\Benitez\CONTRACTS\12071014\12071014.dwg



DETAILS OF CORRUGATED PIPE COLLAR



DETAILS OF SEEPAGE COLLAR

NOTES FOR COLLARS:

- Materials and coatings for all collars shall be the same as that specified for the pipe, except that bituminous coated steel or aluminum collars may be used with PVC pipe.
- Collars shall be shop fabricated, assembled and marked by painting to identify matching half sections of each collar.
- The laps between the half sections and between the pipe and connecting bands shall be caulked with fiberized asphalt mastic at the time of installation.
- All tank lugs, rods, and nuts shall be galvanized steel. Where aluminum collars are used, The rods and lugs shall be separated from the aluminum bands. By at least two (2) layers of 2 wide plastic tape with a total thickness of 2 1/4 mils or more.
- The collars shall be welded to the connecting bands as shown on the drawings, all welds shall be treated as specified for class I, II, and III welds, miscellaneous. (Refer to AWS Standard Specifications)
- Bands shall be fabricated from material having the same class of corrugations as the pipe to which it is to be attached.
- Upper half of sheet may be cut shorter to provide 6 min. earth cover.

SEEPAGE COLLAR DIMENSION TABLE

PIPE DIAMETER	NOMINAL COLLAR SIZE	FABRICATIONS DIMENSIONS	
		W(WIDTH)	H(HEIGHT)
12 15, 18 21, 24	8'x6'	8'-0"	38
27 30	8'x7'	8'-0"	3'-8"
36, 42 48	10'x7'	10'-0"	3'-8"

Collar dimensions shown may be increased to allow fabrication from standard size sheets.

SEEPAGE COLLAR SPACING
Less than 24 pipe: 100' spacing or midpoint
Equal to or greater than 24 pipe: 80' spacing or midpoint

All dimensions are in inches unless otherwise noted.

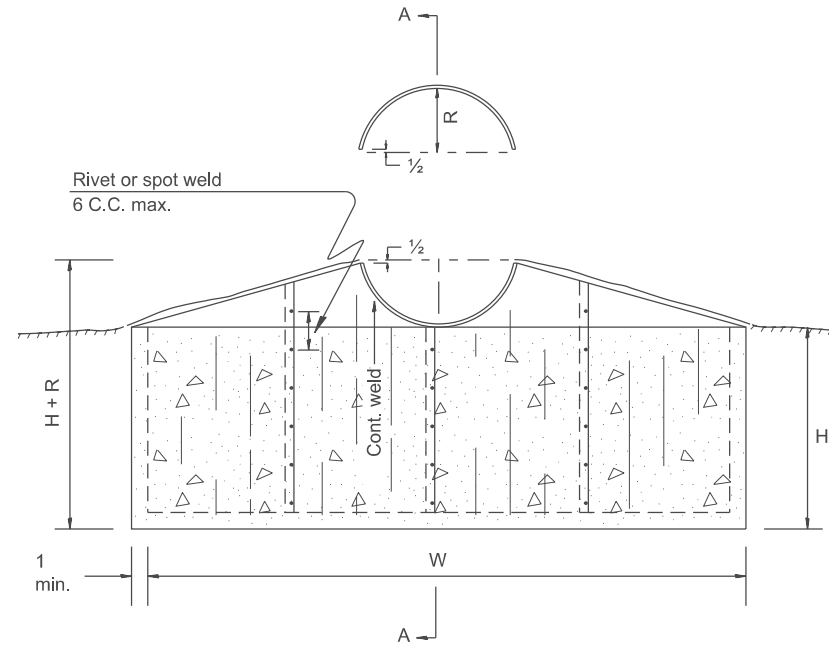
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS OF SEEPAGE COLLARS FOR BURIED PIPES

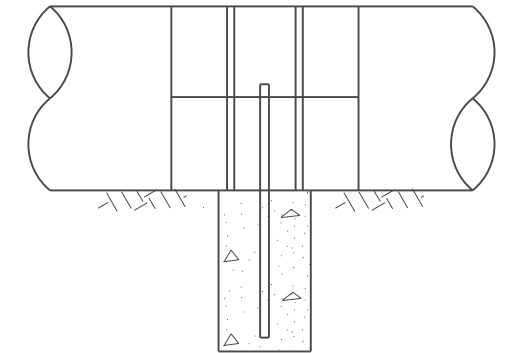
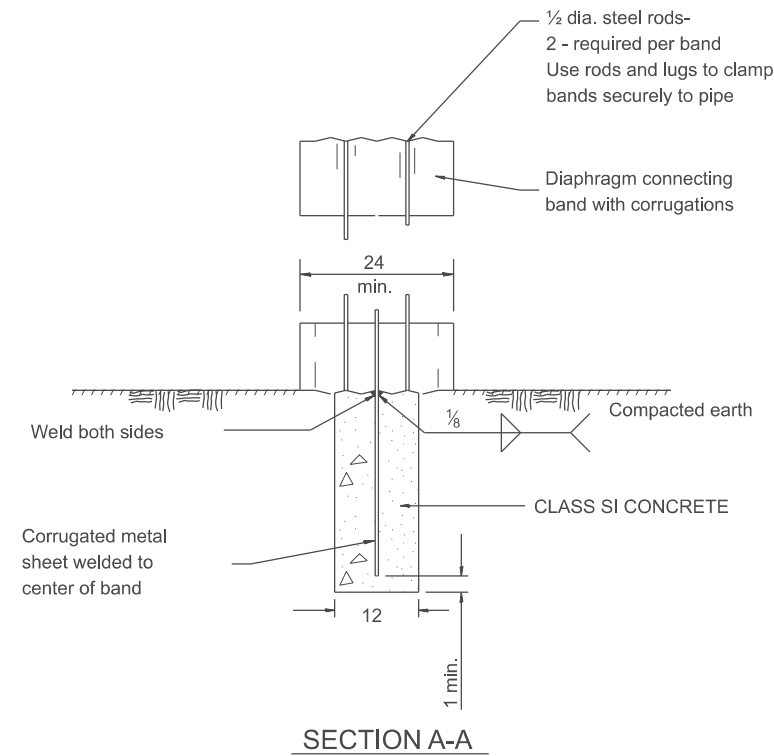
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601401		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



NOTES FOR COLLARS:

1. Materials and coatings for all collars shall be the same as that specified for the pipe, except that bituminous coated steel or aluminum collars may be used with PVC pipe.
2. Collars shall be shop fabricated, assembled and marked by painting to identify matching half sections of each collar.
3. The laps between the half sections and between the pipe and connecting bands shall be caulked with fiberized asphalt mastic at the time of installation.
4. All tank lugs, rods, and nuts shall be galvanized steel. Where aluminum collars are used, the rods and lugs shall be separated from the aluminum bands by at least two (2) layers of 2 wide plastic tape with a total thickness of 2 1/4 mils or more.
5. The collars shall be welded to the connecting bands as shown on the drawings. All welds shall be treated as specified for Class I, II, and III welds, miscellaneous. (Refer to AWS Standard Specifications)
6. Bands shall be fabricated from material having the same class of corrugations as the pipe to which it is to be attached.
7. Trench for CLASS SI CONCRETE to be excavated after the base of the pipe has been compacted.
8. Collar shall be installed at mid-height of slope or 25' maximum spacing.
9. Collar shall be installed 5' ± from pipe section joint or connecting band.



SECTION A-A
(SHOWING PIPE)

SEEPAGE COLLAR DIMENSION TABLE

PIPE DIAMETER	FABRICATIONS DIMENSIONS	
	W(WIDTH)	H(HEIGHT)
12 15, 18 21, 24	8'-0"	36
27 30	8'-0"	3'-6"
36, 42 48	10'-0"	3'-6"

COLLAR DIMENSIONS SHOWN MAY BE INCREASED TO ALLOW FABRICATION FROM STANDARD SIZE SHEETS.

SEEPAGE COLLAR SPACING

- Less than 24 pipe: 100' spacing or midpoint
- Equal to or greater than 24 pipe: 80' spacing or midpoint

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

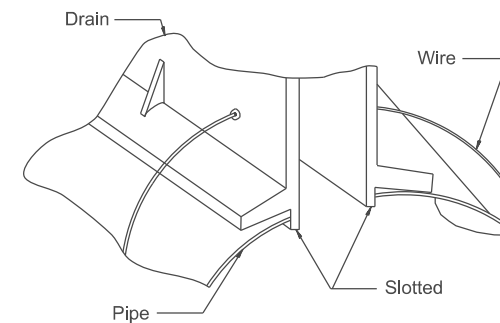
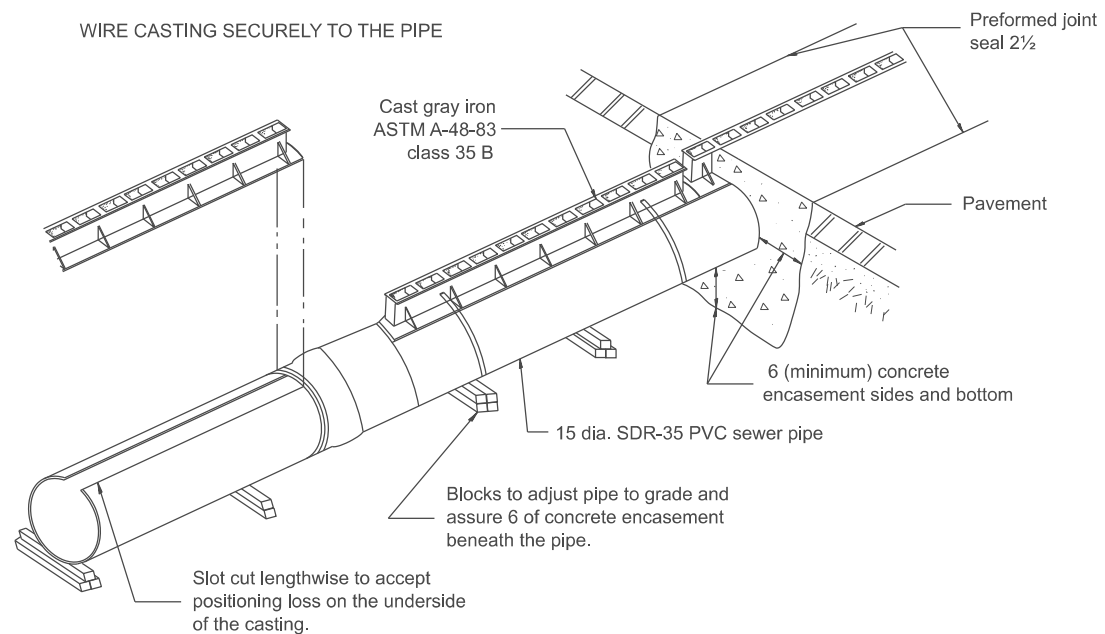
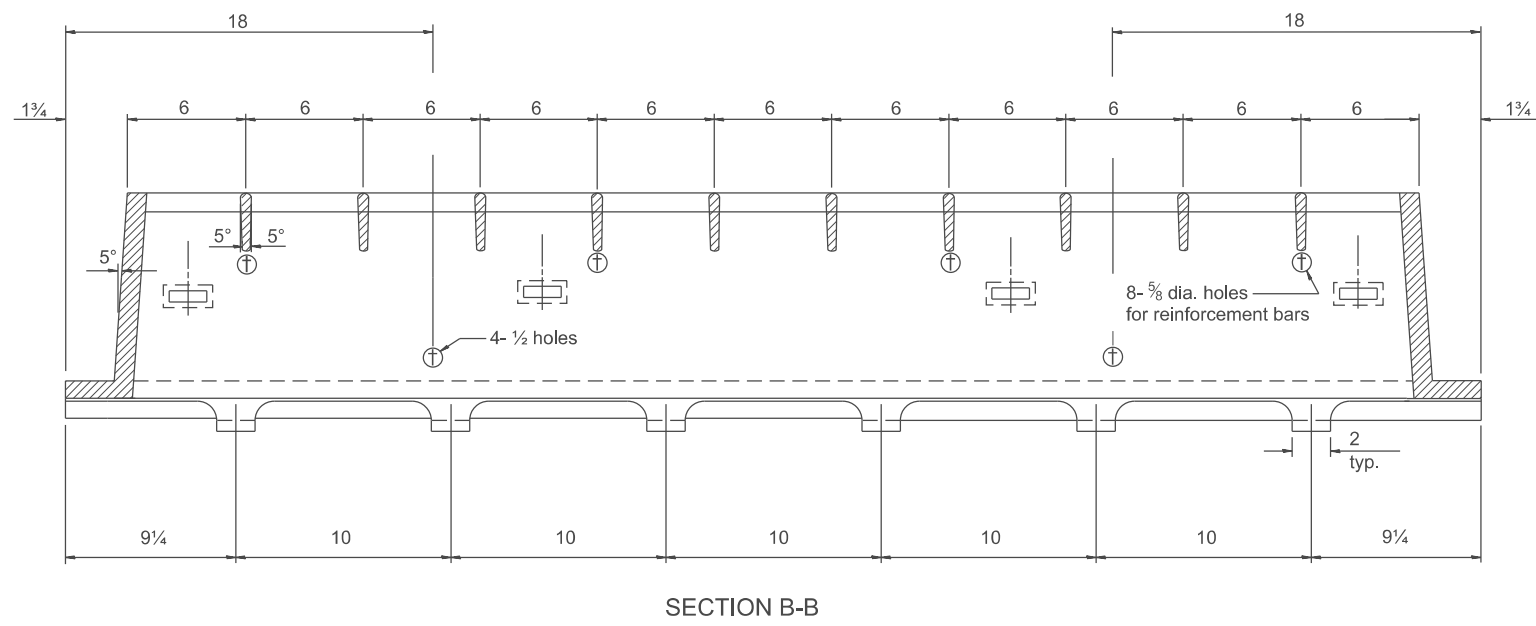
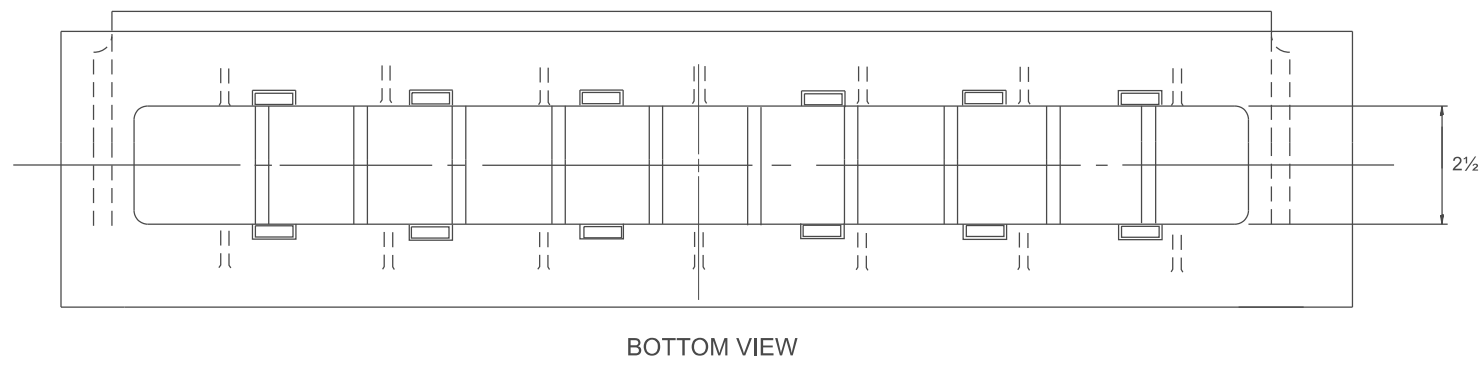
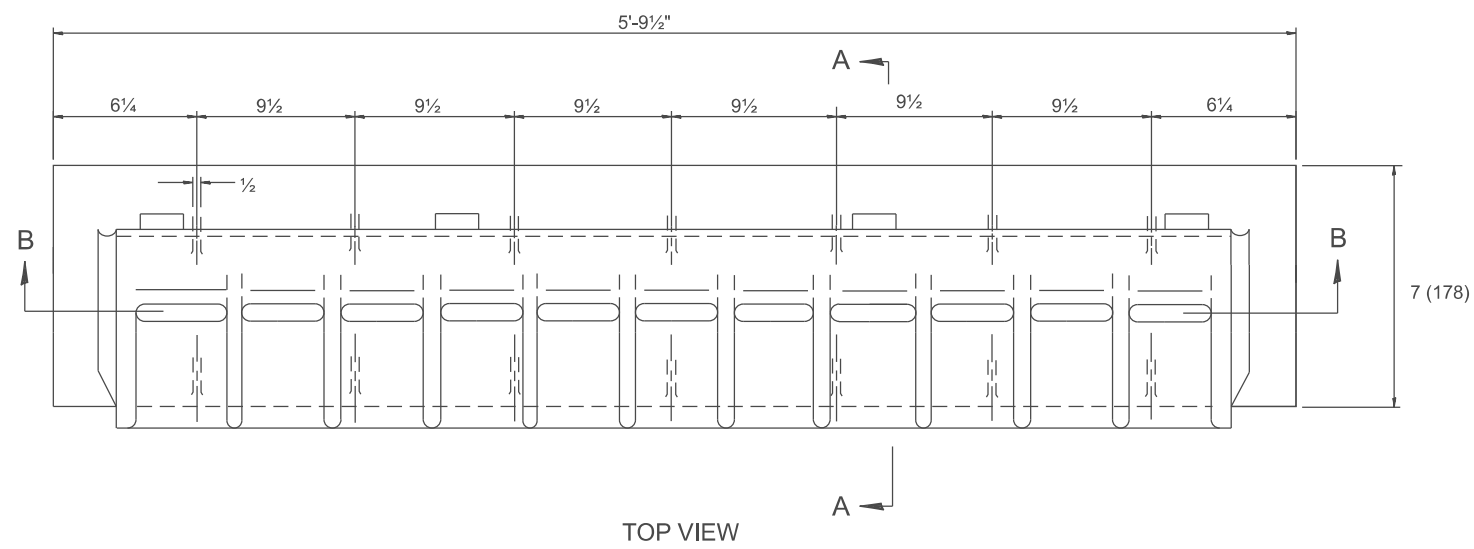
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS OF SEEPAGE COLLARS FOR EXPOSED PIPES

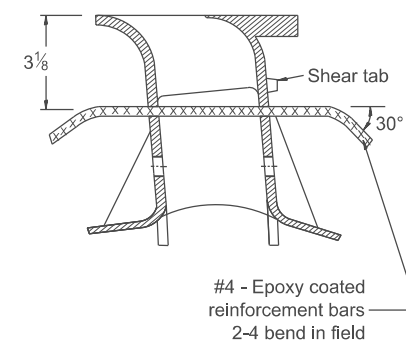
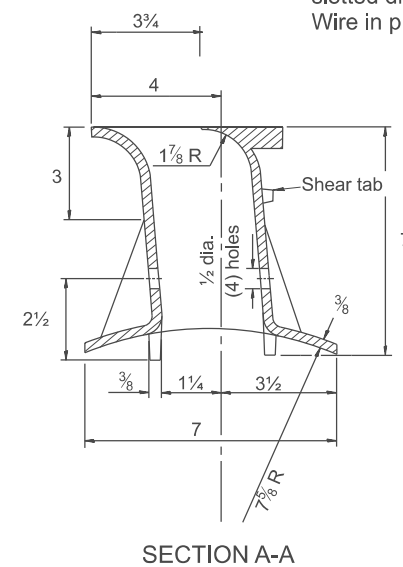
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601501		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

Designer Notes:
 MODEL: SH_T_111111 This drawing is based upon a 1985 Neenah drawing (New Products D -0002). Contact Neenah for new shop drawing prior to inclusion in plans.
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\ChillIDOT_Standards\CatIDOT_Sheets.cat



NOTE:
 Saw slot in pipe. Insert slotted drain in pipe. Wire in place.



All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SLOTTED VANE DRAIN

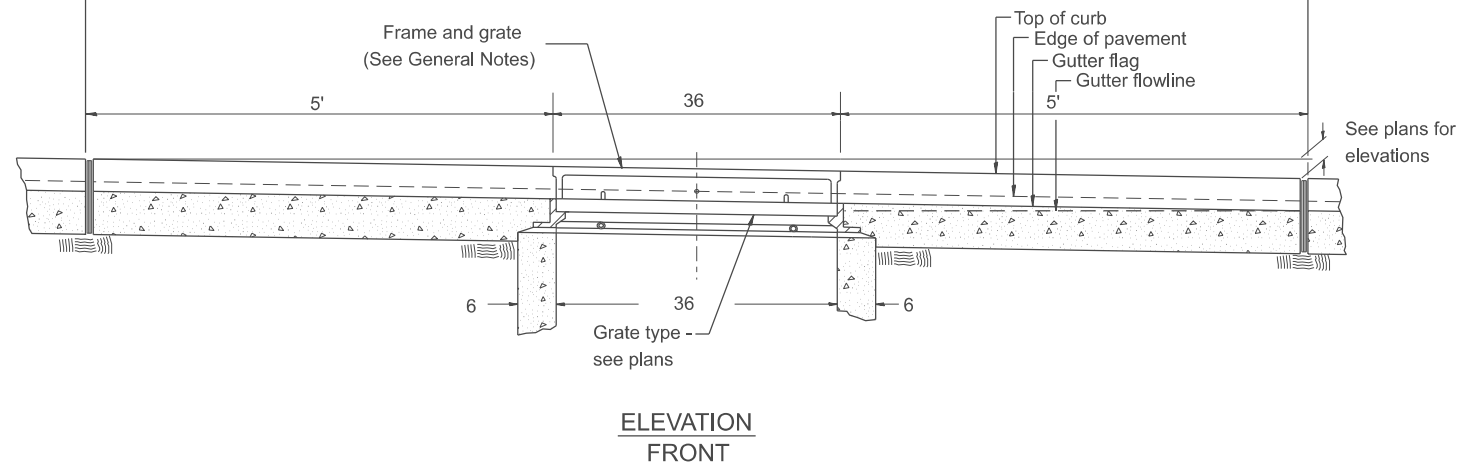
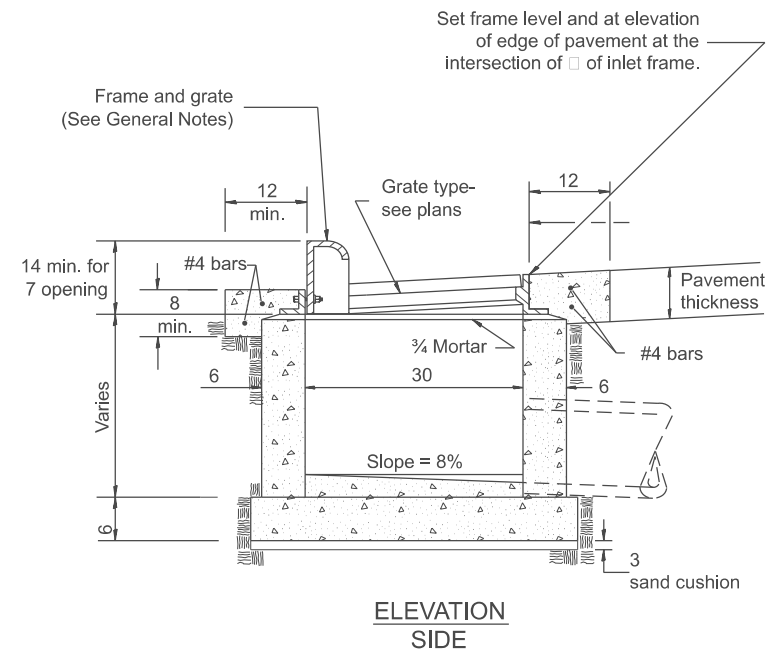
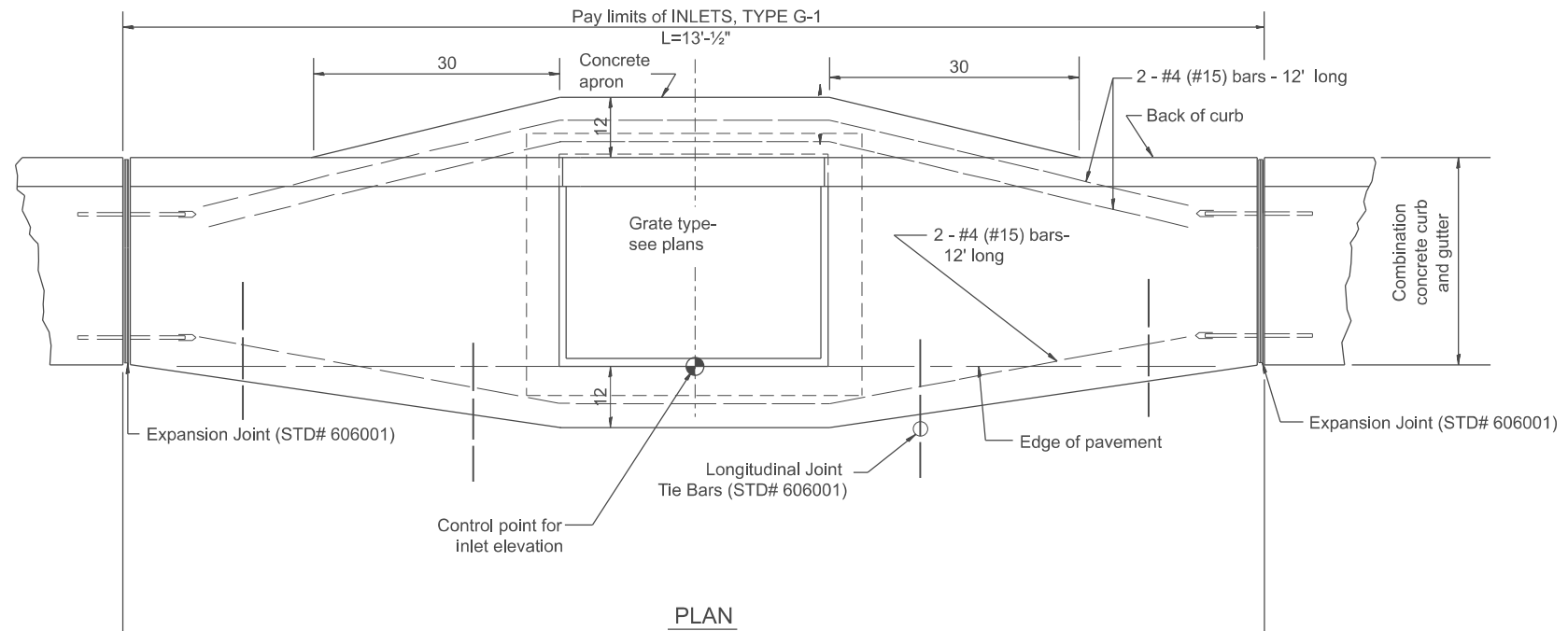
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 601701		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:

1. Include State Standard 606001 for combination concrete curb and gutter details.
2. Include State Standard 420001 for pavement joints.
3. Include District CADD Standard for frame and grates and specify grate type in plans.
4. Include District Special Provision - Pay item includes transitional c.c.&g., inlet and frame and grate. All work within pay limits.

MODEL: SHT_606001.dwg
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chil\IDOT_Standards\Call\IDOT_Sheets.ctb



GENERAL NOTES

1. Inlet construction shall be in accordance with Section 602 of the Standard Specifications.
2. Combination Concrete Curb & Gutter shall be constructed in accordance with Section 606 of the Standard Specifications.
3. See District CADD Standard 604001-D4 for frame and grates.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INLETS, TYPE G-1

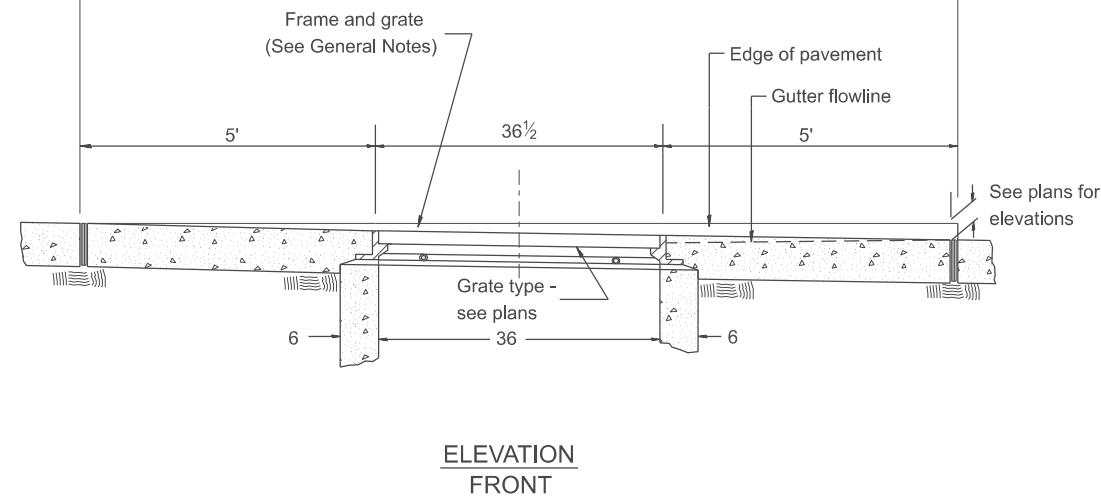
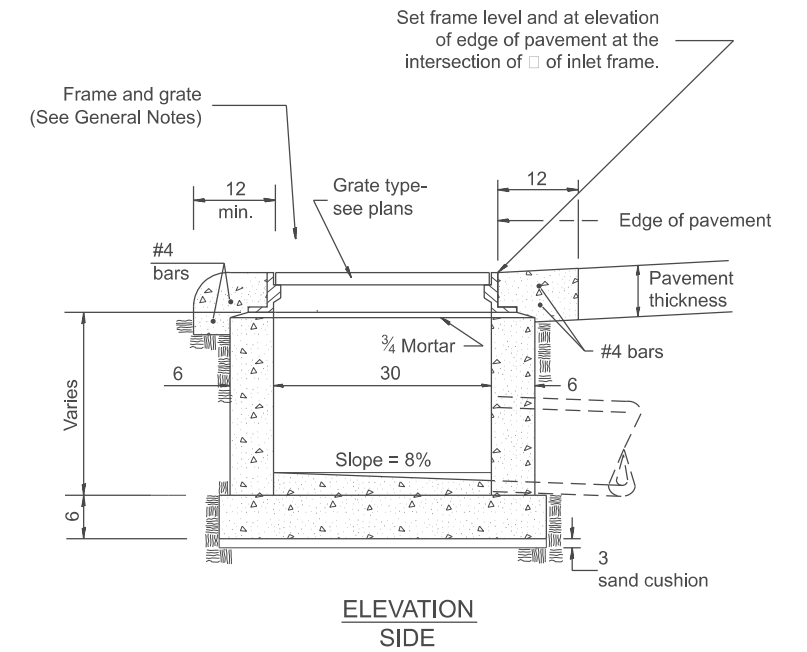
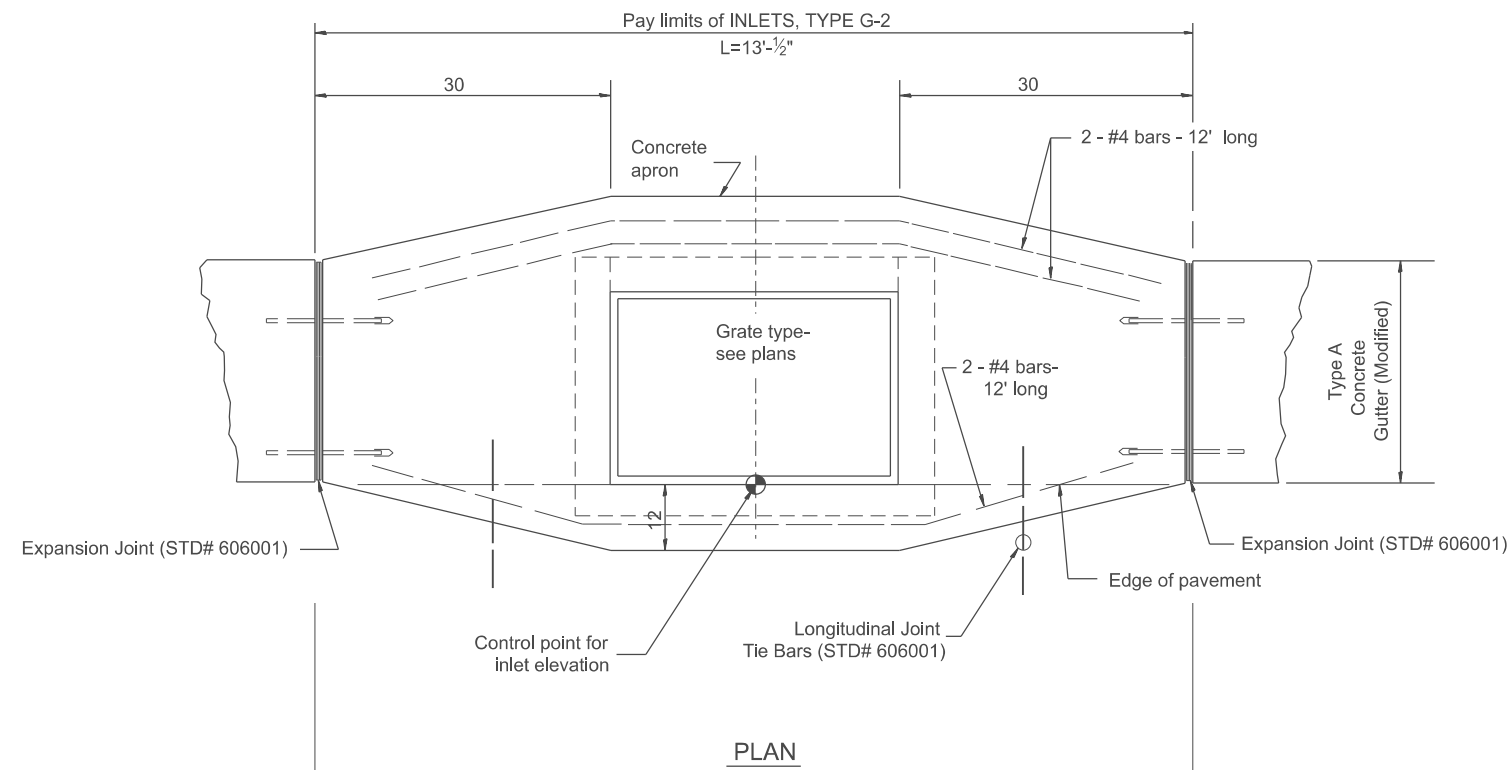
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 602001			
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:

1. Include District CADD Standard 606101 for Type A Gutter (Modified) details.
2. Include State Standard 420001 for pavement joints.
3. Include District CADD Standard for frame and grates and specify grate type in plans.
4. Include District Special Provision. Pay item includes transitional gutter, inlet and frame and grate. All work within pay limits.
5. The designer should include pavement removal quantities when the apron requires pavement removal.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization-Chil\IDOT_Standards\Call\IDOT_Sheets.cad



GENERAL NOTES

1. Inlet construction shall be in accordance with Section 602 of the Standard Specifications.
2. Type A Concrete Gutter (Modified) shall be constructed in accordance with Section 606 of the Standard Specifications.
3. See District CADD Standard 604002-D4 for frame and grate.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

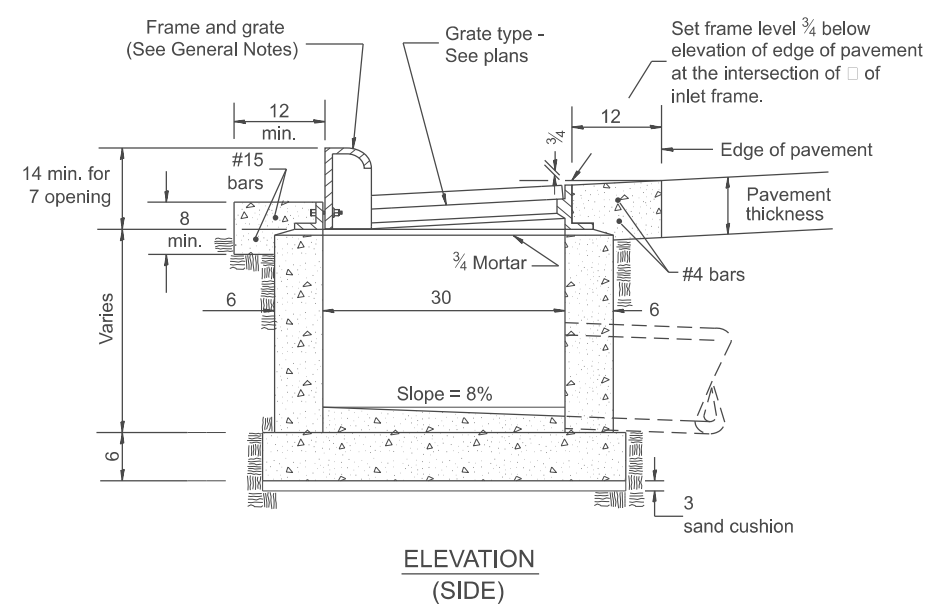
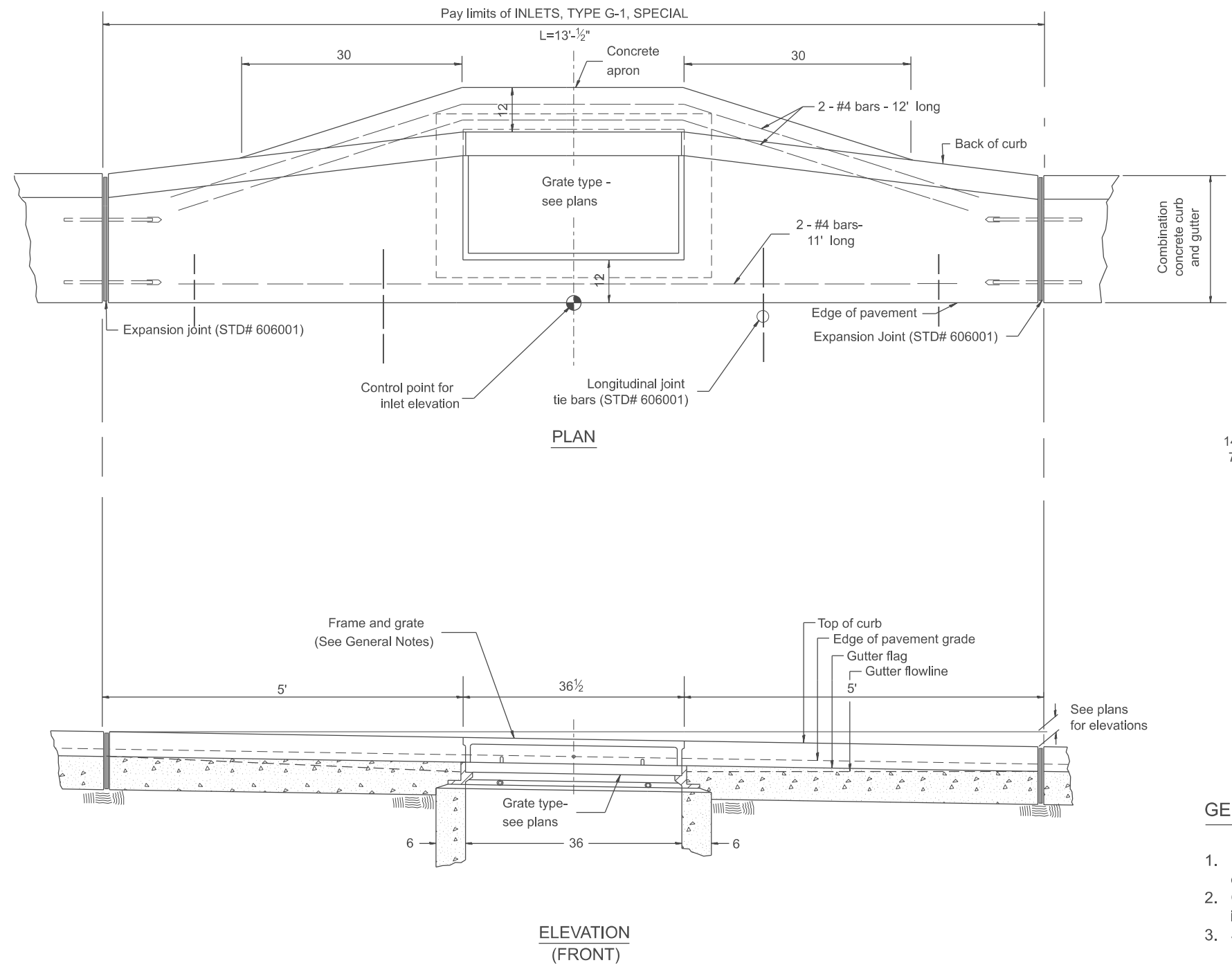
INLETS, TYPE G-2

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602002		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES: 1. Include State Standard 606001 for combination concrete curb and gutter details.
 2. Include State Standard 420001 for pavement joints.
 3. Include District CADD Standard for frame and grates.
 4. Include District Special Provision. Pay item includes transitional c.c.&g., inlet and frame and grate. All work within pay limits.
 5. Specify grate type in plans

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chil\IDOT_Standards\Call\IDOT_Sheets.cad



GENERAL NOTES

1. Inlet construction shall be in accordance with Section 602 of the Standard Specifications.
2. Combination Concrete Curb and Gutter shall be constructed in accordance with Section 606 of the Standard Specifications.
3. See District CADD Standard 604001-D4 for frame and grates.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

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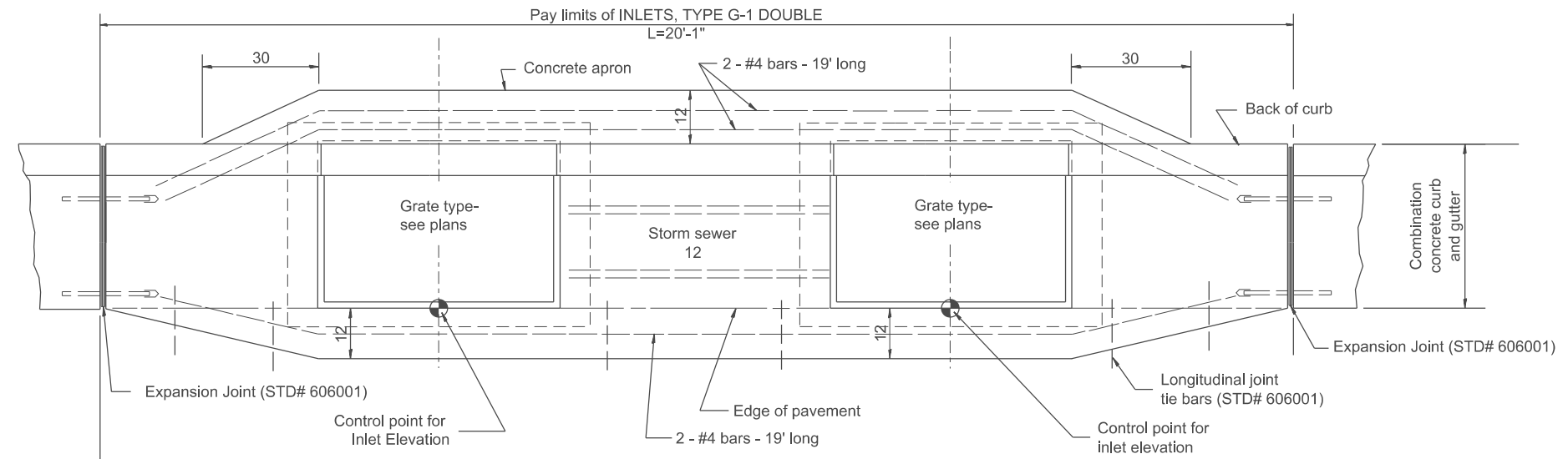
INLETS, TYPE G-1, SPECIAL

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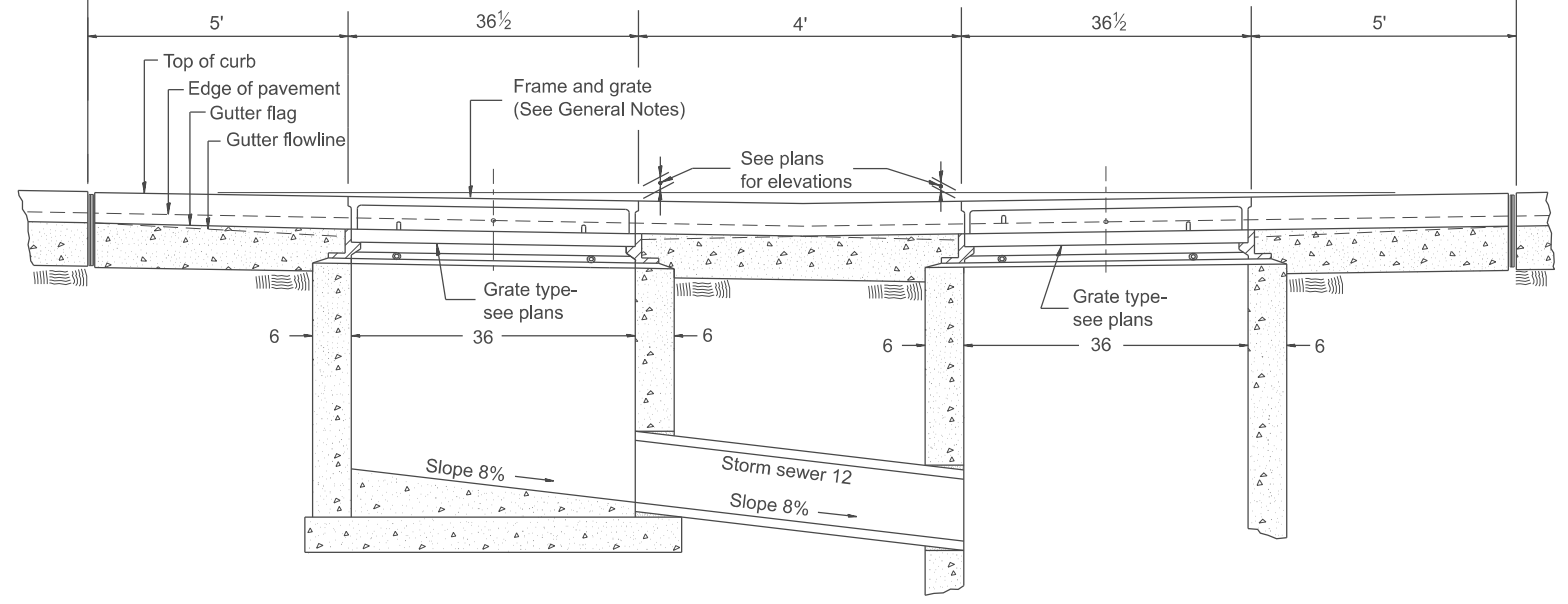
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602006			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. Include State Standard 606001 for combination concrete curb and gutter details.
 2. Include State Standard 420001 for pavement joints.
 3. Include District CADD Standard for frame and grates and specify grate type in plans.
 4. Include District Special Provision. Pay item includes transitional c.c. & g., inlet and frame and grate. All work within pay limits.
 5. The designer should include pavement removal quantities when the apron requires pavement removal.

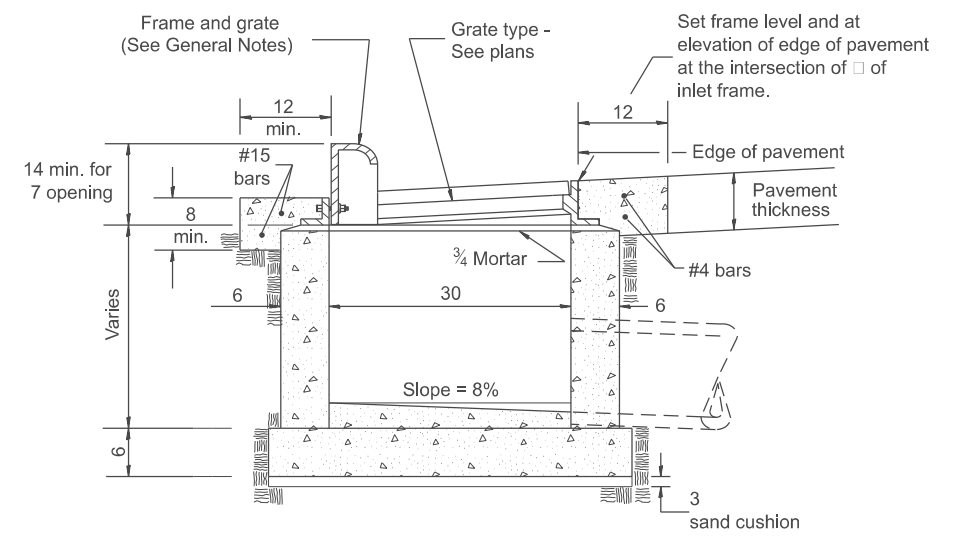
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PLAN



FRONT ELEVATION



ELEVATION (SIDE)

GENERAL NOTES

1. Inlet construction shall be in accordance with Section 602 of the Standard Specifications.
2. Combination Concrete Curb & Gutter shall be constructed in accordance with Section 606 of the Standard Specifications.
3. See District CADD Standard 604001-D4 for frame and grates.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

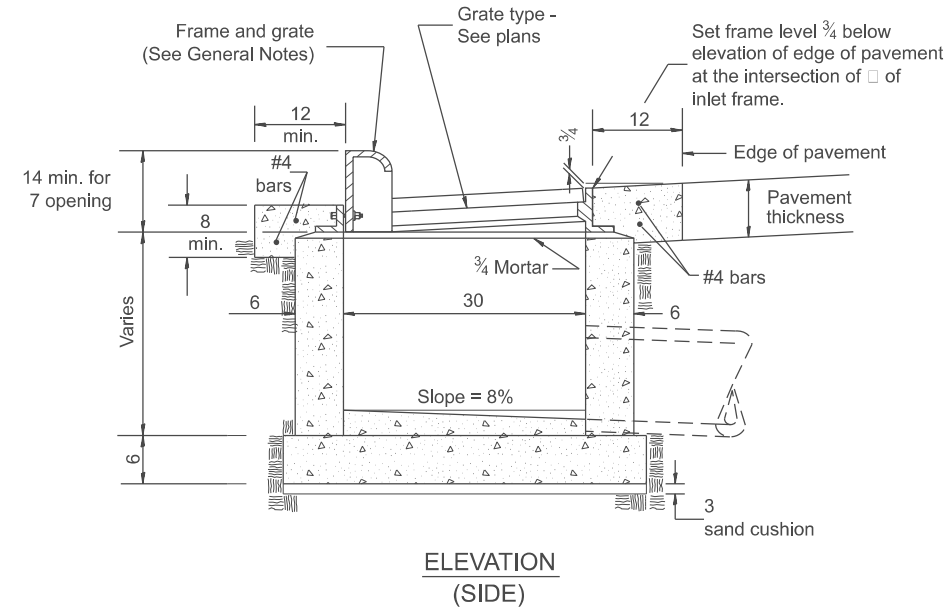
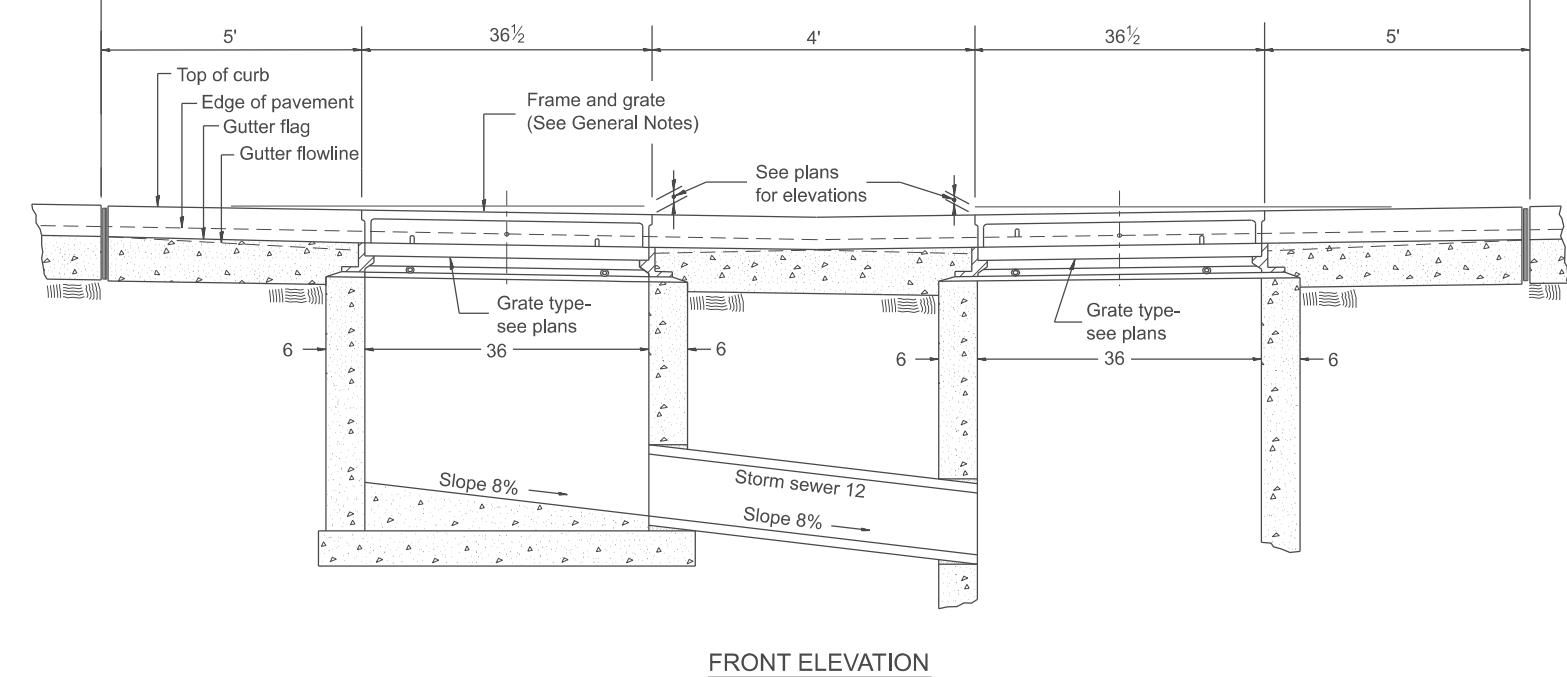
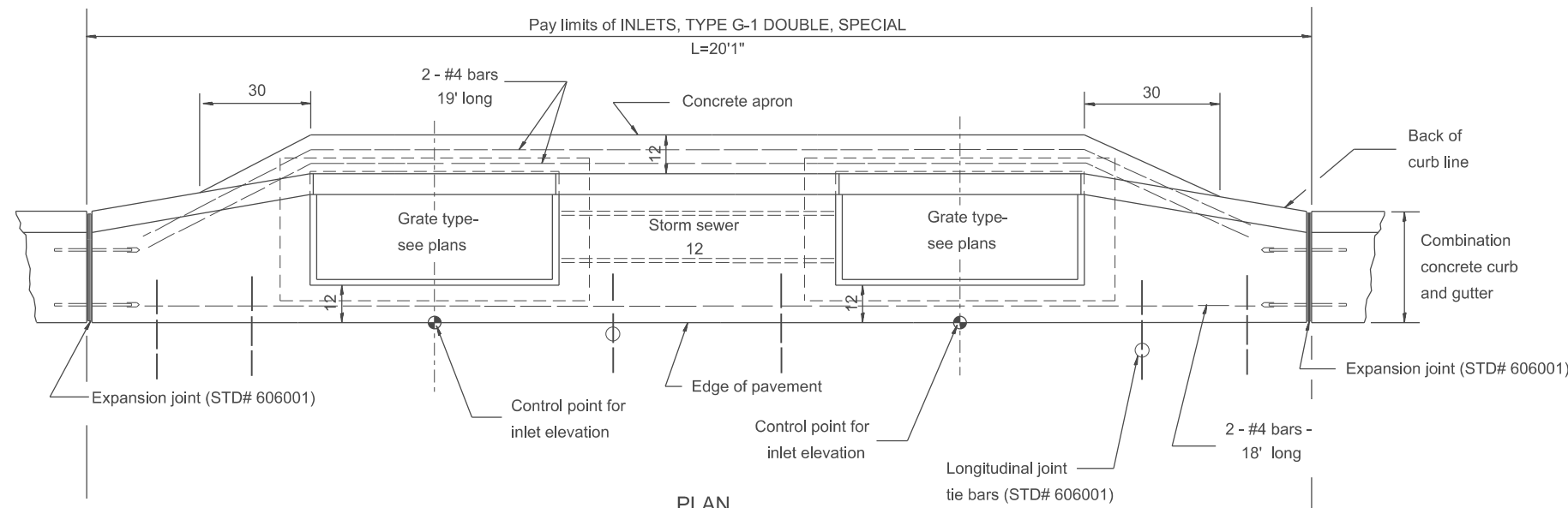
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INLETS, TYPE G-1 DOUBLE

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602011			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. Include State Standard 606001 for combination concrete curb and gutter details.
 2. Include State Standard 420001 for pavement joints.
 3. Include District CADD Standard for frame and grates.
 4. Include District Special Provision. Pay item includes transitional c.c.c & g., inlet and frame and grate. All work within pay limits.
 5. Specify grate type in plans.
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization-Chil\IDOT_Standards\Call\IDOT_Sheets.ctb



GENERAL NOTES

1. Inlet construction shall be in accordance with Section 602 of the Standard Specifications.
2. Combination Concrete Curb & Gutter shall be constructed in accordance with Section 606 of the Standard Specifications.
3. See District CADD Standard 604001-D4 for frame and grates.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

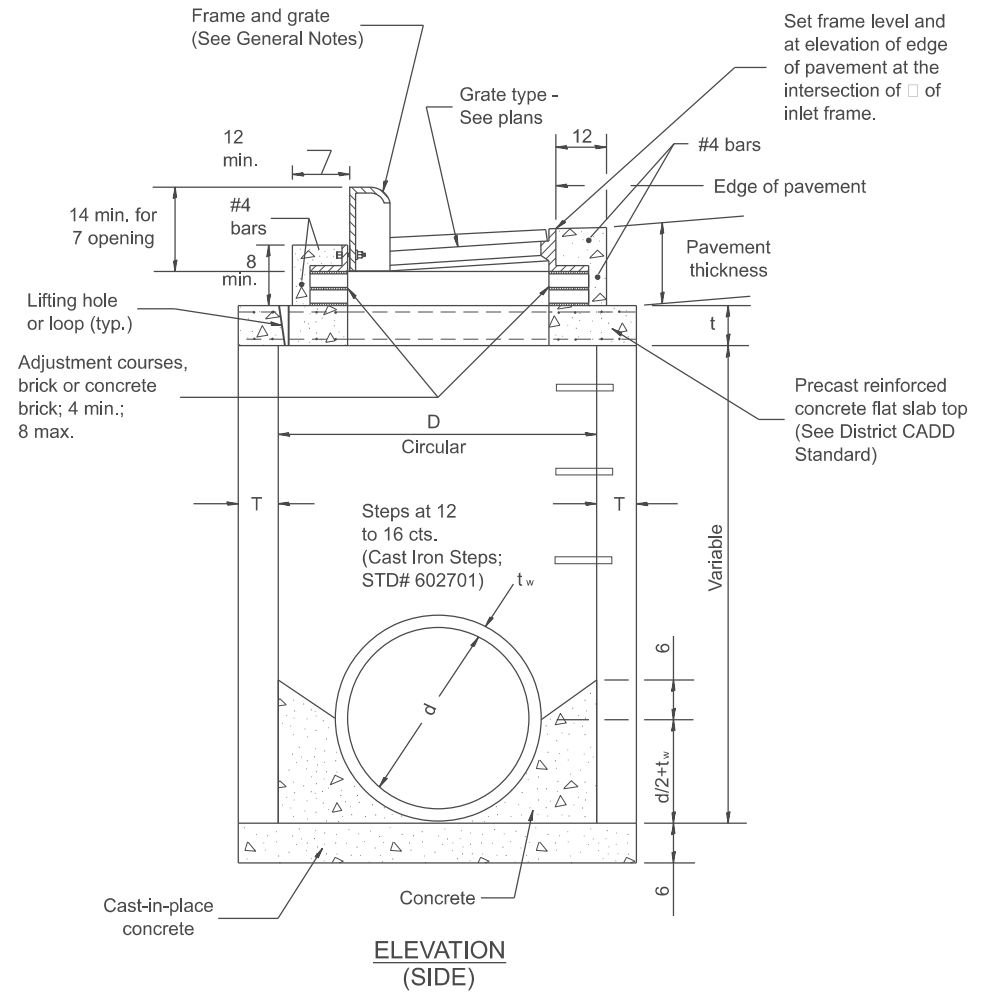
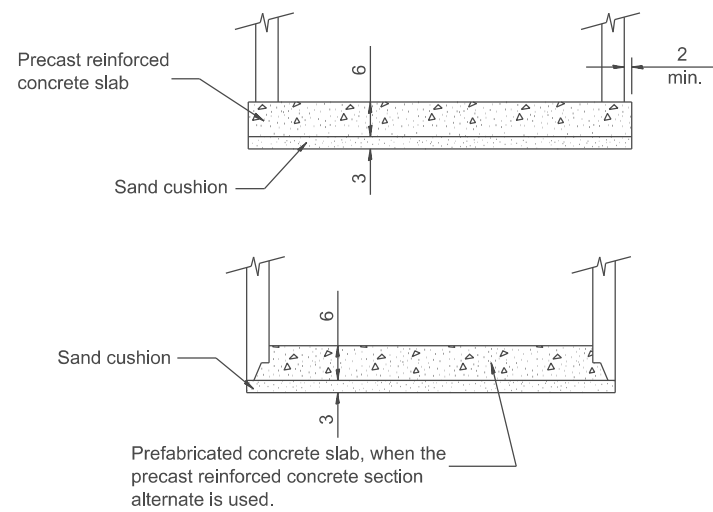
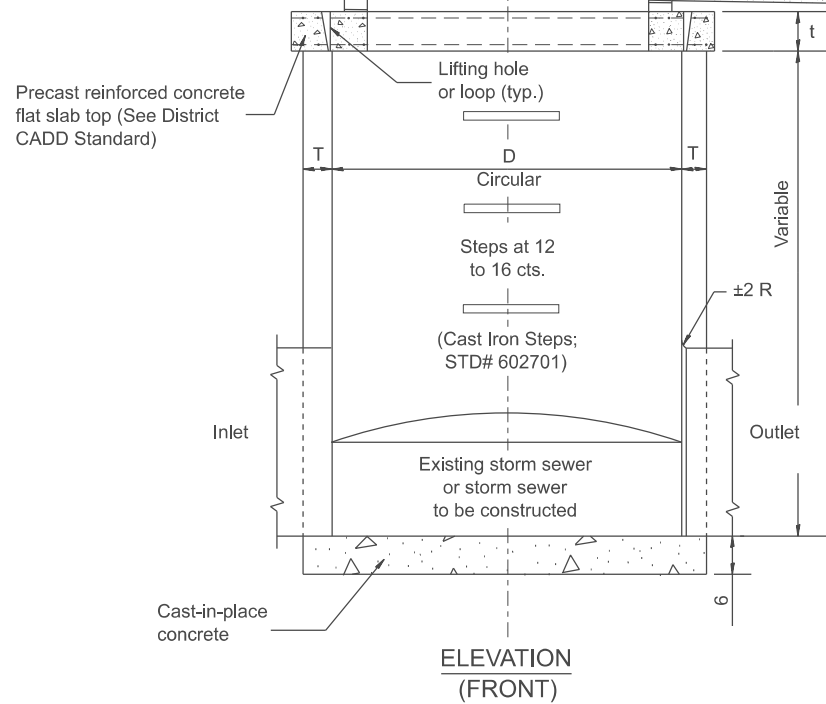
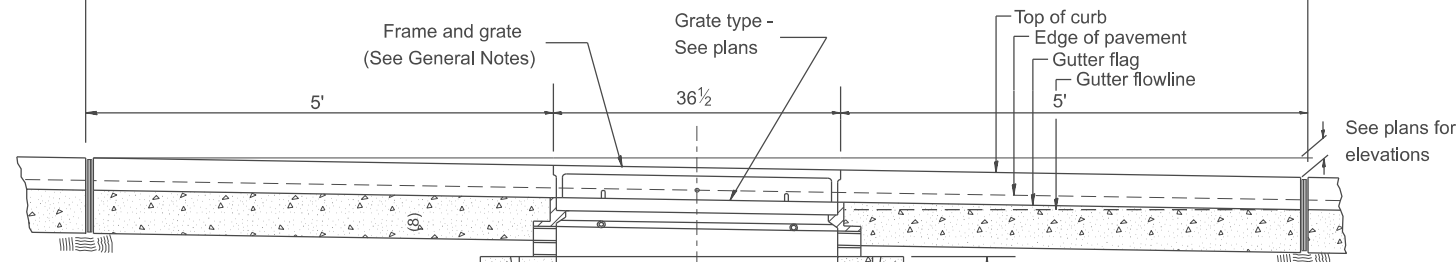
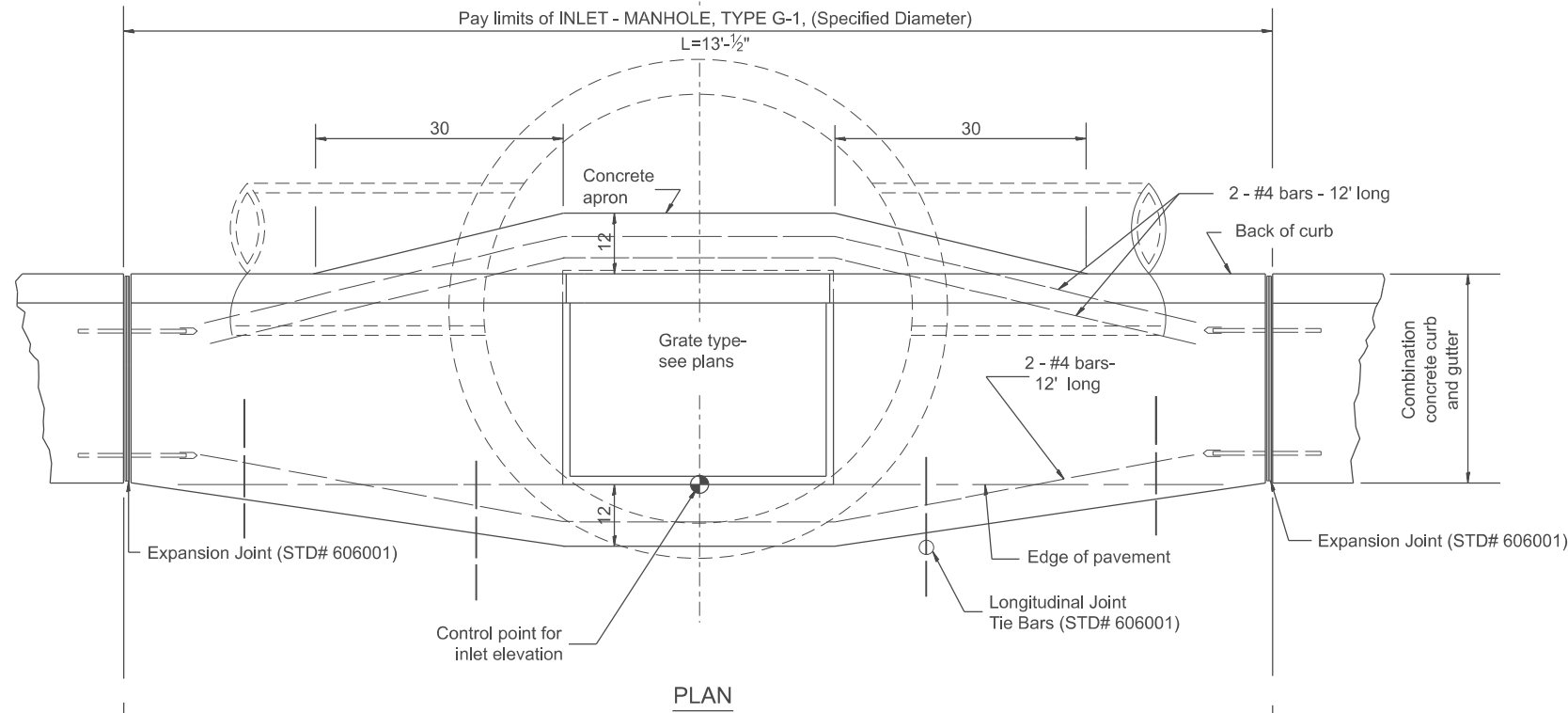
INLETS, TYPE G-1 DOUBLE, SPECIAL

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602016		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. Include State STD# 606001 for combination concrete curb and gutter details.
 2. Include State STD# 420001 for pavement joints.
 3. Include State STD# 602701 for cast iron steps.
 4. Include District CADD Standard for frame and grates and specify grate type in plans.
 5. Include District CADD Standard for precast reinforced concrete flat slab top.
 6. Include District Special Provision. Pay item includes inlet - manhole, flat slab top, transitional c.c.&g. and frame and grate. All work within pay limits.
 7. Specify diameter of inlet - manhole in plans.
 8. The designer should include pavement removal quantities when the apron requires pavement removal.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT10\10\Organization\Chilidiot_Sheetis.ctb



TABLE

D	T	t
4'	5	6
5'	6	8
6'	7¾	8
8'	9	10

GENERAL NOTES

- Inlet-manhole construction shall be in accordance with Section 602 of the Standard Specifications.
- Combination concrete curb and gutter shall be constructed in accordance with Section 606 of the Standard Specifications.
- See District CADD Standard 604001-D4 for frame and grates.
- See District CADD Standard for precast reinforced concrete flat slab top.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INLET-MANHOLE, TYPE G-1

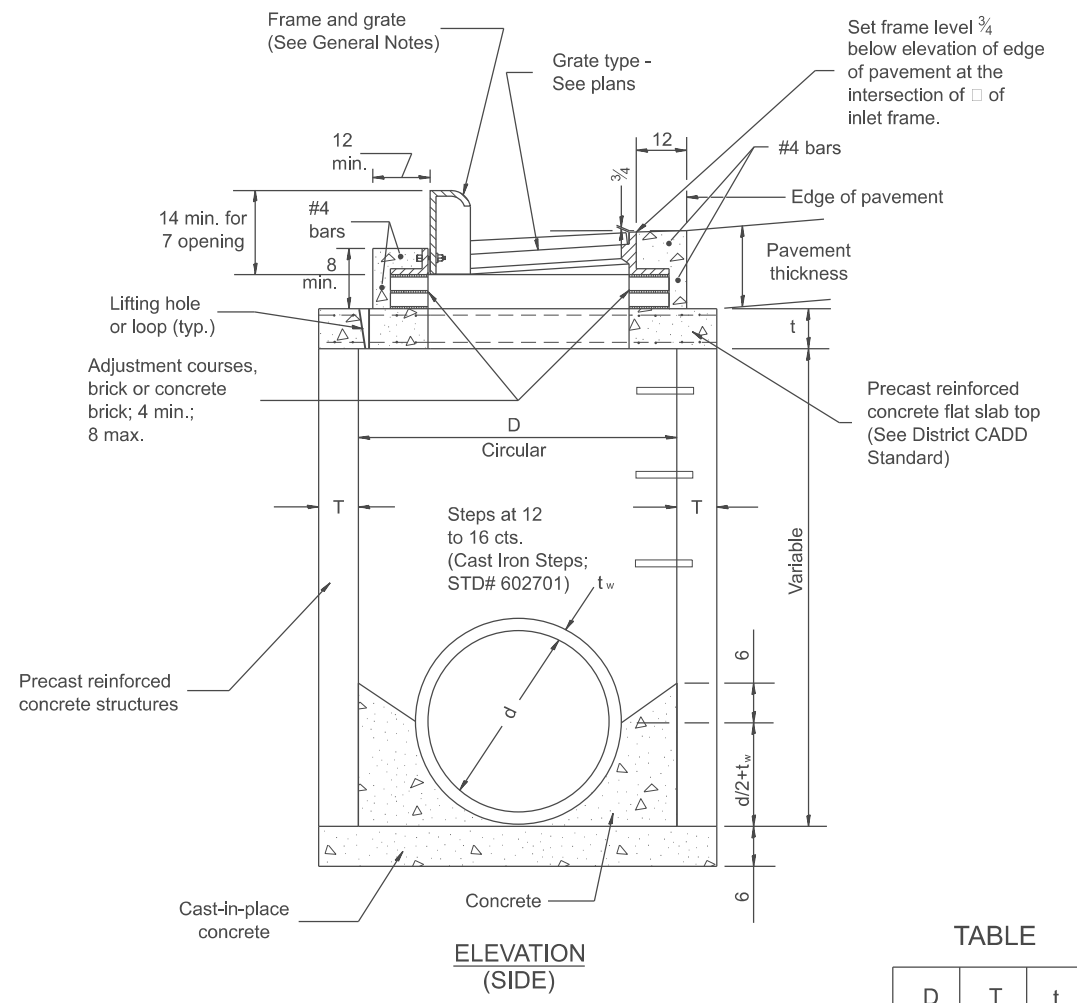
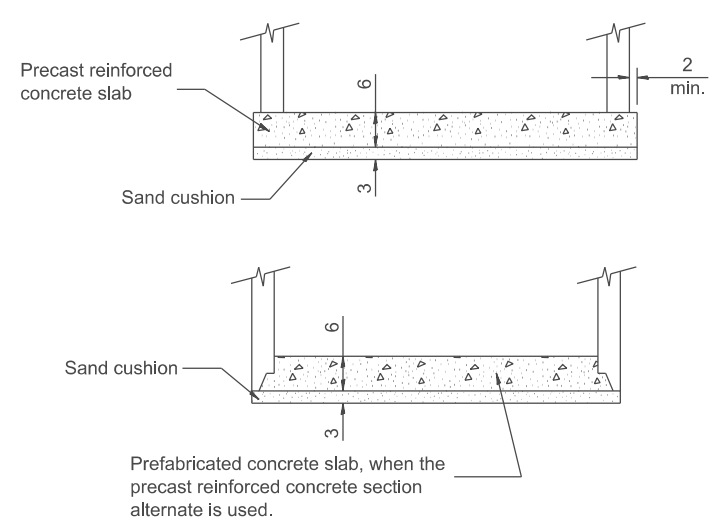
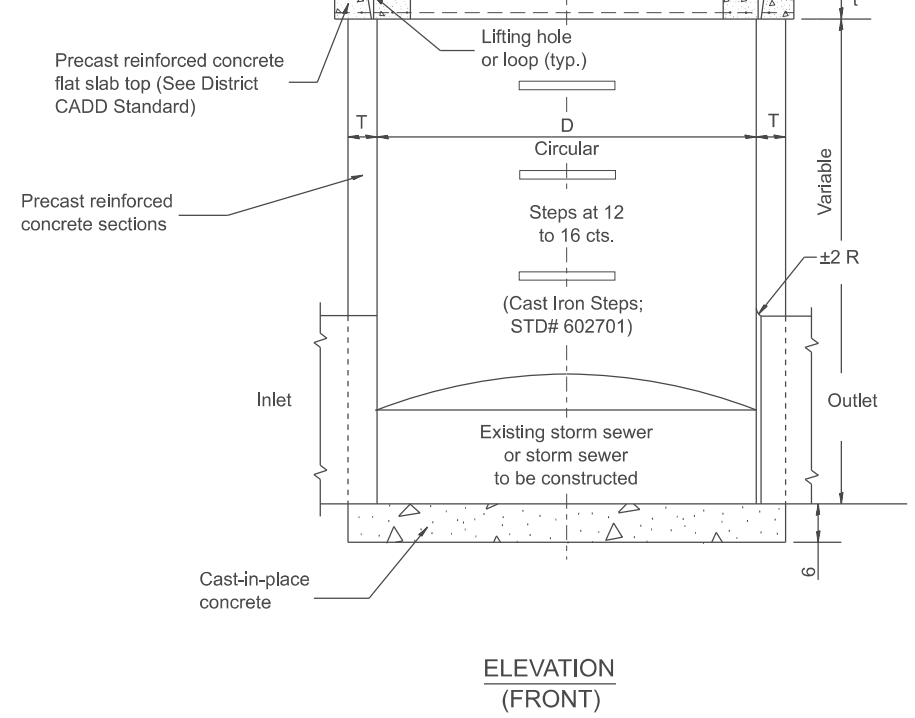
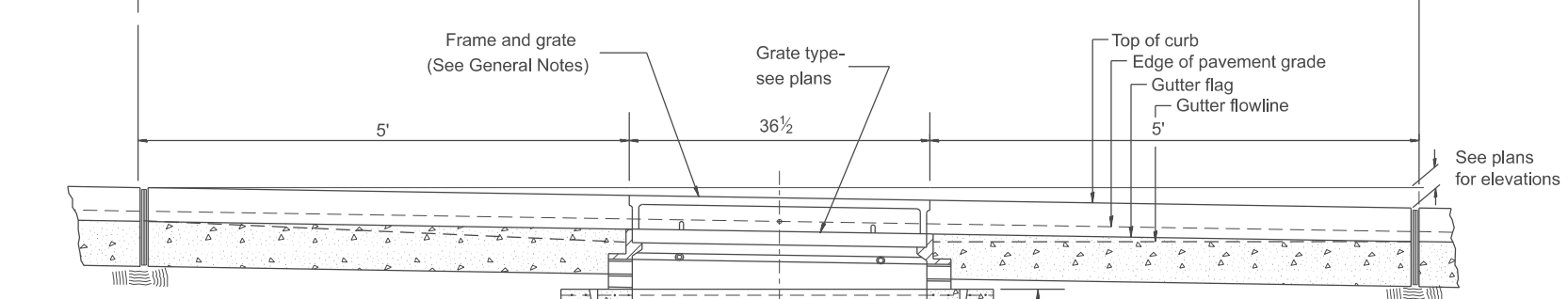
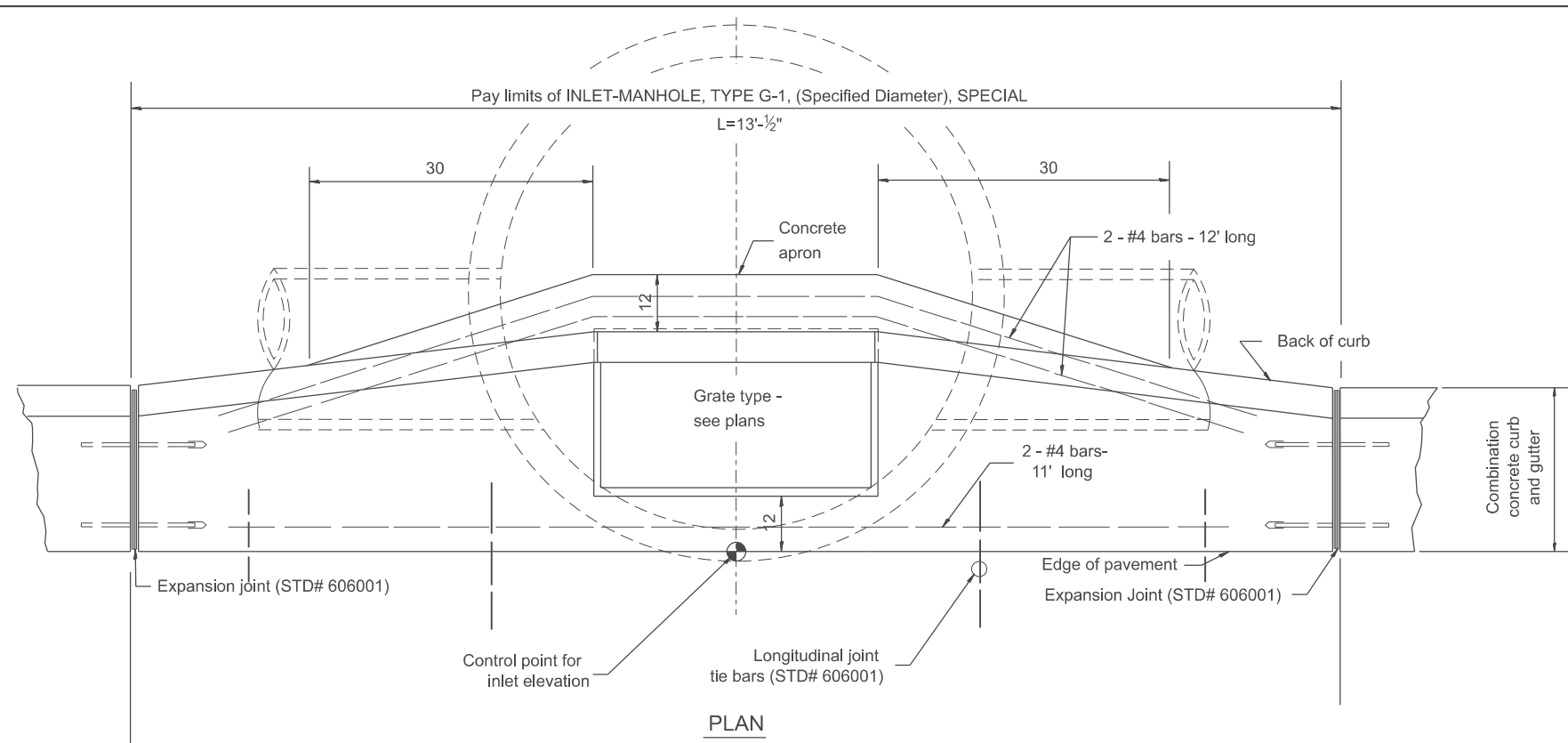
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602021			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:

1. Include State STD# 606001 for combination concrete curb and gutter details.
2. Include State STD# 420001 for pavement joints.
3. Include State STD# 602701 for cast iron steps.
4. Include District CADD Standard for frame and grates.
5. Include District CADD Standard for precast reinforced concrete flat slab top.
6. Include District CADD Special Provision. Pay item includes inlet - manhole, flat slab top, transitional c.c.&g. and frame and grate. All work within pay limits.
7. Specify diameter of inlet - manhole in plans.
8. Specify grate type in plans.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\organization\Chilidiot_Standards\Civil\DOT_Sheets.ctb



GENERAL NOTES

1. Inlet-manhole construction shall be in accordance with Section 602 of the Standard Specifications.
2. Combination concrete curb and gutter shall be constructed in accordance with Section 606 of the Standard Specifications.
3. See District CADD Standard 604001-D4 for frame and grates.
4. See District CADD Standard for precast reinforced concrete flat slab top.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INLET-MANHOLE, TYPE G-1, SPECIAL

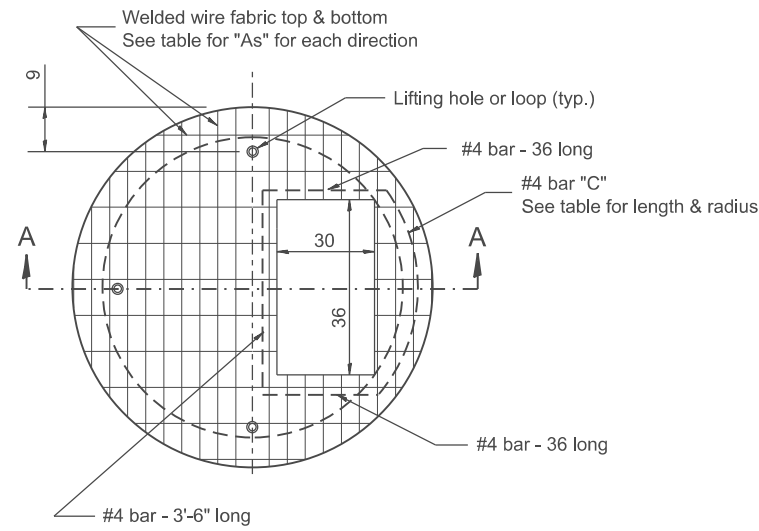
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

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DISTRICT 4 DETAIL NO. 602026			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

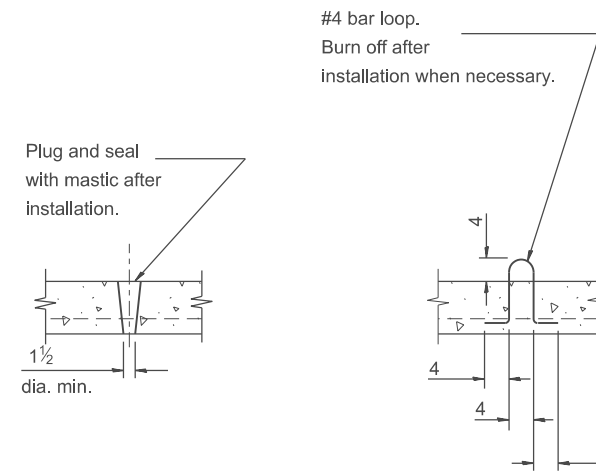
DESIGNER NOTES:

1. Include this standard with Type G-1 and Type G-1, Special Inlet-Manholes.
2. The flat slab top is included in the cost of INLET-MANHOLE as per District Special Provision.

MODEL: D4-602101
 FILE NAME: c:\pwworking\illinois.gov\thomas.cox\10559441D4-602101.dgn



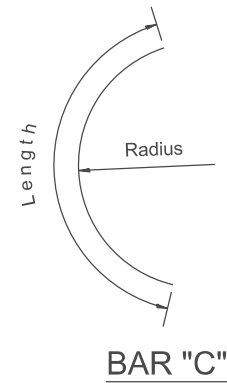
PLAN



LIFTING HOLE OR LIFTING LOOP

TYPICAL

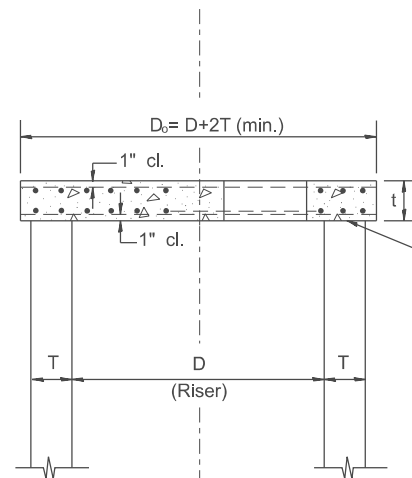
(3 required per slab)



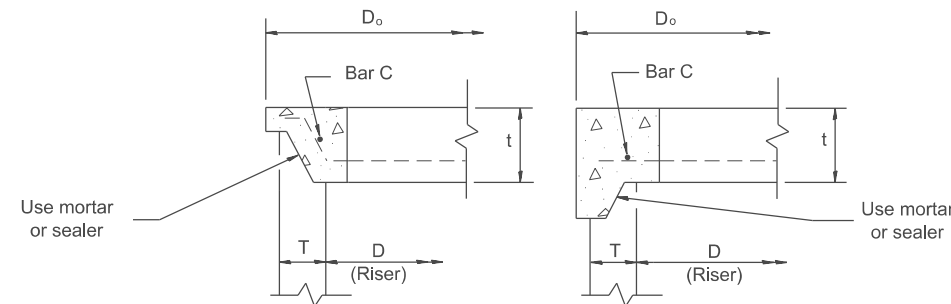
BAR "C"

TABLE

D	T	D _o (min.)	t	Reinforcement "As" W.W.F. each direction	Bar size	No. 4 Bar C	
						Length	Radius
4'	5	4'-10"	6	0.70 sq. inch/lin. ft.	No. 5	4'-6"	26
5'	6	6'-0"	8	0.70 sq. inch/lin. ft.	No. 5	5'-0"	32
6'	7 3/4	7'-3 1/2"	8	0.88 sq. inch/lin. ft.	No. 6	6'-0"	38
8'	9	9'-6"	10	0.88 sq. inch/lin. ft.	No. 6	7'-6"	4'-2"



SECTION A-A



ALTERNATE JOINT CONFIGURATIONS

GENERAL NOTES

1. The precast reinforced concrete flat slab top shall be used with INLET-MANHOLE, TYPE G-1 and INLET-MANHOLE, TYPE G-1, SPECIAL.
2. Joint configuration and dimensions of flat slab top shall match and fit the riser joint detail.
3. Lifting devices shall be approved by the Engineer.

All dimensions are in inches unless otherwise noted.

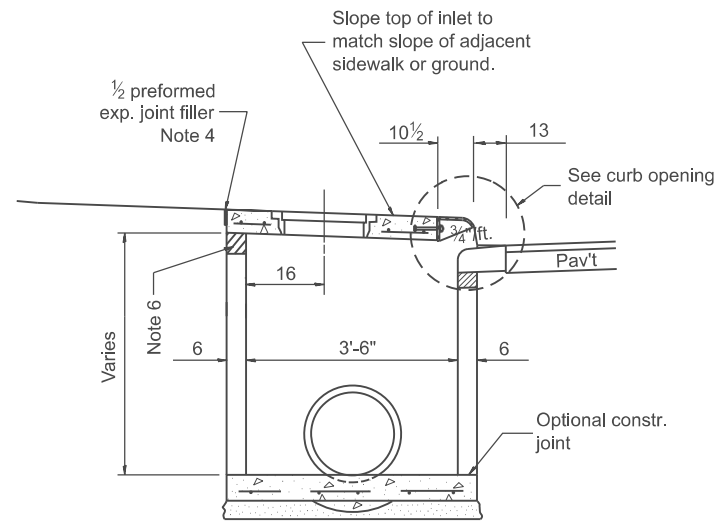
USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

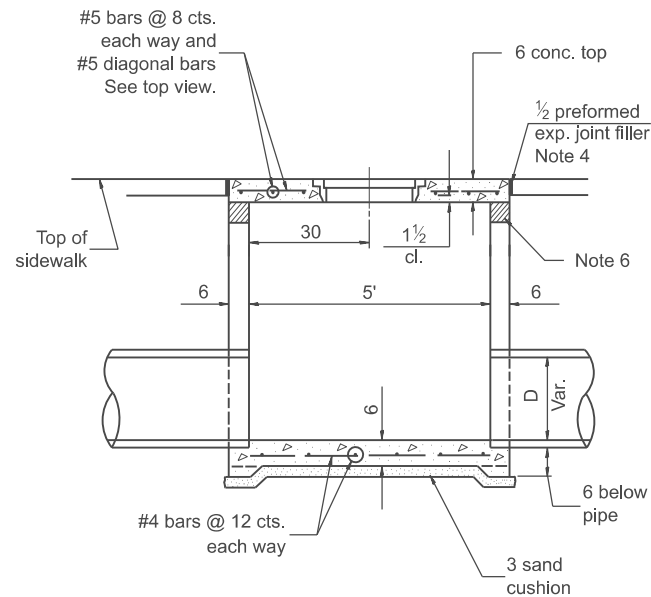
PRECAST REINFORCED CONCRETE FLAT SLAB TOP FOR
 INLET-MANHOLE, TYPE G-1 AND TYPE G-1, SPECIAL

SCALE: NOT TO SCALE SHEET 000 OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 602101			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



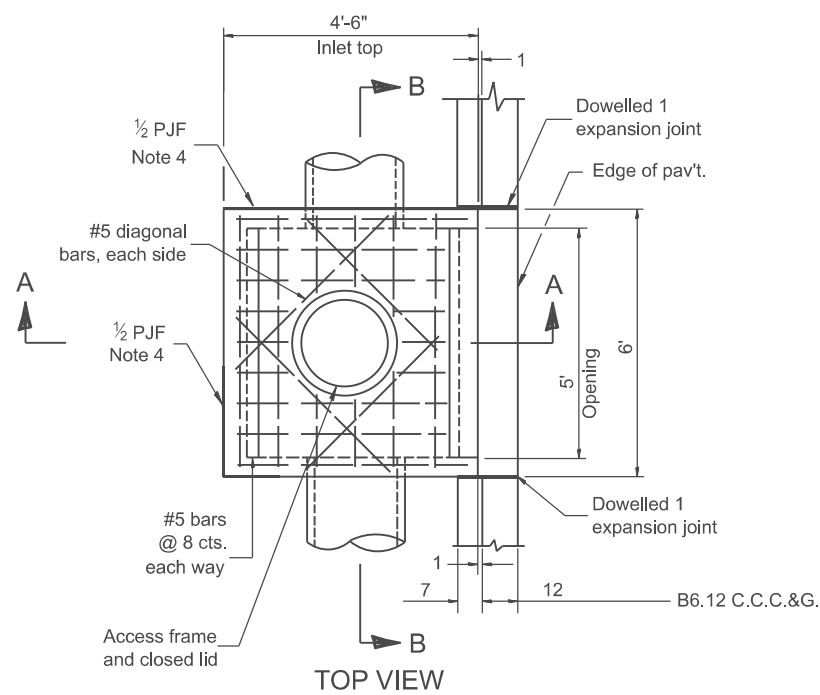
SECTION A-A



SECTION B-B

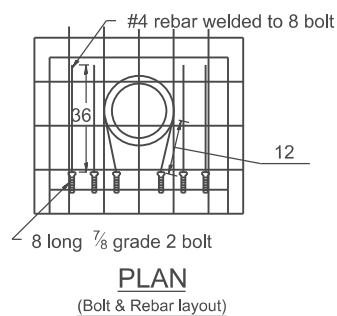
GENERAL NOTES

1. Class PC concrete for precast concrete and CLASS SI CONCRETE for cast-in-place concrete used throughout.
2. The sidewalls may be built as precast segmental sections.
3. Except as noted herein, INLET SPECIAL TYPE 1, TYPE 2, AND, TYPE 3 shall be constructed in accordance with section 602 of the Standard Specifications.
4. 1/2 preformed expansion joints shall be provided on sides of inlet adjacent to sidewalks or other structures. (See section 1051)
5. Curb opening inlet frame, and access frame and lid shall be cast gray iron and conform to A48-83 class 35B
Approximate weight:
Curb opening inlet frame: 100lbs/30 section
Access frame and lid: 160 lbs./ casting.
6. The height of the box may be constructed 6 short to allow for field adjustment. The wall adjustments shall be made with concrete building brick or CLASS SI CONCRETE. (See article 1041.02 and applicable portions of section 503).



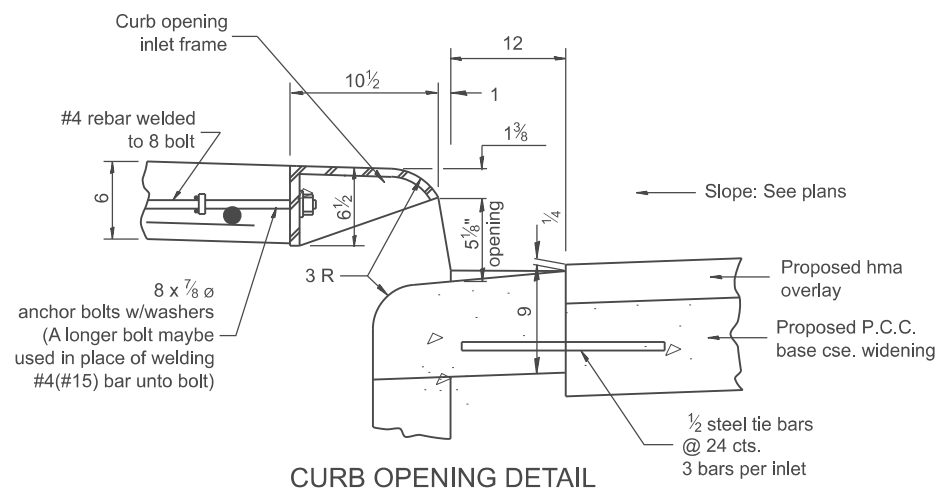
INLET SPECIAL TYPE 1

Front Opening
4'-6" Top

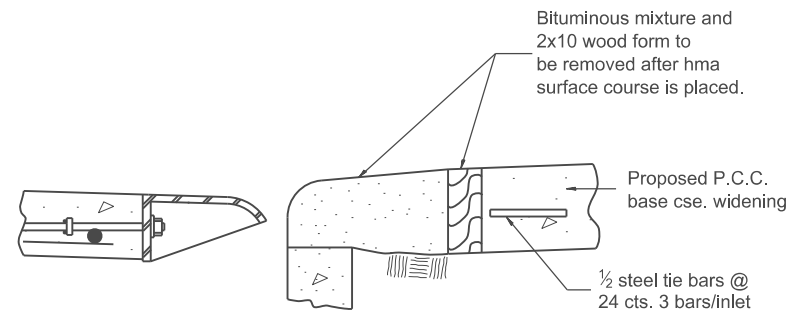


PLAN

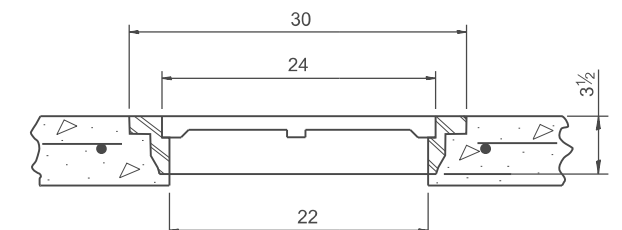
(Bolt & Rebar layout)



CURB OPENING DETAIL



CURB OPENING DETAIL
FOR TEMPORARY PAVEMENT DRAINAGE



ACCESS FRAME & LID
DETAIL

DESIGNER NOTES:
1. Include District Special Provision.
2. This is a special use item. Check with your Project Engineer before using (Problematic Design).
3. Based upon a "Palder Precast Concrete, Inc." Design

MODEL: D4-602201-01
FILE NAME: c:\pwworking\illinois.gov\thomas.cox\illinois.gov\id1055944\D4-602201.dgn

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

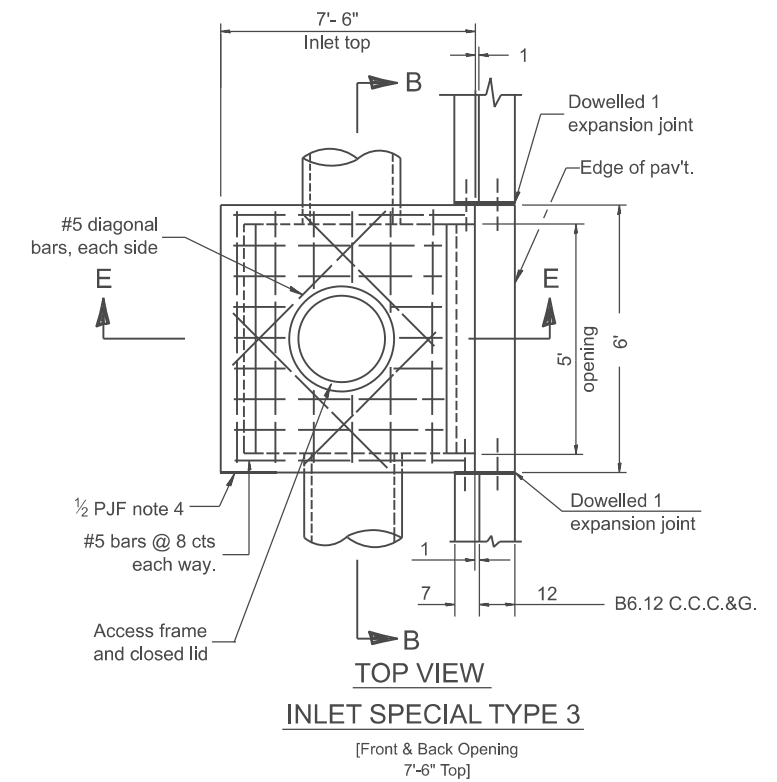
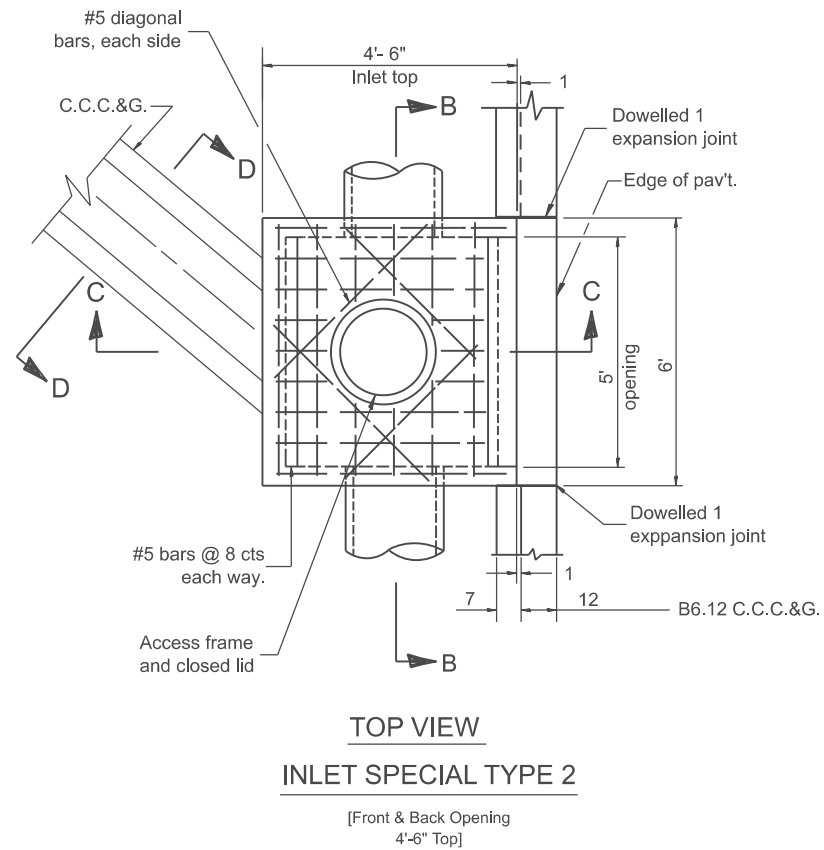
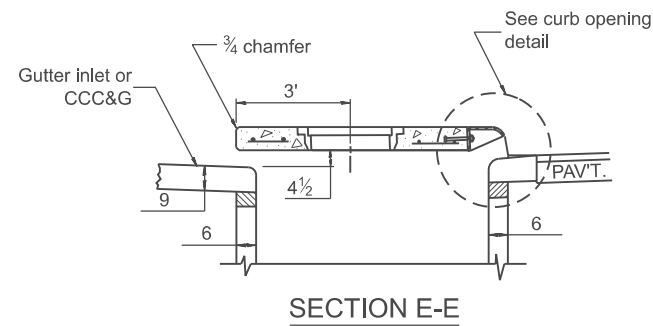
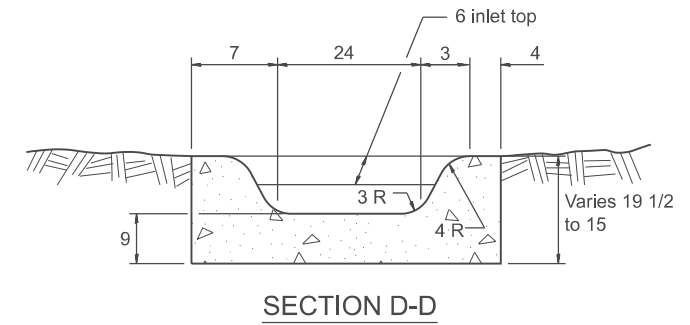
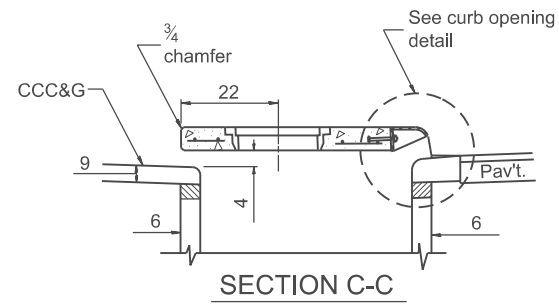
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INLET SPECIAL TYPES 1, 2 & 3

SCALE: NOT TO SCALE SHEET 0001 OF 2 SHEETS STA. TO STA.

All dimensions are in inches unless otherwise noted.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 602201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



MODEL: D4-602201-02
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All dimensions are in inches unless otherwise noted.

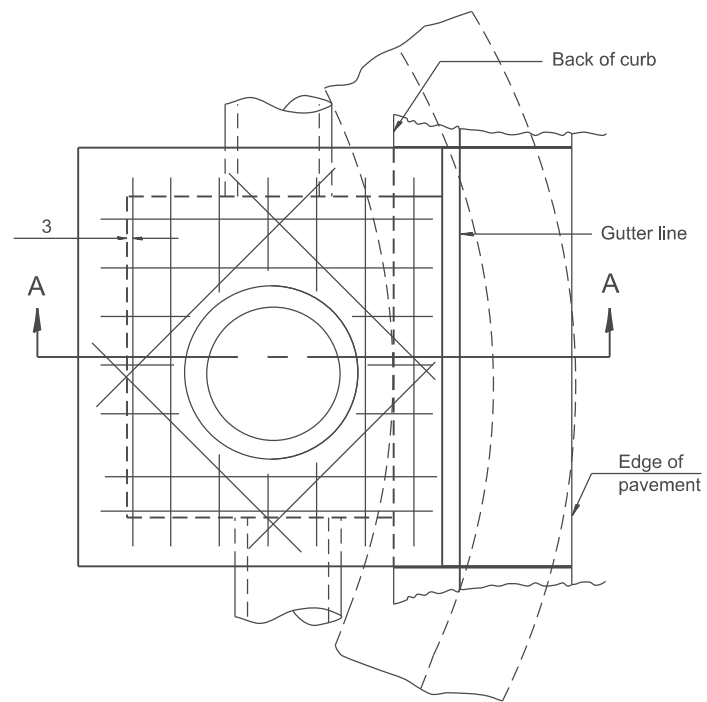
USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INLET SPECIAL TYPES 1, 2 & 3

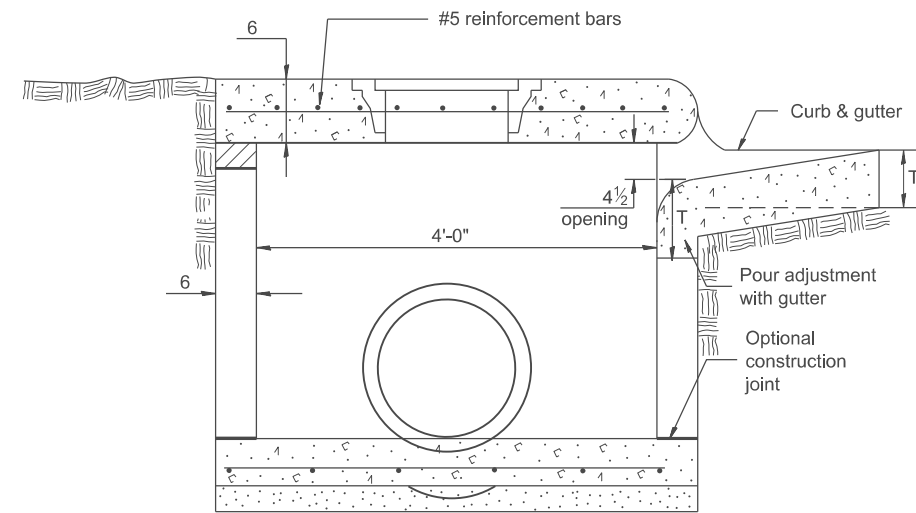
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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DISTRICT 4 DETAIL NO. 602201			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



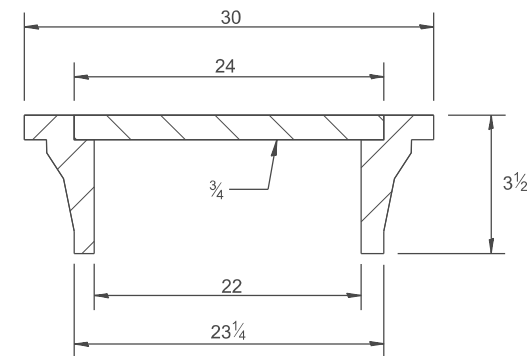
TOP VIEW

When inlet is constructed in return, the top slab shall conform to the radius of the return.

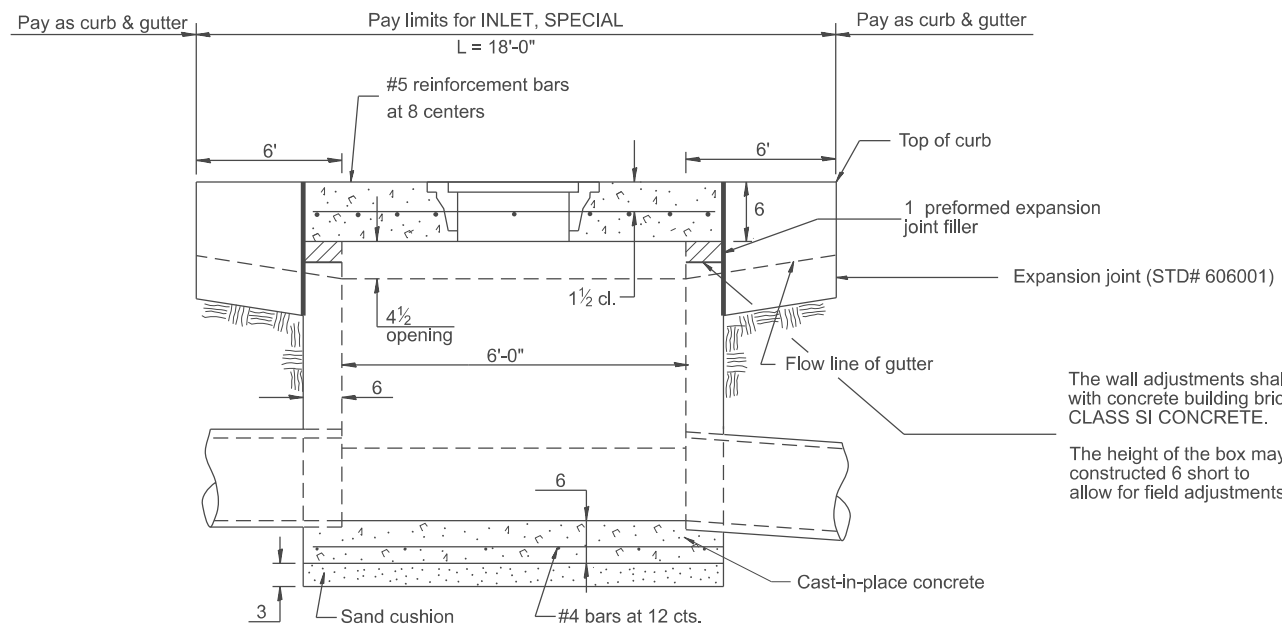


SECTION A-A

LIGHT WEIGHT MANHOLE CASTING



TYPE 5 MODIFIED FRAME, CLOSED LID



FRONT VIEW

The wall adjustments shall be made with concrete building brick or CLASS SI CONCRETE.

The height of the box may be constructed 6 short to allow for field adjustments.

NOTES

- The inlet shall be cast-in-place or precast. Except as noted herein INLET,SPECIAL shall be constructed in accordance with Section 602 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

Designer Notes:
 1. Include STD# 604021 "BASE, FRAME & LIDS TYPE 5".
 2. Include STD# 606001 for c.c.&g. details.
 3. Include STD# 420001 for pavement joints.
 4. Frame and lid based upon NEENAH R-6040
 5. Include District Special Provision. Pay item includes transitional c.c.&g., inlet and frame and grate. All work within pay limits.
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chilidot_Standards\CallIDOT_Sheets.ctb

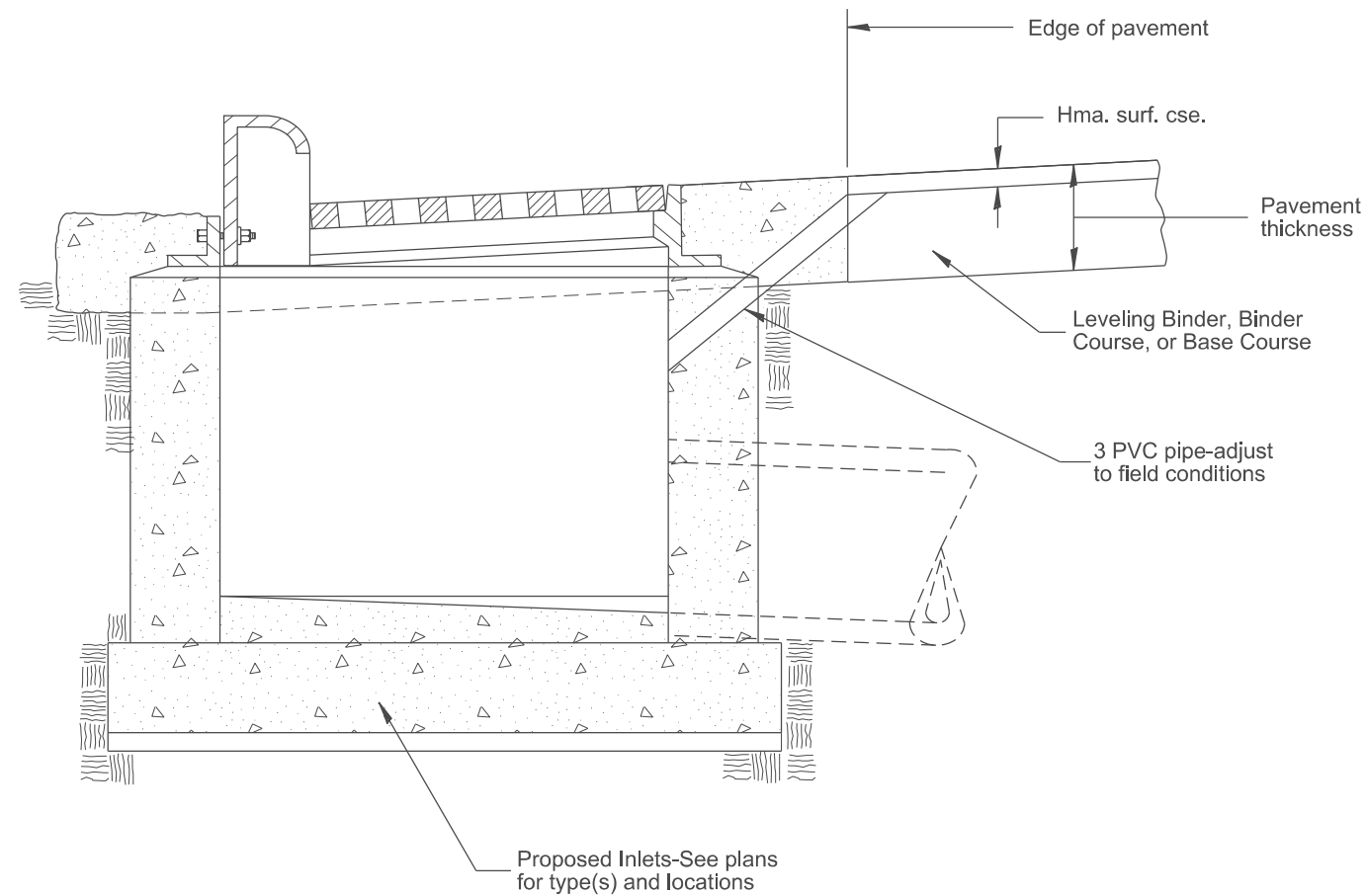
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INLETS, SPECIAL WITH TYPE 5 MODIFIED FRAME, CLOSED LID

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602301		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



GENERAL NOTES:

1. Temporary Drainage - This work consists of furnishing and installing a 3 PVC pipe in the proposed inlet to facilitate drainage off the pavement prior to the placement of bituminous surface course.
2. Adequate pavement drainage shall be maintained during all phases of construction.
3. The PVC pipe is to be filled with mortar prior to surface course placement.
4. This detail applies to all inlet types.

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\1011\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

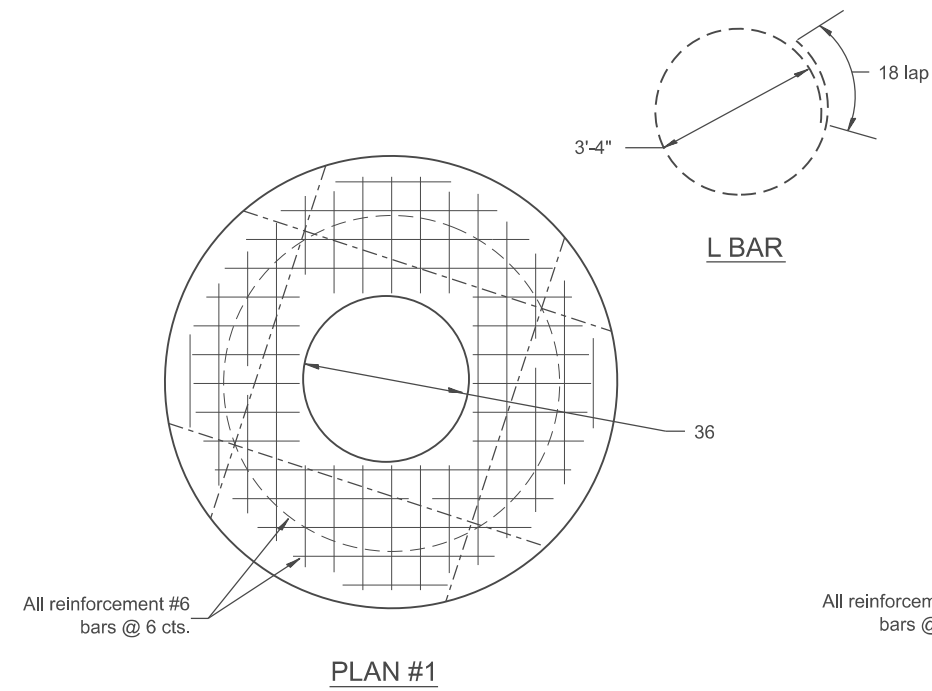
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY INLET DRAINAGE TREATMENT

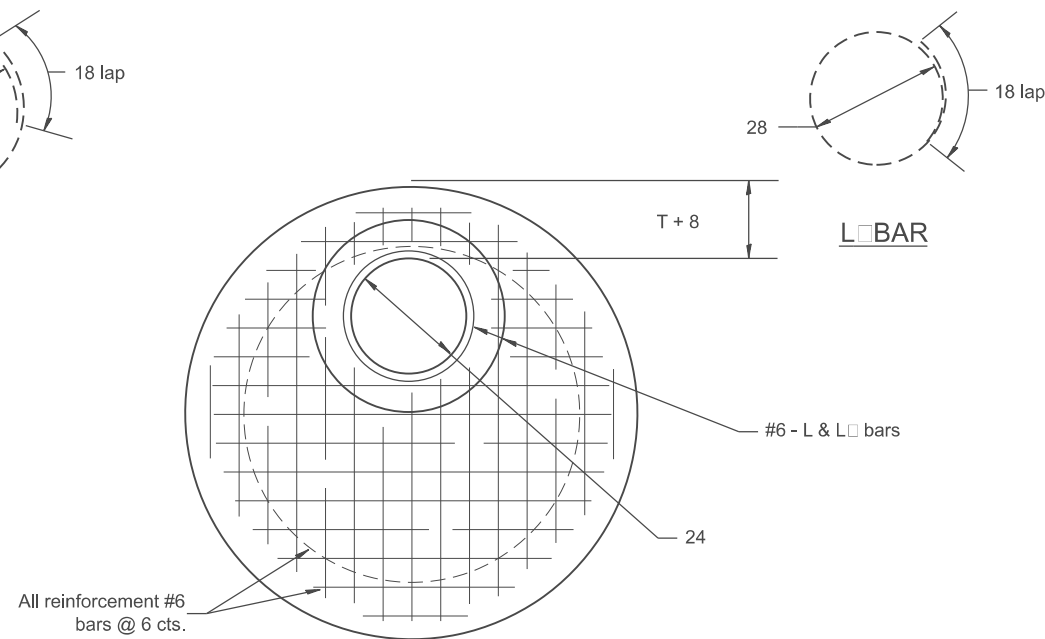
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602401		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:
 1. INCLUDE STD# 602401 (MANHOLE, TYPE A), AND STANDARD 602406 [MANHOLE TYPE A 72" DIAMETER].
 2. INCLUDE STANDARD 602701 (CAST IRON STEPS).
 3. INCLUDE DISTRICT SPECIAL PROVISION, PAY ITEM INCLUDES MANHOLE, FLAT SLAB TOP, AND FRAME, AND GRATE.
 4. SPECIFY FRAME AND GRATE AND INCLUDE STANDARD/S.
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\organization\Chilif\DOT_Standards\Call\DOT_Sheets.ctb

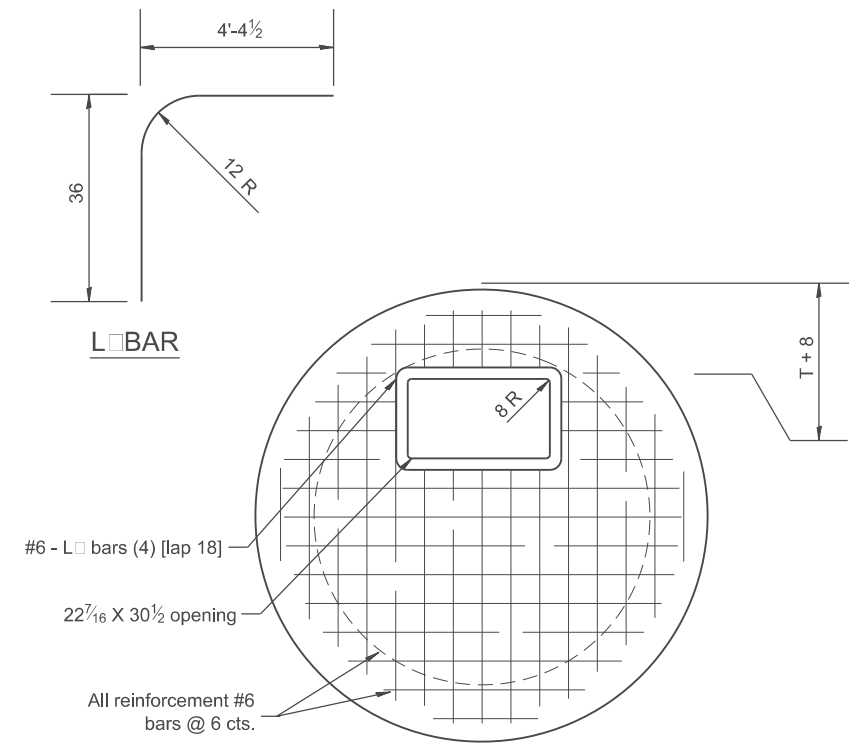


PLAN #1

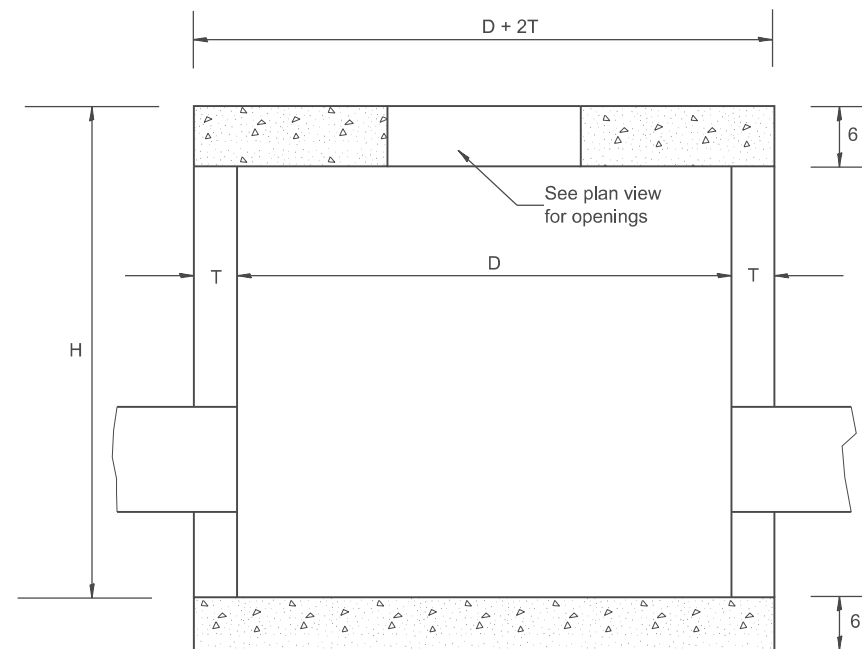


PLAN #2

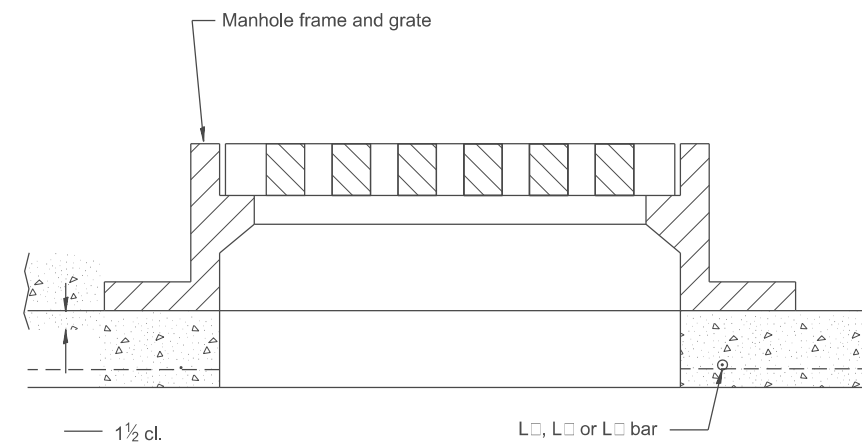
ALTERNATES: FLAT SLAB TOP



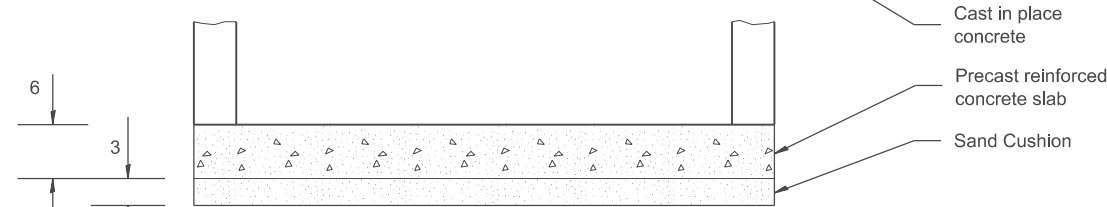
PLAN #3



ELEVATION



ELEVATION



ALTERNATE BOTTOM SLAB
 (See Standard 602401 for other options)

ALTERNATE MATERIALS FOR WALLS	D	T (min.)
CONCRETE MASONRY UNITS	4' 5'	5
BRICK MASONRY	4' 5'	8 8
PRECAST REINFORCED CONCRETE RISERS	4' 5'	4 5
CAST-IN-PLACE CONCRETE	4' 5'	6 6

NOTES

1. Manhole construction shall be in accordance with Section 602 of the Standard Specifications.
2. See Standards 602401 and 602406 for invert details and optional construction details.
3. See Standards 602701 for cast iron steps.

All dimensions are in inches unless otherwise noted.

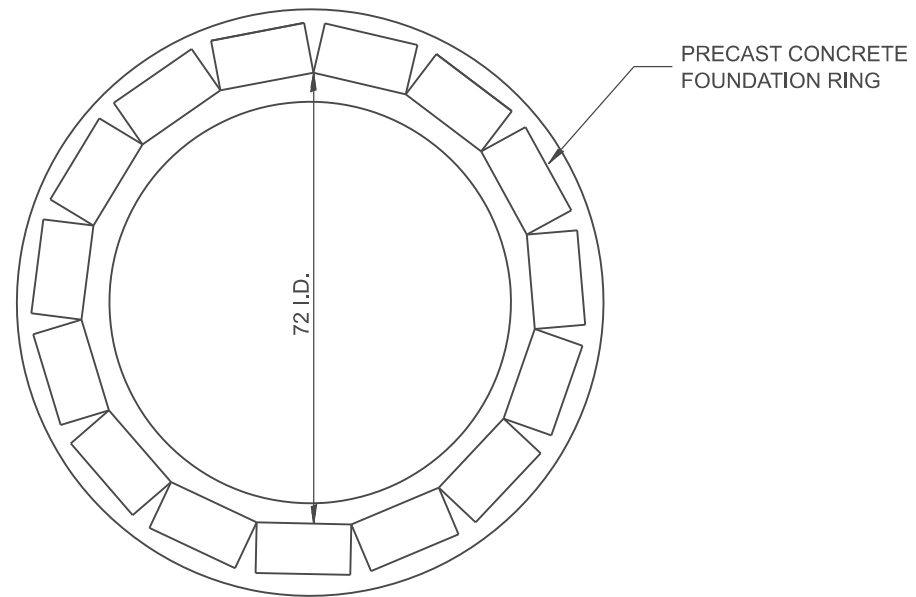
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

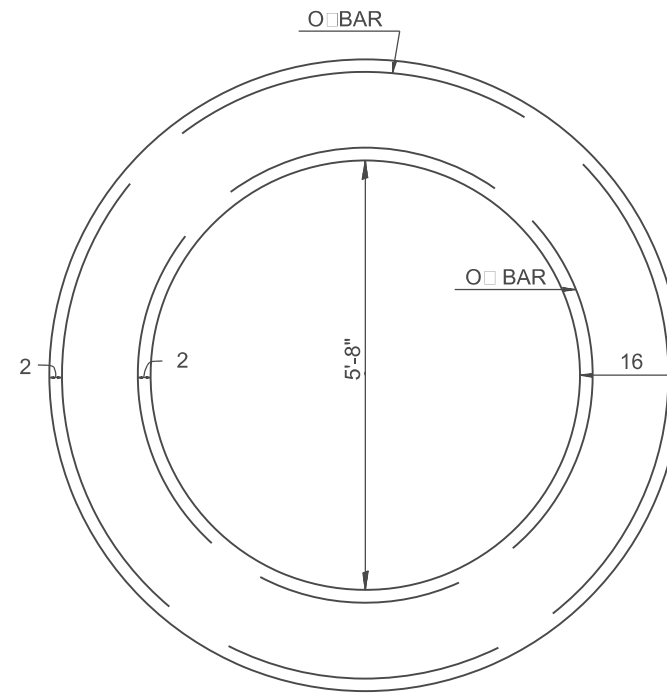
MANHOLE, SPECIAL

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602501		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

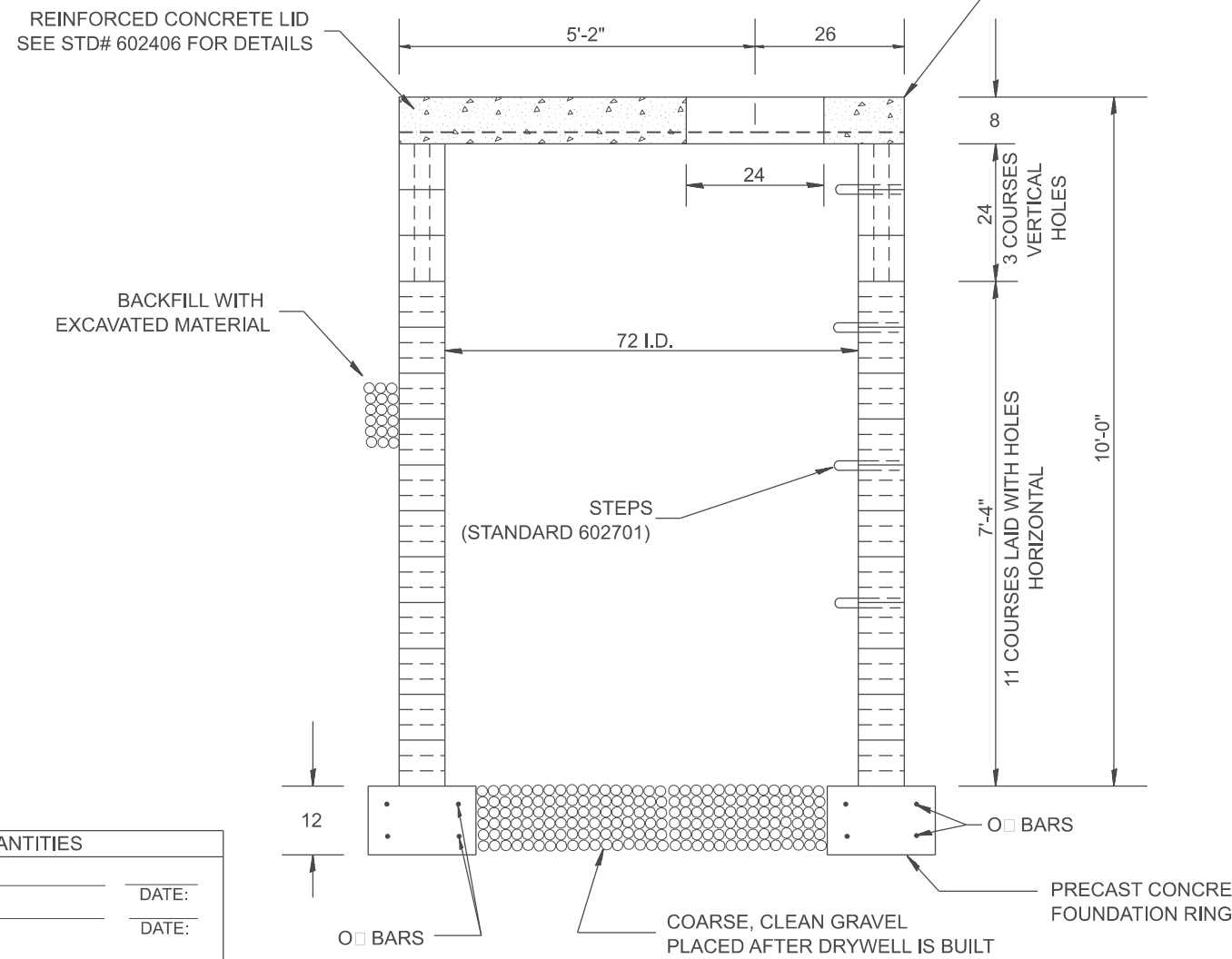


PLAN



PLAN

(SHOWING REINFORCEMENT IN CONCRETE RING FOUNDATION)



ELEVATION

GENERAL NOTES:

- The concrete blocks shall be 3 cell - 8"x8"x16". The top 3 courses of blocks shall be laid with the holes vertical. All other blocks shall be laid with the holes horizontal. All joints shall be mortar.
- The outside of the drywell shall be wrapped in a filter fabric conforming to Article 1080.03 of the Standard Specifications using a two (2) foot overlap at seam.
- Drywell to be provided with a TYPE 8 GRATE. (Standard 604036)

BILL OF MATERIALS FOR 1 DRYWELL

CONCRETE BLOCKS	=	196 EA.
FILTER FABRIC	=	26 SQ YD
TYPE 8 GRATE	=	1 EA.
STEPS PER STD# 602701	=	8 EA.
GRAVEL	=	1 CU YD
CONCRETE LID PER STD# 602406	=	1 EA.
CONCRETE FOUNDATION RING		
CLASS PC CONCRETE	=	1.1 CU YD
2 #4 '0' BARS LENGTH = 25'	=	35 LBS
2 #4 '0' BARS LENGTH = 19'	=	25 LBS

DESIGNER NOTES:
 1. INCLUDE DISTRICT SPECIAL PROVISION.
 2. INCLUDE STATE STANDARDS 602406, 602701 & 604036.
 3. THIS IS FOR SPECIAL APPLICATIONS: CHECK WITH YOUR PROJECT ENGINEER.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\organization\Chilidiot_Standards\CallIDOT_Sheets.dwg

QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DRYWELL

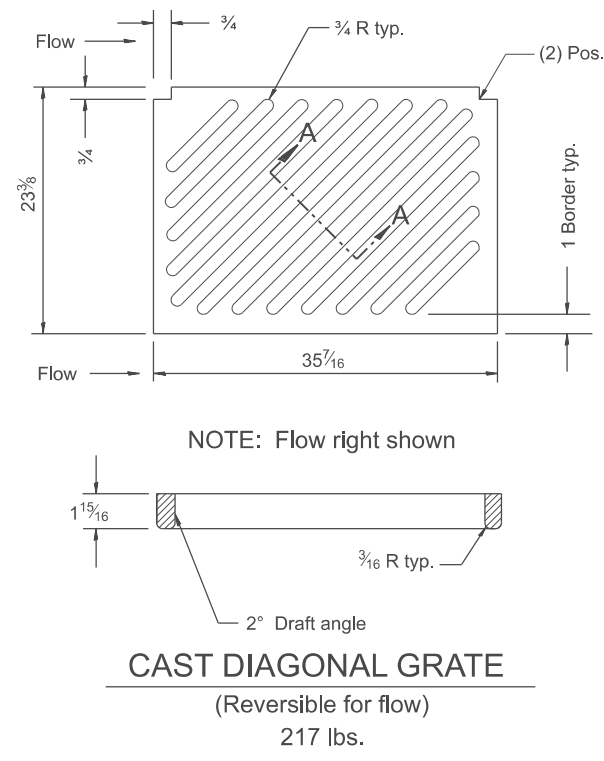
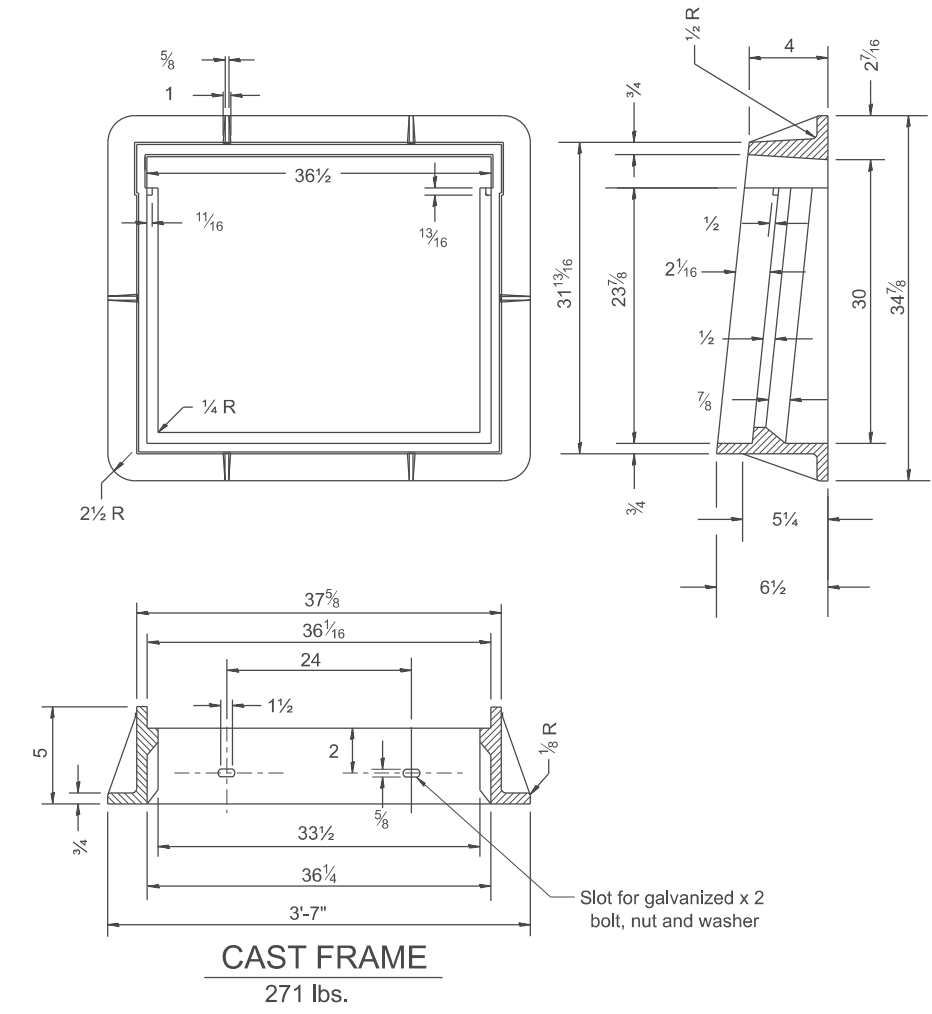
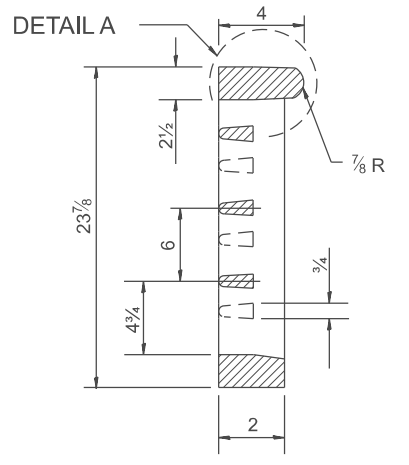
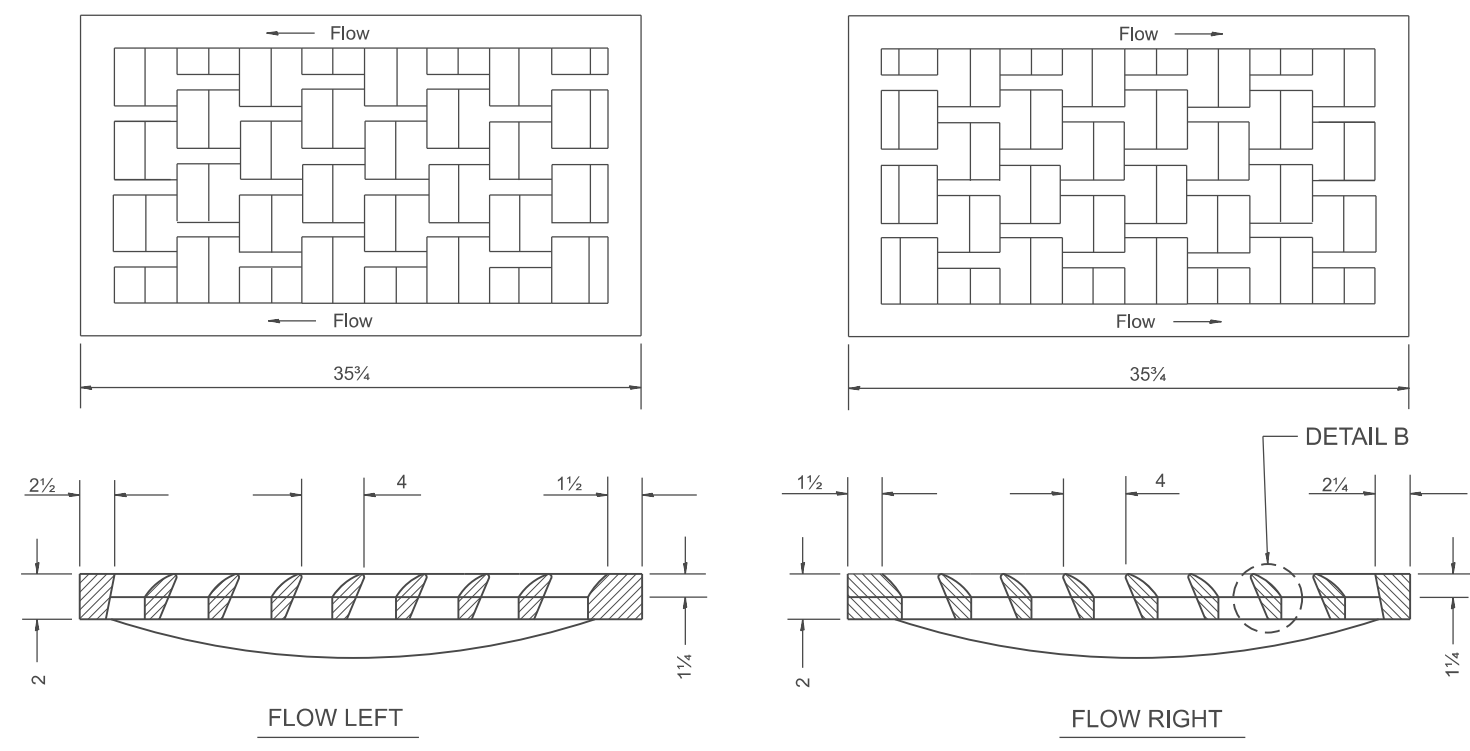
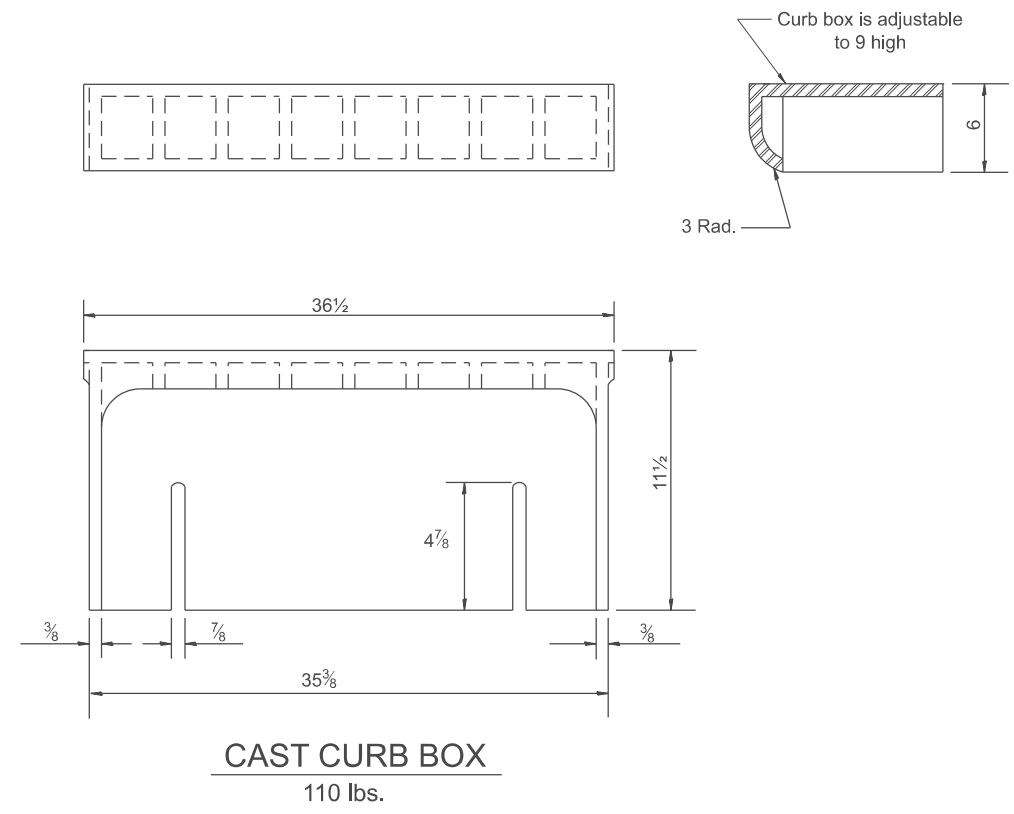
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

All dimensions are in inches unless otherwise noted.

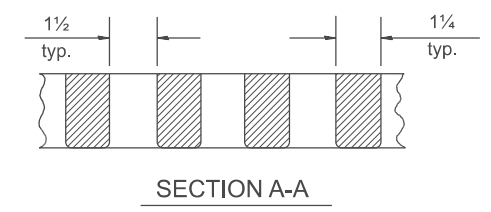
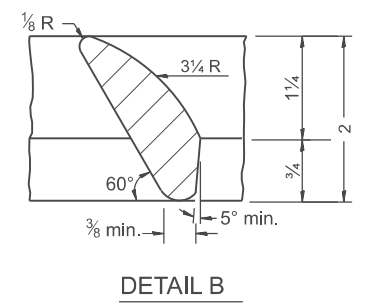
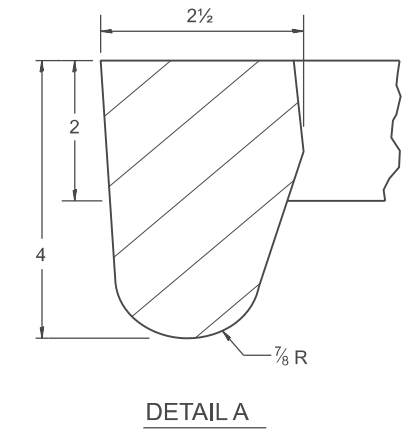
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 602601			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

1. Include this standard with all Type G-1 and Type G-1, Special Drainage Structures.
2. Specify grate types and flow directions in plans.
3. These casings are included in the cost of the drainage structures as per District Special Provision.
4. This drawing based upon "NEENAH" designs as follows: Inlet Frame: R-3246-A, Curb Box: R-3290 Reversible Diagonal Grate: R-3246-A Vane Grates: R-3246-AL (flow left) R-3246-AL (flow right)

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chilidot_Standards\Civil\DOT_Sheets.ctb
 R-3246-AL (flow left)
 R-3246-AL (flow right)



CAST VANE GRATES
 (SPECIFY LEFT OR RIGHT FLOW)
 230 lbs.



GENERAL NOTES

1. The frame and grate shown on this drawing are for use with all TYPE G-1 and TYPE G-1, SPECIAL DRAINAGE STRUCTURES. See plans for grate type and flow direction.
2. Flow direction: As viewed from street side.
3. Material: cast gray iron.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

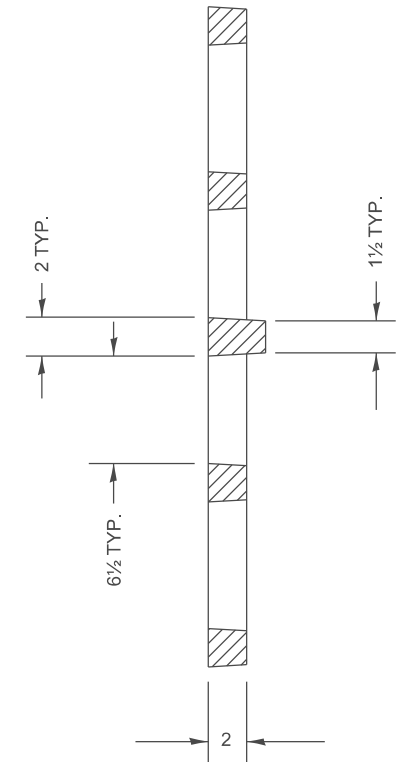
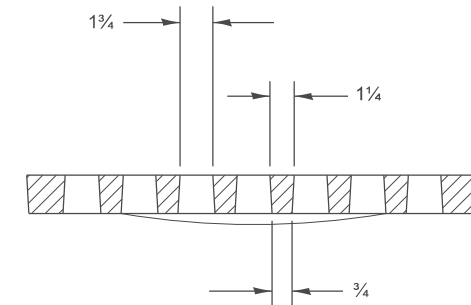
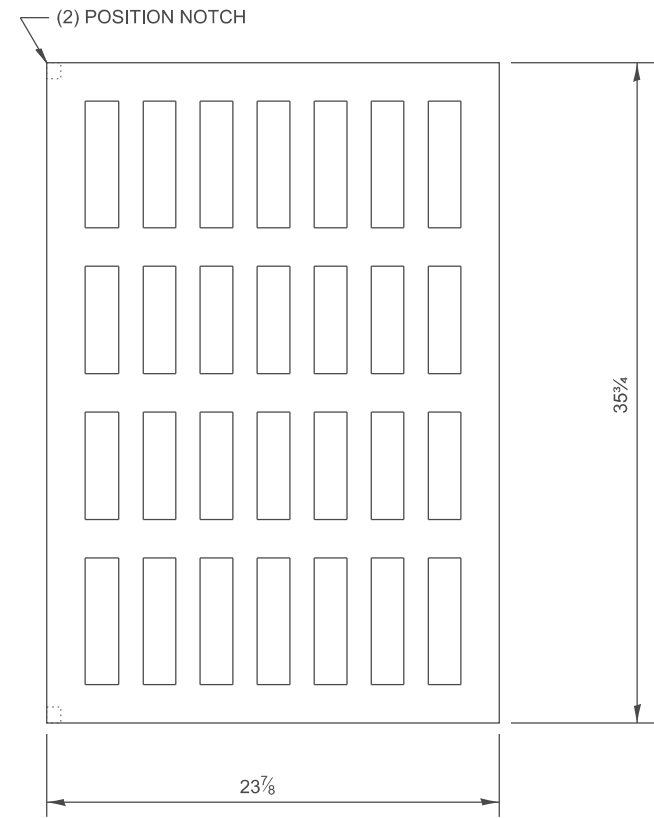
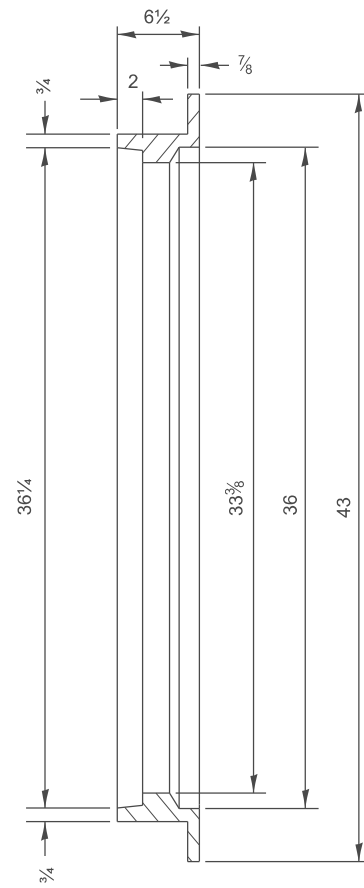
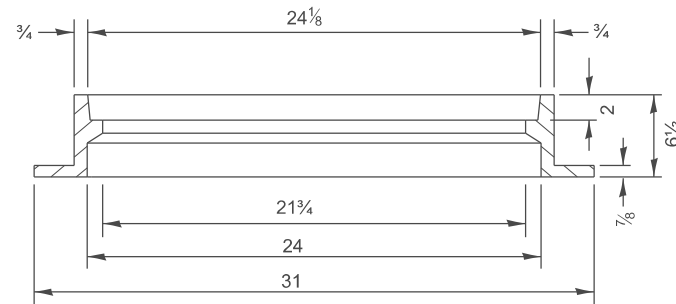
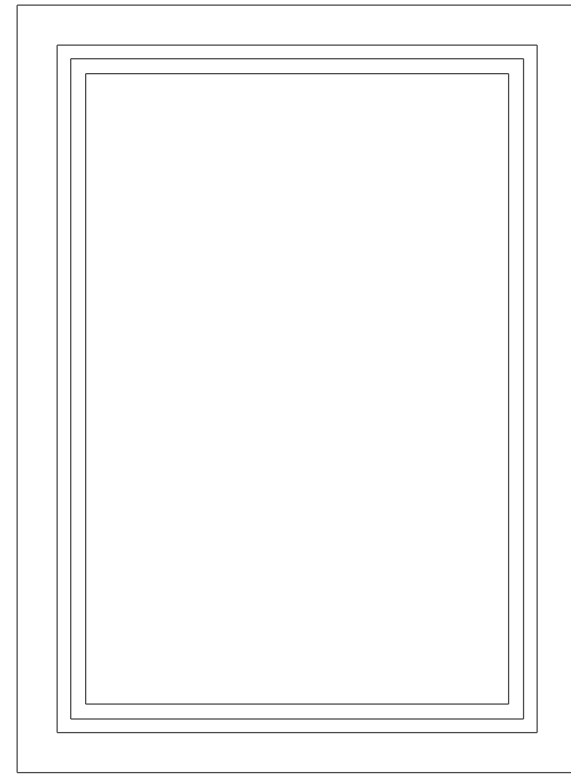
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAME & GRATES FOR TYPE G-1 AND TYPE G-1, SPECIAL DRAINAGE STRUCTURES

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 604001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES: 1. Include this standard District CADD Std. 602002-D4.
 2. Frame & Grate included in cost of G-2 Inlet.
 3. This drawing based upon "NEEMA" designs as follows: Inlet Frame: R-3454-B, Reversible Diagonal Grate: R-3246-A.
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\organizer\Chillicothe\Chillicothe\Standards\CADD\DOT_Sheets.scd



All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

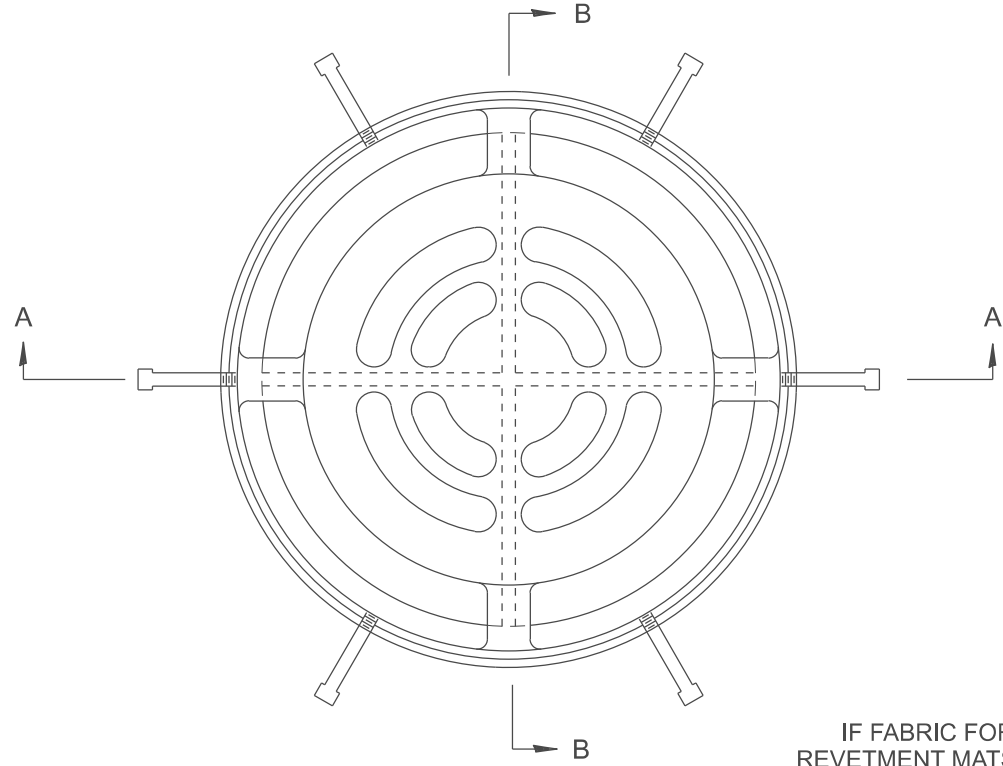
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAME AND GRATES FOR TYPE G-2 DRAINAGE STRUCTURES

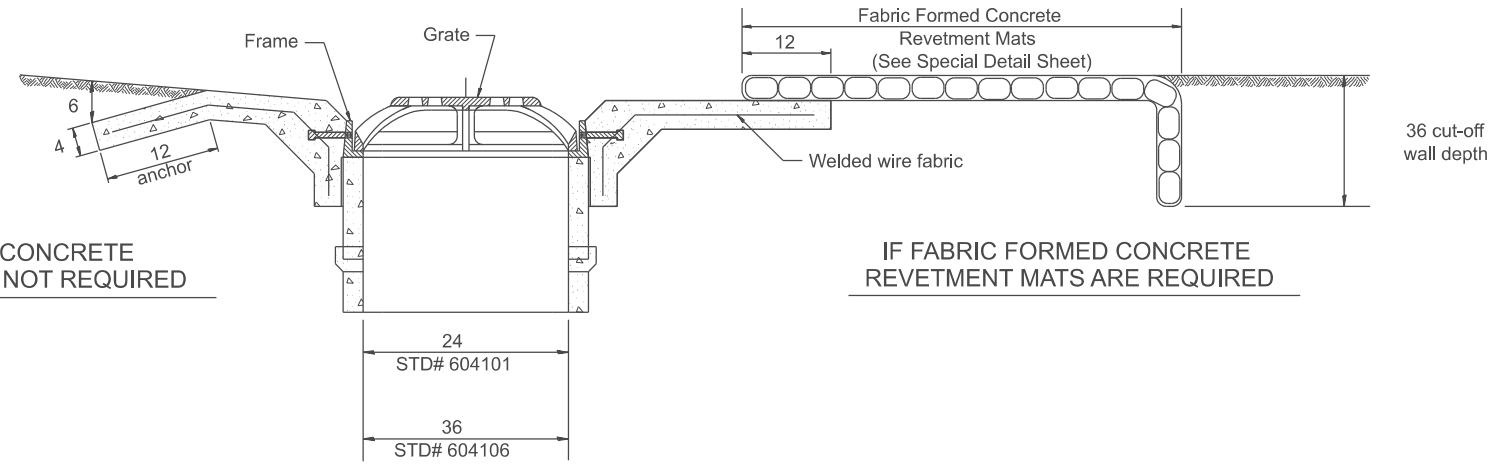
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 604002		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

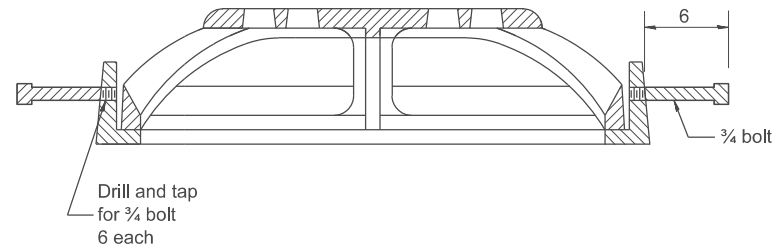
Designer Notes:
 1. This is to be used to supplement Standard 604101 and/or 604106
 2. If fabric formed concrete revetment mats are used, include District CADD drawing.
 3. Include District Special Provision
 4. Include District Standard CADD 01 Sheets.ctb
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\ginitiator\Standard\01_Sheets.ctb



PLAN
 (STD# 604101 & 604106)



SECTION B-B
 (STD# 604101 & 604106)



SECTION A-A
 (STD# 604101 & 604106)

GENERAL NOTES

- The applicable portions of Highway Standards 604101 and/or 604106 shall apply, except as noted herein.

All dimensions are in inches unless otherwise noted.

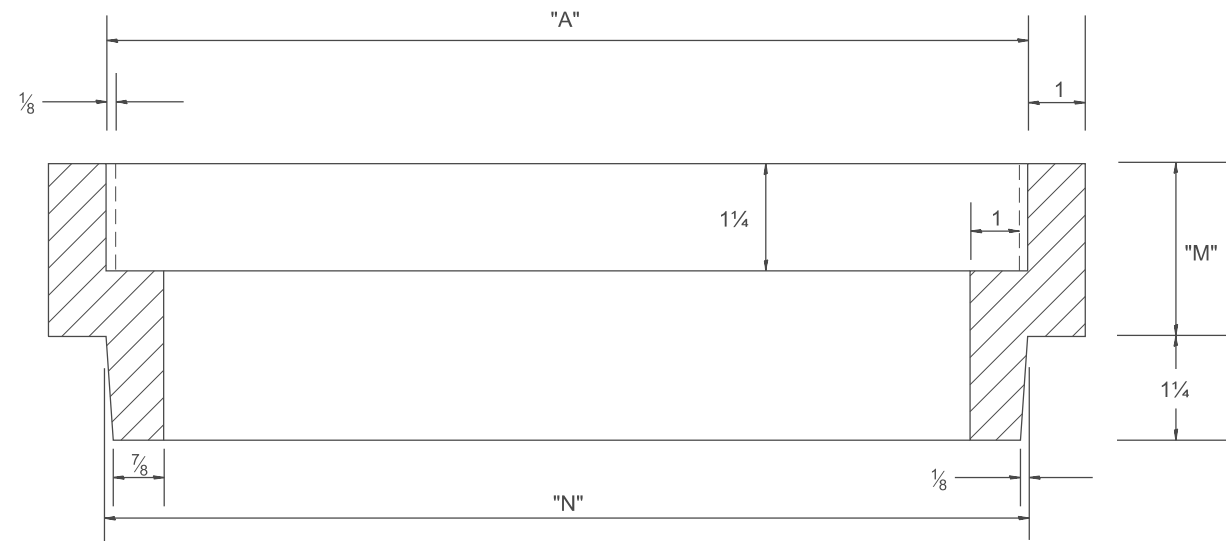
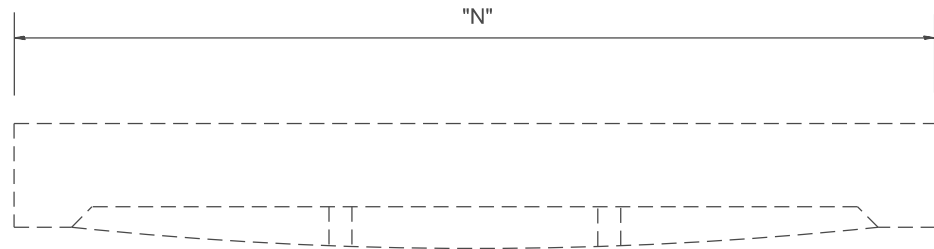
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

**MEDIA INLET (604101), SPECIAL AND
 MEDIA INLET (604106), SPECIAL**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 604101			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



Station	Dimension inches			Quantity
	"A"	"N"	"M"	
Total				

General Notes:
 1. Article 603.08 shall apply

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\1011\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

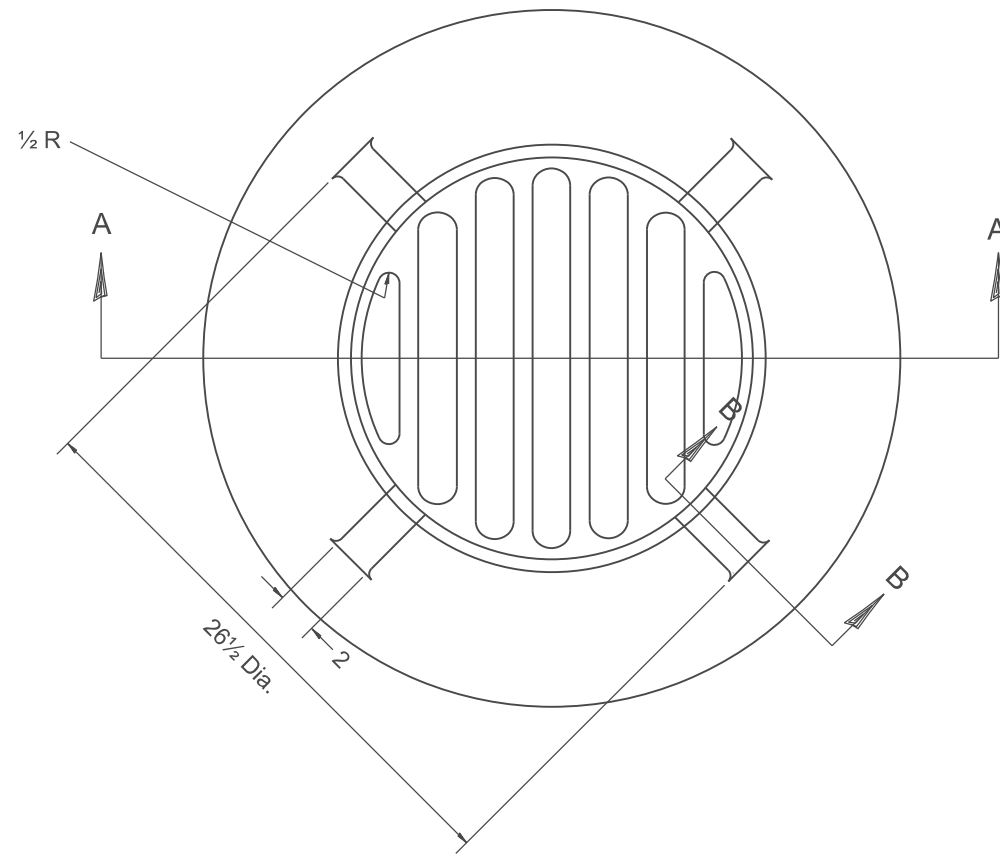
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

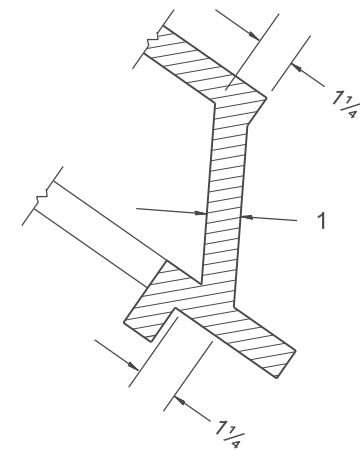
FRAME & GRATE ADJUSTING RING

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

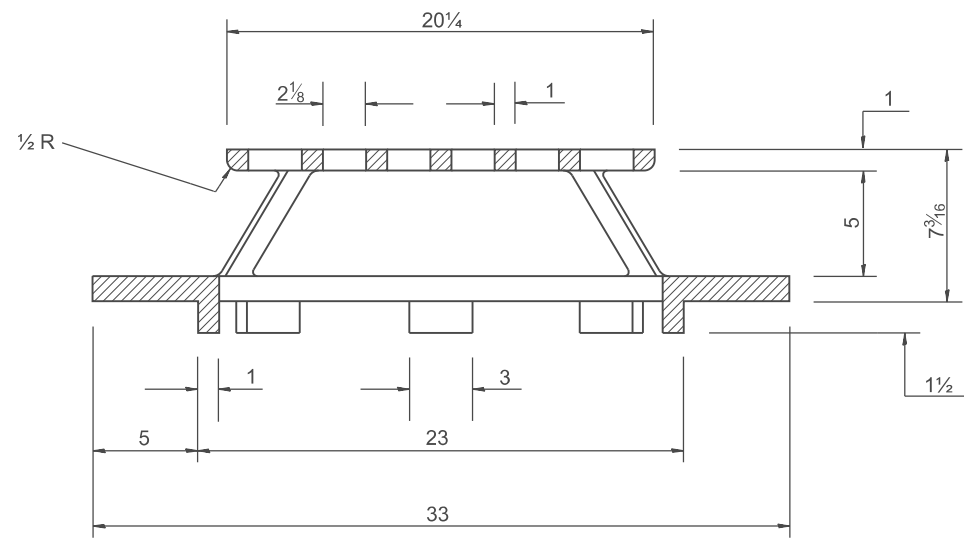
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 604201		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		



PLAN



SECTION B - B



SECTION A - A

GENERAL NOTES

1. MATERIAL - Cast Gray Iron
Weight 209 lbs

All dimensions are in inches unless otherwise noted.

DESIGNER NOTE:
 MODEL: SHT_PLA&L INCLUDE DISTRICT SPECIAL PROVISION.
 FILE NAME: C:\Bentley\CONNECT10110\organization\ChilidDOT_Standards\CatIDDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

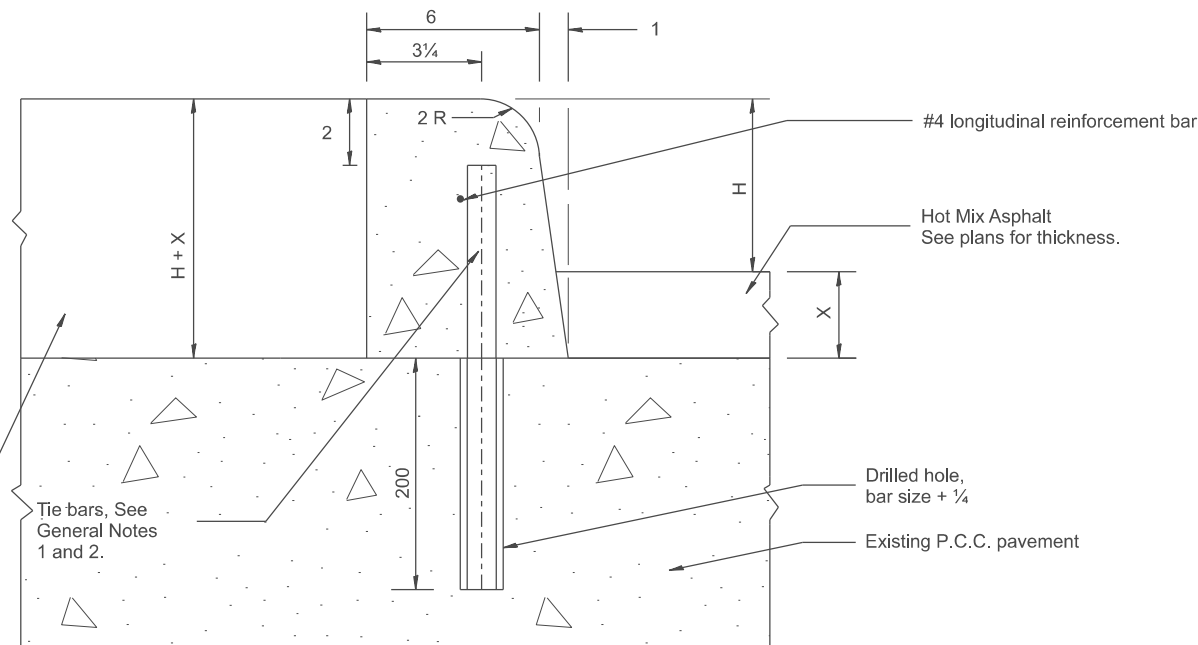
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPE 37 GRATE

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 604301			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

**TYPICAL CURB INSTALLATION
ON TOP OF EXISTING PAVEMENT**

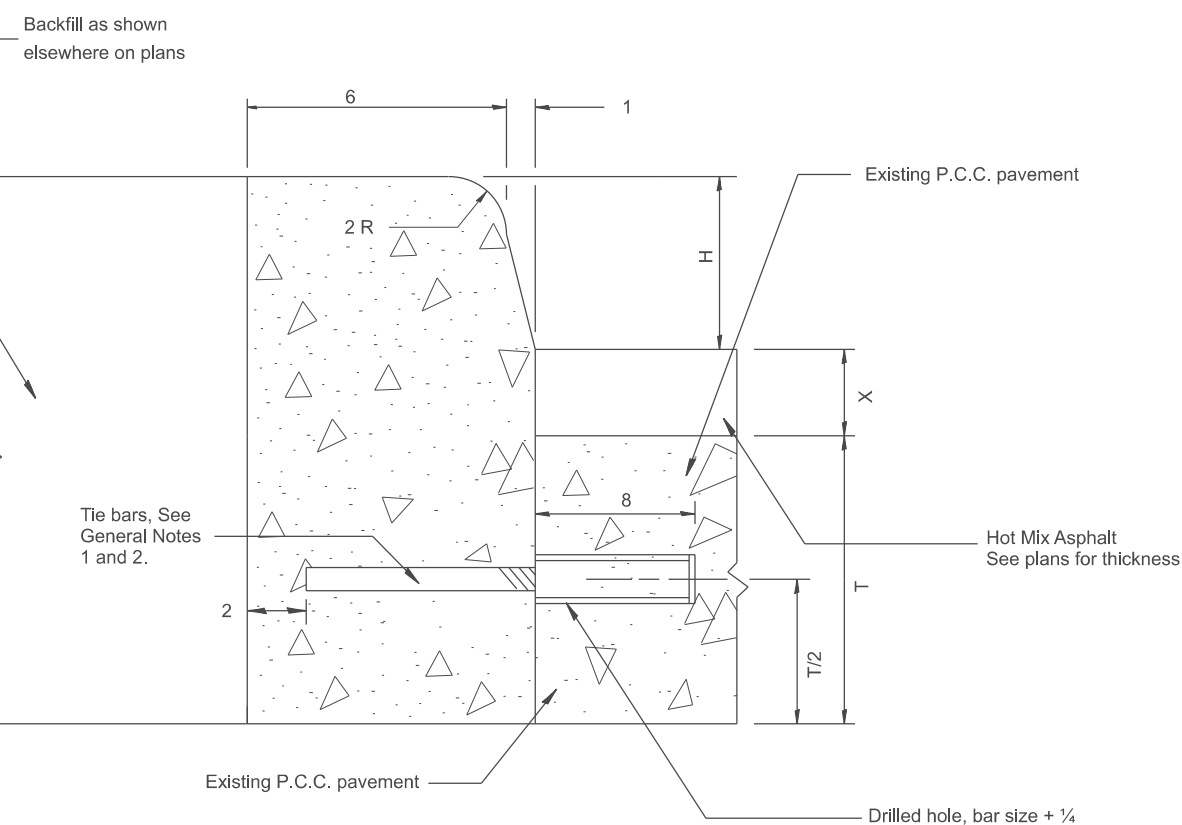


LEGEND

- H = curb height: 6 or 9.
(see plans for curb height)
- X = thickness of HMA resurfacing.
(see plans for thickness)
- T = thickness of existing P.C.C. pavement.
(see plans for thickness)

GENERAL NOTES:

1. Tie bars shall be #6 at 24 center in accordance with details for longitudinal construction joint shown in Standard 420001.
2. A minimum clearance of 2 between the end of the tie bar and the back or top of the curb shall be maintained.
3. Drainage openings 1 sq. ft. in area shall be cut through existing concrete within median along curb at 20' centers and at low points.
4. CONCRETE CURB, TYPE B (MODIFIED) shall be constructed in accordance with the applicable portions of Standards 420001 and 606001, and in accordance with the applicable portions of Article 420.10 and Section 606 of the Standard Specifications except as noted herein.



**TYPICAL CURB INSTALLATION
AT EDGE OF EXISTING PAVEMENT**

MODEL: SHT_PLNDESIGNER NOTE: 1 INCLUDE STATE STANDARDS 420001 AND 606001.
 FILE NAME: C:\Bentley\CONNECTION\10110\organization\ChillIDOT_Standards\CallIDOT_Sheets.dwg

All dimensions are in inches unless otherwise noted.

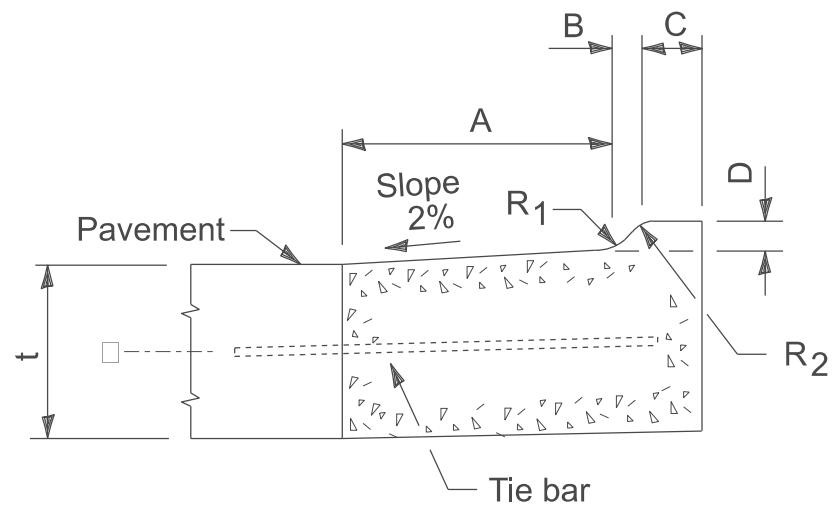
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CONCRETE CURB, TYPE B (MODIFIED)

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 606001			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



M-2.06 and M-2.12

TABLE OF DIMENSIONS MOUNTABLE CURB						
TYPE	A	B	C	D	R ₁	R ₂
M-2.06	6	2	4	2	3	2
M-2.12	12	2	4	2	3	2

t = Thickness of pavement.

Note: This special detail of M-2.06 and M-2.12 shall replace the detail shown on State Standard 606001.

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\1011\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.cad

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

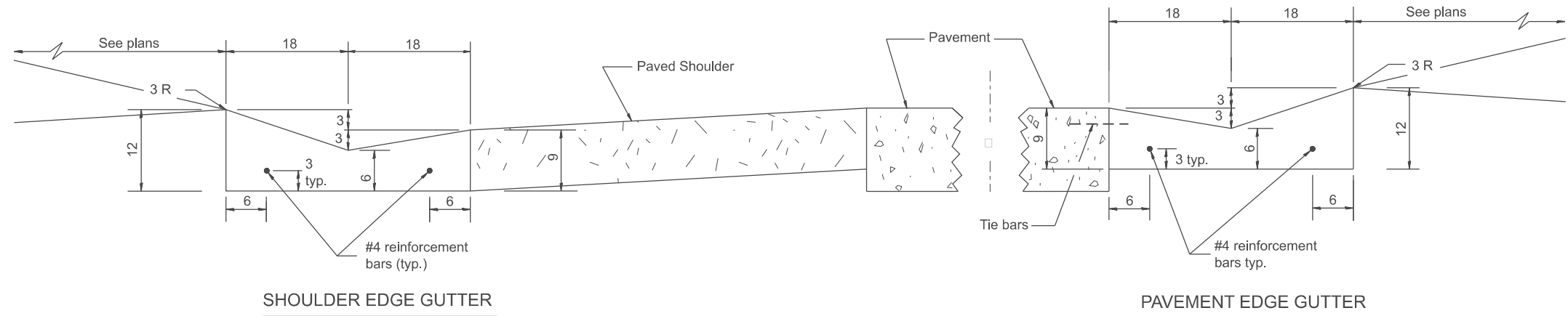
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SPECIAL DETAIL OF M-2.06 (M-5.15) AND
M-2.12 (M-5.30) CURB**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 606002		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

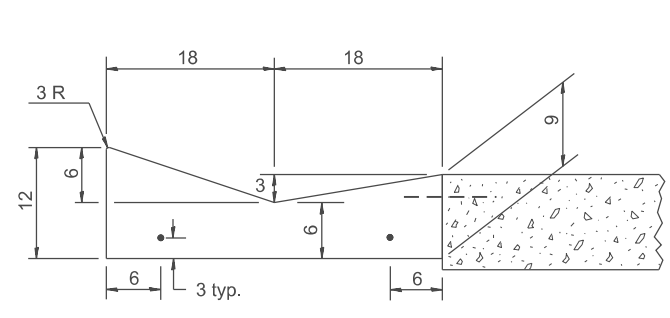
DESIGNER NOTES:
 1. INCLUDE STATE STANDARD 420001.
 2. PAY ITEM FOR INLETS, OUTLETS, AND ENTRANCES IS X6060097 CLASS SI CONCRETE (OULET), SPECIAL
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECTION\PROJECT\1010\signature\chillid\DOT_Signatures\chillid\DOT_Signatures.sct



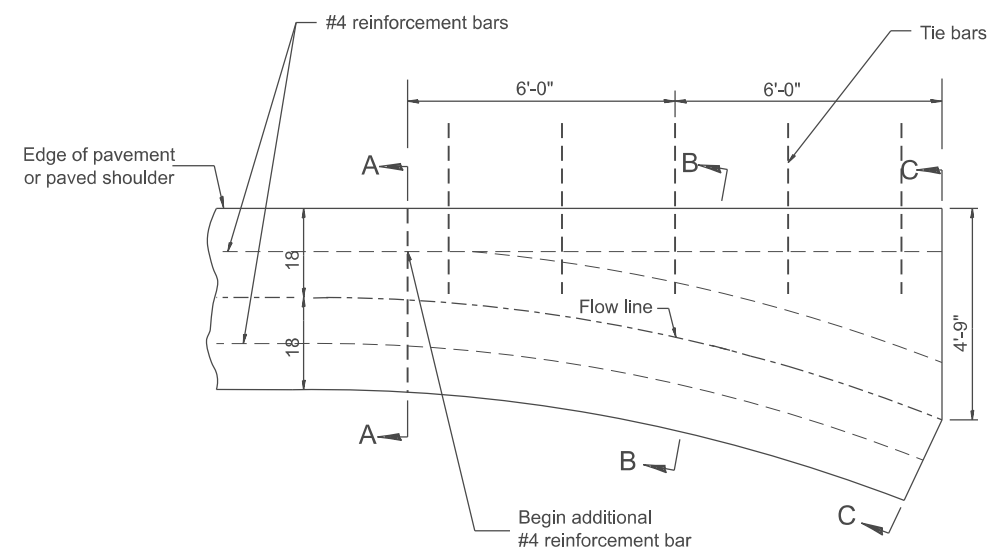
SHOULDER EDGE GUTTER

PAVEMENT EDGE GUTTER

CONCRETE GUTTER, TYPE A, (SPECIAL)

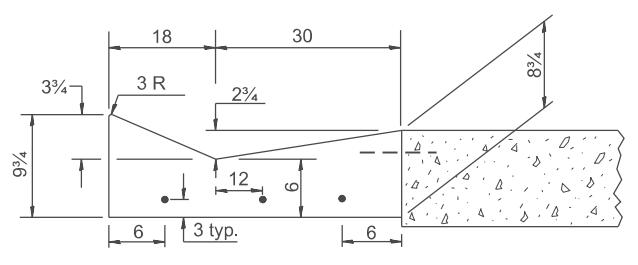


SECTION A-A

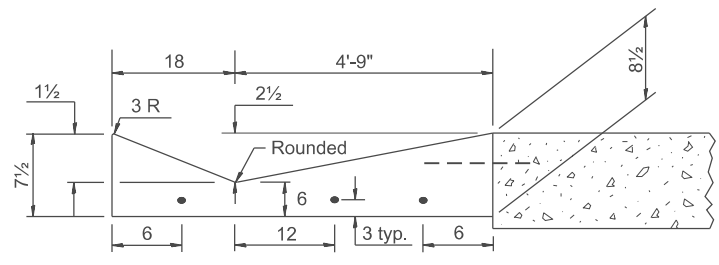


PLAN

QUANTITY
 Section C-C to A-A= 1.2 cu. yd. concrete.



SECTION B-B



SECTION C-C

INLET

GENERAL NOTES:

1. CONCRETE GUTTER, TYPE A, (SPECIAL) shall conform to the applicable portions of Section 606.
2. Tie bars shall be No. 6x24 (No. 19x600) at 36" centers unless otherwise shown.
3. Gutter, gutter inlets, gutter outlets, and gutter entrances shall be tied to rigid pavement in accordance with details shown on Standard 420001.
4. Joints shall be constructed in accordance with Article 606.06.
5. Welded wire fabric shall conform to Article 1006.10(c)(1), and shall not be less than 58 lbs/100 sq.ft.

All dimensions are in inches unless otherwise noted.

QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

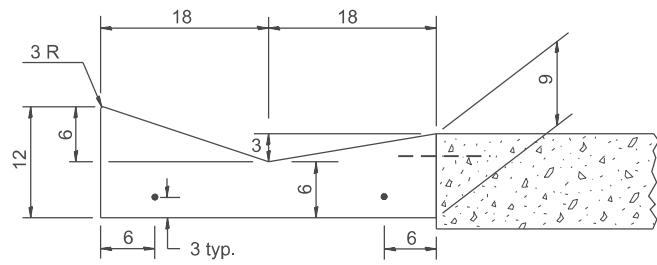
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

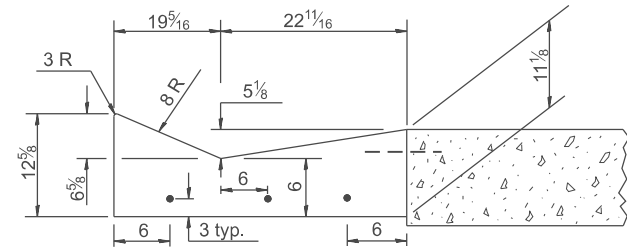
CONCRETE GUTTER, TYPE A, (SPECIAL)
(INLET, OUTLET & ENTRANCE)

SCALE: NOT TO SCALE SHEET 1 OF 3 SHEETS STA. TO STA.

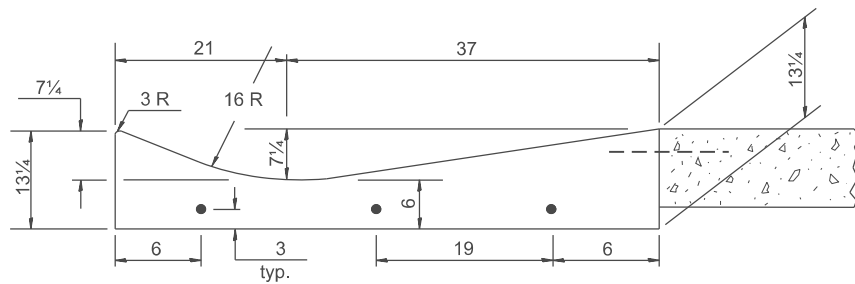
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 606101			
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



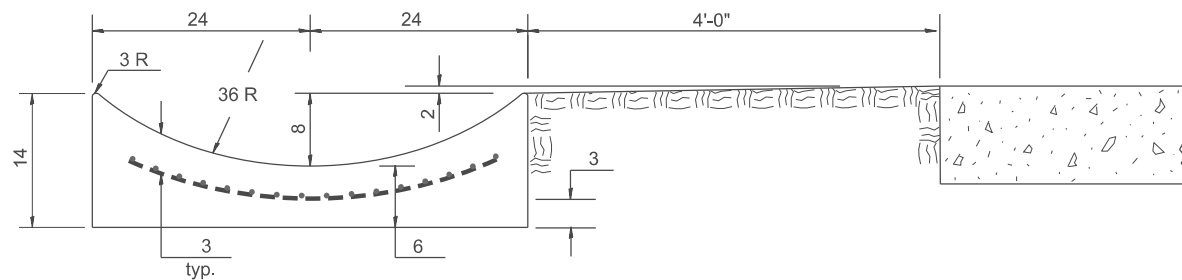
SECTION A-A



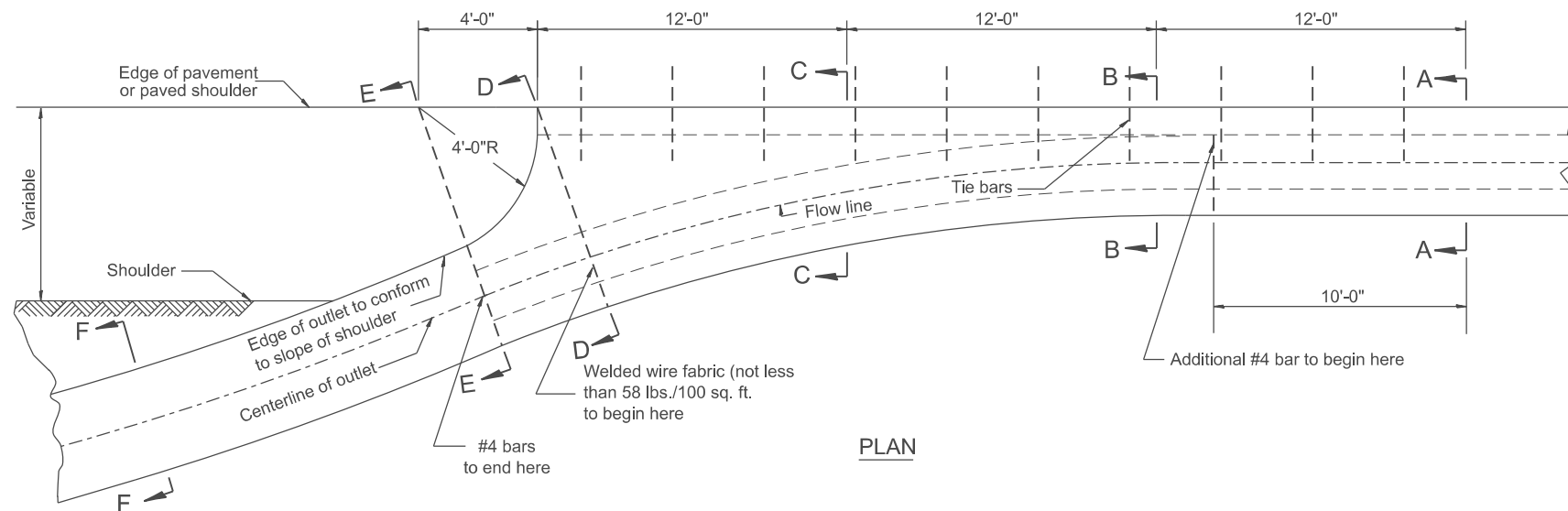
SECTION B-B



SECTION C-C



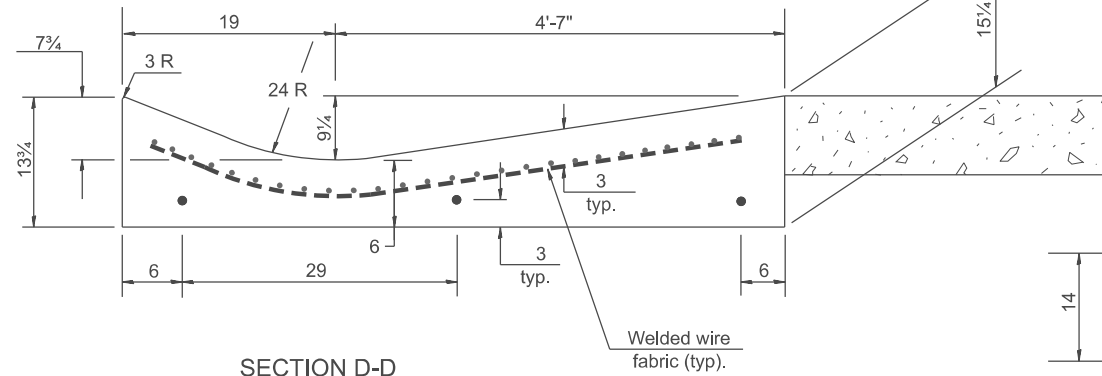
SECTION E-E



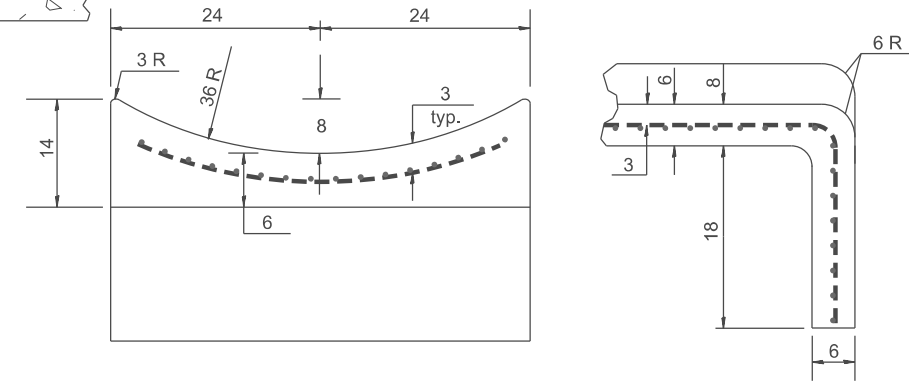
PLAN

QUANTITY
 Section A-A to E-E = 4.5 cu. yd. concrete.
 Section E-E to F-F = 0.10 cu. yd./ft. concrete.

If the average grade of pavement for the distance from section A-A to section D-D exceeds 2%, this distance shall be increased 6 ft. for each 1% increase in grade. A quantity adjustment is required.

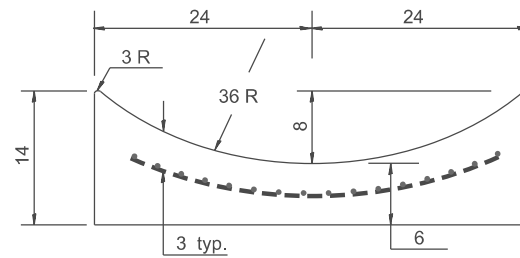


SECTION D-D



SECTIONS AT END OF OUTLET
(CURTAIN WALL)

QUANTITY
 Curtain Wall = 0.1 cu. yd. concrete.



SECTION F-F

OUTLET

QUANTITIES

CALC. BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CONCRETE GUTTER, TYPE A, (SPECIAL)
 (INLET, OUTLET & ENTRANCE)

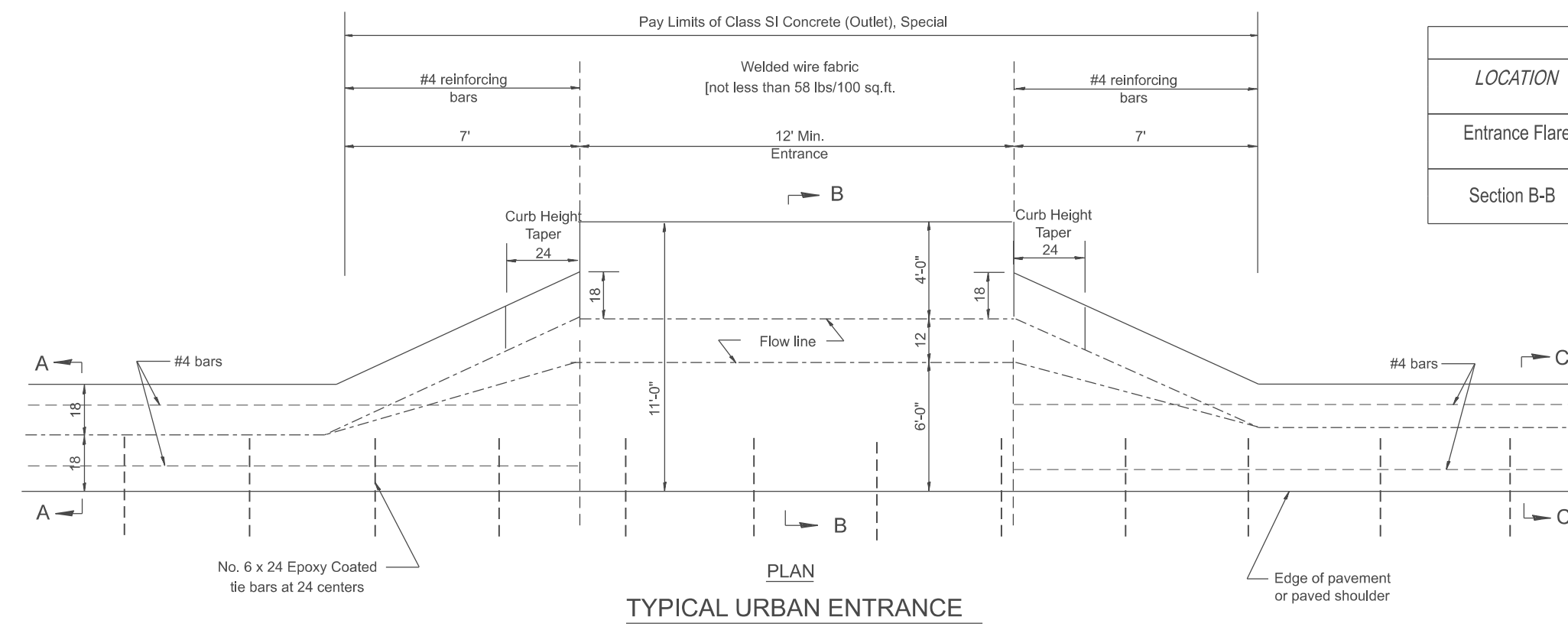
SCALE: NOT TO SCALE SHEET 2 OF 3 SHEETS STA. TO STA.

All dimensions are in inches unless otherwise noted.

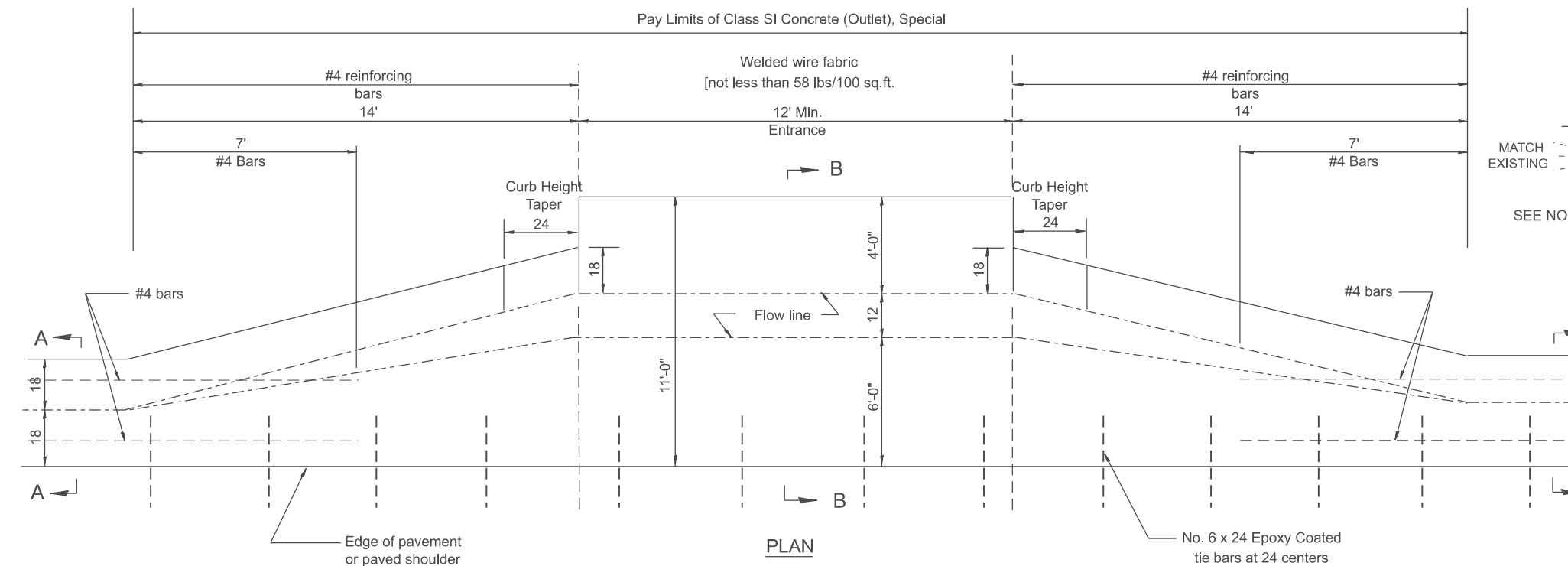
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 606101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chilidiot_Standards\Civil\DOT_Sheets.dwg

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT1011\Organization\ChilIDOT_Standards\Civil\IDOT_Sheets.cad



TYPICAL URBAN ENTRANCE



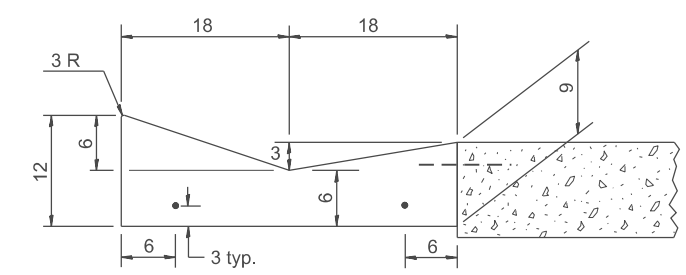
TYPICAL RURAL ENTRANCE

ENTRANCE

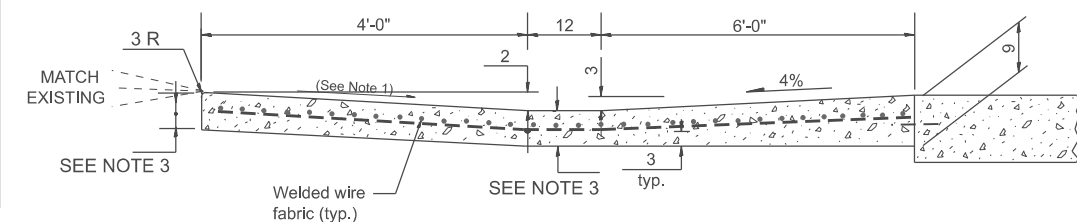
QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

QUANTITY CALCULATION			
LOCATION	LENGTH	NON-COMMERCIAL	COMMERCIAL ENTRANCE
Entrance Flare	7 Ft Urban 14 Ft Rural	0.15 Cu Yd / Ft	0.18 Cu Yd / Ft
Section B-B	See Plans	0.23 Cu Yd / Ft	0.28 Cu Yd / Ft



SECTION A-A & C-C



SECTION B-B

- GENERAL NOTES**
- Slope may be increased from 4% (min.) to 6% (max.) in order to match the existing.
 - The cross-slope is to be constructed as given in the plans from back turnout to where driveway matches existing.
 - For Non-Commercial Entrances the driveway thickness shall be 6. For Commercial Entrances the driveway thickness shall be 8.

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

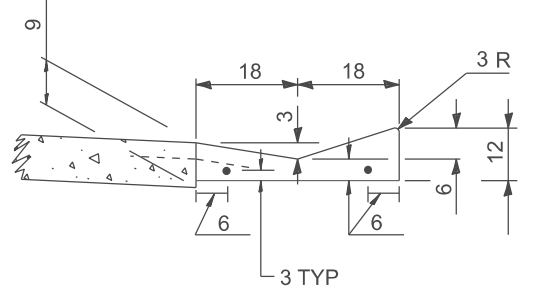
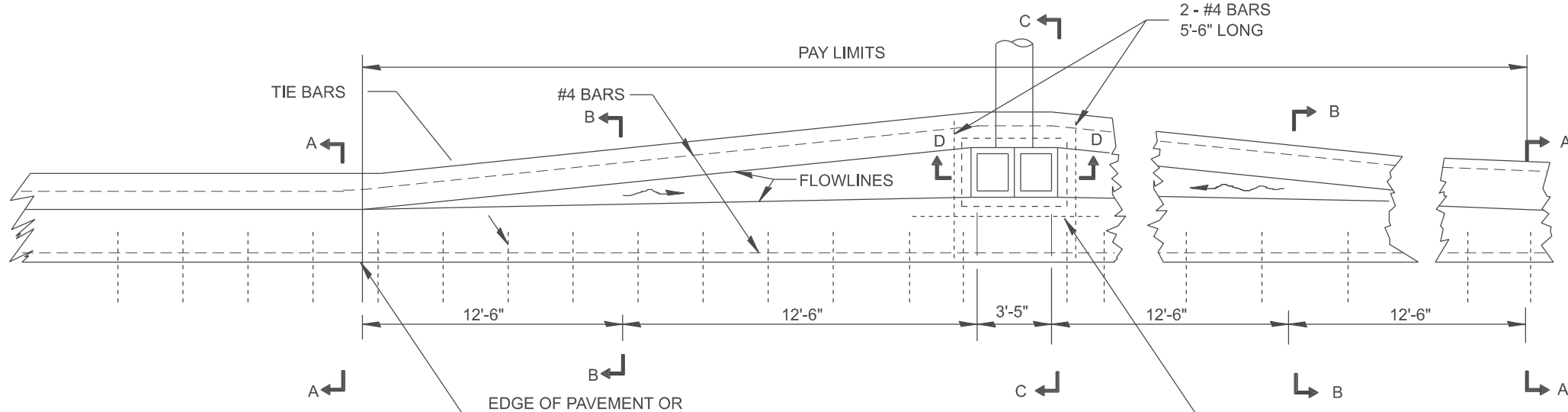
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONCRETE GUTTER, TYPE A, (SPECIAL)
(INLET, OUTLET & ENTRANCE)**

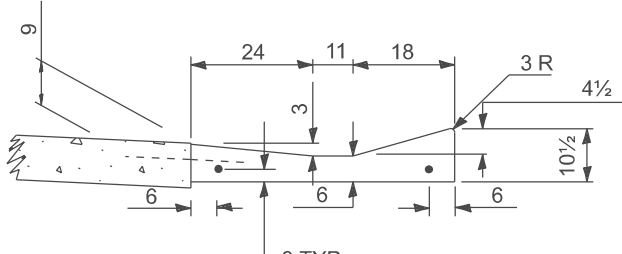
SCALE: NOT TO SCALE SHEET 3 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 606101			
ILLINOIS		FED. AID PROJECT		

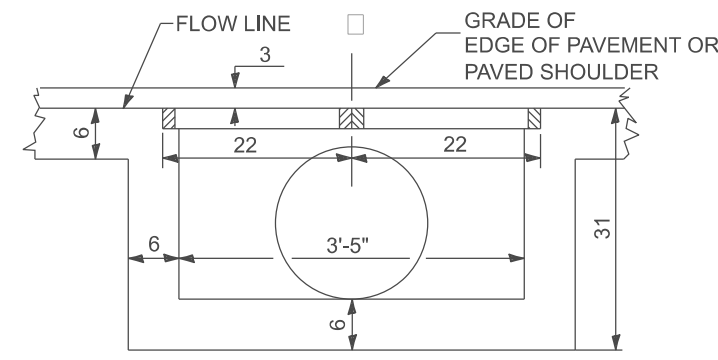
DESIGNER NOTES:
 MODEL: SHT_PLAN
 FILE NAME: C:\Benley\CONTRACT\PROJECT\FILE IS CHANGES\CONCRETE\CONCRETE\OUTLET\OUTLET SPECIAL
 1. INCLUDE STATE STANDARD 420001.



SECTION A-A

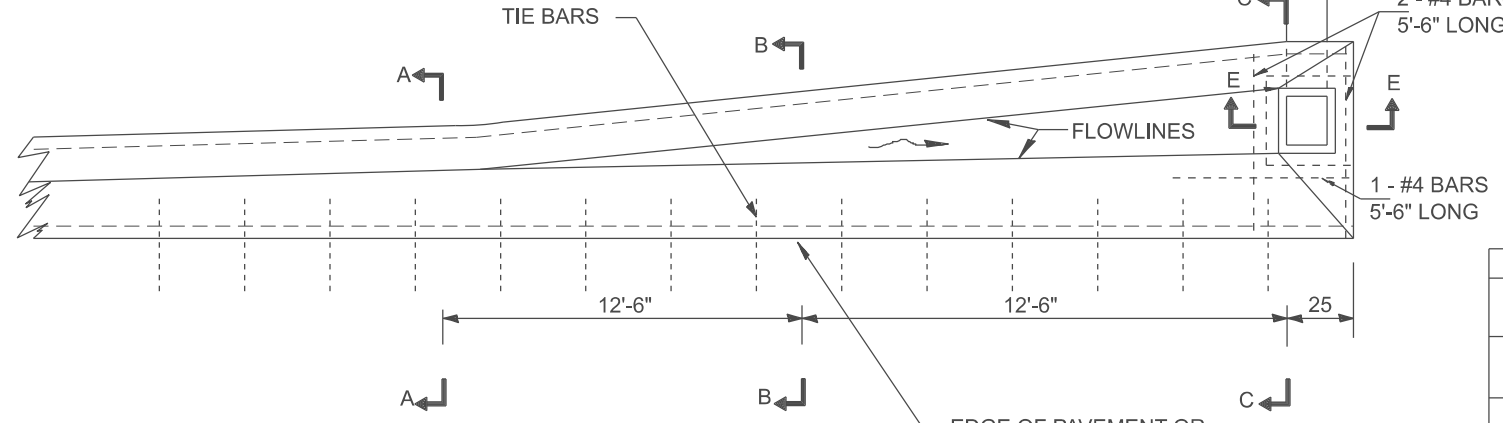


SECTION B-B

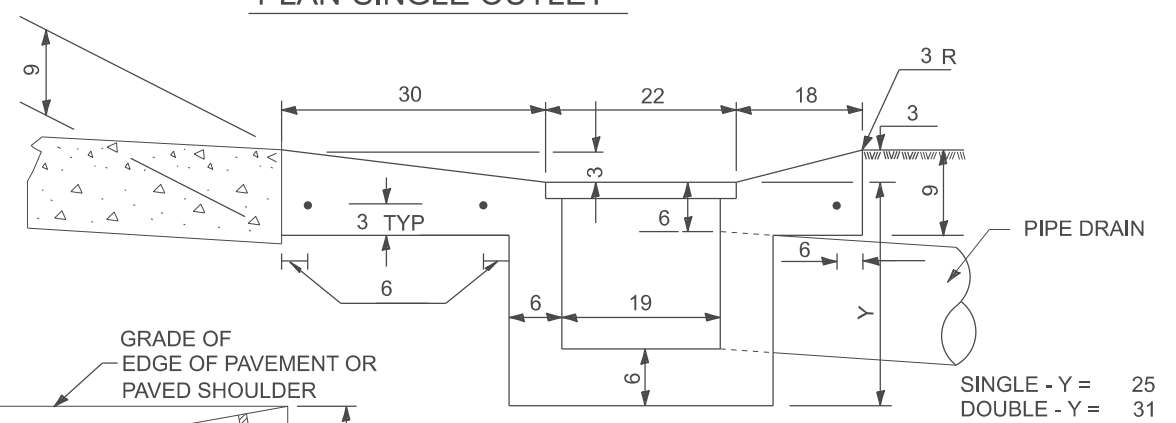


SECTION D-D
(DOUBLE INLET)

PLAN-DOUBLE OUTLET



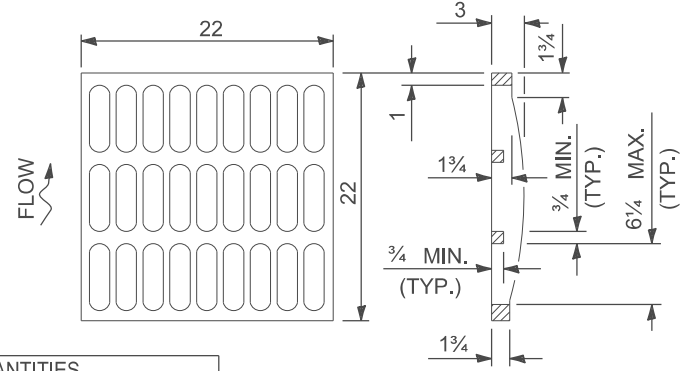
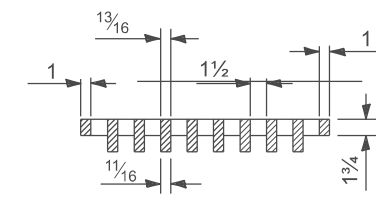
PLAN-SINGLE OUTLET



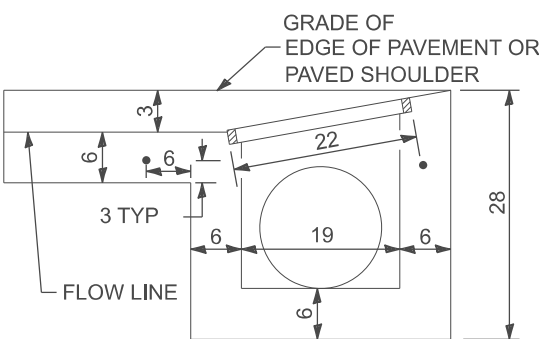
SECTION C-C

QUANTITIES

MATERIAL	SINGLE	DOUBLE
CONCRETE - (cu.yd.)	()	()
CAST IRON GRATE - Ea. 125 lbs.	1	2
PIPE DRAIN - DIA. (in.)	15	18



GRATE TYPE A



SECTION E-E

GENERAL NOTES

The gutter outlet shall be tied to the pavement in accordance with details for longitudinal construction joint shown on Standard 420001.

Tie bars shall be No. 6x24 at 36" centers unless otherwise shown.

If the average grade of pavement for the distance A-D exceeds 2 %, this distance shall be increased 6' for each 1 % increase in grade.

QUANTITIES

CALC. BY: _____ DATE: _____

CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

SINGLE - Y = 25
DOUBLE - Y = 31

All dimensions are in inches unless otherwise noted.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OUTLET TYPE 1 (SPECIAL) FOR
TYPE A GUTTER (SPECIAL)

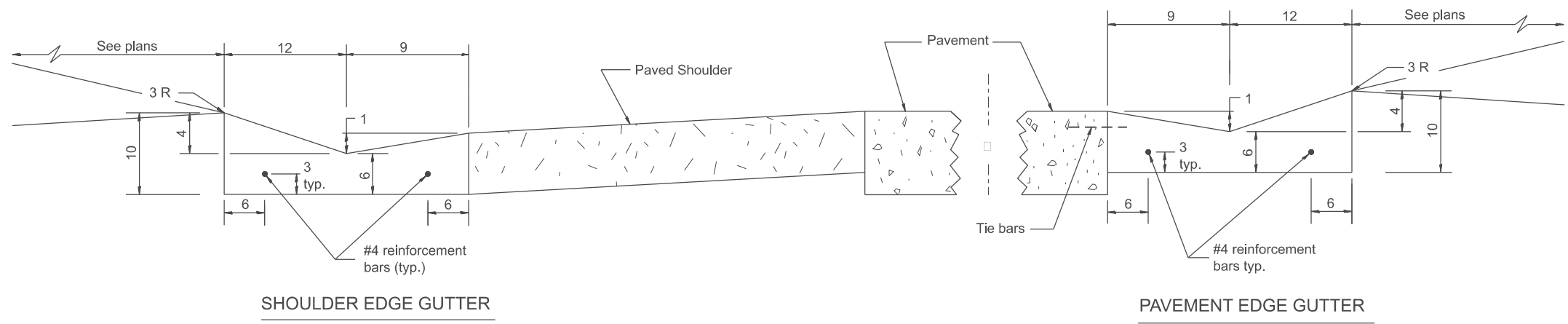
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

DISTRICT 4 DETAIL NO. 606106 CONTRACT NO.

ILLINOIS FED. AID PROJECT

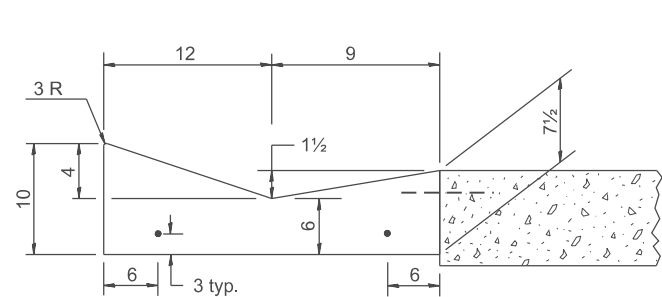
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -



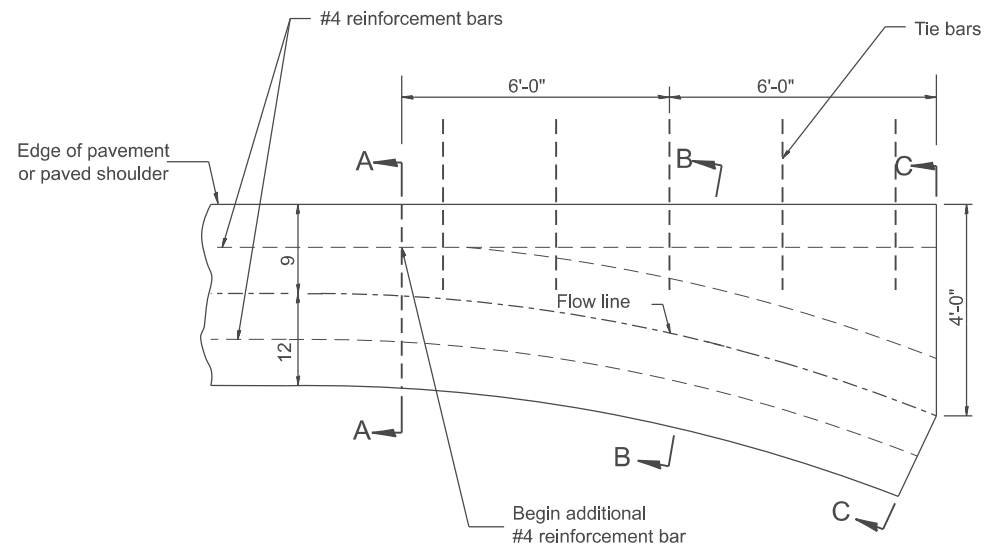
SHOULDER EDGE GUTTER

PAVEMENT EDGE GUTTER

CONCRETE GUTTER, TYPE B, (SPECIAL)



SECTION A-A

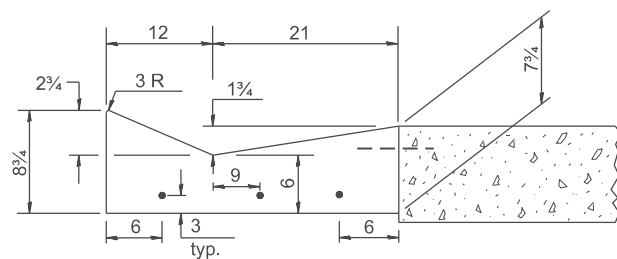


PLAN

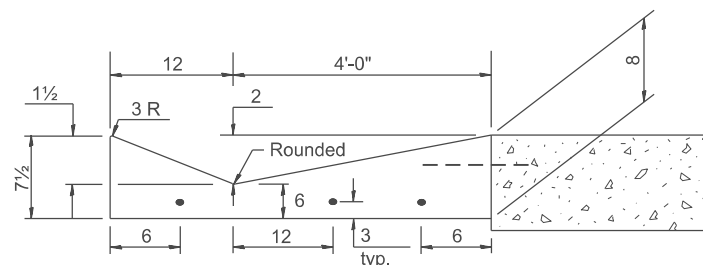
QUANTITY
Section C-C to A-A=
0.73 cu. yd. concrete.

GENERAL NOTES:

1. CONCRETE GUTTER, TYPE B (SPECIAL) shall conform to the applicable portions of Section 606.
2. Tie bars shall be No. 6x24 at 36" centers unless otherwise shown.
3. Gutter, gutter inlets, gutter outlets, and gutter entrances shall be tied to rigid pavement in accordance with details shown on Standard 420001.
4. Joints shall be constructed in accordance with Article 606.06.
5. Welded wire fabric shall conform to Article 1006.10(c)(1), and shall not be less than 58 lbs/100 sq.ft.



SECTION B-B



SECTION C-C

INLET

QUANTITIES

CALC. BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

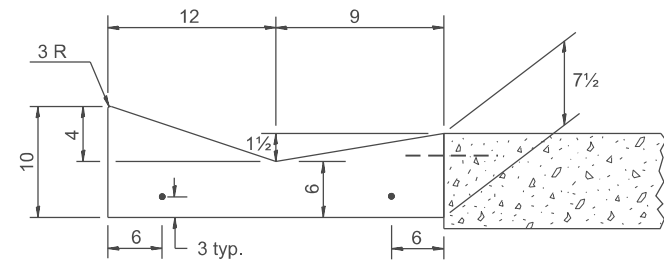
**CONCRETE GUTTER, TYPE B, (SPECIAL)
(INLET, OUTLET & ENTRANCE)**

SCALE: NOT TO SCALE SHEET 1 OF 3 SHEETS STA. TO STA.

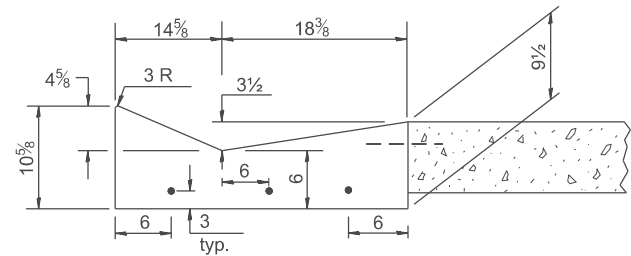
All dimensions are in inches unless otherwise noted.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 606201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

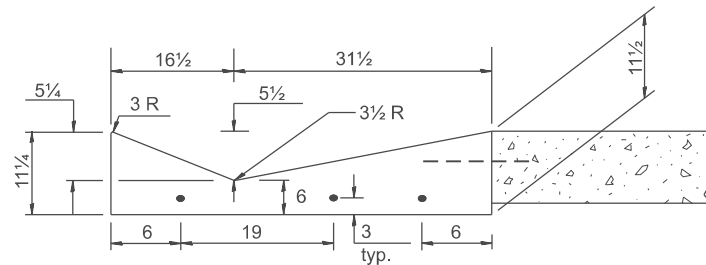
DESIGNER NOTES:
 1. INCLUDE STATE std. 420001.
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg



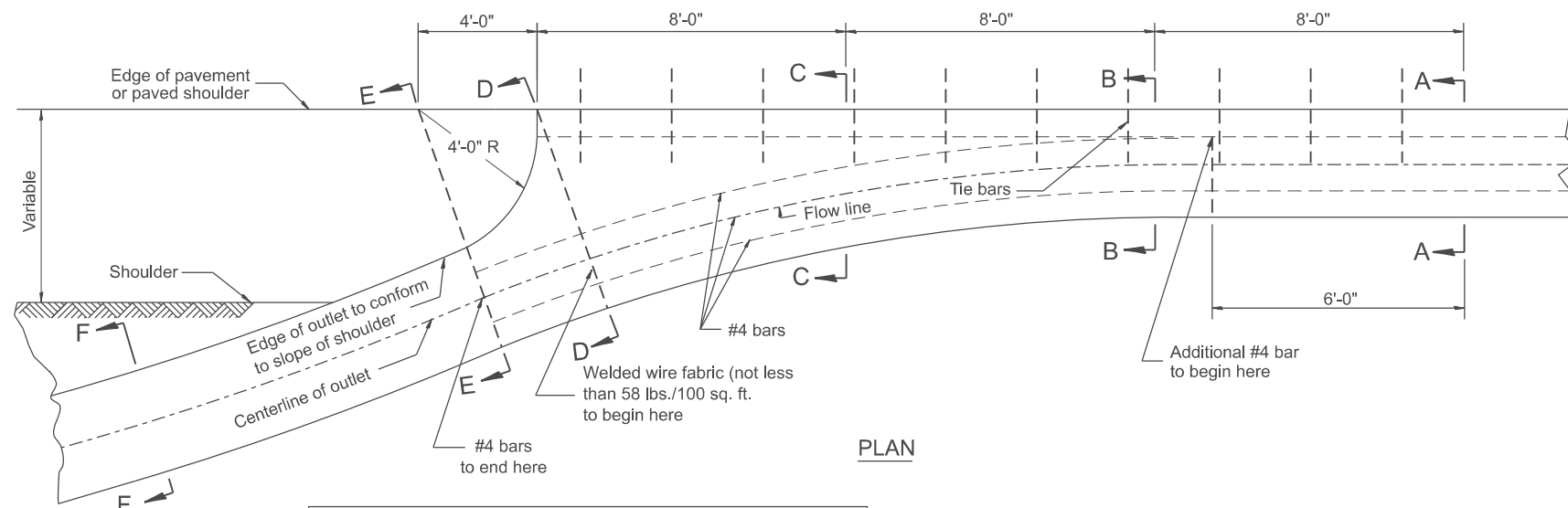
SECTION A-A



SECTION B-B



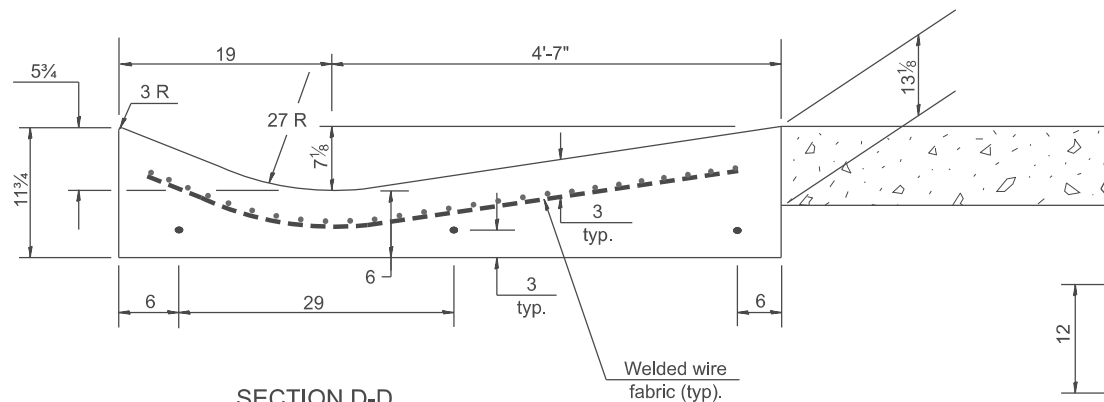
SECTION C-C



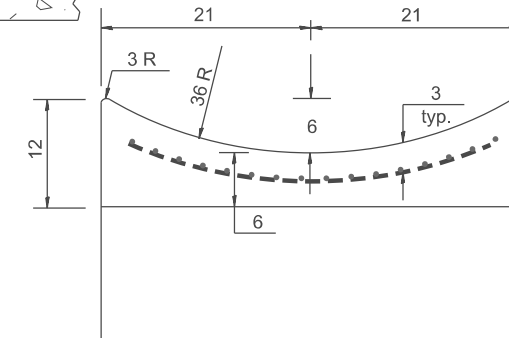
PLAN

QUANTITY
 Section A-A to E-E = 2.81 cu. yd. concrete.
 Section E-E to F-F = 0.09 cu. yd./ft. concrete.

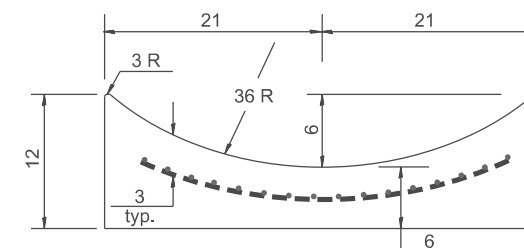
If the average grade of pavement for the distance from section A-A to section D-D exceeds 2%, this distance shall be increased 6 ft. (1.8m) for each 1% increase in grade. A quantity adjustment is required.



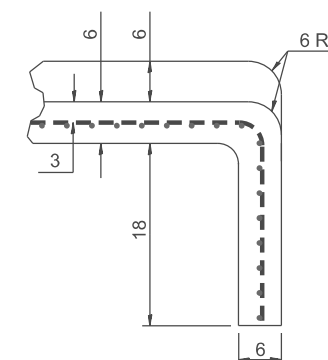
SECTION D-D



SECTION E-E



SECTION F-F



SECTIONS AT END OF OUTLET
(CURTAIN WALL)

QUANTITY
 Curtain Wall =
 0.1 cu. yd. concrete.

OUTLET

QUANTITIES

CALC. BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON
 FILE AT THE DISTRICT 4 OFFICE;
 BUREAU OF PROJECT IMPLEMENTATION;
 DOCUMENTATION SECTION

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chilidiot_Standards\Cat\IDOT_Sheets.cat

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

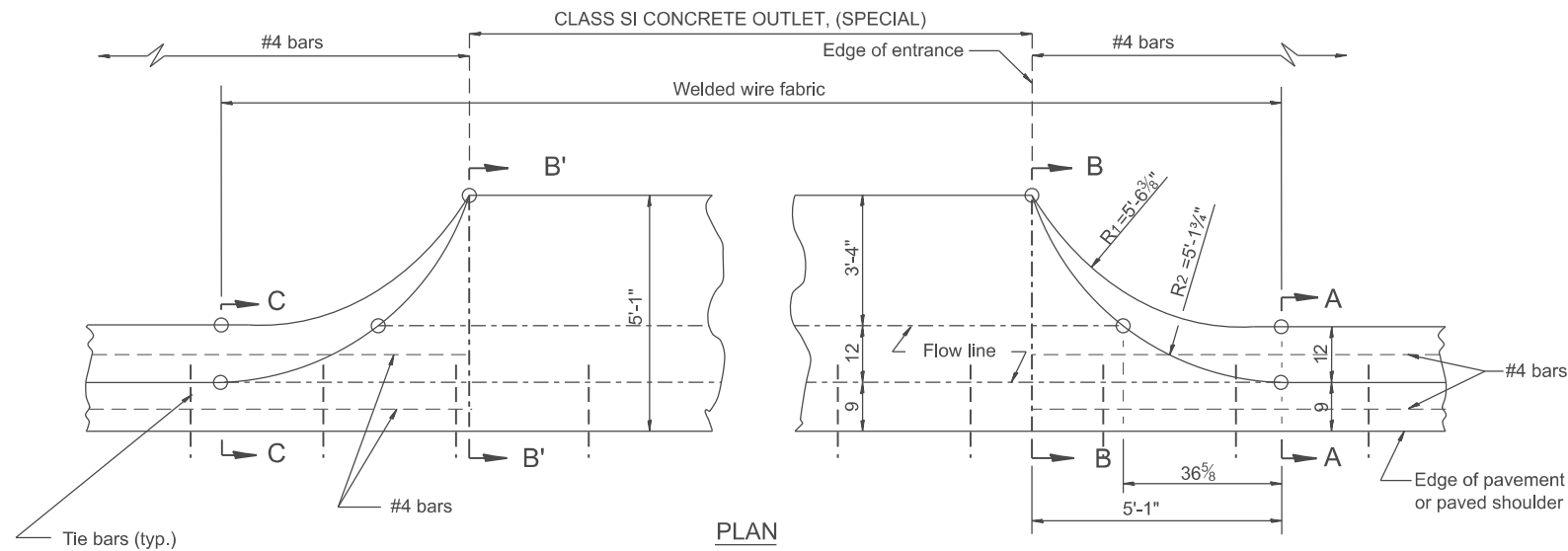
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

**CONCRETE GUTTER, TYPE B, (SPECIAL)
 (INLET, OUTLET & ENTRANCE)**

SCALE: NOT TO SCALE SHEET 2 OF 3 SHEETS STA. TO STA.

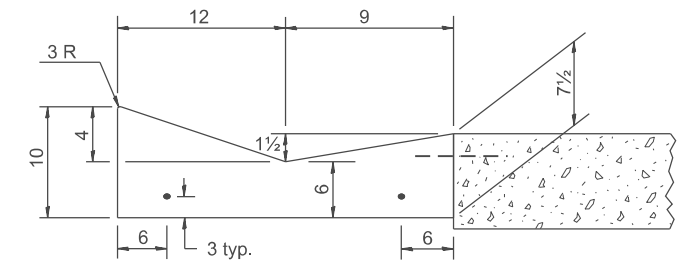
All dimensions are in inches unless otherwise noted.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 606201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

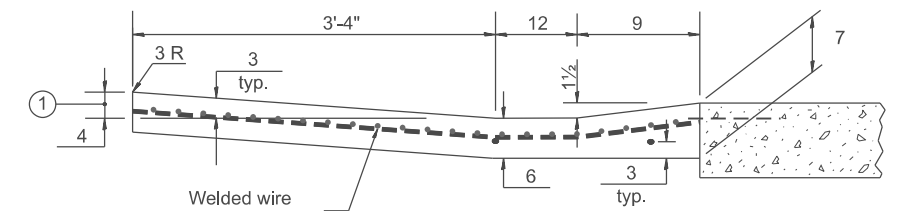


TYPICAL URBAN ENTRANCE

QUANTITY URBAN ENTRANCE
 Section B'-B' to B-B=
 0.1 cu. yd./ft.
 Section C-C to B'-B' + B-B to A-A=
 0.69 cu. yd.

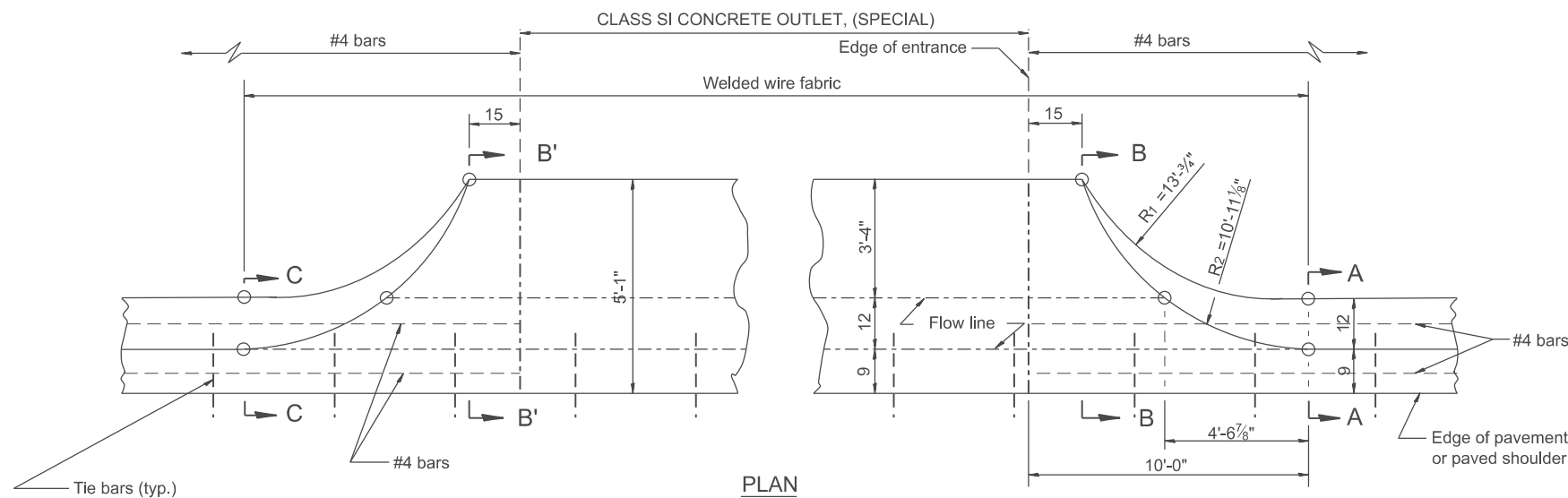


SECTION A-A & C-C



SECTION B-B & B'-B'

SPECIAL NOTES:
 ① 4 is the normal dimension. If specified in the plans, the following shall be used for improved entrance match-up: Minimum - 2 1/2 Maximum - 5



TYPICAL RURAL ENTRANCE

QUANTITY RURAL ENTRANCE
 Section B'-B' to B-B=
 0.1 cu. yd./ft.
 Section C-C to B'-B' + B-B to A-A=
 1.19 cu. yd.

QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE GUTTER, TYPE B, (SPECIAL)
(INLET, OUTLET & ENTRANCE)

SCALE: NOT TO SCALE SHEET 3 OF 3 SHEETS STA. TO STA.

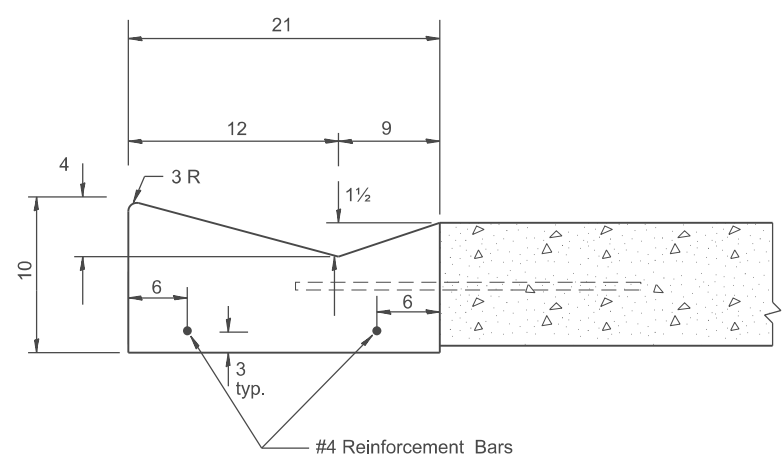
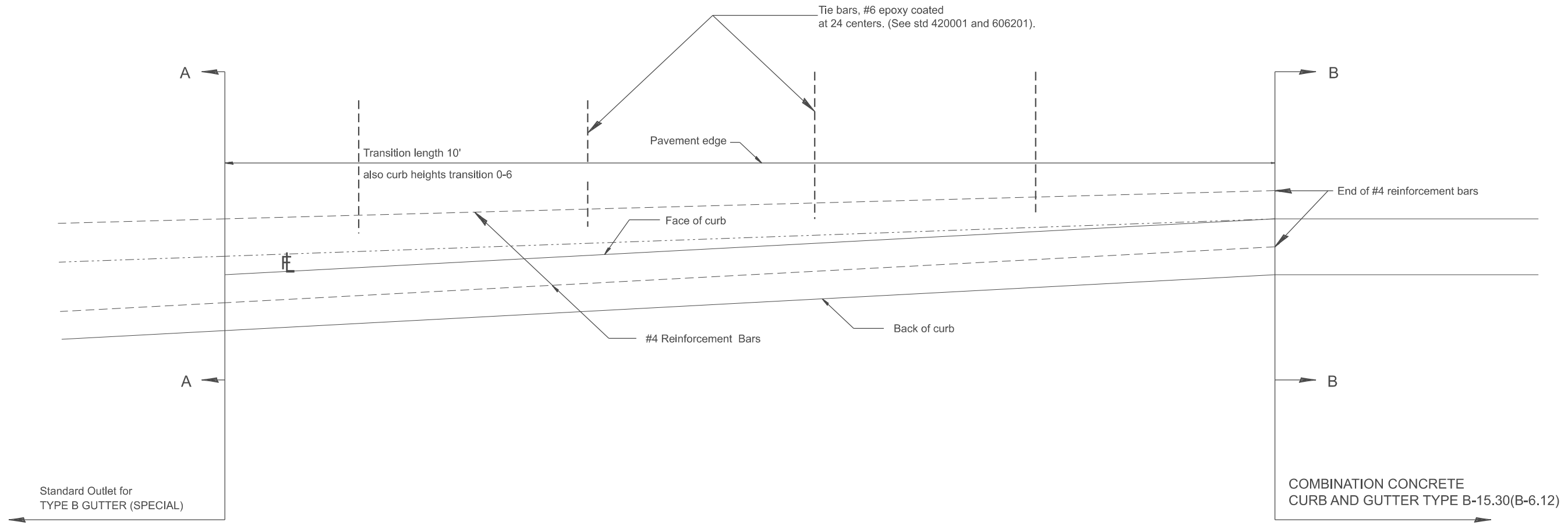
All dimensions are in inches unless otherwise noted.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 606201			
CONTRACT NO.		ILLINOIS FED. AID PROJECT		

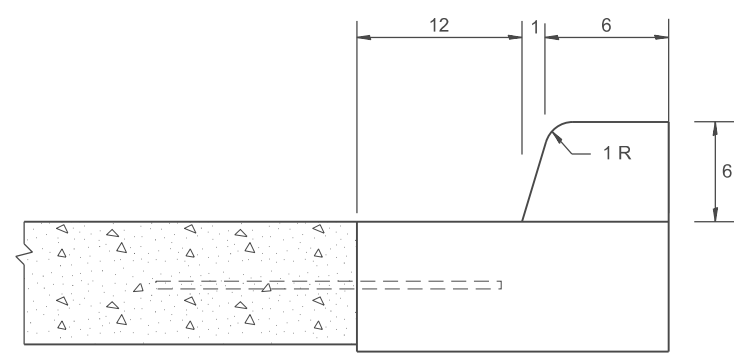
MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT1011\Organization\Chilidiot_Standards\Civil\DOT_Sheets.cad

Designer Notes: 1. Use in conjunction with CAD DRAWING for Standard outlet for CONCRETE GUTTER, TYPE B, (SPECIAL)
 2. Include std 420001.
 3. Pay item for Transitions is 60603200, CONCRETE GUTTER TRANSITION (SPECIAL)

MODEL: D4-606206
 FILE NAME: c:\pwworkspace\illinois.gov\thomas.cox\110823\11082306.dwg



SECTION A - A



SECTION B - B

GENERAL NOTES:

1. Tie bars shall be constructed in accordance with details for BULKHEAD LONGITUDINAL CONSTRUCTION JOINT shown on Standard 420001.
2. Adjacent to sound existing p.c.c. pavement, tie bars shall be installed in drilled holes in accordance with article 420.10(b).
3. Construction and expansion joints shall be installed in prolongation with joints in the pavement. Joint shall be constructed in accordance with the applicable portion of Art. 606.06 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

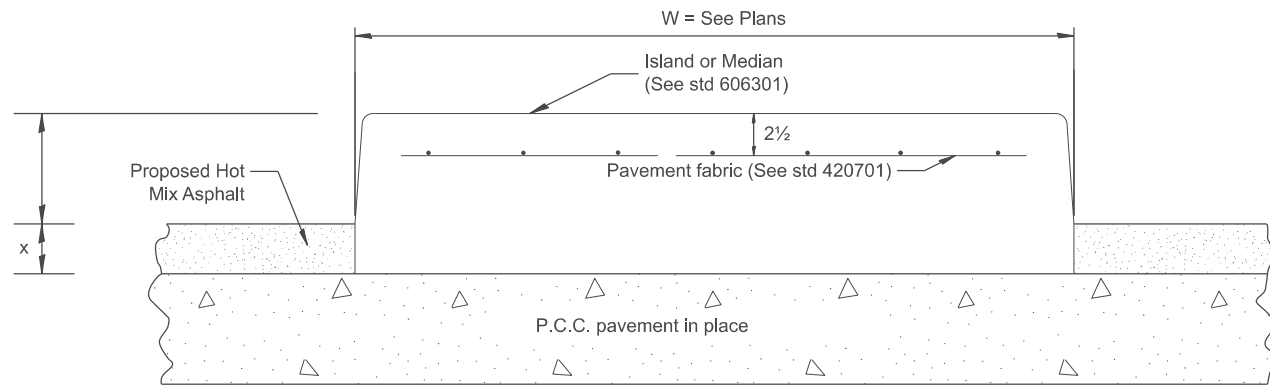
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRANSITION FROM CONCRETE CURB AND GUTTER TYPE B-6.12
 TO OUTLET FOR TYPE B GUTTER (SPECIAL)

SCALE: NOT TO SCALE SHEET 000 OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 606206		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

H: See std 606301 and plans



P.C.C. PAVEMENT

LEGEND

X = thickness of proposed overlay (see plans)

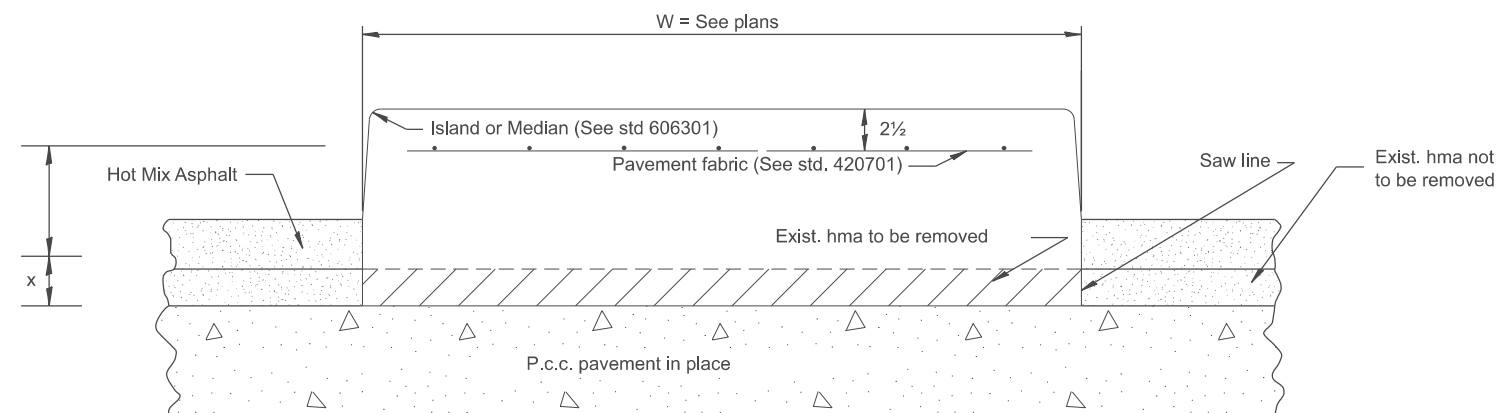
H = height of island or median (see std 606301 and plans)

W = width of island or median (see plans)

GENERAL NOTES:

1. This work shall consist of constructing P.C. concrete Islands and medians of variable width as shown on the plans and in accordance to the applicable portions of section 606 of the Standard Specifications and Standard 606301.

H: See std 606301 and plans



PREVIOUSLY RESURFACED P.C.C. PAVEMENT

DESIGNER NOTES: 1. INCLUDE STD 420701 AND 606301
 2. INCLUDE DISTRICT SPECIAL PROVISION
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chil\IDOT_Standards\CallIDOT_Sheets.ctb

All dimensions are in inches unless otherwise noted.

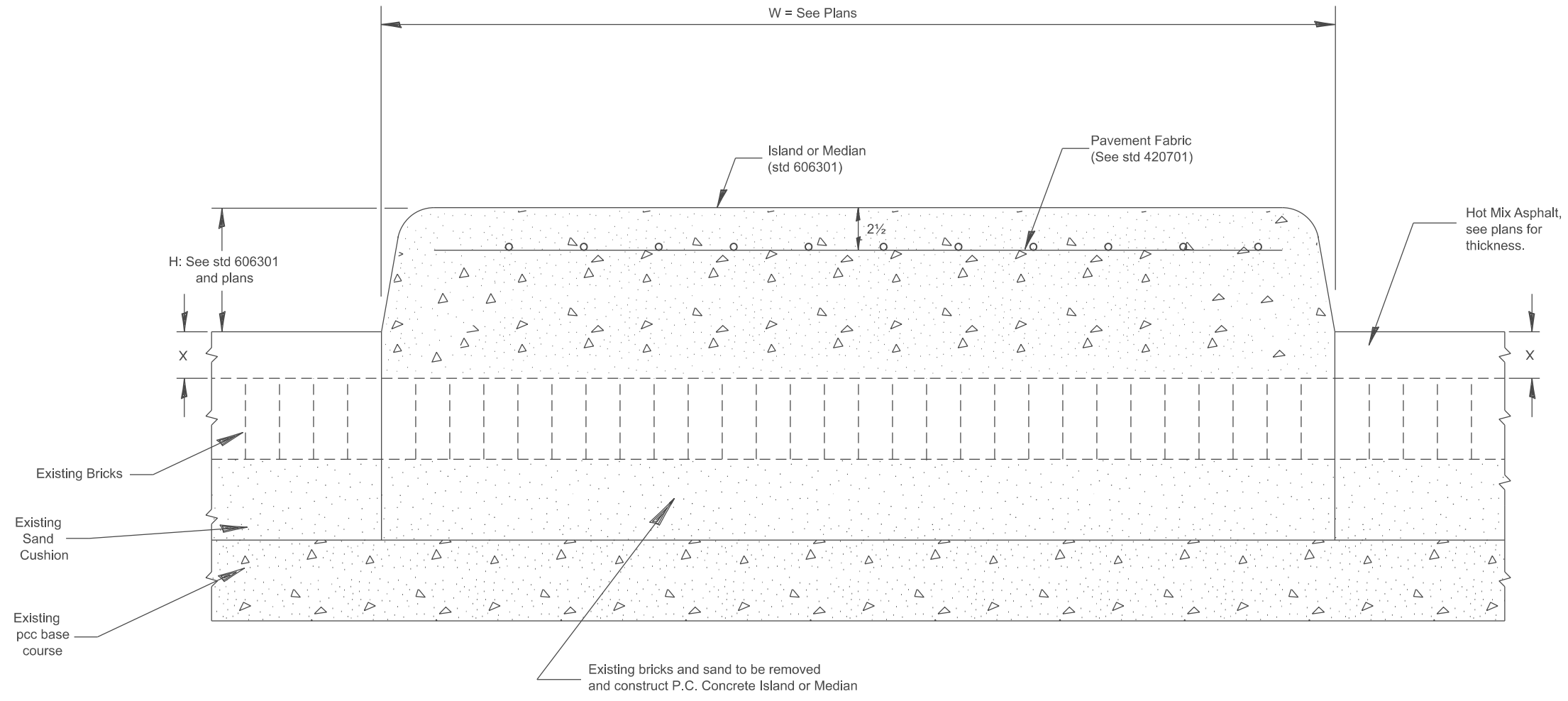
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**P.C. CONCRETE ISLANDS AND MEDIANS
(CONSTRUCTED ON TOP OF EXISTING PAVEMENT)**

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 606301		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		



BRICK PAVEMENT

LEGEND

- X = thickness of proposed overlay (see plans)
- H = height of island or median (see std 606301 and plans)
- W = width of island or median (see plans)

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

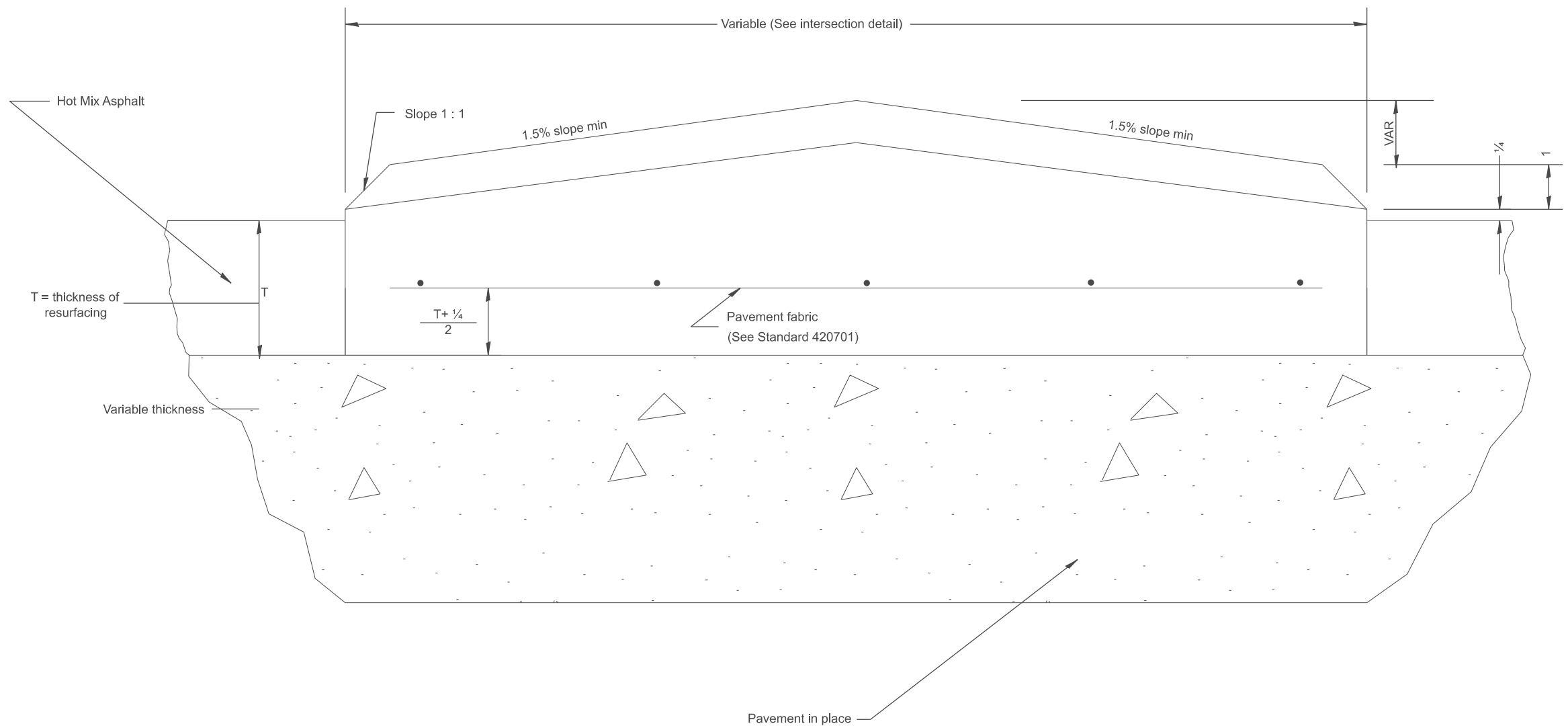
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**P.C. CONCRETE ISLANDS AND MEDIANS
(CONSTRUCTED ON TOP OF EXISTING PAVEMENT)**

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 606301		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES: 1. INCLUDE std 606306
 2. INCLUDE DISTRICT SPECIAL PROVISION
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT10110\Organization\Chilidiot_Sheets.dwg



GENERAL NOTES:

1. This work shall consist of constructing a concrete median of variable width as shown on the plans and in accordance with the applicable portions of Section 606 of the Standard Specifications and Standard no. 606306.
2. See plans for thickness of proposed hma overlay.
3. See Standard 420001 for joints.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CORRUGATED MEDIAN (MODIFIED)

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

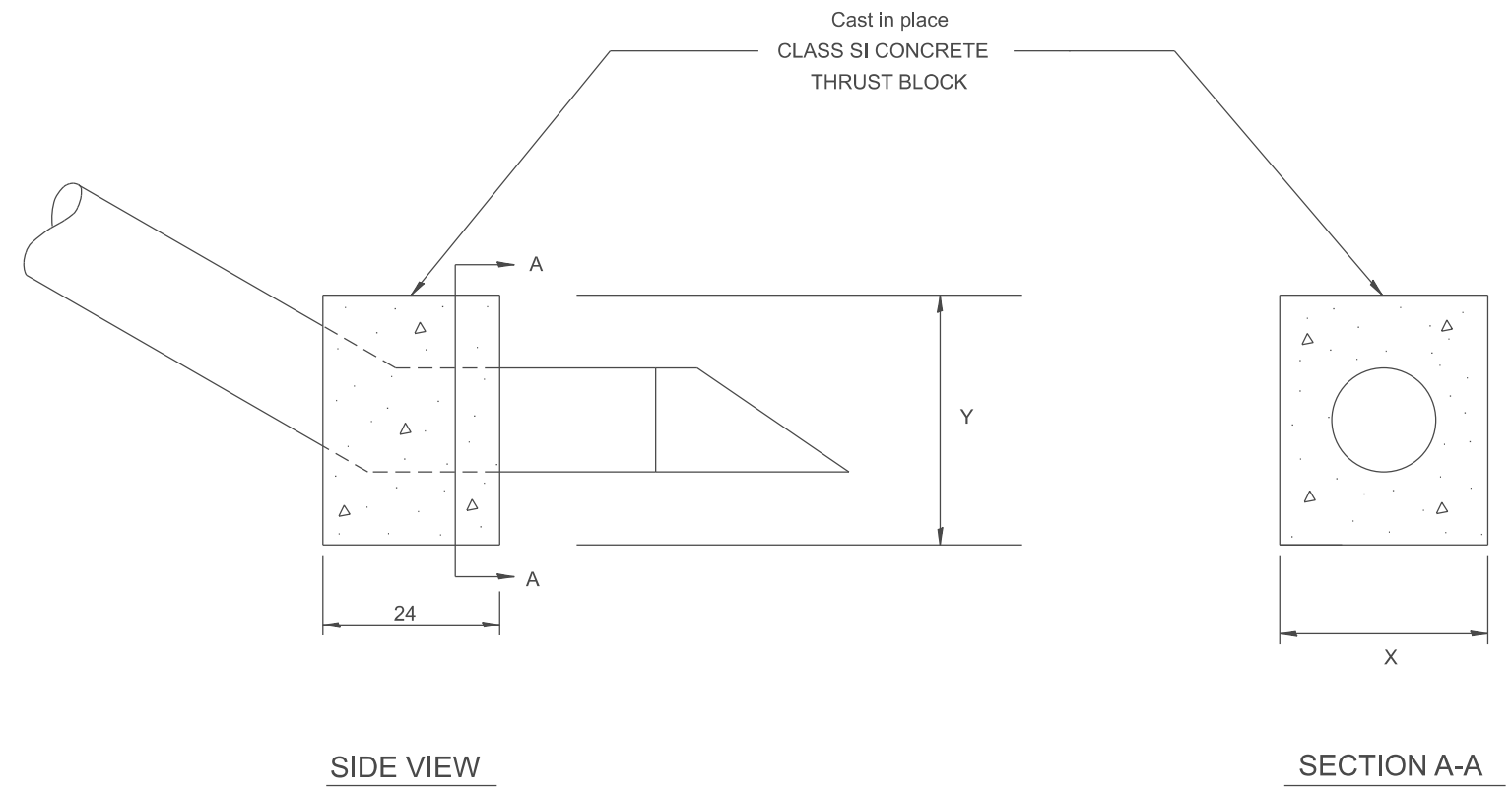
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 606306		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:
 1. A THRUST BLOCK SHALL BE INSTALLED WHEN THE DIFFERENCE BETWEEN THE UPSTREAM AND DOWNSTREAM INVERT ELEVATIONS EXCEEDS 36 AND GRADE EXCEEDS 10%.
 2. USE WITH DISTRICT CADD STANDARDS: "DITCH CHECK, IF NEEDED. DO NOT USE WITH DISTRICT CADD STANDARDS: "SLOPE DRAIN DETAILS FOR BURIED PIPE" "SLOPE DRAIN DETAILS FOR EXPOSED PIPE".

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chillicothe\Standards\CallIDOT_Sheets.dwg

CONCRETE THRUST BLOCK BILL OF MATERIALS

PIPE SIZE	X	Y	CLASS SI CONCRETE cu. yd.
12	24	24	0.2
15	27	27	0.3
18	30	30	0.3
24	36	36	0.4
30	3'-6"	3'-6"	0.8



The contract unit price each for CONCRETE THRUST BLOCK shall include the cost of excavation, CLASS SI CONCRETE and compacted backfill.

QUANTITIES

CALC. BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas DESIGNED - DRAWN - CHECKED - PLOT DATE = 12/7/2022	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONCRETE THRUST BLOCKS SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.	F.A. RTE. SECTION DISTRICT 4 DETAIL NO. 609001 ILLINOIS FED. AID PROJECT	COUNTY CONTRACT NO.	TOTAL SHEETS SHEET NO.
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DESIGNER NOTES: USE THIS IN CONJUNCTION WITH SPECIAL PROVISION FOR "STORM SEWERS, PROTECTED."

PIPE DRAINS-LAST 10' OF EXISTING TILE OUTLET INTO ROADWAY DITCH.

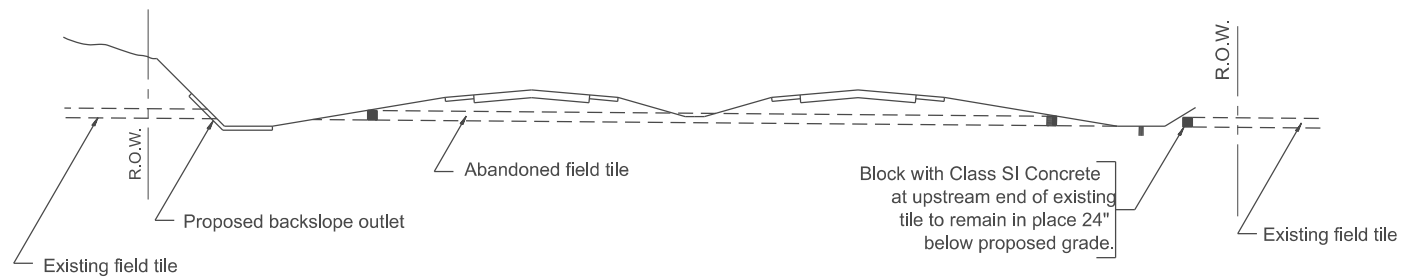
PIPE DRAIN HEADWALLS- C.I.P. WITH CLASS SI CONCRETE (SECTION 503)

STORM SEWERS PROTECTED, CLASS A- TILE WITHIN R.O.W., CROSSING UNDER ROADWAY AND UNDER DITCH WHERE PROTECTION IS NECESSARY.

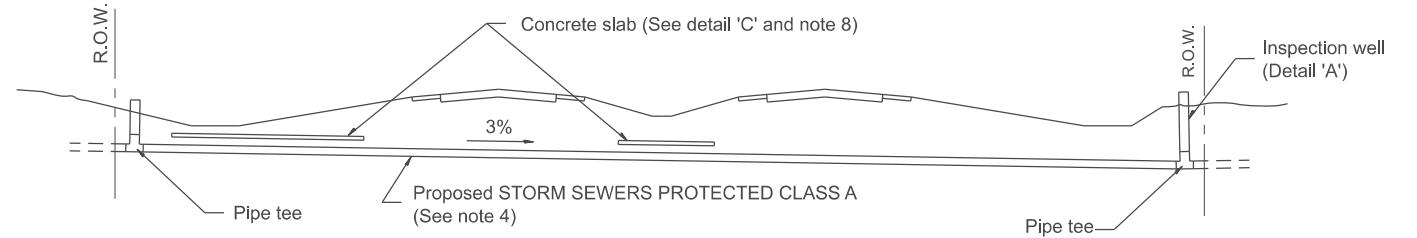
STORM SEWERS, SPECIAL- TILE WITHIN R.O.W., THAT DOESN'T REQUIRE PROTECTION AND DOESN'T OUTLET INTO DITCH.

MODEL: SHT 503 STORM SEWERS, SPECIAL HEADWALLS, ACCORDING TO SECTION 601.05 WHICH ALLOWS C.I.P. OR PRECAST- PAID FOR AS CONCRETE HEADWALLS FOR PIPE DRAINS (EACH)

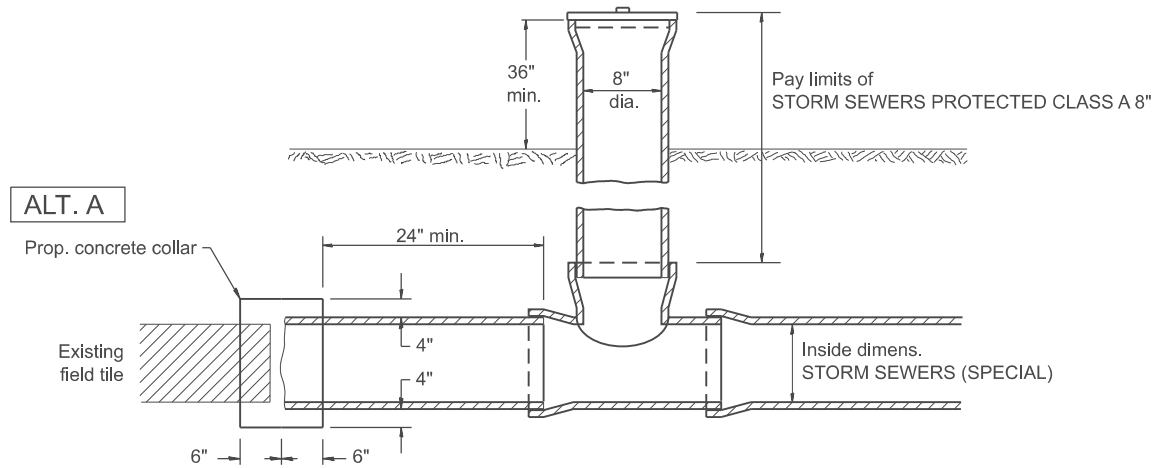
FILE NAME: C:\bentley\project\1010\pdrain\sh503\StormSewerHeadwall.dwg



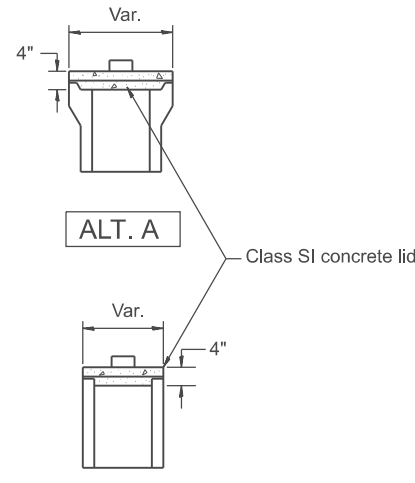
METHOD 'A'
Storm sewer flowline at 6" or more above proposed ditch flowline



METHOD 'B'
Storm sewers below proposed ditch flowline



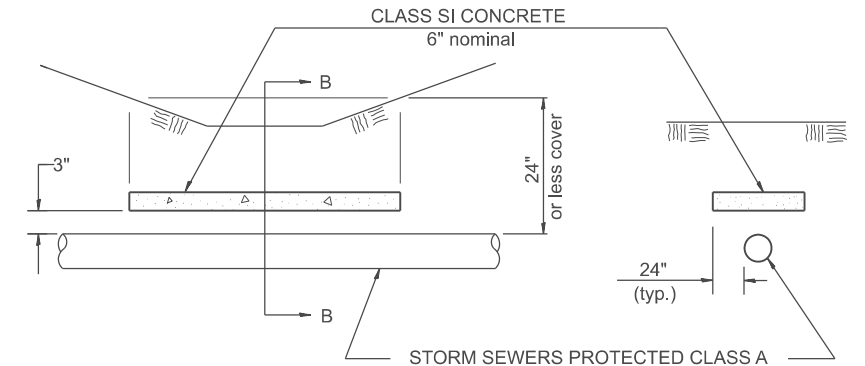
ALT. A



ALT. A

ALT. B

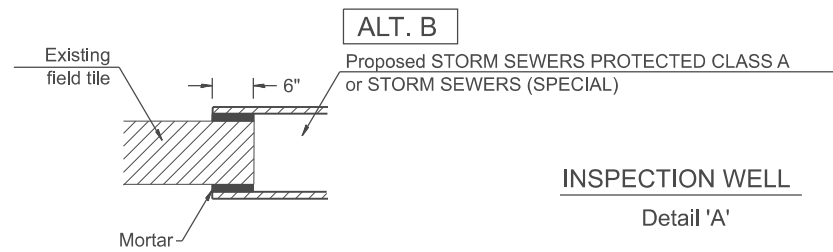
INSPECTION WELL CONCRETE LID
Detail 'B'



ELEVATION

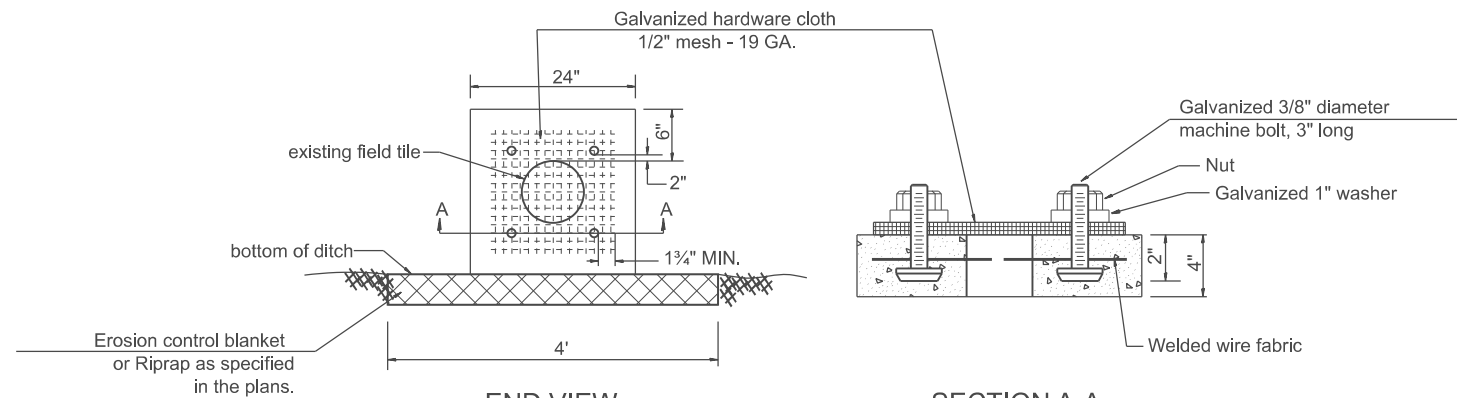
SECTION B-B

CONCRETE SLAB
Detail 'C'



ALT. B

INSPECTION WELL
Detail 'A'



END VIEW

SECTION A-A

CAST-IN-PLACE CONCRETE HEADWALL

Detail 'D'
Use when outletting through a
sloped wall or revetment mat

GENERAL NOTES:

- Method 'A' is the preferred method of installation and should be used to minimize non-essential pipe crossing under pavement. The engineer should consider adjusting ditch elevations to accommodate the field tile outletting 6" above the ditch flowline.
- Method 'B' shall be used only if ditch elevations cannot be adjusted to accommodate the use of method 'A'.
- Abandoned field tiles shall be plugged with Class SI concrete, as directed by the engineer, included in the cost of STORM SEWERS PROTECTED CLASS A or STORM SEWERS (SPECIAL).
- Non-circular field tile shall be replaced with STORM SEWERS PROTECTED CLASS A or STORM SEWERS (SPECIAL) of at least the same cross sectional area as the upstream field tile. All existing field tile shall be replaced with storm sewer of the type required for the minimum depth of cover.
- STORM SEWERS PROTECTED CLASS A 8" shall be used for the inspection well and riser regardless of existing tile size.
- Inspection wells shall be placed approximately 24" inside of both R.O.W. lines at the locations shown on the plans unless arrangements are made by the land acquisition unit to have the wells placed on the property owners side of the R.O.W.
- The inspection well concrete lid shall be constructed of P.C.C. and provided with a handle shaped from a #4 reinforcing bar. This work shall be included in the cost of STORM SEWERS PROTECTED CLASS A or STORM SEWERS (SPECIAL).
- The 6" concrete slab shall be poured the full length of the trench at the ditch flowline locations within the right of way with less than 24" of earth cover. Paid separately as CLASS SI CONCRETE.
- The existing field tiles shall be connected to a STORM SEWERS PROTECTED CLASS A or STORM SEWERS (SPECIAL) by a concrete collar or mortared connection as shown in Detail 'A'.
- All collars, tees, elbows, lids, fittings and mortar necessary to install the storm sewer of the size specified, shall be included in the cost of either STORM SEWERS PROTECTED CLASS A or STORM SEWERS (SPECIAL).
- Applicable portions of the Special Provision for STORM SEWERS PROTECTED CLASS A apply.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

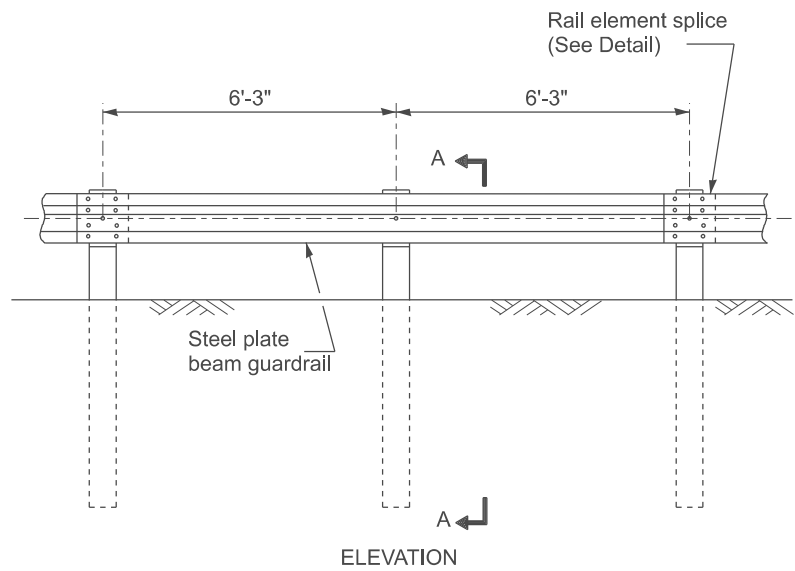
STORM SEWERS PROTECTED CLASS A
OR
STORM SEWERS (SPECIAL)

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

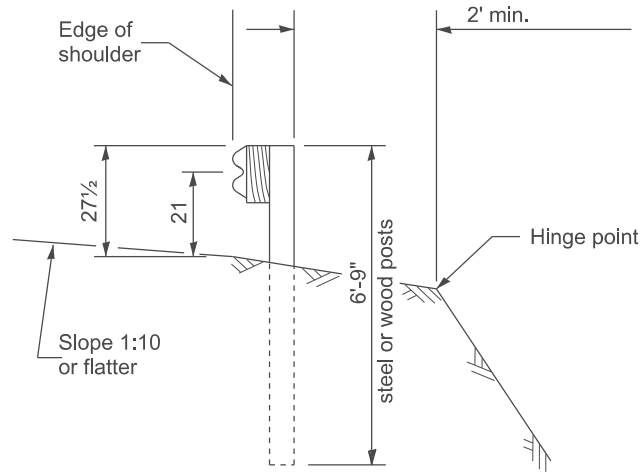
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 611001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTE: Use this CADD Standard when removing and re-erecting existing non-MGS guardrail that was originally installed prior to January 1, 2007 or to replace existing rail to match existing non-MGS rail. Note this is removing and re-erecting so the 27" height is maintained. If existing rail is maintained, use the State Standard.

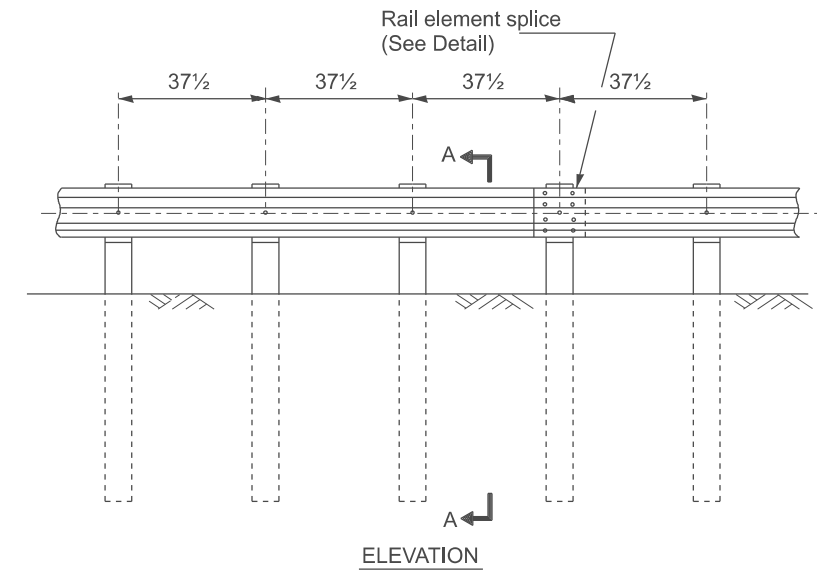
MODEL: D4-630011-01
 FILE NAME: c3pik_work\project\630011\630011.dwg



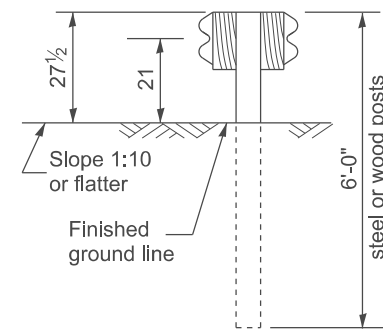
TYPE A
 6'-3" Typical post spacing



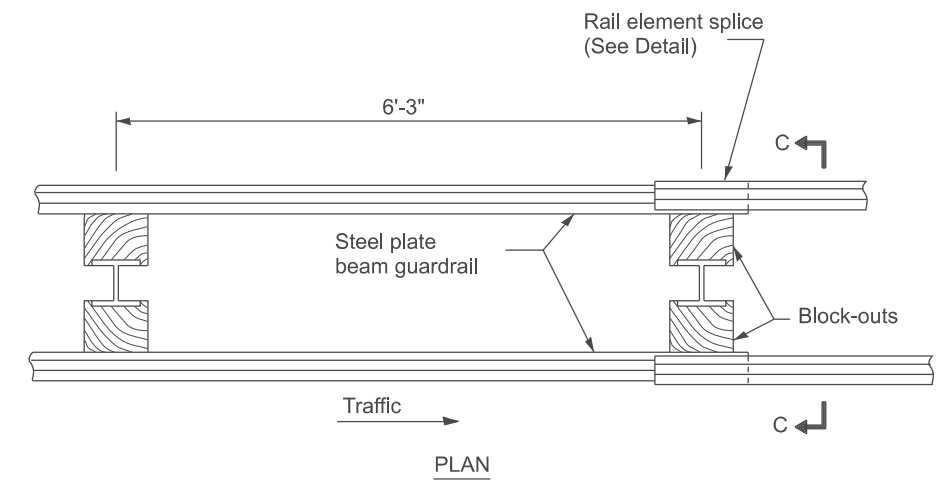
SECTION A-A



TYPE B
 37 1/2" Closed post spacing



SECTION C-C

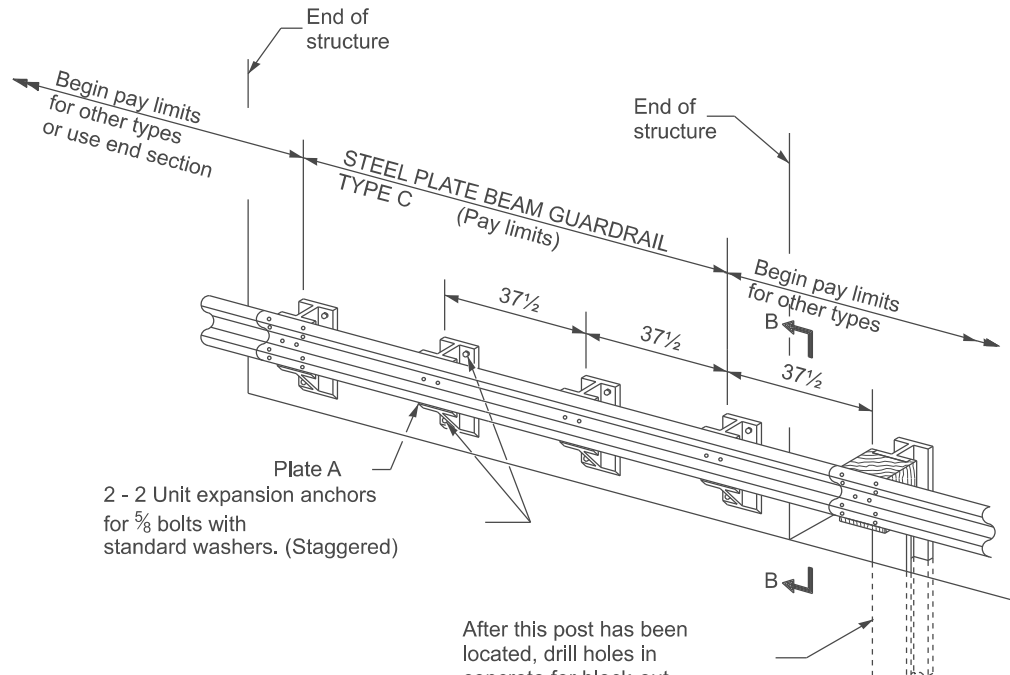


TYPE D
 Double steel plate beam guardrail
 6' - 3" typical post spacing

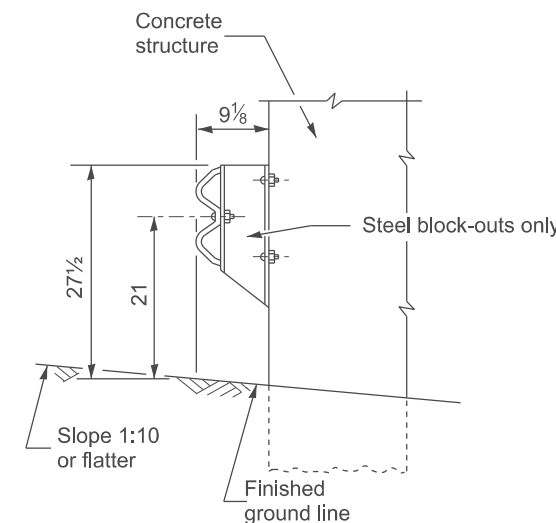
GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
 The existing steel posts may be drilled to match the bolt pattern shown herein for the wood block-out, or a new steel post shall be provided.
 This detail is applicable to the guardrail system used prior to January 1, 2007. For details on the Midwest Guardrail System, see Standard 630001.

All dimensions are in inches unless otherwise noted.



TYPE C
 37 1/2" Block-out spacing



SECTION B-B

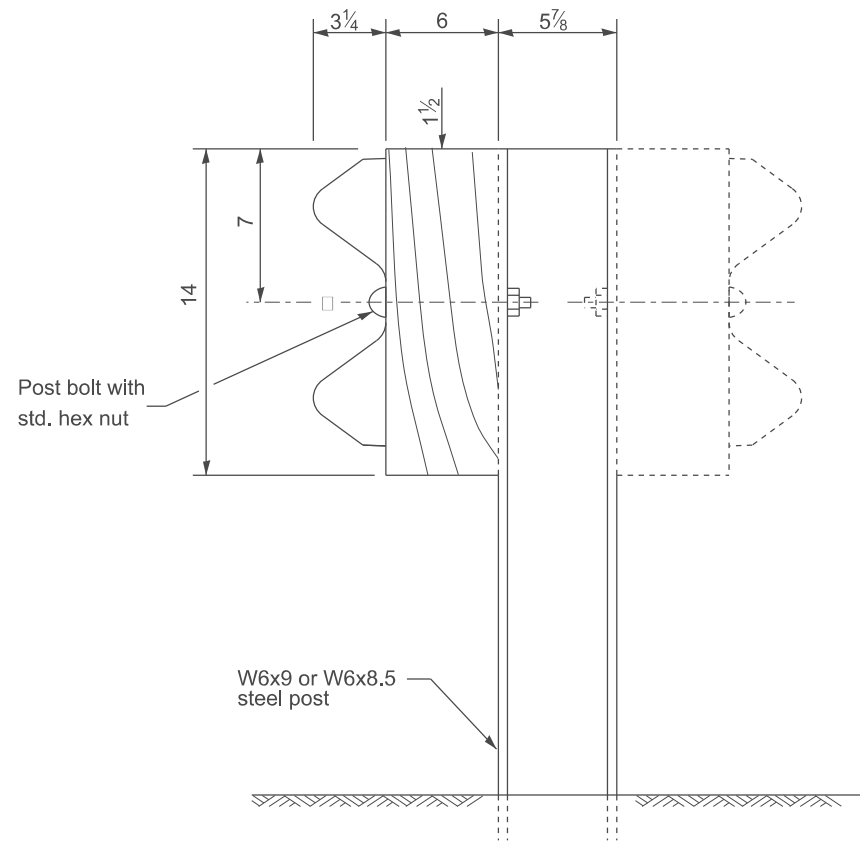
USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

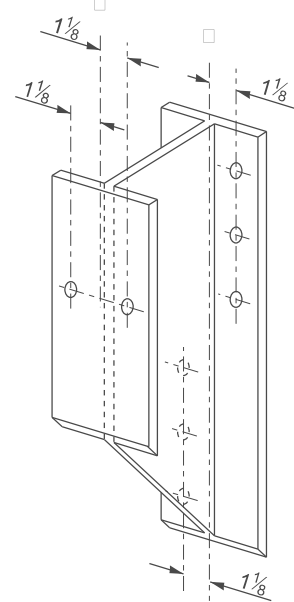
**STEEL PLATE BEAM GUARDRAIL, TYPE A,
 6.75 FOOT POSTS**

SCALE: NOT TO SCALE SHEET 0001 OF 4 SHEETS STA. TO STA.

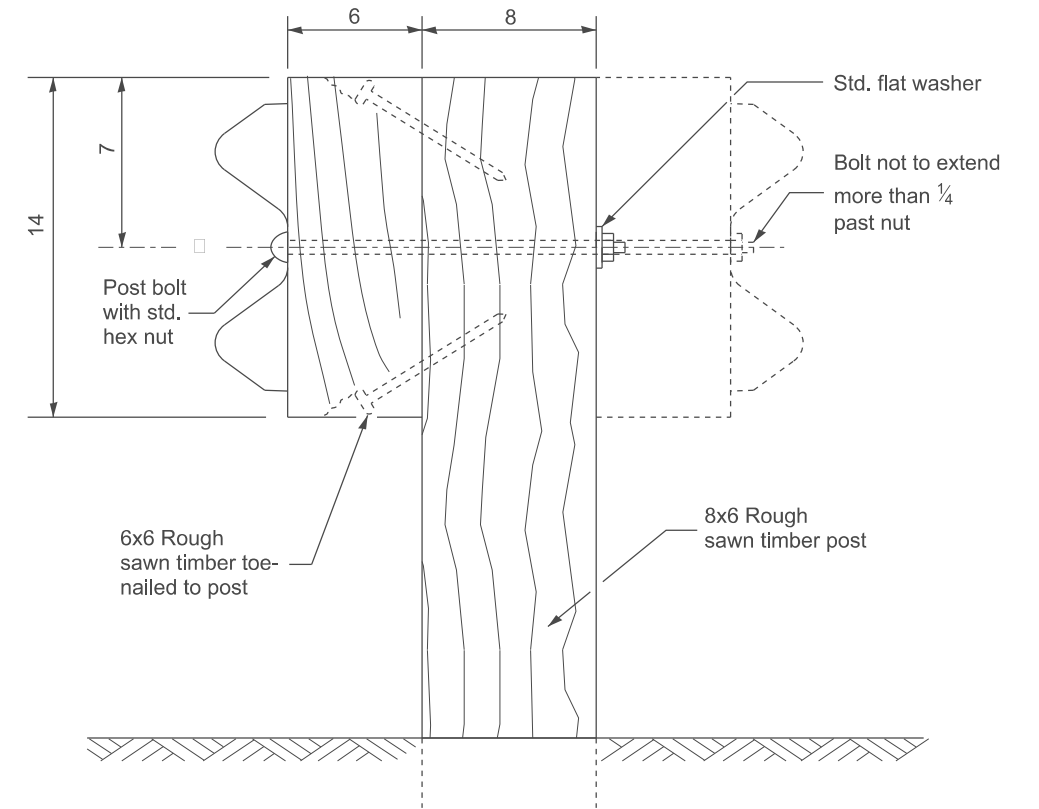
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			4	0
DISTRICT 4 DETAIL NO. 630011			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



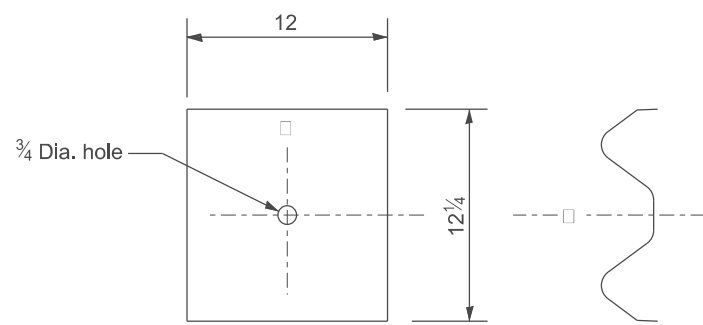
STEEL POST CONSTRUCTION



STEEL BLOCK-OUT DETAIL



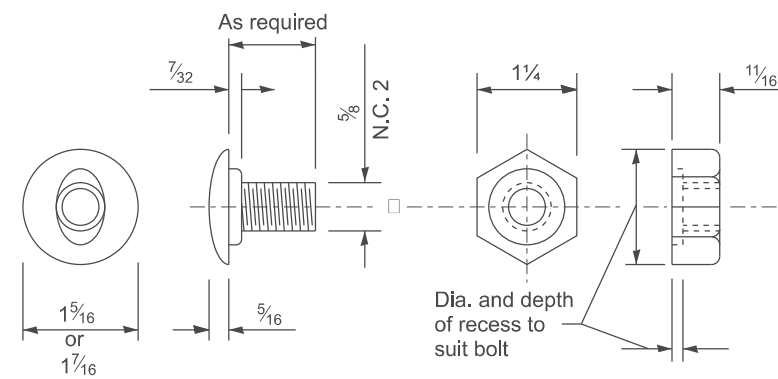
WOOD POST CONSTRUCTION



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



POST OR SPLICE BOLT & NUT

MODEL: D4-630011-02
FILE NAME: c:\p\work\pwrtd\illinois.gov\thomas.cox\illinois.gov\10559441D4-630011.dgn

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

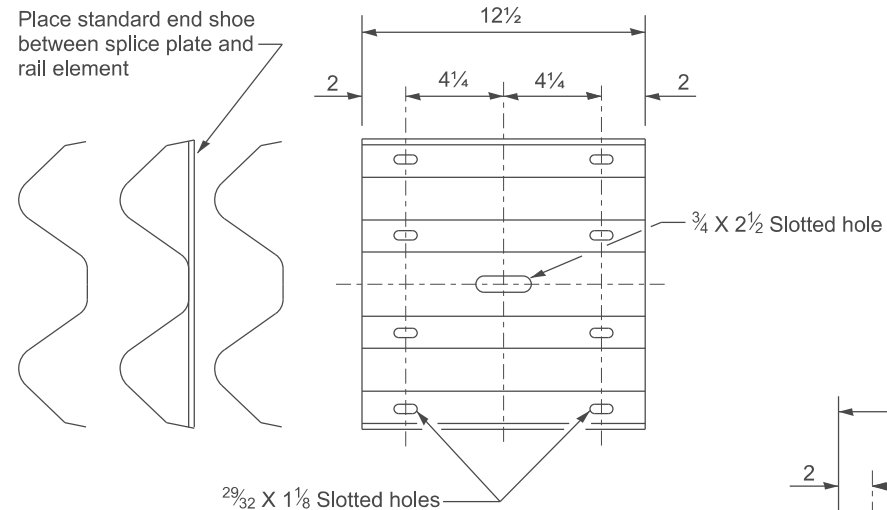
**STEEL PLATE BEAM GUARDRAIL, TYPE A,
6.75 FOOT POSTS**

SCALE: NOT TO SCALE SHEET 0002 OF 4 SHEETS STA. TO STA.

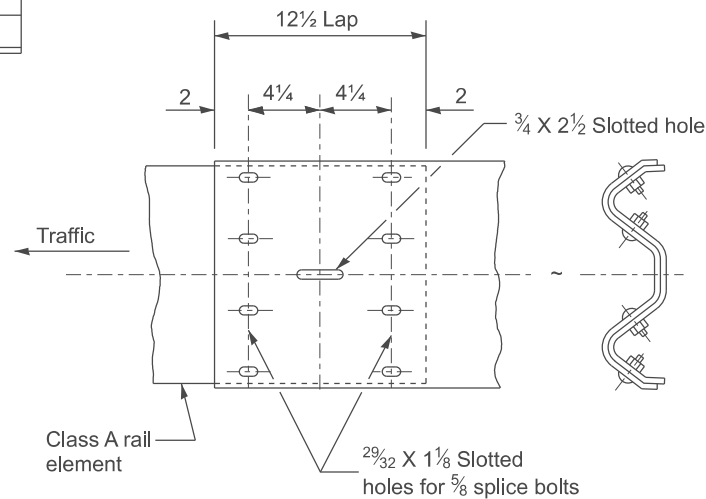
All dimensions are in inches unless otherwise noted.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 630011			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

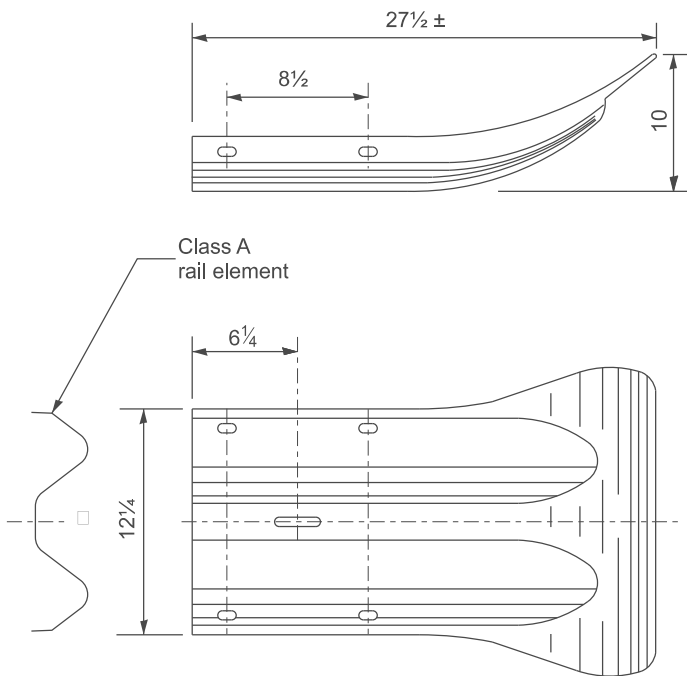
Place standard end shoe between splice plate and rail element



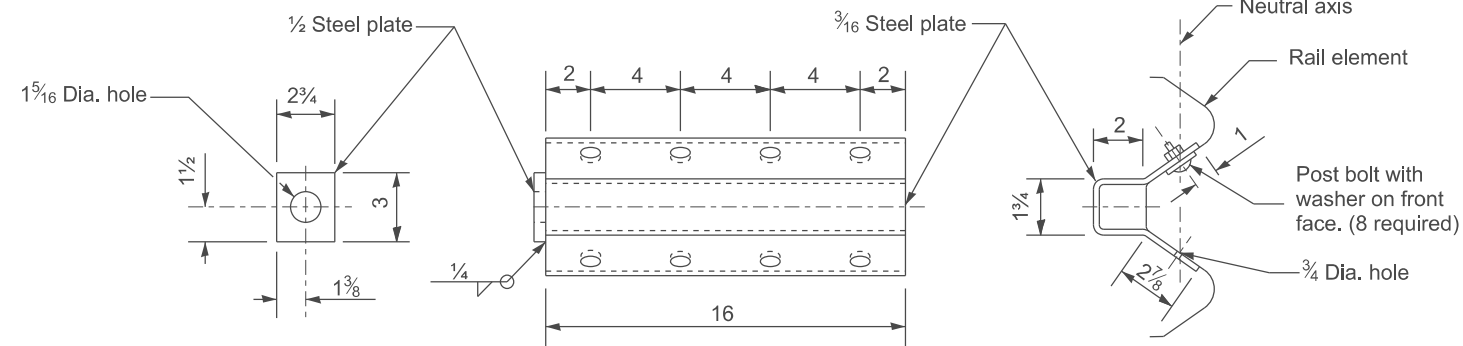
SPLICE PLATE



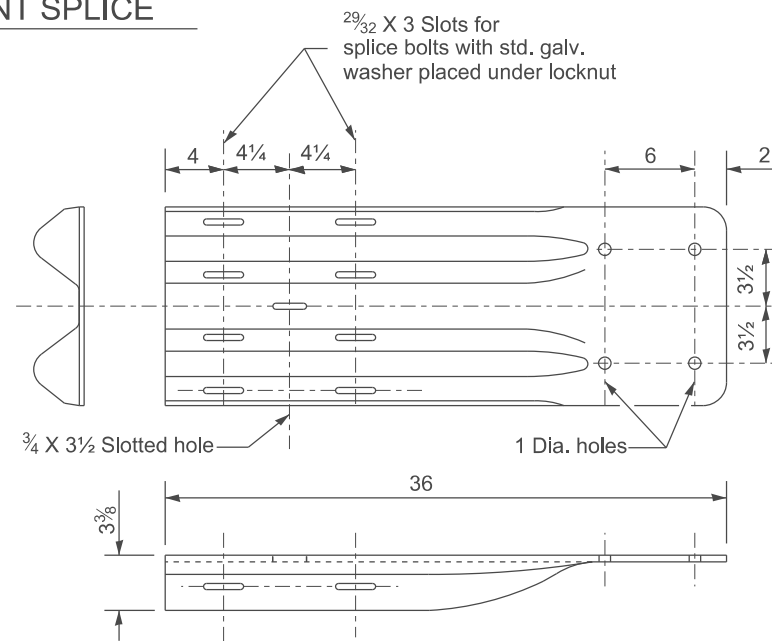
RAIL ELEMENT SPLICE



END SECTION



ANCHOR PLATE T DETAILS

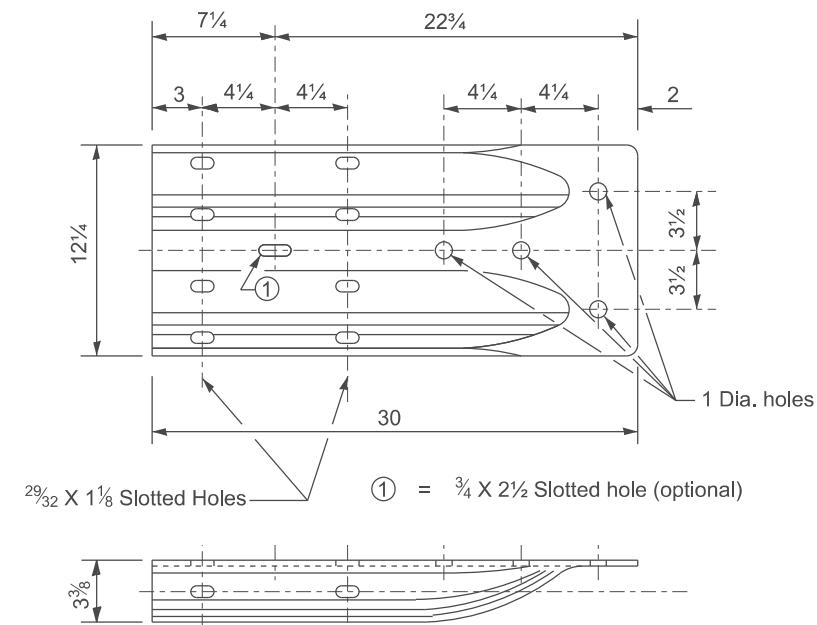


NOTE
When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

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

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\organizer\ChrilIDOT_Standards\CeilIDOT_Sheets.cel

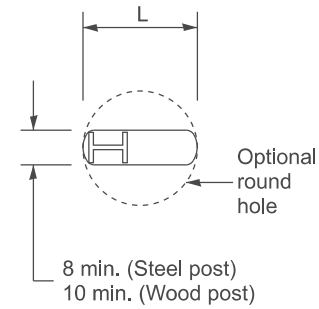
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

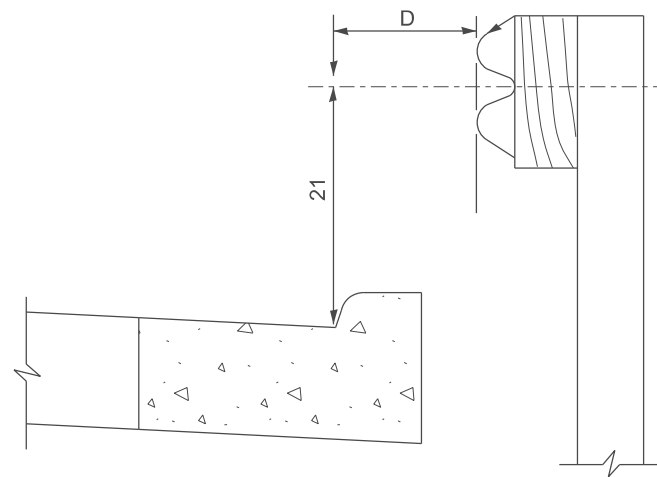
**STEEL PLATE BEAM GUARDRAIL, TYPE A,
6.75 FOOT POSTS**

SCALE: NOT TO SCALE SHEET 3 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 630011		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



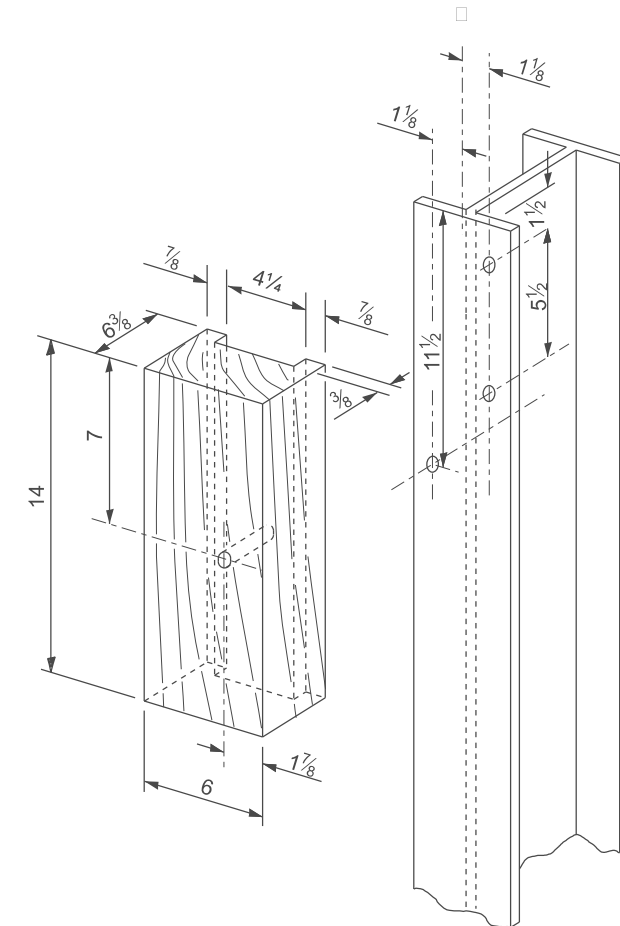
PLAN



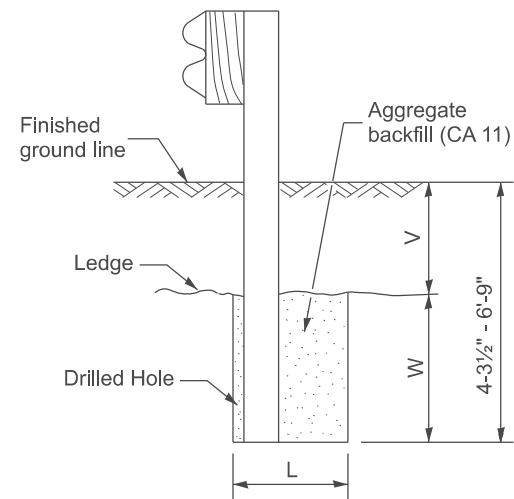
Note:
If it is necessary for D to be more than 12 and less than 10' - 0" type M-2 curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

GUARDRAIL PLACED BEHIND CURB

(D = 0 desirable to 12 maximum)



WOOD BLOCK-OUT AND STEEL POST DETAILS

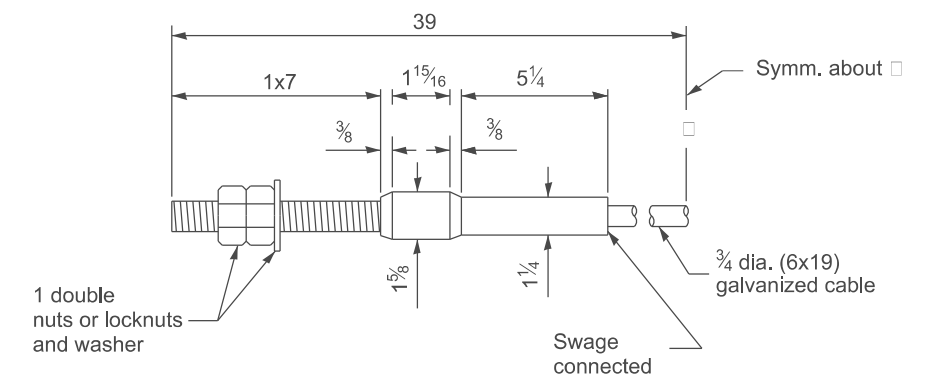


Note:
Ledge line is top of rock ledge or hard slag fill.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED

V	W	L	
		Steel Post	Wood Post
0 - 18	24	21	23
>18 - 41.5	12	8	10
>41.5 - 53.5	12 - 0	8	10



CABLE ASSEMBLY

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

All dimensions are in inches unless otherwise noted.

MODEL: D4-630011-04
FILE NAME: c:\p\work\pwr\illinois.gov\thomas.cox\illinois.gov\10559441D4-630011.dgn

USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

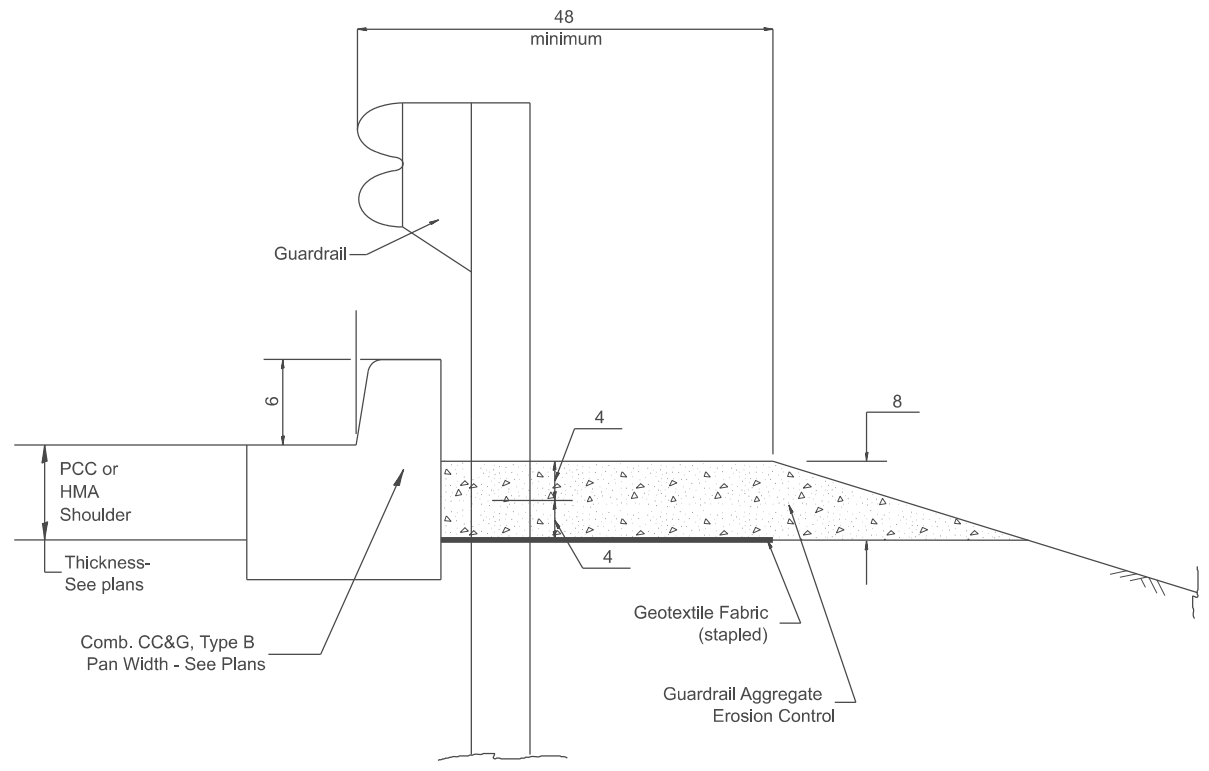
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL PLATE BEAM GUARDRAIL, TYPE A,
6.75 FOOT POSTS

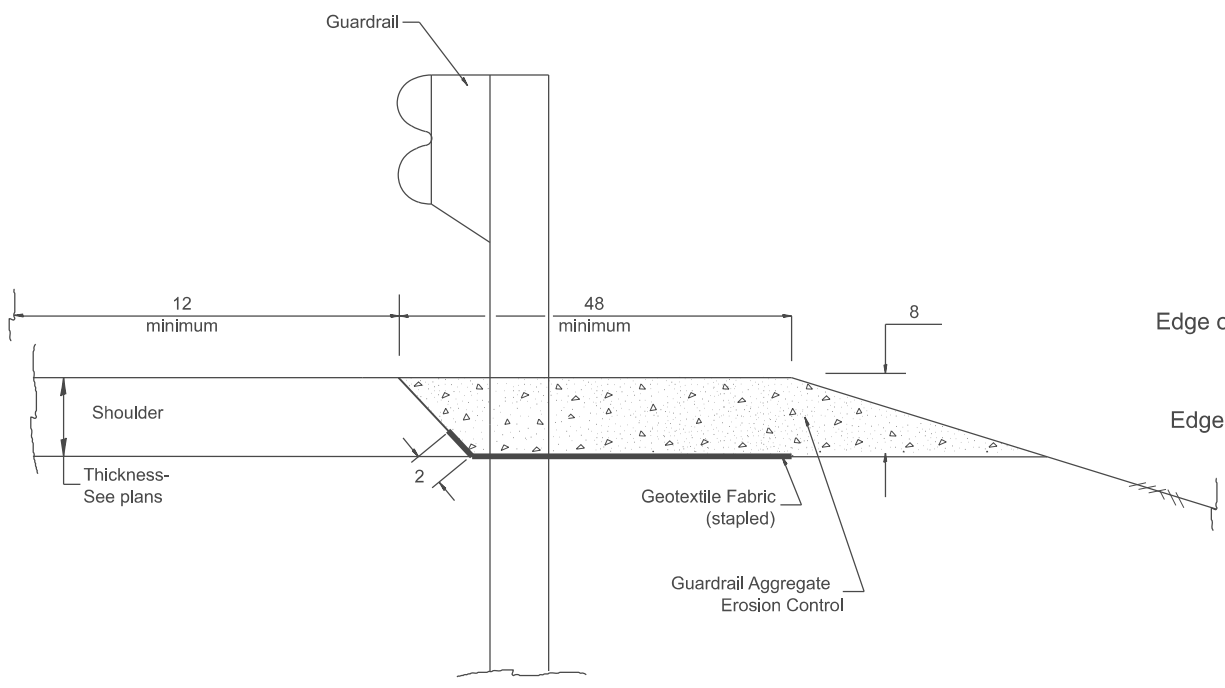
SCALE: NOT TO SCALE SHEET 0004 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 630011			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES: 1. CONSIDER USING A "B" CURB PAY ITEM AT GUARDRAIL INSTALLATIONS WHERE GRADES ARE EQUAL TO OR GREATER THAN 1% AND AT INLETS. (INCLUDE DISTRICT SPECIAL PROVISION)
 2. USE "GUARDRAIL AGGREGATE EROSION CONTROL" AT GUARDRAIL INSTALLATIONS WHERE GRADES ARE LESS THAN 1%. (INCLUDE DISTRICT SPECIAL PROVISION).
 3. INCLUDE STATE STANDARD 610001, IF APPLICABLE.
 4. INCLUDE THE FOLLOWING DISTRICT CADD STANDARDS AS NEEDED: CONCRETE THURST BLOCKS AND PIPE ELBOW.
 5. INCLUDE DISTRICT SPECIAL PROVISION - "AGGREGATE QUALITY" FOR PROJECTS LOCATED IN THE WESTERN AREA OF THE DISTRICT - APPROX. DIVIDING LINE IS IL 97.
 6. DELETE DESIGNER NOTES WHEN INSERTING INTO PLAN FILES.
 7. OPERATIONS PREFERS USE OF PIPE OUTLETTING ONTO FORESLOPE WITH RIPRAP. USE NON-METALLIC PIPE WHEN POSSIBLE BECAUSE OF FUTURE CORROSION ISSUES.
 NO OTHER REVISIONS TO BE MADE TO THIS DRAWING UNLESS SPECIFICALLY NOTED IN THE CONTRACT. USE DISTRICT SPECIAL PROVISION FOR SEEDING, MINOR AREAS



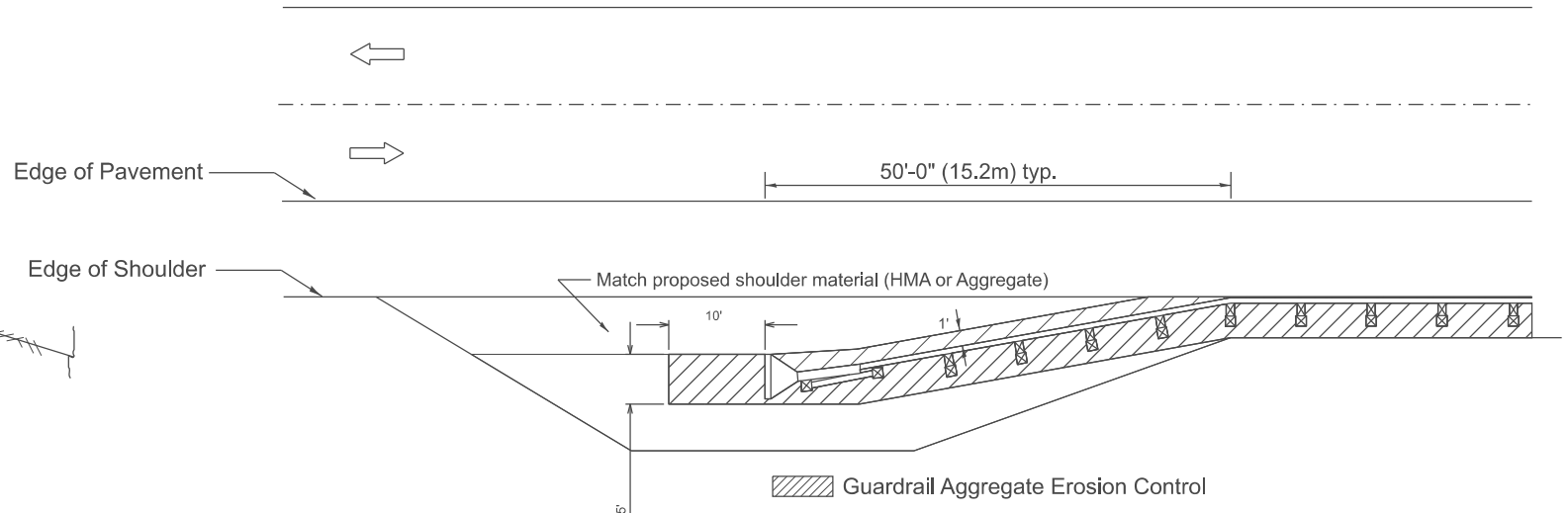
TYPICAL SECTION WITH COMBINATION CONCRETE CURB & GUTTER



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

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



All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECTION\PROJECTS\ILLINOIS\I97\ASB\DRAWING\GUARDRAIL\G4.DWG

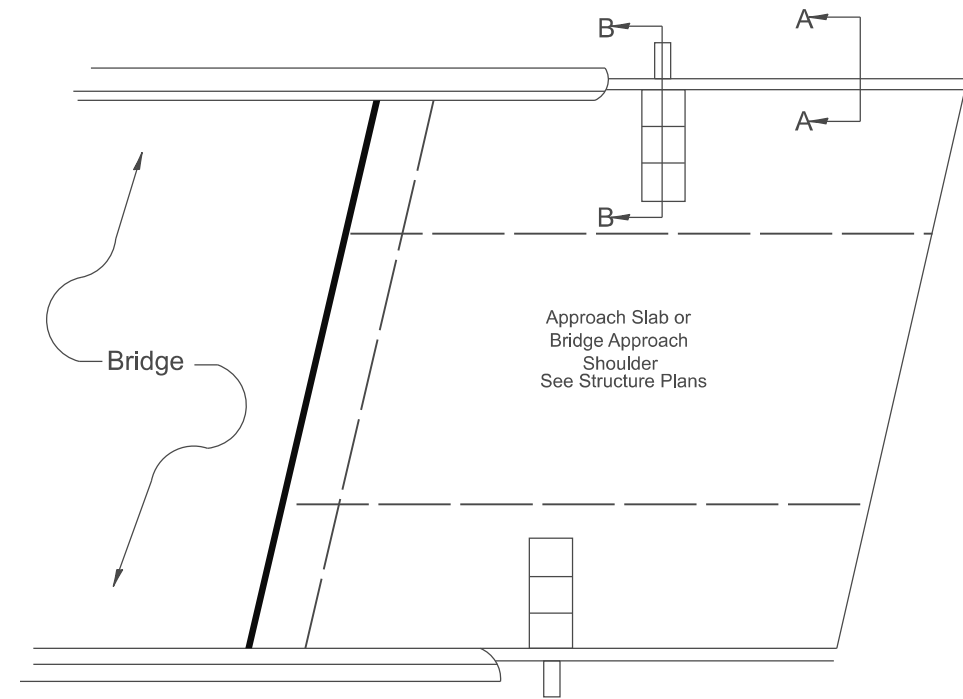
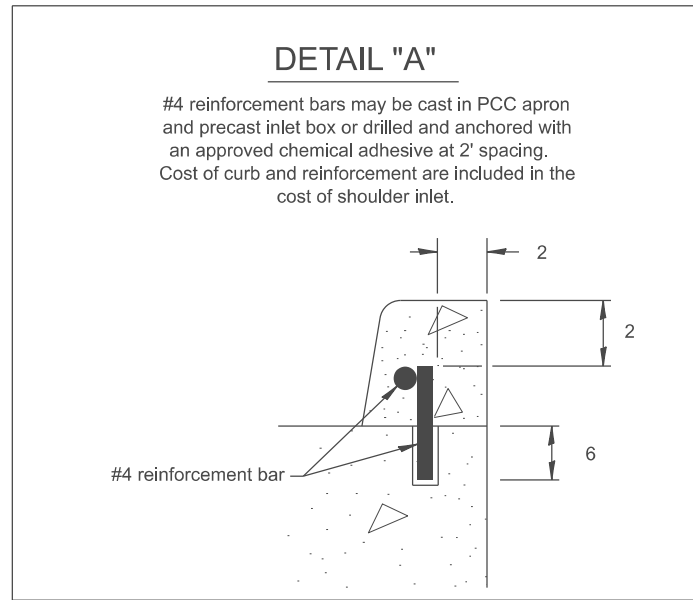
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

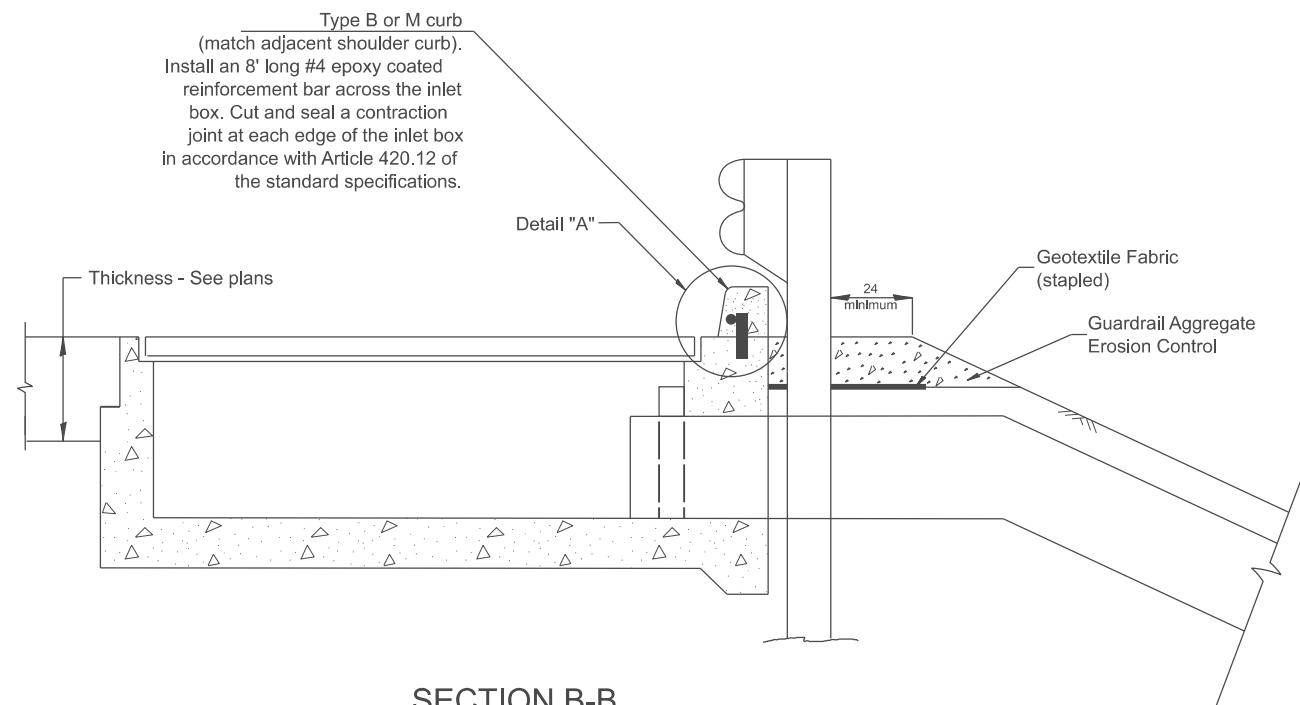
GUARDRAIL EROSION CONTROL TREATMENTS

SCALE: NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

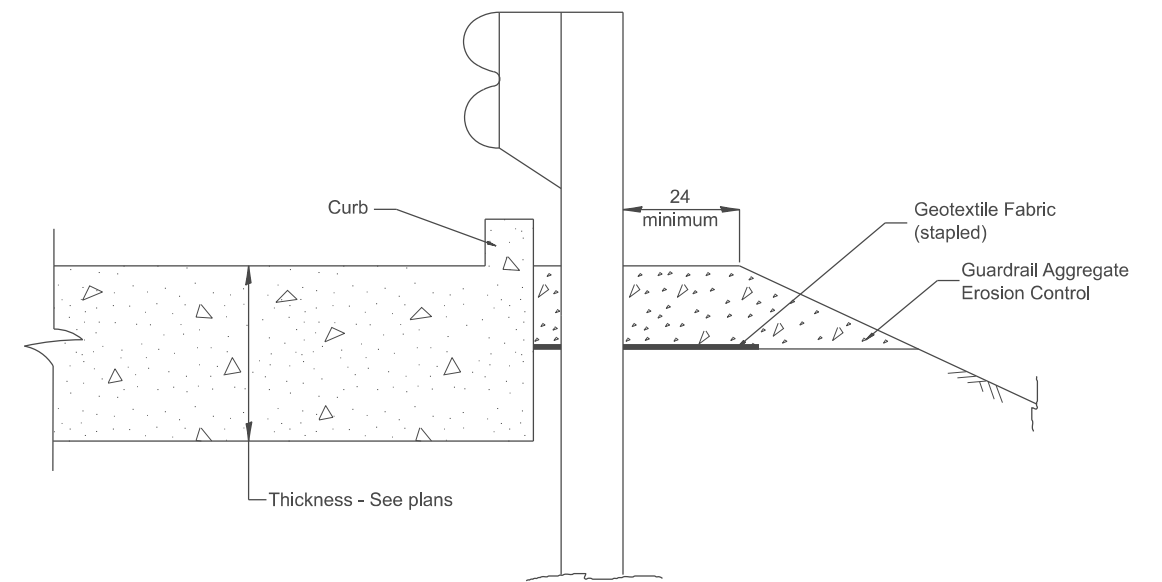
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 630101			
ILLINOIS			CONTRACT NO.	
<small>ILLINOIS FED. AID PROJECT</small>				



PLAN VIEW
APPROACH SLAB OR SHOULDER PLACEMENT



SECTION B-B
TYPICAL SECTION AT INLETS
TYPE E, F & G (HIGHWAY STANDARD 610001)



SECTION A-A
TYPICAL SECTION WITH BRIDGE APPROACH CURB

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chil\IDOT_Standards\Civil\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

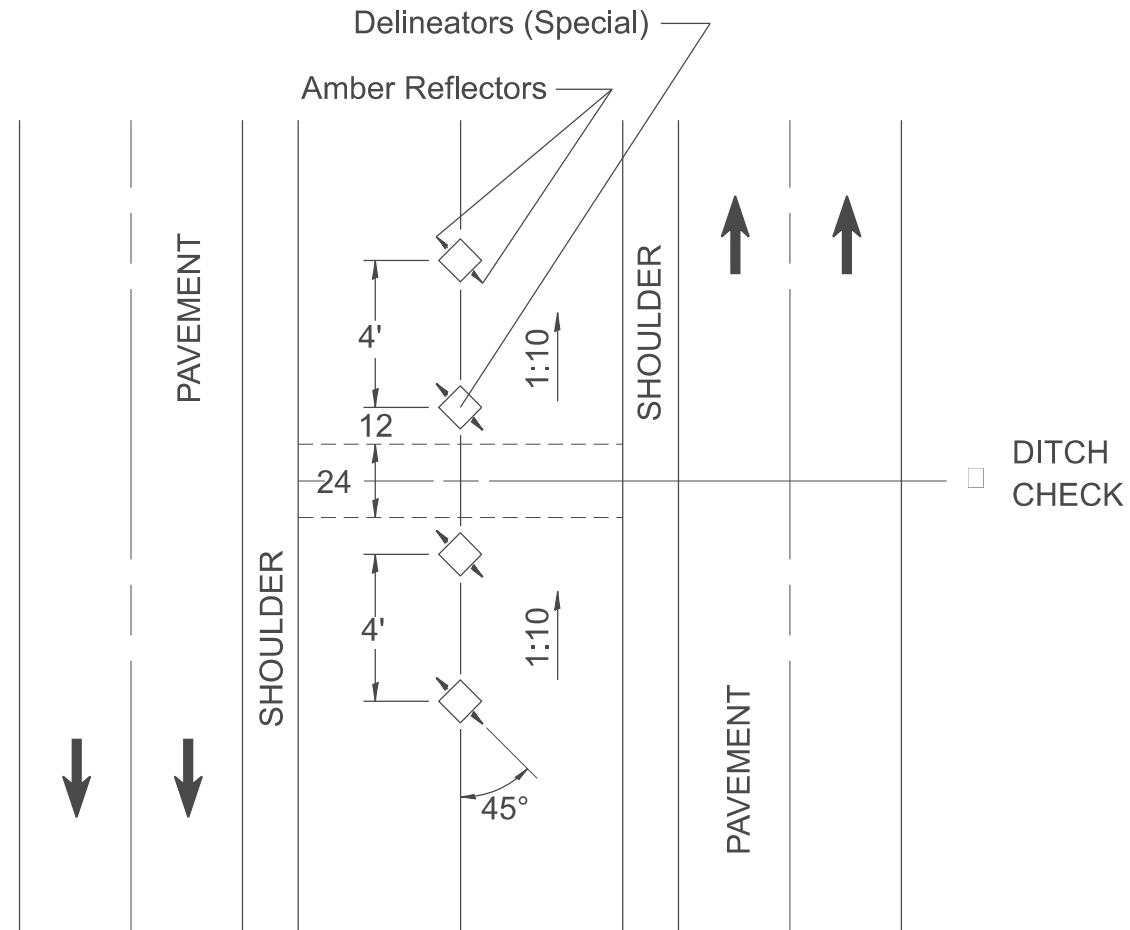
SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 630101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:

- COVERED BY SECTION 636 OF THE STANDARD SPECIFICATIONS.
- DELETE DESIGNER NOTES WHEN INSERTING INTO PLAN FILES.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\organization\Chil\IDOT_Standards\Cat\IDOT_Sheets.dwg



NOTES:

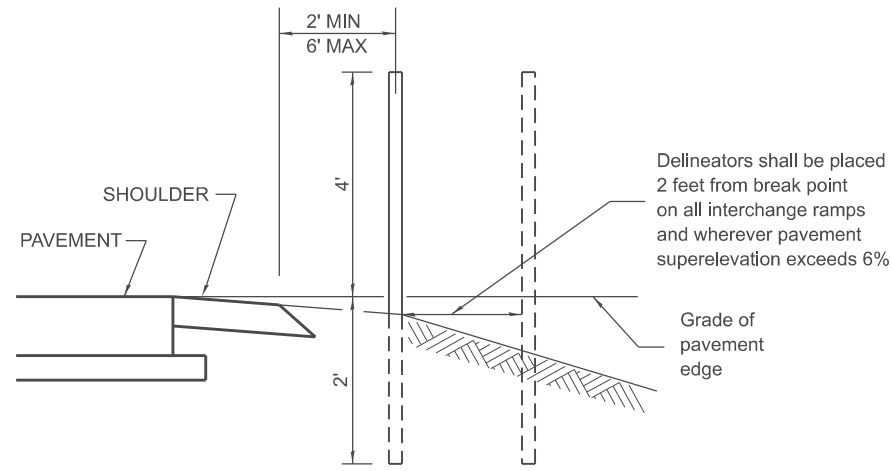
- DELINEATORS (SPECIAL) shall be constructed of 4" x 4" x 6' treated timber.
- Amber Reflectors shall meet the requirements of Article 1097.03 of the Standard Specifications. Reflectors are included in the cost of the "Delineators (Special)".
- Each post shall be buried a minimum of 3'.
- Timber shall be treated in accordance with Article 1007.12 of the standard specifications.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

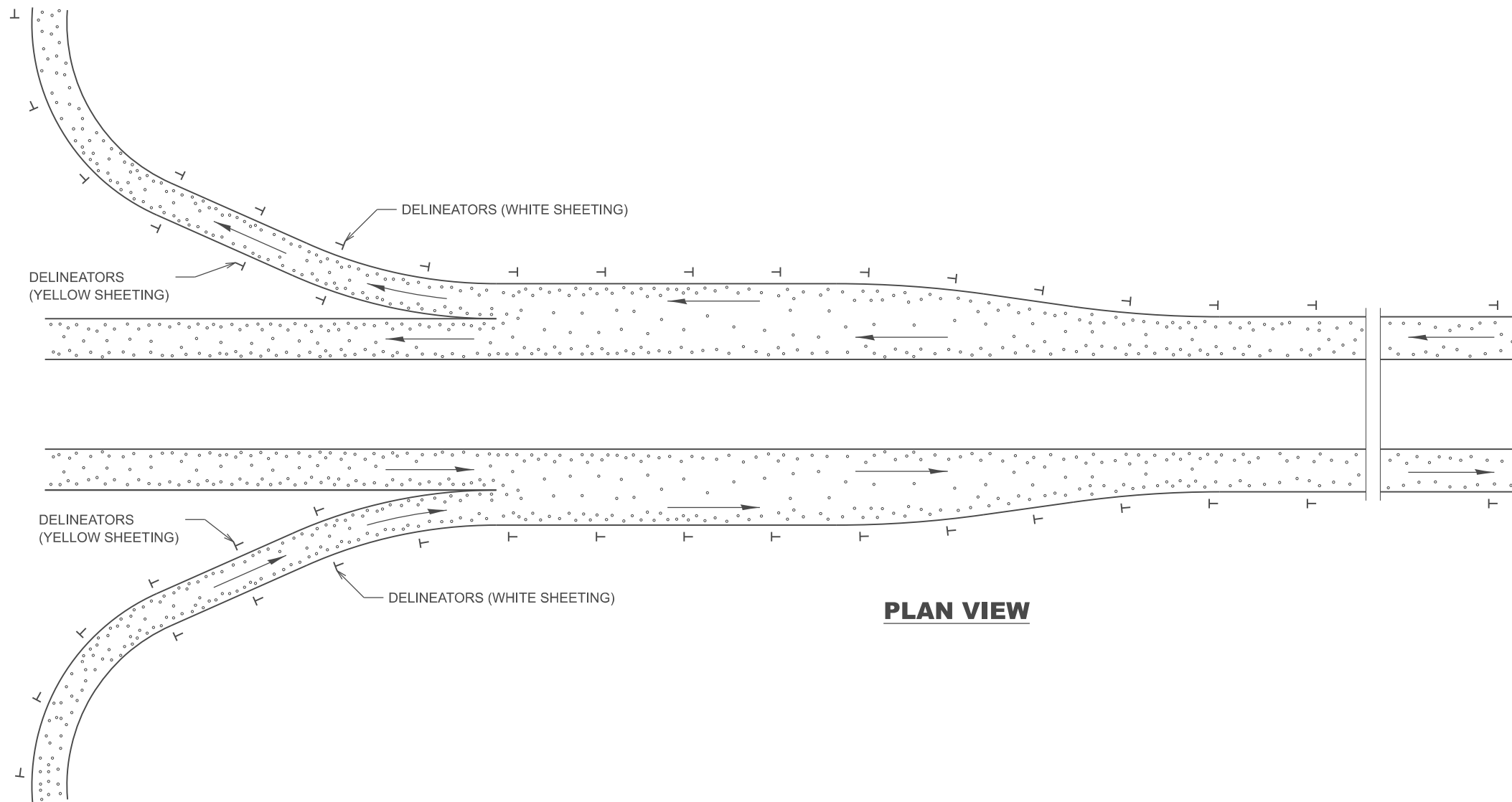
USER NAME = Eric.Thomas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	"DELINEATORS (SPECIAL)"				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -		SCALE: NOT TO SCALE	SHEET	OF	SHEETS	STA.	TO STA.	DISTRICT 4 DETAIL NO. 635001	CONTRACT NO.	
	CHECKED -	REVISED -										
PLOT DATE = 12/7/2022	DATE -	REVISED -		ILLINOIS FED. AID PROJECT								

SPACING FOR RECOVERABLE DELINEATORS ON HORIZONTAL CURVES ON RAMP



SECTIONAL VIEW

Radius of Curve Feet	Spacing on Curve Feet	Spacing in Advance and Beyond Curve Feet		
		1st. Space	2nd. Space	3rd. Space
Less than 100	20	40	65	125
100 - 174	30	60	90	180
175 - 224	35	70	110	200
225 - 274	40	85	125	200
275 - 349	50	95	145	200
350 - 449	55	110	170	200
450 - 549	65	125	190	200
550 - 649	70	140	200	200
650 - 749	75	150	200	200
750 - 849	80	165	200	200
850 - 949	85	175	200	200
950 - 1049	90	185	200	200
1050 - 1299	100	200	200	200
1300 - 1999	125	200	200	300
2000 - 2999	150	200	200	300
3000 - 3999	175	200	300	300
4000 or greater	400	400	400	400



PLAN VIEW

GENERAL NOTES

Delineators on mainline shall be placed at 400' spacing on tangent sections, and 200' spacing on curved sections. (Radius < 4000')

Delineators on ramps, shall be placed as follows:

1. On tangent sections, acceleration lanes and deceleration lanes at maximum spacing of 100'.
2. On outside of all curved sections. (See table above for spacing)

DESIGNER NOTES:

1. USE DISTRICT SPECIAL PROVISION FOR RECOVERABLE DELINEATORS WHEN USING THIS CADD STANDARD.
2. USE ON INTERSTATE AND EXPRESSWAY FACILITIES.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chil\IDOT_Standards\Cadd\IDOT_Sheets.cad

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

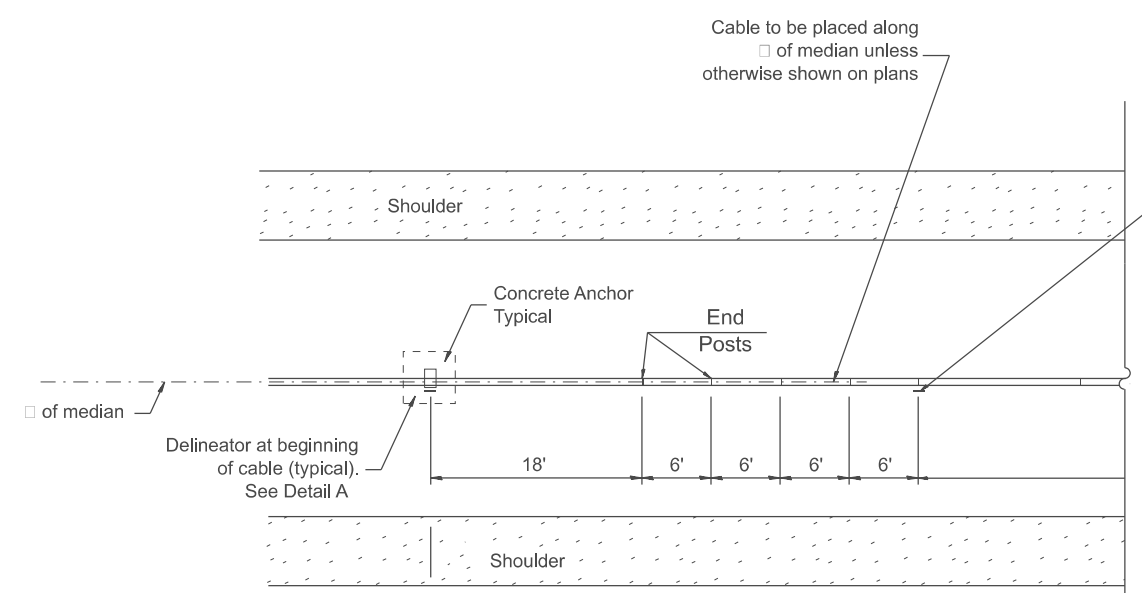
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

RECOVERABLE DELINEATORS DETAIL

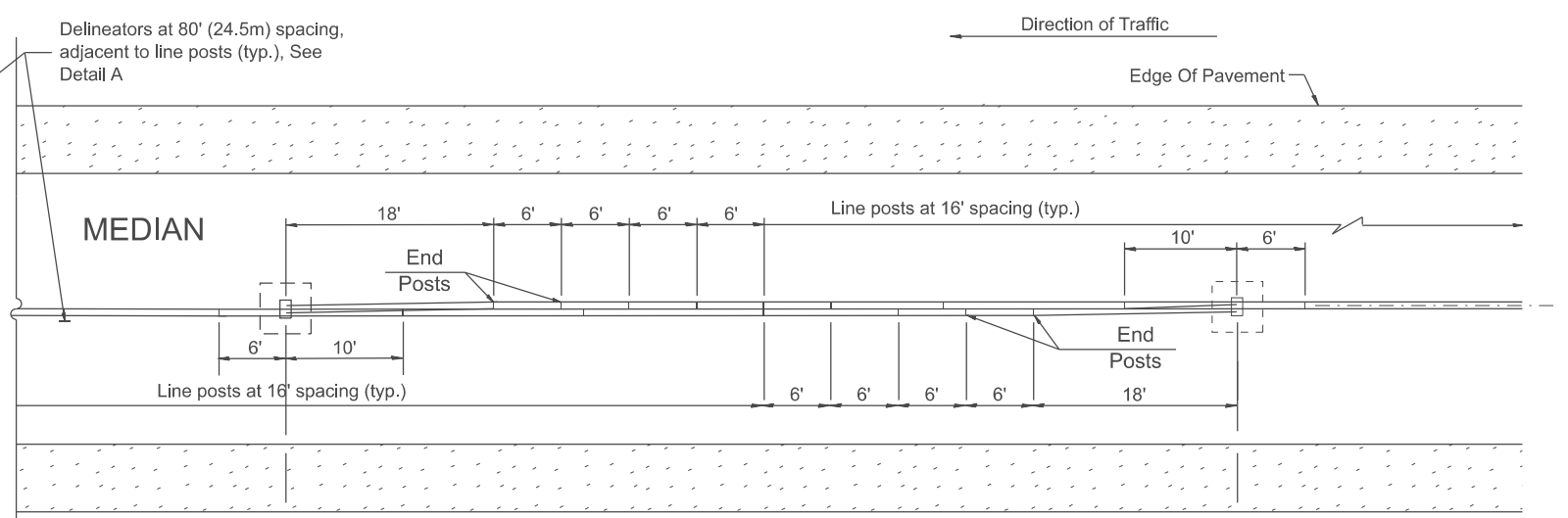
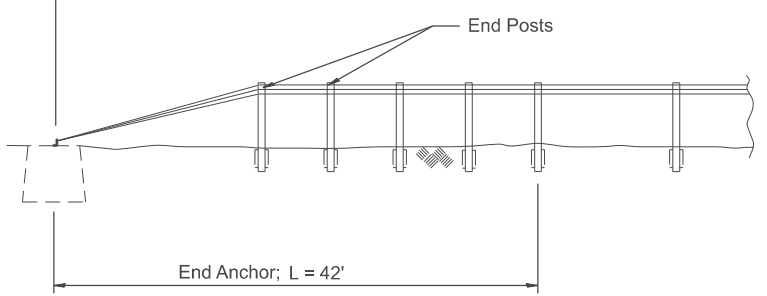
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 635002		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

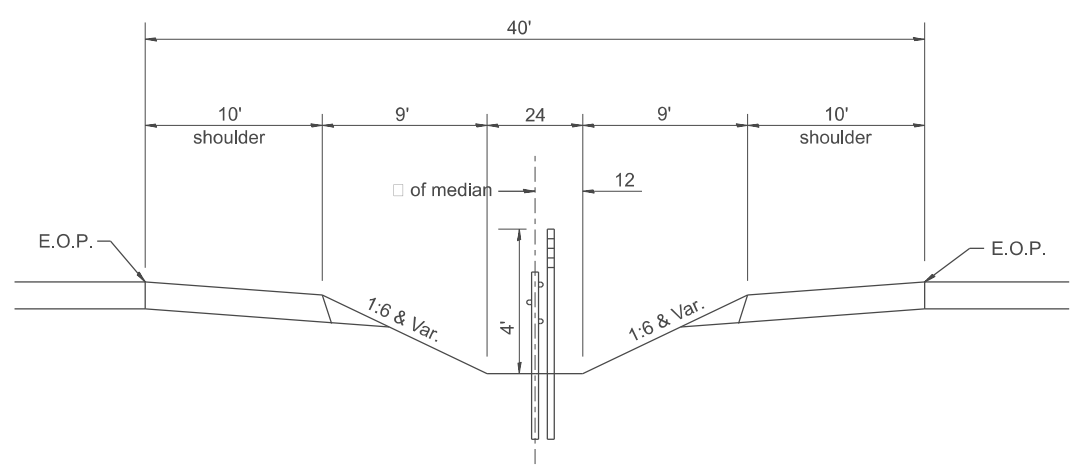
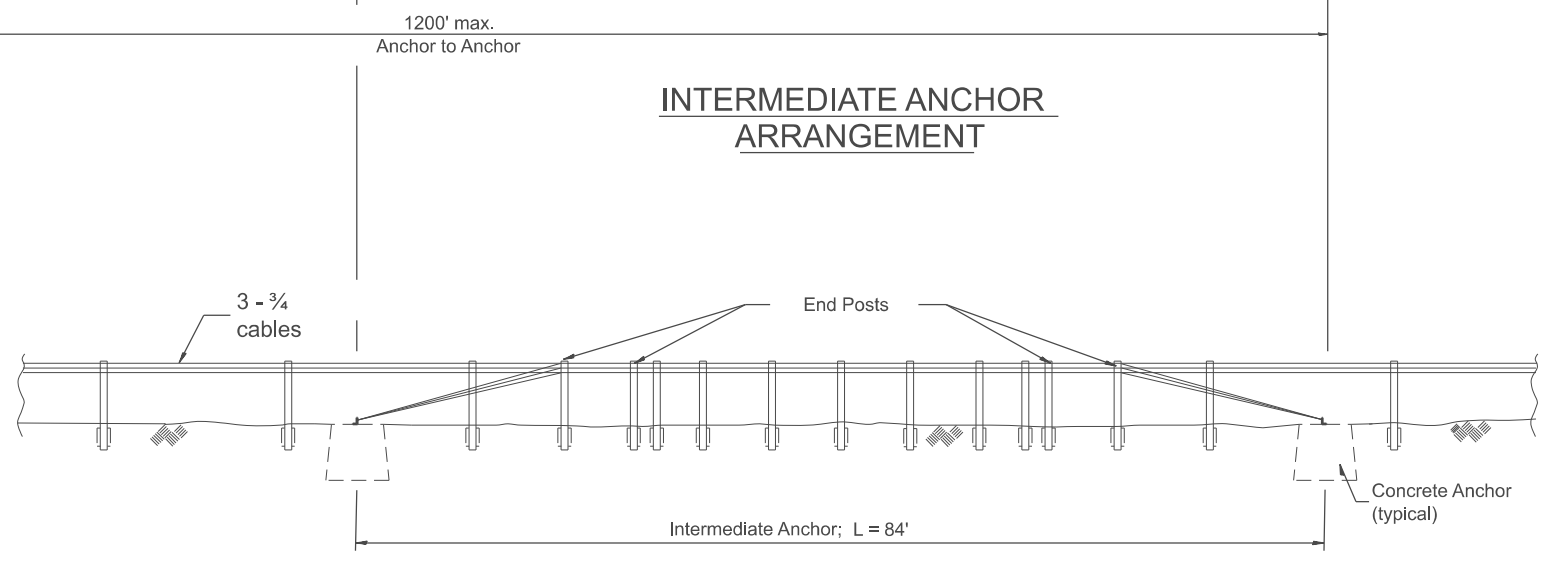
DESIGNER NOTES:
 1. Include District Special Provision.
 2. For application on median widths $\geq 22'$
 [System deflection = 11']
 MODEL: SHT_PLAN3
 FILE NAME: C:\Bentley\CONNECT101\Organization\Chilidiot_Standards\Cat\IDOT_Sheets.cat



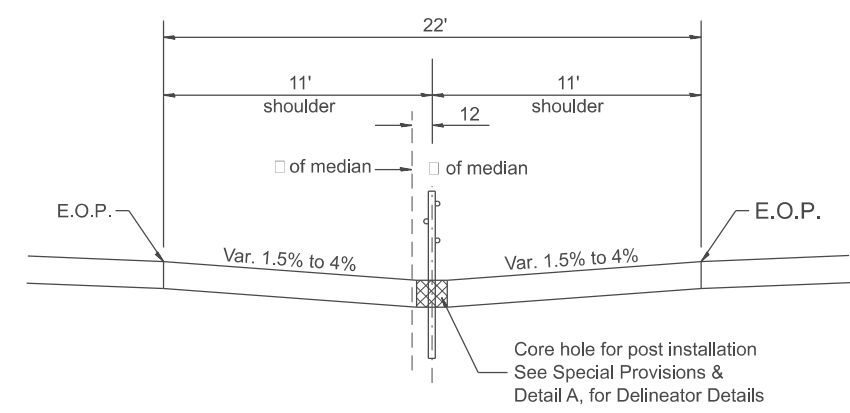
END ANCHOR ARRANGEMENT



INTERMEDIATE ANCHOR ARRANGEMENT



40' OPEN DITCH MEDIAN



22' PAVED MEDIAN

GENERAL NOTES
 All posts are line posts unless otherwise specified.

SYMBOLS
 Two single amber reflector units placed back to back, one on each side of post.

All slope units are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise noted.

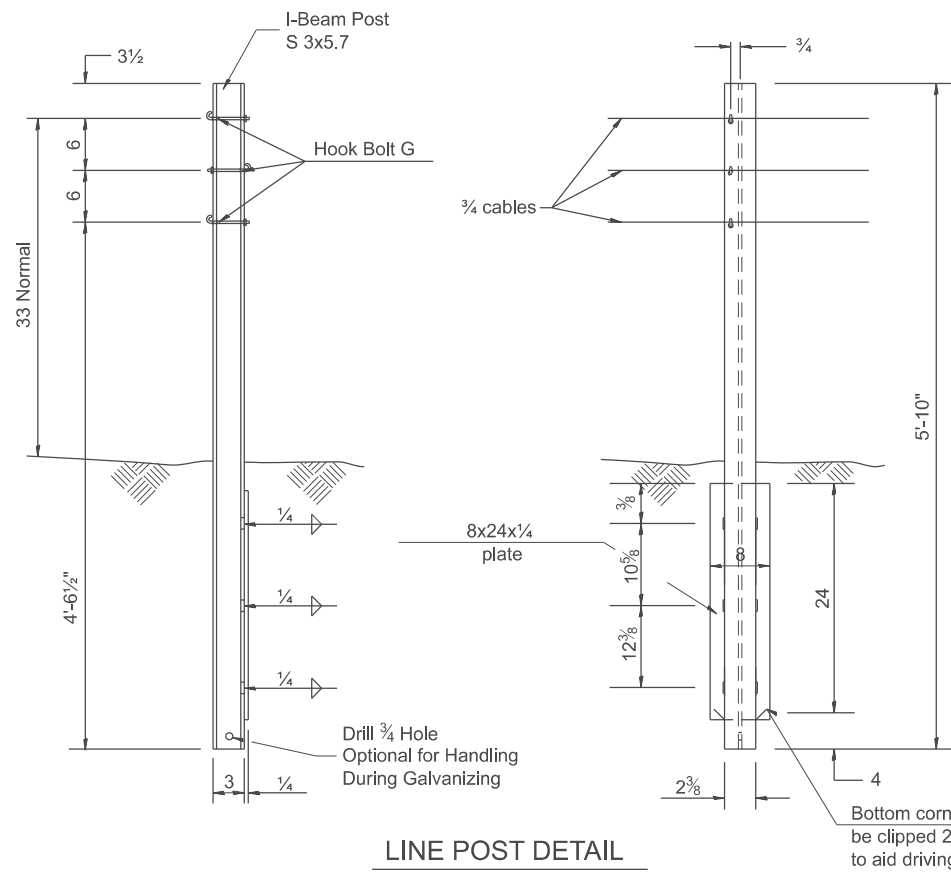
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

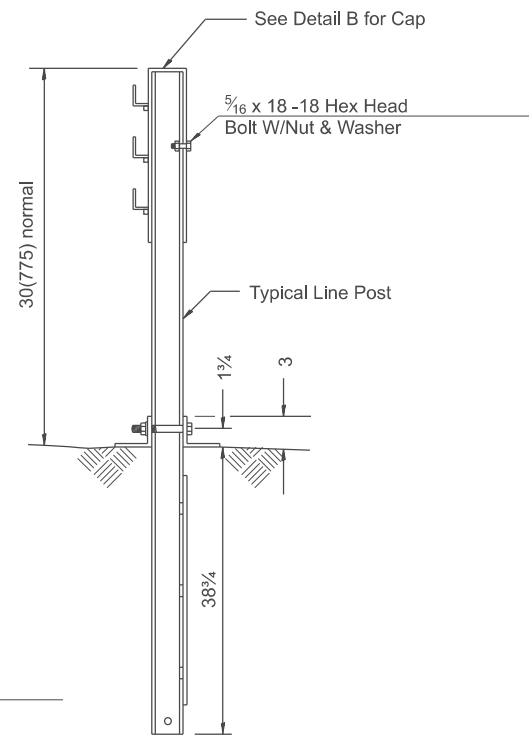
(MEDIAN BARRIER) CABLE ROAD GUARD, THREE STRANDS

SCALE: NOT TO SCALE SHEET 1 OF 3 SHEETS STA. TO STA.

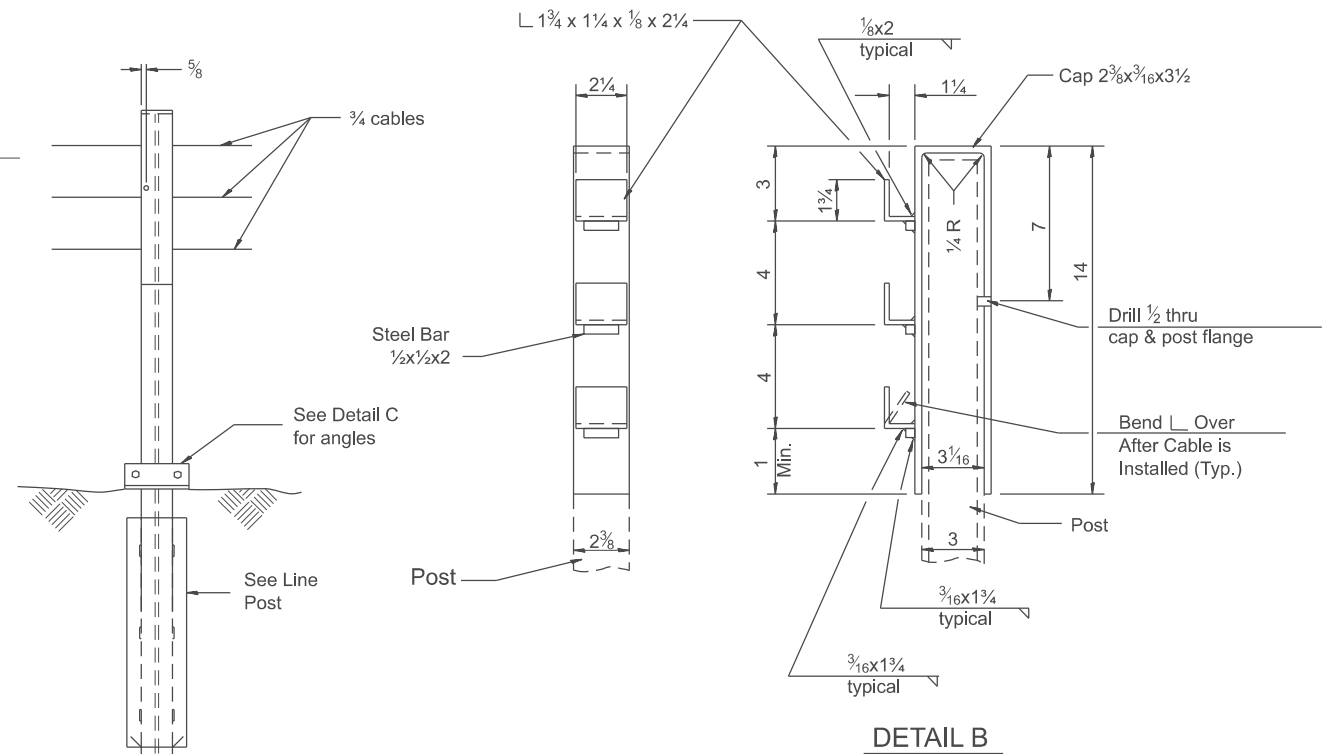
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 636001			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



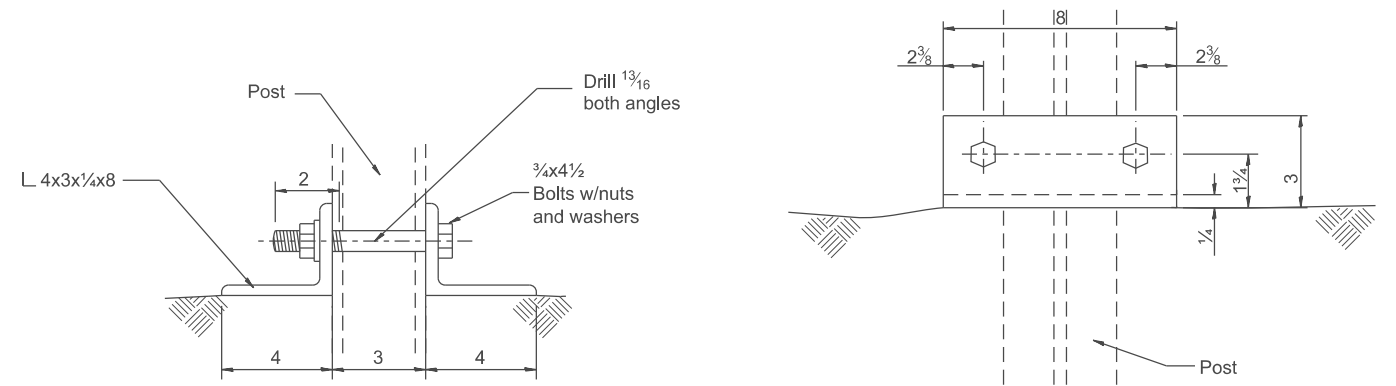
LINE POST DETAIL



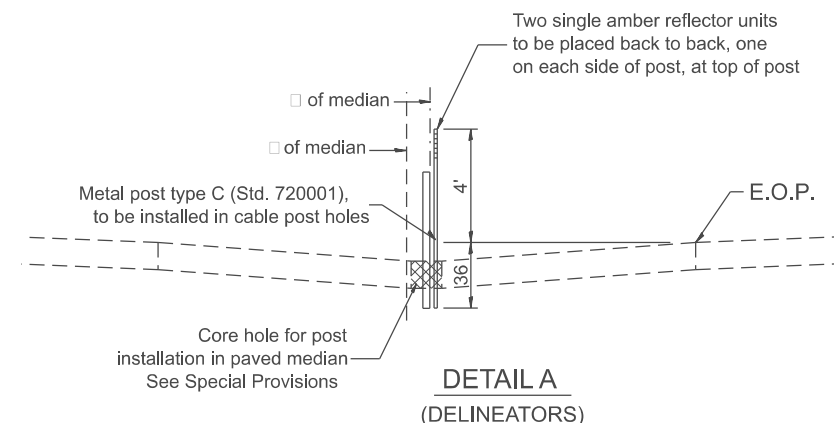
END POST DETAIL



DETAIL B



DETAIL C



DETAIL A (DELINEATORS)

NOTES

- At all locations where the cable is connected to a cable socket with a wedge type connection, one wire of the wire rope shall be crimped over the base of the wedge to hold it firmly in place.
- Compensating devices shall have spring constants of 450 lbs/in, plus or minus 50 lbs/in, and permit a travel of 5, plus or minus 1.
- Socket baskets shall be designed for use with the wedge detailed in these Standards.
- Alternate hardware designs will be considered for approval provided their connection details, for the purpose of maintenance substitutions, are compatible with the details of these standards and their operating characteristics are similar to those of the hardware shown.
- Threads of externally threaded parts shall be UNC, Class 2A tolerance (A.N.S.I. B1.1). Internally threaded parts shall meet the dimensional requirements of ASTM A 563.
- All fittings (including spicer) shall be so designed to use the wedge shown in the wedge detail and shall be of such section as to develop the full strength of the 3/4 round cable 25,000 lbs.
- For arrangement of spring cable end assemblies (compensating devices) and turnbuckle cable end assemblies, the following criteria shall apply:

Length of Cable Runs

- To 1000' - Use compensating cable end assembly on one end, and turnbuckle cable end assembly on the other end of each individual cable.
 - Over 1000' to 2000' - Use compensating cable end assembly on each end of each individual cable.
- All assembly parts and posts are to be galvanized and no punching, cutting or welding will be permitted after galvanizing.
 - Dimensional tolerances not shown or implied are intended to be those consistent with the proper functioning of the part, including its appearance, and accepted manufacturing practices.
 - Prior to final acceptance by the State the following procedures shall be used to tighten the turnbuckles, depending on the temperature at the time of adjustment in accordance with the following table.

Temperature	120°	99°	79°	59°	39°	19°	-1°
Degrees F°	to	to	to	to	to	to	to
	100°	80°	60°	40°	20°	0°	-20°
Spring Compression	1	1 1/2	2	2 1/2	3	3 1/2	4
from unloaded position							
in. in each spring							

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT1011\Organization\Chil\IDOT_Standards\Cable\IDOT_Sheets.cad

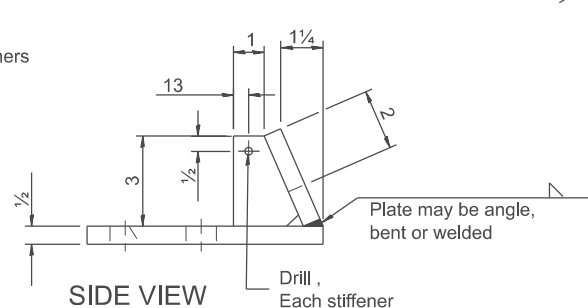
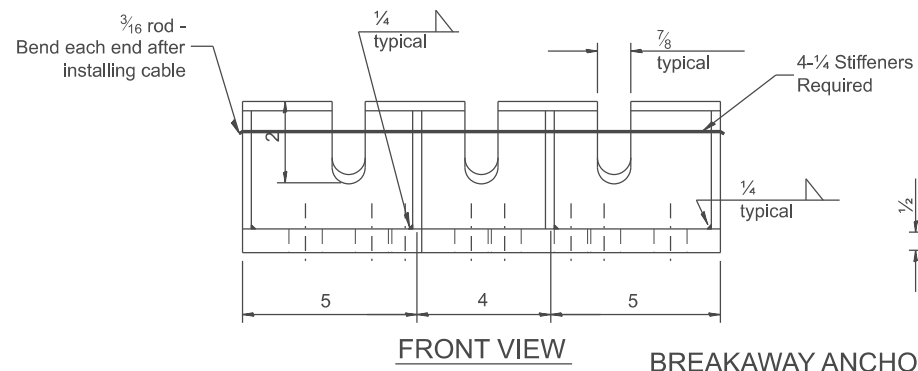
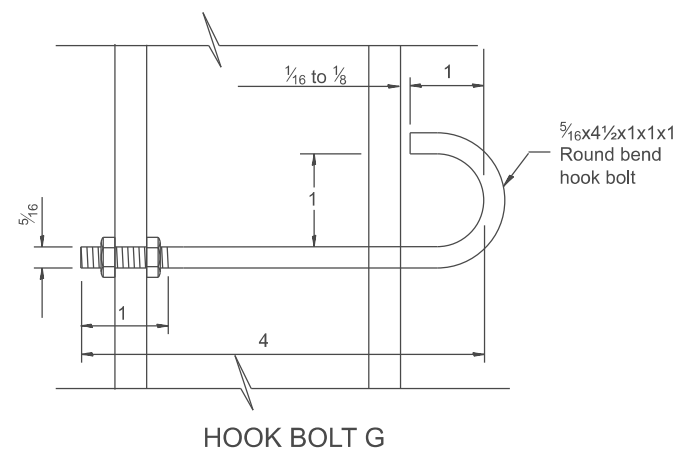
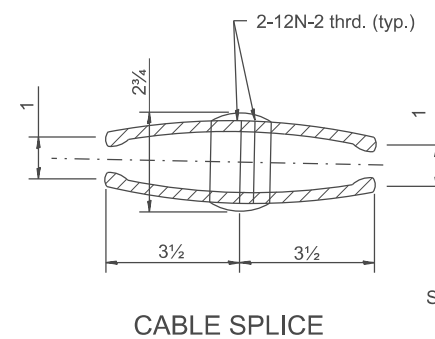
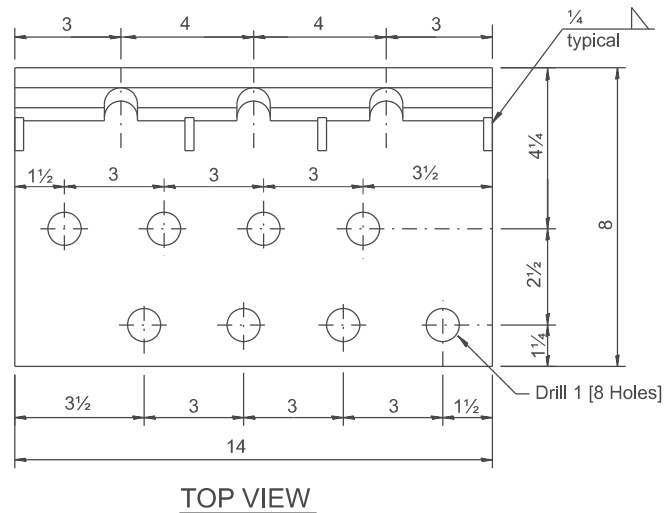
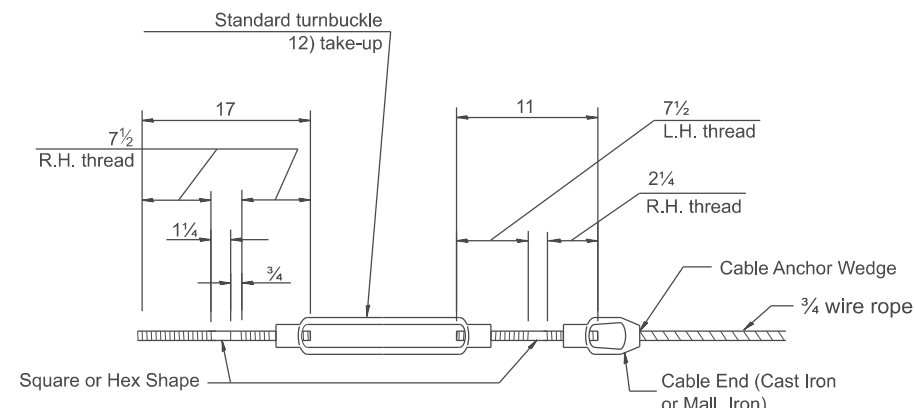
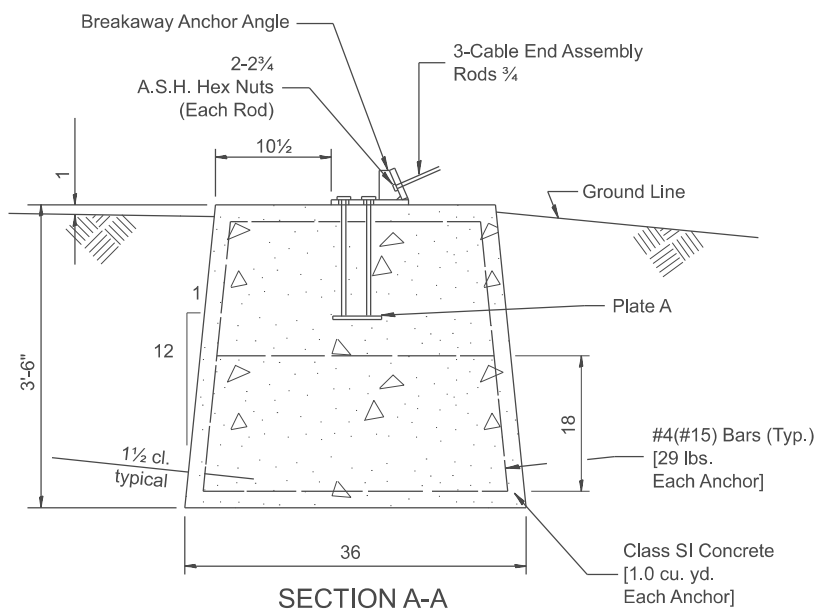
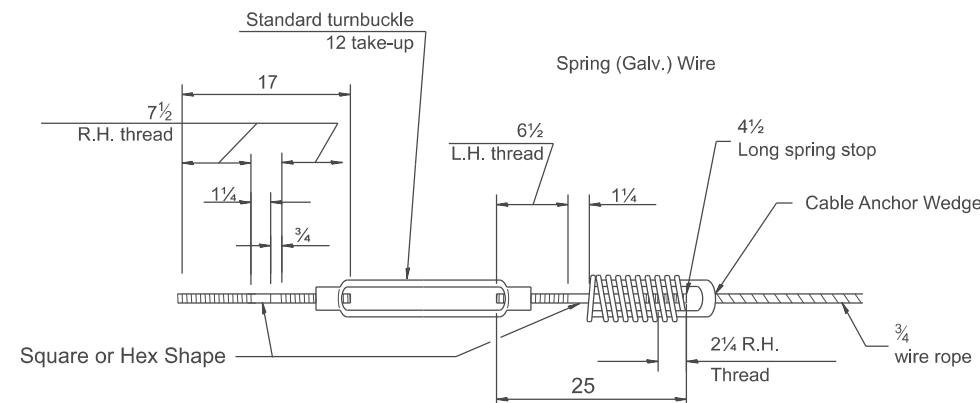
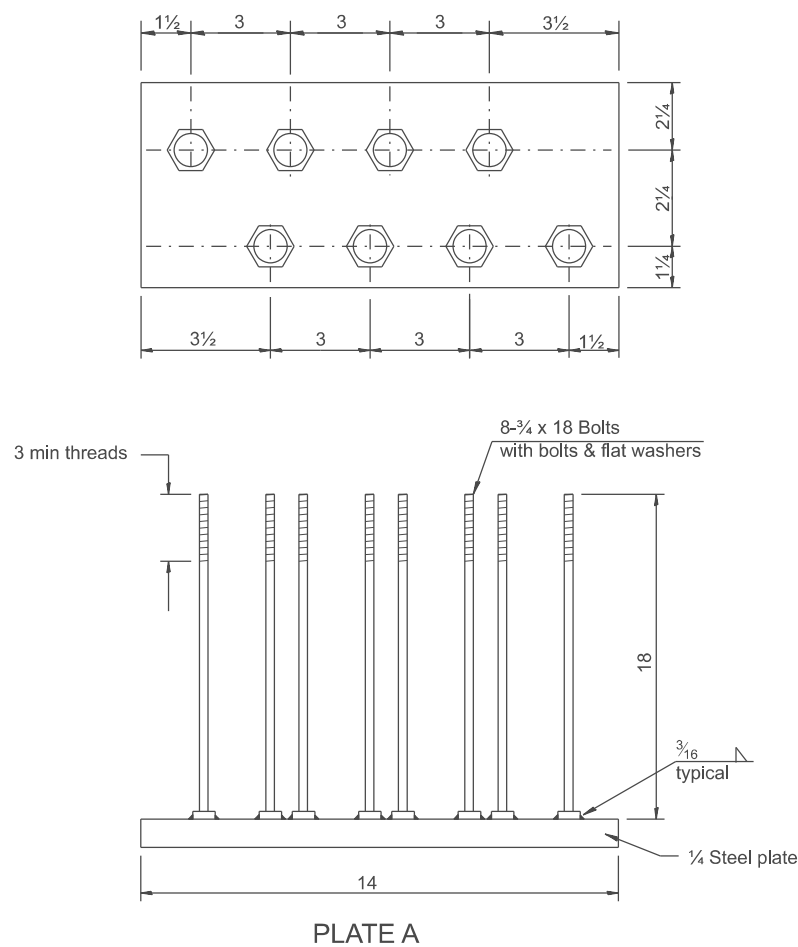
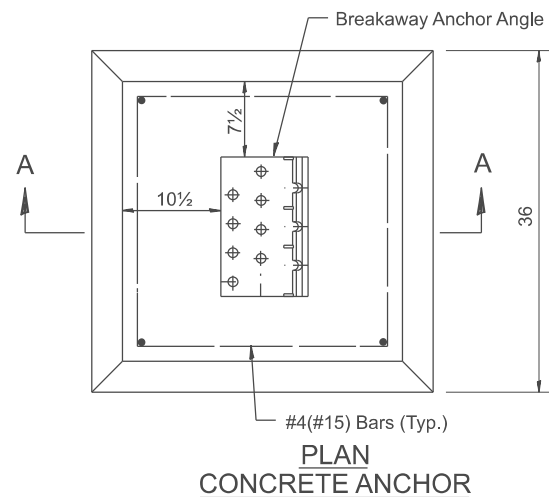
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

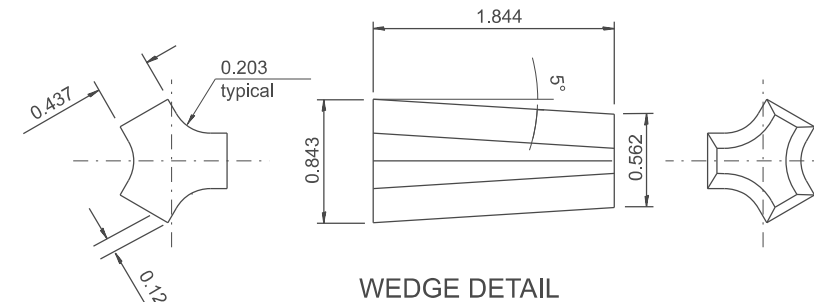
(MEDIAN BARRIER) CABLE ROAD GUARD, THREE STRANDS

SCALE: NOT TO SCALE SHEET 2 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 636001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



Use with Wedge Shown on this Sheet



All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\organizer-ChrillIDOT_Standards\CatIDOT_Sheets.cat

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

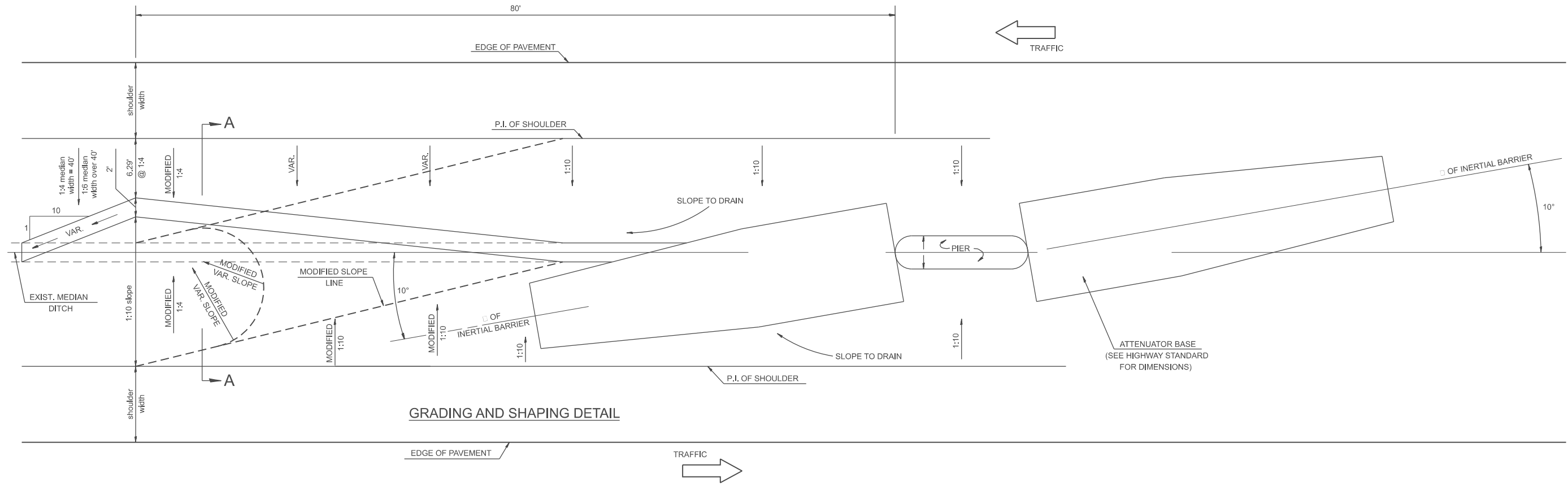
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

(MEDIAN BARRIER) CABLE ROAD GUARD, THREE STRANDS

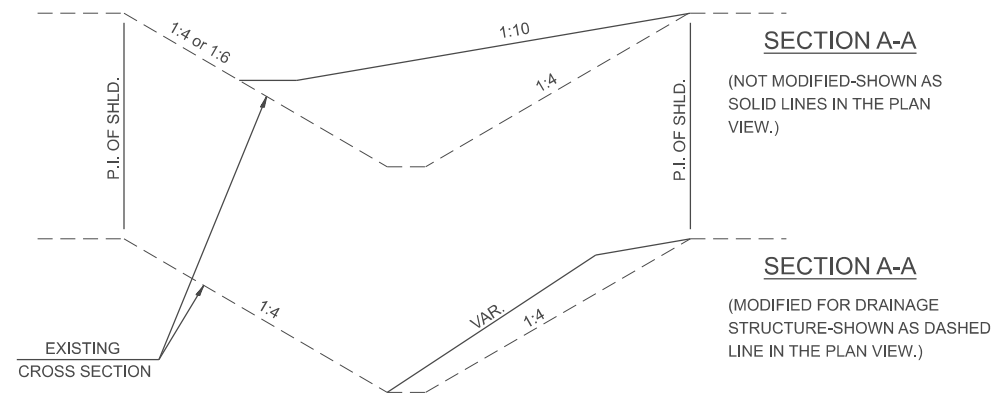
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 636001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DETAIL OF INERTIAL BARRIERS (55 MPH DESIGN - 40' MEDIAN)



GRADING AND SHAPING DETAIL



GENERAL NOTES

1. ALL 1:10 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 1:10 OR FLATTER.
2. ANY EXISTING DRAINAGE STRUCTURES LOCATED WITHIN THE 80' WORKING AREA SHALL BE MODIFIED OR LEFT IN PLACE AS SHOWN ON THE PLANS. WHERE THE EXISTING DRAINAGE STRUCTURES ARE TO REMAIN IN PLACE, THE SLOPES ARE TO BE CONSTRUCTED AS SHOWN AS MODIFIED SLOPES ON THIS DETAIL AND AS DIRECTED BY THE ENGINEER.
3. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
4. ATTENUATOR BASE AND BARREL ARRAY SHALL BE INSTALLED IN ACCORDANCE WITH STATE STANDARD 643001 AND MANUFACTURER'S SPECIFICATIONS.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H)

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:
 1. CONTACT THE BRIDGE OFFICE ABOUT CRASH WALL DETAILS IF IT NEEDS TO BE RAISED.
 2. DESIGNER SHOULD REVIEW MEDIAN DRAINAGE.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chil\IDOT_Standards\Cell\IDOT_Sheets.cad

USER NAME = Eric.Thomas	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 12/7/2022	DATE -	REVISED -	

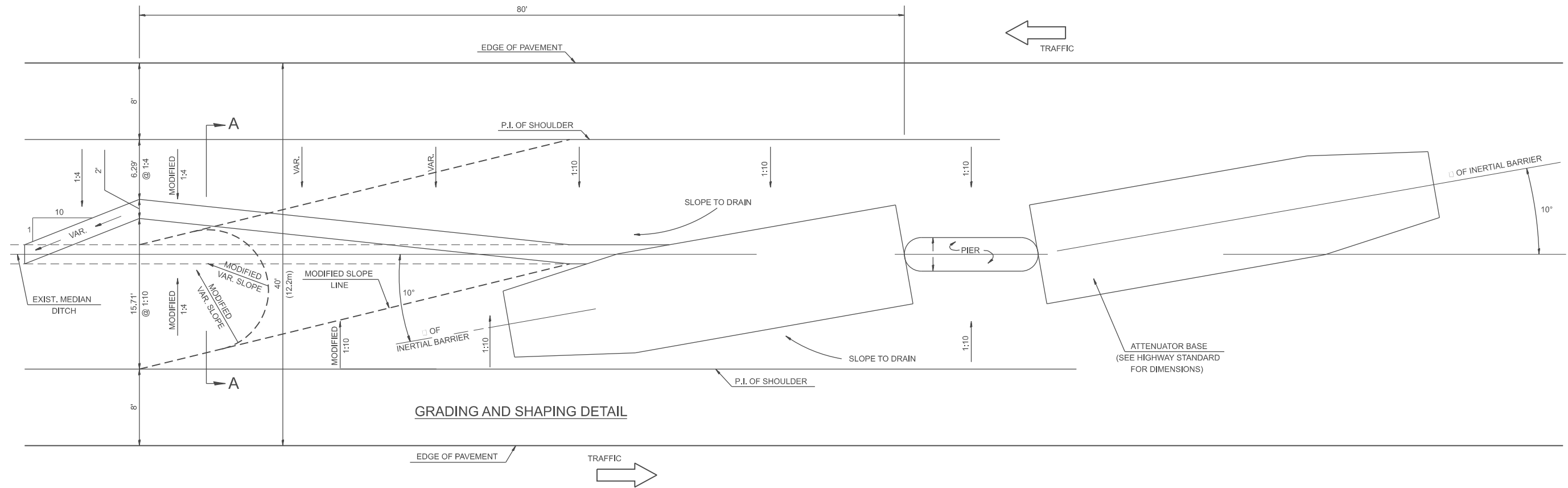
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

MEDIAN SAND MODULE IMPACT ATTENUATOR

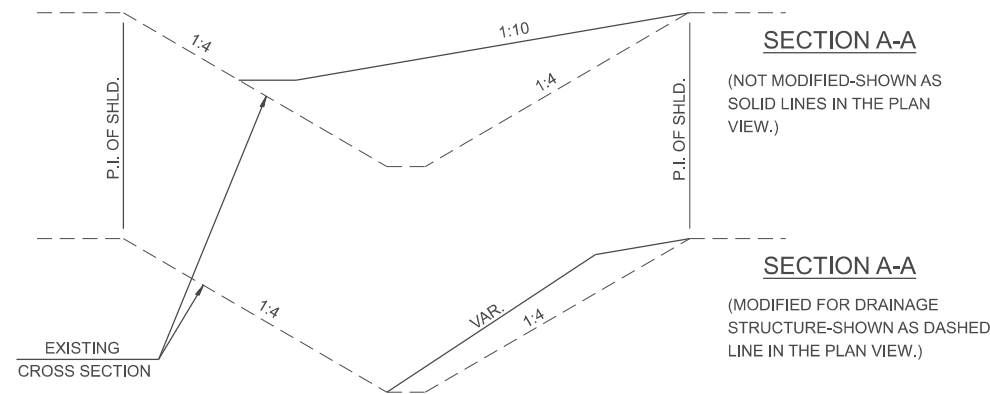
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 650001			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

DETAIL OF INERTIAL BARRIERS (70 MPH DESIGN - 40' MEDIAN)



GRADING AND SHAPING DETAIL



GENERAL NOTES

1. ALL 1:10 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 1:10 OR FLATTER.
2. ANY EXISTING DRAINAGE STRUCTURES LOCATED WITHIN THE 80' WORKING AREA SHALL BE MODIFIED OR LEFT IN PLACE AS SHOWN ON THE PLANS. WHERE THE EXISTING DRAINAGE STRUCTURES ARE TO REMAIN IN PLACE, THE SLOPES ARE TO BE CONSTRUCTED AS SHOWN AS MODIFIED SLOPES ON THIS DETAIL AND AS DIRECTED BY THE ENGINEER.
3. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
4. ATTENUATOR BASE AND BARREL ARRAY SHALL BE INSTALLED IN ACCORDANCE WITH STATE STANDARD 643001 AND MANUFACTURER'S SPECIFICATIONS.
5. IN AREAS OF 1:10 SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR WOOD POSTS SHALL BE PLACED AT 5' INTERVALS IN THE MEDIAN □, SEE SPECIAL PROVISIONS.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H)

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:

1. Include BDE Special Provision "Impact Attenuators"
2. Contact the Bridge Office about crash wall details if it needs to be raised.
3. Designer should review Median Drainage.

MODEL: SHT_PLAN.dwg, Verify Dist. STD No. for Design Speed & Median Width.
FILE NAME: C:\Bentley\CONNECTIONS\10110\organization-Chillicothe\Standards\Cat\DOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 12/7/2022	DATE -	REVISED -	

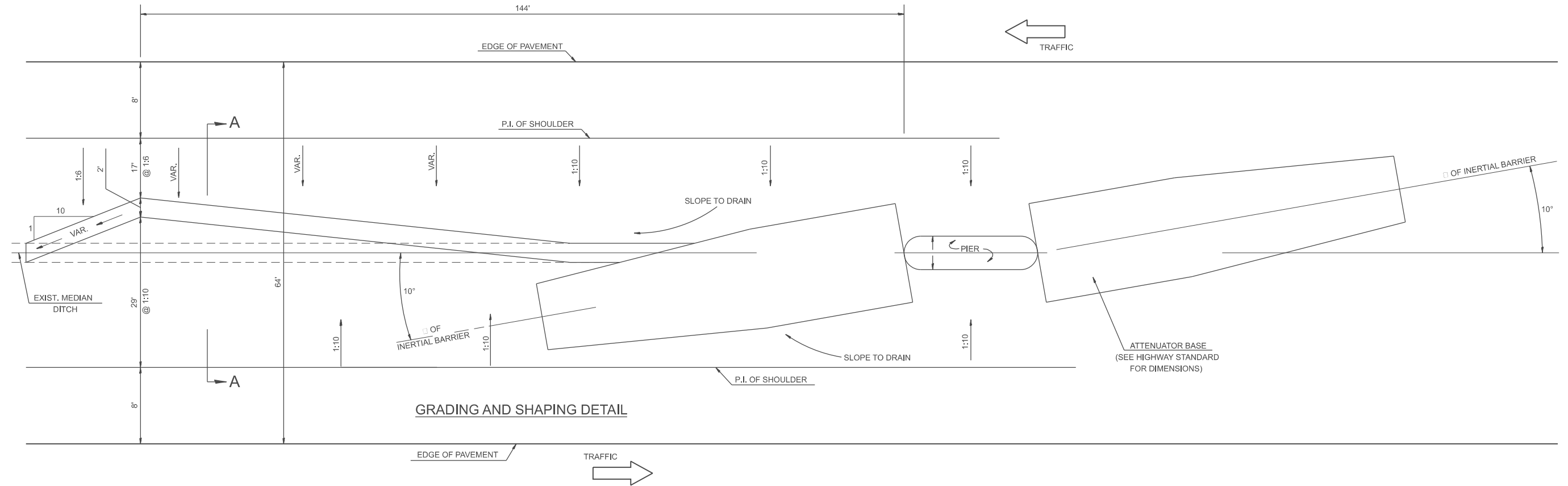
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MEDIAN SAND MODULE IMPACT ATTENUATOR
40' MEDIAN**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 650002			
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

DETAIL OF INERTIAL BARRIERS (55 MPH DESIGN - 64' MEDIAN)



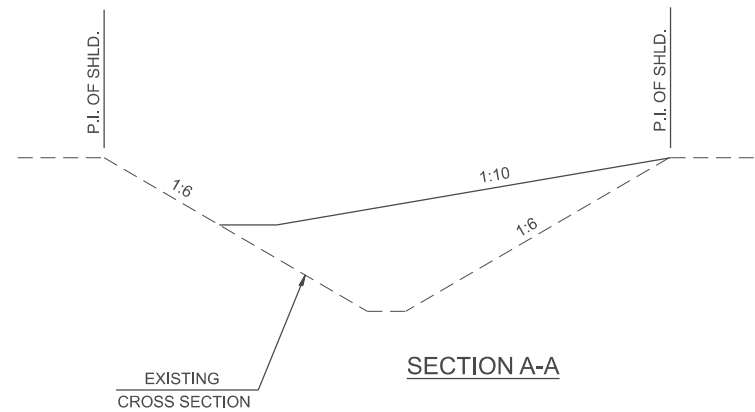
GRADING AND SHAPING DETAIL

GENERAL NOTES

1. ALL 1:10 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 1:10 OR FLATTER.
2. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
3. ATTENUATOR BASE AND BARREL ARRAY SHALL BE INSTALLED IN ACCORDANCE WITH STATE STANDARD 643001 AND MANUFACTURER'S SPECIFICATIONS.
4. IN AREAS OF 1:10 SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR OR MORE WOOD POSTS SHALL BE PLACED AT 5' INTERVALS IN THE MEDIAN □, SEE SPECIAL PROVISIONS AND SCHEDULES.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H)

All dimensions are in inches unless otherwise noted.



SECTION A-A

DESIGNER NOTES:

1. Include BDE Special Provision "Impact Attenuators"
2. Contact the Bridge Office about crash wall details if it needs to be raised.
3. Designer should review Median Drainage.

MODEL: SHT_PLAN4_Verify_Dist STD No. for Design Speed & Median Width.
FILE NAME: C:\Bentley\CONNECTIONS\10110\organization-Chil\DOT_S\standards\Civil\DOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 12/7/2022	DATE -	REVISED -	

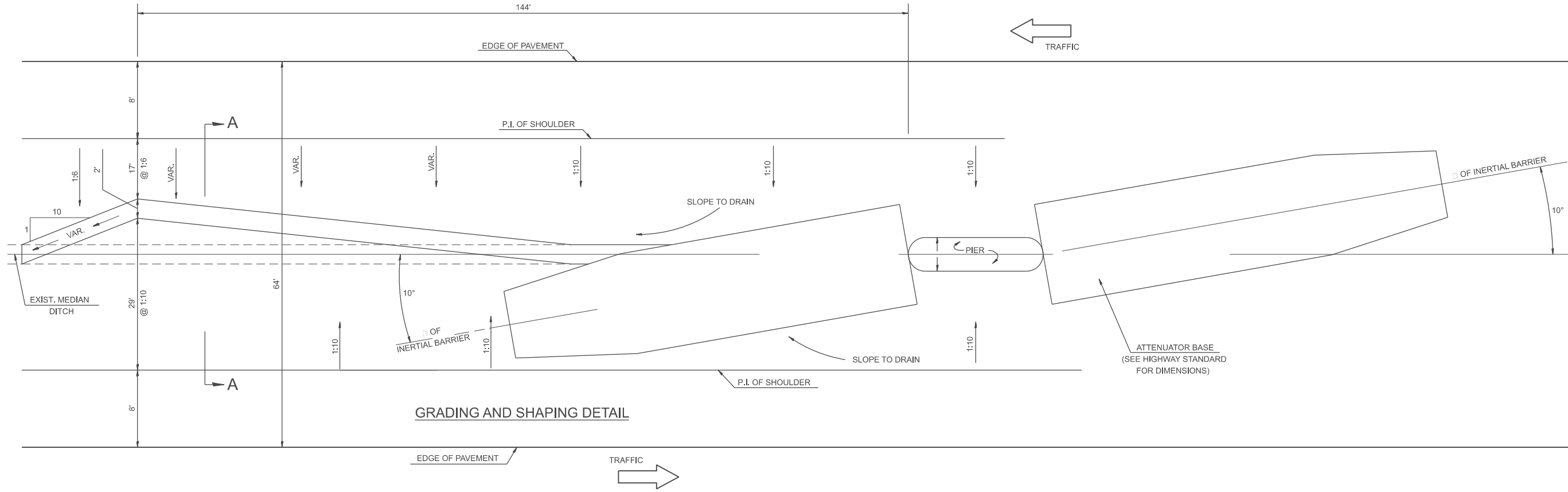
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MEDIAN SAND MODULE IMPACT ATTENUATOR
64' MEDIAN**

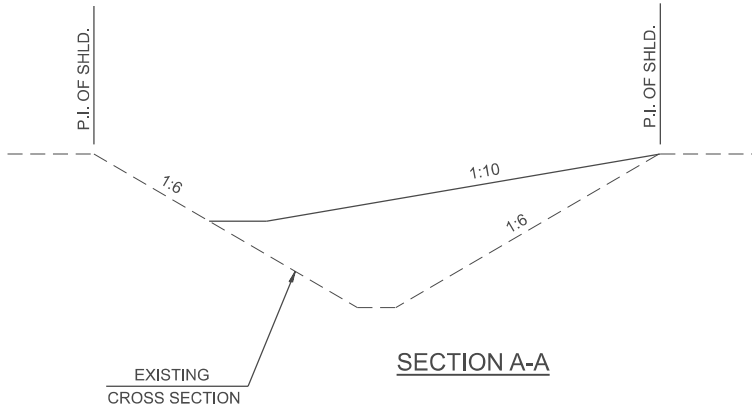
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 650003			
		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

DETAIL OF INERTIAL BARRIERS (70 MPH DESIGN - 64' MEDIAN)



GRADING AND SHAPING DETAIL



SECTION A-A

GENERAL NOTES

1. ALL 1:10 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 1:10 OR FLATTER.
2. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
3. ATTENUATOR BASE AND BARREL ARRAY SHALL BE INSTALLED IN ACCORDANCE WITH STATE STANDARD 643001 AND MANUFACTURER'S SPECIFICATIONS.
4. IN AREAS OF 1:10 SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR OR MORE WOOD POSTS SHALL BE PLACED AT 5' INTERVALS IN THE MEDIAN □, SEE SPECIAL PROVISIONS AND SCHEDULES.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H)

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:
 1. Include BDE Special Provision "Impact Attenuators"
 2. Contact the Bridge Office about crash wall details if it needs to be raised.
 3. Designer should review Median Drainage.
 MODEL: SHT_PLAN4_Verify Dist. STD No. for Design Speed & Median Width.
 FILE NAME: C:\Bentley\CONNECT\10110\organization-Chillicothe\Standards\Civil\DOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 12/7/2022	DATE -	REVISED -	

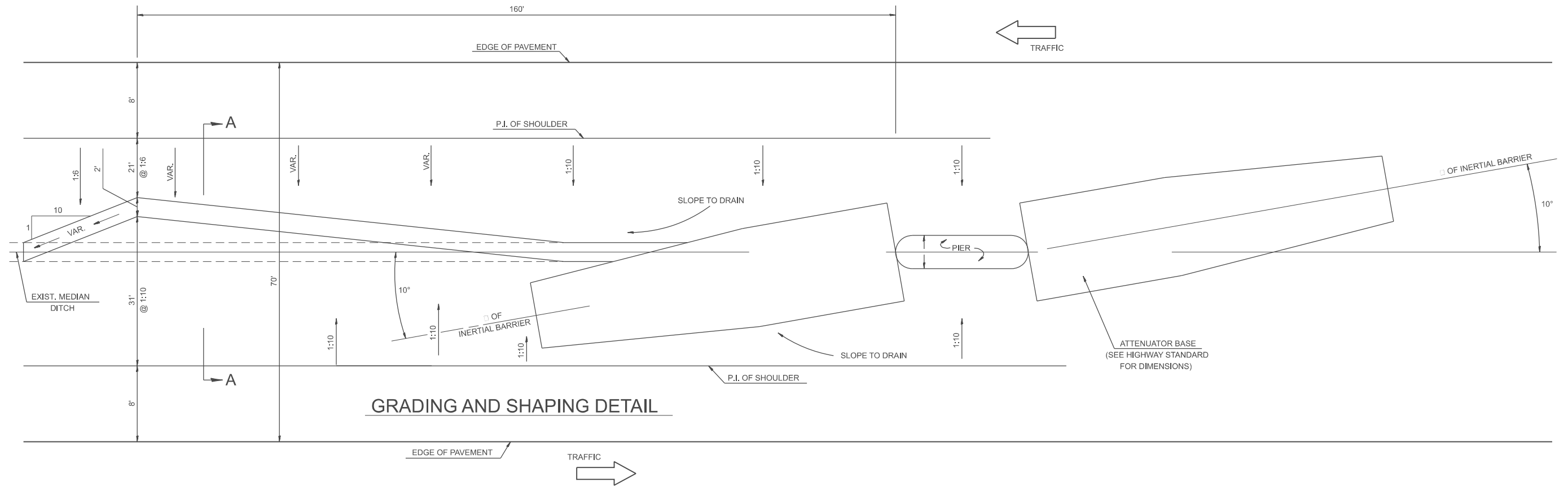
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MEDIAN SAND MODULE IMPACT ATTENUATOR
64' MEDIAN**

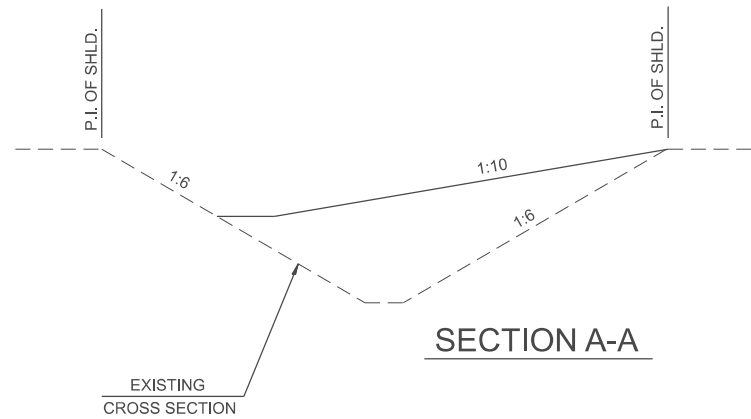
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 650004			
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

DETAIL OF INERTIAL BARRIERS (55 MPH DESIGN - 70' MEDIAN)



GRADING AND SHAPING DETAIL



SECTION A-A

GENERAL NOTES

1. ALL 1:10 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 1:10 OR FLATTER.
2. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
3. ATTENUATOR BASE AND BARREL ARRAY SHALL BE INSTALLED IN ACCORDANCE WITH STATE STANDARD 643001 AND MANUFACTURER'S SPECIFICATIONS
4. IN AREAS OF 1:10 SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR OR MORE WOOD POSTS SHALL BE PLACED AT 5' INTERVALS IN THE MEDIAN □, SEE SPECIAL PROVISIONS AND SCHEDULES.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H)

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:

1. Include BDE Special Provision "Impact Attenuators"
2. Contact the Bridge Office about crash wall details if it needs to be raised.
3. Designer should review Median Drainage.

MODEL: SHT_PLAN.dwg
FILE NAME: C:\Bentley\CONTRACTS\110110\Signatator\CH4\IBD01_Signatator.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 12/7/2022	DATE -	REVISED -	

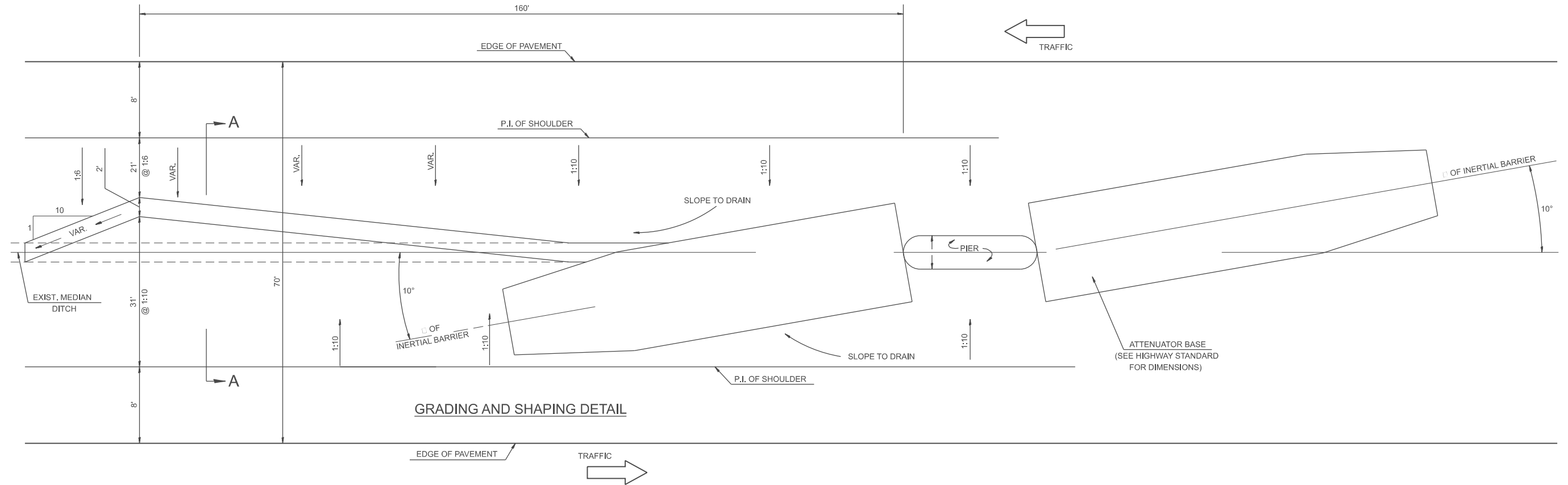
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MEDIAN SAND MODULE IMPACT ATTENUATOR
70' MEDIAN**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DISTRICT 4 DETAIL NO. 650005			
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

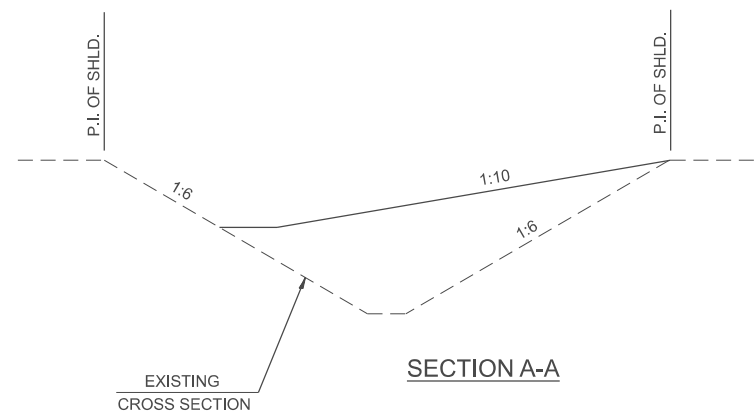
DETAIL OF INERTIAL BARRIERS (70 MPH DESIGN - 70' MEDIAN)



GRADING AND SHAPING DETAIL

GENERAL NOTES

1. ALL 1:10 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 1:10 OR FLATTER.
2. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
3. ATTENUATOR BASE AND BARREL ARRAY SHALL BE INSTALLED IN ACCORDANCE WITH STATE STANDARD 643001 AND MANUFACTURER'S SPECIFICATIONS
4. IN AREAS OF 1:10 SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR OR MORE WOOD POSTS SHALL BE PLACED AT 5' INTERVALS IN THE MEDIAN □, SEE SPECIAL PROVISIONS AND SCHEDULES.



All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H)

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:

1. Include BDE Special Provision "Impact Attenuators"
2. Contact the Bridge Office about crash wall details if it needs to be raised.
3. Designer should review Median Drainage.

MODEL: SHT_PLANM_Verify_Dist STD No. for Design Speed & Median Width.
FILE NAME: C:\Bentley\CONNECTION\10110\organization-Chillicothe\Standards\CALIBDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

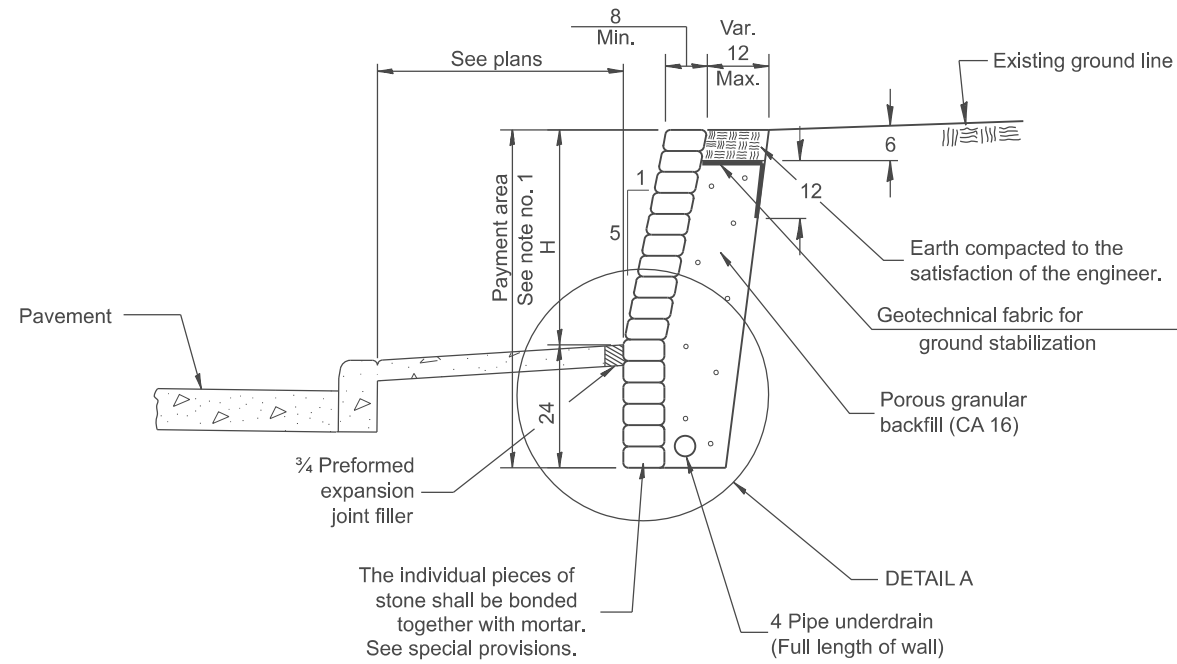
**MEDIAN SAND MODULE IMPACT ATTENUATOR
70' MEDIAN**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 650006		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

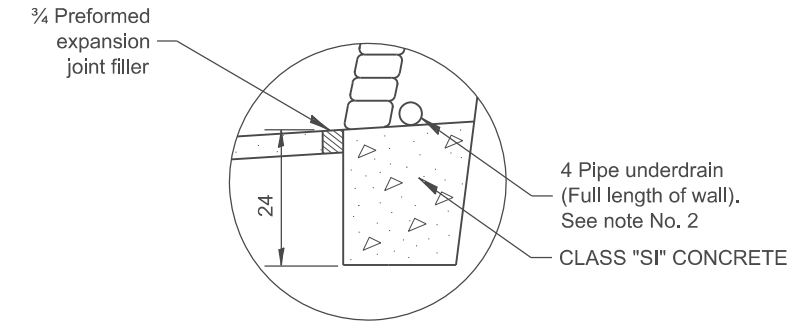
DESIGNER NOTES:
 1. USE IN CONJUNCTION WITH SPECIAL PROVISIONS FOR "MORTARED STONE WALL". THE PAY ITEM INCLUDES P.E.J.F., GEOTECHNICAL FABRIC FOR GROUND STABILIZATION, PIPE UNDERDRAIN, PIPE DRAIN, AND POROUS GRANULAR BACKFILL.

MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\organization\ChillIDOT_Standards\CallIDOT_Sheets.dwg



MORTARED STONE WALL DETAIL

[Payment Formula : 24 + average height of exposed wall (H) x length of construction = payment area in sq. ft.]



**DETAIL A
CONCRETE ALTERNATE**

(See note No. 1)

NOTES:

1. At the Contractor's option this portion of the stone wall below top of sidewalk elevation may be constructed with class SI concrete. The width shall match the width of stone plus the 12 maximum trench.
2. 4 Pipe Underdrains Outlets shall outlet into inlets or storm sewer.
3. Pipe drains and pipe underdrains shall meet the requirements of the applicable portions of section 601 of the Standard Specifications.
4. Preformed expansion joint filler shall be placed between the sidewalk and the wall.
5. The Geotechnical fabric shall meet the requirements of the applicable portions of Section 210 and 1080 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

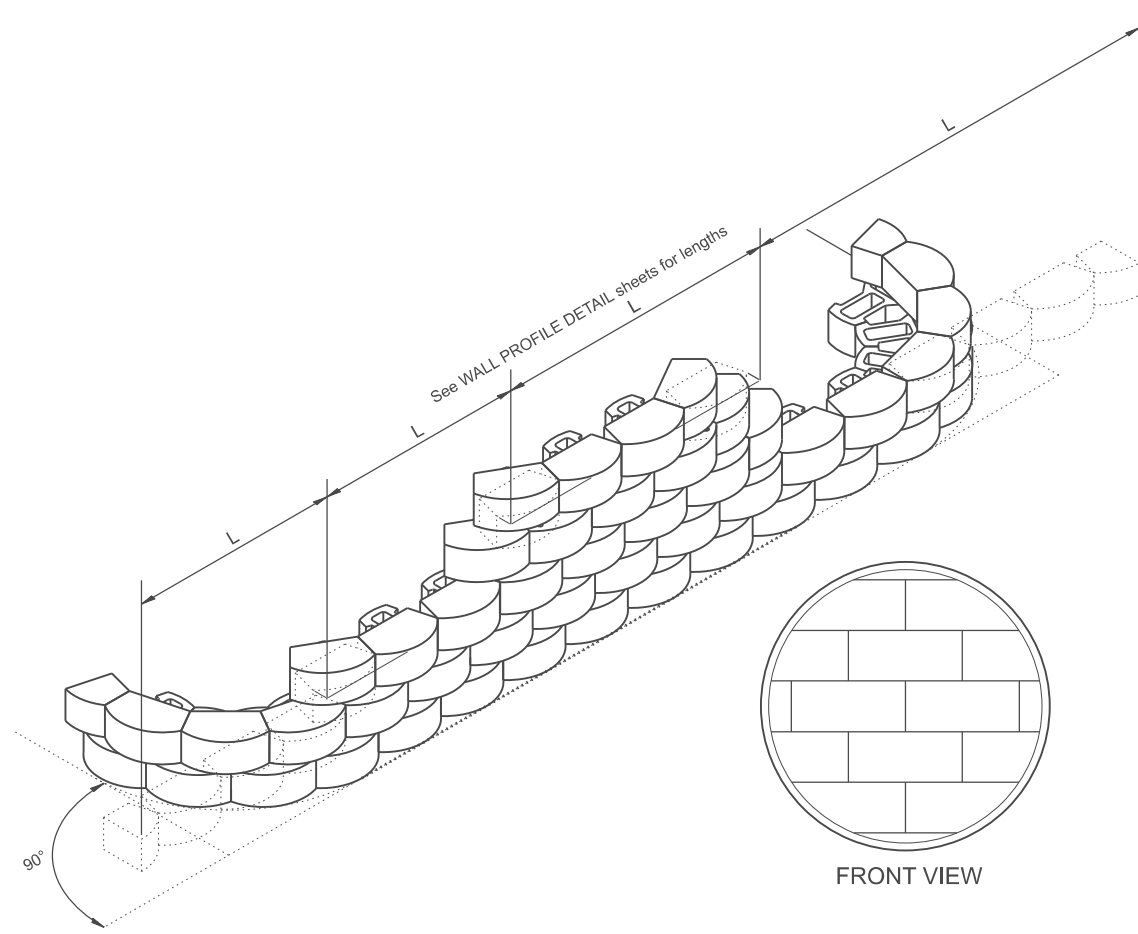
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

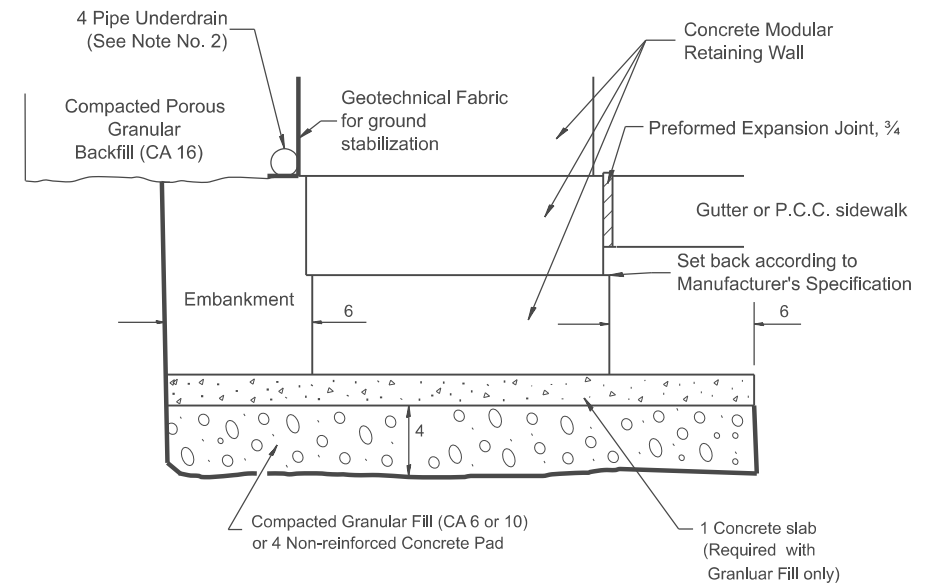
MORTARED STONE WALL

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 660001			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



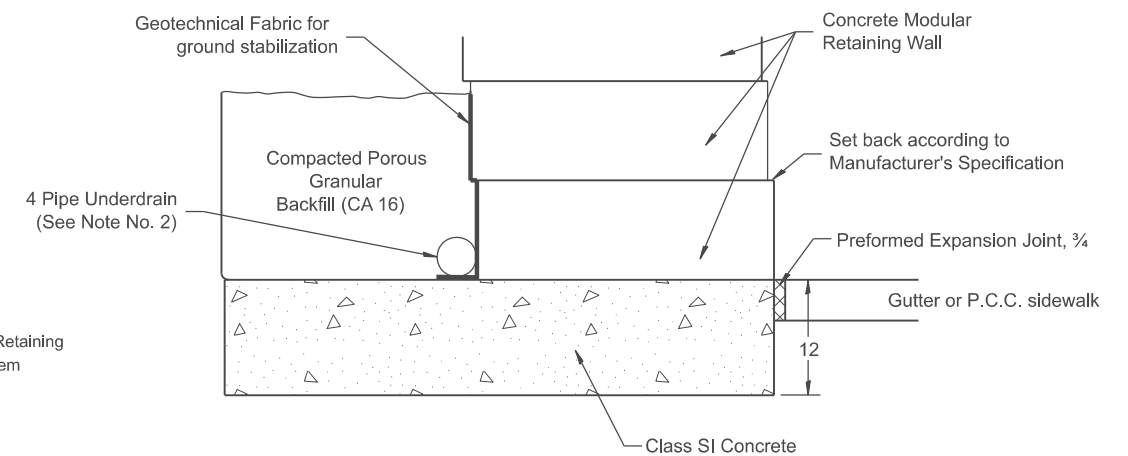
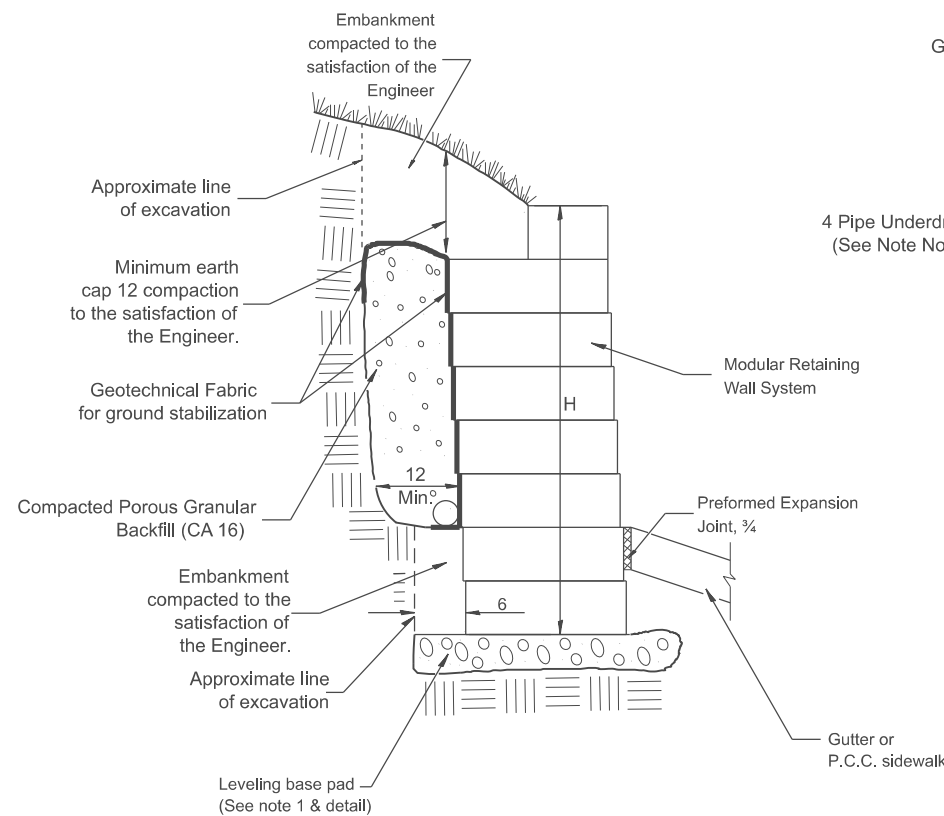
INSTALLATION OF COURSES IN RUNNING BOND



LEVELING BASE PAD DETAIL

NOTES:

1. At the Contractor's option the portion of the stone wall below top of sidewalk elevation may be constructed with class SI concrete. The width shall match the width of the modular block plus the 12 maximum trench.
2. 4 Pipe Underdrains shall outlet into inlets or storm sewer.
3. Pipe drains and pipe underdrains shall meet the requirements of the applicable portions of section 601 of the Standard Specifications.
4. Preformed expansion joint filler shall be placed between the gutter or sidewalk and the wall.
5. The geotechnical fabric shall meet the requirements of the applicable portions of Sections 210 and 1080 of the Standard Specifications.



LEVELING BASE PAD CONCRETE ALTERNATE (See Note 1)

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT10110\Organization\Chil\DOT_Standards\Call\DOT_Sheets.ctb
 1. Use in conjunction with Guide Bridge Special Provisions.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MODULAR RETAINING WALL SYSTEM DETAIL

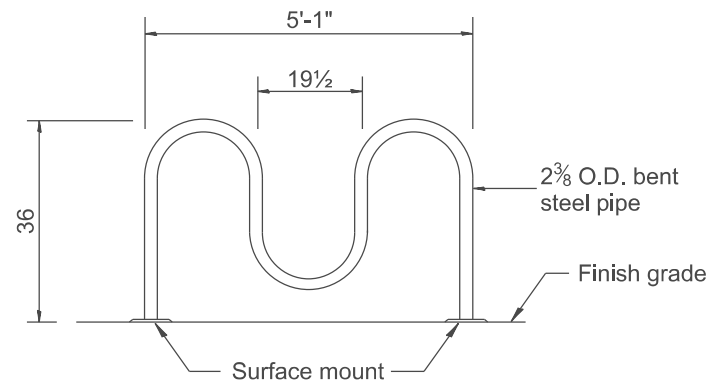
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 660101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

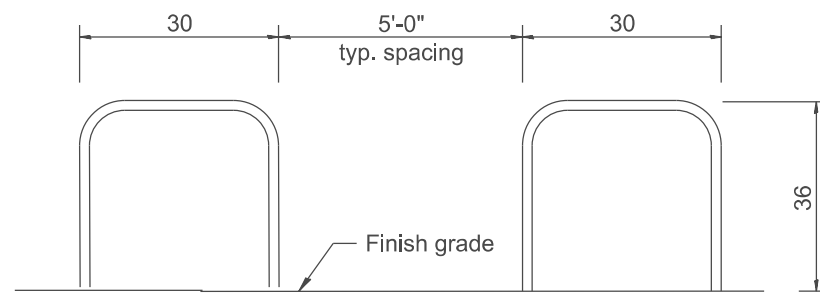
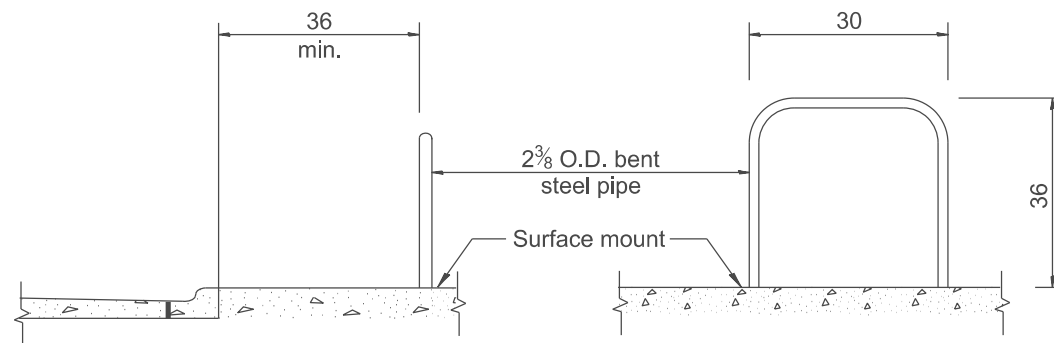
DESIGNER NOTES:

1. CHECK WITH PROJECT ENGINEER BEFORE USING IN PLANS.
2. VERIFY THAT THESE DESIGNS STILL MEET THE CURRENT REQUIREMENTS FOR BICYCLE FACILITIES.
3. A PROJECT SPECIFIC SPECIAL PROVISION WILL BE NEEDED WITH THIS CADD STANDARD.

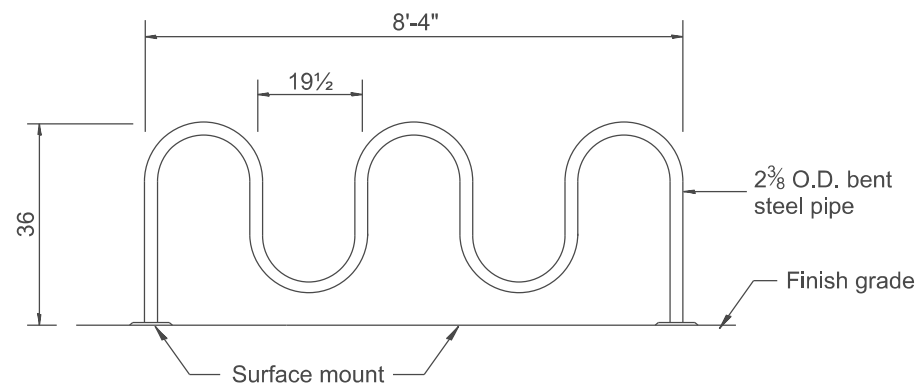
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TYPE A₃ BICYCLE RACK ELEVATION

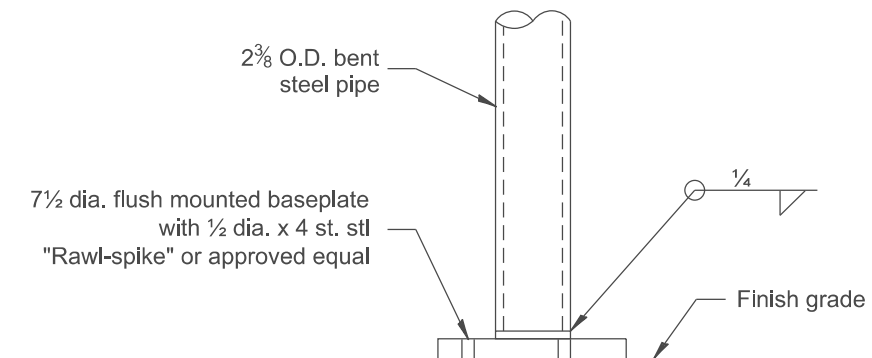
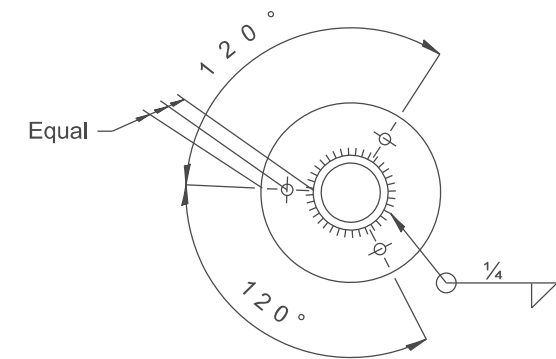


TYPE B BICYCLE RACK



TYPE A₅ BICYCLE RACK ELEVATION

7 1/2 dia. x 1/2 thick base plate



SURFACE MOUNT DETAIL

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

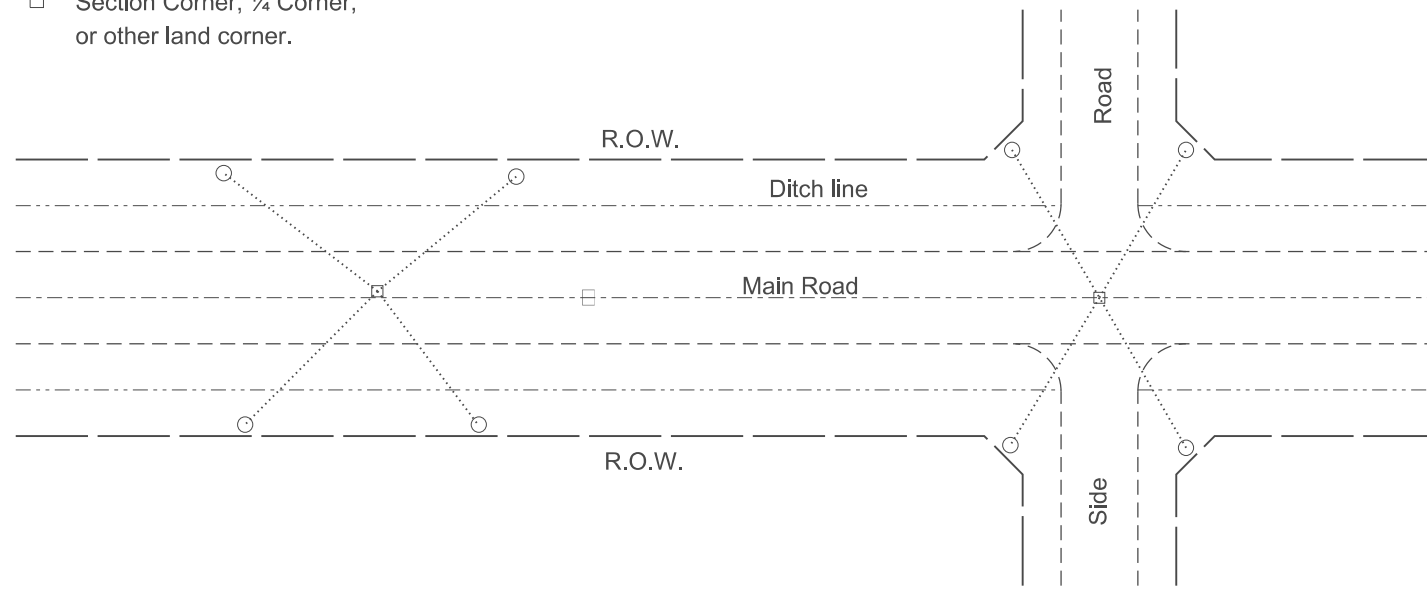
BICYCLE RACK

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 660201		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

PERMANENT SURVEY TIES

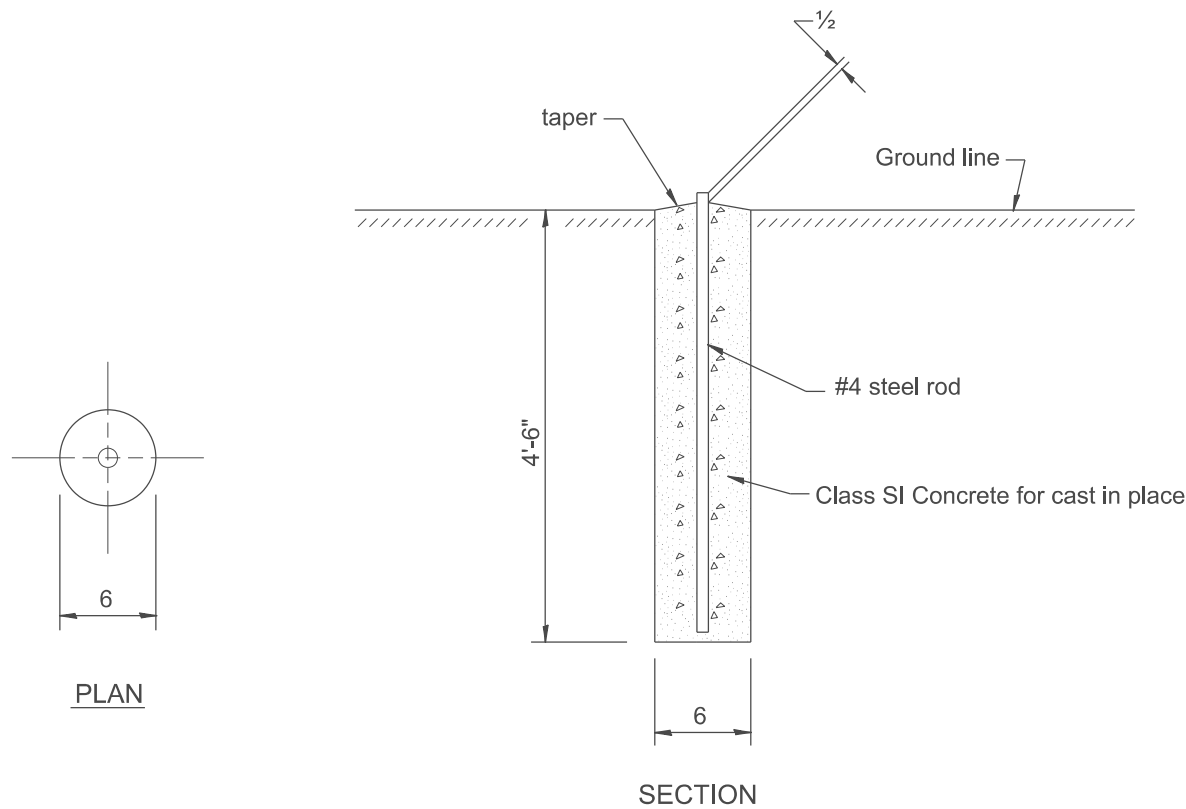
- Permanent Survey Tie
- Section Corner, 1/4 Corner, or other land corner.



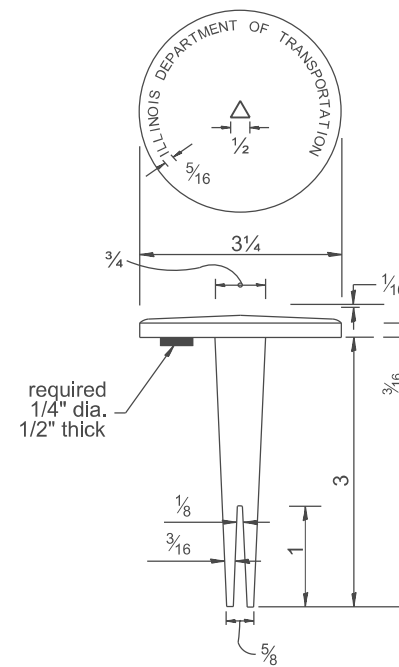
TYPICAL APPLICATION

GENERAL NOTES

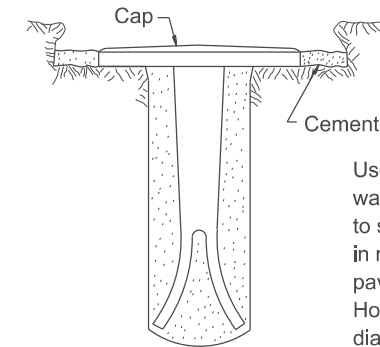
1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall be turned over to the IDOT Chief of Surveys or Chief of Plats after recordation.
4. All documentation shall be performed by a PLS
5. The metal tablet used on permanent survey markers shall be made of bronze.



PERMANENT SURVEY MARKERS



BRASS TABLET

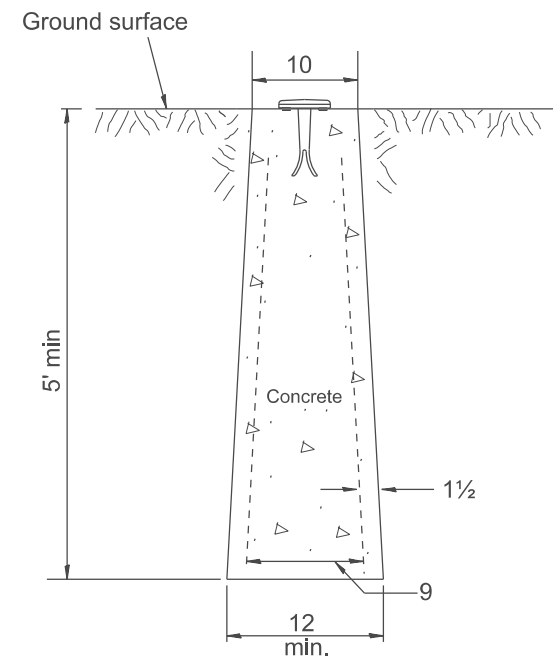


Tablet constructed in rock ledge or concrete.

TYPE I

GENERAL NOTES

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 and a thickness of 1/4 or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s, P.C.'s, and P.I.'s located within the R.O.W. of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 1000.
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.



**TYPE II
CAST-IN-PLACE MARKER**

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:
 1. ADD DISTRICT SPECIAL PROVISION IF PLACING A TYPE 1 MARKER ON A STRUCTURE.
 2. MODIFIES STATE STD 667101. DON'T USE STATE STD IF USING CADD STANDARD
 3. PERMANENT SURVEY MARKERS SHALL BE PLACED TO PERPETUATE THE SURVEY LINES OF DIVIDED HIGHWAYS AND THE CENTERLINE OF ALL OTHERS WHERE THESE LINES HAVE BEEN ESTABLISHED BY SURVEY.
 4. PERMANENT SURVEY MARKERS SHALL BE PLACED AT ALL LAND SECTION CORNERS WITHIN THE STATE R.O.W. WHERE THE MONUMENTS HAVE BEEN ESTABLISHED BY SURVEY.
 MODEL: SHT_PLAN_1
 FILE NAME: C:\Bentley\PROJECTS\15011101\15011101_01\15011101_01_SURVEY.dwg

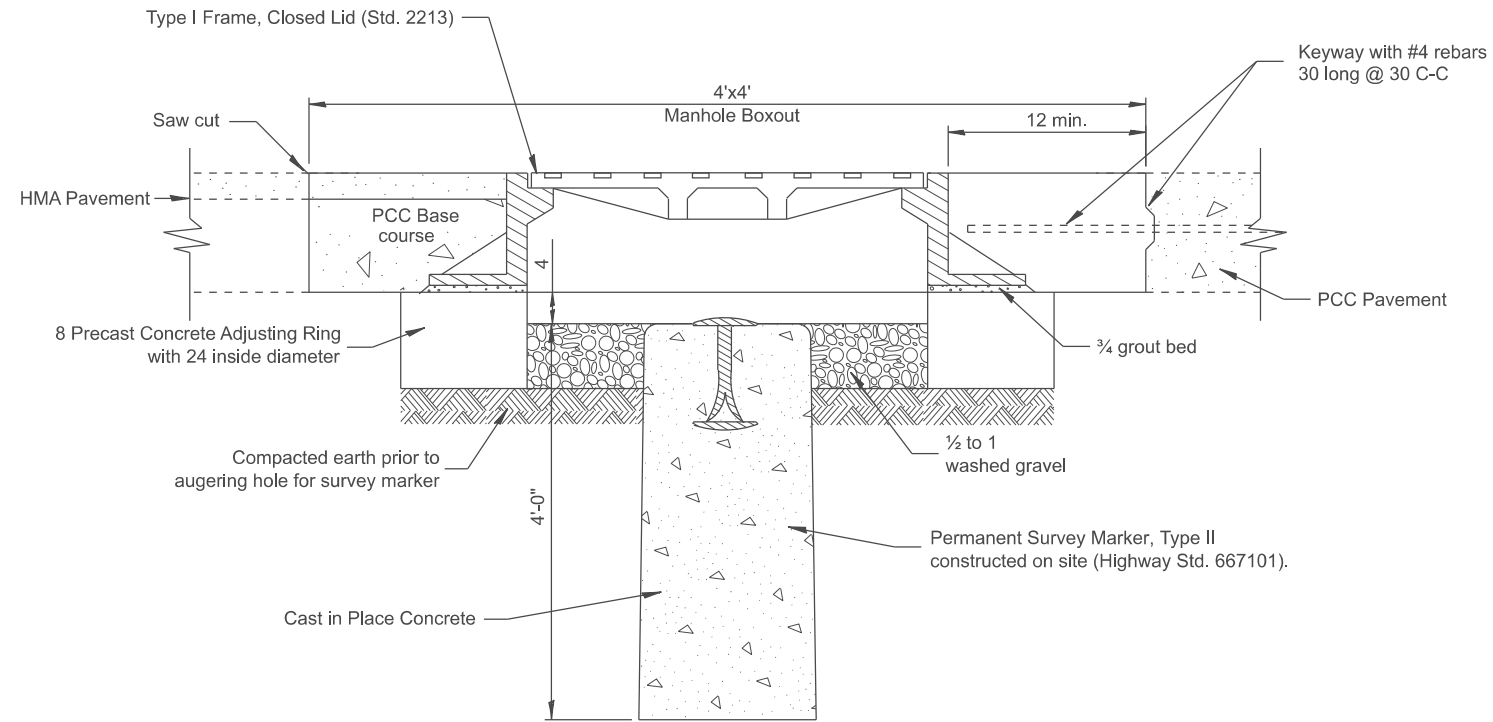
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

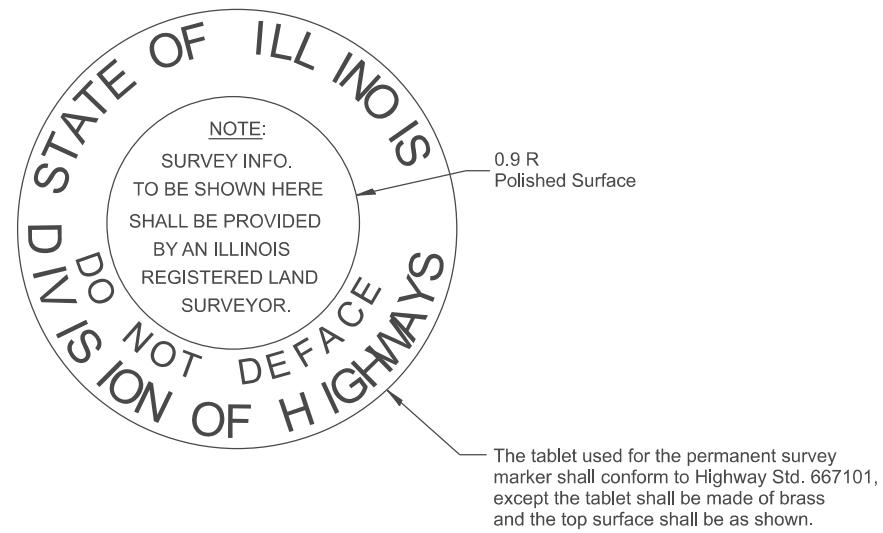
**PERMANENT SURVEY TIE &
PERMANENT SURVEY MARKERS TY.I - TY.II**

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 667101		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



ELEVATION



TOP OF TABLET

GENERAL NOTES:

1. This work shall be performed in accordance with Article 667.04.

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:
 1. Include Highway Standard 667101 for PERMANENT SURVEY MARKERS.
 2. Include District Special Provisions.
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONTEC\110110\Organization\ChilIDOT_Survey\DOT_Survey.dwg

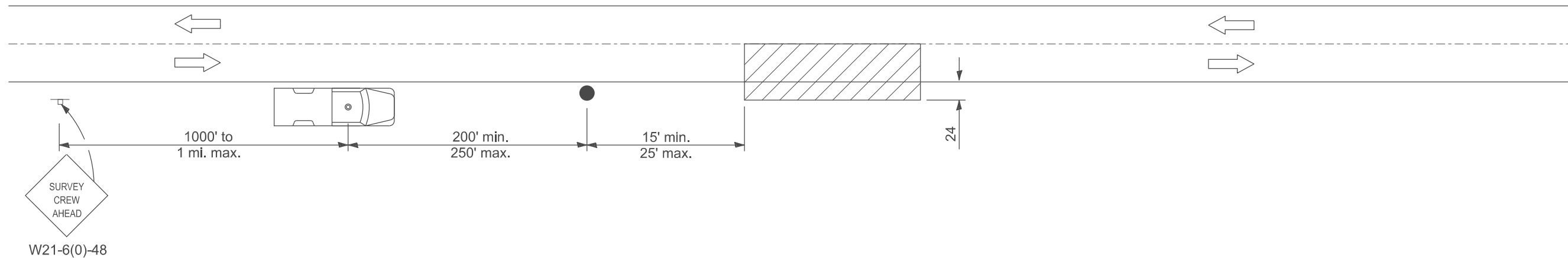
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PERMANENT SURVEY MARKER TYPE II (SPECIAL)

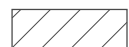
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 667106			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



W21-6(0)-48

SYMBOLS



Work area



Sign on portable or permanent support



Truck with flashing amber light and dual emergency flashers



Flagger with traffic control sign

TYPICAL APPLICATIONS

Utility operations

All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\organization\Chil\IDOT_Standards\Cell\IDOT_Sheets.cel

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

NIGHTTIME LIGHTING INSPECTION

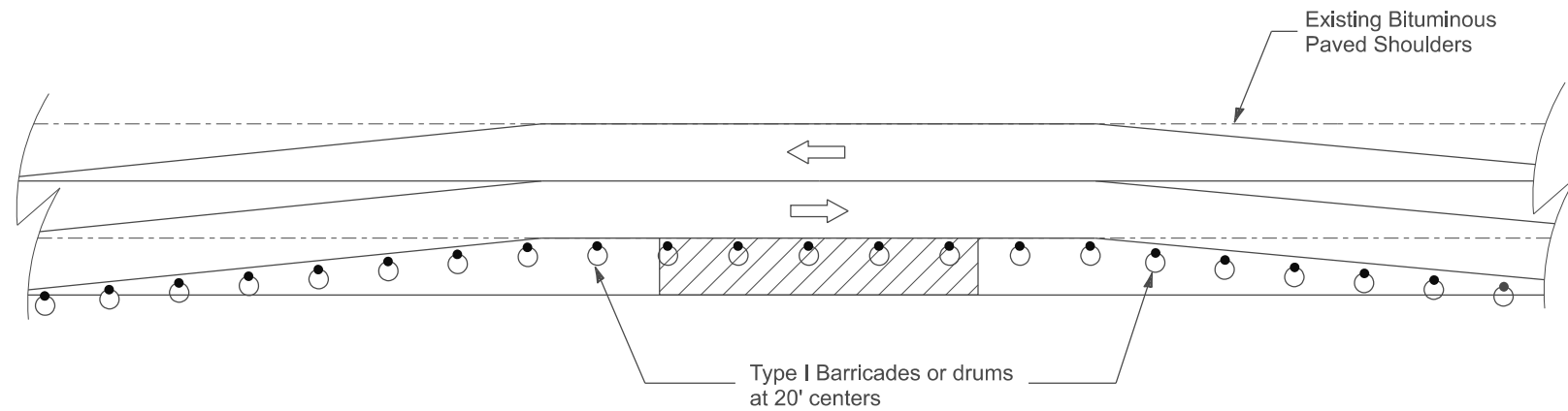
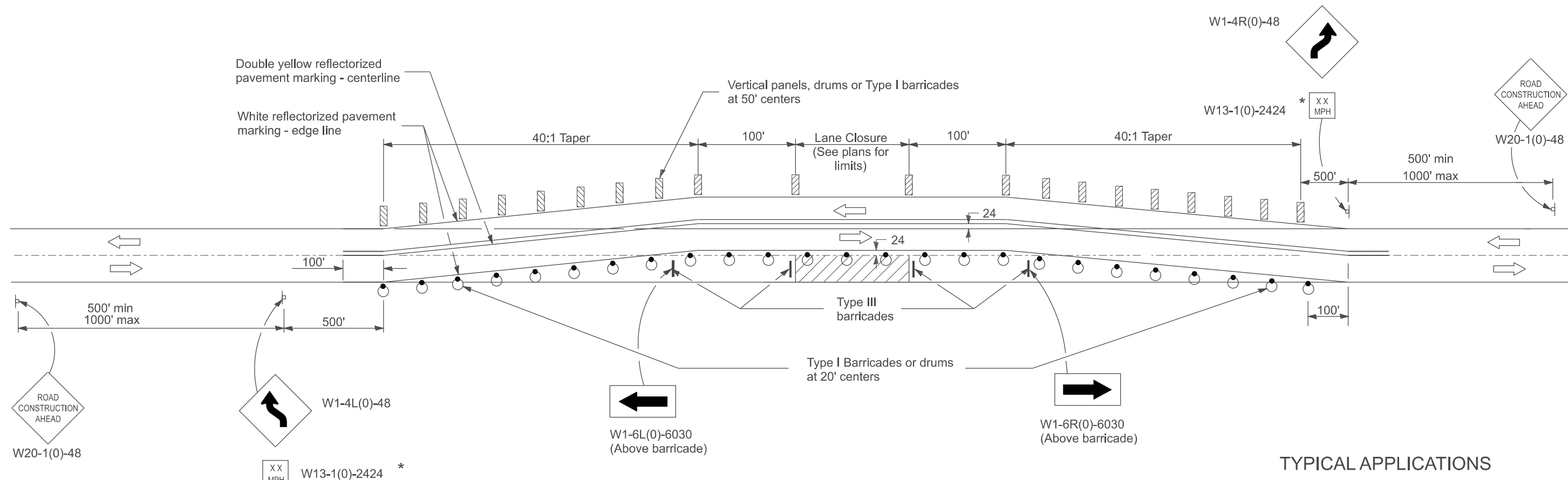
SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 701301		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:

1. Include State Standard 701331.
2. Review treatments with District Traffic Control Engineer (Technician).
3. Include District Special Provision.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT10110\paw\station\chm\DOT_Standards\DOT_Standards.dwg



OPTIONAL TREATMENT WITH EXISTING HMA PAVED SHOULDERS

TYPICAL APPLICATIONS

1. Connection of relocated pavements to existing pavements.
2. Emergency pavement repairs.

GENERAL NOTES

1. This Standard is used where at any time, any vehicle, equipment, workers or their activities require the closure of a single lane and a temporary run-around is constructed adjacent to the existing pavement.
- *2. The advisory speed to be shown below the reverse curve (turn) signs shall be determined at the site and approved by the Engineer.
3. Type III reflectorized pavement marking tape shall be used for marking the edge lines and centerline on the existing pavement. Type III reflectorized pavement marking tape shall also be used for markings on the paved run-arounds. Type III reflectorized pavement marking tape will be paid for in accordance with Article 703.07 of the Standard Specifications

SYMBOLS

- Work area
- Sign
- Barricade or drum with monodirectional steady burning light
- Vertical panel, drum or Type I barricade
- Type III barricade

All dimensions are in inches unless otherwise noted.

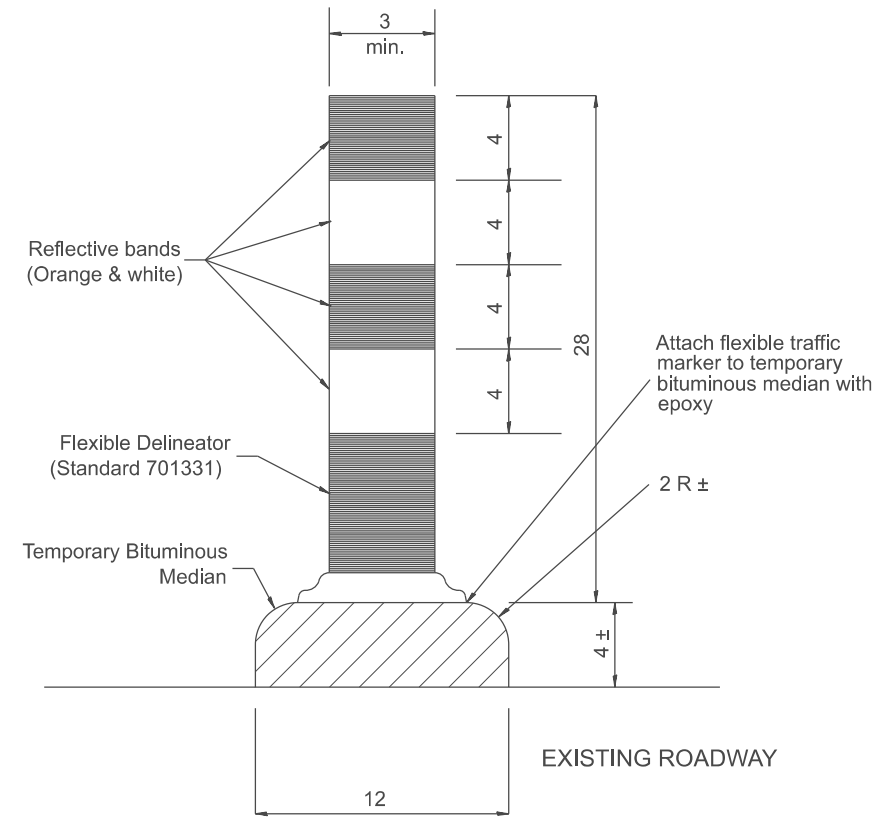
USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

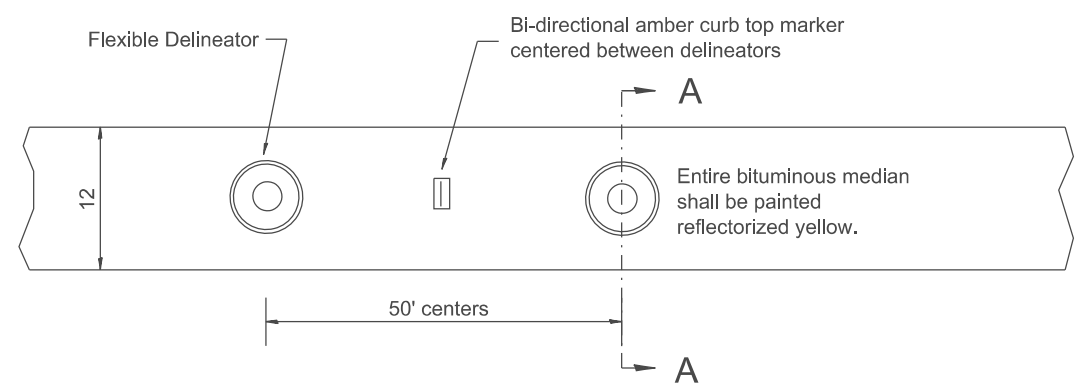
LANE CLOSURE, 2L, 2W WITH RUNAROUND ADJACENT TO EXISTING PAVEMENT FOR SPEEDS ≥45MPH (STANDARD 701331, SPECIAL)			
SCALE: NOT TO SCALE	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 701331		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

DESIGNER NOTES:
 1. Include State Std. 702001
 2. Include District Special Provision.
 MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT1011\Organization\Chil\DOT_Standards\Ceil\DOT_Sheets.dwg



SECTION A-A



PLAN

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY BITUMINOUS MEDIAN

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 702001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

Designer Notes:

1. Add District Special Provision
- A. Foundation Reinforcement requirements include reinforcement bars and spiral hooping.
- B. Stub post kg(lbs) includes weight of stub posts only. For weight of angles, gussets, base plates, bolts, nuts, washers, plus base plates and gussets on main post, plus fuse plate (if any) with bolts, nuts and washers. See Sign Structure Manual.

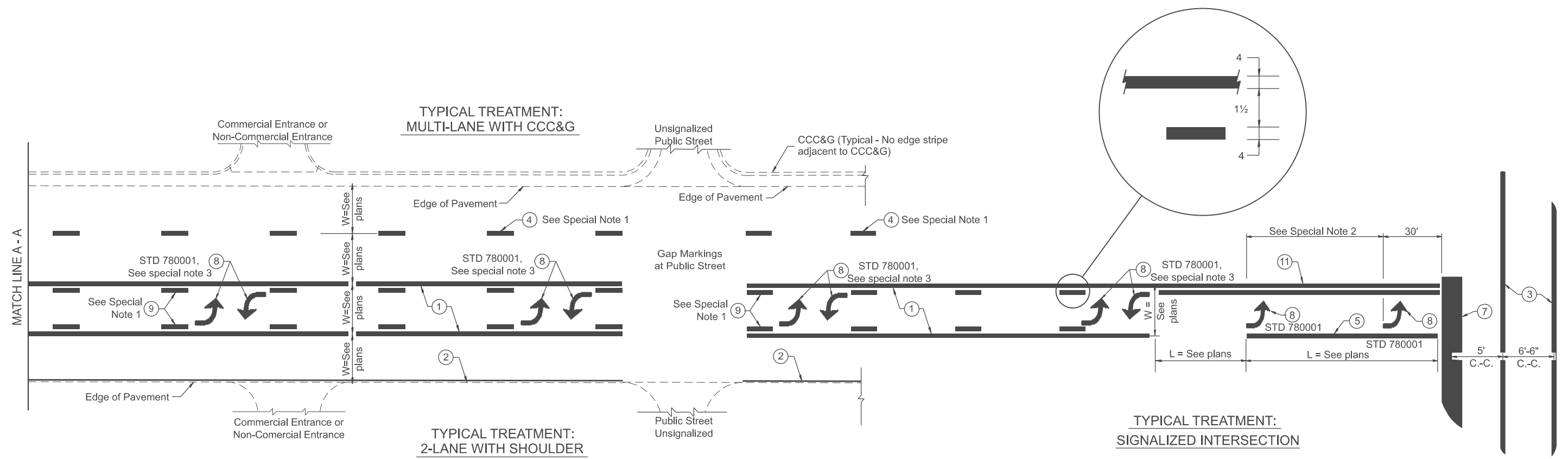
MODEL: SHT_PLAN
 FILE NAME: C:\Bentley\CONNECT\10110\planning\Bentley-Chillicothe\Standards\Cat\DOT_Shts.dwg

ROUTE	STATION	SIGN NO.	MAIN SIGN	SIGN PANEL REFL. SQ FT	NO. POSTS	POST SIZE	C - C POSTS	POST LENGTH (LIN. FT.)			SUPPORT STEEL LBS	FOUNDATION CL. SI CONCRETE CU YD	FOUNDATION REINFORCEMENT LBS	STUB POSTS LBS	FUUSE PLATE BOLT			REMARKS
								L - 1	L - 2	L - 3					SIZE	LENGTH	SPECS	

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GROUND MOUNT SIGN STRUCTURE DETAILS					F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -		SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.					DISTRICT 4 DETAIL NO. 720006 CONTRACT NO.				
	CHECKED -	REVISED -							ILLINOIS FED. AID PROJECT				
	DATE -	REVISED -											
PLOT DATE = 12/7/2022													

MODEL: D4-780001-01_1_Include State Standard 780001 (Typical Pavement Markings)
 FILE NAME: c:\p\work\pavement\780001\780001.dwg
 USER: thomas.cox
 DATE: 11/11/2024



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

SPECIAL NOTES

1. ~~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'.
 - 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 is 200'.
 - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
 - D. The spacing between Bi Directional Left Turn Arrows is 33'.

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. 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)

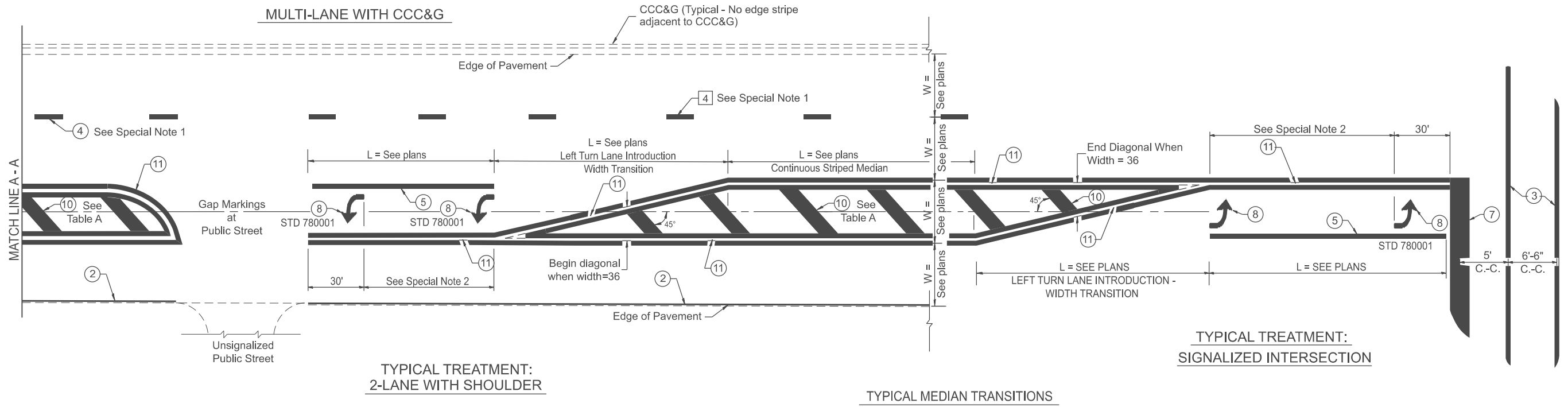
USER NAME = thomas.cox	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 11/11/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL PAVEMENT MARKINGS

SCALE: NOT TO SCALE SHEET 000 OF 2 SHEETS STA. TO STA.

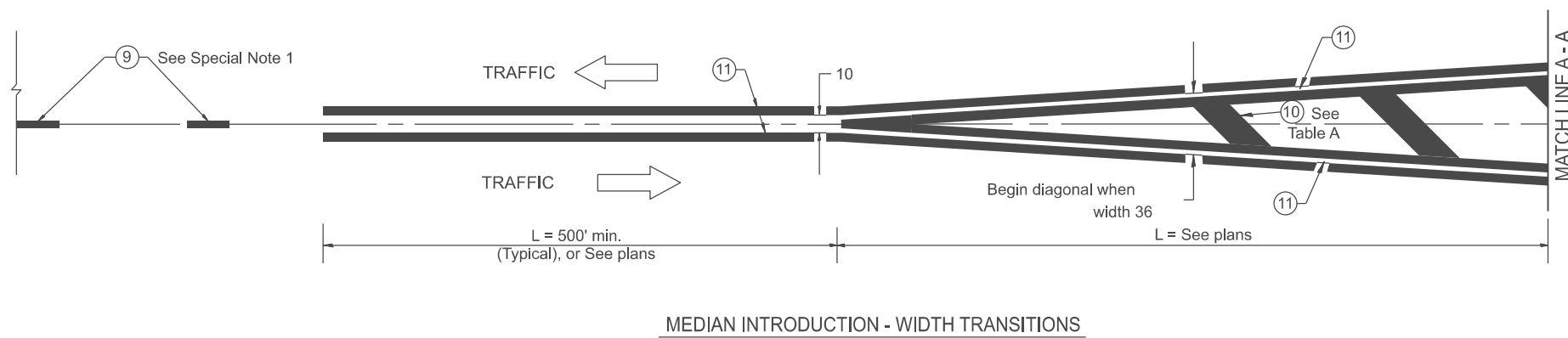
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				0
DISTRICT 4 DETAIL NO. 780001			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)	
	CONTINUOUS	
Less Than 30 mph	50'	15'
30 - 45 mph	75'	20'
Over 45 mph	150'	30'



All dimensions are in inches unless otherwise noted.

MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\organizer\Chil\IDOT_Standards\Cell\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

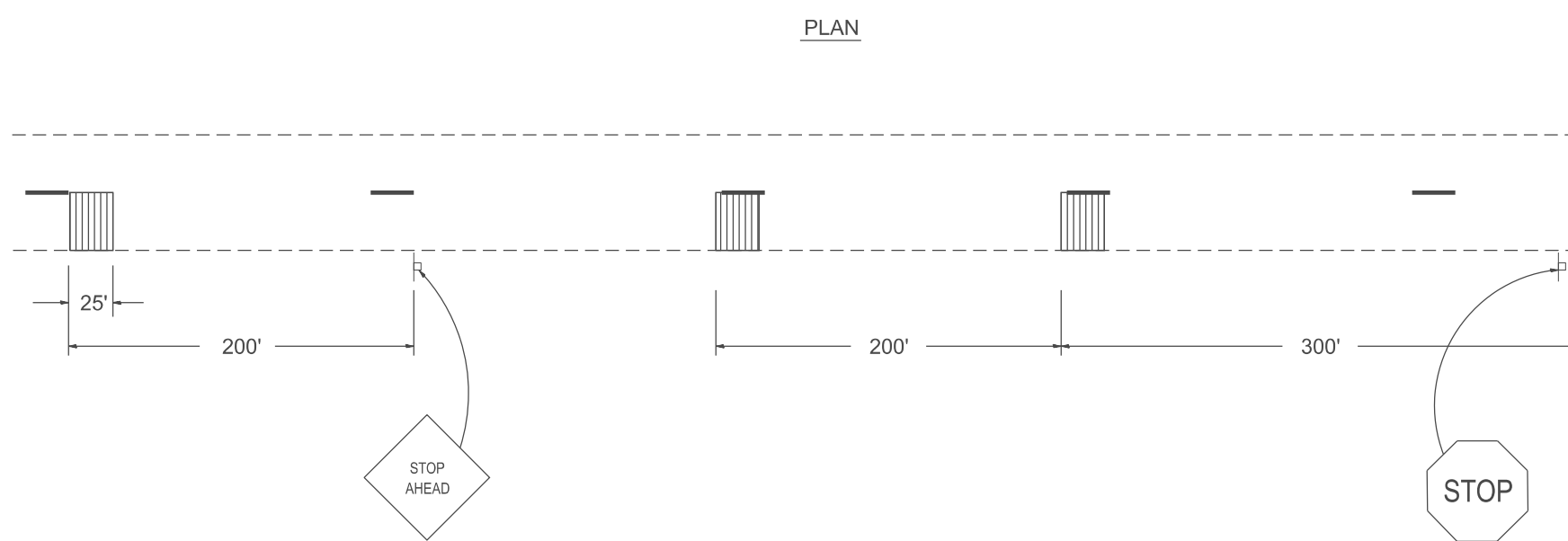
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL PAVEMENT MARKINGS

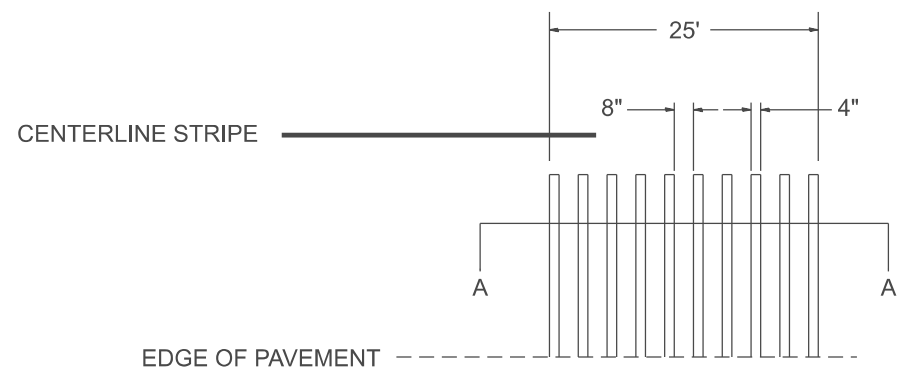
SCALE: NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 780001		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

PLAN



GROOVING DETAIL



SECTION A-A



MODEL: SHT_PLAN
FILE NAME: C:\Bentley\CONNECT\10110\Organization\Chil\IDOT_Standards\Cell\IDOT_Sheets.dwg

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

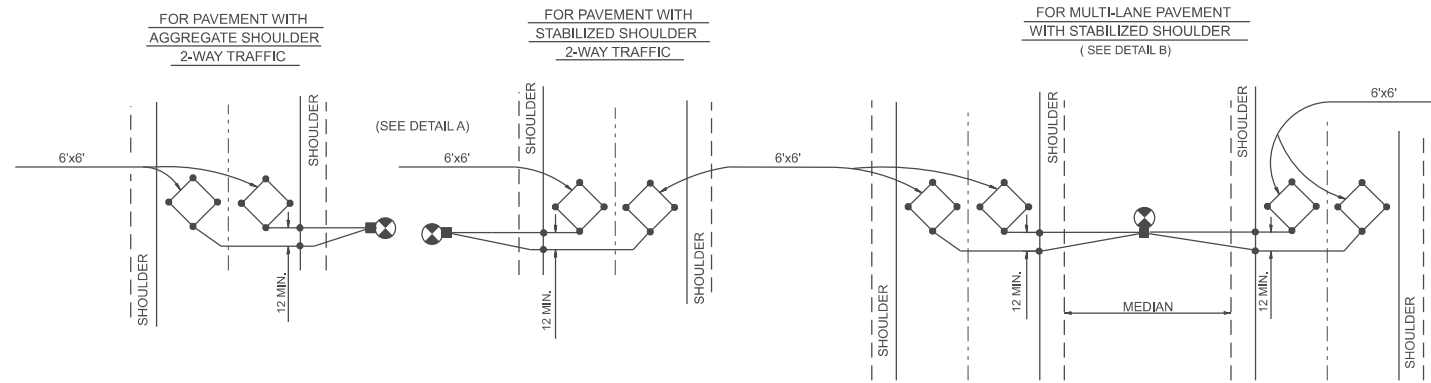
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROOVED-IN RUMBLE STRIP

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO. 780002		CONTRACT NO.		
ILLINOIS		FED. AID PROJECT		

TYPICAL APPLICATIONS FOR TRAFFIC COUNTER USING TERMINAL FACILITY



LEGEND

- 4 x 4 TREATED WOOD POST
- TERMINAL FACILITY
- INDICATES 1 HOLE DRILLED AT DETECTOR LOOP CORNER

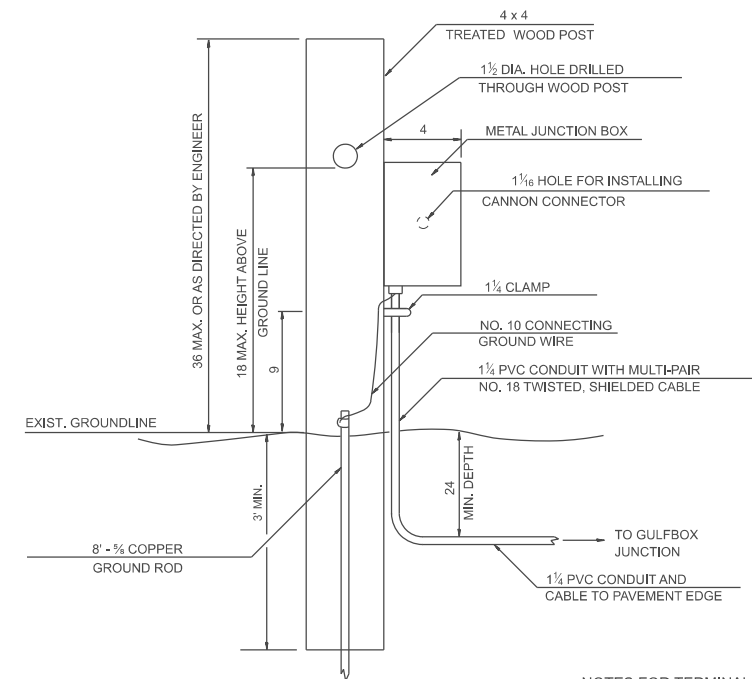
GENERAL NOTES

- EACH DETECTOR LOOP USED SHALL BE WIRED INDEPENDENTLY TO THE TERMINAL.
- DIAMOND SHAPED LOOPS SHALL BE CENTERED IN THE PAVEMENT LANES.
- EACH 6' X 6' DETECTOR LOOP SHALL HAVE A MINIMUM OF 4 OR 5 TURNS OF CABLE OR AS DIRECTED BY THE ENGINEER.
- DETECTOR LOOPS MAY BE LOCATED AS DIAMONDS IN THE PAVEMENT AS DIRECTED BY THE ENGINEER. ALL LOOPS SHALL BE ORIENTED THE SAME DIRECTION.
- THE RESIDENT ENGINEER AND OR CONTRACTOR SHALL NOTIFY THE TRAFFIC STUDIES TECHNICIAN IN PROGRAM DEVELOPMENT AT LEAST ONE WEEK PRIOR TO THE INSTALLATION TO DETERMINE EXACT LOCATION. CONTACT TRAFFIC STUDIES IN THE D4 PROGRAMMING UNIT PH # 309-671-3370

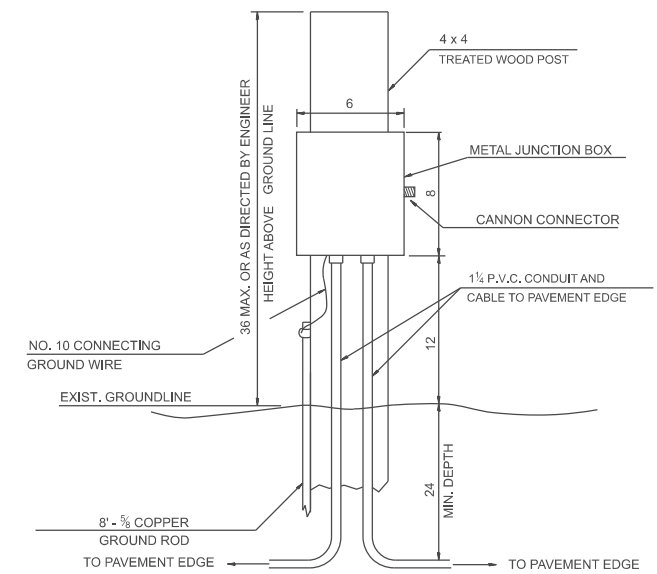
SCHEDULE OF QUANTITIES

ITEM	QUANTITY	UNIT
DETECTOR LOOP, SPECIAL		FEET
CONDUIT IN TRENCH, 30 mm DIA., PVC		FEET
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.18 3 PAIR		FEET
TRENCH AND BACKFILL FOR ELECTRICAL WORK		FEET
TRENCH AND BACKFILL FOR ELECTRICAL WORK (SPECIAL)		FEET
TERMINAL FACILITY		EACH
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.18 6 PAIR		FEET

DETAIL A
TERMINAL FACILITY DETAIL



DETAIL B
TERMINAL FACILITY DETAIL

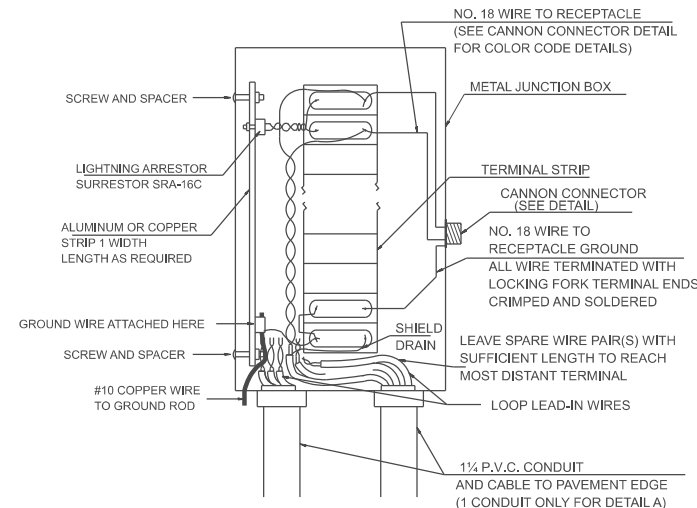


NOTES FOR TERMINAL FACILITY

- GROUND ROD SHALL BE CONNECTED TO THE JUNCTION BOX WITH NO.10 AWG COPPER WIRE AS SHOWN IN THE JUNCTION BOX DETAIL.
- POST FOR TERMINAL FACILITY SHALL BE A MINIMUM DISTANCE OF _____ FROM EDGE OF _____.

LOCATION(S)

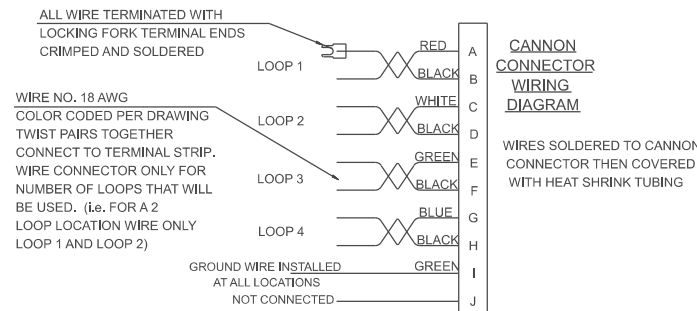
JUNCTION BOX DETAIL
FOR DETAIL A AND B



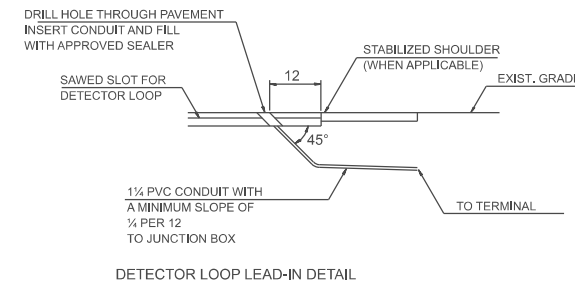
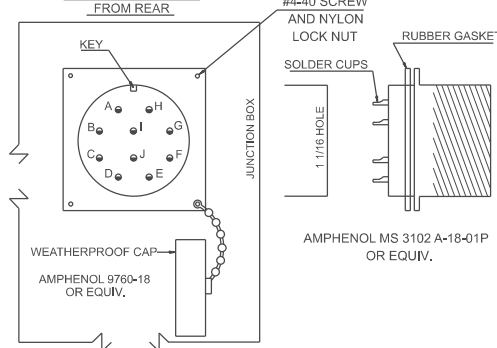
NOTES FOR JUNCTION BOX

- ONE LIGHTNING ARRESTOR FOR EACH LOOP.
- NUMBER OF TERMINALS ON TERMINAL STRIP TO BE DETERMINED BY NUMBER OF LOOPS. TERMINAL STRIP SHALL BE CINCH BARRIER TYPE 140 OR EQUIVALENT.
- JUNCTION BOX SHALL BE WEATHER PROOF WITH SIZE DETERMINED BY NUMBER OF COMPONENTS. JUNCTION BOX SHALL BE A MINIMUM 4x6x8 METAL HOFFMAN BOX WITH KEY ENTRY OR EQUIVALENT.
- TERMINAL WITH MORE THAN 4 LOOPS WILL REQUIRE THE USE OF 2 CANNON CONNECTORS WITH LOOPS GROUPED BY DIRECTION OR AS DIRECTED BY THE ENGINEER.
- THE COST OF INSTALLING THE TERMINAL FACILITY INCLUDES ALL VERTICAL WIRING, BOXES, CONNECTORS, VERTICAL CONDUIT, POST, GROUND ROD, SURRESTORS, AND LABOR, AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR TERMINAL FACILITY.
- THE METAL MOISTURE-PROOF MOUNTING BOX SHALL BE HINGED AND HAVE A KEYED ENTRY.

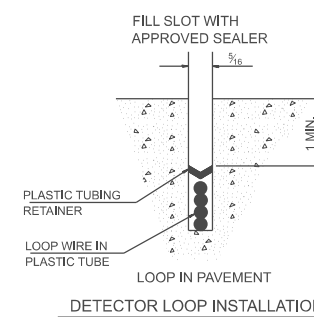
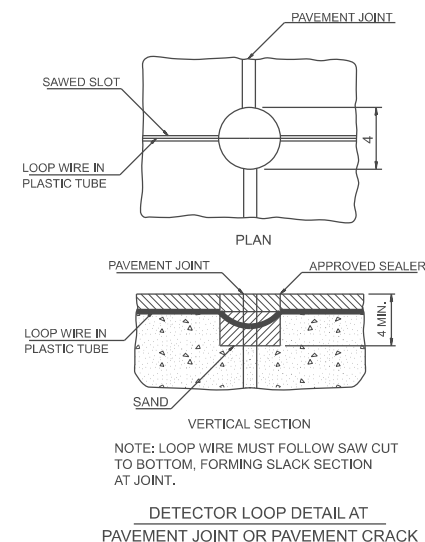
CANNON CONNECTOR DETAIL



CONNECTOR VIEWED FROM REAR



DETECTOR LOOP LEAD-IN DETAIL



DETECTOR LOOP INSTALLATION

All dimensions are in inches unless otherwise noted.

DESIGNER NOTES:
1. Include District Special Provisions.
2. Check with Programming Section.
3. Check with Traffic Studies Section.
4. Check with Construction Section.
5. Check with Safety Section.
6. Check with Materials Section.
7. Check with Utilities Section.
8. Check with Right-of-Way Section.
9. Check with Survey Section.
10. Check with Design Section.
11. Check with Construction Section.
12. Check with Safety Section.
13. Check with Traffic Studies Section.
14. Check with Materials Section.
15. Check with Utilities Section.
16. Check with Right-of-Way Section.
17. Check with Survey Section.
18. Check with Design Section.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/7/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL FOR TRAFFIC COUNTERS USING TERMINAL FACILITY

SCALE: NOT TO SCALE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTRICT 4 DETAIL NO.836002			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				