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August 1, 2025

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4335 3 R3	Approach Slab Drainage Inlet	
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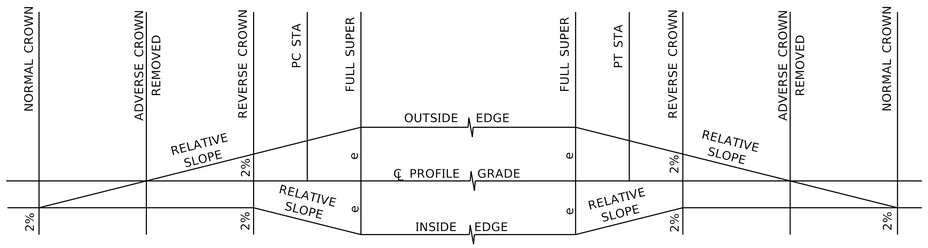
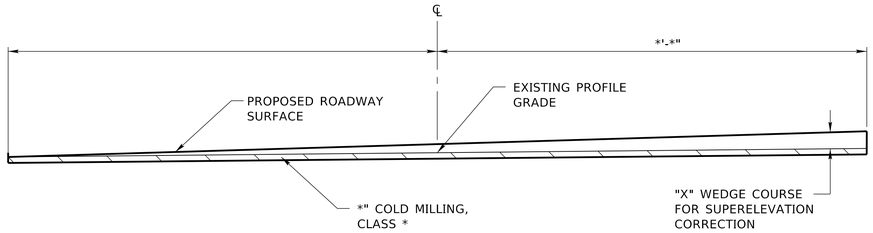


SUPERELEVATION													
P.I. STATION	RADIUS OF CURVE	SUPERELEVATION e %	RELATIVE SLOPE	NORMAL CROWN STATION	ADVERSE CROWN REMOVED STATION	REVERSE CROWN STATION	P.C. STATION	FULL SUPER STATION	FULL SUPER STATION	P.T. STATION	REVERSE CROWN STATION	ADVERSE CROWN REMOVED STATION	NORMAL CROWN STATION
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*

FOR DETAILS NOT SHOWN SEE PLAN ___

SUPERELEVATION DIAGRAM



WEDGE COURSE FOR SUPERELEVATION CORRECTION

STA. ___+__ TO STA. ___+__

SUPERELEVATION CORRECTION			
STATION TO STATION	QUANTITY (TONS)	TYPE	MAXIMUM "X" CORRECTION DEPTH
* - *	*	* * *	_"

FOR INFORMATION ONLY

Project Number

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FILE: 1000 3 R1.dgn

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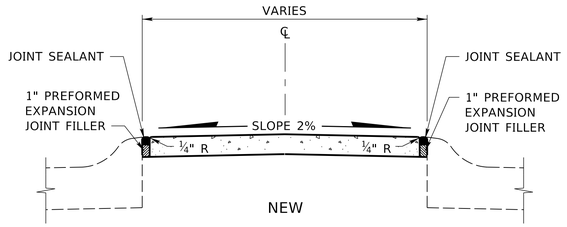
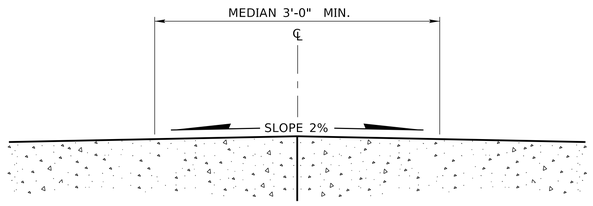
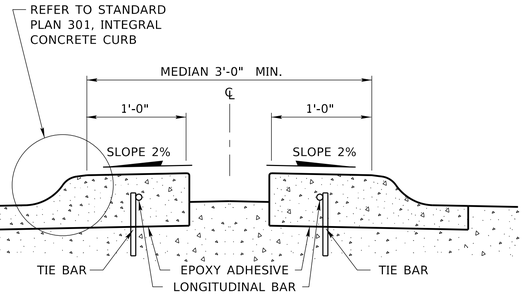
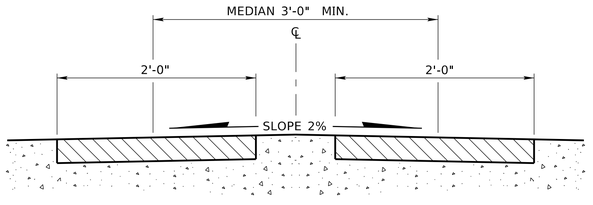




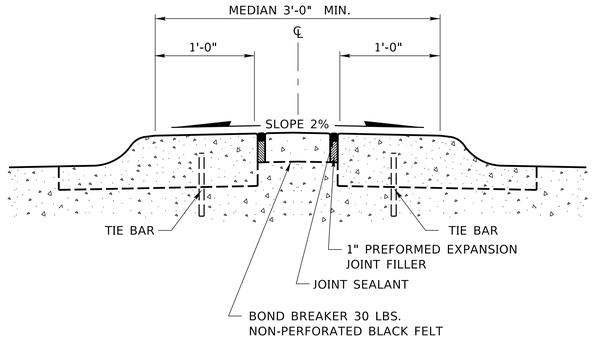
STEP I - BUILD TRAFFIC LANE (FULL DEPTH)



STEP III - BUILD CURB, WITH #5 x 8" TIE BAR AT 5'-0" CENTERS TO BE DRILLED AND GROUT AND #4 LONGITUDINAL BAR GAPPED AT CONTRACTION JOINT LOCATIONS: 3" MIN, 6" MAX.



STEP II - MILL 2" x 2'-0"



STEP IV - BUILD MEDIAN SURFACING ON EXISTING SURFACE

CONCRETE MEDIAN SURFACING

PHASING FOR CONCRETE ISLAND
GENERAL INFORMATION

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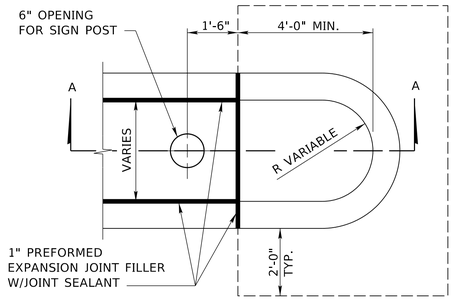
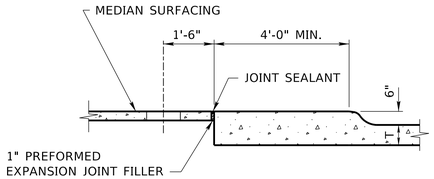
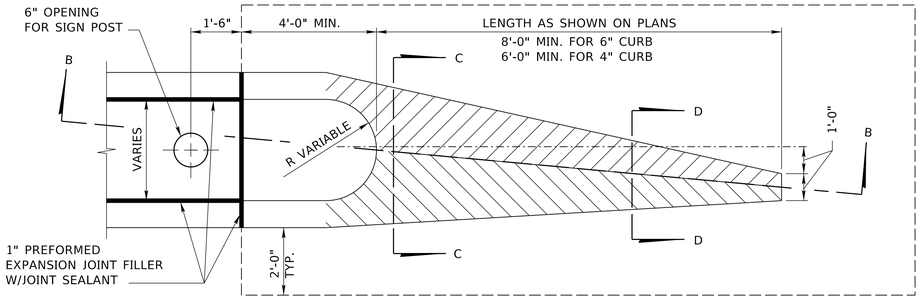


PLAN



SECTION A-A

END OF MEDIAN ISLAND



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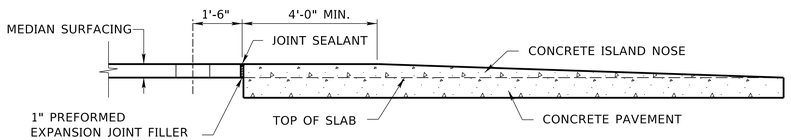
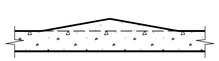


SECTION B-B



SECTION C-C

SECTION D-D

CONCRETE ISLAND NOSE FOR RETROFIT

NOTE:
EXISTING CONCRETE PAVEMENT IS TO BE REMOVED TO BUILD CONCRETE ISLAND NOSE.

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PHASING FOR CONCRETE ISLAND
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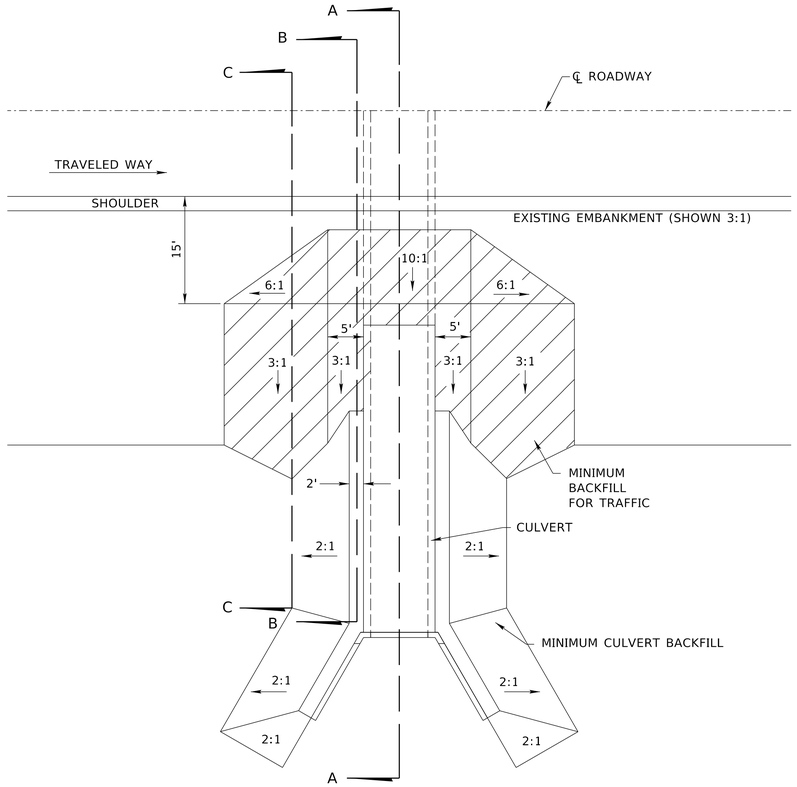
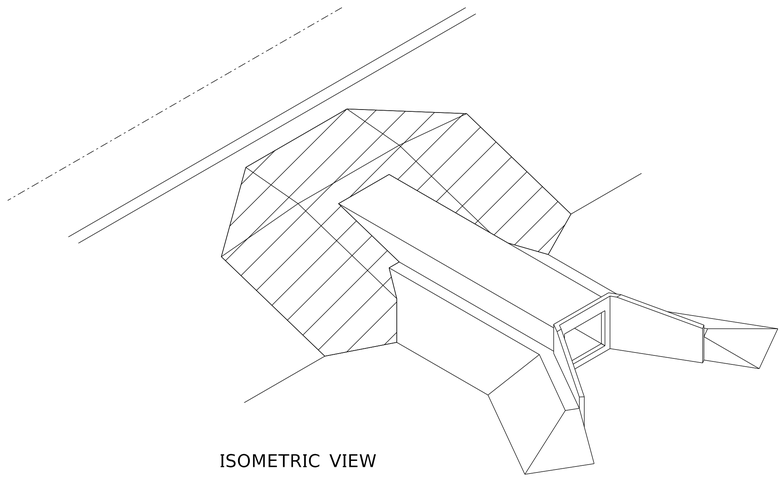
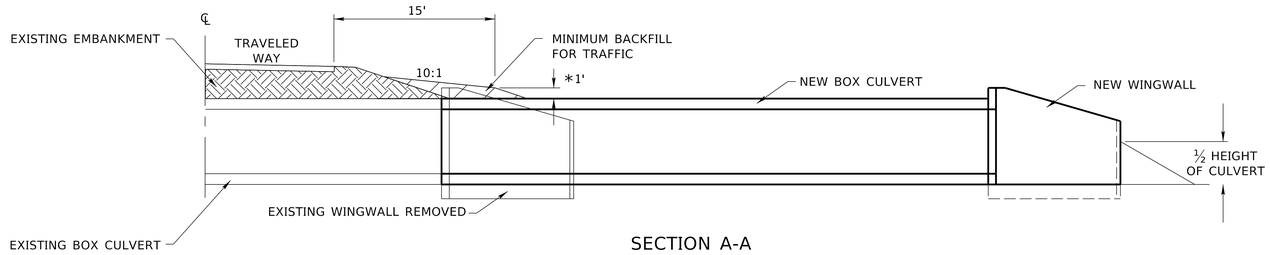


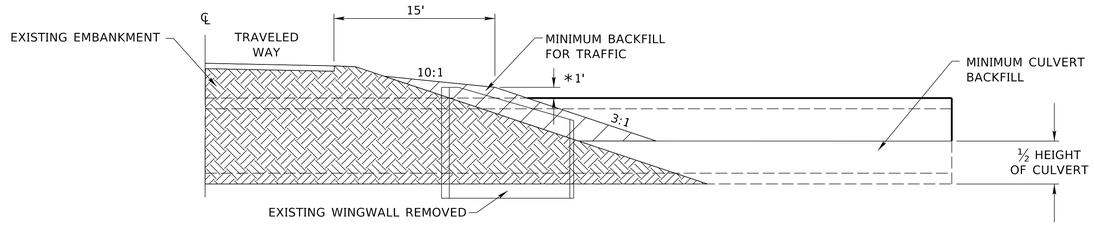
MINIMUM BACKFILL FOR TRAFFIC



ISOMETRIC VIEW



SECTION A-A



SECTION B-B

SECTION C-C

NOTE:

REFER TO STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SECTION 702 FOR MORE INFORMATION.

* TO PROTECT THE PIPE AND BACKFILL DURING CONSTRUCTION, PROVIDE A MINIMUM OF 36" OF COMPACTED FILL MATERIAL OVER THE TOP OF THE PIPE BEFORE ALLOWING ANY HEAVY EQUIPMENT TO TRAVERSE OVER THE PIPE. EXTREMELY HEAVY EQUIPMENT MAY REQUIRE LARGER COVER AS DETERMINED BY THE CONTRACTOR.

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MINIMUM BACKFILL FOR TRAFFIC
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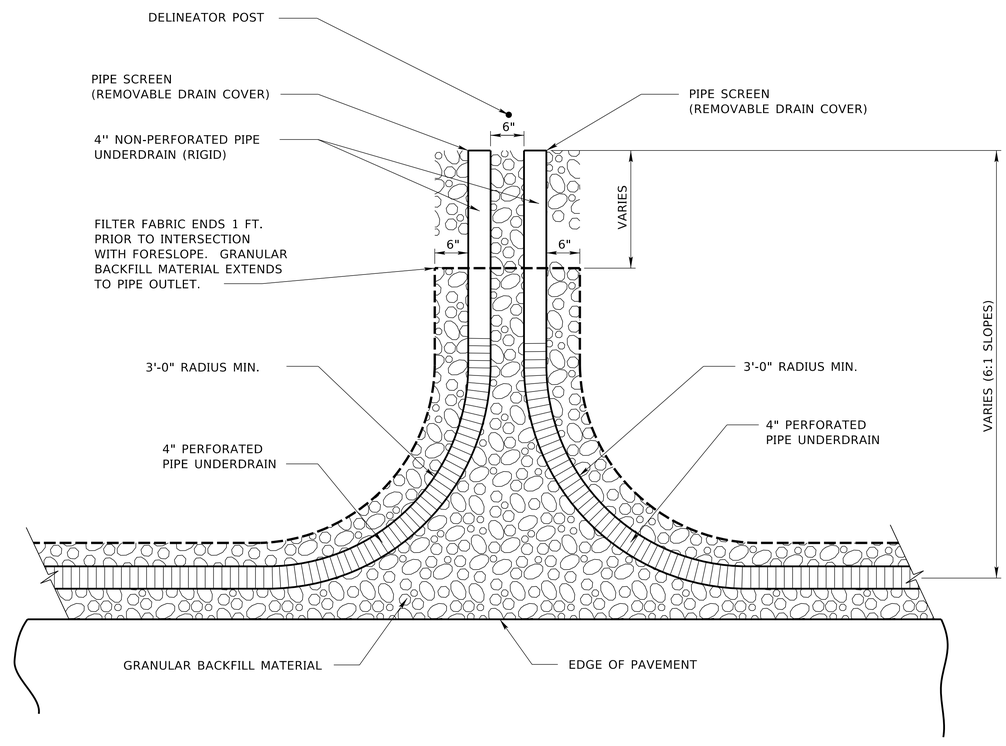
BUILD 4" PIPE UNDERDRAIN				
STATION TO STATION	SIDE	DESCRIPTION	PERFORATED LIN. FT.	NONPERFORATED LIN. FT.
* - *	Lt./Rt.	*	*	*



PLAN

PLAN VIEW OF PIPE UNDERDRAIN OUTLET

4" PIPE UNDERDRAIN
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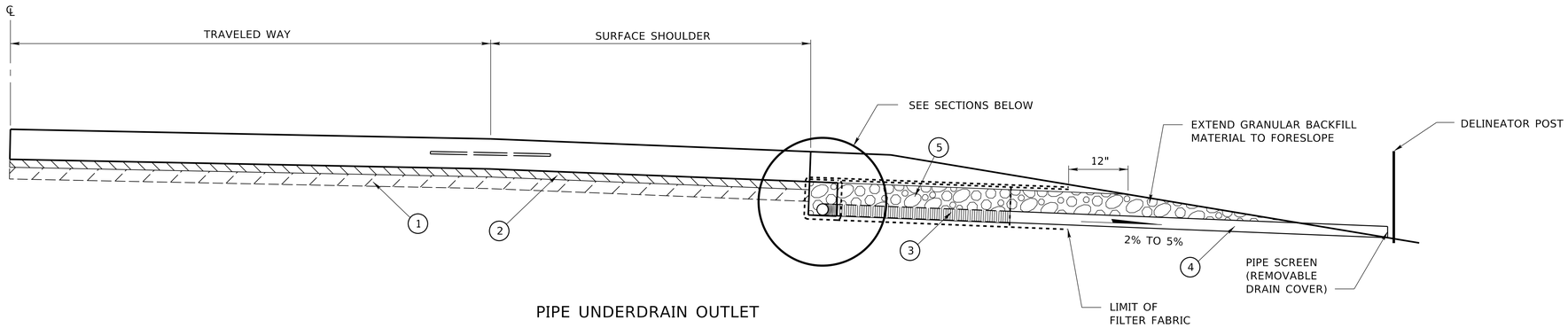
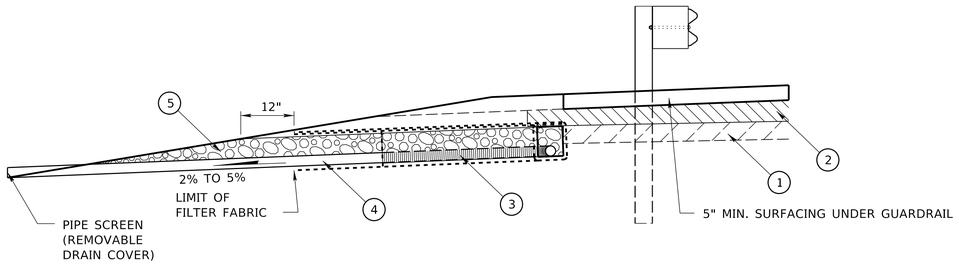


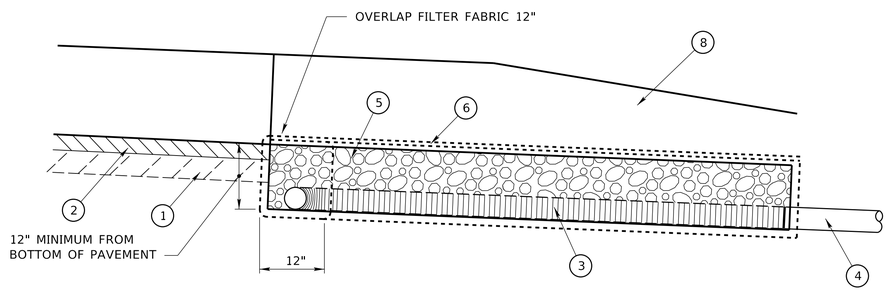
PIPE UNDERDRAIN OUTLET

NOTE:
SHOULDER CONSTRUCTION TO BE PERFORMED PRIOR TO CONSTRUCTING PIPE UNDERDRAINS.

1. SUBGRADE PREPARATION
2. FOUNDATION COURSE
3. 4'' PERFORATED PIPE UNDERDRAIN
4. 4'' NON-PERFORATED PIPE UNDERDRAIN (RIGID)
5. GRANULAR BACKFILL MATERIAL (SUBSIDIARY)
6. FILTER FABRIC (SUBSIDIARY)
7. CONCRETE PAVEMENT
8. COHESIVE SOIL



FOUNDATION COURSE AT GUARDRAIL LOCATIONS, SURFACED SHOULDER



SECTION OF PIPE UNDERDRAIN OUTLET

4" PIPE UNDERDRAIN
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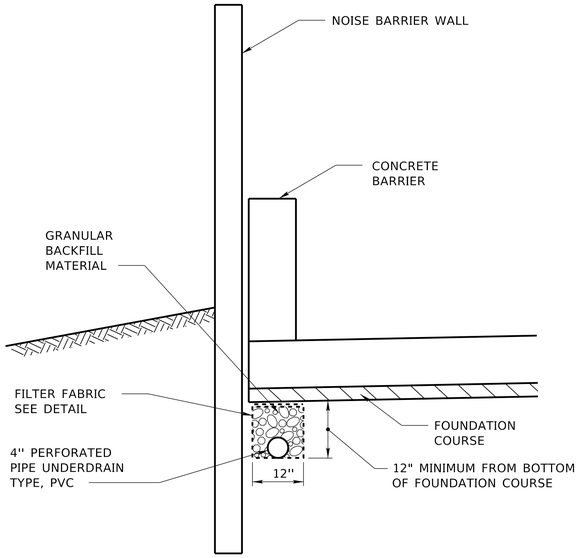

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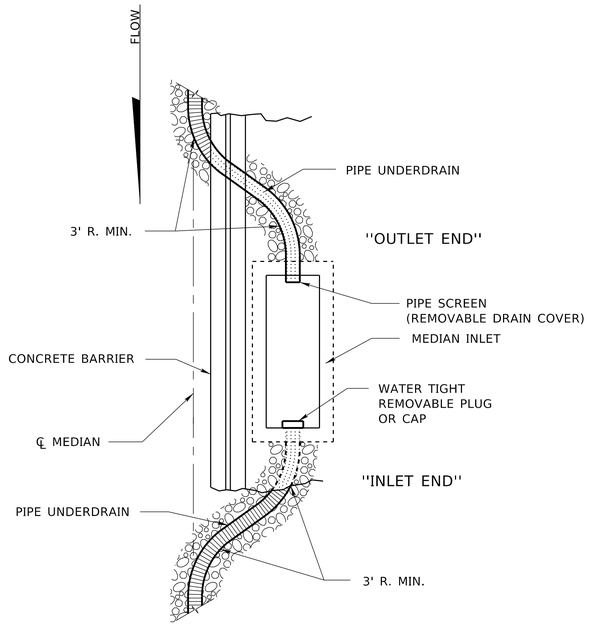
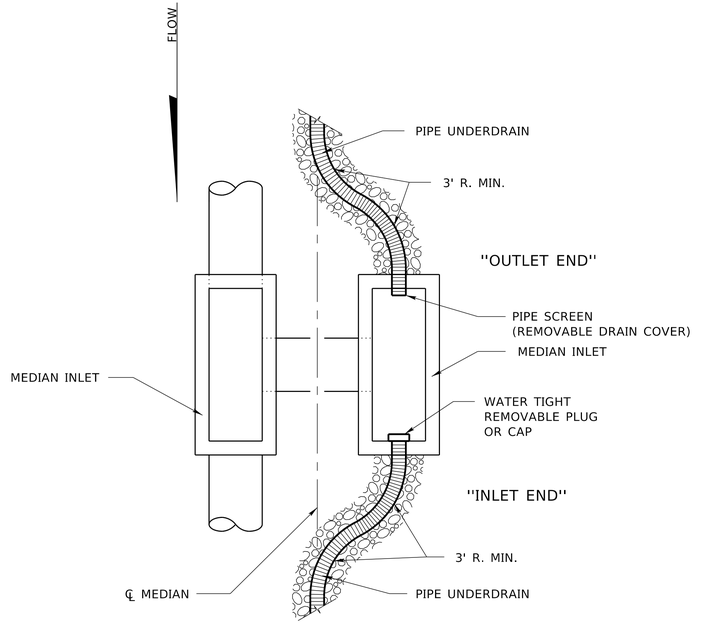


PLAN



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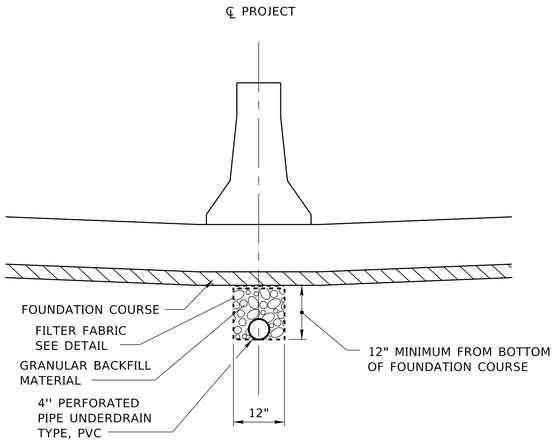

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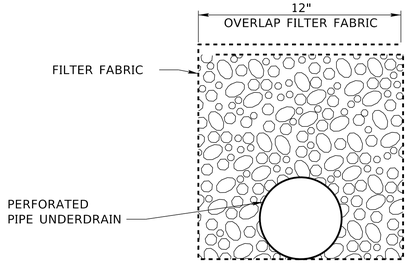
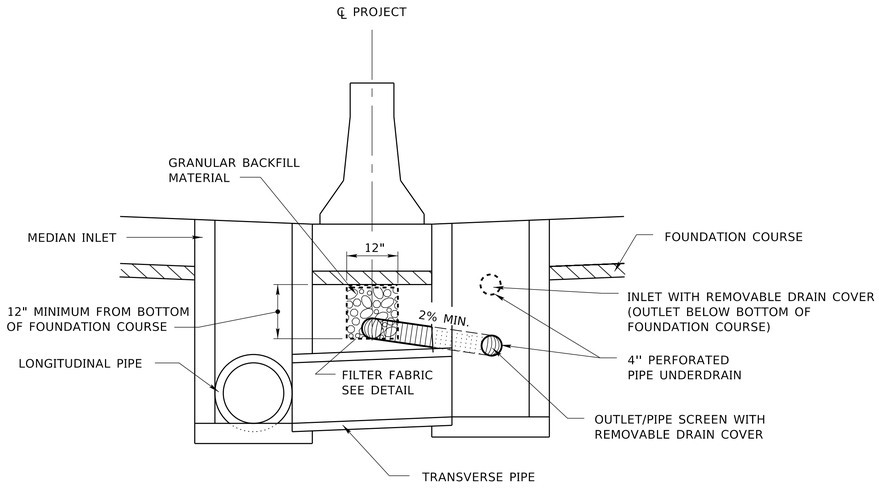


FILTER FABRIC DETAIL

DETAILS OF PIPE UNDERDRAIN PLACEMENT



SECTION

DETAILS OF PIPE UNDERDRAIN CONNECTION TO MEDIAN INLETS & GRATE INLETS

4" PIPE UNDERDRAIN
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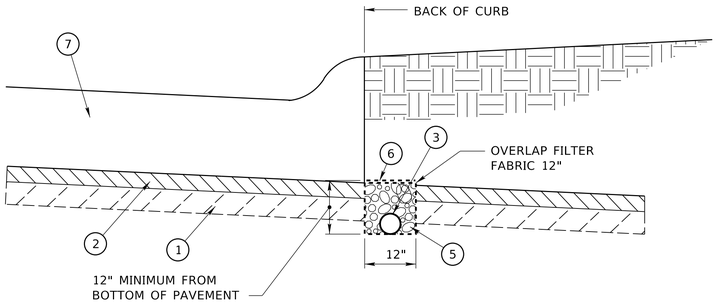
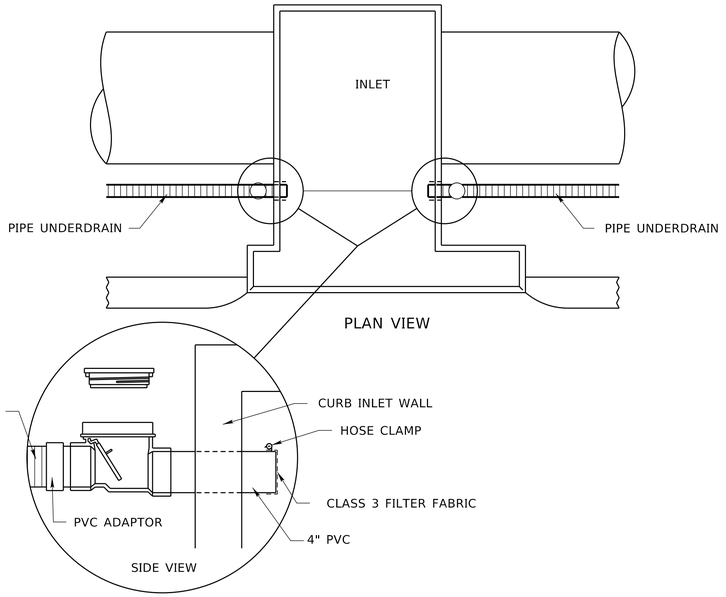
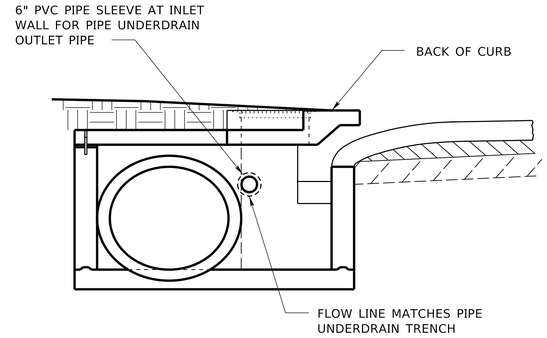


PIPE UNDERDRAIN DETAIL

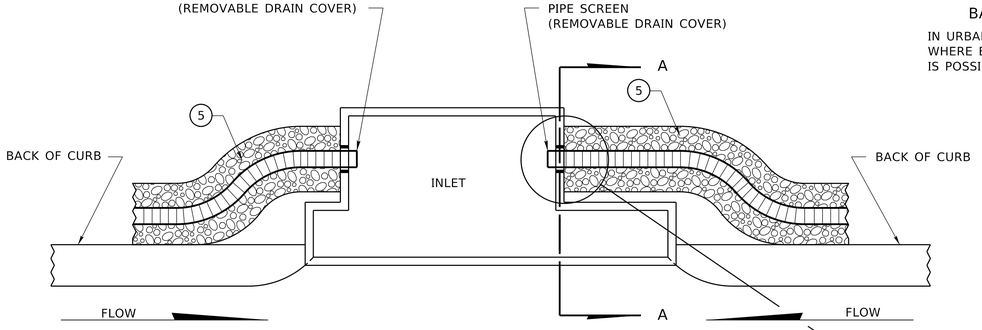


BACKWATER VALVE DETAIL

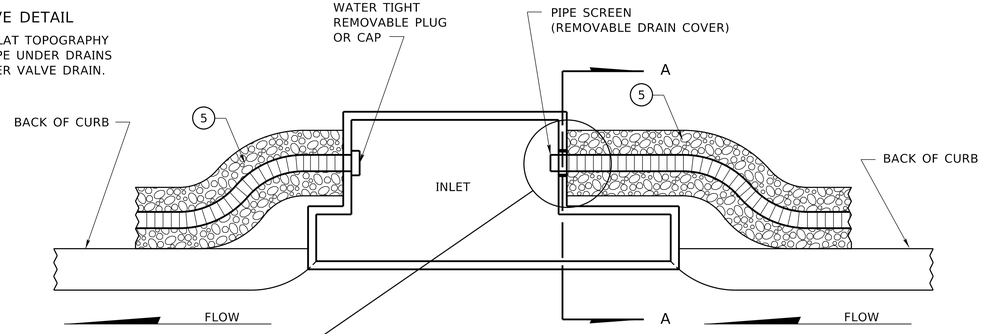
IN URBAN SETTINGS WITH FLAT TOPOGRAPHY WHERE BACK FLOW INTO PIPE UNDER DRAINS IS POSSIBLE, USE BACKWATER VALVE DRAIN.



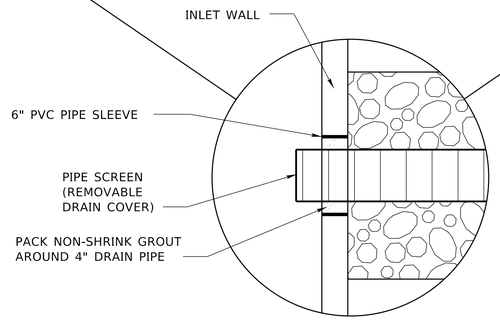
SECTION A-A



PLAN (SAG CONDITION)



PLAN (ON GRADE)



DETAIL OF PIPE UNDERDRAIN AT INLET

1. SUBGRADE PREPARATION
2. FOUNDATION COURSE
3. 4'' PERFORATED PIPE UNDERDRAIN
4. 4'' NON-PERFORATED PIPE UNDERDRAIN (RIGID)
5. GRANULAR BACKFILL MATERIAL (SUBSIDIARY)
6. FILTER FABRIC (SUBSIDIARY)
7. CONCRETE PAVEMENT
8. COHESIVE SOIL

4" PIPE UNDERDRAIN
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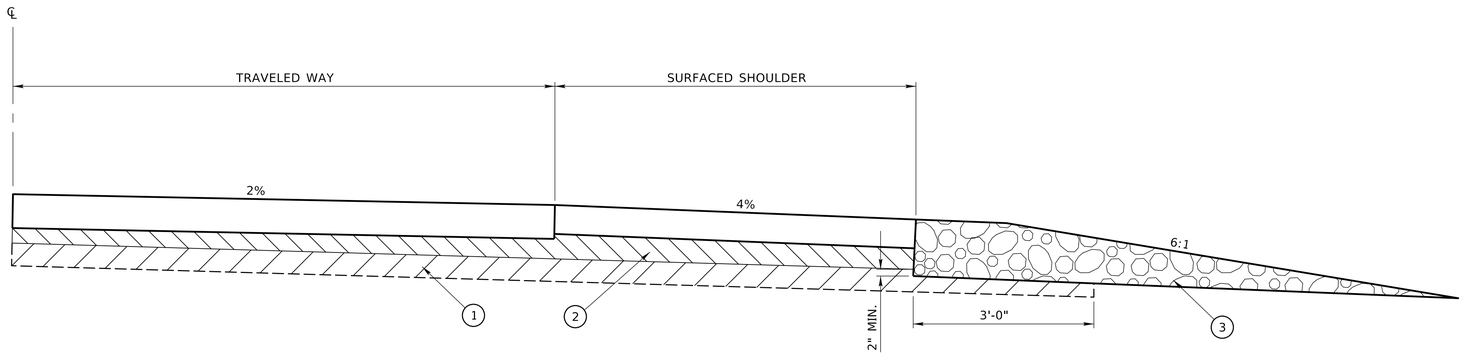
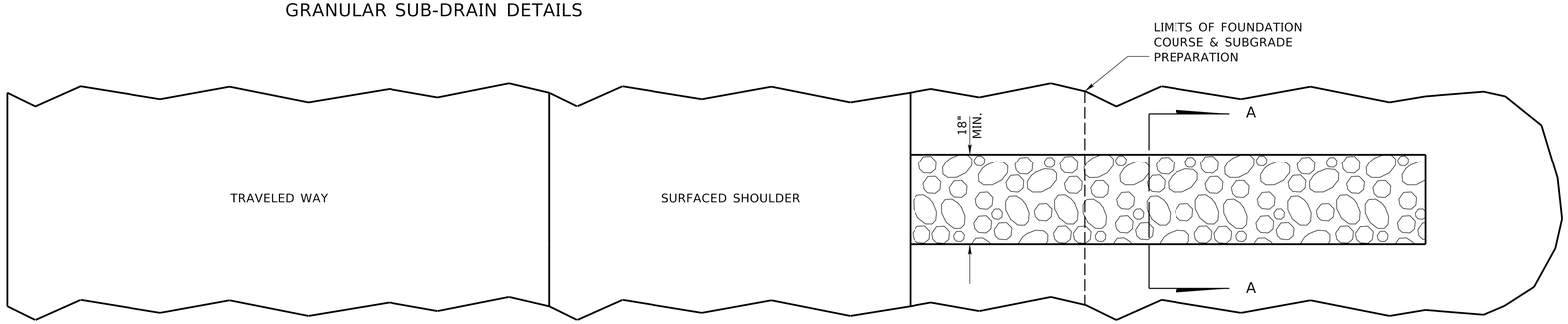
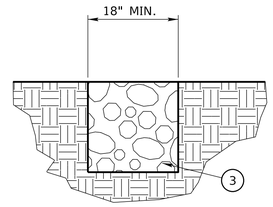


GRANULAR SUB-DRAIN DETAILS





SECTION A-A

GRANULAR SUB-DRAIN DETAILS

(1) SUBGRADE PREPARATION

(2) FOUNDATION COURSE

(3) GRANULAR BACKFILL MATERIAL (SUBSIDIARY)

CONSTRUCTION NOTES:

THE GRANULAR SUB-DRAIN SHALL BE CONSTRUCTED WITH POSITIVE DRAINAGE.

GRANULAR SUB-DRAIN SHALL BE INSTALLED AFTER ALL SHOULDERING & EARTH WORK IS COMPLETED AND PRIOR TO SEEDING.

GRANULAR SUB-DRAINS SHALL BE CONSTRUCTED AT INTERVALS OF 200 FT. WHERE THE GRADE IS 1% OR OVER AND AT INTERVALS OF 100 FT. ON GRADES UNDER 1%.

GRANULAR SUB-DRAINS SHALL BE BUILT PERPENDICULAR TO THE CENTER LINE.

BUILD GRANULAR SUB-DRAIN			
STATION TO STATION	SIDE	EACH	SPACING
* - *	*	*	*

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GRANULAR SUB-DRAIN DETAILS

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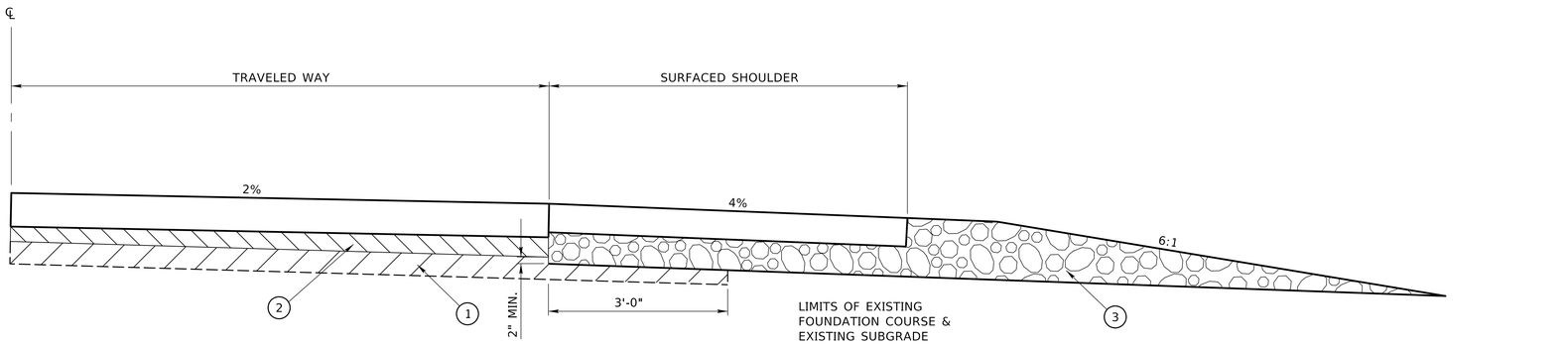

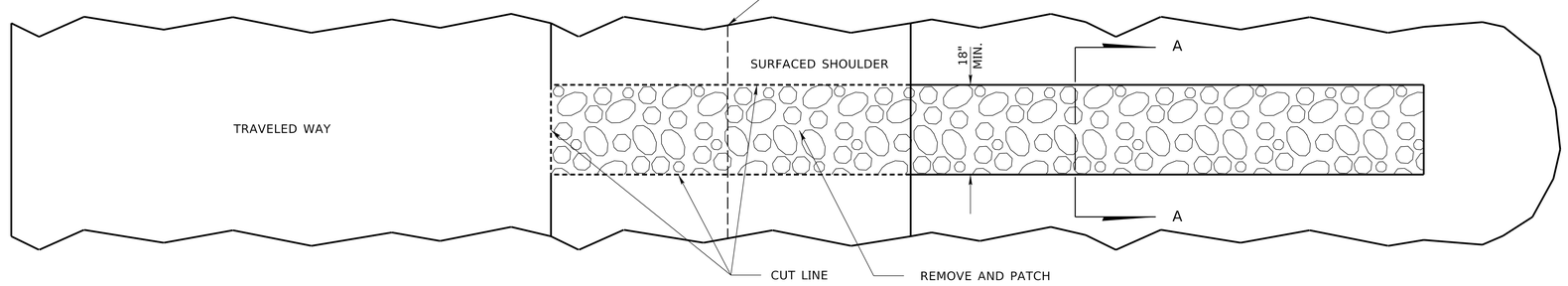

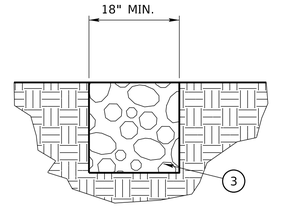

SECTION A-A

GRANULAR SUB-DRAIN DETAILS

1. SUBGRADE PREPARATION
2. FOUNDATION COURSE
3. GRANULAR BACKFILL MATERIAL (SUBSIDIARY)

CONSTRUCTION NOTES:

THE GRANULAR SUB-DRAIN SHALL BE CONSTRUCTED WITH POSITIVE DRAINAGE.

GRANULAR SUB-DRAIN SHALL BE INSTALLED AFTER ALL SHOULDERING & EARTH WORK IS COMPLETED AND PRIOR TO SEEDING.

GRANULAR SUB-DRAINS SHALL BE CONSTRUCTED AT INTERVALS OF 200 FT. WHERE THE GRADE IS 1% OR OVER AND AT INTERVALS OF 100 FT. ON GRADES UNDER 1%.

GRANULAR SUB-DRAINS SHALL BE BUILT PERPENDICULAR TO THE CENTER LINE.

BUILD GRANULAR SUB-DRAIN					
STATION	TO	STATION	SIDE	EACH	SPACING
*	-	*	*	*	*

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GRANULAR SUB-DRAIN DETAILS

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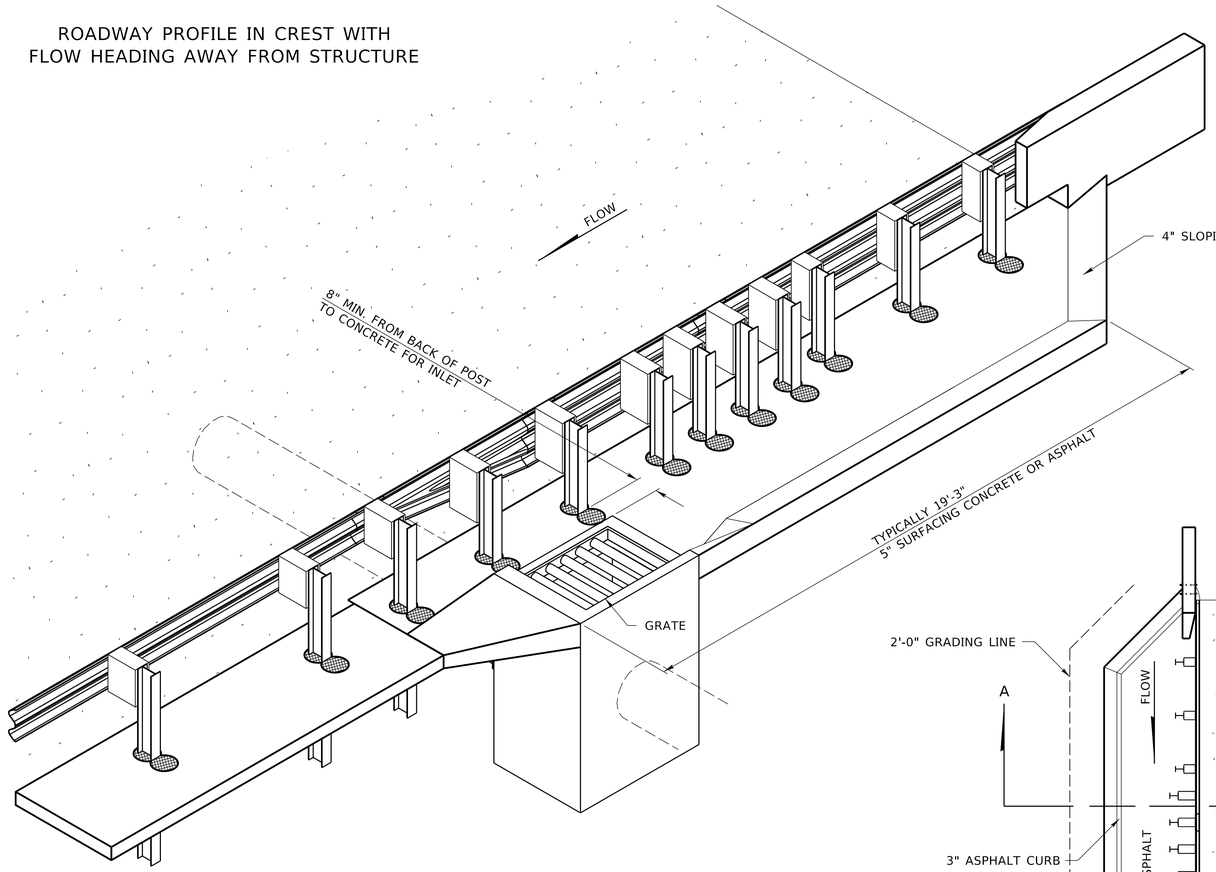
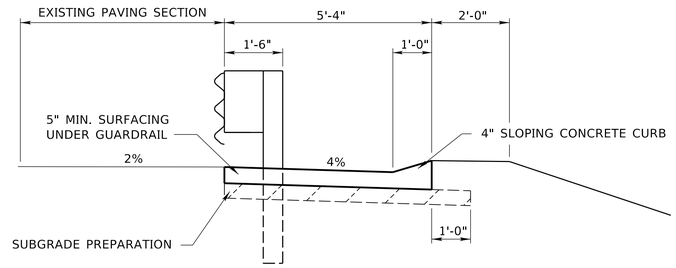
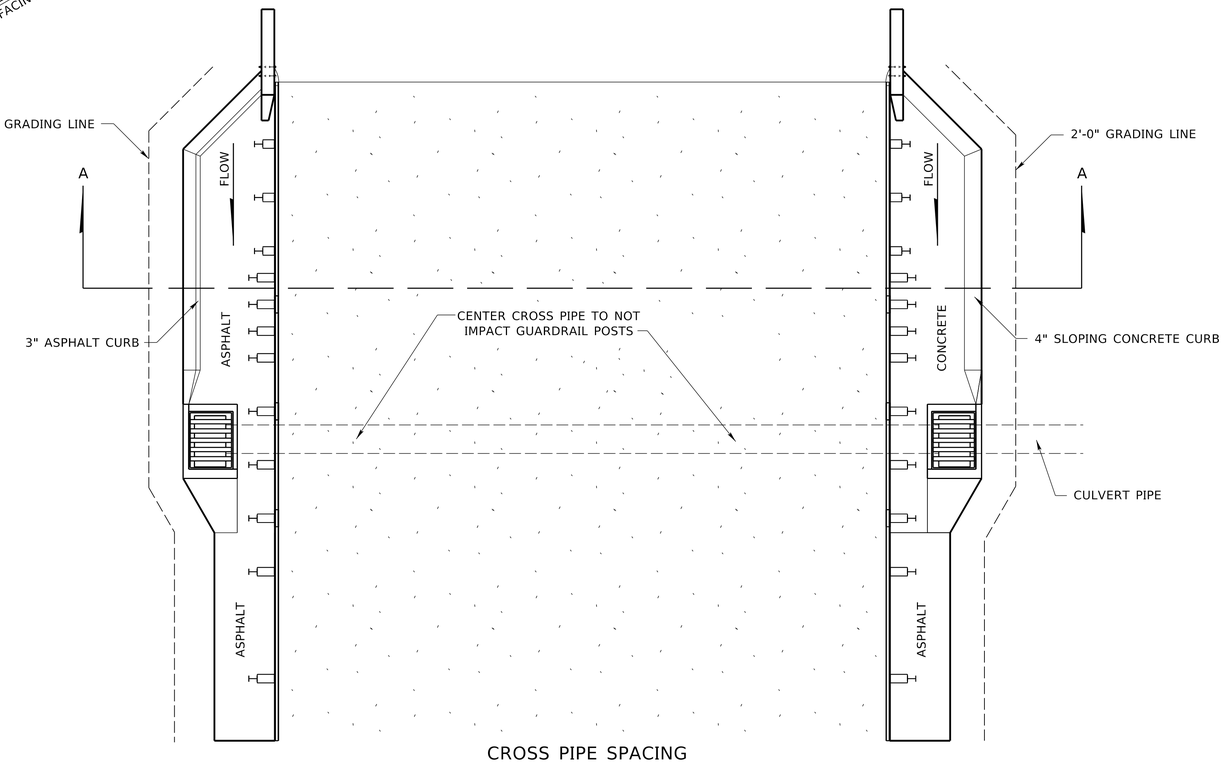
ROADWAY PROFILE IN CREST WITH
FLOW HEADING AWAY FROM STRUCTURE

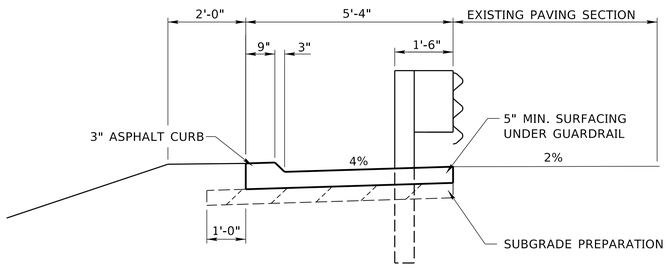




SECTION A-A



CROSS PIPE SPACING



SECTION A-A

BRIDGE INLET BEHIND GUARDRAIL FOR CREST CONDITION

APPROACH SLAB DRAINAGE INLET□

GENERAL INFORMATION

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Roadway
Design
Division

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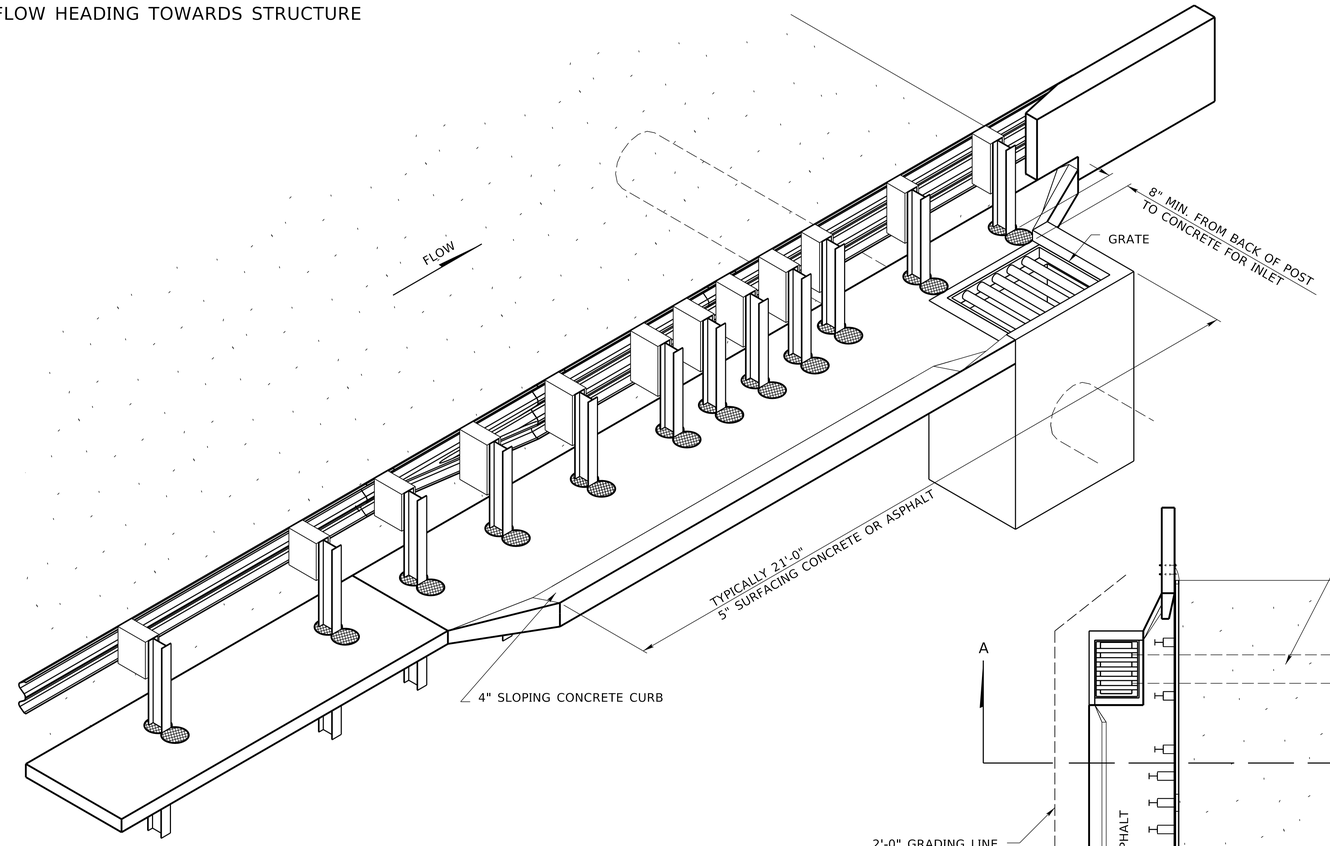
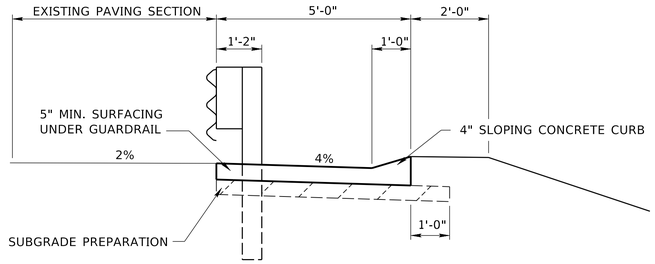
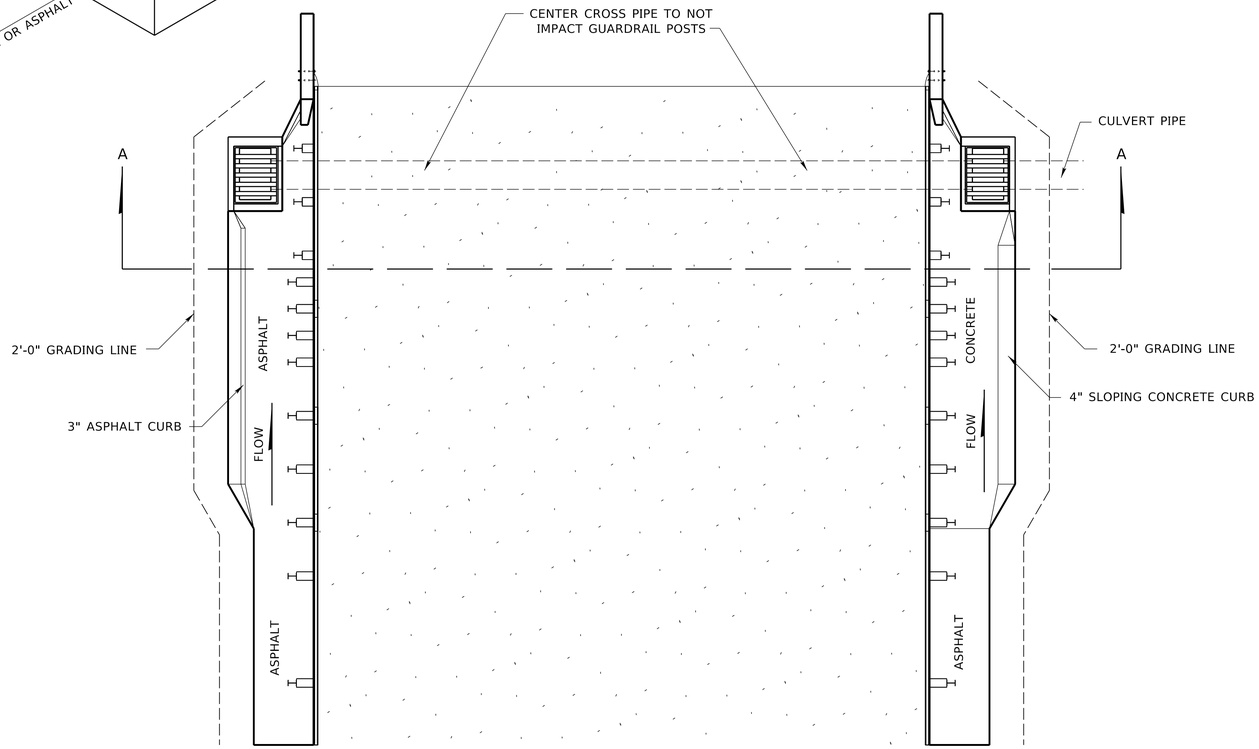
FILE: 4335 3 R3.dgn

ROADWAY PROFILE IN SAG WITH
FLOW HEADING TOWARDS STRUCTURE





SECTION A-A



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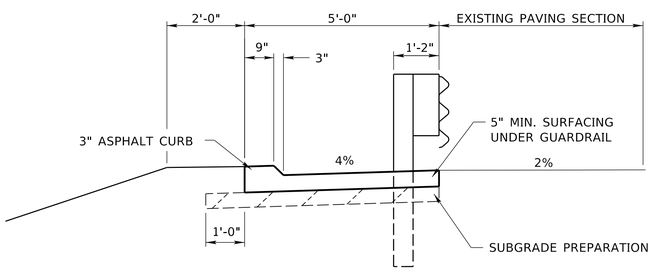

SECTION A-A

BRIDGE INLET BEHIND GUARDRAIL FOR SAG CONDITION

APPROACH SLAB DRAINAGE INLET□

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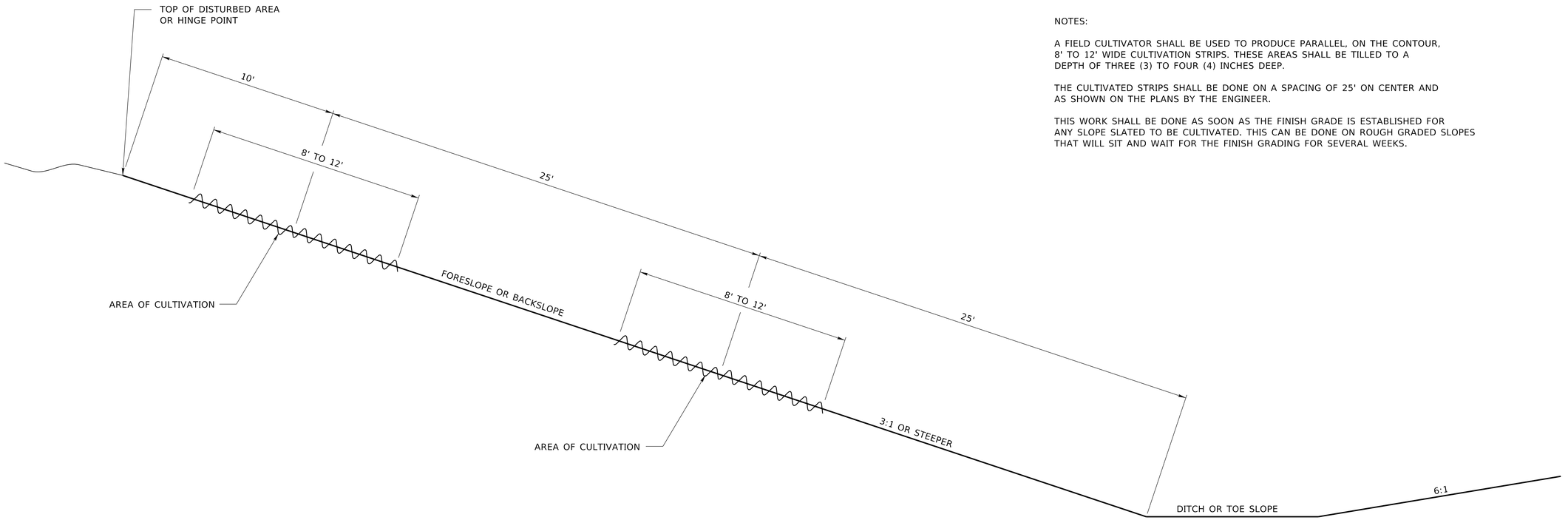

NOTES:

A FIELD CULTIVATOR SHALL BE USED TO PRODUCE PARALLEL, ON THE CONTOUR, 8' TO 12' WIDE CULTIVATION STRIPS. THESE AREAS SHALL BE TILLED TO A DEPTH OF THREE (3) TO FOUR (4) INCHES DEEP.

THE CULTIVATED STRIPS SHALL BE DONE ON A SPACING OF 25' ON CENTER AND AS SHOWN ON THE PLANS BY THE ENGINEER.

THIS WORK SHALL BE DONE AS SOON AS THE FINISH GRADE IS ESTABLISHED FOR ANY SLOPE SLATED TO BE CULTIVATED. THIS CAN BE DONE ON ROUGH GRADED SLOPES THAT WILL SIT AND WAIT FOR THE FINISH GRADING FOR SEVERAL WEEKS.

Project Number

C.N.

CONTOUR CULTIVATION

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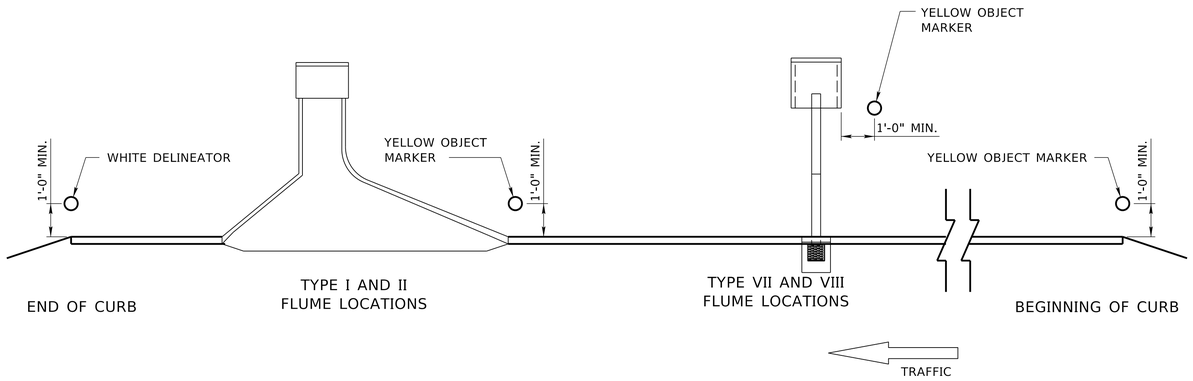
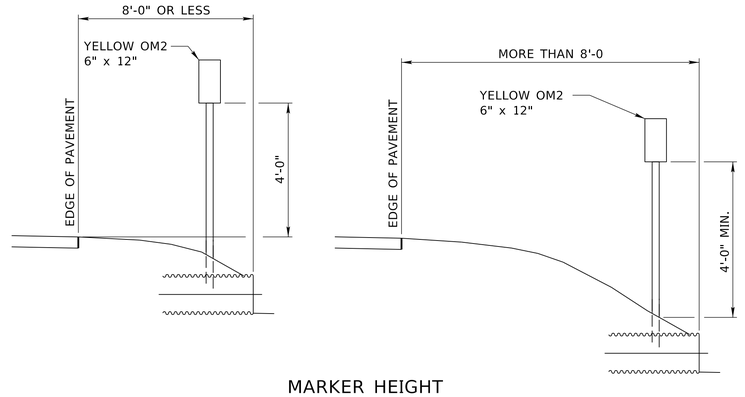
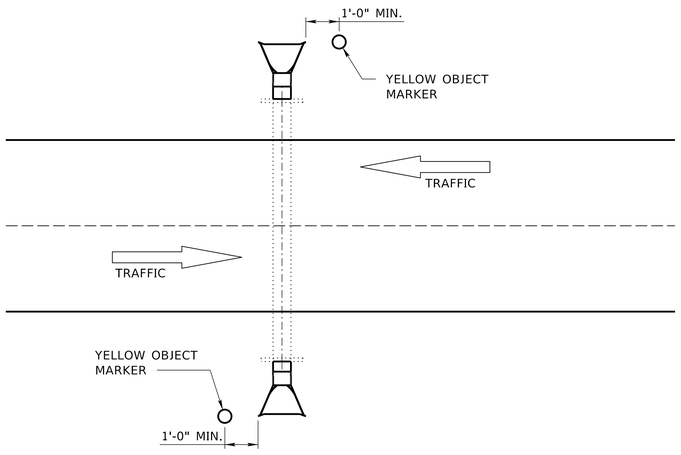


TYPICAL OBJECT MARKER AT CURB & FLUME LOCATIONS

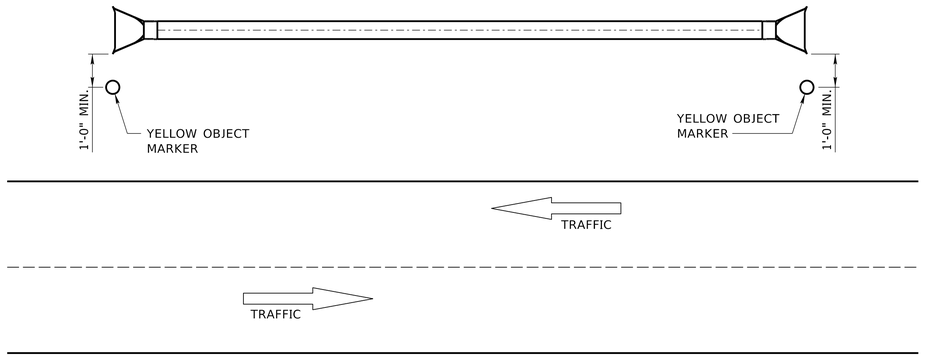


MARKER HEIGHT

MARKER HEIGHT DEPENDS ON OBJECT DISTANCE FROM EDGE OF ROADWAY



TYPICAL OBJECT MARKER AT CULVERT LOCATIONS



TYPICAL OBJECT MARKER AT PARALLEL CULVERT LOCATIONS

1 OF 1

Project Number

C.N.

OBJECT MARKERS
GENERAL INFORMATION

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