

DS 200 Series — Commercial and Residential Entrance Design

Standard Drawings List

Drawing Number	Drawing Title	Revision Date
DS-200	Commercial Entrance - Rural	January 2023
DS-201	Commercial - Typical Right Turn In Only - Rural	March 2023
DS-202	Commercial - Typical Right Turn In / Right Turn Out Only - Rural	March 2023
DS-203	Commercial Entrance - Urban	January 2023
DS-204	Commercial - Typical Right Turn In Only - Urban	March 2023
DS-205	Commercial - Typical Right Turn Out Only - Urban	March 2023
DS-206	Commercial - Right In / Right Out Only (Blocked by Concrete Raised Slab Median) - Urban	March 2023
DS-207	Commercial - Typical Right Turn In / Right Turn Out - Urban	March 2023
DS-208	Commercial - Typical Divided Entrance - (1 Lane In, 2 Lanes Out) - Urban	March 2023
DS-209	Commercial - Typical Divided Entrance - (2 Lanes In, 2 Lanes Out) - Urban	March 2023
DS-210	Commercial - Typical Divided Entrance with Right Turn lane - (2 Lanes In, 2 Lanes Out) - Urban	March 2023
DS-211	Property Requirement for Traffic Control Signals at Commercial Entrance - (1 Lane In, 2 Lanes Out)	January 2023
DS-212	Property Requirement for Traffic Control Signals at Commercial Entrance - (4 Lanes with Median)	January 2023
DS-213	Property Requirement for Traffic Control Signals at Commercial Entrance - (5 Lanes with Median)	January 2023
DS-214	Residential Entrance - Rural	January 2023
DS-215	Single Family Residential Entrance - Urban	January 2023
DS-216	Commercial Entrance Curb Return	January 2023
DS-217	Mud Mat for Temporary Construction Access	January 2023
DS-218	Single Family Residential Entrance - Rural	March 2023
DS-219	Road Widening Detail	March 2023
DS-220	Trench Restoration Detail	March 2023

DS-221	Siltation Control Along Regional Property Lines	January 2023
DS-222	Check Dams on Swales Conveying Flow Towards Regional Property Lines	January 2023

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.

2. ENTRANCE SHALL BE PAVED BETWEEN THE EDGE OF PAVEMENT AND THE REGIONAL RIGHT-OF-WAY.

3. ENTRANCE CONSTRUCTION MINIMUMS:

50mm SP12.5 OR HL-3 (HS)

100mm SP19.0 OR HL-8

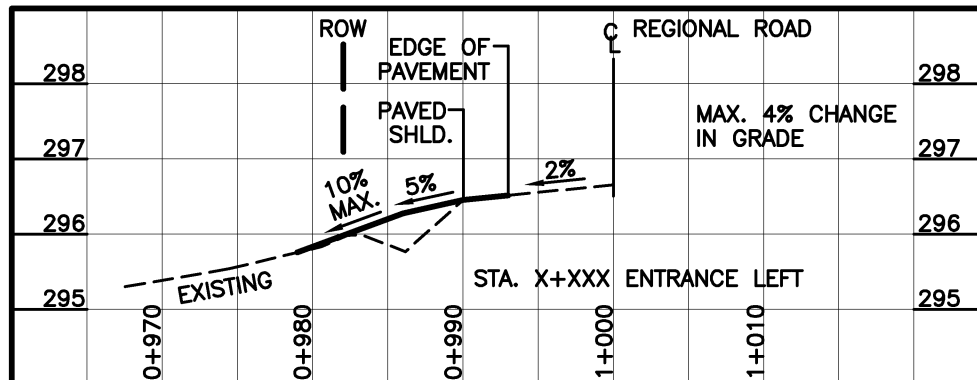
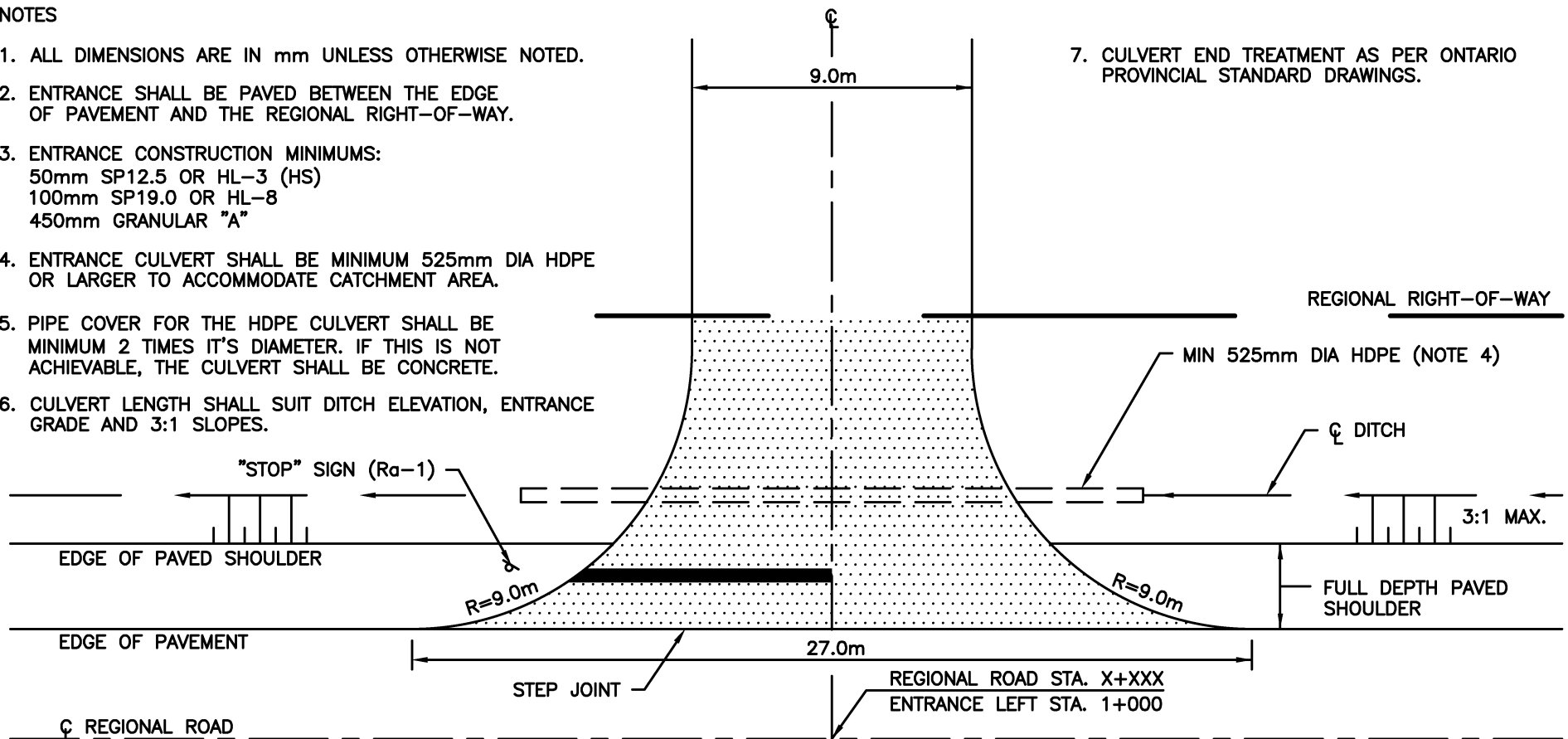
450mm GRANULAR "A"

4. ENTRANCE CULVERT SHALL BE MINIMUM 525mm DIA HDPE OR LARGER TO ACCOMMODATE CATCHMENT AREA.

5. PIPE COVER FOR THE HDPE CULVERT SHALL BE MINIMUM 2 TIMES IT'S DIAMETER. IF THIS IS NOT ACHIEVABLE, THE CULVERT SHALL BE CONCRETE.

6. CULVERT LENGTH SHALL SUIT DITCH ELEVATION, ENTRANCE GRADE AND 3:1 SLOPES.

7. CULVERT END TREATMENT AS PER ONTARIO PROVINCIAL STANDARD DRAWINGS.



York Region

**Public Works
Transportation**

**COMMERCIAL ENTRANCE
-RURAL**

DATE: JANUARY 2023

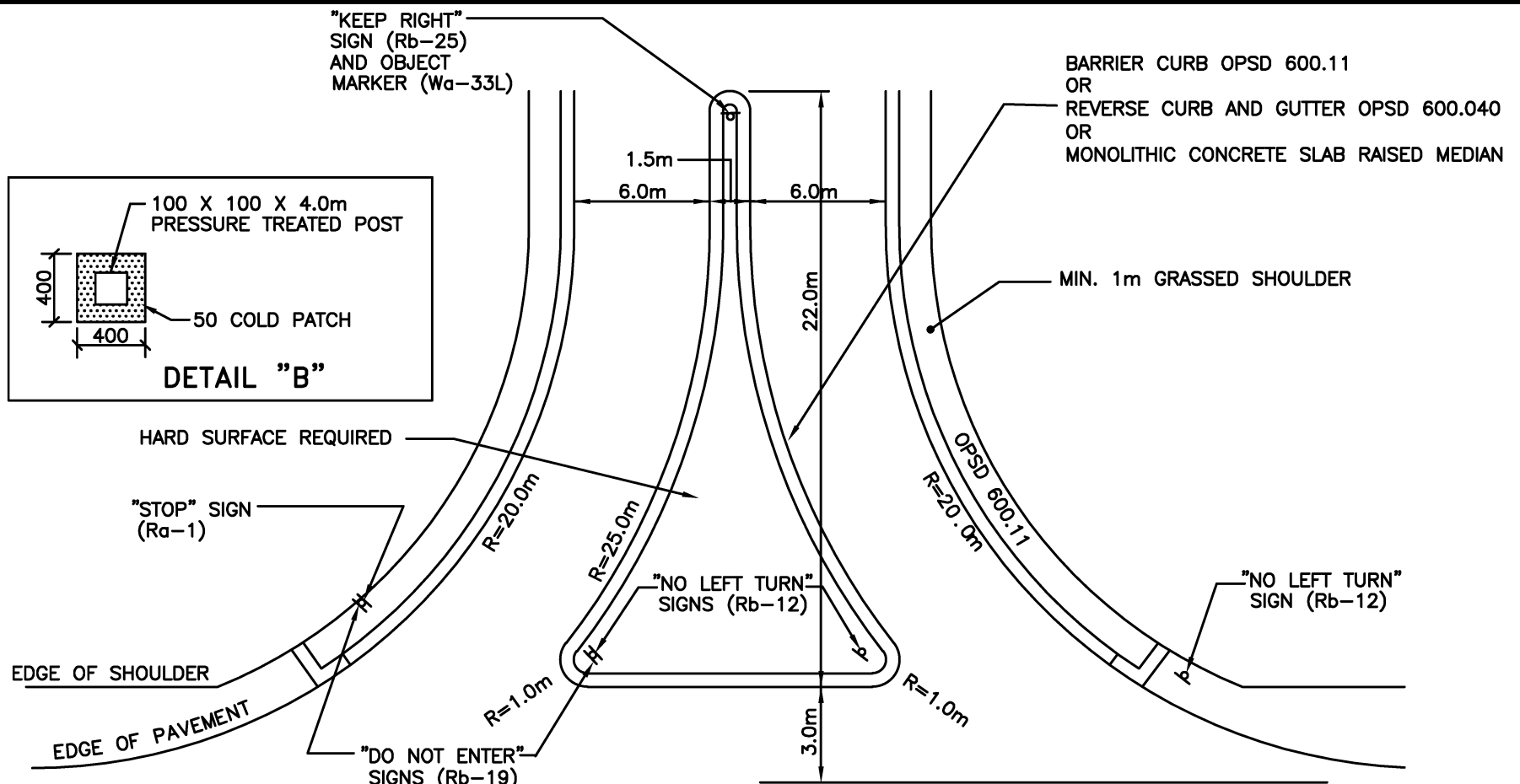
SCALE N.T.S.

REV.

X

X

DS-200



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. CURB TYPE, CATCH BASINS, ETC. SHALL CONFORM TO ONTARIO PROVINCIAL STANDARDS. (INDICATE O.P.S.D. REFERENCE ON PLANS)
3. SIGNS TO BE MOUNTED ON 4X4 PRESSURE TREATED WOOD POSTS.
4. REFER TO STANDARD DRAWING E-6.03, DETAIL "B" WHEN A CONCRETE SLAB RAISED MEDIAN IS BEING USED.
5. HARD SURFACE TO BE PROVIDED WITHIN MEDIAN WHERE BARRIER CURB OR CURB AND GUTTER IS USED.



**Public Works
Transportation**

**COMMERCIAL-
TYPICAL RIGHT TURN IN/
RIGHT TURN OUT ONLY
-RURAL**

DATE: MARCH 2023

SCALE N.T.S.

REV.

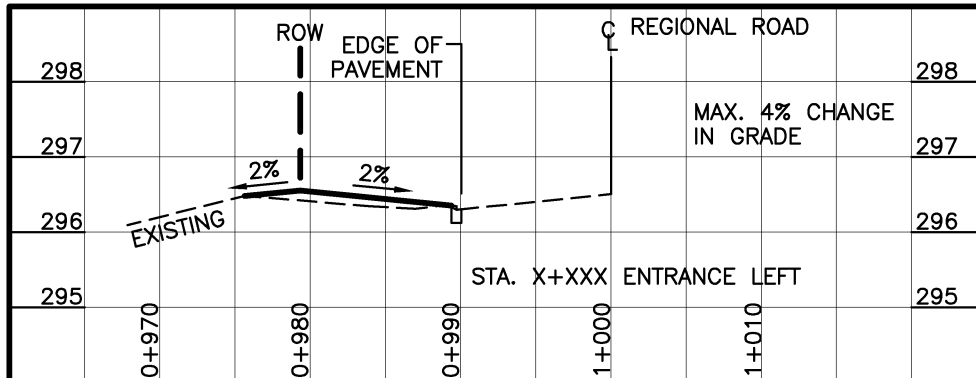
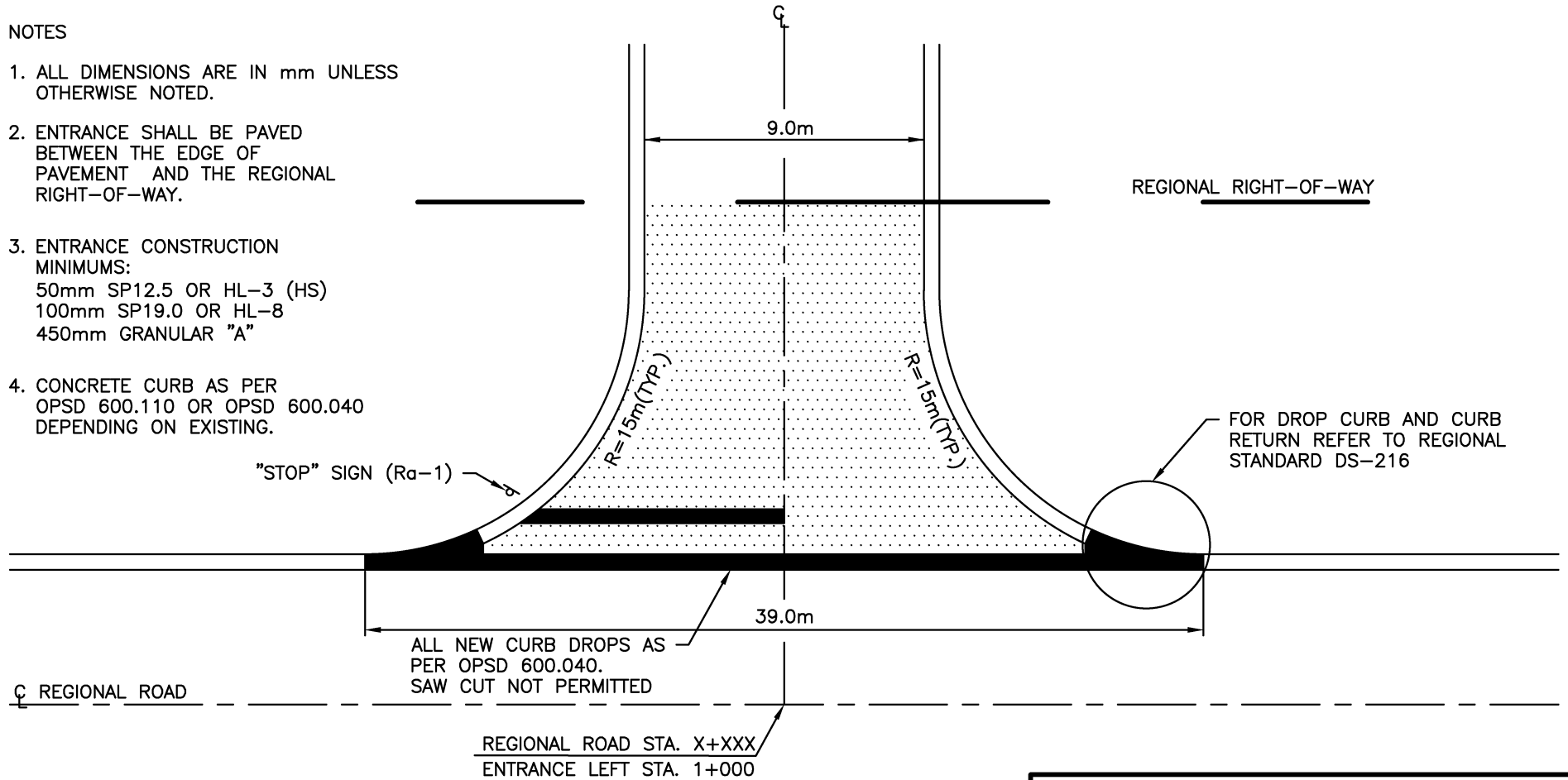
X

X

DS-202

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ENTRANCE SHALL BE PAVED BETWEEN THE EDGE OF PAVEMENT AND THE REGIONAL RIGHT-OF-WAY.
3. ENTRANCE CONSTRUCTION MINIMUMS:
50mm SP12.5 OR HL-3 (HS)
100mm SP19.0 OR HL-8
450mm GRANULAR "A"
4. CONCRETE CURB AS PER OPSD 600.110 OR OPSD 600.040 DEPENDING ON EXISTING.



**Public Works
Transportation**

COMMERCIAL ENTRANCE - URBAN

DATE: JANUARY 2023

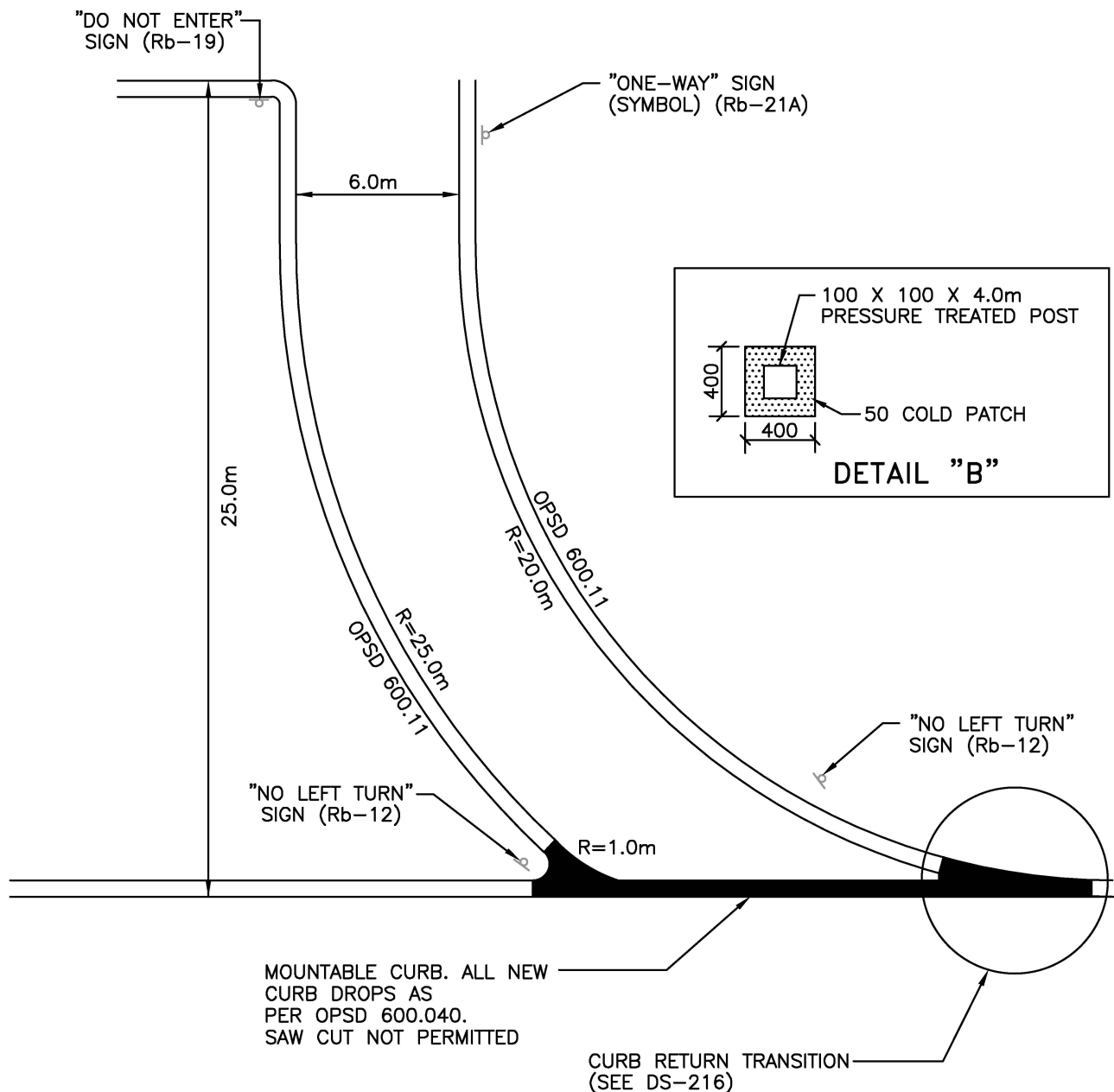
SCALE N.T.S.

REV.

X

X

DS-203



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. CURB TYPE, CATCH BASINS, ETC. SHALL CONFORM TO ONTARIO PROVINCIAL STANDARDS. (INDICATE O.P.S.D. REFERENCE ON PLANS)
3. SIGNS TO BE MOUNTED ON 4X4 PRESSURE TREATED WOOD POSTS.
4. REFER TO STANDARD DRAWING E-6.03, DETAIL "B" WHEN A CONCRETE SLAB RAISED MEDIAN IS BEING USED.
5. SIDEWALK TO CARRY THROUGH ENTRANCE.



York Region

**Public Works
Transportation**

COMMERCIAL- TYPICAL RIGHT TURN IN ONLY -URBAN

DATE: MARCH 2023

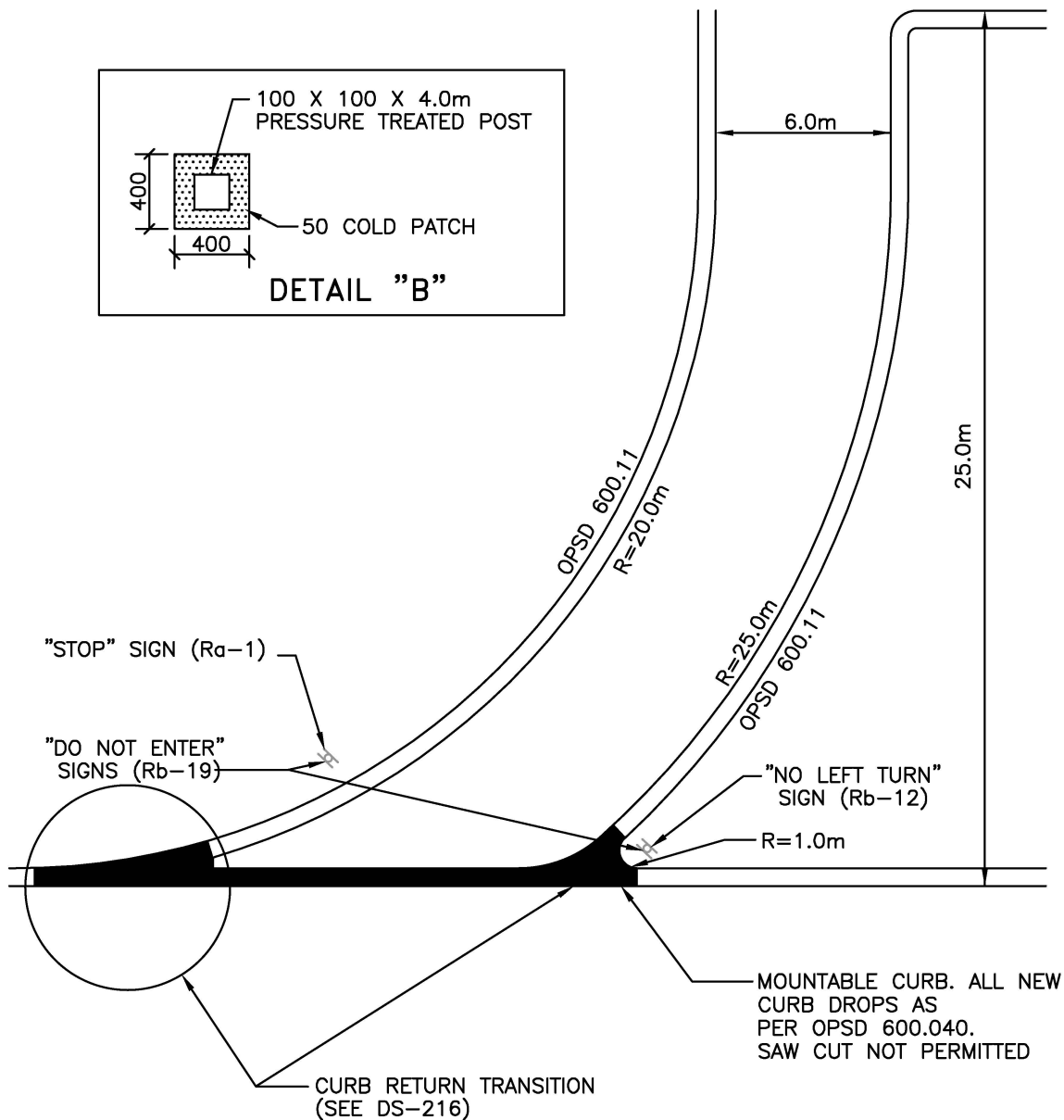
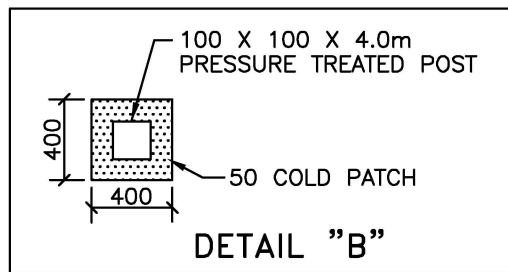
SCALE N.T.S.

REV.

X

X

DS-204



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. CURB TYPE, CATCH BASINS, ETC. SHALL CONFORM TO ONTARIO PROVINCIAL STANDARDS. (INDICATE O.P.S.D. REFERENCE ON PLANS)
3. SIGNS TO BE MOUNTED ON 4X4 PRESSURE TREATED WOOD POSTS.
4. REFER TO STANDARD DRAWING E-6.03, DETAIL "B" WHEN A CONCRETE SLAB RAISED MEDIAN IS BEING USED.



**Public Works
Transportation**

**COMMERCIAL-
TYPICAL RIGHT TURN OUT ONLY
-URBAN**

DATE: MARCH 2023

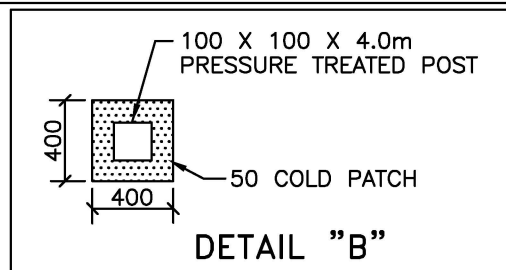
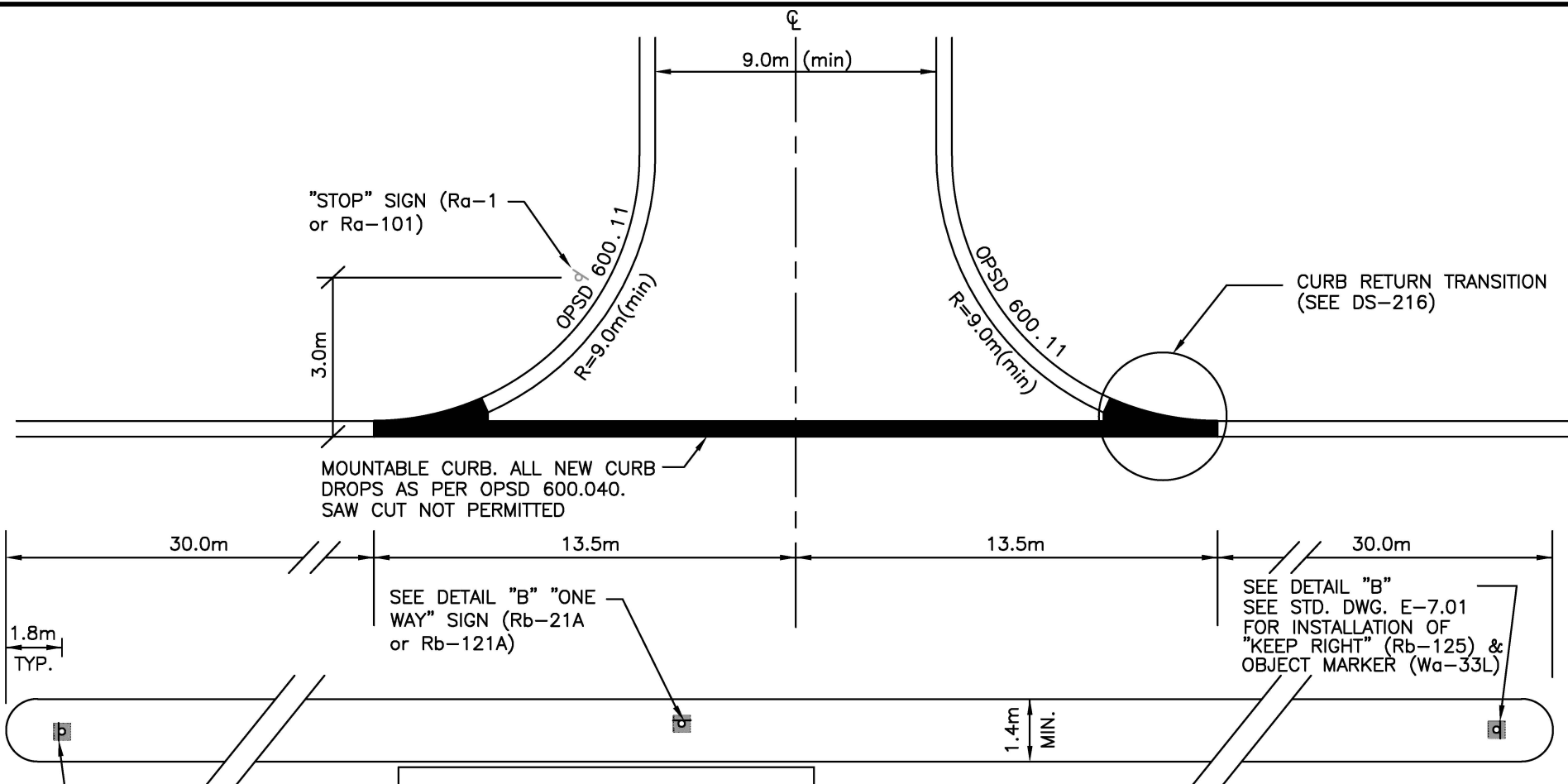
SCALE N.T.S.

REV.

X

X

DS-205



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. CURB TYPE, CATCH BASINS, ETC. SHALL CONFORM TO ONTARIO PROVINCIAL STANDARDS. (INDICATE O.P.S.D. REFERENCE ON PLANS)
3. SIGNS TO BE MOUNTED ON 4x4 PRESSURE TREATED WOOD POSTS.



**Public Works
Transportation**

**COMMERCIAL-
RIGHT IN/RIGHT OUT ONLY
(BLOCKED BY CONCRETE SLAB
RAISED MEDIAN) – URBAN**

DATE: MARCH 2023

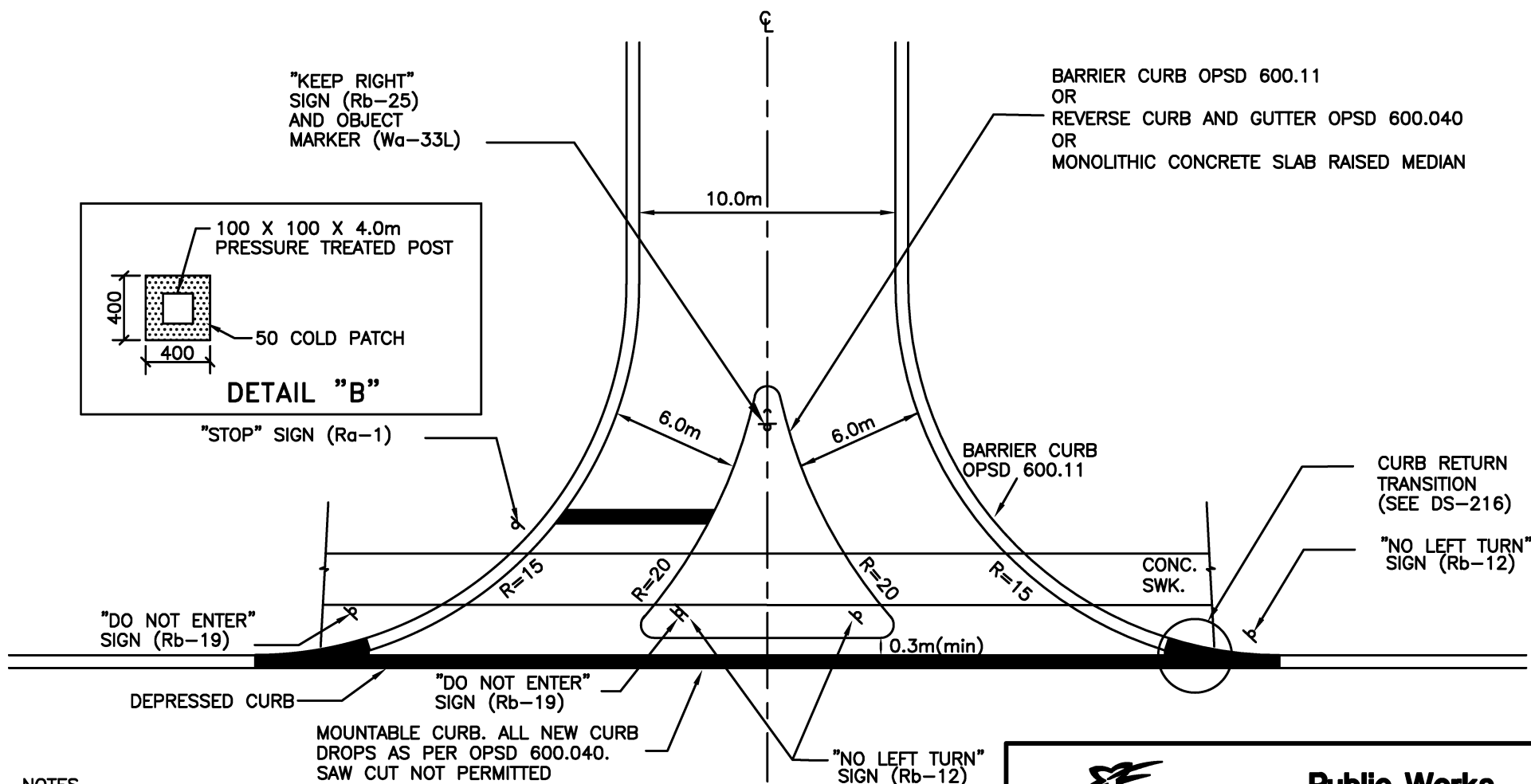
SCALE N.T.S.

REV.

X

X

DS-206



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. CURB TYPE, CATCH BASINS, ETC. SHALL CONFORM TO ONTARIO PROVINCIAL STANDARDS. (INDICATE O.P.S.D. REFERENCE ON PLANS)
3. SIGNS TO BE MOUNTED ON 4X4 PRESSURE TREATED WOOD POSTS.
4. CENTRE RAISED MEDIAN ISLAND ON REGIONAL ROAD IS PREFERRED, WHERE FEASIBLE, RATHER THAN TRUMPET ISLAND (SEE DS-206).
5. REFER TO STANDARD DRAWING E-6.03, DETAIL "B" WHEN A CONCRETE SLAB RAISED MEDIAN IS BEING USED.
6. HARD SURFACE TO BE PROVIDED WITHIN MEDIAN WHERE BARRIER CURB OR CURB AND GUTTER IS USED.

York Region

**Public Works
Transportation**

**COMMERCIAL-
TYPICAL RIGHT TURN IN/
RIGHT TURN OUT
-URBAN**

DATE: MARCH 2023

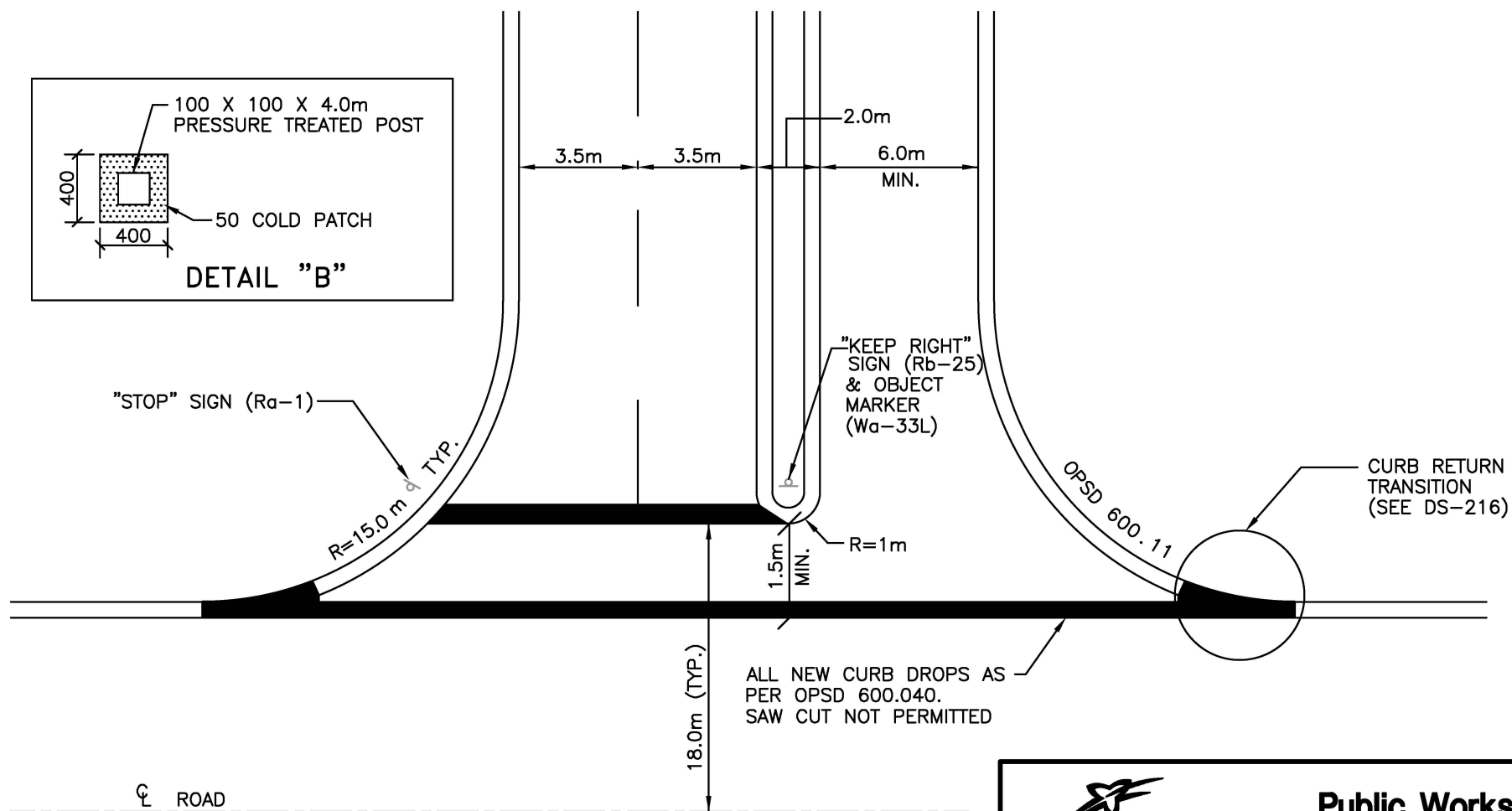
SCALE N.T.S.

REV.

X

X

DS-207



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. CURB TYPE, CATCH BASINS, ETC. SHALL CONFORM TO ONTARIO PROVINCIAL STANDARDS. (INDICATE O.P.S.D. REFERENCE ON PLANS)
3. SIGNS TO BE MOUNTED ON 4X4 PRESSURE TREATED WOOD POSTS.
4. REFER TO STANDARD DRAWING E-6.03, DETAIL "B" WHEN A CONCRETE SLAB RAISED MEDIAN IS BEING USED.
5. SIDEWALK TO CARRY THROUGH ENTRANCE. MINIMUM OFFSET TO BULLNOSE WILL INCREASE.



**Public Works
Transportation**

**COMMERCIAL—
TYPICAL DIVIDED ENTRANCE
1 LANE IN/2 LANES OUT
—URBAN**

DATE: MARCH 2023

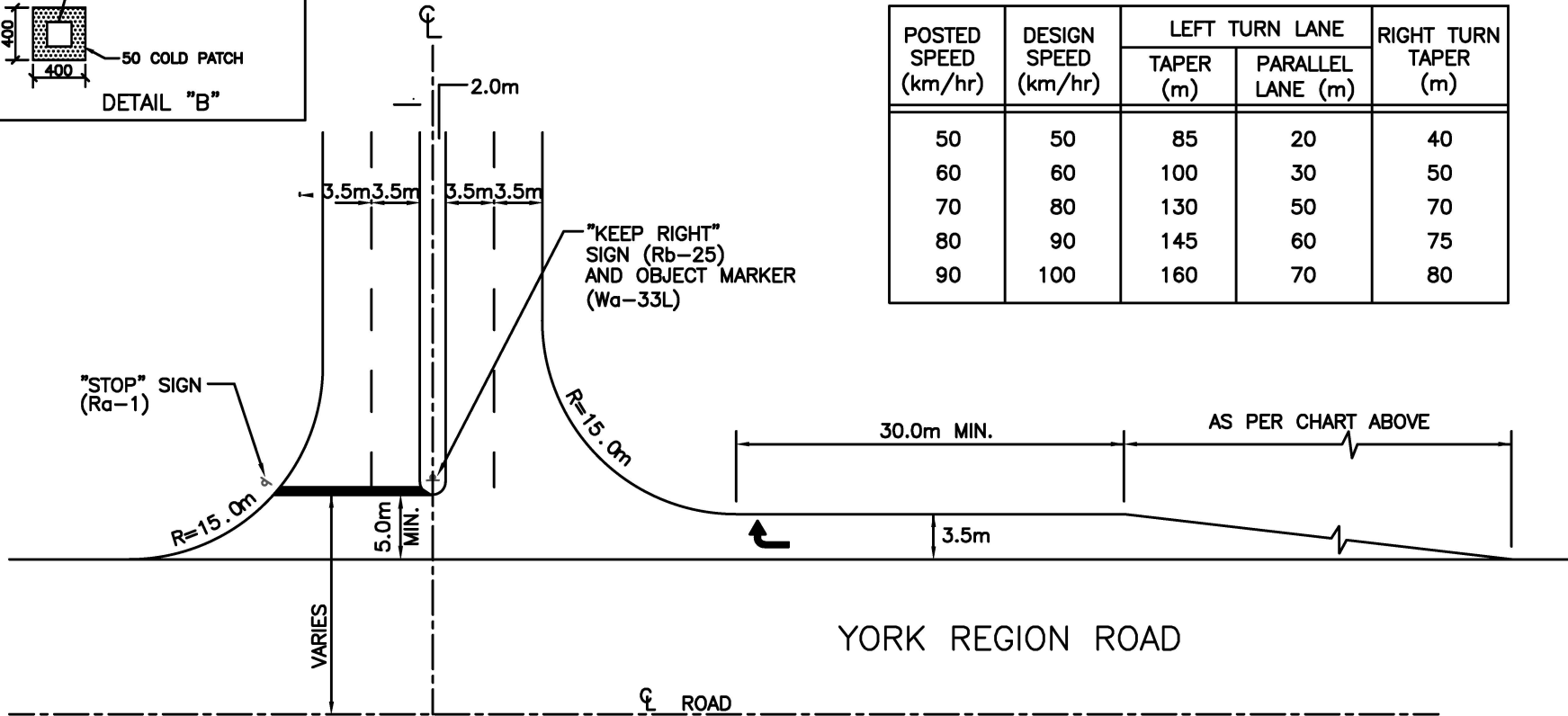
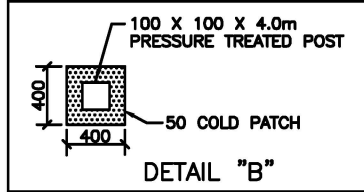
SCALE N.T.S.

REV.

X

X

DS-208



POSTED SPEED (km/hr)	DESIGN SPEED (km/hr)	LEFT TURN LANE		RIGHT TURN TAPER (m)
		TAPER (m)	PARALLEL LANE (m)	
50	50	85	20	40
60	60	100	30	50
70	80	130	50	70
80	90	145	60	75
90	100	160	70	80

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE INDICATED.
2. CURB TYPE, CATCH BASINS, ETC. SHALL CONFORM TO ONTARIO PROVINCIAL STANDARDS. (INDICATE O.P.S.D. REFERENCE ON PLANS)
3. SIGNS TO BE MOUNTED ON 4x4 PRESSURE TREATED WOOD POSTS.
4. REFER TO STANDARD DRAWING E-6.03, DETAIL "B" WHEN A CONCRETE SLAB RAISED MEDIAN IS BEING USED.
5. SIDEWALK TO CARRY THROUGH ENTRANCE. MINIMUM OFFSET TO BULLNOSE WILL INCREASE.



**Public Works
Transportation**

**COMMERCIAL—
TYPICAL DIVIDED ENTRANCE
WITH RIGHT TURN LANE
2 LANES IN/2 LANES OUT
—URBAN**

DATE: MARCH 2023

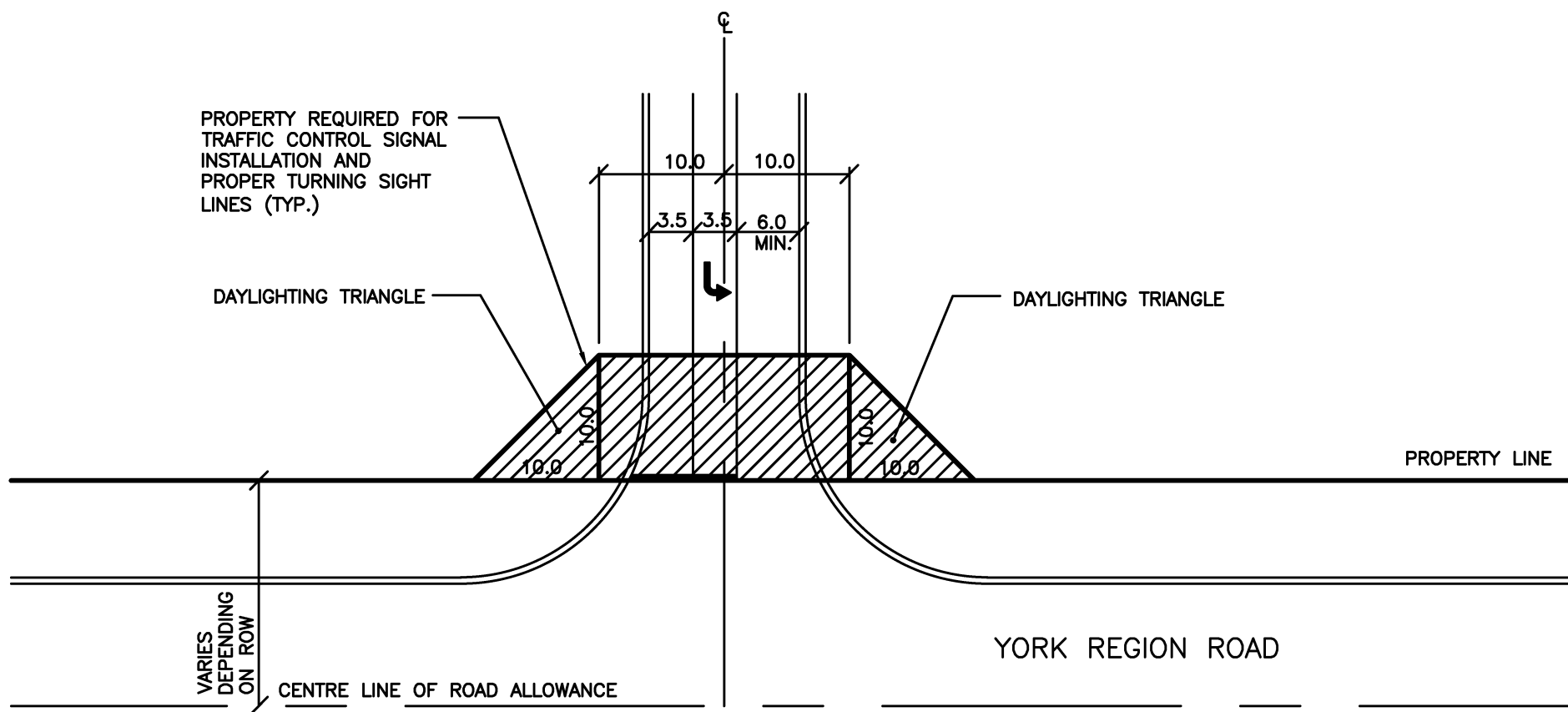
SCALE N.T.S.

REV.

X

X

DS-210



NOTE
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED.



**Public Works
Transportation**

**PROPERTY REQUIREMENTS FOR
TRAFFIC CONTROL SIGNALS AT
COMMERCIAL ENTRANCE
(1 LANE IN, 2 LANES OUT)**

DATE: JANAURY 2023

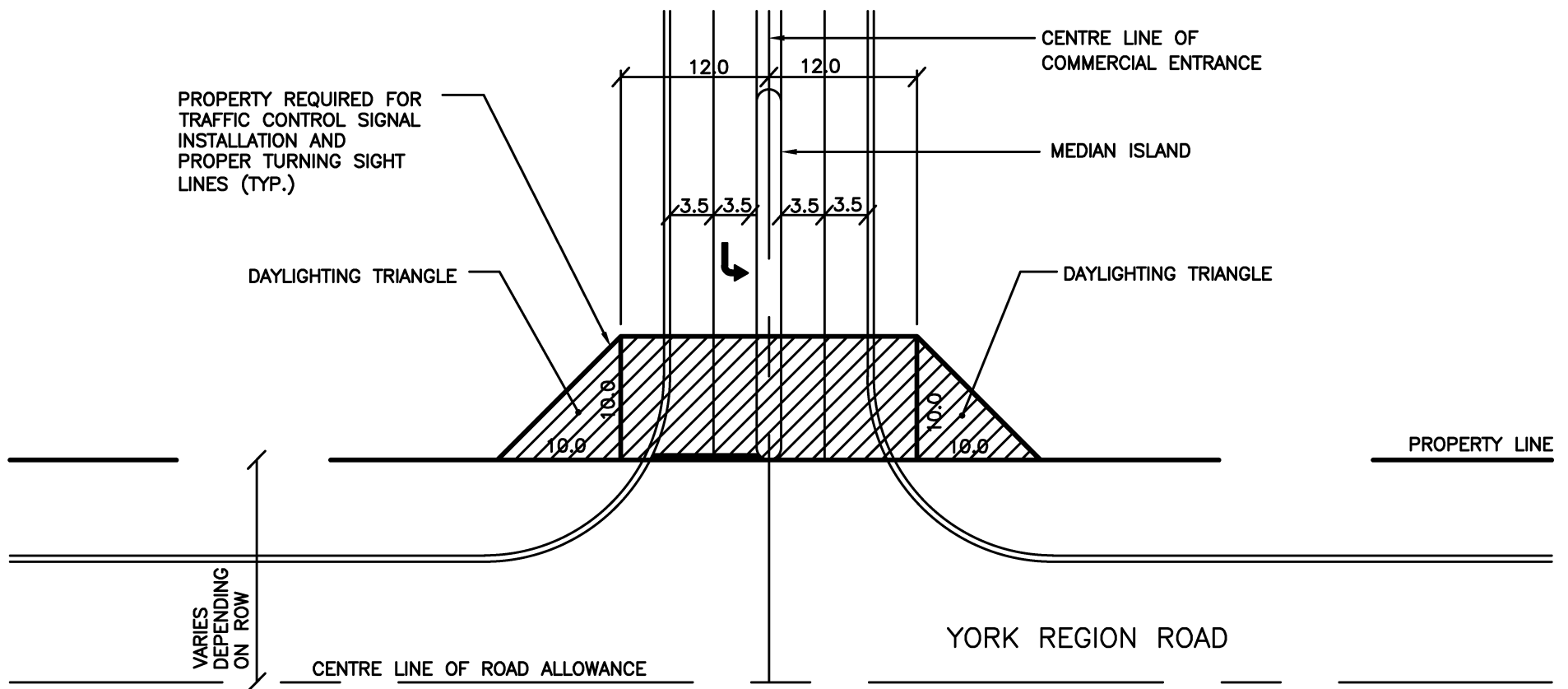
SCALE N.T.S.

REV.

X

X

DS-211



NOTE
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED.



**Public Works
Transportation**

**PROPERTY REQUIREMENTS FOR
TRAFFIC CONTROL SIGNALS AT
COMMERCIAL ENTRANCE
(4 LANES WITH MEDIAN)**

DATE: JANUARY 2023

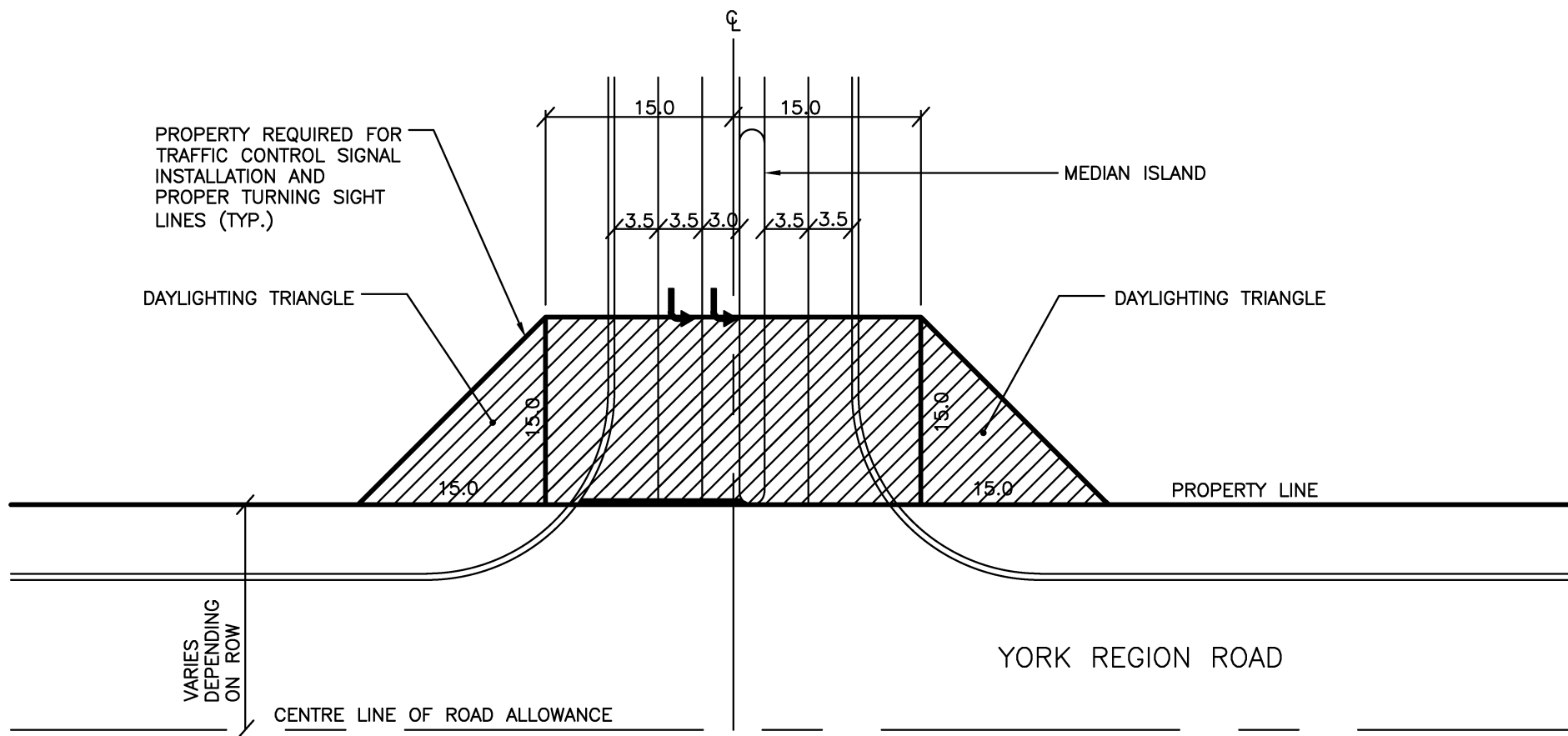
SCALE N.T.S.

REV.

X

X

DS-212



NOTE
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED.



**Public Works
Transportation**

**PROPERTY REQUIREMENTS FOR
TRAFFIC CONTROL SIGNALS AT
COMMERCIAL ENTRANCE
(5 LANES WITH MEDIAN)**

DATE: JANUARY 2023

SCALE N.T.S.

REV.

X

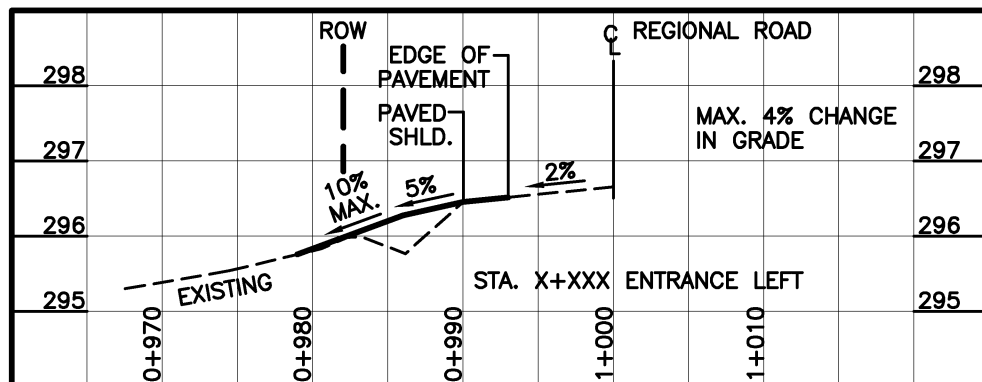
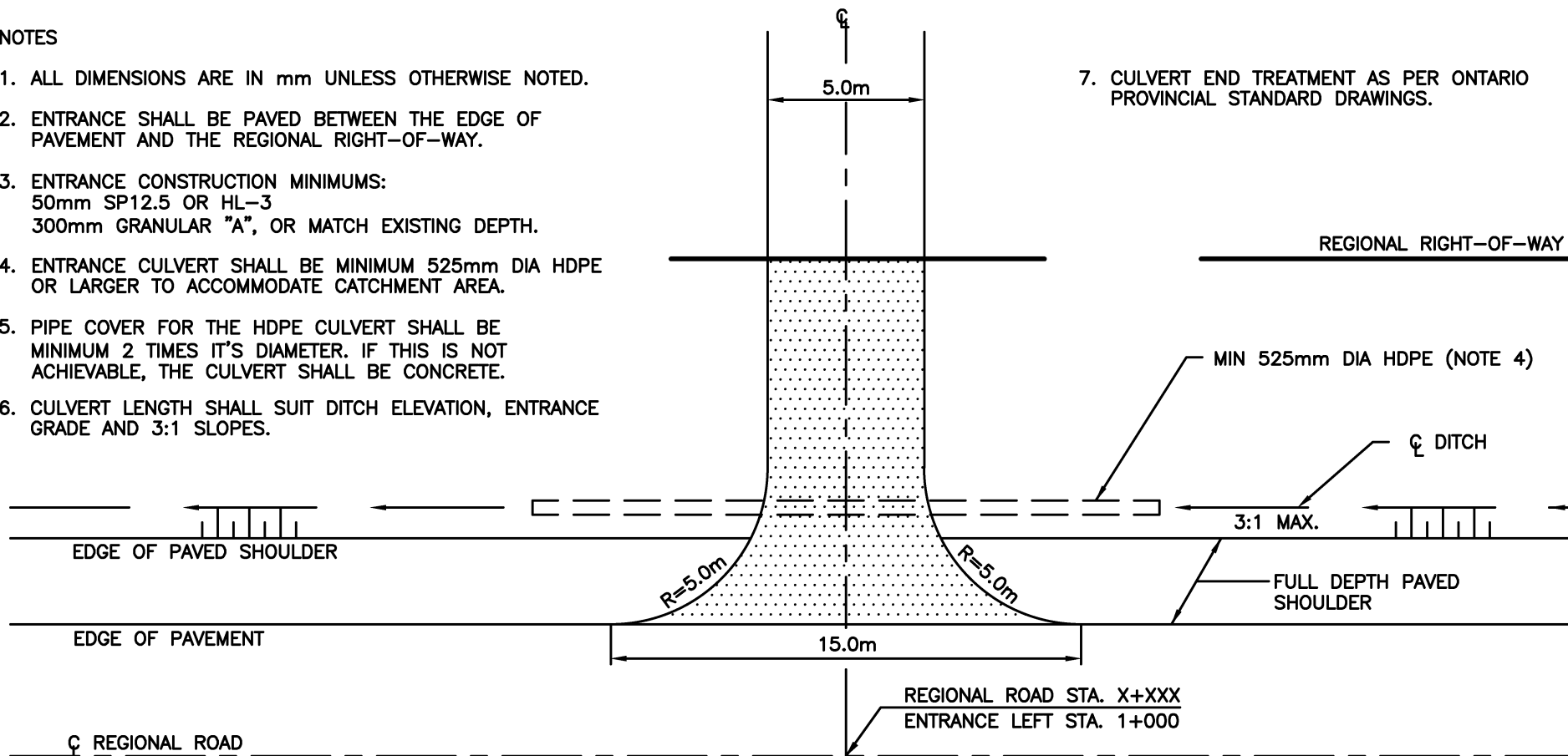
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DS-213

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ENTRANCE SHALL BE PAVED BETWEEN THE EDGE OF PAVEMENT AND THE REGIONAL RIGHT-OF-WAY.
3. ENTRANCE CONSTRUCTION MINIMUMS:
50mm SP12.5 OR HL-3
300mm GRANULAR "A", OR MATCH EXISTING DEPTH.
4. ENTRANCE CULVERT SHALL BE MINIMUM 525mm DIA HDPE OR LARGER TO ACCOMMODATE CATCHMENT AREA.
5. PIPE COVER FOR THE HDPE CULVERT SHALL BE MINIMUM 2 TIMES IT'S DIAMETER. IF THIS IS NOT ACHIEVABLE, THE CULVERT SHALL BE CONCRETE.
6. CULVERT LENGTH SHALL SUIT DITCH ELEVATION, ENTRANCE GRADE AND 3:1 SLOPES.

7. CULVERT END TREATMENT AS PER ONTARIO PROVINCIAL STANDARD DRAWINGS.



York Region

**Public Works
Transportation**

RESIDENTIAL ENTRANCE-RURAL

DATE: JANUARY 2023

SCALE N.T.S.

REV.

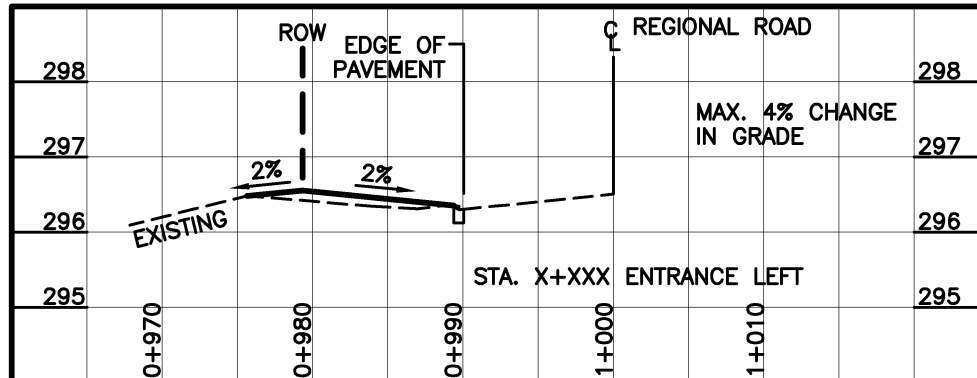
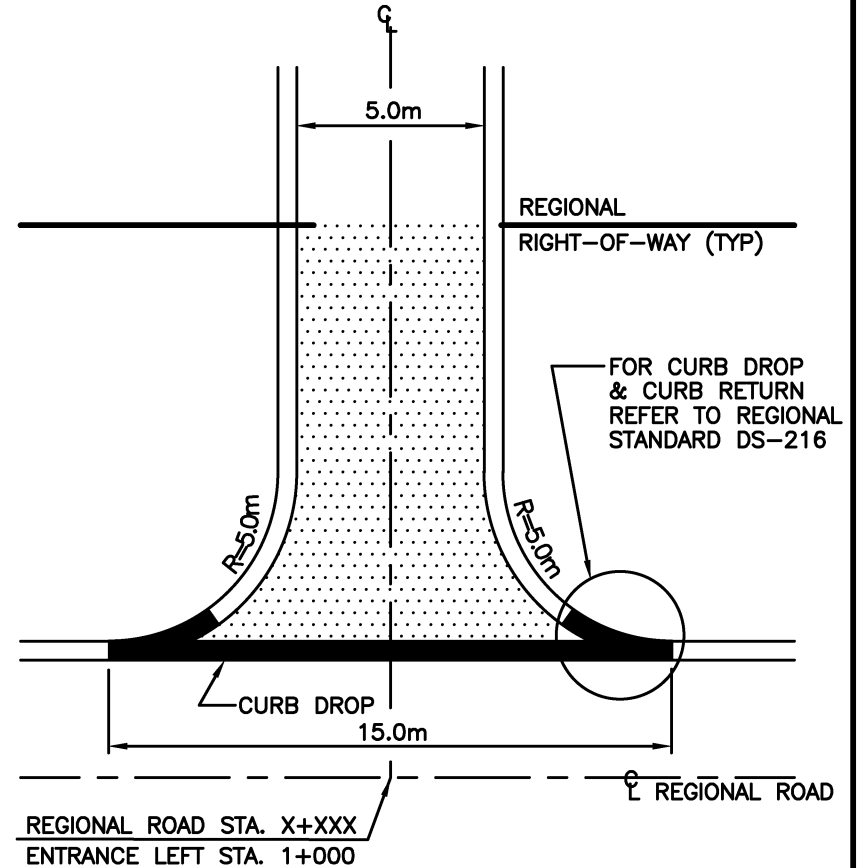
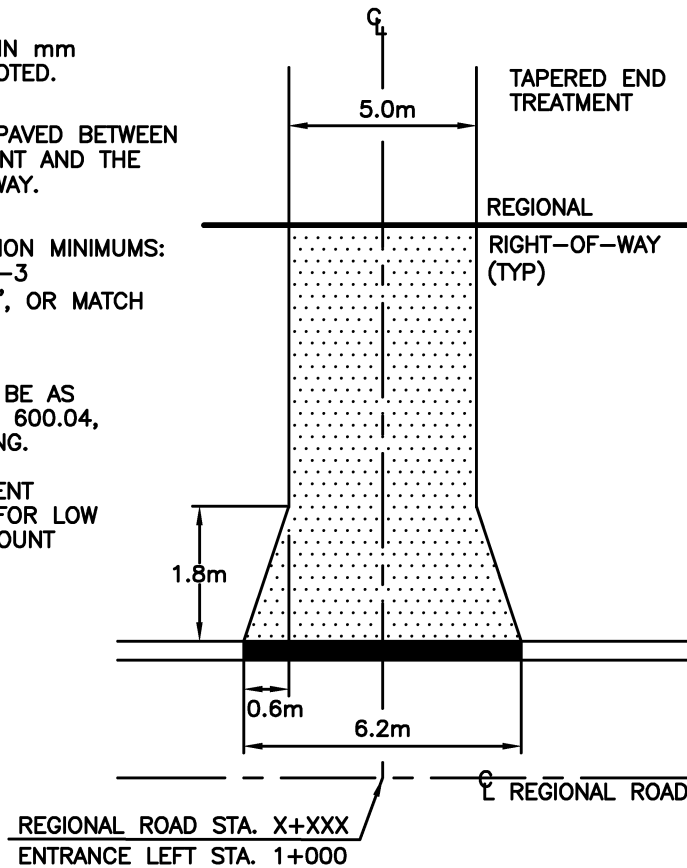
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X

DS-214

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. ENTRANCE SHALL BE PAVED BETWEEN THE EDGE OF PAVEMENT AND THE REGIONAL RIGHT-OF-WAY.
3. ENTRANCE CONSTRUCTION MINIMUMS:
50mm SP12.5 OR HL-3
300mm GRANULAR "A", OR MATCH EXISTING DEPTH.
4. CONCRETE CURB MAY BE AS PER OPSD 600.11 OR 600.04, DEPENDING ON EXISTING.
5. TAPERED END TREATMENT SHALL BE RESERVED FOR LOW SPEED/HIGH SPEED COUNT ROADS.



**Public Works
Transportation**

**SINGLE FAMILY RESIDENTIAL
ENTRANCE -URBAN**

DATE: JANUARY 2023

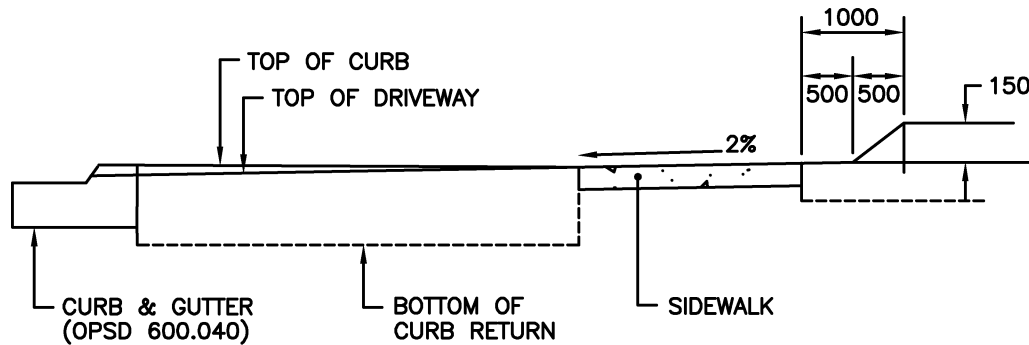
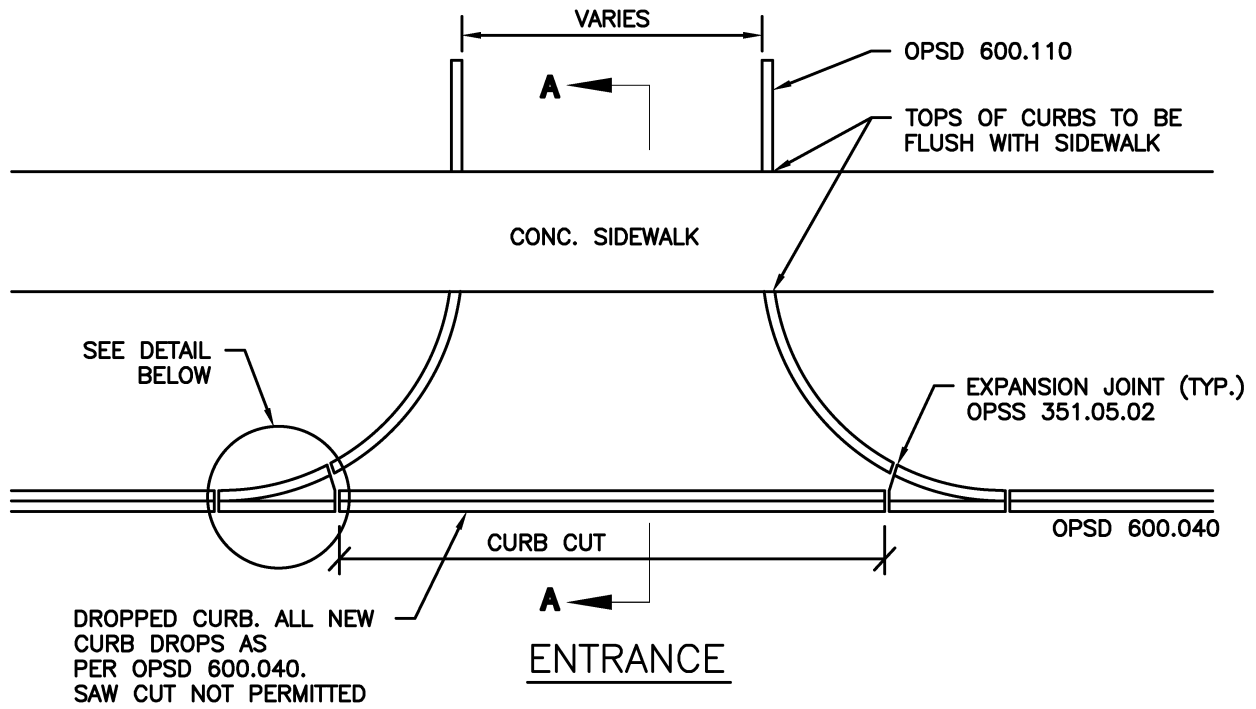
SCALE N.T.S.

REV.

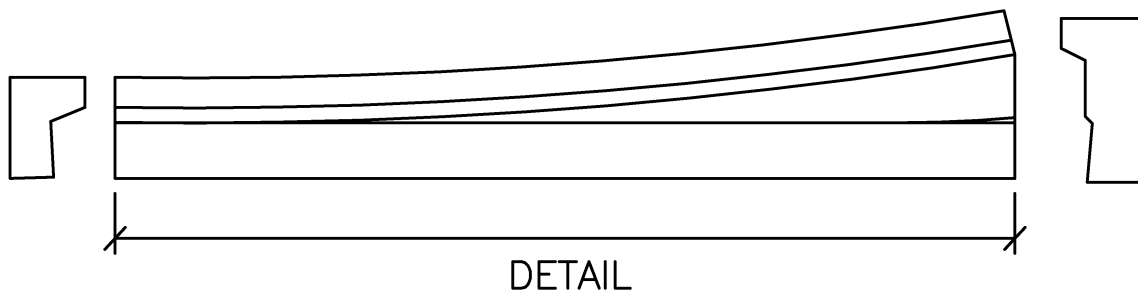
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X

DS-215



SECTION A-A



NOTES:

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. EXISTING CURB AND GUTTER TO BE REMOVED AND REPLACED IN ONE POUR.
3. REFER TO DS-203 TO DS-209 FOR URBANIZED COMMERCIAL ENTRANCE DETAILS AND PAVEMENT STRUCTURE MAKEUP.

York Region

**Public Works
Transportation**

**COMMERCIAL ENTRANCE
CURB RETURN**

DATE: JANUARY 2023

SCALE N.T.S.

REV.

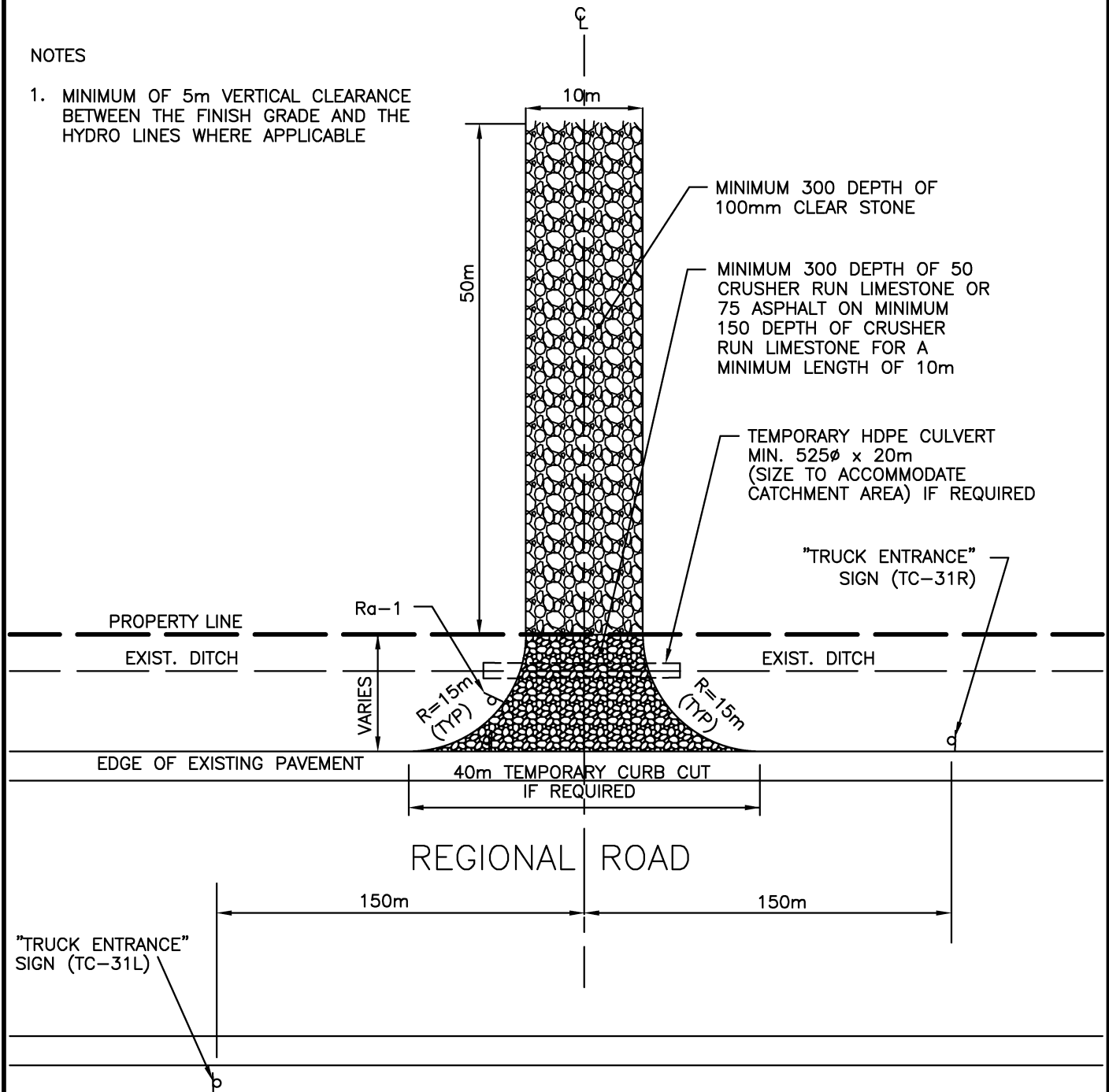
X

X

DS-216

NOTES

1. MINIMUM OF 5m VERTICAL CLEARANCE BETWEEN THE FINISH GRADE AND THE HYDRO LINES WHERE APPLICABLE



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. TEMPORARY "TRUCK ENTRANCE" SIGNS(TC-31) SHALL BE INSTALLED ON THE SHOULDER, 150M IN ADVANCE OF THE ACCESS (NOTE: SEE DETAILS ON USE OF THESE SIGNS IN THE ONTARIO TRAFFIC MANUAL, BOOK 7.) THE APPLICANT WILL BE RESPONSIBLE FOR THE COST OF OBTAINING, ERECTING AND MAINTAINING THESE SIGNS.
3. TEMPORARY CONSTRUCTION ACCESS SHALL BE REMOVED FROM THE REGIONAL ROAD ALLOWANCE AND ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.



**Public Works
Transportation**

MUD MAT FOR TEMPORARY CONSTRUCTION ACCESS

DATE: JANUARY 2023

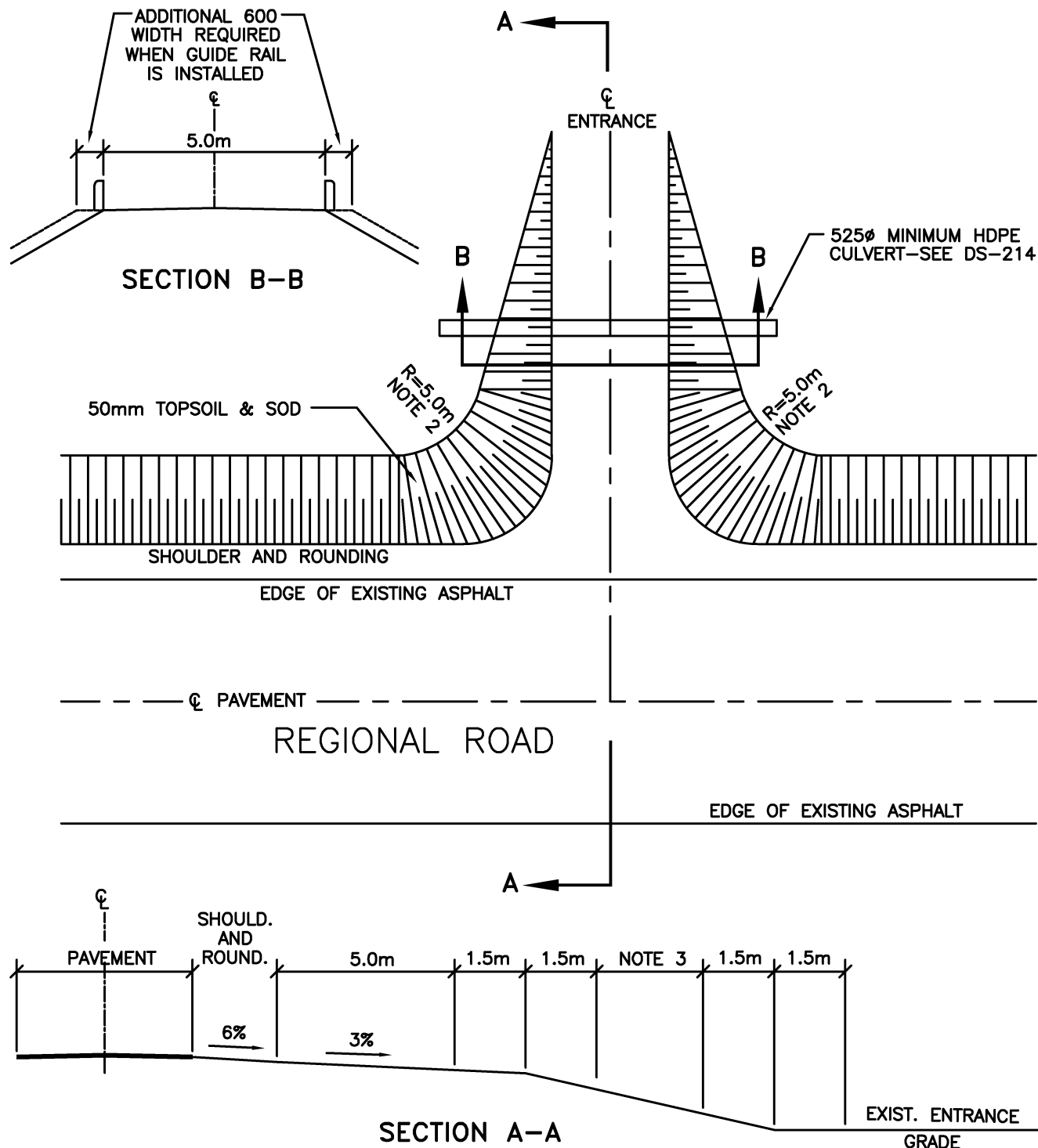
SCALE N.T.S.

REV.

X

X

DS-217



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. RADIUS TO BE 8.0m WHEN ENTRANCE IS USED FOR FARM EQUIPMENT.
3. TYPICAL ENTRANCE CONFIGURATION, WHEN CONDITIONS PERMIT. TYPICAL MAXIMUM GRADIENT: 6% FOR RESIDENTIAL ENTRANCES AND 10% FOR FARM AND FIELD ENTRANCES.
4. 200mm MINIMUM DEPTH OF GRANULAR "A"
5. MINIMUM PIPE COVER OF 300mm GRANULAR "A"



York Region

**Public Works
Transportation**

SINGLE FAMILY RESIDENTIAL ENTRANCE – RURAL

DATE: MARCH 2023

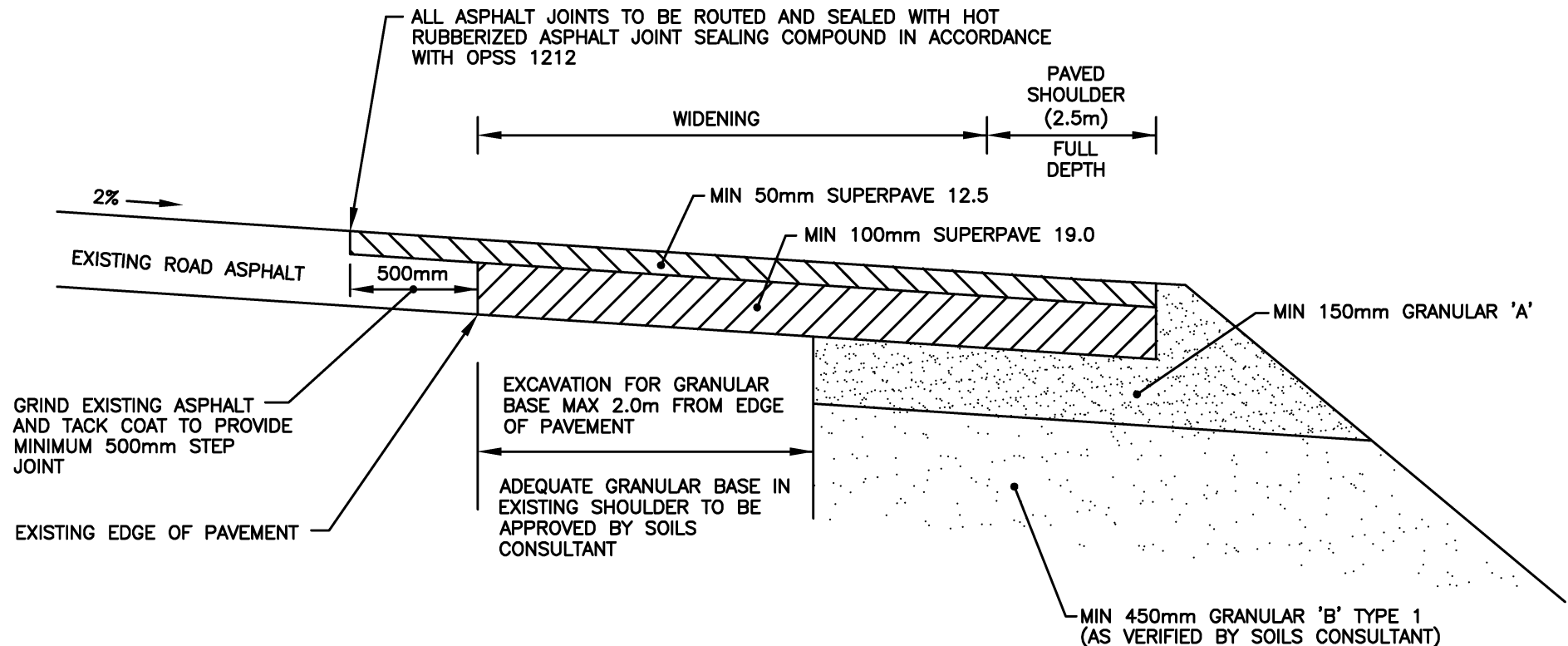
SCALE N.T.S.

REV.

X

X

DS-218



NOTES:

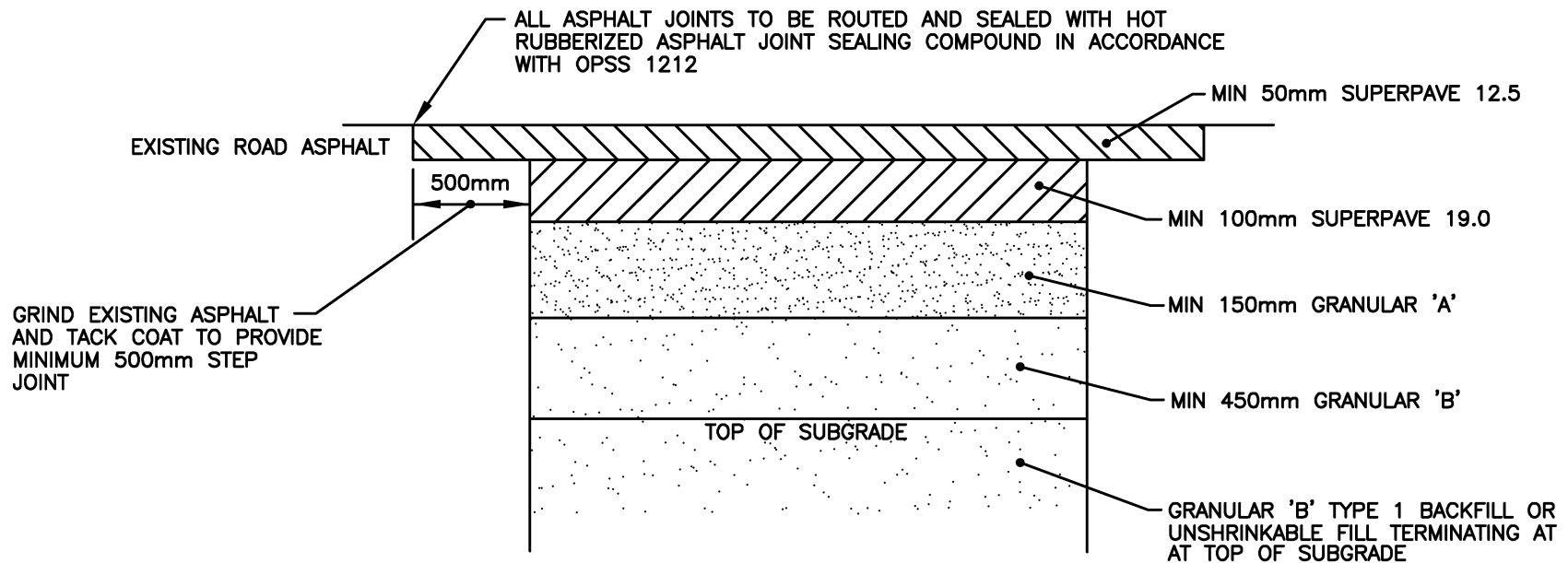
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
2. A STEP JOINT IS REQUIRED AT ALL PAVED ENTRANCES MATCHING INTO A REGIONAL ROAD
3. RURAL ROADS MAY HAVE PARTIALLY PAVED SHOULDERS AND THEY ARE TO BE RESTORED WITH FULL ASPHALT DEPTH



**Public Works
Transportation**

ROAD WIDENING DETAIL

DATE:		MARCH 2023		SCALE N.T.S.	
REV.	X	X		DS-219	



NOTES:

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
2. WHERE EXISTING DEPTHS ARE GREATER THAN MINIMUMS SPECIFIED, TRENCH RESTORATION SHALL MATCH EXISTING REGIONAL ROAD STRUCTURE.
3. A STEP JOINT IS REQUIRED AT ALL PAVED ENTRANCES MATCHING INTO A REGIONAL ROAD.
4. SHOULDERS SHALL HAVE FULL DEPTH PAVEMENT. IF RURAL ROAD HAS PARTIALLY PAVED SHOULDERS, THEY ARE TO BE RESTORED WITH 50mm OF SUPERPAVE 12.5.

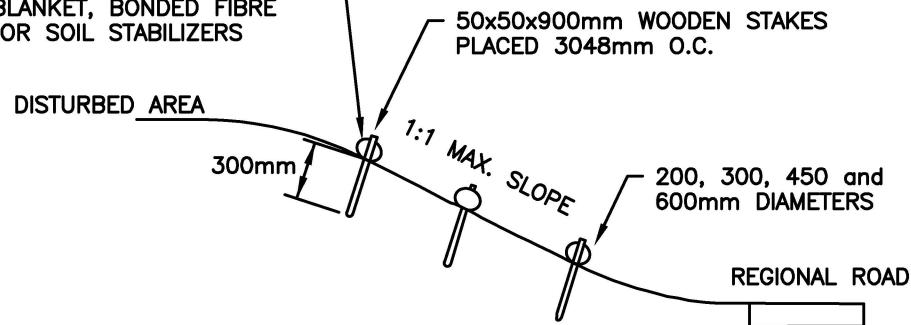


**Public Works
Transportation**

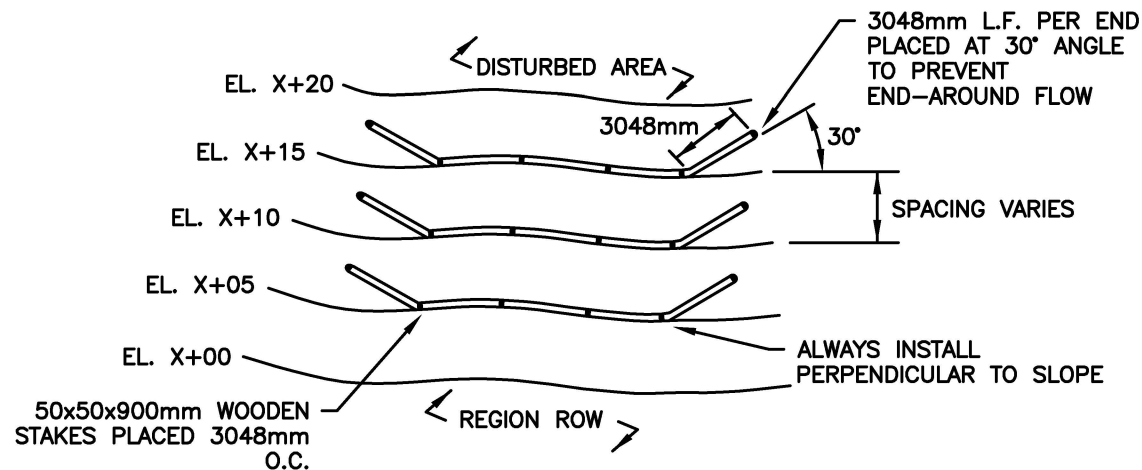
TRENCH RESTORATION DETAIL

DATE: MARCH 2023		SCALE N.T.S.	
REV.	X	X	DS-220

ONE OR MORE ROWS OF ESC SOCKS
USE IN CONJUNCTION WITH SLOPE
PROTECTION, ROLLED EROSION
CONTROL BLANKET, BONDED FIBRE
MATTRESS OR SOIL STABILIZERS

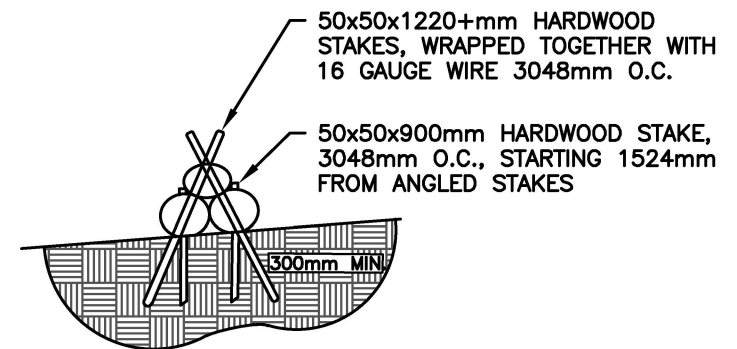


SECTION NTS

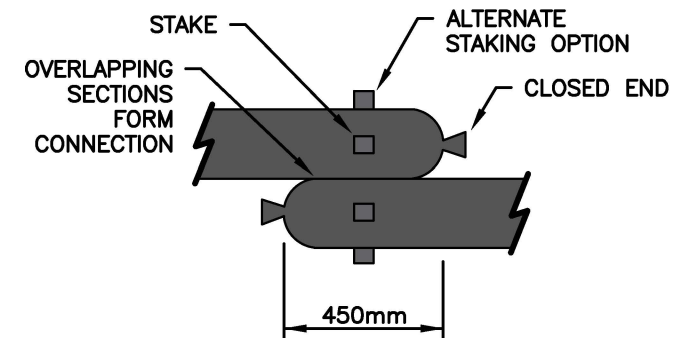


NOTES

1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
2. REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF THE SOCK WHEN ACCUMULATION HAS REACHED $\frac{1}{2}$ OF EFFECTIVE HEIGHT OF SOCK.
3. LOOSE FILTER MEDIA MAY BE BACKFILLED ON THE UPSLOPE SIDE OF THE SOCK TO ENHANCE PERFORMANCE.



ALTERNATE STACKING DETAIL



COMPOST SOCK CONNECTION/ATTACHMENT DETAIL



**Public Works
Transportation**

**SILTATION CONTROL ALONG
REGIONAL PROPERTY LINES**

DATE: JANUARY 2023

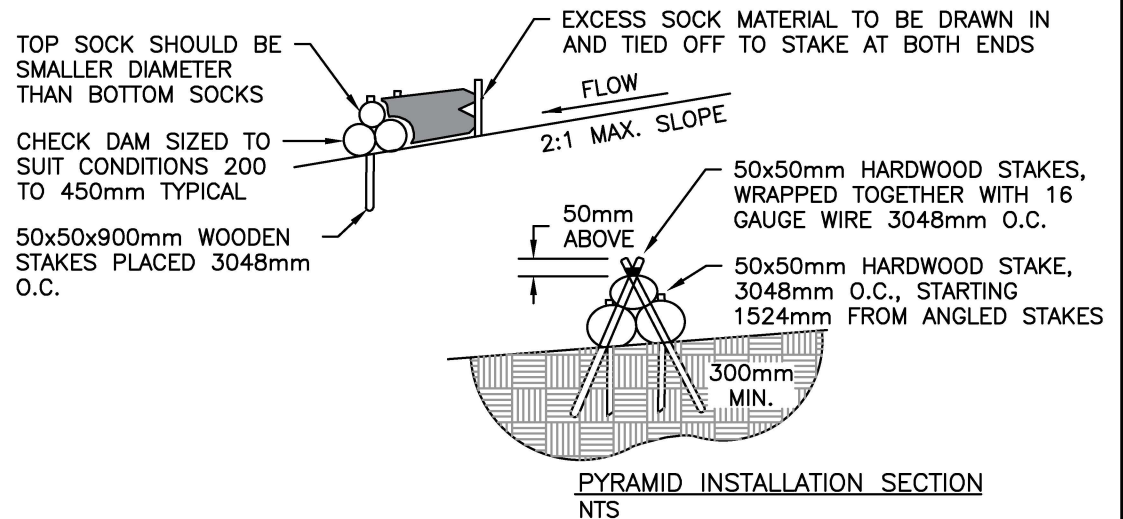
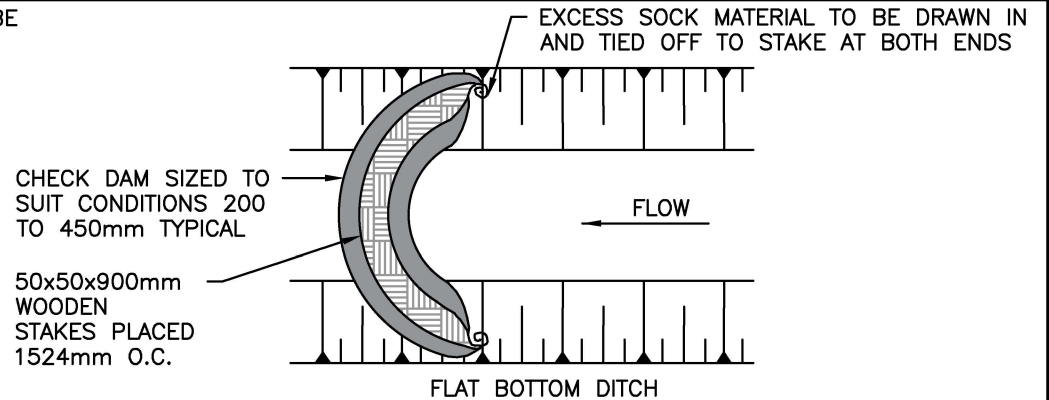
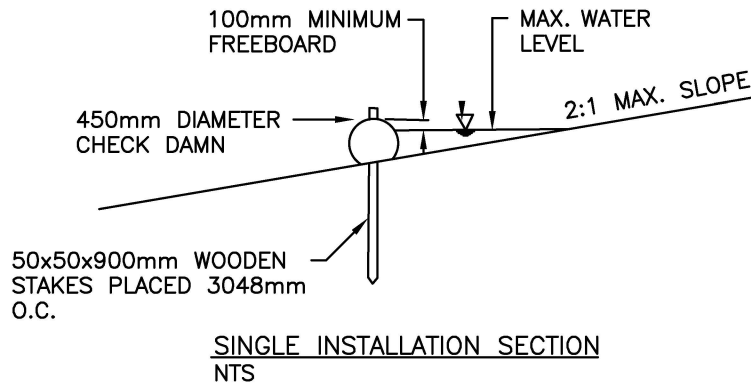
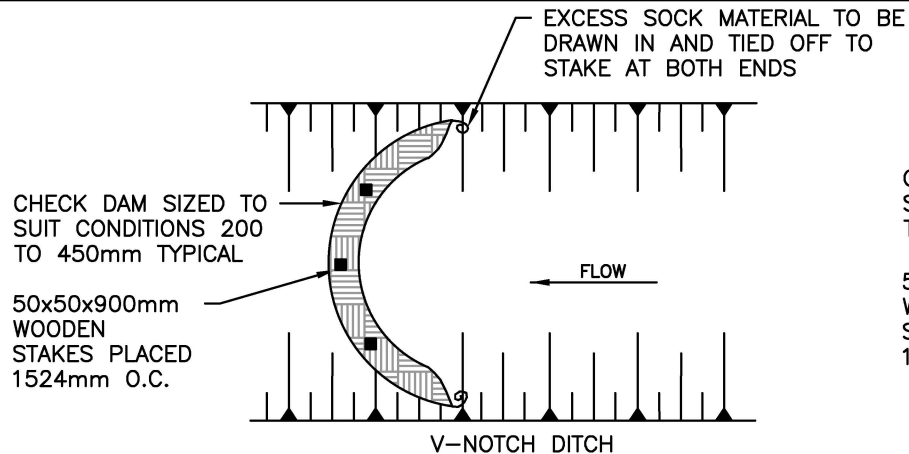
SCALE N.T.S.

REV.

X

X

DS-221



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
2. ALL MATERIAL TO MEET SPECIFICATIONS.
3. CHECK DAMS SHOULD BE USED IN AREAS THAT DRAIN 10 ACRES OR LESS.
4. SEDIMENT SHOULD BE REMOVED FROM BEHIND CHECK DAM ONCE THE ACCUMULATED HEIGHT HAS BEEN REACHED $\frac{1}{2}$ THE HEIGHT OF THE CHECK DAMN.
5. CHECK DAM CAN BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
6. CONTRACTOR IS REQUIRED TO BE AN INSTALLER CERTIFIED BY THE MANUFACTURER OF THE PRODUCT.



**Public Works
Transportation**

**CHECK DAMS ON SWALES CONVEYING
FLOWS TOWARDS REGIONAL PROPERTY
LINES**

DATE: JANUARY 2023

SCALE N.T.S.

REV.

X

X

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