Appendix "A"
Town of Tillsonburg Standard Drawings

TOWN OF TILLSONBURG STANDARD DETAILS

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NOTES:

1. COLOUR OF LETTERING TO BE BLACK, BACKGROUND YELLOW.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

Tillsonburg CONNECTED. ENRICHED. INSPIRED. STANDARD DETAIL	UNASSUMED ROAD SIGN	APPROVED MANAGER OF ENGINEERING DATE DIRECTOR OF OPERATIONS DATE	REVISION No.	DATE: MARCH 2020 SCALE: N.T.S. TSD-220

SUBDIVISION NAME

SUBDIVISION TYPE

BLOCK #

PLAN

KEY PLAN

1

2

3

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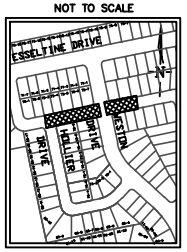
ABC ROAD
SURFACE IMPROVEMENTS

CONTRACT # 20xx-xx

KEY PLAN
NOT TO SCALE



LIST OF DRAWINGS

SAN1	–	SANITARY DRAINAGE PLAN
STM1	–	STORM DRAINAGE PLAN
PP1	–	ABC ROAD STA. __ (AT ____)
PP2	–	ABC ROAD STA. __ (AT ____)
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PP4	–	ABC ROAD STA. __ (AT ____)
DET1	–	GENERAL NOTES & DETAILS
DET2	–	PAVEMENT MARKINGS
DET3	–	TYPICAL SECTIONS
DET4	–	DETAILS
DET5	–	OPSD DETAILS
DET6		WATERMAIN DETAILS

1 TOWN OF TILLSONGBURG, ENGINEERING DEPARTMENT, TILLSONGBURG, ONTARIO

2 DEVELOPER'S NAME & ADDRESS

3 DEVELOPER'S ENGINEER & ADDRESS

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STANDARD DETAIL

TYPICAL TITLE PAGES

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-221

GENERAL NOTES:

DRAWINGS

A. ALL DRAWINGS SHALL BE PRODUCED IN ACCORDANCE WITH CURRENT TOWN OF TILLSONBURG STANDARDS & SYMBOLS FOR PLAN & PROFILE DRAWINGS, GENERAL SERVICE PLANS AND LOT GRADING PLANS.

MEASUREMENTS

A. ALL DIMENSIONS ARE IN METRES, EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETRES UNLESS SPECIFIED OTHERWISE.

GENERAL

A. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF TILLSONBURG STANDARD DRAWINGS (TSD) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).
B. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY TOWN OF TILLSONBURG STANDARD DRAWINGS (TSD) AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).
C. LOCATION OF EXISTING SERVICES ARE NOT GUARANTEED. THE CONTRACTOR IS REQUIRED TO NOTIFY THE VARIOUS UTILITY COMPANIES 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
D. A ROAD ENCROACHMENT PERMIT IS REQUIRED FROM THE TOWN ENGINEERING DEPARTMENT PRIOR TO THE COMMENCEMENT OF WORK WITHIN ANY TOWN RIGHT-OF-WAY.
E. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
F. GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
G. ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE CITY ENGINEERING DEPARTMENT.
H. ALL SILT CONTROL AND EROSION PROTECTION DEVICES ARE TO BE IN PLACE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND THE GRASS HAS ESTABLISHED GROWTH, SUBJECT TO APPROVAL BY THE TOWN ENGINEERING DEPARTMENT.

Tillsonburg
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STANDARD DETAIL

GENERAL NOTES

APPROVED

MANAGER OF ENGINEERING DATE

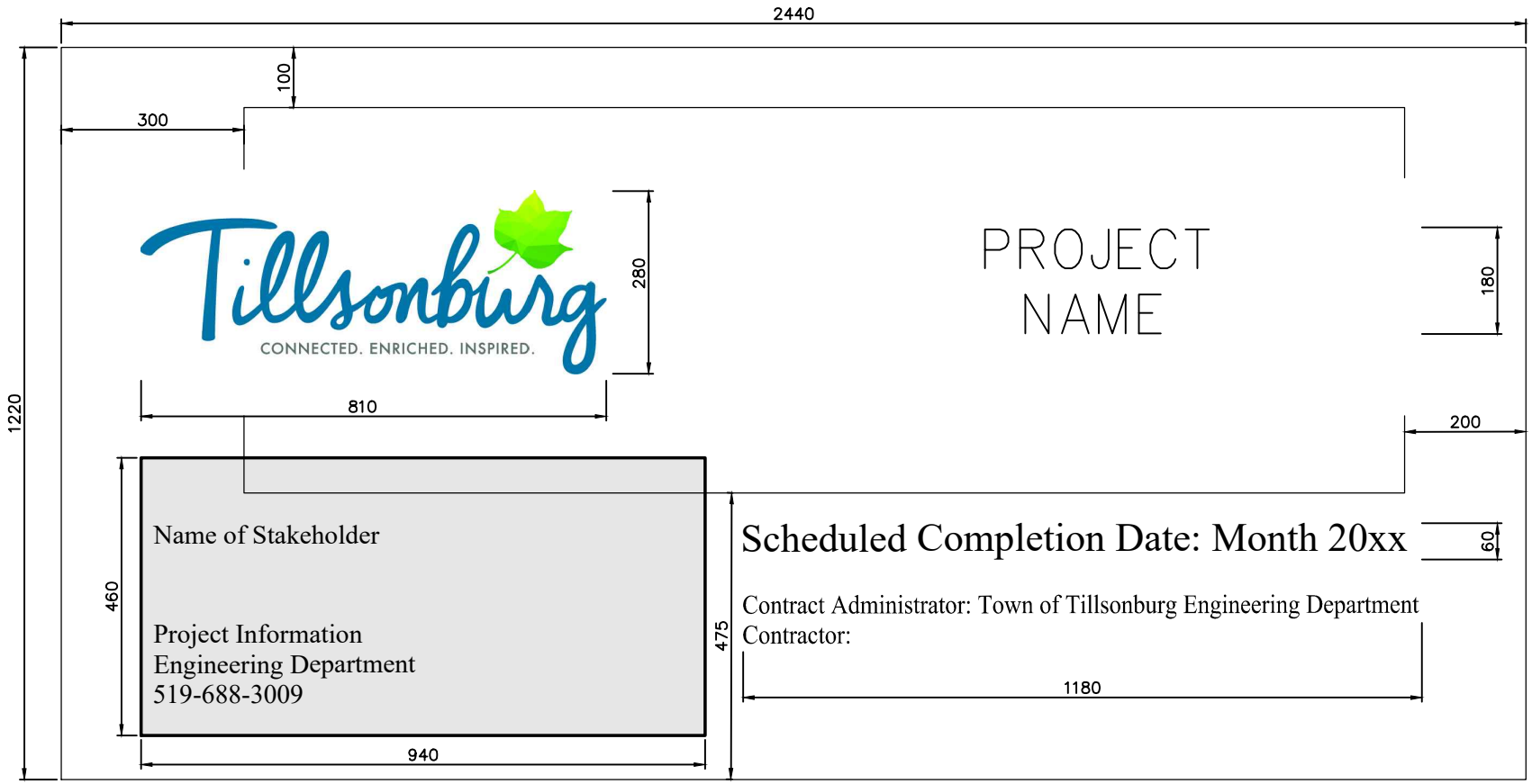
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-222



NOTES:

1. CONTACT THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT FOR EXACT COLOURS AND INFORMATION DETAILS.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

STANDARD DETAIL

TYPICAL PROJECT IDENTIFICATION SIGN

APPROVED

MANAGER OF ENGINEERING DATE

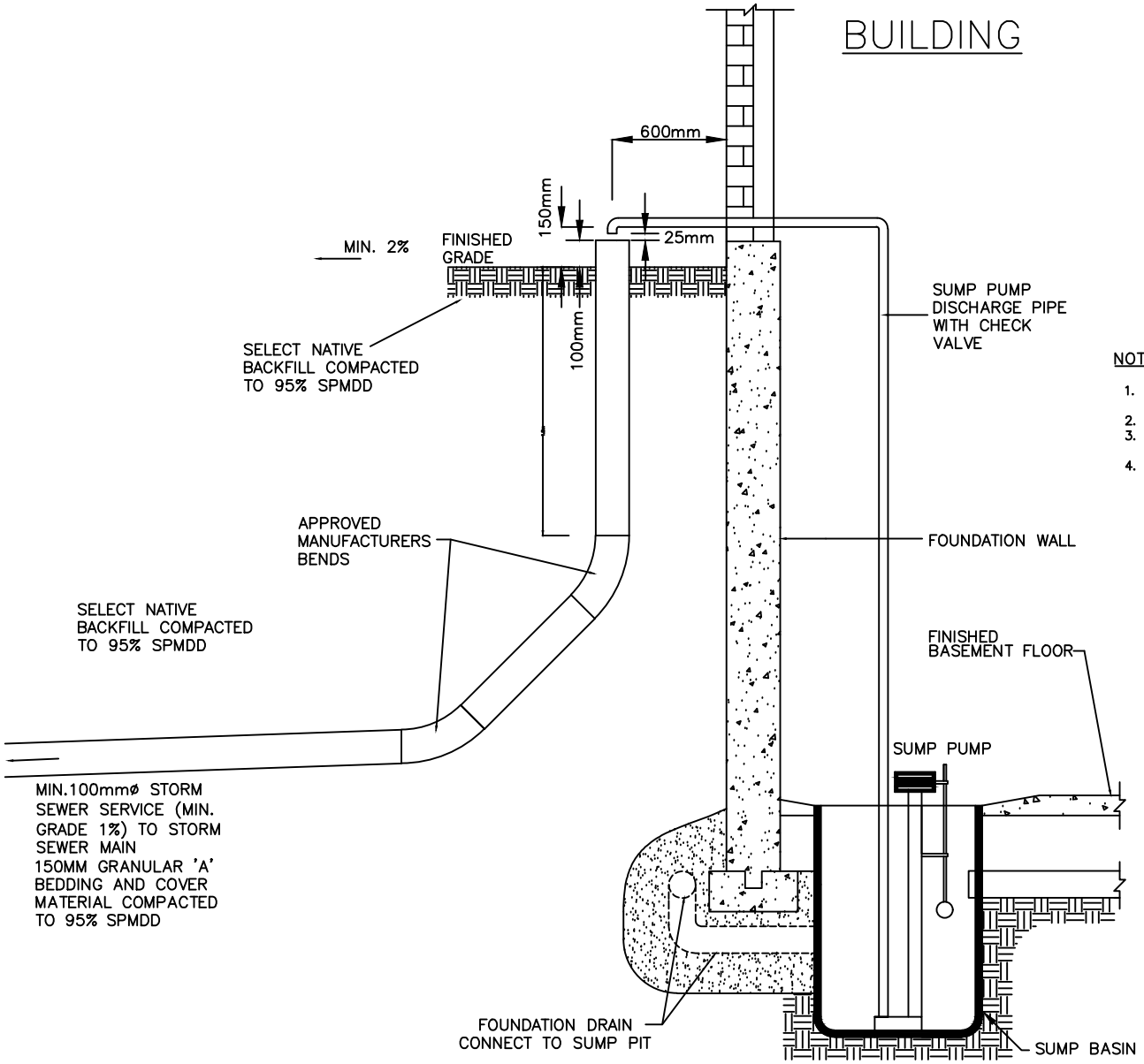
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-223



NOTES:

1. PIPE SHALL BE 100mm DIA. PVC. MEETING CSA–B182.4–M90, RUBBER GASKET TYPE JOINTS OR EQUIVALENT.
2. MIN. SLOPE OF PIPE TO BE 1%.
3. JUNCTION OF SUMP DISCHARGE AND STORM SERVICE MUST BE ABOVE FINISHED GRADE AND IS NOT TO BE SEALED.
4. ALL PLUMBING TO CONFORM TO ONTARIO BUILDING CODE.

Tillsonburg
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STANDARD DETAIL

FOUNDATION DRAIN OUTLET SUMP PUMP TO STORM SEWER AT SURFACE

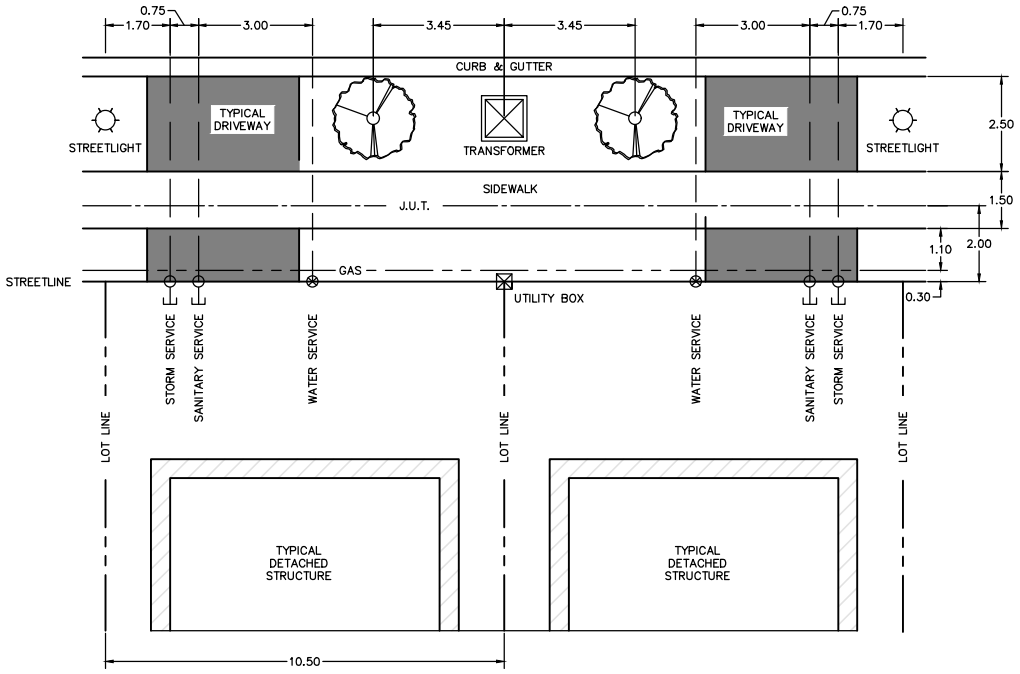
APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

REVISION No.	DATE: DEC 2021
	SCALE: N.T.S.

TSD-230



NOTES:

1. FOR WATER AND SANITARY SERVICE SPECIFICATIONS, REFER TO OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.
2. FOR STORMWATER SERVICE SPECIFICATIONS REFER TO TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
3. SANITARY AND STORMWATER SERVICES ARE TO BE BROUGHT 1.0m PAST PROPERTY LINE AND PROPERLY MARKED WITH A 50x100mm STAKE EXTENDING FROM THE INVERT OF THE SERVICE TO GROUND LEVEL. SANITARY SERVICES TO BE MARKED GREEN. STORM SERVICES TO BE MARKED IN WHITE.
4. WATER SERVICES ARE TO BE BROUGHT TO PROPERTY LINE, TERMINATED WITH A CURB STOP AND PROPERLY MARKED WITH A 50 X 100mm STAKE EXTENDING FROM THE INVERT OF SERVICE TO GROUND LEVEL. WATER SERVICES TO BE MARKED BLUE.
5. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
6. REFER TO TSD-301 FOR VERTICAL LOCATION OF PRIVATE DRAIN CONNECTIONS AT PROPERTY LINES.
7. REFER TO TSD-302 FOR TYPICAL STORMWATER PRIVATE DRAIN CLEAN-OUT DETAIL.
8. REFER TO OXFORD COUNTY D-1860-1-2018 TYPICAL SANITARY PRIVATE DRAIN CLEAN-OUT DETAIL.

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STANDARD DETAIL

STANDARD RESIDENTIAL SERVICE LOCATIONS 10.5m LOT

APPROVED

MANAGER OF ENGINEERING DATE

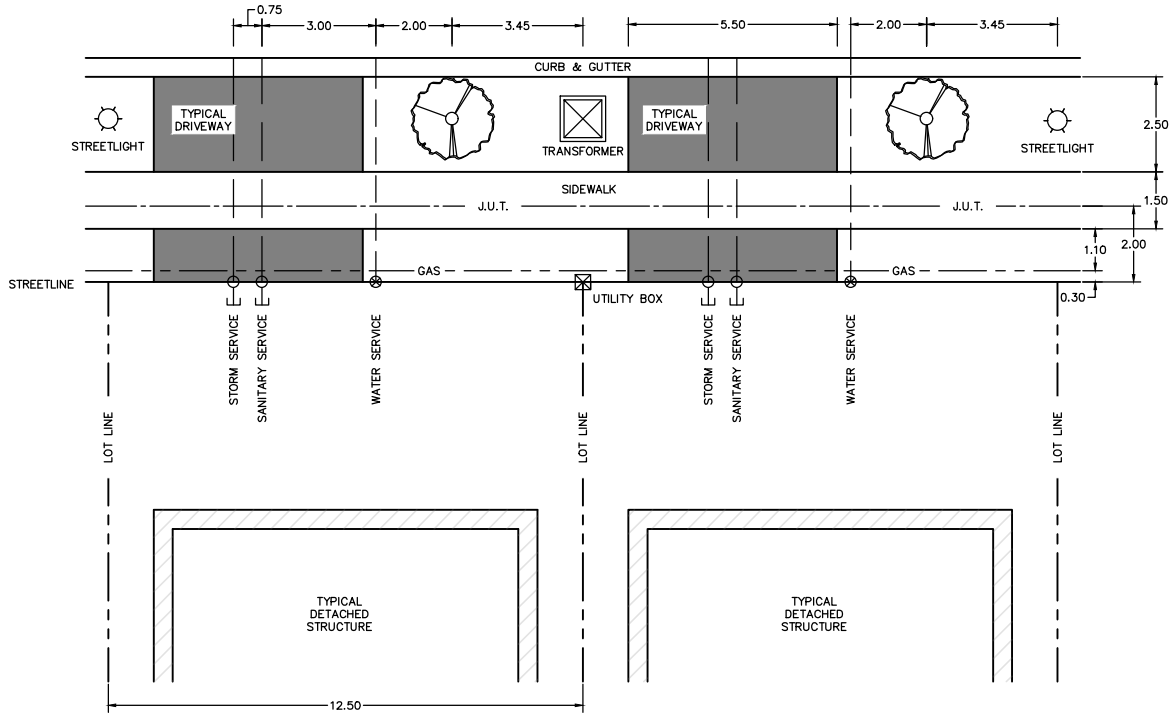
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-300



NOTES:

1. FOR WATER AND SANITARY SERVICE SPECIFICATIONS, REFER TO OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.
2. FOR STORMWATER SERVICE SPECIFICATIONS REFER TO TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
3. SANITARY AND STORMWATER SERVICES ARE TO BE BROUGHT 1.0m PAST PROPERTY LINE AND PROPERLY MARKED WITH A 50x100mm STAKE EXTENDING FROM THE INVERT OF THE SERVICE TO GROUND LEVEL. SANITARY SERVICES TO BE MARKED GREEN. STORM SERVICES TO BE MARKED IN WHITE.
4. WATER SERVICES ARE TO BE BROUGHT TO PROPERTY LINE, TERMINATED WITH A CURB STOP AND PROPERLY MARKED WITH A 50 X 100mm STAKE EXTENDING FROM THE INVERT OF SERVICE TO GROUND LEVEL. WATER SERVICES TO BE MARKED BLUE.
5. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
6. REFER TO TSD-301 FOR VERTICAL LOCATION OF PRIVATE DRAIN CONNECTIONS AT PROPERTY LINES.
7. REFER TO TSD-302 FOR TYPICAL STORMWATER PRIVATE DRAIN CLEAN-OUT DETAIL.
8. REFER TO OXFORD COUNTY D-1860-1-2018 TYPICAL SANITARY PRIVATE DRAIN CLEAN-OUT DETAIL.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

STANDARD RESIDENTIAL SERVICE LOCATIONS 12.5m LOT

APPROVED

MANAGER OF ENGINEERING DATE

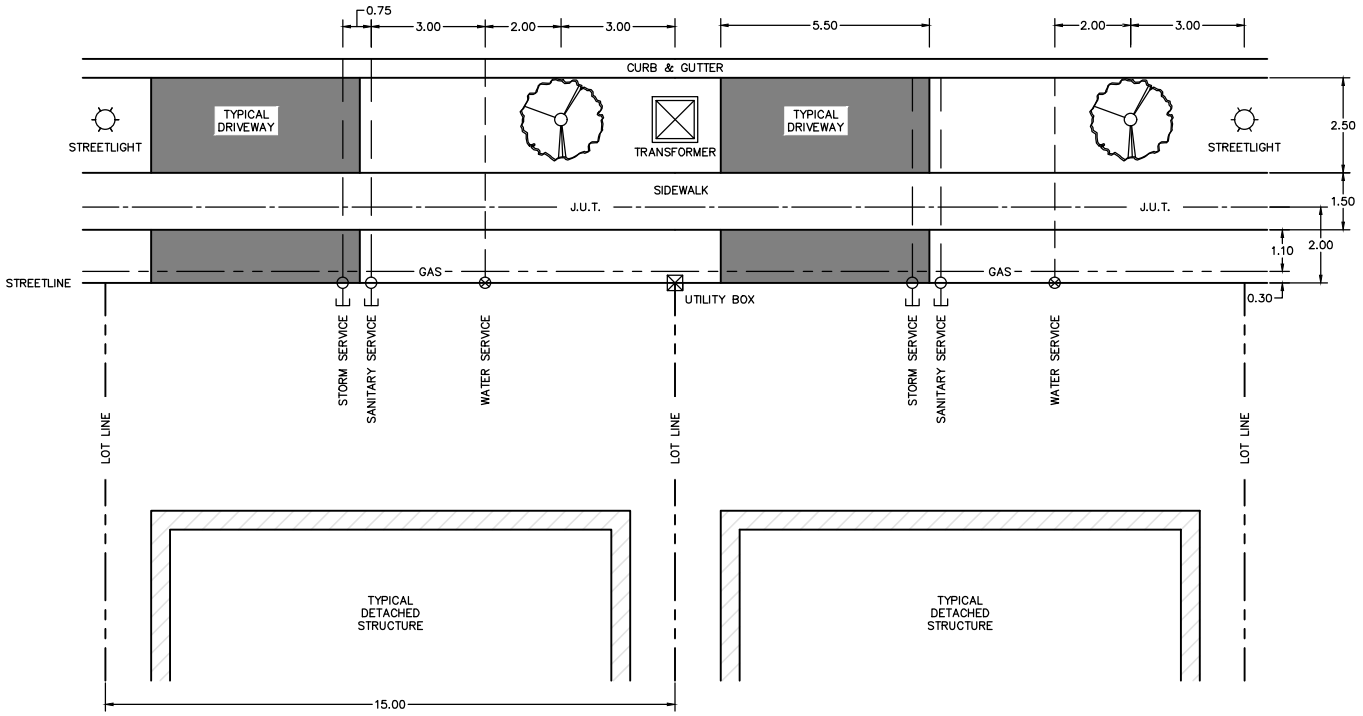
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-301



NOTES:

1. FOR WATER AND SANITARY SERVICE SPECIFICATIONS, REFER TO OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.
2. FOR STORMWATER SERVICE SPECIFICATIONS REFER TO TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
3. SANITARY AND STORMWATER SERVICES ARE TO BE BROUGHT 1.0m PAST PROPERTY LINE AND PROPERLY MARKED WITH A 50x100mm STAKE EXTENDING FROM THE INVERT OF THE SERVICE TO GROUND LEVEL. SANITARY SERVICES TO BE MARKED GREEN. STORM SERVICES TO BE MARKED IN WHITE.
4. WATER SERVICES ARE TO BE BROUGHT TO PROPERTY LINE, TERMINATED WITH A CURB STOP AND PROPERLY MARKED WITH A 50 X 100mm STAKE EXTENDING FROM THE INVERT OF SERVICE TO GROUND LEVEL. WATER SERVICES TO BE MARKED BLUE.
5. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
6. REFER TO TSD-301 FOR VERTICAL LOCATION OF PRIVATE DRAIN CONNECTIONS AT PROPERTY LINES.
7. REFER TO TSD-302 FOR TYPICAL STORMWATER PRIVATE DRAIN CLEAN-OUT DETAIL.
8. REFER TO OXFORD COUNTY D-1860-1-2018 TYPICAL SANITARY PRIVATE DRAIN CLEAN-OUT DETAIL.

Tillsonburg
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STANDARD DETAIL

STANDARD RESIDENTIAL SERVICE LOCATIONS 15m LOT

APPROVED

MANAGER OF ENGINEERING DATE

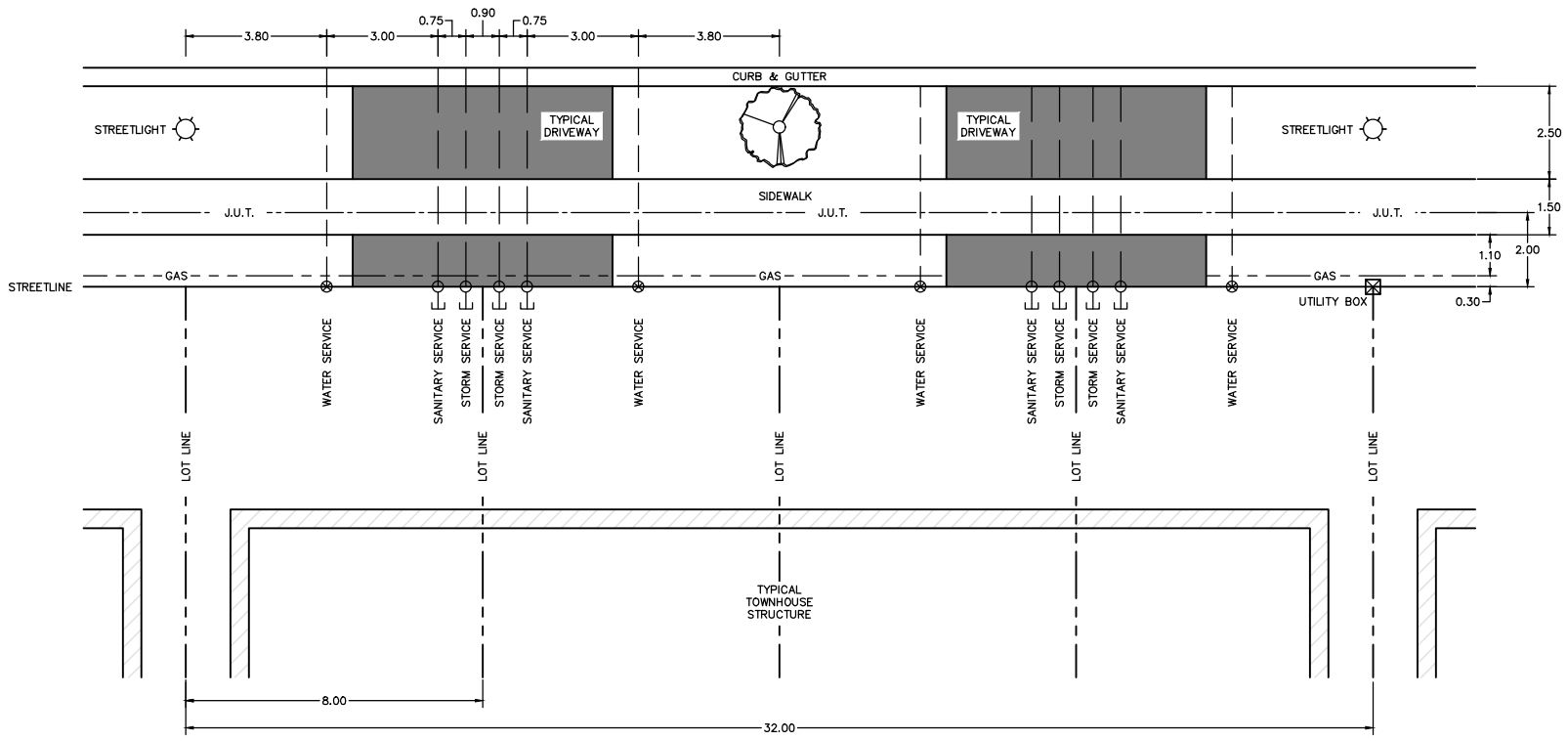
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-302



NOTES:

1. FOR WATER AND SANITARY SERVICE SPECIFICATIONS, REFER TO OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.
2. FOR STORMWATER SERVICE SPECIFICATIONS REFER TO TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
3. SANITARY AND STORMWATER SERVICES ARE TO BE BROUGHT 1.0m PAST PROPERTY LINE AND PROPERLY MARKED WITH A 50x100mm STAKE EXTENDING FROM THE INVERT OF THE SERVICE TO GROUND LEVEL. SANITARY SERVICES TO BE MARKED GREEN. STORM SERVICES TO BE MARKED IN WHITE.
4. WATER SERVICES ARE TO BE BROUGHT TO PROPERTY LINE, TERMINATED WITH A CURB STOP AND PROPERLY MARKED WITH A 50 X 100mm STAKE EXTENDING FROM THE INVERT OF SERVICE TO GROUND LEVEL. WATER SERVICES TO BE MARKED BLUE.
5. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
6. REFER TO TSD-301 FOR VERTICAL LOCATION OF PRIVATE DRAIN CONNECTIONS AT PROPERTY LINES.
7. REFER TO TSD-302 FOR TYPICAL STORMWATER PRIVATE DRAIN CLEAN-OUT DETAIL.
8. REFER TO OXFORD COUNTY D-1860-1-2018 TYPICAL SANITARY PRIVATE DRAIN CLEAN-OUT DETAIL.

Tillsonburg
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STANDARD DETAIL

STANDARD TOWNHOUSE SERVICE LOCATIONS 32m LOT

APPROVED

MANAGER OF ENGINEERING DATE

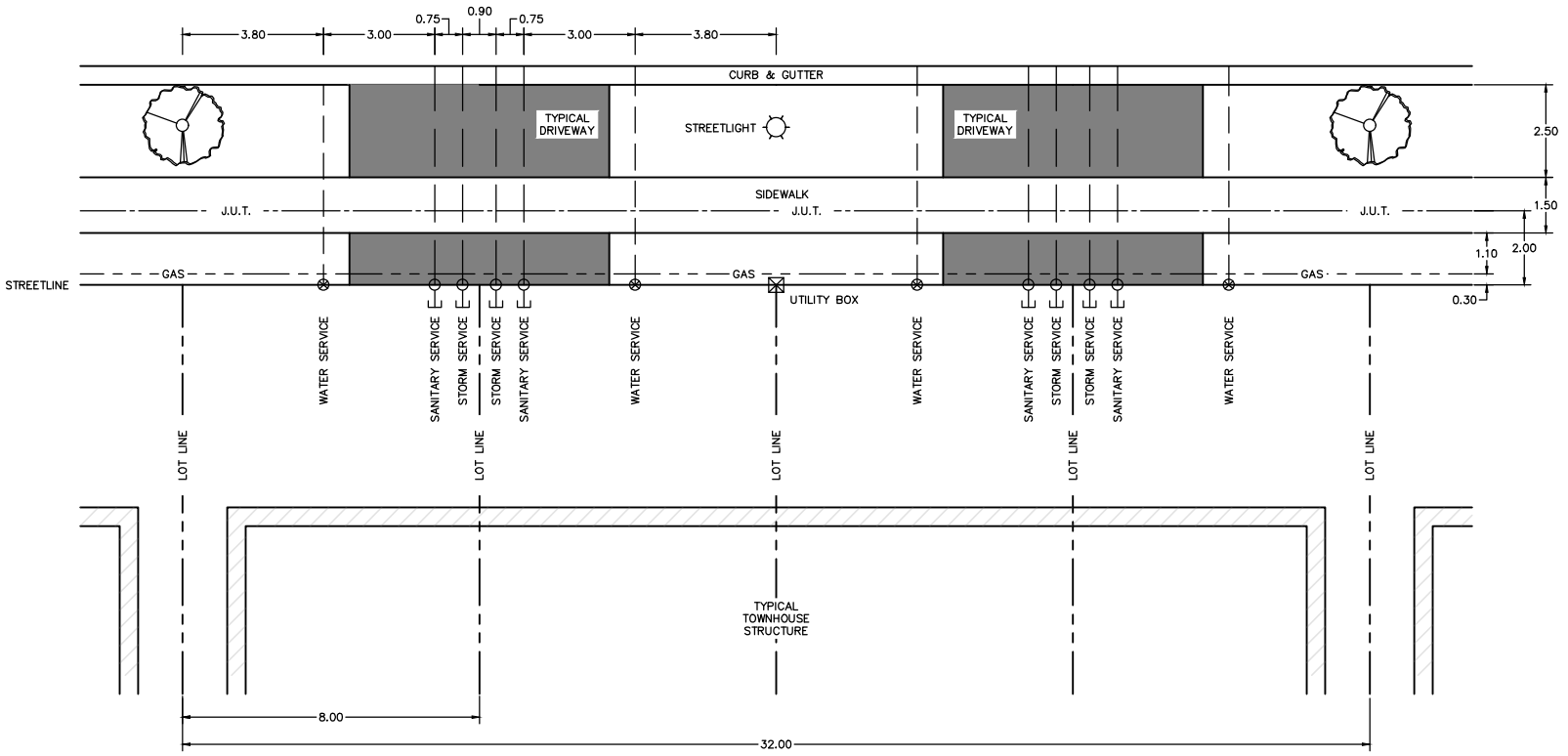
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-303



NOTES:

1. FOR WATER AND SANITARY SERVICE SPECIFICATIONS, REFER TO OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.
2. FOR STORMWATER SERVICE SPECIFICATIONS REFER TO TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
3. SANITARY AND STORMWATER SERVICES ARE TO BE BROUGHT 1.0m PAST PROPERTY LINE AND PROPERLY MARKED WITH A 50x100mm STAKE EXTENDING FROM THE INVERT OF THE SERVICE TO GROUND LEVEL. SANITARY SERVICES TO BE MARKED GREEN. STORM SERVICES TO BE MARKED IN WHITE.
4. WATER SERVICES ARE TO BE BROUGHT TO PROPERTY LINE, TERMINATED WITH A CURB STOP AND PROPERLY MARKED WITH A 50 X 100mm STAKE EXTENDING FROM THE INVERT OF SERVICE TO GROUND LEVEL. WATER SERVICES TO BE MARKED BLUE.
5. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
6. REFER TO TSD-301 FOR VERTICAL LOCATION OF PRIVATE DRAIN CONNECTIONS AT PROPERTY LINES.
7. REFER TO TSD-302 FOR TYPICAL STORMWATER PRIVATE DRAIN CLEAN-OUT DETAIL.
8. REFER TO OXFORD COUNTY D-1860-1-2018 TYPICAL SANITARY PRIVATE DRAIN CLEAN-OUT DETAIL.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

STANDARD TOWNHOUSE SERVICE LOCATIONS 32m LOT

APPROVED

MANAGER OF ENGINEERING DATE

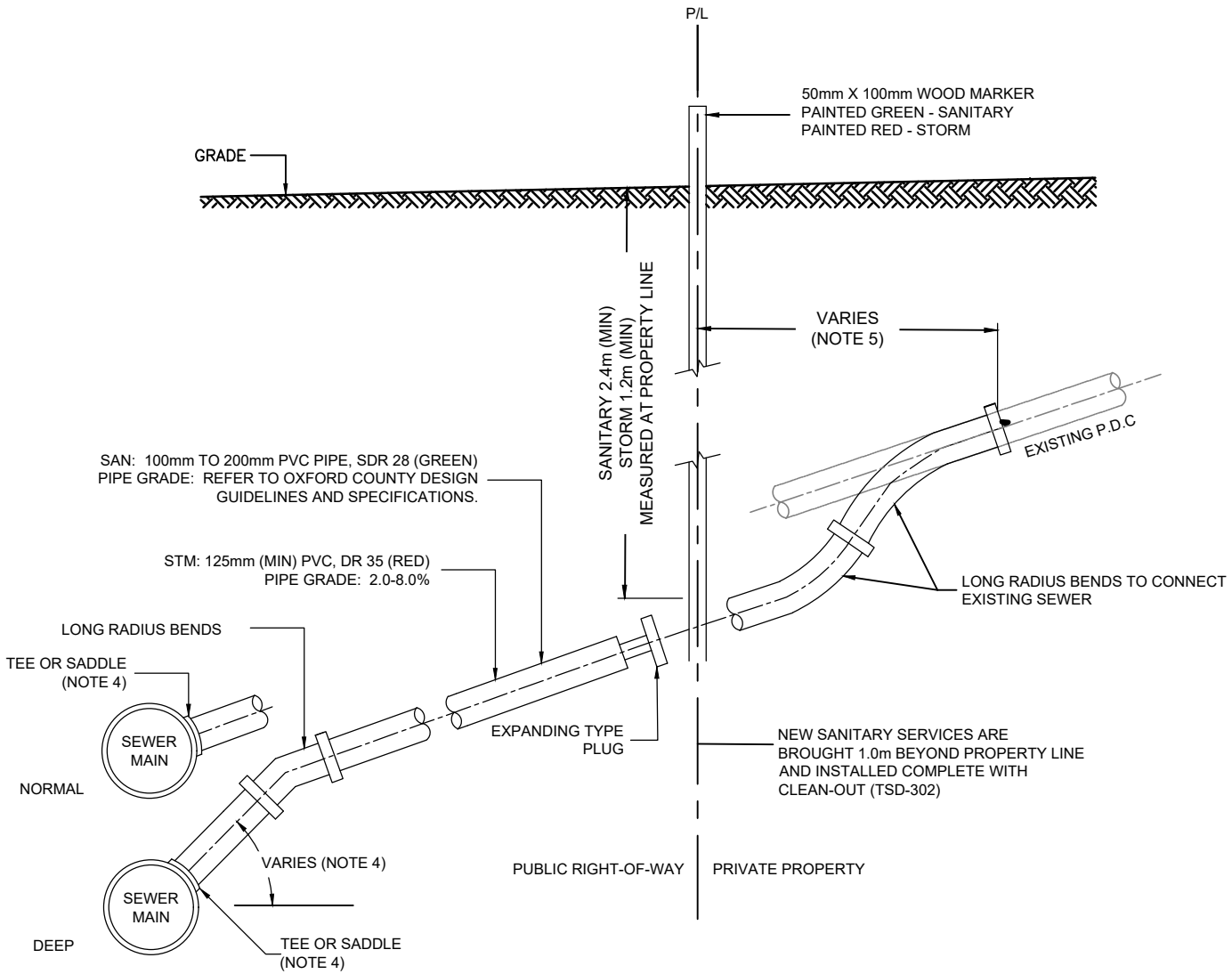
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-304



NOTES:

1. FOR SANITARY SERVICE SPECIFICATIONS, REFER TO OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.
2. FOR STORMWATER SERVICE SPECIFICATIONS REFER TO TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
3. PDCs TO BE PLACED AT DEPTHS AND LOCATIONS SHOWN UNLESS OTHERWISE DIRECTED BY THE TOWN ENGINEER.
4. A TYPICAL 'NORMAL' FLAT TEE IS PREFERRED. FOR DEEP STORM SEWERS (GREATER THAN 3.5m), A 45° INCLINED TEE MAY BE USED WITH THE APPROVAL OF THE TOWN ENGINEER. FOR DEEP CONNECTIONS TO SANITARY SEWERS GREATER THAN 3.5m IN DEPTH, REFER TO OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.
5. PDCs SHALL BE LAID AT DESIGN GRADE TO THE PROPERTY LINE. CONNECTIONS TO EXISTING SEWERS MAY BE MADE BEYOND THIS POINT WITH APPROVED WATERTIGHT FITTINGS USING LONG RADIUS BENDS, CUT AS REQUIRED TO SUIT SITE CONDITIONS. CEMENT MORTAR JOINTS WILL NOT BE ACCEPTED.
6. PDC GRADES MUST BE SELECTED TO AVOID CONFLICTS WITH OTHER EXISTING/PROPOSED INFRASTRUCTURE AND MAINTAIN APPLICABLE SEPARATION REQUIREMENTS.
7. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.

Tillsonburg
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STANDARD DETAIL

PRIVATE DRAIN CONNECTIONS

APPROVED

MANAGER OF ENGINEERING DATE

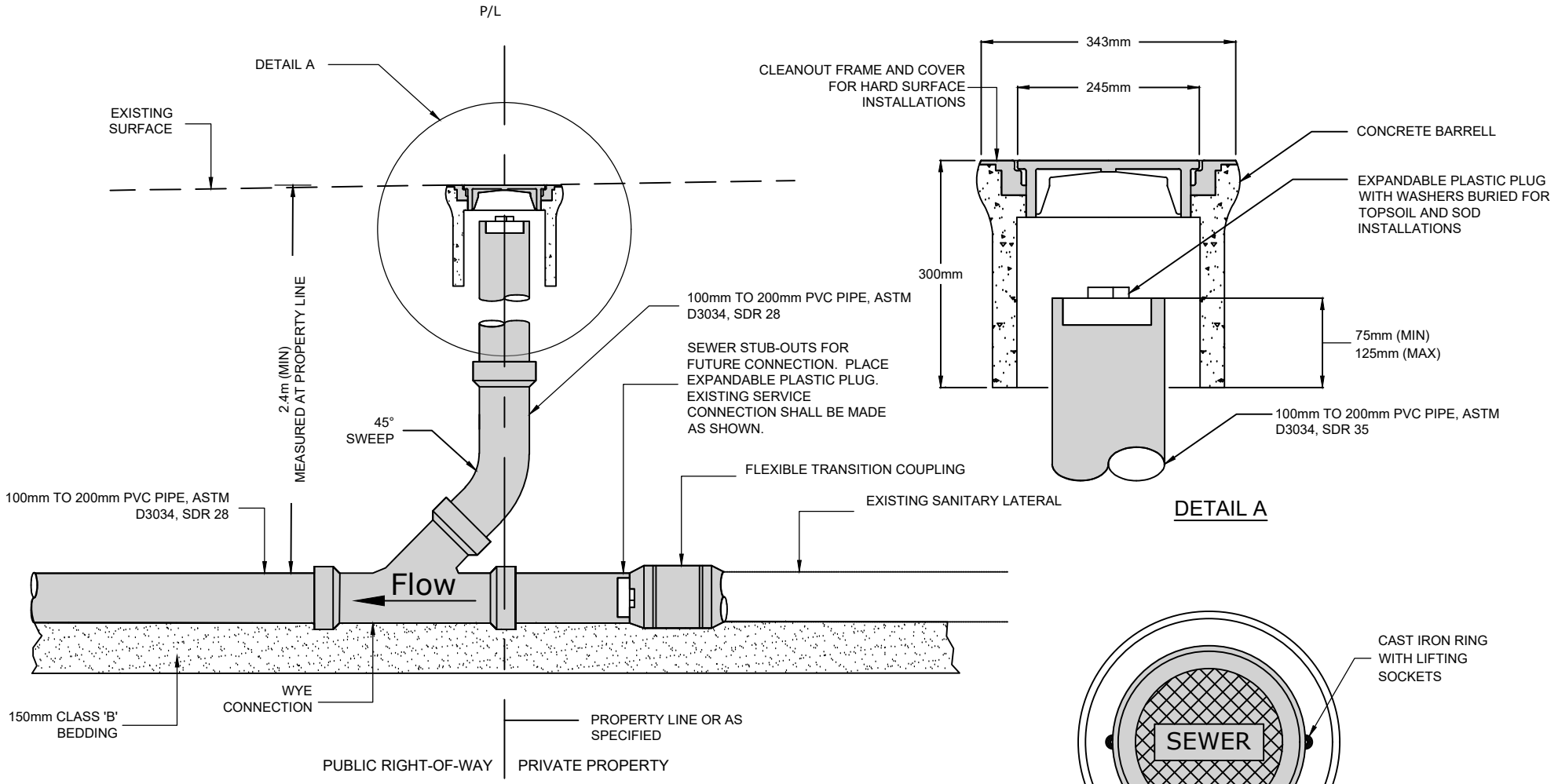
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

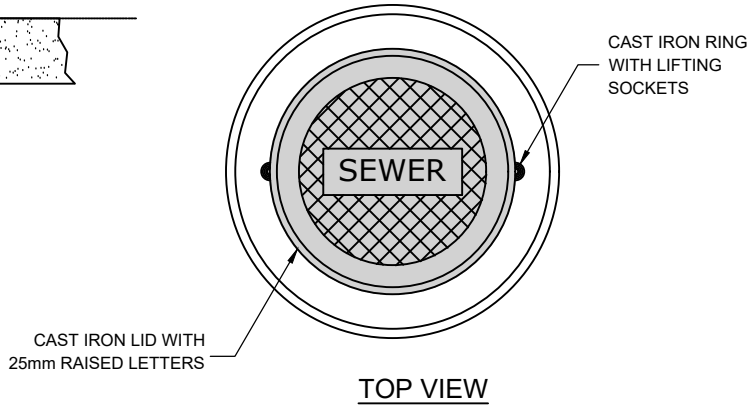
SCALE: N.T.S.

TSD-310



PROFILE VIEW

DETAIL A



TOP VIEW

NOTES:

1. FOR SANITARY SERVICE SPECIFICATIONS, REFER TO OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.

Tillsonburg
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STANDARD DETAIL

TYPICAL SANITARY CLEANOUT

APPROVED

MANAGER OF ENGINEERING DATE

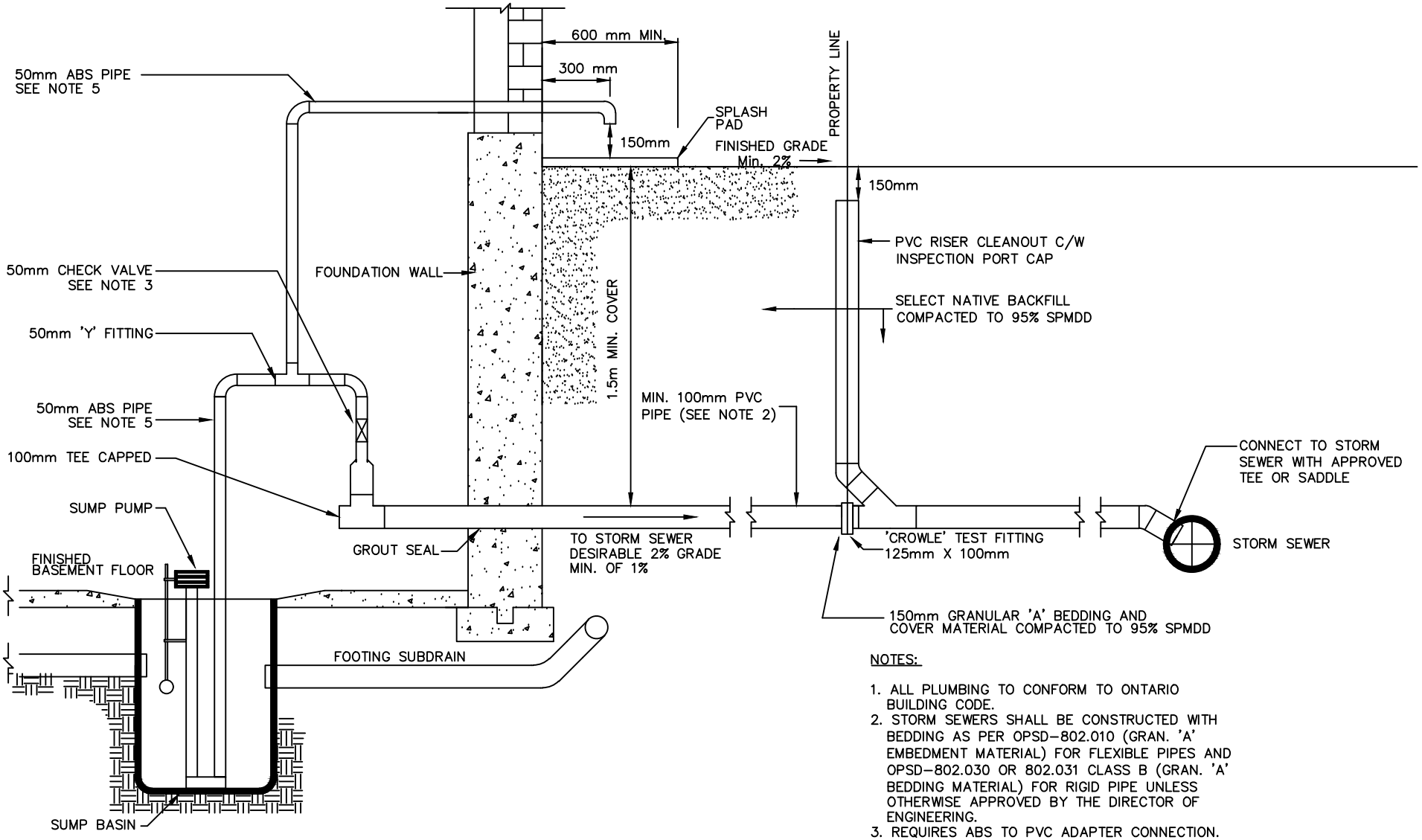
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-311



NOTES:

1. ALL PLUMBING TO CONFORM TO ONTARIO BUILDING CODE.
2. STORM SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD-802.010 (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD-802.030 OR 802.031 CLASS B (GRAN. 'A' BEDDING MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING.
3. REQUIRES ABS TO PVC ADAPTER CONNECTION.
4. POLYVINYL CHLORIDE SEWER PIPE (PVC) STORM PIPE B182.1 B181.2, B182.4
5. ACRYLONITRILE-BUTADIENE-STYRENE (ABS) PIPE B181.1

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STANDARD DETAIL

FOUNDATION DRAIN OUTLET SUMP PUMP TO STORM SEWER

APPROVED

MANAGER OF ENGINEERING DATE

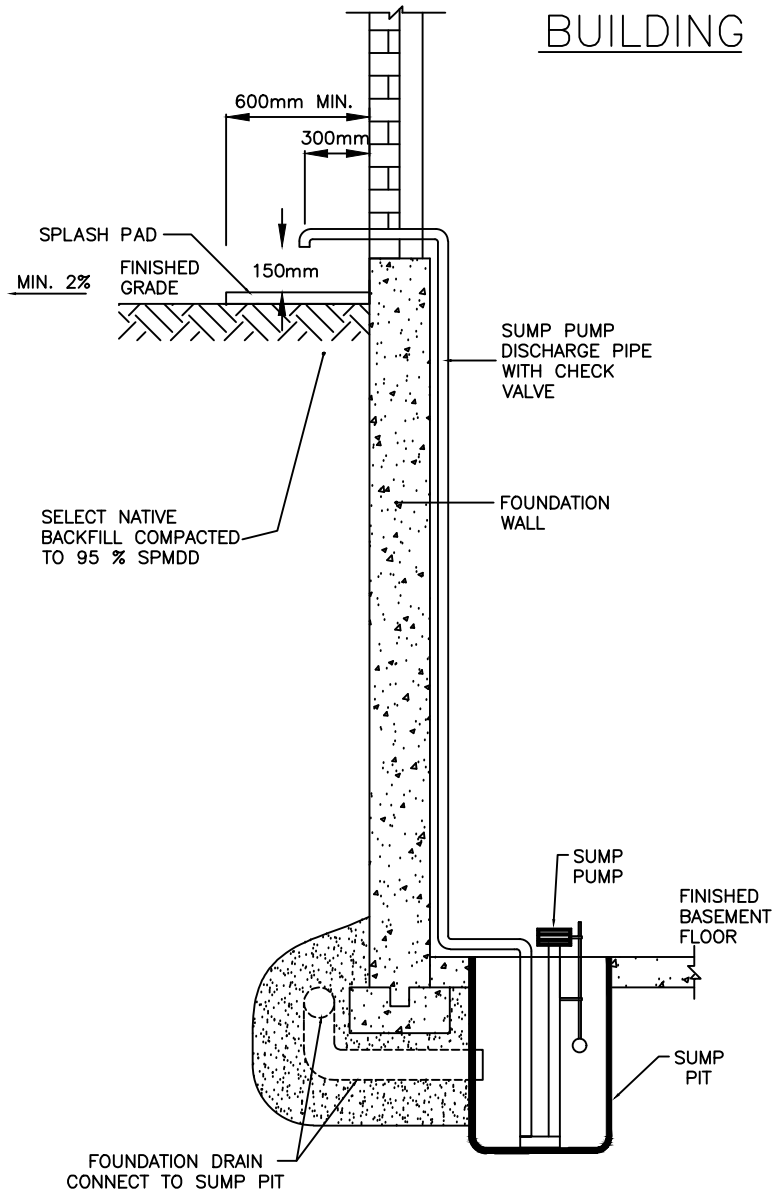
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-312



NOTES:

1. ALL PLUMBING TO CONFORM TO ONTARIO BUILDING CODE.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

FOUNDATION DRAIN OUTLET SUMP PUMP TO SURFACE

APPROVED

MANAGER OF ENGINEERING DATE

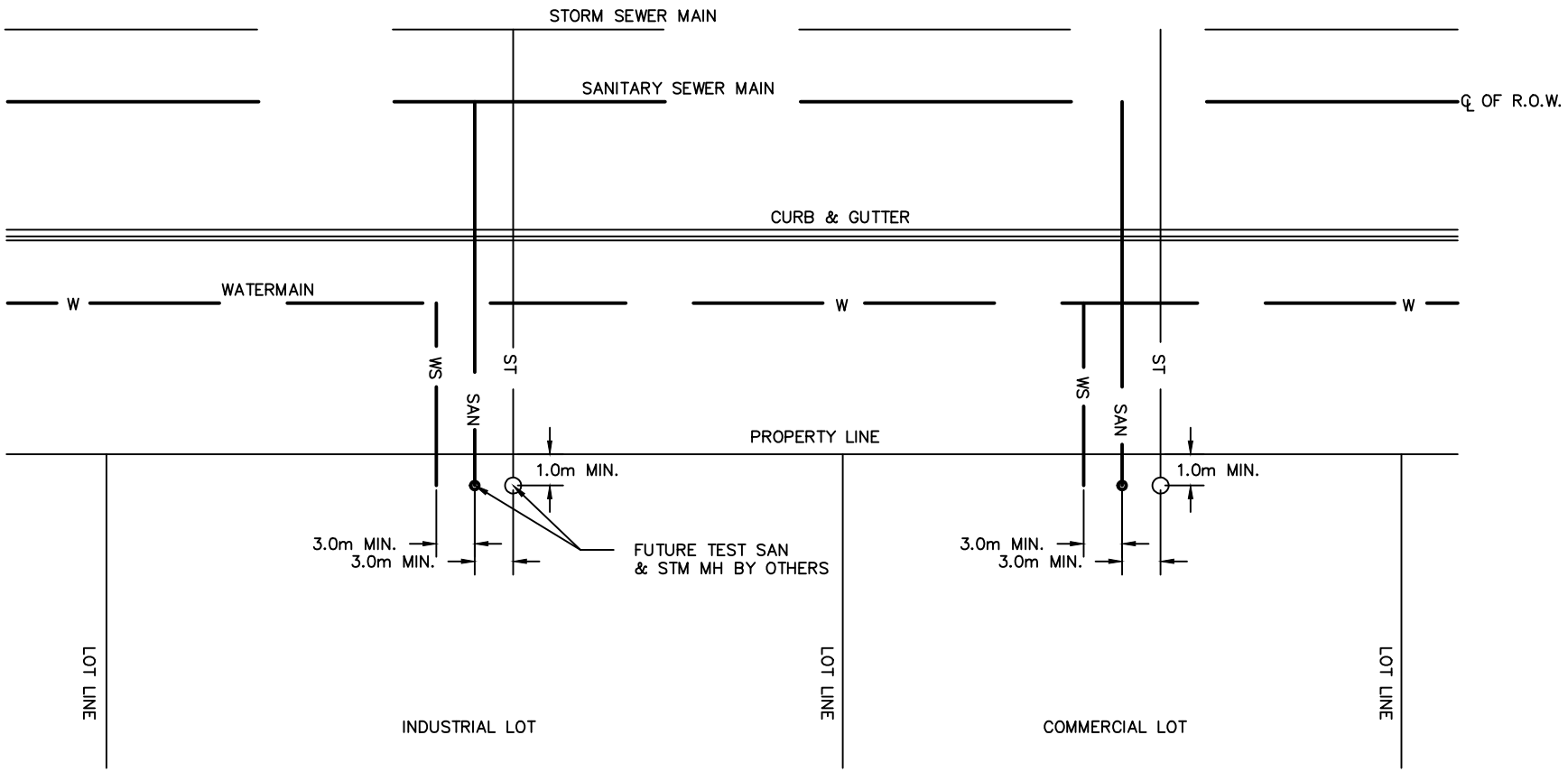
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-313



NOTES:

1. ALL SERVICES TO BE BROUGHT 1.0m MIN. PAST PROPERTY LINE AND PROPERLY MARKED WITH A 50x100mm STAKE EXTENDING FROM THE INVERT OF THE LATERAL TO GROUND LEVEL.
   MARKINGS AS FOLLOWS :
   SANITARY LATERAL – GREEN
   STORM LATERAL – RED
   WATER LATERAL – BLUE
2. SANITARY LATERAL TO BE LOCATED AT THE CENTRE LINE OF EACH UNIT.
3. WATER LATERAL TO BE LOCATED 2.5m OFFSET NORTH OR WEST OF THE SANITARY LATERAL.
4. STORM LATERAL , IF PROVIDED , TO BE LOCATED 3.0m OFFSET SOUTH OR EAST OF SANITARY LATERAL.
5. ALL STORM & SANITARY MAINTENANCE HOLES TO BE OPSD 701.01 – 1200mm DIA.
6. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

STANDARD INDUSTRIAL/COMMERCIAL SERVICE LOCATIONS

APPROVED

MANAGER OF ENGINEERING DATE

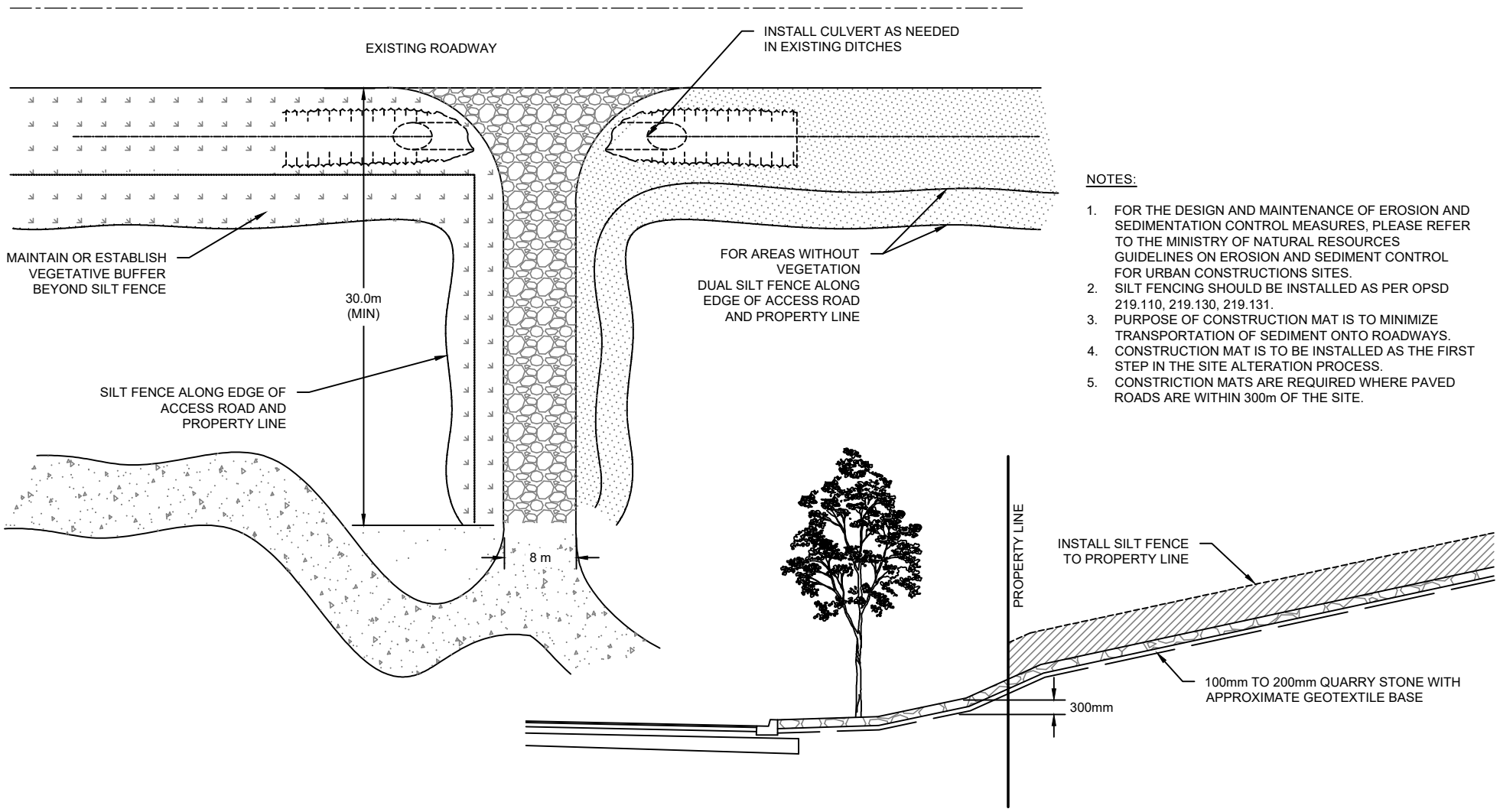
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-400



NOTES:

1. FOR THE DESIGN AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES, PLEASE REFER TO THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTIONS SITES.
2. SILT FENCING SHOULD BE INSTALLED AS PER OPSD 219.110, 219.130, 219.131.
3. PURPOSE OF CONSTRUCTION MAT IS TO MINIMIZE TRANSPORTATION OF SEDIMENT ONTO ROADWAYS.
4. CONSTRUCTION MAT IS TO BE INSTALLED AS THE FIRST STEP IN THE SITE ALTERATION PROCESS.
5. CONSTRICTION MATS ARE REQUIRED WHERE PAVED ROADS ARE WITHIN 300m OF THE SITE.

Tillsonburg
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STANDARD DETAIL

CONSTRUCTION ENTRANCE MAT

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

REVISION No.

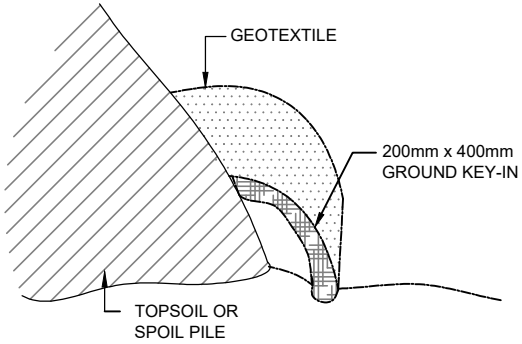
DATE: MARCH 2020

SCALE: N.T.S.

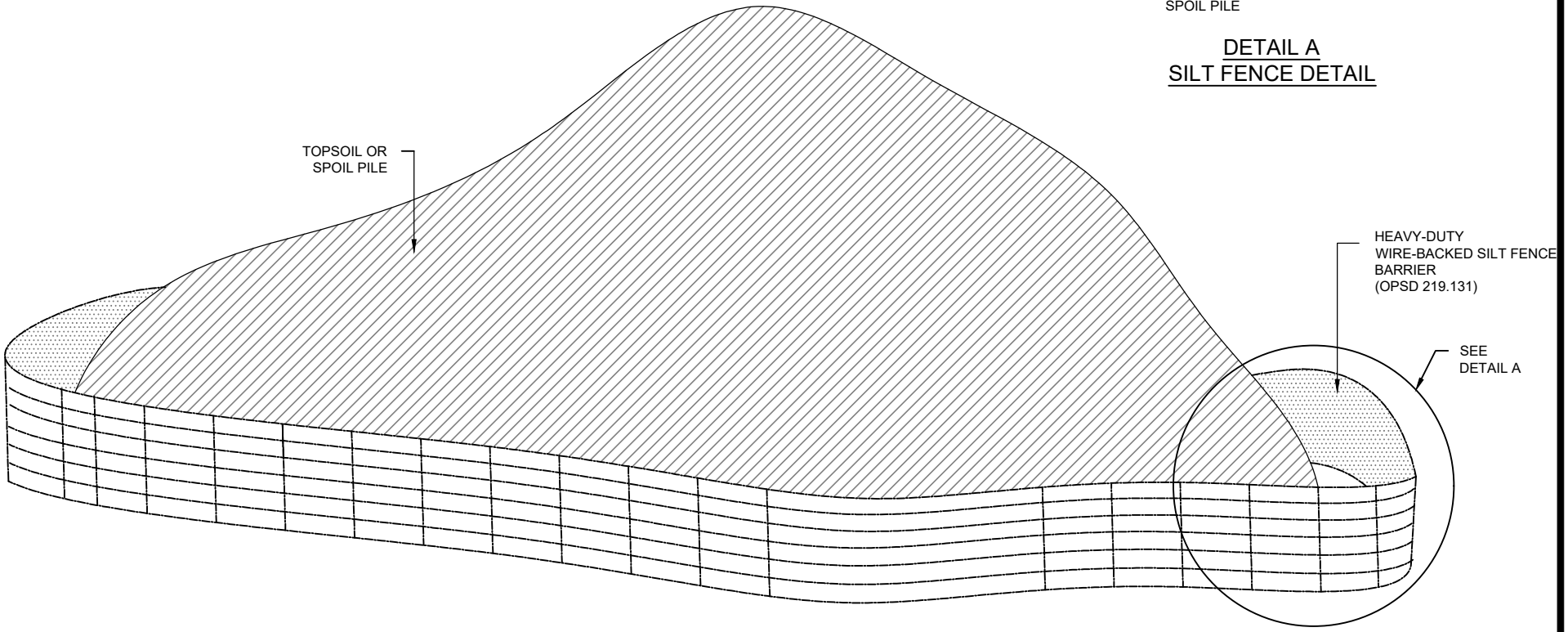
TSD-600

NOTES:

1. FOR THE DESIGN AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES, PLEASE REFER TO THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTIONS SITES.
2. PILES CONTAINING MORE THAN 100 CUBIC METRES OF TOPSOIL OR SPOIL SHALL BE LOCATED AT A MINIMUM OF 15 METRES FROM A ROADWAY AND 30 METRES FROM A WATER COURSE.
3. PILES LEFT IN PLACE FOR MORE THAN 60 DAYS SHALL BE STABILIZED WITH A TARP, MULCH, VEGETATIVE COVER OR OTHER ACCEPTABLE MEANS.



DETAIL A
SILT FENCE DETAIL



Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TOPSOIL OR SOIL PILE SILTATION CONTROL

APPROVED

MANAGER OF ENGINEERING DATE

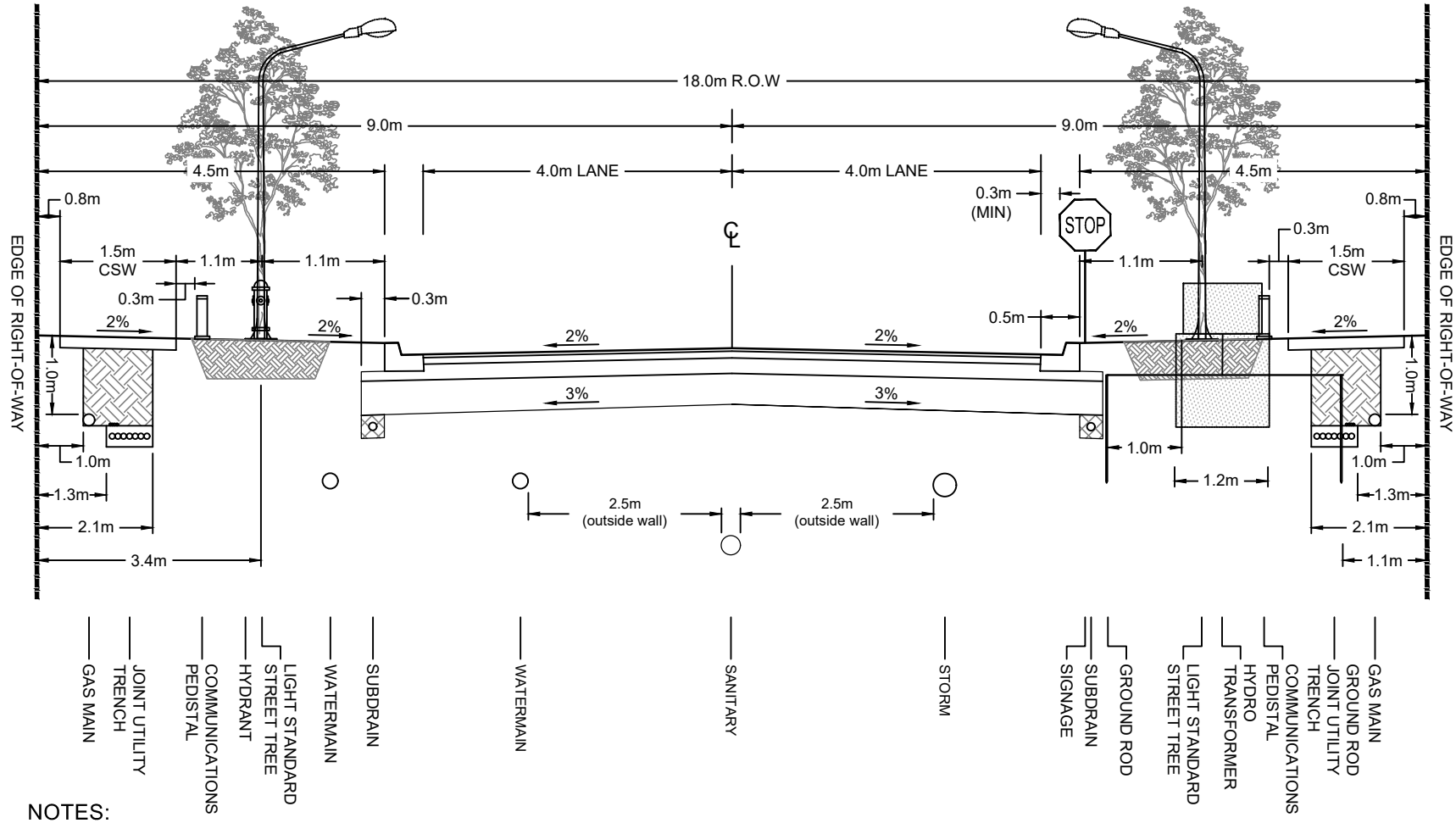
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-601



NOTES:

1. WATER DISTRIBUTION, WASTEWATER AND STORMWATER SYSTEMS TO BE DESIGNED IN ACCORDANCE WITH APPLICABLE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA, OXFORD COUNTY DESIGN GUIDELINES & SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARDS (OPSS/OPSD).
2. REFER TO SECTION 08 - STREET LIGHTING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA AND ASSOCIATED TSD'S FOR LIGHT STANDARD AND POLE BASE LOCATION AND DEPTH.
3. REFER TO SECTION 07 - ROADS, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR PAVEMENT DESIGN SPECIFICATIONS.
4. REFER TO SECTION 14 - PARKS AND STREETSCAPING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR STREET TREE SPECIFICATIONS. LOCATIONS WILL REQUIRE APPROVAL BY THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

18.0m LOCAL ROAD ALLOWANCE 8.0m ASPHALT

APPROVED

MANAGER OF ENGINEERING DATE

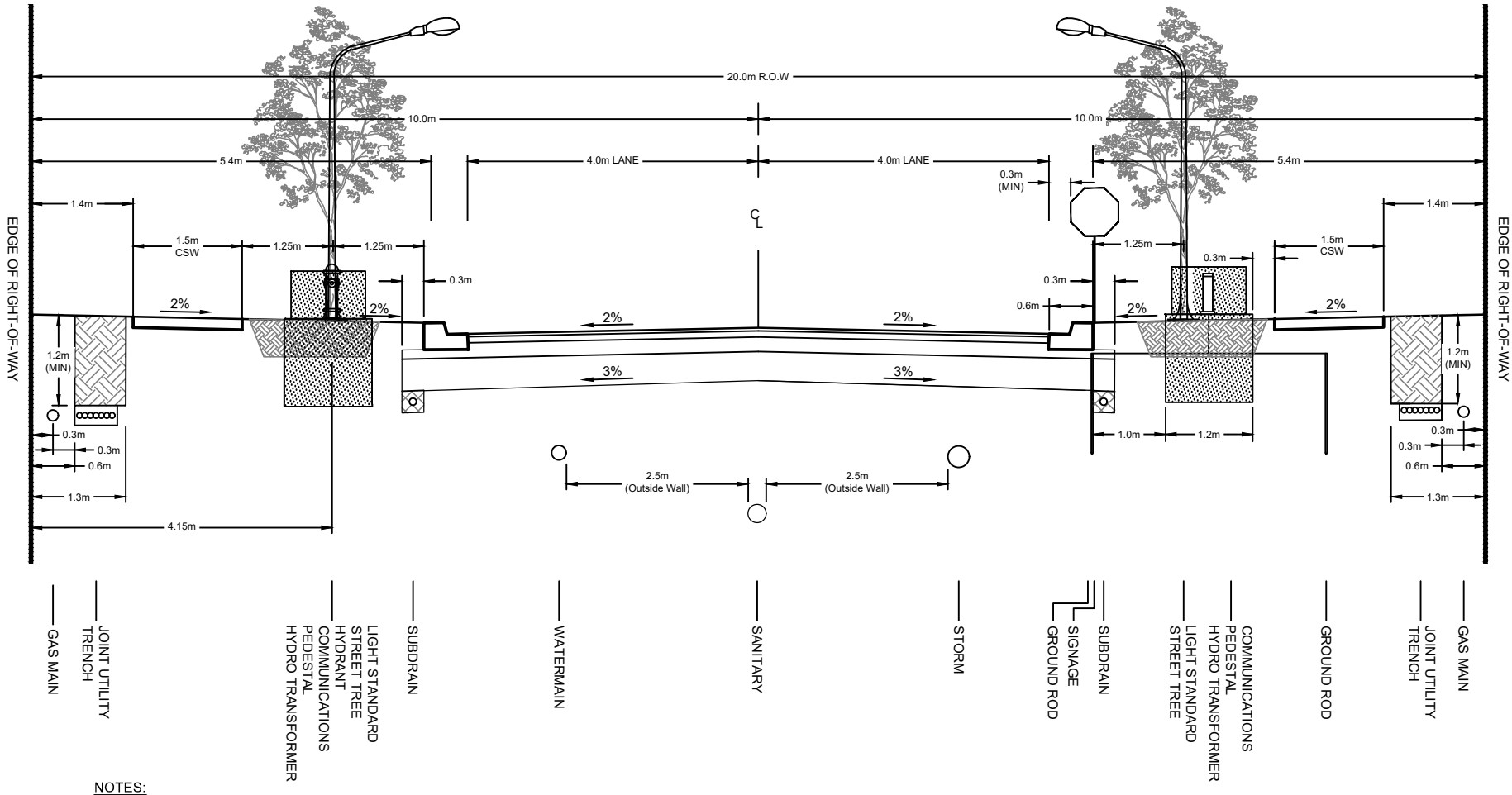
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-700



NOTES:

1. WATER DISTRIBUTION, WASTEWATER AND STORMWATER SYSTEMS TO BE DESIGNED IN ACCORDANCE WITH APPLICABLE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA, OXFORD COUNTY DESIGN GUIDELINES & SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARDS (OPSS/OPSD).
2. REFER TO SECTION 08 - STREET LIGHTING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA AND ASSOCIATED TSD'S FOR LIGHT STANDARD AND POLE BASE LOCATION AND DEPTH.
3. REFER TO SECTION 07 - ROADS, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR PAVEMENT DESIGN SPECIFICATIONS.
4. REFER TO SECTION 14 - PARKS AND STREETSCAPING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR STREET TREE SPECIFICATIONS. LOCATIONS WILL REQUIRE APPROVAL BY THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

20.0m LOCAL ROAD ALLOWANCE 8.0m ASPHALT

APPROVED

MANAGER OF ENGINEERING ..... DATE

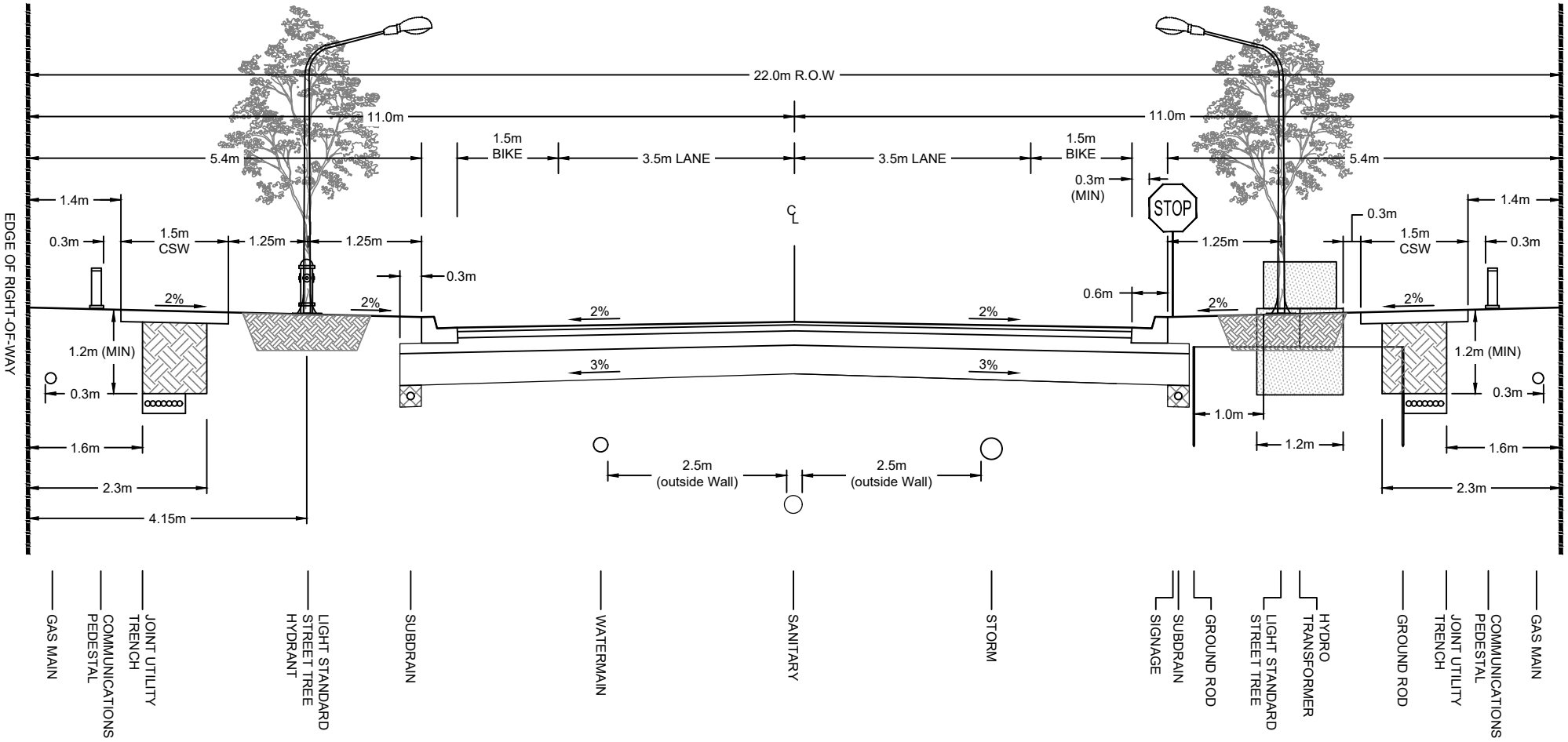
DIRECTOR OF OPERATIONS ..... DATE

REVISION No.

DATE: AUGUST 2022

SCALE: 1:30

TSD-701



NOTES:

1. WATER DISTRIBUTION, WASTEWATER AND STORMWATER SYSTEMS TO BE DESIGNED IN ACCORDANCE WITH APPLICABLE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA, OXFORD COUNTY DESIGN GUIDELINES & SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARDS (OPSS/OPSD).
2. REFER TO SECTION 08 - STREET LIGHTING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA AND ASSOCIATED TSD'S FOR LIGHT STANDARD AND POLE BASE LOCATION AND DEPTH.
3. REFER TO SECTION 07 - ROADS, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR PAVEMENT DESIGN SPECIFICATIONS.
4. REFER TO SECTION 14 - PARKS AND STREETSCAPING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR STREET TREE SPECIFICATIONS. LOCATIONS WILL REQUIRE APPROVAL BY THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

22.0m COLLECTOR ROAD ALLOWANCE (BIKE LANES) 10.0m ASPHALT

APPROVED

MANAGER OF ENGINEERING DATE

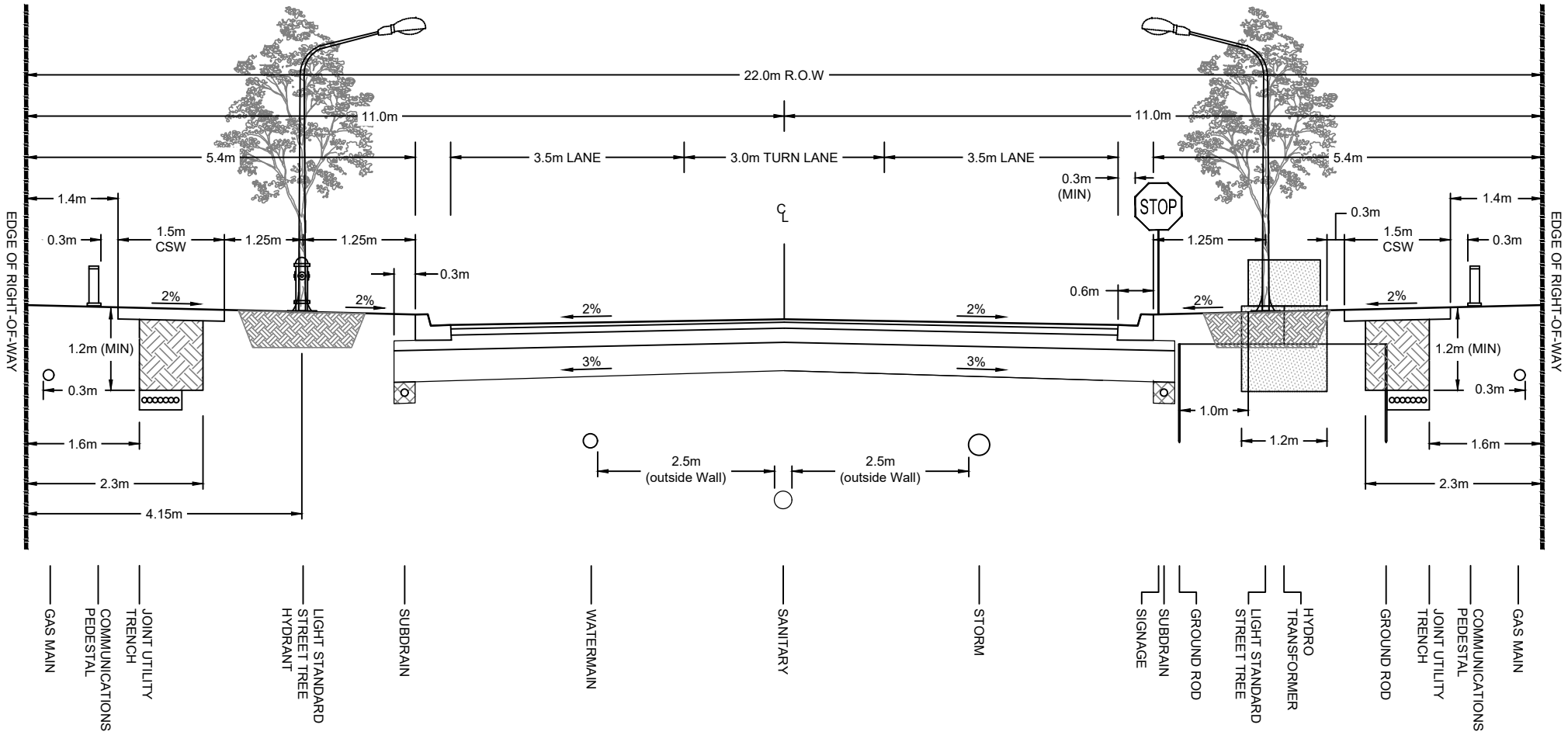
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-702



NOTES:

1. WATER DISTRIBUTION, WASTEWATER AND STORMWATER SYSTEMS TO BE DESIGNED IN ACCORDANCE WITH APPLICABLE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA, OXFORD COUNTY DESIGN GUIDELINES & SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARDS (OPSS/OPSD).
2. REFER TO SECTION 08 - STREET LIGHTING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA AND ASSOCIATED TSD'S FOR LIGHT STANDARD AND POLE BASE LOCATION AND DEPTH.
3. REFER TO SECTION 07 - ROADS, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR PAVEMENT DESIGN SPECIFICATIONS.
4. REFER TO SECTION 14 - PARKS AND STREETSCAPING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR STREET TREE SPECIFICATIONS. LOCATIONS WILL REQUIRE APPROVAL BY THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.
5. WIDENING MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE REQUIRED TURN-LANES.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

22.0m COLLECTOR ROAD ALLOWANCE (TURN LANE) 10.0m ASPHALT

APPROVED

MANAGER OF ENGINEERING DATE

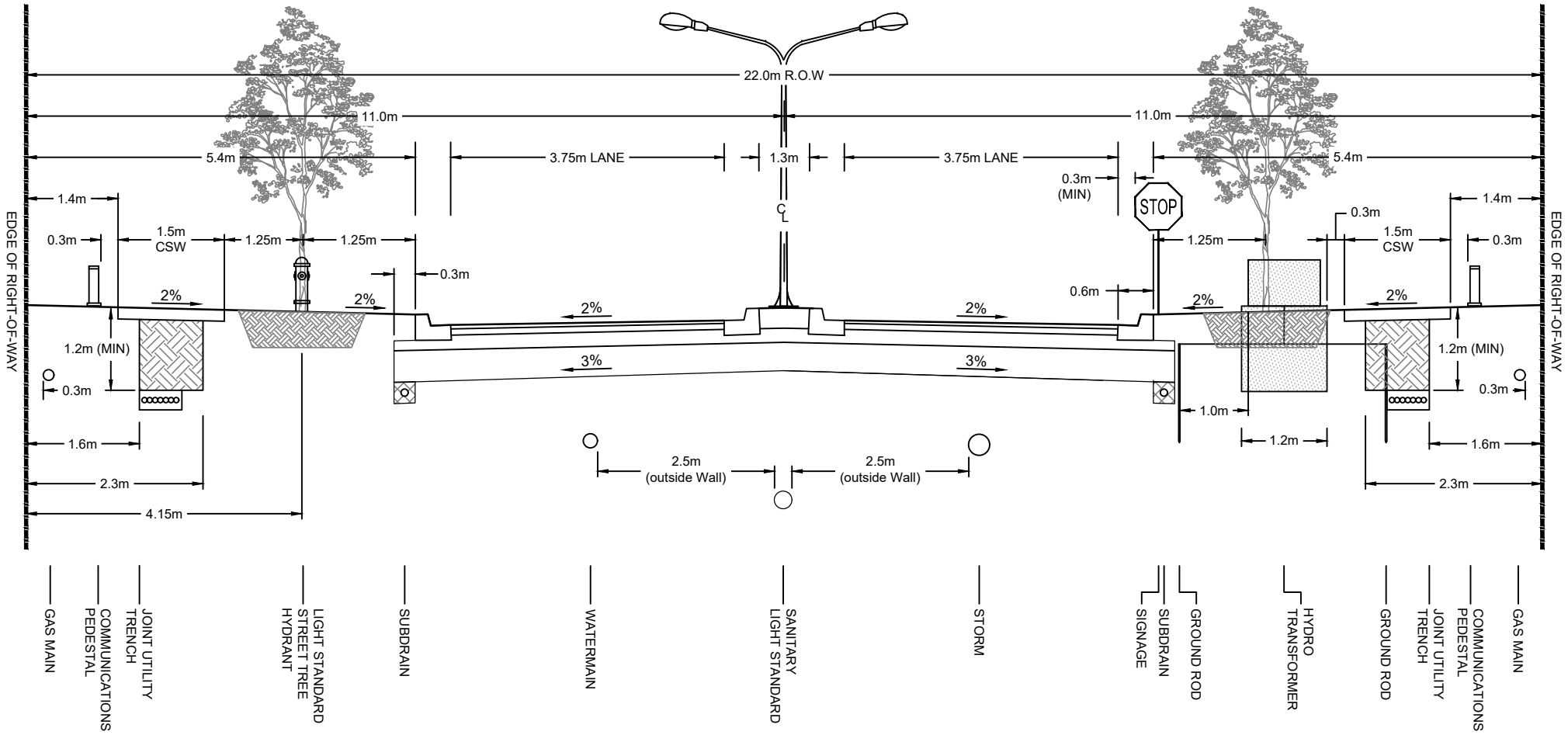
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-703



NOTES:

1. WATER DISTRIBUTION, WASTEWATER AND STORMWATER SYSTEMS TO BE DESIGNED IN ACCORDANCE WITH APPLICABLE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA, OXFORD COUNTY DESIGN GUIDELINES & SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARDS (OPSS/OPSD).
2. REFER TO SECTION 08 - STREET LIGHTING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA AND ASSOCIATED TSD'S FOR LIGHT STANDARD AND POLE BASE LOCATION AND DEPTH.
3. REFER TO SECTION 07 - ROADS, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR PAVEMENT DESIGN SPECIFICATIONS.
4. REFER TO SECTION 14 - PARKS AND STREETSCAPING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR STREET TREE SPECIFICATIONS. LOCATIONS WILL REQUIRE APPROVAL BY THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

22.0m COLLECTOR ROAD ALLOWANCE (MEDIAN) 10.0m ASPHALT

APPROVED

MANAGER OF ENGINEERING DATE

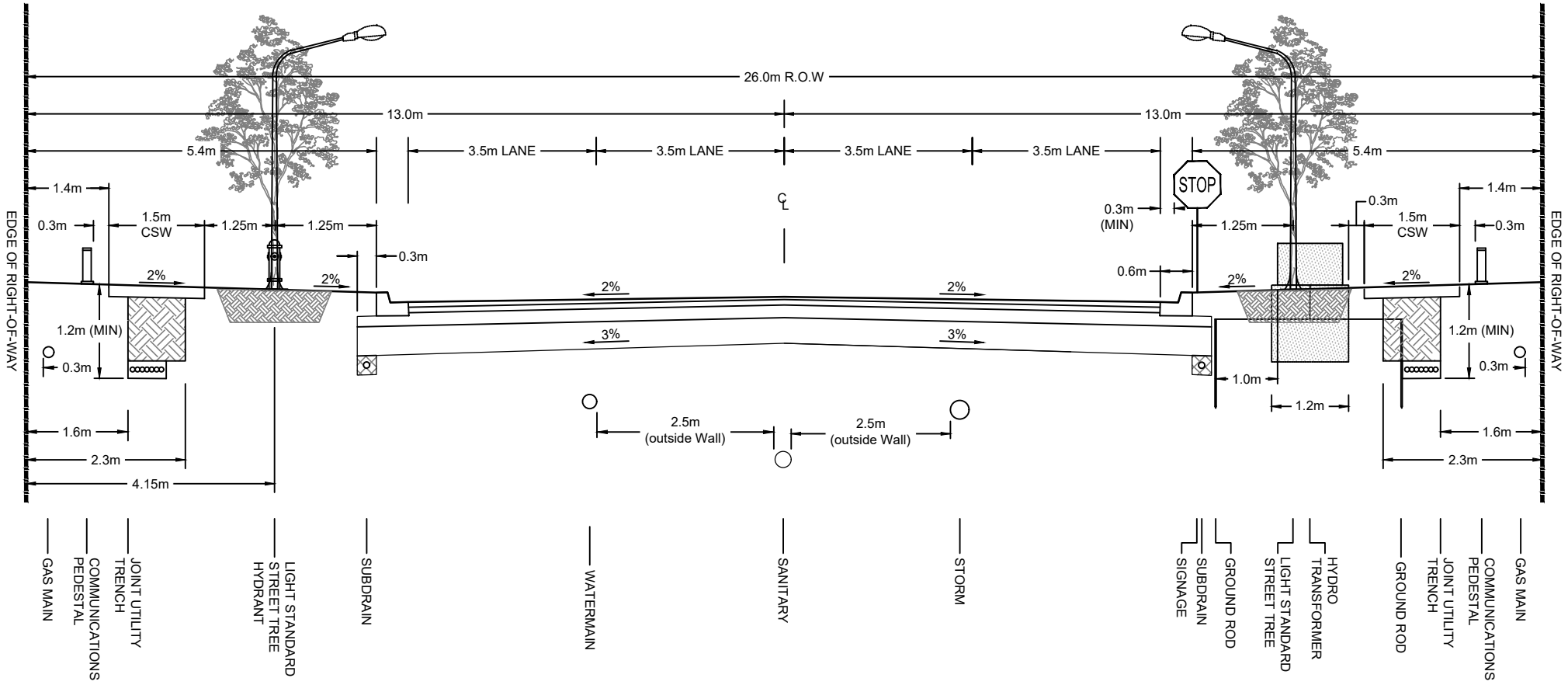
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-704



NOTES:

1. WATER DISTRIBUTION, WASTEWATER AND STORMWATER SYSTEMS TO BE DESIGNED IN ACCORDANCE WITH APPLICABLE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA, OXFORD COUNTY DESIGN GUIDELINES & SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARDS (OPSS/OPSD).
2. REFER TO SECTION 08 - STREET LIGHTING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA AND ASSOCIATED TSD'S FOR LIGHT STANDARD AND POLE BASE LOCATION AND DEPTH.
3. REFER TO SECTION 07 - ROADS, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR PAVEMENT DESIGN SPECIFICATIONS.
4. REFER TO SECTION 14 - PARKS AND STREETSCAPING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR STREET TREE SPECIFICATIONS. LOCATIONS WILL REQUIRE APPROVAL BY THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

26.0m ARTERIAL ROAD ALLOWANCE 14.0m ASPHALT

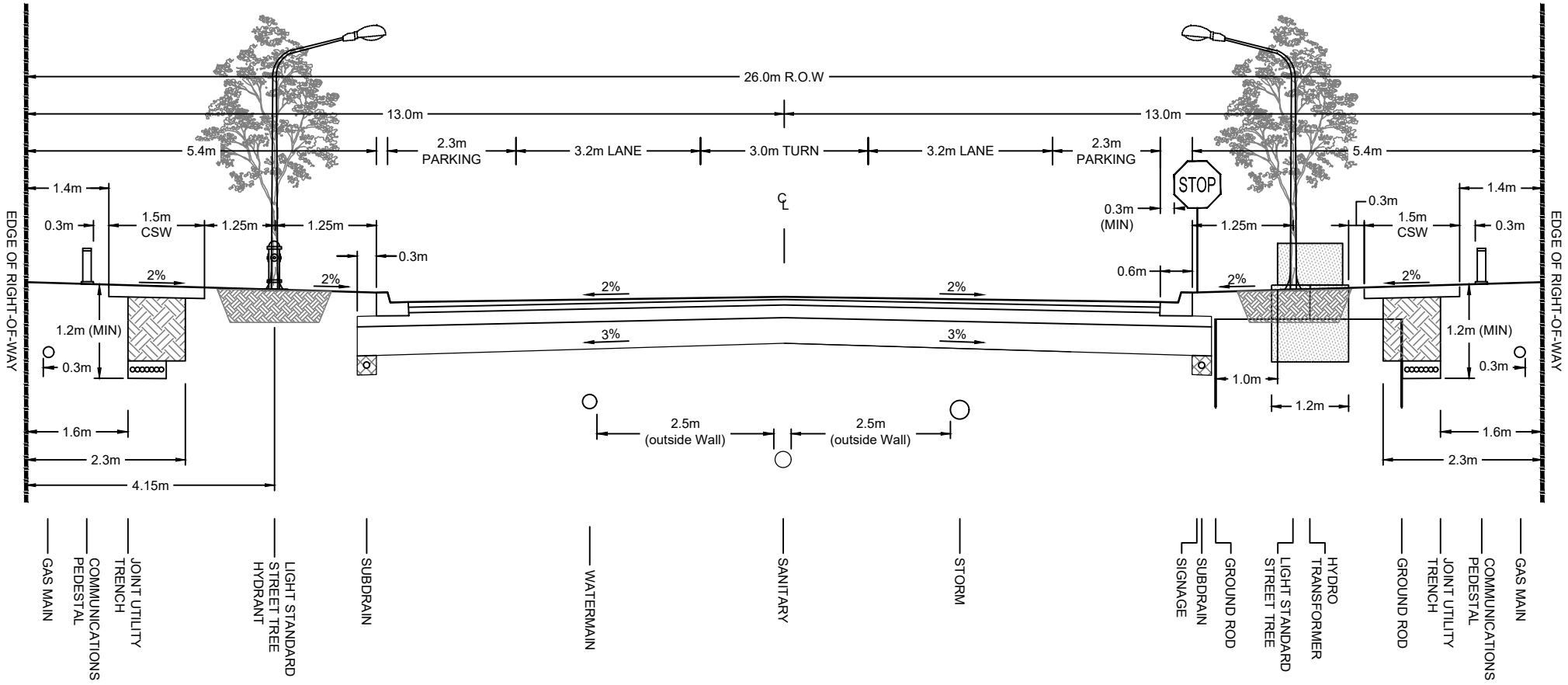
APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

REVISION No.	DATE: FEB 2022
	SCALE: N.T.S.

TSD-705



NOTES:

1. WATER DISTRIBUTION, WASTEWATER AND STORMWATER SYSTEMS TO BE DESIGNED IN ACCORDANCE WITH APPLICABLE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA, OXFORD COUNTY DESIGN GUIDELINES & SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARDS (OPSS/OPSD).
2. REFER TO SECTION 08 - STREET LIGHTING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA AND ASSOCIATED TSD'S FOR LIGHT STANDARD AND POLE BASE LOCATION AND DEPTH.
3. REFER TO SECTION 07 - ROADS, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR PAVEMENT DESIGN SPECIFICATIONS.
4. REFER TO SECTION 14 - PARKS AND STREETSCAPING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR STREET TREE SPECIFICATIONS. LOCATIONS WILL REQUIRE APPROVAL BY THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.
5. WIDENING MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE REQUIRED TURN-LANES.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

26.0m ARTERIAL ROAD ALLOWANCE (PARKING) 14.0m ASPHALT

APPROVED

MANAGER OF ENGINEERING DATE

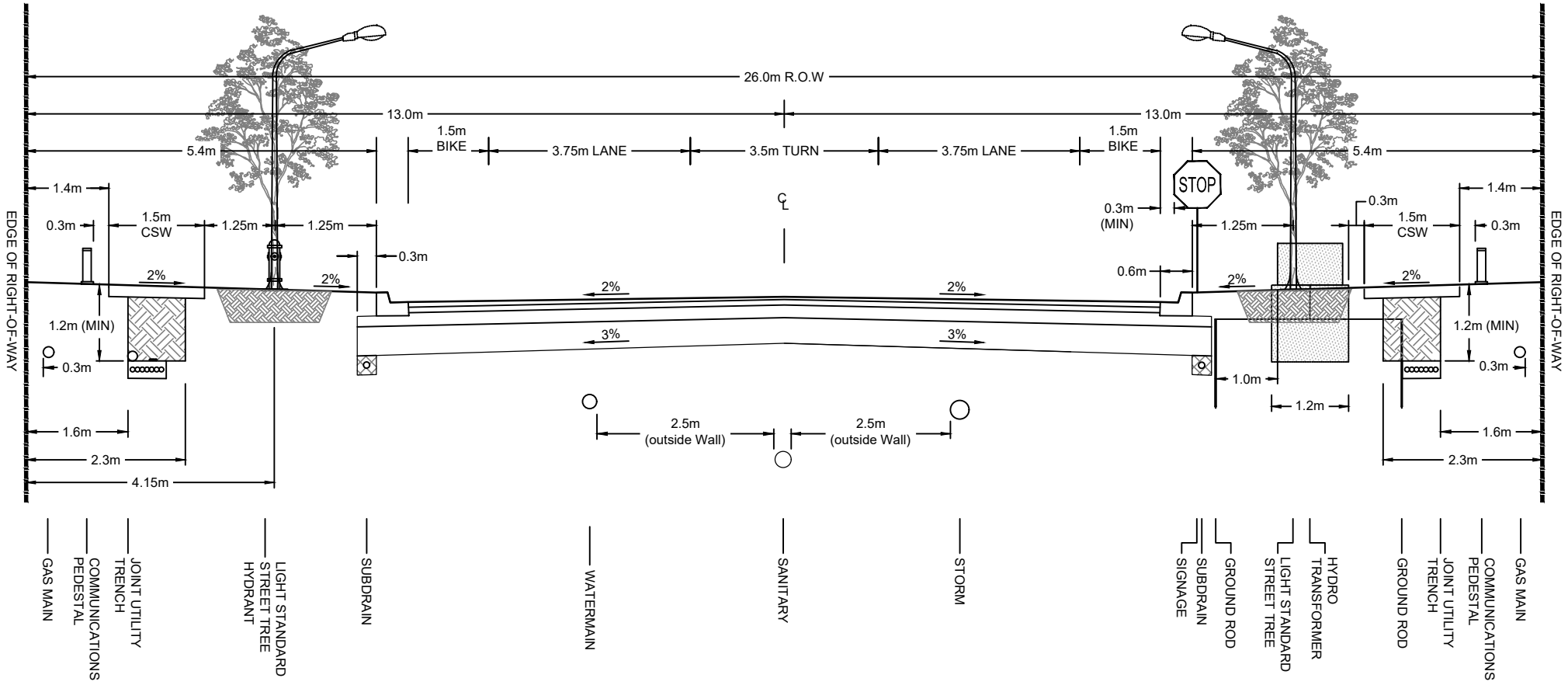
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-706



NOTES:

1. WATER DISTRIBUTION, WASTEWATER AND STORMWATER SYSTEMS TO BE DESIGNED IN ACCORDANCE WITH APPLICABLE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA, OXFORD COUNTY DESIGN GUIDELINES & SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARDS (OPSS/OPSD).
2. REFER TO SECTION 08 - STREET LIGHTING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA AND ASSOCIATED TSD'S FOR LIGHT STANDARD AND POLE BASE LOCATION AND DEPTH.
3. REFER TO SECTION 07 - ROADS, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR PAVEMENT DESIGN SPECIFICATIONS.
4. REFER TO SECTION 14 - PARKS AND STREETSCAPING, TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA FOR STREET TREE SPECIFICATIONS. LOCATIONS WILL REQUIRE APPROVAL BY THE TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.
5. WIDENING MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE REQUIRED TURN-LANES.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

26.0m ARTERIAL ROAD ALLOWANCE (BIKE LANES) 14.0m ASPHALT

APPROVED

MANAGER OF ENGINEERING DATE

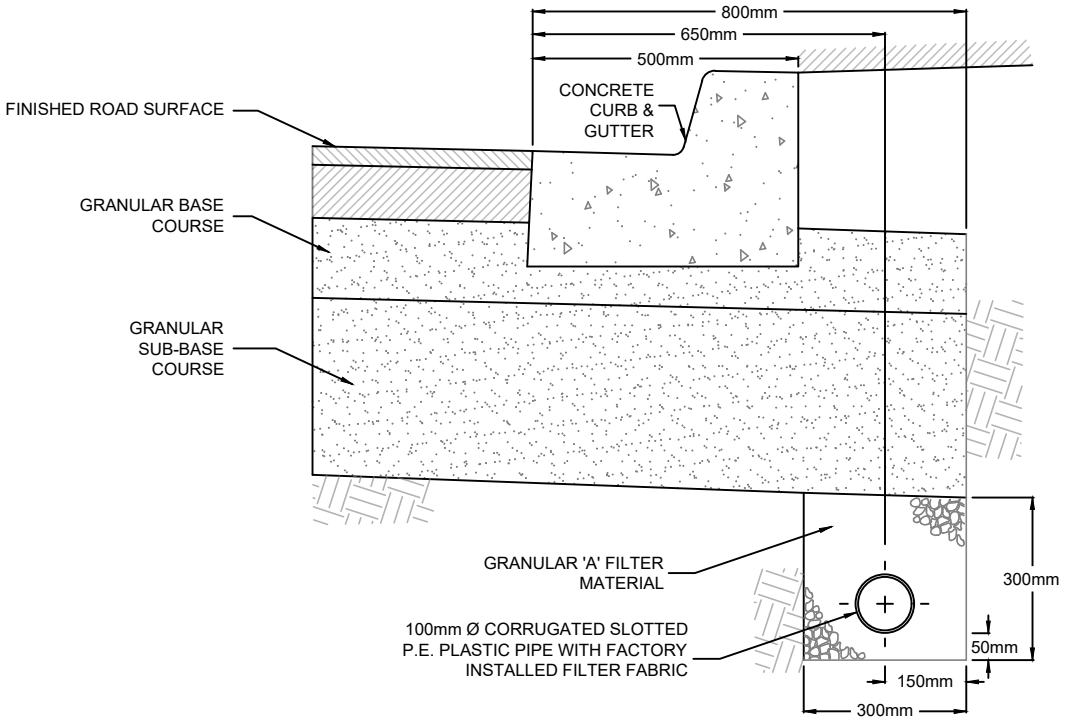
DIRECTOR OF OPERATIONS DATE

REVISION No.

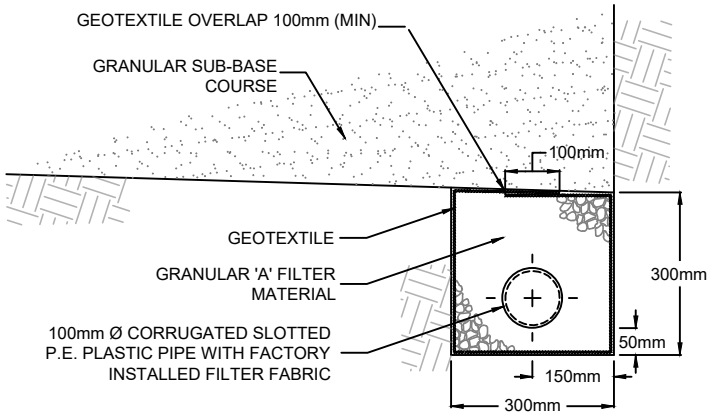
DATE: FEB 2022

SCALE: N.T.S.

TSD-707



TYPE 'A' - TYPICAL



TYPE 'B' - HIGH GROUND WATER

NOTES:

1. ALL CONNECTIONS TO BE MADE ON THE UPSTREAM SIDE OF ALL CATCH BASINS. MORTARED INSIDE AND OUTSIDE.
2. SUBDRAINS TO BE PLUGGED AT THE HIGH END WITH A MANUFACTURED PLUG.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
4. FOR SELECTION OF TYPE 'A' AND TYPE 'B' SUBDRAINS REFER TO TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
5. TYPE 'B' : THE SUBDRAIN TRENCH SHALL BE LINED WITH CLASS II, NON-WOVEN GEOTEXTILE, WITH AN F.D.S. OF 75-150 µm AND A MINIMUM THICKNESS OF 1 mm.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL 100mm SUBDRAIN DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

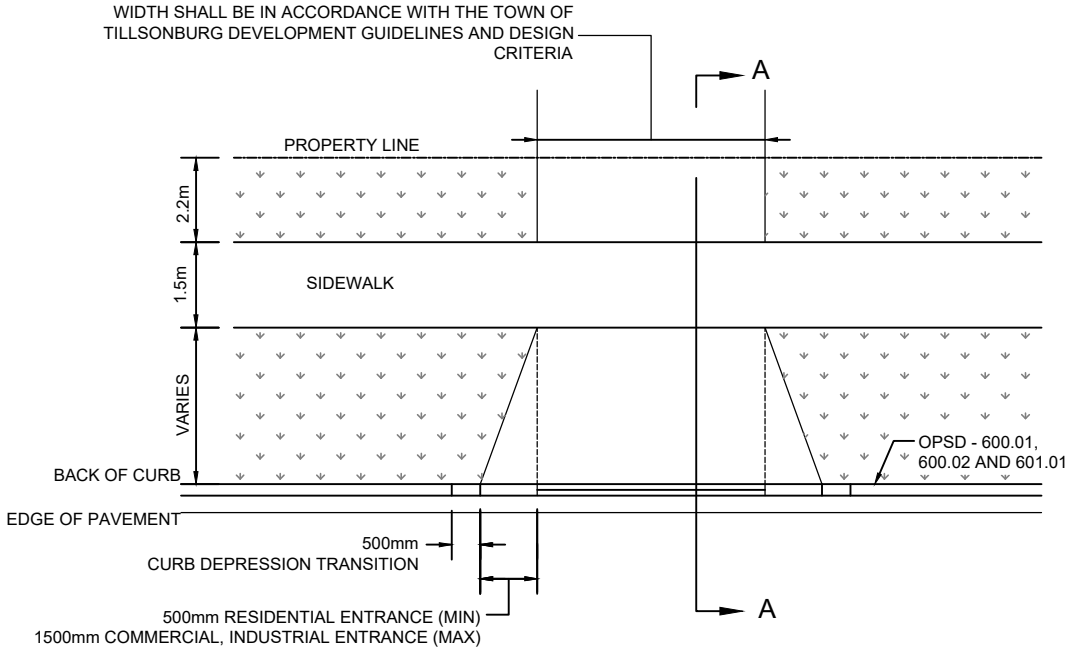
DIRECTOR OF OPERATIONS DATE

REVISION No.

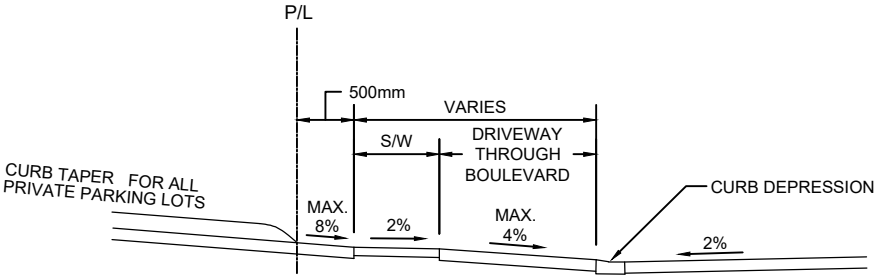
DATE: MARCH 2020

SCALE: N.T.S.

TSD-710



PLAN



SECTION A-A

NOTES:

1. CROSSFALL OF SIDEWALK 2.0% UNLESS OTHERWISE APPROVED BY TOWN OF TILLSONBURG ENGINEERING DEPARTMENT.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
3. REVERSE GRADES WILL NOT BE ACCEPTED.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

DRIVEWAY AND ENTRANCE DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

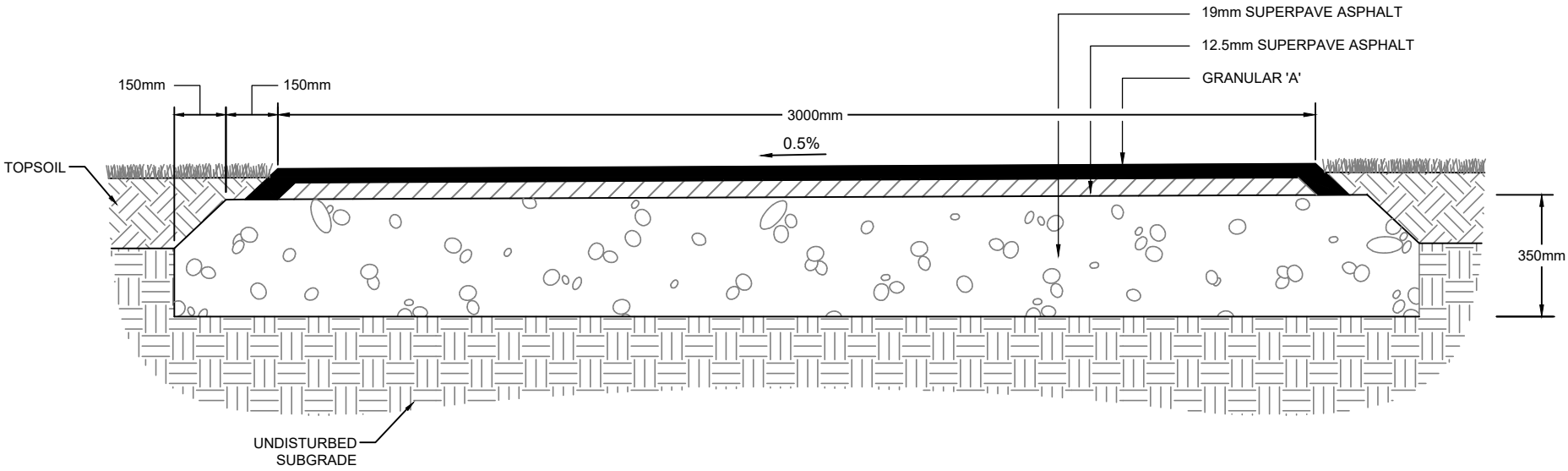
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-711



NOTES:

1. ASPHALT SHALL BE PLACED AND SPREAD USING A MECHANICAL PAVER.
2. ASPHALT LAYERS (AFTER ROLLING) TO BE COMPACTED TO A MINIMUM 97% S.P.M.D.D.
3. IN THE EVENT OF UNSUITABLE SUB-GRADE MATERIAL, BASE IS TO BE OVER-EXCAVATED AND BACKFILLED WITH GRANULAR 'B' COMPACTED TO 98% S.P.M.D.D.
4. ALL BACKFILL TO BE COMPACTED IN LIFTS OF 100mm.
5. ENSURE POSITIVE DRAINAGE.
6. TAMP ALL EDGES TO A FIRM 45 DEGREE BEVEL.
7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

BOULEVARD PATHWAY

APPROVED

MANAGER OF ENGINEERING DATE

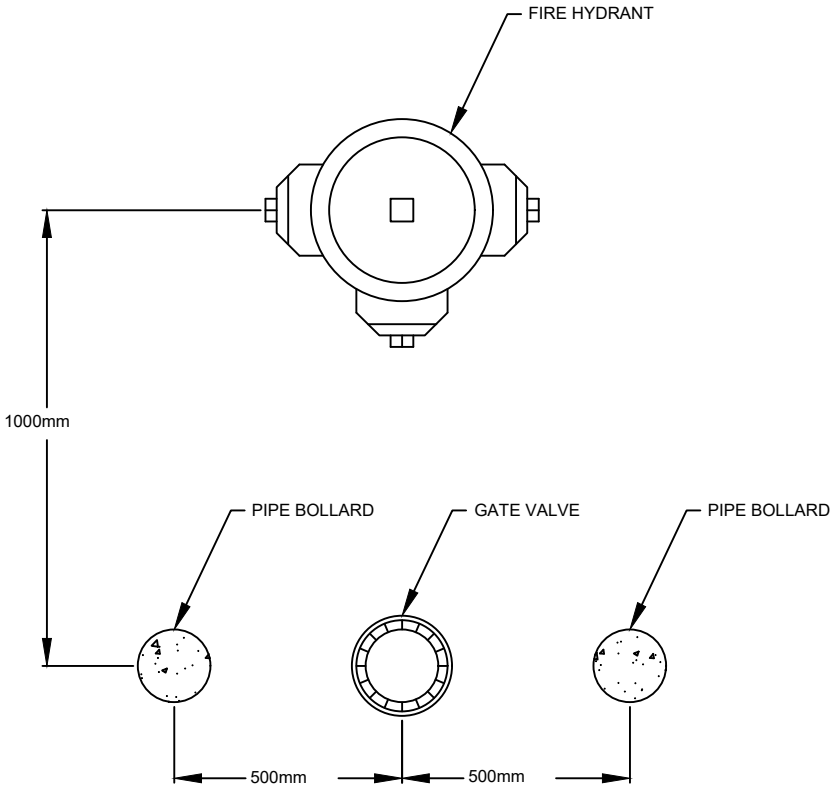
DIRECTOR OF OPERATIONS DATE

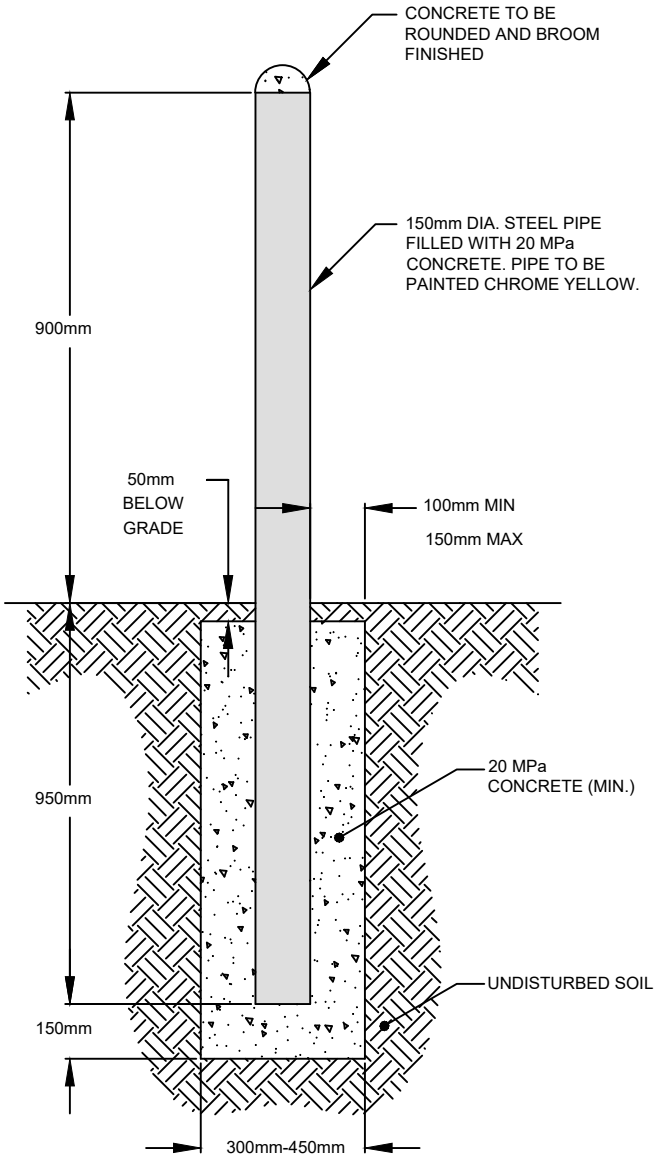
REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-712





NOTES:

1. DIMENSION MAY BE REDUCED TO SUIT AVAILABLE SPACE IN BOULEVARD AREA (DIMENSION - PROVIDED SPACE IS AVAILABLE).
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. REQUIRED NUMBER OF BOLLARDS AND LOCATIONS MAY VARY WITH DIRECTION OF HAZARD(S).

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

PIPE BOLLARD

APPROVED

MANAGER OF ENGINEERING DATE

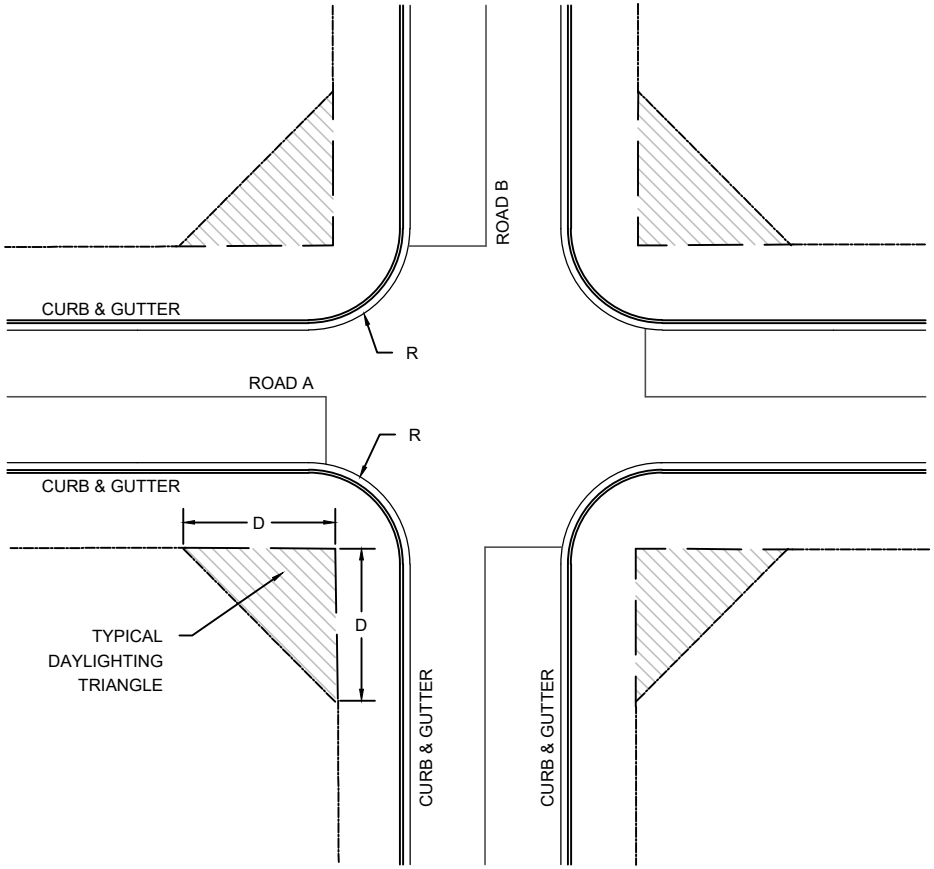
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-713



INTERSECTION TYPE ROAD "A" TO ROAD "B"	CURB RADIUS R (m)	D (m)
LOCAL TO LOCAL	7.5	3X3
LOCAL TO COLLECTOR	9.0	5X7
LOCAL TO ARTERIAL	9.0	5X10
COLLECTOR TO COLLECTOR	12.0	7X7
COLLECTOR TO ARTERIAL	12.0	7X10
ARTERIAL TO ARTERIAL	15.0	10X10
INDUSTRIAL TO ANY OTHER STREET	18.0	12X12

NOTES:

1. CURB RADII IN TABLE ARE FROM 90-DEGREE INTERSECTIONS. OTHER INTERSECTION ANGLES WILL REQUIRE DIFFERENT RADII TO ACCOMMODATE THE SAME DESIGN VEHICLE.
2. DESIGN CRITERIA TO CONFORM WITH MTO DOCUMENT GEOMETRIC DESIGN STANDARDS FOR CANADIAN ROADS (METRIC) AND TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES & DESIGN CRITERIA.
3. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL DAYLIGHTING REQUIREMENTS

APPROVED

MANAGER OF ENGINEERING DATE

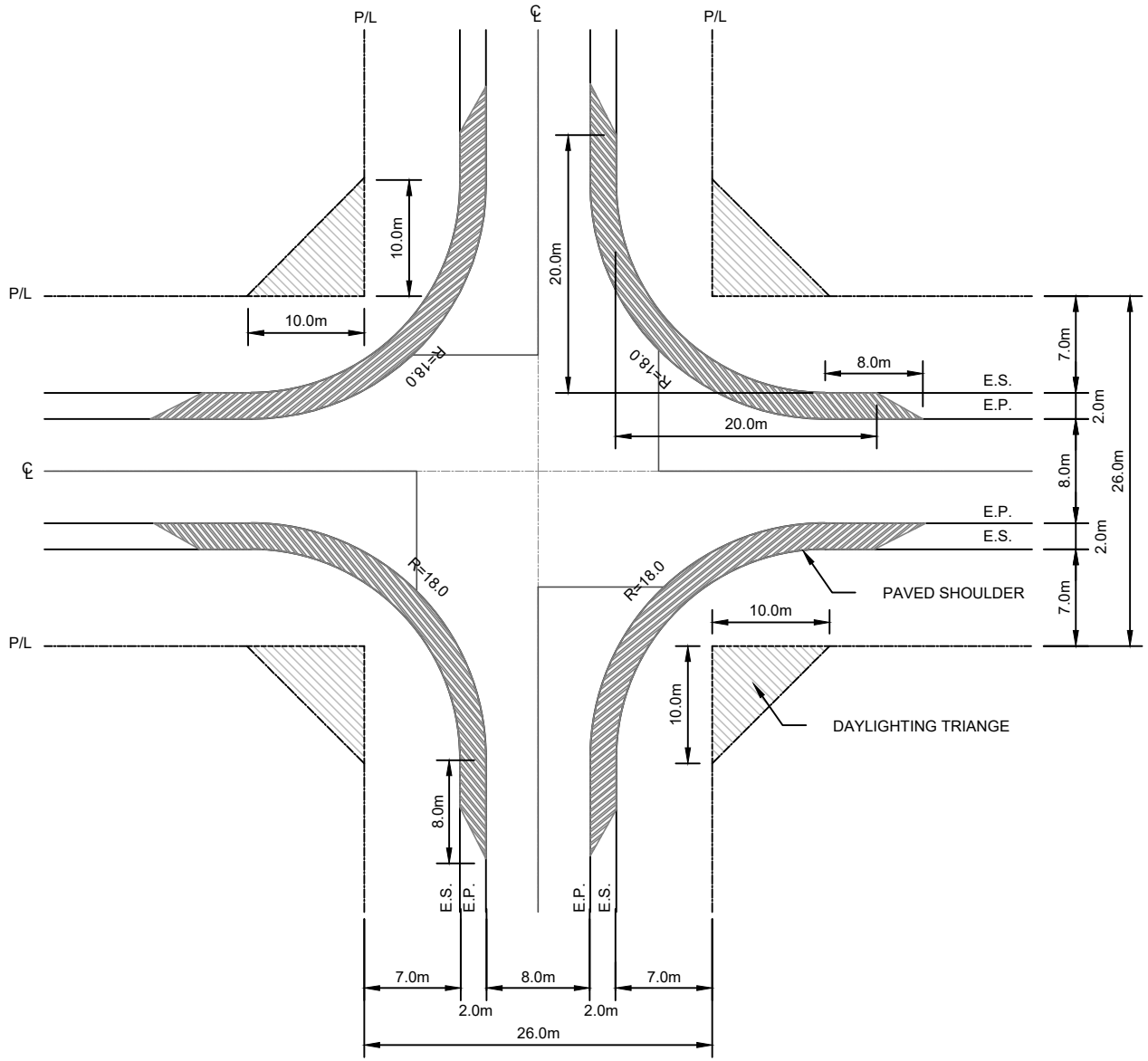
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-720



NOTES:

1. PAVED SHOULDER TO HAVE THE SAME DEPTH OF ASPHALT AS THE ROADWAY.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
3. ASPHALT SHOULDER TO EXTEND 8.0m BEYOND THE CURVE TERMINATION POINT.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL INTERSECTION SEMI-URBAN 18m RADIUS 26m R.O.W.

APPROVED

MANAGER OF ENGINEERING DATE

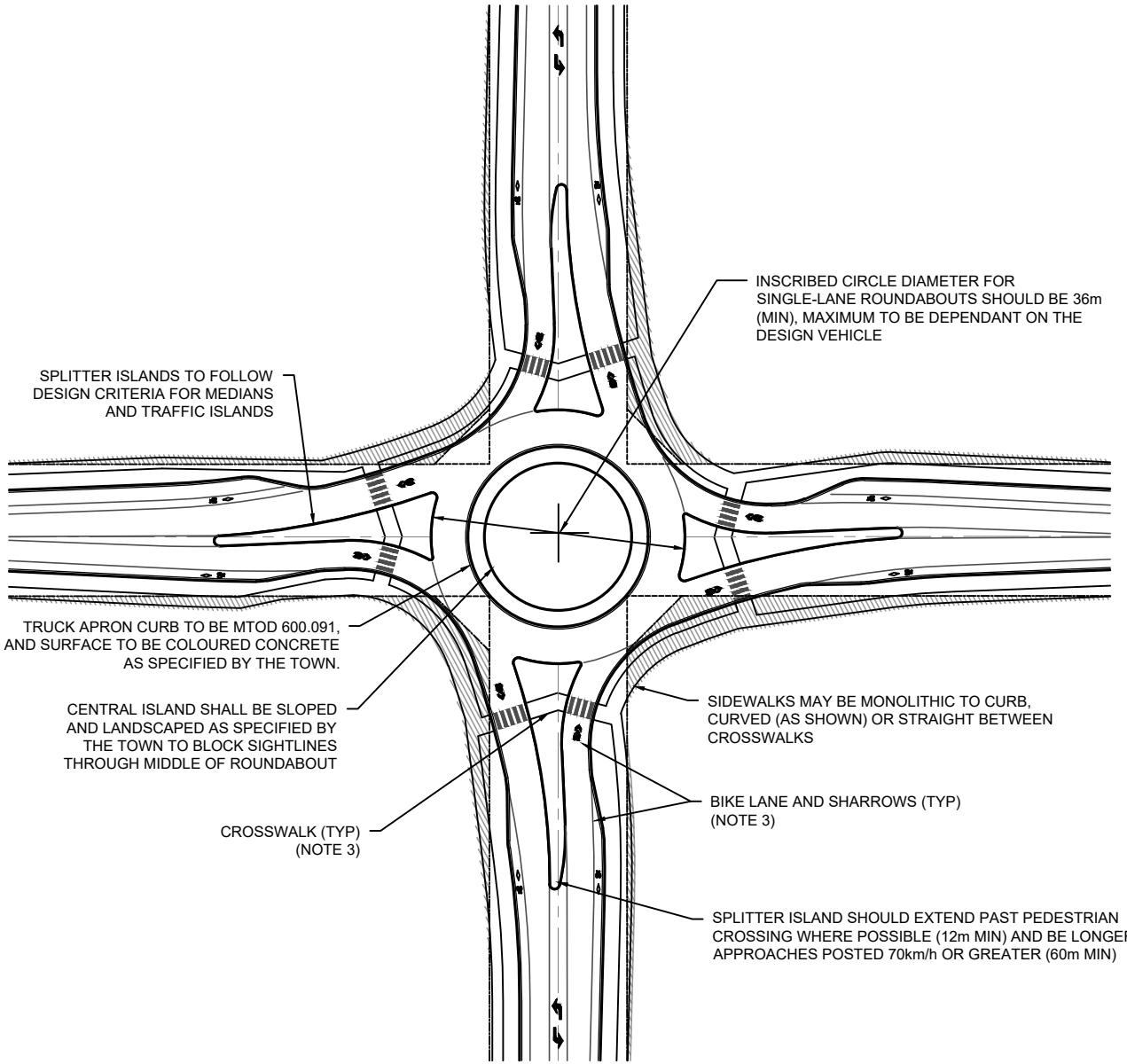
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-721



NOTES:

1. LAYOUT IS TYPICAL AND SHOULD BE REFINED THROUGH FURTHER DESIGN
2. ROUNDABOUT SIGNAGE AND MARKINGS TO FOLLOW THE MUTCD FOR CANADA
3. REFER TO TSD-723 FOR BIKE LANE, SHARROWS AND CROSSWALK TYPICALS.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

ROUNDABOUT SINGLE-LANE

APPROVED

MANAGER OF ENGINEERING DATE

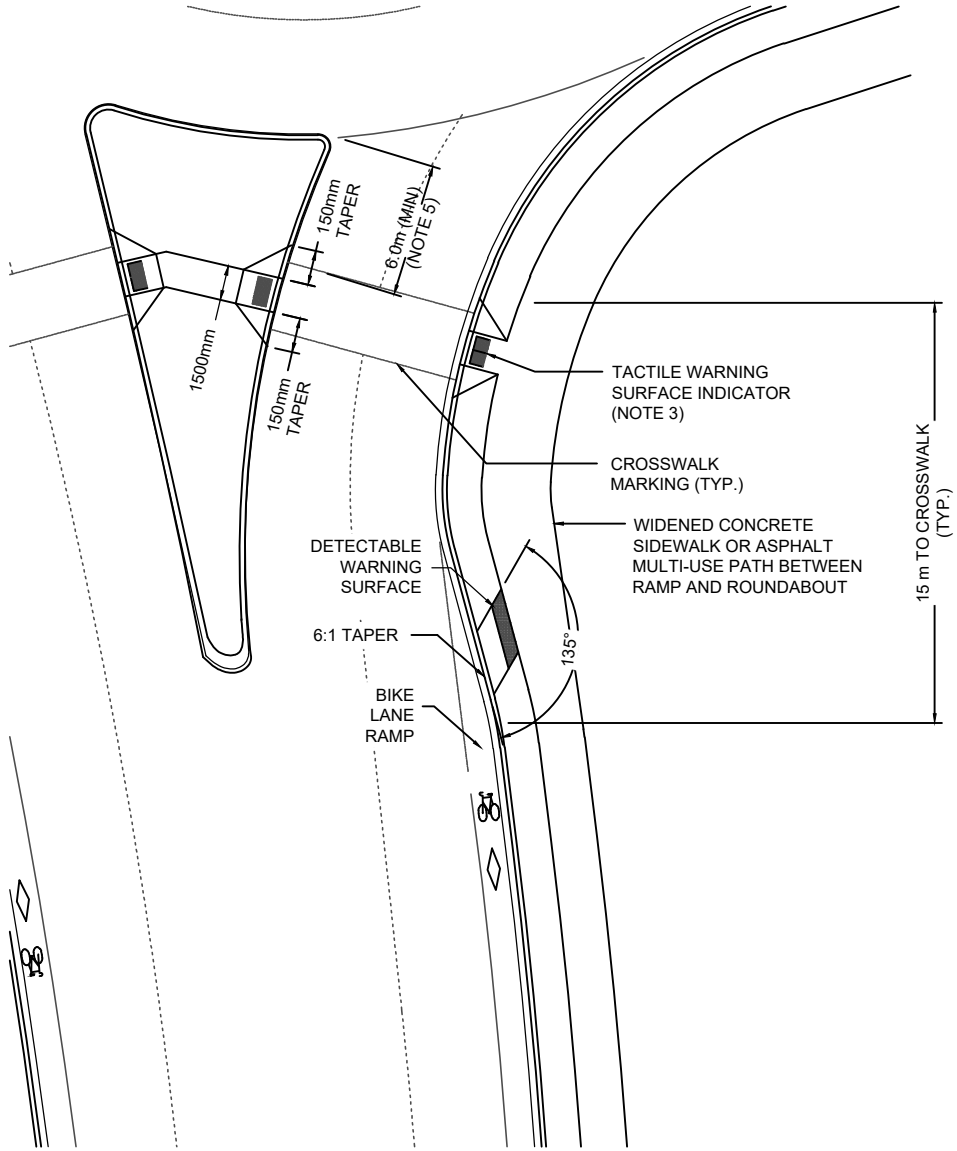
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-722



NOTES:

1. LAYOUT IS TYPICAL AND SHOULD BE REFINED THROUGH FURTHER DESIGN
2. FOR ADDITIONAL SIDEWALK RAMPING DETAILS REFER TO OPSDs 310.030, 310.031, 310.033.
3. FOR TACTILE WARNING SURFACE INDICATOR DETAILS, REFER TO OPSD 310.039
4. FOR CROSSWALK MARKINGS AND SIGNAGE REFER TO OTM BOOK 15
5. 12m RECOMMENDED WITH LEVEL 2 PEDESTRIAN CROSSOVER
6. FOR BIKE FACILITY MARKINGS AND SIGNAGE REFER TO OTM BOOK 18
7. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

SIDEWALK RAMPS, BIKE LANES, CROSSWALKS AT ROUNDABOUTS

APPROVED

MANAGER OF ENGINEERING DATE

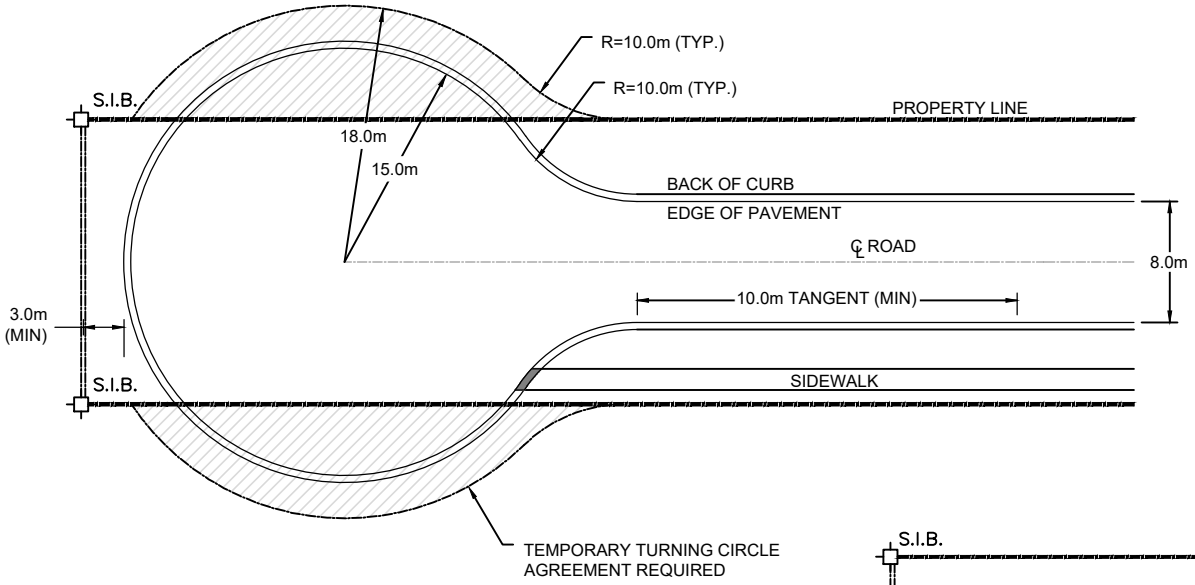
DIRECTOR OF OPERATIONS DATE

REVISION No.

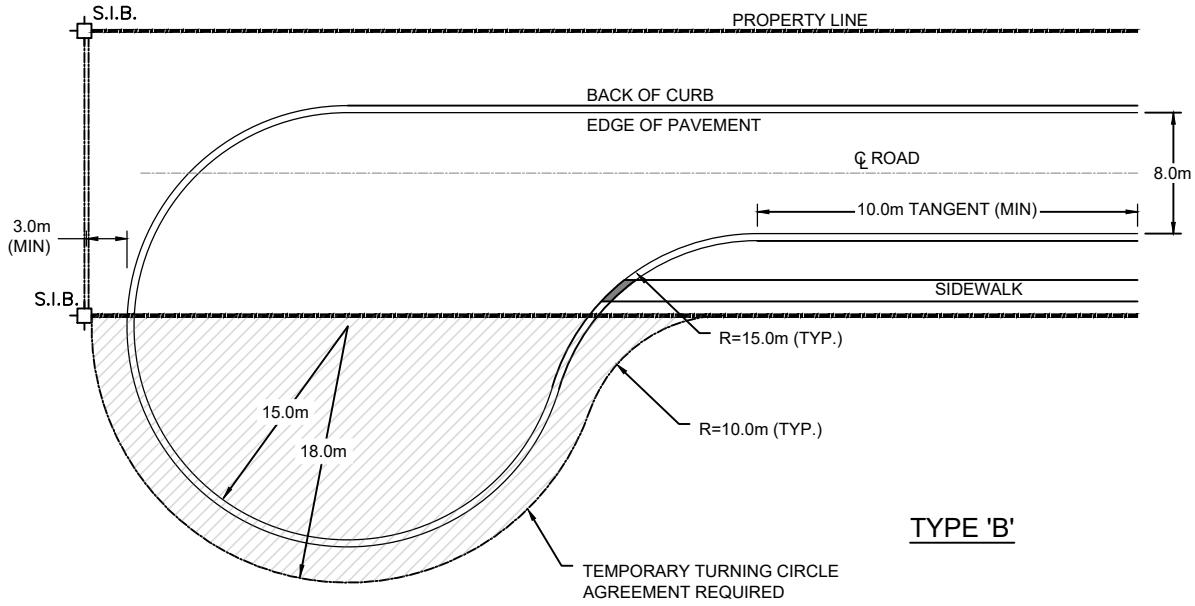
DATE: MARCH 2020

SCALE: N.T.S.

TSD-723



TYPE 'A'



TYPE 'B'

NOTES:

1. ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TEMPORARY RESIDENTIAL CUL-DE-SAC

APPROVED

MANAGER OF ENGINEERING DATE

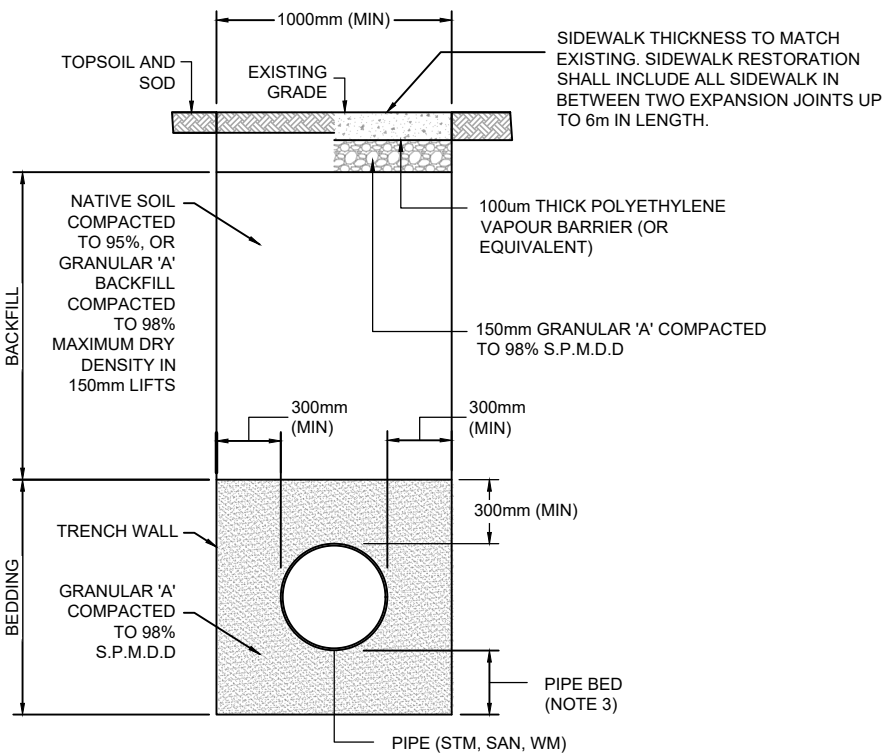
DIRECTOR OF OPERATIONS DATE

REVISION No.

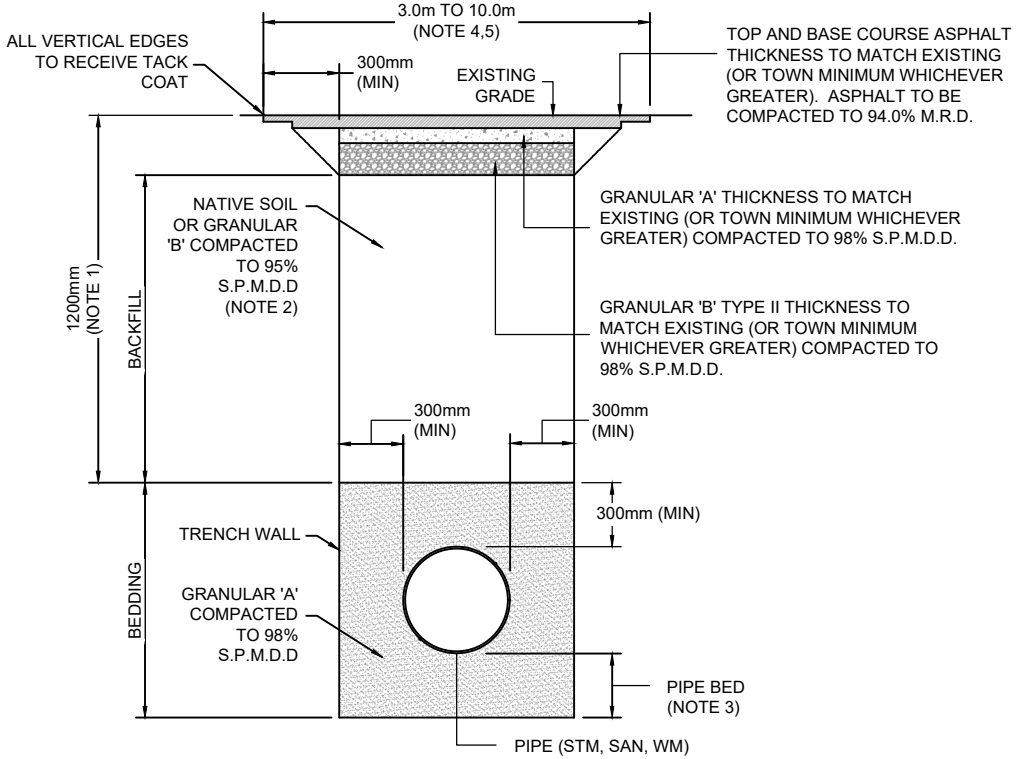
DATE: MARCH 2020

SCALE: N.T.S.

TSD-730



BOULEVARD



ROADWAY

NOTES:

1. FROST TAPER USED IF DEPTH IS LESS THAN 1200mm
2. UNSHRINKABLE FILL TO BE USED IN INTERSECTIONS AND ON HIGH VOLUME ARTERIAL/COLLECTOR ROADS.
3. REFER TO TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA FOR APPLICABLE BEDDING REQUIREMENTS FOR LINEAR INFRASTRUCTURE OF FOCUS.
4. 3.0m (MIN) FOR LONGITUDINAL, 10.0m + TRENCH WIDTH (MIN) FOR TRANSVERSE RESTORATION.
5. IF TRENCH TO FACE OF CURB IS LESS THAN 1000mm, FULL DEPTH ASPHALT IS TO BE REMOVED.
6. ALL DIMENSIONS SHOWN IN MILLIMETRES UNLESS OTHERWISE NOTED.

Tillsonburg
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STANDARD DETAIL

TYPICAL TRENCH RESTORATION

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-740

1. GRADE AND CROSSFALL ADJUSTEMENT OF MAINTENANCE HOLE AND CATCHBASIN FRAMES WILL BE MADE USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE.
2. ADJUSTMENT UNITS MUST BE CERTIFIED TO MEET ALL PERTINENT OPS, CSA, ASTM AND MTO-DSM LISTS, OR OTHER INDUSTRY GUIDELINES FOR MATERIALS, PERFORMANCE AND USE AS APPLICABLE.
3. ADJUSTMENT UNITS AND JOINTS WILL BE SEALED AND OR PARGED IN COMPLIANCE WITH MANUFACTURERS SPECIFICATIONS AND GUIDELINES
4. MORTAR IS USED FOR LEVELING OF PRECAST UNITS ONLY. THE THICKNESS OF MORTAR WILL BE 10mm TO FILL ALL VOIDS CREATED BY IRREGULARITIES IN THE PRECAST UNITS TO ENSURE AN EVEN SURFACE ONLY.

Tillsonburg
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STANDARD DETAIL

GENERAL NOTES FOR ROADWORKS

APPROVED

MANAGER OF ENGINEERING DATE

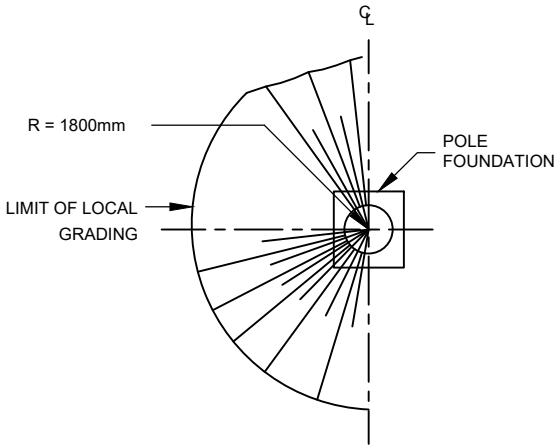
DIRECTOR OF OPERATIONS DATE

REVISION No.

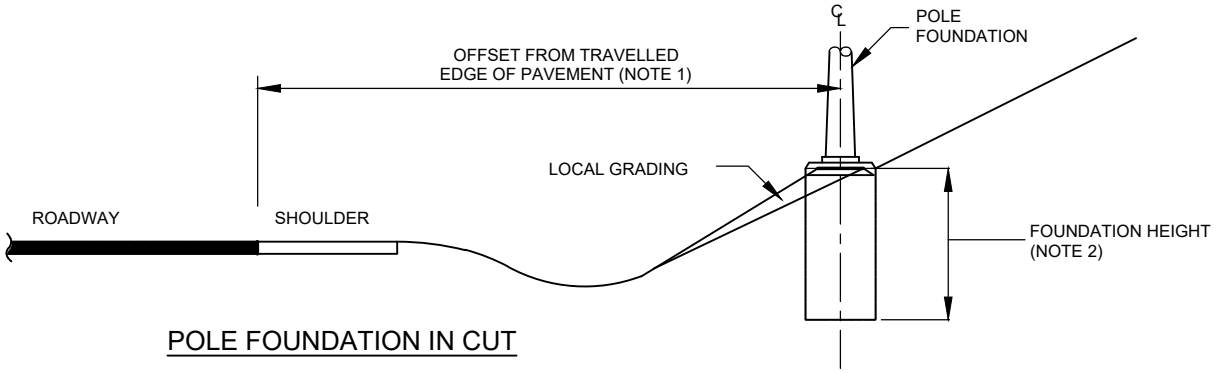
DATE: MARCH 2020

SCALE: N.T.S.

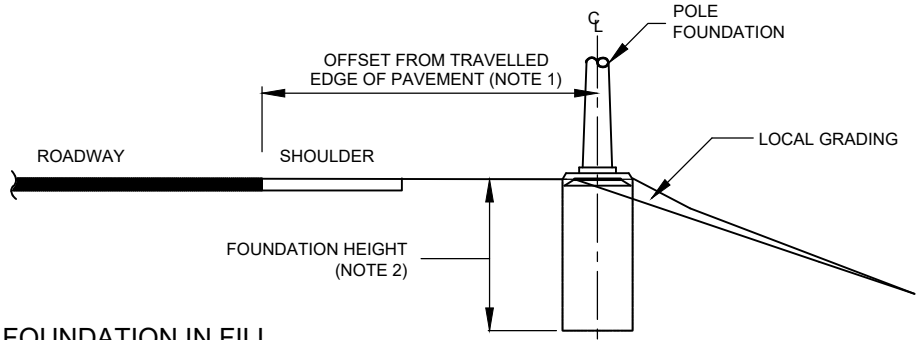
TSD-750



TYPICAL PLAN



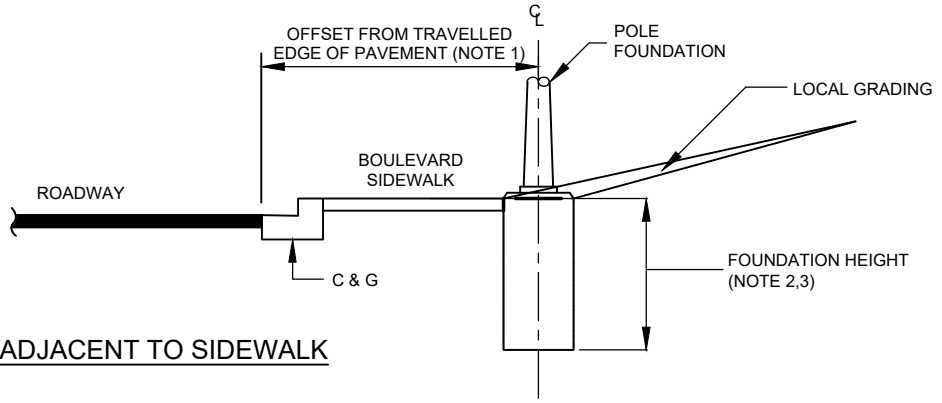
POLE FOUNDATION IN CUT



POLE FOUNDATION IN FILL

NOTES:

1. FOR OFFSET AND POLE TYPE, SEE CONTRACT DRAWINGS.
2. TOP OF FOUNDATION SHALL BE MEASURED FROM THE HIGHEST GRADE ELEVATION.
3. TOP OF FOUNDATION TO BE AT GRADE WITHIN 300mm OF SIDEWALK.
4. ALL DIMENSIONS ARE IN MILLIMETRES OR METRES UNLESS OTHERWISE SHOWN.



POLE FOUNDATION ADJACENT TO SIDEWALK

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

LOCAL GRADING AT POLE FOUNDATIONS

APPROVED

MANAGER OF ENGINEERING DATE

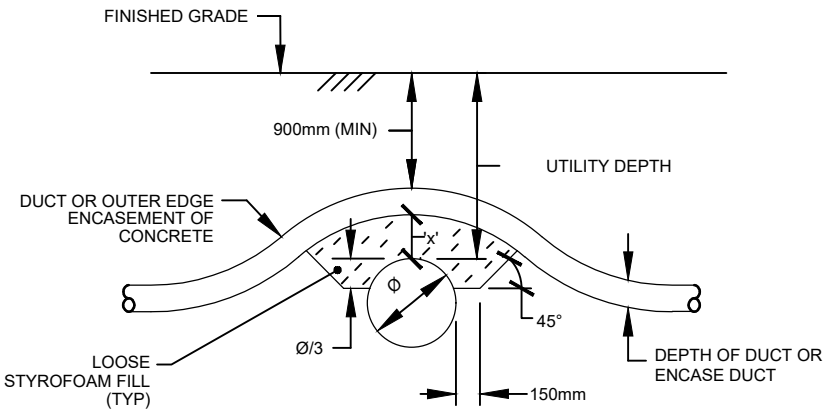
DIRECTOR OF OPERATIONS DATE

REVISION No.

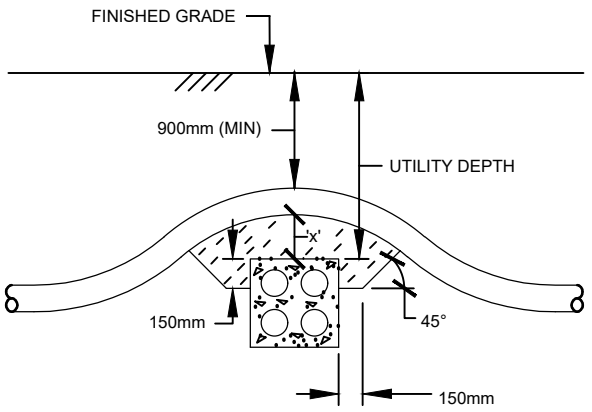
DATE: DEC 2021

SCALE: N.T.S.

TSD-801



CROSSING OVER UTILITY

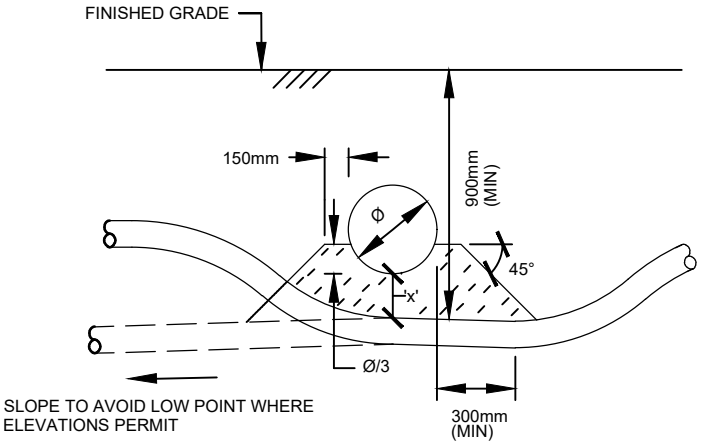


CROSSING OVER CONCRETE ENCASED UTILITY

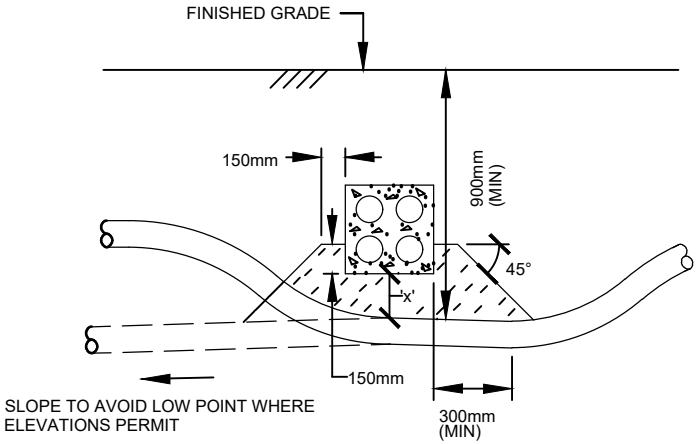
NOTES:

1. TRENCH WIDTHS AS PER OCCUPATIONAL HEALTH AND SAFETY ACT. UTILITY SUPPORTED IN PLACE WHERE REQUIRED.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
3. THE REQUIRED MINIMUM CLEARANCE 'X' BETWEEN THE UTILITY AND THE DUCTS OR CONCRETE ENCASEMENT IS:

DUCTS (DIRECT BURIED OR ENCASED)	100mm
ALL OTHER PIPES	500mm
HIGH VOLTAGE CABLES	1000mm
ALL OTHER CABLES	300mm



CROSSING UNDER UTILITY



CROSSING UNDER CONCRETE ENCASED UTILITY

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

ROADWAY LIGHTING DUCT INSTALLATION AT UTILITY CROSSING

APPROVED

MANAGER OF ENGINEERING DATE

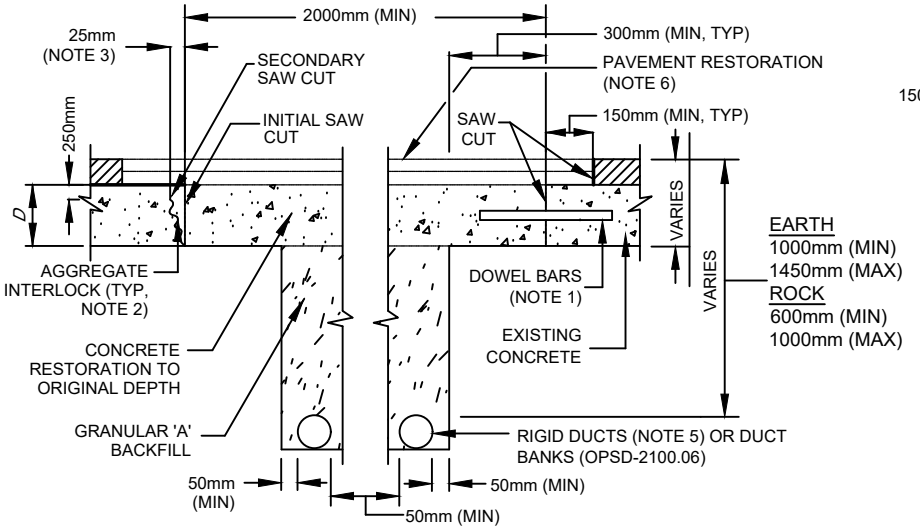
DIRECTOR OF OPERATIONS DATE

REVISION No.

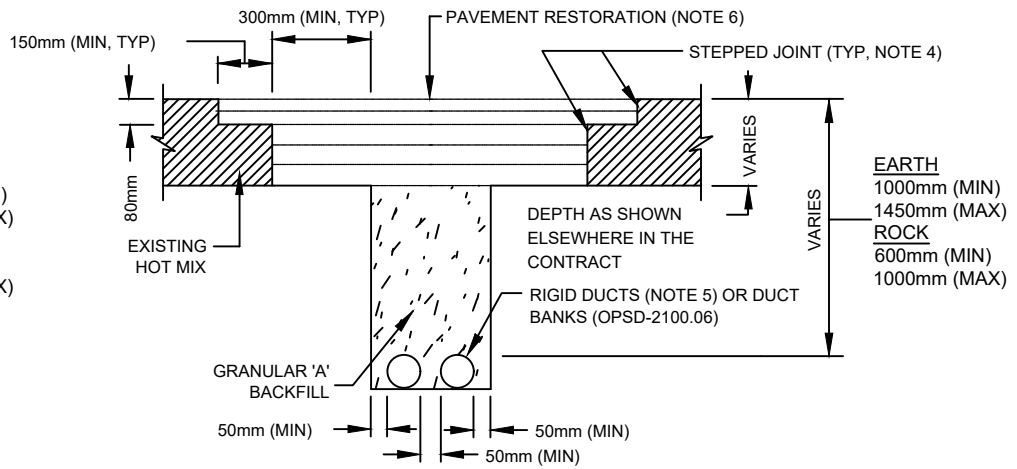
DATE: DEC 2021

SCALE: N.T.S.

TSD-900



UNDOWELLED TREATMENT (NOTE 2) DOWELLED TREATMENT (NOTE 1)
COMPOSITE OR CONCRETE PAVEMENT



BITUMINOUS PAVEMENT

NOTES:

1. DOWELLED TREATMENT IS ONLY REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE WHICH CONTAIN LOAD TRANSFER DEVICES. DOWELS SHALL BE 32mm DIA, 450mm LONG, EPOXY COATED, INSTALLED AT 300mm INTERVALS AT MID DEPTH OF THE CONCRETE SLAB, IN PLANE TO THE PAVEMENT SURFACE, PARALLEL TO THE CENTRE LINE OF THE ROAD AND SET 225mm IN 35mm HOLES WITH EPOXY GROUT.
2. UNDOWELLED TREATMENT IS ONLY REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE WHICH IS CONSTRUCTED WITHOUT LOAD TRANSFER DEVICES AT JOINTS. AGGREGATE INTERLOCK IS CREATED BY CHIPPING THE VERTICAL CONCRETE FACE WITH A LIGHT 15kg MAXIMUM PNEUMATIC HAMMER.
3. THE INITIAL SAW CUT SHALL BE FULL DEPTH. THE SECONDARY SAW CUT SHALL BE 1/4 OF EXISTING PAVEMENT DEPTH WITH 25mm OF CHIPPING FOR AGGREGATE INTERLOCK.
4. WHERE EXISTING PAVEMENT DEPTH IS BETWEEN 80mm AND 120mm, THE 150mm WIDE STEPPED JOINT SHALL BE 40mm DEEP. BITUMINOUS PAVEMENT RESTORATION TO MATCH EXISTING TYPE UNLESS OTHERWISE SPECIFIED. THE SURFACE AND TOP BINDER COURSES SHALL BE PLACED IN 40mm LIFTS, WITH OTHER LIFTS PLACED AT 80mm MAXIMUM.
6. ALL VOIDS BELOW THE PAVEMENT STRUCTURE TO BE REINSTATED AS PER TSD's.
7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
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STANDARD DETAIL

ROADWAY LIGHTING DUCT INSTALLATION IN EXISTING PAVED AREA

APPROVED

MANAGER OF ENGINEERING DATE

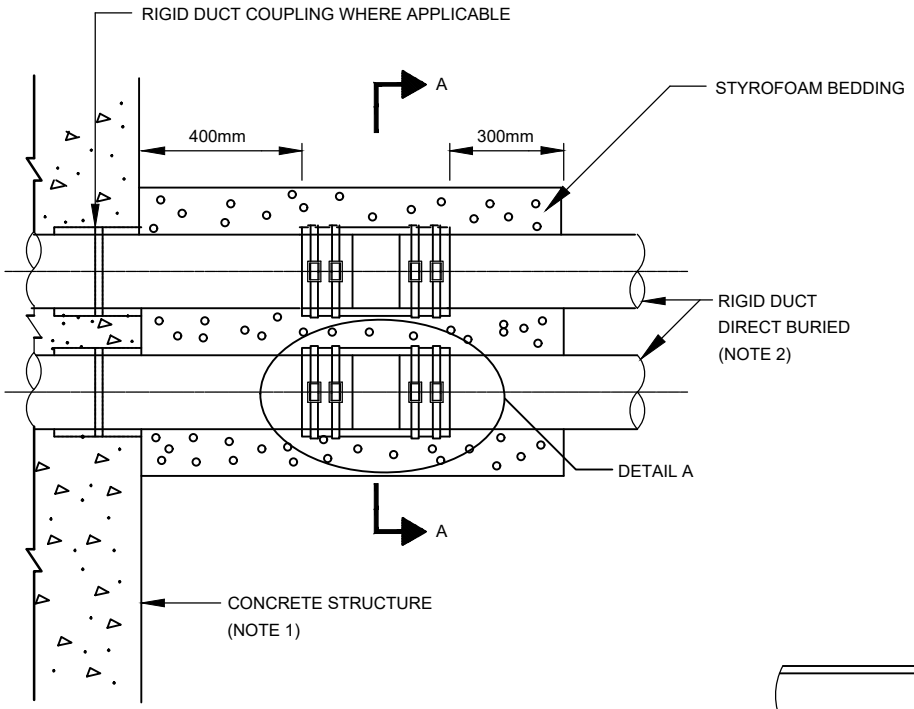
DIRECTOR OF OPERATIONS DATE

REVISION No.

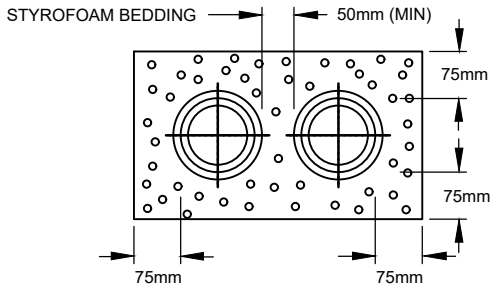
DATE: DEC 2021

SCALE: N.T.S.

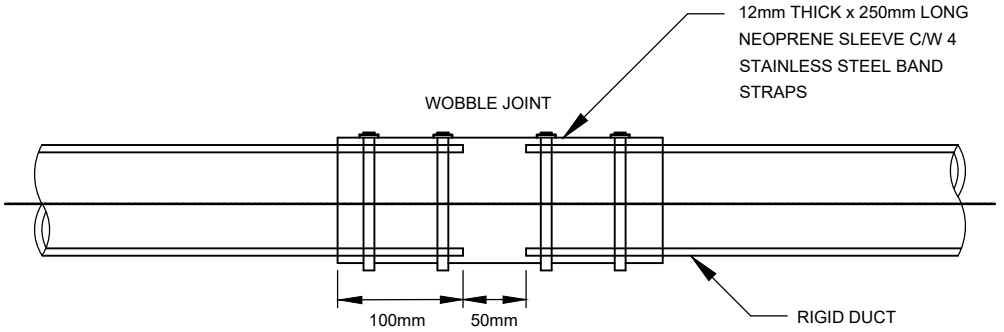
TSD-901



PLAN



SECTION A-A



DETAIL A

NOTES:

1. CONCRETE STRUCTURES INCLUDE BRIDGE STRUCTURE, CONCRETE FOOTING, ELECTRICAL MAINTENANCE HOLE, CONCRETE DUCT BANK, CONCRETE VAULT, ETC.
2. FOR NUMBER, SIZES AND ORIENTATION OF DUCTS REFER TO CONTRACT DRAWINGS.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

UNDERGROUND RIGID DUCT CONNECTION AT CONCRETE STRUCTURE

APPROVED

MANAGER OF ENGINEERING DATE

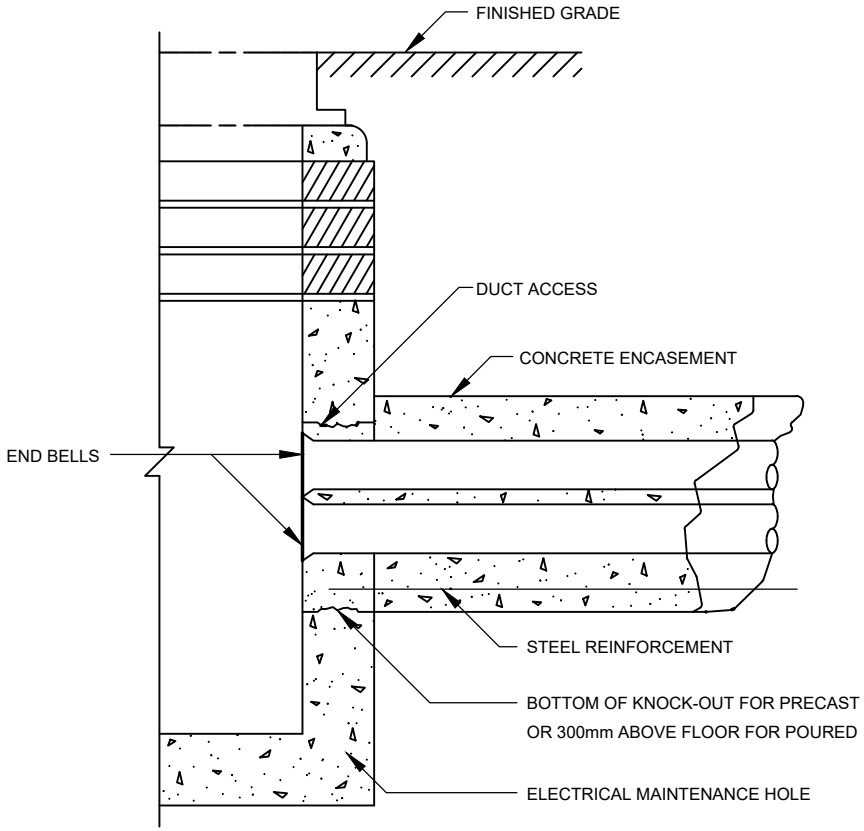
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-902



CONCRETE ENCASED RIGID DUCTS

NOTES:

1. GROUT TO BE PLACED FULL DEPTH, FLUSH WITH BOTH WALLS.
2. GROUT TO BE PLACED WITHIN STEEL PIPE, AROUND ALL DUCTS, TO A MINIMUM DEPTH OF 75mm.
3. ALL DIMENSIONS ARE IN MILLIMETRES OR METRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

ELECTRICAL VAULT ENTRY OF ENCASED DUCTS

APPROVED

MANAGER OF ENGINEERING DATE

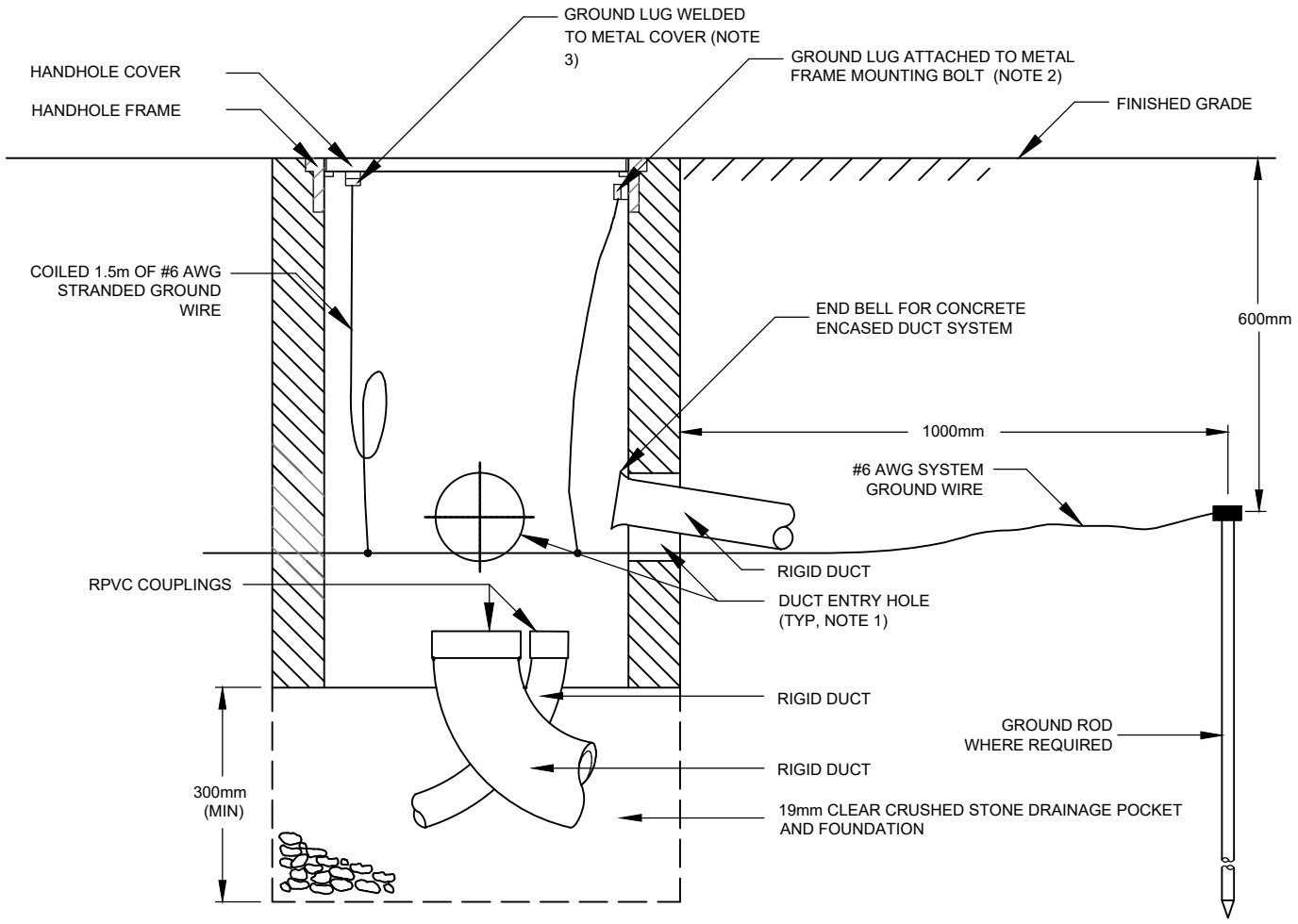
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-903



NOTES:

1. FOR DUCT ENTRY DETAILS SEE TSD-905.
2. FOR HANDHOLES WITH METAL FRAMES, GROUND WIRE SHALL BE ATTACHED TO FRAME USING A GROUND LUG SUITABLE FOR #6 AWG STRANDED COPPER WIRE.
3. FOR HANDHOLES WITH METAL COVERS AND NON METALLIC FRAMES, THE GROUND WIRE SHALL BE ATTACHED TO THE HANDHOLE COVER USING A GROUND LUG SUITABLE FOR #6 AWG COPPER WIRE.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
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STANDARD DETAIL

ELECTRICAL HANDHOLES GENERAL INSTALLATION REQUIREMENTS

APPROVED

MANAGER OF ENGINEERING DATE

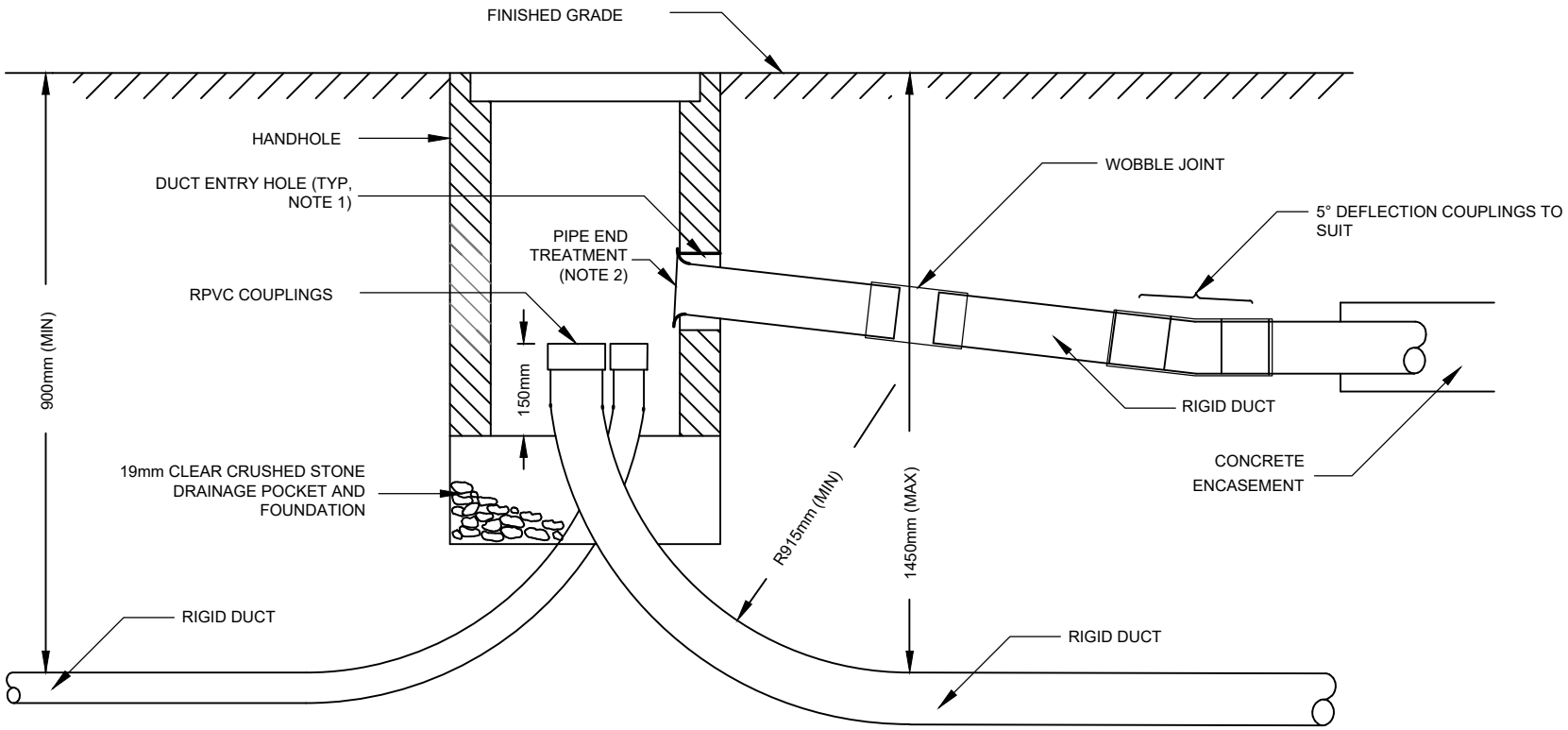
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-904



NOTES:

1. DUCT ENTRY HOLES TO BE FILLED WITH GROUT, FULL DEPTH, FLUSH WITH BOTH WALLS.
2. RIGID DUCTS TERMINATING IN MAINTENANCE HOLES, HANDHOLES, OR OTHER PERMANENT OPENINGS OF UNDERGROUND SYSTEMS SHALL BE PROVIDED WITH AN END BELL. RIGID DUCTS ENTERING THE BOTTOM OF HANDHOLES SHALL BE FITTED WITH RPVC COUPLING.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

ELECTRICAL HANDHOLES ENTRY OF DIRECT BURIED ENCASED DUCTS

APPROVED

MANAGER OF ENGINEERING DATE

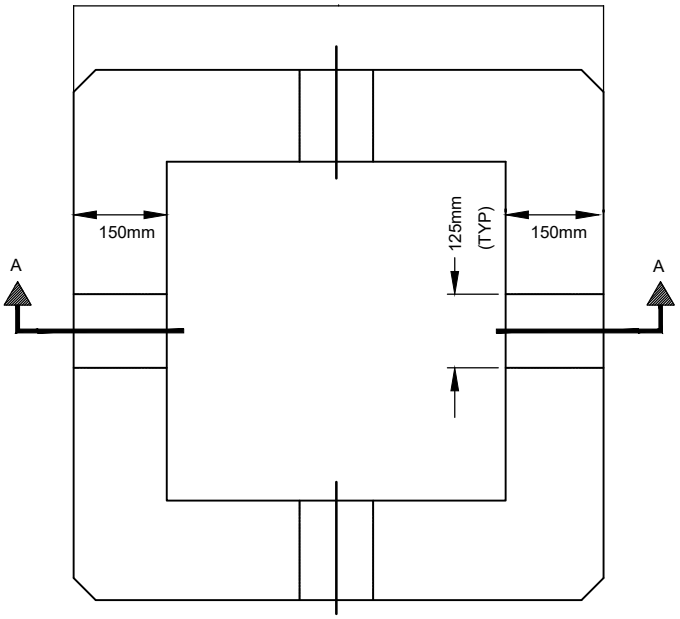
DIRECTOR OF OPERATIONS DATE

REVISION No.

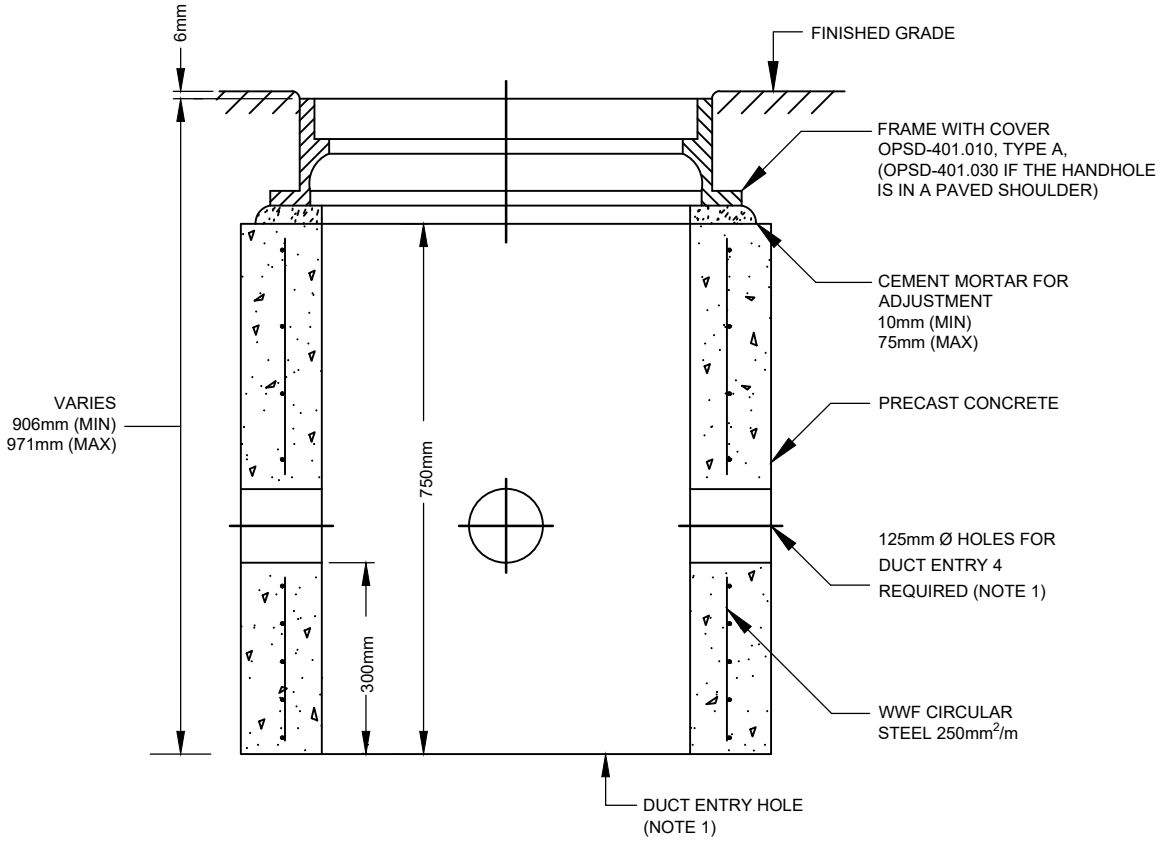
DATE: MARCH 2020

SCALE: N.T.S.

TSD-905



PLAN



SECTION A-A

NOTES:

1. FOR DUCT INSTALLATION DETAILS SEE TSD-905.
2. FOR GENERAL INSTALLATION DETAILS SEE TSD-904.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
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STANDARD DETAIL

ELECTRICAL HANDHOLE PRECAST CONCRETE 600mm x 600mm

APPROVED

MANAGER OF ENGINEERING DATE

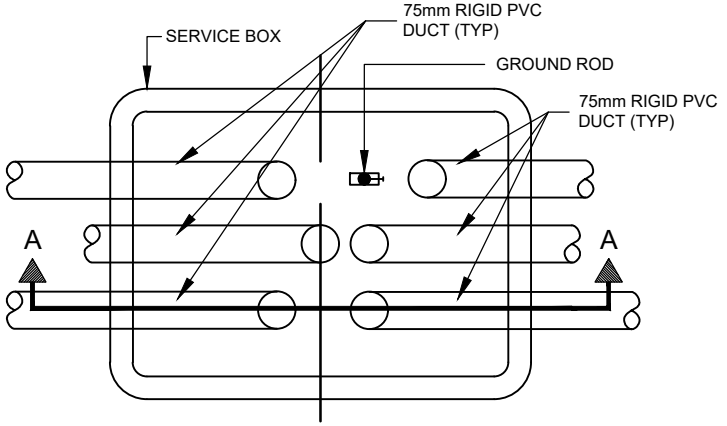
DIRECTOR OF OPERATIONS DATE

REVISION No.

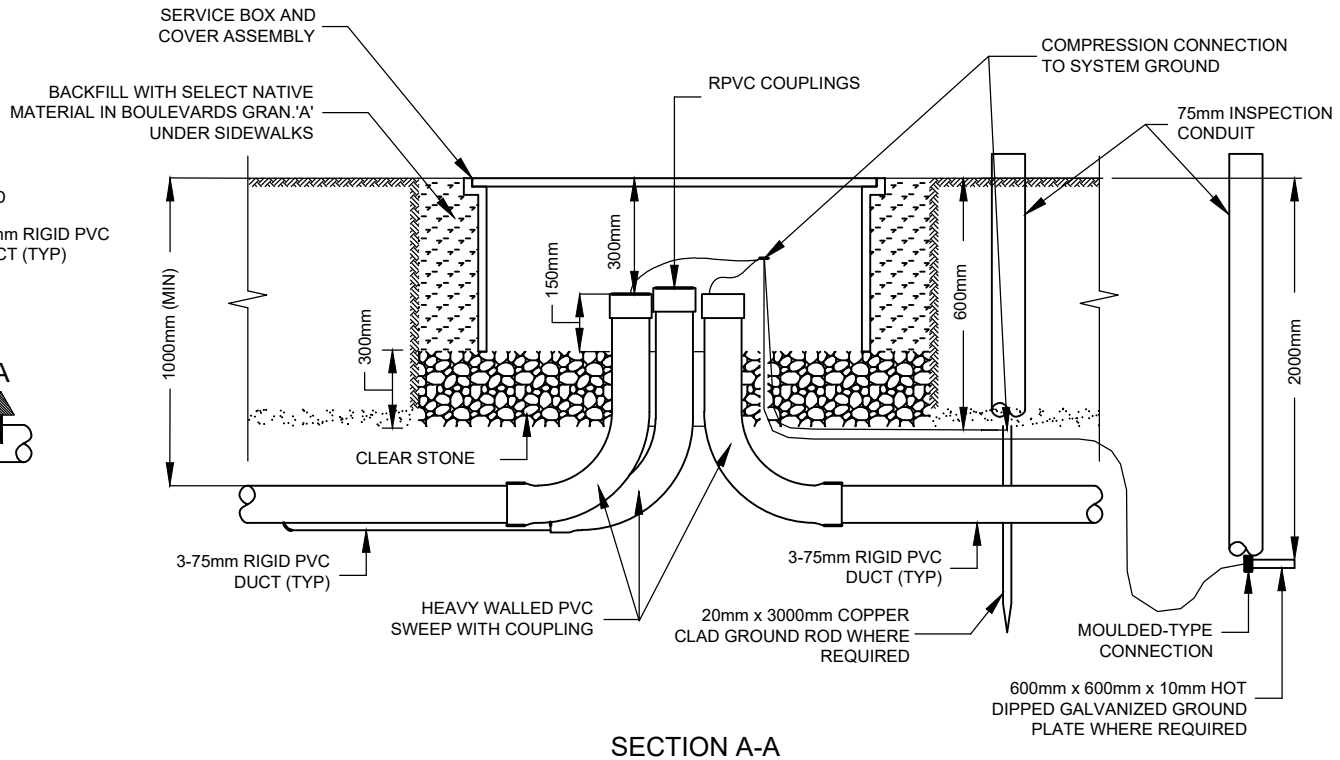
DATE: MARCH 2020

SCALE: N.T.S.

TSD-906



PLAN



SECTION A-A

NOTES:

1. TOP OF SERVICE BOX SHALL BE LEVEL TO CONFORM TO FINISHED GRADE.
2. ALL DUCTS USED IN OPEN CUT INSTALLATION TO BE HEAVY WALLED PVC CONDUITS.
3. END OF ALL DUCTS MUST BE TEMPORARILY CAPPED UNTIL WIRES PULLED.
4. BACKFILL UNDER ROAD AND IN ISLAND TO BE GRANULAR 'A' COMPACTED TO 98% SPMDD.
5. BACKFILL IN BOULEVARD TO BE SELECTED EXCAVATED MATERIAL AS SPECIFIED IN SPECIFICATIONS.
6. ALL DUCTS MUST BE FREE AND CLEAR OF ALL DEBRIS AND OBSTRUCTIONS (DIRT, STONE, ETC).
7. CONTRACTOR TO SUPPLY AND PLACE 5mm POLYPROPYLENE FISH ROPE IN ALL DUCTS.
8. CONTRACTOR TO SUPPLY AND INSTALL GROUND ROD/PLATE AND CONNECTOR IN ALL NEW SERVICE BOXES WHERE INDICATED IN CONTRACT.
9. END OF ALL DUCTS MUST HAVE RPVC COUPLINGS INSTALLED.
10. 75mm INSPECTION CONDUIT REQUIRED FOR GROUND ROD/PLATE CONNECTION OUTSIDE OF HANDHOLE.
11. SERVICE BOXES AND COVERS SHALL MEET ANSI/SCTE77-2007 TIER 15 LOAD RATING. 11.

SERVICE BOXES & COVERS					
		SYNERTECTH		QUAZITE	
SIZE (mm)		BOX	COVER	BOX	COVER
330X610	TYPE I	S1324B18FA	S1324HBBOA	PT1324BA18	PT1324HAOO46
432X762	TYPE II	S1730B18FA	S1730HBBOA	PT1730BA18	PT1730HAOO46

Tillsonburg
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STANDARD DETAIL

PREFABRICATED SERVICE BOX ASSEMBLIES

APPROVED

MANAGER OF ENGINEERING DATE

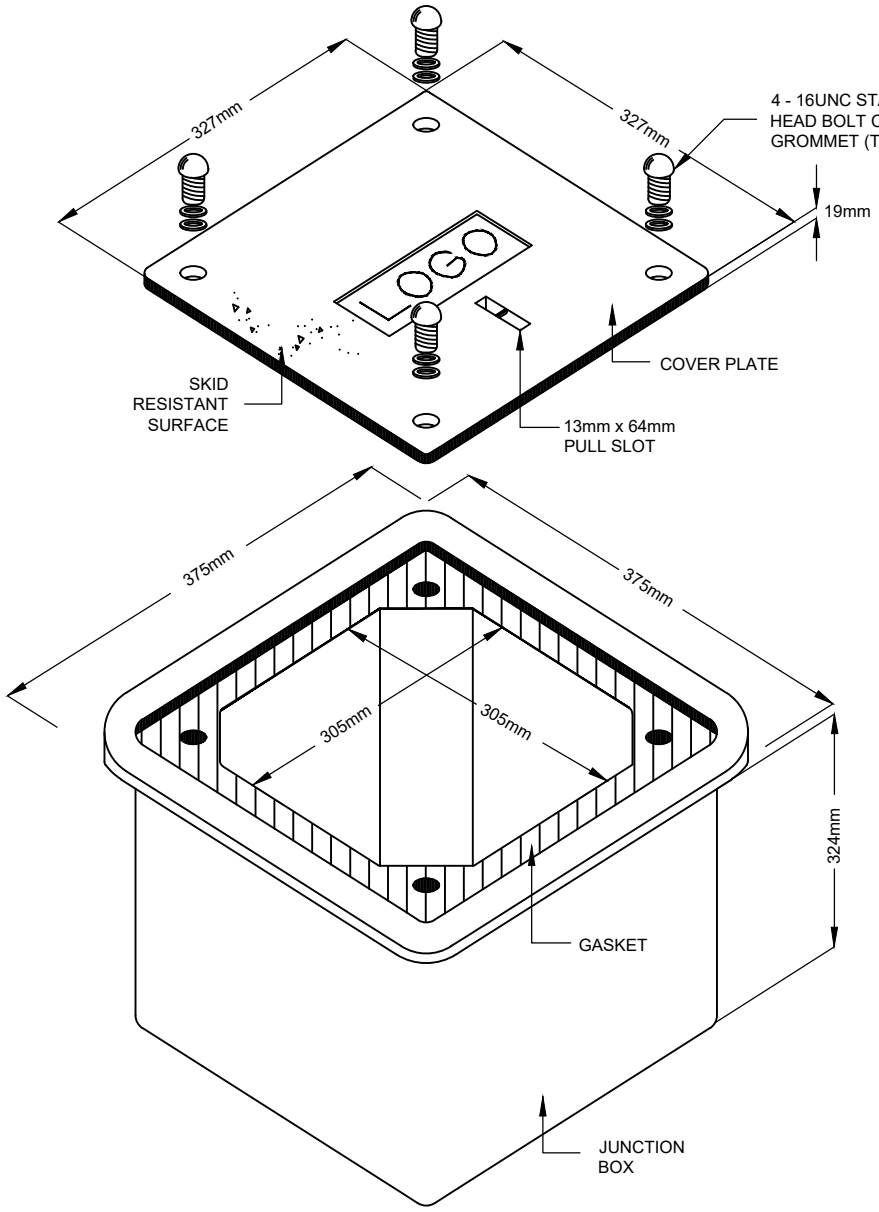
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-907



NOTES:

1. BOXES SHALL BE STACKABLE CONCRETE COMPOSITE TYPE ONLY.
2. BOXES AND COVER SHALL MEET ANSI/SCTE 77-2007 TIER 15 LOAD RATING.

BOXES (STACKABLE)	
DESCRIPTION	PART No.
NO Base	PC1212BA12

COVERS (BLACK UNLESS LOGO SPECIFIED)	
DESCRIPTION	PART No.
C/W 4 Bolts	PC1212HA0046

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STANDARD DETAIL

TYPICAL LOOP AND STREET LIGHTING JUNCTION BOX

APPROVED

MANAGER OF ENGINEERING DATE

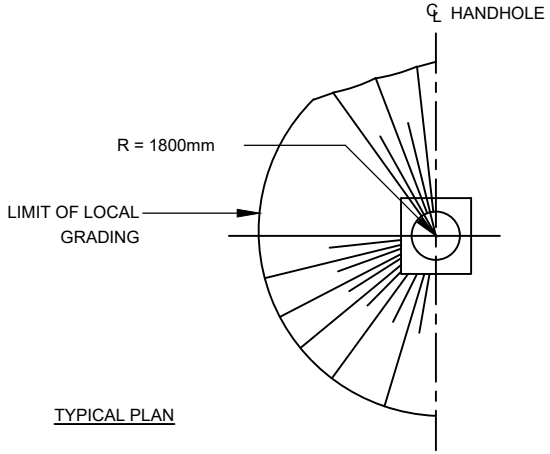
DIRECTOR OF OPERATIONS DATE

REVISION No.

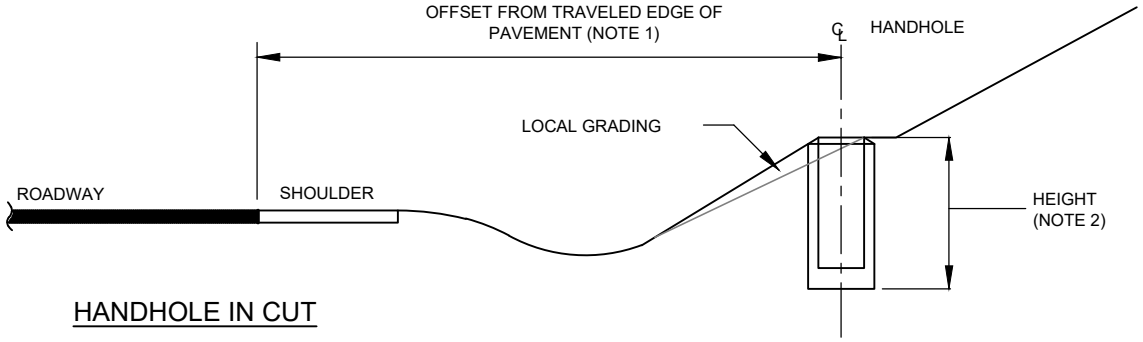
DATE: MARCH 2020

SCALE: N.T.S.

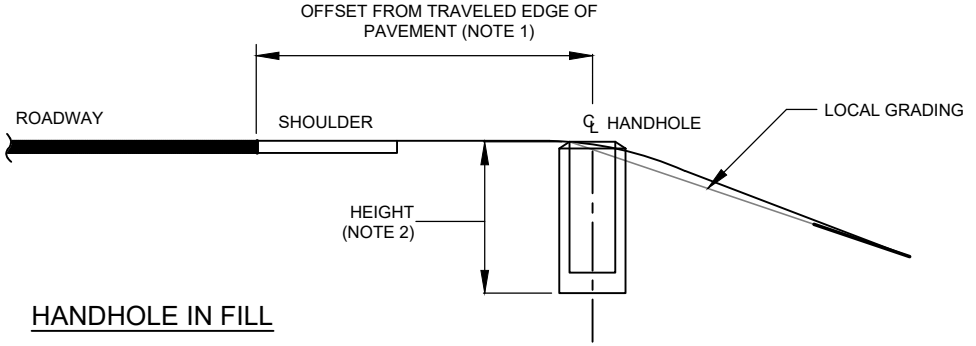
TSD-908



TYPICAL PLAN



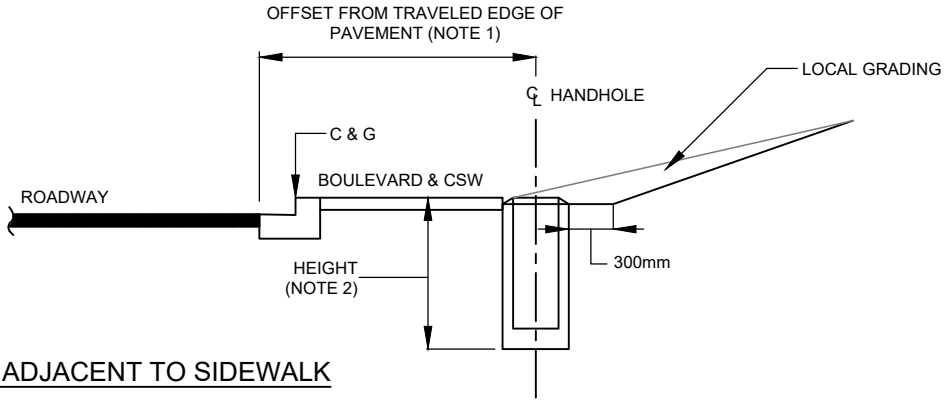
HANDHOLE IN CUT



HANDHOLE IN FILL

NOTES:

1. FOR OFFSET AND BURIAL DEPTH, SEE CONTRACT DRAWINGS.
2. TOP ELEVATION OF HANDHOLE SHALL BE MEASURED FROM THE HIGHEST GRADE ELEVATION.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.



HANDHOLE ADJACENT TO SIDEWALK

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

ELECTRICAL HANDHOLE INSTALLATION IN SLOPE

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

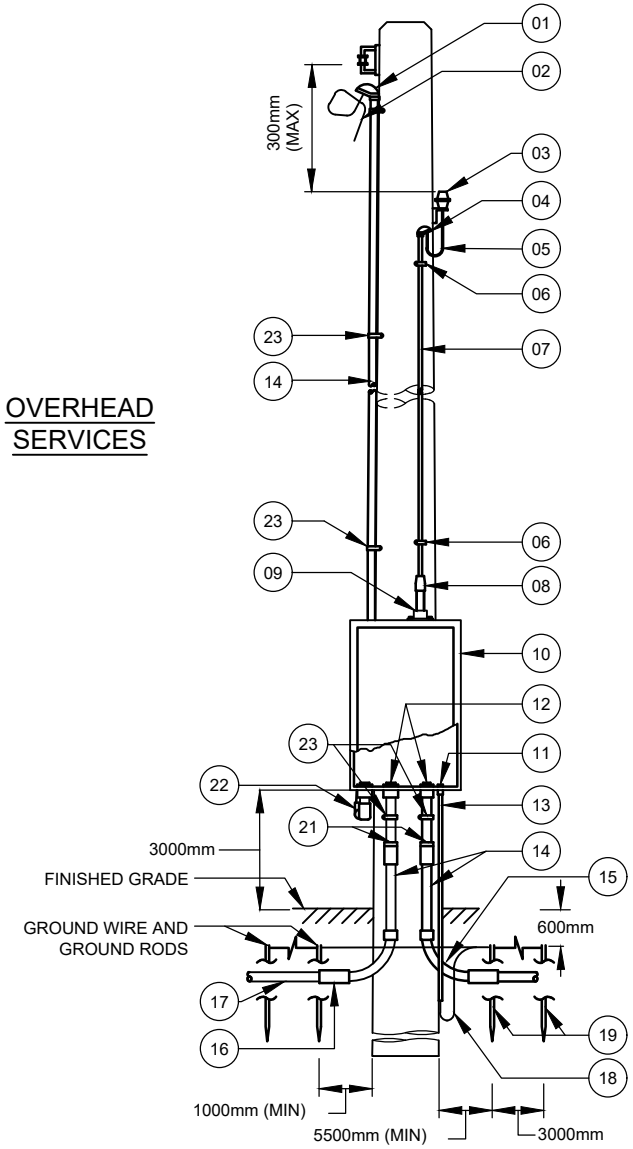
REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

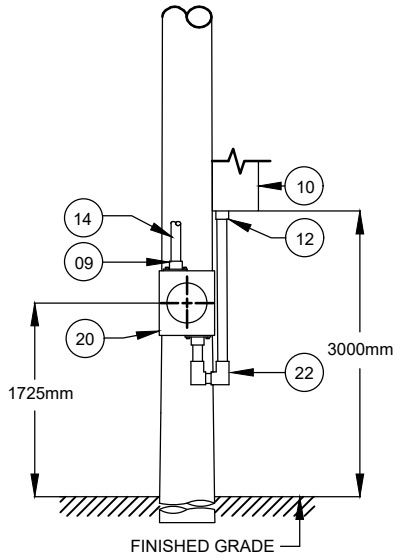
TSD-909

OVERHEAD SERVICES



COMPONENT LIST

01 SERVICE ENTRANCE FITTING, 50mm, RIGID PVC
02 1000mm COIL OF CABLE FOR CONNECTION TO INCOMING SUPPLY
03 PHOTOELECTRIC CONTROLLER WITH BRACKET
04 SERVICE ENTRANCE FITTING, 25mm, RIGID PVC
05 3 NO.12 AWG, LOW VOLTAGE CABLE
06 CLAMP FOR, 25mm, RIGID PVC
07 CONDUIT, 25mm, RIGID PVC
08 REDUCING ADAPTER, 50mm TO 25mm, RIGID PVC
09 METER HUB, 50mm, RIGID PVC
10 SUPPLY CONTROL CABINET
11 TERMINAL ADAPTER AND LOCKNUT, 20mm, RIGID PVC
12 TERMINAL ADAPTER AND LOCKNUT, 50mm, RIGID PVC
13 CONDUIT, 20mm, RIGID PVC
14 CONDUIT, 50mm, RIGID PVC
15 STANDARD 90° ELBOW, 50MM, RIGID PVC
16 ADAPTER COUPLING, 50mm
17 CONDUIT, 50mm, POLYETHYLENE OR STEEL AS INDICATED
18 GROUND WIRE, NOTE 1
19 GROUND ROD, NOTE 1
20 METER BASE, 100A, 600V
21 EXPANSION COUPLING.
22 ACCESS FITTING TYPE LB, 50mm RIGID PVC
23 CLAMP FOR, 50mm, RIGID PVC



DETAIL OF METER BASE

NOTES:

1. NUMBER OF GROUND RODS AND SIZE OF GROUND WIRE SHALL BE AS INDICATED IN THE CONTRACT.
2. THE METER BASE (IF REQUIRED) SHALL BE BONDED IN CONFORMANCE WITH THE REQUIREMENTS OF THE ELECTRICAL SAFETY AUTHORITY. METER BASE SHALL BE PLACED ON THE SIDE OF THE POLE THAT IS MOST ACCESSIBLE TO THE SUPPLY AUTHORITY.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

SUPPLY CONTROL CABINET INSTALLATION OVERHEAD SERVICES BOTTOM ENTRY

APPROVED

MANAGER OF ENGINEERING DATE

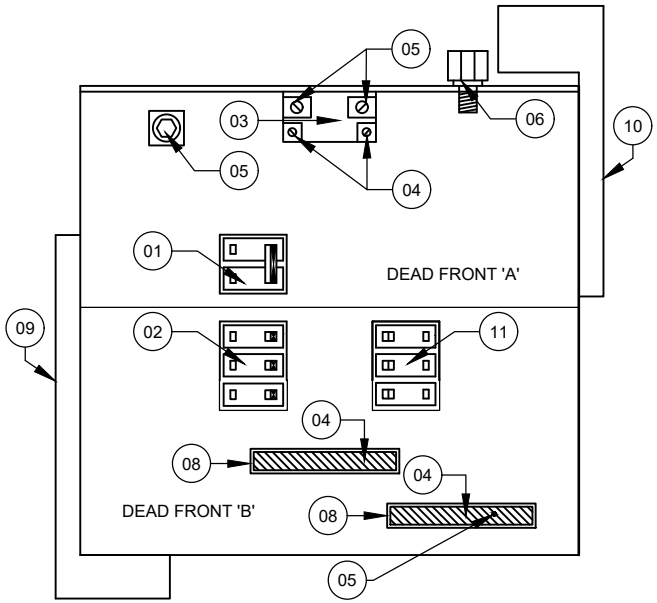
DIRECTOR OF OPERATIONS DATE

REVISION No.

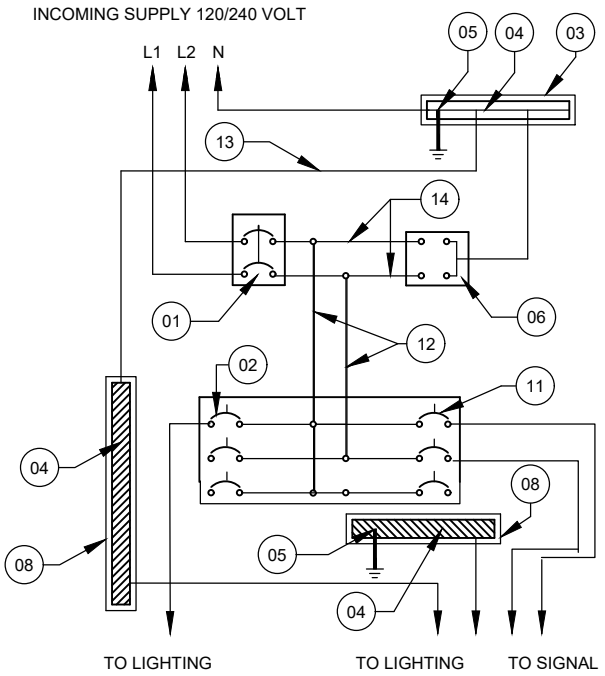
DATE: MARCH 2020

SCALE: N.T.S.

TSD-910



EQUIPMENT LAYOUT



SCHEMATIC WIRING DIAGRAM

LEGEND

DENOTES TERMINAL CONNECTION.

DENOTES #6 AWG RWU90 WIRE.

DENOTES #12 AWG RWU90 WIRE.

DENOTES FIELD WIRING (SIZES ARE INDICATED ELSEWHERE ON THE CONTRACT DRAWINGS.

GROUND LINK.

ELECTRICAL EQUIPMENT LIST

01	MAIN CIRCUIT BREAKER, 240V, 100A, 2-POLE.
02	BRANCH CIRCUIT BREAKERS, 120/240V, 35A, 1-POLE.
03	SOLID NEUTRAL ASSEMBLY, 100A MIN. AMPACITY.
04	GROUND LUG FOR #6 AWG STRANDED COPPER GROUND WIRE.
05	GROUND LUG FOR #2/0 AWG STRANDED COPPER GROUND WIRE.
06	SECONDARY LIGHTNING ARRESTER, 650V, 2-POLE.
07	DRIP SHIELD.
08	LOCATE SECONDARY NEUTRAL AND GROUND BARS ACCORDING TO CSA AND PROJECT REQUIREMENTS.
09	PRIMARY BARRIER.
10	SECONDARY BARRIER.
11	BRANCH BREAKER, 240V, 60A, 1 POLE.
12	COPPER BUS BAR.
13	#6 AWG RWU90 WIRE.
14	#12 AWG RWU90 WIRE.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

LS3M SUPPLY CONTROL CABINET ASSEMBLY TYPE 3M 120/240V, 100A, 1-PHASE, 3-WIRE

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-911

BILL OF MATERIALS				
ITEM NO.	QTY.	DESCRIPTION	MANUFACTURER	PART NO.
01	1	MAIN BREAKER 100A 2P	SQ.D	QO2100
02	5	BRANCH BREAKERS 35A 1POLE	SQ.D	QO135
11	1	BRANCH BREAKER 60A 1 POLE	SQ.D	QO160
03	1	SOLID NEUTRAL ASSEMBLY 100A MIN.	SQ.D	CH200SN
04	1	GROUND LUG FOR #6 COPPER WIRE		
05	1	GROUND LUG FOR #2/0 COPPER	T&B	ADR 25-21
06	1	SECONDARY LIGHTING ARRESTER	GE	9L15ECB001
07	1	DRIP SHIELD	B&M	CUSTOM

NOTES:

1. TYPE 3M NAMEPLATE SEE DETAIL BELOW.
2. PANEL IS SERVICE ENTRANCE READY.

(MANUFACTURER)
TYPE 3M
100 AMP 120/240 VOLT
(DATE OF MANUFACTURE)

NAMEPLATE SAMPLE

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

LS3M SUPPLY CONTROL CABINET ASSEMBLY TYPE 3M EQUIPMENT LIST

APPROVED

MANAGER OF ENGINEERING DATE

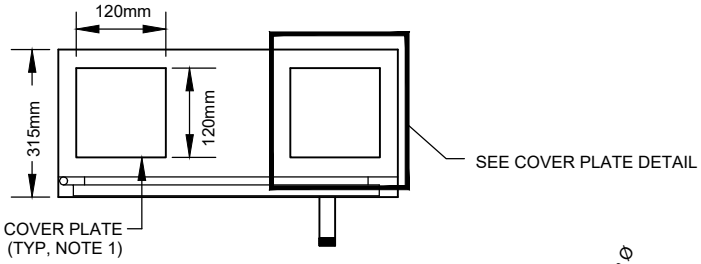
DIRECTOR OF OPERATIONS DATE

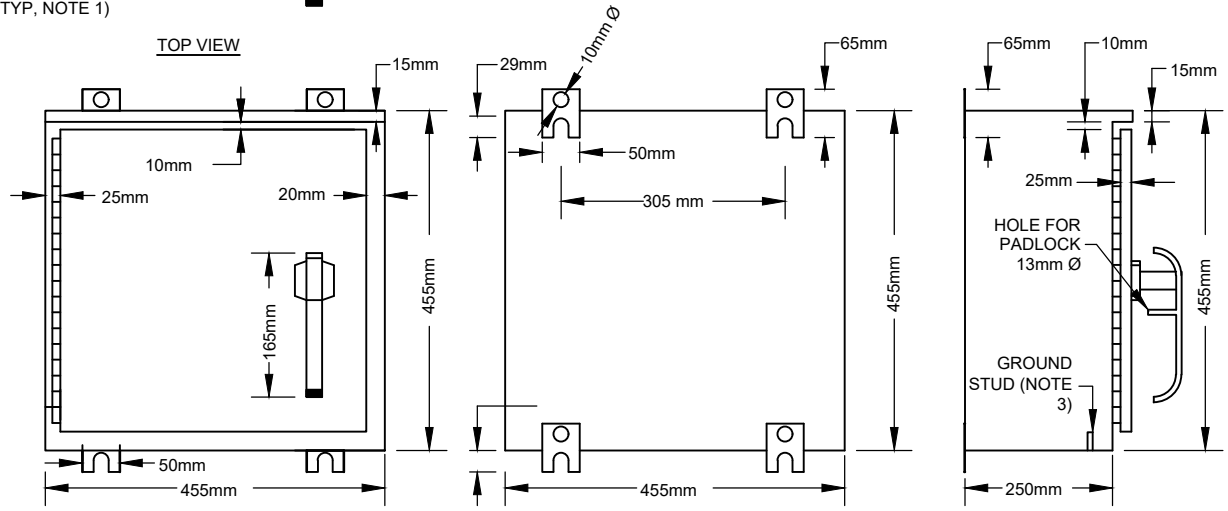
REVISION No.

DATE: MARCH 2020

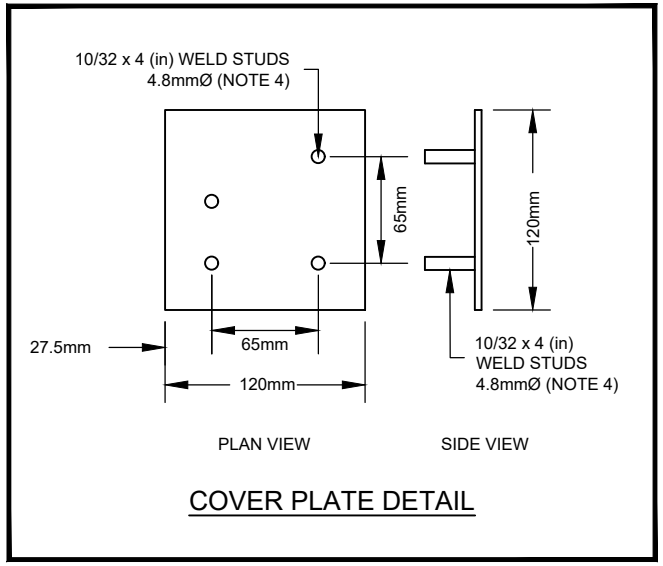
SCALE: N.T.S.

TSD-912

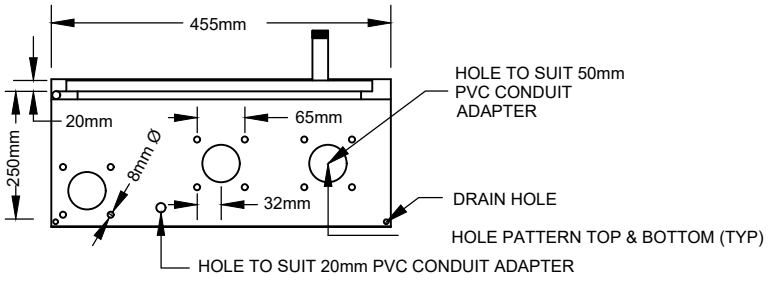




FRONT VIEW BACK VIEW SIDE VIEW



COVER PLATE DETAIL



BOTTOM VIEW

NOTES:

1. ALL PLATES SHALL BE THE SAME SIZE.
2. BOLT AND HOLE PATTERN TO SUIT METER HUB.
3. GROUND STUD SHALL BE COMPLETE WITH WASHERS AND NUTS.
4. COVER PLATE STUDS SHALL BE COMPLETE WITH WASHERS AND NUTS.
5. ALL DIMENSIONS ARE IN MILLIMETRES WITH TOLERANCES ±3mm UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

LS3M SUPPLY CONTROL CABINET ASSEMBLY TYPE 3M ENCLOSURE

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

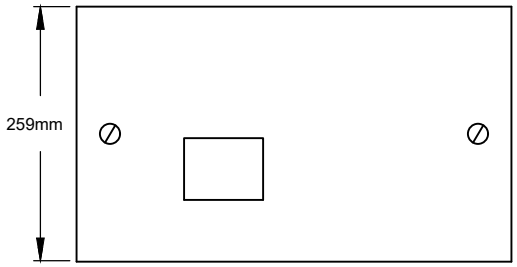
REVISION No.

DATE: MARCH 2020

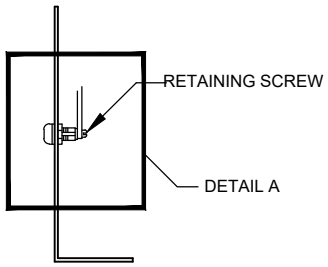
SCALE: N.T.S.

TSD-913

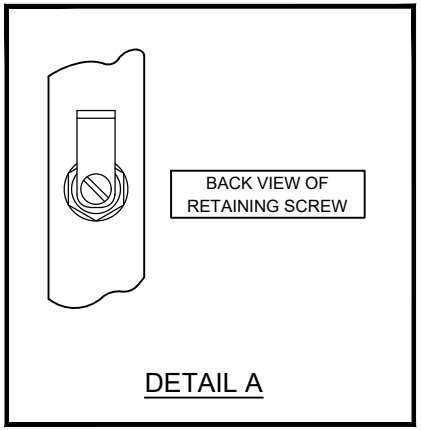
DEAD FRONT A



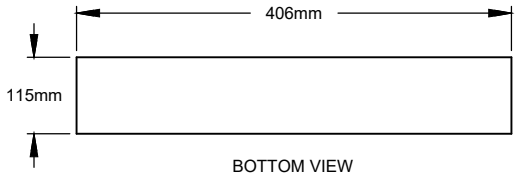
FRONT VIEW



SIDE VIEW

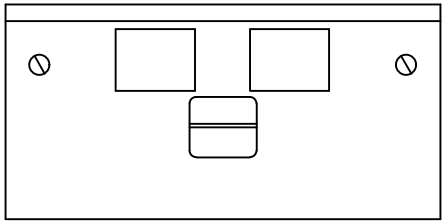


DETAIL A

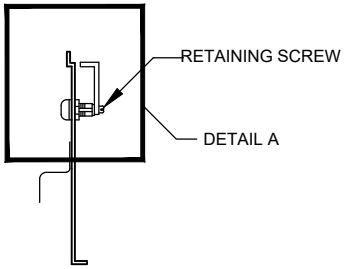


BOTTOM VIEW

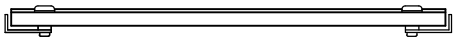
DEAD FRONT B



FRONT VIEW



SIDE VIEW



BOTTOM VIEW

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES WITH TOLERANCES ±3mm UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

LS3M SUPPLY CONTROL CABINET ASSEMBLY TYPE 3M DEAD FRONT PANEL

APPROVED

MANAGER OF ENGINEERING DATE

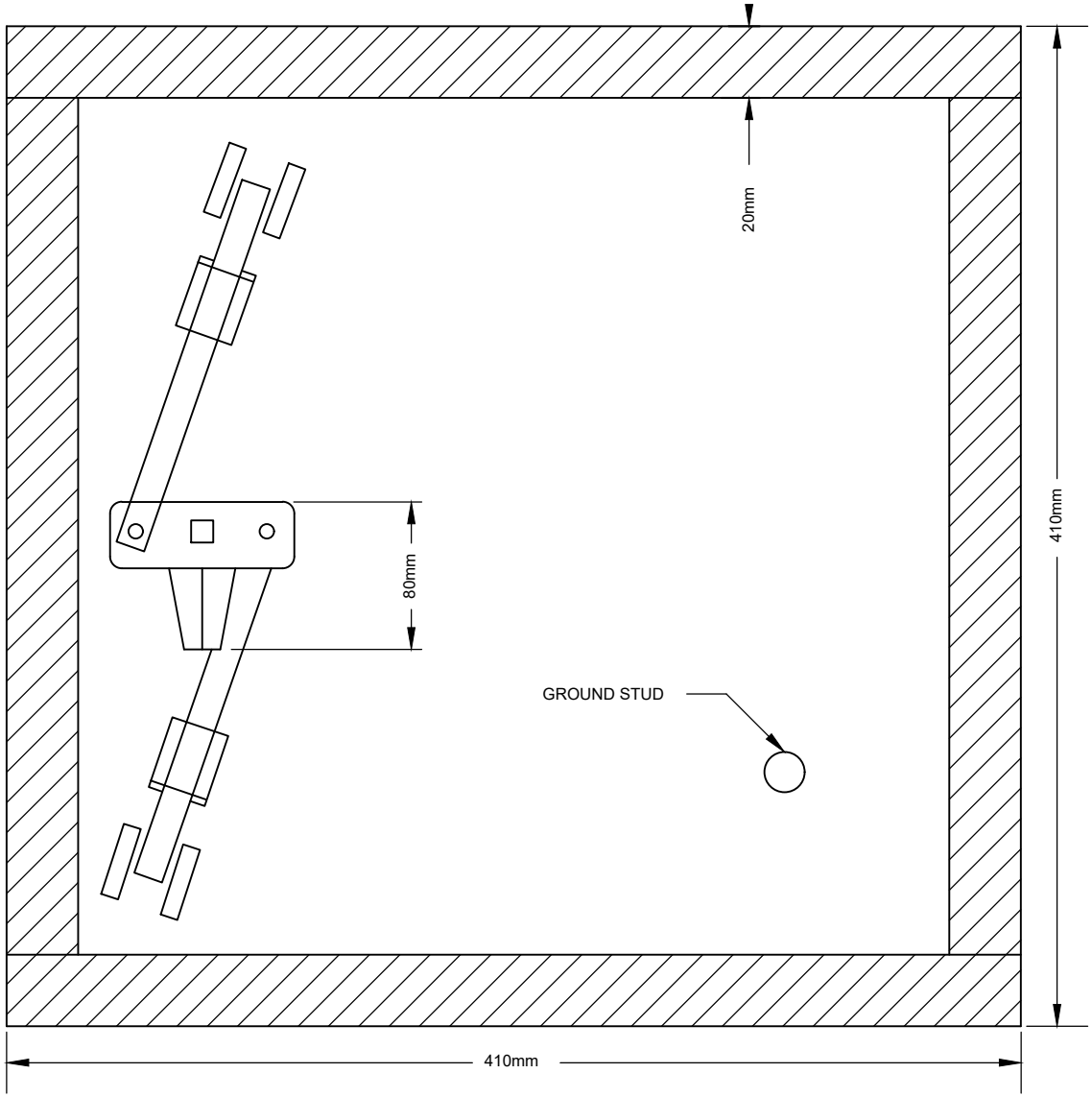
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-914



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES WITH TOLERANCES ±3mm UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

LS3M SUPPLY CONTROL CABINET ASSEMBLY TYPE 3M DEAD DOOR LATCH

APPROVED

MANAGER OF ENGINEERING DATE

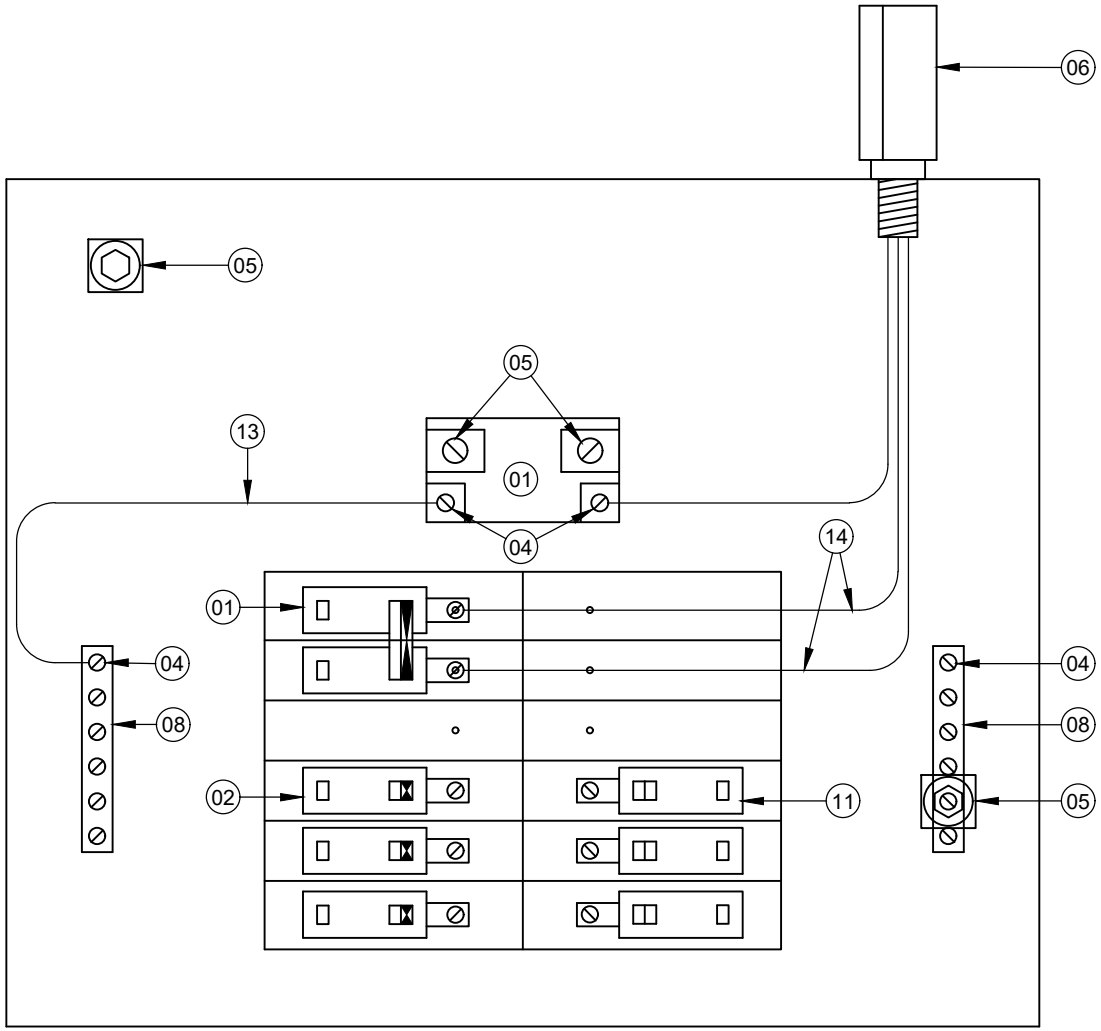
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-915



ELECTRICAL EQUIPMENT LIST

01	MAIN CIRCUIT BREAKER, 240V, 100A, 2-POLE.
02	BRANCH CIRCUIT BREAKERS, 120/240V, 35A, 1-POLE.
04	GROUND LUG FOR #6 AWG STRANDED COPPER GROUND WIRE.
05	GROUND LUG FOR #2/0 AWG STRANDED COPPER GROUND WIRE.
06	SECONDARY LIGHTNING ARRESTER, 650V, 2-POLE.
08	LOCATE SECONDARY NEUTRAL AND GROUND BARS ACCORDING TO CSA AND PROJECT REQUIREMENTS..
11	BRANCH BREAKER, 240V, 60A, 1 POLE.
13	#6 AWG RWU90 WIRE.
14	#12 AWG RWU90 WIRE.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

LS3M SUPPLY CONTROL CABINET ASSEMBLY TYPE 3M INSTRUMENT LAYOUT

APPROVED

MANAGER OF ENGINEERING DATE

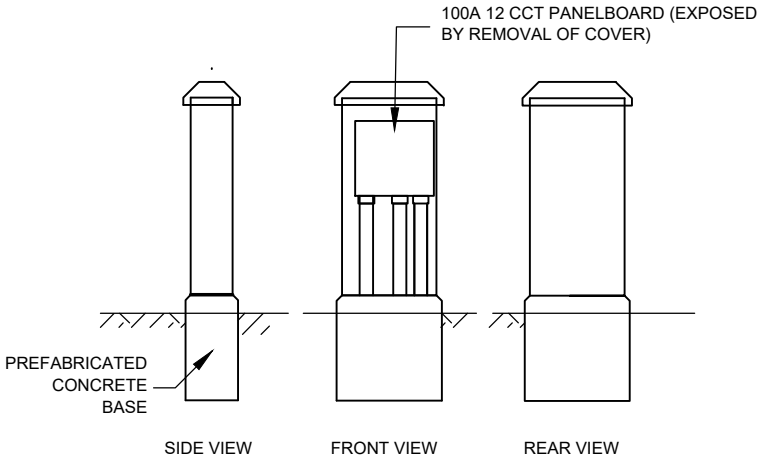
DIRECTOR OF OPERATIONS DATE

REVISION No.

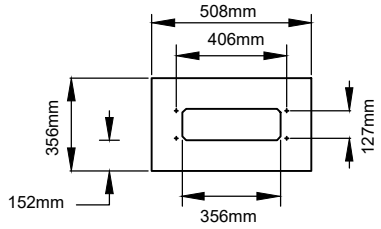
DATE: MARCH 2020

SCALE: N.T.S.

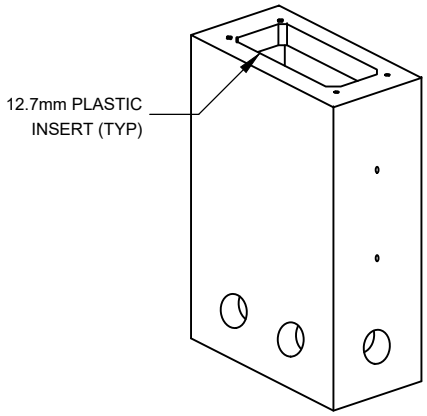
TSD-916



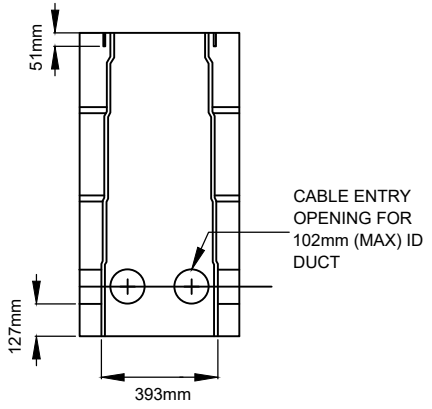
42" PEDESTAL



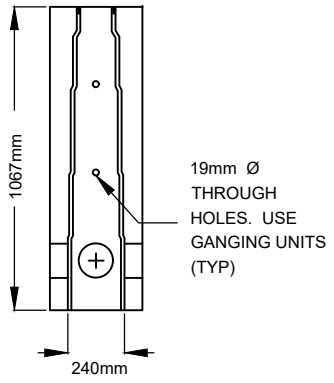
TOP VIEW



ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW

CONCRETE BASE

NOTES:

1. POWER SUPPLY PEDESTAL ASSEMBLY (PEDESTAL SOLUTIONS INC.) OR APPROVED EQUIVALENT.
2. PREFABRICATED CONCRETE BASE (BY BROOKLYN CONCRETE, MODEL BCP 20PED) OR APPROVED EQUIVALENT.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

POWER SUPPLY (42") PEDESTAL AND BASE ASSEMBLY

APPROVED

MANAGER OF ENGINEERING DATE

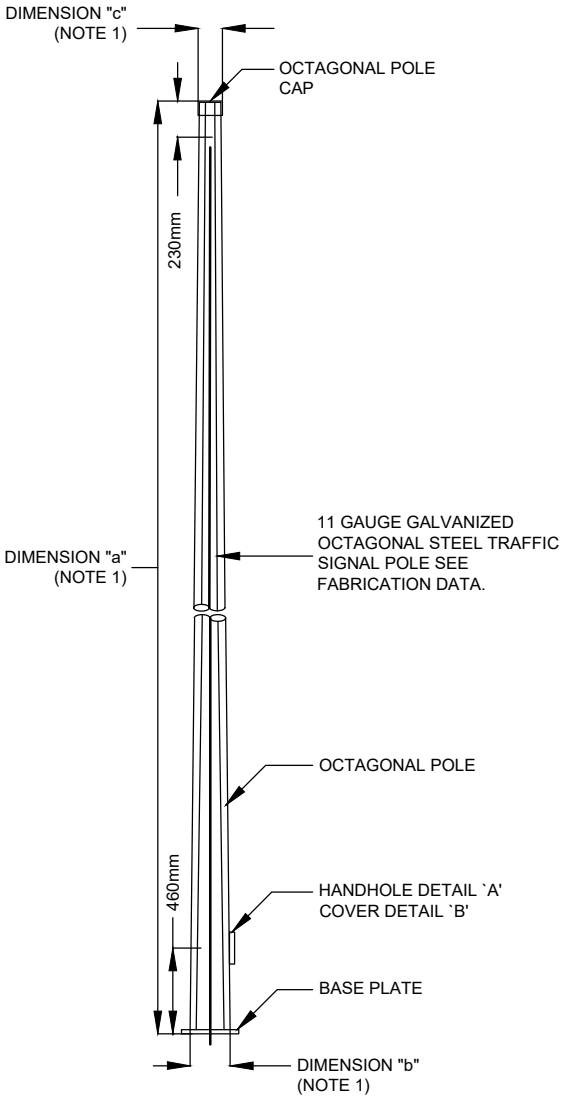
DIRECTOR OF OPERATIONS DATE

REVISION No.

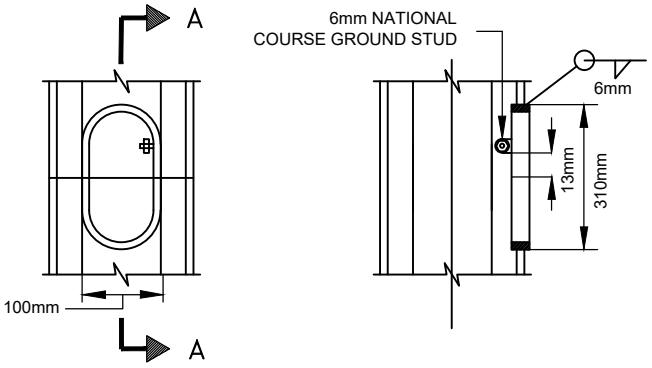
DATE: DEC 2021

SCALE: N.T.S.

TSD-917

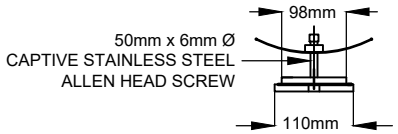


POLE

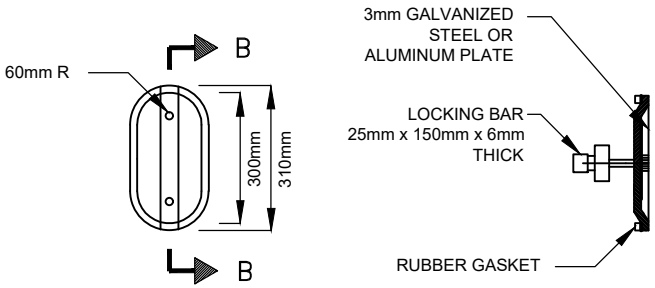


FRONT VIEW SECTION A-A

HAND HOLE DETAIL `A`



FABRICATION DATA			
POLE TYPE	POLE LENGTH "a" m	BOTTOM OUT. Ø "b" mm	TOP OUT. Ø "c" mm
PEDESTAL		206	206
8520	6.1	184	100
8524	7.3	184	100
8535	10.7	254	100
8545	13.7	254	100



FRONT VIEW SECTION B-B

HAND HOLE COVER DETAIL `B`

NOTES:

1. THE DIAMETER SHALL BE MEASURED ACROSS THE FLATS.
2. ALL DIMENSIONS ARE IN MILLIMETRES OR METRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

GALVANIZED OCTAGONAL STEEL POLE, BASE MOUNTED

APPROVED

MANAGER OF ENGINEERING DATE

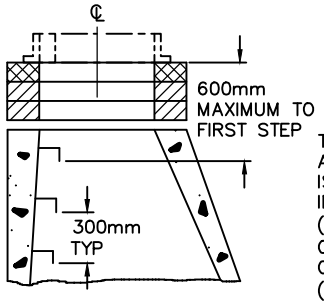
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-918



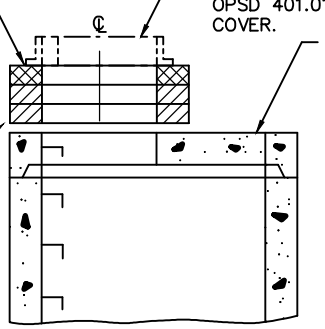
SECTION THROUGH
TAPER TOP

ALL JOINTS BETWEEN UNITS ARE TO BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND GUIDELINES WITH APPROPRIATE CAULKING.

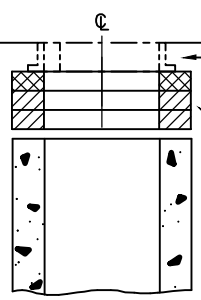
MANHOLE FRAMES AND GRATES FOR BOTH STORM AND SANITARY SHALL BE OPSD 401.01 – CLOSED COVER.

IF LESS THAN 1200mm COVER FROM PIPE OBVERT TO FINISHED ASPHALT GRADE USE SHALLOW MH WITH FLAT CAP.

THE FIRST ADJUSTMENT UNIT IS TO BE PLACED IN MORTAR (CONFORMING WITH OPS 407.05.06) OR CONCRETE (CONFORMING WITH OPS 407.05.01) (TYPICAL)



SECTION THROUGH
FLAT CAP

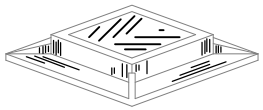


FINISHED ASPHALT GRADE

STANDARD FRAME AND GRATE

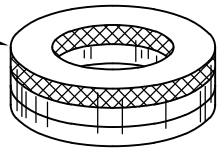
ADJUSTMENT UNITS: MINIMUM OF ONE, MAXIMUM OF THREE, MUST BE CERTIFIED TO MEET ALL PERTINENT OPS, CSA, ASTM AND MTO–DSM LIST, OR OTHER INDUSTRY GUIDELINES FOR MATERIALS, PERFORMANCE AND USE AS APPLICABLE.

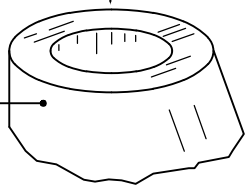
SECTION THROUGH
CATCH BASIN



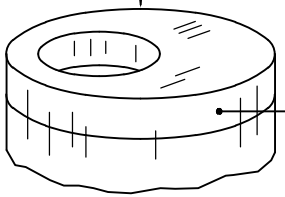
FRAME AND GRATE, OR COVER

ADJUSTMENT UNITS FOR MAINTENANCE HOLES WITH ROUND OPENINGS. AVAILABLE IN SECTIONS OR CONTINUOUS UNITS.

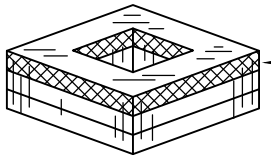




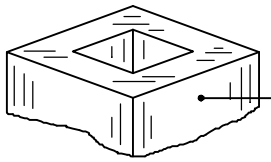
TAPER TOP



FLAT CAP



ADJUSTMENT UNITS FOR CATCH BASINS WITH SQUARE OPENINGS. AVAILABLE IN SECTIONS OR CONTINUOUS UNITS.



CATCH BASIN

NOTES:

1. ADJUSTMENT UNITS SHALL NOT EXTEND BEYOND THE OUTSIDE EDGE OF THE STRUCTURE.
2. NON–COMPRESSIBLE BACK FILL WILL BE USED DURING REBUILDING, ADJUSTING, OR ANY OTHER APPLICABLE CATCH BASIN OR MAINTENANCE HOLE WORKS. GRANULAR MATERIAL SHALL BE PLACED TO A MIN. WIDTH OF 300MM ALL AROUND IN 300mm MAX, LIFTS COMPACTED TO 95% STANDARD PROCTOR.
3. MAINTENANCE HOLE TOPS (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACED. ALL ADJUSTMENT WILL BE ACCORDANCE WITH BSD–N2.
4. IF A STEP IS REQUIRED IN AN ADJUSTMENT UNIT, THEN THE ADJUSTMENT UNIT SHALL BE OF THE TYPE MANUFACTURED WITH A STEP IN PLACE.
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
6. ADJUSTMENTS GREATER THAN 300mm REQUIRE INSTALLATION OF A CONTINUOUS UNIT.
7. PRECAST SECTIONS SHALL COMPLY WITH OPSD 701.030, 701.031, & 701.032.
8. TOP LADDER RUNGS SHALL BE 600mm OR LESS BELOW DESIGN PROFILE GRADE. STEPS ARE NOT PERMITTED IN THE ADJUSTMENT UNITS.
9. BENCHING ON END MANHOLES TO EXTEND TO FAR INSIDE WALL. BENCHING ON LATERAL INLETS SHALL BE 500mm C/L RADIUS.
10. MANHOLES EXCEEDING 5.0m IN DEPTH SHALL INCLUDE A SAFETY GRATE LANDING AS PER OPSD 404.020.
11. MANHOLES COVERRS SHALL BE SET ON GEOTEXTILE F.O.S 250 µm CL II OPSS 1860 UNTIL THE STREET IS PAVED.
12. MANHOLE BENCHING SHALL COMPLY WITH OPSD 701.021.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

MAINTENANCE HOLE AND CATCH BASIN ADJUSTMENT UNITS

APPROVED

MANAGER OF ENGINEERING DATE

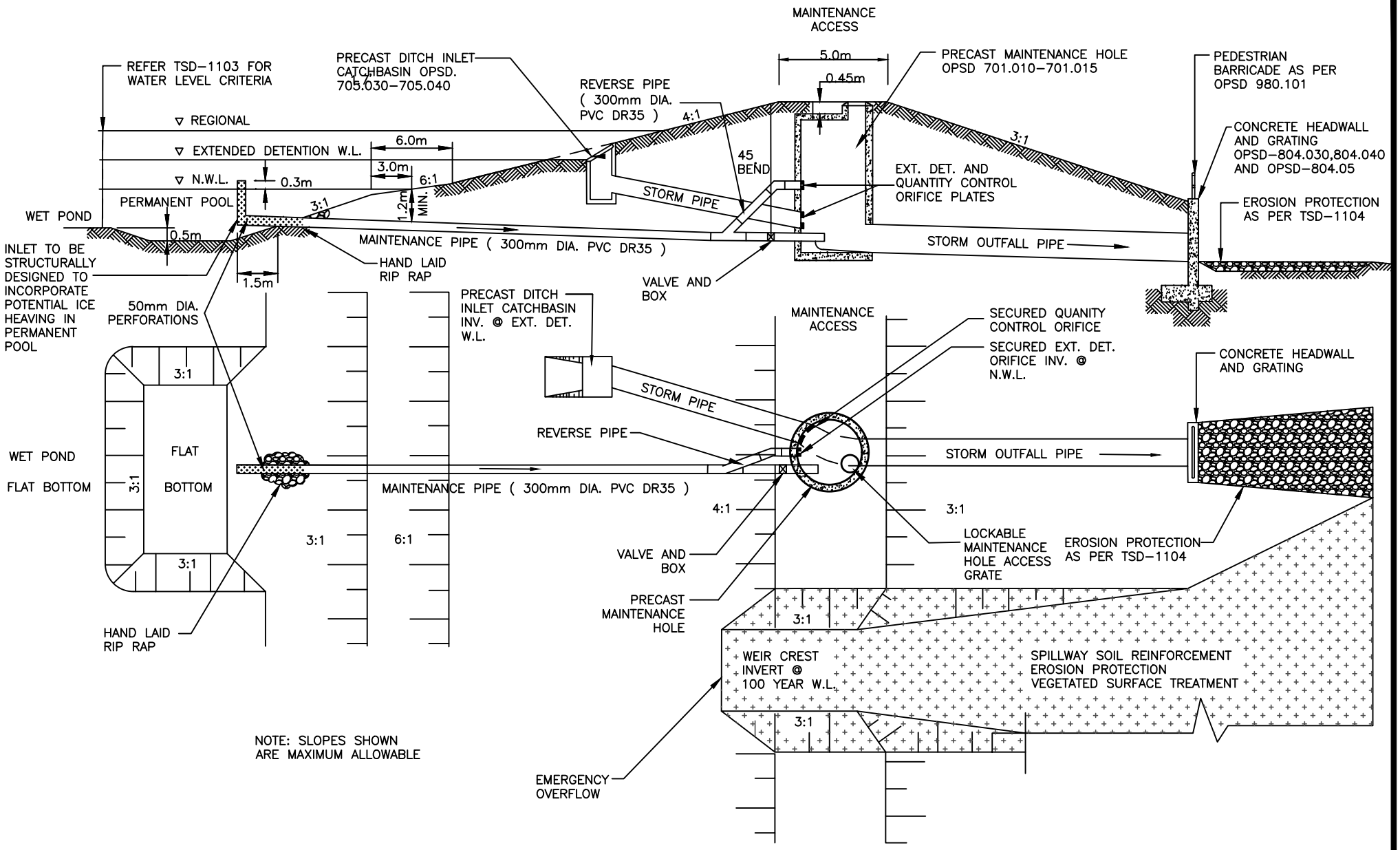
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-1010



Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

OUTLET STRUCTURE TYPICAL DETAIL WET POND FACILITY WITH MAINTENANCE PIPE

APPROVED

MANAGER OF ENGINEERING DATE

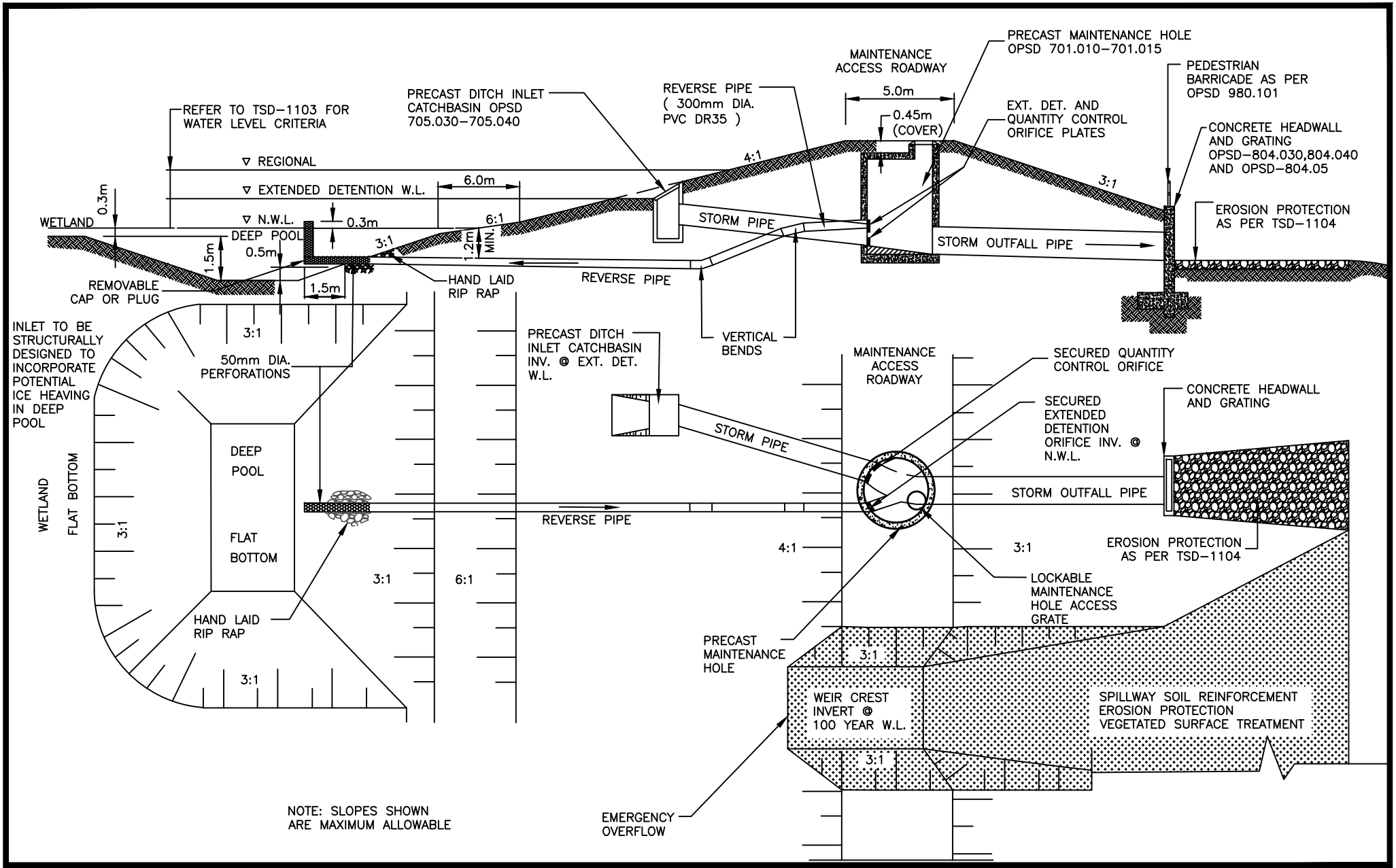
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-1100



Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

OUTLET STRUCTURE TYPICAL DETAIL WETLAND FACILITY WITHOUT MAINTENANCE PIPE

APPROVED

MANAGER OF ENGINEERING DATE

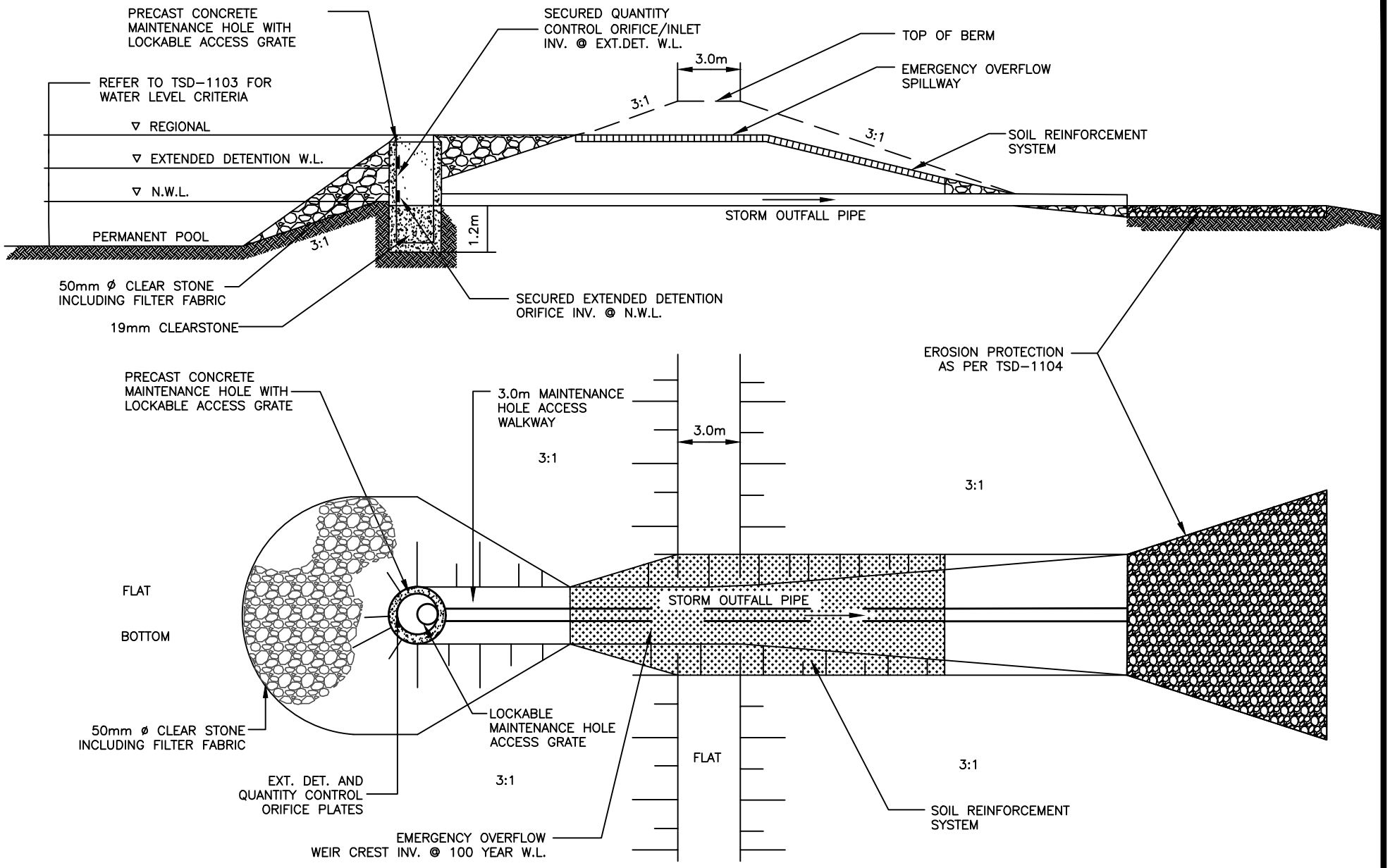
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-1101



Tillsonburg
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STANDARD DETAIL

TEMPORARY OUTLET STRUCTURE TYPICAL DETAIL

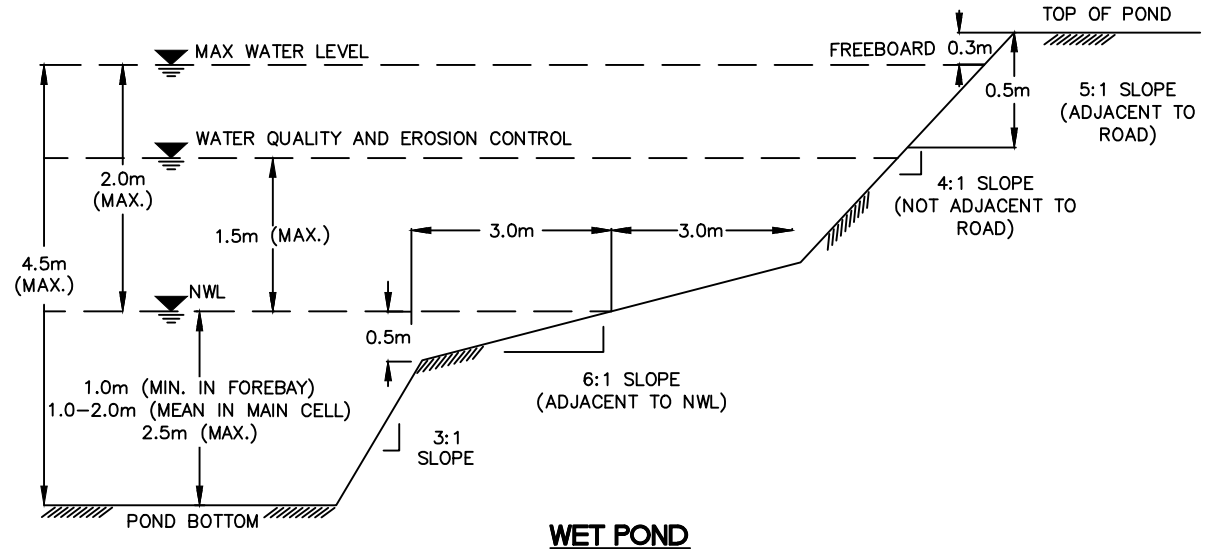
APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

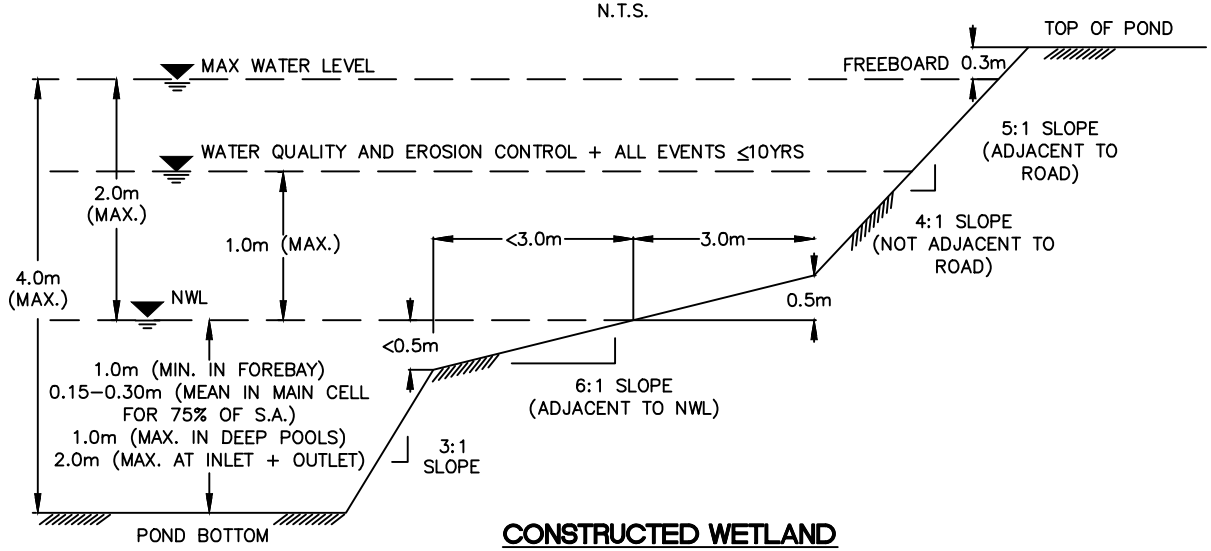
REVISION No.	DATE: FEB 2022
	SCALE: N.T.S.

TSD-1102



WET POND

N.T.S.



CONSTRUCTED WETLAND

NOTES:

FOR HYBRID WET POND / WETLAND FACILITIES, THE ABOVE NOTED CRITERIA FOR DEPTH AND SLOPE SHALL APPLY TO THE RESPECTIVE WET POND AND WETLAND COMPONENTS OF THE HYBRID FACILITY WITH THE FOLLOWING CLARIFICATION:

1. DEPTH FOR ACTIVE STORAGE SHALL NOT EXCEED THE CRITERIA FOR A WETLAND UNLESS A TERRACED OVERFLOW CONFIGURATION IS EMPLOYED.
2. THE MINIMUM LENGTH TO WIDTH RATIO FOR THE WET POND COMPONENT SHALL BE 2:1.

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STANDARD DETAIL

SWM FACILITY GRADING AND WATER LEVEL CRITERIA

APPROVED

MANAGER OF ENGINEERING DATE

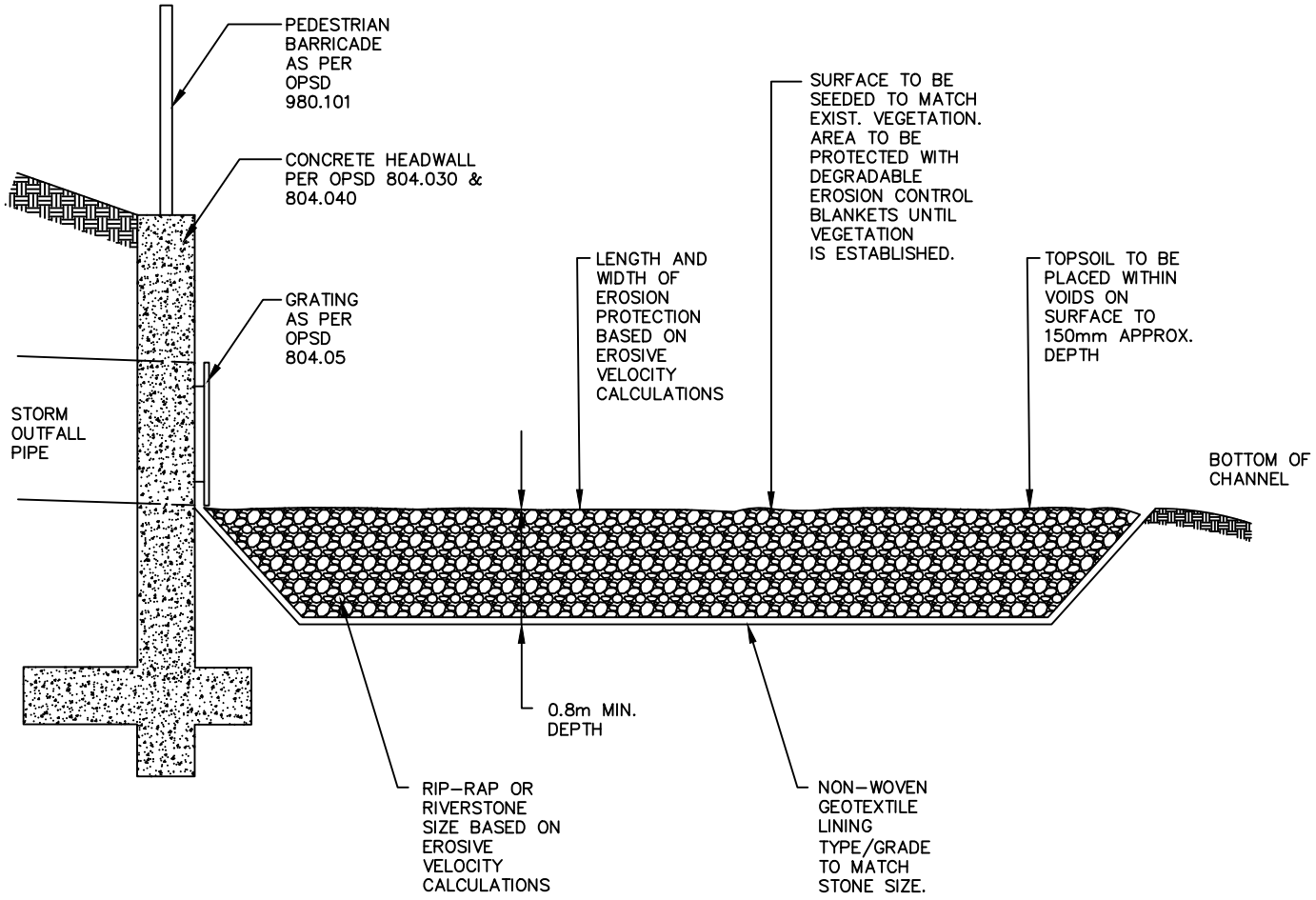
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-1103



Tillsonburg
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STANDARD DETAIL

OUTLET EROSION PROTECTION TYPICAL DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

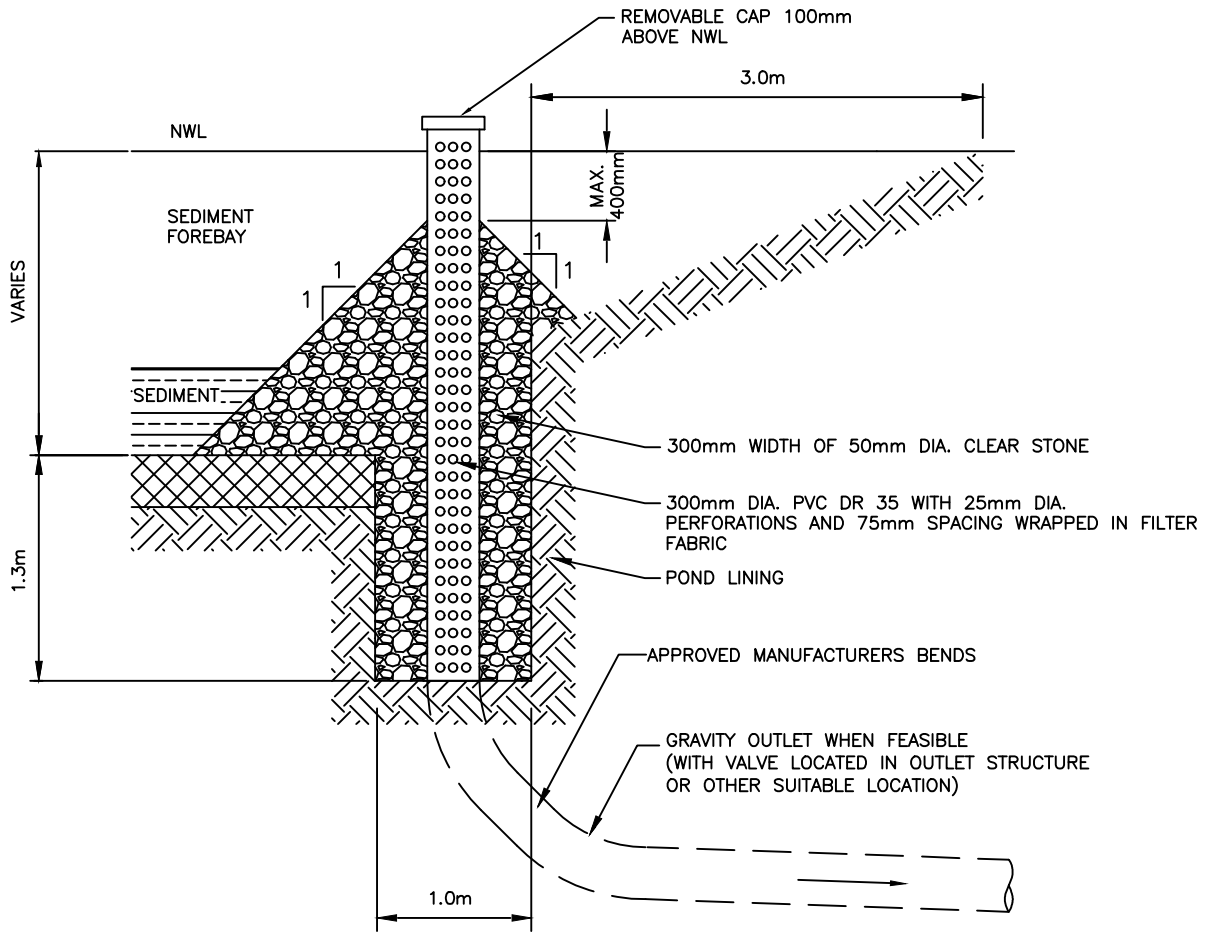
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-1104



Tillsonburg
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STANDARD DETAIL

FOREBAY HICKENBOTTOM DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

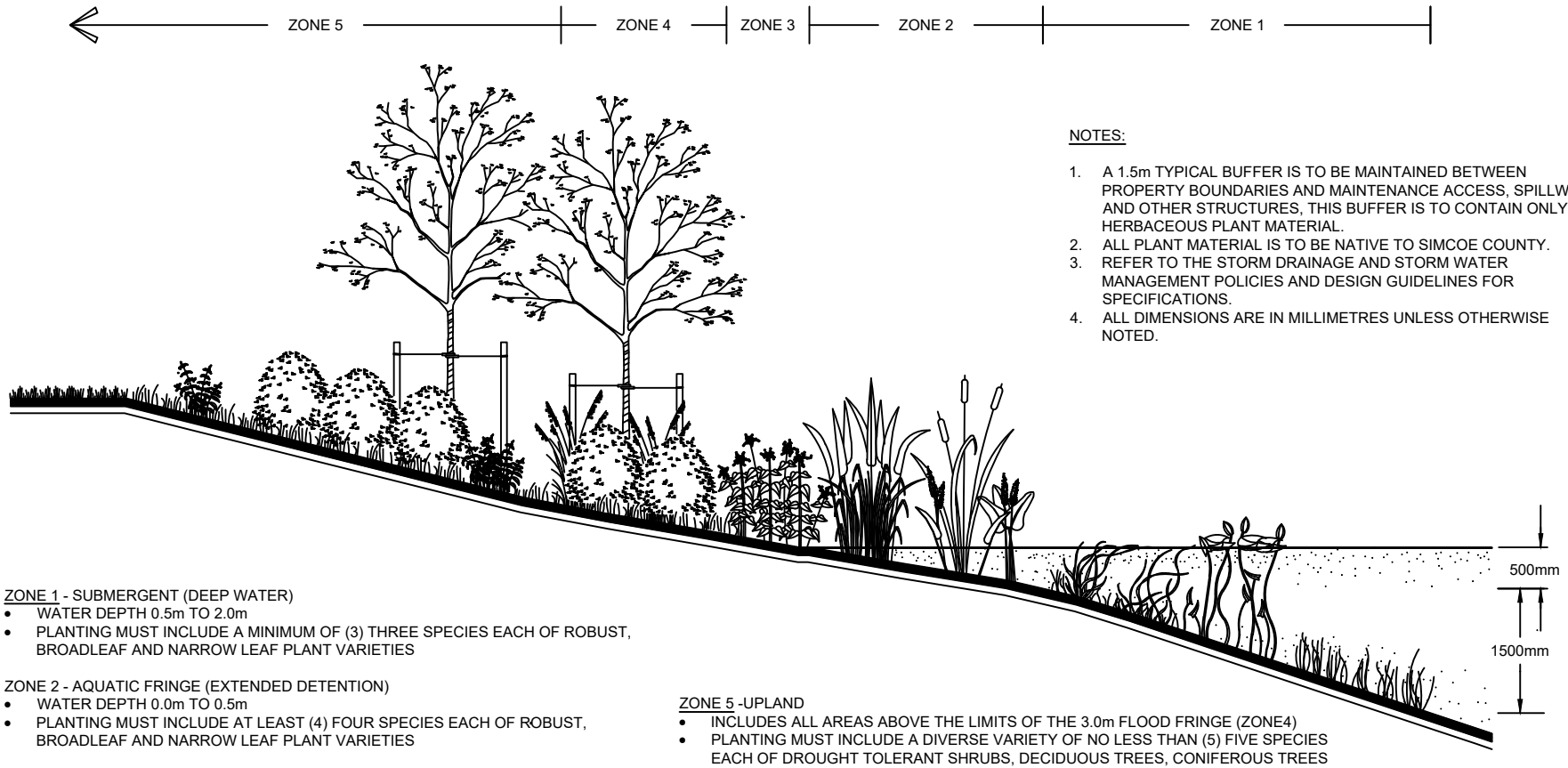
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-1105



NOTES:

1. A 1.5m TYPICAL BUFFER IS TO BE MAINTAINED BETWEEN PROPERTY BOUNDARIES AND MAINTENANCE ACCESS, SPILLWAYS AND OTHER STRUCTURES, THIS BUFFER IS TO CONTAIN ONLY HERBACEOUS PLANT MATERIAL.
2. ALL PLANT MATERIAL IS TO BE NATIVE TO SIMCOE COUNTY.
3. REFER TO THE STORM DRAINAGE AND STORM WATER MANAGEMENT POLICIES AND DESIGN GUIDELINES FOR SPECIFICATIONS.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

ZONE 1 - SUBMERGENT (DEEP WATER)
- WATER DEPTH 0.5m TO 2.0m
- PLANTING MUST INCLUDE A MINIMUM OF (3) THREE SPECIES EACH OF ROBUST, BROADLEAF AND NARROW LEAF PLANT VARIETIES

ZONE 2 - AQUATIC FRINGE (EXTENDED DETENTION)
- WATER DEPTH 0.0m TO 0.5m
- PLANTING MUST INCLUDE AT LEAST (4) FOUR SPECIES EACH OF ROBUST, BROADLEAF AND NARROW LEAF PLANT VARIETIES

ZONE 3 - SHORELINE FRINGE (EXTENDED DETENTION)
- 1.0m (HORIZONTAL) FROM THE PERMANENT POOL ELEVATION
- PLANTING ZONE TO CONTAIN WETLAND SPECIES AND MUST INCLUDE PERENNIAL SEDGES, RUSHES AND WILD FLOWERS IN COMBINATION WITH SHRUBS AND WETLAND SEED MIX

ZONE 4 - FLOOD FRINGE
- 2.0m (HORIZONTAL) FROM LIMIT OF SHORELINE FRINGE LIMIT OR TO THE 100 YEAR FLOOD LEVEL (WHICHEVER IS GREATER)
- PLANTING MUST INCLUDE A DIVERSE VARIETY OF NO LESS THAN (4) FOUR TOLERANT SPECIES EACH OF SHRUBS, DECIDUOUS TREES, CONIFEROUS TREES AND AN UPLAND SEED MIX

ZONE 5 -UPLAND
- INCLUDES ALL AREAS ABOVE THE LIMITS OF THE 3.0m FLOOD FRINGE (ZONE4)
- PLANTING MUST INCLUDE A DIVERSE VARIETY OF NO LESS THAN (5) FIVE SPECIES EACH OF DROUGHT TOLERANT SHRUBS, DECIDUOUS TREES, CONIFEROUS TREES AND AN UPLAND SEED MIX

Tillsonburg
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STANDARD DETAIL

STORMWATER PLANTING ZONE COMPOSITION

APPROVED

MANAGER OF ENGINEERING DATE

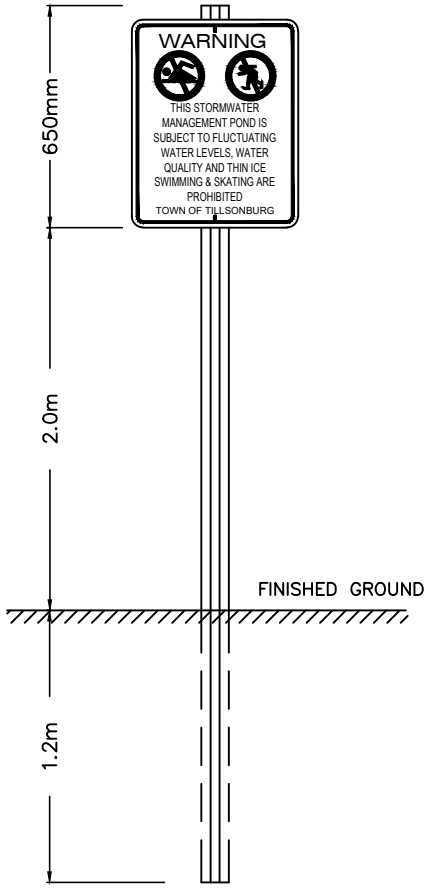
DIRECTOR OF OPERATIONS DATE

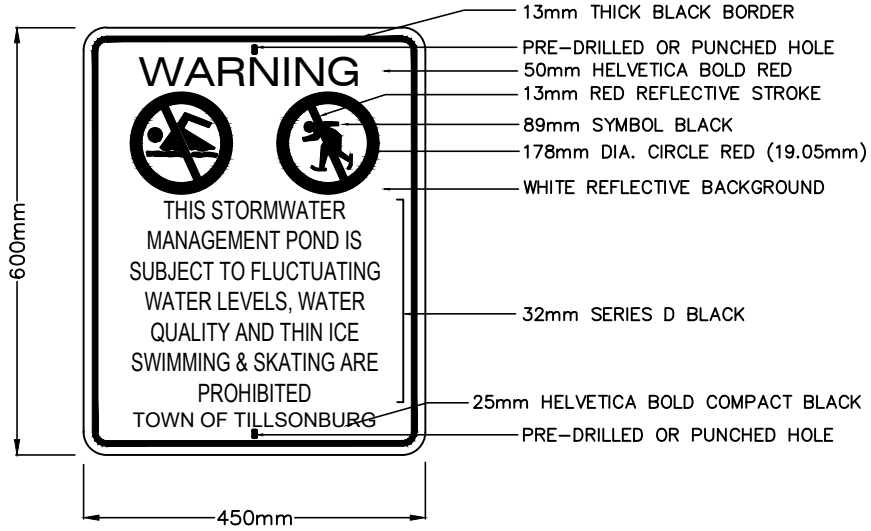
REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-1106





SIGN REQUIREMENTS
SIGN(S) MUST BE PLACED AT ALL POND ENTRANCES.

SIGNAGE FACE
SIGN(S) TO BE MANUFACTURED USING REFLECTIVE FINISH (ENGINEER GRADE) 3.2mm THICK ALUMINUM PANEL (50mm RADIUS CORNERS), WITH TOP AND BOTTOM MOUNT HOLES.

MOUNTING
SIGN(S) TO BE MOUNTED TO 3.85m U-CHANNEL GALVANIZED STEEL POST.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

STORMWATER MANAGEMENT POND WARNING SIGN

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

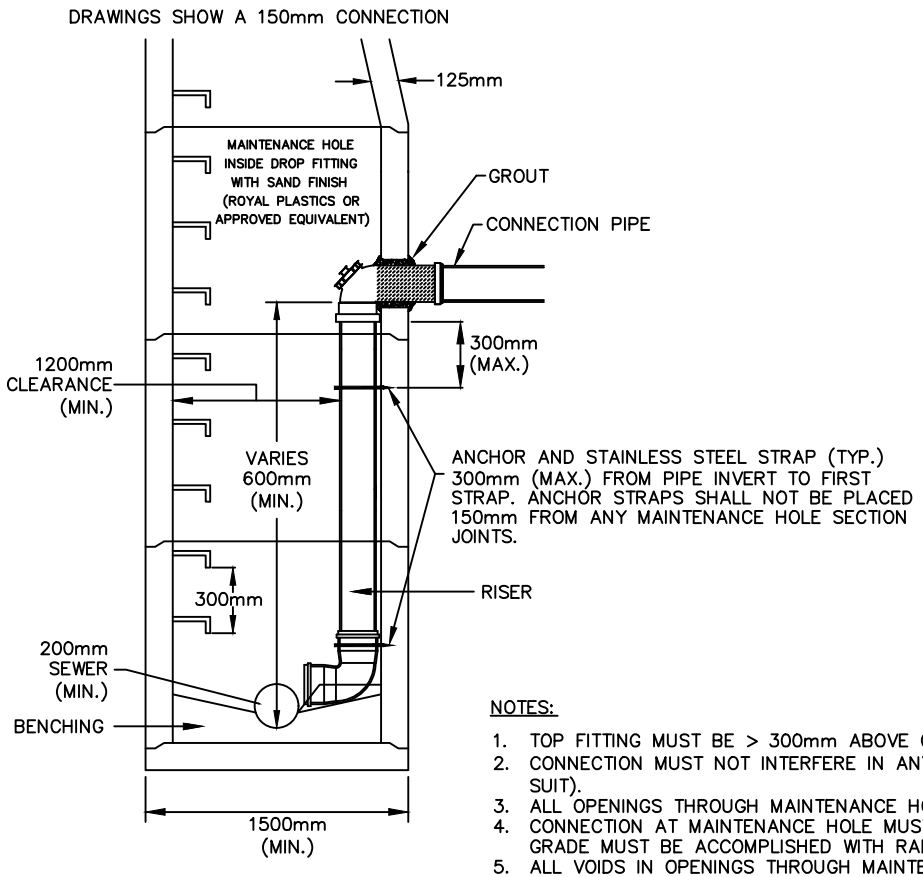
REVISION No.

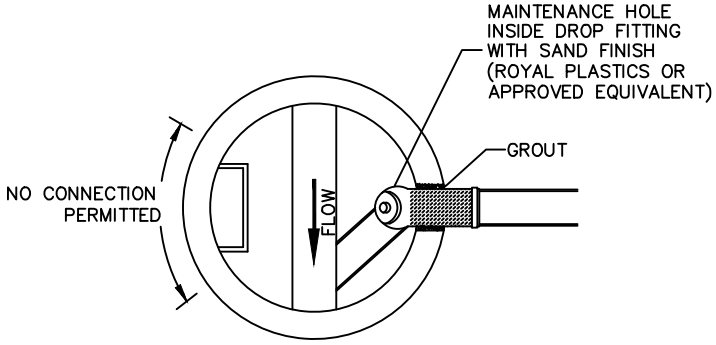
DATE: DEC 2021

SCALE: N.T.S.

TSD-1110

AS SPECIFIED FOR CONVENTIONAL SEWER CONNECTIONS, OWNERS ARE RESPONSIBLE FOR MAINTENANCE OF THE CONNECTION FROM THE SEWER TO THE BUILDING. THIS INCLUDES ALL FITTINGS AND PIPE FROM THE MAINTENANCE HOLE BENCHING TO THE BUILDING.





1. INTERNAL DROP STRUCTURE SYSTEMS SHALL CONFORM TO APPLICABLE OXFORD COUNTY SPECIFICATIONS AND OPSD 1003.031.
2. INTERNAL DROP STRUCTURES SHALL BE USED IN MAINTENANCE HOLES 1500mm AND LARGER WHERE A MINIMUM HEIGHT OF 600mm FROM INLET PIPE INVERT TO THE BOTTOM OF THE CHANNEL EXISTS.
3. SERVICE CONNECTIONS ARE TO BE MADE TO SEWERS AS PER TOWN AND COUNTY POLICIES, UNLESS OTHERWISE APPROVED BY THE MANAGER OF ENGINEERING.
4. ALL APPLICATIONS FOR INSIDE DROP SERVICE CONNECTIONS TO MAINTENANCE HOLES MUST BE ACCOMPANIED BY A PLAN AND PROFILE DRAWING (TO SCALE) SHOWING THE PROPOSED CONNECTION ALIGNMENT, SEWER MAIN, LADDER, SAFETY GRATES AND ANY OTHER CONNECTIONS TO THE MAINTENANCE HOLE. (PROFILE MUST SHOW ENTIRE MAINTENANCE HOLE INCLUDING FRAME).

NOTES:

1. TOP FITTING MUST BE > 300mm ABOVE OR BELOW SAFETY GRATES.
2. CONNECTION MUST NOT INTERFERE IN ANY WAY WITH ACCESS, LADDERS NOR SAFETY GRATE USE OR OPERATION (SAFETY GRATE ADJUSTED TO SUIT).
3. ALL OPENINGS THROUGH MAINTENANCE HOLE WALLS MUST BE CORE DRILLED.
4. CONNECTION AT MAINTENANCE HOLE MUST BE < 4% GRADE, AND WITHIN 30° TO PERPENDICULAR. ANY ADJUSTMENTS TO CONNECTION DIRECTION OR GRADE MUST BE ACCOMPLISHED WITH RADIUS BEND FITTINGS PER OPS.
5. ALL VOIDS IN OPENINGS THROUGH MAINTENANCE HOLE WALLS MUST BE GROUTED WITH OPS APPROVED NON-SHRINK MORTAR.
6. ALL FITTINGS AND RISER PIPES WILL BE SECURED TO THE MAINTENANCE HOLE WALL WITH STAINLESS STRAPPING AND 1" SCREWS; MINIMUM 1 (ONE) STRAP PER SECTION OF RISER PIPE OR FITTING.
7. BENCHING MUST DIRECT FLOW WITH SEWER MAIN FLOW AND BE TO SPRING-LINE OF BOTTOM FITTING.
8. DROP PIPES SHALL BE ONE SIZE SMALLER THAN THE INCOMING SEWER WITH A MINIMUM OF 150mm DIAMETER AND A MAXIMUM OF 375mm DIAMETER.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

PVC INSIDE DROP SEWER SERVICE CONNECTION

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

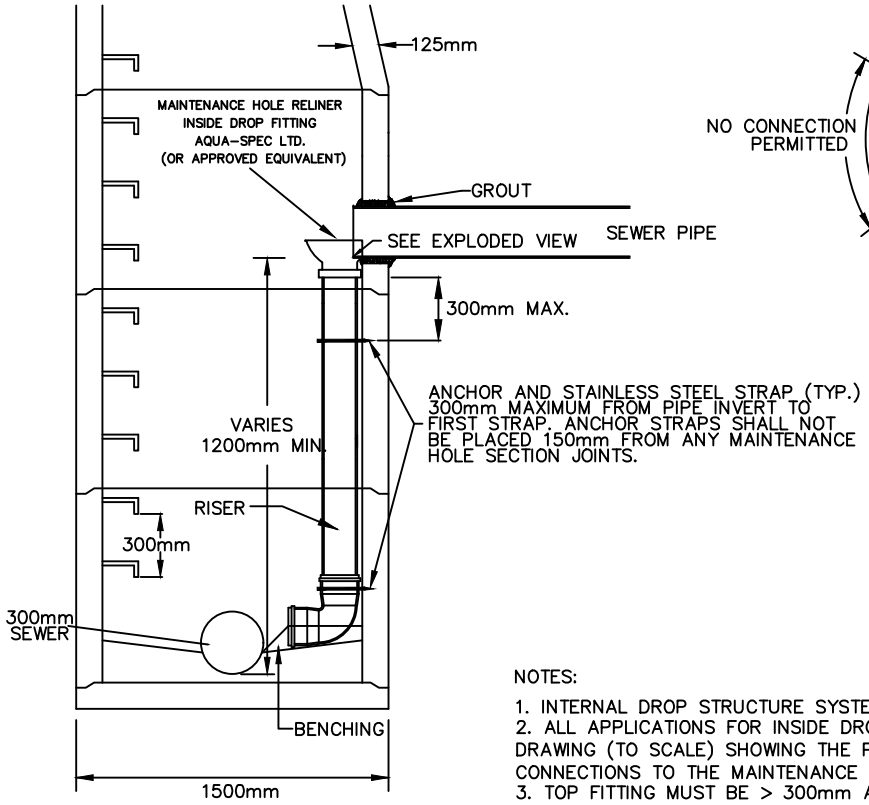
REVISION No.

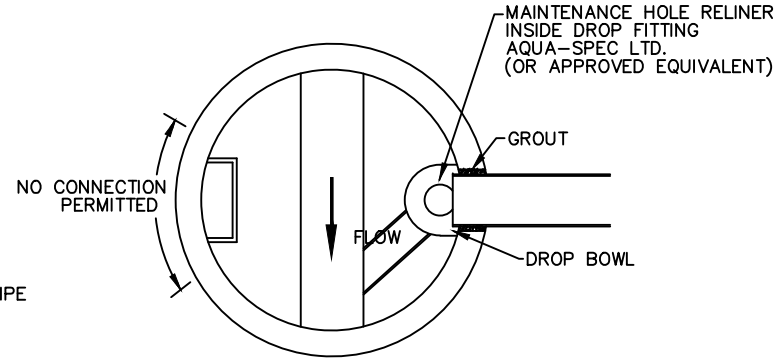
DATE: DEC 2021

SCALE: N.T.S.

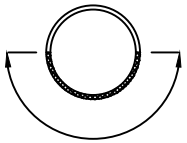
TSD-1200

DRAWINGS SHOW A 250mm SEWER





EXPLODED VIEW OF CUT END
OF SEWER LATERAL



ROUND OFF EDGE OF INCOMING
SEWER LATERAL ON INVERT OF PIPE

NOTES:

1. INTERNAL DROP STRUCTURE SYSTEMS SHALL CONFORM TO APPLICABLE OXFORD COUNTY SPECIFICATIONS AND OPSD 1003.031.
2. ALL APPLICATIONS FOR INSIDE DROP SEWER CONNECTIONS TO MAINTENANCE HOLES MUST BE ACCOMPANIED BY A PLAN AND PROFILE DRAWING (TO SCALE) SHOWING THE PROPOSED CONNECTION ALIGNMENT, SEWER MAIN, LADDER, SAFETY GRATES AND ANY OTHER CONNECTIONS TO THE MAINTENANCE HOLE. (PROFILE MUST SHOW ENTIRE MAINTENANCE HOLE INCLUDING FRAME).
3. TOP FITTING MUST BE > 300mm ABOVE OR BELOW SAFETY GRATES.
4. CONNECTION MUST NOT INTERFERE IN ANY WAY WITH ACCESS, LADDERS NOR SAFETY GRATE USE OR OPERATION. (SAFETY GRATE ADJUSTED TO SUIT)
5. ALL OPENINGS THROUGH MAINTENANCE HOLE WALLS MUST BE CORE DRILLED.
6. CONNECTION AT MAINTENANCE HOLE MUST BE < 4% GRADE, AND TO BE PERPENDICULAR TO THE WALL OF THE MAINTENANCE HOLE.
7. ALL VOIDS IN OPENINGS THROUGH MAINTENANCE HOLE WALLS MUST BE GROUTED WITH APPROVED NON-SHRINK MORTAR, PER OPS.
8. ALL FITTINGS AND RISER PIPES WILL BE SECURED TO THE MAINTENANCE HOLE WALL WITH STAINLESS STRAPPING AND 1" SCREWS; MINIMUM 1 (ONE) STRAP PER SECTION OF RISER PIPE OR FITTING.
9. BENCHING MUST DIRECT FLOW WITH SEWER MAIN FLOW AND BE TO SPRING-LINE OF BOTTOM FITTING.
10. DROP PIPE TO BE ONE SIZE SMALLER THAN INCOMING SEWER WITH A MINIMUM OF 150mm DIA. AND MAX. OF 375mm DIA.
11. INTERNAL DROP STRUCTURE TO BE USED ON MAINTENANCE HOLES 1500mm DIA. AND LARGER ONLY.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

PVC INSIDE DROP SEWER MAINTENANCE HOLE

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-1201

GENERAL NOTES - WATERMAIN

1. CONTRACTORS SHALL INFORM THE TOWN OF TILLSONBURG WATER/ WATSEWATER DEPARTMENT A MINIMUM OF 72 HOURS IN ADVANCE OF THEIR INTENTIONS TO PERFORM WORK ON WATER INFRASTRUCTURE.

2. OPERATION OF HYDRANTS AND VALVES ON THE POTABLE WATER SYSTEM BY OTHER THAN QUALIFIED WATER OPERATIONS STAFF IS PROHIBITED BY CURRENT BY-LAW. TOWN SERVICE FEES ARE PER THE CURRENT FEES BY-LAW. THE TOWN'S WATER OPERATIONS STAFF IS TO BE PRESENT DURING THE SWABBING, PRESSURE TESTING, CHLORINATION AND FLUSHING OF ALL NEW WATERMAINS.

3. MINIMUM COVER OVER WATERMAIN SHALL BE 1.8m. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS SHALL BE 3.0m. WHERE WATERMAIN CONFLICTS WITH SEWER PIPES, DEFLECT WATERMAIN HORIZONTALLY OR VERTICALLY WHILE PROVIDING A MINIMUM OF 0.5m CLEARANCE BETWEEN WATERMAIN AND SEWERS. MAINTAIN MINIMUM DEPTH OF COVER AT ALL TIMES.

4. WATERMAIN SHALL BE INSTALLED IN BEDDING AS PER OPSD 802.010 (GRANULAR 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD 802.030 OR 802.031 CLASS 'B' (GRANULAR 'A' BEDDING MATERIAL, GRANULAR 'A' OR SELECT NATIVE COVER MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY TOWN ENGINEERING. ALTERNATIVE EMBEDMENT MATERIAL - SAND MEETING GRADATION REQUIREMENTS OF OPSS.MUNI 1004.05.07 COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY IS PERMISSIBLE WHERE NOTED IN STANDARD DETAILS. GEOTECHNICAL CERTIFICATION OF MATERIAL AND COMPACTION TESTING MUST BE PROVIDED EVERY 150 METRES. THE COMPACTION TESTING MUST INCLUDE THE ENTIRE EMBEDMENT ENVELOPE (HAUNCHES, BEDDING, TOP OF PIPE AND COVER).

5. COPPER WATERMAINS AND SERVICES 25mm TO 50mm IN DIAMETER SHALL BE EMBEDDED IN SAND 100mm ABOVE AND BELOW TO CONFORM TO OPSS.MUNI 1004.05.07. COPPER WATERMAINS ARE NOT PERMITTED IN NEW CONSTRUCTION AS PER OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.

6. MECHANICAL RESTRAINTS WILL BE REQUIRED ON ALL HYDRANTS. THRUST BLOCKS, AS PER OPSD 1103.010 AND 1103.020 MAY BE REQUIRED IN ADDITION TO STANDARD MECHANICAL RESTRAINTS WHERE SOIL CONDITIONS WARRANT AT THE TOWN'S DISCRETION.

7. NEW WATERMAINS TO BE PVC DR18 CL235 MINIMUM; DUCTILE IRON CEMENT MORTAR LINED CL52 AS PER THE OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.

8. TRACING WIRE SHALL BE #12 AWG HIGH STRENGTH COPPER CLAD (HS-CSS) AND SHALL BE INSTALLED ON THE TOTAL LENGTH OF ALL WATERMAIN AND BROUGHT UP AT EACH HYDRANT AND CONNECTED TO FLANGE BOLT. ALL SPLICES TO UTILIZE CONNECTORS AS PER OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS.

9. ALL WATER SERVICES SHALL BE 25mm CROSS-LINKED POLYETHYLENE OR 25mm HIGH DENSITY POLYETHYLENE (HDPE) UNLESS OTHERWISE APPROVED BY THE TOWN ENGINEERING DEPARTMENT. WATER SERVICE SADDLES SHALL BE USED WHEN TAPPING INTO PVC WATERMAIN.

10. SERVICE TAPPINGS SHALL BE PLACED AT A MINIMUM SEPARATION OF 1.0m AND A MINIMUM OF 0.6m FROM JOINTS. (ENDS OF PIPE)

11. RISER PIPES ARE TO BE INSTALLED AS PER TSD-1340, AND REMOVED AS DIRECTED. SWABBING SCHEDULE TO BE SUPPLIED BY A WATER OPERATIONS FIELD REPRESENTATIVE. ALL RISERS ARE TO BE RESTRAINED OR THRUST BLOCKED.

12. ALL NEW CURB STOPS AND BOXES TO BE LOCATED AT PROPERTY LINE.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

GENERAL NOTES WATERMAIN

APPROVED

MANAGER OF ENGINEERING DATE

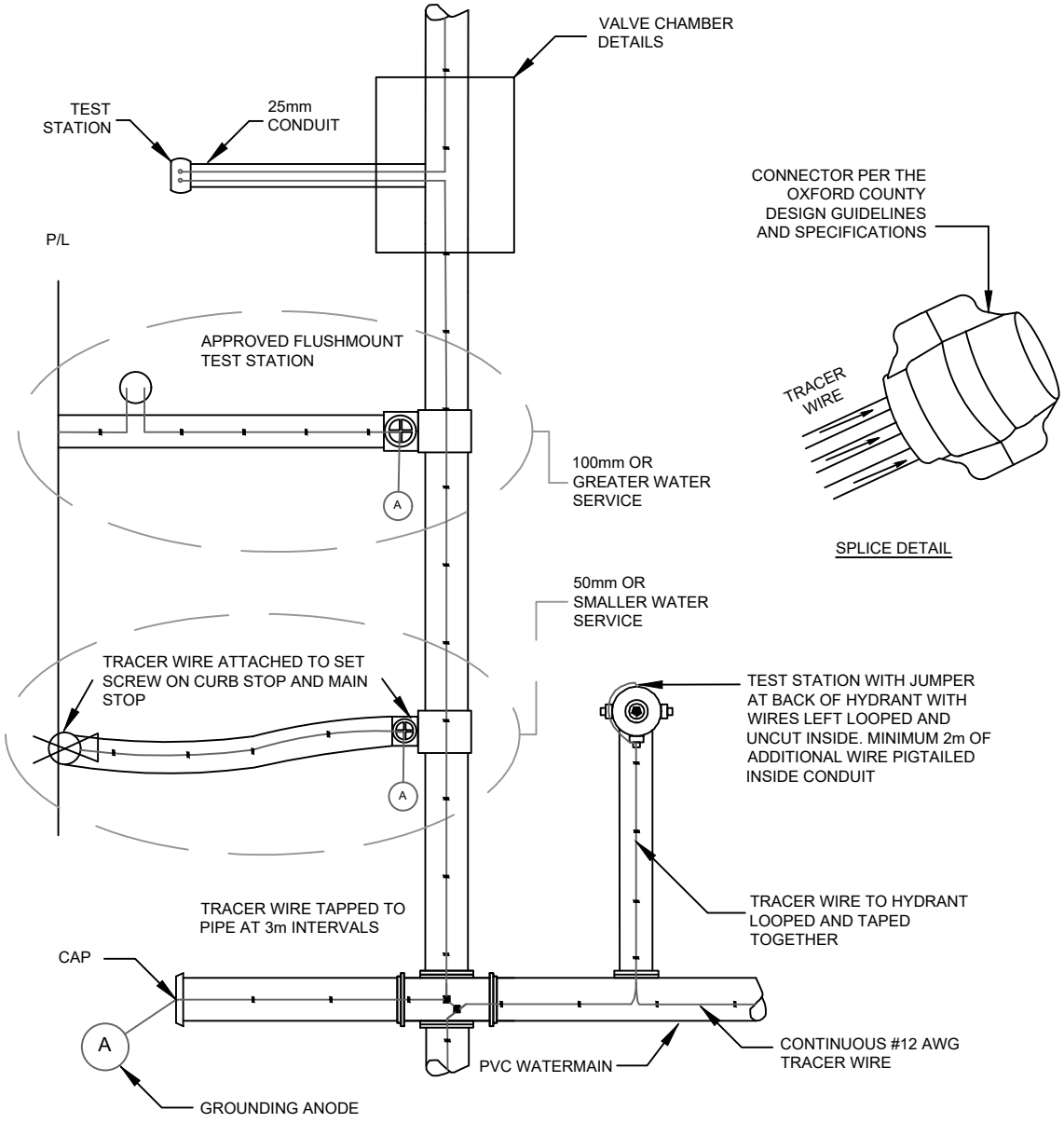
DIRECTOR OF OPERATIONS DATE

REVISION No.

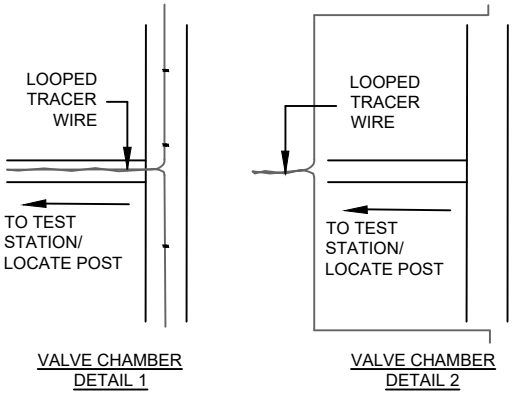
DATE: MARCH 2020

SCALE: N.T.S.

TSD-1300



SPLICE DETAIL



VALVE CHAMBER DETAIL 1 | VALVE CHAMBER DETAIL 2

DETAIL NOTES:

1. TRACER WIRE IS NOT PERMITTED TO TERMINATE INSIDE OF A CHAMBER.
2. TRACER WIRE IS NOT PERMITTED TO RUN ON TOP OF A CHAMBER.
3. TRACER WIRE MAY RUN THROUGH A CHAMBER AT DEPTH OF THE WATERMAIN UNTIL DIRECTLY UNDER A LOCATE POST THEN BE BROUGHT UP INTO THE LOCATE POST (DETAIL 1). ALTERNATIVELY, TRACER WIRE MAY RUN AROUND THE OUTSIDE OF THE CHAMBER AT THE DEPTH OF THE WATERMAIN UNTIL DIRECTLY UNDER A LOCATE POST THEN BE BROUGHT UP INTO THE LOCATE POST (DETAIL 2).

NOTES:

1. TRACER WIRE TO BE INSTALLED AS PER TOWN OF TILLSONBURG AND OXFORD COUNTY DESIGN STANDARDS.
2. HYDRANT TEST STATION CONDUIT SHALL BE A MINIMUM OF 25mm INSTALLED TO A DEPTH OF 600mm BELOW GRADE.
3. ALL CONNECTIONS MUST BE WATERPROOFED.
4. SPLICING OF TRACER WIRE IS NOT ALLOWED UNLESS SPECIFIED OR APPROVED.

Tillsonburg
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STANDARD DETAIL

TRACER WIRE DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

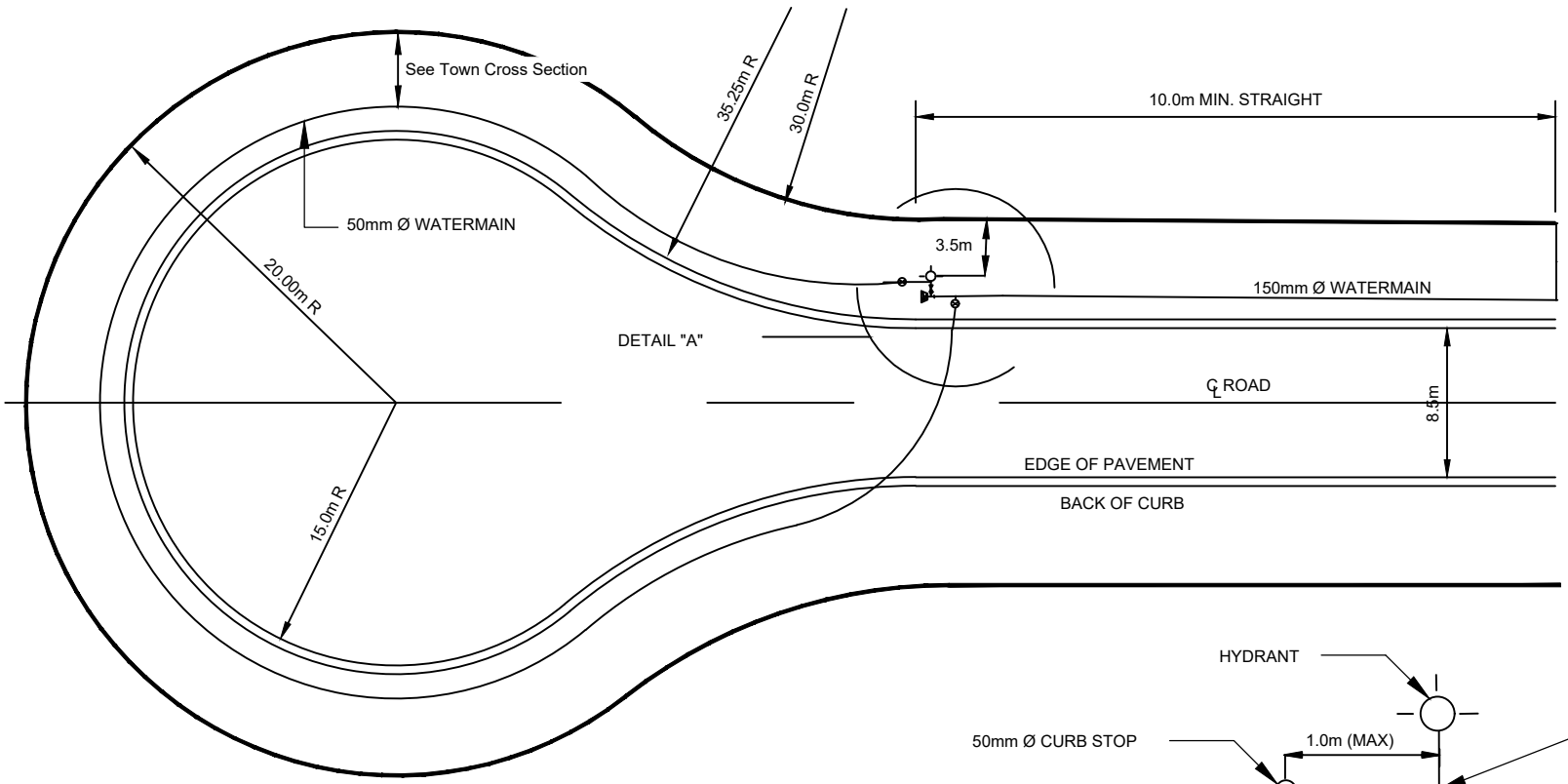
DIRECTOR OF OPERATIONS DATE

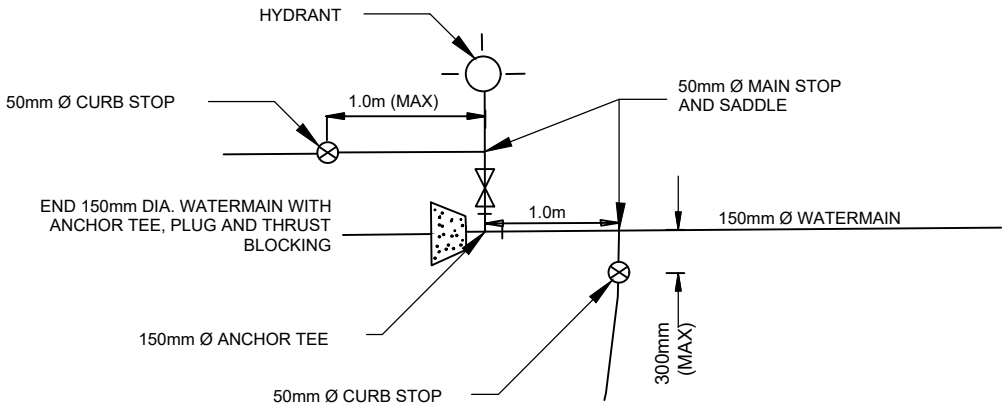
REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-1301





DETAIL "A"

NOTES:

1. MAXIMUM SERVICE SIZE IS 25mm.
2. MAXIMUM OF 7 SERVICES OFF OF 50mm Ø.
3. RESTRAIN JOINTS WHERE REQUIRED.
4. MATERIAL SHALL BE PEX OR P.E SERIES 200.
5. ALL NON-METALLIC PIPE SHALL REQUIRE STAINLESS STEEL INSERT
6. TRACER WIRE TO BE INSTALLED AS PER OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICATIONS

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL CUL-DE-SAC WATERMAIN DESIGN (50mm DIA. LOOP)

APPROVED

MANAGER OF ENGINEERING DATE

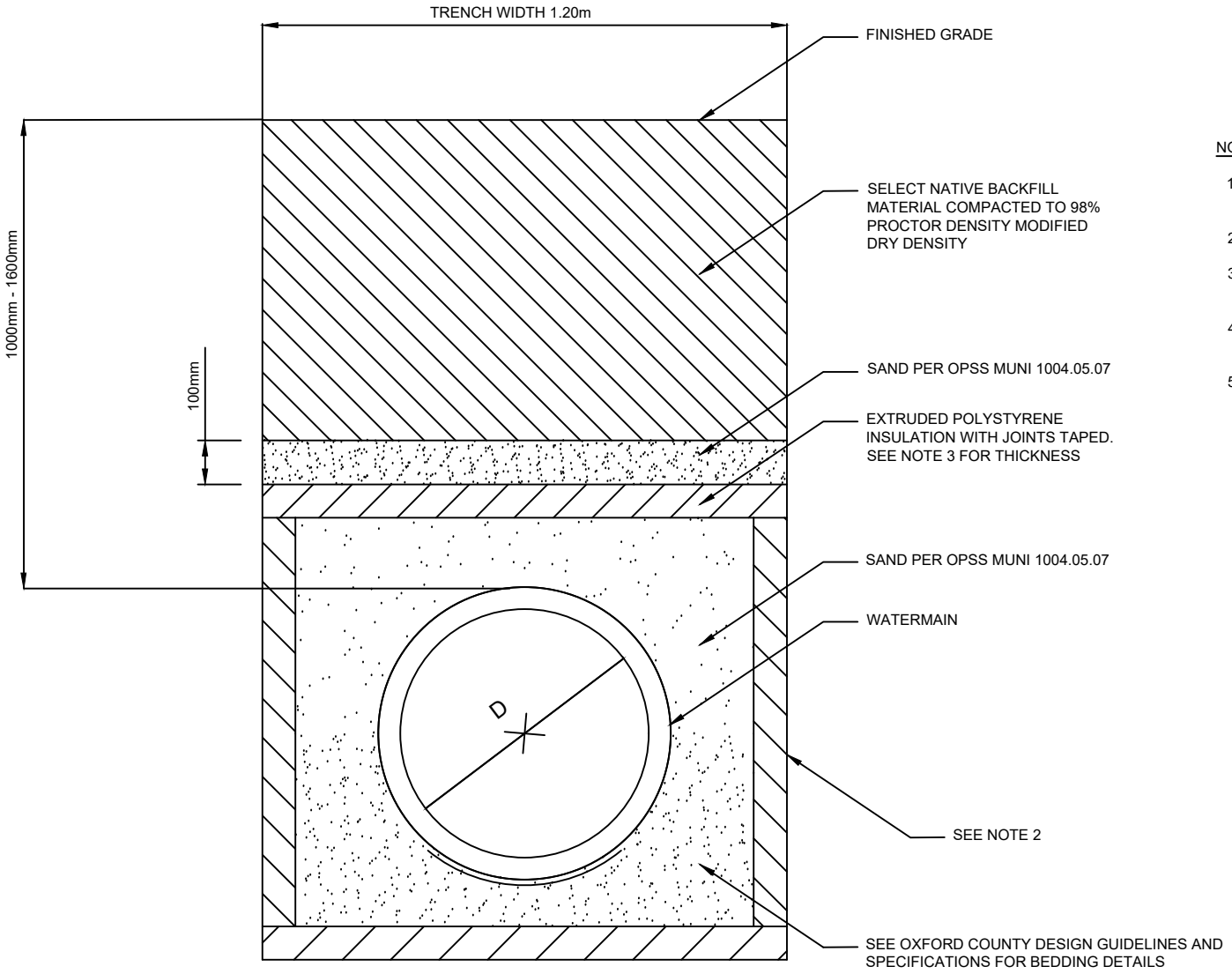
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-1306



NOTES:

1. TYPICAL DETAIL ONLY, THERMAL PROTECTION SHALL BE DESIGNED "SITE SPECIFIC" PER MINISTRY OF ENVIRONMENT DESIGN GUIDELINES.
2. FOR CROSSING OR UNDERGROUND STRUCTURES OR CONDUIT A "FROST BOX" IS REQUIRED.
3. IF GROUND COVER IS 1.3m -1.6m USE 50mm THICK INSULATION. IF GROUND COVER IS BETWEEN 1.0m - 1.3m USE 75mm THICK INSULATION.
4. FOR WATERMAIN AND SERVICES LOCATED 500mm OR LESS HORIZONTALLY ADJACENT TO MANHOLES OR CATCHBASIN, A MINIMUM 50mm INSULATION IS REQUIRED.
5. ALL UNITS IN MILLIMETERS UNLESS OTHERWISE NOTED.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL INSULATION DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

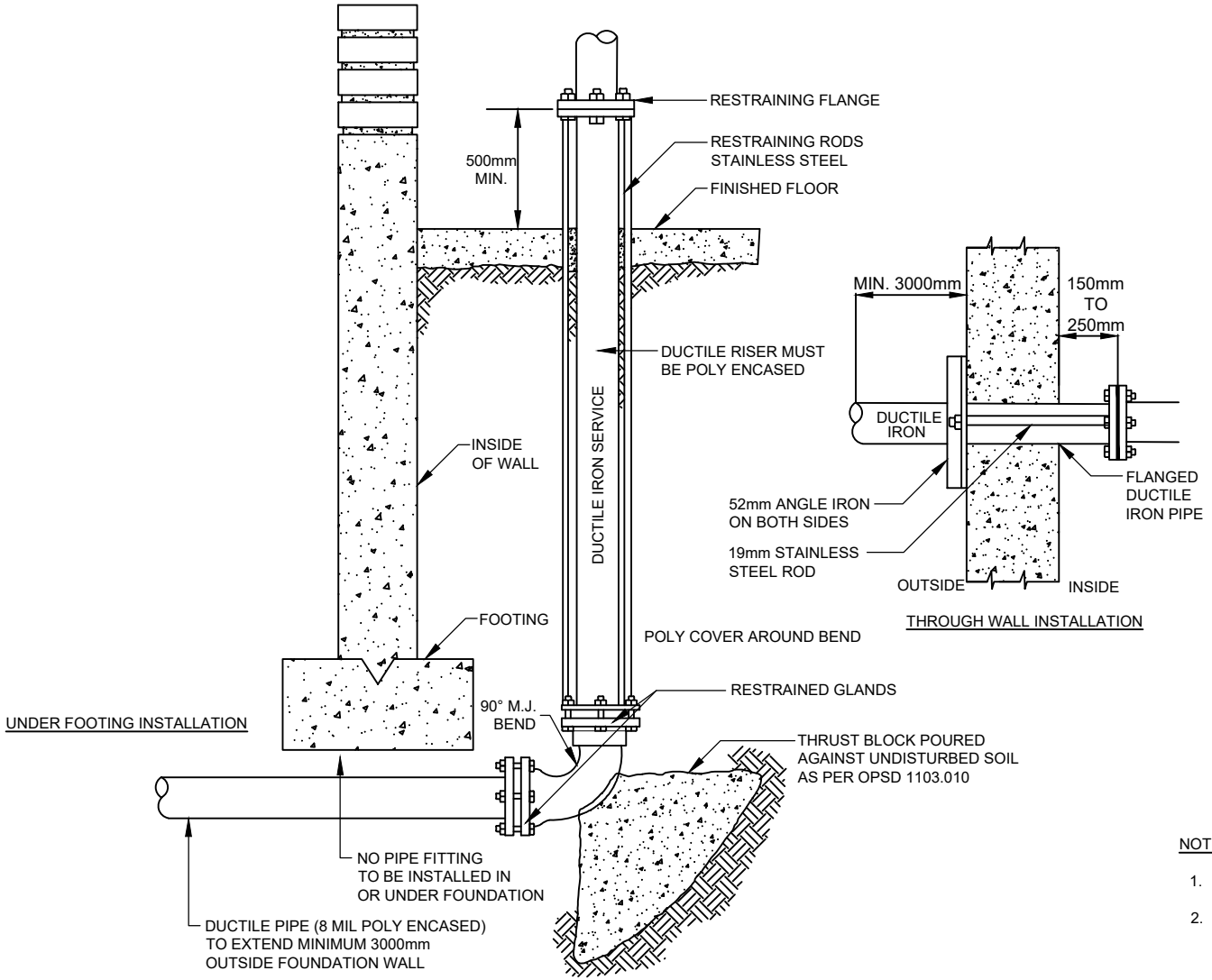
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-1307



NOTES:

1. INSTALLATION MUST MEET THE CURRENT NATIONAL FIRE PROTECTION ACT.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL SERVICE ENTRY 100mm TO 300mm DIAMETER PIPE

APPROVED

MANAGER OF ENGINEERING DATE

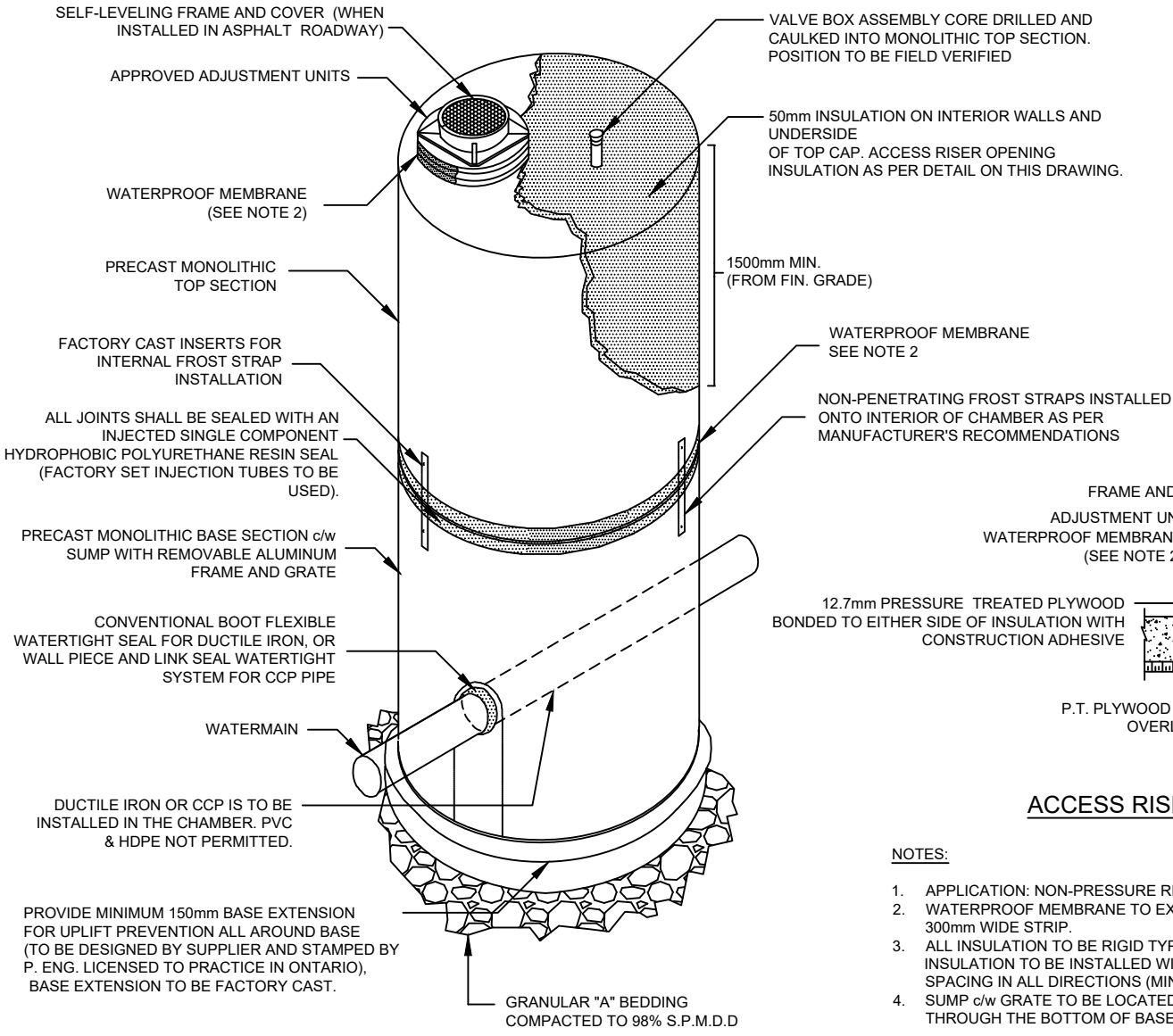
DIRECTOR OF OPERATIONS DATE

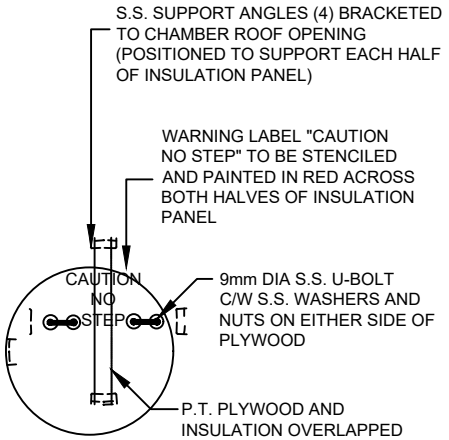
REVISION No.

DATE: MARCH 2020

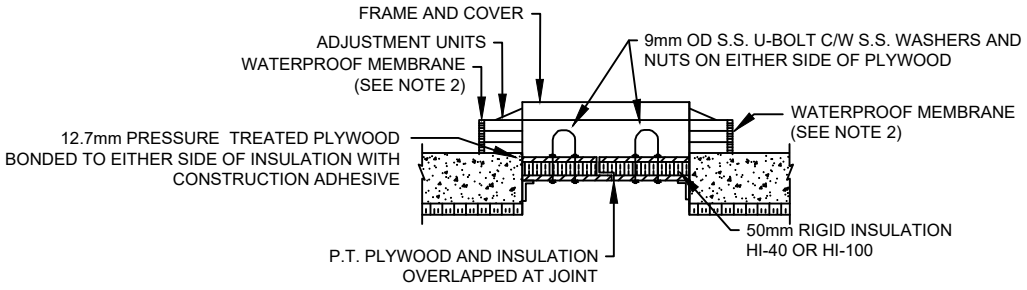
SCALE: N.T.S.

TSD-1320





PLAN



ACCESS RISER INSULATION SECTION DETAIL

NOTES:

1. APPLICATION: NON-PRESSURE REDUCING VALVE CHAMBERS ONLY
2. WATERPROOF MEMBRANE TO EXTEND COMPLETELY AROUND ALL RISER SECTION JOINTS WITH A MINIMUM 300mm WIDE STRIP.
3. ALL INSULATION TO BE RIGID TYPE EXTRUDED POLYSTRENE FOAM DOW HI-40 OR HI-100. ALL CHAMBERS INSULATION TO BE INSTALLED WITH CONSTRUCTION ADHESIVE AND TAPCON ANCHORS AT MAX. 600mm SPACING IN ALL DIRECTIONS (MIN. 2 ANCHORS PER SHEET OF INSULATION).
4. SUMP c/w GRATE TO BE LOCATED AT THE BOTTOM OF THE ACCESS LADDER. SUMP SHALL NOT EXTEND THROUGH THE BOTTOM OF BASE.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL TWO PIECE CIRCULAR CHAMBER DETAILS FOR WATERMAIN

APPROVED

MANAGER OF ENGINEERING DATE

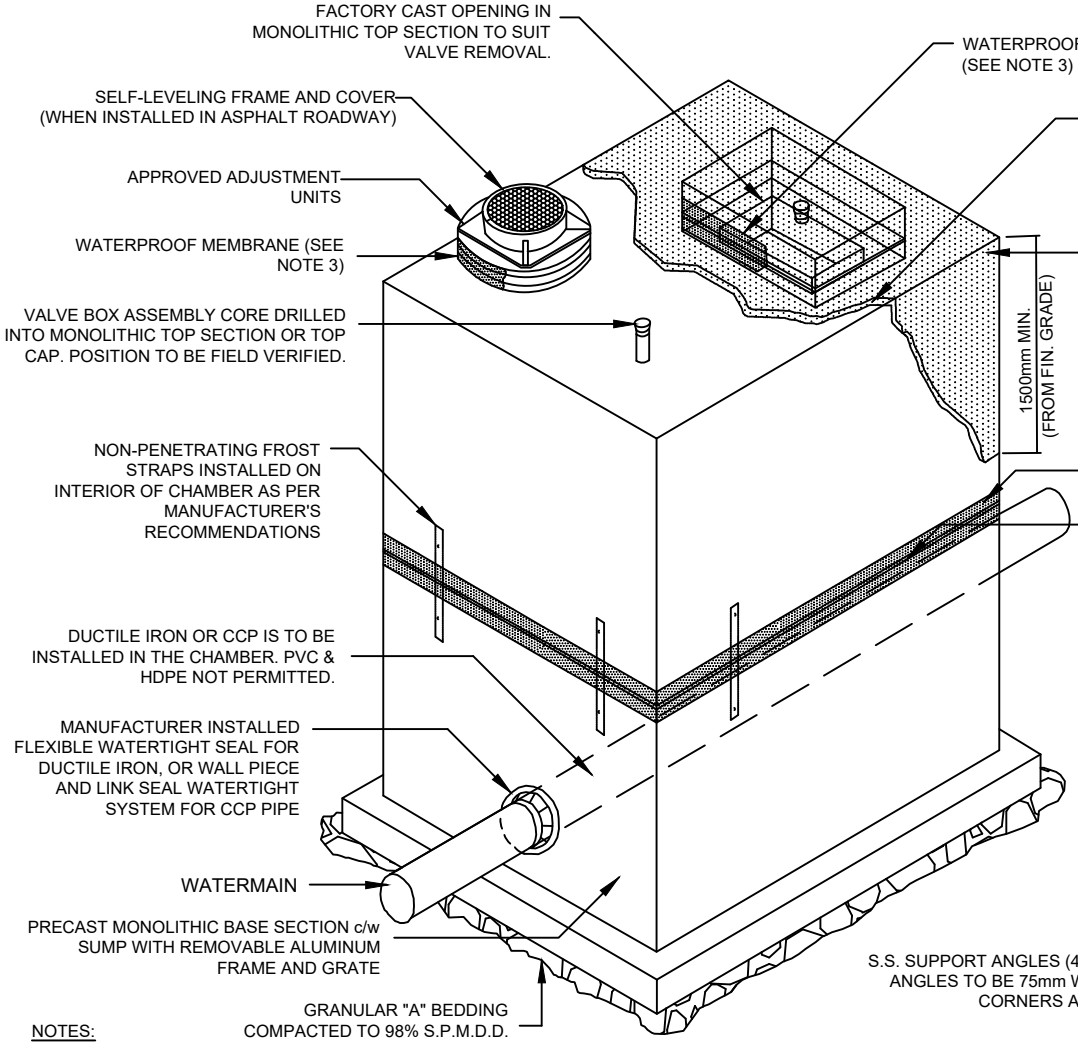
DIRECTOR OF OPERATIONS DATE

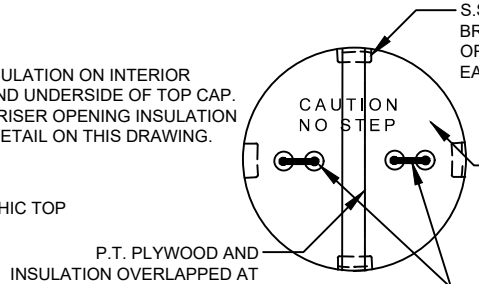
REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

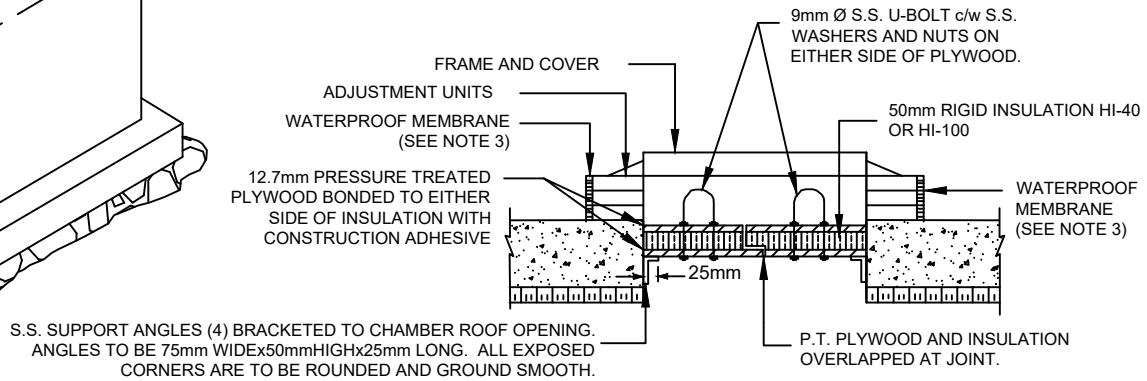
TSD-1326





PLAN

PROVIDE MINIMUM 150mm BASE EXTENSION FOR UPLIFT PREVENTION ALL AROUND BASE (TO BE DESIGNED BY SUPPLIER AND STAMPED BY P.ENG.LICENSED TO PRACTICE IN ONTARIO). BASE EXTENSION TO BE FACTORY CAST OR FACTORY DOWELLED FOR FIELD POUR.



ACCESS RISER INSULATION SECTION DETAIL

NOTES:

1. MINIMUM CHAMBER SIZE 1800mmx2400mm
2. APPLICATION:NON-PRESSURE REDUCING VALVE CHAMBERS ONLY
3. WATERPROOF MEMBRANE TO EXTEND COMPLETELY AROUND RISER SECTION JOINTS WITH A MINIMUM OF 300mm WIDE STRAP.
4. ALL INSULATION TO BE RIGID TYPE EXTRUDED POLYSTRENE FOAM DOW HI-40 OR HI-100. ALL CHAMBER INSULATIONS TO BE INSTALLED WITH CONSTRUCTION ADHESIVE AND TAPCON ANCHORS AT MAX. 600mm SPACING IN ALL DIRECTIONS (MIN. 2 ANCHORS PER SHEET OF INSULATION).
5. SUMP c/w GRATE TO BE LOCATED AT THE BOTTOM OF THE ACCESS LADDER. SUMP SHALL NOT EXTEND THROUGH THE BOTTOM OF BASE.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL TWO PIECE RECTANGULAR CHAMBER DETAILS FOR WATERMAIN

APPROVED

MANAGER OF ENGINEERING DATE

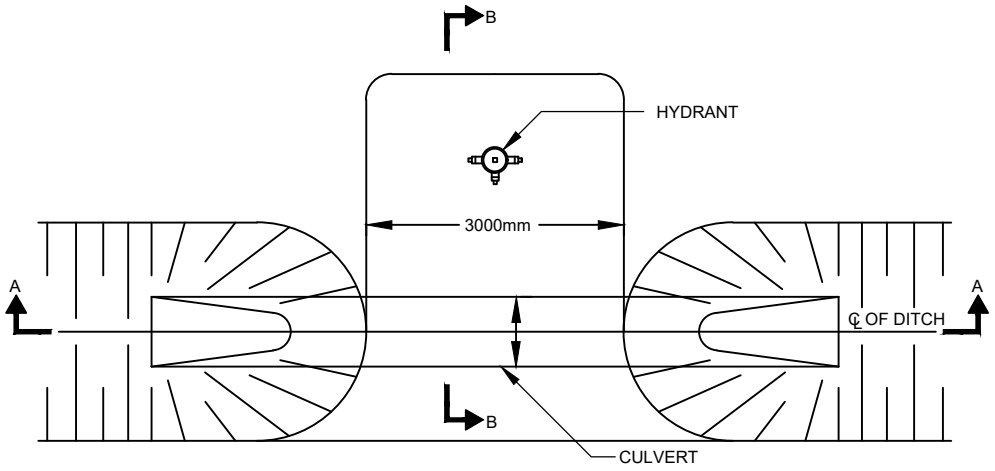
DIRECTOR OF OPERATIONS DATE

REVISION No.

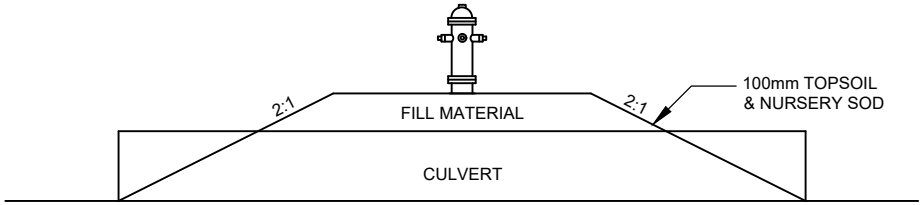
DATE: MARCH 2020

SCALE: N.T.S.

TSD-1327



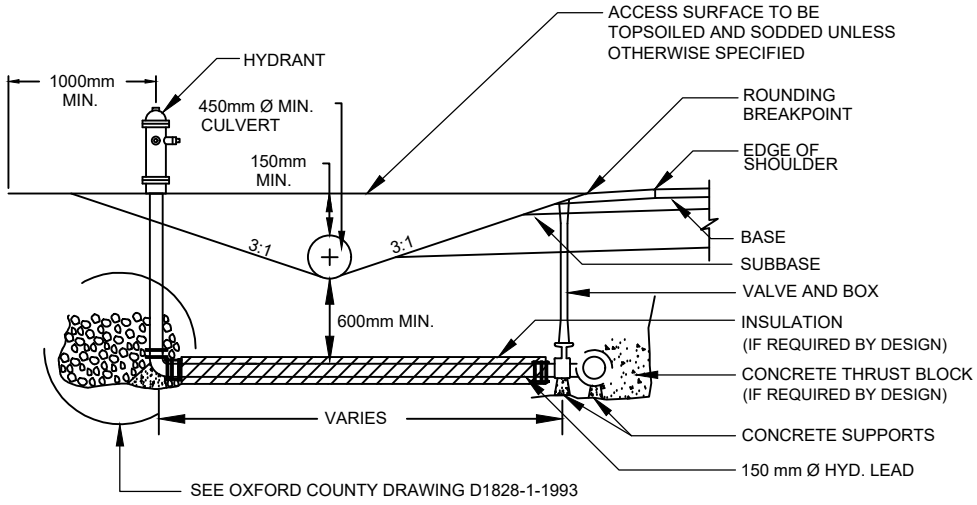
PLAN



SECTION A - A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



SECTION B - B

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

HYDRANT PLATFORM DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

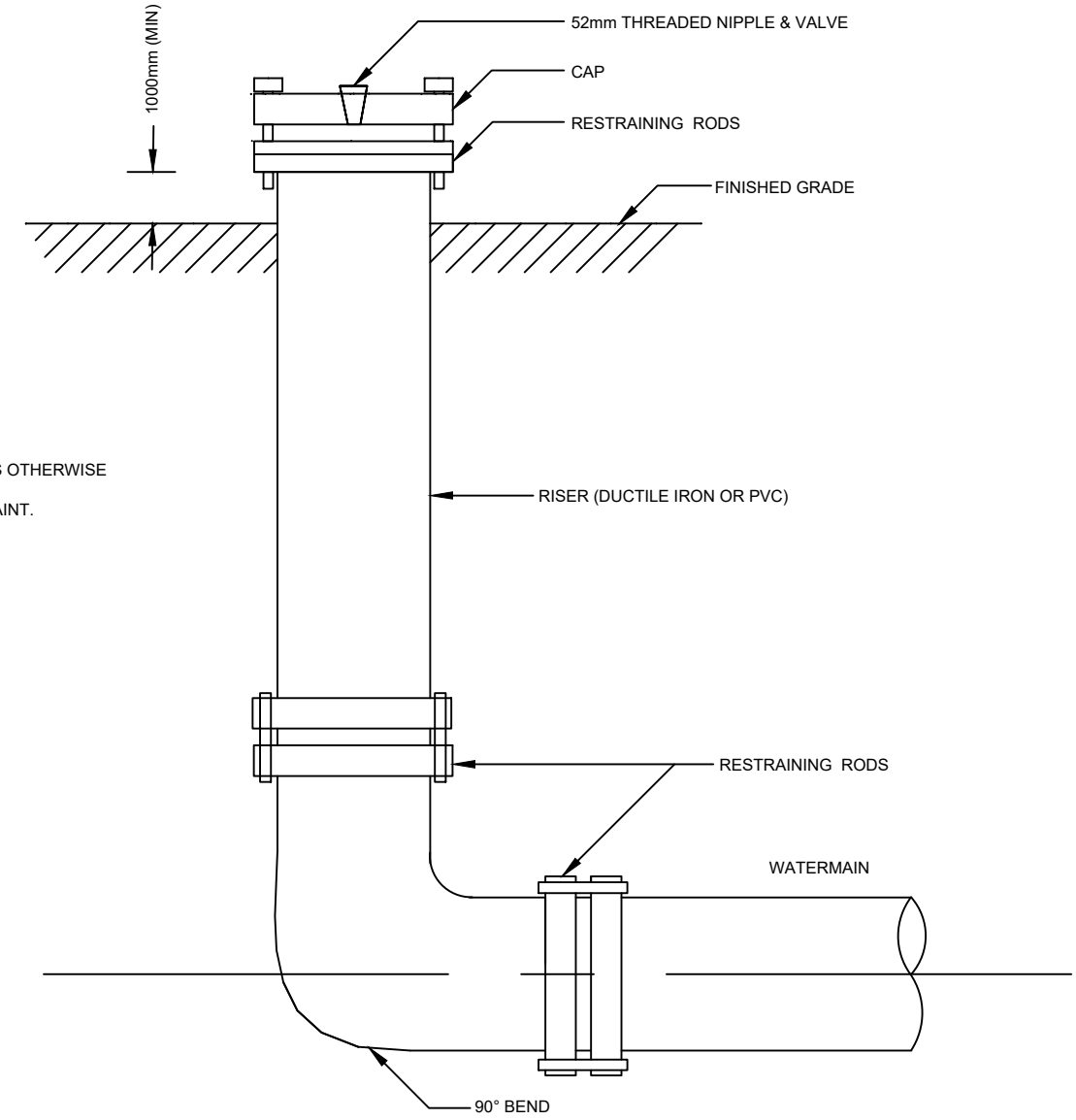
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: DEC 2021

SCALE: N.T.S.

TSD-1331



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
2. RESTRAINING RODS TO BE USED FOR RESTRAINT.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TEMPORARY RISER INSTALLATION

APPROVED

MANAGER OF ENGINEERING DATE

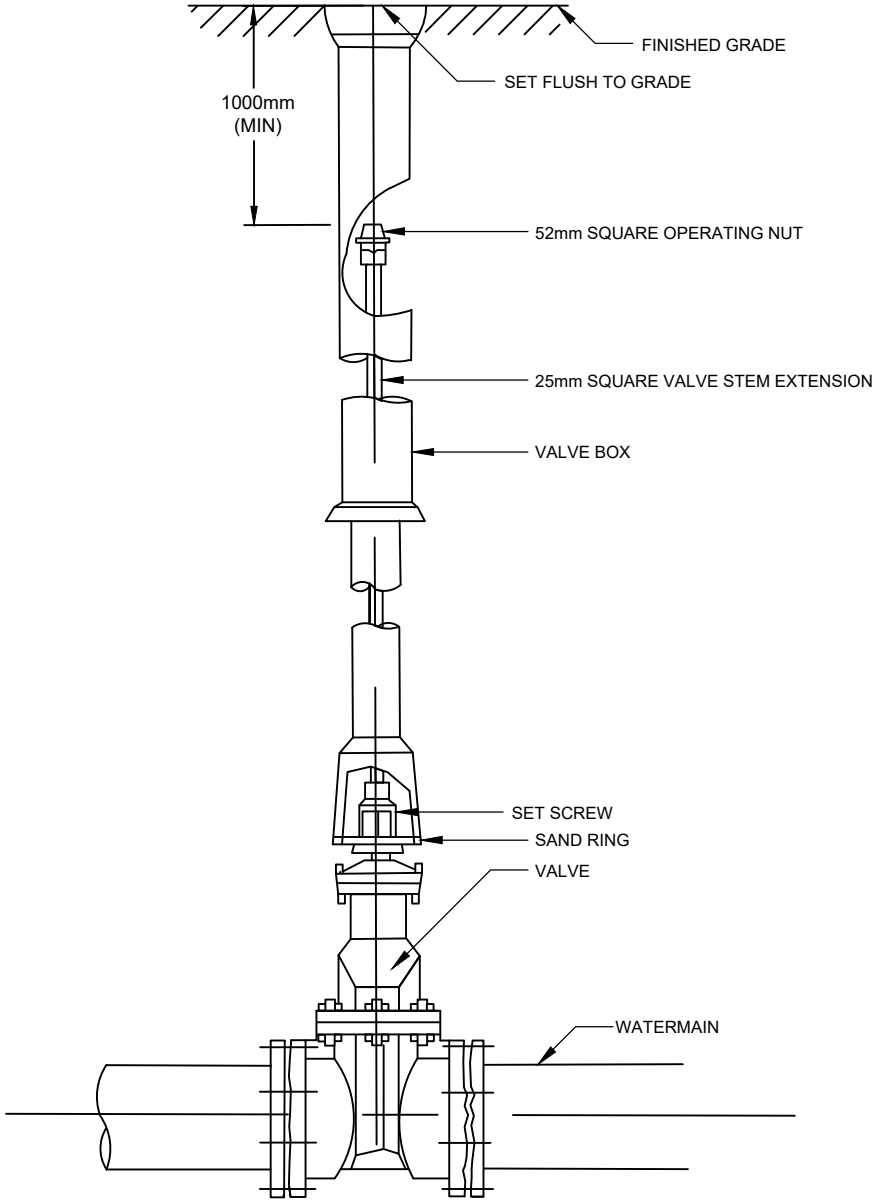
DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-1340



NOTES:

1. EXTENSION REQUIRED WHEN DISTANCE FROM THE TOP OF VALVE TO FINISHED GRADE IS MORE THAN 1.8m.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

VALVE STEM EXTENSION IN VALVE BOX

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

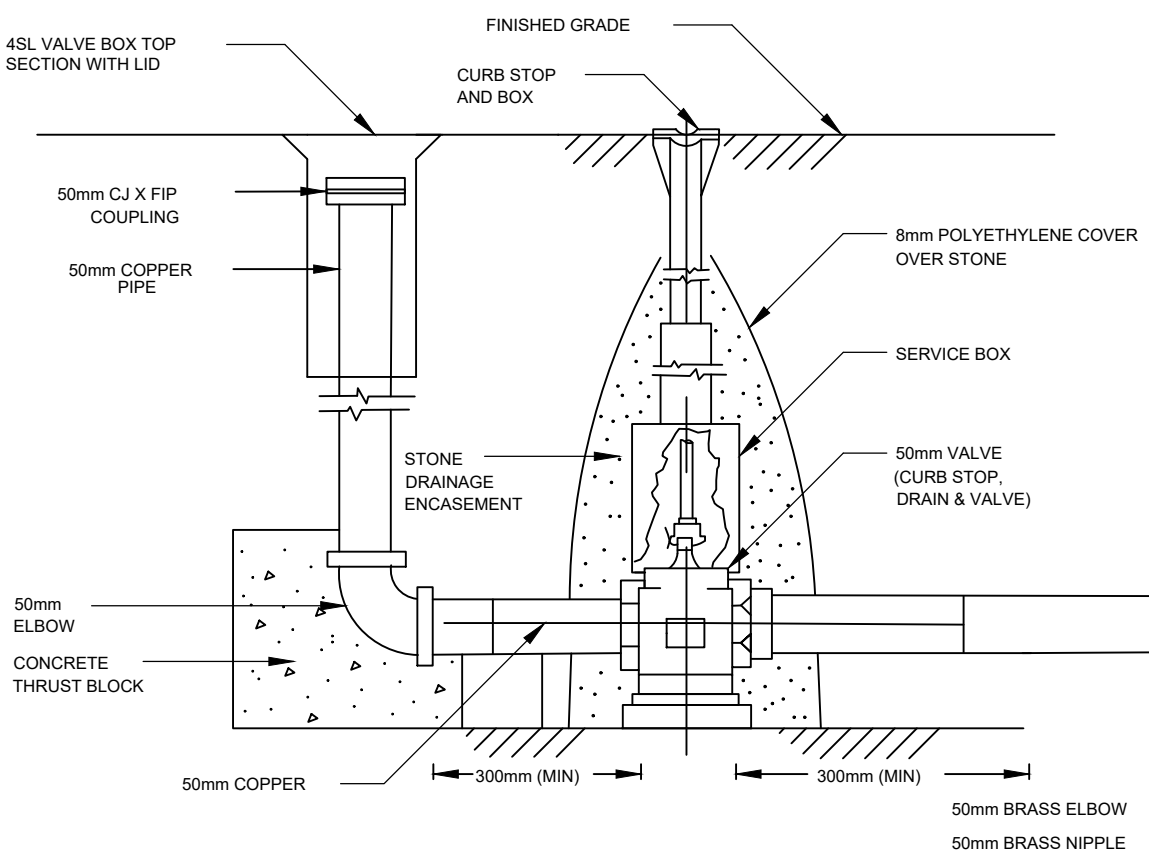
REVISION No.

DATE: MARCH 2020

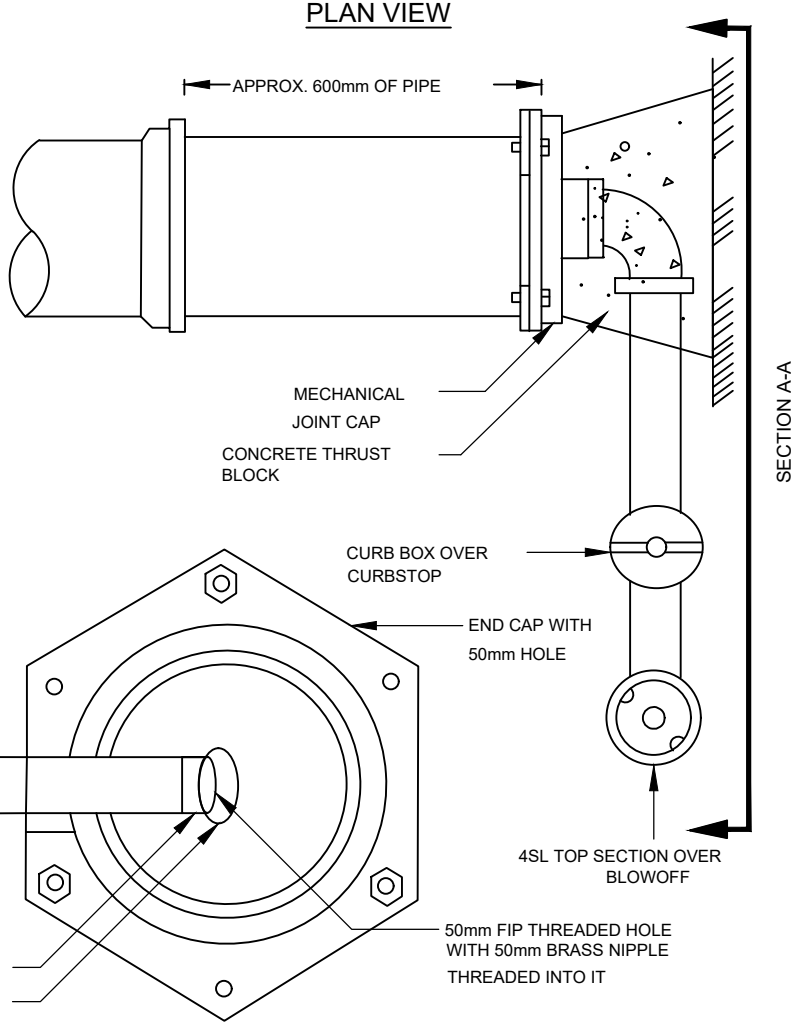
SCALE: N.T.S.

TSD-1350

SECTION A-A



PLAN VIEW



NOTES:

1. POLYETHYLENE COVER IS TO BE USED BETWEEN STONE AND BACKFILL.
2. BLOW OFFS ARE TO BE SELF DRAINING.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

50mm BLOW OFF DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

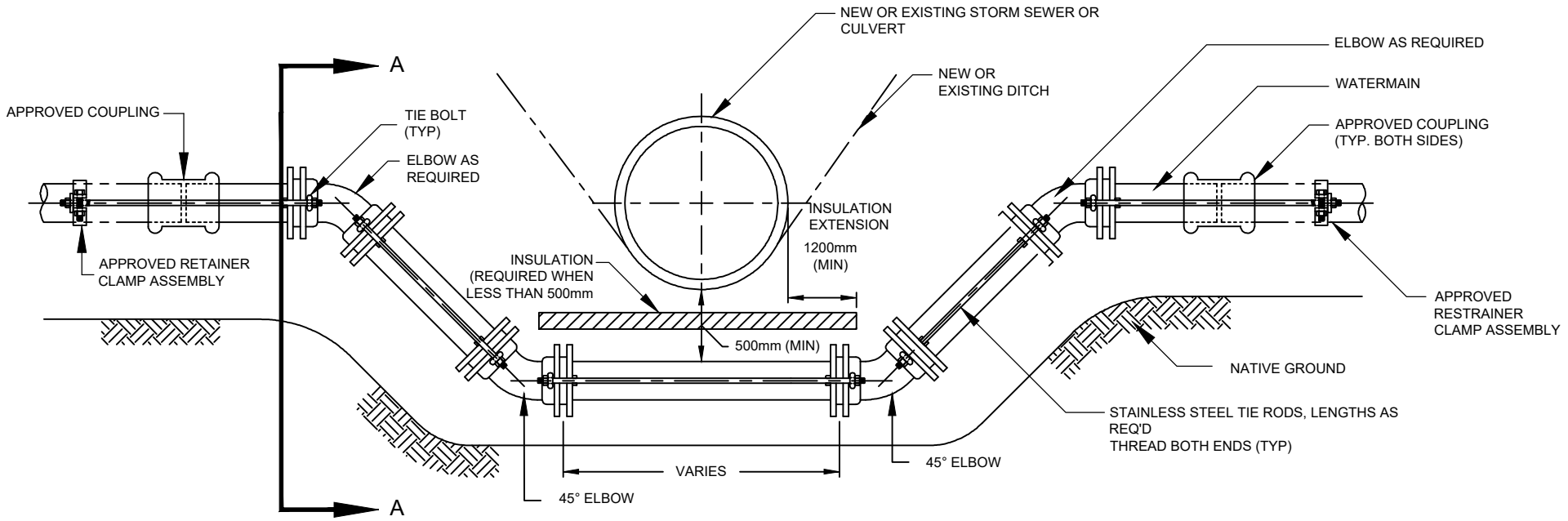
DIRECTOR OF OPERATIONS DATE

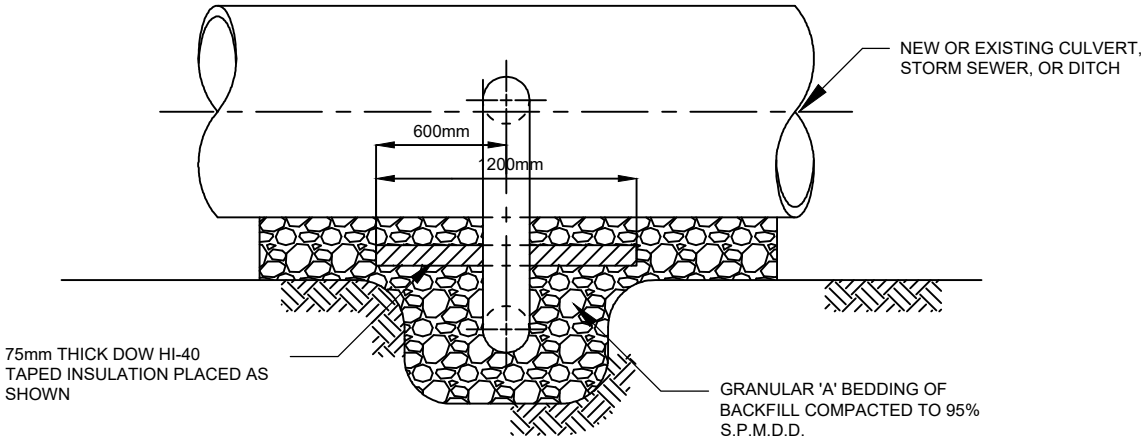
REVISION No.

DATE: MARCH 2020

SCALE: N.T.S.

TSD-1360





SECTION A - A

NOTES:

1. MATERIAL FOR LOWERING SHALL BE DUCTILE IRON IF EXISTING MATERIAL IS METALLIC.
2. UNITS IN MILLIMETERS UNLESS OTHERWISE NOTED.
3. THIS DETAIL IS USED FOR OFFSET ON 100, 150, & 200mm DIA MAINS. OFFSETS ON LARGER MAY REQUIRE INDIVIDUAL APPROVAL.
4. ALL JOINTS TO BE MECHANICALLY RESTRAINED, INCLUDING JOINTS ON EXISTING WATERMAIN.
5. IF OFFSET IS INSTALLED IN HORIZONTAL OR INVERTED POSITIONS, MINIMUM COVER TO BE DECIDED BY THE ENGINEER.
6. COVER TIE BOLT ASSEMBLY WITH PETROLATUM SYSTEM.
7. INSULATION MAY BE REQUIRED AS PER OXFORD COUNTY DESIGN GUIDELINES AND SPECIFICIATIONS

Tillsonburg
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STANDARD DETAIL

WATERMAIN LOWERING DETAIL FOR STORM SEWER OR DITCH CROSSING

APPROVED

MANAGER OF ENGINEERING DATE

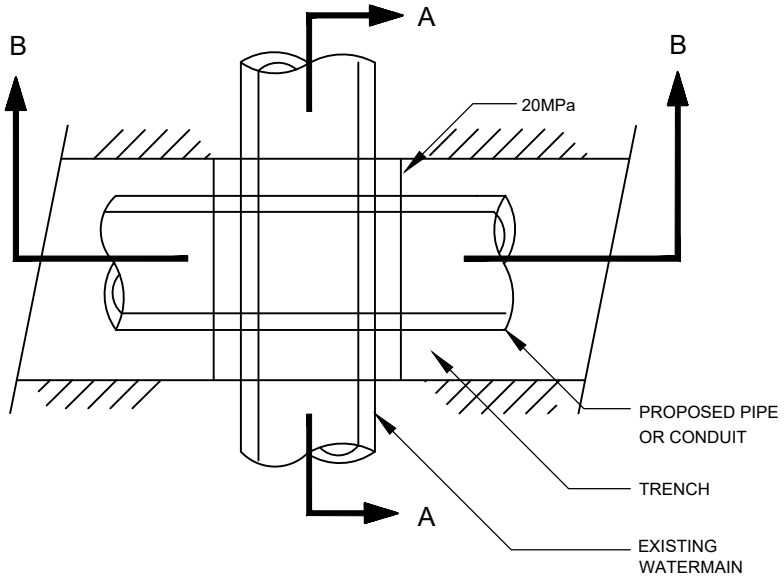
DIRECTOR OF OPERATIONS DATE

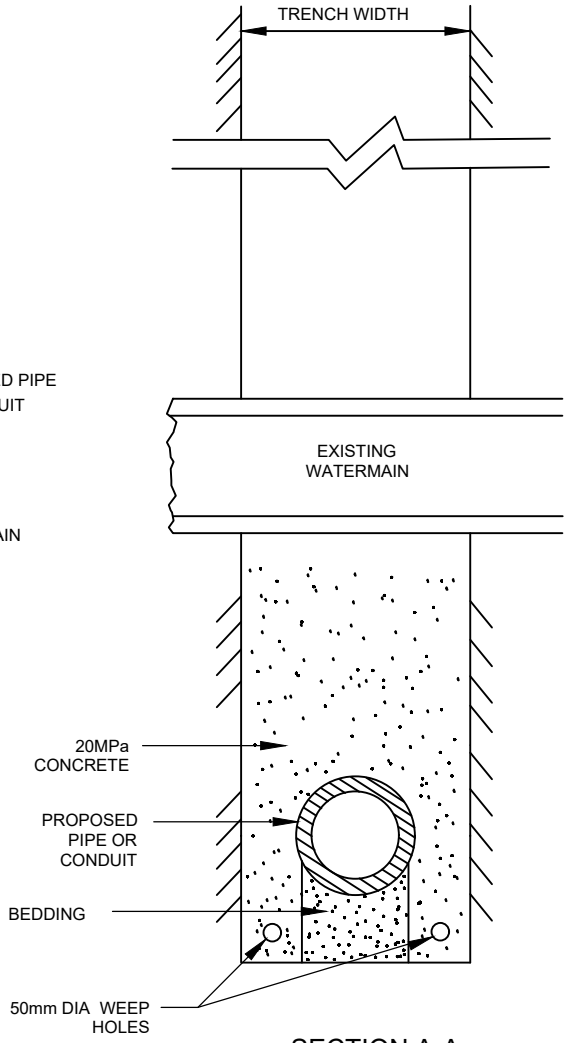
REVISION No.

DATE: FEB 2022

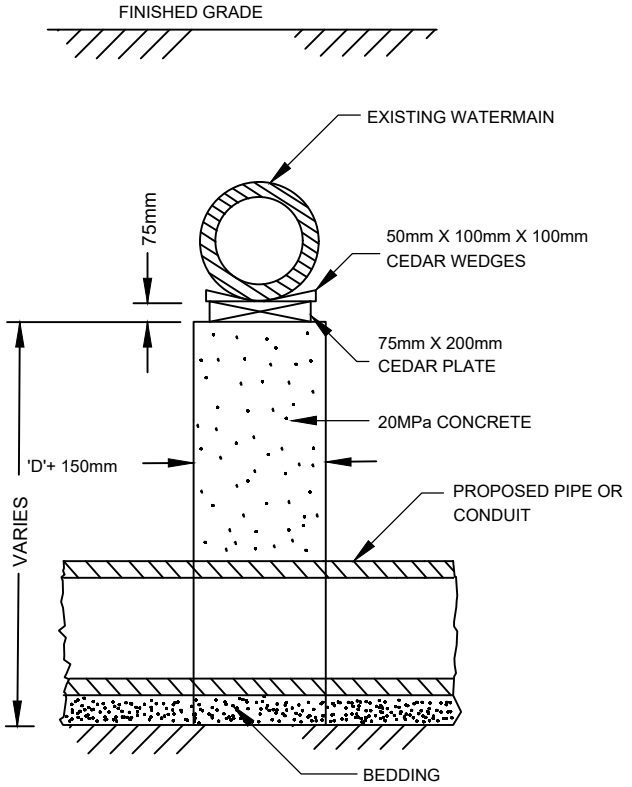
SCALE: N.T.S.

TSD-1366





SECTION A-A



SECTION B-B

NOTES:

1. CONCRETE ENCASED MAINS SHALL BE SUPPORTED WITH CONCRETE TO UNDERSIDE OF MAIN. BOND BREAKER IS TO BE USED BETWEEN THE TWO SURFACES.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

SUPPORT FOR WATERMAINS LARGER THAN 300mm DIA.

APPROVED

MANAGER OF ENGINEERING DATE

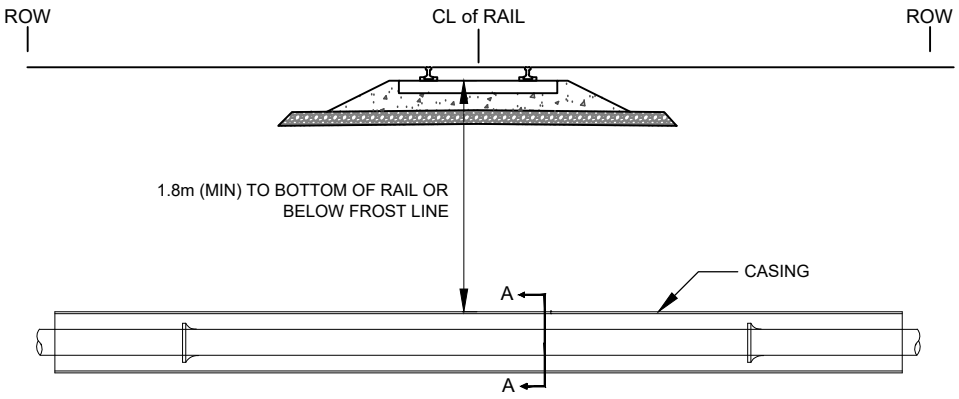
DIRECTOR OF OPERATIONS DATE

REVISION No.

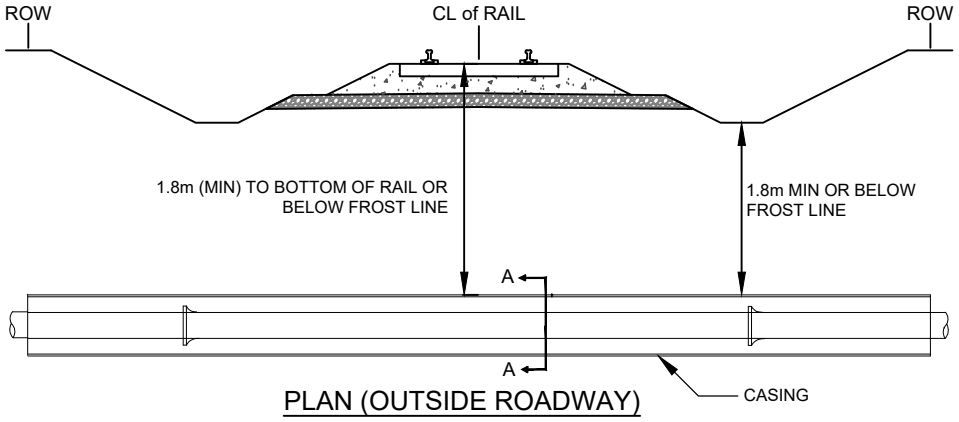
DATE: MARCH 2020

SCALE: N.T.S.

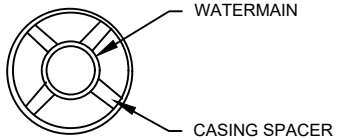
TSD-1367



PLAN (THROUGH ROADWAY)



PLAN (OUTSIDE ROADWAY)



SECTION A-A

NOTES:

1. RAILWAY CROSSING DRAWINGS SHALL BE SUBMITTED TO TOWN ENGINEERING AND SHALL SHOW THE FOLLOWING INFORMATION:
   - DRAWINGS MUST BE TO SCALE AND HAVE ALL DIMENSIONS SHOWN
   - RAILWAY MILEAGE AND SUBDIVISION
   - INDICATED DIRECTION OF FLOW AND NEAREST SHUT-OFF VALVES
   - PROVIDE A PROFILE INDICATING DEPTH OF INSTALLATION
   - PROVIDE INFORMATION AS PER CHART BELOW
   - INCLUDE SECTION 'A-A', OR NOTE THAT CARRIER SHALL BE HELD CLEAR OF CASING BY PROPER SUPPORTS
   - NOTE WARNING MARKERS TO BE INSTALLED AT LIMITS OF RAIL R.O.W., AS APPLICABLE
   - NOTE PROPOSED METHOD OF INSTALLATION
   - NOTE LOCATION OF PROPOSED JACKING AND RECEIVING PITS RELATIVE TO GAUGE (INSIDE) SIDE OF NEAREST RAIL
   - INCLUDE THE CAPTION "CONSTRUCTION AND MAINTENANCE TO BE IN ACCORDANCE WITH THE CANADIAN TRANSPORTATION AGENCY GENERAL ORDER E-10"
2. ENSURE WALL THICKNESS OF CARRIER AND CASING PIPES CONFORM TO TRANSPORT CANADA REQUIREMENTS (COOPER E-90 LOADING).
3. NO EXTERNAL LOADS WILL BE TRANSMITTED TO THE CARRIER PIPE BY USE OF APPROVED PIPE LINE SPACERS.
4. DEPTH OF BURIAL FROM THE BASE OF RAIL TO BE A MINIMUM 1.8m OR BELOW THE FROST LINE.
5. CASING SHALL EXTEND THE FULL WIDTH OF THE RAILWAY R.O.W.
6. THE CASING SHALL BE INSTALLED SO AS TO PREVENT THE FORMATION OF A WATERWAY UNDER THE RAILWAY, WITH AN EVEN BEARING THROUGHOUT ITS LENGTH, AND SHALL SLOPE TO ONE END (EXCEPT FOR LONGITUDINAL OCCUPANCY).
7. THE CASING PIPE SHALL BE CONSTRUCTED AS TOO PREVENT LEAKAGE OF ANY SUBSTANCE FROM THE CASING THROUGHOUT ITS LENGTH EXCEPT AT THE ENDS WHERE FREE FLOW MUST BE MAINTAINED.
8. GROUTING OF THE SPACE BETWEEN THE CARRIER AND CASING WILL NOT BE PERMITTED.
9. THE ENDS OF THE CASING PIPE SHALL NOT BE SEALED BY ANY LOAD TRANSFERRING MATERIAL.
10. SPACERS AND END SEALS SHALL FOLLOW AS PER OXFORD COUNTY'S DESIGN GUIDELINE AND SPECIFICATIONS.
11. DESIGN SHOP DRAWING REQUIRED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN ONTARIO.
12. SITE SPECIFIC SHOP DRAWINGS REQUIRED AS PER CURRENT OCCUPATIONAL HEALTH AND SAFETY.

CASING PIPE SPECIFICATION

OUTSIDE DIA.:	
INSIDE DIA.:	
WALL THICKNESS:	
PIPE SPECIFICATION:	
LENGTH:	
MATERIAL:	
CATHODIC PROTECTION:	

CARRIER PIPE SPECIFICATION

INSIDE DIA.:	
WALL THICKNESS:	
PIPE SPECIFICATION:	
MATERIAL:	
OPER./MAX. PRESSURE	
CATHODIC PROTECTION:	

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

WATERMAIN RAIL CROSSING DETAIL

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

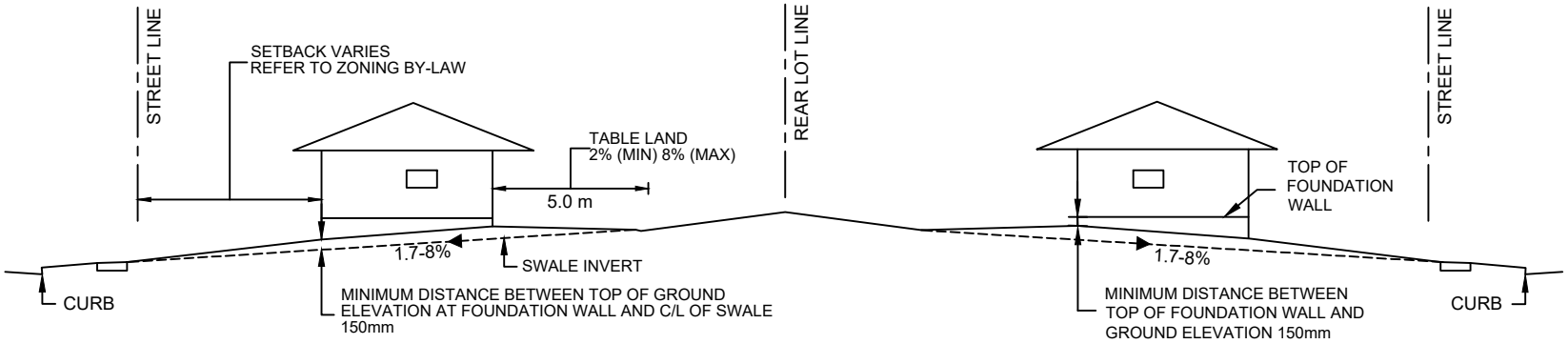
REVISION No.

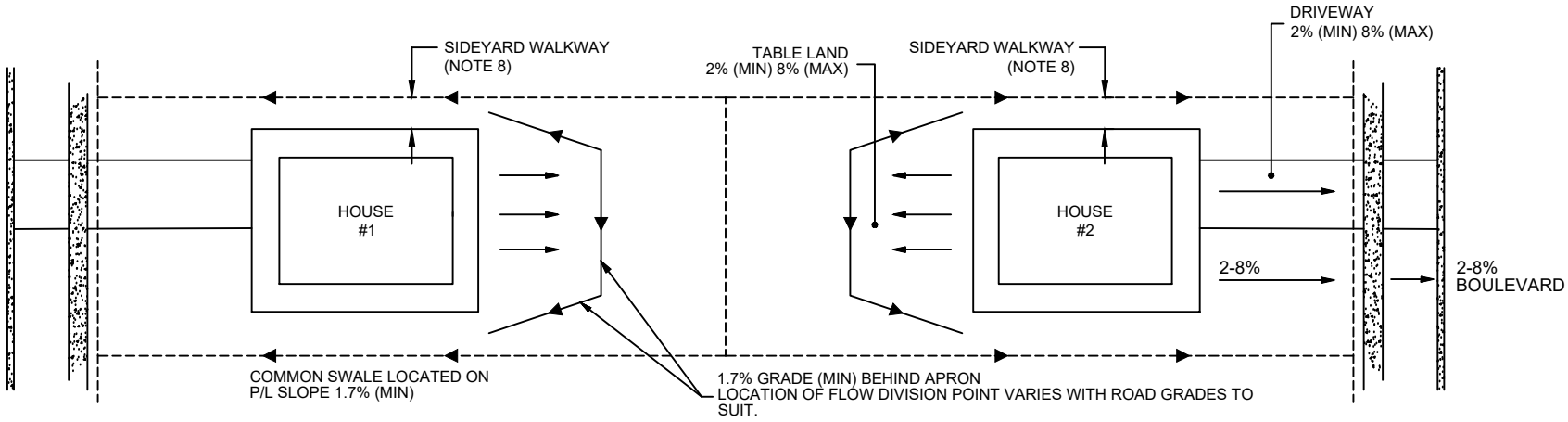
DATE: DEC 2021

SCALE: N.T.S.

TSD-1368

PROFILE VIEW





PLAN VIEW

NOTES:

1. ALTHOUGH MAXIMUM SLOPES ARE SHOWN, THEY SHOULD BE AVOIDED UNLESS NO OTHER ALTERNATIVE IS AVAILABLE.
2. THIS STANDARD IS FOR URBAN LOTS AND GENERAL IN NATURE. CERTAIN LOTS MAY REQUIRE CHANGES.
3. THIS STANDARD IS MEANT TO BE READ IN CONJUNCTION WITH THE TOWN OF TILLSONBURG LOT GRADING AND DRAINAGE STANDARDS AND DESIGN MANUAL.
4. HOUSE STYLES USED TO SUIT LOT GRADING.
5. REAR TO FRONT YARD DRAINAGE IS DISCOURAGED FOR STREET TOWNHOUSE DEVELOPMENT TO AVOID MID-YARD SWALES ACROSS THE UNITS
6. BELOW GRADE WALKOUTS AND REVERSE GRADE DRIVEWAYS WILL NOT BE PERMITTED.
7. THE REAR LOT LINE SHALL BE THE HIGH POINT OF THE LOT.
8. REFER TO TOWN OF TILLSONBURG LOT GRADING STANDARD 14.5 FOR SIDEYARD WALKWAYS.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

REAR TO FRONT YARD DRAINAGE

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

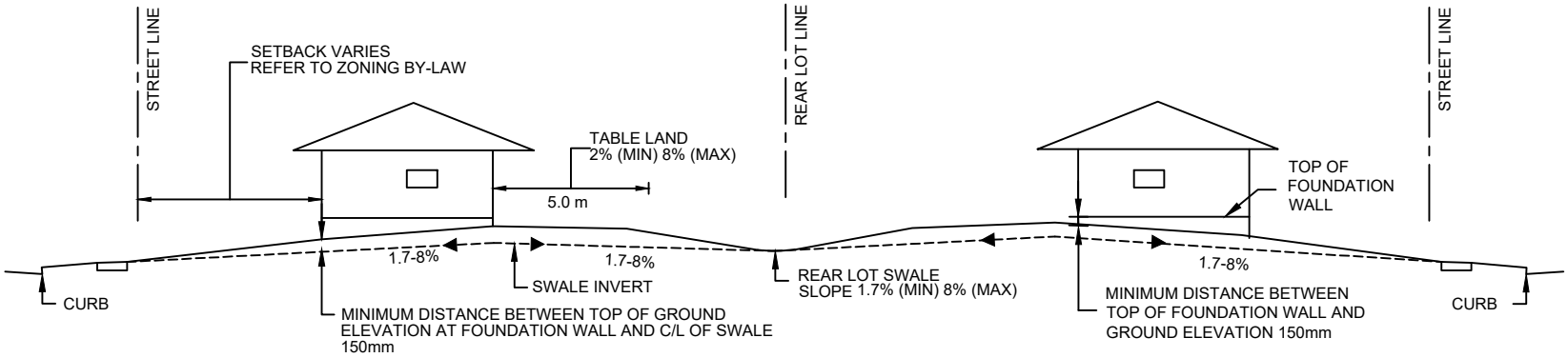
REVISION No.

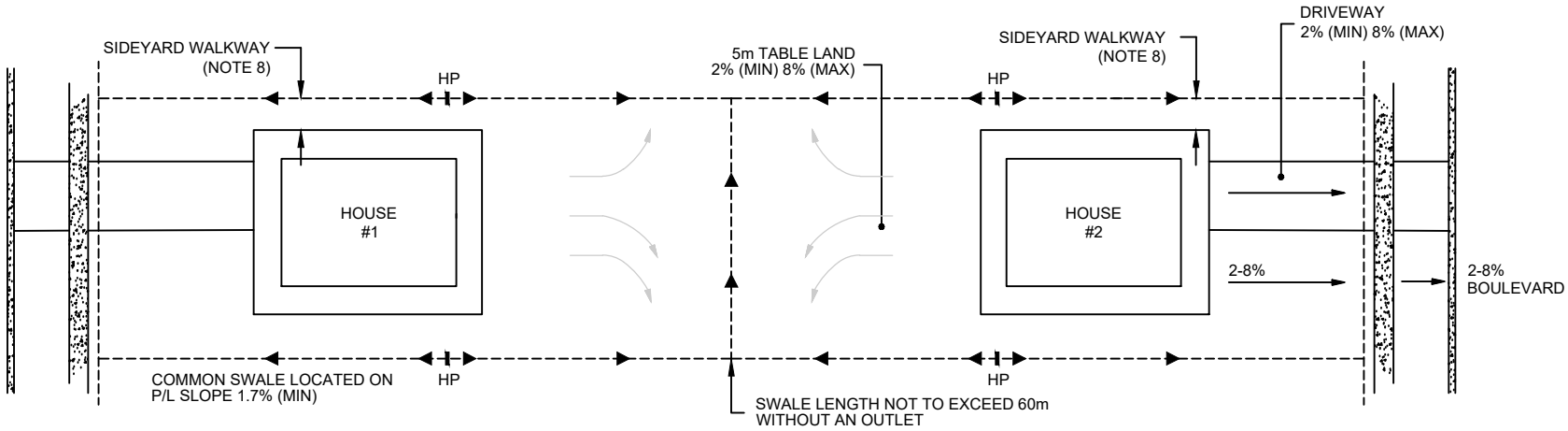
DATE: FEB 2022

SCALE: N.T.S.

TSD-1400

PROFILE VIEW





PLAN VIEW

NOTES:

1. ALTHOUGH MAXIMUM SLOPES ARE SHOWN, THEY SHOULD BE AVOIDED UNLESS NO OTHER ALTERNATIVE IS AVAILABLE.
2. THIS STANDARD IS FOR URBAN LOTS AND GENERAL IN NATURE. CERTAIN LOTS MAY REQUIRE CHANGES.
3. THIS STANDARD IS MEANT TO BE READ IN CONJUNCTION WITH THE TOWN OF TILLSONBURG LOT GRADING AND DRAINAGE STANDARDS AND DESIGN MANUAL.
4. HOUSE STYLES USED TO SUIT LOT GRADING.
5. REAR TO FRONT YARD DRAINAGE IS DISCOURAGED FOR STREET TOWNHOUSE DEVELOPMENT TO AVOID MID-YARD SWALES ACROSS THE UNITS
6. BELOW GRADE WALKOUTS AND REVERSE GRADE DRIVEWAYS WILL NOT BE PERMITTED.
7. ALL REAR LOT SWALES SHALL OUTLET TO CURBS, SIDEWALKS OR CATCHBASINS AS PER LOT GRADING AND DRAINAGE STANDARDS AND DESIGN MANUAL.
8. REFER TO TOWN OF TILLSONBURG LOT GRADING STANDARD 14.5 FOR SIDEYARD WALKWAYS.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

SHARED STORM EASEMENT

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

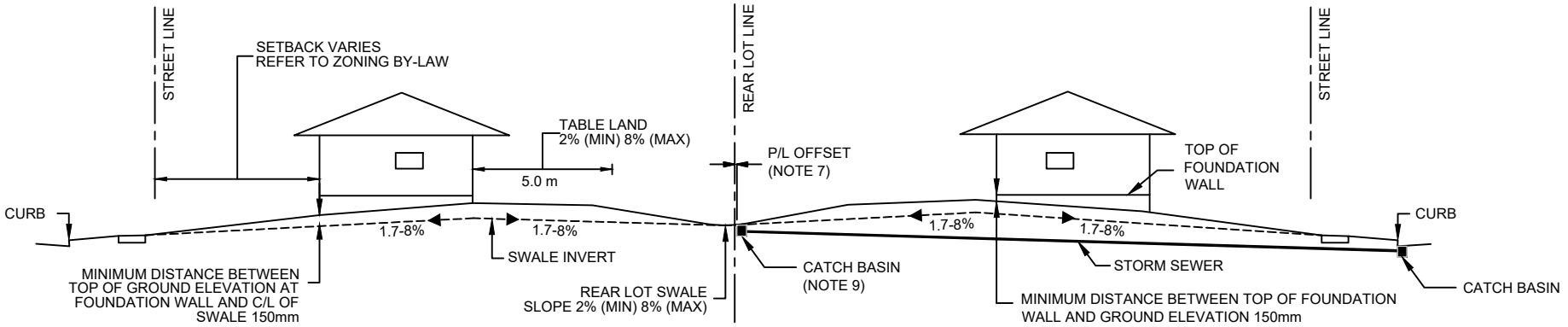
REVISION No.

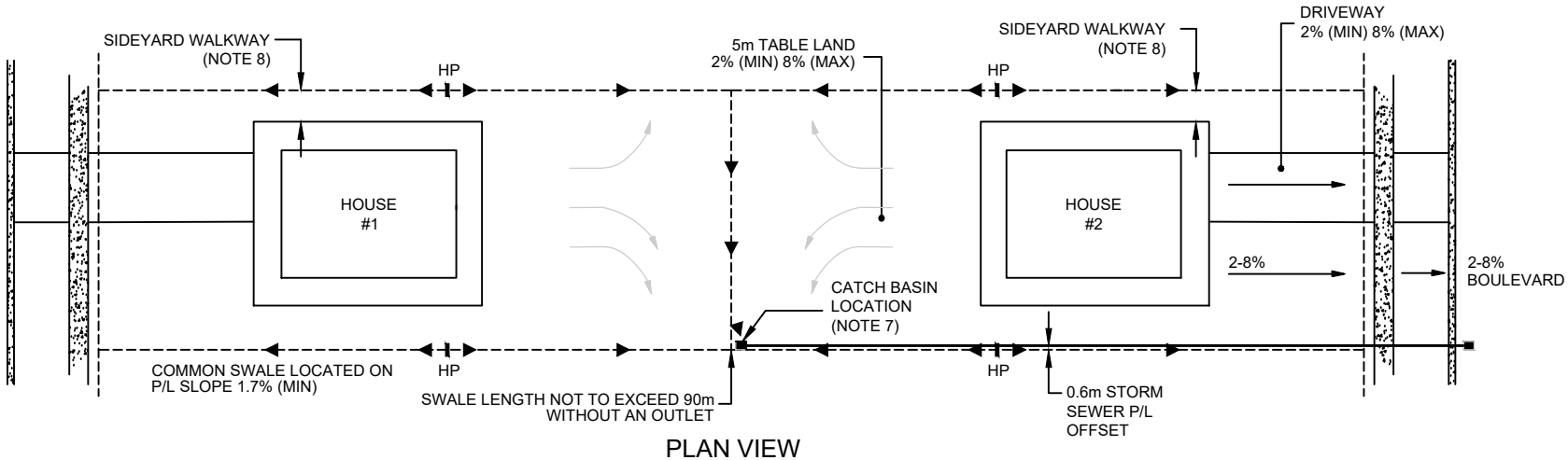
DATE: FEB 2022

SCALE: N.T.S.

TSD-1401

PROFILE VIEW





PLAN VIEW

NOTES:

1. ALTHOUGH MAXIMUM SLOPES ARE SHOWN, THEY SHOULD BE AVOIDED UNLESS NO OTHER ALTERNATIVE IS AVAILABLE.
2. THIS STANDARD IS FOR URBAN LOTS AND GENERAL IN NATURE. CERTAIN LOTS MAY REQUIRE CHANGES.
3. THIS STANDARD IS MEANT TO BE READ IN CONJUNCTION WITH THE TOWN OF TILLSONBURG DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
4. HOUSE STYLES USED TO SUIT LOT GRADING.
5. REAR TO FRONT YARD DRAINAGE IS DISCOURAGED FOR STREET TOWNHOUSE DEVELOPMENT TO AVOID MID-YARD SWALES ACROSS THE UNITS
6. BELOW GRADE WALKOUTS AND REVERSE GRADE DRIVEWAYS WILL NOT BE PERMITTED.
7. ALL REAR LOT CATCHBASIN PLACEMENT AS PER DEVELOPMENT GUIDELINES AND DESIGN CRITERIA.
8. REFER TO TOWN OF TILLSONBURG LOT GRADING STANDARD 14.5 FOR SIDEYARD WALKWAYS.
9. REAR YARD CATCHBASIN MIN. PER OPSD 705.010.
10. REAR LOT CATCH BASIN LEADS TO BE DESIGNED PER TOWN OF TILLSONBURG STORM DRAINAGE AND STORMWATER MANAGEMENT POLICIES AND DESIGN GUIDELINES.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

REAR YARD CATCHBASIN

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

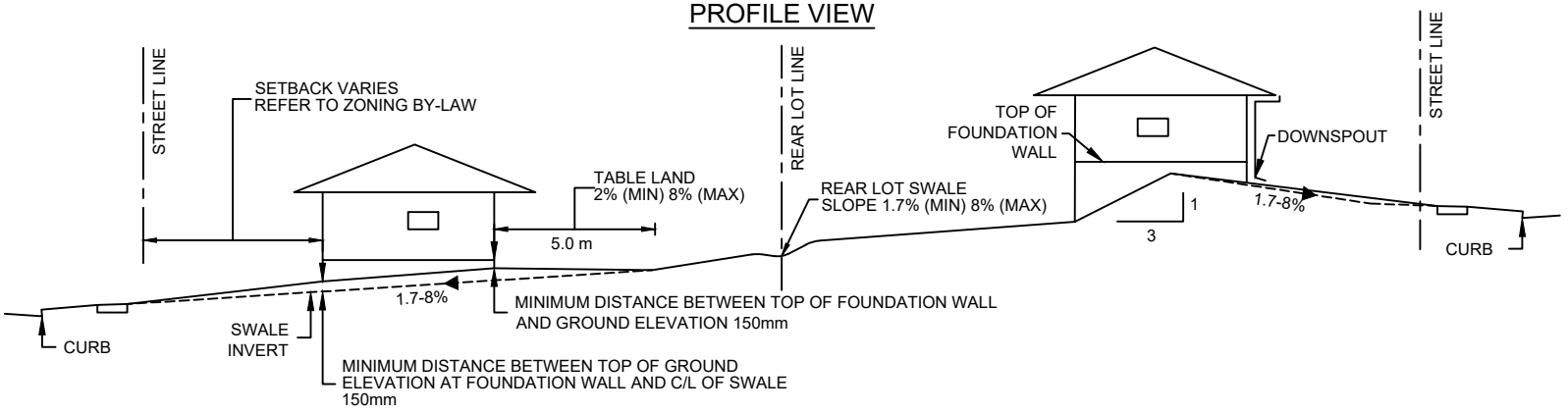
REVISION No.

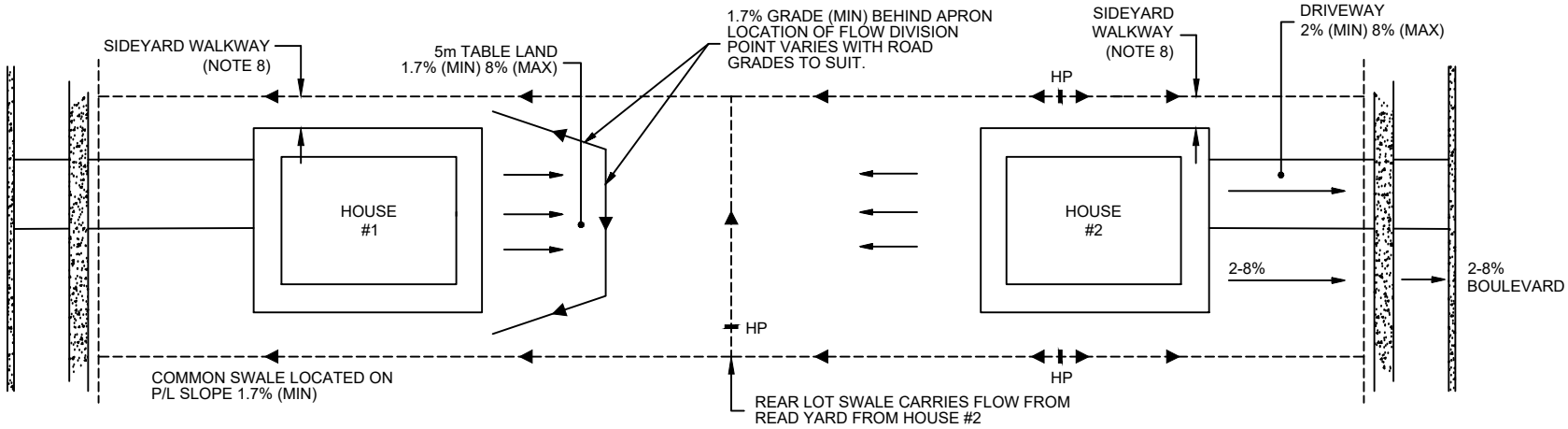
DATE: FEB 2022

SCALE: N.T.S.

TSD-1402

PROFILE VIEW





PLAN VIEW

NOTES:

1. ALTHOUGH MAXIMUM SLOPES ARE SHOWN, THEY SHOULD BE AVOIDED UNLESS NO OTHER ALTERNATIVE IS AVAILABLE.
2. THIS STANDARD IS FOR URBAN LOTS AND GENERAL IN NATURE.CERTAIN LOTS MAY REQUIRE CHANGES.
3. THIS STANDARD IS MEANT TO BE READ IN CONJUNCTION WITH THE TOWN OF TILLSONBURGS LOT GRADING AND DRAINAGE STANDARDS AND DESIGN MANUAL.
4. HOUSE STYLES USED TO SUIT LOT GRADING.
5. REAR TO FRONT YARD DRAINAGE IS DISCOURAGED FOR STREET TOWNHOUSE DEVELOPMENT TO AVOID MID-YARD SWALES ACROSS THE UNITS
6. BELOW GRADE WALKOUTS AND REVERSE GRADE DRIVEWAYS WILL NOT BE PERMITTED.
7. GRASSED WALKWAY AS PER LOT GRADING AND DRAINAGE STANDARDS AND DESIGN MANUAL.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

UPPER TO LOWER LOT DRAINAGE

APPROVED

MANAGER OF ENGINEERING DATE

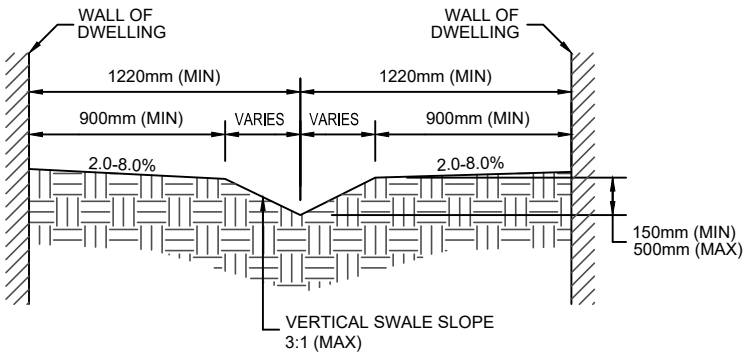
DIRECTOR OF OPERATIONS DATE

REVISION No.

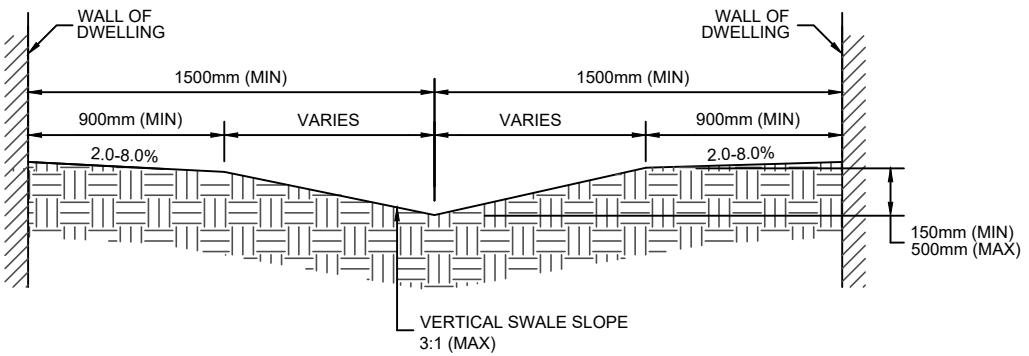
DATE: FEB 2022

SCALE: N.T.S.

TSD-1403



RESIDENTIAL OFFSETS
DETACHED & SEMI-DETACHED



RESIDENTIAL OFFSETS
STREET TOWNHOUSES

NOTES

1. BUILDING OFFSETS FROM PROPERTY LINE AS PER ZONING BY-LAW.
2. THIS STANDARD IS FOR URBAN LOTS AND GENERAL IN NATURE. CERTAIN LOTS MAY REQUIRE CHANGES.
3. THIS STANDARD IS MEANT TO BE READ IN CONJUNCTIONS WITH THE TOWN OF TILLSONBURG LOT GRADING AND DRAINAGE STANDARDS AND DESIGN MANUAL.
4. HOUSE STYLES ARE TO BE USED TO SUIT LOT GRADING.
5. REAR TO FRONT YARD DRAINAGE IS DISCOURAGED FOR STREET TOWNHOUSE DEVELOPMENT TO AVOID MID-YARD SWALES ACROSS THE UNITS.
6. BELOW GRADE WALKOUTS AND REVERSE GRADED DRIVEWAYS WILL NOT BE PERMITTED.

Tillsonburg
CONNECTED. ENRICHED. INSPIRED.

STANDARD DETAIL

TYPICAL SIDE YARD DRAINAGE

APPROVED

MANAGER OF ENGINEERING DATE

DIRECTOR OF OPERATIONS DATE

REVISION No.

DATE: FEB 2022

SCALE: N.T.S.

TSD-1404