

NOTE:
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PRELIMINARY

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REFER TO 118224-ND FOR ADDITIONAL NOTES & DETAILS

| No. | REVISION | DATE | BY |
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| 1. | REVISED AND REISSUED FOR CITY REVIEW | NOV 26/21 | BHB |

| SCALE |
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| AS SHOWN |

DESIGN: BR
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 CHECKED: BCS
 APPROVED: BHB

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PROFESSIONAL ENGINEER
 B. H. BAHIA
 10016467
 NOV 26, 2021
 PROVINCE OF ONTARIO

NOVATECH
 Engineers, Planners & Landscape Architects
 Suite 200, 240 Michael Cowpland Drive
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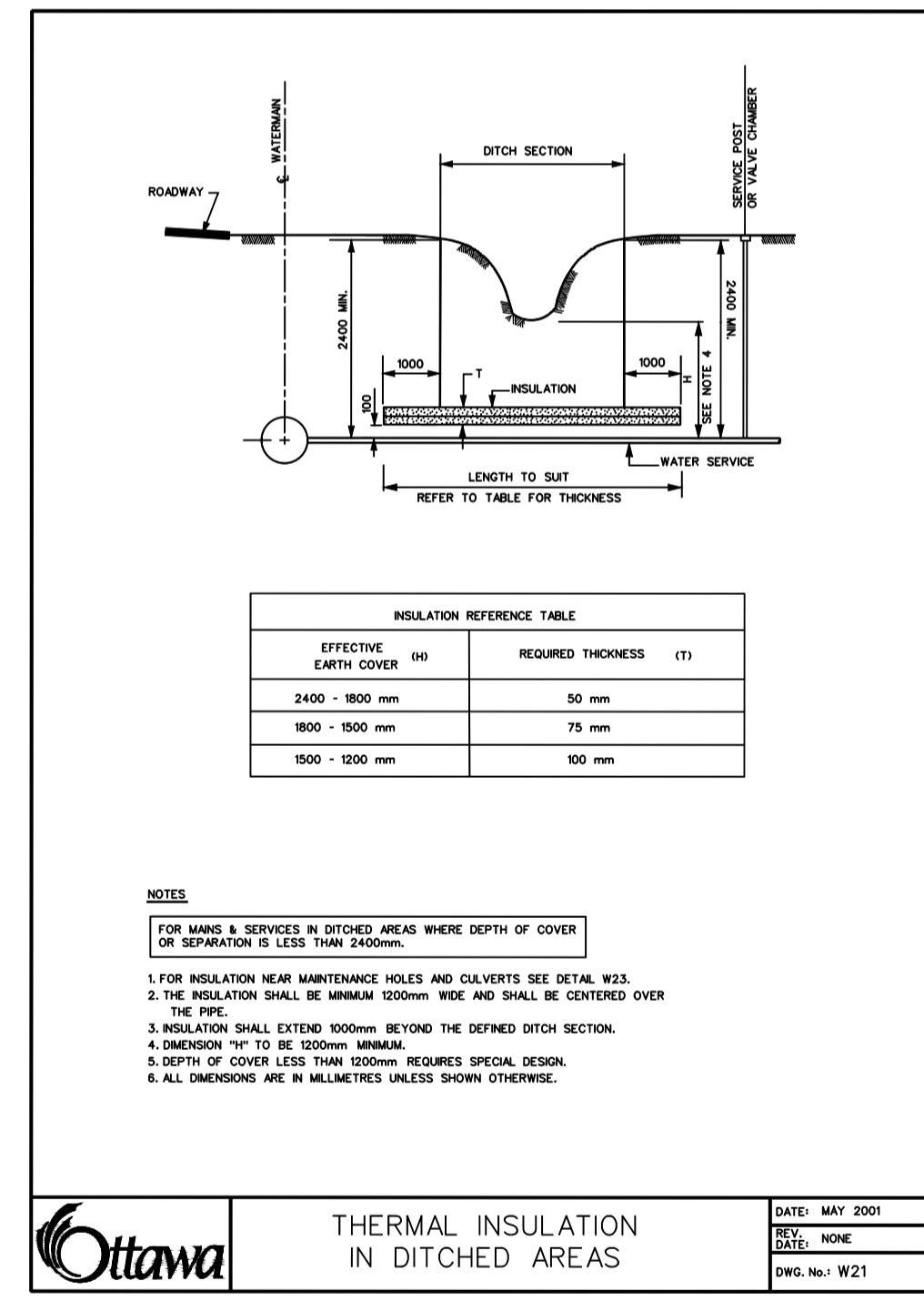
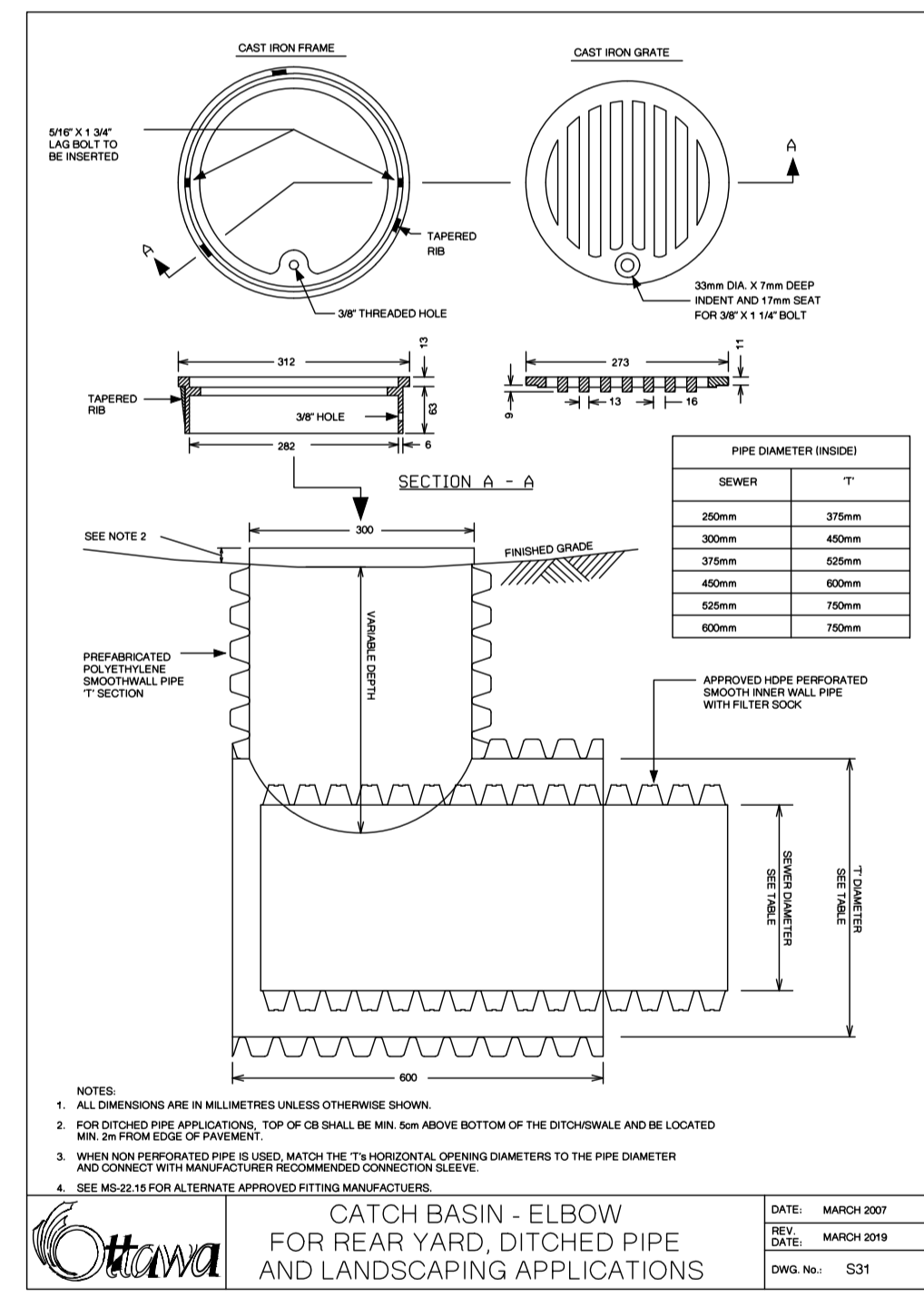
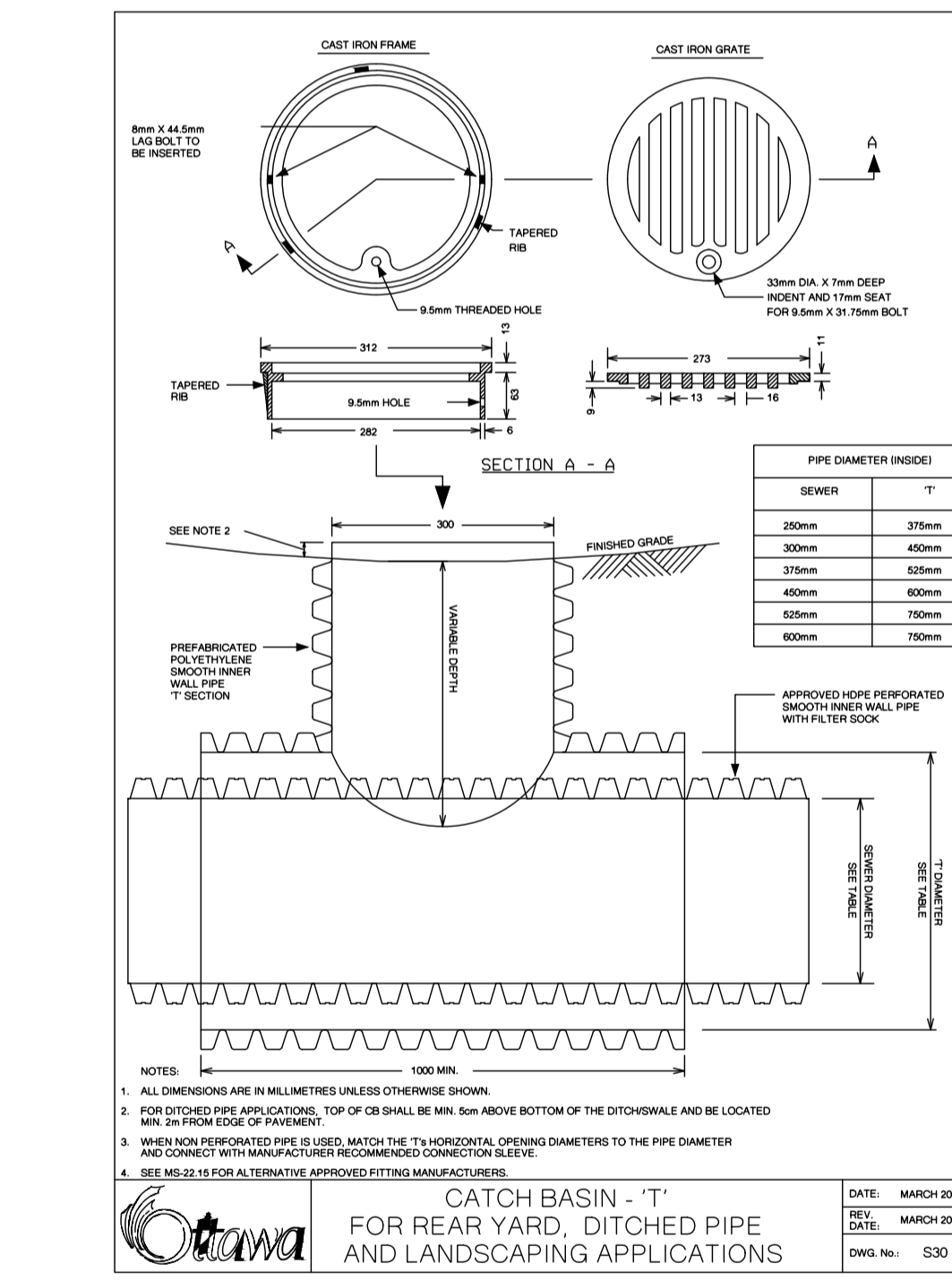
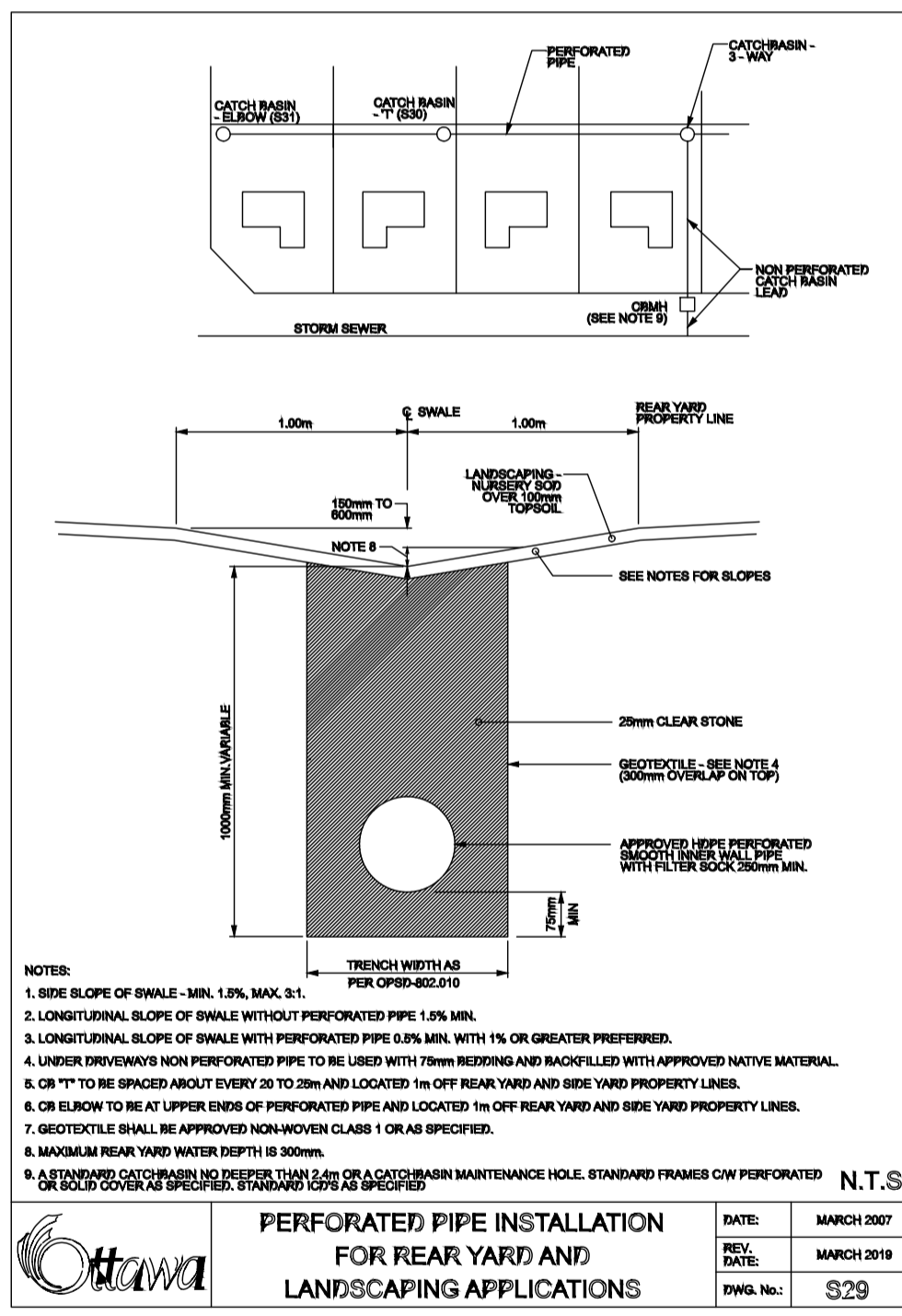
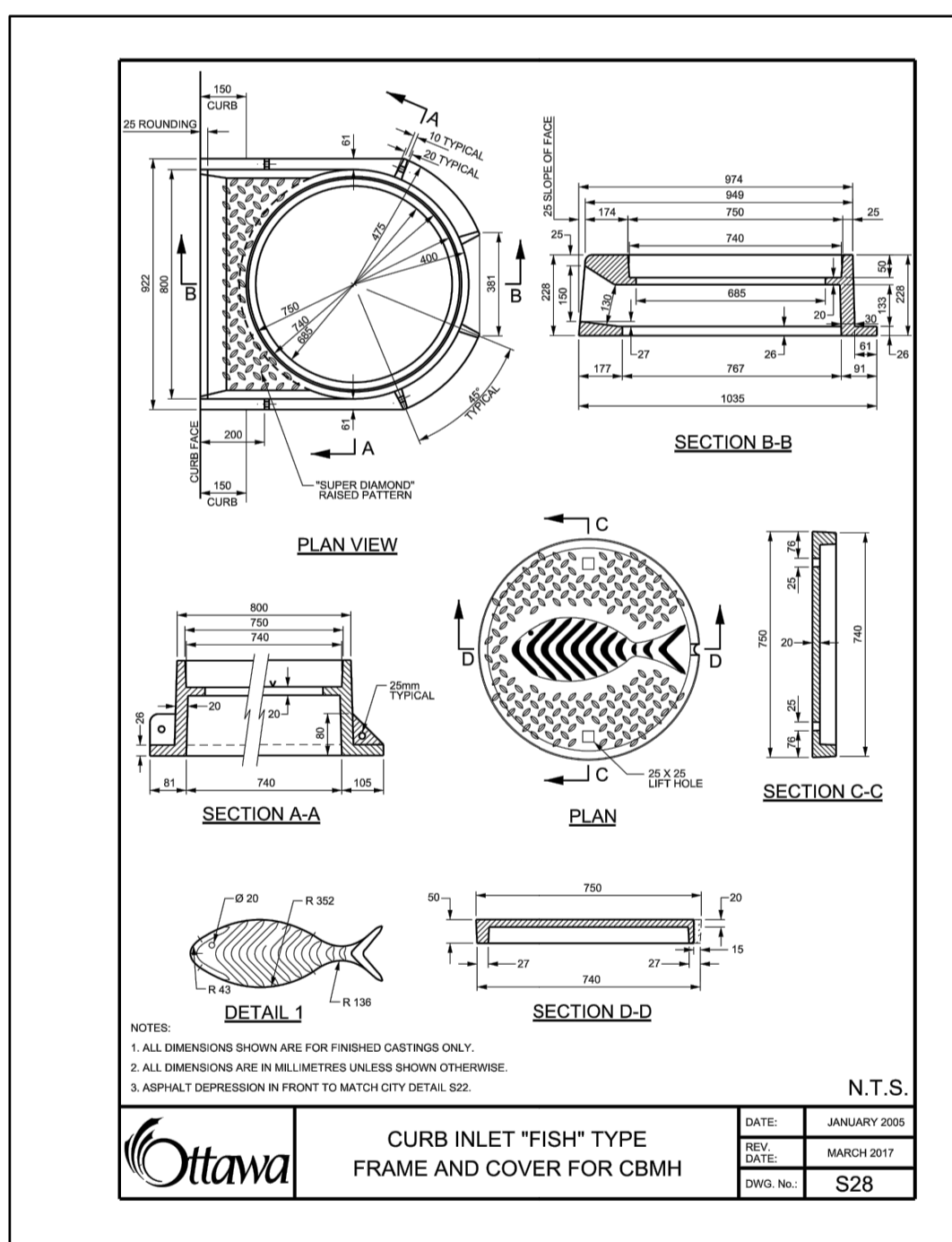
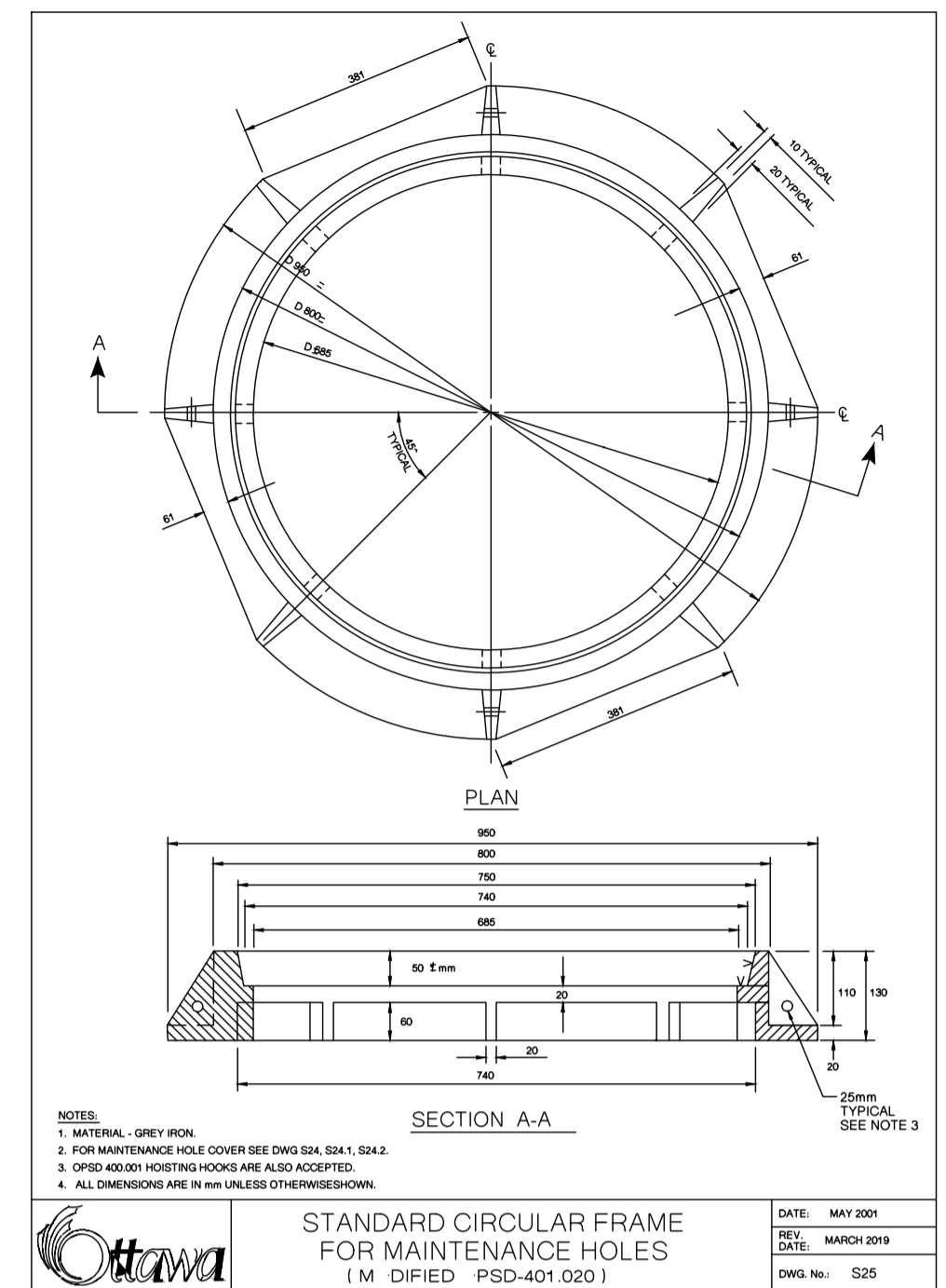
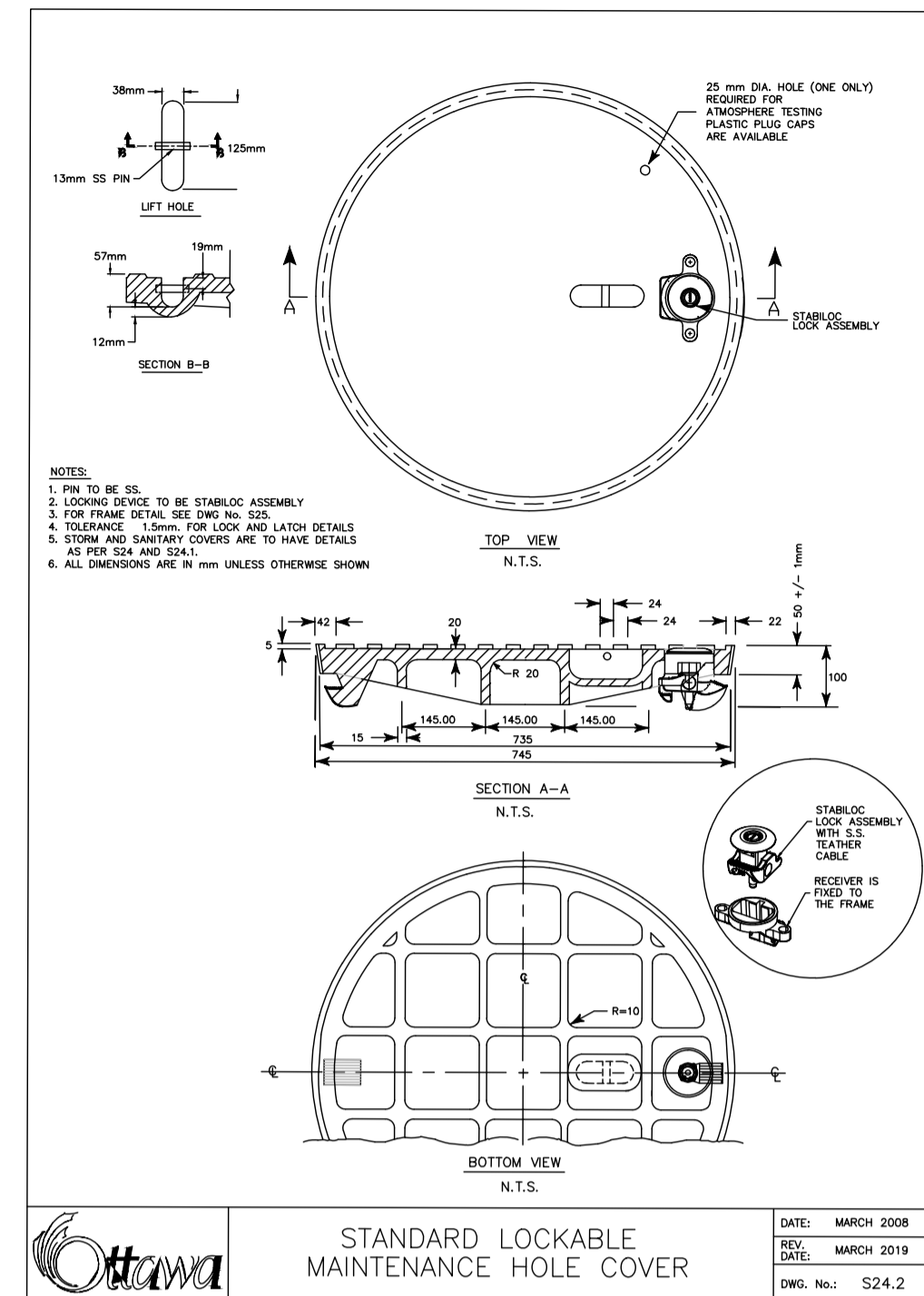
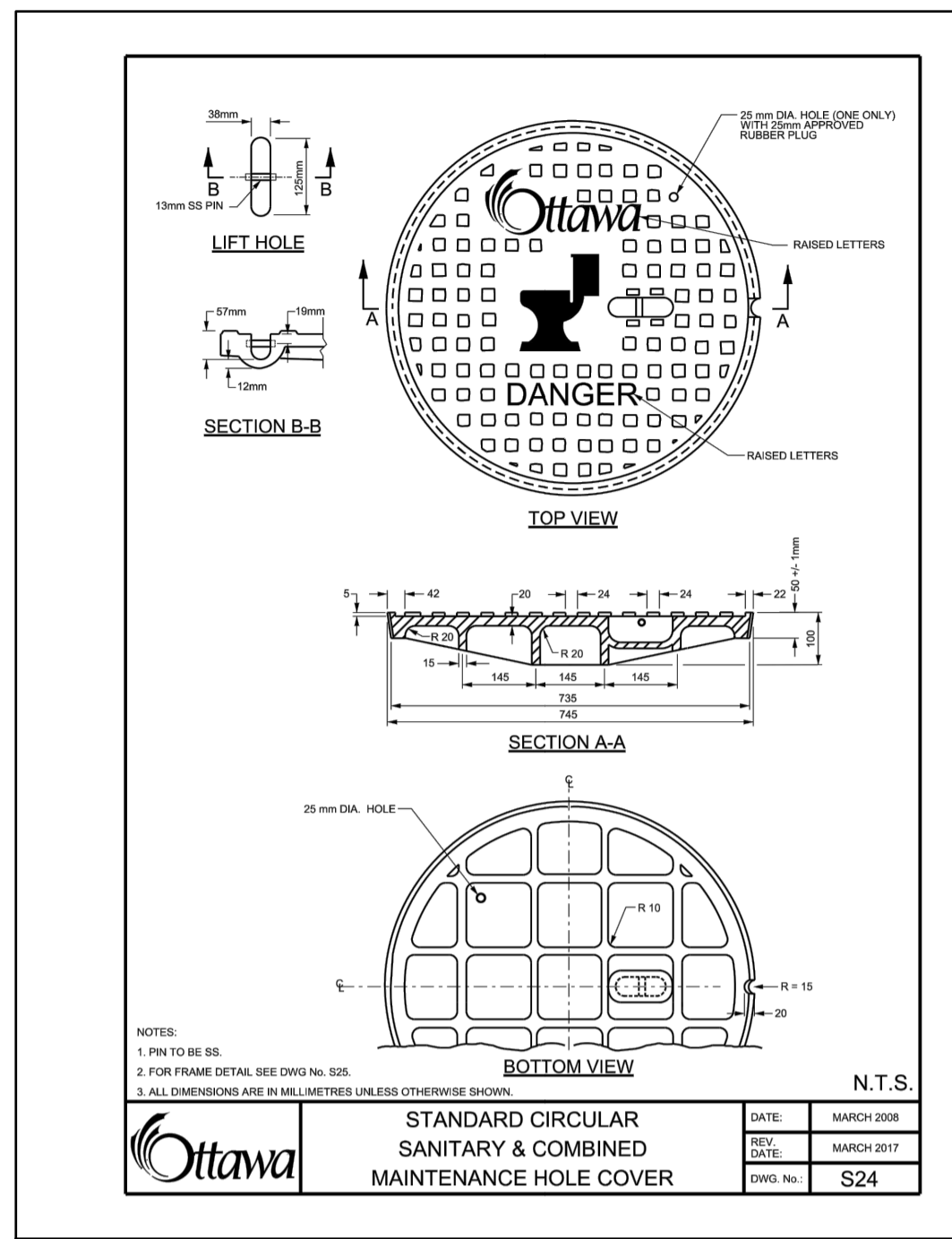
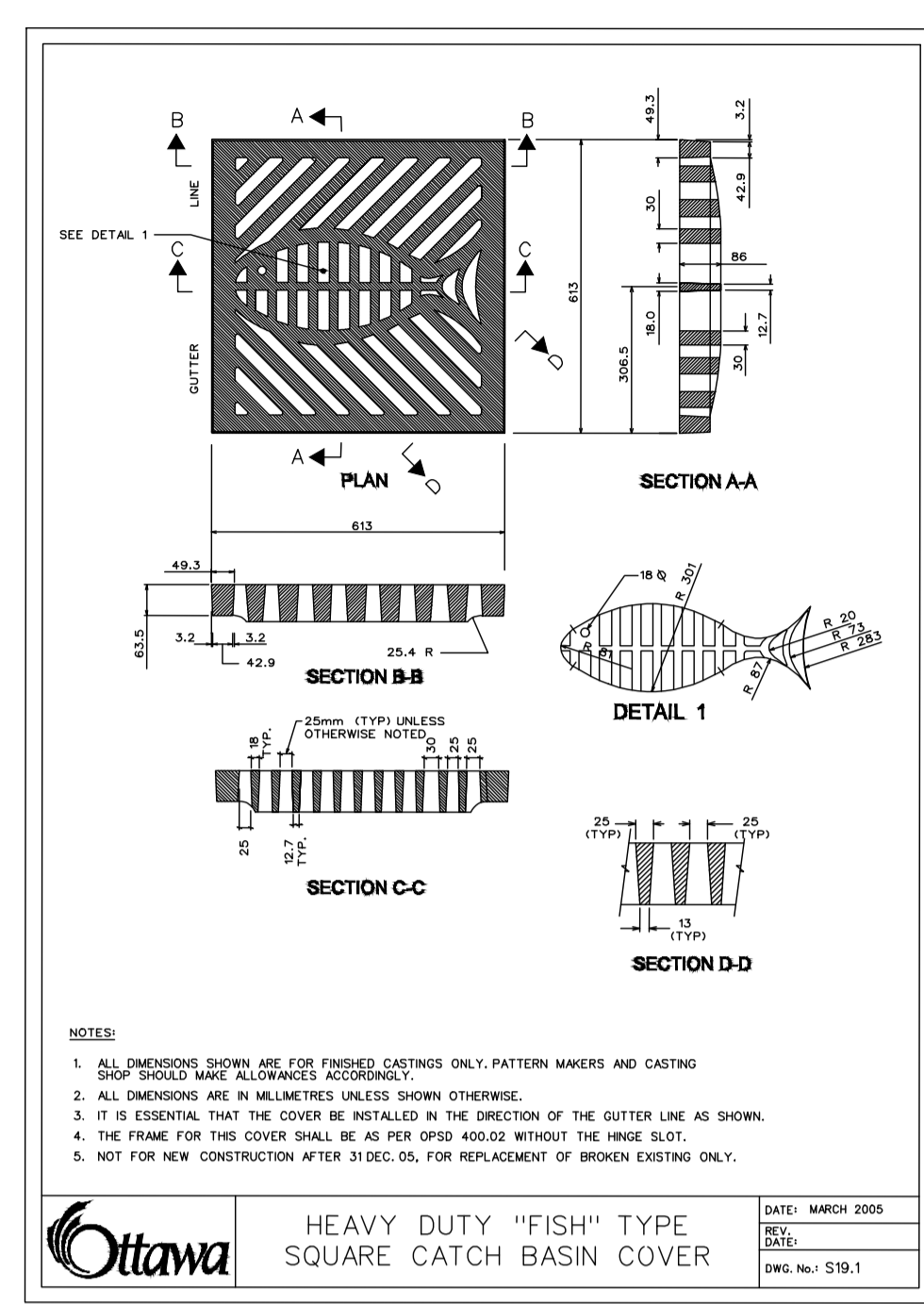
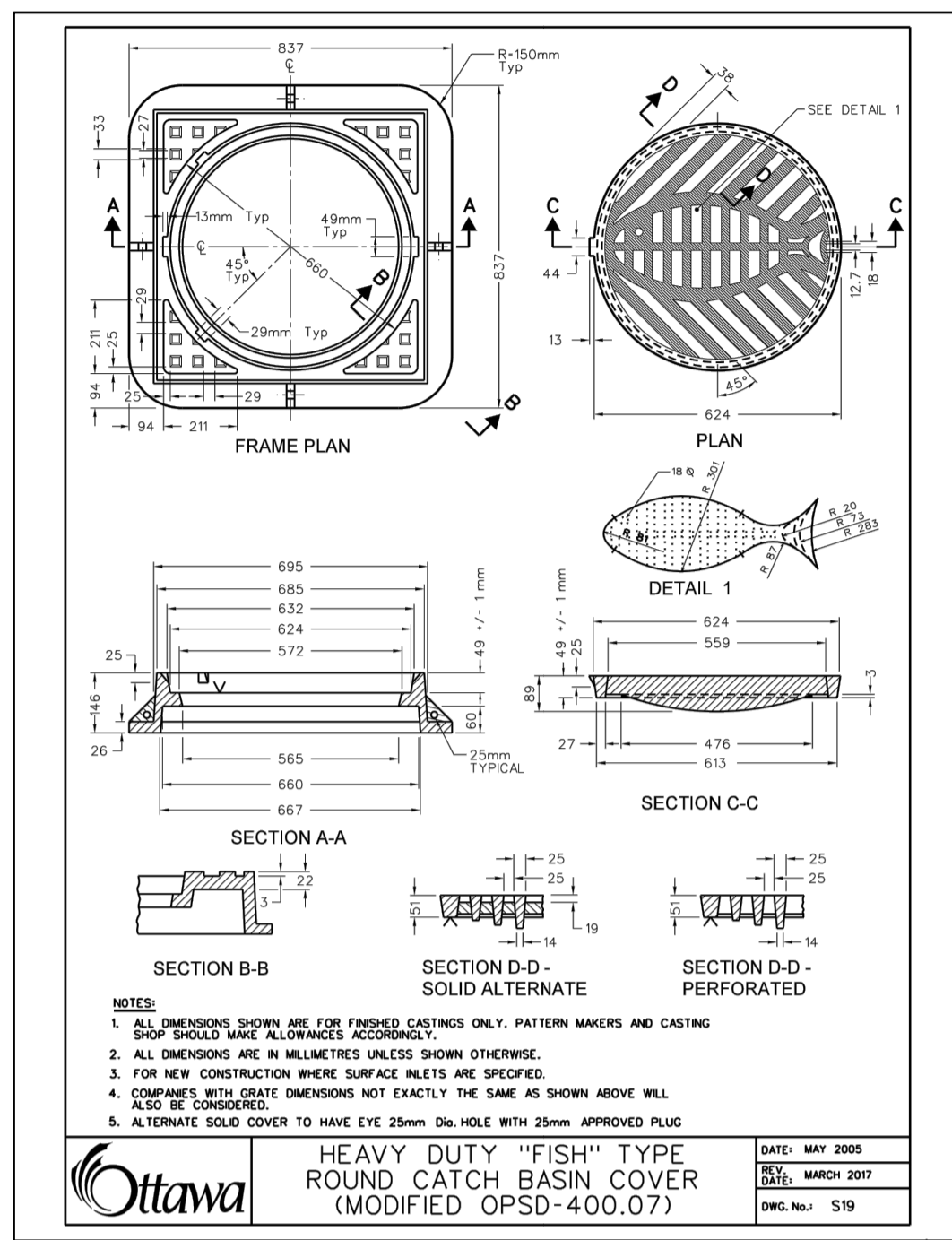
Telephone: (613) 254-9643
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 Website: www.novatech-eng.com

LOCATION: CITY OF OTTAWA THE COMMONS
 DRAWING NAME: STANDARD DETAILS

PROJECT No.: 118224-00
 REV: REV # 1
 DRAWING No.: 118224-D1

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 D07-16-19-0027



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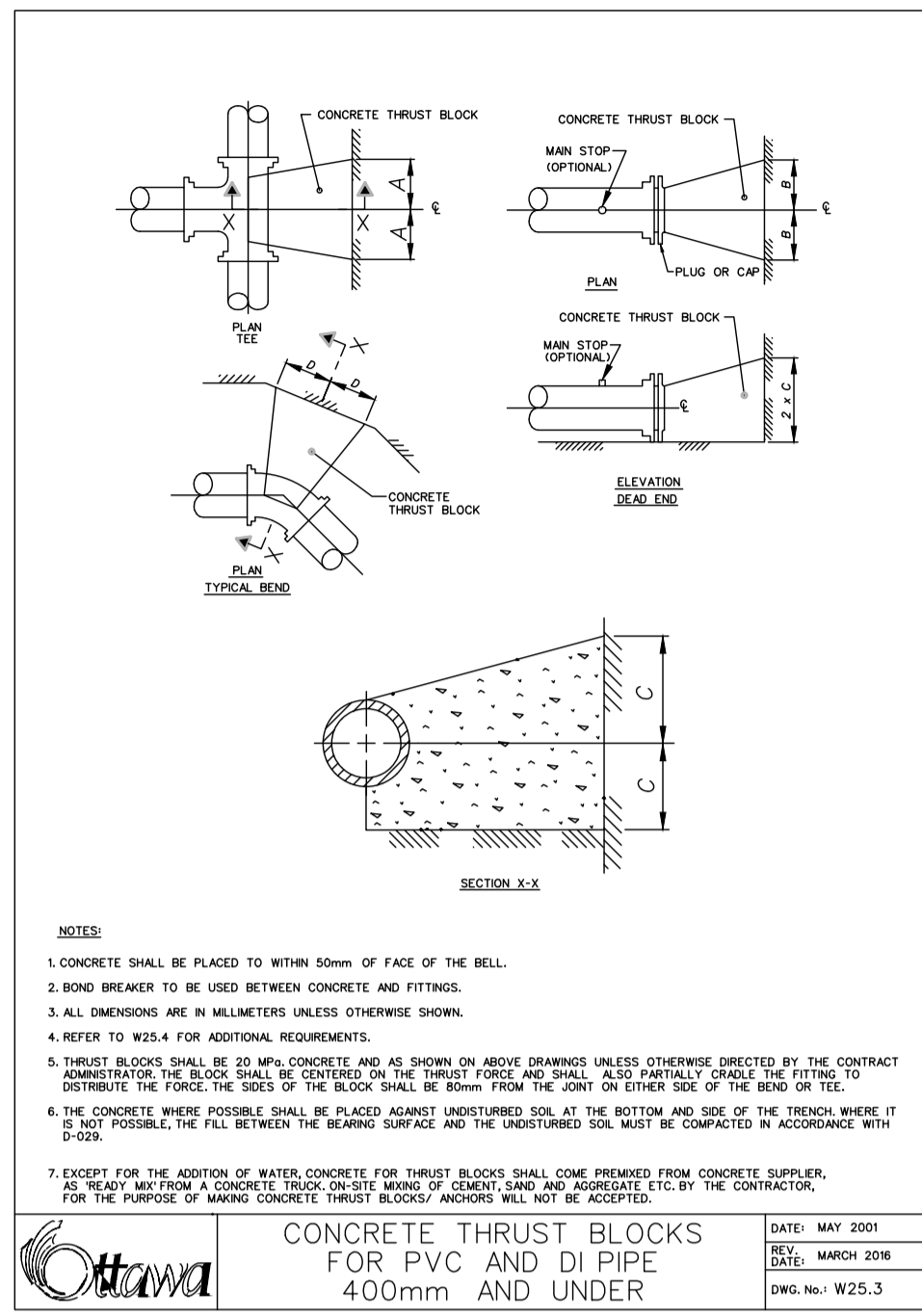
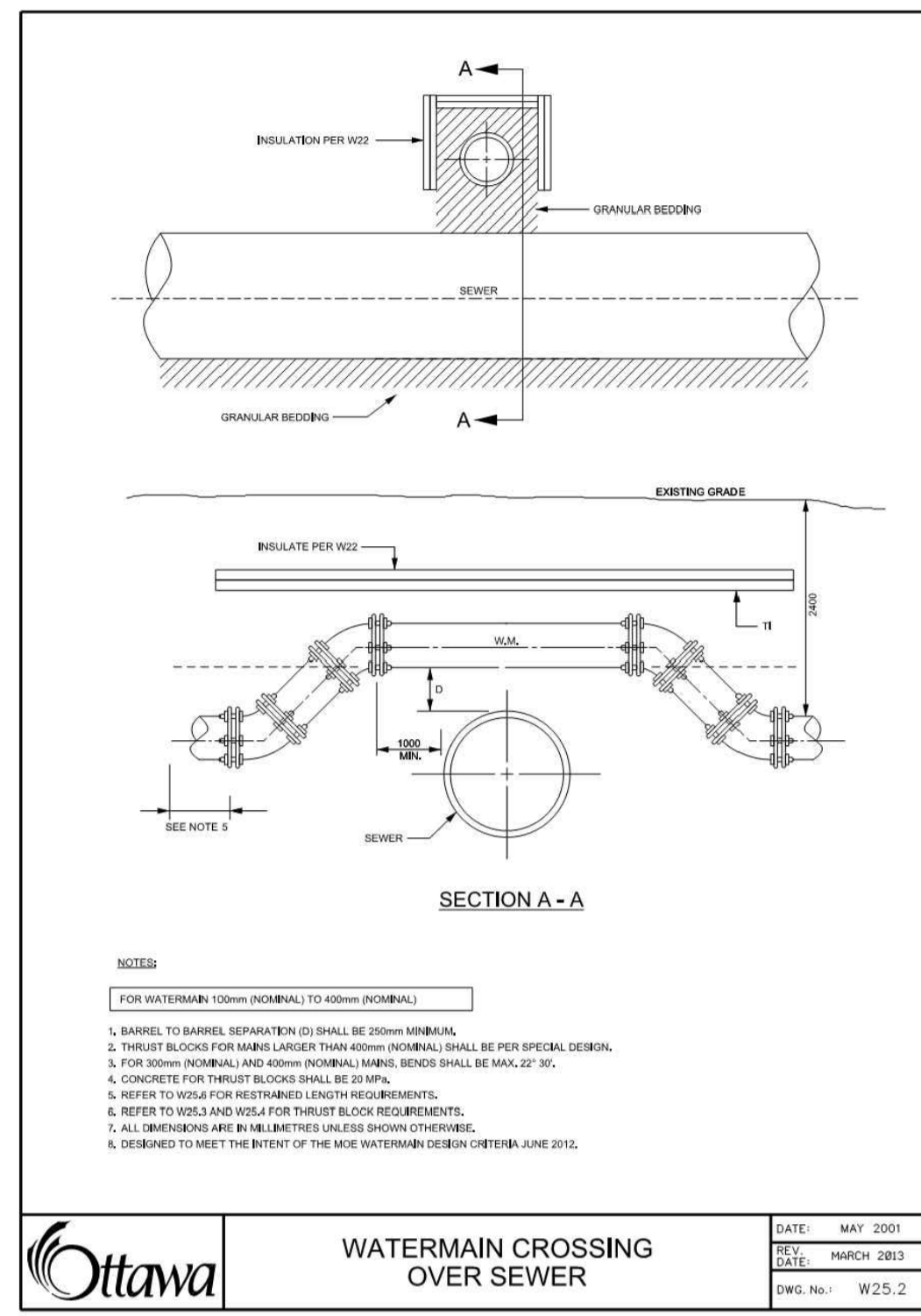
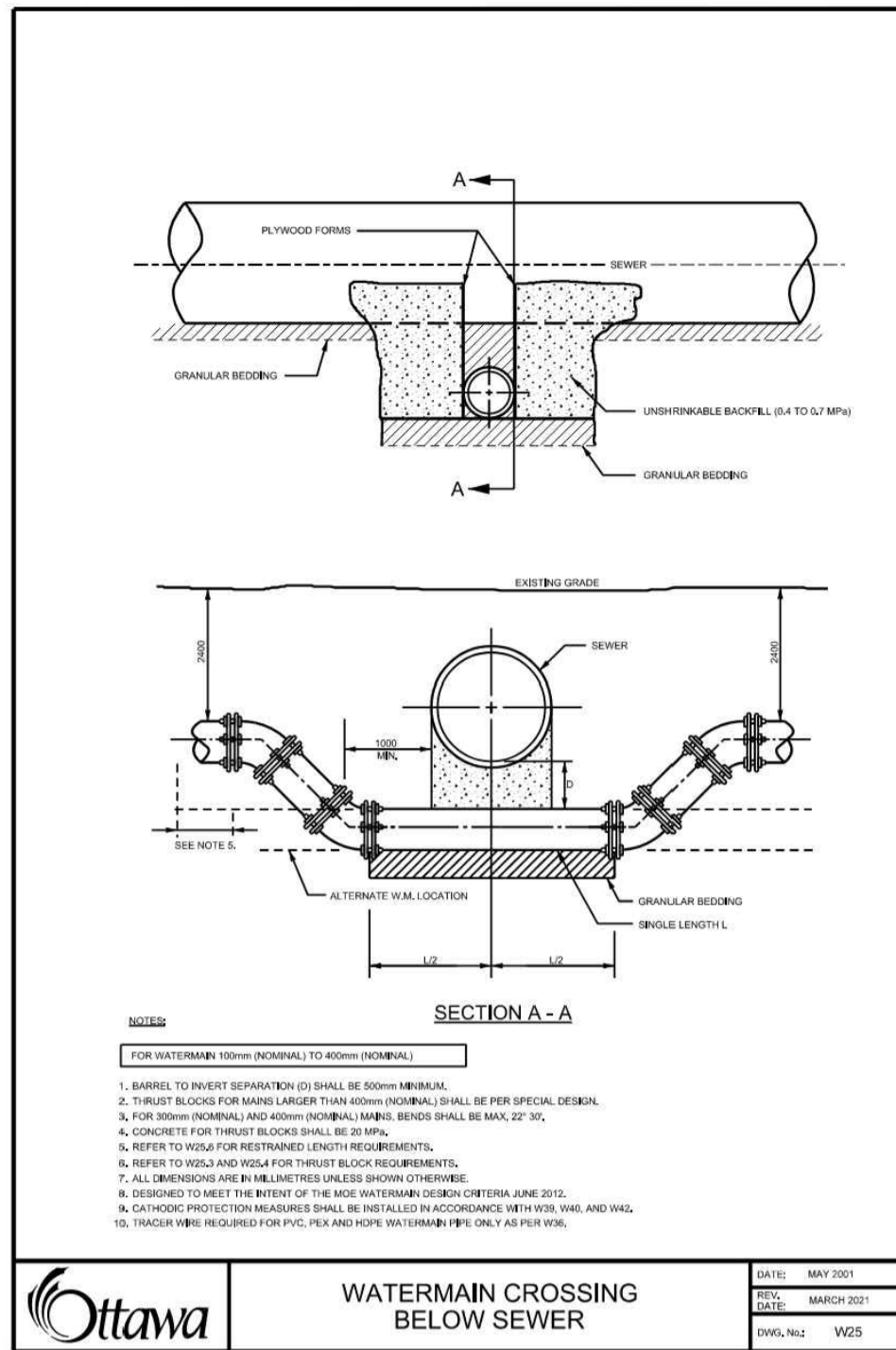
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| | | 118224-D2 |

D07-16-19-0027 #18535



THRUST BLOCK DIMENSION TABLES FOR PVC AND DI PIPE 400mm AND UNDER

DATE: MAY 2001
REV. DATE: MARCH 2011
DWG. No.: W25.4

1. SOIL DESCRIPTION: VERY FINE SANDS, SANDY CLAYS, CLAYS.
SOILS WITH TYPICAL BEARING STRENGTH OF 100 TO 150 KPa

| PIPE DIAMETER | DIMENSION NOTED ON W25.3 | | | |
|---------------|--------------------------|------|-----|-----|
| | A | B | C | D |
| 102 | 250 | 250 | 200 | 200 |
| 152 | 400 | 400 | 250 | 300 |
| 203 | 500 | 500 | 300 | 400 |
| 254 | 600 | 600 | 400 | 500 |
| 305 | 800 | 800 | 450 | 650 |
| 406 | 1050 | 1050 | 600 | 850 |

2. SOIL DESCRIPTION: SILTY SAND, GRAVELS OR CLAYEY SAND, FINEL MATURED, MODERATE AMOUNT OF FINES.
SOILS WITH TYPICAL BEARING STRENGTH OF 200 TO 280 KPa

| PIPE DIAMETER | DIMENSION NOTED ON W25.3 | | | |
|---------------|--------------------------|-----|-----|-----|
| | A | B | C | D |
| 102 | 150 | 150 | 200 | 200 |
| 152 | 200 | 200 | 250 | 270 |
| 203 | 300 | 300 | 300 | 330 |
| 254 | 400 | 400 | 350 | 400 |
| 305 | 500 | 500 | 400 | 450 |
| 406 | 750 | 750 | 400 | 450 |

3. SOIL DESCRIPTION: SANDS, GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.
SOILS WITH TYPICAL BEARING STRENGTH OF 300 KPa AND OVER

| PIPE DIAMETER | DIMENSION NOTED ON W25.3 | | | |
|---------------|--------------------------|-----|-----|-----|
| | A | B | C | D |
| 102 | 150 | 150 | 150 | 150 |
| 152 | 200 | 200 | 200 | 200 |
| 203 | 200 | 200 | 200 | 230 |
| 254 | 200 | 200 | 250 | 270 |
| 305 | 250 | 250 | 300 | 300 |
| 406 | 400 | 400 | 400 | 450 |

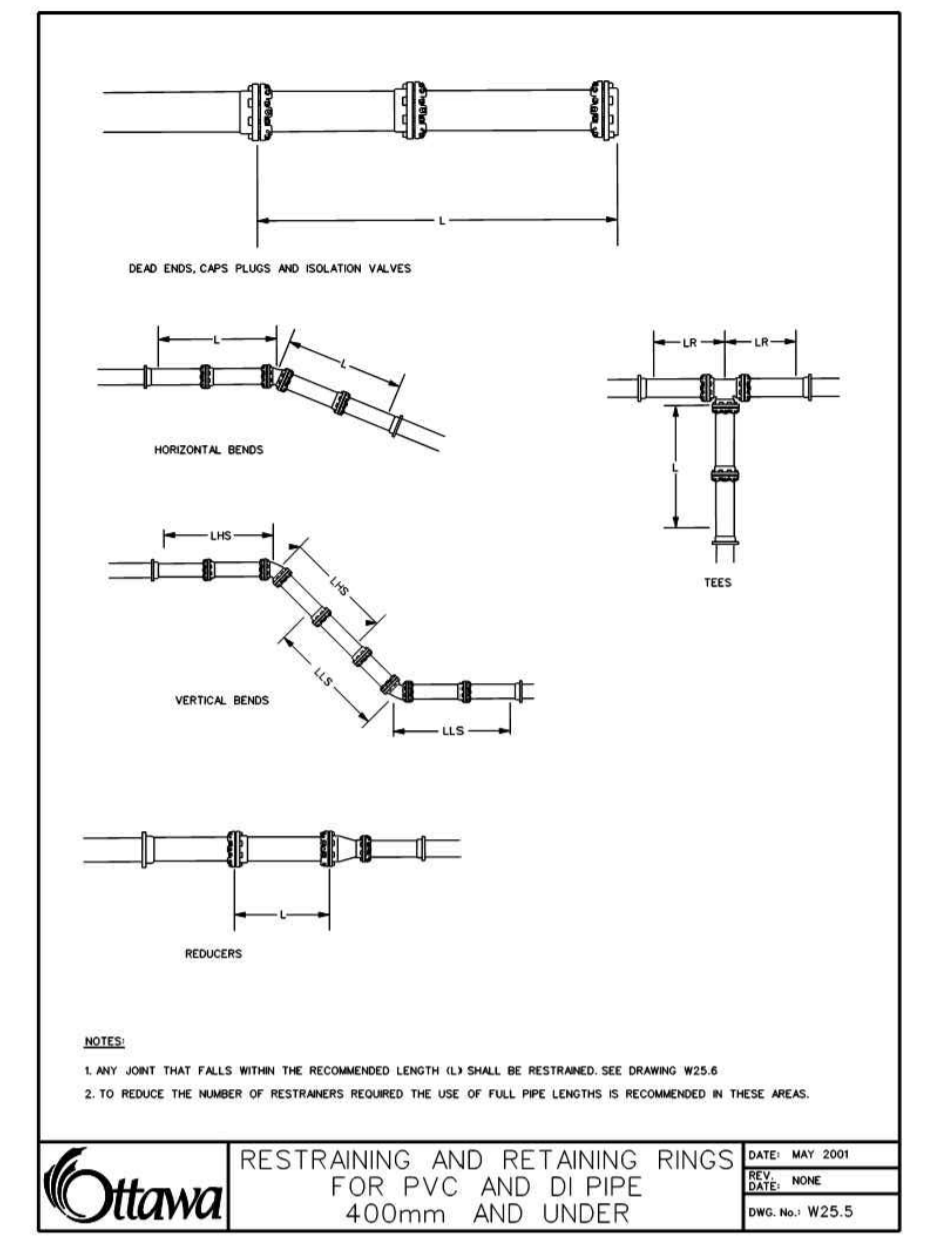
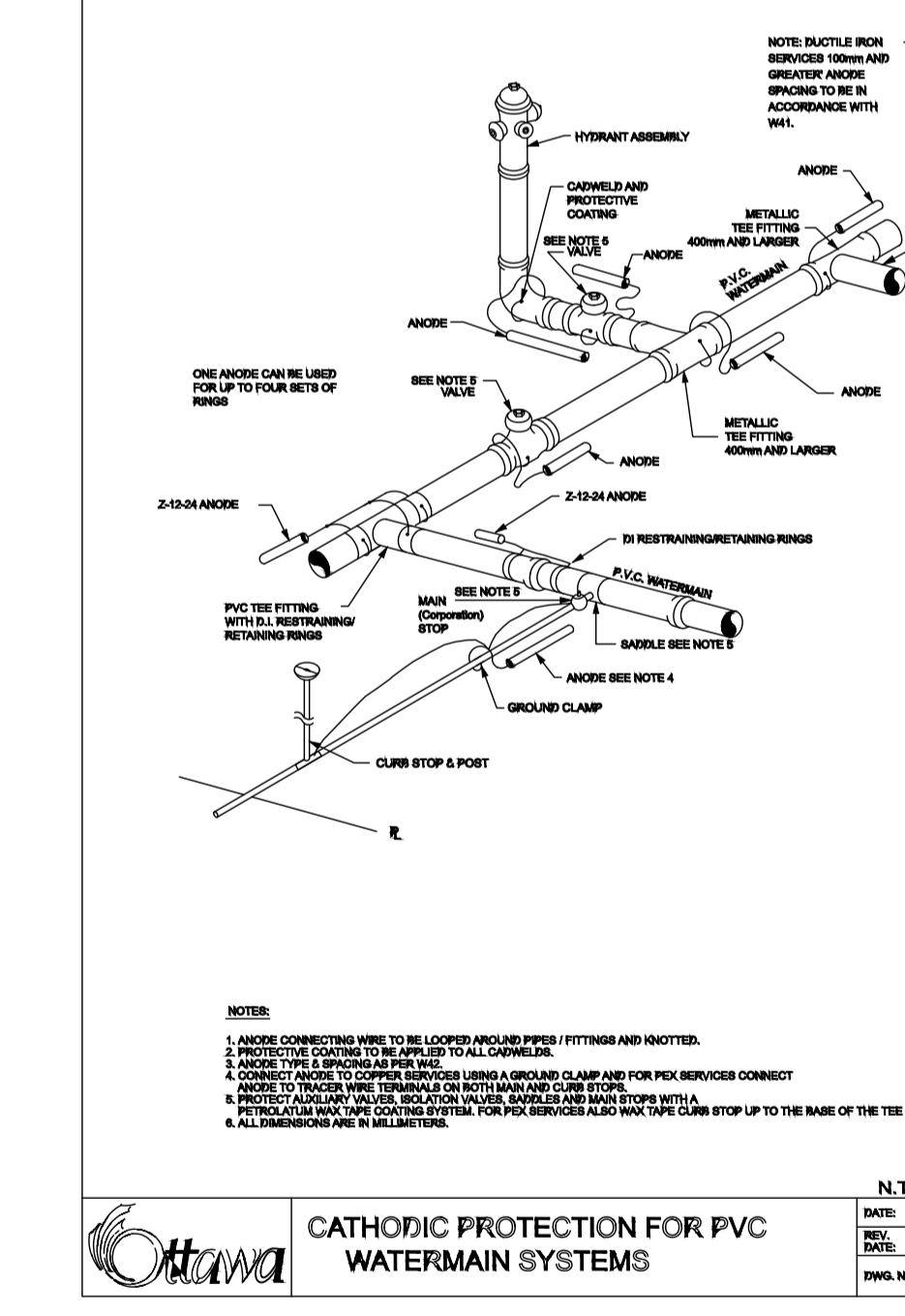
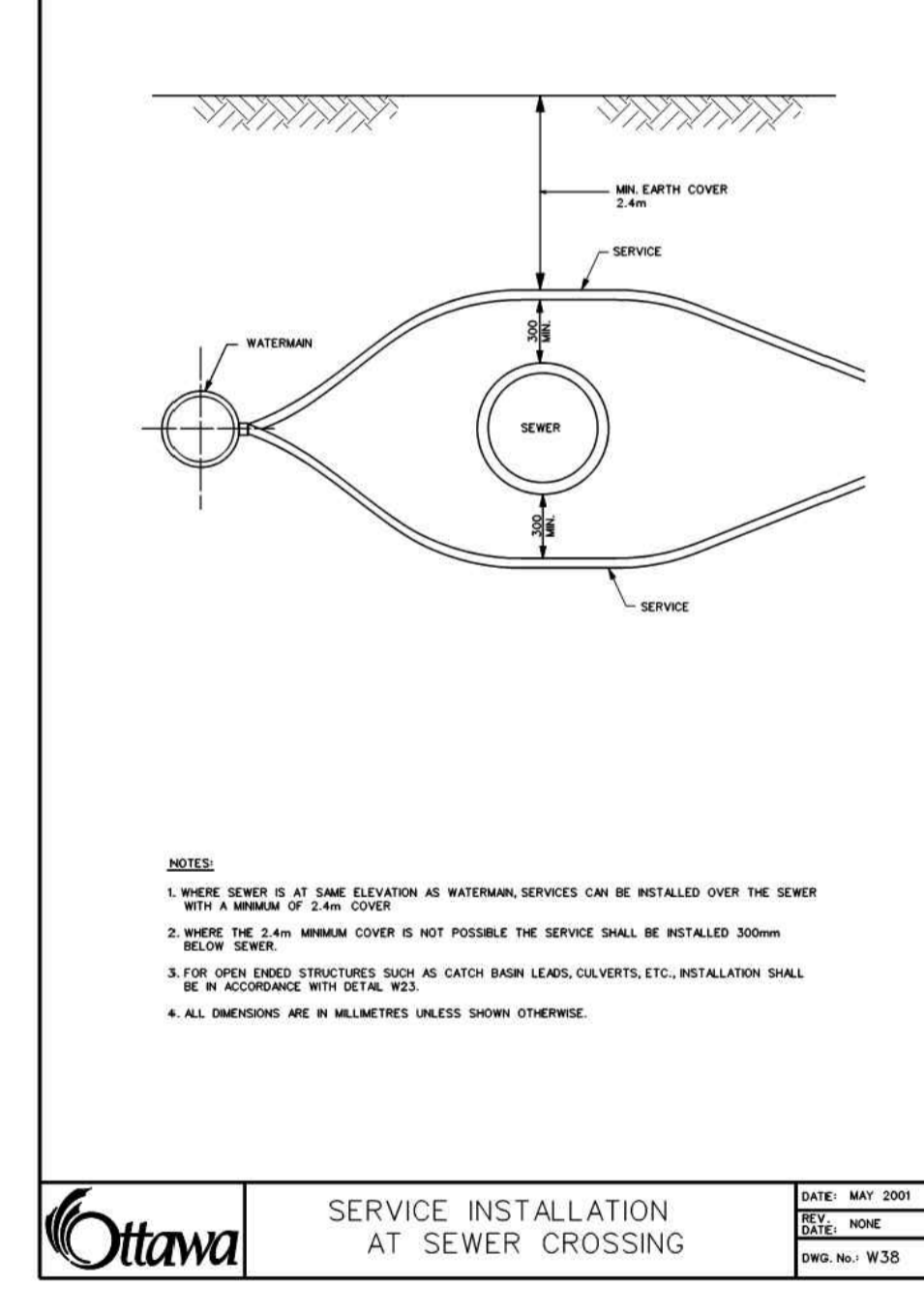
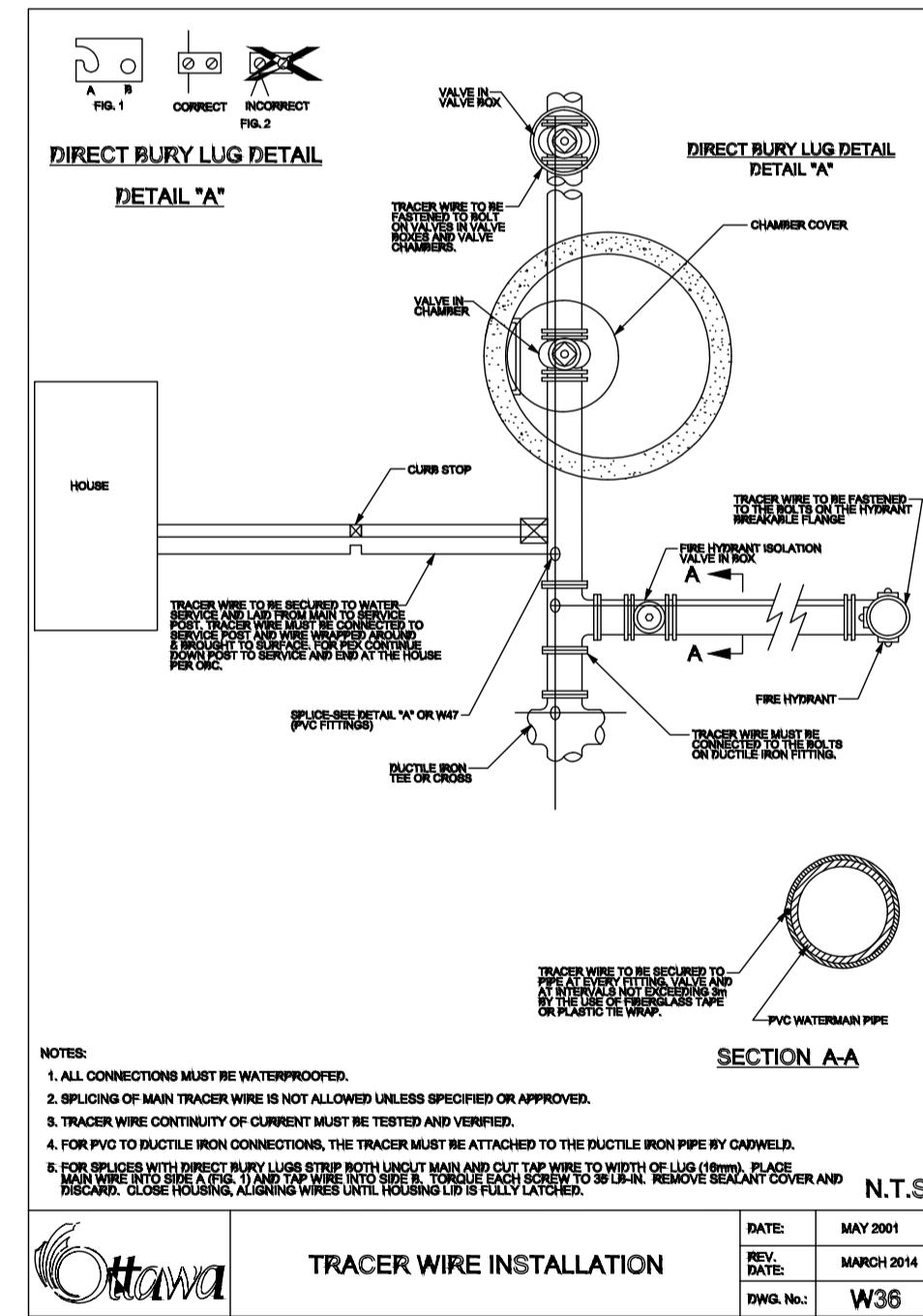
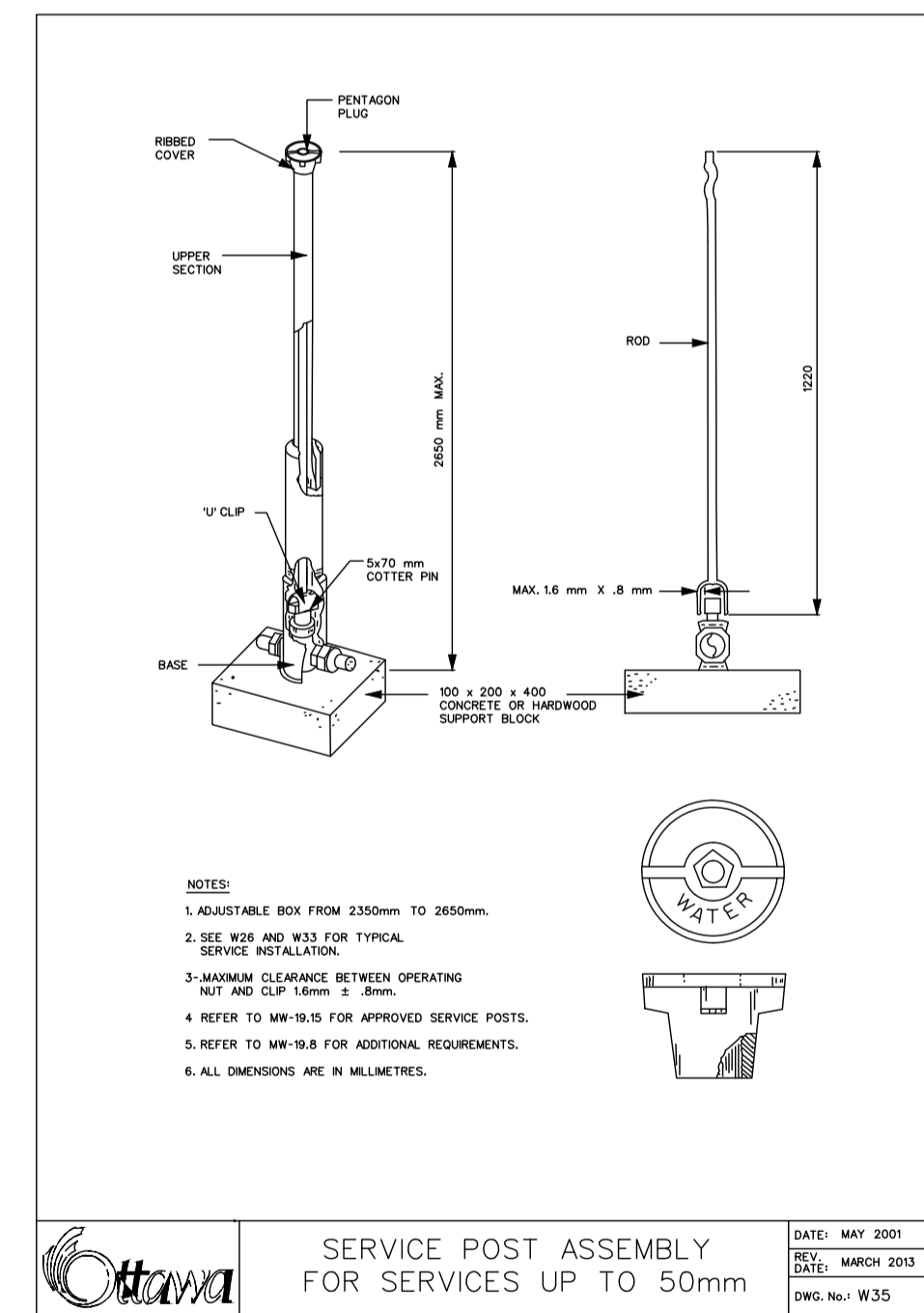


TABLE OF RESTRAINED LENGTHS FOR DI AND PVC WATERMAIN PIPE IN STANDARD GRANULAR 'A' EMBEDMENT IN SOILS OF BEARING CAPACITY OF 100 KPa AND OVER

| REDUCERS | LARGER DIAMETER SIDE (TO BE RESTRAINED) | | | | | | | |
|----------|---|-------|-------|-------|-------|-------|--|--|
| | 100mm | 150mm | 200mm | 250mm | 300mm | 400mm | | |
| 100mm | N/A | 3 | 6 | 8 | 10 | 14 | | |
| 150mm | N/A | N/A | 4 | 6 | 9 | 13 | | |
| 200mm | N/A | N/A | N/A | 3 | 6 | 11 | | |
| 250mm | N/A | N/A | N/A | N/A | 4 | 9 | | |
| 300mm | N/A | N/A | N/A | N/A | N/A | 7 | | |
| 400mm | N/A | N/A | N/A | N/A | N/A | N/A | | |

DATE: MAY 2001
REV. DATE: MARCH 2011
DWG. No.: W25.6



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Nov 26, 2021
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LOCATION: CITY OF OTTAWA THE COMMONS

DRAWING NAME: STANDARD DETAILS

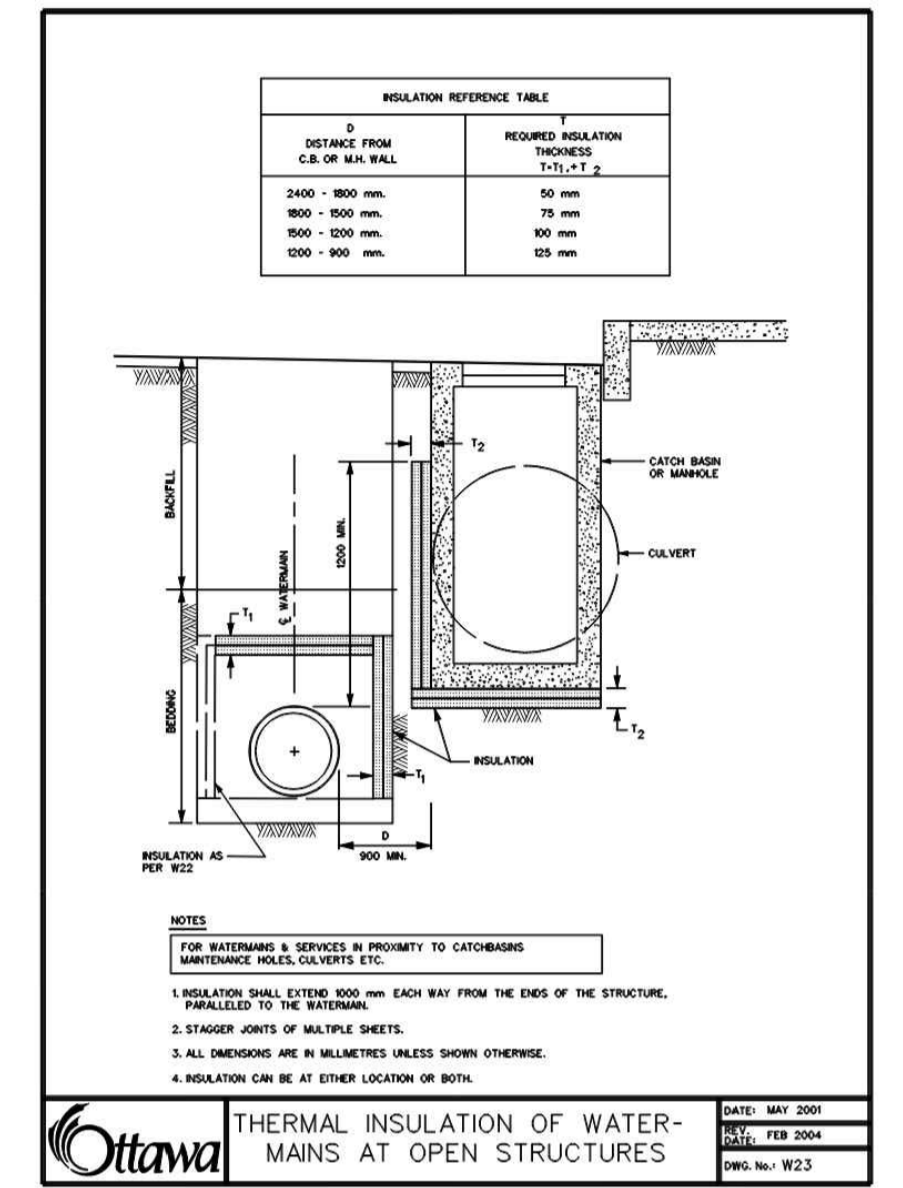
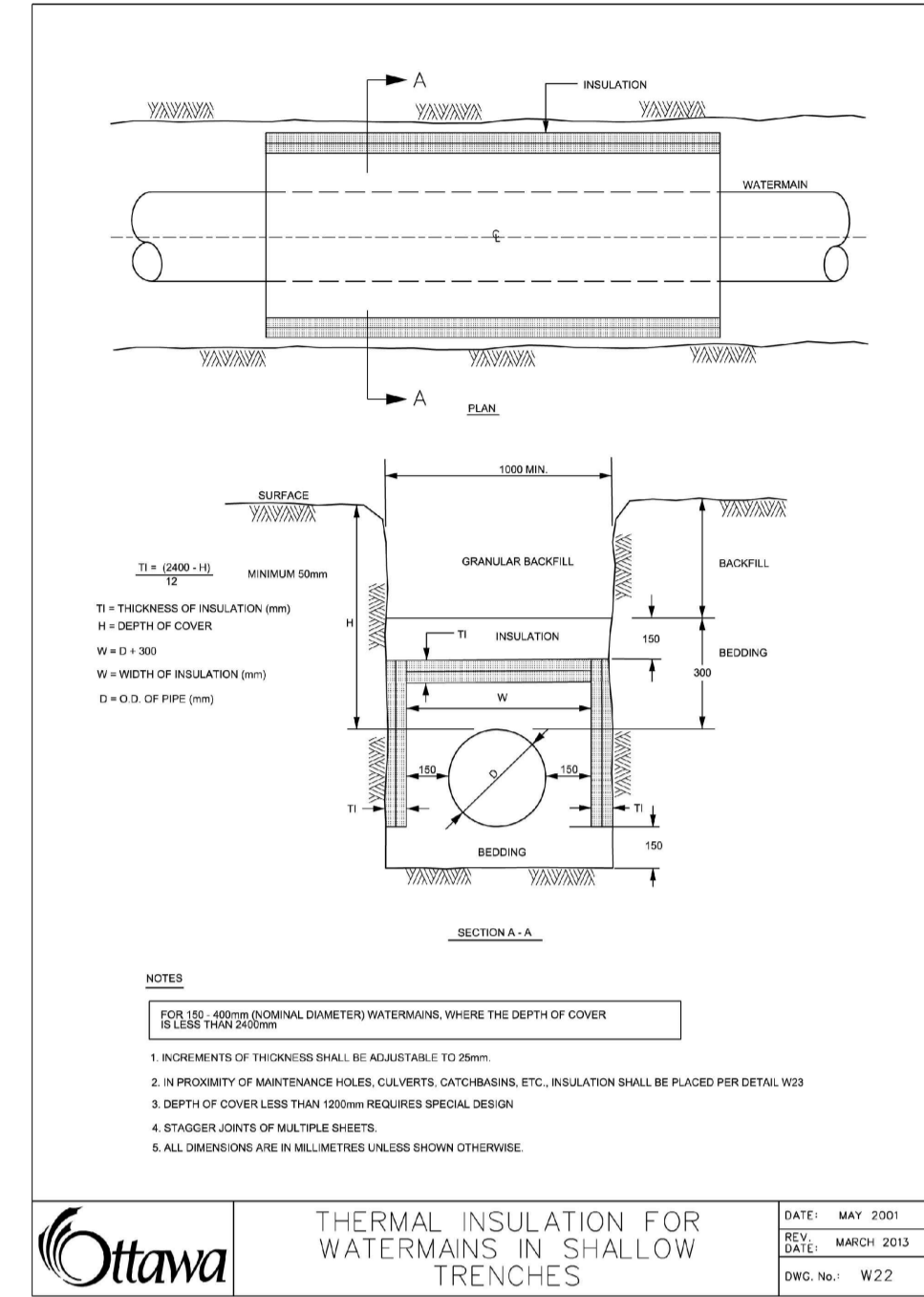
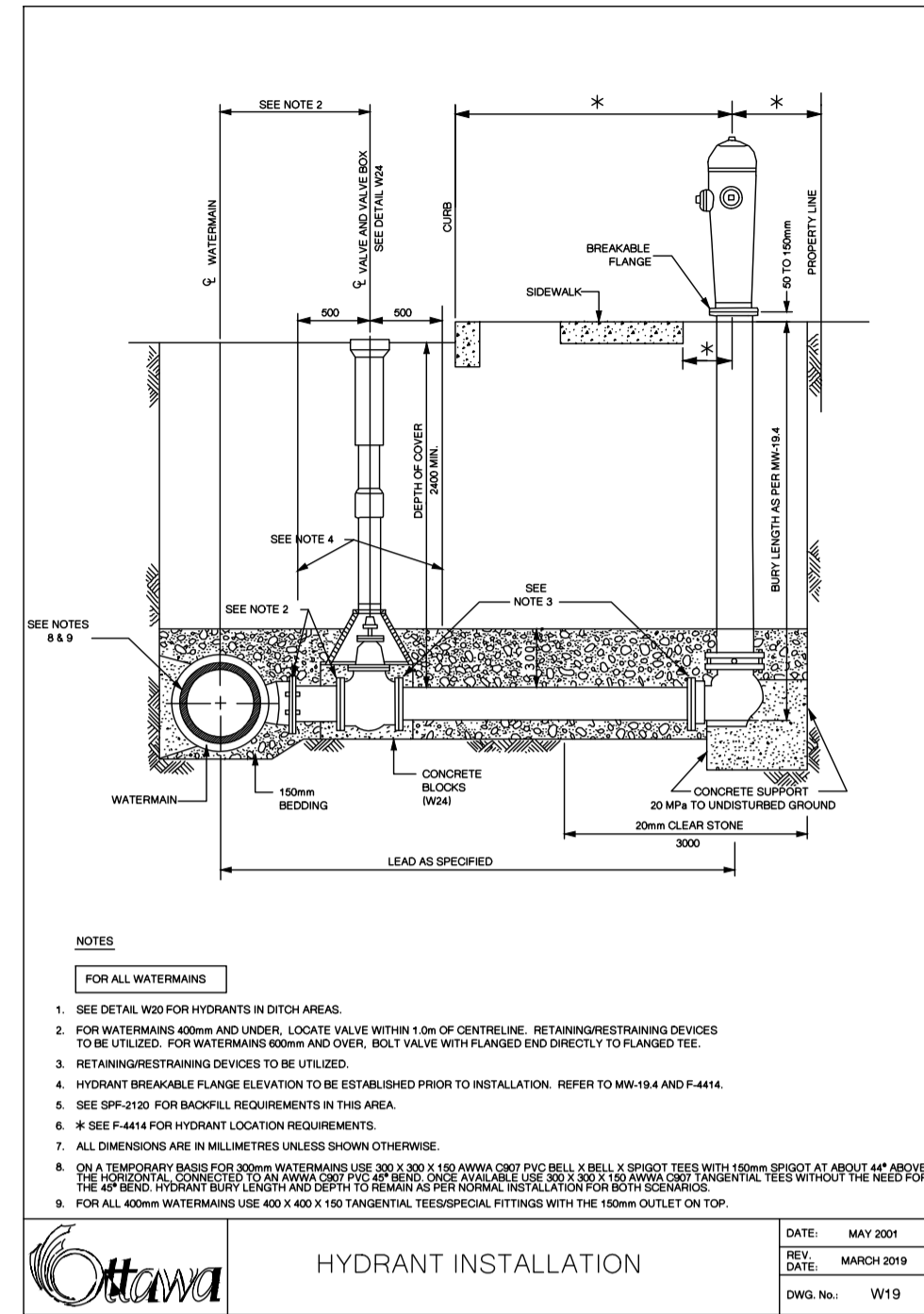
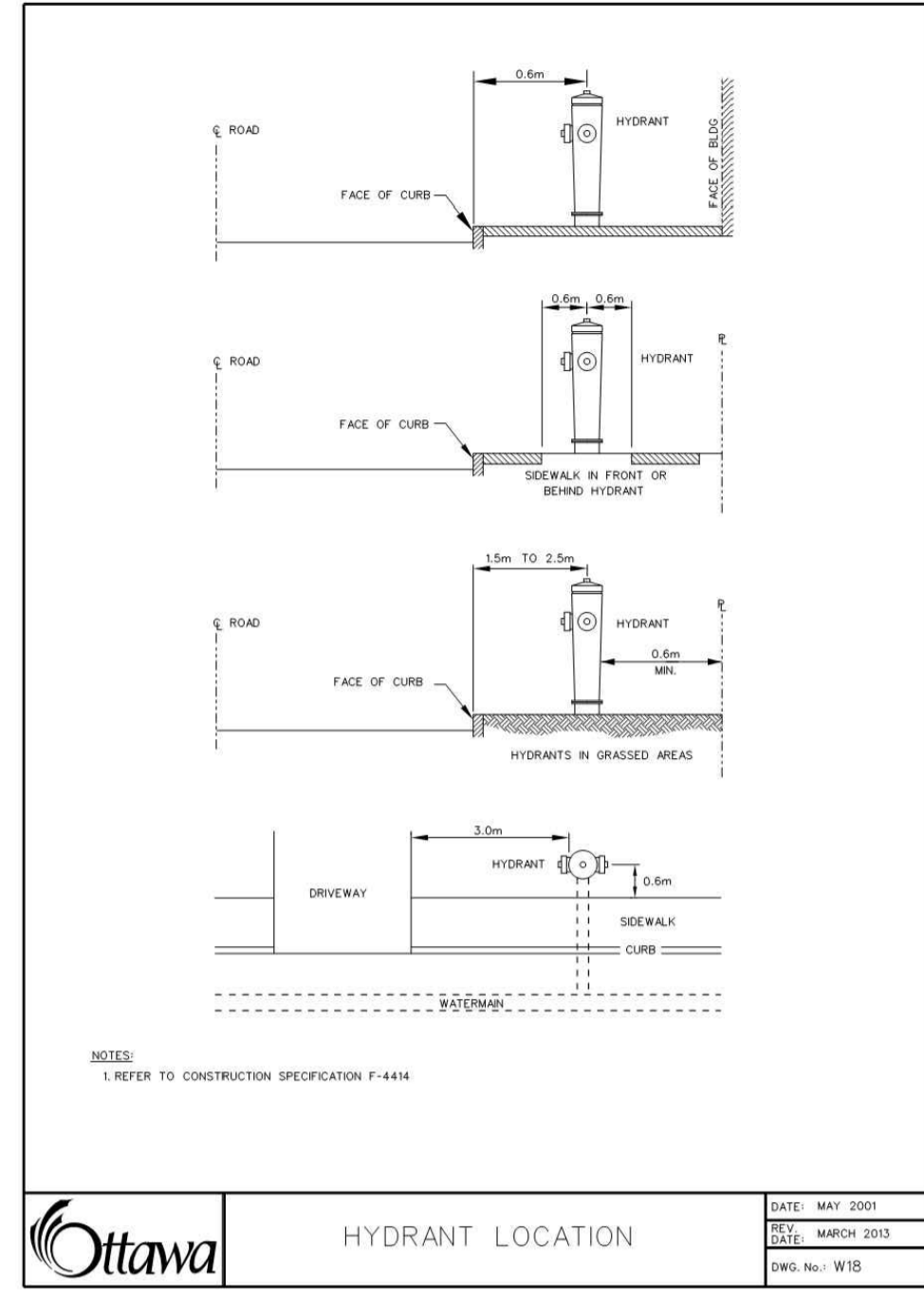
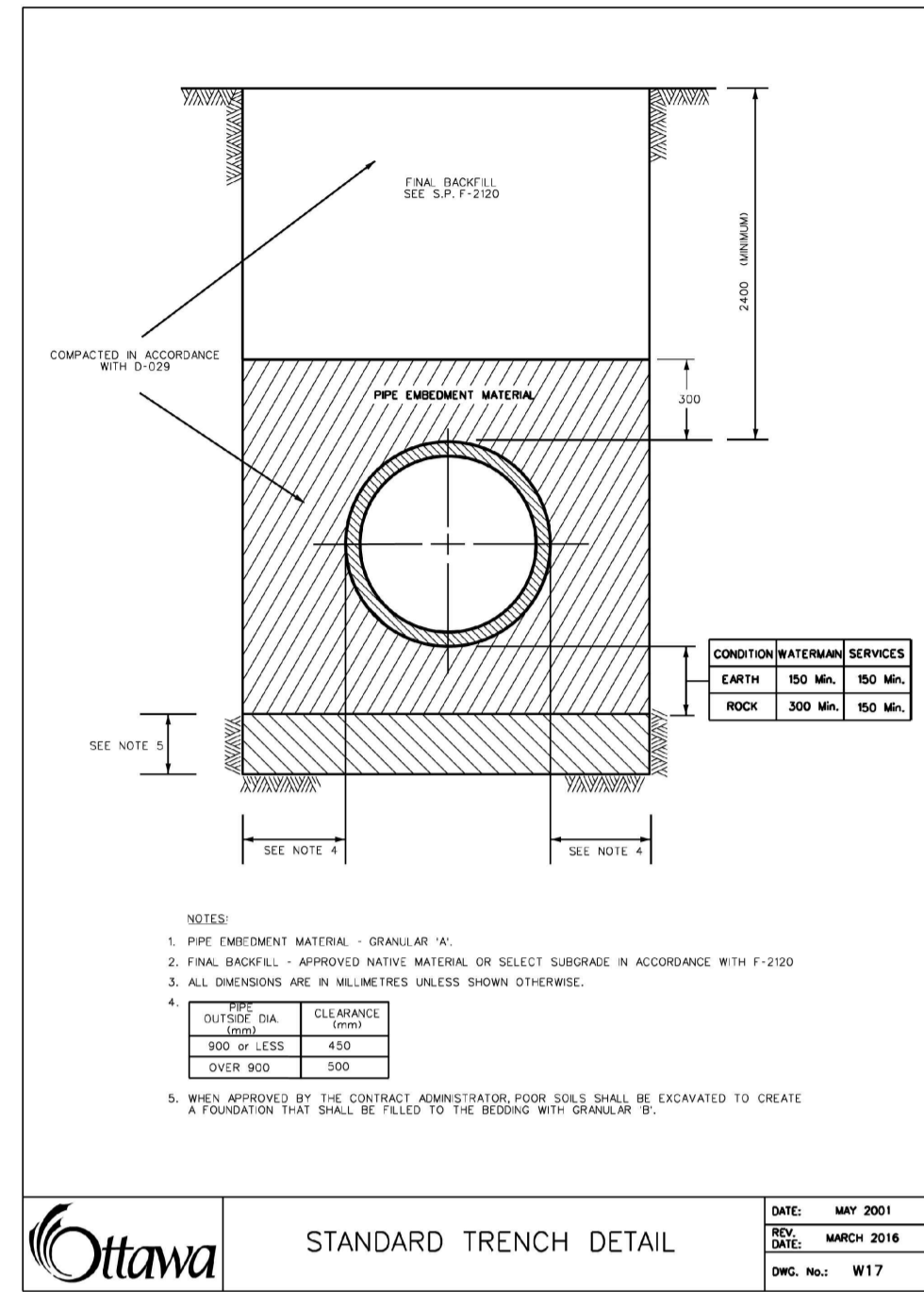
PROJECT No.: 118224-00

REV: REV # 1

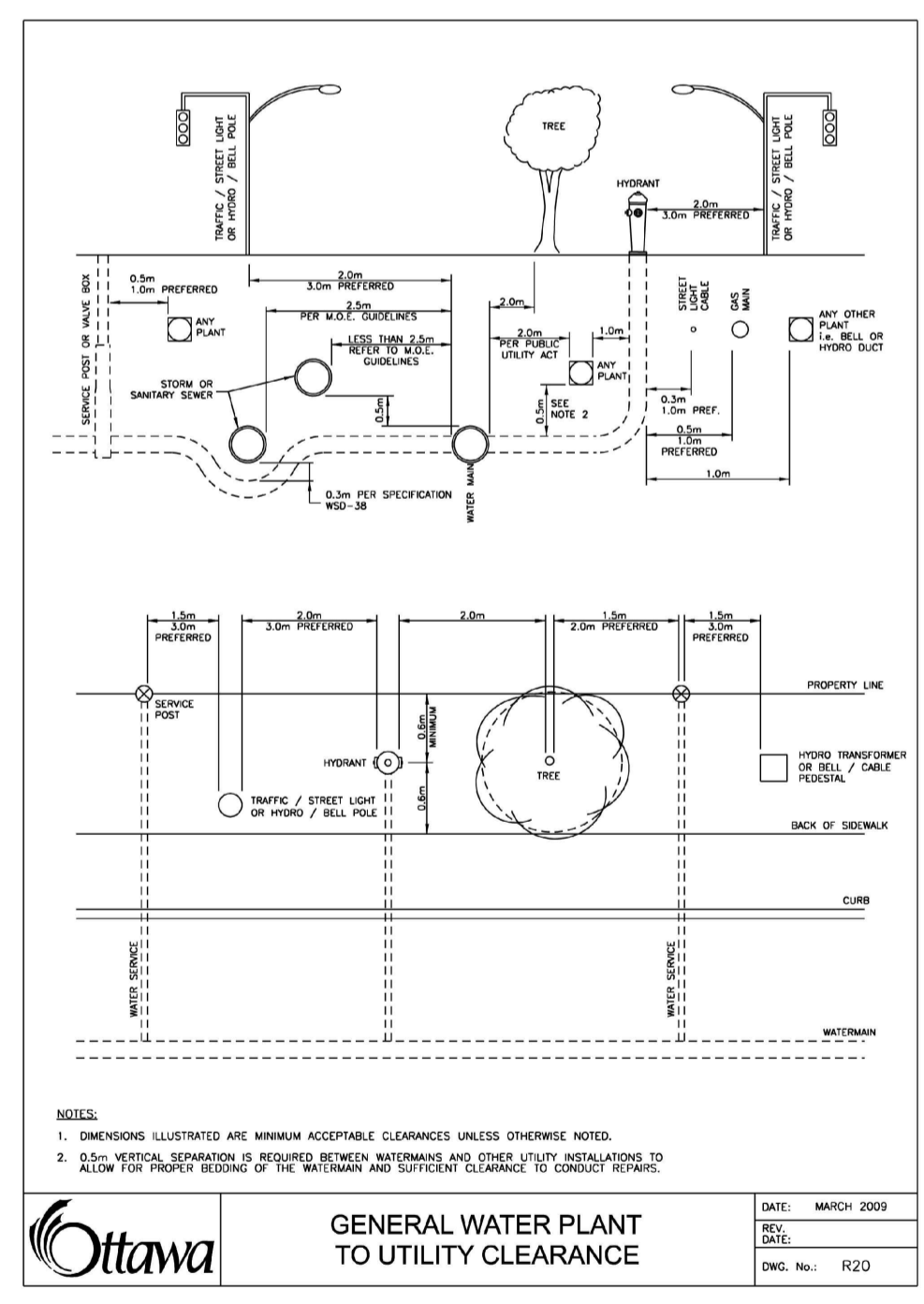
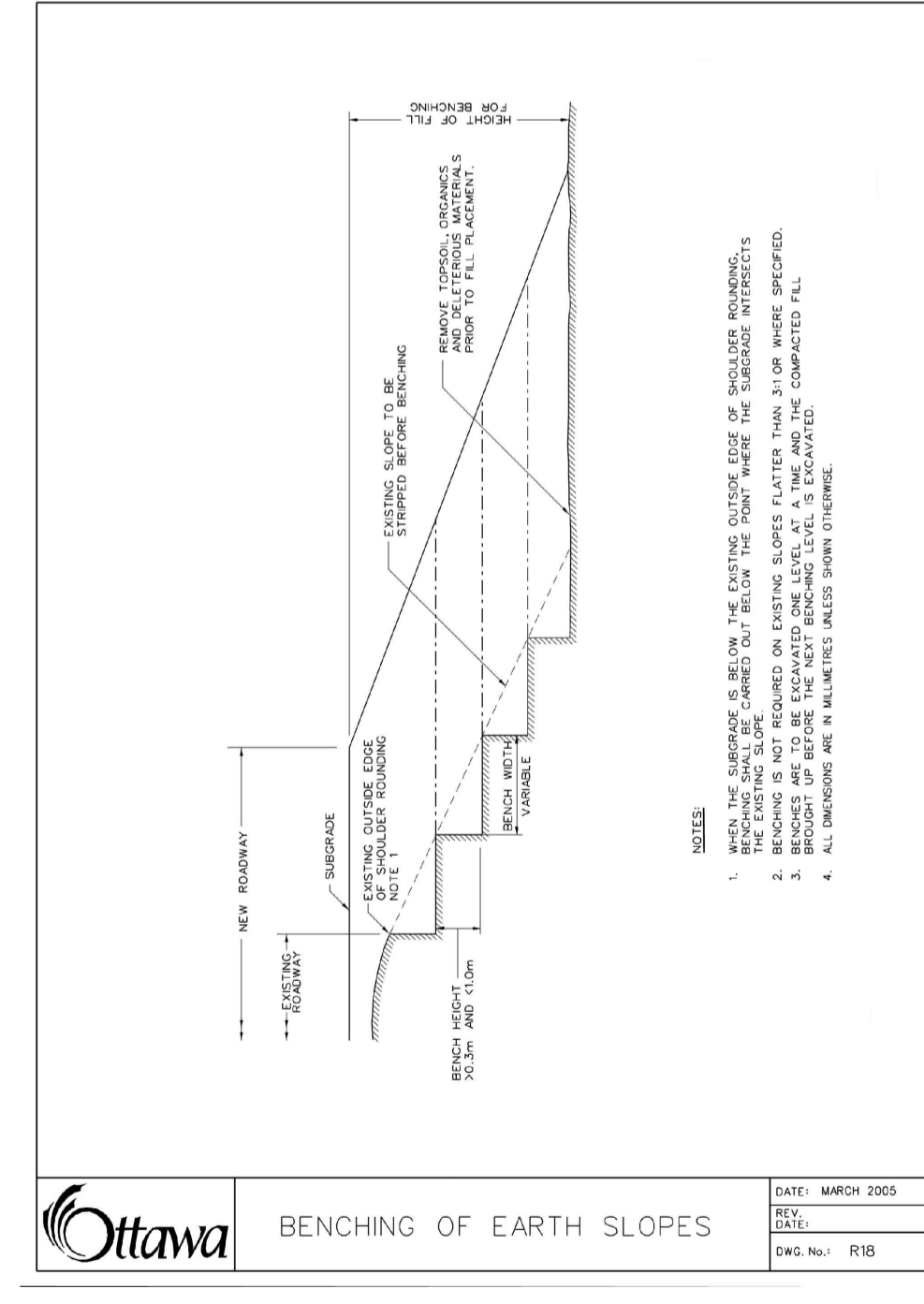
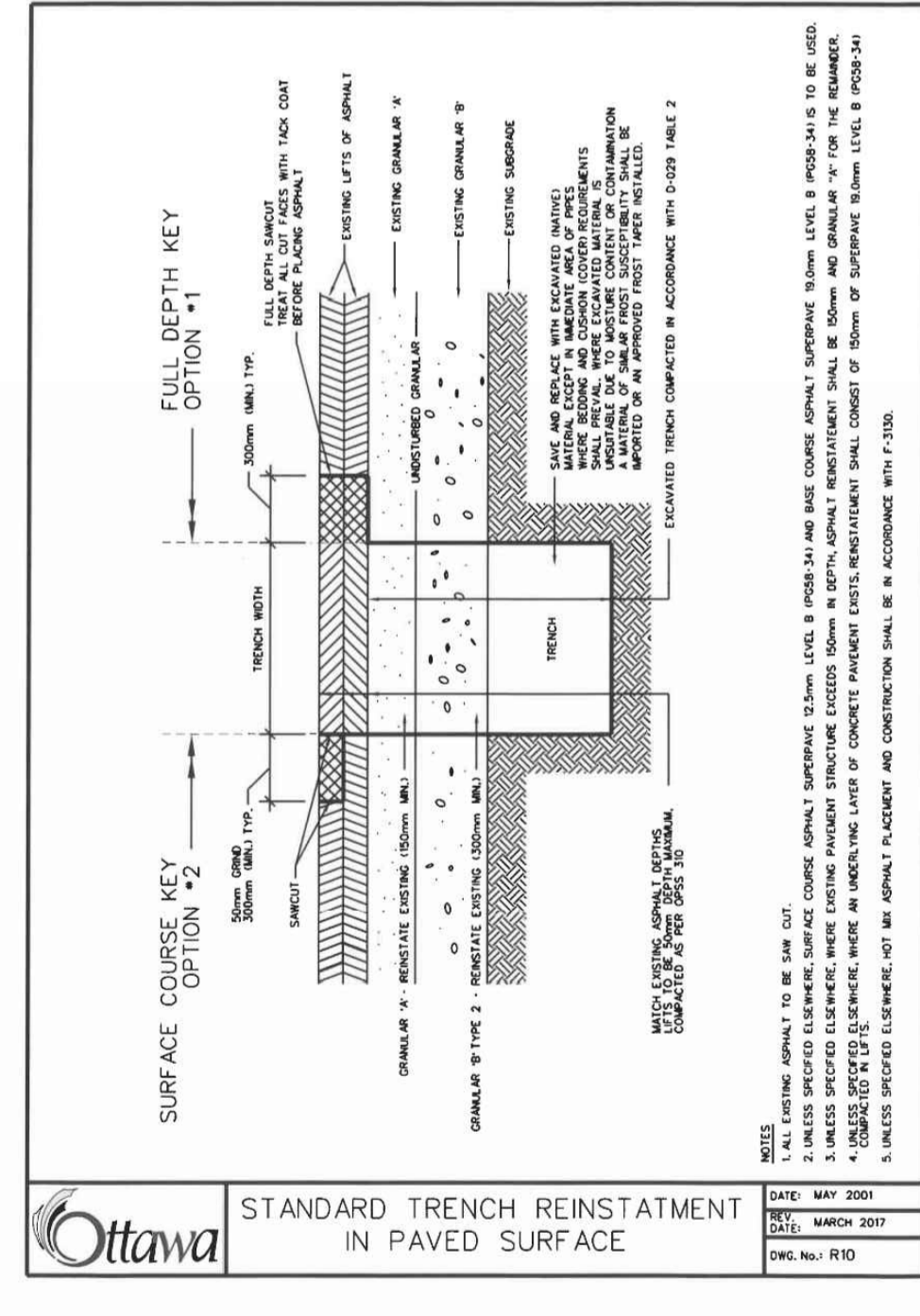
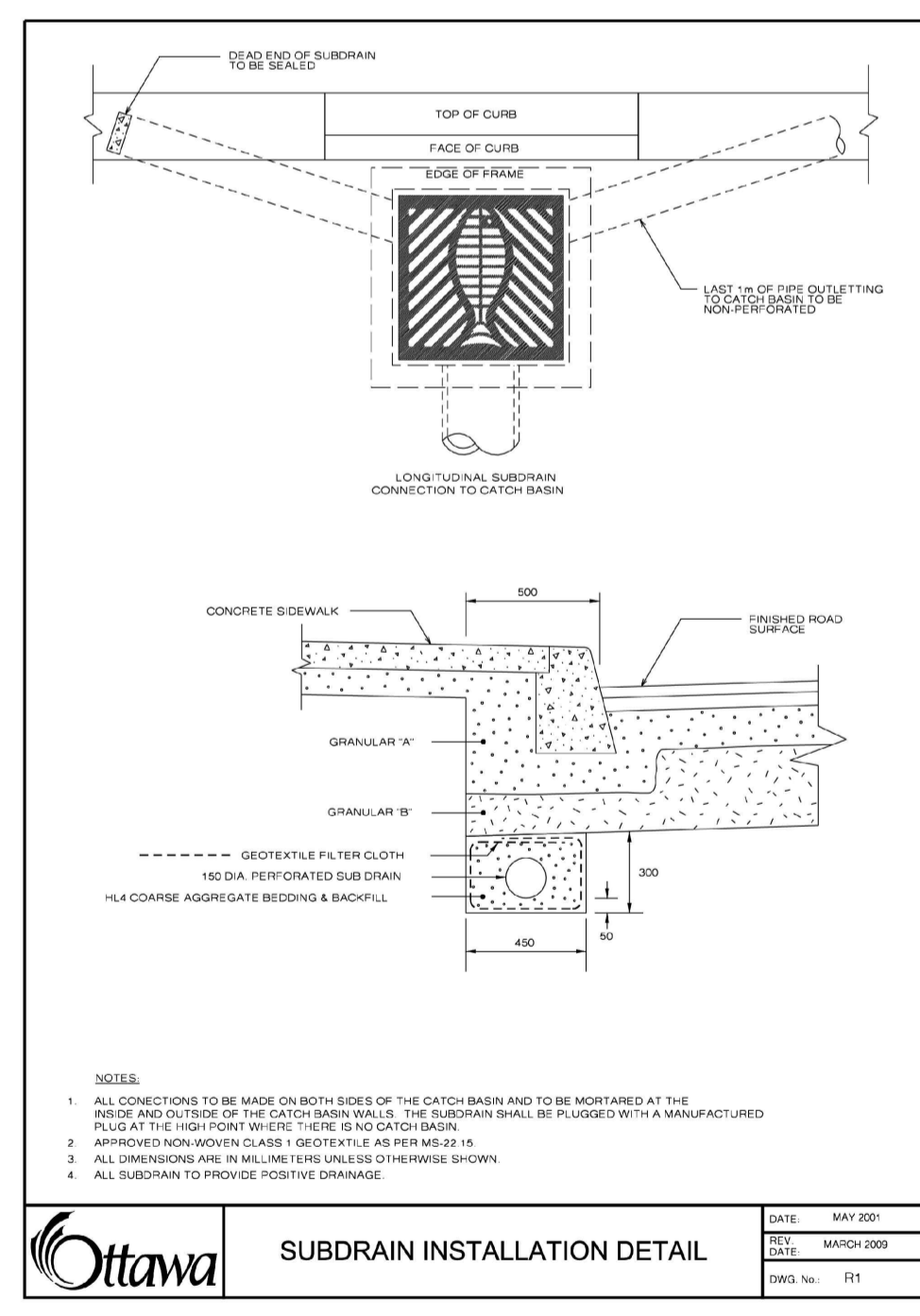
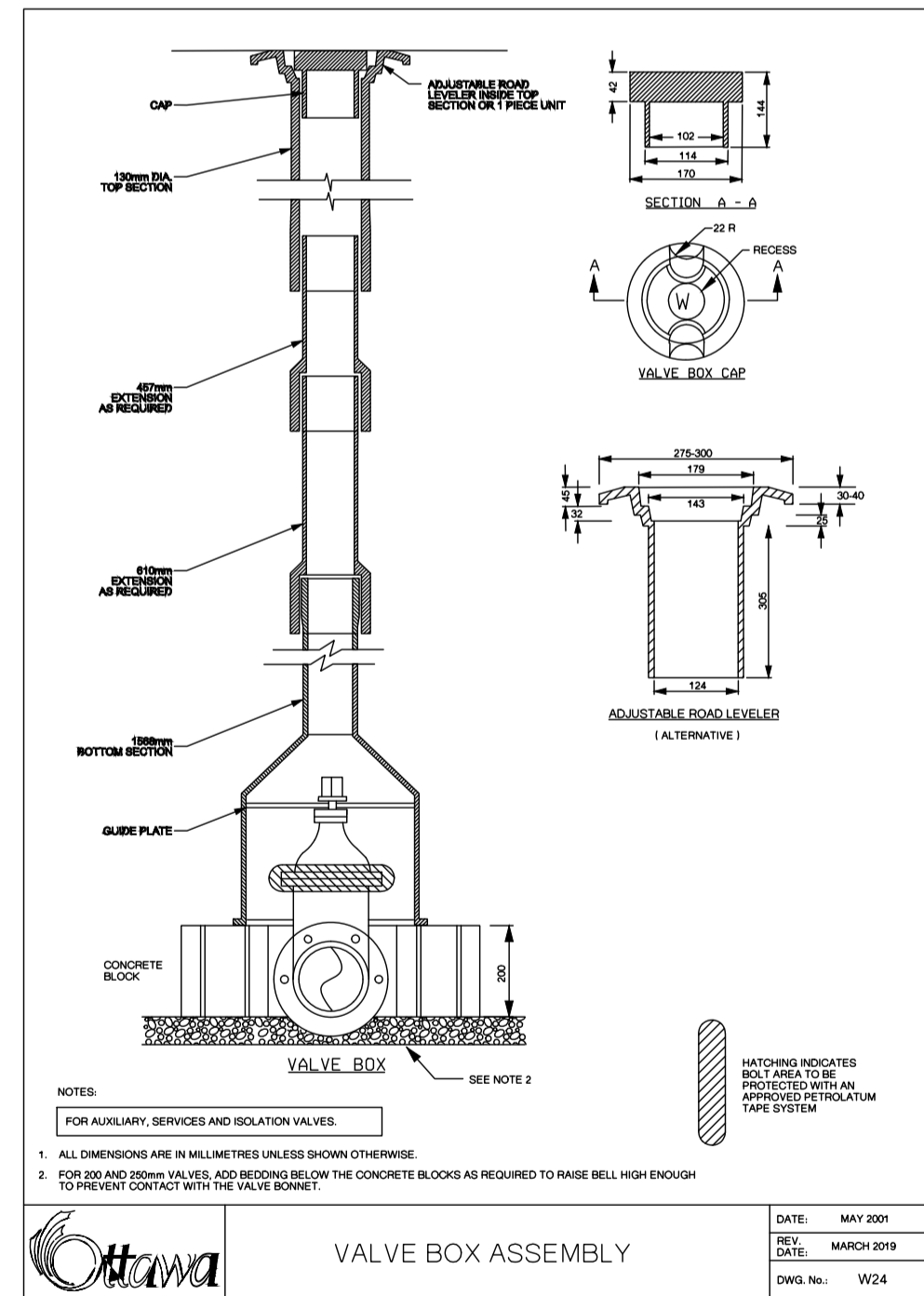
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AS PER TECHNICAL BULLETIN ISTB-2018-03:
ADD NEW NOTES 8 AND 9.
*NOTE 8: ON A TEMPORARY BASIS FOR 300mm WATERMAINS USE 300 x 300 x 150 AWWA C907 PVC BELL X BELL X SPIGOT TEES WITH THE 150mm SPIGOT AT ABOUT 44° ABOVE THE HORIZONTAL, CONNECTED TO AN AWWA C907 PVC 45° BEND. ONCE AVAILABLE USE 300 x 300 x 150 AWWA C907 TANGENTIAL TEES WITHOUT THE NEED FOR THE 45° BEND. HYDRANT BURY LENGTH AND DEPTH TO REMAIN AS PER NORMAL INSTALLATION FOR BOTH SCENARIOS.
*NOTE 9: FOR 400mm WATERMAINS USE 400 x 400 x 150 TANGENTIAL TEES/SPECIAL FITTINGS WITH THE 150mm OUTLET ON TOP.



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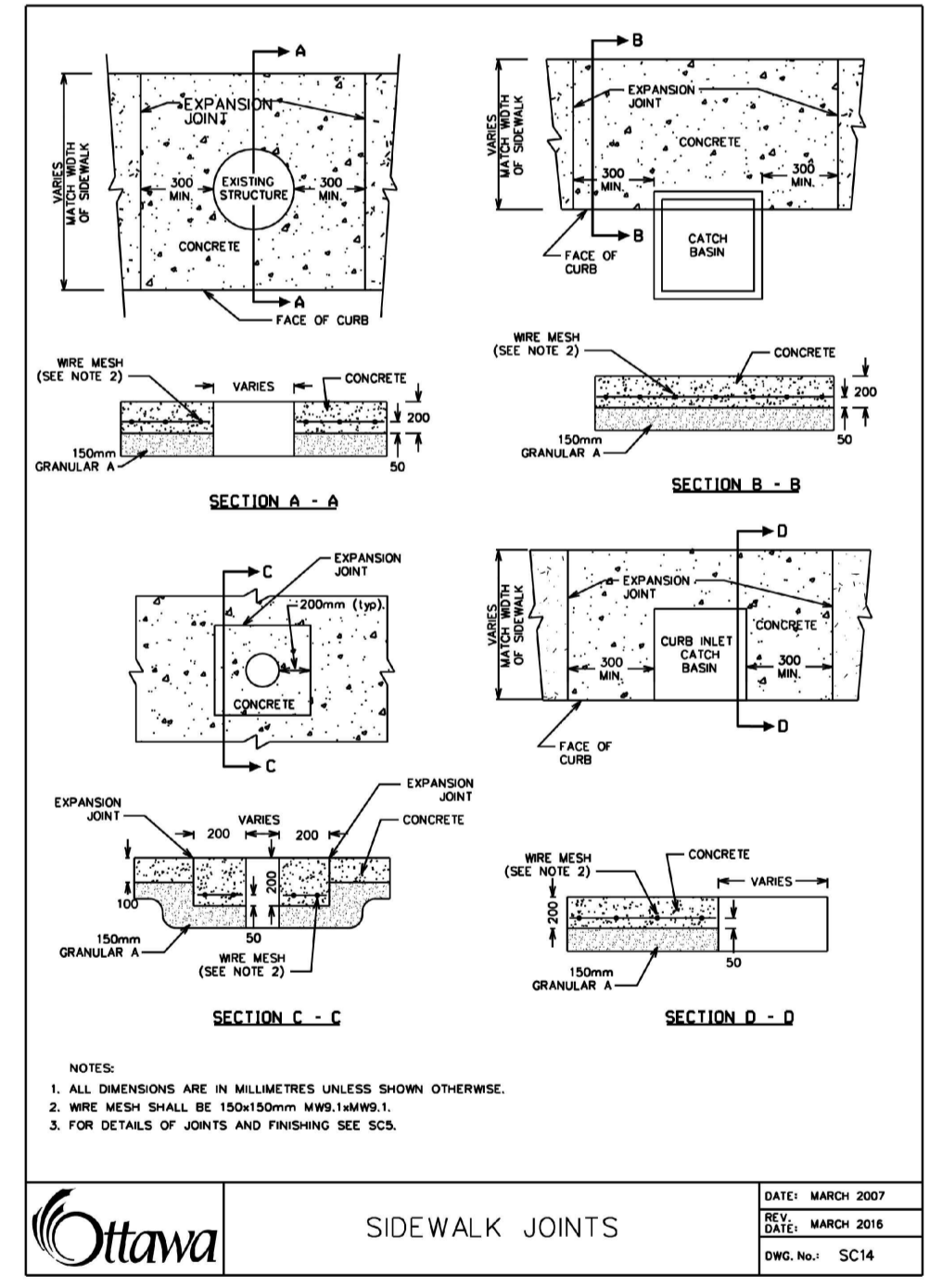
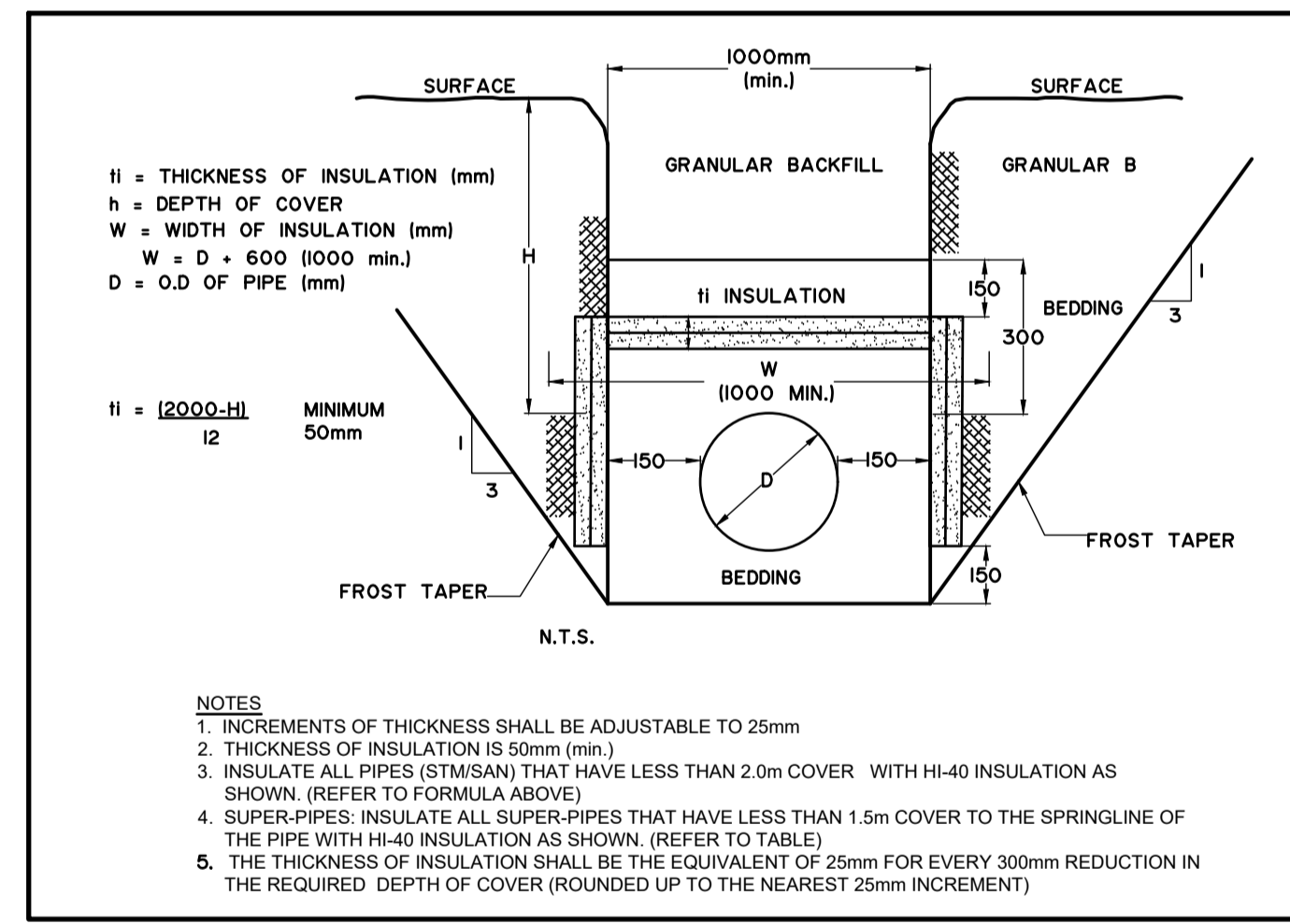
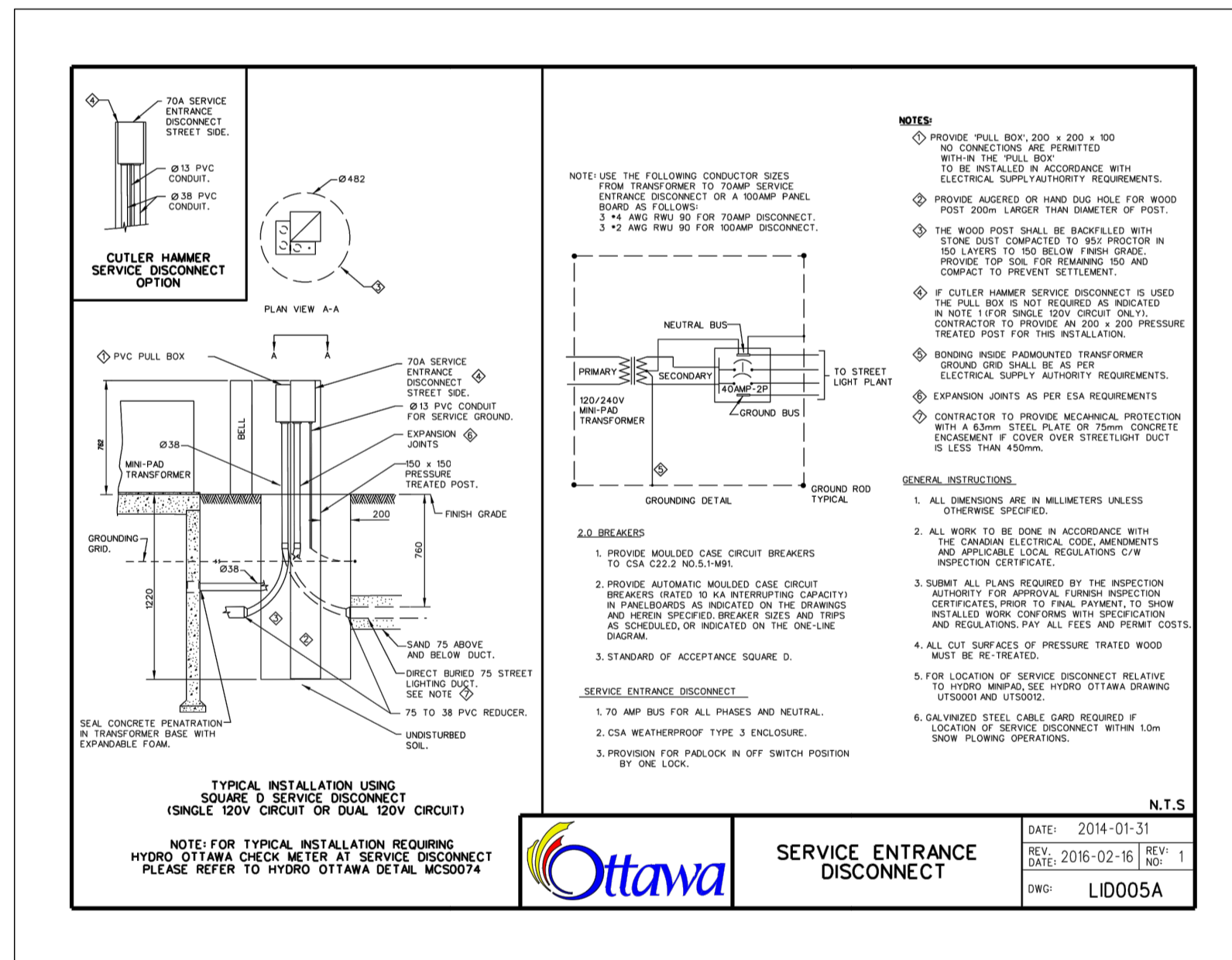
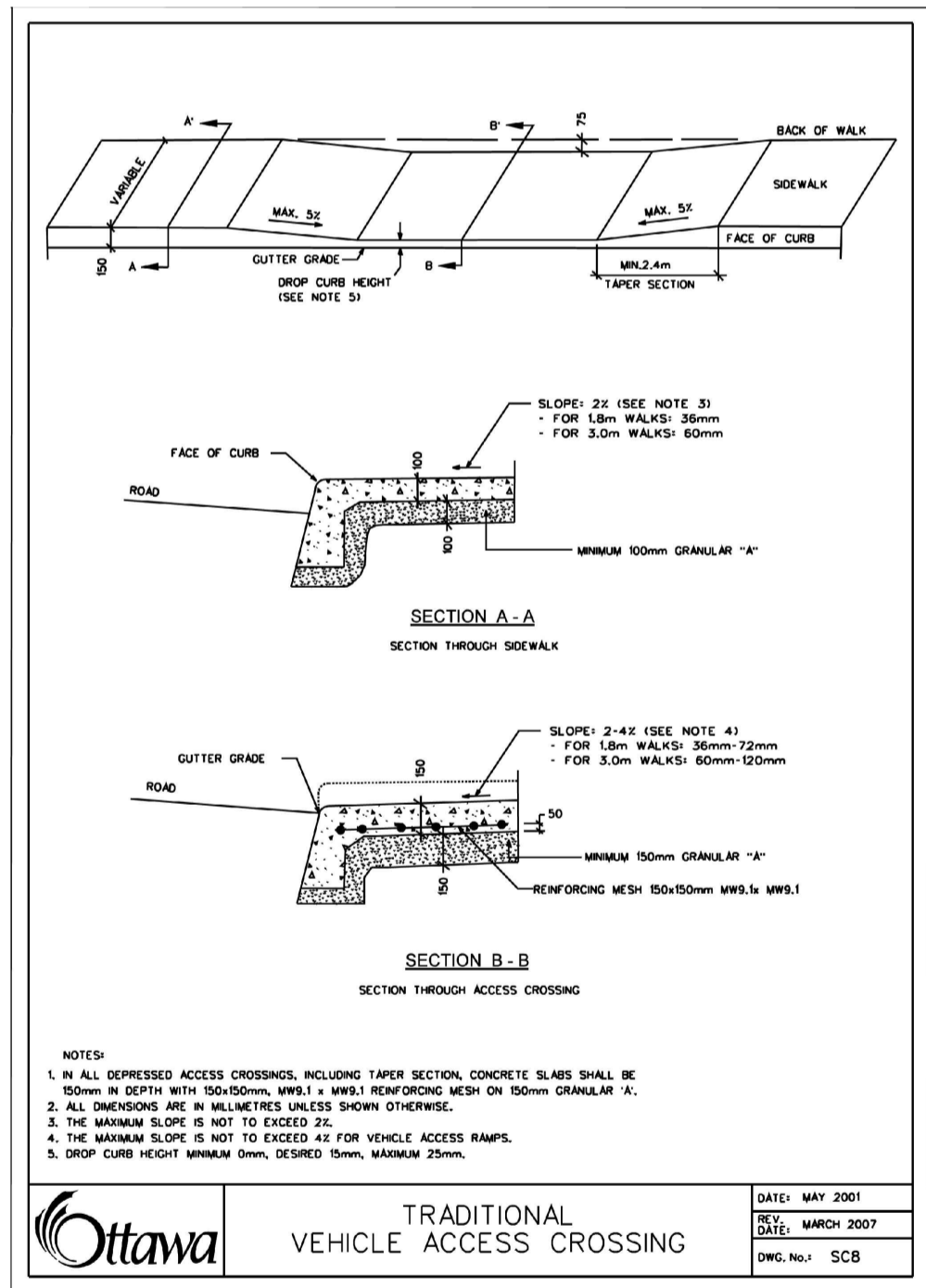
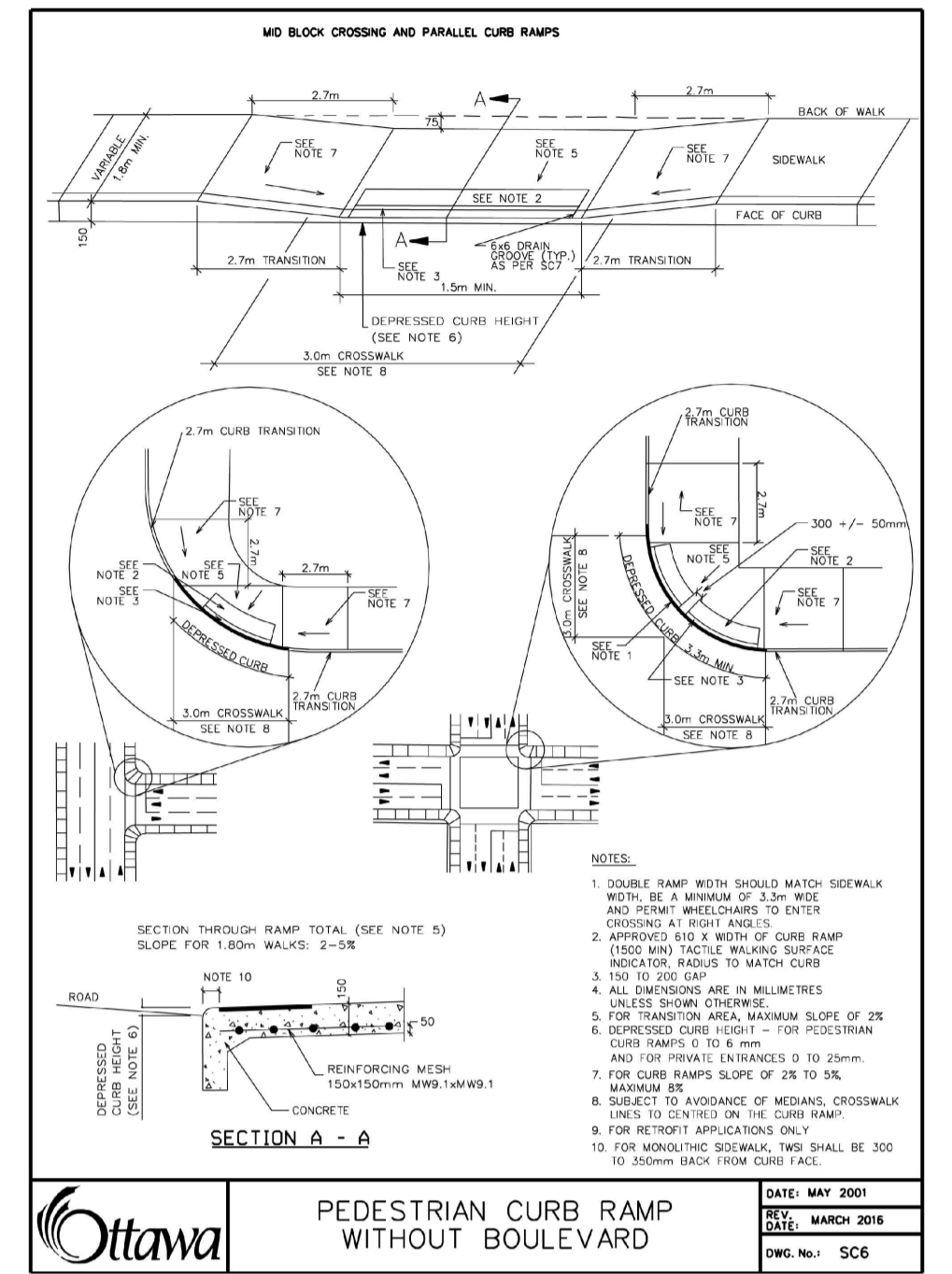
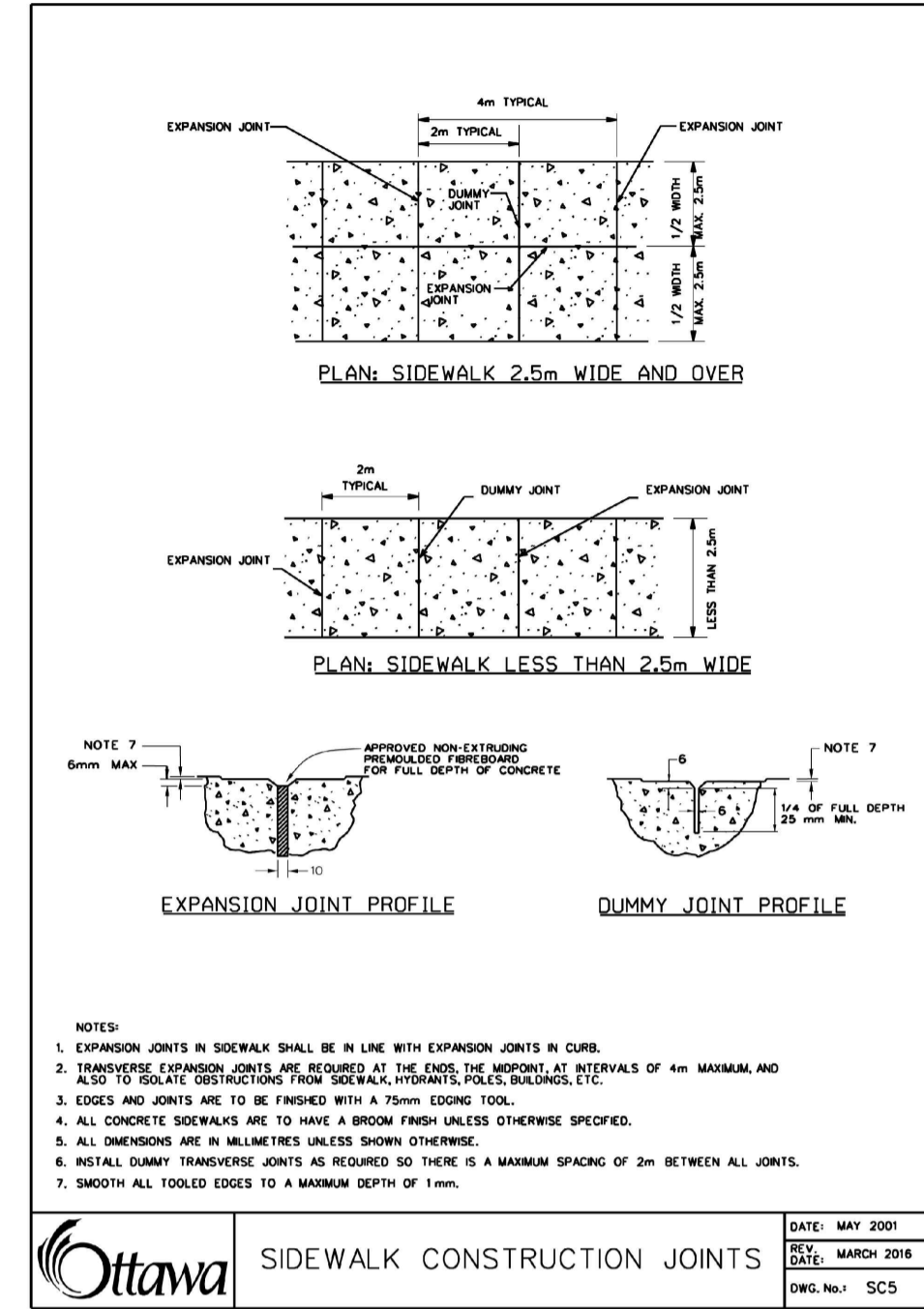
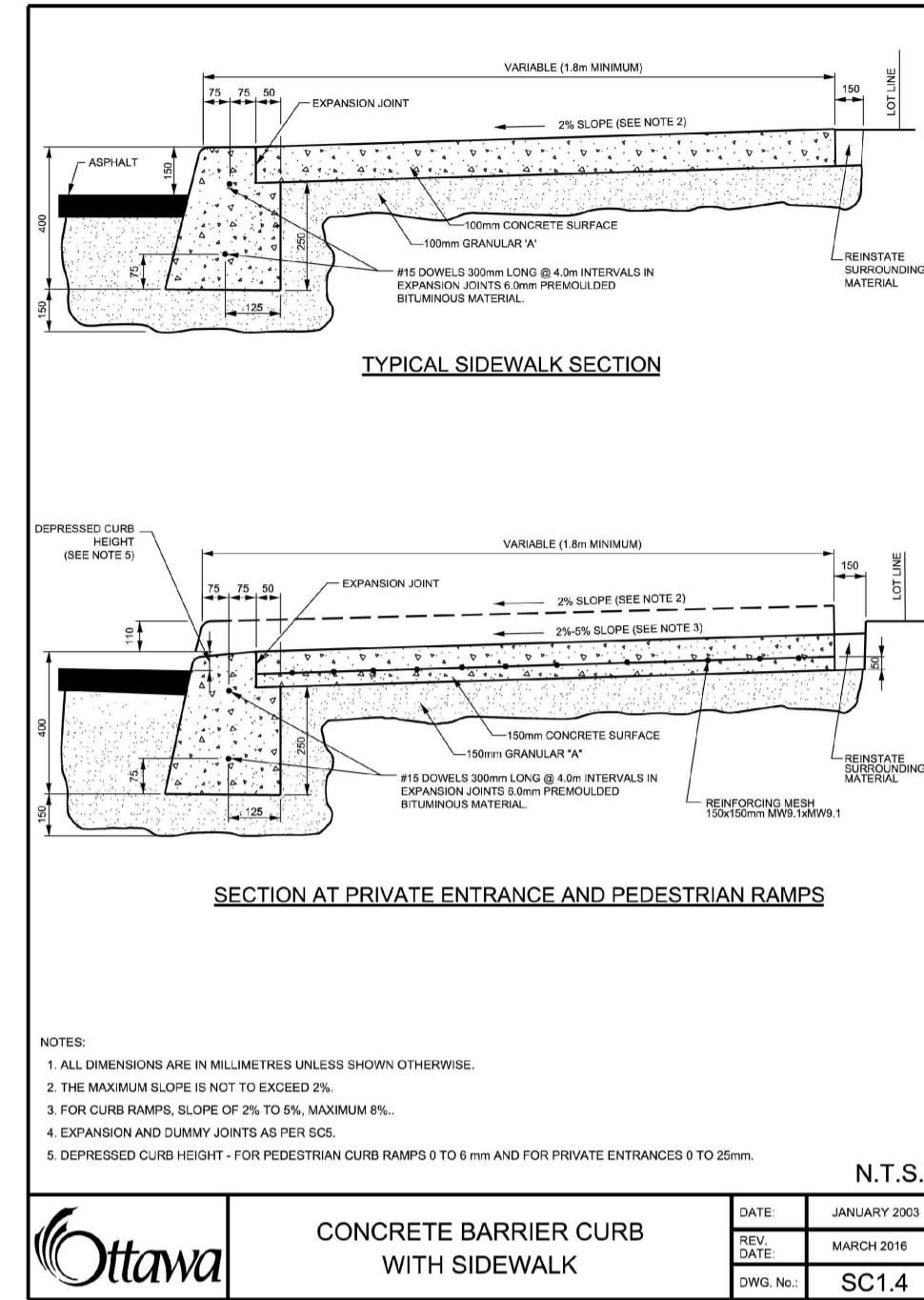
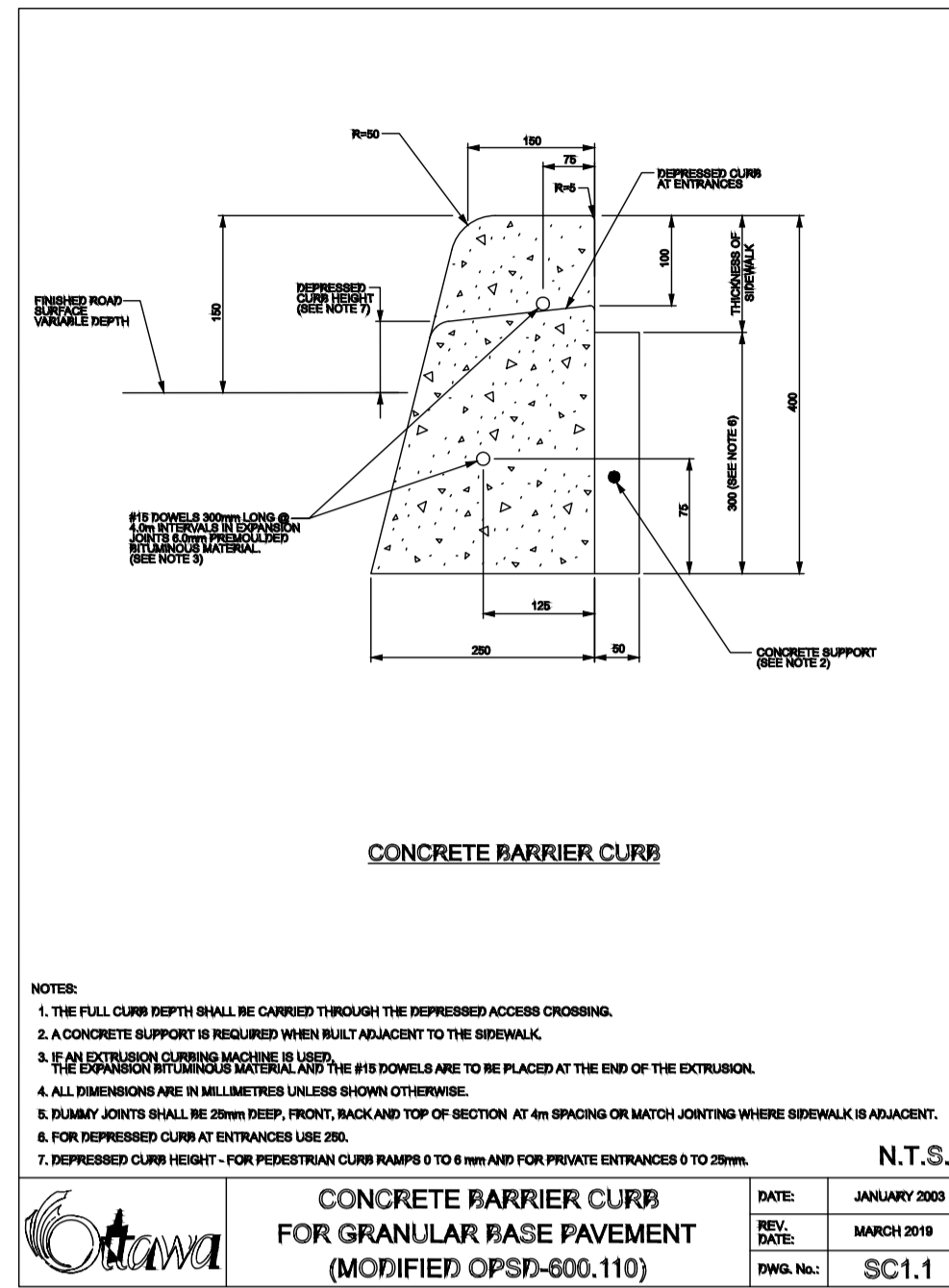
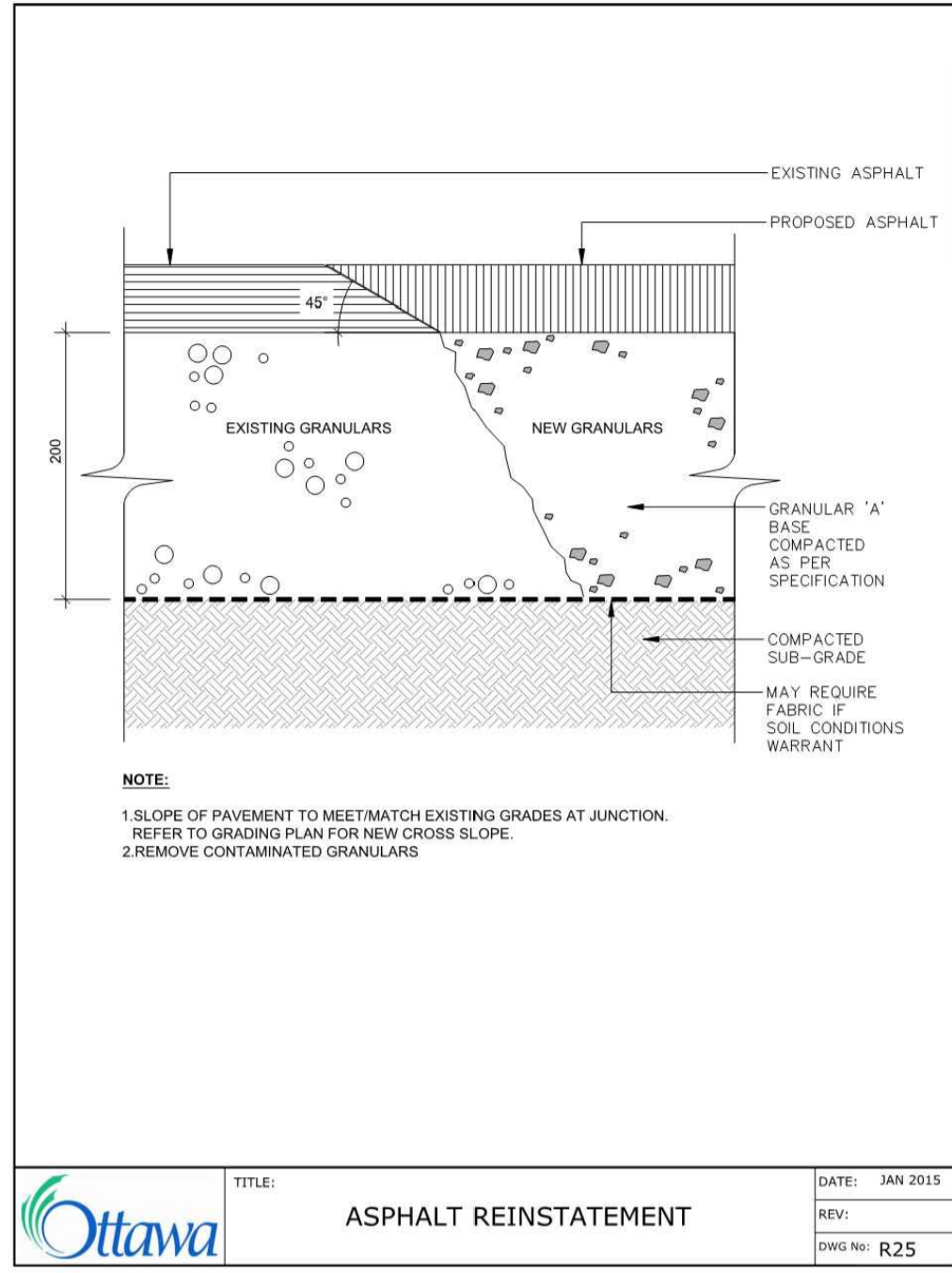
LOCATION
CITY OF OTTAWA
THE COMMONS

DRAWING NAME
STANDARD DETAILS

PROJECT No.
118224-00

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REV # 1

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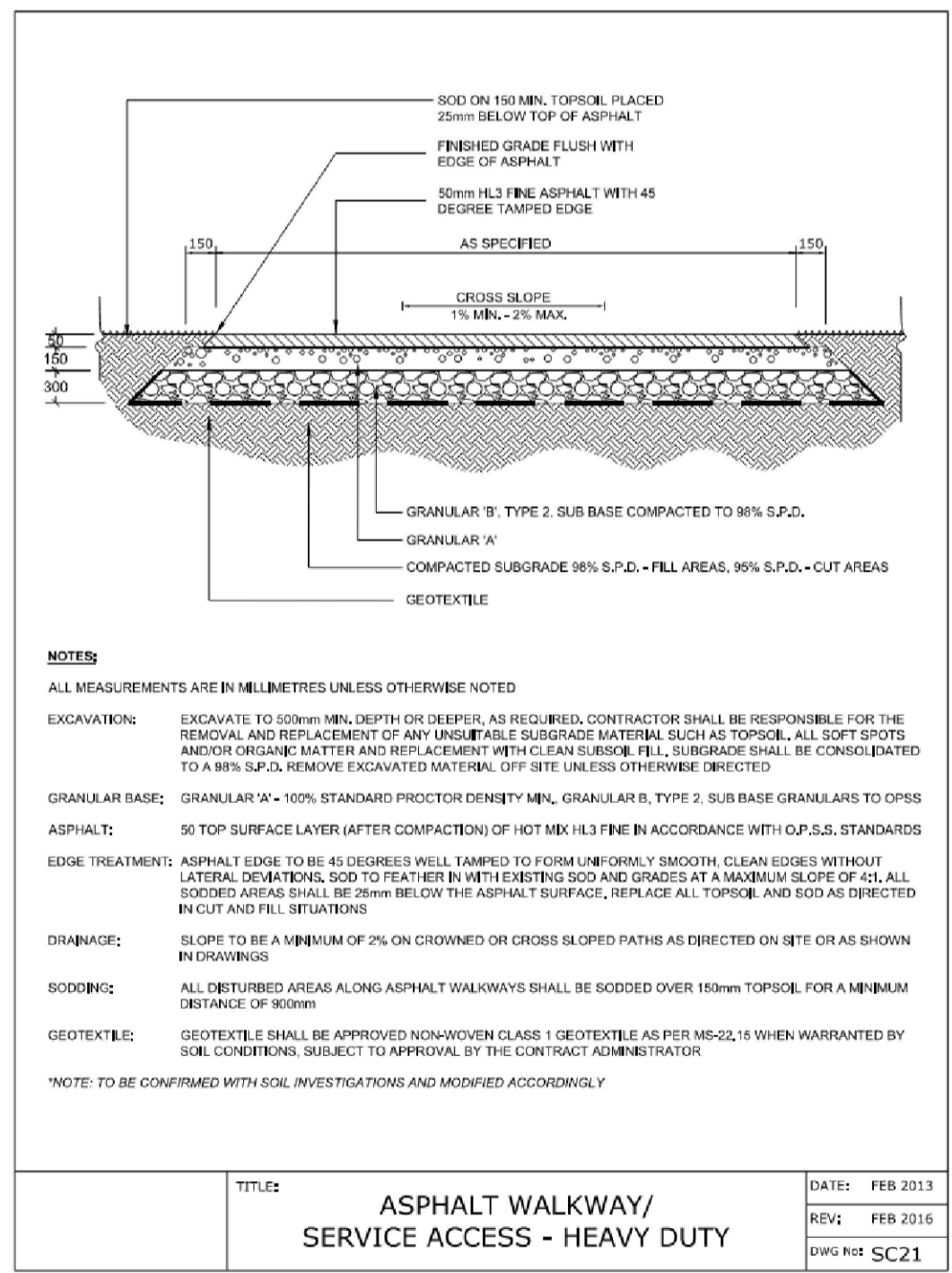
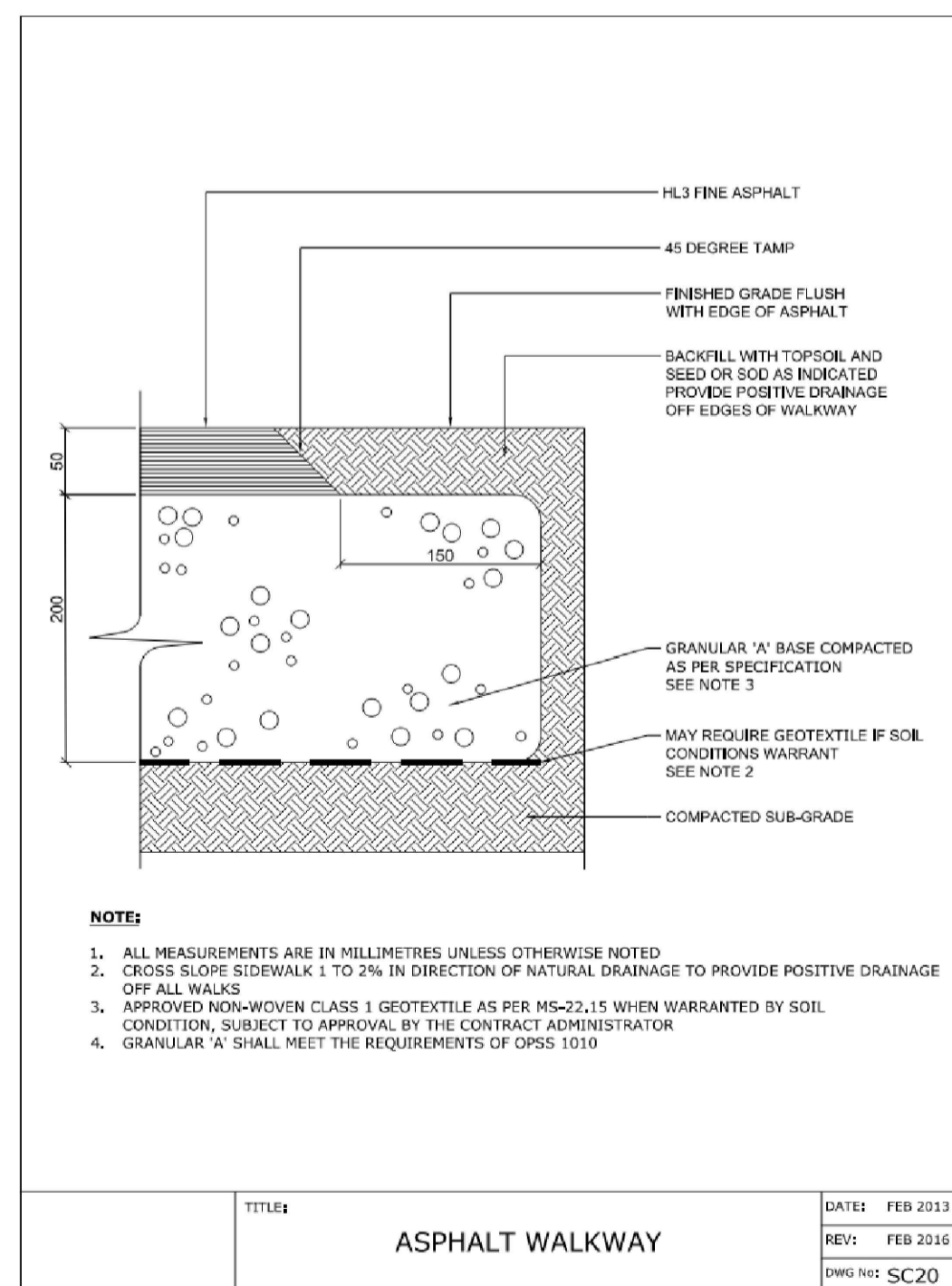
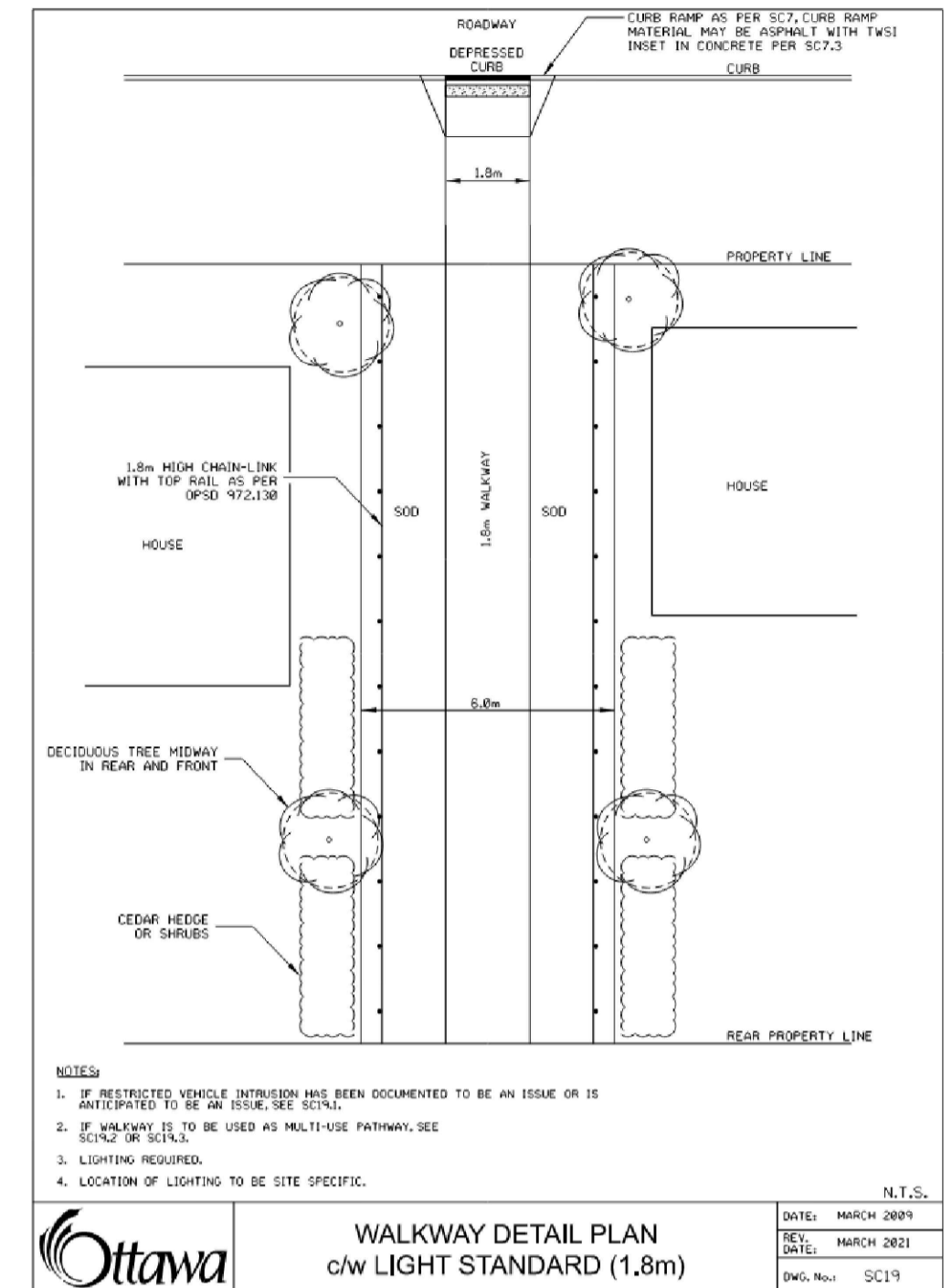
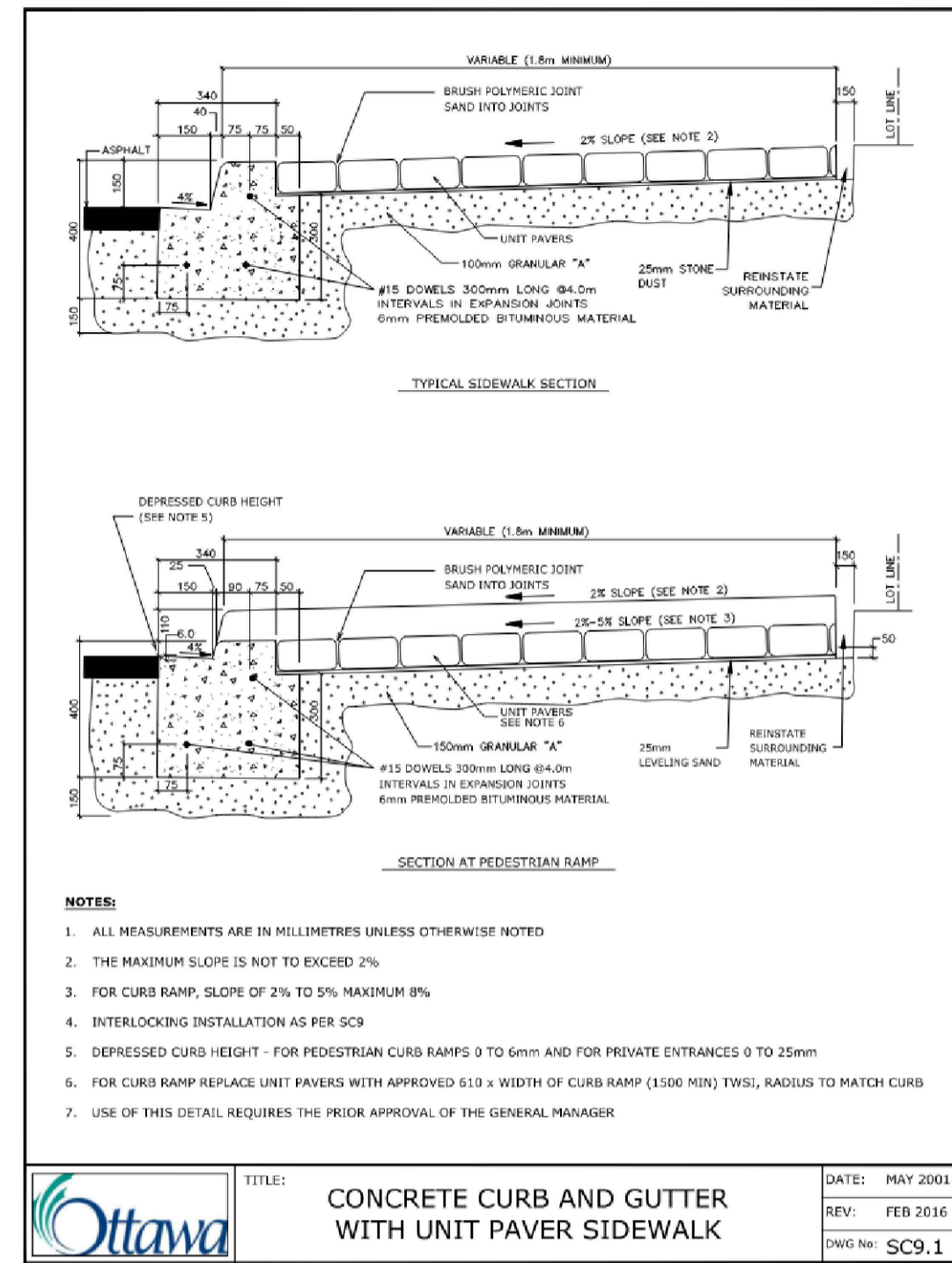
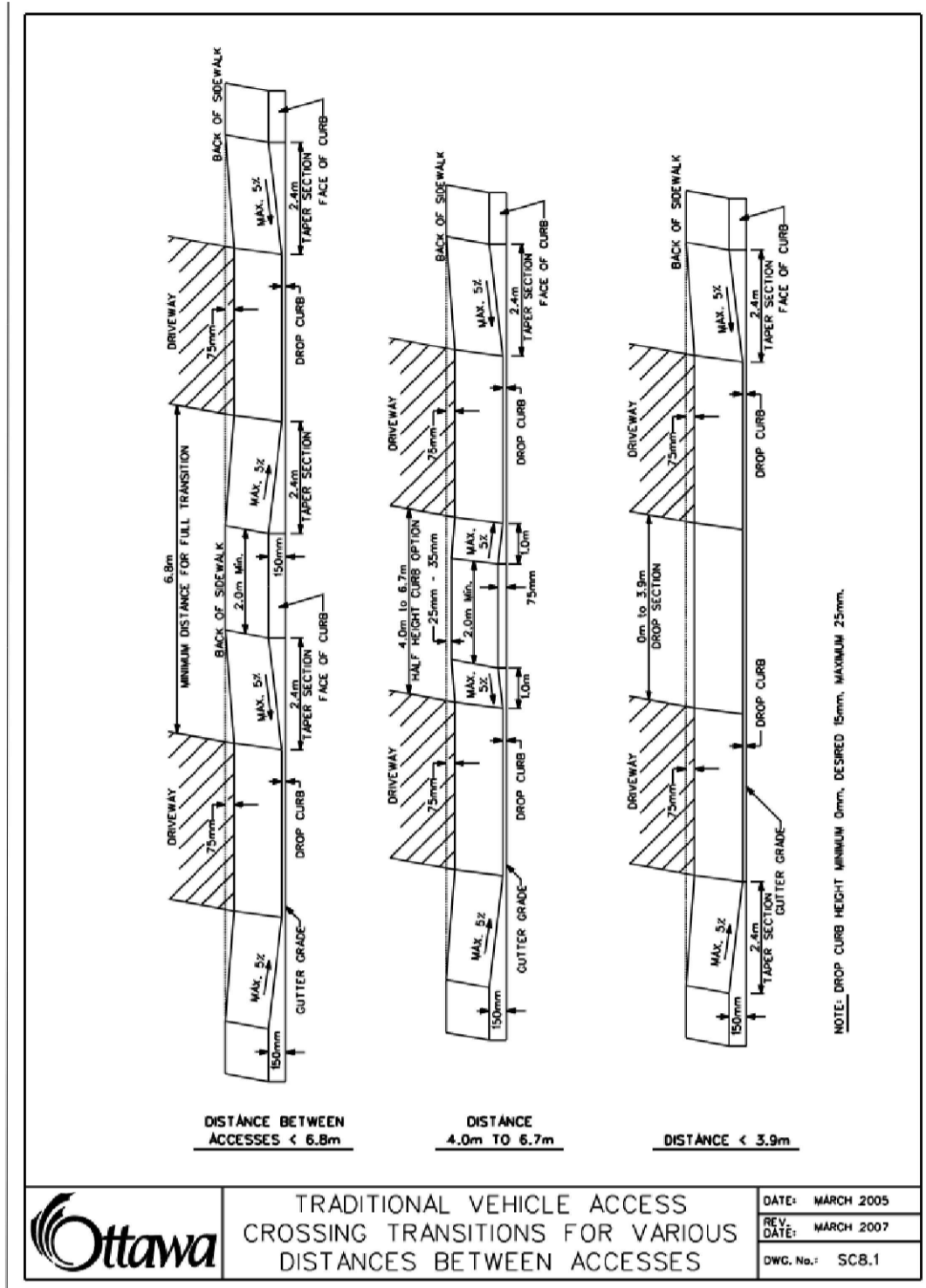
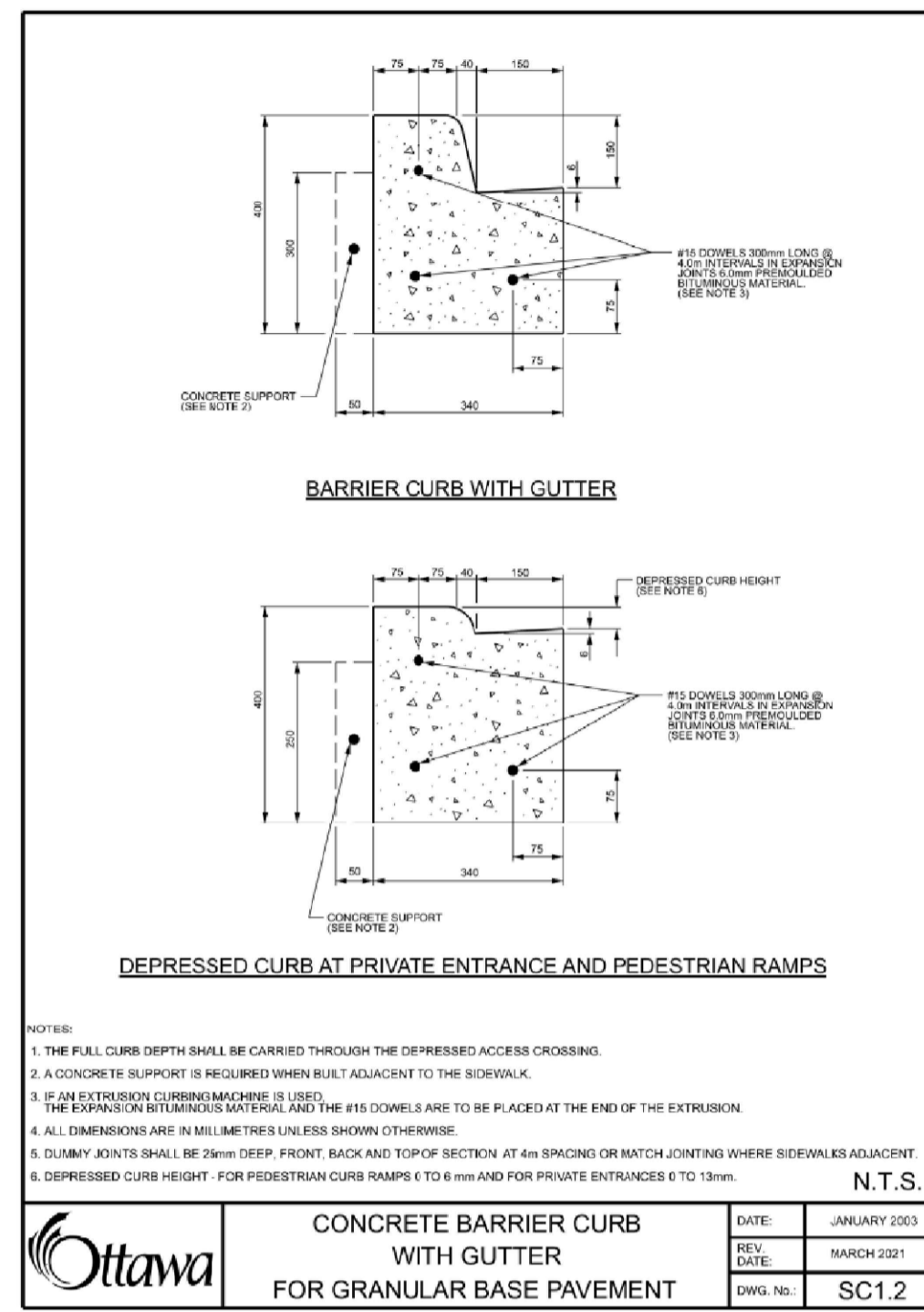
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