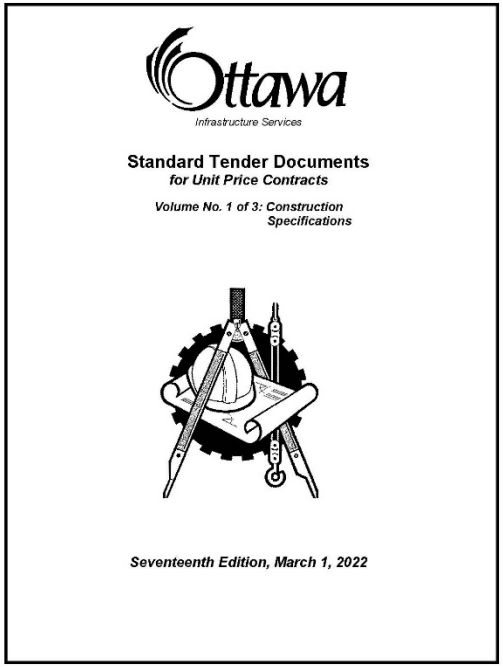
2022 STANDARD TENDER DOCUMENTS FOR UNIT PRICE CONTRACTS

INFORMATION SESSION

March 8th 2022



Opening Remarks (Sandra)

- Welcome
- Agenda
- Presenters

Agenda

1) ISTB-2021-01 & OPS Updates
2) Tender Preparation
3) General Special Provisions D
4) Special Provisions F
5) New Bioretention Facilities Specifications
6) Detail Drawings
7) Material Specifications
8) Ongoing Review
9) Standards Unit – 2022
10) Q&A

Break 10 min.

Agenda

12) Local Residential Streets 30km/h Design Toolbox

13) CSRS and Vertical Datum Migrations

14) Drinking Water Facility Design Guidelines

15) Closing Remarks

Presenters

Reed Adams Guidelines and Standards EIT
Harry Alvey, Guidelines and Standards Engineer
Vanessa Black Transportation Engineer-Network Modifications
Bill Harper City Surveyor
Paul Montgomery Plant Manager, Water Production East
Everett Paulin Guidelines and Standards Engineer
Anna Valliant Senior Engineer, Guidelines and Standards
Jimin Yan Guidelines and Standards EIT

ISTB 2021-01 Incorporation & OPS Updates

- **OTT-GC-02** Time and Material Summary for Payment
- **OTT-F-1007** Sewer Flow Management Plan
- **D-028** Qualifications and Experience –General Contractor
- **F-3510** Concrete Sidewalk, Medians, Boulevards and Islands
- Streetlighting/Electrical detail drawings
- OPS Updates April 2021, November 2021

Tender Preparation Information

- Sections A and B combined include:
  - Tender Information Package
  - Tender now includes commonly used template and Form of Agreement (sample only)
  - Tender Outline updated to reflect existing tender preparation/submission process
  - ~~Contract Item Listing~~
  - ~~Standard Detail Drawing Listing~~

Tender Preparation Information

- Sample Engineer's Estimate provided
  Required information: Item No, Item code, item description, additional specifications (as needed), unit, quantity, unit price and total cost.

Job Description: Date:
Project Manager:
Contract No. CPxxx
PART A - GENERAL

Item No.	Item Code	Item Description	Additional Specifications	Unit	Quantity	Unit Price	Total Cost
A- 0001	A010.01	Field Office for Contract Administrator 20-34m2		wk	28		$ -
A- 0002	A020.01	Traffic Control Plan		LS	1		$ -
A-							
A-							
A-							
A-							
A-							

Tender Preparation Information

- Section E now partially editable
- Editable sections: 1.3,1.4 and 2.3 for listing of OPSD, City of Ottawa standard detail drawings and OPSS (with latest November 2021 updates)

1.3 The Ontario Provincial Standard Drawings (OPSD) which are provisions of this Contract are:

OPSD	Rev No	OPSD	Rev No	OPSD	Rev No
100.01	1	100.02	1	100.03	-
100.04	-	etc	etc	etc	etc
etc					

[List Ontario Provincial Standard Drawings specific to contract]

Tender Preparation Information

Reminders:

- Check NSSP library
- Review the package in detail before sending to program clerks
- Check the current version of the Standard Tender Documents is used
- Notification of stimulus funds is provided (if applicable)

D specs (Anna)

Special Provisions-General

- **D-023** Quality Verification Engineering Services
- **D-032B** & **Appendices** Protection of Species at Risk and Wildlife Protocol
- **D-033** Survey Information

F-Series specs

- **F-1011** Pre-Construction Inspection
- **F-4090** repair work is to be CCTV'ed from MH to MH (Everett)

F-Series specs

- **F-1013** Construction Site Pedestrian Control
  - Revised cane detectable barrier definition and height requirements

New Bioretention Specs

- Six new specifications for the installation of bioretention facilities
- Initial specs form the basis of City requirements – further specs will be forthcoming in 2023
- F-8900 contains requirements for the Bioretention Erosion and Sediment Control Plan

Standard Detail Drawings

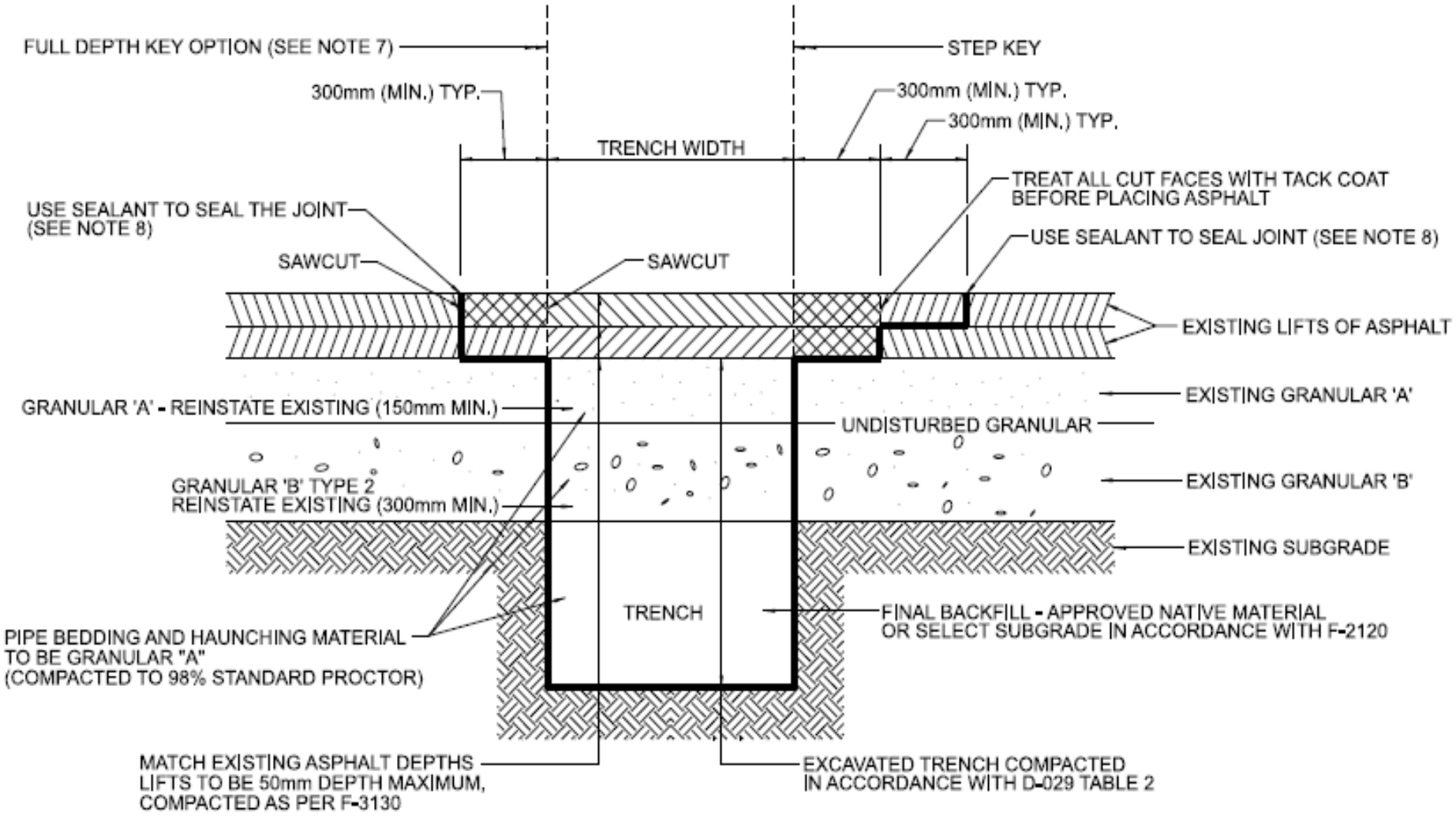
Roads:

- **R10 – Minor changes and clarifications**
- **R15 – Revised detail**
- **R15.1 – Revised and revamped**
- **R15.2 – New detail**

Sidewalks, Curbs and Pathways:

- **SC6**
- **SC7**
- **SC7.2**

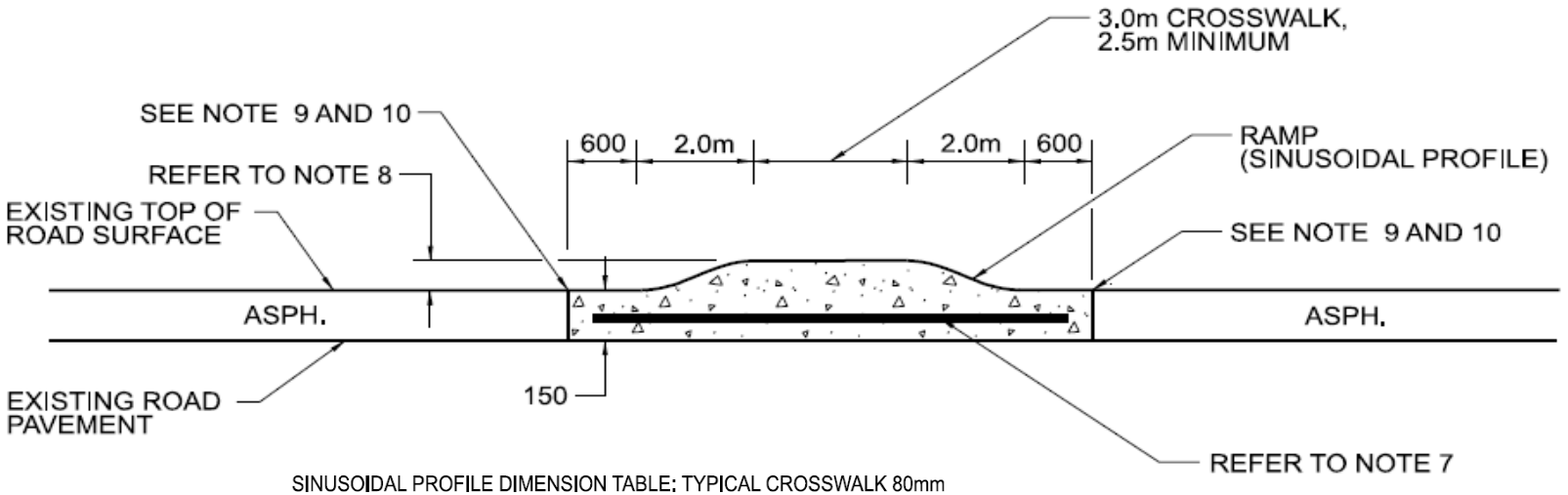
Clarification of TWSI gap and references to new crosswalk drawings



NOTES:

1. ALL EXISTING ASPHALT TO BE SAW CUT.
2. UNLESS SPECIFIED ELSEWHERE, SURFACE COURSE ASPHALT SUPERPAVE 12.5mm AND BASE COURSE ASPHALT SUPERPAVE 19.0mm IS TO BE USED.
3. UNLESS SPECIFIED ELSEWHERE, ASPHALT MIX SHALL BE LEVEL B (PG58-34) FOR NON-BUS LOCAL ROADS, AND LEVEL D (PG 64-34) FOR ALL OTHER ROADS.
4. UNLESS SPECIFIED ELSEWHERE, WHERE EXISTING PAVEMENT STRUCTURE EXCEEDS 150mm IN DEPTH, ASPHALT REINSTATEMENT SHALL BE 150mm AND GRANULAR "A" FOR THE REMAINDER.
5. UNLESS SPECIFIED ELSEWHERE, WHERE AN UNDERLYING LAYER OF CONCRETE PAVEMENT EXISTS, REINSTATEMENT SHALL CONSIST OF 150mm OF SUPERPAVE 19.00mm LEVEL B (PG58-34) COMPACTED IN LIFTS.
6. UNLESS SPECIFIED ELSEWHERE, HOT MIX ASPHALT PLACEMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH F-3130.
7. STEP KEY REINSTATEMENT TO BE IMPLEMENTED UNLESS FULL DEPTH KEY OPTION APPROVED BY THE CITY.
8. ALL EDGES TO BE ROUTED AND SEALED WITH A BEAD OF HOT RUBBERIZED ASPHALT JOINT SEALING COMPOUND.

R15 – CONCRETE RAISED CROSSWALK



SINUSOIDAL PROFILE DIMENSION TABLE: TYPICAL CROSSWALK 80mm

DISTANCE(m)	0.000	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000
FINISHED HEIGHT(mm)	0	1	3	7	12	18	25	32	40	48	55	62	68	73	77	79	80

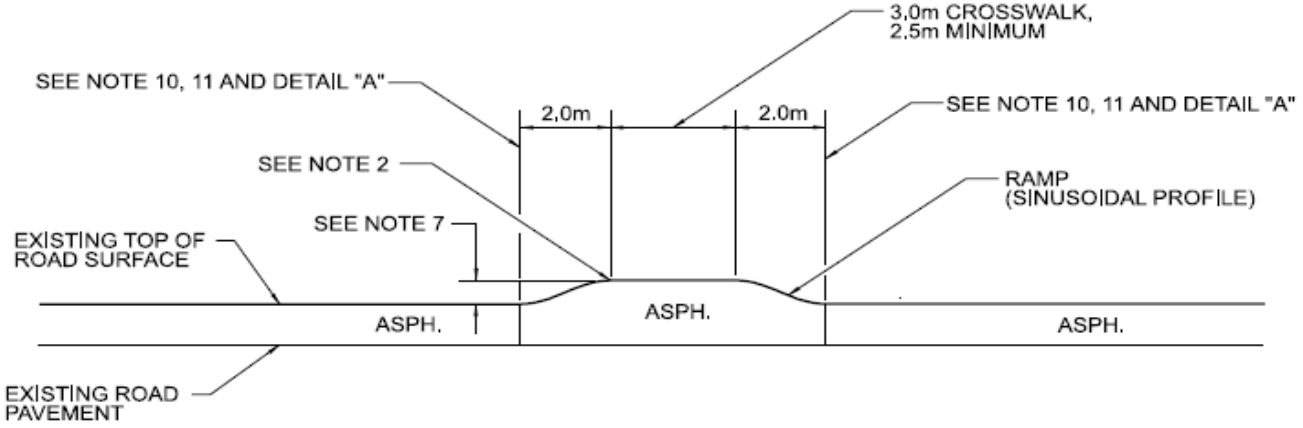
SINUSOIDAL PROFILE DIMENSION TABLE: CROSSWALK ON LOW VOLUME BUS ROUTES 60mm

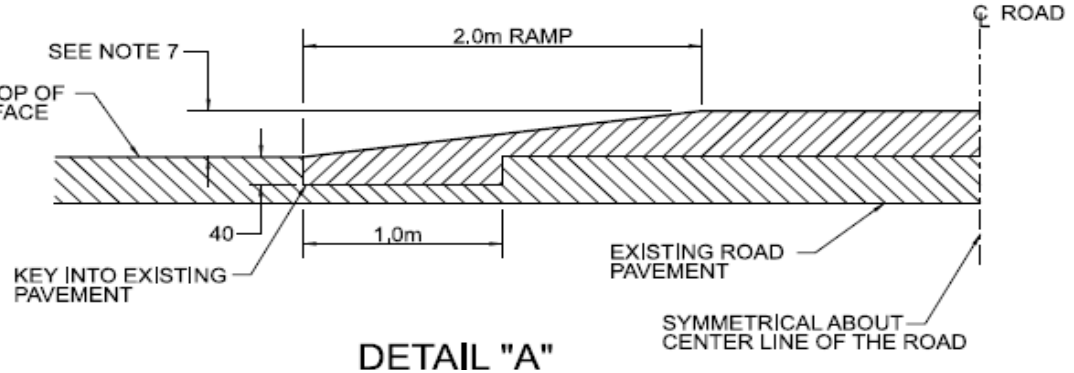
DISTANCE(m)	0.000	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000
FINISHED HEIGHT(mm)	0	1	2	5	9	13	19	24	30	36	41	47	51	55	58	59	60

NOTES:

1. CONCRETE TO BE 35MPA WITH ACCELERATOR.
2. REINSTATED HOT MIX ASPHALT LAYER CONFIGURATION SHALL MATCH EXISTING. HOT MIX ASPHALT TYPE SHALL BE IN ACCORDANCE WITH F-3106 APPENDIX A.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
4. PEDESTRIAN CURB RAMP SHALL BE PER SC6, SC7 AND SC7.2. TACTILE WALKING SURFACE INDICATOR (TWSI) SHALL BE PER SC7.3.
5. REFER TO SINUSOIDAL PROFILE TABLES FOR TOP OF PAVEMENT PROFILE.
6. FOR MAXIMUM SLOPE OF TRANSITION AREA, REFER TO CITY OF OTTAWA ACCESSIBILITY DESIGN STANDARDS.
7. MINIMUM REINFORCEMENT SHALL BE WIRE MESH 150mm x 150mm MW9.1 x MW9.1, PLACED 50mm MINIMUM FROM BOTTOM.
8. CROSSWALK HEIGHT SHALL BE 80mm. FOR LOW VOLUME BUS ROUTES, A HEIGHT OF 60mm SHALL BE USED.
9. ALL EDGES TO BE ROUTED AND SEALED WITH HOT RUBBERIZED ASPHALT JOINT SEALING COMPOUND.
10. JOINT TREATMENT AND TIE-INS AS PER CONTRACT DOCUMENTS.
11. PEDESTRIAN CURB HEIGHT SHALL BE PER SC6, SC7 AND SC7.2, OR EQUAL HEIGHT OF CROSSWALK WHERE APPLICABLE.

R15.1 – ASPHALT RAISED CROSSWALK



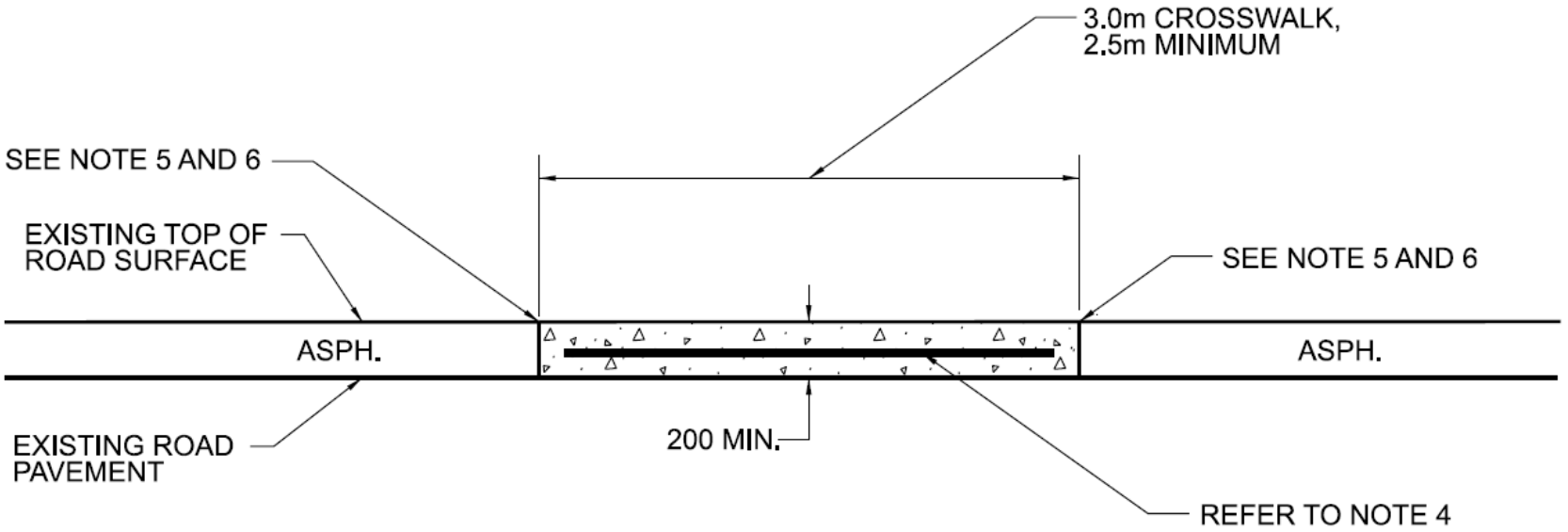


DETAIL "A"

NOTES:

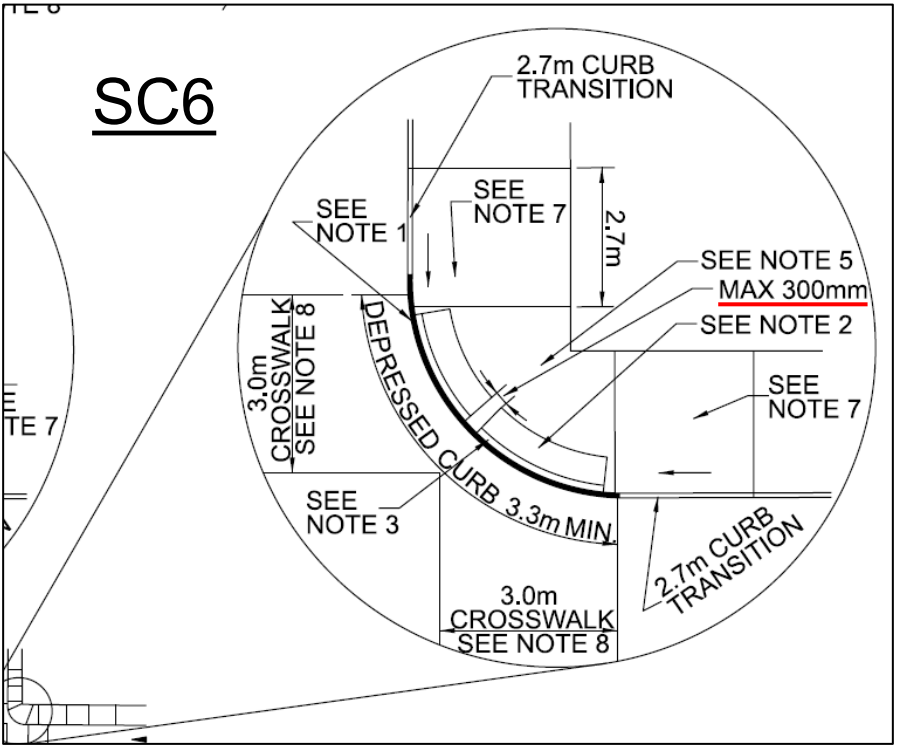
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
2. ASPHALT TO BE IN ACCORDANCE WITH F-3106 AND F-3130.
3. REINSTATED HOT MIX ASPHALT LAYER CONFIGURATION SHALL MATCH EXISTING.
   HOT MIX ASPHALT TYPE SHALL BE IN ACCORDANCE WITH F-3106 APPENDIX A.
4. PEDESTRIAN CURB RAMP SHALL BE PER SC6, SC7 AND SC7.2.
   TACTILE WALKING SURFACE INDICATOR (TWSI) SHALL BE PER SC7.3.
5. REFER TO SINUSOIDAL PROFILE TABLES FOR TOP OF CROSSWALK PROFILE.
6. FOR MAXIMUM SLOPE OF TRANSITION AREA,
   REFER TO CITY OF OTTAWA ACCESSIBILITY DESIGN STANDARDS.
7. CROSSWALK HEIGHT SHALL BE 80mm. FOR LOW VOLUME BUS ROUTES, A HEIGHT OF 60mm SHALL BE USED.
9. ALL EDGES TO BE ROUTED AND SEALED WITH HOT RUBBERIZED ASPHALT JOINT SEALING COMPOUND.
10. TREAT ALL CUT FACES WITH TACK COAT BEFORE PLACING ASPHALT.
11. JOINT TREATMENT AND TIE-INS AS PER CONTRACT DOCUMENTS.
12. PEDESTRIAN CURB HEIGHT SHALL BE PER SC6, SC7 AND SC7.2,
    OR EQUAL HEIGHT OF CROSSWALK WHERE APPLICABLE.

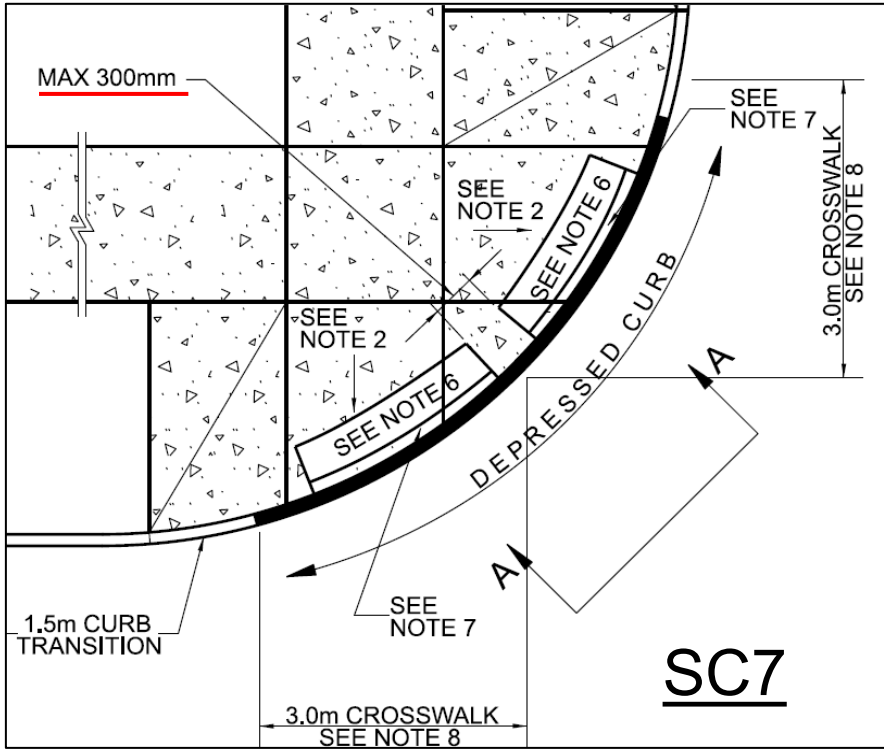
R15.2 – CONCRETE CROSSWALK FOR DESIGN PRIORITY AREAS

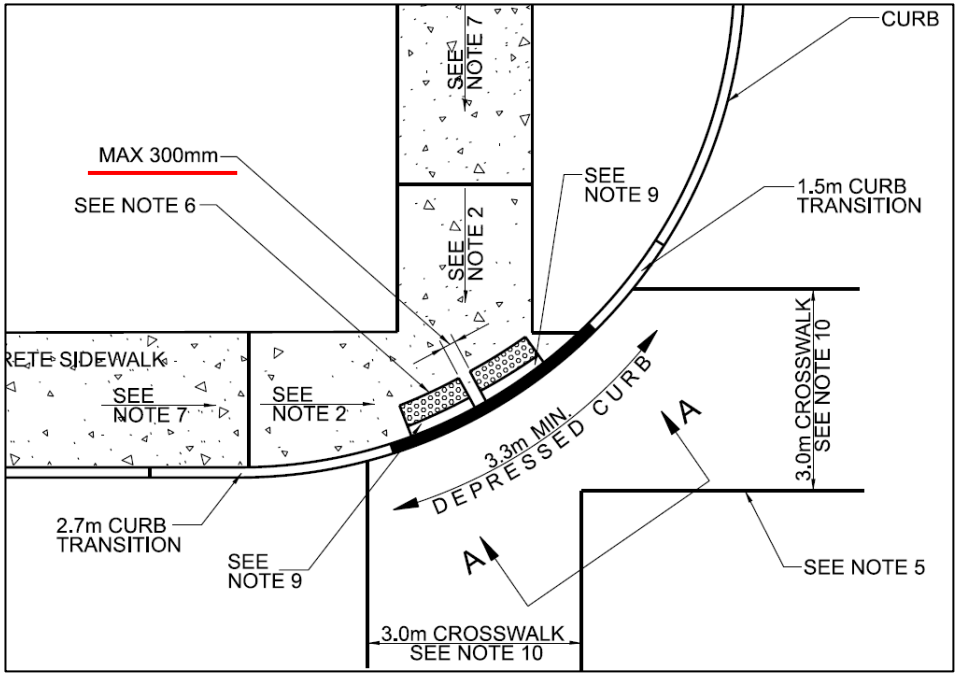


NOTES:

1. CONCRETE TO BE 35MPA WITH ACCELERATOR.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
3. PEDESTRIAN CURB RAMP SHALL BE PER SC6, SC7 AND SC7.2.
   TACTILE WALKING SURFACE INDICATOR (TWSI) SHALL BE PER SC7.3.
4. MINIMUM REINFORCEMENT SHAL BE WIRE MESH 150mm x 150mm MW9.1 x MW9.1,
   PLACED 50mm MINIMUM FROM BOTTOM.
5. ALL EDGES TO BE ROUTED AND SEALED WITH HOT RUBBERIZED ASPHALT JOINT SEALING COMPOUND.
6. JOINT TREATMENT AND TIE-INS AS PER CONTRACT DOCUMENTS.
7. INTENDED FOR DESIGN USE WITHIN DESIGNATED DESIGN PRIORITY AREAS.


SC6
2.7m CURB TRANSITION
SEE NOTE 1
SEE NOTE 7
2.7m
SEE NOTE 5
MAX 300mm
SEE NOTE 2
SEE NOTE 7
3.0m CROSSWALK SEE NOTE 8
DEPRESSED CURB 3.3m MIN
SEE NOTE 3
2.7m CURB TRANSITION
3.0m CROSSWALK SEE NOTE 8


MAX 300mm
SEE NOTE 7
SEE NOTE 2
SEE NOTE 6
3.0m CROSSWALK SEE NOTE 8
SEE NOTE 2
SEE NOTE 6
DEPRESSED CURB
A
A
1.5m CURB TRANSITION
SEE NOTE 7
3.0m CROSSWALK SEE NOTE 8
SC7


CURB
SEE NOTE 7
MAX 300mm
SEE NOTE 6
SEE NOTE 9
1.5m CURB TRANSITION
SEE NOTE 2
RETE SIDEWALK
SEE NOTE 7
SEE NOTE 2
3.3m MIN. DEPRESSED CURB
A
3.0m CROSSWALK SEE NOTE 10
2.7m CURB TRANSITION
SEE NOTE 9
A
SEE NOTE 5
3.0m CROSSWALK SEE NOTE 10

SC7.2


Lisgar St


Gilmour St


James St
DENTISTS
DVA

Standard Detail Drawings

- S11.3 butt connections have been limited to one, near the property line
- W19 tangential tee required on 300 mm watermains
- W25.3 clarification to thrust block design requirements

Material Specifications

- MW-10.1 Product Application Procedure has been significantly updated to match our current process
- MW-19.15 and MS-22.15 have been reformatted for clarity. Several new products added.
- Minor updates to MW-10.2, MS-18.1, and MW-19.3
- MT-24.1 and MT-24.2 have been updated to align with current procedures

Ongoing Review: Broadband Back-up Alarm Pilot

- Spec was not established during this round of updates
- Pilot initiated to determine the effectiveness of broadband back-up alarms on construction vehicles
- Consultant is currently preparing a proposal
- Pilot will take place after half-loads are removed, results will be available in the fall

Ongoing Review: Steel Plates and Survey Information – TAC

- **Steel Plates:**
  - A working group has been formed to look at the issue of how to create a specification which discusses how temporary bridging of open utility trenches with steel plates can be brought forward.
  - A Draft Specification for temporary bridging of open utility trenches with steel plates has been prepared and is under review.

- **Survey Information:**
  - There is an issue with how R.O.W. survey information CADD files are provided to contractors prior to start of City road way construction projects.
  - We are in the process of forming a working group to further discuss this issue and determine a way forward.

On-going Review

- W35 Insulation for Shallow Storm Sewers
- Separated curb ramps at corners pilot

Standards Unit – 2022

- Sewer Design Guidelines
- Sidewalk and Cycle Track Delineation Design Elements (PIDG Gaps)
- Pedestrian Facilities Design Guidelines
- Excess Soils
- Accessibility During Construction Assessments
- Issue identification – ongoing

Questions?

Comments?

Break
10 min

30 Km/h Toolbox

CSRS and Vertical Datum Migrations

Drinking Water Facility Design Guidelines

Closing

- Current access – ftp site
- Future access – SharePoint
- Session Recording available

Contact: StandardsSection@ottawa.ca