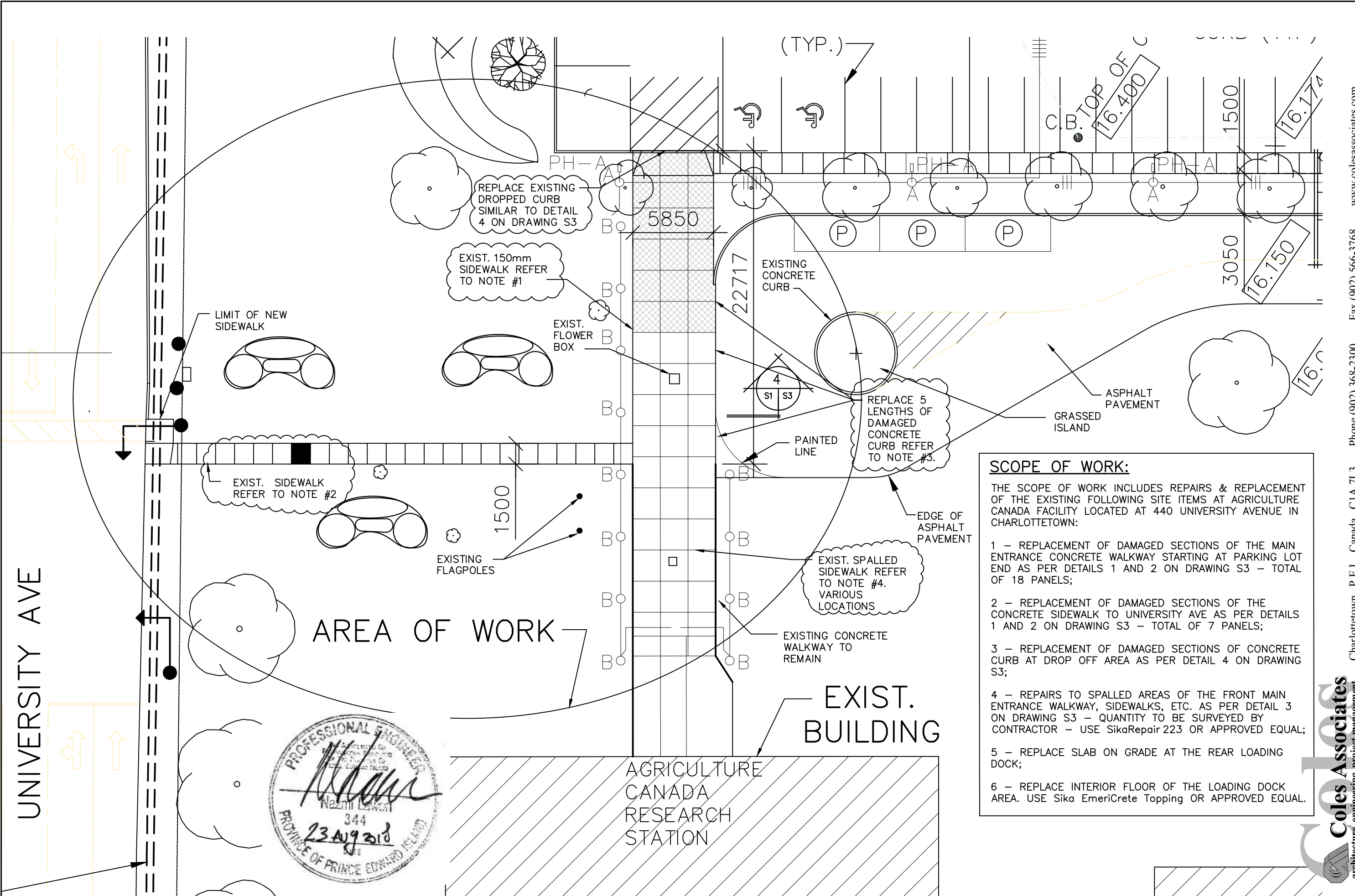


UNIVERSITY AVE



**SCOPE OF WORK:**

THE SCOPE OF WORK INCLUDES REPAIRS & REPLACEMENT OF THE EXISTING FOLLOWING SITE ITEMS AT AGRICULTURE CANADA FACILITY LOCATED AT 440 UNIVERSITY AVENUE IN CHARLOTTETOWN:

- 1 - REPLACEMENT OF DAMAGED SECTIONS OF THE MAIN ENTRANCE CONCRETE WALKWAY STARTING AT PARKING LOT END AS PER DETAILS 1 AND 2 ON DRAWING S3 - TOTAL OF 18 PANELS;
- 2 - REPLACEMENT OF DAMAGED SECTIONS OF THE CONCRETE SIDEWALK TO UNIVERSITY AVE AS PER DETAILS 1 AND 2 ON DRAWING S3 - TOTAL OF 7 PANELS;
- 3 - REPLACEMENT OF DAMAGED SECTIONS OF CONCRETE CURB AT DROP OFF AREA AS PER DETAIL 4 ON DRAWING S3;
- 4 - REPAIRS TO SPALLED AREAS OF THE FRONT MAIN ENTRANCE WALKWAY, SIDEWALKS, ETC. AS PER DETAIL 3 ON DRAWING S3 - QUANTITY TO BE SURVEYED BY CONTRACTOR - USE SikaRepair 223 OR APPROVED EQUAL;
- 5 - REPLACE SLAB ON GRADE AT THE REAR LOADING DOCK;
- 6 - REPLACE INTERIOR FLOOR OF THE LOADING DOCK AREA. USE Sika EmeriCrete Topping OR APPROVED EQUAL.



CLIENT: Agriculture Canada  
440 Univ Ave  
Charlottetown

PROJECT TITLE: Sidewalk Repairs

SHEET TITLE: Site Replacement Plan

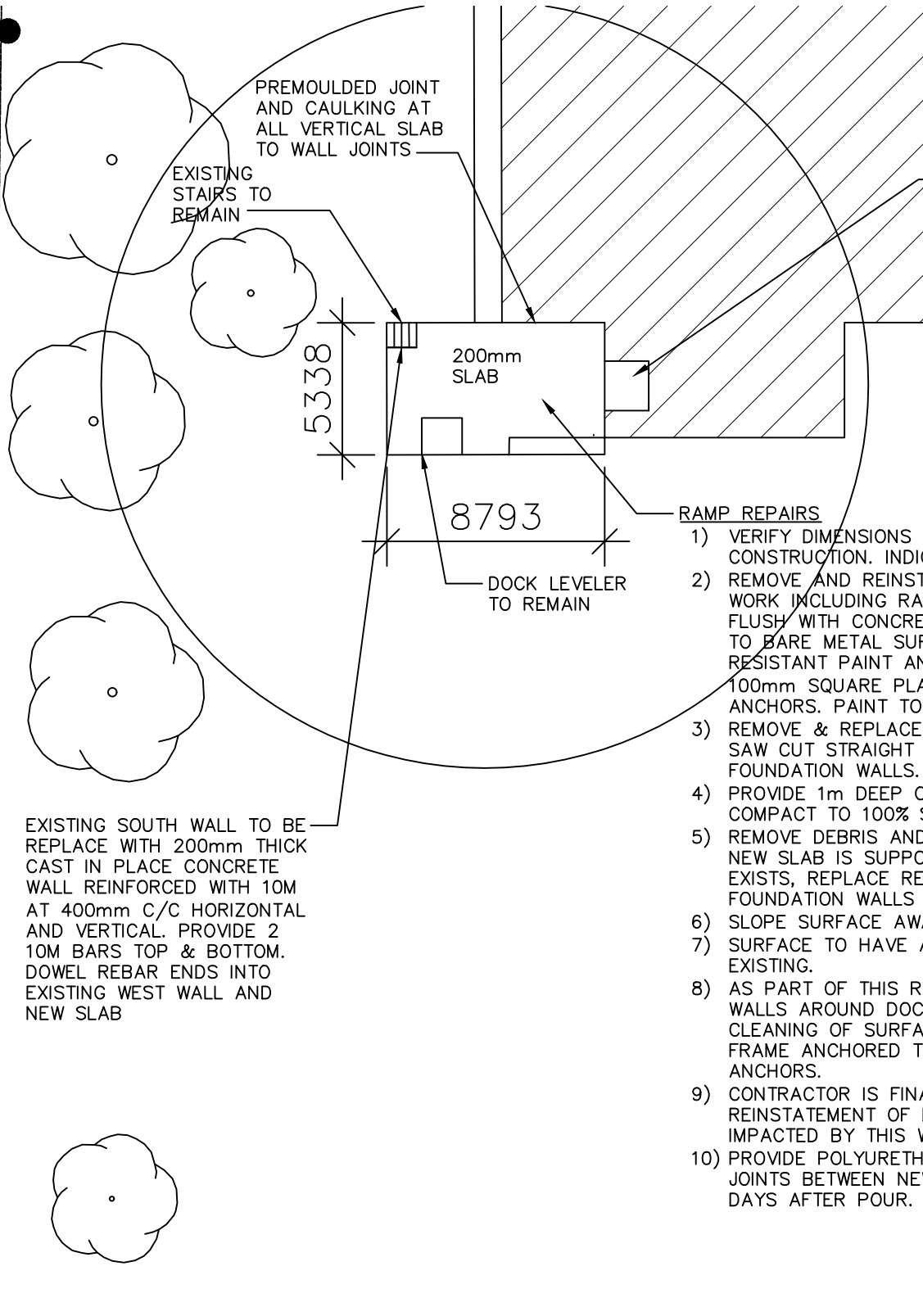
REVISIONS:

DATE: 23 Aug 2018  
DRAWN BY: NL  
PROJECT NUMBER: 171134  
DRAWING NUMBER: S1

Charlottetown, P.E.I., Canada, C1A 7L3  
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- PROVIDE PLASTIC SHEATHING TO PREVENT DUST FROM ENTERING BUILDING SPACE. PROVIDE NEGATIVE VENTILATION IF REQUIRED.
  - REMOVE APPROX 30mm OF TOP SLAB / TILES.
  - SCARIFY SURFACE.
  - REMOVE LOOSE DEBRIS AND CLEAN SURFACE.
  - APPLY SUITABLE BONDING AGENT, AND FILL CAVITY WITH SPECIFIED TOPPING AS NOTED.
  - SMOOTH FINISH SURFACE.
- REFER TO DETAIL 5 ON DRAWING S3

- RAMP REPAIRS**
- 1) VERIFY DIMENSIONS PRIOR TO BIDDING AND START OF CONSTRUCTION. INDICATED MEASUREMENTS ARE APPROXIMATE.
  - 2) REMOVE AND REINSTATE ITEMS THAT INTERFERES WITH THIS WORK INCLUDING RAILS, ETC. CUT EXISTING RAIL BASES FLUSH WITH CONCRETE SURFACE. CLEAN BOTTOM OF RAILS TO BARE METAL SURFACE, APPLY 2 COATS OF CORROSION RESISTANT PAINT AND SECURE TO TOP OF NEW SLAB WITH 100mm SQUARE PLATES C/W WITH 10mmØ EXPANSION ANCHORS. PAINT TO MATCH EXISTING.
  - 3) REMOVE & REPLACE ENTIRE SLAB-ON-GRADE AT THIS RAMP. SAW CUT STRAIGHT WHERE SLAB IS ANCHORED TO FOUNDATION WALLS.
  - 4) PROVIDE 1m DEEP OF DRAINAGE GRAVEL UNDER SLAB. COMPACT TO 100% SPMD.
  - 5) REMOVE DEBRIS AND CLEAN HORIZONTAL SURFACES WHERE NEW SLAB IS SUPPORTED ON FOUNDATION WALLS. WHERE EXISTS, REPLACE REBAR & ANCHORS BETWEEN TOP OF FOUNDATION WALLS AND NEW SLAB.
  - 6) SLOPE SURFACE AWAY FROM BUILDING FOUNDATION WALLS.
  - 7) SURFACE TO HAVE A BROOM FINISH AND SIMILAR TO EXISTING.
  - 8) AS PART OF THIS REPAIR ALLOW FOR REPLACEMENT OF 3 WALLS AROUND DOCK LEVELER. ALLOW FOR ON-SITE CLEANING OF SURFACE RUST AND CORROSION ON STEEL FRAME ANCHORED TO CONCRETE. REPLACE ALL DAMAGED ANCHORS.
  - 9) CONTRACTOR IS FINANCIALLY RESPONSIBLE FOR REINSTATEMENT OF DAMAGED SITE AND BUILDING ELEMENTS IMPACTED BY THIS WORK.
  - 10) PROVIDE POLYURETHANE SEALANT TO ALL HORIZONTAL JOINTS BETWEEN NEW AND EXISTING CONCRETE. APPLY 7 DAYS AFTER POUR. TREMCO THC 901 OR APPROVED EQUAL.

**SCOPE OF WORK:**

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CLIENT  
Agriculture Canada  
440 Univ Ave  
Charlottetown

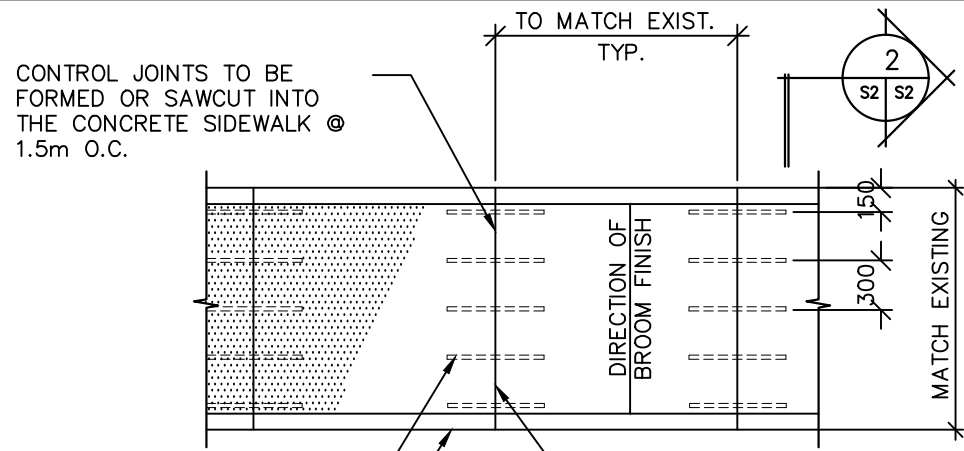
PROJECT TITLE  
Sidewalk  
Repairs

SHEET TITLE  
RAMP  
PLAN

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DATE: 23 Aug 2018  
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PROJECT NUMBER: 171134  
DRAWING NUMBER: S2

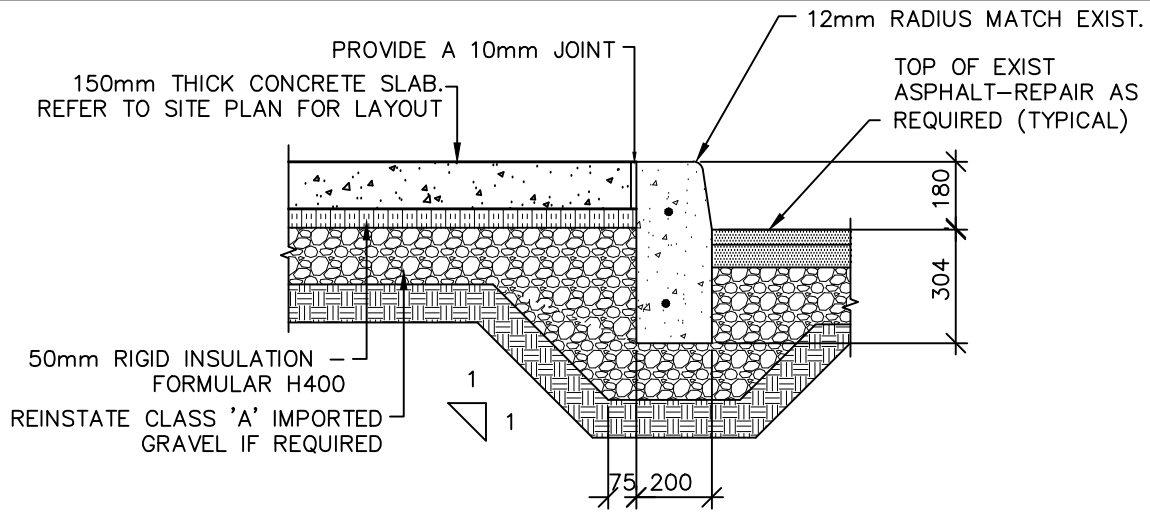


15M REBAR DOWELS 600mm LONG (TYP)  
TOOLED ROUNDED EDGES BOTH SIDES

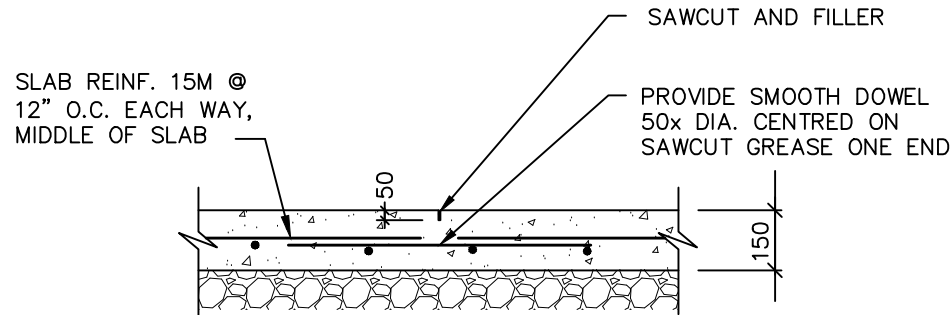
6mm THICK PREMOULDED ASPHALT IMPREGNATED FIBRE BOARD EXPANSION JOINT AT 6m SPACING (TYP.)

1  
S1 S3  
**PLAN: CONCRETE SIDEWALK**  
SCALE: 1:20

DRILL 20mm DIA HOLES, 200mm DEEP INTO FACE OF EXIST. WALKWAY AT NEW SIDEWALK, GROUT & PROVIDE 15mm DOWELS BETWEEN NEW & EXISTING CONCRETE PANELS.

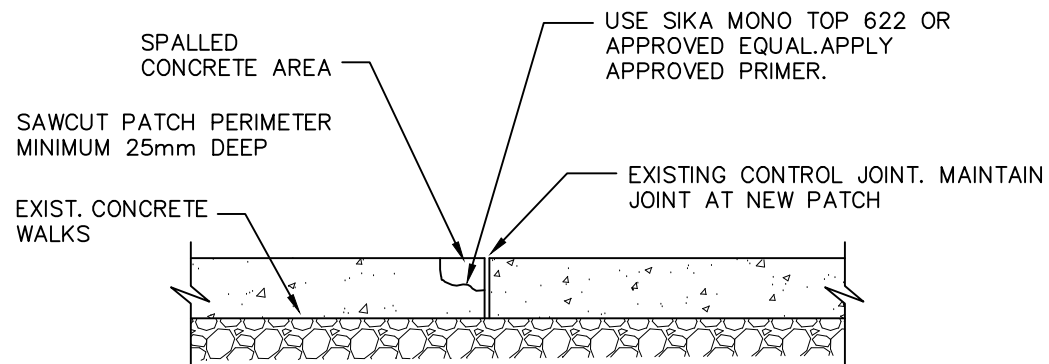


4  
S1 S3  
**SECTION: CONCRETE CURB IN CONCRETE SLAB**  
1:20

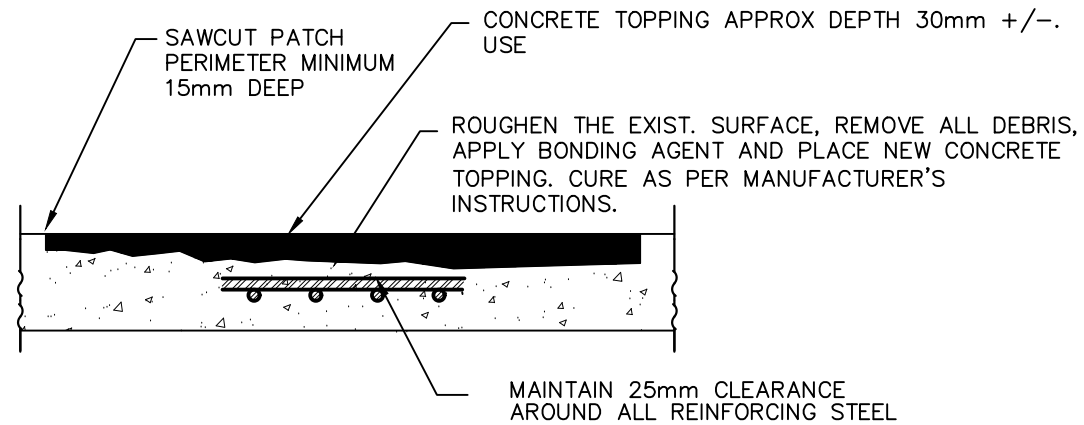


2  
S1 S3  
**SECTION: CONTROL JOINT IN CONCRETE SLAB**  
1:20

NOTE: AT EXPOSED REBAR, WIRE BRUSH & CLEAN EXISTING REINFORCING STEEL SURFACE



3  
S1 S3  
**SPALL REPAIR**  
N.T.S.



5  
S2 S3  
**TOP SIDE REPAIR -INTERIOR SLAB-RAMP**  
N.T.S.



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REVISIONS:

SHEET TITLE

PROJECT TITLE

CLIENT

DATE: 23 Aug 2018

DRAWN BY: NL

**DETAILS**

**Sidewalk Repairs**

**Agriculture Canada**  
440 Univ Ave  
Charlottetown

PROJECT NUMBER: 171134

DRAWING NUMBER: S3

PROFESSIONAL ENGINEER

PROVINCE OF PRINCE EDWARD ISLAND

344

23 Aug 2018

**GENERAL NOTES:**

1. CONTRACTOR MUST VISIT THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS.
2. VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.
3. ALL DIMENSIONS AND ELEVATIONS ARE IN METRIC UNITS U.N.O.
4. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES AND SERVICES (SHOWN OR NOT SHOWN ON DRAWINGS) IN THE FIELD WITHIN THE CONTRACT LIMIT. INFORMATION SHOWN ON PLANS IS APPROXIMATE ONLY. PERFORM EXPLORATORY TEST PITS AS REQUIRED TO UNCOVER ANY POTENTIAL INTERFERENCES.
5. UNDERGROUND WATER, SEWER, TELEPHONE AND POWER SERVICES MAY EXIST BENEATH THE SITE. EXERCISE CAUTION IN EXCAVATION AND PROTECT FACILITIES FROM DAMAGE. CONTRACTOR TO REPAIR DAMAGES AT NO COST TO THE OWNER. WORK SHALL BE CARRIED OUT TO THE SATISFACTION OF THESE AUTHORITIES. CONTACT UTILITIES BEFORE EXCAVATING.
6. THE WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA, LATEST EDITION AND APPLICABLE STANDARDS, UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS.
7. PERFORM WORK AND COMPLY WITH ALL FEDERAL, PROVINCIAL AND MUNICIPAL BY-LAWS AND REGULATIONS.
8. COMPLY WITH ALL ENVIRONMENTAL REGULATIONS & PROVIDE ALL NECESSARY ENVIRONMENTAL PROTECTION INCLUDING SILT FENCES, SEDIMENT TRAPS, DUST CONTROL, ETC.
9. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES. THE FACILITY WILL BE OPERATIONAL DURING THIS CONSTRUCTION. PROVIDE SIGNS, BARRICADES, FLAGGERS AS PER APPLICABLE REGULATIONS AND TO ENSURE SAFETY OF USERS.
10. REPAIR & REINSTATE DISTURBED ASPHALT PAVEMENT, GRASSED & LANDSCAPED AREAS, SIGNS, RETAINING WALLS, ETC., DAMAGED BY WORK OF CONTRACT INCLUDING ALL AREAS IMPACTED BEYOND LIMIT OF CONTRACT. TOPSOIL & SEED ALL GRASSED SURFACES OR AS INDICATED ON THE DRAWINGS.

**CONCRETE**

1. ALL CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH CSA-A23.1 AND NBCC.
2. ALL CONCRETE MATERIAL SHALL CONFORM TO:
  - a. CEMENT: CAN/CSA-A5-TYPE 10
  - d. AGGREGATES: CSA A23.1
  - b. AIR ENTRAINMENT: CSA CAN3-A266.1
  - c. CHEMICAL ADMIXTURES: CSA CAN3-266.2
  - d. DESIGN MIX: CSA A23.1
3. MIX DESIGN: TYPE 10 PORTLAND CEMENT.
4. INTERIOR SLABS:
  - a. COMPRESSIVE STRENGTH (28D): 25MPa (3600psi)
  - b. CLASS OF EXPOSURE: F-2
  - c. NOMINAL AGGREGATE SIZE: 20mm (3/4")
  - d. SLUMP: 80mm (3-1/4") ±20mm (3/4")
  - e. AIR CONTENT: 4-7%
  - f. WATER CEMENT RATIO: 0.5 MAX
6. EXTERIOR SLABS:
  - a. COMPRESSIVE STRENGTH (28D): 35MPa (5000psi)
  - b. CLASS OF EXPOSURE: C-2
  - c. NOMINAL AGGREGATE SIZE: 20mm (3/4")
  - d. SLUMP: 80mm (3-1/4") ±20mm (3/4")
  - e. AIR CONTENT: 5-8%
  - f. WATER CEMENT RATIO: 0.45 MAX
7. USE OF CALCIUM CHLORIDE IS NOT PERMITTED.
8. NO CONCRETE SHALL BE POURED WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF CONSULTANT.
9. ALL CONCRETE SHALL BE TESTED, TESTING SHALL CONFORM TO CSA A23.2. RECORD TESTS FOR SLUMP, AIR CONTENT AND COMPRESSIVE STRENGTH.
10. APPLY CURING COMPOUND OR WET CURE SLAB IMMEDIATELY AFTER COMPLETION OF SLAB FINISHING. CONCRETE CURING AND PROTECTION SHALL CONFORM TO CSA A23.1.
11. COLD WEATHER CONCRETE SHALL BE PLACED AND PROTECTED IN ACCORDANCE WITH THE REQUIREMENTS OF CSA A23.1 AND TO THE REQUIREMENTS OF ACI-306R. PROVIDE HEATED ENCLOSURES AND/OR INSULATED TARPS AS REQUIRED TO MAINTAIN MINIMUM 10°C CONCRETE SURFACE TEMPERATURE FOR A PERIOD OF 5 DAYS FOLLOWING CONCRETE PLACEMENT. PROVIDE CONTROLLED COOL DOWN PERIOD TO PREVENT SURFACE CRACKING AT END OF PROTECTION PERIOD. ENSURE THAT NO CONCRETE IS PLACED ON OR AGAINST FROZEN SUBGRADE, FORMWORK, OR REINFORCING STEEL.
8. PROVIDE CONTROL JOINTS WITH JOINT FILLER. STANDARD OF ACCEPTANCE: MASTERFILL 300I, OR APPROVED EQUAL. INSTALL TO MANUFACTURERS INSTRUCTIONS.

**CONCRETE (CONTD)**

8. PROVIDE CONTROL JOINTS WITH JOINT FILLER. STANDARD OF ACCEPTANCE: MASTERFILL 300I, OR APPROVED EQUAL. INSTALL TO MANUFACTURERS INSTRUCTIONS.
3. PROVIDE 12mm (1/2") PREMOULDED JOINT FILLER BETWEEN SIDEWALKS AND CURBS UNO.
5. CONCRETE SLABS TO HAVE A BROOM FINISH SIMILAR TO EXISTING CONCRETE SLABS/SIDEWALKS AND AS PER OWNER/CONSULTANTS REQUIREMENT.

**REINFORCING STEEL NOTES:**

1. ALL REINFORCING STEEL SHALL BE NEW BILLET AND SHALL CONFORM TO CSA G30.18, WWM REINFORCING TO CSA G30.5. MINIMUM REINFORCING STEEL YIELD STRENGTH SHALL BE 400 MPa.
2. REINFORCING STEEL SHALL BE DETAILED, CUT, BENT, FABRICATED AND PLACED IN ACCORDANCE WITH REINFORCING MANUAL OF STANDARD PRACTICE (REINFORCING STEEL INSTITUTE OF CANADA); CAN3-A23.3 AND CSA-A23.1.
3. THE GENERAL CONTRACTOR SHALL INSPECT ALL THE REINFORCING STEEL BEFORE PLACEMENT OF THE CONCRETE.
4. THE GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS PRIOR TO THE PLACEMENT OF THE CONCRETE.
5. THE POSITION OF ALL REINFORCING STEEL SHALL BE MAINTAINED DURING THE POURING OPERATION BY DIRECT SUPERVISION OF THE REINFORCING STEEL CONTRACTOR.
6. CONCRETE COVER (UNO):
  - a. POURED AGAINST THE GROUND - 75mm (3")
  - b. FORMED SURFACE AGAINST GROUND - 50mm (2")
  - c. FORMED SURFACE EXPOSED TO WEATHER - 50mm (2")
11. USE SPACERS, CHAIRS, TEMPLATES AND DIRECT SUPERVISION OF THE REINFORCING STEEL CONTRACTOR TO ACCURATELY LOCATE & SUPPORT REINFORCING STEEL & SECURE IN POSITION TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT.

