

**1:5 YEAR PEAK DISCHARGE PRE CONDITIONS**

|               | AREA (M2)  | C FACTOR | CA           |
|---------------|------------|----------|--------------|
| PERVIOUS      | 310        | 0.25     | 77.5         |
| IMPERVIOUS    | 657        | 0.90     | 591.3        |
| <b>TOTALS</b> | <b>967</b> |          | <b>668.8</b> |

WEIGHTED C 0.69

TOTAL 5 YR PEAK FLOW FROM SITE Tc = 10 MIN  
Q=CIA  
C = 0.69  
I = 109.5 mm/hr  
A = 0.097 Ha  
Q = 0.020 CMS

**1:5 YEAR PEAK DISCHARGE POST CONDITIONS**

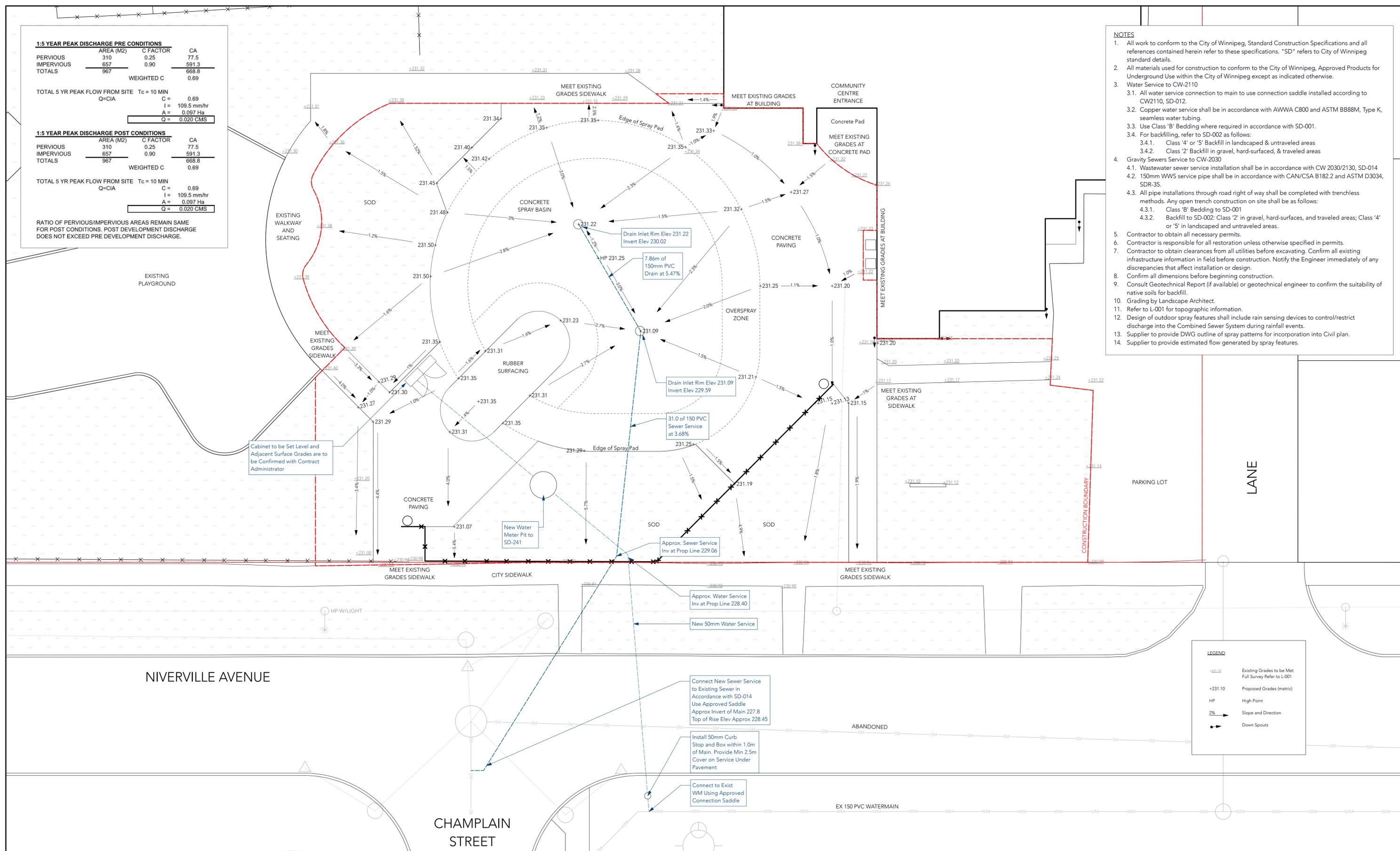
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RATIO OF PERVIOUS/IMPERVIOUS AREAS REMAIN SAME FOR POST CONDITIONS. POST DEVELOPMENT DISCHARGE DOES NOT EXCEED PRE DEVELOPMENT DISCHARGE.

- NOTES**
- All work to conform to the City of Winnipeg, Standard Construction Specifications and all references contained herein refer to these specifications. "SD" refers to City of Winnipeg standard details.
  - All materials used for construction to conform to the City of Winnipeg, Approved Products for Underground Use within the City of Winnipeg except as indicated otherwise.
  - Water Service to CW-2110
    - All water service connection to main to use connection saddle installed according to CW2110, SD-012.
    - Copper water service shall be in accordance with AWWA C800 and ASTM BB88M, Type K, seamless water tubing.
    - Use Class 'B' Bedding where required in accordance with SD-001.
    - For backfilling, refer to SD-002 as follows:
      - Class '4' or '5' Backfill in landscaped & untraveled areas
      - Class '2' Backfill in gravel, hard-surfaced, & traveled areas
  - Gravity Sewers Service to CW-2030
    - Wastewater sewer service installation shall be in accordance with CW 2030/2130, SD-014
    - 150mm WWS service pipe shall be in accordance with CAN/CSA B182.2 and ASTM D3034, SDR-35.
    - All pipe installations through road right of way shall be completed with trenchless methods. Any open trench construction on site shall be as follows:
      - Class 'B' Bedding to SD-001
      - Backfill to SD-002: Class '2' in gravel, hard-surfaces, and traveled areas; Class '4' or '5' in landscaped and untraveled areas.
  - Contractor to obtain all necessary permits.
  - Contractor is responsible for all restoration unless otherwise specified in permits.
  - Contractor to obtain clearances from all utilities before excavating. Confirm all existing infrastructure information in field before construction. Notify the Engineer immediately of any discrepancies that affect installation or design.
  - Confirm all dimensions before beginning construction.
  - Consult Geotechnical Report (if available) or geotechnical engineer to confirm the suitability of native soils for backfill.
  - Grading by Landscape Architect.
  - Refer to L-001 for topographic information.
  - Design of outdoor spray features shall include rain sensing devices to control/restrict discharge into the Combined Sewer System during rainfall events.
  - Supplier to provide DWG outline of spray patterns for incorporation into Civil plan.
  - Supplier to provide estimated flow generated by spray features.



**LEGEND**

|         |   |
|---------|---|
| +231.10 | Existing Grades to be Met<br>Full Survey Refer to L-001 |
| +231.10 | Proposed Grades (metric)                                |
| HP      | High Point  |
| 2%      | Slope and Direction                                     |
| •       | Down Spouts   |

Location of underground structures as shown are based on the best information available but no guarantee is given that all existing utilities are shown or that the given locations are exact. Confirmation of existence and exact location of all services must be obtained from the individual utilities before proceeding with construction.  
DO NOT SCALE DRAWING - PLOT MAY NOT BE AT 100%



| NO. | REVISION / NOTE | DATE | BY |
|-----|-----------------|------|----|
| 9   |                 |      |    |
| 8   |                 |      |    |
| 7   |                 |      |    |
| 6   |                 |      |    |
| 5   |                 |      |    |
| 4   |                 |      |    |
| 3   |                 |      |    |
| 2   |                 |      |    |
| 1   |                 |      |    |

PROJECT  
SPRAY PAD DEVELOPMENT  
CHAMPLAIN COMMUNITY CENTRE  
282 NIVERVILLE AVENUE

| SCALE | DATE          | PROJECT NO. |
|-------|---------------|-------------|
| 1:100 | JUNE 27, 2023 | 2207        |

DRAWING TITLE  
GRADING AND SITE SERVICING PLAN

| SHEET NO. | DATE          | BY |
|-----------|---------------|----|
| L-005     | JUNE 27, 2023 | EC |