


**LEGEND**

2.5%	PROPOSED GRADE AND DIRECTION	100	PROPOSED SANITARY MANHOLE
105.59 HP	PROPOSED ELEVATION AT HIGH POINT	100	SANITARY MANHOLE WITH COMPRESSION ASSEMBLY TOP
x 105.53	PROPOSED ELEVATION EXISTING ELEVATION	100	PROPOSED STORM MANHOLE
x 55.89	EXISTING ELEVATION	100	STORM MANHOLE WITH COMPRESSION ASSEMBLY TOP
56.13 BS	EXISTING ELEVATION AT BACK OF SIDEWALK	100	PROPOSED CATCHBASIN WITH ICD
55.89	EXISTING CONTOUR AND ELEVATION	100	PROPOSED REAR YARD CATCHBASIN WITH ICD
	SWALE AND TERRACE	100	PROPOSED VALVE & VALVE BOX LOCATION
	100 yr + 20% PONDING AREA	100	PROPOSED HYDRANT WITH TOP OF FLANGE ELEVATION
	100 yr + 20% PONDING AREA	100	1.8m WOOD PRIVACY FENCE
	MAX. STATIC PONDING AREA	100	1.5m BLACK VINYL CHAINLINK FENCE
	HYDRO TRANSFORMER	100	2.5m HIGH NOISE BARRIER

- GENERAL NOTES:**
- DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  - THE ORIGINAL TOPOGRAPHY AND GROUND ELEVATIONS, SERVICING AND SURVEY INFORMATION SHOWN ON THIS PLAN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF ALL INFORMATION OBTAINED FROM THIS PLAN.
  - CO-ORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
  - BEFORE COMMENCING CONSTRUCTION, PROVIDE PROOF OF COMPREHENSIVE ALL RISK AND OPERATIONAL LIABILITY INSURANCE INCLUDING BLASTING, INSURANCE POLICY TO NAME THE OWNER, ENGINEER AND THE CITY AS CO-INSURED. AMOUNT OF INSURANCE TO BE SPECIFIED BY OWNER'S AGENT.
  - CONNECT TO EXISTING SYSTEMS AS DETAILED, INCLUDING ALL RESTORATION WORK NECESSARY TO REINSTATE SURFACES TO EXISTING CONDITIONS OR BETTER.
  - DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS.
  - OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS BEFORE COMMENCING CONSTRUCTION.
  - RESTORE ALL TRENCHES AND SURFACE FEATURES TO EXISTING CONDITIONS OR BETTER AND TO THE SATISFACTION OF CITY OF OTTAWA AUTHORITIES.
    - ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DETAIL R-10.
    - THICKNESS OF GRANULAR MATERIAL AND ASPHALT LAYERS TO MATCH EXISTING.
    - BOULEVARDS SHALL BE REINSTATED WITH 100mm OF TOPSOIL, SEED AND MULCH.
  - REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE INSTRUCTED BY ENGINEER.
  - ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.
  - ALL FENCING TO BE LOCATED 0.15m INSIDE PROPERTY LINE. REFER TO LANDSCAPING PLAN FOR DETAILS.
  - REFER TO GEOTECHNICAL INVESTIGATION REPORT PG4278-3 (DATED MARCH 30, 2021), PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS AND CONSTRUCTION RECOMMENDATIONS.
  - ALL BLOCKS ARE SLAB-ON-GRADE WITH NO FOUNDATION DRAINS BEING PROPOSED.
  - PERFORATED PIPE SUB-DRAINS TO BE PROVIDED AT SUBGRADE LEVEL EXTENDING FROM THE ROADSIDE CATCHBASIN FOR A DISTANCE OF 3.0m, PARALLEL TO THE CURB IN TWO DIRECTIONS.
  - GRADE RAISE RESTRICTIONS ON SITE AS PER GEOTECHNICAL INVESTIGATION (DATED 10/2019) PREPARED BY PATERSON GROUP.

  
**JEFF MCEWEN P.ENG.**  
 MANAGER, DEVELOPMENT REVIEW EAST BRANCH  
 PLANNING, INFRASTRUCTURE & ECONOMIC  
 DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

**APPROVED**  
 By Jeff McEwen at 10:40 am, Jul 26, 2021

- GRADING AND PAVEMENT NOTES:**
- ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED HARD SURFACE (ie. PAVEMENT, CURB, SIDEWALK, ETC.) AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
  - EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE HEAVILY PROOF ROLLED WITH A LARGE (10 TON) VIBRATORY STEEL DRUM ROLLER UNDER DRY CONDITIONS AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
  - ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
  - THE GRANULAR BASE SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
  - BUILD ROADWAYS WITH 2% CROSSFALL INCLUDING SUBGRADE AND GRANULAR BASE.
  - ROADWAY SUBGRADE TO BE INSPECTED BY THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION TO REVIEW IF A WOMEN GEOTEXTILE IS REQUIRED BELOW THE GRANULAR MATERIALS, AND TO CONFIRM THE DEPTH AND COMPACTION OF GRANULAR 'B'.
  - PRIOR TO PLACEMENT OF TOPLIFT, THE CONTRACTOR SHALL ADJUST ALL STRUCTURES TO FINAL GRADE PER CITY OF OTTAWA STANDARDS.
  - MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
  - MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
  - ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
  - ALL CURBS SHALL BE MOUNTABLE CURB UNLESS OTHERWISE NOTED AND CONSTRUCTED PER CITY OF OTTAWA STANDARD (SC1.3).
  - REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.

**PAVEMENT STRUCTURE:**

LOCAL ROADS - 6.7m PLATFORM
40mm ASPHALT SP12.5
50mm ASPHALT SP19.0
150mm GRAN "A"
450mm GRAN "B" TYPE II
690mm TOTAL DEPTH

**PONDING**

PONDING ID	STRUCTURE	100 YEAR PONDING ELEVATION	100 YEAR PONDING DEPTH (m)	100 YEAR +20% PONDING ELEVATION	100 YEAR + 20% PONDING DEPTH (m)	MAX STATIC PONDING ELEVATION	MAX STATIC PONDING DEPTH (m)
P1	CB1	89.20	0.20	89.23	0.23	89.31	0.31
P2	CBMH2	89.32	0.24	89.36	0.28	89.38	0.30
P3	CBMH1	89.32	0.17	89.36	0.21	89.45	0.30
P4	CB3	89.37	0.19	89.41	0.23	89.48	0.30
P5	CB4	89.37	0.19	89.41	0.23	89.43	0.25
P6	CB5	89.34	0.21	89.37	0.24	89.38	0.25
P7	CB6	89.24	0.22	89.29	0.27	89.32	0.30
P8	CB7	89.25	0.28	89.29	0.32	89.26	0.29
P9	RYCB4	89.32	0.17	89.36	0.21	89.45	0.30
P10	RYCB2	88.68	0.24	88.78	0.34	88.88	0.44
P11	RYCB3	88.67	0.12	88.75	0.20	88.73	0.18
P12	RYCB1	88.31	0.13	88.44	0.26	88.78	0.60

**NOTE:**  
 THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

No.	REVISION	DATE	BY
8.	CITY SUBMISSION	MAY 14/21	MAB
7.	CITY SUBMISSION	MAY 3/21	MAB
6.	CITY SUBMISSION	APR 6/21	MAB
5.	CITY SUBMISSION	MAR 24/21	MAB
4.	CITY COMMENTS	NOV 24/20	MAB
3.	CITY COMMENTS	OCT 16/20	MAB
2.	CITY COMMENTS	SEP 24/20	MAB
1.	ISSUED FOR APPROVAL	JUN 29/20	MAB

**SCALE**


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**FOR REVIEW ONLY**

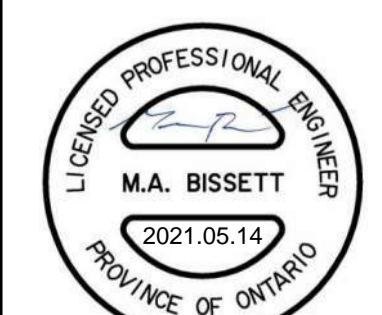
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APPROVED	MAB
	JGR

LICENCED PROFESSIONAL ENGINEER



L.R. WILSON  
100150055

LICENCED PROFESSIONAL ENGINEER



M.A. BISSETT  
2021.05.14

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**CITY OF OTTAWA**  
 PROVENCE ORLEANS - 2128 TRIM ROAD (BLOCK 126)

**GRADING PLAN**

PROJECT No. 120057  
 REV # 8  
 DRAWING No. 120057-GR

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PLAN #18172 D07-12-20-0095