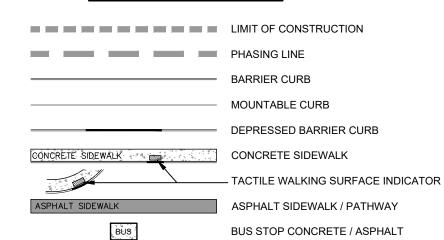
GENERAL LEGEND



SERVICING LEGEND

O MH118A	SANITARY MANHOLE				
200mmØ SAN	SANITARY SEWER				
MH109 MH118	STORM MANHOLE				
825mmØ STM	STORM SEWER - LESS THAN 900Ø				
900mmØ STM	STORM SEWER - 900Ø AND GREATER				
200Ø WATERMAIN	WATERMAIN				
■ CB100	STREET CATCHBASIN C/W TOP OF GRATE				
T/G 104.10 CICB101	CURB INLET CATCHBASIN C/W GUTTER GRADE				
G/G 104.25 DCB100	DOUBLE CATCHBASIN C/W TOP OF GRATE				
T/G 104.10 DCICB101	DOUBLE CURB INLET CATCHBASIN C/W GUTTER GRADE				
G/G 104.25 DI101	DITCH INLET MANHOLE C/W TOP OF GRATE				
T/G 103.59 CBMH101					
T/G 103.59	CATCHBASIN MANHOLE C/W TOP OF GRATE				
RYCB T/G 104.35	REAR YARD CATCHBASIN IN ROAD CONNECTING STRUCTURE C/W SOLID GRATE				
− ○ T/G 104.35 INV 103.35	REAR YARD "TEE" CATCHBASIN (300Ø) C/W TOP OF GRATE AND INVERT OUT				
e ^{T/G} 104.50 NV 103.50	REAR YARD "END" CATCHBASIN (300Ø) C/W TOP OF GRATE AND INVERT OUT				
T/G 104.35 INV 103.35	REAR YARD "CUSTOM ANGLED " CATCHBASIN (450Ø) C/W TOP (GRATE AND INVERT OUT				
T/G 104.35 INV 103.35	REAR YARD "THREE WAY" CATCHBASIN (450Ø) C/W TOP OF GRATE AND INVERT OUT				
	PERFORATED REAR YARD SUBDRAIN				
300mmØ CSP	CSP CULVERT C/W DIAMETER				
⊗ V&VB	VALVE AND VALVE BOX				
⊗ V&VC	VALVE AND VALVE CHAMBER				
- -	PARK VALVE CHAMBER C/W SERVICE POST				
◆ HYD 104.35	FIRE HYDRANT C/W BOTTOM OF FLANGE ELEVATION				
200Ø WM RED 150Ø WM	WATERMAIN REDUCER				
2 VBENDS	VERTICAL BEND LOCATION				
>	SIAMESE CONNECTION (IF REQUIRED)				
M	METER (IF REQUIRED)				
RM	REMOTE METER (IF REQUIRED)				
<u> </u>	WATERMAIN IDENTIFICATION (IF REQUIRED)				
\bigcirc	PIPE CROSSING IDENTIFICATION (IF REQUIRED)				
\triangleleft	SINGLE SERVICE LOCATION				
\triangleleft	DOUBLE SERVICE LOCATION				
BH 12 102.00	INFERRED REFUSAL (SEE GEOTECHNICAL REPORT)				
HGL 101.79	100 YEAR STORM HYDRAULIC GRADE LINE AT MANHOLE				
USF 101.79	UNDERSIDE OF FOOTING ELEVATION				
101.79	CLAY SEAL IN SEWER / WATERMAIN TRENCH				
CB100	CATCHBASIN COMPLETE WITH INLET CONTROL DEVICE				
T/G 104.10 —— I MH10	MANHOLE COMPLETE WITH INLET CONTROL DEVICE				
.sc	SCUPPER DRAIN				
®RD	ROOF DRAIN				

UTILITY NOTES:

WHETHER OR NOT SHOW ON THESE DRAWINGS.

- 1. ALL MATERIALS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS & SPECIFICATIONS OR OPSD/OPSS IF CITY DRAWINGS AND SPECIFICATIONS DO NOT
- 2. THE POSITION OF UNDERGROUND AND ABOVEGROUND SERVICE, UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH SERVICE, UTILITIES AND STRUCTURES IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION.
- 3. THE CONTRACTOR SHALL REPORT ALL CONFLICTS, DISCOVERIES OF ERROR AND DISCREPANCIES TO THE
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND ASSUME RESPONSIBILITY FOR ALL UTILITIES
- 5. THESE DRAWINGS ARE NOT TO BE SCALED OR USED FOR LAYOUT PURPOSES.
- 6. THE COMPOSITE UTILITY PLAN HAS BEEN REVIEWED BY ARCADIS FOR CONFORMITY TO THE DESIGN CONCEPT FOR THE DEVELOPMENT AND FOR GENERAL ARRANGEMENT ONLY AND AS SUCH SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS OR OMISSIONS IN EITHER LAYOUT OR
- 7. THIS DRAWING IS A COMPILATION OF OTHER UTILITY DESIGNS AND DOES NOT INDICATE IN ANY WAY THAT THE PARTY SIGNING THIS DRAWING HAS DESIGNED OR APPROVED THE RESPECTIVE UTILITY PLANTS INDICATED ON THIS DRAWING. THE DRAWING WAS PREPARED TO BE USED AS REFERENCE ONLY AS PER REQUIREMENTS OF THE CITY OF OTTAWA. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE IT HAS REVIEWED THE CURRENT AND EXISTING DESIGNS BY HYDRO, STREET LIGHTING, BELL, CANADA POST, O.C. TRANSPO, CABLE TV AND ANY OTHER PARTIES INCLUDED BUT NOT MENTIONED AND COMPLETE THE INSTALLATION IN ACCORDANCE WITH THE REQUIREMENTS OF THE STAKEHOLDER UTILITY DESIGNS.
- 8. CONTRACTOR TO ADVISE ENGINEER IN WRITING OF ANY DISCREPANCIES IN THE HYDRO. BELL, ROGERS. ENBRIDGE, AND STREETLIGHT DRAWINGS, AND THE CUP AHEAD OF INSTALLATION.
- 9. HYDRO INSPECTOR IS TO BE NOTIFIED AND PRESENT AHEAD OF HYDRO INSTALLATION
- 10. BELL AND ROGERS VAULT EASEMENT SIZE AND LOCATION ARE AS SHOWN ON THE CUP. ANY LOCATION DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IN WRITING AHEAD OF INSTALLATION.
- 11. BELL AND ROGERS VAULTS ARE TO BE PLACED TO THE EXTENT POSSIBLE IN THE RIGHT OF WAY RESPECTING THE REQUIRED CLEARANCES FROM DUCTS IN THE JOINT UTILITY TRENCH. IF VAULTS ARE ON PRIVATE PROPERTY THEY MUST BE PLACED WITHIN THE EASEMENT. VERIFY VAULT CORNERS PRIOR TO FINAL INSTALLATION AND FIBRE LINE PLACEMENT. VAULTS INSTALLED IN THE WRONG LOCATION OR OUTSIDE THE EASEMENTS WILL BE RELOCATED AT THE COST OF BELL AND ROGERS.
- 12. UTILITY EASEMENTS ARE TO BE STAKED ALL 4 CORNERS WITH PROPOSED FINAL GRADES MARKED ON THE
- 13. STREETLIGHTS ARE TO BE INSTALLED AT THE OFFSETS FROM FACE OF CURB SHOWN ON THE APPROVED ROAD SECTIONS FOR THE PROJECT.
- 14. CAD FILES OF THE CUP PROVIDED BY THE ENGINEER ARE AS A COURTESY ONLY TO ASSIST THE CONTRACTOR. LAYOUT OF THE UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR AND LEGAL

Pipe Interference Table			
Crossing No.	PIPE 1	PIPE 2	Clearance
1	STM Bottom 98.336	WTR Top 97.820	0.516
2	WTR Bottom 98.752	SAN Top 97.771	0.981
3	WTR Bottom 98.759	STM Top 98.509	0.250
4	WTR Bottom 98.874	STM Top 98.594	0.280
5	STM Bottom 98.022	SAN Top 97.731	0.291
6	STM Bottom 98.265	SAN Top 97.809	0.456
7	STM Bottom 98.289	SAN Top 97.876	0.413

STORM STRUCTURE TABLE - PHASE 2

		I STRUCTURE I	FRAME & COVER	ELEVATION		OUTLET PIPE		INLET CONTROL DEVICE				
STRUCTURE ID	STORM AREAID			TOP OF GRATE	INVERT		DIAMETER	TYPE	100yr	RESTRICT ED FLOW	,	ORIFICE SIZE
					INLET	OUTLET	(mm)	ITPE	Dynamic HEAD	(l/s)	ICD TYPE	DIAMOND (mm)
CB20	CB20	OPSD 705.010	S19	100.45		99.05	200	PVC DR35	1.600	15.00	Tempest MHF	67 x 67
CB21	MH21	OPSD 705.010	S19	100.40		99.00	200	PVC DR35	1.450			
CB22	MH21	OPSD 705.010	S19	100.30		98.90	200	PVC DR35	1.550			
CB23	MH22	OPSD 705.010	S19	100.45		99.05	200	PVC DR35	1.460			
CB24	CB24	OPSD 705.010	S19	101.34		99.94	200	PVC DR35	1.300	15.00	Tempest MHF	70 x 70
CB25	CB25	OPSD 705.010	S19	101.57		100.17	200	PVC DR35	1.400	6.00	Tempest Vortex	44 x 44
CBMH20	CBMH20	OPSD 701.010	S25 & S28.1	100.20		98.274	300	PVC DR35	2.076	15.00	Tempest MHF	64 x 64
MH21	MH21	OPSD 701.010	S25 & S24.1	101.01		98.373	300	PVC DR35	2.027	33.00	Tempest MHF	93 x 93
MH22	MH22	OPSD 701.010	S25 & S24.1	100.67		98.422	300	PVC DR35	2.178	6.00	Tempest Vortex	39 x 39

Bold font indicates CB's with ICD's

NOTES:

- 1. ALL MATERIALS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA
- 2. THE POSITION OF UNDERGROUND AND ABOVE GROUND SERVICE, UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH SERVICE, UTILITIES AND STRUCTURES IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION.
- 3. THE CONTRACTOR SHALL REPORT ALL CONFLICTS, DISCOVERIES OF ERROR AND DISCREPANCIES TO THE
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND ASSUME RESPONSIBILITY FOR ALL UTILITIES WHETHER OR NOT SHOW ON THESE DRAWINGS.
- BEYOND THE SITE LIMITS, WHICH ARE DISTURBED DURING CONSTRUCTION, SHALL BE REPAIRED AND THE OWNER, THE OWNERS REPRESENTATIVES AND/OR THE AUTHORITY HAVING JURISDICTION AT THE EXPENSE OF THE CONTRACTOR.
- 6. WHERE NECESSARY, THE CONTRACTOR SHALL IMPLEMENT A TRAFFIC MANAGEMENT PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE LATEST VERSION OF THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TEMPORARY TRAFFIC CONTROL MEASURES MUST BE REMOVED UPON THE COMPLETION OF THE WORKS.
- 7. SHOULD ANY BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER TO CONTACT THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATE, AND WORK WITHIN THE AREA SHALL BE CEASED UNTIL FURTHER NOTICE.
- 8. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT PG2934-1 PREPARED BY PATERSON

- 9. FOR GEODETIC BENCHMARK AND GEOMETRIC LAYOUT OF STREET AND LOTS, REFER TO TOPOGRAPHICAL
- 11. THESE DRAWINGS ARE NOT TO BE SCALED OR USED FOR LAYOUT PURPOSES
- ACCEPTABLE NATIVE EARTH BORROW OR IMPORTED OPSS SELECTED SUBGRADE MATERIAL IF NATIVE
- 13. IN AREAS WHERE EXISTING GROUND IS BELOW THE PROPOSED ELEVATION OF SEWER AND WATERMAINS, GRADE RAISING AND FILLING IS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. AS PER CITY GUIDELINES ALL WATERMAINS IN FILL AREAS ARE TO BE TIED WITH RESTRAINING JOINTS AND THRUST BLOCKS.
- 14. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL PLAN PRIOR TO THE COMMENCEMENT OF ANY SITE CONSTRUCTION. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED TO THE SATISFACTION OF THE ENGINEER, OR ANY REGULATORY AGENCY. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR UNTIL THE START OF A SUBSEQUENT PHASE.
- DUST, DEBRIS AND/OR MUD AS A RESULT OF ITS CONSTRUCTION OPERATIONS.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE
- 17. ALL PIPE, CULVERTS, STRUCTURES REFER TO NOMINAL INSIDE DIMENSIONS.

FOR SHALLOW SEWERS, REFER TO CITY STANDARD S35.

- 19. UNLESS SPECIFICALLY NOTED OTHERWISE, PIPE MATERIALS SHALL BE AS FOLLOWS;
- -SANITARY SEWER TO BE PVC DR35
- 20. ALL CONNECTIONS TO EXISTING WATERMAINS ARE TO BE COMPLETED BY CITY FORCES. CONTRACTOR IS TO EXCAVATE, BACKFILL, COMPACT AND REINSTATE.
- 21. ANY WATERMAIN WITH LESS THAN 2.4m AND ANY SEWER WITH LESS THAN 2.0m DEPTH OF COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22 OR AS APPROVED BY THE
- 23. ALL STUBBED SEWERS SHALL HAVE PRE-MANUFACTURED CAPS INSTALLED.
- 24. ALL CATCHBASINS SHALL HAVE A 600mm SUMP. ALL CATCHBASIN MANHOLES, AND ALL STORM MANHOLES WITH OUTLETTING PIPE SIZES LESS THAN 900mm, SHALL HAVE A 300mm SUMP.
- 26. ALL LEADS FOR STREET CATCHBASIN'S AND CURB INLET CATCHBASIN'S CONNECTED TO MAIN SHALL BE 200mmØ PVC DR35 @ MIN 2% SLOPE UNLESS NOTED OTHERWISE. ALL LEADS FOR RYCB'S CONNECTED TO
- 27. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL STREET CATCHBASINS SHALL BE INSTALLED WITH TWO -3.0m MINIMUM SUBDRAINS INSTALLED LONGITUDINALLY, PARALLEL WITH THE CURB. ALL CATCHBASINS IN ASPHALT AREAS, NOT ADJACENT TO A CURB, SHALL BE INSTALLED WITH FOUR - 3.0m MINIMUM SUBDRAINS
- 28. INLET CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMPLETING THE ROAD BASE (GRANULAR A).
- 30. EACH BUILDING SHALL BE EQUIPPED WITH A SANITARY AND STORM SEWER BACKWATER VALVE AND
- 31. THE HGL PROVIDED IS BASED ON HYDRAULIC MODELING COMPLETED USING RATIONAL METHOD AND THE 100 YEAR CHICAGO STORM EVENT (C3H10010).
- REPAIRS HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA.

STANDARD DRAWINGS & SPECIFICATIONS OR OPSD/OPSS IF CITY DRAWINGS AND SPECIFICATIONS DO NOT

- 5. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL LANDS BEYOND THE SITE LIMITS. ANY AREAS RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ADJACENT LAND OWNER,

- SUPERPAVE 12.5 ASPHALTIC CONCRETE 50mm - SUPERPAVE 19.0 ASPHALTIC CONCRETE - OPSS GRANULAR "A" CRUSHED STONE 450mm - OPSS GRANULAR "B" TYPE II

CAR ONLY PARKING AREA : (500mm)
50mm - SUPERPAVE 12.5 ASPHALTIC CONCRETE 150mm - OPSS GRANULAR "A" CRUSHED STONE 300mm - OPSS GRANULAR "B" TYPE II

- SURVEY AND PLAN OF SUBDIVISION PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. BENCHMARK BASED ON CAN--NET VIRTUAL REFERENCE SYSTEM NETWORK.
- 10. FOR SITE PLAN INFORMATION, REFER TO SITE PLAN PREPARED BY ALEXANDER WILSON ARCHITECT INC.
- 12. ROADWAY SECTIONS REQUIRING GRADE RAISE TO PROPOSED SUB GRADE LEVEL TO BE FILLED WITH MATERIAL IS DEFICIENT AS PER RECOMMENDATION OF GEOTECHNICAL ENGINEER.
- 15. CONTRACTORS SHALL BE RESPONSIBLE FOR KEEPING CLEAN ALL ROADS WHICH BECOME COVERED IN
- SHOULD THE MAXIMUM OPSD TRENCH WIDTH BE EXCEEDED.
- 18. SHOULD CLAY SEALS BE REQUIRED, THEY SHALL BE INSTALLED AS PER THE RECOMMENDATIONS WITHIN THE GEOTECHNICAL REPORT.
- -WATERMAINS TO BE PVC DR18
- -PERFORATED STORM SEWERS IN REAR YARDS AND LANDSCAPE AREAS TO BE HDPE -STORM SEWERS 375mm DIAMETER AND LESS TO BE PVC DR35 -STORM SEWERS 450mm DIAMETER AND GREATER TO BE CONCRETE, CLASS AS PER OPSD 807.010 OR 807.030, OR HIGHER
- 22. ALL FIRE HYDRANTS AS PER CITY STANDARD W19, c/w 150mmØ LEAD UNLESS OTHERWISE SPECIFIED.
- 25. ALL SANITARY MANHOLES IN PONDING AREAS SHALL BE EQUIPPED WITH A WATERTIGHT COVER.
- MAIN SHALL BE 200mmØ PVC DR35 @ MIN 1% SLOPE UNLESS NOTED OTHERWISE.
- INSTALLED ORTHOGONALLY.
- 29. ALL SEWER SERVICE LATERALS WITH MAINLINE CONNECTIONS DEEPER THAN 5.0m REQUIRE A CONTROLLED SETTLEMENT JOINT.
- CLEAN-OUT ON ITS PRIMARY SERVICE, AS PER ONTARIO BUILDING CODE REQUIREMENTS (BY OTHERS).
- 32. THE SUBGRADE OF ALL STRUCTURES, PIPE, ROADS, SIDEWALKS, WALKWAYS, AND BUILDINGS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 33. TOP COURSE ASPHALT SHALL NOT BE PLACED UNTIL THE FINAL CCTV INSPECTION AND NECESSARY

2668867 Ontario Inc.

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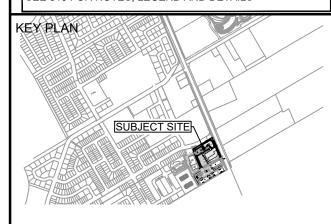
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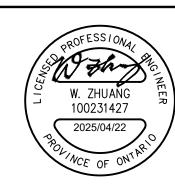
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conformance before proceeding with fabrication.

ISSUE	ISSUES				
No.	DESCRIPTION	DATE			
1	SUBMISSION NO.1 FOR CITY REVIEW	2024-11-26			
2	SUBMISSION NO.2 FOR CITY REVIEW	2025-02-18			
3	SUBMISSION NO.3 FOR CITY REVIEW	2025-04-22			
4					
	-				

SEE 010 FOR NOTES, LEGEND AND DETAILS





PRIME CONSULTANT



333 Preston Street - Suite 500

Ottawa ON K1S 5N4 Canada tel 613 225 1311 www.arcadis.com

PROJECT

SENIORS APARTMENTS

BANK STREET AT DUN SKIPPER DRIVE

PROJECT NO: 148290	
DRAWN BY:	CHECKED BY:
M.M.	R.M.
PROJECT MGR:	APPROVED BY:
D 14	

SHEET TITLE

NOTES & LEGEND

SHEET NUMBER

ISSUE

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D07-1