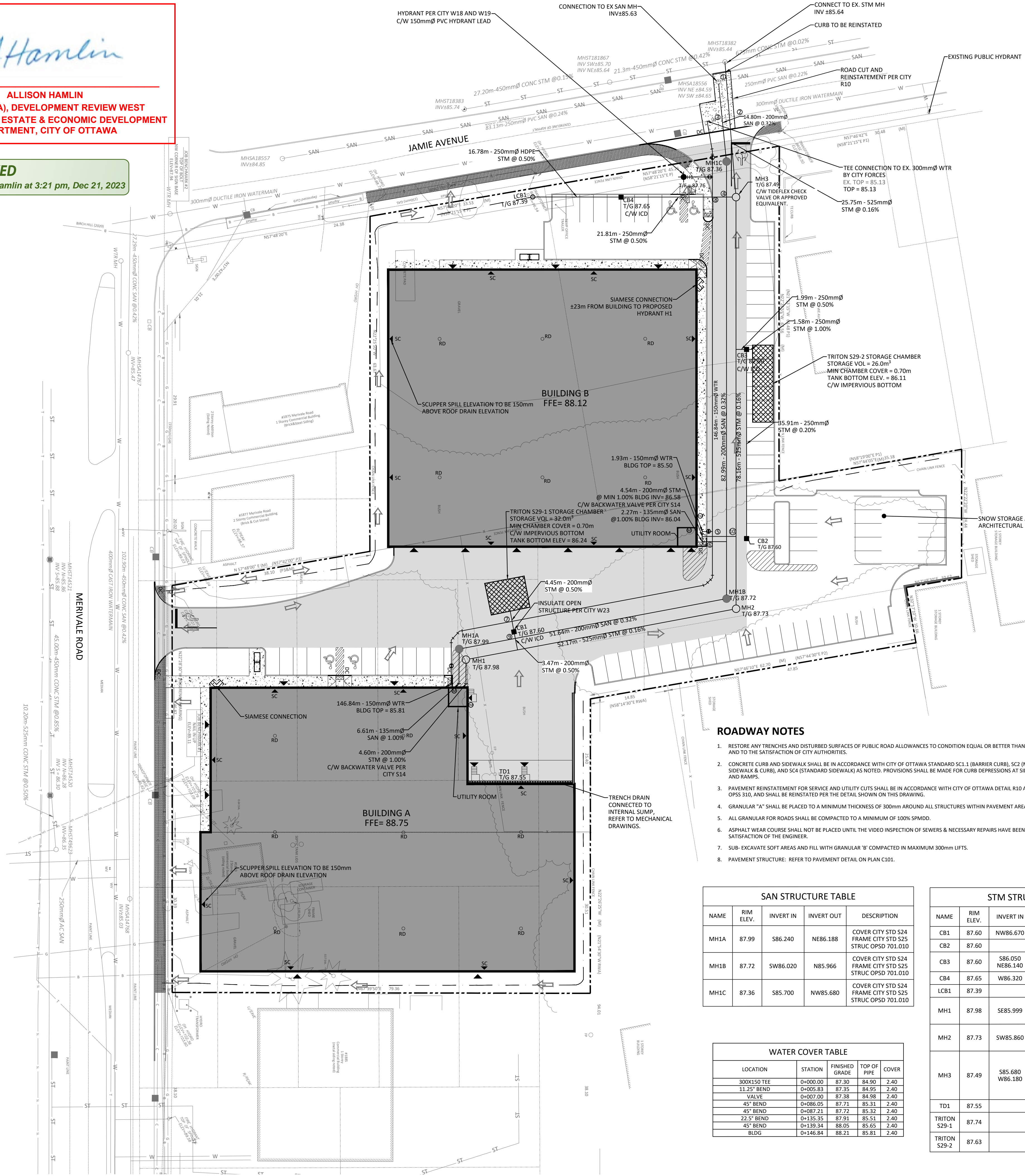


At Hamlin

ALLISON HAMLIN
MANAGER (A), DEVELOPMENT REVIEW WEST
PLANNING, REAL ESTATE & ECONOMIC DEVELOPMENT
DEPARTMENT, CITY OF OTTAWA

APPROVED
By Allison Hamlin at 3:21 pm, Dec 21, 2023



GENERAL NOTES:

- THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
- THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED FROM INFORMATION SUPPLIED BY FAIRHALL MOFFATT & WOODLAND LTD. (JOB NO. AC21300) AND CANNOT BE RELIED UPON TO BE ACCURATE OR COMPLETE. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LAND TITLE SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
- THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
- THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.
- EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
- ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR TO MINIMIZE THE ACTUAL LIMITS OF REMOVALS AND REINSTATEMENT WHEREVER POSSIBLE, AND SHALL MAKE THEIR OWN JUDGEMENT AND ACCOUNT FOR ALL MATERIAL AND LABOUR REQUIRED FOR ADEQUATELY REINSTATING THE AREA TO PRE-CONSTRUCTION CONDITIONS OR BETTER, AND BEAR THE COST OF THE SAME. NO ADDITIONAL PAYMENT WILL BE MADE FOR REINSTATEMENT WORK NOT SHOWN ON THE CONTRACT DRAWING AS A DIRECT RESULT FROM CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
- DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
- ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOIL.
- ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
 - ELECTRICAL SERVICE - HYDRO OTTAWA,
 - GAS SERVICE - ENBRIDGE,
 - TELEPHONE SERVICE - BELL CANADA,
 - TELEVISION SERVICE - ROGERS.
- INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO OTTAWA, BELL AND THE CITY.
- CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION.
- ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.
- THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION COMPLETED BY MR. ARCADIS, DATED JANUARY 29, 2023

SEWER NOTES:

- CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
- SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
 - BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 98% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
 - SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE 1.
 - BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE 1.
 - TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
- SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-26.
- SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
- SEWERS AND WATERMANS LOCATED PARALLEL TO EACH OTHER SHOULD BE CONSTRUCTED IN SEPARATE TRENCHES. WHEN IT IS IMPOSSIBLE OR NOT PRACTICAL TO MAINTAIN VERTICAL AND/OR HORIZONTAL SEPARATION PER MECO STANDARDS, ALL SEWERS SHOULD BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, PRESSURE TESTED IN PLACE AT A PRESSURE OF 350 kPa (50 psi) WITHOUT LEAKS USING THE TESTING METHODOLOGY IN ONTARIO PROVINCIAL STANDARD SPECIFICATION 701 (OPSD 701) OF THE OPS.
- INSULATE ALL STORM AND SANITARY SEWERS/STRUCTURES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER CITY STANDARD S55.
- SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE WATERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
- SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4" LONG MARKER.
- CONTRACTOR TO TELEVISION (CCTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

WATERMAIN NOTES:

- CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS.
- WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY STANDARD W22.
- IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
- THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER CITY DETAIL W23.
- VALVES TO BE OPERATED BY CITY STAFF ONLY.
- NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CITY TO BE PRESENT FOR WATERMAIN CONNECTION, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S) REQUIRED. THIS SHALL BE COMPLETED IN THE PRESENCE OF A DESIGNATED MUNICIPAL WATER OPERATOR. THE CONTRACTOR SHALL PROVE TO THE SATISFACTION OF THE CITY THAT THEY ARE COMPETENT TO PERFORM THE WORKS PRIOR TO INITIATING CONSTRUCTION.
- ALL WATERMANS SHALL BE EQUIPPED WITH GATE VALVES AS PER OPSD 1100.011.
- ALL FIRE HYDRANTS, VALVE AND VALVE BOX SHALL CONFORM TO CITY STANDARDS W18 AND W19.
- CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
- ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT.
- ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.
- AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W25.2 FOR CROSSING UNDER SEWER. THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

ROADWAY NOTES:

- RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF CITY AUTHORITIES.
- CONCRETE CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SC1.1 (BARRIER CURB), SC2 (MONOLITHIC SIDEWALK & CURB), AND SC4 (STANDARD SIDEWALK) AS NOTED. PROVISIONS SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS, DRIVEWAYS AND RAMPS.
- PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DETAIL R10 AND OPSD 509.010, OPSD 510, AND SHALL BE REINSTATEMENT PER THE DETAIL SHOWN ON THIS DRAWING.
- GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
- ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 100% SPMD.
- ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
- SUB-EXCAVATE SOFT AREAS AND FILL WITH GRANULAR "B" COMPACTED IN MAXIMUM 300mm LIFTS.
- PAVEMENT STRUCTURE: REFER TO PAVEMENT DETAIL ON PLAN C10.

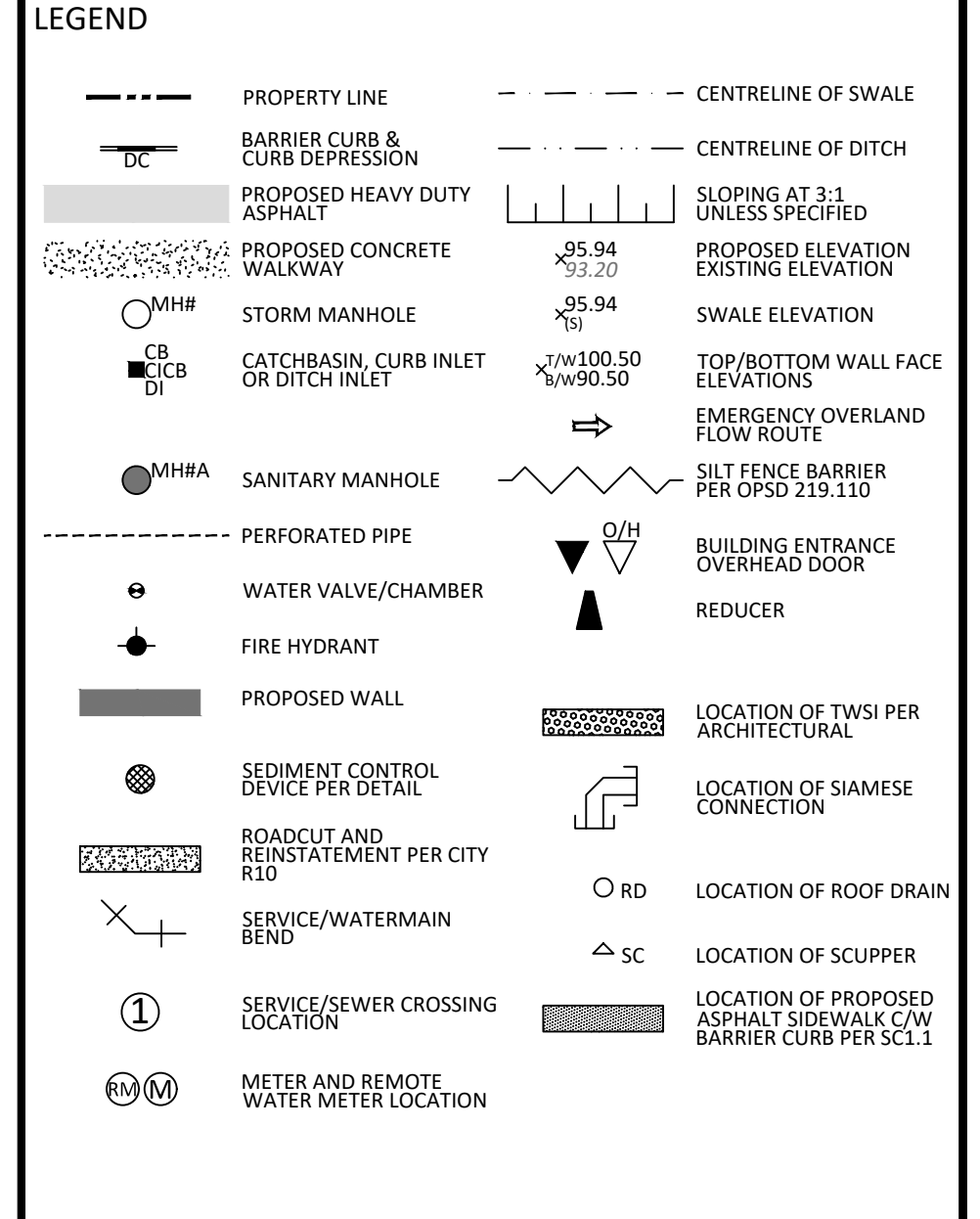
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
MH1A	87.99	S86.240	NE86.188	COVER CITY STD S24 FRAME CITY STD S25 STRUC OPSD 701.010
MH1B	87.72	SW86.020	N85.966	COVER CITY STD S24 FRAME CITY STD S25 STRUC OPSD 701.010
MH1C	87.36	S85.700	NW85.680	COVER CITY STD S24 FRAME CITY STD S25 STRUC OPSD 701.010

LOCATION	STATION	FINISHED GRADE	TOP OF PIPE	COVER
300x150 TEE	0+000.00	87.30	84.90	2.40
11.25° BEND	0+005.83	87.35	84.95	2.40
VALVE	0+007.00	87.38	84.98	2.40
45° BEND	0+086.05	87.71	85.31	2.40
45° BEND	0+087.21	87.72	85.32	2.40
22.5° BEND	0+135.35	87.91	85.51	2.40
45° BEND	0+139.34	88.05	85.65	2.40
BLDG	0+146.84	88.21	85.81	2.40

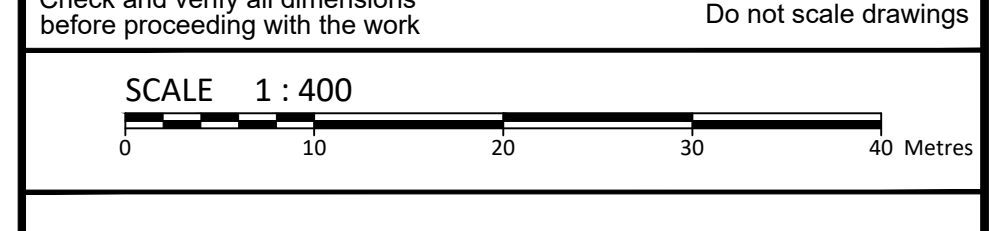
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
CB1	87.60	NW86.670	SE86.650	OPSD 705.010
CB2	87.60	NW86.670	SE86.120	OPSD 705.010
CB3	87.60	S86.050	NW85.140	OPSD 705.010
CB4	87.65	W86.320	E86.289	OPSD 705.010
LCB1	87.39		E86.404	CITY S31
MH1	87.98	SE85.999	NE85.944	COVER: CITY S28.1 FRAME: CITY S25 STUC: OPSD 701.010
MH2	87.73	SW85.860	N85.805	COVER: CITY S28.1 FRAME: CITY S25 STUC: OPSD 701.011
MH3	87.49	S85.680	NW85.661	COVER: CITY S28.1 FRAME: CITY S25 STUC: OPSD 701.010
TD1	87.55			CITY S15
TRITON S29-1	87.74		SE86.692	
TRITON S29-2	87.63		SW86.156	

LOCATION	DESCRIPTION	SEPARATION
1	250mm SAN OBV = 84.84 525mm STM INV = 85.64	0.83
2	300mm WTR OBV = 85.43 525mm STM INV = 85.66	0.50
3	300mm WTR OBV = 85.13 200mm SAN INV = 85.63	0.50
4	200mm SAN OBV = 85.90 250mm STM INV = 86.20	0.30
5	200mm SAN OBV = 85.85 150mm WTR OBV = 85.35	0.50
6	135mm SAN INV = 86.02 150mm WTR OBV = 85.39	0.63
7	150mm WTR OBV = 85.29 250mm STM INV = 86.68	1.39
8	150mm WTR OBV = 85.29 250mm STM INV = 86.20	0.91
9	200mm SAN OBV = 86.35 250mm STM INV = 86.65	0.30
10	200mm SAN OBV = 86.35 250mm STM INV = 86.65	1.30

STRUCTURE ID	ICD SIZE (mm)	INVERT (m)	STYLE	5-YEAR DESIGN OVRH (m)	100-YEAR DESIGN HEAD (m)	5-YEAR DESIGN FLOW (L/s)	100-YEAR DESIGN FLOW (L/s)
CB1	95	86.65	PLUG	0.98	1.15	18.67	20.22
CB3	91	86.00	PLUG	1.67	1.76	22.22	23.81
CB4	146x45	86.10	TEMPST	1.38	1.46	2.00	2.10



No.	Revisions	Date
3	ISSUED FOR SITE PLAN CONTROL	AUG 18, 2023
2	ISSUED FOR SITE PLAN CONTROL	JUN 08, 2023
1	ISSUED FOR SITE PLAN CONTROL	FEB 13, 2023



McINTOSH PERRY
115 Walgreen Road, RR3, Carp, ON K0A 1L0
Tel: 613-836-2184 Fax: 613-836-3742
www.mcintoshperry.com

Client: **Z.V. HOLDINGS CORP.**
1801 WOODWARD DRIVE
OTTAWA, ON K2C 0R3

Project: **WAREHOUSE DEVELOPMENT**
1881 MERIVALE ROAD
OTTAWA ON

Drawing Title: **SITE SERVICING PLAN**

Scale: 1:400 Project Number: CCO-23-1150

Drawn By: R.R.R. Checked By: R.D.F. Designed By: R.R.R.

Drawing Number: C102

FILENAME: I:\Information\2023\CCO-23-1150\Drawings\02-1150_Presentation.dwg
 LAST SAVED: Friday, August 18, 2023 1:51:54 PM
 LAST PLOTTED: Friday, August 18, 2023 1:51:54 PM

D07-12-23-0018

XXXXX