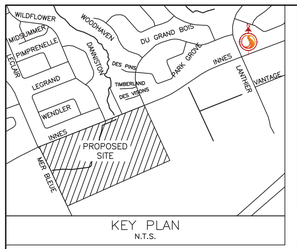


KEY PLAN
N.T.S.

SEWER AND WATERMAIN CROSSING TABLE						
CROSSING	STM INV	STM OBV	SAN INV	SAN OBV	WTR TOP	WTR BTM
1	87.37	87.57	87.97	88.11		
2	88.19	88.34	87.62	87.87	86.10	86.05
3	86.97	87.22			86.46	86.26
4	87.69	87.84	87.21	87.46		
5			87.16	87.41	86.66	86.61
6	87.24	87.49			86.74	86.54
7			86.52	86.77	87.47	87.27
8	85.22(85.12)	85.90(86.00)	86.43	86.68	86.81	86.61
9			86.35	86.60	87.30	87.10
10	86.63	86.83	87.09	87.24	86.13	85.98
11			86.09	86.34	87.14	86.84
12	82.54(82.38)	83.89(84.05)			86.31	86.01
13	80.26(80.07)	81.91(82.10)			85.34	85.04
14	85.33(85.21)	86.23(86.35)	86.51	86.76		

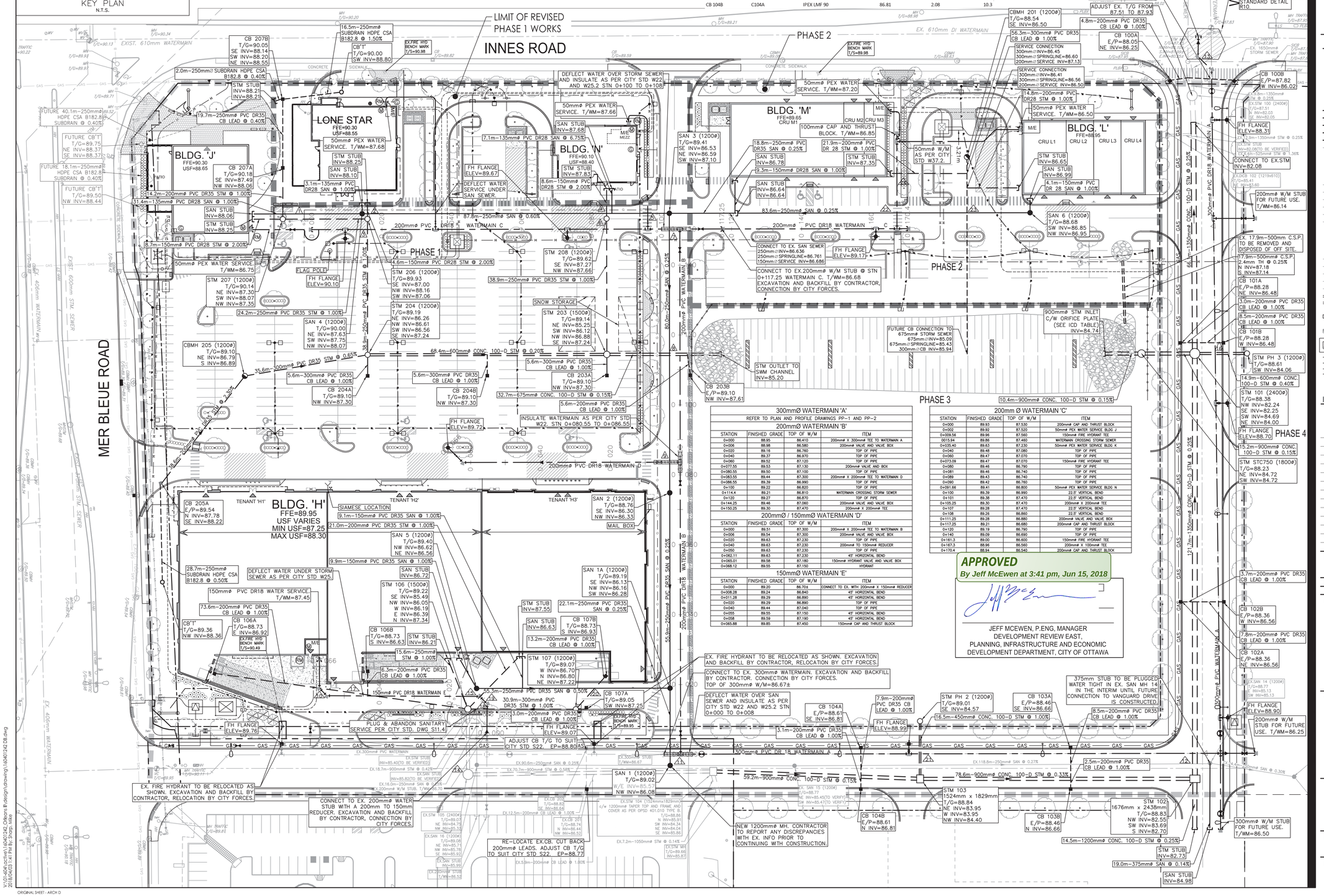
* BRACKETS DENOTE ADJUSTED VALUE WITH CONCRETE PIPE THICKNESS

SEWER AND WATERMAIN CROSSING TABLE						
CROSSING	STM INV	STM OBV	SAN INV	SAN OBV	WTR TOP	WTR BTM
1A	86.09	86.34	85.83	86.08	86.89	86.74
2A	83.02(82.92)	83.62(83.72)			85.90	86.50
3A	86.49	86.69			85.99	85.84
4A	86.42	86.72	85.82	86.07		
5A	87.42	87.62	86.54	86.79	86.89	86.74
6A	86.88	87.08	86.39	86.64		
7A	84.47(84.39)	84.92(85.00)	85.36	85.61	86.32	86.02
8A			86.75	87.00	86.25	86.05
9A	86.34	86.64	86.81	87.06		
10A	87.35	87.55			86.85	86.75

* BRACKETS DENOTE ADJUSTED VALUE WITH CONCRETE PIPE THICKNESS

Structure ID	Drainage Area ID	Type	ICD Invert	100 Year Head (m)	100 Year Flow (L/s)
CBMH 201	L203C	IPEX Tempest 3"	86.5	2.41	17.45
CB 203A	L203A	IPEX Tempest 3"	87.30	2.06	16.4
CB 203B	L203B	IPEX Tempest 3"	87.30	1.96	15.9
CB 204A	L204A	IPEX Tempest 3"	87.30	2.12	16.6
CB 204B	L204B	IPEX Tempest 3"	87.30	2.08	16.4
CBMH 205	L205A	IPEX Tempest 3"	89.79	2.93	18.5
900mm Inlet	PH 2, L20X, BLDG N,J,K	200mm Orifice Plate	84.74	1.65	102.7
CB 107A	L107A	IPEX Tempest 4.25"	87.25	2.01	32.5
EX. CB 201	C105A	IPEX Tempest 5.5"	86.44	2.57	61.7
CB 100A	C100A	IPEX LMF 90	86.25	1.84	9.7
CB 100B	C100A	IPEX LMF 90	86.02	1.84	9.7
CB 101A	C101A	IPEX LMF 90	86.48	2.00	10.1
CB 101B	C101A	IPEX LMF 90	86.48	2.00	10.1
CB 102A	C102A	IPEX LMF 90	86.56	2.01	10.1
CB 102B	C102A	IPEX LMF 90	86.56	2.01	10.1
CB 103A	C103A	IPEX LMF 90	86.66	2.06	10.3
CB 103B	C103A	IPEX LMF 90	86.66	2.06	10.3
CB 104A	C104A	IPEX LMF 90	86.81	2.08	10.3
CB 104B	C104A	IPEX LMF 90	86.81	2.08	10.3

SCHEDULE OF ROOF RELEASE RATES				
BUILDING	DRAIN TYPE	# DRAINS	100YR Head (m)	100YR RELEASE RATE (L/s)
BLDG H	WATTS ACCUFLOW (50% OPEN)	23	0.15	29.02
BLDG J	WATTS ACCUFLOW (50% OPEN)	3	0.147	3.73
BLDG K	WATTS ACCUFLOW (25% OPEN)	3	0.149	2.83
BLDG N	WATTS ACCUFLOW (50% OPEN)	2	0.143	2.43
BLDG M	WATTS ACCUFLOW (50% OPEN)	4	0.147	4.97
BLDG L	WATTS ACCUFLOW (50% OPEN)	3	0.148	3.74



Stantec

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Legend

- PROPOSED WATERMAIN
- PROPOSED VALVE AND VALVE BOX
- PROPOSED VALVE CHAMBER
- PROPOSED REDUCER
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- PROPOSED REMOTE WATER METER
- PROPOSED PRESSURE REDUCING VALVE
- PROPOSED THRUST BLOCK LOCATIONS
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED SUBDRAIN CATCHBASIN
- EXISTING WATERMAIN
- EXISTING VALVE AND VALVE BOX
- EXISTING VALVE CHAMBER
- EXISTING REDUCER
- EXISTING FIRE HYDRANT
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING CATCHBASIN MANHOLE
- EXISTING CATCHBASIN
- EXISTING SUBDRAIN CATCHBASIN
- FUTURE WATERMAIN
- FUTURE VALVE AND VALVE BOX
- FUTURE VALVE CHAMBER
- FUTURE REDUCER
- FUTURE FIRE HYDRANT
- FUTURE SANITARY SEWER
- FUTURE STORM SEWER
- FUTURE CATCHBASIN MANHOLE
- FUTURE CATCHBASIN
- FUTURE SUBDRAIN CATCHBASIN
- PROPOSED DEPRESSED CURB LOCATIONS
- PROPOSED MOUNTABLE/BARRIER CURB LOCATION
- THERMAL INSULATION ON STORM SEWER WHERE COVER IS LESS THAN 1.5m. THERMAL INSULATION ON WATERMAIN WHERE COVER IS LESS THAN 2.4m AS PER W22. 300mm THICK 1.0m GRANULAR SHOULDER.
- PAD MOUNTED TRANSFORMERS AND SWITCH GEAR. REFER TO ELECTRICAL DRAWINGS FOR DETAILS.
- PROPOSED GAS MAIN
- PROPOSED SECONDARY GAS SERVICE
- PROPOSED HYDRO
- PROPOSED COMMUNICATIONS LINES
- PROPOSED GAS METER
- PROPOSED EARTH BINS.
- PROPOSED BOLLARDS (BY BUILDING CONTRACTOR)
- PHASING LIMITS

Notes

1. BUILDING FOUNDATION DRAINS TO BE CONNECTED TO STORM SERVICE LATERALS.
2. FLAG POLE AND BASE INSTALLED BY OTHERS. BASE TO BE DESIGNED AND STAMPED BY LICENSED PROFESSIONAL ENGINEER IN THE PROVINCE OF ONTARIO.

Revision				
13	REVISED AS PER CITY COMMENTS	MJS	KS	18.04.03
12	ISSUED FOR TENDER	MJS	DT	18.03.26
11	REVISED AS PER CITY COMMENTS	WAJ	DT	18.03.08
10	ISSUED FOR SPA	MJS	DT	17.10.20
9	ISSUED FOR ADDENDUM # 3	MJS	GR	17.05.04
8	ISSUED FOR ADDENDUM # 1	MJS	GR	17.04.28
7	ISSUED FOR TENDER	MJS	GR	17.04.12
6	ISSUED FOR TENDER	MJS	GR	17.03.29
5	REVISED AS PER CITY COMMENTS	MJS	DT	17.03.28
4	REVISED AS PER CITY COMMENTS	MJS	DT	17.01.03
3	REVISED SERVICING BLDG H3	MJS	DT	17.01.03
2	REVISED AS PER CITY COMMENTS	MJS	DT	16.12.07
1	ISSUED FOR SPA	MJS	DT	16.07.27
Revision		By	Appd.	YY.MM.DD

File Name: 160401242 DB	MJS	DT	MJS	16.06.30
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

LICENSED PROFESSIONAL ENGINEER
K.L. SMADELLA
2018-04-03
PROVINCE OF ONTARIO

Client/Project

SMARTREIT

ORLEANS II DEVELOPMENT
2025 MER BLEUE ROAD
OTTAWA, ON, CANADA

Title

SITE SERVICING PLAN PHASE 2

Project No. 160401242

Scale 1:500 (0 5 15 25m)

Drawing No. SSP-1

Sheet 2 of 7

Revision 13

D07-12-17-0142

17241

APPROVED
By Jeff McEwen at 3:41 pm, Jun 15, 2018

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

300mmØ WATERMAIN 'A'
REFER TO PLAN AND PROFILE DRAWINGS PP–1 AND PP–2

200mmØ WATERMAIN 'B'			
STATION	FINISHED GRADE	TOP OF W/M	ITEM
0+000	88.95	86.410	200mmø X 300mmø TEE TO WATERMAIN A
0+006	88.98	86.580	200mmø VALVE AND VALVE BOX
0+020	89.16	86.760	TOP OF PIPE
0+040	89.37	86.970	TOP OF PIPE
0+060	89.52	87.120	TOP OF PIPE
0+077.55	89.53	87.130	200mmø VALVE AND BOX
0+080.55	89.50	87.100	TOP OF PIPE
0+083.55	89.44	87.300	200mmø X 200mmø TEE TO WATERMAIN D
0+086.55	89.39	86.990	TOP OF PIPE
0+100	89.22	86.820	TOP OF PIPE
0+114.4	89.21	86.810	WATERMAIN CROSSING STORM SEWER
0+120	89.27	86.870	TOP OF PIPE
0+144.25	89.46	87.060	200mmø VALVE AND VALVE BOX
0+150.25	89.30	87.470	200mmø X 200mmø TEE

200mmØ / 150mmØ WATERMAIN 'D'			
STATION	FINISHED GRADE	TOP OF W/M	ITEM
0+000	89.51	87.300	200mmø X 200mmø TEE TO WATERMAIN B
0+006	89.54	87.300	200mmø VALVE AND VALVE BOX
0+020	89.63	87.230	TOP OF PIPE
0+040	89.63	87.230	200mmø TO 150mmø REDUCER
0+050	89.63	87.230	TOP OF PIPE
0+062.11	89.63	87.230	45° HORIZONTAL BEND
0+065.01	89.58	87.180	150mmø HYDRANT VALVE AND VALVE BOX
0+068.12	89.55	87.150	HYDRANT

150mmØ WATERMAIN 'E'			
STATION	FINISHED GRADE	TOP OF W/M	ITEM
0+000	89.20	86.70±	CONNECT TO EX. WITH 200mmø X 150mmø REDUCER
0+008.28	89.24	86.840	45° HORIZONTAL BEND
0+011.28	89.29	86.890	45° HORIZONTAL BEND
0+020	89.29	86.890	TOP OF PIPE
0+040	89.44	87.040	TOP OF PIPE
0+055	89.55	87.150	45° HORIZONTAL BEND
0+058	89.59	87.190	45° HORIZONTAL BEND
0+065.88	89.85	87.450	150mmø CAP AND THRUST BLOCK

200mm Ø WATERMAIN 'C'			
STATION	FINISHED GRADE	TOP OF W/M	ITEM
0+000	89.93	87.530	200mmø CAP AND THRUST BLOCK
0+002	89.92	87.520	50mmø PEX WATER SERVICE BLDG J
0+009.56	89.96	87.560	150mmø FIRE HYDRANT TEE
0015.94	89.86	87.460	WATERMAIN CROSSING STORM SEWER
0+035.40	89.63	87.230	50mmø PEX WATER SERVICE BLDG K
0+040	89.48	87.080	TOP OF PIPE
0+060	89.47	87.070	TOP OF PIPE
0+073.09	89.47	87.070	150mmø FIRE HYDRANT TEE
0+080	89.46	86.790	TOP OF PIPE
0+081	89.46	86.740	TOP OF PIPE
0+089	89.43	86.740	TOP OF PIPE
0+090	89.42	86.760	TOP OF PIPE
0+091.66	89.41	86.800	50mmø PEX WATER SERVICE BLDG N
0+100	89.39	86.990	22.5° VERTICAL BEND
0+101	89.38	87.470	22.5° VERTICAL BEND
0+105.25	89.30	87.470	200mmø X 200mmø TEE
0+107	89.28	87.470	22.5° VERTICAL BEND
0+108	89.26	86.880	22.5° VERTICAL BEND
0+111.25	89.28	86.880	200mmø VALVE AND VALVE BOX
0+117.25	89.21	86.680	200mmø CAP AND THRUST BLOCK
0+120	89.19	86.790	TOP OF PIPE
0+140	89.09	86.690	TOP OF PIPE
0+161.3	89.00	86.600	150mmø FIRE HYDRANT TEE
0+167.3	88.96	86.560	200mmø X 100mmø TEE
0+170.4	88.94	86.540	200mmø CAP AND THRUST BLOCK

ORIGINAL SHEET - ARCH D