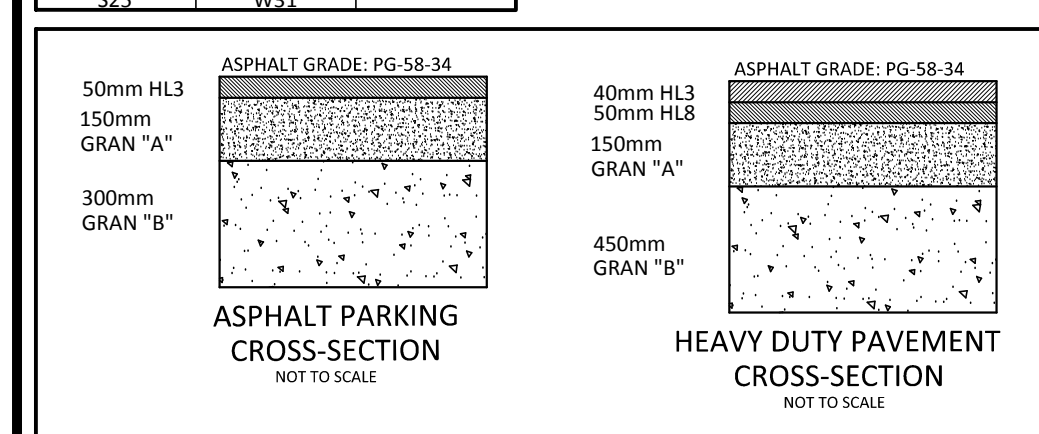


SCHEDULE OF CITY OF OTTAWA STANDARD DRAWINGS

No.	No.	No.
97	W24	SC3.1
100	W25.1	SC3.4
101	W25.2	SC3.4
102	W26	SC3.1
103	W27	SC3.1
104	W28	SC3.1
105	W29	SC3.1



SCHEDULE OF ONTARIO PROVINCIAL STANDARD DRAWINGS

No.	TITLE	DATE	REV.	STRUCTURE
219.110	LIGHT DUTY SILT FENCE BARRIER	NOV 2006	1	
400.020	CAST IRON, SQUARE FRAME WITH SQUARE FLAT GRATE FOR CATCH BASINS, HERRING BONE OPENINGS	NOV 2013	2	
401.010	CAST IRON, SQUARE FRAME WITH CIRCULAR CLOSED OR OPEN COVER FOR MAINTENANCE HOLES	NOV 2013	3	
401.030	CAST IRON, SQUARE FRAME WITH CIRCULAR WATERTIGHT COVER FOR MAINTENANCE HOLES	NOV 2013	3	SAN MH#1
405.010	MAINTENANCE HOLE STEPS, HOLLOW	NOV 2013	3	
509.010	PAVEMENT REINFORCEMENT FOR UTILITY CUTS	NOV 2013	2	
701.010	PRECAST CONCRETE MAINTENANCE HOLE, 1200mm DIAMETER	NOV 2014	5	
701.021	MAINTENANCE HOLE BENCHING AND PIPE OPENING DETAILS	NOV 2014	4	
701.030	PRECAST CONCRETE MAINTENANCE HOLE COMPONENTS, 1200mm DIAMETER TAPERED TOP AND FLAT CAP	NOV 2014	4	STM CSM#2-6
701.040	PRECAST CONCRETE MAINTENANCE HOLE COMPONENTS, 1500mm DIAMETER TRANSITION COVE AND SLABS	NOV 2014	4	STM CSM#7
702.050	PRECAST CONCRETE DITCH INLET MAINTENANCE HOLE - TYPE B	NOV 2014	3	STM DC#8B
704.010	PRECAST CONCRETE ADJUSTMENT UNITS FOR MAINTENANCE HOLES, CATCH BASINS, AND VALVE CHAMBERS	NOV 2014	3	STM DC#8B
705.010	PRECAST CONCRETE CATCH BASIN	NOV 2014	3	STM CB#1
708.030	CATCH BASIN CONNECTION, FLEXIBLE PIPE SEWER	NOV 2011	2	
1306.020	SEWER SERVICE CONNECTIONS, FOR FLEXIBLE MAIN PIPE SEWER	NOV 2011	2	

SITE SERVICES CONFLICT TABLE

CROSSING No.	WTR SERVICE LATERAL	INV./TOP	STM INV./TOP
1	WTR TOP 96.00	STM INV 98.77	
2	SAN TOP 96.16	STM INV 98.79	
3	SAN INV 97.52	STM TOP 96.79	
4	SAN INV 96.57	WTR TOP 96.00	

WATER SERVICE COVER TABLE - OFFICE

LOCATION	STATION	FINISHED GRADE	TOP OF SERVICE	DEPTH
CONNECTION	0+000.00	98.40	96.00	2.40
CROSSING #1	0+045.95	98.40	96.00	2.40
45° BEND	0+118.75	98.45	96.05	2.40
T CONNECTION	0+333.18	98.42	96.02	2.40
CURB @ SDWR	0+383.30	98.40	96.00	2.40
BUILDING	0+598.96	104.40	97.05	7.35

WATER SERVICE COVER TABLE - FIRE HYDRANT

LOCATION	STATION	FINISHED GRADE	TOP OF SERVICE	DEPTH
T CONNECTION	1+000.00	98.42	96.02	2.40
MV @ CURB	1+005.13	98.47	96.07	2.40
FIRE HYDRANT	1+006.88	98.65	96.25	2.40

WATER SERVICE COVER TABLE - TESTING FACILITY

LOCATION	STATION	FINISHED GRADE	TOP OF SERVICE	DEPTH
MV @ PL	0+015.16	98.45	96.00	2.40
T CONNECTION	0+333.18	98.42	96.02	2.40
OFFICE BUILDING	2+000.00	99.50	97.10	2.57
MV @ CURB	2+423.03	99.35	96.95	2.40
TEST BUILDING	2+424.38	99.50	97.10	2.47

GENERAL NOTES

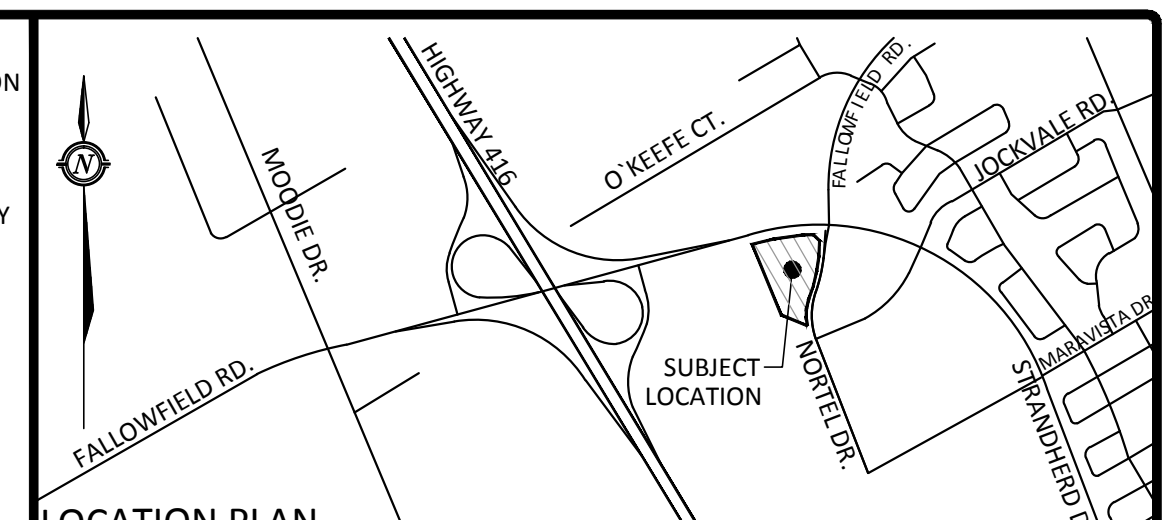
- THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION OBTAINED FROM THEM.
- THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED FROM UNCONFIRMED INFORMATION SUPPLIED BY H.A.KEN SHIPMAN SURVEY LTD. AND SHOULD 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 OF OTTAWA 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.
- ALL "GREEN AREAS" TO BE TREATED WITH 150mm TOPSOIL, SEED & MULCH AS SOON AS FEASIBLE.
- RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF CITY OF OTTAWA AUTHORITIES.
- EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER, OR THE CITY.
- TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
- 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 CITY.
- ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS AND 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 SOD.
- ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- HYDRO, GAS AND BELL SERVICE LOCATIONS SUBJECT TO THE APPROVAL AGENCY:
 - TELEPHONE SERVICE - BELL CANADA; GAS SERVICE - ENBRIDGE
 - CABLE - ROGERS; ELECTRICAL SERVICE - HYDRO OTTAWA
- INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES (BELL, HYDRO) AND THE CITY OF OTTAWA.
- ALL PROPOSED CURB SHALL BE CONCRETE BARRIER CURB AS PER CITY STANDARD SCL.1
- ALL EXISTING REDUNDANT PRIVATE APPROACHES FRONTING THIS DEVELOPMENT MUST BE REMOVED TO THE SATISFACTION OF THE CITY OF OTTAWA.
- THIS PLAN MUST BE READ IN CONJUNCTION WITH GEOTECHNICAL REPORT BY PATERSON GROUP INC. (REPORT # PG3563-1) DATED AUGUST 21, 2015 AND REVISED SITE SERVICING REPORT BY MP (REF RCP-15-0338) DATED APRIL 15, 2016.

SEWER NOTES

- CONSTRUCT ALL SEWER AND APPURTENANCES TO ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS, AS WELL AS THE CITY OF OTTAWA STANDARDS AS INDICATED.
- 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 95% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
- SUB-BEDDING, IF REQUIRED SHALL BE AS PER THE DIRECTION OF A GEOTECHNICAL ENGINEER.
- BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR SAND.
- TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL FROM PAVEMENT SUBGRADE TO 2 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
- SEWERS AND CONNECTIONS 150mm DIAMETER AND SMALLER TO BE PVC SDR 28 OR APPROVED EQUIVALENT. SEWERS AND CONNECTIONS 200mm DIAMETER AND LARGER TO BE PVC SDR 35 OR APPROVED EQUIVALENT.
- INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 1.5m OF COVER WITH THERMAL INSULATION.
- SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4" LONG MARKER.
- CONTRACTOR TO TELEVIEW (CCTV) ALL PROPOSED SEWERS ON SITE, INCLUDING OUTLET CONNECTION TO THE CITY MAIN, 150mm 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 THE SANITARY SEWER MAIN.
- ALL CATCHBASIN AS WELL AS CATCHBASIN MANHOLES LEADS ARE TO BE 200mmØ. SLOPE TO BE 1% UNLESS OTHERWISE NOTED. ALL CATCHBASINS EXCLUDING LANDSCAPE CATCHBASINS TO HAVE 150 mmØ PERFORATED PIPE FOR 3.0m ON ALL AVAILABLE SIDES AS PER CITY STD DWG R1, 2009 REVISION.

WATERMAIN NOTES

- CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS AS WELL AS CITY STANDARDS AS INDICATED.
- INDUSTRIAL/COMMERCIAL SERVICE CONNECTIONS TO BE 50mm COPPER PIPING AND SHALL CONFORM TO ASTM B88 TYPE "K" SOFT.
- WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY DWG. No. 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.
- USE APPROVED SADDLE CONNECTION WITH MAIN (CORPORATION) STOP AS PER STD DWG W26.
- CONNECTION TO EXISTING BY CITY, EXCAVATION, BACKFILLING AND REINSTATEMENT BY CONTRACTOR.
- THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER STD DWG W22.
- THERMAL INSULATION OF WATERMANS UNDER ROAD SIDE DITCHES AS PER STD DWG W21



EXISTING FEATURES

- Grades to be maintained
- Top of curb grade
- Bottom of curb grades
- High point grades
- Surface water drainage
- Swale slope
- Concrete barrier curb
- Depressed curb
- Survey grades
- Storm sewer/lateral
- Sanitary sewer/lateral
- Water sewer/lateral
- Bell cable service
- Overhead hydro
- Underground hydro
- Gas service
- Hydro/bell cable/gas service
- Property line
- Traffic light
- Catchbasin (CB)
- Ditch inlet catchbasin (DICB)
- Catchbasin manhole (CBMH)
- Manhole (MH)
- Fire hydrant
- Waterwale

PROPOSED FEATURES

- Design grades
- Top of curb grade
- Bottom of curb grades
- High point grades
- Surface water drainage
- Swale slope
- Concrete barrier curb
- Depressed curb
- Corner lot grades
- Storm sewer/lateral
- Sanitary sewer/lateral
- Water sewer/lateral
- Bell cable service
- Underground hydro service
- Gas service
- Bottom of slope
- Top of slope
- Top of berm
- Silt fence
- Catchbasin (CB)
- Ditch inlet catchbasin (DICB)
- Catchbasin manhole (CBMH)
- Fire hydrant
- Heavy duty asphalt
- Landscape pavers
- Concrete sidewalk
- Landscape pathway
- Landscape bio-swale
- 5 year ponding elevation
- 100 year ponding elevation

ALL ELEVATIONS ON THIS PLAN ARE GEODETIC

No.	Revision/Issue	Date
09	RE-ISSUED FOR CONSTRUCTION - EXCAVATION AND FOUNDATION SERVICING WORK	JUL 22/16
08	ISSUED FOR CONSTRUCTION - EXCAVATION AND FOUNDATION SERVICING WORK	JUL 14/16
07	REVISED BERM ELEVATIONS	JUN 06/17
06	REVISED AS PER CITY COMMENTS	JUNE 02/16
05	ISSUED FOR FOUNDATION PERMIT	MAY 31/16
04	REVISED SAN OUTLET AS PER OPTIMUM LAYOUT	MAY 19/16
03	REVISED TEST FACILITY GRADES	MAY 11/16
02	REVISED AS PER CITY COMMENTS/REVISED SITE PLAN	APR 13/16
01	ISSUED FOR SITEPLAN CONTROL	DEC 10/15

Check and verify all dimensions before proceeding with the work. Do not scale drawings



115 Walgreen Road R.R. #3, Carp, ON K0A 1L0
Tel: 613-836-2184 Fax: 613-836-3742

Stamp:

Client: TAL-CO BUILDING INNOVATION LTD.
1341 COKER STREET, SUITE 2 P: 613-821-3959
GREELY, ON, K4P 1A1 F: 613-821-2938

Project: 4501 STRANDHERD DRIVE, BLOCK 16
TOMLINSON HEAD OFFICE

OTTAWA ONTARIO
Drawing Title: SITE SERVICING AND UTILITY PLAN
Scale: 1:400 Project Number: OCP-15-0338
Drawn by: JMJ Drawing Number:
Checked by: CJM/KRA
Designed by: JMJ SHEET 2 of 2
Date: OCTOBER 19, 2015

City of Ottawa File # D07-12-15-0197
APPROVED REFUSED
THIS DAY OF _____, 20____
DERRICK MOODIE, ACTING MANAGER
DEVELOPMENT REVIEW, SUBURBAN SERVICES

D07-12-15-0197