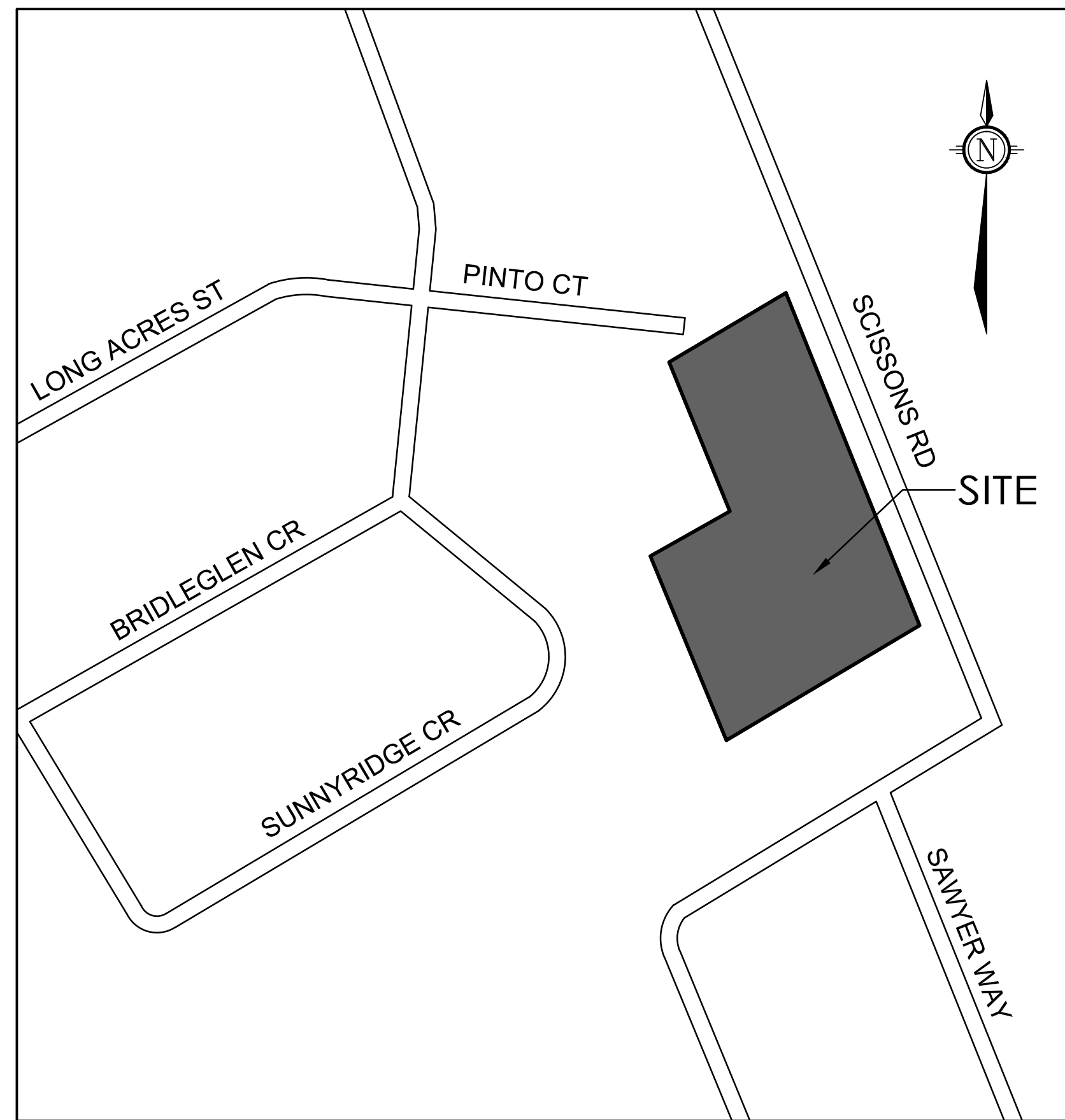


OLYMPIA HOMES SCISSONS ROAD DEVELOPMENT CITY OF OTTAWA

ROADS, SEWERS AND WATERMAINS

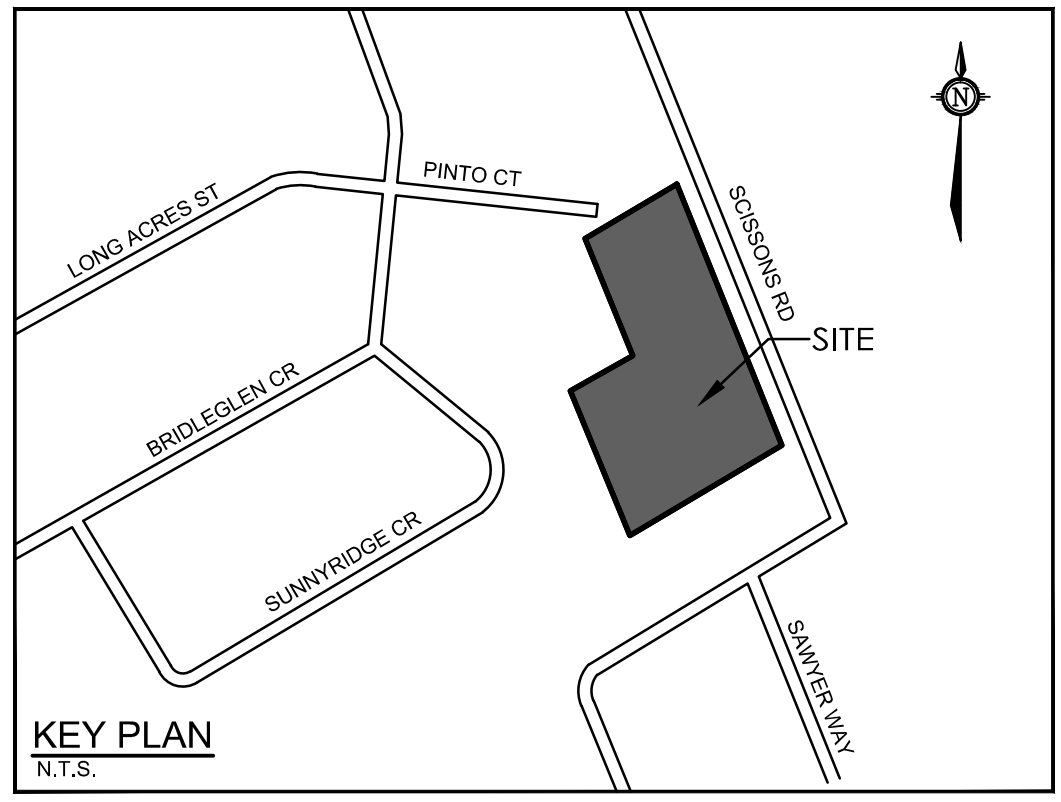


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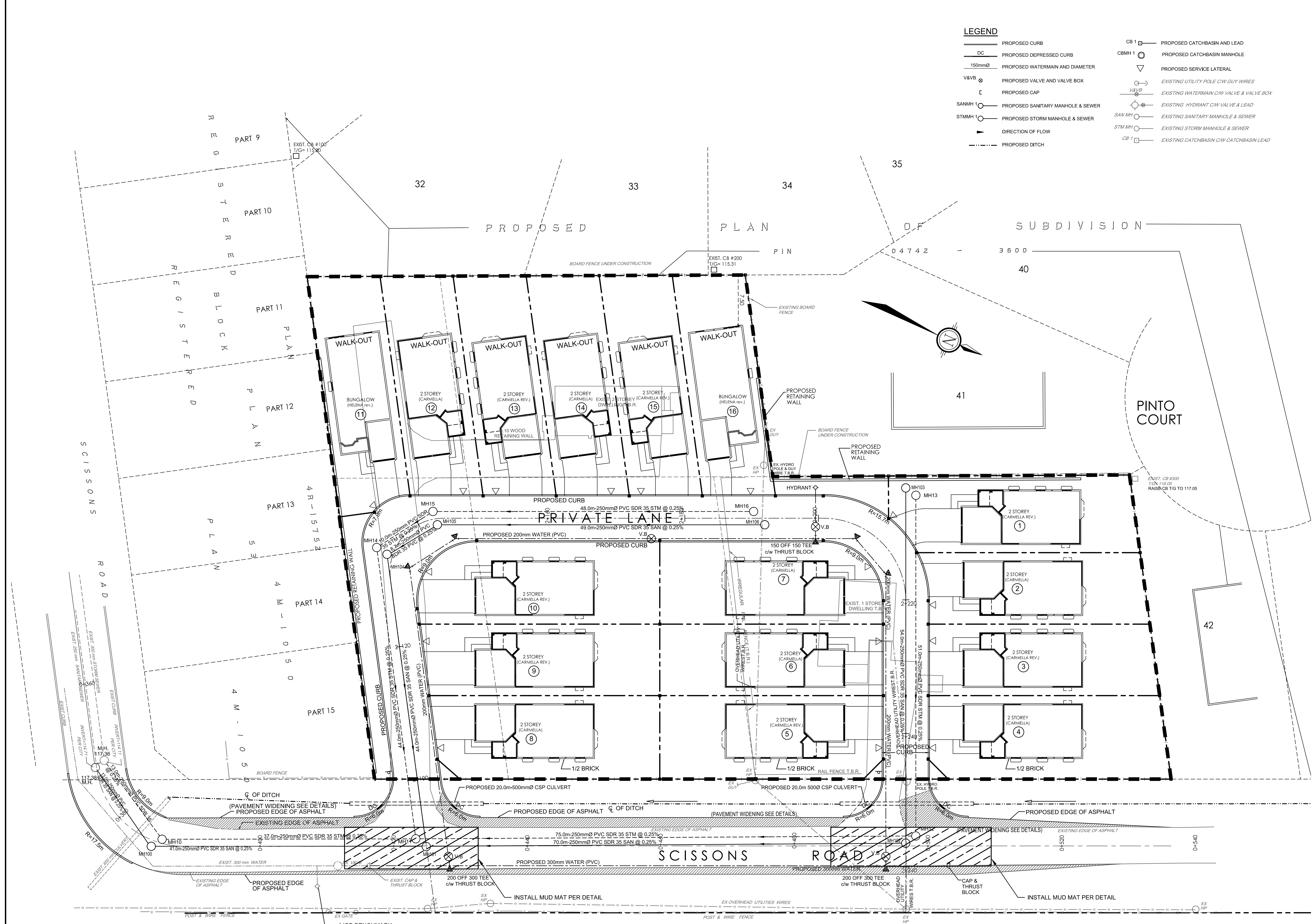
AUGUST 2015

**OLYMPIA
HOMES**
 Quality Home Builders

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- LEGEND**
- PROPOSED CURB
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 - 150mmØ PROPOSED WATERMAIN AND DIAMETER
 - V&VB PROPOSED VALVE AND VALVE BOX
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 - EXISTING UTILITY POLE C/W GUY WIRES
 - EXISTING WATERMAIN C/W VALVE & VALVE BOX
 - EXISTING HYDRANT C/W VALVE & LEAD
 - SANMH EXISTING SANITARY MANHOLE & SEWER
 - STMMH EXISTING STORM MANHOLE & SEWER
 - CB EXISTING CATCHBASIN C/W CATCHBASIN LEAD



- GENERAL NOTES:**
- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
 - DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
 - OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
 - BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED. (Amount of liability insurance to be verified on a project by project basis).
 - RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
 - REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
 - ALL ELEVATIONS ARE GEODETIC.
 - REFER TO GEOTECHNICAL REPORT (No. xxxxxx DATED xxx xx, xxxxx), PREPARED BY FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
 - REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS. (project teams must review drawing to ensure that this is indicated on someone's plan)
 - REFER TO STORMWATER MANAGEMENT REPORT (R-xxxxxx) PREPARED BY WATCH ENGINEERING CONSULTANTS LTD.
 - SAW CUT AND KEY RIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
 - PROVIDE LINE/PARKING PAINTING.
 - CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICES AND RESULT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/O ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWIN ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC. (optional note: usage to be determined on a project by project basis)

- SEWER NOTES:**
- SPECIFICATIONS:

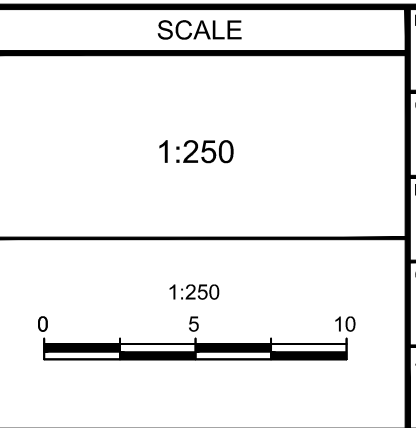
ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
STORM SANITARY MANHOLE (12000)	701.010	OPSD
CS, FRAME & COVER	400.020	OPSD
STORM SANITARY MH FRAME & COVER	401.010	OPSD
SEWER TRENCH - BEDDING (GRANULAR A)		
COVER (GRANULAR A OR GRANULAR B TYPE I, WITH MAXIMUM PARTICLE SIZE=25mm)		
STORM SEWER	PVC DR 35	
SANITARY SEWER	PVC DR 35	
CATCHBASIN LEAD	PVC DR 35	
 - INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.5m COVER WITH 50mm X 1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
 - SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
 - PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST xx% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
 - FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-SEAL, PSX POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
 - THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSR 410.07.16, 410.07.16.01 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
 - STORM MANHOLES AND CBMHs ARE TO HAVE 300mm SUMP UNLESS OTHERWISE INDICATED.
 - CONTRACTOR TO TELETYPE (CCTV) ALL PROPOSED SEWERS, 200mm Ø OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

- WATERMAIN NOTES:**
- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W22	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN	PVC DR 18	
 - SUPPLY AND CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.
 - WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
 - PROVIDE MINIMUM 0.25m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
 - WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.
 - WATER DEMAND:
 - AVERAGE DEMAND = 0.22L/s
 - MAX DAILY DEMAND = 0.56L/s
 - PEAK HOUR DEMAND = 1.23L/s
 - FIRE FLOW DEMAND = 1.67L/s

NOTE:
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No.	REVISION	DATE	BY
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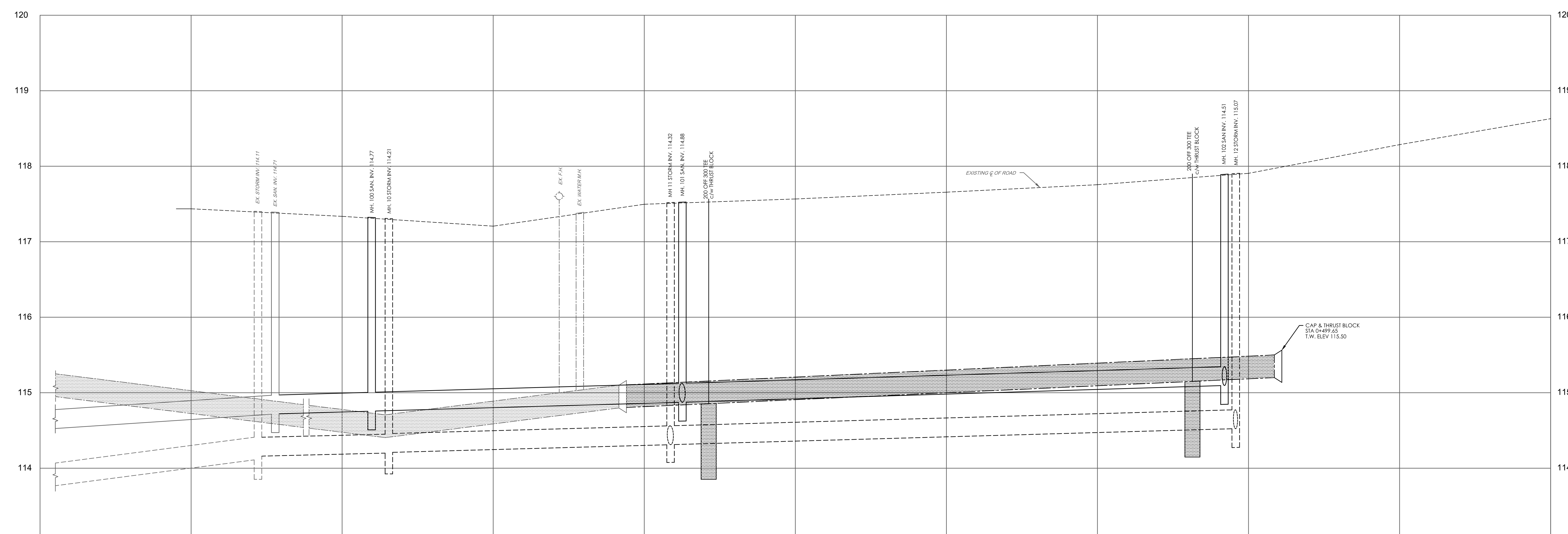
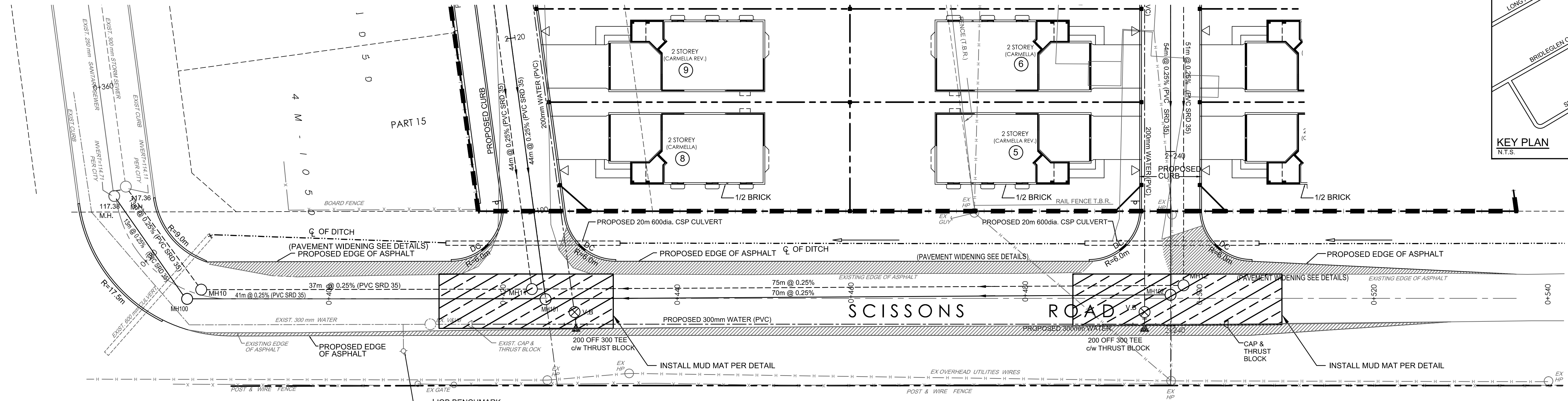
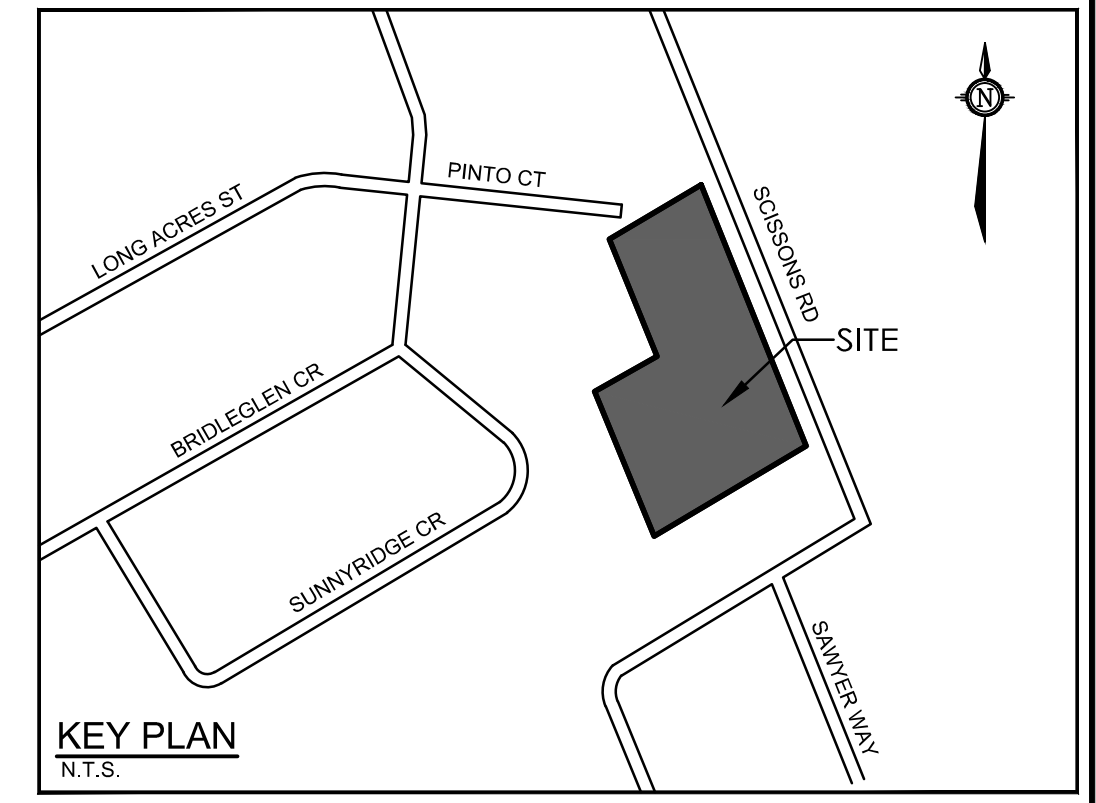
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LOCATION CITY OF OTTAWA SCISSONS ROAD DEVELOPMENT	PROJECT No. 115090
DRAWING NAME GENERAL PLAN OF SERVICES	REV #1
	DRAWING No. 115090-GP

2015/11/15 09:00 CAD Design/115090 - GP.dwg GP_Aug 19, 2015 - 11:42am, mcdonald



Q ROAD ELEVATION	117.49	117.25	117.20	117.49	117.55	117.65	117.76	117.90	118.29	118.63	Q ROAD ELEVATION		
TOP OF WATERMAIN ELEVATION				115.10				115.50			TOP OF WATERMAIN ELEVATION		
STORM SEWER INVERT	EX. 300 dia. @ 1.47%	114.11W 114.16E 13m-250 dia. @ 0.25%	114.20S 114.21W	37m-250 dia. @ 0.25%	114.31 N&S	70m-250 dia. @ 0.25%		114.50			STORM SEWER INVERT		
SANITARY SEWER INVERT	EX. 250 dia. @ 0.5%	114.21 114.72	15m @ 0.25%	114.76 114.77	41m @ 0.25%		71.5m @ 0.25%	115.00			SANITARY SEWER INVERT		
EXISTING Q ROAD ELEVATION	117.49	117.38	117.20	117.20	117.49	117.55	117.76	117.90	118.29	118.63	EXISTING Q ROAD ELEVATION		
CHAINAGE	0+340	0+360	0+369.8 0+370.7	0+390 0+385.3 0+386.5	0+400	0+408.5 0+411.6	0+416 0+420	0+440	0+460	0+480	0+500	0+540	CHAINAGE

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DRAWN	LSC
CHECKED	GJM
APPROVED	GJM

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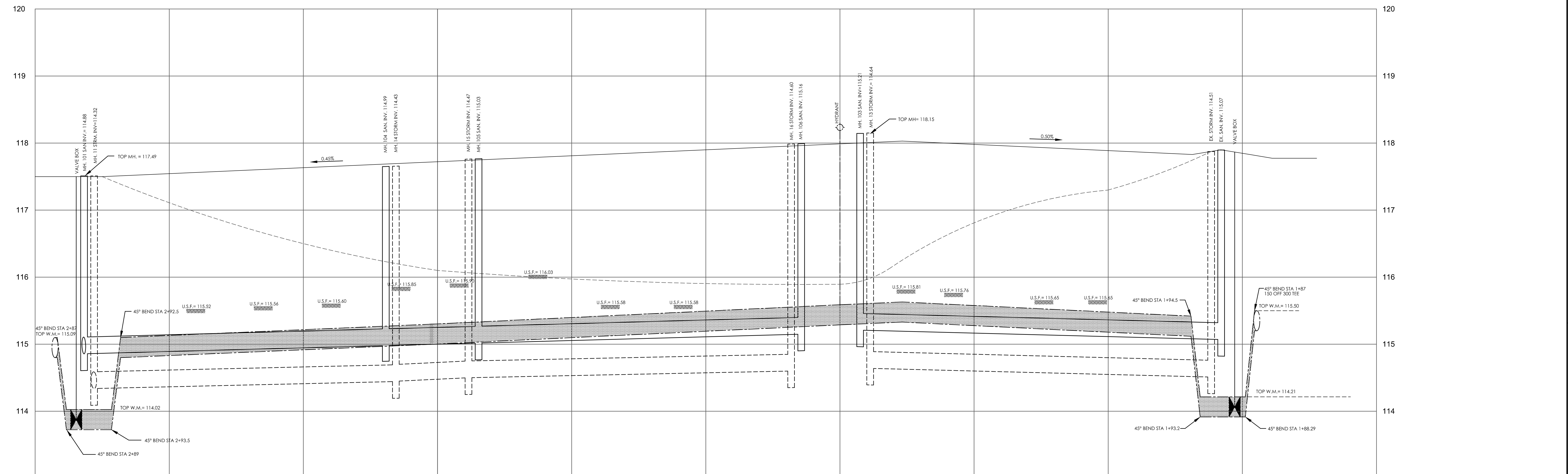
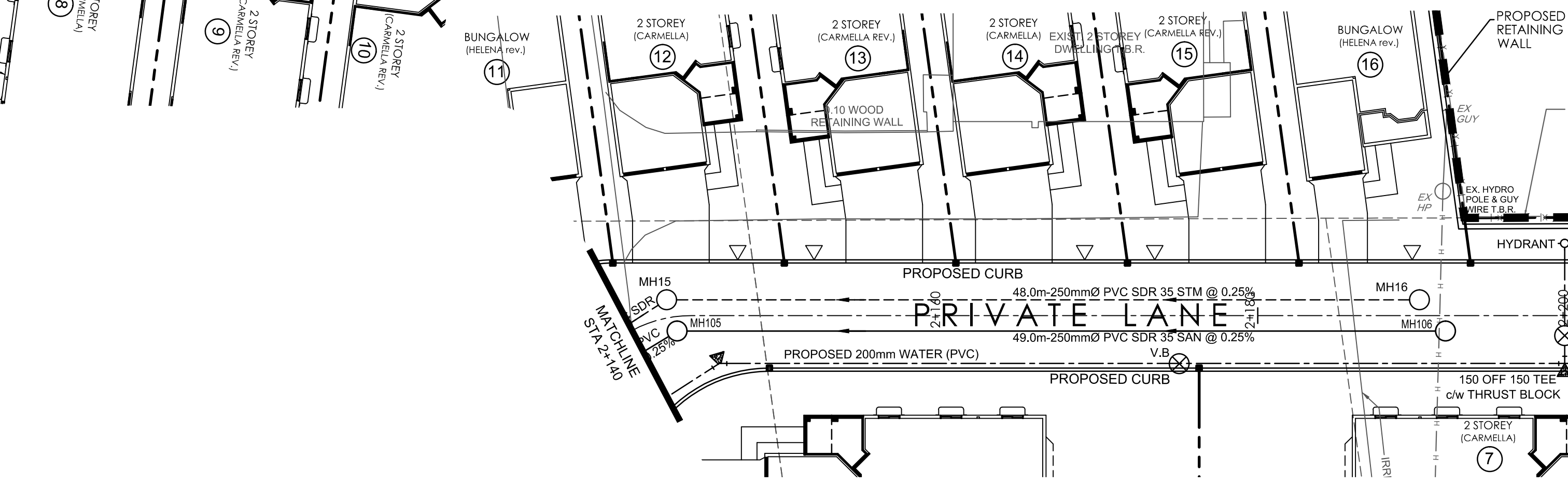
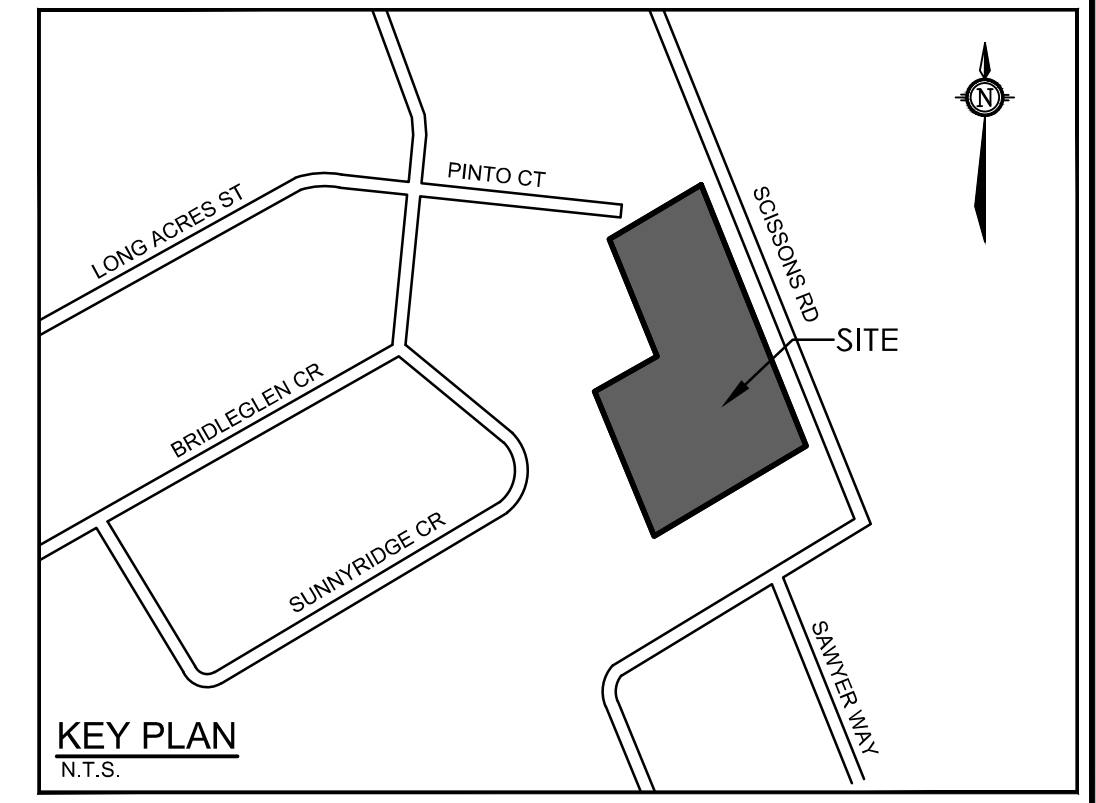
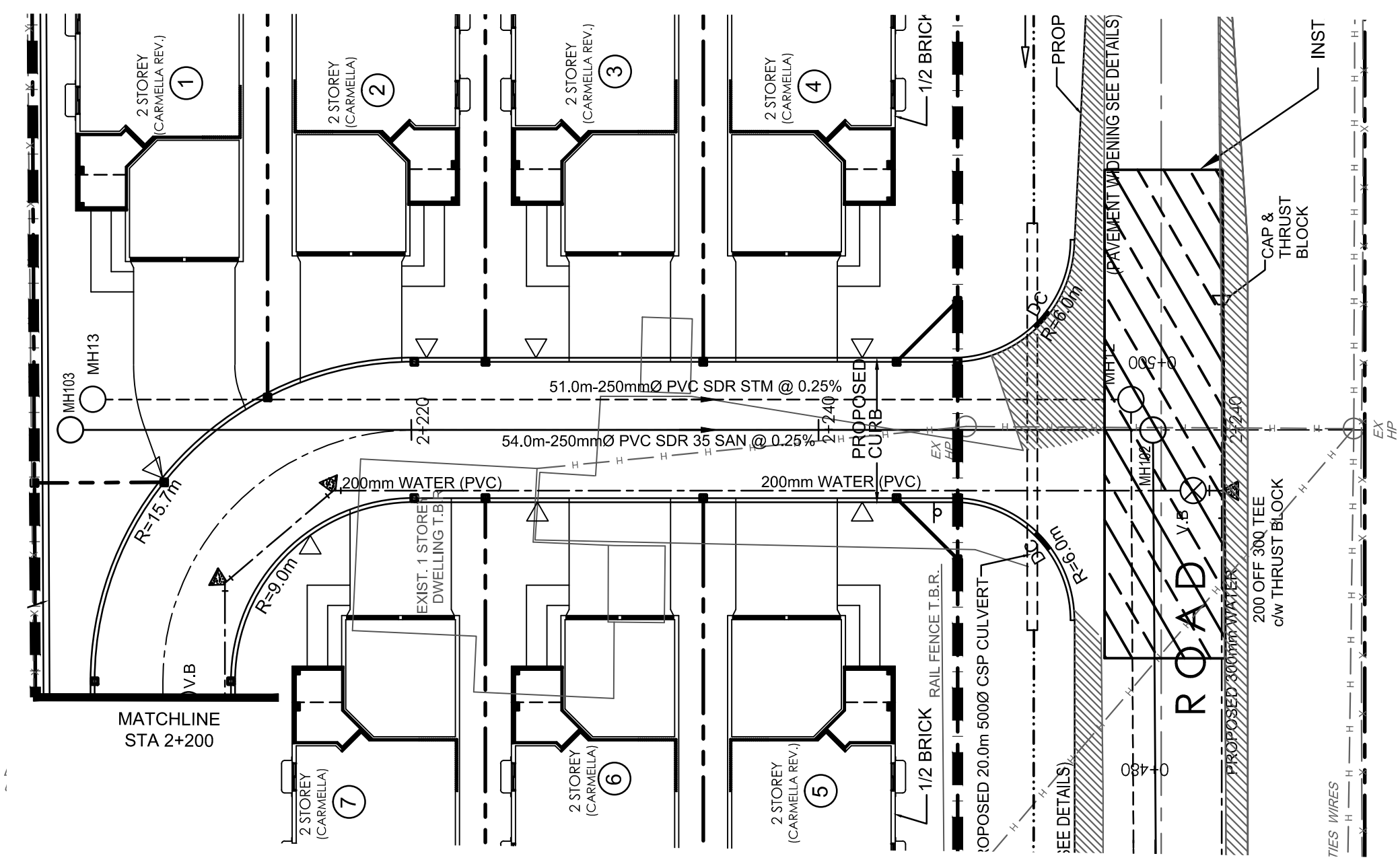
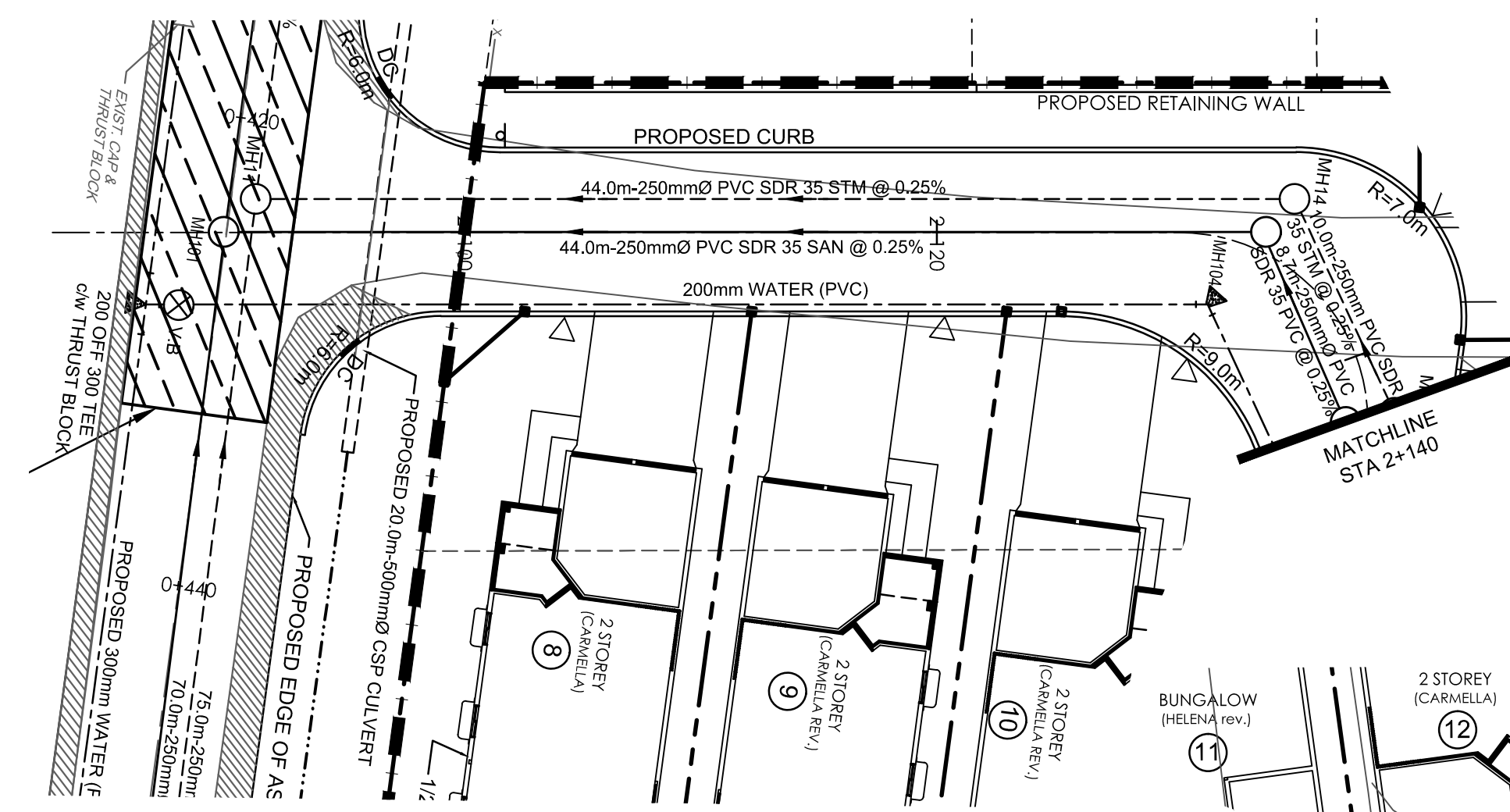
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LOCATION
CITY OF OTTAWA
SCISSONS ROAD DEVELOPMENT

DRAWING NAME
PLAN AND PROFILE
SCISSONS ROAD
STA. 0+340 TO 0+540

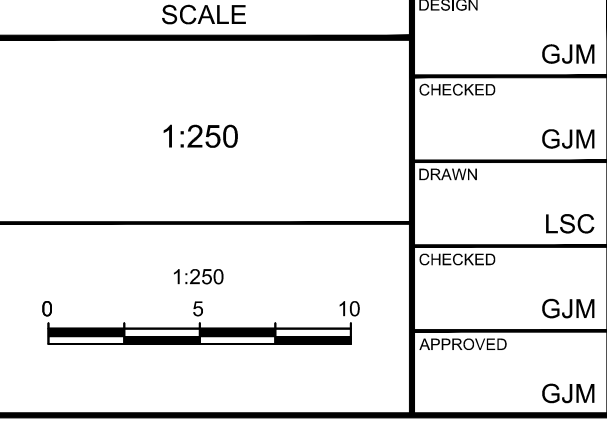
PRODUCT No. 115090
REV #1
DRAWING No. 115090-PP1



Q ROAD ELEVATION	117.49	117.54	117.63	117.72	117.79	117.81	117.90	117.93	117.94	118.03	117.98	117.89	117.89	114.90	C ROAD ELEVATION
TOP OF WATERMAIN ELEVATION	115.09	115.14	115.23	115.32	115.32	115.32	115.50	115.54	115.54	115.63	115.58	115.49	115.49	114.90	TOP OF WATERMAIN ELEVATION
STORM SEWER INVERT	114.32	44.0m-250mm @ 0.25%	114.43	4.44	114.47	114.48	48.0m-250mm @ 0.25%	114.60	114.64	51.0m-250mm @ 0.25%	114.51	114.51	114.51	114.51	STORM SEWER INVERT
SANITARY SEWER INVERT	114.88	44.0m-250mm @ 0.25%	114.89	115.00	115.03	115.04	49.0m-250mm @ 0.25%	115.16	115.21	54.0m-250mm @ 0.25%	115.07	115.07	115.07	115.07	SANITARY SEWER INVERT
EXISTING Q ROAD ELEVATION	117.49	117.50	117.60	117.69	117.79	117.81	117.90	117.93	117.94	118.03	117.98	117.89	117.89	114.90	EXISTING Q ROAD ELEVATION
CHAINAGE	2+080	2+084.5	2+090	2+100	2+120	2+140	2+160	2+180	2+192	2+200	2+220	2+240	2+255.4	2+260	CHAINAGE

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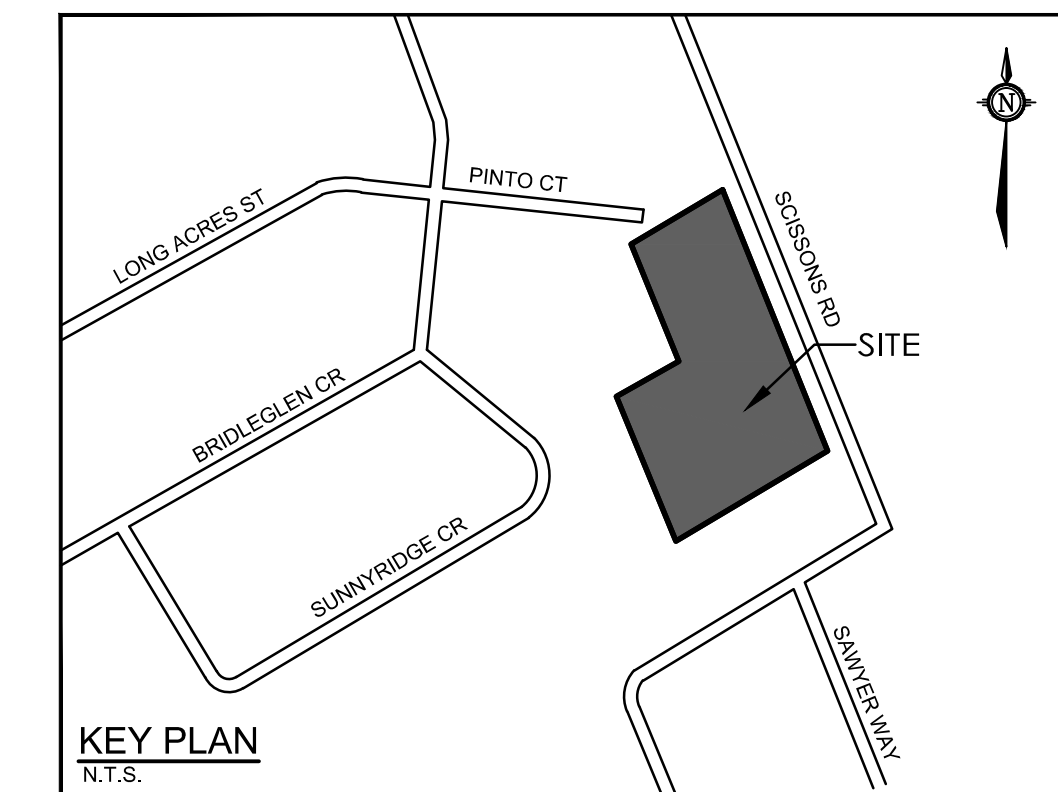
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LOCATION
CITY OF OTTAWA
SCISSORS ROAD DEVELOPMENT

DRAWING NAME
PLAN AND PROFILE
PRIVATE LANE
STA. 2+080 to 2+280

PRODUCT No. 115090
REV #1
DRAWING No. 115090-PP2



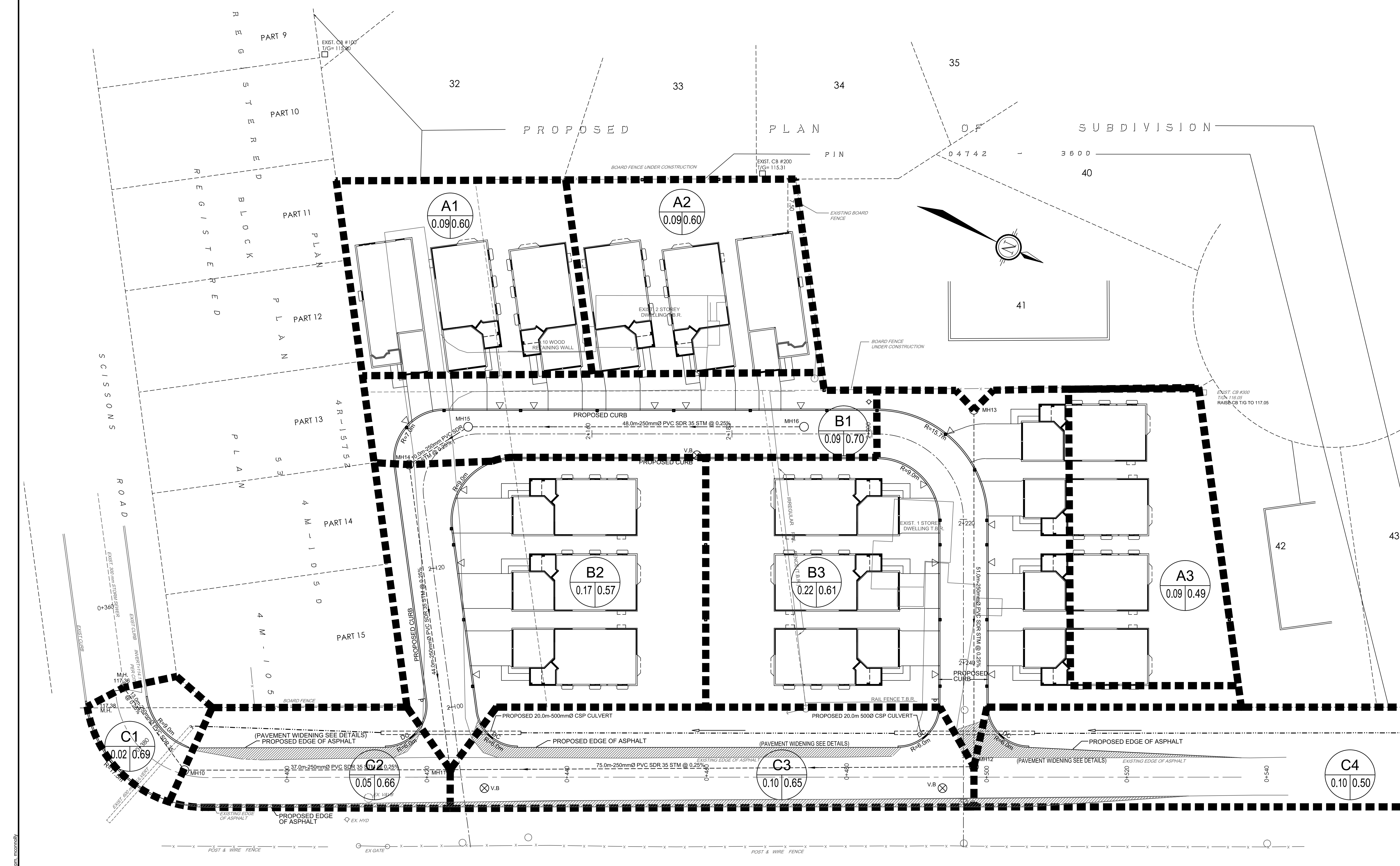
LEGEND

- PROPOSED CURB
- DC PROPOSED DEPRESSED CURB
- CB 1 PROPOSED CATCHBASIN AND LEAD
- CBMH 1 PROPOSED CATCHBASIN MANHOLE
- STMMH 1 PROPOSED STORM MANHOLE & SEWER
- DIRECTION OF FLOW
- STM MH EXISTING STORM MANHOLE & SEWER
- CB 1 EXISTING CATCHBASIN CW CATCHBASIN LEAD
- STORM DRAINAGE AREA

A1 DRAINAGE AREA NUMBER (URBAN/DALE DEVELOPMENT)
DRAINAGE AREA (Ha) 0.09 | RUNOFF COEFFICIENT 0.60

B1 DRAINAGE AREA NUMBER (SITE DRAINAGE TO SCISSONS ROAD)
DRAINAGE AREA (Ha) 0.09 | RUNOFF COEFFICIENT 0.70

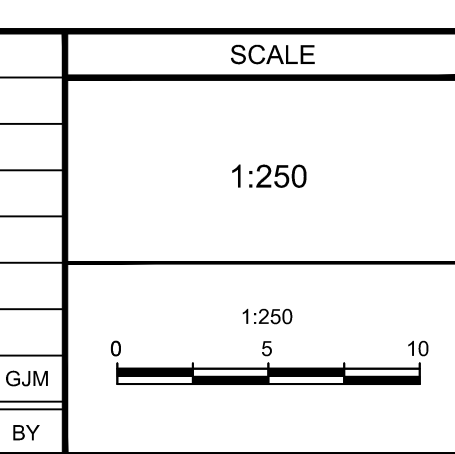
C1 DRAINAGE AREA NUMBER (SCISSONS ROAD, ROADSIDE DRAINAGE)
DRAINAGE AREA (Ha) 0.02 | RUNOFF COEFFICIENT 0.69



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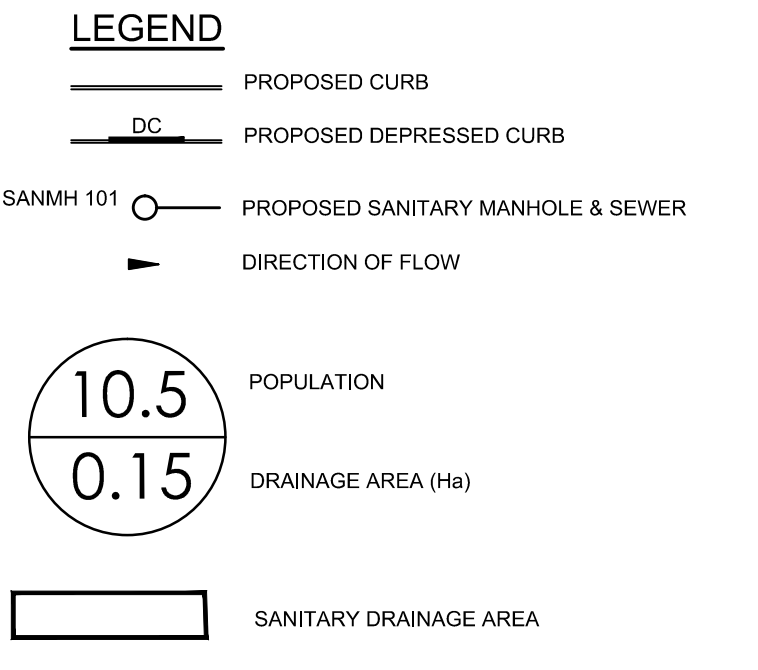
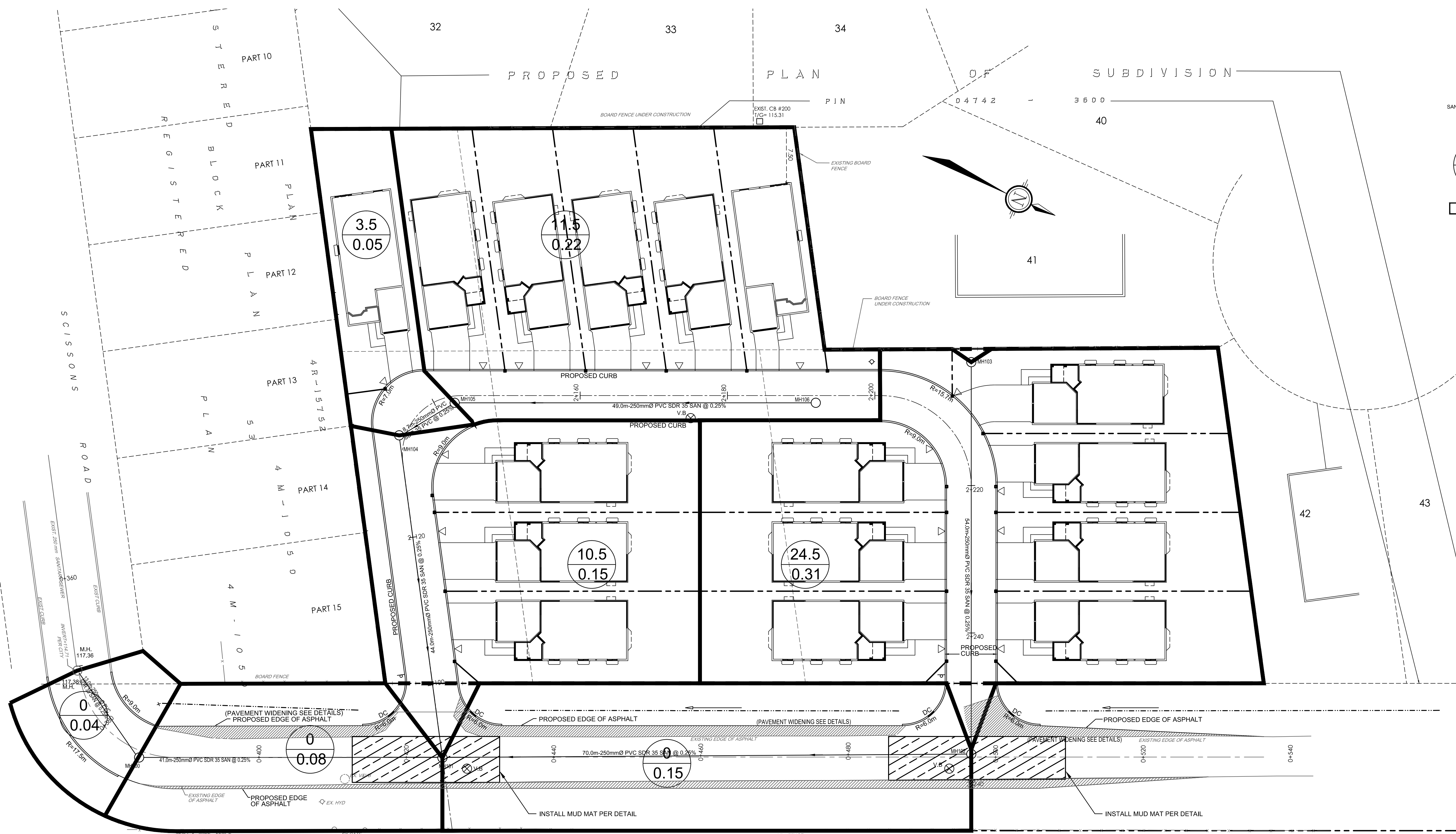
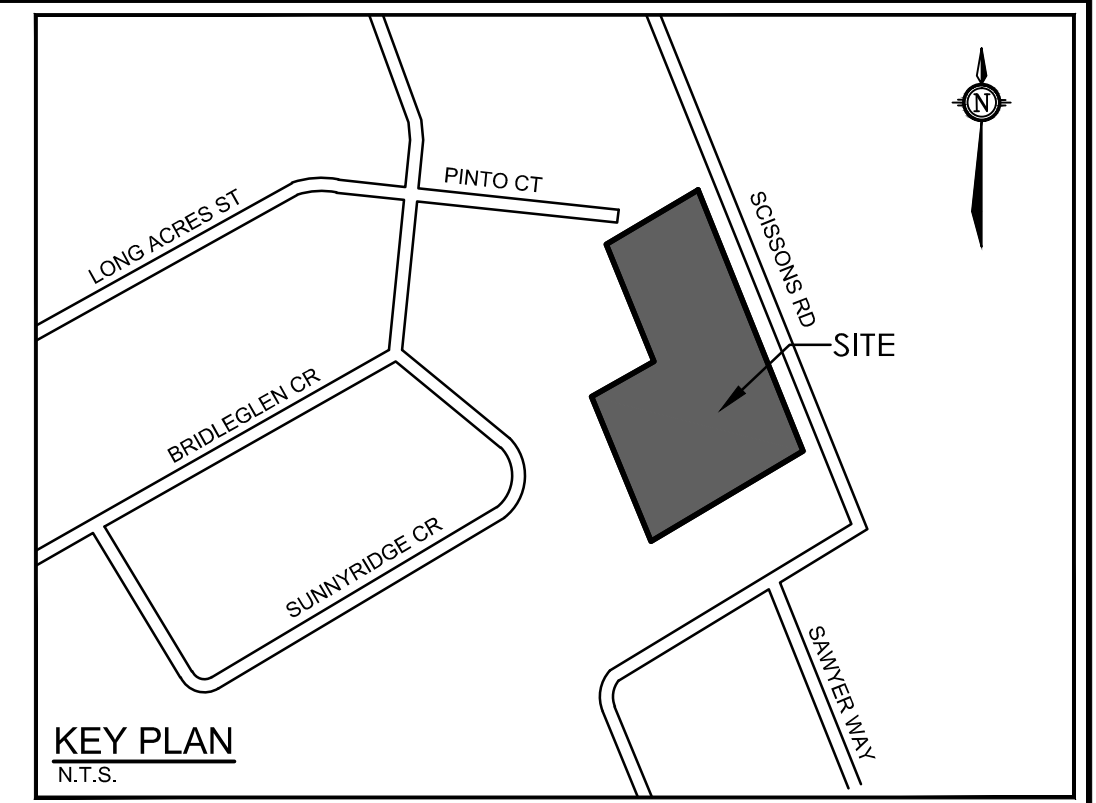
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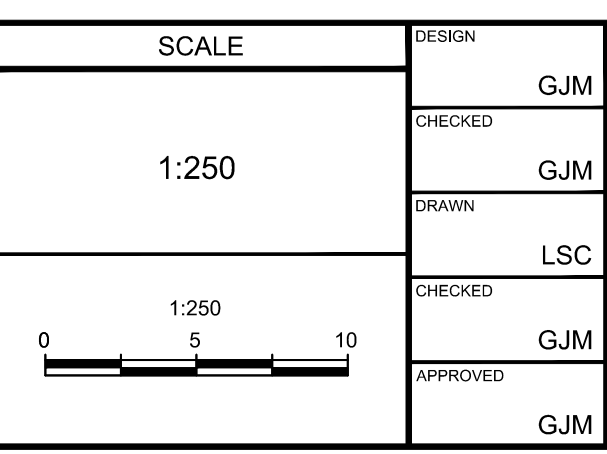
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LOCATION CITY OF OTTAWA SCISSONS ROAD DEVELOPMENT	PROJECT No. 115090
DRAWING NAME STORM DRAINAGE AREA PLAN	REV REV # 1
	DRAWING No. 115090-STM



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APPROVED	GJM



LOCATION
CITY OF OTTAWA
SCISSONS ROAD DEVELOPMENT

DRAWING NAME
SANITARY DRAINAGE AREA PLAN

PROJECT NO.	115090
REV	REV # 1
DRAWING NO.	115090-SAN

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