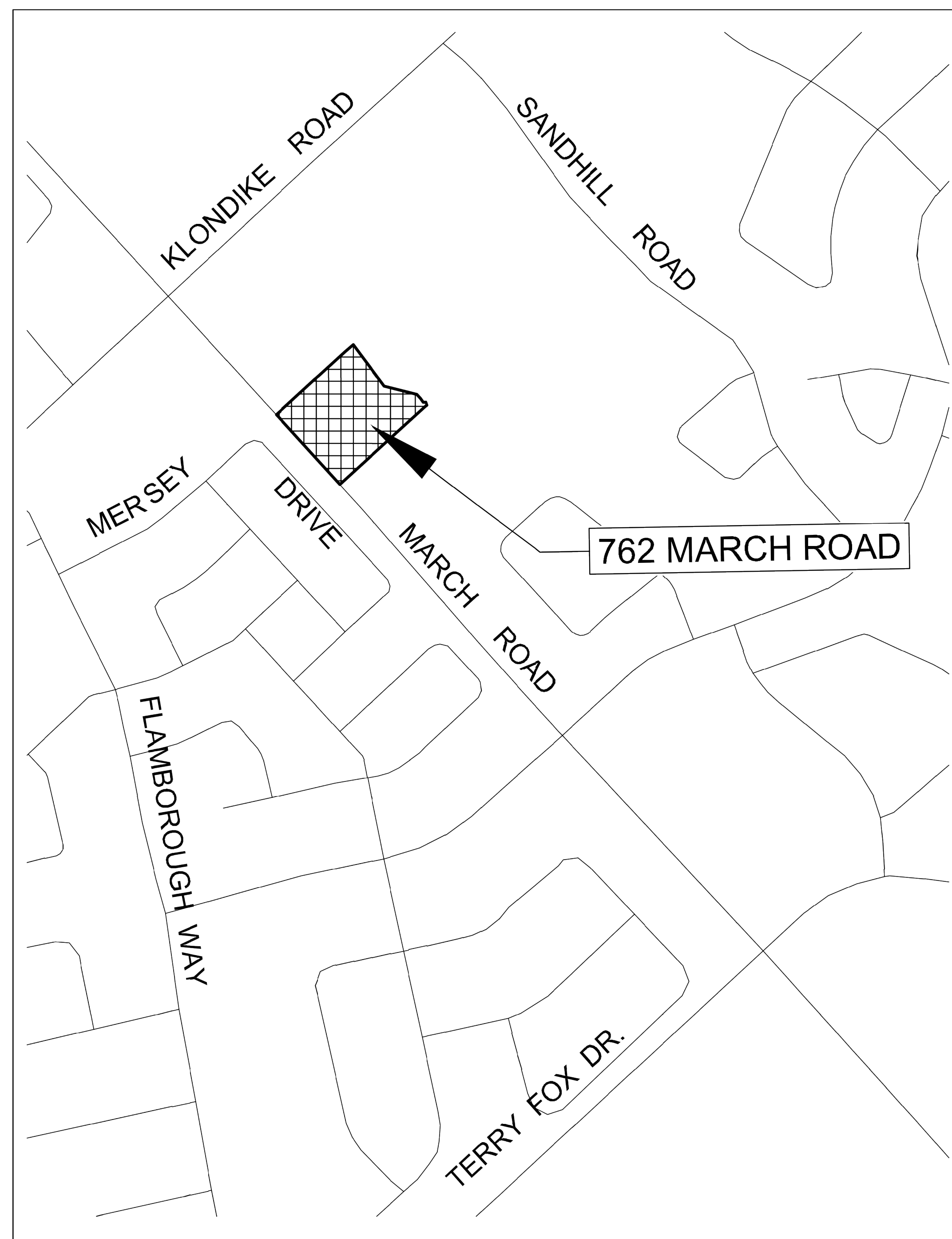


MINTO COMMUNITIES INC.  
200-180 KENT STREET  
OTTAWA, ON  
K1P 0B6



  
**J.L.Richards**  
ENGINEERS-ARCHITECTS-PLANNERS  
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& Associates Limited  
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Ottawa, ON Canada  
K1Z 5M2  
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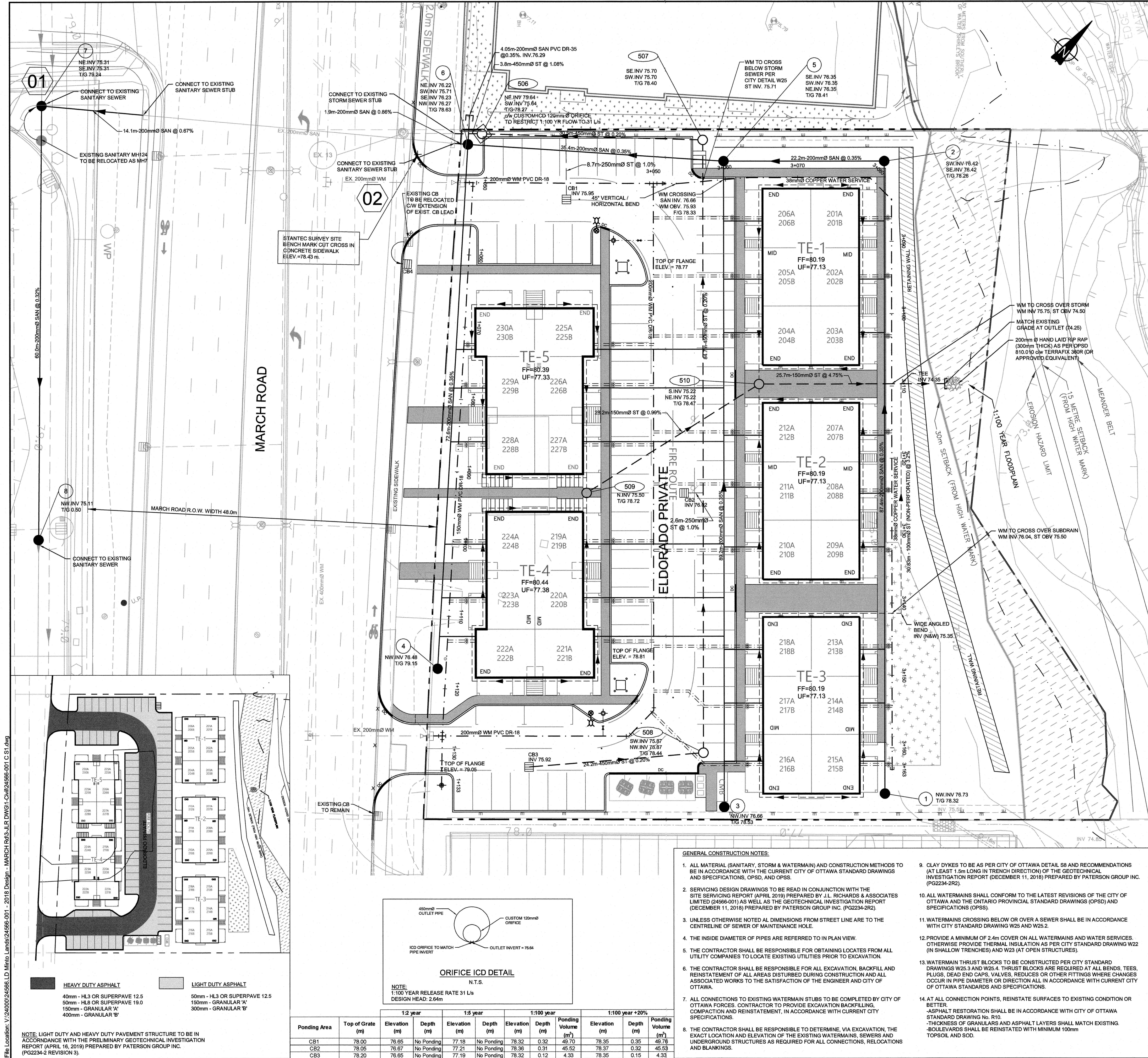
MORGAN'S CREEK STAGE 1 DRAWING LIST	
Sheet Number	Sheet Title
CS	COVER SHEET
S1	SITE SERVICING PLAN
G1	GRADING PLAN
01	MERSEY DRIVE
02	ELDORADO PRIVATE
DSAN	SANITARY DRAINAGE PLAN
SWM	STORM DRAINAGE AND PONDING PLAN
RESC	REMOVALS AND EROSION AND SEDIMENTATION CONTROL PLAN

# MINTO COMMUNITIES INC. MORGAN'S CREEK STAGE 1

762 MARCH ROAD

File Location: V:\244000\24566.LD Minto Lands\24566-001 - 2018 Design - MARCH Rd\3-JLR DWG\1-Civil\24566-001 C CS.dwg





GENERAL CONSTRUCTION NOTES:

1. ALL MATERIAL (SANITARY, STORM & WATERMAIN) AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS, OPSS, AND OPSS.
2. SERVICING DESIGN DRAWINGS TO BE READ IN CONJUNCTION WITH THE SITE SERVICING REPORT (APRIL 2019) PREPARED BY J.L. RICHARDS & ASSOCIATES LIMITED (24566-001) AS WELL AS THE GEOTECHNICAL INVESTIGATION REPORT (DECEMBER 11, 2016) PREPARED BY PATERSON GROUP INC. (PG2234-2R2).
3. UNLESS OTHERWISE NOTED ALL DIMENSIONS FROM STREET LINE ARE TO THE CENTRELINE OF SEWER OF MAINTENANCE HOLE.
4. THE INSIDE DIAMETER OF PIPES ARE REFERRED TO IN PLAN VIEW.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ALL ASSOCIATED WORKS TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA.
7. ALL CONNECTIONS TO EXISTING WATERMAIN STUBS TO BE COMPLETED BY CITY OF OTTAWA FORCES. CONTRACTOR TO PROVIDE EXCAVATION BACKFILL, COMPACTION AND REINSTATEMENT, IN ACCORDANCE WITH CURRENT CITY SPECIFICATIONS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE, VIA EXCAVATION, THE EXACT LOCATION AND ELEVATION OF THE EXISTING WATERMAINS, SEWERS AND UNDERGROUND STRUCTURES AS REQUIRED FOR ALL CONNECTIONS, RELOCATIONS AND BULKINGS.
9. CLAY DYKES TO BE AS PER CITY OF OTTAWA DETAIL S8 AND RECOMMENDATIONS (AT LEAST 1.5m LONG IN TRENCH DIRECTION) OF THE GEOTECHNICAL INVESTIGATION REPORT (DECEMBER 11, 2016) PREPARED BY PATERSON GROUP INC. (PG2234-2R2).
10. ALL WATERMAINS SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSS) AND SPECIFICATIONS (OPSS).
11. WATERMAINS CROSSING BELOW OR OVER A SEWER SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWING W25 AND W25.2.
12. PROVIDE A MINIMUM OF 2.4m COVER ON ALL WATERMAINS AND WATER SERVICES. OTHERWISE PROVIDE THERMAL INSULATION AS PER CITY STANDARD DRAWING W22 (IN SHALLOW TRENCHES) AND W23 (AT OPEN STRUCTURES).
13. WATERMAIN THRUST BLOCKS TO BE CONSTRUCTED PER CITY STANDARD DRAWINGS W23.3 AND W25.4. THRUST BLOCKS ARE REQUIRED AT ALL BENDS, TEES, PLUGS, DEAD END CAPS, VALVES, REDUCES OR OTHER FITTINGS WHERE CHANGES OCCUR IN PIPE DIAMETER OR DIRECTION ALL IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
14. AT ALL CONNECTION POINTS, REINSTATE SURFACES TO EXISTING CONDITION OR BETTER.  
- ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING No. R10.  
- THICKNESS OF GRANULARS AND ASPHALT LAYERS SHALL MATCH EXISTING.  
- BOULEVARDS SHALL BE REINSTATED WITH MINIMUM 100mm TOPSOIL AND SOD.

WATERMAIN TABLE - Sta. 1+000.00 TO 1+133.4 PVC DR-18 CL 150				
STATION	STATION ALONG WM	DETAIL	FINISHED GRADE	TOP OF WM
1+050.0	200 x 200 x 150 TEE		78.28	75.88
1+060.0	-		78.58	76.18
1+070.0	-		78.75	76.35
1+080.0	-		78.78	76.38
1+090.0	-		78.77	76.37
1+100.0	-		78.80	76.40
1+110.0	-		78.84	76.44
1+120.0	-		78.86	76.46
1+130.0	200 x 200 x 200 x 150 (HYDRANT LEAD) CROSS		78.68	76.28
1+133.4	HYDRANT		78.65	76.25

NOTE: ALL WM TO BE CONSTRUCTED AT MINIMUM 2.4m BELOW FINISHED GRADE. OTHERWISE PROVIDE THERMAL INSULATION. SEE GENERAL CONSTRUCTION NOTES 8, 9, 10

WATERMAIN TABLE - Sta. 3+050.00 TO 3+051.6 PVC DR-18 CL 150, Sta. 3+051.6 TO 3+165.3 38mmØ COOPER				
STATION	STATION ALONG WM	DETAIL	FINISHED GRADE	TOP OF WM
3+050.0	200 x 200 x 150 TEE		78.15	75.75
3+051.6	150x38 REDUCER		78.24	75.84
3+053.2	HORIZONTAL BEND		78.27	75.87
3+056.8	WM CROSSING UNDER ST		78.75	75.31
3+059.7	WM CROSSING UNDER SAN		78.35	75.75
3+063.1	HORIZONTAL BEND		78.55	76.15
3+070.0	-		78.55	76.15
3+080.0	HORIZONTAL BEND		78.55	76.15
3+082.8	WM CROSSING OVER SAN		78.50	76.10
3+084.2	HORIZONTAL BEND		78.38	75.98
3+090.0	-		78.35	75.95
3+100.0	-		78.33	75.93
3+109.7	WM CROSSING OVER ST		78.19	75.79
3+120.0	-		78.30	75.90
3+130.0	-		78.39	75.99
3+141.41	WM CROSSING OVER SUBDRAIN		78.48	76.08
3+150.0	-		78.55	76.15
3+160.0	-		78.55	76.15
3+163.0	WM CAP		78.16	75.76

NOTE: ALL WM TO BE CONSTRUCTED AT MINIMUM 2.4m BELOW FINISHED GRADE. OTHERWISE PROVIDE THERMAL INSULATION. SEE GENERAL CONSTRUCTION NOTES 8, 9, 10

INSULATION REFERENCE TABLE	
EARTH COVER	REQUIRED INSULATION THICKNESS
2.0m - 1.8m	25mm
1.8m - 1.5m	50mm
1.5m - 1.2m	75mm
1.2m - 0.9m	100mm
0.9m - 0.6m	125mm

1. SEWER INSTALLATION (INCLUDING BEDDING AND COVER) TO BE PER CITY OF OTTAWA TRENCH DETAIL S8.
2. INSULATION POINTS TO BE STAGGERED, WITH MINIMUM 0.3 OVERLAP.
3. INSULATION TO BE CENTERED OVER PIPE WITH MINIMUM WIDTH OF 1.2m.
4. INSULATION TO BE PROVIDED AT ALL SEWER LOCATIONS WHERE MINIMUM COVERAGE OF 2.0m IS NOT ACHIEVED.

INSULATION DETAIL

N.T.S.

15. WATERMAIN SERVICES TO BE 19mmØ PEX c/w CURB STOP AS PER CITY STANDARD DRAWING W26. WHERE SERVICES CROSS SEWERS, SERVICES TO BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DRAWING W36.
16. A COIL OF SERVICE PIPE, 1.5m IN LENGTH SHALL BE INSTALLED, AND CAPPED AT THE TERMINATION OF EACH WATER SERVICE. THE COIL SHALL BE PROTECTED BY PLYWOOD BEFORE BACKFILLING AND SHALL BE MARKED BY A 2"x4" EXTENDING APPROXIMATELY 300mm ABOVE THE GROUND SURFACE.
17. 200mmØ SANITARY SEWERS SHALL BE PVC DR-35. 450mmØ STORM SEWERS SHALL BE CONCRETE 100-D AND 150mmØ STORM SEWERS SHALL BE PVC DR-35. STORM SEWERS TO BE INSULATED WHERE MINIMUM COVERAGE OF 2.0m IS NOT ACHIEVED (REFER TO INSULATION DETAIL). SANITARY AND STORM SERVICES TO BE IN ACCORDANCE WITH CITY STANDARD DRAWING S11.1 AND PROVIDED WITH 0.3m MINIMUM VERTICAL CLEARANCE TO WATERMAIN. REFER TO WATERMAIN TABLE FOR CROSSING DETAILS.  
- SANITARY SERVICE TO BE 135mmØ PVC SDR-26  
- STORM SERVICE TO BE TO BE 100mmØ PVC SDR-28
18. ALL STORM & SANITARY MAINTENANCE HOLES TO BE 1200Ø UNLESS OTHERWISE NOTED AS PER OPSD 701.010 c/w FRAME AND COVERS AS PER CITY STANDARD DRAWINGS S24 AND S24.1. SANITARY MAINTENANCE HOLES TO HAVE WATERTIGHT COVERS AS PER OPSD 401.030.
19. ALL ONSITE CATCH BASINS TO BE 600x600mm PRECAST CONCRETE PER OPSD 705.010 c/w FRAME AND COVER AS PER CITY STANDARD DRAWING S19.
20. STREET CATCH BASIN LEADS TO BE PVC DR-35 INSTALLED WITH 1% GRADIENT MINIMUM, UNLESS SPECIFIED OTHERWISE ON THE DRAWINGS.
21. 6m SUBDRAIN STUBS, WRAPPED IN FILTER SOCK, TO BE INSTALLED ON EITHER SIDE OF EACH STREET CATCH BASIN, APPROXIMATELY 300mm BELOW THE SUBGRADE LEVEL.
22. SERVICES TO BE TERMINATED 1.0m FROM BUILDING WALL (TYPICAL).
23. CONCRETE CURB TO BE BARRIER TYPE AS PER CITY STANDARD DRAWING SC1.1.
24. CONCRETE SIDEWALKS AND WALKWAYS TO BE CONSTRUCTED AS PER CITY OF OTTAWA DETAIL SC2 (OR SC1.4) AND SC4. ASPHALT SIDEWALKS AND WALKWAYS TO BE CONSTRUCTED AS PER CITY OF OTTAWA DETAIL SC20.
25. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION DEPICTED ON THIS PLAN.
26. EXCAVATION FOR THE INSTALLATION OF SERVICES ALONG OR IN PROXIMITY OF A BUILDING OR A STRUCTURE IS TO BE CONTAINED WITHIN A TRENCH BOX WIDTH AND IS TO ENSURE NO CONFLICT WITH ANY FUTURE FOOTINGS. SERVICE TRENCHES SHALL BE BACKFILLED WITH GRANULAR 'A' COMPACTED TO 100% SPMD WHERE ADJACENT TO A BUILDING FOR THE SECTION PARALLEL TO THE UNIT PLUS 5.0m PAST THE FRONT AND REAR OF THE UNIT. SELECT SUBGRADE MATERIAL COMPACTED TO 100% SDR TO 1.0m BELOW SUBGRADE FOR FULL TRENCH WIDTH OF DISTURBED AREA SHALL BE USED FOR BACKFILL, INCLUDING ALONG ANY SEWERS AND WATERMAINS ADJACENT TO A BUILDING OR OTHER STRUCTURE.
27. BUILDERS TO INSTALL PRESSURE REDUCING VALVES ON ALL WATER SERVICES.
28. BUILDER TO INSTALL BACKWATER VALVES ON SANITARY AND STORM SERVICE LATRALES IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAIL DRAWINGS S14, S14.1 & S14.2.
29. PAVEMENT DESIGN TO BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT (APRIL 16, 2019) PREPARED BY PATERSON GROUP INC. (PG2234-2 REVISION 3):  
CAR ONLY PARKING AREAS (LIGHT DUTY ASPHALT)  
- 50mm WEAR COURSE - HL-3 OR SUPERPAVE 12.5 LEVEL C  
- 150mm BASE - OPSS GRANULAR 'A' COMPACTED TO 100% SPMMC  
- 300mm (MIN.) SUBBASE - OPSS GRANULAR 'B', TYPE II COMPACTED TO 100% SPMD  
LOCAL ROADWAYS (HEAVY DUTY ASPHALT)  
- 40mm WEAR COURSE - HL-3 OR SUPERPAVE 12.5 LEVEL C  
- 50mm BINDER COURSE - HL-3 OR SUPERPAVE 19.0 LEVEL C  
- 150mm BASE - OPSS GRANULAR 'A' COMPACTED TO 100% SPMMC  
- 400mm (MIN.) SUBBASE - OPSS GRANULAR 'B', TYPE II COMPACTED TO 100% SPMD  
ASPHALT CEMENT IS TO BE MINIMUM PERFORMANCE GRADE (PG) 58-34.  
SUBGRADE - EITHER IN SITU SOILS OR OPSS GRANULAR 'B' TYPE I OR II MATERIAL PLACED OVER IN SITU SOILS.  
REQUIREMENT FOR ADDITIONAL GRANULAR 'B' AND/OR GEOTEXTILE TO BE CONFIRMED ON SITE BY GEOTECHNICAL ENGINEER.
30. THE CONTRACTOR SHALL PROVIDE ALL PAVEMENT MARKINGS AS SHOWN, INCLUDING HANDICAPPED PARKING SYMBOLS.

KEYPLAN (N.T.S.)

LEGEND

- EXISTING CATCH BASIN & LEAD
- PROPOSED CATCH BASIN & LEAD
- PROPOSED STORM MAINTENANCE HOLE c/w ICD
- PROPOSED WATERMAIN, VALVE & HYDRANT
- EXISTING WATERMAIN, VALVE & HYDRANT
- EXISTING SANITARY SEWER & MAINTENANCE HOLE
- EXISTING STORM SEWER & MAINTENANCE HOLE
- PROPOSED SANITARY SEWER & MAINTENANCE HOLE
- PROPOSED STORM SEWER & MAINTENANCE HOLE
- DRAWING NUMBER
- DEPRESSED CURB
- PERFORATED PIPE c/w FILTER SOCK
- PROPERTY LINE
- COMMUNITY MAIL BOX

02	ISSUED TO CITY FOR REVIEW - 2nd SUBMISSION	15/04/19
01	ISSUED TO CITY FOR REVIEW - 1st SUBMISSION	19/12/18

No.	ISSUE / REVISION	DD/MYY

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SCALE: 1:250

CLIENT: **minto Communities**

CONSULTANT: **J.L. Richards** ENGINEERS - ARCHITECTS - PLANNERS

CONSULTANT:

PROFESSIONAL STAMP

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ENGINEER  
PROVINCE OF ONTARIO

PROFESSIONAL STAMP

A. WILLIAMS  
100218983  
APR 16/19  
ENGINEER  
PROVINCE OF ONTARIO

PROJECT: **MINTO COMMUNITIES INC. MORGAN'S CREEK STAGE 1**  
762 MARCH ROAD

DRAWING: **S1**

DESIGN: AW	DRAWING #:
DRAWN: SP	
CHECKED: LD	
JLR #: 24566-001	



File Location: V:\24000\24566.LD Minto Lands\24566-001 - 2018 Design - MARCH Rds-JLR DWG31-Civil\24566-001 C.G1.dwg

#### GENERAL NOTES FOR LOT GRADING

1. ALL DIMENSIONS ARE IN METRES (m) UNLESS OTHERWISE SPECIFIED.
2. GIVEN HOUSE GRADES MAY BE REVISED AS NECESSARY TO COMPENSATE FOR DIFFERENCES BETWEEN ASSUMED AND ACTUAL BUILDING DIMENSIONS IN ACCORDANCE WITH THE ESTABLISHED CRITERIA FOR THE LOT DRAINAGE PATTERN, TO THE SATISFACTION OF THE CITY ENGINEER.
3. FOR GRADING AND DRAINAGE DETAILS, REFER TO THE CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS.
4. DO NOT ALTER GRADING WITHOUT APPROVAL OF CITY ENGINEER.
5. ALL ELEVATIONS ARE BASED ON A GEODETIC DATUM.
6. CONTACT THE CITY ENGINEER FOR INSPECTION UPON COMPLETION OF ROUGH GRADING OF DRIVEWAYS, ROADWAYS AND LANDSCAPED AREAS. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL AND SOD.
7. CONTRACTOR IS RESPONSIBLE FOR LOCATION OF ALL EXISTING SERVICES PRIOR TO CONSTRUCTION.

MARCH ROAD

ELDORADO PRIVATE

MERSEY DRIVE

KEYPLAN (N.T.S.)

LEGEND	
	PROPOSED ELEVATION
	PROPOSED LOCAL HIGH POINT ELEVATION
	PROPOSED BOTTOM OF DITCH ELEVATION
	EXISTING ELEVATION
	TOP OF RETAINING WALL ELEVATION
	BOTTOM OF RETAINING WALL ELEVATION
	PROPOSED TERRACING
	SURFACE SLOPE
	EMERGENCY OVERLAND FLOW DIRECTION (>100 YEAR)
	FINISHED FLOOR ELEVATION
	UNDERSIDE OF FOOTING ELEVATION
	ASPHALT / CONCRETE WALKWAY
	CONCRETE BARRIER CURB
	DEPRESSED CURB
	APPROXIMATE RETAINING WALL FOOTPRINT (DETAILED DESIGN BY OTHERS)
	COMMUNITY MAIL BOX
	PROPOSED SANITARY MAINTENANCE HOLE
	PROPOSED STORM MAINTENANCE HOLE
	PROPOSED STORM MAINTENANCE HOLE c/w ICD
	AMENITY AREA
	NON-DEVELOPABLE AREA

02 ISSUED TO CITY FOR REVIEW - 2nd SUBMISSION 15/04/19

01 ISSUED TO CITY FOR REVIEW - 1st SUBMISSION 19/12/18

No. ISSUE / REVISION DD/MM/YY

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SCALE: 1:250

CLIENT:  
 **minto**  
Communities

CONSULTANT: [www.jlrichards.ca](http://www.jlrichards.ca)

**J.L. Richards**  
ENGINEERS - ARCHITECTS - PLANNERS

CONSULTANT:

PROFESSIONAL STAMP

PROJECT:  
**MINTO COMMUNITIES INC.**  
**MORGAN'S CREEK**  
**STAGE 1**  
762 MARCH ROAD

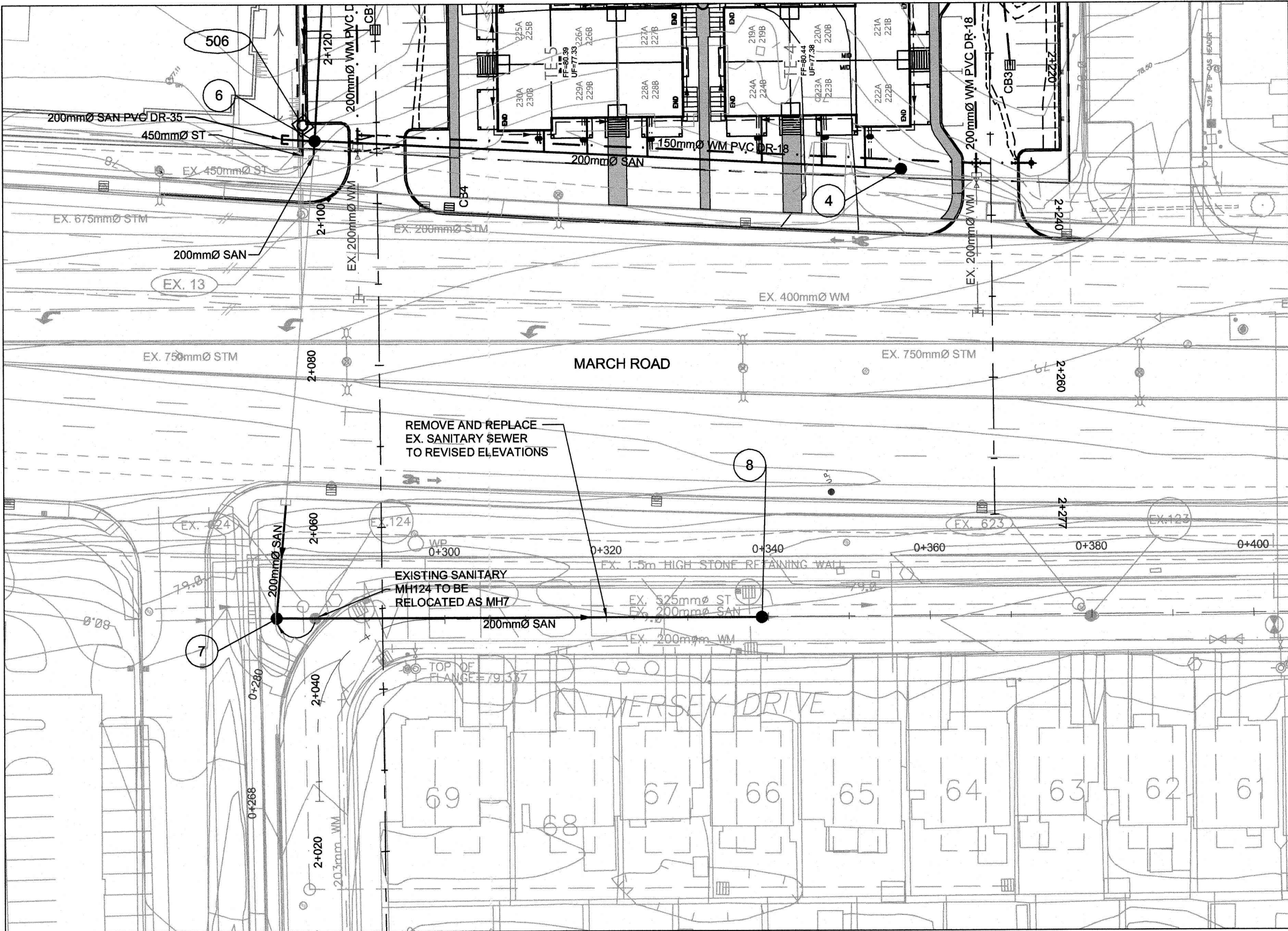
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**GRADING PLAN**

DESIGN: AW  
DRAWN: SP  
CHECKED: LD  
JLR #: 24566-001  
DRAWING #: **G1**

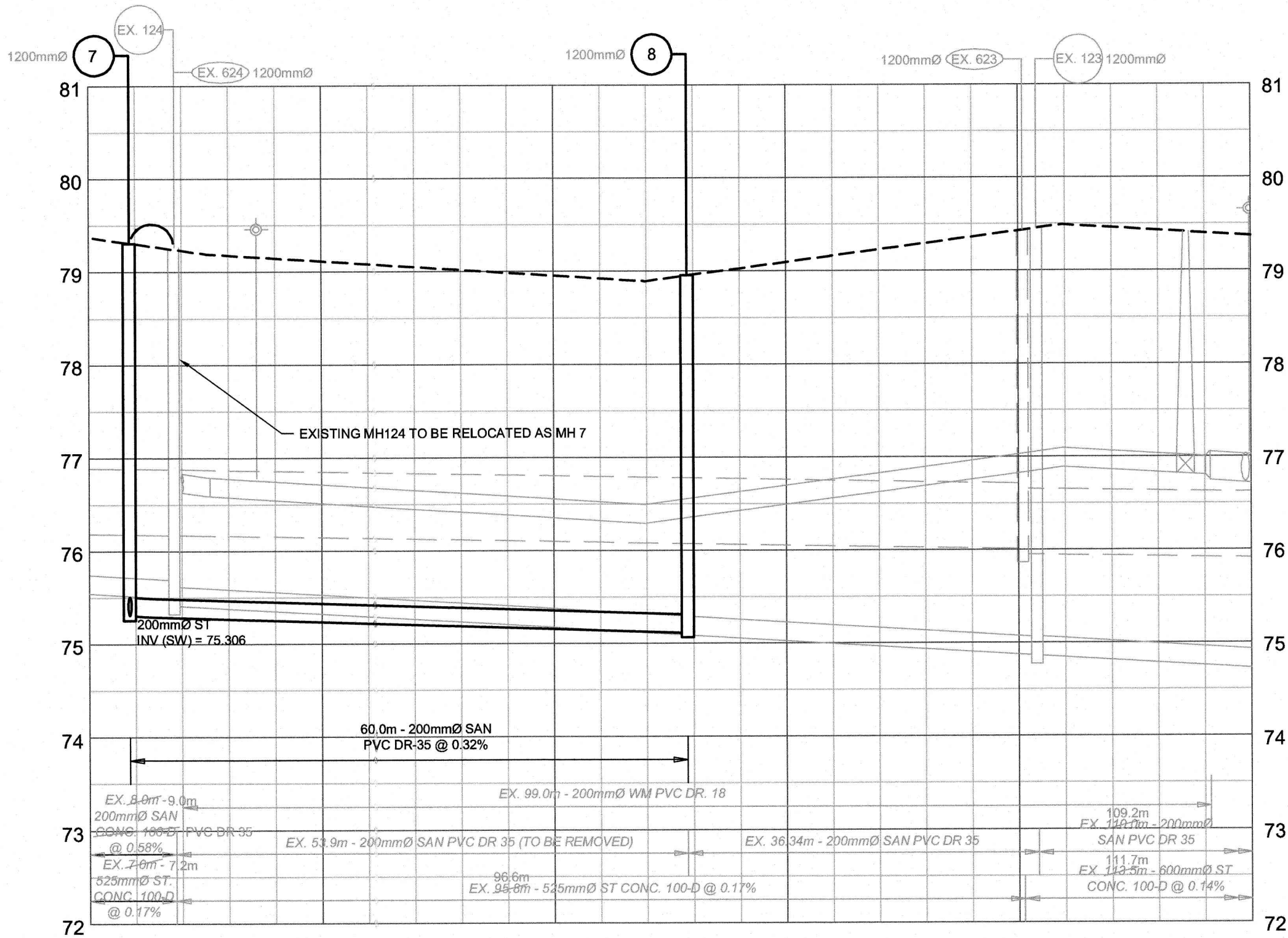
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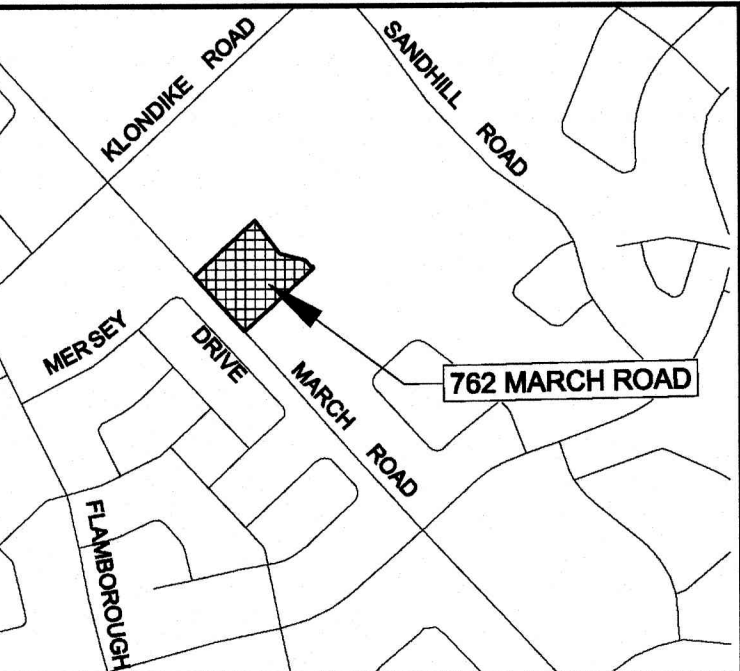




MERSEY DRIVE

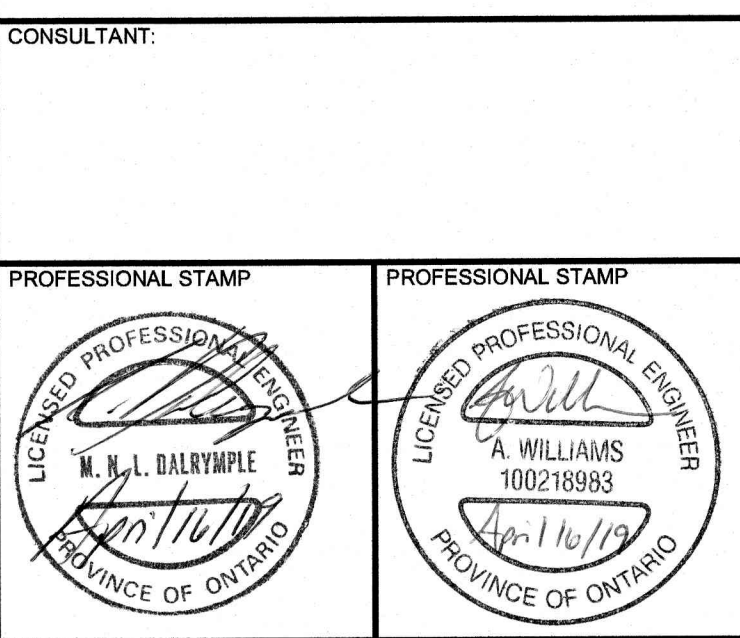


DESIGN PROFILE ELEVATIONS	DESIGN PROFILE ELEVATIONS
W.M. TOP ELEVATIONS	W.M. TOP ELEVATIONS
STORM SEWER INV. ELEVATION	STORM SEWER INV. ELEVATION
SANITARY SEWER INV. ELEVATION	SANITARY SEWER INV. ELEVATION
C.L. ROADWAY STATION	C.L. ROADWAY STATION



KEYPLAN (N.T.S.)	
LEGEND	
	EXISTING CATCH BASIN & LEAD
	PROPOSED CATCH BASIN & LEAD
	PROPOSED WATERMAIN, VALVE & HYDRANT
	EXISTING WATERMAIN, VALVE & HYDRANT
	EXISTING SANITARY SEWER & MANHOLE
	EXISTING STORM SEWER & MANHOLE
	PROPOSED SANITARY SEWER & MANHOLE
	PROPOSED STORM SEWER & MANHOLE
	DRAWING NUMBER
	FF = 88.15
	UF = 77.15
	DEPRESSED CURB
	PERFORATED PIPE
	CMB COMMUNITY MAIL BOX

02	ISSUED TO CITY FOR REVIEW - 2nd SUBMISSION	15/04/19
01	ISSUED TO CITY FOR REVIEW - 1st SUBMISSION	19/12/18
No.	ISSUE / REVISION	DD/MM/YY
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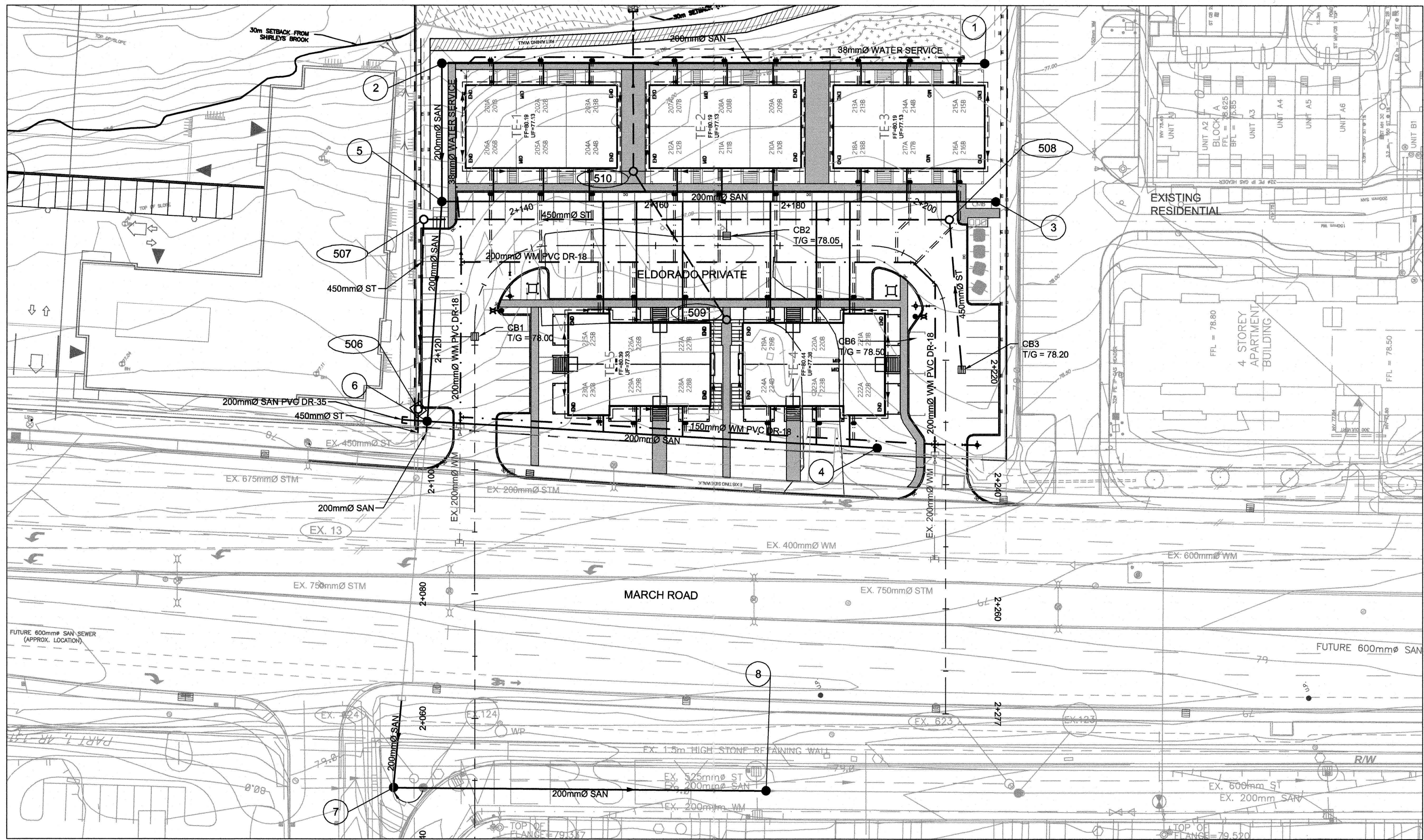


PROJECT:  
MINTO COMMUNITIES INC.  
MORGAN'S CREEK  
STAGE 1  
762 MARCH ROAD

DRAWING:  
PLAN AND PROFILE  
MERSEY DRIVE TO STA. 2+140

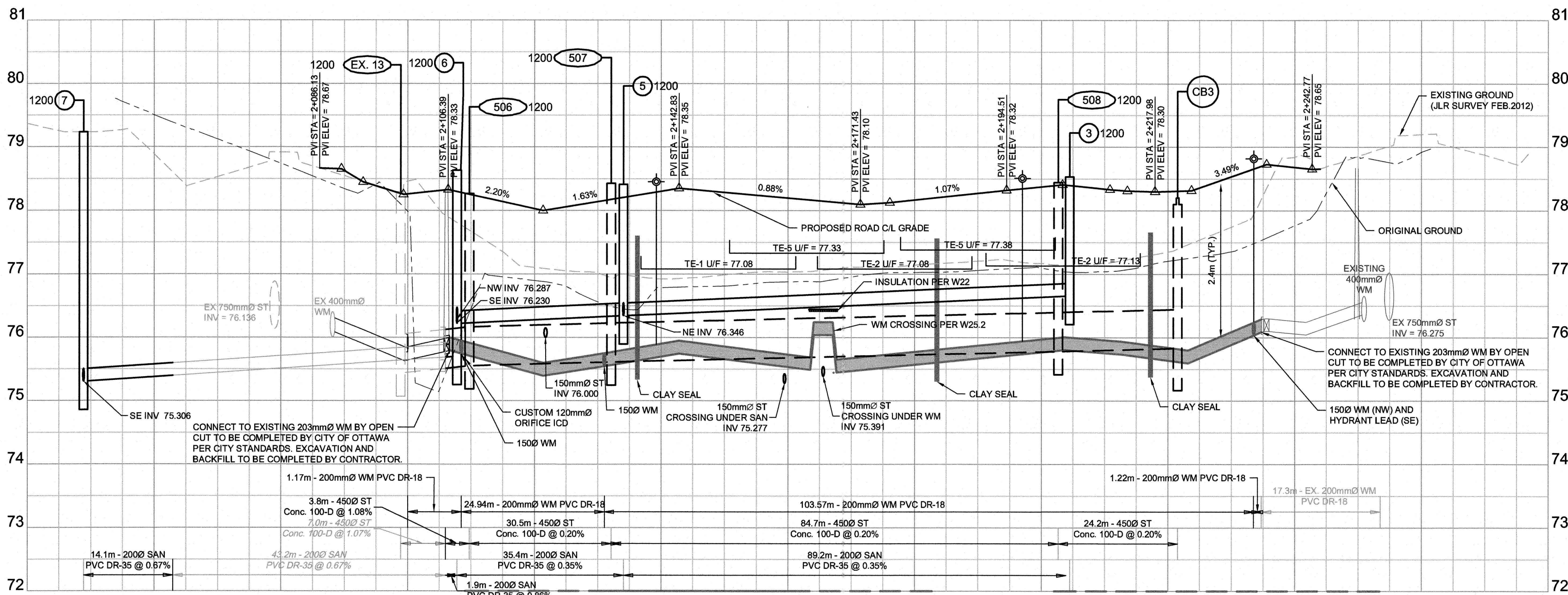
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JLR #: 24566-001	



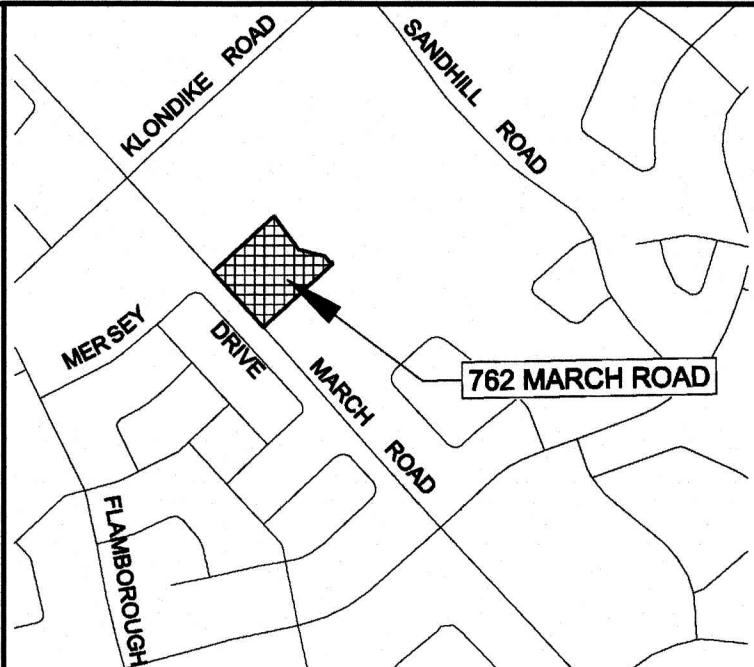


MERSEY DRIVE 01

ELDORADO PRIVATE



DESIGN PROFILE ELEVATIONS	W.M. TOP ELEVATIONS	STORM SEWER INV. ELEVATION	SANITARY SEWER INV. ELEVATION	C.L. ROADWAY STATION
				2+040.00
				2+060.00
				2+080.00
				2+100.00
				2+107.28
				2+108.45
				2+120.00
				2+131.02
				2+139.23
				2+140.00
				2+160.00
				2+167.07
				2+167.65
				2+180.00
				2+197.02
				2+200.00
				2+202.23
				2+207.37
				2+220.00
				2+233.92
				2+234.74
				2+240.00
				2+248.62
				2+260.00
				2+265.20
				2+280.00



KEY PLAN (N.T.S.)	
LEGEND	
	LANDSCAPING CATCH BASIN
	EXISTING CATCH BASIN & LEAD
	PROPOSED CATCH BASIN & LEAD
	PROPOSED WATERMAIN, VALVE & HYDRANT
	EXISTING WATERMAIN, VALVE & HYDRANT
	EXISTING SANITARY SEWER & MANHOLE
	EXISTING STORM SEWER & MANHOLE
	PROPOSED SANITARY SEWER & MANHOLE
	PROPOSED STORM SEWER & MANHOLE
	DRAWING NUMBER
	FINISHED FLOOR ELEVATION
	UNDERSIDE OF FOOTING ELEVATION
	DEPRESSED CURB
	PERFORATED PIPE
	COMMUNITY MAIL BOX

02	ISSUED TO CITY FOR REVIEW - 2nd SUBMISSION	15/04/19
01	ISSUED TO CITY FOR REVIEW - 1st SUBMISSION	19/12/18
No.	ISSUE / REVISION	DD/MM/YY
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CLIENT:

minto Communities

CONSULTANT:

J.L. Richards  
ENGINEERS - ARCHITECTS - PLANNERS

CONSULTANT:

PROFESSIONAL STAMP

PROFESSIONAL STAMP

PROJECT:

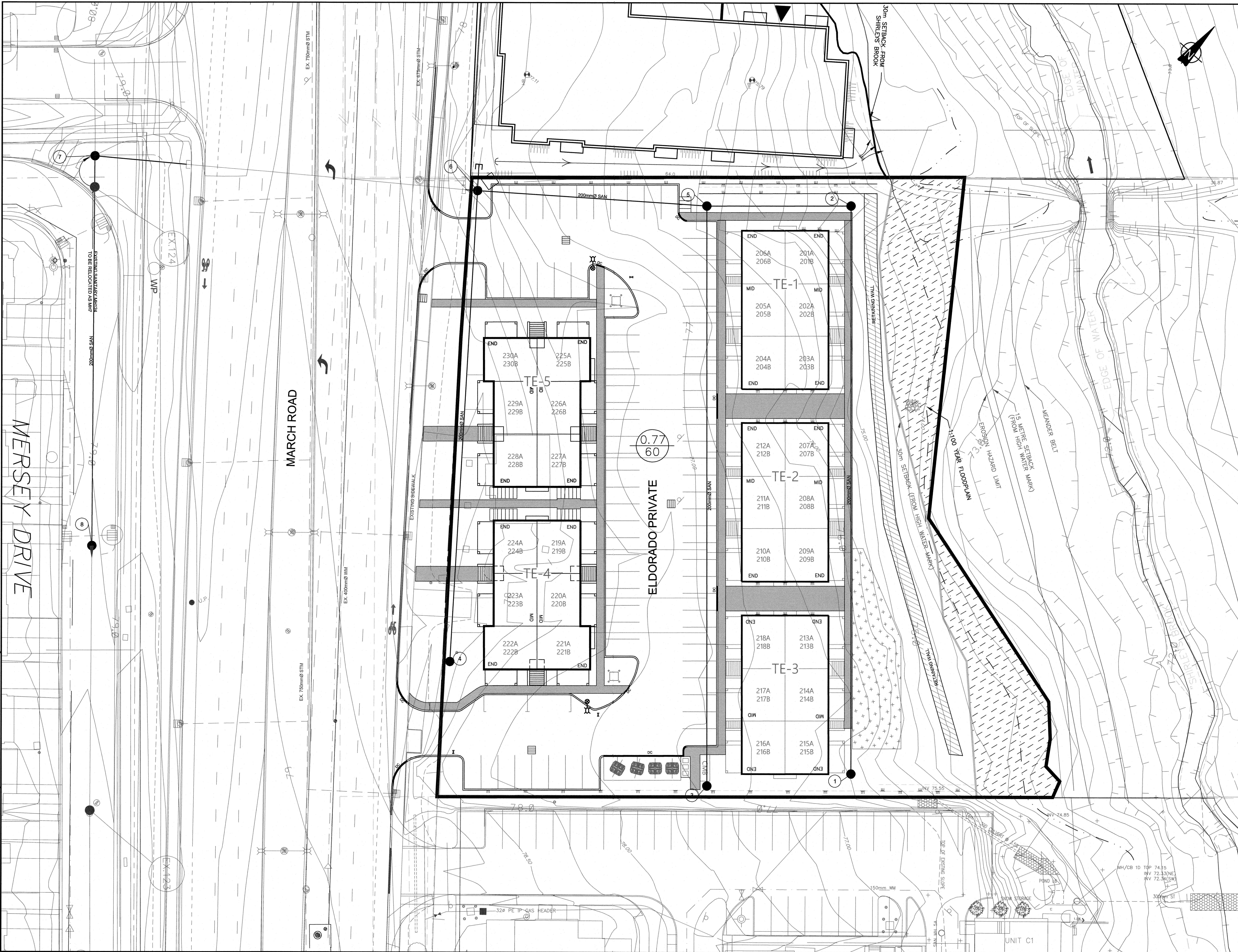
MINTO COMMUNITIES INC.  
MORGAN'S CREEK  
STAGE 1  
762 MARCH ROAD

DRAWING:

PLAN AND PROFILE  
ELDORADO PRIVATE  
STA. 2+040 TO STA. 2+280

DESIGN: AW	DRAWING #:
DRAWN: SP	02
CHECKED: LD	
JLR #: 24566-001	





KEYPLAN (N.T.S.)

LEGEND

- CATCH BASIN
- EXISTING SANITARY SEWER & MANHOLE
- PROPOSED SANITARY SEWER & MANHOLE
- DRAINAGE BOUNDARY
- AREA IN HECTARES  
NUMBER OF UNITS

02	ISSUED TO CITY FOR REVIEW - 2nd SUBMISSION	15/04/19
01	ISSUED TO CITY FOR REVIEW - 1st SUBMISSION	19/12/18
No.	ISSUE / REVISION	DO/MY/YY

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SCALE: 1:250

CLIENT:

**minto**  
Communities

CONSULTANT:

**JLR** J.L. Richards  
ENGINEERS · ARCHITECTS · PLANNERS

CONSULTANT:

PROFESSIONAL STAMP

LICENCED PROFESSIONAL ENGINEER  
M. L. DALRYMPLE  
100218963  
PROVINCE OF ONTARIO

PROFESSIONAL STAMP

LICENCED PROFESSIONAL ENGINEER  
A. WILLIAMS  
100218963  
16/16/19  
PROVINCE OF ONTARIO

PROJECT:

MINTO COMMUNITIES INC.  
MORGAN'S CREEK  
STAGE 1  
762 MARCH ROAD

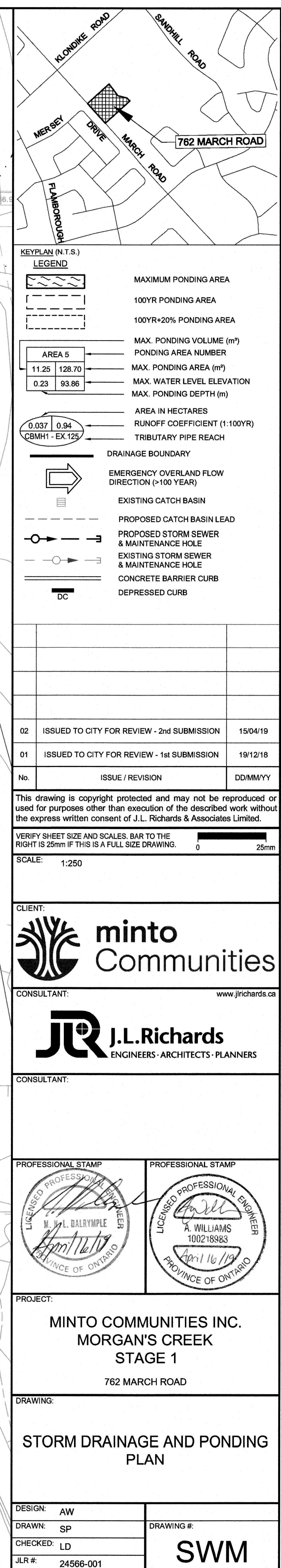
DRAWING:

SANITARY DRAINAGE PLAN

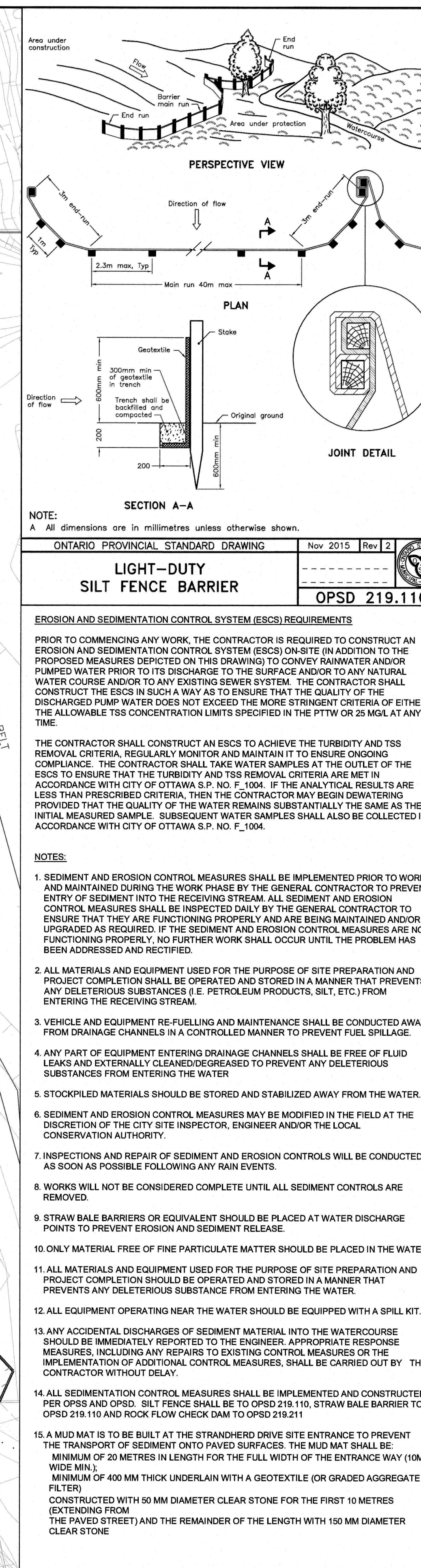
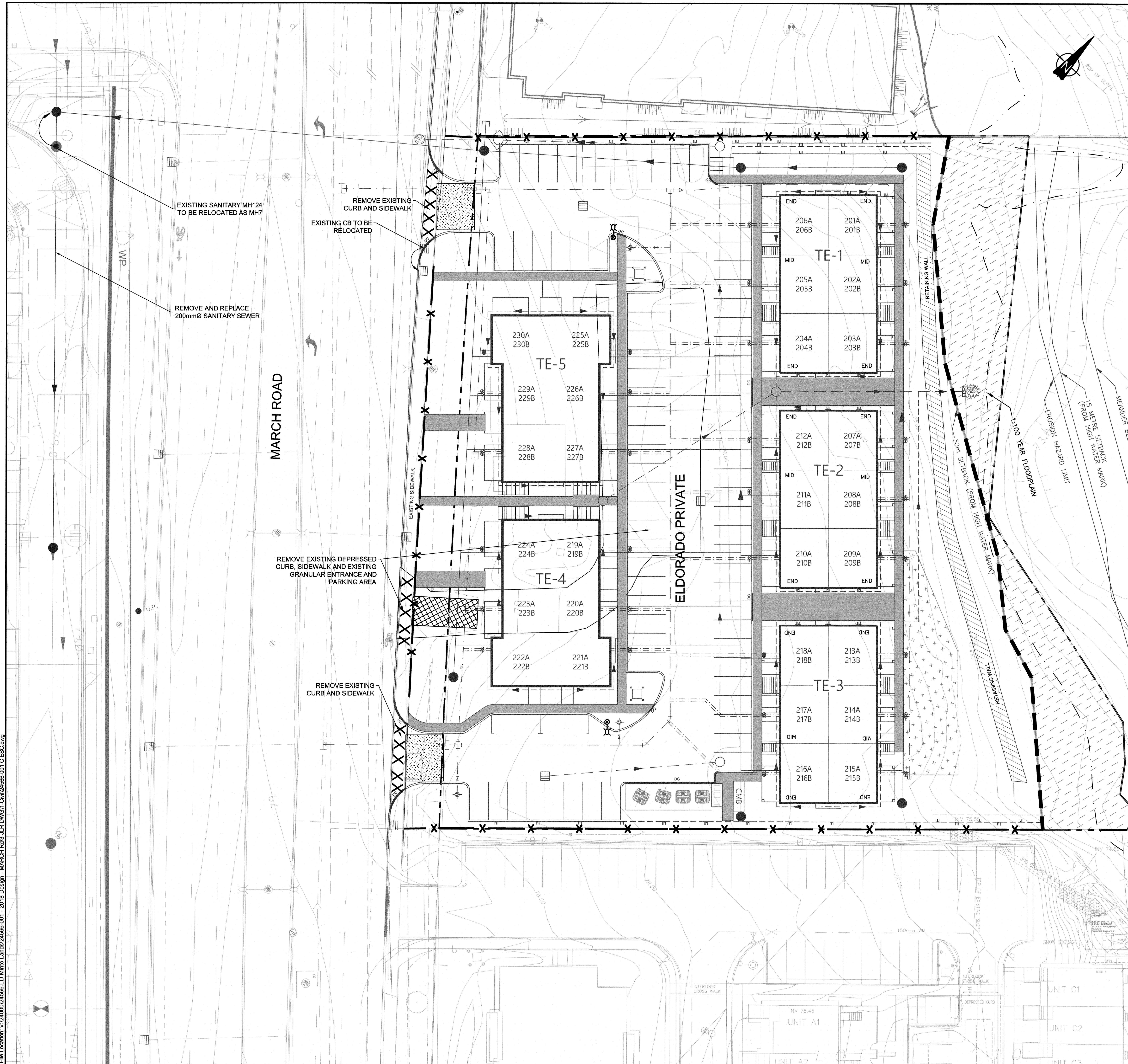
DESIGN:	AW	DRAWING #:
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CHECKED:	LD	
JLR #:	24566-001	

**D-SAN**









**NOTE:**  
A All dimensions are in millimetres unless otherwise shown.

**ONTARIO PROVINCIAL STANDARD DRAWING** Nov 2015 Rev 2

**LIGHT-DUTY  
SILT FENCE BARRIER**

**OPSD 219.110**

**EROSION AND SEDIMENTATION CONTROL SYSTEM (ESCS) REQUIREMENTS**

PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR IS REQUIRED TO CONSTRUCT AN EROSION AND SEDIMENTATION CONTROL SYSTEM (ESCS) ON SITE (IN ADDITION TO THE PROPOSED MEASURES DEPICTED ON THIS DRAWING) TO CONVEY RAINWATER AND/OR PUMPED WATER PRIOR TO ITS DISCHARGE TO THE SURFACE AND/OR TO ANY NATURAL WATER COURSE AND/OR TO ANY EXISTING SEWER SYSTEM. THE CONTRACTOR SHALL CONSTRUCT THE ESCS IN SUCH A WAY AS TO ENSURE THAT THE QUALITY OF THE DISCHARGED PUMP WATER DOES NOT EXCEED THE MORE STRINGENT CRITERIA OF EITHER THE ALLOWABLE TSS CONCENTRATION LIMITS SPECIFIED IN THE PTTW OR 25 MG/L AT ANY TIME.

THE CONTRACTOR SHALL CONSTRUCT AN ESCS TO ACHIEVE THE TURBIDITY AND TSS REMOVAL CRITERIA, REGULARLY MONITOR AND MAINTAIN IT TO ENSURE ONGOING COMPLIANCE. THE CONTRACTOR SHALL TAKE WATER SAMPLES AT THE OUTLET OF THE ESCS TO ENSURE THAT THE TURBIDITY AND TSS REMOVAL CRITERIA ARE MET IN ACCORDANCE WITH CITY OF OTTAWA S.P. NO. F-1004. IF THE ANALYTICAL RESULTS ARE LESS THAN PRESCRIBED CRITERIA, THEN THE CONTRACTOR MAY BEGIN DEWATERING PROVIDED THAT THE QUALITY OF THE WATER REMAINS SUBSTANTIALLY THE SAME AS THE INITIAL MEASURED SAMPLE. SUBSEQUENT WATER SAMPLES SHALL ALSO BE COLLECTED IN ACCORDANCE WITH CITY OF OTTAWA S.P. NO. F-1004.

**NOTES:**

1. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO WORK AND MAINTAINED DURING THE WORK PHASE BY THE GENERAL CONTRACTOR TO PREVENT ENTRY OF SEDIMENT INTO THE RECEIVING STREAM. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY BY THE GENERAL CONTRACTOR TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY AND ARE BEING MAINTAINED AND/OR UPGRADED AS REQUIRED. IF THE SEDIMENT AND EROSION CONTROL MEASURES ARE NOT FUNCTIONING PROPERLY, NO FURTHER WORK SHALL OCCUR UNTIL THE PROBLEM HAS BEEN ADDRESSED AND RECTIFIED.
2. ALL MATERIALS AND EQUIPMENT USED FOR THE PURPOSE OF SITE PREPARATION AND PROJECT COMPLETION SHALL BE OPERATED AND STORED IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCES (I.E. PETROLEUM PRODUCTS, SILT, ETC.) FROM ENTERING THE RECEIVING STREAM.
3. VEHICLE AND EQUIPMENT RE-FUELLING AND MAINTENANCE SHALL BE CONDUCTED AWAY FROM DRAINAGE CHANNELS IN A CONTROLLED MANNER TO PREVENT FUEL SPILLAGE.
4. ANY PART OF EQUIPMENT ENTERING DRAINAGE CHANNELS SHALL BE FREE OF FLUID LEAKS AND EXTERNALLY CLEANED/DEGREASED TO PREVENT ANY DELETERIOUS SUBSTANCES FROM ENTERING THE WATER.
5. STOCKPILED MATERIALS SHOULD BE STORED AND STABILIZED AWAY FROM THE WATER.
6. SEDIMENT AND EROSION CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY SITE INSPECTOR, ENGINEER AND/OR THE LOCAL CONSERVATION AUTHORITY.
7. INSPECTIONS AND REPAIR OF SEDIMENT AND EROSION CONTROLS WILL BE CONDUCTED AS SOON AS POSSIBLE FOLLOWING ANY RAIN EVENTS.
8. WORKS WILL NOT BE CONSIDERED COMPLETE UNTIL ALL SEDIMENT CONTROLS ARE REMOVED.
9. STRAW BALE BARRIERS OR EQUIVALENT SHOULD BE PLACED AT WATER DISCHARGE POINTS TO PREVENT EROSION AND SEDIMENT RELEASE.
10. ONLY MATERIAL FREE OF FINE PARTICULATE MATTER SHOULD BE PLACED IN THE WATER.
11. ALL MATERIALS AND EQUIPMENT USED FOR THE PURPOSE OF SITE PREPARATION AND PROJECT COMPLETION SHOULD BE OPERATED AND STORED IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCE FROM ENTERING THE WATER.
12. ALL EQUIPMENT OPERATING NEAR THE WATER SHOULD BE EQUIPPED WITH A SPILL KIT.
13. ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO THE WATERCOURSE SHOULD BE IMMEDIATELY REPORTED TO THE ENGINEER. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
14. ALL SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED AND CONSTRUCTED PER OPSD AND OPSD. SILT FENCE SHALL BE TO OPSD 219.110, STRAW BALE BARRIER TO OPSD 219.110 AND ROCK FLOW CHECK DAM TO OPSD 219.211
15. A MUD MAT IS TO BE BUILT AT THE STRANDHERO DRIVE SITE ENTRANCE TO PREVENT THE TRANSPORT OF SEDIMENT ONTO PAVED SURFACES. THE MUD MAT SHALL BE:  
MINIMUM OF 20 METRES IN LENGTH FOR THE FULL WIDTH OF THE ENTRANCE WAY (10M WIDE MIN.)  
MINIMUM OF 400 MM THICK UNDERLAIN WITH A GEOTEXTILE (OR GRADED AGGREGATE FILTER)  
CONSTRUCTED WITH 50 MM DIAMETER CLEAR STONE FOR THE FIRST 10 METRES (EXTENDING FROM THE PAVED STREET) AND THE REMAINDER OF THE LENGTH WITH 150 MM DIAMETER CLEAR STONE

**KEYPLAN (N.T.S.)**

**LEGEND**

- PROPOSED SILT FENCE BARRIER TO OPSD 219.110
- PROPOSED SILT FENCE BARRIER TO OPSD 219.110 PLUS SNOW FENCE
- PROPOSED MUD MAT
- PROPERTY LINE
- PAVEMENT REMOVAL AREA

No.	ISSUE / REVISION	DD/MM/YY
02	ISSUED TO CITY FOR REVIEW - 2nd SUBMISSION	15/04/19
01	ISSUED TO CITY FOR REVIEW - 1st SUBMISSION	19/12/18

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VERIFY SHEET SIZE AND SCALES. BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING.

SCALE: 1:250

**CLIENT:**  
**minto Communities**

**CONSULTANT:**  
**J.L. Richards**  
ENGINEERS - ARCHITECTS - PLANNERS

**CONSULTANT:**

**PROFESSIONAL STAMP**  
**PROFESSIONAL ENGINEER**  
**M. L. BARRYMORE**  
**PROVINCE OF ONTARIO**

**PROFESSIONAL STAMP**  
**PROFESSIONAL ENGINEER**  
**A. WILLIAMS**  
**100218993**  
**April 16/19**  
**PROVINCE OF ONTARIO**

**PROJECT:**  
**MINTO COMMUNITIES INC.**  
**MORGAN'S CREEK**  
**STAGE 1**  
**762 MARCH ROAD**

**DRAWING:**  
**REMOVALS AND EROSION AND SEDIMENTATION CONTROL PLAN**

DESIGN:	AW	DRAWING #:
DRAWN:	SP	
CHECKED:	LD	
JLR #:	24566-001	

**RESC**

#17889