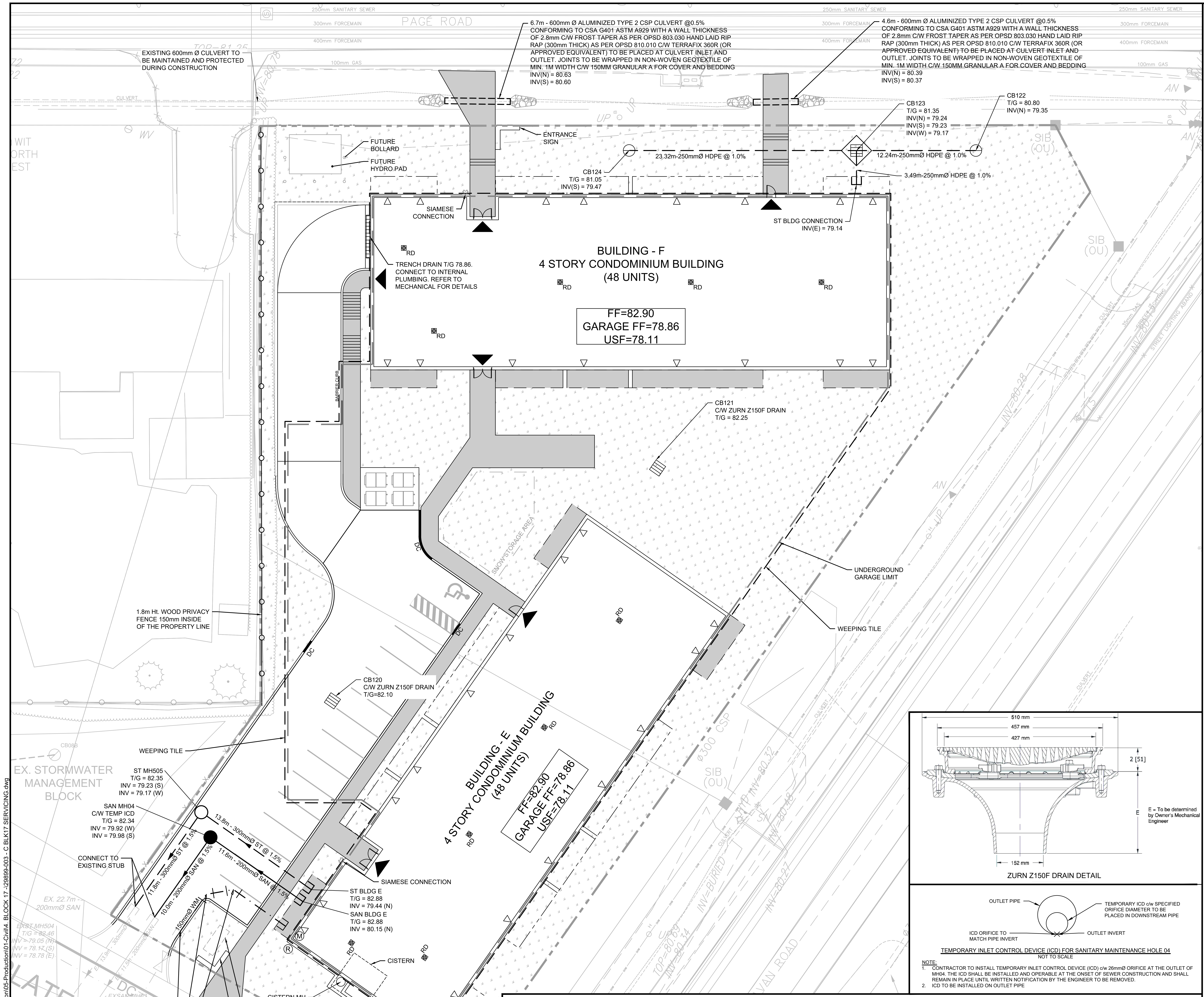


ZURN Z150F DRAIN DETAIL

TEMPORARY INLET CONTROL DEVICE (ICD) FOR SANITARY MAINTENANCE HOLE 04

NOT TO SCALE

NOTE:

1. CONTRACTOR TO INSTALL TEMPORARY INLET CONTROL DEVICE (ICD) c/w 26mmØ ORIFICE AT THE OUTLET OF MH04. THE ICD SHALL BE INSTALLED AND OPERABLE AT THE ONSET OF SEWER CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL WRITTEN NOTIFICATION BY THE ENGINEER TO BE REMOVED.
2. ICD TO BE INSTALLED ON OUTLET PIPE

WATERMAIN TABLE- EX. STUB TO BUILDING 'E'

PVC DR-18 CL.150

SIZE	NO.	DETAIL	FINISHED GRADE	TOP OF WM
150mmØ	1	CONNECT TO EXISTING WM	82.38	79.98
	2	45° BEND	82.35	79.95
	3	45° BEND	82.46	80.06
	4	CAP	82.88	80.48

NOTE: ALL WM CONSTRUCTED AT LESS THAN 2.4m BELOW FINISHED GRADE SHALL BE INSULATED IN ACCORDANCE WITH THE CITY OF OTTAWA'S REQUIREMENTS AS SET OUT IN THE CITY OF OTTAWA SPECIFICATION (F-4415).

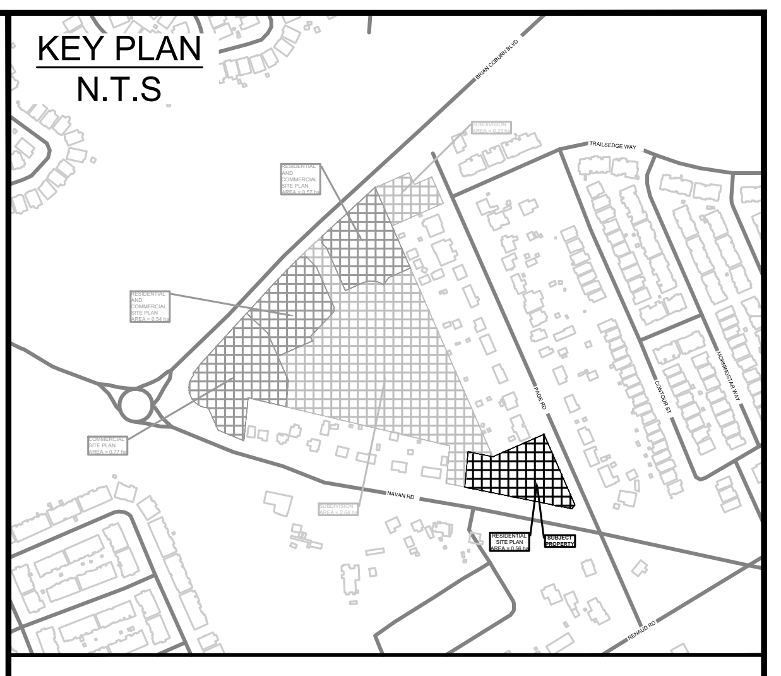
REAR YARD CATCH BASIN TABLE

Street Name	CB ID Number	T/G	Inlet					Outlet				Drop (m)	CATCH BASIN TYPE	ICD TYPE
			Pipe Dia. (mm)	Pipe Length (m)	Slope	Invert	Cover	Pipe Dia. (mm)	Pipe Length (m)	Invert	COVER (m)			
BLOCK 17	CB124	81.05	-	-	-	-		250	23.32	79.470	1.33		CATCH BASIN ELBOW PER CITY STANDARD S30	NO ICD
	CB122	80.80	-	-	-	-		250	12.24	79.350	1.20		CATCH BASIN ELBOW PER CITY STANDARD S30	NO ICD
	CB123	81.35	250 250	23.32 12.24	1.0% 1.0%	79.237 79.228	1.86 1.87	250	3.49	79.168	1.93	0.06	600x600mm PRECAST CONCRETE PER OPSD 705.010 C/W FRAME AND COVER AS PER CITY OF OTTAWA S19	Vortex_ICD_70
	CB125	82.00	-	-	-	-	-	200	1.90	80.200	1.60		600x600mm PRECAST CONCRETE PER OPSD 705.010 C/W FRAME AND COVER AS PER CITY OF OTTAWA S19	Vortex_ICD_70

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, AND ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS.
2. SERVICING DESIGN DRAWINGS TO BE READ IN CONJUNCTION WITH THE SITE SERVICING REPORT (SEPTEMBER 26, 2024) PREPARED BY J.L. RICHARDS & ASSOCIATES LIMITED (29899-003).
3. REFER TO GEOTECHNICAL REPORT NO. OTT-21004743-B0 DATED SEPTEMBER 13 2024, PREPARED BY EXP, 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.
4. UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE TO THE CENTRELINE OF SEWER OR MAINTENANCE HOLE.
5. THE NOMINAL DIAMETER OF PIPES ARE REFERRED TO IN PLAN VIEW.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION.
7. 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.
8. ALL CONNECTIONS TO EXISTING WATERMAIN STUBS (INCLUDING CONNECTIONS TO EXISTING WATERMAIN) TO BE COMPLETED BY CITY OF OTTAWA FORCES. CONTRACTOR TO PROVIDE EXCAVATION BACKFILLING, COMPACTION AND REINSTATEMENTS, IN ACCORDANCE WITH CURRENT CITY SPECIFICATIONS.
9. 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 BLANKINGS.
10. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
11. 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.
12. ALL WATERMAINS SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
13. WATERMAINS CROSSING BELOW OR OVER A SEWER SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWING W25 AND W25.2.
14. PROVIDE A MINIMUM OF 2.4m COVER ON ALL WATERMAINS AND WATER SERVICES. OTHERWISE PROVIDE THERMAL INSULATION AS PER THE CITY STANDARD DRAWING W22 (IN SHALLOW TRENCHES) AND W23 (AT OPEN STRUCTURES).
15. WATERMAIN THRUST BLOCKS TO BE CONSTRUCTED PER CITY STANDARD DRAWINGS W25.3 AND W25.4. THRUST BLOCKS ARE REQUIRED AT ALL BENDS, TEES, PLUGS, DEAD END CAPS, VALVES, REDUCERS, OR OTHER FITTINGS WHERE CHANGES OCCUR IN PIPE DIAMETER OR DIRECTION ALL IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
16. WATERMAIN SERVICE LATERAL TO BUILDING TO BE PVC DR-18.
17. ALL WATER DISTRIBUTION INFRASTRUCTURE TO BE PROVIDED WITH CATHODIC CORROSION PROTECTION AS PER CITY STANDARD W40.
18. 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. ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARD DRAWING NO. R10.
19. SANITARY AND STORM SERVICE LATERALS TO BUILDING TO BE PVC DR-28.
20. 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.
21. ALL FLOWS FROM THE UNDERGROUND PARKING GARAGE ARE TO BE CONVEYED TO THE SANITARY SERVICE. SANITARY FLOWS ARE TO BE PUMPED TO THE PROPOSED SANITARY SERVICE (TYP.)
22. 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 OPSS 410.07.16, 410.07.16.04 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.
23. SERVICES TO BE TERMINATED 1.0m FROM BUILDING WALL (TYPICAL). FOR STRUCTURAL WORK PROPOSED SERVICES TO BE SLEEVED THROUGH FOUNDATION WALL.
24. BUILDER TO INSTALL BACKWATER VALVES ON SANITARY AND STORM SERVICE LATERALS IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAIL DRAWINGS S14, S14.1, S14.2.
25. ALL STORM & SANITARY MAINTENANCE HOLES C/W FRAME AND COVER AS PER CITY STANDARD DRAWINGS 24 AND 24.1. SANITARY AND STORM MAINTENANCE HOLES TO HAVE WATERTIGHT COVERS PER OPSD 401.030.
26. 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. PLEASE REFER TO THE 'VERTICAL CONTROL POINTS' SKETCH PROVIDED BY STANTEC SEPTEMBER 27, 2024 FOR LOCATION AND DESCRIPTION OF CONTROL POINTS.
27. CATCH BASINS FOR LANDSCAPED APPLICATION (CB 122 & CB 124) TO BE IN ACCORDANCE WITH CITY STANDARD DETAIL S31. CB123 & CB125 TO BE 600X600mm PRECAST CONCRETE PER OPSD 705.010 C/W FRAME AND COVER AS PER CITY OF OTTAWA STANDARD DRAWING S19.
28. FILL USED FOR GRADING BENEATH THE BASE AND SUB-BASE LAYERS OF PAVED AREAS SHOULD CONSIST, UNLESS OTHERWISE SPECIFIED, OR CLEAN IMPORTED GRANULAR FILL, SUCH AS OPSS GRANULAR 'A', GRANULAR 'B' TYPE II OR SELECT SUB-GRADE MATERIAL. THIS MATERIAL SHOULD BE TESTED AND APPROVED PRIOR TO DELIVERY TO THE SITE. THE FILL SHOULD BE PLACED IN LIFTS NO GREATER THAN 300mm THICK AND COMPACTED USING SUITABLE COMPACTION EQUIPMENT FOR THE LIFT THICKNESS. FILL PLACED BENEATH THE PAVED AREAS SHOULD BE COMPACTED TO AT LEAST 100% OF ITS SPMDD.
29. CONCRETE CURB TO BE BARRIER TYPE AS PER STANDARD DRAWING SC1.1.
30. CONCRETE SIDEWALKS AND WALKWAYS TO BE CONSTRUCTED AS PER CITY OF OTTAWA DETAIL SC2 (OR SC1.4) AND SC4.
31. 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% SPMDD 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% SPD TO 1.0m BELOW EXISTING GRADE 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.
32. MATCH EXISTING ELEVATIONS AT PROPERTY LIMITS UNLESS OTHERWISE INDICATED ON THE GRADING PLAN. ENSURE POSITIVE DRAINAGE TOWARDS A SUITABLE OUTLET WHETHER INDICATED OR NOT.
33. THE CONTRACTOR SHALL PROVIDE ALL PAVEMENT MARKINGS AS SHOWN, INCLUDING HANDICAPPED PARKING SYMBOLS.
34. ALL GROUNDWATER PUMPED FROM THE SITE TO BE METERED AND A PERMIT TO TAKE WATER OBTAINED AS APPLICABLE.
35. CONTRACTOR TO INSTALL TEMPORARY INLET CONTROL DEVICE ORIFICE AS INDICATED ON THE DETAILS. THE ICD SHALL BE INSTALLED AND OPERABLE AT THE ONSET OF THE SANITARY SEWER CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL WRITTEN NOTIFICATION BY ENGINEER TO BE REMOVED.
36. CONTROLLED ROOF DRAINS ARE TO BE CONVEYED TO THE FREE FLOWING STORM SERVICE/SEWERS.
37. THE PROPOSED DRAINS CB 120 AND CB 121 ARE TO BE INSTALLED WITH THE FOLLOWING:
    - ZURN Z150F FLOW FORE HIGH PERFORMANCE PROMENANDE DECK DRAIN WITH ROTATABLE FRAME AND HEEL-PROOF GRATE. PIPE DIAMETER SHALL BE 150MM DIA. PVC.
    - INSTALLATION OF THE ZURN PRODUCT SHALL INCLUDE AT MINIMUM A 100mm CONCRETE COLLAR AROUND THE ZURN SYSTEM AND PIPE FROM THE TOP OF SLAB TO 50mm BELOW T/G ELEVATION.
    - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
40. PROPOSED PARKING AREA DRAINS, AND RAMP TRENCH DRAIN ARE TO BE CONVEYED TO THE PROPOSED CISTERN VIA THE INTERNAL PLUMBING, REFER TO THE MECHANICAL DRAWINGS FOR DETAILS.
41. PAVEMENT STRUCTURE: FROM GEOTECHNICAL INVESTIGATION PROPOSED RESIDENTIAL DEVELOPMENT 2983, 3053, AND 3079 NAVAN ROAD OTTAWA, ONTARIO" PREPARED BY EXP DATED SEPTEMBER 13 2024:
    - ACCESS LANE, FIRE TRUCK LANE, RAMP AND HEAVY TRUCK PARKING AREAS (ABOVE PODIUM DECK):
      40mm WEAR COURSE - 12.5 CAT B/HL3
      50mm BASE COURSE - 19.0 CAT B/HL8
      300mm - OPSS 1010 GRANULAR 'A' BASE CRUSHED STONE COMPACTED TO 100% SPMDD
      150mm RIGID INSULATION, WATERPROOFING MEMBRANE AND PROTECTION BOARD
    - ACCESS LANE, FIRE TRUCK LANE, RAMP AND HEAVY TRUCK PARKING AREAS (OUTSIDE PODIUM DECK)
      50mm WEAR COURSE - SP 12.5
      60mm BINDER COURSE - SP 19.0
      150mm - OPSS 1010 GRANULAR 'A' BASE CRUSHED STONE COMPACTED TO 100% SPMDD
      600mm - OPSS 1010 GRANULAR 'B' SUB-BASE TYPE II COMPACTED TO 100% SPMDD
42. REFER TO STRUCTURAL FOR DETAILS OF THE PAVEMENT STRUCTURE FOR THE RAMP INTO THE PARKING GARAGE.
43. PAVEMENT STRUCTURE TRANSITIONS: FROM GEOTECHNICAL INVESTIGATION PROPOSED RESIDENTIAL DEVELOPMENT 2983, 3053, AND 3079 NAVAN ROAD OTTAWA, ONTARIO" PREPARED BY EXP DATED SEPTEMBER 13 2024:
    - A 10 HORIZONTAL: 1 VERTICAL LONGITUDINAL TRANSITION ZONE SHOULD BE USED AT THE BOTTOM OF THE PAVEMENT STRUCTURES FOR ABUTTING PAVEMENT STRUCTURES WITH DIFFERENT PAVEMENT STRUCTURE THICKNESS.
    - THE JOINT BETWEEN A RIGID PAVEMENT STRUCTURE (CONCRETE PAVEMENT STRUCTURE) AND FLEXIBLE PAVEMENT STRUCTURE (ASPHALT PAVEMENT STRUCTURE) SHOULD BE SEALED WITH A POLYMER MODIFIED BITUMEN STRIP TO PREVENT INGRESS OF WATER, DIRT, VEGETATION AND OTHER PARTICLES THAT WOULD COMPROMISE THE PERFORMANCE OF THE PAVEMENTS AND TO WITHSTAND DIFFERENT RATES OF EXPANSION BETWEEN THE 2 DIFFERENT TYPES OF PAVEMENT STRUCTURES.

KEY PLAN
N.T.S



LEGEND

SITE BOUNDARY
UNDERGROUND GARAGE LIMITS
DEDICATED SNOW STORAGE AREA
EXISTING CATCH BASIN
CATCH BASIN c/w ICD
ELBOW REAR YARD CATCH BASIN AND LEAD
PROPOSED WATERMAIN, HYDRANT, CURB STOP VALVE & VALVE BOX AND REDUCER
EXISTING WATERMAIN, VALVE & HYDRANT
250mmØ STM — PROPOSED STORM SEWER & MAINTENANCE HOLE
300mmØ STM — EXISTING STORM SEWER & MAINTENANCE HOLE
150mmØ SAN — PROPOSED SANITARY SEWER & MAINTENANCE HOLE
225mmØ SAN — EXISTING SANITARY SEWER & MAINTENANCE HOLE
TRENCH DRAIN
PROPOSED WEEPING TILE
RD — ROOF DRAINS (REFER TO MECHANICAL)
CONCRETE BARRIER CURB
DC — DEPRESSED CURB
CONCRETE SIDEWALK
GRASSED AREA
AT SURFACE BALCONY
CANTILEVERED BALCONY
Ⓜ WATER METER
Ⓡ REMOTE METER
▲ BUILDING ENTRANCE
△ SLIDING DOOR AT BALCONY
1.8m Ht. WOOD PRIVACY FENCE
—x—x— EXISTING FENCE

No.	ISSUE / REVISION	DD/MM/YY
1	ISSUED FOR FIRST ENGINEERING SUBMISSION	26/09/24

VERIFY SHEET SIZE AND SCALES. THE BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING. 0 25mm

SCALE: 1:200

CLIENT:
GROUPE Heafey GROUP

CONSULTANT: www.jlrichards.ca
J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS

CONSULTANT:

PROFESSIONAL STAMP
LICENSED PROFESSIONAL ENGINEER
K.R. FERREY MORENO
100122432
2024-09-27
PROVINCE OF ONTARIO

PROJECT NORTH

PROJECT:
NAVAN RESIDENTIAL AND
COMMERCIAL BLOCK 17

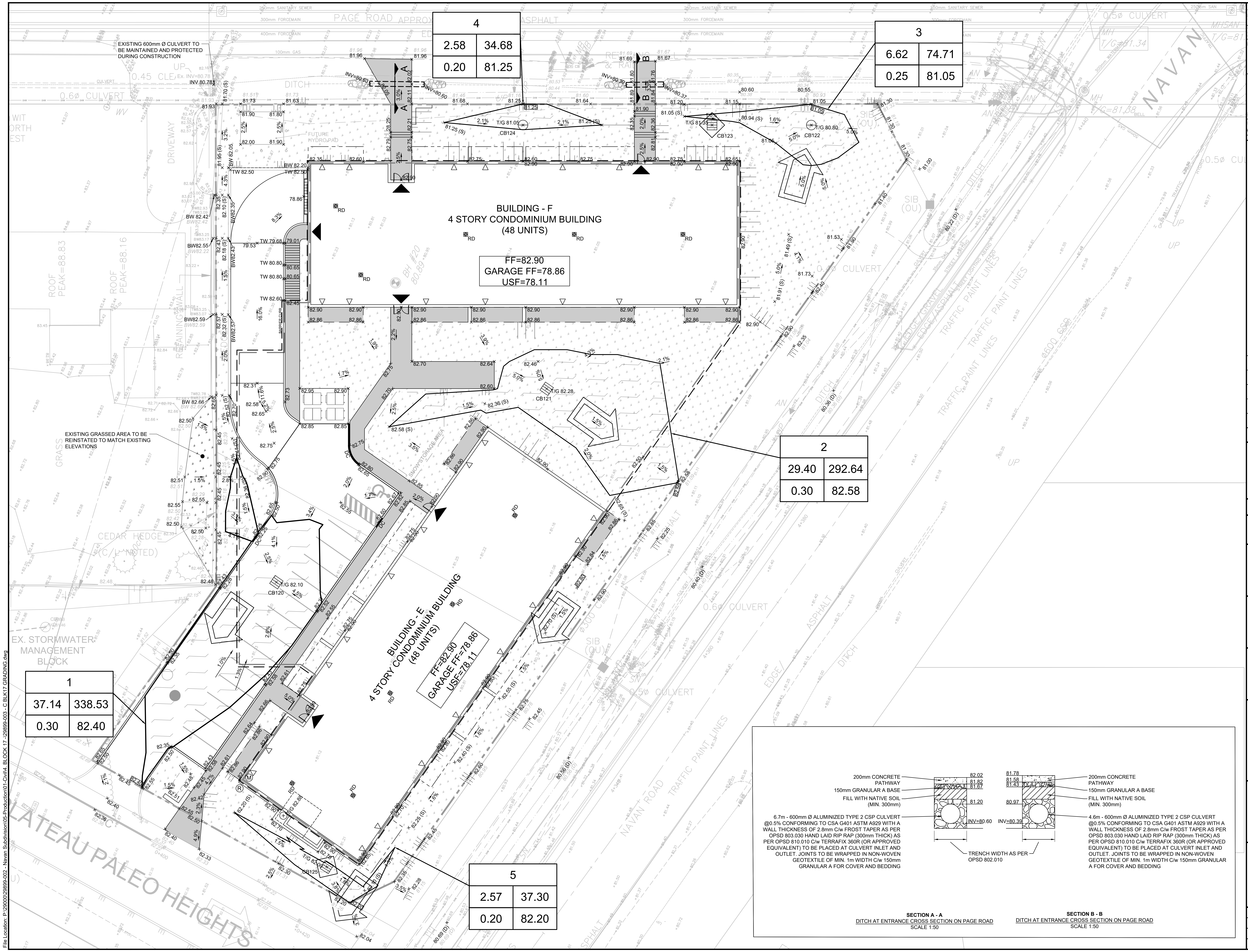
2983 NAVAN ROAD OTTAWA, ONTARIO

DRAWING:
SITE SERVICING PLAN

DESIGN: KF/FA
DRAWN: FA
CHECKED: KF
JLR #: 29899-003
DRAWING #: C01

PLOT DATE: September 27, 2024 11:35:02 AM
CITY FILE No. D07-16-21-0027

File Location: P:\29000\29899-002 - Navan Subdivision\05-Production\01-Civil\4. BLOCK 17 -\29899-003 - C BLK17 SERVICING.dwg



200mm CONCRETE PATHWAY
150mm GRANULAR A BASE
FILL WITH NATIVE SOIL (MIN. 300mm)
6.7m - 600mm Ø ALUMINIZED TYPE 2 CSP CULVERT @0.5% CONFORMING TO CSA G401 ASTM A929 WITH A WALL THICKNESS OF 2.8mm C/w FROST TAPER AS PER OPSD 803.030 HAND LAID RIP RAP (300mm THICK) AS PER OPSD 810.010 C/w TERRAFIX 360R (OR APPROVED EQUIVALENT) TO BE PLACED AT CULVERT INLET AND OUTLET. JOINTS TO BE WRAPPED IN NON-WOVEN GEOTEXTILE OF MIN. 1m WIDTH C/w 150mm GRANULAR A FOR COVER AND BEDDING

TRENCH WIDTH AS PER OPSD 802.010

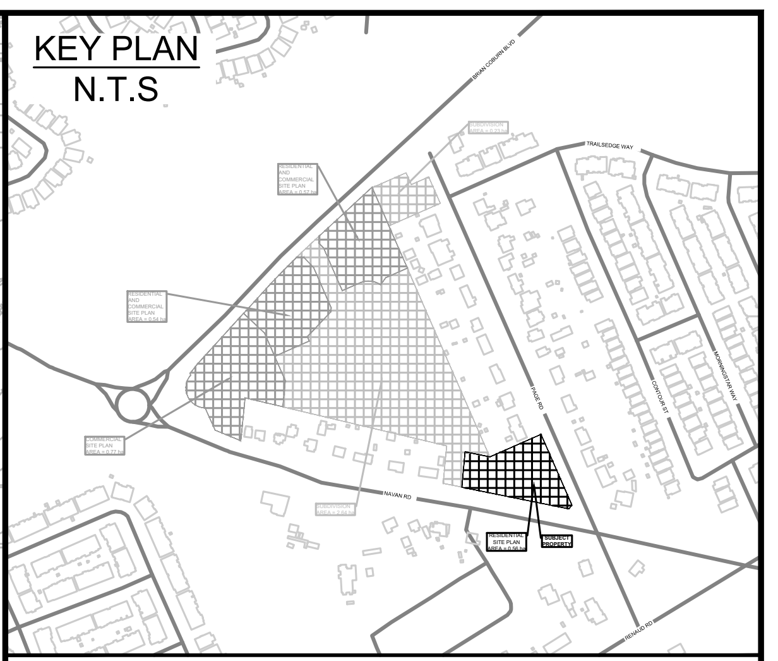
200mm CONCRETE PATHWAY
150mm GRANULAR A BASE
FILL WITH NATIVE SOIL (MIN. 300mm)
4.6m - 600mm Ø ALUMINIZED TYPE 2 CSP CULVERT @0.5% CONFORMING TO CSA G401 ASTM A929 WITH A WALL THICKNESS OF 2.8mm C/w FROST TAPER AS PER OPSD 803.030 HAND LAID RIP RAP (300mm THICK) AS PER OPSD 810.010 C/w TERRAFIX 360R (OR APPROVED EQUIVALENT) TO BE PLACED AT CULVERT INLET AND OUTLET. JOINTS TO BE WRAPPED IN NON-WOVEN GEOTEXTILE OF MIN. 1m WIDTH C/w 150mm GRANULAR A FOR COVER AND BEDDING

SECTION A - A
DITCH AT ENTRANCE CROSS SECTION ON PAGE ROAD
SCALE 1:50

SECTION B - B
DITCH AT ENTRANCE CROSS SECTION ON PAGE ROAD
SCALE 1:50

File Location: P:\29000\29899-002 - Navan Subdivision\05-Production\01-Civil\4. BLOCK 17 -\29899-003 - C BLK17 GRADING.dwg

KEY PLAN
N.T.S



LEGEND

▬ ▬ ▬	SITE BOUNDARY
▬ ▬	UNDERGROUND GARAGE LIMITS
×92.52	PROPOSED ELEVATION
92.52	PROPOSED SUBDIVISION ELEVATION
×92.52	PROPOSED HIGH POINT
×98.23	ORIGINAL SURVEY
┬┬┬	PROPOSED TERRACING (MAX 3:1)
1.5% →	SURFACE SLOPE
⇨	MAJOR/EMERGENCY OVERLAND FLOW DIRECTION (> 1:100 YR)
DC	DEPRESSED CURB
FF=86.25	FINISHED FLOOR ELEVATION
GARAGE FF =82.40	GARAGE FINISHED FLOOR ELEVATION
USF=1.65	UNDERSIDE OF FOOTING ELEVATION
▲	BUILDING ENTRANCE
△	SLIDING DOOR AT BALCONY
BH 5-12	BOREHOLE NUMBER
103.58	GROUND SURFACE ELEVATION (m)
{102.58}	GROUND WATER ELEVATION (m)
▭	MAXIMUM WATER LEVEL (STATIC)
	MAX. PONDING VOLUME (m³)
26	AREA ID
4.90 | 111.46	MAX. PONDING AREA (m²)
0.13 | 97.20	MAX. WATER LEVEL (STATIC)
	PONDING DEPTH (STATIC)
▨	AT SURFACE BALCONY
▭	CANTILEVERED BALCONY
═	CONCRETE BARRIER CURB
▬	CONCRETE SIDEWALK
▨	GRASSED AREA

No.	ISSUE / REVISION	DD/MM/YY
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SCALE: 1:200

CLIENT:
GROUPE Heafey GROUP

CONSULTANT: www.jlrichards.ca
J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS

CONSULTANT:

PROFESSIONAL STAMP
LICENSED PROFESSIONAL ENGINEER
K.R. FERREY MORENO
100122432
2024-09-27
PROVINCE OF ONTARIO

PROJECT NORTH

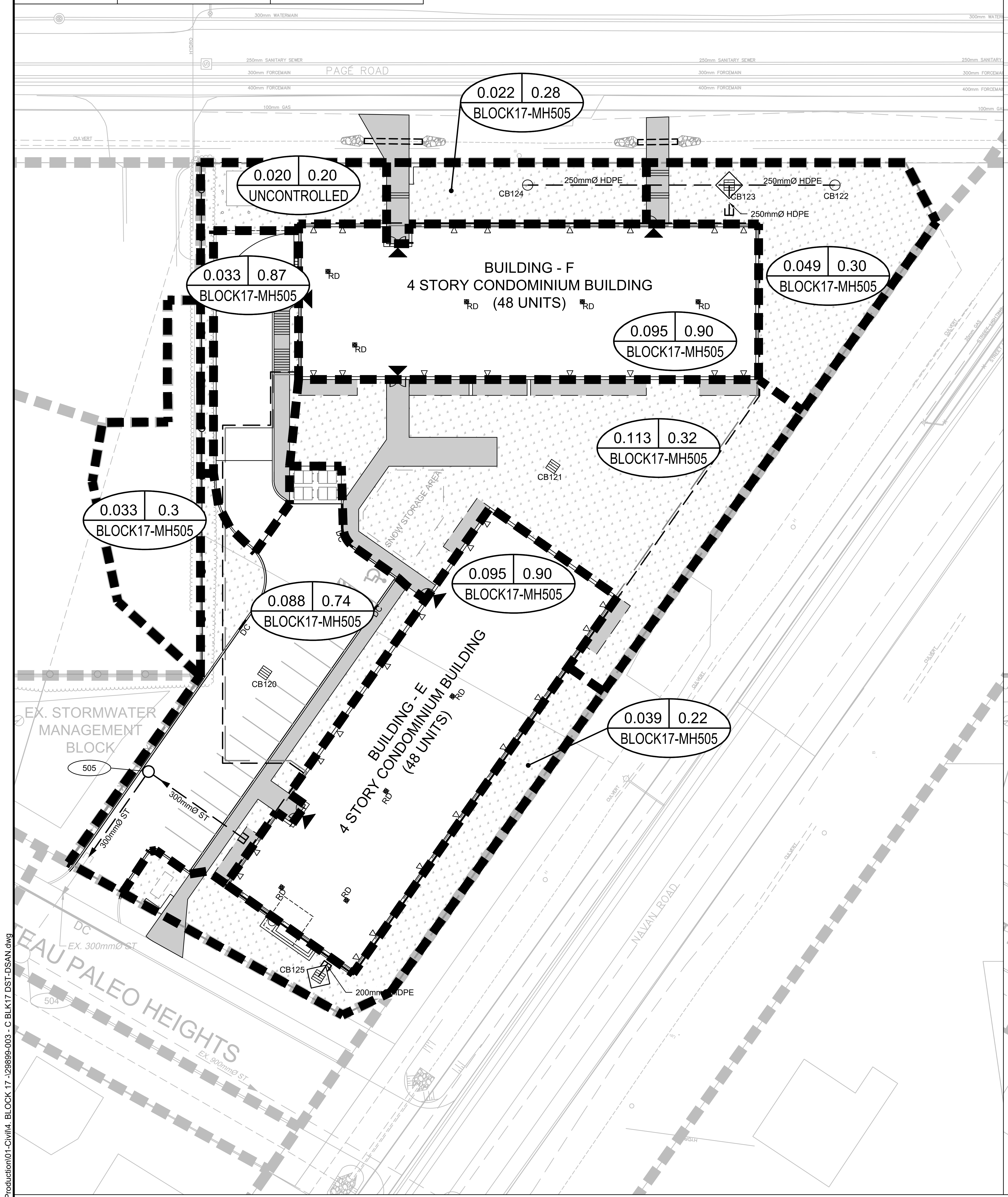
PROJECT:
NAVAN RESIDENTIAL AND COMMERCIAL BLOCK 17
2983 NAVAN ROAD OTTAWA, ONTARIO

DRAWING:
GRADING AND PONDING PLAN

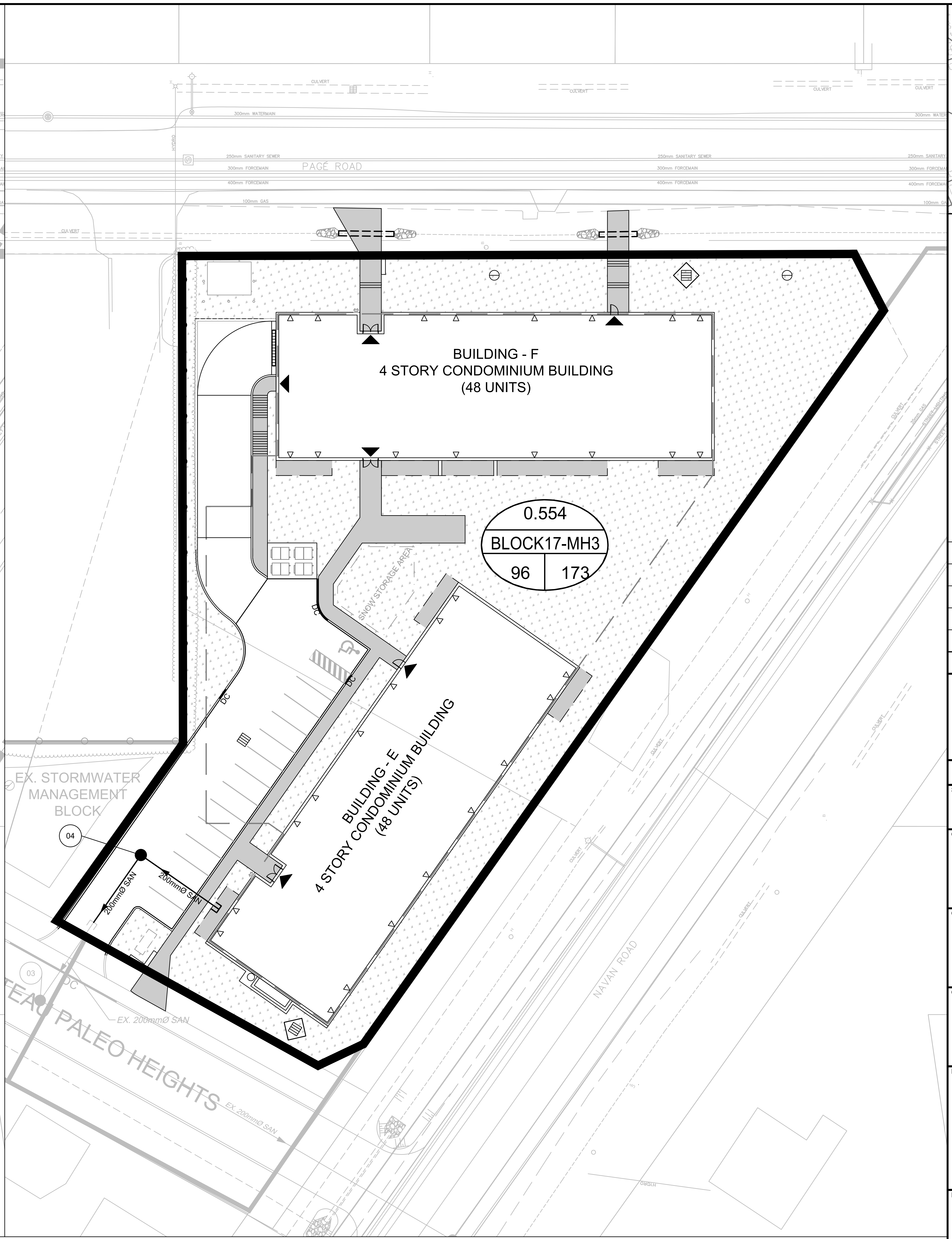
DESIGN:	KF/FA		
DRAWN:	FA	DRAWING #:	C02
CHECKED:	KF		
JLR #:	29899-003		

PLOT DATE:September 27, 2024 11:36:09 AM
CITY FILE No. D07-16-21-0027

	1:100 Year Storage Volume (m^3)	Roof Drain Release Rate (L/s)
Building E	49	2
Building F	49	2

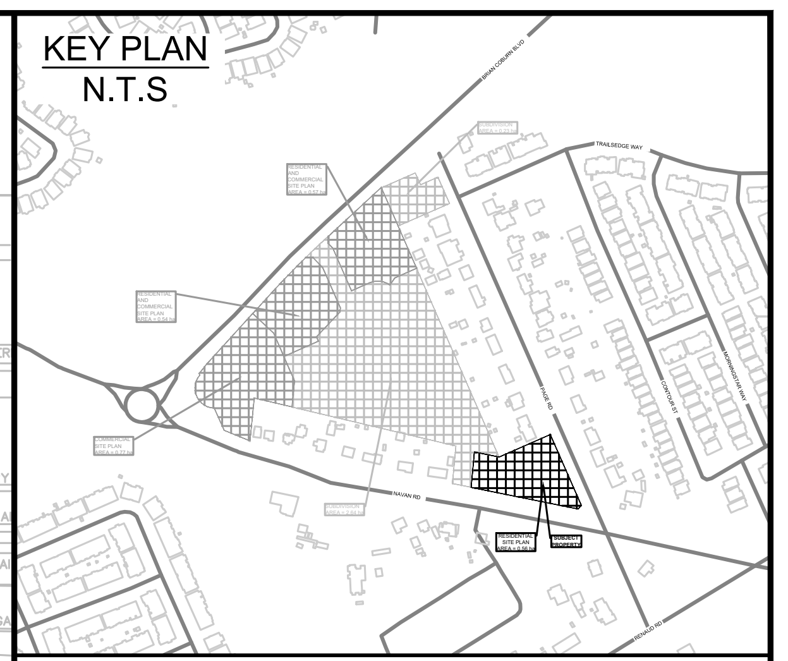


STORM DRAINAGE



SANITARY DRAINAGE

KEY PLAN
N.T.S



LEGEND

▬ ▪ ▪ ▬	SITE BOUNDARY
▬ ▬ ▬	PROPOSED STORM DRAINAGE BOUNDARY
⇨	MAJOR OVERLAND FLOW DIRECTION
A | C / MH-MH	AREA IN HECTARES RUNOFF COEFFICIENT PIPE REACH UPSTREAM CATCHBASIN TO DOWNSTREAM CATCHBASIN
▤	EXISTING CATCH BASIN
◈	CATCH BASIN c/w ICD
– –○– –○– –	ELBOW REAR YARD CATCH BASIN AND LEAD
300mmØ STM	PROPOSED STORM SEWER & MAINTENANCE HOLE
300mmØ STM	EXISTING STORM SEWER & MAINTENANCE HOLE
▬▬	PROPOSED SANITARY DRAINAGE BOUNDARY
A / MH-MH / C | P	AREA IN HECTARES PIPE REACH UPSTREAM MAINTENANCE HOLE TO DOWNSTREAM MAINTENANCE HOLE POPULATION NUMBER OF UNITS
200mmØ SAN	PROPOSED SANITARY SEWER & MAINTENANCE HOLE
225mmØ SAN	EXISTING SANITARY SEWER & MAINTENANCE HOLE

No.	ISSUE / REVISION	DD/MM/YY
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SCALE: 1:300

CLIENT:
GROUPE Heafey GROUP

CONSULTANT: www.jlrichards.ca
J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS

CONSULTANT:

PROFESSIONAL STAMP
K.R. FERREY MORENO
100122432
2024-09-27

PROJECT NORTH

PROJECT:
NAVAN RESIDENTIAL AND
COMMERCIAL BLOCK 17

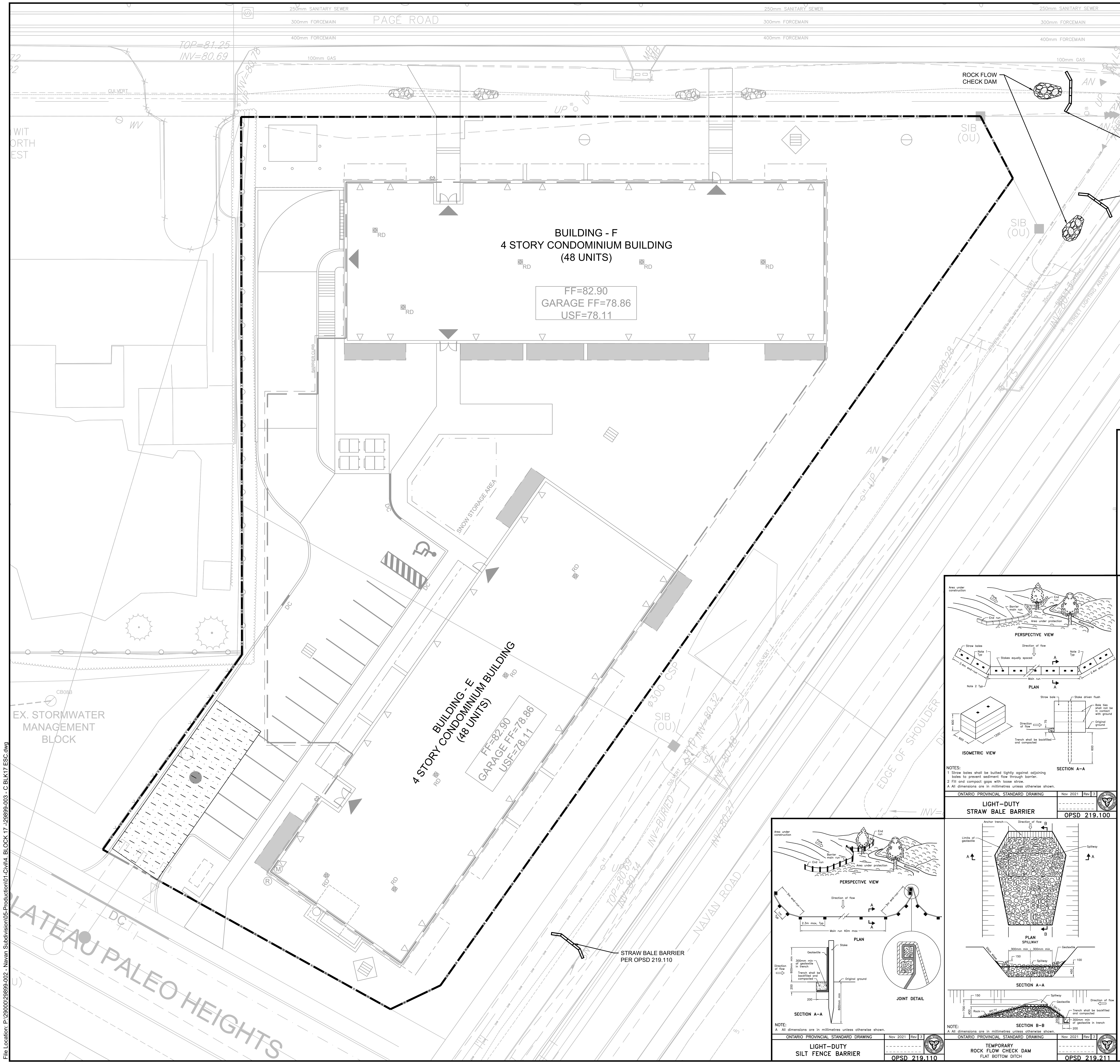
2983 NAVAN ROAD OTTAWA, ONTARIO

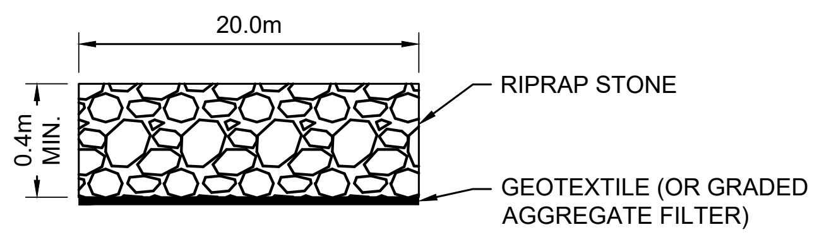
DRAWING:
STORM AND SANITARY DRAINAGE
PLANS

DESIGN: KF/FA
DRAWN: FA
CHECKED: KF
JLR #: 29899-003
DRAWING #: C03

PLOT DATE: September 27, 2024 11:37:02 AM
CITY FILE No. D07-16-21-0027

File Location: P:\29000\29899-002 - Navan Subdivision\05-Production\01-Civil\4. BLOCK 17 -\29899-003 - C BLK17 DST-DSAN.dwg





NOTE:
REFER TO NOTE #15 FOR DETAILS

MUD MAT DETAIL
(NTS)

EROSION AND SEDIMENTATION CONTROL SYSTEM (ESCS) REQUIREMENTS

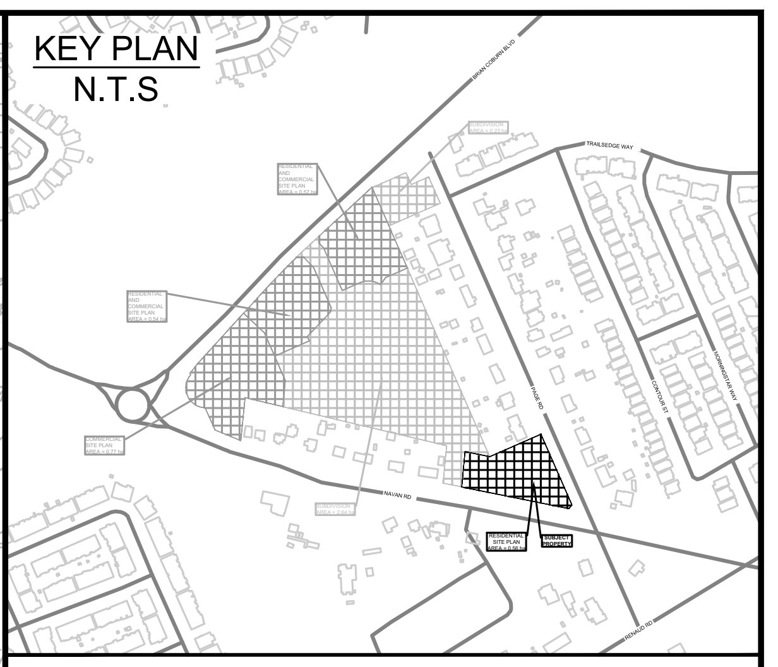
PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR IS REQUIRED TO CONSTRUCT AN EROSION AND SEDIMENTATION CONTROL SYSTEM (ESCS) ON-SITE (IN ADDITION TO THE PROPOSED MEASURES DEPICTED ON THIS DRAWING) TO CONVEY RAINWATER AND/OR PUMPED WATER PRIOR TO ITS DISCHARGE TO THE SURFACE AND/OR TO ANY NATURAL WATER COURSE 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 OPSS AND OPSD. SILT FENCE SHALL BE TO OPSD 219.110, STRAW BALE BARRIER TO OPSD 219.110 AND TEMPORARY ROCK FLOW CHECK DAMN TO OPSD 219.211.
15. A MUD MAT IS TO BE BUILT WHERE SHOWN 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

KEY PLAN
N.T.S



LEGEND

▬ ▪ ▪ ▬	SITE BOUNDARY
▤	EXISTING CATCH BASIN
◈	CATCH BASIN c/w ICD
⊖	ELBOW REAR YARD CATCH BASIN AND LEAD
○	STORM MAINTENANCE HOLE
○	EXISTING STORM MAINTENANCE HOLE
●	SANITARY MAINTENANCE HOLE
●	EXISTING SANITARY MAINTENANCE HOLE
—x—x—	EXISTING FENCE
▨	MUD MAT
	PROPOSED STRAW BALE BARRIER
	PROPOSED ROCK FLOW CHECK DAM
▬x▬x▬	PROPOSED SILT FENCE

No.	ISSUE / REVISION	DD/MM/YY
1	ISSUED FOR FIRST ENGINEERING SUBMISSION	26/09/24

VERIFY SHEET SIZE AND SCALES. THE BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING. 0 25mm

SCALE: 1:200

CLIENT: GROUPE Heafey GROUP

CONSULTANT: www.jlrichards.ca
J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS

CONSULTANT:

PROFESSIONAL STAMP:
LICENSED PROFESSIONAL ENGINEER
K.R. FERREY MORENO
100122432
2024-09-27
PROVINCE OF ONTARIO

PROJECT NORTH

PROJECT:

NAVAN RESIDENTIAL AND
COMMERCIAL BLOCK 17

2983 NAVAN ROAD OTTAWA, ONTARIO

DRAWING:

EROSION AND SEDIMENT
CONTROL PLAN

DESIGN: KF/FA
DRAWN: FA
CHECKED: KF
JLR #: 29899-003
DRAWING #: C04

PLOT DATE:September 27, 2024 11:37:47 AM
CITY FILE No. D07-16-21-0027

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