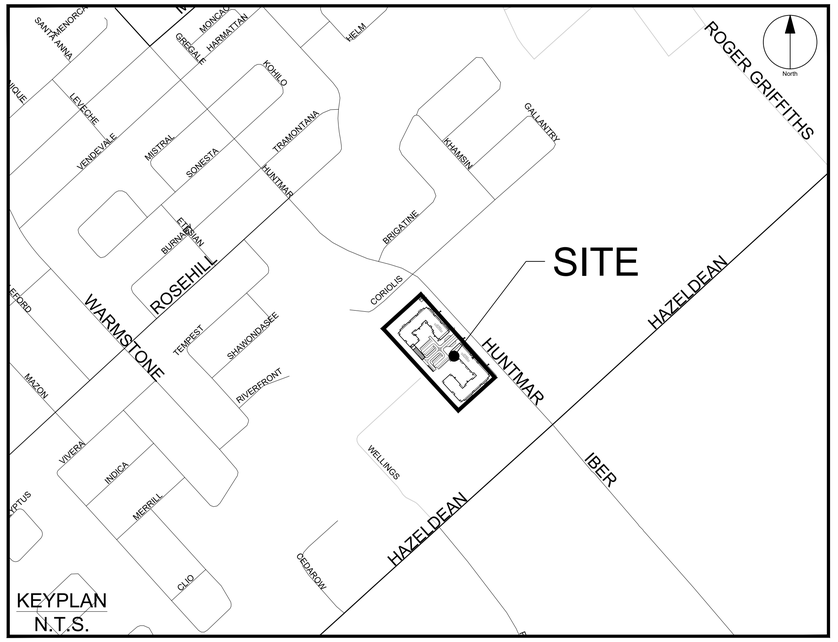
21/35 HUNTMAR DRIVE

CITY OF OTTAWA



IBI GROUP
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Sheet List Table	
Sheet Number	Sheet Title
000	COVER
C-001	GENERAL PLAN OF SERVICES
C-010	NOTES-LEGEND-CB DATA TABLE
C-200	GRADING PLAN
C-400	SANITARY DRAINAGE PLAN
C-500	STORM DRAINAGE PLAN
C-900	EROSION AND SEDIMENTATION CONTROL PLAN

NorthAMERICAN®
DEVELOPMENT GROUP
2851 John Street, Suite One, Markham, Ontario L3R 5R7 T: 905-968-3185

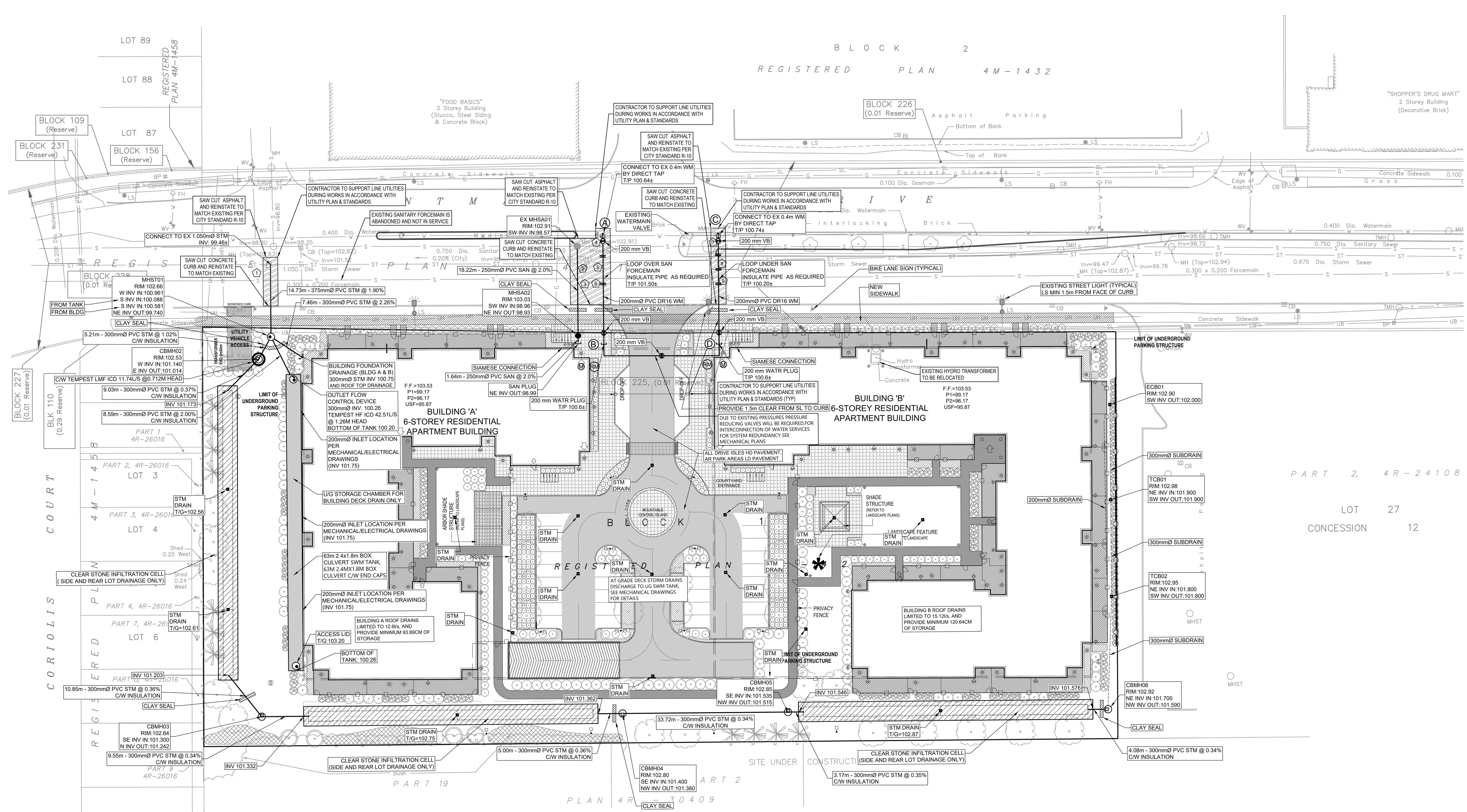
CONTRACT NO. 127134

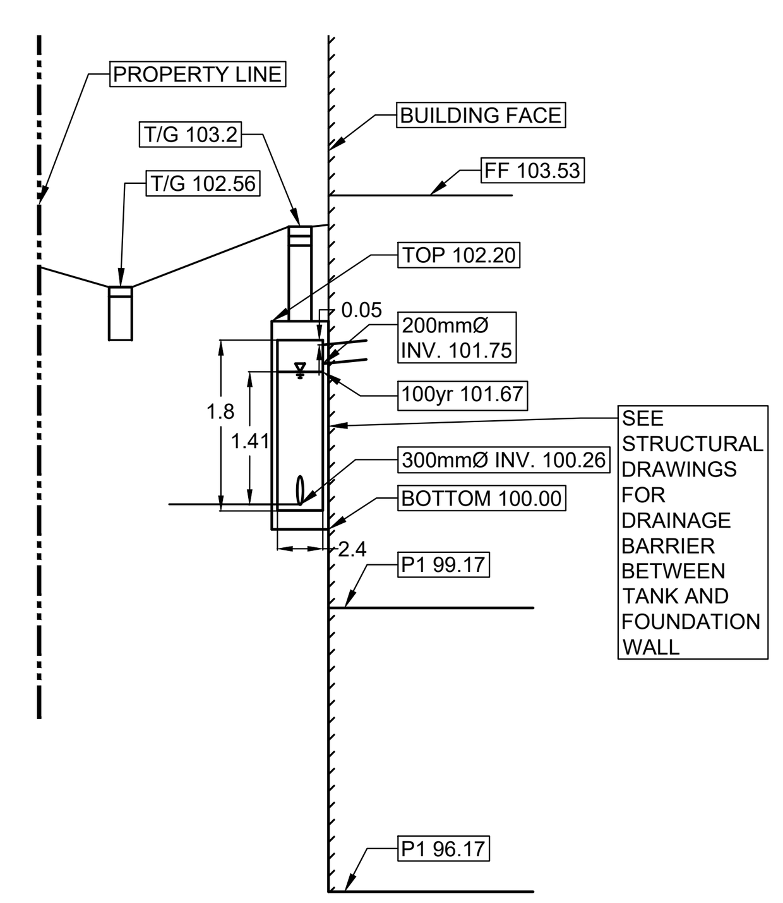
SPA SUBMISSION 2021-10-29
CITY FILE No. D07-12-21-0035
CITY PLAN No. 18424

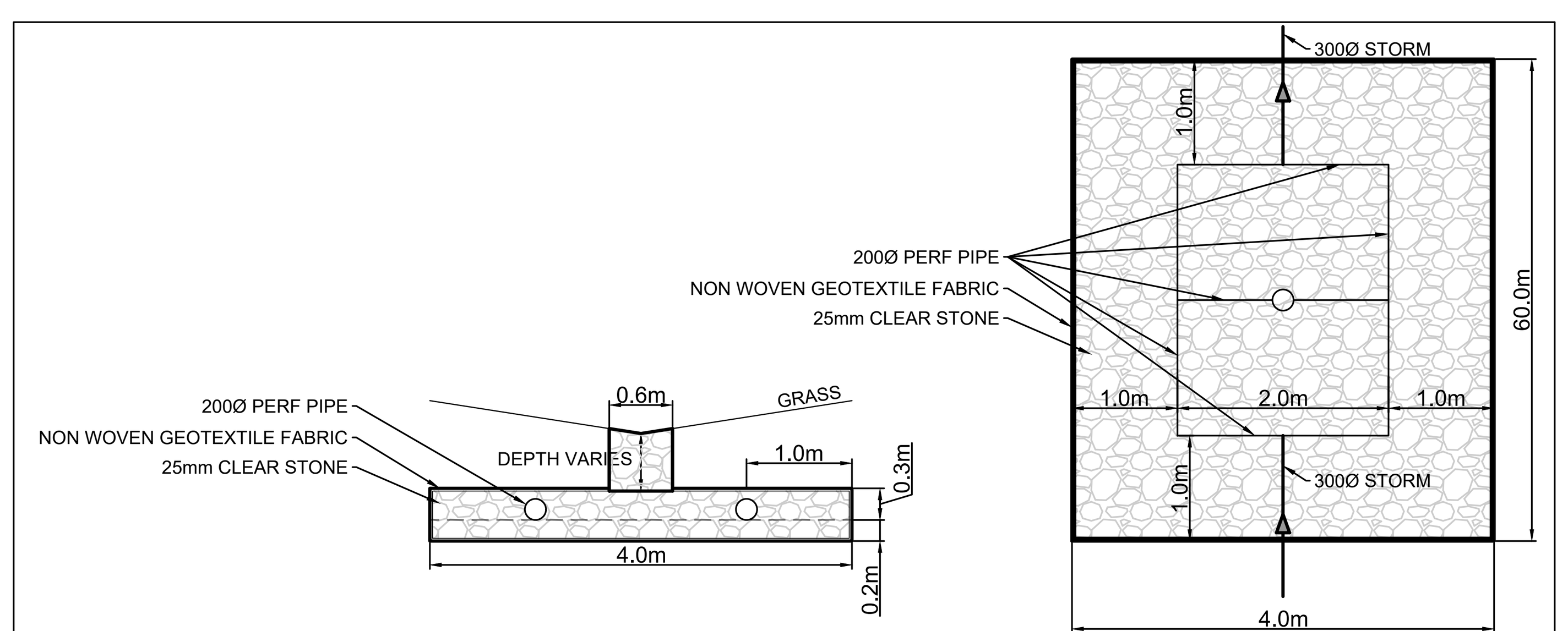
SCALE CHECK 10mm

File Location: J:\127134_21_Huntmar\7.0_Production\7.03_Design\04_Civil\Sheets\COVER.dwg Last Saved: October 29, 2021 by Ehennie Plotted: Friday, October 29, 2021 8:31:49 AM by Eric Hennie

ICD LOCATION (MH #)	RELEASE RATE (L/s)	HEAD (m)	ICD
SWM tank	42.51	1.26	Tempest LMF plate
CBMH2	11.74	0.71	Tempest LMF plate







INFILTRATION CELL DETAIL

CLIENT

NorthAMERICAN® DEVELOPMENT GROUP

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ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2021-02-16
2	SPA SUBMISSION	2021-06-30
3	SPA SUBMISSION	2021-08-17
4	SPA SUBMISSION	2021-10-29

SEE 010 FOR NOTES, LEGEND

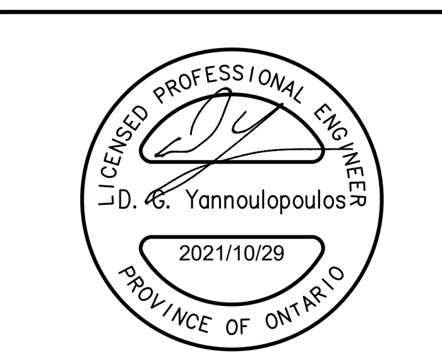
KEY PLAN

CONSULTANTS

Project Coordinator:
North American Development Group
Architect:
RLA Architecture
Surveyor:
Fairhall, Moffatt and Woodland ltd.
Geotechnical:
Paterson Group
Traffic:
JD Halpenny & Assoc.
Electrical:
Hammerschlag & Joffe Inc.
Landscape:
NAK Design Strategies

1:400

SEAL



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PROJECT
21/35 HUNTMAR DRIVE

PROJECT NO:
127134

DRAWN BY:	CHECKED BY:
EH	**DGY**
PROJECT MGR:	APPROVED BY:
DGY	**DGY**

SHEET TITLE
GENERAL PLAN OF SERVICES

SHEET NUMBER: C-001
ISSUE: 1

SCALE CHECK 1 in 10mm

File Location: J:\127134_21_Huntmar\7.0_Production\7.03_Design\04_Civil\Sheets\C-001 GENERAL PLAN OF SERVICES.dwg Last Saved: October 29, 2021 Plotted: Friday, October 29, 2021 8:31:54 AM

CITY FILE No. D07-12-21-0035

CITY PLAN No. 18424

CROSSING SCHEDULE

1	EX300x200 mm SAN	0.681 m	CLEARANCE OVER	375 mm ø STM
2	EX975 mm ø STM	0.262 m	CLEARANCE OVER	250 mm ø SAN
3	EX300x200 mm ø SAN	1.711 m	CLEARANCE OVER	250 mm ø SAN
4	200 mm ø W/M	1.324 m	CLEARANCE OVER	EX750 mm ø SAN
5	200 mm ø W/M	0.482 m	CLEARANCE OVER	EX975 mm ø STM
6	200 mm ø W/M	0.296 m	CLEARANCE OVER	EX300x200 mm ø SAN
7	200 mm ø W/M	1.152 m	CLEARANCE OVER	EX750 mm ø SAN
8	200 mm ø W/M	0.493 m	CLEARANCE OVER	EX975 mm ø STM
9	EX300x200 mm ø SAN	0.493 m	CLEARANCE OVER	200 mm ø W/M

PAVEMENT STRUCTURE **

CAR ONLY PARKING AREAS:

50mm WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
150mm BASE - OPSS GRANULAR "A" CRUSHED STONE
300mm SUBBASE - OPSS GRANULAR "B" TYPE II
SUBGRADE - EITHER FILL, IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II MATERIAL PLACED OVER IN SITU SOIL OR FILL

ACCESS LANES AND HEAVY TRUCK PARKING AREAS

40mm WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
50mm BINDER COURSE - HL-8 OR SUPERPAVE 19.0 ASPHALTIC CONCRETE
150mm BASE - OPSS GRANULAR "A" CRUSHED STONE
400mm SUBBASE - OPSS GRANULAR "B" TYPE II
SUBGRADE - EITHER FILL, IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II MATERIAL PLACED OVER IN SITU SOIL OR FILL

** REFER TO GEOTECHNICAL REPORT BY PATERSON GROUP. REV # 2 DATED DECEMBER 20, 2020

DRAWING NOTES

1.0 GENERAL

1.1 CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

1.2 DO NOT SCALE DRAWINGS.

1.3 CONTRACTOR TO REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE ARCHITECT OR DESIGN ENGINEER AS APPLICABLE.

1.4 USE ONLY THE LATEST REVISED DRAWINGS OR THOSE THAT ARE MARKED "ISSUED FOR CONSTRUCTION".

1.5 ALL CONSTRUCTION SHALL COMPLY WITH CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.

1.6 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS.

1.7 FOR LEGAL SURVEY INFORMATION REFER TO REGISTERED PLAN FROM FAIRHALL, MOFFATT AND WOODLAND LTD.

1.8 REFER TO SITE PLAN BY RLA ARCHITECTURE.

1.9 CONTRACTOR TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES AS IDENTIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.). DURING ALL PHASES OF THE SITE PREPARATION AND CONSTRUCTION THE MEASURES ARE TO BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL. SHOULD ANY ADDITIONAL MEASURES BE REQUIRED TO ADDRESS FIELD CONDITIONS THEY SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR THE CITY OF OTTAWA. SUCH ADDITIONAL MEASURES MAY INCLUDE BUT NOT BE LIMITED TO INSTALLATION OF SEDIMENT CAPTURE FILTER SOCKS WITHIN MANHOLES AND CATCHBASINS TO PREVENT SEDIMENT FROM ENTERING THE STRUCTURE AND INSTALLATION AND MAINTENANCE OF A LIGHT DUTY SILT FENCE BARRIER AS REQUIRED.

1.10 ALL IRON WORK ELEVATIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MINOR ADJUSTMENTS AS DETERMINED BY THE ENGINEER.

1.11 ALL CONCRETE CURBS AND SIDEWALKS TO CONFORM TO O.P.S. AND CONSTRUCTED TO CITY STANDARDS. ALL ONSITE CURBS TO BE BARRIER TYPE, WITH DEPRESSIONS AS NOTED.

1.12 ALL CONCRETE SHALL BE "NORMAL PORTLAND CEMENT" IN ACCORDANCE WITH O.P.S.S. 1350 AND SHALL ACHIEVE A MINIMUM STRENGTH OF 30MPa AT 28 DAYS.

1.13 ALL CONSTRUCTION TRAFFIC TO ACCESS SITE FROM HUNTMAR DRIVE.

1.14 FOR GEOTECHNICAL REPORT SEE GEOTECHNICAL INVESTIGATION BY PATERSON GROUP. REPORT PG5006-1 REVISION 2 DATED DECEMBER 1, 2020. EXISTING MONITORING WELLS DOCUMENTED IN SECTION 4.1 OF THE GEOTECHNICAL INVESTIGATION WILL BE DECOMMISSIONED PER MOE REQUIREMENTS PRIOR TO COMMENCING CONSTRUCTION.

1.15 CONTRACTOR TO PROTECT EXISTING INFRASTRUCTURE AND PROPERTY SUCH AS TREES, PARKING METERS, SIDEWALKS, CURBS, ASPHALT, AND STREET SIGNS FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR TO PAY THE COST TO REINSTATE OR REPLACE ANY DAMAGED INFRASTRUCTURE OR PROPERTY TO THE SATISFACTION OF THE CITY.

1.16 THE POSITION OF POLE LINES, CONDUITS, WATERMAIN, SEWERS, AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK THE CONTRACTOR SHALL INFORM ITSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, SHALL PROTECT ALL UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

1.17 CONTRACTOR TO SUPPLY SUITABLE FILL MATERIAL WHERE REQUIRED TO ROUGH GRADE THE SITE. ALL IMPORTED FILL MATERIAL TO BE CERTIFIED AS ACCEPTABLE BY THE GEOTECHNICAL ENGINEER.

1.18 CONTRACTOR TO HAUL EXCESS MATERIAL OFFSITE AS NECESSARY TO GRADE SITE TO MEET THE PROPOSED GRADES. ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY ENGINEER. ENGINEER TO DETERMINE APPROPRIATE DISPOSAL METHOD/LOCATION.

1.19 FILL MATERIAL WITHIN THE PARKING LOT AND BUILDING PAD AREAS, AND SUPPORTING BUILDING FOUNDATIONS SHALL BE COMPACTED TO 98% STANDARD MODIFIED PROCTOR DENSITY AND TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.

1.20 ALL COMPACTION METHODS TO BE PERFORMED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER TO INCLUDE BUT NOT BE LIMITED TO THE THICKNESS OF LIFTS, AND COMPACTION EQUIPMENT USED.

1.21 ALL DISTURBED BOULEVARDS TO BE REINSTATED WITH SOD ON 100mm TOPSOIL.

1.22 UTILITY DUCTS TO BE INSTALLED PRIOR TO ROAD BASE CONSTRUCTION.

1.23 CLAY DIKES TO BE INSTALLED WHERE INDICATED ON THE DRAWINGS OR AS APPROVED AND DIRECTED BY THE GEOTECHNICAL ENGINEER ALL IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.

1.24 BACKWATER VALES, PER CITY STANDARDS S14, S14.1 AND S14.2 RE TO BE INSTALLED FOR ALL STORM AND SANITARY SERVICE CONNECTIONS.

1.25 EXISTING STREET LIGHT (TYPICAL) LS MIN 1.5M FROM FACE OF CURB.

2.0 SANITARY

2.1 ALL SANITARY SEWER MAINS TO BE CSA CERTIFIED, BELL AND SPIGOT TYPE. ONLY FACTORY FITTINGS TO BE USED. SEWER TO BE INSTALLED AS PER OSPD 1005.01. SANITARY SEWER MATERIALS TO BE: 250mmØ AND SMALLER - PVC DR 35

2.2 ALL SANITARY MAINTENANCE HOLES TO BE 1.2m DIAMETER AS PER CITY OF OTTAWA STANDARDS COMPLETE WITH BENCHING, RUNGS, FRAME AND COVER, DROP PIPES AND LANDINGS WHERE NEEDED.

2.3 SANITARY MANHOLE COVERS TO BE CITY OF OTTAWA STD. S25 (MOD. OPSD. 401.020). SANITARY MANHOLE COVER TO BE CLOSED COVER TYPE, AS PER CITY STANDARD S24.

2.4 SANITARY SEWER LEAKAGE TEST AND CCTV INSPECTION SHALL BE COMPLETED AS PER CITY SPECIFICATIONS PRIOR TO INSTALLATION OF BASE COURSE ASPHALT.

2.5 ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.

2.6 CONNECTION TO THE EXISTING SANITARY SEWER TO BE INCLUDED IN THE COST FOR SANITARY SEWER INSTALLATION. THIS INCLUDES REINSTATEMENT OF ROAD CUTS TO CITY STANDARDS.

2.7 ALL SANITARY CONNECTION TO INCLUDE BACKWATER VALVE TYPE 1 PER CITY STANDARD S14.1

3.0 STORM

3.1 ALL STORM SEWERS TO BE CSA CERTIFIED, BELL AND SPIGOT TYPE. ALL STORM SEWERS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. ONLY FACTORY FITTINGS TO BE USED. STORM SEWER MATERIALS TO BE : 375mmØ AND SMALLER - PVC DR 35 - 450mmØ AND LARGER - 100-D REINFORCED CONCRETE. UNLESS NOTED OTHERWISE

3.2 ALL STORM MAINTENANCE HOLES TO BE SIZED IN ACCORDANCE WITH THE PLANS AND AS PER CITY OF OTTAWA STANDARDS COMPLETE WITH BENCHING, RUNGS, AND FRAME AND COVER.

3.3 STORM MH COVERS TO BE OPEN TYPE, AS PER CITY STANDARD S24, FRAMES TO BE PER CITY OF OTTAWA STD. S25. CONTRACTOR TO INSTALL FILTER FABRIC UNDER STORM MH COVER UNTIL SODDING IS COMPLETE.

3.4 STORM MAINTENANCE HOLES TO BE OPSD, SIZE AS SPECIFIED, TAPER TOP.

3.5 ALL CATCH BASINS TO BE AS PER OPSD 705.010, FRAME & FISH TYPE GRATE AS PER CITY OF OTTAWA STD. S19.1.

3.6 ANY STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.

3.7 CONNECTION TO THE EXISTING STORM SEWER TO BE INCLUDED IN THE COST FOR STORM SEWER INSTALLATION. THIS INCLUDES REINSTATEMENT OF ROAD CUT TO CITY STANDARDS.

3.8 CONTRACTOR TO PROVIDE IPEX-TEMPEST MHF ICD'S SHOP DRAWINGS, OR EQUIVALENT, FOR ENGINEERS REVIEW PRIOR TO ORDERING ICD'S.

3.9 ALL STORM CONNECTION TO INCLUDE FOUNDATION BACKWATER VALVE TYPE 1 PER CITY STANDARD S14.

3.10 LANDSCAPE SUBDRAIN AND APPURTENANCES TO BE INSTALLED PER CITY OF OTTAWA STANDARDS INCLUDING BUT NOT LIMITED TO S29, S30, S31

4.0 WATER

4.1 ALL WATERMAINS 100mmØ OR GREATER TO BE PVC DR 18, LESS THAN 100mm Ø TO BE COPPER OR APPROVED EQUAL WITH MINIMUM COVER OF 2.4m AND INSTALLED PER CITY OF OTTAWA STANDARDS. ALL DOMESTIC WATER SERVICES ARE TO BE 25mmØ.

4.2 THRUST BLOCKS TO BE INSTALLED AT ALL BENDS, TEES, AND CAPS ALL AS PER OPSD 1103.01 AND 1103.02.

4.3 CONTRACTOR TO CONDUCT PRESSURE AND LEAKAGE TESTING OF ALL WATERMAINS AND DISINFECT AND CHLORINATE ALL WATERMAINS TO THE SATISFACTION OF M.O.E. AND THE CITY OF OTTAWA.

4.4 TRACER WIRE TO BE INSTALLED ALONG THE FULL LENGTH OF WATERMAIN AND ATTACHED TO EACH MAIN STOP AS PER CITY OF OTTAWA STANDARDS.

4.5 ALL COMPONENTS OF THE WATER DISTRIBUTION SYSTEM SHALL BE CATHODICALLY PROTECTED AS PER CITY OF OTTAWA STANDARDS.

4.6 ALL VALVES & VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLIES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS.

4.7 ANY WATERMAIN WITH LESS THAN 2.4m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER. OR IN CLOSE PROXIMITY TO OPEN STRUCTURES INSULATE PER W23.

4.8 CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THE WATER PERMIT FROM THE CITY OF OTTAWA AND PAYMENT OF ANY FEES ASSOCIATED WITH SECURING THE WATER PERMIT. OWNER IS RESPONSIBLE FOR REIMBURSING THE CONTRACTOR FOR THE ACTUAL COST OF ACQUIRING THE WATER PERMIT.

4.9 CONNECTION TO EXISTING WATERMAIN TO BE INCLUDED IN THE COST FOR THE WATERMAIN INSTALLATION. THIS COST INCLUDES REINSTATEMENT OF ROAD CUTS TO CITY STANDARDS.

4.10 ALL WATERMAIN CROSSINGS TO BE COMPLETED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2

5.0 PARKING LOT AND WORK IN PUBLIC RIGHTS OF WAY

5.1 CONTRACTOR TO REINSTATE ROAD CUTS PER CITY OF OTTAWA STANDARD R-10.

5.2 THE CONTRACTOR SHALL PREPARE A TRAFFIC MANAGEMENT PLAN FOR REVIEW AND APPROVAL BY THE CITY OF OTTAWA. CONTRACTOR TO MAINTAIN TRAFFIC FLOW DURING THE ENTIRE CONSTRUCTION PERIOD. MAINTENANCE OF ROAD CUTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PROVISION OF FLAGMEN, DETOURS AS NECESSARY, BARRICADES AND SIGNS TO THE FULL SATISFACTION OF THE ENGINEER AND ROAD AUTHORITY SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

5.3 CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING, TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL.

5.4 FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS.

5.5 CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR B MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOETCHNICAL ENGINEER. CONTRACTOR TO PROVIDE ENGINEER WITH SAMPLES OF GRANULAR B MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.

5.6 GRANULAR A MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL ENGINEER OF GRANULAR B PLACEMENT.

5.7 ASPHALT MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL ENGINEER OF GRANULAR A PLACEMENT.

5.8 CONTRACTOR TO SUPPLY, PLACE AND COMPACT ASPHALT MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. CONTRACTOR TO PROVIDE ENGINEER WITH SAMPLES OF ASPHALT MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER THAT THE MATERIAL MEETS THE REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.

5.9 CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS, AND FOR PROVIDING THE ENGINEER WITH VERIFICATION PRIOR TO PLACEMENT.

5.10 PAVEMENT STRUCTURE (MATERIAL TYPES AND THICKNESSES) FOR HEAVY DUTY AND LIGHT DUTY AREAS TO BE AS SPECIFIED IN THE GEOTECHNICAL REPORT AND SHOWN ON THE PLANS.

LEGEND:

● MHSA3A	SANITARY MANHOLE STORM
⊙ MHST01	MANHOLE
CB01	CATCHBASIN
CBMH01	CATCHBASIN MANHOLE
CBMH02	CATCHBASIN MANHOLE C/W ICD
▪ ECB01	REAR YARD "END" CATCHBASIN
-------------	SUBDRAIN
200mmØ SAN	SANITARY SEWER
300mmØ STM	STORM SEWER
VB	VALVE AND VALVE BOX
200Ø WATERMAIN	WATERMAIN
—--—‖—‖--——	VERTICAL BEND LOCATION
Ⓜ	METER
RM	REMOTE METER
2R	NUMBER OF RISERS

FAIRHALL, MOFFATT AND WOODLAND LTD.
TOPOGRAPHIC LEGEND

■	- SURVEY MONUMENT FOUND
SIB	- STANDARD IRON BAR
SSIB	- SHORT STANDARD IRON BAR
IB	- IRON BAR
CP	- CONCRETE PIN
DIA.	- DIAMETER
BLK	- BLOCK
PIN	- PROPERTY IDENTIFIER NUMBER
CB	- CATCH BASIN
○ MH	- MANHOLE
○ MHST	- STORM MANHOLE
○ MHSA	- SANITARY MANHOLE
○ WMH	- WATER MANHOLE
○ TMH	- TRAFFIC MANHOLE
○ HMH	- HYDRO MANHOLE
FH	- FIRE HYDRANT
☒ TCB	- TRAFFIC CONTROL BOX
WV	- WATER VALVE
TL	- TRAFFIC LIGHT
● LS	- LAMP STANDARD
⊗ UP	- UTILITY POLE
☒ BP	- BELL PEDESTAL
○ MW	- MONITORING WELL
	- BOREHOLE
	- BOLLARD
	- GUY WIRE AND ANCHOR
	- SIGN
	- DECIDUOUS TREE
═══	- CURB
—G—G—G—	- GASMAIN
—S—S—S—	- SANITARY SEWER
—ST—ST—	- STORM SEWER
—W—W—W—W—	- WATERMAIN
—UB—UB—	- UNDERGROUND BELL
—UH—UH—	- UNDERGROUND HYDRO
—SL—SL—	- STREET LIGHTING
—C—C—C—	- ROGERS CABLE
—V—V—V—V—	- TRAFFIC
	- EDGE OF TREES

STORM STRUCTURE TABLE

NAME	RIM ELEV.	INVERT IN	INVERT IN ASBUILT	INVERT OUT	INVERT OUT ASBUILT	DESCRIPTION
MHST01	102.66	W100.961		99.974		1200Ø OPSD 701.010
		W100.540				
		SW 100.088				
CBMH02	102.53	101.164		101.014		1200Ø OPSD 701.010
CBMH03	102.64	101.300		101.240		1200Ø OPSD 701.010
CBMH04	102.80	101.400		101.380		1200Ø OPSD 701.010
CBMH05	102.85	101.540		101.520		1200Ø OPSD 701.010
CBMH06	102.92	101.700		101.590		1200Ø OPSD 701.010

WATERMAIN SCHEDULE

	Station	Description	Finished Grade	Top of Waterain	As Built Waterain
A	0+000.00	TEE 400mmX200mm	102.91	100.51	
	0+001.10	VB 200mm	102.90	100.50	
	0+004.06	V-BEND 200mm	102.94	100.54	
	0+004.36	V-BEND 200mm	102.94	101.09	
	0+009.71	V-BEND 200mm	102.84	101.50	
	0+010.01	V-BEND 200mm	102.84	100.44	
	0+019.83	VB 200mm	103.04	100.64	
B	0+022.17	CAP 200mm	103.05	100.65	
C	0+000.00	TEE 400mmX200mm	103.08	100.68	
	0+001.10	VB 200mm	103.13	100.73	
	0+003.79	V-BEND 200mm	103.24	100.84	
	0+004.09	V-BEND 200mm	103.26	101.14	
	0+006.75	V-BEND 200mm	103.11	101.14	
	0+007.05	V-BEND 200mm	103.07	100.20	
	0+009.71	V-BEND 200mm	102.95	100.20	
	0+010.01	V-BEND 200mm	102.94	100.54	
	0+019.83	VB 200mm	103.13	100.73	
D	0+022.17	CAP 200mm	103.01	100.61	

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DEVELOPMENT GROUP

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ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2021-02-16
2	SPA SUBMISSION	2021-06-30
3	SPA SUBMISSION	2021-08-17
4	SPA SUBMISSION	2021-10-29

SEE 010 FOR NOTES, LEGEND

KEY PLAN

CONSULTANTS

Project Coordinator:
North American Development Group
Architect:
RLA Architecture
Surveyor:
Fairhall, Moffatt and Woodland ltd.
Geotechnical:
Paterson Group
Traffic:
JD Halpenny & Assoc.
Electrical:
Hammerschlag & Joffe Inc.
Landscape:
NAK Design Strategies

SEAL

LICENSED PROFESSIONAL ENGINEER
D. G. Yannoulopoulos
2021/10/29
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PROJECT
21/35 HUNTMAR DRIVE

PROJECT NO: 127134	
DRAWN BY: **EH**	CHECKED BY: **DGY**
PROJECT MGR: **DGY**	APPROVED BY: **DGY**

SHEET TITLE
GENERAL NOTES,
LEGEND AND TABLES

SHEET NUMBER	ISSUE
C-010	1

SCALE CHECK
1 in
10mm

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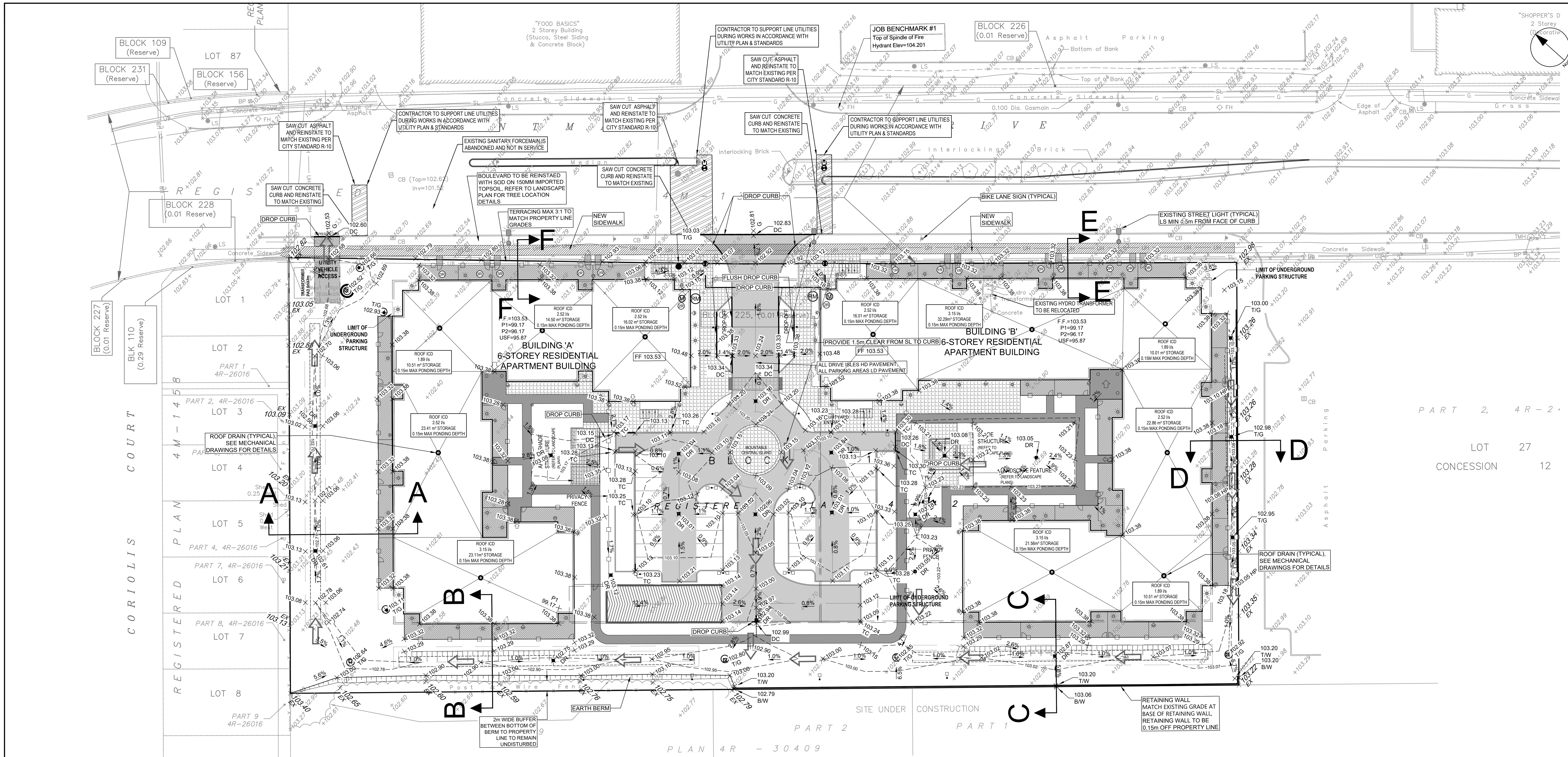
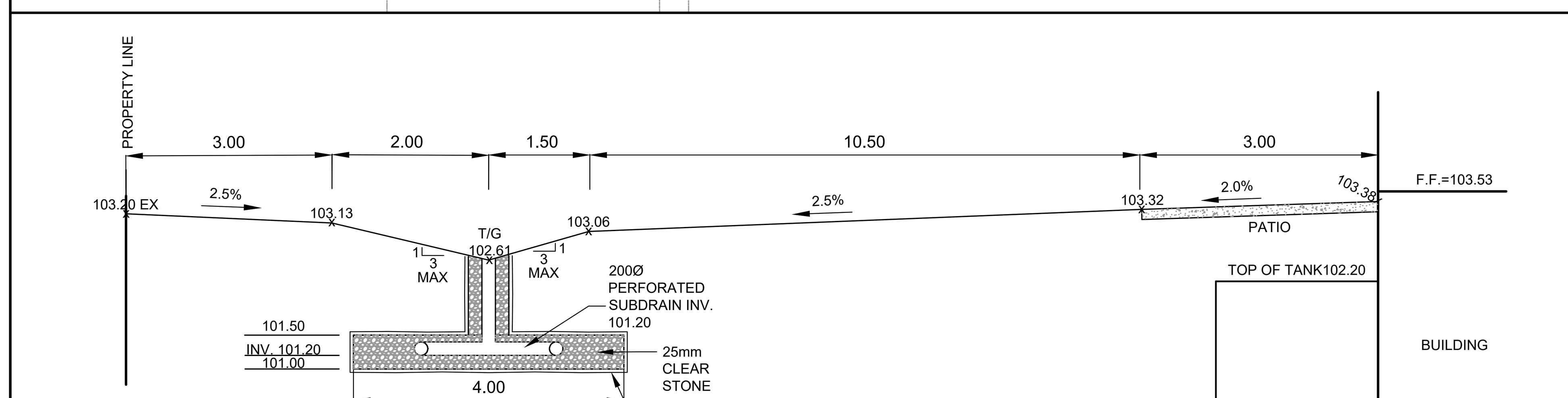
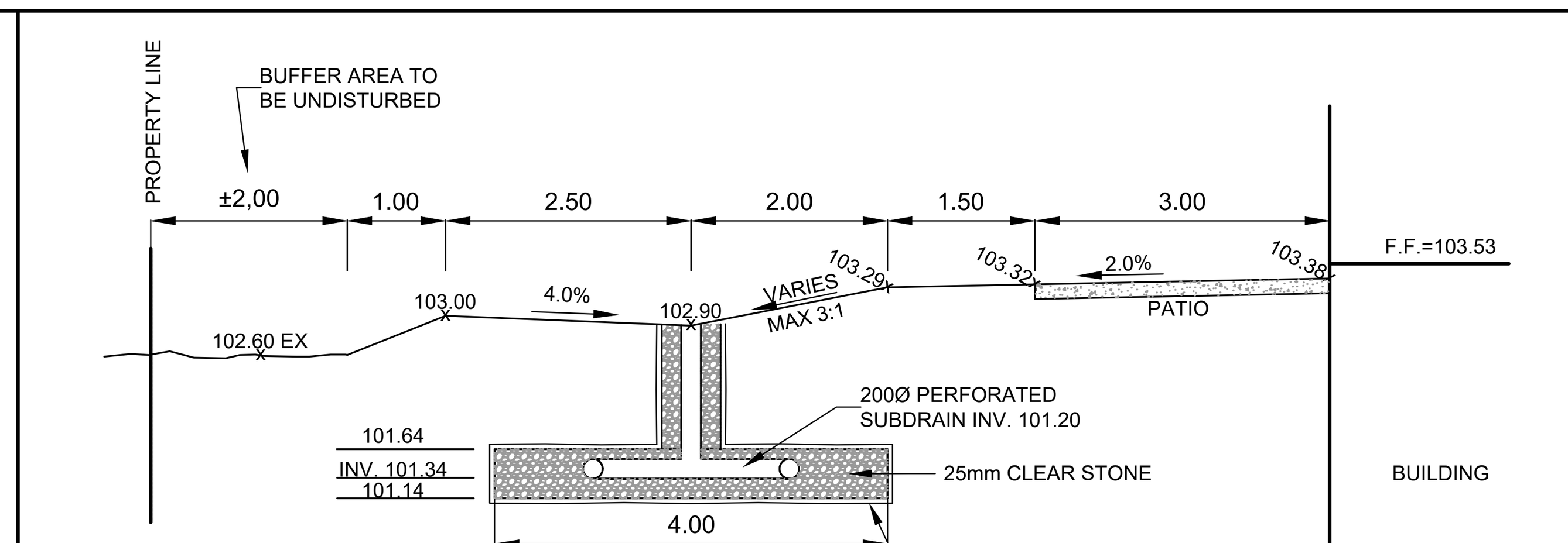
CITY FILE No. D07-12-21-0035

CITY PLAN No. 18424





SECTION A-A
N.T.S.



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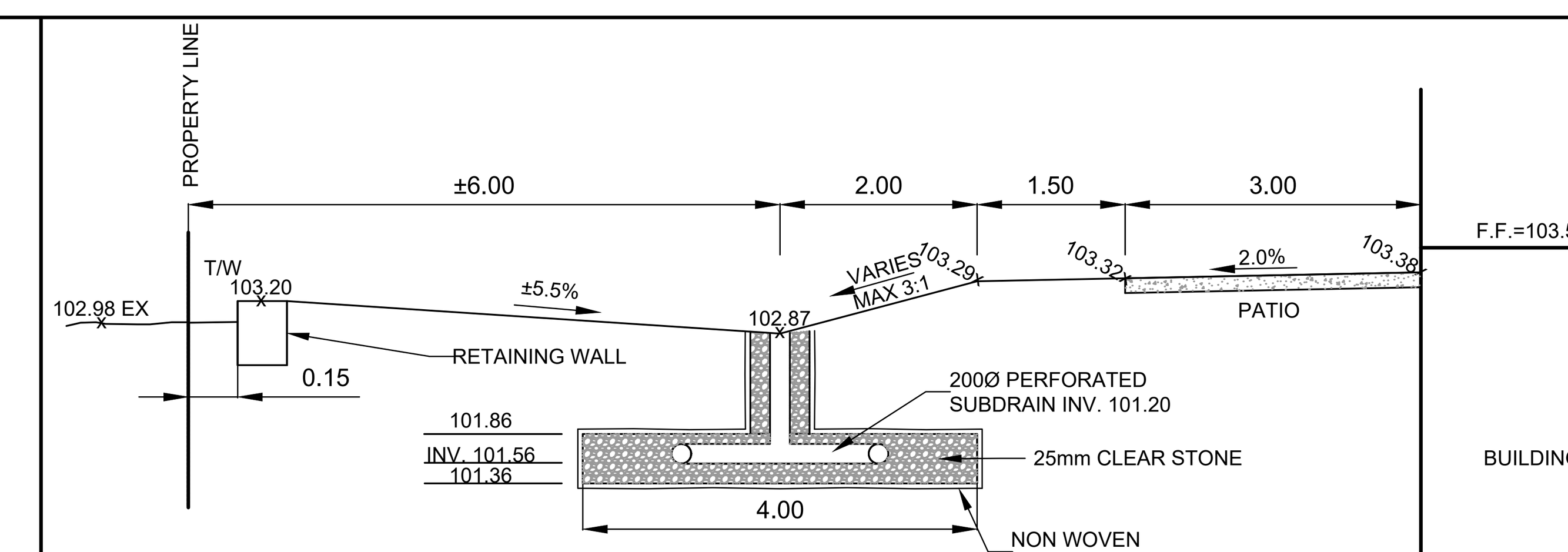

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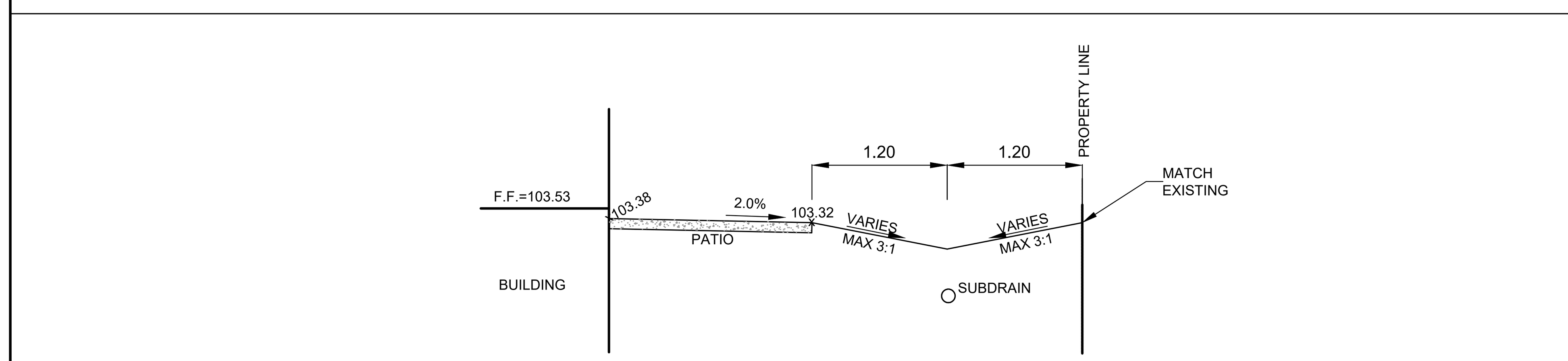

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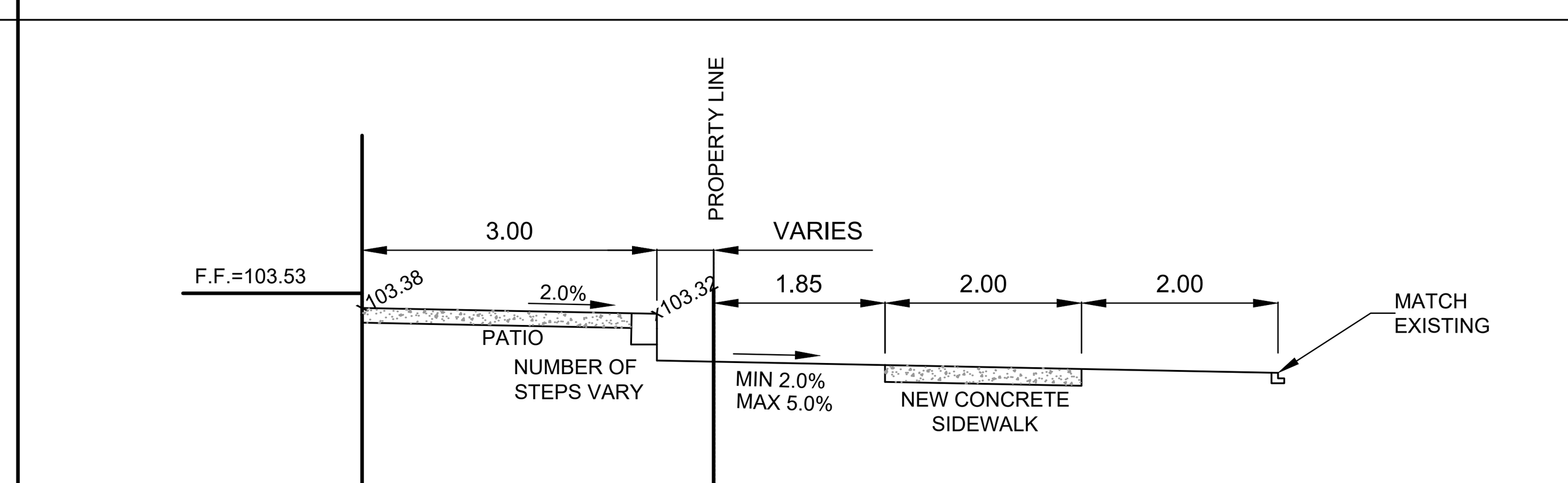

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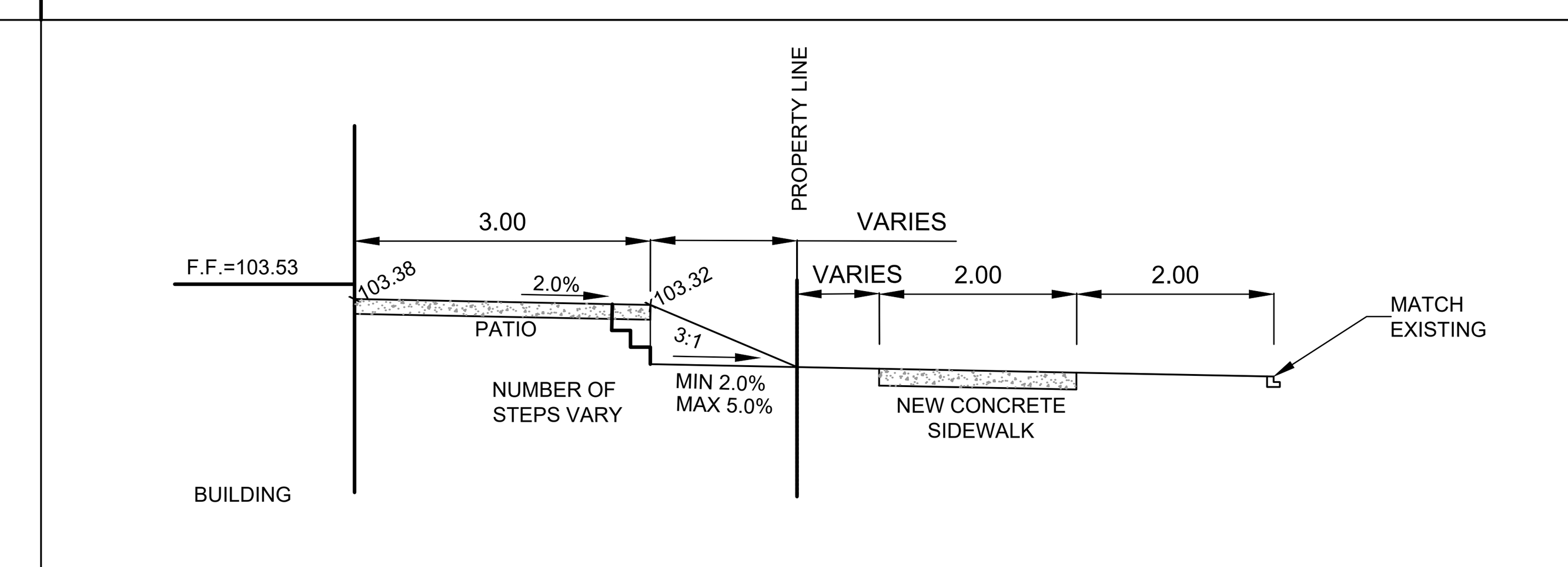

SECTION F-F
N.T.S.

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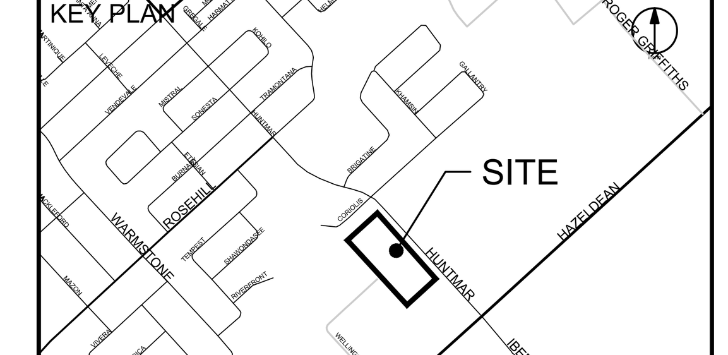
ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2021-02-16
2	SPA SUBMISSION	2021-06-30
3	SPA SUBMISSION	2021-08-17
4	SPA SUBMISSION	2021-10-29

SEE 010 FOR NOTES, LEGEND

KEY PLAN



CONSULTANTS

Project Coordinator:
North American Development Group
Architect:
RLA Architecture
Surveyor:
Fairhall, Moffatt and Woodland ltd.
Geotechnical:
Paterson Group
Traffic:
JD Halpenny & Assoc.
Electrical:
Hammerschlag & Joffe Inc.
Landscape:
NAK Design Strategies

1:400

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PROJECT

21/35 HUNTMAR DRIVE

PROJECT NO: 127134	
DRAWN BY: EH	CHECKED BY: DGY
PROJECT MGR: DGY	APPROVED BY: DGY

SHEET TITLE

GRADING PLAN

SHEET NUMBER	ISSUE
C-200	1

File Location: J:\127134_21_Huntmar\7.0_Production\7.03_Design\04_Civil\Sheets\C-200 GRADING PLAN.dwg Last Saved: October 28, 2021, by Ehenrie Plotted: Friday, October 29, 2021 8:32:37 AM by Eric Henrie

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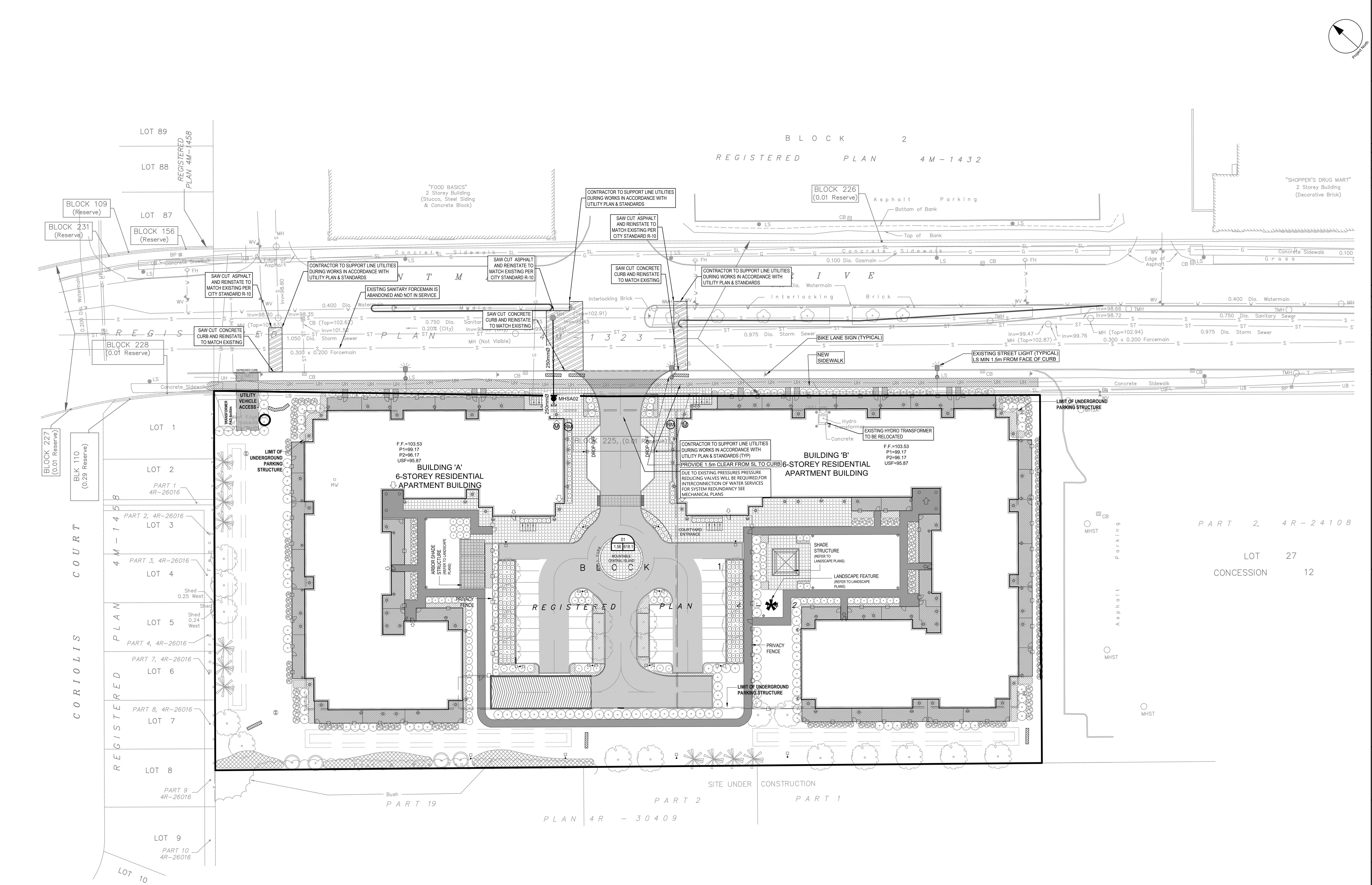
CITY FILE No. D07-12-21-0035

CITY PLAN No. 18424



LEGEND :

01	AREA NUMBER
1.56 / 619.2	POPULATION
	AREA IN HECTARES

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SEE 010 FOR NOTES, LEGEND

KEY PLAN

SITE

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Geotechnical:
Paterson Group
Traffic:
JD Halpenny & Assoc.
Electrical:
Hammerschlag & Joffe Inc.
Landscape:
NAK Design Strategies

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LICENSED PROFESSIONAL ENGINEER
D. G. Yannoulopoulos
2021/10/29
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PROJECT
21/35 HUNTMAR DRIVE

PROJECT NO: 127134	
DRAWN BY: EH	CHECKED BY: DGY
PROJECT MGR: DGY	APPROVED BY: DGY

SHEET TITLE
SANITARY DRAINAGE PLAN

SHEET NUMBER	ISSUE
C-400	1

File Location: J:\127134_21_Huntmar\7.0_Production\7.03_Design\04_Civil\Sheets\C-400.dwg Last Saved: October 28, 2021, by Ehenrie Plotted: Friday, October 29, 2021 8:32:53 AM by Eric Henrie

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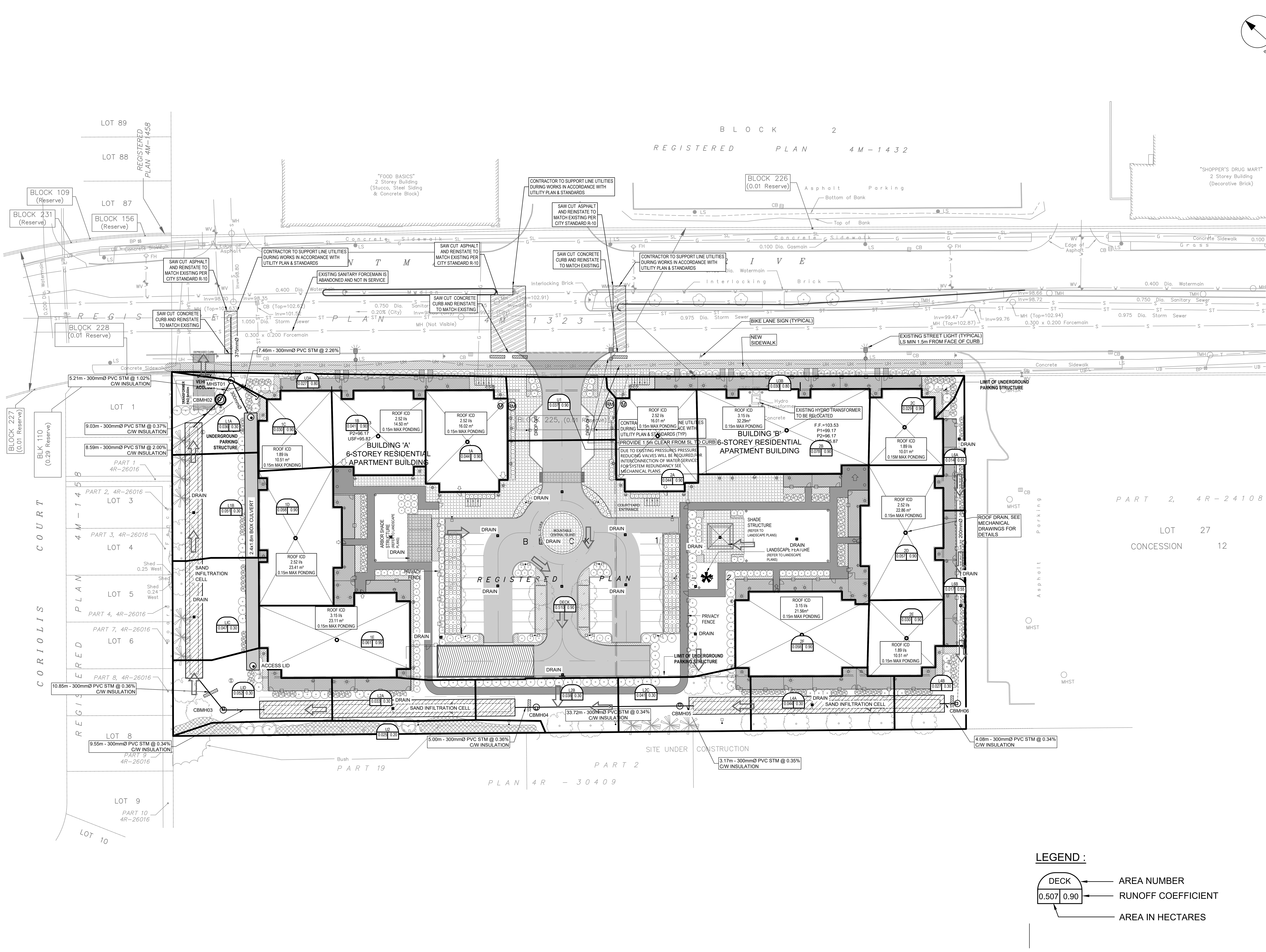

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SEE 010 FOR NOTES, LEGEND

KEY PLAN

SITE

CONSULTANTS

Project Coordinator:
North American Development Group
Architect:
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Paterson Group
Traffic:
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Landscape:
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2021/10/29
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PROJECT

21/35 HUNTMAR DRIVE

PROJECT NO:
127134

DRAWN BY:	CHECKED BY:
EH	DGY
PROJECT MGR:	APPROVED BY:
DGY	DGY

SHEET TITLE

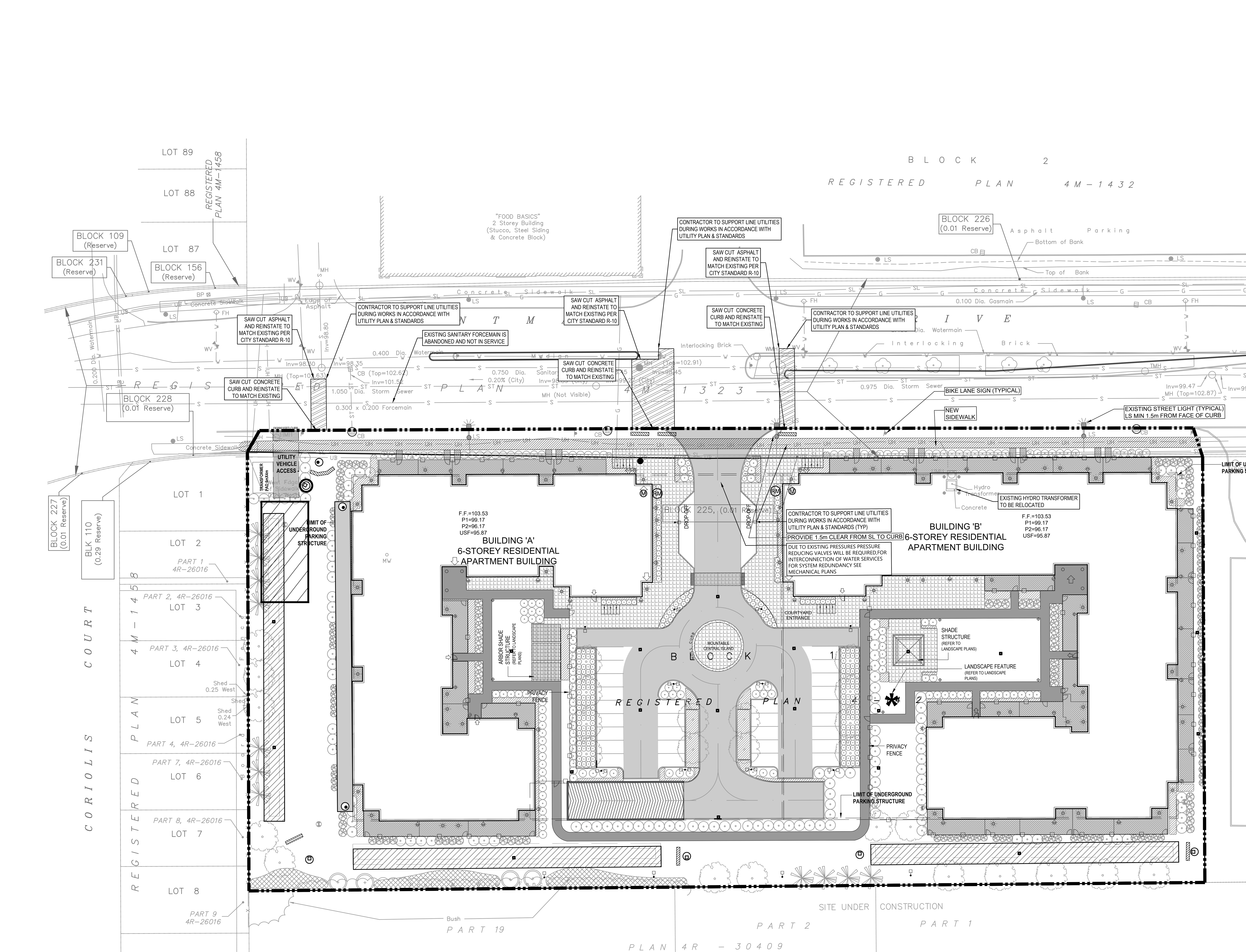
STORM DRAINAGE PLAN

SHEET NUMBER
C-500

ISSUE
1

CITY FILE No. D07-12-21-0035

CITY PLAN No. 18424

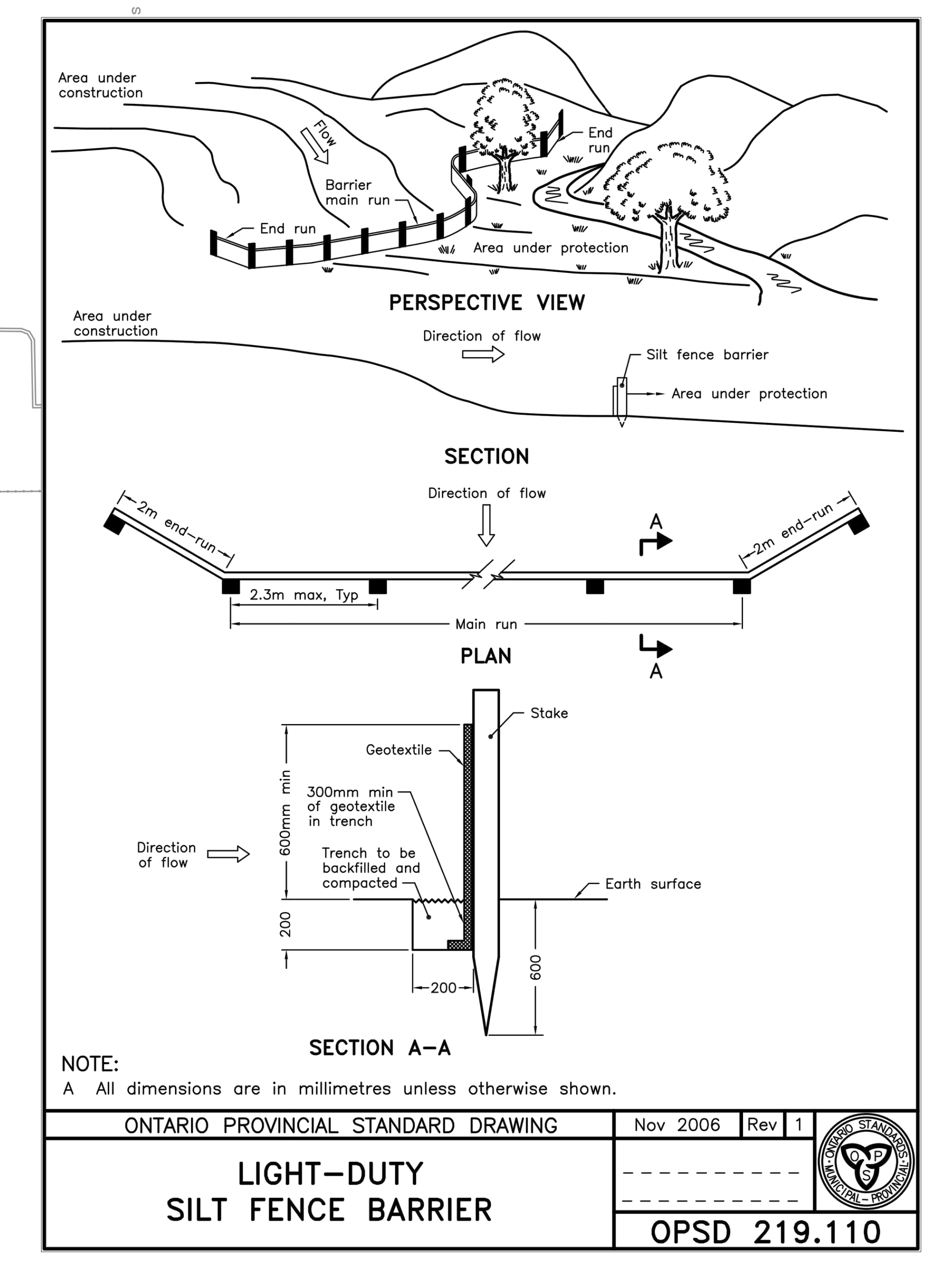


NOTES:

THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY,

1. SILT FENCE TO BE ERECTED PRIOR TO EARTH WORKS BEING COMMENCED. SILT FENCE TO BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR UNTIL START OF SUBSEQUENT PHASE.
2. STRAW BALE SEDIMENT TRAPS TO BE CONSTRUCTED IN EXISTING ROAD SIDE DITCHES. TRAPS TO REMAIN AND BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED.
3. SILT SACK TO BE PLACED AND MAINTAINED UNDER COVER OF ALL CATCHBASINS. GEOTEXTILE SILT SACK IN STREET CBs TO REMAIN UNTIL ALL CURBS ARE CONSTRUCTED. ALL CATCHBASINS TO BE REGULARLY INSPECTED AND CLEANED, AS NECESSARY, UNTIL SOD AND CURBS ARE CONSTRUCTED.
4. CONTRACTOR TO PROVIDE DETAILS ON LOCATION(S) AND DESIGN OF DEWATERING TRAP(S) PRIOR TO COMMENCING WORK. CONTRACTOR ALSO RESPONSIBLE FOR MAINTAINING TRAP(S) AND ADJUSTING SIZE(S) IF DEEMED REQUIRED BY THE ENGINEER DURING CONSTRUCTION. ALL DEWATERING EFFLUENT TO BE DISCHARGED TO EXISTING STORM SEWER SYSTEM.
5. WORKS NOTED ABOVE ARE TO BE INSTALLED, INSPECTED, MAINTAINED AND ULTIMATELY REMOVED BY SERVICING CONTRACTOR. EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED FOLLOWING EACH RAINFALL EVENT.
6. THIS IS A "LIVING DOCUMENT" AND MAY BE MODIFIED IN THE EVENT THE PROPOSED CONTROL MEASURES ARE INSUFFICIENT

- LIGHT DUTY SILT FENCE AS PER OPSD-219.110
- SNOW FENCE
- STRAW BALE CHECK DAM AS PER OPSD-219.180
- ROCK CHECK DAM AS PER OPSD-219.210
- SILT SACK PLACED UNDER EXISTING CB COVER
- TEMPORARY MUD MAT 0.15m THICK 50mm CLEAR STONE ON NON WOVEN FILTER CLOTH



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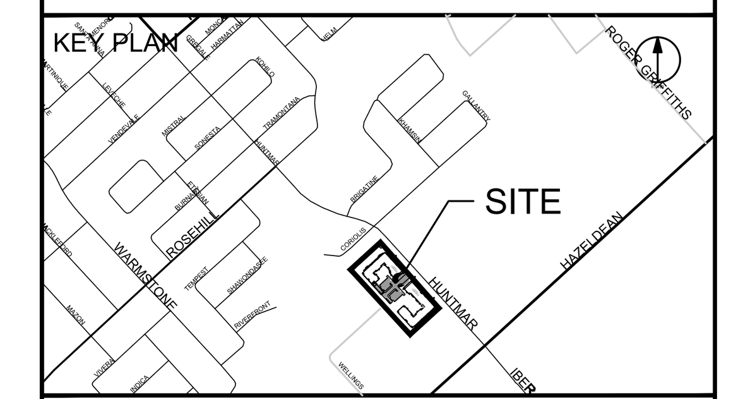
KEY PLAN



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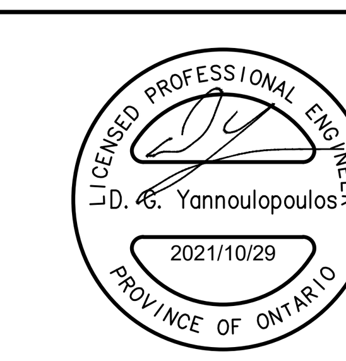

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PROJECT

21/35 HUNTMAR DRIVE

PROJECT NO:	
127134	
DRAWN BY: EH	CHECKED BY: DGY
PROJECT MGR: DGY	APPROVED BY: DGY

SHEET TITLE

EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NUMBER C-900 | ISSUE 1

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CITY PLAN No. 18424