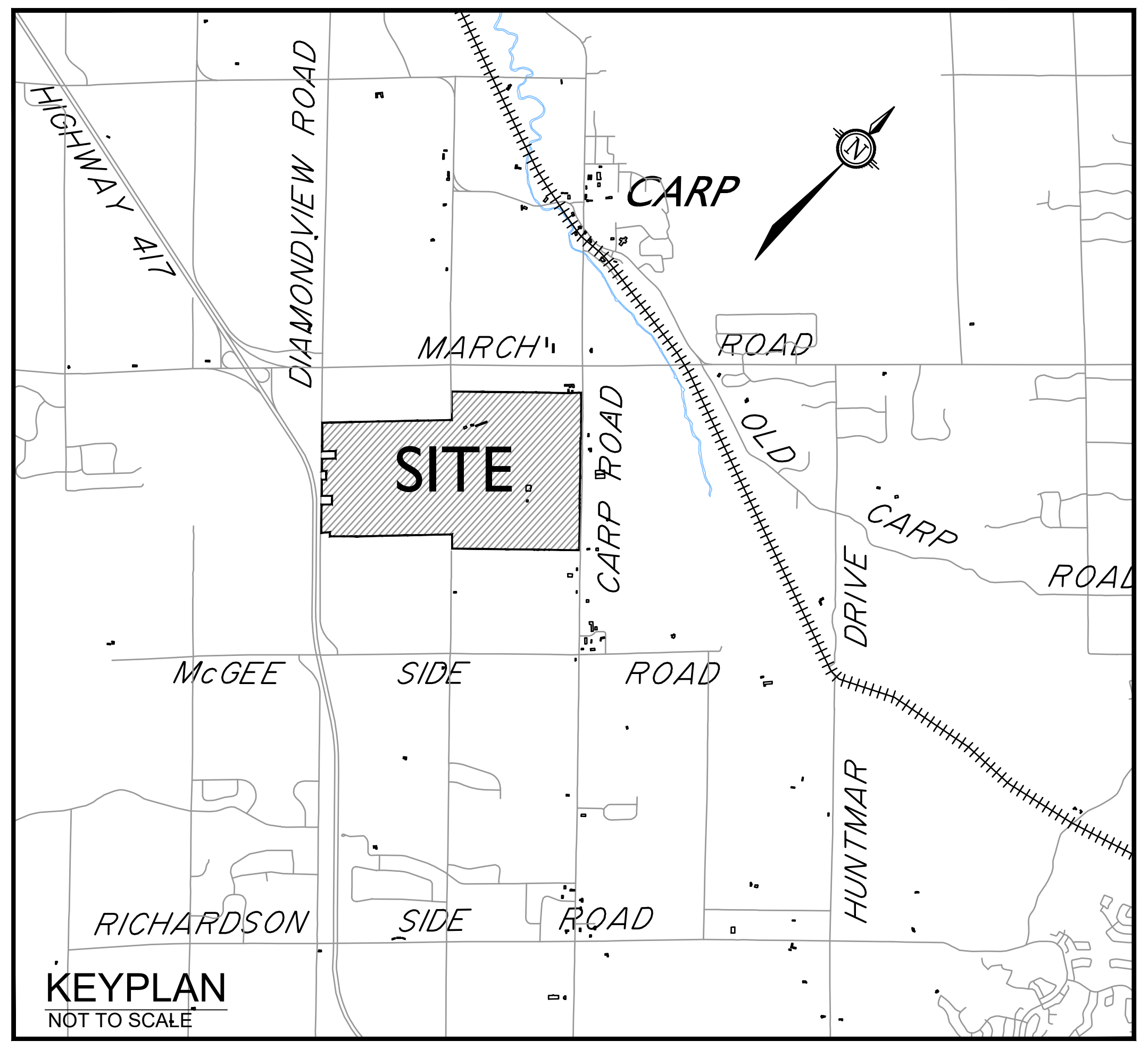
WEST CAPITAL AIRPARK
PHASE 2 - BUSINESS PARK

CITY OF OTTAWA



KEYPLAN
NOT TO SCALE

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

PROJECT No. 102085

REVISED PER
COMMENTS

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102085-P69	PLAN & PROFILE - STREET 17	STA. 17+000 - 17+350	REV. 5
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102085 - REVISED PER COMMENTS - PHASE 2- BUSINESS PARK - NOVEMBER 14, 2025

STREET FIFTEEN
102085-P61
102085-P62
102085-P63
102085-P64
102085-P60
THOMAS ARGUE ROAD
WINGOVER PRIVATE
102085-P76
STREET SIXTEEN
SPS
102085-P74
102085-P73
LIMIT OF DEVELOPMENT
(NO TOUCH)
STREET EIGHTEEN
102085-P72
102085-P71
102085-P70
CARP ROAD
102085-P69
STREET SEVENTEEN
GP7
GR7
IGR7
GP8
GR8
IGR8
GP10
GP6
GR6
IGR6
GP9
GR9
IGR9
GP5
GR5
IGR5
"Core Airport Area"
EXISTING RUNWAY 4-22
EXISTING RUNWAY 10-28 (1200m, 3940 ft)
EXISTING TAXIWAY CHARLIE
EXISTING TAXIWAY ALPHA
TAXIWAY BRAVO
EXISTING TAXIWAY BRAVO
04
22
10
28
BLOCK 18
NORTH
N
CONSTRUCTION NORTH

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-LP.dwg, LP3, Nov 13, 2025 - 5:33pm, mblanton

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

No.	REVISION	DATE	BY
4.	REVISED PER COMMENTS	NOV 14/25	ARM
3.	ISSUED FOR REVIEW	NOV 19/24	ARM
2.	ISSUED FOR COORDINATION	AUG 21/24	ARM
1.	ISSUED FOR COORDINATION	APR 23/24	ARM

SCALE
1 : 2500

1 : 2500
0 25 50 75 100

DESIGN MJB
CHECKED ARM
DRAWN MJB
CHECKED ARM
APPROVED SMG

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
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Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK

DRAWING NAME
LAYOUT PLAN

PROJECT No. 102085-14
REV REV # 4
DRAWING No. 102085-LP3

PLANB1.DWG - 1000mmx707mm

GENERAL NOTES:

1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. 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.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. 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.
5. 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.
6. 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.
7. ALL ELEVATIONS ARE GEODETIC.
8. REFER TO GEOTECHNICAL REPORT (No. 100011.049, DATED OCTOBER 25, 2024), PREPARED BY GEMTEC, 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.
9. REFER TO STORMWATER MANAGEMENT REPORT(R-2024-125) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
10. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

GRADING NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
3. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
4. THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
5. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
6. MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
7. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
13. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THIS PLAN.

SEWER NOTES:

1. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
CATCH BASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200Ø)	701.010	OPSD
CB, 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	HDPE PER CLEARFORD SPECIFICATION	
SANITARY SEWER FORCEMAIN	PVC DR 35	
CATCHBASIN LEAD	PVC DR 35	

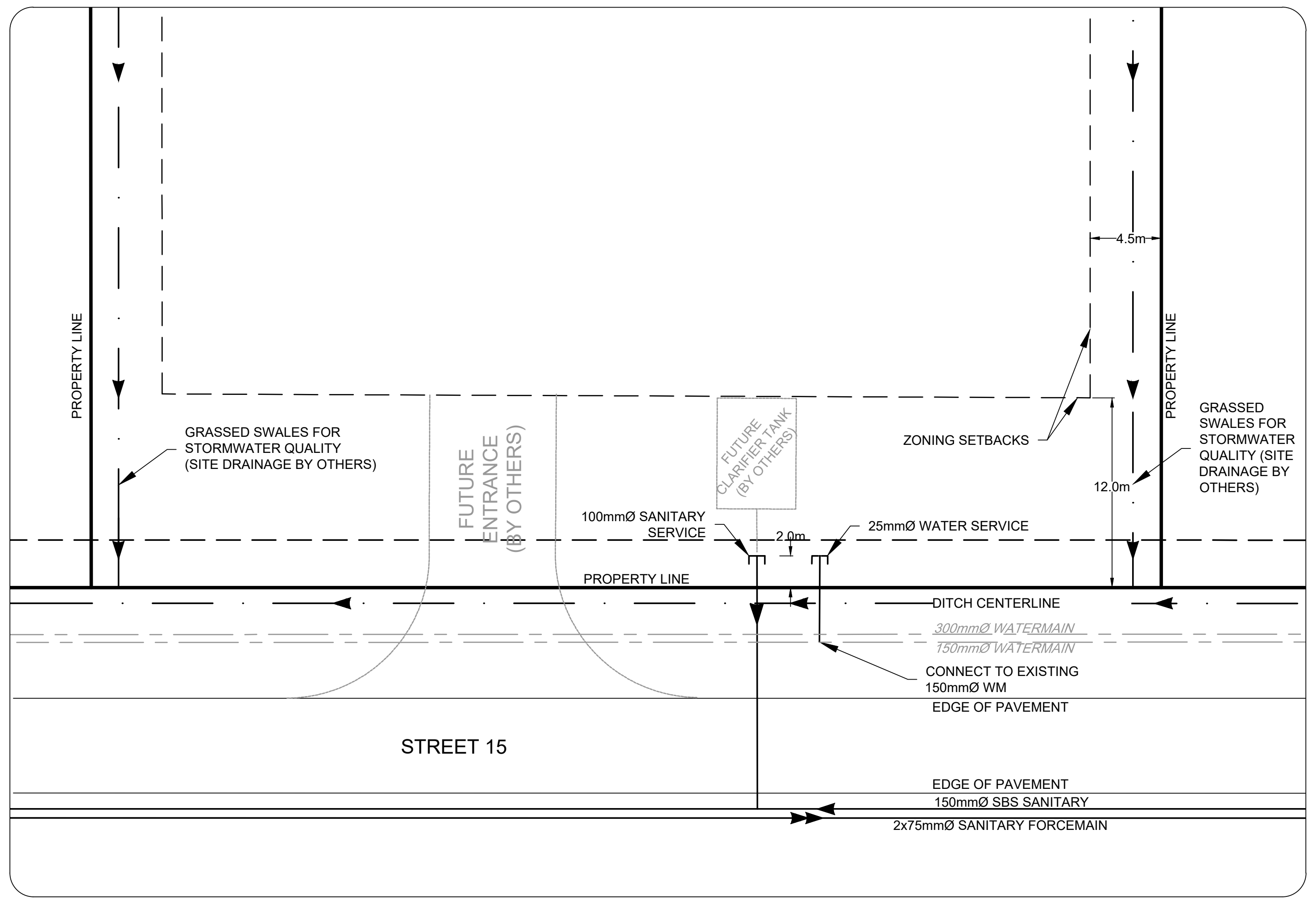
2. INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.5m COVER WITH 50mmX1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
3. SERVICES ARE TO BE CONSTRUCTED TO 2.0m PAST THE PROPERTY LINE AT A MINIMUM SLOPE OF 1.0%.
4. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
5. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
6. 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.
7. STORM MANHOLES AND CBMHS ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED.
8. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

WATERMAIN NOTES:

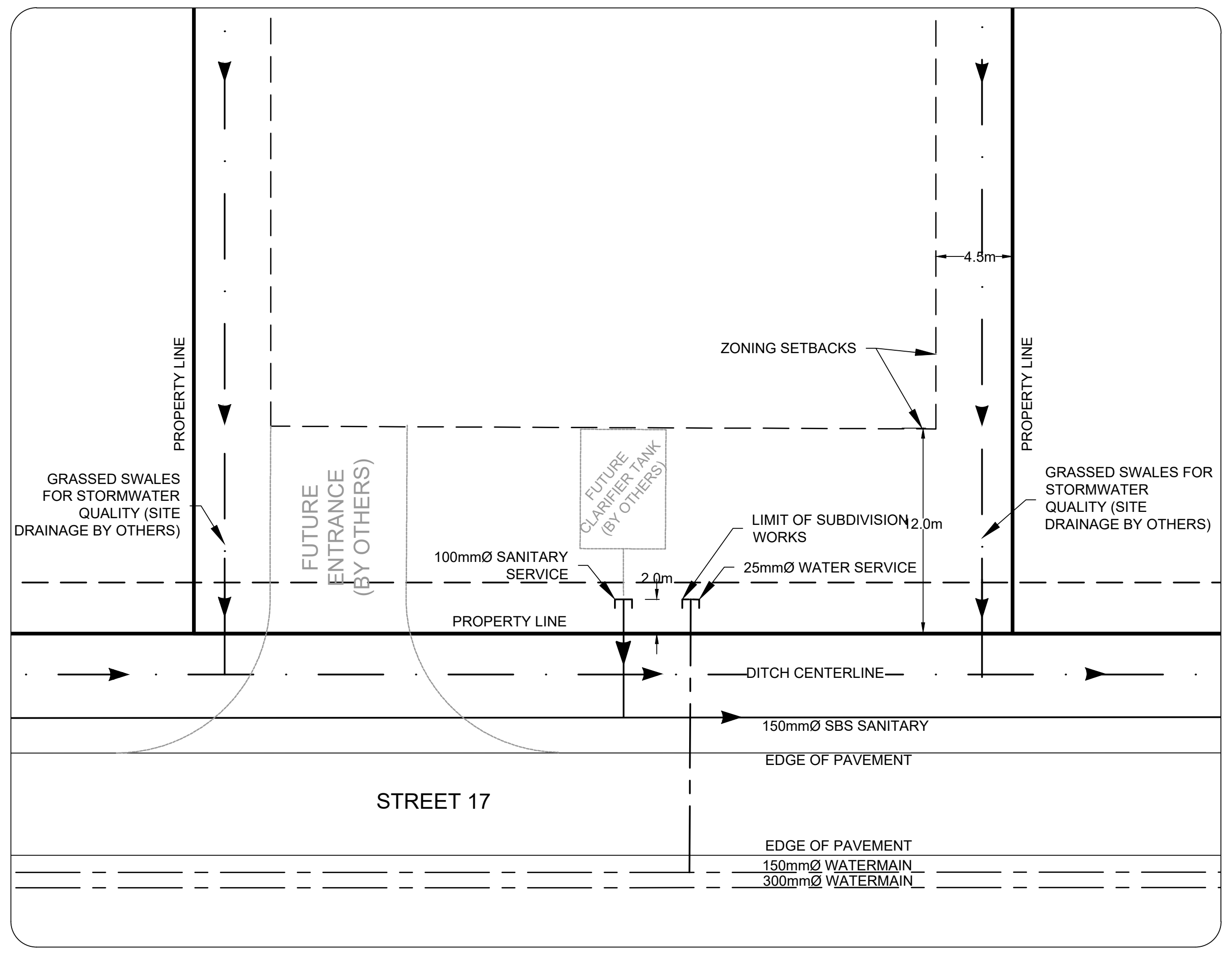
1. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN	PVC DR 18	

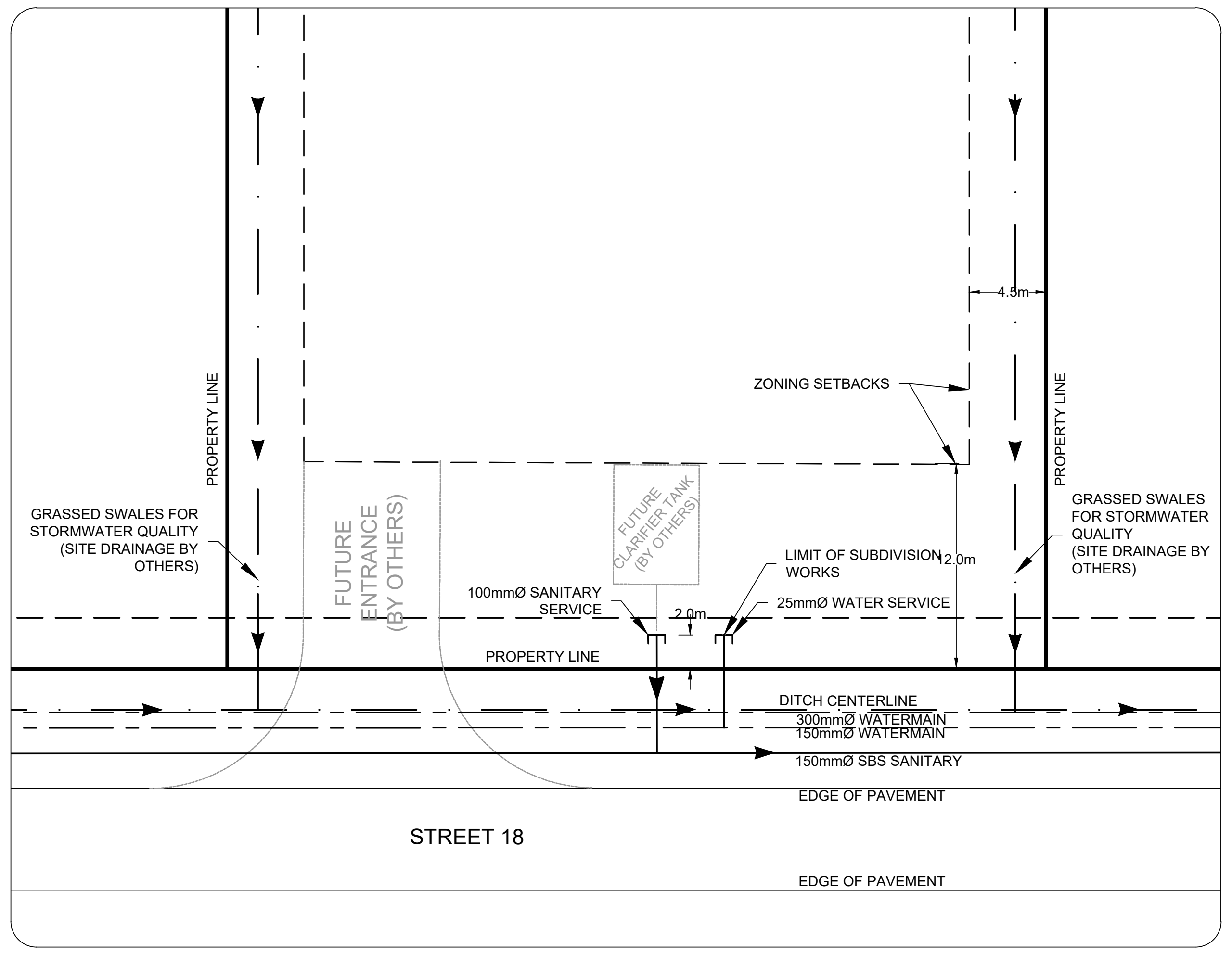
2. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.
3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
4. PROVIDE MINIMUM 0.25m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
5. WATER SERVICE IS TO BE CONSTRUCTED TO 2.0m PAST THE PROPERTY LINE AND CAPPED, UNLESS OTHERWISE INDICATED.
6. WATER DEMAND = TBD


PROPERTY LINE
PROPERTY LINE
4.5m
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
FUTURE ENTRANCE (BY OTHERS)
FUTURE CLARIFIER TANK (BY OTHERS)
ZONING SETBACKS
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
12.0m
100mmØ SANITARY SERVICE
2.0m
25mmØ WATER SERVICE
PROPERTY LINE
DITCH CENTERLINE
300mmØ WATERMAIN
150mmØ WATERMAIN
CONNECT TO EXISTING 150mmØ WM
EDGE OF PAVEMENT
STREET 15
EDGE OF PAVEMENT
150mmØ SBS SANITARY
2x75mmØ SANITARY FORCEMAIN

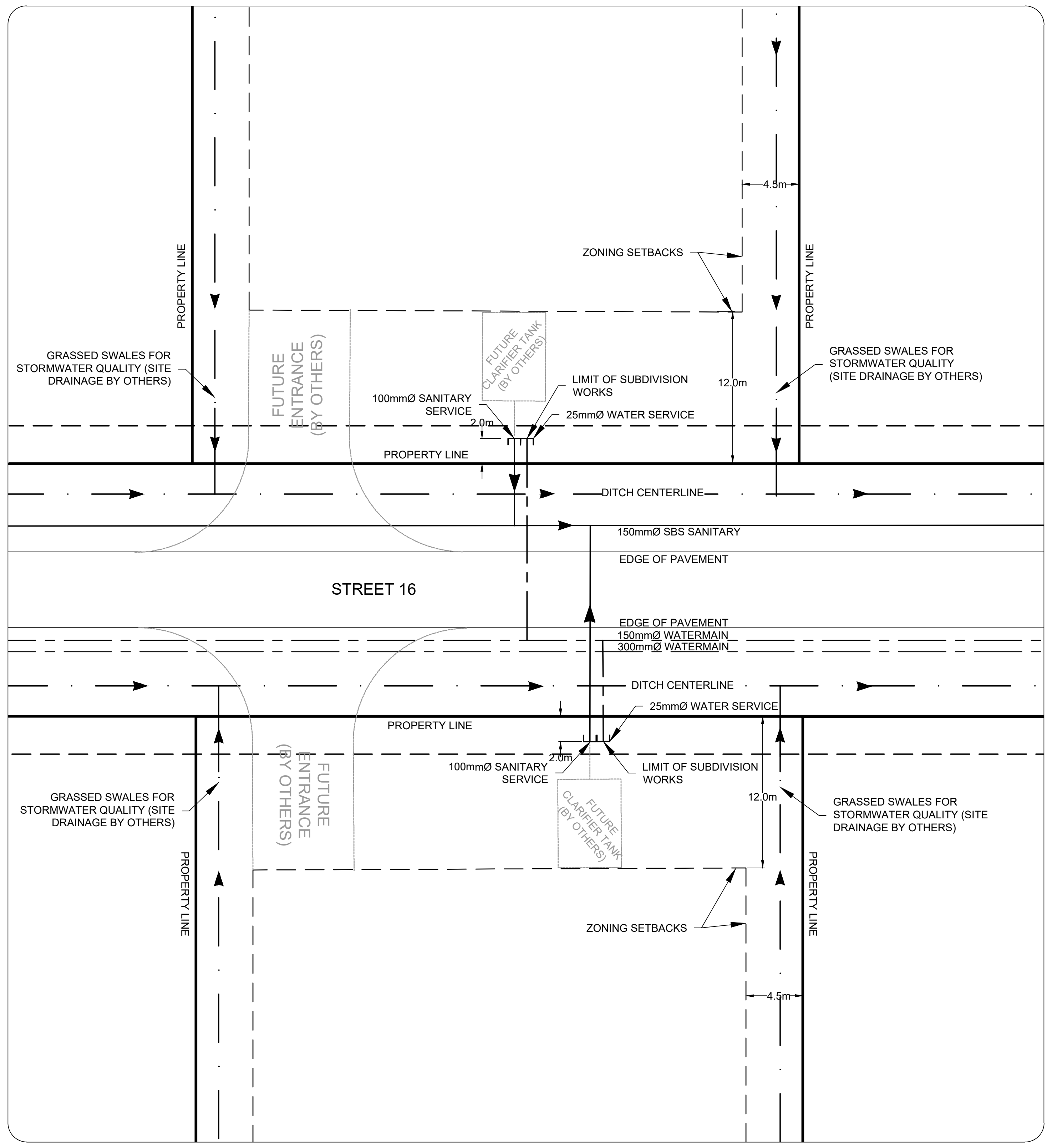
TYPICAL STREET 15 LOT SERVICING DETAIL
SCALE: N.T.S.


4.5m
ZONING SETBACKS
PROPERTY LINE
PROPERTY LINE
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
FUTURE ENTRANCE (BY OTHERS)
FUTURE CLARIFIER TANK (BY OTHERS)
LIMIT OF SUBDIVISION WORKS
12.0m
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
100mmØ SANITARY SERVICE
2.0m
25mmØ WATER SERVICE
PROPERTY LINE
DITCH CENTERLINE
150mmØ SBS SANITARY
EDGE OF PAVEMENT
STREET 17
EDGE OF PAVEMENT
150mmØ WATERMAIN
300mmØ WATERMAIN

TYPICAL STREET 17 LOT SERVICING DETAIL
SCALE: N.T.S.


4.5m
ZONING SETBACKS
PROPERTY LINE
PROPERTY LINE
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
FUTURE ENTRANCE (BY OTHERS)
FUTURE CLARIFIER TANK (BY OTHERS)
LIMIT OF SUBDIVISION WORKS
12.0m
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
100mmØ SANITARY SERVICE
2.0m
25mmØ WATER SERVICE
PROPERTY LINE
DITCH CENTERLINE
300mmØ WATERMAIN
150mmØ WATERMAIN
150mmØ SBS SANITARY
EDGE OF PAVEMENT
STREET 18
EDGE OF PAVEMENT

TYPICAL STREET 18 LOT SERVICING DETAIL
SCALE: N.T.S.


4.5m
ZONING SETBACKS
PROPERTY LINE
PROPERTY LINE
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
FUTURE ENTRANCE (BY OTHERS)
FUTURE CLARIFIER TANK (BY OTHERS)
LIMIT OF SUBDIVISION WORKS
12.0m
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
100mmØ SANITARY SERVICE
2.0m
25mmØ WATER SERVICE
PROPERTY LINE
DITCH CENTERLINE
150mmØ SBS SANITARY
EDGE OF PAVEMENT
STREET 16
EDGE OF PAVEMENT
150mmØ WATERMAIN
300mmØ WATERMAIN
DITCH CENTERLINE
25mmØ WATER SERVICE
PROPERTY LINE
100mmØ SANITARY SERVICE
2.0m
LIMIT OF SUBDIVISION WORKS
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
FUTURE ENTRANCE (BY OTHERS)
FUTURE CLARIFIER TANK (BY OTHERS)
12.0m
GRASSED SWALES FOR STORMWATER QUALITY (SITE DRAINAGE BY OTHERS)
PROPERTY LINE
PROPERTY LINE
ZONING SETBACKS
4.5m

TYPICAL STREET 16 LOT SERVICING DETAIL
SCALE: N.T.S.

NOTE:
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CLEARFORD

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
AS SHOWN

DESIGN RJK
CHECKED MJB
DRAWN RJK
CHECKED MJB
APPROVED ARM

FOR REVIEW ONLY

A.R. MCAULEY
100141256
Nov 14, 2025

Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

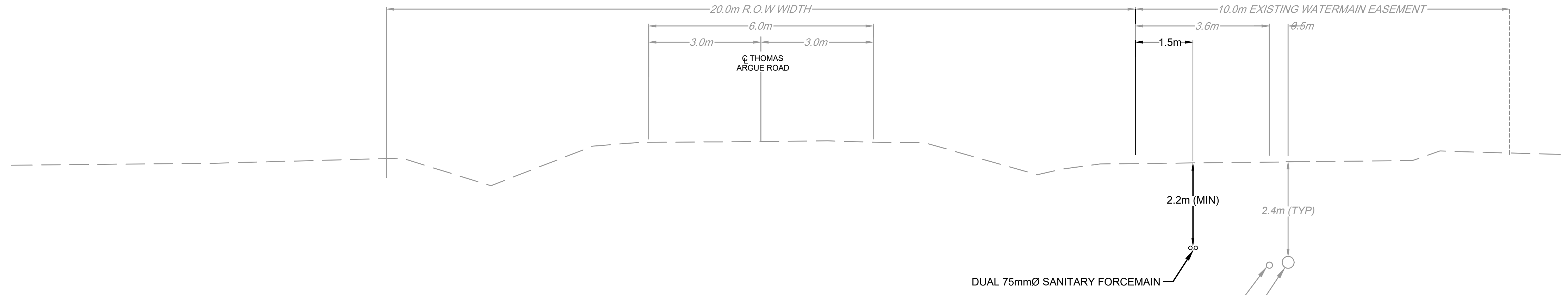
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
NOTES & DETAILS

PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-BPND1

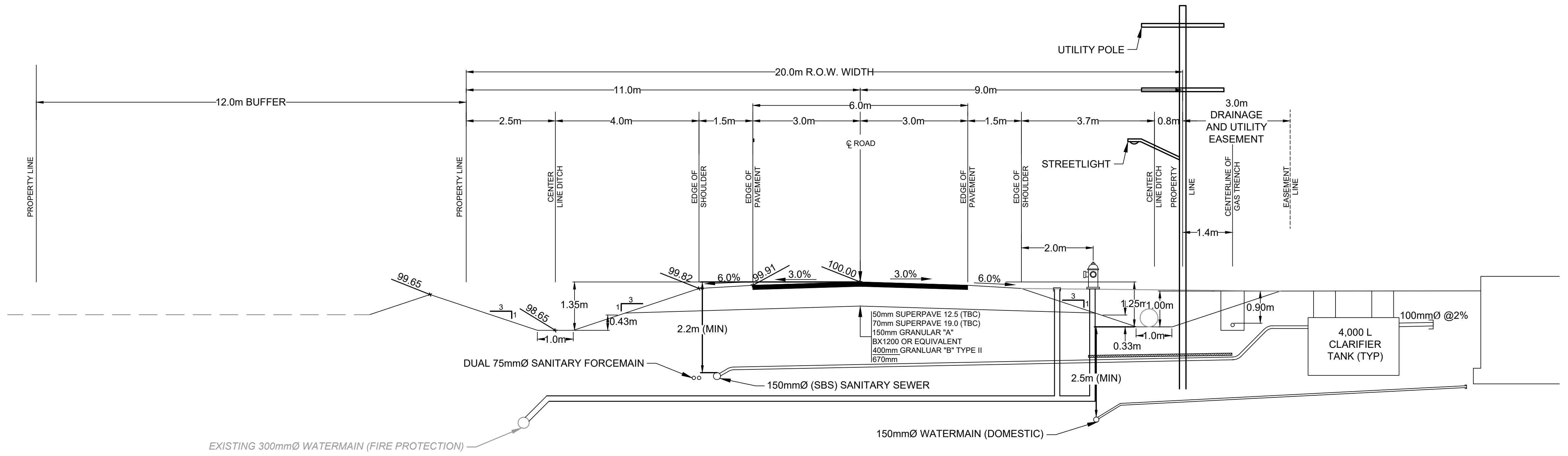
PLANB1.DWG - 1000mmx707mm

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-ND.dwg, ND1, Nov 14, 2025 - 10:52am, mblanton


20.0m R.O.W WIDTH
10.0m EXISTING WATERMAIN EASEMENT
6.0m
3.0m
3.0m
3.6m
8.5m
1.5m
℄ THOMAS ARGUE ROAD
2.2m (MIN)
2.4m (TYP)
DUAL 75mmØ SANITARY FORCEMAIN
EXISTING 150mmØ WATERMAIN (DOMESTIC)
EXISTING 300mmØ WATERMAIN (FIRE PROTECTION)

THOMAS ARGUE ROAD
STA.42+185 - 20.0m R.O.W.

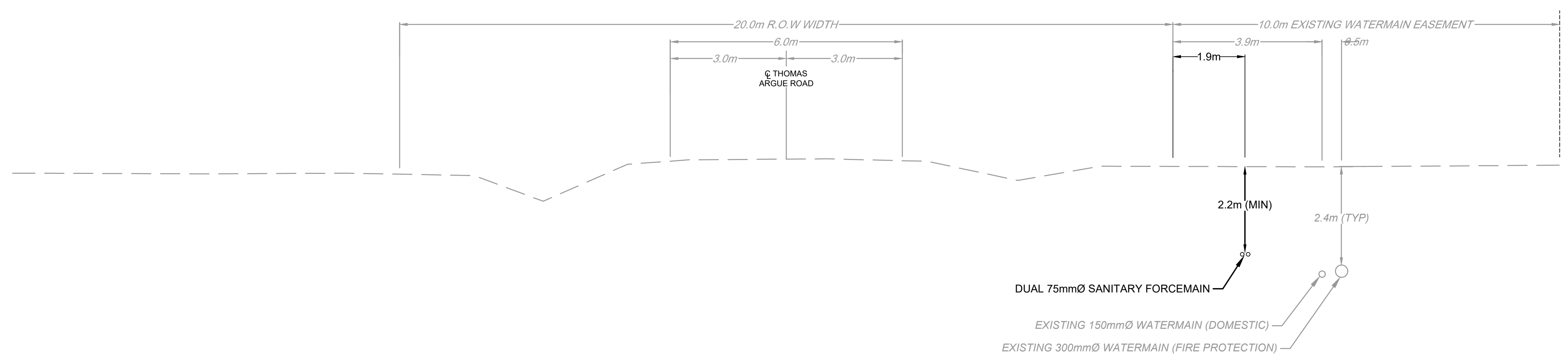
SCALE = 1:100


UTILITY POLE
20.0m R.O.W. WIDTH
12.0m BUFFER
11.0m
9.0m
6.0m
2.5m
4.0m
1.5m
3.0m
3.0m
1.5m
3.7m
0.8m
3.0m DRAINAGE AND UTILITY EASEMENT
℄ ROAD
STREETLIGHT
PROPERTY LINE
PROPERTY LINE
CENTER LINE DITCH
EDGE OF SHOULDER
EDGE OF PAVEMENT
EDGE OF PAVEMENT
EDGE OF SHOULDER
CENTER LINE DITCH
PROPERTY LINE
CENTERLINE OF GAS TRENCH
EASEMENT LINE
1.4m
2.0m
99.65
98.65
99.82
6.0%
99.91
3.0%
100.00
3.0%
6.0%
1.35m
0.43m
1.0m
2.2m (MIN)
1.25m
1.00m
0.90m
1.0m
0.33m
2.5m (MIN)
50mm SUPERPAVE 12.5 (TBC)
70mm SUPERPAVE 19.0 (TBC)
150mm GRANULAR "A"
BX1200 OR EQUIVALENT
400mm GRANLUAR "B" TYPE II
670mm
4,000 L CLARIFIER TANK (TYP)
100mmØ @2%
DUAL 75mmØ SANITARY FORCEMAIN
150mmØ (SBS) SANITARY SEWER
150mmØ WATERMAIN (DOMESTIC)
EXISTING 300mmØ WATERMAIN (FIRE PROTECTION)

STREET 15 - STA. 15+875 TO 15+975
TYPICAL CROSS SECTION - 20.0m R.O.W.

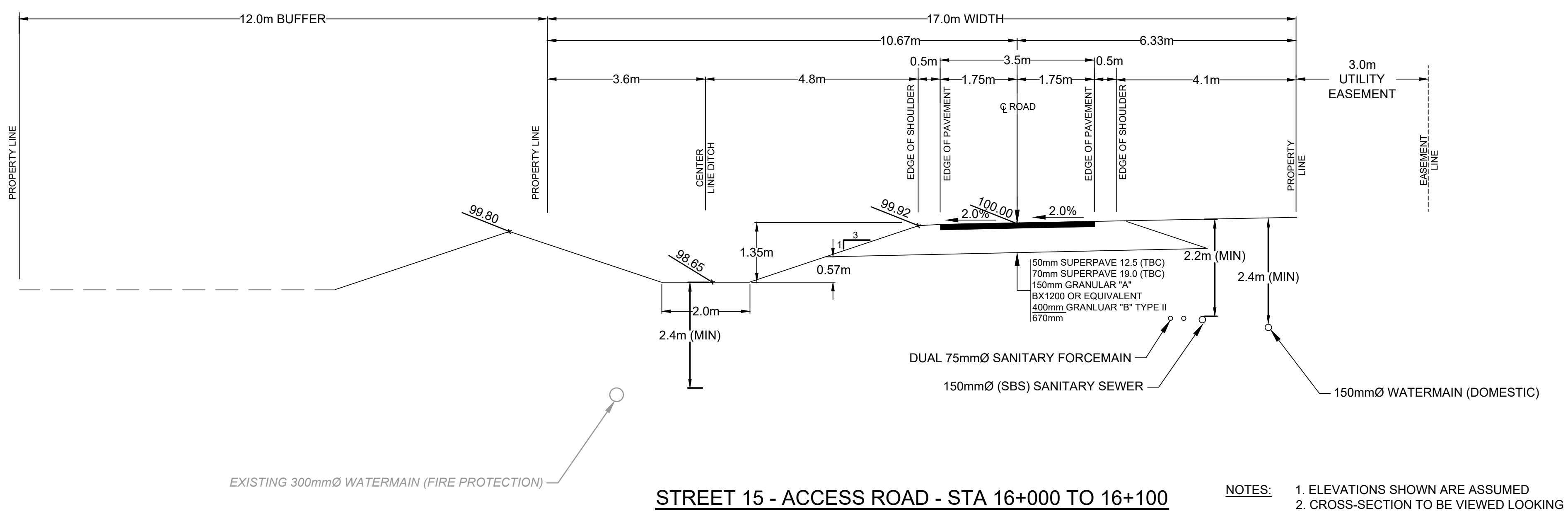
SCALE = 1:100

NOTES:
1. ELEVATIONS SHOWN ARE ASSUMED
2. CROSS-SECTION TO BE VIEWED LOOKING UP CHAINAGE


20.0m R.O.W WIDTH
10.0m EXISTING WATERMAIN EASEMENT
6.0m
3.0m
3.0m
3.9m
8.5m
1.9m
℄ THOMAS ARGUE ROAD
2.2m (MIN)
2.4m (TYP)
DUAL 75mmØ SANITARY FORCEMAIN
EXISTING 150mmØ WATERMAIN (DOMESTIC)
EXISTING 300mmØ WATERMAIN (FIRE PROTECTION)

THOMAS ARGUE ROAD
STA.42+065 - 20.0m R.O.W.

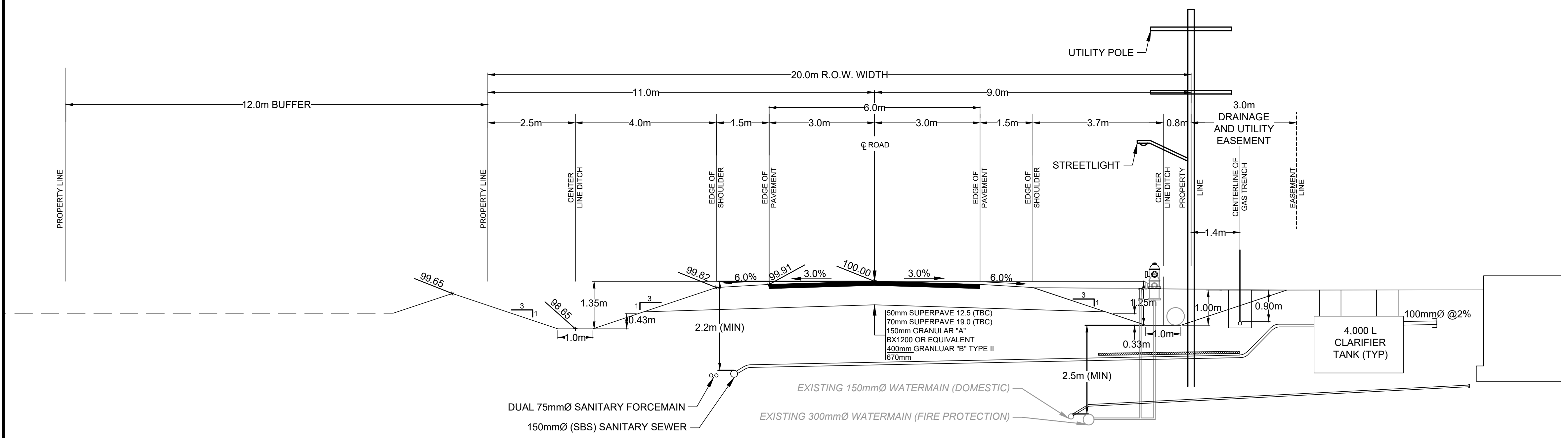
SCALE = 1:100


12.0m BUFFER
17.0m WIDTH
10.67m
6.33m
0.5m
3.5m
0.5m
3.6m
4.8m
1.75m
1.75m
4.1m
3.0m UTILITY EASEMENT
℄ ROAD
PROPERTY LINE
PROPERTY LINE
CENTER LINE DITCH
EDGE OF SHOULDER
EDGE OF PAVEMENT
EDGE OF PAVEMENT
EDGE OF SHOULDER
PROPERTY LINE
EASEMENT LINE
99.80
98.65
99.92
2.0%
100.00
2.0%
1.35m
0.57m
2.0m
2.4m (MIN)
2.2m (MIN)
2.4m (MIN)
50mm SUPERPAVE 12.5 (TBC)
70mm SUPERPAVE 19.0 (TBC)
150mm GRANULAR "A"
BX1200 OR EQUIVALENT
400mm GRANLUAR "B" TYPE II
670mm
DUAL 75mmØ SANITARY FORCEMAIN
150mmØ (SBS) SANITARY SEWER
150mmØ WATERMAIN (DOMESTIC)
EXISTING 300mmØ WATERMAIN (FIRE PROTECTION)

STREET 15 - ACCESS ROAD - STA 16+000 TO 16+100
TYPICAL CROSS SECTION - 15.0m R.O.W.

SCALE = 1:100

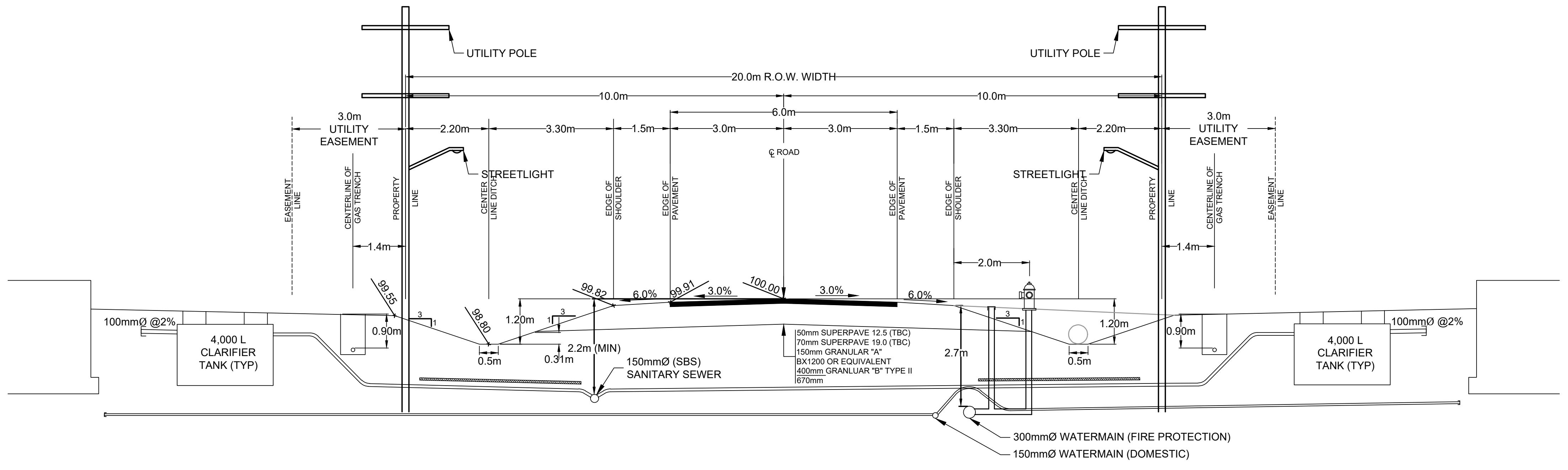
NOTES:
1. ELEVATIONS SHOWN ARE ASSUMED
2. CROSS-SECTION TO BE VIEWED LOOKING UP CHAINAGE


UTILITY POLE
20.0m R.O.W. WIDTH
12.0m BUFFER
11.0m
9.0m
6.0m
2.5m
4.0m
1.5m
3.0m
3.0m
1.5m
3.7m
0.8m
3.0m DRAINAGE AND UTILITY EASEMENT
℄ ROAD
STREETLIGHT
PROPERTY LINE
PROPERTY LINE
CENTER LINE DITCH
EDGE OF SHOULDER
EDGE OF PAVEMENT
EDGE OF PAVEMENT
EDGE OF SHOULDER
CENTER LINE DITCH
PROPERTY LINE
CENTERLINE OF GAS TRENCH
EASEMENT LINE
1.4m
99.65
98.65
99.82
6.0%
99.91
3.0%
100.00
3.0%
6.0%
1.35m
0.43m
1.0m
2.2m (MIN)
1.25m
1.00m
0.90m
1.0m
0.33m
2.5m (MIN)
50mm SUPERPAVE 12.5 (TBC)
70mm SUPERPAVE 19.0 (TBC)
150mm GRANULAR "A"
BX1200 OR EQUIVALENT
400mm GRANLUAR "B" TYPE II
670mm
4,000 L CLARIFIER TANK (TYP)
100mmØ @2%
DUAL 75mmØ SANITARY FORCEMAIN
150mmØ (SBS) SANITARY SEWER
EXISTING 150mmØ WATERMAIN (DOMESTIC)
EXISTING 300mmØ WATERMAIN (FIRE PROTECTION)

STREET 15 - STA. 15+025 TO 15+875
TYPICAL CROSS SECTION - 20.0m R.O.W.

SCALE = 1:100

NOTES:
1. ELEVATIONS SHOWN ARE ASSUMED
2. CROSS-SECTION TO BE VIEWED LOOKING UP CHAINAGE


UTILITY POLE
UTILITY POLE
20.0m R.O.W. WIDTH
10.0m
10.0m
6.0m
3.0m UTILITY EASEMENT
2.20m
3.30m
1.5m
3.0m
3.0m
1.5m
3.30m
2.20m
3.0m UTILITY EASEMENT
℄ ROAD
STREETLIGHT
STREETLIGHT
EASEMENT LINE
CENTERLINE OF GAS TRENCH
PROPERTY LINE
CENTER LINE DITCH
EDGE OF SHOULDER
EDGE OF PAVEMENT
EDGE OF PAVEMENT
EDGE OF SHOULDER
CENTER LINE DITCH
PROPERTY LINE
CENTERLINE OF GAS TRENCH
EASEMENT LINE
1.4m
1.4m
2.0m
99.55
98.80
99.82
6.0%
99.91
3.0%
100.00
3.0%
6.0%
1.20m
0.5m
0.31m
2.2m (MIN)
2.7m
1.20m
0.5m
0.90m
0.90m
50mm SUPERPAVE 12.5 (TBC)
70mm SUPERPAVE 19.0 (TBC)
150mm GRANULAR "A"
BX1200 OR EQUIVALENT
400mm GRANLUAR "B" TYPE II
670mm
100mmØ @2%
4,000 L CLARIFIER TANK (TYP)
100mmØ @2%
4,000 L CLARIFIER TANK (TYP)
150mmØ (SBS) SANITARY SEWER
300mmØ WATERMAIN (FIRE PROTECTION)
150mmØ WATERMAIN (DOMESTIC)

STREET 16
TYPICAL CROSS SECTION - 20.0m R.O.W.

SCALE = 1:100

NOTES:
1. ELEVATIONS SHOWN ARE ASSUMED
2. CROSS-SECTION TO BE VIEWED LOOKING UP CHAINAGE

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-ND.dwg, ND2, Nov 14, 2025 - 10:52am, mblanton

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

CLEARFORD
WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
AS SHOWN

DESIGN RJK
CHECKED MJB
DRAWN RJK
CHECKED MJB
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

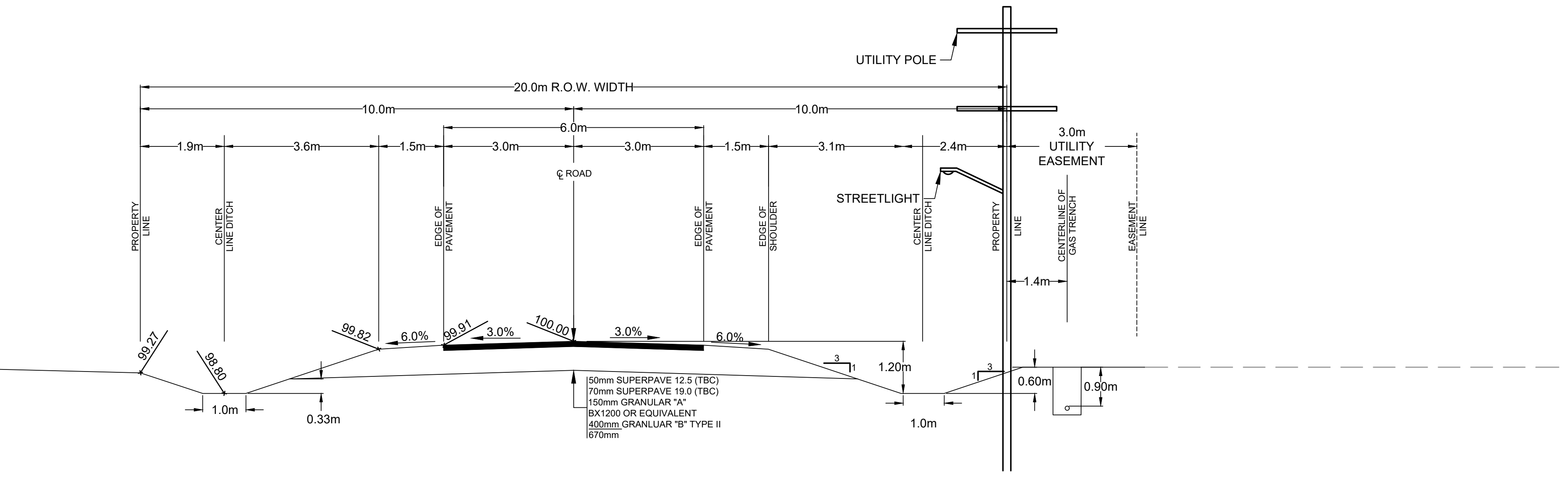
NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
NOTES & DETAILS

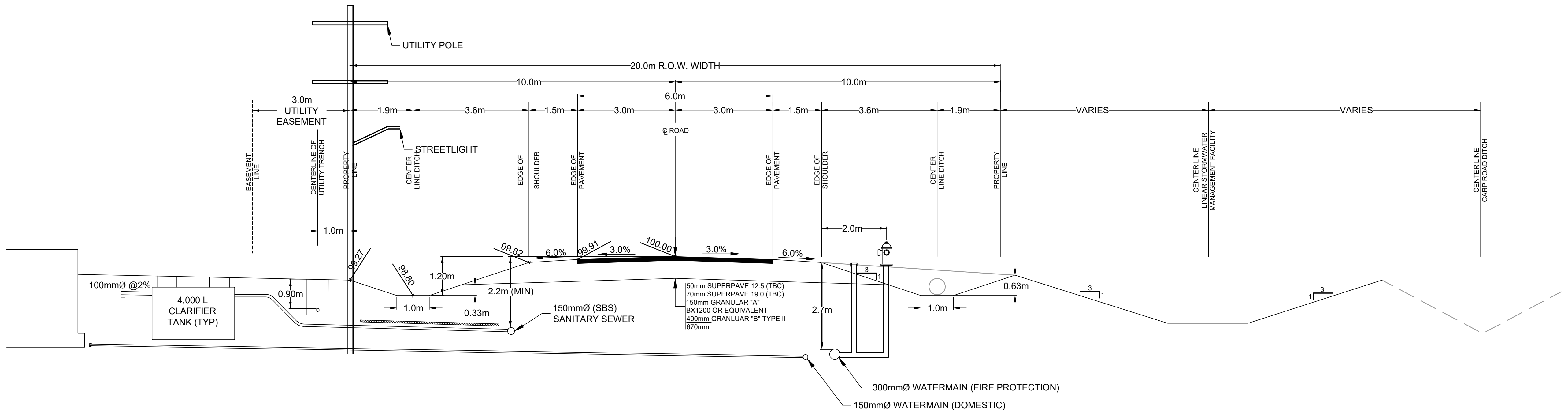
PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-BPND2

PLANB1.DWG - 1000mmx707mm


UTILITY POLE
20.0m R.O.W. WIDTH
10.0m
10.0m
6.0m
1.9m
3.6m
1.5m
3.0m
3.0m
1.5m
3.1m
2.4m
3.0m UTILITY EASEMENT
℄ ROAD
STREETLIGHT
PROPERTY LINE
CENTER LINE DITCH
EDGE OF PAVEMENT
EDGE OF PAVEMENT
EDGE OF SHOULDER
CENTER LINE DITCH
PROPERTY LINE
CENTERLINE OF GAS TRENCH
EASEMENT LINE
1.4m
99.27
98.80
99.82
6.0%
99.91
3.0%
100.00
3.0%
6.0%
1.20m
0.60m
0.90m
1.0m
0.33m
1.0m
50mm SUPERPAVE 12.5 (TBC)
70mm SUPERPAVE 19.0 (TBC)
150mm GRANULAR "A"
BX1200 OR EQUIVALENT
400mm GRANLUAR "B" TYPE II
670mm

STREET 17 - STA. 17+000 TO 17+250
TYPICAL CROSS SECTION - 20.0m R.O.W.

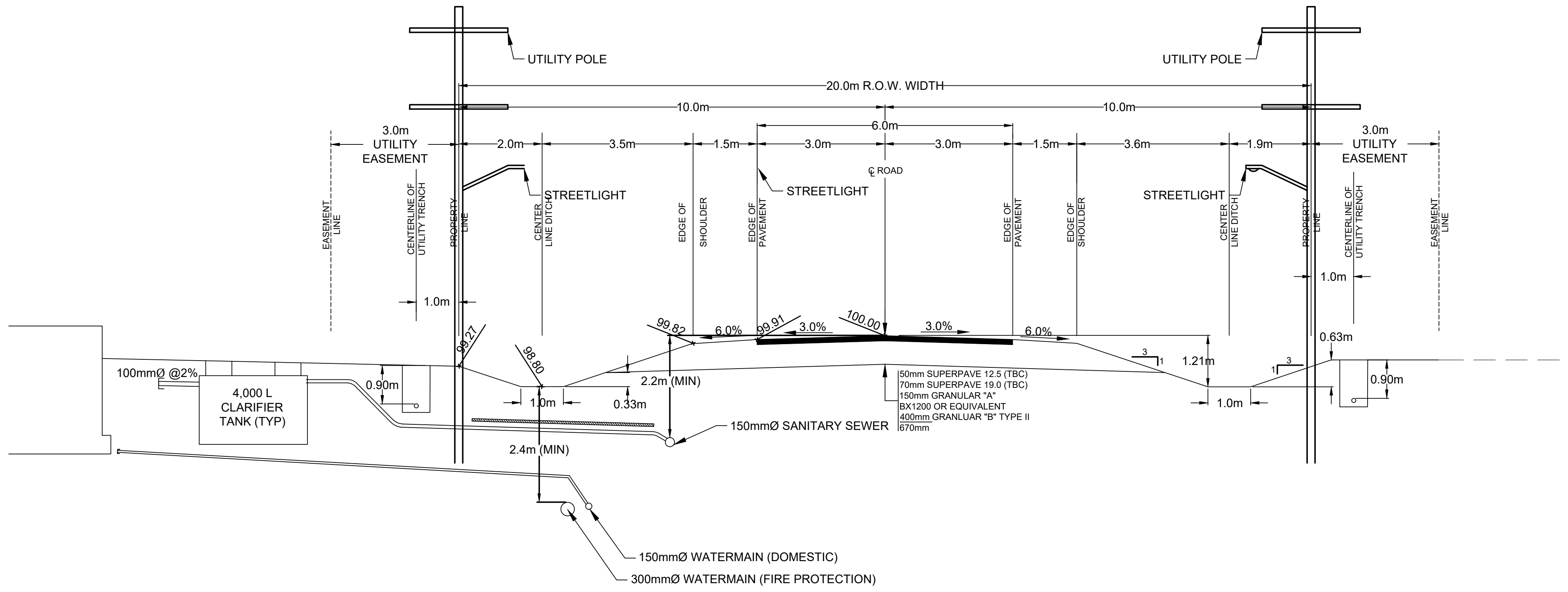
SCALE = 1:100


UTILITY POLE
20.0m R.O.W. WIDTH
10.0m
10.0m
6.0m
3.0m UTILITY EASEMENT
1.9m
3.6m
1.5m
3.0m
3.0m
1.5m
3.6m
1.9m
VARIES
VARIES
℄ ROAD
STREETLIGHT
EASEMENT LINE
CENTERLINE OF UTILITY TRENCH
PROPERTY LINE
CENTER LINE DITCH
EDGE OF SHOULDER
EDGE OF PAVEMENT
EDGE OF PAVEMENT
EDGE OF SHOULDER
CENTER LINE DITCH
PROPERTY LINE
CENTER LINE LINEAR STORMWATER MANAGEMENT FACILITY
CENTER LINE CARP ROAD DITCH
1.0m
2.0m
99.27
98.80
99.82
6.0%
99.91
3.0%
100.00
3.0%
6.0%
1.20m
2.2m (MIN)
0.33m
1.0m
0.63m
1.0m
2.7m
0.90m
100mmØ @2%
4,000 L CLARIFIER TANK (TYP)
150mmØ (SBS) SANITARY SEWER
50mm SUPERPAVE 12.5 (TBC)
70mm SUPERPAVE 19.0 (TBC)
150mm GRANULAR "A"
BX1200 OR EQUIVALENT
400mm GRANLUAR "B" TYPE II
670mm
300mmØ WATERMAIN (FIRE PROTECTION)
150mmØ WATERMAIN (DOMESTIC)

STREET 17 - STA. 17+250 TO 17+800
TYPICAL CROSS SECTION - 20.0m R.O.W.

SCALE = 1:100

NOTES:
1. ELEVATIONS SHOWN ARE ASSUMED
2. CROSS-SECTION TO BE VIEWED LOOKING UP CHAINAGE


UTILITY POLE
UTILITY POLE
20.0m R.O.W. WIDTH
10.0m
10.0m
6.0m
3.0m UTILITY EASEMENT
2.0m
3.5m
1.5m
3.0m
3.0m
1.5m
3.6m
1.9m
3.0m UTILITY EASEMENT
STREETLIGHT
STREETLIGHT
STREETLIGHT
℄ ROAD
EASEMENT LINE
CENTERLINE OF UTILITY TRENCH
PROPERTY LINE
CENTER LINE DITCH
EDGE OF SHOULDER
EDGE OF PAVEMENT
EDGE OF PAVEMENT
EDGE OF SHOULDER
CENTER LINE DITCH
PROPERTY LINE
CENTERLINE OF UTILITY TRENCH
EASEMENT LINE
1.0m
1.0m
99.27
98.80
99.82
6.0%
99.91
3.0%
100.00
3.0%
6.0%
0.63m
1.21m
0.90m
1.0m
2.2m (MIN)
0.33m
0.90m
1.0m
100mmØ @2%
4,000 L CLARIFIER TANK (TYP)
150mmØ SANITARY SEWER
2.4m (MIN)
50mm SUPERPAVE 12.5 (TBC)
70mm SUPERPAVE 19.0 (TBC)
150mm GRANULAR "A"
BX1200 OR EQUIVALENT
400mm GRANLUAR "B" TYPE II
670mm
150mmØ WATERMAIN (DOMESTIC)
300mmØ WATERMAIN (FIRE PROTECTION)

STREET 18
TYPICAL CROSS SECTION - 20.0m R.O.W.

SCALE = 1:100

NOTES:
1. ELEVATIONS SHOWN ARE ASSUMED
2. CROSS-SECTION TO BE VIEWED LOOKING UP CHAINAGE

ROAD CROSSING CULVERT SCHEDULE

CULVERT	PLAN AND PROFILE SHEET	STREET	SIZE (mm)	LENGTH (m)	MATERIAL	THICKNESS (mm)	COUNTERSINK DEPTH (mm)	UPSTREAM INVERT	DOWNSTREAM INVERT
C17	102085-P63	STREET 15	2 x 800	16.5	ALUMINIZED CSP	2.8	80 [1]	106.35	106.31
C18	102085-P63	STREET 15	900	17.0	ALUMINIZED CSP	2.8	90 [1]	106.80	106.70
C19	102085-P63	STREET 15	800	17.0	ALUMINIZED CSP	2.8	80 [1]	107.26	107.16
C20	102085-P63	STREET 15	900	17.0	ALUMINIZED CSP	2.8	90 [1]	107.65	107.55
C21	102085-P62	STREET 15	600	17.0	ALUMINIZED CSP	2.8	60 [1]	108.08	107.98
C22	102085-P62	STREET 15	800	17.0	ALUMINIZED CSP	2.8	80 [1]	108.35	108.25
C23	102085-P62	STREET 15	600	17.0	ALUMINIZED CSP	2.8	60 [1]	108.88	108.78
C24	102085-P61	STREET 15	600	17.0	ALUMINIZED CSP	2.8	60 [1]	109.28	109.18
C25	102085-P61	STREET 15	600	17.0	ALUMINIZED CSP	2.8	60 [1]	109.88	109.78
C28	102085-P72	STREET 18	800	12.0	ALUMINIZED CSP	2.8	80 [1]	104.42	104.42
C29	102085-P71	STREET 17	800	15.5	ALUMINIZED CSP	2.8	80 [1]	105.32	105.32
C37	102085-P70	STREET 17	700	15.5	ALUMINIZED CSP	2.8	70 [1]	106.32	106.32
C38	102085-P70	STREET 17	700	15.5	ALUMINIZED CSP	2.8	70 [1]	107.49	107.49
C39	102085-P70	STREET 17	700	15.5	ALUMINIZED CSP	2.8	70 [1]	107.83	107.83
C40	102085-P61	STREET 17	500	15.5	ALUMINIZED CSP	2.8	50 [1]	108.31	108.31
C41	102085-P70	STREET 17	1200	20.5	ALUMINIZED CSP	2.8	120 [1]	106.75	106.57
C43	102085-P61	STREET 17	600	15.5	ALUMINIZED CSP	2.8	60 [1]	111.81	111.78
C44	102085-P61	STREET 18	600	16.9	ALUMINIZED CSP	2.8	60 [1]	107.78	107.71
C46	102085-P61	STREET 15	600	14.5	ALUMINIZED CSP	2.8	60 [1]	110.10	110.05

[1] ROADWAY CROSSING CULVERTS ARE TO BE INSTALLED 1/10TH THEIR DIAMETER BELOW INVERT OF DITCH.

HYDRANT CULVERT SCHEDULE

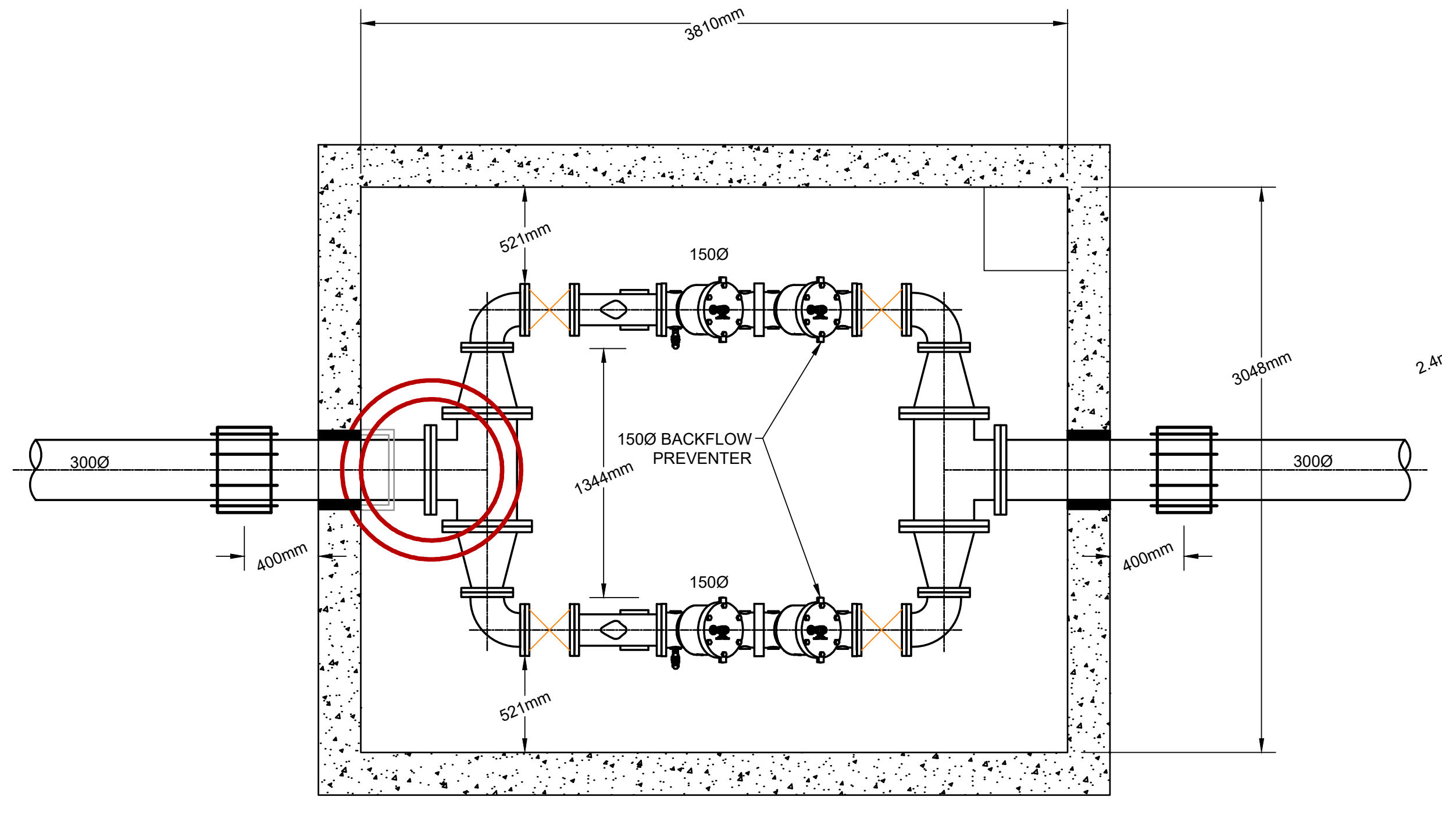
CULVERT	PLAN AND PROFILE SHEET	LOCATION	SIZE (mm)	LENGTH (m)	MATERIAL	THICKNESS (mm)	COUNTERSINK DEPTH (mm)	UPSTREAM INVERT	DOWNSTREAM INVERT
HYD-01	102085-P63	STREET 15 BLCOK 13	600	6.0	ALUMINIZED CSP	1.6	60 [2]	106.63	106.61
HYD-02	102085-P63	STREET 15 BLCOK 12	700	6.0	ALUMINIZED CSP	1.6	70 [2]	106.99	106.97
HYD-03	102085-P63	STREET 15 BLCOK 12	600	6.0	ALUMINIZED CSP	1.6	60 [2]	107.27	107.25
HYD-04	102085-P63	STREET 15 BLCOK 11	700	6.0	ALUMINIZED CSP	1.6	70 [2]	107.62	107.60
HYD-05	102085-P62	STREET 15 BLCOK 10	600	6.0	ALUMINIZED CSP	1.6	60 [2]	107.97	107.95
HYD-06	102085-P62	STREET 15 BLCOK 5	800	6.0	ALUMINIZED CSP	1.6	80 [2]	108.37	108.35
HYD-07	102085-P62	STREET 15 BLCOK 5	700	6.0	ALUMINIZED CSP	1.6	70 [2]	108.70	108.68
HYD-08	102085-P62	STREET 15 BLCOK 5	600	6.0	ALUMINIZED CSP	1.6	60 [2]	109.07	109.05
HYD-09	102085-P61	STREET 15 BLCOK 4	600	6.0	ALUMINIZED CSP	1.6	60 [2]	109.43	109.41
HYD-10	102085-P61	STREET 15 BLCOK 3	600	6.0	ALUMINIZED CSP	1.6	60 [2]	109.79	109.77
HYD-11	102085-P61	STREET 15 BLCOK 1	500	6.0	ALUMINIZED CSP	1.6	50 [2]	110.16	110.14
HYD-12	102085-P61	STREET 15 BLCOK 1	500	6.0	ALUMINIZED CSP	1.6	50 [2]	110.13	110.12
HYD-13	102085-P76	STREET 16 BLCOK 7	600	6.0	ALUMINIZED CSP	1.6	60 [2]	109.23	109.20
HYD-14	102085-P76	STREET 16 BLCOK 6	800	6.0	ALUMINIZED CSP	1.6	80 [2]	108.77	108.75
HYD-15	102085-P71	STREET 17 BLCOK 15	500	6.0	ALUMINIZED CSP	1.6	50 [2]	105.46	105.40
HYD-16	102085-P71	STREET 17 BLCOK 15	500	6.0	ALUMINIZED CSP	1.6	50 [2]	106.29	106.24
HYD-17	102085-P70	STREET 17 BLCOK 16	500	6.0	ALUMINIZED CSP	1.6	50 [2]	106.55	106.24
HYD-18	102085-P70	STREET 17 BLCOK 18	500	6.0	ALUMINIZED CSP	1.6	50 [2]	107.84	107.82
HYD-19	102085-P69	STREET 17 BLCOK 20	500	6.0	ALUMINIZED CSP	1.6	50 [2]	108.02	107.98
HYD-20	102085-P69	STREET 17 BLCOK 21	500	6.0	ALUMINIZED CSP	1.6	50 [2]	108.40	108.37

[2] HYDRANT CULVERTS ARE TO BE INSTALLED 1/10TH THEIR DIAMETER BELOW INVERT OF DITCH.

MISCELLANEOUS CULVERT SCHEDULE

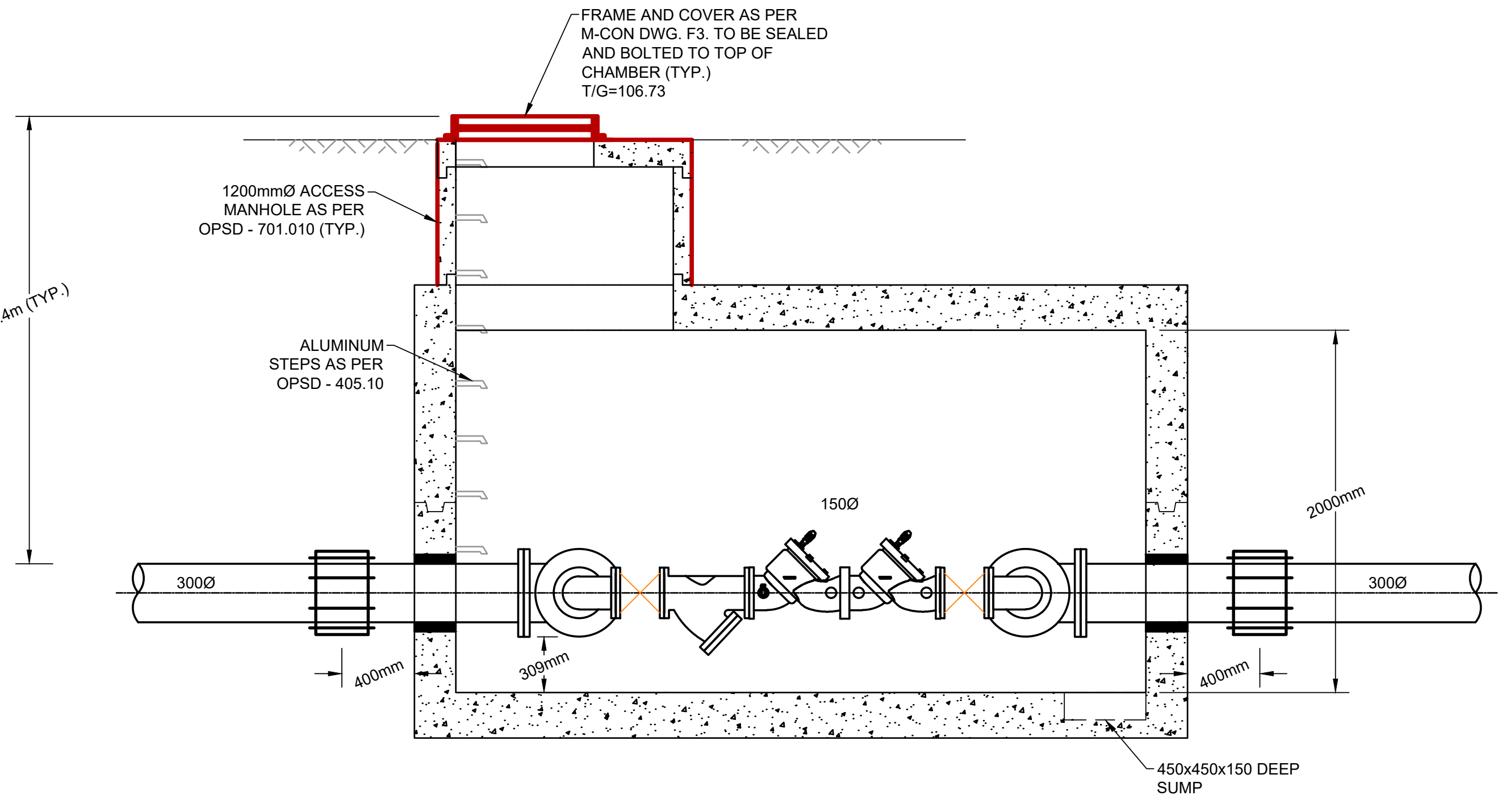
CULVERT	PLAN AND PROFILE SHEET	STREET	SIZE (mm)	LENGTH (m)	MATERIAL	THICKNESS (mm)	COUNTERSINK DEPTH (mm)	UPSTREAM INVERT	DOWNSTREAM INVERT
C1		POND A ACCESS ROAD	3 x 600	10.0	ALUMINIZED CSP	2.8	60 [3]	105.03	104.89
C26		POND B ACCESS ROAD	3 x 600	11.8	ALUMINIZED CSP	2.8	60 [3]	103.86	103.74
C42		CORE AIRPORT DRAINAGE DITCH	600	57.5	ALUMINIZED CSP	2.8	60 [3]	109.94	109.88
C45		POND B ACCESS ROAD	600	12.8	ALUMINIZED CSP	2.8	60 [3]	102.95	102.75

[3] PATHWAY CULVERTS ARE TO BE INSTALLED 1/10TH THEIR DIAMETER BELOW INVERT OF DITCH.


3810mm
521mm
150Ø
150Ø BACKFLOW PREVENTER
1344mm
150Ø
521mm
3048mm
300Ø
300Ø
400mm
400mm

TYPICAL BACKFLOW PREVENTER CHAMBER - PLAN VIEW

N. T. S.


FRAME AND COVER AS PER M-CON DWG. F3. TO BE SEALED AND BOLTED TO TOP OF CHAMBER (TYP.) T/G=106.73
1200mmØ ACCESS MANHOLE AS PER OPSD - 701.010 (TYP.)
2.4m (TYP.)
ALUMINUM STEPS AS PER OPSD - 405.10
150Ø
2000mm
300Ø
300Ø
400mm
309mm
400mm
450x450x150 DEEP SUMP

TYPICAL BACKFLOW PREVENTER CHAMBER - SECTION VIEW

N. T. S.

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CLEARFORD WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL Developments

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE	AS SHOWN
DESIGN	RJK
CHECKED	MJB
DRAWN	RJK
CHECKED	MJB
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

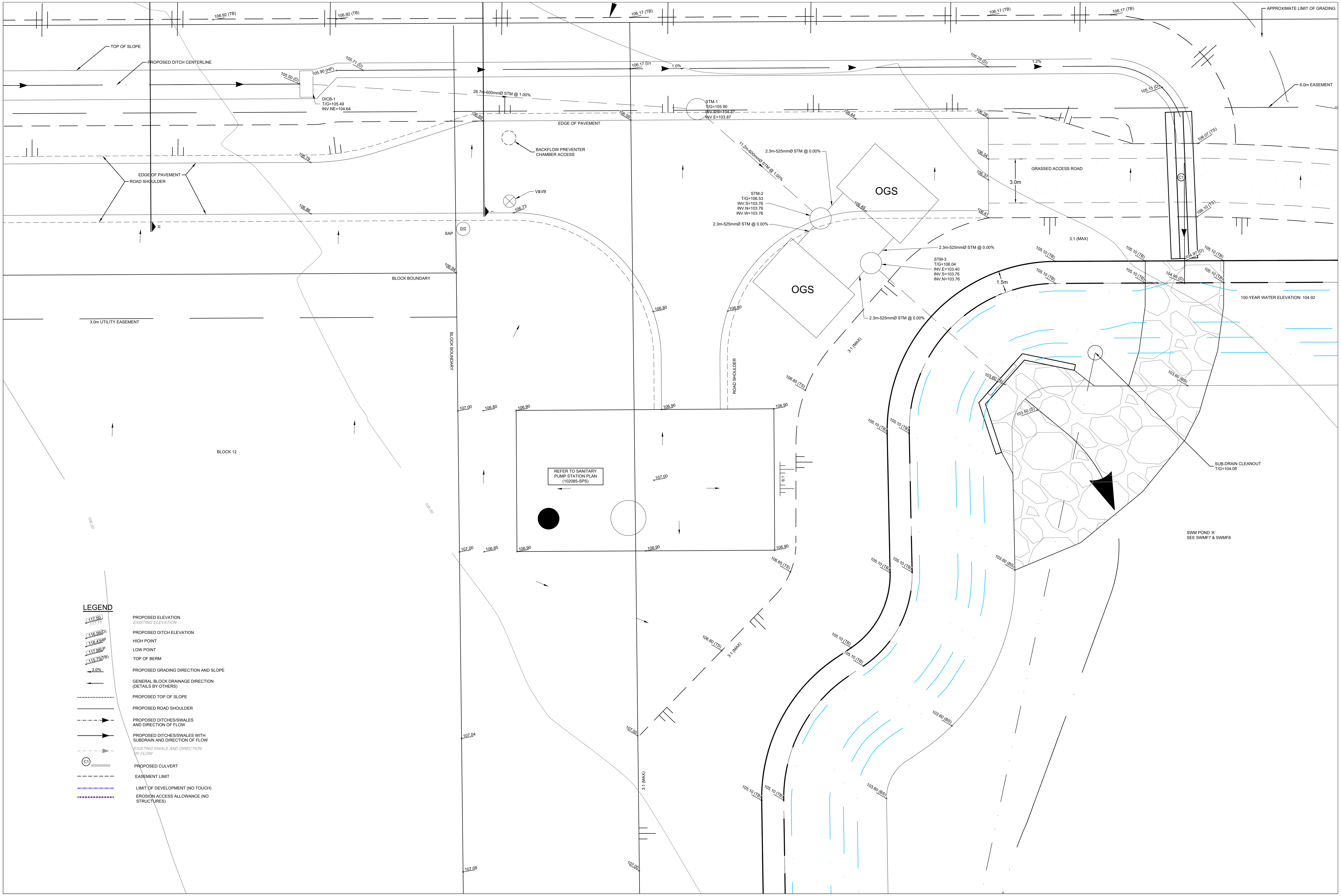
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
NOTES & DETAILS

PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-BPND3

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-ND.dwg, ND3, Nov 14, 2025 - 10:52am, mblanton

PLANB1.DWG - 1000mmx707mm


106.92 (TB)
106.92 (TB)
106.17 (TB)
106.17 (TB)
106.17 (TB)
APPROXIMATE LIMIT OF GRADING
TOP OF SLOPE
PROPOSED DITCH CENTERLINE
105.50 (D)
105.90 (HP)
105.71 (D)
106.17 (D)
1.0%
105.28 (D)
1.2%
105.15 (D)
6.0m EASEMENT
DICB-1
T/G=105.49
INV.NE=104.64
26.7m-600mmØ STM @ 1.00%
STM-1
T/G=105.90
INV.SW=104.37
INV.E=103.87
106.69
106.59
106.44
106.28
EDGE OF PAVEMENT
106.07 (TS)
106.79
BACKFLOW PREVENTER
CHAMBER ACCESS
11.2m-600mmØ STM @ 1.00%
2.3m-525mmØ STM @ 0.00%
106.34
GRASSED ACCESS ROAD
106.37
3.0m
C1
EDGE OF PAVEMENT
ROAD SHOULDER
V&VB
106.73
OGS
STM-2
T/G=106.53
INV.S=103.76
INV.N=103.76
INV.W=103.76
106.49
106.41
106.10 (TS)
106.86
2.3m-525mmØ STM @ 0.00%
SAP
3:1 (MAX)
105.10 (TB)
105.10 (TB)
104.97 (D)
105.10 (TB)
2.3m-525mmØ STM @ 0.00%
STM-3
T/G=106.04
INV.E=103.40
INV.S=103.76
INV.N=103.76
105.10 (TB)
105.10 (TB)
104.95 (D)
105.10 (TB)
106.94
BLOCK BOUNDARY
1.5m
OGS
100-YEAR WATER ELEVATION: 104.92
106.80
106.80
2.3m-525mmØ STM @ 0.00%
3.0m UTILITY EASEMENT
3:1 (MAX)
BLOCK BOUNDARY
ROAD SHOULDER
106.85 (TS)
103.60 (BS)
103.60 INV
107.00
106.80
106.90
106.90
106.90
103.50 (S)
105.10 (TB)
105.10 (TB)
BLOCK 12
REFER TO SANITARY
PUMP STATION PLAN
(102085-SPS)
107.00
6:1
SUB-DRAIN CLEANOUT
T/G=104.08
105.00
106.00
107.00
106.85
106.90
106.90
106.85 (TS)
103.60 (BS)
105.10 (TB)
105.10 (TB)
SWM POND 'A'
SEE SWMF7 & SWMF8
105.10 (TB)
105.10 (TB)
106.80 (TS)
3:1 (MAX)
103.60 (BS)
107.04
107.00
3:1 (MAX)
105.10 (TB)
105.10 (TB)
103.60 (BS)
107.08
107.00
LEGEND
117.50
117.15
PROPOSED ELEVATION
EXISTING ELEVATION
116.56(D)
PROPOSED DITCH ELEVATION
118.43HP
HIGH POINT
117.88LP
LOW POINT
115.75(TB)
TOP OF BERM
3.0%
PROPOSED GRADING DIRECTION AND SLOPE
GENERAL BLOCK DRAINAGE DIRECTION
(DETAILS BY OTHERS)
PROPOSED TOP OF SLOPE
PROPOSED ROAD SHOULDER
PROPOSED DITCHES/SWALES
AND DIRECTION OF FLOW
PROPOSED DITCHES/SWALES WITH
SUBDRAIN AND DIRECTION OF FLOW
EXISTING SWALE AND DIRECTION
OF FLOW
C1
PROPOSED CULVERT
EASEMENT LIMIT
LIMIT OF DEVELOPMENT (NO TOUCH)
EROSION ACCESS ALLOWANCE (NO
STRUCTURES)

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-ND.dwg, ND4, Nov 14, 2025 - 10:52am, mblanton

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

CLEARFORD

CLEARFORD WATER SYSTEMS INC.

WEST CAPITAL Developments

No.	REVISION	DATE	BY
1.	REVISED PER COMMENTS (NEW DRAWING)	NOV 14/25	ARM

SCALE
1:100

1:100
0 1 2 3 4

DESIGN MJB
CHECKED TGS
DRAWN MJB
CHECKED TGS
APPROVED ARM

FOR REVIEW ONLY

A.R. MCAULEY
100141256
Nov 14, 2025

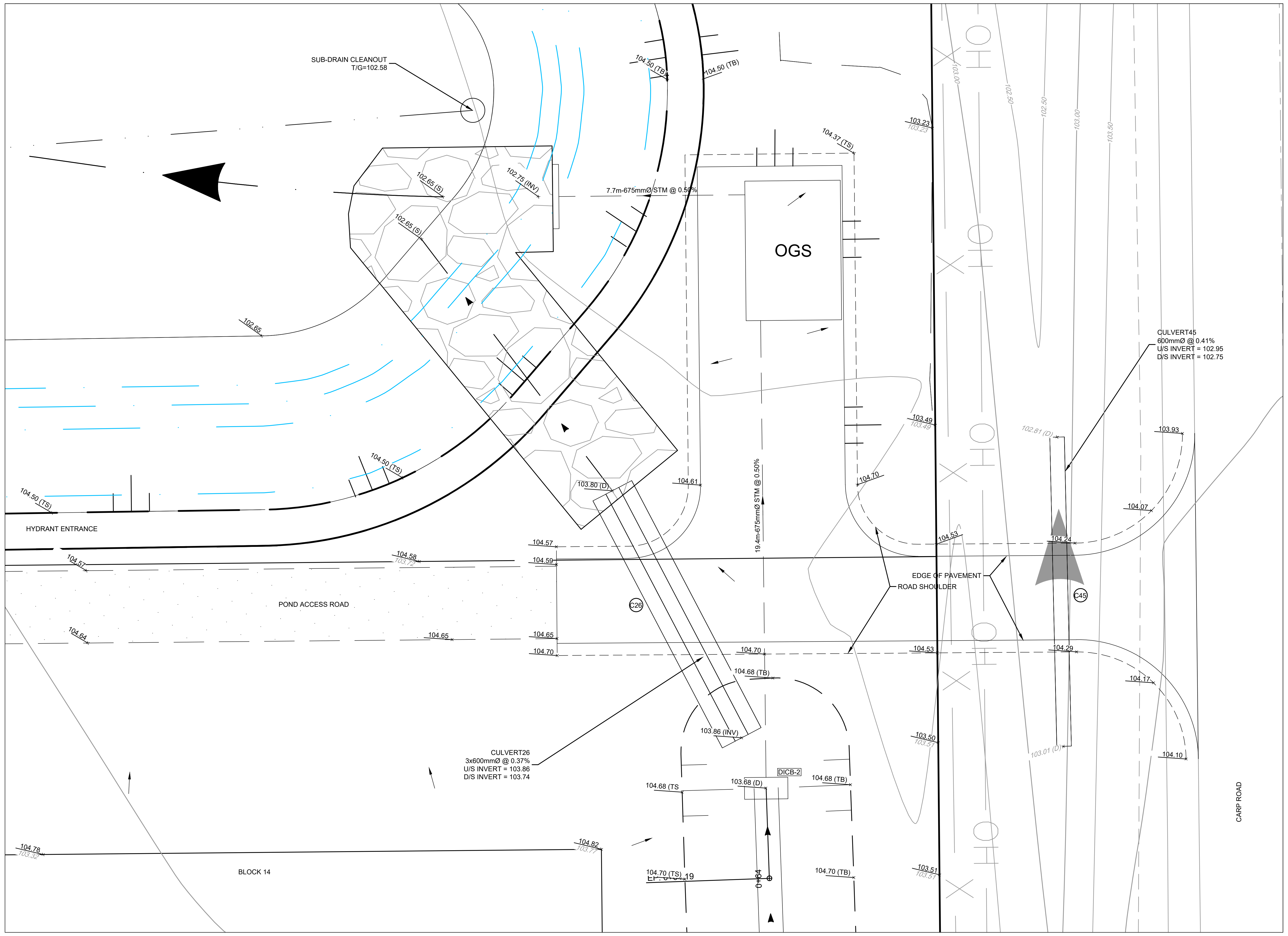
NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
NOTES & DETAILS -
POND 'A' INLET GRADING AND
DRAINAGE BLOWUP

PROJECT No. 102085-14
REV REV # 1
DRAWING No. 102085-BPND4

PLANB1.DWG - 1000mmx707mm


SUB-DRAIN CLEANOUT
T/G=102.58
104.50 (TB)
104.50 (TB)
104.37 (TS)
103.23
103.23
102.65 (S)
102.75 (INV)
7.7m-675mmØ STM @ 0.50%
102.65 (S)
OGS
102.65
CULVERT45
600mmØ @ 0.41%
U/S INVERT = 102.95
D/S INVERT = 102.75
103.00
102.50
102.50
103.00
103.50
103.49
103.49
102.81 (D)
103.93
104.50 (TS)
104.50 (TS)
103.80 (D)
104.61
104.70
19.4m-675mmØ STM @ 0.50%
104.07
HYDRANT ENTRANCE
104.57
104.53
104.24
104.58
103.72
104.57
104.59
EDGE OF PAVEMENT
ROAD SHOULDER
POND ACCESS ROAD
C26
C45
104.64
104.65
104.65
104.70
104.70
104.53
104.29
104.68 (TB)
104.17
103.86 (INV)
103.50
103.51
104.10
103.01 (D)
CULVERT26
3x600mmØ @ 0.37%
U/S INVERT = 103.86
D/S INVERT = 103.74
DICB-2
103.68 (D)
104.68 (TB)
104.68 (TS
CARP ROAD
104.78
103.32
104.82
103.77
BLOCK 14
104.70 (TS)
0+64
104.70 (TB)
103.51
103.51

NOTE:
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CLEARFORD
WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
1.	REVISED PER COMMENTS (NEW DRAWING)	NOV 14/25	ARM

SCALE
1:100

1:100
0 1 2 3 4

DESIGN MJB
CHECKED TGS
DRAWN MJB
CHECKED TGS
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

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Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
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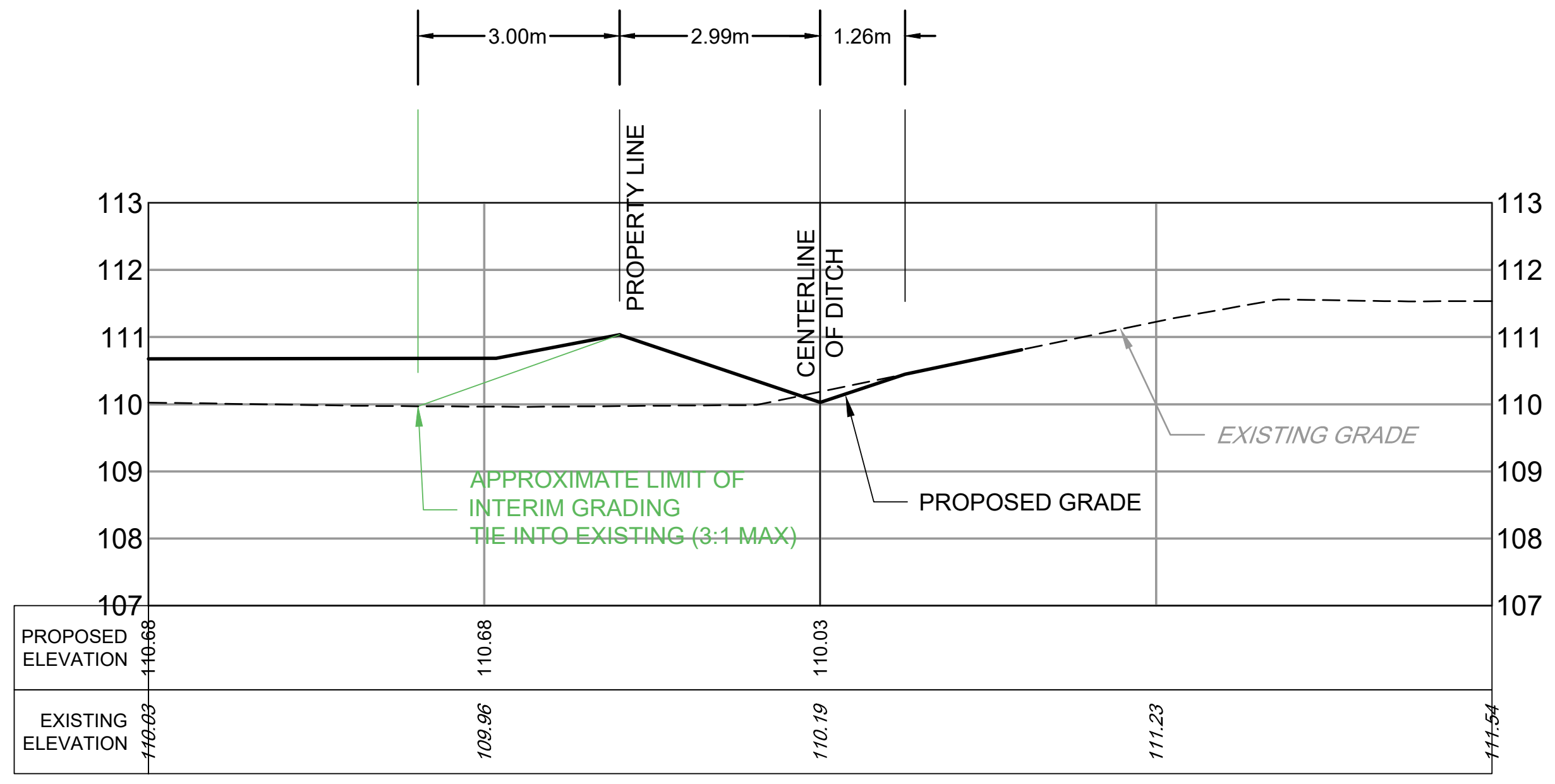
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
NOTES & DETAILS -
POND 'B' INLET GRADING AND DRAINAGE BLOWUP

PROJECT No.
102085-14
REV
REV # 1
DRAWING No.
102085-BPND5

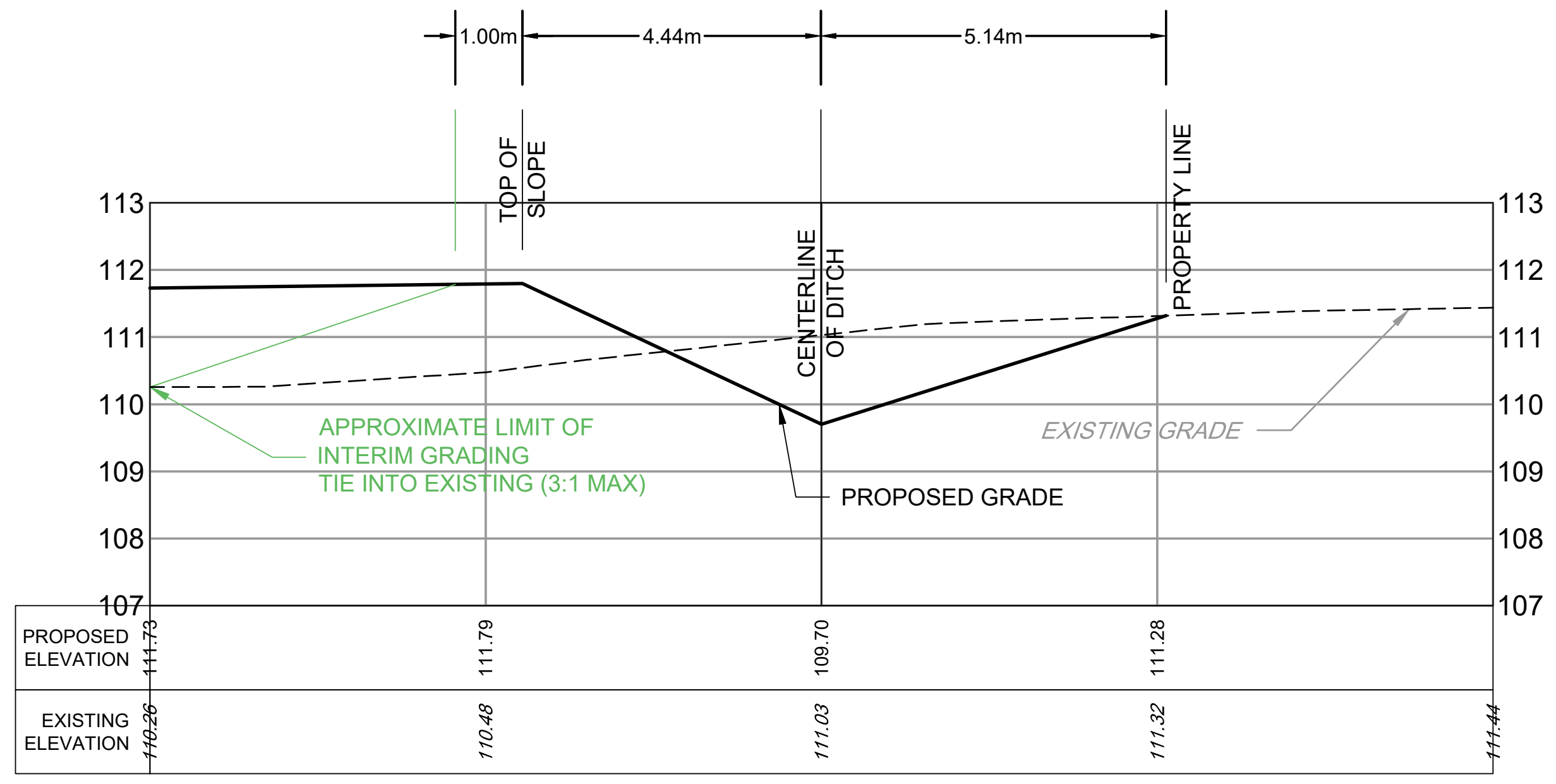
M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-ND.dwg, ND5, Nov 14, 2025 - 10:52am, mblanton

PLANB1.DWG - 1000mmx707mm


3.00m
2.99m
1.26m
PROPERTY LINE
CENTERLINE OF DITCH
113
112
111
110
109
108
107
APPROXIMATE LIMIT OF INTERIM GRADING TIE INTO EXISTING (3:1 MAX)
PROPOSED GRADE
EXISTING GRADE
PROPOSED ELEVATION
110.68
110.68
110.03
EXISTING ELEVATION
110.03
109.96
110.19
111.23
111.54

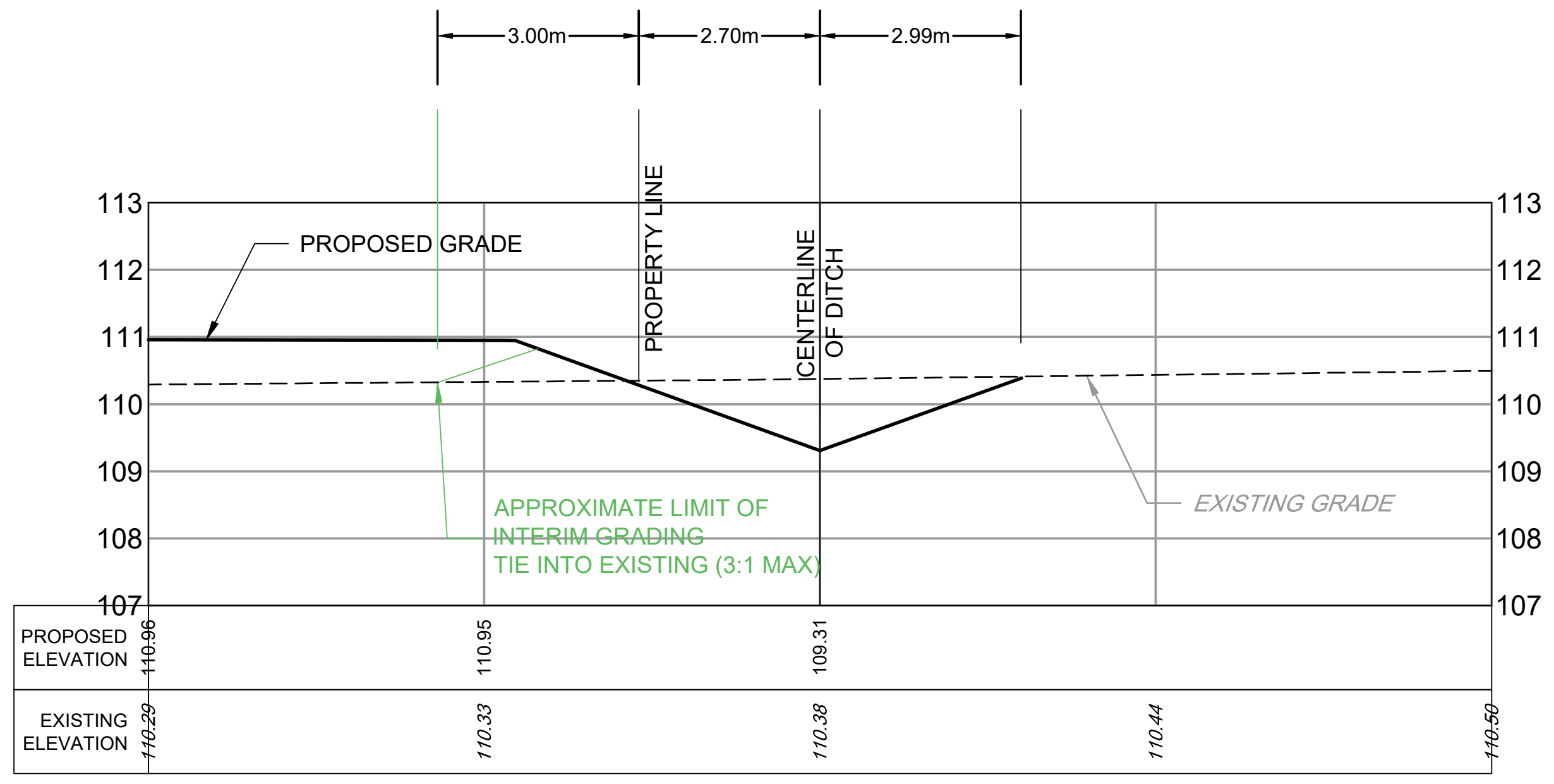
DITCH SECTION A-A

SCALE 1:100


1.00m
4.44m
5.14m
TOP OF SLOPE
CENTERLINE OF DITCH
PROPERTY LINE
113
112
111
110
109
108
107
APPROXIMATE LIMIT OF INTERIM GRADING TIE INTO EXISTING (3:1 MAX)
PROPOSED GRADE
EXISTING GRADE
PROPOSED ELEVATION
111.73
111.79
109.70
111.28
EXISTING ELEVATION
110.26
110.48
111.03
111.32
111.44

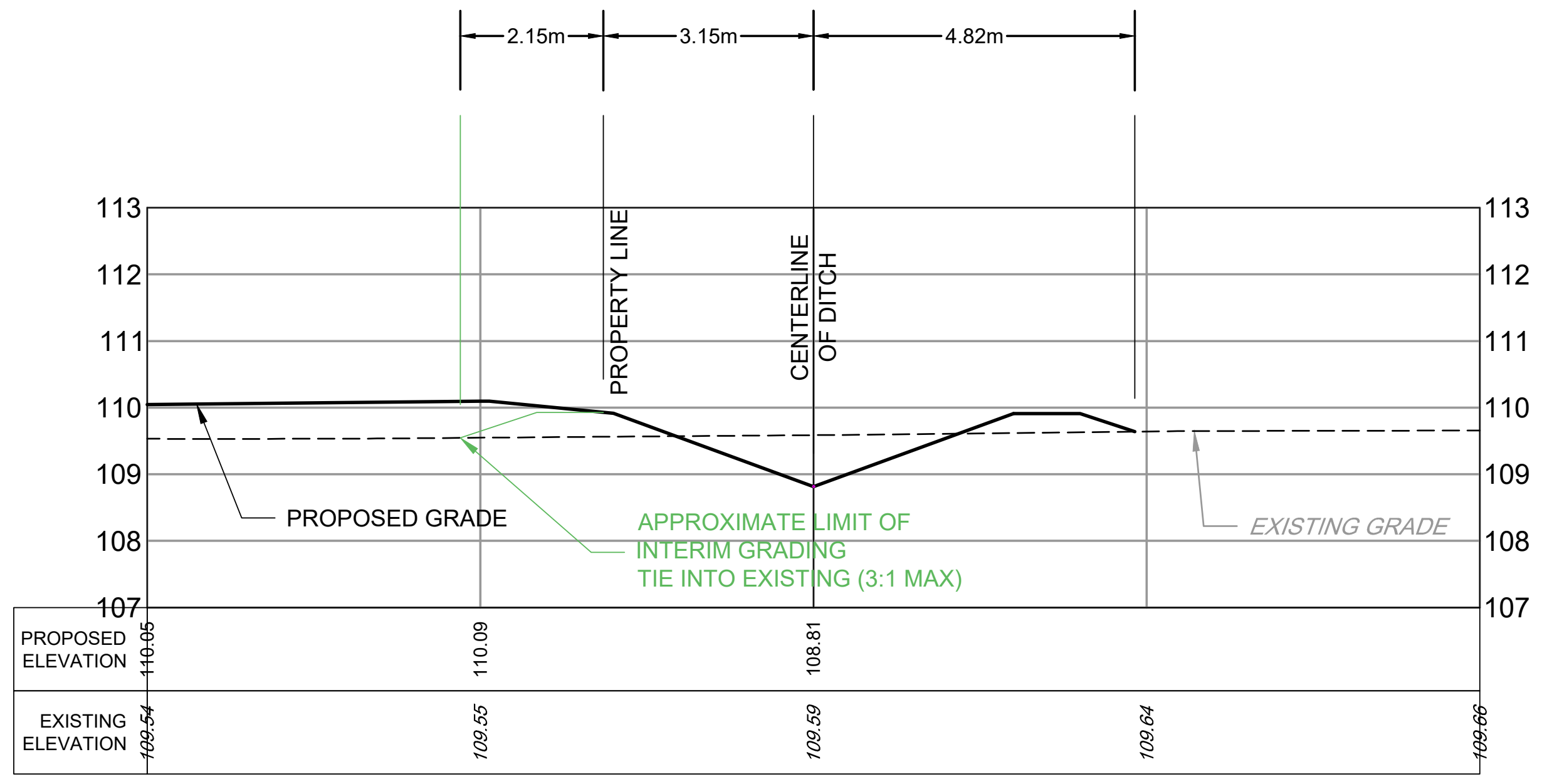
DITCH SECTION B-B

SCALE 1:100


3.00m
2.70m
2.99m
PROPOSED GRADE
PROPERTY LINE
CENTERLINE OF DITCH
113
112
111
110
109
108
107
APPROXIMATE LIMIT OF INTERIM GRADING TIE INTO EXISTING (3:1 MAX)
EXISTING GRADE
PROPOSED ELEVATION
110.96
110.95
109.31
EXISTING ELEVATION
110.29
110.33
110.38
110.44
110.50

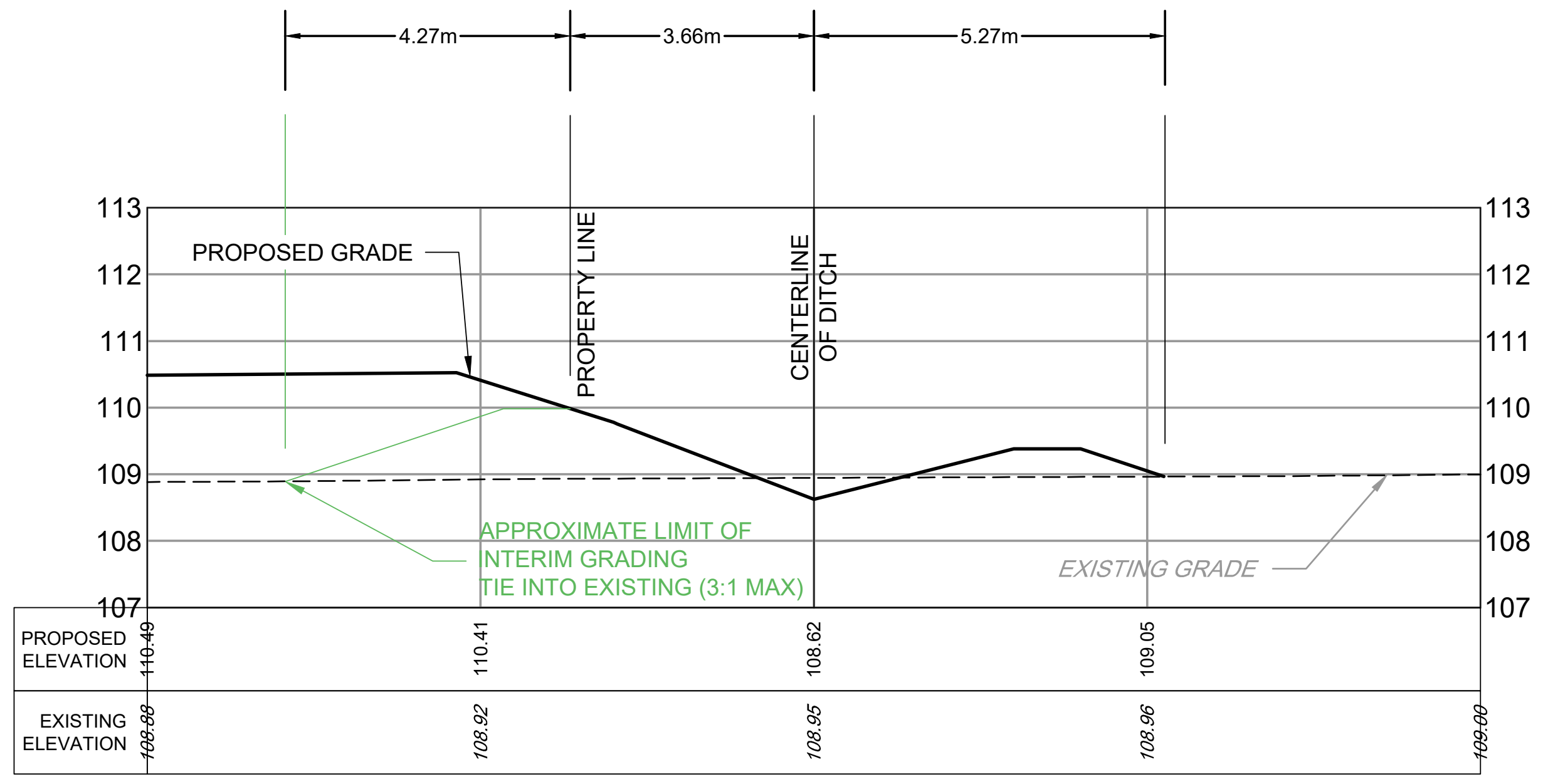
DITCH SECTION C-C

SCALE 1:100


2.15m
3.15m
4.82m
PROPERTY LINE
CENTERLINE OF DITCH
113
112
111
110
109
108
107
PROPOSED GRADE
APPROXIMATE LIMIT OF INTERIM GRADING TIE INTO EXISTING (3:1 MAX)
EXISTING GRADE
PROPOSED ELEVATION
110.05
110.09
108.81
EXISTING ELEVATION
109.54
109.55
109.59
109.64
109.66

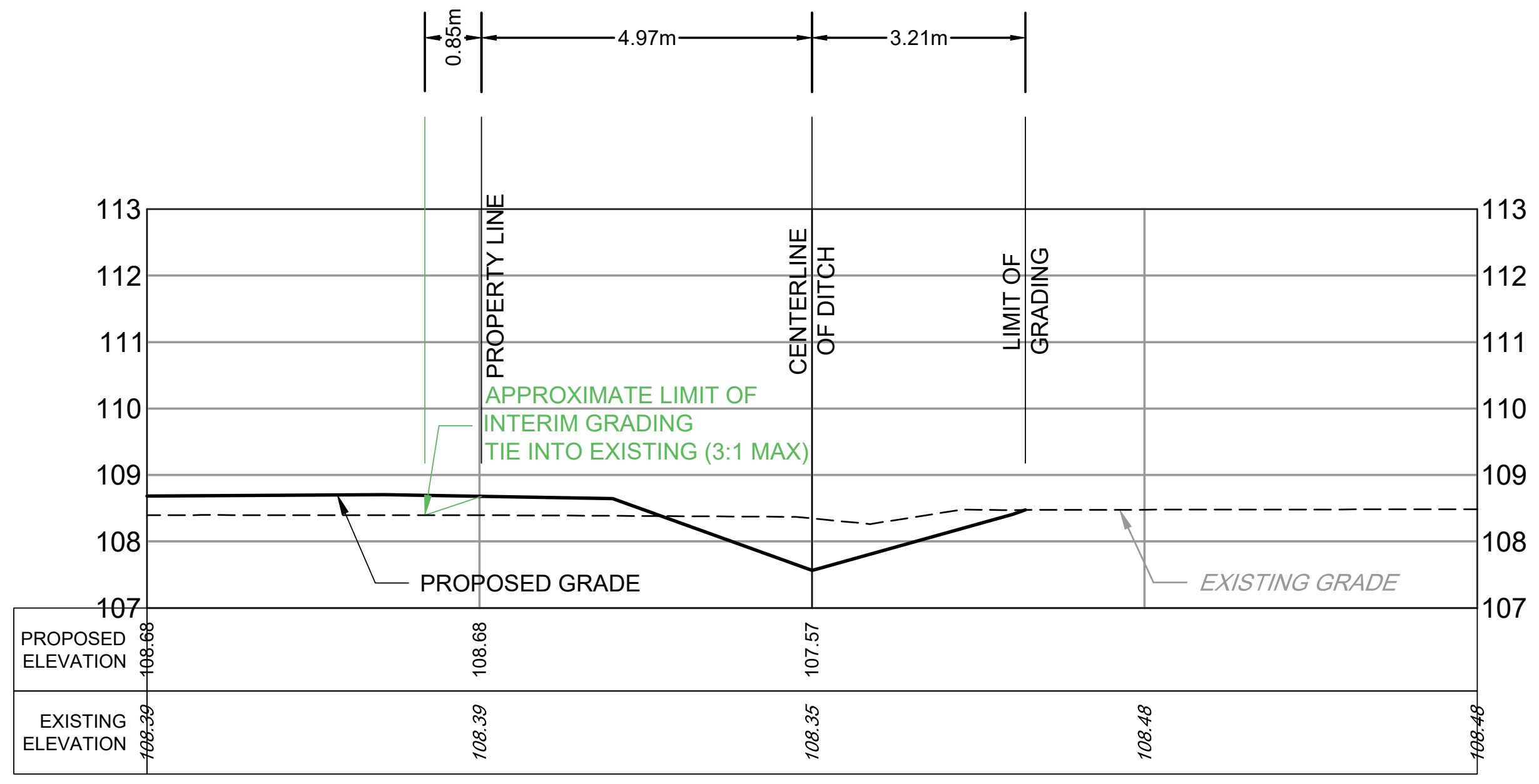
DITCH SECTION D-D

SCALE 1:100


4.27m
3.66m
5.27m
PROPOSED GRADE
PROPERTY LINE
CENTERLINE OF DITCH
113
112
111
110
109
108
107
APPROXIMATE LIMIT OF INTERIM GRADING TIE INTO EXISTING (3:1 MAX)
EXISTING GRADE
PROPOSED ELEVATION
110.49
110.41
108.62
109.05
EXISTING ELEVATION
108.88
108.92
108.95
108.96
109.00

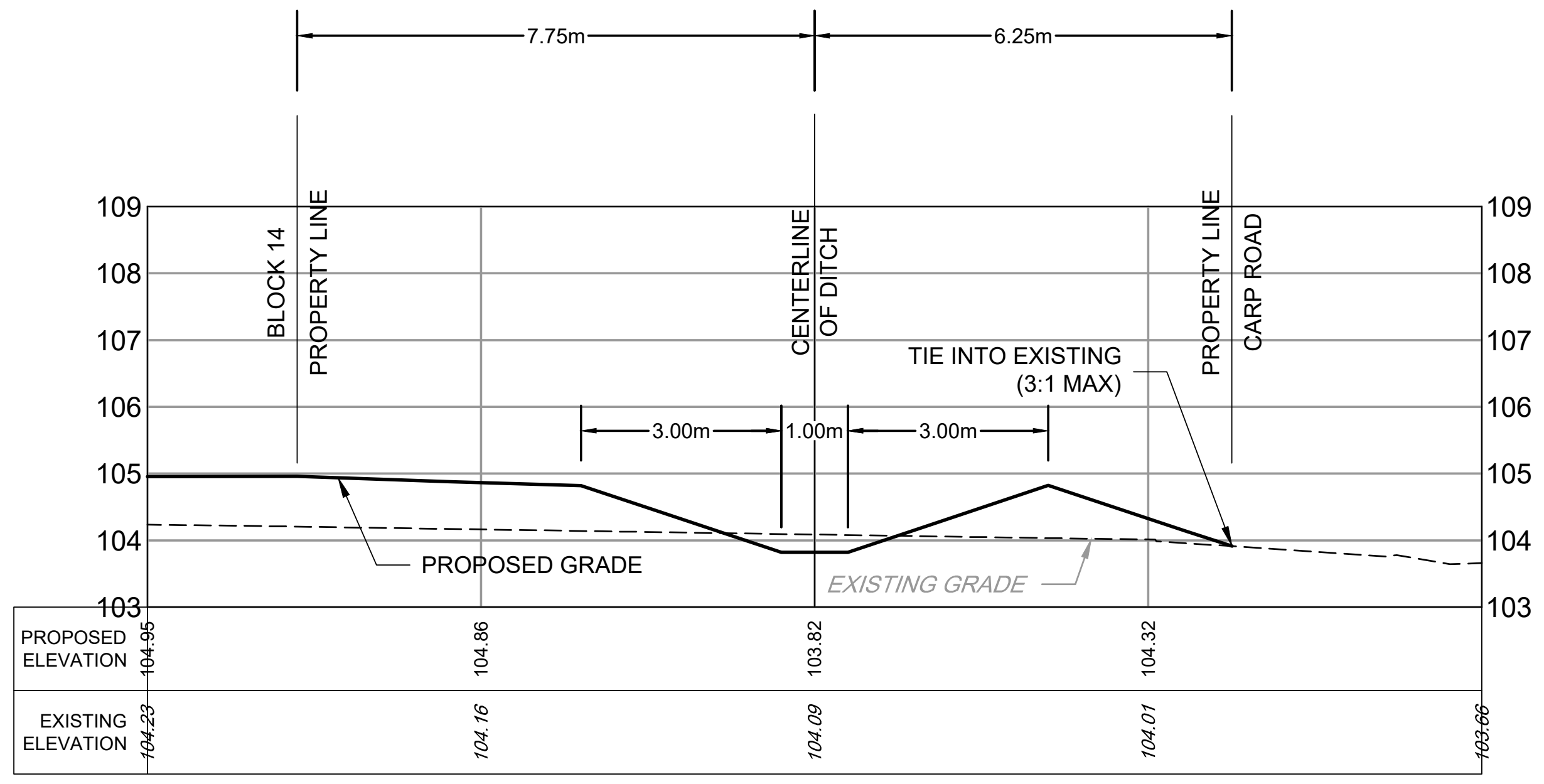
DITCH SECTION E-E

SCALE 1:100


0.85m
4.97m
3.21m
PROPERTY LINE
CENTERLINE OF DITCH
LIMIT OF GRADING
113
112
111
110
109
108
107
APPROXIMATE LIMIT OF INTERIM GRADING TIE INTO EXISTING (3:1 MAX)
PROPOSED GRADE
EXISTING GRADE
PROPOSED ELEVATION
108.68
108.68
107.57
EXISTING ELEVATION
108.39
108.39
108.35
108.48
108.48

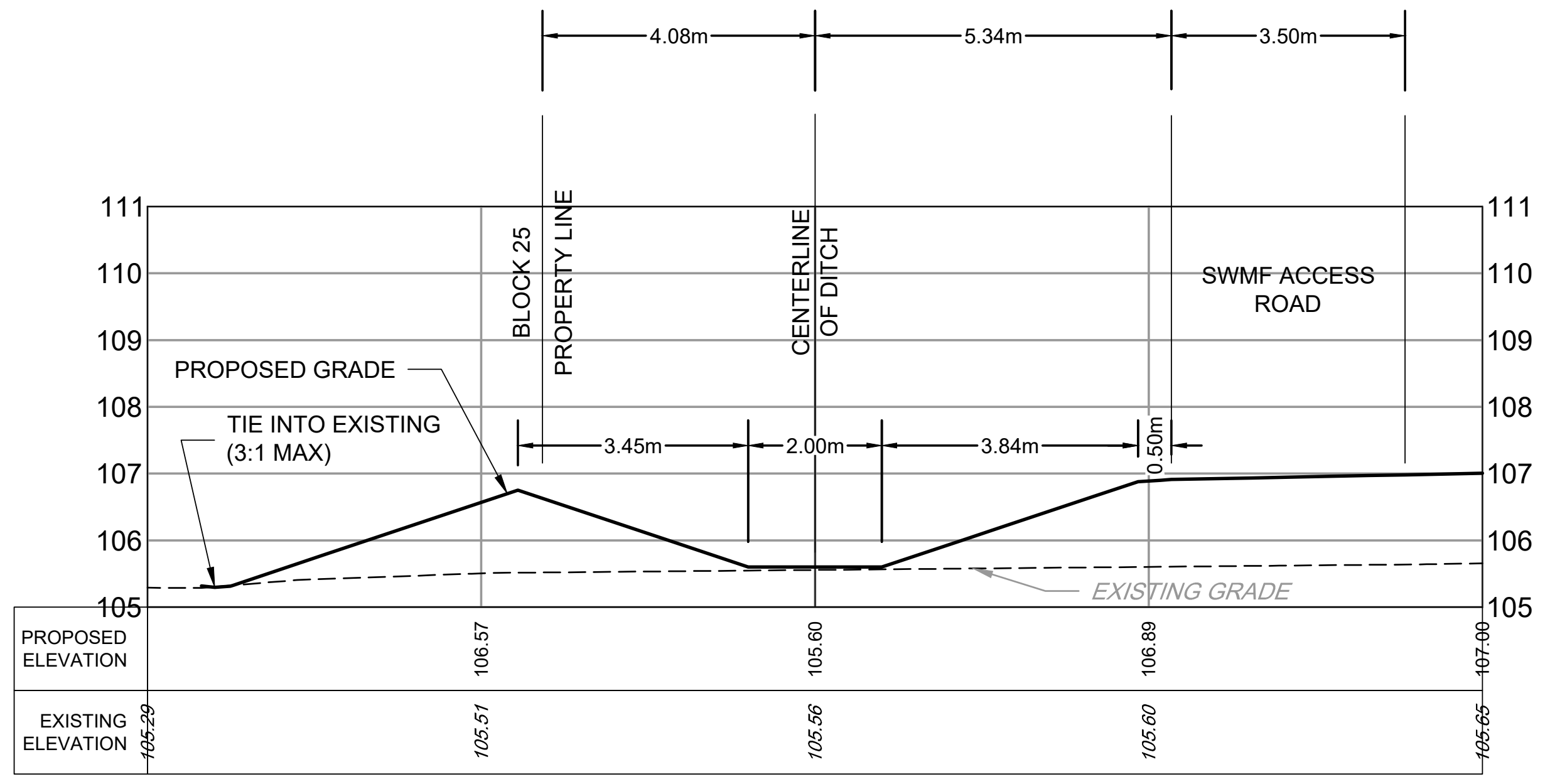
DITCH SECTION F-F

SCALE 1:100


7.75m
6.25m
BLOCK 14 PROPERTY LINE
CENTERLINE OF DITCH
PROPERTY LINE CARP ROAD
109
108
107
106
105
104
103
TIE INTO EXISTING (3:1 MAX)
3.00m
1.00m
3.00m
PROPOSED GRADE
EXISTING GRADE
PROPOSED ELEVATION
104.95
104.86
103.82
104.32
EXISTING ELEVATION
104.23
104.16
104.09
104.01
103.66

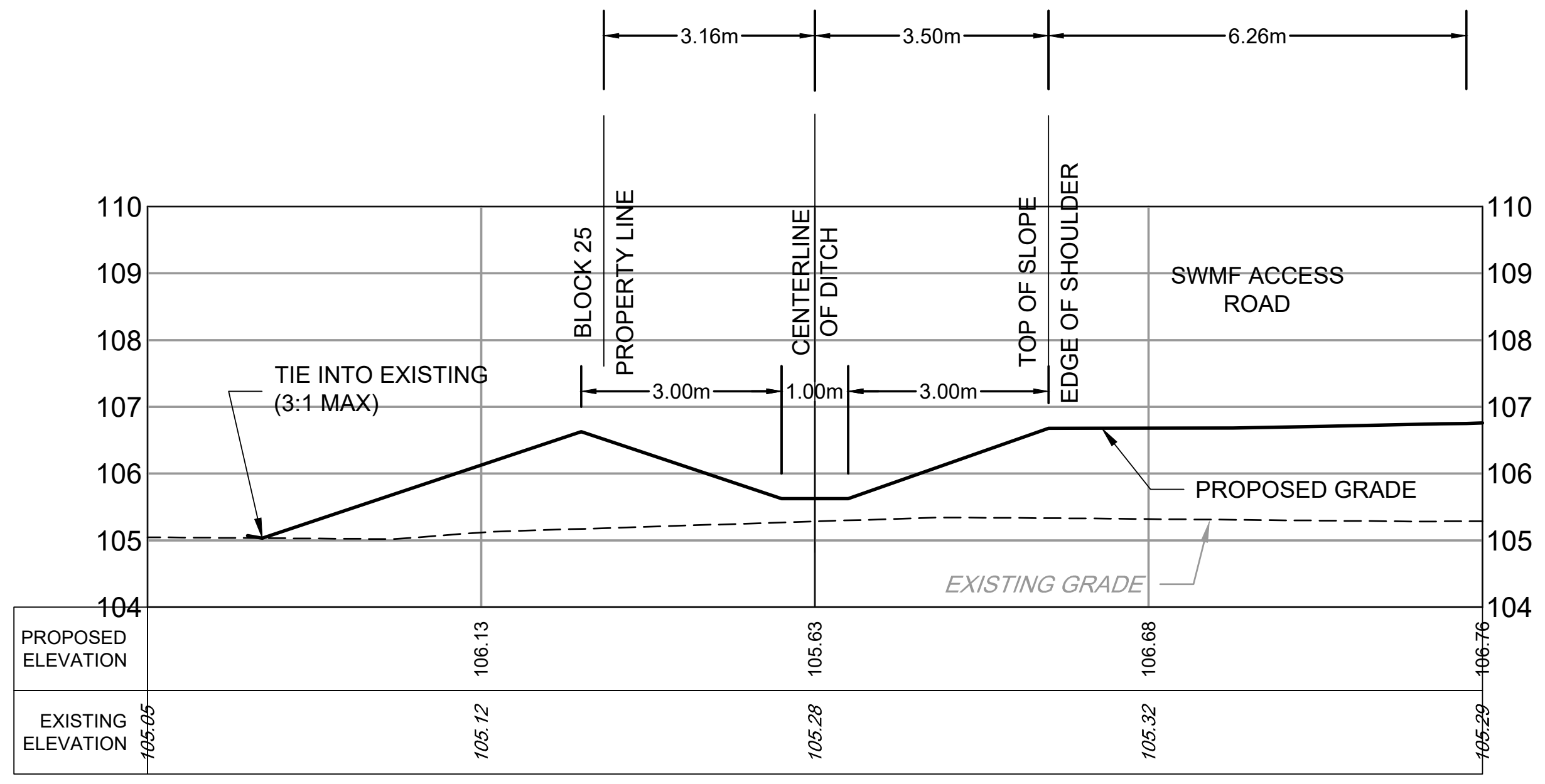
DITCH SECTION G-G

SCALE 1:100


4.08m
5.34m
3.50m
BLOCK 25 PROPERTY LINE
CENTERLINE OF DITCH
SWMF ACCESS ROAD
111
110
109
108
107
106
105
PROPOSED GRADE
TIE INTO EXISTING (3:1 MAX)
3.45m
2.00m
3.84m
0.50m
EXISTING GRADE
PROPOSED ELEVATION
106.57
105.60
106.89
107.00
EXISTING ELEVATION
105.29
105.51
105.56
105.60
105.65

DITCH SECTION H-H

SCALE 1:100


3.16m
3.50m
6.26m
BLOCK 25 PROPERTY LINE
CENTERLINE OF DITCH
TOP OF SLOPE EDGE OF SHOULDER
SWMF ACCESS ROAD
110
109
108
107
106
105
104
TIE INTO EXISTING (3:1 MAX)
3.00m
1.00m
3.00m
PROPOSED GRADE
EXISTING GRADE
PROPOSED ELEVATION
106.13
105.63
106.68
106.76
EXISTING ELEVATION
105.05
105.12
105.28
105.32
105.29

DITCH SECTION I-I

SCALE 1:100

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CLEARFORD

No.	REVISION	DATE	BY
1.	REVISED PER COMMENTS (NEW DRAWING)	NOV 14/25	ARM

SCALE
1:100
1:100
0 1 2 3 4

DESIGN	TGS
CHECKED	MJB
DRAWN	TGS
CHECKED	MJB
APPROVED	ARM

FOR REVIEW ONLY

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
DRAINAGE DITCH CROSS SECTIONS

PROJECT No. 102085-14
REV REV # 1
DRAWING No. 102085-BPND6

PLANB1.DWG - 1000mmx707mm

SEE SHEET 102085-GP6
SEE SHEET 102085-GP9
HUISSON ROAD
200mmØ EX-WM
PHASE 1 BUSINESS PARK
BLOCK 12, PLAN 4M-1511
BLOCK 14, PLAN 4M-1511
LIMITS OF PHASE 2 BUSINESS PARK
STREET 17
EDGE OF PAVEMENT
17+100
17+050
17+000
OPEN SPACE BLOCK
EXISTING GUARDRAIL
CARP ROAD
EXISTING 18.3m 1200mmØ CSP
S INV = 111.98
N INV = 111.88
5.0m SIGHT TRIANGLE
5.0m SIGHT TRIANGLE
C43
RUSS BRADLEY ROAD
EDGE OF PAVEMENT
200mmØ EX-WM
200mmØ EX-WM
CORE AIRPORT AREA
EXISTING SOUTHEAST TRIBUTARY
PHASE 1 BUSINESS PARK
CORE AIRPORT AREA
CARP ROAD
N
CONSTRUCTION NORTH
N
THOMAS ARGUE ROAD
MARCH ROAD
SITE
(PHASE 2 BUSINESS PARK)
CARP ROAD
WEST CAPITAL AIRPARK
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
N

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
⌖ HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
⌖ *HYD*	EXISTING HYDRANT C/W VALVE & LEAD
SBS SAN	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SAN FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP	PROPOSED SANITARY SYSTEM ACCESS POINT
CB ⊡	PROPOSED CATCHBASIN
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
— - —	PROPOSED CENTRELINE OF ROAD
——	PROPOSED EDGE OF PAVEMENT
— · ▶—	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
— - - —	LIMIT OF DEVELOPMENT (NO TOUCH)
- - - - -	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
◉	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)

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CLEARFORD

CLEARFORD WATER SYSTEMS INC.

WEST CAPITAL Developments

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
17.	REVISED PER COMMENTS	NOV 14/25	ARM	9.	ISSUED FOR WATERMAIN CONSTRUCTION	SEPT 07/18	ARM
16.	ISSUED FOR REVIEW	NOV 19/24	ARM	8.	ISSUED FOR TENDER	FEB 26/15	DJC
15.	ISSUED FOR REVIEW	OCT 29/24	ARM	7.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	FEB 19/14	DJC
14.	ISSUED FOR COORDINATION	AUG 22/24	ARM	6.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
13.	ISSUED FOR COORDINATION	APR 23/24	ARM	5.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
12.	ISSUED FOR CONSTRUCTION (NO CHANGES)	AUG 20/20	ARM	4.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
11.	ISSUED FOR TENDER ROADS, TAXIWAY & DITCHING	JULY 17/20	ARM	3.	ISSUED TO OLS	MAR 11/13	DJC
10.	ISSUED FOR TENDER ROADS, TAXIWAY & DITCHING	JULY 17/20	ARM	2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC

SCALE
1:750

1:750
0 10 20 30

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
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Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

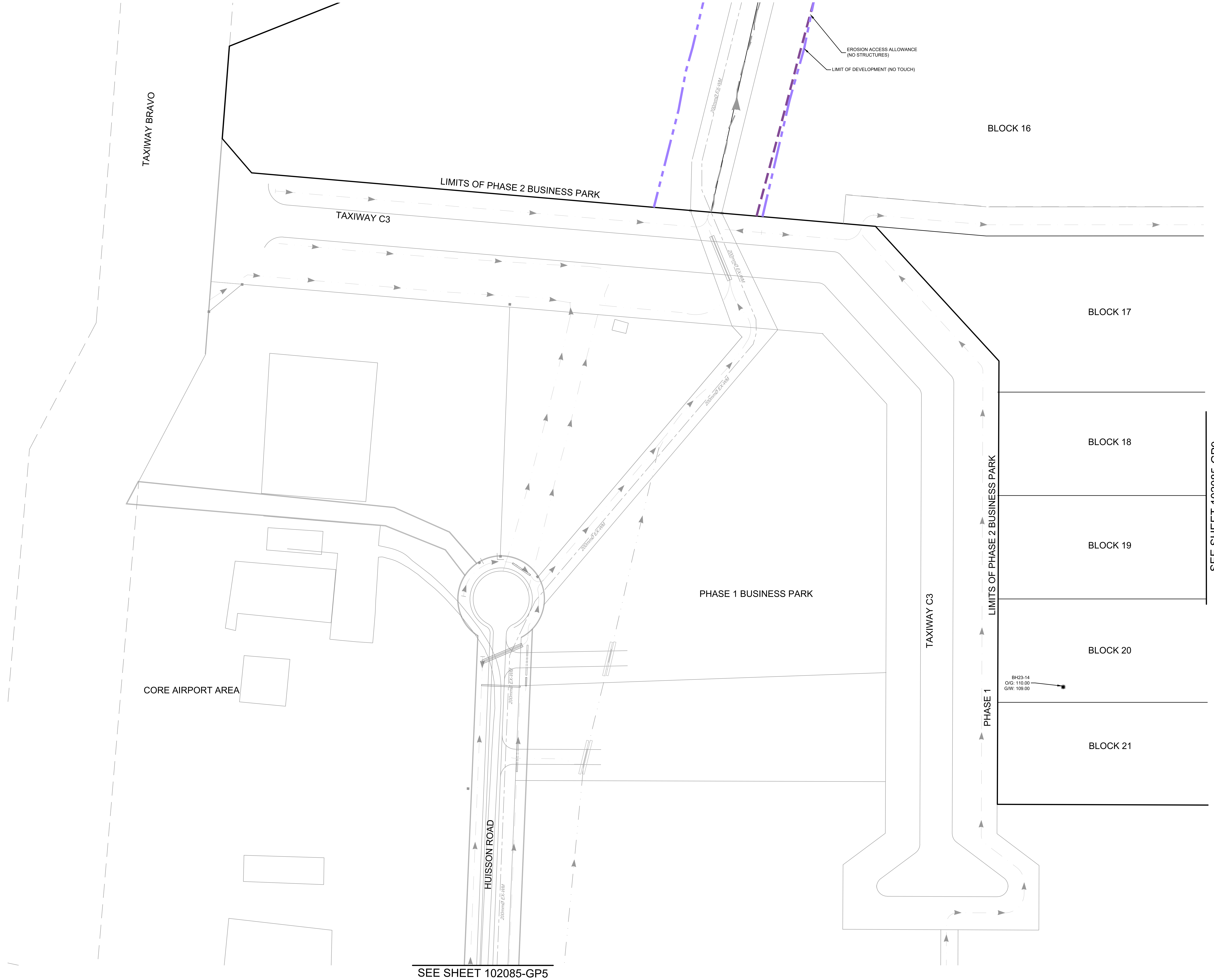
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

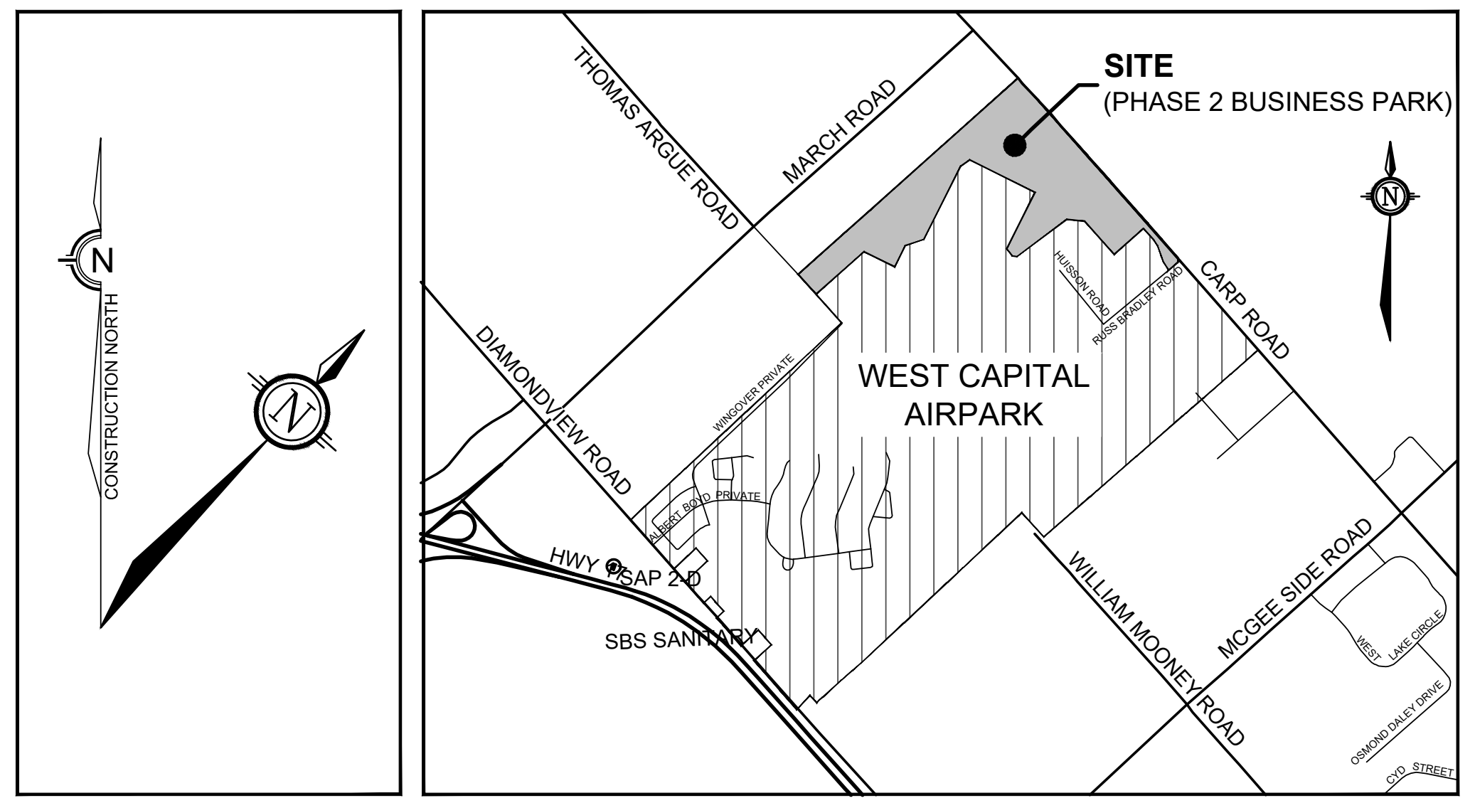
DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No. 102085-14
REV REV # 17
DRAWING No. 102085-GP5

PLANB1.DWG - 1000mmx707mm

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-GP.dwg, GP5, Nov 14, 2025 - 10:54am, tstaff


TAXIWAY BRAVO
LIMITS OF PHASE 2 BUSINESS PARK
TAXIWAY C3
EROSION ACCESS ALLOWANCE
(NO STRUCTURES)
LIMIT OF DEVELOPMENT (NO TOUCH)
200mmØ EX-WM
BLOCK 16
BLOCK 17
BLOCK 18
BLOCK 19
BLOCK 20
BLOCK 21
SEE SHEET 102085-GP9
LIMITS OF PHASE 2 BUSINESS PARK
PHASE 1
TAXIWAY C3
PHASE 1 BUSINESS PARK
CORE AIRPORT AREA
HUISSON ROAD
BH23-14
O/G: 110.00
G/W: 109.00
SEE SHEET 102085-GP5


CONSTRUCTION NORTH
N
SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
HUISSON ROAD
RUSS BRADLEY ROAD
WEST CAPITAL AIRPARK
HWY 7
SAP 2-D
SBS SANITARY
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ V&VB	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SAN	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SAN FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP	PROPOSED SANITARY SYSTEM ACCESS POINT
CB ⊡	PROPOSED CATCHBASIN
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
	LIMIT OF DEVELOPMENT (NO TOUCH)
	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
●	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)

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CLEARFORD WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL Developments

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
16.	REVISED PER COMMENTS	NOV 14/25	ARM	8.	ISSUED FOR TENDER	FEB 26/15	DJC
15.	ISSUED FOR REVIEW	NOV 19/24	ARM	7.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	FEB 19/14	DJC
14.	ISSUED FOR REVIEW	OCT 29/24	ARM	6.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
13.	ISSUED FOR COORDINATION	AUG 22/24	ARM	5.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
12.	ISSUED FOR COORDINATION	APR 23/24	ARM	4.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
11.	ISSUED FOR CONSTRUCTION (NO CHANGES)	AUG 20/20	ARM	3.	ISSUED TO OLS	MAR 11/13	DJC
10.	ISSUED FOR TENDER ROADS, TAXIWAY & DITCHING	JUL 17/20	ARM	2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
9.	ISSUED FOR WATERMAIN CONSTRUCTION	SEPT 07/18	ARM	1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE

1:750

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DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME

GENERAL PLAN OF SERVICES

PROJECT No.
102085-14

REV
REV # 16

DRAWING No.
102085-GP6

PLANB1.DWG - 1000mmx707mm

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-GP.dwg, GP6, Nov 14, 2025 - 10:54am, tstaff

STREET 15
SEE SHEET 102085-GP8
THOMAS ARGUE ROAD
STREET 16
2x75mmØ SAN FORCEMAIN
150mmØ SBS SAN
SAP
EDGE OF PAVEMENT
V&VB
150mmØ EX-WM
300mmØ EX-FPWM
C20
C23
C24
C25
C21
C22
C42
C46
10.00m EASEMENT
CONNECT TO EXISTING DOMESTIC AND FIRE PROTECTION WATERMAINS
EX HYD (15-7)
HYD (15-7)
HYD (15-8)
EXISTING FIRE HYDRANT TO BE RELOCATED
BACKFLOW PREVENTER (SEE DRAWING 102085-BPND3 FOR DETAILS)
HYD (16-1)
HYD (16-2)
300mmØ FPWM
150mmØ WM
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 6
BLOCK 7
BLOCK 8
BLOCK 9
BLOCK 10
BLOCK 9 HIGH POINT
BLOCK 8 HIGH POINT
WCAA GARAGE & STORAGE
BLOCK 294 (DRAFT PLAN)
LIMITS OF PHASE 2 BUSINESS PARK
EXISTING TAXIWAY
14 T-HANGERS
EXISTING APRON
WESTAIR TERMINAL
CORE AIRPORT AREA
EXISTING TAXIWAY ALPHA
SIB (857)
CONSTRUCTION NORTH
N
SITE
(PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
HUISSON ROAD
RUSS BRADLEY ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
⌖ HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
⌖ *HYD*	EXISTING HYDRANT C/W VALVE & LEAD
SBS SAN	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SAN FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP	PROPOSED SANITARY SYSTEM ACCESS POINT
CB ⊡	PROPOSED CATCHBASIN
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
— - —	PROPOSED CENTRELINE OF ROAD
——	PROPOSED EDGE OF PAVEMENT
— · ►	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▬ ▪ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
▬ ▬ ▬	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
◉	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)

NOTE:
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CLEARFORD

No.	REVISION	DATE	BY
13.	REVISED PER COMMENTS	NOV 14/25	ARM
12.	ISSUED FOR REVIEW	NOV 19/24	ARM
11.	ISSUED FOR REVIEW	OCT 29/24	ARM
10.	ISSUED FOR COORDINATION	AUG 22/24	ARM
9.	ISSUED FOR COORDINATION	APR 23/24	ARM
8.	ISSUED FOR TENDER	FEB 26/15	DJC
7.	ISSUED FOR PHASE 1 RESIDENTIAL REGISTRATION	OCT 15/14	DJC
6.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
5.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
4.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
3.	ISSUED TO OLS	MAR 11/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:750

1:750
0 10 20 30

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
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LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No. 102085-14
REV REV # 13
DRAWING No. 102085-GP7

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-GP.dwg, GP7 Nov 14, 2025 - 10:54am, tstaff

PLANB1.DWG - 1000mmx707mm

STREET 15
SEE SHEET 102085-GP7
EXISTING FIRE HYDRANT TO BE RELOACTED
2x75mmØ SAN FORCEMAIN
150mmØ SBS SAN
SAP
C20
C19
C18
C17
C1
15+750
15+800
15+850
15+900
15+950
EDGE OF PAVEMENT
150mmØ EX-WM
300mmØ EX-FPWM
300mmØ EX-WM
HYD (15-9)
HYD (15-10)
EX HYDRANT
V&VB
HYD (15-11)
HYD (15-12)
CONNECT TO EXISTING 150mmØ WATERMAIN
150mmØ SANITARY STUB FOR FUTURE CAP INV: 105.24
300mm X 200mm REDUCER
BACKFLOW PREVENTER (SEE DRAWING 102085-BPND3 FOR DETAILS)
3.5m SWMF ACCESS ROAD
200MM X 200MM TEE C/W 300MM TO 200MM REDUCER
26.7m-600mmØ STM @ 1.00%
11.2m-600mmØ STM @ 1.00%
DICB-1
16+000
16+050
16+100
16+150
16+200
16+250
16+300
16+350
16+400
200mmØ SBS SAN
150mmØ WM
22.5°
45°
200mmØ EX-WM
POND ACCESS ROAD
6.0m EASEMENT
200mmØ EX-FPWM
BH23-05 O/G: 103.70 GW: 103.10
POND A INLET (REFER TO DRAWING 102085-SWMF7 FOR DETAILS)
SANITARY PUMPING STATION (SEE DRAWING 102085-SPS)
SWM POND 'A' (REFER TO DRAWING 102085-SWMF7 & SWMF8)
SERVICING BLOCK
300mmØ FPWM
150mmØ WM
150mmØ SBS SAN
BLOCK 11
BLOCK 12
BLOCK 13
BLOCK 9
BLOCK 14
BLOCK 15
LIMIT OF PHASE 2 BUSINESS PARK
BH23-06 O/G: 106.00 G/W: 102.70
SANMH-1
SANMH-2
150mmØ SBS SAN
INVERTED SIPHON CROSSING
SIB
SSIB
OH
EXISTING 1000mmØ CSP CULVERT
W.INV=100.30
E.INV=99.68
POND ACCESS ROAD
POND B INLET (REFER TO DRAWING 102085-SWMF9)
BH23-09 O/G:103.80 G/W:103.20
SWM POND 'B' (REFER TO DRAWING 102085-SWMF9)
C26
C45
DICB-2
150mmØ SBS SAN
150mmØ WM
300mmØ FPWM
SERVICING BLOCK
CARP ROAD
300X300MM TEE
150X150MM TEE
STREET 18
CAP
V&VB
150mmØ WM
150mmØ SBS SAN
18+000
18+050
18+100
18+150
18+200
18+250
18+300
17+825
17+800
17+750
C28
C29
C44
HYD (17-7)
STREET 17
SWM POND 'C' (REFER TO DRAWING 102085-SWMF10)
300mmØ FPWM
EXISTING 1.8
SEE SHEET 102085-GP9
CONSTRUCTION NORTH
N
SITE (PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
DIAMONDVIEW ROAD
CARP ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
HUISSON ROAD
RUSS BRADLEY ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ V&VB	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SAN	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SAN FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP	PROPOSED SANITARY SYSTEM ACCESS POINT
CB	PROPOSED CATCHBASIN
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
	LIMIT OF DEVELOPMENT (NO TOUCH)
	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
●	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)

NOTE:
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CLEARFORD

CLEARFORD WATER SYSTEMS INC.

WEST CAPITAL Developments

No.	REVISION	DATE	BY
14.	REVISED PER COMMENTS	NOV 14/25	ARM
13.	ISSUED FOR REVIEW	NOV 19/24	ARM
12.	ISSUED FOR REVIEW	OCT 29/24	ARM
11.	ISSUED FOR COORDINATION	AUG 22/24	ARM
10.	ISSUED FOR COORDINATION	APR 23/24	ARM
9.	ISSUED FOR WATERMAIN CONSTRUCTION	SEPT 07/18	ARM

No.	REVISION	DATE	BY
8.	ISSUED FOR TENDER	FEB 26/15	DJC
7.	ISSUED FOR PHASE 1 RESIDENTIAL REGISTRATION	OCT 15/14	DJC
6.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
5.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
4.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
3.	ISSUED TO OLS	MAR 11/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
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1:750
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DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

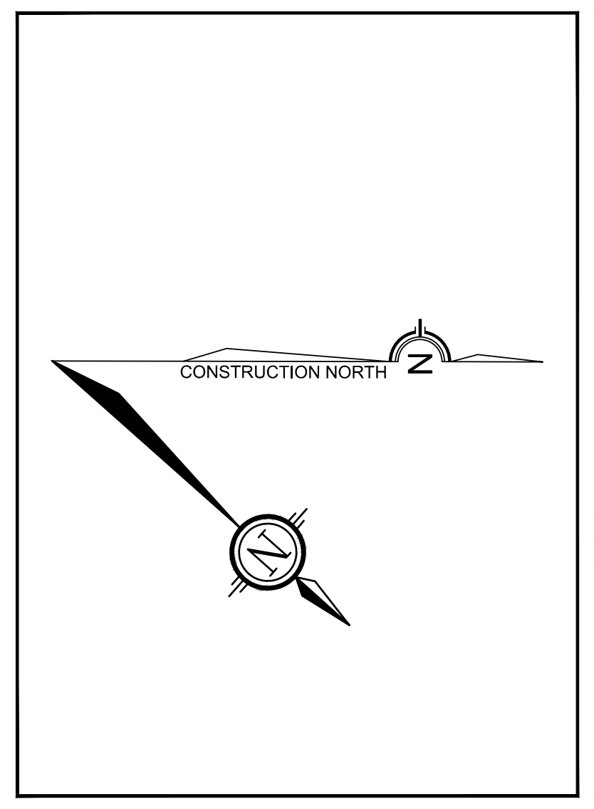
Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

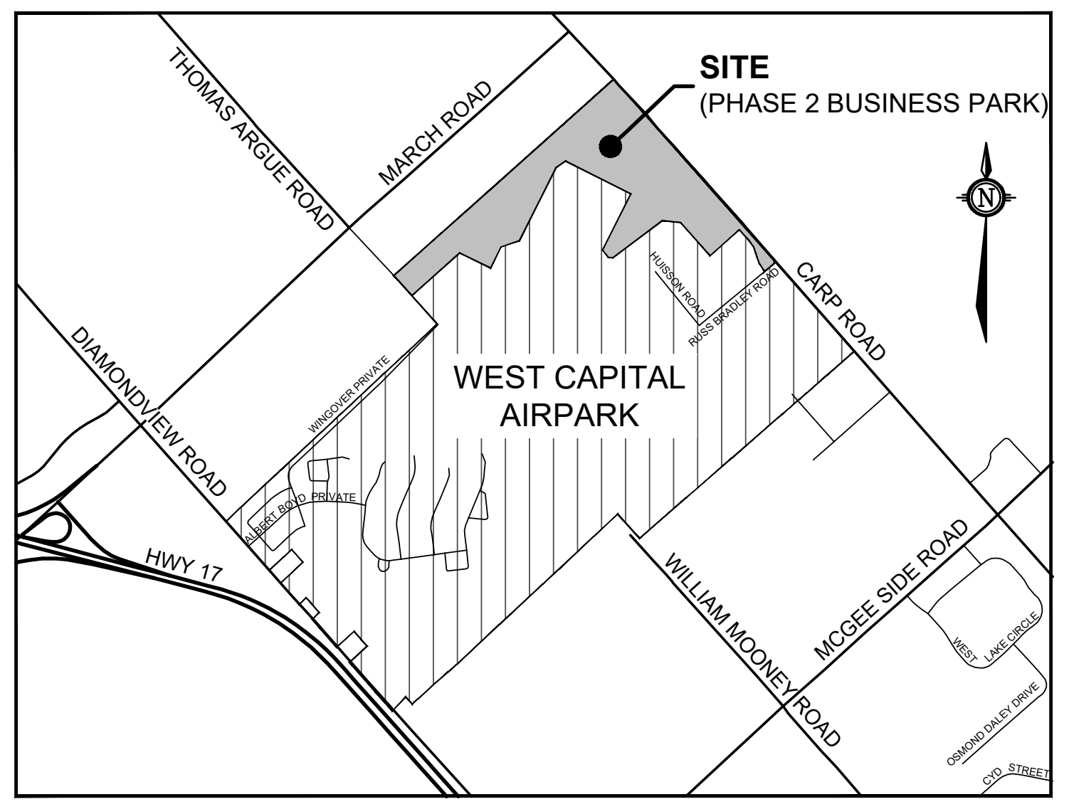
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No.	102085-14
REV	REV # 14
DRAWING No.	102085-GP8

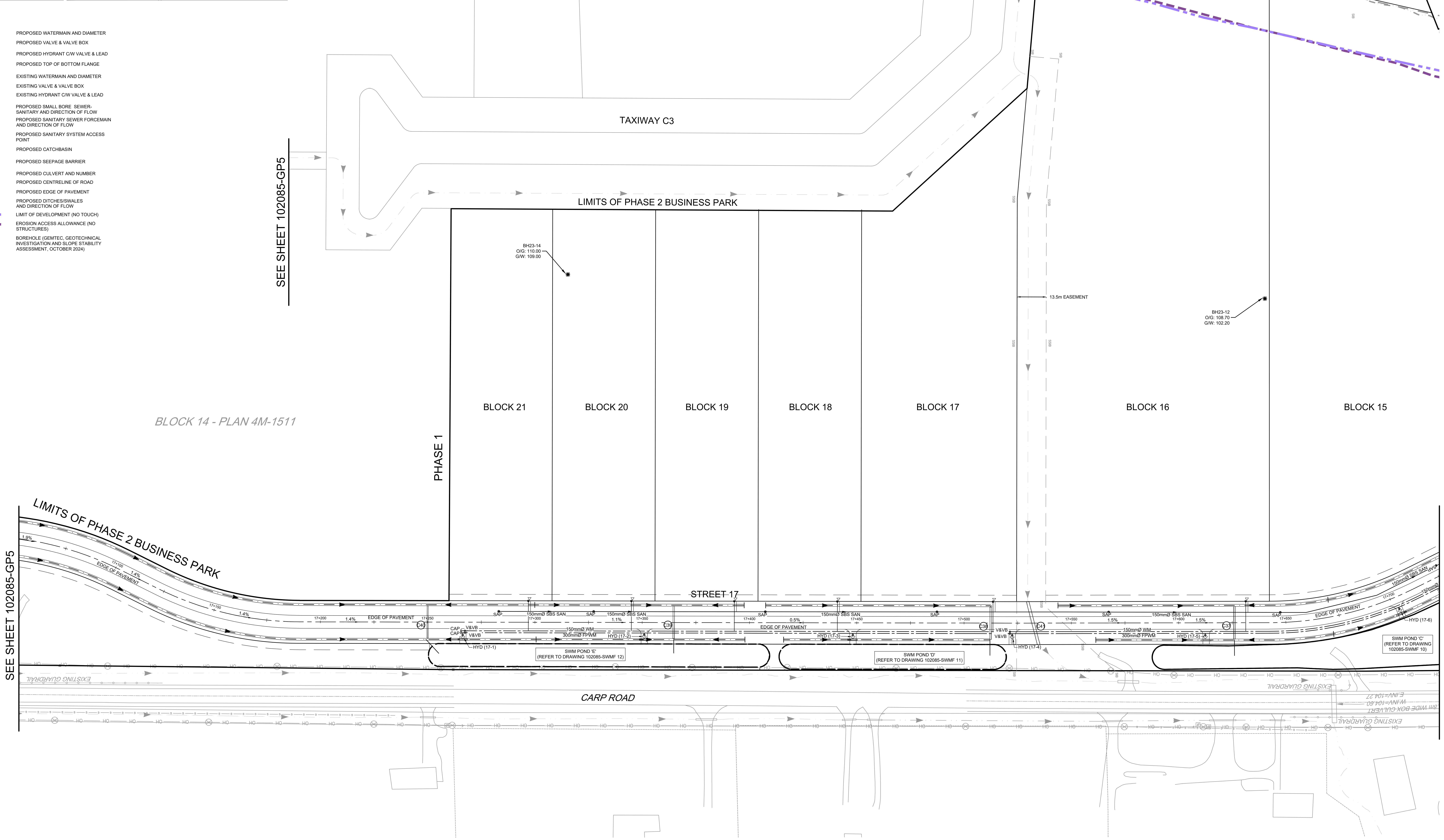
PLANB1.DWG - 1000mmx707mm


CONSTRUCTION NORTH
N


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WEST CAPITAL
AIRPARK
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
N

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SAN	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SAN FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP	PROPOSED SANITARY SYSTEM ACCESS POINT
CB ⊡	PROPOSED CATCHBASIN
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
	LIMIT OF DEVELOPMENT (NO TOUCH)
	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
●	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)


SEE SHEET 102085-GP6
SEE SHEET 102085-GP5
SEE SHEET 102085-GP5
SEE SHEET 102085-GP8
200mmØ EX-WM
TAXIWAY C3
LIMITS OF PHASE 2 BUSINESS PARK
BH23-14
O/G: 110.00
G/W: 109.00
13.5m EASEMENT
BH23-12
O/G: 108.70
G/W: 102.20
BLOCK 21
BLOCK 20
BLOCK 19
BLOCK 18
BLOCK 17
BLOCK 16
BLOCK 15
BLOCK 14 - PLAN 4M-1511
PHASE 1
LIMITS OF PHASE 2 BUSINESS PARK
STREET 17
EDGE OF PAVEMENT
1.9%
1.4%
1.4%
1.4%
17+100
17+150
17+200
17+250
17+300
17+350
17+400
17+450
17+500
17+550
17+600
17+650
17+700
1.1%
0.5%
1.5%
1.5%
SAP
150mmØ SBS SAN
150mmØ WM
300mmØ FPWM
CAP
V&VB
HYD (17-1)
HYD (17-2)
HYD (17-3)
HYD (17-4)
HYD (17-5)
HYD (17-6)
C37
C38
C39
C40
C41
SWM POND 'E'
(REFER TO DRAWING 102085-SWMF 12)
SWM POND 'D'
(REFER TO DRAWING 102085-SWMF 11)
SWM POND 'C'
(REFER TO DRAWING 102085-SWMF 10)
CARP ROAD
EXISTING GUARDRAIL
EXISTING GUARDRAIL
E.INV=104.27
W.INV=104.60
.8m WIDE BOX CULVERT
EXISTING GUARDRAIL
HO
SSIB

NOTE:
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CLEARFORD

CLEARFORD WATER SYSTEMS INC.

WEST CAPITAL Developments

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
				8.	ISSUED FOR TENDER	MAR 9/15	DJC
15.	REVISED PER COMMENTS	NOV 14/25	ARM	7.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	FEB 19/14	DJC
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9.	ISSUED FOR TENDER ROADS, TAXIWAY & DITCHING	JUL 17/20	ARM	1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:750

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DESIGN	MJB
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APPROVED	ARM

FOR REVIEW ONLY

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No.
102085-14

REV
REV # 15

DRAWING No.
102085-GP9

PLANB1.DWG - 1000mmx707mm

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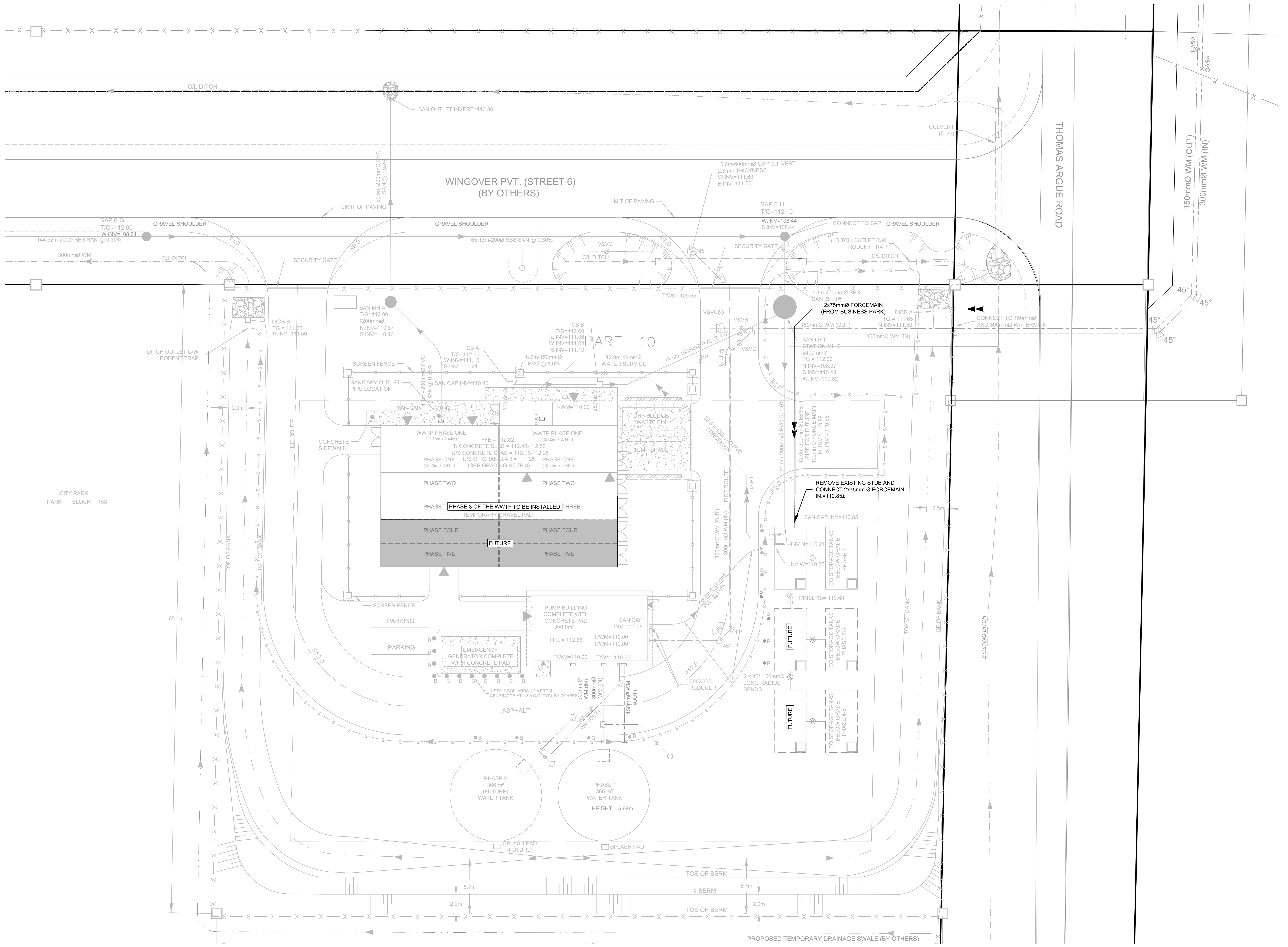
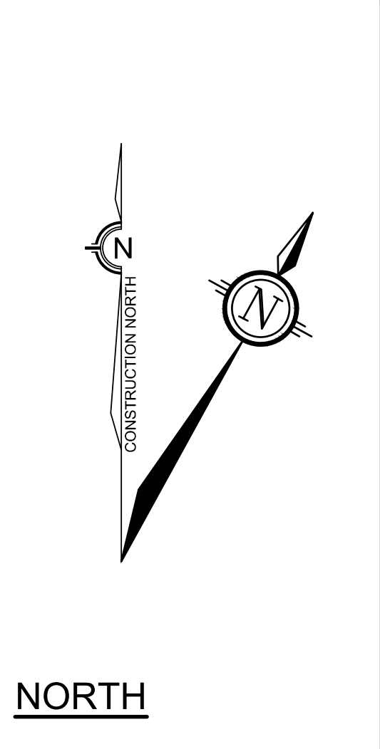
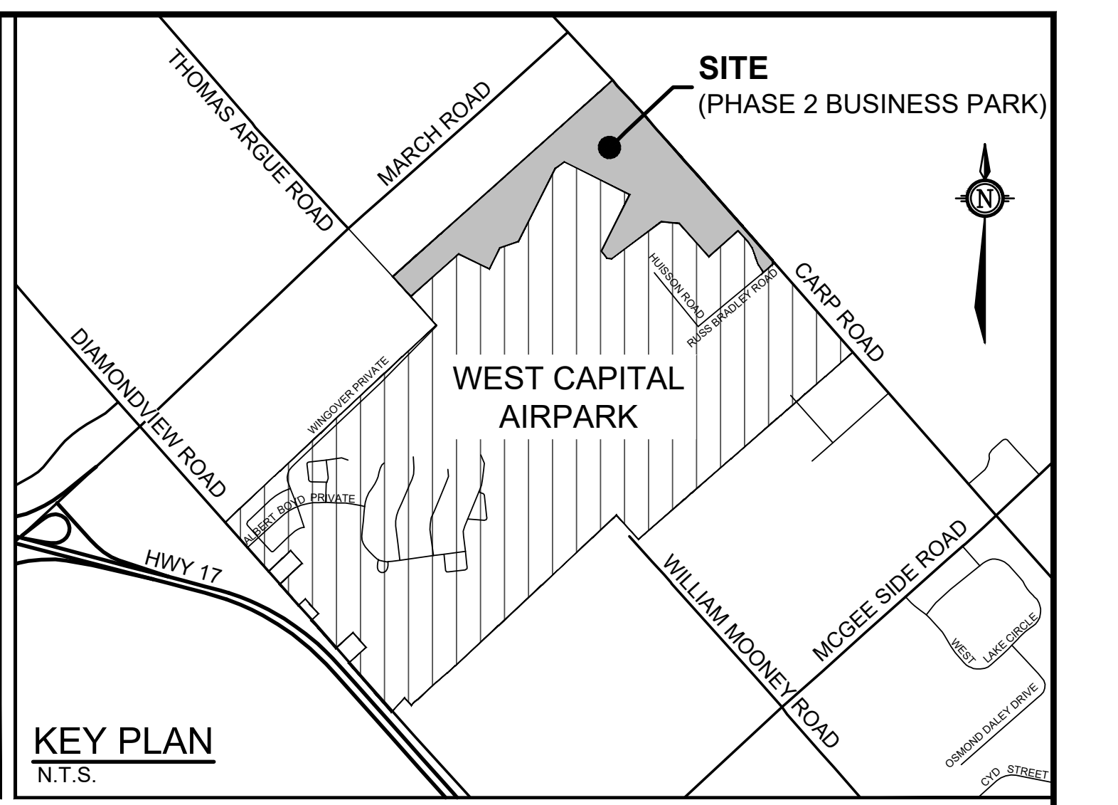

SAN OUTLET INVERT=110.30
C/L DITCH
20.5m-200mmØ PVC SAN @ 0.35%
WINGOVER PVT. (STREET 6) (BY OTHERS)
LIMIT OF PAVING
LIMIT OF PAVING
15.6m-600mmØ CSP CULVERT 2.8mm THICKNESS W.INV=111.60 E.INV=111.50
CULVERT (C-26)
THOMAS ARGUE ROAD
150mmØ WM (OUT)
300mmØ WM (IN)
SAP 6-G T/G=112.00 W.INV=108.64
GRAVEL SHOULDER
144.52m-200Ø SBS SAN @ 0.30%
300mmØ WM
C/L DITCH
SECURITY GATE
R9.0
65.13m-200Ø SBS SAN @ 0.30%
V&VC
SAP 6-H T/G=112.10 W.INV=108.44 S.INV=108.44
CONNECT TO SAP
GRAVEL SHOULDER
DITCH OUTLET C/W RODENT TRAP
C/L DITCH
SECURITY GATE
45°
T/WM=109.65
7.3m-200mmØ SBS SAN @ 1.0%
2x75mmØ FORCEMAIN (FROM BUSINESS PARK)
DICB A TG = 111.65 N.INV=111.50
CONNECT TO 150mmØ AND 300mmØ WATERMAIN
150mmØ WM (OUT)
300mmØ WM (IN)
SAN LIFT STATION MH B 2400mmØ TG = 112.00 N.INV=108.37 S.INV=110.43 W.INV=110.82
V&VB
V&VC
DICB B TG = 111.65 N.INV=111.50
DITCH OUTLET C/W RODENT TRAP
SAN MH A T/G=112.00 1200mmØ N.INV=110.37 S.INV=110.40
CB B T/G=112.60 E.INV=111.06 W.INV=111.04 S.INV=111.10
PART 10
CB A T/G=112.60 W.INV=111.15 S.INV=111.21
8.7m-150mmØ PVC @ 1.0%
12.9m-19mmØ WATER SERVICE
19.5m-150mmØ PVC @ 1.0%
SP
SCREEN FENCE
SANITARY OUTLET PIPE LOCATION
14.1m - 200mmØ PVC SAN @ 0.35%
SAN CAP INV=110.40
SAN CAP INV=110.42
T/WM=110.00
DRY SLUDGE WASTE BIN
TEMP SPACE
38.5m-100mmØ PVC FORCEMAIN
21.6m-200mmØ PVC @ 1.0%
12.0m-300mm SLEEVE PIPE FOR FUTURE 100mmØ FORCE MAIN N. INV = 110.99 S. INV = 110.88
CONCRETE SIDEWALK
WWTP PHASE ONE (12.25m x 2.44m)
FFE = 112.82
T/ CONCRETE SLAB = 112.40-112.50
U/S CONCRETE SLAB = 112.15-112.25
U/S OF GRANULAR = 111.25 (SEE GRADING NOTE 8)
PHASE ONE (12.25m x 2.44m)
PHASE TWO
PHASE THREE
PHASE 3 OF THE WWTF TO BE INSTALLED
TEMPORARY GRAVEL PAD
PHASE FOUR
FUTURE
PHASE FIVE
REMOVE EXISTING STUB AND CONNECT 2x75mm Ø FORCEMAIN IN.=110.85±
SAN CAP INV=110.85
INV.N=110.21
INV.W=110.85
EQ STORAGE TANKS BELOW GRADE PHASE 1
T/RISERS= 112.60
FUTURE
EQ STORAGE TANKS BELOW GRADE PHASE 2-3
EQ STORAGE TANKS BELOW GRADE PHASE 4-5
2.5m
FIRE ROUTE
TOP OF BANK
EXISTING DITCH
CITY PARK
PARK BLOCK 156
2.0m
65.1m
300mmØ WM (OUT)
300mmØ WM (IN)
16.2m-150mmØ PVC @1.0%
PUMP BUILDING COMPLETE WITH CONCRETE PAD A=80m²
SAN CAP INV=111.05
FFE = 112.65
T/WM=110.00
SCREEN FENCE
PARKING
PARKING
EMERGENCY GENERATOR COMPLETE WITH CONCRETE PAD
INSTALL BOLLARDS 1.0m FROM GENERATOR AT 1.3m O/C (TYP), BY OTHERS
R12.0
300X200 REDUCER
2 x 45°-150mmØ LONG RADIUS BENDS
300mmØ WM (IN)
150mmØ WM (OUT)
ASPHALT
PHASE 2 366 m³ (FUTURE) WATER TANK
PHASE 1 366 m³ WATER TANK
HEIGHT = 5.94m
SPLASH PAD (FUTURE)
SPLASH PAD
TOE OF BERM
℄ BERM
TOE OF BERM
5.7m
2.0m
PROPOSED TEMPORARY DRAINAGE SWALE (BY OTHERS)


N
CONSTRUCTION NORTH
N

NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
HUISSON ROAD
RUSS BRADLEY ROAD
WEST CAPITAL AIRPARK
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN
N.T.S.

LEGEND

	EXISTING WATERMAIN
	EXISTING SANITARY
	PROPOSED FORCEMAIN
	EXISTING FORCEMAIN
SAN MH ●	*EXISTING SAN MANHOLE*
● B	*EXISTING BOLLARD*
	EXISTING SCREEN FENCE
	EXISTING CULVERT
V&VC ⊗	*VALVE & VALVE CHAMBER*
V&VB ⊗	*VALVE & VALVE BOX*
HYD	*EXISTING HYDRANT COMPLETE WITH VALVE AND VALVE CHAMBER*
11°	*EXISTING BEND AND THRUSTBLOCK*
SAP 2-D	*EXISTING SANITARY SYSTEM ACCESS POINT*
	EXISTING CONCRETE
	℄ SWALE AND DIRECTION OF FLOW
	℄ DITCH AND DIRECTION OF FLOW
	EXISTING PERSON DOOR
	PROPERTY LINE
—x—x—x—x—x—	*2.4m GALVANIZED CHAIN LINK FENCE*
	SECURITY GATE (PER OPSD 972.102)
3:1	*TERRACING WITH SIDESLOPE*
	EXISTING RIP-RAP (PER OPSD 810.010)

GENERAL NOTES:

1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. 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.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. 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.
5. 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 THE ENGINEER.
6. 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.
7. ALL ELEVATIONS ARE GEODETIC.
8. REFER TO GEOTECHNICAL REPORT (No. PG2450-2, DATED JULY 22, 2013), PREPARED BY PATERSON GROUP INC. FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION AND PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
9. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

SEWER NOTES:

1. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
DICB (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200Ø)	701.010	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
STORM SEWER	PVC DR 35	
SANITARY SEWER	PVC DR 35	

2. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 1.5m COVER WITH HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION. SEE CITY DETAIL W-22. DEPTH OF INSULATION IS TO PROVIDE EQUIVALENT TO 1.5m COVER.
3. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
4. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
5. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
6. STORM MANHOLES AND CBMHS ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED.
7. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

WATERMAIN NOTES:

1. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN	PVC DR 18	

2. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.
3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
4. PROVIDE MINIMUM 0.30m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
5. WATER SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING.

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-STFWS-GP.dwg, GP10, Nov 14, 2025 - 10:50am, tstaff

NOTE:
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No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
				8	REVISED MECHANICAL PIPING AND CONDUITS	MAR 23/17	SM
				7	REVISED FENCE HEIGHT TO 2.4m	MAY 19/16	LKS
				6	REVISED PER CITY COMMENTS	APR 22/15	LKS
				5	ISSUED FOR COORDINATION	MAR 4/15	MJH
12.	REVISED PER COMMENTS (NO CHANGES)	NOV 14/25	ARM	4	ISSUED FOR COORDINATION	FEB 27/15	MJH
11	ISSUED FOR REVIEW	NOV 19/24	ARM	3	ISSUED FOR TENDER	FEB 26/15	MJH
10	ISSUED FOR REVIEW	OCT 29/24	ARM	2	ISSUED FOR REVIEW	JAN 13/15	MJH
9	REVISED FOR CONSTRUCTION	AUG 15/17	DJC	1	ISSUED FOR COORDINATION	DEC 2/14	JLP

SCALE
1:200

1:200
0 2 4 6 8

DESIGN	RJK
CHECKED	ARM
DRAWN	RJK
CHECKED	ARM
APPROVED	SMG

FOR REVIEW ONLY

NOVATECH

NOVATECH

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
WASTEWATER TREATMENT & WATER STORAGE FACILITY

GENERAL PLAN OF SERVICES

PROJECT No.
102085-14

REV
REV #12

DRAWING No.
102085-GP10

PLANB1.DWG - 1000mmx707mm

SEE SHEET 102085-GR6
SEE SHEET 102085-GR9
PHASE 1 BUSINESS PARK
BLOCK 12, PLAN 4M-1511
BLOCK 14, PLAN 4M-1511
HUISSON ROAD
LIMITS OF PHASE 2 BUSINESS PARK
EDGE OF PAVEMENT
STREET 17
OPEN SPACE BLOCK
5.0m SIGHT TRIANGLE
5.0m SIGHT TRIANGLE
RUSS BRADLEY ROAD
CARP ROAD
EXISTING 400mmØ CSP CULVERT - 32.9m
W.INV=111.81
E.INV=111.71
200mmØ EX-WM
C43
17+000
17+050
17+100
17+150
1.9%
1.4%
1.4%
110.40
109.90
109.43(D)
109.43(D)
110.63
109.91
110.30
110.23
110.23
110.99
111.01
110.59
110.15(D)
110.15(D)
111.35
110.63
111.06
111.71
111.20
111.20
111.57
111.35
110.87(D)
110.87(D)
112.07
111.35
111.66
111.73
112.54
112.25
112.09
111.69(D)
112.90
112.10
112.33
112.20
112.20
113.00
111.69(D)
112.18
112.18
112.30
112.30
111.50
112.50
113.00
CORE AIRPORT AREA
PHASE 1 BUSINESS PARK
CORE AIRPORT AREA
CONSTRUCTION NORTH
N
SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WEST CAPITAL AIRPARK
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD

LEGEND

117.50 *117.15*	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TB)	TOP OF BERM
3.0%	PROPOSED GRADING DIRECTION AND SLOPE
	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
	PROPOSED TOP OF SLOPE
	PROPOSED ROAD SHOULDER
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
—s—s—s—	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
	EXISTING SWALE AND DIRECTION OF FLOW
C1	PROPOSED CULVERT
	EASEMENT LIMIT
	LIMIT OF DEVELOPMENT (NO TOUCH)
	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
◉	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)

NOTE:
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M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-GR.dwg, GR5, Nov 14, 2025 - 10:49am, tstaff

WEST CAPITAL
Developments

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
16.	REVISED PER COMMENTS	NOV 14/25	ARM	8.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
15.	ISSUED FOR REVIEW	NOV 19/24	ARM	7.	REVISED AS PER MVC COMMENTS	DEC 20/13	DJC
14.	ISSUED FOR COORDINATION	AUG 29/24	ARM	6.	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC
13.	AS-BUILT GRADES ADDED	JUL 15/22	ARM	5.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
12.	ISSUED FOR CONSTRUCTION (NO CHANGES)	AUG 20/20	ARM	4.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
11.	ISSUED FOR TENDER ROADS, TAXIWAY & DITCHING	JUL 17/20	ARM	3.	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC
10.	ISSUED FOR TENDER	FEB 26/15	DJC	2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
9.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	FEB 19/14	DJC	1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:750

1:750
0 10 20 30

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

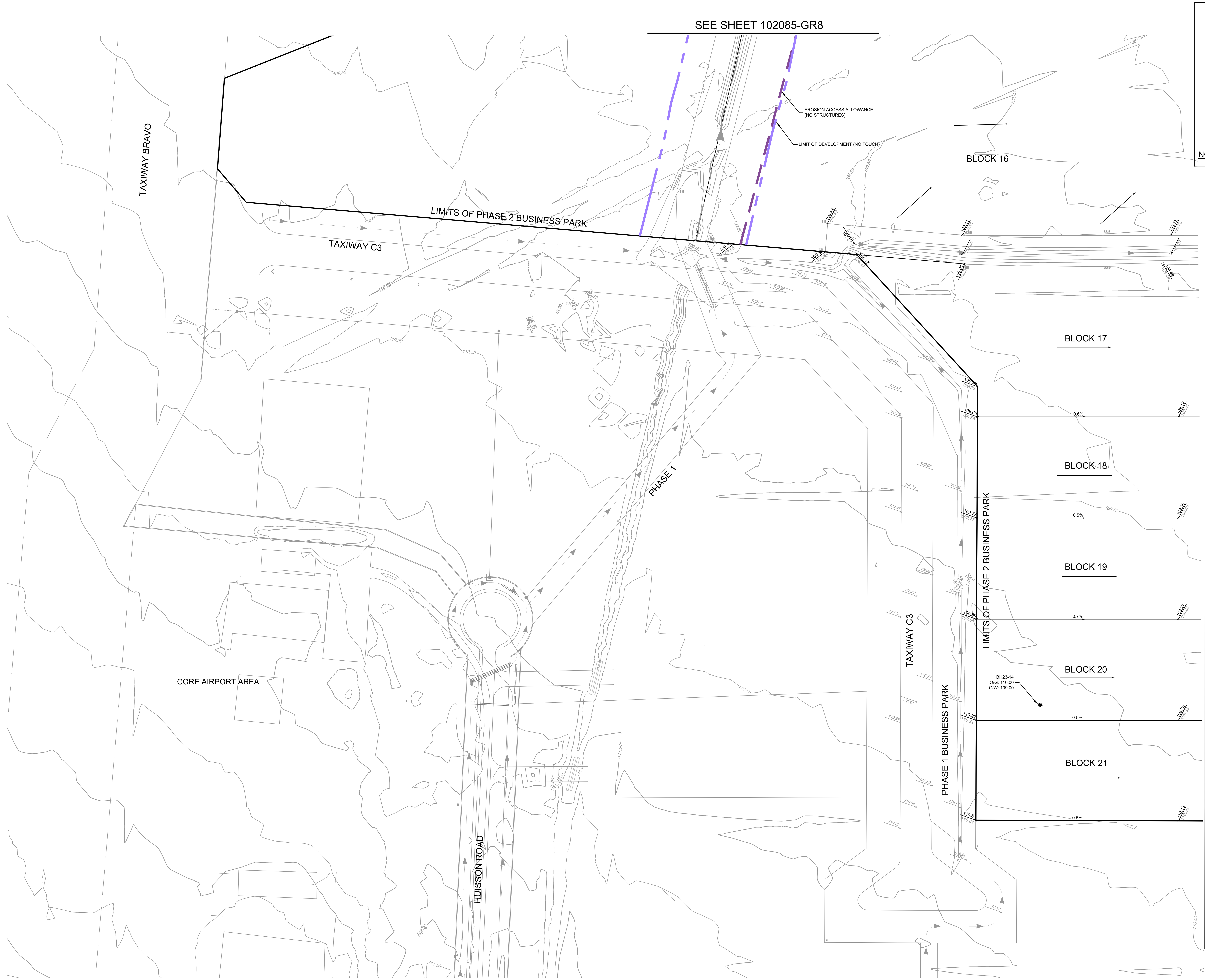
DRAWING NAME
GRADING PLAN

PROJECT No.
102085-14

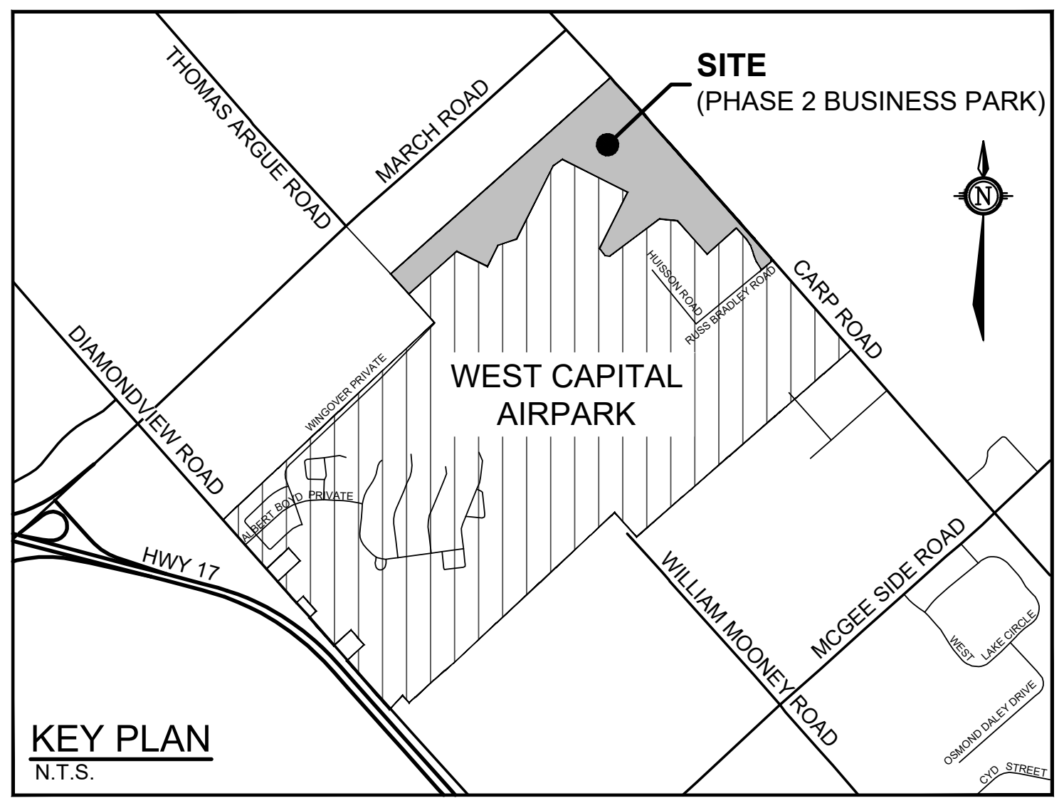
REV
REV # 16

DRAWING No.
102085-GR5

PLANB1.DWG - 1000mmx707mm


SEE SHEET 102085-GR8
EROSION ACCESS ALLOWANCE (NO STRUCTURES)
LIMIT OF DEVELOPMENT (NO TOUCH)
BLOCK 16
TAXIWAY BRAVO
LIMITS OF PHASE 2 BUSINESS PARK
TAXIWAY C3
BLOCK 17
0.6%
BLOCK 18
0.5%
PHASE 1
BLOCK 19
0.7%
LIMITS OF PHASE 2 BUSINESS PARK
TAXIWAY C3
BLOCK 20
BH23-14
O/G: 110.00
G/W: 109.00
0.5%
CORE AIRPORT AREA
PHASE 1 BUSINESS PARK
BLOCK 21
0.5%
HUISSON ROAD
SEE SHEET 102085-GR9
110.50
109.50

NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
DIAMONDVIEW ROAD
WINGOVER PRIVATE
WEST CAPITAL AIRPARK
HUISSON ROAD
RUSS BRADLEY ROAD
CARP ROAD
ALBERT BOYD PRIVATE
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN
N.T.S.

LEGEND

117.50 / *117.15*	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TB)	TOP OF BERM
← 3.0%	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— — —	PROPOSED TOP OF SLOPE
– – – – – – –	PROPOSED ROAD SHOULDER
—— · ▶—	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
—s—s—s—▶—	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
—— · ▶—	*EXISTING SWALE AND DIRECTION OF FLOW*
C1 ▭	PROPOSED CULVERT
—— ——	EASEMENT LIMIT
▬ ▪ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
▬ ▬ ▬	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
◉	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-GR.dwg, GR6, Nov 14, 2025 - 10:49am, tstaff

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WEST CAPITAL
Developments

No.	REVISION	DATE	BY
17.	REVISED PER COMMENTS	NOV 14/25	ARM
16.	ISSUED FOR REVIEW	NOV 19/24	ARM
15.	ISSUED FOR COORDINATION	AUG 29/24	ARM
14.	AS-BUILT GRADES ADDED	JUL 15/22	ARM
13.	ISSUED FOR CONSTRUCTION	AUG 20/20	ARM
12.	ISSUED FOR TENDER ROADS, TAXIWAY & DITCHING	JUL 17/20	ARM
11.	ISSUED FOR TENDER	FEB 26/15	DJC
10.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	FEB 19/14	DJC
9.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
8.	REVISED AS PER MVC COMMENTS	DEC 20/13	DJC
7.	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC
6.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
5.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
4.	TREE PROTECTION AREAS ADDED	APR 30/13	BBH
3.	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC

SCALE
1:750

1:750
0 10 20 30

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
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Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
GRADING PLAN

PROJECT No.
102085-14

REV
REV # 17

DRAWING No.
102085-2BP-GR6

PLANB1.DWG - 1000mmx707mm

STREET 15
THOMAS ARGUE ROAD
5.0m SIGHT TRIANGLE
V&VB
SAP
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 6
BLOCK 7
BLOCK 8
BLOCK 9
BLOCK 10
WCAA GARAGE & STORAGE
STREET 16
SEE SHEET 102085-GR8
EXISTING FIRE HYDRANT TO BE RELOCATED
TOP OF SLOPE
BLOCK 9 HIGH POINT
BLOCK 8 HIGH POINT
EXISTING SWALE TO BE DIRECTED TO PROPOSED SWALE
LIMITS OF PHASE 2 BUSINESS PARK
APPROXIMATE LIMIT OF GRADING
RELOCATE EXISTING BUILDINGS
TIE TO EXISTING SWALE
R15.0m
14 T-HANGERS
EXISTING APRON
WESTAIR TERMINAL
CORE AIRPORT AREA
EXISTING TAXIWAY CHARLIE
EXISTING TAXIWAY ALPHA
NORTH
CONSTRUCTION NORTH
N
KEY PLAN
N.T.S.
SITE
(PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
HUISSON ROAD
RUSS BRADLEY ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

LEGEND

117.50 / *117.15*	PROPOSED ELEVATION / *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TB)	TOP OF BERM
3.0% ←	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— — —	PROPOSED TOP OF SLOPE
– – – – – – –	PROPOSED ROAD SHOULDER
— · ►	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
—s—s—s—►s—	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
— · ►	*EXISTING SWALE AND DIRECTION OF FLOW*
C1 ▭	PROPOSED CULVERT
——— ———	EASEMENT LIMIT
— · · —	LIMIT OF DEVELOPMENT (NO TOUCH)
— — —	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
◉	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-GR.dwg, GR7, Nov 14, 2025 - 10:49am, tstaff

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WEST CAPITAL
Developments

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
				8.	ISSUED FOR PHASE 1 RESIDENTIAL REGISTRATION	OCT 15/14	DJC
				7.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
				6.	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC
				5.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
12.	REVISED PER COMMENTS	NOV 14/25	ARM	4.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
11.	ISSUED FOR REVIEW	NOV 19/24	ARM	3.	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC
10.	ISSUED FOR COORDINATION	AUG 29/24	ARM	2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
9.	ISSUED FOR TENDER	FEB 26/15	DJC	1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:750

1:750
0 10 20 30

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
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100141256
Nov 14, 2025
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Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
GRADING PLAN

PROJECT No. 102085-14
REV REV # 12
DRAWING No. 102085-2BP-GR7

PLANB1.DWG - 1000mmx707mm

OPEN SPACE BLOCK (BLOCK 25)
STREET 15
SEE SHEET 102085-GR7
BLOCK 11
BLOCK 12
BLOCK 13
BLOCK 9
BLOCK 14
BLOCK 15
"Core Airport Area"
LIMIT OF PHASE 2 BUSINESS PARK
GRADING BLOWUP 'B'
SWM POND 'A' (SEE 102085-SWMF7 & 102085-SWMF8)
SWM POND 'B' (SEE 102085-SWMF9)
SWM POND 'C' (SEE 102085-SWMF10)
POND ACCESS ROAD
RIPRAP LIMIT
HEADWALL INVERT =103.60
CARP ROAD
APPROXIMATE LIMIT OF BLOCK FILL FOR POSITIVE GRADING TO SWM FACILITY
INVERTED SIPHON CROSSING
GRADING BLOWUP 'A' (SEE 102085-BPND5)
PI: 0+33.55
BP: 0+00.00
EP: 0+64.10
TIE INTO EXISTING GRADE
HYD (15-11)
HYD (15-12)
HYD (17-7)
150mmØ SANITARY STUB FOR FUTURE CAP INV: 105.24
5.0m SIGHT TRIANGLE
TOP OF SWALE
PROPOSED DITCH AND DIRECTION OF FLOW
BLOCK 12
BLOCK 9
BLOCK 8
TOP OF SWALE
TOP OF SWALE
PROPOSED DITCH AND DIRECTION OF FLOW
CORE AIRPORT AREA
CONSTRUCTION NORTH
N
NORTH
SITE (PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
KEY PLAN
N.T.S.

SEE SHEET 102085-GR6

SEE SHEET 102085-GR9

GRADING BLOWUP 'B'

SCALE = 1:100

LEGEND

117.50 / *117.15*	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TB)	TOP OF BERM
3.0%	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— — —	PROPOSED TOP OF SLOPE
- - - - - - -	PROPOSED ROAD SHOULDER
— · ► —	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
—•—•—►—	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
— · ► —	*EXISTING SWALE AND DIRECTION OF FLOW*
C1	PROPOSED CULVERT
—— ——	EASEMENT LIMIT
— - - —	LIMIT OF DEVELOPMENT (NO TOUCH)
— — —	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
◉	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)

NOTE:
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M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-GR.dwg, GR8, Nov 14, 2025 - 10:49am, tstaff

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
13.	REVISED PER COMMENTS	NOV 14/25	ARM
12.	ISSUED FOR REVIEW	NOV 19/24	ARM
11.	ISSUED FOR COORDINATION	AUG 29/24	ARM
10.	ISSUED FOR TENDER	FEB 26/15	DJC
9.	ISSUED FOR PHASE 1 RESIDENTIAL REGISTRATION	OCT 15/14	DJC

No.	REVISION	DATE	BY
8.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
7.	REVISED AS PER MVC COMMENTS	DEC 20/13	DJC
6.	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC
5.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
4.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
3.	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:750

1:750
0 10 20 30

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

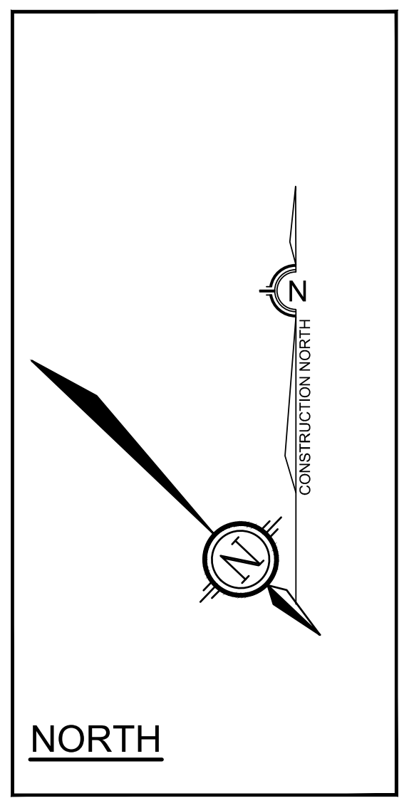
DRAWING NAME
GRADING PLAN

PROJECT No.
102085-14

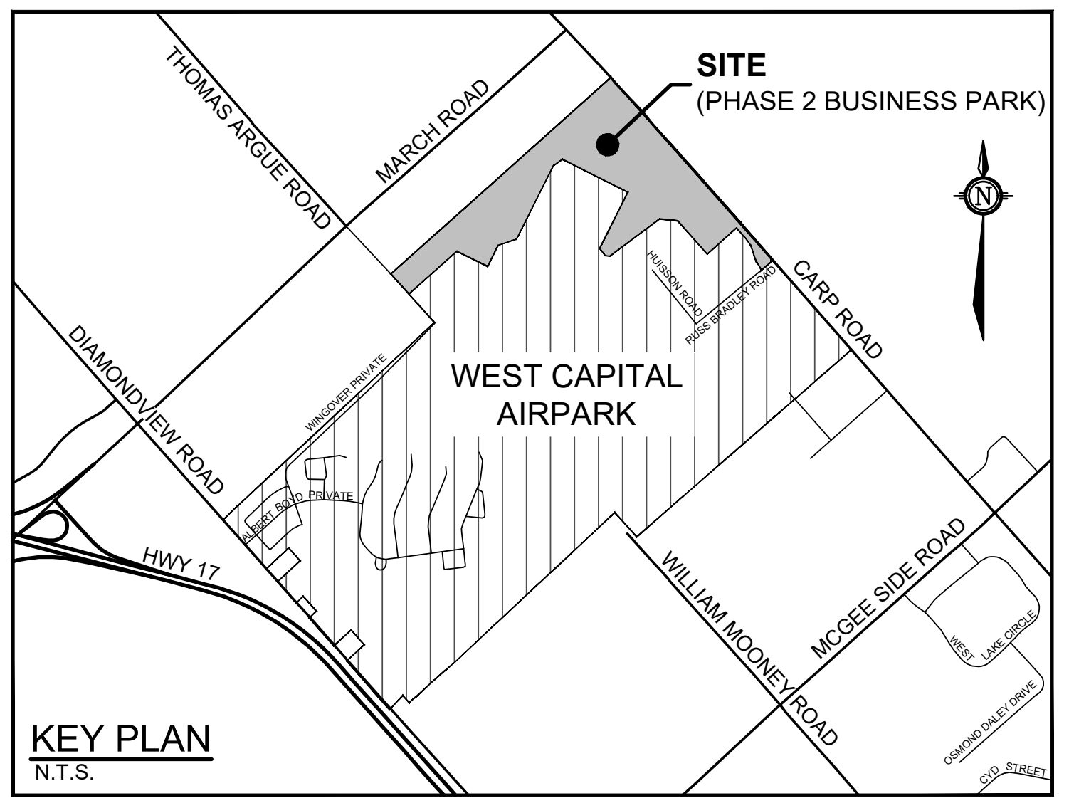
REV
REV # 13

DRAWING No.
102085-2BP-GR8

PLANB1.DWG - 1000mmx707mm


N
CONSTRUCTION NORTH

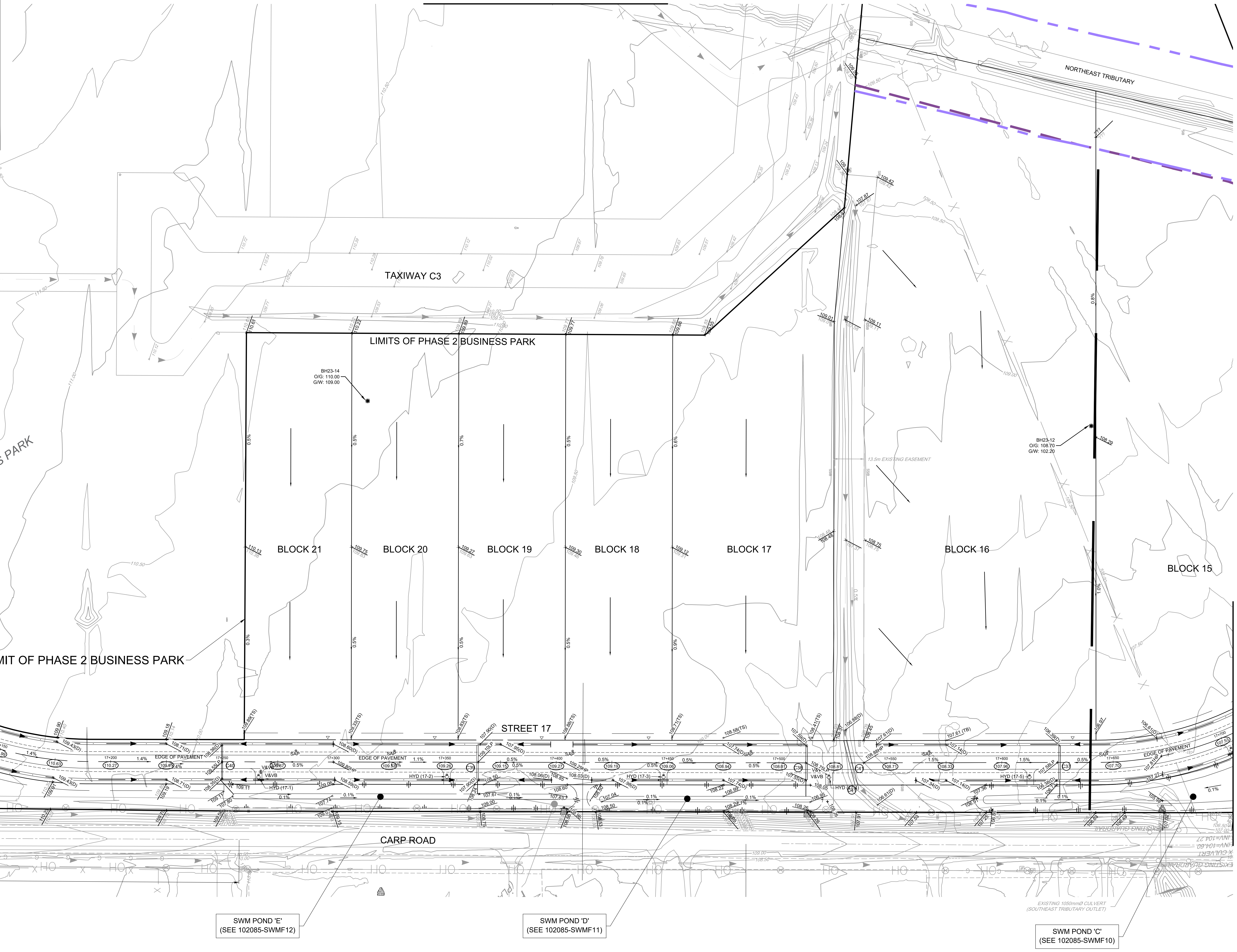
NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
DIAMONDVIEW ROAD
WEST CAPITAL AIRPARK
CARP ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD

KEY PLAN
N.T.S.

LEGEND

117.50 / *117.15*	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TB)	TOP OF BERM
3.0%	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— — —	PROPOSED TOP OF SLOPE
- - - - - - -	PROPOSED ROAD SHOULDER
— · ►	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
—s—s—s—►s—	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
— · ►	*EXISTING SWALE AND DIRECTION OF FLOW*
C1	PROPOSED CULVERT
—— ——	EASEMENT LIMIT
— · · —	LIMIT OF DEVELOPMENT (NO TOUCH)
— — —	EROSION ACCESS ALLOWANCE (NO STRUCTURES)
●	BOREHOLE (GEMTEC, GEOTECHNICAL INVESTIGATION AND SLOPE STABILITY ASSESSMENT, OCTOBER 2024)


SEE SHEET 102085-GR6
SEE SHEET 102085-GR5
SEE SHEET 102085-GR8
NORTHEAST TRIBUTARY
TAXIWAY C3
LIMITS OF PHASE 2 BUSINESS PARK
LIMIT OF PHASE 2 BUSINESS PARK
EXISTING PHASE 1 BUSINESS PARK
BH23-14
O/G: 110.00
G/W: 109.00
BH23-12
O/G: 108.70
G/W: 102.20
13.5m EXISTING EASEMENT
BLOCK 21
BLOCK 20
BLOCK 19
BLOCK 18
BLOCK 17
BLOCK 16
BLOCK 15
OPEN SPACE BLOCK
STREET 17
EDGE OF PAVEMENT
CARP ROAD
EXISTING GUARDRAIL
HYD (17-1)
HYD (17-2)
HYD (17-3)
HYD (17-5)
V&VB
SAP
EXISTING 1050mmØ CULVERT (SOUTHEAST TRIBUTARY OUTLET)
SWM POND 'E' (SEE 102085-SWMF12)
SWM POND 'D' (SEE 102085-SWMF11)
SWM POND 'C' (SEE 102085-SWMF10)

NOTE:
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WEST CAPITAL
Developments

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
17.	REVISED PER COMMENTS	NOV 14/25	ARM	9.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	JAN 30/14	DJC
16.	ISSUED FOR REVIEW	NOV 19/24	ARM	8.	REVISED AS PER MVC COMMENTS	DEC 20/13	DJC
15.	ISSUED FOR COORDINATION	AUG 29/24	ARM	7.	REVISED AS PER CITY / MVC COMMENTS	NOV 29/13	DJC
14.	AS-BUILT GRADES ADDED	JUL 15/22	ARM	6.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
13.	ISSUED FOR CONSTRUCTION	AUG 20/20	ARM	5.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
12.	ISSUED FOR TENDER ROADS, TAXIWAY & DTICHING	JUL 17/20	ARM	4.	TREE PROTECTION AREAS ADDED	APR 30/13	BBH
11.	ISSUED FOR TENDER	MAR 9/15	DJC	3.	ISSUED TO GEOTECHNICAL CONSULTANT	APR 24/13	DJC
10.	ISSUED FOR PHASE 1 BUSINESS PARK REGISTRATION	FEB 19/14	DJC	2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC

SCALE
1:750

1:750
0 10 20 30

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
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LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
GRADING PLAN

PROJECT No.
102085-14

REV
REV # 17

DRAWING No.
102085-GR9

SEE SHEET 102085-IGR6
SEE SHEET 102085-IGR9
PHASE 1 BUSINESS PARK
BLOCK 12, PLAN 4M-1511
BLOCK 14, PLAN 4M-1511
HUISSON ROAD
LIMITS OF PHASE 2 BUSINESS PARK
STREET 17
EDGE OF PAVEMENT
OPEN SPACE BLOCK
5.0m SIGHT TRIANGLE
5.0m SIGHT TRIANGLE
RUSS BRADLEY ROAD
EXISTING 400mmØ CSP CULVERT
200mmØ EX-WM
CARP ROAD
CORE AIRPORT AREA
PHASE 1 BUSINESS PARK
CORE AIRPORT AREA
CARP ROAD
CONSTRUCTION NORTH
N
SITE
(PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD

LEGEND

110.72	INTERIM GRADING ELEVATION
	APPROXIMATE LIMIT OF INTERIM GRADING
←	INTERIM SLOPE ARROWS
117.50 117.15	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TS)	TOP OF SLOPE
← 3.0%	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— · ➤	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
—➤	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
C1	PROPOSED CULVERT
	EASEMENT LIMIT
	LIMIT OF DEVELOPMENT (NO TOUCH)
	EROSION ACCESS ALLOWANCE (NO STRUCTURES)

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WEST CAPITAL
Developments

No.	REVISION	DATE	BY
1.	REVISED PER COMMENTS (NEW DRAWING)	NOV 14/25	ARM

SCALE	1:750
DESIGN	DKM
CHECKED	MJB
DRAWN	DKM
CHECKED	MJB
APPROVED	ARM

1:750
0 10 20 30

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
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Ottawa, Ontario, Canada K2M 1P6
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Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK

DRAWING NAME
INTERIM GRADING PLAN

PROJECT No.	102085-14
REV	REV # 1
DRAWING No.	102085-IGR5

PLANB1.DWG - 1000mmx707mm

SEE SHEET 102085-IGR8
EROSION ACCESS ALLOWANCE (NO STRUCTURES)
LIMIT OF DEVELOPMENT (NO TOUCH)
TAXIWAY BRAVO
LIMITS OF PHASE 2 BUSINESS PARK
TAXIWAY C3
BLOCK 16
BLOCK 17
BLOCK 18
BLOCK 19
BLOCK 20
BLOCK 21
0.6%
0.5%
0.7%
0.5%
0.5%
EXISTING WATERMAIN
PHASE 1
CORE AIRPORT AREA
HUISSON ROAD
TAXIWAY C3
PHASE 1 BUSINESS PARK
LIMITS OF PHASE 2 BUSINESS PARK
BH23-14
O/G: 110.00
G/W: 109.00
SEE SHEET 102085-IGR9
NORTH
CONSTRUCTION NORTH
N
KEY PLAN
N.T.S.
SITE
(PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
OSMOND DALEY DRIVE
CYD STREET

LEGEND

110.72	INTERIM GRADING ELEVATION
───	APPROXIMATE LIMIT OF INTERIM GRADING
←	INTERIM SLOPE ARROWS
117.50 117.15	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TS)	TOP OF SLOPE
3.0% ←	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— · ➤	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
──➤	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
C1 ▭	PROPOSED CULVERT
—— ——	EASEMENT LIMIT
▬ ▪ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
▬ ▬	EROSION ACCESS ALLOWANCE (NO STRUCTURES)

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-IGR.dwg, IGR6, Nov 14, 2025 - 10:44am, tstaff

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WEST CAPITAL
Developments

No.	REVISION	DATE	BY
1.	REVISED PER COMMENTS (NEW DRAWING)	NOV 14/25	ARM

SCALE
1:750

1:750
0 10 20 30

DESIGN	DKM
CHECKED	MJB
DRAWN	DKM
CHECKED	MJB
APPROVED	ARM

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Nov 14, 2025
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Facsimile (613) 254-5867
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LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK

DRAWING NAME
INTERIM GRADING PLAN

PROJECT No. 102085-14
REV REV # 1
DRAWING No. 102085-IGR6

PLANB1.DWG - 1000mmx707mm

STREET 15
THOMAS ARGUE ROAD
STREET 16
WCAA GARAGE & STORAGE
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 6
BLOCK 7
BLOCK 8
BLOCK 9
BLOCK 10
BLOCK 9 HIGH POINT
BLOCK 8 HIGH POINT
EDGE OF PAVEMENT
V&VB
SEE SHEET 102085-IGR8
LIMITS OF PHASE 2 BUSINESS PARK
EXISTING TAXIWAY CHARLIE
CORE AIRPORT AREA
R15.0m
APPROXIMATE LIMIT OF INTERIM GRADING. TIE INTO EXISTING (3:1 max)
INTERIM DRAINAGE DEPRESSION/OUTLET TO ROADSIDE DITCH
REGRADE EXISTING DITCH TO PROVIDE POSITIVE DRAINAGE
EXISTING SWALE TO BE DIRECTED TO PROPOSED SWALE
TIE INTO EXISTING GRADE (3:1 max)
TIE TO EXISTING SWALE
20.0m R.O.W. WIDTH
12.0m BUFFER
11.0m
9.0m
6.0m
2.5m
4.0m
1.5m
3.0m
3.7m
0.8m
3.0m DRAINAGE AND UTILITY EASEMENT
VARIES
PROPERTY LINE
CENTER LINE DITCH
EDGE OF SHOULDER
EDGE OF PAVEMENT
EASEMENT LINE
℄ ROAD
STREETLIGHT
APPROXIMATE LIMIT OF INTERIM GRADING. TIE INTO EXISTING
EXISTING GROUND
FUTURE FINISHED GRADE
99.65
98.65
99.82
99.91
100.00
6.0%
3.0%
1.35m
0.43m
1.0m
1.25m
1.00m
0.33m
40mm SUPERPAVE 12.5
50mm SUPERPAVE 19.0
150mm GRANULAR "A"
450mm GRANLUAR "B" TYPE II
690mm
CONSTRUCTION NORTH
N
SITE (PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

STREET 15 - STA. 15+025 TO 15+875
TYPICAL CROSS SECTION - 20.0m R.O.W.
SCALE = 1:100

NOTES:
1. ELEVATIONS SHOWN ARE ASSUMED
2. CROSS-SECTION TO BE VIEWED LOOKING UP CHAINAGE

NORTH

KEY PLAN
N.T.S.

LEGEND

110.72	INTERIM GRADING ELEVATION
—	APPROXIMATE LIMIT OF INTERIM GRADING
←	INTERIM SLOPE ARROWS
117.50 117.15	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TS)	TOP OF SLOPE
← 3.0%	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— · ➤	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
—➤	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
Ⓒ1	PROPOSED CULVERT
— —	EASEMENT LIMIT
— - - —	LIMIT OF DEVELOPMENT (NO TOUCH)
— —	EROSION ACCESS ALLOWANCE (NO STRUCTURES)

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-IGR.dwg, IGR7, Nov 14, 2025 - 10:44am, tstaff

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WEST CAPITAL
Developments

No.	REVISION	DATE	BY
1.	REVISED PER COMMENTS (NEW DRAWING)	NOV 14/25	ARM

SCALE
1:750
1:750
0 10 20 30

DESIGN DKM
CHECKED MJB
DRAWN DKM
CHECKED MJB
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
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LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK

DRAWING NAME
INTERIM GRADING PLAN

PROJECT No. 102085-14
REV REV # 1
DRAWING No. 102085-IGR7

PLANB1.DWG - 1000mmx707mm

STREET 15
CARP ROAD
BLOCK 9
BLOCK 11
BLOCK 12
BLOCK 13
BLOCK 14
BLOCK 15
"Core Airport Area"
LIMIT OF PHASE 2 BUSINESS PARK
SWM POND 'A' (SEE 102085-SWMF7 & 102085-SWMF8)
SWM POND 'B' (SEE 102085-SWMF9)
SWM POND 'C' (SEE 102085-SWMF10)
INTERIM DRAINAGE DEPRESSION/OUTLET TO ROADSIDE DITCH
APPROXIMATE LIMIT OF INTERIM GRADING. TIE INTO EXISTING (3:1 max)
APPROXIMATE LIMIT OF GRADING
150mmØ SANITARY STUB FOR FUTURE CAP INV: 105.24
APPROXIMATE LIMIT OF BLOCK FILL FOR POSITIVE GRADING TO SWM FACILITY
INVERTED SIPHON CROSSING
TIE INTO EXISTING GRADE
3.5m SWMF ACCESS RD
HEADWALL INVERT =103.60
RIPRAP LIMIT
5:1
5.0m SIGHT TRIANGLE
HYD (17-7)
SEE SHEET 102085-IGR7
SEE SHEET 102085-IGR6
SEE SHEET 102085-IGR9
NORTH
CONSTRUCTION NORTH
N
KEY PLAN
N.T.S.
SITE
(PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
DIAMONDVIEW ROAD
CARP ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE

LEGEND

110.72	INTERIM GRADING ELEVATION
——	APPROXIMATE LIMIT OF INTERIM GRADING
←	INTERIM SLOPE ARROWS
117.50 117.15	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TS)	TOP OF SLOPE
← 3.0%	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— · →	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
——→	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
(C1) ▭	PROPOSED CULVERT
—— ——	EASEMENT LIMIT
— - - —	LIMIT OF DEVELOPMENT (NO TOUCH)
—— ——	EROSION ACCESS ALLOWANCE (NO STRUCTURES)

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-IGR.dwg, IGR8, Nov 14, 2025 - 10:44am, tstaff

NOTE:
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WEST CAPITAL
Developments

No.	REVISION	DATE	BY
1.	REVISED PER COMMENTS (NEW DRAWING)	NOV 14/25	ARM

SCALE
1:750

1:750
0 10 20 30

DESIGN	DKM
CHECKED	MJB
DRAWN	DKM
CHECKED	MJB
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK

DRAWING NAME
INTERIM GRADING PLAN

PROJECT No. 102085-14
REV REV # 1
DRAWING No. 102085-IGR8

PLANB1.DWG - 1000mmx707mm

SEE SHEET 102085-IGR6
SEE SHEET 102085-IGR8
NORTH
CONSTRUCTION NORTH
KEY PLAN
N.T.S.
SITE
(PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
TAXIWAY C3
LIMITS OF PHASE 2 BUSINESS PARK
EXISTING PHASE 1 BUSINESS PARK
NORTHEAST TRIBUTARY
BLOCK 21
BLOCK 20
BLOCK 19
BLOCK 18
BLOCK 17
BLOCK 16
BLOCK 15
BH23-14
O/G: 110.00
G/W: 109.00
BH23-12
O/G: 108.70
G/W: 102.20
13.5m EXISTING EASEMENT
INTERIM DRAINAGE DEPRESSION/OUTLET TO ROADSIDE DITCH
APPROXIMATE LIMIT OF INTERIM GRADING. TIE INTO EXISTING (3:1 max)
STREET 17
EDGE OF PAVEMENT
OPEN SPACE BLOCK
5.0m SIGHT TRIANGLE
CARP ROAD
EXISTING 1050mmØ CULVERT (SOUTHEAST TRIBUTARY OUTLET)
SWM POND 'E' (SEE 102085-SWMF12)
SWM POND 'D' (SEE 102085-SWMF11)
SWM POND 'C' (SEE 102085-SWMF10)

LEGEND

110.72	INTERIM GRADING ELEVATION
—	APPROXIMATE LIMIT OF INTERIM GRADING
←	INTERIM SLOPE ARROWS
117.50 117.15	PROPOSED ELEVATION *EXISTING ELEVATION*
116.56(D)	PROPOSED DITCH ELEVATION
118.43HP	HIGH POINT
117.88LP	LOW POINT
115.75(TS)	TOP OF SLOPE
← 3.0%	PROPOSED GRADING DIRECTION AND SLOPE
←	GENERAL BLOCK DRAINAGE DIRECTION (DETAILS BY OTHERS)
— · ➤—	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
—➤—	PROPOSED DITCHES/SWALES WITH SUBDRAIN AND DIRECTION OF FLOW
C1 ▭	PROPOSED CULVERT
— —	EASEMENT LIMIT
▬ ▬ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
▬ ▬	EROSION ACCESS ALLOWANCE (NO STRUCTURES)

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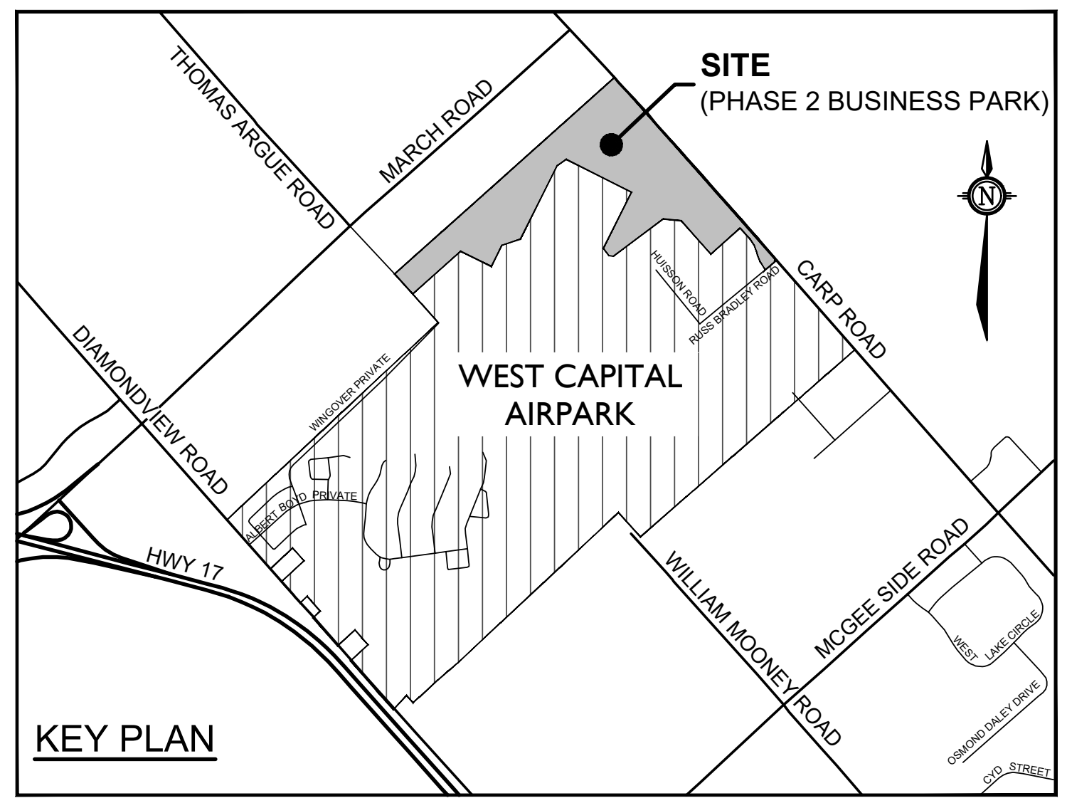
WEST CAPITAL AIRPARK

DRAWING NAME
INTERIM GRADING PLAN

PROJECT No. 102085-14
REV: REV # 1
DRAWING No. 102085-IGR9

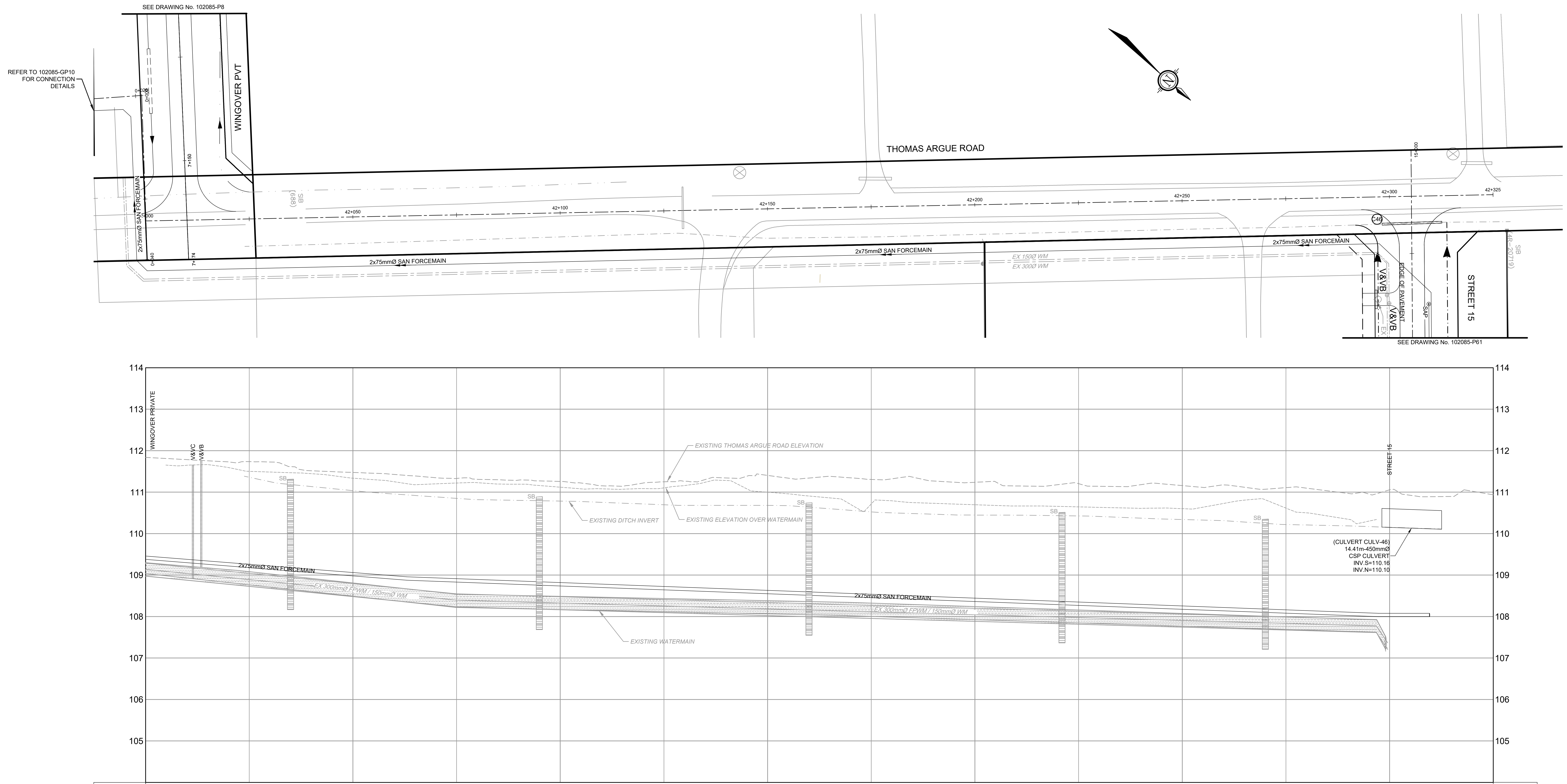
PLANB1.DWG - 1000mmx707mm


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WEST CAPITAL
AIRPARK
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD

KEY PLAN

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER- SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ☐	PROPOSED CATCHBASIN
CB ☐	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)


SEE DRAWING No. 102085-P8
REFER TO 102085-GP10
FOR CONNECTION
DETAILS
WINGOVER PVT
THOMAS ARGUE ROAD
2x75mmØ SAN FORCEMAIN
2x75mmØ SAN FORCEMAIN
2x75mmØ SAN FORCEMAIN
2x75mmØ SAN FORCEMAIN
SIB
(688)
42+050
42+100
42+150
42+200
42+250
42+300
42+325
EX 150Ø WM
EX 300Ø WM
C46
V&VB
V&VB
EDGE OF PAVEMENT
SAP
STREET 15
SIB
(48-20719)
SEE DRAWING No. 102085-P61
114
113
112
111
110
109
108
107
106
105
WINGOVER PRIVATE
V&VC
V&VB
EXISTING THOMAS ARGUE ROAD ELEVATION
SB
EXISTING DITCH INVERT
EXISTING ELEVATION OVER WATERMAIN
2x75mmØ SAN FORCEMAIN
EX 300mmØ FPWM / 150mmØ WM
EXISTING WATERMAIN
STREET 15
(CULVERT CULV-46)
14.41m-450mmØ
CSP CULVERT
INV.S=110.16
INV.N=110.10

EXISTING TOP OF WM ELEVATION	*109.29*		*109.05*	*108.79*		*108.54*	*108.49*	*108.43*	*108.38*	*108.34*	*108.32*	*108.24*	*108.16*	*108.07*	*107.99*	*107.92*	*107.51*	
EXISTING DITCH INVERTS			*111.38* *111.36*	*111.04*		*110.85*	*110.78*	*110.70*	*110.68*		*110.52*	*110.45*	*110.43*	*110.34*	*110.22*		*110.15*	
SANITARY FORCEMAIN OBVERTS	109.46		109.26	109.06	108.96	108.91	108.82	108.73	108.63		108.54	108.44	108.35	108.26	108.16	108.08	108.08	108.08
EXISTING ELEVATION		*111.65*	*111.50*	*111.34*		*111.22*	*111.12*	*111.10*	*111.00*		*110.72*	*110.70*	*110.65*	*110.60*	*110.62*	*110.34*		
CHAINAGE	42+000		42+025	42+050		42+075	42+100	42+125	42+150		42+175	42+200	42+225	42+250	42+275		42+300	42+325

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3
FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P60, Nov 14, 2025 - 10:37am, tstaff

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CLEARFORD
WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
11.	REVISED PER COMMENTS	NOV 14/25	ARM
10.	ISSUED FOR REVIEW	NOV 19/24	ARM
9.	ISSUED FOR REVIEW	OCT 29/24	ARM

No.	REVISION	DATE	BY
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7.	ISSUED FOR COORDINATION	APR 23/24	ARM
6.	ISSUED FOR TENDER	FEB 26/15	DJC
5.	ISSUED FOR PHASE 1 RESIDENTIAL REGISTRATION	OCT 15/14	DJC
4.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
3.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
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APPROVED	ARM

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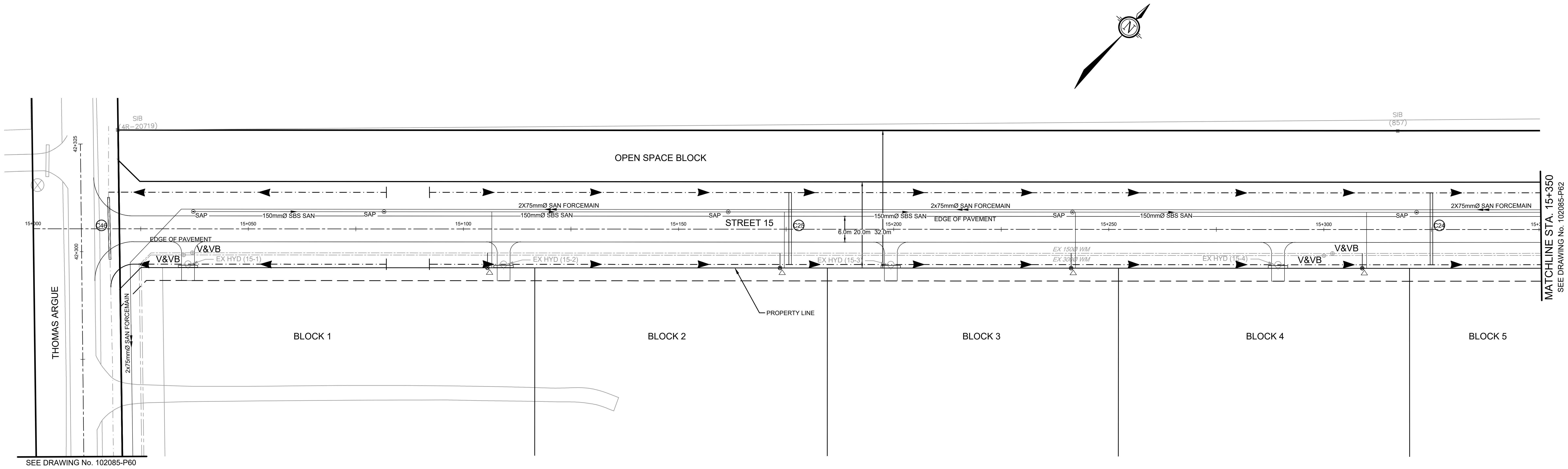
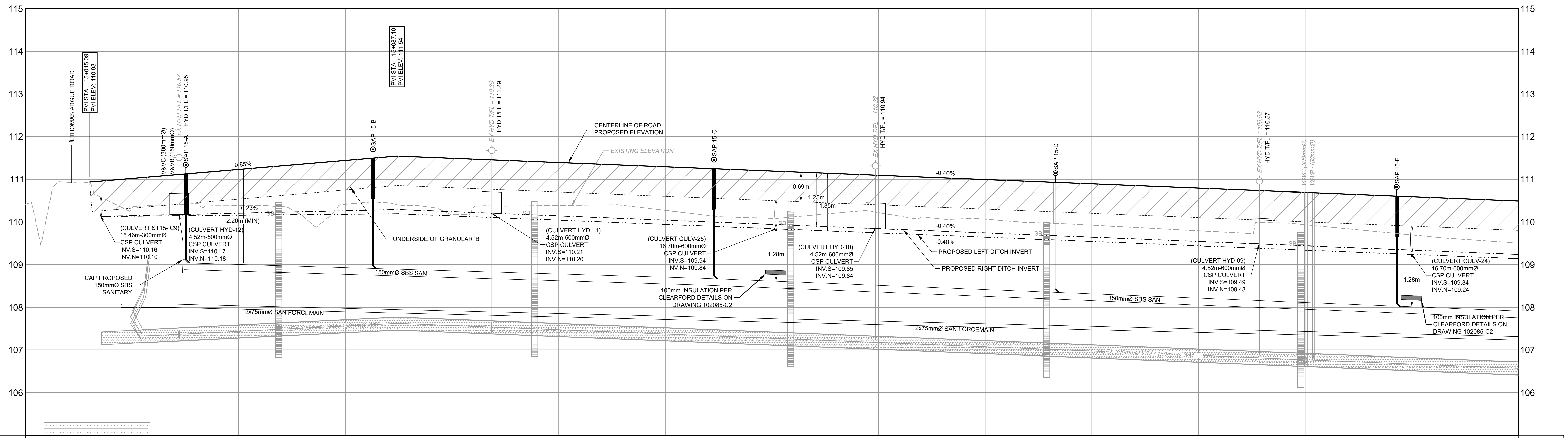
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
PLAN & PROFILE
THOMAS ARGUE ROAD
STA. 42+000 TO 42+328

PROJECT No.	102085-14
REV	REV # 11
DRAWING No.	102085-P60

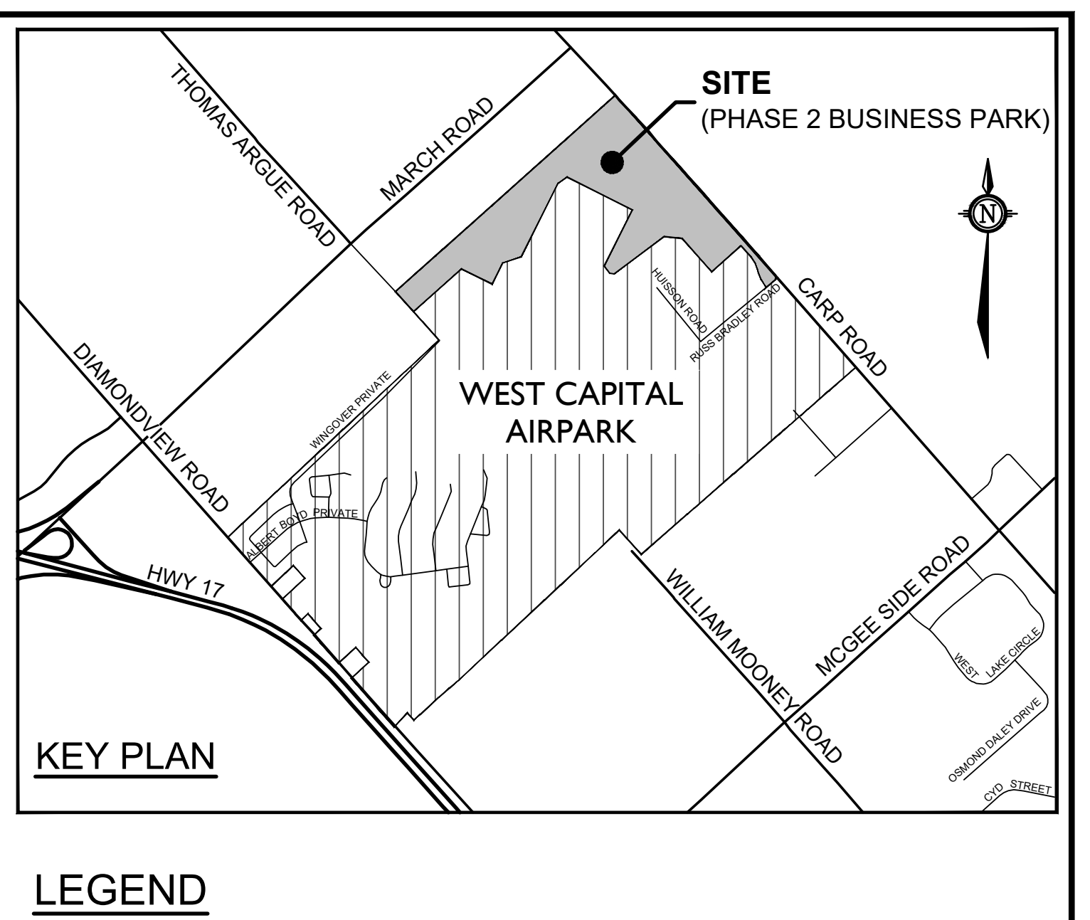
PLANB1.DWG - 1000mmx707mm


SIB
(4R-20719)
SIB
(857)
OPEN SPACE BLOCK
MATCHLINE STA. 15+350
SEE DRAWING No. 102085-P62
2X75mmØ SAN FORCEMAIN
2x75mmØ SAN FORCEMAIN
2x75mmØ SAN FORCEMAIN
SAP
150mmØ SBS SAN
SAP
150mmØ SBS SAN
EDGE OF PAVEMENT
SAP
150mmØ SBS SAN
SAP
STREET 15
15+000
15+050
15+100
15+150
15+200
15+250
15+300
6.0m 20.0m 32.0m
EDGE OF PAVEMENT
V&VB
V&VB
V&VB
V&VB
EX HYD (15-1)
EX HYD (15-2)
EX HYD (15-3)
EX 150Ø WM
EX 300Ø WM
EX HYD (15-4)
C25
C24
C49
PROPERTY LINE
THOMAS ARGUE
42+325
42+300
2x75mmØ SAN FORCEMAIN
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
SEE DRAWING No. 102085-P60


115
114
113
112
111
110
109
108
107
106
℄ THOMAS ARGUE ROAD
PVI STA: 15+015.09
PVI ELEV: 110.93
V&VC (300mmØ)
V&VB (150mmØ)
EX HYD T/FL = 110.57
HYD T/FL = 110.95
SAP 15-A
0.85%
0.23%
2.20m (MIN)
(CULVERT ST15- C9)
15.46m-300mmØ
CSP CULVERT
INV.S=110.16
INV.N=110.10
(CULVERT HYD-12)
4.52m-500mmØ
CSP CULVERT
INV.S=110.17
INV.N=110.18
CAP PROPOSED
150mmØ SBS
SANITARY
PVI STA: 15+087.10
PVI ELEV: 111.54
SAP 15-B
UNDERSIDE OF GRANULAR 'B'
150mmØ SBS SAN
2x75mmØ SAN FORCEMAIN
EX 300mmØ WM / 150mmØ WM
EX HYD T/FL = 110.39
HYD T/FL = 111.29
CENTERLINE OF ROAD
PROPOSED ELEVATION
EXISTING ELEVATION
(CULVERT HYD-11)
4.52m-500mmØ
CSP CULVERT
INV.S=110.21
INV.N=110.20
SAP 15-C
(CULVERT CULV-25)
16.70m-600mmØ
CSP CULVERT
INV.S=109.94
INV.N=109.84
1.28m
100mm INSULATION PER
CLEARFORD DETAILS ON
DRAWING 102085-C2
SB
0.69m
1.25m
1.35m
EX HYD T/FL = 110.22
HYD T/FL = 110.94
(CULVERT HYD-10)
4.52m-600mmØ
CSP CULVERT
INV.S=109.85
INV.N=109.84
-0.40%
-0.40%
-0.40%
PROPOSED LEFT DITCH INVERT
PROPOSED RIGHT DITCH INVERT
SAP 15-D
150mmØ SBS SAN
2x75mmØ SAN FORCEMAIN
EX 300mmØ WM / 150mmØ WM
EX HYD T/FL = 109.92
HYD T/FL = 110.57
V&VC (300mmØ)
V&VB (150mmØ)
(CULVERT HYD-09)
4.52m-600mmØ
CSP CULVERT
INV.S=109.49
INV.N=109.48
SAP 15-E
(CULVERT CULV-24)
16.70m-600mmØ
CSP CULVERT
INV.S=109.34
INV.N=109.24
1.28m
100mm INSULATION PER
CLEARFORD DETAILS ON
DRAWING 102085-C2

PROPOSED ELEVATION		110.93			111.02			111.23	111.44		111.54	111.49	111.39	111.29			111.19
TOP OF WM ELEVATION			107.42		107.46			107.58	107.71		107.77	107.72	107.62	107.52			107.42
PROPOSED RIGHT DITCH INVERTS			110.13		110.15			110.21	110.26		110.29	110.24	110.14	110.04			109.94
PROPOSED LEFT DITCH INVERTS			110.13		110.14			110.16	110.18		110.19	110.14	110.04	109.94			109.84
SANITARY FORCEMAIN OBVERTS				108.08	108.08	108.08		108.04	107.98		107.95	107.92	107.86	107.80	107.78		107.74
SANITARY SEWER INVERTS							108.89	108.85	108.78	108.76		108.70	108.62	108.55		108.51	108.46
EXISTING ELEVATION	110.42				110.32			110.38	110.41			110.17	110.39	110.27			110.09
CHAINAGE	15+000				15+025			15+050	15+075			15+100	15+125	15+150			15+175

PROPOSED ELEVATION	111.09	110.99		110.89	110.79		110.69		110.59	110.49
TOP OF WM ELEVATION	107.32	107.22		107.12	107.02		106.92		106.82	
PROPOSED RIGHT DITCH INVERTS	109.84	109.74		109.64	109.54		109.44		109.34	109.24
PROPOSED LEFT DITCH INVERTS	109.74	109.64		109.54	109.44		109.34		109.24	109.14
SANITARY FORCEMAIN OBVERTS	107.68	107.62		107.55	107.49		107.43		107.37	107.31
SANITARY SEWER INVERTS	108.36	108.26	108.19	108.16	108.06	108.05	107.96	107.87	107.86	107.76
EXISTING ELEVATION	110.22	110.07		109.92	109.79		109.93		109.70	109.50
CHAINAGE	15+200	15+225		15+250	15+275		15+300		15+325	15+350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(PHASE 2 BUSINESS PARK)
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WEST CAPITAL
AIRPARK
HUISSON ROAD
RUSS BRADLEY ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N
KEY PLAN

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ V&VB	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ▨	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

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CLEARFORD

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0 5 10 15 20
HORIZONTAL
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0 0.5 1.0 1.5 2.0
VERTICAL

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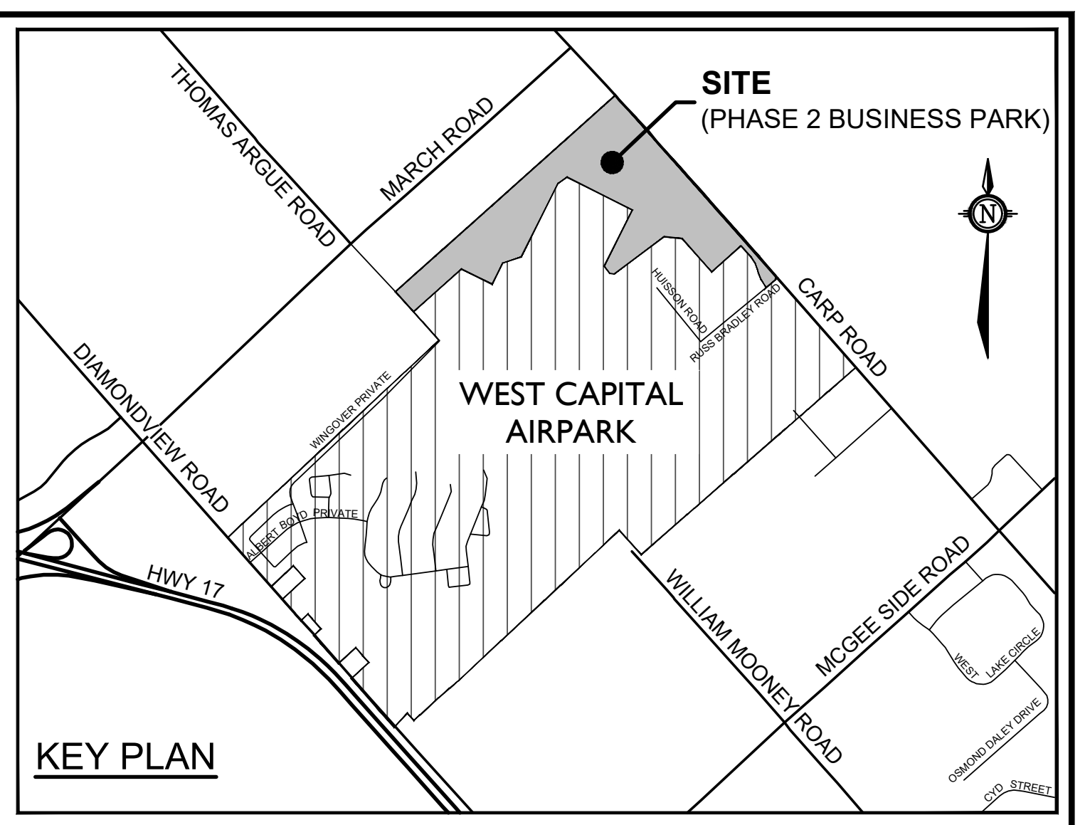
DRAWING NAME
PLAN & PROFILE
STREET 15
STA. 15+000 TO 15+350

PROJECT No. 102085-14
REV REV # 11
DRAWING No. 102085-P61

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P61, Nov 14, 2025 - 10:37am, lsauff

PLANB1.DWG - 1000mmx707mm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WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
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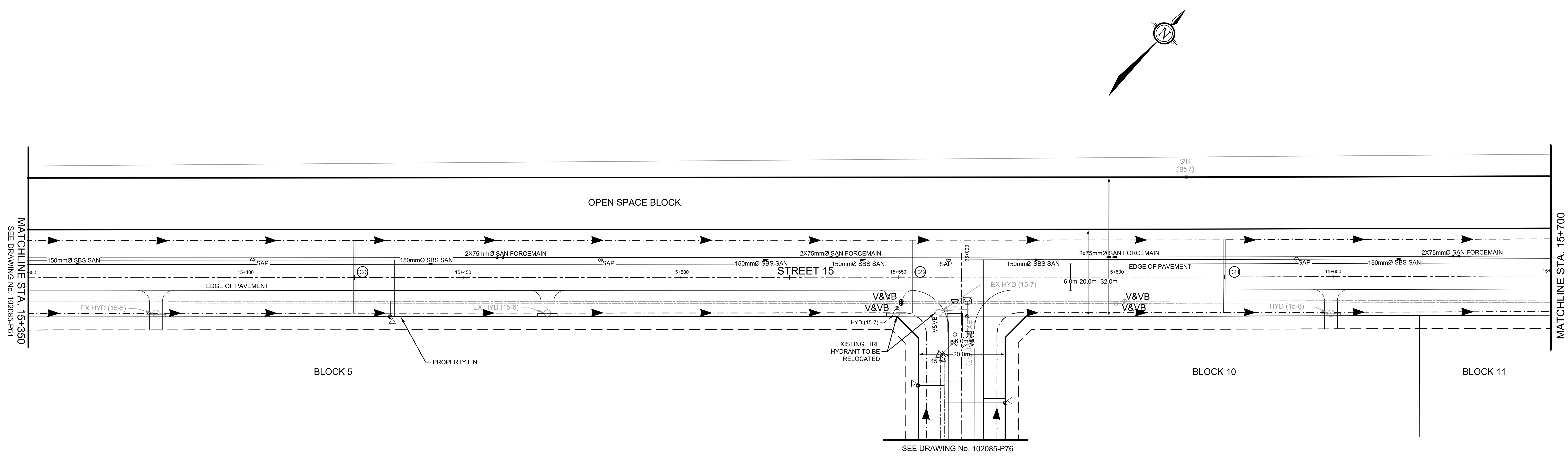
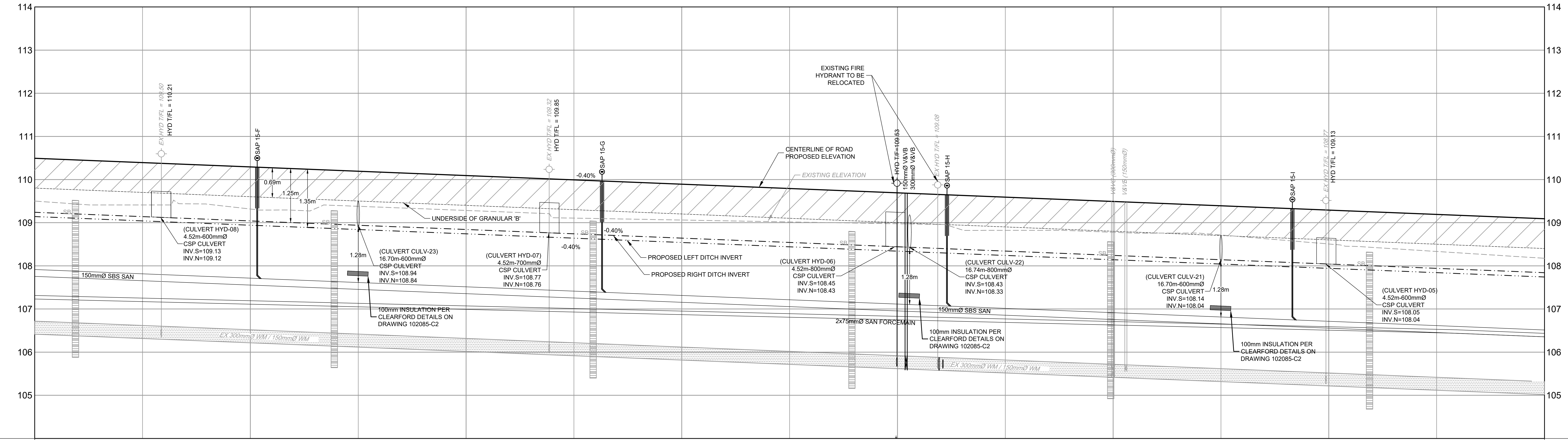
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)


N
SIB
(857)
OPEN SPACE BLOCK
MATCHLINE STA. 15+350
SEE DRAWING No. 102085-P61
MATCHLINE STA. 15+700
SEE DRAWING No. 102085-P63
150mmØ SBS SAN
2X75mmØ SAN FORCEMAIN
SAP
15+400
15+450
15+500
15+550
15+600
15+650
STREET 15
EDGE OF PAVEMENT
EX HYD (15-5)
EX HYD (15-6)
EX HYD (15-7)
HYD (15-6)
HYD (15-7)
C22
C21
V&VB
6.0m 20.0m 32.0m
20.0m
45°
EXISTING FIRE HYDRANT TO BE RELOCATED
PROPERTY LINE
BLOCK 5
BLOCK 10
BLOCK 11
SEE DRAWING No. 102085-P76


114
113
112
111
110
109
108
107
106
105
EX HYD T/FL = 109.30
HYD T/FL = 110.21
SAP 15-F
0.69m
1.25m
1.35m
UNDERSIDE OF GRANULAR 'B'
(CULVERT HYD-08)
4.52m-600mmØ
CSP CULVERT
INV.S=109.13
INV.N=109.12
150mmØ SBS SAN
1.28m
(CULVERT CULV-23)
16.70m-600mmØ
CSP CULVERT
INV.S=108.94
INV.N=108.84
100mm INSULATION PER CLEARFORD DETAILS ON DRAWING 102085-C2
EX HYD T/FL = 109.32
HYD T/FL = 109.85
(CULVERT HYD-07)
4.52m-700mmØ
CSP CULVERT
INV.S=108.77
INV.N=108.76
SAP 15-G
-0.40%
-0.40%
-0.40%
PROPOSED LEFT DITCH INVERT
PROPOSED RIGHT DITCH INVERT
CENTERLINE OF ROAD PROPOSED ELEVATION
EXISTING ELEVATION
EX 300mmØ WM / 150mmØ WM
EXISTING FIRE HYDRANT TO BE RELOCATED
HYD T/F=109.53
150mmØ V&VB
300mmØ V&VB
EX HYD T/FL = 109.08
SAP 15-H
(CULVERT HYD-06)
4.52m-800mmØ
CSP CULVERT
INV.S=108.45
INV.N=108.43
(CULVERT CULV-22)
16.74m-800mmØ
CSP CULVERT
INV.S=108.43
INV.N=108.33
1.28m
150mmØ SBS SAN
2x75mmØ SAN FORCEMAIN
100mm INSULATION PER CLEARFORD DETAILS ON DRAWING 102085-C2
V&VC (300mmØ)
V&VB (150mmØ)
SB
(CULVERT CULV-21)
16.70m-600mmØ
CSP CULVERT
INV.S=108.14
INV.N=108.04
1.28m
100mm INSULATION PER CLEARFORD DETAILS ON DRAWING 102085-C2
SAP 15-I
EX HYD T/FL = 108.77
HYD T/FL = 109.13
(CULVERT HYD-05)
4.52m-600mmØ
CSP CULVERT
INV.S=108.05
INV.N=108.04

CHAINAGE	15+350	15+375	15+400	15+425	15+450	15+475		15+500
PROPOSED ELEVATION	110.49	110.39	110.29	110.19	110.09	109.99		109.89
TOP OF WM ELEVATION		*106.62*	*106.52*	*106.42*	*106.32*	*106.22*		*106.12*
PROPOSED RIGHT DITCH INVERTS	109.24	109.14	109.04	108.94	108.84	108.74		108.64
PROPOSED LEFT DITCH INVERTS	109.14	109.04	108.94	108.84	108.74	108.64		108.54
SANITARY FORCEMAIN OBVERTS	107.31	107.25	107.19	107.13	107.07	107.01		106.95
SANITARY SEWER INVERTS	107.76	107.66	107.56 107.56 107.55	107.46	107.36	107.26	107.23	107.16
EXISTING ELEVATION	*109.50*	*109.41*	*109.32*	*109.38*	*109.28*	*109.11*		*109.06*

CHAINAGE		15+525	15+550	15+559		15+575	15+600	15+625		15+650	15+675		15+700	CHAINAGE
PROPOSED ELEVATION		109.79	109.69			109.59	109.49	109.39		109.29	109.19		109.09	PROPOSED ELEVATION
TOP OF WM ELEVATION		*106.02*	*105.92*	*105.88*		*105.82*	*105.72*	*105.62*		*105.52*	*105.42*			TOP OF WM ELEVATION
PROPOSED RIGHT DITCH INVERTS		108.54	108.44			108.34	108.24	108.14		108.04	107.94		107.84	PROPOSED RIGHT DITCH INVERTS
PROPOSED LEFT DITCH INVERTS		108.44	108.34			108.24	108.14	108.04		107.94	107.84		107.74	PROPOSED LEFT DITCH INVERTS
SANITARY FORCEMAIN OBVERTS		106.89	106.83			106.77	106.71	106.65		106.59	106.53	106.52	106.44	SANITARY FORCEMAIN OBVERTS
SANITARY SEWER INVERTS	107.08	107.06	106.96	106.91	106.88	106.86	106.76	106.66	106.59	106.56	106.46	106.44	106.36	SANITARY SEWER INVERTS
EXISTING ELEVATION		*109.02*	*108.98*			*108.82*	*108.78*	*108.72*		*108.51*	*108.33*		*108.18*	EXISTING ELEVATION

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P62, Nov 14, 2025 - 10:37am, lsauff

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

CLEARFORD WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL Developments

No.	REVISION	DATE	BY
11.	REVISED PER COMMENTS	NOV 14/25	ARM
10.	ISSUED FOR REVIEW	NOV 19/24	ARM
9.	ISSUED FOR REVIEW	OCT 29/24	ARM
8.	ISSUED FOR COORDINATION	AUG 22/24	ARM
7.	ISSUED FOR COORDINATION	APR 23/24	ARM
6.	ISSUED FOR TENDER	FEB 26/15	DJC
5.	ISSUED FOR PHASE 1 RESIDENTIAL REGISTRATION	OCT 15/14	DJC
4.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
3.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN MJB
CHECKED MNP
DRAWN MJB
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

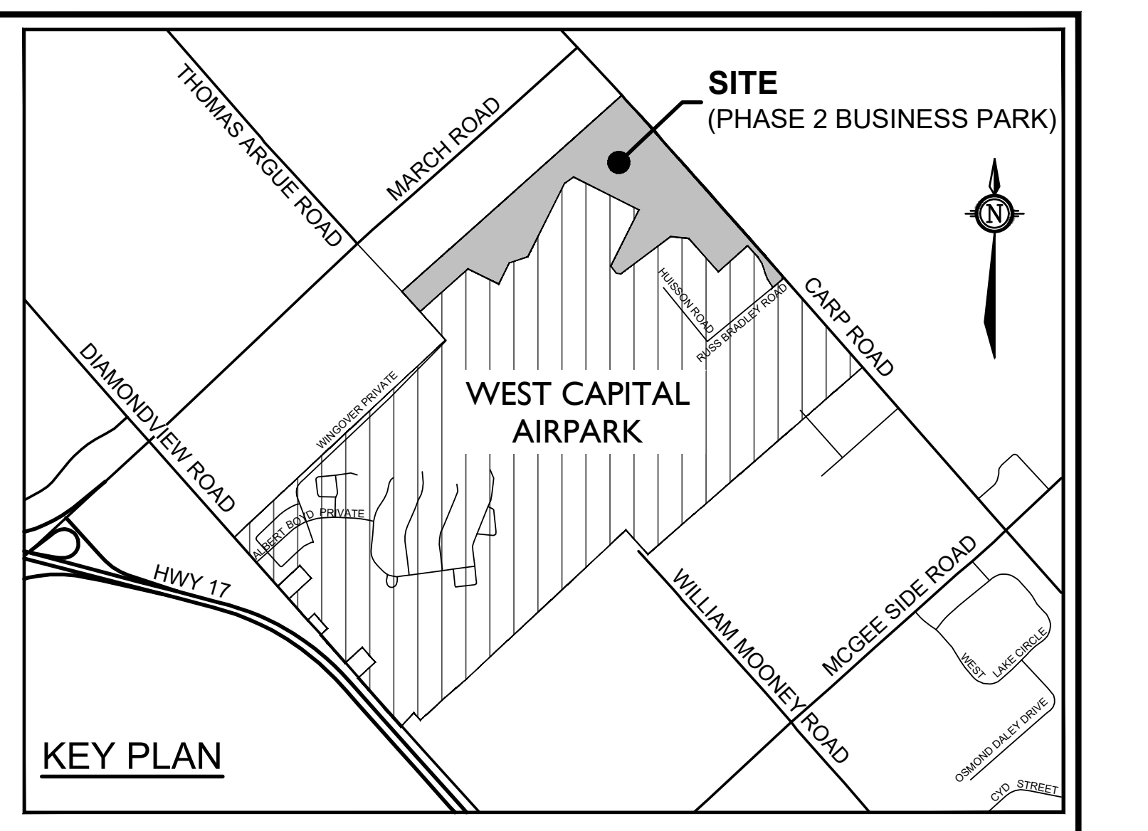
NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

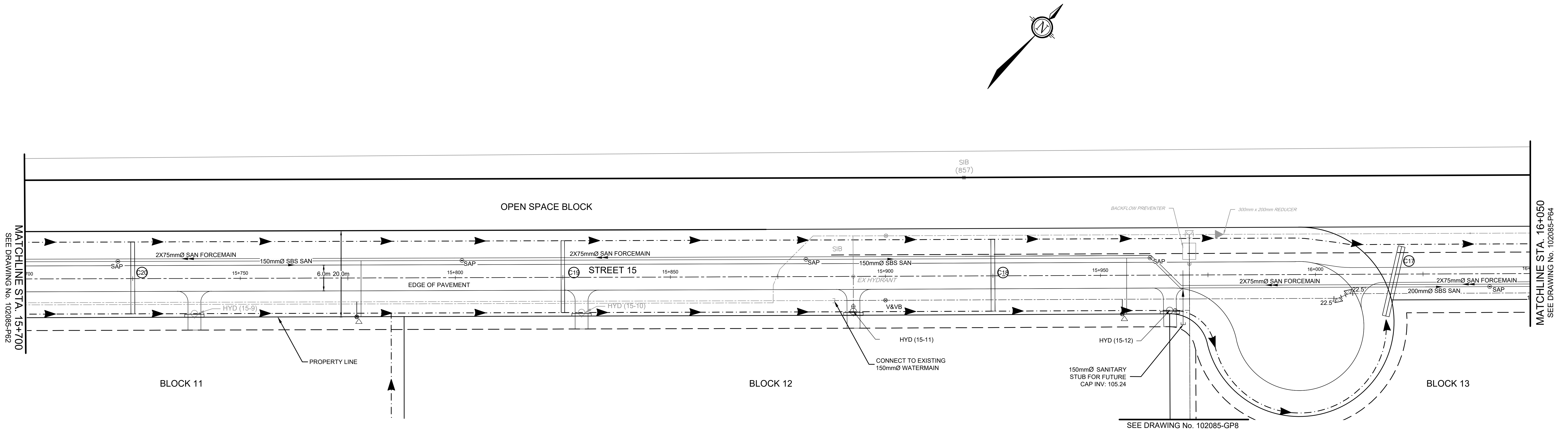
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
PLAN & PROFILE
STREET 15
STA. 15+350 TO 15+700

PROJECT No. 102085-14
REV REV # 11
DRAWING No. 102085-P62

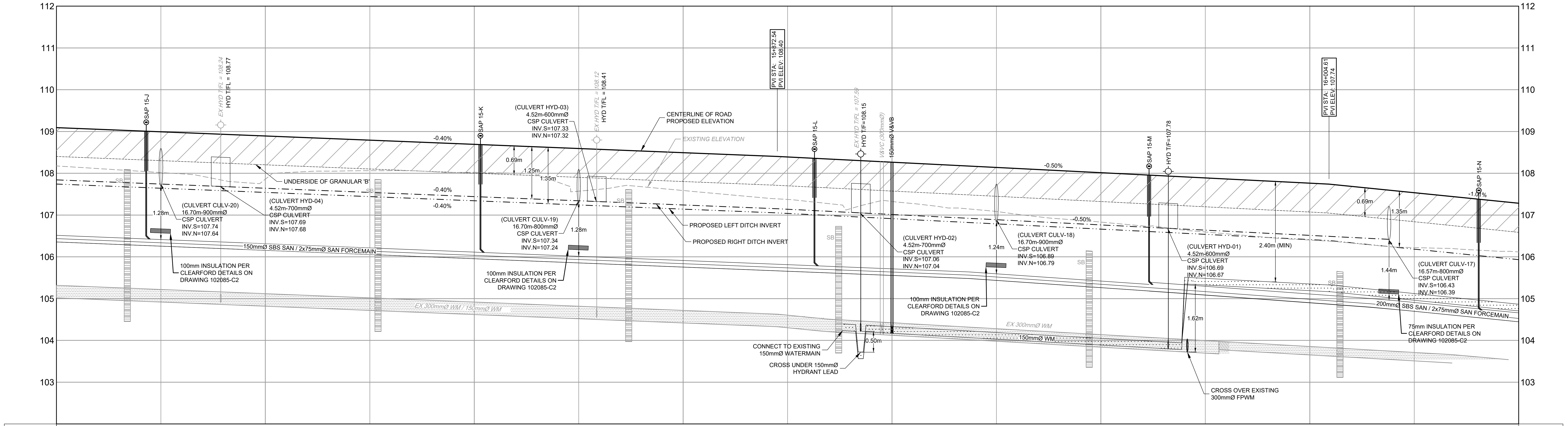
PLANB1.DWG - 1000mmx707mm


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WEST CAPITAL AIRPARK
HUISSON ROAD
RUSS BRADLEY ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N
KEY PLAN


N
MATCHLINE STA. 15+700
SEE DRAWING No. 102085-P62
SIB
(857)
OPEN SPACE BLOCK
BACKFLOW PREVENTER
300mm x 200mm REDUCER
2X75mmØ SAN FORCEMAIN
150mmØ SBS SAN
SAP
C20
15+750
6.0m 20.0m
15+800
EDGE OF PAVEMENT
C19
STREET 15
15+850
HYD (15-9)
HYD (15-10)
SIB
EX HYDRANT
15+900
C18
15+950
V&VB
16+000
2X75mmØ SAN FORCEMAIN
22.5°
22.5°
C17
200mmØ SBS SAN
SAP
PROPERTY LINE
HYD (15-11)
CONNECT TO EXISTING
150mmØ WATERMAIN
HYD (15-12)
150mmØ SANITARY
STUB FOR FUTURE
CAP INV: 105.24
SEE DRAWING No. 102085-GP8
BLOCK 11
BLOCK 12
BLOCK 13
MATCHLINE STA. 16+050
SEE DRAWING No. 102085-P64

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ▨	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)


112
111
110
109
108
107
106
105
104
103
SAP 15-J
EX HYD T/FL = 108.24
HYD T/FL = 108.77
SAP 15-K
(CULVERT HYD-03)
4.52m-600mmØ
CSP CULVERT
INV.S=107.33
INV.N=107.32
EX HYD T/FL = 108.12
HYD T/FL = 108.41
CENTERLINE OF ROAD
PROPOSED ELEVATION
EXISTING ELEVATION
PVI STA: 15+872.54
PVI ELEV: 108.40
SAP 15-L
EX HYD T/FL = 107.59
HYD T/F=108.15
V&VC (300mmØ)
150mmØ V&VB
SAP 15-M
HYD T/F=107.78
PVI STA: 16+004.61
PVI ELEV: 107.74
SAP 15-N
-0.40%
-0.40%
-0.40%
-0.50%
-0.50%
-1.01%
0.69m
1.25m
1.35m
UNDERSIDE OF GRANULAR 'B'
1.28m
(CULVERT CULV-20)
16.70m-900mmØ
CSP CULVERT
INV.S=107.74
INV.N=107.64
(CULVERT HYD-04)
4.52m-700mmØ
CSP CULVERT
INV.S=107.69
INV.N=107.68
(CULVERT CULV-19)
16.70m-800mmØ
CSP CULVERT
INV.S=107.34
INV.N=107.24
1.28m
PROPOSED LEFT DITCH INVERT
PROPOSED RIGHT DITCH INVERT
150mmØ SBS SAN / 2x75mmØ SAN FORCEMAIN
100mm INSULATION PER
CLEARFORD DETAILS ON
DRAWING 102085-C2
100mm INSULATION PER
CLEARFORD DETAILS ON
DRAWING 102085-C2
EX 300mmØ WM / 150mmØ WM
SB
(CULVERT HYD-02)
4.52m-700mmØ
CSP CULVERT
INV.S=107.06
INV.N=107.04
1.24m
(CULVERT CULV-18)
16.70m-900mmØ
CSP CULVERT
INV.S=106.89
INV.N=106.79
100mm INSULATION PER
CLEARFORD DETAILS ON
DRAWING 102085-C2
(CULVERT HYD-01)
4.52m-600mmØ
CSP CULVERT
INV.S=106.69
INV.N=106.67
2.40m (MIN)
0.69m
1.35m
1.44m
(CULVERT CULV-17)
16.57m-800mmØ
CSP CULVERT
INV.S=106.43
INV.N=106.39
200mmØ SBS SAN / 2x75mmØ SAN FORCEMAIN
75mm INSULATION PER
CLEARFORD DETAILS ON
DRAWING 102085-C2
EX 300mmØ WM
150mmØ WM
1.62m
0.50m
CONNECT TO EXISTING
150mmØ WATERMAIN
CROSS UNDER 150mmØ
HYDRANT LEAD
CROSS OVER EXISTING
300mmØ FPWM

CHAINAGE	15+700	15+725	15+750	15+775	15+800	15+825	15+850	15+875	15+900	15+925	15+950	15+975	16+000	16+025	16+050
PROPOSED ELEVATION	109.09	108.99	108.89	108.79	108.69	108.59	108.49	108.40 108.39	108.27	108.14	108.01	107.89	107.76 107.74	107.53	107.28
TOP OF WM ELEVATION		*105.22*	*105.12*	*105.02*	*104.92*	*104.82*	*104.72*	*104.59*	104.39 104.32	104.18	104.04	103.94 105.51 105.50 105.49 105.45	105.35 105.32	105.12	104.97
PROPOSED RIGHT DITCH INVERTS	107.84	107.74	107.64	107.54	107.44	107.34	107.24	107.15 107.14	107.01	106.89	106.76	106.64	106.51	106.42	
PROPOSED LEFT DITCH INVERTS	107.74	107.64	107.54	107.44	107.34	107.24	107.14	107.05 107.04	106.91	106.79	106.66	106.54	106.41 106.39	106.18	105.93
SANITARY FORCEMAIN OBVERTS	106.44	106.34	106.24	106.14	106.03	105.93	105.83	105.73	105.63	105.56 105.51	105.34	105.16	104.98	104.80 104.78	104.53
SANITARY SEWER INVERTS	106.36	106.27 106.26	106.16	106.06	105.96 105.96 105.95	105.86	105.76	105.66 105.63	105.56	105.48 105.44	105.27 105.19	105.14 105.09	104.90	104.80 104.72 104.70	104.55 104.45
EXISTING ELEVATION	*108.18*	*108.02*	*107.86*	*108.06*	*108.02*	*107.57*	*107.59*	*107.37*	*107.33*	*107.09*	*106.83*	*106.60*	*106.40*	*106.22*	*106.12*

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P63, Nov 14, 2025 - 10:37am, tstaff

NOTE:
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CLEARFORD WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL Developments

No.	REVISION	DATE	BY
11.	REVISED PER COMMENTS	NOV 14/25	ARM
10.	ISSUED FOR REVIEW	NOV 19/24	ARM
9.	ISSUED FOR REVIEW	OCT 29/24	ARM
8.	ISSUED FOR COORDINATION	AUG 22/24	ARM
7.	ISSUED FOR COORDINATION	APR 23/24	ARM
6.	ISSUED FOR TENDER	FEB 26/15	DJC
5.	ISSUED FOR PHASE 1 RESIDENTIAL REGISTRATION	OCT 15/14	DJC
4.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
3.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

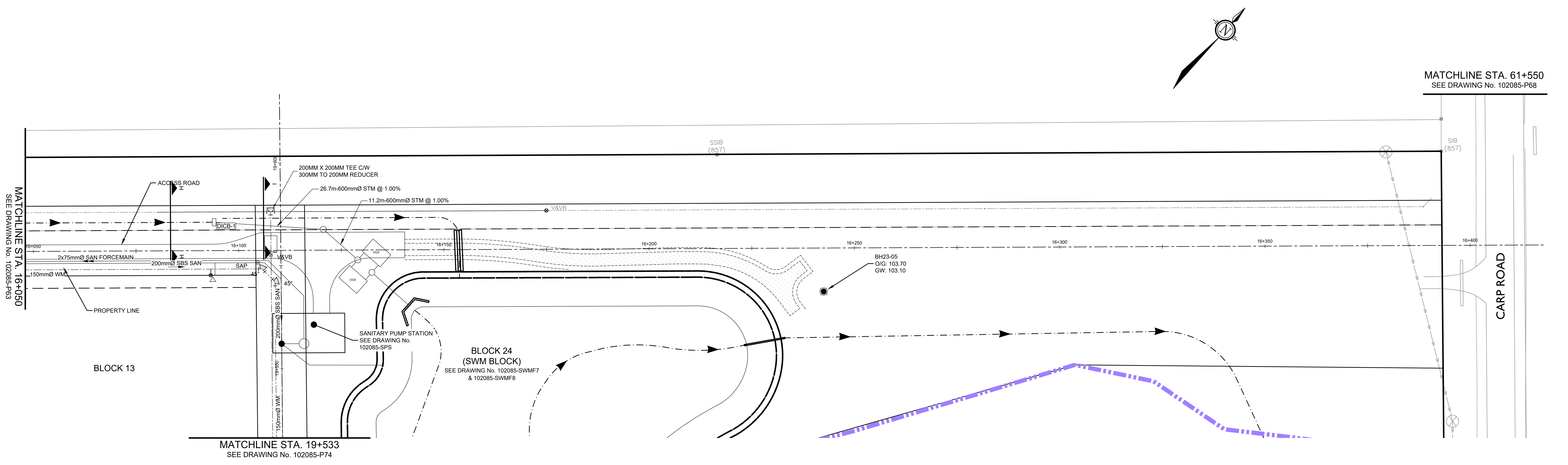
NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

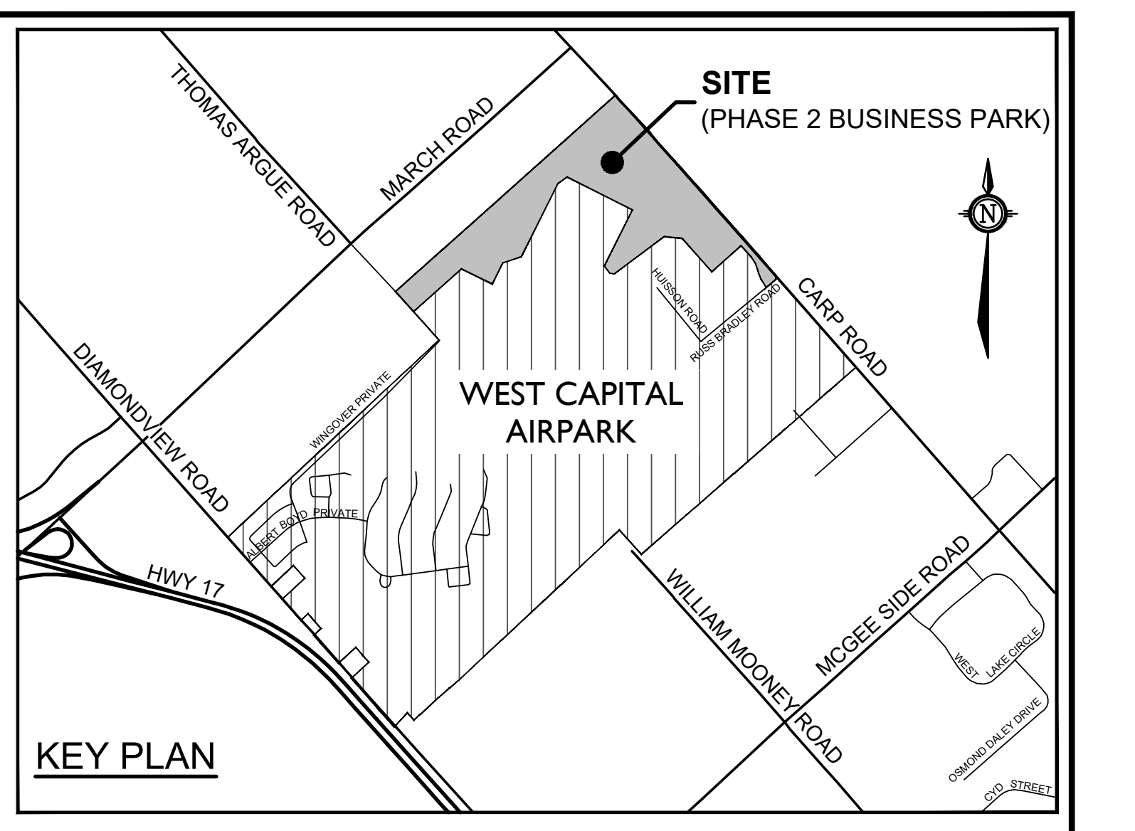
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
PLAN & PROFILE
STREET 15
STA. 15+700 TO 16+050

PROJECT No. 102085-14
REV REV # 11
DRAWING No. 102085-P63

PLANB1.DWG - 1000mmx707mm

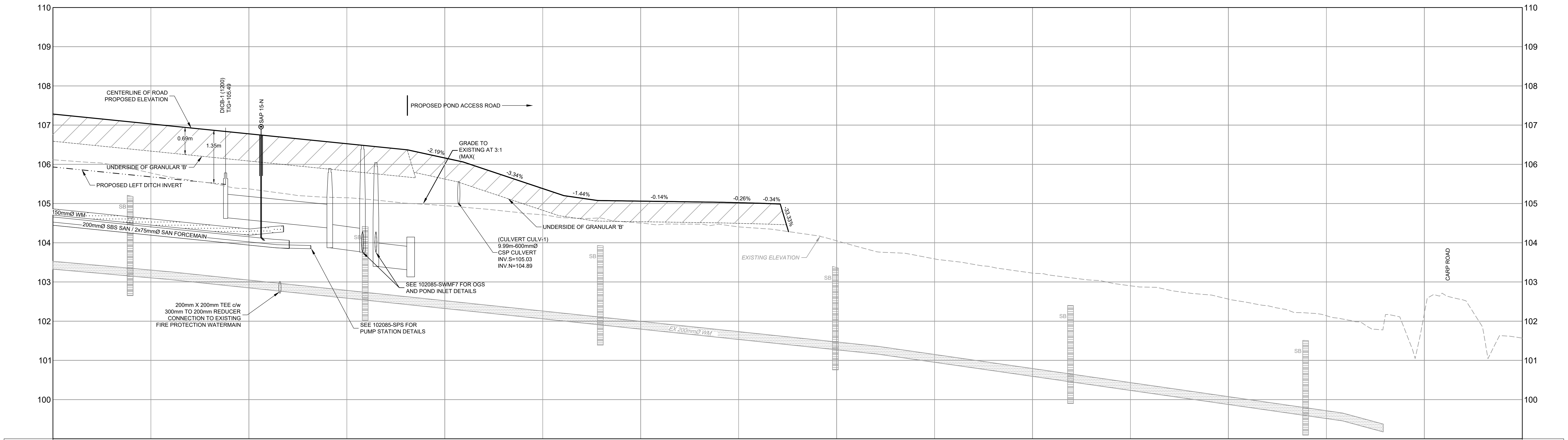

MATCHLINE STA. 16+050
SEE DRAWING No. 102085-P63
ACCESS ROAD
200MM X 200MM TEE C/W
300MM TO 200MM REDUCER
26.7m-600mmØ STM @ 1.00%
11.2m-600mmØ STM @ 1.00%
DICB-1
16+050
16+100
16+150
16+200
16+250
16+300
16+350
16+400
19+600
19+550
2x75mmØ SAN FORCEMAIN
200mmØ SBS SAN
150mmØ WM
SAP
V&VB
45°
45°
200mmØ SBS SAN
150mmØ WM
OGS
OGS
PROPERTY LINE
SANITARY PUMP STATION
SEE DRAWING No.
102085-SPS
BLOCK 13
BLOCK 24
(SWM BLOCK)
SEE DRAWING No. 102085-SWMF7
& 102085-SWMF8
MATCHLINE STA. 19+533
SEE DRAWING No. 102085-P74
SSIB
(857)
SIB
(857)
V&VB
BH23-05
O/G: 103.70
GW: 103.10
MATCHLINE STA. 61+550
SEE DRAWING No. 102085-P68
CARP ROAD
N


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WEST CAPITAL AIRPARK
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
⌖ HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ V&VB	EXISTING VALVE & VALVE BOX
⌖ HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
◉ SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ■	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
— - —	PROPOSED CENTRELINE OF ROAD
—	PROPOSED EDGE OF PAVEMENT
— · ►	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)


110
109
108
107
106
105
104
103
102
101
100
CENTERLINE OF ROAD
PROPOSED ELEVATION
DICB-1 (1200)
T/G=105.49
SAP 15-N
PROPOSED POND ACCESS ROAD
0.69m
1.35m
UNDERSIDE OF GRANULAR 'B'
PROPOSED LEFT DITCH INVERT
-2.19%
GRADE TO
EXISTING AT 3:1
(MAX(
-3.34%
-1.44%
-0.14%
-0.26%
-0.34%
-33.33%
UNDERSIDE OF GRANULAR 'B'
150mmØ WM
200mmØ SBS SAN / 2x75mmØ SAN FORCEMAIN
SB
(CULVERT CULV-1)
9.99m-600mmØ
CSP CULVERT
INV.S=105.03
INV.N=104.89
EXISTING ELEVATION
SEE 102085-SWMF7 FOR OGS
AND POND INLET DETAILS
200mm X 200mm TEE c/w
300mm TO 200mm REDUCER
CONNECTION TO EXISTING
FIRE PROTECTION WATERMAIN
SEE 102085-SPS FOR
PUMP STATION DETAILS
EX 200mmØ WM
CARP ROAD

PROPOSED ELEVATION	107.28, 107.03, 106.78, 106.53, 106.37, 106.16, 106.06, 105.38, 105.20, 105.08, 105.06, 105.03, 105.02, 105.00, 104.99, 104.28
PROPOSED TOP OF WATERMAIN (TOP OF WM ELEVATION)	104.87, 104.61, 104.57, 104.35, 104.39, 104.41, 104.43
PROPOSED RIGHT DITCH INVERTS	
PROPOSED LEFT DITCH INVERTS	105.93, 105.68, 105.49
SANITARY FORCEMAIN OBVERTS	104.53, 104.27, 104.02, 103.93
SANITARY SEWER INVERTS	104.53, 104.27, 104.02, 103.95, 103.93
EXISTING ELEVATION	106.12, 105.78, 105.37, 105.15, 104.95, 104.71, 104.50, 104.40, 104.05, 103.59, 103.23, 102.90, 102.56, 102.14, 102.19, 101.57
CHAINAGE	16+050, 16+075, 16+100, 16+125, 16+150, 16+175, 16+200, 16+225, 16+250, 16+275, 16+300, 16+325, 16+350, 16+375, 16+400, 16+425

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

NOTE:
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CLEARFORD WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL Developments

No.	REVISION	DATE	BY
11.	REVISED PER COMMENTS	NOV 14/25	ARM
10.	ISSUED FOR REVIEW	NOV 19/24	ARM
9.	ISSUED FOR REVIEW	OCT 29/24	ARM
8.	ISSUED FOR COORDINATION	AUG 22/24	ARM
7.	ISSUED FOR COORDINATION	APR 23/24	ARM
6.	ISSUED FOR TENDER	FEB 26/15	DJC
5.	ISSUED FOR PHASE 1 RESIDENTIAL REGISTRATION	OCT 15/14	DJC
4.	REVISED AS PER CITY / MVC COMMENTS	SEPT 26/13	DJC
3.	REVISED AS PER CITY / MVC COMMENTS	MAY 28/13	DJC
2.	REVISED AS PER CITY COMMENTS	MAR 8/12	DJC
1.	ISSUED FOR REVIEW	NOV 21/11	DJC

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN MJB
CHECKED MNP
DRAWN MJB
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

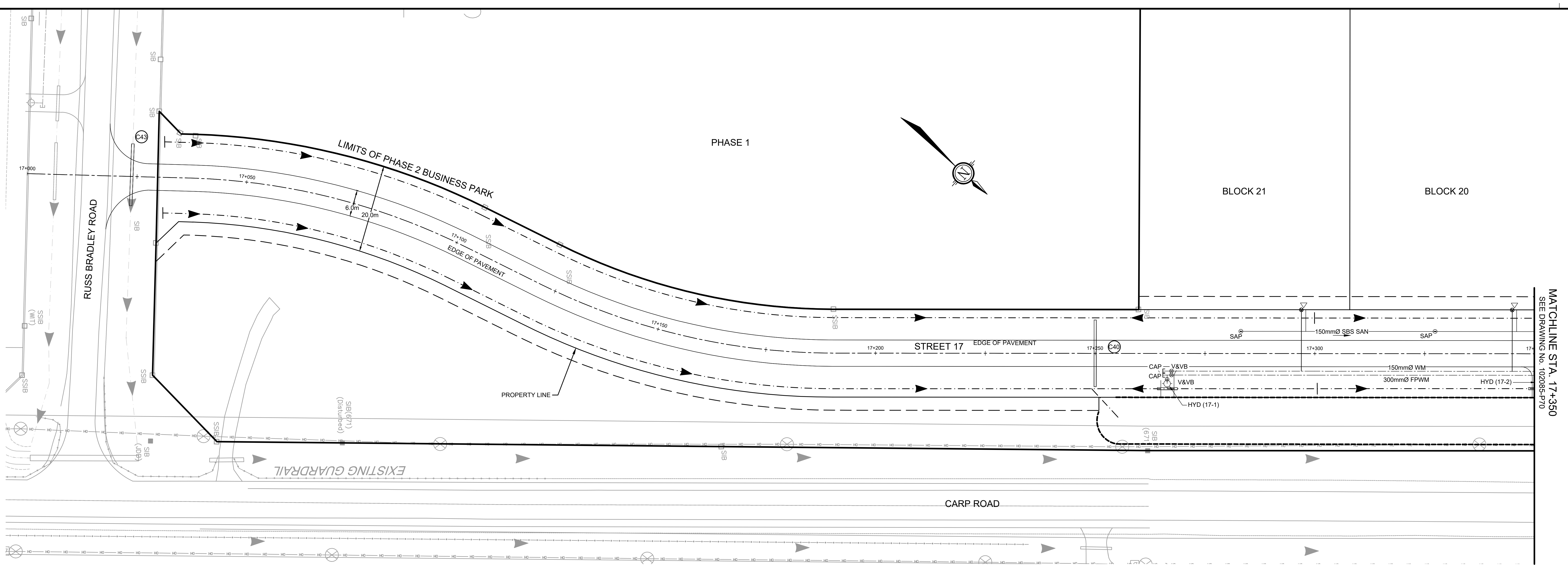
NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

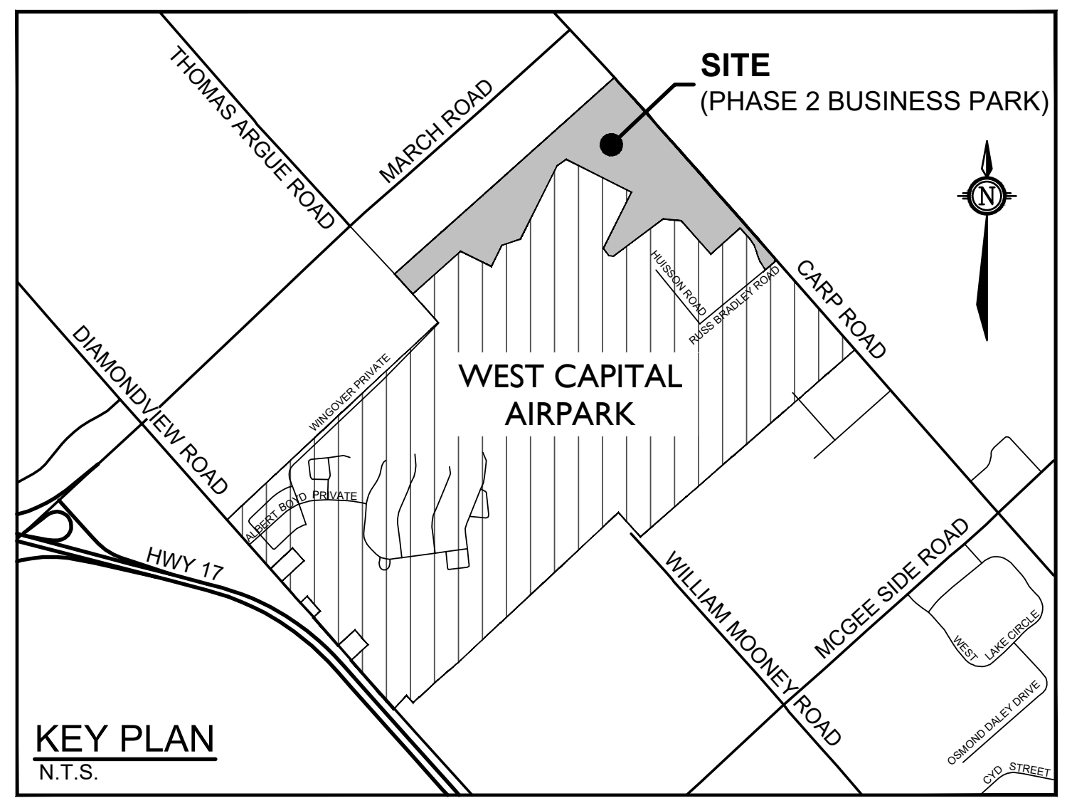
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
PLAN & PROFILE
EASEMENT
STA. 16+050 TO 16+425

PROJECT No. 102085-14
REV REV # 11
DRAWING No. 102085-P64

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P64, Nov 14, 2025 - 10:37am, tstaff

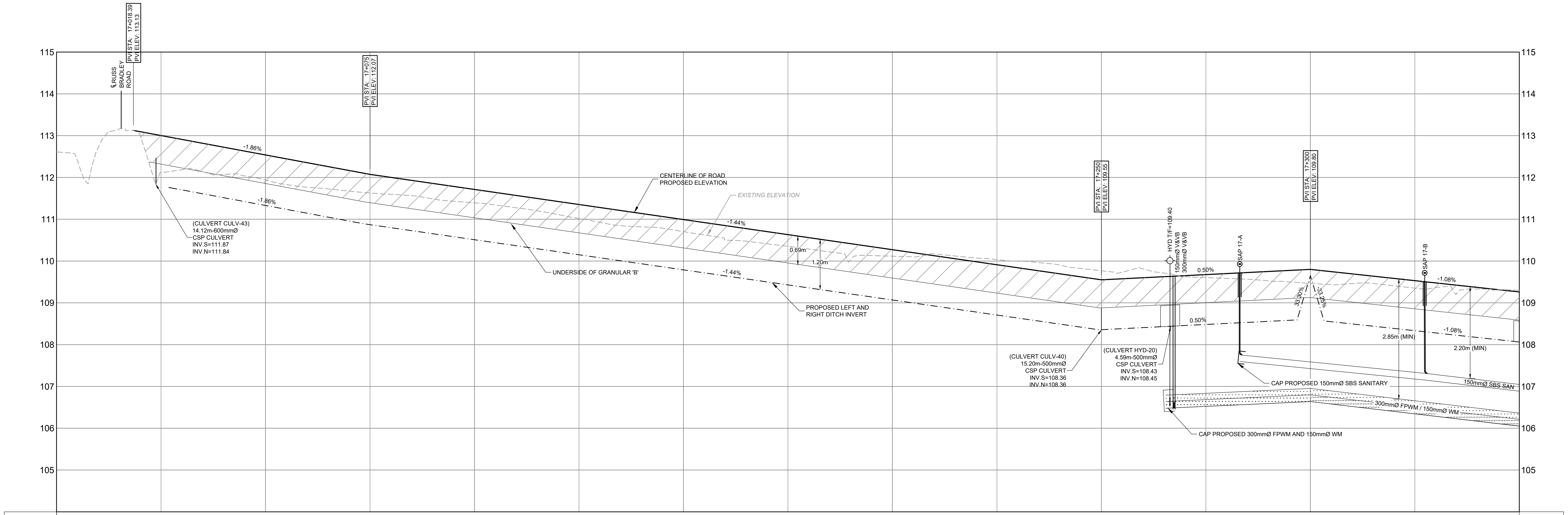

PHASE 1
BLOCK 21
BLOCK 20
LIMITS OF PHASE 2 BUSINESS PARK
RUSS BRADLEY ROAD
C43
17+000
17+050
17+100
17+150
17+200
17+250
17+300
6.0m
20.0m
EDGE OF PAVEMENT
STREET 17
PROPERTY LINE
C40
SAP
150mmØ SBS SAN
SAP
CAP
V&VB
CAP
V&VB
150mmØ WM
300mmØ FPWM
HYD (17-1)
HYD (17-2)
EXISTING GUARDRAIL
CARP ROAD
MATCHLINE STA. 17+350
SEE DRAWING No. 102085-P70


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WEST CAPITAL AIRPARK
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

KEY PLAN
N.T.S.

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ V&VB	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ▢	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)


PVI STA: 17+018.39
PVI ELEV: 113.13
℄ RUSS BRADLEY ROAD
PVI STA: 17+075
PVI ELEV: 112.07
-1.86%
-1.86%
(CULVERT CULV-43)
14.12m-600mmØ
CSP CULVERT
INV.S=111.87
INV.N=111.84
CENTERLINE OF ROAD
PROPOSED ELEVATION
EXISTING ELEVATION
-1.44%
-1.44%
0.69m
1.20m
UNDERSIDE OF GRANULAR 'B'
PROPOSED LEFT AND
RIGHT DITCH INVERT
PVI STA: 17+250
PVI ELEV: 109.55
PVI STA: 17+300
PVI ELEV: 109.80
(CULVERT CULV-40)
15.20m-500mmØ
CSP CULVERT
INV.S=108.36
INV.N=108.36
(CULVERT HYD-20)
4.59m-500mmØ
CSP CULVERT
INV.S=108.43
INV.N=108.45
HYD T/F=109.40
150mmØ V&VB
300mmØ V&VB
SAP 17-A
SAP 17-B
0.50%
0.50%
33.30%
-33.25%
-1.08%
-1.08%
2.85m (MIN)
2.20m (MIN)
CAP PROPOSED 150mmØ SBS SANITARY
150mmØ SBS SAN
300mmØ FPWM / 150mmØ WM
CAP PROPOSED 300mmØ FPWM AND 150mmØ WM
115
114
113
112
111
110
109
108
107
106
105

PROPOSED ELEVATION		112.12 112.12	111.94 111.90	111.63 111.60	111.39	111.24	111.02	110.82	110.70	110.48	110.35	109.97	110.12	110.08 110.03	109.82 109.77		109.62 109.60		109.47 109.46	109.35 109.34		PROPOSED ELEVATION
PROPOSED TOP OF WATERMAIN																106.79	106.83		106.95	106.66		TOP OF WM ELEVATION
PROPOSED RIGHT DITCH INVERTS		111.76	111.33	110.89 110.87	110.51		110.15		109.79		109.43		109.07	108.71	108.35 108.36		108.48		108.59 109.65 108.57	108.33		PROPOSED RIGHT DITCH INVERTS
PROPOSED LEFT DITCH INVERTS		111.76	111.33	110.89 110.87	110.51		110.15		109.79		109.43		109.07	108.71	108.35 108.36		108.48		108.59 109.65 108.57	108.33		PROPOSED LEFT DITCH INVERTS
SANITARY SEWER INVERTS																		107.60	107.43	107.18		SANITARY SEWER OBVERTS
EXISTING ELEVATION	112.61	112.12	111.94	111.63	111.39		111.02		110.70		110.35		110.12	110.03	109.77		109.60		109.46	109.35		EXISTING ELEVATION
CHAINAGE	17+000	17+025	17+050	17+075	17+100		17+125		17+150		17+175		17+200	17+225	17+250		17+275		17+300	17+325	17+350	CHAINAGE

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

NOTE:
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CLEARFORD

WEST CAPITAL
Developments

CLEARFORD
WATER SYSTEMS INC.

No.	REVISION	DATE	BY
5.	REVISED PER COMMENTS	NOV 14/25	ARM
4.	ISSUED FOR REVIEW	NOV 19/24	ARM
3.	ISSUED FOR REVIEW	OCT 29/24	ARM
2.	ISSUED FOR COORDINATION	AUG 22/24	ARM
1.	ISSUED FOR COORDINATION	APR 23/24	ARM

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN MJB
CHECKED MNP
DRAWN MJB
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

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Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

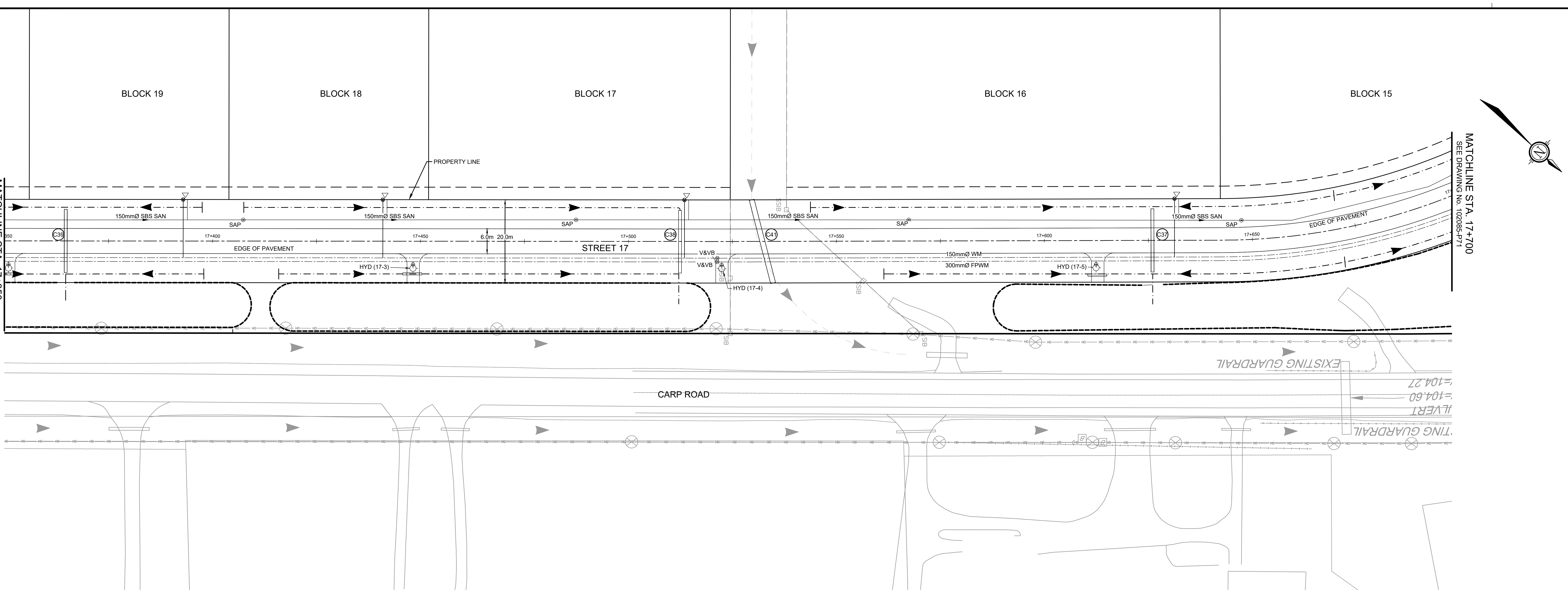
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

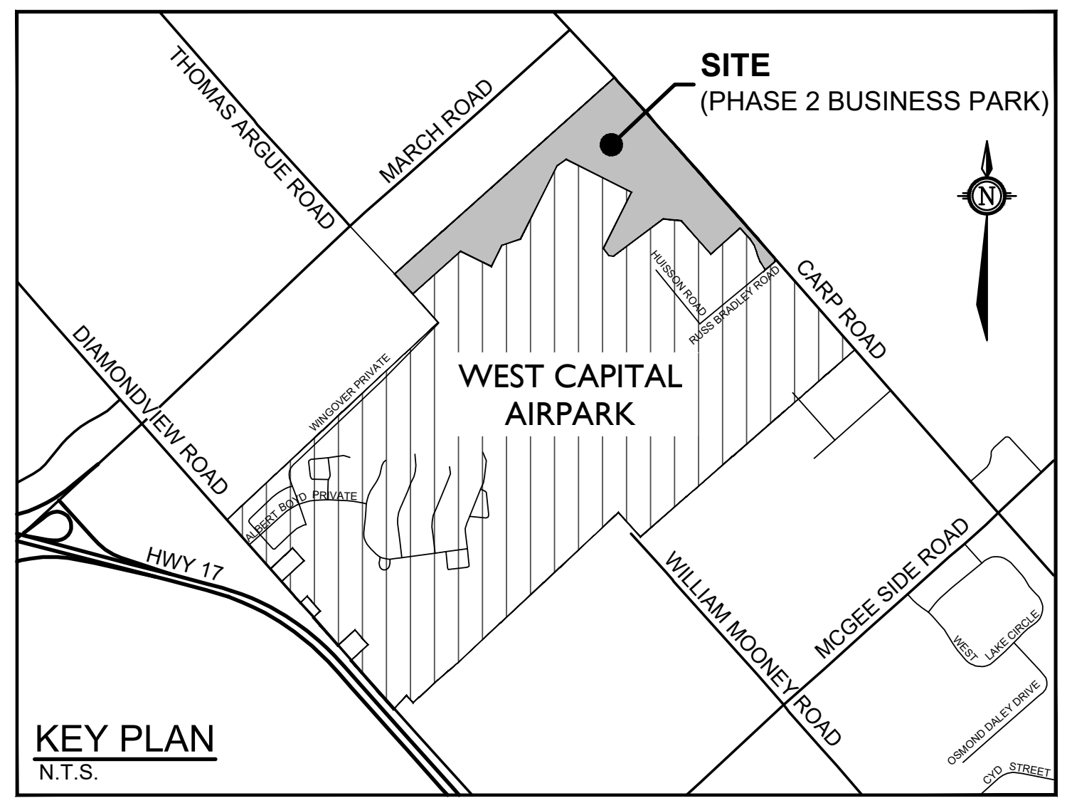
DRAWING NAME
PLAN & PROFILE
STREET 17
STA. 17+000 TO 17+350

PROJECT No. 102085-14
REV REV # 5
DRAWING No. 102085-P69

M:\2020\102085\CAD\...BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P69, Nov 14, 2025 - 10:37am, tstaff

PLANB1.DWG - 1000mmx707mm

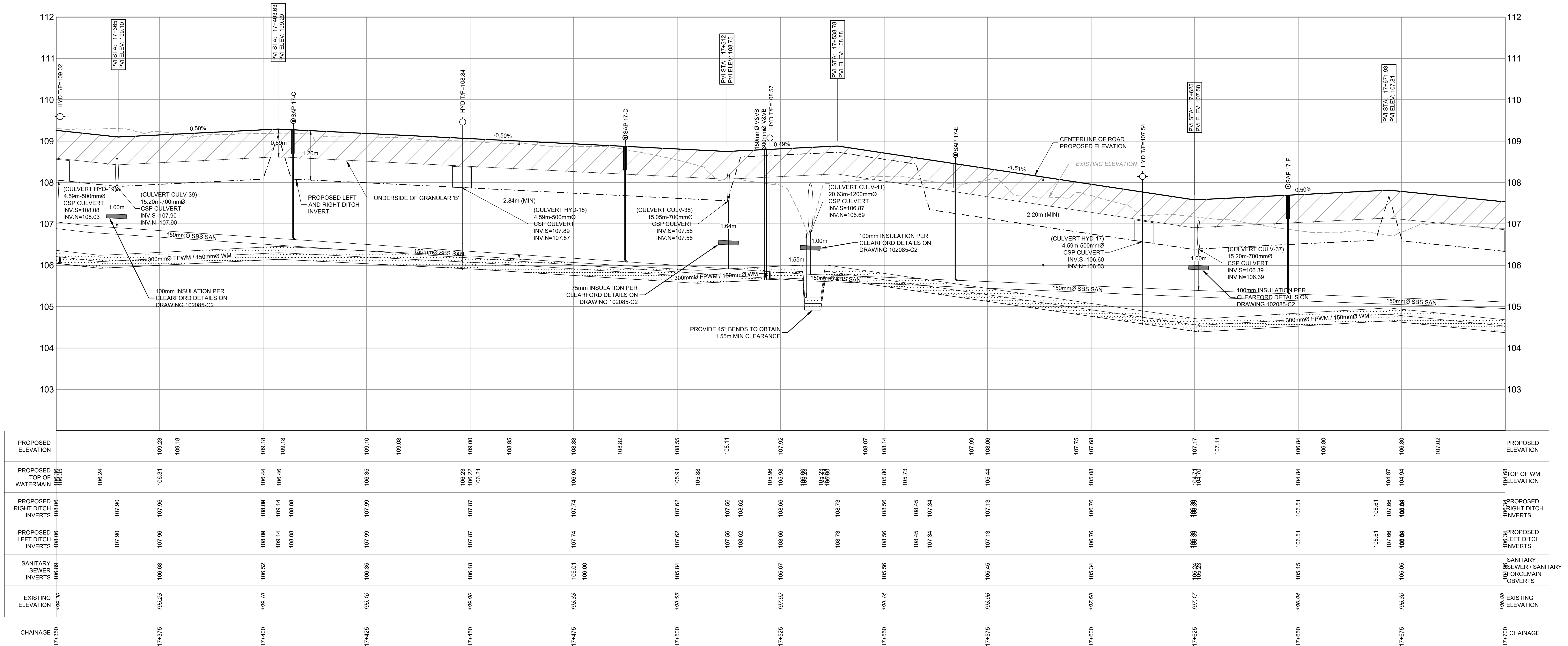

BLOCK 19
BLOCK 18
BLOCK 17
BLOCK 16
BLOCK 15
PROPERTY LINE
MATCHLINE STA. 17+350
SEE DRAWING No. 102085-P69
MATCHLINE STA. 17+700
SEE DRAWING No. 102085-P71
150mmØ SBS SAN
SAP
17+400
17+450
17+500
17+550
17+600
17+650
6.0m
20.0m
C39
C38
C41
C37
EDGE OF PAVEMENT
STREET 17
V&VB
HYD (17-3)
HYD (17-4)
HYD (17-5)
150mmØ WM
300mmØ FPWM
SSIB
CARP ROAD
EXISTING GUARDRAIL


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WEST CAPITAL AIRPARK
HUISSON ROAD
RUSS BRADLEY ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN
N.T.S.

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ V&VB	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ▨	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)


112
111
110
109
108
107
106
105
104
103
PVI STA: 17+365
PVI ELEV: 109.10
PVI STA: 17+403.63
PVI ELEV: 109.29
PVI STA: 17+512
PVI ELEV: 108.75
PVI STA: 17+538.78
PVI ELEV: 108.88
PVI STA: 17+625
PVI ELEV: 107.58
PVI STA: 17+671.93
PVI ELEV: 107.81
HYD T/F=109.02
HYD T/F=108.84
HYD T/F=108.57
HYD T/F=107.54
SAP 17-C
SAP 17-D
SAP 17-E
SAP 17-F
150mmØ V&VB
300mmØ V&VB
0.50%
-0.50%
0.49%
-1.51%
0.50%
0.69m
1.20m
2.84m (MIN)
2.20m (MIN)
1.64m
1.55m
1.00m
(CULVERT HYD-19)
4.59m-500mmØ
CSP CULVERT
INV.S=108.08
INV.N=108.03
(CULVERT CULV-39)
15.20m-700mmØ
CSP CULVERT
INV.S=107.90
INV.N=107.90
PROPOSED LEFT AND RIGHT DITCH INVERT
UNDERSIDE OF GRANULAR 'B'
(CULVERT HYD-18)
4.59m-500mmØ
CSP CULVERT
INV.S=107.89
INV.N=107.87
(CULVERT CULV-38)
15.05m-700mmØ
CSP CULVERT
INV.S=107.56
INV.N=107.56
(CULVERT CULV-41)
20.63m-1200mmØ
CSP CULVERT
INV.S=106.87
INV.N=106.69
CENTERLINE OF ROAD PROPOSED ELEVATION
EXISTING ELEVATION
(CULVERT HYD-17)
4.59m-500mmØ
CSP CULVERT
INV.S=106.60
INV.N=106.53
(CULVERT CULV-37)
15.20m-700mmØ
CSP CULVERT
INV.S=106.39
INV.N=106.39
150mmØ SBS SAN
300mmØ FPWM / 150mmØ WM
100mm INSULATION PER CLEARFORD DETAILS ON DRAWING 102085-C2
75mm INSULATION PER CLEARFORD DETAILS ON DRAWING 102085-C2
PROVIDE 45° BENDS TO OBTAIN 1.55m MIN CLEARANCE
PROPOSED ELEVATION: 109.23 109.18 109.18 109.18 109.10 109.08 109.00 108.95 108.88 108.82 108.55 108.11 107.92 108.07 108.14 107.99 108.06 107.75 107.68 107.17 107.11 106.84 106.80 106.80 107.02
PROPOSED TOP OF WATERMAIN / TOP OF WM ELEVATION: 106.36 106.35 106.24 106.31 106.44 106.46 106.35 106.23 106.22 106.21 106.06 105.91 105.88 105.96 105.98 106.09 105.23 105.23 106.01 106.00 105.80 105.73 105.44 105.08 104.71 104.70 104.84 104.97 104.94 104.68
PROPOSED RIGHT DITCH INVERTS: 108.06 107.90 107.96 108.09 108.08 109.14 108.08 107.99 107.87 107.74 107.62 107.56 108.62 108.66 108.73 108.56 108.45 107.34 107.13 106.76 106.39 106.38 106.51 106.61 107.66 106.59 106.64 106.34
PROPOSED LEFT DITCH INVERTS: 108.06 107.90 107.96 108.09 108.08 109.14 108.08 107.99 107.87 107.74 107.62 107.56 108.62 108.66 108.73 108.56 108.45 107.34 107.13 106.76 106.39 106.38 106.51 106.61 107.66 106.59 106.64 106.34
SANITARY SEWER INVERTS / SANITARY SEWER / SANITARY FORCEMAIN OBVERTS: 106.89 106.68 106.52 106.35 106.18 106.01 106.00 105.84 105.67 105.56 105.45 105.34 105.24 105.23 105.15 105.05 104.96
EXISTING ELEVATION: 109.30 109.23 109.18 109.10 109.00 108.88 108.55 107.92 108.14 108.06 107.68 107.17 106.84 106.80 106.88
CHAINAGE: 17+350 17+375 17+400 17+425 17+450 17+475 17+500 17+525 17+550 17+575 17+600 17+625 17+650 17+675 17+700

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

NOTE:
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CLEARFORD

WEST CAPITAL Developments

CLEARFORD WATER SYSTEMS INC.

No.	REVISION	DATE	BY
5.	REVISED PER COMMENTS	NOV 14/25	ARM
4.	ISSUED FOR REVIEW	NOV 19/24	ARM
3.	ISSUED FOR REVIEW	OCT 29/24	ARM
2.	ISSUED FOR COORDINATION	AUG 22/24	ARM
1.	ISSUED FOR COORDINATION	APR 23/24	ARM

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

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Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

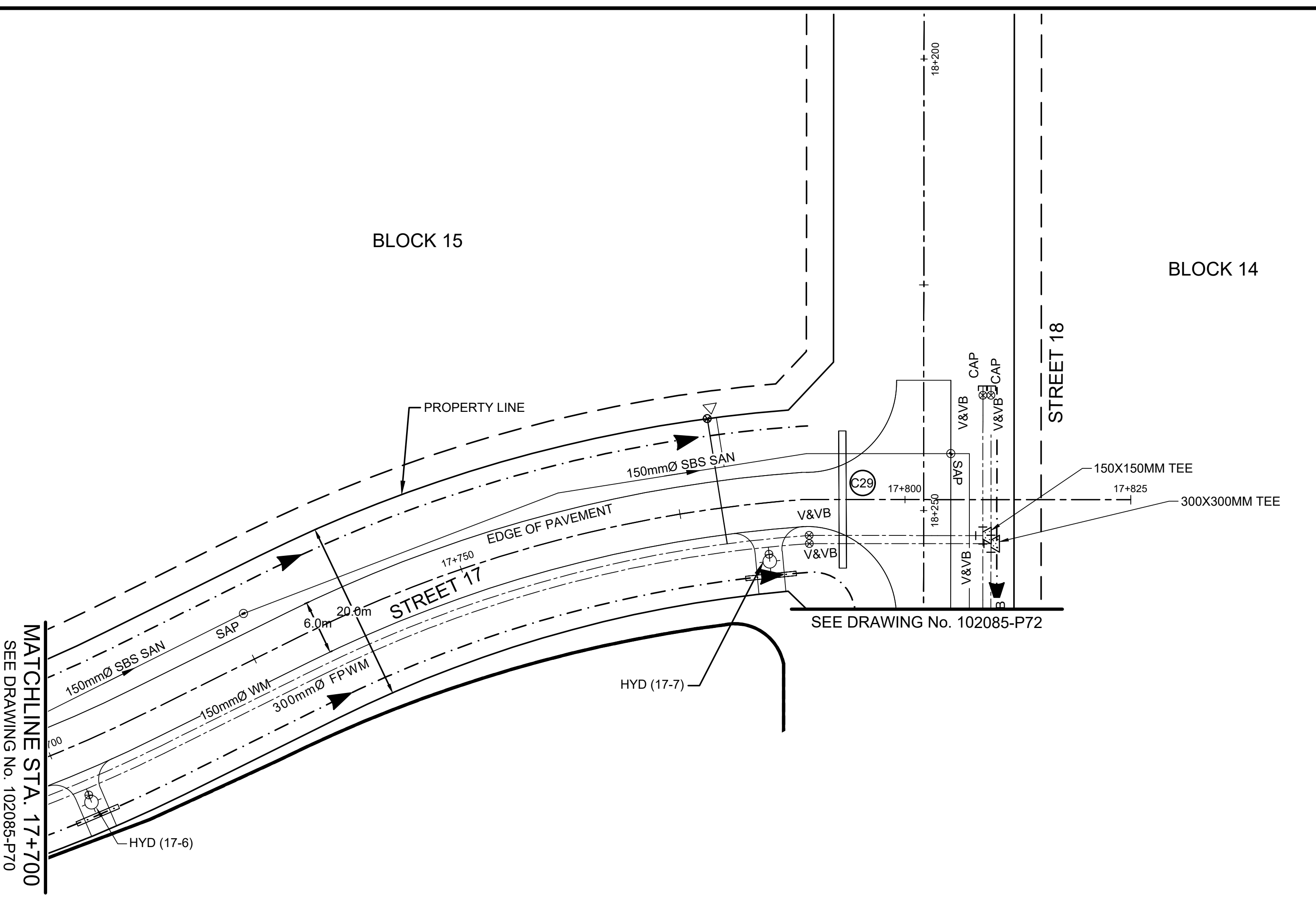
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

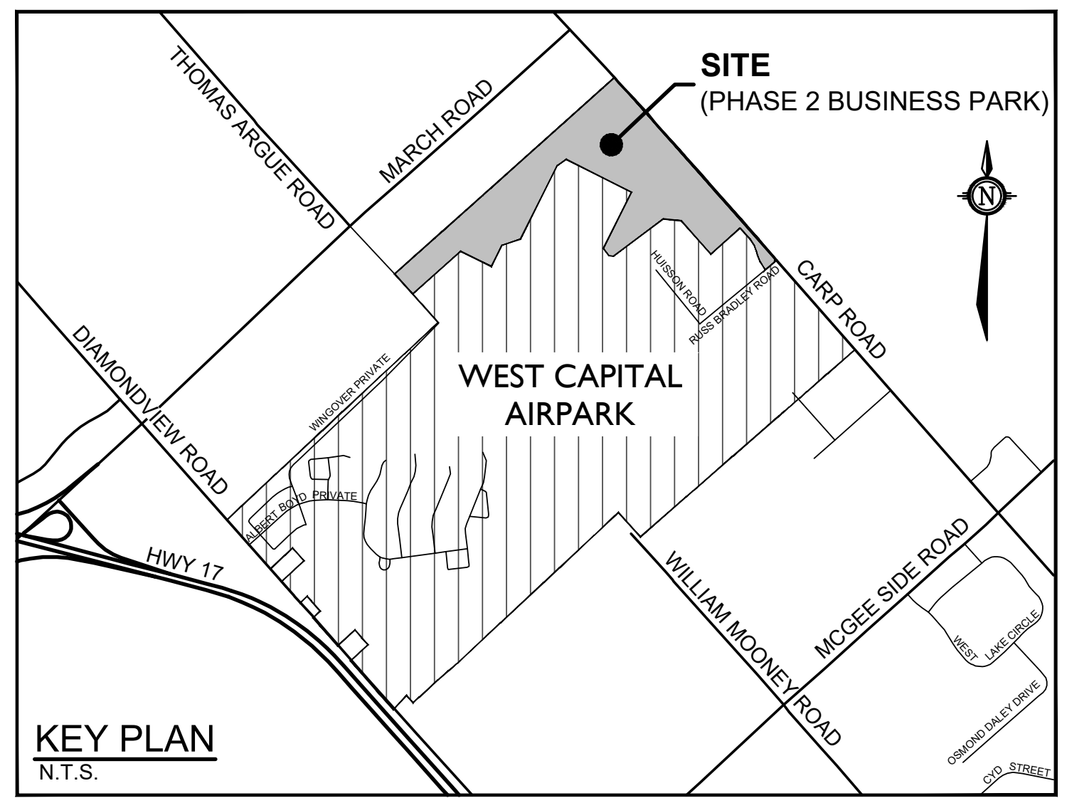
DRAWING NAME
PLAN & PROFILE
STREET 17
STA. 17+350 TO 17+700

PROJECT No. 102085-14
REV # 5
DRAWING No. 102085-P70

M:\2020\102085\CAD\ BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P70, Nov 14, 2025 - 10:37am, tstaff

PLANB1.DWG - 1000mmx707mm

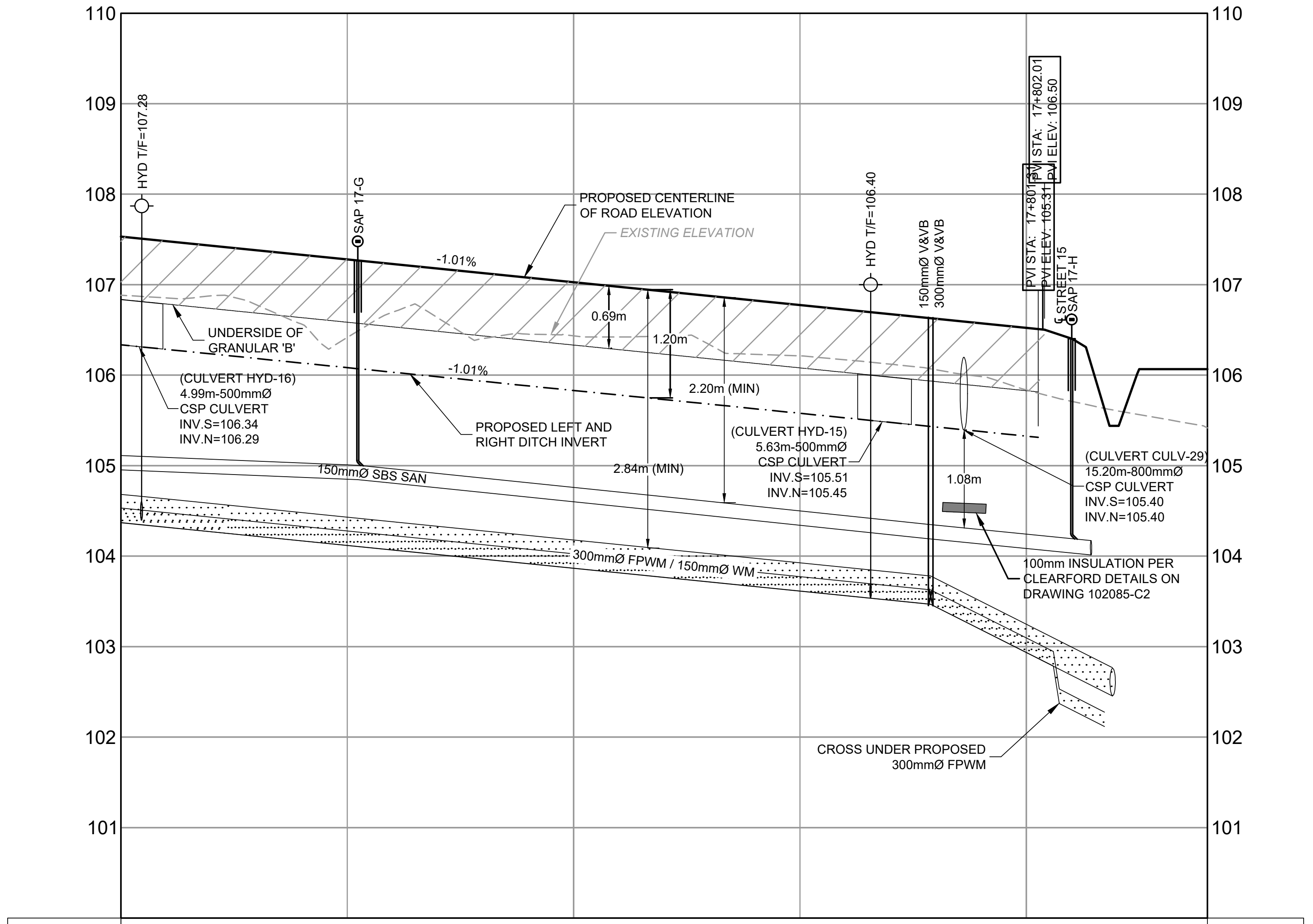

BLOCK 15
BLOCK 14
STREET 18
PROPERTY LINE
150mmØ SBS SAN
EDGE OF PAVEMENT
17+750
STREET 17
20.0m
6.0m
SAP
150mmØ SBS SAN
150mmØ WM
300mmØ FPWM
HYD (17-6)
HYD (17-7)
MATCHLINE STA. 17+700
SEE DRAWING No. 102085-P70
V&VB
CAP
SAP
C29
17+800
18+250
17+825
150X150MM TEE
300X300MM TEE
SEE DRAWING No. 102085-P72


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WEST CAPITAL AIRPARK
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
HUISSON ROAD
RUSS BRADLEY ROAD
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN
N.T.S.

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
⌖ HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
⌖ *HYD*	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER- SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
⊙SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ▢	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2 ▬	PROPOSED CULVERT AND NUMBER
—— - ——	PROPOSED CENTRELINE OF ROAD
———	PROPOSED EDGE OF PAVEMENT
— · ►	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)


110
109
108
107
106
105
104
103
102
101
HYD T/F=107.28
SAP 17-G
PROPOSED CENTERLINE OF ROAD ELEVATION
EXISTING ELEVATION
-1.01%
0.69m
1.20m
UNDERSIDE OF GRANULAR 'B'
-1.01%
2.20m (MIN)
(CULVERT HYD-16)
4.99m-500mmØ
CSP CULVERT
INV.S=106.34
INV.N=106.29
PROPOSED LEFT AND RIGHT DITCH INVERT
150mmØ SBS SAN
2.84m (MIN)
(CULVERT HYD-15)
5.63m-500mmØ
CSP CULVERT
INV.S=105.51
INV.N=105.45
300mmØ FPWM / 150mmØ WM
HYD T/F=106.40
150mmØ V&VB
300mmØ V&VB
PVI STA: 17+801.31
PVI ELEV: 105.31
PVI STA: 17+802.01
PVI ELEV: 106.50
℄ STREET 15
SAP 17-H
1.08m
(CULVERT CULV-29)
15.20m-800mmØ
CSP CULVERT
INV.S=105.40
INV.N=105.40
100mm INSULATION PER CLEARFORD DETAILS ON DRAWING 102085-C2
CROSS UNDER PROPOSED 300mmØ FPWM

PROPOSED TOP OF WATERMAIN	104.68	104.43		104.18		103.93	103.78	103.25	102.77		PROPOSED ELEVATION
PROPOSED ELEVATION		106.42	106.61	106.43	106.42	106.21	106.15	105.84	105.62		TOP OF WM ELEVATION
PROPOSED RIGHT DITCH INVERTS	106.34	106.08		105.83		105.58		105.33 105.31			PROPOSED RIGHT DITCH INVERTS
PROPOSED LEFT DITCH INVERTS	106.34	106.08		105.83		105.58		105.33 105.31			PROPOSED LEFT DITCH INVERTS
SANITARY SEWER INVERTS	104.96	104.85 104.85		104.61		104.35		104.09	104.02		SANITARY SEWER OBVERTS
EXISTING ELEVATION	*106.88*	*106.42*		*106.43*		*106.21*		*105.84*		*105.42*	EXISTING ELEVATION
CHAINAGE	17+700	17+725		17+750		17+775		17+800		17+820	CHAINAGE

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P71, Nov 14, 2025 - 10:37am, tstaff

NOTE:
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CLEARFORD
WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
5.	REVISED PER COMMENTS	NOV 14/25	ARM
4.	ISSUED FOR REVIEW	NOV 19/24	ARM
3.	ISSUED FOR REVIEW	OCT 29/24	ARM
2.	ISSUED FOR COORDINATION	AUG 22/24	ARM
1.	ISSUED FOR COORDINATION	APR 23/24	ARM

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN MJB
CHECKED MNP
DRAWN MJB
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

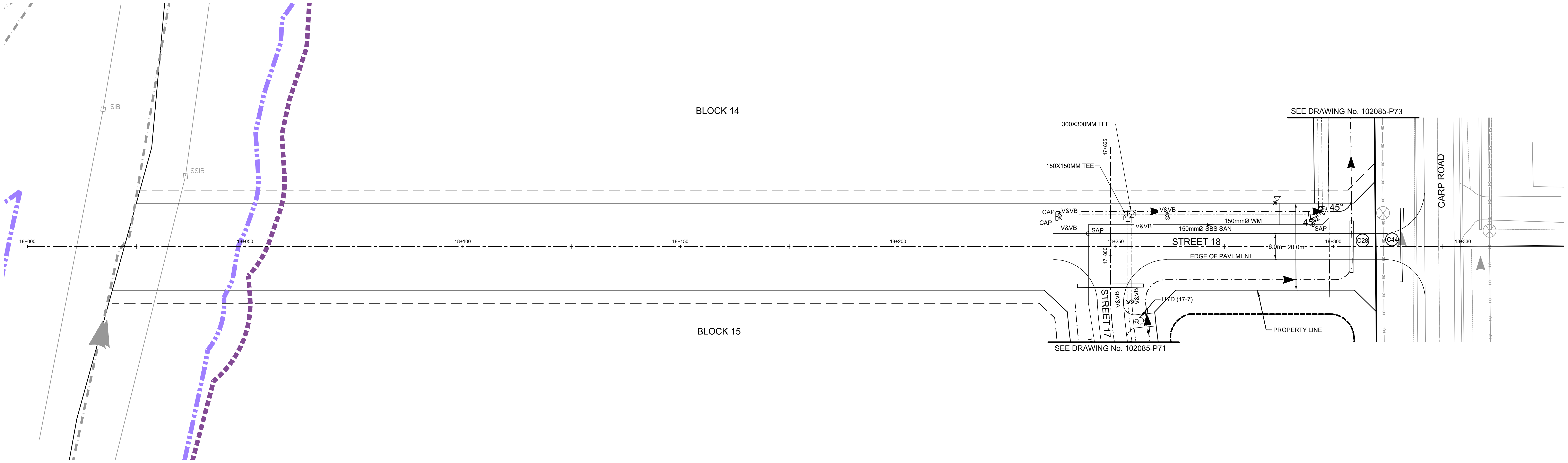
NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

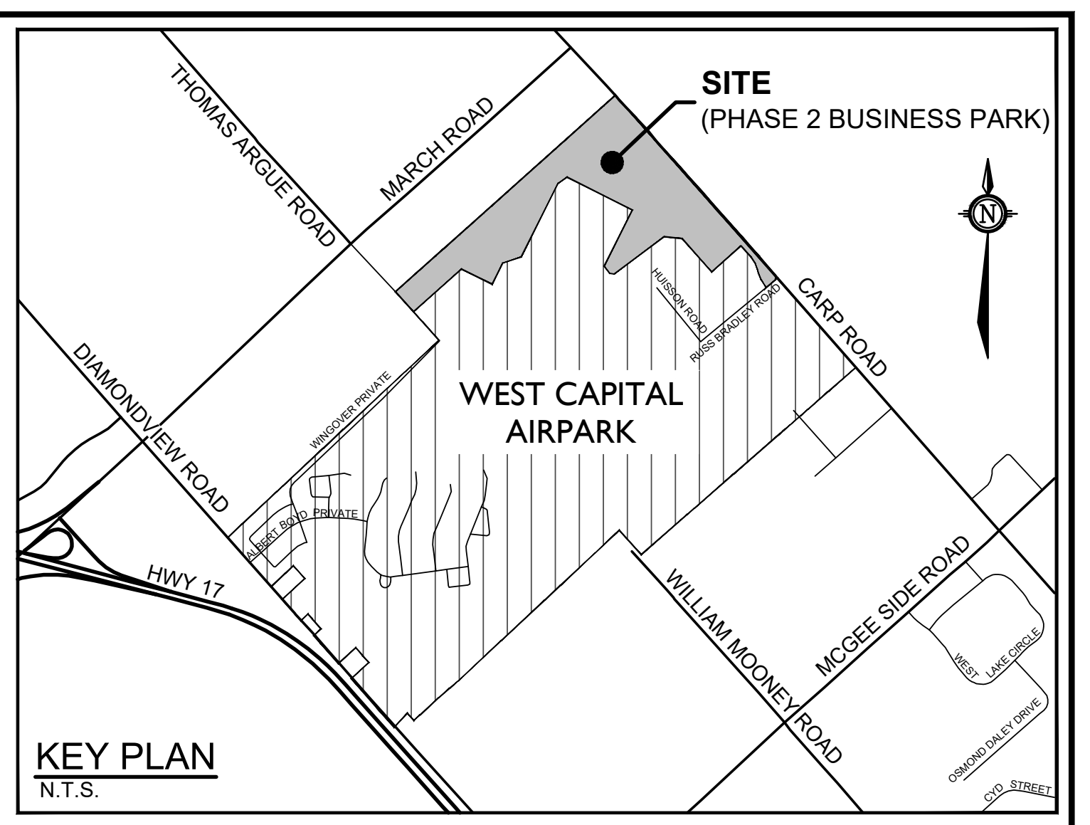
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
PLAN & PROFILE
STREET 17
STA. 17+700 TO 17+822

PROJECT No. 102085-14
REV REV # 5
DRAWING No. 102085-P71

PLANB1.DWG - 1000mmx707mm

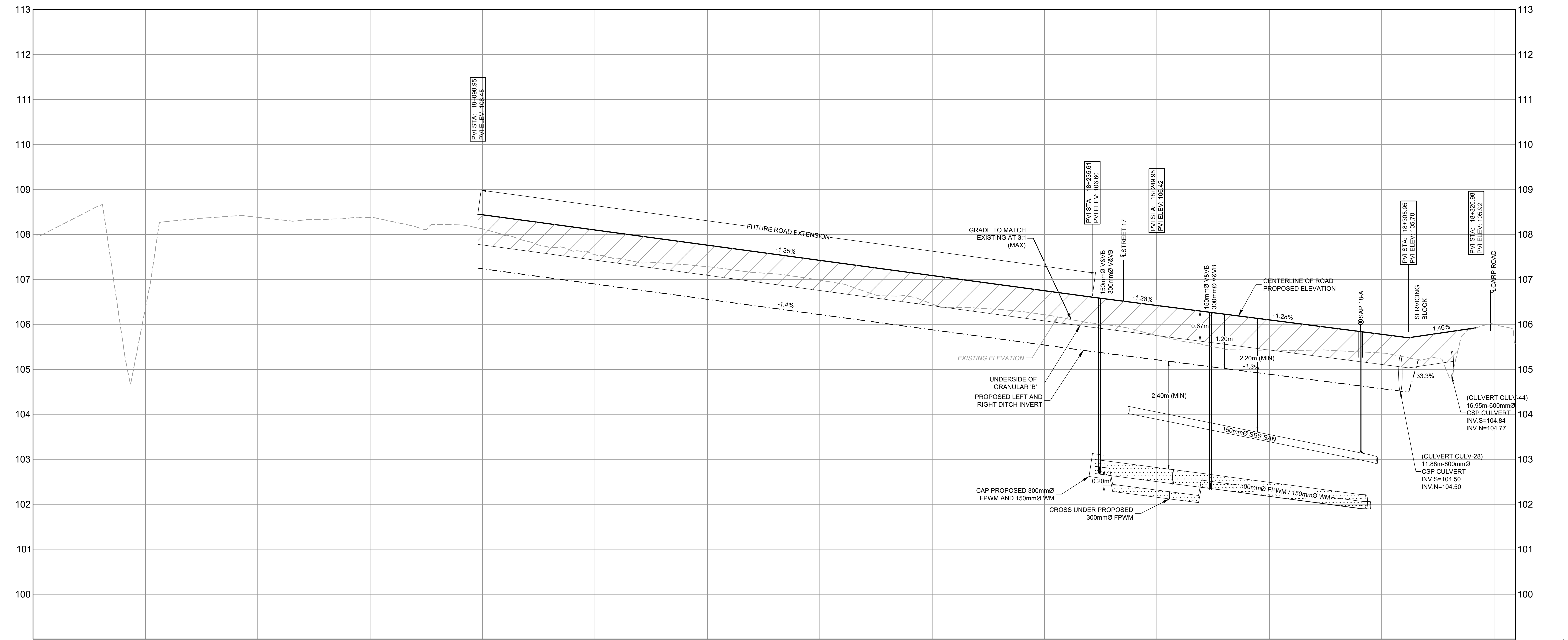

BLOCK 14
BLOCK 15
SIB
SSIB
18+000
18+050
18+100
18+150
18+200
18+250
18+300
18+330
SEE DRAWING No. 102085-P73
SEE DRAWING No. 102085-P71
300X300MM TEE
150X150MM TEE
17+825
17+800
CAP
CAP
V&VB
V&VB
V&VB
V&VB
SAP
SAP
150mmØ WM
150mmØ SBS SAN
45°
45°
STREET 18
6.0m
20.0m
EDGE OF PAVEMENT
C28
C44
CARP ROAD
STREET 17
V&VB
V&VB
HYD (17-7)
PROPERTY LINE


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
DIAMONDVIEW ROAD
WEST CAPITAL AIRPARK
CARP ROAD
HUISSON ROAD
RUSS BRADLEY ROAD
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN
N.T.S.

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ☐	PROPOSED CATCHBASIN
CB ☐	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR DEPTHS)


113
112
111
110
109
108
107
106
105
104
103
102
101
100
PVI STA: 18+098.95
PVI ELEV: 108.45
FUTURE ROAD EXTENSION
-1.35%
-1.4%
GRADE TO MATCH EXISTING AT 3:1 (MAX)
PVI STA: 18+235.61
PVI ELEV: 106.60
150mmØ V&VB
300mmØ V&VB
℄ STREET 17
PVI STA: 18+249.95
PVI ELEV: 106.42
-1.28%
150mmØ V&VB
300mmØ V&VB
CENTERLINE OF ROAD PROPOSED ELEVATION
-1.28%
0.67m
1.20m
2.20m (MIN)
-1.3%
2.40m (MIN)
SAP 18-A
PVI STA: 18+305.95
PVI ELEV: 105.70
SERVICING BLOCK
PVI STA: 18+320.98
PVI ELEV: 105.92
℄ CARP ROAD
1.46%
33.3%
EXISTING ELEVATION
UNDERSIDE OF GRANULAR 'B'
PROPOSED LEFT AND RIGHT DITCH INVERT
150mmØ SBS SAN
(CULVERT CULV-44) 16.95m-600mmØ CSP CULVERT INV.S=104.84 INV.N=104.77
(CULVERT CULV-28) 11.88m-800mmØ CSP CULVERT INV.S=104.50 INV.N=104.50
0.20m
CAP PROPOSED 300mmØ FPWM AND 150mmØ WM
CROSS UNDER PROPOSED 300mmØ FPWM
300mmØ FPWM / 150mmØ WM

CHAINAGE	PROPOSED ELEVATION	PROPOSED TOP OF WATERMAIN / TOP OF WM ELEVATION	PROPOSED RIGHT DITCH INVERTS	PROPOSED LEFT DITCH INVERTS	SANITARY SEWER INVERTS	EXISTING ELEVATION
18+000						107.99
18+025						106.36
18+050						108.38
18+075						108.37
18+100	108.45 108.43		107.25 107.23	107.25 107.23		108.12
18+125	108.09		106.89	106.89		107.55
18+150	107.76		106.55	106.55		107.28
18+175	107.42		106.21	106.21		106.98
18+200	107.08		105.88	105.88		106.45
18+225	106.74		105.54	105.54		106.21
	106.60	102.99	105.39	105.39		
					104.02	
18+250	106.42	102.81	105.21	105.21	103.89	105.75
		102.76				
18+275	106.10	102.48	104.89	104.89	103.39	105.43
		102.21 102.20			102.94 102.90	
18+300	105.78		104.57	104.57		105.36
	105.70		104.49 105.21	104.49 105.21		
	105.92					
18+325						106.00
18+329.78						105.56

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

NOTE:
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CLEARFORD
WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
6.	REVISED PER COMMENTS	NOV 14/25	ARM
5.	ISSUED FOR REVIEW	NOV 19/24	ARM
4.	ISSUED FOR COORDINATION	NOV 14/24	ARM
3.	ISSUED FOR REVIEW	OCT 29/24	ARM
2.	ISSUED FOR COORDINATION	AUG 22/24	ARM
1.	ISSUED FOR COORDINATION	APR 23/24	ARM

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

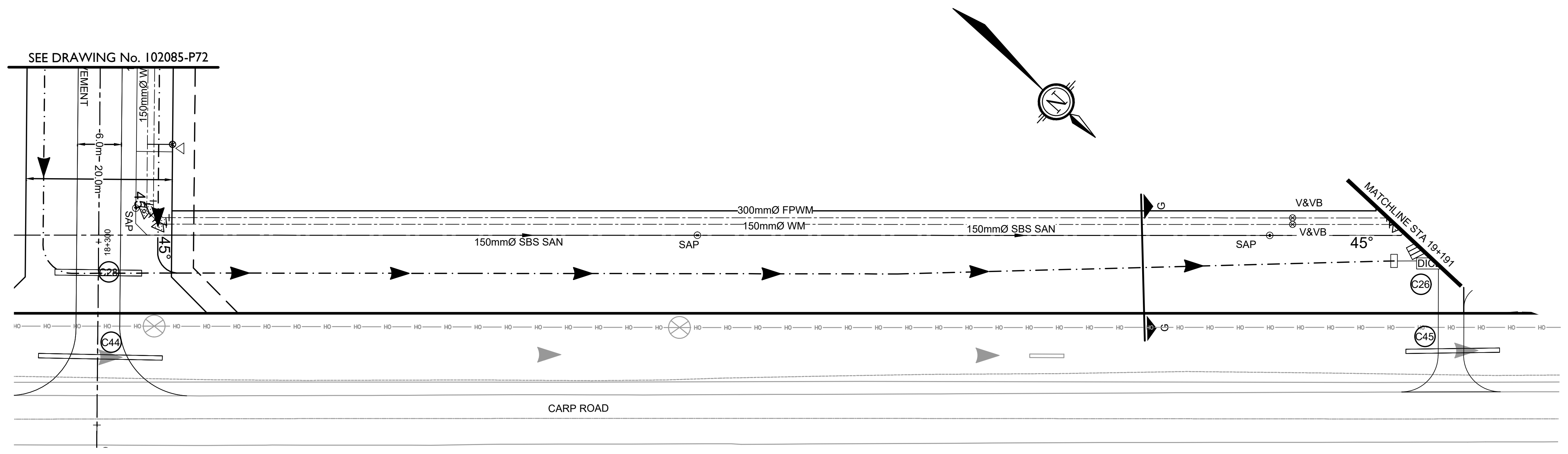
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

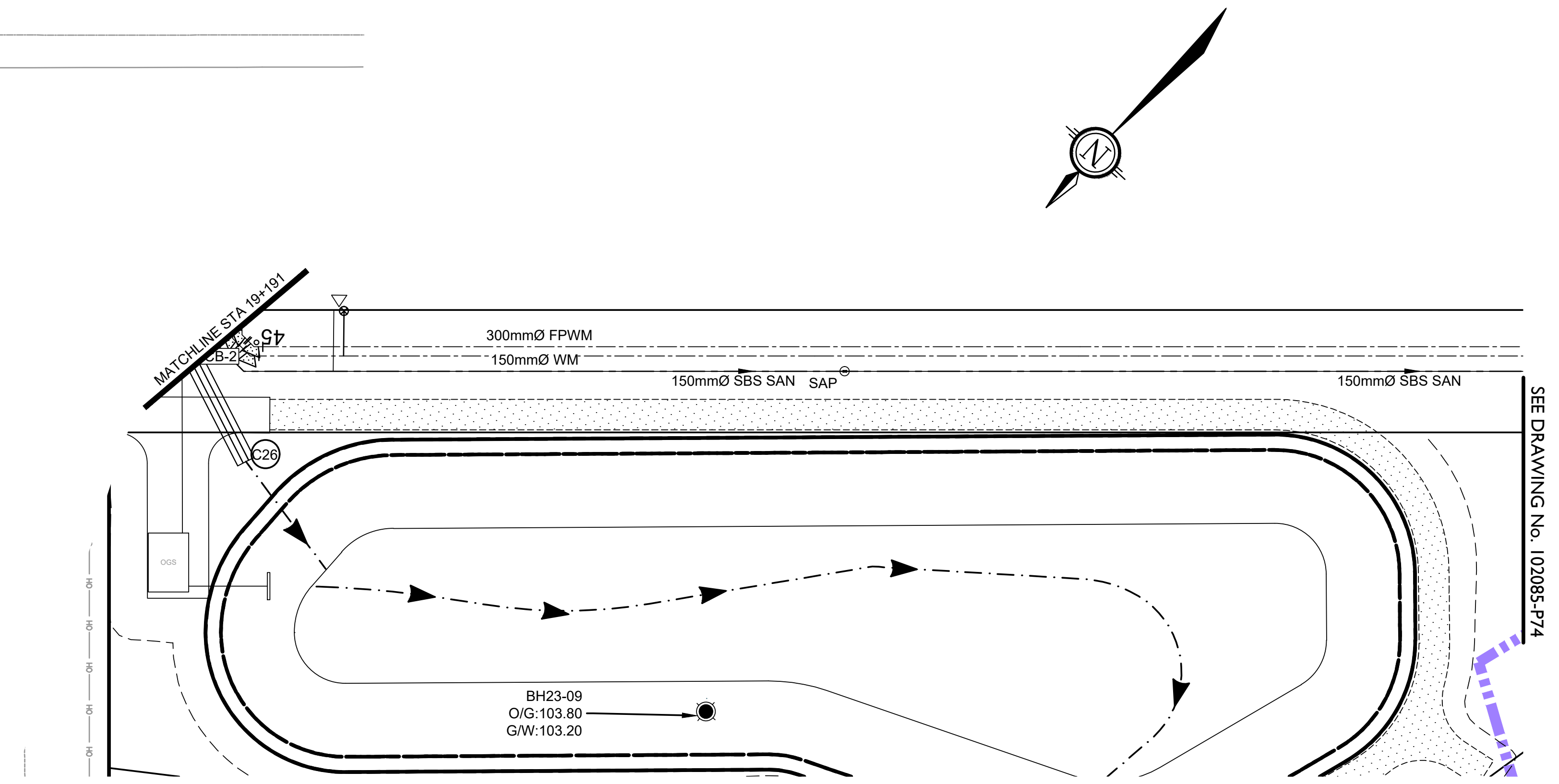
DRAWING NAME
PLAN & PROFILE
STREET 18
STA. 18+000 TO 17+308

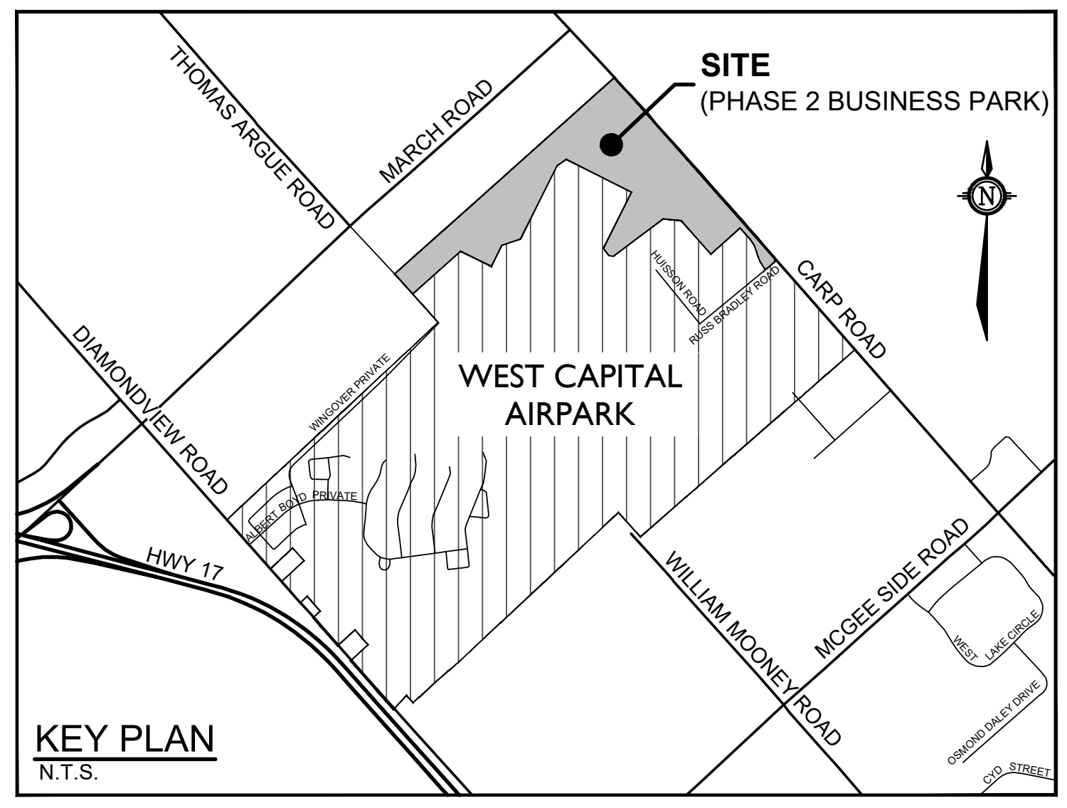
PROJECT No.
102085-14
REV
REV # 6
DRAWING No.
102085-P72

M:\2020\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P72, Nov 14, 2025 - 10:37am, tstaff

PLANB1.DWG - 1000mmx707mm


SEE DRAWING No. 102085-P72
300mmØ FPWM
150mmØ WM
150mmØ SBS SAN
150mmØ SBS SAN
SAP
SAP
V&VB
V&VB
45°
MATCHLINE STA. 19+191
C26
C28
C44
C45
CARP ROAD

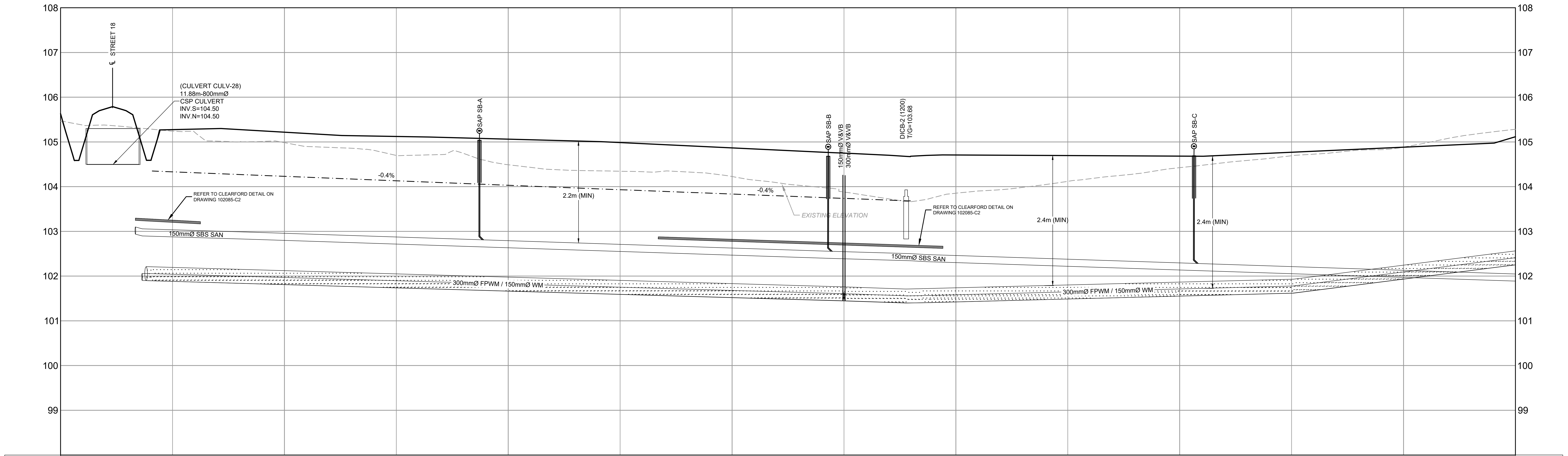

MATCHLINE STA. 19+191
45°
300mmØ FPWM
150mmØ WM
150mmØ SBS SAN
SAP
150mmØ SBS SAN
C26
BH23-09
O/G:103.80
G/W:103.20
SEE DRAWING No. 102085-P74


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
WEST CAPITAL AIRPARK
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

KEY PLAN
N.T.S.

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ■	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND FOR DEPTHS)


108
107
106
105
104
103
102
101
100
99
℄ STREET 18
(CULVERT CULV-28)
11.88m-800mmØ
CSP CULVERT
INV.S=104.50
INV.N=104.50
SAP SB-A
SAP SB-B
150mmØ V&VB
300mmØ V&VB
DICB-2 (1200)
T/G=103.68
SAP SB-C
-0.4%
-0.4%
2.2m (MIN)
2.4m (MIN)
2.4m (MIN)
REFER TO CLEARFORD DETAIL ON DRAWING 102085-C2
REFER TO CLEARFORD DETAIL ON DRAWING 102085-C2
EXISTING ELEVATION
150mmØ SBS SAN
150mmØ SBS SAN
300mmØ FPWM / 150mmØ WM
300mmØ FPWM / 150mmØ WM

CHAINAGE	19+000		19+025	19+050	19+075	19+100	19+125	19+150	19+175			19+200	19+225	19+250	19+275	19+300	19+325
PROPOSED TOP OF WATERMAIN		102.21 102.20	102.19	102.12	102.04	101.97	101.89	101.81	101.74	101.70		101.74	101.80	101.86	101.92	102.24	102.56
SANITARY SEWER OBVERTS		103.09 103.05	103.03	102.95	102.87	102.78	102.70	102.62	102.54		102.47	102.46	102.37	102.29	102.21	102.13	102.04
EXISTING ELEVATION	*105.46*		*105.24*	*104.98*	*104.70*	*104.49*	*104.35*	*104.23*	*103.88*			*103.85*	*104.12*	*104.42*	*104.69*	*104.88*	*105.28*

REFER TO 102085-ND FOR NOTES & DETAILS

REFER TO 102085-LP FOR BUSINESS PARK LAYOUT

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P73, Nov 14, 2025 - 10:37am, tstaff

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CLEARFORD WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL Developments

No.	REVISION	DATE	BY
6.	REVISED PER COMMENTS	NOV 14/25	ARM
5.	ISSUED FOR REVIEW	NOV 19/24	ARM
4.	ISSUED FOR COORDINATION	NOV 14/24	ARM
3.	ISSUED FOR REVIEW	OCT 29/24	ARM
2.	ISSUED FOR COORDINATION	AUG 22/24	ARM
1.	ISSUED FOR COORDINATION	APR 23/24	ARM

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
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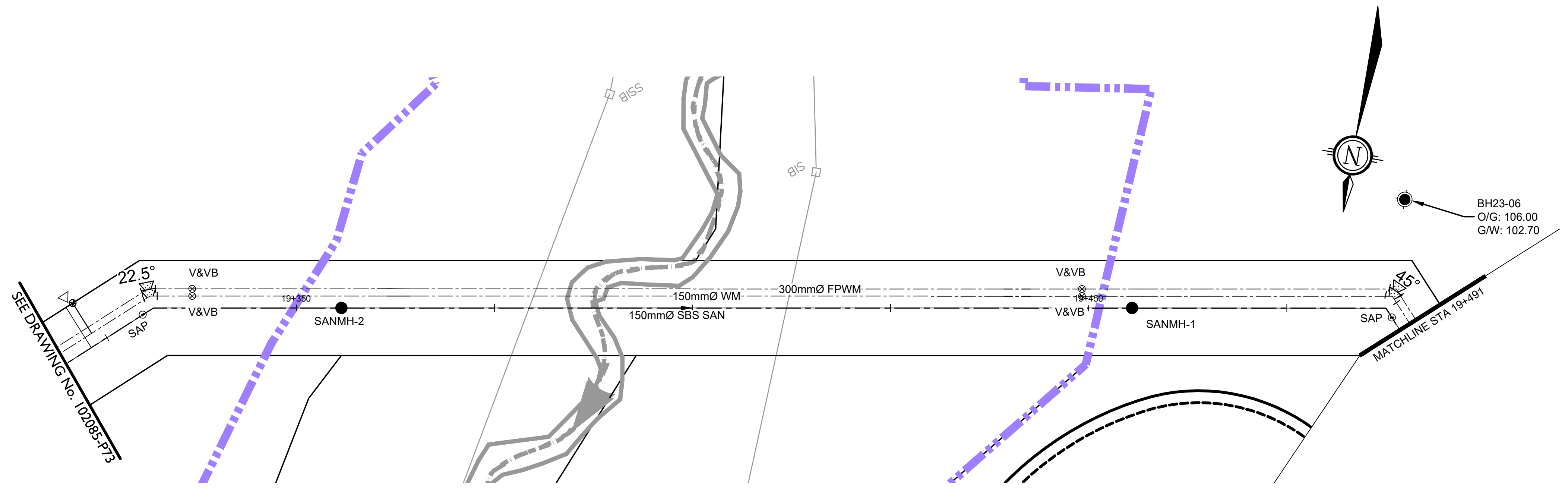
Facsimile (613) 254-5867
Website www.novatech-eng.com

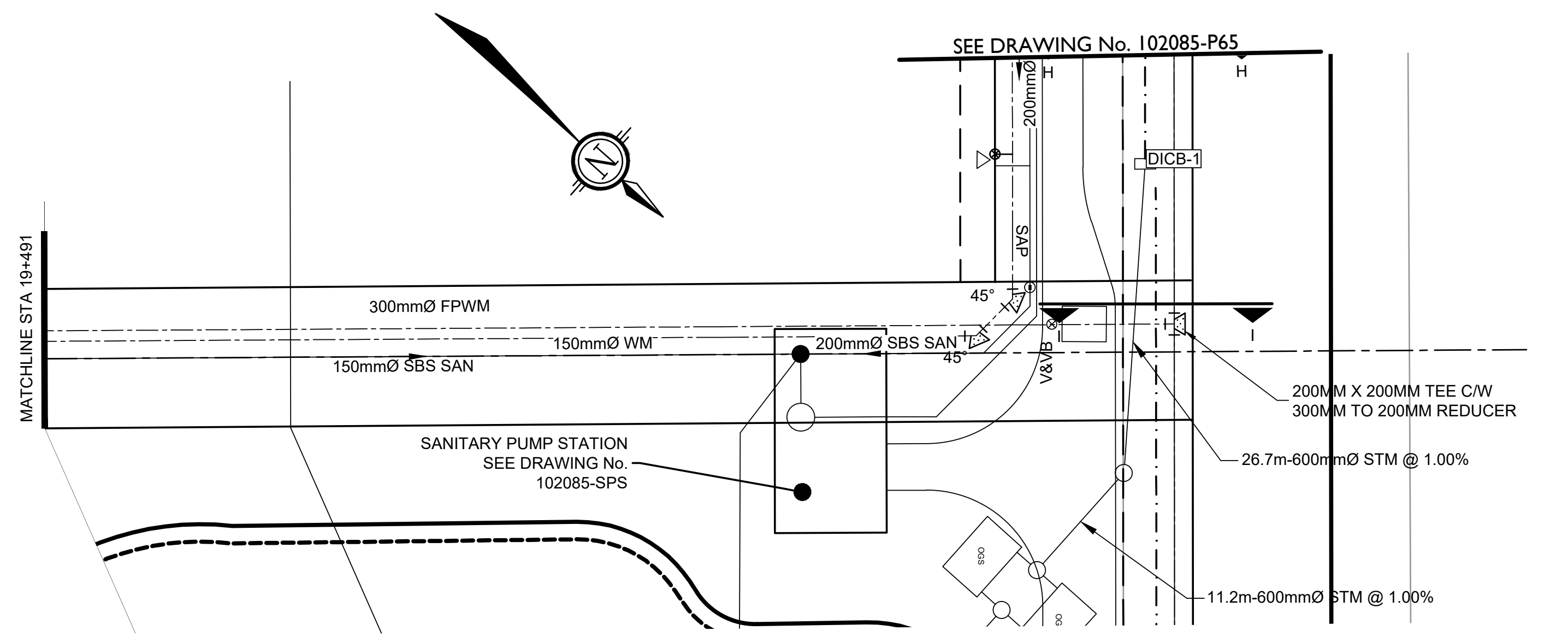
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

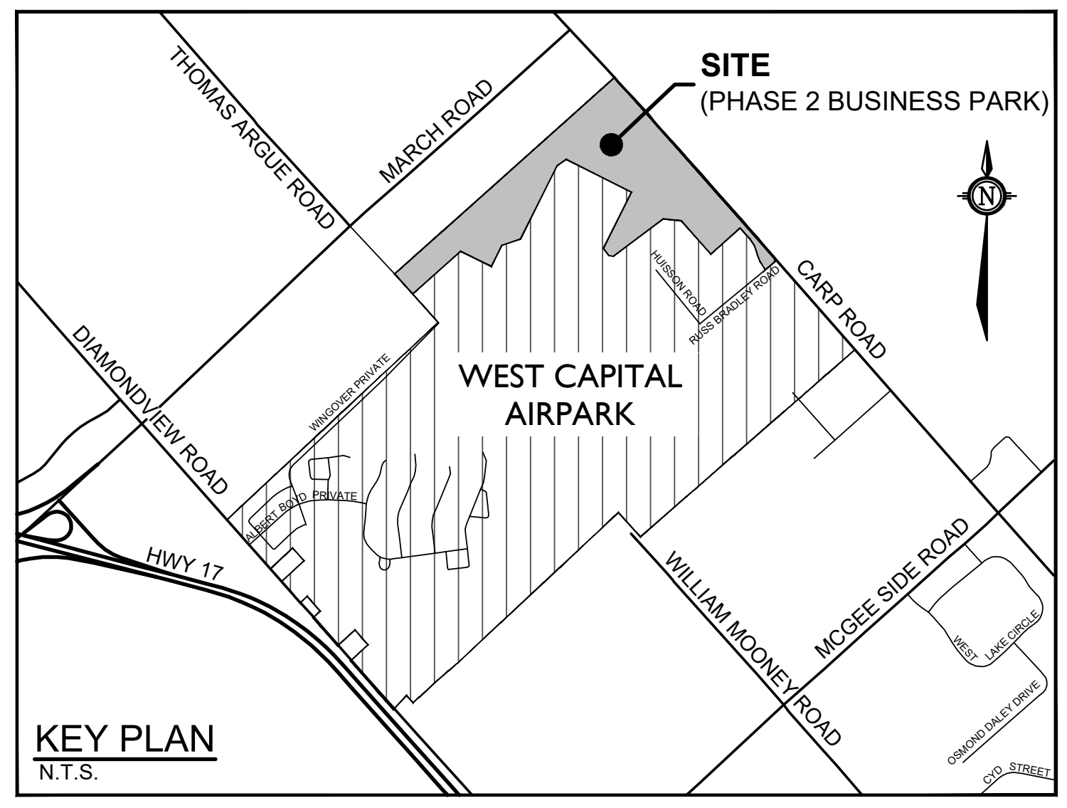
DRAWING NAME
PLAN & PROFILE
SERVICE EASEMENT
STA. 19+000 TO 19+300

PROJECT No. 102085-14
REV REV # 6
DRAWING No. 102085-P73

PLANB1.DWG - 1000mmx707mm


V&VB
V&VB
22.5°
SAP
SEE DRAWING No. 102085-P73
19+350
SANMH-2
150mmØ WM
300mmØ FPWM
150mmØ SBS SAN
SSIB
SIB
V&VB
19+450
V&VB
SANMH-1
SAP
45°
MATCHLINE STA 19+491
N
BH23-06
O/G: 106.00
G/W: 102.70

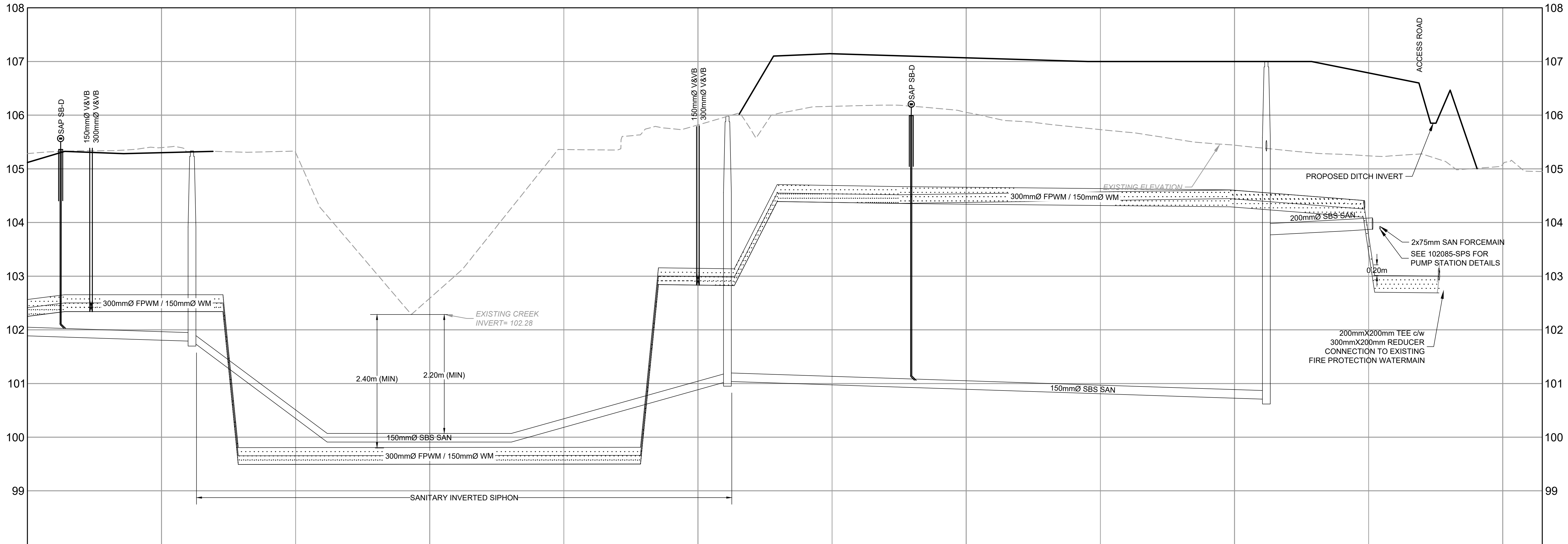

SEE DRAWING No. 102085-P65
MATCHLINE STA 19+491
N
300mmØ FPWM
150mmØ WM
150mmØ SBS SAN
200mmØ SBS SAN
200mmØ
SAP
45°
45°
V&VB
H
H
DICB-1
OGS
SANITARY PUMP STATION
SEE DRAWING No.
102085-SPS
200MM X 200MM TEE C/W
300MM TO 200MM REDUCER
26.7m-600mmØ STM @ 1.00%
11.2m-600mmØ STM @ 1.00%


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
WEST CAPITAL AIRPARK
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST
LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

KEY PLAN
N.T.S.

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ☐	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
	PROPOSED CENTRELINE OF ROAD
	PROPOSED EDGE OF PAVEMENT
	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND FOR DEPTHS)


108
107
106
105
104
103
102
101
100
99
SAP SB-D
150mmØ V&VB
300mmØ V&VB
300mmØ FPWM / 150mmØ WM
EXISTING CREEK
INVERT= 102.28
2.40m (MIN)
2.20m (MIN)
150mmØ SBS SAN
300mmØ FPWM / 150mmØ WM
SANITARY INVERTED SIPHON
150mmØ V&VB
300mmØ V&VB
SAP SB-D
EXISTING ELEVATION
300mmØ FPWM / 150mmØ WM
150mmØ SBS SAN
200mmØ SBS SAN
PROPOSED DITCH INVERT
ACCESS ROAD
2x75mm SAN FORCEMAIN
SEE 102085-SPS FOR
PUMP STATION DETAILS
0.20m
200mmX200mm TEE c/w
300mmX200mm REDUCER
CONNECTION TO EXISTING
FIRE PROTECTION WATERMAIN

CHAINAGE	19+325	19+350	19+375	19+400	19+425	19+450	19+475	19+500	19+525	19+550	19+575	19+600	19+607.37
PROPOSED TOP OF WATERMAIN / PROPOSED TOP OF WM ELEVATION	102.56 102.65	102.65 102.65 99.80	99.80	99.80	99.80 99.81 103.15	103.14 103.14 104.71	104.70	104.66	104.63	104.60 104.60	104.41 103.76 103.01 103.00		
SANITARY SEWER OBVERTS	102.04	101.96 101.94	100.50 100.06	100.06 100.06	100.34	101.04 101.19	101.13	101.05	100.96	100.88 100.86 103.98	104.08 104.08		
EXISTING ELEVATION	*105.28*	*105.40*	*105.30*	*102.59*	*105.36*	*105.82*	*106.16*	*106.05*	*105.73*	*105.44*	*105.24*	*105.08*	*104.95*

REFER TO 102085-ND FOR NOTES & DETAILS

REFER TO 102085-LP FOR BUSINESS PARK LAYOUT

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

CLEARFORD
WATER SYSTEMS INC.

CLEARFORD

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
6.	REVISED PER COMMENTS	NOV 14/25	ARM
5.	ISSUED FOR REVIEW	NOV 19/24	ARM
4.	ISSUED FOR COORDINATION	NOV 14/24	ARM
3.	ISSUED FOR REVIEW	OCT 29/24	ARM
2.	ISSUED FOR COORDINATION	AUG 22/24	ARM
1.	ISSUED FOR COORDINATION	APR 23/24	ARM

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

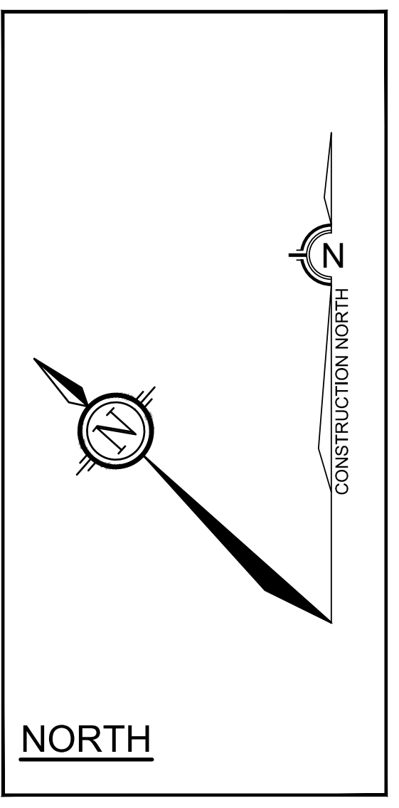
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

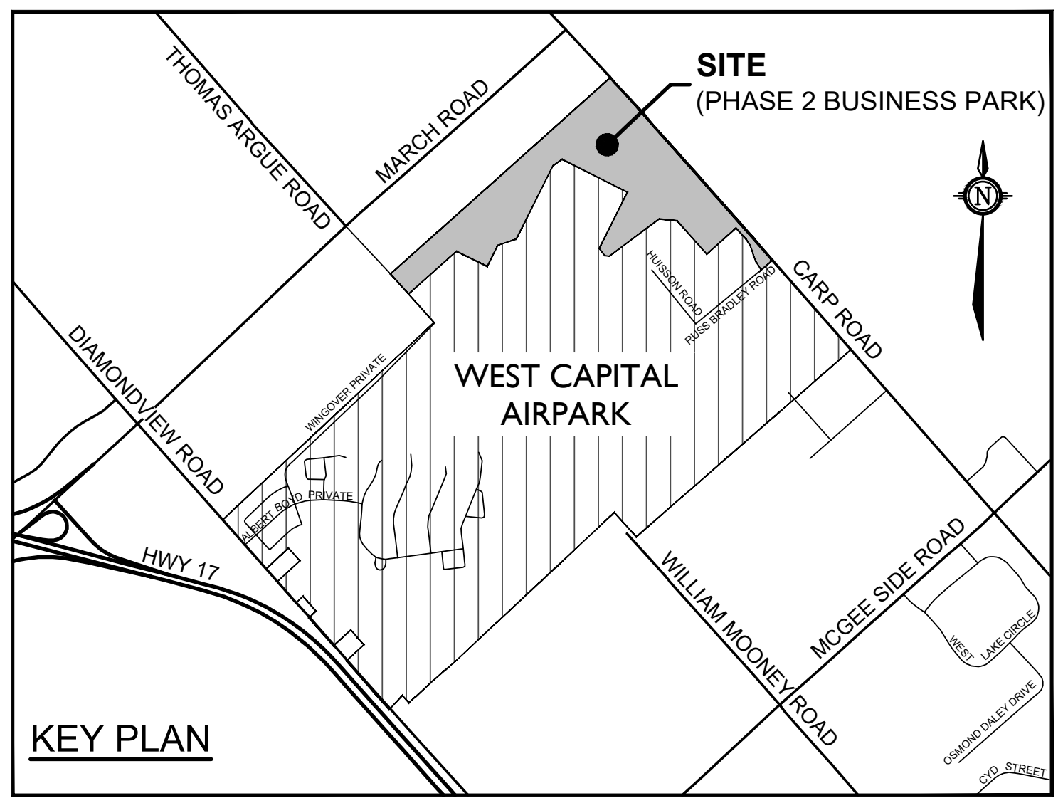
DRAWING NAME
PLAN & PROFILE
SERVICE EASEMENT
STA. 19+300 TO 19+460

PROJECT No.
102085-14

REV
REV # 6

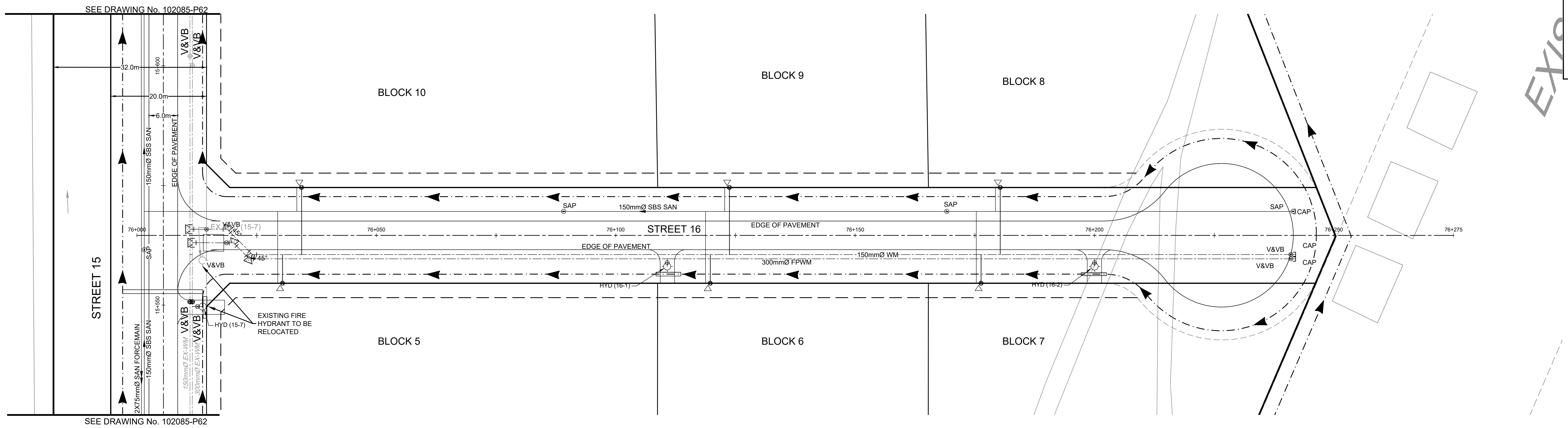
DRAWING No.
102085-P74

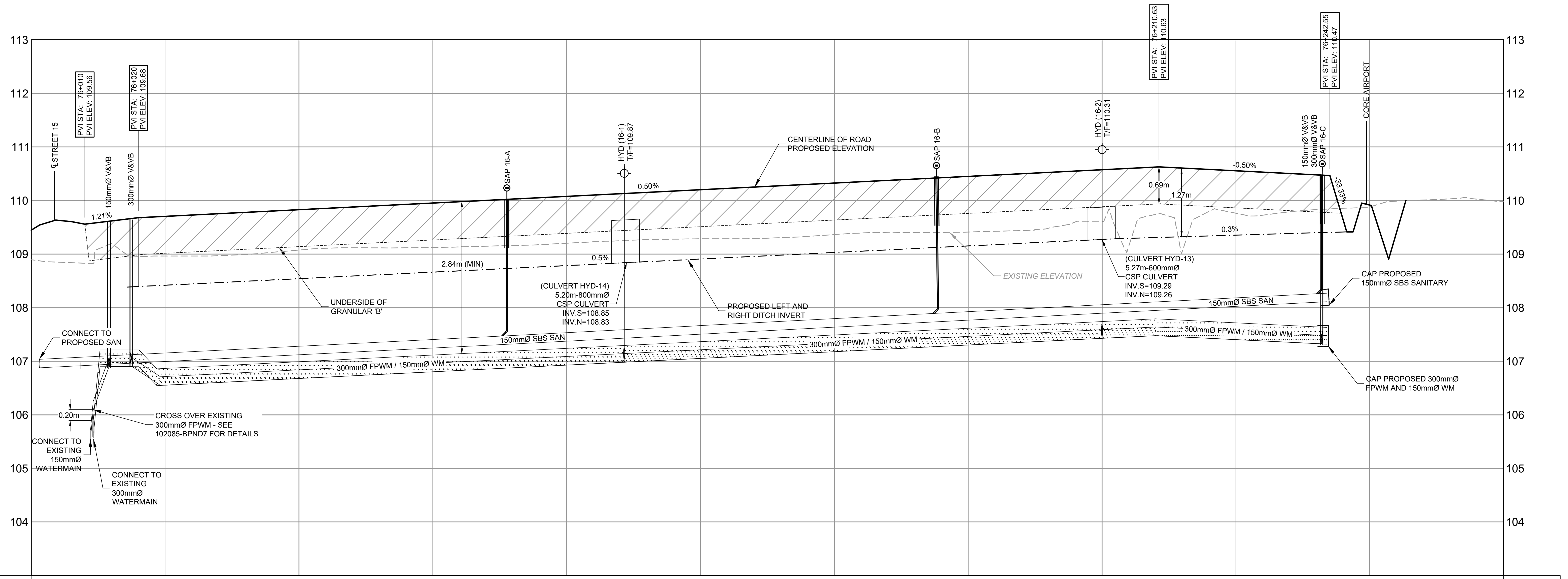

CONSTRUCTION NORTH
N
N
NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
WEST CAPITAL AIRPARK
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
KEY PLAN

LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
⊗ V&VB	PROPOSED VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F = 98.45	PROPOSED TOP OF BOTTOM FLANGE
200mmØ WM	EXISTING WATERMAIN AND DIAMETER
⊗ *V&VB*	EXISTING VALVE & VALVE BOX
HYD	EXISTING HYDRANT C/W VALVE & LEAD
SBS SANITARY	PROPOSED SMALL BORE SEWER-SANITARY AND DIRECTION OF FLOW
SANI FORCEMAIN	PROPOSED SANITARY SEWER FORCEMAIN AND DIRECTION OF FLOW
SAP 1-A	PROPOSED SANITARY SYSTEM ACCESS POINT
222 ○	PROPOSED STORM MANHOLE
CB ⊡	PROPOSED CATCHBASIN
CB ▨	PROPOSED CATCHBASIN WITH INLET CONTROL DEVICE
SB ▨	PROPOSED SEEPAGE BARRIER
C2	PROPOSED CULVERT AND NUMBER
— - —	PROPOSED CENTRELINE OF ROAD
——	PROPOSED EDGE OF PAVEMENT
— · ► —	PROPOSED DITCHES/SWALES AND DIRECTION OF FLOW
▨	PROPOSED ROAD STRUCTURE (REFER TO 102085-ND FOR DEPTHS)


SEE DRAWING No. 102085-P62
STREET 15
32.0m
20.0m
6.0m
15+600
15+550
V&VB
V&VB
150mmØ SBS SAN
EDGE OF PAVEMENT
SAP
2X75mmØ SAN FORCEMAIN
150mmØ SBS SAN
150mmØ EX-WM
300mmØ EX-WM
V&VB
V&VB
EX HYD (15-7)
45°
45°
V&VB
HYD (15-7)
EXISTING FIRE HYDRANT TO BE RELOCATED
76+000
76+050
76+100
76+150
76+200
76+250
76+275
BLOCK 10
BLOCK 9
BLOCK 8
BLOCK 5
BLOCK 6
BLOCK 7
SAP
150mmØ SBS SAN
STREET 16
EDGE OF PAVEMENT
EDGE OF PAVEMENT
300mmØ FPWM
150mmØ WM
HYD (16-1)
SAP
HYD (16-2)
SAP
CAP
V&VB
CAP
V&VB
CAP
EXIS
SEE DRAWING No. 102085-P62


113
112
111
110
109
108
107
106
105
104
℄ STREET 15
PVI STA: 76+010
PVI ELEV: 109.56
PVI STA: 76+020
PVI ELEV: 109.68
150mmØ V&VB
300mmØ V&VB
1.21%
SAP 16-A
HYD (16-1)
T/F=109.87
0.50%
CENTERLINE OF ROAD
PROPOSED ELEVATION
SAP 16-B
HYD (16-2)
T/F=110.31
PVI STA: 76+210.63
PVI ELEV: 110.63
0.69m
1.27m
-0.50%
PVI STA: 76+242.55
PVI ELEV: 110.47
150mmØ V&VB
300mmØ V&VB
SAP 16-C
CORE AIRPORT
-33.33%
0.3%
2.84m (MIN)
0.5%
UNDERSIDE OF GRANULAR 'B'
(CULVERT HYD-14)
5.20m-800mmØ
CSP CULVERT
INV.S=108.85
INV.N=108.83
PROPOSED LEFT AND RIGHT DITCH INVERT
EXISTING ELEVATION
(CULVERT HYD-13)
5.27m-600mmØ
CSP CULVERT
INV.S=109.29
INV.N=109.26
CAP PROPOSED 150mmØ SBS SANITARY
150mmØ SBS SAN
150mmØ SBS SAN
300mmØ FPWM / 150mmØ WM
300mmØ FPWM / 150mmØ WM
300mmØ FPWM / 150mmØ WM
CAP PROPOSED 300mmØ FPWM AND 150mmØ WM
CONNECT TO PROPOSED SAN
0.20m
CROSS OVER EXISTING 300mmØ FPWM - SEE 102085-BPND7 FOR DETAILS
CONNECT TO EXISTING 150mmØ WATERMAIN
CONNECT TO EXISTING 300mmØ WATERMAIN

PROPOSED ELEVATION		109.56	109.68	109.70	109.83	109.95	110.08	110.20	110.33	110.45	110.57	110.63	110.56	110.47 109.86			PROPOSED ELEVATION
PROPOSED TOP OF WATERMAIN		109.56	109.68	109.70	109.83	109.95	110.08	110.20	110.33	110.45	110.57	110.63	110.56	110.47 109.86			TOP OF WM ELEVATION
PROPOSED RIGHT DITCH INVERTS		105.70 106.25 107.06	107.06	106.70 106.71	106.83	106.96	107.08	107.21	107.33	107.46	107.58	107.63	107.56	107.47			PROPOSED RIGHT DITCH INVERTS
PROPOSED LEFT DITCH INVERTS			108.38	108.42	108.54	108.66	108.79	108.91	109.03	109.15	109.28 109.29		109.35	109.42			PROPOSED LEFT DITCH INVERTS
SANITARY SEWER INVERTS	106.88			107.00	107.13	107.26	107.39	107.52	107.64	107.77	107.90		108.03	108.12			SANITARY SEWER OBVERTS
EXISTING ELEVATION	*108.89*			*108.96*	*109.08*	*109.13*	*109.20*	*109.29*	*109.37*	*109.41*	*109.61*		*109.76*		*109.88*	*109.99*	EXISTING ELEVATION
CHAINAGE	76+000			76+025	76+050	76+075	76+100	76+125	76+150	76+175	76+200		76+225		76+250	76+275	CHAINAGE

REFER TO 102085-ND1, 102085-ND2, AND 102085-ND3 FOR NOTES & DETAILS

REFER TO 102085-LP3 FOR BUSINESS PARK LAYOUT

NOTE:
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CLEARFORD

WEST CAPITAL
Developments

CLEARFORD
WATER SYSTEMS INC.

No.	REVISION	DATE	BY
5.	REVISED PER COMMENTS	NOV 14/25	ARM
4.	ISSUED FOR REVIEW	NOV 19/24	ARM
3.	ISSUED FOR REVIEW	OCT 29/24	ARM
2.	ISSUED FOR COORDINATION	AUG 22/24	ARM
1.	ISSUED FOR COORDINATION	APR 23/24	ARM

SCALE
1:500
0 5 10 15 20
HORIZONTAL
1:50
0 0.5 1.0 1.5 2.0
VERTICAL

DESIGN MJB
CHECKED MNP
DRAWN MJB
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

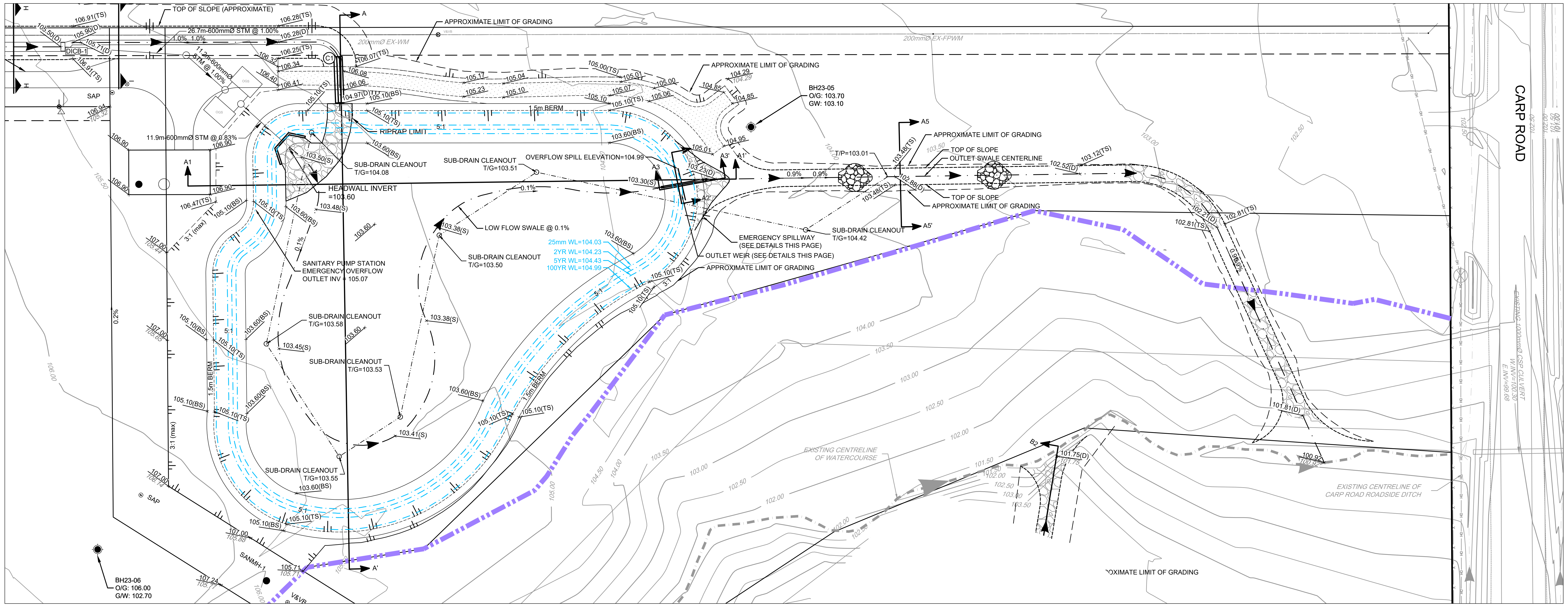
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
PLAN & PROFILE
STREET 16
STA. 76+000 TO 76+253.13

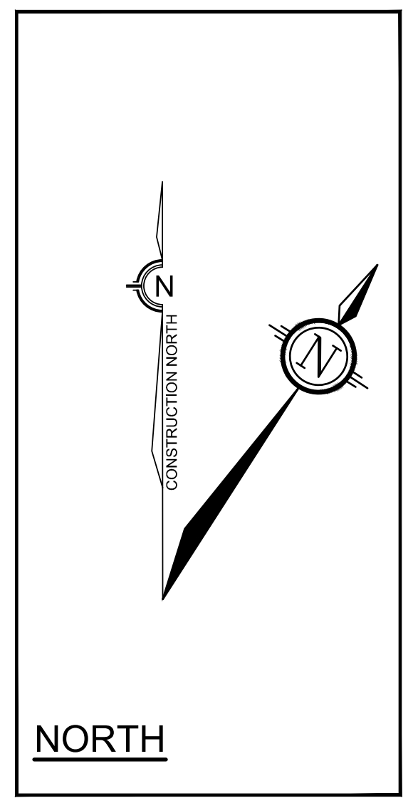
PROJECT No. 102085-14
REV REV # 5
DRAWING No. 102085-P76

PLANB1.DWG - 1000mmx707mm

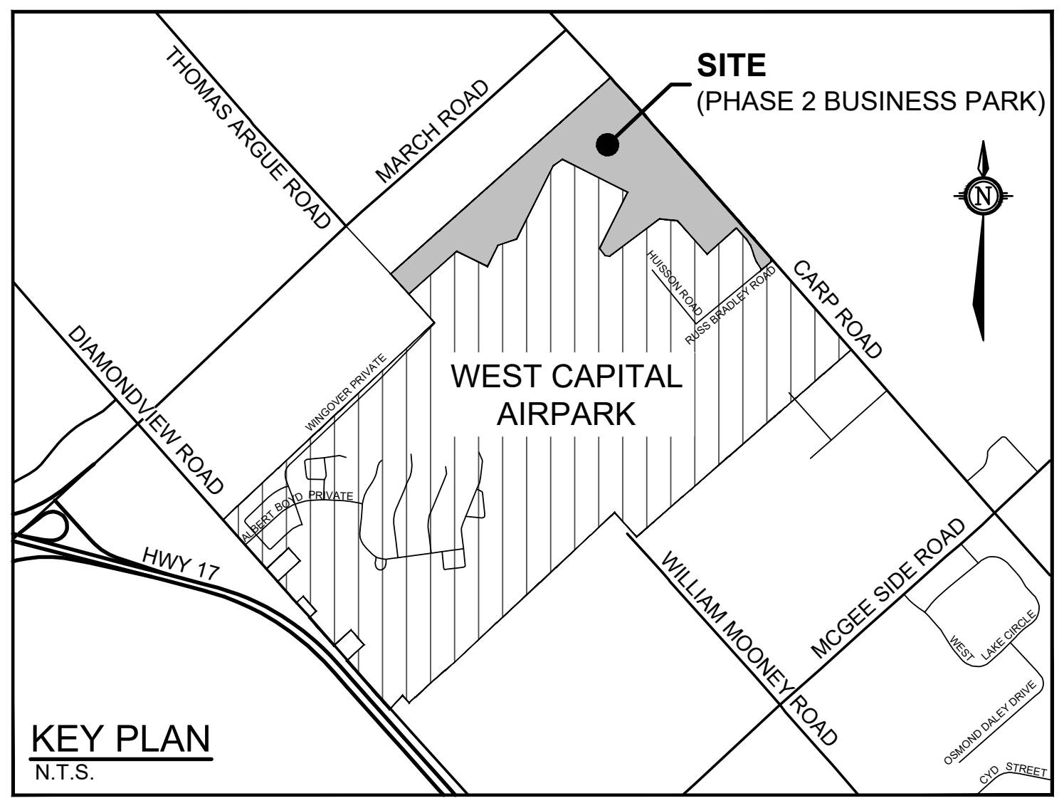
M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-P.dwg, P76, Nov 14, 2025 - 10:37am, tstaff


TOP OF SLOPE (APPROXIMATE)
APPROXIMATE LIMIT OF GRADING
26.7m-600mmØ STM @ 1.00%
200mmØ EX-WM
200mmØ EX-FPWM
RIPRAP LIMIT
5m BERM
HEADWALL INVERT =103.60
SUB-DRAIN CLEANOUT T/G=104.08
OVERFLOW SPILL ELEVATION=104.99
SUB-DRAIN CLEANOUT T/G=103.51
LOW FLOW SWALE @ 0.1%
25mm WL=104.03
2YR WL=104.23
5YR WL=104.43
100YR WL=104.99
SUB-DRAIN CLEANOUT T/G=103.50
SANITARY PUMP STATION EMERGENCY OVERFLOW OUTLET INV = 105.07
SUB-DRAIN CLEANOUT T/G=103.58
SUB-DRAIN CLEANOUT T/G=103.53
SUB-DRAIN CLEANOUT T/G=103.55
EMERGENCY SPILLWAY (SEE DETAILS THIS PAGE)
OUTLET WEIR (SEE DETAILS THIS PAGE)
SUB-DRAIN CLEANOUT T/G=104.42
TOP OF SLOPE
OUTLET SWALE CENTERLINE
BH23-05 O/G: 103.70 G/W: 103.10
BH23-06 O/G: 106.00 G/W: 102.70
T/P=103.01
11.9m-600mmØ STM @ 0.83%
EXISTING CENTRELINE OF WATERCOURSE
EXISTING CENTRELINE OF CARP ROAD ROADSIDE DITCH
CARP ROAD
SAP
A A' A1 A1' A5 A5'

POND 'A' PLAN VIEW
SCALE 1:500


CONSTRUCTION NORTH
N

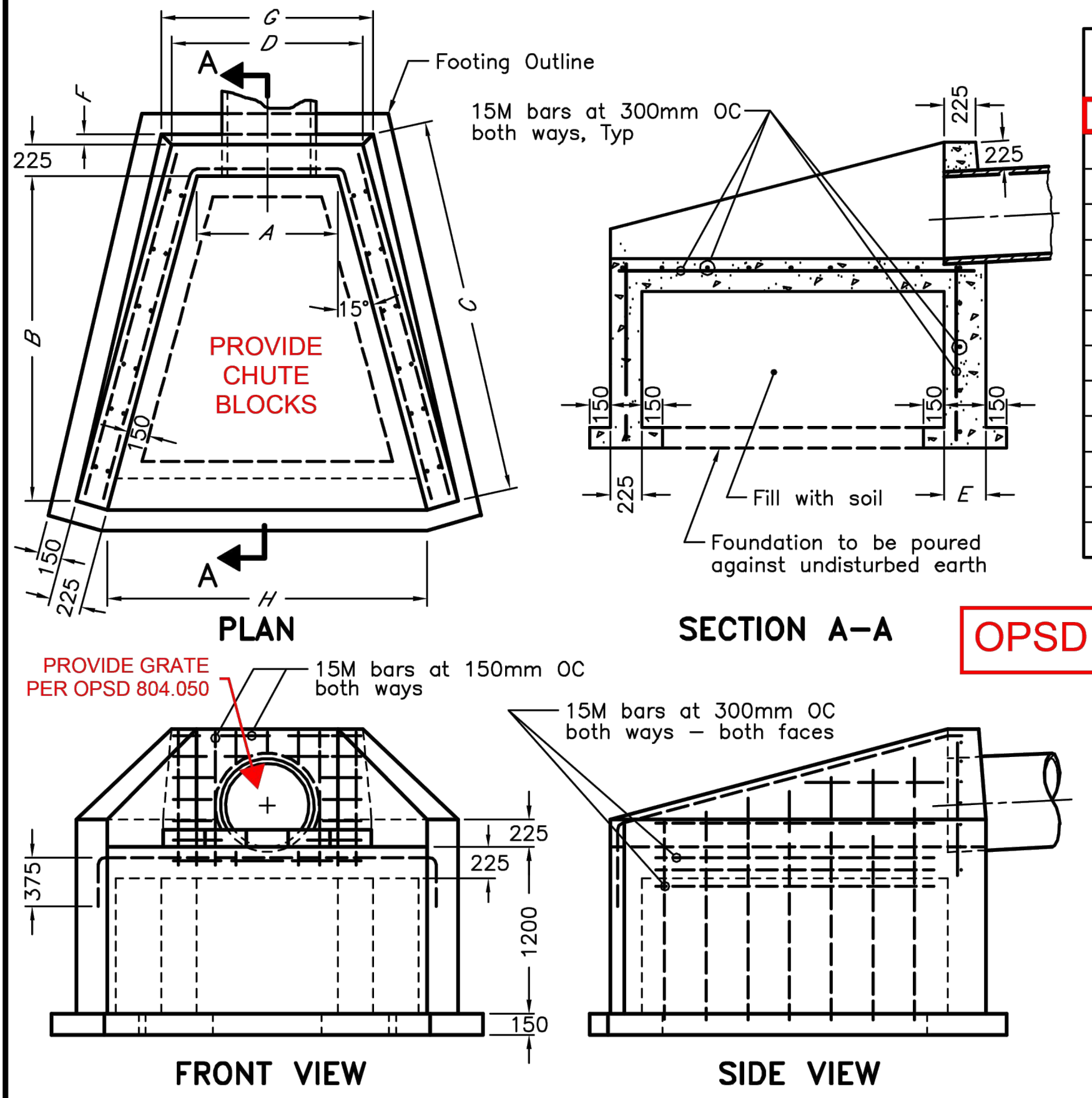
NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
WEST CAPITAL AIRPARK
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN
N.T.S.

LEGEND

○— —	PROPOSED STORM MH & SEWER	▨	PROPOSED RIP-RAP TREATMENT (OPSD 810.010)
C-1	CULVERT ID PROPOSED CSP CULVERT (REFER TO DRAWING 102085-BPND3)	113.88 113.88	PROPOSED ELEVATION EXISTING ELEVATION
——·—▸	PROPOSED ROADSIDE DITCH	113.40(D)	PROPOSED DITCH ELEVATION
—▶·—	CENTRELINE SWALE AND DIRECTION OF FLOW	111.05(S)	PROPOSED SWALE ELEVATION
—··—··—	PROPOSED SUB-DRAIN	111.05(BS)	PROPOSED BOTTOM OF SLOPE ELEVATION
▬ ╎ ╎ ▬	DEVELOPMENT SETBACK	111.05(TB)	PROPOSED TOP OF BANK ELEVATION
3:1	PROPOSED 3:1 SIDESLOPING	←	PROPOSED DRAINAGE FLOW DIRECTION
●—●—●—●	POST AND RAIL FENCE	←	EXISTING DRAINAGE FLOW DIRECTION
▬ ▪ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)	⇦	MAJOR OVERLAND FLOW ROUTE


G
D
A
Footing Outline
15M bars at 300mm OC both ways, Typ
225
B
C
15°
150
PROVIDE CHUTE BLOCKS
H
PLAN
SECTION A-A
225
150
Fill with soil
E
Foundation to be poured against undisturbed earth
PROVIDE GRATE PER OPSD 804.050
15M bars at 150mm OC both ways
15M bars at 300mm OC both ways – both faces
375
1200
FRONT VIEW
SIDE VIEW

PIPE DIA	ENDWALL DIMENSIONS							
	A	B	C	D	E	F	G	H
600	1050	2400	2725	1400	300	75	1525	2350
675	1125	2400	2725	1475	300	75	1600	2425
750	1200	2400	2725	1550	300	75	1675	2500
825	1275	2400	2725	1625	300	75	1755	2575
900	1350	2400	2725	1700	300	75	1825	2650
975	1425	2400	2725	1775	375	150	1975	2725
1050	1500	3000	3400	1850	375	150	2050	3100
1200	1650	3000	3400	2000	375	150	2200	3250
1350	1800	3000	3400	2150	375	150	2350	3400
1500	1950	3000	3400	2300	375	150	2500	3550
1650	2100	3000	3400	2450	375	150	2650	3700
1800	2250	3000	3400	2600	375	150	2800	3850
2400	3000	3000	3400	3350	375	150	3550	4600

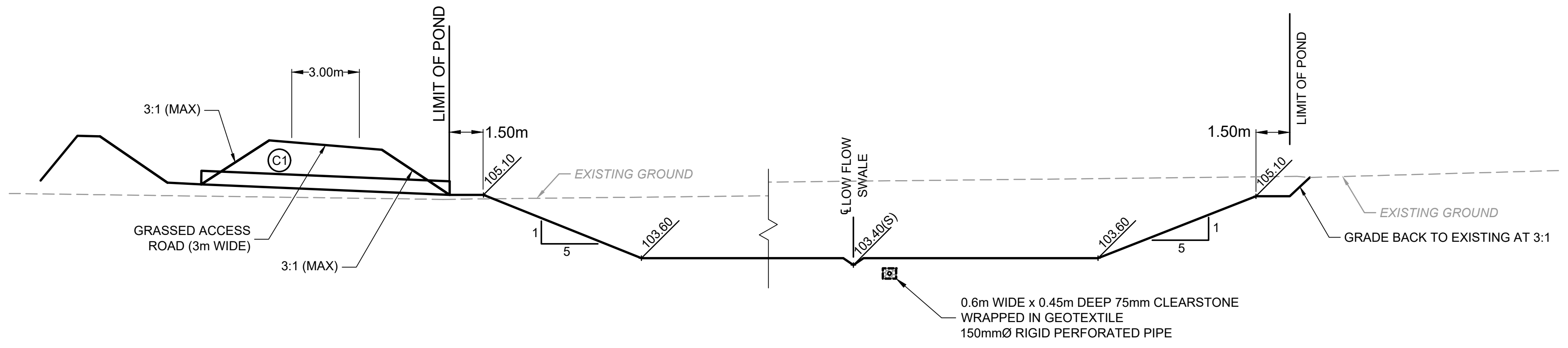
OPSD MODIFIED BY NOVATECH NOV. 06/25

NOTES:
- A This OPSD to be read in conjunction with OPSD 3940.150.
- B Class of concrete: 30MPa.
- C Cover to reinforcing bars: 75mm ±20mm.
- D Granular backfill to be placed to 300mm min thickness on all sides.
- E All dimensions are in millimetres unless otherwise shown.

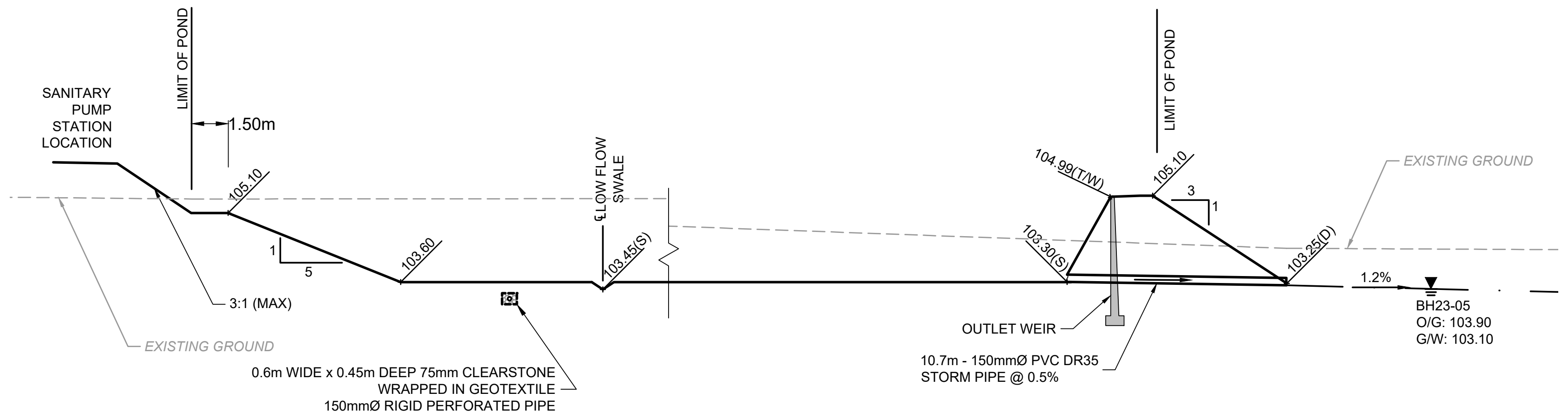
ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2017 | Rev 1

CONCRETE HEADWALL
FOR SEWER OR CULVERT PIPE OUTLET

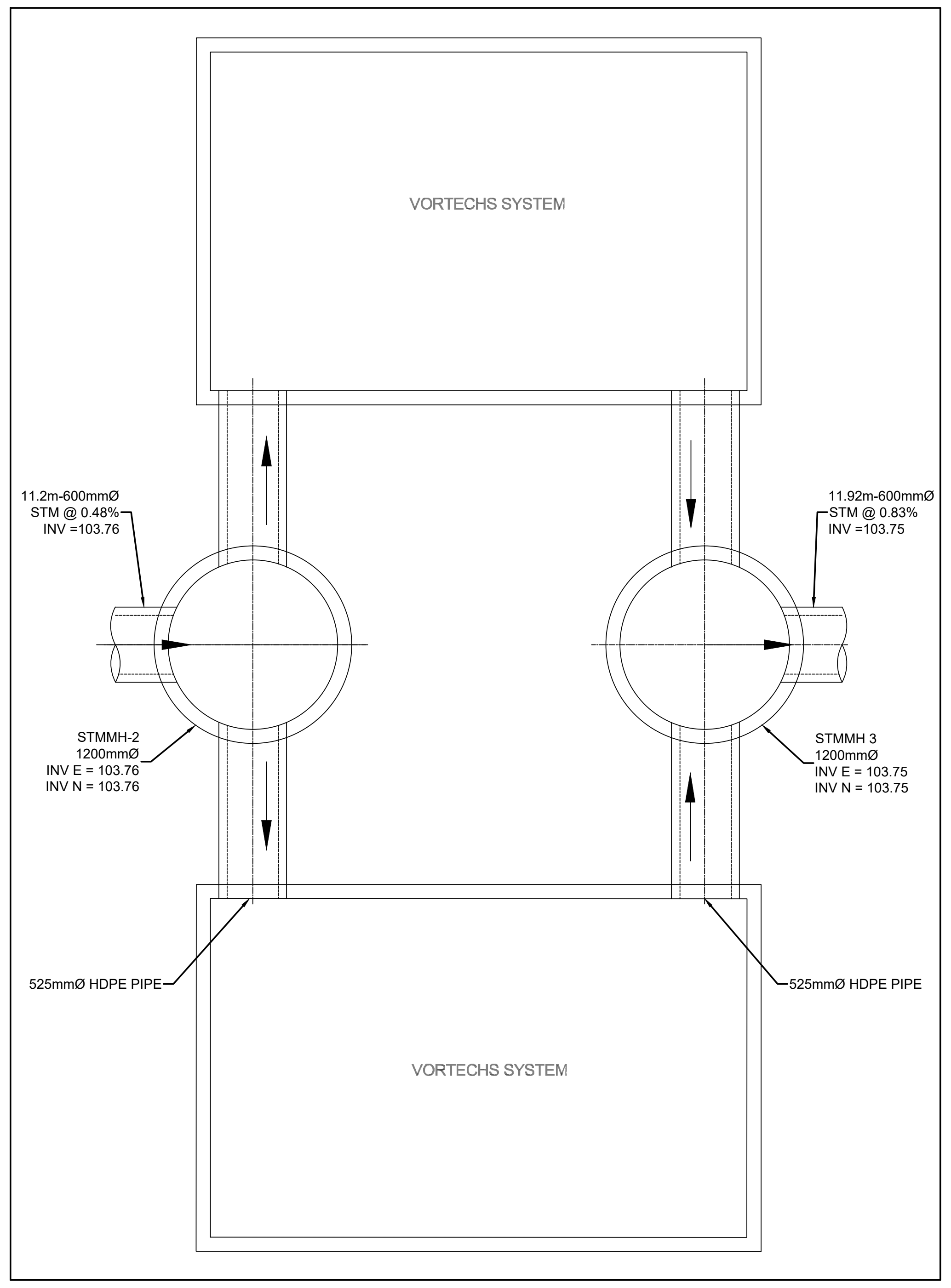
OPSD 804.040


LIMIT OF POND
3.00m
1.50m
3:1 (MAX)
C1
105.10
EXISTING GROUND
LOW FLOW SWALE
GRASSED ACCESS ROAD (3m WIDE)
3:1 (MAX)
1
5
103.60
103.40(S)
0.6m WIDE x 0.45m DEEP 75mm CLEARSTONE WRAPPED IN GEOTEXTILE 150mmØ RIGID PERFORATED PIPE
GRADE BACK TO EXISTING AT 3:1

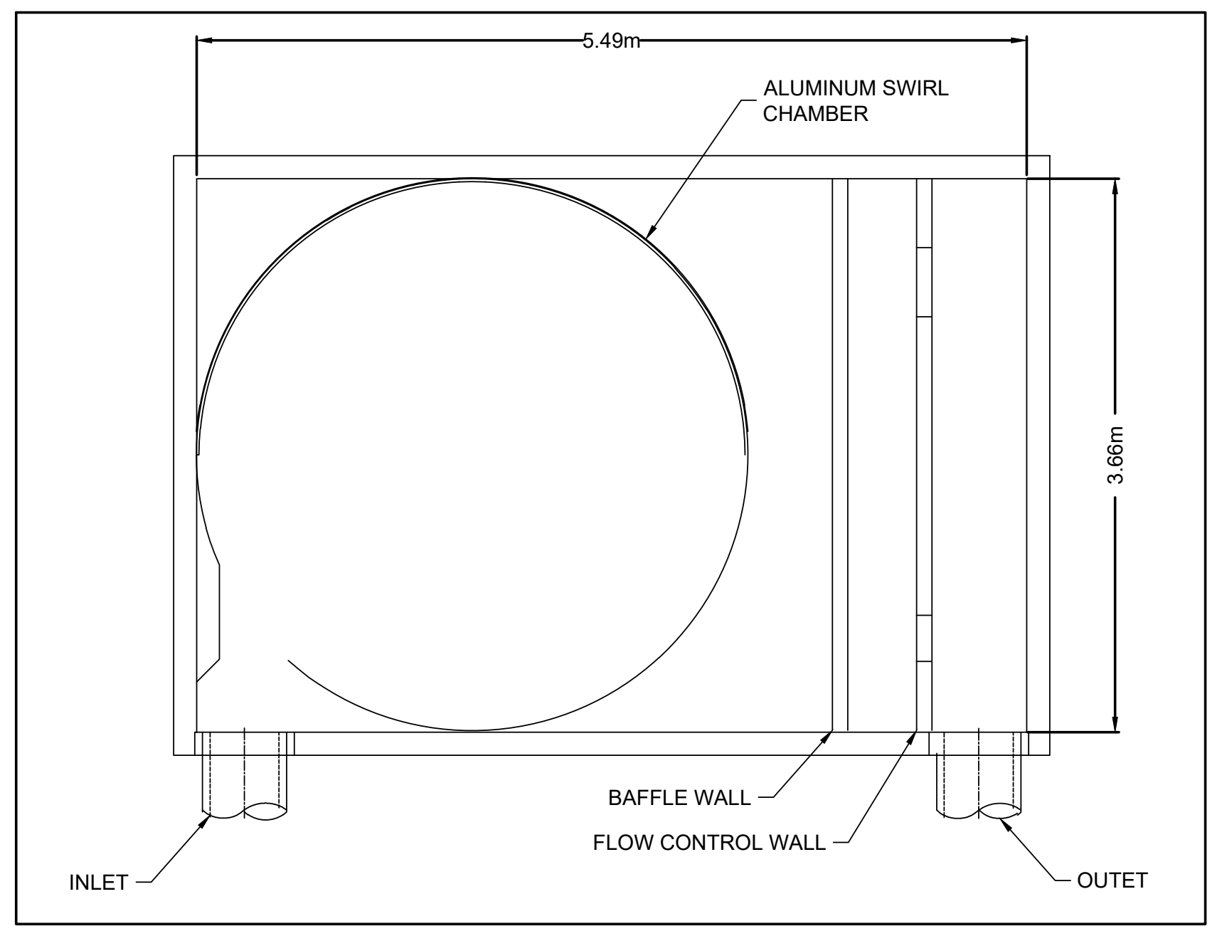
POND 'A' CROSS SECTION A-A
SCALE 1:250


SANITARY PUMP STATION LOCATION
LIMIT OF POND
1.50m
105.10
LOW FLOW SWALE
3:1 (MAX)
103.60
103.45(S)
0.6m WIDE x 0.45m DEEP 75mm CLEARSTONE WRAPPED IN GEOTEXTILE 150mmØ RIGID PERFORATED PIPE
EXISTING GROUND
104.99(T/W)
103.30(I)
103.20(D)
1.2%
OUTLET WEIR
10.7m - 150mmØ PVC DR35 STORM PIPE @ 0.5%
BH23-05 O/G: 103.90 G/W: 103.10

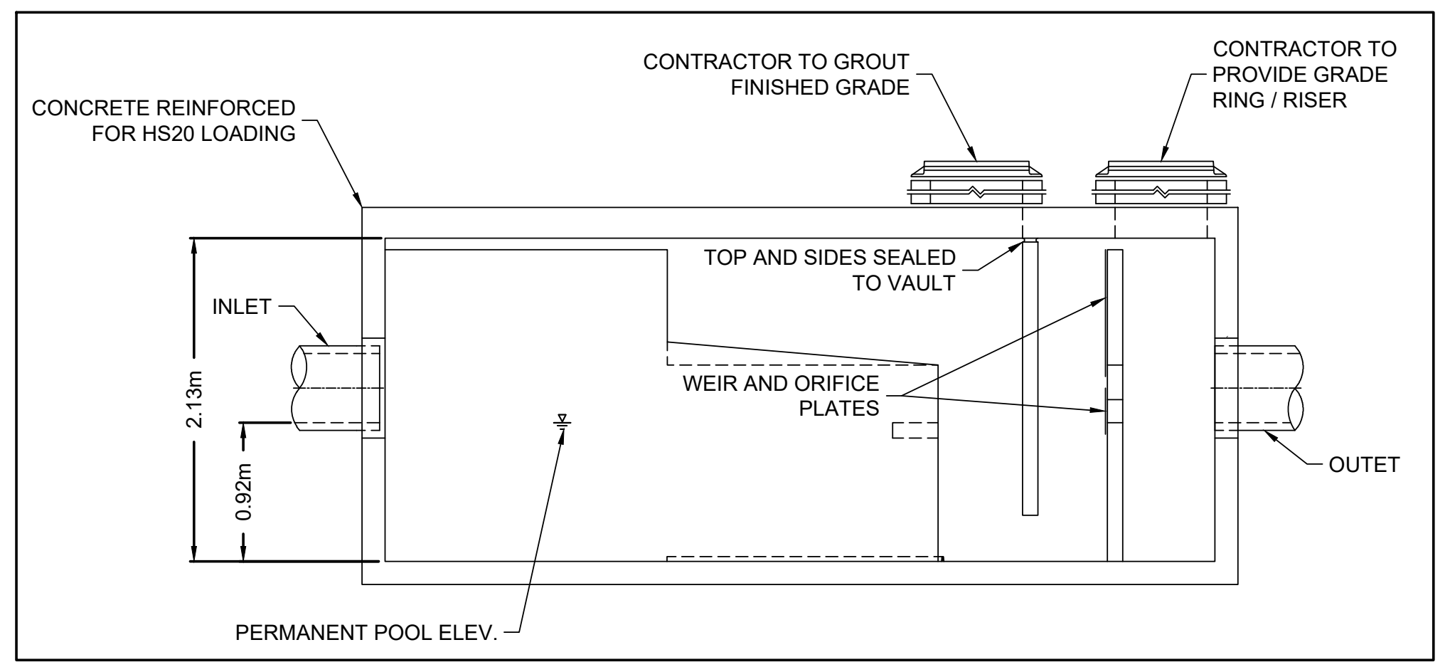
POND 'A' CROSS SECTION A1-A1'
SCALE 1:250


VORTECHS SYSTEM
11.2m-600mmØ STM @ 0.48% INV =103.76
11.92m-600mmØ STM @ 0.83% INV =103.75
STMMH-2 1200mmØ INV E = 103.76 INV N = 103.76
STMMH 3 1200mmØ INV E = 103.75 INV N = 103.75
525mmØ HDPE PIPE
525mmØ HDPE PIPE
VORTECHS SYSTEM

VORTECHS 16000 LAYOUT DETAIL
SCALE 1:50

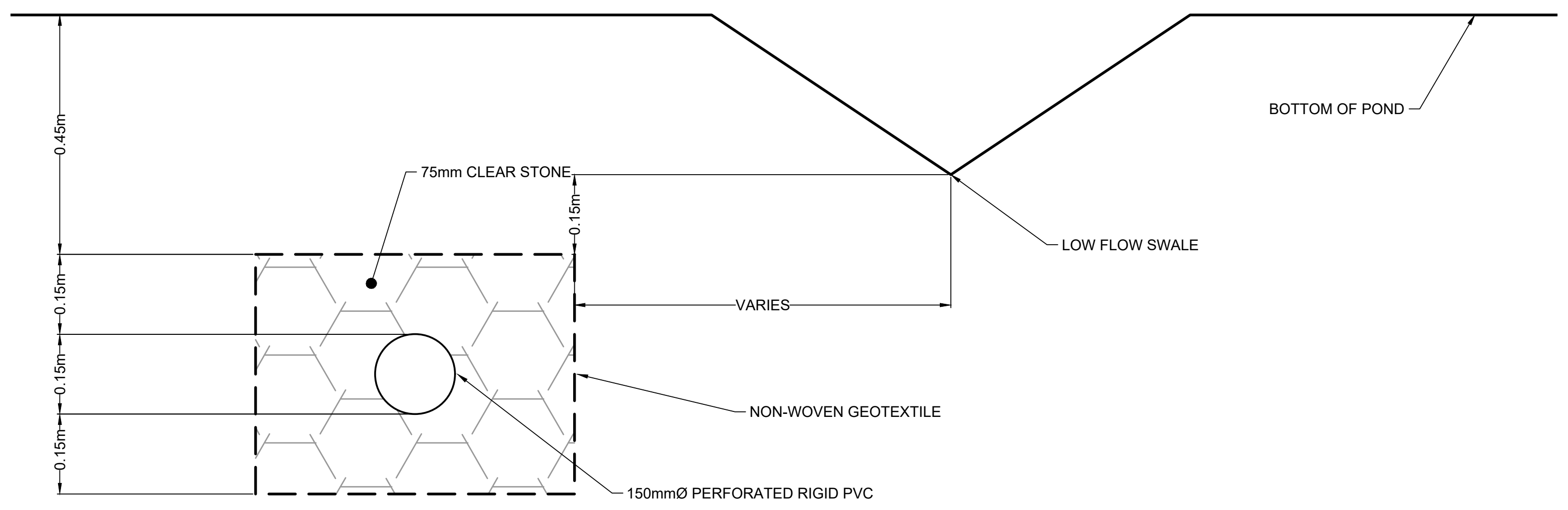

5.49m
ALUMINUM SWIRL CHAMBER
3.66m
BAFFLE WALL
FLOW CONTROL WALL
INLET
OUTLET

VORTECHS 16000 STANDARD DETAIL
SCALE 1:50


CONTRACTOR TO GROUT FINISHED GRADE
CONTRACTOR TO PROVIDE GRADE RING / RISER
CONCRETE REINFORCED FOR HS20 LOADING
TOP AND SIDES SEALED TO VAULT
INLET
WEIR AND ORIFICE PLATES
2.13m
0.92m
OUTLET
PERMANENT POOL ELEV.

VORTECHS 16000 STANDARD DETAIL
SCALE 1:50

REFER TO 102085-GR8 FOR POND GRADING


BOTTOM OF POND
0.45m
75mm CLEAR STONE
0.15m
LOW FLOW SWALE
VARIES
0.15m
0.15m
NON-WOVEN GEOTEXTILE
0.15m
150mmØ PERFORATED RIGID PVC

TYPICAL POND SUBDRAIN DETAIL
SCALE 1:10

NOTE:
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M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-SWMF.dwg, SWMF7 (POND A), Nov 14, 2025 - 10:29am, tstaff

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
AS NOTED

DESIGN MLS
CHECKED MJP
DRAWN MJB
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
M. Schroeder
M. L. SCHROEDER
100213677
Nov. 14, 2025
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
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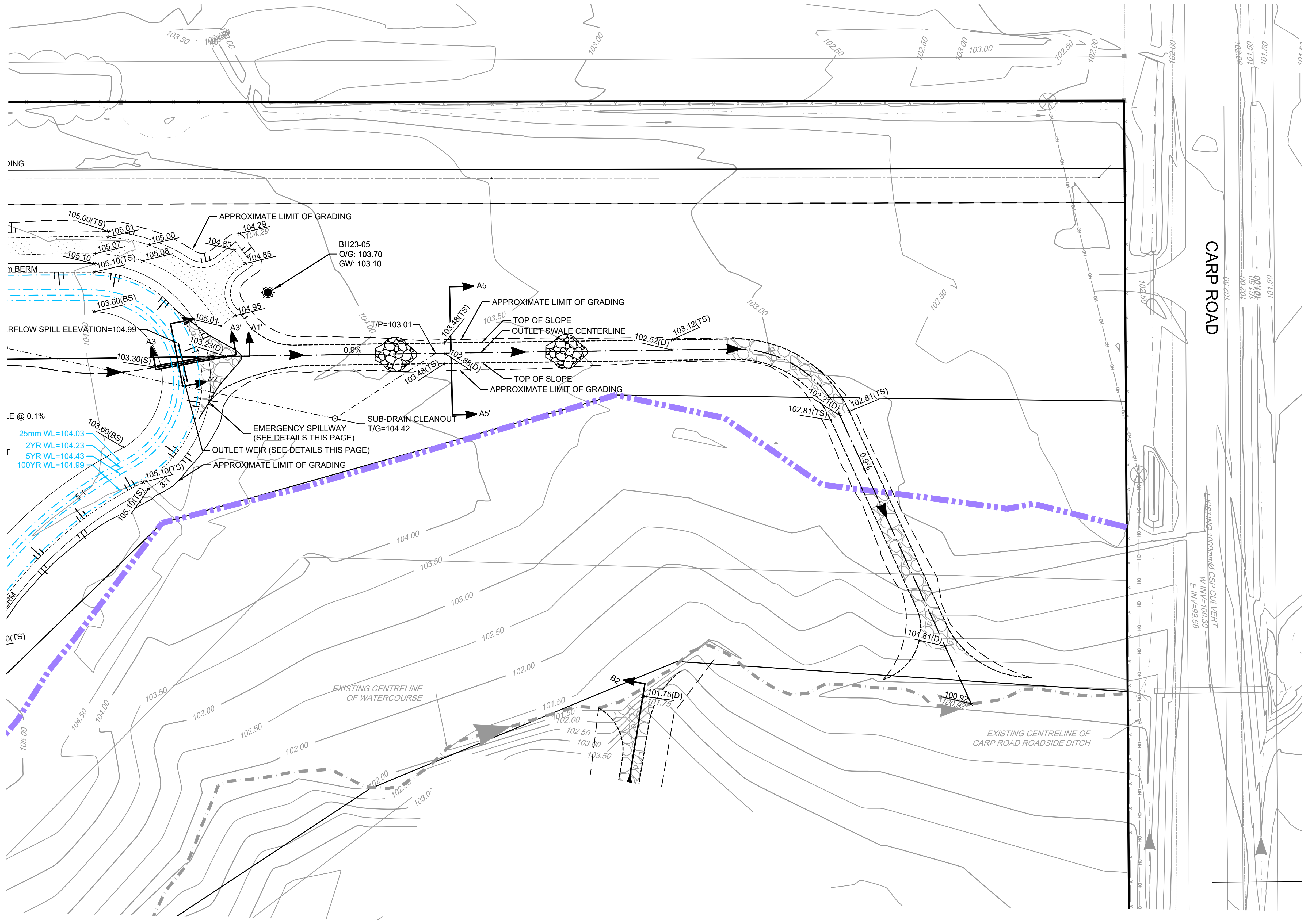
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

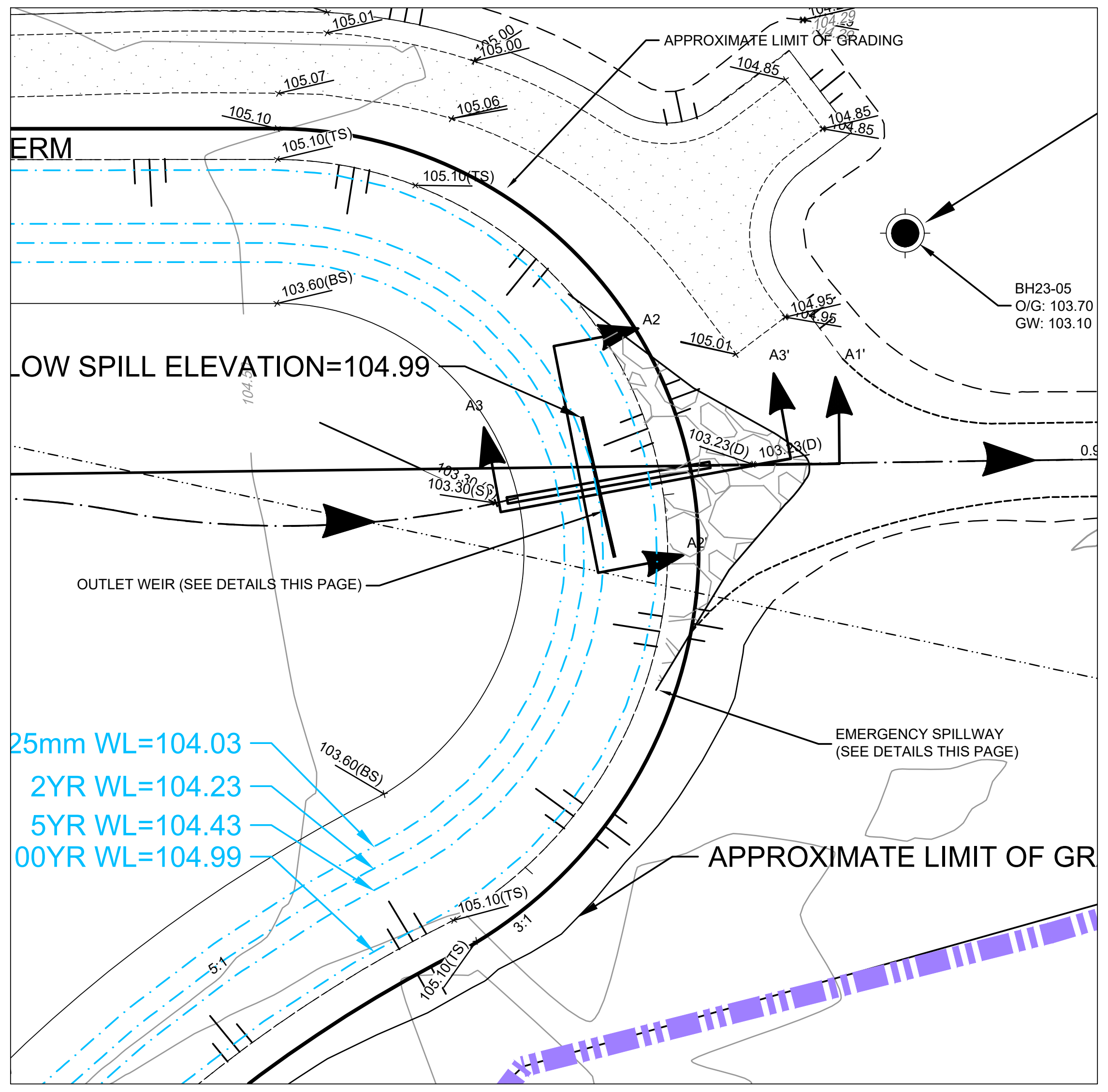
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
STORMWATER MANAGEMENT
POND FACILITY - POND 'A'
LAYOUT AND CROSS SECTIONS

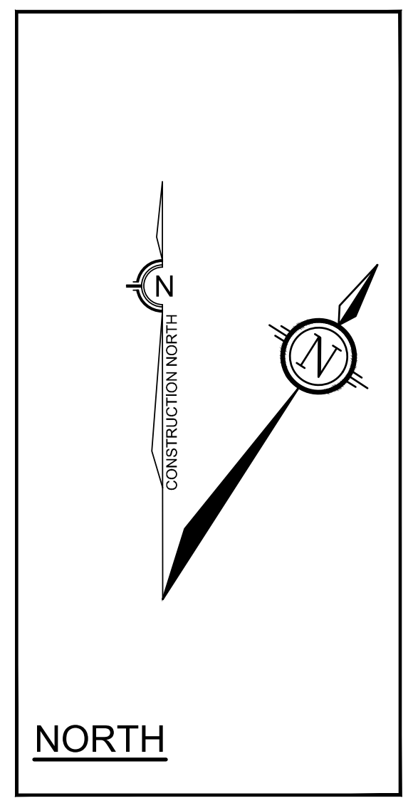
PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-SWMF7

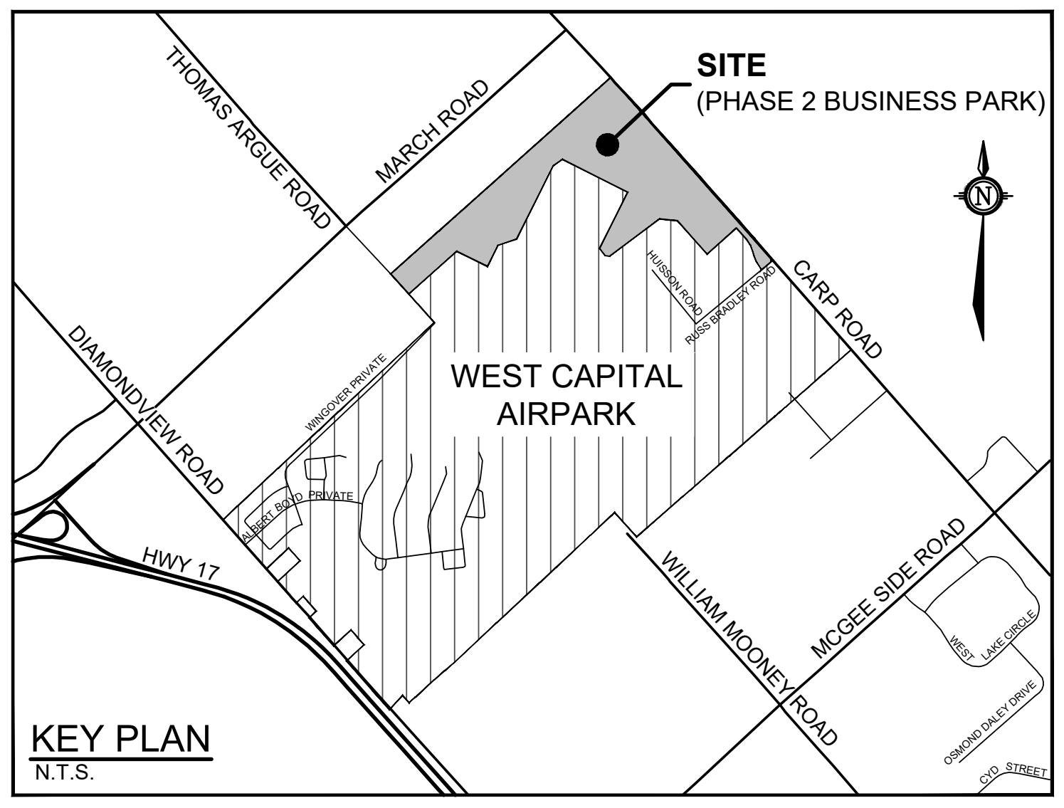
PLANB1.DWG - 1000mmx707mm


CARP ROAD
APPROXIMATE LIMIT OF GRADING
BH23-05
O/G: 103.70
GW: 103.10
A5
APPROXIMATE LIMIT OF GRADING
TOP OF SLOPE
OUTLET SWALE CENTERLINE
TOP OF SLOPE
APPROXIMATE LIMIT OF GRADING
T/P=103.01
SUB-DRAIN CLEANOUT
T/G=104.42
A5'
EMERGENCY SPILLWAY
(SEE DETAILS THIS PAGE)
OUTLET WEIR (SEE DETAILS THIS PAGE)
APPROXIMATE LIMIT OF GRADING
OVERFLOW SPILL ELEVATION=104.99
25mm WL=104.03
2YR WL=104.23
5YR WL=104.43
100YR WL=104.99
EXISTING CENTRELINE OF WATERCOURSE
EXISTING CENTRELINE OF CARP ROAD ROADSIDE DITCH
B2
101.75(D)
100.92
101.81(D)
102.52(D)
103.12(TS)
102.81(TS)
0.9%


APPROXIMATE LIMIT OF GRADING
BERM
BH23-05
O/G: 103.70
GW: 103.10
OVERFLOW SPILL ELEVATION=104.99
A2
A3
A1
A3'
A1'
103.23(D)
103.30(S)
OUTLET WEIR (SEE DETAILS THIS PAGE)
25mm WL=104.03
2YR WL=104.23
5YR WL=104.43
100YR WL=104.99
EMERGENCY SPILLWAY
(SEE DETAILS THIS PAGE)
APPROXIMATE LIMIT OF GRADING
103.60(BS)
105.10(TS)
3:1
5:1

POND 'A' OUTLET STRUCTURE BLOWUP
SCALE 1:250

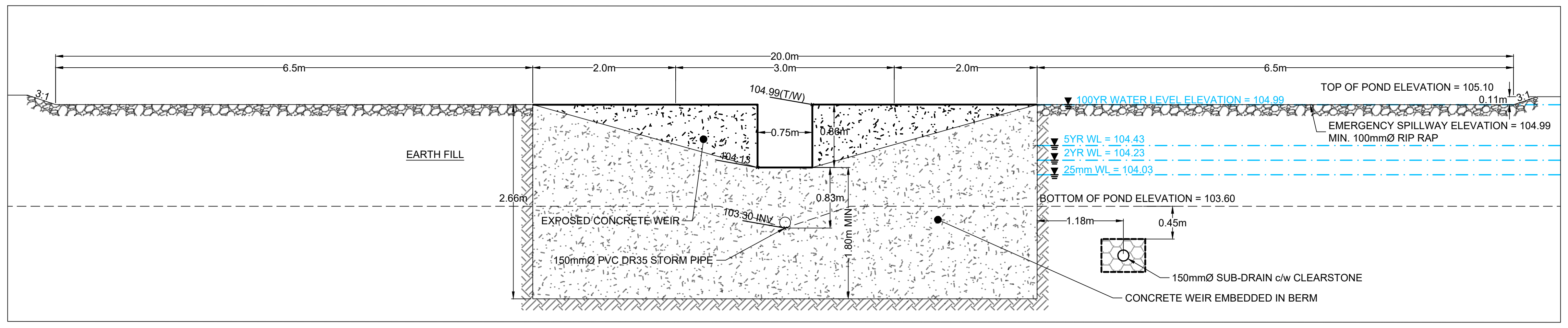

N
CONSTRUCTION NORTH
NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
WEST CAPITAL AIRPARK
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

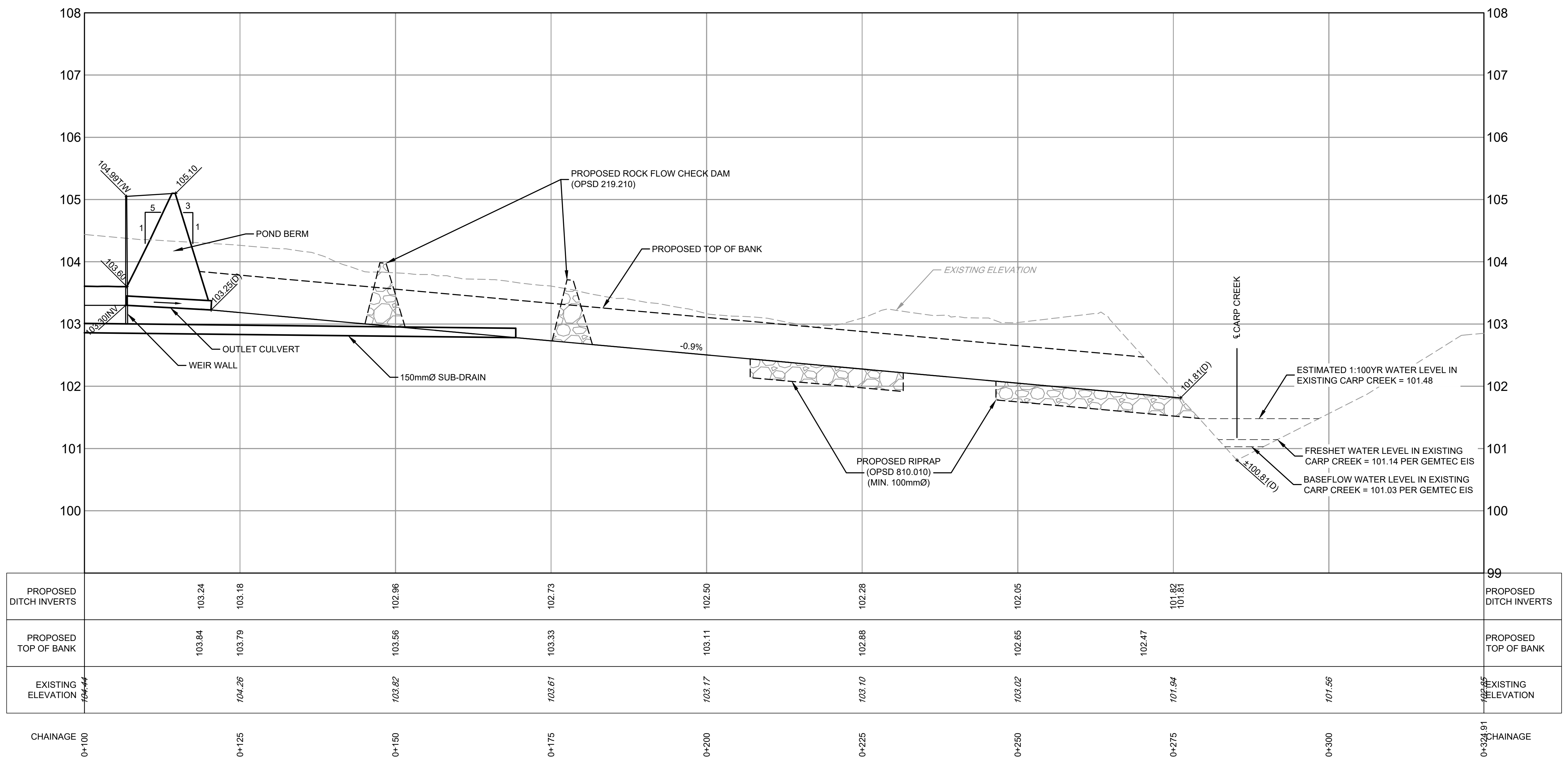
KEY PLAN
N.T.S.

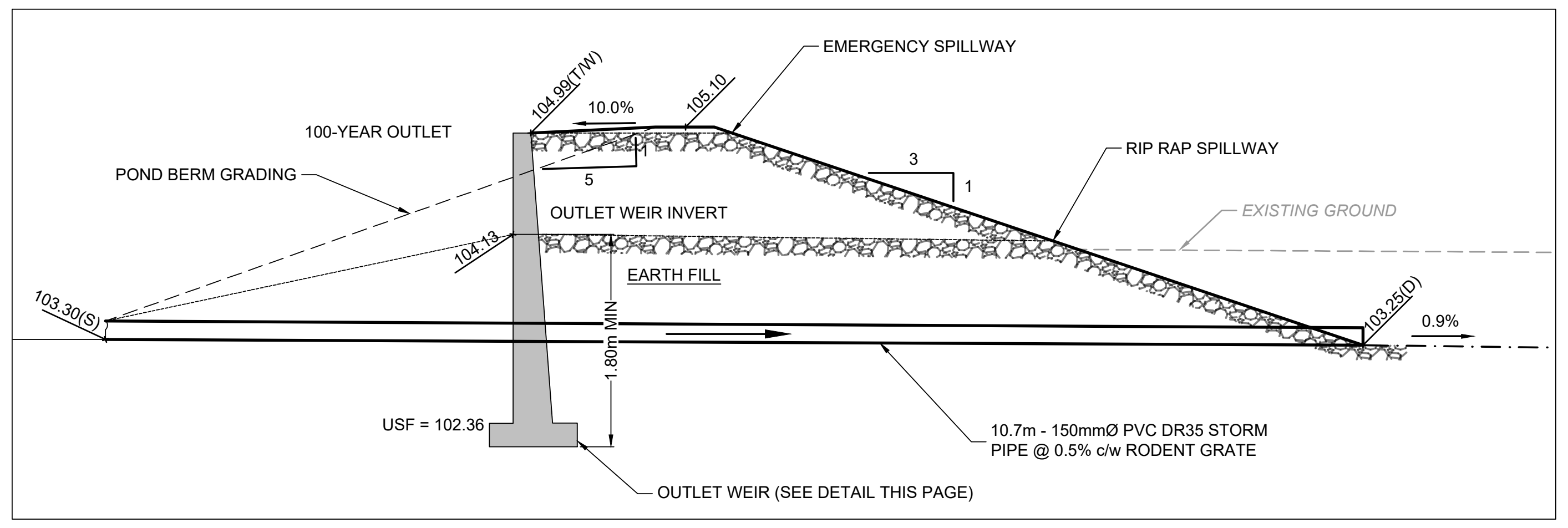
LEGEND

○— —	PROPOSED STORM MH & SEWER
C-1 ▭	CULVERT ID PROPOSED CSP CULVERT (REFER TO DRAWING 102085-BPND3)
— · → —	PROPOSED ROADSIDE DITCH
➜ · —	CENTRELINE SWALE AND DIRECTION OF FLOW
—·—··—··	PROPOSED SUB-DRAIN
▬ ╎ ▬	DEVELOPMENT SETBACK
3:1	PROPOSED 3:1 SIDESLOPING
●—●—●—●	POST AND RAIL FENCE
▬ ▪ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
▨	PROPOSED RIP-RAP TREATMENT (OPSD 810.010)
113.88 113.88	PROPOSED ELEVATION EXISTING ELEVATION
113.40(D)	PROPOSED DITCH ELEVATION
111.05(S)	PROPOSED SWALE ELEVATION
111.05(BS)	PROPOSED BOTTOM OF SLOPE ELEVATION
111.05(TB)	PROPOSED TOP OF BANK ELEVATION
←	PROPOSED DRAINAGE FLOW DIRECTION
←	EXISTING DRAINAGE FLOW DIRECTION
⇦	MAJOR OVERLAND FLOW ROUTE

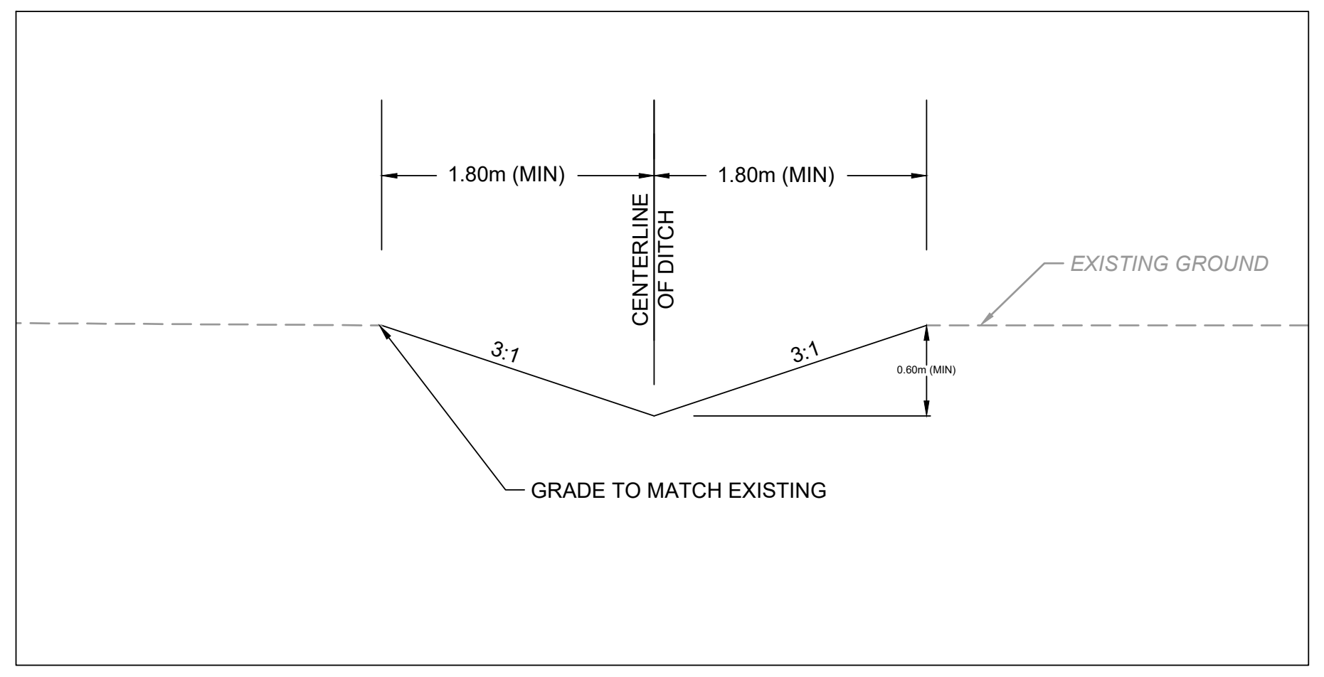

20.0m
6.5m
2.0m
3.0m
2.0m
6.5m
3:1
104.99(T/W)
100YR WATER LEVEL ELEVATION = 104.99
TOP OF POND ELEVATION = 105.10
0.11m
3:1
EMERGENCY SPILLWAY ELEVATION = 104.99
MIN. 100mmØ RIP RAP
0.75m
0.86m
104.13
EARTH FILL
5YR WL = 104.43
2YR WL = 104.23
25mm WL = 104.03
2.66m
0.83m
BOTTOM OF POND ELEVATION = 103.60
EXPOSED CONCRETE WEIR
103.30 INV
1.18m
0.45m
1.80m MIN
150mmØ PVC DR35 STORM PIPE
150mmØ SUB-DRAIN c/w CLEARSTONE
CONCRETE WEIR EMBEDDED IN BERM

POND 'A' OUTLET STRUCTURE CROSS SECTION A2-A2
SCALE 1:50




EMERGENCY SPILLWAY
104.99(T/W)
105.10
10.0%
100-YEAR OUTLET
POND BERM GRADING
5
1
3
1
RIP RAP SPILLWAY
OUTLET WEIR INVERT
EXISTING GROUND
104.13
EARTH FILL
103.30(S)
103.25(D)
0.9%
1.80m MIN
USF = 102.36
10.7m - 150mmØ PVC DR35 STORM
PIPE @ 0.5% c/w RODENT GRATE
OUTLET WEIR (SEE DETAIL THIS PAGE)

POND 'A' OUTLET STRUCTURE CROSS SECTION A3-A3'
SCALE 1:50


1.80m (MIN)
1.80m (MIN)
CENTERLINE OF DITCH
EXISTING GROUND
3:1
3:1
GRADE TO MATCH EXISTING

POND 'A' OUTLET SWALE CROSS SECTION A5-A5
SCALE 1:50

REFER TO 102085-SWMF-7 FOR POND DETAILS

REFER TO 102085-GR8 FOR POND GRADING

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
1:500 (0, 5, 10, 15, 20) HORIZONTAL
1:50 (0, 0.5, 1.0, 1.5, 2.0) VERTICAL

DESIGN	MLS
CHECKED	MJP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
M. L. SCHROEDER
100213677
Nov. 14, 2025
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

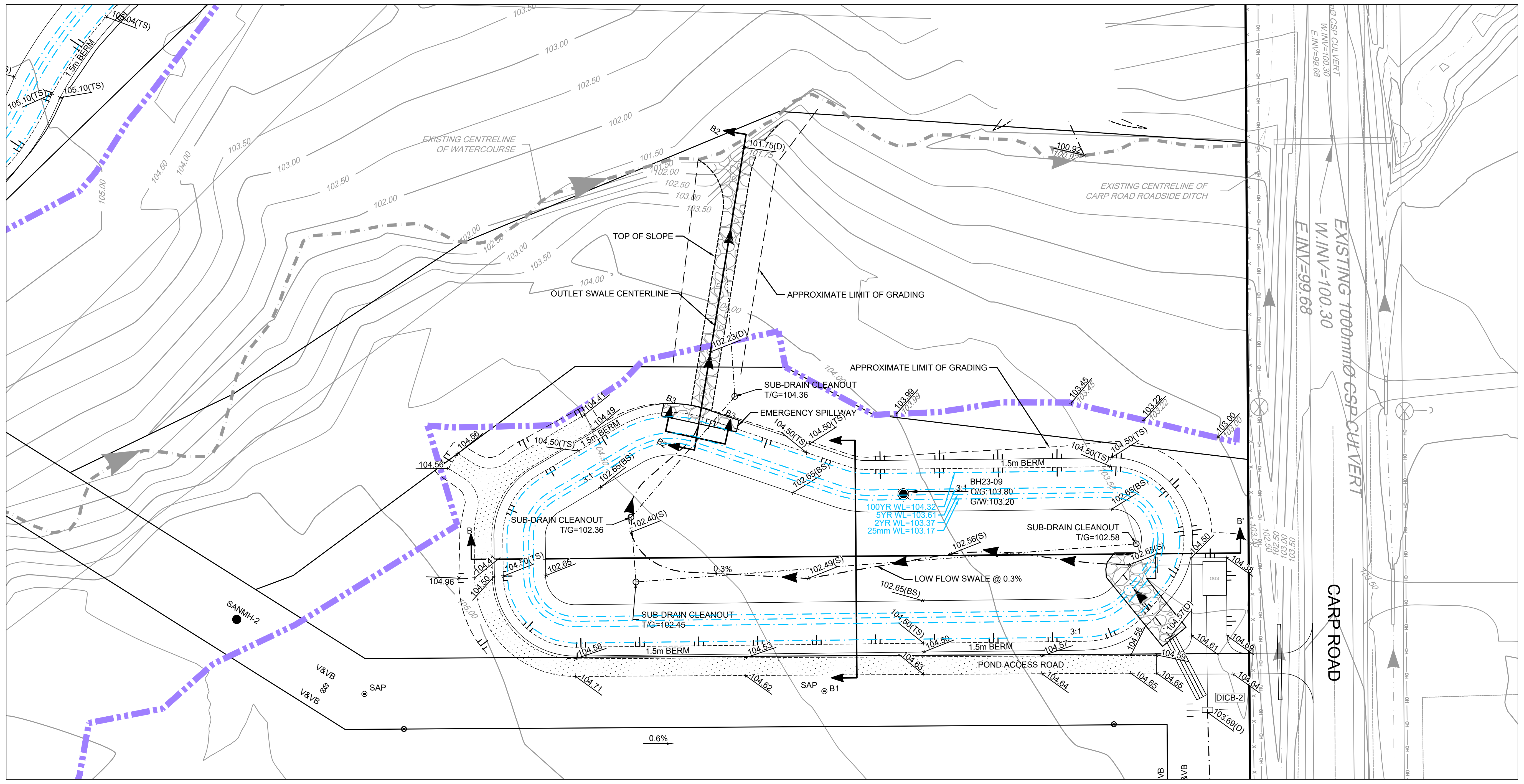
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
STORMWATER MANAGEMENT
POND FACILITY - POND 'A'
OUTLET DETAILS

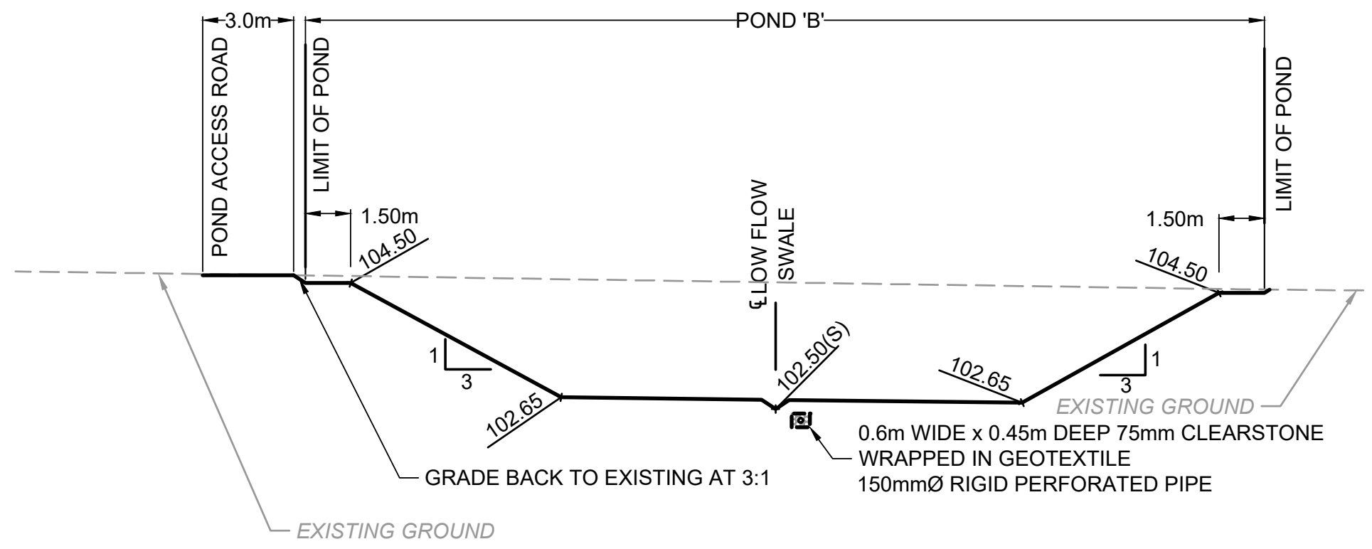
PROJECT No. 102085-14
REV: REV # 2
DRAWING No. 102085-SWMF8

PLANB1.DWG - 1000mmx707mm

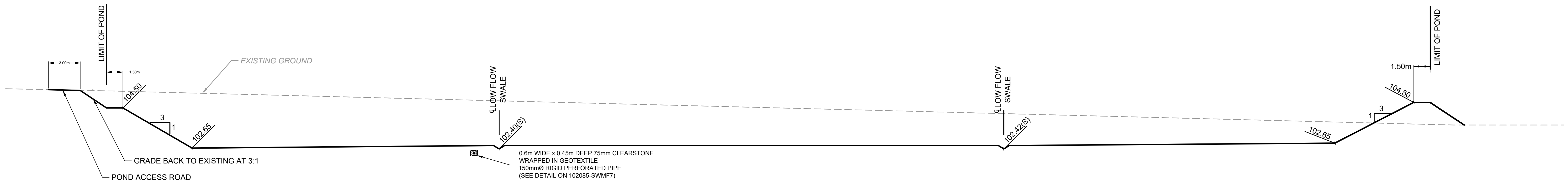
M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-SWMF.dwg, SWMF8 (POND A-OUTLET), Nov 14, 2025 - 10:29am, tstaff


EXISTING CENTRELINE OF WATERCOURSE
EXISTING CENTRELINE OF CARP ROAD ROADSIDE DITCH
EXISTING 1000mmØ CSP CULVERT
W.INV=100.30
E.INV=99.68
CARP ROAD
TOP OF SLOPE
OUTLET SWALE CENTERLINE
APPROXIMATE LIMIT OF GRADING
SUB-DRAIN CLEANOUT T/G=104.36
EMERGENCY SPILLWAY
1.5m BERM
BH23-09 O/G:103.80 G/W:103.20
100YR WL=104.32
5YR WL=103.61
2YR WL=103.37
25mm WL=103.17
SUB-DRAIN CLEANOUT T/G=102.36
SUB-DRAIN CLEANOUT T/G=102.58
SUB-DRAIN CLEANOUT T/G=102.45
LOW FLOW SWALE @ 0.3%
POND ACCESS ROAD
DICB-2
SAP
B1
B2
B3
B
B'
0.3%
0.6%
3:1
101.75(D)
102.23(D)
100.92
104.50(TS)
102.65(BS)
102.40(S)
102.49(S)
102.56(S)
102.65(S)
104.57(D)
103.69(D)
104.56
104.96
104.71
104.62
104.63
104.64
104.65
104.61
104.69
104.58
104.53
104.50
104.38
103.99
103.45
103.22
103.00

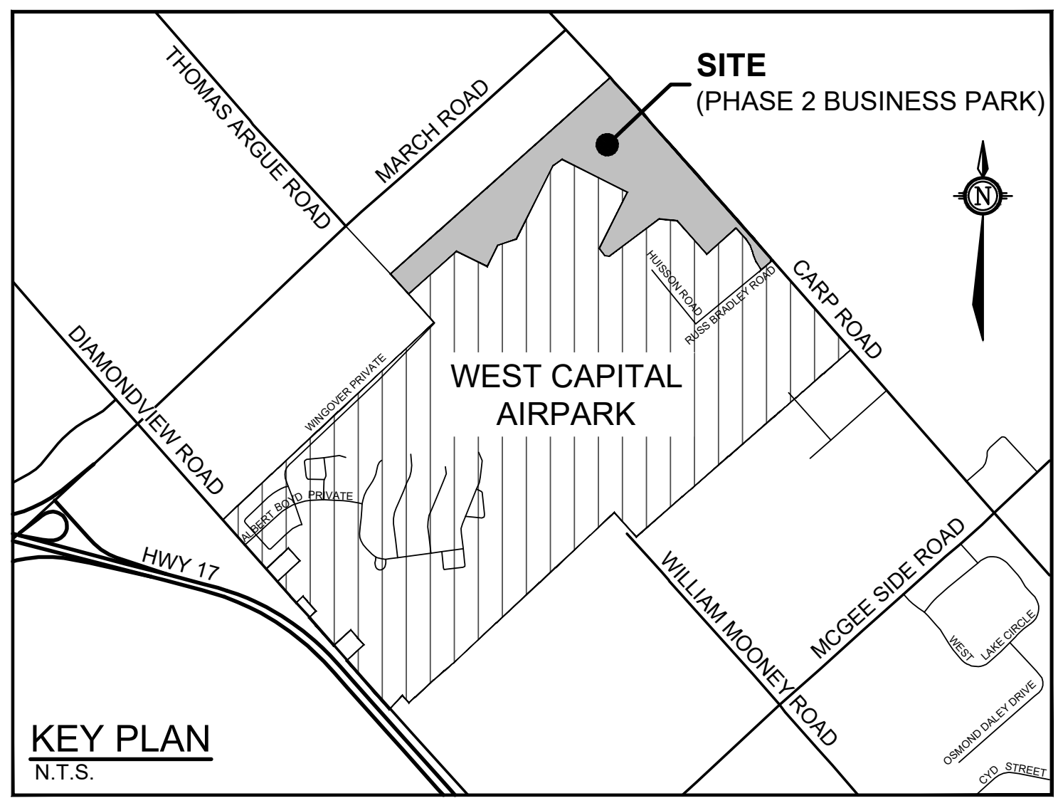
POND 'B' PLAN VIEW
SCALE 1:500


3.0m
POND 'B'
POND ACCESS ROAD
LIMIT OF POND
1.50m
104.50
℄ LOW FLOW SWALE
102.50(S)
102.65
1
3
EXISTING GROUND
GRADE BACK TO EXISTING AT 3:1
0.6m WIDE x 0.45m DEEP 75mm CLEARSTONE WRAPPED IN GEOTEXTILE 150mmØ RIGID PERFORATED PIPE

POND 'B' CROSS SECTION B1-B1'
SCALE 1:250


3.00m
LIMIT OF POND
1.50m
EXISTING GROUND
104.50
3
1
102.65
℄ LOW FLOW SWALE
102.40(S)
102.42(S)
GRADE BACK TO EXISTING AT 3:1
POND ACCESS ROAD
0.6m WIDE x 0.45m DEEP 75mm CLEARSTONE WRAPPED IN GEOTEXTILE 150mmØ RIGID PERFORATED PIPE (SEE DETAIL ON 102085-SWMF7)

POND 'B' CROSS SECTION B-B'
SCALE 1:250

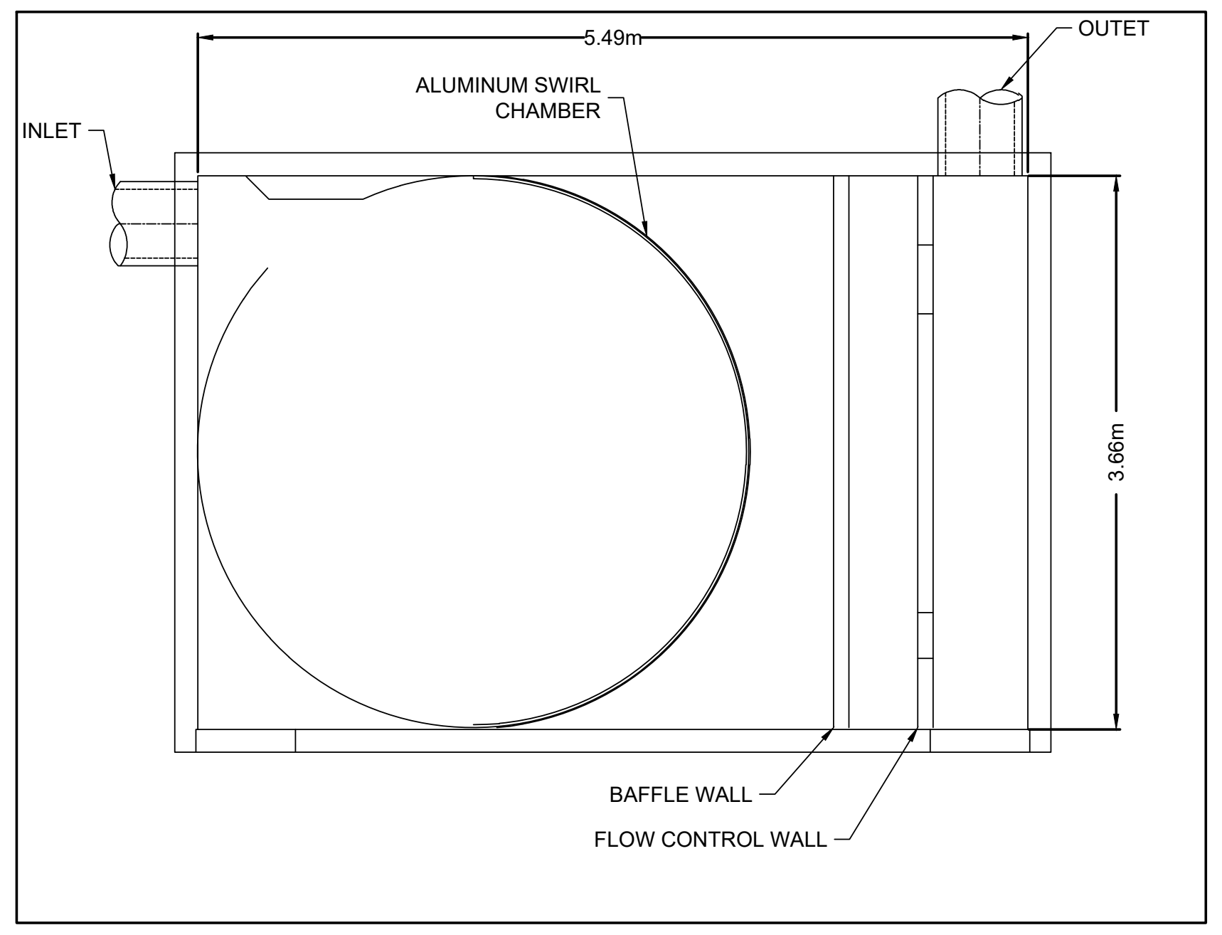

SITE
(PHASE 2 BUSINESS PARK)
WEST CAPITAL AIRPARK
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET

NORTH

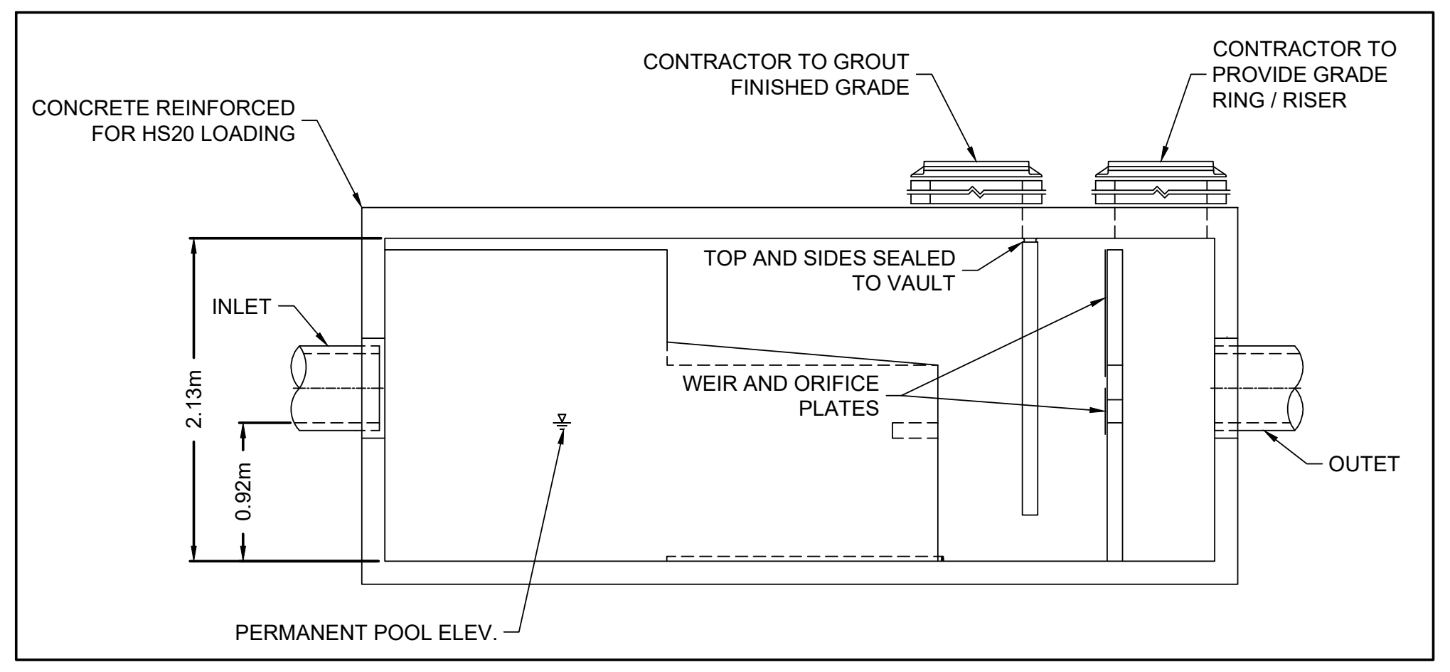
KEY PLAN
N.T.S.

LEGEND

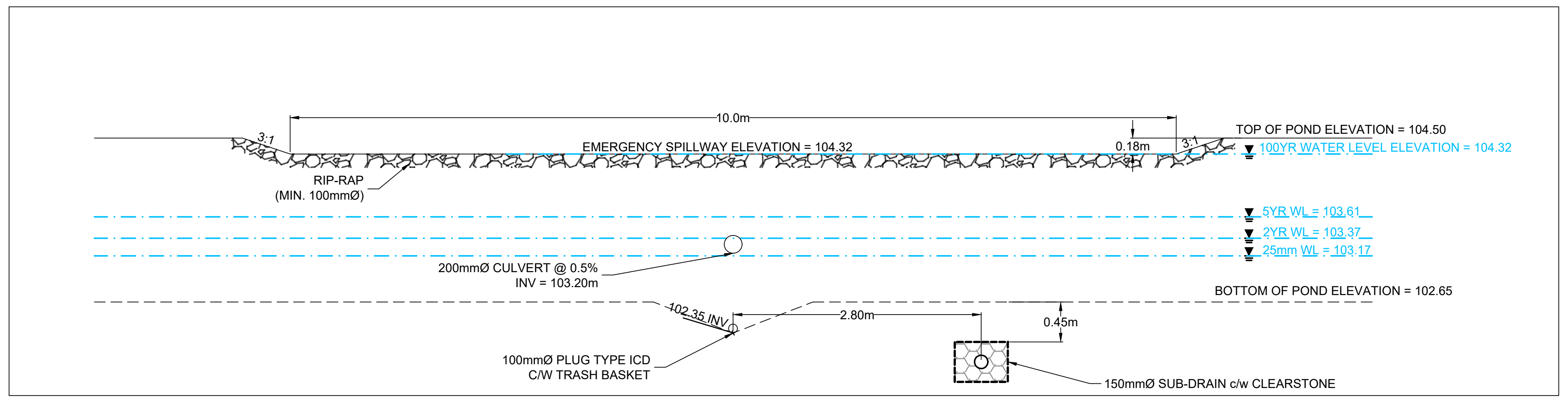
○── ──	PROPOSED STORM MH & SEWER
C-1	CULVERT ID PROPOSED CSP CULVERT (REFER TO DRAWING 102085-BPND3)
── · ─►	PROPOSED ROADSIDE DITCH
─► · ──	CENTRELINE SWALE AND DIRECTION OF FLOW
─·─··─·─	PROPOSED SUB-DRAIN
▬ ╎ ▬	DEVELOPMENT SETBACK
3:1	PROPOSED 3:1 SIDESLOPING
●──●──●	POST AND RAIL FENCE
▬ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
▨	PROPOSED RIP-RAP TREATMENT (OPSD 810.010)
113.88 113.88	PROPOSED ELEVATION EXISTING ELEVATION
113.40(D)	PROPOSED DITCH ELEVATION
111.05(S)	PROPOSED SWALE ELEVATION
111.05(BS)	PROPOSED BOTTOM OF SLOPE ELEVATION
111.05(TB)	PROPOSED TOP OF BANK ELEVATION
←	PROPOSED DRAINAGE FLOW DIRECTION
←	EXISTING DRAINAGE FLOW DIRECTION
⇦	MAJOR OVERLAND FLOW ROUTE


5.49m
OUTET
ALUMINUM SWIRL CHAMBER
INLET
3.66m
BAFFLE WALL
FLOW CONTROL WALL

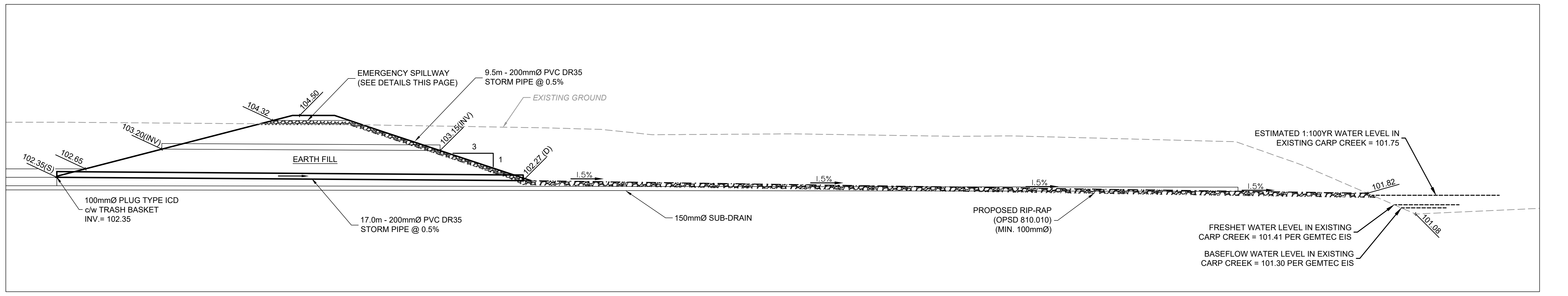
VORTECHS 16000 LAYOUT DETAIL
SCALE 1:50


CONCRETE REINFORCED FOR HS20 LOADING
CONTRACTOR TO GROUT FINISHED GRADE
CONTRACTOR TO PROVIDE GRADE RING / RISER
TOP AND SIDES SEALED TO VAULT
INLET
WEIR AND ORIFICE PLATES
OUTET
2.13m
0.92m
PERMANENT POOL ELEV.

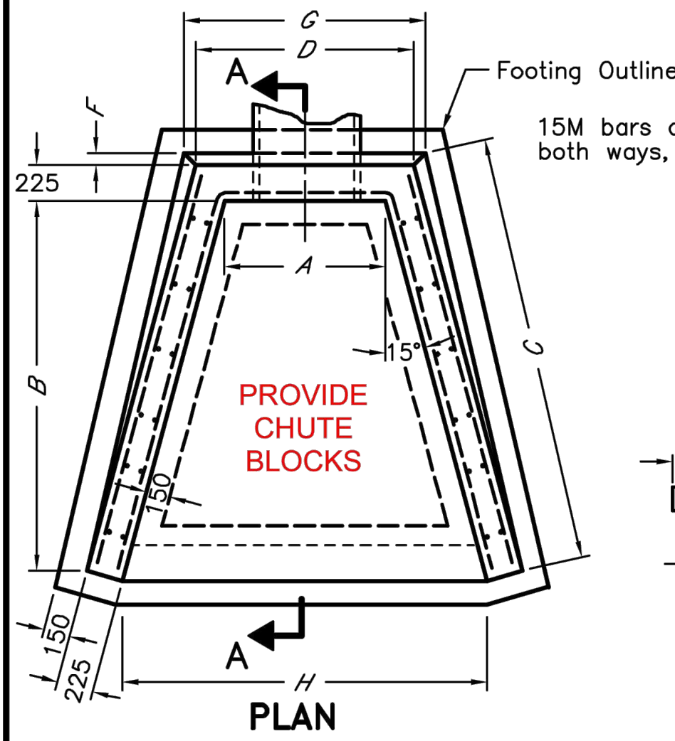
VORTECHS 16000 LAYOUT DETAIL
SCALE 1:50


10.0m
3:1
EMERGENCY SPILLWAY ELEVATION = 104.32
0.18m
TOP OF POND ELEVATION = 104.50
100YR WATER LEVEL ELEVATION = 104.32
RIP-RAP (MIN. 100mmØ)
5YR WL = 103.61
2YR WL = 103.37
25mm WL = 103.17
200mmØ CULVERT @ 0.5% INV = 103.20m
BOTTOM OF POND ELEVATION = 102.65
102.35 INV
2.80m
0.45m
100mmØ PLUG TYPE ICD C/W TRASH BASKET
150mmØ SUB-DRAIN c/w CLEARSTONE

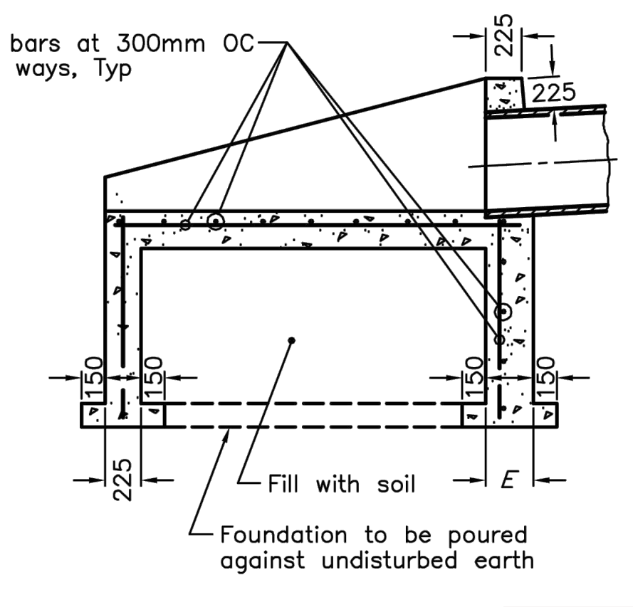
POND 'B' OUTLET STRUCTURE CROSS SECTION B3-B3'
SCALE 1:50


EMERGENCY SPILLWAY (SEE DETAILS THIS PAGE)
9.5m - 200mmØ PVC DR35 STORM PIPE @ 0.5%
EXISTING GROUND
104.32
104.50
103.20(INV)
103.15(INV)
102.65
102.35(S)
EARTH FILL
3
1
102.27 (D)
1.5%
ESTIMATED 1:100YR WATER LEVEL IN EXISTING CARP CREEK = 101.75
101.82
101.08
100mmØ PLUG TYPE ICD c/w TRASH BASKET INV.= 102.35
17.0m - 200mmØ PVC DR35 STORM PIPE @ 0.5%
150mmØ SUB-DRAIN
PROPOSED RIP-RAP (OPSD 810.010) (MIN. 100mmØ)
FRESHET WATER LEVEL IN EXISTING CARP CREEK = 101.41 PER GEMTEC EIS
BASEFLOW WATER LEVEL IN EXISTING CARP CREEK = 101.30 PER GEMTEC EIS

POND 'B' OUTLET STRUCTURE CROSS SECTION B2-B2'
SCALE 1:50


G
D
A
Footing Outline
F
225
B
C
15°
150
H
PROVIDE CHUTE BLOCKS

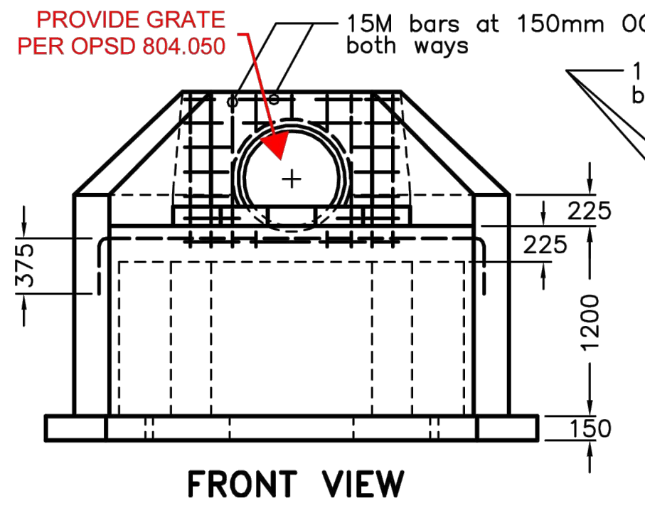
PLAN


15M bars at 300mm OC both ways, Typ
225
150
E
Fill with soil
Foundation to be poured against undisturbed earth

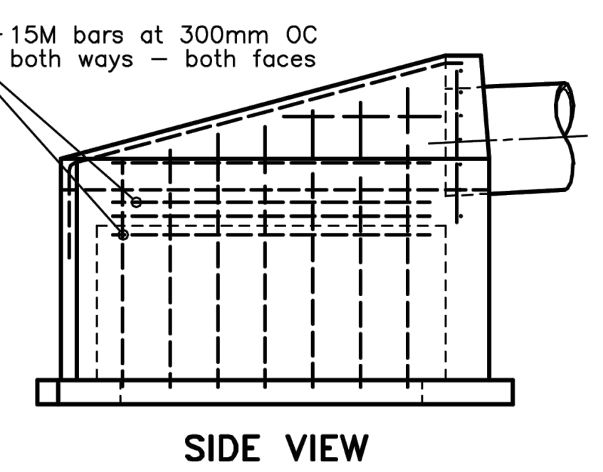
SECTION A–A

PIPE DIA	ENDWALL DIMENSIONS							
	A	B	C	D	E	F	G	H
600	1050	2400	2725	1400	300	75	1525	2350
675	1125	2400	2725	1475	300	75	1600	2425
750	1200	2400	2725	1550	300	75	1675	2500
825	1275	2400	2725	1625	300	75	1755	2575
900	1350	2400	2725	1700	300	75	1825	2650
975	1425	2400	2725	1775	375	150	1975	2725
1050	1500	3000	3400	1850	375	150	2050	3100
1200	1650	3000	3400	2000	375	150	2200	3250
1350	1800	3000	3400	2150	375	150	2350	3400
1500	1950	3000	3400	2300	375	150	2500	3550
1650	2100	3000	3400	2450	375	150	2650	3700
1800	2250	3000	3400	2600	375	150	2800	3850
2400	3000	3000	3400	3350	375	150	3550	4600

OPSD MODIFIED BY NOVATECH NOV. 06/25


PROVIDE GRATE PER OPSD 804.050
15M bars at 150mm OC both ways
375
225
225
1200
150

FRONT VIEW


15M bars at 300mm OC both ways – both faces

SIDE VIEW

NOTES:
- A This OPSD to be read in conjunction with OPSD 3940.150.
- B Class of concrete: 30MPa.
- C Cover to reinforcing bars: 75mm ±20mm.
- D Granular backfill to be placed to 300mm min thickness on all sides.
- E All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2017	Rev 1
CONCRETE HEADWALL FOR SEWER OR CULVERT PIPE OUTLET	OPSD 804.040	

REFER TO 102085-GR8 FOR POND GRADING

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
AS NOTED

DESIGN MLS
CHECKED MJP
DRAWN MJB
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
M. L. SCHROEDER
100213677
Nov. 14, 2025
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

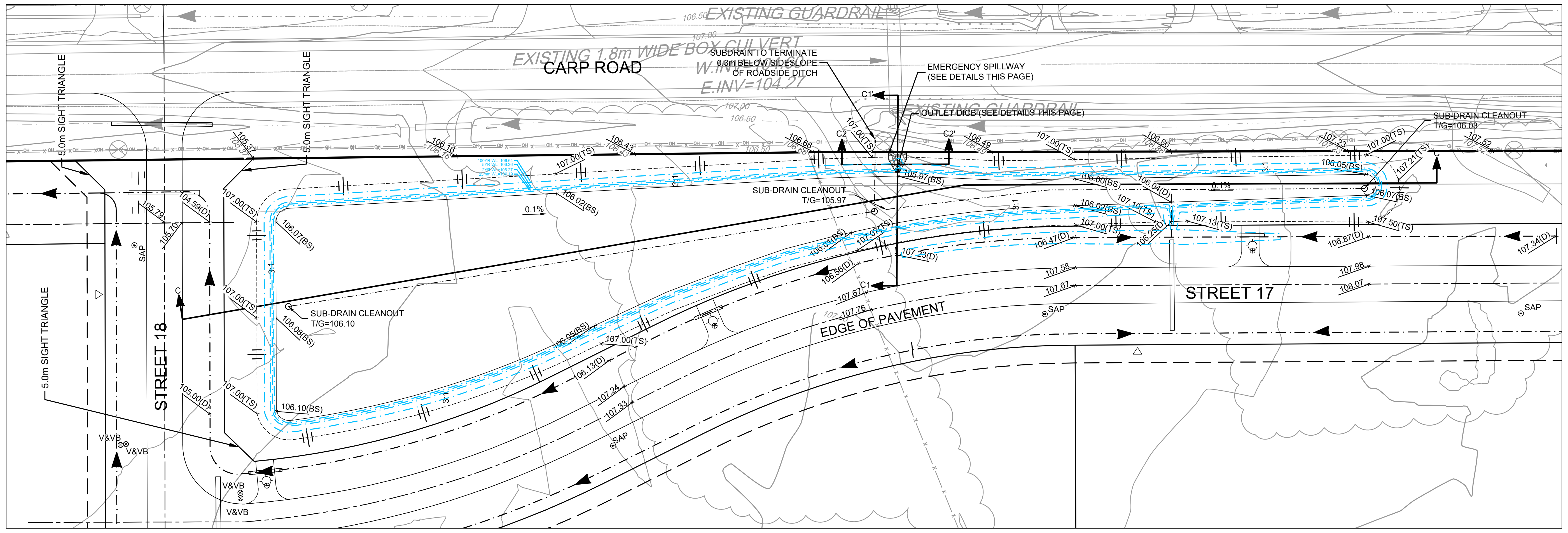
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
STORMWATER MANAGEMENT
POND FACILITY - POND 'B'
LAYOUT AND CROSS SECTIONS

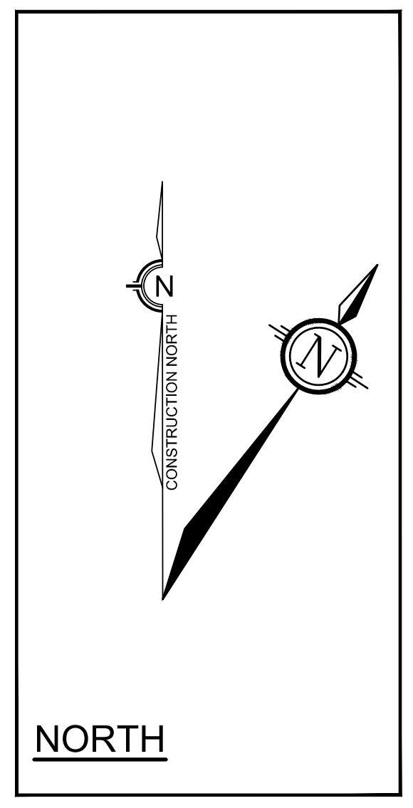
PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-SWMF9

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-SWMF.dwg, SWMF9 (POND B), Nov 14, 2025 - 10:29am, tstaff

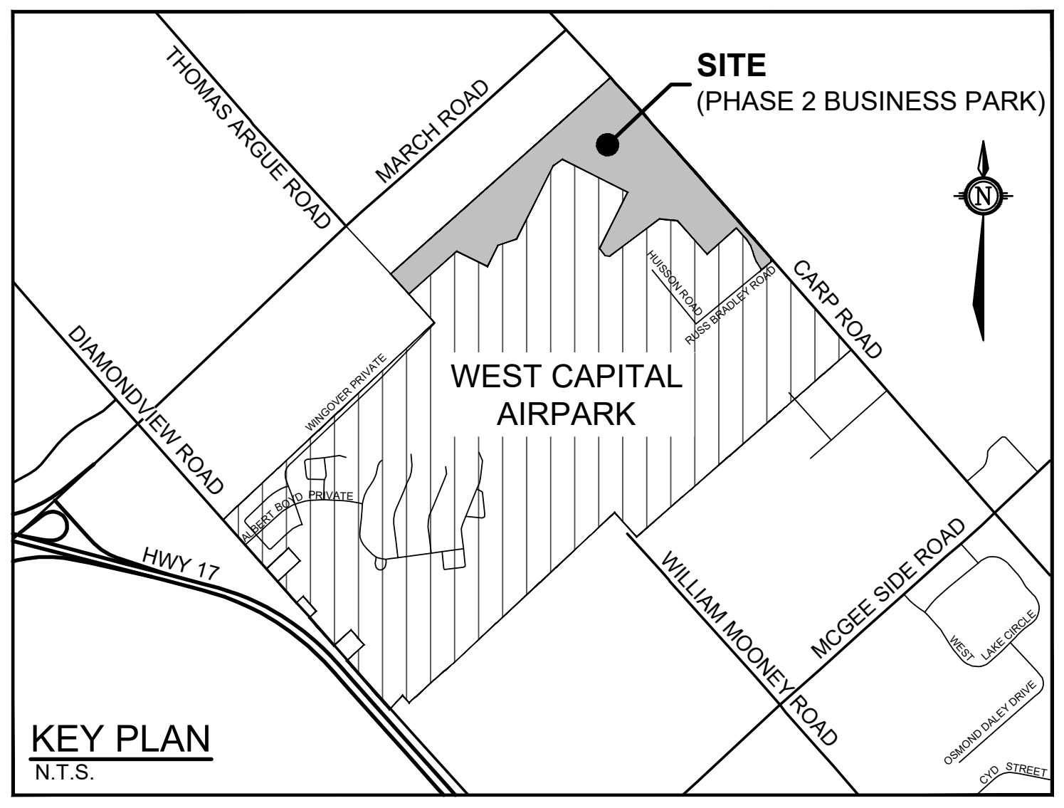
PLANB1.DWG - 1000mmx707mm


EXISTING GUARDRAIL
EXISTING 1.8m WIDE BOX CULVERT
W.INV=104.60
E.INV=104.27
CARP ROAD
SUBDRAIN TO TERMINATE
0.3m BELOW SIDESLOPE
OF ROADSIDE DITCH
EMERGENCY SPILLWAY
(SEE DETAILS THIS PAGE)
OUTLET DICB (SEE DETAILS THIS PAGE)
C1'
C1
C2
C2'
C
SUB-DRAIN CLEANOUT
T/G=105.97
SUB-DRAIN CLEANOUT
T/G=106.10
SUB-DRAIN CLEANOUT
T/G=106.03
5.0m SIGHT TRIANGLE
5.0m SIGHT TRIANGLE
5.0m SIGHT TRIANGLE
STREET 18
STREET 17
EDGE OF PAVEMENT
SAP
V&VB
100YR WL=106.64
5YR WL=106.36
2YR WL=106.27
25mm WL=106.19
0.1%
3:1
105.37
105.79
105.70
104.59(D)
105.00(D)
107.00(TS)
106.07(BS)
106.08(BS)
106.10(BS)
106.16
106.43
106.02(BS)
106.05(BS)
106.13(D)
107.24
107.33
106.66
106.49
105.97(BS)
106.00(BS)
106.04(D)
106.02(BS)
107.10(TS)
106.25(D)
107.13(TS)
106.47(D)
107.23(D)
106.56(D)
106.01(BS)
107.07(TS)
106.86
107.23
107.21(TS)
106.07(BS)
107.50(TS)
106.87(D)
107.34(D)
107.52
107.58
107.67
107.76
107.98
108.07

POND 'C' PLAN VIEW
SCALE 1:500


N
CONSTRUCTION NORTH

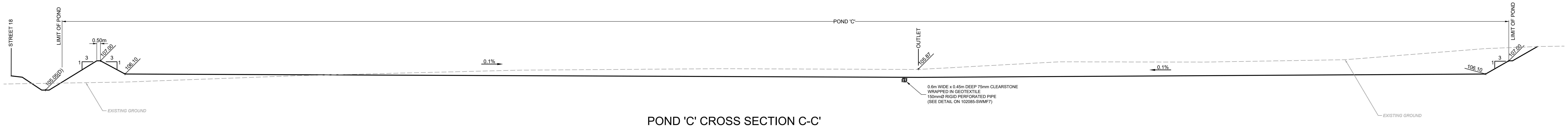
NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WEST CAPITAL AIRPARK
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN
N.T.S.

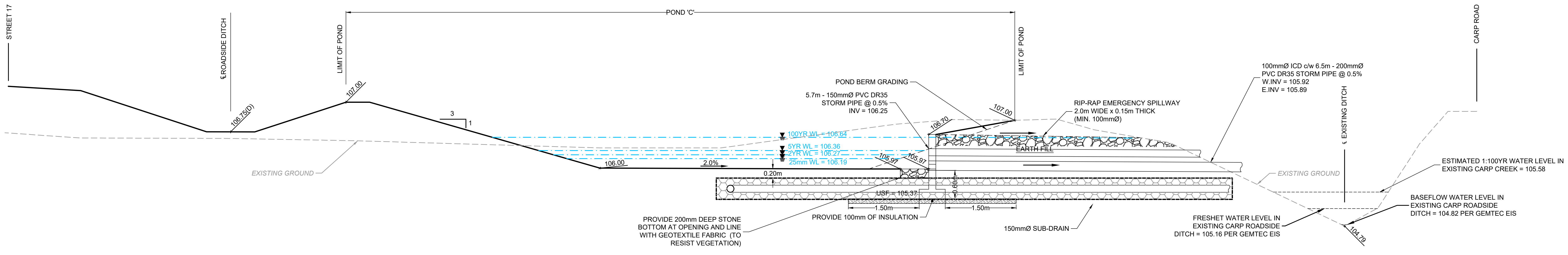
LEGEND

○— —	PROPOSED STORM MH & SEWER
C-1	CULVERT ID PROPOSED CSP CULVERT (REFER TO DRAWING 102085-BPND3)
—— · ▸—	PROPOSED ROADSIDE DITCH
—▶ · ——	CENTRELINE SWALE AND DIRECTION OF FLOW
—··—··—	PROPOSED SUB-DRAIN
3:1	PROPOSED 3:1 SIDESLOPING
•—•—•—•	POST AND RAIL FENCE
▬ ▪ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
⇦	MAJOR OVERLAND FLOW ROUTE
▨	PROPOSED RIP-RAP TREATMENT (OPSD 810.010)
113.88 113.88	PROPOSED ELEVATION EXISTING ELEVATION
113.40(D)	PROPOSED DITCH ELEVATION
111.05(S)	PROPOSED SWALE ELEVATION
111.05(BS)	PROPOSED BOTTOM OF SLOPE ELEVATION
111.05(TB)	PROPOSED TOP OF BANK ELEVATION
←	PROPOSED DRAINAGE FLOW DIRECTION
←	EXISTING DRAINAGE FLOW DIRECTION


STREET 18
LIMIT OF POND
POND 'C'
0.50m
3
1
107.00
3
1
105.05(D)
106.10
0.1%
OUTLET
105.87
0.1%
LIMIT OF POND
107.00
3
1
106.10
EXISTING GROUND
EXISTING GROUND

0.6m WIDE x 0.45m DEEP 75mm CLEARSTONE
WRAPPED IN GEOTEXTILE
150mmØ RIGID PERFORATED PIPE
(SEE DETAIL ON 102085-SWMF7)

POND 'C' CROSS SECTION C-C'
SCALE 1:250


STREET 17
℄ ROADSIDE DITCH
LIMIT OF POND
POND 'C'
LIMIT OF POND
CARP ROAD
℄ EXISTING DITCH
106.75(D)
107.00
3
1
EXISTING GROUND
100YR WL = 106.64
5YR WL = 106.36
2YR WL = 106.27
25mm WL = 106.19
106.00
2.0%
0.20m
105.97
105.97
106.70
107.00
EARTH FILL
USF = 105.37
0.60m
1.50m
1.50m
EXISTING GROUND
104.79

POND BERM GRADING

5.7m - 150mmØ PVC DR35
STORM PIPE @ 0.5%
INV = 106.25

RIP-RAP EMERGENCY SPILLWAY
2.0m WIDE x 0.15m THICK
(MIN. 100mmØ)

100mmØ ICD c/w 6.5m - 200mmØ
PVC DR35 STORM PIPE @ 0.5%
W.INV = 105.92
E.INV = 105.89

ESTIMATED 1:100YR WATER LEVEL IN
EXISTING CARP CREEK = 105.58

BASEFLOW WATER LEVEL IN
EXISTING CARP ROADSIDE
DITCH = 104.82 PER GEMTEC EIS

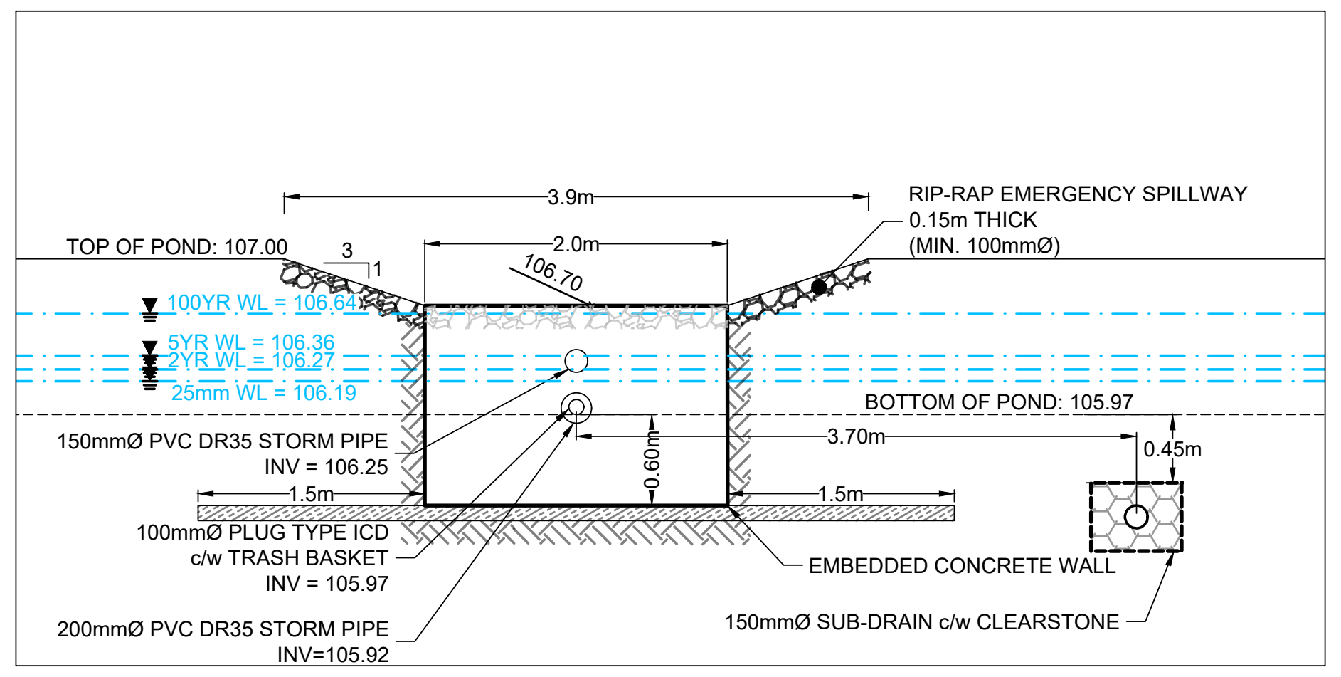
FRESHET WATER LEVEL IN
EXISTING CARP ROADSIDE
DITCH = 105.16 PER GEMTEC EIS

PROVIDE 200mm DEEP STONE
BOTTOM AT OPENING AND LINE
WITH GEOTEXTILE FABRIC (TO
RESIST VEGETATION)

PROVIDE 100mm OF INSULATION

150mmØ SUB-DRAIN

POND 'C' OUTLET STRUCTURE CROSS SECTION C1-C1'
SCALE 1:50


3.9m
2.0m
TOP OF POND: 107.00
3
1
106.70
100YR WL = 106.64
5YR WL = 106.36
2YR WL = 106.27
25mm WL = 106.19
BOTTOM OF POND: 105.97
3.70m
0.45m
0.60m
1.5m
1.5m

RIP-RAP EMERGENCY SPILLWAY
0.15m THICK
(MIN. 100mmØ)

150mmØ PVC DR35 STORM PIPE
INV = 106.25

100mmØ PLUG TYPE ICD
c/w TRASH BASKET
INV = 105.97

200mmØ PVC DR35 STORM PIPE
INV=105.92

EMBEDDED CONCRETE WALL

150mmØ SUB-DRAIN c/w CLEARSTONE

POND 'C' OUTLET STRUCTURE CROSS SECTION C2-C2'
SCALE 1:50

REFER TO 102085-GR8 FOR POND GRADING

NOTE:
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WEST CAPITAL
Developments

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
AS NOTED

DESIGN	MLS
CHECKED	MJP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
M. Schroeder
M. L. SCHROEDER
100213677
Nov. 14, 2025
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

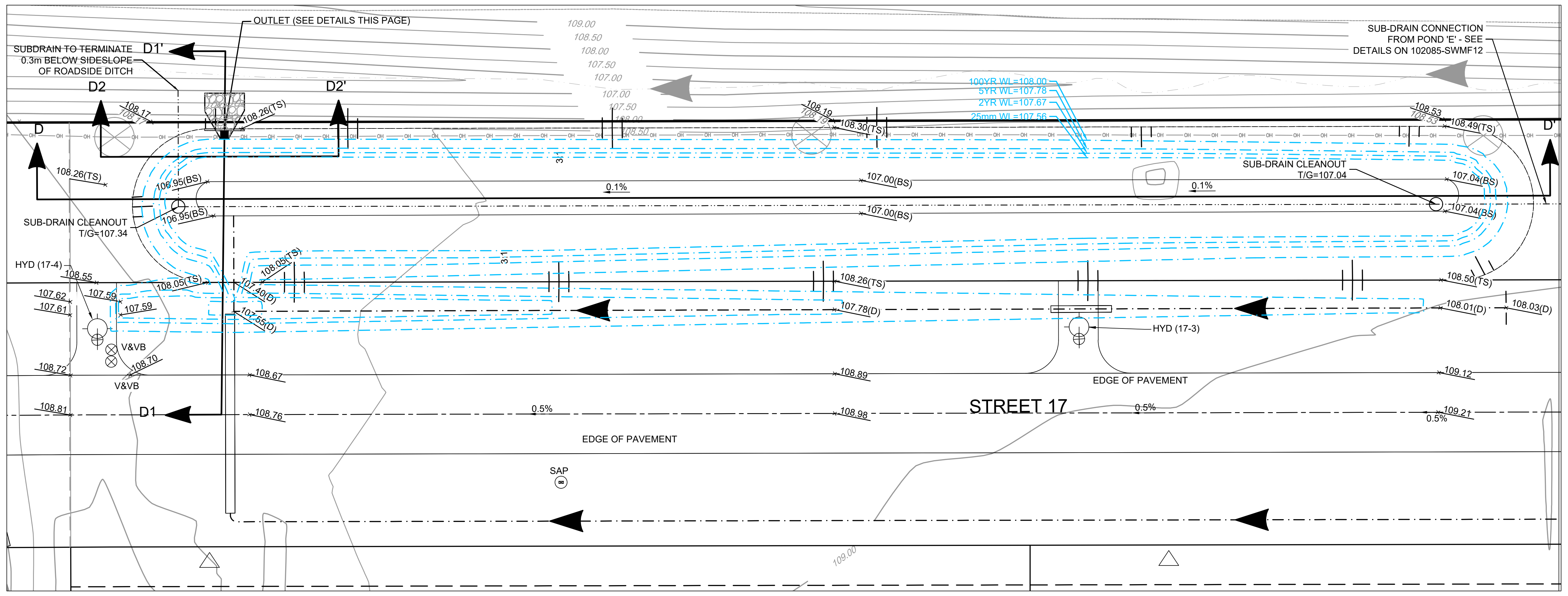
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
STORMWATER MANAGEMENT
POND FACILITY - POND 'C'
LAYOUT AND CROSS SECTIONS

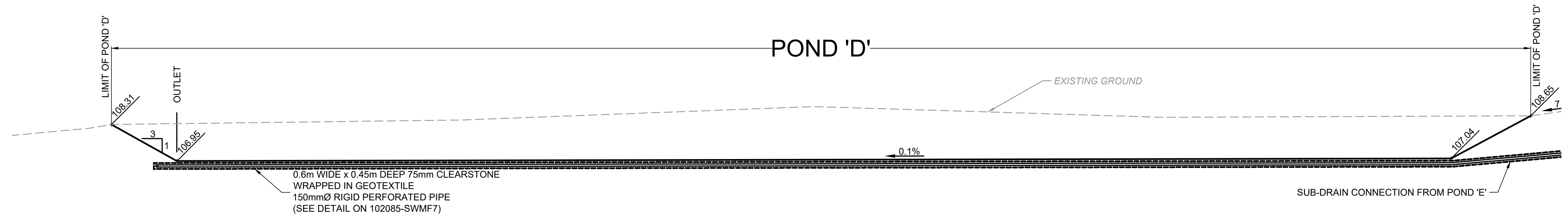
PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-SWMF10

PLANB1.DWG - 1000mmx707mm

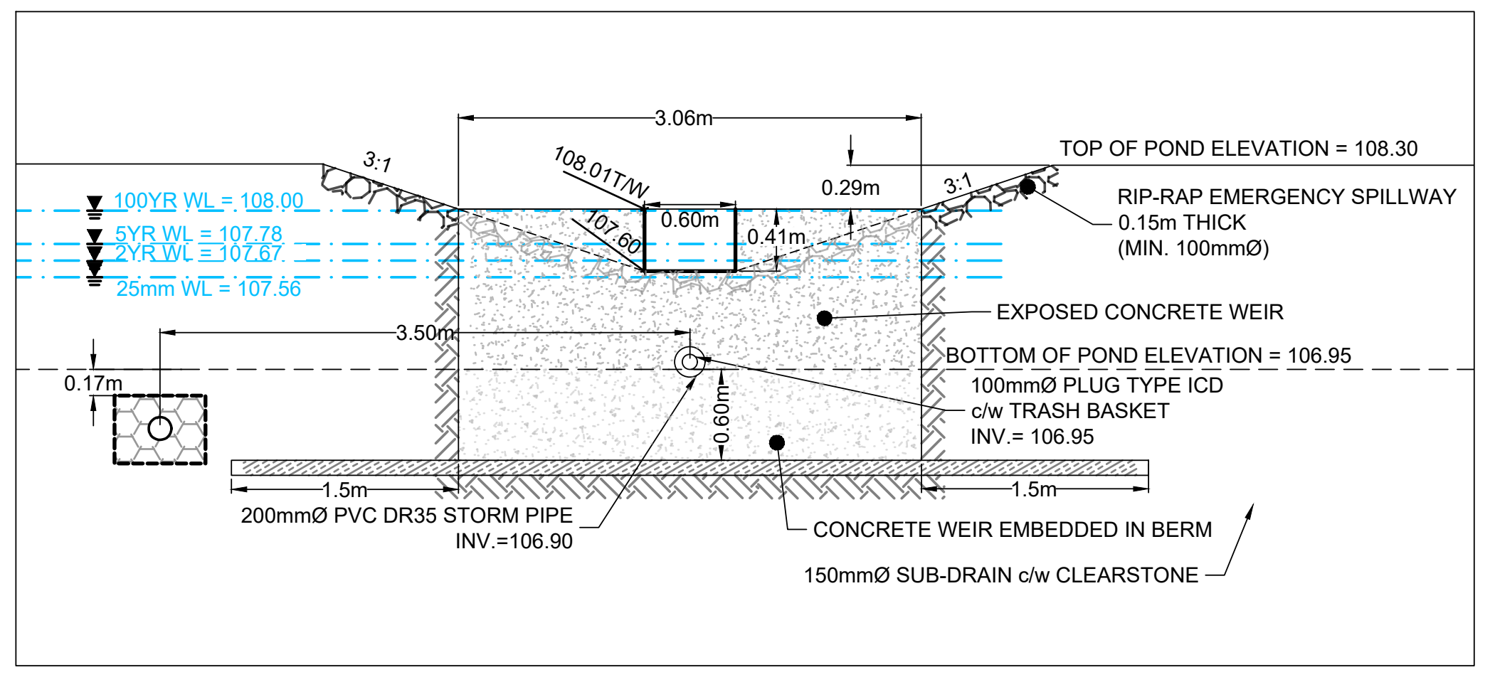
M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-SWMF.dwg, SWMF10 (POND C), Nov 14, 2025 - 10:29am, tstaff


OUTLET (SEE DETAILS THIS PAGE)
SUBDRAIN TO TERMINATE 0.3m BELOW SIDESLOPE OF ROADSIDE DITCH
SUB-DRAIN CONNECTION FROM POND 'E' - SEE DETAILS ON 102085-SWMF12
D1'
D2
D2'
D
D'
100YR WL=108.00
5YR WL=107.78
2YR WL=107.67
25mm WL=107.56
SUB-DRAIN CLEANOUT T/G=107.34
SUB-DRAIN CLEANOUT T/G=107.04
HYD (17-4)
HYD (17-3)
V&VB
EDGE OF PAVEMENT
STREET 17
SAP
0.1%
0.5%
D1

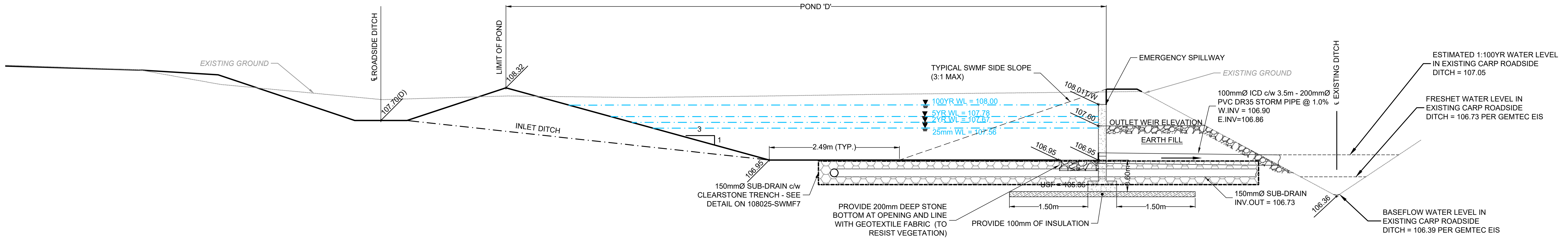
POND 'D' PLAN VIEW
SCALE 1:250


POND 'D'
LIMIT OF POND 'D'
OUTLET
EXISTING GROUND
108.31
106.95
0.1%
107.04
108.65
3
1
0.6m WIDE x 0.45m DEEP 75mm CLEARSTONE WRAPPED IN GEOTEXTILE 150mmØ RIGID PERFORATED PIPE (SEE DETAIL ON 102085-SWMF7)
SUB-DRAIN CONNECTION FROM POND 'E'

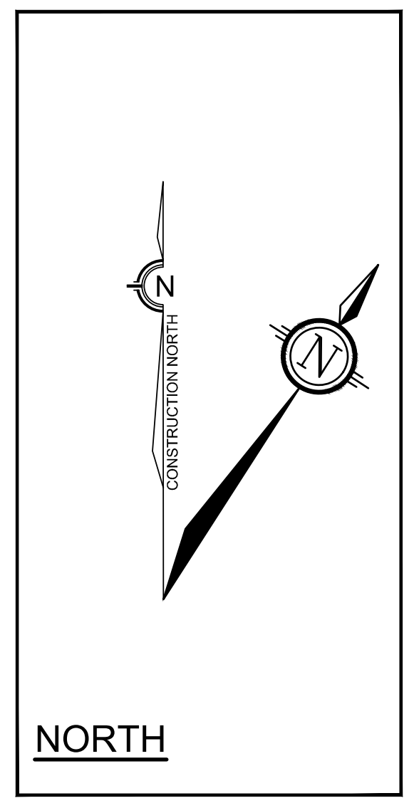
POND 'D' CROSS SECTION D-D'
SCALE 1:250


3.06m
TOP OF POND ELEVATION = 108.30
108.01TW
0.29m
0.60m
0.41m
3:1
RIP-RAP EMERGENCY SPILLWAY 0.15m THICK (MIN. 100mmØ)
100YR WL = 108.00
5YR WL = 107.78
2YR WL = 107.67
25mm WL = 107.56
3.50m
EXPOSED CONCRETE WEIR
BOTTOM OF POND ELEVATION = 106.95
100mmØ PLUG TYPE ICD c/w TRASH BASKET INV.= 106.95
0.17m
0.60m
1.5m
200mmØ PVC DR35 STORM PIPE INV.=106.90
CONCRETE WEIR EMBEDDED IN BERM
150mmØ SUB-DRAIN c/w CLEARSTONE

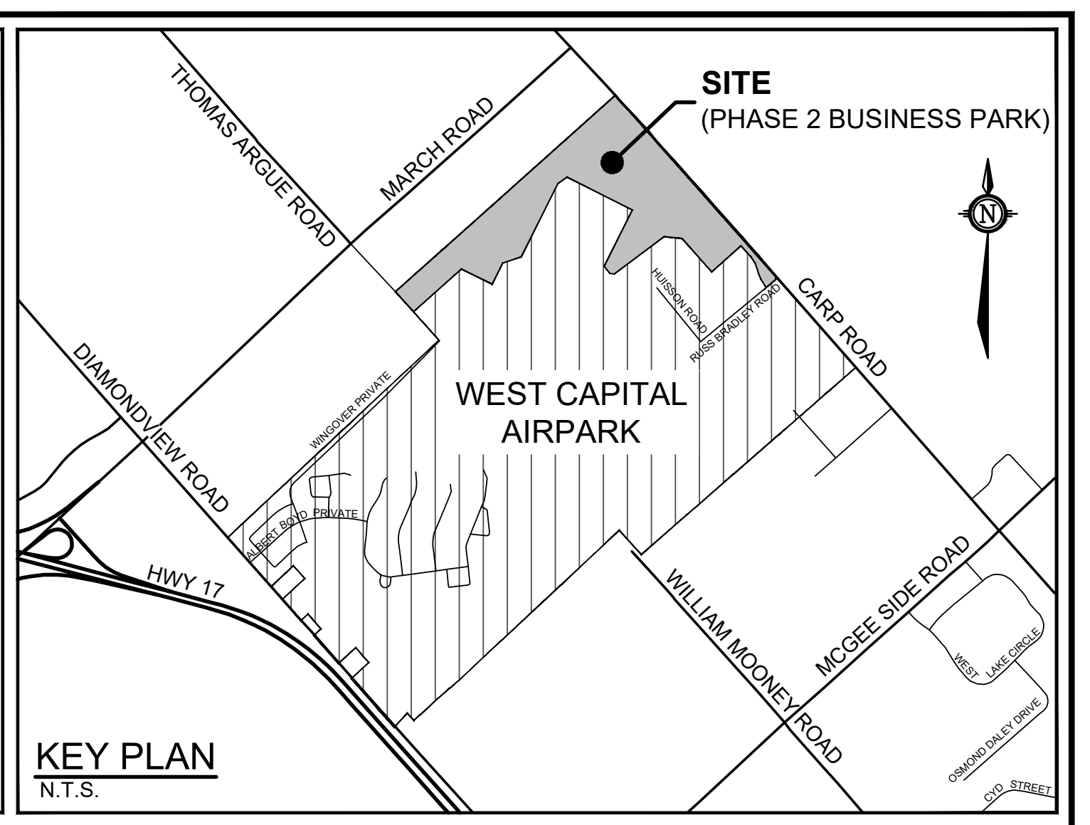
POND 'D' OUTLET STRUCTURE CROSS SECTION D2-D2'
SCALE 1:50


POND 'D'
EXISTING GROUND
℄ ROADSIDE DITCH
LIMIT OF POND
107.70(D)
108.32
INLET DITCH
3
1
106.95
2.49m (TYP.)
150mmØ SUB-DRAIN c/w CLEARSTONE TRENCH - SEE DETAIL ON 108025-SWMF7
TYPICAL SWMF SIDE SLOPE (3:1 MAX)
100YR WL = 108.00
5YR WL = 107.78
2YR WL = 107.67
25mm WL = 107.56
108.01TW
107.60
EMERGENCY SPILLWAY
EXISTING GROUND
OUTLET WEIR ELEVATION
EARTH FILL
106.95
100mmØ ICD c/w 3.5m - 200mmØ PVC DR35 STORM PIPE @ 1.0% W.INV = 106.90 E.INV=106.86
1.50m
1.50m
PROVIDE 200mm DEEP STONE BOTTOM AT OPENING AND LINE WITH GEOTEXTILE FABRIC (TO RESIST VEGETATION)
PROVIDE 100mm OF INSULATION
150mmØ SUB-DRAIN INV.OUT = 106.73
℄ EXISTING DITCH
106.38
ESTIMATED 1:100YR WATER LEVEL IN EXISTING CARP ROADSIDE DITCH = 107.05
FRESHET WATER LEVEL IN EXISTING CARP ROADSIDE DITCH = 106.73 PER GEMTEC EIS
BASEFLOW WATER LEVEL IN EXISTING CARP ROADSIDE DITCH = 106.39 PER GEMTEC EIS

POND 'D' CROSS SECTION D1-D1'
SCALE 1:50


N
CONSTRUCTION NORTH

NORTH


SITE (PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WEST CAPITAL AIRPARK
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

KEY PLAN
N.T.S.

LEGEND

o— —	PROPOSED STORM MH & SEWER
C-1	CULVERT ID PROPOSED CSP CULVERT (REFER TO DRAWING 102085-BPND3)
—·→—	PROPOSED ROADSIDE DITCH
➤·—	CENTRELINE SWALE AND DIRECTION OF FLOW
—··—··—	PROPOSED SUB-DRAIN
3:1	PROPOSED 3:1 SIDESLOPING
•—•—•—•	POST AND RAIL FENCE
▬ ▪ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
⇦	MAJOR OVERLAND FLOW ROUTE
▨	PROPOSED RIP-RAP TREATMENT (OPSD 810.010)
113.88 113.88	PROPOSED ELEVATION EXISTING ELEVATION
113.40(D)	PROPOSED DITCH ELEVATION
111.05(S)	PROPOSED SWALE ELEVATION
111.05(BS)	PROPOSED BOTTOM OF SLOPE ELEVATION
111.05(TB)	PROPOSED TOP OF BANK ELEVATION
←	PROPOSED DRAINAGE FLOW DIRECTION
←	EXISTING DRAINAGE FLOW DIRECTION

REFER TO 102085-GR9 FOR POND GRADING

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-SWMF.dwg, SWMF11 (POND D), Nov 14, 2025 - 10:29am, tstaff

NOTE:
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WEST CAPITAL
Developments

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
AS NOTED

DESIGN MLS
CHECKED MJP
DRAWN MJB
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
M. L. SCHROEDER
100213677
Nov. 14, 2025
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

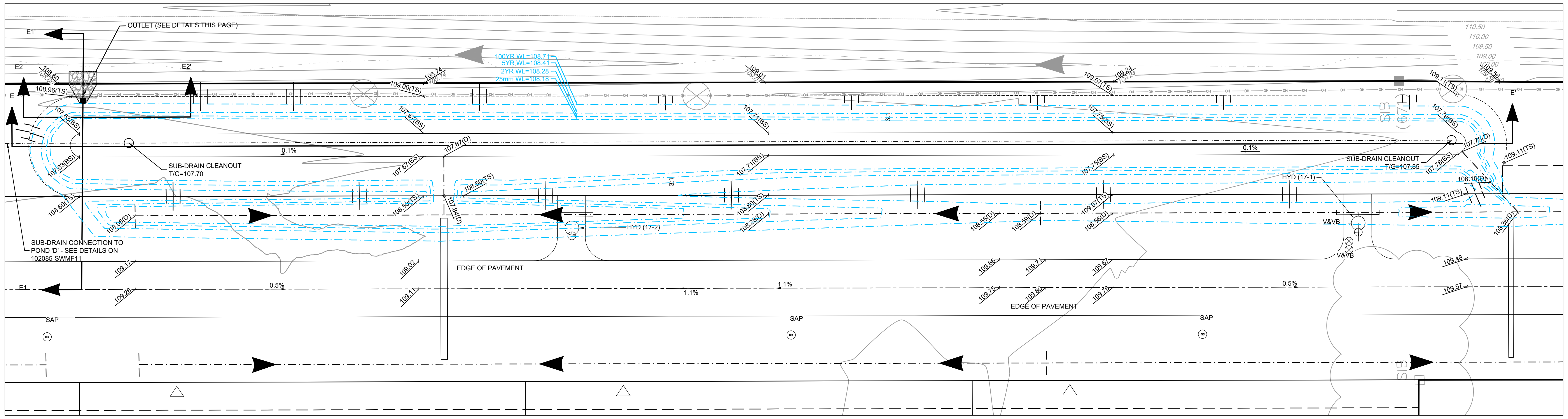
NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

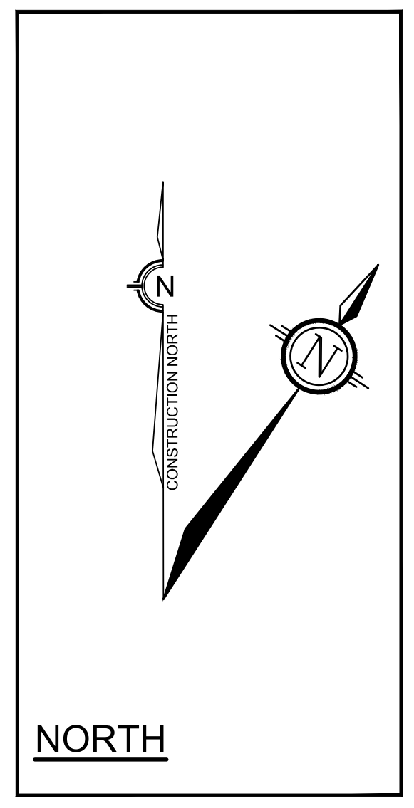
DRAWING NAME
LINEAR STORMWATER MANAGEMENT POND FACILITY - POND 'D' LAYOUT AND CROSS SECTIONS

PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-SWMF11

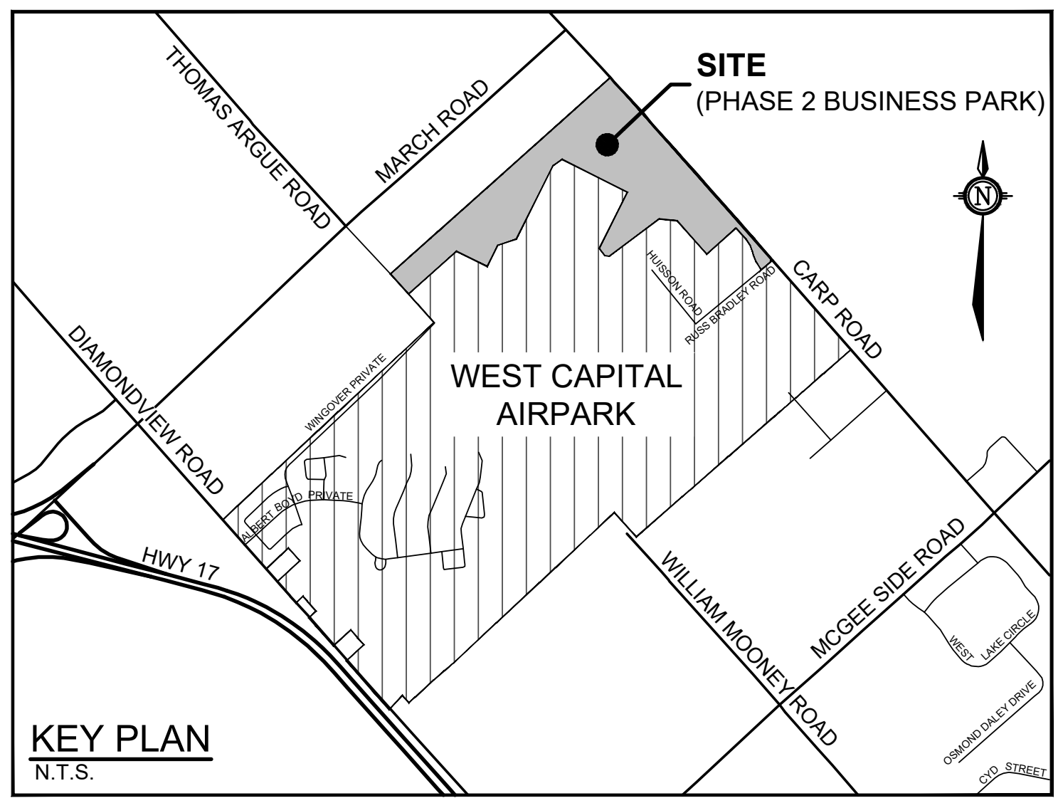
PLANB1.DWG - 1000mmx707mm


OUTLET (SEE DETAILS THIS PAGE)
E1'
E2
E2'
E
E'
E1
108.60
108.96(TS)
107.63(BS)
108.60(TS)
108.06(D)
SUB-DRAIN CLEANOUT
T/G=107.70
SUB-DRAIN CONNECTION TO POND 'D' - SEE DETAILS ON 102085-SWMF11
100YR WL=108.71
5YR WL=108.41
2YR WL=108.28
25mm WL=108.18
108.74
109.00(TS)
107.67(BS)
107.67(D)
108.50(TS)
107.84(D)
109.01
107.71(BS)
108.80(TS)
108.28(D)
HYD (17-2)
HYD (17-1)
0.1%
0.5%
1.1%
3:1
EDGE OF PAVEMENT
SAP
109.17
109.26
109.02
109.11
109.24
109.07(TS)
107.75(BS)
108.55(D)
108.59(D)
109.07(TS)
108.56(D)
109.66
109.71
109.67
109.75
109.80
109.76
109.11(TS)
107.79(BS)
107.78(D)
107.78(BS)
SUB-DRAIN CLEANOUT
T/G=107.85
108.10(D)
109.11(TS)
108.36(D)
109.56
V&VB
109.48
109.57
110.50
110.00
109.50
109.00

POND 'E' PLAN VIEW
SCALE 1:250


CONSTRUCTION NORTH
N

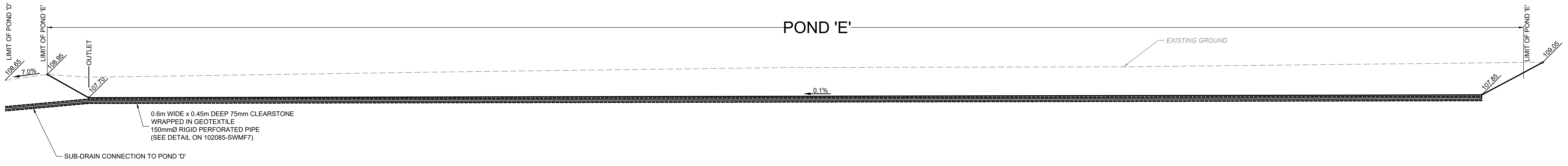
NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WEST CAPITAL AIRPARK
WINGOVER PRIVATE
ALBERT BOYD PRIVATE
HUISSON ROAD
RUSS BRADLEY ROAD
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

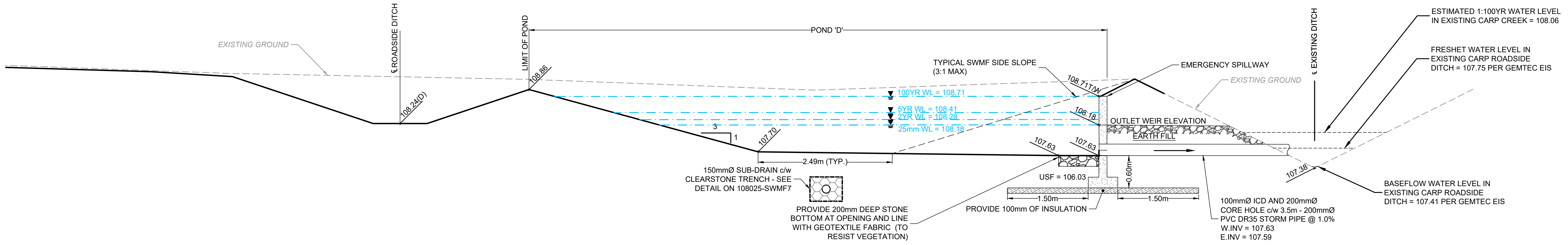
KEY PLAN
N.T.S.

LEGEND

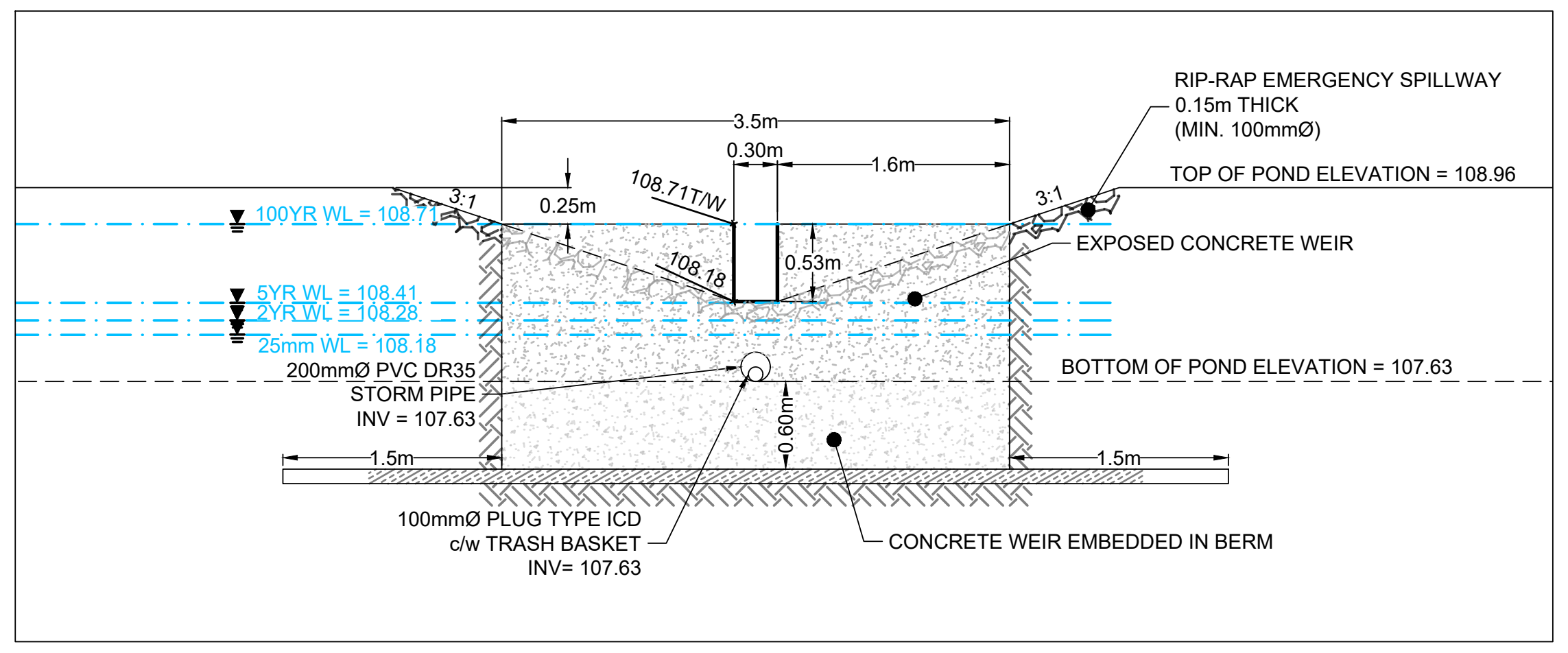
○— —	PROPOSED STORM MH & SEWER
C-1	CULVERT ID PROPOSED CSP CULVERT (REFER TO DRAWING 102085-BPND3)
—— · —▶—	PROPOSED ROADSIDE DITCH
—▶ · ——	CENTRELINE SWALE AND DIRECTION OF FLOW
—··—··—··—	PROPOSED SUB-DRAIN
3:1	PROPOSED 3:1 SIDESLOPING
●—●—●—●	POST AND RAIL FENCE
▬ ▪ ▪ ▬	LIMIT OF DEVELOPMENT (NO TOUCH)
⇦	MAJOR OVERLAND FLOW ROUTE
▨	PROPOSED RIP-RAP TREATMENT (OPSD 810.010)
113.88 113.88	PROPOSED ELEVATION EXISTING ELEVATION
113.40(D)	PROPOSED DITCH ELEVATION
111.05(S)	PROPOSED SWALE ELEVATION
111.05(BS)	PROPOSED BOTTOM OF SLOPE ELEVATION
111.05(TB)	PROPOSED TOP OF BANK ELEVATION
←	PROPOSED DRAINAGE FLOW DIRECTION
←	EXISTING DRAINAGE FLOW DIRECTION


LIMIT OF POND 'D'
LIMIT OF POND 'E'
OUTLET
POND 'E'
LIMIT OF POND 'E'
108.65
7.0%
108.95
107.70
EXISTING GROUND
0.1%
107.85
109.05
0.6m WIDE x 0.45m DEEP 75mm CLEARSTONE
WRAPPED IN GEOTEXTILE
150mmØ RIGID PERFORATED PIPE
(SEE DETAIL ON 102085-SWMF7)
SUB-DRAIN CONNECTION TO POND 'D'

POND 'E' CROSS SECTION E-E'
SCALE 1:250


EXISTING GROUND
℄ ROADSIDE DITCH
108.24(D)
LIMIT OF POND
108.86
POND 'D'
3
1
107.70
2.49m (TYP.)
150mmØ SUB-DRAIN c/w
CLEARSTONE TRENCH - SEE
DETAIL ON 108025-SWMF7
PROVIDE 200mm DEEP STONE
BOTTOM AT OPENING AND LINE
WITH GEOTEXTILE FABRIC (TO
RESIST VEGETATION)
TYPICAL SWMF SIDE SLOPE
(3:1 MAX)
100YR WL = 108.71
5YR WL = 108.41
2YR WL = 108.28
25mm WL = 108.18
108.71T/W
108.18
107.63
107.63
EMERGENCY SPILLWAY
EXISTING GROUND
OUTLET WEIR ELEVATION
EARTH FILL
USF = 106.03
0.60m
1.50m
1.50m
PROVIDE 100mm OF INSULATION
100mmØ ICD AND 200mmØ
CORE HOLE c/w 3.5m - 200mmØ
PVC DR35 STORM PIPE @ 1.0%
W.INV = 107.63
E.INV = 107.59
℄ EXISTING DITCH
107.38
ESTIMATED 1:100YR WATER LEVEL
IN EXISTING CARP CREEK = 108.06
FRESHET WATER LEVEL IN
EXISTING CARP ROADSIDE
DITCH = 107.75 PER GEMTEC EIS
BASEFLOW WATER LEVEL IN
EXISTING CARP ROADSIDE
DITCH = 107.41 PER GEMTEC EIS

POND 'E' CROSS SECTION E1-E1'
SCALE 1:50


3.5m
0.30m
1.6m
108.71T/W
0.25m
3:1
3:1
100YR WL = 108.71
5YR WL = 108.41
2YR WL = 108.28
25mm WL = 108.18
108.18
0.53m
200mmØ PVC DR35
STORM PIPE
INV = 107.63
0.60m
1.5m
1.5m
100mmØ PLUG TYPE ICD
c/w TRASH BASKET
INV= 107.63
RIP-RAP EMERGENCY SPILLWAY
0.15m THICK
(MIN. 100mmØ)
TOP OF POND ELEVATION = 108.96
EXPOSED CONCRETE WEIR
BOTTOM OF POND ELEVATION = 107.63
CONCRETE WEIR EMBEDDED IN BERM

POND 'E' OUTLET STRUCTURE CROSS SECTION E2-E2'
SCALE 1:50

REFER TO 102085-GR9 FOR POND GRADING

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

WEST CAPITAL
Developments

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
AS NOTED

DESIGN	MLS
CHECKED	MJP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

M. L. SCHROEDER
100213677
Nov. 14, 2025

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
LINEAR STORMWATER
MANAGEMENT POND
FACILITY - POND 'E'
LAYOUT AND CROSS SECTIONS

PROJECT No.
102085-14
REV
REV # 2
DRAWING No.
102085-SWMF12

PLANB1.DWG - 1000mmx707mm

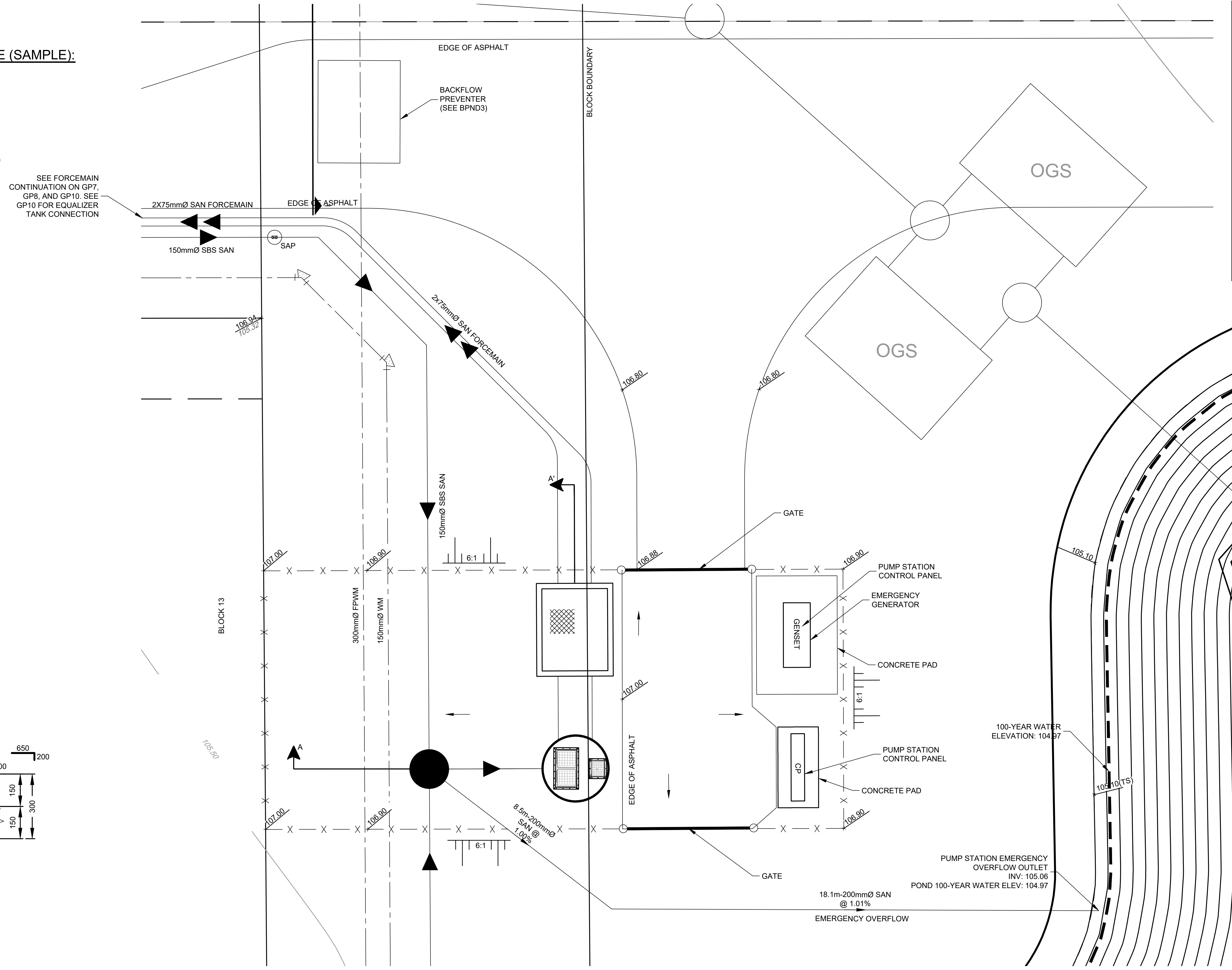
M:\2020\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-SWMF.dwg, SWMF12 (POND E), Nov 14, 2025 - 10:29am, tstaff

LEGEND (TBC)

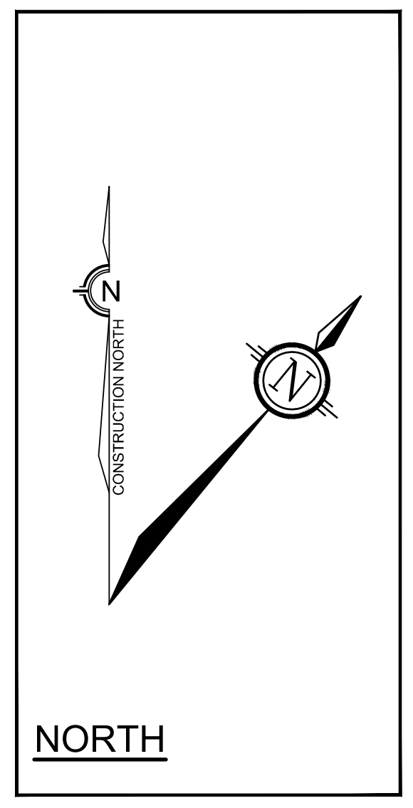
—○—	PROPOSED STORM MH & SEWER
C-1	CULVERT ID PROPOSED CSP CULVERT (REFER TO DRAWING 102085-NT)
— - ► - —	PROPOSED ROADSIDE DITCH
SWALE @ 0.10%	C SWALE AND DIRECTION OF FLOW
6:1	PROPOSED 6:1 SIDESLOPING
←	EXISTING DRAINAGE FLOW DIRECTION
⇦	MAJOR OVERLAND FLOW ROUTE
▨	PROPOSED RIP-RAP TREATMENT (OPSD 810.010)
113.88 113.88	PROPOSED ELEVATION EXISTING ELEVATION
113.40(D)	PROPOSED DITCH ELEVATION
111.05(S)	PROPOSED SWALE ELEVATION
←	PROPOSED DRAINAGE FLOW DIRECTION

PAVEMENT STRUCTURE (SAMPLE):

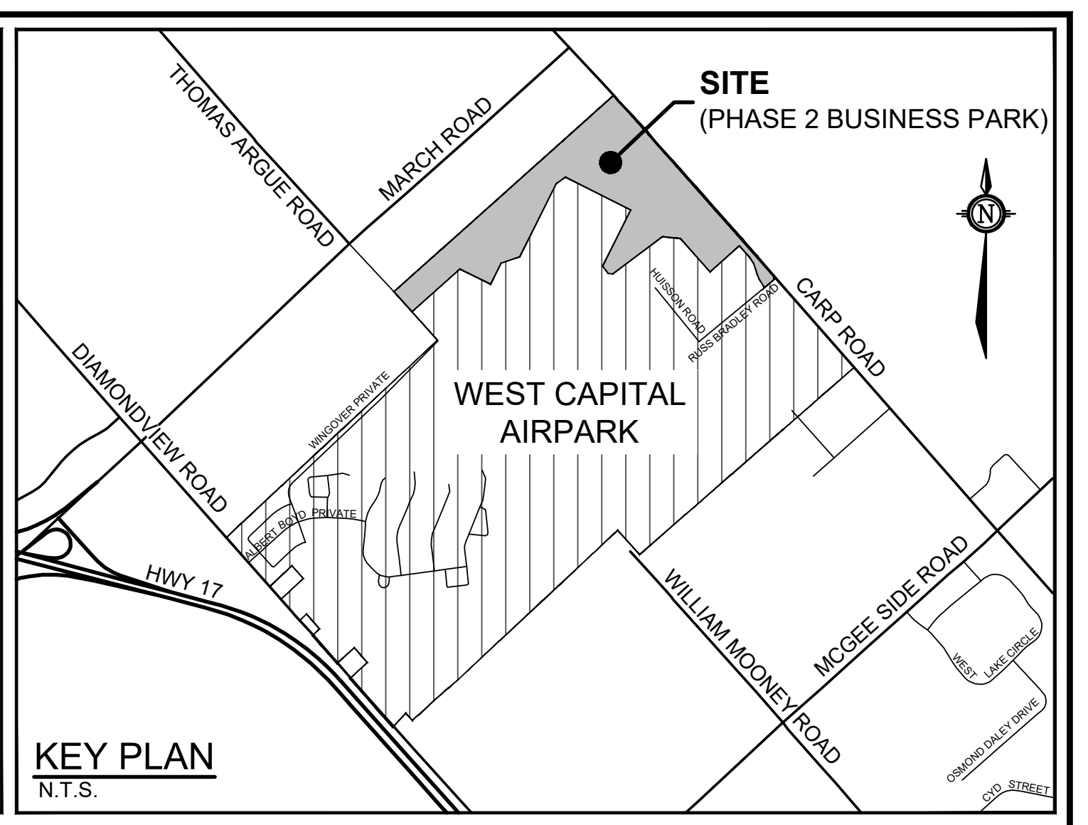
▨	HEAVY DUTY 40mm HL3 50mm HL8 150mm GRAN "A" 400mm GRAN "B" TYPE II
▨	GRAVEL PAD 500mm GRAN "A" (TO BE CONFIRMED WITH GEOTECHNICAL CONSULTANT)


SEE FORCEMAIN CONTINUATION ON GP7, GP8, AND GP10. SEE GP10 FOR EQUALIZER TANK CONNECTION
EDGE OF ASPHALT
BACKFLOW PREVENTER (SEE BPND3)
BLOCK BOUNDARY
OGS
OGS
2X75mmØ SAN FORCEMAIN
EDGE OF ASPHALT
150mmØ SBS SAN
SAP
106.94
105.32
2x75mmØ SAN FORCEMAIN
106.80
106.80
A'
150mmØ SBS SAN
GATE
107.00
106.90
6:1
106.88
106.90
105.10
PUMP STATION CONTROL PANEL
EMERGENCY GENERATOR
GENSET
CONCRETE PAD
BLOCK 13
300mmØ FPWM
150mmØ WM
107.00
6:1
EDGE OF ASPHALT
105.50
A
100-YEAR WATER ELEVATION: 104.97
PUMP STATION CONTROL PANEL
CP
CONCRETE PAD
105.10(TS)
107.00
106.90
8.5m-200mmØ SAN @ 1.00%
6:1
106.90
GATE
PUMP STATION EMERGENCY OVERFLOW OUTLET INV: 105.06
POND 100-YEAR WATER ELEV: 104.97
18.1m-200mmØ SAN @ 1.01%
EMERGENCY OVERFLOW

SANITARY PUMP STATION PLAN VIEW
SCALE 1:100


N
CONSTRUCTION NORTH
N

NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
WINGOVER PRIVATE
WEST CAPITAL AIRPARK
HUISSON ROAD
RUSS BRADLEY ROAD
ALBERT BOYD PRIVATE
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

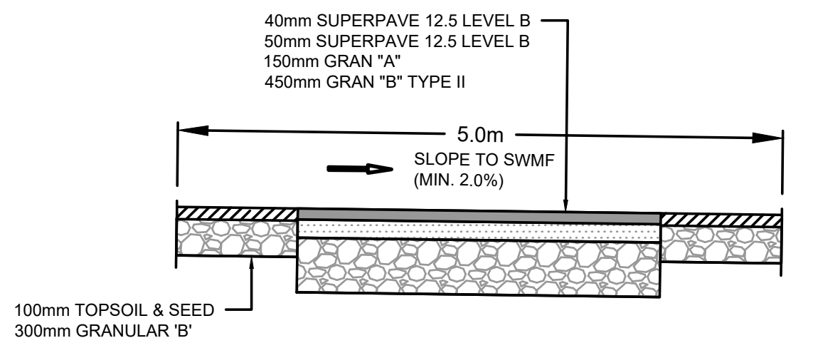
KEY PLAN
N.T.S.

GENERAL NOTES:

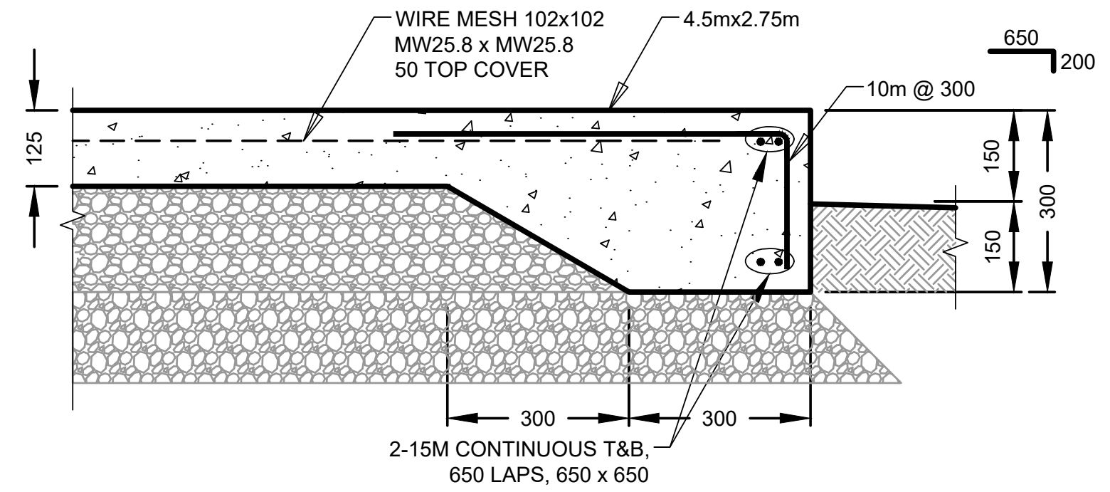
1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR $2,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
5. 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 THE ENGINEER.
6. 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.
7. ALL ELEVATIONS ARE GEODETIC.
8. REFER TO GEOTECHNICAL REPORT (No. PG2450-2, DATED JULY 22, 2013), PREPARED BY PATERSON GROUP INC. 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.
9. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

GRADING NOTES:

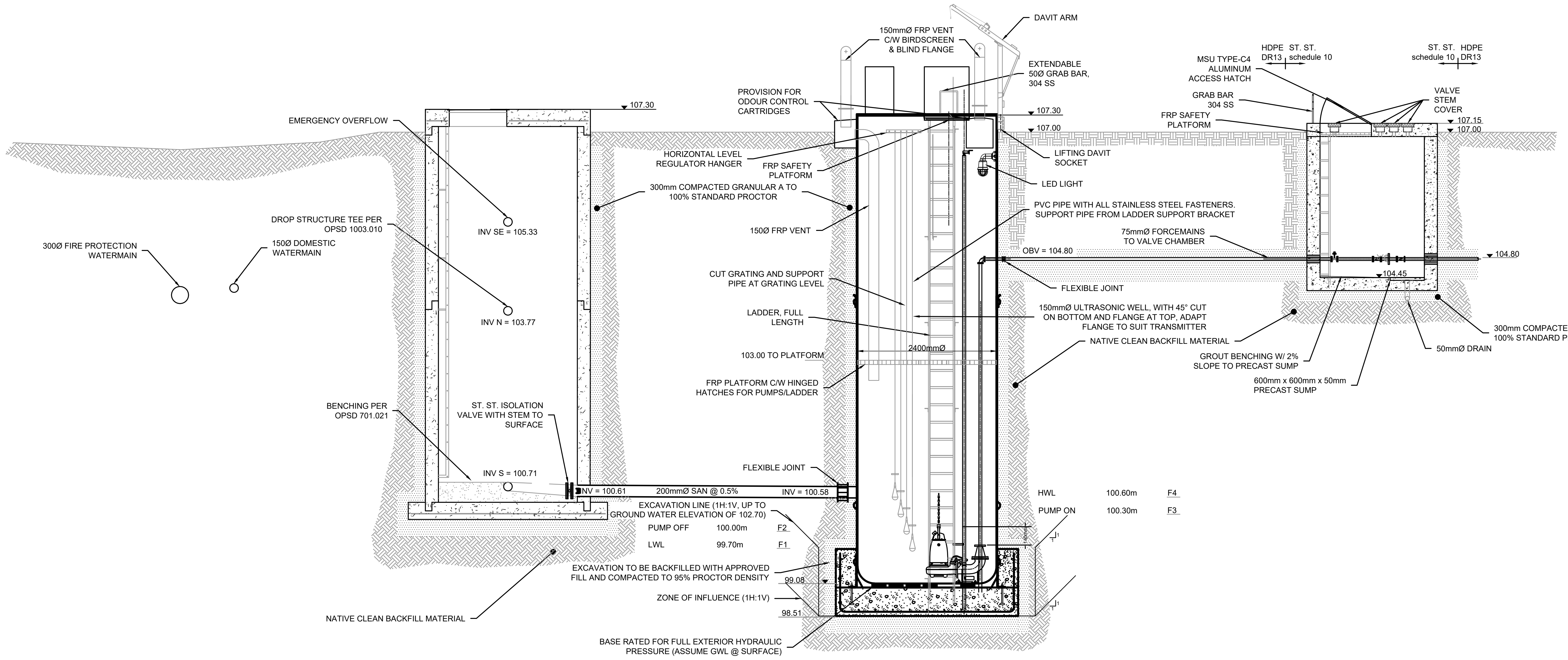
1. ALL WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARDS.
2. CULVERTS ARE TO BE INSTALLED MIN 1/10th THEIR DIAMETER BELOW INVERT OF DITCH.
3. ROADWAY CROSSING CULVERTS ARE TO BE INSTALLED PER OPSD 802.010. PROVIDE FROST TAPERS PER OPSD 803.030.
4. ENSURE POSITIVE DRAINAGE WHETHER INDICATED OR NOT.
5. MATCH EXISTING ELEVATIONS AT ALL BOUNDARIES WITH ADJACENT LANDS.
6. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
7. MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
8. UNDERSIDE OF GRAVEL TO GEOTECHNICAL ENGINEERS RECOMMENDATIONS.
9. THE PROPOSED PERIMETER SWALE IS TO BE TREATED WITH TOPSOIL, HYDROSEED AND MULCH AS SOON AS IS PRACTICAL AFTER CONSTRUCTION OF THE SWALE.


40mm SUPERPAVE 12.5 LEVEL B
50mm SUPERPAVE 12.5 LEVEL B
150mm GRAN "A"
450mm GRAN "B" TYPE II
5.0m
SLOPE TO SWMF (MIN. 2.0%)
100mm TOPSOIL & SEED
300mm GRANULAR 'B'

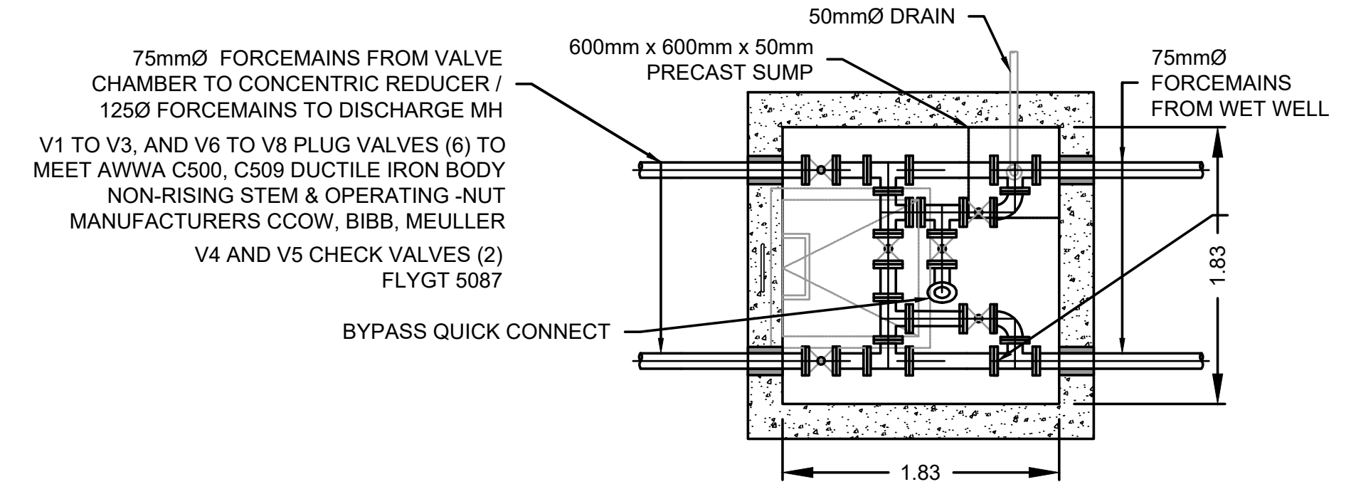
5.0m ACCESS ROUTE DETAIL
N . T . S .


WIRE MESH 102x102 MW25.8 x MW25.8 50 TOP COVER
4.5mx2.75m
650
200
10m @ 300
125
150
150
300
300
300
2-15M CONTINUOUS T&B, 650 LAPS, 650 x 650 L-BARS AT CORNERS

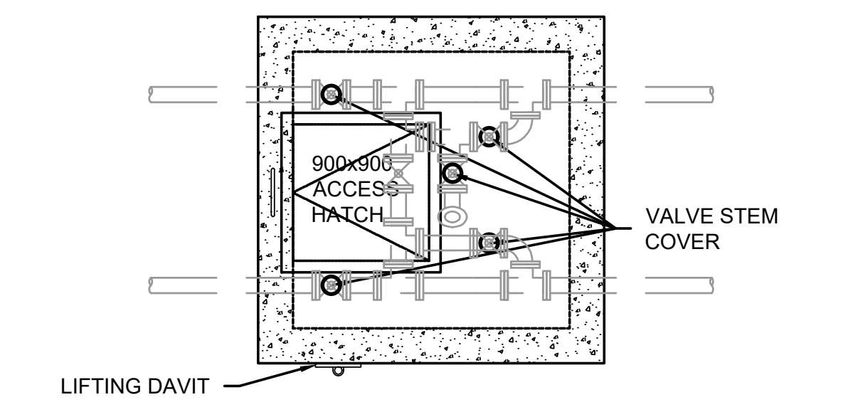
CONCRETE PAD DETAIL
N . T . S .


EMERGENCY OVERFLOW
107.30
DROP STRUCTURE TEE PER OPSD 1003.010
INV SE = 105.33
300Ø FIRE PROTECTION WATERMAIN
150Ø DOMESTIC WATERMAIN
INV N = 103.77
BENCHING PER OPSD 701.021
ST. ST. ISOLATION VALVE WITH STEM TO SURFACE
INV S = 100.71
INV = 100.61
200mmØ SAN @ 0.5%
INV = 100.58
NATIVE CLEAN BACKFILL MATERIAL
PROVISION FOR ODOUR CONTROL CARTRIDGES
HORIZONTAL LEVEL REGULATOR HANGER
FRP SAFETY PLATFORM
300mm COMPACTED GRANULAR A TO 100% STANDARD PROCTOR
150Ø FRP VENT
CUT GRATING AND SUPPORT PIPE AT GRATING LEVEL
LADDER, FULL LENGTH
103.00 TO PLATFORM
FRP PLATFORM C/W HINGED HATCHES FOR PUMPS/LADDER
FLEXIBLE JOINT
EXCAVATION LINE (1H:1V, UP TO GROUND WATER ELEVATION OF 102.70)
PUMP OFF 100.00m F2
LWL 99.70m F1
EXCAVATION TO BE BACKFILLED WITH APPROVED FILL AND COMPACTED TO 95% PROCTOR DENSITY
99.08
ZONE OF INFLUENCE (1H:1V)
98.51
BASE RATED FOR FULL EXTERIOR HYDRAULIC PRESSURE (ASSUME GWL @ SURFACE)
150mmØ FRP VENT C/W BIRDSCREEN & BLIND FLANGE
DAVIT ARM
EXTENDABLE 50Ø GRAB BAR, 304 SS
107.30
107.00
LIFTING DAVIT SOCKET
LED LIGHT
PVC PIPE WITH ALL STAINLESS STEEL FASTENERS. SUPPORT PIPE FROM LADDER SUPPORT BRACKET
OBV = 104.80
75mmØ FORCEMAINS TO VALVE CHAMBER
FLEXIBLE JOINT
150mmØ ULTRASONIC WELL, WITH 45° CUT ON BOTTOM AND FLANGE AT TOP, ADAPT FLANGE TO SUIT TRANSMITTER
NATIVE CLEAN BACKFILL MATERIAL
2400mmØ
HWL 100.60m F4
PUMP ON 100.30m F3
140mm
1
1
MSU TYPE-C4 ALUMINUM ACCESS HATCH
HDPE DR13
ST. ST. schedule 10
ST. ST. schedule 10
HDPE DR13
GRAB BAR 304 SS
FRP SAFETY PLATFORM
VALVE STEM COVER
107.15
107.00
104.80
104.45
GROUT BENCHING W/ 2% SLOPE TO PRECAST SUMP
600mm x 600mm x 50mm PRECAST SUMP
50mmØ DRAIN
300mm COMPACTED GRANULAR A TO 100% STANDARD PROCTOR

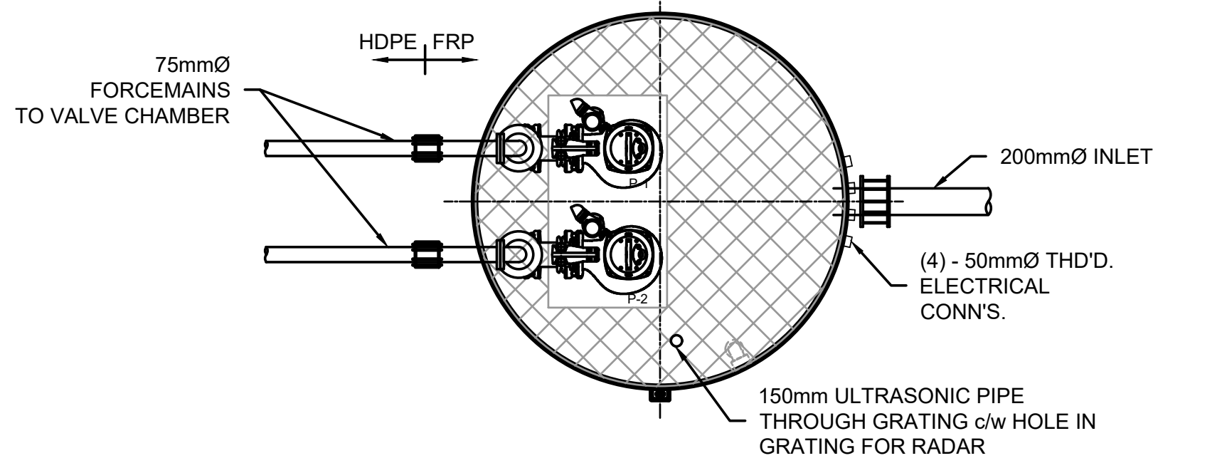
SECTION A-A' - PUMP STATION AND VALVE CHAMBERS
SCALE 1 : 50


HDPE DR13
ST. ST. schedule 10
ST. ST. schedule 10
HDPE DR13
50mmØ DRAIN
600mm x 600mm x 50mm PRECAST SUMP
75mmØ FORCEMAINS FROM VALVE CHAMBER TO CONCENTRIC REDUCER / 125Ø FORCEMAINS TO DISCHARGE MH
75mmØ FORCEMAINS FROM WET WELL
V1 TO V3, AND V6 TO V8 PLUG VALVES (6) TO MEET AWWA C500, C509 DUCTILE IRON BODY NON-RISING STEM & OPERATING -NUT MANUFACTURERS CCOW, BIBB, MEULLER
V4 AND V5 CHECK VALVES (2) FLYGT 5087
BYPASS QUICK CONNECT
1.83
1.83

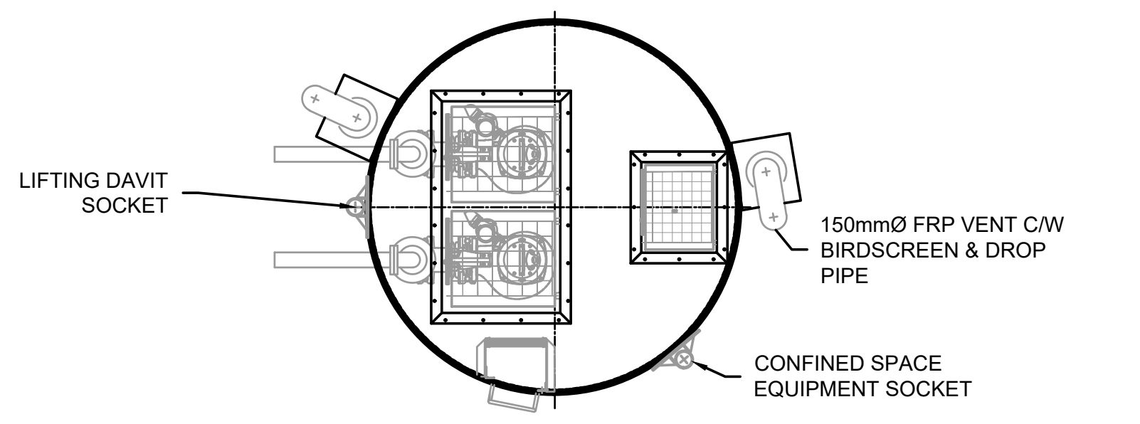
VALVE CHAMBER DETAILED PLAN VIEW @ ELEV = 104.70
SCALE 1 : 50


900x900 ACCESS HATCH
VALVE STEM COVER
LIFTING DAVIT

VALVE CHAMBER DETAILED PLAN VIEW @ ELEV 107.15
SCALE 1 : 50


HDPE FRP
75mmØ FORCEMAINS TO VALVE CHAMBER
P-1
P-2
200mmØ INLET
(4) - 50mmØ THD'D. ELECTRICAL CONN'S.
150mm ULTRASONIC PIPE THROUGH GRATING c/w HOLE IN GRATING FOR RADAR

WET WELL PLAN VIEW @ ELEV = 104.80
SCALE 1 : 50


LIFTING DAVIT SOCKET
150mmØ FRP VENT C/W BIRDSCREEN & DROP PIPE
CONFINED SPACE EQUIPMENT SOCKET

WET WELL PLAN VIEW @ ELEV = 107.30
SCALE 1 : 50

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
AS NOTED

DESIGN	MJB
CHECKED	CJS
DRAWN	MJB
CHECKED	CJS
APPROVED	CJS

FOR REVIEW ONLY

C. J. SCIUK
NOV 14, 2025

A.R. MCAULEY
100141256
Nov 14, 2025

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

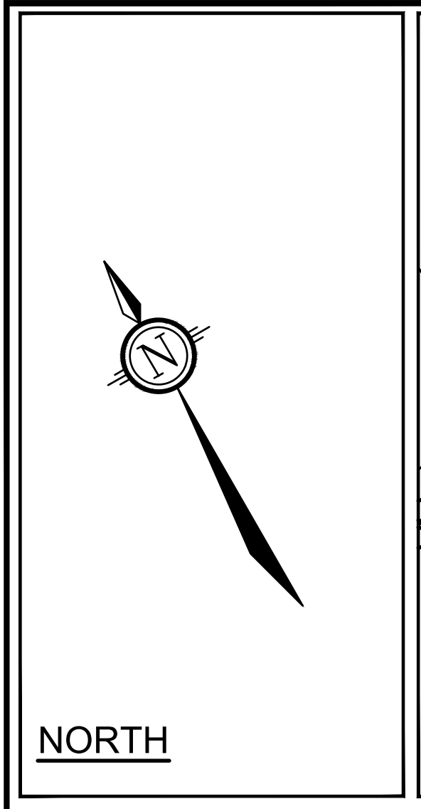
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
SANITARY PUMPING STATION

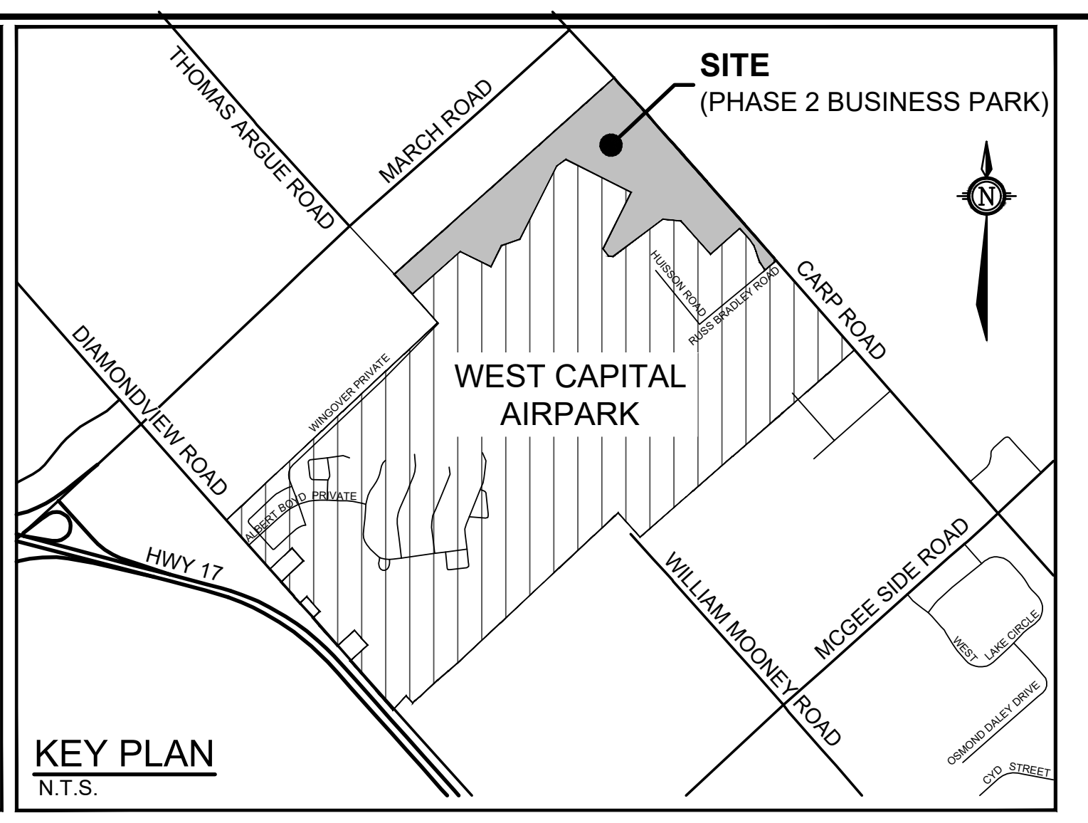
PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-SPS

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-SPS.dwg, SPS, Nov 14, 2025 - 10:20am, tstaff

PLANB1.DWG - 1000mmx707mm



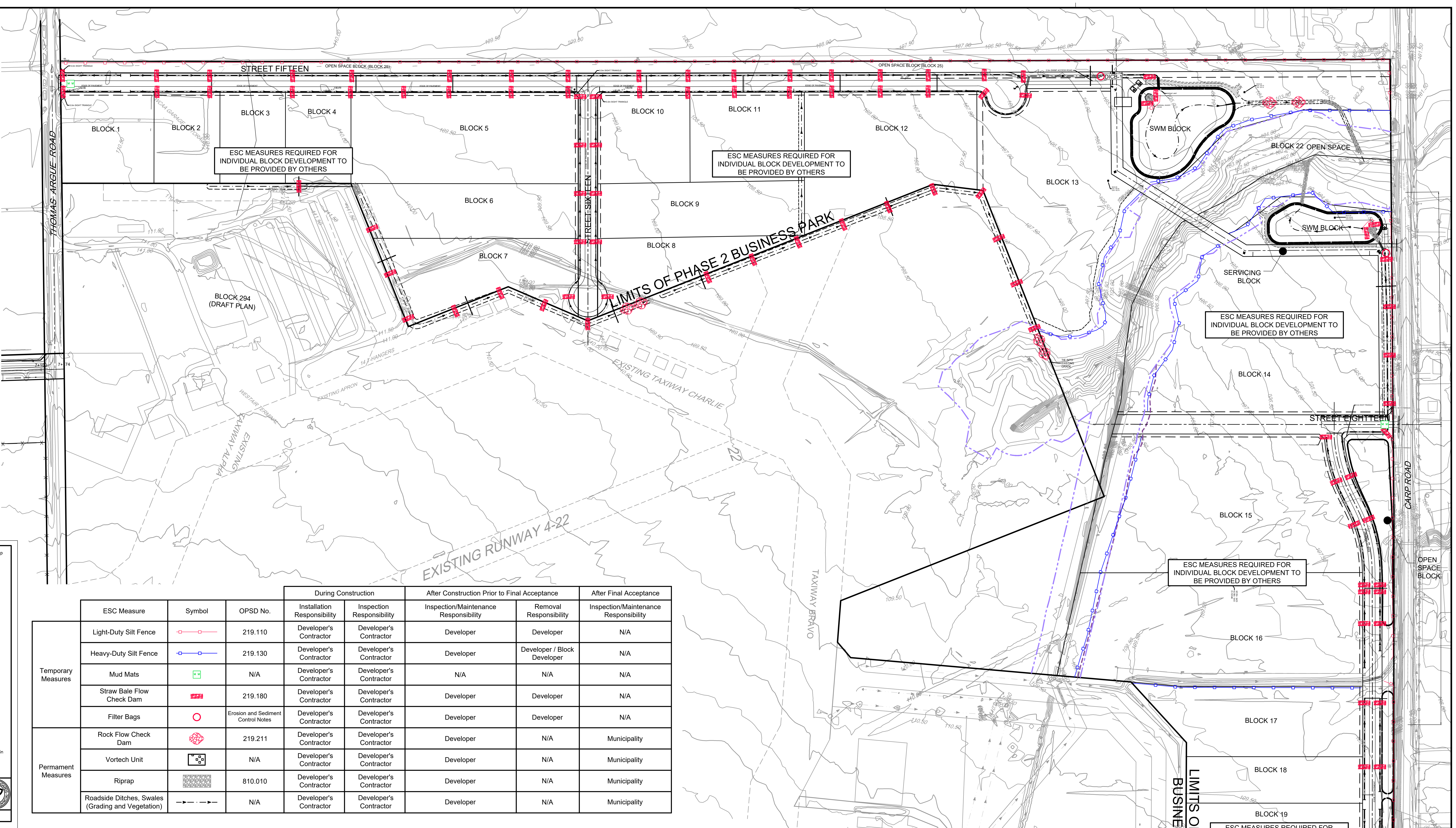
NORTH


SITE
(PHASE 2 BUSINESS PARK)
THOMAS ARGUE ROAD
MARCH ROAD
WEST CAPITAL AIRPARK
CARP ROAD
DIAMONDVIEW ROAD
HWY 17
WILLIAM MOONEY ROAD
MCGEE SIDE ROAD
WEST LAKE CIRCLE
OSMOND DALEY DRIVE
CYD STREET
N

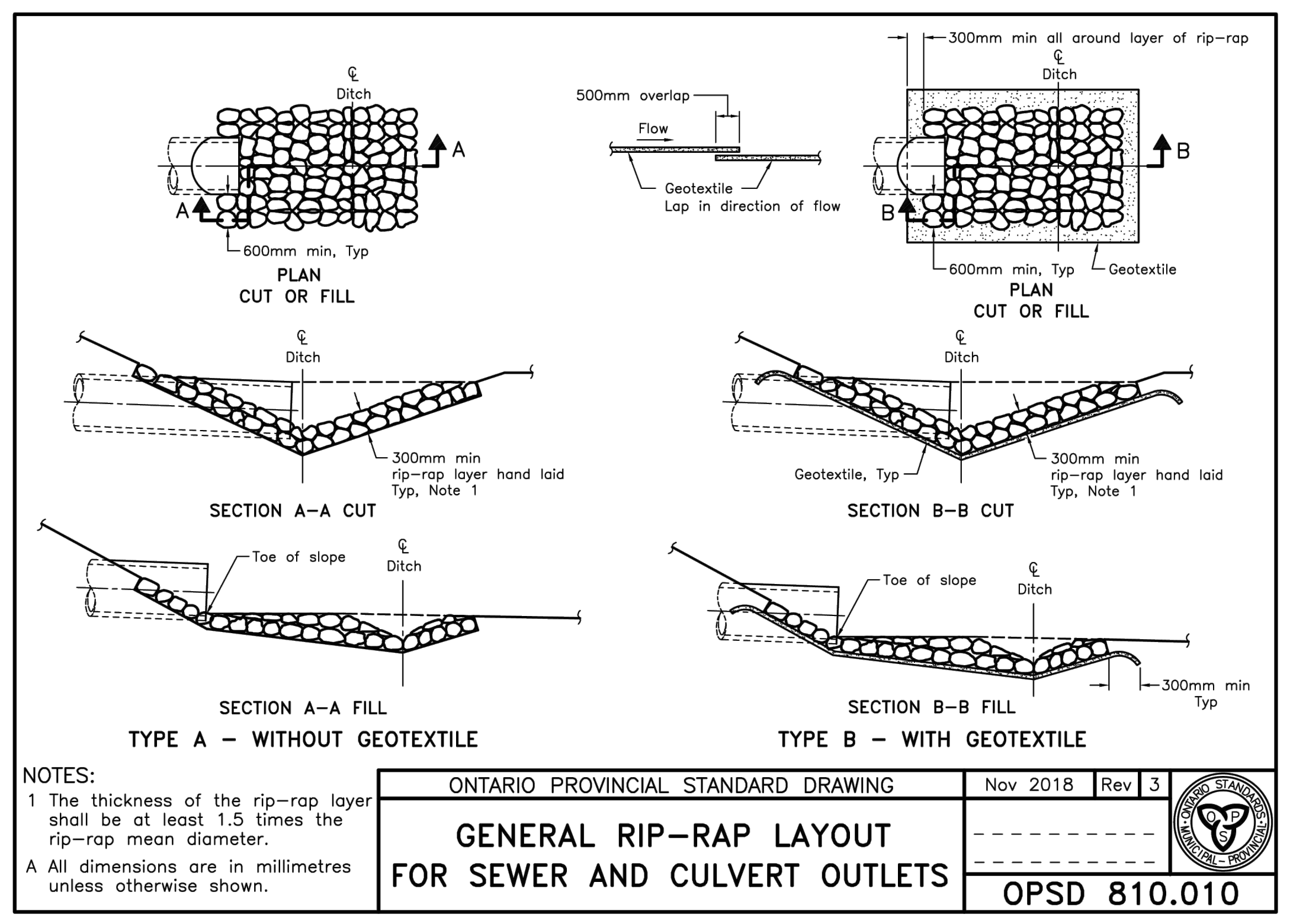
KEY PLAN
N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR AGREES TO PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA AND CONSERVATION AUTHORITY (MVCA), APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL.
2. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
3. THE CONTRACTOR IS TO INSTALL FILTER BAGS UNDER ROADWAY AND REARYARD CATCHBASIN LIDS TO PREVENT SEDIMENTS FROM ENTERING STRUCTURES. FILTER BAGS MUST BE KEPT IN PLACE AND REGULARLY INSPECTED AND MAINTAINED UNTIL SOD OR VEGETATION HAS FULLY ESTABLISHED.
4. THE CONTRACTOR IS TO INSTALL AND MAINTAIN A LIGHT DUTY SILT FENCE BARRIER.
5. THE CONTRACTOR IS ADVISED THAT THE EXISTING VORTECHS UNIT WILL REMAIN IN SERVICE DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN FREE OF DEBRIS, MONITOR ON A REGULAR BASIS, AND CLEAN AS REQUIRED (AT LEAST ONCE A YEAR).
6. THE CONTRACTOR IS TO INSPECT ALL EROSION AND SEDIMENT CONTROL DAILY DURING ACTIVE CONSTRUCTION AND IMMEDIATELY AFTER EVERY RAINFALL EVENT, SIGNIFICANT SNOWMELT EVENT, AND ANY EXTREME WEATHER EVENT, AND REPAIR ANY DAMAGED OR NON FUNCTIONING MEASURES IMMEDIATELY.
7. THE CONTRACTOR SHALL ENSURE THAT RECORDS OF INSPECTION, INCLUDING AT A MINIMUM, THE INSPECTOR'S NAME, DATE OF INSPECTION, VISUAL OBSERVATIONS, AND ANY NECESSARY REMEDIAL MEASURES TO MAINTAIN INTERIM ESC MEASURES.
8. THE EROSION AND SEDIMENT CONTROL PLANS ARE TO BE CONSIDERED A 'LIVING DOCUMENT' WHICH MAY BE MODIFIED IN THE EVENT THE EROSION AND SEDIMENT CONTROL MEASURES ARE INSUFFICIENT.
7. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER UNTIL THE SITE HAS STABILIZED, AFTER WHICH ANY SUCH MEASURES THAT ARE NOT PERMANENT, AS PER THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, SHALL BE REMOVED IN A MANNER THAT MINIMIZES DISTURBANCE TO THE SITE. THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER
8. FOR MATERIAL STOCKPILING, MINIMIZE THE AMOUNT OF EXPOSED MATERIALS AT ANY GIVEN TIME: APPLY TEMPORARY SEEDING, TARPS, COMPACTION AND/OR SURFACE ROUGHENING AS REQUIRED TO STABILIZE STOCKPILED MATERIALS THAT WILL NOT BE USED WITHIN 14 DAYS.
9. ROADWAYS ARE TO BE SWEPT AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE REPRESENTATIVE OF THE CITY OF OTTAWA.

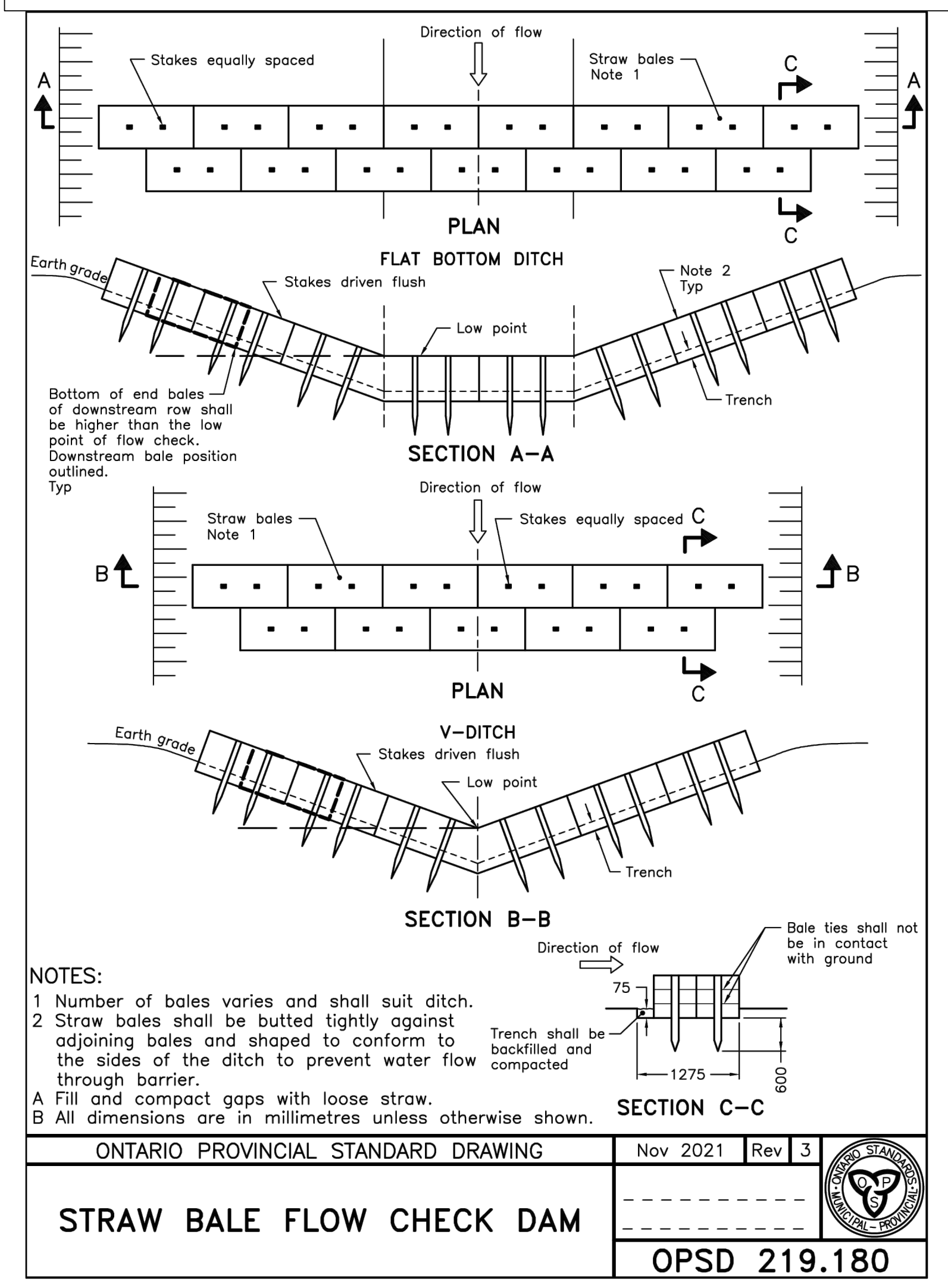

STREET FIFTEEN
OPEN SPACE BLOCK (BLOCK 25)
OPEN SPACE BLOCK (BLOCK 25)
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 6
BLOCK 7
BLOCK 8
BLOCK 9
BLOCK 10
BLOCK 11
BLOCK 12
BLOCK 13
BLOCK 14
BLOCK 15
BLOCK 16
BLOCK 17
BLOCK 18
BLOCK 19
BLOCK 20
BLOCK 21
BLOCK 22 OPEN SPACE
BLOCK 294 (DRAFT PLAN)
SWM BLOCK
SWM BLOCK
SERVICING BLOCK
OPEN SPACE BLOCK
OPEN SPACE BLOCK
OPEN SPACE BLOCK
ESC MEASURES REQUIRED FOR INDIVIDUAL BLOCK DEVELOPMENT TO BE PROVIDED BY OTHERS
ESC MEASURES REQUIRED FOR INDIVIDUAL BLOCK DEVELOPMENT TO BE PROVIDED BY OTHERS
ESC MEASURES REQUIRED FOR INDIVIDUAL BLOCK DEVELOPMENT TO BE PROVIDED BY OTHERS
ESC MEASURES REQUIRED FOR INDIVIDUAL BLOCK DEVELOPMENT TO BE PROVIDED BY OTHERS
ESC MEASURES REQUIRED FOR INDIVIDUAL BLOCK DEVELOPMENT TO BE PROVIDED BY OTHERS
STREET SIXTEEN
STREET SEVENTEEN
STREET EIGHTEEN
LIMITS OF PHASE 2 BUSINESS PARK
LIMITS OF PHASE 2 BUSINESS PARK
THOMAS ARGUE ROAD
CARP ROAD
CARP ROAD
HUISSON ROAD
RUSS BRADLEY ROAD
EXISTING RUNWAY 4-22
EXISTING TAXIWAY CHARLIE
EXISTING TAXIWAY ALPHA
TAXIWAY BRAVO
T-HANGERS
EXISTING APRON
22

	ESC Measure	Symbol	OPSD No.	During Construction		After Construction Prior to Final Acceptance		After Final Acceptance
				Installation Responsibility	Inspection Responsibility	Inspection/Maintenance Responsibility	Removal Responsibility	Inspection/Maintenance Responsibility
Temporary Measures	Light-Duty Silt Fence	—□—□—	219.110	Developer's Contractor	Developer's Contractor	Developer	Developer	N/A
	Heavy-Duty Silt Fence	—□—□—	219.130	Developer's Contractor	Developer's Contractor	Developer	Developer / Block Developer	N/A
	Mud Mats	M M	N/A	Developer's Contractor	Developer's Contractor	N/A	N/A	N/A
	Straw Bale Flow Check Dam	▨	219.180	Developer's Contractor	Developer's Contractor	Developer	Developer	N/A
	Filter Bags	○	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Developer	Developer	N/A
Permament Measures	Rock Flow Check Dam	▨	219.211	Developer's Contractor	Developer's Contractor	Developer	N/A	Municipality
	Vortech Unit	▣	N/A	Developer's Contractor	Developer's Contractor	Developer	N/A	Municipality
	Riprap	▨	810.010	Developer's Contractor	Developer's Contractor	Developer	N/A	Municipality
	Roadside Ditches, Swales (Grading and Vegetation)	—►— · —►—	N/A	Developer's Contractor	Developer's Contractor	Developer	N/A	Municipality


300mm min all around layer of rip-rap
Ditch
500mm overlap
Flow
Geotextile
Lap in direction of flow
600mm min, Typ
Geotextile
PLAN CUT OR FILL
PLAN CUT OR FILL
SECTION A-A CUT
SECTION B-B CUT
300mm min rip-rap layer hand laid Typ, Note 1
Geotextile, Typ
Toe of slope
SECTION A-A FILL
SECTION B-B FILL
TYPE A — WITHOUT GEOTEXTILE
TYPE B — WITH GEOTEXTILE

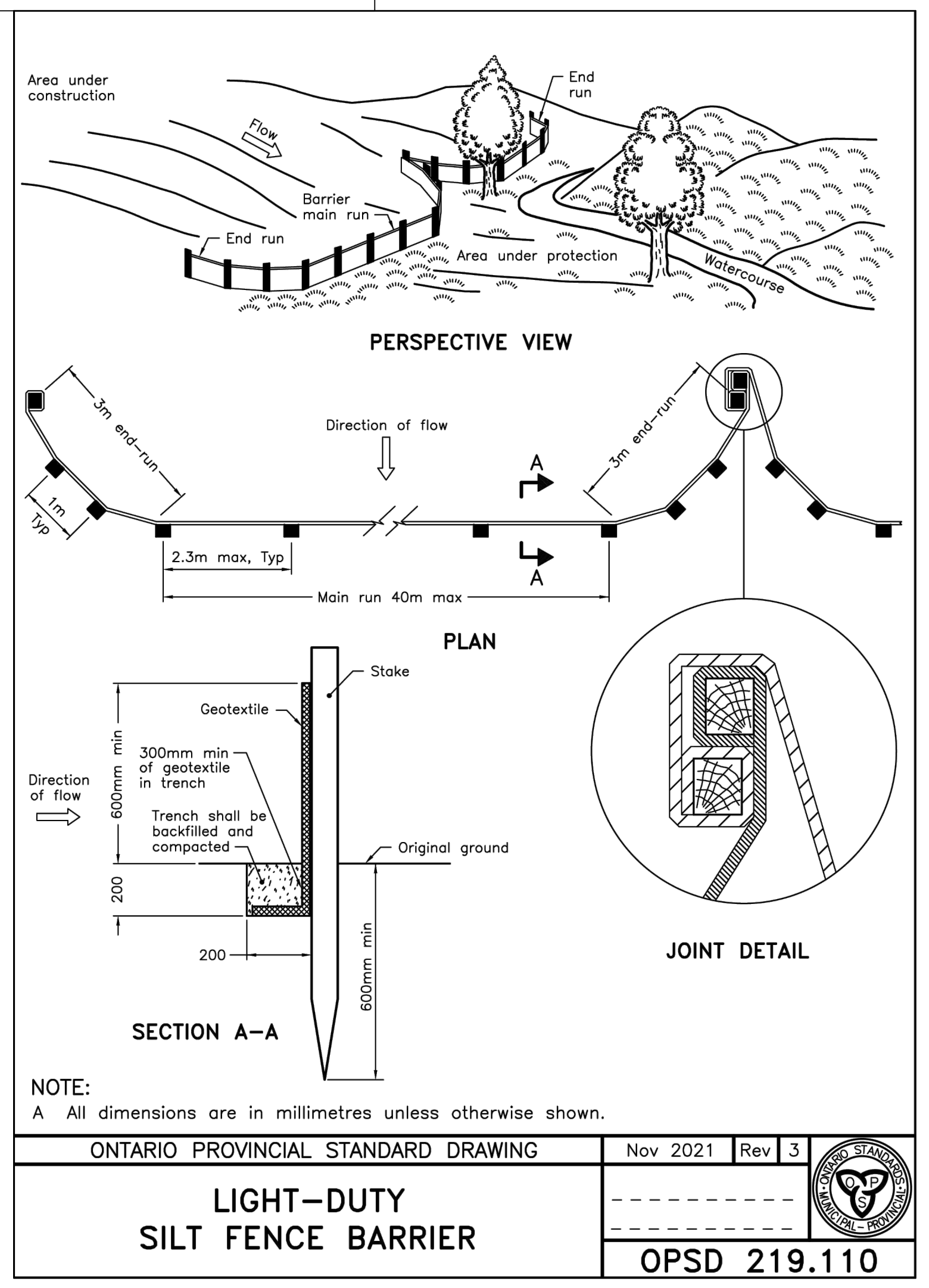
NOTES:
1 The thickness of the rip-rap layer shall be at least 1.5 times the rip-rap mean diameter.
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING — Nov 2018 — Rev 3
GENERAL RIP-RAP LAYOUT FOR SEWER AND CULVERT OUTLETS
OPSD 810.010


Direction of flow
Stakes equally spaced
Straw bales Note 1
PLAN
FLAT BOTTOM DITCH
Earth grade
Stakes driven flush
Low point
Note 2 Typ
Trench
Bottom of end bales of downstream row shall be higher than the low point of flow check. Downstream bale position outlined. Typ
SECTION A-A
Straw bales Note 1
Stakes equally spaced
PLAN
V-DITCH
SECTION B-B
Bale ties shall not be in contact with ground
Trench shall be backfilled and compacted
SECTION C-C

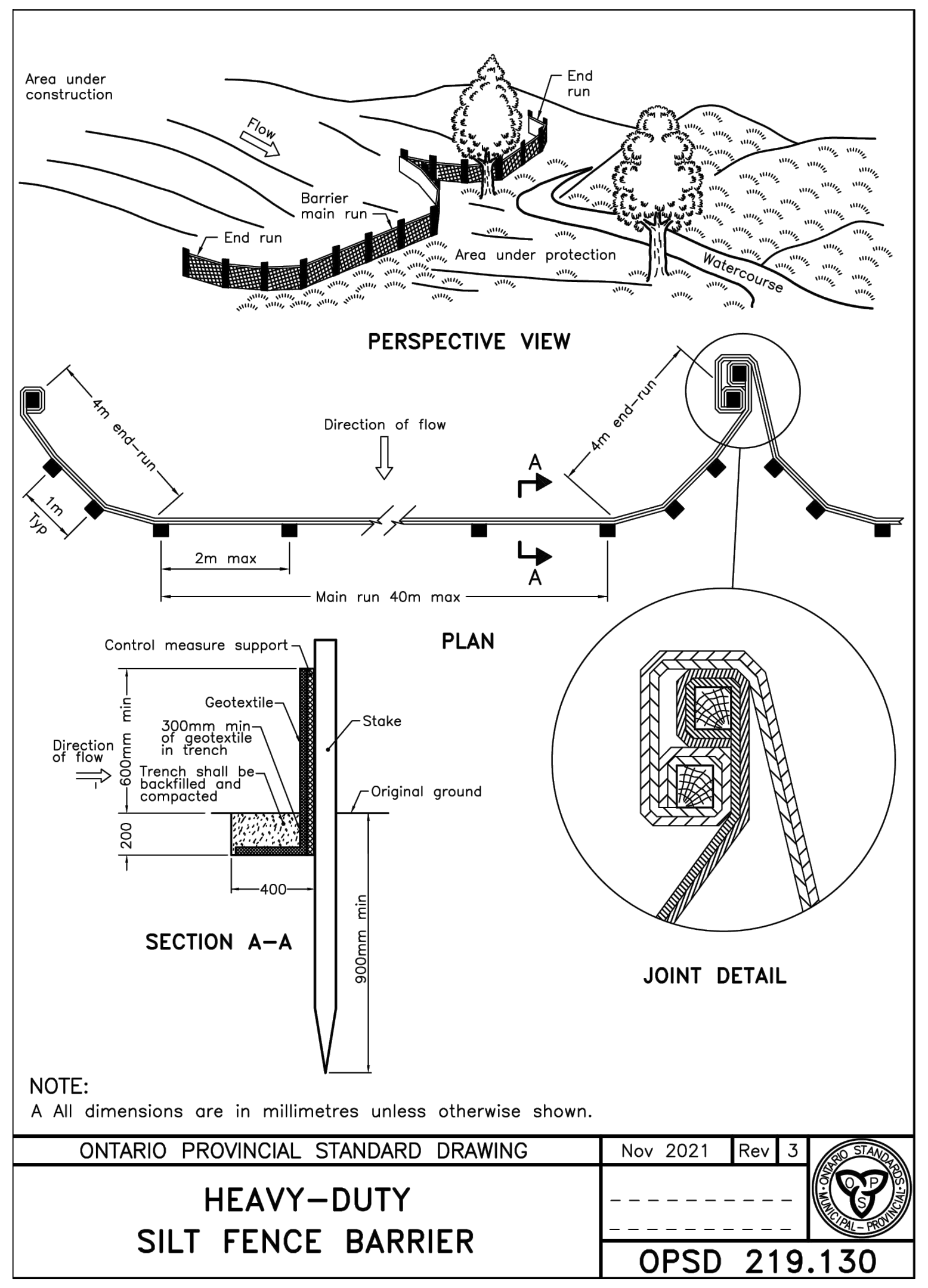
NOTES:
1 Number of bales varies and shall suit ditch.
2 Straw bales shall be butted tightly against adjoining bales and shaped to conform to the sides of the ditch to prevent water flow through barrier.
A Fill and compact gaps with loose straw.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING — Nov 2021 — Rev 3
STRAW BALE FLOW CHECK DAM
OPSD 219.180


Area under construction
Flow
End run
Barrier main run
Area under protection
PERSPECTIVE VIEW
Direction of flow
2.3m max, Typ
Main run 40m max
PLAN
Geotextile
Stake
300mm min of geotextile in trench
Trench shall be backfilled and compacted
Original ground
Direction of flow
SECTION A-A
JOINT DETAIL

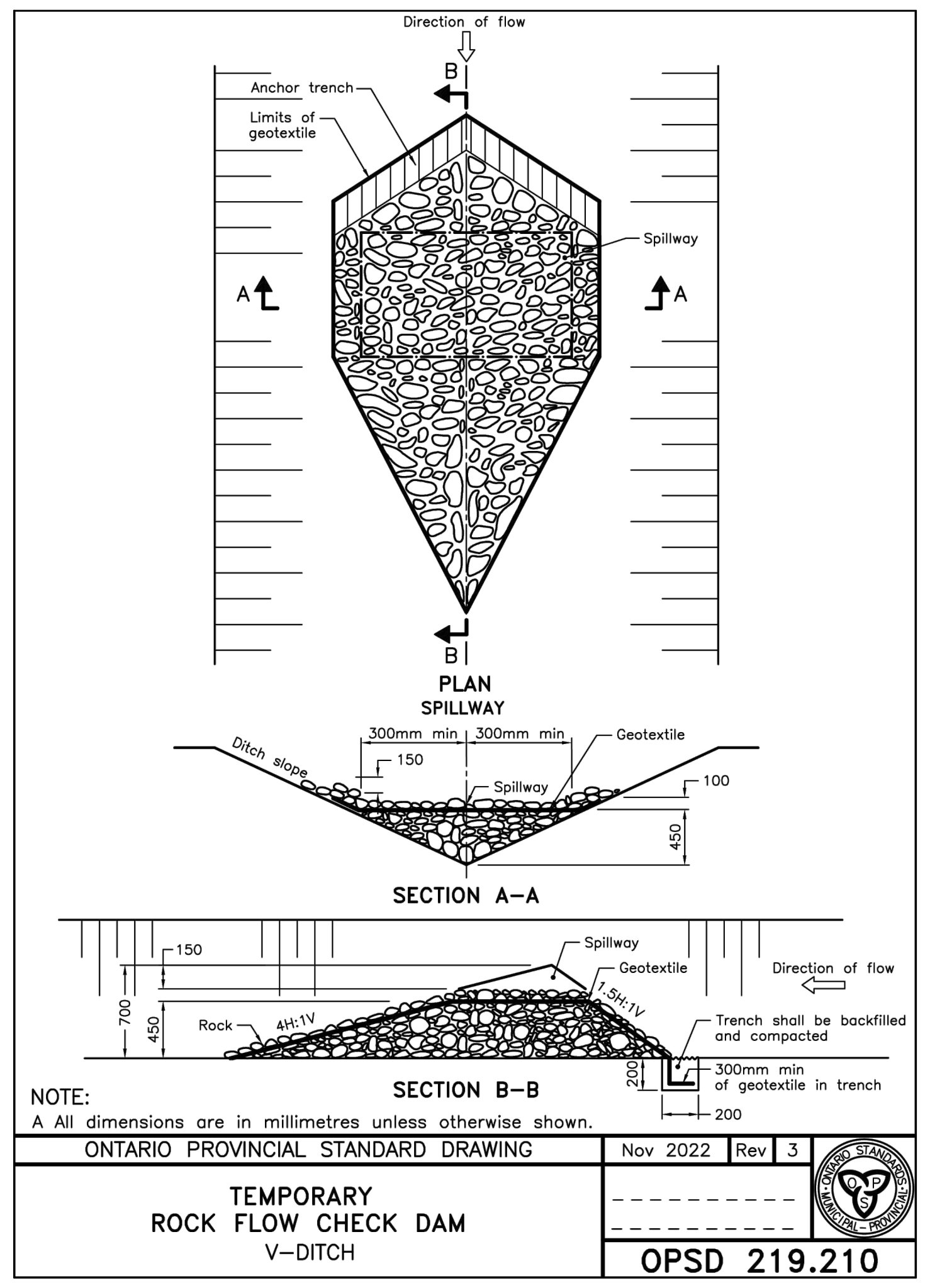
NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING — Nov 2021 — Rev 3
LIGHT-DUTY SILT FENCE BARRIER
OPSD 219.110


Area under construction
Flow
End run
Barrier main run
Area under protection
PERSPECTIVE VIEW
Direction of flow
2m max
Main run 40m max
PLAN
Control measure support
Geotextile
Stake
300mm min of geotextile in trench
Trench shall be backfilled and compacted
Original ground
Direction of flow
SECTION A-A
JOINT DETAIL

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

ONTARIO PROVINCIAL STANDARD DRAWING — Nov 2021 — Rev 3
HEAVY-DUTY SILT FENCE BARRIER
OPSD 219.130


Direction of flow
Anchor trench
Limits of geotextile
Spillway
PLAN
SPILLWAY
Ditch slope
300mm min
Geotextile
SECTION A-A
Spillway
Geotextile
Rock
Direction of flow
Trench shall be backfilled and compacted
300mm min of geotextile in trench
SECTION B-B

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

ONTARIO PROVINCIAL STANDARD DRAWING — Nov 2022 — Rev 3
TEMPORARY ROCK FLOW CHECK DAM V-DITCH
OPSD 219.210

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

No.	REVISION	DATE	BY
2.	REVISED PER COMMENTS	NOV 14/25	ARM
1.	ISSUED FOR REVIEW	NOV 19/24	ARM

SCALE
1 : 2000
1 : 2000
0 20 40 60 80

DESIGN	MJB
CHECKED	MNP
DRAWN	MJB
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
Nov 14, 2025
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

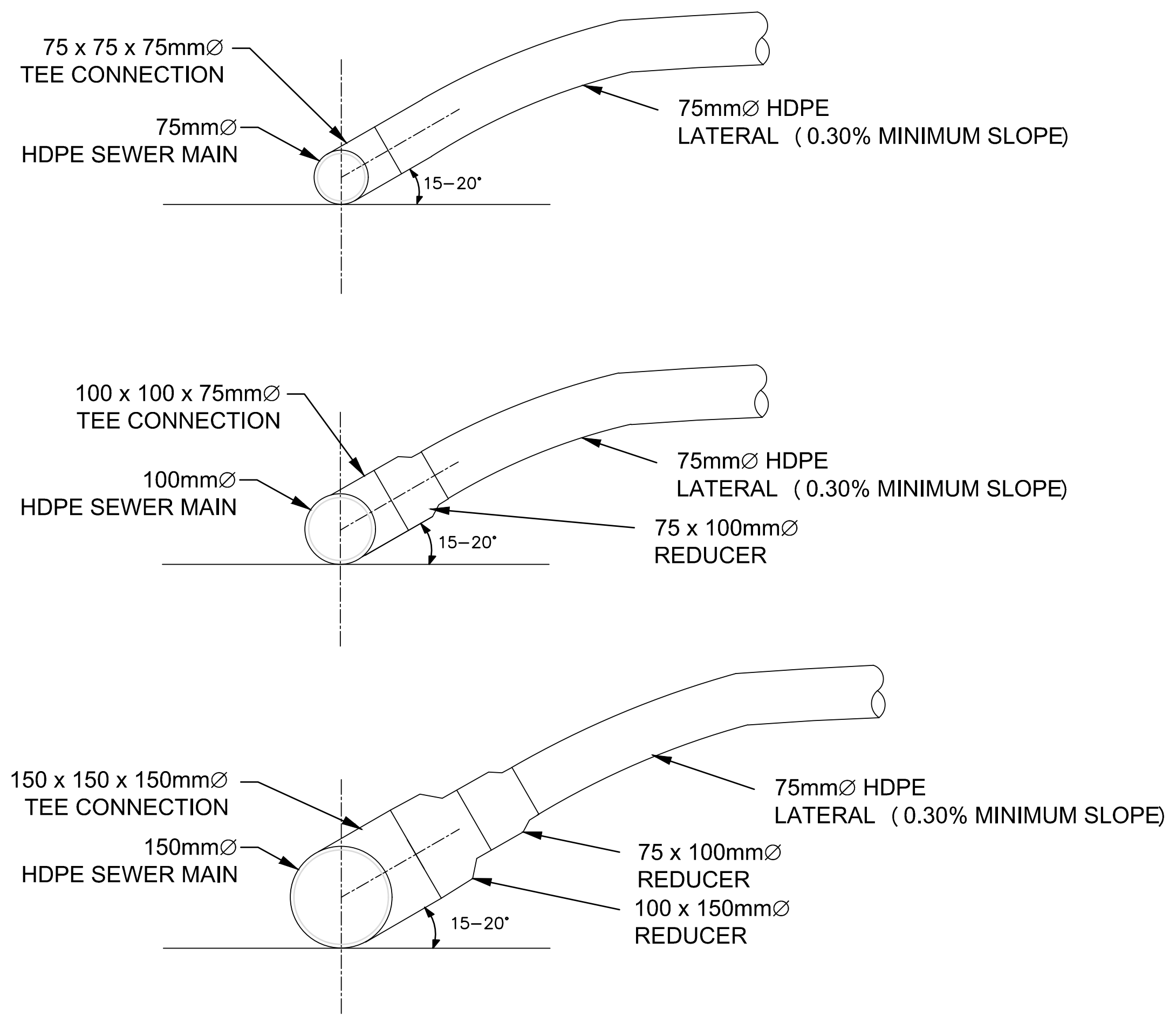
LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
EROSION & SEDIMENT CONTROL PLAN

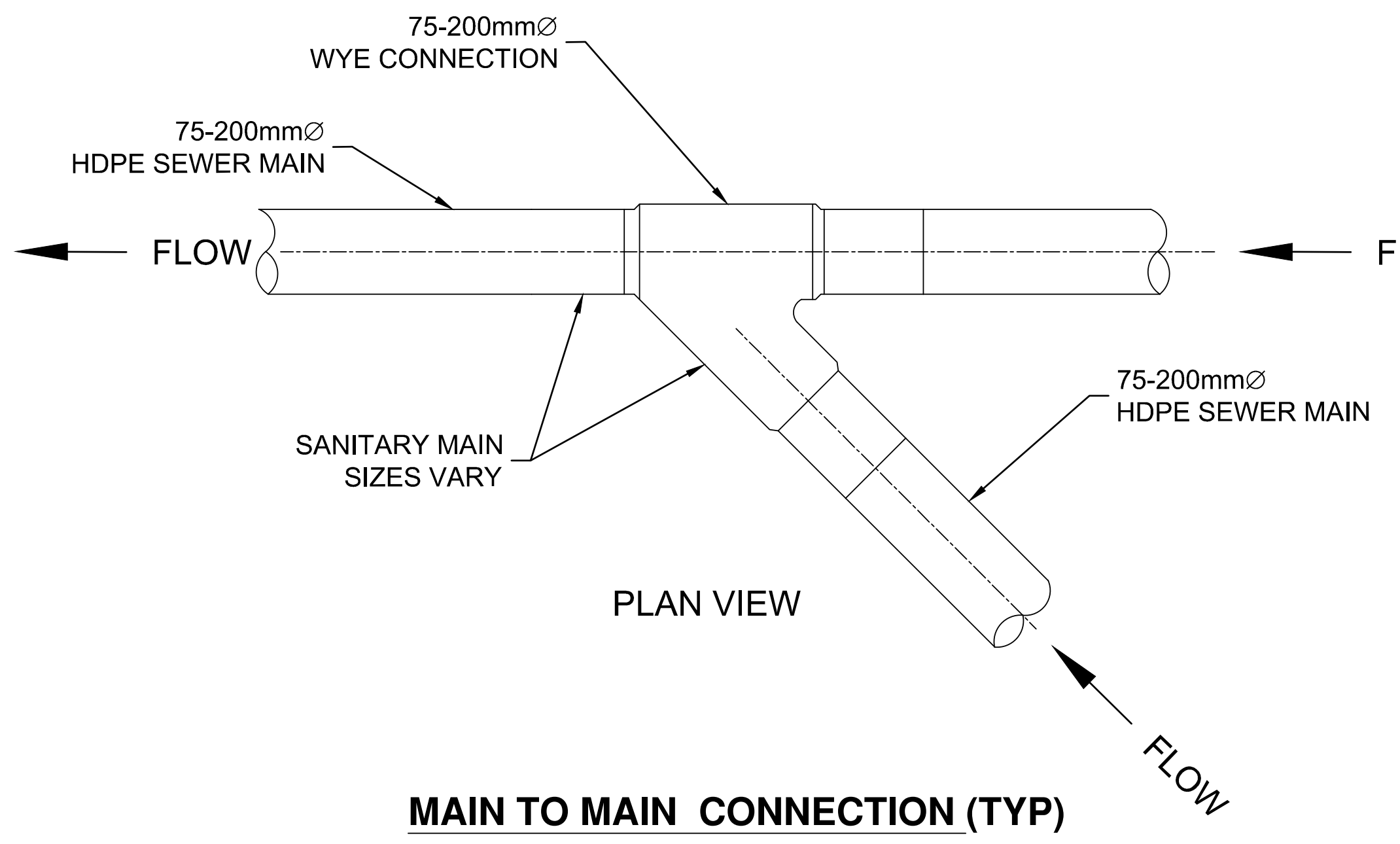
PROJECT No. 102085-14
REV REV # 2
DRAWING No. 102085-ESC4

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-ESC.dwg, ESC4, Nov 14, 2025 - 10:17am, fstaff

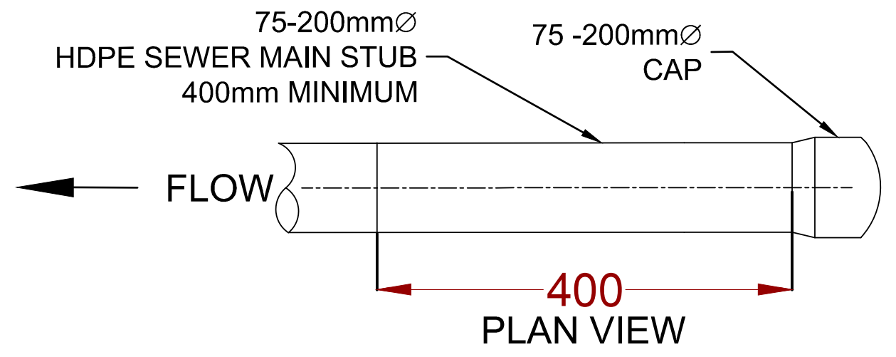
PLANB1.DWG - 1000mmx707mm


75 x 75 x 75mmØ
TEE CONNECTION
75mmØ
HDPE SEWER MAIN
75mmØ HDPE
LATERAL (0.30% MINIMUM SLOPE)
15–20°
100 x 100 x 75mmØ
TEE CONNECTION
100mmØ
HDPE SEWER MAIN
75mmØ HDPE
LATERAL (0.30% MINIMUM SLOPE)
75 x 100mmØ
REDUCER
15–20°
150 x 150 x 150mmØ
TEE CONNECTION
150mmØ
HDPE SEWER MAIN
75mmØ HDPE
LATERAL (0.30% MINIMUM SLOPE)
75 x 100mmØ
REDUCER
100 x 150mmØ
REDUCER
15–20°

LATERAL TO MAIN CONNECTION (TYP)

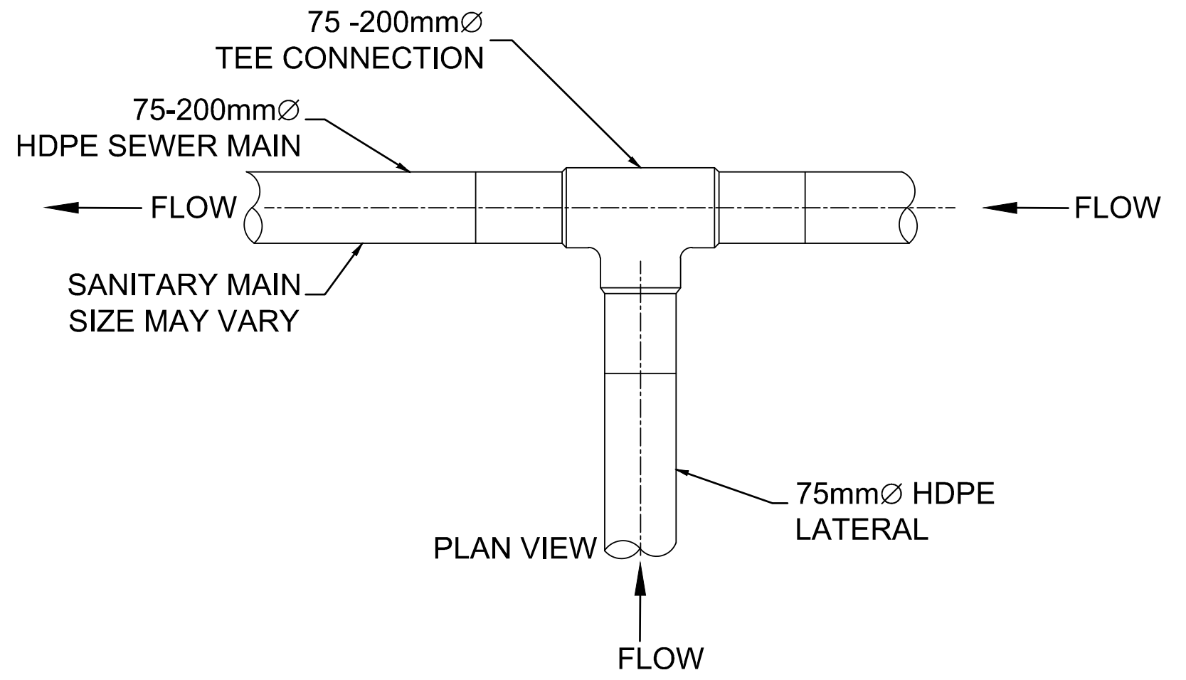

75-200mmØ
WYE CONNECTION
75-200mmØ
HDPE SEWER MAIN
FLOW
FLOW
SANITARY MAIN
SIZES VARY
75-200mmØ
HDPE SEWER MAIN
PLAN VIEW
FLOW

MAIN TO MAIN CONNECTION (TYP)

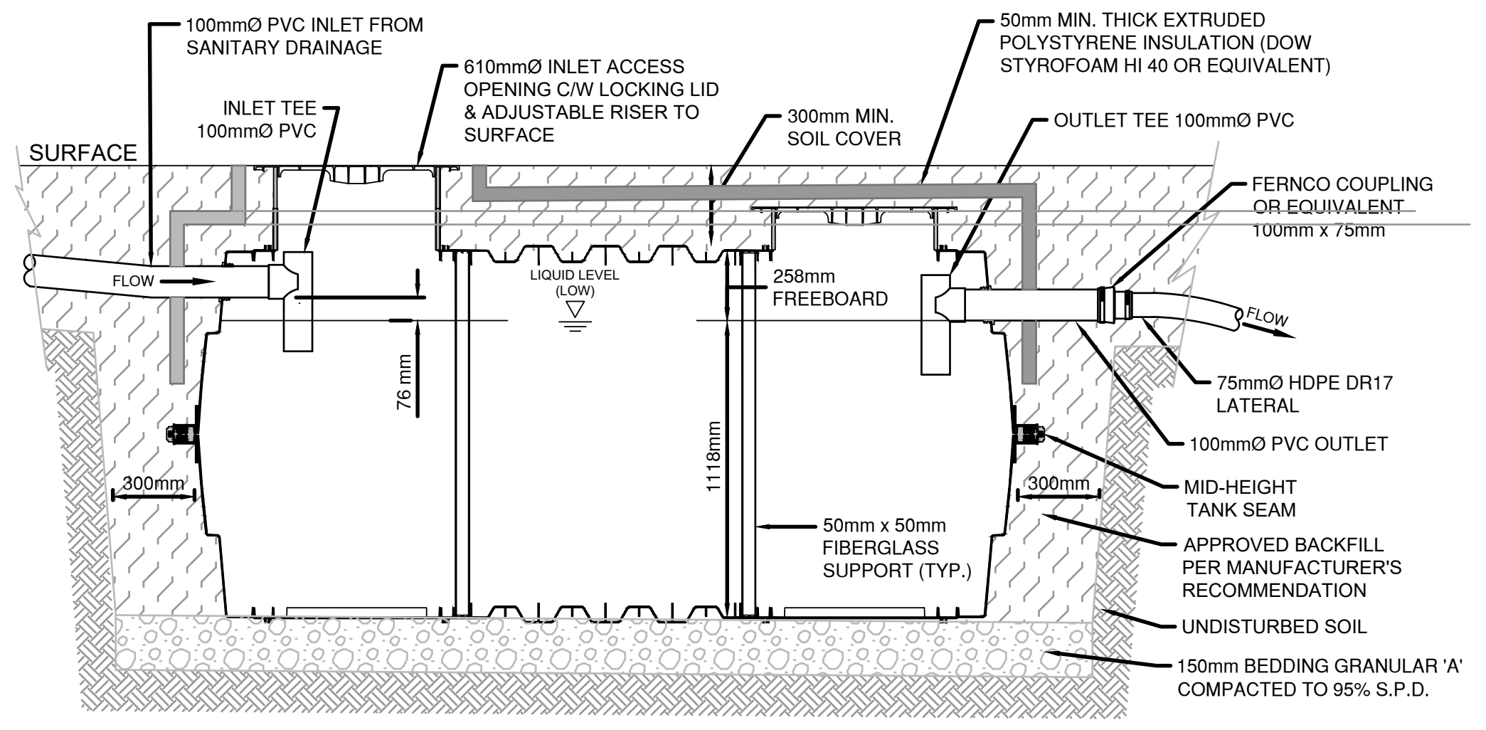

75-200mmØ
HDPE SEWER MAIN STUB
400mm MINIMUM
75 -200mmØ
CAP
FLOW
400
PLAN VIEW

NOTE: END CAPS TO BE CUT OFF & A NEW CONNECTION PERFORMED BY AN APPROVED FUSIONTECHNOLOGY IN SUBSEQUENT PHASES.

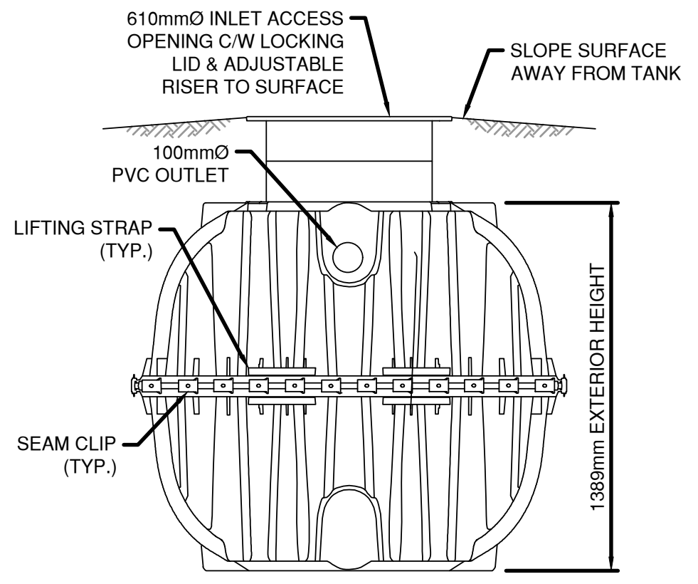
END CAP- FUTURE PHASE CONNECTION


75 -200mmØ
TEE CONNECTION
75-200mmØ
HDPE SEWER MAIN
FLOW
FLOW
SANITARY MAIN
SIZE MAY VARY
75mmØ HDPE
LATERAL
PLAN VIEW
FLOW

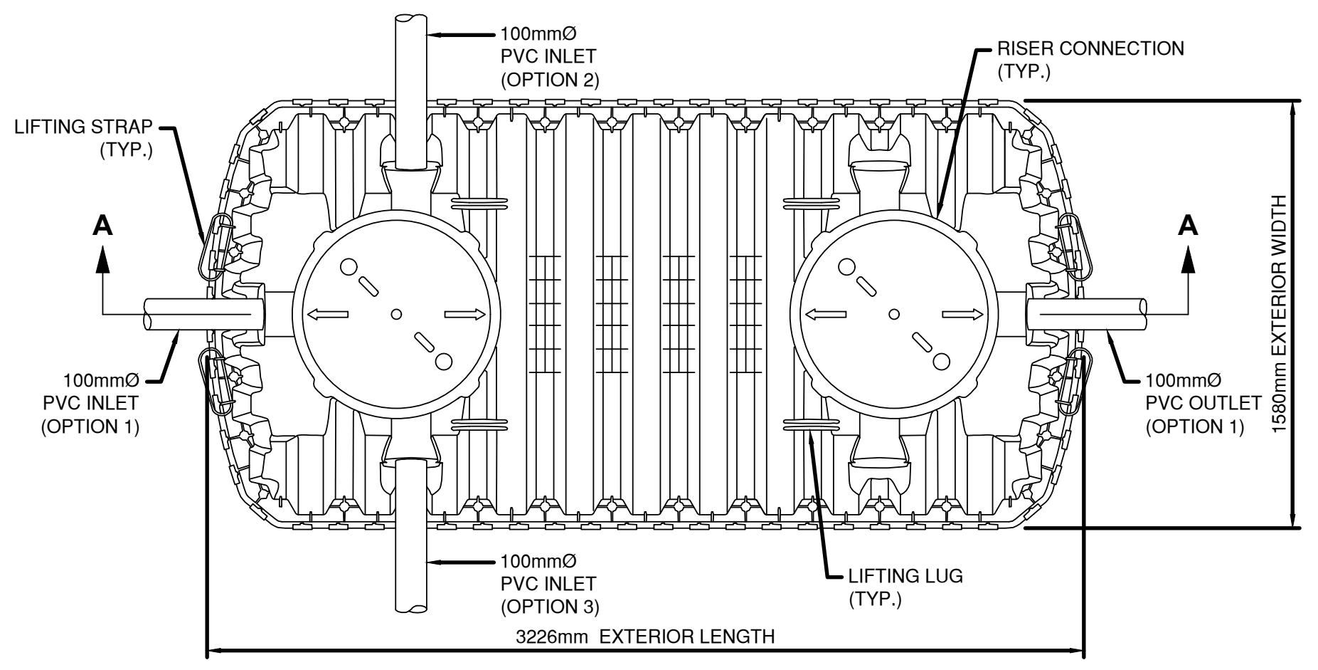
LATERAL TO MAIN CONNECTION (TYP)


100mmØ PVC INLET FROM
SANITARY DRAINAGE
INLET TEE
100mmØ PVC
610mmØ INLET ACCESS
OPENING C/W LOCKING LID
& ADJUSTABLE RISER TO
SURFACE
300mm MIN.
SOIL COVER
50mm MIN. THICK EXTRUDED
POLYSTYRENE INSULATION (DOW
STYROFOAM HI 40 OR EQUIVALENT)
OUTLET TEE 100mmØ PVC
SURFACE
FLOW
LIQUID LEVEL
(LOW)
258mm
FREEBOARD
FERNCO COUPLING
OR EQUIVALENT
100mm x 75mm
FLOW
76 mm
1118mm
300mm
300mm
50mm x 50mm
FIBERGLASS
SUPPORT (TYP.)
75mmØ HDPE DR17
LATERAL
100mmØ PVC OUTLET
MID-HEIGHT
TANK SEAM
APPROVED BACKFILL
PER MANUFACTURER'S
RECOMMENDATION
UNDISTURBED SOIL
150mm BEDDING GRANULAR 'A'
COMPACTED TO 95% S.P.D.

SECTION A-A WITH EXCAVATION DETAIL


610mmØ INLET ACCESS
OPENING C/W LOCKING
LID & ADJUSTABLE
RISER TO SURFACE
SLOPE SURFACE
AWAY FROM TANK
100mmØ
PVC OUTLET
LIFTING STRAP
(TYP.)
SEAM CLIP
(TYP.)
1389mm EXTERIOR HEIGHT

END VIEW


100mmØ
PVC INLET
(OPTION 2)
RISER CONNECTION
(TYP.)
LIFTING STRAP
(TYP.)
A
A
100mmØ
PVC INLET
(OPTION 1)
100mmØ
PVC OUTLET
(OPTION 1)
1580mm EXTERIOR WIDTH
100mmØ
PVC INLET
(OPTION 3)
LIFTING LUG
(TYP.)
3226mm EXTERIOR LENGTH

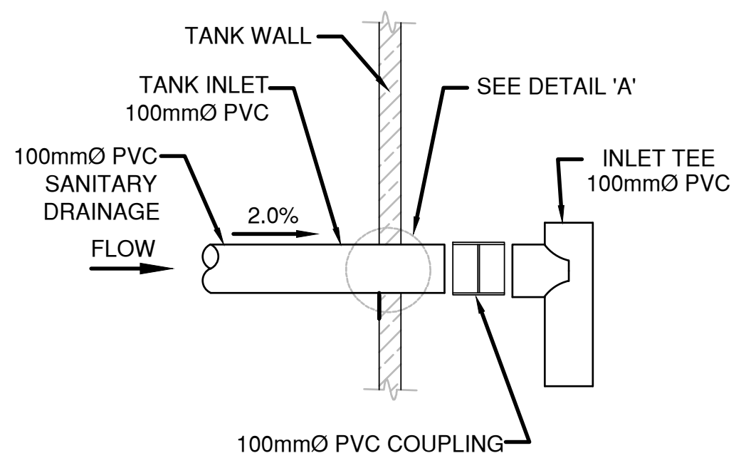
TOP VIEW

CLEARFORD INTERCEPTOR TANK DETAIL (TYP.)

N.T.S.

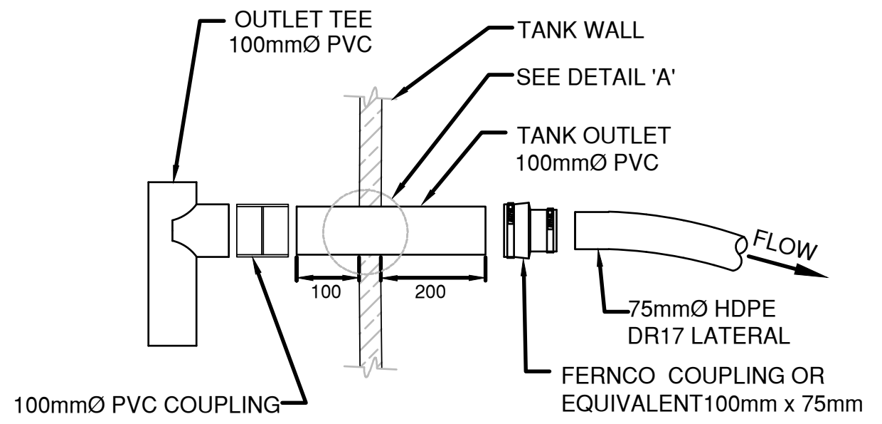
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
2. PVC PIPES AND FITTINGS TO BE SDR 35 PER CSA B182.1.
3. ALL PVC PARTS TO BE GLUED TOGETHER WITH APPROPRIATE SOLVENT CEMENT AND PRIMER.
4. CONTRACTOR SHALL TO PROVIDE SHOP DRAWINGS OF PVC COMPONENTS AND COUPLINGS.


TANK WALL
TANK INLET
100mmØ PVC
SEE DETAIL 'A'
100mmØ PVC
SANITARY
DRAINAGE
2.0%
FLOW
INLET TEE
100mmØ PVC
100mmØ PVC COUPLING

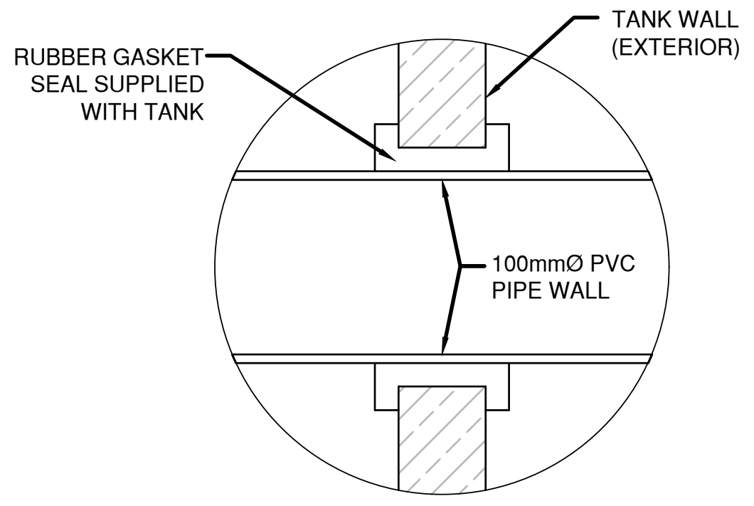
CLEARFORD INTERCEPTOR TANK INLET DETAIL

N.T.S.


OUTLET TEE
100mmØ PVC
TANK WALL
SEE DETAIL 'A'
TANK OUTLET
100mmØ PVC
FLOW
100
200
75mmØ HDPE
DR17 LATERAL
FERNCO COUPLING OR
EQUIVALENT100mm x 75mm
100mmØ PVC COUPLING

CLEARFORD INTERCEPTOR TANK OUTLET DETAIL

N.T.S.


RUBBER GASKET
SEAL SUPPLIED
WITH TANK
TANK WALL
(EXTERIOR)
100mmØ PVC
PIPE WALL

DETAIL 'A' - RUBBER GASKET PIPE SEAL

N.T.S.

M:\2002\102085\CAD_BUSINESS PARK PH2\Civil\102085-2BP-ND-C1-C2.dwg, 102085-C1, Nov 14, 2025 - 10:15am, tstaff

NOTE:
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CLEARFORD
WATER SYSTEMS INC.

WEST CAPITAL
Developments

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
				8.	ISSUED WITH ADDENDUM #2 (NO CHANGES)	JAN 5/24	ARM
				7.	ISSUED FOR TENDER - PHASE 1B-2 (NO CHANGES)	DEC 7/23	ARM
				6.	ISSUED FOR REVIEW - PHASE 1B-2 (NO CHANGES)	JUL 25/23	ARM
				5.	ISSUED FOR CONSTRUCTION - PHASE 1B (NO CHANGES)	NOV 4/21	ARM
12.	REVISED PER COMMENTS (NO CHANGES)	NOV 14/25	ARM	4.	ISSUED FOR REGISTRATION - PHASE 2A	APR 26/21	ARM
11.	ISSUED FOR REVIEW	NOV 19/24	ARM	3.	ISSUED FOR CONSTRUCTION	AUG 14/20	ARM
10.	REVISED PER CITY COMMENTS (NO CHANGES)	FEB 20/24	ARM	2.	REVISED PER CLEARFORD REVIEW	JUL 14/20	ARM
9.	REVISED PER CITY COMMENTS (NO CHANGES)	FEB 9/24	ARM	1.	ISSUED FOR REVIEW	JUL 10/20	ARM

SCALE
AS SHOWN

DESIGN
CHECKED
DRAWN
CHECKED
APPROVED

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

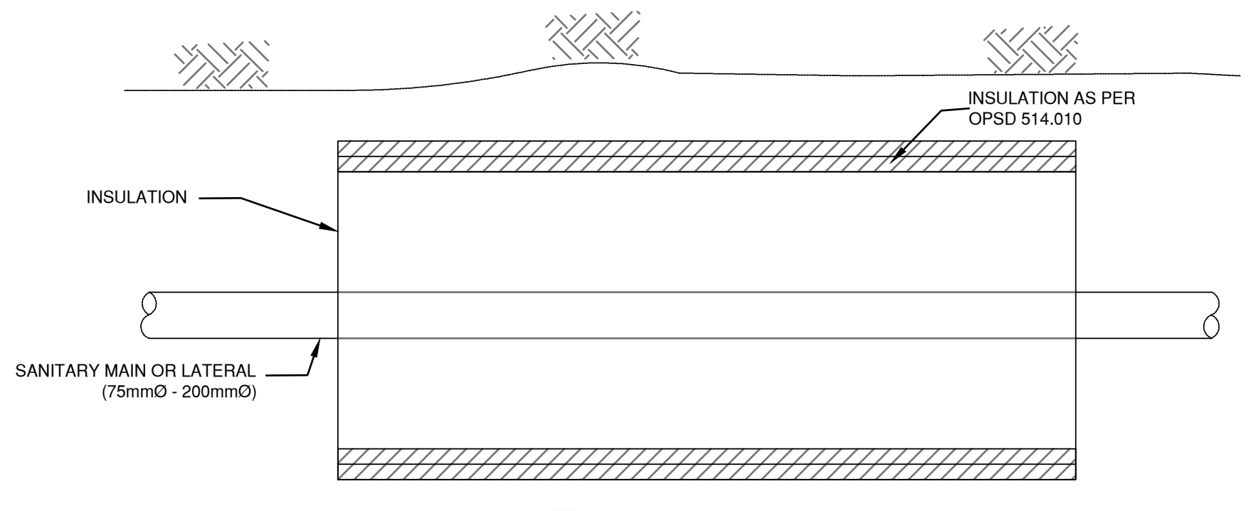
DRAWING NAME
CLEARFORD SBS™ DETAIL SHEET

PROJECT No.
102085-14

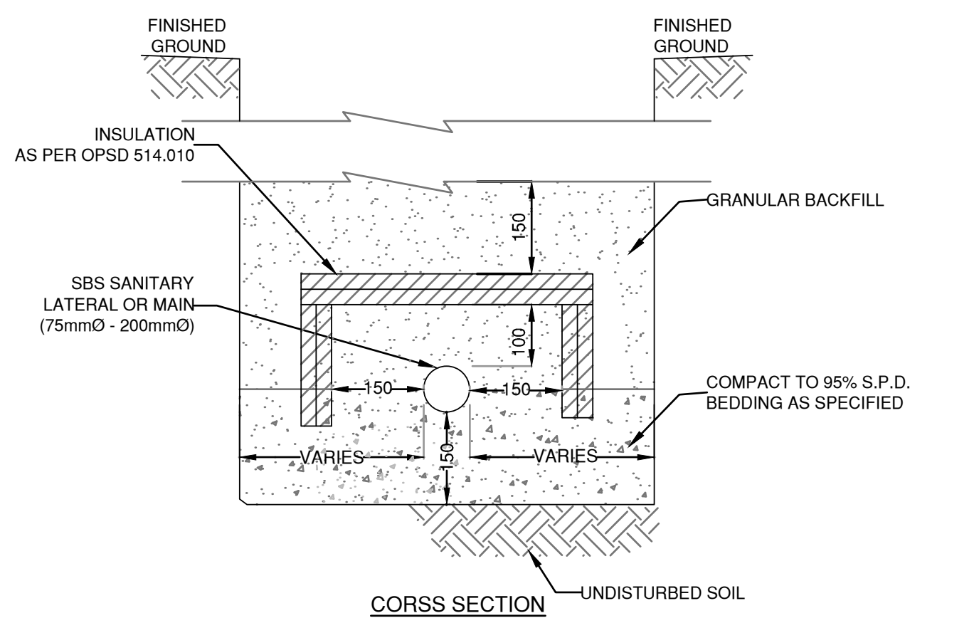
REV
REV # 12

DRAWING No.
102085-C1

PLANB1.DWG - 1000mmx707mm


INSULATION AS PER
OPSD 514.010
INSULATION
SANITARY MAIN OR LATERAL
(75mmØ - 200mmØ)

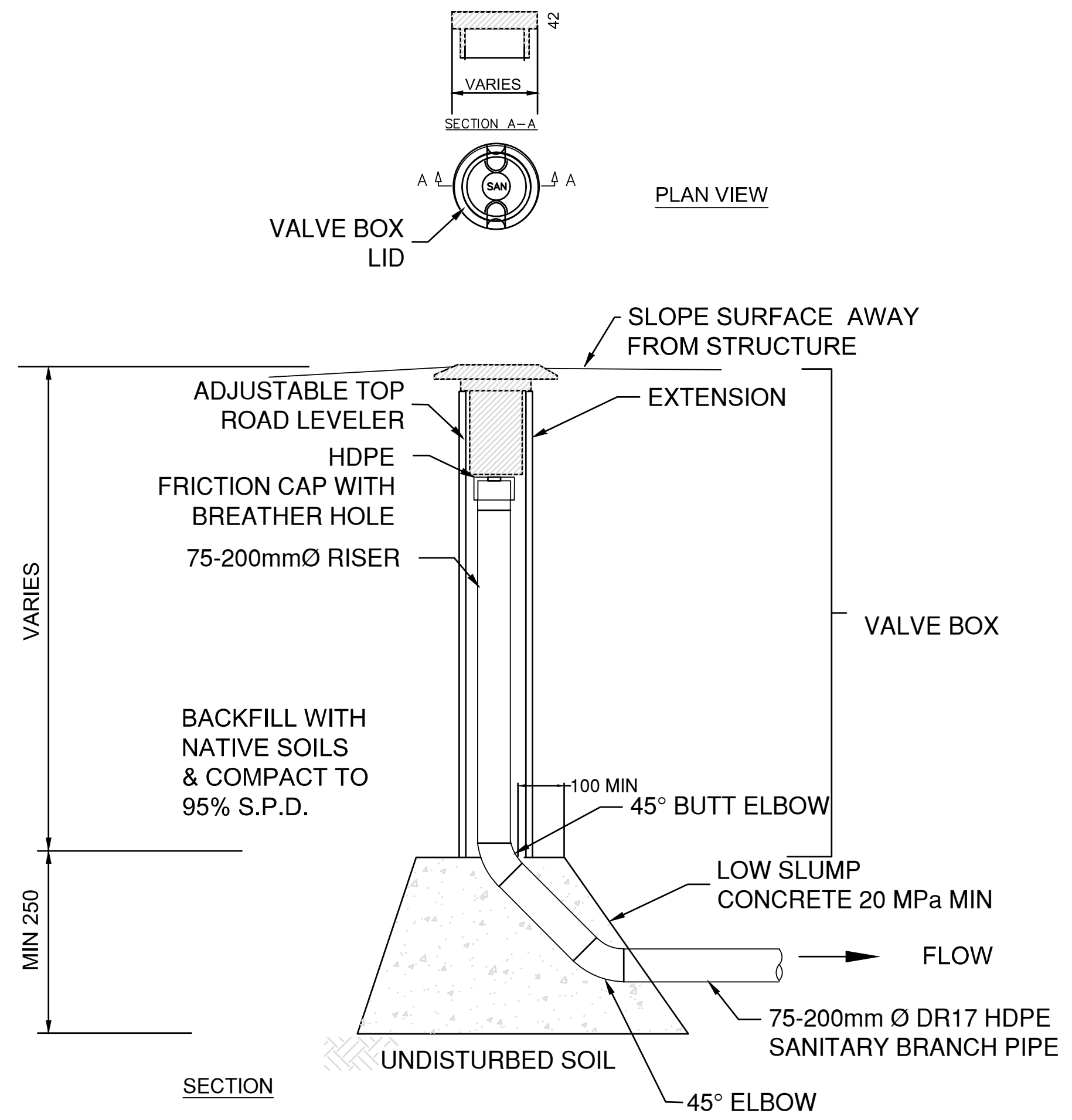
PLAN


FINISHED
GROUND
FINISHED
GROUND
INSULATION
AS PER OPSD 514.010
GRANULAR BACKFILL
SBS SANITARY
LATERAL OR MAIN
(75mmØ - 200mmØ)
150
100
150
150
150
VARIES
VARIES
COMPACT TO 95% S.P.D.
BEDDING AS SPECIFIED
UNDISTURBED SOIL

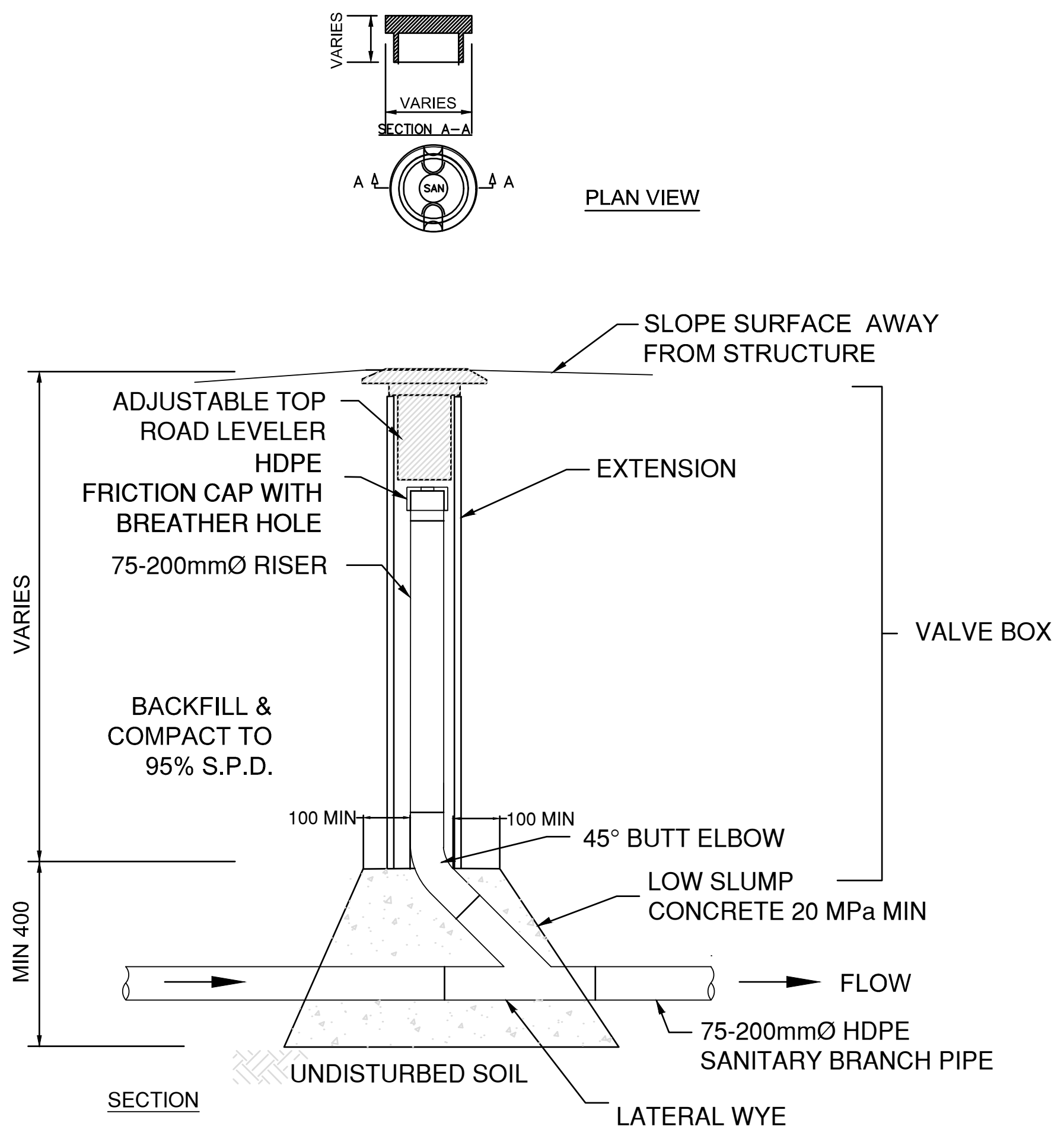
CORSS SECTION

NOTES:
1. EARTH COVER DEPTH LESS THAN 1.2m REQUIRES SPECIAL DESIGN
2. STAGGER JOINTS OF MULTIPLE SHEETS

INSULATION IN TRENCH DETAIL (TYP)


42
VARIES
SECTION A–A
A
A
SAN
PLAN VIEW
VALVE BOX
LID
SLOPE SURFACE AWAY
FROM STRUCTURE
ADJUSTABLE TOP
ROAD LEVELER
EXTENSION
HDPE
FRICTION CAP WITH
BREATHER HOLE
75-200mmØ RISER
VARIES
VALVE BOX
BACKFILL WITH
NATIVE SOILS
& COMPACT TO
95% S.P.D.
100 MIN
45° BUTT ELBOW
MIN 250
LOW SLUMP
CONCRETE 20 MPa MIN
FLOW
75-200mm Ø DR17 HDPE
SANITARY BRANCH PIPE
UNDISTURBED SOIL
SECTION
45° ELBOW

LOAD BEARING SAP (SYSTEM ACCESS POINT) END OF LINE (TYP)


VARIES
VARIES
SECTION A–A
A
A
SAN
PLAN VIEW
SLOPE SURFACE AWAY
FROM STRUCTURE
ADJUSTABLE TOP
ROAD LEVELER
HDPE
FRICTION CAP WITH
BREATHER HOLE
EXTENSION
75-200mmØ RISER
VARIES
VALVE BOX
BACKFILL &
COMPACT TO
95% S.P.D.
100 MIN
100 MIN
45° BUTT ELBOW
LOW SLUMP
CONCRETE 20 MPa MIN
MIN 400
FLOW
75-200mmØ HDPE
SANITARY BRANCH PIPE
UNDISTURBED SOIL
SECTION
LATERAL WYE

LOAD BEARING SAP (SYSTEM ACCESS POINT) IN LINE (TYP)

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED. PIPE DIAMETER SIZES ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
2. REPORT ANY UNUSUAL CONDITIONS TO THE INSPECTING ENGINEER IMMEDIATELY.
3. REINSTATE SANITARY UTILITY CUTS TO ORIGINAL OR BETTER CONDITION WITH APPROVED BASE GRANULAR MATERIALS. PAVEMENT RESTORATION IF APPLICABLE, TO O.P.S.D. 509.01 REVISION 1.
4. IN THE EVENT OF HIGH GROUNDWATER TABLE, CRUSHED STONE AND APPROVED DEWATERING TECHNIQUES SHALL BE EMPLOYED. CONTRACTOR SHALL SUBMIT GROUNDWATER REMOVAL PLAN TO THE ENGINEER FOR APPROVAL BEFORE PROCEEDING.
5. CONTRACTOR SHALL SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN FROM THE CLARIFIER OUTLET. CONNECTIONS TO THE CLARIFIER FROM THE RESIDENCE WILL BE PROVIDED BY THE BUILDING PLUMBER.
6. EXISTING UTILITY ALIGNMENT AND ELEVATIONS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITY ALIGNMENTS & ELEVATIONS PRIOR TO CONSTRUCTION ON SITE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE CROSSING OF EXISTING UTILITIES INCLUDING ANY SUPPORTS AND PRECAUTIONS REQUIRED.
8. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS. ANY ERRORS AND/OR OMISSIONS SHALL BE REPORTED TO THE ENGINEER WITHOUT DELAY.
9. BUILDING DRAINS (NOT IN SCOPE) WHICH FLOW TO THE CLARIFIERS SHALL BE SUFFICIENTLY STRONG TO RESIST SURFACE LOAD AND SHALL BE INSTALLED AT A MINIMUM GRADE OF 2%. APPLICATION OF THERMAL INSULATION SHALL TAKE PLACE WHERE DRAINS ARE GREATER THAN 1.5m LONG AND/OR SHALLOW BURY TAKES PLACE AND/OR RISK OF FROST PENETRATION DUE TO SIDEWALKS, STORMWATER DITCHES, DRIVEWAYS OR OTHER UNUSUAL EXPOSURES. REF. O.B.C. 7.3.5.4.

SBS^{TM} SANITARY MAIN & LATERAL NOTES

1. ALL SANITARY MAINS SHALL HAVE 2.2m COVER OR SPECIFIED COVER (MINIMUM) AS NOTED ON DRAWINGS.
2. ALL SANITARY MAINS SHALL BE BEDDED ON A SHAPED BEDDING OF COMPACTED GRANULAR 'A' MEASURING 150mm IN DEPTH. GRANULAR 'A' BEDDING SHALL BE COMPACTED TO 95% S.P.D. AND SHALL BE 200mm ABOVE THE CROWN OF THE PIPE AND SHALL EXTEND 300mm (MINIMUM) LATERALLY IN ALL CASES. SOFT FOUNDATION MATERIALS MAY REQUIRE ADDITIONAL COMPACTED FILL SUPPORT AS DIRECTED BY THE GEOTECHNICAL ENGINEER. TRENCH BACKFILL TO ROAD SUBGRADE ELEVATION SHALL CONSIST OF GRANULAR 'B' OR APPROVED NATIVE MATERIALS COMPACTED TO 95 % S.P.D.
3. COATED No. 12 GAUGE TRACER WIRE SHALL BE INSTALLED ALONG ALL SBS SEWER MAINS.
4. UNLESS OTHERWISE NOTED, ALL SBS SANITARY SEWER MAINS, LATERALS AND CONNECTIONS SHALL BE THERMALLY WELDED HDPE DR17 PIPE IN ACCORDANCE WITH CAN/CSA- B182.11-06 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE DRAWINGS, O.P.S.D. SPECIFICATIONS AND CLEARFORD INDUSTRIES "SPECIFICATIONS FOR THE INSTALLATION OF HDPE SBS SANITARY SEWERS AND FORCEMAINS."
5. SANITARY SEWERS SHALL BE WATER TESTED TO OPSD 410.07.16.04 TO ENSURE LEAK-PROOF CONSTRUCTION. COMPLETED MAINS SHALL BE CCTV INSPECTED.
6. SANITARY LATERALS FROM THE CLARIFIER TO THE MAIN SHALL BE HDPE DR17 PIPE UNLESS OTHERWISE NOTED. WHERE RADII ARE SHOWN ON THE DRAWINGS, SANITARY MAINS AND LATERALS MAY EMPLOY LONG RADIUS CURVATURE OF 25 x OUTSIDE DIAMETER FOR 75 mm THROUGH 200mm HDPE DR17 IN LIEU OF FITTINGS.
7. NO CONNECTIONS, OTHER THAN APPROVED RESIDENTIAL SANITARY LATERALS, ARE PERMITTED TO THE CLARIFIER OR SANITARY SEWER MAINS.

SBS^{TM} SYSTEM ACCESS POINTS NOTES

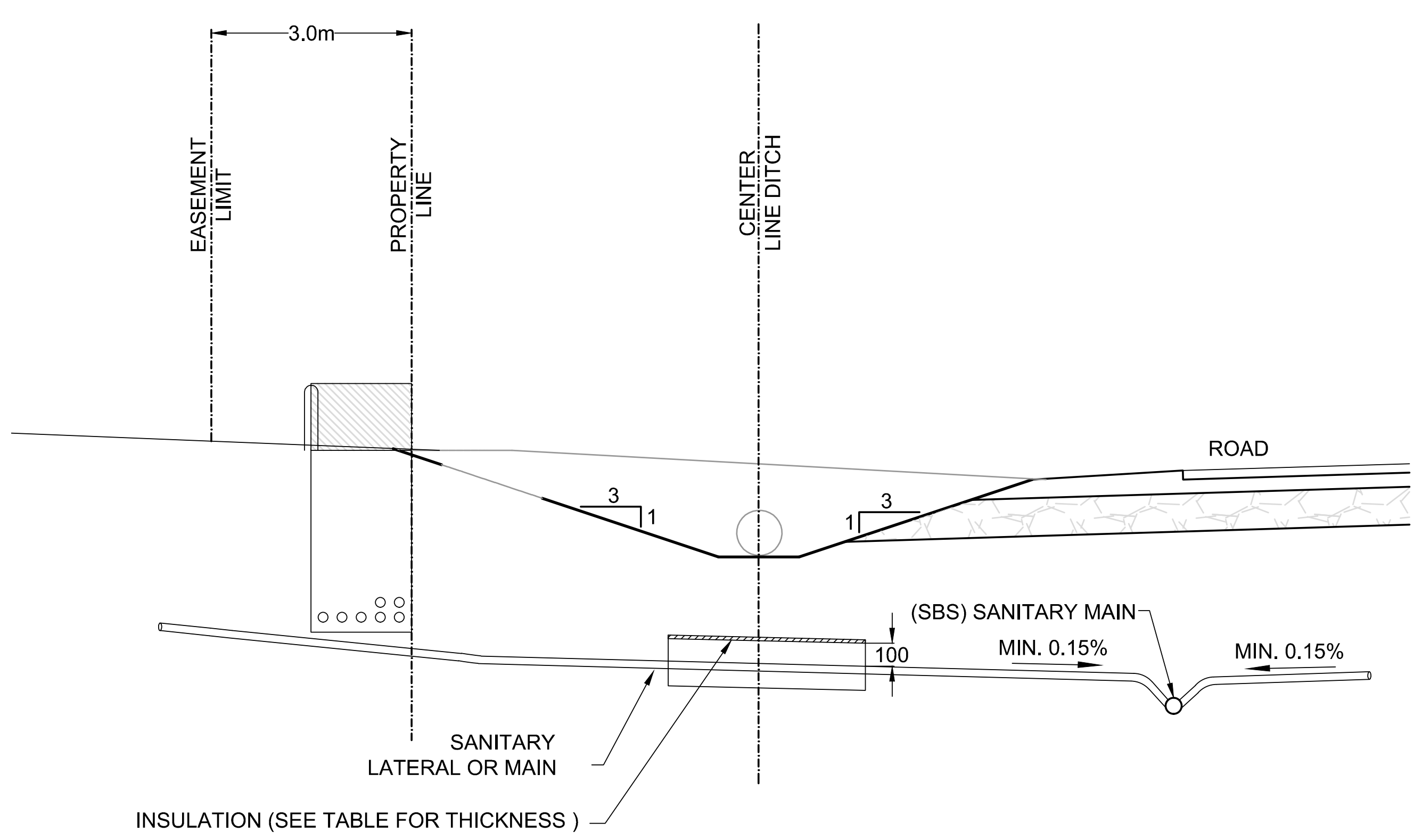
1. CAST IRON SYSTEM ACCESS POINT (SAP) FRAMES C/W COVERS AND SPECIFICATIONS WILL BE SUPPLIED BY CONTRACTOR AND APPROVED BY CLEARFORD ENGINEERS. EQUIVALENT PRE-CAST CONCRETE FRAMES MAY BE CONSIDERED.
2. CONTRACTOR IS RESPONSIBLE FOR SOURCING, STORAGE AND INSTALLATION OF SAPS. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION AGAINST DAMAGE.

SBS^{TM} CLARIFIER & STRUCTURES NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR UNLOADING, STORAGE AND INSTALLATION. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION AGAINST DAMAGE
2. CLARIFIERS SHALL BE INSTALLED IN AREAS NOT SUBJECT TO WHEEL LOADINGS UNLESS SPECIFIED AS LOAD BEARING.
3. CLARIFIERS SHALL BE INSULATED ON THE TOP AND SIDES OF TANK TO 610mm BELOW TOP OF TANK IN EARTH AND TO 1200mm BELOW TOP OF TANK IN ROCK OR AS PER CLEARFORD DRAWING. INSULATION SHALL BE STYROFOAM^{TM} DOW HI40 BOARD OR EQUIVALENT.
4. CLARIFIERS SHALL BE PLACED ON 200mm GRANULAR A BEDDING COMPACTED TO 95% STANDARD PROCTOR DENSITY (S.P.D.) UNLESS OTHERWISE NOTED ON THE DRAWING.
5. CLARIFIERS INSTALLED IN HIGH GROUNDWATER CONDITIONS SHALL BE BALLASTED WITH WATER DURING INSTALLATION TO PREVENT UPLIFT. ONCE INSTALLED 300mm (MINIMUM) OF BACKFILL SOIL MUST BE PLACED ON TOP OF THE CLARIFIER TANK IN ORDER TO EVACUATE THE CONTENTS.

WEST CAPITAL AIRPARK DEVELOPMENT

1. FUTURE PHASING INFORMATION FOR DEVELOPMENT OF RESIDENTIAL & COMMERCIAL FACILITIES SHALL BE PROVIDED TO CLEARFORD INDUSTRIES FOR REVIEW & APPROVAL TO ENSURE CAPACITY WITHIN THE COLLECTION SYSTEM.


3.0m
EASEMENT
LIMIT
PROPERTY
LINE
CENTER
LINE DITCH
ROAD
3
1
3
1
(SBS) SANITARY MAIN
100
MIN. 0.15%
MIN. 0.15%
SANITARY
LATERAL OR MAIN
INSULATION (SEE TABLE FOR THICKNESS)

NOTES:
1. FOR MAINS AND SERVICES IN DITCHED AREAS WHERE DEPTH OF COVER OR SEPARATION IS LESS THAN 2200mm.
2. THE INSULATION SHALL BE MINIMUM 1.2m WIDE AND SHALL BE CENTERED OVER THE PIPE.
3. INSULATION SHALL EXTEND 1000mm BEYOND THE DEFINED DITCH SECTION.
4. IF DEPTH FROM BOTTOM OF DITCH TO TOP OF PIPE IS LESS THAN 1000m, SPECIAL DESIGN IS REQUIRED.
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

EFFECTIVE EARTH COVER H_C(m)	REQUIRED THICKNESS (mm)
$1.9 \le H_C < 2.2$	25
$1.6 \le H_C < 1.9$	50
$1.3 \le H_C < 1.6$	75
$1.0 \le H_C < 1.3$	100

INSULATION UNDER SWALE DETAIL (TYP)

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS 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, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

CLEARFORD
WATER SYSTEMS INC.

WEST CAPITAL
Developments

No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
				8.	REVISED PER CITY COMMENTS (NO CHANGES)	FEB 9/24	ARM
				7.	ISSUED WITH ADDENDUM #2 (NO CHANGES)	JAN 5/24	ARM
				6.	ISSUED FOR TENDER - PHASE 1B-2 (NO CHANGES)	DEC 7/23	ARM
				5.	ISSUED FOR REVIEW - PHASE 1B-2 (NO CHANGES)	JUL 25/23	ARM
				4.	ISSUED FOR CONSTRUCTION - PHASE 1B (NO CHANGES)	NOV 4/21	ARM
11.	REVISED PER COMMENTS (NO CHANGES)	NOV 14/25	ARM	3.	ISSUED FOR REGISTRATION - PHASE 2A	APR 26/21	ARM
10.	ISSUED FOR REVIEW	NOV 19/24	ARM	2.	ISSUED FOR CONSTRUCTION	AUG 14/20	ARM
9.	REVISED PER CITY COMMENTS (NO CHANGES)	FEB 20/24	ARM	1.	ISSUED FOR REVIEW	JUL 10/20	ARM

SCALE
AS SHOWN

DESIGN
CHECKED
DRAWN
CHECKED
APPROVED

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

LOCATION
CITY OF OTTAWA
WEST CAPITAL AIRPARK - PHASE 2 BUSINESS PARK

DRAWING NAME
CLEARFORD SBS^{TM} DETAIL SHEET

PROJECT No.
102085-14

REV
REV # 11

DRAWING No.
102085-C2