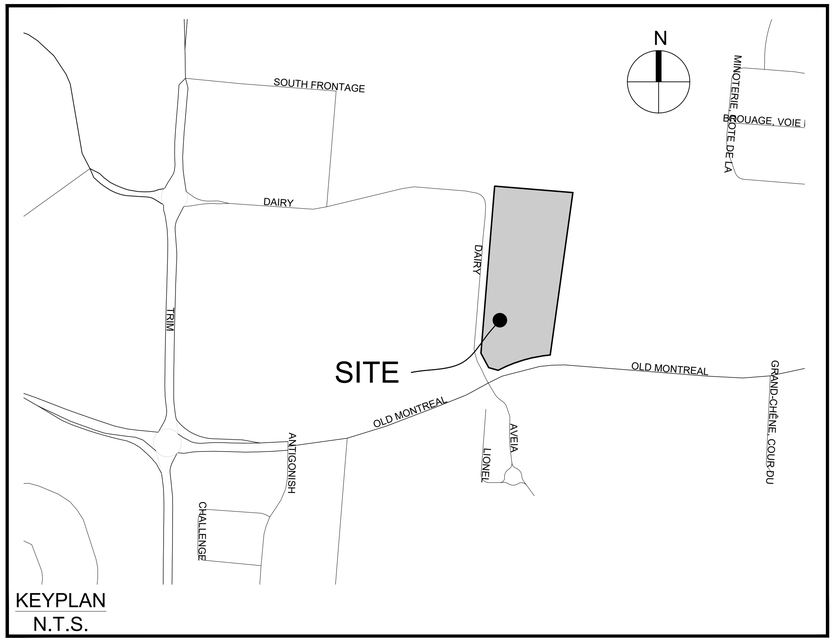
1015 DAIRY DRIVE

TSL DAIRY INC.



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C-400	SANITARY DRAINAGE AREA PLAN
C-500	STORM DRAINAGE AREA PLAN
C-600	PONDING PLAN
C-900	EROSION AND SEDIMENT CONTROL PLAN

ARCADIS

333 Preston Street - Suite 500
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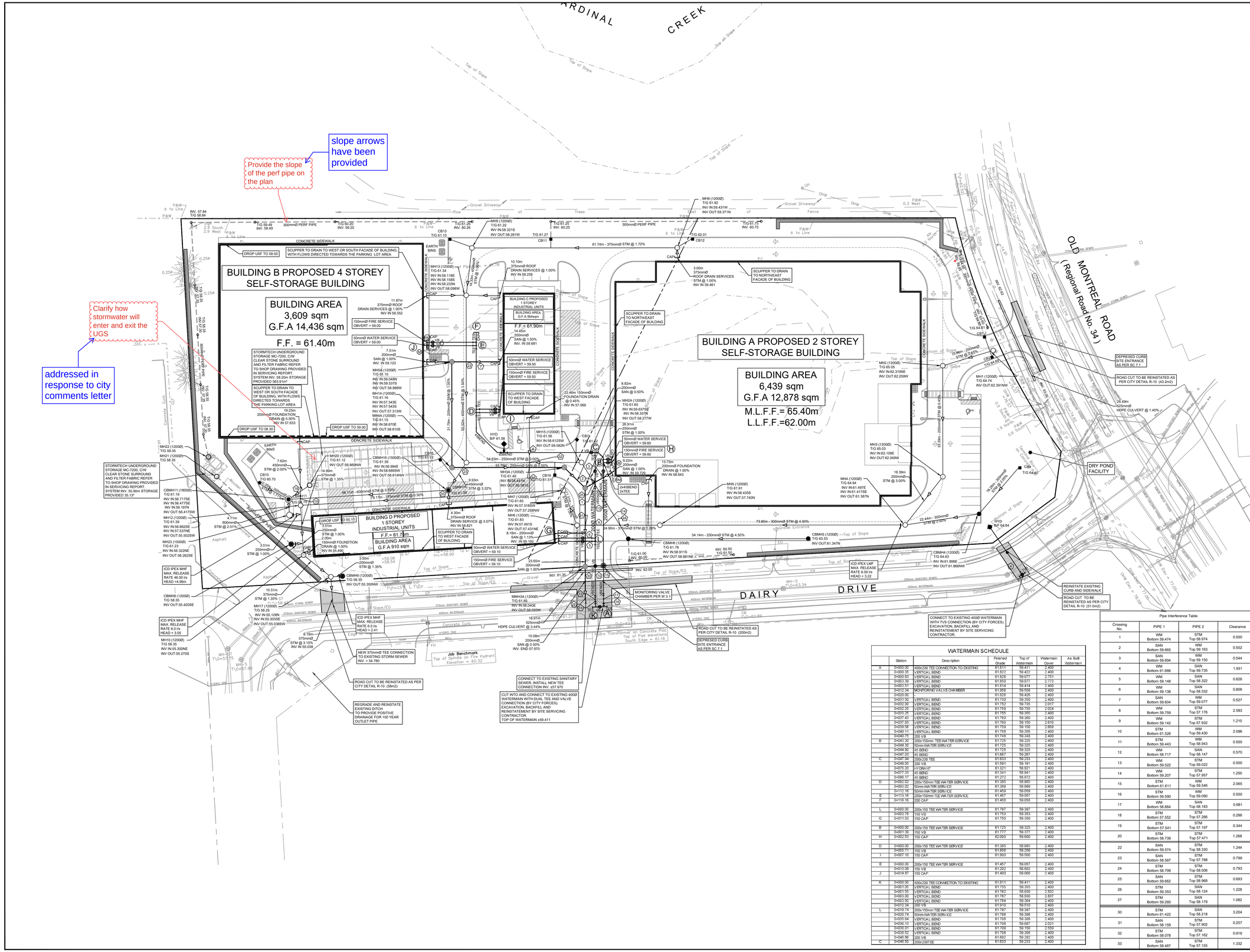
CITY OF OTTAWA

CONTRACT NO. 142817

SUBMISSION NO. 3 FOR CITY REVIEW - 2024-10-04
CITY FILE No. D07-12-12-0249 CITY PLAN No. ----



WATERMAIN SCHEDULE

	Station	Description	Finished Grade	Top of Watermain	Watermain Cover	As Built Watermain
A	0+000.00	400x200 TEE CONNECTION TO EXISTING	61.811	59.411	2.400	
	0+000.35	VERTICAL BEND	61.822	59.422	2.400	
	0+000.83	VERTICAL BEND	61.828	59.077	2.751	
	0+001.39	VERTICAL BEND	61.850	59.077	2.773	
	0+001.51	VERTICAL BEND	61.814	59.414	2.400	
	0+012.34	MONITORING VALVE CHAMBER	61.958	59.558	2.400	
	0+020.00		61.826	59.426	2.400	
	0+031.92	VERTICAL BEND	61.750	59.350	2.400	
	0+032.00	VERTICAL BEND	61.752	59.733	2.017	
	0+032.25	VERTICAL BEND	61.759	59.735	2.024	
	0+033.25	VERTICAL BEND	61.755	59.355	2.400	
	0+037.43	VERTICAL BEND	61.760	59.360	2.400	
	0+037.93	VERTICAL BEND	61.760	59.150	2.610	
	0+039.56	VERTICAL BEND	61.759	59.150	2.609	
	0+040.11	VERTICAL BEND	61.758	59.358	2.400	
	0+040.75	200 VB	61.748	59.348	2.400	
B	0+043.30	200x150mm TEE WATER SERVICE	61.725	59.325	2.400	
	0+044.30	50mm WATER SERVICE	61.725	59.325	2.400	
	0+044.80	45 BEND	61.725	59.325	2.400	
	0+047.03	45 BEND	61.667	59.267	2.400	
C	0+047.94	200x200 TEE	61.633	59.233	2.400	
	0+049.05	200 VB	61.591	59.191	2.400	
	0+075.33	HYDRANT	61.321	58.921	2.400	
	0+077.33	45 BEND	61.341	58.941	2.400	
	0+086.17	45 BEND	61.272	58.872	2.400	
D	0+092.02	200x150mm TEE WATER SERVICE	61.355	58.955	2.400	
	0+093.02	50mm WATER SERVICE	61.389	58.989	2.400	
	0+112.16	50mm WATER SERVICE	61.459	59.059	2.400	
E	0+113.16	200x150mm TEE WATER SERVICE	61.457	59.057	2.400	
F	0+116.16	200 CAP	61.458	59.058	2.400	
L	0+000.00	200x150 TEE WATER SERVICE	61.797	59.397	2.400	
	0+003.16	150 VB	61.753	59.353	2.400	
G	0+011.03	150 CAP	61.750	59.350	2.400	
B	0+000.00	200x150 TEE WATER SERVICE	61.725	59.325	2.400	
	0+001.38	150 VB	61.727	59.377	2.400	
H	0+002.53	150 CAP	62.000	59.600	2.400	
D	0+000.00	200x150 TEE WATER SERVICE	61.385	58.985	2.400	
	0+005.71	150 VB	61.658	59.256	2.400	
I	0+007.10	150 CAP	61.900	59.500	2.400	
E	0+000.00	200x150 TEE WATER SERVICE	61.457	59.057	2.400	
	0+013.08	150 VB	61.202	58.802	2.400	
J	0+014.87	150 CAP	61.400	59.000	2.400	
K	0+000.00	400x200 TEE CONNECTION TO EXISTING	61.811	59.411	2.400	
	0+001.00	VERTICAL BEND	61.755	59.355	2.400	
	0+001.55	VERTICAL BEND	61.782	58.930	2.832	
	0+003.00	VERTICAL BEND	61.767	58.930	2.837	
	0+003.50	VERTICAL BEND	61.764	59.364	2.400	
	0+012.34	200 VB	61.910	59.510	2.400	
L	0+019.74	200x150mm TEE WATER SERVICE	61.797	59.397	2.400	
	0+020.74	50mm WATER SERVICE	61.786	59.386	2.400	
	0+035.64	VERTICAL BEND	61.708	59.308	2.400	
	0+036.13	VERTICAL BEND	61.708	59.687	2.021	
	0+035.01	VERTICAL BEND	61.709	59.150	2.559	
	0+033.52	VERTICAL BEND	61.708	59.308	2.400	
	0+040.56	200 VB	61.692	59.292	2.400	
C	0+046.50	200x200TEE	61.833	59.233	2.400	

Pipe Interference Table

Crossing No.	PIPE 1	PIPE 2	Clearance
1	WM Bottom 59.474	STM Top 58.974	0.500
2	SAN Bottom 59.665	WM Top 59.163	0.502
3	SAN Bottom 59.694	WM Top 59.150	0.544
4	WM Bottom 61.666	SAN Top 59.735	1.931
5	WM Bottom 59.148	SAN Top 58.322	0.826
6	WM Bottom 59.138	SAN Top 58.332	0.806
7	SAN Bottom 59.604	WM Top 59.077	0.527
8	WM Bottom 59.759	STM Top 57.176	2.583
9	WM Bottom 59.142	STM Top 57.932	1.210
10	STM Bottom 61.526	WM Top 59.430	2.096
11	STM Bottom 59.443	WM Top 58.943	0.500
12	WM Bottom 58.717	SAN Top 58.147	0.570
13	WM Bottom 59.522	STM Top 59.022	0.500
14	WM Bottom 59.207	STM Top 57.957	1.250
15	STM Bottom 61.611	WM Top 59.546	2.065
16	STM Bottom 59.590	WM Top 59.090	0.500
17	WM Bottom 58.864	SAN Top 58.183	0.681
18	STM Bottom 57.552	STM Top 57.266	0.286
19	STM Bottom 57.541	STM Top 57.197	0.344
20	STM Bottom 58.739	STM Top 57.471	1.268
22	SAN Bottom 59.574	STM Top 58.330	1.244
23	SAN Bottom 58.587	STM Top 57.788	0.799
24	STM Bottom 58.799	STM Top 58.006	0.793
25	SAN Bottom 59.662	STM Top 58.968	0.693
26	STM Bottom 59.353	SAN Top 58.124	1.228
27	STM Bottom 59.260	SAN Top 58.179	1.082
30	STM Bottom 61.422	SAN Top 58.218	3.204
31	SAN Bottom 58.159	STM Top 57.902	0.257
32	STM Bottom 58.078	STM Top 57.162	0.916
33	SAN Bottom 58.487	STM Top 57.155	1.332

CLIENT

TSL DAIRY INC.

ISSUES

No.	DESCRIPTION	DATE
1	SUBMISSION NO.1 FOR CITY REVIEW	2024-02-14
2	SUBMISSION NO. 2 FOR CITY REVIEW	2024-06-27
3	SUBMISSION NO. 3 FOR CITY REVIEW	2024-10-04
4		
5		
6		

SEE 010, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

SEAL

L.D. K. Yannoulopoulos
2024/10/04
LICENCED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

PRIME CONSULTANT

ARCADIS
333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT

1015 DAIRY DRIVE

1015 DAIRY DRIVE

PROJECT NO: 142817

DRAWN BY:	CHECKED BY:
M.M./A.B.	R.M./D.Y.
PROJECT MGR: R.M.	APPROVED BY: D.Y.

SHEET TITLE

GENERAL PLAN OF SERVICES

SHEET NUMBER C-001

ISSUE 3

SCALE CHECK 1cm = XXXXX 1 in

File Location: J:\142817_1015_Dairy_DT\0_Production\7.03_Design\04_Civil\Sheets\C-001 GENERAL PLAN.dwg Last Saved: October 4, 2024, by sturnas3150 Plotted: October 4, 2024 2:41:40 PM by Sturna, Don

D07-12-13-0249

GENERAL LEGEND

- LIMIT OF CONSTRUCTION
- PHASING LINE
- BARRIER CURB
- MOUNTABLE CURB
- DEPRESSED BARRIER CURB
- CONCRETE SIDEWALK
- TACTILE WALKING SURFACE INDICATOR
- ASPHALT SIDEWALK / PATHWAY
- BUS STOP CONCRETE / ASPHALT

SERVICING LEGEND

- MH118A — SANITARY MANHOLE
- 200mmØ SAN — SANITARY SEWER
- MH109 / MH118 — STORM MANHOLE
- 825mmØ STM — STORM SEWER - LESS THAN 900Ø
- 900mmØ STM — STORM SEWER - 900Ø AND GREATER
- 200Ø WATERMAIN — WATERMAIN
- CB100, T/G 104.10 — STREET CATCHBASIN C/W TOP OF GRATE
- CICB101, G/G 104.25 — CURB INLET CATCHBASIN C/W GUTTER GRADE
- DCB100, T/G 104.10 — DOUBLE CATCHBASIN C/W TOP OF GRATE
- DCICB101, G/G 104.25 — DOUBLE CURB INLET CATCHBASIN C/W GUTTER GRADE
- D100, T/G 103.59 — DITCH INLET MANHOLE C/W TOP OF GRATE
- CBMH101, T/G 103.59 — CATCHBASIN MANHOLE C/W TOP OF GRATE
- RYCB, T/G 104.35 — REAR YARD CATCHBASIN IN ROAD CONNECTING STRUCTURE C/W SOLID GRATE
- T/G 104.35, INV. 103.35 — REAR YARD "TEE" CATCHBASIN (300Ø) C/W TOP OF GRATE AND INVERT OUT
- T/G 104.50, INV. 103.50 — REAR YARD "END" CATCHBASIN (300Ø) C/W TOP OF GRATE AND INVERT OUT
- T/G 104.35, INV. 103.35 — REAR YARD "CUSTOM ANGLED " CATCHBASIN (450Ø) C/W TOP OF GRATE AND INVERT OUT
- T/G 104.35, INV. 103.35 — REAR YARD "THREE WAY" CATCHBASIN (450Ø) C/W TOP OF GRATE AND INVERT OUT
- PERFORATED REAR YARD SUBDRAIN
- 300mmØ CSP — CSP CULVERT C/W DIAMETER
- VBVB — VALVE AND VALVE BOX
- VBVC — VALVE AND VALVE CHAMBER
- PARK VALVE CHAMBER C/W SERVICE POST
- HYD 104.35 — FIRE HYDRANT C/W BOTTOM OF FLANGE ELEVATION
- 200Ø WM — RED — 150Ø WM — WATERMAIN REDUCER
- 2 VBENDS — VERTICAL BEND LOCATION
- SIAMESE CONNECTION (IF REQUIRED)
- M — METER (IF REQUIRED)
- RM — REMOTE METER (IF REQUIRED)
- A — WATERMAIN IDENTIFICATION (IF REQUIRED)
- 1 — PIPE CROSSING IDENTIFICATION (IF REQUIRED)
- SINGLE SERVICE LOCATION
- DOUBLE SERVICE LOCATION
- BH 12, 102.00 — INFERRED REFUSAL (SEE GEOTECHNICAL REPORT)
- HGL 101.79 — 100 YEAR STORM HYDRAULIC GRADE LINE AT MANHOLE
- USF 101.79 — UNDERSIDE OF FOOTING ELEVATION
- CLAY SEAL IN SEWER / WATERMAIN TRENCH

UTILITY NOTES :

1. ALL MATERIALS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS & SPECIFICATIONS OR OPSD/OPSS IF CITY DRAWINGS AND SPECIFICATIONS DO NOT APPLY.
2. THE POSITION OF UNDERGROUND AND ABOVEGROUND SERVICE, UTILITIES AND STRUCUTRES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH SERVICE, UTILITIES AND STRUCTURES IS NOT GUARENTEED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL REPORT ALL CONFLICTS, DISCOVERIES OF ERROR AND DESCREPENCIES TO THE ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND ASSUME RESPONSIBILITY FOR ALL UTILITIES WHETHER OR NOT SHOW ON THESE DRAWINGS.
5. THESE DRAWINGS ARE NOT TO BE SCALED OR USED FOR LAYOUT PURPOSES.
6. THE COMPOSITE UTILITY PLAN HAS BEEN REVIEWED BY ARCDIS FOR CONFORMITY TO THE DESIGN CONCEPT FOR THE DEVELOPMENT AND FOR GENERAL ARRANGEMENT ONLY AND AS SUCH SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS OR OMISSIONS IN EITHER LAYOUT OR WORKMANSHIP.
7. THIS DRAWING IS A COMPILATION OF OTHER UTILITY DESIGNS AND DOES NOT INDICATE IN ANY WAY THAT THE PARTY SIGNING THIS DRAWING HAS DESIGNED OR APPROVED THE RESPECTIVE UTILITY PLANTS INDICATED ON THIS DRAWING. THE DRAWING WAS PREPARED TO BE USED AS REFERENCE ONLY AS PER REQUIREMENTS OF THE CITY OF OTTAWA. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE IT HAS REVIEWED THE CURRENT AND EXISTING DESIGNS BY HYDRO, STREET LIGHTING, BELL, CANADA POST, O.C. TRANSPO, CABLE TV AND ANY OTHER PARTIES INCLUDED BUT NOT MENTIONED AND COMPLETE THE INSTALLATION IN ACCORDANCE WITH THE REQUIREMENTS OF THE STAKEHOLDER UTILITY DESIGNS.
8. CONTRACTOR TO ADVISE ENGINEER IN WRITING OF ANY DISCREPANCIES IN THE HYDRO, BELL, ROGERS, ENBRIDGE, AND STREETLIGHT DRAWINGS, AND THE CUP AHEAD OF INSTALLATION.
9. HYDRO INSPECTOR IS TO BE NOTIFIED AND PRESENT AHEAD OF HYDRO INSTALLATION
10. BELL AND ROGERS VAULT EASEMENT SIZE AND LOCATION ARE AS SHOWN ON THE CUP. ANY LOCATION DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IN WRITING AHEAD OF INSTALLATION.
11. BELL AND ROGERS VAULTS ARE TO BE PLACED TO THE EXTENT POSSIBLE IN THE RIGHT OF WAY RESPECTING THE REQUIRED CLEARANCES FROM DUCTS IN THE JOINT UTILITY TRENCH. IF VAULTS ARE ON PRIVATE PROPERTY THEY MUST BE PLACED WITHIN THE EASEMENT. VERIFY VAULT CORNERS PRIOR TO FINAL INSTALLATION AND FIBRE LINE PLACEMENT. VAULTS INSTALLED IN THE WRONG LOCATION OR OUTSIDE THE EASEMENTS WILL BE RELOCATED AT THE COST OF BELL AND ROGERS.
12. UTILITY EASEMENTS ARE TO BE STAKED - ALL 4 CORNERS WITH PROPOSED FINAL GRADES MARKED ON THE STAKES.
13. STREETLIGHTS ARE TO BE INSTALLED AT THE OFFSETS FROM FACE OF CURB SHOWN ON THE APPROVED ROAD SECTIONS FOR THE PROJECT.
14. CAD FILES OF THE CUP PROVIDED BY THE ENGINEER ARE AS A COURTESY ONLY TO ASSIST THE CONTRACTOR. LAYOUT OF THE UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR AND LEGAL SURVEYOR.

Provide notes for watermains crossing under/above sewers. City Spec W25 is to be followed for crossings under sewers, W25.2 is to be followed for crossings above sewers.

Covered under general note 1. 250mm provided for all sewer-sewer crossings, 250mm provided when water crossing over sewer and 500mm provided when sewer crossing over water.

NOTES :

1. ALL MATERIALS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS & SPECIFICATIONS OR OPSD/OPSS IF CITY DRAWINGS AND SPECIFICATIONS DO NOT APPLY.
2. THE POSITION OF UNDERGROUND AND ABOVEGROUND SERVICE, UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH SERVICE, UTILITIES AND STRUCTURES IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL REPORT ALL CONFLICTS, DISCOVERIES OF ERROR AND DISCREPANCIES TO THE ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND ASSUME RESPONSIBILITY FOR ALL UTILITIES WHETHER OR NOT SHOW ON THESE DRAWINGS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL LANDS BEYOND THE SITE LIMITS. ANY AREAS BEYOND THE SITE LIMITS, WHICH ARE DISTURBED DURING CONSTRUCTION, SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ADJACENT LAND OWNER, THE OWNER, THE OWNERS REPRESENTATIVES AND/OR THE AUTHORITY HAVING JURISDICTION AT THE EXPENSE OF THE CONTRACTOR.
6. WHERE NECESSARY, THE CONTRACTOR SHALL IMPLEMENT A TRAFFIC MANAGEMENT PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE LATEST VERSION OF THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TEMPORARY TRAFFIC CONTROL MEASURES MUST BE REMOVED UPON THE COMPLETION OF THE WORKS.
7. SHOULD ANY BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER TO CONTACT THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATE, AND WORK WITHIN THE AREA SHALL BE CEASED UNTIL FURTHER NOTICE.
8. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT PG6498-1 PREPARED BY PATERSON GROUP.

   DRIVE ISLE, FIRE ROUTE AND HEAVY DUTY AREAS: (690mm)
   40mm - SUPERPAVE 12.5 ASPHALTIC CONCRETE
   50mm - SUPERPAVE 19.0 ASPHALTIC CONCRETE
   150mm - OPSS GRANULAR "A" CRUSHED STONE
   450mm - OPSS GRANULAR "B" TYPE II

   CAR ONLY PARKING AREA : (500mm)
   50mm - SUPERPAVE 12.5 ASPHALTIC CONCRETE
   150mm - OPSS GRANULAR "A" CRUSHED STONE
   300mm - OPSS GRANULAR "B" TYPE II
9. FOR GEODETIC **BENCHMARK** AND GEOMETRIC LAYOUT OF STREET AND LOTS, REFER TO TOPOGRAPHICAL SURVEY AND PLAN OF SUBDIVISION PREPARED BY ANNIS O'SULLIVAN VOLLEBEKK LTD. BENCHMARK BASED ON CAN--NET VIRTUAL REFERENCE SYSTEM NETWORK.
10. FOR SITE PLAN INFORMATION, REFER TO SITE PLAN PREPARED BY ESPOSTO ARCHITECTS.
11. THESE DRAWINGS ARE NOT TO BE SCALED OR USED FOR LAYOUT PURPOSES
12. ROADWAY SECTIONS REQUIRING GRADE RAISE TO PROPOSED SUB GRADE LEVEL TO BE FILLED WITH ACCEPTABLE NATIVE EARTH BORROW OR IMPORTED OPSS SELECTED SUBGRADE MATERIAL IF NATIVE MATERIAL IS DEFICIENT AS PER RECOMMENDATION OF GEOTECHNICAL ENGINEER.
13. IN AREAS WHERE EXISTING GROUND IS BELOW THE PROPOSED ELEVATION OF SEWER AND WATERMAINS, GRADE RAISING AND FILLING IS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. AS PER CITY GUIDELINES ALL WATERMAINS IN FILL AREAS ARE TO BE TIED WITH RESTRAINING JOINTS AND THRUST BLOCKS.
14. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL PLAN PRIOR TO THE COMMENCEMENT OF ANY SITE CONSTRUCTION. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED TO THE SATISFACTION OF THE ENGINEER, OR ANY REGULATORY AGENCY. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION IS ESTABLISH OR UNTIL THE START OF A SUBSEQUENT PHASE.
15. CONTRACTORS SHALL BE RESPONSIBLE FOR KEEPING CLEAN ALL ROADS WHICH BECOME COVERED IN DUST, DEBRIS AND/OR MUD AS A RESULT OF ITS CONSTRUCTION OPERATIONS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE SHOULD THE MAXIMUM OPSD TRENCH WIDTH BE EXCEEDED.
17. ALL PIPE, CULVERTS, STRUCTURES REFER TO NOMINAL INSIDE DIMENSIONS.
18. SHOULD CLAY SEALS BE REQUIRED, THEY SHALL BE INSTALLED AS PER THE RECOMMENDATIONS WITHIN THE GEOTECHNICAL REPORT.
19. UNLESS SPECIFICALLY NOTED OTHERWISE, PIPE MATERIALS SHALL BE AS FOLLOWS;
    -WATERMAINS TO BE PVC DR18
    -SANITARY SEWER TO BE PVC DR35
    -PERFORATED STORM SEWERS IN REAR YARDS AND LANDSCAPE AREAS TO BE HDPE
    -STORM SEWERS 375mm DIAMETER AND LESS TO BE PVC DR35
    -STORM SEWERS 450mm DIAMETER AND GREATER TO BE CONCRETE, CLASS AS PER OPSD 807.010 OR 807.030, OR HIGHER
    FOR SHALLOW SEWERS, REFER TO CITY STANDARD S35.
20. ALL CONNECTIONS TO EXISTING WATERMAINS ARE TO BE COMPLETED BY CITY FORCES. CONTRACTOR IS TO EXCAVATE, BACKFILL, COMPACT AND REINSTATE.
21. ANY WATERMAIN WITH LESS THAN 2.4m AND ANY SEWER WITH LESS THAN 2.0m DEPTH OF COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22 OR AS APPROVED BY THE ENGINEER.
22. ALL FIRE HYDRANTS AS PER CITY STANDARD W19, c/w 150mmØ LEAD UNLESS OTHERWISE SPECIFIED.
23. ALL STUBBED SEWERS SHALL HAVE PRE-MANUFACTURED CAPS INSTALLED.
24. ALL CATCHBASINS SHALL HAVE A 600mm SUMP. ALL CATCHBASIN MANHOLES, AND ALL STORM MANHOLES WITH OUTLETTING PIPE SIZES LESS THAN 900mm, SHALL HAVE A 300mm SUMP.
25. ALL SANITARY MANHOLES SHALL BE EQUIPPED WITH A WATERTIGHT COVER.
26. ALL LEADS FOR STREET CATCHBASIN'S AND CURB INLET CATCHBASIN'S CONNECTED TO MAIN SHALL BE 200mmØ PVC DR35 @ MIN 2% SLOPE UNLESS NOTED OTHERWISE. ALL LEADS FOR RYCB'S CONNECTED TO MAIN SHALL BE 200mmØ PVC DR35 @ MIN 1% SLOPE UNLESS NOTED OTHERWISE.
27. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL STREET CATCHBASINS SHALL BE INSTALLED WITH TWO - 3.0m MINIMUM SUBDRAINS INSTALLED LONGITUDINALLY, PARALLEL WITH THE CURB. ALL CATCHBASINS IN ASPHALT AREAS, NOT ADJACENT TO A CURB, SHALL BE INSTALLED WITH FOUR - 3.0m MINIMUM SUBDRAINS INSTALLED ORTHOGONALLY.
28. INLET CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMPLETING THE ROAD BASE (GRANULAR A).
29. ALL SEWER SERVICE LATERALS WITH MAINLINE CONNECTIONS DEEPER THAN 5.0m REQUIRE A CONTROLLED SETTLEMENT JOINT.
30. EACH BUILDING SHALL BE EQUIPPED WITH A SANITARY AND STORM SEWER BACKWATER VALVE AND CLEAN-OUT ON ITS PRIMARY SERVICE, AS PER ONTARIO BUILDING CODE REQUIREMENTS (BY OTHERS).
31. THE SUBGRADE OF ALL STRUCTURES, PIPE, ROADS, SIDEWALKS, WALKWAYS, AND BUILDINGS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
32. TOP COURSE ASPHALT SHALL NOT BE PLACED UNTIL THE FINAL CCTV INSPECTION AND NECESSARY REPAIRS HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA.
33. ALL RETAINING WALLS GREATER THAN 1.0m IN HEIGHT SHALL BE DESIGNED BY A QUALIFIED STRUCTURAL ENGINEER.
34. ALL RETAINING WALLS GREATER THAN 0.6m IN HEIGHT REQUIRE A GUARD. ANY GUARD ON A RETAINING WALL GREATER THAN 1.0m IN HEIGHT SHALL BE DESIGNED BY THE QUALIFIED STRUCTURAL ENGINEER RESPONSIBLE FOR THE WALL DESIGN.
35. UPON COMPLETION OF THE RETAINING WALL, THE CONTRACTOR SHALL REQUEST A CONFORMANCE CERTIFICATE FROM THE QUALIFIED ENGINEER RESPONSIBLE FOR THE WALL DESIGN.

CLIENT

TSL DAIRY INC.

Arcadis Professional Services (Canada) Inc.
formerly IBI Group Professional Services (Canada) Inc.

ISSUES

No.	DESCRIPTION	DATE
1	SUBMISSION NO.1 FOR CITY REVIEW	2024-02-14
2	SUBMISSION NO. 2 FOR CITY REVIEW	2024-06-27
3	SUBMISSION NO. 3 FOR CITY REVIEW	2024-10-04
4		
5		
6		

SEE 010, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

KEY PLAN

SEAL

LICENSED PROFESSIONAL ENGINEER
L.D. Yannoulopoulos
2024/10/04
PROVINCE OF ONTARIO

PRIME CONSULTANT
ARCADIS
333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT
1015 DAIRY DRIVE

1015 DAIRY DRIVE

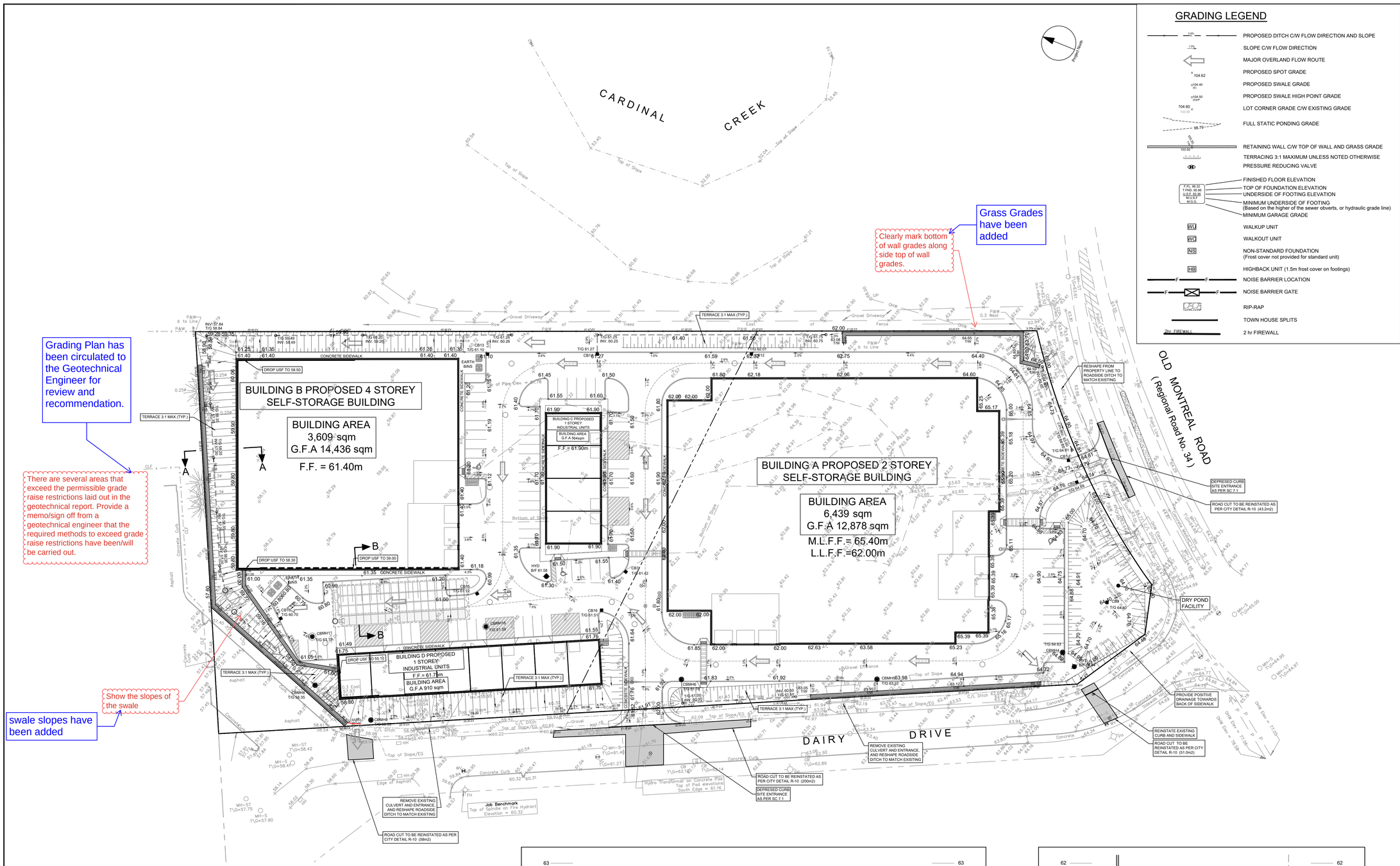
PROJECT NO: 142817	
DRAWN BY: **M.M./A.B.**	CHECKED BY: **R.M./D.Y.**
PROJECT MGR: **R.M.**	APPROVED BY: **D.Y.**

SHEET TITLE
NOTES DETAILS CB DATA TABLE

SHEET NUMBER	ISSUE
C-010	3

SCALE CHECK: 1:n XXXXX | 10mm | D07-12-13-0249

File Location: J:\142817_1015_Dairy_D\7 0_Production\7 03_Design\04_Civil\Sheets\C-010 NOTES DETAILS CB DATA TABLE.dwg Last Saved: June 27, 2024, by dsiuma Plotted: October 4, 2024 2:42:01 PM by Siuma, Don



GRADING LEGEND

- PROPOSED DITCH C/W FLOW DIRECTION AND SLOPE
- SLOPE C/W FLOW DIRECTION
- MAJOR OVERLAND FLOW ROUTE
- PROPOSED SPOT GRADE
- PROPOSED SWALE GRADE
- PROPOSED SWALE HIGH POINT GRADE
- LOT CORNER GRADE C/W EXISTING GRADE
- FULL STATIC PONDING GRADE
- RETAINING WALL C/W TOP OF WALL AND GRASS GRADE
- TERRACING 3:1 MAXIMUM UNLESS NOTED OTHERWISE
- PRESSURE REDUCING VALVE
- F.F.EL. 98.32 / T.POND. 95.96 / U.S.F. 93.36 / M.U.S.F. / M.G.G. — FINISHED FLOOR ELEVATION; TOP OF FOUNDATION ELEVATION; UNDERSIDE OF FOOTING ELEVATION; MINIMUM UNDERSIDE OF FOOTING (Based on the higher of the sewer obverts, or hydraulic grade line); MINIMUM GARAGE GRADE
- WU — WALKUP UNIT
- WO — WALKOUT UNIT
- NS — NON-STANDARD FOUNDATION (Frost cover not provided for standard unit)
- HB — HIGHBACK UNIT (1.5m frost cover on footings)
- NOISE BARRIER LOCATION
- NOISE BARRIER GATE
- RIP-RAP
- TOWN HOUSE SPLITS
- 2hr FIREWALL — 2 hr FIREWALL

CLIENT

TSL DAIRY INC.

Arcadis Professional Services (Canada) Inc.
formerly IBI Group Professional Services (Canada) Inc

ISSUES

No.	DESCRIPTION	DATE
1	SUBMISSION NO.1 FOR CITY REVIEW	2024-02-14
2	SUBMISSION NO. 2 FOR CITY REVIEW	2024-06-27
3	SUBMISSION NO. 3 FOR CITY REVIEW	2024-10-04
4		
5		
6		

SEE 010, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

KEY PLAN

1:500 0 5 15 25m

SEAL

PRIME CONSULTANT

ARCADIS

333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT

1015 DAIRY DRIVE

1015 DAIRY DRIVE

PROJECT NO: 142817	
DRAWN BY: **M.M./A.B.**	CHECKED BY: **R.M./D.Y.**
PROJECT MGR: **R.M.**	APPROVED BY: **D.Y.**

SHEET TITLE

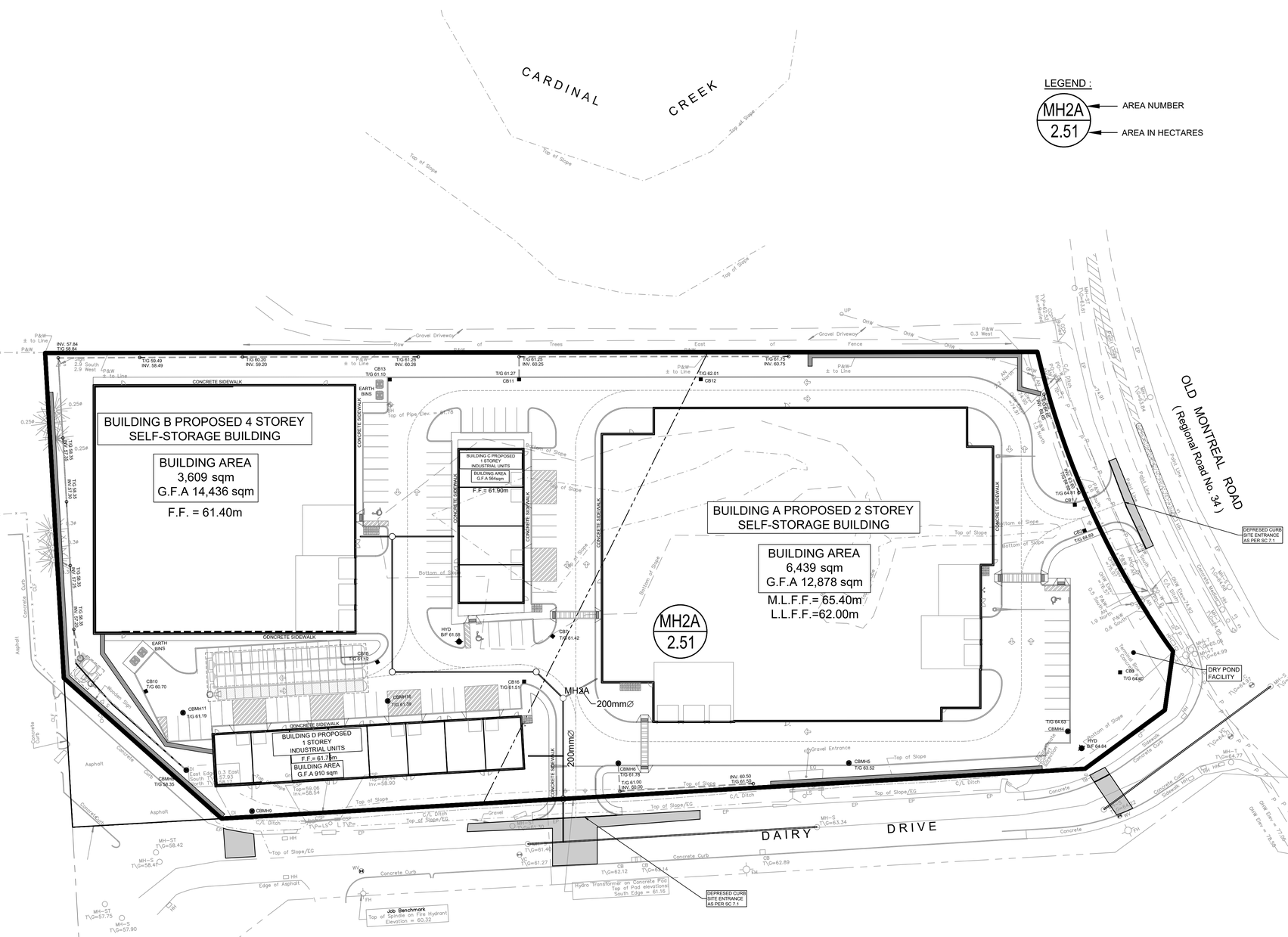
GRADING PLAN

SHEET NUMBER	ISSUE
C-200	3

SCALE CHECK 1 in 50mm XXXXX

File Location: J:\142817_1015_Dairy_DT\0_Production\7.03_Design\04_Civil\Sheets\C-200 GRADING.dwg Last Saved: October 4, 2024, by slurma93150 Plotted: October 4, 2024 2:43:01 PM by Slurma, Don

D07-12-13-0249



CLIENT

TSL DAIRY INC.

ISSUES

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6		

SEE 010, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

KEY PLAN

1:500 0 5 15 25m

SEAL

LICENSED PROFESSIONAL ENGINEER
L.I.D. #: Yannoulopoulos
2024/10/04
PROVINCE OF ONTARIO

PRIME CONSULTANT

ARCADIS

333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT

1015 DAIRY DRIVE

1015 DAIRY DRIVE

PROJECT NO: 142817	
DRAWN BY: **M.M./A.B.**	CHECKED BY: **R.M./D.Y.**
PROJECT MGR: **R.M.**	APPROVED BY: **D.Y.**

SHEET TITLE

SANITARY DRAINAGE AREA PLAN

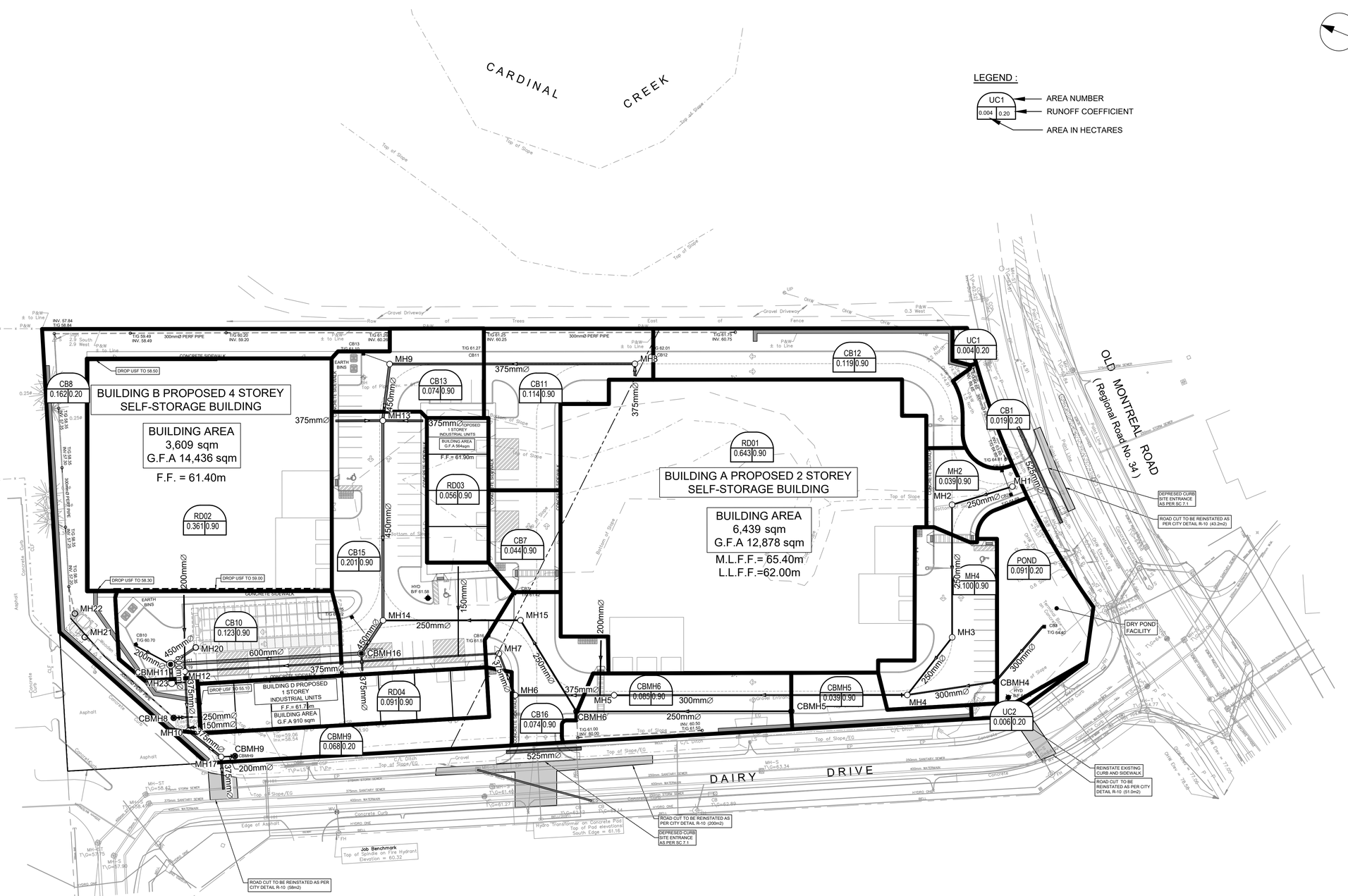
SHEET NUMBER	ISSUE
C-400	3

SCALE CHECK 1 in 10mm

XXXXX

D07-12-13-0249

File Location: J:\142817_1015_Dairy_D7\0_Production\7.03_Design\04_Civil\Sheets\C-400 SANITARY DRAINAGE AREA PLAN.dwg Last Saved: June 27, 2024, by cbiurna Plotted: October 4, 2024 2:44:02 PM by Suma, Don



CLIENT

TSL DAIRY INC.

ISSUES

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SEE 010, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

KEY PLAN

1:500 0 5 15 25m

SEAL

LICENSED PROFESSIONAL ENGINEER
L.D. M. Yannoulopoulos
2024/10/04
PROVINCE OF ONTARIO

PRIME CONSULTANT

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Ottawa ON K1S 5N4 Canada
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PROJECT

1015 DAIRY DRIVE

1015 DAIRY DRIVE

PROJECT NO: 142817	
DRAWN BY: **M.M./A.B.**	CHECKED BY: **R.M./D.Y.**
PROJECT MGR: **R.M.**	APPROVED BY: **D.Y.**

SHEET TITLE

STORM DRAINAGE AREA PLAN

SHEET NUMBER	ISSUE
C-500	3

SCALE CHECK 1 in XXXXX 10mm

D07-12-13-0249

File Location: J:\142817_1015_Dairy_D7\0_Production\7.03_Design\04_Civil\Sheets\C-500 STORM DRAINAGE AREA PLAN.dwg Last Saved: October 4, 2024 by siuma3150 Plotted: October 4, 2024 2:45:09 PM by Siuma, Don

PONDING LEGEND

- PROPOSED DITCH C/W FLOW DIRECTION AND SLOPE
- SLOPE C/W FLOW DIRECTION
- MAJOR OVERLAND FLOW ROUTE
- PROPOSED SPOT GRADE
- PROPOSED SWALE GRADE
- PROPOSED SWALE HIGH POINT GRADE
- LOT CORNER GRADE C/W EXISTING GRADE
- FULL STATIC AND 100YR PONDING GRADE
- TERRACING 3:1 MAXIMUM UNLESS NOTED OTHERWISE

Project North

CARDINAL CREEK

OLD MONTREAL ROAD (Regional Road No. 34)

BUILDING B PROPOSED 4 STOREY SELF-STORAGE BUILDING

BUILDING AREA 3,609 sqm G.F.A 14,436 sqm

F.F. = 61.40m

BUILDING A PROPOSED 2 STOREY SELF-STORAGE BUILDING

BUILDING AREA 6,439 sqm G.F.A 12,878 sqm

M.L.F.F. = 65.40m

L.L.F.F.=62.00m

BUILDING C PROPOSED 1 STOREY INDUSTRIAL UNITS

BUILDING AREA G.F.A 564sqm

F.F.= 61.90m

BUILDING D PROPOSED 1 STOREY INDUSTRIAL UNITS

F.F.= 61.75m

BUILDING AREA G.F.A 910 sqm

DAIRY DRIVE

POND ID	POND 1
TOP OF GRATE (m)	60.70
STATIC ELEV (m)	61.00
STATIC DEPTH (m)	0.30
STATIC VOLUME (m³)	29.54
5yr ELEV (m)	60.70
100yr ELEV (m)	61.04
100yr +20 ELEV (m)	61.05

POND ID	POND 2
BOTTOM DRY POND (m)	64.40
STATIC ELEV (m)	64.95
STATIC DEPTH (m)	0.55
STATIC VOLUME (m³)	194.59
5yr ELEV (m)	64.74
5yr VOLUME (m³)	22.53
100yr ELEV (m)	64.87
100yr VOLUME (m³)	64.76
100yr + 20 ELEV (m)	64.92
100yr +20 VOLUME (m³)	82.03

What is this dark triangle?

removed

Show the ponding depth/peak flow depth for this area (swale area tributary to CBMH8)

ponding information provided

Show the ponding depth/peak flow depth for this area (swale area tributary to CBMH9)

ponding information provided

Job Benchmark
Top of Spindle on Fire Hydrant
Elevation = 60.32

REMOVE EXISTING CULVERT AND ENTRANCE, AND RESHAPE ROADSIDE DITCH TO MATCH EXISTING

ROAD CUT TO BE REINSTATED AS PER CITY DETAIL R-10 (28m2)

ROAD CUT TO BE REINSTATED AS PER CITY DETAIL R-10 (200m2)

DEPRESED CURB SITE ENTRANCE AS PER SC 7.1

RESHAPE FROM PROPERTY LINE TO ROADSIDE DITCH TO MATCH EXISTING

DEPRESED CURB SITE ENTRANCE AS PER SC 7.1

ROAD CUT TO BE REINSTATED AS PER CITY DETAIL R-10 (43.2m2)

DRY POND FACILITY

PROVIDE POSITIVE DRAINAGE TOWARDS BACK OF SIDEWALK

REINSTATE EXISTING CURB AND SIDEWALK

ROAD CUT TO BE REINSTATED AS PER CITY DETAIL R-10 (51.0m2)

REMOVE EXISTING CULVERT AND ENTRANCE, AND RESHAPE ROADSIDE DITCH TO MATCH EXISTING

1:500 0 5 10 15 25m

CLIENT

TSL DAIRY INC.

ISSUES

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SEE 010, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

KEY PLAN

SEAL

LICENSED PROFESSIONAL ENGINEER
L.D. M. Yannoulopoulos
2024/10/04
PROVINCE OF ONTARIO

PRIME CONSULTANT
ARCADIS
333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT
1015 DAIRY DRIVE

1015 DAIRY DRIVE

PROJECT NO: 142817	
DRAWN BY: **M.M./A.B.**	CHECKED BY: **R.M./D.Y.**
PROJECT MGR: **R.M.**	APPROVED BY: **D.Y.**

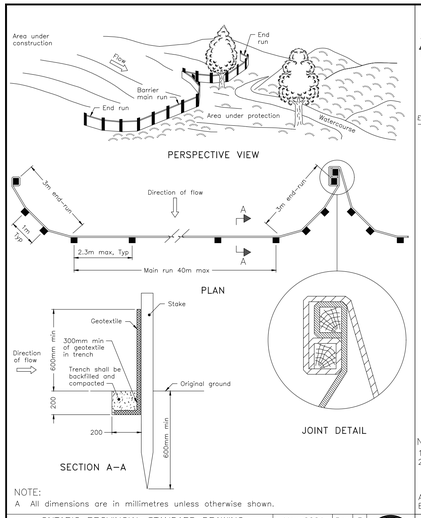
SHEET TITLE
PONDING PLAN

SHEET NUMBER	ISSUE
C-600	3

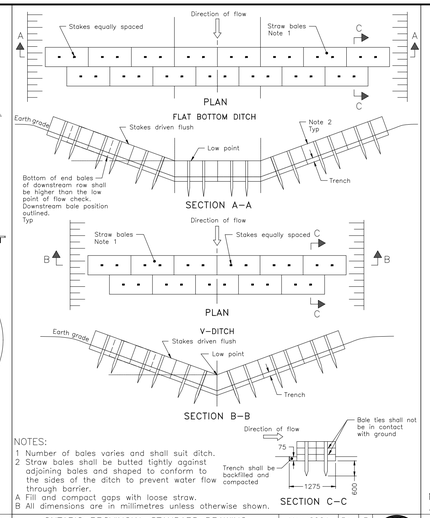
SCALE CHECK: 1 in XXXXX 10mm

File Location: J:\142817_1015_Dairy_DI\7.0_Production\7.03_Design\04_Civil\Sheets\C-600 PONDING.dwg Last Saved: June 27, 2024 by dsiurna Plotted: October 4, 2024 2:46:18 PM by Siurna, Don

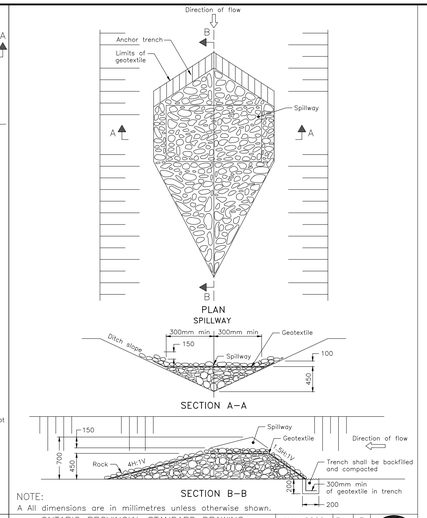
D07-12-13-0249



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



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



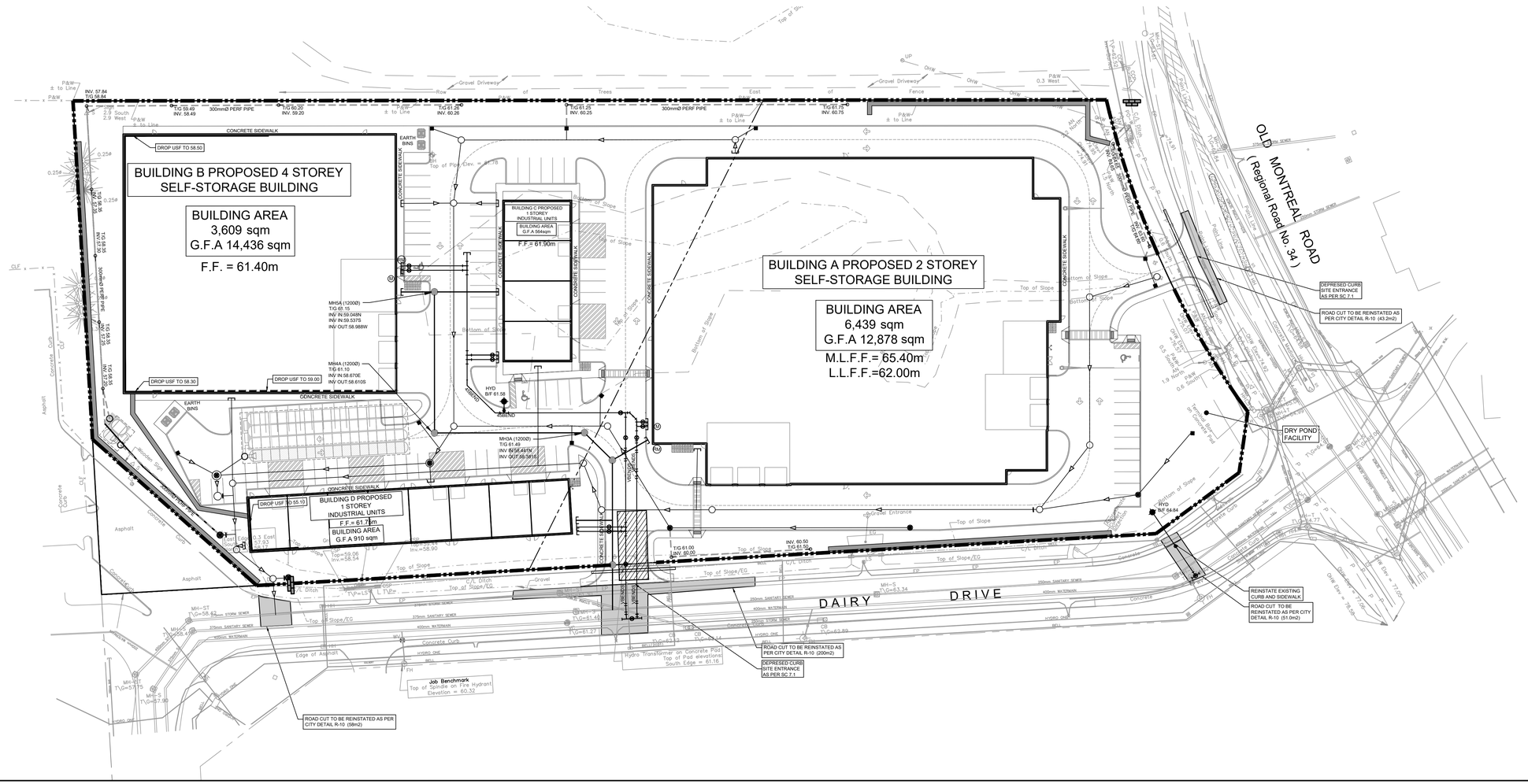
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2022	Rev	3
TEMPORARY ROCK FLOW CHECK DAM V–DITCH		OPSD 219.210	

NOTES:

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY,
2. SILT FENCE TO BE ERECTED PRIOR TO EARTH WORKS BEING COMMENCED. SILT FENCE TO BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR UNTIL START OF SUBSEQUENT PHASE.
3. STRAW BALE SEDIMENT TRAPS TO BE CONSTRUCTED IN EXISTING ROAD SIDE DITCHES. TRAPS TO REMAIN AND BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED.
4. SILT SACK TO BE PLACED AND MAINTAINED UNDER COVER OF ALL CATCHBASINS. GEOTEXTILE SILT SACK IN STREET CBs TO REMAIN UNTIL ALL CURBS ARE CONSTRUCTED. GEOTEXTILE FABRIC IN RYCBs TO REMAIN UNTIL VEGETATION IS ESTABLISHED. ALL CATCHBASINS TO BE REGULARLY INSPECTED AND CLEANED, AS NECESSARY, UNTIL SOD AND CURBS ARE CONSTRUCTED.
5. CONTRACTOR TO PROVIDE DETAILS ON LOCATION(S) AND DESIGN OF DEWATERING TRAP(S) PRIOR TO COMMENCING WORK. CONTRACTOR ALSO RESPONSIBLE FOR MAINTAINING TRAP(S) AND ADJUSTING SIZE(S) IF DEEMED REQUIRED BY THE ENGINEER DURING CONSTRUCTION.
6. CONTRACTOR TO PROTECT EXISTING CATCHBASINS WITH FILTER CLOTH UNDER THE COVERS TO TRAP SEDIMENTATION. REFER TO IDENTIFIED STRUCTURES.
7. WORKS NOTED ABOVE ARE TO BE INSTALLED, INSPECTED, MAINTAINED AND ULTIMATELY REMOVED BY SERVICING CONTRACTOR.
8. THIS IS A "LIVING DOCUMENT" AND MAY BE MODIFIED IN THE EVENT THE PROPOSED CONTROL MEASURES ARE INSUFFICIENT

LEGEND:

- LIGHT DUTY SILT FENCE AS PER OPSD-219.110
- SNOW FENCE
- STRAW BALE CHECK DAM AS PER OPSD-219.180
- ROCK CHECK DAM AS PER OPSD-219.210
- CB SILT SACK PLACED UNDER EXISTING CB COVER
- TEMPORARY MUD MAT 0.15m THICK 50mm CLEAR STONE ON NON WOVEN FILTER CLOTH (4.0 x 15.0)



1:500 (0, 5, 15, 25m)

CLIENT

TSL DAIRY INC.

ISSUES

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KEY PLAN

SEAL

LICENSED PROFESSIONAL ENGINEER
L.D. 4C. Yannoulopoulos
2024/10/04
PROVINCE OF ONTARIO

PRIME CONSULTANT
ARCADIS
333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
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PROJECT
1015 DAIRY DRIVE
1015 DAIRY DRIVE

PROJECT NO: 142817	
DRAWN BY: **M.M./A.B.**	CHECKED BY: **R.M./D.Y.**
PROJECT MGR: **R.M.**	APPROVED BY: **D.Y.**

SHEET TITLE
EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER **C-900** | ISSUE **3**

D07-12-13-0249

SCALE CHECK 1 in XXXXX 50mm

File Location: J:\142817_1015_Dairy_D7\0_Production\7.03_Design\04_Civil\Sheets\C-900 EROSION AND SEDIMENT .dwg Last Saved: October 3, 2024, by siumad3150 Plotted: October 4, 2024 2:47:22 PM by Siuma, Don