LEGEND

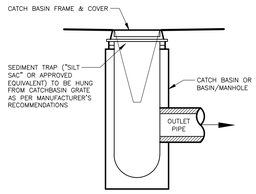
XXX.XX	EXISTING GRADE	APP	APPROACH
(XXX.XX)	PROPOSED GRADE	APPROX.	APPROXIMATE
EX(XXX.XX)	PROPOSED GRADE = EXISTING GRADE	AD	AREA DRAIN
FFE=(XXX.XX)	PROPOSED FINISHED FLOOR ELEVATION	BOL	BOLLARD
(XXX.XX)SW	PROPOSED SWALE ELEVATION	BLDG	BUILDING
T/G=(XXX.XX)	PROPOSED TOP OF GRATE ELEVATION	CB	CATCH BASIN
		CONC	CONCRETE
▲	ENTRANCE	CCRB	CONCRETE CURB
	PROPOSED SHEET FLOW DIRECTION	CRW	CONCRETE RETAINING WALL
	EXISTING SHEET FLOW DIRECTION	DC	DROP CURB
	DIRECTION OF OVERLAND DRAINAGE	DN	DOWN
	PROPOSED HEAVY DUTY SILT FENCE AS PER OPSD 219.130	EX.	EXISTING
		HP	HYDRO POLE
	PROPOSED SILT SAC AS PER **DETAIL 2/C1-1**	LA	LANDSCAPING
		MH	MANHOLE
		ORM	ORNAMENTAL FENCE
		PIL	PILLAR
		PROP.	PROPOSED
		TYP.	TYPICAL

PRIOR TO CONSTRUCTION

NOTE: a) CONTRACTOR TO INSTALL SILT SAC'S ON ALL EX. CB'S WHERE SHOWN. SILT SAC'S ON PROPOSED INFRASTRUCTURE TO BE INSTALLED IMMEDIATELY WITH INSTALLATION OF FRAME AND GRATE.

b) SILT SAC'S SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND EMPTIED FOLLOWING EVERY RAINFALL EVENT, IF REQ'D.

c) CONTRACTOR SHALL REMOVE SILT SAC'S FOLLOWING PLACEMENT OF BASE ASPHALT ONLY.

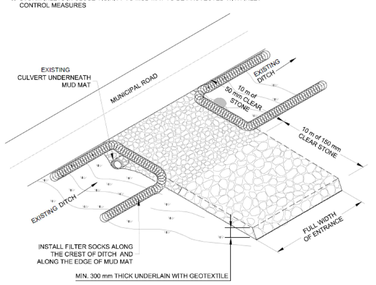


2 / C1-1 **Silt Sac Sediment Control Detail**

N.T.S.

MUD MAT DETAIL NOTES:

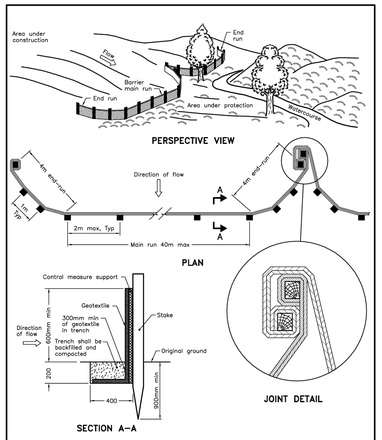
1. MUD MAT TO BE UNDERLAIN WITH A GEOTEXTILE CLOTH
2. SEDIMENT WILL BE CLEANED FROM PUBLIC RIGHT OF WAYS AS REQUIRED
3. STORM INLETS IN CLOSE VICINITY TO MUD MAT TO BE PROTECTED WITH INLET CONTROL MEASURES



NOTE: THIS DETAIL REPRESENTS AN IDEAL SCENARIO. SITE CONDITIONS VARY AND EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE TAILORED FOR EACH SITE AND PROJECT

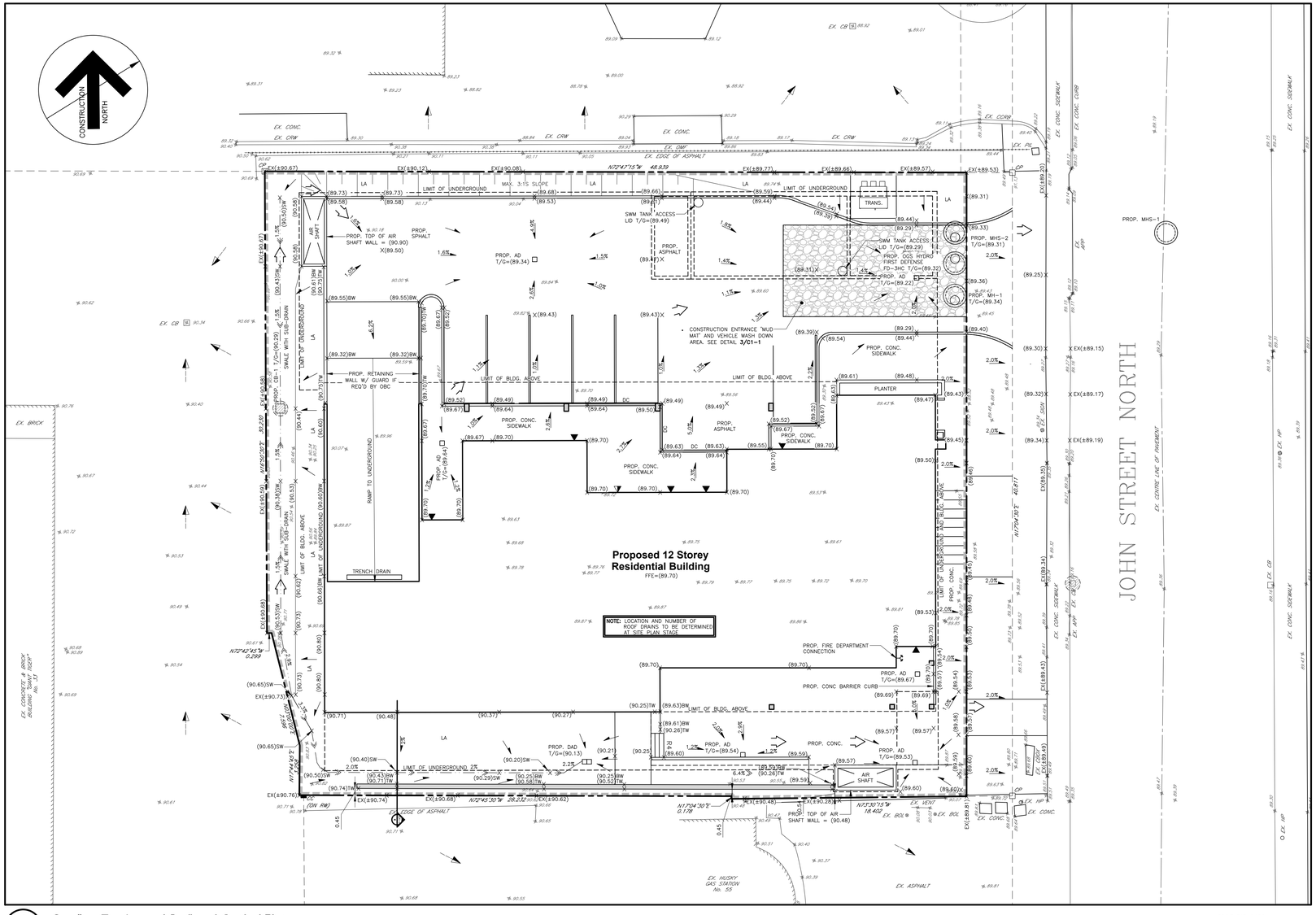
3 / C1-1 **Mud Mat Tracking Control Detail**

N.T.S.



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

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev. 2
HEAVY–DUTY SILT FENCE BARRIER		OPSD 219.130



1 / C1-1 **Grading, Erosion and Sediment Control Plan**

GENERAL GRADING NOTES

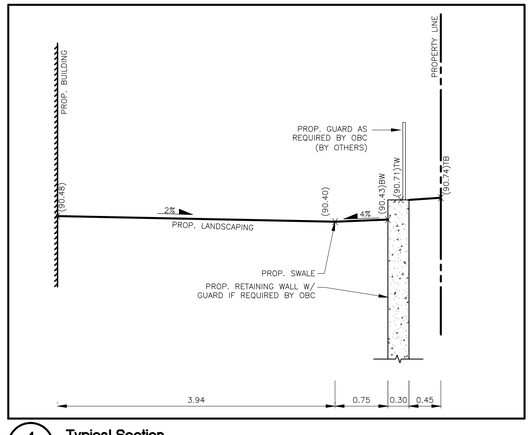
1. ALONG ADJOINING PROPERTIES GRADE TO MEET EXISTING OR PROPOSED ELEVATIONS WITH SODDED SLOPES (MIN. 3H TO 1V) AND/OR RETAINING WALLS AS SPECIFIED
2. ALL RETAINING WALLS, WALKWAYS, CURBS, ETC., SHALL BE PLACED A MIN. OF 0.45m OFF THE PROPERTY LINE. ALL WALLS 1.0m OR HIGHER SHALL BE DESIGNED BY A P.ENG.
3. SHOULD A RETAINING WALL BE REQUIRED, THE TOP OF WALL ELEVATIONS SHALL BE SET 150mm ABOVE THE PROPOSED SIDE YARD SWALES
4. RETAINING WALLS 0.6m IN HEIGHT OR GREATER REQUIRE CONSTRUCTION OF A FENCE OR GUARD RAIL AT THE TOP OF THE REAR OF THE WALL. GUARDS FOR RETAINING WALLS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF EXTERIOR GUARDS AS CONTAINED IN THE ONTARIO BUILDING CODE
5. SLOPES OF SWALES FOR BOTH "BACK TO FRONT" AND "SPLIT" DRAINAGE SHALL BE NO LESS THAN 2.0% GRADE AND NO GREATER THAN 33% GRADE (3:1 SLOPES)
6. WHEN MATCHING TO EXISTING PROPERTIES WHERE A 2.0% GRADE CANNOT BE ACHEVED, A 1.5% GRADE IS PERMITTED PROVIDED A 150mm SUB–DRAIN IS INSTALLED BELOW THE BOTTOM OF THE SWALE AND DRAINED TO A SUITABLE OUTLET, (WITH A MINIMUM 0.3m COVER OVER THE SUB–DRAIN), OR OTHER MITIGATION MEASURES
7. MINIMUM GRADE FOR A WRAP–AROUND SWALE IN THE BACKYARD SHALL BE 1.0%
8. UNLESS OTHERWISE NOTED, THE GROUND BETWEEN PROPOSED ELEVATIONS ON SIDE LOTS SHALL BE GRADED AS A STRAIGHT LINE
9. TOP OF FOUNDATION WALLS FOR BUILDINGS SHALL BE 150mm (MIN) ABOVE FINISHED GRADE
10. DRIVEWAY SLOPES SHALL NOT BE LESS THAN 2% AND NOT MORE THAN 7.0%. REVERSED SLOPED DRIVEWAYS IN NEW DEVELOPMENTS ARE NOT PERMITTED
11. GARAGE FLOOR ELEV. TO BE SET MINIMUM 0.3m HIGHER THAN BACK OF WALK, UNLESS OTHERWISE SPECIFIED
12. ALL FILL PLACED ON LOTS SHALL BE COMPACTED TO A MINIMUM 95% SPD (UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER). ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300mm LIFTS
13. FOR DELINEATION OF TREE PROTECTION ZONES, BUFFERS, REMOVALS AND PROTECTION SCHEMATICS, ETC., REFER TO TREE PROTECTION PLAN
14. LOT GRADING FOR ALL LOTS IN THE SUBDIVISION SHALL CONFORM STRICTLY WITH THIS PLAN. ANY CHANGES, UNLESS APPROVED PRIOR TO CONSTRUCTION BY THE CITY, SHALL RESULT IN NON ACCEPTANCE OF THE SUBDIVISION BY THE CITY
15. IF GRADING IS REQUIRED ON LANDS ADJACENT TO THE DEVELOPMENT WHICH ARE NOT OWNED BY THE DEVELOPER, THEN THE DEVELOPER MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER TO ALLOW THE DEVELOPER TO GRADE ON THE ADJACENT LANDS, OTHERWISE RETAINING WALLS MUST BE USED
16. THE WRITTEN PERMISSION REQUIRED FROM THE ADJACENT LANDOWNER SHALL BE OBTAINED PRIOR TO ENTERING THE LANDS. SHOULD PERMISSION NOT BE OBTAINED OR IS WITHDRAWN PRIOR TO COMMENCING THE WORK, THEN THE DEVELOPER SHALL LIMIT HIS ACTIVITIES TO THE LIMITS OF THE DEVELOPMENT SITE
17. DRIVEWAY AND DRIVEWAY APPROACHES SHALL BE LOCATED SUCH THAT HYDRO VAULTS AND OTHER STREET FURNITURE ARE A MIN. OF 1.2m FROM THE PROJECTIONS OF THE OUTSIDE GARAGE WALLS

BEFORE STARTING WORK

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF HAMILTON AND LANHACK CONSULTANTS INC. AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
2. THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ALL BENCHMARKS, ELEVATIONS, DIMENSIONS, AND GRADES MUST BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE ENGINEER.
4. ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE LOCATED, MARKED AND PROTECTED. ANY UTILITIES DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
5. AT LEAST TWO DIFFERENT BENCHMARKS MUST BE REFERRED TO AT ALL TIMES.

SILTATION AND EROSION CONTROL NOTES

1. SILTATION CONTROL BARRIERS SHALL BE PLACED AS DETAILED.
2. SILTATION AND EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO WORKS COMMENCING ON THE SITE AND SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION AND UNTIL GROUND COVER IS ESTABLISHED AND THE SITE IS FULLY DEVELOPED.
3. EROSION AND SEDIMENT CONTROLS MUST BE INSPECTED ON A REGULAR BASIS AND AFTER EVERY RAIN FALL EVENT, AND MUST BE MAINTAINED AND REPAIRED IN A TIMELY MANNER TO PREVENT SEDIMENT FROM LEAVING THE SITE.
4. EXISTING AND PROPOSED CATCHBASINS ARE TO BE PROTECTED WITH A SILTSAC FOR THE DURATION OF CONSTRUCTION.
5. IT IS REQUIRED TO STABILIZE ALL AREAS THAT WILL REMAIN DISTURBED FOR MORE THAN 30 DAYS.
6. SILT FENCE AND CATCHBASIN PROTECTION ARE NOT TO BE REMOVED UNTIL COMPLETION OF CONSTRUCTION.
7. THE SILTATION AND EROSION CONTROL MEASURES ILLUSTRATED ON THIS PLAN ARE CONSIDERED TO BE THE MINIMUM REQUIREMENT. CONDITIONS MAY REQUIRE ADDITIONAL MEASURES WHICH WILL BE IDENTIFIED BY THE ENGINEER DURING CONSTRUCTION.
8. ALL EROSION AND SILTATION CONTROL DEVICES SHOULD BE AS PER THE "GREATER GOLDEN HORSESHOE AREA CONSERVATION AUTHORITIES" AND "EROSION AND SEDIMENT CONTROL GUIDELINE FOR URBAN CONSTRUCTION".
9. THE OWNER IS RESPONSIBLE FOR THE REMOVAL OF ALL MUD AND DEBRIS THAT ARE TRACKED ONTO THE ROADWAYS FROM VEHICLES ENTERING AND LEAVING THE CONSTRUCTION SITE. THE OWNER SHALL, UPON VERBAL AND/OR REQUEST BY THE CITY, IMMEDIATELY PROCEED WITH THE CLEANUP OPERATION AT THEIR EXPENSE. SHOULD THE OWNER FAIL TO MAINTAIN THE ROAD AS DIRECTED, THE CITY WILL HAVE THE CLEANING CARRIED OUT, AND DRAW ON THE SECURITY FOR COSTS AND/OR LAY CHARGES.
10. ADDITIONAL SILT CONTROL LOCATIONS MAY BE REQUIRED AS DETERMINED BY THE CITY OF HAMILTON.



4 / C1-1 **Typical Section**

1:50

KEY PLAN

Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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SOURCE
– EXISTING BOUNDARY SURVEY AND TOPOGRAPHICAL INFORMATION OBTAINED FROM A.T. MCLAREN LTD., DWG NO –36814, DATED – DEC 23, 2021

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

Revision Record

No.	Description	Date (m/d/y)
C	RE–ISSUED FOR ZBA/OPA	11/19/24
B	RE–ISSUED FOR ZBA/OPA	02/14/24
A	ISSUED FOR ZBA/OPA	12/02/22

Issue Record

LICENSED PROFESSIONAL ENGINEER J. D. LAMARRE November 2024 PROVINCE OF ONTARIO

NOT FOR CONSTRUCTION

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Proposed 12 Storey Residential Building

175 JOHN STREET NORTH
HAMILTON, ON

Date:	NOVEMBER 2024
Drawn By:	GRW
Chkd By:	SMP
Scale:	AS NOTED

Preliminary Grading, Erosion and Sediment Control Plan

Project No.:	Drawing No.:	Rev.:
22080	C1-1	C

Plot Date: 11/19/24
M:\2022\22080 – 175 John St. N., Pane Del Sole\CIVIL\22080_001 – Grading and Servicing Plan.dwg