Mississauga Valley Park
Stormwater Management Facility
Virtual Public Open House

www.mississauga.ca

March 1st – April 2nd, 2021

Flooding of Cooksville Creek

- In recent years, the Cooksville Creek watershed has experienced a number of flooding events largely as a result of inadequate stormwater management and concentrated urban development located within the watershed. Most recently, the flooding events of August 2009 and July 2013 caused significant damage to both public and private properties within the Cooksville Creek Floodplain.
- The City of Mississauga undertook a Municipal Class Environmental Assessment (EA) Study in July 2012 to compare alternatives which would reduce the risk of flooding in the Cooksville Creek watershed.

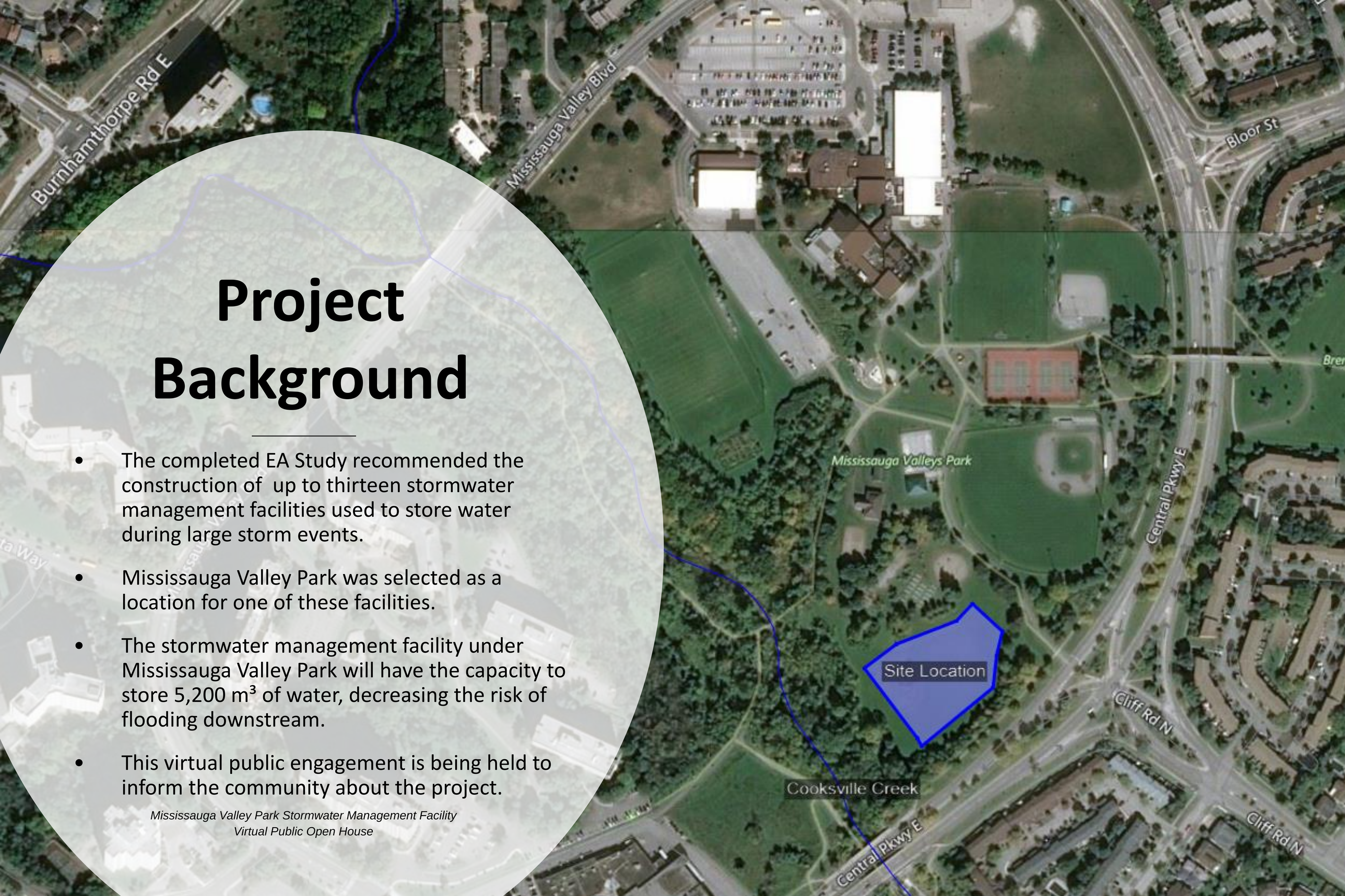



http://www.mississauga.ca/file/COM/Cooksville_Creek_Flooding_v03_Draft.pdf

Project Background

- The completed EA Study recommended the construction of up to thirteen stormwater management facilities used to store water during large storm events.
- Mississauga Valley Park was selected as a location for one of these facilities.
- The stormwater management facility under Mississauga Valley Park will have the capacity to store 5,200 m^3 of water, decreasing the risk of flooding downstream.
- This virtual public engagement is being held to inform the community about the project.

Mississauga Valley Park Stormwater Management Facility
Virtual Public Open House



Existing Mississauga Valley Park

- Mississauga Valley Park consists of ~10 hectares of public park space containing an extensive greenbelt trail system, fitness centre, arena, indoor pool and various outdoor recreational facilities.
- The subject site in the park is located in the southwest quadrant of the park and is currently under utilized. The site is bound by Cooksville Creek to the southwest, Central Parkway East to the southeast and open park space to the north.
- Existing drainage through the site is conveyed from west to east over relatively flat ground towards Cooksville Creek. There are existing storm and sanitary sewers that run through the Boulevard along Central Parkway E on the south side of the park.

Image from Google Images

Facility Summary

- The proposed underground storage facility will have the capacity to store up to 5,200 m³ of water during large storm events.
- Smaller storm events will bypass the facility similar to existing conditions in order to retain storage for large events.
- The construction of this project, along with other facilities including Eastgate Park and Sandalwood Park, will increase the available capacity of storm sewers and watercourses downstream. This ultimately reduces the risk of flooding during large events.

Image from Google Images

Image from Google Images

Images from Installation at Sandalwood Park, Mississauga

Project Benefits

- The proposed project will provide many benefits to the residents of Mississauga including:
  - New landscaping within the southwest quadrant of Mississauga Valley Park;
  - Improved drainage within the park following rainfall events; and,
  - Reduced risk of flooding in the Cooksville Creek Watershed located downstream of Mississauga Valley Park.

Project Summary

- The project will include the following:
  - Removal of all existing structures, minor tree removal, temporary lane restrictions of Central Parkway East and excavation of the existing park;
  - Installation of the underground stormwater facility including a concrete tank and intake/outlet structures;
  - Backfilling and regrading of the park;
  - Replacement of all removed structures including road and sidewalk restoration in the Central Parkway East Boulevard;
  - Additional landscaping including new trees and shrubs surrounding the park and in the Boulevard.

Images from Installation at Eastgate Park, Mississauga

EX. 35m - 750mmØ CONC. STM @ 1.90%

EX. 87m - 750mmØ CONC. STM @ 0.60%

EX. 92m - 300mmØ CONC. STM @ 1.42%

RAPID

COOKSVILLE CREEK

30m FROM EDGE OF CREEK

0.90ø_CLUMP

PLAY

150 mm PERFORATED "BIG O" PIPE.
SET IN WASHED 50mm CLEARSTONE
TRENCH 1.0m WIDE AND 1.8m DEEP

LIMIT OF DISTURBANCE

2.4m X 2.4m STEEL GRATED VENTING AND
MAINTENANCE ACCESS STRUCTURE

UNDERGROUND CONCRETE STORAGE FACILITY
FACILITY FOOTPRINT 3795m²
STORAGE VOLUME PROVIDED 5,260m³
SEE DEG SEC FOR CROSS SECTIONS AND
STRUCTURAL DRAWINGS FOR DETAILS

EXCAVATION LIMIT

ISOLATOR ROW

DEBRIS WEIR

75mm CONTROLLING ORIFICE

PROP. 58.8m - 300mm Ø N-12 WT IB HDPE PIPE @ 0.3%

OUTLET CONNECTION
117.45

LOCKED AND SEALED
MANHOLE LID

WASTOP BACKFLOW
PREVENTOR TO BE
INSTALLED ON EXISTING
OUTLET

150 mm PERFORATED "BIG O" PIPE
SET IN WASHED 50mm CLEARSTONE
TRENCH 1.0m WIDE AND 1.8m DEEP

LOCKED AND SEALED
MANHOLE LID

PROP. 30.9m - 1800mm x 900mm CONC. BOX PIPE @ 0.8%

EX. 200m - 1200mmØ CONC. SAN @ 0.86%

3600mm x 900mm SCB2
GRATE INV. = 121.78
W INV. = 118.02
E INV. = 118.35
SEE DETAIL ON DWG DE-1

EASEMENT

CENTRAL PARKWAY EAST

PROP. 154m - 1200mmØ
HDPE STM PIPE @ 1.0%

TWIN 3600mm x 900mm SCB 1
GRATE INV. = 121.47
W INV. = 118.51
SEE DETAIL ON DWG DE-1

EX. 78.03m - 1200mmØ CONC. STM @ 1.16%

EX. 92.66m - 1200mmØ CONC. STM @ 1.11%

EX. 90.83m - 1200mmØ CONC. STM @ 1.07%

EX. 87.70m - 450mmØ CONC. SAN @ 1.00%

EX. 58m - 450mmØ CONC. SAN @ 1.00%

CONRETE INLET DEPRESSION GRADED
IN BLVD. SEE IN DWG FOR DETAILS

EX. 600mmØ CONC. WM PIPE

EX. 600mmØ CONC. WM PIPE

SITE

LOCATION PLAN
N.T.S.

LEGEND

- PROPERTY LINE
- LIMIT OF DISTURBANCE
- EXCAVATION LIMIT
- TREE DRIPLINE
- SANITARY SEWER EASEMENT
- EXISTING CONTOURS

NO.	REVISION	DATE	BY
3.	ISSUED FOR AGENCY APPROVAL	01/14/21	MFB
2.	95% DESIGN PHASE	08/13/20	MFB
1.	30% DESIGN PHASE	05/14/20	MFB

MISSISSAUGA VALLEY PARK
GENERAL PLAN
COOKSVILLE SWM FACILITIES - CITY OF MISSISSAUGA

MISSISSAUGA

RESILIENT CONSULTING

DESIGNED BY: SR	DATE: MAY 2020		CHECKED BY: MB
DRAWN BY: AN	PROJECT No. 2020-004		APPROVED BY: MB
SCALE: 1:350			DRAWING No. GP

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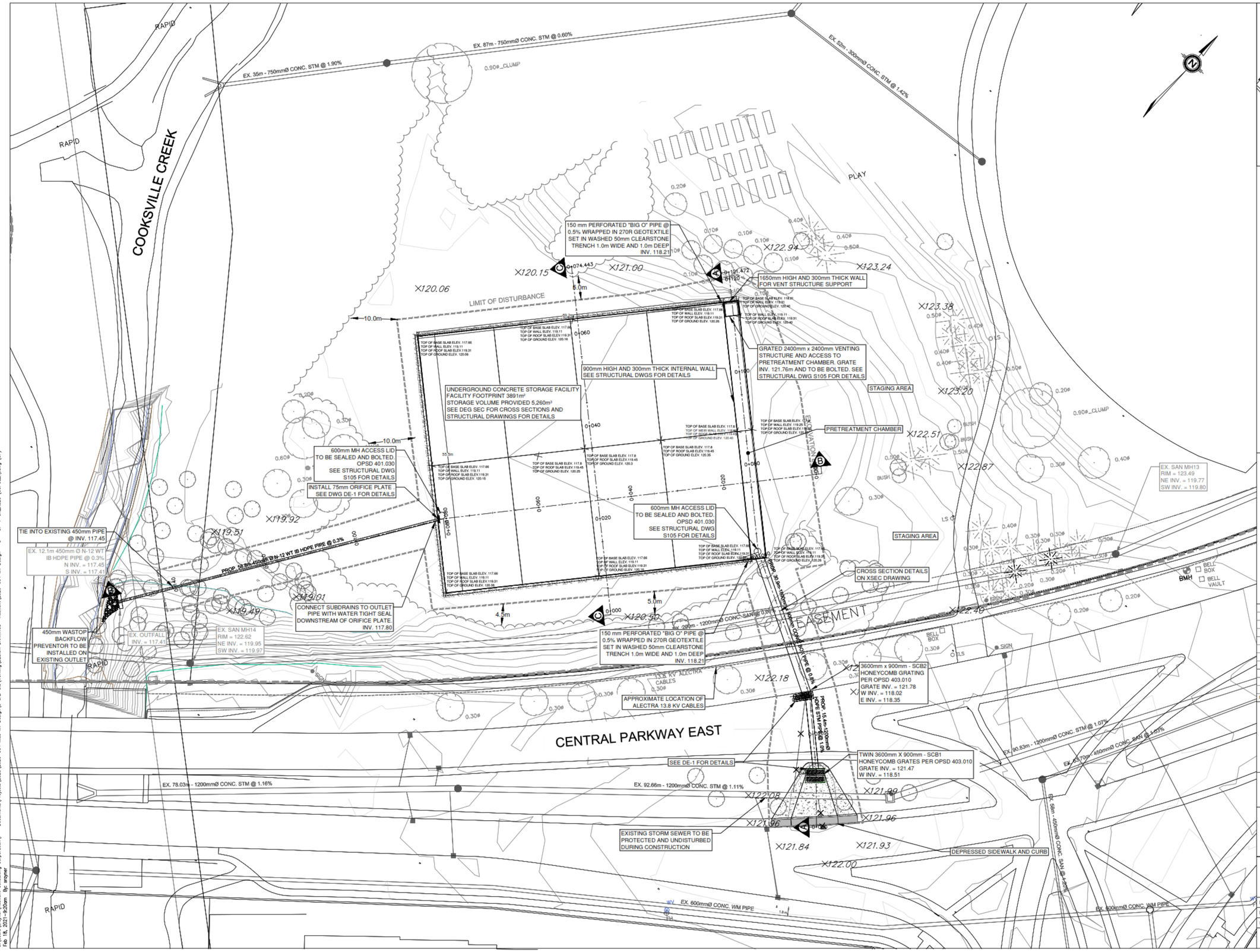
Feb 18, 2021 - 8:50am By: ranyman



LOCATION PLAN
N.T.S.

LEGEND

- PROPERTY LINE
- EXCAVATION LIMIT
- LIMIT OF DISTURBANCE
- TREE DRIPLINE
- REMOVALS

NO.	REVISION	DATE	BY
3.	ISSUED FOR AGENCY APPROVAL	01/14/21	MFB
2.	95% DESIGN PHASE	08/13/20	MFB
1.	30% DESIGN PHASE	05/14/20	MFB

MISSISSAUGA VALLEY PARK
UNDERGROUND INFRASTRUCTURE PLAN
COOKSVILLE SWM FACILITIES - CITY OF MISSISSAUGA

MISSISSAUGA

RESILIENT CONSULTING

DESIGNED BY: SR	DATE: MAY 2020	CHECKED BY: MB	
DRAWN BY: AN	PROJECT No. 2020-004	APPROVED BY: MB	
SCALE: 1:350		DRAWING No. UP	

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Feb 18, 2021 - 9:20am By: ianyner

NOTE:

DEWATERING AT THE SITE WILL INCLUDE BOTH GROUNDWATER CONTROL TO LOWER GROUNDWATER FOR EXCAVATION, AND LOCALIZED EXCAVATION DEWATERING TO HANDLE RAINFALL.

GROUNDWATER CONTROL SYSTEM IS TO BE DESIGNED AND IMPLEMENTED BY THE CONTRACTOR. CONTRACTOR TO REVIEW GEOTECHNICAL INVESTIGATION BY TERRAPROBE, MAY 2020. GROUNDWATER IS TO BE TREATED AS REQUIRED TO CONFORM TO CITY OF MISSISSAUGA STORM SEWER BY-LAW AND DISCHARGED TO EXISTING STORM SEWER NORTH OF WORK AREA. ANTICIPATED DEWATERING RATE IS 175 M^3/DAY.

LOCALIZED EXCAVATION DEWATERING IS TO BE PROVIDED THROUGH GRAVELED DEWATERING SUMPS, PUMPED TO FILTER BAGS MINIMUM 30 m FROM WATERCOURSE.

LOCATION PLAN
N.T.S.

LEGEND

- LIMIT OF DISTURBANCE
- PROPERTY LINE
- SANITARY SEWER EASEMENT
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED TREE HOARDING
- TREE DRIPLINE
- EXISTING CONTOURS
- ESTIMATED EXCAVATION LIMIT
- COFFER DAM

DISCHARGE POINT FOR GROUNDWATER CONTROL SYSTEM

EX. 35m - 750mmØ CONC. STM @ 1.90%

EX. 87m - 750mmØ CONC. STM @ 0.60%

EX. 52m - 300mmØ CONC. STM @ 1.42%

30m FROM EDGE OF CREEK

GRAVELED DEWATERING SUMP CONTRACTOR TO MOVE AS REQUIRED TO ENSURE DRY EXCAVATION AREA

PROVIDE COFFER DAM TO MINIMUM ELEVATION 120.5m TO PROVIDE 5 YEAR FLOOD PROTECTION FOR EXCAVATION

WATER TO BE DISCHARGED THROUGH A FILTER BAG ENCLOSED WITH 450mm SILT SOCKS SEE DETAIL ON DWG TR-1

DISCHARGE FROM DEWATERING MUST BE DISPERSED FROM TRAP THROUGH VEGETATED AREA MIN. 30m FROM WATERCOURSE OR AS FAR AS POSSIBLE GIVEN PROPERTY AND SITE CONSTRAINTS. FILTER BAG TO BE PLACED OUTSIDE OF THE WOODLAND DRIPLINE.

PUMP, SEE DETAIL ON DWG TR-1 ADJUST PUMP SIZE AND LOCATION AS REQUIRED TO ENSURE DRY EXCAVATION AREA

PUMP, SEE DETAIL ON DWG TR-1 ADJUST PUMP SIZE AND LOCATION AS REQUIRED TO ENSURE DRY EXCAVATION AREA

LIMIT OF DISTURBANCE

EXCAVATION LIMIT

STAGING AREA

PROPOSED SEDIMENT CONTROL / TREE HOARDING FENCING AS PER CITY OF MISSISSAUGA DETAIL OR AS APPROVED BY SITE ENGINEER. TREE PROTECTION AND SEDIMENT FENCING DETAILS SHOWN ON DWG TR-1 AND TR-2

TOTAL DISTURBANCE AREA = 9410m²

DISCHARGE FROM DEWATERING MUST BE DISPERSED FROM TRAP THROUGH VEGETATED AREA MIN. 30m FROM WATERCOURSE OR AS FAR AS POSSIBLE GIVEN PROPERTY AND SITE CONSTRAINTS. FILTER BAG TO BE PLACED OUTSIDE OF THE WOODLAND DRIPLINE.

WATER TO BE DISCHARGED THROUGH A FILTER BAG ENCLOSED WITH 450mm SILT SOCKS SEE DETAIL ON DWG TR-1

GRAVELED DEWATERING SUMP CONTRACTOR TO MOVE AS REQUIRED TO ENSURE DRY EXCAVATION AREA

STABILIZED IMMEDIATELY WITH EROSION CONTROL BLANKET AND ULTIMATELY PER THE RESTORATION PLAN

INSTALL FILTER CLOTH IN EX. CATCHBASINS

PROPOSED MUD MAT AS PER CITY OF MISSISSAUGA DETAIL ON DWG TR-1

CONTRACTORS TO ACCESS SITE FROM CENTRAL PARKWAY EAST. RIGHT IN, RIGHT OUT TRUCK ACCESS ONLY

INSTALL FILTER CLOTH IN EX. CATCHBASINS

INSTALL FILTER CLOTH IN EX. CATCHBASINS

INSTALL FILTER CLOTH IN EX. CATCHBASINS

EX. 78.03m - 1200mmØ CONC. STM @ 1.16%

EX. 92.66m - 1200mmØ CONC. STM @ 1.11%

EX. 90.83m - 1200mmØ CONC.

EX. 43.70m - 450mmØ CONC.

EX. 58m - 450mmØ CONC. SAN @ 1.20%

EX. 600mmØ CONC. WM PIPE

EX. 600mmØ CONC. WM PIPE

RAPID

PLAY

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3.	ISSUED FOR AGENCY APPROVAL	01/14/21	MFB
2.	95% DESIGN PHASE	08/13/20	MFB
1.	30% DESIGN PHASE	05/14/20	MFB

MISSISSAUGA VALLEY PARK
EROSION AND SEDIMENT CONTROL PLAN
COOKSVILLE SWM FACILITIES - CITY OF MISSISSAUGA

MISSISSAUGA

RESILIENT CONSULTING

DESIGNED BY: SR	DATE: MAY 2020	CHECKED BY: MB
DRAWN BY: AN	PROJECT No. 2020-004	APPROVED BY: MB
SCALE: 1:350		DRAWING No. ESC

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Feb 18, 2021 - 8:54am By: arogner

Next Steps

- The City of Mississauga is now moving forward with the construction of the project.
- The project design is in the final stages of review, with all comments received from this Public Open House to be considered in finalizing the design.
- Construction at Mississauga Valley Park is planned to begin in Fall 2021, with completion anticipated in Summer 2022.

Contact Information

- If you wish to provide comments on the proposed work, please contact one of the identified Project Team members listed below through email or telephone. A comment sheet has also been made available to print, which can be mailed to either member of the Project Team by the April 2nd, 2021 deadline.
- For additional information, please contact:

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