MONTGOMERY COUNTY NY
BUSINESS DEVELOPMENT CENTER
Made of Something Stronger

Meeting Notice

TO: **Board Members**

FROM: **Andrew Santillo**

DATE: **November 12, 2019**

RE: **Planning Board Meeting**

The regular meeting of the Montgomery County Planning Board is scheduled for Thursday, November 14, 2019 at 6:30 p.m. at the Montgomery County Business Development Center, 9 Park Street, Fonda, NY.

Please call Karl at (518) 853-8334 between 8:30 a.m. and 4:00 p.m. if you have any questions.

cc: The Recorder
Montgomery Co. Legislature
DPW
The Leader Herald
Daily Gazette

MONTGOMERY COUNTY NY
BUSINESS DEVELOPMENT CENTER
Made of Something Stronger

MONTGOMERY COUNTY PLANNING BOARD MEETING

Thursday, November 14, 2019

6:30 PM – Montgomery County Business Development Center, 9 Park Street Fonda, NY

I. Pledge of Allegiance

II. Role Call

III. Adoption of Agenda

IV. Approval of previous meeting minutes

V. Public comments on agenda items (3 minute limit per person)

VI. Referral City of Amsterdam—East Main Street (Area Varience)

VII. Referral City of Amsterdam---East Main Street (Site Plan)

VIII. Referral Town of Florida---Site Plan Review

IX. Any other business

Montgomery County Planning Board
Meeting Minutes
October 10th, 2019

MEMBERS PRESENT:
Wayne DeMallie, Chairman
David Wiener, Member
John Lyker, Member
Irene Collins, Member
Jim Post, Alternate

STAFF MEMBERS PRESENT:
Ken Rose, Director
Andrew Santillo, Eco. Dev. Staff Assistant
Karl Gustafson Jr., Eco. Dev. Grant Assistant
Alex Kuttesch, Senior Planner

ABSENT:
Mark Hoffman, Vice Chair
Robert DiCaprio, Secretary
Betty Sanders, Alternate

Ronald Jemmott, Member
Erin Covey, Member

OTHERS PRESENT:
John McGlone, Palatine Bridge
Rachel Bonacquisti, Capital District YMCA
Rev. Laurence C. Greenwold, United Pres. Church

I. Call to Order

The meeting was called to order by Wayne DeMallie at 6:50 pm.

II. Adoption of Agenda

A motion was made by Irene Collins, seconded by John Lyker to adopt the agenda for the October Planning Board meeting.

III. Minutes

A motion was made by John Lyker, Seconded by Irene Collins to accept the August Planning Board meeting minutes.

IV. Public Comment

Rachel Bonacquisti from the Capital District YMCA explained that they are looking to use/ lease the United Presbyterian Church at 25 Church Street for a YMCA/ afterschool program. Rachel explained that the Capital District YMCA employees will be working at the church for this program.

Rev. Laurence C. Greenwold from the United Presbyterian Church stated that he was in support of the Capital District YMCA's program. Explained to the planning board that he was there to answer any questions the board may have.

John McGlone read a letter that he had sent to the planning board. It stated:

Thank you for your time this evening and for the opportunity to speak. My name is John McGlone and I live in Palatine Bridge. My wife and I own several properties in the village of Canajoharie where we also operate successful small businesses. The village is a place that we both love, and we are committed to it for the foreseeable future.
I first want to thank personally each of the members and alternates of the planning board. I know that you are volunteers. I appreciate the time you take to prepare for and attend meetings, as well as the training you receive in order to perform your duties. I assume you do this because, like me, you care about Montgomery County.
The planning board has received a communication from my attorney, Claudia Brayer, regarding the update to the village master plan. That letter asks that this board direct the Village of Canajoharie to rescind its negative declaration and require the preparation of a GEIS. It is my understanding that this referral is not on the agenda tonight, however it may come before you in the future. I asked for a few minutes at this meeting to affirm my support of the Exit 29 redevelopment project. I am deeply grateful for the leadership of the county executive, the commitment and teamwork of the legislature, and the effort put forward by the staff of the IDA and the county. As a past board member, and until recently chairman of the county IDA, I was honored to lend my support and efforts to the Exit 29 project. The project has immense potential for the village, county and region.
It is because of this potential that I find myself here tonight and have hired an attorney with deep expertise in this field to provide guidance. I believe that it is vitally important that any update of the village master plan is done exactly right. Failing to do so now increases the risk of future challenges which might delay or derail the project and its benefits to the area.

I believe that the master plan update that has been undertaken by the village, guided by an outside consultant, and with participation from the county is so inadequate and so flawed as to present the distinct possibility of future legal challenges and delays. The legal basis for my concerns, as well as a recommended cure is presented in the correspondence, which speaks for itself. Since this is a county planning board, I wish to put into the record several factors beyond those raised in the letter which I believe places an additional burden on the county to correct the inadequacies in the submission. These points, along with many village specific concerns that I will not go into here, amplify the urgent requirement to mandate a properly updated master plan and GEIS. The master plan, as well as the preparation of the negative declaration was performed by a consulting firm selected and managed by the county for inter-related redevelopment activities. The village has limited resources and almost no expertise in the finer points of undertaking a multi-phase, multi-year transformation project. On March 26, 2019, the legislature authorized the county to transfer a Local Waterfront Revitalization Program grant award from the Village to the County. Part of the reasoning for this transfer in ownership was that the same vendor would be used for multiple phases of the Exit 29 project. The county is managing the performance of the overall Exit 29 deliverables and oversees the vendor. I believe this must include the requirement that the village master plan and GEIS

are completed in conformance with current law. One cannot build Exit 29 on a weak foundation.

The county IDA is the owner of several parcels in the heart of the village, operated under a long-term arrangement which expires in 2022. Some of these parcels are vacant. It is relevant to planning the future of the village and to the update of the master plan when a significant portion on the village downtown is owned by the county IDA. The near-term expiration of the underlying agreements on property in the center of the village represents a potentially significant adverse impact. This should have been identified and considered in updating the master plan.

An ongoing study by the NY State Power Authority could significantly impact navigation and recreation on the Mohawk River, and if enacted could negatively impact planned waterfront development. The county planning department is aware of and has participated in public meetings for the "Reimagine the Canals" project. Governor Cuomo's task force is scheduled to make a recommendation in December 2019, and to request action from the legislature April 2020. While the eventual outcome is not known, it is reported that the recommendation includes decreased water levels, diminished navigability and less access for recreational and long-voyage boaters. This represents a potential adverse risk that should have been noted in updating the master plan. The village, its planning board, and the code enforcement officer have completely ignored Local Law 1-2009. This law requires major and minor site plan review and referrals for projects meeting certain criteria. It has to my knowledge never been enforced.

At first glance, it might seem that a completely ignoring a local law requiring site plan reviews for 10 years is strictly a village matter. Quite the opposite is true. Any redevelopment project for the Exit 29 site would also likely involve an action by the IDA, the legislature, or the county planning board. I cannot imagine any situation where future redevelopment would not face a legal challenge based on the lack of previous enforcement LL#1-2009.

In conclusion, let me affirm that I support the redevelopment of the Exit 29 site. My wife and I have invested and contributed to the village because we believe in its future. We spend 6 days a week downtown and own a building directly across from the western portion of the site. Since the site was abandoned and stripped, I have watched as trees grow on the roof of the former office building. The case for transformation is clear, and I believe that building a strong foundation is worth fighting for, even at great cost.
Thank you for your time and for listening. Commencing next month, you will be able to find these remarks, as well as photos, letters and other documents on my website, www.exit29.com

V. Referral City Of Amsterdam- Site Plan Review, 25 Church Street

Alex Kuttesch explained to the board and the public that since Irene Collins is from the City of Amsterdam Common Council she will have to recuse herself. With Irene recusing herself, the Planning Board would not have a quorum to take action on the City of Amsterdam's referral.

There was no action taken, and the referral will be sent back to the city.

VI. Referral Town of Canajoharie – Area Varience

Ken Rose explained to the board that the previous referral from September's planning Board meeting from the Town of Minden is the same project that is looking for an area variance in the Town of Canajoharie as well. Ken Rose stated that the solar project will have a 200 ft. barrier around the premises of the project. Mohawk Solar is working with a private land owner to get an easement through his property.

John Lyker made a motion to approve the Town of Canajoharie's referral, seconded by David Wiener. All were in favor.

The referral was approved.

VII. Other Discussion

None

VIII. Adjournment

A motion was made by Irene Collins, seconded by David Wiener to adjourn the October 10th, 2019 Planning Board Meeting at 7:10 pm.

Respectfully submitted

_____

Karl Gustafson Jr.
Grant Assistant

REFERRAL FORM
MONTGOMERY COUNTY PLANNING BOARD

Referral Number_____
assigned by the MCPB upon acceptance of referral for review

This Referral must be received **SEVEN CALENDAR DAYS** prior to the MCPB meeting date in order for it to be placed on the agenda.

TO: Montgomery County Planning Board,
Old County Courthouse,
PO Box 1500, Fonda, New York 12068
Phone: 518-853-8334
Fax: 518-853-8336

FROM: Municipal Board: Amsterdam Zoning Board
Referring Officer: Vincent Iannello, Chairman
Mail original resolution to: Robin Waldron
141 Church Street, Amsterdam, NY 12010

1. **Applicant:** DePaul Properties **2. Site Address:** 251, 253, 255, 257, 259-261 East Main 12, 14, and 22 Lark Street, 19 John Street
3. **Tax Map Number(s):** See attached **4. Acres:** 1.77
5. **Is the site currently serviced by public water?** ☑ Yes ☐ No
6. **On-site waste water treatment is currently provided by:** ☑ Public Sewer or ☐ Septic System
7. **Current Zoning:** CC **8. Current Land Use:** Comm/residential
9. **Project Description:** The proposed building will be used as a 60+/- unit, three story multi family apartment building (62,000 +/- SF) and parking spaces

10. **MCPB Jurisdiction:**

☐ **Text Adoption or Amendment** ☑ **Site is located within 500' of:** N/S Route 5

- ☐ a municipal boundary.
- ☑ a State or County thruway/highway/roadway
- ☐ an existing or proposed State or County park/recreation area
- ☐ an existing or proposed County-owned stream or drainage channel
- ☐ a State or County-owned parcel on which a public building or institution is situated
- ☐ a farm operation within an Agricultural District (Incl. Ag data Statement) (does not apply to area variances)

11. **PUBLIC HEARING:** Date: 11/7/19 Time: 6:15 pm Location: Amsterdam Council Chambers

Referred Action(s)
If referring multiple, related actions, please identify the referring municipal board if different from above.

12. ☐ **Text Adoption or** ☐ **Amendment** **Referring Board:**
☐ Comprehensive Plan ☐ Local Law ☐ Zoning Ordinance ☐ Other _____

13. ☐ **Zone Change** **Referring Board:**
Proposed Zone District: _____ Number of Acres: _____
Purpose of the Zone Change: _____

14. ☐ **Site Plan** ☐ **Project Site Review** **Referring Board:**
Proposed Improvements: _____
Proposed Use: _____
Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use
Specify: _____
Is a State of County DOT work permit needed? If Yes : ☐ State or ☐ County ☐ No
Specify: _____

15. ☐ **Special Permit** **Referring Board:**

Section of local zoning code that requires a special permit for this use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

16. Variance **Referring Board:** Amsterdam ZBA

☑ Area ☐ Use

Section(s) of local zoning code to which the variance is being sought: 31-Off Street Parking 16(B)5c Min Front Yard

Describe how the proposed project varies from the above code section: Multi family rental dwelling is 1.5 spaces per dwelling unit, which is 90 req. for the 60 unit bldg. 47 spaces are being proposed. Min front yard setback is 10ft., prop zero front setback.

SEQR Determination

Action:

- ☐ Type I
- ☐ Type II
- ☑ Unlisted Action
- ☐ Exempt

Finding:

- ☐ Positive Declaration – Draft EIS
- ☐ Conditional Negative Declaration
- ☐ Negative Declaration
- ☐ No Finding (Type II Only)

SEQR determination made by (Lead Agency): _____ **Date:** _____

REQUIRED MATERIAL

Send 3 copies of a "Full Statement of the Proposed Action" which includes:

All materials required by and submitted to the referring body as an application

- If submitting site plans, please submit only 1 large set of plans, and 12 11x17 packets.
- All material may be submitted digitally as well at http://www.mcbdc.org/planning-services/montgomery-county-planning-board-referrals/

This referral, as required by GML §239 l and m, includes complete information, and supporting materials to assist the Montgomery County Planning Board (MCPB) in its review. Recommendations by MCPB shall be made to the Referring Body within thirty days of receipt of the Full Statement.

Vint Fulle Chairman — 11/7/19

Name, Title & Phone Number of Person Completing this Form — Transmittal Date

This side to be completed by Montgomery County Planning.

REFERRAL FORM
MONTGOMERY COUNTY PLANNING BOARD

TO: _____

Receipt of 239-m referral is acknowledged on _____. Please be advised that the Montgomery County Planning Board has reviewed the proposal stated on the opposite side of this form on _____ and makes the following recommendation.

☐ Approves

☐ Approves (with Modification)

☐ Disapproves:

☐ No significant County-wide or inter-community input

☐ Not subject to Planning Board review

☐ Took no action

Section 239-m of the General Municipal Law requires that within thirty days after final action by the municipality is taken; a report of the final action shall be filed with the County Planning Board.

_____
Date

_____
Kenneth F. Rose, Director
Montgomery County Dept. of Economic
Development and Planning

REFERRAL FORM
MONTGOMERY COUNTY PLANNING BOARD

Referral Number_____
assigned by the MCPB upon acceptance of referral for review

This Referral must be received **SEVEN CALENDAR DAYS** prior to the MCPB meeting date in order for it to be placed on the agenda.

TO: Montgomery County Planning Board,
Old County Courthouse,
PO Box 1500, Fonda, New York 12068
Phone: 518-853-8334
Fax: 518-853-8336

FROM: Municipal Board: Amsterdam Planning Comm.
Referring Officer: Paul Gaying, Chairman
Mail original resolution to: Robin Waldron
41 Church Street, Amsterdam, NY 12010

1. **Applicant:** DePaul Properties **2. Site Address:** 251, 253, 255, 257, 259-261 East Main 12, 14 and 22 Lark Street, 19 John Street
3. **Tax Map Number(s):** See attached **4. Acres:** 1.77
5. **Is the site currently serviced by public water?** ☑ Yes ☐ No
6. **On-site waste water treatment is currently provided by:** ☑ Public Sewer or ☐ Septic System
7. **Current Zoning:** CC **8. Current Land Use:** Comm / residential
9. **Project Description:** The proposed building will be used as a 60+/- unit, three-story multifamily apartment building (62,000+/- SF) and parking spaces

10. **MCPB Jurisdiction:**

☐ **Text Adoption or Amendment** ☑ **Site is located within 500' of:** NYS Route 5

- ☐ a municipal boundary.
- ☑ a State or County thruway/highway/roadway
- ☐ an existing or proposed State or County park/recreation area
- ☐ an existing or proposed County-owned stream or drainage channel
- ☐ a State or County-owned parcel on which a public building or institution is situated
- ☐ a farm operation within an Agricultural District (Incl. Ag data Statement) (does not apply to area variances)

11. **PUBLIC HEARING:** Date: 10/23/19 Time: 6:30pm Location: Common Council Chambers

Referred Action(s)
If referring multiple, related actions, please identify the referring municipal board if different from above.

12. ☐ **Text Adoption or** ☐ **Amendment** **Referring Board:**
☐ Comprehensive Plan ☐ Local Law ☐ Zoning Ordinance ☐ Other _____

13. ☐ **Zone Change** **Referring Board:**
Proposed Zone District: _____ Number of Acres: _____
Purpose of the Zone Change: _____

14. ☑ **Site Plan** ☐ **Project Site Review** **Referring Board:** Amsterdam Planning Comm.
Proposed Improvements: Demolition of existing commercial facilities
Proposed Use: see above
Will the proposed project require a variance? ☑ Yes ☐ No Type: ☑ Area ☐ Use
Specify: off street parking and minimum front yard setback
Is a State of County DOT work permit needed? If Yes : ☐ State or ☐ County ☑ No
Specify: _____

15. ☑ **Special Permit** **Referring Board:** Amsterdam Planning Comm. Concurred

Section of local zoning code that requires a special permit for this use: Section 116(B)3K

Will the proposed project require a variance? ☑ Yes ☐ No Type: ☑ Area ☐ Use

16. Variance **Referring Board:** Amsterdam ZBA

☑ Area ☐ Use

Section(s) of local zoning code to which the variance is being sought: 39-Off Street parking 116(B)5C Min front Yard

Describe how the proposed project varies from the above code section: Multi family rental dwelling is 1.5 spaces per dwelling unit, which is 90 req. for the 60 unit bldg. 47 spaces are being prop. Min. front yard setback is 10 ft., prop. zero front setback.

SEQR Determination

Action:

- ☐ Type I
- ☐ Type II
- ☑ Unlisted Action
- ☐ Exempt

Finding:

- ☐ Positive Declaration – Draft EIS
- ☐ Conditional Negative Declaration
- ☐ Negative Declaration
- ☐ No Finding (Type II Only)

SEQR determination made by (Lead Agency): _____ **Date:** _____

REQUIRED MATERIAL

Send 3 copies of a "Full Statement of the Proposed Action" which includes:

All materials required by and submitted to the referring body as an application

- If submitting site plans, please submit only 1 large set of plans, and 12 11x17 packets.
- All material may be submitted digitally as well at http://www.mcbdc.org/planning-services/montgomery-county-planning-board-referrals/

This referral, as required by GML §239 l and m, includes complete information, and supporting materials to assist the Montgomery County Planning Board (MCPB) in its review. Recommendations by MCPB shall be made to the Referring Body within thirty days of receipt of the Full Statement.

Paul Emery CHAIR

Name, Title & Phone Number of Person Completing this Form

10/24/19

Transmittal Date

518-866-4999

This side to be completed by Montgomery County Planning.

REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

TO: _____

Receipt of 239-m referral is acknowledged on _____. Please be advised that the Montgomery County Planning Board has reviewed the proposal stated on the opposite side of this form on _____ and makes the following recommendation.

☐ Approves

☐ Approves (with Modification)

☐ Disapproves:

☐ No significant County-wide or inter-community input

☐ Not subject to Planning Board review

☐ Took no action

Section 239-m of the General Municipal Law requires that within thirty days after final action by the municipality is taken; a report of the final action shall be filed with the County Planning Board.

_____
Date

_____
Kenneth F. Rose, Director
Montgomery County Dept. of Economic Development and Planning

CITY OF AMSTERDAM
ENGINEERING DEPARTMENT
CITY HALL, RM. 201
AMSTERDAM, NY 12010

APPLICATION FOR PERMIT DENIED: Case # 19-31PZ
Official Use Only

This is the decision of the Zoning Officer of the City of Amsterdam.

REFERRAL TO PLANNING COMMISSION FOR SITE PLAN REVIEW (P)

☑ *SITE PLAN ☑ SPECIAL USE PERMIT ___ SUBDIVISION of LAND

And/or OFFICIAL DECISION FOR DENYING APPLICATION FOR PERMIT (Z)

___ USE VARIANCE ☑ AREA VARIANCE ___ USE/TEXT/MAP INTERPRETATION

LOCATION of SUBJECT PROPERTY: 251, 253, 255, 257 259-261 East Main St, 12, 14 and 22 Lark St, and 19 John St

Subject property is in a CC Zoning District. SBL# See Attached

Proposed use or construction or installation:
See attached narrative

The undersigned, having examined the plans and specifications and plot or site plan submitted by the applicant(s), makes the following findings:

☑ Prior approval of a special permit is required by the provisions of the Zoning Ordinance of the City of Amsterdam.

☑ Prior approval of a *Site Plan is required by the provisions of the Zoning Ordinance of the City of Amsterdam.

☑ Proposed use, construction or installation is in violation of Section(s) 39 - Off Street Parking, 16 (B) 5c - Min Front Yard of the Zoning Ordinance of the City of Amsterdam, in that

Mulitfamily rental dwelling is 1.5 spaces per dwelling unit, which is 90 required for the 60 unit building. Forty seven spaces are being proposed. Minimum front yard setback is 10 feet, proposing zero front setback.

Dated: 10/10/19

Zoning Officer/Building Official

☐ Copied to Engineering Aid

☐ Copied to Corporation Counsel Office

APPLICANT(S): DePaul Properties

Mailings to: Legal Address 1931 Buffalo Road

Rochester, NY 14624

Contact Phone #: 585-426-8000

Dated: 10/8/19

Applicant Signature

Co-Applicant Signature

apzi-11

CITY OF AMSTERDAM

BOARD OF APPEALS
CITY HALL
61 CHURCH ST.
AMSTERDAM, NY 12010

ZONING OFFICE
CITY HALL
RM. 201

APPLICATION TO BOARD OF APPEALS

The under signed hereby makes application for appeal with the attached application, plans and specifications; Attention all pertinent information below shall be filled in or application will be denied.

A. NATURE OF APPLICATION

Application is hereby made to the Board of Appeals for (check appropriate item):

( ) Prior approval of subdivision is required by the provisions of Chapter 210, Code of the City of Amsterdam **(Complete Block E)**

(X) Approval of a Special Permit as required by the provisions of the Zoning Ordinance. **(Complete Blocks B and E)**

(X) Approval of a Site Plan as required by the provisions of the Zoning Ordinance. **(Complete Blocks B and E)**

[✓] Review of a decision of the Zoning Officer in denying a Building Permit or Certificate of Occupancy. **(Complete Blocks C and E)**

( ) Zoning Officer request for an interpretation of the Zoning Law, Use/Text/Map. **(Complete Blocks D and E)**

Description of Premises Involved: Applicant shall fill in below.

The property or properties involved are identified as follows _____

251, 253, 255, 257, 259-261 East Main St, 12, 14 and 22 Lark St, and 19 John St

B. IF APPLICATION IS FOR A SPECIAL USE PERMIT OR SITE PLAN APPROVAL

The applicant proposes to use the premises for the following purposes (give details) The proposed building will be used as a 60+/- unit three-story multifamily apartment building (62,000+/- SF) and parking spaces

C. IF APPLICATION IS FOR A REVIEW, OF DECISION OF THE ZONING OFFICER

1. The applicant requests relief from the decision of the Zoning Officer with respect to the following section(s) of Zoning Ordinance 39 - Off Street Parking 16 (B) 5c - Min Front Yard

   See attached

2. The applicant proposes to use the premises for the following purposes (give details) _____

   See attached

3. The applicant certifies that the following special circumstances apply to his or her property but do not apply generally to land or buildings in the neighborhood See attached

APPLICATION TO BOARD OF APPEALS
pg. 2 of 3

4. The applicant certifies that no permissible use of his property will produce a reasonable return for the following reasons See attached

5. The applicant certifies that the relief requested is the minimum variance which will enable reasonable use of his property for the following reasons See attached

6. The applicant certifies that the proposed use will not be injurious to the character of the neighbor for the following reasons NA

7. The applicant has owned the subject property since NA
The applicant certifies that he owns the following adjoining property

D. IF APPLICATION IS FOR AN INTERPRETATION TO THE USE/TEXT/MAP

The interpretation is as follows NA

E. MAPS, PLANS OR INFORMATION SUBMITTED HEREWITH

The following are submitted herewith (list and identify accurately)
DePaul Amsterdam Apartments Site Plans - Dated 10/8/19

*** Applicant must fill in all information below and sign application and if the applicant is not the owner of the for-mentioned premises then the Owner must also sign application.**

*** Applicant Name (Please Print):** DePaul Properties

Mailings to Legal Address: 1931 Buffalo Road, Rochester, NY 14624

Applicant's Contact Telephone Number: 585-426-8000

*** Owner Name (If other than applicant):**

Owner Address: *SEE Attached Purchase Agreement

*** Owner Signature:** X SEE Attached Owner Authorization

*** Applicant Signature:** Mark A. Dulla

Date: October 8, 2019

OFFICE USE ONLY

Building Department: 1 copy needed

Date Received 10/15/19

Case No. 19-31PZ

Is property situated in 500 feet of Montgomery County referral buffer zone?

X YES – Preliminary review for Montgomery County Planning Board

_____ NO

City Clerk: original needed

Date Received 10/15/19

Fee Paid $12,875.00

RECEIVED
OCT 24 2019
BY:

Zoning Board of Appeals: 6 copies needed

Date Received 10/15/19

Fee Paid N/A

Planning Commission: 7 copies needed

Date Received 10/15/19

~~Fee Paid~~ _____

Applicant: 1 copy

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT ("**Agreement**") made as of the 20th day of September, 2019 ("**Effective Date**") by and between **Jeffrey Chace** having a mailing address of 14 Lark Street, Amsterdam, New York 12010 ("**Seller**") and **DePaul Acquisitions LLC,** a New York limited liability company having an address of 1931 Buffalo Road, Rochester, New York 14624 ("**Purchaser**").

WITNESSETH:

WHEREAS, Seller is the owner of, and intends to convey, real property known as 14 Lark Street (TM#56.45-4-24), , all of which is more particularly described on **Exhibit A** (the "**Land**"), attached hereto and incorporated herein by reference; and

WHEREAS, Seller desires to sell said property and other elements to Purchaser, and Purchaser desires to buy the Property (hereinafter defined) from Seller in connection with Purchaser's development, construction, and operation of an affordable apartment community, together with related parking facilities, and supporting infrastructure (collectively, the "**Project**"), all on and subject to the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants, promises and undertakings set forth herein, and other good and valuable consideration, Seller and Purchaser agree as follows:

1. The Property.

a. Subject to all the terms, conditions and provisions of this Agreement, and for the consideration herein set forth, Seller agrees to sell and Purchaser agrees to purchase the Land, together with the following:

i. All buildings, improvements, and fixtures now situated on the Land (collectively, the "**Improvements**");

ii. Any and all easements, rights of way, privileges, rights, benefits, hereditaments, and appurtenances belonging to or inuring to the benefit of Seller and pertaining to the Land or Improvements; and

iii. Any and all strips and gores and any land lying in the bed of any street, road or alley, open or proposed, adjoining the Land.

b. The Land and all of the above are hereinafter referred to as the "**Property**".

2. Purchase Price and Manner of Payment. Purchaser hereby covenants and agrees to and with Seller that Purchaser, upon the Closing (as hereinafter defined), will pay to Seller the "Purchase Price" determined as follows:

a. The "Purchase Price" for the Property shall be equal to $80,000.00

this Agreement. At Closing, the Deposit shall be paid to Seller and credited toward the Purchase Price.

d. It is understood and agreed that the Contingencies are for Purchaser's sole benefit and may be waived by Purchaser at any time. Except as otherwise specifically provided in this Agreement, Seller hereby consents to Purchaser taking any and all necessary or desirable actions in order to satisfy the Contingencies. Wherever any Contingency requires performance or receipt of evidence acceptable or satisfactory to Purchaser, such Contingency shall be construed to require performance acceptable or satisfactory to Purchaser in Purchaser's sole discretion. Seller shall cooperate with Purchaser and take all actions and join in all applications, and execute all documents as are reasonably necessary to allow Purchaser to pursue and satisfy the Contingencies, including, without limitation, clearing areas of the Property where samples will be taken, arranging entry upon the Property and access to all parts of the Improvements on the Property, and making available knowledgeable personnel from Seller to answer questions regarding the Property.

e. Seller agrees that during the Contingency Period, Purchaser and its authorized agents or representatives shall be entitled to enter upon the Land and the Improvements during normal business hours upon advance written notice to Seller to make such investigations, studies and tests including, without limitation, surveys and engineering studies, as Purchaser deems necessary or advisable. All investigations made by Purchaser will be at Purchaser's sole cost and expense and will be performed without causing any damage to the Property. Purchaser shall restore the Property in a timely manner at Purchaser's sole cost to the condition that existed immediately prior to the Property Investigations (defined below). Seller understands, and it is agreed, that the investigations may include surveying and engineering studies, a Phase I and/or Phase II environmental site assessment certified to Purchaser (all investigations of the Property or any materials regarding the ownership, management, use or operation of the Property are collectively called the "**Property Investigations**").

f. Purchaser shall indemnify, hold harmless and defend Seller from all damages, liens, costs and expenses, including reasonable attorneys' fees and experts' fees, on account of any act, omission or negligence by Purchaser in connection with the Property Investigations. The foregoing indemnity shall not include any claims, demands, causes of action, losses, damages, liabilities, costs or expenses that result from the mere discovery, by Purchaser or its consultants or representatives, of existing conditions on the Property during such inspections or tests conducted pursuant to the terms of this Agreement. This Agreement to indemnify, hold harmless and defend Seller shall survive closing or any termination of this Agreement.

g. The parties acknowledge that Purchaser will be responsible for obtaining all development approvals including, without limitation, the obtaining of all necessary variances, special exceptions or permits, rezoning, site plan and other planning commission or board of supervisor approvals ("**Development Approvals**"). Seller hereby authorizes Purchaser and take all actions, and if required Seller shall join in all applications, and to execute all documents as are reasonably necessary to allow Purchaser to pursue the Development Approvals; provided, however, that the Seller shall not bear or become obligated to pay any expense or assume any

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed the day and year first mentioned.

SELLER:

JEFFREY CHACE

PURCHASER:

DEPAUL ACQUISITIONS LLC, a New York limited liability company

By: DePaul Properties, Inc., its sole member

By: _____
Name: _____
Its: _____

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT ("**Agreement**") made as of the 17th day of September, 2019 ("**Effective Date**") by and between **Zakra Fortuna, LLC** having a mailing address of 262 East Main Street, Amsterdam, New York 12010 ("**Seller**") and **DePaul Acquisitions LLC,** a New York limited liability company having an address of 1931 Buffalo Road, Rochester, New York 14624 ("**Purchaser**").

W I T N E S S E T H:

WHEREAS, Seller is the owner of, and intends to convey, real property known as 251 E. Main Street (TM#56.45-4-47), all of which is more particularly described on **Exhibit A** (the "**Land**"), attached hereto and incorporated herein by reference; and

WHEREAS, Seller desires to sell said property and other elements to Purchaser, and Purchaser desires to buy the Property (hereinafter defined) from Seller in connection with Purchaser's development, construction, and operation of an affordable apartment community, together with related parking facilities, and supporting infrastructure (collectively, the "**Project**"), all on and subject to the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants, promises and undertakings set forth herein, and other good and valuable consideration, Seller and Purchaser agree as follows:

1. The Property.

a. Subject to all the terms, conditions and provisions of this Agreement, and for the consideration herein set forth, Seller agrees to sell and Purchaser agrees to purchase the Land, together with the following:

i. All buildings, improvements, and fixtures now situated on the Land (collectively, the "**Improvements**");

ii. Any and all easements, rights of way, privileges, rights, benefits, hereditaments, and appurtenances belonging to or inuring to the benefit of Seller and pertaining to the Land or Improvements; and

iii. Any and all strips and gores and any land lying in the bed of any street, road or alley, open or proposed, adjoining the Land.

b. The Land and all of the above are hereinafter referred to as the "**Property**".

2. Purchase Price and Manner of Payment. Purchaser hereby covenants and agrees to and with Seller that Purchaser, upon the Closing (as hereinafter defined), will pay to Seller the "Purchase Price" determined as follows:

a. The "Purchase Price" for the Property shall be equal to **$50,800.00**

or receipt of evidence acceptable or satisfactory to Purchaser, such Contingency shall be construed to require performance acceptable or satisfactory to Purchaser in Purchaser's sole discretion. Seller shall cooperate with Purchaser and take all actions and join in all applications, and execute all documents as are reasonably necessary to allow Purchaser to pursue and satisfy the Contingencies, including, without limitation, clearing areas of the Property where samples will be taken, arranging entry upon the Property and access to all parts of the Improvements on the Property, and making available knowledgeable personnel from Seller to answer questions regarding the Property.

e. Seller agrees that during the Contingency Period, Purchaser and its authorized agents or representatives shall be entitled to enter upon the Land and the Improvements during normal business hours upon advance written notice to Seller to make such investigations, studies and tests including, without limitation, surveys and engineering studies, as Purchaser deems necessary or advisable. All investigations made by Purchaser will be at Purchaser's sole cost and expense and will be performed without causing any damage to the Property. Purchaser shall restore the Property in a timely manner at Purchaser's sole cost to the condition that existed immediately prior to the Property Investigations (defined below). Seller understands, and it is agreed, that the investigations may include surveying and engineering studies, a Phase I and/or Phase II environmental site assessment certified to Purchaser (all investigations of the Property or any materials regarding the ownership, management, use or operation of the Property are collectively called the "**Property Investigations**").

f. Purchaser shall indemnify, hold harmless and defend Seller from all damages, liens, costs and expenses, including reasonable attorneys' fees and experts' fees, on account of any act, omission or negligence by Purchaser in connection with the Property Investigations. The foregoing indemnity shall not include any claims, demands, causes of action, losses, damages, liabilities, costs or expenses that result from the mere discovery, by Purchaser or its consultants or representatives, of existing conditions on the Property during such inspections or tests conducted pursuant to the terms of this Agreement. This Agreement to indemnify, hold harmless and defend Seller shall survive closing or any termination of this Agreement.

g. The parties acknowledge that Purchaser will be responsible for obtaining all Development Approvals. Seller hereby authorizes Purchaser and take all actions, and if required Seller shall join in all applications, and to execute all documents as are reasonably necessary to allow Purchaser to pursue the Development Approvals; provided, however, that the Seller shall not bear or become obligated to pay any expense or assume any liability in connection with any Development Approval activity. In addition, the Seller agrees not to take any action to oppose, hinder or delay any application by Purchaser for any Development Approval or the issuance of any Development Approval. Without limiting the generality of the foregoing, the Seller agrees not to communicate with any governmental authorities requesting that any such application (or Development Approval) be delayed, limited or altered.

h. If, for any reason or no reason, Purchaser determines that it does not want to acquire and own the Property, Purchaser may terminate this Agreement by delivering written notice of termination ("**Notice of Termination**") to Seller on or before the expiration of the

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed the day and year first mentioned.

SELLER:

ZAKRA FORTUNA, LLC

By: _____
Name: Yik Chew
Its: Member

PURCHASER:

DEPAUL ACQUISITIONS LLC, a New York limited liability company

By: DePaul Properties, Inc., its sole member

By: _____
Name: _____
Its: _____

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed the day and year first mentioned.

SELLER:

ZAKRA FORTUNA, LLC

By: _____
Name: _____
Its: _____

PURCHASER:

DEPAUL ACQUISITIONS LLC, a New York limited liability company

By: DePaul Properties, Inc., its sole member

By: _____
Name: MARK H. FULLER
Its: PRESIDENT

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT ("**Agreement**") made as of the 11th day of Sept., 2019 ("**Effective Date**") by and between **William Petrosino and Lou's Super Market, of Amsterdam, N.Y., Inc.**, as their interests may appear, each having a mailing address of 182 Locust Avenue, Amsterdam, New York 12010 (collectively, "**Seller**") and **DePaul Acquisitions LLC**, a New York limited liability company having an address of 1931 Buffalo Road, Rochester, New York 14624 ("**Purchaser**").

WITNESSETH:

WHEREAS, Seller is the owner of, and intends to convey, real property known as 253 E. Main Street (TM#56.45-4-43.1), 8 Lark Street (TM#56.45-4-22), 12 Lark Street (TM#56.45-4-23), 257 E. Main Street (TM#56.45-4-43.2), and 259-261 E. Main Street (TM# 56.45-4-21), all of which is more particularly described on **Exhibit A** (the "**Land**"), attached hereto and incorporated herein by reference; and

WHEREAS, Seller desires to sell said property and other elements to Purchaser, and Purchaser desires to buy the Property (hereinafter defined) from Seller in connection with Purchaser's development, construction, and operation of an affordable apartment community, together with related parking facilities, and supporting infrastructure (collectively, the "**Project**"), all on and subject to the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants, promises and undertakings set forth herein, and other good and valuable consideration, Seller and Purchaser agree as follows:

1. The Property.

a. Subject to all the terms, conditions and provisions of this Agreement, and for the consideration herein set forth, Seller agrees to sell and Purchaser agrees to purchase the Land, together with the following:

i. All buildings, improvements, and fixtures now situated on the Land (collectively, the "**Improvements**");

ii. Any and all easements, rights of way, privileges, rights, benefits, hereditaments, and appurtenances belonging to or inuring to the benefit of Seller and pertaining to the Land or Improvements; and

iii. Any and all strips and gores and any land lying in the bed of any street, road or alley, open or proposed, adjoining the Land.

b. The Land and all of the above are hereinafter referred to as the "**Property**".

g. The parties acknowledge that Purchaser will be responsible for obtaining all development approvals including, without limitation, the obtaining of all necessary variances, special exceptions or permits, rezoning, site plan and other planning commission or board of supervisor approvals ("Development Approvals"). Seller hereby authorizes Purchaser and take all actions, and if required Seller shall join in all applications, and to execute all documents as are reasonably necessary to allow Purchaser to pursue the Development Approvals; provided, however, that the Seller shall not bear or become obligated to pay any expense or assume any liability in connection with any Development Approval activity. In addition, the Seller agrees not to take any action to oppose, hinder or delay any application by Purchaser for any Development Approval or the issuance of any Development Approval. Without limiting the generality of the foregoing, the Seller agrees not to communicate with any governmental authorities requesting that any such application (or Development Approval) be delayed, limited or altered.

h. If, for any reason or no reason, Purchaser determines that it does not want to acquire and own the Property, Purchaser may terminate this Agreement by delivering written notice of termination ("**Notice of Termination**") to Seller prior to the end of the Contingency Period. Upon receipt of such Notice of Termination, the Deposit shall be returned to Purchaser, and all liability of either party by reason of this Agreement shall cease and Seller and Purchaser shall be released from all further obligations to each other under this Agreement (with the exception of those obligations which expressly survive termination).

6. Seller's Condition Precedent for Closing.

Notwithstanding any other provisions of this Agreement, the timing of the Closing shall be subject to the removal of all equipment from the property. Such removal shall take place no later than April 15, 2020 with the Closing to take place no later than April 30, 2020.

7. Closing and Post-Closing Adjustments; Real Estate Transfer Taxes.

a. The following are to be apportioned between Purchaser and Seller as of 12:01 a.m. on the Closing Date (provided, however, that in the event that any tenant or subtenant is responsible for direct payment of any of the expenses, such expenses shall not be apportioned as between Seller and Purchaser):

i. Property taxes and/or payments in-lieu-of taxes, if applicable, in accordance with the practice prevailing in the City, county and state where the Property is located;

ii. Water, sewer, gas, electric, vault and fuel charges, if any, and Seller shall use commercially reasonable efforts to cause the applicable utility provider to perform a meter reading as close to the Closing as

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed the day and year first mentioned.

SELLER:

WILLIAM PETROSINO

LOU'S SUPER MARKET, OF AMSTERDAM, N.Y., INC.

By: _____
Name: William Petrosino
Its: President

PURCHASER:

DEPAUL ACQUISITIONS LLC, a New York limited liability company

By: DePaul Properties, Inc., its sole member

By: _____
Name: Mark H. Fuller
Its: president

DePaul Project SBLs

251 East Main Street – 56.45-4-47

253 East Main Street – 56.45-4-43.2

255 East Main Street – 56.45-4-45

257 East Main Street – 56.45-4-43.2

259-261 East Main Street – 56.45-4-21

8 Lark Street – 56.45-4-22

12 Lark Street – 56.45-4-23

14 Lark Street – 56.45-4-24

22 Lark Street – 56.45-4-26

19 John Street – 56.45-4-40

ingalls

Project Narrative
East Main Apartments

October 8, 2019

The East Main Apartments Project is located at 251, 253, 255, 257, 259-261 E. Main St, 12, 14 and 22 Lark St, and 19 John St, City of Amsterdam, Montgomery County, New York. The project proposes to redevelop an existing area to build a sixty (60) unit multifamily apartment building, an outdoor courtyard area, parking spaces, a bioretention stormwater facility, and associated utility connections including water and sanitary sewer.

The intent of the project is to provide needed housing to encourage local people to stay in their community of choice. The site is being designed to support persons with mobility issues and will give preference to Seniors and Veterans for housing. The building will have 24-hour staff coverage and staff will be hired from the local community. Support staff will assist tenants in accessing community services. The sixty (60) apartments will be a combination of one- and two-bedroom units. Housing applicants will be determined by considering 60% of the Montgomery County annual median income – or rental rates of approximately $750 a month for a one-bedroom apartment and $900 a month for a two-bedroom apartment. The project includes nine (9) parcels south of E. Main St. The total project area with nine (9) parcels is ±1.77 acres while the area of the multifamily apartment building is ± 62,000 SF. The parcels are currently identified by Tax Map ID number 56.45, Block 4, Parcels 21, 22, 24, 26, 40, 43.1, 43.2, 45 & 47.

The property is zoned by the City of Amsterdam as a Commercial Corridor (CC) District. According to Article IV, Zoning District General Use Regulations § 16 Commercial Corridor (CC) District B. Allowable Uses 3. Special Use Permit k. Multiple Family Dwellings, multiple family dwellings as an apartment building are allowable within the CC zone and are subject to Site Plan and Special Use Permit review. The site plan layout is in general compliance with the guidelines and requirements of the CC zone, however, two (2) variances are being sought.

A variance is being sought under Article VI, § 39 Off-Street Parking and Loading Standards. In subsection A., the required number of parking spaces for a multifamily rental dwelling is 1.5 spaces per dwelling unit, which is 90 required for the (60) unit building. Forty-seven (47) spaces are being proposed. As an owner and operator of numerous apartment buildings, DePaul Properties has found in its experience that typically about 0.7 spaces or less are required per dwelling, not 1.5 spaces.

Another variance is being sought under Article IV, § 16 Commercial Corridor (CC) District B. Allowable Uses 5. Lot, Yard and Height Requirements. In subsection 5.c., the minimum front yard setback is listed as ten (10) feet. The applicant is proposing a building footprint with a portion of the building located at the edge of the property boundary (zero front setback). The existing structure(s) is already located near the edge of the property boundary. Comparatively, a smaller portion of the proposed apartment building footprint would be located along the property boundary than that of the existing structure's footprint. Therefore, the proposed building setback is in keeping with the existing buildings as well as the surrounding neighborhood.

The site's existing condition is best characterized as urban, with existing development consisting of various existing structures and a parking lot. A wetland delineation of the site has been conducted and there are no federally regulated wetlands on the site. The proposed bioretention stormwater structure outlet will tie into an existing 24-inch combined storm sewer line along Lark Street. The proposed 6-inch water lateral will tie into an existing 6-inch water main along John Street and the proposed 6-inch sanitary sewer lateral from the building will connect to the existing 8-inch sewer along John Street. The project will not generate significant traffic or trash.

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information		
Name of Action or Project:		
Project Location (describe, and attach a location map):		
Brief Description of Proposed Action:		
Name of Applicant or Sponsor:	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☐	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:	☐	☐

3. a. Total acreage of the site of the proposed action? _____ acres
   b. Total acreage to be physically disturbed? _____ acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☐	☐
b. Consistent with the adopted comprehensive plan?	☐	☐	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☐

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: _____	☐	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☐	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☐

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☐	☐

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: _____ _____	☐	☐

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____ _____	☐	☐

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☐	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☐	☐

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☐
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☐	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐Shoreline ☐ Forest Agricultural/grasslands Early mid-successional

Wetland ☐ Urban Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☐	☐
16. Is the project site located in the 100-year flood plan?	☐	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☐
If Yes,		
a. Will storm water discharges flow to adjacent properties?	☐	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☐
If Yes, briefly describe: _____ _____		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?	☐	☐
If Yes, explain the purpose and size of the impoundment:_____ _____		
~~1~~9. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?	☐	☐
If Yes, describe: _____ _____		
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?	☐	☐
If Yes, describe: _____ _____		

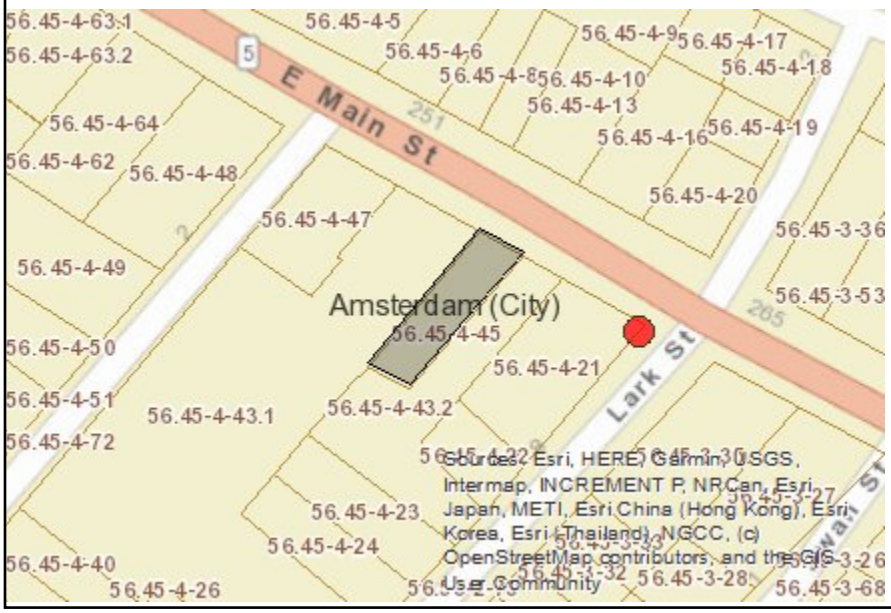
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: _____ Date:_____

Signature: Neal Calum Title:_____

EAF Mapper Summary Report

Thursday, October 03, 2019 12:02 PM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Yes
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

September 11, 2019

Mr. Mark Kiburz
Ingalls & Associates, LLP
2803 Guilderland Ave
Schenectady, NY 12306

Re: USACE
Depaul Apartments Construction
255 East Main St., Amsterdam , NY
19PR06270

Dear Mr. Kiburz:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

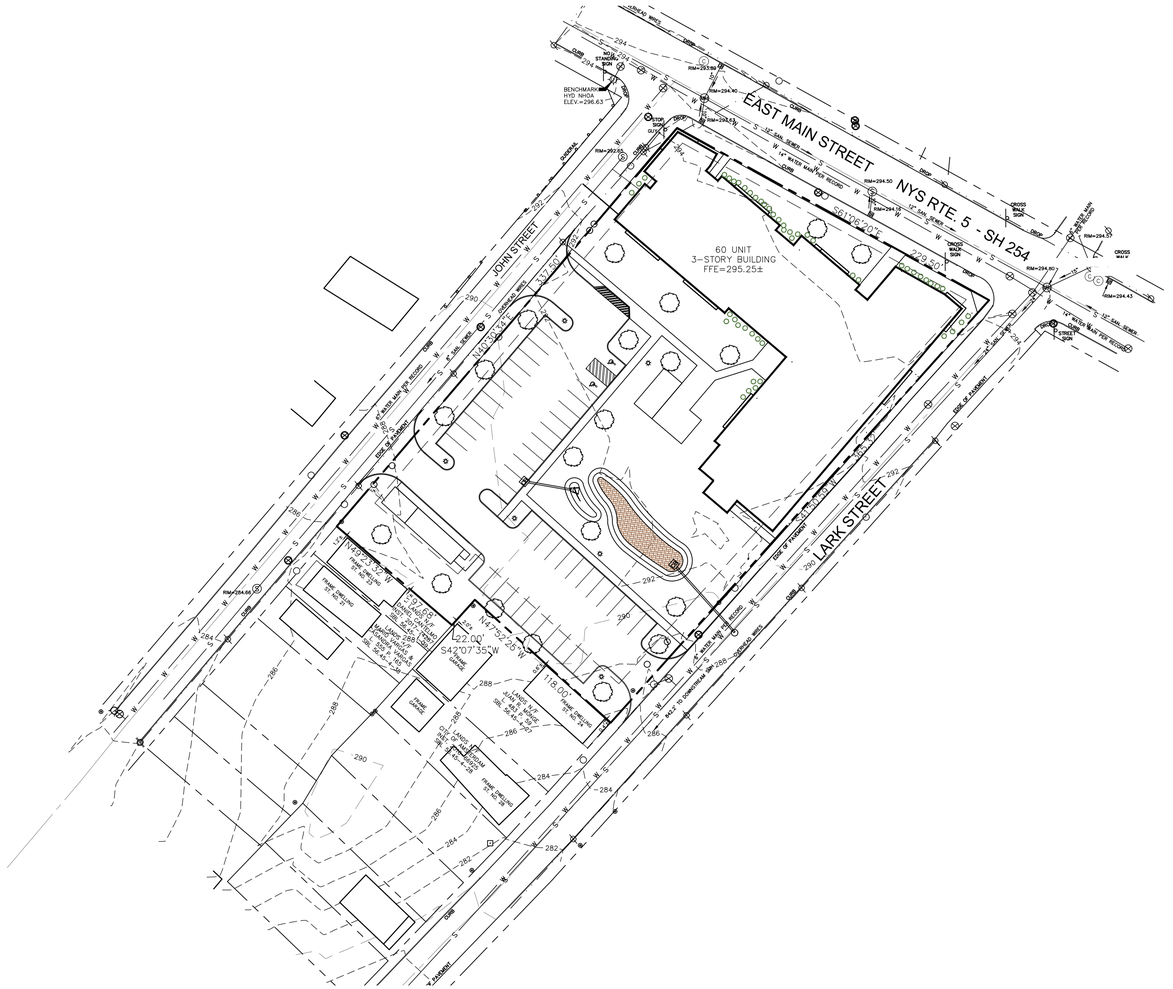
Sincerely,

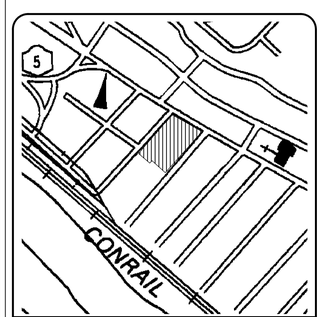
R. Daniel Mackay

Deputy State Historic Preservation Officer
Division for Historic Preservation

EAST MAIN STREET APARTMENTS

251 MAIN STREET
CITY OF AMSTERDAM
MONTGOMERY COUNTY, STATE OF NEW YORK





SITE LOCATION MAP
SCALE: 1" = 500'

EAST MAIN STREET APARTMENTS

LAST REVISED
OCTOBER 8, 2019

TAX MAP ID:
56.45-4-47, 56.45-4-45, 56.45-4-43.2, 56.45-4-21, 56.45-4-22, 56.45-4-43.1, 56.45-4-23, 56.45-4-40, 56.45-4-26

ingalls

ingalls & associates, LLP
engineering, environmental, surveying
2603 GUILDERLAND AVENUE
SCHENECTADY, N.Y. 12306
PHONE: (518) 393-7725
FAX: (518) 393-2324

APPLICANT:
DEPAUL PROPERTIES
1931 BUFFALO ROAD
ROCHESTER, NY 14624

SCHEDULE OF DRAWINGS

SHEET NO.	DRAWING TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	SITE PLAN
4	GRADING & UTILITY PLAN
5	EROSION & SEDIMENT PLAN
6	ESC DETAILS
7	SITE DETAILS
8	CONSTRUCTION DETAILS

DEED REFERENCES:

1) CONVEYED BY LOUIS PETROSINO TO WILLIAM L. PETROSINO BY DEED DATED JUNE 28, 1985 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON NOVEMBER 5, 1987 IN LIBER 480 OF DEEDS AT PAGE 332 FOR SBL# 56.45-4-21.

2) CONVEYED BY HELEN T. PETROSINO TO LOU'S SUPERMARKET BY DEED DATED JULY 3, 2008 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON JULY 7, 2008 IN LIBER 1672 OF DEEDS AT PAGE 132 FOR SBL# 56.45-4-22.

3) CONVEYED BY LOUIS A. PETROSINO TO WILLIAM L. PETROSINO BY DEED DATED JUNE 28, 1985 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON NOVEMBER 5, 1987 IN LIBER 480 OF DEEDS AT PAGE 334 FOR SBL# 56.45-4-23.

4) CONVEYED BY JOSEPHINE CHACE TO JEFFREY CHACE BY DEED DATED APRIL 27, 2011 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON MAY 11, 2011 LIBER 480 OF DEEDS AT PAGE 334 FOR SBL# 56.45-4-24.

5) CONVEYED BY MATTHEW A. AGRESTA AS CITY CONTROLLER TO CITY OF AMSTERDAM BY DEED DATED MARCH 30, 2016 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON MARCH 31, 2016 AS INSTRUMENT # 2016-66924 FOR SBL# 56.45-4-26.

6) CONVEYED BY MATTHEW A. AGRESTA AS CITY CONTROLLER TO CITY OF AMSTERDAM BY DEED DATED MARCH 30, 2016 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON MARCH 31, 2016 AS INSTRUMENT # 2016-66929 FOR SBL# 56.45-4-40.

7) CONVEYED BY HELEN T. PETROSINO TO LOU'S SUPER MARKET OF AMSTERDAM BY DEED DATED OCTOBER 22, 2008 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON NOVEMBER 5, 2008 IN LIBER 1706 OF DEEDS AT PAGE 264 FOR SBL# 56.45-4-43.1.

8) CONVEYED BY HELEN T. PETROSINO TO LOU'S SUPER MARKET BY DEED DATED JUNE 27, 2008 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON JULY 8, 2008 IN LIBER 1672 OF DEEDS AT PAGE 261 FOR SBL# 56.45-4-43.1

9) CONVEYED BY LOUIS PETROSINO TO LOU'S SUPER MARKET OF AMSTERDAM, N.Y. INC. BY DEED DATED MARCH 11, 1963 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE IN LIBER 345 OF DEEDS AT PAGE 373 FOR SBL# 56.45-4-43.1

10) CONVEYED BY ANNA CHRISTIAN TO LOU'S SUPER MARKET OF AMSTERDAM, N.Y. INC. BY DEED DATED DECEMBER 31, 1962 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE IN LIBER 344 OF DEEDS AT PAGE 352 FOR SBL# 56.45-4-43.1

11) CONVEYED BY ANNA KORABIK TO LOU'S SUPER MARKET OF AMSTERDAM, N.Y. INC. BY DEED DATED DECEMBER 31, 1962 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE IN LIBER 344 OF DEEDS AT PAGE 354 FOR SBL# 56.45-4-43.1

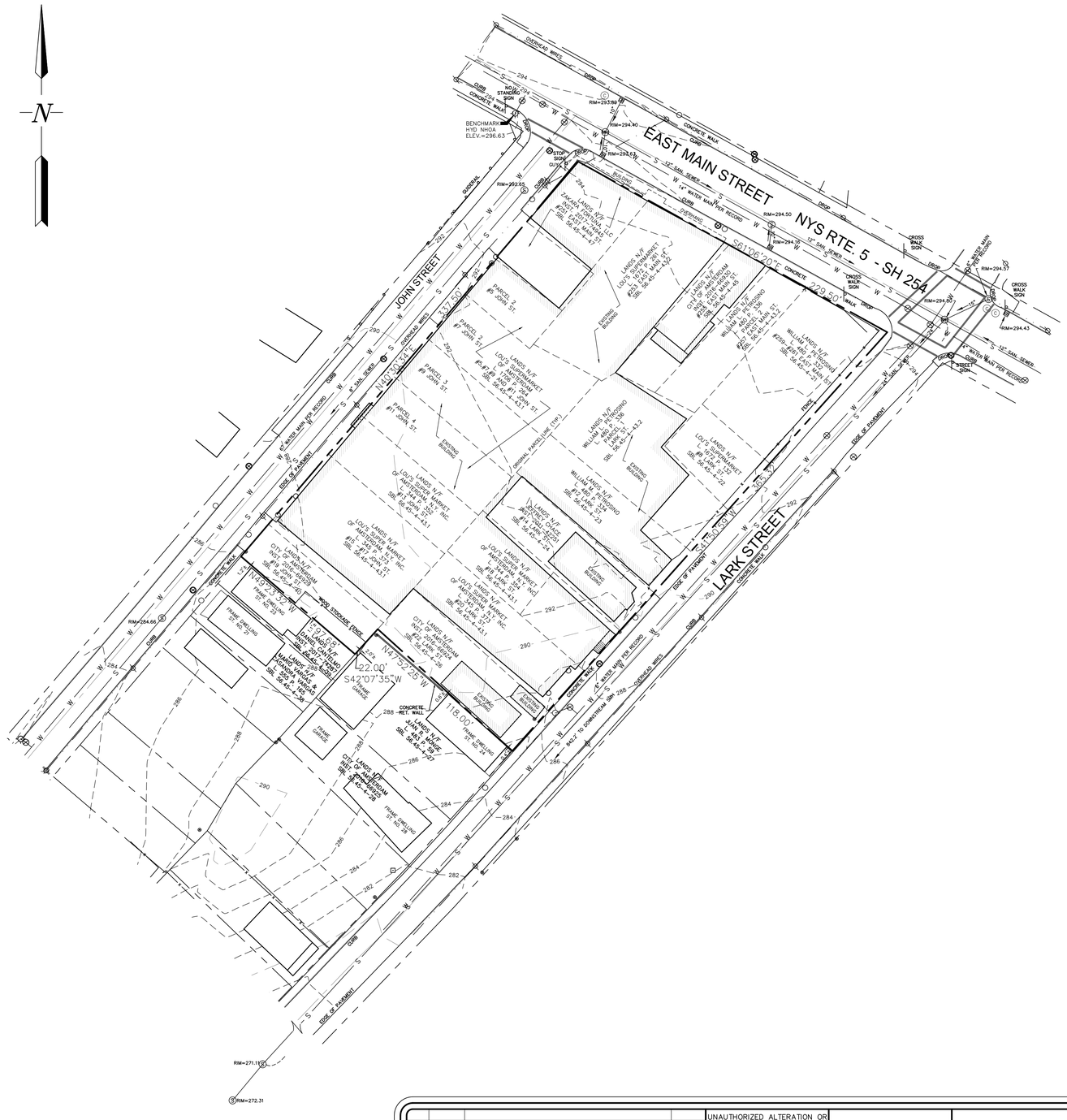
12) CONVEYED BY LOU'S SUPER MARKET OF AMSTERDAM, N.Y. INC. TO WILLIAM L. PETROSINO BY DEED DATED JUNE 28, 1985 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE IN LIBER 480 OF DEEDS AT PAGE 336 FOR SBL# 56.45-4-43.2.

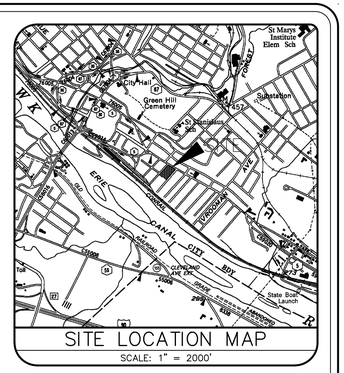
13) CONVEYED BY MATTHEW A. AGRESTA AS CITY CONTROLLER TO CITY OF AMSTERDAM BY DEED DATED MARCH 30, 2016 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON MARCH 31, 2016 AS INSTRUMENT # 2016-66930 FOR SBL# 56.45-4-45.

14) CONVEYED BY LAP YAN REGINA LAW TO ZAKARA FORTUNA, LLC BY DEED DATED SEPTEMBER, 2017 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON SEPTEMBER 29, 2017 AS INSTRUMENT # 2017-74945 FOR SBL# 56.45-4-47.

LEGEND

- LIGHT POLE
- SANITARY MANHOLE
- DROP INLET
- CATCH BASIN
- STORM MANHOLE
- HYDRANT
- WATER VALVE
- WATER SHUT OFF
- GAS SERVICE VALVE
- GAS VALVE
- TEL PEDESTAL
- POWER POLE
- ELEC. MANHOLE
- COM. MANHOLE
- IRON ROD
- IRON PIPE
- CONCRETE MONUMENT
- PROPERTY LINE
- CONTOUR LINE





MAP REFERENCES:

1) STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION RECONSTRUCTION PLANS FOR EAST MAIN STREET, ROUTE 5 S.H. 254 CITY OF AMSTERDAM, MONTGOMERY COUNTY, REGION 2, SHEET 23 AND 24, DATED 1995. AS PROVIDED BY THE CITY OF AMSTERDAM ENGINEERING DEPARTMENT

2) MAP ENTITLED "MAP OF THE CITY OF AMSTERDAM NEW YORK SHOWING STREETS AND PROPERTIES" AS PREPARED BY THE BUREAU OF ENGINEERING, DEPARTMENT OF PUBLIC WORKS, PLATE-27 DATED 1916.

3) CITY OF AMSTERDAM, SANITARY SEWER SYSTEM, BUREAU OF ENGINEERS, FILE NO. 6-11, DATED SEPTEMBER 16, 1965 AND PREPARED BY O'BRIEN & GERE CONSULTING ENGINEERS AND LAND SURVEYORS. AS PROVIDED BY THE CITY OF AMSTERDAM ENGINEERING DEPARTMENT

4) CITY OF AMSTERDAM WATER RECORD MAP, SHEET NO. 297 AS PROVIDED BY THE CITY OF AMSTERDAM ENGINEERING DEPARTMENT.

NOTES:

1) SURVEYED PARCELS: CITY OF AMSTERDAM – TAX MAP 56.45, BLOCK 4, PARCELS 21, 22, 23, 24, 26, 40, 43.1, 43.2, 45 AND 47. TOTAL AREA OF PARCELS IS 1.77± ACRES.

2) SURVEY PREPARED BY INGALLS & ASSOCIATES, LLP FROM A SEPTEMBER 2019 FIELD SURVEY.

3) NORTH IS REFERENCED TO NAD 83 NEW YORK STATE PLANES, EAST ZONE. ELEVATION DATUM IF SHOWN IS BASED UPON NAVD 1988 VERTICAL DATUM BY GPS OBSERVATIONS.

4) SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS OR RESTRICTION; RECORDED OR UNRECORDED.

5) SUBJECT TO ANY STATEMENT OF FACT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE.

6) UNDERGROUND UTILITIES IF SHOWN HEREON ARE BASED ON VISIBLE PHYSICAL EVIDENCE. THEY SHOULD BE CONSIDERED SCHEMATIC ONLY AND ARE SHOWN TO DEPICT GENERAL UTILITY LOCATIONS AND CONNECTIONS RATHER THAN EXACT UNDERGROUND LOCATIONS. INGALLS & ASSOCIATES, LLP MAKES NO CERTIFICATION AS TO THE ACCURACY OF THE UNDERGROUND UTILITY LOCATIONS AND OTHER UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THIS MAP.

7) SURVEY IS PREPARED IN ACCORDANCE WITH THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS CODE OF PRACTICE FOR LAND SURVEYS AS ADOPTED IN OCTOBER OF 1966 AND LAST REVISED ON JULY 18, 1997.

PRELIMINARY

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NO.	DATE:	REVISIONS	BY:

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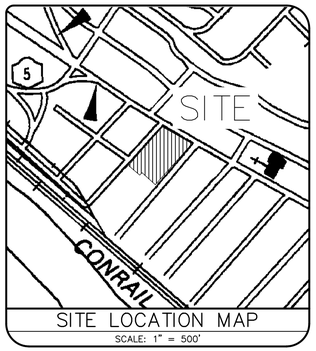
EXISTING CONDITIONS
EAST MAIN APARTMENTS
EAST MAIN ST., JOHN ST. & LARK ST.

CITY OF AMSTERDAM
COUNTY OF MONTGOMERY STATE OF NEW YORK

DATE: OCTOBER 9, 2019
CHECKED BY: JJP
JOB NO. 19-094
SCALE: 1" = 40'
DRAWN BY:
CADD FILE: 19-045 EX
SHEET 2 OF 8



SITE LOCATION MAP

SCALE: 1" = 500'

SITE STATISTICS:

ZONING CLASSIFICATION: COMMERCIAL CORRIDOR (CC) DISTRICT

ALLOWED USE: MULTIPLE FAMILY DWELLINGS WITH A SPECIAL USE PERMIT
PROPOSED USE: 60 UNIT MULTIFAMILY BUILDING

LOT AREA:
- ALLOWED: 0.11 ACRES MIN.
- PROVIDED: 1.77±ACRES

LOT WIDTH:
- ALLOWED: MINIMUM LOT FRONTAGE OF 50 FT
- PROVIDED: 230± FT

LOT DEPTH:
- ALLOWED: 100 FT MIN.
- PROVIDED: 366± FT

MAX. LOT BUILDING COVERAGE:
- ALLOWED: 60%
- PROVIDED: 27% (21,000± SF) WITH MAIN BUILDING

MAX. BUILDING HEIGHT:
- ALLOWED: 70 FT
- PROVIDED: <70 FT

FRONT SETBACK:
- ALLOWED: 10 FT
- PROVIDED: 0 FT (REQUESTING A VARIANCE)

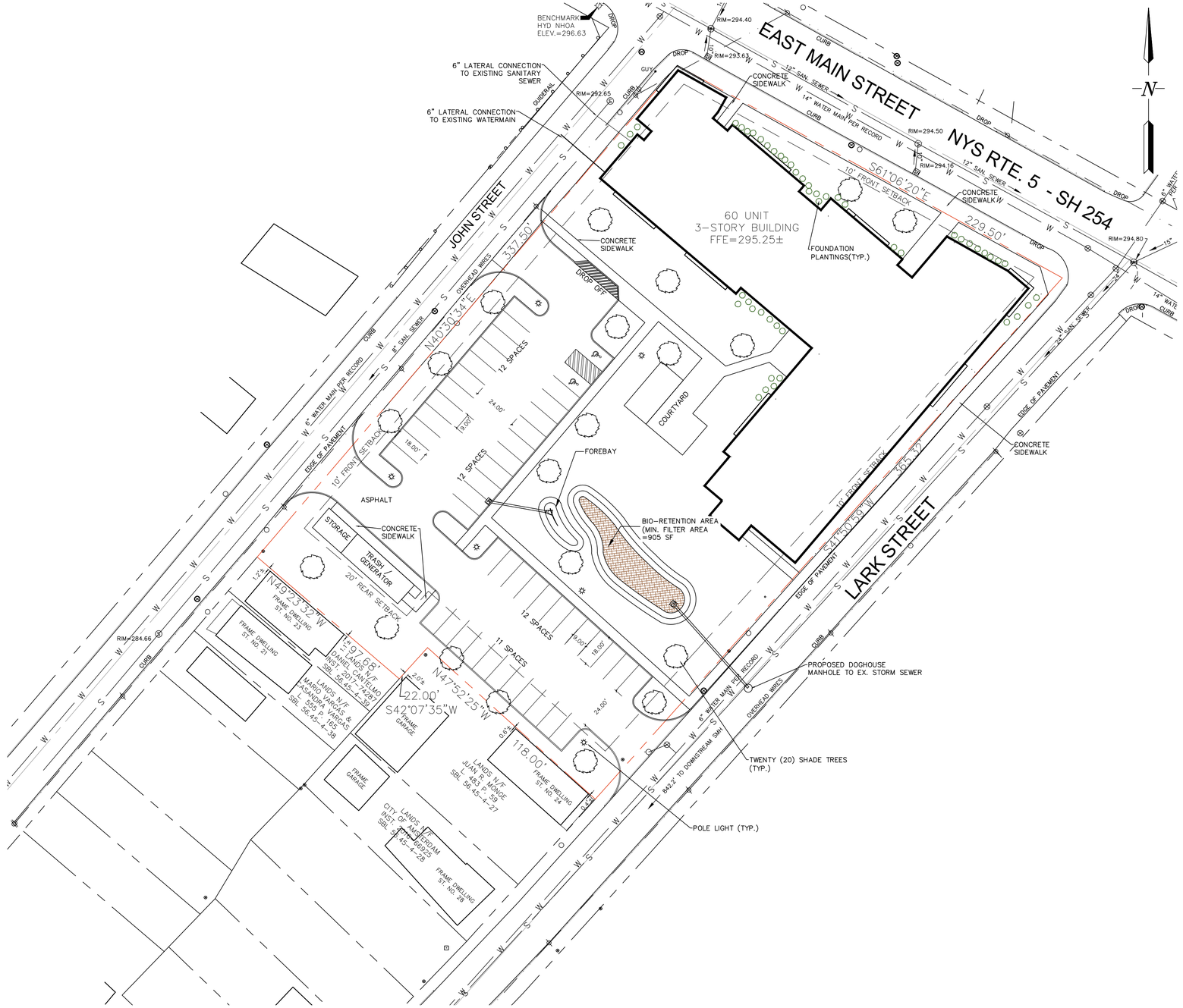
SIDE SETBACK:
- ALLOWED: 10 FT
- PROVIDED: N/A

REAR SETBACK:
- ALLOWED: 20 FT
- PROVIDED: >20 FT
- NOTE: OFF STREET PARKING ARTICLE VI SECTION 39 SUBSECTION B. 3. ALLOWS OFF STREET PARKING WITHIN 5 FEET OF A REAR OR SIDE PROPERTY LINE.

OFF STREET PARKING:
- ALLOWED: RESIDENTIAL MULTIFAMILY 1.5 SPACES PER DWELLING
- PROVIDED PARKING: 47 SPACES (2 HC)
- (REQUESTING A VARIANCE)

LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK
- ADJACENT PROPERTY LINE
- PROPOSED EASEMENT
- EXISTING CONTOUR
- EXISTING TREELINE
- EXISTING HYDRANT
- EXISTING UTILITY POLE
- EXISTING SIGN
- EXISTING CATCH BASIN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING OVERHEAD WIRE
- WETLAND BOUNDARY
- PROPOSED TREELINE
- PROPOSED CONTOUR
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY MAIN
- PROPOSED SANITARY LATERAL
- PROPOSED GRINDER PUMP
- PROPOSED LPSS FORCEMAIN
- PROPOSED HYDRANT
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE
- PROPOSED STORM SEWER
- PROPOSED CATCH BASIN
- PROPOSED DRY WELL



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NOT FOR CONSTRUCTION

TAX MAP ID:
56.45-4-47, 56.45-4-45, 56.45-4-43.2, 56.45-4-21, 56.45-4-22, 56.45-4-43.1, 56.45-4-23, 56.45-4-40, 56.45-4-26

APPLICANT:
DEPAUL PROPERTIES
1931 BUFFALO ROAD
ROCHESTER, NY 14624

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962

NO.	DATE:	REVISIONS	BY:

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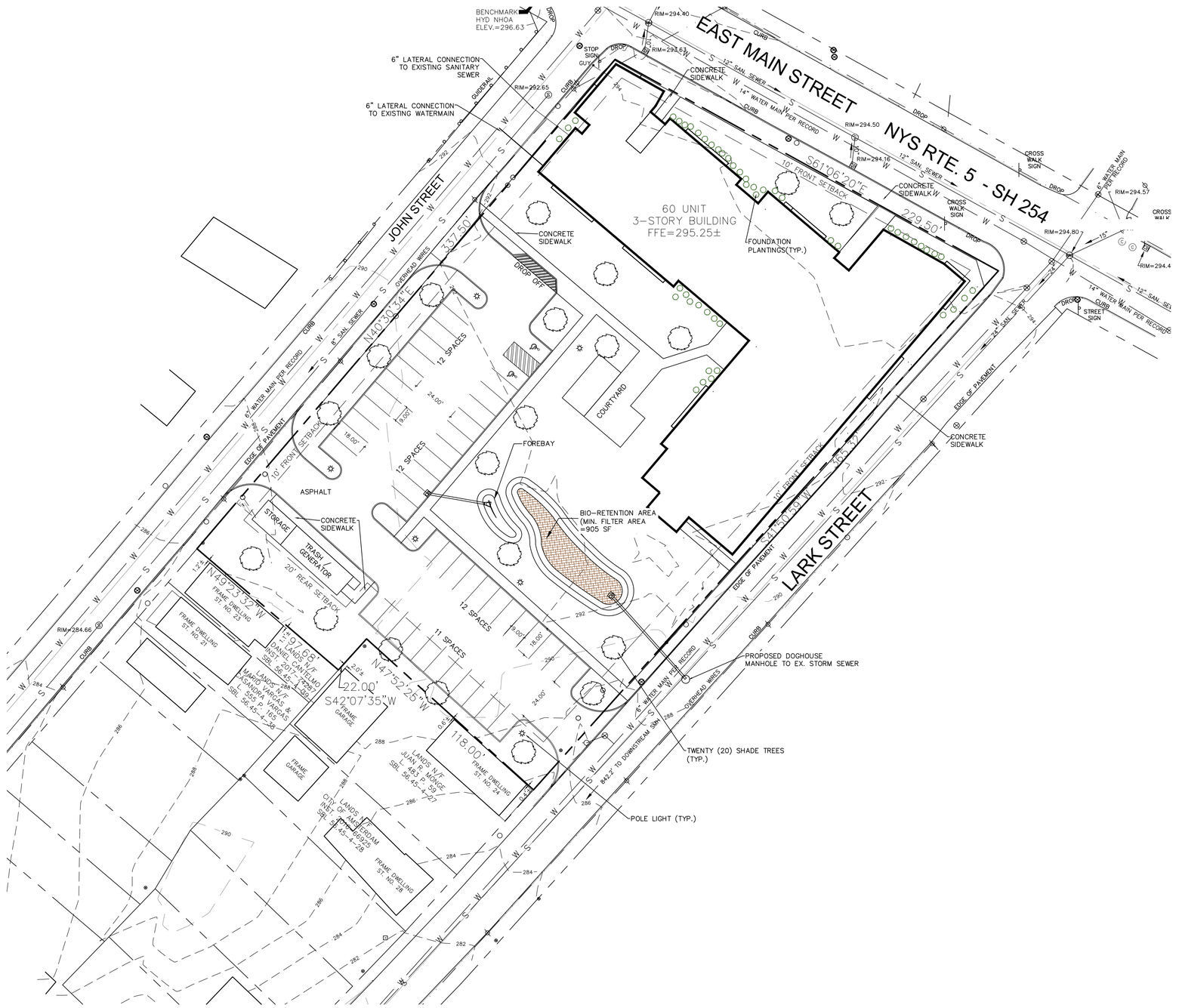
SITE PLAN
EAST MAIN APARTMENTS
251 MAIN STREET
CITY OF AMSTERDAM
COUNTY OF MONTGOMERY STATE OF NEW YORK

DATE: OCTOBER 8, 2019
CHECKED BY: D.F.I.
JOB NO. 19-094
SCALE: 1" = 30'
DRAWN BY: PJY
CADD FILE: 19-094.dwg
SHEET 3 OF 8



LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK
- ADJACENT PROPERTY LINE
- PROPOSED EASEMENT
- EXISTING CONTOUR
- EXISTING TREELINE
- EXISTING HYDRANT
- EXISTING UTILITY POLE
- EXISTING SIGN
- EXISTING CATCH BASIN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING OVERHEAD WIRE
- WETLAND BOUNDARY
- PROPOSED TREELINE
- PROPOSED CONTOUR
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY MAIN
- PROPOSED SANITARY LATERAL
- PROPOSED GRINDER PUMP
- PROPOSED LPSS FORCEMAIN
- PROPOSED STORM SEWER
- PROPOSED CATCH BASIN
- PROPOSED DRY WELL
- PROPOSED WATERMAIN WITH VALVE & HYDRANT
- PROPOSED WATER LATERAL

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962

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GRADING & UTILITY PLAN
EAST MAIN APARTMENTS
251 MAIN STREET
CITY OF AMSTERDAM
COUNTY OF SCHENECTADY STATE OF NEW YORK

DATE: OCTOBER 8, 2019
CHECKED BY: D.F.I.
JOB NO. 19-094
SCALE: 1" = 30'
DRAWN BY: PJY
CADD FILE: 19-094.dwg
SHEET 4 OF 8

EROSION CONTROL GENERAL NOTES:

1. THIS PROJECT IS AUTHORIZED UNDER NYSDEC PERMIT GP-0-15-002.

2. ANY CONTRACTOR INVOLVED IN EARTHWORK ACTIVITIES, INCLUDING BUT NOT LIMITED TO: CLEARING, GRADING & TRENCHING, SHALL REVIEW ALL PERMIT CONDITIONS & CERTIFY UNDERSTANDING OF THESE CONDITIONS, IN WRITING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT ALL EROSION CONTROLS DESCRIBED IN GP-0-15-002, & IT IS NOT THE INTENT OF THESE DRAWINGS TO REPLACE OR DISSEMINATE THE PERMIT REQUIREMENTS. THE CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH THE PERMIT AT ALL TIMES.

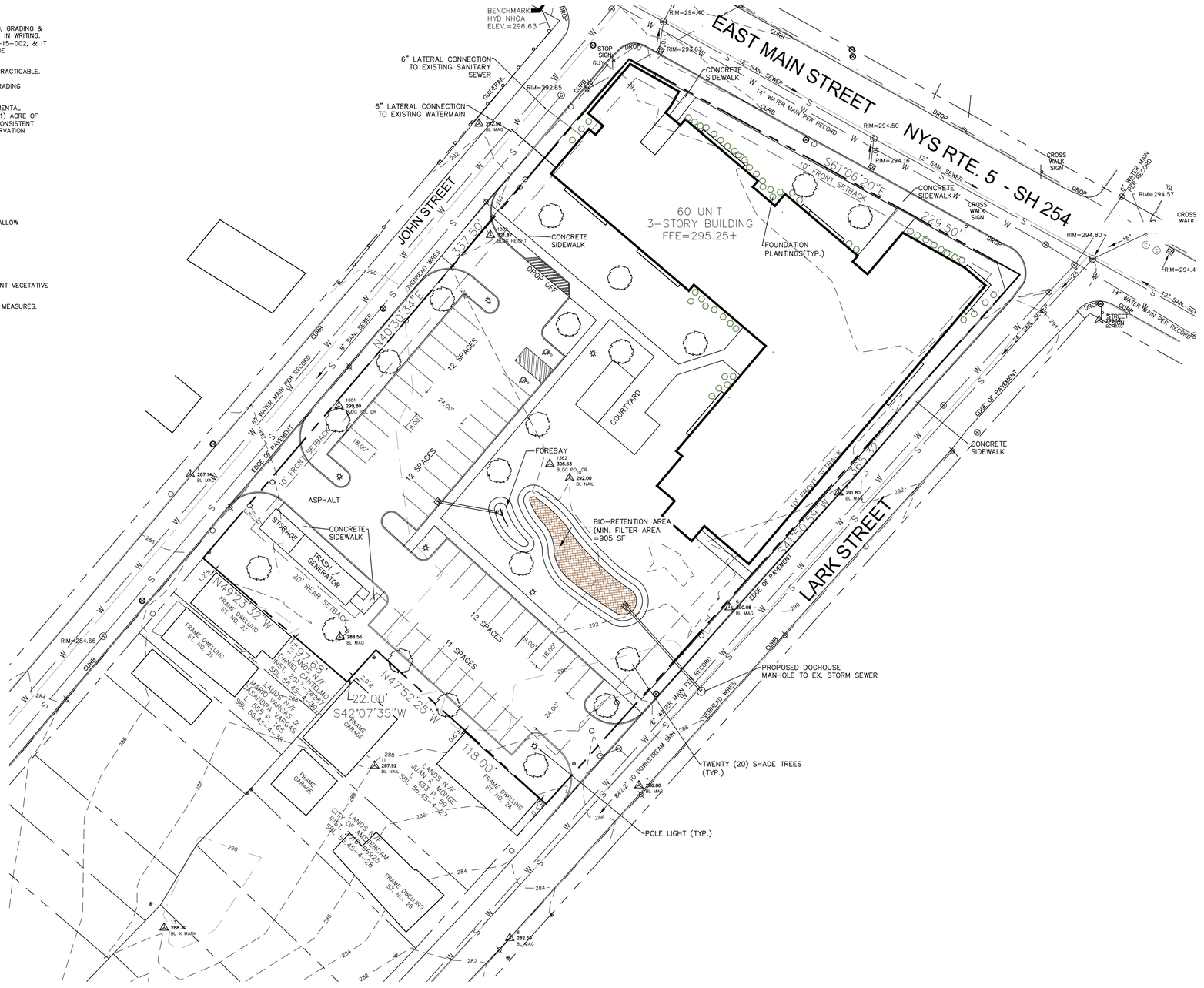
3. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION & EQUIPMENT ENTRANCE WHENEVER PRACTICABLE.

4. DISTURBED AREAS SHALL BE STABILIZED WITHIN (14) DAYS OF COMPLETION OR SUSPENSION OF GRADING OPERATIONS.

5. A NOTICE OF INTENT (NOI) MUST BE FILED WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (5) BUSINESS DAYS PRIOR TO CONSTRUCTION ACTIVITIES WHICH DISTURB MORE THAN (1) ACRE OF LAND AFFIRMING THAT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED CONSISTENT WITH THE REQUIREMENTS INCLUDED IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES (GP-0-15-002).

EROSION & SEDIMENT CONTROL CONSTRUCTION SEQUENCING:

1. ESTABLISH PERIMETER SILT FENCING, & STABILIZED CONSTRUCTION ENTRANCE.
2. COMPLETE ROUGH GRADING FOR DRIVEWAY, BUILDINGS, AND BIORETENTION AREA.
3. CONSTRUCT BIORETENTION AREA. CONSTRUCT OUTLET STRUCTURE WITHIN BIORETENTION AREA TO ALLOW FUNCTIONALITY AS A TEMPORARY SEDIMENT BASIN DURING SITE CONSTRUCTION.
4. CONSTRUCT BUILDINGS.
5. PAVE DRIVEWAY AND PARKING AREAS.
6. REMOVE SEDIMENT FROM BIORETENTION AREA, INSTALL FILTER MEDIA AND PLANTINGS
6. UPON COMPLETION OF THE ROAD & BIORETENTION AREA, SEEDING & ESTABLISHMENT OF PERMANENT VEGETATIVE COVER SHALL OCCUR ON ALL DISTURBED AREAS.
7. ONCE FINAL STABILIZATION IS ACHIEVED, REMOVE ALL TEMPORARY EROSION & SEDIMENT CONTROL MEASURES. CONTINUE INSPECTION & MAINTENANCE OF ROADWAY, EROSION/SEDIMENT CONTROL DEVICES & POST-CONSTRUCTION MANAGEMENT PRACTICES THROUGHOUT DURATION OF THE CONSTRUCTION.



LEGEND

- ADJACENT PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED SETBACK
- EXISTING CONTOUR
- EXISTING TREELINE
- EXISTING OVERHEAD WIRE
- EXISTING FENCE
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED SILT FENCE

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962

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ESC PLAN
EAST MAIN APARTMENTS
251 MAIN STREET
CITY OF AMSTERDAM
COUNTY OF SCHENECTADY STATE OF NEW YORK

DATE: OCTOBER 8, 2019 | CHECKED BY: D.F.I. | JOB NO. 19-094 | SCALE: 1" = 30'
DRAWN BY: PJY | CADD FILE: 19-094.dwg | SHEET 5 OF 8

TEMPORARY EROSION AND SEDIMENT CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE LATEST EDITION OF NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL." (aka: THE BLUE BOOK) EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.

2. IT IS THE INTENT OF THESE PLANS AND NOTES TO BE USED AS A GUIDE BY THE CONTRACTOR TO ENSURE THAT NO ERODED MATERIAL MIGRATES FROM THE SITE OR ENTERS ANY WATER COURSE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THIS GOAL IS MET, BY IMPLEMENTING THESE PLANS AND ANY ADDITIONAL MEANS THAT MAY BE NECESSARY. FURTHER MEASURES MAY BE REQUIRED BY THE CITY, VILLAGE, OR VILLAGE ENGINEER. WHILE MANY OF THE EROSION CONTROL DETAILS CONTAINED WITHIN THESE PLANS ARE TAKEN DIRECTLY FROM THE BLUE BOOK, THE CONTRACTOR SHOULD CONSIDER ANY OF THE DETAILS CONTAINED IN SECTION 7A OF THE BLUE BOOK AS ACCEPTABLE PRACTICE IN THE APPROPRIATE APPLICATION.

3. THE DEVELOPER/CONTRACTOR OR HIS BUILDER SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAINFALL EVENT THROUGH THE ENTIRE DEVELOPMENT PROCESS. TO ASSURE PROPER FUNCTION, SILTATION BARRIERS SHALL BE MAINTAINED IN GOOD CONDITION AND REINFORCED, EXTENDED, REPAIRED, RE-SEEDED AND PROTECTED FROM FURTHER EROSION. ALL SEDIMENT ACCUMULATED SHALL BE REMOVED AND CONTAINED IN APPROPRIATE SPOIL AREAS. WATER SHALL BE APPLIED TO NEWLY SEEDED AREAS AS NEEDED UNTIL GRASS COVER IS WELL ESTABLISHED. DURING THESE PERIODIC INSPECTIONS, THE FOLLOWING ITEMS SHOULD BE PAID PARTICULAR ATTENTION: A. SILT FENCING SHALL BE INSPECTED FOR UNDERMINING AND DETERIORATION. B. SEEDED/MULCHED AREAS SHALL BE INSPECTED TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE REPAIRED AS NECESSARY.

4. EROSION CONTROL DEVICES SHALL NOT BE REMOVED UNTIL THE CITY, VILLAGE OR VILLAGE ENGINEER HAS APPROVED FINAL STABILIZATION.

5. SILT FENCE AND OTHER EROSION CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THESE DETAIL SHEETS AND SECTION 7A OF THE BLUE BOOK.

6. PRIOR TO ANY CONSTRUCTION ACTIVITY, THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.

7. CONSTRUCTION TRAFFIC SHALL NOT CROSS STREAMS OR DITCHES EXCEPT AT SUITABLE CROSSING FACILITIES. EQUIPMENT SHALL NOT OPERATE, UNNECESSARILY, WITHIN WATERWAYS OR DRAINAGE DITCHES.

8. EXISTING PAVEMENT AREAS SHALL BE CLEANED AT THE DIRECTION OF THE CITY, VILLAGE, OR VILLAGE ENGINEER.

9. WATER TRUCKS SHALL BE USED TO MINIMIZE DUST POLLUTION ON SITE, AND ON ADJACENT ROADWAY AREAS AS DIRECTED BY THE CITY, VILLAGE, OR VILLAGE ENGINEER.

10. ANY WATER PUMPED AS A RESULT OF DEWATERING ACTIVITIES SHALL BE PUMPED INTO A DEWATERING PIT.

11. ALL AREAS DISTURBED IN THE CONSTRUCTION PROCESS SHALL BE STABILIZED WITH SEED AND MULCH NO MORE THAN 14 DAYS AFTER THE COMPLETION OF WORK IN THAT AREA. IF WORK IN AN AREA IS SUSPENDED, IT SHALL NOT REMAIN UNSTABILIZED FOR MORE THAN 21 DAYS. IT MAY BE NECESSARY TO SEED AND MULCH SOME AREAS SEVERAL TIMES TO MEET THIS REQUIREMENT.

12. IT IS RECOMMENDED THAT ALL EROSION CONTROL DEVICES BE PLACED FOR THE ENTIRE PHASE AS SHOWN ON THE EROSION CONTROL PLAN.

13. STOCK PILES SHALL BE PROTECTED BY SILT FENCE PER GP-0-15-002. THESE DEVICES SHALL BE MAINTAINED IN GOOD CONDITION UNTIL SAID STOCK PILES ARE REMOVED AND STOCK PILING AREAS ARE PERMANENTLY STABILIZED.

14. STOCK PILES SHALL BE SEEDED UPON SUSPENSION OF WORK OR IF MATERIAL IS NOT TO BE USED WITHIN 14 DAYS, IN ACCORDANCE WITH GP-0-15-002.

15. IN NO CASE SHALL ERODIBLE MATERIALS BE STOCKPILED WITHIN 25 FEET OF ANY DITCH, STREAM OR OTHER SURFACE WATER BODY.

16. SILT FENCING SHALL BE INSTALLED AT THE PERIMETER OF ALL SLOPES TO BE GRADED, PRIOR TO GRADING OPERATIONS.

17. CLEARING OPERATIONS SHALL BE LIMITED TO ACTIVE WORK AREAS.

18. CARE SHALL BE TAKEN TO PRESERVE AS MUCH EXISTING VEGETATION AS POSSIBLE AND HEALTHY TREES OF DESIRABLE SPECIES SHALL BE PROTECTED.

19. WHEN RUNOFF IS COLLECTED AND FLOW IS CONCENTRATED IN A SWALE OR DRAINAGE DITCH, THEN CHECK DAMS SHALL BE INSTALLED TO REDUCE VELOCITY UNTIL THE SWALE AND THE AREA DRAINING TO THE SWALE ARE STABILIZED. SEDIMENT SHALL BE REMOVED FROM THE DAM AS NEEDED TO ALLOW THE CHANNEL TO DRAIN THROUGH THE DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM.

EROSION & SEDIMENT CONTROL CONSTRUCTION SEQUENCING:

1. ESTABLISH PERIMETER SILT FENCING AND STABILIZED CONSTRUCTION ENTRANCE.
2. REMOVE VEGETATION AND BEGIN GRADING.
3. CONSTRUCT BIO-RETENTION AREA TO ALLOW FUNCTIONALITY AS A TEMPORARY SEDIMENT BASIN DURING SITE CONSTRUCTION.
4. COMPLETE GRADING, MATERIAL EXPORT AND CONSTRUCT CONCRETE WASHOUT. BEGIN CONSTRUCTION OF BUILDINGS, SIDEWALKS AND DRIVEWAY.
5. UPON COMPLETION OF THE CONSTRUCTION, REMOVE SEDIMENT FROM POND AND BEGIN THE SEEDING & ESTABLISHMENT OF PERMANENT VEGETATIVE COVER IN ALL DISTURBED AREAS
6. ONCE FINAL STABILIZATION IS ACHIEVED, REMOVE ALL TEMPORARY EROSION & SEDIMENT CONTROL MEASURES.

EROSION CONTROL GENERAL NOTES:

1. THIS PROJECT IS AUTHORIZED UNDER NYSDEC GENERAL PERMIT GP-0-15-002.

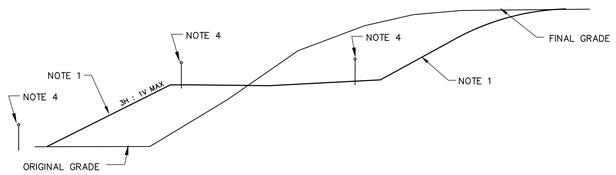
2. ANY CONTRACTOR INVOLVED IN EARTHWORK ACTIVITIES, INCLUDING BUT NOT LIMITED TO: CLEARING, GRADING AND TRENCHING, SHALL REVIEW ALL PERMIT CONDITIONS AND CERTIFY UNDERSTANDING OF THESE CONDITIONS, IN WRITING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT ALL EROSION CONTROLS DESCRIBED IN GP-0-15-002, AND IT IS NOT THE INTENT OF THESE DRAWINGS TO REPLACE OR DISSEMINATE THE PERMIT REQUIREMENTS. THE CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH THE PERMIT AT ALL TIMES.

3. AT NO TIME, SHALL MORE THAN FIVE (5) ACRES REMAIN UNSTABILIZED. THE CONTRACTOR SHALL COORDINATE EARTHWORK ACTIVITIES AND IMPLEMENTATION OF SOIL STABILIZATION MEASURES TO ENSURE COMPLIANCE TO THIS PERMIT REQUIREMENT.

4. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION AND EQUIPMENT ENTRANCE WHENEVER PRACTICABLE.

5. DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF COMPLETION OR SUSPENSION OF GRADING OPERATIONS.

6. A NOTICE OF INTENT (NOI) MUST BE FILED WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION FIVE (5) BUSINESS DAYS PRIOR TO CONSTRUCTION ACTIVITIES WHICH DISTURB MORE THAN ONE ACRE OF LAND AFFIRMING THAT A STORMWATER POLLUTION PREVENTION PLAN HAS BEEN PREPARED CONSISTENT WITH THE REQUIREMENTS INCLUDED IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES (GP-0-15-002).

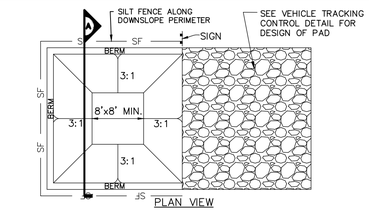


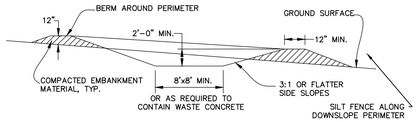
NOTES:

1. WHEN CUT/FILL SLOPE HAS BEEN COMPLETED, THE SLOPE SHOULD BE TRIMMED AND THE PERMANENT EROSION CONTROL MEASURES OF SEEDING AND MULCHING SHOULD BE CARRIED OUT. IF THE CUT/FILL IS TRIMMED OUT OF "SEASON" (FROM NOV. 1 THROUGH APRIL 1), MULCH THE SLOPE AND SEED ON TOP OF THE MULCH IN THE NEXT SEEDING SEASON.
2. IF THE SLOPE CANNOT BE COMPLETED BECAUSE PAVING IS REQUIRED OR FOR OTHER REASONS, THE SEEDING AND MULCHING SHOULD BE COMPLETED TO THE MAXIMUM EXTENT POSSIBLE.
3. WHEN THE CUT/FILL CANNOT BE BROUGHT TO FINAL GRADE IN A REASONABLE LENGTH OF TIME IT SHOULD BE MULCHED.
4. PROVIDE A CONTINUOUS LINE OF SILT FENCE AT THE PERIMETER OF SLOPES UNTIL THE FINAL STABILIZATION HAS BEEN APPROVED BY THE DESIGN ENGINEER OR THE INSPECTING PROFESSIONAL.
5. ALL FILL SLOPES AND CONSTRUCTED EMBANKMENTS SHALL BE INSTALLED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS SECTION 203 (EXCAVATION AND EMBANKMENT).

SEEDING AND MULCHING GUIDES – CUT/FILL SLOPES

NOT TO SCALE





SECTION A

CONCRETE WASHOUT AREA INSTALLATION NOTES:

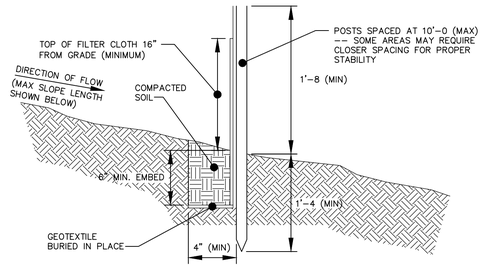
1. SEE PLAN VIEW FOR LOCATIONS OF CONCRETE WASHOUT AREA
2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL IS REQUIRED AT THE ACCESS POINT.
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES:

1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
2. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, COVER THE DISTURBED AREA WITH TOPSOIL, SEED AND MULCH OR OTHERWISE STABILIZE IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
4. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

CONCRETE WASHOUT AREA

NOT TO SCALE



MAXIMUM ALLOWABLE SLOPE LENGTH

MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING RUNOFF TO A SECTION OF SILT FENCE SHALL BE AS FOLLOWS:

SLOPE STEEPNESS:	MAX. SLOPE LENGTH:
1:2	25 FT
1:3	50 FT
1:4	75 FT
1:5 OR FLATTER	100 FT

NOTE:
MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO SILT FENCE SECTION SHALL NOT EXCEED 1/4 ACRE PER 100 FT OF FENCE. CONCENTRATED DISCHARGE OF SEDIMENT LADEN WATER SHALL NOT BE ALLOWED TO FLOW DIRECTLY TO THE FENCING.

SILT FENCE DETAIL

NOT TO SCALE

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

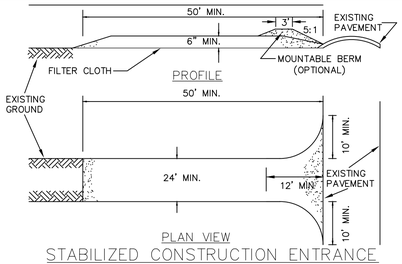
1. INSTALL SILT FENCE IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE WRAPPED TOGETHER PER DETAIL 4 ON THIS PAGE.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN ACCUMULATION REACHES 1/2 OF DESIGN CAPACITY OF FENCE (1/2 HEIGHT OF FILTER FABRIC) OR WHEN "BULGES" DEVELOP IN FENCING.

POSTS: STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962

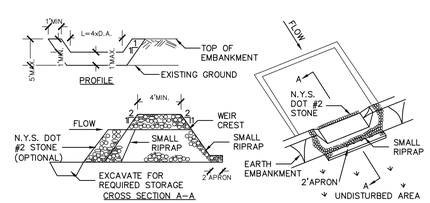


STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FEET MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY – FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5 : 1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS – OF – WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS – OF – WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



OPTION: A ONE FOOT LAYER OF N.Y.S. DOT #2 STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP INPLACE OF THE EMBEDDED FILTER CLOTH.

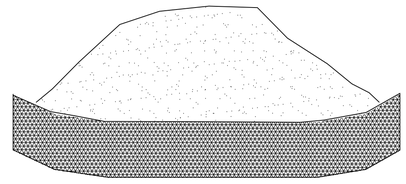
CONSTRUCTION SPECIFICATIONS

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

MAXIMUM DRAINAGE AREA 5 ACRES

STONE OUTLET SEDIMENT TRAP DETAIL

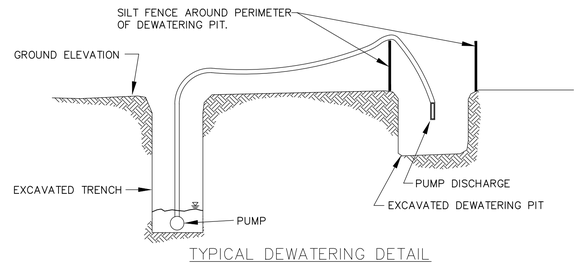
NOT TO SCALE



1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
3. SILT FENCE SHALL BE PLACED 5-FEET DOWNSLOPE OF EACH PILE. UPON COMPLETION OF SOIL STOCKPILING, TOPSOIL SHALL BE STABILIZED WITH SEED AND MULCH IF NOT TO BE DISTURBED/UTILIZED WITHIN 14 DAYS.
4. SEE ADDITIONAL DETAILS FOR INSTALLATION OF SILT FENCE.
5. TEMPORARY PERIMETER DIKES MAY BE REQUIRED TO DIRECT CLEAN RUNOFF FROM STOCKPILE AREAS. REFER TO EROSION AND SEDIMENT CONTROL PLAN.

SOIL STOCKPILE STABILIZATION DETAIL

NOT TO SCALE



TYPICAL DEWATERING DETAIL

NOT TO SCALE

FOR MUNICIPAL APPROVAL ONLY
NOT FOR CONSTRUCTION

NO.	DATE:	REVISIONS	BY:

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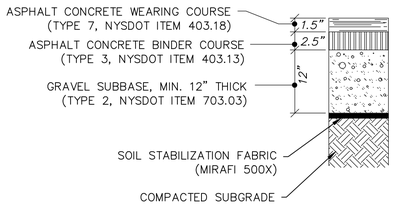
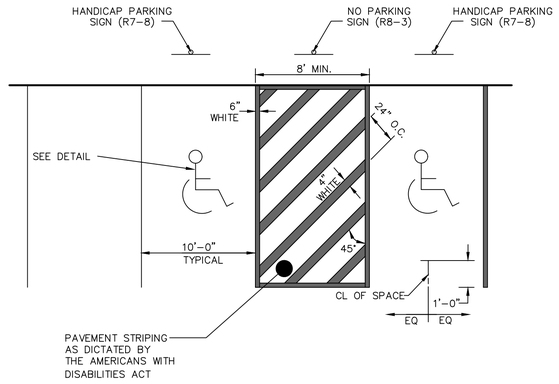
ESC DETAILS
EAST MAIN APARTMENTS
251 MAIN STREET
CITY OF AMSTERDAM
COUNTY OF SCHENECTADY STATE OF NEW YORK

DATE: OCTOBER 8, 2019
CHECKED BY: D.F.I.
JOB NO. 19-094
SCALE: AS SHOWN
DRAWN BY: PJY
CADD FILE: 19-094.dwg
SHEET 6 OF 8



ASPHALT PAVEMENT SECTION
NOT TO SCALE

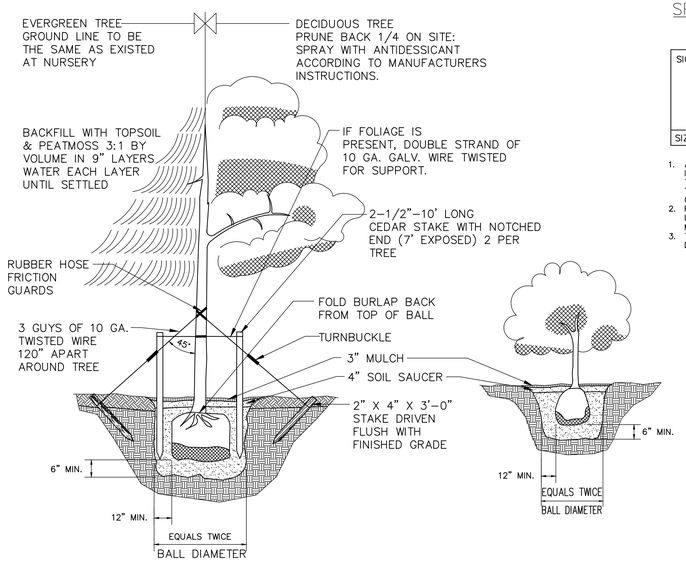


HANDICAPPED ACCESSIBLE PARKING
SPACE DETAIL
NOT TO SCALE

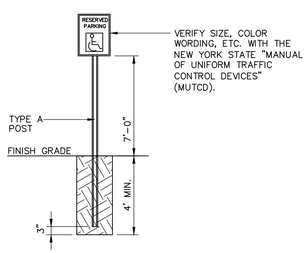
SIGN	RESERVED PARKING P4-6	STOP R1-1	15 MPH W13-1
SIZE	12" x 18"	24" x 24"	18"X18"

1. ALL PERMANENT STRIPING AND SIGNAGE IS TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE FEDERAL MUTCD WITH NYS SUPPLEMENT; AND THE CURRENT SET OF NYSDOT STANDARD SHEETS, GROUP M685 AND GROUP M645.
2. FOR STANDARD SIGN HEIGHT AND LATERAL LOCATION REFERENCE NYSDOT STANDARD SHEET M645-55R1 (2008 EDITION)
3. THE MINIMUM SHEETING REFLECTIVITY SHALL BE DIAMOND GRADE.

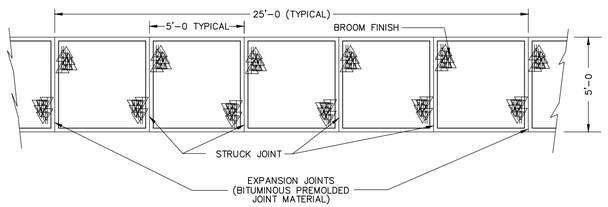
SIGN SCHEDULE



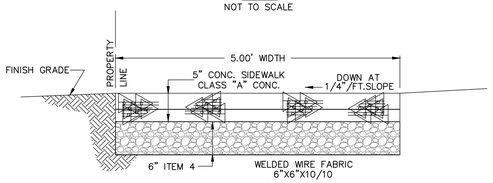
TYPICAL PLANTING DETAIL
NOT TO SCALE



ACCESSIBLE PARKING SIGN
NOT TO SCALE

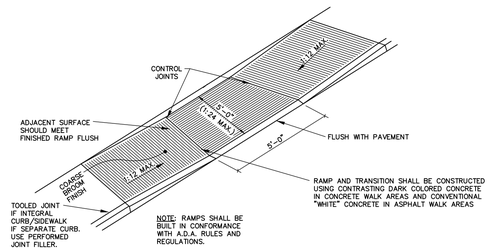


PLAN
NOT TO SCALE

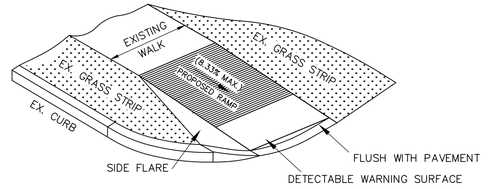


SECTION
NOT TO SCALE

CONCRETE SIDEWALK DETAILS
NOT TO SCALE

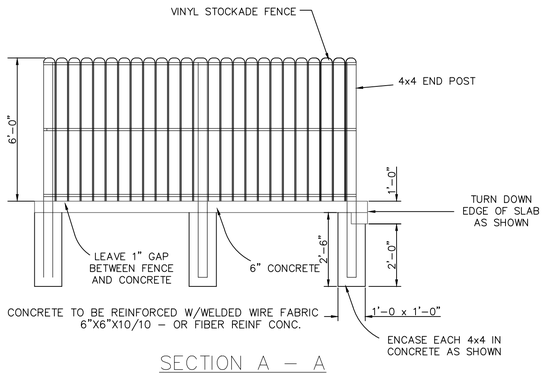


HANDICAPPED SIDEWALK RAMP
NOT TO SCALE



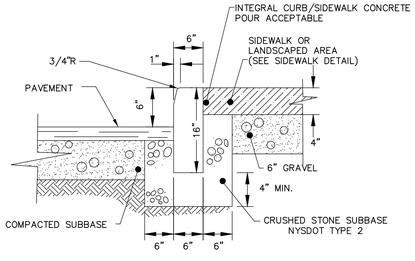
NOTE: RAMPS SHALL BE
BUILT IN CONFORMANCE
WITH A.D.A. RULES AND
REGULATIONS.

HANDICAPPED SIDEWALK RAMP
AT PROPOSED DRIVEWAY
NOT TO SCALE



SECTION A - A

TRASH AREA SCREENING DETAIL
NOT TO SCALE



CONCRETE CURB DETAIL
NOT TO SCALE

FOR MUNICIPAL APPROVAL ONLY
NOT FOR CONSTRUCTION

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962

NO.	DATE:	REVISIONS	BY:

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SITE DETAILS
EAST MAIN APARTMENTS
251 MAIN STREET
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DATE: 10-8-19
CHECKED BY: D.F.I
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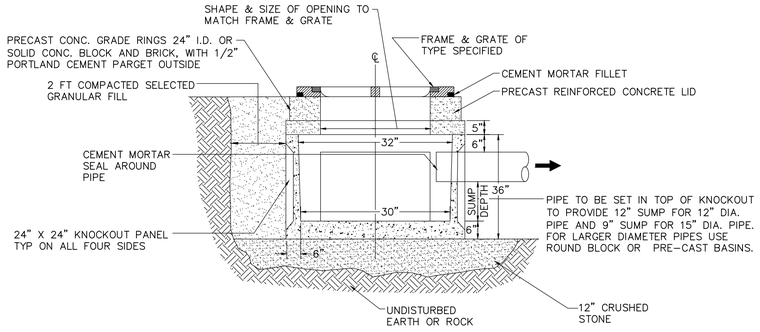
SCALE: AS SHOWN
DRAWN BY: PJY
CADD FILE: 19-094.dwg
SHEET 7 OF 8

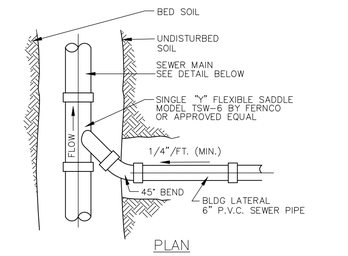


STANDARD SQUARE PRECAST CONCRETE CATCH BASIN

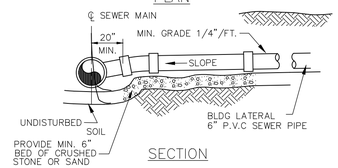
NOT TO SCALE

POND EMBANKMENT NOTES:

1. THE GROUND SURFACE LOCATED BELOW THE EMBANKMENT SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC, AND OTHERWISE OBJECTIONABLE MATERIALS.
2. AFTER STRIPPING, THE IN-PLACE MATERIAL SHOULD BE MOISTENED, IF DRY, AND COMPACTED BEFORE PLACEMENT OF THE FIRST LAYER OF EMBANKMENT MATERIAL.
3. INCLUSION OF VEGETATION, ORGANIC MATERIALS, OR FROZEN SOIL IN THE EMBANKMENT IS PROHIBITED.
4. THE EMBANKMENT MATERIAL SHALL BE PLACED IN 1' MAXIMUM LIFTS.
5. EACH LIFT WILL BE COMPACTED TO 90% OF THE MAXIMUM DRY DENSITY AS ESTABLISHED BY A MODIFIED PROCTOR COMPACTION TEST.
6. THE MATERIAL BEING USED FOR THE EMBANKMENT SHALL BE FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, OR OTHER OBJECTIONABLE MATERIALS.
7. RELATIVELY PERVIOUS MATERIALS SUCH AS GRAVEL (I.E. UNIFIED SOIL CLASSES GW, GP, SW, & SP) SHALL NOT BE PLACED IN THE EMBANKMENT.
8. BACKFILL AROUND CONDUITS WITHIN THE EMBANKMENT SHALL BE PLACED IN 4" LIFTS AND SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3". IT SHALL ALSO MEET 90% COMPACTION.
9. THE SLOPES OF THE EMBANKMENT SHALL NEVER EXCEED 1(V):3(H).
10. A TRASH RACK SHALL BE INSTALLED AT THE OUTLET STRUCTURE IN ORDER TO PROTECT THE VERTICAL ORIFICES FROM CLOGGING.
11. THE ANTI-SEEP COLLAR SHALL BE POSITIONED AT THE CENTERLINE OF THE BASINS BERM.



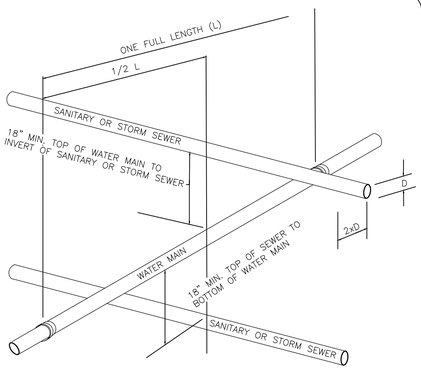
PLAN



SECTION

SEWER LATERAL CONNECTION

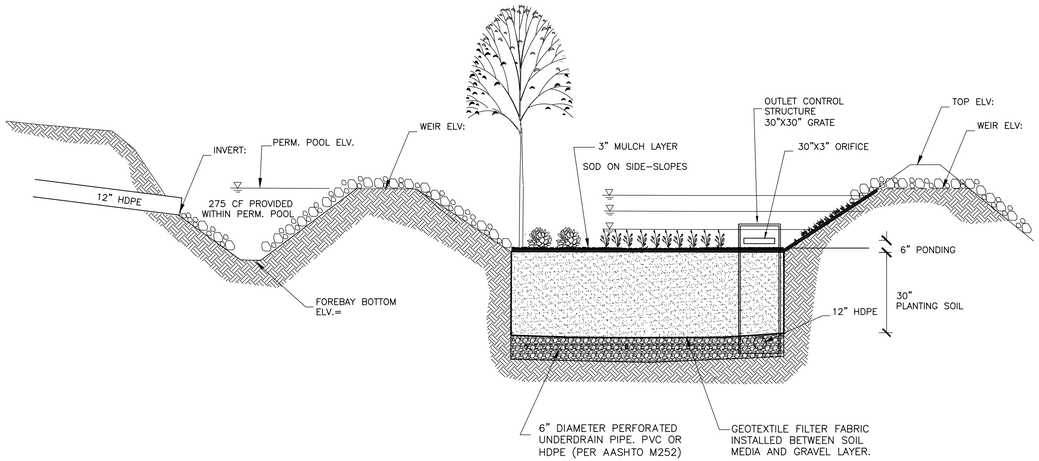
(NOT TO SCALE)



VERTICAL PIPE CROSSING DETAIL

NOT TO SCALE

NOTES:
1. SEWER AND WATER LINES SHALL HAVE MINIMUM SEPARATIONS OF 10 FEET HORIZONTAL AND 18 INCHES VERTICAL.



BIORETENTION FILTER DETAIL

(NOT TO SCALE)

NOTES:
1. ALL DRAINAGE AREAS TO A BIORETENTION FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF AMENDED SOILS, MULCH OR PLANTINGS.
2. AMENDED SOIL WILL ONLY BE PERMITTED WITH A VALID SOIL ANALYSIS REPORT. NO AMENDED SOIL SHALL BE ALLOWED ON THE SIDE SLOPES.
   AMENDED SOIL COMPOSITION: 85% SAND
   13% COMPOST MATERIAL
   2% MIN ORGANIC SOIL (i.e. PEAT)
3. INSTALL WIRE SCREENING AROUND ALL OUTLET OPENINGS TO PREVENT LOSS OF MULCH.
4. ONLY SMALL MATURING TREES ARE ALLOWED TO BE PLANTED IN THE AMENDED SOILS AND SHALL BE PLANTED NEAR THE PERIMETER OF THE FILTER AREA
5. FILTER SYSTEM SHALL REMAIN "OFF-LINE" UNTIL THE SITE IS STABILIZED AND APPROVED BY THE DESIGN ENGINEER.
6. DURING CONSTRUCTION, ALL SLOPES IN THE FILTER AREA SHALL BE PROTECTED BY EROSION CONTROL MATTING AND SEEDED IMMEDIATELY AFTER THE COMPLETION OF GRADING.
7. CONTRACTOR SHOULD NOTIFY ENGINEER WHEN PLANTING MATERIAL IS IN PLACE FOR OBSERVATION OR PROVIDE ANALYSIS REPORT.

PLANTING SCHEDULE BIORETENTION AREA

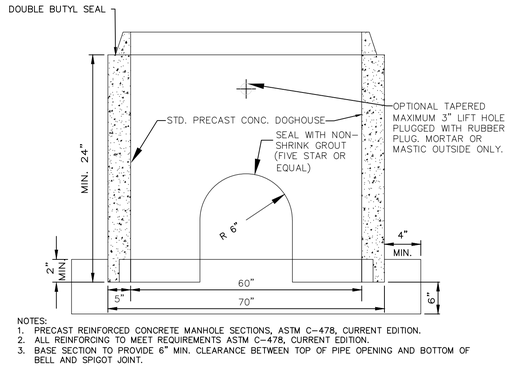
ABBREV.	COMMON NAME	SCIENTIFIC NAME	SIZE	QUANTITY
Ac	RED MAPLE	ACER RUBRUM	2"-3" cal.	2
Qp	PIN OAK	QUERCAS PALUSTRIS	2"-3" cal.	3
Sn	BLACK WILLOW	SALIX NIGRA	2"-3" cal.	4
Sa	ELDERBERRY	SAMBUCUS CANADENSIS	2 GAL.	4
Aa	CHOKEBERRY	ARONIA ABUTIFOLIA	2 GAL.	4
Ca	BUTTONBUSH	CEPAHLANTHUS ACCIDENTALIS	2 GAL.	4

NOTES:

1) PLANTS SHALL BE PLACED IN A RANDOM, NATURAL ORDER
2) TREES SHALL BE PLANTED 10-20' O.C.
3) SHRUBS SHALL BE PLACED 5-10' O.C.

PLANT SPECIES LIST

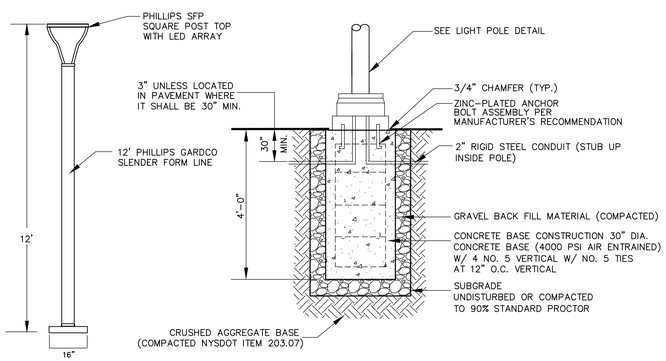
NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962



NOTES:
1. PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, ASTM C-478, CURRENT EDITION.
2. ALL REINFORCING TO MEET REQUIREMENTS ASTM C-478, CURRENT EDITION.
3. BASE SECTION TO PROVIDE 6" MIN. CLEARANCE BETWEEN TOP OF PIPE OPENING AND BOTTOM OF BELL AND SPIGOT JOINT.

TYPICAL 'DOGHOUSE' BASE

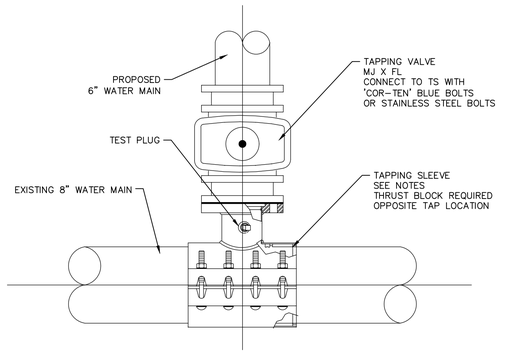
NOT TO SCALE



LIGHT POLE AND BASE DETAIL

NOT TO SCALE

NOTES:
SEE ELECTRICAL PLANS FOR BUILDING MOUNTED LIGHTS AND POLE MOUNTED LIGHT SPECIFICATIONS.



MATERIAL AND INSTALLATION NOTES:

1. TAPPING SLEEVE SHALL BE POWERSEAL MODEL 3490 TYPE 304 STAINLESS STEEL WITH CARBON STEEL FLANGE, FORD MODEL FTSS WITH CARBON STEEL FLANGE OR APPROVED EQUIVALENT. SLEEVE SHALL BE RATED AT 250 PSI AND MUST HAVE A TEST PLUG.
2. TAPPING VALVE SHALL BE MUELLER T-2360 RESILIENT WEDGE TAPPING VALVE WITH MJFL. VALVE SHALL BE RATED AT 250 PSI.
3. TAPPING SLEEVE AND VALVE SHALL BE FULL PORT TO ACCEPT FULL SIZE SHELL CUTTER.
4. STEEL FLANGE SHALL MEET THE REQUIREMENTS OF AWWA C207.

MECHANICAL JOINT TAPPING SLEEVE AND VALVE

NOT TO SCALE

FOR MUNICIPAL APPROVAL ONLY
NOT FOR CONSTRUCTION

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CONSTRUCTION DETAILS

EAST MAIN APARTMENTS
251 MAIN STREET
CITY OF AMSTERDAM
COUNTY OF MONTGOMERY STATE OF NEW YORK

DATE: 10-8-19 | CHECKED BY: DFI | JOB NO. 19-094 | SCALE: NTS
DRAWN BY: PJY | CADD FILE: 19-094.dwg | SHEET 8 OF 8

STORMWATER POLLUTION PREVENTION PLAN

For the Proposed

DePaul Amsterdam Apartments

251 East Main Street
City of Amsterdam
MONTGOMERY COUNTY
STATE OF NEW YORK

PREPARED BY:

Ingalls & Associates, LLP
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Schenectady, NY 12306
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October 8, 2019

APPLICANT:
DePaul Properties
1931 Buffalo Road
Rochester, NY 14624

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LIST OF APPENDICIES

I. PROJECT BACKGROUND INFORMATION

Project and Site Description

The proposed project is a 60-unit residential development located in the City of Amsterdam, Montgomery County. The proposed project consists of the development of one building, outdoor courtyard area, and associated utilities including water and sanitary sewer on the 1.77± acre site. Tax Map ID's 56.45, Block 4, Parcels 21, 22, 24, 26, 40, 43.1, 43.2, 45 & 47 reference the site.

This project type is listed under Table 2 in Appendix B of the NYSDEC GP-0-15-002, and will require a full Stormwater Pollution Prevention Plan (SWPPP) that includes post-construction stormwater management practices. The project also meets the scope and applicability of Chapter 9 of the manual to be considered a redevelopment activity.

Stormwater Management Objectives

The primary stormwater management objective is to provide water quantity and quality control from the developed area to protect the adjacent roadways & storm sewers and lessen the impacts to downstream water channels. Per the New York State Stormwater Management Design Manual the water quality control must be accomplished at least in part by green infrastructure practices for all new development areas.

Sources of water pollution during construction typically include erosion, siltation, and debris transport from excavated site areas, accidental spillage or leakage of motor fuels, lubrication oils, and other fluids from construction equipment, and other potential releases of construction related debris. In post construction, typical pollution sources include leakage of motor fuel or lubricating oils onto pavement, sediment-laden runoff from paved areas after deicing procedures, and runoff from landscaped areas that may contain fertilizers and other landscape maintenance chemicals.

The proposed stormwater management scheme will provide peak flow-rate attenuation for the 1, 10, and 100-year storm events; and provide permanent water quality control for the 90th percentile one-year event. Stormwater quality and erosion control during construction will utilize temporary measures including installation of silt fencing, temporary seeding, and stabilized construction entrances to minimize the potential of soil erosion and water pollution.

II. PRE-DEVELOPMENT CONDITIONS

Existing Drainage areas are outlined on the attached Map entitled "Existing Drainage Map" (see Appendix B of this report). There are two analysis points reviewed for the purposes of this project. Analysis point 'A' is located at the southern corner of the project site where runoff drains off-site down Lark Street and into the City storm sewer system. Analysis point 'B' is located at the southwestern corner of the project site where runoff drains off-site down John Street and into the City storm sewer system. The total drainage area is 1.77± acres.

The topography of the site can be generally described as flat with a slight slope toward the south and southwest where runoff collects and is conveyed south and southwesterly down Lark Street and John Street, respectively. The site is fully developed by multiple buildings and a parking lot.

Vegetation within the site can be classified as urban predominately impervious. Soils found within the project site according to the USDA "Custom Soil Resource Report for Montgomery County, New York" include:

Soil Type	Abbreviation	Description	Erodibilty	Hydrologic Soil Group
Lansing silt loam	LaB	Lansing silt loam, 3 to 8 percent slopes	Medium	B

The receiving body is the Mohawk River. The site is not located above a Sole Source Aquifer. There are no Critical Environmental Areas, natural resource protection areas, or identified wildlife habitats.

Through coordination with the NYSDEC, no known record of occurrences of state listed threatened or endangered species or critical habitat areas where found to occur within the vicinity of project. The USFWS' automatically generated IPaC resource list for the site indicates that the Northern Long-eared Bat may be located near the site, however, the existing site consists of urban buildings with few trees for bat habitation. No impact to the Northern Long-eared Bat is expected.

Site screening was conducted with respect to archeological significance. Correspondence with the Office of Parks, Recreation & Historic Preservation (OPRHP) and their "Letter of No Impact" is included in Appendix J.

There are no water supply or sewage disposal sites located within the project site.

III. POST-DEVELOPMENT CONDITIONS

The proposed project consists of the development of one building, parking, and associated utilities including water service, sanitary service, and stormwater conveyance on the 1.77± acre site. The analysis points for the site remains the same with all contributing areas still discharging in the same location.

Development on this site falls within the guidelines of Chapter 9 of the NYS Stormwater Design Manual. The area to be disturbed is predominantly covered with impervious surfaces and will remain impervious post construction. Portions of the site will be reverted to greenspace with a net decrease in total impervious area. Additionally, there is minimal usable space available for treatment practices.

The criteria identified under section 9.1.1.B option IV, was utilized to determine the required water quality volumes to be treated for water quality. Stormwater Runoff Quality Control will be provided by the use of a bioretention practice. Water Quality treatment for the proposed development through these practices will treat the required Water Quality Volume for the redevelopment activity.

Quantity control for the project will be provided through the reduction of impervious surface from existing to proposed conditions. Since the activity does not result in an increase in discharge rate the ten-year and hundred-year criteria do not apply.

A stormwater analysis was completed to ensure that the site meets the requirements set by the NYS DEC Stormwater Manual. This analysis is further outlined in Section V and calculations are included in Appendices B & C. Detailed construction plans containing sequencing information, construction details, and placement of erosion control devices are also included in the appendices.

IV. EROSION AND SEDIMENTATION CONTROL

Erosion and Sedimentation Control

Erosion and sedimentation control will be achieved in two phases:

1. Temporary Controls shall be installed and maintained throughout the site during construction activity. This will include the use of silt fencing, check dams, tracking pads at construction entrances, silt fencing at drainage inlets, and temporary seeding of disturbed areas. *All temporary E&S controls will be installed and maintained by the site contractor.*
2. Permanent controls include as necessary the planting of vegetation, including appropriate buffer shrubbery; and the construction of permanent water-quality control structures within the stormwater management areas.

Temporary Controls

All appropriate stormwater control measures shall be in place before commencement of construction on any segment of the project that requires such measures. Inspections by a qualified individual will be required once every seven days.

The site will be the most susceptible to erosion and sediment problems during the construction phase of the project. This can result in sedimentation in the nearby storm sewer systems. To prevent erosion and sediment transport during the construction phase, temporary erosion control measures will be used including:

- Silt fencing will be placed around the perimeter of the site at the toe of all slopes to be disturbed or property boundary;
- Stabilized construction entrance will be placed at the roadway entrances to the site;
- As excavation progresses, disturbed areas will be mulched to prevent sediment transport. Areas that are at or near finish grade will be stabilized.
- Inlet protection devises will be installed around all storm basins that have potential to receive runoff from disturbed areas.
- Areas adjacent to pavement, not under active construction will be covered with mulch or erosion matting and be seeded to minimize sediment transport onto paved areas. Seed mixtures to be compliant with NYS DEC.
- As structure is constructed, in the area adjacent to the building, sod or erosion control matting will be installed to minimize erosion from roof runoff.
- All disturbed areas will be seeded as soon as possible and dust will be controlled on adjacent roadways with water.

- Stockpiles of soil materials shall be stabilized with geotextile or seeding, and be surrounded by silt fencing or other suitable erosion control device.
- No area shall be left unstabilized within 14 days after completion of construction activities.
- Erosion control devices should be cleaned and repaired as necessary to insure proper operation.
- Creation of a designated, protected area to stockpile material stripped/excavated during construction;
- Litter and construction debris shall be collected on a daily basis by the General Contractor, and disposed of properly. Any storage of such debris on-site shall be undertaken only in designated areas where any runoff will not directly discharge to adjacent waterways;
- Construction chemicals and other potential pollutants shall be stored in covered containers.

In accordance with the "New York Guidelines for Urban Erosion and Sediment Control", there shall not be more than five (5) acres of disturbed soil at any one time.

Inspections

All contractors involved in earthwork operations are required to review and understand the Stormwater Pollution Prevention Plan and certify in writing such knowledge (see Appendix E for the Contractor's Certifications).

The contractor shall maintain erosion control devices on a daily basis. As established in the general permit, "Each contractor is responsible for providing at least one trained individual from their company that will be responsible for implementation of the SWPPP. The Owner/Operator shall ensure that at least one trained individual is on site on a daily basis when soil disturbance activities are being performed."

In addition, a qualified inspector must conduct a site inspection at least once every seven calendar days. This inspection is performed to inspect all erosion and sediment control practices are installed properly, all post-construction stormwater management practices are installed in accordance with the SWPPP, all disturbed areas that have not achieved final stabilization, and all points of discharge from the site. The inspector shall complete an inspection report after each site inspection and this form is to be kept in the on-site SWPPP binder. Should the inspector identify any deficiencies on the inspection report, he/she shall notify the owner of such deficiencies within one business day of the inspection. The contractor/subcontractor shall initiate the corrective measures within one business day of the notification and shall be completed within a reasonable time.

Erosion control devices shall be removed upon site stabilization with the approval of the Design Engineer. Upon final site stabilization the Design Engineer shall conduct a final stabilization and post construction control inspection to ensure that the site is ready for termination of permit coverage.

Spill Prevention Measures

In the event of a spill of potentially hazardous material (fuel, solvents, etc), appropriate containment and reporting to NYSDEC measures shall be implemented.

The following good housekeeping practices will be followed onsite during the construction project:

- All materials stored onsite will be stored in a neat, orderly manner and under cover.
- Products will be kept in their original containers with the original manufacturer's label in legible condition.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Original labels and material safety data sheets (MSDS) will be procured and used for each material.
- Whenever possible, all of a product will be used up before disposing of the container.
- If surplus product must be disposed of, manufacturers or local/state/federal recommended methods for proper disposal will be followed.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The job site superintendent will be responsible for daily inspections to ensure proper use and disposal of materials.

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite in spill control and containment kit (containing, for example, absorbent such as kitty litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.).
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with the hazardous substances.

- Spills of toxic or hazardous materials will be reported to the appropriate federal, state, and/or local government agency, regardless of the size of the spill. Spills of amounts that exceed Reportable Quantities of certain substances specifically mentioned in federal regulations (40 CFR 302 list and oil) will be immediately reported to the EPA National Response Center, telephone 1-800-424-8802.
- A description of the spill, what caused it, and the cleanup measures will also be included. If the spill exceeds a Reportable Quantity, all federal regulations regarding reports of the incident will be complied with.
- The job site superintendent will be the spill prevention and cleanup coordinator. He will designate the individuals who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of these personnel will be posted in the material storage area and in the office trailer onsite.

Winter Shutdown Measures

Prior to temporary winter shutdown any disturbed areas as well as stockpiles shall be stabilized. Temporary sediment basins shall be cleaned out and cleared of any debris as needed.

Access roads shall be kept clear of excessive snow to allow for ingress and egress. Snow shall be stockpiled in a location that does not inhibit runoff to stormwater drainage and detention areas.

Permanent Measures

For long-term sedimentation and erosion control measures, the following are to be incorporated:

- All disturbed areas not containing buildings or pavement shall be revegetated, either with grass or native plantings;
- Catch basins will be constructed with sumps to act as sediment traps;
- Pipe outlets and structures will be sized to provide erosion protection for velocities associated with the ten-year storm event.
- There are no direct discharges to adjacent surface water bodies.
- Vegetated areas will be maintained to prevent erosion and transport of bare soil.

V. WATER QUALITY AND QUANTITY CONTROL PLAN

In accordance with the NYSDEC GP 0-15-002 regulations, appropriate Stormwater Quality and Quantity Controls are provided for the post-construction condition.

Site Planning & Analysis Criteria (Redevelopment)

The first step in the planning for a redevelopment activity is to determine the sizing criteria to be used from the NYSSWDM Section 9.2.1.B. This project includes a reduction of impervious area from approximately 95% to 63%. Since the reduction is not greater than 25% option IV is utilized to size the remaining water quality volume required. The calculation for required treatment of WQv is included within Appendix D.

Both the hydrologic and hydraulic drainage analyses for this project were based on accepted methodologies presented in the New York State Stormwater Management Design Manual. Water Quality Volume (WQ_v) is based on the 90th percentile one-year event (1.1"). Stream Channel Protection Volume (CP_v) was determined using the one-year rainfall event (2.25"). Overbank Flood Control (Qp) and Extreme Flood Control (Qf) were determined using the 10 (4.0") and 100-year (6.75") events, respectively.

Water Quality

As required by the criteria in Chapter 9 of the NYSSWDM a portion of runoff from impervious surfaces will be treated for water quality prior to discharging from the site. The stormwater practice intended for treatment of the site will be owned long term by the property owner. A stormwater O&M Manual is included in Appendix I to ensure current and long term maintenance of the proposed practice is provided.

In accordance with the New York State Stormwater Design Manual and conditions of GP 0-15-002, Water Quality Volumes are reduced by the application of approved Green Infrastructure Practices and SMP's with runoff reduction capacity. The applied practice is a biorentention area (F-5).

The Water Quality practice has been designed to treat the calculated water quality volume as well as safely conveying the 10-yr storm event. See Appendix D for calculations and sizing of the stormwater treatment practice.

Water Quantity

As described in Section III above, stormwater runoff from the area of re-development does not increase from existing to proposed conditions as there is a net decrease in impervious cover.

Summary

The stormwater management system will prevent flooding, nutrient loading, and erosion that may result from development while at the same time maintaining the current hydrologic conditions of the site. Based upon the attached calculations, plans and summaries the proposed closed drainage system, as designed, will function adequately and not adversely impact adjacent or downstream properties. In addition, the guidelines set by the NYS DEC Stormwater Design Manual relative to redevelopment sites have been met.

VI. IMPLEMENTATION SCHEDULE AND MAINTENANCE

To provide for proper installation and operation of pollution control devices, the following schedule shall be maintained for each phase of the project.

1) Establish perimeter silt fencing and concrete washout areas;

2) Construct stabilized construction site entrances;

3) Construct ponds and/or temporary sediment controls; establish vegetative cover;

4) Begin rough grading of parking area and building pad, taking care to establish temporary swales to divert runoff; stabilize cut and fill slopes as work progresses; stabilize roads with sub-base course as necessary;

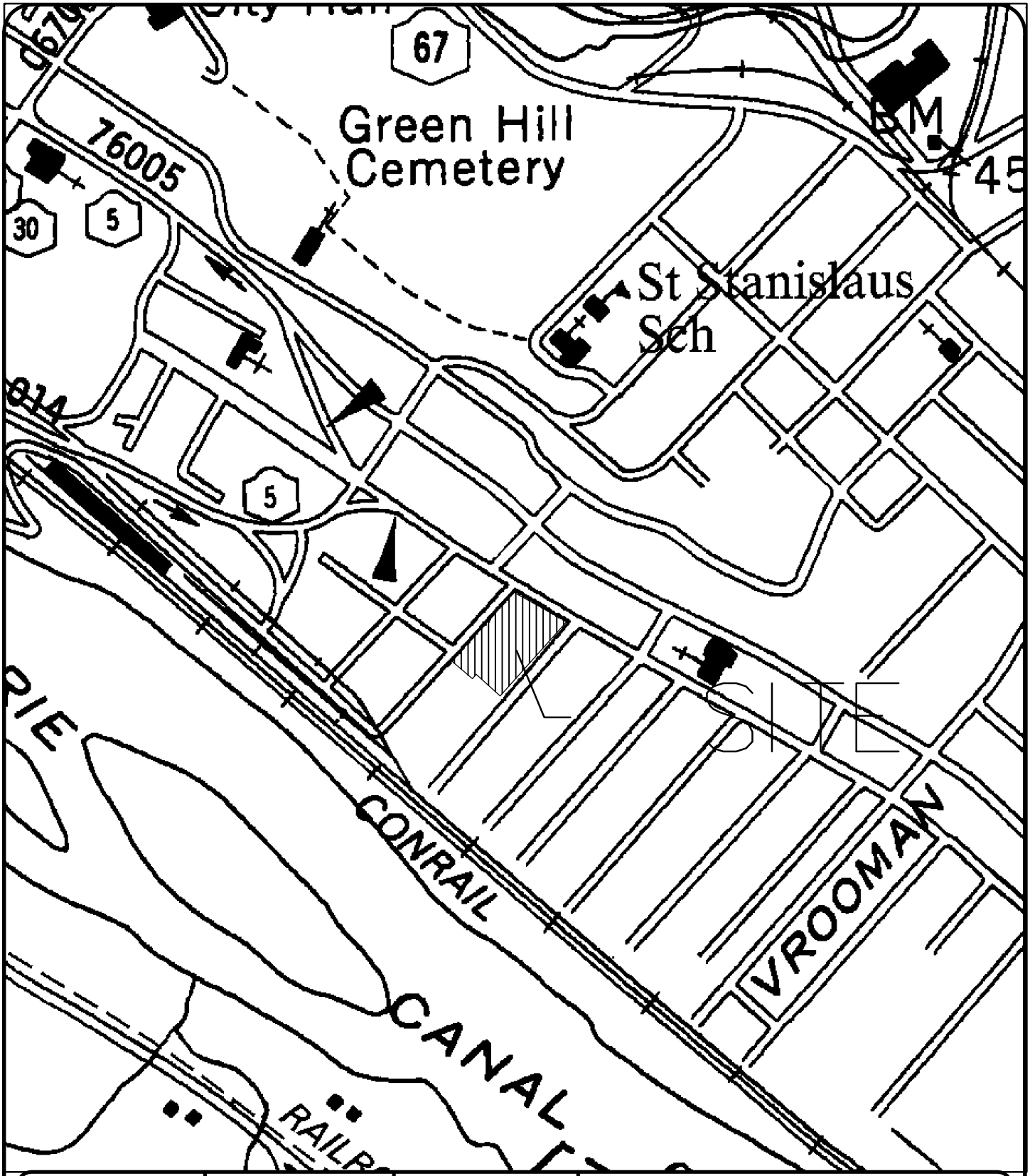
5) Install sewer lines and storm drainage system. Install drop inlet sediment traps and check dams in drainage flow lines;

6) Complete grading in building area and begin building construction. Install silt fencing along roadway edge and/or in front of installed filtration practices until areas are stabilized;

7) Obtain complete site stabilization and remove all temporary erosion & sediment control measures.

APPENDIX A

SITE LOCATION MAP AND SOILS MAP



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SITE LOCATION MAP

EAST MAIN APARTMENTS
251 MAIN STREET
CITY OF AMSTERDAM
COUNTY OF MONTGOMERY STATE OF NEW YORK

DATE: OCTOBER 8, 2019	CHECKED BY: D.F.I. JOB NO. 19–094	SCALE: 1" = 500'
DRAWN BY: PJY CADD FILE: 19–094 DF.dwg		SHEET 1 OF 1

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Montgomery County, New York

October 3, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,020 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 45 90 180 270

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Montgomery County, New York
Survey Area Data: Version 17, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 7, 2013—Nov 9, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LaB	Lansing silt loam, 3 to 8 percent slopes	1.8	100.0%
Totals for Area of Interest		**1.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Montgomery County, New York

LaB—Lansing silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2w3mg
Elevation: 330 to 1,970 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Lansing and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lansing

Setting

Landform: Drumlins, hills, till plains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Calcareous loamy lodgment till derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 8 inches: silt loam
E - 8 to 13 inches: gravelly silt loam
Bt/E - 13 to 21 inches: gravelly silt loam
Bt1 - 21 to 28 inches: gravelly silt loam
Bt2 - 28 to 39 inches: gravelly silt loam
C - 39 to 79 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Available water storage in profile: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Conesus

Percent of map unit: 8 percent
Landform: Drumlins, hills, till plains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Kendaia

Percent of map unit: 3 percent
Landform: Drumlins, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Appleton

Percent of map unit: 2 percent
Landform: Drumlins, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Danley

Percent of map unit: 1 percent
Landform: Drumlinoid ridges, hills, till plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Palatine

Percent of map unit: 1 percent
Landform: Benches, ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest, tread
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

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APPENDIX B

PRE-DEVELOPMENT DRAINAGE MAP

DEED REFERENCES:

1) CONVEYED BY LOUIS PETROSINO TO WILLIAM L. PETROSINO BY DEED DATED JUNE 28, 1985 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON NOVEMBER 5, 1987 IN LIBER 480 OF DEEDS AT PAGE 332 FOR SBL# 56.45–4–21.

2) CONVEYED BY HELEN T. PETROSINO TO LOU'S SUPERMARKET BY DEED DATED JULY 3, 2008 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON JULY 7, 2008 IN LIBER 1672 OF DEEDS AT PAGE 132 FOR SBL# 56.45–4–22.

3) CONVEYED BY LOUIS A. PETROSINO TO WILLIAM L. PETROSINO BY DEED DATED JUNE 28, 1985 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON NOVEMBER 5, 1987 IN LIBER 480 OF DEEDS AT PAGE 334 FOR SBL# 56.45–4–23.

4) CONVEYED BY JOSEPHINE CHACE TO JEFFREY CHACE BY DEED DATED APRIL 27, 2011 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON MAY 11, 2011 LIBER 480 OF DEEDS AT PAGE 334 FOR SBL# 56.45–4–24.

5) CONVEYED BY MATTHEW A. AGRESTA AS CITY CONTROLLER TO CITY OF AMSTERDAM BY DEED DATED MARCH 30, 2016 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON MARCH 31, 2016 AS INSTRUMENT # 2016–66924 FOR SBL# 56.45–4–26.

6) CONVEYED BY MATTHEW A. AGRESTA AS CITY CONTROLLER TO CITY OF AMSTERDAM BY DEED DATED MARCH 30, 2016 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON MARCH 31, 2016 AS INSTRUMENT # 2016–66929 FOR SBL# 56.45–4–40.

7) CONVEYED BY HELEN T. PETROSINO TO LOU'S SUPER MARKET OF AMSTERDAM BY DEED DATED OCTOBER 22, 2008 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON NOVEMBER 5, 2008 IN LIBER 1706 OF DEEDS AT PAGE 264 FOR SBL# 56.45–4–43.1.

8) CONVEYED BY HELEN T. PETROSINO TO LOU'S SUPER MARKET BY DEED DATED JUNE 27, 2008 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON JULY 8, 2008 IN LIBER 1672 OF DEEDS AT PAGE 261 FOR SBL# 56.45–4–43.1

9) CONVEYED BY LOUIS PETROSINO TO LOU'S SUPER MARKET OF AMSTERDAM, N.Y. INC. BY DEED DATED MARCH 11, 1963 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE IN LIBER 345 OF DEEDS AT PAGE 373 FOR SBL# 56.45–4–43.1

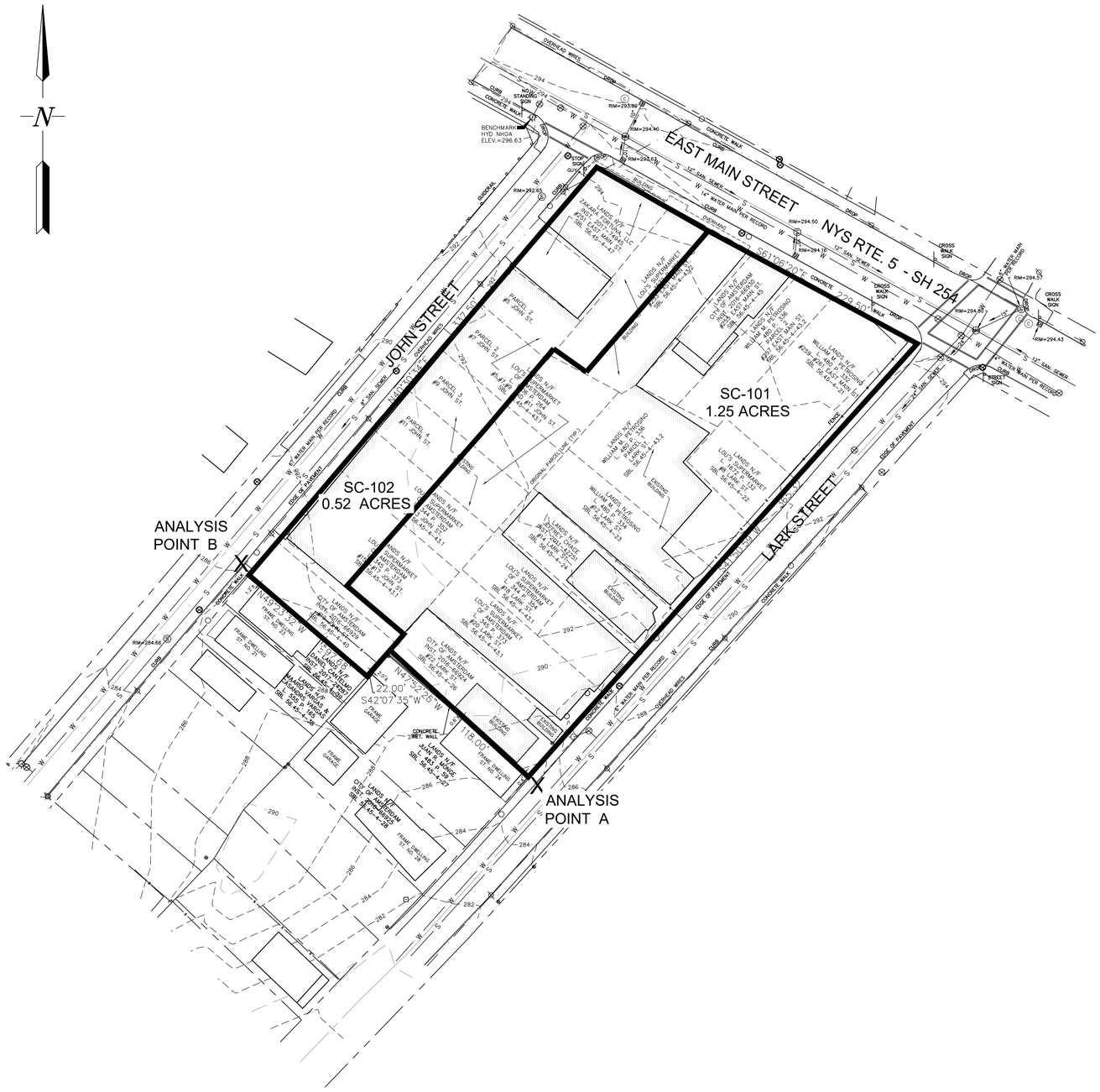
10) CONVEYED BY ANNA CHRISTIAN TO LOU'S SUPER MARKET OF AMSTERDAM, N.Y. INC. BY DEED DATED DECEMBER 31, 1962 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE IN LIBER 344 OF DEEDS AT PAGE 352 FOR SBL# 56.45–4–43.1

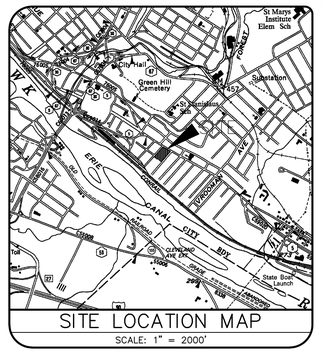
11) CONVEYED BY ANNA KORABIK TO LOU'S SUPER MARKET OF AMSTERDAM, N.Y. INC. BY DEED DATED DECEMBER 31, 1962 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE IN LIBER 344 OF DEEDS AT PAGE 354 FOR SBL# 56.45–4–43.1

12) CONVEYED BY LOU'S SUPER MARKET OF AMSTERDAM, N.Y. INC. TO WILLIAM L. PETROSINO BY DEED DATED JUNE 28, 1985 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE IN LIBER 480 OF DEEDS AT PAGE 336 FOR SBL# 56.45–4–43.2.

13) CONVEYED BY MATTHEW A. AGRESTA AS CITY CONTROLLER TO CITY OF AMSTERDAM BY DEED DATED MARCH 30, 2016 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON MARCH 31, 2016 AS INSTRUMENT # 2016–66930 FOR SBL# 56.45–4–45.

14) CONVEYED BY LAP YAN REGINA LAW TO ZAKARA FORTUNA, LLC BY DEED DATED SEPTEMBER, 2017 AND RECORDED IN THE MONTGOMERY COUNTY CLERK'S OFFICE ON SEPTEMBER 29, 2017 AS INSTRUMENT # 2017–74945 FOR SBL# 56.45–4–47.





SITE LOCATION MAP

SCALE: 1" = 2000'

LEGEND

- LIGHT POLE
- SANITARY MANHOLE
- DROP INLET
- CATCH BASIN
- STORM MANHOLE
- HYDRANT
- WATER VALVE
- WATER SHUT OFF
- GAS SERVICE VALVE
- GAS VALVE
- TEL PEDESTAL
- POWER POLE
- ELEC. MANHOLE
- COM. MANHOLE
- IRON ROD
- IRON PIPE
- CONCRETE MONUMENT
- PROPERTY LINE
- CONTOUR LINE

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.

MAP REFERENCES:

1) STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION RECONSTRUCTION PLANS FOR EAST MAIN STREET, ROUTE 5 S.H. 254 CITY OF AMSTERDAM, MONTGOMERY COUNTY, REGION 2, SHEET 23 AND 24, DATED 1995. AS PROVIDED BY THE CITY OF AMSTERDAM ENGINEERING DEPARTMENT

2) MAP ENTITLED "MAP OF THE CITY OF AMSTERDAM NEW YORK SHOWING STREETS AND PROPERTIES" AS PREPARED BY THE BUREAU OF ENGINEERING, DEPARTMENT OF PUBLIC WORKS, PLATE–27 DATED 1916.

3) CITY OF AMSTERDAM, SANITARY SEWER SYSTEM, BUREAU OF ENGINEERS, FILE NO. 6–11, DATED SEPTEMBER 16, 1965 AND PREPARED BY O'BRIEN & GERE CONSULTING ENGINEERS AND LAND SURVEYORS. AS PROVIDED BY THE CITY OF AMSTERDAM ENGINEERING DEPARTMENT

4) CITY OF AMSTERDAM WATER RECORD MAP, SHEET NO. 297 AS PROVIDED BY THE CITY OF AMSTERDAM ENGINEERING DEPARTMENT.

NOTES:

1) SURVEYED PARCELS: CITY OF AMSTERDAM – TAX MAP 56.45, BLOCK 4, PARCELS 21, 22, 23, 24, 26, 40, 43.1, 43.2, 45 AND 47.

2) SURVEY PREPARED BY INGALLS & ASSOCIATES, LLP FROM A SEPTEMBER 2019 FIELD SURVEY.

3) NORTH IS REFERENCED TO NAD 83 NEW YORK STATE PLANES, EAST ZONE. ELEVATION DATUM IF SHOWN IS BASED UPON NAVD 1988 VERTICAL DATUM BY GPS OBSERVATIONS.

4) SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS OR RESTRICTION; RECORDED OR UNRECORDED.

5) SUBJECT TO ANY STATEMENT OF FACT AN UP–TO–DATE ABSTRACT OF TITLE WOULD DISCLOSE.

6) UNDERGROUND UTILITIES IF SHOWN HEREON ARE BASED ON VISIBLE PHYSICAL EVIDENCE. THEY SHOULD BE CONSIDERED SCHEMATIC ONLY AND ARE SHOWN TO DEPICT GENERAL UTILITY LOCATIONS AND CONNECTIONS RATHER THAN EXACT UNDERGROUND LOCATIONS. INGALLS & ASSOCIATES, LLP MAKES NO CERTIFICATION AS TO THE ACCURACY OF THE UNDERGROUND UTILITY LOCATIONS AND OTHER UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THIS MAP.

7) SURVEY IS PREPARED IN ACCORDANCE WITH THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS CODE OF PRACTICE FOR LAND SURVEYS AS ADOPTED IN OCTOBER OF 1966 AND LAST REVISED ON JULY 18, 1997.

NO.	DATE:	REVISIONS	BY:

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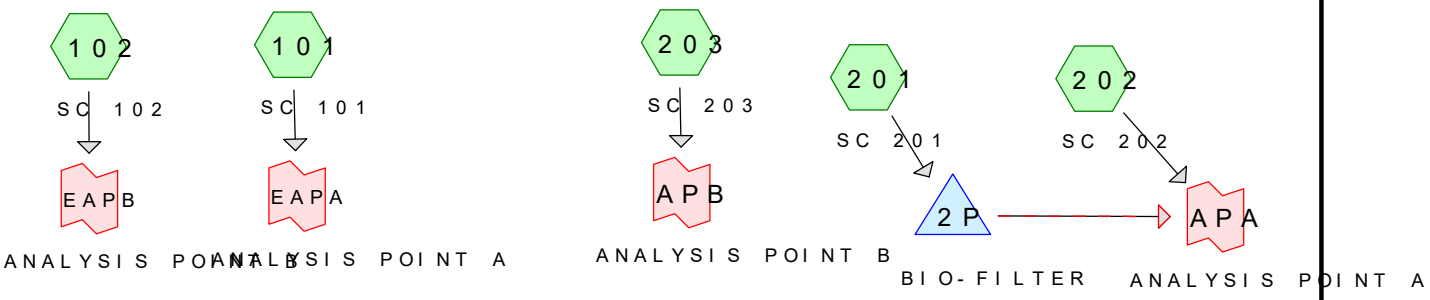
EXISTING CONDITIONS
EAST MAIN APARTMENTS
EAST MAIN ST., JOHN ST. & LARK ST.
CITY OF AMSTERDAM
COUNTY OF MONTGOMERY STATE OF NEW YORK

DATE: OCTOBER 9, 2019	CHECKED BY: JJP JOB NO. 19–094	SCALE: 1" = 40'
DRAWN BY: CADD FILE: 19–045 EX		SHEET OF



Subcat Reach Pond Link

Routing Diagram for 19-094 Drain
Prepared by Avatara, Printed 10
HydroCAD® 10.00-22 s/n 10564 © 2018 Hydro

Time span=5.00-20.00 hrs, dt=0.05 hrs, 3
Runoff by SCS TR-20 method, UH=SCS, Weigh
Reach routing by Dyn-Stor-Ind method - Pond r

Subcatchment 101: SC 101 Runoff Area=1.250 ac 93.60% Imper
Tc=6.0 min CN=96 Runo

Subcatchment 102: SC 102 Runoff Area=0.520 ac 100.00% Impe
Tc=6.0 min CN=98 Runo

Subcatchment 201: SC 201 Runoff Area=1.120 ac 67.86% Imper
Tc=6.0 min CN=86 Runo

Subcatchment 202: SC 202 Runoff Area=0.510 ac 41.18% Imper
Tc=6.0 min CN=76 Runo

Subcatchment 203: SC 203 Runoff Area=0.140 ac 100.00% Impe
Tc=6.0 min CN=98 Runo

Pond 2P: BIO-FILTER Peak Elev=290.85' Storage=987 cf
Primary=1.69 cfs 0.077 af Secondary=0.0

Link APA: ANALYSIS POINT A Inflow=2.12 cfs
Primary=2.12 cfs

Link APB: ANALYSIS POINT B Inflow=0.43 cfs
Primary=0.43 cfs

Link EAPA: ANALYSIS POINT A Inflow=3.62 cfs
Primary=3.62 cfs

Link EAPB: ANALYSIS POINT B Inflow=1.59 cfs
Primary=1.59 cfs

Total Runoff Area = 3.540 ac Runoff Volume =
20.90% Pervious = 0.740 ac 79

Summary for Subcatchment 101: SC 10

Runoff = 3.62 cfs @ 11.96 hrs, Volume= 0.177

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 1 Year Rainfall=2.25"

Area (ac)	CN	Description
0.080	61	>75% Grass cover, Good, HSG B
* 1.170	98	Roofs, Paved parking, HSG B
1.250	96	Weighted Average
0.080		6.40% Pervious Area
1.170		93.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 102: SC 10

Runoff = 1.59 cfs @ 11.96 hrs, Volume= 0.082

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 1 Year Rainfall=2.25"

Area (ac)	CN	Description
* 0.520	98	Roofs, Paved parking, HSG B
0.520		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 201: SC 20

Runoff = 2.01 cfs @ 11.97 hrs, Volume= 0.089

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 1 Year Rainfall=2.25"

Area (ac)	CN	Description
0.360	61	>75% Grass cover, Good, HSG B
* 0.760	98	Roofs, Paved parking, HSG B
1.120	86	Weighted Average
0.360		32.14% Pervious Area
0.760		67.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 202: SC 20

Runoff = 0.47 cfs @ 11.99 hrs, Volume= 0.021

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 1 Year Rainfall=2.25"

Area (ac)	CN	Description
0.300	61	>75% Grass cover, Good, HSG B
* 0.210	98	Roofs, Paved parking, HSG B
0.510	76	Weighted Average
0.300		58.82% Pervious Area
0.210		41.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 203: SC 20

Runoff = 0.43 cfs @ 11.96 hrs, Volume= 0.022

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 1 Year Rainfall=2.25"

Area (ac)	CN	Description
* 0.140	98	Roof, Paved parking, HSG B
0.140		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Pond 2P: BIO-FILTER

Inflow Area = 1.120 ac, 67.86% Impervious, Inflow
Inflow = 2.01 cfs @ 11.97 hrs, Volume= 0.089
Outflow = 1.69 cfs @ 12.02 hrs, Volume= 0.077
Primary = 1.69 cfs @ 12.02 hrs, Volume= 0.077
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00
Peak Elev= 290.85' @ 12.02 hrs Surf.Area= 1,408 sf
Flood Elev= 292.00' Surf.Area= 2,090 sf Storage=

Plug-Flow detention time= 64.9 min calculated for 0.

Center-of-Mass det. time= 21.1 min (813.0 - 792.0)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	6,865 cf	**Custom Stage Data** (Prismatic)(Recal

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
290.00	905	0	0
291.00	1,495	1,200	1,200
292.00	2,090	1,793	2,993
292.50	2,200	1,073	4,065

Device	Routing	Invert	Outlet Devices
#1	Device 4	286.07'	**Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Device 1	290.00'	**1.0 in/hr Exfiltration over Surface**
#3	Secondary	292.00'	**20.0' long x 8.0' breadth Broad-Crested** Head (feet) 0.20 0.40 0.60 0.80 2.50 3.00 3.50 4.00 4.50 5.00 5 Coef. (English) 2.43 2.54 2.70 2. 2.64 2.65 2.65 2.66 2.66 2.68 2
#4	Primary	282.50'	**12.0" Round Culvert** L= 60.0' CPP, square edge headwall, Inlet / Outlet Invert= 286.50' / 282. n= 0.013 Corrugated PE, smooth inter
#5	Device 4	290.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#6	Device 4	290.00'	**6.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=1.63 cfs @ 12.02 hrs HW=290.84' TW=0.
4=Culvert (Passes 1.63 cfs of 7.41 cfs potential flow)
1=Orifice (Underdrain) (Passes 0.01 cfs of 1.79 cfs potential
2=Exfiltration (Exfiltration Controls 0.01 cfs)
5=Orifice/Grate (Controls 0.00 cfs)
6=Orifice/Grate (Orifice Controls 1.62 cfs @ 1.88 fps)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=290.00' TW=0
3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Link APA: ANALYSIS POIN

Inflow Area = 1.630 ac, 59.51% Impervious, Inflow
Inflow = 2.12 cfs @ 12.01 hrs, Volume= 0.097
Primary = 2.12 cfs @ 12.01 hrs, Volume= 0.097

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Summary for Link APB: ANALYSIS POINT

Inflow Area = 0.140 ac,100.00% Impervious, Inflow
Inflow = 0.43 cfs @ 11.96 hrs, Volume= 0.022
Primary = 0.43 cfs @ 11.96 hrs, Volume= 0.022

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Summary for Link EAPA: ANALYSIS POINT

Inflow Area = 1.250 ac, 93.60% Impervious, Inflow
Inflow = 3.62 cfs @ 11.96 hrs, Volume= 0.177
Primary = 3.62 cfs @ 11.96 hrs, Volume= 0.177

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Summary for Link EAPB: ANALYSIS POINT

Inflow Area = 0.520 ac,100.00% Impervious, Inflow
Inflow = 1.59 cfs @ 11.96 hrs, Volume= 0.082
Primary = 1.59 cfs @ 11.96 hrs, Volume= 0.082

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Time span=5.00-20.00 hrs, dt=0.05 hrs, 3
Runoff by SCS TR-20 method, UH=SCS, Weigh
Reach routing by Dyn-Stor-Ind method - Pond r

Subcatchment 101: SC 101 Runoff Area=1.250 ac 93.60% Imper
Tc=6.0 min CN=96 Runo

Subcatchment 102: SC 102 Runoff Area=0.520 ac 100.00% Impe
Tc=6.0 min CN=98 Runo

Subcatchment 201: SC 201 Runoff Area=1.120 ac 67.86% Imper
Tc=6.0 min CN=86 Runo

Subcatchment 202: SC 202 Runoff Area=0.510 ac 41.18% Imper
Tc=6.0 min CN=76 Runo

Subcatchment 203: SC 203 Runoff Area=0.140 ac 100.00% Impe
Tc=6.0 min CN=98 Runo

Pond 2P: BIO-FILTER Peak Elev=291.21' Storage=1,528 c
Primary=4.04 cfs 0.208 af Secondary=0.0

Link APA: ANALYSIS POINT A Inflow=5.50 cfs
Primary=5.50 cfs

Link APB: ANALYSIS POINT B Inflow=0.77 cfs
Primary=0.77 cfs

Link EAPA: ANALYSIS POINT A Inflow=6.75 cfs
Primary=6.75 cfs

Link EAPB: ANALYSIS POINT B Inflow=2.87 cfs
Primary=2.87 cfs

Total Runoff Area = 3.540 ac Runoff Volume =
20.90% Pervious = 0.740 ac 79

Summary for Subcatchment 101: SC 10

Runoff = 6.75 cfs @ 11.96 hrs, Volume= 0.344

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 10 Year Rainfall=4.00"

Area (ac)	CN	Description
0.080	61	>75% Grass cover, Good, HSG B
* 1.170	98	Roofs, Paved parking, HSG B
1.250	96	Weighted Average
0.080		6.40% Pervious Area
1.170		93.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 102: SC 10

Runoff = 2.87 cfs @ 11.96 hrs, Volume= 0.150

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 10 Year Rainfall=4.00"

Area (ac)	CN	Description
* 0.520	98	Roofs, Paved parking, HSG B
0.520		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 201: SC 20

Runoff = 4.81 cfs @ 11.97 hrs, Volume= 0.221

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 10 Year Rainfall=4.00"

Area (ac)	CN	Description
0.360	61	>75% Grass cover, Good, HSG B
* 0.760	98	Roofs, Paved parking, HSG B
1.120	86	Weighted Average
0.360		32.14% Pervious Area
0.760		67.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 202: SC 20

Runoff = 1.54 cfs @ 11.98 hrs, Volume= 0.068

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 10 Year Rainfall=4.00"

Area (ac)	CN	Description
0.300	61	>75% Grass cover, Good, HSG B
* 0.210	98	Roofs, Paved parking, HSG B
0.510	76	Weighted Average
0.300		58.82% Pervious Area
0.210		41.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 203: SC 20

Runoff = 0.77 cfs @ 11.96 hrs, Volume= 0.040

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 10 Year Rainfall=4.00"

Area (ac)	CN	Description
* 0.140	98	Roof, Paved parking, HSG B
0.140		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Pond 2P: BIO-FILTER

Inflow Area = 1.120 ac, 67.86% Impervious, Inflow
Inflow = 4.81 cfs @ 11.97 hrs, Volume= 0.221
Outflow = 4.04 cfs @ 12.01 hrs, Volume= 0.208
Primary = 4.04 cfs @ 12.01 hrs, Volume= 0.208
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00
Peak Elev= 291.21' @ 12.01 hrs Surf.Area= 1,620 sf
Flood Elev= 292.00' Surf.Area= 2,090 sf Storage=

Plug-Flow detention time= 36.9 min calculated for 0.2

Center-of-Mass det. time= 14.9 min (787.0 - 772.1)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	4,065 cf	**Custom Stage Data** (Prismatic) Listed below (Recal

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
290.00	905	0	0
291.00	1,495	1,200	1,200
292.00	2,090	1,793	2,993
292.50	2,200	1,073	4,065

Device	Routing	Invert	Outlet Devices
#1	Device 4	287.00'	**6.0" Vert. Orifice (Underdrain)** C= 0.600
#2	Device 1	290.00'	**2.250 in/hr Exfiltration over Surface**
#3	Secondary	292.00'	**5.0' long x 8.0' breadth Broad-Crest**
			Head (feet) 0.20 0.40 0.60 0.80
			2.50 3.00 3.50 4.00 4.50 5.00 5
			Coef. (English) 2.43 2.54 2.70 2.
			2.64 2.65 2.65 2.66 2.66 2.68 2
#4	Primary	286.50'	**12.0" Round Culvert**
			L= 60.0' CPP, square edge headwall,
			Inlet / Outlet Invert= 286.50' / 282.
			n= 0.013 Corrugated PE, smooth inter
#5	Device 4	290.50'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600
			Limited to weir flow at low heads
#6	Device 4	290.00'	**6.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=3.98 cfs @ 12.01 hrs HW=291.20' TW=0.
└**4=Culvert** (Passes 3.98 cfs of 7.75 cfs potential flow)
  ├**1=Orifice (Underdrain)** (Passes 0.01 cfs of 1.88 cfs potential
  │ └**2=Exfiltration** (Exfiltration Controls 0.01 cfs)
  ├**5=Orifice/Grate** (Controls 0.00 cfs)
  └**6=Orifice/Grate** (Orifice Controls 3.97 cfs @ 3.18 fps)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=290.00' TW=0
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link APA: ANALYSIS POIN

Inflow Area = 1.630 ac, 59.51% Impervious, Inflow
Inflow = 5.50 cfs @ 12.00 hrs, Volume= 0.276
Primary = 5.50 cfs @ 12.00 hrs, Volume= 0.276

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Summary for Link APB: ANALYSIS POI

Inflow Area = 0.140 ac,100.00% Impervious, Inflow
Inflow = 0.77 cfs @ 11.96 hrs, Volume= 0.040
Primary = 0.77 cfs @ 11.96 hrs, Volume= 0.040

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Summary for Link EAPA: ANALYSIS POI

Inflow Area = 1.250 ac, 93.60% Impervious, Inflow
Inflow = 6.75 cfs @ 11.96 hrs, Volume= 0.344
Primary = 6.75 cfs @ 11.96 hrs, Volume= 0.344

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Summary for Link EAPB: ANALYSIS POI

Inflow Area = 0.520 ac,100.00% Impervious, Inflow
Inflow = 2.87 cfs @ 11.96 hrs, Volume= 0.150
Primary = 2.87 cfs @ 11.96 hrs, Volume= 0.150

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Time span=5.00-20.00 hrs, dt=0.05 hrs, 3
Runoff by SCS TR-20 method, UH=SCS, Weigh
Reach routing by Dyn-Stor-Ind method - Pond r

Subcatchment 101: SC 101 Runoff Area=1.250 ac 93.60% Imper
Tc=6.0 min CN=96 Runo

Subcatchment 102: SC 102 Runoff Area=0.520 ac 100.00% Impe
Tc=6.0 min CN=98 Runo

Subcatchment 201: SC 201 Runoff Area=1.120 ac 67.86% Imper
Tc=6.0 min CN=86 Runo

Subcatchment 202: SC 202 Runoff Area=0.510 ac 41.18% Imper
Tc=6.0 min CN=76 Runo

Subcatchment 203: SC 203 Runoff Area=0.140 ac 100.00% Impe
Tc=6.0 min CN=98 Runo

Pond 2P: BIO-FILTER Peak Elev=291.75' Storage=2,489 c
Primary=8.30 cfs 0.435 af Secondary=0.0

Link APA: ANALYSIS POINT A Inflow=11.57 cf
Primary=11.57 cf

Link APB: ANALYSIS POINT B Inflow=1.31 cfs
Primary=1.31 cfs

Link EAPA: ANALYSIS POINT A Inflow=11.61 cf
Primary=11.61 cf

Link EAPB: ANALYSIS POINT B Inflow=4.87 cfs
Primary=4.87 cfs

Total Runoff Area = 3.540 ac Runoff Volume =
20.90% Pervious = 0.740 ac 79

Summary for Subcatchment 101: SC 10

Runoff = 11.61 cfs @ 11.96 hrs, Volume= 0.604

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 100 Year Rainfall=6.75"

Area (ac)	CN	Description
0.080	61	>75% Grass cover, Good, HSG B
* 1.170	98	Roofs, Paved parking, HSG B
1.250	96	Weighted Average
0.080		6.40% Pervious Area
1.170		93.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 102: SC 10

Runoff = 4.87 cfs @ 11.96 hrs, Volume= 0.257

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 100 Year Rainfall=6.75"

Area (ac)	CN	Description
* 0.520	98	Roofs, Paved parking, HSG B
0.520		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 201: SC 20

Runoff = 9.33 cfs @ 11.96 hrs, Volume= 0.448

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 100 Year Rainfall=6.75"

Area (ac)	CN	Description
0.360	61	>75% Grass cover, Good, HSG B
* 0.760	98	Roofs, Paved parking, HSG B
1.120	86	Weighted Average
0.360		32.14% Pervious Area
0.760		67.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 202: SC 20

Runoff = 3.50 cfs @ 11.97 hrs, Volume= 0.159

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 100 Year Rainfall=6.75"

Area (ac)	CN	Description
0.300	61	>75% Grass cover, Good, HSG B
* 0.210	98	Roofs, Paved parking, HSG B
0.510	76	Weighted Average
0.300		58.82% Pervious Area
0.210		41.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 203: SC 20

Runoff = 1.31 cfs @ 11.96 hrs, Volume= 0.069

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time
Type II 24-hr 100 Year Rainfall=6.75"

Area (ac)	CN	Description
* 0.140	98	Roof, Paved parking, HSG B
0.140		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Pond 2P: BIO-FILTER

Inflow Area = 1.120 ac, 67.86% Impervious, Inflow
Inflow = 9.33 cfs @ 11.96 hrs, Volume= 0.448
Outflow = 8.30 cfs @ 12.01 hrs, Volume= 0.435
Primary = 8.30 cfs @ 12.01 hrs, Volume= 0.435
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00
Peak Elev= 291.75' @ 12.00 hrs Surf.Area= 1,941 sf
Flood Elev= 292.00' Surf.Area= 2,090 sf Storage=

Plug-Flow detention time= 25.5 min calculated for 0.4

Center-of-Mass det. time= 13.1 min (769.1 - 756.0)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	4,065 cf	**Custom Stage Data (Prismatic)** Listed below (Recal

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
290.00	905	0	0
291.00	1,495	1,200	1,200
292.00	2,090	1,793	2,993
292.50	2,200	1,073	4,065

Device	Routing	Invert	Outlet Devices
#1	Device 4	287.00'	**6.0" Vert. Orifice (Underdrain)** C= 0.600
#2	Device 1	290.00'	**0.250 in/hr Exfiltration over Surface**
#3	Secondary	292.00'	**5.0' long x 8.0' breadth Broad-Crest** Head (feet) 0.20 0.40 0.60 0.80 2.50 3.00 3.50 4.00 4.50 5.00 5 Coef. (English) 2.43 2.54 2.70 2. 2.64 2.65 2.65 2.66 2.66 2.68 2
#4	Primary	286.50'	**12.0" Round Culvert** L= 60.0' CPP, square edge headwall, Inlet / Outlet Invert= 286.50' / 282. n= 0.013 Corrugated PE, smooth inter
#5	Device 4	290.50'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#6	Device 4	290.00'	**30.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=8.22 cfs @ 12.01 hrs HW=291.73' TW=0.
└─**4=Culvert** (Inlet Controls 8.22 cfs @ 10.47 fps)
  ├─**1=Orifice (Underdrain)** (Passes < 2.00 cfs potential flow)
  │ └─**2=Exfiltration** (Passes < 0.01 cfs potential flow)
  ├─**5=Orifice/Grate** (Passes < 3.51 cfs potential flow)
  └─**6=Orifice/Grate** (Passes < 5.93 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=290.00' TW=0
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link APA: ANALYSIS POIN

Inflow Area = 1.630 ac, 59.51% Impervious, Inflow
Inflow = 11.57 cfs @ 12.00 hrs, Volume= 0.594
Primary = 11.57 cfs @ 12.00 hrs, Volume= 0.594

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Summary for Link APB: ANALYSIS POIN

Inflow Area = 0.140 ac,100.00% Impervious, Inflow
Inflow = 1.31 cfs @ 11.96 hrs, Volume= 0.069
Primary = 1.31 cfs @ 11.96 hrs, Volume= 0.069

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

Summary for Link EAPA: ANALYSIS POIN

Inflow Area = 1.250 ac, 93.60% Impervious, Inflow
Inflow = 11.61 cfs @ 11.96 hrs, Volume= 0.604
Primary = 11.61 cfs @ 11.96 hrs, Volume= 0.604

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

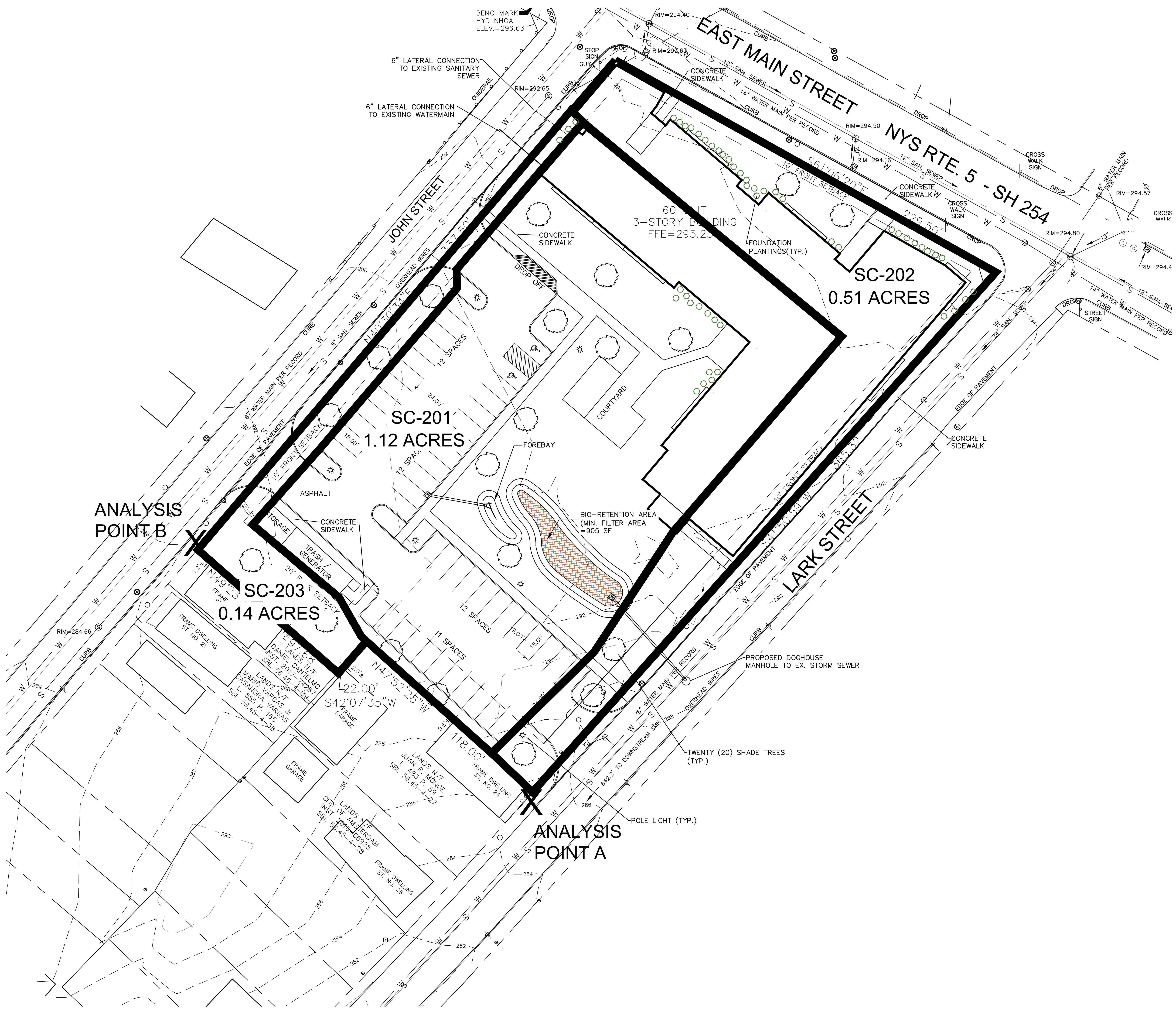
Summary for Link EAPB: ANALYSIS POIN

Inflow Area = 0.520 ac,100.00% Impervious, Inflow
Inflow = 4.87 cfs @ 11.96 hrs, Volume= 0.257
Primary = 4.87 cfs @ 11.96 hrs, Volume= 0.257

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs,

APPENDIX C

POST-DEVELOPMENT DRAINAGE PLAN



-N-

LEGEND

EXISTING PROPERTY LINE	
PROPOSED PROPERTY LINE	
PROPOSED SETBACK	
ADJACENT PROPERTY LINE	
PROPOSED EASEMENT	
EXISTING CONTOUR	200
EXISTING TREELINE	
EXISTING HYDRANT	HYD
EXISTING UTILITY POLE	NG 19
EXISTING SIGN	S1
EXISTING CATCH BASIN	CB
EXISTING SANITARY MANHOLE	S
EXISTING SANITARY SEWER	S
EXISTING STORM SEWER	ST
EXISTING WATERMAIN	W
EXISTING OVERHEAD WIRE	OH
WETLAND BOUNDARY	
PROPOSED TREELINE	
PROPOSED CONTOUR	200
PROPOSED SANITARY SEWER	S
PROPOSED SANITARY MANHOLE	S
PROPOSED SANITARY MAIN	S
PROPOSED SANITARY LATERAL	SSL
PROPOSED GRINDER PUMP	G
PROPOSED LPSS FORCEMAIN	FM
PROPOSED STORM SEWER	
PROPOSED CATCH BASIN	
PROPOSED DRY WELL	D
PROPOSED WATERMAIN WITH VALVE & HYDRANT	HYD W WV
PROPOSED WATER LATERAL	WL

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962

FOR MUNICIPAL APPROVAL ONLY
NOT FOR CONSTRUCTION

NO.	DATE:	REVISIONS	BY:

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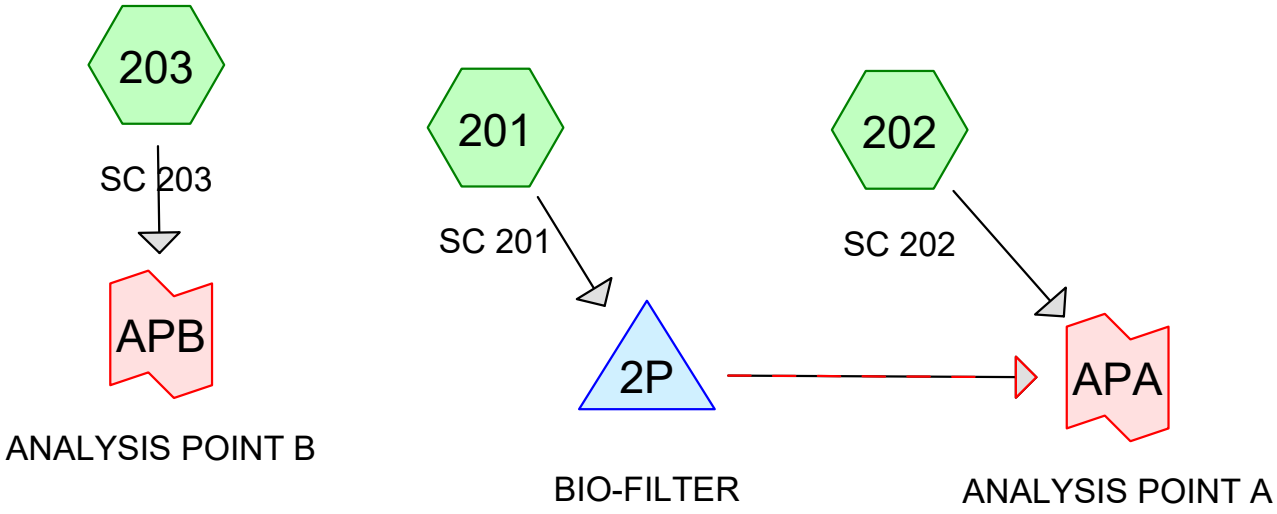
PROPOSED DRAINAGE PLAN

EAST MAIN APARTMENTS
251 MAIN STREET

CITY OF AMSTERDAM
COUNTY OF SCHENECTADY STATE OF NEW YORK

DATE: OCTOBER 8, 2019
CHECKED BY: D.F.I.
JOB NO. 19-094
DRAWN BY: PJY
CADD FILE: 19-094.dwg
SCALE: 1" = 30'
SHEET 1 OF 1



Subcat Reach Pond Link

Routing Diagram for 19-094 Drainage
Prepared by Avatara, Printed 10/9/2019

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 201: SC 201 Runoff Area=1.120 ac 67.86% Impervious Runoff Depth>0.96"
Tc=6.0 min CN=86 Runoff=2.01 cfs 0.089 af

Subcatchment 202: SC 202 Runoff Area=0.510 ac 41.18% Impervious Runoff Depth>0.49"
Tc=6.0 min CN=76 Runoff=0.47 cfs 0.021 af

Subcatchment 203: SC 203 Runoff Area=0.140 ac 100.00% Impervious Runoff Depth>1.88"
Tc=6.0 min CN=98 Runoff=0.43 cfs 0.022 af

Pond 2P: BIO-FILTER Peak Elev=290.85' Storage=987 cf Inflow=2.01 cfs 0.089 af
Primary=1.69 cfs 0.077 af Secondary=0.00 cfs 0.000 af Outflow=1.69 cfs 0.077 af

Link APA: ANALYSIS POINT A Inflow=2.12 cfs 0.097 af
Primary=2.12 cfs 0.097 af

Link APB: ANALYSIS POINT B Inflow=0.43 cfs 0.022 af
Primary=0.43 cfs 0.022 af

Total Runoff Area = 1.770 ac Runoff Volume = 0.132 af Average Runoff Depth = 0.89"
37.29% Pervious = 0.660 ac 62.71% Impervious = 1.110 ac

Summary for Subcatchment 201: SC 201

Runoff = 2.01 cfs @ 11.97 hrs, Volume= 0.089 af, Depth> 0.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 1 Year Rainfall=2.25"

	Area (ac)	CN	Description
	0.360	61	>75% Grass cover, Good, HSG B
*	0.760	98	Roofs, Paved parking, HSG B
	1.120	86	Weighted Average
	0.360		32.14% Pervious Area
	0.760		67.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 202: SC 202

Runoff = 0.47 cfs @ 11.99 hrs, Volume= 0.021 af, Depth> 0.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 1 Year Rainfall=2.25"

	Area (ac)	CN	Description
	0.300	61	>75% Grass cover, Good, HSG B
*	0.210	98	Roofs, Paved parking, HSG B
	0.510	76	Weighted Average
	0.300		58.82% Pervious Area
	0.210		41.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 203: SC 203

Runoff = 0.43 cfs @ 11.96 hrs, Volume= 0.022 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 1 Year Rainfall=2.25"

	Area (ac)	CN	Description
*	0.140	98	Roof, Paved parking, HSG B
	0.140		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Pond 2P: BIO-FILTER

Inflow Area = 1.120 ac, 67.86% Impervious, Inflow Depth > 0.96" for 1 Year event
Inflow = 2.01 cfs @ 11.97 hrs, Volume= 0.089 af
Outflow = 1.69 cfs @ 12.02 hrs, Volume= 0.077 af, Atten= 16%, Lag= 2.9 min
Primary = 1.69 cfs @ 12.02 hrs, Volume= 0.077 af
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 290.85' @ 12.02 hrs Surf.Area= 1,408 sf Storage= 987 cf
Flood Elev= 292.00' Surf.Area= 2,090 sf Storage= 2,993 cf

Plug-Flow detention time= 64.9 min calculated for 0.076 af (86% of inflow)
Center-of-Mass det. time= 21.1 min (813.0 - 792.0)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	4,065 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
290.00	905	0	0
291.00	1,495	1,200	1,200
292.00	2,090	1,793	2,993
292.50	2,200	1,073	4,065

Device	Routing	Invert	Outlet Devices
#1	Device 4	287.00'	**6.0" Vert. Orifice (Underdrain)** C= 0.600
#2	Device 1	290.00'	**0.250 in/hr Exfiltration over Surface area**
#3	Secondary	292.00'	**5.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#4	Primary	286.50'	**12.0" Round Culvert** L= 60.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 286.50' / 282.00' S= 0.0750 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#5	Device 4	291.50'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#6	Device 4	290.50'	**30.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=1.63 cfs @ 12.02 hrs HW=290.84' TW=0.00' (Dynamic Tailwater)
└─**4=Culvert** (Passes 1.63 cfs of 7.41 cfs potential flow)
  ├─**1=Orifice (Underdrain)** (Passes 0.01 cfs of 1.79 cfs potential flow)
  │ └─**2=Exfiltration** (Exfiltration Controls 0.01 cfs)
  ├─**5=Orifice/Grate** (Controls 0.00 cfs)
  └─**6=Orifice/Grate** (Orifice Controls 1.62 cfs @ 1.88 fps)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=290.00' TW=0.00' (Dynamic Tailwater)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link APA: ANALYSIS POINT A

Inflow Area = 1.630 ac, 59.51% Impervious, Inflow Depth > 0.72" for 1 Year event
Inflow = 2.12 cfs @ 12.01 hrs, Volume= 0.097 af
Primary = 2.12 cfs @ 12.01 hrs, Volume= 0.097 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link APB: ANALYSIS POINT B

Inflow Area = 0.140 ac,100.00% Impervious, Inflow Depth > 1.88" for 1 Year event
Inflow = 0.43 cfs @ 11.96 hrs, Volume= 0.022 af
Primary = 0.43 cfs @ 11.96 hrs, Volume= 0.022 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 201: SC 201 Runoff Area=1.120 ac 67.86% Impervious Runoff Depth>2.37"
Tc=6.0 min CN=86 Runoff=4.81 cfs 0.221 af

Subcatchment 202: SC 202 Runoff Area=0.510 ac 41.18% Impervious Runoff Depth>1.59"
Tc=6.0 min CN=76 Runoff=1.54 cfs 0.068 af

Subcatchment 203: SC 203 Runoff Area=0.140 ac 100.00% Impervious Runoff Depth>3.47"
Tc=6.0 min CN=98 Runoff=0.77 cfs 0.040 af

Pond 2P: BIO-FILTER Peak Elev=291.21' Storage=1,528 cf Inflow=4.81 cfs 0.221 af
Primary=4.04 cfs 0.208 af Secondary=0.00 cfs 0.000 af Outflow=4.04 cfs 0.208 af

Link APA: ANALYSIS POINT A Inflow=5.50 cfs 0.276 af
Primary=5.50 cfs 0.276 af

Link APB: ANALYSIS POINT B Inflow=0.77 cfs 0.040 af
Primary=0.77 cfs 0.040 af

Total Runoff Area = 1.770 ac Runoff Volume = 0.329 af Average Runoff Depth = 2.23"
37.29% Pervious = 0.660 ac 62.71% Impervious = 1.110 ac

Summary for Subcatchment 201: SC 201

Runoff = 4.81 cfs @ 11.97 hrs, Volume= 0.221 af, Depth> 2.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10 Year Rainfall=4.00"

	Area (ac)	CN	Description
	0.360	61	>75% Grass cover, Good, HSG B
*	0.760	98	Roofs, Paved parking, HSG B
	1.120	86	Weighted Average
	0.360		32.14% Pervious Area
	0.760		67.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 202: SC 202

Runoff = 1.54 cfs @ 11.98 hrs, Volume= 0.068 af, Depth> 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10 Year Rainfall=4.00"

	Area (ac)	CN	Description
	0.300	61	>75% Grass cover, Good, HSG B
*	0.210	98	Roofs, Paved parking, HSG B
	0.510	76	Weighted Average
	0.300		58.82% Pervious Area
	0.210		41.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 203: SC 203

Runoff = 0.77 cfs @ 11.96 hrs, Volume= 0.040 af, Depth> 3.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10 Year Rainfall=4.00"

	Area (ac)	CN	Description
*	0.140	98	Roof, Paved parking, HSG B
	0.140		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Pond 2P: BIO-FILTER

Inflow Area = 1.120 ac, 67.86% Impervious, Inflow Depth > 2.37" for 10 Year event
Inflow = 4.81 cfs @ 11.97 hrs, Volume= 0.221 af
Outflow = 4.04 cfs @ 12.01 hrs, Volume= 0.208 af, Atten= 16%, Lag= 2.8 min
Primary = 4.04 cfs @ 12.01 hrs, Volume= 0.208 af
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 291.21' @ 12.01 hrs Surf.Area= 1,620 sf Storage= 1,528 cf
Flood Elev= 292.00' Surf.Area= 2,090 sf Storage= 2,993 cf

Plug-Flow detention time= 36.9 min calculated for 0.208 af (94% of inflow)
Center-of-Mass det. time= 14.9 min (787.0 - 772.1)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	4,065 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
290.00	905	0	0
291.00	1,495	1,200	1,200
292.00	2,090	1,793	2,993
292.50	2,200	1,073	4,065

Device	Routing	Invert	Outlet Devices
#1	Device 4	287.00'	**6.0" Vert. Orifice (Underdrain)** C= 0.600
#2	Device 1	290.00'	**0.250 in/hr Exfiltration over Surface area**
#3	Secondary	292.00'	**5.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#4	Primary	286.50'	**12.0" Round Culvert** L= 60.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 286.50' / 282.00' S= 0.0750 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#5	Device 4	291.50'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#6	Device 4	290.50'	**30.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=3.98 cfs @ 12.01 hrs HW=291.20' TW=0.00' (Dynamic Tailwater)
└─**4=Culvert** (Passes 3.98 cfs of 7.75 cfs potential flow)
  ├─**1=Orifice (Underdrain)** (Passes 0.01 cfs of 1.88 cfs potential flow)
  │ └─**2=Exfiltration** (Exfiltration Controls 0.01 cfs)
  ├─**5=Orifice/Grate** (Controls 0.00 cfs)
  └─**6=Orifice/Grate** (Orifice Controls 3.97 cfs @ 3.18 fps)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=290.00' TW=0.00' (Dynamic Tailwater)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link APA: ANALYSIS POINT A

Inflow Area = 1.630 ac, 59.51% Impervious, Inflow Depth > 2.03" for 10 Year event
Inflow = 5.50 cfs @ 12.00 hrs, Volume= 0.276 af
Primary = 5.50 cfs @ 12.00 hrs, Volume= 0.276 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link APB: ANALYSIS POINT B

Inflow Area = 0.140 ac,100.00% Impervious, Inflow Depth > 3.47" for 10 Year event
Inflow = 0.77 cfs @ 11.96 hrs, Volume= 0.040 af
Primary = 0.77 cfs @ 11.96 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 201: SC 201 Runoff Area=1.120 ac 67.86% Impervious Runoff Depth>4.81"
Tc=6.0 min CN=86 Runoff=9.33 cfs 0.448 af

Subcatchment 202: SC 202 Runoff Area=0.510 ac 41.18% Impervious Runoff Depth>3.75"
Tc=6.0 min CN=76 Runoff=3.50 cfs 0.159 af

Subcatchment 203: SC 203 Runoff Area=0.140 ac 100.00% Impervious Runoff Depth>5.94"
Tc=6.0 min CN=98 Runoff=1.31 cfs 0.069 af

Pond 2P: BIO-FILTER Peak Elev=291.75' Storage=2,489 cf Inflow=9.33 cfs 0.448 af
Primary=8.30 cfs 0.435 af Secondary=0.00 cfs 0.000 af Outflow=8.30 cfs 0.435 af

Link APA: ANALYSIS POINT A Inflow=11.57 cfs 0.594 af
Primary=11.57 cfs 0.594 af

Link APB: ANALYSIS POINT B Inflow=1.31 cfs 0.069 af
Primary=1.31 cfs 0.069 af

Total Runoff Area = 1.770 ac Runoff Volume = 0.677 af Average Runoff Depth = 4.59"
37.29% Pervious = 0.660 ac 62.71% Impervious = 1.110 ac

Summary for Subcatchment 201: SC 201

Runoff = 9.33 cfs @ 11.96 hrs, Volume= 0.448 af, Depth> 4.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 Year Rainfall=6.75"

	Area (ac)	CN	Description
	0.360	61	>75% Grass cover, Good, HSG B
*	0.760	98	Roofs, Paved parking, HSG B
	1.120	86	Weighted Average
	0.360		32.14% Pervious Area
	0.760		67.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 202: SC 202

Runoff = 3.50 cfs @ 11.97 hrs, Volume= 0.159 af, Depth> 3.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 Year Rainfall=6.75"

	Area (ac)	CN	Description
	0.300	61	>75% Grass cover, Good, HSG B
*	0.210	98	Roofs, Paved parking, HSG B
	0.510	76	Weighted Average
	0.300		58.82% Pervious Area
	0.210		41.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Subcatchment 203: SC 203

Runoff = 1.31 cfs @ 11.96 hrs, Volume= 0.069 af, Depth> 5.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 Year Rainfall=6.75"

	Area (ac)	CN	Description
*	0.140	98	Roof, Paved parking, HSG B
	0.140		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 6 Min. Minimum**

Summary for Pond 2P: BIO-FILTER

Inflow Area = 1.120 ac, 67.86% Impervious, Inflow Depth > 4.81" for 100 Year event
Inflow = 9.33 cfs @ 11.96 hrs, Volume= 0.448 af
Outflow = 8.30 cfs @ 12.01 hrs, Volume= 0.435 af, Atten= 11%, Lag= 2.9 min
Primary = 8.30 cfs @ 12.01 hrs, Volume= 0.435 af
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 291.75' @ 12.00 hrs Surf.Area= 1,941 sf Storage= 2,489 cf
Flood Elev= 292.00' Surf.Area= 2,090 sf Storage= 2,993 cf

Plug-Flow detention time= 25.5 min calculated for 0.435 af (97% of inflow)
Center-of-Mass det. time= 13.1 min (769.1 - 756.0)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	4,065 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
290.00	905	0	0
291.00	1,495	1,200	1,200
292.00	2,090	1,793	2,993
292.50	2,200	1,073	4,065

Device	Routing	Invert	Outlet Devices
#1	Device 4	287.00'	**6.0" Vert. Orifice (Underdrain)** C= 0.600
#2	Device 1	290.00'	**0.250 in/hr Exfiltration over Surface area**
#3	Secondary	292.00'	**5.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74
#4	Primary	286.50'	**12.0" Round Culvert** L= 60.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 286.50' / 282.00' S= 0.0750 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#5	Device 4	291.50'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#6	Device 4	290.50'	**30.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=8.22 cfs @ 12.01 hrs HW=291.73' TW=0.00' (Dynamic Tailwater)
└**4=Culvert** (Inlet Controls 8.22 cfs @ 10.47 fps)
  ├**1=Orifice (Underdrain)** (Passes < 2.00 cfs potential flow)
  │ └**2=Exfiltration** (Passes < 0.01 cfs potential flow)
  ├**5=Orifice/Grate** (Passes < 3.51 cfs potential flow)
  └**6=Orifice/Grate** (Passes < 5.93 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=290.00' TW=0.00' (Dynamic Tailwater)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link APA: ANALYSIS POINT A

Inflow Area = 1.630 ac, 59.51% Impervious, Inflow Depth > 4.37" for 100 Year event
Inflow = 11.57 cfs @ 12.00 hrs, Volume= 0.594 af
Primary = 11.57 cfs @ 12.00 hrs, Volume= 0.594 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link APB: ANALYSIS POINT B

Inflow Area = 0.140 ac,100.00% Impervious, Inflow Depth > 5.94" for 100 Year event
Inflow = 1.31 cfs @ 11.96 hrs, Volume= 0.069 af
Primary = 1.31 cfs @ 11.96 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

APPENDIX D

WATER QUALITY CALCULATIONS

INGALLS & ASSOCIATES, LLP

2603 GUILDERLAND AVE., SCHENECTADY, NEW YORK 12306 PH:(518)393-7725 FAX:(518)393-3761

Project Name: DePaul Apartments **Project Number:** 19-094
Performed By: PJY **Date:** 10/7/2019

WATER QUALITY CALCULATIONS FOR: Total Site

Catchment Number	Total Area *(Acres)*	Impervious Area *(Acres)*	Percent Impervious *%*	Rv	WQv *(ft^3)*	Precipitation *(in)*
Entire Site Wqv (Bio-Retention)	1.77	1.11	0.63	0.61	4342	1.10
25% Required Redevelopment	0.44	0.28	0.63		1086	1.10

Water Quality Volume:

WQv = 4,342 c.f.

Existing Impervious = ***1.69 Acres***
Proposed Impervious = ***1.11 Acres***

IC Reduction Provided: **34%**

Remaining Treatment Required
(25% of Existing Impervious) = **4,342(0.25) = 1,086 c.f.**

Description

Version 1.4
Last Updated: 01/23/2014

Total Water Quality Volume Calculation
WQv(acre-feet) = [(P)(Rv)(A)] /12

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?.....								
P=	1.10	*inch*						

Breakdown of Subcatchments

Catchment Number	Total Area *(Acres)*	Impervious Area *(Acres)*	Percent Impervious *%*	Rv	WQv *(ft^3)*	Description		
1	0.44	0.28	63%	0.61	1,086	Bioretention		
2								
3								
4								
5								
6								
7								
8								
9								
10								
Subtotal (1-30)	0.44	0.28	63%	0.61	**1,086**	**Subtotal 1**		
Total	0.44	0.28	63%	0.61	**1,086**	**Initial WQv**	**0.02**	**af**

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area *(Acre)*	Contributing Impervious Area *(Acre)*	Notes
Conservation of Natural Areas	0.00	0.00	*minimum 10,000 sf*
Riparian Buffers	0.00	0.00	*maximum contributing length 75 feet to 150 feet*
Filter Strips	0.00	0.00	
Tree Planting	0.00	0.00	*Up to 100 sf directly connected impervious area may be subtracted per tree*
Total	**0.00**	**0.00**	

Recalculate WQv after application of Area Reduction Techniques

	Total Area *(Acres)*	Impervious Area *(Acres)*	Percent Impervious *%*	Runoff Coefficient	WQv *(ft^3)*		
"<<Initial WQv"	0.44	0.28	63%	0.61	1,086		
Subtract Area	0.00	0.00					
WQv adjusted after Area Reductions	**0.44**	**0.28**	63%	0.61	1,086		
Disconnection of Rooftops		0.00					
Adjusted WQv after Area Reduction and Rooftop Disconnect	0.44	0.28	63%	0.61	**1,086**	**0.02**	**af**
WQv reduced by Area Reduction techniques					0	**0.00**	**af**

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Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00	
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	0.00	0.00	
	Tree Planting/Tree Pit	RR-3	0.00	0.00	
	Disconnection of Rooftop Runoff	RR-4		0.00	
	Vegetated Swale	RR-5	0.00	0.00	0
	Rain Garden	RR-6	0.00	0.00	0
	Stormwater Planter	RR-7	0.00	0.00	0
	Rain Barrel/Cistern	RR-8	0.00	0.00	0
	Porous Pavement	RR-9	0.00	0.00	0
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0
	Infiltration Basin	I-2	0.00	0.00	0
	Dry Well	I-3	0.00	0.00	0
	Underground Infiltration System	I-4	0.00		
	Bioretention & Infiltration Bioretention	F-5	0.44	0.28	434
	Dry swale	O-1	0.00	0.00	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1			
	Wet Pond (P-2)	P-2			
	Wet Extended Detention (P-3)	P-3			
	Multiple Pond system (P-4)	P-4			
	Pocket Pond (p-5)	P-5			
	Surface Sand filter (F-1)	F-1			
	Underground Sand filter (F-2)	F-2			
	Perimeter Sand Filter (F-3)	F-3			
	Organic Filter (F-4	F-4			
	Shallow Wetland (W-1)	W-1			
	Extended Detention Wetland (W-2	W-2			
	Pond/Wetland System (W-3)	W-3			
	Pocket Wetland (W-4)	W-4			
	Wet Swale (O-2)	O-2			
Totals by Area Reduction →			0.00	0.00	0
Totals by Volume Reduction →			0.00	0.00	0
Totals by Standard SMP w/RRV →			0.44	0.28	434
Totals by Standard SMP →			0.00	0.00	
Totals (Area + Volume + all SMPs) →			0.44	0.28	434

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Minimum RRv

Enter the Soils Data for the site		
Soil Group	Acres	S
A		55%
B	0.44	40%
C		30%
D		20%
Total Area	0.44	
Calculate the Minimum RRv		
S =	**0.40**	
Impervious =	0.28	*acre*
Precipitation	1.1	*in*
Rv	0.95	
Minimum RRv	**421**	***f t 3***
	0.01	af

Bioretention Worksheet

(For use on HSG C or D Soils with underdrains)

Af=WQv*(df)/[k*(hf+df)(tf)]

Af	Required Surface Area (ft2)
WQv	Water Quality Volume (ft3)
df	Depth of the Soil Medium (feet)
hf	Average height of water above the planter bed
tf	Volume Through the Filter Media (days)

k — The hydraulic conductivity [ft/day], can be varied depending on the properties of the soil media. Some reported conductivity values are: ***Sand*** - 3.5 ft/day (City of Austin 1988); ***Peat*** - 2.0 ft/day (Galli 1990); ***Leaf Compost*** - 8.7 ft/day (Claytor and Schueler, 1996); ***Bioretention Soil*** (0.5 ft/day (Claytor &

Design Point:

Enter Site Data For Drainage Area to be Treated by Practice							
Catchment Number	**Total Area** *(Acres)*	**Impervious Area** *(Acres)*	**Percent Impervious** *%*	**Rv**	**WQv** *(ft^3)*	**Precipitation** *(in)*	**Description**
1	0.44	0.28	0.63	0.61	1085.96	1.10	Bioretention
Enter Impervious Area Reduced by Disconnection of Rooftops		0.00	63%	0.61	1,086	<<WQv after adjusting for Disconnected Rooftops	
Enter the portion of the WQv that is not reduced for all practices routed to this practice.						*ft^3*	

Soil Information			
Soil Group	B		
Soil Infiltration Rate	0.00	*in/hour*	*Okay*
Using Underdrains?	Yes	*Okay*	

Calculate the Minimum Filter Area				
		Value	Units	Notes
WQv		1,086	*ft^3*	
Enter Depth of Soil Media	*df*	2.5	*ft*	*2.5-4 ft*
Enter Hydraulic Conductivity	*k*	0.5	*ft/day*	
Enter Average Height of Ponding	*hf*	0.5	*ft*	*6 inches max.*
Enter Filter Time	*tf*	2	*days*	
Required Filter Area	***Af***	**905**	***ft^2***	

Determine Actual Bio-Retention Area			
Filter Width		*ft*	
Filter Length		*ft*	
Filter Area	905	*ft^2*	
Actual Volume Provided	1086	*ft^3*	

Determine Runoff Reduction				
Is the Bioretention contributing flow to another practice?		No	Select Practice	Other/Standard SMP
RRv	434			
RRv applied	**434**	***ft^3***	***This is 40% of the storage provided or WQv whichever is less.***	
Volume Treated	652	*ft^3*	*This is the portion of the WQv that is not reduced in the practice.*	
Volume Directed	0	*ft^3*	This volume is directed another practice	
Sizing √	OK		*Check to be sure Area provided ≥ Af*	

APPENDIX E

CONTRACTOR'S CERTIFICATION STATEMENT

CONTRACTOR and SUBCONTRACTOR CERTIFICATION STATEMENT

for the New York State Department of Environmental Conservation (DEC) State Pollutant Discharge Elimination System Permit for Stormwater Discharges from Construction Activity (GP-0-15-002)

As per *Part III.A.6* on page 19 of *GP-0-15-002* (effective January 29, 2015):

'Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.'

The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence <u>any</u> *construction activity*:

_____	**NYR**_____	_____
Name of Construction Site	*DEC Permit ID*	*Municipality (MS4)*

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations."

_____	_____
Responsible Corporate Officer/Partner Signature	Date
_____	_____
Name of above Signatory	Name of Company
_____	_____
Title of above Signatory	Mailing Address
_____	_____
Telephone of Company	City, State and Zip

Identify the specific elements of the SWPPP the contractor or subcontractor is responsible for:

***'TRAINED CONTRACTOR'* FOR THE CERTIFIED CONTRACTOR OR SUBCONTRACTOR**		
_____	_____	_____
Name of Trained Employee	*Title of Trained Employee*	*NYSDEC SWT #*

A copy of this signed contractor certification statement must be maintained at the SWPPP onsite.

APPENDIX F

SAMPLE INSPECTION FORM

ingalls

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES General Permit for Stormwater Discharges from Construction Activity

Permit Number GP 0-15-002

Site Assessment and Inspection Report

Name of Permitted Facility:		Date of Inspection:
Location:		Time of Inspection:
Purpose of Inspection:		Permit Identification Number:
Weather:	Soil Conditions:	Inspector:

General Recordkeeping:		
1.	Has a site map been attached with the limits of disturbance, areas of stabilization and current working areas marked?	☐ Yes ☐ No ☐ N/A
2.	Will the inspection report be forwarded to NYSDEC?	☐ Yes ☐ No ☐ N/A

General Housekeeping:		
1.	Is there an increase in turbidity that will cause a substantial visible contrast to natural conditions?	☐ Yes ☐ No ☐ N/A
2.	Is there residue from oil, visible oil film or globules of grease?	☐ Yes ☐ No ☐ N/A
3.	Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly placed?	☐ Yes ☐ No ☐ N/A
4.	Is construction impacting adjacent properties?	☐ Yes ☐ No ☐ N/A
5.	Is dust adequately controlled?	☐ Yes ☐ No ☐ N/A

Adverse Impacts or Off-Site Degradation:		
1.	Is work within the limits of the approved plans, including clearing and blasting?	☐ Yes ☐ No ☐ N/A
2.	Adverse impacts – ponds, streams, wetlands and sinkholes are free from sediment from site.	☐ Yes ☐ No ☐ N/A
3.	Off-site degradation – sediment is kept out of roadways, adjacent properties, storm sewers and air (dust).	☐ Yes ☐ No ☐ N/A

Site Discharge:		
Discharge Point	**Noted:**	**Description**
1.	☐ Yes ☐ No ☐ N/A	
2.	☐ Yes ☐ No ☐ N/A	

Ingalls & Associates LLP
2603 Guilderland Ave.
Schenectady NY 12306
518-393-7725

Corrected Areas/General Observations	

Practices in Need of Repair/Maintenance:	

Project Notes

Modifications to the SWPPP:		
Date of Modification	Description of Modification:	Reason for Modification:

_____ _____

Signature of Qualified Inspector Date

Ingalls & Associates LLP
2603 Guilderland Ave.
Schenectady NY 12306
518-393-7725

APPENDIX G

NOTICE OF INTENT (NOI)

APPENDIX H

NOTICE OF TERMINATION (NOT)

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person: | 4a.Telephone:

5. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. G All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP.
***Date final stabilization completed** (month/year): _____

9b. G Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. G Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? G yes G no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? G yes G no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? G yes G no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

- G Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.
- G Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).
- G For post-construction stormwater management practices that are privately owned, the deed of record has been modified to include a deed covenant that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.
- G For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? G yes G no
(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:
(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2010)

APPENDIX I

OPERATION & MAINTENANCE MANUAL

STORMWATER MANAGEMENT
OPERATION & MAINTENANCE MANUAL

For the Proposed

DePaul Amsterdam Apart

251 East Main Street
City of Amsterdam
MONTGOMERY COUNTY
STATE OF NEW YORK

PREPARED BY:

Ingalls & Associates, LLP
2603 Guilderland Avenue
Schenectady, NY 12306
Phone: (518) 393-7725
Fax: (518) 393-2324

October 8, 2019

APPLICANT:
DePaul Properties
1931 Buffalo Road
Rochester, NY 14624

TABLE OF CONTENTS

LIST OF APPENDICIES

I. GENERAL PROJECT INFORMATION

A. Project Name and Location

DePaul Amsterdam Apartments
251 East Main Street.
Amsterdam, NY
Area of Site: 1.77± Ac.
Area of disturbance: 1.77± Ac.

B. Engineer of Record for Stormwater Design

Ingalls & Associates, LLP
C/o David F. Ingalls, P.E.
2603 Guilderland Ave
Phone: (518)393-7725
Schenectady, NY 12306

C. Project and Site Description

The proposed project is a 60-unit residen
of Amsterdam, Montgomery County. The pro
development of one building, outdoor cour
including water and sanitary sewer on th
56.45, Block 4, Parcels 21, 22, 24, 26,
site.

All of runoff produced from the apartment
parking lot will be routed through a
Infrastructure Practice selected for thi
water quality volume will be provided t
Techniques prior to leaving the site. T
provide appropriate downstream channel pr
event (2.25”), and peak outflow control
year (6.75”) events. Soil disturbing acti

A. Construction of temporary construction
   phase under construction,
B. Installation of the perimeter silt fen
   construction,
C. Clearing and grubbing of the phase of
D. Begin rough grading of development are
   temporary swales to divert runoff to t
   stabilize cut and fill slopes as work
E. Initial stabilization, by seeding and
   within the project,
F. Construction of utilities

G. Construction of buildings, along with
H. Final grading and seeding of disturbed

D. Maintenance & Inspection Schedule During

NEW INSTALLATIONS
Check the condition of the devices after
days. The visual inspection needs to asce
functioning properly (no blockages and/or
devices), measuring the amount of solid m
the devices, embankments do not show sign
are in satisfactory condition. Record fin

ONGOING OPERATION
During the rainfall season, the devices w
week. The devices should be cleaned as de
Cleanout of the devices at the end of the
because of the nature of pollutants colle
generation from the decomposition of mate

E. Recordkeeping Requirements

The owner shall keep and maintain all of th
the construction phase and post-constructi
appropriate appendices in the SWPPP binder l
readily available for inspection. The owner
the City of Amsterdam, NYS DEC, and/or the E

II. CONSTRUCTION OF STORMWATER FACILITI

A. SHOP DRAWING & SUBMITTAL REVIEW

The structural design for all devices sh
Professional Engineer, based on the loa
shown on the plans. The shop drawings f
sheets for all materials will be submitt
project for approval. Once approved by t
approval will be submitted to the Owner
unit is to be constructed or installed
Record's approval.

B. INSTALLATION INSPECTION

The Engineer of Record, or an employee un
will inspect and document the subsurface
material directly beneath the devices, pr
The Engineer of Record, or an employee un
will witness the installation of the cont
embankments. The fill is to be placed in
compacted to a minimum of 90% of the maxi
by a Modified Proctor Compaction Test (AS
geotechnical testing is to be done by a q
company who will be contracted by the Own

C. CERTIFICATION OF DEVICES

As each device is installed, the Enginee
certifying to the Owner that the unit wa
shop drawings, SWPPP, and Operations & M
modifications were made to any of the
appropriate documentation is to be submi
certification.

D. OTHER DOCUMENTATION

Provide periodic verbal updates and copie
Amsterdam Engineering Division, if reques

E. CONSTRUCTION INSPECTION REPORT FORMS

The Engineer of Record, or an employee u
to use the Inspection Forms found in Ap
project. Detailed specifications can be

III. FACILITY OPERATION

F. RECOMMENDATIONS TO OWNER

During construction, it is imperative t
mouthed culvert be protected, as much
sediment. The proper catch-basin inlet
the use of a drop inlet protection de
maintained in good operating conditions.
protection devices and/or check dams, wi
open-mouthed culverts feeding into the s
keep large debris and sands from ente
eliminating or reducing the amounts of s
devices, the less maintenance and damage

G. EMERGENCY ACTION PLAN

Should an emergency condition resulting f
or a structural failure of the facility o
outside of normal business hours, please
provided in section I.B of this manual.

IV. FACILITY INSPECTION

A. ROUTINE INSPECTIONS

During the installation of each device, or an employee directly under his/her su inspections and complete the inspection manual for this project.

B. PERIODIC INSPECTIONS

Each device will be inspected by the representative once every seven days dur project.

C. INSPECTION REPORT FORM

See Appendix A of this manual for inspe structures during the construction phase

V. FACILITY MAINTENANCE AFTER FULL BU

A. REGULARLY SCHEDULED MAINTENANCE

The devices will be inspected once every
inspections determine that a more freq
schedule is needed, a modification to t
performed and all parties will be notifi
devices' internal components are damaged
owner who will in turn make arrangement
repaired or replaced.

B. MAINTENANCE PLAN

Use the inspection forms located in Appen
inspection forms that are to be used afte
construction of the immediate area of the
completed.

C. BIORETENTION

A. Sediment should be removed once filteri
the total capacity is lost.
B. Trash and debris shall be removed as ne
C. Stone drop along the inlet shall be rep
D. Embankments and spillways shall be ins
erosion and failures.
E. Vegetation shall be monitored to ensure
Plantings may require replacement throu
garden.

D. UNSCHEDULED MAINTENANCE

In cases of emergencies, please contact
pertinent to the devices to facilitate
owner will then make the necessary arran
to initiate the appropriate maintenance

E. LONG TERM MAINTENANCE AGREEMENT

The property owner or designated manageme
for maintenance of the stormwater managem
Amsterdam will be provided with a stormwa
ensure the long term maintenance and oper

APPENDIX A

CONSTRUCTION INSPECTION CHECKLISTS

Open Channel System Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Facility location staked out		
2. Excavation		
Size and location		
Side slope stable		
Soil permeability		
Groundwater / bedrock		
Lateral slopes completely level		
Longitudinal slopes within design range		
Excavation does not compact subsoils		
3. Check dams		
Dimensions		
Spacing		
Materials		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
4. Structural Components		
Underdrain installed correctly		
Inflow installed correctly		
Pretreatment devices installed		
5. Vegetation		
Complies with planting specifications		
Topsoil adequate in composition and placement		
Adequate erosion control measures in place		
6. Final inspection		
Dimensions		
Check dams		
Proper outlet		
Effective stand of vegetation and stabilization		
Contributing watershed stabilized before flow is routed to the factility		

Comments:

Actions to be Taken:

APPENDIX B

MAINTENANCE INSPECTION CHECKLISTS

Open Channel Operation, Maintenance, and Management Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Debris Cleanout (Monthly)		
Contributing areas clean of debris		
2. Check Dams or Energy Dissipators (Annual, After Major Storms)		
No evidence of flow going around structures		
No evidence of erosion at downstream toe		
Soil permeability		
Groundwater / bedrock		
3. Vegetation (Monthly)		
Mowing done when needed		
Minimum mowing depth not exceeded		
No evidence of erosion		
Fertilized per specification		
4. Dewatering (Monthly)		
Dewaters between storms		

MAINTENANCE ITEM	SATISFACTORY/ UNSATISFACTORY	COMMENTS
5. Sediment deposition (Annual)		
Clean of sediment		
6. Outlet/Overflow Spillway (Annual)		
Good condition, no need for repairs		
No evidence of erosion		

Comments:

Actions to be Taken:

APPENDIX J

OPRHP CORRESPONDENCE

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

September 11, 2019

Mr. Mark Kiburz
Ingalls & Associates, LLP
2803 Guilderland Ave
Schenectady, NY 12306

Re: USACE
Depaul Apartments Construction
255 East Main St., Amsterdam , NY
19PR06270

Dear Mr. Kiburz:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy State Historic Preservation Officer
Division for Historic Preservation

APPENDIX K

EROSION & SEDIMENT CONTROL PLAN
SEE PLAN DOCUMENTS

REFERRAL FORM
MONTGOMERY COUNTY PLANNING BOARD

Referral Number_____
assigned by the MCPB upon acceptance of referral for review

This Referral must be received **SEVEN CALENDAR DAYS** prior to the MCPB meeting date in order for it to be placed on the agenda.

TO: Montgomery County Planning Board,
Old County Courthouse,
PO Box 1500, Fonda, New York 12068
Phone: 518-853-8334
Fax: 518-853-8336

FROM: Municipal Board:_____
Referring Officer:_____
Mail original resolution to:_____
_____
_____

1. **Applicant:** _____ **2. Site Address:** _____
3. **Tax Map Number(s):** _____ **4. Acres:** _____
5. **Is the site currently serviced by public water?** ☐ Yes ☐ No
6. **On-site waste water treatment is currently provided by:** ☐ Public Sewer or ☐ Septic System
7. **Current Zoning**: _____ **8. Current Land Use**: _____
9. **Project Description:** _____

_____

_____

10. MCPB Jurisdiction:

☐ **Text Adoption or Amendment** ☐ **Site is located within 500' of:** _____

- ☐ a municipal boundary.
- ☐ a State or County thruway/highway/roadway
- ☐ an existing or proposed State or County park/recreation area
- ☐ an existing or proposed County-owned stream or drainage channel
- ☐ a State or County-owned parcel on which a public building or institution is situated
- ☐ a farm operation within an Agricultural District (Incl. Ag data Statement) (does not apply to area variances)

11. PUBLIC HEARING: Date: _____ Time: _____ Location: _____

Referred Action(s)

If referring multiple, related actions, please identify the referring municipal board if different from above.

12. ☐ **Text Adoption or** ☐ **Amendment** **Referring Board:**

☐ Comprehensive Plan ☐ Local Law ☐ Zoning Ordinance ☐ Other _____

13. ☐ **Zone Change** **Referring Board:**

Proposed Zone District: _____ Number of Acres: _____

Purpose of the Zone Change: _____

14. ☐ **Site Plan** ☐ **Project Site Review** **Referring Board:**

Proposed Improvements: _____

Proposed Use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

Specify: _____

Is a State of County DOT work permit needed? If Yes : ☐ State or ☐ County ☐ No

Specify: _____

15. ☐ **Special Permit** **Referring Board:**

Section of local zoning code that requires a special permit for this use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

16. Variance **Referring Board:**

☐ Area ☐ Use

Section(s) of local zoning code to which the variance is being sought: _____

Describe how the proposed project varies from the above code section: _____

_____

SEQR Determination

Action:

- ☐ Type I
- ☐ Type II
- ☐ Unlisted Action
- ☐ Exempt

Finding:

- ☐ Positive Declaration – Draft EIS
- ☐ Conditional Negative Declaration
- ☐ Negative Declaration
- ☐ No Finding (Type II Only)

SEQR determination made by (Lead Agency): _____ **Date**: _____

REQUIRED MATERIAL

Send 3 copies of a "Full Statement of the Proposed Action" which includes:

All materials required by and submitted to the referring body as an application

- If submitting site plans, please submit only 1 large set of plans, and 12 11x17 packets.
- All material may be submitted digitally as well at http://www.mcbdc.org/planning-services/montgomery-county-planning-board-referrals/

This referral, as required by GML §239 l and m, includes complete information, and supporting materials to assist the Montgomery County Planning Board (MCPB) in its review. Recommendations by MCPB shall be made to the Referring Body within thirty days of receipt of the Full Statement.

_____ _____

Name, Title & Phone Number of Person Completing this Form Transmittal Date

This side to be completed by Montgomery County Planning.

REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

TO: _____

Receipt of 239-m referral is acknowledged on _____. Please be advised that the Montgomery County Planning Board has reviewed the proposal stated on the opposite side of this form on _____ and makes the following recommendation.

☐ Approves

☐ Approves (with Modification)

☐ Disapproves:

☐ No significant County-wide or inter-community input

☐ Not subject to Planning Board review

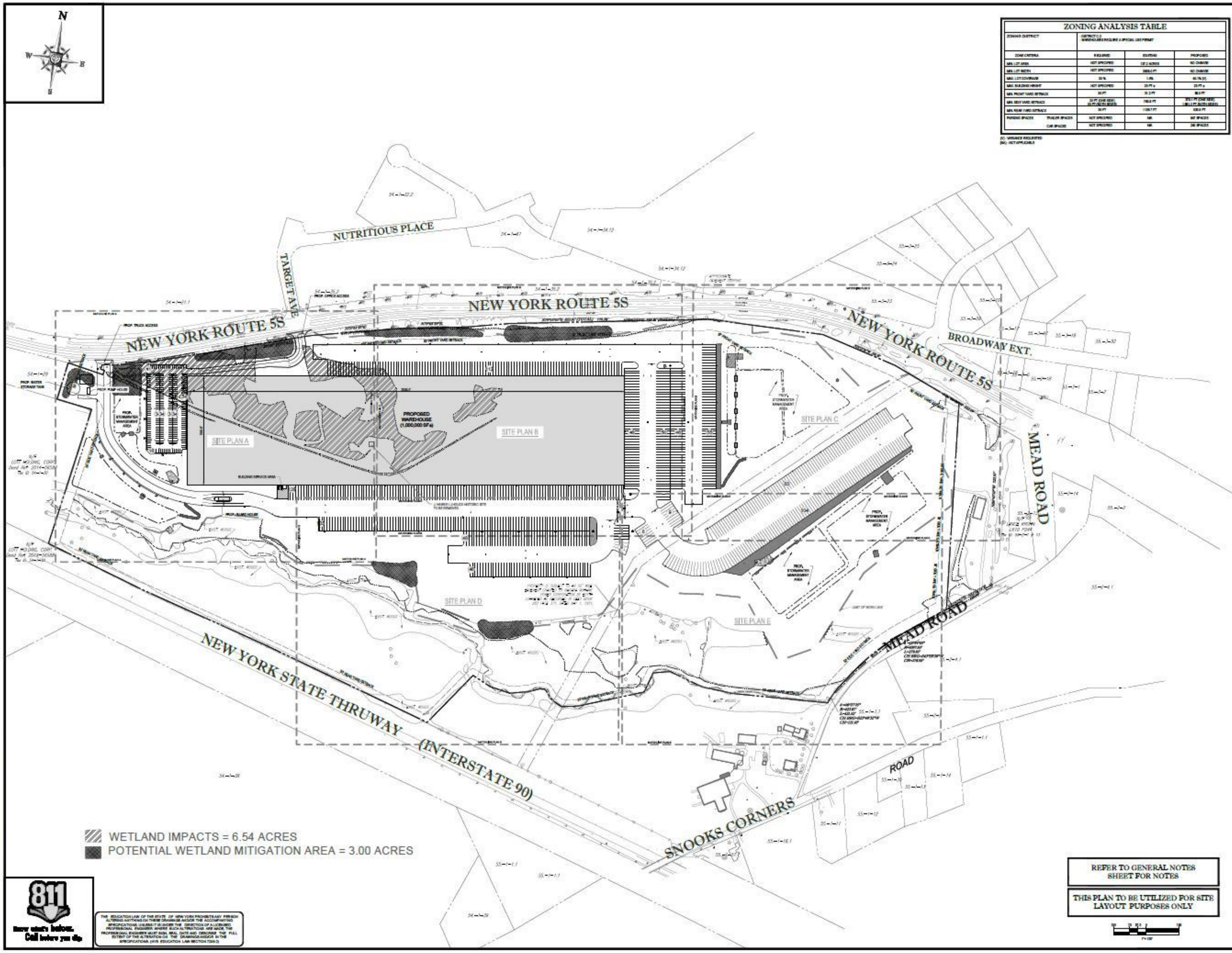
☐ Took no action

Section 239-m of the General Municipal Law requires that within thirty days after final action by the municipality is taken; a report of the final action shall be filed with the County Planning Board.

_____ _____

Date

Kenneth F. Rose, Director
Montgomery County Dept. of Economic Development and Planning



ZONING ANALYSIS TABLE

ZONING DISTRICT	DISTRICT C-2 – WAREHOUSES REQUIRE A SPECIAL USE PERMIT		
ZONE CRITERIA	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	NOT SPECIFIED	[illegible] ACRES	NO CHANGE
MIN. LOT WIDTH	NOT SPECIFIED	[illegible] FT	NO CHANGE
MAX. LOT COVERAGE	30 %	[illegible]	[illegible] (V)
MAX. BUILDING HEIGHT	NOT SPECIFIED	[illegible] FT ±	[illegible] FT ±
MIN. FRONT YARD SETBACK	30 FT	[illegible] FT	[illegible] FT
MIN. SIDE YARD SETBACK	20 FT (ONE SIDE) [illegible] FT (BOTH SIDES)	[illegible] FT	[illegible] FT (ONE SIDE) [illegible] FT (BOTH SIDES)
MIN. REAR YARD SETBACK	30 FT	[illegible] FT	[illegible] FT
PARKING SPACES – TRAILER SPACES	NOT SPECIFIED	NA	[illegible] SPACES
PARKING SPACES – CAR SPACES	NOT SPECIFIED	NA	[illegible] SPACES

(V) VARIANCE REQUESTED
(NA) NOT APPLICABLE

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 7209-2)

REFER TO GENERAL NOTES SHEET FOR NOTES

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

BOHLER ENGINEERING

REVISIONS

REV	DATE	COMMENT	BY
1	[illegible]	PER TOWN COMMENTS	[illegible]
2	[illegible]	PER TOWN COMMENTS	[illegible]

PRELIMINARY

PROJECT: SITE DEVELOPMENT PLAN —FOR— WAREHOUSE

LOCATION OF SITE
ROUTE 5S
TOWN OF FLORIDA
MONTGOMERY COUNTY
NEW YORK STATE

BOHLER ENGINEERING
17 COMPUTER DRIVE WEST
ALBANY, NY 12205
Phone: (518) 438-9900
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W.D. GOEBEL
PROFESSIONAL ENGINEER

SHEET TITLE: OVERALL SITE PLAN

SHEET NUMBER: 4 OF 23

NORTHWEST VIEW
CONCEPT PERSPECTIVE

July 19, 2019

NORTH WEST VIEW
CONCEPT PERSPECTIVE

July 19, 2019

ci

SOUTHWEST VIEW
CONCEPT PERSPECTIVE

July 19, 2019

ci

OFFICE VIEW
CONCEPT PERSPECTIVE

July 19, 2019

ci

Expanded Full Environmental Assessment Form

Interchange 27 Warehouse

Route 5S
Town of Florida,
Montgomery County, NY

August 30, 2019
Revised October 25, 2019

Prepared by:

BOHLER
ENGINEERING

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No. B180283

Exit 27 Warehouse
Route 5S Town of Florida, NY
SEQR Full Environmental Assessment Form – Part 3

PART 3

EVALUATION OF THE IMPORTANCE OF IMPACTS

Responsibility of the Town of Florida Planning Board as Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

Instructions

Discuss the following for each impact identified in column 2 of Part 2:

1. Briefly describe the impact.

2. Describe how the impact could be mitigated or reduced to a small to moderate impact by project change(s).

3. Based on the information available, decide if it is reasonable to conclude that this impact is important.

To answer the question of importance, consider:

- The probability of the impact occurring
- The duration of the impact
- Its irreversibility, including permanently lost resources of value
- Whether the impact can or will be controlled
- The regional consequence of the impact
- Its potential divergence from local needs and goals
- Whether known objections to the project relate to this impact

List of Attachments
Attachment 1 – Parts 1 and 2 of FEAF
Attachment 2 – Preliminary Building/Site Perspectives
Attachment 3 – Site Development Plans
Attachment 4 – Existing Conditions Plan
Attachment 5 – Subdivision & Lot Consolidation Plans
Attachment 6 – Geotechnical Investigation
Attachment 7 – Wildlife Habitat Assessment
Attachment 8 – Cultural Resource Documentation
Attachment 9 – Traffic Impact Study

Part 3 - Expanded Environmental Assessment

1. Project Description

1.1 Proposed Development

WE Acquisitions, LLC is proposing to construct a 1,000,000 square foot warehouse storage facility on approximately 138 +/- acres along NYS Route 5S in the Town of Florida, Montgomery County, New York (hereinafter referred to as "project site").

The project includes associated on-site roadways, parking, utility infrastructure, landscaping, and stormwater management facilities. There will be two (2) driveway entrances from NYS Route 5S; one dedicated driveway for employees and one for trucks.

A security gate with a guard house will be provided at the truck entrance. Approximately 245 parking spaces will be provided for employees and approximately 850 parking spaces will be provided for truck trailers, off which 244 are loading docks.

There will be two employee shifts per day, with the facility operating Monday through Saturday. The day shift will be from 7:00 am to 5:30 pm and the night shift from 6:30 am to 5:00 pm. The project site is currently zoned C-2 Commercial, with "warehouse/storage" listed as requiring a special use permit.

The proposed facility will be constructed in its entirely in one phase, with an 18-month construction schedule.

Refer to Attachment 2 for Preliminary Building/Site Perspectives and Attachment 3 – Preliminary Site Development Plans for further information on the project.

1.2 Project Site

The project site is bounded by NY-5S to the north, Mead Road to the southeast, a working farm and the New York State Thruway (I-90) to the south, and the property of Lott Holding Corp., 1785 NY Route 5, to the west. Refer to Attachment 4 – Existing Conditions Plan for further information.

The site currently consists of eleven (11) separate parcels, which will be consolidated/subdivided into three parcels, of 138, 3.7 and 18.6 acres. The two smaller parcels will be retained by their current owner and continue to be used for agriculture. Refer to Attachment 5 for the Preliminary Subdivision and Lot Consolidation Plans for further information.

Presently, the project site consists of two residential properties including houses, garages, and outbuildings (both properties to the north along Route 5S), a wooden farm stand building and associated small metal shed (central-north, along Route 5S), and a metal barn/shed structure to the east, off of Mead Rd.

Several portions of the project site consist of brush and forested areas, and the remainder consists of active farmed fields. The westernmost boundary lies along the edge of a graveled parking lot, part of which appears to extend onto the project site.

An unnamed tributary of the Chuctanunda Creek runs along the southeastern boundary and through the southern portion of the project site. A natural gas transmission line crosses the project site in a north-south direction near its eastern limit. The line is reputed to be 10" and installed during the 1970's

1.3 Project Implementation

Implementation of the project involves several approvals including the following:

- Coordinated SEQRA review by the Town of Florida Planning Board (Lead Agency), as the action is considered to be a "Type I" action.
- Site Plan, Special Use Permit and Subdivision review and approval by the Town of Florida Planning Board.
- NYSDOT review and approval of the Traffic Impact Study.
- NYSDOT approval of two (2) new curb cuts onto NYS Route 5S.
- Town approval of water and sewer connection permits
- Montgomery County Planning Board Board 239M Review
- NYS Office of Parks Recreation and Historic Preservation Approval of Data Recovery Plan (DRP)
- Approval and acceptance of the Stormwater Pollution Prevention Plan (SWPPP), which is to be prepared in compliance with the NYSDEC General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002), as well as approval for disturbing more than five (5) acres of land at one time.
- Review and approval of Section 401 Water Quality Certificate by NYSDEC and Individual Permit from US Army Corps of Engineers for wetland disturbance.

2. Impact Analysis and Mitigation Measures

2.1 Impact on Land

In general, the project site surface elevations slope downward from north to south and west to east between elevations 550 to 450 feet. The change in grades across the site will result in substantial cuts and fill to develop the site.

Based on preliminary grading, fill slopes up to about 65 feet in height are planned on the southern and eastern sides of the site. The fill slopes incorporate short sections of the retaining wall. Furthermore, stormwater management areas are planned to the southeast, east, and southwest of the proposed building.

To better define subsurface conditions, the applicant undertook a geotechnical investigation over the course of the spring and summer 2019. The fieldwork consisted of a series of borings and test pits scattered across the area where the proposed developed portions of the site.

Site subsurface conditions consisted of topsoil overlying natural glacial till, which is underlain by shallow shale bedrock. Generally found at depths ranging from 2 to 20 feet. Groundwater was encountered at depths ranging from about 1 to 13'.

The results of the investigation indicate that the proposed structure may be supported on conventional shallow foundations bearing on the natural glacial till or on glacial till placed over the shale bedrock. The results also indicate that the site is suitable for a ground-supported floor slab deriving support from the glacial till placed over the shale bedrock, or structural fill placed over these materials. Additionally, the site conditions support the use of typical pavement sections using standard New York State Department of Transportation (NYSDOT) specified materials.

The shallow bedrock will be removed by a combination ripping via a large track mounted backhoe and controlled blasting. Where blasting is determined to be necessary, the following protocol would be used:

- Blasting operation will be monitored by a seismologist using a seismograph
- "Peak Particle Velocity" emanating from any blast will be restricted to 2.0 in/sec
- Each blast will be monitored to ensure that this criterion is not exceeded.

The U.S. Bureau of Mines [Nicholas et al (1971)] has established a vibrational threshold of 2.0 in/sec. This threshold has been used successfully in the industry. Each blast would be monitored independently to ensure that this threshold is not exceeded. The monitoring results would be provided to the blasting contractor as soon as possible so that the blasting program can be modified if necessary.

A minimum of four monitoring points would be established, to the north, east, south and west of the planned blast area. The seismograph sensors would be placed near the closest structure and at any structures identified during the pre-blast survey that are considered to be susceptible to vibration damage.

Prior to the start of any construction, a Blasting Management Plan would be prepared in accordance with the applicable State regulations and the Explosive Materials Code, NFPA No. 495, National Fire Prevention Association. Additionally, all blasting would adhere to the provisions of 29 CFR Ch. XVII Section 1910.109 for explosives and blasting agents.

Not more than 30 days or less than 72 hours prior to the intended blasting, a notice would be sent to the owner or owners of any parcel of property immediately within a 500 foot radius of the blast area and the building inspector.

A contact person will be established and named in this notice to respond to all concerns raised by nearby residents during the blasting phase of the project. The contact person is to respond to any inquiries within 24 hours.

Prior to any blasting work being done, a licensed professional engineer will to be retained to perform a detailed pre-blast survey of existing structures located within 500 feet of the planned blast area. A copy of all reports prepared by the licensed engineer will be submitted to the Building Inspector.

2.2 Impacts on Surface Water

Wetlands: There is no New York State Department of Environmental Conservation (NYSDEC) regulated wetland or watercourses with the project site. Chuctanunda Creek, located along the southern edge of the

project site is identified as Class "C" and, therefore, is not regulated by the NYSDEC under Article 15 Protection of Waters.

In May 2019, Ecological Solutions, LLC completed a wetland delineation of the project site in accordance with the Army Corps of Engineers (USACE) Wetlands Delineation Manual (January 1987), Routine Determination Method and Northcentral/Northeast supplement. Federally regulated wetlands were delineated based upon the identification of the three mandatory criteria for wetland determination as outlined in the 1987 Federal Manual and supplement: dominant hydrophytic vegetation, hydric soils, and evidence of wetland hydrology.

The Routine Methodology procedure for wetland determination was used. Several transects consisting of sample points were walked. Dominant vegetation around each sample point was identified and its percent cover quantified. The areas were checked in detail for the presence of wetland hydrologic indicators. Soil profiles were then observed and characterized at each point.

The detailed field investigation included:

- Identification of vegetation species to determine whether there was a dominance of hydrophytic plants and areas containing transitional but primarily wetland-oriented species.

- Determination of soil features for hydric (poorly and very poorly drained) natural soils.

- Observation of site features displaying evidence of wetland hydrology based on the presence of inundated areas, apparent high seasonal water tables, and evidence of saturation within 12 inches of the surface (considered the root zone) during sufficient periods during the growing season to provide for anaerobic/hydric soil conditions.

Based on observed field conditions the federal wetland/waters of the US located on the site are shown on Attachment 4 and confirmed by the US Army Corps of Engineer as part of a June 25, 2019 field visit. Based on the delineation, the project site includes several separate wetland systems totaling approximately 12.6 acres.

The project is expected to impact approximately 6.5 acres of wetlands that are located along northwest corner of the site along Route 5S. This wetland area is mainly abandoned agricultural field and lawn area that consists of wetland meadow and shrub dominated wetland.

Proposed impacts to the wetland areas will require an Individual Permit from the USACE and a Section 401 Water Quality Certification from the NYSDEC. The wetland impacts that cannot be avoided will be minimized to the maximum extent practicable. It is expected that unavoidable wetland impacts will be mitigated through a combination of onsite creation and purchase of wetland credits.

Wetland creation is expected to be required at a ratio of 1.5 acres of impact for each acre impacted, which would equate to the project creating approximately nine (9) acres of wetlands. Approximately 3 acres will be created on site with the balance of 6 acres mitigated through the purchase of credits from the Wetland Trust.

The Wetland Trust (TWT) is a 501C (3) not-for-profit New York Corporation that manages in-lieu fee program sells wetland mitigation credits for permitted wetland impacts throughout much of New York State. TWT presently owns 26 properties covering 1,600 wetland acres.

Stormwater Management: A Stormwater Pollution Prevention Plan (SWPPP), which includes a Stormwater Management Plan has been prepared. The stormwater management plan includes an analysis of the existing and proposed hydrology and hydraulics to ensure that the proposed development does not significantly affect the environment. The results of the report are consistent with a site that can support the proposed development.

Although the project will alter the existing site topography, the existing drainage pattern will be maintained on the north and south sides of the property. There are three (3) discharge points (DP) where peak stormwater runoff is evaluated for both existing and proposed conditions. DP-1 is located in southeast corner of the site; DP - 2 is located in the northwest corner of the site, and DP-3 is located in the northeast corner of the site.

If untreated, the construction of the building and paved areas would increase the rate and volume of stormwater run-off. Therefore, the increase in run-off will be mitigated by the construction of stormwater management facilities designed to temporarily detain stormwater run-off during storm events and slowly release stormwater after the storm event. These facilities are designed in accordance with the NYSDEC Stormwater Design Manual and consist of sedimentation basins and bioretention for treatment prior to discharging into detention basins that will provide stormwater detention and water quality treatment.

Stormwater run-off from the building and paved areas will be collected in a series of catch basins and directed through a piping network to the stormwater management facilities. The stormwater bioretention areas will be sized to mitigate the Water Quality Volume (WQv), and the Runoff Reduction Volume (RRv). Detention basins will mitigate the Channel Protection Volume (CPv), the Overbank Flood (Qp), and the Extreme Storm (Qf). Each of these is addressed below:

- Water Quality Volume: The required WQv is provided in multiple bioretention basins.
- Runoff Reduction Volume: The RRv is achieved by filtering a substantial portion of the run-off to meet the minimum RRv requirement.
- Channel Protection Volume: The CPv requires that a minimum of 24-hour detention be provided for the 1-year, 24-hour storm event. This requirement is met since the detention basins will control the peak discharge from the 10 year storm to the 10-year predevelopment rates.
- Overbank Flood: The Qp requires that the there be no net increase in peak runoff for the 10- year, 24 hour storm event. This requirement is met since the detention basins will control the peak discharge from the 100-year storm to rates less than the 100-year predevelopment rates.
- Extreme Storm: The Qf requires that the there be no net increase in peak runoff for the 100-year, 24 hour storm event. This requirement is met since the detention basins will control the peak discharge from the 100-year storm to rates less than the 100-year predevelopment rates.

This project will be required to comply with the State Pollutant Discharge Elimination System (SPDES) Phase II General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002). To that

end, the project will incorporate Best Management Practices (BMPs) to ensure that water quality on site will be protected. BMPs to be employed will, at a minimum, include:

- Temporary Erosion and Sediment Control Measures:
  - Silt fencing placed around construction areas prior to grading activities;
  - Diversion Channels to prevent runoff from leaving the site
  - Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed;
  - Permanent seeding and planting of all unpaved areas using the hydro-mulching grass seeding technique;
  - Mulching exposed areas, where specified;
  - Temporary seeding of all unpaved areas using the hydro-mulching grass seeding technique within 14 days of disturbance;
  - Frequent watering to minimize wind erosion during construction; and
  - Rock check dams

- Permanent structural practices for this site shall include:
  - Outlet protection using stone riprap as specified;
  - Utilize storm sewer collection system that will be tested for water tightness;
  - Sedimentation basins will also serve as a temporary sediment basin;
  - Vegetated and/or riprap lined swales.
  - Retaining walls

All erosion and sediment control measures will be designed in accordance with the New York State Standards and Specifications for Erosion and Sediment Controls. The site contractor will be required to adhere to all erosion and sediment control measures as defined in the SWPPP.

Since the building will be constructed in a single phase, a waiver to disturb more than five (5) acres at a time will be required. To obtain the five-acre waiver, at least two site inspections be required to be performed during construction by a qualified professional, every seven days, for as long as the disturbed area exceeds five acres. This increased frequency of inspection will ensure that the erosion and sediment control facilities are functioning as designed and that there are no impacts to the waters of the U.S.

Based on the above, there will not be a significant impact on stormwater runoff from the project site.

Water Usage: Water will be supplied through the Town of Florida Water District. There is an existing 10" water main located along the north side of Route5S. A new service lateral for both potable and fire service will be installed and connected to the existing water main.

Based on loading rates established by the New York State Design Standards for Intermediate Sized Wastewater Treatment Systems (March 2014), water usage for the facility is conservatively estimated as follows:

Use	Unit	Gallons Per Day (GPD)	Project	Estimated Daily Usage
"Factory/Distribution Warehouse"	Per Employee/shift	15	200 employees x 2 shifts	6,000
	Per Shower	10	4	40
			Total	6,040 gpd

The facility will require potable water solely for bathroom and shower facilities. Additional water usage for processing or other non-potable uses is not needed. Per NYS Building Code the building will be sprinkled. To ensure adequate fire flow capacity a new water tank will be installed. It will be located on the western edge of the site and sized according to NYS Building Code.

Based on the above, this project will not have a significant impact on the municipal water system.

Sanitary Sewer: The projected sanitary waster generation is expected to be comparable to water usage. A new sanitary sewer lateral will be installed from the building to the existing 10" sanitary sewer main located along the south side of Route 5S, which is part of the Town of Florida Sewer District.

Based on the above, this project will not have a significant impact on the municipal sanitary sewer system.

2.3 Impact on Plants and Animals

A Wildlife Habitat Assessment was completed by AECOM over the course of the spring and summer of 2019. The purpose of the assessment to identify existing wildlife habitat present and the potential for threatened or endangered species. A copy of the report is included as Attachment XX.

This wildlife habitat assessment identified existing habitat cover types and land uses on the site with the objective of identifying ecological resources in the context of the surrounding landscape. For classification purposes, the project site and surrounding areas are divided into ecological communities per the New York Natural Heritage Program (NYNHP) as indicated below. Approximate acreage of each habitat type is provided.

NYNHP Classes for Upland Areas:

- Successional Old Field — 3 +/- acres
- Successional Shrubland — 10 +/- acres
- Rich Mesophytic Forest — 12 +/- acres
- Successional Northern Hardwood Forest — 1 +/- acres
- Crop land (row and field) — 108 +/- acres
- Residential (includes buildings, lawn and impervious surfaces — 9+/- acres

NYNHP Classes for Wetland/Aquatic Areas:

- Shallow Emergent Marsh — < 1 acre
- Shrub Swamp — < 1 acre

- Mixed Emergent/Shrub Swamp 12 +/- acre
- Red Maple-Hardwood Swamp 3 +/- acres
- Rocky Headwater Stream 4,400 +/- linear feet)
- Farm Pond/Artificial Pond < 1 acre

The project is expected to impact a portion of all the upland habitats identified on the project site. The habitats are typical of those found in the region and are not particularly sensitive. The habits are minimally ranked in important by the NYS Natural Heritage Program are considered secure in New York State.

For discussion of impacts to wetland/aquatic habitats refer to Section B - Impact on Surface Water.

Review of the NYS Natural Heritage and US Fish and Wildlife Service databases identified a single federally listed endangered species that has the potential to be present on the site: Northern long-eared bat (*Myotis septentrionalis*). While the northern long ear bat has not been observed on the site, tree cutting restriction will be placed on the project to avoid impacting potential roost trees (> 4" in diameter). No tree clearing will occur between April 1, and October 31 to avoid impacting roosting bats.

Based on the above the project is not expected to have a significant impact on wildlife habitats or threatened or endangered species.

2.4 Impact on Historical and Archaeological Resources

Hartgen Archeological Associates, Inc. (Hartgen) conducted a Phase I and 2 archeological investigation to comply with Section 14.09 of the State Historic Preservation Act. The Phase 1 and 2 have been reviewed by the NYS Office of Parks, Recreation and Historic Preservation (OPRHP). The investigation was conducted according to the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994), which are endorsed by OPRHP.

The Phase 1, which generally consists of a literature search and limited field assessment, identified one area of potential significance. The J. Houck Historic Site was identified on the west-central portion of the project site, adjacent to the right-of way of old NY Route 5S. The site consists of the remains of a house foundation and well.

Shovel tests in the area identified artifacts suggesting an occupation from circa 1830 through 1910. Since avoidance of this area is not feasible, Hartgen recommended that a Phase II archeological site evaluation be completed to determine if the site is National Register eligible.

Artifacts collected during the Phase II investigation are consistent with an occupation lasting from the early to mid-19th century until the early 20th. There are two distinct midden[1] deposits on the site, one from the 1920's and the other from the 1930's that postdate the occupation phase. There is no indication of disturbance of the site, suggesting that the site retains its integrity and has the potential to provide useful data.

[1] A midden is an old dump for domestic waste which may consist of animal bone, botanical material, ceramics, and other artifacts associated with past human occupation

The artifact distribution is quite restricted with almost all recovered materials from both Phases I and II being restricted to a 110' radius around the structure foundations. The collection is a typical domestic assemblage including ceramics, glass and food remains.

The Phase II concluded that the J. Houck Historic Site contains significant archaeological data in undisturbed contexts. Since the site cannot be avoided, a Phase III Data Retrieval Plan (DRP) was prepared and submitted to the OPRHP.

In general, the DRP will complete additional testing near the structure to further understand the form and construction history of the building and acquire additional samples of contemporary artifacts. A temporary sump will be installed to lower the level of local ground water and allow excavation within the basement hole.

The existing well will be bisected with a backhoe trench to determine if useful data can be acquired from below the layer of field cobbles currently preventing sampling. An area of approximately 20 meters around the house and well will be mechanically stripped of soil in order to identify features such as middens or privies. If encountered, these features will be studied and sampled as needed.

The OPRHP has reviewed and approved the DRP. Correspondence from OPRHP along with copies of the Phase 1, 2 and DRP are included herein as Attachment 7.

Since all significant artifacts will be recovered as part of the DRP, which is expected to be completed in the Fall of 2019, the project will not have a significant impact on historical or archaeological resources.

2.5 Impacts on Transportation

Creighton Manning Engineering, LLP has completed a traffic impact study for the proposed development. Refer to Attachment 10.

Data collection for the traffic study included an automatic traffic recorder installed on NY Route 5S, east of Target Drive and traffic counts collected at:

- NY Route 5S/Route 920P/Clark Drive
- NY Route 5S/Target Drive

These counts were supplemented by traffic counts conducted by NYSDOT in 2018 at:

- NY Route 5S/PS Street/Route 30 SB Ramp
- NY Route 5S/Route 30 NB Ramp
- NY Route 30 SB/Route 5S Ramp
- NY Route 30/Thruway Exit 27

This traffic study focuses on the AM and PM peak periods since these time periods correspond to peak operations at the site and peak traffic conditions on the surrounding roadway network. The peak hours varied but generally occurred from 8:00 to 9:00 a.m. in the morning and 4:00 to 5:00 p.m. in the afternoon.

Based on the Institute of Transportation Engineers (ITE) *Trip Generation (*10th edition), the project is estimated to generate 120 trips during the AM peak hour of the generator (96 employee trips and 24 truck trips) and 162 trips during the PM peak hour of the generator (130 employee trips and 32 truck trips).

The level of service analysis indicates that the signalized study area intersections and the unsignalized NY Route 5S/NY Route 920P/Clark Drive intersection will continue to operate similar to No-Build conditions after build-out for the proposed development during the AM and PM peak hours. No mitigation is recommended at these signalized and unsignalized study area intersections.

Access to the Employee Driveway associated with the proposed *Exit 27 Warehouse* will be provided opposite Target Drive on NY Route 5S. It is recommended that a shared left- turn/through lane and a separate right turn lane be constructed on the southern leg of the intersection. In addition, the southbound left-turn lane currently provided on Target Drive should be modified to allow through movements to the Employee Driveway.

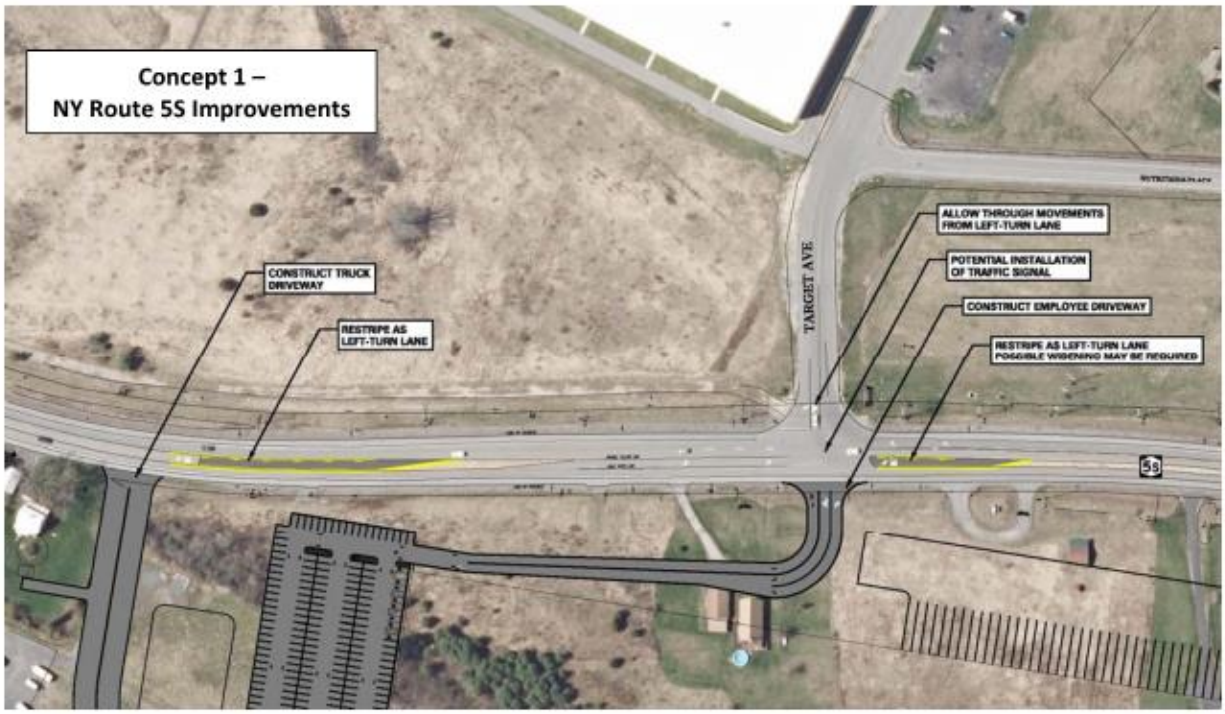
It is also recommended that the existing hatched median currently provided opposite the exclusive eastbound left-turn lane be restriped to provide an exclusive westbound left- turn lane in this area for employees associated with the site. NY Route 5S may need to be widened to accommodate the left-turn lane and that any proposed changes to NY Route 5S will be reviewed by NYSDOT as part of a Highway Work Permit.

The level of service analysis indicates that the southbound left-turn lane will operate at LOS F and that the northbound left-turn lane will operate at LOS E under unsignalized build conditions during the PM peak hour.

A signal warrant analysis indicates that 2020 Build traffic volumes over the course of a typical day will not be high enough to meet the minimum traffic signal criteria for the three signal warrants investigated; however, a review of the data indicates that all three signal warrants are close to being met.

It is recommended that an after study be completed at this intersection after the site is fully operational to determine if a traffic signal is truly warranted since the build volumes are based on future traffic projections. If an after study confirms that a traffic signal is indeed warranted, the Applicant will install the signal subject to review and approval by NYSDOT. The analysis indicates that this intersection will operate at good levels of service under traffic signal control.

It is recommended that the existing hatched median currently provided west of the exclusive eastbound left-turn lane for Target Drive be restriped to provide an exclusive westbound left-turn lane for trucks associated with the site. It is not anticipated that NY Route 5S will need to be widened to accommodate the left-turn lane in this area; however, any proposed changes to NY Route 5S will be reviewed by NYSDOT as part of a Highway Work Permit.



The analysis indicates that this intersection will operate at good levels of service under stop sign control. A stop sign is recommended on the northbound Truck Driveway approach.

The available intersection and stopping sight distances at the Employee and Truck Driveways on NY Route 5S meet AASHTO guidelines for the 65-mph operating speed for the applicable design vehicle.

It is recommended that any site signing be placed a minimum of fifteen feet back from the travel way and that the landscaping plan consider sight lines in order to maintain visibility at the proposed driveway locations.

A review of crash history on NY Route 5S indicated that most accidents were classified as “other” and involved running off the road or collisions with earth, ditch, rock, etc. or deer. The majority involved property damage only or were non-reportable (having damage less than $1,000 and no injuries). There were no fatalities and only four injury crashes.

2.6 Impact on Energy

National Grid (NG) currently provides natural gas and electric in the Town of Florida and it is anticipated that the project will use National Grid for these services. Application has been made to National Grid for new electric and gas service. It is not expected that the project will have a impact on existing energy supplies.

The electric distribution system on site will consist of a below ground duct bank system with ground mounted transformers. Natural gas will be piped underground into the building mechanical room to run the buildings heating system.

To minimize energy consumption, the project will review and implement energy saving measures where practicable. These may include:

- Optimized building envelope and insulation through energy modelling
- LED lighting
- Air Turnover Units to de-stratify building;
- Minimization of "vampire loads" for all material handling equipment
- Incorporation of high-efficiency carousels and automated storage and retrieval system conveyors, etc.
- Incorporation of programmable lighting controls
- A natural gas transmission main crosses the site north-south along the eastern limits. Refer to Attachment 4 for the location of the gas main. The natural gas main will be avoided during construction except for a single driveway crossing to prove access to tractor trailer storage lot. Crossing of the gas main will require review and approval by National Grid.

2.7 Impact on Light

Lighting will be provided for the parking lot areas, loading docks and along the two driveways. The lighting will consist of energy efficient LED light fixtures with a color temperature range of 3000 to 3500k. All lighting will have full cutoff and be dark sky friendly minimize the potential for glare and light spillage.

The light fixtures will be mounted on 40' poles and along the loading docks with full cut wall packs. The foot-candle level will be zero at the property line, except for the driveway/Route 5S intersections, which will be slightly elevated for safety.