Town of Manlius
Planning Board Agenda
April 12, 2021
6:30PM

1. Pledge Of Allegiance

2. Approval Of Minutes - March 22, 2021

   Documents:

   MARCH 22, 2021.PDF

3. Falck Renewables - One Bridge Street, Suite 11, Irvington, NY 15033 - 8507 Green Lakes Road, Fayetteville, NY 13066 - Special Use Permit & Site Plan Amendment - Solar Array - Tax Map # 082.-02-15.1

   Documents:

   8507 GREEN LAKES ROAD - SOLAR - SUP AMENDMENT.PDF

4. Falck Renewables - One Bridge Street, Suite 11, Irvington, NY 15033 - 5062 North Eagle Village Road- Special Use Permit & Site Plan Amendment - Solar Array - Tax Map # 098.-01-15.0

   Documents:

   5062 NORTH EAGLE VILLAGE - SOLAR - SUP AMENDMENT.PDF

5. Brolex Properties - 5912 North Burdick Street, East Syracuse, NY 13057 - Public Hearing - 12-Lot Subdivision & Site Plan- Freeman Estates - 7430 Highbridge Road, Fayetteville, NY 13066 Tax Map #101.-02-02.1

   Documents:

   L-1 FREEMAN SITE PLAN - 6 LOT DENSITY PLAN.PDF
   FREEMAN SUBD5.PDF
   7430 HIGHBRIDGE ROAD - COVENANTS - DRAFT.PDF
   7430 HIGHBRIDGE ROAD - MAP.PDF
   7430 HIGHBRIDGE ROAD - COVER LETTER AND DOT LETTER.PDF
   7430 HIGHBRIDGE ROAD - HOUSE LAYOUT.PDF

6. Napierala Consulting - 110 Fayette Street, Manlius, NY 13104 -Public Hearing - Site Plan - 7030 Manlius Center Road, East Syracuse, NY 13057 - Proposed Self Storage Facility - Tax Map #'s 062.-04-6.1 & 062.-04-6.2

   Documents:

   7030 MANLIUS CENTER ROAD - PLANNING BOARD APPLICATION-SIGNED.PDF
   7030 MANLIUS CENTER ROAD - SHORT EAF SITE REVIEW-SIGNED.PDF
   7030 MANLIUS CENTER ROAD - SITE PLANS_COMPRESSED.PDF
   7030 MANLIUS CENTER ROAD - SWPPP_COMPRESSED.PDF
   GML RETURN - 7030 MANLIUS CENTER ROAD.PDF

7. Melanie Nicotra - 7075 North Manlius Road, Kirkville, NY 13082 - Public Hearing - Site Plan - Greenhouse - 7550 Collamer Road, East Syracuse, NY 13057 - Tax Map # 038.-03-18.4

Documents:

7550 COLLAMER ROAD - NICOTRA - GREENHOUSE - APPLICATION AND EAF.PDF
7550 COLLAMER ROAD - NICOTRA - GREENHOUSE. - MAPS.PDF
GML RETURN - 7550 COLLAMER ROAD - NICOTRA - GREENHOUSE.PDF

8. David Muraco, Empire Management - 4306 East Genesee Street, DeWitt, NY 13214 - Zone Change (From RA To RM) - Recommendation - Real Estate Office - 112 South Burdick Street, Fayetteville, NY 13066 - Tax Map # 092.-07-02.1

   Documents:

   112 SOUTH BURDICK STREET - ZONE CHANGE.PDF

9. Other Business

10. Adjournment

TOWN OF MANLIUS
PLANNING BOARD MINUTES
March 22, 2021

DRAFT

The Town of Manlius Planning Board convened with the members live streaming from their homes and in accordance with the Executive Order of the Governor to assure compliance with the Open meetings Law. Chairperson Joseph Lupia presided, and the following Members were present: Fred Gilbert, Ann Kelly, Mike LeRoy, Arnie Poltenson, Richard Rossetti and Valerie Beecher. Also, present were Attorney Jamie Sutphen and Town Engineer Douglas Miller.

Also, Present: Tom Oot, Christian Hill, Melanie Nicotra

The Pledge of Allegiance was recited.

Minutes
Member Rossetti made a motion seconded by Member LeRoy and carried unanimously to approve the minutes of February 22, 2021.

Member Kelly made a motion seconded by Member Rossetti and carried unanimously to approve the minutes of March 8, 2021.

Brolex Properties – 5912 North Burdick Street, East Syracuse, NY 13057
Subdivision and Site Plan – Freeman Estates – 12 Lots – 7430 Highbridge Road, Fayetteville, NY 13066
Tax Map # 101.-02-02.1
Chairman Lupia stated that at the last meeting the Board was looking for the elevations for the conventional plan. He stated that the plan has been submitted and asked Town Engineer Miller if he approved of the plan. Engineer Miller said yes.

Tom Oot, Application told the Board that the current survey includes the 12 units with the 278 clustering, which is being proposed. The Addresses are included as well along with the street name of Freeman Court.

Attorney Sutphen read the draft resolution aloud. After review of the application and plan of applicant, this Board finds that in accordance with Section 278 of the NY Town Law, State of New York, the applicant has presented a plan which shows that a conventional subdivision plan for this property in the R-3 zone would accommodate up to 12 conforming building lots (and one additional non-buildable lot). Accordingly, the applicant may move forward with a proposed cluster subdivision plan (per Section 278 of the Town Law and Section 127-12 of the Town of Manlius Code) for a proposed cluster subdivision plan showing a maximum of 12 buildable lots.

Member Gilbert made a motion, seconded by Member Rossetti to approve the following resolution: After review of the application and plan of applicant, this Board finds that in

accordance with Section 278 of the NY Town Law, State of New York, the applicant has presented a plan which shows that a conventional subdivision plan for this property in the R-3 zone would accommodate up to 12 conforming building lots (and one additional non-buildable lot). Accordingly, the applicant may move forward with a proposed cluster subdivision plan (per Section 278 of the Town Law and Section 127-12 of the Town of Manlius Code) for a proposed cluster subdivision plan showing a maximum of 12 buildable lots.

The motion carried unanimously.

Conversation ensued regarding HOA's, covenants, deed restrictions and declarations.

Member Kelly made a motion, seconded by Member Rossetti and carried unanimously to declare this as an Unlisted Action for SEQRA. A motion was also made by Member Kelly, seconded by Member Rossetti and carried unanimously to hold a Public Hearing on April 12, 2021 at approximately 6:35pm for a subdivision application for proposed Cluster Development.

Napierala Consulting, 110 Fayette Street, Manlius, NY 13104
Initial Presentation – Site Plan – Proposed Storage Facility - 7030 Manlius Center Rd, East Syracuse, NY 13057
Tax Map #'s 062.-04-6.1 & 062.-04-6.2

Christian Hill, Representing the Applicant, presented the Board with a slideshow and explained the project. They are proposing a self-storage facility. They received a Zone Change (CB) from the Town Board at their last meeting. The 2 lots are in the process of being combined. There will be 6 single story buildings, the front building will house the office and will be climate controlled, the remainder of the buildings will be drive up, not climate controlled. There will be a monument sign out front. An access gate with a keypad will be installed at the entrance to the property. Screening will be planted. There will be no lights on poles at the site, the lights will be mounted on the buildings. Mr. Hill stated that they have received comments from the New York State Department of Transportation (NYSDOT), and they suggested moving the entrance to the facility to the other side of the property due to the potential issues with the intersection at Eisenhower. The current proposed driveway will be closed off and grass and plantings will take its place.

Chairman Lupia asked Engineer Miller if he had the opportunity to review the SWPPP. Engineer Miller said not in great detail but at first glance it looks like it is in good shape. He has been working with Mr. Hill and he will get a memo to the Board for review.

Member Gilbert made a motion, seconded by Member Rossetti and carried unanimously to declare this as an Unlisted Action for SEQRA. A motion was also made by Member Gilbert, seconded by Member Rossetti and carried unanimously to hold a Public Hearing on April 12, 2021 at approximately 6:40pm for a proposed self-storage facility.

Melanie Nicotra – 7075 North Manlius Road, Kirkville, NY 13082
Initial Presentation – Site Plan – Greenhouse – 7550 Collamer Road, East Syracuse, NY 13057
Tax Map # 038.-03-18.4

Melanie Nicotra, Applicant, told the Board that she would like to build a greenhouse so she can sell her plants. She also sells produce at the corner. She will remove the current produce wagon and sell the produce at the Greenhouse. She stated that it will be a non-permanent structure that will be made out of pipes and a plastic covering. The building will be heated, as needed, with a small heater.

Chairman Lupia asked what the greenhouse was going to sit on, concrete, pavement? Ms. Nicotra said it will be crushed stone.

Member Kelly asked how the Applicant was going to get water to the site? Ms. Nicotra said she is considering OCWA for city water or just putting in a well, she has not decided yet. There will also be no restrooms on site, just a port-a-potty.

Chairman Lupia asked Engineer Miller if a SWPPP would be needed. Engineer Miller said probably not, she is using crushed stone and less than an acre of land is being disturbed.

Member Rossetti made a motion, seconded by Member LeRoy and carried unanimously to declare this as an Unlisted Action for SEQRA. A motion was also made by Member Rossetti, seconded by Member LeRoy and carried unanimously to hold a Public Hearing on April 12, 2021 at approximately 6:45pm for a proposed Greenhouse.

Special Permit Renewal – Compassionate Care Vet Hospital – Dr. John and Connie Enders – 8277 & 8275 East Seneca Turnpike, Manlius, NY 13104

The Board received a memo from Director of Code Enforcement Randy Capriotti, stating that there have been no complaints and or violations and he recommends renewal of the Special Permit.

Member Kelly made a motion, seconded by Member Beecher and carried unanimously to approve the Special Use Permit for a period of 7 years to expire on March 26, 2028.

Other Business

With there being no further business, Member Gilbert made a motion, seconded by Member Rossetti and carried unanimously to adjourn the Regular Meeting at 7:39 pm.

Respectfully submitted,
Lisa Beeman, Clerk

DRAFT

TOWN OF MANLIUS SPECIAL PERMIT

Falck Renewables - 8507 Green Lakes Rd. Town of Manlius

Pursuant to a Resolution of the Planning Board of the Town of Manlius on the Application of Falck Renewables, (the "Applicant") which granted the Applicant approval of a Special Permit, which Resolution was passed at a regular meeting of the Planning Board of the Town of Manlius, held on August 10, 2020, permission is hereby granted to Applicant, effective upon the mutual execution of this Permit, to construct an addition to the existing Solar Array - Large Solar Photovoltaic Energy System ("The Project") on the parcel of land located at 8507 Green Lakes Road, East Syracuse, New York 13057; identified by Tax Map # 082.02-15.1 on the tax rolls of the Town of Manlius.

This Permit will continue in full force until terminated by the Planning Board for breach of one or more of the conditions pursuant to which it is granted, and the implementation thereof will be in accordance with the following conditions:

1. The Special Permit and the use allowed pursuant thereto, including the existing portion of the Solar Array on the parcel, shall be for a term of seven (7) years, through August 9, 2027 and to be renewed at the discretion of the Planning Board.
2. Trees shall be planted on the parcel along the perimeter of Green Lakes Road of a species which provide screening from the roadway to the Solar Array site. Trees shall be planted as soon as feasible and not later than April 30, 2021.
3. The Project shall be constructed in accordance with the Site Plan Approval granted to the Applicant for The Project by the Planning Board of the Town of Manlius on August 10, 2020.
4. If any condition contained herein is determined to be in violation of any law, such condition shall be automatically removed from this Special Permit but shall not affect the effectiveness of any other condition contained herein.

5. Each of the conditions contained herein have been carefully considered as a means of addressing concerns raised by the Town and residents and if the Applicant is in violation of any one condition, or multiple conditions, the Planning Board reserves the right to withdraw this Special Use Permit, at its discretion.

6. The Applicant, by the acceptance of this Special Permit, agrees to all of the above terms and conditions, and in the event that he shall fail for any reason to perform any of the said terms and conditions on his part to be performed, this Special Permit can be revoked.

_____
Lisa Beeman, Clerk
Office of Planning and Development
Town of Manlius, Onondaga County, New York

The undersigned does hereby accept the foregoing Special Permit and agrees to perform all of the terms and conditions thereof.

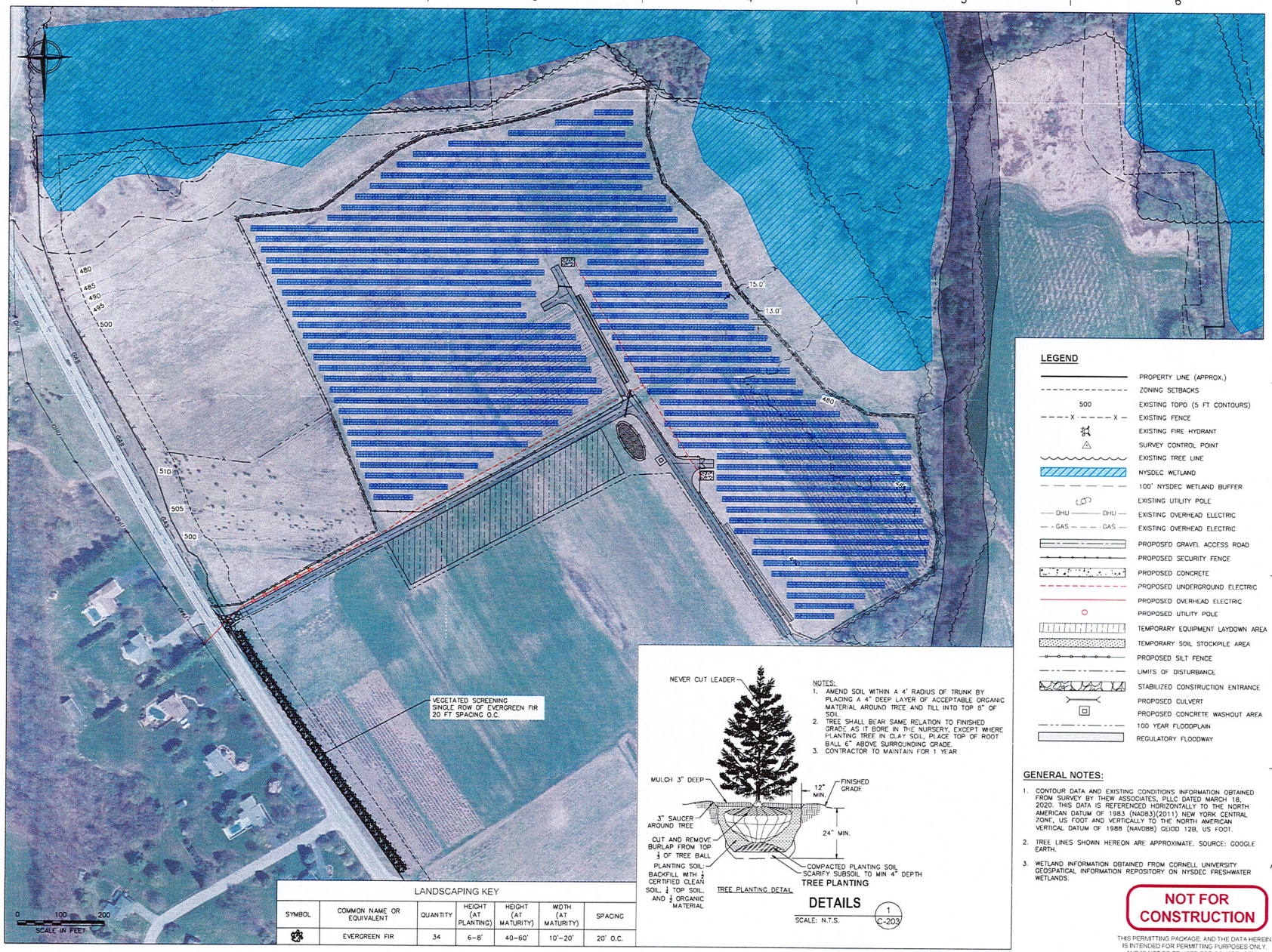
Falck Renewables

_____
By:

STATE OF NEW YORK)
COUNTY OF ONONDAGA) ss:

On the ____ day of _____ in the year 2020 before me, the undersigned, personally appeared _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individuals(s) acted, executed the instrument.

_____
Notary Public



LANDSCAPING KEY

SYMBOL	COMMON NAME OR EQUIVALENT	QUANTITY	HEIGHT (AT PLANTING)	HEIGHT (AT MATURITY)	WIDTH (AT MATURITY)	SPACING
	EVERGREEN FIR	34	6–8'	40–60'	10'–20'	20' O.C.

TREE PLANTING DETAIL

NOTES:
1. AMEND SOIL WITHIN A 4' RADIUS OF TRUNK BY PLACING A 4" DEEP LAYER OF ACCEPTABLE ORGANIC MATERIAL AROUND TREE AND TILL INTO TOP 8" OF SOIL.
2. TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE IN THE NURSERY, EXCEPT WHERE PLANTING TREE IN CLAY SOIL, PLACE TOP OF ROOT BALL 6" ABOVE SURROUNDING GRADE.
3. CONTRACTOR TO MAINTAIN FOR 1 YEAR

TREE PLANTING

DETAILS

SCALE: N.T.S.

1 / C-203

LEGEND

- PROPERTY LINE (APPROX.)
- ZONING SETBACKS
- 500 EXISTING TOPO (5 FT CONTOURS)
- X X EXISTING FENCE
- EXISTING FIRE HYDRANT
- SURVEY CONTROL POINT
- EXISTING TREE LINE
- NYSDEC WETLAND
- 100' NYSDEC WETLAND BUFFER
- EXISTING UTILITY POLE
- OHU OHU EXISTING OVERHEAD ELECTRIC
- GAS GAS EXISTING OVERHEAD ELECTRIC
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED SECURITY FENCE
- PROPOSED CONCRETE
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED OVERHEAD ELECTRIC
- PROPOSED UTILITY POLE
- TEMPORARY EQUIPMENT LAYDOWN AREA
- TEMPORARY SOIL STOCKPILE AREA
- PROPOSED SILT FENCE
- LIMITS OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED CULVERT
- PROPOSED CONCRETE WASHOUT AREA
- 100 YEAR FLOODPLAIN
- REGULATORY FLOODWAY

GENERAL NOTES:

1. CONTOUR DATA AND EXISTING CONDITIONS INFORMATION OBTAINED FROM SURVEY BY THEW ASSOCIATES, PLLC DATED MARCH 18, 2020. THIS DATA IS REFERENCED HORIZONTALLY TO THE NORTH AMERICAN DATUM OF 1983 (NAD83)(2011) NEW YORK CENTRAL ZONE, US FOOT AND VERTICALLY TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) GEOID 12B, US FOOT.
2. TREE LINES SHOWN HEREON ARE APPROXIMATE. SOURCE: GOOGLE EARTH.
3. WETLAND INFORMATION OBTAINED FROM CORNELL UNIVERSITY GEOSPATIAL INFORMATION REPOSITORY ON NYSDEC FRESHWATER WETLANDS.

NOT FOR CONSTRUCTION

THIS PERMITTING PACKAGE, AND THE DATA HEREIN, IS INTENDED FOR PERMITTING PURPOSES ONLY, AND IS NOT TO BE USED FOR CONSTRUCTION.

EF NY CDG 002, LLC

ONE BRIDGE STREET, SUITE 11
IRVINGTON, NY 10533
T. +1 (914) 340-4740
WWW.FALCKRENEWABLES.COM

TETRA TECH

TETRA TECH ENGINEERING CORPORATION, P.C.
CERTIF 0015490
3136 SOUTH WINTON ROAD, SUITE 303
ROCHESTER, NY 14623

STAMP:

IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS UNDER THE DIRECTION OF A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN THIS DOCUMENT IN ANY WAY.

GREEN LAKES ROAD SOLAR PROJECT

8507 GREEN LAKES ROAD
MANLIUS, NY 13066

PROJECT NUMBERS:
194-7119

SHEET TITLE:
LANDSCAPING PLAN

SHEET SIZE:
ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

THIS DOCUMENT IS THE PROPERTY OF TETRA TECH WHO HAS UNLIMITED RIGHTS. THIS DOCUMENT IS PROVIDED UPON CONDITION THAT IT WILL NEITHER BE REPRODUCED, COPIED, OR ISSUED TO A THIRD PARTY AND WILL BE USED SOLELY FOR THE ORIGINAL INTENDED PURPOSE.

NO.	REVISION	DATE	INIT.
A	PERMITTING	02/09/2021	KMG
B	LANDSCAPING	03/09/2021	KMG

DATE:	03/05/2021
DRAWN BY:	KMG
ENGINEER:	KMG
APPROVED BY:	BMS

PROJECT PHASE:
DISCRETIONARY PERMITTING

SCALE:
AS SHOWN

SHEET NO.
C-203

P:\Falck Renewables\01-Green Lakes Solar\06-Design\05-Plan Set\GREENLAKES-C-201-SITE PLAN-08.dwg
Printed: 3/9/2021 9:55 PM
GESTAMP FTCM SHEET SET R1.0.4

TOWN OF MANLIUS SPECIAL PERMIT

Falck Renewables – 5062 North Eagle Village Road, Town of Manlius

Pursuant to a Resolution of the Planning Board of the Town of Manlius on the Application of Falck Renewables, (the "Applicant") which granted the Applicant approval of a Special Permit, which Resolution was passed at a regular meeting of the Planning Board of the Town of Manlius, held on August 10, 2020, permission is hereby granted to Applicant, effective upon the mutual execution of this Permit, to construct a Solar Array - Large Solar Photovoltaic Energy System ("The Project") on the parcel of land located at 5062 North Eagle Village Road, Manlius, New York 13104; identified by Tax Map # 098-01-15.0 on the tax rolls of the Town of Manlius.

This Permit will continue in full force until terminated by the Planning Board for breach of one or more of the conditions pursuant to which it is granted, and the implementation thereof will be in accordance with the following conditions:

1. The Special Permit and the use allowed pursuant thereto shall be for a term of seven (7) years, through August 9, 2027 and to be renewed at the discretion of the Planning Board.
2. Trees shall be planted by the Applicant on the property of Neighboring Parcels along Townsend Road being premises owned by 1) Winschel, at 5190 Townsend Road, and 2) Young, at 5212 Townsend Road. The trees shall be mature Blue Spruce trees no more than 8-10 feet in height and shall be thirty (30) in number for each of the two Neighboring Parcels. Said trees shall be so planted only upon the permission of said Neighboring Parcel Owners on such terms and conditions as the Neighboring Parcel Owners and the Applicant may mutually agree. Said trees shall be planted as soon as feasible and not later than April 30, 2021. In the event either

or both of the Neighboring Parcel Owners do not so consent or give permission, the trees shall be planted on the property of Applicant, along Townsend Road, to provide screening from the roadway to the Solar Array site.

3. The Project shall be constructed in accordance with the Site Plan Approval granted to the Applicant for The Project by the Planning Board of the Town of Manlius on August 10, 2020.

4. If any condition contained herein is determined to be in violation of any law, such condition shall be automatically removed from this Special Permit but shall not affect the effectiveness of any other condition contained herein.

5. Each of the conditions contained herein have been carefully considered as a means of addressing concerns raised by the Town and residents and if the Applicant is in violation of any one condition, or multiple conditions, the Planning Board reserves the right to withdraw this Special Use Permit, at its discretion.

6. The Applicant, by the acceptance of this Special Permit, agrees to all of the above terms and conditions, and in the event that he shall fail for any reason to perform any of the said terms and conditions on his part to be performed, this Special Permit can be revoked.

_____
Lisa Beeman, Clerk
Office of Planning and Development
Town of Manlius, Onondaga County, New York

The undersigned does hereby accept the foregoing Special Permit and agrees to perform all of the terms and conditions thereof.

Falck Renewables

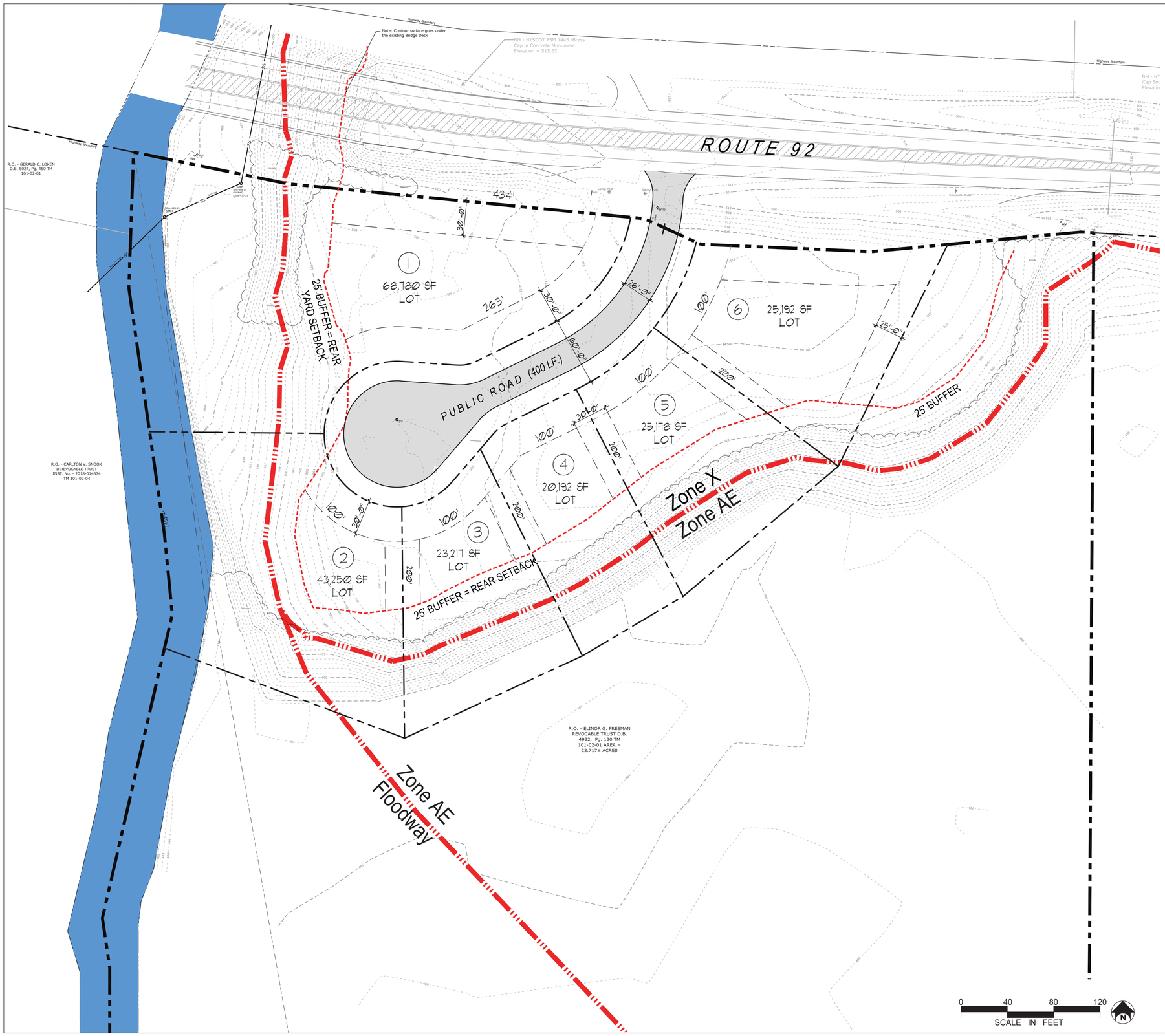
_____
By:

STATE OF NEW YORK)
COUNTY OF ONONDAGA) ss:

On the ____ day of _____ in the year 2020 before me, the undersigned,

personally appeared _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individuals(s) acted, executed the instrument.

_____
Notary Public



RESIDENTIAL DISTRICT (R3)

LOT INFORMATION	TOTAL LOT AREA
LOT SIZE	22.17 ACRES
USABLE LOT AREA	4-5 ACRES
BULK ZONING REGULATIONS	REQUIRED
MINIMUM LOT WIDTH (FEET)	100
MINIMUM LOT DEPTH (FEET)	200
MINIMUM FRONT YARD (FEET)	30
MINIMUM REAR YARD (FEET)	25
MINIMUM SIDE YARD (FEET)	15
MAXIMUM BUILDING HEIGHT (FEET)	40

SITE INFORMATION

GENERAL
SITE ADDRESS - 7430 HIGHBRIDGE RD FAYETTEVILLE, NY
TAX MAP NUMBER - 010.1-02-02.1
SITE ACREAGE - 22.17 Ac
LAND USE - RESIDENTIAL/ COMMERCIAL
EXISTING ZONING DISTRICT - RESTRICTED AGRICULTURE/ RESIDENTIAL R-1

ENVIRONMENTAL

FEMA MAPPING	36067C0244F DATED 11/4/16 LOW RISK OF FLOOD (ZONE X)
SHPO	ARCHEOLOGICALLY SENSITIVE AREAS OR NATIONAL HISTORIC BUILDINGS LOCATED NEAR THE SITE NYSDEC WEBSITE SEARCHED
ENDANGERED PLANTS/ANIMALS	ENDANGERED PLANTS AND ANIMALS ON PROJECT SITE INDICATED BY NYSDEC WEBSITE
FEDERAL WETLANDS	R5UBH / R2UBH
NYSDEC WETLANDS	STATE REGULATED FRESHWATER WETLANDS AND CHECKZONE ON SITE AS INDICATED BY NYSDEC WEBSITE

PERMITS REQUIRED
NYSDEC SPDES PERMIT

KEPLINGER FREEMAN ASSOCIATES
LANDSCAPE ARCHITECTURE & LAND PLANNING
6320 FLY ROAD SUITE 201, EAST SYRACUSE, NEW YORK 13057
PHONE: (315) 445-7980 FAX: (315) 445-7981

CONSULTANTS

FREEMAN ESTATES HOUSING
HIGHBRIDGE STREET
TOWN OF MANLIUS, NY

CLIENT:
Brolex Properties, LLC

ISSUED AND REVISIONS NOTIFICATION

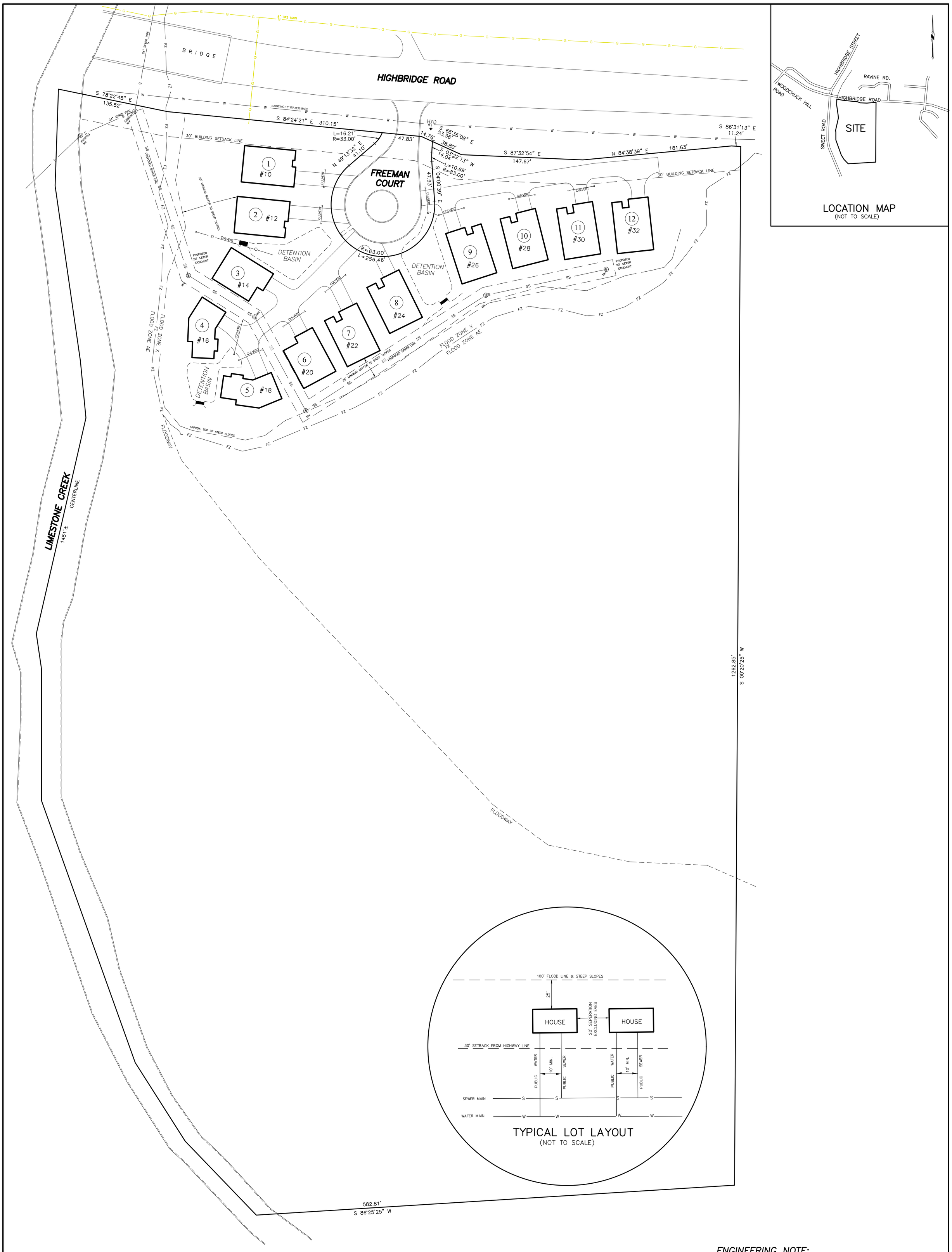
No.	Rev.	Description	Date
1		Municipal Review	2-21-20
2		Municipal Review	5-06-20
3		Municipal Review	6-09-20
4		Municipal Review	7-27-20
5		Municipal Review	8-3-20
6		Municipal Review	9-17-20
7			

Drawn By: SLF/NL
Checked By: SLF
Proj. No.: 39062
Date: 07 JULY 2020
Scale: AS NOTED

Title:
6 LOT - R3
DENSITY PLAN
(DUPLEX UNITS)

L-1

REVIEW 10-7-20



LOCATION MAP
(NOT TO SCALE)

TYPICAL LOT LAYOUT
(NOT TO SCALE)

REFERENCE MAP:

Map prepared by C.T. Male Associates, of Lands of Elinor G. Freeman Revocable Trust. Bearing Project #20.0150 and dated March 3, 2020.

PROJECT AREA:

Project area: 23.717± acres (including Freeman Court).
Area of proposed roadways: 0.339± acres.

ENGINEERING NOTE:

Engineering information taken from a set of plans entitled "Freeman Estates Housing" prepared by GZA GEOEnvironmental of NY, dated 12/15/2020.

ZONING NOTE:

Residential District R–3, with approval for N.Y.S. Town Law 278 "Cluster Development".

0 50 100 150

Only survey maps with the surveyor's embossed seal are genuine, true and correct copies of the surveyor's original work and opinion.
Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of sect. 7209, subsection 2, of the New York State Education Law.
The certification is limited to the persons for whom the survey map is prepared and on his behalf to the title company, governmental agency, and the lending institution listed hereon. Certification are not transferable to additional institutions or subsequent owners.
The location of underground improvements, structures, and utilities are not covered by this certificate.

MUNICIPAL APPROVAL
APPROVED TOWN OF MANLIUS

PLANNING BOARD CHAIRMAN

DATE / FILE NUMBER

APPROVED:

BY:

COUNTY HEALTH DEPARTMENT APPROVAL
ONONDAGA COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

I HEREBY APPROVE THIS TRACT MAP:

BROLEX PROPERTIES, LLC
5912 NORTH BURDICK STREET
EAST SYRACUSE, N.Y. 13057

The undersigned surveyor hereby certifies that this map was made from an actual field survey completed on 1/25/2021.

Forrest L. SeGuin, PLS – N.Y.S. LIC. NO. 050384

MAP REVISIONS

No.	Date	Revision
1	3.2.21	hse #, island
2	3.22.21	sew. esmt. typ. hse.

STATE OF NEW YORK · FORREST L. SeGUIN · LICENSED PROFESSIONAL SURVEYOR · NO. 050384A

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FINAL PLAN

FREEMAN ESTATES

TOWN OF MANLIUS
ONONDAGA COUNTY, NEW YORK

SURVEY AND MAP PREPARED BY:
SeGUIN LAND SURVEYING, P.L.L.C.
FORREST L. SEGUIN, L.S.
6197 DYKE ROAD, CHITTENANGO, N.Y. 13037
PHONE:(315)263–1642 FAX:(315)687–0002

SCALE: 1" = 50'
DATE: 1/25/2021
PROJECT NO. 21012
TAX MAP NO. 101.–2–2.1
DWG. FREEMAN SUBD

DRAFT

RECEIVED
MAR 04 2021

DECLARATION OF COVENANTS, RESTRICTIONS, EASEMENTS, CHARGES & LIENS

DECLARATION made as of the __ day of , 2021, by BROLEX PROPERTIES, LLC., a limited liability corporation organized and existing under the Laws of the State of New York, with offices for the transaction of business located at 5912 North Burdick Street, East Syracuse, NY 13057 (hereinafter referred to as "SPONSOR").

WITNESSETH:

WHEREAS, Sponsor is the Owner of the real property described in Schedule "A" of this Declaration and desires to develop thereon, a residential community, together with common lands and facilities for the sole use and benefit of the residents of such community and their guests; and

WHEREAS, in order to provide for the efficient preservation of the value and amenities in said community, Sponsor has deemed it desirable to create an agency to which will be delegated and assigned the powers of maintaining the grounds of the community, the exteriors of the residential units and the recreational facilities contained therein, administering and enforcing the Covenants, Restrictions, levying, collecting and disbursing the assessments and charges hereinafter created; and

WHEREAS, Sponsor has caused to be incorporated under the Laws of the State of New York, as a Not-for-Profit Corporation, FREEMAN ESTATES HOMEOWNERS ASSOCIATION, LTD., for the purpose of exercising the aforesaid functions.

NOW, THEREFORE, Sponsor, for itself, its successors and assigns, declares that the real property described in Schedule "A", annexed hereto and forming a part hereof, is and shall be held, transferred, sold, conveyed and occupied subject to the Covenants, Restrictions, Easements, Charges and Liens, hereinafter set forth. (Sometimes referred to as the "Declaration".) The same shall be binding on all parties having any right, title or interest in the described properties, or any part hereof, their heirs, successors and assigns, and shall inure to the benefit of each Owner thereof.

DEFINITIONS

Section 101. The following words when used in this Declaration or any supplemental Declaration, unless the context shall prohibit, shall have the following meanings:

(a.) **"Association"** shall mean and refer to FREEMAN ESTATES HOMEOWNERS ASSOCIATION, LTD., its successors and assigns.

(b.) **"Builder"** shall mean any individual, corporation, partnership or joint venture which constructs homes on the lots.

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(c.) **"Common Areas"** shall mean and refer to those areas of land surrounding the homes, comprising approximately 20 acres, which Sponsor shall convey to the Association to be devoted to the common use and enjoyment of the Owners of the Properties. and the Common Areas in these parcels are shown on the "Final Plan of the Properties". Prior to conveying title to the first home located within the project, the Sponsor shall convey title to the Common Areas. Included, shall be the improvements and storm-water facilities to be constructed thereon, shown on the Subdivision Map or Contract Drawings for the project or by any other means so designated. Such areas are intended to be devoted to the common use and enjoyment of the Members of the Association as herein defined, and are not dedicated for use by the general public. Common Areas shall include all portions of the property excepting the lots.

(d.) **"Development"** shall mean and refer to the residential community to be constructed, by the Sponsor, on the Properties.

(e.) **"Homes"** shall mean and refer to all residential dwellings intended for occupancy by a single family and situated on a lot.

(f.) **"Lot" or "Envelope"** shall mean and refer to the footprint for the home as constructed or the land area located under the completed foundation and intended for residential use as shown on the Final Subdivision Map of the Property.

(g.) **"Member"** shall mean and refer to Members of the Association, as provided in Section 201 hereof.

(h.) **"Minimum Separation"** shall mean the minimum distance of 20 lineal feet from any single point located on an existing structure or dwelling unit, to any point on an adjoining property, where a structure or dwelling or any addition, expansion or modification is located or planned to be located, with the exception of roof overhangs that are not to be included in computing the minimum distance of 20 lineal feet of separation. In no event shall roof overhangs exceed a width of 12 inches on any side of a structure or dwelling unit.

(i) **"Owner"** shall mean and refer to the record Owner of the fee simple title to any home. It shall include the Sponsor with respect to any unsold home, but shall not mean or refer to any mortgagee or subsequent holder of a mortgage, unless and until such mortgagee or holder has acquired title pursuant to foreclosure or any proceeding in lieu of foreclosure. The Owner of each home owned, shall be entitled to one (1) vote for each home held, irrespective of whether such ownership is joint, in common, or tenancy by the entirety. Where such ownership is joint, in common or tenancy by the entirety, majority vote of such Owners shall be necessary to cast any vote to which such Owner is entitled.

(j) **"Party Wall"** (if applicable) shall mean and refer to the entire wall, from front to rear all or a portion of which is used for support of each adjoining property, situate, or intended to be situate, on the boundary line between the adjoining lots.

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(k.) **"Project"** shall mean and refer to the residential community to be constructed by the Sponsor on the Properties.

(l.) **"Property"** shall mean and refer to all those lands acquired by the Sponsor from the Eleanor G. Freeman Revocable Trust. This parcel being developed as a single project known as "FREEMAN ESTATES SUBDIVISION" consisting of both homes and Common Areas, that are the subject to this Declaration.

(m.) **"Resident"** shall mean the person or persons in lawful possession of a lot or town house unit.

(n.) **"Sponsor"** shall mean BROLEX PROPERTIES, LLC., its successors and assigns in the development of the Property.

(o) **"Storm-Water Management Feature"** shall mean any detention pond, retention pond, bio-retention basin, swale, culvert pipe, rip-rap, check dam, yard drain, as well as any trees, shrubs or other plantings intended to control storm-water runoff or promote water quality, generated by all types of precipitation, occurring either on site or from adjacent property and relating to the quantity and quality of storm-water runoff and any impact that it may have on the community whether located on Common Area owned by the Association, or from individual patio homes or dwelling units, subject to any easements as shown on the final subdivision map, and including any required maintenance or improvements to these facilities.

MEMBERSHIP AND VOTING RIGHTS IN THE ASSOCIATION

Section 201. Unit and Membership.

Every person or entity, who is an Owner of a lot, which is subjected by this Declaration to assessment by the Association, shall be a Member of the Association. Membership shall be appurtenant to and may not be separated from ownership of any lot, which is subject to assessment.

Section 202. Voting Rights.

The Association shall have two (2) classes of voting membership.

CLASS A

Class A members shall be all Owners who buy single-family lots with a patio home constructed thereon, excepting the Sponsor and any other person or entity which acquires title to all or any portion of the Properties for the purpose of constructing residences thereon for other than their own use. Class A Members shall be entitled to one

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(1) vote for each home, in which they hold ownership interest required for membership by Section 201 hereof.

CLASS B

Class B Members shall be the Sponsor and its successors and assigns and also any other person or entity which acquires title to all or any portion of the Properties for the purpose of constructing residences thereon for other than their own use. The Class B Members shall be entitled to one (1) vote for each unsold home or lot, for so long as it owns one (1) unsold home or lot, provided that upon the happening of either of the following events, whichever first occurs, the Class B membership shall cease and be converted to Class A membership:

(a.) when the total number of homes that have been closed, equals 12.
(b.) on December 31, 2030.

When a Purchaser of an individual home takes title thereto from the Sponsor, he becomes a Class A Member and the membership of the Sponsor with respect to such home shall cease.

PROPERTY RIGHTS IN THE COMMON AREAS

Section 301. Members' Easements of Enjoyment.

(a.) Subject to the provisions of Section 303 hereof, every Member shall have a right and easement of enjoyment in and to the Common Areas and such easement shall be appurtenant to and shall pass with title to every lot.

Section 302. Title to Common Areas.

The Sponsor hereby covenants for itself, its successors and assigns, that on or before the conveyance of the first lot, it will convey to the Association, by Warranty Deed, Fee Title to the Common Areas, free and clear of all encumbrances and liens, except those created by or pursuant to this Declaration. Subject, however, to the following covenant, which shall be deemed to run with the land and shall be binding upon the Association, its successors and assigns:

In order to preserve and enhance the property values and amenities of the community, the Common Areas and all facilities now or hereafter built or installed thereon shall, at all times, be maintained by the Association in good repair and condition and shall be operated in accordance with high standards. The maintenance and repair of the Common Areas shall include, but not be limited to, the grounds, walking trails and any other recreational facilities and appurtenances either now constructed or to be constructed in the future. This Section shall not be amended, as provided for in Section 1001, to eliminate or substantially impair the obligation for the maintenance and repair of the Common Areas.

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Section 303. Extent of Members' Easements.

The rights and easements created hereby shall be subject to the following:

(a.) It is the right of the Sponsor and of the Association, to dedicate, transfer or convey all or any part of the Common Areas, with or without consideration, to any governmental body, district, agency or authority or to any utility company, provided that it shall not adversely affect the use of the Common Areas by the Members of the Association.

(b.) The right of the Sponsor and the Association, to grant and reserve easements and rights-of-way through, under, over and across the Common Areas for the installation, maintenance and inspection of lines and appurtenances for public or private water, sewer, drainage, fuel, oil, electricity, natural gas, telephone and other utilities and services, including cable (CATV) or community antenna, television systems and irrigation or lawn sprinkler systems. The Sponsor shall have the right to grant and reserve easements and rights-of-way through, over, upon and across the Common Areas for the completion of the project and for the operation and maintenance of the Common Areas.

(c.) The right of the Association to dedicate or transfer all or any part of the Common Areas to public agency, authority or utility, for such purposes and subject to such conditions as may be agreed to by the Members, provided that no such dedication or transfer determination as to the purposes or as to the conditions thereof, shall be effective unless an instrument signed by Members entitled to cast seventy-five (75%) percent of the votes of the Class A membership and the vote of the Class B Member, if any, has been recorded, agreeing to such dedication, transfer, purpose or condition and unless written notice of the action is sent to every member at least sixty (60) days in advance of any action taken, except as provided for in subparagraph (a) above and Section 402 hereof.

(d.) The right of the Association, as provided by its By-laws, to suspend the enjoyment rights of any Member for any period during which any assessment remains unpaid, and for a period not to exceed thirty (30) days for any infraction of its published rules and regulations; provided, however, that the right of a Member to ingress and egress over the roads in the project shall not be suspended.

(e.) The rights of the Association, in accordance with Law, its Certificate of Incorporation and By-laws, to borrow money for the purpose of improving the Common Areas and in pursuance thereof, to mortgage the same.

Section 304. Delegation of Use.

Any Owner may delegate, in accordance with the By-laws of the Association, his right of enjoyment to the Common Areas and facilities to the members of his family, his tenants or contract Purchasers, under written contract, who reside on the property, except

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the number of guests using any recreation facility may be limited by the Association. The Association limiting such guest use may adopt reasonable rules.

Section 305. Restrictions Pertaining to Lands Located in 100 Year Flood Zone

The southerly portion of the property shown on the Final Subdivision Plan and located within the 100 year flood zone, as it exists as of the date of this Declaration, shall forever remain the property of the Association and shall be held as forever wild green-space

DEVELOPMENT AND EASEMENTS

Section 401. Limitation on Development.

Sponsor shall in no event construct more than 12 homes on the Property that is subject to this Offering Plan, with the express understanding that the total number of homes may be reduced by the Sponsor based upon the size and footprint of the homes and compliance with the separation, setbacks and other provisions of these Declarations.

Section 402. Reservation of Easements.

Sponsor reserves the easements, licenses, rights and privileges of a right-of-way in, through, over, under and across the Common Areas for the purpose of completing the construction and sale of homes on the Properties. To this end, the Sponsor reserves the right to grant and reserve easements and rights-of-way in, through, over, under and across the Common Areas for the installation, maintenance and inspection of lines and appurtenances for public and private water, sewer, drainage, cable television, electricity, fuel, oil, gas and other utilities and for any other materials or services necessary for the completion of work. The Sponsor, its nominees and agents shall have the right and privilege to maintain general and local sales offices in and about the Properties, including model homes. Also, the Sponsor, its nominees and agents shall have the right and privilege to have their representatives, employees and agents present on the Properties to show the homes to prospective Purchasers and to utilize Common Areas, without limitation, to do any and all things necessary and incidental to the sale of the homes, without charge or contribution. The Sponsor shall have the right to continue to employ signs of its choice upon the Properties in its efforts to market and sell the homes.

Section 403. Easements in Favor of Association and Owners.

Sponsor does hereby establish and create for the benefit of the Association and for all Owners of homes located on the Properties, the following easements, licenses, rights and privileges:

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(i.) Right of ingress and egress to the nearest public highway, over and through all roads, walkways and driveways on the Common Areas.

(i.) Right to connect with and make use of utility lines, wires, pipes, conduits, cable television, sewer and drainage lines, which may from time to time, be in or along the driveways and roads or other portions of the Common Areas, subject to prior written approval required by Section 701.

(ii.) Right of Owner to use the roads, walkways, walk paths, and Common Areas, within the Property, as shown on the filed Subdivision Map.

COMPLETION, MAINTENANCE AND OPERATION OF COMMON AREAS AND COVENANT FOR ASSESSMENT THEREFORE

Section 501. Completion of Construction of Common Areas by Sponsor.

(a.) Utilities and Roadways. Prior to the conveyance of title to each lot, the Sponsor shall complete the construction of the utilities and roadways directly serving such lot.

(b.) Completion of Common Areas. The Sponsor is obliged to complete the construction of the remainder of the Common Areas, at Sponsor's sole cost and expense, and this obligation shall survive the conveyance of the Common Areas to the Association.

Section 502. Operation and Maintenance of Common Areas by Sponsor and Association.

Commencing on the date of conveyance of the first lot, the Association, at its own cost and expense, shall operate and maintain the Common Areas and provide the requisite services in connection therewith, except for the obligations of the Sponsor set forth in Section 502 (b) hereof.

Section 503. Assessments, Liens and Personal Obligations therefore; Operation and Maintenance of Common Areas Solely by the Association.

(a.) By acceptance of a Deed to a lot in the Project, the lot Owner shall be bound to pay the Association: (1) annual assessments or charges (that may be collected on a monthly basis); (2) special assessments for capital improvements. Such assessments, together with such interest thereon and costs of collection thereof, as are hereinafter provided, shall be a charge on the land and shall constitute a continuing lien upon the lot against which each such assessment is made. Each such assessment, together with such interest thereon and cost of collection thereof, as hereinafter provided,

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shall also be the personal obligation of the Owner of such lot at the time when the assessment falls due.

(b.) The Sponsor will be obligated after the closing of title to the first lot, for the differences between the actual Association expenses, including reserves applicable to completed improvements and the Association Charges levied on Owners who have closed title to their lots. Such obligation shall cease after title to 8 lots has been transferred to Owners. No assessment will be charged the Sponsor or a builder on unsold or uncompleted units, other than as set forth in this paragraph.

(c.) The assessments levied by the Association shall be used exclusively for the purpose of promoting the recreation, health, safety and welfare of the residents of the community and in particular for the maintenance of Common Areas and individual homes as set forth herein, which obligation the Association hereby assumes as of the date of the sale of the first lot in the Subdivision to an Owner, except as provided in Section 503(b) above.

Section 504. Amount and Payment of Annual Assessment.

The Board of Directors of the Association shall fix the amount of the annual assessment at an amount sufficient to pay the costs of performing the maintenance of Common Areas and maintenance of homes as required to be performed by the Association under this Declaration. The amount of the annual assessment shall be uniform for each home, with the exception of larger homes that may be built occupying more than one home site or building footprint as shown on the Final Subdivision plan for the community. In such case the assessment will be based on the number of building lots or building footprints used, occupied or eliminated from the subdivision based on the size of the home actually constructed and on a total of (12) homes as shown on the Final Subdivision plan. Payment of the annual assessment shall not commence until the home is completed and sold. The Board shall also fix the amount of the assessment against each home for each assessment at least 30 days in advance of such date and shall at that time prepare a roster of the homes and assessments applicable thereto. Said roster shall be kept in the office of the Association and shall be open to inspection by any Owner. Written notice of the assessment shall thereupon be sent to every Owner subject thereto. Each annual assessment may be paid in equal monthly payments due on the first day of each month. The Board of Directors of the Association shall set the monthly assessment. There shall further be a late charge of five percent (5%) due on any monthly payment not received by the tenth day of each month. In the event a monthly payment remains unpaid for a period of in excess of 30 days, the Board of Directors shall have the option to file a lien with the Onondaga County Clerk's Office for any balance that may be due for a home and shall further be entitled to maintain an action at law for recovery of any payment past due, together with reasonable attorneys' fees, Court costs and disbursements incurred in collecting the same.

The Association shall, upon demand, furnish to the Owner liable for any assessment, a certificate, in writing, signed by an Officer of the Association, setting forth therein, the amount of said assessment and whether it has been paid. Such certificate

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shall be in recordable form and shall be conclusive evidence of payment of any assessment therein stated to have been paid.

This Section shall not be amended as provided in Section 1001 to eliminate or substantially impair the obligation to fix the assessment at an amount sufficient to perform the maintenance of Common Areas and homes required to be performed by the Association under this Declaration.

Section 505. Special Assessments for Capital Improvements.

In addition to the annual assessments, the Board of Directors of the Association may levy a special assessment (which must be fixed at a uniform rate for all homes) applicable to that year only, in an amount not to exceed the sum of $5,000.00 per unit, for the purpose of defraying, in whole or in part, the cost of any construction or reconstruction, unexpected repair or replacement of a described capital improvement upon the Common Areas. Including the necessary fixtures and personal property related thereto, provided that any such assessment shall have the consent of two-thirds (2/3) of the votes of each Class of Members who are voting, in person or by proxy at a meeting duly called for this purpose. Written notice of any such meeting, shall be sent to all members not less than thirty (30) days nor more than sixty days (60) in advance of the meeting, setting forth the purpose of the meeting, the date and location of the meeting, as well as the due date of any special assessment that shall be fixed by Resolution authorizing such assessment.

Section 506. Paid Professional Manager.

The Board of Directors of the Association may employ on such terms as the Board of Directors deems fair and reasonable, the services of a professional manager or managerial firm to supervise all of the duties, work, labor, services and materials required in the operation and maintenance of Common Areas and homes, as required herein.

Section 507. Reserve Fund – Separate Assessment of Owners.

At the time of acquiring title to a lot from the Sponsor, each Owner acquiring such title shall deposit with the Association a Reserve Fund payment in the sum of $1000.00 to enable the Association to fund the carrying out of its duties. Such Reserve Fund payment shall, in no way, be considered a prepayment of the annual assessment fee. Such Reserve Fund payment shall be used solely for the purpose specified in Section 503 (c) hereof as determined from time to time by resolution of the Board of Directors of the Association after the cessation of the Class B Membership of the Sponsor, as specified in Section 202 of this Declaration.

Section 508. Effect of Non-Payment of Assessment. The Personal Obligation of the Owner: The Lien, Remedies of Association.

In addition to the provisions set forth in Section 504, any assessment not paid on the date when due, and it remains unpaid for a period in excess of thirty (30) days, such assessment shall constitute a lien against the home. The amount thereof, together with

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such interest thereon and cost of collection thereof, as are hereinafter provided, constitutes a lien against the lot, which shall bind such lot in the hands of the delinquent Owner, his heirs, devisees, personal representative, successors and assigns. The obligation of the delinquent Owner to pay such assessment shall also continue as the delinquent Owner's personal obligation and any mortgage, judgment or lien that may be filed against the delinquent Owner and/or home shall be subordinate to the assessment and/or lien held by the Homeowners Association.

If the assessment is not paid within thirty (30) days after the delinquency date, the assessment shall bear interest from the date of delinquency at a rate of nine percent (9%) per annum. In addition, the Association may bring legal action against the delinquent Owner personally obligated to pay the same, or may enforce or foreclose the lien against the lot. In the event a judgment is obtained, such judgment shall include interest on the assessment as above provided and reasonable attorney fees to be fixed by the Court, together with the costs and disbursements incurred in the action. An Owner's right to vote shall not be suspended even if an Owner is in default of an annual or special assessment.

Section 509. Subordination of the Lien to Mortgages.

The lien of the assessments provided for herein, shall be subordinate to the lien of any mortgage or mortgages now or hereafter placed upon all lots subject to assessment. Provided, however, that such subordination shall apply only to assessments which have become due and payable prior to the sale or transfer of such property pursuant to a decree of foreclosure or any proceeding in lieu of foreclosure. Such sale or transfer shall not relieve such property from liability for any assessments thereafter becoming due, nor from the lien of any such subsequent assessment. This section shall not be amended as provided in Section 1001.

Section 510. Exempt Property.

The following properties subject to this Declaration shall be exempted from the assessments, charges and liens created herein:

(a.) All properties dedicated or conveyed to a governmental body, district, agency or authority subject to this Declaration;

(b.) All Common Areas, as defined in Section 101 hereof.

Notwithstanding any provisions to the contrary, contained herein, no land or improvements devoted to residential use shall be exempt from said assessments, charges or liens.

Section 511. Reserve Fund.

Pursuant to Section 507 of the Declaration of Covenants, Restrictions, Charges and Liens, the Association has established a Reserve Fund in the sum of $1000.00 payable to the Association on the sale or resale of each townhouse unit, within the

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Freeman Estates Subdivision. Pursuant to the terms of Section 507, said Reserve Fund cannot be used by the Association, until all of the homes have been completed and sold by the Sponsor and the Class B Membership of the Sponsor ceases.

The Sponsor is not required to make any contribution to the Reserve Fund for the Freeman Estates Homeowners Association.

In addition to the Reserve Fund set forth in Section 507 of the Declaration, the individual Owners are further required to pay an annual assessment payable in equal monthly installments to create a Reserve/Capital Fund for the expenditures that will be needed in the foreseeable future. Pursuant to the projected Budget for the Freeman Estates Homeowners Association, each Owner will make a monthly contribution to the Reserve Fund for restricted items that include driveway sealing, driveway repairs and the perpetual maintenance, repair or replacement of the storm-water management features located within the subdivision as further set forth in these Declarations.

The Reserve Fund collected within the restricted items as set forth in the Projected Budget for the Freeman Estates Homeowners Association will be sufficient to pay for the scheduled driveway sealing, driveway repairs and the care and maintenance of the storm-water management features located in the subdivision, which are the only capital expenditure likely to be incurred within the first five (5) years of HOA operation.

While the Sponsor is in control of the Board of Directors, the Reserve Fund, established pursuant to Section 507 of the Declaration and the restricted items set forth in the Projected Budget for the HOA, will not be used by the Sponsor to pay for any deficit in the projected expenses.

In addition, the Sponsor is obligated to pay the difference between the actual Association expenses incurred and the amounts collected from Members of the HOA for the first year of the HOA operation, or until eight (8) patio homes have been sold.

Neither the Department of Law nor any other government agency has passed upon the adequacy of the Reserve Fund set forth within this Offering Plan or the projected Budget for the Freeman Estates Homeowners Association.

STORM-WATER MANAGEMENT FEATURES

Section 601 Associations Responsibility

The Association shall be responsible for the perpetual care, maintenance, replacement and proper operation of all storm-water management features designed and constructed for the subdivision. The maintenance of Common Area and the assessment allocated to storm-water management shall include, but not be limited to, maintenance, repair and replacement at the Association's sole cost and expense all storm-water management features including but not limited to all basins, swales, culverts, pipes and plantings related thereto and including any grassed areas, rip-rap, under-drains, yard drains or other

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improvements situated throughout the subdivision or subsequently constructed in furtherance of storm-water management. In order to effectuate this responsibility, the Association and the Town of Manlius, its agents. Servants and employees shall have a right and easement of ingress and egress over the Common Area in furtherance of inspection, monitoring, maintaining, repairing, replacing or improving the function and operation of any storm-water management feature located within the subdivision.

Section 602. Storm-Water Management Feature Reserve Account

The Association shall be responsible for the maintenance of a "reserve account" specifically earmarked for the perpetual maintenance of all storm-water management features located within the subdivision. On completion and sale of (8) homes in the subdivision and following the Sponsors completion of all storm-water management features, the Association shall be required to commence funding the storm-water management reserve account in the minimum sum of $2,500 per year and with a cap on the total accumulated storm-water management reserve account in the sum of $25,000. Money held in reserve for storm-water management features may be used by the Association as needed for any repair, improvement, replacement or enhancement of a storm-water management feature, including but not limited to the removal of silt, sediment or re-dredging of any basin, swale, or storm-water management area, the addition or improvement of a storm-water management feature, including pipes, culverts, swales, rip-rap or the planting or replacement of any grass, trees or shrubs intended to improve storm-water quality or control storm-water runoff. When the balance in the storm-water management reserve account reaches the maximum cap amount of $25,000, no further monetary additions will be required of the Association, other than the minimum amount needed to restore the account to a $25,000 balance based on expenditures made, or a minimum annual contribution of $2,500 towards restoration of the reserve account to the $25,000 cap, or whichever is less.

Section 603. Associations Failure to Maintain Storm-Water Management Features

In the event the Association fails to properly maintain any storm-water management feature as designed and constructed for the subdivision, and on the written complaint of any homeowner, resident, adjoining property owner or the municipality in which the subdivision is located, the Association shall be required to take immediate action to repair, correct or remedy the situation complained of. In the alternative, or in the event of a questionable complaint relative to storm-water management, the Association may elect to conduct an independent engineering review within (30) days following receipt of the complaint. The Association shall be responsible for the cost of any engineering review and shall provide copies of the completed report to both the party making the complaint and the Town of Manlius. The recommendations of the reviewing engineer shall be deemed conclusive, requiring the Association to commence and complete the recommended repairs and/or improvements within (30) days of receipt or as soon as weather conditions permit. Copies of any written complaints, engineering reviews, recommendations, repairs, improvements or additions to storm-water management features shall be provided by the Association to the complaining party and the Town of Manlius. In the event the Association fails to address a written complaint within (30)

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days of receipt, the Town of Manlius may conduct its own review, and if warranted, deliver to the Association by way of email or regular mail, a "demand for repair" based on observations made. Within (30) days following receipt of a "demand for repair" from the Town of Manlius, the Association shall immediately commence any suggested corrective work and/or improvements with notice to the Town of Manlius and the complaining party. Any corrective work or improvements to the storm-water management features instituted at the request of the Town of Manlius shall be subject to a final inspection and approval by the Town. Should the Association fail to address a storm-water complaint as set forth in these Declarations, or fail to complete any necessary repairs or corrective work within (30) days of a "demand for repair", the Town, of Manlius, may at its option, elect to complete any needed repairs or improvements at the sole cost and expense of the Association. On completion of any repairs or improvements made by the Town following a "demand for repair", the Town shall promptly deliver to the Association an invoice reflecting the cost of the completed repairs or improvements due and payable within (10) days of receipt. In the event the Association fails to make timely repairs, or fails to promptly reimbursement the Town as set forth herein, the Town may seek recovery of any amount due from the Association for completed repairs together with legal costs, disbursements and reasonable attorneys fees in addition to any lien or property tax assessment that may be available to the Town with respect to the Common Areas owned by the Association.

AHIRCTECTURAL CONTROL

Section 701. Restrictions.

No building, fence, wall or other structure, and no change in topography, landscaping or any other item constructed by the Sponsor or a Builder, shall be erected or maintained upon the properties, nor shall any exterior addition to or change or alteration thereto, including without limitation, siding, roofing, windows and exterior doors, porch, overhang, awning or other exterior modifications to any patio home, be made until the plans and specifications showing the nature, kind, shape, height, materials, color and locations of the same have been submitted to and approved, in writing, to be in harmony with the intended exterior theme and design of the project and being consistent with the character and price structure established for the FREEMAN ESTATES SUBDIVISION, in relation to any neighboring or surrounding structures and the specific topography of the proposed site by the Board of Directors of the Association, or by an Architectural Committee comprised of three (3) or more representatives appointed by the Board. In the event the Board or its designated committee fails to approve a request for any exterior modification, in writing and within sixty (60) days following delivery of a completed application that includes details, plans, specifications, color selections and any other relevant information that is requested, and after having been submitted to the Board and stamped by the Board showing date of receipt, then the same shall be deemed disapproved. In that event, this Section shall be deemed to have been fully complied with. Provided, however, that no such failure to act shall be deemed an approval of any matter and in no event may approval be granted for any exterior modification to a patio home that is specifically prohibited by any other provision of this Declaration. The

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provision of this Section shall not apply to the original construction of the 12 homes presently planned for development on the property owned by the Sponsor.

Section 702. Restriction in Section 701 Inapplicable to Developer or Builder.

The provisions in Section 701 shall not apply to the Sponsor or any building or any entity that is affiliated with the Sponsor or any Builder.

Section 703. Restrictions on Builders.

No Builder shall construct any house or related structure upon any lot until the plans and specifications have been submitted and approved, in writing by the Sponsor. Any submission for approval must include specific information pertaining to the nature, kind, shape, and size of the patio home or project, including but not limited to, the height, roof pitch, materials, manufacturer, color, finish, location, distances, separation, utility connection, access, grading, landscaping, plantings and time schedule for work and completion, together with a detailed plot plan or house location survey, prepared by a licensed land surveyor, showing actual distances and measurements together with the required minimum separation of 20 lineal feet as defined herein, by the Sponsor, relative to the desirability, consistency, and harmony of the proposed construction and based on the exterior design, placement and location relative to surrounding structures and the specific topography of the intended site and the perceived impact that the project may have on the character and quality of the overall community.

Section 704.

In all events, it shall be the duty of the Board of Directors and the Architectural Control Committee to observe the spirit and intent of this Declaration in order to preserve the value, character and amenities of the Project and to decline to grant waivers of other relief from these Declarations unless the Owner has demonstrated some significant hardship that he will sustain unless relief is granted.

USE OF PROPERTY.

Section 801. Use and Structures.

No lot shall be used except for residential purposes. No building shall be erected, altered, placed or permitted to remain on any lot, other than an attached or detached single-family dwelling, porch, patio and garage, provided, however, additions or modifications to a structure may only be made with approval of the Association, as provided in Section 701 hereof, provided that the lot Owner, their successors and/or assigns agrees, by written agreement, to assume all maintenance costs in connection therewith. No dwelling or any part thereof shall be used for any purpose except as a private dwelling for one family, nor shall any businesses of any kind be conducted therein, and without limiting the generality of the foregoing, no offices shall be maintained on any lot notwithstanding that such use may conform with the applicable zoning ordinances and codes. No motor vehicle shall be parked or stored, in any manner, on any lot or Common Area, excepting that private passenger-type pleasure automobiles

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only, registered and operable, may be parked in driveways. No business or trade of any kind or noxious or offensive activity shall be carried on upon any lot, nor shall anything be done thereon, which may be or become an annoyance or nuisance to the neighborhood. No campers, motor home, or any vehicle bearing a commercial registration, and no boat, trailer, tent, shack or other vehicle or structure shall be located, erected or used on any lot or parking areas, roadway, and/or driveway, temporarily or permanently.

Section 802. Alterations.

No alteration or addition to or the re-siding, re-roofing or replacement of any exterior feature including windows and exterior doors shall be made unless it first approved in writing pursuant to the provisions contained herein and shown to conform in character, architecture, material, color and finish as originally constructed by the Sponsor or a Builder or approved, in writing, by the Board of Directors or Architectural Committee, in accordance with Section 701 of this Declaration based upon a detailed submission in support of the requested exterior modification.

Section 803. Signs.

No sign of any kind shall be displayed to the public view on any home or lot, except a one-family name sign of not more than one hundred (100) square inches attached to the garage entrance or house number area. A temporary sign of not more than two (2) square feet advertising the property for sale or rent, may be displayed in a window only and only after one (1) year after the last home has been constructed and completed by the Sponsor or a Builder. No such sign shall be illuminated except by non-flashing white light illuminating from within or on the sign itself and shielded from direct view.

Section 804. Drilling and Mining.

No drilling, development operations, refining, quarrying or mining operations of any kind shall be permitted upon or in any lot, nor shall wells, tanks, tunnels, excavation or shafts be permitted upon or in any lot. No derrick or other structure designed for use in boring for any matter shall be erected, maintained or permitted upon any lot.

Section 805. Animals.

No animals, livestock or poultry of any kind shall be raised, bred or kept in any dwelling or on any lot, except that dogs, cats, or other domesticated household pets may be kept, provided that they are not kept, bred or maintained for any commercial purpose and provided that not more than two (2) pets in the aggregate may be kept in any such home or lot. All pets must be curbed and their Owner shall be responsible for cleaning up after them. In no event shall any such pet be permitted on the Common Areas unless carried or on a leash or where the Owner has obtained written permission from the Association for the installation and pet training of an approved invisible fencing system.

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Approval of an invisible fence must be made to the Association in writing specifically setting forth the following; survey plan of house and proposed location of underground fence, number, size and species of pet(s), installation company and equipment, owners proof of liability insurance, proof of pet training with system and any other items that may be requested by the Association. Areas for underground pet fencing will be strictly controlled by the Association and any committee that it may form. All underground fence approvals shall be subject to cancelation at any time in furtherance of preserving the quality and character of the subdivision. Pet owners must comply with all requirements of governmental agencies with regard to the ownership of domesticated animals.

Section 806. Garbage and Rubbish.

Garbage and rubbish shall be stored in containers in the garage. Disposal shall be in accordance with the regulations of the Association. A commercial refuse hauler under contract with the Homeowners Association at least once each week will pick up refuse. Owners shall comply with all applicable rules and regulations regarding separation and disposal of recyclable items.

Section 807. Laundry.

Laundry poles, lines and the like are prohibited outside the home, nor may laundry be hung in any manner whatsoever outside of the home.

Section 808. Antenna.

The Sponsor and the Association shall have the right to arrange for a cable (CATV) or community antenna television system. No individual radio, television or similar towers or disks shall be erected, or continued to be maintained, on any lot or attached to the exterior of any home.

Section 809. Fence.

No fence, fabricated, growing or otherwise (other than those originally constructed by the Sponsor) shall be erected on any lot or attached to the exterior of any home without the written approval required by Section 701 herein. The Owner, their successors and/or assign, erecting the same, at his sole cost and expense shall maintain any such permitted fence.

Section 810. Additional Structures.

No additional structures of any kind, permanent or temporary shall be erected on any lot, without the prior written approval required in Section 701.

Section 811. Obstructions and Storage.

There shall be no obstruction of any of the open spaces on the lots, including Common Areas, lawns, walkways and driveway, nor shall anything be stored in such

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open spaces, without the prior written approval of the Board of Directors, required by Section 701.

Section 812. Displays, Awnings.

Owners shall not cause or permit anything to be hung or displayed on the outside of windows or placed on the outside walls or doors of a home and no awning or canopy shall be affixed to or placed upon the exterior walls or doors, roof of any part thereof, or exposed on or at any window, overhang or fascia, without prior written approval required by Section 701.

Section 813. Plantings.

No Owner or occupant (other than the Sponsor) shall plant or install any trees, bushes, shrubs or other plantings, or authorize the same to be done, on any portion of his lot or Common Areas owned by the Homeowners Association, without prior written approval required by Section 701. No agricultural use of the property shall be permitted. No healthy trees or mature vegetation located on the southerly or westerly embankment, shall be removed or cut down without the prior written approval of the Sponsor or Board of Directors. Trees over six (6) inches in diameter will not be cut or removed from the property except by Sponsor, to clear a sufficient area for the location of roadways, driveways, utilities and patio homes plus an area not to exceed twenty (20) feet around the perimeter of the proposed building or improvement, without prior written approval required by Section 701; however, dead or decayed trees or branches may be removed at any time. Trees may not be trimmed solely for the purpose of improving a view, except upon prior approval in writing as provided in Section 701.

Section 814. Noise, Light, Odors and Nuisances.

Owners shall not cause or permit any unusual or objectionable noise, light, or odors to emanate from their homes. No nuisances shall be allowed upon the property, nor shall any use or practice be allowed which is a source of annoyance to residents or which interferes with the peaceful possession and proper use of the property by its residents.

Section 815. Visibility at Intersections.

No hedge or shrub planting, which obstructs sight lines, shall be placed or permitted to remain on any lot or Common Area owned by the Homeowners Association, so as to create a safety hazard to persons lawfully using the driveway and private roads within the property. No tree shall be permitted to remain within such distances of such intersections unless the foliage line is maintained at sufficient height to prevent obstruction of such sight lines. This section shall not apply to grades, slopes and other formations of the terrain, whether natural or created by the Sponsor, and shall not oblige the Sponsor to maintain any original landscaping to insure compliance herewith.

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Section 816. Windmills and Solar Panels.

No windmills, solar panels or other similar devices shall be erected, by anyone other than the Sponsor, on a lot or on a home, without prior written approval required by Section 701.

Section 817. Rental Restrictions.

Members may rent or lease their homes to others. The minimum rental period shall be one (1) month.

Section 818. Regulations.

The Members shall observe new regulations promulgated by the Board of Directors concerning the use of the property. Copies of such regulations shall be furnished to each Member prior to the time said regulations become effective.

Section 819.

This entire Section 800 shall not be amended as provided for in Section 1001, except to clarify the Restrictions, herein, contained or to create additional Restrictions.

EXTERIOR MAINTENANCE OR REPAIR

Section 901.

(a.) Exterior Maintenance.

In addition to maintenance of the Common Areas, the Association shall provide exterior maintenance upon each lot or around each patio home, which is subject to assessment under Section 1001 hereof, as follows: to maintain, repair, replace and preserve on a non-profit basis, the exterior driveways, lawns and plantings, including trees, shrubs and other vegetation for the purpose of preserving the exterior appearance and configuration of said homes, including, but not limited to, lawn mowing, lawn care, lawn fertilization, lawn repair and/or replacement, snow removal, driveway sealing, driveway repair and/or replacement and repair and/or replacement of mailboxes. The Association shall have the obligation to mow, trim, fertilize and properly maintain all grassed lawn areas within the project including the care, maintenance or replacement of all planting beds, trees, shrubs or other living improvements on the property. The Association shall further have the obligation to keep the driveways and private access roadways, for each home reasonably clear of snow and ice and for the regular sealing, repair and/or replacement of private roadways and driveways. The Association shall be responsible for the coordination of trash and recyclable removal from each home including standardized trash and recyclable containers, weekly collection from each garage or private driveway end. The Association shall have the obligation to maintain, repair, reconstruct, replace or preserve any walking trail that may be provided and/or constructed in the future. The Association shall not be responsible for any water lines, sewer lines, natural gas lines, underground electrical service, CATV service or telephone

DRAFT

service for the individual patio homes, as these items are the responsibility of either the individual Owner or the utility company providing the same. There shall be no obligation on the part of the Association to maintain, repair, reconstruct, replace or preserve any part or portion of the exterior or interior of any home or any fixture or mechanical system (including, but not limited to, heating, including chimney, lighting, plumbing and air conditioning) for any Owner. The above obligation shall not include any maintenance, repairs or replacements caused by fire or other casualty to a home, except as provided under Section 601 hereof, or any maintenance during the warranty period of the above. The lot or home Owner is responsible for the maintenance and repair of all exterior decks, patios and walkways, including railing, stairways, deck boards, joist and support columns for attached deck, either constructed with the original home or added by the individual Owner after having received the appropriate permission from the Architectural Control Committee.

(b.) Maintenance of Storm-water Management Features

The Association shall be forever responsible for the care, maintenance, repair, replacement or improvement of all storm-water management features located within the subdivision.

(c) Disrepair of Lots.

In the event the Owner of any lot in the Properties shall fail to maintain the premises and the improvements situated thereon, in a manner reasonably satisfactory to the Board of Directors of the Association, upon direction of the Board of Directors, it shall have the right, through its agents and employees, after reasonable written notice to the Owner, to enter upon said lot and to repair, maintain and restore the lot and the exterior of the buildings and any other improvements erected thereon. The cost of such work shall be borne solely by each lot Owner and shall be added to and become part of the assessment to which such lot is subject.

(d.) Access at Reasonable Hours.

For the purpose of performing its function under this or any other Section of the Declaration, and to make necessary surveys in connection therewith, the Association, through its duly authorized agents and employees, shall have the right to enter upon any lot at reasonable hours, on any day except Sundays and religious holidays, without prior notice; except that reasonable prior notice will be required in the event of any major repair work.

This Section shall not be amended as provided for in Section 1001, except to clarify any matter or to enlarge the scope of the Association's obligations.

GENERAL PROVISIONS

Section 1001. Duration and Amendment.

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The Covenants and Restrictions of this Declaration shall run with and bind the land forever, and shall inure to the benefit of and be enforceable by the Association, any Member, or the Owner of any land subject to this Declaration, their respective legal representatives, heirs, successors and assigns. These Covenants and Restrictions may be amended, but not nullified by an instrument in writing, signed by the then Owners of seventy-five (75%) percent of the lots and duly recorded, agreeing to change said Covenants and Restrictions, in whole or in part, provided, however, that no such Amendment shall be effective unless written notice of the proposed Amendment is sent to every Owner at least ninety (90) days in advance of any action taken. Notwithstanding the foregoing, the easements, licenses, rights and privileges established and created with respect to the Common Areas by Section 403 shall be perpetual, run with the land and shall survive any destruction, reconstruction and relocation of the physical structures, unless said provision is abrogated by the unanimous written consent of all the Owners. On and after December 31, 2030, Amendments shall require the approval and signature of only two-thirds (2/3) of the then Owners. Any Amendment must be properly recorded in the Onondaga County Clerk's Office to be effective.

Section 1002. Notices.

Any notice required to be sent to any Member or Owner, under the provisions of this Declaration, shall be deemed to have been properly sent when mailed, postpaid, to the last known address of the person who appears as Member or Owner on the records of the Association at the time of such mailing. All notices to the Association shall be sent via certified mail, return receipt requested.

Section 1003. Enforcement.

The Association, the Developer (whether or not owning any lots) and any Owner shall have the right to enforce these Covenants and Restrictions by any proceeding at law or in equity, against any person or persons violating or attempting to violate any Covenant or Restriction, or failing to pay any assessment, to restrain violations, to require specific performance and/or to recover damages, and against the land to enforce any lien created by these Covenants. Primary right to bring suit, hereunder, is vested in the Association and no action or proceeding shall be commenced by any other party in interest without such party first having notified the Board of Directors of the Association of the matter in question and having allowed the Board sixty (60) days within which to commence the requested legal proceeding. Failure to enforce any Covenant or Restriction herein contained, shall, in no event, be deemed a waiver of the right to do so thereafter. All expenses of enforcement, including without limitation, interest, costs and reasonable attorneys' fees shall be specifically chargeable to the Owner of the lot violating these Covenants and Restrictions and shall constitute a lien thereon, collectible immediately and in the same manner as assessments hereunder.

Section 1004. Beneficiaries of Easements, Rights and Privileges.

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The easements, licenses, rights and privileges established, created and granted by this Declaration shall be for the benefit of, and restricted solely to, the Association and the Owners of homes constructed on the properties; and any Owner may grant the benefit of such easements, licenses, rights and privileges to his immediate family members for the duration of their tenancies or visits, subject in the case of the Common Areas to the Rules and Regulations of the Board of Directors but the same is not intended nor shall it be construed as creating any rights in or for the benefit of the general public.

Section 1005. Disposition of Assets Upon Dissolution of Association.

Upon dissolution of the Association, its real and personal assets, including the Common Areas, shall be dedicated to an appropriate public agency or utility to be devoted to purposes as nearly as practicable the same as those to which they were required to be devoted by the Association. No such disposition of the Association properties shall be effective to divest or diminish any right or title of any member vested in him under the licenses, covenants and easements of this Declaration, or under any subsequently recorded Covenants and deeds applicable to the properties, unless made in accordance with the provisions of Section 1001 hereof.

Section 1006. Administration.

The administration of the Association shall be in accordance with the provisions of the Association By-Laws, attached to Part II of this Offering Plan, as Exhibit "D".

Section 1007. Severability.

Invalidation of any of the Covenants, limitations or provisions of this Declaration by judgment or court order, shall in no way, affect any of the remaining provisions hereof, and the same shall continue in full force and effect.

BROLEX PROPERTIES, LLC.

BY: _____
Managing Member/Sponsor

STATE OF NEW YORK, COUNTY OF ONONDAGA, ss:

On the ___ day of _____, 2021, before me the undersigned a Notary Public in and for said State, personally appeared _____, known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that the individual executed the same in the individual's capacity and that by the individual's signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

BROLEX PROPERTIES, LLC.
5912 North Burdick Street
East Syracuse, NY 13057

DRAFT

HAND DELIVERED

Town of Manlius Planning Board
301 Brooklea Drive
Fayetteville, NY 13066

Re: Freeman Subdivision, Final Plan
Proposed Declaration of Covenants

Dear Board Members,

Enclosed at this time please find (11) copies of the "Final Subdivision Plan" for the Freeman Estates project on Rt. 92, Highbridge Road in the Town of Manlius. I believe all of the requested changes have been made to the plan, inclusive of the grass island in the Town entrance roadway and the 911 house addresses assigned by the County. We have also taken the opportunity to meet with the Town Engineer, the developers engineer and several Planning Board Members to review any concerns as well as the final plan.

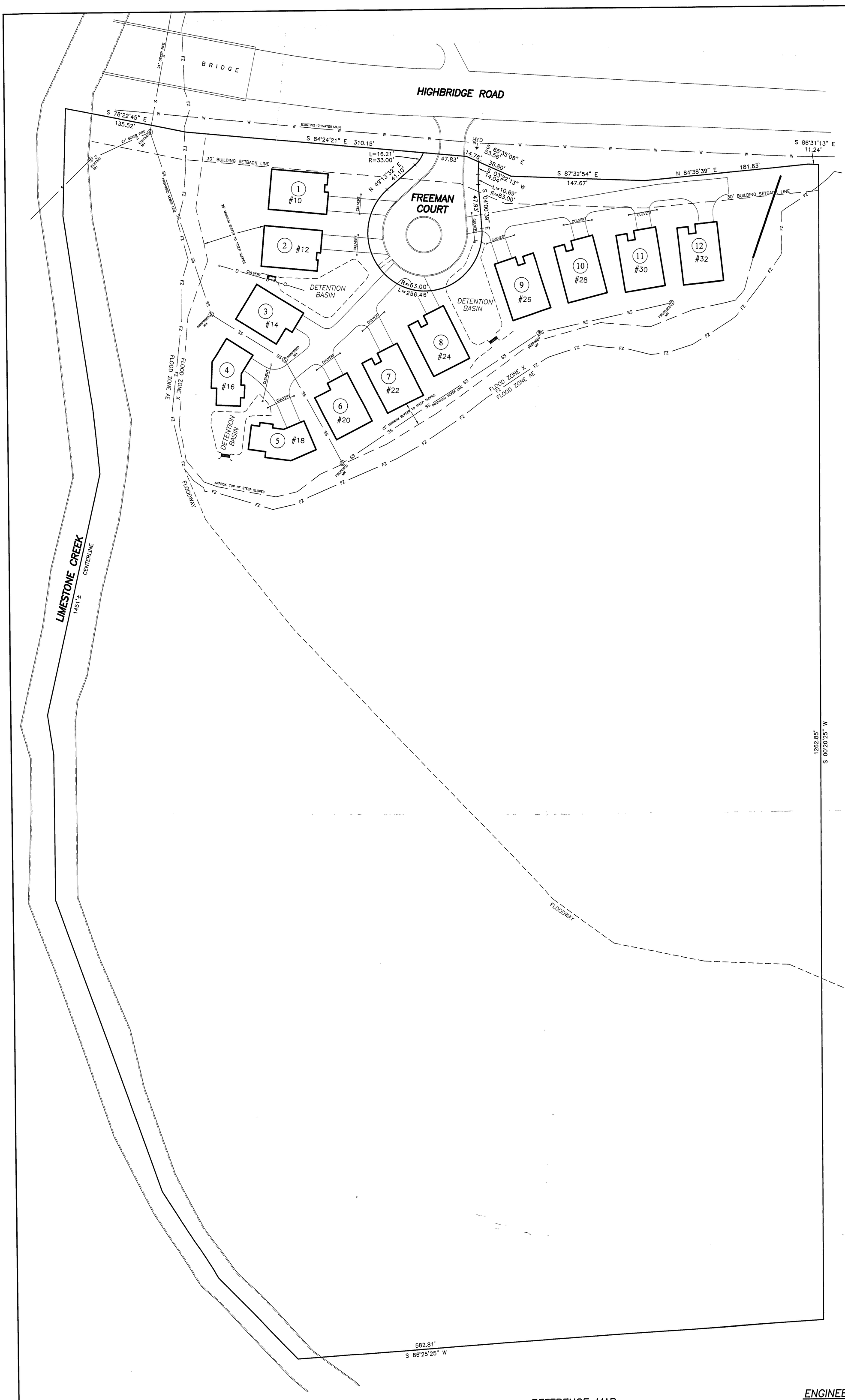
Also enclosed at this time is a copy of the proposed Declaration of Covenants that I forwarded to the Planning Board Attorney for review. I have highlighted some of the important provisions found in the Covenants and these Covenants will be applied to the project in perpetuity to insure that the project forever remains as represented. In particular, I draw your attention to Section 101. (h) regarding a minimum required separation between homes of 20'. Also, Section 401. Limiting the maximum number of homes to 12. Section 601. Pertains to the responsibility of the HOA for storm water management and sets up a "reserve fund" to insure these facilities are maintained to the satisfaction of the Town.

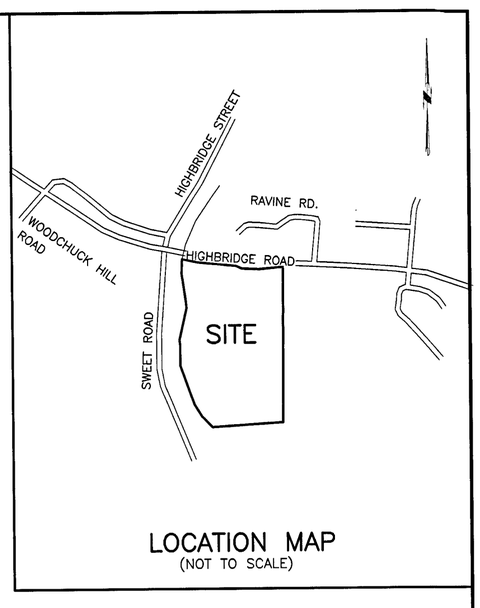
Also enclosed please find correspondence from New York State Department of Transportation relative to the highway entrance permit being approved for the site. Accordingly, at this time we would request an appearance before the Board to address any remaining questions with the hope that a public hearing for final approval can be scheduled?

Please let me know when our next appearance date will be? If anything further is needed at this time, please let me know?

Respectfully Yours,

Thomas M. Oot





LOCATION MAP
(NOT TO SCALE)

REFERENCE MAP:

Map prepared by C.T. Male Associates, of Lands of Elinor G. Freeman Revocable Trust. Bearing Project #20.0150 and dated March 3, 2020.

PROJECT AREA:

Project area: 23.717± acres (including Freeman Court).
Area of proposed roadways: 0.339± acres.

ENGINEERING NOTE:

Engineering information taken from a set of plans entitled "Freeman Estates Housing" prepared by GZA GEOEnvironmental of NY, dated 12/15/2020.

ZONING NOTE:

Residential District R-3, with approval for N.Y.S. Town Law 278 "Cluster Development".

RECEIVED
MAR 04 2021
By

0 50 100 150

Only survey maps with the surveyor's embossed seal are genuine, true and correct copies of the surveyor's original work and opinion.
Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of sect. 7209, subsection 2, of the New York State Education Law.
The certification is limited to the persons for whom the survey map is prepared and on his behalf to the title company, governmental agency, and the lending institution listed hereon. Certification are not transferable to additional institutions or subsequent owners.
The location of underground improvements, structures, and utilities are not covered by this certificate.

MUNICIPAL APPROVAL
APPROVED TOWN OF MANLIUS

PLANNING BOARD CHAIRMAN

DATE / FILE NUMBER

APPROVED:

BY:

COUNTY HEALTH DEPARTMENT APPROVAL
ONONDAGA COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

The undersigned surveyor hereby certifies that this map was made from an actual field survey completed on 1/25/2021.

Forrest L. SeGuin, PLS – N.Y.S. LIC. NO. 050384

I HEREBY APPROVE THIS TRACT MAP:

BROLEX PROPERTIES, LLC
5912 NORTH BURDICK STREET
EAST SYRACUSE, N.Y. 13057

MAP REVISIONS

No.	Date	Revision
1	3.2.21	hse #, island

STATE OF NEW YORK · FORREST L. SeGUIN · 050384 · LICENSED PROFESSIONAL SURVEYOR

COPYRIGHT © 2021 SeGUIN LAND SURVEYING, PLLC

FINAL PLAN

FREEMAN ESTATES

TOWN OF MANLIUS
ONONDAGA COUNTY, NEW YORK

SURVEY AND MAP PREPARED BY:
SeGUIN LAND SURVEYING, P.L.L.C.
FORREST L. SEGUIN, L.S.
6197 DYKE ROAD, CHITTENANGO, N.Y. 13037
PHONE:(315)263-1642 FAX:(315)687-0002

SCALE: 1" = 50'
DATE: 1/25/2021
PROJECT NO. 21012
TAX MAP NO. 101.-2-2.1
DWG. FREEMAN SUBD

BROLEX PROPERTIES, LLC.

5912 North Burdick Street
East Syracuse, NY 13057

March 4, 2021

HAND DELIVERED

RECEIVED
MAR 04 2021
By_____

Town of Manlius Planning Board
301 Brooklea Drive
Fayetteville, NY 13066

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Proposed Declaration of Covenants

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Please let me know when our next appearance date will be? If anything further is needed at this time, please let me know?

Respectfully Yours,

Thomas M. Oot

RECEIVED
MAR 04 2021
By

NEW YORK STATE OF OPPORTUNITY | Department of Transportation

From: Deep, Jeffrey (DOT)
Sent: Monday, February 22, 2021 8:58 AM
To: Edward Reid <Edward.Reid@gza.com>
Subject: RE: Freeman Housing - Manlius

Good Morning Ed,

Thanks for reaching out with this new project to check with us. Although there is existing access to Route 92, consider the change in use, driveway reconstruction, site grade changes, plantings in the State right-of-way, etc., we'll need to review and permit this project under the typical minor-commercial driveway permit process.

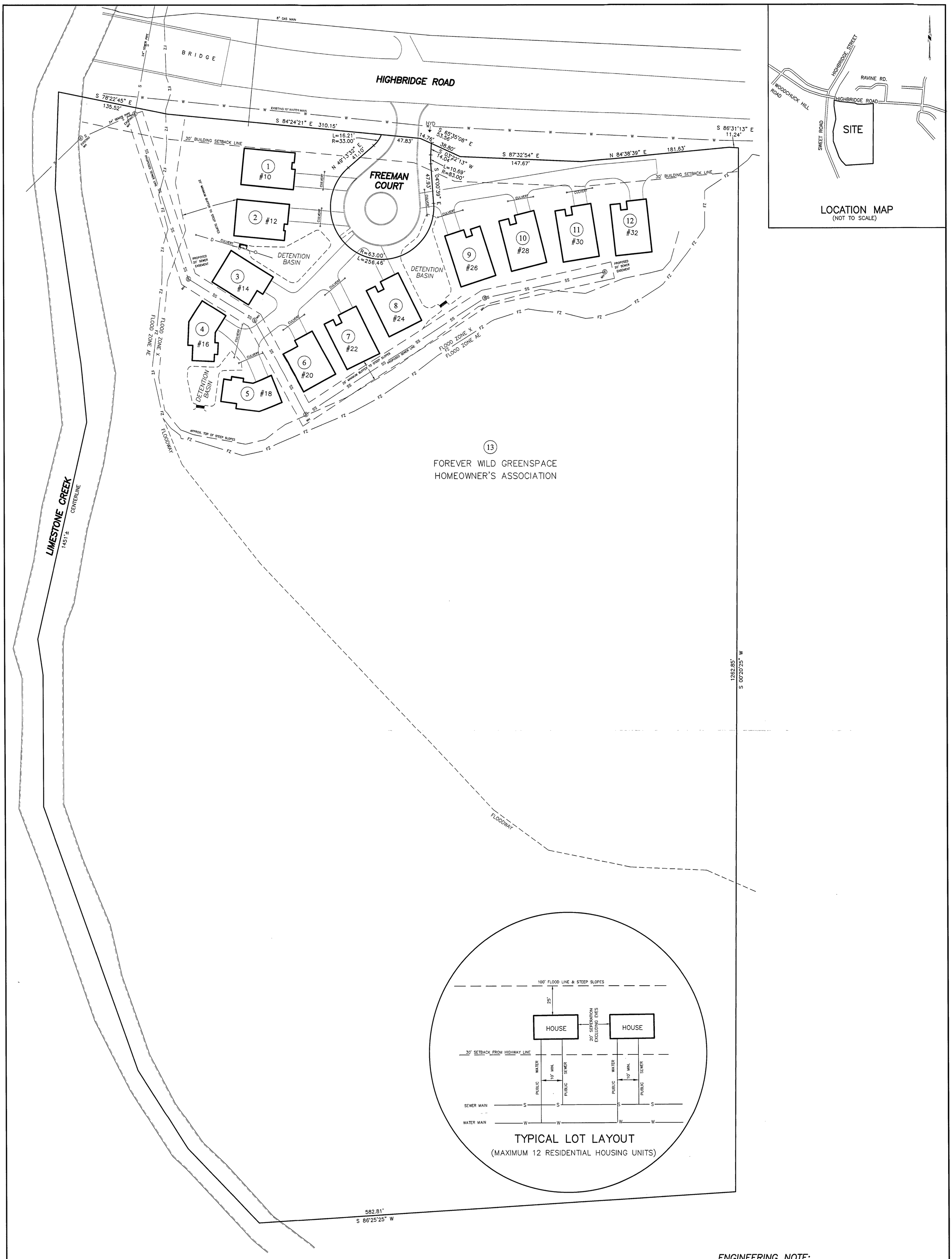
Please submit a Perm 33-Com; Stage 1 for conceptual review or Stages 1&2 for design review. We'll also need a copy of the SWPPP for review when it's available.

Thank you,
Jeff

Jeffrey A. Deep
Assistant Permit Engineer
New York State Department of Transportation, Central New York Region
333 E. Washington Street, Syracuse, NY 13202
(315) 428-3233 | Jeffrey.Deep@dot.ny.gov
https://www.dot.ny.gov/permits

NEW YORK STATE OF OPPORTUNITY | Department of Transportation

From: Edward Reid <Edward.Reid@gza.com>
Sent: Monday, February 22, 2021 7:27 AM
To: Deep, Jeffrey (DOT) <Jeffrey.Deep@dot.ny.gov>



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The certification is limited to the persons for whom the survey map is prepared and on his behalf to the title company, governmental agency, and the lending institution listed hereon. Certification are not transferable to additional institutions or subsequent owners.

The location of underground improvements, structures, and utilities are not covered by this certificate.

MUNICIPAL APPROVAL
APPROVED TOWN OF MANLIUS

PLANNING BOARD CHAIRMAN

DATE / FILE NUMBER

APPROVED:

BY:

COUNTY HEALTH DEPARTMENT APPROVAL
ONONDAGA COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

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Forrest L. SeGuin, PLS – N.Y.S. LIC. NO. 050384

I HEREBY APPROVE THIS TRACT MAP:

BROLEX PROPERTIES, LLC
5912 NORTH BURDICK STREET
EAST SYRACUSE, N.Y. 13057

MAP REVISIONS

No.	Date	Revision
1	3.2.21	hse #, island
2	3.22.21	sew. esmt. typ. hse.
3	4.1.21	Lot 13 & max. hse.

STATE OF NEW YORK · FORREST L. SeGUIN · LICENSED PROFESSIONAL SURVEYOR · NO. 050384

COPYRIGHT © 2021 SeGUIN LAND SURVEYING, PLLC

ENGINEERING NOTE:
Engineering information taken from a set of plans entitled "Freeman Estates Housing" prepared by GZA GEOEnvironmental of NY, dated 12/15/2020.

ZONING NOTE:
Residential District R-3, with approval for N.Y.S. Town Law 278 "Cluster Development".

RECEIVED APR 01 2021 By

0 50 100 150

FINAL PLAN

FREEMAN ESTATES
TOWN OF MANLIUS
ONONDAGA COUNTY, NEW YORK

SURVEY AND MAP PREPARED BY:
SeGUIN LAND SURVEYING, P.L.L.C.
FORREST L. SEGUIN, L.S.
6197 DYKE ROAD, CHITTENANGO, N.Y. 13037
PHONE:(315)263-1642 FAX:(315)687-0002

SCALE: 1" = 50'
DATE: 1/25/2021
PROJECT NO. 21012
TAX MAP NO. 101.-2-2.1
DWG. FREEMAN SUBD

Expected Fee: _____

TOWN OF MANLIUS
PLANNING DEPARTMENT
INITIAL APPEARANCE APPLICATION

DATE: March 11, 2021

Name of Project: Manlius Center Road Proposed Self Storage Center

Applicant must submit 12 copies of all site plans, surveys, and supporting data with the final application before a planning board meeting can be scheduled.

Location of Project: 7030 Manlius Center Road, Manlius, NY 13057

Type of Project:

○ Division of Land ○ Subdivision ○ Accessory Use ○ Zone Change X Site Review ○ Other _____

Developer: G&T Properties LLC. Phone: (315) 415-9409

Address: P.O. Box 411, Fayetteville, NY Zip: 13066

Tax Map Number(#)/s: 062.-04-06.1 & 062.-04-06.2

Present Zoning: Commercial B Desired Zoning: ---

Total Acreage: 2.56 Acres Total Number of Lots: 2

Property Owner/s: Greg Rinaldi Phone: _____

Address: 5990 Drott Drive, East Syracuse, NY Zip: 13057

Tax Map#(s): 062.-04-06.1 & 062.-04-06.2 Owner's Signature: _____

Printed Name: _____

Property Owner/s: _____ Phone: _____

Address: _____ Zip: _____

Tax Map#(s): _____ Owner's Signature: _____

Printed Name: _____

Use next page for additional known property owners' information

Planning Board Meeting Date Assignment: _____

Fee: _____ Paid: _____ Per: ○ Credit/Debit Card ○ Check ○ Cash

TOWN OF MANLIUS

DISCLOSURE AFFIDAVIT

This affidavit is a part of and must be completed and attached to every application, petition, request submitted for a *site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license* or *permit.*

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

I. Greg Rinaldi, being duly sworn, deposes and says that (s) he is:

Property Owner

(applicant, petitioner, corporation officer, property owner, ***etc.)***

II. That deponent has read and is familiar with the provisions of the General Municipal Law, Section 809 which states:

A. Every application, petition or request submitted for a site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license or permit, pursuant to the provisions or any ordinance, local law, rule or regulation constituting the zoning and planning regulations of a municipality shall state the name, residence and the nature and extent of the interest of any state officer or any officer or employee of such municipality is a part, in the person, partnership or association making such application, petition or request (hereinafter called the applicant) to the extent known to such applicant.

B. For the purpose of this action an officer or employee shall be deemed to have an interest in the applicant when (s)he, his/her spouse, or their brothers, sisters, parents, children, grandchildren, or the spouse of any of them:

1) is the applicant, or
2) is an officer, director, partner or employee of the applicant, or
3) legally or beneficially owns or controls stock of a corporate applicant or is a member of a partnership or association applicant, or
4) is a party to an agreement with such an applicant, express or implied, whereby (s) he may receive any payment or other benefit, whether or not for services rendered, or contingent upon the favorable approval of such application, petition or request.

C. Ownership of less than five percent (5%) of the stock of a corporation whose stock is listed on the New York or American Stock Exchanges shall not constitute an interest for the purposes of this section.

D. A person who knowingly and intentionally violates this section shall be guilty of a misdemeanor.

III. That no Town of Manlius officer, employee or a relative of either, as defined in Section 809 General Municipal Law has any interest in this application.

-OR-

If a Town of Manlius officer, employee or relative of either as defined in Section 809 General Municipal law has any interest in this application, the full particulars are provided on an attached sheet.

Date: _____, 20_____.	Date: _____, 20_____.
GREGORY A. RINALDI	
(Print Name)	(Print Name)
(Signature)	(Signature)
G&T Properties LLC.	
(Entity Name)	(Entity Name)
Greg Rinaldi Owner	
By (Officer) (Title)	By (Officer) (Title)
P.O. Box 411, Fayetteville, NY	
(Mailing Address of Applicant)	(Mailing Address of Applicant)
(315) 415-9409	
(Telephone Number)	(Telephone Number)

ACKNOWLEDGEMENTS

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

On this 8th day of March in the year 20 21, before me, the undersigned, a notary public in and for said state, personally appeared Gregory A. Rinaldi, _____, and _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within Petition and acknowledged to me the he/she/they executed the same in his/her/their capacity, and that by his/her/their signature(s) on the Petition, the individual or the persons upon behalf of which the individual acted executed the instrument.

Notary Public

SARAH KAY COLEMAN
Notary Public, State of New York
Registration #01CO6316692
Qualified in Onondaga County
Commission Expires December 15, 2022

CORPORATE ACKNOWLEDGEMENT

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

Gregory A. Rinaldi, being duly sworn, deposes and says the s(he) is the Member of G&T Properties, LLC corporation named in the within Application/Petition, that s(he) has read the foregoing affidavit and knows the contents thereof; that the same is true of s(he) own knowledge, except as to those matters therein stated to be alleged upon information and belief, and as to those matters s(he) believes it to be true.

Applicant Signature

Subscribed to me before this day
Of March 8, 2021

Notary Public

SARAH KAY COLEMAN
Notary Public, State of New York
Registration #01CO6316692
Qualified in Onondaga County
Commission Expires December 15, 2022

06/29/16 LB

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:
Self Storage Facility - Manlius Center Road

Project Location (describe, and attach a location map):
7030 Manlius Center Road, Manlius, NY 13057

Brief Description of Proposed Action:
Proposed construction of self storage facility at a vacant commercial property on Manlius Center Road. Project will include indoor climate controlled storage building and office building, drive-up storage buildings, asphalt parking and drive aisles, and associated stormwater mitigation facilities.

Name of Applicant or Sponsor:	Telephone: (315) 415-9409
G&T Properties LLC (Greg Rinaldi)	E-Mail: grinaldi8408@gmail.com

Address:
5990 Drott Drive

City/PO:	State:	Zip Code:
East Syracuse	NY	13057

	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: NYSDEC SPDES Stormwater Permit, Town Board and Planning Board Approval, NYSDOT, SOCPA	☐	☑

3. a. Total acreage of the site of the proposed action? 2.56 acres
   b. Total acreage to be physically disturbed? 2.5 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 2.56 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

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

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.	NO	YES
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?	☐	☑

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.	NO	YES
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?	☑	☐

13.	NO	YES
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? Northern Long-eared Bat, In...	☐	☑
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: Stormwater to be collected and mitigated in an on-site underground detention basin with an outlet control structure.		
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:	☑	☐
19. 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: MATTHEW R. NAPIERALA, P.E. Date: 11 MARCH 2021

Signature: Matthew R. Napierala Title: MANAGING ENGINEER - ENGINEER FOR OWNER

PRINT FORM

EAF Mapper Summary Report

Friday, March 08, 2019 9:30 AM

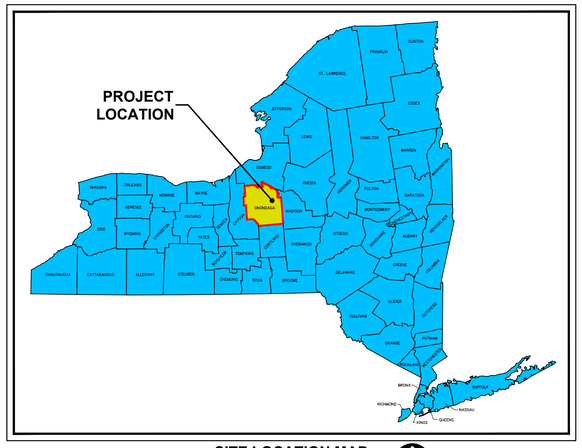
Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the 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]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Northern Long-eared Bat, Indiana Bat
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No

PROPOSED SELF STORAGE FACILITY

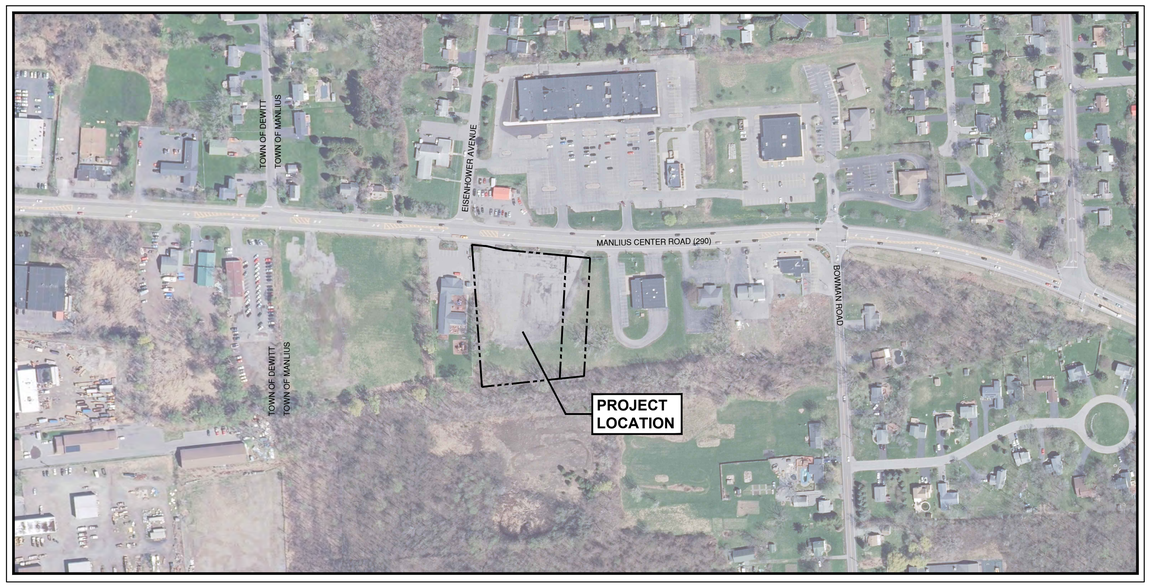
7030 MANLIUS CENTER ROAD (ROUTE 290)
EAST SYRACUSE, NY 13057

TOWN OF MANLIUS
ONONDAGA COUNTY
NEW YORK STATE



SITE LOCATION MAP
NOT TO SCALE

PROJECT LOCATION MAP
NOT TO SCALE



AERIAL MAP
1"=200'

PREPARED BY:

NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104

email: MNAP@NAPCON.COM
PH: (315) 682-5580 FAX: (315) 682-5544

PREPARED FOR:

G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET INDEX:

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Dig Safely. New York
Call 811 before you dig

APPROVED BY OWNER

NAME DATE

SHEET TITLE:

TITLE SHEET

NO.	REVISION/ISSUE	DATE

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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, PROFESSIONAL ENGINEER, LANDSCAPE ARCHITECT, OR LAND SURVEYOR TO ALTER ANY ITEM ON THIS DOCUMENT IN ANY WAY.

ANY LICENSEE WHO ALTERS THIS DOCUMENT IS REQUIRED BY LAW TO AFFIX HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE AND SPECIFIC DESCRIPTION OF THE ALTERATIONS.

PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 068733

PROJECT NO. 20-1913
DATE 11 MAR 2021

PROPOSED SELF STORAGE
7030 MANLIUS CENTER RD

TOWN OF MANLIUS
ONONDAGA COUNTY, NY

SHEET **C-1**

GENERAL NOTES

1. PROPERTY LINE INFORMATION TAKEN FROM A PLAN ENTITLED "LANDS OF G&T PROPERTIES, INC. PART OF LOT 44" PREPARED BY SEGUIN LAND SURVEYING, P.L.L.C. (FORREST L. SEGUIN, L.S.).
2. THE PLANS SHOW SUBSURFACE STRUCTURES, ABOVEGROUND STRUCTURES, AND/OR UTILITIES FROM FIELD LOCATION AND RECORD MAPPING. EXACT LOCATION MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE DIFFERENT FROM THAT SHOWN OR MAY NOT BE SHOWN AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. THE CONTRACTOR IS TO CALL DIG SAFELY NY AT 1-800-962-7962 A MINIMUM OF 72 HOURS BEFORE DIGGING, DRILLING, OR BLASTING.
3. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER.
4. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
5. THE CONTRACTOR SHALL RESTORE LAWNS, DRIVEWAYS, CULVERTS, SIGNS, AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD A CONDITION AS BEFORE BEING DISTURBED AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC. AND SHALL COMPLY WITH ALL PERMITS.
7. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES, AND REGULATIONS.
8. ALL PROPOSED UTILITIES AND APPURTENANCES ARE TO BE CONSTRUCTED IN COMPLIANCE WITH THE LOCAL MUNICIPALITY'S CODES AND REGULATIONS GOVERNING THE INSTALLATION OF SUCH UTILITIES.
9. THE ENGINEER RESERVES THE RIGHT TO EXAMINE ANY WORK DONE ON THIS PROJECT AT ANY TIME TO DETERMINE CONFORMANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OF THIS PROJECT AS INTENDED AND INTERPRETED BY THE ENGINEER.
10. MISCELLANEOUS WORK NOT SPECIFICALLY SHOWN ON THE CONTRACT DRAWINGS SUCH AS PATCHING, BLOCKING, TRIMMING, ETC. SHALL BE PERFORMED AS REQUIRED TO MAKE THE WORK COMPLETE.
11. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE INFORMATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND COORDINATE WORK WITH ALL OTHER CONTRACTS FOR THE SITE.
13. THE CONTRACTOR SHALL:
    A. VERIFY ALL CONDITIONS IN THE FIELD PRIOR TO COMMENCEMENT OF WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
    B. EXAMINE THE SITE AND INCLUDE IN HIS WORK THE EFFECT OF ALL EXISTING CONDITIONS ON THE WORK.
    C. PROVIDE AND INSTALL ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH RECOGNIZED GOOD STANDARD PRACTICE.
    D. HOLD THE OWNER HARMLESS AGAINST ANY AND ALL CLAIMS ARISING FROM WORK DONE BY THE CONTRACTOR ON THE SITE.
14. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISIONS OF NEW YORK STATE INDUSTRIAL CODE RULE 23 AND OSHA REGULATIONS FOR CONSTRUCTION. SHEET PILING SHALL BE DESIGNED AND SEALED BY A NEW YORK STATE PROFESSIONAL ENGINEER.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK. HE SHALL SUBMIT A DEWATERING PLAN DESIGNED AND SEALED BY A NEW YORK STATE PROFESSIONAL ENGINEER. CONTRACTOR SHALL MAINTAIN EXISTING SITE DRAINAGE PATTERNS THROUGHOUT CONSTRUCTION.
16. ALL BACKFILL USED IN TRENCHES EXCAVATED IN EXISTING ROADWAYS SHALL BE PLACED IN MAXIMUM 6-INCH LIFTS AND COMPACTED BY MEANS OF A MECHANICAL COMPACTOR BETWEEN LIFTS TO 90% STANDARD PROCTOR COMPACTION.
17. WHEN BACKFILLING AROUND PROPOSED OR EXISTING STRUCTURES, MATERIAL SHALL BE PLACED IN MAXIMUM 6-INCH LIFTS AND COMPACTED BY MEANS OF A MECHANICAL COMPACTOR BETWEEN LIFTS TO 90% STANDARD PROCTOR COMPACTION.
18. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE ENGINEER AND THE UTILITY OWNER. NOTIFY THE ENGINEER AND THE UTILITY OWNER 72 HOURS BEFORE EACH AND EVERY CONNECTION TO AN EXISTING SYSTEM IS MADE.
19. CONSTRUCTION OF ALL PROPOSED UTILITIES MUST BEGIN AT ITS POINT OF CONNECTION TO THE EXISTING UTILITY OR AT THE LOWEST POINT IN THE SYSTEM. RIMS, GRATES, INVERTS, CLEARANCES, AND LOCATION AT CROSSINGS MUST BE VERIFIED PRIOR TO THE BEGINNING OF CONSTRUCTION.
20. MAINTAIN FLOW FOR ALL EXISTING UTILITIES.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP AS-BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES, AND INVERTS. THE OWNER AND HIS REPRESENTATIVES SHALL REVIEW AS-BUILT PLANS SHOWING ALL UNDERGROUND UTILITIES INSTALLED OR ENCOUNTERED. THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR OMISSIONS TO THE SATISFACTION OF THE OWNER AND HIS REPRESENTATIVES BEFORE UTILITIES WILL BE ACCEPTED.
22. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC IN ALL AREAS IN ACCORDANCE WITH THE NYSDOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
23. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL COMMERCIAL, RESIDENTIAL, AND PUBLIC PROPERTIES OR AS DIRECTED BY THE ENGINEER.
24. ALL EXCAVATIONS SHALL BE BACKFILLED TO EXISTING GRADE AT THE END OF EACH WORKDAY.
25. THE CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO EXISTING UTILITIES. DAMAGED UTILITIES SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

SITE DEMOLITION NOTES

1. THE GENERAL CONSTRUCTION CONTRACTOR RESPONSIBLE FOR DEMOLITION WORK AS NOTED ON THIS PLAN.
2. EXISTING FEATURES ARE BASED ON A SURVEY BY SEGUIN LAND SURVEYING, P.L.L.C. (FORREST SEGUIN, L.S.)
3. OWNER WILL PROVIDE AN 'ALL CLEAR' PRIOR TO DEMOLITION.
4. THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK AT 811 FOR UTILITY STAKEOUTS A MINIMUM OF THREE (3) BUSINESS DAYS PRIOR TO ANY DEMOLITION WORK, SITE WORK, OR EXCAVATION.
5. THE CONTRACTOR SHALL COORDINATE WITH ALL PUBLIC AND PRIVATE UTILITIES FOR RESPECTIVE REQUIREMENTS FOR THE REMOVAL/ABANDONMENT OF UTILITY MAINS/LATERALS SERVICING THE SITE.

GRADING NOTES

1. MAXIMUM SLOPE FOR ALL CUT AND FILL LAWN AREAS SHALL BE 3H:1V UNLESS SHOWN OTHERWISE ON PLANS.
2. SLOPES GREATER THAN 4H:1V SHALL BE STABILIZED IMMEDIATELY AFTER GRADING OCCURS IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
3. CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT AND BECOME FAMILIAR WITH THE SOIL CONDITIONS ON THE SITE. CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS AND REQUIREMENTS FROM THE GEOTECHNICAL ENGINEER.
4. UNLESS OTHERWISE NOTED, LIMITS OF DISTURBANCE ARE AS REPRESENTED BY PROPOSED GRADES. NO GRADING SHALL TAKE PLACE BEYOND LIMITS SHOWN.
5. ALL SLOPES STEEPER THAN 3H:1V SHALL BE TREATED WITH AN EROSION CONTROL PRACTICE SUCH AS A ROLLED EROSION CONTROL BLANKET OR RIPRAP. SEE DESIGNATED AREAS ON PLANS.

UTILITY NOTES

1. ALL CONSTRUCTION SHALL CONFORM WITH APPROPRIATE CODE AND REGULATORY REQUIREMENTS.
2. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH MUNICIPAL REGULATIONS AND THE STANDARDS OF THE PRIVATE UTILITY COMPANIES.
3. THESE PLANS SHOW PUBLIC UTILITY CONNECTION ONLY. PRIVATE UTILITY SERVICE FINAL LOCATION, SIZE AND DEPTH ARE SUBJECT TO THE APPROVAL OF THE UTILITY COMPANY.
4. EXTERIOR BUILDING LIGHTING LUMINARES SHALL BE OF SIZE AND TYPE, AND AT LOCATIONS SPECIFIED BY THE ARCHITECTS ELECTRICAL SITE PLAN AND SHALL CONFORM TO THE MUNICIPAL ZONING REQUIREMENTS.
5. WATER
   WATER LINES, FITTINGS AND APPURTENANCES TO BE IN CONFORMANCE WITH APPROPRIATE CODE AND REGULATORY REQUIREMENTS. VERIFY EXISTING LINE SIZE AND LOCATION PRIOR TO CONSTRUCTION. ALL WATER LINES MUST MAINTAIN A MINIMUM 10' HORIZONTAL SEPARATION WITH SANITARY SEWER AND STORM SEWER LINES. ALL WATER MAIN AND SERVICE WORK MUST BE COORDINATED WITH THE MUNICIPAL WATER DEPARTMENT.
6. SANITARY SEWER
   SANITARY SEWERS SHALL BE PVC PER ASTM D3034 SDR 35 UNLESS OTHERWISE NOTED. SUITABLE COUPLINGS AND ADAPTERS SHALL BE PROVIDED AT BUILDING CONNECTIONS.
7. STORM DRAINAGE
   STORM DRAINAGE PIPING SHALL BE SMOOTH INTERIOR CORRUGATED PLASTIC PIPE (SICPP) UNLESS OTHERWISE NOTED (SICPP). PIPE JOINTS AND FITTINGS SHALL CONFORM TO AASHTO M252 OR AASHTO M294.
8. ELECTRIC AND GAS
   ALL ELECTRIC AND GAS INSTALLATION SHALL BE COORDINATED WITH NATIONAL GRID. ALL SITE ELECTRIC IS TO BE PROVIDED BY THE BUILDING ARCHITECT/PROJECT ELECTRICIAN. THESE DRAWINGS DO NOT SHOW CIRCUITING OR SITE WIRING. REFER TO SITE ELECTRICAL BY ELECTRICIAN.

LEGEND: PROPOSED
(SEE EXISTING CONDITION SURVEY FOR LEGEND OF EXISTING ELEMENTS)

- ----- PROPOSED BUILDING
- ----- PROPERTY LINE
- ----- PROPOSED EASEMENT LINE
- ----- PROPOSED CONCRETE SIDEWALK/PAD
- ----- PROPOSED STORM INLET
- ----- PROPOSED MANHOLE (STORM OR SEWER AS NOTED)
- ----- PROPOSED STORMWATER QUALITY TREATMENT UNIT
- SAN ----- PROPOSED SANITARY PIPE
- ST ----- PROPOSED STORM PIPE
- W ----- PROPOSED WATER PIPE
- G ----- PROPOSED GAS PIPE
- UGE ----- PROPOSED UNDERGROUND ELECTRIC
- ----- PROPOSED STOCKADE FENCE
- ----- PROPOSED TREE
- ----- PROPOSED LIGHT
- ----- PROPOSED DESIGNATED ACCESSIBLE PARKING SPACE
- ----- PROPOSED NO PARKING
- ----- DIRECTIONAL ARROW (NOT ACTUAL PAVEMENT MARKING)
- ----- PROPOSED PAVEMENT MARKING

LANDSCAPE NOTES

TEMPORARY SEEDING MIXTURES

	LBS./ACRE	LBS./1000 SQ. FT
FOR SPRING, SUMMER OR EARLY FALL SEEDINGS:		
A. ANNUAL RYEGRASS -OR-	30	0.70
B. PERENNIAL RYEGRASS	30	0.70
FOR LATE FALL OR EARLY WINTER		
A. WINTER RYE (AROOSTOOK)	100	2.50

MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROXIMATELY 2 LARGE ROLLED BALES/ACRE).

MULCH ANCHORING IS REQUIRED WHERE WIND OR AREAS OF CONCENTRATED WATER ARE OF CONCERN.

PERMANENT SEEDINGS SHOULD TAKE PLACE IN EARLY SPRING. PROPER MULCHING AND ADAQUATE MOISTURE MUST BE PROVIDED FOR PERMANENT SEEDING. RESEEDING OF FAILED AREAS SHALL TAKE PLACE DURING LATE SUMMER/EARLY FALL OR DURING THE FOLLOWING SPRING.

FERTILIZER:
5% NITROGEN
10% PHOSPHORUS
5% POTASH
HYDROMULCH
HYDROMULCH SHALL BE A WOOD-FIBER COMPOSITION (50% PAPER - 50% WOOD)
IF MULCHING IS NOT APPLIED WITH HYDROSEED MIXTURE, APPROVED MULCHING, CONSISTING OF STALKS OF WHEAT, OATS, OR RYE, SHALL BE SPREAD EVENLY AT A RATE OF 2 TONS PER ACRE. MULCH IS TO BE TACKED INTO PLACE.

PERMANENT SEEDING MIXTURES

	LBS./ACRE
SEED MIXTURE NO. 1	
CREEPING RED FESCUE (var. ENSYLVA)	10
PERENNIAL RYE GRASS (var. PENNFINE)	10
SEED MINXTURE NO. 2	
SWITCHGRASS (var. SHELTER, PATHFINDER, TRAILBLAZER, OR BLACKWELL)	20
SEED MINXTURE NO. 3	
BIRDSFOOT TREFOIL (var. EMPIRE, PARDEE)	10
REDTOP	2
TALL FESCUE (var. KY 31, REBEL)	20
SEED MIXTURE NO. 4	
CREEPING RED FESCUE (var. ENSYLVA)	20
CHEWINGS FESCUE (COMMON)	20
PERENNIAL RYE GRASS (var. PENNFINE)	5
RED CLOVER (COMMON)	10

SEED MIXTURE 1 TO BE APPLIED TO SHADED AREAS.

SEED MIXTURE 2 IS IN PURE LIVE SEED. TO BE APPLIED TO AREAS UPLAND OF WETLANDS AND ALONG STORMWATER MITIGATION BASIN BANKS.

SEED MIXTURE 3 TO BE APPLIED TO ALL SWALES AND WATERWAYS. WHITE CLOVER OR LADINO CLOVER MAY BE SUBSTITUTED FOR BRIDSFOOT TREFOIL AND SEEDED AT THE SAME RATE PERENNIAL RYEGRASS MAY BE SUBSTITUTED FOR REDTOP BUT INCREASE SEEDING RATE TO 5 LBS./ACRE (0.1 LBS./1000 SQ. FT)

SEED MIXTURE 4 TO BE APPLIED TO ALL AREAS. (NOT FOR USE IN PLAYGROUNDS OR AS TURF)

METHOD OF SEEDING
BROADCAST, DRILLING WITH A CULTIPACK TYPE SEEDER, OR HYDROSEEDING ARE ACCEPTABLE. GOOD SOIL TO SEED CONTACT IS THE KEY TO SUCCESSFUL SEEDINGS.

MULCHING
APPLY STRAW MULCH AT A RATE OF 2 TON/ACRE (90 LBS./1,000 SF) ANCHORED WITH WOOD FIBER MULCH (HYDROMULCH) AT 500 - 750 LBS./ACRE (11 - 17 LBS./1,000 SF). THE WOOD FIBER MULCH MUST BE APPLIED THROUGH A HYDROSEEDER AFTER MULCHING.

IRRIGATION
WATERING MAY BE ESSENTIAL TO ESTABLISH TO NEW SEEDING. WEATHER CONDITIONS WILL DICTATE WHEN TO WATER. EACH APPLICATION MUST BE UNIFORMLY APPLIED AND 1 TO 2 INCHES OF WATER SHOULD BE APPLIED PER APPLICATION.

PERMANENT SEEDING TO OCCUR AFTER FINAL GRADING HAS OCCURRED. PERMANENT SEEDING WILL INCLUDE:
SITE PREPARATION
A. SCARIFY ALL COMPACT, SLOWLY PERMEABLE, MEDIUM AND FINE TEXTURED SUBSOIL AREAS. SCARIFY AT APPROXIMATELY RIGHT ANGLES TO THE SLOPE DIRECTION IN SOIL AREAS THAT ARE STEEPER THAN 5 PERCENT.
B. REMOVE REFUSE, WOOD PLANT PARTS, STONES OVER 3 INCHES IN DIAMETER, AND OTHER LITTER.

TOPSOIL MATERIALS
A. TOPSOIL SHALL HAVE AT LEAST 2 PERCENT AND NO GREATER THAN 6 PERCENT BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL.
B. TOPSOIL SHALL HAVE NOT LESS THAN 20 PERCENT FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15 PERCENT CLAY.
C. TOPSOIL TREATED WITH SOIL STERILANTS OR HERBICIDES SHALL BE SO IDENTIFIED TO THE PURCHASER.
D. TOPSOIL SHALL BE RELATIVELY FREE OF STONES OVER 1½" INCHES IN DIAMETER, TRASH, NOXIOUS WEEDS SUCH AS NUTSEDGE AND QUACKGRASS, AND WILL HAVE LESS THAN 10% GRAVEL BY VOLUME.
E. TOPSOIL CONTAINING SOLUBLE SALTS GREATER THAN 500 PPM SHALL NOT BE USED.

APPLICATION AND GRADING
A. TOPSOIL SHALL BE DISTRIBUTED TO A UNIFORM DEPTH OVER THE AREA. IT SHALL NOT BE PLACED WHEN IT IS PARTLY FROZEN, MUDDY, OR ON FROZEN SLOPES OR OVER ICE, SNOW, OR STANDING WATER PUDDLES.
B. TOPSOIL PLACED AND GRADED ON SLOPES STEEPER THAN 5% SHALL BE PROMPTLY FERTILIZED, SEEDED, MULCHED AND STABILIZED BY "TRACKING" WITH SUITABLE EQUIPMENT.
C. A MINIMUM OF 4 INCHES OF TOPSOIL IS TO BE USED IN ALL AREAS.

SOIL AMENDMENTS
A. LIME TO A pH OF 7.0. LIME IS NOT TO BE APPLIED WITHIN 50 FEET OF STREAMS AND WETLANDS.
B. FERTILIZER APPLICATION RATE TO BE BASED ON SOIL TESTS.
   1. IN NO CASE SHALL FERTILIZER BE APPLIED BETWEEN DECEMBER 1 AND APRIL 1 ANNUALLY.
   2. FERTILIZER SHALL NOT BE SPREAD WITHIN 20 FEET OF A SURFACE WATER.
   3. ANY FERTILIZER FALLING OR SPILLED INTO IMPERVIOUS SURFACE AREAS SUCH AS PARKING LOTS, ROADWAYS, AND SIDEWALKS SHALL BE IMMEDIATELY CONTAINED AND LEGALLY APPLIED OR PLACED IN AN APPROPRIATE CONTAINER.
   4. INCORPORATE THE FERTILIZER, AND LIME IF SPECIFIED, INTO THE TOP 2 - 4 INCHES OF THE TOPSOIL OR SOIL PROFILE.
   5. WHEN APPLYING FERTILIZER BY HYDROSEEDING CARE SHOULD BE TAKEN TO APPLY MIX ONLY TO SEED BED AREAS AT AN APPROPRIATE FLOW RATE TO PREVENT EROSION AND SPRAYING ONTO IMPERVIOUS AREAS.

PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
GENERAL NOTES

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
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PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 068733

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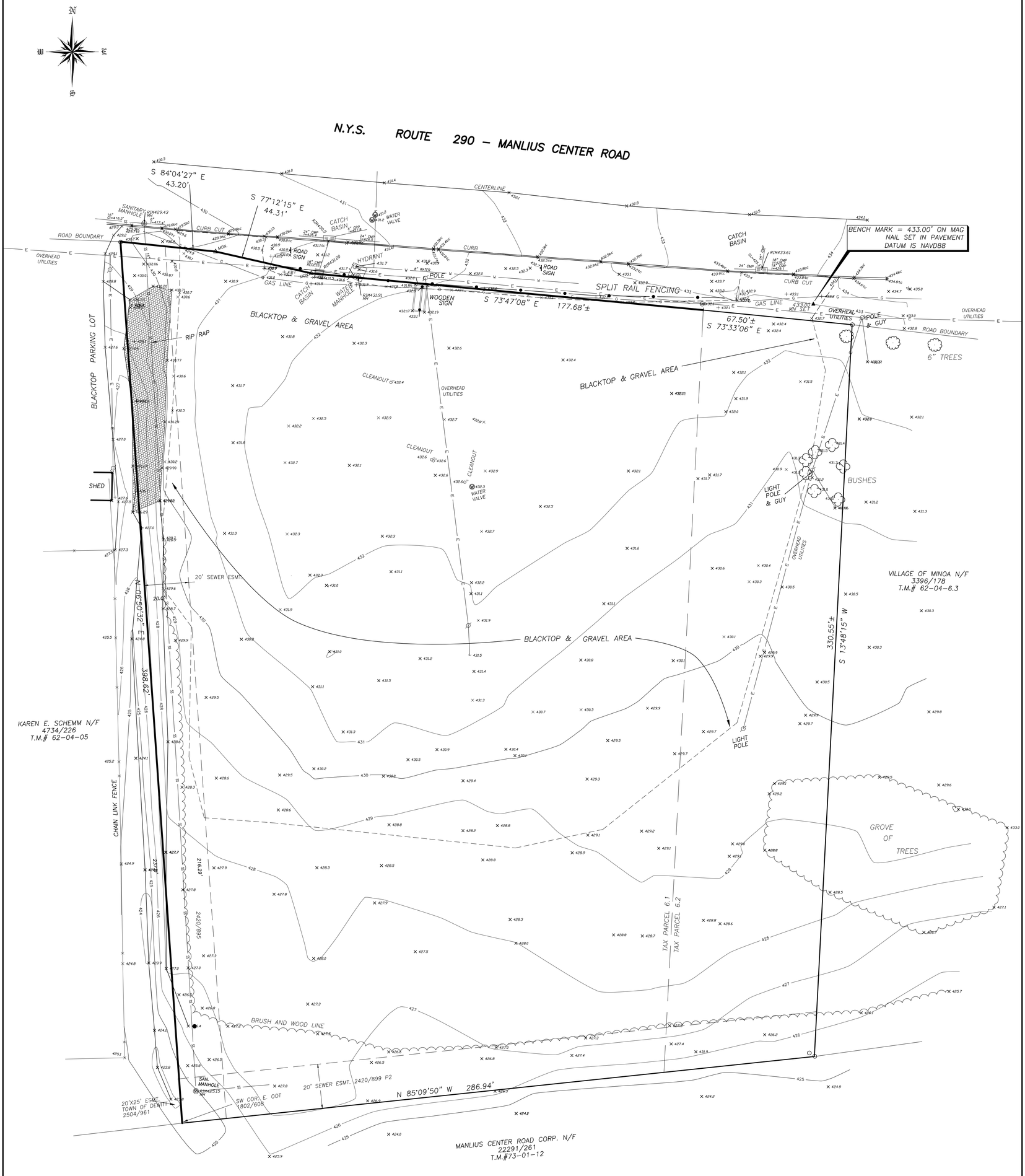
PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE NTS
SHEET **C-2**



AREA = 2.557± Acres
111381 Sq. Feet

REFERENCE DEED

WARRANTY DEED CONVEYED TO
G & T PROPERTIES, INC.
BK. 5016 PG. 78
(DEED CONTAINED MAP PREPARED BY
COTTRELL LAND SURVEYORS, P.C.)

Dig Safely. New York
Call 811
before you dig

0' 20' 40' 60'

Only survey maps with the surveyor's embossed seal are genuine, true and correct copies of the surveyor's original work product.
Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of sect. 7209, subsection 2, of the New York State Education Law.
The certification is limited to the persons for whom the survey was prepared and to those who act on behalf to the title company, governmental agency, and the lending institution listed hereon. Certification are not transferable to additional institutions or subsequent owners.
The location of underground improvements, structures, and utilities are not covered by this certificate.

UTILITY NOTE

This surveyor has not physically located the underground utilities. Underground utility locations may have been determined from visible evidence, available public maps and/ or maps prepared by others and markings established by independent locators or utility companies. There is no guarantee as to the accuracy or completeness of such data, nor is there any guarantee that all utilities are shown. Actual locations of underground utilities in the vicinity of any proposed construction shall be verified prior to commencing excavation, demolition or construction.

I hereby certify that this map was prepared from an actual field topographic survey of the property presented hereon, that all work was performed by me or under my supervision, and that the results of said survey are hereby represented to the best of my belief, professional knowledge and ability.

Forrest L. SeGuin, PLS – N.Y.S. LIC. NO. 050384

STATE OF NEW YORK · FORREST L. SEGUIN · No. 050384 · LICENSED LAND SURVEYOR

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TOPOGRAPHIC SURVEY

LANDS OF G & T PROPERTIES, INC.

PART OF LOT 44 ~ TOWN OF MANLIUS
ONONDAGA COUNTY, NEW YORK

SURVEY AND MAP PREPARED BY:
SeGUIN LAND SURVEYING, P.L.L.C.
FORREST L. SEGUIN, L.S.
6197 DYKE ROAD, CHITTENANGO, N.Y. 13037
PHONE:(315)263-1642 FAX:(315)687-0002

SCALE: 1" = 20'
DATE: 9/20/2020
PROJECT NO. 14017A
TAX MAP NO. 62-04-6.1,6.2
DWG. MAN. 062.0-04-6.1,6.2

SITE CRITERIA CHECKLIST		
PROJECT SITE INFORMATION		
ADDRESS	MANLIUS CENTER ROAD	
TAX MAP ID NO.	62.-04-06.1 & 62.-04-06.2	
BOUNDARY SURVEY	FORREST L. SEGUIN, L.S.	
TOTAL SITE AREA	2.56 ACRES	
EXISTING LAND USE	VACANT COMMERCIAL	
BUILDING AREA	TOTAL ±39,400 SF	
ZONING INFORMATION		
ZONING DISTRICT	COMMERCIAL B (C-B)	
	REQUIRED	PROVIDED
LOT AREA	16,000 SF	±111,500 SF
LOT FRONTAGE	100'	332'
LOT DEPTH	200'	330'
FRONT YARD SETBACK	30'	30'
REAR YARD SETBACK	25'	35'
SIDE YARD SETBACK	15'	16'
PARKING DIMENSIONS	10'x20'	10'x20'
PARKING AISLE WIDTH	24'	30'
PARKING SPACES	1 SP/300 SF OFFICE (3 SP)	4 SPACES

GRAPHIC SCALE
0 30' 60'
(IN FEET)
1 inch = 30 ft

PRELIMINARY
FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS
ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
LAYOUT PLAN

NO.	REVISION/ISSUE	DATE

PREPARED BY:
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PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE 1" = 30'

PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 090753

SHEET
C-4

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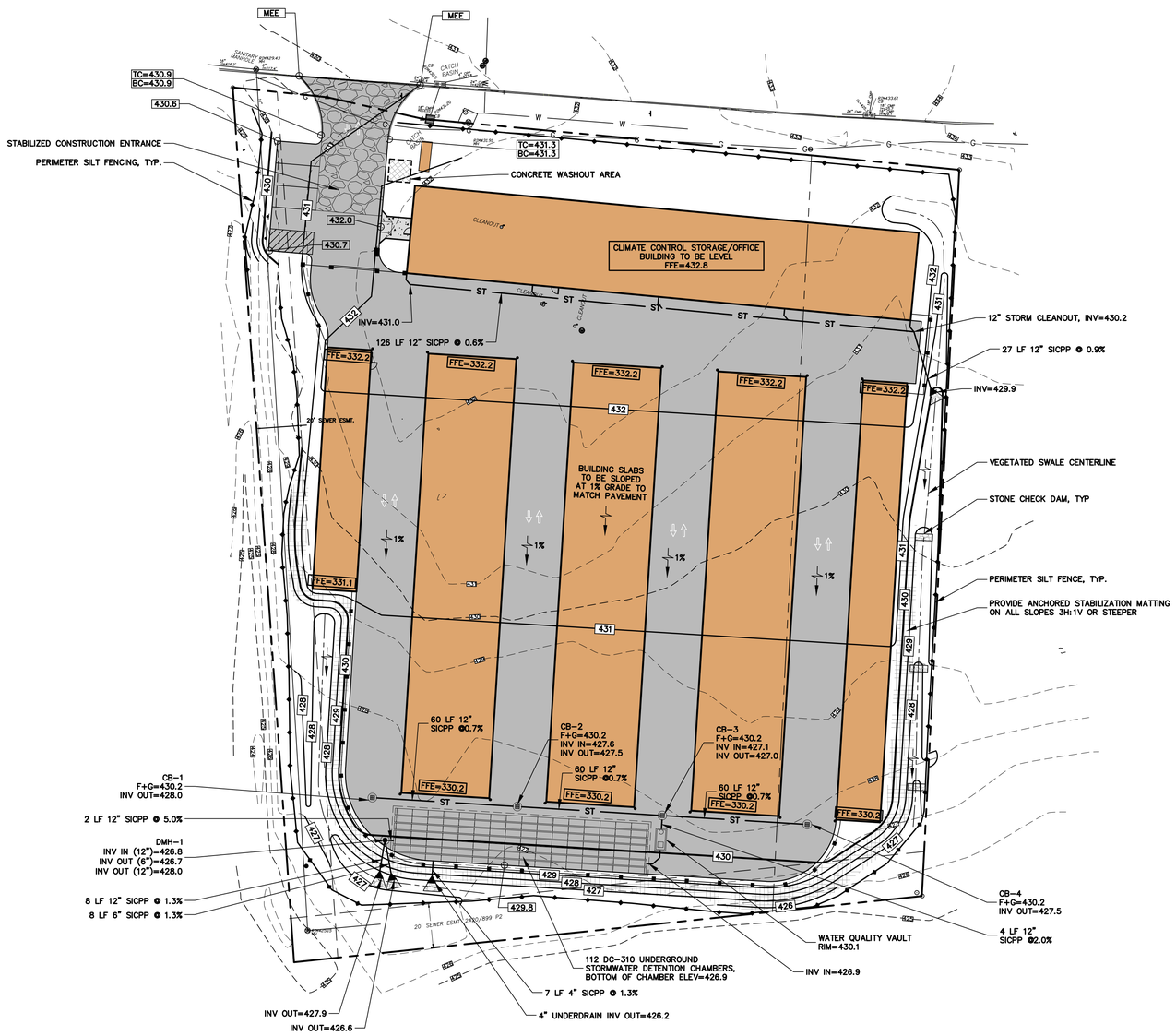

GRADING PLAN LEGEND

458	EXISTING CONTOUR GRADES
459	PROPOSED CONTOUR GRADES
459.8	PROPOSED FINISHED SPOT ELEVATION
TC=459.8 BC=459.3	PROPOSED TOP OF CURB AND BOTTOM OF CURB ELEVATIONS
MEE	MATCH/MEET EXISTING ELEVATION
	ANCHORED STABILIZATION MATTING
	STABILIZED CONSTRUCTION ENTRANCE/EXIT
	SILT FENCE
	SWALE CENTERLINE
	CONCRETE WASHOUT AREA
	CONCRETE WASHOUT AREA

GRAPHIC SCALE
0 30' 60'
(IN FEET)
1 inch = 30 ft

PRELIMINARY FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS
ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN

NO.	REVISION/ISSUE	DATE

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PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE 1" = 30'

PLAN SEAL BY:
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NYS REGISTRATION # 090733

SHEET C-5

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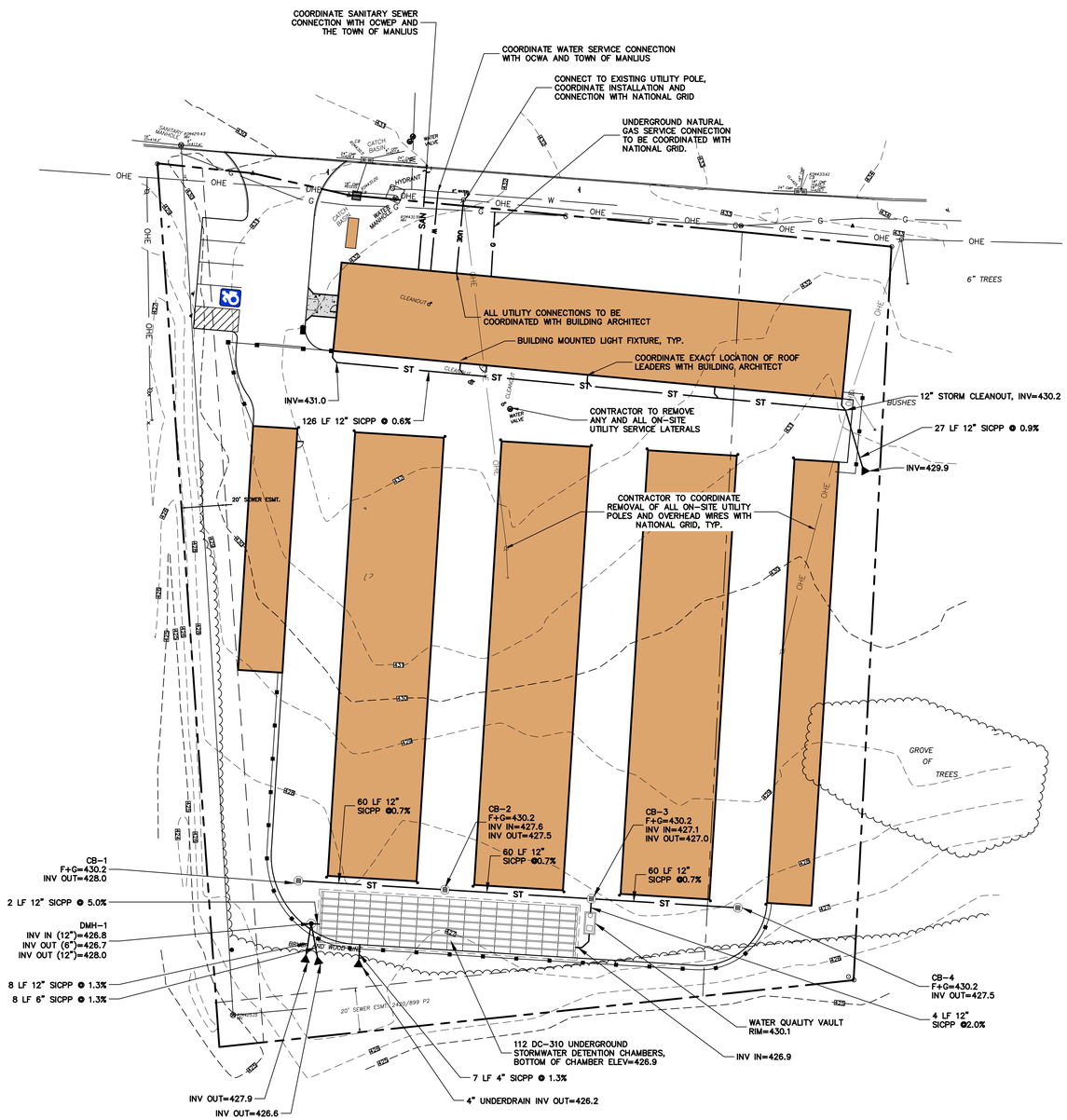

GRAPHIC SCALE
0 30' 60'
(IN FEET)
1 inch = 30 ft

PRELIMINARY
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PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS — ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
UTILITY PLAN

NO.	REVISION/ISSUE	DATE

PREPARED BY:
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PLAN SEAL BY:
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NYS REGISTRATION # 090733

PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE 1" = 30'

SHEET C-6

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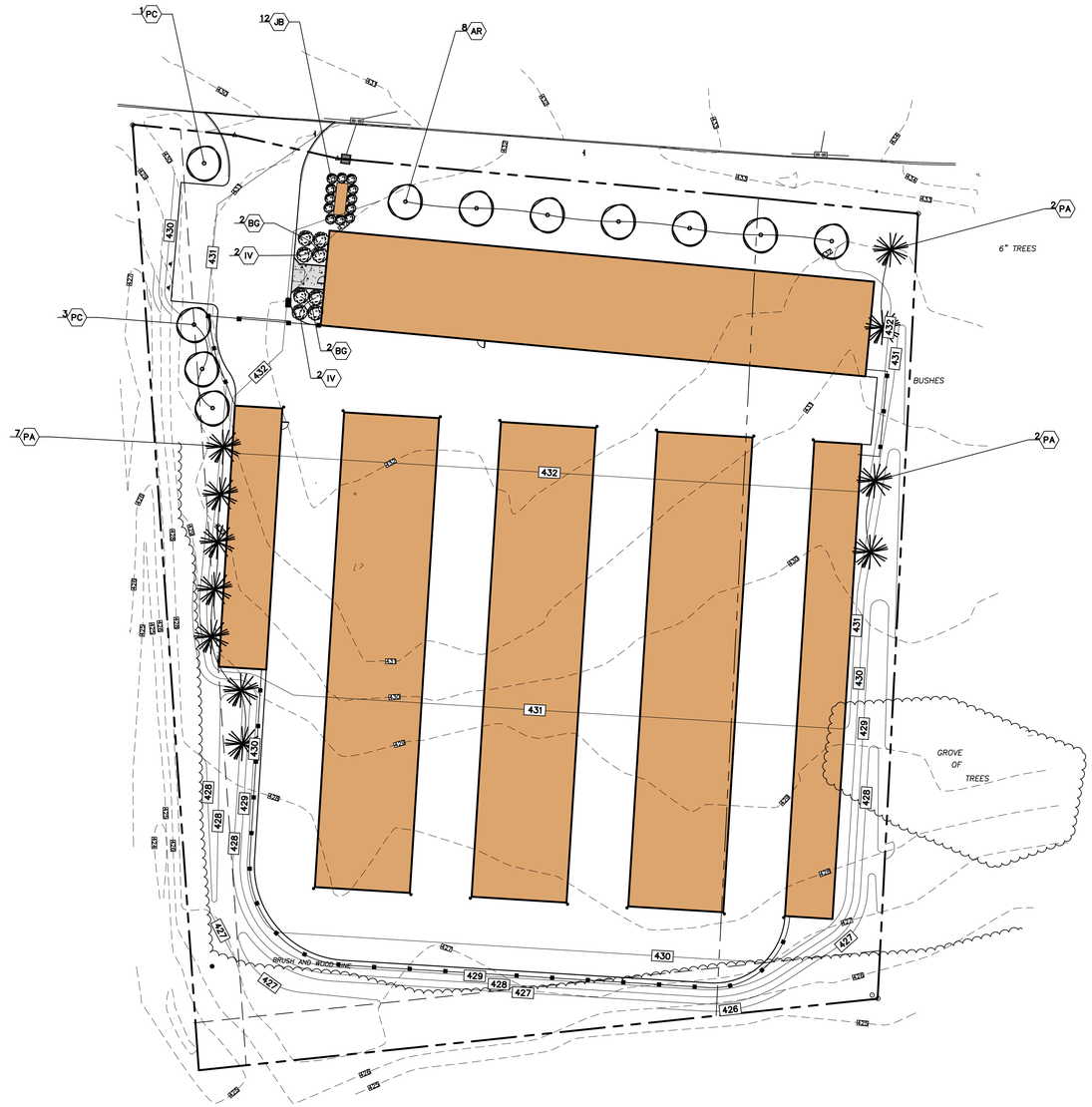

LANDSCAPE LEGEND

KEY	QUANTITY	LATIN NAME	COMMON NAME	CALIPER	HEIGHT	ROOT
TREES						
PA	11	PICEA ABIES	NORWAY SPRUCE	–	6'	B&B
AR	8	ACER RUBRUM	RED MAPLE	2½"	–	B&B
PC	4	PYRUS CALLERYANA	CALLERY PEAR	2½"	–	B&B
SHRUBS						
BG	4	BERBERIS GOLD	GOLD BARBERRY	–	–	5 GAL
IV	4	ILEX MESERVAE	HOLLY 'BLUE MAID'	–	–	5 GAL
JB	12	JUNIPERUS HORIZONTALIS	BAR HARBOR JUNIPER	–	–	2 GAL

LEGEND:
XX XX
SPECIES KEY
QUANTITY

LANDSCAPING NOTES:

1. ALL TREES AND SHRUBS SHALL BE SURROUNDED BY A BED OF BARK MULCH UNLESS OTHERWISE SPECIFIED.
2. DEAD MATERIAL SHALL BE REPLACED AND PLANT MATERIAL SHALL BE REGULARLY PRUNED AND NOURISHED TO MAINTAIN HEALTH.
3. TREES AND SHRUBS IDENTIFIED MAY BE SUBSTITUTED AT THE OWNER AND/OR LANDSCAPER'S REQUEST WITH SIMILAR/ALTERNATE SPECIES BASED ON PREFERENCE AND LOCAL AVAILABILITY.

GRAPHIC SCALE
0 30' 60'
(IN FEET)
1 inch = 30 ft

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PLAN SEAL BY:
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PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS — ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
LANDSCAPE PLAN

NO.	REVISION/ISSUE	DATE

PREPARED BY:
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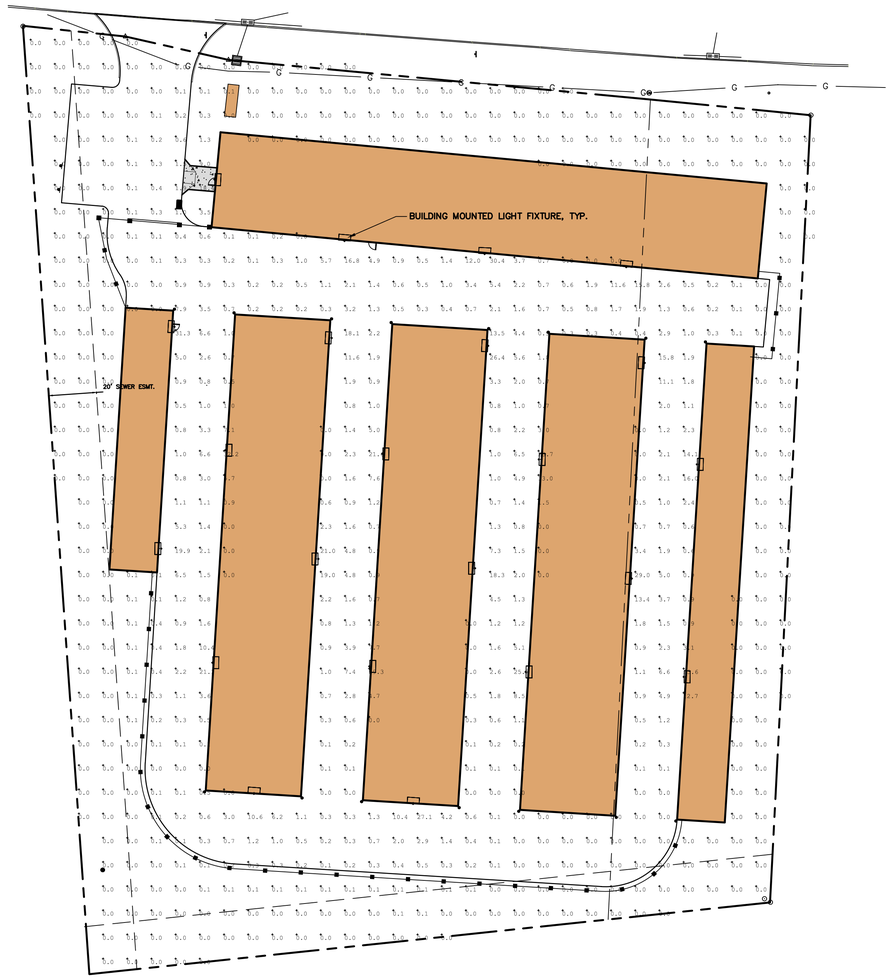
PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE 1" = 30'
SHEET C-7



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	1.51	32.2	0.0	N.A.	N.A.

Luminaire Schedule					
Symbol	Qty	Label	Total Lamp Lumens	LLF	Description
	22	AE-WP-MS-060L-D-40	7516.2	0.900	MASSINO SERIES 60W 70CRI 4000K 120-277V

GRAPHIC SCALE

0 30' 60'

(IN FEET)
1 inch = 30 ft

PRELIMINARY
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PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS
ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
LIGHTING PLAN

NO.	REVISION/ISSUE	DATE

PREPARED BY:
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PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 069753

PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE 1" = 30'

SHEET C-8

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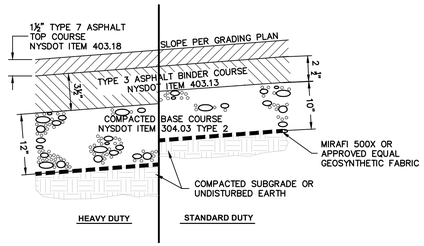
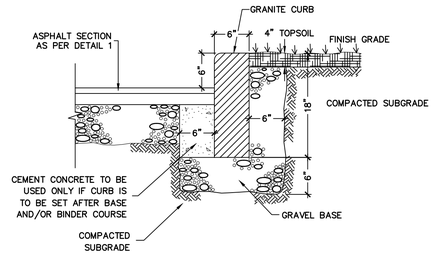
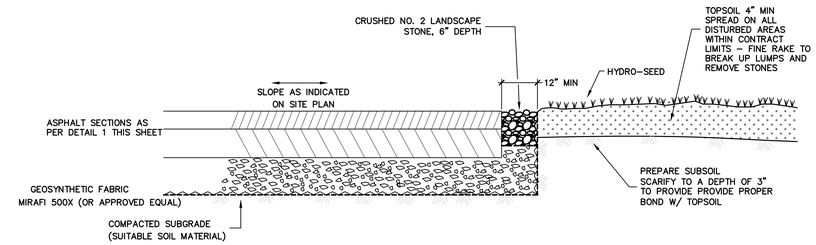


1 STANDARD/HEAVY-DUTY PAVEMENT SECTION
C-9 SCALE: NTS

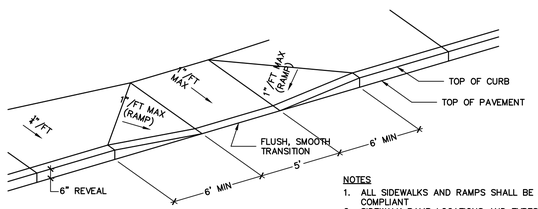
ALL PAVEMENT SECTIONS TO BE CONFIRMED WITH THE GEOTECHNICAL REPORT



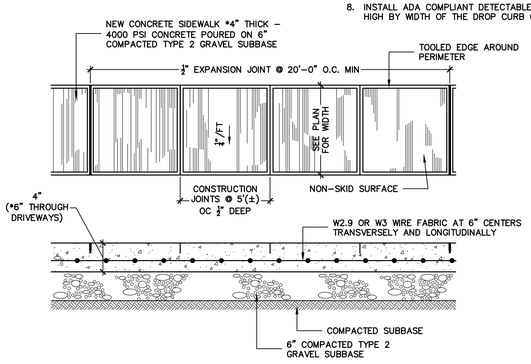
2 GRANITE CURBING
C-9 SCALE: NTS



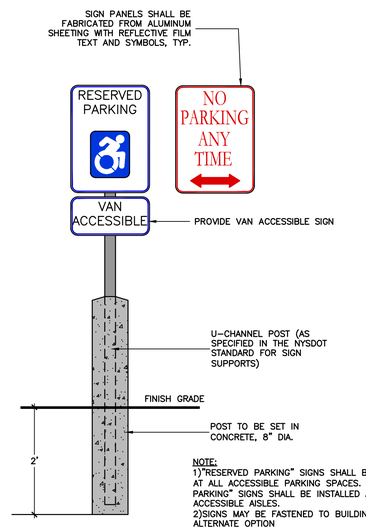
3 EDGE OF PAVEMENT WITHOUT CURBING
C-9 SCALE: NTS



NOTES
1. ALL SIDEWALKS AND RAMPS SHALL BE ADA AND PROWAG COMPLIANT
2. SIDEWALK RAMP LOCATIONS AND TYPES ARE TO BE AS SHOWN ON THE PLANS.
3. SURFACE TEXTURE OF RAMP SHALL BE OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE SLOPE OF THE RAMP.
4. NORMAL PAVEMENT EDGE PROFILE IS TO BE MAINTAINED THROUGH THE AREA OF THE RAMP. LONG
5. TRANSITION CURB FOR RAMPS SHALL BE 6–0"
6. MAXIMUM DESIRABLE RAMP SLOPE 1:12.
7. PROVIDE TOOLED TACTILE GROVES ON ALL SURFACES AS INDICATED
8. INSTALL ADA COMPLIANT DETECTABLE WARNING PAVERS 2' HIGH BY WIDTH OF THE DROP CURB OPENING

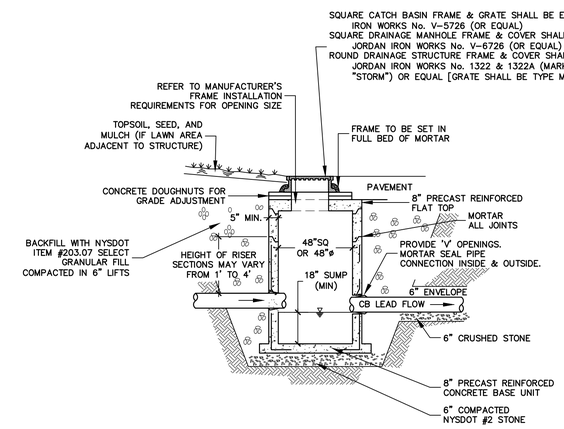


4 SIDEWALK
C-9 SCALE: NTS



NOTE:
1)"RESERVED PARKING" SIGNS SHALL BE INSTALLED AT ALL ACCESSIBLE PARKING SPACES. "NO PARKING" SIGNS SHALL BE INSTALLED AT ALL ACCESSIBLE AISLES.
2)SIGNS MAY BE FASTENED TO BUILDING AS AN ALTERNATE OPTION

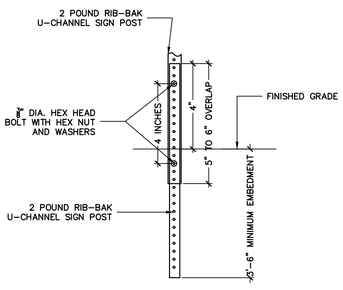
5 ACCESSIBLE PARKING SIGNS
C-9 SCALE: NTS



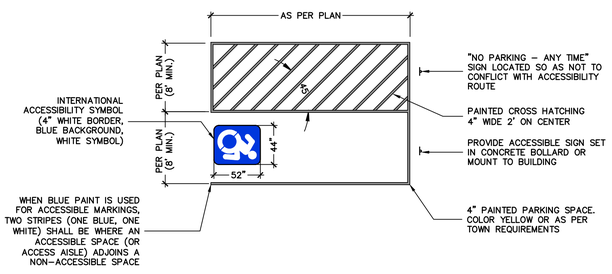
DRAINAGE STRUCTURE GENERAL NOTES

1. REINFORCING FOR ALL SECTIONS SHALL BE AS FOLLOWS:
   TOP: #3 BARS SPACED AT 4" IN BOTH DIRECTIONS.
   BOTTOM: #3 BARS SPACED AT 4" IN BOTH DIRECTIONS.
   SIDES: #3 BARS SPACED AT 8" IN BOTH HORIZONTAL AND VERTICAL.
2. ALL REINFORCEMENT SHALL BE PLACED SO IT WILL HAVE A MINIMUM COVER OF 2" AND BE LOCATED APPROXIMATELY WITHIN THE CENTER OF THE SECTION.
3. TOP SLAB AND/OR FRAME ADJUSTMENT:
   FOR ALL DRAINAGE STRUCTURES A MAXIMUM OF 6 INCHES OF BRICK AND MORTAR OR A MAXIMUM OF 2 INCHES OF MORTAR ALONE SHALL BE USED FOR TOP SLAB AND/OR FRAME & GRATE ADJUSTMENT. FOR ADJUSTMENTS OVER 6 INCHES AND NOT TO EXCEED 12 INCHES, PRECAST CONCRETE ADJUSTMENT ELEMENT(S) MANUFACTURED IN ACCORDANCE WITH NYS–DOT STANDARD SPEC SUB–SECTION #706–04 SHALL BE USED; A MAXIMUM OF 2 INCHES OF MORTAR SHALL BE ALLOWED ON BOTH THE TOP AND BOTTOM OF THE PRECAST DEVICES. BRICK SHALL BE PRECAST PAVERS CONFORMING TO NYS–DOT STANDARD SPEC SUB–SECTION #704–13 AND MORTAR SHALL BE MORTAR FOR CONCRETE MASONRY CONFORMING TO NYS–DOT STANDARD SPEC SUB–SECTION #705–21.
4. MANHOLE STEPS SHALL BE REQUIRED IN ALL DRAINAGE STRUCTURES DEEPER THAN 4 FEET. STEPS SHALL CONFORM TO NYS–DOT STANDARD SPEC SUB–SECTION #725–02.
5. BASE OF PRECAST CATCH BASIN SHALL REST ON BASE MATERIAL COMPACTED IN PLACE WITH A VIBRATORY MECHANICAL TAMPER IN LIFTS NOT TO EXCEED 6" AT A TIME.
6. TRENCH SIDES SHALL CONFORM TO NYS DEPT OF LABOR AND OSHA SAFETY REGULATIONS.

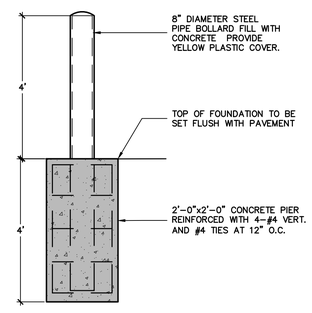
6 PRECAST DRAINAGE STRUCTURE (CB AND DMH)
C-9 SCALE: NTS



7 BREAK-AWAY SIGN POST
C-9 SCALE: NTS



8 ACCESSIBLE PARKING PAVEMENT MARKING DETAIL
C-9 SCALE: NTS



9 CONCRETE BOLLARD
C-9 SCALE: NTS

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PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 090123

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PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS — ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
SITE DETAILS

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
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PH: (315) 682-5580 FAX: (315) 682-5544

PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE AS SHOWN
SHEET C-9

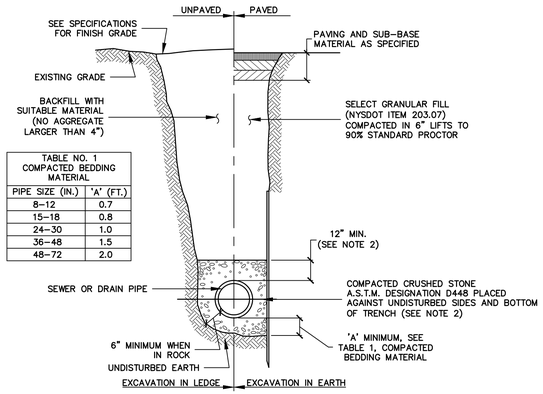
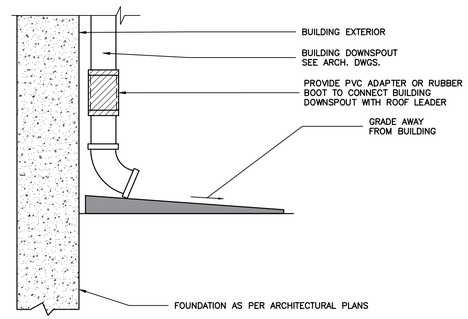


TABLE NO. 1 COMPACTED BEDDING MATERIAL	
PIPE SIZE (IN.)	'A' (FT.)
8–12	0.7
15–18	0.8
24–30	1.0
36–48	1.5
48–72	2.0

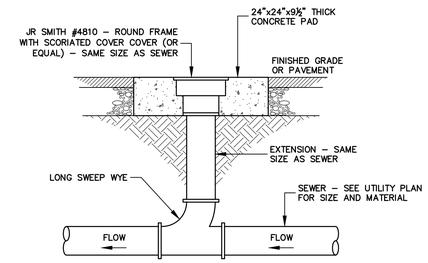
NOTES:

1. SHEETING, WHEN REQUIRED, TO BE CUT OFF AT LEAST 5 FEET BELOW STREET AND A MINIMUM OF 1 FOOT ABOVE TOP OF PIPE. WOOD SHEETING DRIVEN BELOW MID–DIAMETER OF THE PIPE SHALL BE LEFT IN PLACE. STEEL SHEETING DRIVEN BELOW MID–DIAMETER MAY BE WITHDRAWN IF APPROVED IN WRITING BY THE ENGINEER. FOR PVC PIPE ALL SHEETING DRIVEN BELOW MID–DIAMETER SHALL BE LEFT IN PLACE.
2. WHEN APPROVED BY THE ENGINEER FOR PIPES OTHER THAN PVC SELECTED GRAVEL FILL MATERIAL MAY BE USED FROM MID–DIAMETER OF PIPE TO 12" ABOVE TOP OF PIPE. NO STONES LARGER THAN 2 INCHES IN ANY DIMENSION WILL BE PERMITTED IN THIS AREA.
3. TRENCHES LOCATED ON THE ROAD SHOULDER SHALL BE TREATED THE SAME AS IF LOCATED UNDER PAVEMENT (EXCEPT FOR PAVEMENT SECTION).
4. BEDDING MATERIAL FOR PVC PIPE SHALL MEET THE REQUIREMENTS OF ASTM D2321 CLASS I OR CLASS II EMBEDMENT MATERIALS.

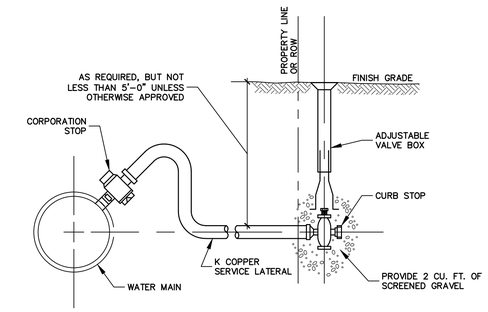
1 / C–10 TYPICAL SEWER AND DRAIN TRENCH
SCALE: NTS



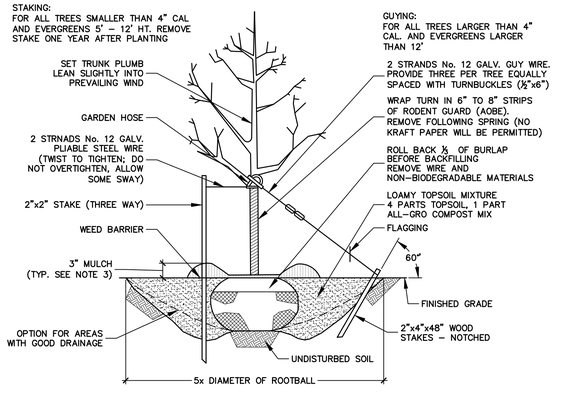
2 / C–10 ROOF LEADER DOWNSPOUT
SCALE: NTS



3 / C–10 TYPICAL SEWER CLEANOUT
SCALE: NTS



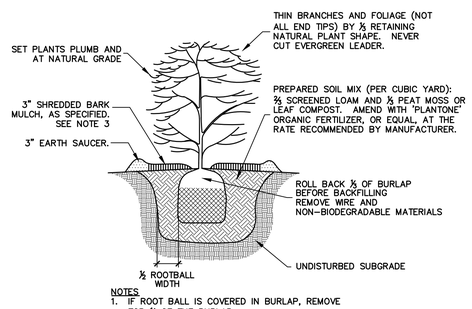
4 / C–10 WATER SERVICE CONNECTION
SCALE: NTS



NOTES

1. USE 8' STAKES – DRIVE 48" BELOW GROUND
2. ROOT COLLAR TO BE SLIGHTLY ABOVE SURROUNDING GRADE.
3. MULCH IS TO BE PLACED 6" AWAY FROM TRUNK.

5 / C–10 TREE PLANTING DETAIL
SCALE: NTS



NOTES

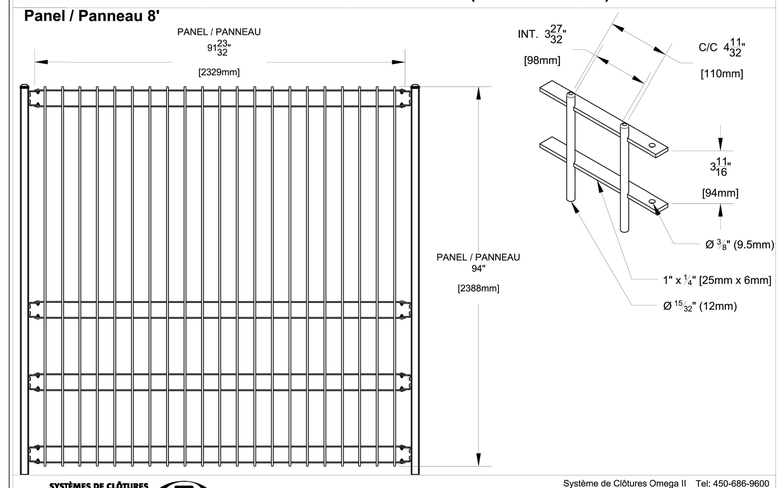
1. IF ROOT BALL IS COVERED IN BURLAP, REMOVE TOP ⅓ OF THE BURLAP.
2. PRUNE BROKEN BRANCHES TO RETAIN NATUAL FORM OF THE SHRUB.
3. MULCH IS TO BE PLACED 6" AWAY FROM TRUNK

6 / C–10 SHRUB PLANTING DETAIL
SCALE: NTS

OMEGA CLASSIC PANELS MOUNTED ON SQUARE POSTS (8' HEIGHT) REVISION 01

PANNEAUX OMEGA CLASSIC SUR POTEAUX CARRÉS (HAUTEUR DE 8')

Panel / Panneau 8'



SYSTÈMES DE CLÔTURES omega II FENCE SYSTEMS

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1735 boul. St-Elzéar Ouest
Laval, Quebec
H7L 3N6
Tel: 450-686-9600
1-800-836-6342
Fax: 450-681-5318
www.omegadeux.com

7 / C–10 ORNAMENTAL STOCKADE FENCING
SCALE: NTS

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PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
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SHEET TITLE:
SITE DETAILS

NO.	REVISION/ISSUE	DATE

PREPARED BY:
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PLAN SEAL BY:
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NYS REGISTRATION # 068733

PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE AS SHOWN

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SHEET **C-10**

EROSION CONTROL NOTES

EROSION AND SEDIMENT CONTROLS

1. STABILIZATION PRACTICES (TEMPORARY)
   a) TEMPORARY SEEDING AND PLANTING OF ALL UNPAVED AREAS WHEN CONSTRUCTION ACTIVITY HAS CEASED, OR WILL CEASE, IN AN AREA FOR 14 DAYS. SEEDING MIXTURES AND APPLICATION RATES ARE LISTED ON SHEET C–2.
   b) MULCHING EXPOSED AREAS.
   c) FREQUENT WATERING TO MINIMIZE WIND EROSION DURING CONSTRUCTION.

2. STABILIZATION PRACTICES (PERMANENT)
   a) LAND CLEARING ACTIVITIES SHALL BE DONE ONLY IN AREAS WHERE EARTHWORK WILL BE PERFORMED AND SHALL PROGRESS AS EARTHWORK IS NEEDED.
   b) PERMANENT SEEDING AND PLANTING OF ALL UNPAVED AREAS.

3. STRUCTURAL MEASURES TEMPORARY
   a. STABILIZED CONSTRUCTION ENTRANCE: AT THE ENTRANCE TO THE ALL DISTURBED AREAS FROM AN EXISTING ROADWAY A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED. THE PURPOSE OF THE STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO THE PUBLIC RIGHT–OF–WAY.
   b. SILT FENCE: SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE EROSION CONTROL PLAN . THE FABRIC SHALL MEET THE SPECIFICATIONS NOTED ON THE DETAILS UNLESS OTHERWISE APPROVED BY THE APPROPRIATE EROSION AND SEDIMENT CONTROL PLAN APPROVAL AUTHORITY. SUCH APPROVAL SHALL NOT CONSTITUTE STATEWIDE ACCEPTANCE.
   c. DUST CONTROL: DUST CONTROL IS THE CONTROL OF DUST RESULTING FROM LAND–DISTURBING ACTIVITIES. THE PURPOSE IS TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM DISTURBED SOIL SURFACES THAT MAY CAUSE OFF–SITE DAMAGE, HEALTH HAZARDS, AND TRAFFIC SAFETY PROBLEMS.
   d. SEDIMENT TRAP: SEDIMENT TRAP TO BE INSTALLED IN DETENTION BASIN AREA FOR USE DURING CONSTRUCTION. STONE OUTLET SEDIMENT TRAP TO BE INSTALLED AS PER DETAIL TO ELIMINATE SEDIMENT DISCHARGE TO DOWNSTREAM AREAS DURING CONSTRUCTION PHASE.

4. STRUCTURAL PRACTICES (PERMANENT)
   a. ROCK OUTLET PROTECTION: ROCK OUTLET PROTECTION IS A SECTION OF ROCK PROTECTION PLACED AT THE OUTLET END OF CULVERTS, CONDUITS, OR CHANNELS. THE PURPOSE OF THE ROCK OUTLET PROTECTION IS TO REDUCE THE DEPTH, VELOCITY, AND ENERGY OF WATER, SUCH THAT THE FLOW WILL NOT ERODE THE RECEIVING DOWNSTREAM REACH.
   b. REINFORCED SLOPE PROTECTION: A TEMPORARY PROTECTIVE COVERING PLACED ON A PREPARED PLANTING AREA THAT IS ANCHORED IN PLACE BY STAPLES OR OTHER MEANS TO AID IN CONTROLLING EROSION BY ABSORBING RAIN SPLASH ENERGY AND WITHSTAND OVERLAND FLOW AS WELL AS PROVIDE A MICROCLIMATE TO PROTECT AND PROMOTE SEED ESTABLISHMENT.
   c. LAND GRADING: PERMANENT RESHAPING OF THE EXISTING LAND SURFACE BY GRADING IN ACCORDANCE WITH AN ENGINEERING TOPOGRAPHIC PLAN AND SPECIFICATION TO PROVIDE EROSION CONTROL AND VEGETATIVE ESTABLISHMENT ON DISTURBED, RESHAPED AREAS.

5. SEQUENCE OF MAJOR ACTIVITIES
   THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE ABOVE LISTED EROSION AND SEDIMENT CONTROL PRACTICES. THE CONTRACTOR MAY DESIGNATE THESE TASKS TO CERTAIN SUBCONTRACTORS AS IS SEEN FIT, BUT THE ULTIMATE RESPONSIBILITY FOR IMPLEMENTING THESE CONTROLS AND ENSURING THEIR PROPER FUNCTION REMAINS WITH THE CONTRACTOR. THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:
   a) CONDUCT PRECONSTRUCTION MEETING
   b) CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE/EXIT AT THE LOCATION SHOWN ON THE PLAN.
   c) INSTALL PERIMETER SILT FENCE AND SECURITY CONSTRUCTION FENCE IN THE LOCATIONS SHOWN ON THE PLAN.
   d) ESTABLISH STAGING AREA ON PROJECT SITE
   e) CONSTRUCT TEMPORARY SEDIMENT TRAP
   f) REMOVE TOPSOIL, STOCKPILE AND STABILIZE
   g) SITE GRADING. IMPORT OF FILL MATERIAL TO RAISE SITE TO PROPOSED GRADE (OR SUB–GRADE, AS APPROPRIATE).
   h) BUILDING FOUNDATION EXCAVATION (BUILDING CONSTRUCTION TO CONTINUE CONCURRENTLY WITH REMAINING SITE WORK).
   i) DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED.
   j) UNDERGROUND UTILITY INSTALLATIONS.
   k) INSTALL FILTER FABRIC DROP INLET PROTECTION AT ALL STORM INLETS.
   l) COMPACT GRAVEL ALONG ALL DRIVE AISLES AND PARKING AREAS
   m) SITE CONCRETE CONSTRUCTION.
   n) FINALIZE PAVEMENT SUBGRADE PREPARATION.
   o) REMOVE INLET PROTECTION NO MORE THAN 24 HOURS PRIOR TO PLACING ASPHALT PAVEMENT.
   p) PAVE AREAS NOTED ON PLAN.
   q) DEEP RIPPING OF NON–PAVED AREAS AS REQUIRED (NON–PAVED AREAS THAT HAVE BEEN COMPACTED DURING CONSTRUCTION VIA CONSTRUCTION TRAFFIC).
   r) FINAL GRADING, SEEDING, AND PLANTING.
   s) CONSTRUCT BIORETENTION BASINS AND OUTLET CONTROLS UPON UPSTREAM STABILIZATION OF SITE
   t) REMOVE SEDIMENT TRAP AND FINALIZE GRADING OF DETENTION BASIN
   u) REMOVE SILT FENCE ONLY AFTER ALL PAVING IS COMPLETE AND EXPOSED SURFACES ARE STABILIZED.

MAINTENANCE/INSPECTION PROCEDURES

THE FOLLOWING INSPECTION AND MAINTENANCE PRACTICES WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS AND STABILIZATION MEASURES.

1. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST TWICE EVERY SEVEN (7) CALENDAR DAYS
2. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF REPAIRS OR OTHER EROSION CONTROL MEASURES ARE FOUND TO BE NECESSARY, THEY WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
3. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE–THIRD THE HEIGHT OF THE FENCE.
4. SILT FENCES WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, ETC., TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE SECURELY IN THE GROUND.
5. TEMPORARY AND PERMANENT SEEDING AND ALL OTHER STABILIZATION MEASURES WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
6. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. COPIES OF THE REPORT FORMS TO BE COMPLETED BY THE INSPECTOR ARE INCLUDED IN THIS SWPPP.
7. THE OPERATOR SHALL HAVE A "QUALIFIED PROFESSIONAL" CONDUCT SITE INSPECTIONS FOLLOWING THE COMMENCEMENT OF CONSTRUCTION. A "QUALIFIED PROFESSIONAL" IS A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICE OF EROSION AND SEDIMENT CONTROLS, SUCH AS A LICENSED PROFESSIONAL ENGINEER, CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), OR SOIL SCIENTIST.
8. DISTURBED AREAS AND MATERIALS STORAGE AREAS WILL BE INSPECTED FOR EVIDENCE OF OR POTENTIAL FOR POLLUTANTS ENTERING STORMWATER SYSTEMS.
9. REPORT TO NYS DEC WITHIN 24 HOURS ANY NONCOMPLIANCE WITH THE SWPPP THAT WILL ENDANGER PUBLIC HEALTH OR THE ENVIRONMENT. FOLLOW UP WITH A WRITTEN REPORT WITHIN 5 DAYS OF THE NONCOMPLIANCE EVENT. THE FOLLOWING EVENTS REQUIRE 24 HOUR REPORTING: A) ANY UNANTICIPATED BYPASS WHICH EXCEEDS ANY EFFLUENT LIMITATION IN THE PERMIT, B) ANY UPSET WHICH EXCEEDS ANY EFFLUENT LIMITATION IN THE PERMIT, AND C) A VIOLATION OF A MAXIMUM DAILY DISCHARGE LIMITATION FOR ANY OF THE POLLUTANTS LISTED BY THE EPA IN THE PERMIT TO BE REPORTED WITHIN 24 HOURS. THE WRITTEN SUBMISSION MUST CONTAIN A DESCRIPTION OF THE NON–COMPLIANCE AND ITS CAUSE; THE PERIOD OF NON–COMPLIANCE, INCLUDING EXACT DATES AND TIMES, AND IF THE NON–COMPLIANCE HAS NOT BEEN CORRECTED, THE ANTICIPATED TIME IT IS EXPECTED TO CONTINUE; AND STEPS TAKEN OR PLANNED TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NON–COMPLIANCE.
10. RELEASES OF HAZARDOUS SUBSTANCES OR OIL IN EXCESS OF REPORTABLE QUANTITIES (AS ESTABLISHED UNDER 40 CFR 110, 40 CFR 117 OR 40 CFR 302) MUST BE REPORTED. FORM G–1 PROVIDES FURTHER DETAILS ON THE NOTIFICATION AND REPORTING PROCESS.

INSPECTION AND MAINTENANCE REPORT FORMS

ONCE INSTALLATION OF ANY REQUIRED OR OPTIONAL EROSION CONTROL DEVICE OR MEASURE HAS BEEN IMPLEMENTED, AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND SHALL BE PERFORMED BY A QUALIFIED PROFESSIONAL. THE FORMS FOUND IN THIS SWPPP SHALL BE USED BY THE INSPECTORS TO INVENTORY AND REPORT THE CONDITION OF EACH MEASURE TO ASSIST IN MAINTAINING THE EROSION AND SEDIMENT CONTROL MEASURES IN GOOD WORKING ORDER.

THESE REPORT FORMS SHALL BECOME AN INTEGRAL PART OF THE SWPPP AND SHALL BE MADE READILY ACCESSIBLE TO GOVERNMENTAL INSPECTION OFFICIALS, THE OPERATOR'S ENGINEER, AND THE OPERATOR FOR REVIEW UPON REQUEST DURING VISITS TO THE PROJECT SITE. IN ADDITION, COPIES OF THE REPORTS SHALL BE PROVIDED TO ANY OF THESE PERSONS, UPON REQUEST, VIA MAIL OR FACSIMILE TRANSMISSION. INSPECTION AND MAINTENANCE REPORT FORMS ARE TO BE MAINTAINED BY THE PERMITTEE FOR FIVE YEARS FOLLOWING THE FINAL STABILIZATION OF THE SITE.

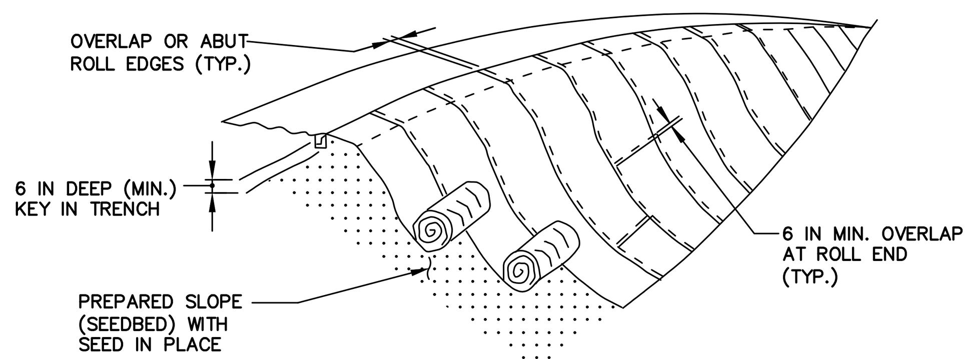
OTHER RECORD–KEEPING REQUIREMENTS

THE CONTRACTOR SHALL KEEP THE FOLLOWING RECORDS RELATED TO CONSTRUCTION ACTIVITIES AT THE SITE:

- DATES WHEN MAJOR GRADING ACTIVITIES OCCUR AND THE AREAS WHICH WERE GRADED
- DATES AND DETAILS CONCERNING THE INSTALLATION OF STRUCTURAL CONTROLS
- DATES WHEN CONSTRUCTION ACTIVITIES CEASE IN AN AREA
- DATES WHEN AN AREAS IS STABILIZED, EITHER TEMPORARILY OR PERMANENTLY
- DATES OF RAINFALL AND THE AMOUNT OF RAINFALL
- DATES AND DESCRIPTIONS OF THE CHARACTER AND AMOUNT OF ANY SPILLS OF HAZARDOUS MATERIALS
- RECORDS OF REPORTS FILED WITH REGULATORY AGENCIES IF REPORTABLE QUANTITIES OF HAZARDOUS MATERIALS SPILLED

EROSION CONTROL NOTES

1. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED SWPPP DRAWINGS DURING CONSTRUCTION OPERATIONS.
2. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL THE APPROPRIATE EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
3. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 7 DAYS OF FINAL GRADING.
4. SHOULD CONSTRUCTION STOP FOR LONGER THAN 14 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
5. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
6. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
7. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
8. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
11. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

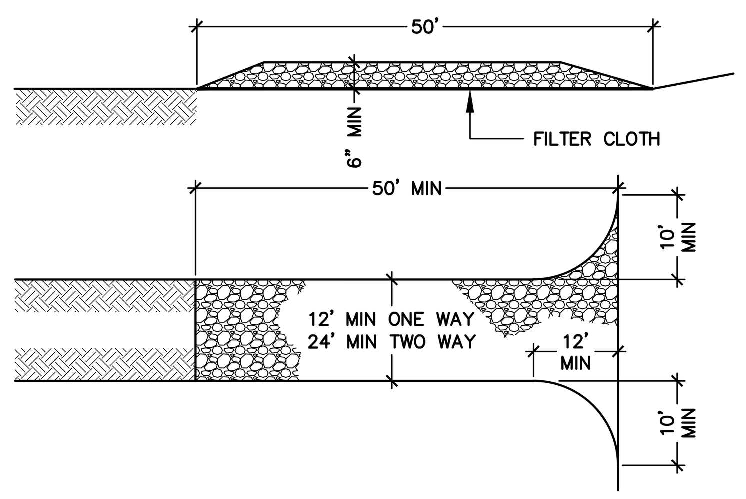


ISOMETRIC VIEW

CONSTRUCTION SPECIFICATIONS

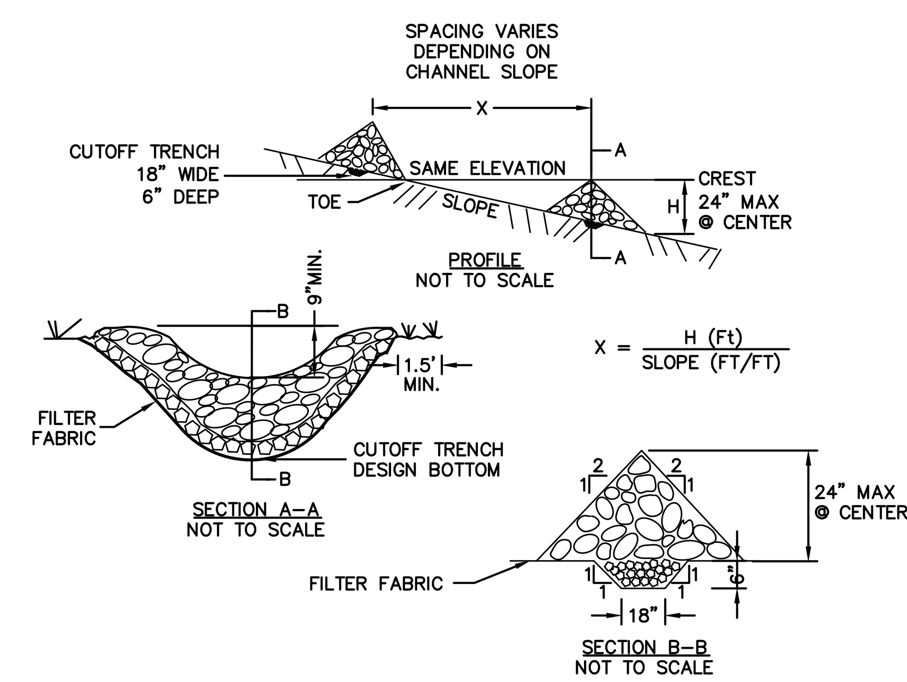
1. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN–MADE FIBERS (MOSTLY ORGANIC).
2. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.
3. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.

1 / C–11 SLOPE STABILIZATION MATTING
SCALE: NTS



1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 24 FEET MINIMUM.
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.

2 / C–11 CONSTRUCTION ENTRANCE
SCALE: NTS

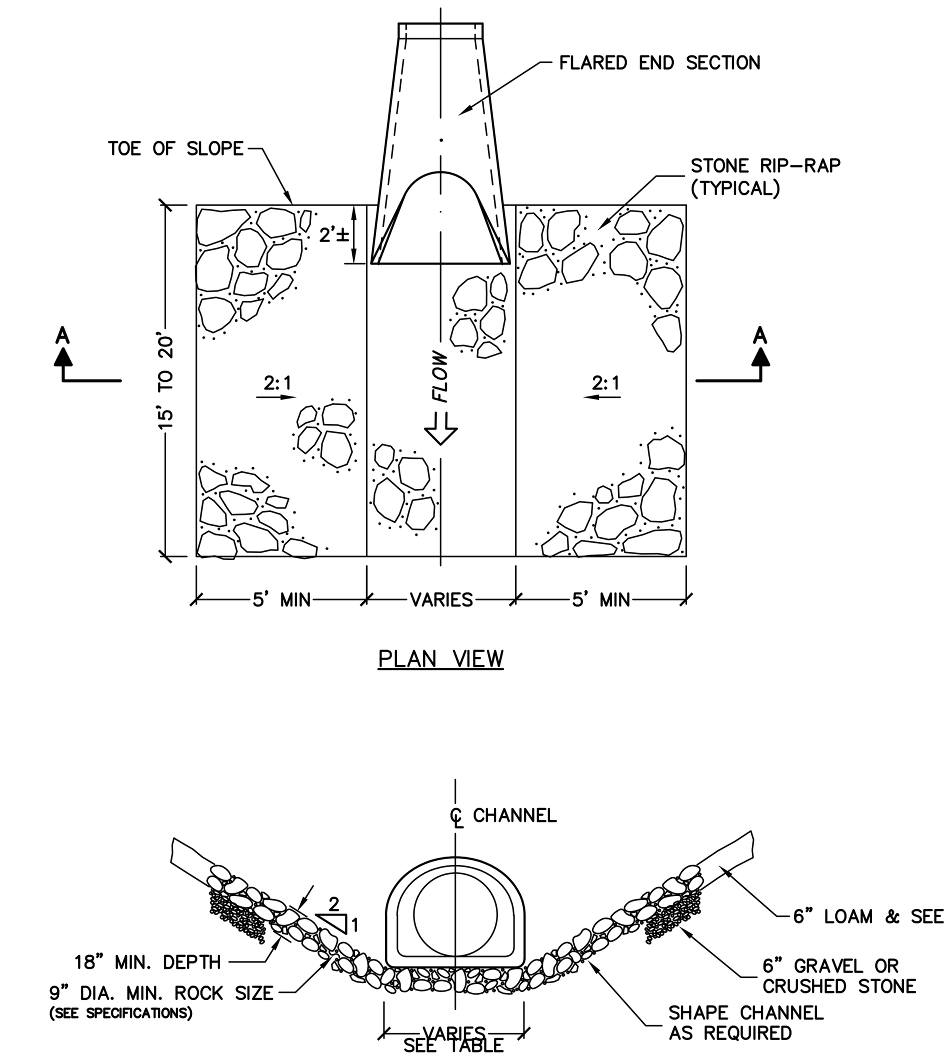


CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

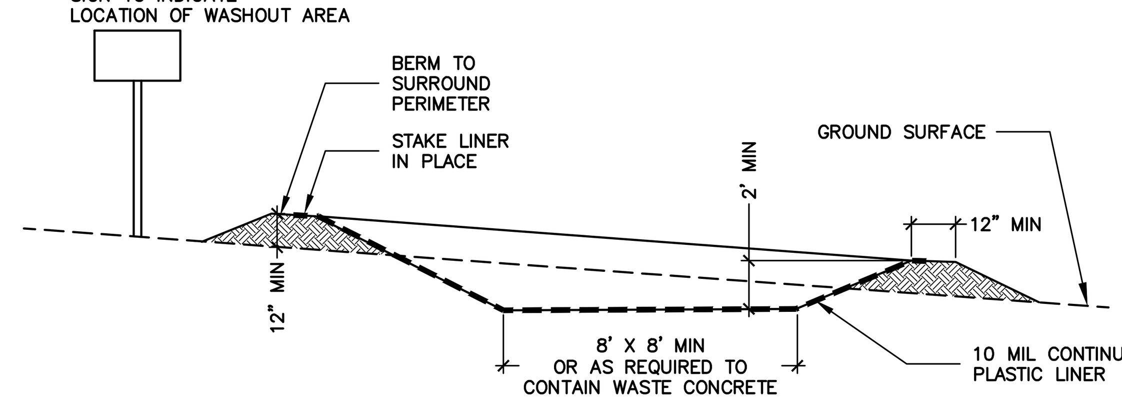
3 / C–11 TYPICAL STONE CHECK DAM
SCALE: NTS



DIMENSION TABLE:

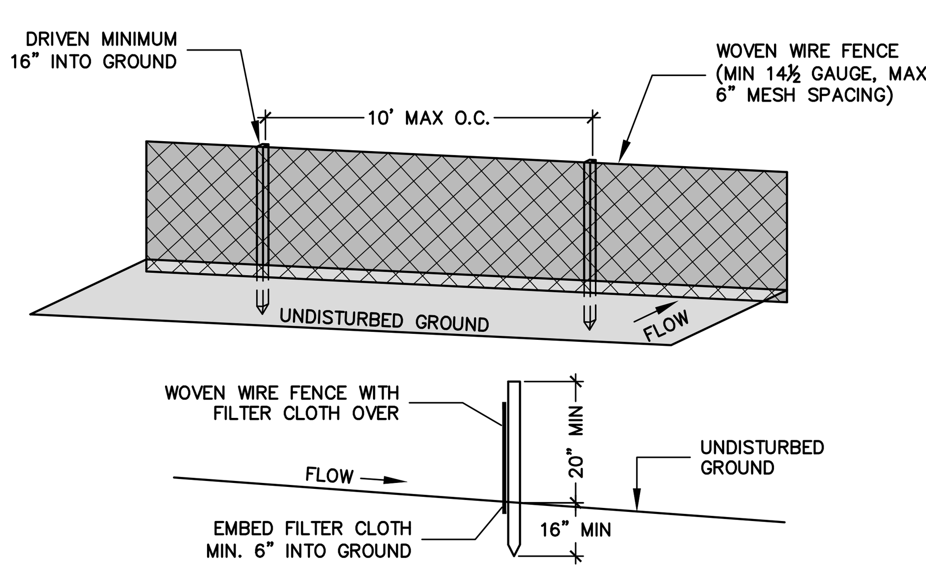
PIPE DIA.	CHANNEL WIDTH
12"	2'–6"
15"	3'–0"
18"	3'–7"
24"	4'–8"

4 / C–11 ROCK RIPRAP OUTLET PROTECTION UNCONFINED DOWNSTREAM SECTION
SCALE: NTS



NOTES:
1. CONCRETE WAHSOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. CONCRETE WASHOUT OUT AREA SHALL BE LINED WITH A 10 MIL IMPERMEABLE LINER AND STAKED IN PLACE.
3. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE LOCATION OF CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
4. THE CONCRETE WAHSOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
5. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN ACCEPTED WASTE SITE.
6. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED.

5 / C–11 CONCRETE WASHOUT AREA
SCALE: NTS



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

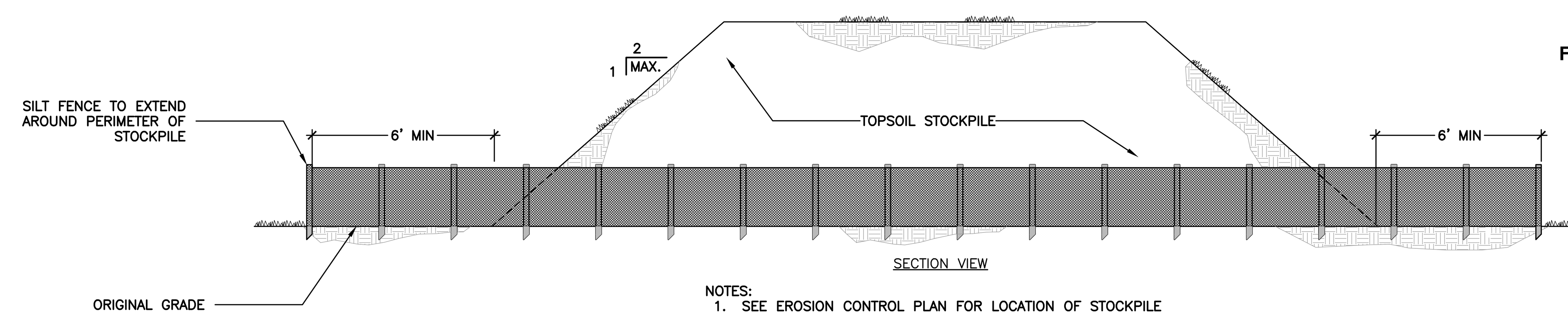
FENCE: WOVEN WIRE, 14 1/2 GAUGE, 6" MAX. MESH OPENING

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

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH IS 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 OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

6 / C–11 SILT FENCE
SCALE: NTS



SECTION VIEW

NOTES:
1. SEE EROSION CONTROL PLAN FOR LOCATION OF STOCKPILE
2. REFER TO SILT FENCE DETAIL FOR INSTALLATION OF SILT FENCE
3. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS IT SHALL BE TEMPORARILY SEEDED FOR STABILIZATION
4. SILT FENCES TO BE MAINTAINED IN PLACE UNTIL TOPSOIL STOCKPILE HAS BEEN REMOVED

7 / C–11 TYPICAL TOPSOIL STOCKPILE
SCALE: NTS

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PLAN SEAL BY:
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NYS REGISTRATION # 068733

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ANY LICENSEE WHO ALTERS THIS DOCUMENT IS REQUIRED BY LAW TO AFFIX HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE AND SPECIFIC DESCRIPTION OF THE ALTERATIONS.

PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
SITE DETAILS

NO.	REVISION/ISSUE	DATE

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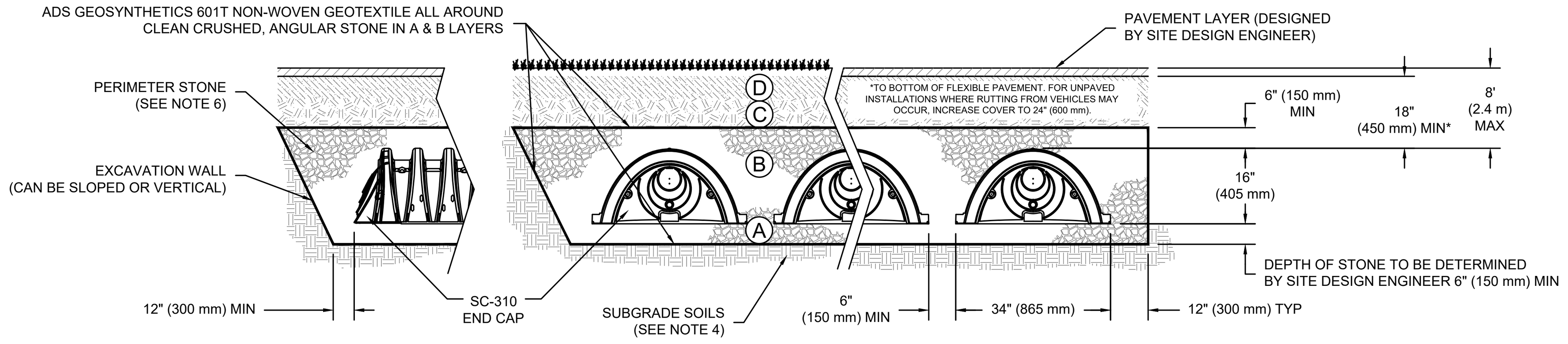
PH: (315) 682-5580 FAX: (315) 682-5544

PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE AS SHOWN
SHEET **C-11**



NOTES:

1. SC-310 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

1 / C–12 SC-310 TYPICAL CROSS SECTION

SCALE: NTS

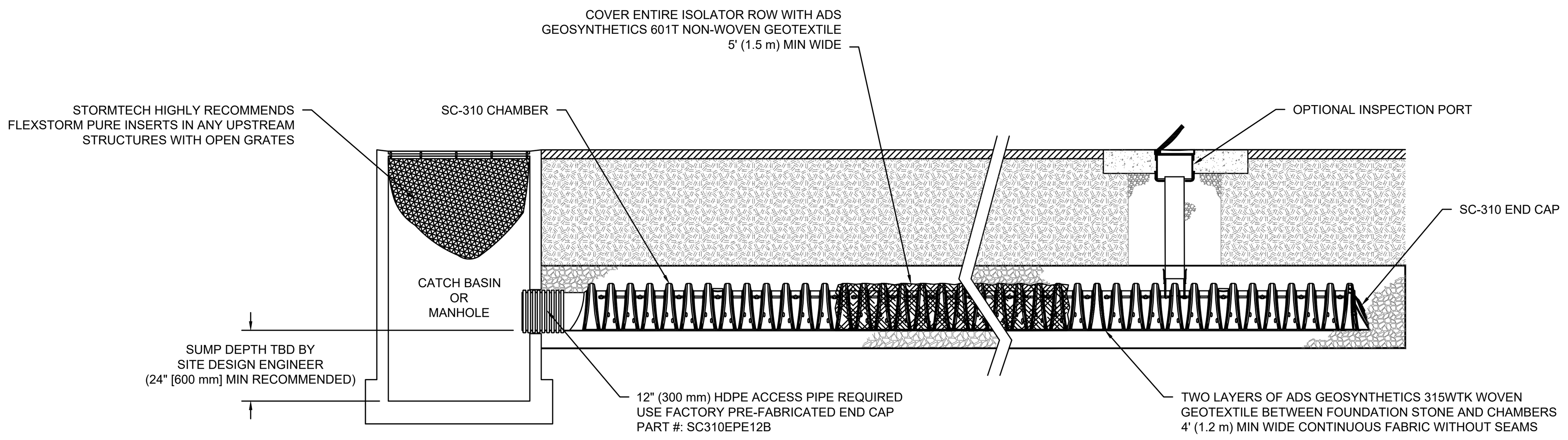
ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

2 / C–12 CHAMBER SYSTEM ACCEPTABLE FILL MATERIAL

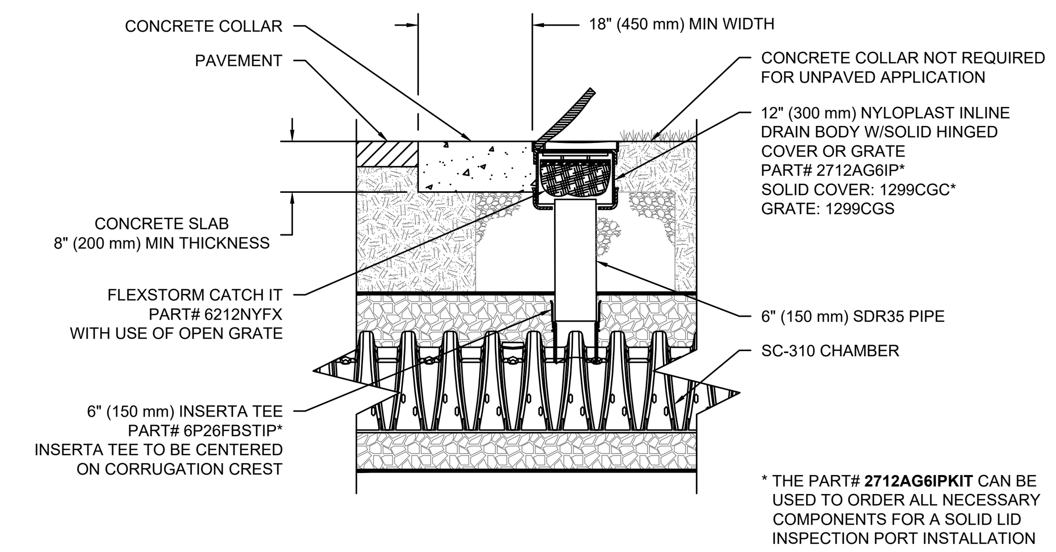
SCALE: NTS



SC-310 ISOLATOR ROW DETAIL
NTS

3 / C–12 SC-310 ISOLATOR ROW CROSS SECTION

SCALE: NTS



SC-310 6" INSPECTION PORT DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

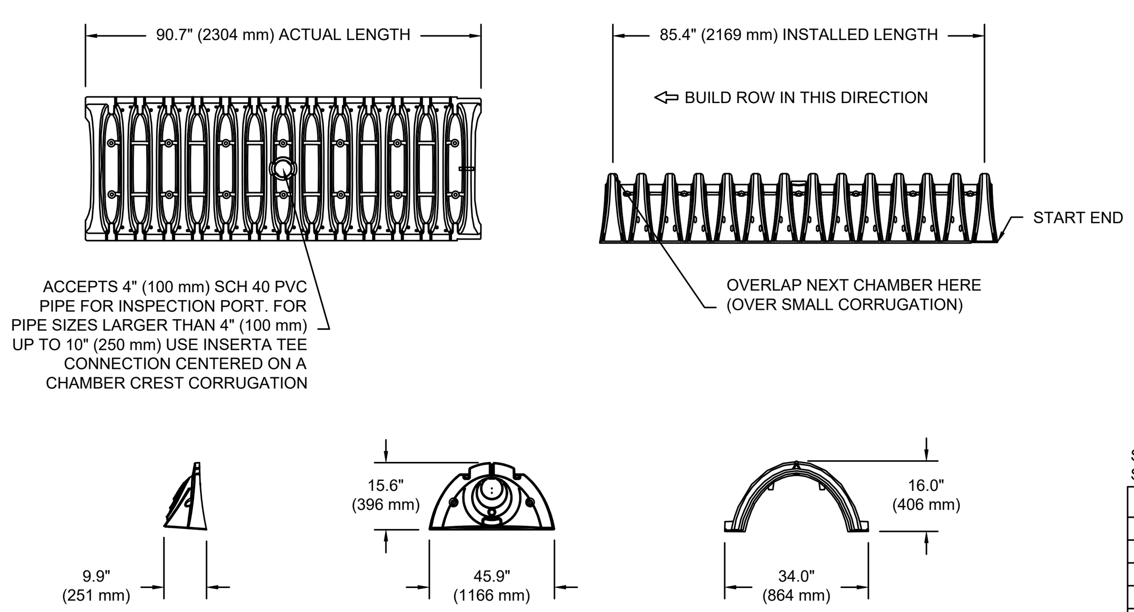
STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

4 / C–12 TYPICAL INSPECTION PORT

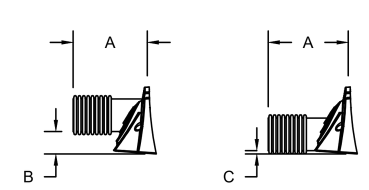
SCALE: NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

5 / C–12 SC-310 SPECIFICATIONS

SCALE: NTS

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PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
UNDERGROUND DETENTION CHAMBER SYSTEM DETAILS

NO.	REVISION/ISSUE	DATE

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PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE AS SHOWN
SHEET **C-12**

STORMWATER POLLUTION PREVENTION PLAN

For the:

Proposed Self Storage Facility
7030 Manlius Center Road
Town of Manlius, NY

Prepared for:

G&T Properties LLC
P.O. Box 411
Fayetteville, NY 13066

Prepared by:

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Project No. 20-1913

March 2021

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EXECUTIVE SUMMARY

A. Purpose

The following Stormwater Pollution Prevention Plan (SWPPP) has been developed to control stormwater runoff and pollutants from a site during and after construction activities. The objective of this SWPPP is to comply with the NYSDEC SPDES Stormwater Permit from Construction Activities by planning and implementing standard design practices.

B. Project Description

The 2.56-acre property is located on the south side of Manlius Center Road (Route 290) in the Town of Manlius, Onondaga County, NY. The subject parcel is an existing vacant commercial property with existing asphalt and two driveways onto Manlius Center Road. This project consists of the construction of a self-storage facility, including a climate-controlled storage/office building and several drive-up storage buildings. The project will include one access driveway onto Manlius Center Road and standard asphalt parking spaces. Also included in this project is site landscaping, site lighting, utility connections, and associated stormwater mitigation facilities.

C. Stormwater Practices

Stormwater practices are categorized as either temporary construction measures or permanent operation measures. The temporary measures that will be used on this site for erosion and sediment control include (but are not limited to): stabilized construction entrance, silt fencing, and temporary sediment basins. The permanent stormwater practice to be installed is a vegetated water quality swale that will provide water quality and runoff reduction. As well, given the classification of this project as a redevelopment project, an underground water quality vault will be installed to provide water quality control for the existing impervious area. All practices, both the temporary construction measures and the permanent operation measures, have been designed in accordance with the established standards.

D. Water Quality Treatment

The water quality volume treatment characteristics are summarized below. The entire water quality descriptions and calculations are further detailed in Section III.E.

Water Quality Volume	
Required WQv (ac-ft)	**Total Provided WQv (ac-ft)**
0.086	0.094

E. Runoff Reduction Volume (RRv)

The NYSDEC regulation requires all construction projects that disturb greater than one acre of land to provide runoff reduction through the implementation of green infrastructure practices. Runoff reduction volume for this project is achieved using a vegetated swale. This volume is summarized below and further detailed in Section III.D.

Runoff Reduction Volume	
Required RRv (ac-ft)	**Total Provided RRv (ac-ft)**
0.006	0.008

F. Stormwater Quantity

The chart below summarizes the stormwater discharges from the site and is further detailed in Section III.H.

	Existing Peak Runoff Rate (cfs)		**Proposed Peak Runoff Rate (cfs)**	
	DA-1A	DA-1B	DA-1A	DA-1B
10-Year Storm	1.93	8.21	1.58	7.59
100-Year Storm	3.37	15.74	2.95	15.60

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APPENDIX D: VEGETATED SWALE AND DETENTION CHAMBER SYSTEM CONSTRUCTION AND MAINTENANCE
APPENDIX E: SWPPP FORMS
APPENDIX F: EROSION & SEDIMENT CONTROL DETAILS AND STORMWATER MANAGEMENT PLAN

Section I. SCOPE

A. PURPOSE

Napierala Consulting, Professional Engineer, P.C., has prepared this Stormwater Pollution Prevention Plan (SWPPP) in compliance with the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) Construction General Permit governing stormwater discharges during construction. The contractor's participation and adherence to this plan is mandatory. Non-compliance with the plan is subject to various remedies including, without limitation, monetary set-offs, withholding payments, reimbursement for costs, expenses (including reasonable attorney's fees), fines and civil penalties incurred and/or liquidated damages. This section provides a descriptive explanation of the Stormwater Pollution Prevention Plan and required contractor participation.

B. SPDES GENERAL PERMIT GP-0-20-001

Regulations enacted by the New York State Department of Environmental Conservation require permitting for the discharge of stormwater from construction activities on sites where an area of one acre or more of soil disturbance is proposed. To comply with these regulations, the developer of the site must request coverage under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). In order to obtain coverage under the General Permit, a Stormwater Pollution Prevention Plan (SWPPP) for the site must be prepared following the requirements of the New York State Stormwater Management Design Manual and the New York State Standards and Specifications for Erosion and Sediment Control.

The NOI, the SWPPP, and any amendments to the SWPPP, as well as any reports required by the SPDES General Permit for Stormwater Discharges from Construction Activity, must also be submitted concurrently to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction project.

C. RESPONSIBILITIES OF THE OWNER

The owner/operator shall 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. The owner/operator shall identify the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The owner/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. The owner/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/operator shall have a qualified inspector conduct site inspections.

D. RESPONSIBILITIES OF THE CONTRACTOR

The contractor shall manage the discharge of stormwater from the site in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity. The owner shall be responsible for conducting the stormwater management practices in accordance with the permit. The contractor shall be responsible for providing qualified inspectors to conduct the inspections required by the SWPPP. The contractor shall be responsible for any enforcement action taken or imposed by federal, state, or local agencies, including the cost of fines, construction delays, and remedial actions resulting from the contractor's failure to comply with the permit provisions. It shall be the responsibility of the contractor to make any changes to the SWPPP necessary when the contractor or any of his subcontractors elects to use borrow or fill or material storage sites, either contiguous to or remote from the construction

site, when such sites are used solely for this construction site. Such sites are considered to be part of the construction site covered by the permit and this SWPPP. Off-site borrow, fill, or material storage sites which are used for multiple construction projects are not subject to this requirement, unless specifically required by state or local jurisdictional entity regulations. The contractor should consider this requirement in negotiating with earthwork subcontractors, since the choice of an off-site borrow, fill, or material storage site may impact their duty to implement, make changes to, and perform inspections required by the SWPPP for the site.

The SWPPP shall provide forms for both the general contractor and subcontractor(s) identifying the company name, business address and telephone number along with the responsible person for the contractor and all subcontractors' who will implement the measures identified in the SWPPP. **The general contractor shall sign the "General Contractor's Certification" and all subcontractors shall sign the "Subcontractor's Certification",** verifying they have been instructed on how to comply with and fully understand the requirements of the NYSDEC and SWPPP. **This certification must be signed, by a fully qualified individual on behalf of each entity, prior to the beginning of any construction activities and shall be filed in the projects SWPPP.**

The SWPPP is meant to be a working document that shall be maintained at the site of the construction activities at all times throughout the project, shall be readily available upon request by the operator's personnel or NYSDEC or any other agency with regulatory authority over storm water issues, and shall be kept on-site until the site complies with the Final Stabilization section of this document. **A sign or other notice must be posted near the main entrance of the construction site which contains a completed NOI, the location of the SWPPP and the name and phone number of a contact person responsible for scheduling SWPPP viewing times, and any other state specific requirements.**

E. NOTICE OF INTENT

The operator has petitioned the NYSDEC for the stormwater discharges during construction at this site to be covered by the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity. A **Notice of Intent** (NOI) to be covered under this permit has been filed by the operator. The signatory on the NOI must sign all documents (i.e., inspection reports) associated with the SWPPP. If the signatory chooses not to sign all documents, he/she must designate a duly authorized representative to sign all relevant documents. This designation must be made in writing and be included in the SWPPP. The duly authorized representative may be either a named individual or any individual occupying a named position. Additionally, the written designation must be submitted to the NYSDEC.

F. STORMWATER INSPECTIONS

1. Inspection Procedures

Inspections of the erosion control practices are required once every seven days by a qualified professional. All inspections will continue until the site complies with the final stabilization section of this document. **Weekly Inspections must be conducted by a "Qualified Professional". "Qualified Professional" means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a licensed Professional Engineer (PE), Certified Professional in Erosion and Sediment Control (CPESC), or soil scientist.** Each inspection must be followed up by a report documenting the inspector's findings and request the required maintenance and/or repair for the erosion and sedimentation control measures. It is imperative that the contractor documents the inspection and maintenance of all erosion and sedimentation control measures as soon as possible after the inspection and/or maintenance have been completed. These records are used to prove that the required inspection and maintenance were performed. The records shall be placed in the SWPPP. In addition to inspection and maintenance reports, records should be kept of the construction activities that occur on the site. The operator shall post at the site, in a publicly-accessible location, a summary of the site inspection activities on a monthly basis.

2. Record Keeping

The operator shall also prepare a written summary of its status with respect to compliance with this general permit at a minimum frequency of every three months during which coverage under the NYSDEC

SPDES General Permit for Stormwater Discharges from Construction Activity exists. The summary should address the status of achieving each component of the SWPPP. The reports shall be signed by the signatory of the NOI or a duly-authorized person and be retained at the construction site.
The contractor shall retain copies of the SWPPP, all reports and data for a minimum of five (5) years after the project. The following list identifies the required inspection and maintenance documentation that must be maintained by the contractor under this SWPPP.

- Inspection Report
- Stabilization Schedule
- Implementation Schedule
- Status Report

G. SWPPP MODIFICATIONS

The inspection report should also identify if any revisions to the SWPPP are warranted due to unexpected conditions. The SWPPP is meant to be a dynamic working guide that is to be kept current and amended whenever:

- The NYSDEC provides notification that the SWPPP does not comply with the minimum permit requirements.
- The design, construction, operation, or maintenance of the site changes in a way which significantly affects the potential for the discharge of pollutants or when the plan proves to be ineffective in eliminating or significantly minimizing pollutant discharges
- Within seven (7) calendar days of knowledge of a reportable release.

Any such changes to the SWPPP must be made in writing within seven (7) days of the date such modification or amendment is made. The contractor's failure to monitor or report deficiencies to the operator will result in the contractor being liable for fines and construction delays resulting from any federal, state, or local agency enforcement action.

H. FINAL STABILIZATION AND TERMINATION OF PERMIT COVERAGE

A site can be considered stabilized when all soil disturbing activities have been completed and a uniform perennial vegetative cover with a density of 80% over the unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures have been established and the facility no longer discharges stormwater associated with construction activities, and a **Notice of Termination** (NOT) form has been filed by the operator(s) with the NYSDEC. Prior to filing of the Notice of Termination, the operator shall have the qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fence) not needed for long-term erosion control have been removed. The filing of the NOT terminates coverage under the General Permit and terminates the contractor's responsibility to implement the SWPPP, but the requirements of the SWPPP, including periodic inspections, must be continued until the NOT is filed. Upon achieving this milestone, the contractor shall also submit "Final Stabilization Certification/Termination Checklist". Final payment and/or the release of any retainer will be withheld until all provisions of the SWPPP have been submitted, completed and accepted by the operator.

Section II. SITE DESCRIPTION

A. PROJECT NAME AND LOCATION

Proposed Self Storage Facility
7030 Manlius Center Road
Town of Manlius
Onondaga County, New York

UTM Coordinates from NYSDEC Stormwater Interactive Map: E: 415658; N: 4768230
NYSDEC Region 7

B. OWNER/OPERATOR NAME AND ADDRESS

G&T Properties LLC.
P.O. Box 411
East Syracuse, NY 13057

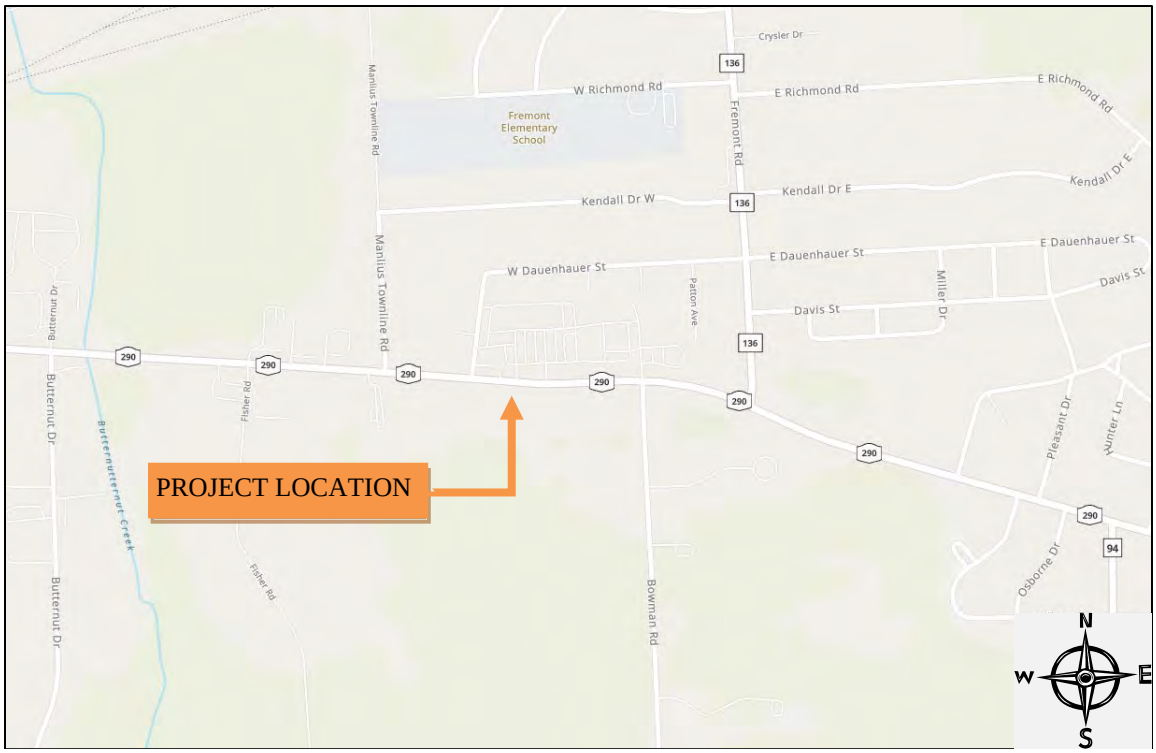

Figure 1: Site Location Map

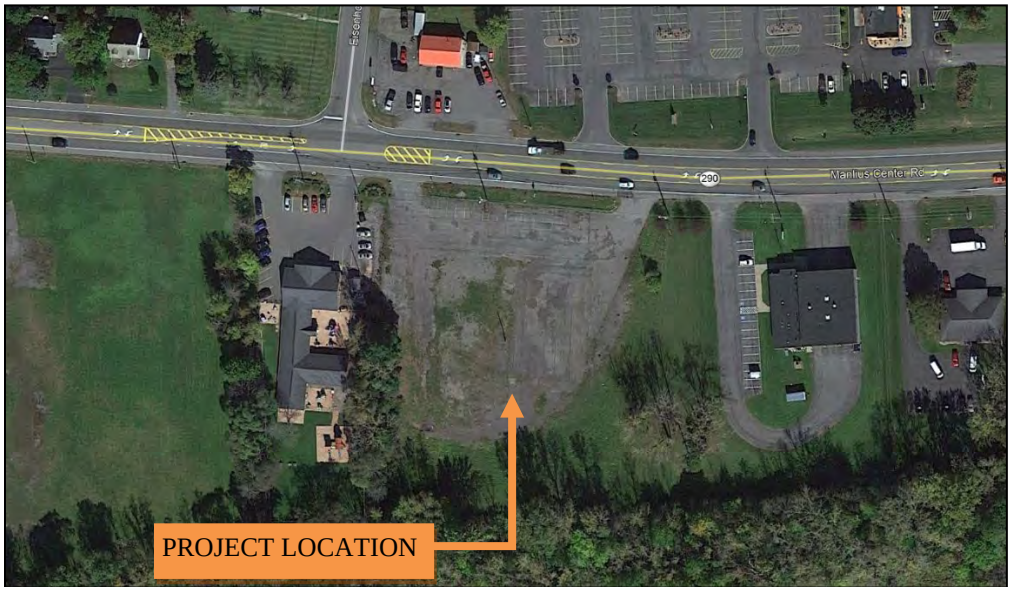

Figure 2: Proposed Site Aerial Image - Google Earth

C. PROJECT DESCRIPTION

The 2.56-acre property is located on the south side of Manlius Center Road (Route 290) in the Town of Manlius, NY. The subject parcel is an existing vacant commercial property with existing asphalt and two driveways onto Manlius Center Road. This project consists of the construction of a self-storage facility, including a climate-controlled storage/office building and several drive-up storage buildings. The project will include a driveway onto Manlius Center Road and standard asphalt parking spaces. Also included in this project is site landscaping, site lighting, utility connections, and associated stormwater mitigation facilities.

D. RECEIVING WATERS

Stormwater runoff from the site generally flows at a very gradual slope to the rear of the site where there are existing wetlands on the property to the south. This site is within The Town of Manlius which is a regulated MS4 (municipal separate storm sewer system). The NYS DEC Environmental Resource Mapper shows that DEC regulated wetlands are not located on the project site, nor is the site in the floodplain.

Figure 3. Onondaga County GIS Wetland and Floodplain Mapper

Figure 4: NYS DEC Environmental Resource Mapper

E. ENDANGERED OR THREATENED SPECIES

The NYS DEC Environmental Resource Mapper identifies the site as within the check zone for potentially containing rare plants and animals. We have reached out to the NYSDEC National Heritage Program and are awaiting a response.

F. FEDERAL AND STATE HISTORIC PRESERVATION

The SPDES (State Pollutant Discharge Elimination System) GP-0-20-001 requires that the discharge from construction activities shall not influence properties listed as or eligible for listing on the State or National Register of Historic Places. Figure 5 shows the SHPO (State Historic Preservation Office) map which indicates the project is not within an archeologically sensitive area.

Figure 5: State Historic Preservation Office Map

Section III. STORMWATER MANAGEMENT

A. METHODOLOGY

1. Hydrologic Conditions

The peak runoff rates for the site were calculated for the existing and proposed hydrologic conditions using HydroCAD software. The HydroCAD program uses the standard SCS TR-55 Curve Number Method for calculation of the time of concentration, composite curve number, and peak runoff rates for the drainage area(s) based on input by the user. The input data was taken from soil maps, detailed topographic and utility survey information, rainfall distribution maps, and aerial images. The required Water Quality Volume (WQ_v) was calculated in accordance with the New York State Stormwater Management Design Manual. The Channel Protection Volume (Cp_v) was calculated based on the release of the 1-year storm runoff volume over a 24-hour period. The hydrologic conditions are used to assess the impacts to the runoff characteristics and to design appropriate measures to mitigate these impacts. The NYS SPDES General Permit for Stormwater Discharges from Construction Activity requires that a stormwater mitigation system meet the following five design criteria.

a. Water Quality Volume: The system must capture and treat runoff from the 90% of the average annual runoff volume.
b. Runoff Reduction Volume: The system must apply green infrastructure techniques and Stormwater Management Practices to replicate pre-development hydrology.
c. Provide 24-hour extended detention of the runoff from the one-year, 24-hour rainfall event.
d. Attenuation of the post-development 10-year, 24-hour peak discharge rate to predevelopment levels.
e. Attenuation of the post-development 100-year, 24-hour peak discharge rate to predevelopment levels.

2. Rainfall Information

The following table shows the rainfall values used in the design of the stormwater mitigation basin. These values are taken from rainfall distribution maps provided by the Northeast Regional Climate Center and the New York State Stormwater Management Design Manual, which can be seen on the following page. These values are applied to a Type II 24-hour rainfall distribution in the modeling of the watersheds using the HydroCAD program.

Table 1: Rainfall Information

Precipitation Event	Rainfall in inches
90% Rainfall (WQ_v)	1.00
1-Yr, 24-Hr (Cp_v)	2.04
10-Yr, 24-Hr (Q_p)	3.42
100-Yr, 24-Hr (Q_f)	5.76

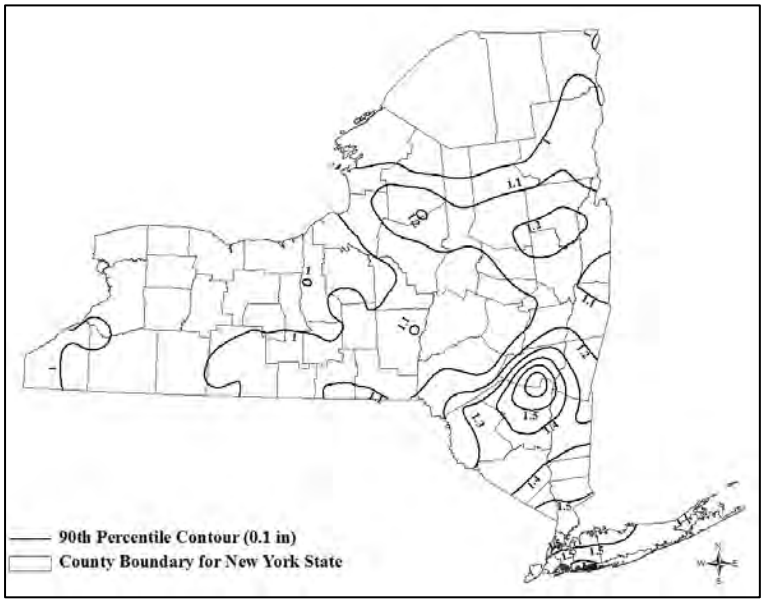

Figure 6: New York State 90% Rainfall Map

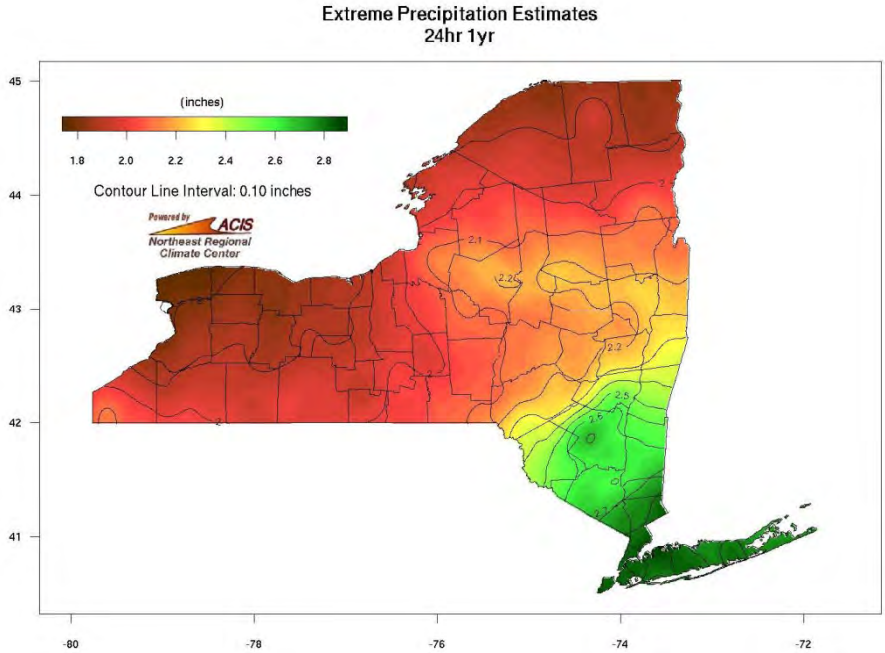

Figure 7: New York State One-Year Design Storm Map

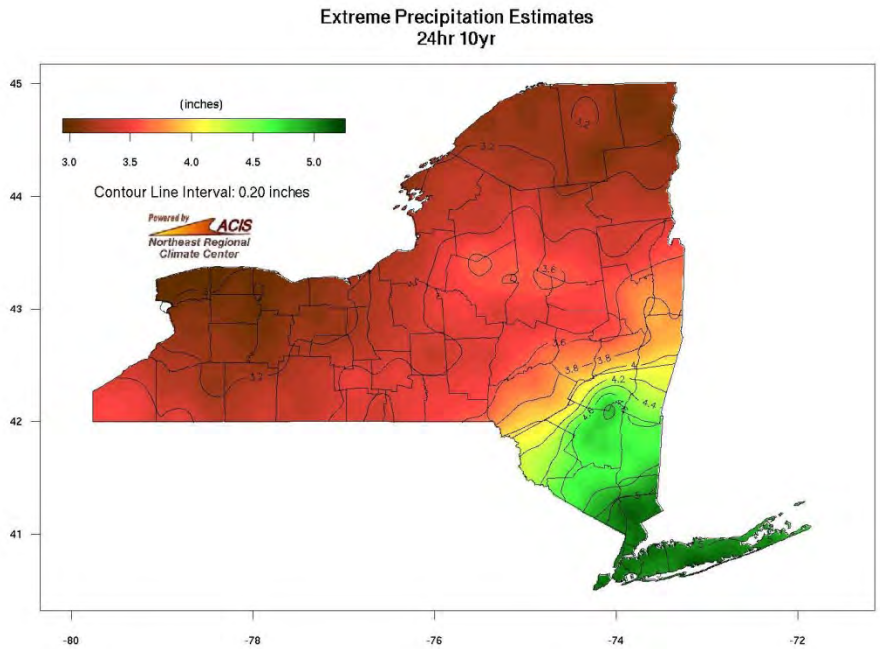

Figure 8: New York State 10-Year Design Storm Map

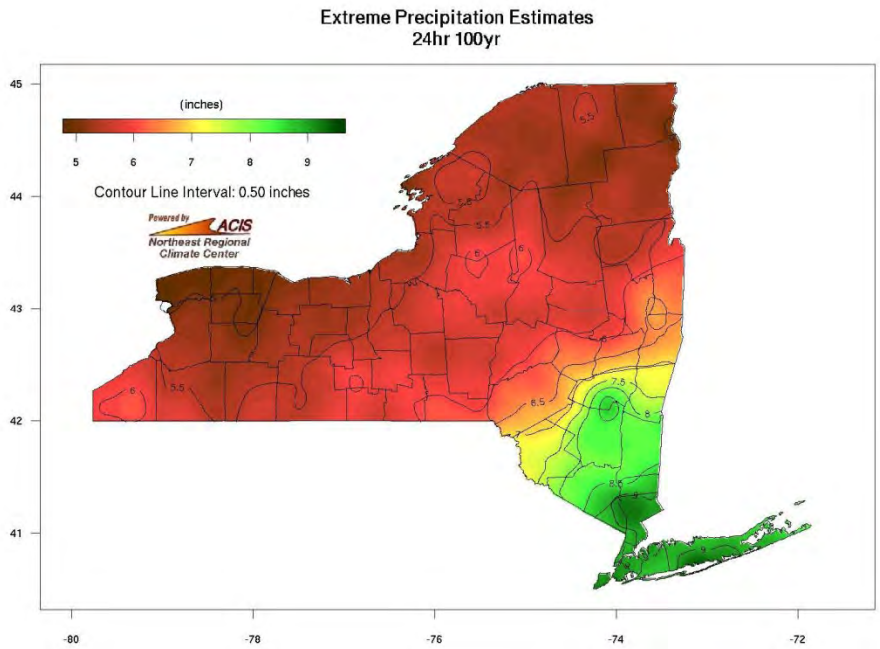

Figure 9: New York State 100-Year Design Storm Map

3. Soil Information

A majority of the subject site has been classified as Urban Land (Ub) with the remainder as Varick silt loam (Va), which has a hydrologic soil group (HSG) of D. This indicates that the site should have soils that have a low infiltration rate. As such, all on-site soils will be treated as HSG D for modeling and analysis purposes. The NRCS Soil Survey Map is shown in Figure 10 below and the soil descriptions can be reviewed in Appendix C.

Figure 10: Project Site NRCS Soil Survey Map

B. EXISTING CONDITIONS

The existing drainage area of approximately ±3.16 acres consists largely of the vacant pavement and lawn area that makes up a majority of the subject property. The existing impervious area is comprised of the gravel and asphalt pavement, driveway, and southern half of Manlius Center Road. The grade of the land across the site consistently slopes very gradually to the south towards the wetlands adjacent property to the south. The following figure displays the map of the existing drainage conditions on the project site.

GRAPHIC SCALE
0 30' 60'
(IN FEET)
1 inch = 30 ft

NOTE:
THIS LAYOUT REQUIRES THE USE OF UNDERGROUND STORMWATER MANAGEMENT TO MEET SPDES PERMIT REGULATIONS.

PROJECT TITLE:
MANLIUS CENTER ROAD
SELF STORAGE
TOWN OF MANLIUS
ONONDAGA COUNTY, NY

PREPARED FOR:
GREG RINALDI
5890 DROTT DRIVE
EAST SYRACUSE, NY 13057

SHEET TITLE:
EXISTING DRAINAGE AREA

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104
EMAIL MNAPIER@NAPCON.COM
PH: (315) 682-5588 FAX: (315) 682-5544

PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE 1" = 30'

SHEET EX

PLANS SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 065733

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PROFESSIONAL ENGINEER, PC

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Existing Drainage Area DA-1A

Existing Drainage Area 1 (DA-1A) covers 0.43± acres and drains to a catch basin within the Manlius Center Road ROW. The drainage area is mainly comprised of pavement area at the front of the subject site, the southern half of Manlius Center Road, and the lawn area between them.

Table 2: Existing Drainage Area 1A Curve Number Calculation

Area (ac)	CN	Description
0.360	98	Paved parking, HSG D
0.070	80	>75% Grass cover, Good, HSG D
0.430	95	Weighted Average
0.070		16.28% Pervious Area
0.360		83.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min TR-55 value**

Existing Drainage Area DA-1B

Existing Drainage Area 1 (DA-1B) covers 2.91± acres and drains to the west. The drainage area is mainly comprised of existing pavement and gravel area, the surrounding lawn area, and the wooded area at the rear of the subject site.

Table 3: Existing Drainage Area 1 Curve Number Calculation

Area (ac)	CN	Description
1.510	98	Paved parking, HSG D
0.840	80	>75% Grass cover, Good, HSG D
0.560	77	Woods, Good, HSG D
2.910	89	Weighted Average
1.400		48.11% Pervious Area
1.510		51.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0350	0.13		**Sheet Flow, sheet flow** Grass: Dense n= 0.240 P2= 2.38"
2.6	362	0.0200	2.28		**Shallow Concentrated Flow, shallow flow** Unpaved Kv= 16.1 fps
15.8	462	Total			

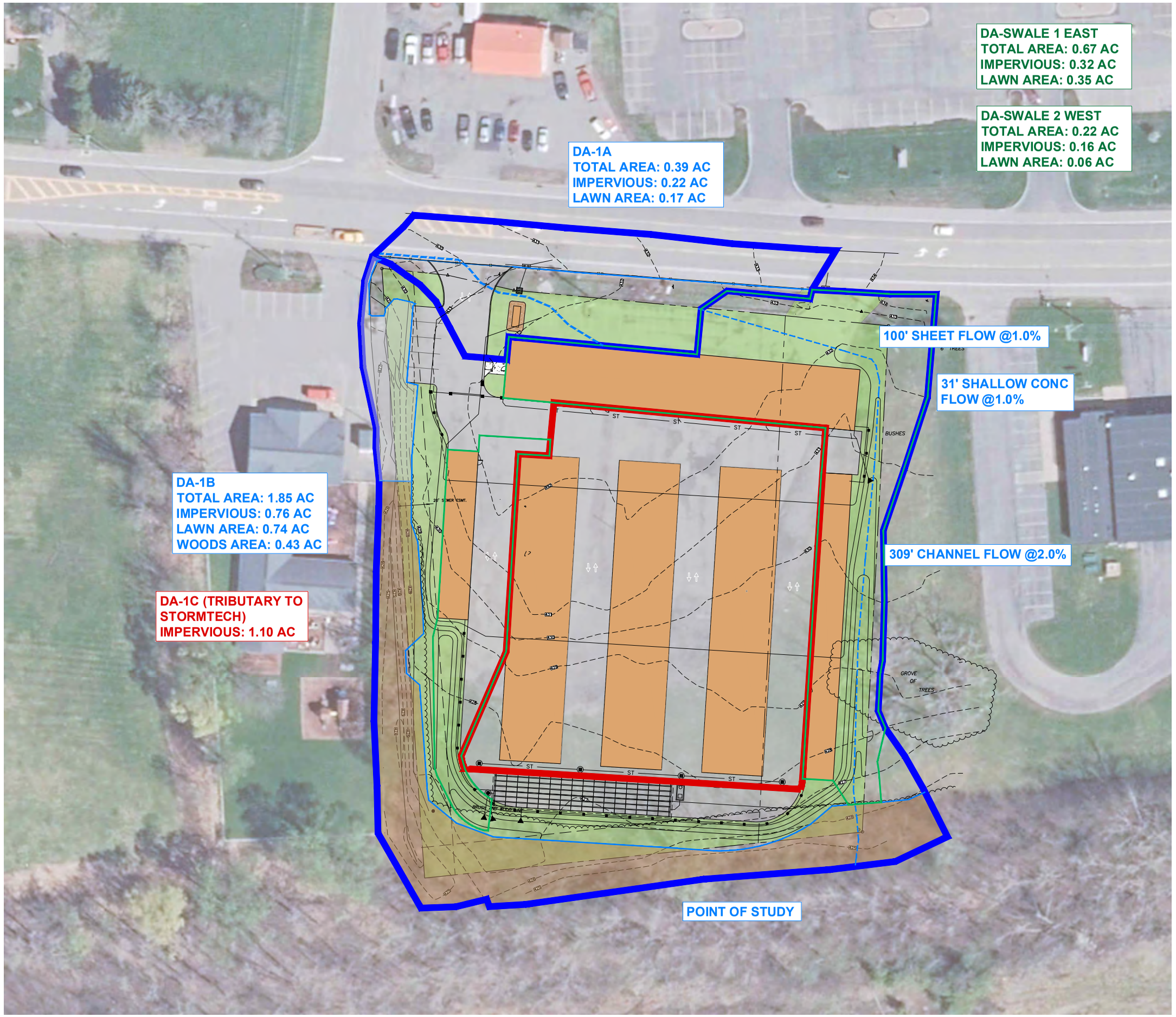
C. PROPOSED CONDITIONS

The 2.56-acre property is located on the south side of Manlius Center Road (Route 290) in the Town of Manlius, Onondaga County, NY. The subject parcel is an existing vacant commercial property with existing asphalt and two driveways onto Manlius Center Road. This project consists of the construction of a self-storage facility, including a climate-controlled storage/office building and several drive-up storage buildings. Approximately 0.35 acres of additional impervious area are proposed under the new development. The project will include one access driveway onto Manlius Center Road and standard asphalt parking spaces. Also included in this project is site landscaping, site lighting, utility connections, and associated stormwater mitigation facilities.

The stormwater management system includes several management practices to capture, treat and control the release of runoff from the site. Runoff from the impervious areas, both rooftop and asphalt, will be directed to practices to provide runoff reduction, water quality treatment and water quantity storage. The following stormwater management practices will be constructed:

- Vegetated Swale: Vegetated swales are open drainage channel systems lined with grass and designed to capture and divert stormwater runoff to a downstream point of collection or discharge. Vegetated swales temporarily store, infiltrate, and treat stormwater runoff from lower intensity storms while providing a path of conveyance for higher intensity storm events.
- Water Quality Unit (1): The water quality unit, considered an alternative stormwater management practice, uses a series of baffles, weirs, and oil catchment to improve water quality. The water quality unit removes pollutants such as phosphorous and suspended solids in order to improve the quality of the runoff before it is discharged. This unit will be located under paved area and its sizing calculations are included in Section F.

The map and narrative on the following pages summarize the hydrology of the proposed condition watershed.



GRAPHIC SCALE

0 30' 60'

(IN FEET)
1 inch = 30 ft

NOTE:
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PROJECT NO. 20-1913
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SCALE 1" = 30'

SHEET PR

PLAN SEAL BY:
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Proposed Drainage Area DA-1A

Proposed Drainage Area 1A is 0.39 acres and encompasses the driveway, front landscaping berm, and the southern half of Manlius Center Road. This area drains to a catch basin within the Manlius Center Road ROW.

Table 4: Proposed Drainage Area DA-1A Curve Number Calculations

Area (ac)	CN	Description
0.220	98	Paved parking, HSG D
0.170	80	>75% Grass cover, Good, HSG D
0.390	90	Weighted Average
0.170		43.59% Pervious Area
0.220		56.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum TR-55 Value**

Proposed Drainage Area DA-1B

Proposed Drainage Area 1B is 1.93 acres and encompasses the portion of the proposed development that is not tributary to the underground detention chamber system. The westernmost storage building drains to a vegetated swale on the southwest side of the site pavement area. The northern and easternmost storage buildings both drain to a vegetated swale on the eastern side of the site. The remaining lawn and woods area generally flows to the south towards the low-lying wet area on the property to the south.

Table 5: Proposed Drainage Area DA-1B Curve Number Calculations

Area (ac)	CN	Description
0.760	98	Paved parking, HSG D
0.740	80	>75% Grass cover, Good, HSG D
0.430	77	Woods, Good, HSG D
1.930	86	Weighted Average
1.170		60.62% Pervious Area
0.760		39.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.5	100	0.0200	0.10		**Sheet Flow, sheet flow** Grass: Dense n= 0.240 P2= 2.38"
0.3	31	0.0100	1.61		**Shallow Concentrated Flow, shallow flow** Unpaved Kv= 16.1 fps
0.6	309	0.0200	8.41	50.44	**Channel Flow, swale flow** Area= 6.0 sf Perim= 6.0' r= 1.00' n= 0.025 Earth, clean & straight
17.4	440	Total			

Proposed Drainage Area DA-1C

Proposed Drainage Area 1B is 1.10 acres of impervious area that is collected by a series of catch basins before entering a water quality vault and is ultimately tributary to the underground detention chamber system.

Table 6: Proposed Drainage Area DA-1C Curve Number Calculations

Area (ac)	CN	Description
1.100	98	Paved parking, HSG D
1.100		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MIN TR 55**

D. RUNOFF REDUCTION VOLUME (RRV)

The NYSDEC implemented regulations effective March 1, 2011 that requires all construction projects that disturb greater than one acre of land to provide runoff reduction through the implementation of green infrastructure practices. The goal of the runoff reduction volume criteria is to implement stormwater management practices and green infrastructure techniques to replicate pre-development hydrology. The NYS Stormwater Management Design Manual provides the acceptable green planning techniques and green infrastructure techniques to meet the runoff reduction volume criteria. The following narrative and calculations detail the implementation of the planning and infrastructure techniques on the site to achieve the minimum runoff reduction volume. The narrative follows the Design Manual, Chapter 5.

PLANNING

1. Plan to preserve, avoid and minimize

	Applicable	Not Applicable
a. Preserve undisturbed, natural buffer, and critical environmental areas.	☐	☒
b. Employ open space, conservation, and clustering site design techniques.	☐	☒
c. Avoid developing in environmentally sensitive areas: floodplain, steep slopes, habitat, ecosystems, bedrock, wetlands, shorelines, shallow groundwater, impervious soils and unstable soils.	☐	☒
d. Minimize impervious surfaces: building footprints, parking, roads, sidewalks, and driveways.	☐	☒
e. Minimize clearing and grading	☒	☐

Discussion:

a. The project is developing a vacant commercial property that does not contain critical environmental areas.

b. Open space design, as discussed in the Stormwater Management Design Manual, is not applicable to this project. Open space is used in projects on tracts of land where the development can be concentrated in a portion of the site while maintaining large portions of undisturbed land. Clustering is typically incorporated in residential subdivision projects involving the creation of multiple lots with multiple buildings.

c. The subject property does not contain environmentally sensitive areas.

d. The NYS Stormwater Design Manual discusses building footprint reduction in terms of building multiple floors to achieve the same, or comparable, square footage as a single-floor footprint. Reducing the footprint by locating any services on anything other than a single floor is not feasible to the operation of this building.

e. The proposed grading plan for the project minimizes the amount of grading to the maximum extent practicable. Grade requirements for a functional site, including slopes to meet the American's with Disabilities Act and tenant requirements were taken into account during the design phase. Once grades for the building were established, the off-grading was designed to catch up to the existing grade in the shortest distance possible (i.e., minimize off-grading) while still meeting acceptable standards for slope stabilization and erosion control.

E. WATER QUALITY VOLUME (WQv) & RUNOFF REDUCTION VOLUME (RR_V) REQUIRED:

The site will be treated as a redevelopment project with an increase in impervious area. As such, 75% of the water quality volume calculated from the existing impervious area shall be treated with an alternative SMP such as a water quality treatment vault. Additionally, 100% of the water quality volume calculated from the new on-site impervious area shall be treated with a standard SMP. Only new impervious area will be used in the requirement for Runoff Reduction Volume, as is stated in Chapter 9 of the NYS Stormwater Design Manual.

Existing DA-1 (Total, A&B) (75% of existing to be treated by Alternative SMP)

1. Water Quality Volume

$$\mathbf{WQ_v = \frac{PR_vA}{12}}$$

90th Percentile rainfall event (P) = 1.0 inch

Drainage Area (A) = 3.16 acres (on-site drainage area)

Impervious Area (A_I) = 1.66 acres (on-site existing impervious area)

$$R_v = 0.05 + 0.9\left(\frac{A_I}{A}\right)$$

R_v = 0.523

$$\therefore WQ_v = \frac{1.0*0.523*1.66}{12}$$

WQ_v= 0.072 ac·ft (3,150 cf)

WQ_v Required by Alternative SMP= 0.072 (75%) = **0.054 ac·ft (2,350 cf)**

Proposed DA-1 (Total, A, B, &C) (100% of **new** to be treated by Standard SMPs)

1. Water Quality Volume

$$\mathbf{WQ_v = \frac{PR_vA}{12}}$$

90th Percentile rainfall event (P) = 1.0 inch

Drainage Area (A) = 3.16 acres

Impervious Area (A_I) = 2.01 acres (on-site impervious area)

$$R_v = 0.05 + 0.9\left(\frac{A_I}{A}\right)$$

R_v = 0.622

$$\therefore WQ_v = \frac{1.0*0.622*2.01}{12}$$

WQ_v = 0.104 ac·ft (4,535 cf)

WQ_v Required by Standard SMP= 0.104-0.072 = **0.032 ac·ft (1,395 cf)**

2. Required Runoff Reduction Volume

Calculate minimum required Runoff Reduction Volume (RR_v) for DA-1 using:

$$\mathbf{RR_v = \frac{P \cdot Rv \cdot S \cdot A_I}{12}}$$

A_I = total impervious area

S = 0.55 (A Soils), 0.40 (B Soils), 0.30 (C Soils), 0.20 (D Soils), or weighted average

$$\therefore RR_v = \frac{1.0(0.95)(0.20)(2.01-1.66)}{12}$$

Total Minimum RR_v required = 0.006 ac·ft (260 cf)

F. WATER QUALITY VOLUME (WQV) & RUNOFF REDUCTION VOLUME (RRv) PROVIDED

Water quality treatment and runoff reduction for the stormwater runoff from proposed impervious surfaces will be provided by two vegetated swales and a water quality vault.

Vegetated Swale Design #1 (Northeastern Portion of DA-1B)

The *Simplified Peak Flow Estimating Method* outlined in Appendix B.2 of the Stormwater Design Manual was used to calculate the peak rate of runoff during the water quality event.

$$CN = \frac{1000}{10 + 5P + 10Q - 10\sqrt{Q^2 + 1.25QP}}$$

Where:

CN = the computed runoff curve number

P = rainfall, in inches (use the 90% rainfall event for the Water Quality Storm)

Q = runoff volume ($P*R_v$), in inches

P = 1.0"

Drainage Area Tributary to Practice = 0.67 acres

Impervious Areas (A_I) = 0.32 acres

$$R_v = 0.05 + 0.9\left(\frac{0.32\text{ ac}}{0.67\text{ ac}}\right) = 0.480$$

$$CN = \frac{1000}{10 + (5 \cdot 1.0) + (10 \cdot 0.480) - 10\sqrt{(0.480)^2 + 1.25(0.480 \cdot 1.0)}}$$

$$CN = 94$$

Time of Concentration, t_c, is 18 minutes (minimum TR-55 value)

From Table 4-1 of TR-55, the initial abstraction, I_a, for a watershed with a CN of 97 is 0.128

$$\frac{I_a}{P} = \frac{0.128}{1.0} = 0.128$$

Using the I_a/P and the time of concentration, the unit peak discharge, q_u, is found to be 600 csm/in (from Exhibit 4-II, TR-55).

The peak rate of runoff is then calculated using the following formula:

$$Q_p = q_u \times A \times WQ_v$$

Where, Q_p = the peak discharge, in cfs

q_u = the unit peak discharge, in cfs/mi^2/inch

A = drainage area, in square miles (acres/640)

WQ_v = water quality volume, in watershed inches ($P*R_v$)

$$Q_p = 600\frac{\text{csm}}{\text{in}} \times \frac{0.67\text{ acres}}{\frac{640\text{ ac}}{\text{mi}^2}} \times (0.480) \times 1.0"$$

$$\mathbf{Q_p = 0.30\ cfs}$$

The required swale length must provide an average of 10 minutes of retention time where:

base width = 3 ft

side slope = 3H:1V

slope = 0.02 ft/ft

depth = 0.20 ft

cross sectional area =6 ft^2

V = 0.44 fps (calculated using Hyroflow Express in AutoCAD).

$$\text{Required Length} = 0.44\,\frac{\text{ft}}{\text{sec}} \cdot 10\text{ min} \cdot \frac{60\text{ sec}}{\text{min}} = 264\text{ ft}$$

Length provided = 270 ft

$$WQ_v = \frac{1.0*0.480*0.67}{12}$$

WQ_v Provided in Swale = $\mathbf{0.027\ ac \cdot ft}$ (1,170 cf)

The RR_v provided is calculated as follows:

Vegetated swales in C and D soils have a RRv factor of 0.2 * WQv.

$$RR_v = 0.2 * 0.027\text{ ac} \bullet \text{ft}$$

RR_v provided = 0.005 ac·ft

Vegetated Swale Design #2 (Southwestern Portion of DA-1B)

The *Simplified Peak Flow Estimating Method* outlined in Appendix B.2 of the Stormwater Design Manual was used to calculate the peak rate of runoff during the water quality event.

$$CN = \frac{1000}{10 + 5P + 10Q - 10\sqrt{Q^2 + 1.25QP}}$$

Where:

CN = the computed runoff curve number

P = rainfall, in inches (use the 90% rainfall event for the Water Quality Storm)

Q = runoff volume ($P*R_v$), in inches

P = 1.0”

Drainage Area Tributary to Practice = 0.22 acres

Impervious Areas (A_I) = 0.16 acres

$$R_v = 0.05 + 0.9\left(\frac{0.16\text{ ac}}{0.22\text{ ac}}\right) = 0.705$$

$$CN = \frac{1000}{10 + (5 \cdot 1.0) + (10 \cdot 0.705) - 10\sqrt{(0.705)^2 + 1.25(0.705 \cdot 1.0)}}$$

CN = 97

Time of Concentration, t_c, is 18 minutes (minimum TR-55 value)

From Table 4-1 of TR-55, the initial abstraction, I_a, for a watershed with a CN of 97 is 0.062

$$\frac{I_a}{P} = \frac{0.062}{1.0} = 0.062$$

Using the I_a/P and the time of concentration, the unit peak discharge, q_u, is found to be 950 csm/in (from Exhibit 4-II, TR-55).

The peak rate of runoff is then calculated using the following formula:

$$Q_p = q_u \times A \times WQ_v$$

Where, Q_p = the peak discharge, in cfs

q_u = the unit peak discharge, in cfs/mi^2/inch

A = drainage area, in square miles (acres/640)

WQ_v = water quality volume, in watershed inches ($P*R_v$)

$$Q_p = 950\frac{\text{csm}}{\text{in}} \times \frac{0.22\text{ acres}}{\frac{640\text{ ac}}{\text{mi}^2}} \times (0.705) \times 1.0"$$

$$\mathbf{Q_p = 0.23\ cfs}$$

The required swale length must provide an average of <u>10 minutes</u> of retention time where:
base width = 4 ft
side slope = 4H:1V
slope = 0.013 ft/ft
depth = 0.20 ft
cross sectional area =6 ft^2
V = 0.44 fps (calculated using Hyroflow Express in AutoCAD).

$$\text{Required Length} = 0.30\frac{\text{ft}}{\text{sec}} \cdot 10\text{ min} \cdot \frac{60\text{ sec}}{\text{min}} = 180\text{ ft}$$

Length provided = 180 ft

$$WQ_v = \frac{1.0*0.705*0.22}{12}$$

$$\boxed{\mathbf{WQ_v\ Provided\ in\ Swale = 0.013\ ac \cdot ft}\ (565\text{ cf})}$$

The RR_v provided is calculated as follows:
Vegetated swales in C and D soils have a RRv factor of 0.2 * WQv.

$$RR_v = 0.2 * 0.013\text{ ac} \bullet \text{ft}$$

$$\boxed{\mathbf{RR_v\ provided = 0.003\ ac{\cdot}ft}}$$

WQ_f for DA-Existing:

Sizing of the unit is based on peak flow during the water quality rain event. The following series of equations are used to determine the water quality flow (derived from Appendix B Section B.2 of NYSDEC Stormwater Management Design Manual):

$$CN = \frac{1000}{10 + 5P + 10Q - 10(Q^2 + 1.25QP)^{\frac{1}{2}}}$$

where:

WQ_v Rainfall (P) = 1.0 inch

Runoff Volume $(Q) = R_v * P$

where:

$R_v = 0.05 + 0.009(\%I)$

Total Drainage Area (A) = 0.67 acres

Impervious Area (A_I) = 0.67 acres

$$R_v = 0.05 + 0.9\left(\frac{A_I}{A}\right)$$

R_v = 0.95

$$\therefore Q = 0.95 * 2.04 = 1.94$$

$$CN = 98$$

Using a T_c of 6 minutes and a Type II Rainfall Distribution, the peak water quality discharge (Q_p) can be calculated:

Initial Abstraction $(I_a) = 0.041$ (Table 4-1 of TR-55)

$$\therefore \frac{I_a}{P} = \frac{0.041}{1.0} = 0.041$$

Unit Peak Discharge $(q_u) = 1{,}000\ csm/in$ (Exhibit 4-II of TR-55)

$$Q_p = q_u * A * Q * \left(\frac{1}{640}\right)$$

$$Q_p = 1{,}000 * 0.67 * 1.94 * \left(\frac{1}{640}\right)$$

$$\boxed{\boldsymbol{Q_p = 2.03\ cfs}}$$

The water quality treatment unit to be implemented is a CrystalStream "CrystalClean" Water Quality Vault Model 856, or equal. This unit has a target water quality flow of 2.30 cfs.

Greater than 75% of the existing impervious area is treated, ∴ **WQ_v Provided = 0.054 ac·ft**

G. CHANNEL PROTECTION VOLUME (CP_V)

Channel protection for redevelopment activities is not required if there is no increase in the discharge rate from the proposed development. As seen in the following peak flow mitigation section of this report, the proposed peak runoff rate is less than the existing peak runoff rate for the specified drainage areas. If the hydrology and hydraulic analysis for the project site shows that the post-construction 1-year 24-hour discharge rate and velocity are less than or equal to the pre-construction discharge rate, providing 24-hour detention of the 1-year storm to meet the channel protection criteria is not required.

H. PEAK FLOW MITIGATION (Q_{p10} and Q_{p100})

The remaining two requirements of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity are that the stormwater system cannot discharge runoff from the site during the 10-year and 100-year, 24-hour rainfall events at rates higher than the existing condition peak rates of runoff during the correlating rainfall events. An underground stormwater detention chamber system will be installed in order to mitigate the post-construction peak runoff to rates lower than the existing conditions peak runoff rates. The following tables summarize the HydroCAD results for the 10-year and 100-year rainfall events.

Table 11: Peak Flow Rates for 10-Year & 100-Year Rainfall Events

	Existing Peak Runoff Rate (cfs)		**Proposed Peak Runoff Rate (cfs)**	
	DA-1A	DA-1B	DA-1A	DA-1B
10-Year Storm	1.93	8.21	1.58	7.59
100-Year Storm	3.37	15.74	2.95	15.60

Section IV. CONTROLS

A. EROSION AND SEDIMENT CONTROLS

Prior to the commencement of construction, the operator will identify the contractor(s) and subcontractor(s) that will implement each erosion and sediment control measure identified in this SWPPP. All contractors and subcontractors identified in the SWPPP must sign a copy of the certification statement in Part III.E. of the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activities in accordance with Part V.H. of the SPDES General Permit.

1. Stabilization Practices (Permanent)
   Permanent stabilization practices for this site include:
   a. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed.
   b. Permanent seeding and planting of all unpaved areas.

2. Stabilization Practices (Temporary) Temporary stabilization practices for this site include:
   a. Temporary seeding and planting of all unpaved areas when construction activity has ceased, or will cease, in an area for 14 days. Seeding mixtures and application rates are listed in the erosion and sediment control notes on the plans.
   b. Mulching exposed areas. Mulching rates are listed in the erosion and sediment control notes on the plan sheet.
   c. Frequent watering to minimize wind erosion during construction.

Temporary Seeding of Critical Areas
Temporary seeding may be necessary on areas where final grading is complete, when preparing for winter work shutdown, or to provide cover when permanent seeding are likely to fail due to unfavorable seasonal conditions. The following seed mix shall be used for temporary seeding of disturbed slopes subject to erosion:

Spring or summer or early fall, then seed the area with ryegrass (annual or perennial) at 30 lbs. per acre (Approximately 0.7 lb./1000 sq. ft. or use 1 lb./1000 sq. ft.).

Late fall or early winter, then seed Certified 'Aroostook' winter rye (cereal rye) at 100 lbs. per acre (2.5 lbs./1000 sq. ft.).

Permanent Seeding of Critical Areas
Permanent seeding of disturbed slopes subject to erosion shall be according to the following seed mixtures.

	Variety	lbs./acre	lbs/1000 sq. ft.
Birdsfoot trefoil[1]	Empire/Pardee	8[2]	0.20
OR Common white clover[1]	Common	8	0.20
PLUS Tall fescue	KY-31/Rebel	20	0.45
PLUS Redtop OR	Common	2	0.05
Ryegrass (perennial)	Pennfine/Linn	5	0.10

1. Add inoculant immediately prior to seeding
2. Mix 4 lbs each of Empire and Pardee OR 4 lbs of Birdsfoot and 4 lbs white clover per acre.

Topsoil

Existing topsoil shall be conserved by stripping and stockpiling before rough grading the site. Topsoil stockpiles shall be seeded and mulched immediately after placement. After rough grades have been established screened topsoil shall be placed at a depth of 6 inches in all areas to be seeded. See Table 5.3 below for NYSDEC requirements on soil restoration.

Table 5.3 Soil Restoration Requirements

Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required		Clearing and grubbing
Areas where topsoil is stripped only - no change in grade	HSG A &B	HSG C&D	Protect area from any ongoing construction activities.
	apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	
Areas of cut or fill	HSG A &B	HSG C & D	
	Aerate and apply 6 inches of topsoil	Apply full Soil Restoration **	
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls)	Apply full Soil Restoration (de-compaction and compost enhancement)		
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area
Redevelopment projects	Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.		

*Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.

** Per "Deep Ripping and De-compaction, DEC 2008".

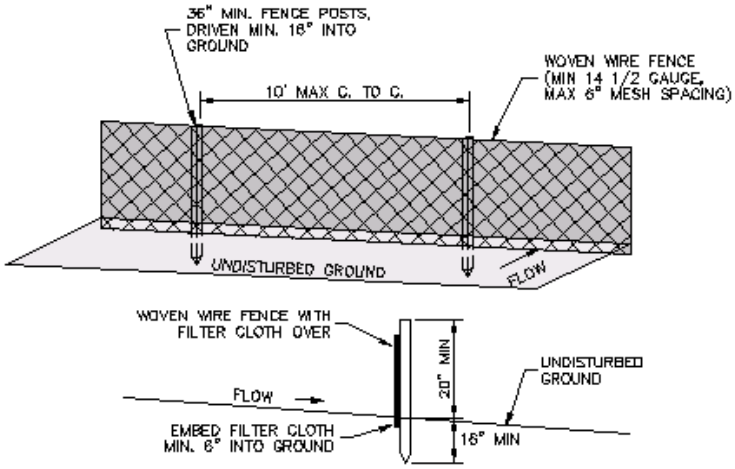
Mulching Exposed Areas

Mulch the area with hay or straw at 2 tons/acre (approximately 90 lbs/1000 ft2 or 2 bales). Quality of hay or straw mulch allowable will be determined based on long term use and visual concerns. Mulch anchoring will be required where wind or areas of concentrated water are of concern. Wood fiber hydromulch or other sprayable products approved for erosion control (nylon web or mesh) may be used if applied according to manufacturer's specification. Note: nylon or other synthetic products may be difficult to remove prior to final seeding.

3. Structural Practices (Permanent)Permanent structural practices for this site include:
   a. Stone Rip-Rap reinforced outlet protection. Stone reinforced outlet protection will be provided at all spillways and culvert outlets where velocities are sufficient to erode downstream areas, as indicated on the plans.
   b. Land grading. Land grading is the reshaping of the existing land surface in accordance with a plan as determined by the engineering survey and layout. The purpose of a land grading specification is to provide erosion control and vegetative establishment on areas where the existing land is to be reshaped according to the plan.

4. Structural Practices (Temporary)
   Temporary structural practices for this site include:

   a. Silt fence. Silt fence is a temporary barrier of geotextile fabric installed on the contours across from a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil. The purpose of silt fence is to reduce runoff velocity and effect deposition of transported sediment load.



   - Grab Tensile Strength - minimum 90 lbs per ASTM D1682
   - Elongation at Failure –50% per ASTM D1682
   - Mullen Burst Strength – minimum 190 psi per ASTM D3786
   - Puncture Strength – minimum 40 lbs per ASTM D751 (modified)
   - Slurry Flow Rate – 0.3 gal/min/sf
   - Equivalent Opening Size 40-80 per square inch US Std Sieve CW-02215
   - Ultraviolet Radiation Stability 90% ASTM G-26
   - Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.0 square inches. Steel posts will be standard T and U section weighing not less than 1 pound per linear foot.
   - Wire Fence (for fabricated units): Wire fencing shall be a minimum 14 gage with a maximum 6 in. mesh opening, or as approved.
   - Prefabricated Units: Envirofence, Geofab, or approved equal, may be used in lieu of the above method providing the unit is installed per the detail above.

   b. Stabilized construction entrance/exit. A stabilized construction entrance/exit is a stabilized pad of aggregate underlain with geotextile located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of the stabilized construction entrance is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets.
      1. Aggregate size: Use a matrix of one to four-inch stone, or reclaimed or recycled equivalent
      2. Thickness: Not less than six inches

3. Width: 24-foot minimum
4. Length: As required, but not less than 50 feet
5. Geotextile: To be placed over the entire area to be covered with aggregate. Piping of surface water under entrance shall be provided as necessary.

c. Concrete washout area. A temporary excavated or above ground lined constructed pit where concrete truck mixers and equipment can be washed after their loads have been discharged to prevent highly alkaline runoff from entering storm drainage systems or leaching into the soil.

1. The washout facility is sized to contain solids, wash water and rainfall. The maximum size shall be eight feet by eight feet at the bottom and two feet deep. If excavated, then the side slopes shall be 2:1 (horizontal to vertical).
2. The facility shall be located a minimum of 100 feet from drainage swales, storm drain inlets, wetlands, streams, and other surface waters. Surface waters shall be prevented from entering the structure except got the access road. Appropriate access shall be provided with a gravel access road sloped down to the structure. Signs shall be placed to direct drivers to the facility after their load is discharged.
3. All washout facilities will be lined to prevent leaching of liquids into the ground. The liner shall be plastic sheeting with a minimum thickness of 10 mils with no holes or tears, and anchored beyond the top of the pit with an earthen berm, sand bags, stone, or other structural appurtenance except at the access point.

5. Sequence of Major Activities

The contractor will be responsible for implementing the above listed erosion and sediment control practices. The contractor may designate these tasks to certain subcontractors as is seen fit, but the ultimate responsibility for implementing these controls and ensuring their proper function remains with the contractor. The order of activities shall be as follows:

a. Conduct a preconstruction meeting with all involved parties
b. Delineate boundaries of disturbance as per the layout and grading plans
c. Construct temporary construction entrance at the location on the erosion and sediment control plan
d. Install silt fence in locations shown on the layout and grading plans
e. Establish staging areas on the project site
f. Construct temporary sediment trap for use during construction
g. Remove topsoil, stockpile and stabilize
h. Rough grade site including swales and provide temporary stabilization when idle for more than 7 days
i. Building slabs and building construction
j. Connect and install utilities
k. Construct stormwater conveyance and underground detention chamber system.
l. Compact gravel along driveways and parking areas
m. Complete final grading of the site
n. Restore all compacted soils in accordance with section 5.1.6 of the NYS Stormwater Design Manual
o. Provide final stabilization and landscaping of new area
p. Provide final stabilization of disturbed areas via seeding and mulching.
q. Remove sediment trap and finalize grading of detention basin
r. Provide final stabilization of detention basin area via seeding and mulching.
s. Remove all temporary stabilization control practices

Disturbed areas of the site where construction activity has ceased for more than seven (7) days shall be temporarily seeded and mulched. The Erosion & Sediment Control plan is shown in Appendix F.

Section V. INSPECTION AND MAINTENANCE REQUIREMENTS

Best management practices, both construction and operational, must be inspected and maintained on a routine basis to ensure continued compliance with the NYS SPDES General Permit for Stormwater Discharges from Construction Activity. The contractor is responsible for inspecting the erosion and sediment control practices, the operator/owner is responsible for providing a qualified professional, as defined in the SPDES General Permit, to perform the required weekly inspections of the construction site from the time earth-disturbing activities begin until final stabilization is achieved and the Notice of Termination is filed. The contractor will obtain copies of all local and state regulations that are applicable to stormwater management, erosion control, and pollution minimization at this job site and will comply fully with such regulations. The contractor will submit written evidence of such compliance if requested by the operator or any agent of a regulatory body. The contractor will comply with all conditions of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity, including the conditions related to maintaining the SWPPP and evidence of compliance with the SWPPP at the job site and allowing regulatory personnel access to the job site and to records to determine compliance.

A. CONSTRUCTION MAINTENANCE/INSPECTION PROCEDURES

The operator shall maintain a record of all inspection reports in a site logbook. The logbook shall be maintained on site and be made available to the permitting authority upon request. Prior to the commencement of construction, the operator shall certify in the site logbook that the SWPPP, prepared in accordance with Part III.D. of the NYS DEC SPDES General Permit for Discharges from Construction Activities, meets all Federal, State and local erosion and sediment control requirements. The operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities monthly. The following inspection and maintenance practices will be used to maintain erosion and sediment controls and stabilization measures.

1. Inspection and Maintenance Practices
    a. Inspections shall occur once every seven calendar days.
    b. At a minimum, the qualified inspector shall inspect all erosion and sediment control practices to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved final stabilization, all points of discharge to natural surface water bodies located within or immediately adjacent to the property boundaries of the construction site, and all points of discharge from the construction site.
    c. The qualified inspector shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:
        i. Date and time of inspection;
        ii. Name and title of person(s) performing inspection;
        iii. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
        iv. A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any discharges of sediment from the construction site. Include discharges from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
        v. A description of the condition of all natural surface water bodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any discharges of sediment to the surface water body;
        vi. Identification of all erosion and sediment control practices that need repair or maintenance;
        vii. Identification of all erosion and sediment control practices that were not installed or are not functioning as designed and need to be reinstalled or replaced;
        viii. Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporarily and/or final) since the last inspection;

ix. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

x. Corrective action(s) that must be taken to install, repair, replace, or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s); and

xi. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The qualified inspector shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

d. Within one business day of the completion of an inspection, the qualified inspector shall notify the owner or operator and appropriate contractor or subcontractor of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

e. All inspection reports shall be signed by the qualified inspector. The inspection reports shall be maintained on the site.

f. Erosion and Sediment Control Inspection/Maintenance

i. Silt Fence: Silt fence shall be inspected for depth of sediment, tears, etc., to see if the fabric is securely attached to the fence posts, and to see that the fence posts are securely in the ground. Built up sediment will be removed from silt fence when it has reached one-third the height of the fence.

ii. Stabilized Construction Entrance/Exit: The entrance shall be maintained in a condition which will prevent tracking of sediment onto public rights-of-way. This may require periodic top dressing with additional aggregate. All sediment spilled, dropped, or washed onto public rights-of-way must be removed immediately. When necessary, wheels must be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device. All sediment shall be prevented from entering storm drains, ditches, or water courses.

iii. Seeding: Temporary and permanent seeding and all other stabilization measures will be inspected for bare spots, washouts, and healthy growth.

2. Inspection and Maintenance Report Forms

- Once installation of any required or optional erosion control device or measure has been implemented, at least twice every seven calendar days a Qualified Professional shall inspect each practice. The inspector shall use the forms found in this SWPPP to inventory and report the condition of each measure to assist in maintaining the erosion and sediment control measures in good working order.
- These report forms shall become an integral part of the SWPPP and shall be made readily accessible to governmental inspection officials, the operator's engineer, and the operator for review upon request during visits to the project site. In addition, copies of the reports shall be provided to any of these persons upon requires, via mail or facsimile transmission. Inspection and maintenance report forms are to be maintained by the permittee for three years following the final stabilization of the site.
- The operator shall also prepare a written summary of its status with respect to compliance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity at a minimum frequency of every three months during which coverage under the SPDES General Permit exists. The summary should address the status of achieving each

component of the SWPPP. The reports shall be signed by the signatory of the NOI or a duly authorized person and be retained at the construction site.

1. Other Record Keeping Requirements

   The contractor shall keep the following records related to construction activities at the site:

   - Dates when major grading activities occur and the areas which were graded.
   - Dates and details concerning the installation of structural controls.
   - Dates when construction activities cease in an area.
   - Dates when an area is stabilized, either temporarily or permanently.
   - Dates of rainfall and the amount of rainfall.
   - Dates and descriptions of the character and amount of any spills of hazardous materials.
   - Records of reports filed with regulatory agencies if reportable quantities of hazardous materials are spilled.

B. OPERATION MAINTENANCE AND INSPECTION PROCEDURES

Long-term maintenance of the stormwater mitigation basins and swales will be the responsibility of the owner and/or the tenant. Maintenance and inspection check lists have been included in Appendix D.

1. Embankments and emergency spillways will be inspected annually and after major storm events. Items to be inspected include:
   a. Vegetation and ground cover is adequate to prevent erosion.
   b. No embankment erosion has occurred.
   c. No animal burrows into embankments.
   d. No unauthorized planting.
   e. No cracking, bulging or sliding of dam.
   f. Emergency spillway is in good condition, free of silt buildup and debris.
   g. No leaks or seepage is occurring on downstream face.
   h. All slope protection and riprap is intact and no failure has occurred.

2. Grass lined swales shall be inspected and maintained as follows:
   a. All channels are free of debris on monthly basis.
   b. No visible evidence of erosion.
   c. Mowing shall be performed as needed. Inspect to ensure minimum mowing depth has not been exceeded.
   d. Dewatering of swales between storms. Inspect monthly or as necessary.
   e. Inspect swales for sediment deposition annually and clean, as necessary.

3. Underground stormwater detention chamber system is to be inspected and maintained as per the manufacturers specifications.

Section VI. MATERIALS MANAGEMENT PLAN

A. MATERIALS COVERED

The following materials or substances are expected to be present onsite during construction:

Concrete/Additives/Wastes	Cleaning Solvents
Detergents	Petroleum Based Products
Paints/Solvents	Pesticides
Acids	Solid and Construction Wastes
Sanitary Wastes	Soil Stabilization Additives

B. MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. The job site superintendent will be responsible for ensuring that these procedures are followed.

1. Good Housekeeping
   The following good housekeeping practices will be followed onsite during the construction project.
   a. An effort will be made to store only enough products required to do the job.
   b. All materials stored onsite will be stored in a neat, orderly manner and, if possible, under a roof or in a containment area. At a minimum, all containers will be stored with their lids on when not in use. Drip pans shall be provided under all dispensers.
   c. Products will be kept in their original containers with the original manufacturer's label in legible condition.
   d. Substances will not be mixed with one another unless recommended by the manufacturer.
   e. Whenever possible, all of a product will be used up before disposing of the container.
   f. Manufacturer's recommendations for proper use and disposal will be followed.
   g. The job site superintendent will be responsible for daily inspections to ensure proper use and disposal of materials.

2. Hazardous Products
   These practices will be used to reduce the risks associated with hazardous materials. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the SWPPP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.
   a. Products will be kept in original containers with the original labels in legible condition.
   b. Original labels and material safety data sheets (MSDS's) will be procured and used for each material.
   c. If surplus product must be disposed of, manufacturer's or local/state/federal recommended methods for proper disposal will be followed.

3. Hazardous Waste
   All hazardous waste materials will be disposed of by the contractor in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. Site personnel will be instructed in these practices by the job site superintendent, who will also be responsible for seeing that these practices are followed.

4. Product Specific Practices
   The following product specific practices will be followed on the job site.

   a. Petroleum Products
      All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any petroleum storage tanks used onsite will have a dike or berm containment structure constructed around it to contain any spills, which may occur. Drip pans shall be provided for all dispensers. Any asphalt substances used onsite will be applied per the manufacturer's recommendations.

   b. Fertilizers
      Due to the onsite public water supply that will be constructed as part of this project, the use of fertilizers is not allowed without the written authorization of the operator. Authorization will be based on the specific product's possible contaminants and impacts to the groundwater.

   c. Paints, Paint Solvents, and Cleaning Solvents
      All containers will be tightly sealed and stored when not in use. Excess paint and solvents will not be discharged to the storm sewer system but will be properly disposed of per manufacturer's instructions or state and federal regulations.

5. Concrete Wastes
   Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on the site, but only in either (1) specifically designated area which has been prepared to prevent contact between the concrete and/or washout and stormwater which will be discharged from the site or (2) in locations where waste concrete can be poured into forms to make riprap or other useful concrete products.

   The hardened residue from the concrete washout areas will be disposed of in the same manner as other non-hazardous construction waste materials or may be broken up and used on site as deemed appropriate by the contractor. The job site superintendent will be responsible for seeing that these procedures are followed.

   All concrete washout areas will be in an area where the likelihood of the area contributing to storm water discharges is negligible. If required, additional BMPs must be implemented to prevent concrete wastes from contributing to storm water discharges.

6. Solid and Construction Wastes
   All waste materials will be collected and stored in a securely lidded metal dumpster rented from a local waste management company which must be a solid waste management company licensed to do business in New York State. The dumpster will comply with all local and state solid waste management regulations.

   All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of twice per week or more often if necessary, and the trash will be hauled to a landfill approved by New York State. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal.

   All waste dumpsters and roll-off containers will be in an area where the likelihood of the containers contributing to storm water discharges is negligible. If required, additional BMPs must be implemented, such as sandbags around the base, to prevent wastes from contributing to storm water discharges.

7. Sanitary Wastes
   All sanitary waste will be collected from the portable units a minimum of three times per week by a licensed portable facility provider in complete compliance with local and state regulation.

   All sanitary waste units will be in an area where the likelihood of the unit contributing to storm water discharges is negligible. If required, additional BMPs must be implemented, such as sandbags around the base, to prevent wastes from contributing to storm water discharges.

Section VII. SPILL PREVENTION AND RESPONSE PROCEDURES

The contractor will train all personnel in the proper handling and cleanup of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm water. It shall be the responsibility of the job site superintendent to properly train all personnel in spill prevention and clean up procedures.

In order to minimize the potential for a spill of hazardous materials to come into contact with storm water, the following steps will be implemented:

1. All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, cleaning solvents, additives for soil stabilization, concrete curing compounds and additives, etc.) will be stored in a secure location, with their lids on, preferably under cover, when not in use.
2. The minimum practical quantity of all such materials will be kept on the job site.
3. A spill control and containment kit (containing, for example, absorbent materials, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the storage site.
4. 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.

In the event of a spill, the following procedures should be followed

1. All spills will be cleaned up immediately after discovery.
2. The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with the hazardous substances.
3. The project manager and the Engineer of Record will be notified immediately.

   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 110, 40 CFR 117, and 40 CFR 302) must be immediately reported to the NYSDEC 24-Hour Spill Hotline at **1-800-457-7362.**

4. If the spill exceeds a Reportable Quantity, the SWPPP must be modified within seven (7) calendar days of knowledge of the discharge to provide a description of the release, the circumstances leading to the release, and the date of the release. The plans must identify measures to prevent the recurrence of such releases and to respond to such releases.

The job site superintendent will be the spill prevention and response coordinator. He will designate the individuals who will receive spill prevention and response training. These individuals will each become responsible for a particular phase of prevention and response. The names of these personnel will be posted in the material storage area and in the office trailer onsite.

Section VIII. CONTROL OF NON-STORMWATER DISCHARGES

Certain types of discharges are allowable under the NYS-DEC SPDES General Permit for Stormwater Discharges from Construction Activity, and it is the intent of this SWPPP to allow such discharges. These types of discharges will be allowed under the conditions that no pollutants will be allowed to come in contact with the water prior to or after its discharge. The control measures, which have been outlined previously in this SWPPP, will be strictly followed to ensure that no contamination of these non-stormwater discharges takes place. The following non-storm water discharges are allowed by the NYS-DEC and may occur at the job site:

1. Discharges from firefighting activities
2. Fire hydrant flushing
3. Waters to which cleansers or other components have not been added that are used to wash vehicles or control dust
4. Routine external building wash down which does not use detergents
5. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used
6. Air conditioning condensate
7. Springs
8. Foundation or footing drains where flows are not contaminated with process materials such as solvents.

Section IX. CERTIFICATION AND NOTIFICATION

The New York State Department of Environmental Conservation requires that the operator and the contractor make certifications of knowledge of the contents of this SWPPP and agreement to follow the SWPPP. The terms of the General Permit also require that each contractor sign the SWPPP plan, thereby making them co-permittees and acknowledging their responsibility for certain operational aspects of the plan. These certifications should be signed before the contractor begins activities and should be filed with the site's SWPPP at the jobsite.

APPENDIX A: HYDRO CAD – EXISTING CONDITIONS

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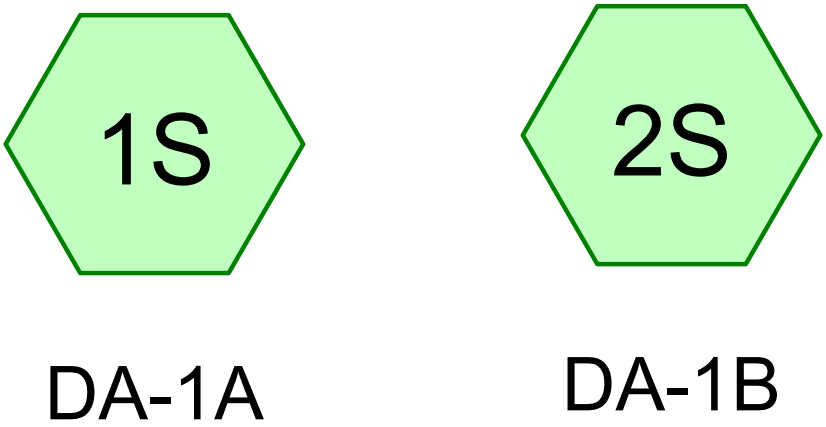
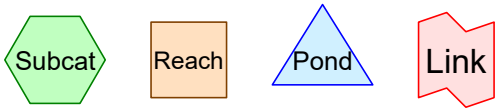




Routing Diagram for Existing Conditions
Prepared by Napierala Consulting, P.C., Printed 3/10/2021
HydroCAD® 10.00-18 s/n 01332 © 2016 HydroCAD Software Solutions LLC

Summary for Subcatchment 1S: DA-1A

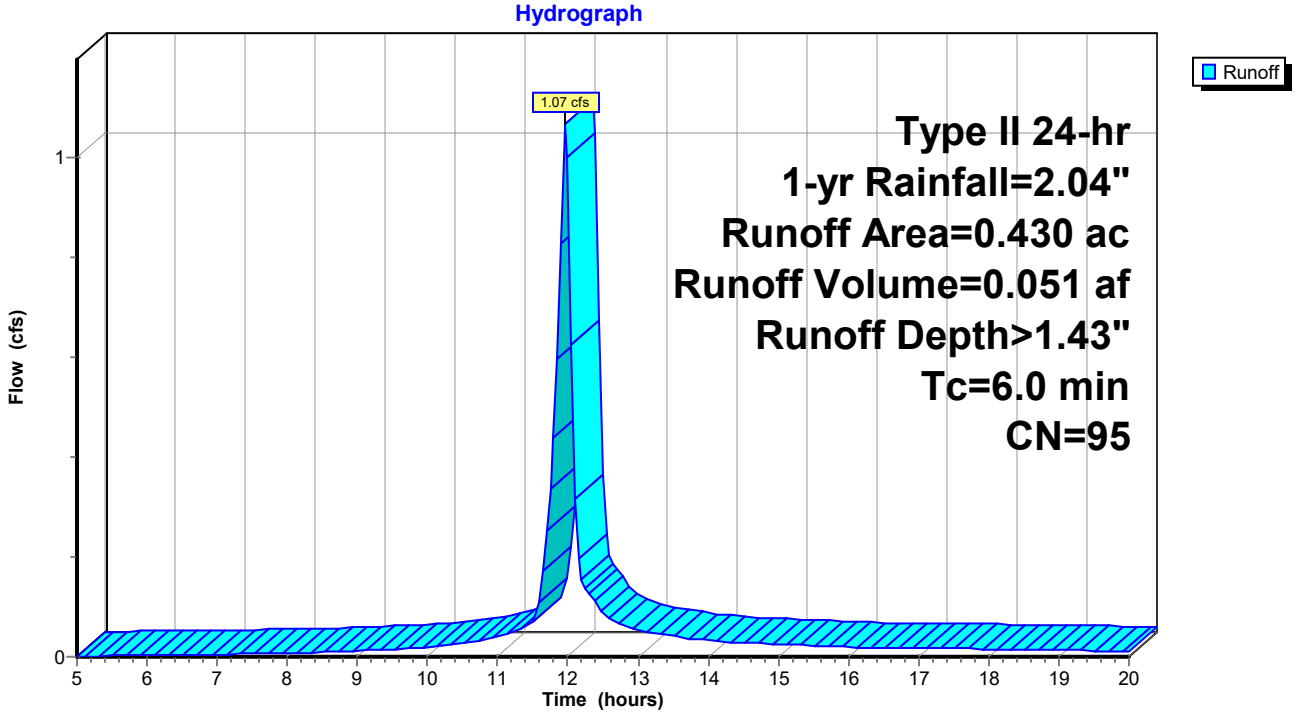
Runoff = 1.07 cfs @ 11.97 hrs, Volume= 0.051 af, Depth> 1.43"

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-yr Rainfall=2.04"

Area (ac)	CN	Description
0.360	98	Paved parking, HSG D
0.070	80	>75% Grass cover, Good, HSG D
0.430	95	Weighted Average
0.070		16.28% Pervious Area
0.360		83.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min TR-55 value**

Subcatchment 1S: DA-1A



Summary for Subcatchment 2S: DA-1B

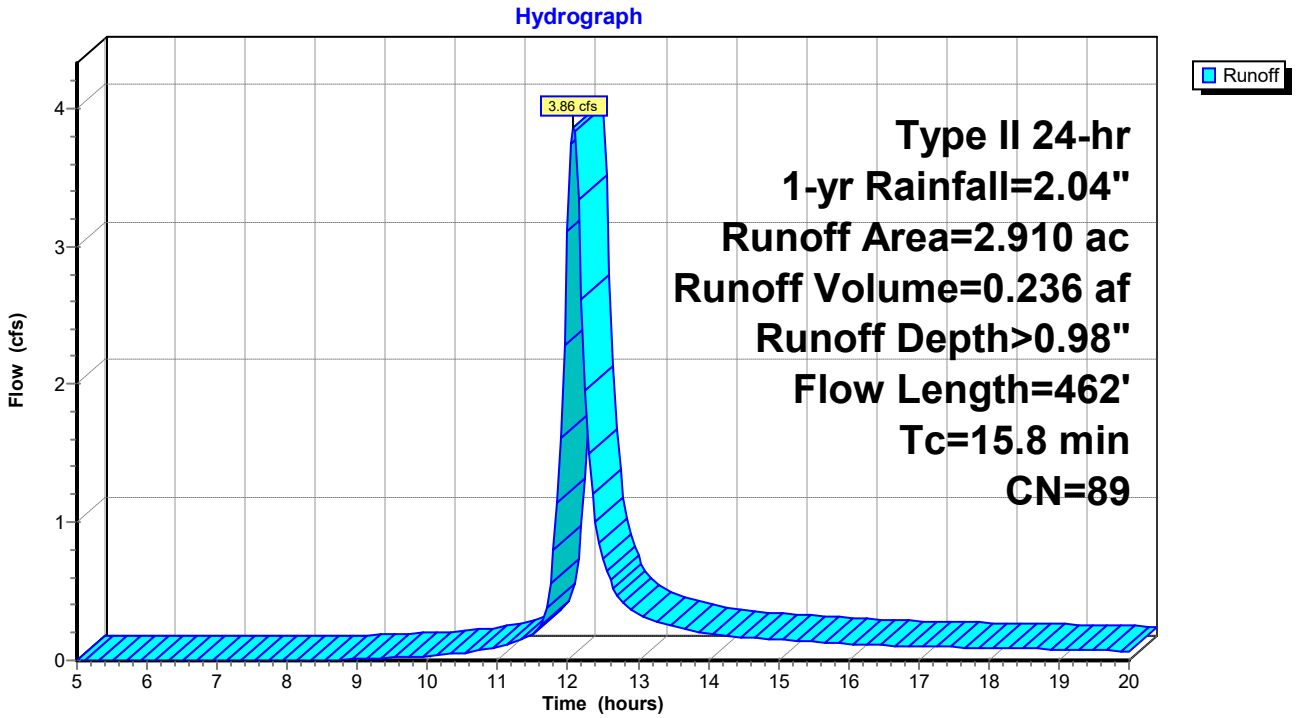
Runoff = 3.86 cfs @ 12.08 hrs, Volume= 0.236 af, Depth> 0.98"

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-yr Rainfall=2.04"

Area (ac)	CN	Description
1.510	98	Paved parking, HSG D
0.840	80	>75% Grass cover, Good, HSG D
0.560	77	Woods, Good, HSG D
2.910	89	Weighted Average
1.400		48.11% Pervious Area
1.510		51.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0350	0.13		**Sheet Flow, sheet flow** Grass: Dense n= 0.240 P2= 2.38"
2.6	362	0.0200	2.28		**Shallow Concentrated Flow, shallow flow** Unpaved Kv= 16.1 fps
15.8	462	Total			

Subcatchment 2S: DA-1B



Summary for Subcatchment 1S: DA-1A

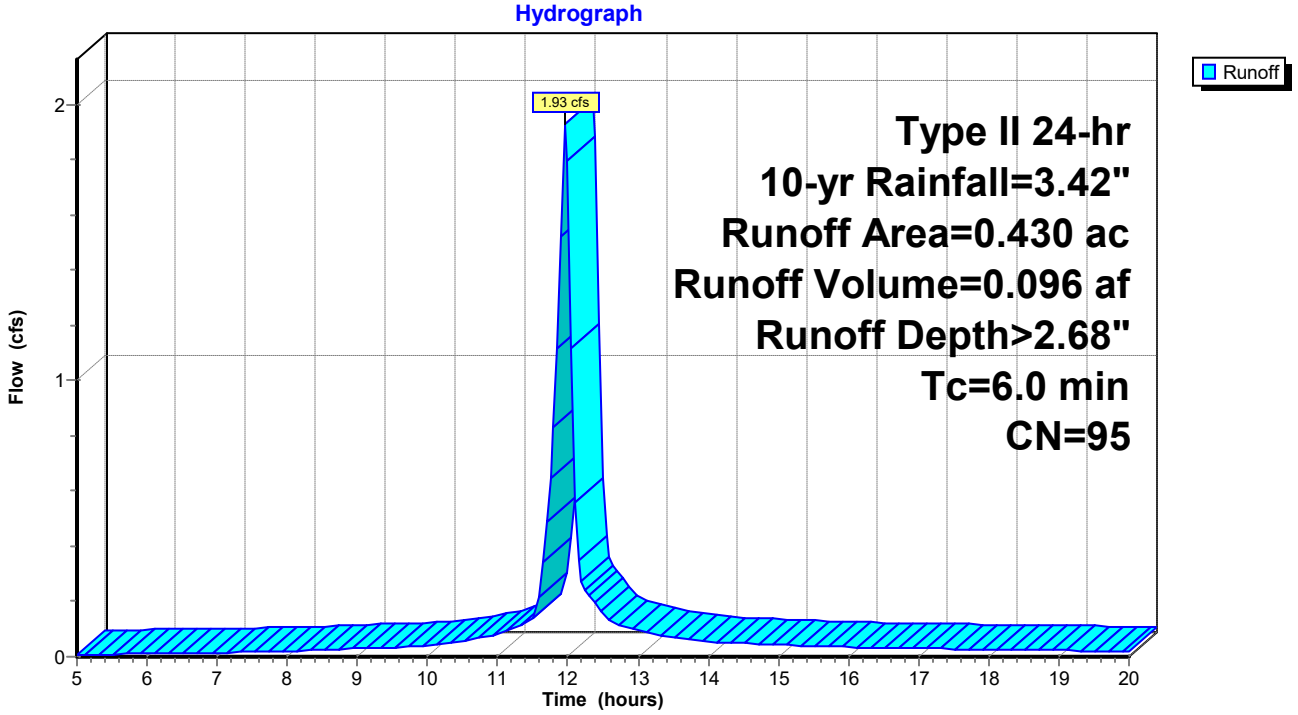
Runoff = 1.93 cfs @ 11.96 hrs, Volume= 0.096 af, Depth> 2.68"

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-yr Rainfall=3.42"

Area (ac)	CN	Description
0.360	98	Paved parking, HSG D
0.070	80	>75% Grass cover, Good, HSG D
0.430	95	Weighted Average
0.070		16.28% Pervious Area
0.360		83.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min TR-55 value**

Subcatchment 1S: DA-1A



Summary for Subcatchment 2S: DA-1B

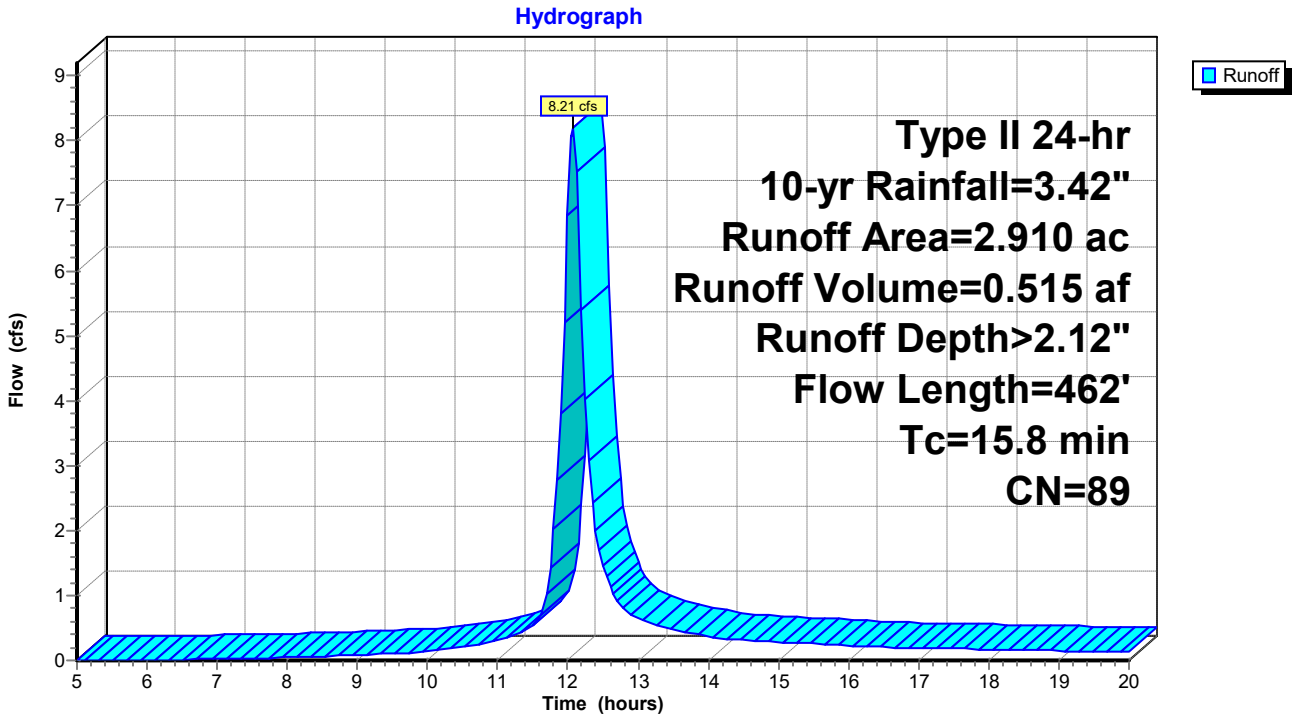
Runoff = 8.21 cfs @ 12.08 hrs, Volume= 0.515 af, Depth> 2.12"

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-yr Rainfall=3.42"

Area (ac)	CN	Description
1.510	98	Paved parking, HSG D
0.840	80	>75% Grass cover, Good, HSG D
0.560	77	Woods, Good, HSG D
2.910	89	Weighted Average
1.400		48.11% Pervious Area
1.510		51.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0350	0.13		**Sheet Flow, sheet flow** Grass: Dense n= 0.240 P2= 2.38"
2.6	362	0.0200	2.28		**Shallow Concentrated Flow, shallow flow** Unpaved Kv= 16.1 fps
15.8	462	Total			

Subcatchment 2S: DA-1B



Summary for Subcatchment 1S: DA-1A

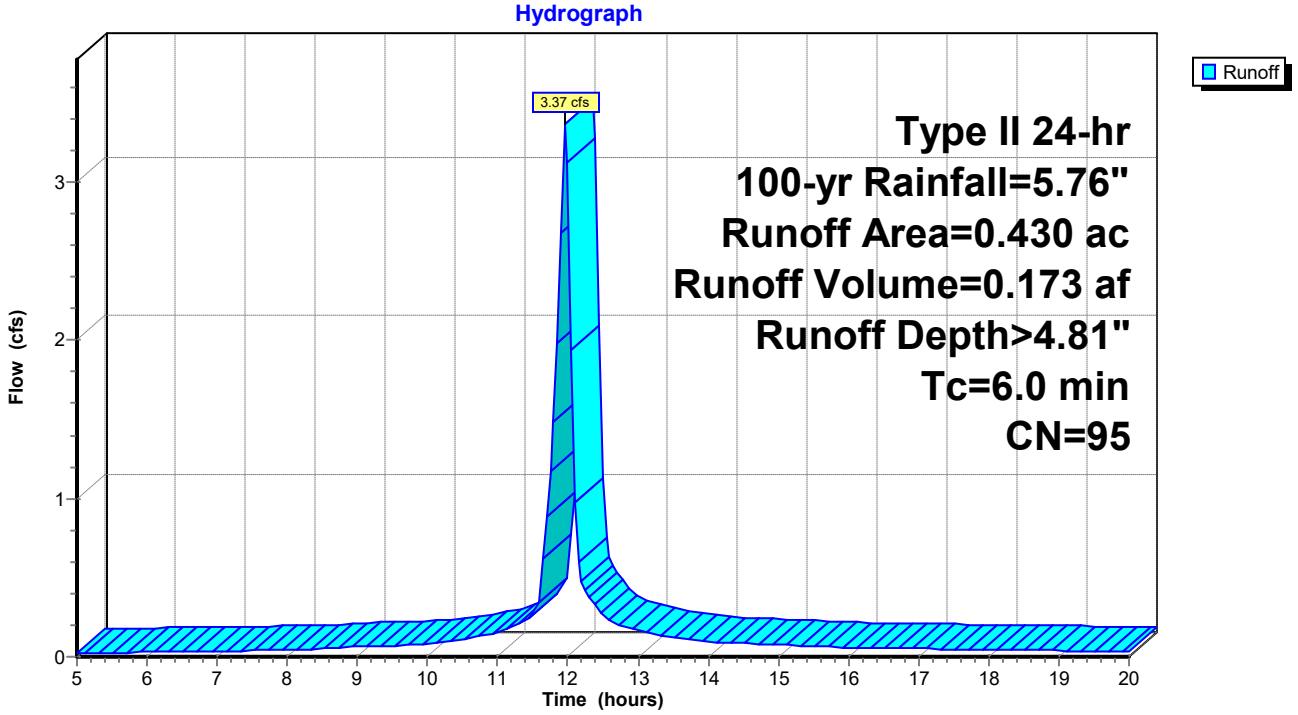
Runoff = 3.37 cfs @ 11.96 hrs, Volume= 0.173 af, Depth> 4.81"

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-yr Rainfall=5.76"

Area (ac)	CN	Description
0.360	98	Paved parking, HSG D
0.070	80	>75% Grass cover, Good, HSG D
0.430	95	Weighted Average
0.070		16.28% Pervious Area
0.360		83.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min TR-55 value**

Subcatchment 1S: DA-1A



Summary for Subcatchment 2S: DA-1B

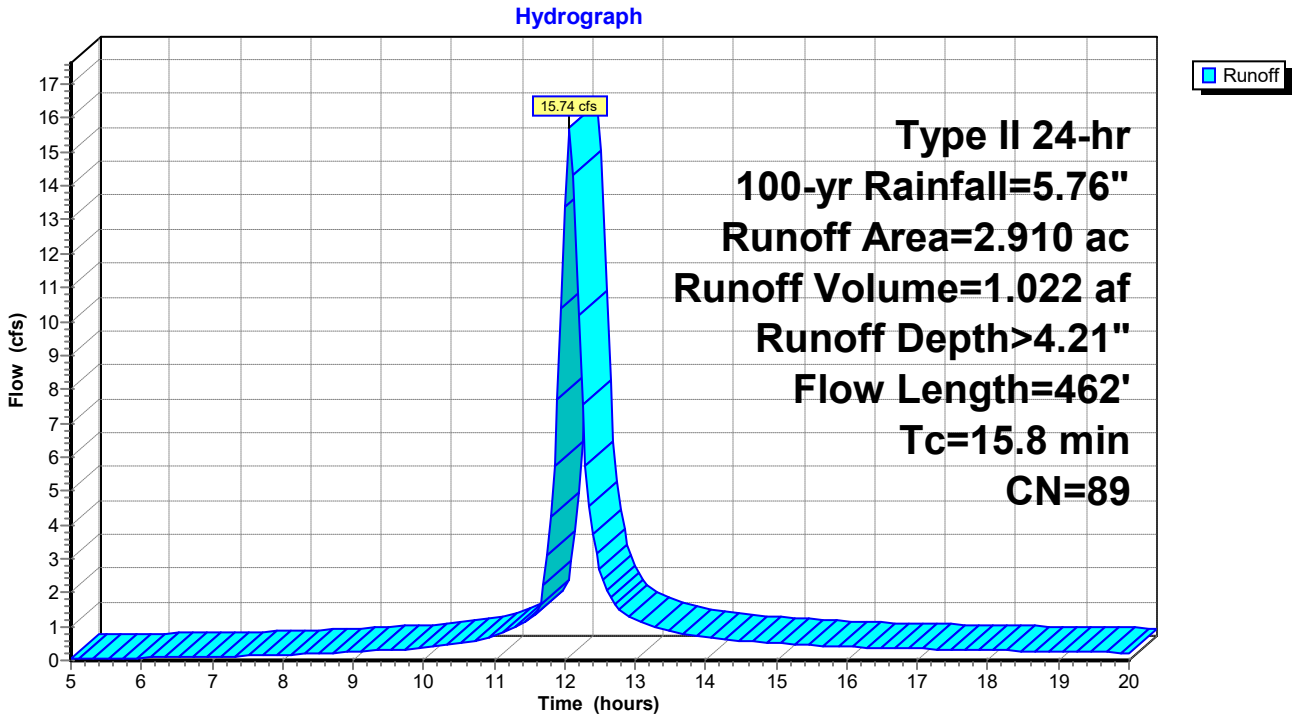
Runoff = 15.74 cfs @ 12.07 hrs, Volume= 1.022 af, Depth> 4.21"

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-yr Rainfall=5.76"

Area (ac)	CN	Description
1.510	98	Paved parking, HSG D
0.840	80	>75% Grass cover, Good, HSG D
0.560	77	Woods, Good, HSG D
2.910	89	Weighted Average
1.400		48.11% Pervious Area
1.510		51.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0350	0.13		**Sheet Flow, sheet flow** Grass: Dense n= 0.240 P2= 2.38"
2.6	362	0.0200	2.28		**Shallow Concentrated Flow, shallow flow** Unpaved Kv= 16.1 fps
15.8	462	Total			

Subcatchment 2S: DA-1B



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APPENDIX B: HYDRO CAD – PROPOSED CONDITIONS

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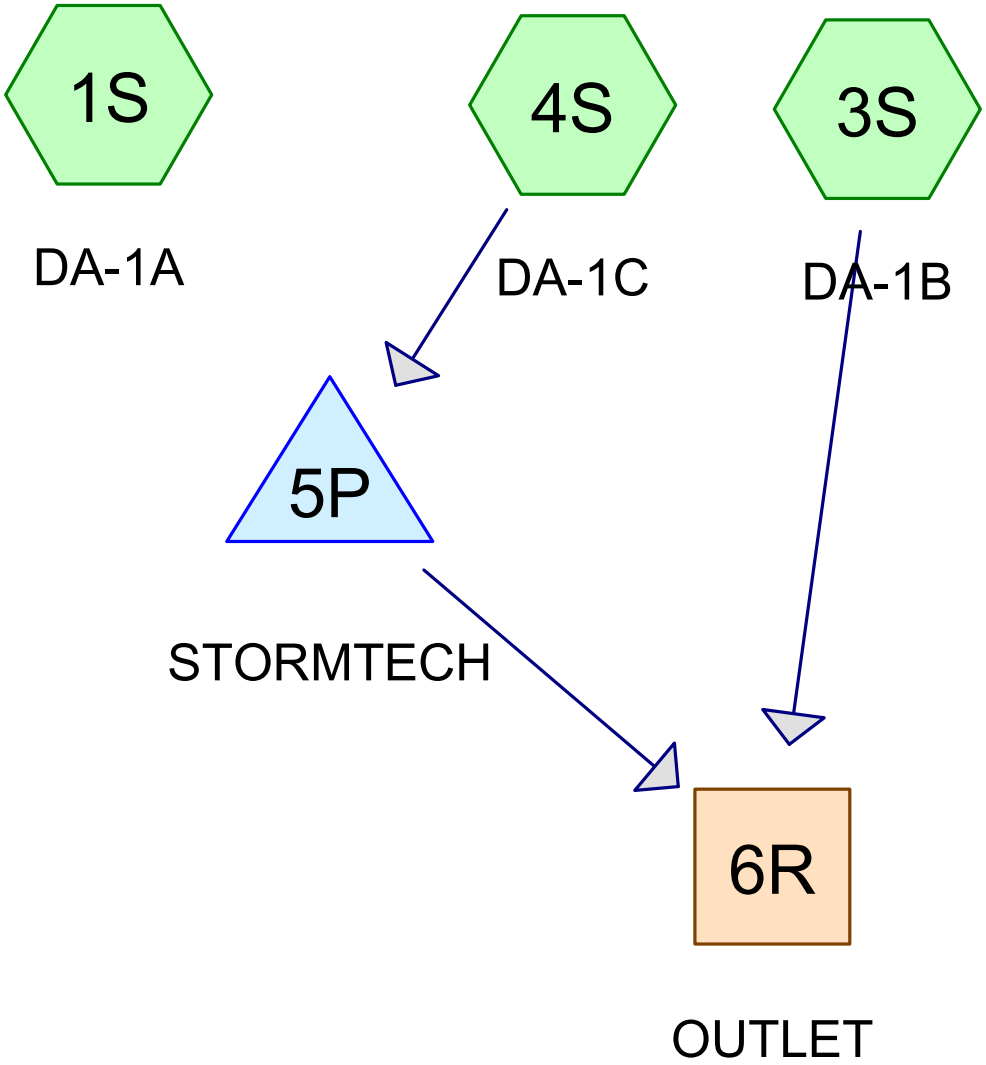
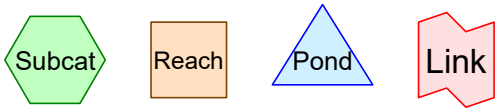




Routing Diagram for Proposed Conditions
Prepared by Napierala Consulting, P.C., Printed 3/10/2021
HydroCAD® 10.00-18 s/n 01332 © 2016 HydroCAD Software Solutions LLC

Summary for Subcatchment 1S: DA-1A

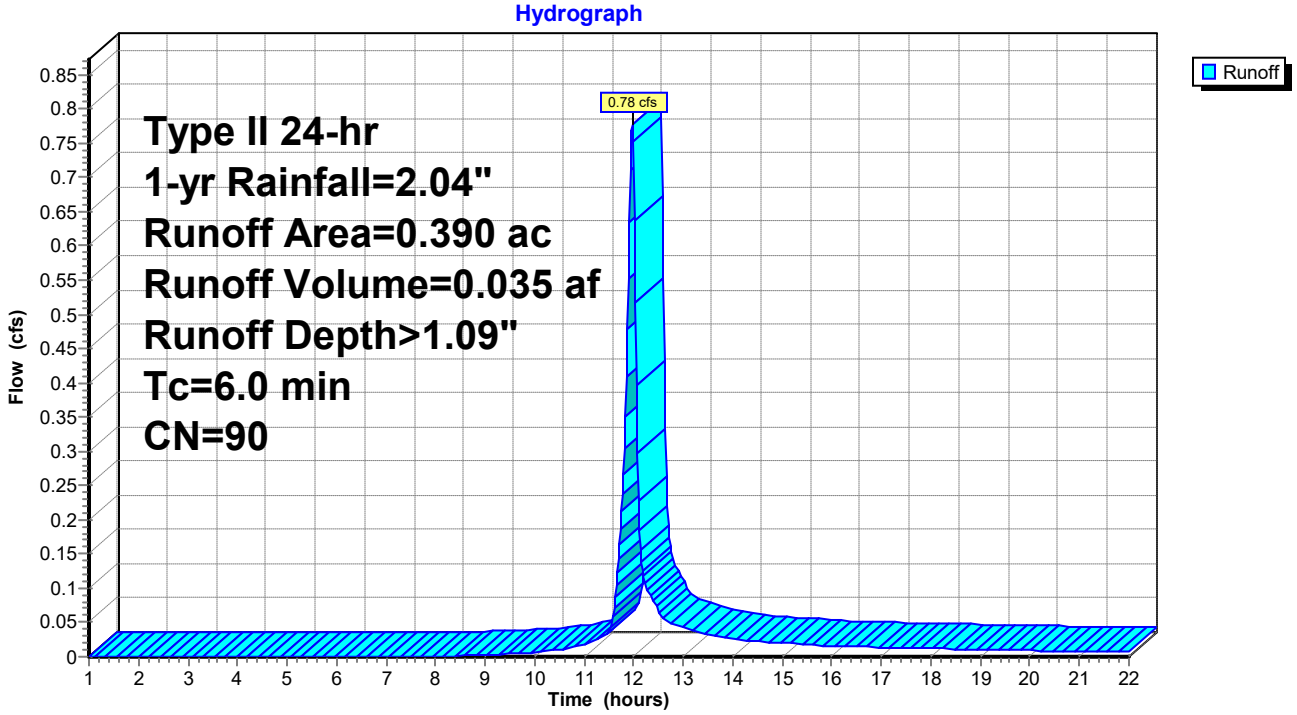
Runoff = 0.78 cfs @ 11.97 hrs, Volume= 0.035 af, Depth> 1.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 1-yr Rainfall=2.04"

Area (ac)	CN	Description
0.220	98	Paved parking, HSG D
0.170	80	>75% Grass cover, Good, HSG D
0.390	90	Weighted Average
0.170		43.59% Pervious Area
0.220		56.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum TR-55 Value**

Subcatchment 1S: DA-1A



Summary for Subcatchment 3S: DA-1B

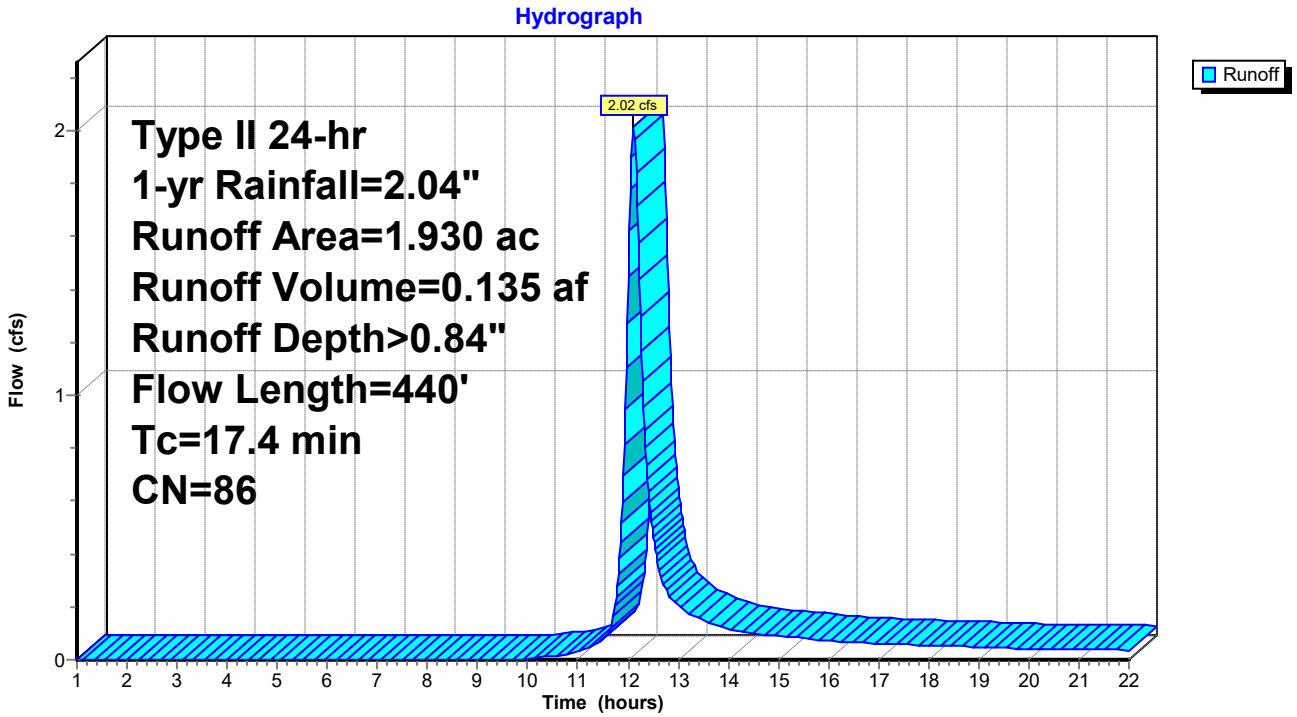
Runoff = 2.02 cfs @ 12.10 hrs, Volume= 0.135 af, Depth> 0.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 1-yr Rainfall=2.04"

Area (ac)	CN	Description
0.760	98	Paved parking, HSG D
0.740	80	>75% Grass cover, Good, HSG D
0.430	77	Woods, Good, HSG D
1.930	86	Weighted Average
1.170		60.62% Pervious Area
0.760		39.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.5	100	0.0200	0.10		**Sheet Flow, sheet flow** Grass: Dense n= 0.240 P2= 2.38"
0.3	31	0.0100	1.61		**Shallow Concentrated Flow, shallow flow** Unpaved Kv= 16.1 fps
0.6	309	0.0200	8.41	50.44	**Channel Flow, swale flow** Area= 6.0 sf Perim= 6.0' r= 1.00' n= 0.025 Earth, clean & straight
17.4	440	Total			

Subcatchment 3S: DA-1B



Summary for Subcatchment 4S: DA-1C

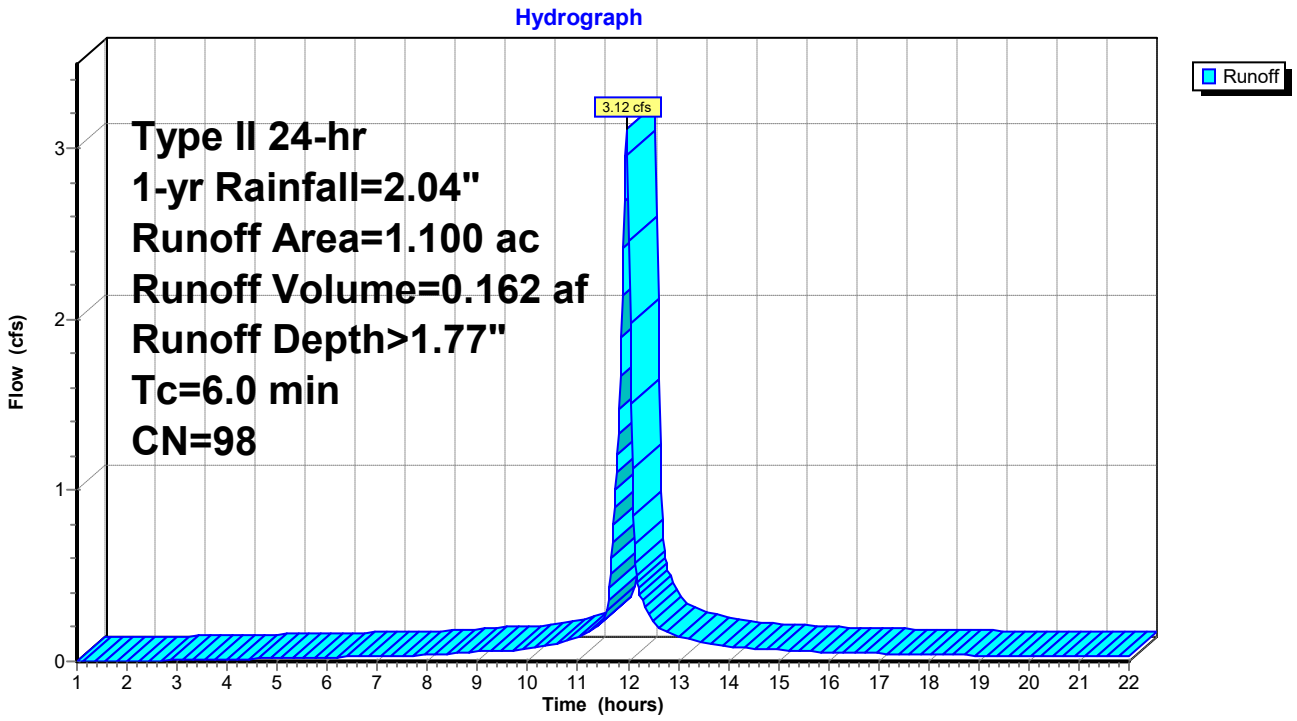
Runoff = 3.12 cfs @ 11.97 hrs, Volume= 0.162 af, Depth> 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 1-yr Rainfall=2.04"

Area (ac)	CN	Description
1.100	98	Paved parking, HSG D
1.100		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MIN TR 55**

Subcatchment 4S: DA-1C

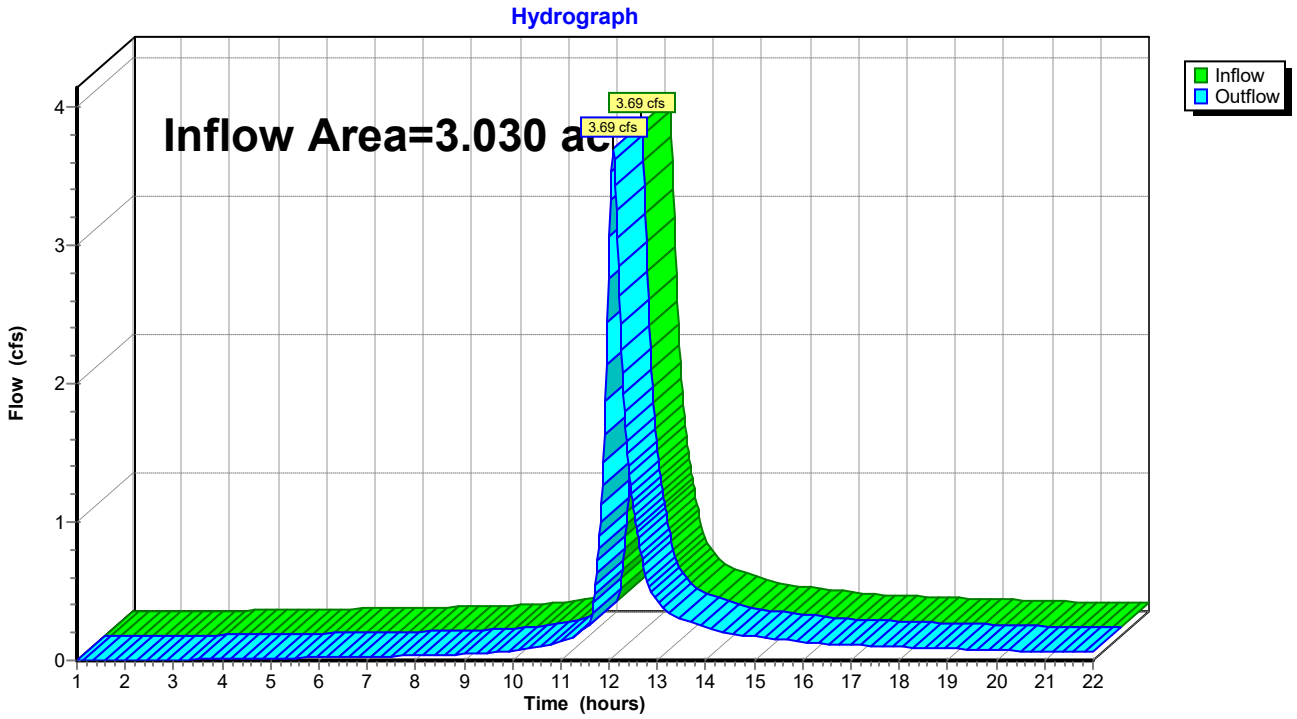


Summary for Reach 6R: OUTLET

Inflow Area = 3.030 ac, 61.39% Impervious, Inflow Depth > 1.17" for 1-yr event
Inflow = 3.69 cfs @ 12.08 hrs, Volume= 0.296 af
Outflow = 3.69 cfs @ 12.08 hrs, Volume= 0.296 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs

Reach 6R: OUTLET



Summary for Pond 5P: STORMTECH

Inflow Area = 1.100 ac,100.00% Impervious, Inflow Depth > 1.77" for 1-yr event
Inflow = 3.12 cfs @ 11.97 hrs, Volume= 0.162 af
Outflow = 1.75 cfs @ 12.05 hrs, Volume= 0.161 af, Atten= 44%, Lag= 5.0 min
Primary = 1.75 cfs @ 12.05 hrs, Volume= 0.161 af

Routing by Stor-Ind method, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Peak Elev= 427.43' @ 12.05 hrs Surf.Area= 0.067 ac Storage= 0.040 af

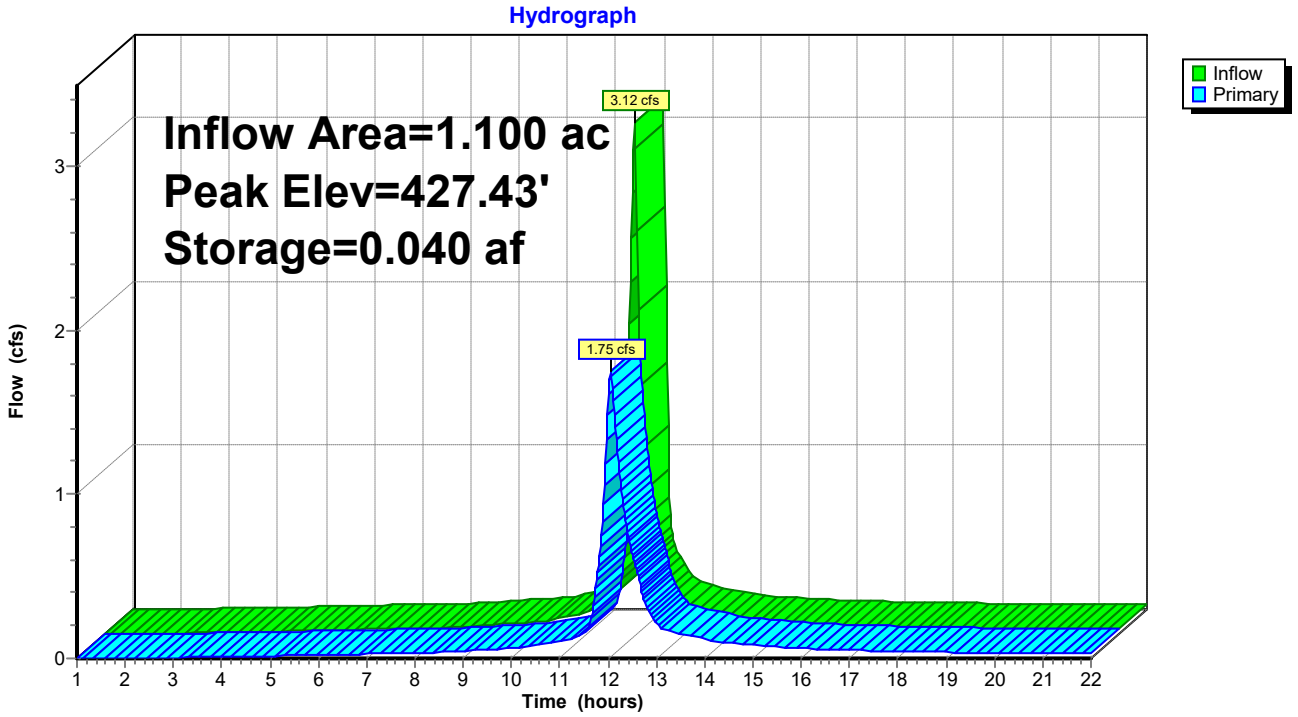
Plug-Flow detention time= 25.1 min calculated for 0.161 af (99% of inflow)
Center-of-Mass det. time= 20.8 min (767.1 - 746.2)

Volume	Invert	Avail.Storage	Storage Description
#1	426.40'	0.789 af	**24.83'W x 117.58'L x 30.00'H Drainage Stone** 2.011 af Overall - 0.038 af Embedded = 1.973 af x 40.0% Voids
#2	426.90'	0.038 af	**ADS_StormTech RC-310 +Cap** x 112 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 7 Rows of 16 Chambers
		0.827 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	426.40'	**6.0" Round Underdrain Outlet** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 426.40' / 426.20' S= 0.0250 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Primary	426.70'	**10.0" Round Outlet Pipe 1** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 426.70' / 426.60' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.55 sf
#3	Primary	427.80'	**12.0" Round Outlet Pipe 2** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 427.80' / 427.70' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.74 cfs @ 12.05 hrs HW=427.42' (Free Discharge)
- **1=Underdrain Outlet** (Inlet Controls 0.66 cfs @ 3.34 fps)
- **2=Outlet Pipe 1** (Barrel Controls 1.09 cfs @ 2.89 fps)
- **3=Outlet Pipe 2** (Controls 0.00 cfs)

Pond 5P: STORMTECH



Summary for Subcatchment 1S: DA-1A

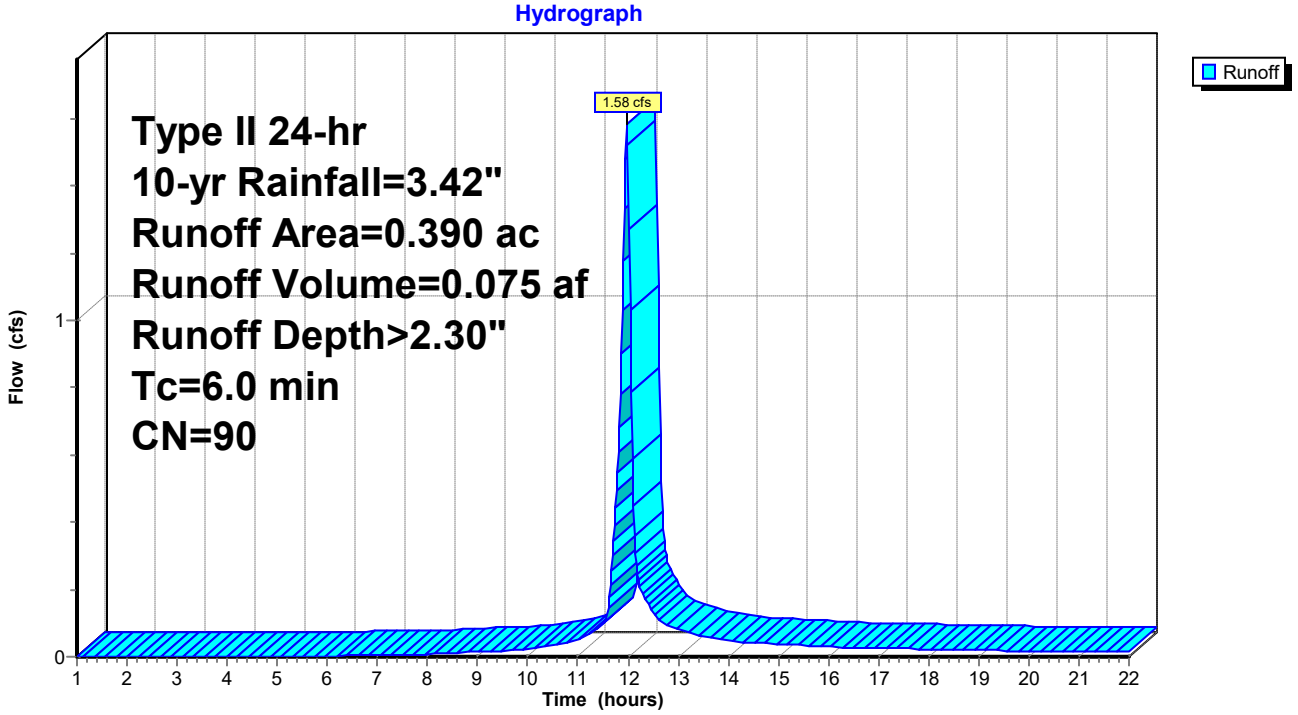
Runoff = 1.58 cfs @ 11.97 hrs, Volume= 0.075 af, Depth> 2.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 10-yr Rainfall=3.42"

Area (ac)	CN	Description
0.220	98	Paved parking, HSG D
0.170	80	>75% Grass cover, Good, HSG D
0.390	90	Weighted Average
0.170		43.59% Pervious Area
0.220		56.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum TR-55 Value**

Subcatchment 1S: DA-1A



Summary for Subcatchment 3S: DA-1B

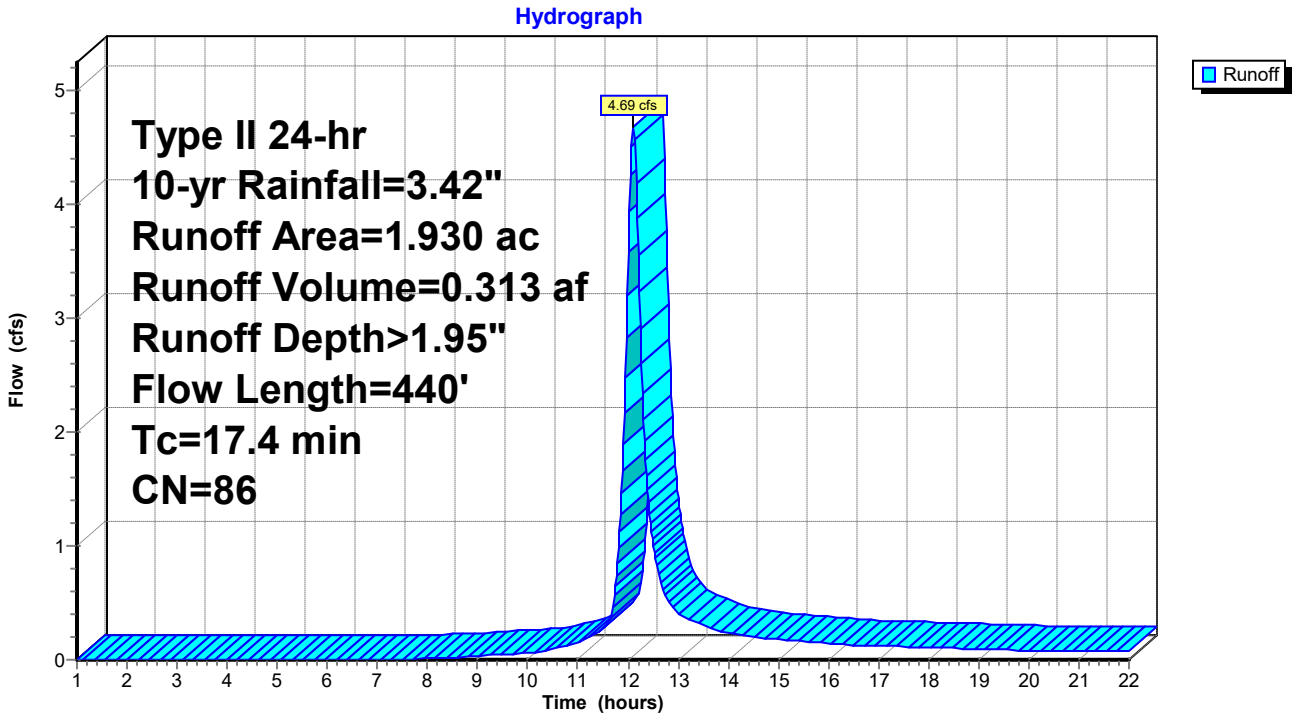
Runoff = 4.69 cfs @ 12.10 hrs, Volume= 0.313 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 10-yr Rainfall=3.42"

Area (ac)	CN	Description
0.760	98	Paved parking, HSG D
0.740	80	>75% Grass cover, Good, HSG D
0.430	77	Woods, Good, HSG D
1.930	86	Weighted Average
1.170		60.62% Pervious Area
0.760		39.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.5	100	0.0200	0.10		**Sheet Flow, sheet flow** Grass: Dense n= 0.240 P2= 2.38"
0.3	31	0.0100	1.61		**Shallow Concentrated Flow, shallow flow** Unpaved Kv= 16.1 fps
0.6	309	0.0200	8.41	50.44	**Channel Flow, swale flow** Area= 6.0 sf Perim= 6.0' r= 1.00' n= 0.025 Earth, clean & straight
17.4	440	Total			

Subcatchment 3S: DA-1B



Summary for Subcatchment 4S: DA-1C

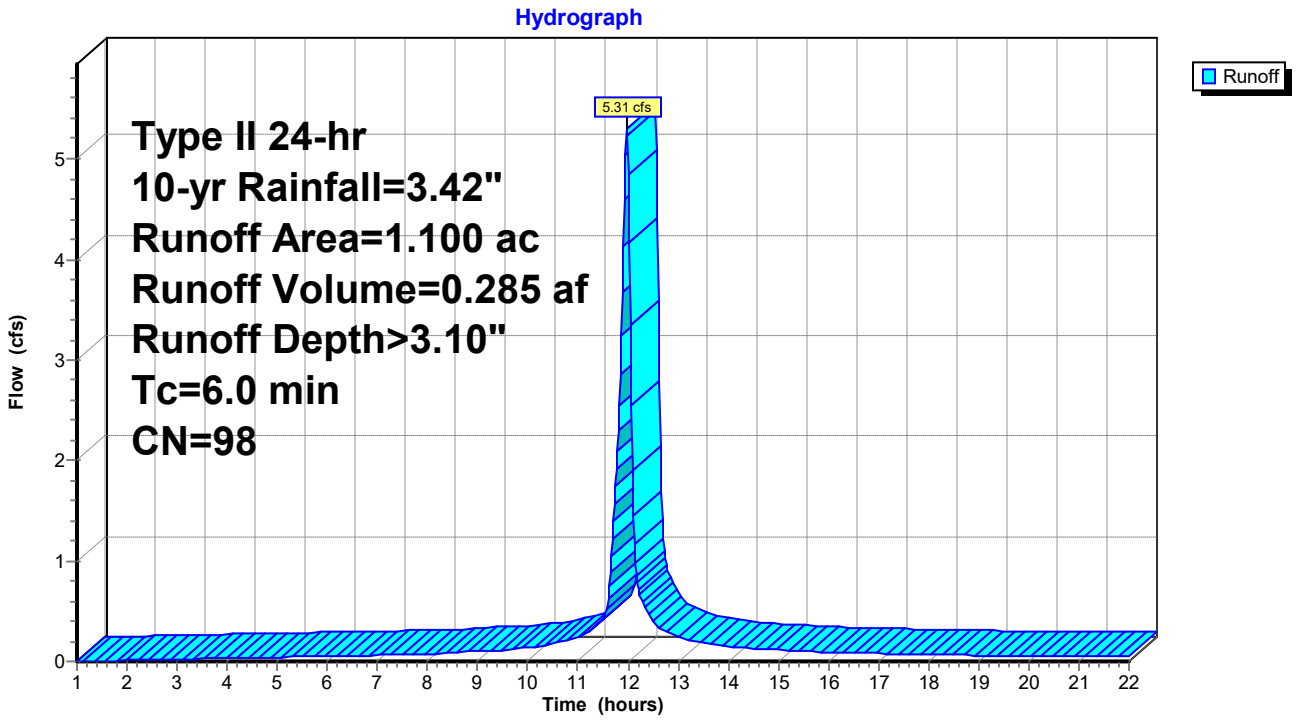
Runoff = 5.31 cfs @ 11.97 hrs, Volume= 0.285 af, Depth> 3.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 10-yr Rainfall=3.42"

Area (ac)	CN	Description
1.100	98	Paved parking, HSG D
1.100		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MIN TR 55**

Subcatchment 4S: DA-1C

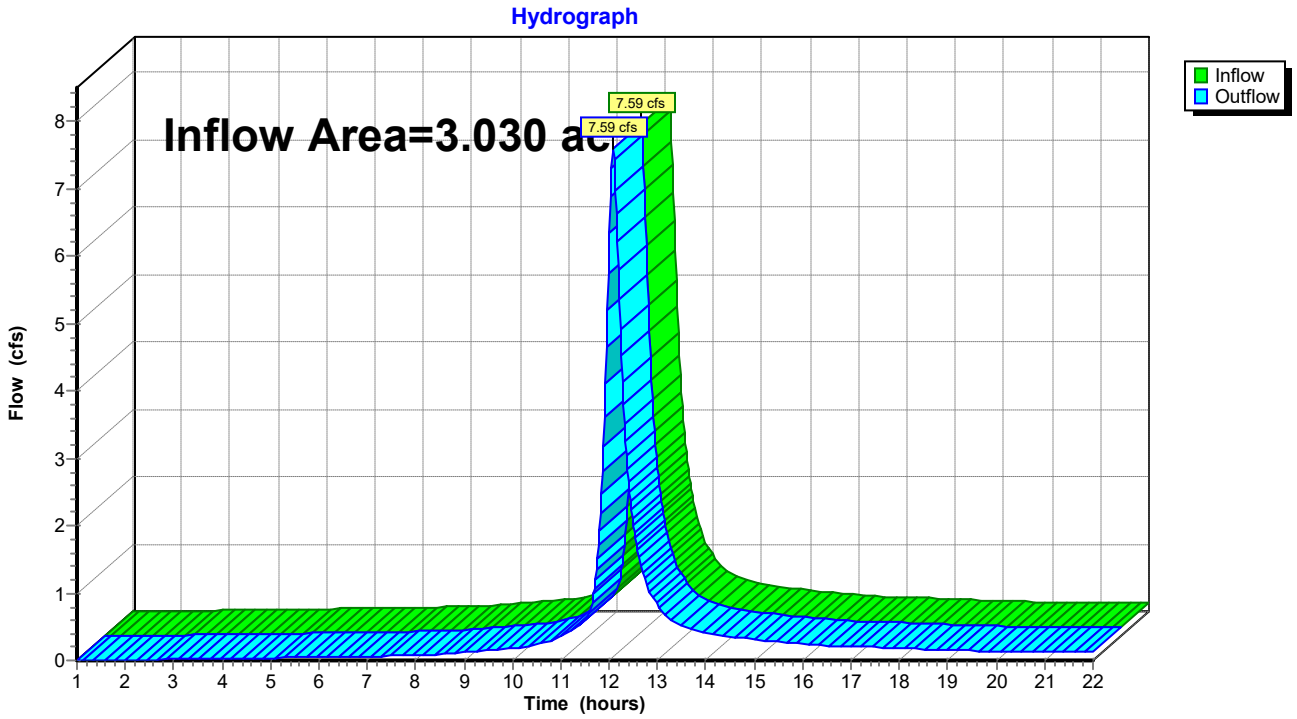


Summary for Reach 6R: OUTLET

Inflow Area = 3.030 ac, 61.39% Impervious, Inflow Depth > 2.36" for 10-yr event
Inflow = 7.59 cfs @ 12.08 hrs, Volume= 0.596 af
Outflow = 7.59 cfs @ 12.08 hrs, Volume= 0.596 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs

Reach 6R: OUTLET



Summary for Pond 5P: STORMTECH

Inflow Area = 1.100 ac,100.00% Impervious, Inflow Depth > 3.10" for 10-yr event
Inflow = 5.31 cfs @ 11.97 hrs, Volume= 0.285 af
Outflow = 3.06 cfs @ 12.05 hrs, Volume= 0.283 af, Atten= 42%, Lag= 4.9 min
Primary = 3.06 cfs @ 12.05 hrs, Volume= 0.283 af

Routing by Stor-Ind method, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Peak Elev= 428.04' @ 12.05 hrs Surf.Area= 0.067 ac Storage= 0.066 af

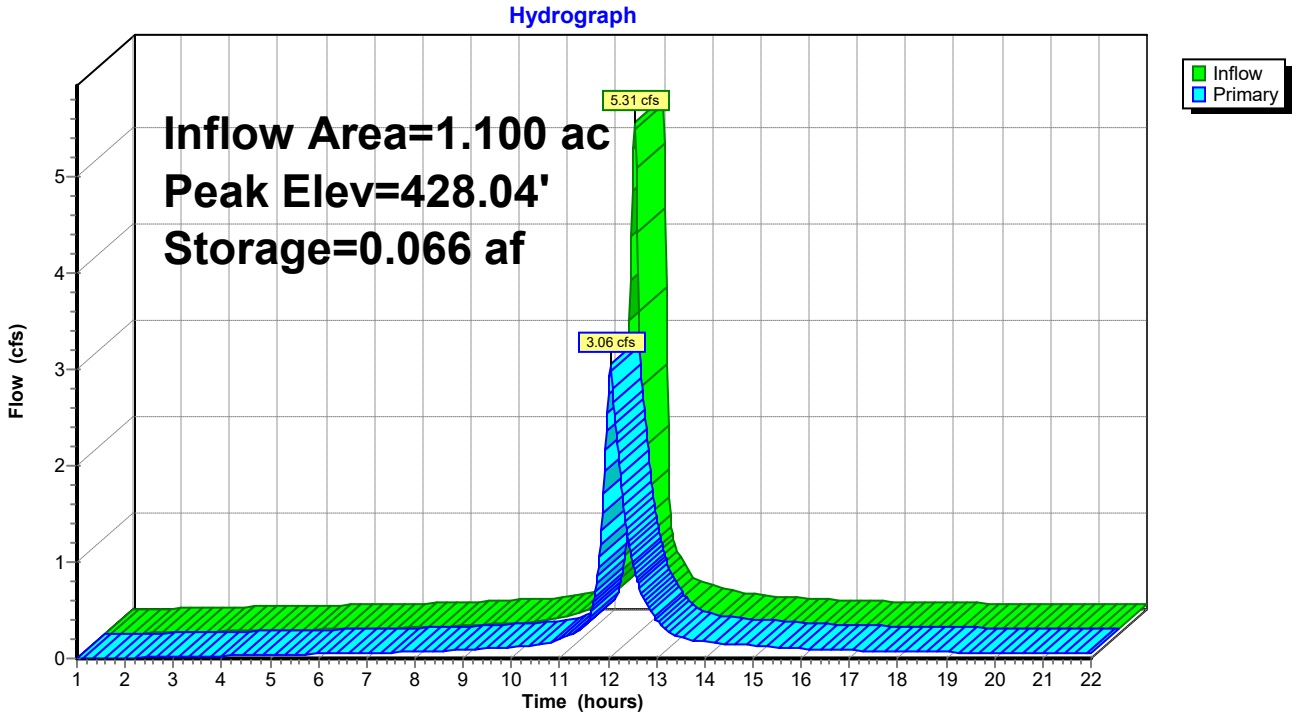
Plug-Flow detention time= 23.6 min calculated for 0.282 af (99% of inflow)
Center-of-Mass det. time= 19.5 min (753.9 - 734.5)

Volume	Invert	Avail.Storage	Storage Description
#1	426.40'	0.789 af	**24.83'W x 117.58'L x 30.00'H Drainage Stone** 2.011 af Overall - 0.038 af Embedded = 1.973 af x 40.0% Voids
#2	426.90'	0.038 af	**ADS_StormTech RC-310 +Cap** x 112 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 7 Rows of 16 Chambers
		0.827 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	426.40'	**6.0" Round Underdrain Outlet** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 426.40' / 426.20' S= 0.0250 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Primary	426.70'	**10.0" Round Outlet Pipe 1** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 426.70' / 426.60' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.55 sf
#3	Primary	427.80'	**12.0" Round Outlet Pipe 2** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 427.80' / 427.70' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.04 cfs @ 12.05 hrs HW=428.03' (Free Discharge)
- **1=Underdrain Outlet** (Inlet Controls 0.88 cfs @ 4.47 fps)
- **2=Outlet Pipe 1** (Inlet Controls 1.98 cfs @ 3.64 fps)
- **3=Outlet Pipe 2** (Barrel Controls 0.18 cfs @ 1.95 fps)

Pond 5P: STORMTECH



Summary for Subcatchment 1S: DA-1A

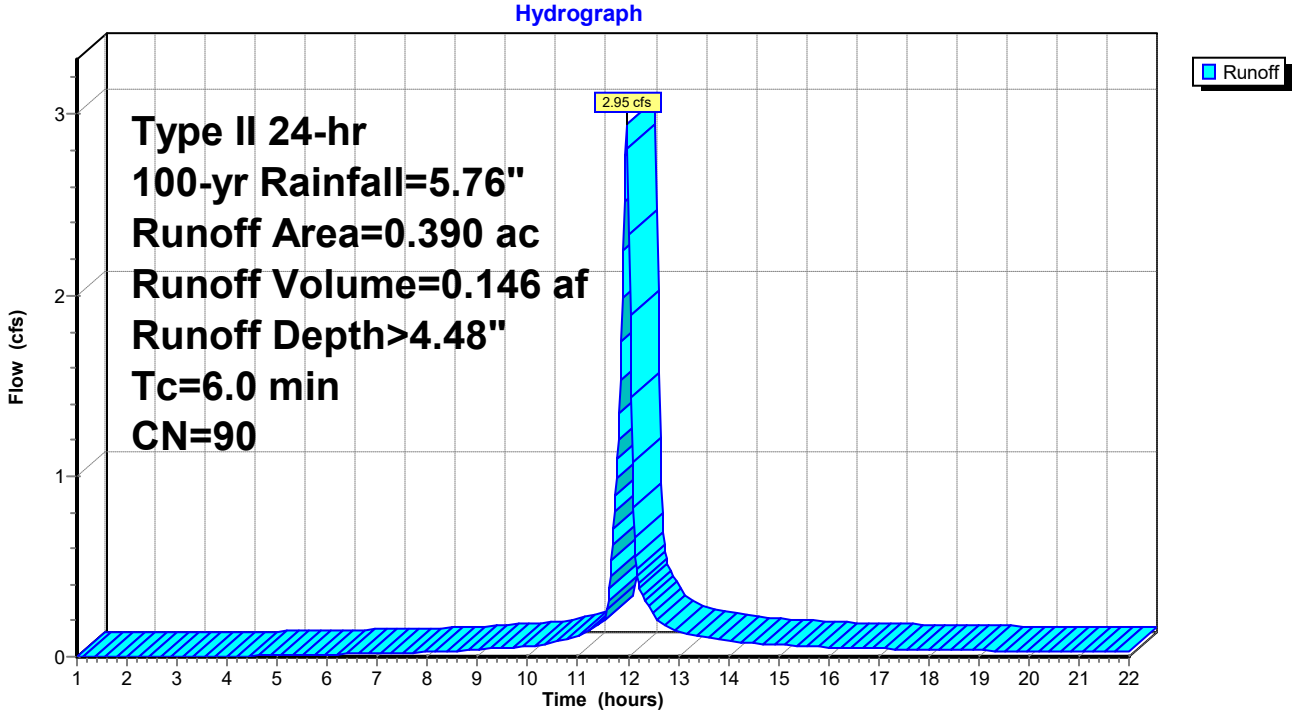
Runoff = 2.95 cfs @ 11.97 hrs, Volume= 0.146 af, Depth> 4.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 100-yr Rainfall=5.76"

Area (ac)	CN	Description
0.220	98	Paved parking, HSG D
0.170	80	>75% Grass cover, Good, HSG D
0.390	90	Weighted Average
0.170		43.59% Pervious Area
0.220		56.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum TR-55 Value**

Subcatchment 1S: DA-1A



Summary for Subcatchment 3S: DA-1B

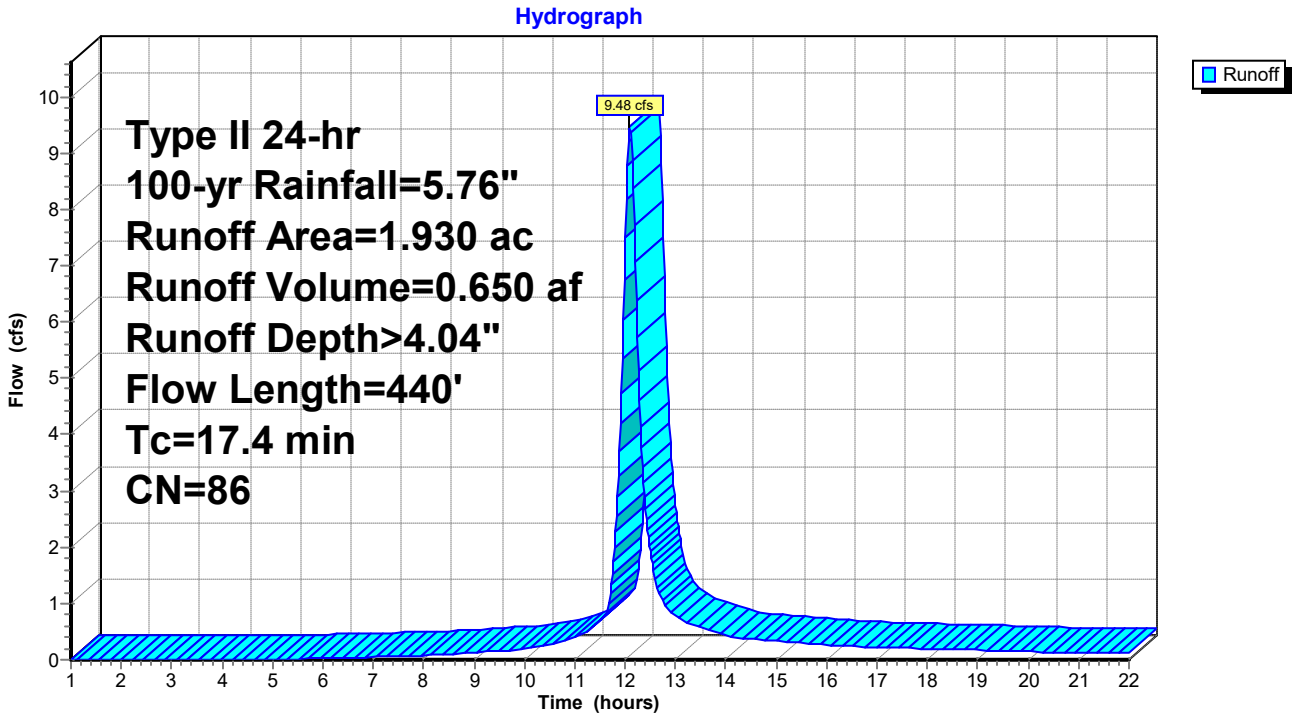
Runoff = 9.48 cfs @ 12.09 hrs, Volume= 0.650 af, Depth> 4.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 100-yr Rainfall=5.76"

Area (ac)	CN	Description
0.760	98	Paved parking, HSG D
0.740	80	>75% Grass cover, Good, HSG D
0.430	77	Woods, Good, HSG D
1.930	86	Weighted Average
1.170		60.62% Pervious Area
0.760		39.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.5	100	0.0200	0.10		**Sheet Flow, sheet flow** Grass: Dense n= 0.240 P2= 2.38"
0.3	31	0.0100	1.61		**Shallow Concentrated Flow, shallow flow** Unpaved Kv= 16.1 fps
0.6	309	0.0200	8.41	50.44	**Channel Flow, swale flow** Area= 6.0 sf Perim= 6.0' r= 1.00' n= 0.025 Earth, clean & straight
17.4	440	Total			

Subcatchment 3S: DA-1B



Summary for Subcatchment 4S: DA-1C

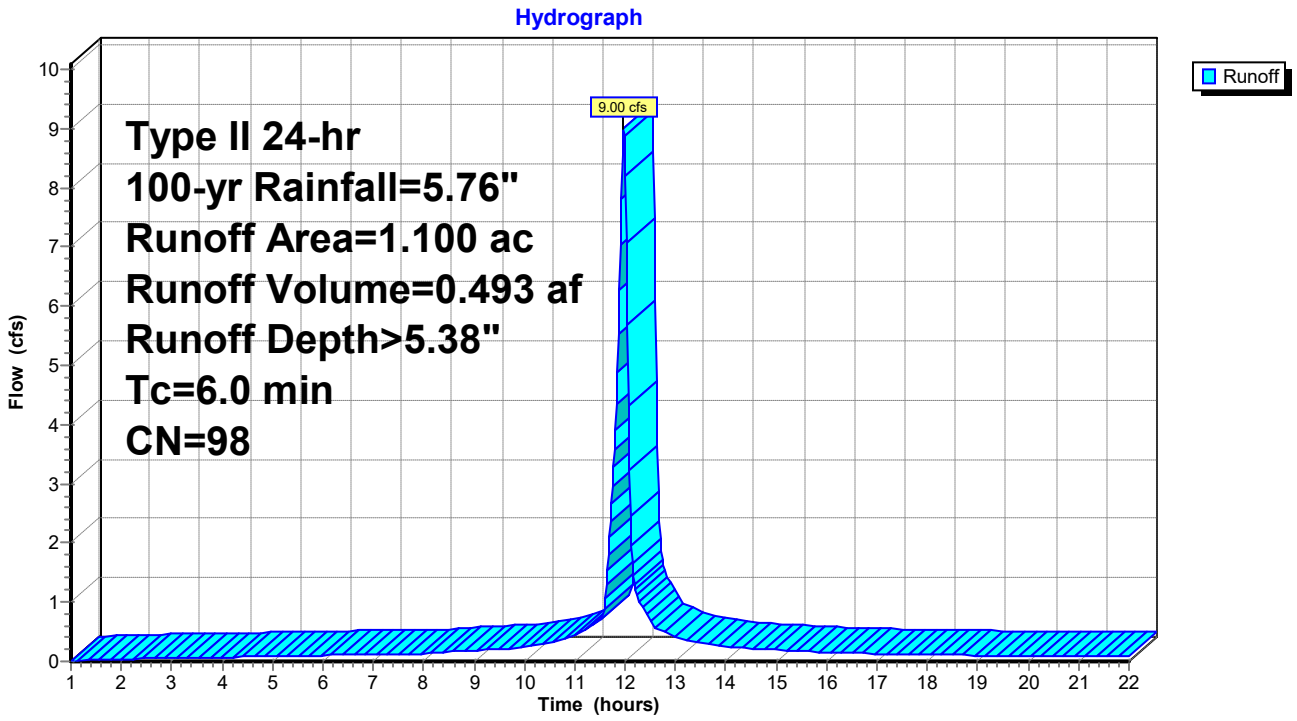
Runoff = 9.00 cfs @ 11.97 hrs, Volume= 0.493 af, Depth> 5.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Type II 24-hr 100-yr Rainfall=5.76"

Area (ac)	CN	Description
1.100	98	Paved parking, HSG D
1.100		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, MIN TR 55**

Subcatchment 4S: DA-1C

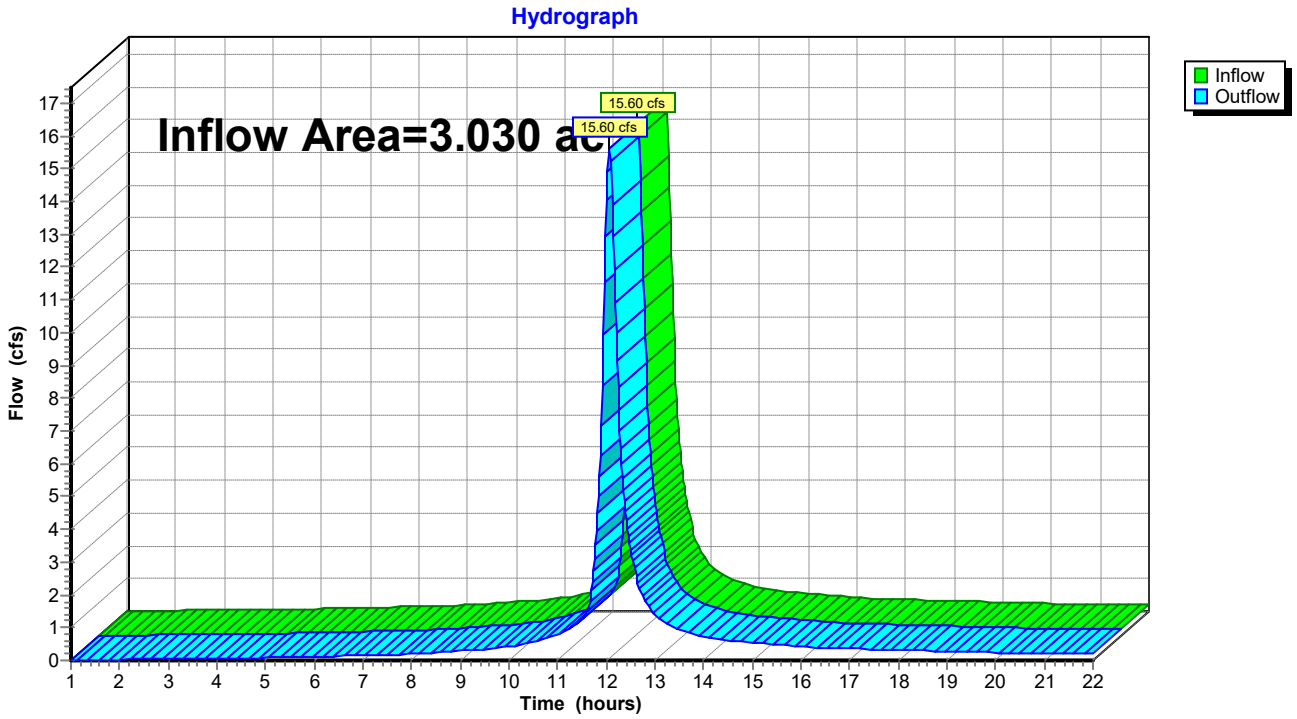


Summary for Reach 6R: OUTLET

Inflow Area = 3.030 ac, 61.39% Impervious, Inflow Depth > 4.51" for 100-yr event
Inflow = 15.60 cfs @ 12.06 hrs, Volume= 1.140 af
Outflow = 15.60 cfs @ 12.06 hrs, Volume= 1.140 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs

Reach 6R: OUTLET



Summary for Pond 5P: STORMTECH

Inflow Area = 1.100 ac,100.00% Impervious, Inflow Depth > 5.38" for 100-yr event
Inflow = 9.00 cfs @ 11.97 hrs, Volume= 0.493 af
Outflow = 6.75 cfs @ 12.02 hrs, Volume= 0.490 af, Atten= 25%, Lag= 3.5 min
Primary = 6.75 cfs @ 12.02 hrs, Volume= 0.490 af

Routing by Stor-Ind method, Time Span= 1.00-22.00 hrs, dt= 0.02 hrs
Peak Elev= 429.10' @ 12.02 hrs Surf.Area= 0.067 ac Storage= 0.095 af

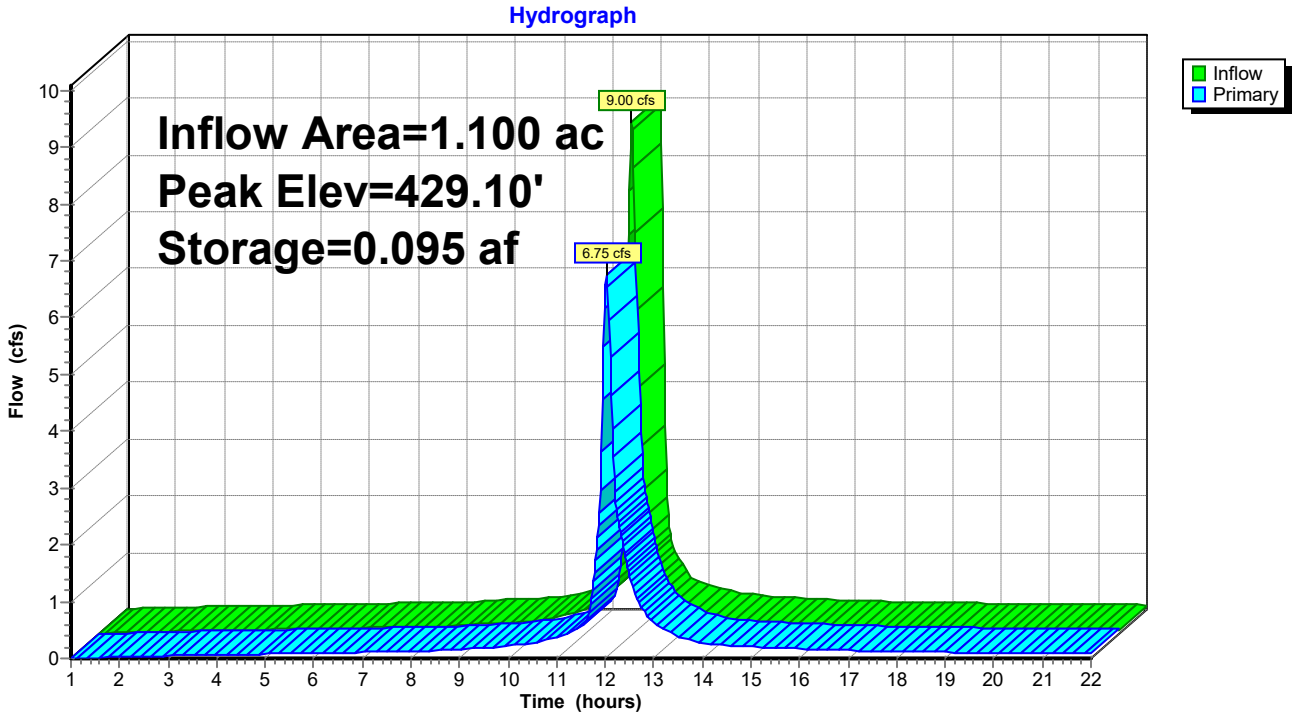
Plug-Flow detention time= 21.1 min calculated for 0.490 af (99% of inflow)
Center-of-Mass det. time= 17.0 min (742.3 - 725.3)

Volume	Invert	Avail.Storage	Storage Description
#1	426.40'	0.789 af	**24.83'W x 117.58'L x 30.00'H Drainage Stone** 2.011 af Overall - 0.038 af Embedded = 1.973 af x 40.0% Voids
#2	426.90'	0.038 af	**ADS_StormTech RC-310 +Cap** x 112 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 7 Rows of 16 Chambers
		0.827 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	426.40'	**6.0" Round Underdrain Outlet** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 426.40' / 426.20' S= 0.0250 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Primary	426.70'	**10.0" Round Outlet Pipe 1** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 426.70' / 426.60' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.55 sf
#3	Primary	427.80'	**12.0" Round Outlet Pipe 2** L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 427.80' / 427.70' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=6.73 cfs @ 12.02 hrs HW=429.09' (Free Discharge)
- **1=Underdrain Outlet** (Inlet Controls 1.17 cfs @ 5.94 fps)
- **2=Outlet Pipe 1** (Inlet Controls 2.91 cfs @ 5.34 fps)
- **3=Outlet Pipe 2** (Inlet Controls 2.65 cfs @ 3.38 fps)

Pond 5P: STORMTECH



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APPENDIX C: SOIL DESCRIPTIONS

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Hydrologic Soil Group—Onondaga County, New York

Map Scale: 1:2,640 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

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 Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

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 1:20,000.

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: Onondaga County, New York
Survey Area Data: Version 15, Jun 11, 2020

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

Date(s) aerial images were photographed: May 21, 2020—Jun 17, 2020

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CfB	Cazenovia silt loam, 2 to 8 percent slopes	C	4.4	15.1%
Fr	Fredon loam	B/D	1.7	5.7%
LvB	Lockport and Brockport silty clay loams, 0 to 6 percent slopes	C/D	3.1	10.6%
PpA	Phelps gravelly loam, 0 to 3 percent slopes	B/D	0.8	2.6%
Rh	Rhinebeck silt loam	C/D	1.7	5.8%
Ub	Urban land		11.0	37.5%
Va	Varick silt loam	D	6.6	22.7%
Totals for Area of Interest			**29.2**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX D: VEGETATED SWALE AND DETENTION CHAMBER SYSTEM CONSTRUCTION AND MAINTENANCE

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Swale Stormwater Management Practices
Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

SW Drainage Area

Look at areas that are uphill from the swale.

Problem (Check if Present)	Follow-Up Actions
☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and mulch or sod areas of bare soil to establish vegetation. ☐ Fill in erosion areas with soil, compact, and add seed and straw to establish vegetation. ☐ If a rill or small channel is forming, try to redirect water flowing to this area by creating a small berm or adding topsoil to areas that are heavily compacted. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths
☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Other:
☐ Open containers of oil, grease, paint, or other substances	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous.
☐ Grass dying at edge of road	☐ Seed and mulch; add topsoil or compost if needed. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Grass on edge of pavement continues to die off for unknown reasons. Swale edge may need to be replaced with other materials (e.g., stone diaphragm).

SW Inlets

Stand in the swale and look for all the places where water flows in.

Problem (Check if Present)	Follow-Up Actions
☐ Inlets or the swale edge are collecting grit, grass clippings, or debris or have grass/weeds growing. Some water may not be getting into the swale. The objective is to have a clear pathway for water to flow into the swale.	☐ Use a flat shovel to remove grit and debris (especially at curb inlets or opening). Parking lots will generate fine grit that will accumulate at these spots. ☐ Pull out clumps of growing grass or weeds, and scoop out the soil or grit that the plants are growing in. ☐ Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets or along the edge of the swale where water is supposed to enter. ☐ For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the swale. ☐ Dispose of all material properly in an area where it will not re-enter the swale. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the swale.
 ☐ Some or all of the inlets are eroding so that rills, gullies, and other erosion are present, or there is bare dirt that is washing into the swale.	☐ For small areas of erosion, smooth out the eroded part and apply rock or stone (e.g., river cobble) to prevent further erosion. Usually, filter fabric is placed under the rock or stone. ☐ In some cases, reseeding and applying an erosion control matting can be used to prevent further erosion. Some of these materials may be available at a garden center, but it may be best to consult a landscape contractor. ☐ Other:
	☐ Level 2 Inspection: Erosion is occurring at most of the inlets or along much of the swale edge. The inlet design may have to be modified.

SW Surface Area

Examine the entire swale surface and side slopes.

Problem (Check if Present)	Follow-Up Actions
☐ Minor areas of sediment, grit, trash, or other debris are accumulating in the swale.	☐ Use a shovel to scoop out minor areas of sediment or grit, especially in the spring after winter sanding materials may wash in and accumulate. Dispose of the material where it cannot re-enter the swale. ☐ If removing the material creates a hole or low area, fill with good topsoil and add seed and straw to re-vegetate. ☐ Remove trash, vegetative debris, and other undesirable materials. ☐ If the swale is densely vegetated, it may be difficult to do the maintenance; check for excessive ponding or other issues described in this section to see if the accumulated material is causing a problem. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Sediment has accumulated more than 3 inches deep and covers 25% or more of the swale surface. ☐ The source of sediment is unknown or cannot be controlled with simple measures.
 ☐ There is erosion in the bottom or on the side slopes. Water seems to be carving out rills as it flows through the swale or on the slopes.	☐ Try filling the eroded areas with clean topsoil, and then seed and mulch to establish vegetation. ☐ If the problem recurs, you may have to use some type of matting, stone (e.g., river cobble), or other material to fill in eroded areas. ☐ If the erosion is on a side slope, fill with soil and cover with erosion-control matting or at least straw mulch after re-seeding.
	☐ Kick-Out to Level 2 Inspection: The problem persists or the erosion is more than 3 inches deep and seems to be an issue with how water enters and moves through the swale. ☐ Kick-Out to Level 2 Inspection: The problem does not seem to be caused by flowing water, but a collapse or sinking of the surface (e.g., “sinkhole”) due to some underground problem.
☐ Water does not flow evenly down the length of the swale, but ponds in certain areas for long periods of time (e.g., 72 hours after a storm). The swale does not seem to have “positive drainage.” Check during or immediately after a rain storm.	☐ If the problem is minor (just small, isolated areas), try using a metal rake or other tools to create a more even flow path; remove excessive vegetative growth, sediment, or other debris that may be blocking the flow. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Water ponds in more than 25% of the swale for three days or more after a storm. The issue may be with the underlying soil or the grade of the swale. ☐ Water ponds behind check dams for three days or more after a storm. Check dams may be clogged or not functioning properly.

SW Surface Area

Examine the entire swale surface and side slopes.

Problem (Check if Present)	Follow-Up Actions
 ☐ Check dams (if present): water is flowing around the edges of check dams, creating erosion or sinkholes on the uphill or downhill side, or the check dams are breaking apart or breaching .	☐ If the problem is isolated to just a few check dams, try simple repairs. ☐ It is very important for the center of each check dam (where most of the water flows) to be lower (by at least several inches) than the edges of the check dams where they meet the side slopes. Also, the check dams should be keyed into side slopes so water does not flow between the check dam and side slope. ☐ Use a level to check the right check-dam configuration, as noted above. Repair by moving around stone, filling and compacting soil, or adding new material so that water will be directed to the center of the check dam instead of the edges. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Many check dams are impacted and/or the problem seems to be a design issue with height, spacing, shape, or materials used to construct them.

SW Vegetation

Assess the swale vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation is too overgrown to access swale for maintenance activities	☐ Mow or bush-hog the path. ☐ Other:

SW Vegetation

Assess the swale vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation requires regular maintenance: pulling weeds, removing dead and diseased plants, adding plants to fill in areas that are not well vegetated, etc.	☐ If you can identify which plants are weeds or not intended to be part of the planting plan, eliminate these, preferably by hand pulling. ☐ If weeds are widespread, check with the local stormwater authority and/or Extension Office about proper use of herbicides for areas connected with the flow of water. ☐ Even vegetation that is intended to be present can become large, overgrown, block flow, and/or crowd out surrounding plants. Prune and thin accordingly. ☐ If weeds or invasive plants have overtaken the whole swale, bush-hog the entire area before seed heads form in the spring. It will be necessary to remove the root mat manually or with appropriate herbicides, as noted above. ☐ Replant with species that are aesthetically pleasing and seem to be doing well in the swale. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: You are unsure of the original planting design or the vegetation maintenance task is beyond your capabilities of time, expertise, or resources. If you are unsure of the health of the vegetation (e.g. salt damage, invasives, which plants are undesirable) or the appropriate season to conduct vegetation management, consult a landscape professional before undertaking any cutting, pruning, mowing, or brush hogging.
☐ Vegetation is too thin, is not healthy, and there are many spots that are not well vegetated.	☐ The original plants are likely not suited for the actual conditions within the swale. If you are knowledgeable about plants, select and plant more appropriate vegetation (preferably native plants) so that almost the entire surface area will be covered by the end of the second growing season. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: For all but small practices (e.g., in residential yards), this task will likely require a landscape design professional or horticulturalist.

SW Outlets

Examine outlets that release water out of the swale.

Problem (Check if Present)	Follow-Up Actions
☐ Outlet is obstructed with mulch, sediment, debris, trash, etc.	☐ Remove the debris and dispose of it where it cannot re-enter the swale. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Outlet is completely clogged or obstructed; there is too much material to remove by hand or with simple hand tools.

Additional Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Swale Stormwater Management Practices
Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: SWALE	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Water Stands on Surface for More than 72 Hours after Storm	
☐ Condition 1: Small pockets of standing water Use a soil probe or auger to examine the soil profile. If isolated areas have accumulated grit, fines, or vegetative debris or have compacted soil, try scraping off top 3 to 6 inches of soil and replacing with clean material. Also check to see that surface is level and water is not ponding selectively in certain areas. ☐ Condition 2: Standing water is widespread or covers entire surface Requires diagnosis and resolution of problem: • Bad or compacted soil • Filter fabric on the swale bottom • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Longitudinal slope is too flat?	• Soil is overly compacted or clogged and problem is not evident from Level 2 inspection. • Level 2 inspection identifies problem, but it cannot be resolved easily or is associated with the original design of the practice (e.g., not enough slope down through the swale). ☐ Level 3 inspection necessary
Observed Condition: Vegetation is predominantly weeds and invasive species	
For a small area, weed and dig up invasive plants. Replant with natives or plants from original planting plan. If longer than 100 feet, develop a new planting plan and have it professionally reviewed.	• Vegetation deviates significantly from original planting plan; swale has been neglected and suffered from deferred maintenance. • Owner/responsible party does not know how to maintain the practice. • For large area, hire a professional to develop a grading plan and develop a planting plan. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

> "I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

SiteASSIST™ by StormTech

FOR STORMTECH INSTRUCTIONS, DOWNLOAD THE INSTALLATION APP

StormTech® An ADS company

SC-310/SC-740/DC-780

StormTech Construction Guide

REQUIRED MATERIALS AND EQUIPMENT LIST

- Acceptable fill materials per Table 1
- Woven and non-woven geotextiles
- StormTech solid end caps and pre-cored end caps
- StormTech chambers
- StormTech manifolds and fittings

IMPORTANT NOTES:

A. This installation guide provides the minimum requirements for proper installation of chambers. Non-adherence to this guide may result in damage to chambers during installation. Replacement of damaged chambers during or after backfilling is costly and very time consuming. It is recommended that all installers are familiar with this guide, and that the contractor inspects the chambers for distortion, damage and joint integrity as work progresses.

B. Use of a dozer to push embedment stone between the rows of chambers may cause damage to chambers and is not an acceptable backfill method. Any chambers damaged by using the "dump and push" method are not covered under the StormTech standard warranty.

C. Care should be taken in the handling of chambers and end caps. Avoid dropping, prying or excessive force on chambers during removal from pallet and initial placement.

Requirements for System Installation

Excavate bed and prepare subgrade per engineer's plans.

Place non-woven geotextile over prepared soils and up excavation walls. Install underdrains if required.

Place clean, crushed, angular stone foundation 6" (150 mm) min. Compact to achieve a flat surface.

Manifold, Scour Fabric and Chamber Assembly

Install manifolds and lay out woven scour geotextile at inlet rows [min. 12.5 ft (3.8 m)] at each inlet end cap. Place a continuous piece (no seams, double layer) along entire length of Isolator® Row(s).

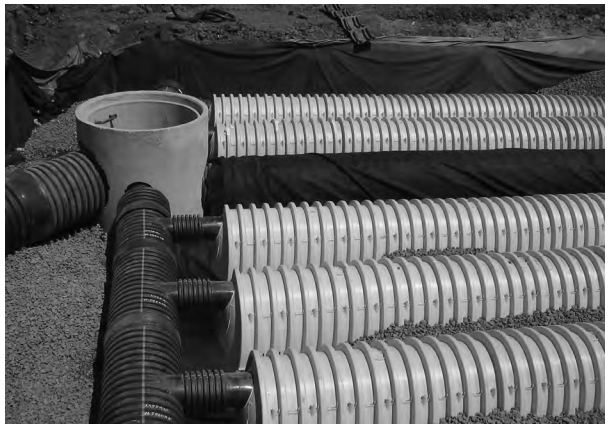
Align the first chamber and end cap of each row with inlet pipes. Contractor may choose to postpone stone placement around end chambers and leave ends of rows open for easy inspection of chambers during the backfill process.

Continue installing chambers by overlapping chamber end corrugations. Chamber joints are labeled "Lower Joint – Overlap Here" and "Build this direction – Upper Joint" Be sure that the chamber placement does not exceed the reach of the construction equipment used to place the stone. Maintain minimum 6" (150 mm) spacing between rows.

Attaching the End Caps

Lift the end of the chamber a few inches off the ground. With the curved face of the end cap facing outward, place the end cap into the chamber's end corrugation.

Prefabricated End Caps



24" (600 mm) inlets are the maximum size that can fit into a SC-740/DC-780 end cap and must be prefabricated with a 24" (600 mm) pipe stub. SC-310 chambers with a 12" (300 mm) inlet pipe must use a prefabricated end cap with a 12" (300 mm) pipe stub.

Isolator Row

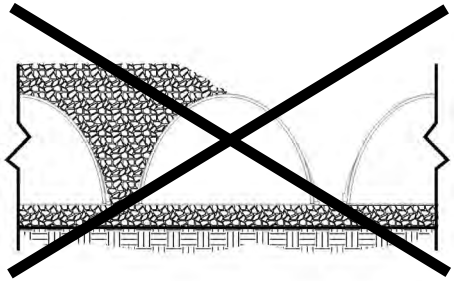
Place two continuous layers of ADS Woven fabric between the foundation stone and the isolator row chambers, making sure the fabric lays flat and extends the entire width of the chamber feet. Drape a strip of ADS non-woven geotextile over the row of chambers (not required over DC-780). This is the same type of non-woven geotextile used as a separation layer around the angular stone of the StormTech system.

Initial Anchoring of Chambers – Embedment Stone

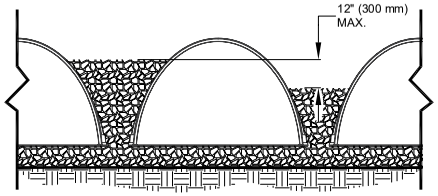
Initial embedment shall be spotted along the centerline of the chamber evenly anchoring the lower portion of the chamber. This is best accomplished with a stone conveyor or excavator reaching along the row.

No equipment shall be operated on the bed at this stage of the installation. Excavators must be located off the bed. Dump trucks shall not dump stone directly on to the bed. Dozers or loaders are not allowed on the bed at this time.

Backfill of Chambers – Embedment Stone

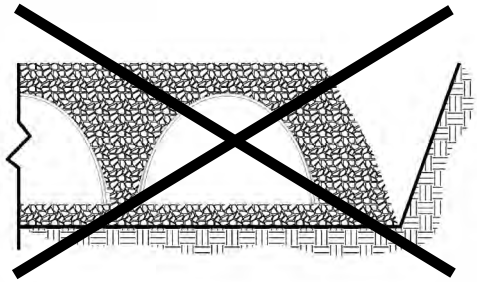


UNEVEN BACKFILL

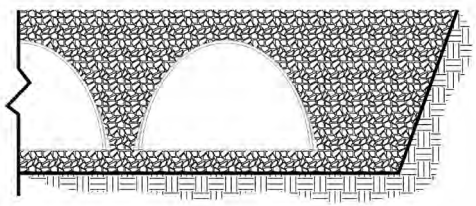


EVEN BACKFILL

Backfill chambers evenly. Stone column height should never differ by more than 12” (300 mm) between adjacent chamber rows or between chamber rows and perimeter.



PERIMETER NOT BACKFILLED



PERIMETER FULLY BACKFILLED

Perimeter stone must be brought up evenly with chamber rows. Perimeter must be fully backfilled, with stone extended horizontally to the excavation wall.

Backfill - Embedment Stone & Cover Stone

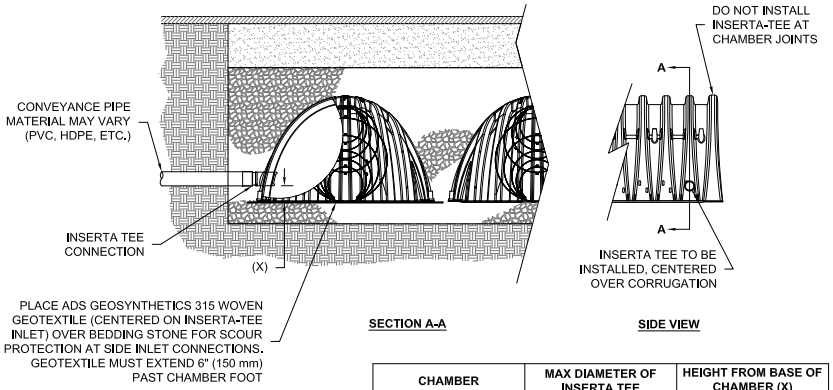
Continue evenly backfilling between rows and around perimeter until embedment stone reaches tops of chambers. Perimeter stone must extend horizontally to the excavation wall for both straight or sloped sidewalls. **Only after chambers have been backfilled to top of chamber and with a minimum 6" (150 mm) of cover stone on top of chambers can small dozers be used over the chambers for backfilling remaining cover stone.**

Small dozers and skid loaders may be used to finish grading stone backfill in accordance with ground pressure limits in Table 2. They must push material parallel to rows only. Never push perpendicular to rows. StormTech recommends that the contractor inspect chambers before placing final backfill. Any chambers damaged by construction shall be removed and replaced.

Final Backfill of Chambers – Fill Material

Install non-woven geotextile over stone. Geotextile must overlap 24" (600 mm) min. where edges meet. Compact each lift of backfill as specified in the site design engineer's drawings. Roller travel parallel with rows.

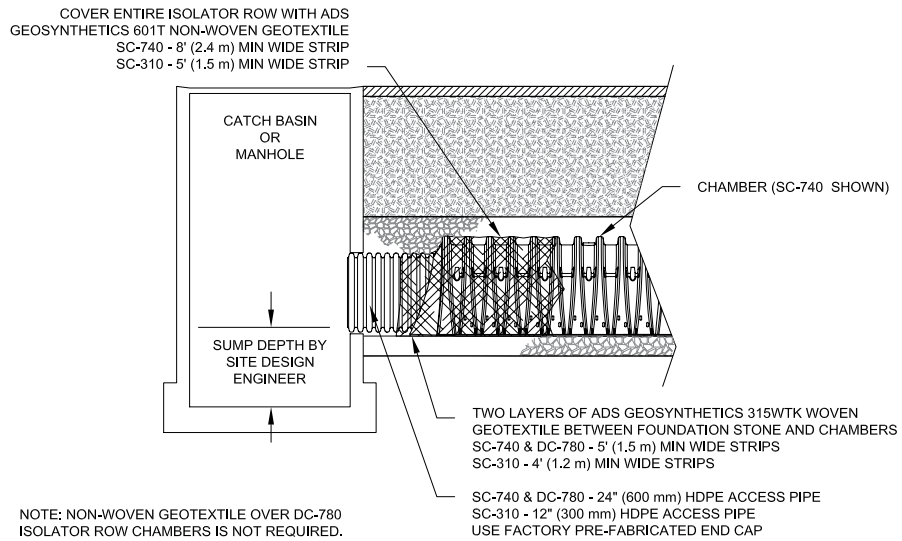
Inserta Tee Detail



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

NOTE:
PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.

StormTech Isolator Row Detail



NOTE: NON-WOVEN GEOTEXTILE OVER DC-780 ISOLATOR ROW CHAMBERS IS NOT REQUIRED.

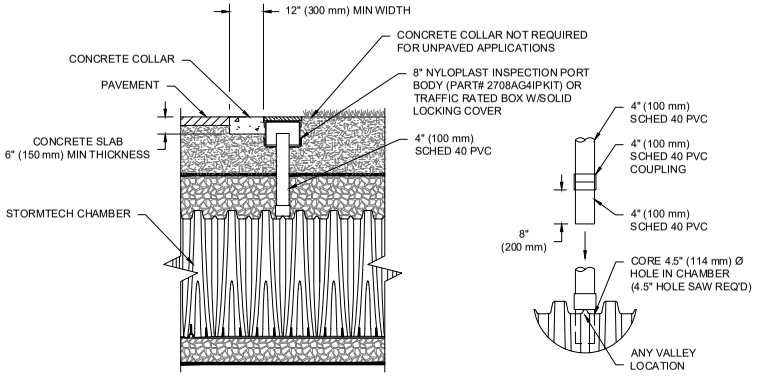
Table 1- Acceptable Fill Materials

Material Location	Description	AASHTO M43 Designation[1]	Compaction/Density Requirement
Ⓓ **Final Fill:** Fill Material for layer 'D' starts from the top of the 'C' layer to the bottom of flexible pavement or unpaved finished grade above. Note that the pavement subbase may be part of the 'D' layer.	Any soil/rock materials, native soils or per engineer's plans. Check plans for pavement subgrade requirements.	N/A	Prepare per site design engineer's plans. Paved installations may have stringent material and preparation requirements.
Ⓒ **Initial Fill:** Fill Material for layer 'C' starts from the top of the embedment stone ('B' layer) to 18" (450 mm) above the top of the chamber. Note that pavement subbase may be part of the 'C' layer.	Granular well-graded soil/ aggregate mixtures, <35% fines or processed aggregate. Most pavement subbase materials can be used in lieu of this layer.	AASHTO M45 A-1, A-2-4, A-3 or AASHTO M431 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	Begin compaction after min. 12" (300 mm) of material over the chambers is reached. Compact additional layers in 6" (150 mm) max. lifts to a min. 95% Proctor density for well-graded material and 95% relative density for processed aggregate materials. Roller gross vehicle weight not to exceed 12,000 lbs (53 kN). Dynamic force not to exceed 20,000 lbs (89 kN)
Ⓑ **Embedment Stone:** Embedment Stone surrounding chambers from the foundation stone to the 'C' layer above.	Clean, crushed, angular stone	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	No compaction required.
Ⓐ **Foundation Stone:** Foundation Stone below the chambers from the subgrade up to the foot (bottom) of the chamber.	Clean, crushed, angular stone,	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	Place and compact in 6" (150 mm) lifts using two full coverages with a vibratory compactor.[2, 3]

PLEASE NOTE:

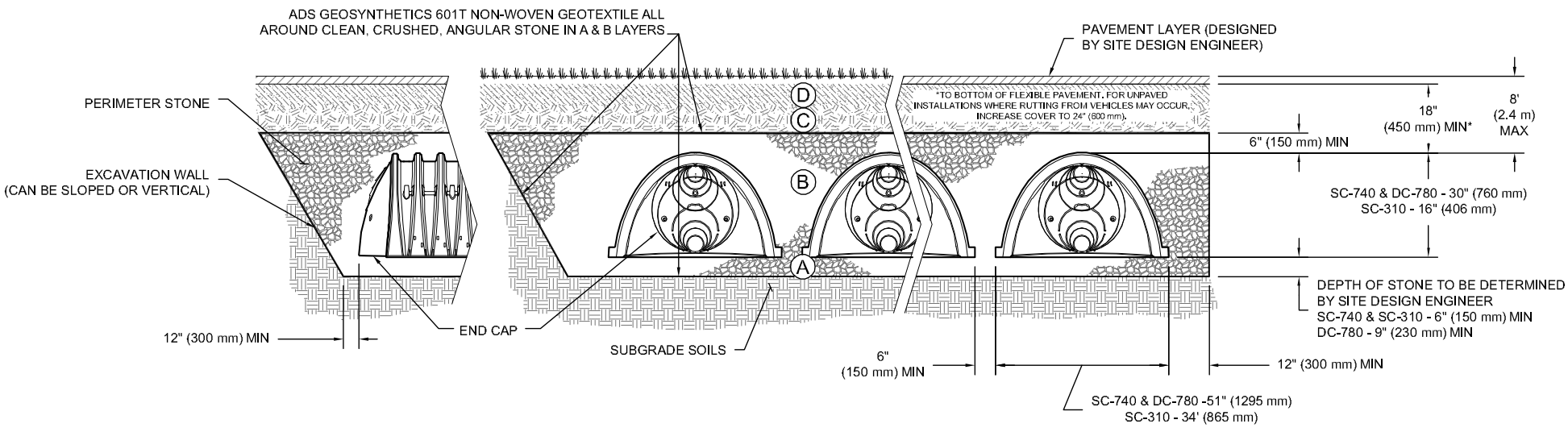
1. ***The listed AASHTO designations are for gradations only. The stone must also be clean, crushed, angular. For example, a specification for #4 stone would state: "clean, crushed, angular no. 4 (AASHTO M43) stone".***
2. ***StormTech compaction requirements are met for 'A' location materials when placed and compacted in 6" (150 mm) (max) lifts using two full coverages with a vibratory compactor.***
3. ***Where infiltration surfaces may be comprised by compaction, for standard installations and standard design load conditions, a flat surface may be achieved by raking or dragging without compaction equipment. For special load designs, contact StormTech for compaction requirements.***

Figure 1- Inspection Port Detail



NOTES:
1. INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.
2. ALL SCHEDULE 40 FITTINGS TO BE SOLVENT CEMENTED (4" PVC NOT PROVIDED BY ADS).

Figure 2 - Fill Material Locations



NOTES:

1. ***36" (900 mm) of stabilized cover materials over the chambers is required for full dump truck travel and dumping.***
2. ***During paving operations, dump truck axle loads on 18" (450 mm) of cover may be necessary. Precautions should be taken to avoid rutting of the road base layer, to ensure that compaction requirements have been met, and that a minimum of 18" (450 mm) of cover exists over the chambers. Contact StormTech for additional guidance on allowable axle loads during paving.***
3. ***Ground pressure for track dozers is the vehicle operating weight divided by total ground contact area for both tracks. Excavators will exert higher ground pressures based on loaded bucket weight and boom extension.***
4. ***Mini-excavators (< 8,000lbs/3,628 kg) can be used with at least 12" (300 mm) of stone over the chambers and are limited by the maximum ground pressures in Table 2 based on a full bucket at maximum boom extension.***
5. ***Storage of materials such as construction materials, equipment, spoils, etc. should not be located over the StormTech system. The use of equipment over the StormTech system not covered in Table 2 (ex. soil mixing equipment, cranes, etc) is limited. Please contact StormTech for more information.***
6. ***Allowable track loads based on vehicle travel only. Excavators shall not operate on chamber beds until the total backfill reaches 3 feet (900 mm) over the entire bed.***

Table 2 - Maximum Allowable Construction Vehicle Loads[5]

Material Location	Fill Depth over Chambers in. [mm]	Maximum Allowable Wheel Loads		Maximum Allowable Track Loads[6]		Maximum Allowable Roller Loads
		Max Axle Load for Trucks lbs [kN]	Max Wheel Load for Loaders lbs [kN]	Track Width in. [mm]	Max Ground Pressure psf [kPa]	Max Drum Weight or Dynamic Force lbs [kN]
Ⓓ Final Fill Material	36" [900] Compacted	32,000 [142]	16,000 [71]	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	3420 [164] 2350 [113] 1850 [89] 1510 [72] 1310 [63]	38,000 [169]
Ⓒ Initial Fill Material	24" [600] Compacted	32,000 [142]	16,000 [71]	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	2480 [119] 1770 [85] 1430 [68] 1210 [58] 1070 [51]	20,000 [89]
	24" [600] Loose/Dumped	32,000 [142]	16,000 [71]	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	2245 [107] 1625 [78] 1325 [63] 1135 [54] 1010 [48]	20,000 [89] Roller gross vehicle weight not to exceed 12,000 lbs. [53 kN]
	18" [450]	32,000 [142]	16,000 [71]	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	2010 [96] 1480 [71] 1220 [58] 1060 [51] 950 [45]	20,000 [89] Roller gross vehicle weight not to exceed 12,000 lbs. [53 kN]
Ⓑ Embedment Stone	12" [300]	16,000 [71]	NOT ALLOWED	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	1540 [74] 1190 [57] 1010 [48] 910 [43] 840 [40]	20,000 [89] Roller gross vehicle weight not to exceed 12,000 lbs. [53 kN]
	6" [150]	8,000 [35]	NOT ALLOWED	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	1070 [51] 900 [43] 800 [38] 760 [36] 720 [34]	NOT ALLOWED

Table 3 - Placement Methods and Descriptions

Material Location	Placement Methods/ Restrictions	Wheel Load Restrictions	Track Load Restrictions	Roller Load Restrictions
		See Table 2 for Maximum Construction Loads		
Ⓓ Final Fill Material	A variety of placement methods may be used. All construction loads must not exceed the maximum limits in Table 2.	36" (900 mm) minimum cover required for dump trucks to dump over chambers.	Dozers to push parallel to rows until 36" (900mm) compaced cover is reached.[4]	Roller travel parallel to rows only until 36" (900 mm) compacted cover is reached.
Ⓒ Initial Fill Material	Excavator positioned off bed recommended. Small excavator allowed over chambers. Small dozer allowed.	Asphalt can be dumped into paver when compacted pavement subbase reaches 18" (450 mm) above top of chambers.	Small LGP track dozers & skid loaders allowed to grade cover stone with at least 6" (150 mm) stone under tracks at all times. Equipment must push parallel to rows at all times.	Use dynamic force of roller only after compacted fill depth reaches 12" (300 mm) over chambers. Roller travel parallel to chamber rows only.
Ⓑ Embedment Stone	No equipment allowed on bare chambers. Use excavator or stone conveyor positioned off bed or on foundation stone to evenly fill around all chambers to at least the top of chambers.	No wheel loads allowed. Material must be placed outside the limits of the chamber bed.	No tracked equipment is allowed on chambers until a min. 6" (150 mm) cover stone is in place.	No rollers allowed.
Ⓐ Foundation Stone	No StormTech restrictions. Contractor responsible for any conditions or requirements by others relative to subgrade bearing capacity, dewatering or protection of subgrade.			

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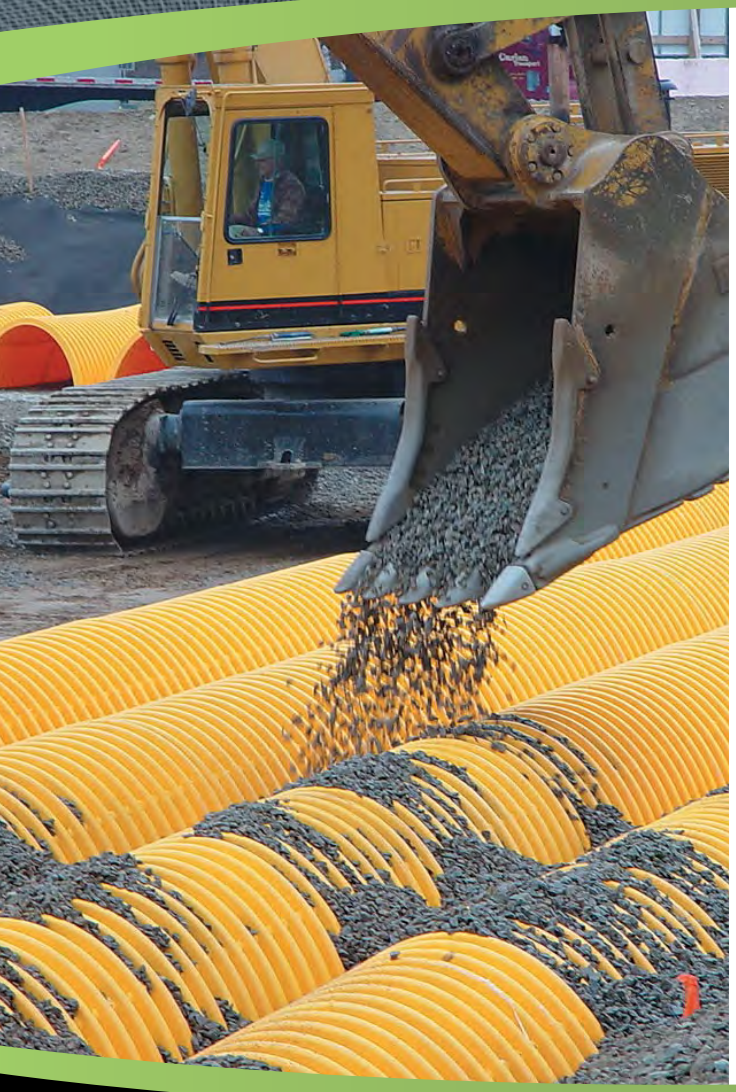
SC-160LP, SC-310, SC-740 & DC-780 Design Manual

StormTech® Chamber Systems for Stormwater Management



*THE MOST **ADVANCED** NAME IN WATER MANAGEMENT SOLUTIONS®*

ADS®

12.1 ISOLATOR ROW INSPECTION

Regular inspection and maintenance are essential to assure a properly functioning stormwater system. Inspection is easily accomplished through the manhole or optional inspection ports of an Isolator Row. Please follow local and OSHA rules for a confined space entry.

Inspection ports can allow inspection to be accomplished completely from the surface without the need for a confined space entry. Inspection ports provide visual access to the system with the use of a flashlight. A stadia rod may be inserted to determine the depth of sediment. If upon visual inspection it is found that sediment has accumulated to an average depth exceeding 3" (76 mm), cleanout is required.

A StormTech Isolator Row should initially be inspected immediately after completion of the site's construction. While every effort should be made to prevent sediment from entering the system during construction, it is during this time that excess amounts of sediments are most likely to enter any stormwater system. Inspection and maintenance, if necessary, should be performed prior to passing responsibility over to the site's owner. Once in normal service, a StormTech Isolator Row should be inspected bi-annually until an understanding of the sites characteristics is developed. The site's maintenance manager can then revise the inspection schedule based on experience or local requirements.

12.2 ISOLATOR ROW MAINTENANCE

JetVac maintenance is recommended if sediment has been collected to an average depth of 3" (76 mm) inside the Isolator Row. More frequent maintenance may be required to maintain minimum flow rates through the Isolator Row. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments. As the nozzle is retrieved, a wave of suspended sediments is flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/ JetVac combination vehicles. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45" (1143 mm) are best. The JetVac process shall only be performed on StormTech Rows that have AASHTO class 1 woven geotextile over the foundation stone (ADS 315ST or equal).

Looking down the Isolator Row

A typical JetVac truck (This is not a StormTech product.)

Examples of culvert cleaning nozzles appropriate for Isolator Row maintenance. (These are not StormTech products).

12.0 Inspection & Maintenance

STORMTECH ISOLATOR™ ROW - STEP-BY-STEP MAINTENANCE PROCEDURES

Step 1) Inspect Isolator Row for sediment

A) Inspection ports (if present)

i. Remove lid from floor box frame

ii. Remove cap from inspection riser

iii. Using a flashlight and stadia rod, measure depth of sediment

iv. If sediment is at, or above, 3" (76 mm) depth proceed to Step 2. If not proceed to Step 3.

B) All Isolator Rows

i. Remove cover from manhole at upstream end of Isolator Row

ii. Using a flashlight, inspect down Isolator Row through outlet pipe

1. Follow OSHA regulations for confined space entry if entering manhole
2. Mirrors on poles or cameras may be used to avoid a confined space entry

iii. If sediment is at or above the lower row of sidewall holes [approximately 3" (76 mm)] proceed to Step 2. If not proceed to Step 3.

Step 2) Clean out Isolator Row using the JetVac process

A) A fixed floor cleaning nozzle with rear facing nozzle spread of 45" (1143 mm) or more is preferable

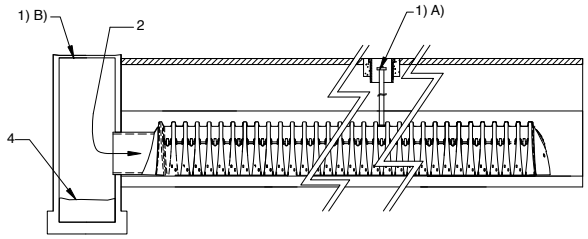
B) Apply multiple passes of JetVac until backflush water is clean

C) Vacuum manhole sump as required during jetting

Step 3) Replace all caps, lids and covers

Step 4) Inspect and clean catch basins and manholes upstream of the StormTech system following local guidelines.

Figure 20 – StormTech Isolator Row (not to scale)



12.3 ECCENTRIC PIPE HEADER INSPECTION

Theses guidelines do not supercede a pipe manufacturer's recommended I&M procedures. Consult with the manufacturer of the pipe header system for specific I&M procedures. Inspection of the header system should be carried out quarterly. On sites which generate higher levels of sediment more frequent inspections may be necessary. Headers may be accessed through risers, access ports or manholes. Measurement of sediment may be taken with a stadia rod or similar device. Cleanout of sediment should occur when the sediment volume has reduced the storage area by 25% or the depth of sediment has reached approximately 25% of the diameter of the structure.

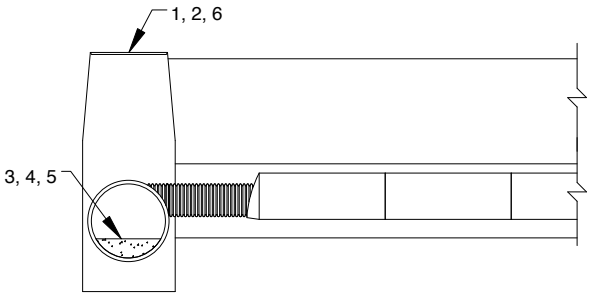
12.4 ECCENTRIC PIPE MANIFOLD MAINTENANCE

Cleanout of accumulated material should be accomplished by vacuum pumping the material from the header. Cleanout should be accomplished during dry weather. Care should be taken to avoid flushing sediments out through the outlet pipes and into the chamber rows.

Eccentric Header Step-by-Step Maintenance Procedures

1. Locate manholes connected to the manifold system
2. Remove grates or covers
3. Using a stadia rod, measure the depth of sediment
4. If sediment is at a depth of about 25% pipe volume or 25% pipe diameter proceed to step 5. If not proceed to step 6.
5. Vacuum pump the sediment. Do not flush sediment out inlet pipes.
6. Replace grates and covers
7. Record depth and date and schedule next inspection

Figure 21 – Eccentric Manifold Maintenance



Please contact StormTech's Technical Services Department at 888-892-2894 for a spreadsheet to estimate cleaning intervals.

13.0 General Notes

1. StormTech ("StormTech") requires installing contractors to use and understand StormTech's latest Installation Instructions prior to beginning system installation.

2. Our Technical Services Department offers installation consultations to installing contractors. Contact our Technical Service Representatives at least 30 days prior to system installation to arrange a preinstallation consultation. Our representatives can then answer questions or address comments on the StormTech chamber system and inform the Installing contractor of the minimum installation requirements before beginning the system's construction. Call **860-529-8188** to speak to a Technical Service Representative or visit **www.stormtech.com** to receive a copy of our Installation Instructions.

3. StormTech's requirements for systems with pavement design (asphalt, concrete pavers, etc.): Minimum cover for the SC-740, DC-780 and SC-310 chambers is 18" (457 mm) not including pavement; Minimum cover for the SC-160LP chamber is 14" (350 mm); Maximum cover for the SC-740 and SC-310 chambers is 96" (2.4 m) including pavement design; Maximum cover for the SC-160LP chamber is 10' (3.0 m); Maximum cover for the DC-780 chamber is 12' (3.6 m) including pavement design. For installations that do not include pavement, where rutting from vehicles may occur, minimum required cover is 24" (610 mm), maximum cover is as stated above.

4. The contractor must report any discrepancies with the bearing capacity of the chamber foundation materials to the design engineer.

5. AASHTO M288 Class 2 non-woven geotextile (filter fabric) must be used as indicated in the project plans.

6. Stone placement between chamber rows and around perimeter must follow instructions as indicated in the most current version of StormTech's Installation Instructions.

7. Backfilling over the chambers must follow requirements as indicated in the most current version of StormTech's Installation Instructions.

8. The contractor must refer to StormTech's Installation Instructions for a Table of Acceptable Vehicle Loads at various depths of cover. This information is also available at StormTech's website: **www.stormtech.com**. The contractor is responsible for preventing vehicles that exceed StormTech's requirements from traveling across or parking over the stormwater system. Temporary fencing, warning tape and appropriately located signs are commonly used to prevent unauthorized vehicles from entering sensitive construction areas.

9. The contractor must apply erosion and sediment control measures to protect the stormwater system during all phases of site construction per local codes and design engineer's specifications.

10. STORMTECH PRODUCT WARRANTY IS LIMITED. Contact StormTech for warranty information.

14.0 StormTech Product Specifications

1.0 GENERAL

1.1 StormTech chambers are designed to control storm water runoff. As a subsurface retention system, StormTech chambers retain and allow effective infiltration of water into the soil. As a subsurface detention system, StormTech chambers detain and allow for the metered flow of water to an outfall.

2.0 CHAMBER PARAMETERS

2.1 The Chamber shall be injection molded of an impact modified polypropylene or polyethylene copolymer to maintain adequate stiffness through higher temperatures experienced during installation and service.

2.2 The nominal chamber dimensions of the StormTech SC-740 and DC-780 shall be 30.0" (762 mm) tall, 51.0" (1295 mm) wide and 90.7" (2304 mm) long. The nominal chamber dimensions of the StormTech SC-310 shall be 16.0" (406 mm) tall, 34.0" (864 mm) wide and 90.7" (2304 mm) long. SC-160LP shall be 12"(305mm) tall, 25" (635 mm) wide and 90.7" (2304mm) long. The installed length of a joined chamber shall be 85.4" (2169 mm).

2.3 The chamber shall have a continuously curved section profile.

2.4 The chamber shall be open-bottomed.

2.5 The chamber shall incorporate an overlapping corrugation joint system to allow chamber rows of almost any length to be created. The overlapping corrugation joint system shall be effective while allowing a chamber to be trimmed to shorten its overall length.

2.6 The nominal storage volume of all StormTech chambers includes the volume of the clean, crushed, angular stone with an assumed 40% porosity. The nominal storage volume of a joined StormTech SC-740 chamber shall be 74.9 ft^3 (2.1 m^3) per chamber when installed per StormTech's typical details. This equates to a storage volume per unit area of bed of 2.2 ft^3/ft^2 (0.67 m^3/m^2). The nominal storage volume of a joined StormTech DC-780 chamber shall be 78.4 ft^3 (2.2 m^3) per chamber when installed per StormTech's typical details. This equates to a storage volume per unit area of bed of 2.3 ft^3/ft^2 (0.70 m3/m2). The nominal storage volume of a joined StormTech SC-310 chamber shall be 31.0 ft^3 (0.88 m^3) per chamber when installed per StormTech's typical details. This equates to a storage volume per unit area of bed of 1.3 ft^3/ft2 (0.40 m^3/m^2). The nominal storage volume of a joined StormTech SC-160LP chamber shall be 15 ft^3 (0.42 m^3) per chamber when installed per StormTech's typical details. This equates to a storage volume per unit area of bed of 1.0 ft^3/ft^3 (0.30 m^3/m^3).

2.7 The SC-740 and SC-310 chambers shall have forty eight orifices penetrating the sidewalls to allow for lateral conveyance of water.

2.8 The chamber shall have two orifices near its top to allow for equalization of air pressure between its interior and exterior.

2.9 The chamber shall have both of its ends open to allow for unimpeded hydraulic flows and visual inspections down a row's entire length.

2.10 The chamber shall have 14 corrugations.

2.11 The chamber shall be analyzed and designed using AASHTO methods for thermoplastic culverts contained in the LRFD Bridge Design Specifications, 2nd Edition, including Interim Specifications through 2001. Design live load shall be the AASHTO design truck. Design shall consider earth and live loads as appropriate for the minimum to maximum specified depth of fill.

2.12 The chamber shall be manufactured in an ISO 9001:2000 certified facility.

3.0 END CAP PARAMETERS

3.1 The end cap shall be designed to fit into any corrugation of a chamber, which allows: capping a chamber that has its length trimmed; segmenting rows into storage basins of various lengths.

3.2 The end cap shall have saw guides to allow easy cutting for various diameters of pipe that may be used to inlet the system.

3.3 The end cap shall have excess structural adequacies to allow cutting an orifice of any size at any invert elevation.

3.4 The primary face of an end cap shall be curved outward to resist horizontal loads generated near the edges of beds.

3.5 The end cap shall be manufactured in an ISO 9001:2000 certified facility.

15.0 Chamber Specifications for Contract Documents

SC-160LP STORMTECH CHAMBER SPECIFICATIONS

1. Chambers shall be Stormtech SC-160LP.
2. Chambers shall be arch-shaped and shall be manufactured from virgin, impact-modified polypropylene copolymers.
3. Chambers shall meet the requirements of ASTM F2418-16A, "Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers"
4. Chamber rows shall provide continuous, unobstructed internal space with no internal supports that would impede flow or limit access for inspection.
5. The structural design of the chambers, the structural backfill, and the installation requirements shall ensure that the load factors specified in the AASHTO LRFD bridge design specifications, Section 12.12, are met for: 1) long-duration dead loads and 2) short-duration live loads, based on the AASHTO design truck with consideration for impact and multiple vehicle presences.
6. Chambers shall be designed, tested and allowable load configurations determined in accordance with ASTM F2787, "Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers". Load configurations shall include: 1) instantaneous (<1 min) AASHTO design truck live load on minimum cover 2) maximum permanent (75-yr) cover load and 3) allowable cover with parked (1-week) aashto design truck.
7. Requirements for handling and installation:
   - To maintain the width of chambers during shipping and handling, chambers shall have integral, interlocking stacking lugs.
   - To ensure a secure joint during installation and backfill, the height of the chamber joint shall not be less than 1.5".
   - To ensure the integrity of the arch shape during installation, a) the arch stiffness constant as defined in section 6.2.8 of ASTM F2418 shall be greater than or equal to 400 lbs/in/in. And b) to resist softening during hot, sunny installation conditions, chambers shall be produced from light, reflective gold or yellow colors.
8. Only chambers that are approved by the site design engineer will be allowed. The chamber manufacturer shall submit the following upon request to the site design engineer for approval before delivering chambers to the project site:
   - A structural evaluation sealed by a registered professional engineer that demonstrates that the safety factors are greater than or equal to 1.95 for dead load and 1.75 for live load, the minimum required by ASTM F2787 and by AASHTO for thermoplastic pipe.
   - A structural evaluation sealed by a registered professional engineer that demonstrates that the load factors specified in the AASHTO IRFD bridge design specifications, Section 12.12, are met. The 50 year creep modulus data specified in ASTM F2418 must be used as part of the AASHTO structural evaluation to verify long-term performance.

Chambers and end caps shall be produced at an ISO 9001 certified manufacturing facility.

SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. Chambers shall be Stormtech SC-310.
2. Chambers shall be arch-shaped and shall be manufactured from virgin, impact-modified polypropylene or polyethylene copolymers.
3. Chambers shall meet the requirements of ASTM F2922 (polethylene) or ASTM F2418-16A (polypropylene), "Standard Specification for Corrugated Wall Stormwater Collection Chambers"
4. Chamber rows shall provide continuous, unobstructed internal space with no internal supports that would impede flow or limit access for inspection.
5. The structural design of the chambers, the structural backfill, and the installation requirements shall ensure that the load factors specified in the AASHTO IRFD bridge design specifications, Section 12.12, are met for: 1) long-duration dead loads and 2) short-duration live loads, based on the AASHTO design truck with consideration for impact and multiple vehicle presences.
6. Chambers shall be designed, tested and allowable load configurations determined in accordance with ASTM F2787, "Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers". Load configurations shall include: 1) instantaneous (<1 min) AASHTO design truck live load on minimum cover 2) maximum permanent (75-yr) cover load and 3) allowable cover with parked (1-week) AASHTO to design truck.
7. Requirements for handling and installation:
   - To maintain the width of chambers during shipping and handling, chambers shall have integral, interlocking stacking lugs.
   - To ensure a secure joint during installation and backfill, the height of the chamber joint shall not be less than 2".
   - To ensure the integrity of the arch shape during installation, a) the arch stiffness constant as defined in Section 6.2.8 of ASTM F2418 shall be greater than or equal to 400 lbs/in/in. And b) to resist softening during hot, sunny installation conditions, chambers shall be produced from light, reflective gold or yellow colors.
8. Only chambers that are approved by the site design engineer will be allowed. The chamber manufacturer shall submit the following upon request to the site design engineer for approval before delivering chambers to the project site:
   - A structural evaluation sealed by a registered professional engineer that demonstrates that the safety factors are greater than or equal to 1.95 for dead load and 1.75 for live load, the minimum required by ASTM F2787 and by AASHTO for thermoplastic pipe.
   - A structural evaluation sealed by a registered professional engineer that demonstrates that the load factors specified in the AASHTO LRFD bridge design specifications, Section 12.12, are met. The 50 year creep modulus data specified in ASTM F2418 must be used as part of the aashto structural evaluation to verify long-term performance.

Chambers and end caps shall be produced at an ISO 9001 certified manufacturing facility.

15.0 Chamber Specifications for Contract Documents

SC-740 STORMTECH CHAMBER SPECIFICATIONS

1. Chambers shall be Stormtech SC-740.
2. Chambers shall be arch-shaped and shall be manufactured from virgin, impact-modified polypropylene copolymers.
3. Chambers shall meet the requirements of ASTM F2418-16A, "Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers"
4. Chamber rows shall provide continuous, unobstructed internal space with no internal supports that would impede flow or limit access for inspection.
5. The structural design of the chambers, the structural backfill, and the installation requirements shall ensure that the load factors specified in the AASHTO LRFD bridge design specifications, Section 12.12, are met for: 1) long-duration dead loads and 2) short-duration live loads, based on the AASHTO design truck with consideration for impact and multiple vehicle presences.
6. Chambers shall be designed, tested and allowable load configurations determined in accordance with ASTM F2787, "Standard practice for structural design of Thermoplastic Corrugated Wall Stormwater Collection Chambers". Load configurations shall include: 1) instantaneous (<1 min) AASHTO design truck live load on minimum cover 2) maximum permanent (75-yr) cover load and 3) allowable cover with parked (1-week) AASHTO design truck.
7. Requirements for handling and installation:
   - To maintain the width of chambers during shipping and handling, chambers shall have integral, interlocking stacking lugs.
   - To ensure a secure joint during installation and backfill, the height of the chamber joint shall not be less than 2".
   - To ensure the integrity of the arch shape during installation, a) the arch stiffness constant as defined in Section 6.2.8 of ASTM F2418 shall be greater than or equal to 550 lbs/in/in. And b) to resist softening during hot, sunny installation conditions, chambers shall be produced from light, reflective gold or yellow colors.
8. Only chambers that are approved by the site design engineer will be allowed. The chamber manufacturer shall submit the following upon request to the site design engineer for approval before delivering chambers to the project site:
   - A structural evaluation sealed by a registered professional engineer that demonstrates that the safety factors are greater than or equal to 1.95 for dead load and 1.75 for live load, the minimum required by ASTM F2787 and by AASHTO for thermoplastic pipe.
   - A structural evaluation sealed by a registered professional engineer that demonstrates that the load factors specified in the AASHTO LRDF bridge design specifications, Section 12.12, are met. The 50 year creep modulus data specified in ASTM F2418 must be used as part of the AASHTO structural evaluation to verify long-term performance.

Chambers and end caps shall be produced at an ISO 9001 certified manufacturing facility.

DC-780 STORMTECH CHAMBER SPECIFICATIONS

1. Chambers shall be Stormtech DC-780.
2. Chambers shall be arch-shaped and shall be manufactured from virgin, impact-modified polypropylene copolymers.
3. Chambers shall meet the requirements of ASTM F2418-16A, "Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers"
4. Chamber rows shall provide continuous, unobstructed internal space with no internal supports that would impede flow or limit access for inspection.
5. The structural design of the chambers, the structural backfill, and the installation requirements shall ensure that the load factors specified in the AASHTO LRFD bridge design specifications, Section 12.12, are met for: 1) long-duration dead loads and 2) short-duration live loads, based on the AASHTO design truck with consideration for impact and multiple vehicle presences.
6. Chambers shall be designed, tested and allowable load configurations determined in accordance with ASTM F2787, "Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers". Load configurations shall include: 1) instantaneous (<1 min) AASHTO design truck live load on minimum cover 2) maximum permanent (75-yr) cover load and 3) allowable cover with parked (1-week) AASHTO design truck.
7. Requirements for handling and installation:
   - To maintain the width of chambers during shipping and handling, chambers shall have integral, interlocking stacking lugs.
   - To ensure a secure joint during installation and backfill, the height of the chamber joint shall not be less than 2".
   - To ensure the integrity of the arch shape during installation, a) the arch stiffness constant as defined in Section 6.2.8 of ASTM F2418 shall be greater than or equal to 550 lbs/in/in. And b) to resist softening during hot, sunny installation conditions, chambers shall be produced from light, reflective gold or yellow colors.
8. Only chambers that are approved by the site design engineer will be allowed. The chamber manufacturer shall submit the following upon request to the site design engineer for approval before delivering chambers to the project site:
   - A structural evaluation sealed by a registered professional engineer that demonstrates that the safety factors are greater than or equal to 1.95 for dead load and 1.75 for live load, the minimum required by ASTM F2787 and by AASHTO for thermoplastic pipe.
   - A structural evaluation sealed by a registered professional engineer that demonstrates that the load factors specified in the AASHTO LRFD bridge design specifications, Section 12.12, are met. The 50 year creep modulus data specified in ASTM F2418 must be used as part of the AASHTO structural evaluation to verify long-term performance.

Chambers and end caps shall be produced at an ISO 9001 certified manufacturing facility.

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APPENDIX E: SWPPP FORMS

Notice of Intent

Notice of Termination

Contractor Forms

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0644089821

NOTICE OF INTENT

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR _____
(for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

-IMPORTANT-

RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)
G&T PROPERTIES LLC

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
RINALDI

Owner/Operator Contact Person First Name
GREG

Owner/Operator Mailing Address
P.O. BOX 411

City
FAYETTEVILLE

State
NY

Zip
13066 -

Phone (Owner/Operator)
315 - 415 - 9409

Fax (Owner/Operator)
___ - ___ - ____

Email (Owner/Operator)
grinaldi8408@gmail.com

FED TAX ID
__ - _____ (not required for individuals)

Project Site Information

Project/Site Name

PROPOSED SELF STORAGE

Street Address (NOT P.O. BOX)

7030 MANLIUS CENTER ROAD

Side of Street

○ **North** ● **South** ○ **East** ○ **West**

City/Town/Village (THAT ISSUES BUILDING PERMIT)

TOWN OF MANLIUS

State: NY

Zip: 13104 -

County: ONONDAGA

DEC Region: 7

Name of Nearest Cross Street

BOWMAN ROAD

Distance to Nearest Cross Street (Feet)

700

Project In Relation to Cross Street

○ **North** ○ **South** ○ **East** ● **West**

Tax Map Numbers
Section-Block-Parcel

062.-04-06.1

Tax Map Numbers

062.-04-06.2

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

www.dec.ny.gov/imsmaps/stormwater/viewer.htm

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting): 415658

Y Coordinates (Northing): 4768230

2. What is the nature of this construction project?

○ **New Construction**

● **Redevelopment with increase in impervious area**

○ **Redevelopment with no increase in impervious area**

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

Pre-Development Existing Land Use

- ○ FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ● COMMERCIAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ○ OTHER

Post-Development Future Land Use

- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION — Number of Lots
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ● COMMERCIAL
- ○ MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ○ OTHER

***Note**: for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
2.6	2.5	1.7	2.0

5. Do you plan to disturb more than 5 acres of soil at any one time? ○ **Yes** ○ **No**

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A	B	C	D
%	%	%	100 %

7. Is this a phased project? ○ **Yes** ○ **No**

8. Enter the planned start and end dates of the disturbance activities.

Start Date 06/01/2021 – **End Date** 05/01/2022

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Name

OFF SITE WETLAND

9a. Type of waterbody identified in Question 9?

- ○ Wetland / State Jurisdiction On Site (Answer 9b)
- ● Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 9b)
- ○ Wetland / Federal Jurisdiction Off Site
- ○ Stream / Creek On Site
- ○ Stream / Creek Off Site
- ○ River On Site
- ○ River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

9b. How was the wetland identified?

- ○ Regulatory Map
- ○ Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ○ Other (identify)

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001? ○ **Yes** ● **No**

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001? ○ **Yes** ● **No**

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? ○ **Yes** ● **No**
If no, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? ○ **Yes** ○ **No**
If Yes, what is the acreage to be disturbed?

.

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ○ **Yes** ● **No**

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ● **Yes** ○ **No** ○ **Unknown**

16. What is the name of the municipality/entity that owns the separate storm sewer system?

TOWN OF MANLIUS

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ **Yes** ● **No** ○ **Unknown**

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ○ **Yes** ● **No**

19. Is this property owned by a state authority, state agency, federal government or local government? ○ **Yes** ● **No**

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ○ **Yes** ● **No**

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ● **Yes** ○ **No**

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ● **Yes** ○ **No**
If No, skip questions 23 and 27-39.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ● **Yes** ○ **No**

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ● **Professional Engineer (P.E.)**
- ○ **Soil and Water Conservation District (SWCD)**
- ○ **Registered Landscape Architect (R.L.A)**
- ○ **Certified Professional in Erosion and Sediment Control (CPESC)**
- ○ **Owner/Operator**
- ○ **Other**

SWPPP Preparer
NAPIERALA CONSULTING

Contact Name (Last, Space, First)
NAPIERALA MATTHEW

Mailing Address
110 FAYETTE STREET

City
MANLIUS

State Zip
NY 13104-

Phone
315-682-5580

Fax
315-682-5544

Email
MNAP@NAPCON.COM

SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name
MATTHEW

MI
R

Last Name
NAPIERALA

Signature

Date
/ /

25. Has a construction sequence schedule for the planned management practices been prepared? ○ **Yes** ○ **No**

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- ● **Check Dams**
- ○ **Construction Road Stabilization**
- ○ **Dust Control**
- ○ **Earth Dike**
- ○ **Level Spreader**
- ○ **Perimeter Dike/Swale**
- ○ **Pipe Slope Drain**
- ○ **Portable Sediment Tank**
- ○ **Rock Dam**
- ○ **Sediment Basin**
- ○ **Sediment Traps**
- ● **Silt Fence**
- ● **Stabilized Construction Entrance**
- ● **Storm Drain Inlet Protection**
- ○ **Straw/Hay Bale Dike**
- ○ **Temporary Access Waterway Crossing**
- ○ **Temporary Stormdrain Diversion**
- ○ **Temporary Swale**
- ○ **Turbidity Curtain**
- ○ **Water bars**

Biotechnical

- ○ **Brush Matting**
- ○ **Wattling**

Vegetative Measures

- ○ **Brush Matting**
- ○ **Dune Stabilization**
- ● **Grassed Waterway**
- ● **Mulching**
- ○ **Protecting Vegetation**
- ○ **Recreation Area Improvement**
- ● **Seeding**
- ○ **Sodding**
- ○ **Straw/Hay Bale Dike**
- ○ **Streambank Protection**
- ○ **Temporary Swale**
- ● **Topsoiling**
- ○ **Vegetating Waterways**

Permanent Structural

- ○ **Debris Basin**
- ○ **Diversion**
- ○ **Grade Stabilization Structure**
- ● **Land Grading**
- ○ **Lined Waterway (Rock)**
- ○ **Paved Channel (Concrete)**
- ○ **Paved Flume**
- ○ **Retaining Wall**
- ● **Riprap Slope Protection**
- ● **Rock Outlet Protection**
- ○ **Streambank Protection**

Other

Post-construction Stormwater Management Practice (SMP) Requirements

Important: Completion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- ○ **Preservation of Undisturbed Areas**
- ○ **Preservation of Buffers**
- ● **Reduction of Clearing and Grading**
- ● **Locating Development in Less Sensitive Areas**
- ○ **Roadway Reduction**
- ○ **Sidewalk Reduction**
- ○ **Driveway Reduction**
- ○ **Cul-de-sac Reduction**
- ○ **Building Footprint Reduction**
- ○ **Parking Reduction**

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

- ● All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- ○ Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

0.086 **acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

	Total Contributing Area (acres)		Total Contributing Impervious Area (acres)
RR Techniques (Area Reduction)			
○ Conservation of Natural Areas (RR-1)		and/or	
○ Sheetflow to Riparian Buffers/Filters Strips (RR-2)		and/or	
○ Tree Planting/Tree Pit (RR-3)		and/or	
○ Disconnection of Rooftop Runoff (RR-4)		and/or	
RR Techniques (Volume Reduction)			
● Vegetated Swale (RR-5)			0.9
○ Rain Garden (RR-6)			
○ Stormwater Planter (RR-7)			
○ Rain Barrel/Cistern (RR-8)			
○ Porous Pavement (RR-9)			
○ Green Roof (RR-10)			
Standard SMPs with RRv Capacity			
○ Infiltration Trench (I-1)			
○ Infiltration Basin (I-2)			
○ Dry Well (I-3)			
○ Underground Infiltration System (I-4)			
○ Bioretention (F-5)			
○ Dry Swale (O-1)			
Standard SMPs			
○ Micropool Extended Detention (P-1)			
○ Wet Pond (P-2)			
○ Wet Extended Detention (P-3)			
○ Multiple Pond System (P-4)			
○ Pocket Pond (P-5)			
○ Surface Sand Filter (F-1)			
○ Underground Sand Filter (F-2)			
○ Perimeter Sand Filter (F-3)			
○ Organic Filter (F-4)			
○ Shallow Wetland (W-1)			
○ Extended Detention Wetland (W-2)			
○ Pond/Wetland System (W-3)			
○ Pocket Wetland (W-4)			
○ Wet Swale (O-2)			

Table 2 - Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Alternative SMP	Total Contributing Impervious Area (acres)
○ **Hydrodynamic**	
● **Wet Vault**	1.1
○ **Media Filter**	
○ **Other**	

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name: WATER QUALITY VAULT

Manufacturer: CRYSTAL STREAM

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided

0.008 **acre-feet**

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

○ **Yes** ● **No**

If Yes, go to question 36.
If No, go to question 32.

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]

Minimum RRv Required

0.006 **acre-feet**

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

● **Yes** ○ **No**

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

WQv Provided

0.094 **acre-feet**

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). 0.102

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ● **Yes** ○ **No**

If Yes, go to question 36.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

CPv Required ___ . ___ **acre-feet**

CPv Provided ___ . ___ **acre-feet**

36a. The need to provide channel protection has been waived because:

○ Site discharges directly to tidal waters or a fifth order or larger stream.

○ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

Total Overbank Flood Control Criteria (Qp)

Pre-Development 10.14 **CFS**

Post-development 9.17 **CFS**

Total Extreme Flood Control Criteria (Qf)

Pre-Development 19.11 **CFS**

Post-development 18.55 **CFS**

37a. The need to meet the Qp and Qf criteria has been waived because:

- ○ Site discharges directly to tidal waters or a fifth order or larger stream.
- ○ Downstream analysis reveals that the Qp and Qf controls are not required

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? ● **Yes** ○ **No**

If Yes, Identify the entity responsible for the long term Operation and Maintenance

G & T PROPERTIES LLC

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required(#28). (See question 32a) This space can also be used for other pertinent project information.

ON SITE SOILS ARE NOT CONDUCIVE TO INFILTRATION PRACTICES.

40. Identify other DEC permits, existing and new, that are required for this project/facility.

○ Air Pollution Control

○ Coastal Erosion

○ Hazardous Waste

○ Long Island Wells

○ Mined Land Reclamation

○ Solid Waste

○ Navigable Waters Protection / Article 15

○ Water Quality Certificate

○ Dam Safety

○ Water Supply

○ Freshwater Wetlands/Article 24

○ Tidal Wetlands

○ Wild, Scenic and Recreational Rivers

○ Stream Bed or Bank Protection / Article 15

○ Endangered or Threatened Species(Incidental Take Permit)

○ Individual SPDES

○ SPDES Multi-Sector GP N Y R

○ Other

● None

41. Does this project require a US Army Corps of Engineers Wetland Permit? ○ **Yes** ● **No**
If Yes, Indicate Size of Impact. .

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? ● **Yes** ○ **No**
(If No, skip question 43)

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ● **Yes** ○ **No**

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. N Y R

Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name

MI

Print Last Name

Owner/Operator Signature

Date

/ /

STORMWATER POLLUTION PREVENTION PLAN
GENERAL CONTRACTOR'S CERTIFICATION

Construction Site:

STORMWATER POLLUTION PREVENTION PLAN

GENERAL CONTRACTOR'S CERTIFICATION:

> "I hereby certify 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 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."

Name: _____
(Print)

Signature: _____

Title: _____

Company Name: _____

Address: _____

Telephone Number: _____

Date: _____

Scope of Services: _____

_____

_____

STORMWATER POLLUTION PREVENTION PLAN
SUBCONTRACTOR'S CERTIFICATION

Construction Site:

STORMWATER POLLUTION PREVENTION PLAN

SUBCONTRACTOR'S CERTIFICATION:

NYS-DEC SPDES General Permit Contractor's Certification Statement

"I hereby certify 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 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."

Name: _____
(Print)

Signature: _____

Title: _____

Company Name: _____

Address: _____

Telephone Number: _____

Date: _____

Scope of Services: _____

_____

_____

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information
1. Owner/Operator Name:
2. Contact Person:
3. Street Address:
4. City/State/Zip:
II. Project Site Information
5. Project/Site Name:
6. Street Address:
7. City/State/Zip:
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information
8. SWPPP Reviewed by:
9. Title/Position:
10. Date Final SWPPP Reviewed and Accepted:
IV. Regulated MS4 Information
11. Name of MS4:
12. MS4 SPDES Permit Identification Number: NYR20A
13. Contact Person:
14. Street Address:
15. City/State/Zip:
16. Telephone Number:

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

VI. Additional Information

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

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:

4b. 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. K All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. K 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. K 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? K yes K no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? K yes K 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? K yes K no

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

K Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

K Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

K For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

K For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; 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? K yes □ 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 2015)

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APPENDIX F: EROSION & SEDIMENT CONTROL DETAILS AND STORMWATER MANAGEMENT PLAN

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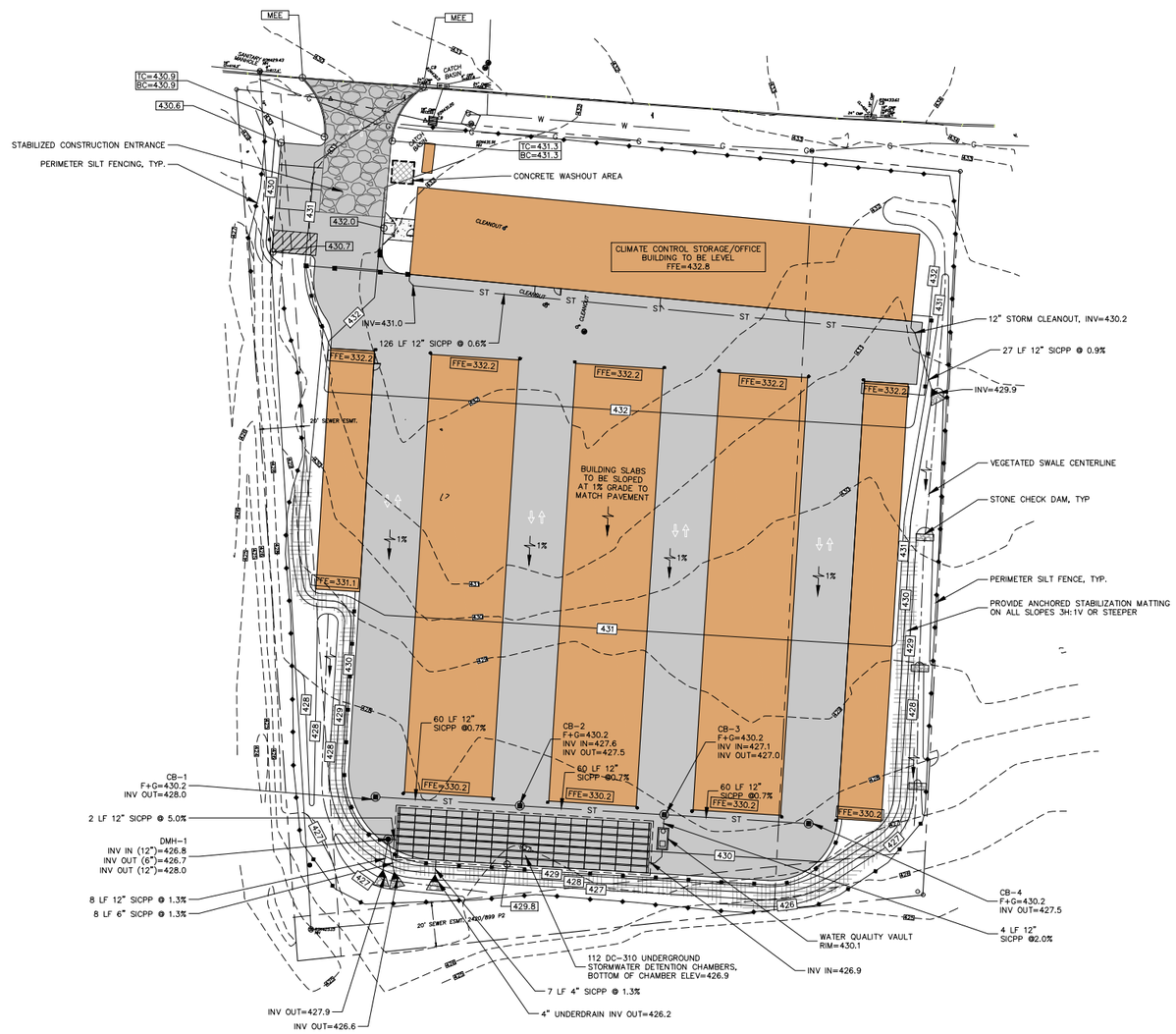

GRADING PLAN LEGEND

458	EXISTING CONTOUR GRADES
459	PROPOSED CONTOUR GRADES
459.8	PROPOSED FINISHED SPOT ELEVATION
TC=459.8 BC=459.3	PROPOSED TOP OF CURB AND BOTTOM OF CURB ELEVATIONS
MEE	MATCH/MEET EXISTING ELEVATION
	ANCHORED STABILIZATION MATTING
	STABILIZED CONSTRUCTION ENTRANCE/EXIT
	SILT FENCE
	SWALE CENTERLINE
	CONCRETE WASHOUT AREA
	CONCRETE WASHOUT AREA

GRAPHIC SCALE
0 30' 60'
(IN FEET)
1 Inch = 30 ft

PRELIMINARY
FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS — ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, New York 13104
email: MNAPIER@NAPCONS.COM
PH: (315) 682-5580 FAX: (315) 682-5544

PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE 1" = 30'

SEAL AND SIGNATURE
FOR AND ON BEHALF OF:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 080703

SHEET
C-5

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NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, PC

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR SURVEYOR, TO ALTER IN ANY WAY AN ITEM ON THIS DOCUMENT IN ANY WAY.

ANY LICENSEE WHO ALTERS THIS DOCUMENT SHALL STAMP THE DOCUMENT TO ALTER IT WITH THE WORDS "ALTERED BY" FOLLOWED BY THE ALTERER'S SIGNATURE AND THE SPECIFIC DESCRIPTION OF THE ALTERATIONS.

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EROSION CONTROL NOTES

EROSION AND SEDIMENT CONTROLS

1. STABILIZATION PRACTICES (TEMPORARY)
   a) TEMPORARY SEEDING AND PLANTING OF ALL UNPAVED AREAS WHEN CONSTRUCTION ACTIVITY HAS CEASED, OR WILL CEASE, IN AN AREA FOR 14 DAYS. SEEDING MIXTURES AND APPLICATION RATES ARE LISTED ON SHEET C-2.
   b) MULCHING EXPOSED AREAS.
   c) FREQUENT WATERING TO MINIMIZE WIND EROSION DURING CONSTRUCTION.

2. STABILIZATION PRACTICES (PERMANENT)
   a) LAND CLEARING ACTIVITIES SHALL BE DONE ONLY IN AREAS WHERE EARTHWORK WILL BE PERFORMED AND SHALL PROGRESS AS EARTHWORK IS NEEDED.
   b) PERMANENT SEEDING AND PLANTING OF ALL UNPAVED AREAS.

3. STRUCTURAL MEASURES TEMPORARY
   a. STABILIZED CONSTRUCTION ENTRANCE: AT THE ENTRANCE TO THE ALL DISTURBED AREAS FROM AN EXISTING ROADWAY A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED. THE PURPOSE OF THE STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO THE PUBLIC RIGHT-OF-WAY.
   b. SILT FENCE: SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE EROSION CONTROL PLAN . THE FABRIC SHALL MEET THE SPECIFICATIONS NOTED ON THE DETAILS UNLESS OTHERWISE APPROVED BY THE APPROPRIATE EROSION AND SEDIMENT CONTROL PLAN APPROVAL AUTHORITY. SUCH APPROVAL SHALL NOT CONSTITUTE STATEWIDE ACCEPTANCE.
   c. DUST CONTROL: DUST CONTROL IS THE CONTROL OF DUST RESULTING FROM LAND-DISTURBING ACTIVITIES. THE PURPOSE IS TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM DISTURBED SOIL SURFACES THAT MAY CAUSE OFF-SITE DAMAGE, HEALTH HAZARDS, AND TRAFFIC SAFETY PROBLEMS.
   d. SEDIMENT TRAP: SEDIMENT TRAP TO BE INSTALLED IN DETENTION BASIN AREA FOR USE DURING CONSTRUCTION. STONE OUTLET SEDIMENT TRAP TO BE INSTALLED AS PER DETAIL TO ELIMINATE SEDIMENT DISCHARGE TO DOWNSTREAM AREAS DURING CONSTRUCTION PHASE.

4. STRUCTURAL PRACTICES (PERMANENT)
   a. ROCK OUTLET PROTECTION: ROCK OUTLET PROTECTION IS A SECTION OF ROCK PROTECTION PLACED AT THE OUTLET END OF CULVERTS, CONDUITS, OR CHANNELS. THE PURPOSE OF THE ROCK OUTLET PROTECTION IS TO REDUCE THE DEPTH, VELOCITY, AND ENERGY OF WATER, SUCH THAT THE FLOW WILL NOT ERODE THE RECEIVING DOWNSTREAM REACH.
   b. REINFORCED SLOPE PROTECTION: A TEMPORARY PROTECTIVE COVERING PLACED ON A PREPARED PLANTING AREA THAT IS ANCHORED IN PLACE BY STAPLES OR OTHER MEANS TO AID IN CONTROLLING EROSION BY ABSORBING RAIN SPLASH ENERGY AND WITHSTAND OVERLAND FLOW AS WELL AS PROVIDE A MICROCLIMATE TO PROTECT AND PROMOTE SEED ESTABLISHMENT.
   c. LAND GRADING: PERMANENT RESHAPING OF THE EXISTING LAND SURFACE BY GRADING IN ACCORDANCE WITH AN ENGINEERING TOPOGRAPHIC PLAN AND SPECIFICATION TO PROVIDE EROSION CONTROL AND VEGETATIVE ESTABLISHMENT ON DISTURBED, RESHAPED AREAS.

5. SEQUENCE OF MAJOR ACTIVITIES
   THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE ABOVE LISTED EROSION AND SEDIMENT CONTROL PRACTICES. THE CONTRACTOR MAY DESIGNATE THESE TASKS TO CERTAIN SUBCONTRACTORS AS IS SEEN FIT, BUT THE ULTIMATE RESPONSIBILITY FOR IMPLEMENTING THESE CONTROLS AND ENSURING THEIR PROPER FUNCTION REMAINS WITH THE CONTRACTOR. THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:
   a) CONDUCT PRECONSTRUCTION MEETING
   b) CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE/EXIT AT THE LOCATION SHOWN ON THE PLAN.
   c) INSTALL PERIMETER SILT FENCE AND SECURITY CONSTRUCTION FENCE IN THE LOCATIONS SHOWN ON THE PLAN.
   d) ESTABLISH STAGING AREA ON PROJECT SITE
   e) CONSTRUCT TEMPORARY SEDIMENT TRAP
   f) REMOVE TOPSOIL, STOCKPILE AND STABILIZE
   g) SITE GRADING. IMPORT OF FILL MATERIAL TO RAISE SITE TO PROPOSED GRADE (OR SUB-GRADE, AS APPROPRIATE).
   h) BUILDING FOUNDATION EXCAVATION (BUILDING CONSTRUCTION TO CONTINUE CONCURRENTLY WITH REMAINING SITE WORK).
   i) DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED.
   j) UNDERGROUND UTILITY INSTALLATIONS.
   k) INSTALL FILTER FABRIC DROP INLET PROTECTION AT ALL STORM INLETS.
   l) COMPACT GRAVEL ALONG ALL DRIVE AISLES AND PARKING AREAS
   m) SITE CONCRETE CONSTRUCTION.
   n) FINALIZE PAVEMENT SUBGRADE PREPARATION.
   o) REMOVE INLET PROTECTION NO MORE THAN 24 HOURS PRIOR TO PLACING ASPHALT PAVEMENT.
   p) PAVE AREAS NOTED ON PLAN.
   q) DEEP RIPPING OF NON-PAVED AREAS AS REQUIRED (NON-PAVED AREAS THAT HAVE BEEN COMPACTED DURING CONSTRUCTION VIA CONSTRUCTION TRAFFIC).
   r) FINAL GRADING, SEEDING, AND PLANTING.
   s) CONSTRUCT BIORETENTION BASINS AND OUTLET CONTROLS UPON UPSTREAM STABILIZATION OF SITE
   t) REMOVE SEDIMENT TRAP AND FINALIZE GRADING OF DETENTION BASIN
   u) REMOVE SILT FENCE ONLY AFTER ALL PAVING IS COMPLETE AND EXPOSED SURFACES ARE STABILIZED.

MAINTENANCE/INSPECTION PROCEDURES

THE FOLLOWING INSPECTION AND MAINTENANCE PRACTICES WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS AND STABILIZATION MEASURES.

1. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST TWICE EVERY SEVEN (7) CALENDAR DAYS
2. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF REPAIRS OR OTHER EROSION CONTROL MEASURES ARE FOUND TO BE NECESSARY, THEY WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
3. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
4. SILT FENCES WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, ETC., TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE SECURELY IN THE GROUND.
5. TEMPORARY AND PERMANENT SEEDING AND ALL OTHER STABILIZATION MEASURES WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
6. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. COPIES OF THE REPORT FORMS TO BE COMPLETED BY THE INSPECTOR ARE INCLUDED IN THIS SWPPP.
7. THE OPERATOR SHALL HAVE A "QUALIFIED PROFESSIONAL" CONDUCT SITE INSPECTIONS FOLLOWING THE COMMENCEMENT OF CONSTRUCTION. A "QUALIFIED PROFESSIONAL" IS A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICE OF EROSION AND SEDIMENT CONTROLS, SUCH AS A LICENSED PROFESSIONAL ENGINEER, CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), OR SOIL SCIENTIST.
8. DISTURBED AREAS AND MATERIALS STORAGE AREAS WILL BE INSPECTED FOR EVIDENCE OF OR POTENTIAL FOR POLLUTANTS ENTERING STORMWATER SYSTEMS.
9. REPORT TO NYS DEC WITHIN 24 HOURS ANY NONCOMPLIANCE WITH THE SWPPP THAT WILL ENDANGER PUBLIC HEALTH OR THE ENVIRONMENT. FOLLOW UP WITH A WRITTEN REPORT WITHIN 5 DAYS OF THE NONCOMPLIANCE EVENT. THE FOLLOWING EVENTS REQUIRE 24 HOUR REPORTING: A) ANY UNANTICIPATED BYPASS WHICH EXCEEDS ANY EFFLUENT LIMITATION IN THE PERMIT, B) ANY UPSET WHICH EXCEEDS ANY EFFLUENT LIMITATION IN THE PERMIT, AND C) A VIOLATION OF A MAXIMUM DAILY DISCHARGE LIMITATION FOR ANY OF THE POLLUTANTS LISTED BY THE EPA IN THE PERMIT TO BE REPORTED WITHIN 24 HOURS. THE WRITTEN SUBMISSION MUST CONTAIN A DESCRIPTION OF THE NON-COMPLIANCE AND ITS CAUSE; THE PERIOD OF NON-COMPLIANCE, INCLUDING EXACT DATES AND TIMES, AND IF THE NON-COMPLIANCE HAS NOT BEEN CORRECTED, THE ANTICIPATED TIME IT IS EXPECTED TO CONTINUE; AND STEPS TAKEN OR PLANNED TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NON-COMPLIANCE.
10. RELEASES OF HAZARDOUS SUBSTANCES OR OIL IN EXCESS OF REPORTABLE QUANTITIES (AS ESTABLISHED UNDER 40 CFR 110, 40 CFR 117 OR 40 CFR 302) MUST BE REPORTED. FORM G-1 PROVIDES FURTHER DETAILS ON THE NOTIFICATION AND REPORTING PROCESS.

INSPECTION AND MAINTENANCE REPORT FORMS

ONCE INSTALLATION OF ANY REQUIRED OR OPTIONAL EROSION CONTROL DEVICE OR MEASURE HAS BEEN IMPLEMENTED, AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND SHALL BE PERFORMED BY A QUALIFIED PROFESSIONAL. THE FORMS FOUND IN THIS SWPPP SHALL BE USED BY THE INSPECTORS TO INVENTORY AND REPORT THE CONDITION OF EACH MEASURE TO ASSIST IN MAINTAINING THE EROSION AND SEDIMENT CONTROL MEASURES IN GOOD WORKING ORDER.

THESE REPORT FORMS SHALL BECOME AN INTEGRAL PART OF THE SWPPP AND SHALL BE MADE READILY ACCESSIBLE TO GOVERNMENTAL INSPECTION OFFICIALS, THE OPERATOR'S ENGINEER, AND THE OPERATOR FOR REVIEW UPON REQUEST DURING VISITS TO THE PROJECT SITE. IN ADDITION, COPIES OF THE REPORTS SHALL BE PROVIDED TO ANY OF THESE PERSONS, UPON REQUEST, VIA MAIL OR FACSIMILE TRANSMISSION. INSPECTION AND MAINTENANCE REPORT FORMS ARE TO BE MAINTAINED BY THE PERMITTEE FOR FIVE YEARS FOLLOWING THE FINAL STABILIZATION OF THE SITE.

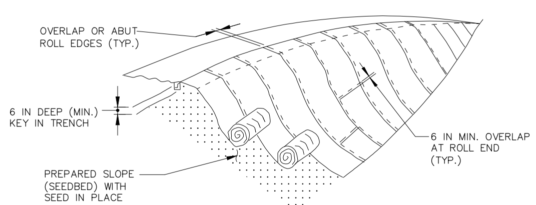
OTHER RECORD-KEEPING REQUIREMENTS

THE CONTRACTOR SHALL KEEP THE FOLLOWING RECORDS RELATED TO CONSTRUCTION ACTIVITIES AT THE SITE:

- DATES WHEN MAJOR GRADING ACTIVITIES OCCUR AND THE AREAS WHICH WERE GRADED
- DATES AND DETAILS CONCERNING THE INSTALLATION OF STRUCTURAL CONTROLS
- DATES WHEN CONSTRUCTION ACTIVITIES CEASE IN AN AREA
- DATES WHEN AN AREAS IS STABILIZED, EITHER TEMPORARILY OR PERMANENTLY
- DATES OF RAINFALL AND THE AMOUNT OF RAINFALL
- DATES AND DESCRIPTIONS OF THE CHARACTER AND AMOUNT OF ANY SPILLS OF HAZARDOUS MATERIALS
- RECORDS OF REPORTS FILED WITH REGULATORY AGENCIES IF REPORTABLE QUANTITIES OF HAZARDOUS MATERIALS SPILLED

EROSION CONTROL NOTES

1. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED SWPPP DRAWINGS DURING CONSTRUCTION OPERATIONS.
2. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL THE APPROPRIATE EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
3. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 7 DAYS OF FINAL GRADING.
4. SHOULD CONSTRUCTION STOP FOR LONGER THAN 14 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
5. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
6. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
7. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
8. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
11. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

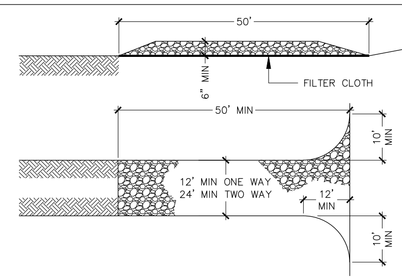


ISOMETRIC VIEW

CONSTRUCTION SPECIFICATIONS

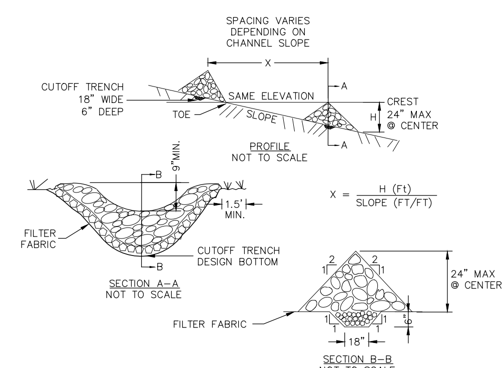
1. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC).
2. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.
3. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.

1 SLOPE STABILIZATION MATTING
C-11 SCALE: NTS



1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - 24 FEET MINIMUM.
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.

2 CONSTRUCTION ENTRANCE
C-11 SCALE: NTS

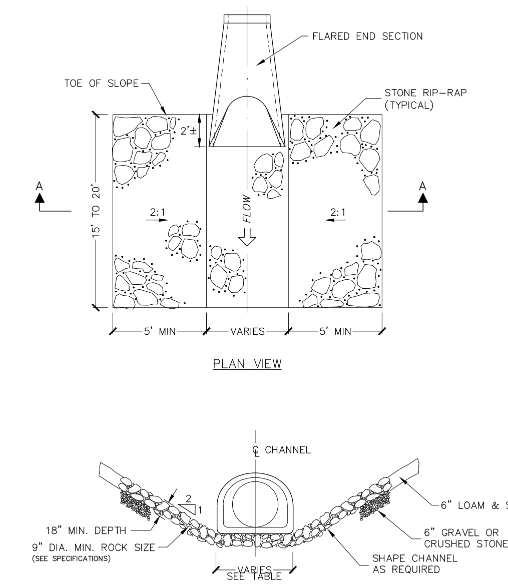


CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

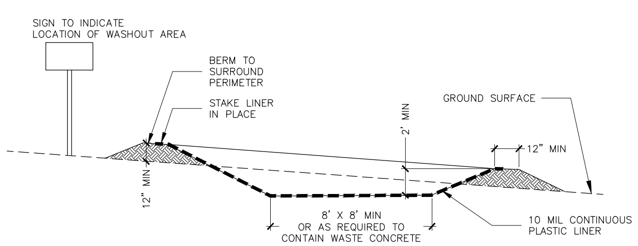
3 TYPICAL STONE CHECK DAM
C-11 SCALE: NTS



DIMENSION TABLE:

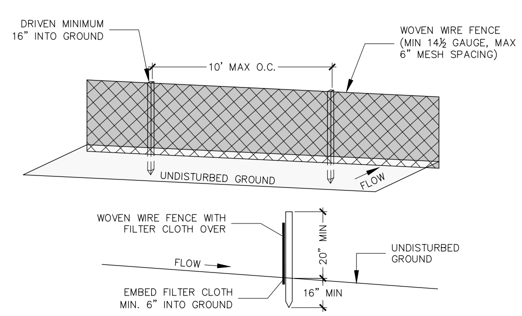
PIPE DIA.	CHANNEL WIDTH
12"	2'-6"
15"	3'-0"
18"	3'-7"
24"	4'-8"

4 ROCK RIPRAP OUTLET PROTECTION UNCONFINED DOWNSTREAM SECTION
C-11 SCALE: NTS



NOTES:
1. CONCRETE WAHSOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. CONCRETE WASHOUT OUT AREA SHALL BE LINED WITH A 10 MIL IMPERMEABLE LINER AND STAKED IN PLACE.
3. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE LOCATION OF CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
4. THE CONCRETE WAHSOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
5. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN ACCEPTED WASTE SITE.
6. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED.

5 CONCRETE WASHOUT AREA
C-11 SCALE: NTS



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

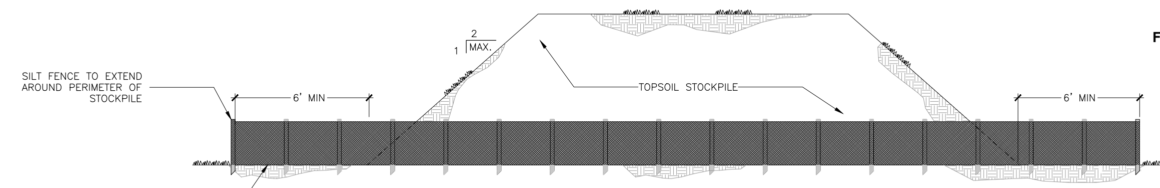
FENCE: WOVEN WIRE, 14 1/2 GAUGE, 6" MAX. MESH OPENING

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

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH IS 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 OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

6 SILT FENCE
C-11 SCALE: NTS



NOTES:
1. SEE EROSION CONTROL PLAN FOR LOCATION OF STOCKPILE
2. REFER TO SILT FENCE DETAIL FOR INSTALLATION OF SILT FENCE
3. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS IT SHALL BE TEMPORARILY SEEDED FOR STABILIZATION
4. SILT FENCES TO BE MAINTAINED IN PLACE UNTIL TOPSOIL STOCKPILE HAS BEEN REMOVED

7 TYPICAL TOPSOIL STOCKPILE
C-11 SCALE: NTS

PRELIMINARY
FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

PROJECT TITLE: PROPOSED SELF STORAGE 7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS ONONDAGA COUNTY, NY

PREPARED FOR: G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE: SITE DETAILS

NO.	REVISION/ISSUE	DATE

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PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE AS SHOWN
SHEET C-11

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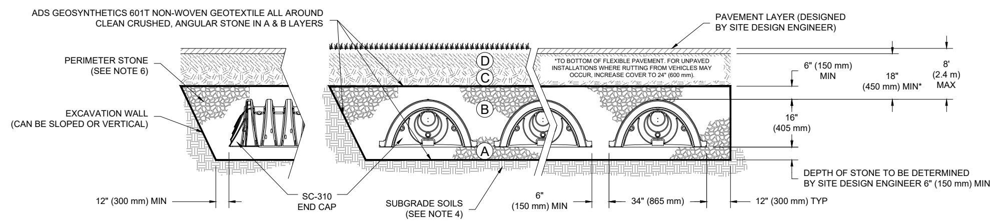


NOTES:

1. SC-310 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

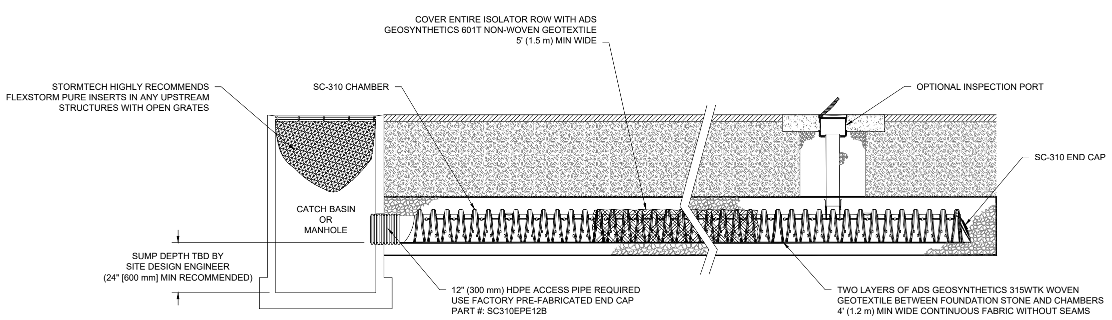
1 (C-12) SC-310 TYPICAL CROSS SECTION
SCALE: NTS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2,3]

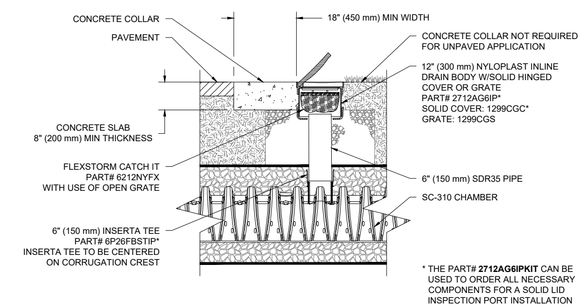
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

2 (C-12) CHAMBER SYSTEM ACCEPTABLE FILL MATERIAL
SCALE: NTS



SC-310 ISOLATOR ROW DETAIL
NTS

3 (C-12) SC-310 ISOLATOR ROW CROSS SECTION
SCALE: NTS



SC-310 6" INSPECTION PORT DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

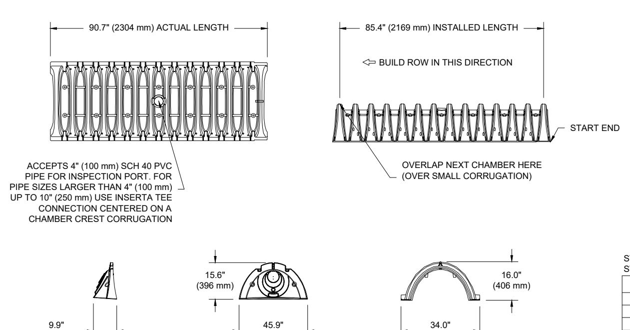
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

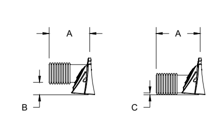
4 (C-12) TYPICAL INSPECTION PORT
SCALE: NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

5 (C-12) SC-310 SPECIFICATIONS
SCALE: NTS

PRELIMINARY
FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, PROFESSIONAL ENGINEER, LANDSCAPE ARCHITECT, OR LAND SURVEYOR TO ALTER ANY ITEM ON THIS DOCUMENT IN ANY WAY.

ANY LICENSEE WHO ALTERS THIS DOCUMENT IS REQUIRED BY LAW TO AFFIX HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE AND SPECIFIC DESCRIPTION OF THE ALTERATIONS.

PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 068733

PROJECT TITLE:
PROPOSED SELF STORAGE
7030 MANLIUS CENTER ROAD
TOWN OF MANLIUS ONONDAGA COUNTY, NY

PREPARED FOR:
G&T PROPERTIES, LLC
P.O. BOX 411
FAYETTEVILLE, NY 13066

SHEET TITLE:
UNDERGROUND DETENTION CHAMBER SYSTEM DETAILS

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104
email: MNAP@NAPCON.COM
PH: (315) 682-5580 FAX: (315) 682-5544

PROJECT NO. 20-1913
DATE 11 MAR 2021
SCALE AS SHOWN
SHEET C-12

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J.Ryan McMahon II
County Executive

Onondaga County Planning Board

RESOLUTION OF THE
ONONDAGA COUNTY PLANNING BOARD

Meeting Date: March 31, 2021

OCPB Case # Z-21-107

WHEREAS, the Onondaga County Planning Board, pursuant to General Municipal Law, Section 239 l, m and n, has considered and reviewed the referral for a SITE PLAN from the Town of Manlius Planning Board at the request of G&T Properties for the property located at 7030 Manlius Center Road; and

WHEREAS, General Municipal Law Section 239-m allows the County Planning Board to review approval of site plans and the site is located within 500 feet of Manlius Center Road (Route 290), a state highway; and

WHEREAS, the applicant is proposing construction of a self-storage facility on two parcels totaling 2.56 acres in a Commercial B (C-B) zoning district; and

WHEREAS, the Board recently offered no position with comment for a zone change referral (Z-21-43) to change the zoning of the subject site from Commercial A (C-A) to Commercial B (C-B) as part of the proposed project; in 2014, the Board recommended modification of a site plan referral (Z-14-200) to revise the site plan for an RV sales facility on the subject site, which is no longer in operation; the Board previously recommended modification of related site plan (Z-14-57) and area variance (Z-14-58) referrals and offered no position with comment for a zone change referral (Z-14-56) as part of the project; and

WHEREAS, the site is located along Manlius Center Road between a fire station and child care facility and across the road from Fremont Plaza, a strip shopping mall; the Town Zoning Map shows these neighboring uses are zoned C-A, C-B, and Neighborhood Shopping (NS); the site abuts vacant, undeveloped land to the south that is zoned Restricted Agriculture (RA); and

WHEREAS, the submitted survey map dated September 20, 2020 shows the vacant site is largely covered by a blacktop and gravel area and has two remnant driveways onto Manlius Center Road; and

WHEREAS, the submitted Layout Plan dated March 11, 2021 shows the proposed self-storage facility will include (3) 8,000 sf buildings, (1) 9,200 sf building, (1) 2,200 sf building, and (1) 4,000 sf building, separated by 26' wide drive aisles and enclosed by an 8' tall security fence; Building A (9,200 sf) will be climate-controlled and include an 800 sf office; the building is shown to be oriented parallel to Manlius Center Road and set back 30' from the front lot line; there will be an adjacent parking area (4 spaces), full access driveway, and motorized sliding gate for access to the remaining buildings; and

WHEREAS, per the Layout Plan, the proposed driveway is in roughly the same location as the existing, westernmost driveway; the easternmost driveway will be removed; ADVISORY NOTE: per the NYS Department of Transportation, all existing or proposed driveways on Manlius Center Road must meet Department requirements; a work permit will be required for any work in the state right-of-way, including work to remove the existing driveway; and

1100 Civic Center, 421 Montgomery Street, Syracuse, NY 13202 (315) 435-2611, Fax (315) 435-2439

E-mail Address: countyplanning@ongov.net

WHEREAS, proposed landscaping is shown along a portion of each side lot line and along the frontage of the site; a monument sign and landscape bed are shown adjacent to the proposed driveway; and

WHEREAS, the submitted Lighting Plan shows 22 building-mounted light fixtures are proposed; fixtures will be mounted around the perimeter of each building; and

WHEREAS, per the submitted Environmental Assessment Form (EAF) dated March 11, 2021, 2.5 acres of the site will be disturbed by the storage facility; stormwater will be collected and mitigated in an on-site underground detention basin with outlet control structure, shown at the rear of the developed area; a Stormwater Pollution Prevention Plan (SWPPP) was provided with the referral, and includes a Notice of Intent for Stormwater Discharges Associated with Construction Activity under State Pollutant Discharge Elimination System (SPDES) General Permit was
ADVISORY NOTE: per the NYS Department of Transportation, additional stormwater runoff into the state's drainage system is prohibited; and

WHEREAS, the site has access to public drinking water and sewers and is located in the Meadowbrook-Limestone Wastewater Treatment Plant service area; per the EAF, the proposed project will connect to the drinking water and wastewater utilities;
ADVISORY NOTES: the Onondaga County Department of Water Environment Protection asks that the applicant contact the Department's Flow Control office to determine sewer availability and capacity; the applicant is advised to also contact OCWA's Engineering Department to determine the activities and structures permitted within OCWA easements/right-of-ways, water availability and service options, obtain hydrant flow test information, evaluate backflow prevention requirements, and/or request that the Authority conduct hydrant flow testing to assess fire flow availability; and

WHEREAS, per the Onondaga County Department of Water Environment Protection, the submitted project is located in an area designated as flow constrained or impacted by excessive wet weather flow or is tributary to a Combined Sewer Overflow (CSO);
ADVISORY NOTE: per the Onondaga County Department of Water Environment Protection, the applicant is advised to develop a 2 gallon to 1 gallon sanitary flow offset plan/project in coordination with the municipal engineer; and

WHEREAS, the site may contain an animal or plant species, or associated habitat, listed by the state or federal government as threatened or endangered (per EAF Mapper);
ADVISORY NOTE: per the NYS Department of Environmental Conservation (DEC), if the site contains a threatened or endangered species and/or associated habitat, and the project requires review under the State Environmental Quality Review Act (SEQRA), a request for a project screening should be submitted to the New York Natural Heritage Program or to the regional DEC Division of Environmental Permits office; and

NOW THEREFORE BE IT RESOLVED, that the Onondaga County Planning Board recommends the following MODIFICATION(S) to the proposed action prior to local board approval of the proposed action:

The applicant must coordinate Manlius Center Road access plans with the New York State Department of Transportation. To further meet Department

requirements, the applicant must submit copies of the Stormwater Pollution Prevention Plan (SWPPP) and lighting plan to the Department for review. The municipality must ensure any mitigation as may be determined by the Department is reflected on the project plans prior to, or as a condition of, municipal approval of the site plan.

The Board also offers the following comment:

To further enhance the front yard aesthetic, the applicant is encouraged to consider architectural detailing, such as windows or a mix of exterior materials, for facades that are visible from Manlius Center Road.

Daniel Cupoli, Chairman
Onondaga County Planning Board
Transmittal Date: 03-31-2021

GML 239 Report of Final Action

NYS GML § 239-m.6. and n.6. require the referring body to file a report of the final action it has taken on a referred matter with the county planning agency within 30 days after the final action (separate from the minutes taken at the meeting). A referring body which acts contrary to a County Planning Board recommendation of MODIFICATION or DISAPPROVAL of a referred matter shall also set forth the reasons for the contrary action in such report.

This section to be completed by the Syracuse-Onondaga County Planning Agency

To: Onondaga County Planning Board **From:** Town of Manlius Planning Board

Fax: 435-2439 **Phone:** 435-2611

Re:
Applicant: G&T Properties
Address: at 7030 Manlius Center Road
Referral Type: SITE PLAN
OCPB Date: March 31, 2021
OCPB Action: Modification
OCPB Case #: Z-21-107

The local board took the following action regarding the above referenced referral (Check one box. If checking Other, please specify the final action taken. Use the space at the bottom of the report to identify reasons if acting contrary to the OCPB recommendation.):

☐ Approved the proposed action with regard to the OCPB's No Position or No Position with Comment.
☐ Approved the proposed action as modified by the OCPB.
☐ Approved the proposed action contrary to some of the modifications recommended by the OCPB.*
☐ Approved the proposed action contrary to all of the modifications recommended by the OCPB.*
☐ Approved the proposed action contrary to the disapproval recommended by the OCPB.*

☐ Disapproved the proposed action with regard to the OCPB's no position or no position with comment.
☐ Disapproved the proposed action with regard to the recommended modification(s) by the OCPB.
☐ Disapproved the proposed action as recommended and for reasons set forth by the OCPB.
☐ Disapproved the proposed action as recommended but for reasons other than those set forth by the OCPB. (Please list reasons below for local disapproval.)

☐ Other _____

Local Board Date: _____

*List reasons for acting contrary to the OCPB recommendation and include a copy of the local board resolution. Attach additional reasons on a separate sheet of paper as necessary.

_____
_____
_____
_____

Expected Fee: _____

TOWN OF MANLIUS
PLANNING DEPARTMENT
INITIAL APPEARANCE APPLICATION

DATE: 3-9-2021

Name of Project: Green house at 7550 Collamer Rd

Applicant must submit 12 copies of all site plans, surveys, and supporting data with the final application before a planning board meeting can be scheduled.

Location of Project: 7550 Collamer Rd E. Syracuse

Type of Project:

○ Division of Land ○ Subdivision ○ Accessory Use ○ Zone Change ○ Site Review ☒ Other _____

Developer: Melanie Nicotra Phone: 315-243-2008

Address: 7075 N. Manlius Rd Kirkville Zip: 13082

Tax Map Number(#)/s: 038.-03-18.4

Present Zoning: C-B Desired Zoning: C-B

Total Acreage: 4.11 Total Number of Lots: 1

Property Owner/s: Melanie Nicotra Phone: (315)243 2008

Address: 7075 N. Manlius Rd Kirkville Zip: 13082

Tax Map#(s): _____ Owner's Signature: Melanie Nicotra

Printed Name: Melanie Nicotra

Property Owner/s: _____ Phone: _____

Address: _____ Zip: _____

Tax Map#(s): _____ Owner's Signature: _____

Printed Name: _____

Use next page for additional known property owners' information

Planning Board Meeting Date Assignment: _____

Fee: _____ Paid: _____ Per: ○ Credit/Debit Card ○ Check ○ Cash

Planning Board - Initial

TOWN OF MANLIUS

DISCLOSURE AFFIDAVIT

This affidavit is a part of and must be completed and attached to every application, petition, request submitted for a *site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license* or *permit.*

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

I. Mehnie Nieto being duly sworn, deposes and says that (s) he is:
Property Owner
(applicant, petitioner, corporation officer, property owner, *etc.)*

II. That deponent has read and is familiar with the provisions of the General Municipal Law, Section 809 which states:

A. Every application, petition or request submitted for a site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license or permit, pursuant to the provisions or any ordinance, local law, rule or regulation constituting the zoning and planning regulations of a municipality shall state the name, residence and the nature and extent of the interest of any state officer or any officer or employee of such municipality is a part, in the person, partnership or association making such application, petition or request (hereinafter called the applicant) to the extent known to such applicant.

B. For the purpose of this action an officer or employee shall be deemed to have an interest in the applicant when (s)he, his/her spouse, or their brothers, sisters, parents, children, grandchildren, or the spouse of any of them:

1) is the applicant, or
2) is an officer, director, partner or employee of the applicant, or
3) legally or beneficially owns or controls stock of a corporate applicant or is a member of a partnership or association applicant, or
4) is a party to an agreement with such an applicant, express or implied, whereby (s) he may receive any payment or other benefit, whether or not for services rendered, or contingent upon the favorable approval of such application, petition or request.

C. Ownership of less than five percent (5%) of the stock of a corporation whose stock is listed on the New York or American Stock Exchanges shall not constitute an interest for the purposes of this section.

D. A person who knowingly and intentionally violates this section shall be guilty of a misdemeanor.

III. That no Town of Manlius officer, employee or a relative of either, as defined in Section 809 General Municipal Law has any interest in this application.

-OR-

If a Town of Manlius officer, employee or relative of either as defined in Section 809 General Municipal law has any interest in this application, the full particulars are provided on an attached sheet.

Date: March 9, 2021.

Melanie Nicotra
(Print Name)

Mela O M
(Signature)

(Entity Name)

By (Officer) (Title)

7075 N. Manlius Rd
(Mailing Address of Applicant) Kirkville NY 13082

315 243 2008
(Telephone Number)

Date: _____, 20____.

(Print Name)

(Signature)

(Entity Name)

By (Officer) (Title)

(Mailing Address of Applicant)

(Telephone Number)

ACKNOWLEDGEMENTS

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

On this 9 day of March in the year 2021, before me, the undersigned, a notary public in and for said state, personally appeared Melanie Nicotra, _____, and _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within Petition and acknowledged to me the he/she/they executed the same in his/her/their capacity, and that by his/her/their signature(s) on the Petition, the individual or the persons upon behalf of which the individual acted executed the instrument.

Susan M Crandall-Ranous
Notary Public

SUSAN M. CRANDALL-RANOUS
Notary Public in the State of New York
Qualified in Onondaga County No. 01SU6156
My Commission Expires October 31, 2022

617.20
Appendix B
Short Environmental Assessment Form

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:
Proposed Greenhouse (32w x 48' Long)

Project Location (describe, and attach a location map):
7550 Collamer Rd (Corner of Collamer Rd and Schepps Corner Rd)

Brief Description of Proposed Action:
Greenhouse for growing plants and Retailing plants as well as vegetables - Seasonal USE

Name of Applicant or Sponsor: Melanie Nicotra
Telephone: 315 243 2008
E-Mail: melanienicotra@outlook.com

Address: 7075 N. Manlius Rd

City/PO: Kirkville
State: NY
Zip Code: 13082

	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 governmental Agency? If Yes, list agency(s) name and permit or approval:	☐	☐

3.a. Total acreage of the site of the proposed action? 1 acres
b. Total acreage to be physically disturbed? 1 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 4.11 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ 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?	☐	☒
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☒	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☒	☐
b. Are public transportation service(s) available at or near the site of the proposed action?	☒	☐
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☒	☐
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: _____	☐	☒
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	☐	☒
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: Porta Potty / Septic System	☒	☐
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	☒	☐
b. Is the proposed action located in an archeological sensitive area?	☒	☐
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 plain?	☒	☐
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? ☒ NO ☐ YES	☒	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: _____ ☒ NO ☐ YES		

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size:	☒	☐
19. 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 AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: Melanie A Mott Date: 3/6/2021

Signature: Melanie A Mott

STOP

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☐	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☐	☐
3. Will the proposed action impair the character or quality of the existing community?	☐	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☐	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☐	☐
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	☐	☐
7. Will the proposed action impact existing: a. public / private water supplies?	☐	☐
b. public / private wastewater treatment utilities?	☐	☐
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☐	☐
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☐	☐

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☑	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☑	☐

Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

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Proposed Greenhouse (32' wide x 48' long)

Project Location (describe, and attach a location map):
7550 Collamer Road (corner of Collamer Road and Shepps Corners Road)

Brief Description of Proposed Action:
Proposed construction of a 32' wide x 48' long seasonal use greenhouse (1,536sf). Construction of the greenhouse shall be by a reputable greenhouse manufacturer with all components compatible and coordinated. Associated and appropriate site develpment is planned.

Name of Applicant or Sponsor:	Telephone: 315-243-2008
Melanie Nicotra	E-Mail: melanienicotra@outlook.com

Address:
7075 N. Manlius Rd

City/PO:	State:	Zip Code:
Kirkville	NY	13082

	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: NYSDOT for site access	☐	☑

3. a. Total acreage of the site of the proposed action? 4.16 acres
   b. Total acreage to be physically disturbed? < 1 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 4.16 acres

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

☐ 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?	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☑	☐
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?	☑	☐
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 requirement as it is a seasonal use greenhouse	☐	☑
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: If the connection with backflow prevention proves to be unfeasible the Owner would elect to drill a well on site	☐	☑
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	☑	☐
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?	☑	☐
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:	☐	☑
All stormwater will continue to drain in the same pattern as pre-development. Conveyance will be via grass swales. Magnitude of increased run-off is minimal as all pavement areas with exception to site access points will be permeable.		
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:	☑	☐
19. 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: Melanie Nicotra Date: 3/8/2021

Signature: Melanie Nicotra Title: Owner

PRINT FORM

Proposed Greenhouse at 7550 Collamer Rd

Tax id 038.-03-18.4

8.) All construction to be done by May 1 2021. This includes driveways as allowed by state and county permit timetables.

9.) This site will be open for seasonal use from May 1 thru Nov 30 as weather permits. Product to be sold are flowers and vegetative plants grown by Melanie Nicotra at 7082 N Manlius Rd. as well as fresh homegrown produce.

Hours are proposed to be 9am to 7 pm daily.

The expected number of employees is to be 3-7 people.

There is not expected to be an impact on current traffic levels or volume.

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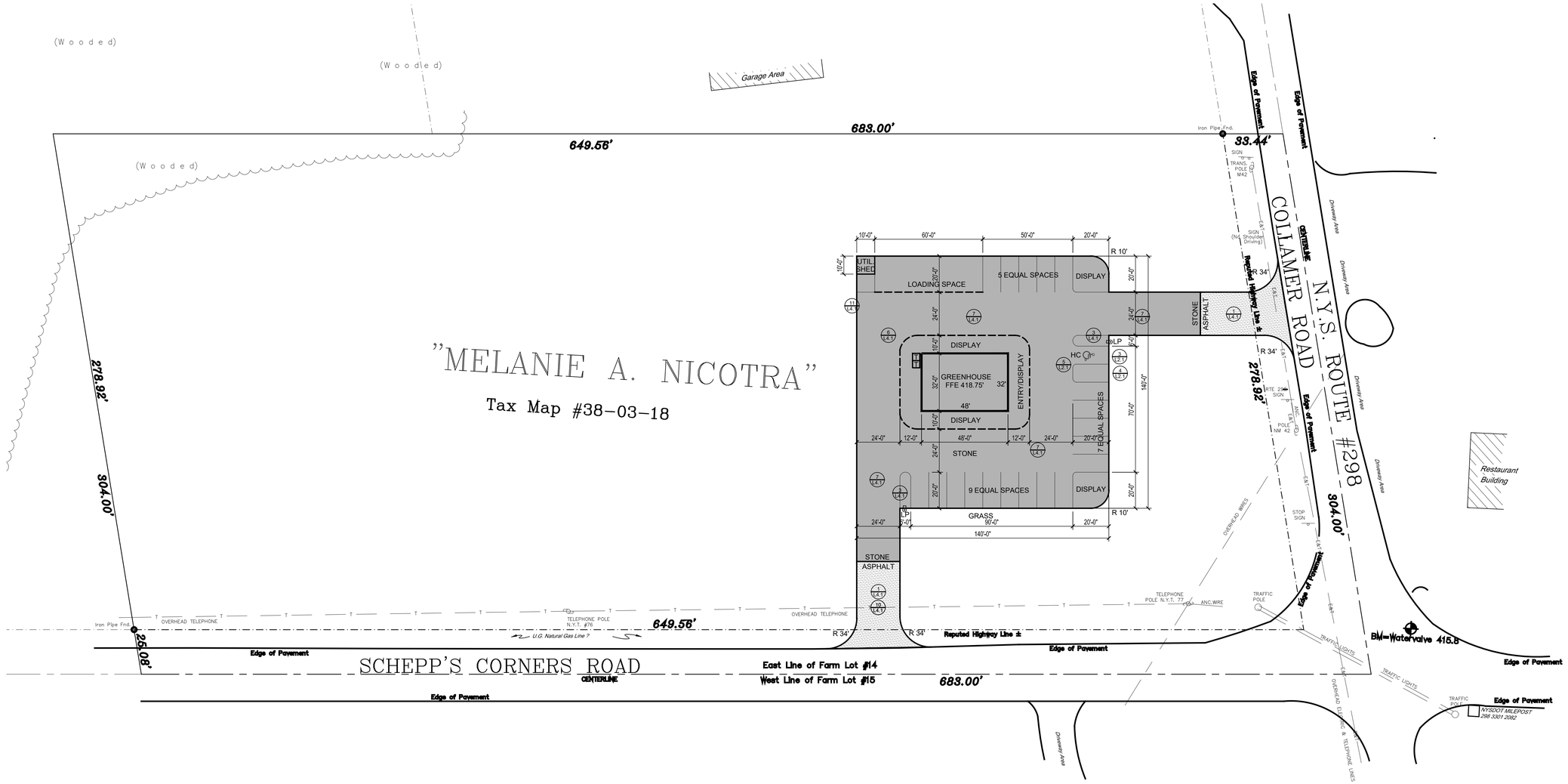
By



1 SITE PLAN
L1.1

SCALE 1" = 30'

1. AN ELECTRONIC .dwg FILE WILL BE PROVIDED TO THE CONTRACTOR FOR THE GENERAL LAYOUT OF THE SITE IMPROVMENTS.
2. DETAILED LAYOUT OF THE SITE IMPROVEMENTS SHALL BE PER THE PLAN AND DETAIL DIMENSIONS. DIMENSIONS AND ELEVATIONS INDICATED ON THE PLANS AND DETAILS SUPERCEDE THE ELECTRONIC LAYOUT IN THE CASE OF A DISCREPANCY.
3. BUILDING LAYOUT SHALL BE DONE PER THE DIMENSIONS INDICATED ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FROM THE WORK POINTS INDICATED.
4. REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ARCHITECT BEFORE PROCEEDING WITH ANY WORK.
5. SAW-CUT ALL EXISTING ASPHALT PAVEMENT AT THE LIMITS OF REMOVAL TO FORM A CLEAN STRAIGHT EDGE TO WHICH NEW PAVEMENTS, LAWNS, OR PLANT BEDS WILL ABUT.
6. EXISTING UTILITIES (LOCATIONS, SIZES, AND INVERT ELEVATIONS) SHOWN ON THE PLANS HAVE BEEN PLOTTED FROM FIELD SURVEYS AND RECORDED MAPS AND SHALL BE INTERPRETED AS APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXISTING INFORMATION AT LOCATIONS IN CLOSE PROXIMITY TO UTILITIES UNDER CONSTRUCTION. NOTIFY THE UNDERGROUND FACILITY PROTECTIVE ORGANIZATION AND (UFPO) OTHER APPLICABLE AUTHORITIES 48 HOURS PRIOR TO EXCAVATION. DIG SAFE, NY: 1.800.962.7962.
7. DRAWINGS ARE BASED ON A SURVEY PROVIDED BY CHRISTOPHERSON LAND SURVEYING; DATED 2.28.19.
8. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR PERTINENT INFORMATION.
9. ALL WORK SHALL BE LAID OUT IN ACCORDANCE WITH THE SITE AND BUILDING PLANS.
10. MEET EXISTING LINE AND GRADE OF EXISTING CONDITIONS AT THE LIMITS OF WORK. TRANSITIONS TO EXISTING CONDITIONS SHALL BE SMOOTH AND UNIFORM WITHOUT ABRUPT CHANGES IN GRADE. TRANSITION FINISHED GRADE IN NEW VEGETATION AREAS TO MEET EXISTING GRADE TO PROVIDE A SMOOTH EVEN SURFACE.
11. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR OWNER REVIEW AND APPROVAL FOR THE DUMPSTER ENCLOSURE AND GATE.
12. USDA SOIL SURVEY OF SITE IDENTIFIED MADRID FINE SANDY LOAM (MdB), 2-8 PERCENT SLOPES. TYPICAL PROFILE H1 -- 0" - 9": FINE SANDY LOAM; H2 -- 9" - 19": FINE SANDY LOAM; H3 -- 19" - 42": FINE SANDY LOAM; H4 -- 42"-72": FINE SANDY LOAM. DEPTH TO RESTRICTIVE FEATURE: MORE THAN 80"; NATURAL DRAINAGE CLASS: WELL DRAINED; DEPTH TO WATER TABLE: >80"; HYDROLOGIC SOIL GROUP: B. MINOA FINE SANDY LOAM (MtB), 2-6 PERCENT SLOPES. TYPICAL PROFILE H1 -- 0"-10"; FINE SANDY LOAM; H2 -- 10"-38"; LOAMY VERY FINE SAND; H3 -- 38"-60"; STRATIFIED VERY FINE SAND TO FINE SAND TO SILT LOAM. NATURAL DRAINAGE CLASS: SOMEWHAT POORLY DRAINED. DEPTH TO WATER TABLE: 6"-18". HYDROLOGIC SOIL GROUP: B/D.
13. SIGNAGE - ALL SIGNAGE MUST BE SUBMITTED FOR TOWN REVIEW / APPROVAL (NOT INCLUDED FOR SITE REVIEW). SIGN VENDOR SHALL REVIEW TOWN REQUIREMENTS FOR ALL SIGNAGE AND PREPARE AN ACCEPTABLE SUBMISSION FOR TOWN APPROVAL AT LATER DATE.
14. STRIPING: PARKING SPACES SHALL BE 10'0" x 20'0". STRIPE PARKING LAYOUT AS SHOWN.
15. GEOTEXTILE FABRIC: SHALL BE PLACED UNDER ALL PAVING AND SUB-BASE. FABRIC SHALL BE MIRAFI 600X OR EQUAL.
16. ALL TRASH WILL BE TRANSPORTED AND DISPOSED OF TO CODE AT OWNERS MAIN FACILITY.
17. PROVIDE SINGLE HEAD POLE MOUNTED FULL CUT-OFF LED 250W FIXTURES (2 TOTAL). POLE HEIGHT TO BE 20', FINISH TO BE ANODIZED BRONZE.
18. OWNER MUST OBTAIN DOT PERMITS FOR INSTALLATION OF ROAD ACCESS.

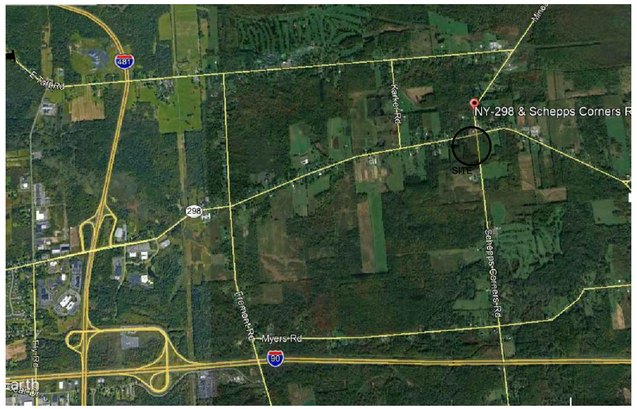
2 SITE GENERAL AND LAYOUT NOTES
L1.1

1. REFER TO OTHER DRAWINGS FOR PERTINENT INFORMATION.
2. PLANTING OPERATIONS SHALL BE PERFORMED ONLY BY EXPERIENCED WORKMAN FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE DIRECTION OF A QUALIFIED SUPERVISOR.
3. PLANT MATERIALS SHALL COMPLY WITH AMERICAN STANDARDS FOR NURSERY STOCK ANSI Z60.1.
4. LAY OUT ALL PLANTINGS ON FINISHED FRADE IN THE LOCATIONS INDICATED ON PLAN FOR REVIEW BY OWNER PRIOR TO INSTALLATION. OWNER RESERVES THE RIGHT TO ADJUST PLANT LOCATIONS.
5. INSTALL PLANT MATERIALS AT THE CORRECT GRADE. CONFIRM THAT THE FINISHED GRADING IS COMPLETED IN THE AREAS WHERE PLANT MATERIALS ARE TO BE INSTALLED.
6. PROTECT AND MAINTAIN THE INSTALLED PLANT MATERIALS UNTIL SUBSTANTIAL COMPLETION OF THE CONSTRUCTION OR UNTIL FINAL ACCEPTANCE OF THE INSTALLED PLANTINGS.
7. PROVIDE A ONE YEAR REPLACEMENT WARRANTY ON ALL PLANT MATERIALS. AT THE END OF THE ONE YEAR WARRANTY PERIOD, THE CONTRACTOR WILL REPLACE ALL PLANT MATERIALS THAT ARE DEAD, UNHEALTHY OR ARE IN UNSIGHTLY CONDITION, AS DETERMINED BY OWNER, AT NO ADDITIONAL COST TO THE OWNER. WARRANTY PERIOD BEGINS AT SUBSTANTIAL COMPLETION. REPLACEMENT MATERIALS SHALL BE WARRANTED FOR ONE YEAR. WARRANTY SHALL NOT INCLUDE LOSS OF PLANT MATERIALS DUE TO SEVERE WEATHER CONDITION, OWNER NEGLIGENCE OR CONDITION BEYOND CONTRACTORS CONTROL.
8. MAINTENANCE - PLANTINGS: THE CONTRACTOR IS RESPONSIBLE FOR WATERING, PRUNING, AND PEST DISEASE TREATMENT FOR ALL PLANT MATERIALS FOR A PERIOD OF 60 DAYS. AT THE END OF THE MAINTENANCE PERIOD, REPAIR AND / OR RE-SEED ANY LAWN AREAS WITH BARE OR DEAD SPOTS ONE SQUARE FOOT OR GREATER, S DETERMINED BY THE OWNER.
9. MAINTENANCE - PERMANENT LANDSCAPING: SUBSEQUENT TO CONTRACTOR REQUIRED MAINTENANCE, THE OWNER IS RESPONSIBLE TO MAINTAIN AND REPLACE ALL LANDSCAPING IN COMPLIANCE WITH TOWN CODE.
10. LAWN STARTER FERTILIZER FOR SEEDED LAWN AND WETLAND AREAS: COMMERCIAL STARTER FERTILIZER 19-26-5 WITH A MINIMUM OF 50% SLOW RELEASE NITROGEN. APPLICATION RATE: TO PROVIDE 1 LB. NITROGEN PER 1000SF AREA.
11. TREE IRRIGATION BAGS: TREEGATOR IRRIGATION BAGS WITH AVERAGE 20 GALLON CAPACITY. PROVIDE ONE BAG FOR EACH DECIDUOUS TREE. BAGS SHALL REMAIN CONTRACTORS PROPERTY UPON COMPLETION OF MAINTENANCE PERIOD.
12. INSTALL 6" MIN.DEPTH TOPSOIL IN ALL LAWN AREAS.
13. ALL AREAS NOT DESIGNATED FOR PLANTING, PAVEMENT, WETLAND SEED OR OTHER TREATMENT SHALL BE SPREAD WITH TOPSOIL, SEEDED, AND MULCHED TO ESTABLISH LAWN.
14. PLANTING SOIL: (4) PARTS SANDY-LOAM TOPSOIL AND (1) PART COMMERCIALLY PRODUCED COMPOST BY VOLUME, MIXED IN BULK.
15. MULCH: DOUBLE GROUND, UN-DYED SHREDDED WOOD BARK MULCH NOT OT EXCEED 3" IN LENGTH. COLOR-DARK BROWN.
16. PLANTING FERTILIZER: M ROOTS 3-3-3 MANUFACTURED BY NOVOZYMES BIOLOGICALS, INC. INSTALL IN ALL PLANTING BEDS AND INDIVIDUAL PLANTINGS. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
17. LAWN SEED MIXTURE: FINE FESCUE BLEND AS MANUFACTURED BY MATRIX TURF SOLUTIONS, OR APPROVED EQUAL. SEEDING RATE: 5LBS. PER 1,000SF. FIBER MULCH FOR HYDROSEEDING: CONWED FIBERS HYDRO MULCH 1000 OR EQUAL WITH A NON-ASPHALTIC TACKIFIER; APPLICATION RATE: 45LBS PER 1000SF OR 2000LBS PER ACRE.
18. CONFIRM PRIOR TO TOPSOIL OR PLANTING SOIL PLACEMENT, THAT FINE GRADING HAS BEEN COMPLETED AND PROVIDES POSITIVE DRAINAGE AWAY FROM BUILDING
19. TREES SHALL BE PROVIDED AT LOCATIONS SHOWN. SCIENTIFIC NAME: GLEDITSIA TRIACANTHOS "NERMIS", COMMON NAME IMMPERIAL THORNLESS COMMON HONEYLOCUST; SIZE: 2"CAL. MM; ROOT: B&B; QUANTITY: 7., REFER TO DECIDUOUS TREE PLANTING DETAIL.

3 SITE LANDSCAPING / PLANTING NOTES
L1.1

TAX MAP #	38-03018
ZONING	C-B
USE	RETAIL
AREAS	
PAVEMENT (RUN-OF-CRUSH)	19,679SF
PAVEMENT (ASPHALT)	2,600SF
BUILDING GREENHOUSE	1,536SF (32'x48')
BUILDING UTILITY	100SF (10'x10')
TOTAL	23,915SF
LANDSCAPE / GREEN AREA	157,260SF
LOT AREA	181,175SF (4.16 ACRE)
PARKING (10'x20')	
REQUIRED	16 (1 HC)
PROPOSED	20 (1 HC)
LOADING SPACE	1 SPACE
SETBACKS	
FRONT (COLLAMER ROAD)	447.68'
FRONT (SHEPPS CORNERS ROAD)	439.04'
REAR (SHEPPS CORNERS ROAD)	431.57'
REAR (COLLAMER ROAD)	612.34'
DEVELOPED / DISTURBED AREA	41,943SF < 1 ACRE

4 SITE INFORMATION
L1.1



5 SITE LOCATION MAP
L1.1

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315.952.2072
wnelson@wyattnelson.com
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REGISTERED ARCHITECT WYATT HOWARD NELSON 015940 STATE OF NEW YORK

Owner:
Melanie Nicotra
7075 N. Manlius Road
Kirkville, NY 13082

Project:
Nicotra Greenhouse
7550 Collamer Road (NYS 298)
East Syracuse, NY 13057

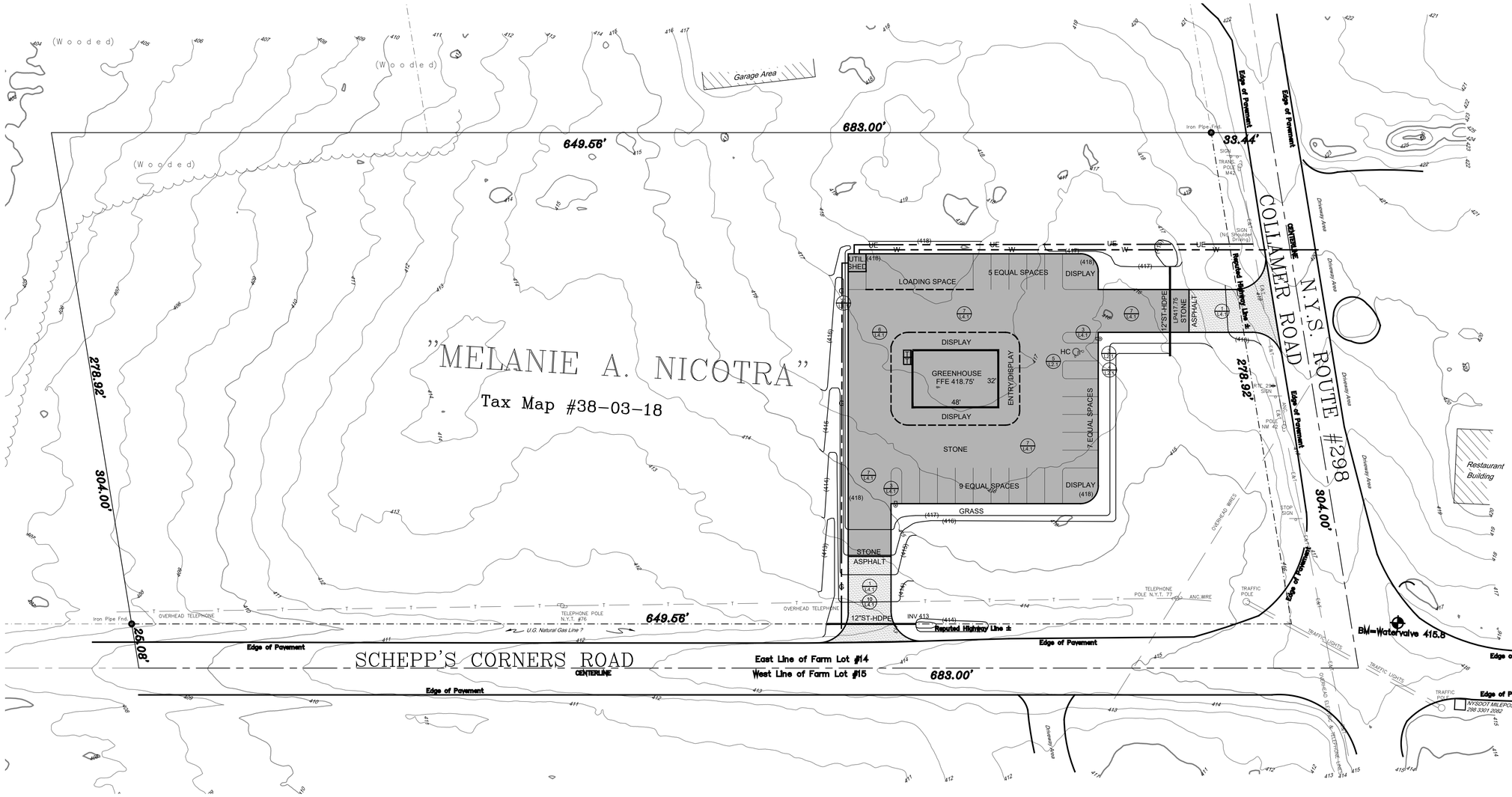
REVISIONS

PROJECT NO.

DATE
02.21.21 SITE PLAN REVIEW

SITE LAYOUT / LANDSCAPE / PLANTING PLAN
NOTES

L1.1



1	SITE PLAN
L2.1	

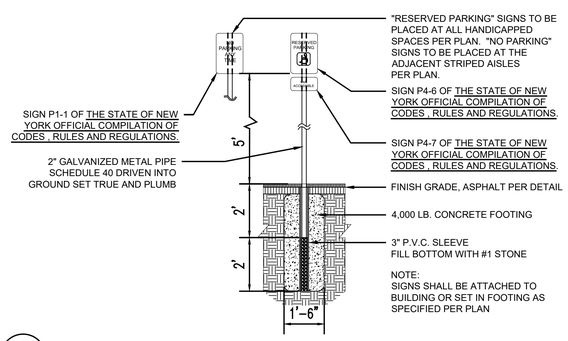
SCALE 1/16" = 1'-0"

1. REFER TO PERTINENT INFORMATION ON OTHER DRAWINGS.
2. CLEAR AND GRUB EXISTING VEGETATION IN ALL AREAS TO BE GRADED.
3. PROVIDE AND INSTALL TEMPORARY FENCING AND GATES WHERE NECESSARY TO PREVENT PEDESTRIAN TRAFFIC FROM ENTERING WORK AREAS AND TO PROTECT WORK AND STAGING AREAS.
4. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR RE-USE ON SITE OR RELOCATED TO OWNERS OTEHR ADDRESS APPROXIMATELY .25 MILES TO THE EAST.
5. EXISTING DRAINAGE DITCHES AND OR PIPES TO REMAIN THAT WERE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED.

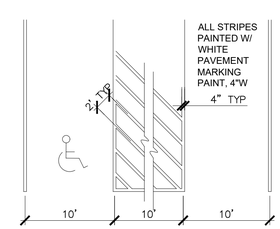
2	SITE GENERAL AND LAYOUT NOTES
L2.1	

1. REFER TO OTHER DRAWINGS FOR PERTINENT INFORMATION.
2. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE NOTIFICATION TIME TO UTILITY SERVICE PROVIDERS FOR LOCATION OF EXISTING UTILITY FACILITIES AND SERVICES.
3. WHEN PLACING PIPE IN EXCAVATION, POSITION BELL OF THE PIPE ON THE UPSTREAM END.
4. COORDINATE INSTALLATION OF UTILITIES WITH SITE WORK AND OTHER TRADES.
5. INSTALL WARNING TAPE IN ALL UNDERGROUND UTILITY PIPE TRENCHES.
6. INSTALL SITE UTILITY PIPING TO FIVE FEET OFF BUILDING FOUNDATION WALL FACE.
7. SANITARY CLEANOUTS SHALL BE LOCATED NO MORE THAN 100' ON CENTER AND AS REQUIRED BY CODE.
8. ENCASE STORM DRAINAGE PIPE IN CONCRETE WHERE LOCATED UNDER ASPHALT PAVEMENT, WHERE COVER OVER PIPE IS LESS THAN 12".
9. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF FINAL SERVICE OF ELECTRIC, WATER, AND GAS WITH APPROPRIATE UTILITY COMPANY.
10. PROPOSED UTILITIES: GAS (G) - 1" DIAMETER UNDERGROUND SERVICE TO BULDING; WATER (W) - DRILLED WELL WITH 1" DIAMETER SERVICE TO BUILDING; ELECTRIC (OE) (UE) - OVERHEAD SERVICE TO NEW POLE WITH TRANSFORMER AT WEST EDGE OF PROPERTY, RUN UNDERGROUND ELECTRIC SERVICE TO BUILDING; SANITARY (SAN) - SEPTIC SYSTEM DESIGNED BY OTHERS (RICK EASTERLY), EXTEND 4" GRAVITY FROM DISTRIBUTION TO SEPTIC TANK LOCATED SOUTH OF BUILDING ON WEST END OF BUILDING AS SHOWN.
11. EXISTING TELEPHONE LINE ON SHEPPS CORNERS ROAD MUST BE RAISED TO PROPER CLEARANCE AT SITE ACCESS.
12. OWNER SHALL SUBMIT MANUFACTURERS INFORMATION / SHOP DRAWINGS ON 'GREENHOUSE' PROPER.
13. REPLACE ASPHALT ROAD APRON WITH 'HD' PAVEMENT EACH SIDE OF ASPHALT SITE ACCESS ENTRY - 10' TO THE EXIT SIDE OF RADIUS AND 30' TO THE ENTRY SIDE OF RADIUS.

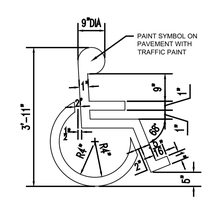
2	SITE UTILITY NOTES
L2.1	



3 / L2.1 HANDICAP PARKING SIGN
SCALE: 3/8" =1'-0"



4 / L2.1 HANDICAP ACCESS ISLE
SCALE: 3/8"=1'-0"



5 / L2.1 HANDICAP PARKING SYMBOL
SCALE: 3/8"=1'-0"

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REGISTERED ARCHITECT WYATT HOWARD NELSON 015940 STATE OF NEW YORK

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East Syracuse, NY 13057

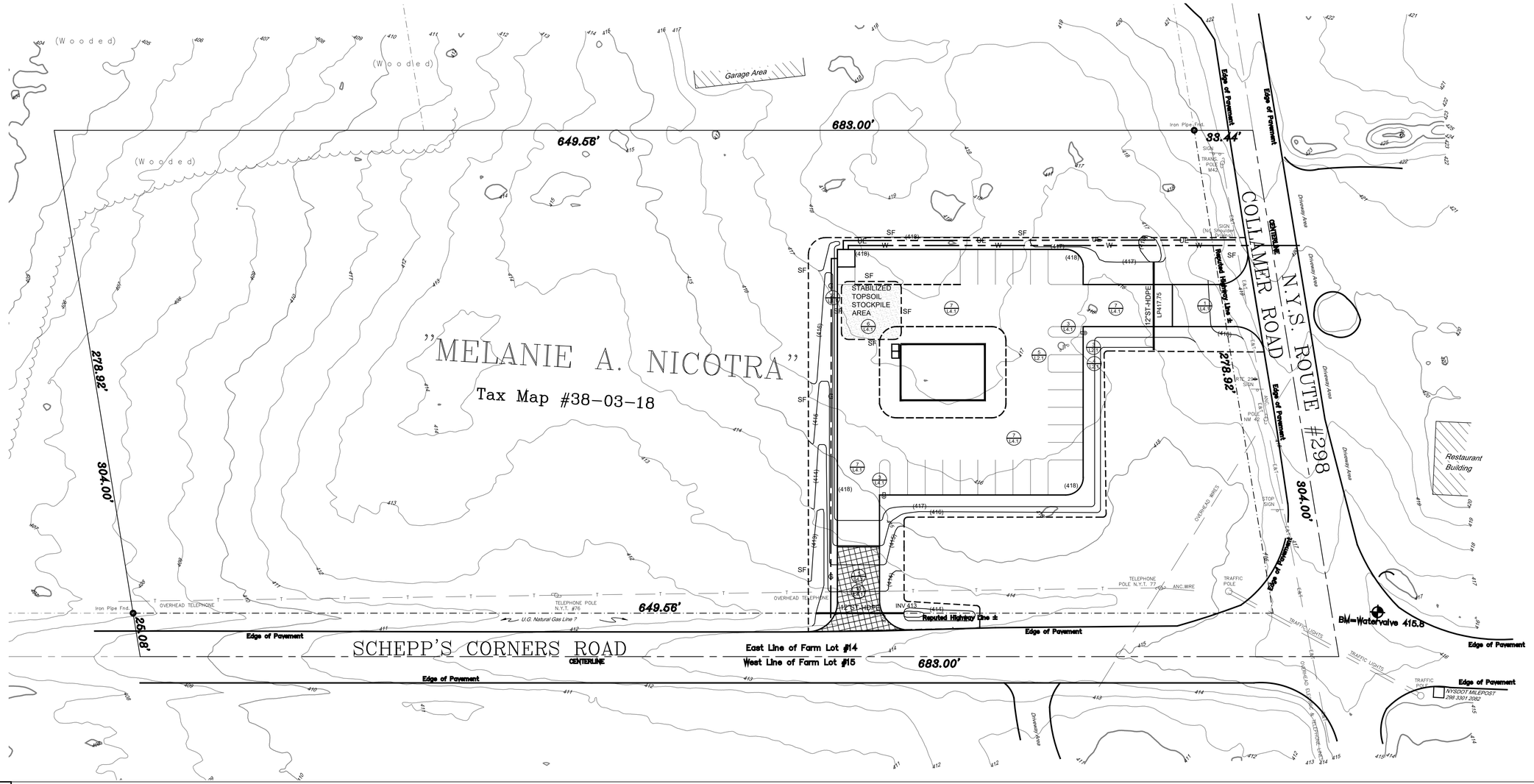
REVISIONS

PROJECT NO.

DATE
02.21.21 SITE PLAN REVIEW

SITE GRADING PLAN
SITE UTILITY PLAN
NOTES

L2.1



1	SITE PLAN
L3.1	

SCALE 1" = 30'

1. EMPLOY EROSION CONTROL MEASURES AS SHOWN AND OTHERWISE NECESSARY TO PREVENT DAMAGE TO ON-SITE FACILITIES AND ADJOINING PROPERTY. ALL MEASURED SHALL BE IN CONFORMANCE WITH THE NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENTATION CONTROL.
2. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ONE TIME DURING CONSTRUCTION.
3. WHEN LAND IS EXPOSED DURING CONSTRUCTION, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
4. PHYSICALLY MARK OFF LIMITS OF LAND DISTURBANCE ON THE SITE WITH TAPE, SIGNS, FENCING, OR OTHER METHODS TO ENSURE UN-NECESSARY DISTURBANCE TO NON CONSTRUCTION AREAS.
5. EROSION AND SEDIMENT CONTROL DEVICES SHOULD BE INSPECTED DAILY TO DETERMINE WHEN THEY NEED MAINTENANCE OR REPAIR.
6. SEED BARE SOILS WITHIN 7 DAYS OF EXPOSURE, UNLESS CONSTRUCTION WILL BEGIN WITHIN 30 DAYS. IF CONSTRUCTION IS SUSPENDED, OR SECTIONS COMPLETED, AREAS SHOULD BE SEEDED IMMEDIATELY WITH TEMPORARY SEED (ANNUAL OR PERENNIAL RYEGRASS).
7. INSTALL JUTE MESH ON ALL SLOPES 3:1 AND GREATER AND WHERE INDICATED PRIOR TO SEEDING.
8. CONSTRUCTION SEQUENCE: 1. INSTALL AND MAINTAIN A STABILIZED CONSTRUCTION ENTRANCE ON ACCESS ROAD; 2. INSTALL SILT FENCES AS SHOWN ON THE GRADING AND EROSION CONTROL DRAWING; 3. COMPLETE ROUGH GRADING; 4. INSTALL SILT FENCE AROUND ANY SOIL STOCKPILES; 5. PLACE SEED AND MULCH OVER ALL DISTURBED AREAS OUTSIDE OF PAVEMENT, UTILITY EASEMENTS, AND CONSTRUCTED SWALES; 6. COMPLETE UTILITY CONSTRUCTION; 7. COMPLETE DRIVEWAY, PARKING LOT AND BUILDING CONSTRUCTION; 8. TOPSOIL AND SEED ALL REMAINING AREAS AFTER DRIVEWAY AND PARKING LOT CONSTRUCTION IS COMPLETE; 9. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION IS ESTABLISHED.

2	EROSION CONTROL NOTES
L3.1	

1. PLACE SILT FENCING AT LOCATIONS SHOWN.
2. CONSTRUCT A TEMPORARY SITE ACCESS AT LOCATION SHOWN ON PLAN. PROVIDE A STABILIZED CONSTRUCTION ENTRANCE DURING CONSTRUCTION ACTIVITIES. REMOVE ENTRANCE JUST PRIOR TO THE CONSTRUCTION OF THE FINAL DRIVEWAY.
3. CONSTRUCT BUILDING AND INSTALL SUB-GRADE UTILITIES.
4. STRIP TOPSOIL AND STOCKPILE. PERFORM EARTHWORK OPERATIONS TO REACH FINAL GRADING ELEVATIONS.
5. CONSTRUCT SWALE WITH MEDIUM RIP RAP STONE LINING.
6. PLACE TOPSOIL, SEED AND MULCH.
7. RESTORE ALL DISTURBED AREAS WITH SEEDING AS SOON AS POSSIBLE AFTER COMPLETION OF FINAL GRADING.
8. CONTRACTOR SHALL MAINTAIN ALL EROSION / SEDIMENTATION CONTROL FEATURES UNTIL COMPLETION OF BINDER COURSE AND ESTABLISHMENT OF SUBSTANTIAL STAND OF GRASS ON ALL GREEN AREAS, IN ACCORDANCE WITH THE MAINTENANCE NOTES PROVIDED. ON ACCEPTANCE OF RESTORATION BY THE OWNER, REMOVE ALL TEMPORARY FEATURES AND PERFORM FINAL GRADING OF THE WORK AREA.
9. INSPECTION AND MAINTENANCE PROCEDURES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSIGNING AN INDIVIDUAL TO BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES. THE WORK MAY INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: ALL EROSION CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE PER WEEK AND FOLLOWING ANY STORM EVENT OF 1/2" INCH OR GREATER RAINFALL IN A 24 HOUR PERIOD.

3	CONSTRUCTION SEQUENCE FOR EROSION CONTROL
L3.1	

1. PHYSICALLY DELINEATE DISTURBANCE LIMITS ON SITE WITH TAPES, SIGNS AND FENCING, ETC...
2. CLEAR ONLY WHAT IS REQUIRED FOR IMMEDIATE CONSTRUCTION, LEAVE IN A WELL DRAINING MANNER.
3. INSTALL DRAINAGE CONVEYANCE SYSTEMS AS DESIGNED, IE: STORM STRUCTURES, PIPES, SWALES, ETC...
4. PROTECT STORM SYSTEM INLETS AND OUTLETS AS SHOWN ON THE PLANS IMMEDIATELY AFTER INSTALLATION.
5. MAINTAIN EROSION AND SEDIMENT CONTROL DEVICES: (A) VEGETATIVE MEASURES, 1. MOW LAWN AREAS WHEN TURF REACHES 3" HEIGHT; 2. RESEED ALL BARE AND ERODED AREAS AS REQUIRED. (B) STRUCTURAL MEASURES: 1. INSPECT DAILY; 2. CLEAN AND REPAIR WHENEVER NECESSARY; 3. CHECK PERFORMANCE OF CONTROL DEVICES DURING RAIN STORMS TO ENSURE THEY ARE FUNCTIONING ADEQUATELY.
6. PUBLIC ROADWAY MAINTENANCE - ROADWAY SHALL BE KEPT CLEAN AND FREE OF DEBRIS AT ALL TIMES. POWER SWEEP A MINIMUM OF ONCE PER DAY.
7. EMPLOY MEASURES TO MINIMIZE DUST AND OTHER CONSTRUTION NUISANCES THROUGHOUT THE COURSE TO THE PROJECT.
8. COMPLY WITH ALL REQUIREMENTS OF AGENCIES HAVING JURISDICTION OF ADJOINING ROADWAYS RELATIVE TO MAINTENANCE AND PROTECTION OF TRAFFIC.
9. INSTALL 6" (COMPACTED) TOPSOIL AND ESTABLISH LAWN IN ALL AREAS WITHIN THE CONTRACT LIMITS NOT DESIGNATED FOR OTHER SURFACES. REPAIR ALL OTHER AREAS DISTURBED BY CONSTRUCTION.
10. REPAIR ALL EXISTING LAWN AREAS DAMAGED / DISTURBED BY THE WORK OF THIS CONTRACT. REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE METHODS AND MATERIALS DESCRIBED OR PATCH / MATCH.
11. REPAIR ALL EXISTING PAVEMENT WHERE DAMAGED / DISTURBED BY THE WORK OF THE CONTRACT AT NO COST TO THE OWNER. REPAIRS SHALL BE MADE WITH LIKE MATERIALS OF EQUAL QUALITY AND TH TO THE EXISTING PAVEMENT SECTION DEPTH. THE AREA OF REPAIR SHALL BE NOT LESS THAN 10' BY 10' UNLESS APPROVED BY THE ARCHITECT.
12. PRIOR TO PERFORMING ANY SITE DEMOLITION, CLEARING OR EARTHWORK ACTIVITY WITHIN THE CONSTRUCTION AREA, ESTABLISH THE LIMITS OF ALL AREAS TO BE DISTURBED. INSTALL ALL REQUIRED TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES IN A TIMELY MANNER FOR THE APPROPRIATE PHASE OF CONSTRUCTION TO MINIMIZE THE IMPACT ON THE SURROUNDING ENVIRONMENT.
13. CONSTRUCTION ROUTES SHALL BE STABILIZED PER THE NYS STANDARDS FOR EROSION AND SEDIMENT CONTROL, AS NECESSARY BASED ON SITE CONDITIONS.
14. UPSLOPE DRAINAGE AND UNCONTAMINATED RUN-ON WATER FROM OFF-SITE MUST BE INTERCEPTED AND DIVERTED AROUND THE ACTIVE CONSTRUCTION AREA.
15. CONCRETE WASHOUTS SHALL BE INSTALLED A MINIMUM OF 50' FROM STORM DRAINAGE OR SURFACE WATER. CONCRETE WASTE MATERIAL SHALL NOT BE ALLOWED TO ESCAPE FROM CONCRETE WASHOUTS.
16. MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE IN A CONDITION THAT PREVENTS TRACKING OF SEDIMENT ONTO PUBLIC ROADS.
17. THE CONTRACTOR SHALL PROVIDE PORTABLE HAND-WASHING AND SANITARY FACILITIES, THESE FACILITIES SHALL BE SERVICED REGULARLY.
18. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM AND FUEL TANK DRAIN DOWN, DEGREASING OPERATIONS AND OTHER ACTIVITIES THAT MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAINMENTS MUST BE CONDUCTED OFF-SITE. ACCIDENTAL SPILLS MUST BE CLEANED UP IMMEDIATELY AND CONTAINMENT DISPOSED OF PROPERLY.
19. PROVIDE CONCRETE WASHOUT FACILITY AT LOCATION SHOWN. REFER TO DETAIL PROVIDED.

4	IMPLEMENTATION OF EROSION CONTROL NOTES
L3.1	

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REGISTERED ARCHITECT WYATT HOWARD NELSON 815940 STATE OF NEW YORK

Owner:
Melanie Nicotra
7075 N. Manlius Road
Kirkville, NY 13082

Project:
Nicotra Greenhouse
7550 Collamer Road (NYS 298)
East Syracuse, NY 13057

REVISIONS

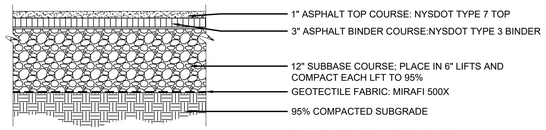
PROJECT NO.

DATE
02.21.21 SITE PLAN REVIEW

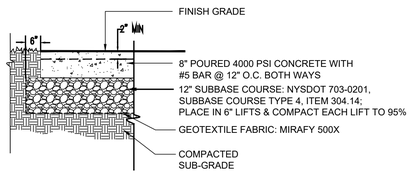
SITE EROSION & SEDIMENTATION CONTROL PLAN

NOTES

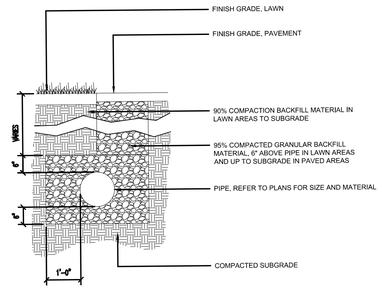
L3.1



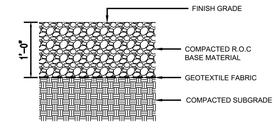
1 / L4.1 ASPHALT PAVEMENT
SCALE: 3/8"=1'-0"



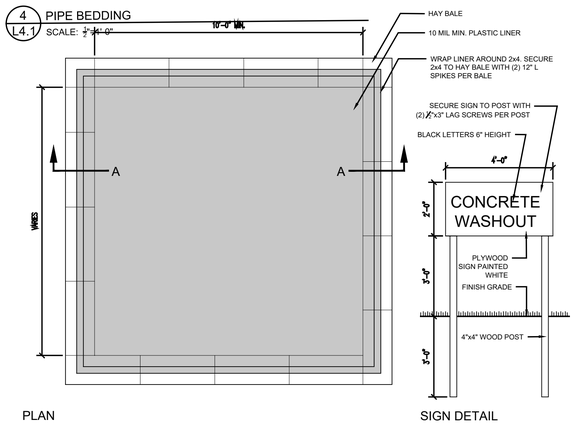
2 / L4.1 HEAVY DUTY CONCRETE PAVEMENT DETAIL
SCALE: NTS



4 / L4.1 PIPE BEDDING
SCALE: 1/2"=1'-0"

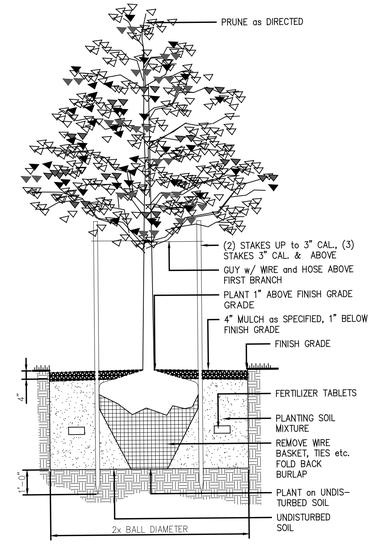


7 / L4.1 STONE PAVEMENT DETAIL
SCALE: 3/4"=1'-0"

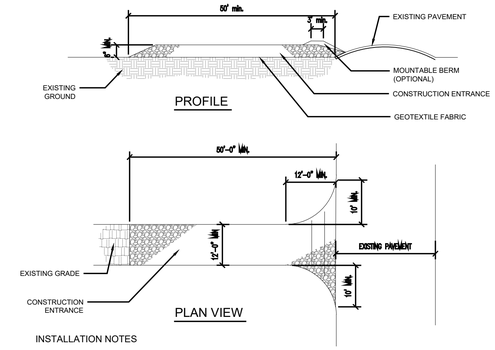


PLAN

SIGN DETAIL



8 / L4.1 TREE PLANTING DETAIL
SCALE NTS



INSTALLATION NOTES

1. CONSTRUCTION ENTRNCE STONE SIZE - USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT

2. GEOTEXTILE FABRIC - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE: MIRAFI 600X OR EQUAL

3. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERMWITH 5:1 SLOPES WILL BE PERMITTED.

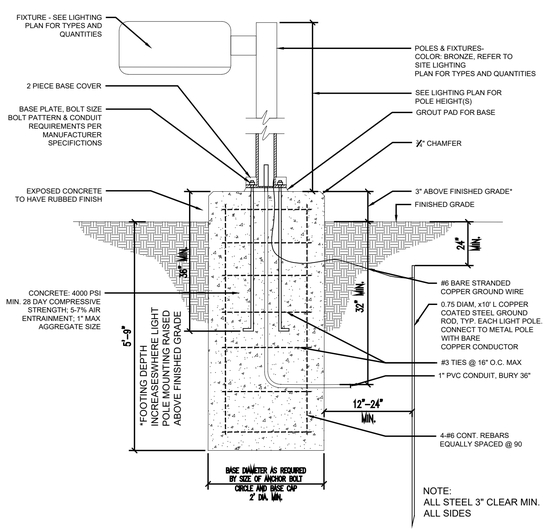
4. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITIONWHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

5. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROPRIATE SEDIMENT TRAPPING DEVICE.

6. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

7. WIDTH - TWELVE (12) FOOT MINIMUM. BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS AND EGRESS OCCUR. TWENTY FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.

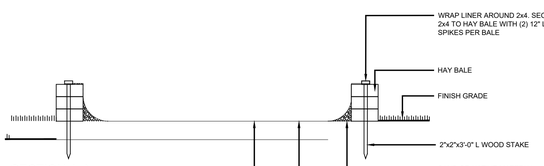
10 / L4.1 STABILIZED CONSTRUCTION ENTRANCE
SCALE: NTS



NOTE:
ALL STEEL 3" CLEAR MIN. ALL SIDES

*NOTE: LIGHT POLE BASE LOCATED IN PARKING AREA SHALL EXTEND 2'-6" ABOVE FINISHED GRADE. INCREASE BASE DEPTH BELOW GRADE TO 6'-9" FOR A TOTAL BASE HEIGHT OF 9'-0"

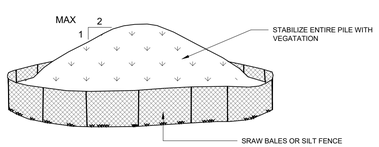
3 / L4.1 CONCRETE LIGHT POLE BASE
SCALE: NTS



SECTION A-A

NOTES:
1. ACTUAL SIZE OF CONCRETE WASHOUT TO BE DETERMINED IN THE FIELD.
2. CONCRETE WASHOUT SIGN SHALL BE LOCATED WITHIN 10 FT. OF WASHOUT FACILITY

5 / L4.1 ABOVE GRADE TEMPORARY CONCRETE WASHOUT FACILITY
SCALE: 3/8" = 1'-0"



INSTALLATION NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.

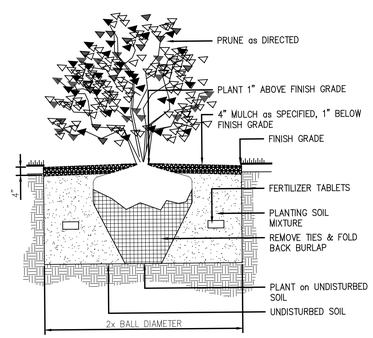
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1. MAXIMUM HEIGHT SHALL BE 12 FEET.

3. EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAW BALES, INSTALLED PER CORRESPONDING DETAIL THEN STABILIZED WITH ANNUAL GRAIN WITHIN 3 DAYS.

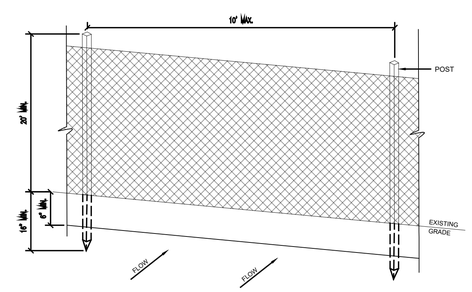
4. A PERIMETER DIKE/ SWALE SHALL BE LOCATED UP-SLOPE OF THE TOPSOIL STOCKPILE.

5. SILT FENCE PREFABRICATED UNITS PRODUCED BY TENCATE MIRAFI, EAST COAST NETTING, ACF ENVIRONMENTAL, OR EQUAL.

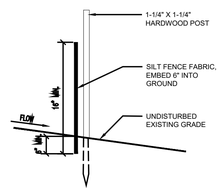
6 / L4.1 STABILIZED SOIL STOCKPILE
SCALE: NTS



9 / L4.1 SHRUB PLANTING DETAIL
SCALE NTS



PERSPECTIVE VIEW



SECTION

NOTES
1. SILT FENCE SHALL BE PREFABRICATED UNITS PRODUCED BY TENCATE MIRAFI, EAST COAST NETTING, ACF ENVIRONMENTAL, OR EQUAL.

2. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY A MINIMUM 6", FOLDED AROUND END STAKE AND SECURED AS NECESSARY TO CREATE A CONTINUOUS BARRIER.

3. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM SILT FENCING WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE, OR WHEN BULDGES DEVELOP.

4. SILT FENCE SHALL BE INSPECTED REGULARLY AND MAINTAINED IN WORKINGORDER FOR THE DURATION OF CONSTRUCTION.

11 / L4.1 SILT FENCE DETAILS
SCALE: NTS

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REGISTERED ARCHITECT WYATT HOWARD NELSON 015943 STATE OF NEW YORK

Owner: Melanie Nicotra
7075 N. Manlius Road
Kirkville, NY 13082

Project: Nicotra Greenhouse
7550 Collamer Road (NYS 298)
East Syracuse, NY 13057

REVISIONS

PROJECT NO.

DATE
02.21.21 SITE PLAN REVIEW

SITE DETAILS

L4.1

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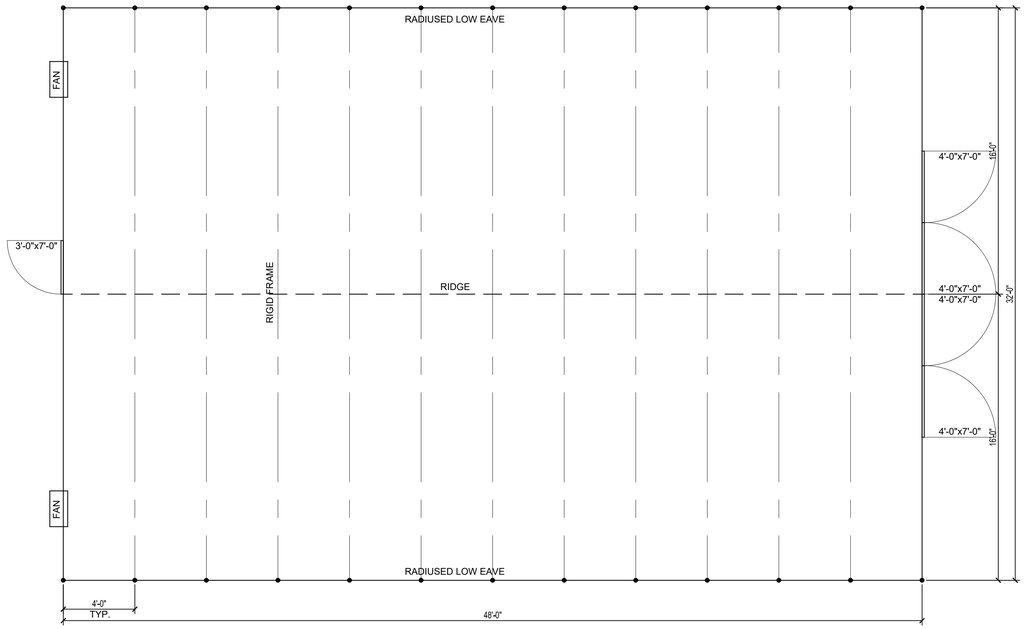
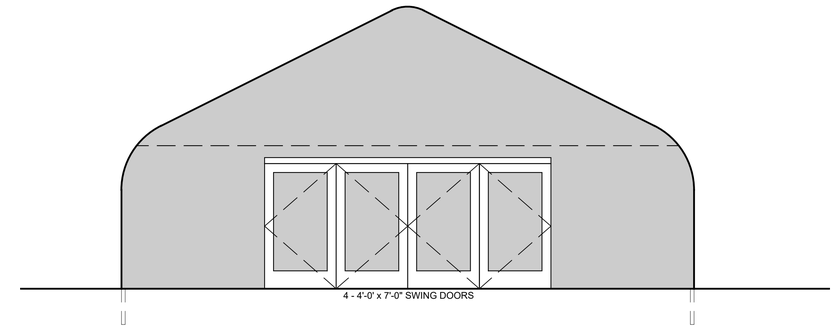
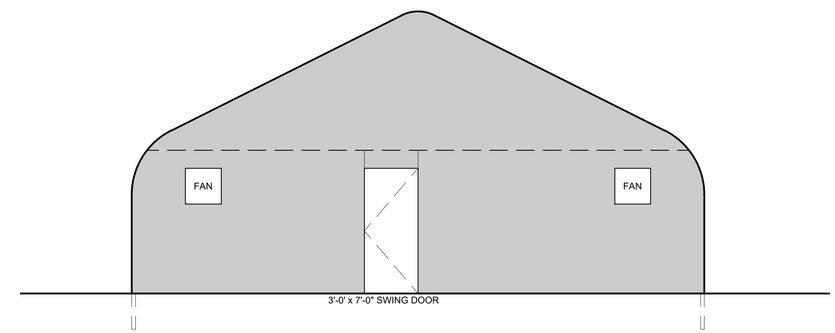


1 A1.1 FLOOR PLAN
SCALE 1/4" = 1'-0"



2 A1.1 NORTH ELEVATION - FRONT
SCALE 1/4" = 1'-0"

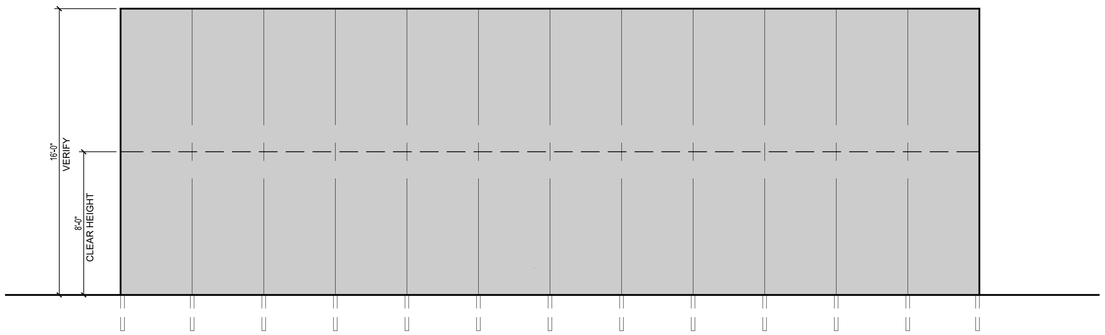


3 A1.1 SOUTH ELEVATION - REAR
SCALE 1/4" = 1'-0"

1. ALL WORK SHALL CONFORM TO APPLICABLE NATIONAL, STATE, AND LOCAL CODE.
2. ONE SET OF CURRENT APPROVED DRAWINGS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. NO WORK SHALL COMMENCE UNTIL APPROVAL HAS BEEN OBTAINED FROM THE BUILDING DEPARTMENT HAVING JURISDICTION.
4. ALL MATERIALS AND CONSTRUCTION TO BE INCORPORATED IN THE WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ASTM SPECIFICATIONS WHERE APPLICABLE AND SHALL CONFORM TO THE STANDARDS AND RECOMMENDATIONS OF THE VARIOUS TRADE INSTITUTES (ACI, AISC, ETC...).
5. DRAWINGS SHALL NOT BE SCALED, CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS, DIMENSIONS, ELEVATIONS, OPENINGS PRIOR TO COMMENCING ANY WORK. DISCREPANCIES OR OMISSIONS FROM THE PLANS AND SPECIFICATIONS MUST BE BROUGHTTO THE ATTENTION OF THE ARCHITECT AND SAME CORRECTED WITHIN (5) WORKING DAYS AFTER CONTRACT HAS BEEN AWARDED.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND HAULING AWAY OF ALL TRASH AND DEBRIS IN ACCORDANCE WITH LOCAL CODE ON A REGULAR BASIS THROUGHOUT THE CONSTRUCTION PERIOD.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE SCOPE OF WORK.
8. CONTRACTOR AND SUBCONTRACTOR SHALL COORDINATE THEIR WORK WITH THE WORK OF OTHER TRADES AND SHALL PROVIDE CHASES AND POCKETS AS SHOWN OR REQUIRED BY OTHER TRADES. CONTRACTOR TO REPAIR AND PATCH ANY AREAS ALTERED OR DAMAGED DURING THE COURSE OF THE WORK.
9. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO COMMENCING WORK. CONTRACTOR SHALL COORDINATE ALL UTILITY SHUTDOWNS, REMOVALS, AND REVISIONS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION INCLUDING TEMPORARY SHORING AND /OR SUPPORT OF EXISTING STRUCTURE.

1. OWNER SHALL SELECT FROM MANUFACTURERS STANDARD MODELS.
2. ALL GREENHOUSE CONSTRUCTION COMPONENTS SHALL BE COMPATIBLE AND COORDINATED TO PROVIDE A COMPLETE SYSTEM.
3. STEEL PIPE FRAMES SHALL BE CONSTRUCTED TO PROVIDE A RIGID REPETITIVE FRAME WHEN FULLY CONNECTED CONFORMS TO ALL APPLICABLE LOADS. MANUFACTURER TO PROVIDE SHOP DRAWINGS INSTAALLATION INSTRUCTIONS AND LITERATURE.
4. RIGID FRAMES SHALL BE SET IN CORROSION RESISTANT SLEEVES SET 24" MINIMUM BELOW FINISH GRADE.
5. RIGID FRAMES SHALL BE CAPABLE OF SUPPORTING SUSPENDED UNIT HEATER (REZNOR OR EQUAL); MISTING SYSTEMS; AND LIGHTING.
6. OWNER SHALL INSTALL DISPLAY BENCHES ANCHORED TO GROUND TO PREVENT ANY DAMAGES.
7. GREENHOUSE ENCLOSURE SHALL BE WITH 6 MIL POLYETHYLENE WITH A 4 YEAR MINIMUM WARRANTY.
8. PROVIDE (2) FANS AT SOUTH ELEVATION (REAR) TO PROVIDE COOLING EXHAUST. FANS SHALL BE MANUALLY SWITCHED.
9. FLOOR OF GREENHOUSE SHALL BE COMPACTED RUN-OF-CRUSH.

4 A1.1 GENERAL NOTES / GREENHOUSE NOTES



5 A1.1 EAST ELEVATION - SIDE (WEST SIMILAR)
SCALE 1/4" = 1'-0"

Owner:
Melanie Nicotra
7075 N. Manlius Road
Kirkville, NY 13082

Project:
Nicotra Greenhouse
7550 Collamer Road (NYS 298)
East Syracuse, NY 13057

REVISIONS

PROJECT NO.

DATE
03.08.21 SITE REVIEW

Floor Plans
Elevations
Notes

A1.1

Onondaga County Planning Board

J.Ryan McMahon II
County Executive

RESOLUTION OF THE
ONONDAGA COUNTY PLANNING BOARD

Meeting Date: March 31, 2021

OCPB Case # Z-21-104

WHEREAS, the Onondaga County Planning Board, pursuant to General Municipal Law, Section 239 l, m and n, has considered and reviewed the referral for a SITE PLAN from the Town of Manlius Planning Board at the request of Melanie Nicotra for the property located at 7550 Collamer Road; and

WHEREAS, General Municipal Law Section 239-m allows the County Planning Board to review approval of site plans and the site is located within 500 feet of Collamer Road (Route 298), a state highway, and Schepps Corners Road (Route 54) and North Manlius Road (Route 115), both county highways; and

WHEREAS, the applicant is proposing construction of a 1,536 sf greenhouse, with associated site development, on a 4.11-acre parcel in a Commercial B (C-B) zoning district; and

WHEREAS, the vacant parcel is located at the signalized intersection of NYS Route 298, Schepps Corners Road, and North Manlius Road; surrounding land uses are mostly residential and there are large tracts of undeveloped and wooded lands; there is a bar/restaurant and a gas station north across Route 298 from the site; and

WHEREAS, the submitted Site Layout/Landscape/Planting Plan dated February 21, 2021 shows the proposed greenhouse (32' x 48') will be constructed on the front half of the site and surrounded on all four sides by stone; the greenhouse entry will be oriented towards Route 298 with parking and display areas at the front and both sides of the building; a utility shed and drive aisle are shown at the rear of the building; and

WHEREAS, per the Site Layout/Landscape/Planting Plan, the site has frontage on Route 298 and Schepps Corners Road; one proposed asphalt driveway is shown on each road;
ADVISORY NOTES: the proposed driveway onto Schepps Corners Road requires highway access and work permits from the Onondaga County Department of Transportation and will be subject to the availability of sight distance; per the NYS Department of Transportation, no access to Route 298 will be permitted; and

WHEREAS, per the local application, the greenhouse will be used seasonally from May 1 through November 30 as weather permits with products to be sold on-site including flowers, vegetative plants, and produce; proposed hours of operation will be 9am to 7pm daily; the expected number of employees is 3 to 7 people; and

WHEREAS, per the submitted Environmental Assessment Form (EAF) dated March 8, 2021, less than 1.0 acre of the site will be disturbed by the proposed project; all stormwater will continue to drain in the same pattern as pre-development; conveyance will be via grass swales; the anticipated increase in runoff will be minimal as most pavement areas will be permeable;
ADVISORY NOTE: per the Onondaga County and NYS Departments of

1100 Civic Center, 421 Montgomery Street, Syracuse, NY 13202 (315) 435-2611, Fax (315) 435-2439

E-mail Address: countyplanning@ongov.net

Transportation, additional stormwater runoff into the county's or state's drainage system is prohibited; and

WHEREAS, submitted plans do not indicate how a large open area at the corner of Schepps Corner Rd and Route 298 at the front of the parcel will be used, and the planting plan does not indicate any new plantings on site; and

WHEREAS, the site has access to public drinking water that the proposed project will connect to; the site does not have existing wastewater services and is located outside of the Onondaga County Sanitary District boundary; per the EAF, wastewater services will be provided by a porta potty/septic system; and

WHEREAS, the site or a portion of it is located in or adjacent to an area designated as sensitive for archaeological sites on the NYS Historic Preservation Office archaeological site inventory (per EAF Mapper); and

NOW THEREFORE BE IT RESOLVED, that the Onondaga County Planning Board recommends the following MODIFICATION(S) to the proposed action prior to local board approval of the proposed action:

1. Per the New York State Department of Transportation, no access to Route 298 will be permitted. The site plan must be modified to eliminate the proposed driveway prior to municipal approval of the site plan.

2. The applicant is required to coordinate Schepps Corners Road access plans with the Onondaga County Department of Transportation. The municipality must ensure any mitigation as may be determined by the Department is reflected on the project plans prior to, or as a condition of, municipal approval.

3. The Onondaga County Health Department's Bureau of Public Health Engineering must formally accept or approve, respectively, any existing or proposed septic system to service this property prior to, or as a condition of, municipal approval of the site plan.

The Board offers the following comment:

The applicant is encouraged to install landscape plantings on site, including at road frontages, to screen open parking, improve aesthetics and aid in stormwater management.

Daniel Cupoli, Chairman
Onondaga County Planning Board
Transmittal Date: 03-31-2021

GML 239 Report of Final Action

NYS GML § 239-m.6. and n.6. require the referring body to file a report of the final action it has taken on a referred matter with the county planning agency within 30 days after the final action (separate from the minutes taken at the meeting). A referring body which acts contrary to a County Planning Board recommendation of MODIFICATION or DISAPPROVAL of a referred matter shall also set forth the reasons for the contrary action in such report.

This section to be completed by the Syracuse-Onondaga County Planning Agency

To: Onondaga County Planning Board **From:** Town of Manlius Planning Board

Fax: 435-2439 **Phone:** 435-2611

Re:
Applicant: Melanie Nicotra
Address: at 7550 Collamer Road
Referral Type: SITE PLAN
OCPB Date: March 31, 2021
OCPB Action: Modification
OCPB Case #: Z-21-104

The local board took the following action regarding the above referenced referral (Check one box. If checking Other, please specify the final action taken. Use the space at the bottom of the report to identify reasons if acting contrary to the OCPB recommendation.):

☐ Approved the proposed action with regard to the OCPB's No Position or No Position with Comment.
☐ Approved the proposed action as modified by the OCPB.
☐ Approved the proposed action contrary to some of the modifications recommended by the OCPB.*
☐ Approved the proposed action contrary to all of the modifications recommended by the OCPB.*
☐ Approved the proposed action contrary to the disapproval recommended by the OCPB.*

☐ Disapproved the proposed action with regard to the OCPB's no position or no position with comment.
☐ Disapproved the proposed action with regard to the recommended modification(s) by the OCPB.
☐ Disapproved the proposed action as recommended and for reasons set forth by the OCPB.
☐ Disapproved the proposed action as recommended but for reasons other than those set forth by the OCPB. (Please list reasons below for local disapproval.)

☐ Other _____

Local Board Date: _____

*List reasons for acting contrary to the OCPB recommendation and include a copy of the local board resolution. Attach additional reasons on a separate sheet of paper as necessary.

_____
_____
_____
_____

ZONE CHANGE APPLICATION

for

TAX PARCELS 092.-07-02.1
112 S. BURDICK STREET
FAYETTEVILLE (Town of Manlius)

Future Offices of
EMPIRE MANAGEMENT OF CNY, Inc.

Prepared for

EMPIRE MANAGEMENT OF CNY, Inc.
4306 E. Genesee Street
DEWITT, NY 13214

Prepared by

NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104
Telephone: (315) 682-5580

MARCH 17, 2021
(Revised March 30, 2021)

PROJECT NARRATIVE

NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING

110 Fayette Street
Manlius, New York 13104

March 17, 2021 – Revised March 30, 2021

Town Board – Town of Manlius
301 Brooklea Drive
Fayetteville, NY 13066

Re: Zone Change Request – Empire Management of CNY, Inc – Corporate Offices
112 S.Burdick Street Fayetteville (in Town of Manlius)

Dear Mr. Supervisor,

Enclosed for your review are application materials for a proposed zone change for the parcel, tax no. 092.-07-02.1 located at 112 S. Burdick Street from the existing zoning district of Restricted Agriculture (RA) to the Residential Multiple Use Districts (R-M). It is our belief that this request for a zone change will be of minor consequence to the surrounding commercial corridor and neighborhood. The subject parcel is currently fronted by commercially zone parcels along the E. Genesee Street corridor. The subject site and building look down upon the back of the Craftsman Inn and its parking area as well as the drive thru lanes of the Empower Bank. The property is no longer fitting for residential use and it is more fitting for a business transitional area that would be allowed under similar zoning as the Craftsman and Empower Bank.

This zone change being requested is to allow for the utilization of the existing structure to be converted into the offices of Empire Management of CNY. This business is a family owner and operated real estate company run by Manlius native Dave Muraco and is now operated with both his son and daughter, Louis and Alexis. No physical exterior or site changes are proposed associated with this zone change requests. There may be some interior modifications made to convert the residence into the office use.

We look forward to working with the Town of Manlius on this project. If you have any questions or if you need any other additional information, please contact us.

Respectfully submitted,

NAPIERALA CONSULTING
Professional Engineer, P.C.

Matthew R. Napierala

Matthew R. Napierala, P.E.
Managing Engineer / President

PH 315-682-5580 • FAX 315-682-5544 • EMAIL:MNAP@NAPCON.COM

ZONE CHANGE APPLICATION

TOWN OF MANLIUS
ZONE CHANGE APPLICATION

1. Name of Person applying for Zone Change David C. Muraco (Empire Management)
   Address of person applying 4306 E Genesee St. DeWitt, NY 13214
   Cell Number 315-420-0735 Phone Number 315- 445-8990
2. Name: (owner of record) of land where Zone Change would occur Cedar Circle, LLC - Andrea M Audi, Member
   Address (owner of record) 112 S Burdick St. Fayetteville, NY 13066
   Cell Number (owner of record) 315-445-8990 Phone Number _____
3. Tax Map Number of property where Zone Change would occur 092.-07-02.1
4. Is this property located in a flood hazard area? No
   If so, what flood area is the property in it in?
   _____
5. Present zoning classification of property RA
6. Desired zoning classification RM
   Reason for Change of Zone (use additional sheets if necessary) The home is no longer desirable as a single family residence.
   In front of the property, the closest abutting structure the home looks down to the Craftsman Inn & Suites, Starbucks and and Town Square Center.
   Other commercial tenants in the immediate area are Empower Federal Credit Union, Romano Auto Dealers, FairTax America, Inc., Papa Gallo Restaurant, UPS Store, Twin Trees Pizza, Town Square Center Development, Express Mart, McDonalds, etc.
7. What is lot size? 2.07 Acres
8. If the Zone Change is granted, will the use of the property conform to the District regulations as stated in Chapter 155 Article III of the Town of Manlius Municipal Code? Yes
9. Is the property within the protectively zoned area of a housing project authorized under the public housing law? No
10. Is the property within five hundred (500) feet of the boundaries of any city, village, town, county, state park or parkway? Yes
    If yes, please specify Village of Fayetteville
11. Is the property within five hundred (500) feet from the boundary of any existing or proposed County or State park or other recreation area, or from the right-of-way of any existing or proposed county or state parkway, thruway, expressway, road or highway, or from the existing or proposed right-of-way of any stream or drainage channel owned by the county or for which the county has established channel lines, or from the existing or proposed boundary of any county or state owned land on which a public building or institution is situated? No

If yes, please specify _____

_____

12. List the uses of all abutting property Homes / Apartments / Offices to the Rear of the Property.

In front of the property, the closest abutting structure the home looks down to the Cratfsman Inn & Suites, Starbucks and and Town Square Center.

Other commercial tenants in the immediate area are Empower Federal Credit Union, Romano Auto Dealers, FairTax America, Inc., Papa Gallo Restaurant, UPS Store, Twin Trees Pizza, Town Square Center Development, Express Mart, McDonalds

13. The following must be included with your 12 application packets unless otherwise specified and/or specifically waived by the Town Board:

- An environmental assessment form which can be obtained from the Town Clerk, or an environmental impact statement.
- Copy of a survey of the premises certified by a New York State licensed surveyor.
- Legal description of the premises.
- This application must be signed by both the owner of record of the property and the applicant.

The failure to answer any question on this application, the failure to submit any item as specified or the failure to execute this application will result in a delay in the processing of the application.

Date 3/16/21 _____ David C. Muraco
Applicant 1

Date _____ _____
Applicant 2

Date _____ _____
Applicant

TOWN OF MANLIUS

DISCLOSURE AFFIDAVIT

This affidavit is a part of and must be completed and attached to every application, petition, request submitted for a *site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license* or *permit.*

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

I. David Moracco, being duly sworn, deposes and says that (s) he is:

(applicant, petitioner, corporation officer, property owner, *etc.)*

II. That deponent has read and is familiar with the provisions of the General Municipal Law, Section 809 which states:

A. Every application, petition or request submitted for a site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license or permit, pursuant to the provisions or any ordinance, local law, rule or regulation constituting the zoning and planning regulations of a municipality shall state the name, residence and the nature and extent of the interest of any state officer or any officer or employee of such municipality is a part, in the person, partnership or association making such application, petition or request (hereinafter called the applicant) to the extent known to such applicant.

B. For the purpose of this action an officer or employee shall be deemed to have an interest in the applicant when (s)he, his/her spouse, or their brothers, sisters, parents, children, grandchildren, or the spouse of any of them:

1) is the applicant, or
2) is an officer, director, partner or employee of the applicant, or
3) legally or beneficially owns or controls stock of a corporate applicant or is a member of a partnership or association applicant, or
4) is a party to an agreement with such an applicant, express or implied, whereby (s) he may receive any payment or other benefit, whether or not for services rendered, or contingent upon the favorable approval of such application, petition or request.

C. Ownership of less than five percent (5%) of the stock of a corporation whose stock is listed on the New York or American Stock Exchanges shall not constitute an interest for the purposes of this section.

D. A person who knowingly and intentionally violates this section shall be guilty of a misdemeanor.

III. That no Town of Manlius officer, employee or a relative of either, as defined in Section 809 General Municipal Law has any interest in this application.

-OR-

If a Town of Manlius officer, employee or relative of either as defined in Section 809 General Municipal law has any interest in this application, the full particulars are provided on an attached sheet.

Date: March 16th, 20 21.

David C. Muraco
(Print Name)

David C. Muraco
(Signature)

Empire Management of CNY, Inc. - David C. Muraco (President)
(Entity Name)

President / Owner
By (Officer) (Title)

4306 E Genesee St. DeWitt, NY 13214
(Mailing Address of Applicant)

315-420-0735 (cell) or 315-445-8990 (office)
(Telephone Number)

Date: _____, 20_____.

(Print Name)

(Signature)

(Entity Name)

By (Officer) (Title)

(Mailing Address of Applicant)

(Telephone Number)

ACKNOWLEDGEMENTS

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

On this 16th day of March in the year 2021, before me, the undersigned, a notary public in and for said state, personally appeared David C. Muraco, _____, and _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within Petition and acknowledged to me the he/she/they executed the same in his/her/their capacity, and that by his/her/their signature(s) on the Petition, the individual or the persons upon behalf of which the individual acted executed the instrument.

Bari S. Nardella
Notary Public

BARI S. NARDELLA
Notary Public – State of New York
No. 01NA6355217
Qualified in Onondaga County
My Commission Expires 02/27/2025

CORPORATE ACKNOWLEDGEMENT

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

_____, being duly sworn, deposes and says the s(he) is the _____ of _____ corporation named in the within Application/Petition, that s(he) has read the foregoing affidavit and knows the contents thereof; that the same is true of s(he) own knowledge, except as to those matters therein stated to be alleged upon information and belief, and as to those matters s(he) believes it to be true.

_____
Applicant Signature

Subscribed to me before this day
Of _____, 20_____

_____
Notary Public

06/29/16 LB

SEQRA FORM

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

David C. Muraco - Empire Management of CNY, Inc.

Name of Action or Project:

112 S. Burdick Street, Fayetteville, NY 13066 - for Empire Management Office

Project Location (describe, and attach a location map):

112 S. Burdick Street, Fayetteville, NY 13066

Brief Description of Proposed Action:

Re-Zone the existing property from the Town of Manlius Restricted Agriculture (RA) Zone to Residential Multiple Use (RM) Zone.

The property is no longer desirable as a single family residence, with it being virtually surrounded and overlooking the commercial area. The intent is to use the property for the purposes of a family owner / operated company office. Low intensity us of 5-7 people in the office daily.

In front of and the closest adjoining property is the Craftsman Inn & Suites along with the commercial area along E Genesee St. that consists of Empower Federal Credit Union, Starbucks, Romano Auto Dealers, Fair Tax American, Papa Gallo Restaurant, UPS Store, Twin Trees Pizza and Town Square Center. There are residential areas to the south of which are buffered with a mature tree line that is to remain as no physical changes to the existing property are proposed.

Name of Applicant or Sponsor:	Telephone: 315-445-8990
David C. Muraco, President, Empire Management of CNY, Inc.	E-Mail: dcmuraco@empiremgtco.com

Address:

4306 E. Genesee Street

City/PO:	State:	Zip Code:
DeWitt	New York	13214

	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? 2.07 acres
   b. Total acreage to be physically disturbed? 0 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 2.07 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?	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☑	☐
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?	☐	☑
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: _____ _____	☐	☑
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ _____	☐	☑
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ _____	☐	☑
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?	☑	☐
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: _____ _____ _____		

	NO	YES
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		
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:	☑	☐
19. 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:	☑	☐

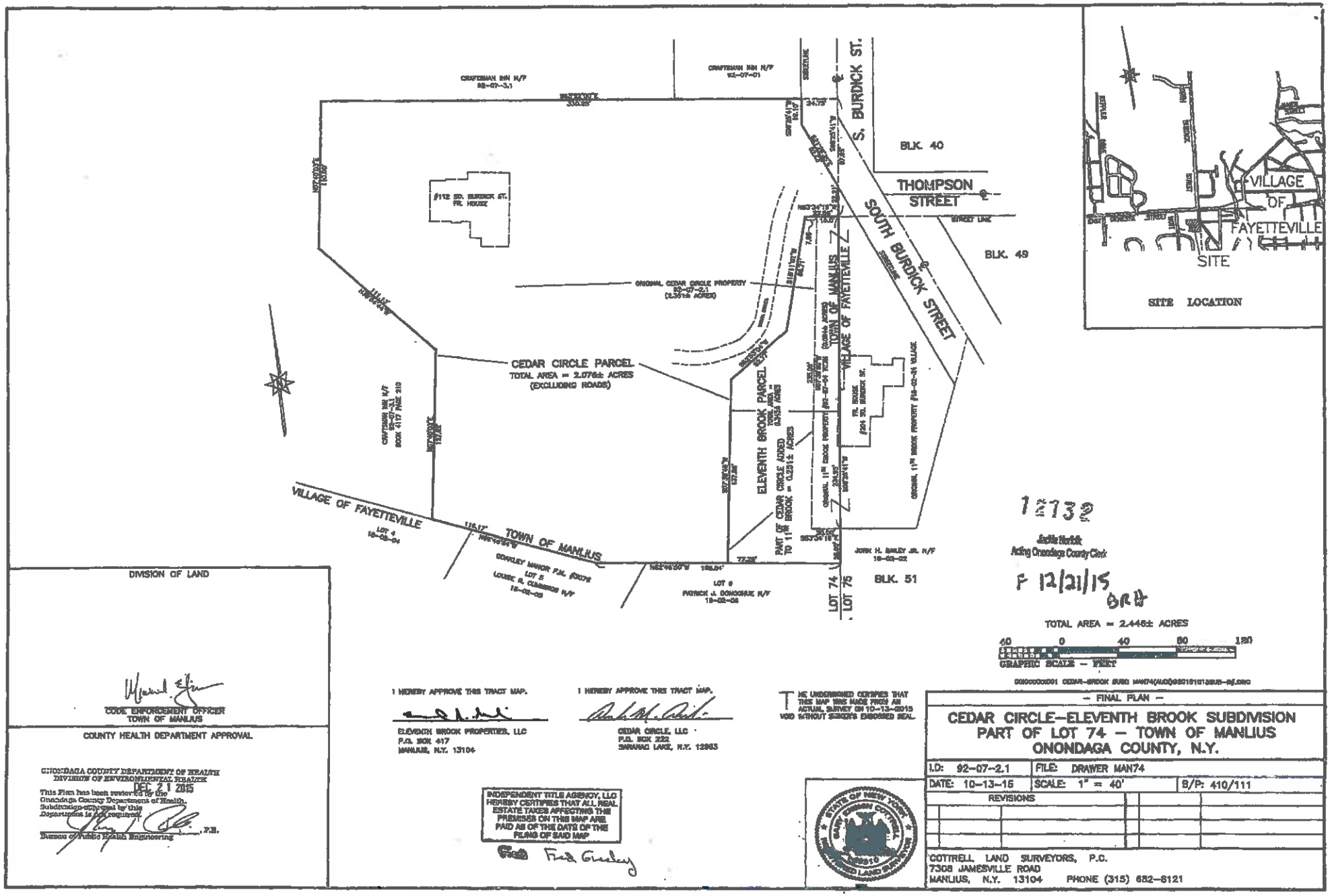
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: MATTHEW R. NAPIERALA, P.E. Date: 17 MARCH 2021

Signature: Matthew R Napierala Title: MANAGING ENGINEER-ENGINEER FOR APPLICANT

PRINT FORM

EXISTING CONDITIONS SURVEY


CRAFTSMAN INN N/F
92-07-3.1
CRAFTSMAN INN N/F
92-07-01
S. BURDICK ST.
BLK. 40
THOMPSON STREET
SOUTH BURDICK STREET
BLK. 49
#112 SO. BURDICK ST. FR. HOUSE
ORIGINAL CEDAR CIRCLE PROPERTY
CEDAR CIRCLE PARCEL
TOTAL AREA = 2.076± ACRES
(EXCLUDING ROADS)
ELEVENTH BROOK PARCEL
PART OF CEDAR CIRCLE ADDED TO 11TH BROOK = 0.291± ACRES
TOWN OF MANLIUS
VILLAGE OF FAYETTEVILLE
VILLAGE OF FAYETTEVILLE
TOWN OF MANLIUS
LOT 4
19-02-04
CONVILLY MANOR F.N. JOHN
LOT 5
LOUIS S. CLEMENS N/F
19-02-05
LOT 6
PATRICK J. DONOGHUE N/F
19-02-06
JOHN H. BAILEY JR. N/F
19-02-22
BLK. 51
LOT 74
LOT 75
SITE
SITE LOCATION
12732
Jackie Hartnett
Acting Onondaga County Clerk
F 12/21/15
BRH
TOTAL AREA = 2.446± ACRES
GRAPHIC SCALE – FEET
DIVISION OF LAND
CODE ENFORCEMENT OFFICER
TOWN OF MANLIUS
COUNTY HEALTH DEPARTMENT APPROVAL
ONONDAGA COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
DEC 21 2015
This Plan has been reviewed by the Onondaga County Department of Health. Subdivision approval by this Department is not required.
Bureau of Public Health Engineering
I HEREBY APPROVE THIS TRACT MAP.
ELEVENTH BROOK PROPERTIES, LLC
P.O. BOX 417
MANLIUS, N.Y. 13104
I HEREBY APPROVE THIS TRACT MAP.
CEDAR CIRCLE, LLC
P.O. BOX 222
SWANN LAKE, N.Y. 12983
THE UNDERSIGNED CERTIFIES THAT THIS MAP WAS MADE FROM AN ACTUAL SURVEY ON 10-13-2015
VOID WITHOUT SURVEY'S EMBOSSED SEAL
INDEPENDENT TITLE AGENCY, LLC HEREBY CERTIFIES THAT ALL REAL ESTATE TAXES AFFECTING THE PREMISES ON THIS MAP ARE PAID AS OF THE DATE OF THE FILING OF SAID MAP
Fred Gradey
STATE OF NEW YORK
MARK DUANE COTTRELL
LICENSED LAND SURVEYOR
– FINAL PLAN –
CEDAR CIRCLE–ELEVENTH BROOK SUBDIVISION
PART OF LOT 74 – TOWN OF MANLIUS
ONONDAGA COUNTY, N.Y.
I.D: 92-07-2.1
FILE: DRAWER MAN74
DATE: 10-13-15
SCALE: 1" = 40'
B/P: 410/111
REVISIONS
COTTRELL LAND SURVEYORS, P.C.
7308 JAMESVILLE ROAD
MANLIUS, N.Y. 13104
PHONE (315) 682-8121

ZONE CHANGE PLAN

PRELIMINARY
FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

GRAPHIC SCALE
0 40' 80'
(IN FEET)
1 inch = 40 ft

PROJECT TITLE:
EMPIRE MANAGEMENT HEAD QUARTERS
TOWN OF MANLIUS ONONDAGA CO., STATE OF NEW YORK

PREPARED FOR:
EMPIRE MANAGEMENT
4306 EAST GENESEE STREET
DEWITT, NY 13214

SHEET TITLE:
PROPOSED RE-ZONING SITE PLAN

NO.	REVISION/ISSUE	DATE
1	PROPOSED ZONE CHANGE TO R-M ZONE	3/30/21

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104
email: MNAP@NAPCON.COM
PH: (315) 682-5580 FAX: (315) 682-5544

PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 86753

PROJECT NO. 21-1972
DATE 16 MAR 2021
SCALE 1"=40 FT

SHEET SK-1

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