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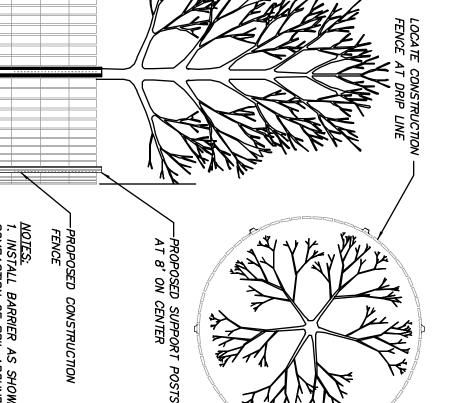
### PERSPECTIVE VIEW 10' O.C. F —36" MIN. FENCE POSTS, DRIVEN MIN. 16" INTO GROUND HEIGHT OF FILTER ABOVE 16" MIN. GROUND EMBEDMENT

CONSTRUCTION NOTES FOR FABRA

1. FILTER CLOTH TO BE FASTENED SECURELY TO
POSTS AT TOP AND MID SECTION.

2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN
EACH OTHER THEY SHALL BE OVERLAPPED BY
SIX INCHES AND FOLDED.

3. MAINTENANCE SHALL BE PERFORMED AS NEEDED
AND MATERIAL REMOVED WHEN "BULGES"
DEVELOP IN THE SILT FENCE. EMBED FILTER CLOTH : MIN. 8" INTO GROUND SECTION FABRICATED 20" MIN. FILTER CL POSTS: CLOTH: FILTER X,
MIRAFI 100X, STABILINKA T140N,
OR APPROVED EQUAL
BRICATED UNIT: GEOFAB,
ENVIROFENCE, OR APPROVED
EQUAL STEEL EITHER T OR U TYPE OR 2" HARDWOOD



### *TREE* PROTECTION NOTES:

- es prior to start of site

- tree damaged during construction activities i red by a qualified arborist at no additional
- PROPOSED SILT FENCE (SEE DETAIL)

- clearing &
- ng tree removal operations associated with construction, do not lage adjacent trees to remain. Lower limbs and tree trunks, do not them.
- fully tie back any tree branches that conflict with construction went.
- Where trenching for utilities is required within a root zone, tunneling under and around roots shall be by hand digging. If roots 3" or la are encountered immediately adjacent to the location of new construand relocation is not practical, the roots shall be hand pruned under supervision of a Certified Arborist or Landscape Architect to 6" back from the new construction limit. All exposed roots to receive appropriate treatment prior to backfilling.

- AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY A O
- MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
- ALL STOCKPILES SHALL BE PROTECTED DOWNGRADIENT SIDE. WITH SILT FENCING INSTALLED

### TEMPORARY SOIL . STOCKPILE

## NOTES: roust be immediately cost to the owner.

### AND THE PARTY OF T TREE PROTECTION DETAIL NOTES: 1. INSTALL BARRIER AS SHOWN TO PREVENT COMPACTION OF SOIL AROUND ROOTS BY CONSTRUCTION EQUIPMENT. 2. OPTIONAL: 2" X 6" WOOD FRAMING BUILT AS SQUARE AROUND TREE, AS ALTERNATIVE.

- Trees to be preserved in proximity to disturbance areas shall be marked in the field by the Landscape Architect prior to start of construction.
- No construction equipment shall be parked and no earth or construction materials shall be stockpiled or stored under the canopy of trees to be preserved.

- tree protection fencing to protect the root zone is not possible, six to ght inches of wood chip mulch and 3/4 inch plywood shall be placed er the entire affected root zone area to prevent soll compaction.

- UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.

## ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

### SECTION FLATIER: (LEVEL)

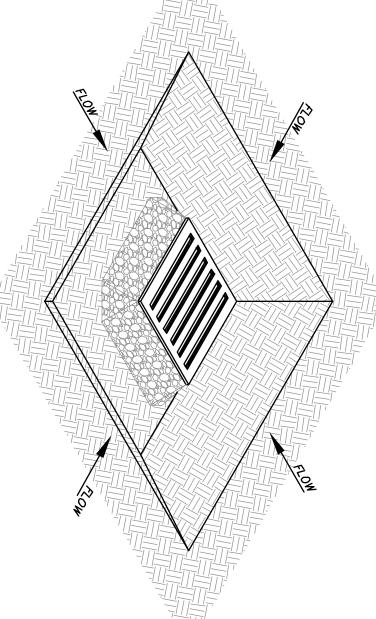
## OR STEEPE R, DEPENDENT

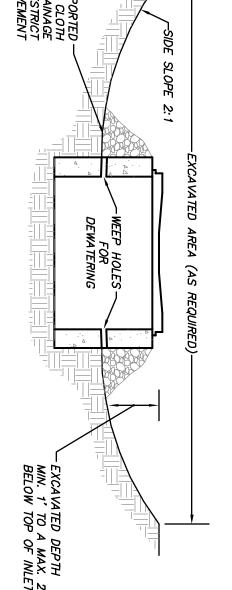
- ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.

- EARTH MOVING EQUIPMENT.
- L EARTH REMOVED AND NOT ACED SO THAT IT WILL NOT HE SWALE.
- SHALL BE PER THE CHART BELOW:

4	Ğ	2	1	TREATMENT
8.1-20%	5.1-8.0%	3.1-5.0%	0.5-3.0%	<u>GRADE</u>
LINED 4-8" RIP-RAP	SEED WIH JUTE OR EXCELSIOR; SOD	SEED AND STRAW MULCH	SEED AND STRAW MULCH SEED AND STRAW MUL	A (5 AC. OR LESS)
ENGINEERED DESIGN	LINED RIP-RAP 4-8 RECYCLED CONCRETE EQUIVALENT	SEED USING JUTE OR EXCELSIOR	SEED AND STRAW MUL	B (5-10 AC.)

## TEMPORARY SWALE





- 1. CLEAR THE AREA OF ALL DEBRIS THAT WII
  2. GRADE APPROACH TO THE INLET UNIFORM.
  3. WEEP HOLES SHALL BE PROTECTED BY GR
  4. UPON STABILIZATION OF CONTRIBUTING DR
  HOLES, FILL EXCAVATION WITH STABLE SOI
  IT PROPERLY, AND STABILIZE WITH PERMAI
  5. MAXIMUM DRAINAGE AREA = 1 ACRE WILL HINDER EXCAVATION RMLY AROUND THE BASIN
- DRAINAGE AREA, SEAL WEEP SOIL TO FINAL GRADE, COMPACT NANENT SEEDING

# EXCAVATED DROP INLET PROTECTION DETAIL

# CROSS

### CONSTRUCTION SPECIFICATIONS

- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.

  DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON—EROSIVELOCITY. IURBED AREA SHALL BE CONVEYED ICE
- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTION—ABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE MITH THE PROPER FUNCTIONING OF THE SWALE.

  THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED SHERIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULAR—THES WHICH MILL IMPEDE NORMAL FLOW.

SILT FENCE

DETAIL

- 'ERIODIC INSPECTION AND REQ NDED AFTER EACH RAIN EVEN NEEDED ON CONSTRUCTION SHALL BE JIRED MAINTENANCE MUST BE PRO-
- STABILIZATION

- description and location of any stormwater discharges associated with Justrial activity other than construction at the site: There are no known Justrial stormwater discharges present or proposed at the site.
- entification of any elements of the design that are not in conformance th the technical standard, "New York Standards and Specifications for rosion and Sediment Control." All proposed elements of this SWPPP have sen designed in accordance with the "New York Standards and secifications for Erosion and Sediment Control."

### *ই*: CLEAN STONE 6 MIN.

- INSTALLATION NOTES

  1. STONE SIZE USE 3" STONE
- LENGTH AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.)
- NOT LESS THAN SIX (6) INCHES.
- FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE, FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT. WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
- 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.
- AINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH ILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY HIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS ONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO RAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO UBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
- WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO BENTRANCE ONTO PUBLIC RIGHT OF WAY, WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

  PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
- STABILIZED CONSTRUCTION ENTRANCE DETAIL

## REQUIRED EROSION CONTROL

Pursuant to the NYSDEC "SPDES General Permit for Starmwater Discharges from Construction Activity" (GP-0-15-002), all Stormwater Pollution Prevention Plan's (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." Where erosion and sediment control practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list a required SWPPP components is provided in accordance with Part Ill.B.1a-1 of General Permit GP-0-15-002.

- Background Information: The subject project consists of the construction of (98) apartments in three buildings with appurtenances and utilities. Site map / construction requirement. cription of the soils present at the site: Onsite soils located within the sosed limits of disturbance consist of Udorthents (Ud), Nassau—Cardigan oplex (NwC) and Dutchess—Cardigan Complex (DwB) as identified on the Conservation Service Websoil Survey. These soil types belong to the rologic Soil Group "B" and "B/C"." serve to satisfy
- nstruction phasing plan / sequence of operations: The Construction equence and phasing found on these plans provide the required phasing. Instruction Sequence and Erosion and Sediment Control Maintenance shedule has been provided. The Sedimentation and Erosion Control Notes entained hereon outline a general sequence of operations for the coposed project. In general all erosion and sediment control facilities all be installed prior to commencement with land disturbing activities, all areas of disturbance shall be limited to the shortest period of time cacticable.
- Description of erosion and sediment control practices: This plan, and details / notes shown hereon serve to satisfy this SWPPP requirement.
- Temporary and permanent soil stabilization plan: The Sedimentation and Erosion Control Notes and Details provided heron identify temporary and permanent stabilization measures to be employed with respect to specific sermanents of the project, and at the various stages of development.
- Site map / construction drawing: SWPPP requirement. This plan set serves to satisfy this
- The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The details, Erosion and Sediment Control Notes, and Erosion and Sediment Control Naintenance Schedule serve to satisfy this SWPPP requirement.
- n inspection schedule: Inspections are to be performed twice weekly and a qualified professional as required by the General Permit 2—0—15—002. In addition the NYSDEC Trained Contractor shall perform ditional inspections as cited in the Erosion and Sediment Control Notes.
- ii. A description of pollution prevention measures that will be used to control litter, construction chemicals and construction debris: In general, all construction litter / debris shall be collected and removed from the site. The general contractor shall supply either waste barrels or dumpster for proper waste disposal. Any construction chemicals utilized during construction shall either be removed from site daily by the contractor or stored in a structurally sound and weatherproof building. No hazardous waste shall be disposed of onsite, and shall ultimately be disposed of in accordance with all federal, state and local regulations. Material Safety Data Sheets (MSDS), material inventory, and emergency contact numbers shall be maintained by the general contractor for all construction chemicals utilized onsite. Finally, temporary sanitary facilities (portable toilets) shall be provided onsite during the entire length of construction, and inspected weekly for evidence of leaking holding tanks.

# MIRAFI 600X FILTER FABRIC, OR APPROVED EQUAL

- Stormwater from disturbed areas musi before discharge beyond disturbed are
- Erosion and sediment control measures shall be inspected and maintained on a daily basis by the NYSDEC Trained Contractor. to Insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the site engineer.
- Cut and fills shall not endanger adjoin of others. Dust shall be controlled by sprinkling as directed by the trained contractor or other approved methods as necessary, or or site engineer. ing property, nor divert water onto the property
- All fills shall be placed and comp to prevent settlement. acted in 6" lifts to provide stability of material and
- As warranted by field conditions, speci measures, as specified by the site eng the contractor. shall remain in place until all disturbed areas
- vernents, the owner will assume responsibility for orking lot, drainage system and stormwater facilities. be cleaned to remove the winter accumulation of sted all drain inlet and catch basin sumps should be sed for debris and blockage and cleaned as required. ain inlets, catch basins and pipes should be of overall condition. Repairs and/ar
- Maintain basin vegetation including removal of trees and replacement of vegetation that should die. Remove any litter which accumulates as necessary. Typically, the accumulated silt will be required to be removed every 10 to 20 years. Any accumulated silt shall be removed from the stormwater basins once the site has been stabilized. vention Plan for additional details regard drainage facilities.

AS SHOWN

CHECKED BY

10-25-16

PROJECT MANAGER DRAWN BY

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# SWPPP

- ldentification of all post—construct constructed as part of the project serve to satisfy this SWPPP requir
- Stormwater Modeling and Analysis Report including pre—development conditions, to st—development conditions, the results of the stormwater modeling, a summary table smonstrating that each practice has been designed in conformance with the sizing iteria, identification of and justification for any deviations from the Design Manual, and entification of any design criteria that are not required. The required analysis will be ovided in a Preliminary Stormwater Pollution Prevention Plan. ) showing the specific location and size of each agement practice; This plan, and details/notes SWPPP requirement.
- Infiltration testing results. This SWPPP requirement will be provided in the Preliminary Stormwater Pollution Prevention Plan. Soil testing results and locations. This SWPPP requirement will be provided in the Preliminary Stormwater Pollution Prevention Plan.
- An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post—construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The Permanent Stormwater Facilities Maintenance Schedule provided on these plans serves to satisfy this requirement.
- Enhanced Phosphorus Removal Standards Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a 2.f above: These standards do not apply to the subject project.

### EROSION SEDIMENT CONTROL NOTES:

- The Erosion and Sediment Control Plan of erosion and sediment control measu activities, including, but not limited to, drawings. is only to be referred to for the installation res. For all other construction related grading and utilities, refer to the appropriate
- Each contractor or subcontractor responsible for soil disturbance shall have a NYSDEC trained contractor onsite during soil disturbing activities. The NYSDEC trained contractor will be responsible to comply with the stormwater pollution prevention plan and for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction. The NYSDEC trained contractor shall sign a certification statement required by GP-0-15-002.
- All construction activities involving the provided with appropriate protective m sediment disposition within. Minimum shall be implemented as shown on the "New Yark Standards and Specification." removal or disposition of soil are to be leasures to minimize erosion and contain soil erosion and sediment control measures e plans and shall be installed in accordance with s For Erosion and Sediment Control," latest
- When land is exposed during development, the exposure shall be kept to the shortest practical period of time, but in no case more than 7 days after the construction activity in that portion of the site has ceased. Disturbance shall be minimized in the arreas required to perform construction. herever feasible, natural vegetation should be retained and protected. Disturbance tall be minimized in the areas required to perform construction. No more than 5 tres of unprotected soil shall be exposed at any one time, unless prior authorization is anted by the MS4.
- All construction vehicles shall be kept clear of the watercourses and wetland control areas outside the areas of proposed development. Silt fence and orange construction fence shall be installed in the areas where the grading is in close proximity of the watercourses or wetland control areas.
- The stabilized construction entrance and silt fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
- Any graded areas not subject to further disturbance or construction traffic shall, within 7 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. Refer to "Site Seeding Notes" for additional detail and application rate. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded with a rye grass mixture having a quick germination time.
- Grass seed mix may be applied by either mechanical or hydroseeding methods. Turf establishment shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610—3.02, Method No. 1".
- Cut or fill (all) slopes steeper than 3:1 shall be stabilized immediately after grading with a rolled erosion control product (RECP) such as, Curlex I Single Net Erosion Control Blanket, or approved equal.
- Paved roadways shall be kept clean at The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities. all times.
- All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
- t be passed through erosion control barriers as or discharged into other drainage systems.
- The NYSDEC Trained Contractor shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms. ial additional erosion and sediment control gineer and the Town Engineer shall be installed by
- Erosion and sediment control are suitably stabilized.
- 3. After completion of the site improvement maintenance of the access drive, parking Each spring the paved areas shall be clip traction sand. After this is completed a cleaned. All pipes should be checked for During the cleaning process, the drain it inspected for structural integrity and over replacements should be made as required.
- Inspection of the stormwater basin should be performed every 6 months and after large storm events. These inspections should, at a minimum, check the outlet pipes for blockage and the general overall integrity of the basin and appurtenances.

# REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

# Pursuant to the NYSDEC "SPDES General Construction Activity" (GP-0-15-002), a post-construction stormwater management includes practices designed in conformant technical standard, New York State Storm Manual"). Where post-construction storm designed in conformance with this technical demonstrate equivalence to the technical components is provided in accordance with this technical components.

- General Permit for Stormwater Discharges from 002), all construction projects needing magement practices shall prepare a SWPPP that also informance with the most current version of the te Stormwater Management Design Manual ("Design on stormwater management practices are not stechnical standard, the owner or operator must echnical standard. The following list of SWPPP lance with Part Ill.B.2a—g and Ill.B.3:
- tion stormwater management practices to be t; This plan, and details/notes shown hereon ement.

STABILIZED CONSTRUCTION ENTRANCE

Inspect

Inspect

Clean/Replace Stone and Fabric

Remove

SILT FENCE BARRIER

PRACTICE

DAILY

WEEKLY

AFTER RAINFALL

DURING CONSTRUCTION

AFTER CONSTRUCTION

MAINTENANCE REQUIREMENTS

Inspect

Clean/Replace

Remove

MONITORING REQUIREMENTS

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

DUST CONTROL

Inspect

1

Inspect

Mulching/ Spraying Water

× 4

\*VEGETATIVE ESTABLISHMENT

Inspect

Water/Reseed/ Remulch

Reseed to 80% Coverage

- SOIL STOCKPILES INLET PROTECTION SWALES

CHECK DAMS

*Inspect* 

Inspect

Clean/Mulch/ Repair

Mow Permanent Grass/Replace/ Repair Rip Rap Clean/Replace Stanes/Repair

Inspect

Clean/Replace Stones/Repair

*Inspect* 

Inspect

Mulching/ Silt Fence Repair

Remove

Inspect

Inspect

Clean/Repair/ Replace

Remove

CONCRETE DRAINAGE STRUCTURES DRAINAGE PIPES

Inspect

Clean/Repair

Clean/Repair

Inspect

Clean Sumps/ Remove Debris/ Repair/Replace

Clean Sumps/ Remove Debris/ Repair/Replace

Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas area permanently stabilized. | ote: The party responsible for implementation of the maintenance schedule during and after construction is: ROAD & PAVEMENT KEARNEY REALTY & DEVELOPMENT GROUP 34 CLAYTON BOULEVARD BALDWIN PLACE, NY 10505

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Areas where runoff reduction and/or infiltration practices are	Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls.)	Areas of cut or fill	Areas where topsoil is stripped only — no change in grade	No soil disturbance Minimal soil disturbance	CONSITE SOILS MITHIN THE L	and/or the current o
Restoration not required, but may be applied for appropriate practices.	Apply full Soil Restoration <sup>6</sup> (de-compaction and compost enhancement) <sup>6</sup>	HSG A & B  Aerate <sup>3</sup> and apply Apply full Soil 6" of topsoil  Restoration	HSG A & B  Apply 6" of Aerate3 and apply topsoil  Aerate3 and apply 6" of topsoil	Restoration not permitted Restoration not required	SOIL RESTORATION REQUIREMENTS.  (ONSITE SOILS MITHIN THE LIMIT OF DISTURBANCE BELONG TO THE HYDROLOGIC SOIL GROUP (HSG) B)  TYPE OF SOIL DISTURBANCE SOIL RESTORATION REQUIREMENT COMMENTS/EXAMPLES	and/or the current owner(s) of the subject property.
Keep construction equipment from crossing these areas. To protect newly installed practices from any ongoing construction activities			Protect area from any ongoing construction activities	Preservation of Natural Features Clearing and grubbing	<u>TMENTS</u> 1.2 DROLOGIC SOIL GROUP (HSG) B) COMMENTS/EXAMPLES	

	Soll restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.	Soil restoration redevelopmen where existing will be convey area.	Redevelopment projects
Keep construction equipment from crossing these areas. To protect newly installed practices from any ongoing construction activities construction a single phase operation fence area.	Restoration not required, but may be applied for appropriate practices.	Restoration n may be appli practices.	Areas where runoff reduction and/or infiltration practices are applied
	Apply full Soil Restoration <sup>5</sup> (de-compaction and compost enhancement) <sup>6</sup>	Apply full Soil I (de-compaction enhancement) <sup>6</sup>	Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls.)
	HSG A & B  Aerate <sup>3</sup> and apply Apply full Soil 6" of topsoil  Restoration	HSG A & B Aerate <sup>3</sup> and app 6" of topsoil	Areas of cut or fill
Protect area from any ongoing construction activities	HSG C & B Acrate <sup>3</sup> and apply 6" of topsoil	HSG A & B Apply 6" of topsoil	Areas where topsoil is stripped only — no change in grade
Preservation of Natural Features Clearing and grubbing	Restoration not permitted Restoration not required	Restoration not permitte	No soil disturbance Minimal soil disturbance
COMMENTS/EXAMPLES	TION REQUIREMENT	SOIL RESTORAT	TYPE OF SOIL DISTURBANCE SOIL RESTORATION REQUIREMENT
SOIL KESTOKATION KEQUIKEMENTS  (ONSITE SOILS MITHIN THE LIMIT OF DISTURBANCE BELONG TO THE HYDROLOGIC SOIL GROUP (HSG) B)	SOIL KESTOKATION KEQUIKEMENTS	LIMIT OF DISTURBA	ONSITE SOILS MITHIN THE

	Redevelopment projects	where existing impervious area will be converted to pervious area.
[ <b>.</b>	<ol> <li>Table taken from Chapter 5</li> <li>Items struck out on the tab</li> <li>Aeration includes the use of</li> </ol>	Table taken from Chapter 5 of the "New York State Stormwater Management Design Manual" Items struck out on the table are items that are not applicable to this project.  Aeration includes the use of machines such as tractor—drawn implements with coulters making a
	narrow slit in the soil, a roller functions like a mini—subsoiler.	narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which functions like a mini—subsoiler.
4; rC		Per "Deep Ripping and Decompaction, DEC 2008" During periods of relatively low to moderate subsoil moisture, the disturbed soils are returned to
	rough grade and the followin 5.1. Apply 3 inches of	rough grade and the following Soil Restoration steps applied: 5.1. Apply 3 inches of compost over subsoil.
	5.2. Till compost into s tractor-mounted a	5.2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor-mounted disc, or tiller, mixing, and circulating air and compost into subsoils.
	5.3. Rock-pick until uplit cleaned off the site.	Rock—pick until uplifted stone/rock materials of four inches and larger size area cleaned off the site.
	5.4. Apply topsoil to a 5.5. Vegetate as require	Apply topsoil to a depth of 6 inches. Vegetate as required by Erosion & Sediment Control Note #9.
		Tilling should not be performed within the drip line of any existing trees or over any utility installations that are within 24 inches of the surface
<i>i</i> 9		Compost shall be aged, from plant derived materials, free of viable weed seeds, have no visible free water or dust produced when handling, pass through a half inch screen and have a pH suitable to grow desired plants.

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CTQ	REVISIONS PER CITY CONSULTANT COMMENTS	3-28-17	2
CTQ	REVISIONS PER CITY CONSULTANT COMMENTS	4-25-17	3
CTQ	REVISIONS PER CITY CONSULTANT COMMENTS	5-30-17	4
JLL	REVISIONS PER CITY CONSULTANT COMMENTS	6-27-17	5

DRAI		PR0 <sub>1</sub>		NO.	1	2	3	4	5
MOLCOTT DRAWING:	WE	PROJECT:		DATE	1-31-17	3-28-17	4-25-17	5-30-17	6-27-17
WOLCOTT AVENUE, BEACON, NEW YORK 12508  DETAILS	WEST END LOFTS		INSINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.	REVISION	REVISIONS FOR PLANNING BOARD SUBMISSION	REVISIONS PER CITY CONSULTANT COMMENTS			
			3 Garrett Place Carmel, NY 10512 (845) 225–9690 (845) 225–9717 fax www.insite–eng.com		SUBMISSION	COMMENTS	COMMENTS	COMMENTS	COMMENTS
			o'x	ВҮ	MEU	CTQ	CTQ	CTQ	JLL

### ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW. SEWER TESTING PROCEDURES TESTS FOR NON-PRESSURE PIPELINES FOR TRANSPORT OF SEWAGE The leakage shall be determined by extiltration, infiltration or low pressure air. Exfiltration Testing ole Testing Low pressure air tests shall conform to ASTM F1417—92, Section 8.2.2, Time—Pressure Drop Method for a 0.5 psi drop, except as specified herein and shall not be limited to type or size of pipe. Regardless of the above allowable leakage, any spurting leaks detect be permanently stopped. Measurement of the infiltration shall be by means of a calibrated weir constructed at the outlet of the section being tested. Exfiltration tests shall be made by filling a section of pipeline with water measuring the quantity of leakage. Infiltration tests shall be performed after backfilling when the groundwater level is above the joint of the top section of a precast manhole. The equipment required for air testing shall be furnished by the Contractor and shall include the necessary compressor, valves, gauges and plugs to allow for the monitoring of the pressure, release of pressure and a separable test gauge. Infiltration test shall be made by measuring the quantity of water into a section of pipeline. The head of water at the beginning of the test shall be at least 2 feet above the highest pipe within the section being tested. Exfiltration tests shall be performed after backfilling. The test shall be made by filling the manhole with water and observing the level for a minimum of eight hours. Deflection testing shall be performed 30 days after backfilling. The test shall be made by passing a ball or cylinder no less then 95% of the pipe diameter through the pipe. The test shall be performed without mechanical pulling devices. tion Testing The air test shall be based on the starting pressure of 3.5 to 4.0 psi gauge the time allowed for the 0.5 psi drop in pressure, measured in seconds, will be computed based on the size and length of the test section by the Engineer. The allowable leakage (exfiltration or infiltration) for non-pressure pipelines shall not exceed the following in gallons per 24 hours per inch of diameter per 1000 feet of pipe: Vacuum testing shall be performed after backfilling in acc latest revision of ASTM C1244—11 as follows: All sections of pipelines shall be clev Air testing for accepta been completed. <u>Type of Pipe</u> Ductile iron — mechanical or push—on joints Polyvinyl chloride, thermal plastic or fiberglass with rubber joints Cast iron soil pipe ible Leakage for Non Infiltration tests will be allowed only when the water table gauges determine the groundwater level to be 2 feet or more above the highest pipe of the section being tested. The test gauge shall be sized to allow for the measuring of the 0.5 psig loss allowed during the test period and shall be on a separate line to the test section. ure Air Testing Should groundwater be present within the section being tested, the head of water for the test shall be 2 feet above the hydraulic gradient of the groundwater. A manhole will be acceptable if the leakage does not exceed an allowance of one gallon per vertical foot of depth for 24 hours. Regardless of the allowable leakage, any leaks detected shall be permanently stopped. The maximum pressure allowed under any condition in air testing shall be 10 psig. The maximum groundwater level for air testing is 13 feet above the top of the pipe. Should the requirement of 2 feet of water above the highest pipe subject any joint at the lower end of the test section to a differential head of greater than 11.5 feet, another method of testing shall be employed. If the manhole fails the initial test, necessary repairs shall be made by an approved method. The manhole shall then be retested until a satisfactory test is obtained. A vacuum of 10 in. of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head closed, and the vacuum pump shut off. The time shall be measured for the vacuum to drop 9 in. of mercury. Each manhole shall be tested by either exfiltration, infiltration or vacuum testing. When groundwater is present, the average test pressure of 3 psig shall be above any back pressure due to the groundwater level. The test head shall be placed at the top of the manhole in accordain with the manufacturer's recommendations. The manhole shall pass if the time for the vacuum reading to drop from 10 in. of mercury to 9 in. of mercury meets or exceeds the values indicated below: Test Times for Depth (ft) D nce shall not be perforn Diameter (inches) 48 60 Time (seconds) 20 26 30 39 40 52 45 59 50 65 ed and flushed prior to testing. ned until the backfilling has ordance with the DUCTILE IRON PIPE WATER TESTING PROCEDURES TESTS ON PRESSURE PIPING FOR TRANSPORT OF WATER Disinfection Prior to placing the water main into service, the new pipe shall be cleaned and disinfected in accordance with the latest revision of AWWA C651, Section 4.4.3, "The Continuous Feed Method". The "Tablet Method" will not be accepted. Hydrostatic Pressure Test Hydrostatic testing shall be performed in accordance with the revision C600, Section 5.2, "Hydrostatic Testing". The test medium shall be water. static Leakage Test The test medium shall be water. Test pressure shall be as scheduled or, where no pressure is scheduled, shall be 150 psi, or 1.25 times the static operating pressure, whichever is higher. Test pressure shall be held on the piping for a period of at least 2 hours, unless a longer period is requested by the Engineer. When making repairs to, or when specified, structures and portions of pipelines shall be chlorinated by a concentrated chlorine solution containing not less than 200 PPM (mg/l) of free chlorine. The solution shall be applied with a brush or sprayed on the entire inner surface of the empty pipes or structures. The structures disinfected shall remain in contact with the strong chlorine solution for at least 30 minutes. Prior to chlorination, all dirt and foreign matter shall be remove cleaning and flushing of the pipeline or structure. Chlorination shall be by the use of a solution of water and liquid chlorine, calcium hypochlorite or sodium hypochlorite and the solution shall be contained in the pipo or structure as specified. Chlorination shall be scheduled such that sampling and flushing will be performed during normal daylight working hours. The contractor shall provide acceptable backflow prevention on all supply water to prevent any potential backflow contamination or cross connection. The leakage test shall be conducted concurrently with the pressure test. All water quality requirements shall be fulfilled prior to the passage of any water through the new system to a public supply or the use of the new system. The application of the chlorine solution shall be by means of a controlled solution feed device. The rate of chlorine solution flow shall be in such proportion to the rate of water entering the pipe or structure that the resulting free chlorine residual shall be between 25 and 50 parts per million (PPM) or milligrams per liter (mg/l). The chlorine solution shall be introduced to pipelines through corporation stops placed in the horizontal axis of the pipe, to structures by means of tubing extending directly into the structure, or other approved methods. Regardless of the above stopped. The rate of leakage shall be determined at 15-minute intervals by means of volumetric measurement of the makeup water added to maintain the test press. The test shall proceed until the rate of leakage has stabilized or is decreasing below an allowable value, for three consecutive 15-minute intervals. After this, the test pressure shall be maintained for at least another 15 minutes. The chlorine residual shall be not less than 10 PPM (or mg/l) at pipe or structure at the end of the 24—hour retention period. The chlorine treated water shall be retained in the pipe or struchours, unless otherwise directed. During the retention period, all hydrants within the treated sections shall be operated. All work under this section shall be performed in the presence of the Design Engineer, and a representative of the public health authority having jurisdiction, as required. The Contractor shall make all arrangements for the testing of water quality by an approved independent laboratory. Two acceptable bacteriological test, taken at least 24 hours apart, shall be collected from the new water main. At least 1 set of samples must be collected from every 1,000 LF of the new water main, plus one set from the end of the line and at least one set from each branch. The results for all tests shall be forwarded to the Design Engineer and the public health authority having jurisdiction. The disposal of chlorinated water from any pipe or structure shall be such that it will not cause damage to any vegetation, fish, or animal life. After the required retention of chlorinated water in the pipe or structures, they shall be thoroughly flushed until the replacement water shall, upon test, both themically and bacteriological, be proven equal to water quality served by the sublic from the existing water supply system. All exposed piping shall be examined during the test and all lear material or joints shall be repaired or replaced before repeating At the completion of the test, the pressure shall be releasing the the point of application. SEWER MAIN SLEEVE DETAIL PROPOSED 1'x 1'x 1' POURED BLOCK OF CONCRETE TO PLUG AND CAP THE 10" HDPE SLEEVE (TYP.) quantity of makeup water, in gallons per hour length of pipe tested, in feet nominal diameter of the pipe, in inches average test pressure during the hydrostatic test, square inch (gauge) akage will be determined by the follow [D √P 148,000 PROPOSED 8"¢ PVC SDR 35 SEWER PIPE any visible leaks shall be PROPOSED MODULAR BLOCK RETAINING WALL, SEE DETAIL. 12" -PROPOSED GRANULAR LEVELING PAD, SEE DETAIL. MIN. SEPARATION SED 10" HDPE cture at least 24 I valves and ks, defective the tests. sed at the of AWWA SLEEVE any point in the d by a thorough NOTE: THE WATER TRENCH NYSDOT ITEM 304.12 MITHIN SEWER TOPSOIL (4" MIN.), SEED— & MULCH OR WHEN IN PAVEMENT SEE PAVEMENT DETAIL TRENCH DEPTH VARIES (3'-0" MIN.) 4'-0" MIN. COVER TAPPING SLEEVE H-615 AS MANUFACTURED B U.S. PIPE OR APPROVED EQUAL SERVICE LINE SER VICE ' THE NYSDOT RIGHT OF WAY TRENCH TRENCH JOINT (TYP.) -ROB GRAVEL, COMPACT IN 6" LIFTS TO 90% MAXIMUM DRY DENSITY, OR 3/4" TO 1 1/2" CRUSHED STONE/ WASHED GRAVEL -SUITABLE BACKFILL FREE FREE OF ORGANIC MATERIAL STONES GREATER THAN 4". COMPACT IN 6" LIFTS TO 90% MAXIMUM DRY DENSITY 6"ø PVC SDR 35 SEWER SERVICE LINE TNISHED GRADE DETAIL POB GRAVEL OR GRANULAR BASE PIPE EMBEDMENT (3/4" MAX. FOR ANGULAR GRAVEL, 11/2" MAX. FOR ROUND STONE). 6" MIN. SAND BED WHEN IN ROCK. COMPACT IN 6" LIFTS TO 90% MAX. DRY DENSITY. DETAIL I CANNOT BE MAINTAINED, THE WATER LINE SHALL BE E (SEE DETAIL) ONLY WITH PRIOR APPROVAL OF THE DESIGN TMENT OF HEALTH. TING RESTRAINT AS REQUIRED. APPLIES TO WATER MAINS AND WATER SERVICE CONNECTION WATER SERVICE LINE (SEE PLAN FOR TYPE AND SIZE) COMPACTED SUBBASE -MAGNETIC UNDERGROUND MARKING TAPE. LABEL FOR APPROPRIATE UTILITY. BURY 18" FROM FINISHED GRADE. SUITABLE BACKFILL FREE OF ORGANIC MATERIAL AND STONES > 4". COMPACT IN 6" LIFTS TO 90% MAXIMUM DRY DENSITY, 95% UNDER PAVEMENT. (8' MIN) WATER LINE CROSSING OVER SANITARY SEWER LINE OR STORM DRAIN LINE TAPPING SLEEVE, AND THRUST BLO WATER LINE CROSSING UNDER SANITARY SEWER LINE OR STORM DRAIN LINE WATER LINE CROSSING DETAIL SEWER LINE OR DRAIN LINE SEWER LINE DRAIN LINE EEVE. VALVE. BLOCK DETAIL 18" M/N "MEGALUG" RETAINER GLAND BY EBAA IRON SALES, INC. OR APPROVED EQUAL PROPOSED 8" ø DIP WATER LINE (8' MIN) 45° BEND THRUST D 1.5° $\sim B_{\perp}$ 10CK N.T.S.) 1/2° BEND 2, -<u>DETAILS</u> 1.5' D W DOOR HARDWARE MOUNTED ® 4'-0" MAX. ELEVATION 10'-0" MIN. INSIDE DIMENSION HEAVY TAR PAPER LMECHANICA JOINT CAP GENERAL NOTES: 1. CHECK WITH REFUSE HAULER PRIOR TO INSTALLATION OF REFUSE ENCLOSURE DIMENSIONS. ACCESSIBILITY NOTES: GATE(S) DESIGNATED FOR ACCESSIBLE ENTRY INTO DUMPSTER ENCLOSURE SHALL BE MAINTAINED TO BE RELATIVELY FREE SWINGING AND EASY TO OPEN AND CLOSE. VERTICAL CHANGE IN LEVEL BETWEEN FINISHED GRADE OF CONCRETE PAD FOR DUMPSTER ENCLOSURE AND ADJACENT PAVEMENT AT GATE OPENINGS SHALL NOT EXCEED 1/4"; 1/4" 10 1/2" VERTICAL CHANGE SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 2H:1V. ALL HARDWARE UTILIZED TO ATTACH WOOD FENCE TO POSTS SHALL BE GALVANIZED STEEL. ACCESSIBLE REFUSE CONTAINERS SHALL BE PROVIDED — AND/OR DUMPSTERS WITH ACCESSIBLE SIDE OPENINGS. A 36" MINIMUM CLEAR DISTANCE SHALL BE MAINTAINED BETWEEN DUMPSTERS AND IN FRONT OF DUMPSTER AS NECESSARY TO PROVIDE ACCESSIBLE ROUTE MITHIN DUMPSTER ENCLOSURE TO SIDE ACCESS DOORS TO DUMPSTERS AND / OR REFUSE CARTS. SHOULD INDIVIDUAL AS SUCH. MECHANICAL JOINT CAP AT FRONDE 8" HAUNCH AT FRONT OF CONCRETE SLAB 4" CONC. SLAB MTH 6"X6"/#10X#10 WWF OVER 6" THICK CRUSHED STONE DUMPSTER ENCLOSURE DETAIL CATE BE DES PROJECT NUMBER DATE DRA WING: 3'-0" CLEAR GNATED FOR ACCESSIBLE ENTRY, IT SHALL 3'-6' MIN. 6-27-17 5-30-17 4-25-17 3-28-17 REFUSE CART (OPTIONAL) ELEVATION PLAN <u>¼" PER FOOT</u> MIN. SLOPE AS SHOWN 16226.100 10-25-16 WEST END LOFTS <u>DETAILS</u> × GAL VANIZED STEEL POST (TYP.) 3000 PSI. CONCRETE -8" & CONCRETE FOOTING (TYP.) 14" & CONCRETE FOOTING AT DOUBLE POSTS. —ACCESSIBLE REFUSE OR RECYCLING CONTAINER (3'—В" MAX. HEIGHT) REVISIONS PER CITY CONSULTANT COMMENTS REVISIONS FOR PLANNING BOARD SUBMISSION TRASH CAN(S), PROJECT MANAGER DRAWN BY CHECKED BY -ACCESSIBLE SIDE DOOR OPENING, MAX. 48" ABOVE GRADE (TYP.) S G, SURVEYING & ARCHITECTURE, P.C BE LABELLED C.T.Q. J.J.C. 3 Garrett Place Carmel, NY 10512 (845) 225–9690 (845) 225–9717 fax www.insite-eng.com -DOOR HARDWARE SHALL BE EASY TO OPERATE U-SHAPED HANDLE OR LEVER-OPERATED MECHANISM (TYP.) —6' HIGH STOCKADE FENCE STAINED TO MATCH BUILDING COLOR -GALVANIZED STEEL HINGES AND HARDWARE (TYP.) GRADE 4 12 CTQ CTQ CTQ