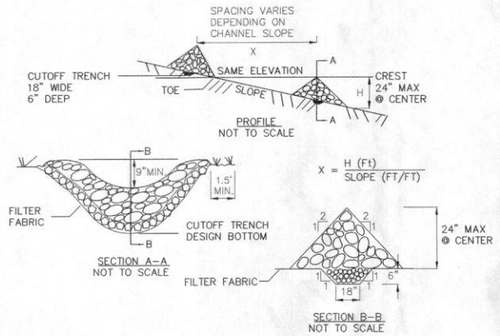
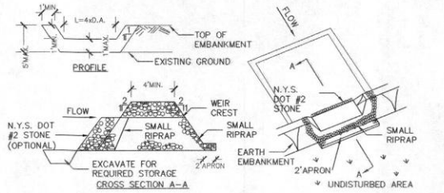


1/10 CHECK DAM DETAIL

(NOT TO SCALE)

NOTES:

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.



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

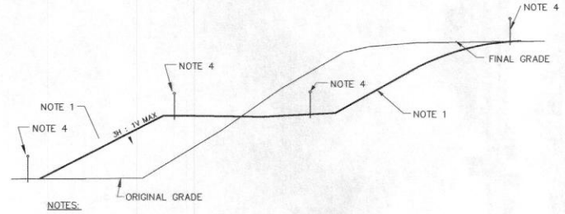
CONSTRUCTION SPECIFICATIONS

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

MAXIMUM DRAINAGE AREA 5 ACRES

3/10 STONE OUTLET SEDIMENT TRAP DETAIL

NOT TO SCALE

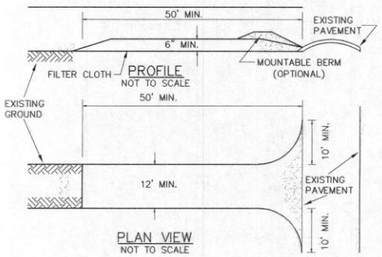


NOTES:

1. WHEN CUT/FILL SLOPE HAS BEEN COMPLETED, THE SLOPE SHOULD BE TRIMMED AND THE PERMANENT EROSION CONTROL MEASURES OF SEEDING AND MULCHING SHOULD BE CARRIED OUT. IF THE CUT/FILL IS TRIMMED OUT OF "SEASON" (FROM NOV. 1 THROUGH APRIL 1), MULCH THE SLOPE AND SEED ON TOP OF THE MULCH IN THE NEXT SEEDING SEASON.
2. IF THE SLOPE CANNOT BE COMPLETED BECAUSE PAVING IS REQUIRED OR FOR OTHER REASONS, THE SEEDING AND MULCHING SHOULD BE COMPLETED TO THE MAXIMUM EXTENT POSSIBLE.
3. WHEN THE CUT/FILL CANNOT BE BROUGHT TO FINAL GRADE IN A REASONABLE LENGTH OF TIME IT SHOULD BE MULCHED PER GP 0-10-001.
4. PROVIDE A CONTINUOUS LINE OF SILT FENCE AT THE PERIMETER OF SLOPES UNTIL THE FINAL STABILIZATION HAS BEEN APPROVED BY THE DESIGN ENGINEER OR THE INSPECTING PROFESSIONAL.
5. ALL FILL SLOPES AND CONSTRUCTED EMBANKMENTS SHALL BE INSTALLED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS SECTION 203 (EXCAVATION AND EMBANKMENT).

5/10 SEEDING AND MULCHING GUIDES - CUT/FILL SLOPES

NOT TO SCALE

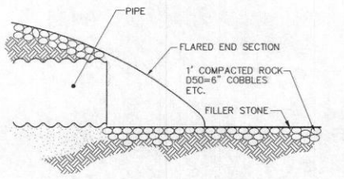


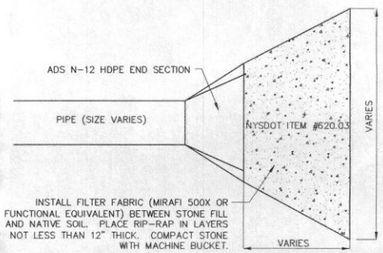
CONSTRUCTION SPECIFICATIONS:

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

7/10 STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE





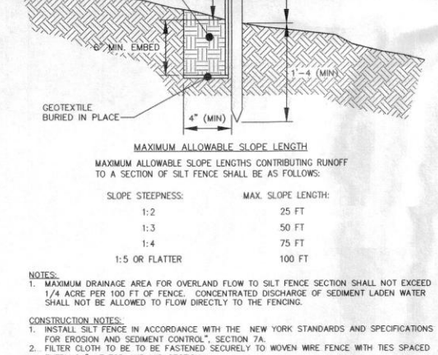
	12" STORM OUTFALL	15" STORM OUTFALL	36" CULVERT OUTFALL
Qr (CFS)	3	14	75
D= DIA. OF DISCH. PIPE	12"	15"	36"
LA= LENGTH OF APRON	8'	10'	22'
W= LA+D	9'	11'	25'
D50 RIP-RAP SIZE	6"	6"	15"
D50 RIP-RAP DEPTH	14"	14"	32"

NOTES:
1) REFERENCE FIG. 5B.12 OF NYS STANDARDS & SPECIFICATIONS FOR EROSION & SEDIMENT CONTROL.
2) 6" RIP-RAP SIZE EQUIVALENT TO NYS DOT LIGHT STONE FILL

PIPE OUTLET PROTECTION

2/10 PIPE W/ FLARED END SECTION

NOT TO SCALE



MAXIMUM ALLOWABLE SLOPE LENGTH

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

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

NOTES:

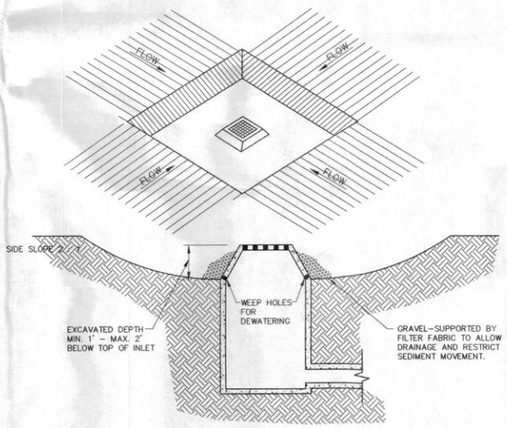
1. MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO SILT FENCE SECTION SHALL NOT EXCEED 1/4 ACRE PER 100 FT OF FENCE. CONCENTRATED DISCHARGE OF SEDIMENT LADEN WATER SHALL NOT BE ALLOWED TO FLOW DIRECTLY TO THE FENCING.

CONSTRUCTION NOTES:

1. INSTALL SILT FENCE IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE WRAPPED TOGETHER PER DETAIL 4 ON THIS PAGE.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN ACCUMULATION REACHES 1/2 OF DESIGN CAPACITY OF FENCE (1/2 HEIGHT OF FILTER FABRIC) OR WHEN BULGES" DEVELOP IN FENCING.
5. POSTS SHALL BE 2" HARDWOOD.
6. FILTER CLOTH SHALL BE FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
7. ACCEPTABLE PREFABRICATED UNITS INCLUDE GEOFAB, ENVROFENCE OR APPROVED EQUAL.
8. WHEN DISTURBANCE OCCURS ADJACENT TO A WETLAND ORANGE CONSTRUCTION FENCE SHALL BE INSTALLED ON THE BACK SIDE OF THE SILT FENCE. SEE PLAN FOR LOCATIONS.

8/10 SILT FENCE DETAIL

NOT TO SCALE

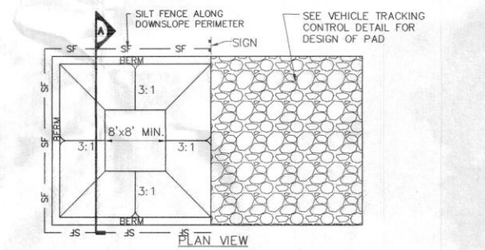


CONSTRUCTION SPECIFICATIONS:

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
6. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES,FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
7. MAXIMUM DRAINAGE AREA 1 ACRE

4/10 EXCAVATED DROP INLET PROTECTION DETAIL

NOT TO SCALE



CONCRETE WASHOUT AREA INSTALLATION NOTES:

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

CONCRETE WASHOUT AREA MAINTENANCE NOTES:

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

6/10 CONCRETE WASHOUT AREA

NOT TO SCALE

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

NO.	DATE:	REVISIONS	BY:
3	11/12/15	REVISED TO FINAL PLAN SET	CDL
2	5/21/15	REVISED PER TOWN & TDE COMMENTS	CDL
1	3/2/15	REVISION PER MEETING WITH TOWN & TDE	CDL

STATE OF NEW YORK — DAVID FRANCIS INGALLS JR. — 64993 — LICENSED PROFESSIONAL ENGINEER

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E&SC DETAILS

WINDSOR DEVELOPMENT GROUP, INC.
1319 NEW SCOTLAND ROAD
TOWN OF BETHLEHEM
COUNTY OF ALBANY STATE OF NEW YORK

DATE: JANUARY 23, 2015 | CHECKED BY: D.F.I. | JOB NO. 13-076 | SCALE: AS SHOWN
DRAWN BY: M.S.H. | CADD FILE: 13076 DETAILS | SHEET 10 OF 14

ALBANY COUNTY DEPARTMENT OF HEALTH

TOWN OF BETHLEHEM PLANNING BOARD