

EROSION AND SEDIMENT CONTROL LEGEND

- PROPOSED SEDIMENT CONTROL FENCE OR EARTH DIKE
- 4:4 PROPOSED CHECK DAM
- PROPOSED PIPE OUTLET SEDIMENT TRAP
- PROPOSED TEMPORARY SWALE
- - - - - PROPOSED CONSTRUCTION SEQUENCE (CS) LINE (NOT TO EXCEED 5 ACRES)

SEQUENCE OF CONSTRUCTION

CONSTRUCTION SEQUENCING & SEDIMENTATION AND EROSION CONTROL DURING CONSTRUCTION

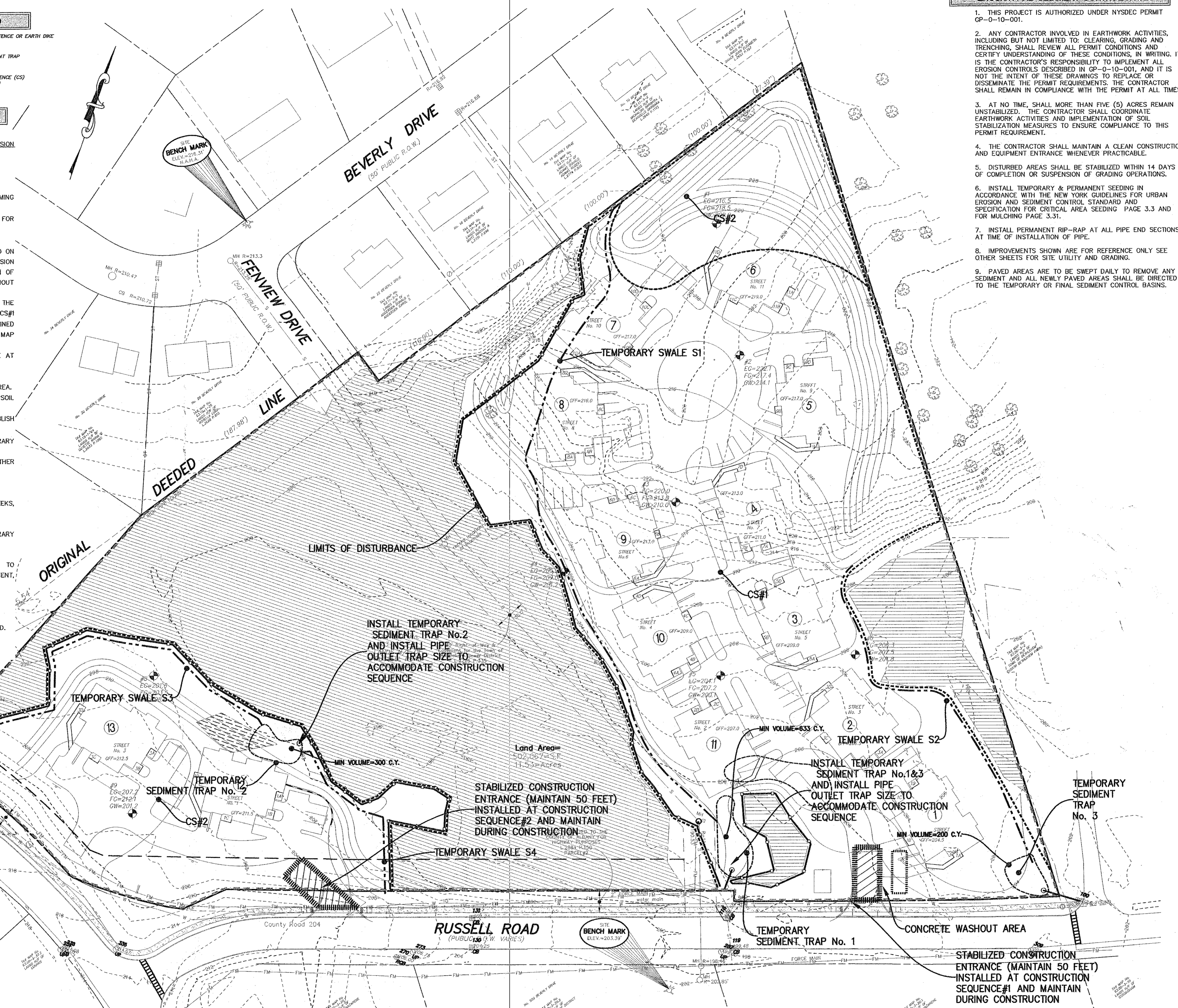
- ✓ ASSURE THAT COPY OF SWMR IS ON THE SITE.
 - ✓ ESTABLISH SCHEDULE FOR SITE INSPECTION.
 - ✓ ESTABLISH QUALIFIED INDIVIDUAL(S) WHO WILL BE PERFORMING SITE INSPECTION.
 - ✓ ESTABLISH CONTACT PERSON FOR CONTRACTOR/SUBCONTRACTOR.
 - ✓ MAINTAIN DISTURBED AREA UNDER 5 ACRES AT ALL TIME.
 - ✓ INSTALL SEDIMENTATION FENCE OR EARTH DIKE AS INDICATED ON THE PLAN. A PLAN SHOWING SEDIMENTATION AND EROSION PROTECTION IS CONTAINED IN THIS REPORT. THE LOCATION OF SILT FENCE OR EARTH DIKE TO BE MAINTAINED THROUGHOUT CONSTRUCTION IS SHOWN ON SHEET C5 IN MAP POCKET #2
 - ✓ INSTALL CONSTRUCTION FENCE AS INDICATED ON THE PLAN. THE LOCATION OF CONSTRUCTION FENCE IS TO LIMIT WORK TO CS#1 UNTIL ADJACENT AREA IS STABILIZED AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION IS SHOWN ON SHEET C5 IN MAP POCKET #2
 - ✓ GRADE AND PREPARE STABILIZED CONSTRUCTION ENTRANCE AT LEAST 50 FEET IN LENGTH FROM RUSSELL ROAD.
 - ✓ CLEAR AREA TO CLEARING AND LIMIT LINES.
 - ✓ COMMENCE GRADING BY REMOVING TOPSOIL TO STOCKPILE AREA.
 - ✓ PROVIDE ADDITIONAL SEDIMENTATION CONTROL AROUND TOPSOIL STOCKPILE AS REQUIRED.
 - ✓ UTILIZE CS#2 FOR PLACEMENT OF EXCESS FILL. ESTABLISH CONTROLS ON THIS AREA.¹
 - ✓ INSTALL TEMPORARY DRAINAGE SWALE AND TEMPORARY SEDIMENTATION BASIN.
 - ✓ PLACE TOPSOIL ON LOT AREAS WHERE NO FURTHER DISTURBANCE WILL BE REQUIRED.
 - ✓ SEED AND MULCH TOP SOILED AREAS.
 - ✓ CONSTRUCT ALL UNDERGROUND UTILITIES.
 - ✓ WHEN AREA WILL NOT BE DISTURBED FOR 2 WEEKS, TEMPORARILY MULCH THESE AREAS.
 - ✓ PROTECT ALL CATCH BASINS AS SHOWN ON THE PLAN.
 - ✓ CLEAN ANY ACCUMULATED SILT FROM TEMPORARY SEDIMENTATION BASIN.
 - ✓ TOPSOIL, SEED AND MULCH DETENTION FACILITY.
 - ✓ PERFORM DEEP RIPPING AND DECOMPACTION ON AREAS TO RECEIVE SUBGRADE MATERIAL FOR ROADWAY PAVEMENT, DRIVEWAYS OR LAWNS.
 - ✓ PLACE SUBBASE MATERIAL FOR ROADWAY AREA.
 - ✓ PREPARE FINAL GRADES OF BALANCE OF AREA.
 - ✓ TOPSOIL AND SEED THE BALANCE OF THE AREA.
 - ✓ MAINTAIN AREA UNTIL ADEQUATE GRASS GROWTH IS ACHIEVED.
 - ✓ MAINTAIN THIS AREA CLEAN OF DEBRIS.
- OIL AND GREASE SPILLS FROM EQUIPMENT SHALL BE TREATED IMMEDIATELY.

EROSION AND SEDIMENT CONTROL NOTES

1. THIS PROJECT IS AUTHORIZED UNDER NYSDEC PERMIT GP-0-10-001.
2. ANY CONTRACTOR INVOLVED IN EARTHWORK ACTIVITIES, INCLUDING BUT NOT LIMITED TO: CLEARING, GRADING AND TRENCHING, SHALL REVIEW ALL PERMIT CONDITIONS AND CERTIFY UNDERSTANDING OF THESE CONDITIONS, IN WRITING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT ALL EROSION CONTROLS DESCRIBED IN GP-0-10-001, AND IT IS NOT THE INTENT OF THESE DRAWINGS TO REPLACE OR DISSEMINATE THE PERMIT REQUIREMENTS. THE CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH THE PERMIT AT ALL TIMES.
3. AT NO TIME, SHALL MORE THAN FIVE (5) ACRES REMAIN UNSTABILIZED. THE CONTRACTOR SHALL COORDINATE EARTHWORK ACTIVITIES AND IMPLEMENTATION OF SOIL STABILIZATION MEASURES TO ENSURE COMPLIANCE TO THIS PERMIT REQUIREMENT.
4. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION AND EQUIPMENT ENTRANCE WHENEVER PRACTICABLE.
5. DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF COMPLETION OR SUSPENSION OF GRADING OPERATIONS.
6. INSTALL TEMPORARY & PERMANENT SEEDING IN ACCORDANCE WITH THE NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL STANDARD AND SPECIFICATION FOR CRITICAL AREA SEEDING PAGE 3.3 AND FOR MULCHING PAGE 3.31.
7. INSTALL PERMANENT RIP-RAP AT ALL PIPE END SECTIONS AT TIME OF INSTALLATION OF PIPE.
8. IMPROVEMENTS SHOWN ARE FOR REFERENCE ONLY SEE OTHER SHEETS FOR SITE UTILITY AND GRADING.
9. PAVED AREAS ARE TO BE SWEEP DAILY TO REMOVE ANY SEDIMENT AND ALL NEWLY PAVED AREAS SHALL BE DIRECTED TO THE TEMPORARY OR FINAL SEDIMENT CONTROL BASINS.

TEMPORARY EROSION AND SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE LATEST EDITION OF NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (aka: THE BLUE BOOK) EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. IT IS THE INTENT OF THESE PLANS AND NOTES TO BE USED AS A GUIDE BY THE CONTRACTOR TO ENSURE THAT NO ERODED MATERIAL MIGRATES FROM THE SITE OR ENTERS ANY WATER COURSE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THIS GOAL IS MET, BY IMPLEMENTING THESE PLANS AND ANY ADDITIONAL MEANS THAT MAY BE NECESSARY. FURTHER MEASURES MAY BE REQUIRED BY THE CITY, VILLAGE, OR TOWN ENGINEER, WHILE MANY OF THE EROSION CONTROL DETAILS CONTAINED WITHIN THESE PLANS ARE TAKEN DIRECTLY FROM THE BLUE BOOK, THE CONTRACTOR SHOULD CONSIDER ANY OF THE DETAILS CONTAINED IN SECTION 7A OF THE BLUE BOOK AS ACCEPTABLE PRACTICE IN THE APPROPRIATE APPLICATION.
3. THE DEVELOPER/CONTRACTOR OR HIS BUILDER SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAINFALL EVENT THROUGH THE ENTIRE DEVELOPMENT PROCESS, TO ASSURE PROPER FUNCTION. SILTATION BARRIERS SHALL BE MAINTAINED IN GOOD CONDITION AND REINFORCED, EXTENDED, REPAIRED, RE-SEEDED AND PROTECTED FROM FURTHER EROSION. ALL SEDIMENT ACCUMULATED SHALL BE REMOVED AND CONTAINED IN APPROPRIATE SPILL AREAS. WATER SHALL BE APPLIED TO NEWLY SEEDDED AREAS AS NEEDED UNTIL GRASS COVER IS WELL ESTABLISHED. DURING THESE PERIODIC INSPECTIONS, THE FOLLOWING ITEMS SHOULD BE PAID PARTICULAR ATTENTION:
 - A. THE BASIN INLET LOCATIONS SHALL BE INSPECTED FOR SILT ACCUMULATION CAUSED BY THE LACK OF ESTABLISHED SURROUNDING VEGETATION.
 - B. CATCH BASINS SHALL BE CHECKED FOR SEDIMENT ACCUMULATION.
 - C. RIP-RAP OUTLET PROTECTION SHALL ALSO BE CHECKED FOR SEDIMENT ACCUMULATION. IF SIGNIFICANT AMOUNTS OF SEDIMENT ACCUMULATE, RIP-RAP SHALL BE REMOVED AND REPLACED.
 - D. HAY/STRAW BALES AND SILT FENCING SHALL BE INSPECTED REGULARLY FOR UNDERMINING AND DETERIORATION.
 - E. SEEDDED/MULCHED AREAS SHALL BE INSPECTED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE REPAIRED AS NECESSARY.
4. EROSION CONTROL DEVICES SHALL NOT BE REMOVED UNTIL THE CITY, VILLAGE OR TOWN ENGINEER HAS APPROVED FINAL STABILIZATION.
5. HAY BALE CHECK DAMS AND SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH PLAN AND DETAIL LOCATIONS AND AS DESCRIBED IN GP-0-10-001.
6. PRIOR TO CONSTRUCTION OF ANY PHASE, THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.
7. CONSTRUCTION TRAFFIC SHALL NOT CROSS STREAMS OR DITCHES EXCEPT AT SUITABLE CROSSING FACILITIES. EQUIPMENT SHALL NOT OPERATE, UNNECESSARILY.
8. EXISTING PAVEMENT AREAS SHALL BE CLEANED AT THE DIRECTION OF THE CITY, VILLAGE, OR TOWN ENGINEER.
9. WATER TRUCKS SHALL BE USED TO MINIMIZE DUST POLLUTION ON SITE, AND ON ADJACENT ROADWAYS ROADWAY AREAS AS DIRECTED BY THE CITY, VILLAGE, OR TOWN ENGINEER.
10. ANY WATER PUMPED AS A RESULT OF DEWATERING ACTIVITIES SHALL BE PUMPED INTO A DEWATERING PIT.
11. CONCRETE WASHOUT AREAS SHALL BE DESIGNATED BY THE DEVELOPER OR CONTRACTOR AND PROTECTED IN ACCORDANCE WITH GP-0-10-001.
12. ALL AREAS DISTURBED IN THE CONSTRUCTION PROCESS SHALL BE RE-SEEDDED AS SOON AS PRACTICABLE. PARTICULAR CARE SHALL BE TAKEN TO RE-SEED DISTURBED SLOPES IN A TIMELY MANNER.
13. IT IS RECOMMENDED THAT ALL EROSION CONTROL DEVICES BE PLACED FOR THE ENTIRE PHASE AS SHOWN ON THE EROSION CONTROL PLAN. PLACEMENT MAY BE DONE, HOWEVER, TO SUIT CONSTRUCTION SEQUENCING AS APPROVED BY THE CITY, VILLAGE, OR TOWN ENGINEER.
14. STOCK PILES SHALL BE PROTECTED BY HAY BALE BERMS PER GP-0-10-001. THESE BERMS SHALL BE MAINTAINED IN GOOD CONDITION UNTIL SAID STOCK PILES ARE REMOVED AND STOCK PILING AREAS ARE PERMANENTLY STABILIZED.
15. STOCK PILES SHALL BE SEEDDED UPON SUSPENSION OF WORK OR IF MATERIAL IS NOT TO BE USED WITHIN 14 DAYS, IN ACCORDANCE WITH GP-0-10-001.
16. IN NO CASE SHALL ERODIBLE MATERIALS BE STOCKPILED WITHIN 25 FEET OF ANY DITCH, STREAM OR OTHER SURFACE WATER BODY.
17. SILT FENCING SHALL BE INSTALLED AT THE DOWN GRADIENT PERIMETERS OF ALL SLOPES TO BE GRADED, PRIOR TO GRADING OPERATIONS.
18. SEDIMENT STILLING BASINS SHALL BE UTILIZED TO PREVENT OFF SITE EROSION.
19. THE STORMWATER DETENTION PONDS AND CUT-OFF SWALES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF ADJACENT AREAS.
20. WHERE NECESSARY, TEMPORARY GRADING WILL BE REQUIRED TO ROUTE STORMWATER TO CUT OFF SWALES AND DETENTION PONDS.
21. PRIOR TO ANY CONSTRUCTION ALL FEDERAL JURISDICTIONAL WETLANDS SHALL BE FIELD LOCATED AND DELINEATED WITH SILT FENCING. THE SILT FENCE SHALL BE LOCATED BETWEEN THE BUFFER AND THE JOB SITE.
22. CLEARING OPERATIONS SHALL BE LIMITED TO ACTIVE WORK AREAS.
23. CARE SHALL BE TAKEN TO PRESERVE AS MUCH EXISTING VEGETATION AS POSSIBLE AND HEALTHY TREES OF DESIRABLE SPECIES SHALL BE PROTECTED.
24. RIP-RAP OUTLET PROTECTION: RIP-RAP SHALL BE PROVIDED AT CULVERT LOCATIONS AS INDICATED ON THESE DRAWINGS. THE RIP-RAP SHALL PROTECT SIDE SLOPES FROM EROSION, AND SHALL BE ESTABLISHED AS THE CULVERT IS INSTALLED.
25. STONE CHECK DAMS SHALL BE PROVIDED AT ALL STORMWATER OUTLETS UNTIL VEGETATION HAS BEEN STABILIZED.
26. STORM INLET PROTECTION: IMMEDIATELY FOLLOWING COMPLETION OF ANY AND ALL OF THE PROPOSED STORM DRAIN INLETS, STORM DRAIN INLET PROTECTION SHALL BE CONSTRUCTED. THIS PROTECTION SHALL FUNCTION TO PREVENT SEDIMENT ENTRANCE INTO THE STORM DRAINS. PROTECTION SHALL BE MAINTAINED IN GOOD CONDITION UNTIL THE DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.
27. RECP (ROLLED EROSION CONTROL PRODUCT) SHALL BE JUTE OR EXCELSSOR MATTING PROVIDE 4" MIN TOPSOIL AND SEED WITH KENTUCKY BLUEGRASS, CREEPING RED FESCUE AND PERENIAL RYGRASS AT A RATE OF 25, 20 AND 10 LBS PER ACRE RESPECTIVELY.
28. EROSION AND SEDIMENT CONTROL MEASURES SHALL INCLUDE A SWPPP MONITORING PROFESSIONAL AS WELL AS COORDINATION WITH TOWN OF BETHELEM STORMWATER COORDINATOR IN ADDITION TO INSPECTION ROLES OF CONTRACTOR AND/OR BUILDER.



TEMPORARY SEDIMENT TRAP SUMMARY TABLE

DESCRIPTION	TRAP No.1	TRAP No.2	TRAP No.3
TYPE	I	I	I
DRAINAGE AREA	4.6 ACRES	2.2 ACRES	1.4 ACRES
STORAGE REQ'D	612 C.Y.	293 C.Y.	187 C.Y.
STORAGE PROVIDED*	633 C.Y.	300 C.Y.	200 C.Y.
PIPE OUTLET	8"	8"	8"
DEPTH BELOW OUTLET	12"	12"	8"
EMBANKMENT HT.	5'	5'	5'
SOX CLEANOUT ELEVATION	201	201	201
INVERT OUT ELEVATION	199	199	199
LENGTH x WIDTH x HT*	95'x36x5'	41'x40x5'	40'x27x5'

*STORAGE CAPACITY FROM THE TOP ELEVATION OF THE RISER PIPE OUTLET TO THE TRAP BOTTOM

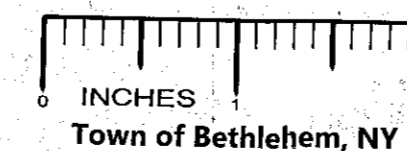
TEMPORARY SWALE SUMMARY TABLE

SWALE	LENGTH	GRADE	TYPE*	DRAINAGE AREA
S1	650'	1%	A, 1	2.9 ACRES
S2	370'	1%	A, 1	1.6 ACRES
S3	500'	1%	A, 1	1.2 ACRES
S4	70'	1%	A, 1	0.2 ACRES

* ALL TEMPORARY SWALES SHALL RECEIVE RECP

CONSTRUCTION SEQUENCE SUMMARY TABLE

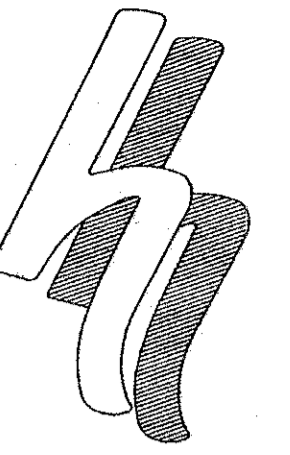
CS#	DISTURBED AREA
CS1	4.58 ACRES
CS2	2.28 ACRES



FOR MUNICIPAL APPROVAL ONLY-NOT INTENDED FOR CONSTRUCTION

APPLICANT: MARINI LAND 1, INC.
TOWN OF BETHELEM PLANNING BOARD APPROVAL

Town of Bethlehem Planning Board
By direction of the Chairman
these plans are hereby Approved.
See first sheet for date & signature.

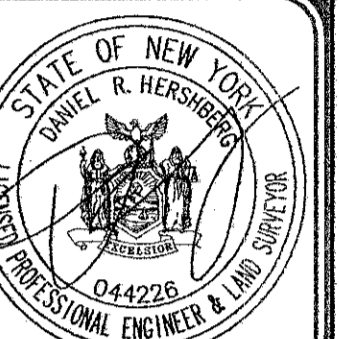


HERSHBERG & HERSHBERG

Consulting Engineers and Land Surveyors

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Albany, New York 12203

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DATE	TOWN COMMENT LETTER #	TOWN REVIEW COMMENTS
11/25/13		
11/26/13		

REVISIONS

PROPOSED EROSION AND SEDIMENT CONTROL PLAN
BLESSINGS CORNER
No. 572 RUSSELL ROAD
TOWN OF BETHELEM, ALBANY COUNTY, NEW YORK

DATE: 9/25/13
CHK: DRH
SCALE: 1"=50'
FILE: 060032

C5