

GRADING NOTES:

1. A MINIMUM 18"x24" SIGN STATING "STORMWATER MANAGEMENT PRACTICE - NAME OF THE PRACTICE, DO NOT REMOVE OR ALTER" SHALL BE ERECTED IN THE IMMEDIATE VICINITY OF ALL PRACTICES.
2. PROJECT IDENTIFICATION - (SPDES CONSTRUCTION PERMIT #, OTHER) MUST BE MAINTAINED IN ACCORDANCE WITH O&M PLAN.
3. SOIL RESTORATION SHALL BE COMPLETED IN ALL AREAS OF CUT OR FILL. THESE AREAS SHALL RECEIVE AERATION AND AN ADDITIONAL 6 INCHES OF TOPSOIL.
4. SOIL RESTORATION SHALL BE COMPLETED IN ALL AREAS WHERE TOPSOIL IS STRIPPED. THIS SHALL INCLUDE THE REPLACEMENT OF A MINIMUM 6 INCHES OF TOPSOIL.
5. ALL GRADING TO BE 3:1 (HORIZONTAL: VERTICAL) MAXIMUM SLOPE. GRADED LAWN/YARD AREAS, DRIVEWAYS AND ASSOCIATED LOT GRADING AS SHOWN ON THIS PLAN ARE CONCEPTUAL AND ARE INCLUDED FOR MUNICIPAL REVIEW PURPOSES. ACTUAL BUILDING LOCATIONS AND CONFIGURATIONS, AND RELATED SITE GRADING, MAY VARY FROM WHAT IS SHOWN. HOWEVER, ANY SUBSTANTIAL VARIATION FROM WHAT IS SHOWN ON ANY LOT, AS DETERMINED BY THE TOWN BUILDING INSPECTOR, SHALL BE SUBJECT TO FURTHER REVIEW BY THE TOWN DEPARTMENT OF PUBLIC WORKS (AND POSSIBLY OTHER TOWN ENTITIES) PRIOR TO THE ISSUANCE OF A BUILDING PERMIT FOR THAT LOT.
7. ALL CONTROLLED FILL SHALL BE CERTIFIED BY A LICENSED SOILS ENGINEER, THAT PLACEMENT OF THE MATERIAL WAS DONE IN A MANNER SUITABLE FOR THE CONSTRUCTION OF THE ROAD AND THE INSTALLATION OF WATER MAIN, STORM SEWERS, AND SANITARY SEWERS. TO THIS END, NO FILL SHALL BE PLACED IN AREAS IDENTIFIED ON THESE PLANS AS CONTROLLED FILL AREAS UNTIL THE CERTIFYING SOILS ENGINEER HAS BEEN CONSULTED.
8. ALL PIPES AND APPURTENANCES SHALL BE INSTALLED ACCORDING TO THE TOWN OF BETHLEHEM WATER AND SEWER AUTHORITY STANDARD SPECIFICATIONS.
9. THE CONTRACTOR SHALL VERIFY SIZE, TYPE, HORIZONTAL AND VERTICAL LOCATION OF THE MAIN AT THE PROPOSED CONNECTION POINTS PRIOR TO CONSTRUCTION. CONFLICTS WITH OTHER UTILITIES TO BE CONSTRUCTED ARE TO BE AVOIDED. DISCREPANCIES OR OTHER CONFLICTS WITH EXISTING UTILITIES SHALL BE REPORTED TO THE WATER SUPERINTENDENT IMMEDIATELY.
10. MINIMUM WATER MAIN DEPTH (TOP OF PIPE TO FINISH GRADE) SHALL BE 5'-0".
11. ALL FILL BELOW WATER MAIN SHALL BE COMPACTED GRANULAR MATERIAL (MIN. 95% PROCTOR TYP.).
12. ALL TRENCH BACKFILL SHALL BE MECHANICALLY COMPACTED TO PREVENT SETTLEMENT. TOP TRENCH WITH 12" MIN. APPROVED GRAVEL IN PAVED AREAS AND ALONG SIDE OF EXISTING ROAD FOR SHOULDER BASE. REPLACE DAMAGED PAVEMENTS WITH LIKE KIND AND LIKE THICKNESS.
13. THE DEVELOPER SHALL HAVE A SITE-SPECIFIC SOILS REPORT WRITTEN FOR ANY LOT THAT HAS A PROPOSED FOUNDATION FOOT PRINT THAT IS LOCATED ON THE DOWNHILL SIDE OF THE SLOPE SET BACK LINE AS SHOWN ON THIS SHEET. ADDRESSING THE SLOPE STABILITY OF THE SLOPE. THE REPORT SHALL BE PREPARED BY A LICENSED GEOTECHNICAL ENGINEER. THE REPORT SHALL BE SUBMITTED TO THE TOWN BUILDING INSPECTOR PRIOR TO THE ISSUANCE OF A BUILDING PERMIT FOR THAT LOT. THE DEVELOPER SHALL ALSO INCLUDE A DEED NOTICE IN THE DEED FOR THAT LOT, AS WRITTEN BELOW. THIS FOLLOWS TO, BUT IS NOT LIMITED TO, THE FOLLOWING LOTS: LOT 4.
14. IN ADDITION TO THE ABOVE LOTS, THE DEVELOPER SHALL INCLUDE A DEED NOTICE IN THE DEED FOR ANY OTHER LOT THAT HAS A SLOPE SET BACK LINE SHOWN ON IT AS SHOWN ON THIS SHEET. THE DEED NOTICE SHALL BE WRITTEN AS IN NOTE 16 BELOW. THIS PERTAINS TO, BUT IS NOT LIMITED TO, THE FOLLOWING LOTS: LOT 3, LOT 4, LOT 5, LOT 6, LOT 7, LOT 8, LOT 9, LOT 10, LOT 11, LOT 12, LOT 13, LOT 14, LOT 15, LOT 16, LOT 17, LOT 18, LOT 19, LOT 20, LOT 21, LOT 22, LOT 23, LOT 24.
15. THE DEVELOPER SHALL PLACE A CONDITION IN THE CONTRACT FOR PURCHASE AND SALE OF REAL ESTATE FOR ANY LOT THAT WILL HAVE A DEED NOTICE. THE CONDITION WILL STATE THAT THE DEED FOR THE TRANSACTION WILL HAVE A DEED NOTICE AS WRITTEN IN NOTE 16 BELOW.
16. THE FOLLOWING STATEMENT IS THE SLOPE-RELATED DEED NOTICE TO BE PLACED IN THE DEEDS OF LOTS 3-9, 23 AND 24: "SUBJECT TO THIS NOTICE OF SITE CONDITIONS, WHICH SHOULD BE CONSIDERED BEFORE FUTURE IMPROVEMENTS ARE MADE TO THE LOT, DUE TO THE SLOPE-PRONE NATURE OF THE SOIL CONDITIONS ASSOCIATED WITH THE SLOPES ON THIS PROPERTY, THE SERVICES OF A LICENSED GEOTECHNICAL ENGINEER SHOULD BE OBTAINED BEFORE ANY CHANGES ARE MADE ON THE PROPERTY, SUCH AS PLACING FILL, RE-GRADING, BUILDING RETAINING WALLS, CUTTING TREES, INSTALLING SWIMMING POOLS, CHANGING SURFACE OR SUB-SURFACE DRAINAGE PATTERNS, ALTERING ANY STREAMS THAT MAY BE ON THE PROPERTY, ETC. A SITE-SPECIFIC SOILS REPORT ADDRESSING THE ISSUE OF SLOPE STABILITY MAY HAVE BEEN REQUIRED FOR TOWN SUBDIVISION APPROVAL OF THIS LOT, IN WHICH CASE THE REPORT WOULD BE ON FILE AND AVAILABLE AT THE TOWN OF BETHLEHEM BUILDING DEPARTMENT."
17. THIS PLAN SHALL NOT BE USED TO ESTABLISH BEARING CAPACITIES FOR STRUCTURAL FOUNDATIONS. SOIL BEARING CAPACITIES SHALL BE DETERMINED BY BORING LOGS AND DETERMINATION BY A PROFESSIONAL GEOTECHNICAL ENGINEER.
18. A SLOPE STABILITY EVALUATION, DATED MARCH 25, 2016, WAS PREPARED BY DENT ENGINEERING. ALL RECOMMENDATIONS PROVIDED IN THE EVALUATION SHALL BE FOLLOWED DURING CONSTRUCTION.
19. PRIOR TO PLACING FILLS OVER EXISTING SLOPES, THE AREAS SHOULD BE CLEARED AND STRIPPED OF TOPSOIL AND SURFICIAL ORGANIC MATTER.
20. ALL EXISTING UNSUITABLE FILLS SHALL BE REMOVED FROM THE SOUTH SIDE OF THE WET POND (STREET #15) AND REPLACED WITH COMPACTED SAND AND GRAVEL. WHERE SAND AND GRAVEL MATERIALS ARE IMPORTED THE BASIN SHOULD BE LINED WITH A MINIMUM 18" CLAY CAP. THE CONTRACTOR MAY PERFORM SUPPLEMENTAL INVESTIGATION AT THE TIME OF CONSTRUCTION TO BE WITNESSED BY THE GEOTECHNICAL ENGINEER TO DETERMINE POTENTIAL STABILITY OF ON-SITE SOILS IN THIS AREA.
21. FILLING AND BUILDING CONSTRUCTION SHOULD NOT BE PERMITTED BEYOND THE SETBACK LINES SHOWN ON LOTS #485.

TEST PIT LOG	
TEST PIT	SOIL PROFILE
TP 1	0-18" BR. LOAMY CLAY TOPSOIL 18-72" BR. CLAY (FILL) 72-102" LT. BR. SAND 102-120" BR. SILTY CLAY GROUNDWATER SEEPAGE @ 120" GW ELEV.=168.0
TP 2	0-12" BR. LOAMY CLAY TOPSOIL 12-60" BR. CLAY W/ DEBRIS (FILL) 60-102" LT. BR. SAND 102-120" BR. SILTY CLAY NO GROUNDWATER ENCOUNTERED
TP 3	0-12" BR. LOAMY SILT TOPSOIL 12-44" BR. SILTY CLAY 44-108" BR. SILTY CLAY WITH MOTTLING INFILTRATION RATE @ 48" = 0 MIN./IN NO GROUNDWATER ENCOUNTERED
TP 4	0-12" DK. BR. SANDY LOAM TOPSOIL 12-24" OR. BR. SANDY SILT W/ MOTTLING 24-120" BR. SILTY CLAY MOIST GROUNDWATER SEEPAGE @ 120" GW ELEV.=170.0
TP 5	0-12" BR. LOAMY SILT TOPSOIL 12-21" OR. BR. SANDY SILT W/ MOTTLING 21-108" BR. SILTY CLAY MOIST GROUNDWATER SEEPAGE @ 120" GW ELEV.=170.5
TP 6	0-12" BR. LOAMY SILT TOPSOIL 12-24" OR. BR. SILTY W/ MOTTLING 24-54" BR. SILTY CLAY MOIST AT BOTTOM 54-120" DENSE BR. SILTY CLAY LAYERED NO GROUNDWATER ENCOUNTERED
TP 7	0-12" BR. LOAMY SILT TOPSOIL 12-18" OR. BR. SILTY W/ MOTTLING 18-60" BR. SILTY CLAY MOIST AT BOTTOM 60-108" DENSE BR. SILTY CLAY LAYERED NO GROUNDWATER ENCOUNTERED
TP 8	0-12" BR. LOAMY SAND TOPSOIL 12-30" BR. SAND 30-120" BR. SILTY CLAY LAYERED GROUNDWATER SEEPAGE @ 120" GW ELEV.=166.0

*TEST PITS PERFORMED BY C. LONGO OF INGALLS & ASSOCIATES, LLP ON JUNE 19, 2015.

LEGEND

EXISTING PROPERTY LINE	---
PROPOSED PROPERTY LINE	---
PROPOSED SETBACK	---
ADJACENT PROPERTY LINE	---
PROPOSED EASEMENT	---
EXISTING CONTOUR	200'
EXISTING TREELINE	---
EXISTING HYDRANT	HYD
EXISTING UTILITY POLE	19
EXISTING SANITARY MANHOLE	19
EXISTING SANITARY SEWER	---
EXISTING WATER MAIN	---
WETLAND BOUNDARY	---
WETLAND IMPACT	---
LIMITS OF STEEP SLOPES	---
PROPOSED LIMITS OF DISTURBANCE	---
PROPOSED CONTOUR	200'
PROPOSED TREELINE	---
PROPOSED SANITARY MANHOLE	19
PROPOSED SANITARY MAIN	---
PROPOSED SANITARY LATERAL	---
PROPOSED HYDRANT	HYD
PROPOSED WATER MAIN	---
PROPOSED WATER SERVICE	---
PROPOSED STORM SEWER	---
PROPOSED CATCH BASIN	---

WATERS OF THE UNITED STATES

WETLAND	AREA
WETLAND A	1.81± AC
WETLAND TOTAL	1.81± AC
STREAM	LENGTH
STREAM 1	85± LF
STREAM TOTAL	85± LF

IMPACTS TO WATERS OF THE UNITED STATES

WETLAND IMPACT	AREA
IMPACT AREA 1	300± SF
IMPACT AREA 2	2,800± SF
IMPACT AREA 3	600± SF
IMPACT AREA 4	5,700± SF
IMPACT AREA 5	400± SF
WETLAND TOTAL	9,800± SF (0.22 AC)

WETLAND NOTES:

- 1) WETLAND LIMITS SHOWN HEREIN: AREA FROM A JULY 14, 2014 FIELD DELINEATION BY GEOFF LAWTON OF INGALLS & ASSOCIATES, LLP.
- 2) NO WETLAND SURVEY SHALL BE DEEMED FINAL WITHOUT A JURISDICTIONAL DETERMINATION FROM THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE) AND/OR THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSED).

PLANTING SCHEDULE

ABBREV.	COMMON NAME	SCIENTIFIC NAME	SIZE	QUANTITY
As	SUGAR MAPLE	ACER SACCHARUM	3" col.	14
Gl	HONEY LOCUST	GLEDISIA TRIACANTHOS	3" col.	10
Pc	CHANTICLEER CALLERY PEAR	PIRUS CALLERYANA CHANTICLEER	3" col.	9
Ar	RED MAPLE	ACER RUBRUM	3" col.	14
Pg	NORWAY SPRUCE	PICEAS ABIES	8'-10' HT.	10
Pg	WHITE SPRUCE	PICEAS GLAUCA	8'-10' HT.	10
Ac	WHITE FIR	ABIES CONCOLOR	8'-10' HT.	9

LANDSCAPING NOTES:

1. TREE PROTECTION/DEED RESTRICTED AREA PROVIDED ALONG REAR OF LOTS 11-14 TO PROHIBIT FUTURE PROPERTY OWNERS FROM CLEARING, BURNING, CUTTING OR DESTROYING OF TREES OR VEGETATION, EXCEPT REMOVAL OR TRIMMING OF VEGETATION HAZARDOUS TO PERSON OR PROPERTY, OR OF TIMBER DOWNED OR DAMAGED DUE TO DISEASE OR NATURAL DISASTER.
2. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES REGARDING LANDSCAPING.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE WATERING AND THE MAINTENANCE OF ALL LANDSCAPED AREAS UNTIL THIRTY (30) DAYS FOLLOWING THE PLANTING OF THE GRASS AND SHRUBS, AND SHALL MAINTAIN A ONE (1) YEAR WARRANTY ON ALL TREES AND SHRUBS WHICH HAVE BEEN PLANTED BY THE CONTRACTOR ON SITE. ANY TREES OR SHRUBS THAT ARE DEAD OR DYING DURING THE WARRANTY PERIOD SHALL BE REPLACED WITH THE SAME SPECIES.
4. ALL EXISTING TREES TO REMAIN ON SITE, SHALL BE PROTECTED DURING CONSTRUCTION.
5. ALL PLANT MATERIAL SHALL CONFORM TO, AND BE PLANTED IN ACCORDANCE WITH THE STANDARDS RECOMMENDED BY THE AMERICAN STANDARD NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
6. TIME OF PLANTING SHALL GENERALLY BE PRIOR TO JUNE 15 AND AFTER SEPTEMBER 1, OTHER PLANTING REQUIREMENTS SHALL BE AS REQUIRED ABOVE AS WELL AS FOR NURSERY AND LANDSCAPER RECOMMENDATIONS.
7. ALL PLANT SIZES INDICATED ARE MINIMUM AT TIME OF PLANTING.
8. ALL DISTURBED AREAS TO BE TOPSOILED AND SEEDED USING ENVIRONMENTAL SEED MIX OR APPROVED EQUAL.

ALBANY COUNTY DEPARTMENT OF HEALTH

DIVISION OF ENVIRONMENTAL HEALTH SERVICE
By direction of the Commissioner of Health, these plans are hereby approved. See first sheet for date and signature.

ALBANY COUNTY HEALTH DEPARTMENT APPROVAL

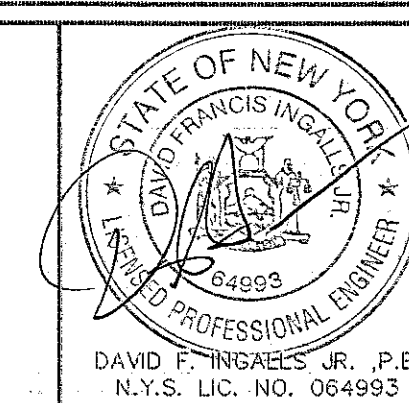
FOR MUNICIPAL APPROVAL ONLY
NOT FOR CONSTRUCTION

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

NO.	DATE	REVISIONS	BY:
10	2/07/17	REVISIONS PER TOWN COMMENTS	JCH
9	1/24/17	REVISIONS PER TOWN COMMENTS	JCH
8	9/09/16	REVISIONS PER PRELIMINARY PLAT COMMENTS	PJT
7	7/15/16	REVISIONS PER TOWN & IDE COMMENTS	PJT
6	6/27/16	REVISION PER TOWN COMMENT	PJT
5	5/18/16	REVISION PER TOWN REQUEST & TOWN COMMENTS	PJT
4	3/21/16	REVISION PER GEOTECH RECOMMENDATIONS	CDL
3	2/12/16	REVISION PER TOWN & IDE COMMENTS	CDL
2	1/28/16	CORRECTED UTILITY R/W INFORMATION	CDL
1	12/10/15	REVISION PER ACCE & TOWN ENGINEERING COMMENTS	CDL

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GRADING & PLANTING PLAN

BENDER FARMS
250 & 288 BENDER LANE
TOWN OF BETHLEHEM
STATE OF NEW YORK
DATE: MAY 13, 2015
CHECKED BY: D.F.L.
JOB NO. 14-056
SCALE: 1"=50'
DRAWN BY: C.D.L.
CADD FILE: 14-066 Grading.dwg
SHEET 4 OF 11