SPECIFICATIONS

THESE SPECIFICATIONS ARE WRITTEN FOR THE CLEAN UTILITY CORRIDOR INSTALLATION AND SURFACE SCRAPING AND RESTORATION ACTIVITIES.

PART 1 - GENERAL

1.01 DESCRIPTION
WORK FOR THIS PROJECT GENERALLY INCLUDES EXCAVATION OF SOIL AND REPLACEMENT WITH CLEAN FILL, SPECIFICALLY INCLUDING BUT NOT LIMITED TO, SOIL EROSION AND SEDIMENT CONTROLS, UTILITY CLEARANCE, DUST/ODOR CONTROL, CLEARING AND GRUBBING, SURVEY, CONCRETE REMOVAL AND DISPOSAL, SOIL EXCAVATION, EXCAVATION SUPPORT, SOIL HANDLING AND MANAGEMENT, OFF-SITE DISPOSAL, PLACEMENT OF CLEAN FILL, INSTALLATION OF GEOTEXTILE AND DEMARCATION LAYERS, SITE RESTORATION, DECONTAMINATION, AS INDICATED, SPECIFIED, AND REQUIRED. PERFORM WORK IN ACCORDANCE WITH OWNER AND IN ACCORDANCE WITH CONDITIONS OF CONTRACT.

1.02 SUBMITTALS
CONTRACTOR SHALL SUBMIT THE FOLLOWING FOR REVIEW AND APPROVAL:
A. A SOIL MANAGEMENT PLAN THAT INCLUDES A DESCRIPTION OF SHEETING/BRACING AND EXCAVATION METHODOLOGY AND TECHNIQUES TO BE USED FOR THE EXCAVATION
B. SAMPLES OF ALL CLEAN FILL WITH SUPPORTING ANALYTICAL RESULTS TO MEET REQUIREMENTS OF DER-10.
C. INFORMATION ON THE WASTE DISPOSAL FACILITY WHERE THE EXCAVATED SOIL WILL BE DISPOSED.
D. A DUST AND ODOR CONTROL PLAN.
E. A DECONTAMINATION PLAN.

1.03 SITE CONDITIONS
A. SUBSURFACE CONDITIONS: INFORMATION PERTAINING TO DATA ON THE SUBSURFACE CONDITIONS IS INCLUDED IN THE "FINAL REMEDIAL INVESTIGATION REPORT FOR THE PATCHOGUE FORMER MGP SITE, PATCHOGUE, SUFFOLK COUNTY, NEW YORK" (RIR), THE "PRELIMINARY SITE ASSESSMENT REPORT, ORDER ON CONSENT D1-0001-99-05, NYSDEC SITE NO. 1-52-182, FORMER PATCHOGUE MGP SITE, VILLAGE OF PATCHOGUE, SUFFOLK COUNTY, NEW YORK" (PSA) AND THE "FOCUSED FEASIBILITY STUDY, PATCHOGUE FORMER MANUFACTURED GAS PLANT SITE, NYSDEC SITE NO.1-52-182, VILLAGE OF PATCHOGUE, SUFFOLK COUNTY, NEW YORK." IT IS NOT INTENDED AS A REPRESENTATION OR WARRANTY OF CONTINUITY OF SUCH CONDITIONS BETWEEN SOIL BORINGS. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR.
B. EXISTING STRUCTURES: THE DRAWINGS SHOW HISTORIC SUBSURFACE STRUCTURES. THIS INFORMATION HAS BEEN OBTAINED FROM EXISTING RECORDS. IT IS NOT GUARANTEED TO BE COMPLETE OR CORRECT, AND IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR. CONTRACTOR SHALL DETERMINE THE PRESENCE, LOCATIONS AND DIMENSIONS OF SUBSURFACE STRUCTURES IN THE EXCAVATION AREA.
C. EXISTING UTILITIES: CONTRACTOR SHALL LOCATE EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN THE WORK AREA.
   a. IF EXISTING UTILITIES ARE TO REMAIN, THE CONSTRUCTOR SHALL PROVIDE ADEQUATE MEANS OF PROTECTION DURING EXCAVATION.
   b. EXISTING OVERHEAD UTILITIES SHALL REMAIN, AND WORK ACTIVITIES SHALL BE CONDUCTED SO THAT INTERFERENCE, CONTACT OR DAMAGE TO THESE LINES SHALL NOT OCCUR.
   c. SHOULD INCORRECTLY MAPPED UTILITIES BE ENCOUNTERED DURING EXCAVATION, CONSULT THE ENGINEER OR OWNER IMMEDIATELY.
   d. DEMOLISH AND COMPLETELY REMOVE UTILITIES INDICATED TO BE REMOVED. COORDINATE WITH UTILITY COMPANIES FOR SHUT-OFF OF SERVICES IF LINES ARE ACTIVE.
D. DUST AND ODOR CONTROLS: CONTRACTOR SHALL MONITOR FOR DUST AND ODOR CONTROL IN ACCORDANCE WITH THEIR APPROVED PLAN. CONTRACTOR SHALL CONDUCT ACTIVITIES SO AS TO MINIMIZE CREATION AND DISPERSION OF DUST. DUST SHALL BE CONTROLLED WITH WATER SPRAYS OR OTHER APPROVED METHODS. CALCIUM CHLORIDE OR OTHER CHEMICAL METHODS SHALL NOT BE USED FOR DUST CONTROL.
E. DECONTAMINATION AREA: CONTRACTOR SHALL IMPLEMENT THE WORK IN ACCORDANCE WITH THEIR HEALTH AND SAFETY PLAN. THREE WORK ZONES SHALL BE ESTABLISHED, INCLUDING THE EXCLUSION ZONE, THE CONTAMINATION REDUCTION ZONE AND THE SUPPORT ZONE. THE DECONTAMINATION AREA SHALL BE LOCATED WITHIN THE CONTAMINATION REDUCTION ZONE AND SHALL INCLUDE PERSONNEL DECONTAMINATION AND EQUIPMENT DECONTAMINATION PADS.

1.04 MATERIAL HANDLING, STORAGE AND DISPOSAL
A. SITE MATERIALS WILL BE STORED SO AS TO PROVIDE ACCESS AT ALL TIMES TO THE SITE AND WORK AREAS.
B. EXCAVATED SOILS WILL BE SITUATED ADJACENT TO THE EXCAVATION AREAS AND WITHIN THE LIMITS OF THE SURFACE SCRAPING AREA ON POLYETHLYENE SHEETING IN A MANNER THAT ALLOWS AND PROMOTES DRAINAGE OF GROUNDWATER INTO THE EXCAVATION AREA. ONCE THE SOIL IS DEWATERED, THE SOIL WILL BE STAGED IN ACCORDANCE WITH THE EXCAVATION PLAN AND/OR DISPOSED OFF-SITE AT AN APPROPRIATE FACILITY.
C. STORE GEOTEXTILE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

1.05 COORDINATION
A. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE WORK REQUIRED HEREIN AND THE WORK OF ANY OTHER CONTRACTOR OR UTILITY SERVICE COMPANY PERFORMING ADDITIONAL WORK RELATED TO THE PROJECT AT THE SITE.

PART 2-PRODUCTS

2.01 MATERIALS-BACKFILL
A. WITHIN THE WATERTABLE:BACKFILL MATERIALS SHALL CONSIST OF COARSE AGGREGATE IN ACCORDANCE WITH NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR COARSE AGGREGATE SIZE DESIGNATION TYPE 1 (OR APPROVED EQUAL). THE NYSDOT DESIGNATION INCLUDES THE FOLLOWING:

a. SIEVE SIZE	PERCENT PASSING
1 INCH	100%
½ INCH	90-100%
¼ INCH	0-15%

B. ABOVE THE GROUNDWATER TABLE (UP TO 6 INCHES BELOW GRADE): THE CLEAN FILL SHALL BE A WELL GRADED SANDY SOIL CONSISTING OF CLEAN NATURALLY OCCURING OR BLENDED SOIL AND AGGREGATE MIX CONFORMING TO THE FOLLOWING GRADATION (OR APROVED EQUAL):

a. SIEVE SIZE	PERCENT PASSING
2 INCH	100%
¾ INCH	70-100%
NO. 4	30-80%
NO. 50	10-35%
NO. 200	5-12%

C. SURFACE FILL (FROM GROUND SURFACE TO 6 INCHES BELOW GRADE): THE CLEAN FILL SHALL BE COARSE AGGREGATE IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS FOR COARSE AGGREGATE SIZE DESIGNATION TYPE 2 (OR APPROVED EQUAL). THE NYSDOT DESIGNATION INCLUDES THE FOLLOWING:

a. SIEVE SIZE	PERCENT PASSING
1 ½ INCH	100%
1 INCH	90-100%
½ INCH	0-15%

2.02 MATERIALS-GEOTEXTILE
A.GEOTEXTILE FABRIC SHALL BE MIRAFI 140 N, POLYPROPYLENE NEEDLEPUNCHED NONWOVEN GEOTEXTILE, OR APPROVED EQUAL.
B. DEMARCATION LAYER SHALL BE CONSTRUCTION FENCE, CONSISTING OF LIGHTWEIGHT POLYETHYLENE SAFETY FENCE, ORANGE COLOR.

PART 3 - EXECUTION

3.01 ENVIRONMENTAL CONTROLS
A. CONTRACTOR SHALL INSTALL AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROLS IN ACCORDANCE WITH THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS". CONTROL SHALL IMPLEMENT PROCEDURES FOR DUST AND ODOR CONTROLS IN ACCORDANCE WITH APPROVED PLAN.

3.02 TEMPORARY FACILITIES
A. CONTRACTOR SHALL PROVIDE ALL NECESSARY TOILET AND LAVATORY FACILITIES FOR THE DURATION OF THE WORK.

3.03 EQUIPMENT AND MATERIAL STAGING AREAS
A. CONTRACTOR WILL CONSTRUCT THE EQUIPMENT STAGING AREAS AS SHOWN ON THE DRAWINGS. SOIL STAGING AREAS SHALL BE CONSTRUCTED SO THAT EXCAVATED SOIL WILL BE STAGED DIRECTLY ADJACENT TO THE EXCAVATION ON POLYETHLYLENE SHEETING AND STOCKPILED IN A MANNER THAT ALLOWS WATER TO DRAIN BACK IN THE EXCAVATION. ONCE DRAINED, THE SOILS WILL BE MANAGED IN ACCORDANCE WITH THE APPROVED SOILS MANAGEMENT PLAN.

3.04 DECONTAMINATION AREA
A. CONTRACTOR WILL CONSTRUCT THE DECONTAMINATION AREA IN ACCORDANCE WITH THE DRAWINGS AND WILL CONDUCT DECONTAMINATION PROCEDURES IN ACCORDANCE WITH APPROVED DECONTAMINATION PLAN.

3.05 SITE PREPARATION ACTIVITIES
A. CONTRACTOR SHALL CLEAR AND GRUB, REMOVE ASPHALT AND OTHER MATERIALS, AS NECESSARY TO PERFORM THE WORK. CONTRACTOR SHALL ALSO REMOVE CONCRETE THAT MAY BE LOCATED WITHIN THE WORK AREA.

3.06 EXCAVATION
A. SOILS SHALL BE EXCAVATED IN THE AREA AND TO THE DEPTH SHOWN ON THE DRAWINGS. SHEETING AND SHORING SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED SOIL MANAGEMENT PLAN.
   1. SOILS EXCAVATED ABOVE THE WATER TABLE SHALL BE STOCKPILED, HANDLED AND LOADED IN ACCORDANCE WITH THE APPROVED SOIL MANAGEMENT PLAN. THE SOILS SHALL BE DISPOSED OFF-SITE AT THE DESIGNATED DISPOSAL FACILITY.
   2. SOILS EXCAVATED BELOW THE WATER TABLE SHALL BE STOCKPILED IN THE SOIL STAGING AREA ADJACENT TO THE EXCAVATION UNTIL EXCESS WATER HAS DRAINED FROM THE SOILS. ONCE THE SOILS ARE DRAINED, THEY WILL BE HANDLED CONSISTENT WITH PARAGRAPH 1. (ABOVE).
   3. EXCAVATION WILL CONTINUE TO A DEPTH OF 10 FEET (+.1 FEET TOLERANCE). DEPTH OF EXCAVATION SHALL BE VERIFIED AND CONFIRMED BY OWNERS REPRESENTATIVE.

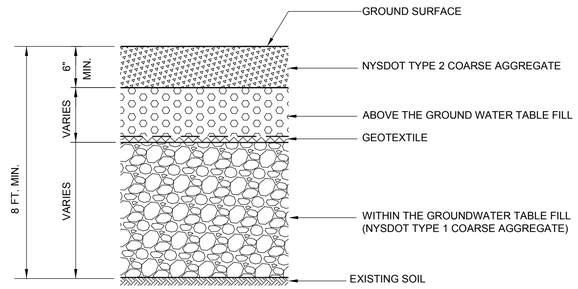
3.07 SURVEY
A. CONTRACTOR SHALL SURVEY THE AREAL LIMITS OF EXCAVATION AND SIGNIFICANT FEATURES. THE SURVEYOR SHALL BE A LICENSED SURVEYOR IN THE STATE OF NEW YORK. BASE MAP WILL BE PROVIDED BY NATIONAL GRID.

3.08 BACKFILL
A. BACKFILL WITHIN THE WATERTABLE SHALL BE PLACED IN LOOSE LAYERS AND TAMPED IN-PLACE USING EXCAVATION EQUIPMENT.
B. BACKFILL ABOVE THE WATERTABLE, SHALL BE PLACED IN 12-INCH LIFTS AND MECHANICALLY COMPACTED TO A MINIMUM OF 90 PERCENT OF THE MODIFIED PROCTOR DENSITY (AS DETERMINED BY ASTM D1557).

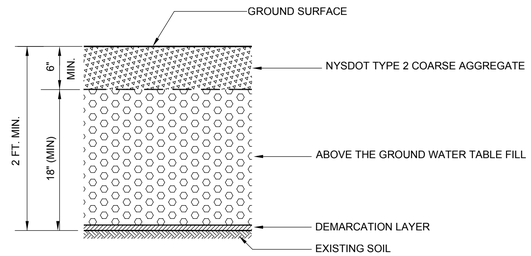
3.09 GEOTEXTILE AND DEMARCATION LAYER
A. A GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE LAYERS (OF THE TWO DIFFERENT BACKFILLS) OVER THE ENTIRE EXCAVATION AREA.
B. A DEMARCATION LAYER SHALL BE PLACED UNDER THE SOIL CAP IN THE AREA OF THE 2 FT EXCAVATION.

3.10 SITE RESTORATION
A. CONTRACTOR SHALL RESTORE BACKFILL TO MEET EXISTING SURROUNDING GRADES. CONTRACTOR WILL RESTORE REMAINDER OF SITE TO PRE-EXISTING CONDITIONS.
B. TEMPORARY FENCING, DECONTAMINATION PAD, MATERIAL STORAGE AND STOCKPILE AREAS WILL BE REMOVED AND DISPOSED OFF-SITE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.
C. PRE-EXISTING FENCING AND GATES WILL BE RE-INSTALLED.

3.11 RECORD/AS-BUILT
A. CONTRACTOR SHALL SUBMIT A PLAN SHOWING THE EXTENT AND LIMITS OF EXCAVATION, LOCATIONS OF STRUCTURES ENCOUNTERED AND/OR REMOVED DURING EXCAVATION INCLUDING LATITUDE AND LONGITUDE IN NEW YORK STATE PLANE COORDINATES AND NAD 1983 FOR HORIZONTAL REFERENCE AND NAVD 88 FOR VERTICAL REFERENCE. PLAN SHALL ALSO SHOW PROPERTY LINES, FENCING, TOPOGRAPHIC CONTOURS, SPOT ELEVATIONS, UTILITIES, AND ANY OTHER SITE FEATURES WITHIN 20 FT OF THE EXCAVATION AREA.
B. CONTRACTOR SHALL SUBMIT FIVE (5) COPIES OF THE RECORD SURVEY SIGNED AND SEALED BY THE REGISTERED NY-LICENSED SURVEYOR, PDF AND THE ELECTRONIC FILE IN AUTOCAD 2009 (OR LATEST VERSION).



EXCAVATION (TO 8 FT. MIN) BACKFILL DETAIL



EXCAVATION (TO 2 FT. MIN) ENVIRONMENTAL CAP DETAIL

SITE RESTORATION DETAIL

DETAIL 5 / C-101

N.T.S.

Brown AND Caldwell
ASSOCIATES
ALLENDALE, NEW JERSEY
N.J. C.A. 24GA28043100

SUBMITTED: KEITH BOGATCH (PROJECT MANAGER) DATE: 11-7-2011
APPROVED: JEFF CAPUTI (BROWN AND CALDWELL) DATE: 11-7-2011

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: PP
DRAWN: RJ
CHECKED: KB
CHECKED:
APPROVED: JC

EXTERNAL REFERENCE FILES
138893-G-001.dwg

JEFFREY R. CAPUTI DATE
PROFESSIONAL ENGINEER
N.Y. LICENSE NO. 048454E

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

NATIONAL GRID

PATCHOGUE FORMER MGP SITE
VILLAGE OF PATCHOGUE, NEW YORK

UTILITY CORRIDOR WORK PLAN

SPECIFICATIONS

FILENAME
BC PROJECT NUMBER 138893.420
CLIENT PROJECT NUMBER
DRAWING NUMBER C-102
SHEET NUMBER 3 OF 3

rjames
Jan 09, 2012 - 4:56pm
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