

Lake Erie



- NOTES**
- ALL STORM INLET STRUCTURES SHALL HAVE SILT FENCE DROP INLET PROTECTION INSTALLED.
 - THIS SITE IS COVERED UNDER OHIO EPA CONSTRUCTION GENERAL PERMIT # 300022289A2.
 - EROSION CONTROL SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE GOVERNING AGENCY DURING THE LIFE OF THE CONTRACT TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH USE OF EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP).
 - LIMITS OF CLEARING AND GRADING SHALL BE CLEARLY MARKED ON SITE WITH SIGNAGE, FLAGGING AND/OR CONSTRUCTION FENCING.
 - PERIMETER SEDIMENT CONTROLS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN (7) DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL DISTURBED AREAS ARE RE-ESTABLISHED WITH TEMPORARY VEGETATION. CONTRACTOR SHALL PAY SPECIAL ATTENTION TO SILT FENCE PLACED ALONG STREAM TO ENSURE IT IS FUNCTIONING PROPERLY AND STREAM BANK IS STABILIZED. ADDITIONAL CONTROLS MAY BE NECESSARY TO MAINTAIN STREAM BANK STABILIZATION.
 - CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL INGRESS AND EGRESS LOCATIONS TO ELIMINATE OFF-SITE VEHICLE TRACKING OF SEDIMENT. SEDIMENTS SHALL BE REMOVED FROM ROADWAYS DAILY.
 - SEEDED AREAS SHALL BE INSPECTED AND WHERE THE SEED HAS NOT PRODUCED 80% COVER SHALL BE RESEED AS NECESSARY BY THE CONTRACTOR. AREAS SHALL BE STABILIZED WITH MULCH WHEN CONDITIONS PROHIBIT SEEDING.
 - STRAW MULCHING SHALL BE APPLIED AT A RATE OF 2-3 STANDARD 45 LB. BALES PER 1000 SQ. FT. OF DISTURBED AREA OR TWO (2) TONS PER ACRE. ALL HYDROSEEDING MUST BE STRAW MULCHED UNLESS IT IS WATERED WEEKLY.
 - CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. ALL WASH WATER SHALL BE COLLECTED IN AN APPROVED, DESIGNATED LOCATION.
 - CONTAINERS SHALL BE PROVIDED FOR COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS TO BE USED ON-SITE. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL.
 - CONTRACTOR SHALL COMPLY WITH THE MAINTENANCE SCHEDULE INCLUDED IN THE APPROVED PLANS FOR THE PROPOSED EROSION CONTROLS. A WRITTEN DOCUMENT CONTAINING THE SIGNATURES OF ALL CONTRACTORS AND SUB-CONTRACTORS INVOLVED IN THE IMPLEMENTATION OF THE SWP'S MUST BE MAINTAINED AS PROOF ACKNOWLEDGING THAT THEY REVIEWED AND UNDERSTAND THE CONDITIONS AND RESPONSIBILITIES OF THE SWP'S.
 - THESE NOTES AND DRAWING ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE ODMR RAINWATER AND LAND DEVELOPMENT MANUAL.
 - SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED FOR OVER 14 DAYS.
 - ADDITIONAL EROSION CONTROL BMP'S MAY BE MANDATED BY THE CITY OF WILLOWICK.

SEQUENCE OF CONSTRUCTION

NOTE: PROVIDE SAFE AND SECURE PEDESTRIAN AND VEHICULAR TRAFFIC CIRCULATION THROUGHOUT THE ENTIRETY OF THE CONSTRUCTION SEQUENCE WITH WELL DEFINED CONSTRUCTION BOUNDARIES TO BE ACCESSED BY CONSTRUCTION PERSONNEL ONLY. ALL EROSION CONTROLS ARE TO BE THOROUGHLY INSPECTED BY THE CONTRACTOR UPON THE COMPLETION OF EACH WORK DAY AND MAINTAINED THROUGHOUT THE REQUIRED LIFE OF THE CONTROL AS SPECIFIED BY THE APPROVED EROSION AND SEDIMENTATION CONTROL PLANS AND NARRATIVE. CONTRACTOR MUST REVIEW THE APPROVED EROSION AND SEDIMENTATION CONTROL PLANS AND NARRATIVE. CONTRACTOR MUST REVIEW THE APPROVED NPDES PERMIT AND SIGN THE PERMIT TO ACCEPT RESPONSIBILITIES AS THE CO-PERMITTEE.

- INSTALL CONSTRUCTION ENTRANCE FOR ACCESS TO CONSTRUCTION AREAS OF SITE.
- STAKEOUT LIMIT OF DISTURBANCE.
- INSTALL ALL FILTER FABRIC FENCE AND TEMPORARY SEDIMENT TRAPS WHERE SHOWN ON PLANS.
- INSTALL ANY TEMPORARY DIVERSION CHANNELS THAT ARE REQUIRED TO DIVERT ALL DISTURBED AREA'S STORMWATER RUNOFF THROUGH A TEMPORARY SEDIMENT TRAP PRIOR TO LEAVING THE SITE. PLEASE NOTE MAXIMUM ACREAGE PER SEDIMENT TRAP.
- BEGIN SITE DEMOLITION AND CLEAR THE CONSTRUCTION AREA AS NECESSARY WITHIN THE CLEARING LIMITS.
- MAINTAIN TEMPORARY SEDIMENT CONTROLS AND DIVERSION CHANNELS UNTIL REMOVAL IS WARRANTED DUE TO PROGRESSION OF WORK.
- BEGIN EARTHWORK OPERATIONS AND ACCOMPLISH ALL ROUGH GRADING REQUIRED FOR CUTS AND FILLS. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE COUNTY CONSERVATION DISTRICT OF ANY IMPORTED/EXPORTED MATERIAL AND ITS BORROW OR SPOIL SITE LOCATION. THE CONTRACTOR SHALL PROVIDE SOIL AND EROSION CONTROL MEASURES AT ANY BORROW OR SPOIL SITE.
- STORM SEWER AND UTILITY LINE CONSTRUCTION MAY BEGIN IMMEDIATELY FOLLOWING ESTABLISHMENT OF GRADE. INSTALL INLET PROTECTION AS STORM SEWER INLETS ARE CONSTRUCTED.
- STABILIZE ALL UTILITY TRENCHES AT THE END OF EACH WORKDAY BY MEANS OF GRAVEL BACKFILL TO SURFACE, REPAVING OR MULCHING. EROSION CONTROL MATTING SHALL BE INSTALLED ON AREAS WITH STEP SLOPES.
- CONTINUE UTILITY INSTALLATION.
- REPLACE TOPSOIL, FINE GRADE AND SEED AS REQUIRED.
- STABILIZE ALL DISTURBED AREAS OUTSIDE OF PROPOSED PAVEMENT WITH PERMANENT SEED AND MULCHING IMMEDIATELY UPON REACHING FINAL GRADE.
- INSTALL PAVEMENT SUBBASE.
- BEGIN PAVING, REMOVING CONSTRUCTION ENTRANCE ONLY WHEN NECESSARY.
- REMOVE TEMPORARY SEDIMENT TRAPS AND INSTALL PROPOSED RETENTION POND OUTLET AND UNDERDRAINS ONCE SITE HAS BEEN STABILIZED.
- COMPLETE SITEWORK, PAVEMENT MARKINGS, FINAL LANDSCAPING AND CLEAN-UP.
- RESEED AND REDRESS ANY AREAS THAT MAY REQUIRE ATTENTION IMMEDIATELY. NOTE THAT LAWN AREAS WILL NOT BE DEEMED STABLE UNTIL A UNIFORM 70% COVERAGE IS ACHIEVED.
- ALL EROSION MEASURES SHALL REMAIN IN PLACE UNTIL THE SITE IS STABILIZED. ALL AREAS OF VEGETATIVE SURFACE STABILIZATION, WHETHER TEMPORARY OR PERMANENT, SHALL BE CONSIDERED TO BE IN PLACE AND FUNCTIONAL WHEN THE REQUIRED UNIFORM RATE OF COVERAGE (70%) IS OBTAINED.
- THE FOLLOWING ITEMS MUST BE COMPLETED BY THE CONTRACTOR, IN ORDER, ONCE THE SITE HAS BEEN DEEMED STABLE:
 - REMOVE CONSTRUCTION ENTRANCE PRIOR TO COMPLETION OF PAVING.
 - SITE CLEAN UP.
 - RESEED ANY AREAS THAT REQUIRE ADDITIONAL SEED.
 - FILTER FENCES ARE TO BE CLEANED, REMOVED, BACKFILLED AND SEEDED WITH PERMANENT SEEDING.
 - VERIFY POSITIVE CONVEYANCE FLOW IN ALL DRAINAGE STRUCTURES.

- LEGEND**
- SILT FENCE
 - CLEARING LIMITS
 - INLET PROTECTION
 - DRAINAGE EASEMENT
 - DIVERSION CHANNEL
 - EXISTING 1' CONT.
 - EXISTING 5' CONT.
 - PROP. 1' CONT.
 - PROP. 5' CONT.
- SITE LOCATION INFORMATION:**
- CITY OF WILLOWICK LAKE OHIO
 CITY, VILLAGE, TOWNSHIP COUNTY STATE
- LAKE ERIE
 NAME OF WATERSHED/IMMEDIATE RECEIVING WATER(S)
- LAKE SHORE DRIVE
 SITE ADDRESS (WHERE ABOUT)
- WILLOWICK PARTNERS, LLC (440) 944-0341
 DEVELOPER PHONE
- 3009 LAKESHORE BLVD. WILLOWICK, OH 44095
 DEVELOPER ADDRESS
- SITE DESCRIPTION**
- | | | |
|--------------------------|-------------------------|------------------|
| SUBDIVISION () | TOTAL AREA | Approx. 16 Ac. |
| COMMERCIAL () | PRE-DEV. RUNOFF COEFF. | 0.20 |
| RESIDENTIAL () | POST DEV. RUNOFF COEFF. | 0.69 |
| P.U.D. (X) SINGLE FAMILY | AREA TO BE DISTURBED | Approx. 8.05 Ac. |
| OTHER () | | |
- Impervious Areas:
 Prop. Buildings = 1.87 acres
 Prop. Pavement = 1.84 acres
 Total = 3.71 acres
 (46% of Disturbed Site)
- Soil Information:
 Entire Site is comprised of
 CTA Conneaut Silt Loam,
 0-1% slopes

ForeSight Engineering Group
 Engineers & Surveyors

440 298-1000
 440 298-1000 fax
 320 Center Street, Unit F
 Chardon, Ohio 44024

SCALE: Horz. 1" = 40'
 Vert. None

FILE NAME: Map11102/Grading&Erosion

DATE: February 6, 2012

REVISIONS: 02-17-12 ~ Added additional silt fence and revised plan note #5.

WILLOWICK PARTNERS, LLC
 LARIMAR LAKEFRONT NEIGHBORHOOD PHASE III
 City of Willowick - Lake County - Ohio
 Grading and Erosion Control Plan

SHEET NO. 3