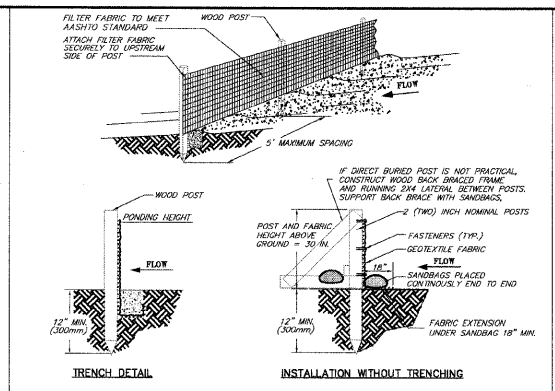


SLOPE PROTECTION USING ULTRAFLEX MATS

ERO-TEX
P.O. BOX 681342
SCHLAUBURG, IL 60194

NEED CONCEPT DRAWINGS BE PROVIDED BY OWNER FOR EXISTING PROJECTS AND FOR NEW CONSTRUCTION PROJECTS. MAKE CONCEPT DRAWINGS NOT BE CORRECT UNLESS APPROVED BY SUBMAR, INC. CA/24/08



SILT FENCE INSTALLATION DETAIL

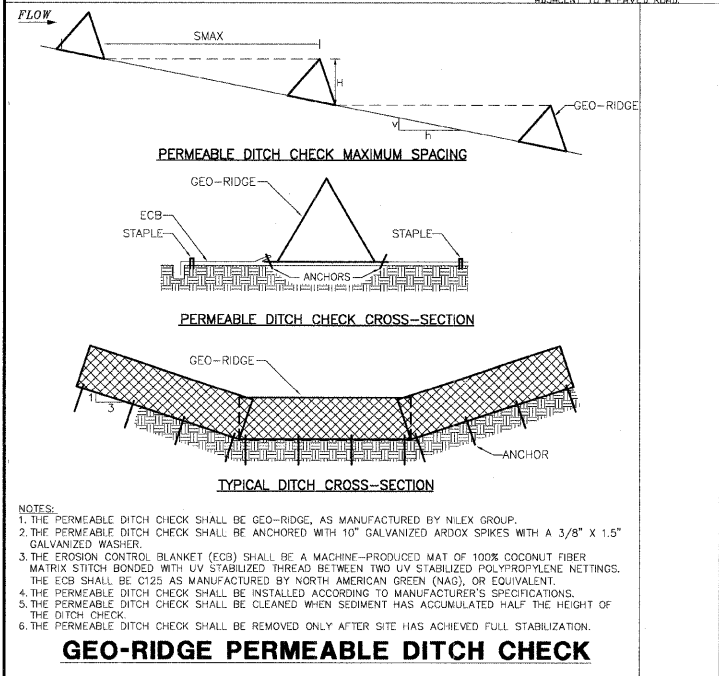
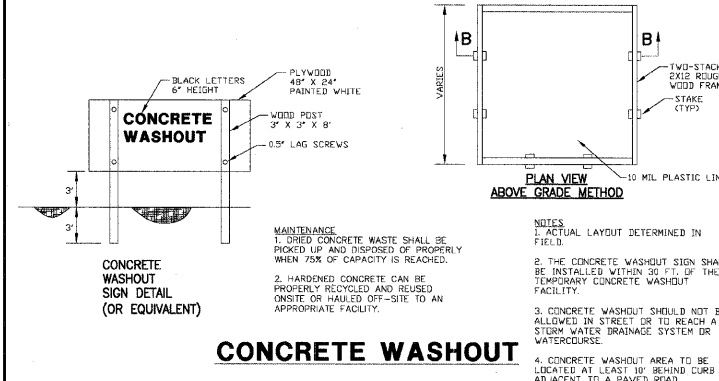
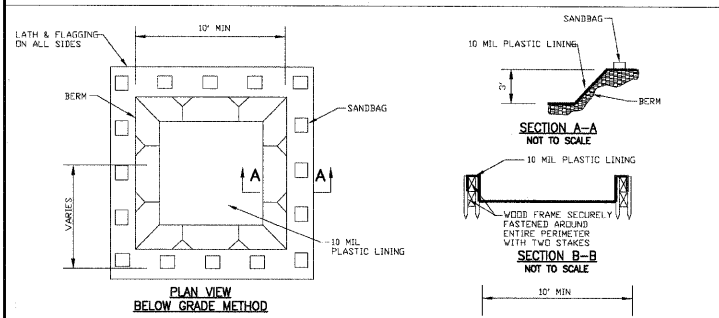
1. SET POSTS AND EXCAVATE OR SLIT-TRENCH A 6-INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF THE POST.

2. ATTACH GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF THREE FASTENERS PER POST AND EXTEND TO THE BOTTOM OF THE TRENCH. ACCEPTABLE FASTENERS INCLUDE STAPLES, ZIP-TIES, OR WIRE TIES.

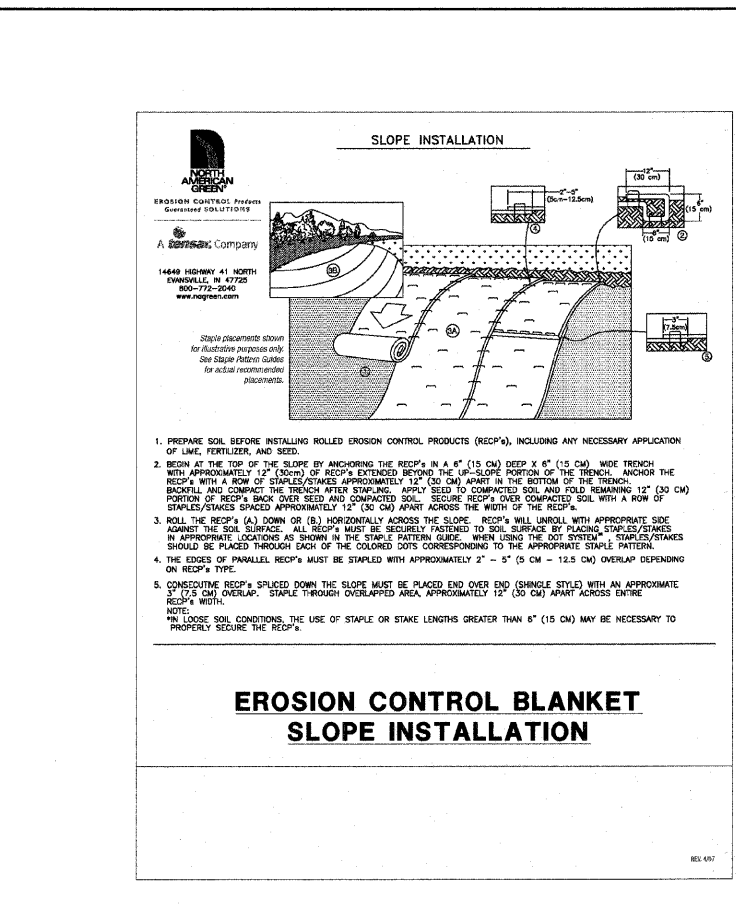
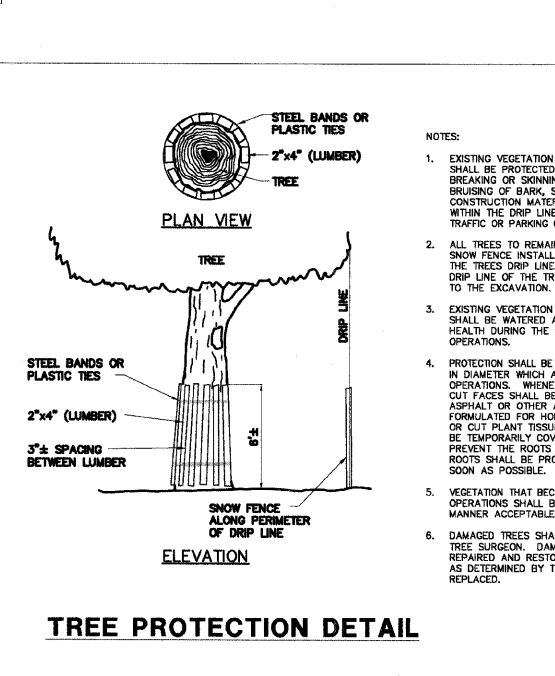
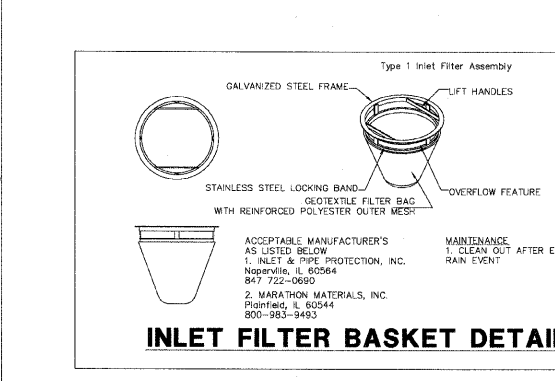
3. BACKFILL AND COMPACT THE EXCAVATED SPILL MATERIALS.

NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE FLOW EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9\"/>

ARTICULATED BLOCK REVETMENT MATERIAL



EROSION CONTROL BLANKET SLOPE INSTALLATION



RIP RAP TABLE - FROM STORMWATER MANAGEMENT REPORT

| FES | PROJECT LOCATION | PIPE DIA. | ROCK GRADE | APRON SIZE | UP | DOWN |
|-----|------------------|-----------|------------|------------|------|------|
| 74H | CEM: 208+82 | 18 | No.4 | 16 | 4.5 | 17.5 |
| 9G | CEM: 217+80 | 24 | ABRM | 16 | 6.0 | 18.0 |
| 20A | CEM: 239+60 | 48 | No.4 | 24 | 12.0 | 13.6 |
| 62A | WAS: 107+55 | 36 | No.4 | 22 | 9.0 | 11.8 |
| 61A | WAS: OUTLOT | 36 | ABRM | 20 | 9.0 | 23.0 |
| 51F | WAS: 137+18 | 48 | No.4 | 24 | 12.0 | |

ROCK GRADE REFERENCES IDOT SSRB ARTICLE 281.04
NOTE: CA3 BEDDING FOR RIP RAP CL A4 SHALL BE INCIDENTAL TO THE 'STONE RIP RAP, CLASS A4' PAY ITEM.

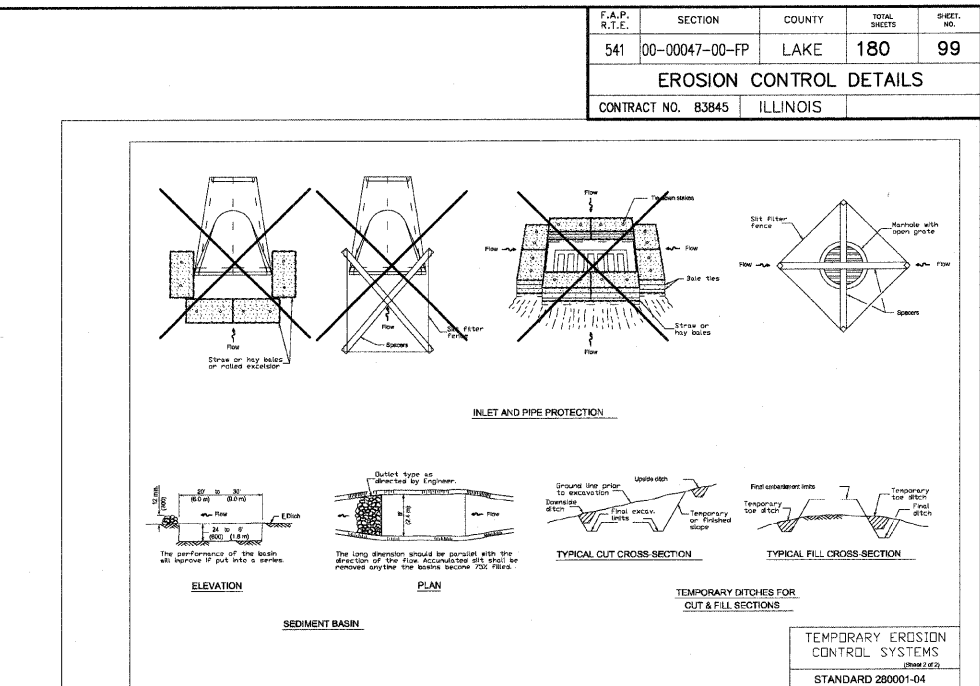
ILLINOIS DEPARTMENT OF TRANSPORTATION
EROSION AND SEDIMENT CONTROL PLAN
PROPOSED ROADWAY WIDENING AND INTERSECTION IMPROVEMENTS
EROSION CONTROL DETAILS

PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax

| REVISIONS | |
|----------------------|----------|
| NAME | DATE |
| REV.-1 IDOT COMMENTS | 02-03-06 |
| REV.-2 PLANS STAGED | 06-02-06 |
| REV.-4 LCSMC COMMENT | 04-30-07 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

SCALE: N.T.S.
DATE: 09-10-05

DRAWN BY: CGP
DESIGNED BY: TAR
CHECKED BY: BLS



SOIL EROSION CONTROL NOTES

- PRIOR TO STARTING ANY WORK ON THIS PROJECT, THE CONTRACTOR SHALL PERFORM PERTINENT ACTIVITIES AS OUTLINED.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SOIL EROSION DEVICES AS OUTLINED IN THE SOIL EROSION NOTES ON THIS SHEET AND THE LAKE COUNTY STORMWATER MANAGEMENT COMMISSION SEDIMENT AND EROSION CONTROL NOTES ON THIS SHEET. SOME MAJOR ITEMS ARE INCLUDED BELOW.
- NO DIRT STOCKPILES, EQUIPMENT, SUPPLIES, OR TRAILERS ARE PERMITTED TO BE LOCATED OR STORED WITHIN THE FLOODPLAIN. ALL MATERIAL SHALL BE MOVED OUTSIDE THE FLOODPLAIN LIMITS AT THE CLOSE OF EACH DAY.
- INSTALL SILT FENCE ALONG PERIMETER OF CONSTRUCTION ZONE AS SHOWN. ALL SILT FENCE TO BE INSTALLED OUTSIDE OF DELINEATED NATURAL RESOURCE. ALL EARTH STOCKPILES SHALL BE SURROUNDED BY PERIMETER EROSION BARRIER.
- TEMPORARY SEEDING, MULCHING, AND INSTALLATION OF EROSION CONTROL BLANKETS WILL BE REQUIRED ON ALL DISTURBED EARTH DRAINAGE AREAS. THE CONTRACTOR SHALL HAVE SUFFICIENT QUANTITIES OF EROSION CONTROL BLANKET (NAG S-75 OR APPROVED EQUAL) ON SITE AT ALL TIMES TO IMMEDIATELY COVER DISTURBED AREAS.
- ALL PROPOSED STRUCTURES RECEIVING OR DISCHARGING STORM WATER SHALL BE PROTECTED WITH INLET FILTER BASKETS UNDER THE OPEN LID. OPEN LID STRUCTURES WITHIN PAVED ZONES SHALL BE PROTECTED WITH FILTER FABRIC BASKETS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPER INSTALLATION, INSPECTION, AND MAINTENANCE OF ALL EROSION CONTROL DEVICES. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED, REPAIRED, AND REPLACED THROUGHOUT THE LIFE OF THE PROJECT. AFTER ACHIEVING PERMANENT VEGETATION, ALL EROSION CONTROL DEVICES SHALL BE REMOVED AND ALL DRAINAGE STRUCTURES CLEANED.

LCSMC SEDIMENTATION AND EROSION CONTROL NOTES

- THE STORMWATER POLLUTION PREVENTION PLAN (SWP3) IS COMPRISED OF THIS DRAWING ("SITE MAP"), THE STANDARD DETAILS, THE PLAN NARRATIVE, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE ILLINOIS PERMIT (LIRID) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE SWP3, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED BY THE END OF THE DAY.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.
- SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 7 CALENDAR DAYS OF THE END OF ACTIVE HYDROLOGIC DISTURBANCE, REDISTURBANCE.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.