

GREENFIELD, MASSACHUSETTS



Purchasing and Procurement

City Hall • 14 Court Square • Greenfield, MA 01301 Phone 413-772-1569 Laura.Phelps@greenfield-ma.gov

IFB 24-09 PD Site Grading and Erosion Control ADDENDUM #2

DATE: October 5, 2023

THE ORIGINAL SPECIFICATIONS DATED September 20, 2023 FOR THE ABOVE-NOTED PROJECT ARE AMENDED AS NOTED IN THE ADDENDUM #1

THIS ADDENDUM IS ISSUED FOR THE PURPOSE OF AMENDING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND IS HEREBY MADE PART OF THE CONTRACT DRAWINGS AND SPECIFICATIONS TO THE SAME EXTENT AS THOUGH IT WERE FULLY INCORPORATED THEREIN.

- 1. Owner will relocate all equipment in the shed and relocate power. The Contractor will remove shed structure above this slab.
- 2. The curb mentioned in the revised plan should be included in the work from beginning, not as a 'potential' curb.
- 3. Reuse of existing fence material and posts is expected.
- 4. See: Greenfield Police Stamped Plans Revised 2023-10-04.

Please acknowledge this Addendum #2 on the IFB Form END OF ADDENDUM



GREENFIELD POLICE DEPARTMENT

321 HIGH STREET · GREENFIELD · MA
TAX MAP R03 BLOCK 9 LOT 1

POLICE DEPARTMENT GRADING

SEPTEMBER 12, 2023 REVISED OCTOBER 4, 2023

PREPARED FOR

H2H ARCHITECTS & ENGINEERS, INC.

433 RIVER STREET, SUITE 8002 TROY, NY 12180

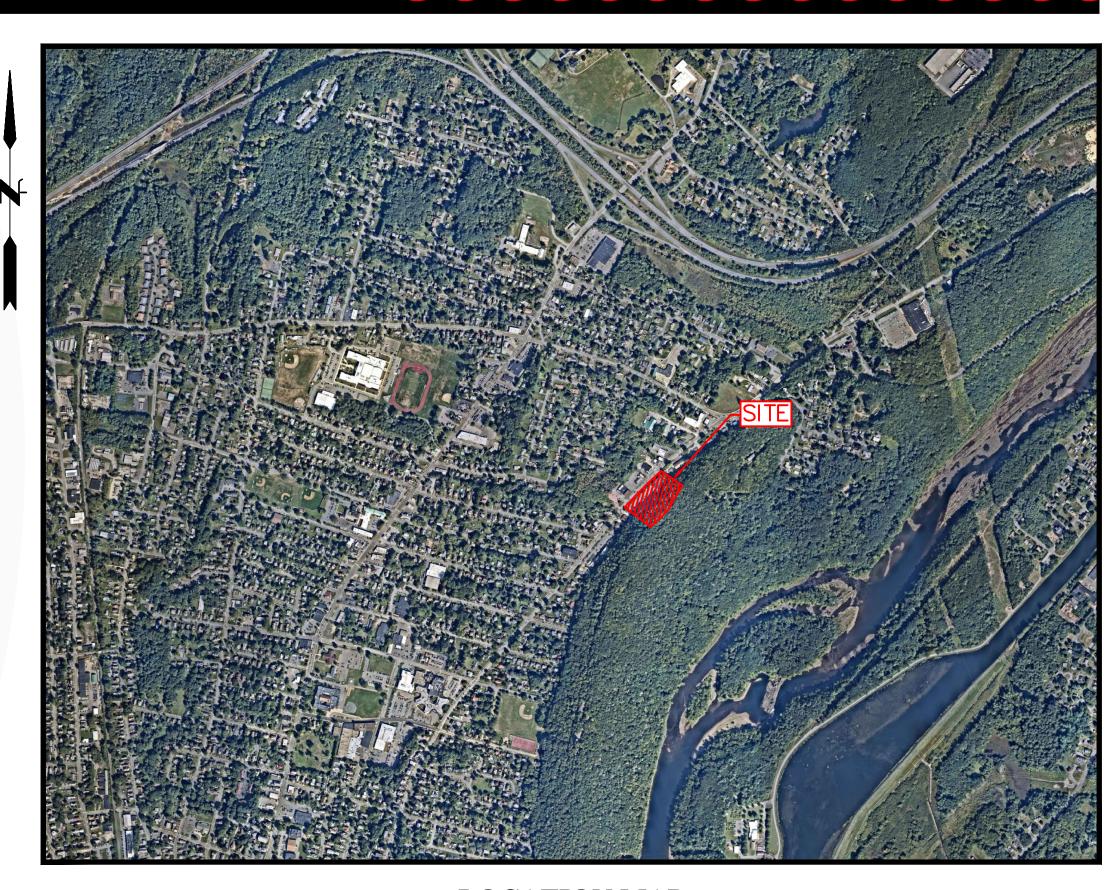


SHEET INDEX

SHEET No.
GI-001
SHEET TITLE
COVER SHEET

CP-101 EXISTING CONDITIONS PLAN

CS-101 SITE, GRADING, AND EROSION CONTROL PLAN
CD-500 SITE, GRADING, AND DRAINAGE DETAILS PLAN
CD-501 EROSION CONTROL DETAILS PLAN



LOCATION MAP

SCALE: 1" = 1000'



PROJ. No.: 20260380.A50

DATE: SEPTEMBER 2023

GI-001

EXISTING CONDITIONS NOTES:

- 1. THE PURPOSE OF THIS PLAN IS TO DEPICT EXISTING CONDITIONS OF THE SUBJECT PARCELS LOCATED ON TAX MAP R03 BLOCK 9 LOT 0, WITH A PHYSICAL ADDRESS OF 321 HIGH STREET, GREENFIELD MA.
- 2. OWNER OF RECORD FOR TAX MAP R03 BLOCK 9 LOT 0 IS "GREENFIELD CITY OF INHABITANTS, POLICE STATION". WITH A LEGAL ADDRESS OF 14 COURT SQUARE, GREENFIELD, MA 01301. DEED REFERENCE AT THE FCRD IS BOOK 3295 PAGE 135.
- 3. PROPERTY LINE/BOUNDARY LINE INFORMATION IS BASED ON GIS DATA RECEIVED FROM MASSMAPPER ON MARCH 17, 2023.
- 4. EXISTING CONDITIONS IS BASED ON A COMBINATION OF AERIAL IMAGES AND FIELD OBSERVATION BY FUSS & O'NEILL ON MARCH 13, 2023.
- EXISTING CONTOURS WERE ESTABLISHED DURING A SITE VISIT FROM FUSS & O'NEILL ON MARCH 13, 2023 BY JAMES BLACK AND ANDREW ROSSOSHANSKIY. VERTICAL DATUM IS ASSUMED WITH A BASE ELEVATION OF 100.0' AT TOP OF EXISTING POLICE STATION. F&O DID NOT PERFORM FULL GROUND SURVEY. NO REPRESENTATION OR WARRANTY IS MADE AS TO NON-SURVEY FEATURES OF REFERENCE BY F&O.
- PER THE CURRENT CITY OF GREENFIELD ZONING ORDINANCE THE SUBJECT PROPERTY IS ZONED GC. NO CHANGE TO THE LOT, BUILDINGS, OR GROUND COVER IS PROPOSED.
- PROJECT AREA NOT IN 100 YEAR FLOOD BOUNDARY BASED ON "FIRM, FLOOD INSURANCE RATE MAP, CITY OF GREENFIELD, MASSACHUSETTS, FRANKLIN COUNTY." PANEL 6 OF 8, COMMUNITY-PANEL NUMBER 250118 0006 B, EFFECTIVE DATE JULY 2, 1980.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING CONDITIONS SURROUNDING IT AND THEREON.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION OF EXISTING FEATURES BOTH ABOVE GROUND AND BELOW, NO GUARANTEE IS MADE BY THIS OFFICE OR INDIVIDUALS AS TO THE LOCATION OF EXISTING FEATURES. UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON REFERENCE PLANS AND INFORMATION PROVIDED BY THE UTILITY COMPANIES. UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON REFERENCES LOCATED ON THE EXISTING CONDITIONS AND TOPOGRAPHY REFERENCES LISTED ABOVE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT NEW HAMPSHIRE DIG SAFE, AT 1-888-DIG-SAFE, AT LEAST 72 HOURS BEFORE DIGGING.
- 11. IF ANY ERROR OR OMISSION IN THESE PLANS IS DISCOVERED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY IN WRITING FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR SHALL DISCONTINUE WORK IN THE AFFECTED PROJECT AREA UNTIL AGREEMENT HAS BEEN REACHED WITH THIS FIRM ON CORRECTIVE ACTION. ALL FIELD CHANGES MUST BE APPROVED BY THE ENGINEER.
- 12. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION.

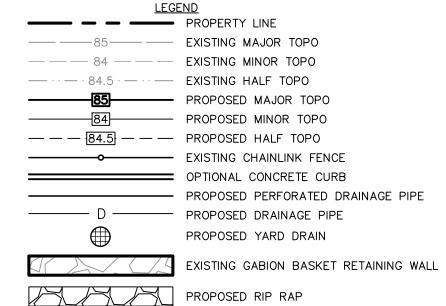
- 1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE AREAS AND LOCATIONS OF DISTURBANCE RELATED TO THE PROPOSED PROJECT ON THE SUBJECT PARCEL.
- REMOVE AND DISPOSE OF EXISTING STUMPS AND UNSUITABLE MATERIAL IN ACCORDANCE WITH APPLICABLE MASSACHUSETTS DEP STANDARDS.
- REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS, AND OTHER DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- NO CHANGES ARE PROPOSED OUTSIDE OF THE VISIBLE CONTENT PRESENTED ON THIS PLAN.
- COORDINATE WITH THE CITY FOR A PREFERRED TRUCK HAULING ROUTE FOR DEMOLITION DEBRIS.
- 6. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION.

GENERAL PLAN NOTES:

- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SHOWN ON THE DRAWINGS TO SCALE OR TO THEIR DIMENSION OR LOCATION. COORDINATE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT
- DO NOT RELY SOLELY ON ELECTRONIC VERSIONS OF DRAWINGS, SPECIFICATIONS, AND DATA FILES THAT ARE PROVIDED BY THE ENGINEER. FIELD VERIFY LOCATION OF PROJECT FEATURES.
- PERFORM NECESSARY CONSTRUCTION NOTIFICATIONS, APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK AS REQUIRED BY THE CONTRACT DOCUMENTS.
- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDINGS AND ADJACENT SITE ELEMENTS INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
- SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS.

REGULATORY REQUIREMENTS

- 1. APPROVED PLANS TO BE ON SITE AT ALL TIMES.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST OSHA STANDARDS, STATE AND LOCAL REQUIREMENTS, AND CITY OF GREENFIELD REQUIREMENTS, POLICIES, AND SPECIFICATIONS.



DELANY NO. 48477 10/05/2

PROJ. No.: 20160380.A50 DATE: 09/11/2023

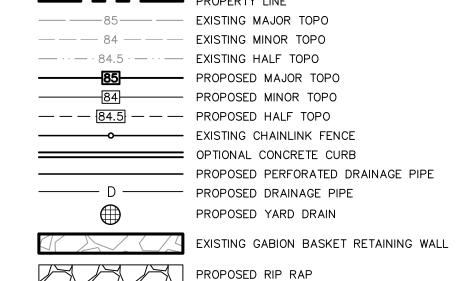
- 1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE PROPOSED SITE IMPROVEMENTS FOR THE CONSTRUCTION OF DRAINAGE IMPROVEMENTS, GRADING, AND EROSION CONTROL UPON THE PARCEL LOCATED ON TAX MAP R03 BLOCK 9 LOT 0, WITH A PHYSICAL ADDRESS OF 321 HIGH STREET, GREENFIELD MA.
- 2. PER THE CURRENT CITY OF GREENFIELD ZONING ORDINANCE THE SUBJECT PROPERTY IS ZONED GC. NO CHANGE TO THE LOT, BUILDINGS, OR GROUND COVER IS PROPOSED.
- 3. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
- 4. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE CITY.
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
- 6. THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WILL ALL LOCAL, STATE AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS
 - THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY FUSS & O'NEILL, INC. DO NOT EXTEND TO OR INCLUDE SYSTEM PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE ENGINEER HERE ON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEM THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEM WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
 - 3. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS, IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- 9. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY THEIR WORK AT ALL TIMES.
- 10. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE CITY OF GREENFIELD SITE PLAN REGULATIONS, CITY OF GREENFIELD, MA STANDARD SPECIFICATION. ALL CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH THE CITY OF GREENFIELD.
- 11. ALL WORK MUST CONFORM TO THE CITY OF GREENFIELD, DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS AND ANY WORK WITHIN THE CITY RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT.
- 12. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION.

GRADING, DRAINAGE, AND EROSION CONTROL NOTES:

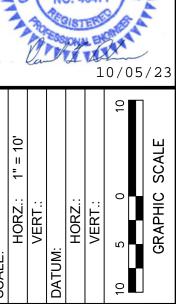
- 1. THE CONTRACTOR SHALL VERIFY BENCH MARKS (TBMS) WITH DESIGN ENGINEER PRIOR TO CONSTRUCTION.
- 2. DRAINAGE PIPE LENGTHS NOTED ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
- 3. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
- 4. FLUSH CLEAN AND REMOVE ALL DEBRIS OF EXISTING AND PROPOSED CULVERTS DURING AND POST CONSTRUCTION.
- 5. REMOVE ALL UNSUITABLE MATERIALS ENCOUNTERED DURING EXCAVATIONS AND REPLACE WITH SUITABLE FILL. CONTRACTOR TO COORDINATE ADDITIONAL TEST BORINGS, TEST PITS, AND COORDINATE WITH A GEOTECHNICAL ENGINEER, IF NECESSARY.
- IF LEDGE IS DISCOVERED DURING EXCAVATION, REMOVE LEDGE A MINIMUM OF TWO (2) FEET BELOW GRAVELS AND REPLACE WITH SUITABLE MATERIAL. COORDINATE WITH ARCHITECT OR GEOTECHNICAL ENGINEER.
- 7. CONTRACTORS LOAM AND SEED ALL DISTURBED AREAS PER DETAIL LOCATED WITHIN THIS PLAN SET.
- 8. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION. REFER TO EROSION CONTROL NOTES ON PLAN SHEET GI-101.

EROSION AND SEDIMENT CONTROL NOTES

- 1. PROVIDE EROSION CONTROL MEASURES PRIOR TO STARTING ANY WORK ON THE SITE. IMPLEMENT ALL NECESSARY MEASURES REQUIRED TO CONTROL STORMWATER RUNOFF, DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE. PERFORM CORRECTIVE ACTION AS NEEDED FOR EROSION CLEANUP AND REPAIRS TO OFF SITE AREAS, IF ANY, AT NO COST TO OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN IN THE PLANS THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND MUNICIPALITY STANDARDS. THE DETAILS PROVIDED SERVE AS A GUIDE ONLY. DISPOSE OF SEDIMENT IN AN UPLAND AREA
- 3. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE, THE PROPERTY OWNER SHALL BE REQUIRED TO PROVIDE THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE MUNICIPALITY.
- 4. PERFORM CONSTRUCTION SEQUENCING IN SUCH A MANNER TO CONTROL EROSION AND TO MINIMIZE THE TIME THAT EARTH MATERIALS ARE EXPOSED BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED.
- . UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROL MEASURES. CLEAN SEDIMENT AND DEBRIS FROM TEMPORARY MEASURES AND FROM PERMANENT STORM DRAINAGE.
- POST CONSTRUCTION, THE PROPERTY OWNER/OPERATOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL DRAINAGE AND STORMWATER PRACTICES. COORDINATE WITH THE CITY IF INSPECTION AND MAINTENANCE RECORDS ARE REQUIRED TO BE PROVIDED TO THE CITY, PERIODICALLY. REFER TO THE STORMWATER REPORT FOR THE OPERATION AND MAINTENANCE MANUAL.



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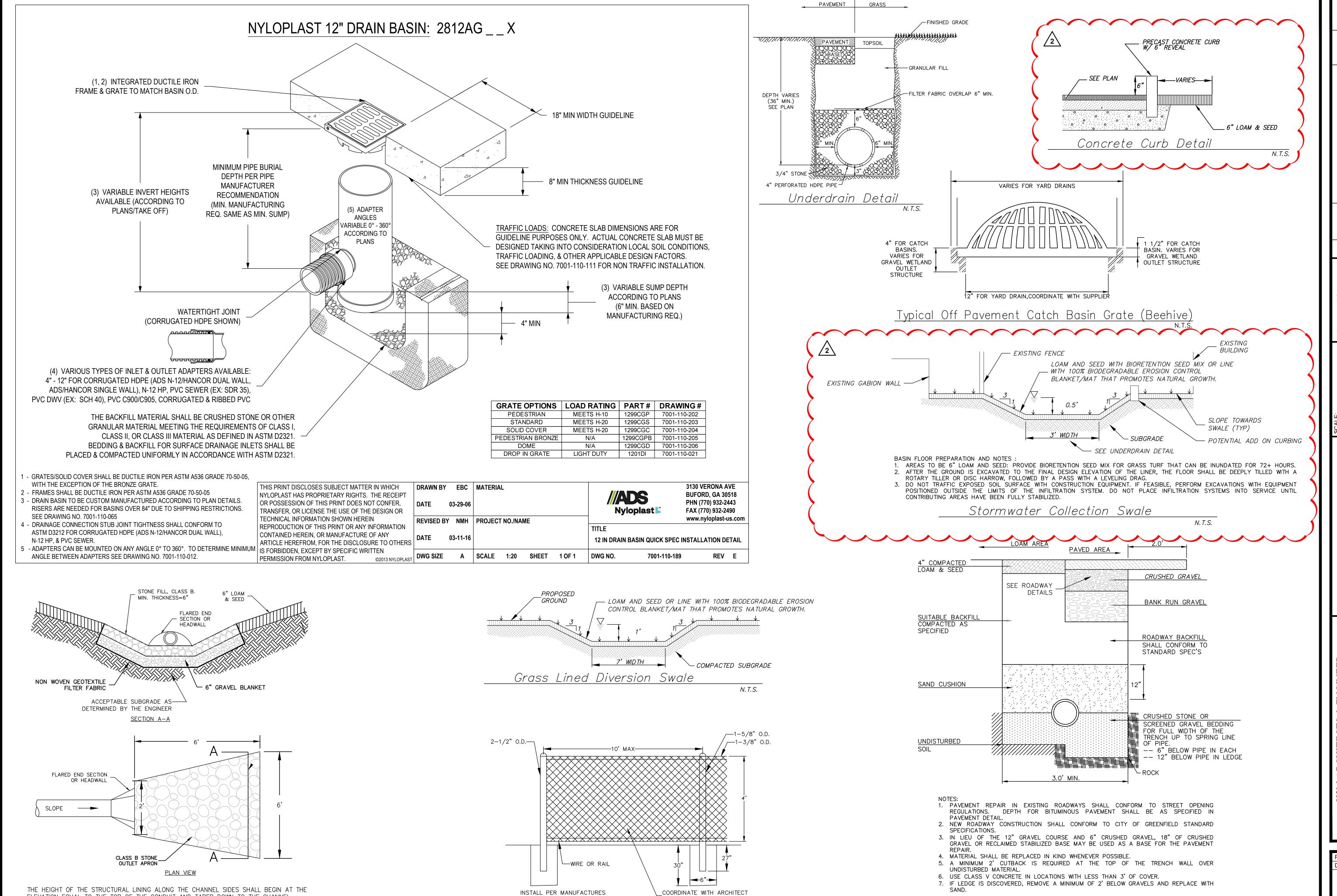
FUSS & C. N. 1550 MAIN STREET, SUITE 400 SPRINGFIELD, MA 01103 413.452.0445



SITE, GRADING, AND EROSION CONTROL PLAN GREENFIELD POLICE STATION 321 HIGH STREET

PROJ. No.: 20160380.A50 DATE: 09/11/2023

CS-101



FOR COLOR AND MATERIAL

Chain Link Fence

REQUIREMENTS

File: J:\DWG\P2016\0380\A50\Civil\Plan\20160380A50_DTLS01.dwg Layout: CD-501 Plotted: 2023-10-04 10:11 AM Saved: 2023-10-04 10:08 AM User: jbl

ELEVATION EQUAL TO THE TOP OF THE CONDUIT AND TAPER DOWN TO THE CHANNEL

N.T.S.

BOTTOM THROUGH THE LENGTH OF THE APRON.

Stone Outlet Protection

PROJ. No.: 20160380.A50 DATE: 09/11/2023

GREENFIELD POLICE ST 321 HIGH STREET

DANIEL F. DELANY

CIVIL NO. 48477

CD-501

Typical Drainage Trench Detail

N.T.S.

2"X2"X3' WOODEN STAKES— -STAKE AT 60° ANGLE 100% BIODEGRADABLE EROSION CONTROL MATTING THAT PROMOTES NATURAL GROWTH. BLANKETS SHALL BE COCONUT STRAW JUTE MATTING. BLANKETS CONTAINING PLASTIC SHALL FLOW NOT BE USED DUE TO POTENTIAL ENDANGERED SPECIES. ALTERNATIVE STAKING DETAIL

COMPOST FILTER SOCK GENERAL NOTES:

. NHF&G REQUIRES WHITE FILTREXX DEGRADABLE WOVEN SILT SOCK OR APPROVED EQUA 2. FOR DITCH APPLICATIONS, MINIMUM INSTALLED HEIGHT OF SINGLE SOCK NOMINALLY. SOCKS ARE PLACED

The following channel guide outlines general recommendations for installing RollMax System temporary and/or permanent RECPs

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concentrated flow applications. Consult the staple pattern guide (Figure 1) for fastener spacing recommendations based

PERPENDICULAR TO FLOW OF WATER. FILTER SOCKS SHALL CONTINUE UP SIDE SLOPES TO TOP OF BANK OR MAXIMUM 3-FEET ABOVE INSTALLED HEIGHT. FILTER SOCKS SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM AREAS ARE PERMANENTLY STABILIZED.

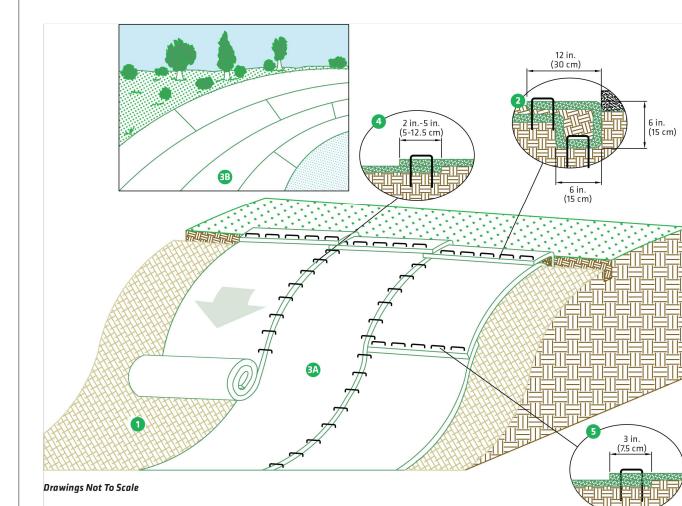
3. REMOVE SEDIMENT FROM BEHIND THE FILTER SOCK ONCE IT ACCUMULATES TO ONE-HALF OF THE ORIGINAL HEIGHT OF THE FILTER SOCK.

4. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.

SOCKS SHOULD BE REMOVED FROM SLOPES AFTER STABILIZATION IS COMPLETE UNLESS DIRECTED OTHERWISE. 6. FILTER SOCKS APPLIED IN DITCHES SHALL BE COMPLETELY REMOVED ONCE VEGETATION IS ESTABLISHED.

## Compost Filter Sock Installation Detail

The following slope guide outlines general recommendations for installing RollMax™ System temporary and/or permanent RECPs on sloping applications. Consult the staple pattern guide (Figure 1) for fastener spacing recommendations based on the slope severity.



## **CHANNEL INSTALLATION STEPS**

C. Channel Bottom/Side Slope Vertices

CRITICAL POINTS

A. Overlaps and Seams

B. Projected Water Line

**Drawings Not To Scale** 

on the channel severity

1. Prepare soil before installing RECPs, including any necessary application of lime, fertilizer and seed.

2. Begin at the top of the channel by anchoring the RECPs in a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench with approximately 12 in. (30 cm) of RECPs extended beyond the upslope portion of the trench. For supplemental scour protection, use RevetMax™ System ShoreMax® Mat at the channel/ culvert outlet as needed. Anchor the RECPs with a row of staples/stakes approximately 12 in. (30 cm) apart in the bottom of the trench. Backfill and compact the trench after 7. In high flow channel applications a staple check slot is stapling. Apply seed to the compacted soil and fold the remaining 12 in. (30 cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12 in. (30 cm)

apart across the width of the RECPs. 3. Roll center RECPs in direction of water flow in bottom of channel. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil

as shown in the staple pattern guide.

surface by placing staples/stakes in appropriate locations

**8.** The terminal end of the RECPs must be anchored with a row of staples/stakes approximately 12 in. (30 cm) apart in a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench. Backfill and compact the trench after stapling.

Horizontal staple/stake spacina should be alter

if necessary to allow staples to secure the critical

points along the channel surface.

**4.** Place consecutive RECPs end-over-end (shingle style)

with a 4 in.-6 in. (10-15 cm) overlap. Use a double row of

5. Full-length edge of RECPs at top of side slopes must be

anchored with a row of staples/stakes approximately

**6.** Adjacent RECPs must be overlapped approximately 2 in.-

recommended at 30 to 40 ft (9-12 m) intervals. Use a

double row of staples staggered 4 in. (10 cm) apart and

4 in. (10 cm) on center over entire width of the channel.

5 in. (5-12.5 cm) (depending on RECP type) and stapled.\*

12 in. (30 cm) apart in a 6 in. (15 cm) deep x 6 in. (15 cm)

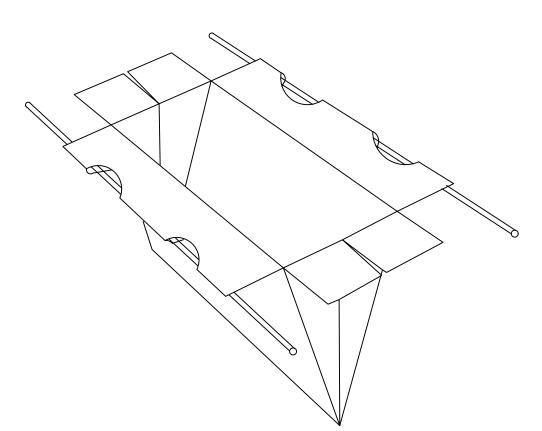
wide trench. Backfill and compact the trench after stapling

staples staggered 4 in. (10 cm) apart and 4 in. (10 cm) on

\*NOTE: In adverse soil conditions longer staples/stakes or earth anchors may be necessary to properly secure the RECPs.

NOTE: EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN SC 150 BN, OR APPROVED EQUAL. APPROVED EQUAL MUST BE ALL NATURAL MATERIAL WITH NO PHOTOBIODEGRADABLE CONTENT AND SHALL NOT CONTAIN PLASTIC, OR MULTIFILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES.

Erosion Control Channel Installation Detail



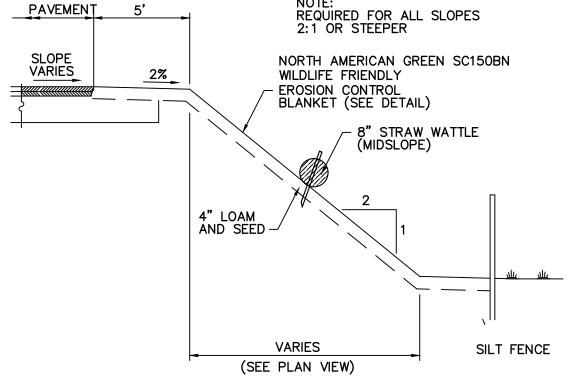
## NOTES:

1. SIZED TO FIT ANY SIZE OR SHAPE CATCH BASIN.

2. ALL SEAMS DOUBLE STITCHED.

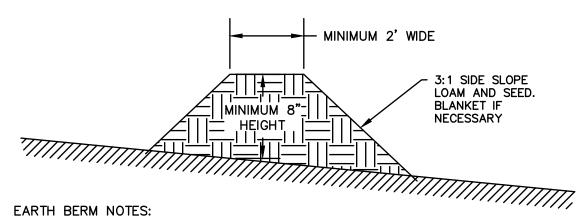
3. PERMEABILITY - REGULAR FLOW SILTSACK - 40 gal./min./sq. ft. HI - FLOW SILTSACK - 200 gal./min./sq. ft.

Catch Basin Silt Sack



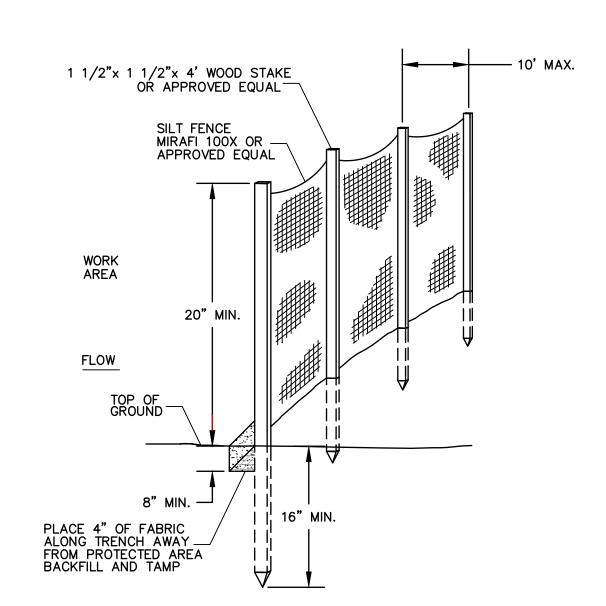
Slope Stabilization

6" LOAM & SEED LIMESTONE, FERTILIZER, MULCH SEE EROSION CONTROL NOTES FOR PROCEDURES AND MIXTURES Loam & Seed Detail



1. EARTH BERM SHALL: NOT COMPRISED OF WOOD CHIPS, BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS; NOT CONTAIN SILTS, CLAYS, OR FINE SANDS;

Earth Berm Detail



<u>Silt Fence Barrier</u>

## MAINTENANCE NOTES

SILT FENCE / FILTER SOCK

THE BARRIER.

- 1. SILT FENCE / FILTER SOCK SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEÁST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED
- SHALL BE MADE IMMEDIATELY. 2. IF THE FABRIC ON A SILT FENCE OR THE FILTER SOCK SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE OR FILTER SOCK, THE FABRIC
- OR FILTER SOCK SHALL BE REPLACED PROMPTLY. 3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF
- 4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND

CATCH BASIN SEDIMENT FILTER

1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM THE TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAX. OF 1/2 THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

## TYPICAL CONSTRUCTION SEQUENCE

- INSTALL PERIMETER CONTROLS IN LOCATIONS SHOWN ON PLANS AS A MINIMUM. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION. PREPARE TEMPORARY STABILIZED CONSTRUCTION ENTRANCE IN SUITABLE LOCATION.
- INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A DAILY BASIS. DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES, SILTATION FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
- 4. CUT AND CLEAR TREES, DISPOSE OF DEBRIS IN AN APPROVED OFF-SITE LOCATION. 5. THE WORK AREA SHALL BE GRADED, SHAPED AND OTHERWISE DRAINED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, SILTATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE LIMITS OF THE WORK AREA. SILT FENCES, FILTER SOCK AND/OR DETENTION BASINS WILL BE NECESSARY TO
- ACCOMPLISH THIS. 6. TOPSOIL SHALL BE STRIPPED AND STOCKPILED DURING DRY CONDITIONS AND WITHOUT
- COMPACTION. TOPSOIL SHALL BE STABILIZED AGAINST EROSION. REMOVE ONSITE UNDESIRABLE SOILS AND LEDGE.
- GRUBBING AND STUMPING DISPOSAL IN AN APPROVED OFF-SITE LOCATION. 9. CONSTRUCT ALL DITCHES AND SWALES.
- 10. ALL DITCHES AND SWALES, SHALL BE STABILIZED PRIOR TO DIRECTING ANY STORM WATER INTO THEM.
- 11. CONSTRUCT SLOPED EMBANKMENTS. 12. ROUGH GRADE SITE OR PHASED WORK AREA. DISTURBED AREAS SHALL BE STABILIZED
- UPON COMPLETION OF ROUGH GRADING PER THE EROSION CONTROL NOTES. 13. INSTALL ALL UNDERGROUND UTILITIES. 14. INSTALL DRAINAGE STRUCTURES, CULVERTS, HEADWALLS, RIP RAP, AND OTHER DRAINAGE FACILITIES. PLACE CATCH BASIN RIMS IN DANDY BAGS UNTIL PARKING AREAS ARE PAVED. STORMWATER PONDS, INFILTRATION BASINS AND SWALES MUST BE
- STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM. 15. FINISH GRADING, LOAMING AND SEEDING. ALL DISTURBED AREAS SHALL BE STABILIZED
- WITHIN 72 HOURS AFTER FINAL GRADING. 16. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 17. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED AND HAVE A HEALTHY VEGETATIVE COVER. 18. CLEAN ALL DRAINAGE STRUCTURE SUMPS OF SEDIMENT AND DEBRIS (INCLUDES ALL
- STRUCTURES WITHIN THE LIMITS OF WORK). 19. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF WATER.

TYPICAL EROSION CONTROL NOTES

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:

- 1. INSTALLATION OF PERIMETER CONTROLS (SILT FENCE OR FILTER SOCK) SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA. PREFABRICATED SILT FENCES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURES'
- RECOMMENDATIONS. 2. PERIMETER CONTROLS SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A HEALTHY STAND OF VEGETATIVE COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RAINFALL.
- EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
- 5. STABILIZATION SHALL INCLUDE THE FOLLOWING, AT A MINIMUM: MIN. 85% VEGETATED GROWTH
- INSTALLATION OF STONE OR RIP RAP MATERIAL (3" MIN. DEPTH)
- PROPERLY INSTALLED EROSION CONTROL BLANKETS 6. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 6" OF LOAM INSTALLED WITH NOT LESS THAN 1.1 POUNDS OF SEED MIX PER 1,000 SQ. FT. SEED MIXTURE TO BE SHADE
- MIX VARIETY, COORDINATE MIX WITH ENGINEER/ARCHITECT PRIOR TO CONSTRUCTION. 7. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO SEEDING. MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.
- 8. HAY MULCH OR JUTE MATTING SHALL BE USED WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. JUTE MATTING SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
- 9. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS BAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS, PLANT ANNUAL RYE GRASS PRIOR TO OCTOBER 15TH.
- 10. THE LAND AREA EXPOSED SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME AND SHALL NOT REMAIN EXPOSED MORE THAN 45 DAYS FROM INITIAL
- 11. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. 12. ALL CONTRIBUTING WATERSHED AREAS MUST BE FULLY STABILIZED PRIOR TO DIRECTING STORMWATER TO THEM. 13. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.25" OR
- GREATER RAINFALL WITHIN A 24-HOUR PERIOD. 14. TEMPORARY WATER DIVERSION (SEDIMENT BASINS, SWALES, ETC.) MUST BE USED AS
- NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED 15. CUT AND FILL SLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED 16. STORMWATER BASINS AND SWALES MUST BE INSTALLED BEFORE ROUGH GRADING THE
- 17. STORMWATER BASINS AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF

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**SLOPE INSTALLATION STEPS** 

2. Begin at the top of the slope by anchoring the RECPs in portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12 in. (30 cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12 in. (30 cm) portion of RECPs back over

12 in. (30 cm) apart across the width of the RECPs.

1. Prepare soil before installing RECPs, including any necessary application of lime, fertilizer and seed. a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench with approxi-

mately 12 in. (30 cm) of RECPs extended beyond the upslope the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately

3. Roll the RECPs (3A) down or (3B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.

**4.** The edges of parallel RECPs must be stapled with an approximately 2 in.-5 in. (5-12.5 cm) overlap depending on the RECP type. **5.** Consecutive RECPs spliced down the slope must be end-

over-end (shingle style) with an approximate 3 in. (7.5 cm) overlap. Staple through overlapped area, approximately 12 in. (30 cm) apart across entire RECPs width.\*

\*NOTE: In adverse soil conditions longer staples/stakes or earth anchors may be necessary to properly secure the RECPs.

NOTE: EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN SC 150 BN, OR APPROVED EQUAL. APPROVED EQUAL MUST BE ALL NATURAL MATERIAL WITH NO PHOTOBIODEGRADABLE CONTENT AND SHALL NOT CONTAIN PLASTIC, OR MULTIFILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES.

<u>Erosion Control Slope Installation Detail</u>