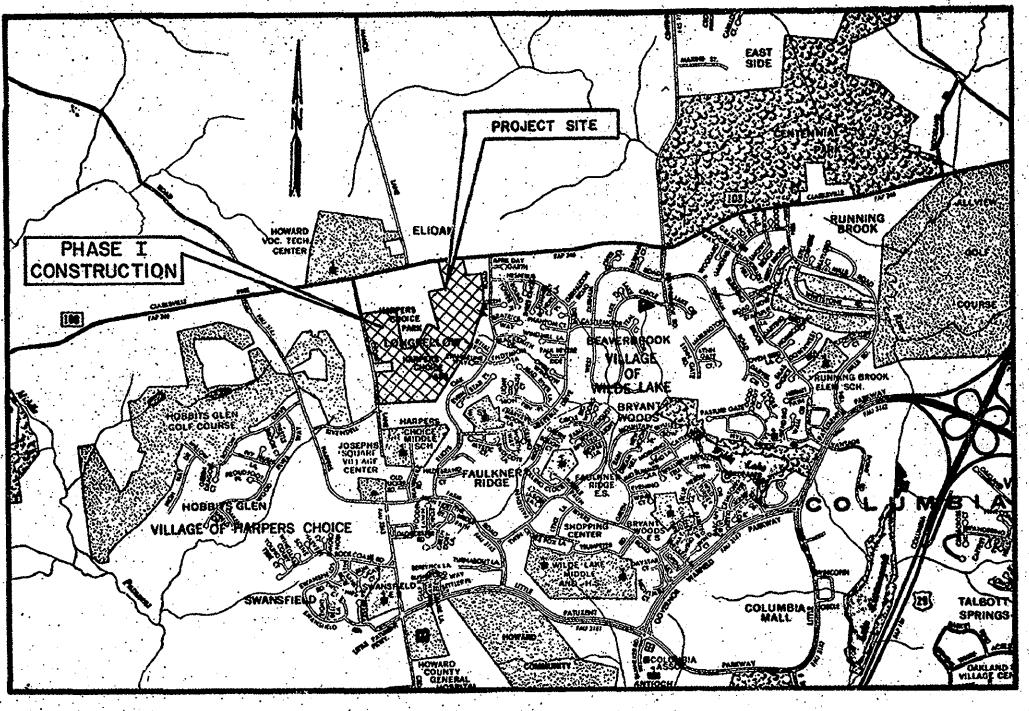
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A-10 A-11 A-12 A-13 A-14 S-1 S-2 S-3 S-4 M-1 M-2 M-3 M-4		Press Box Schedules Details Details  STRUCTURAL  Roof Framing Plans Foundation and First Floor Plans Schedules and Details Storage Bins, Details & General Notes  MECHANICAL  Office / Concession Building - Mechanical Storage Building - Toilet/Storage Building Mech Vehicle / Equipment Building & Risers - Mech Risers - Schedules - Details and Press Box - Mech ELECTRICAL  Outside Electrical Work - Sheet 1 Outside Electrical Work - Sheet 2
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A-10 A-11 A-12 A-13 A-14 S-1 S-2 S-3 S-4 M-2 M-3 M-4 E-2 E-3 E-4 E-5		Press Box Schedules Details Details  STRUCTURAL  Roof Framing Plans Foundation and First Floor Plans Schedules and Details Storage Bins, Details & General Notes  MECHANICAL  Office / Concession Building - Mechanical Storage Building - Toilet/Storage Building Mech Vehicle / Equipment Building & Risers - Mech Risers - Schedules - Details and Press Box - Mech ELECTRICAL  Outside Electrical Work - Sheet 1 Outside Electrical Work - Sheet 2 Outside Electrical Work - Sheet 3 Sports Lighting Details - Electrical Office/Concession Building - Electrical



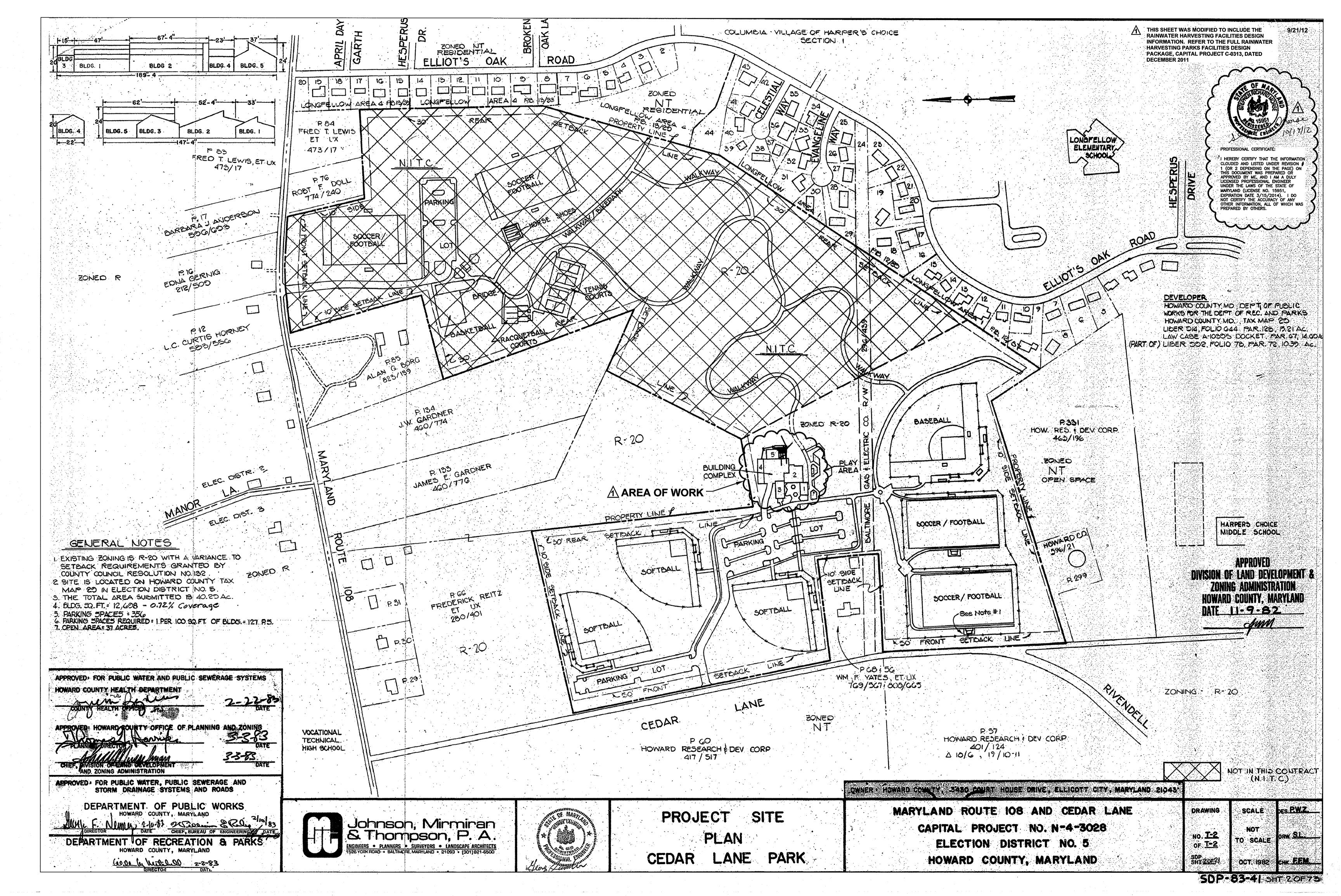
# HOWARD COUNTY MARYLAND DEPARTMENT OF PUBLIC WORKS FOR DEPARTMENT OF RECREATION AND PARKS

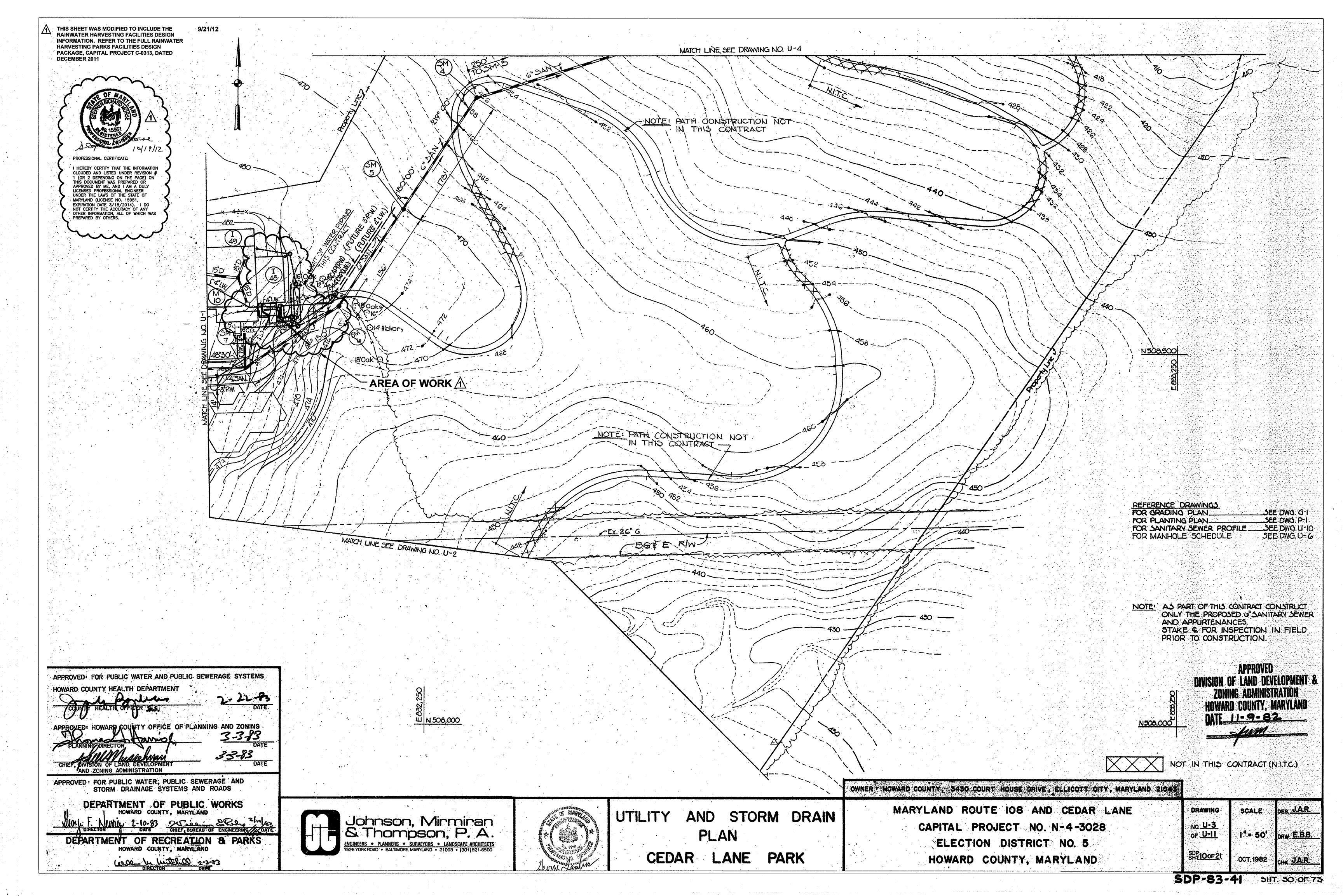


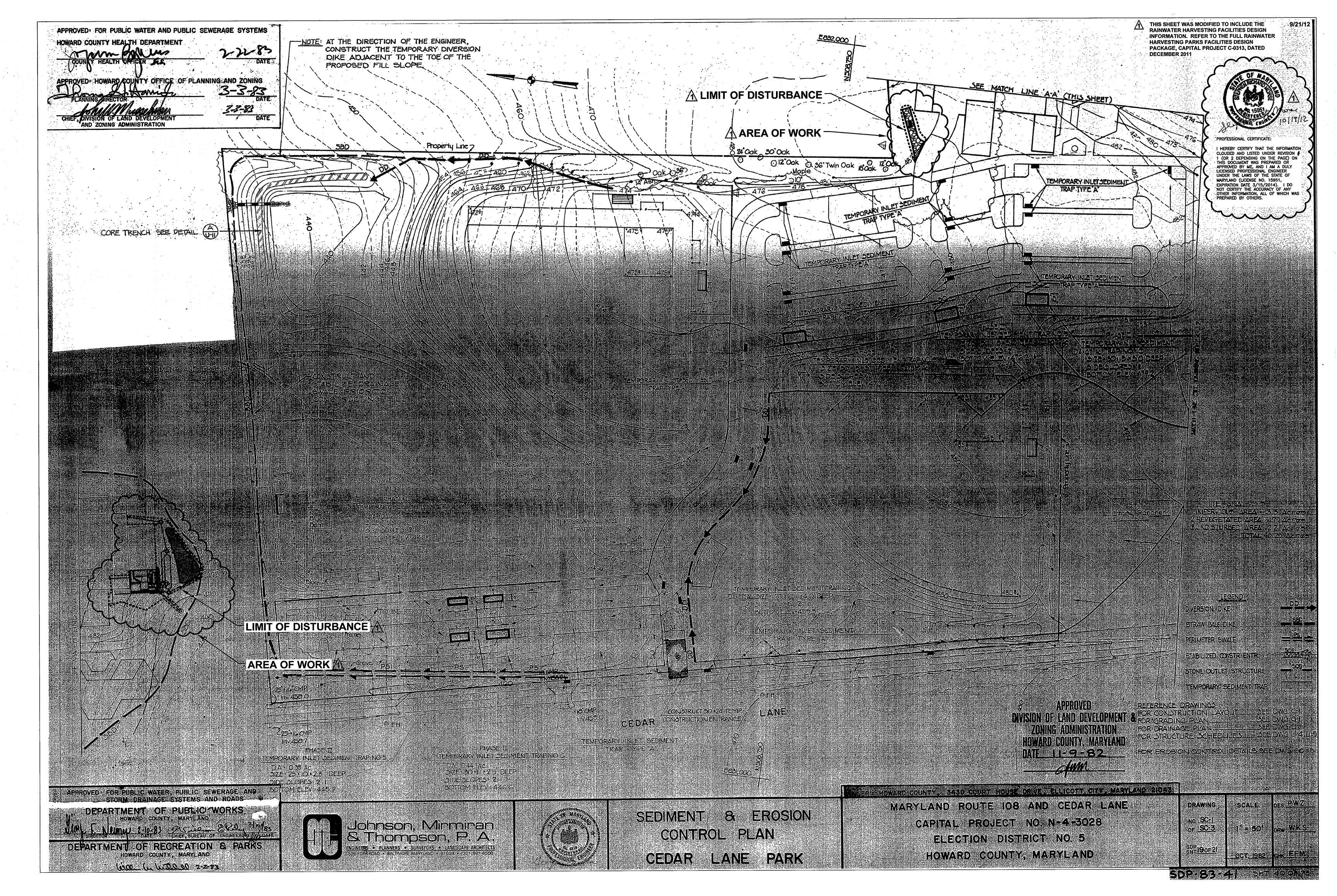
# PHASE I CEDAR LANE PARK

MARYLAND ROUTE 108 AND CEDAR LANE

CAPITAL PROJECT N-4-3028







#### HOWARD SOIL CONSERVATION DISTRICT

#### PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE OF THE FOLLOWING SCHEDULES:

PREFERRED - APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS/ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING, HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS/ACRE 30-0-0

ACCEPTABLE -- APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 1000 LBS/ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 - APRIL 30, AND AUGUST 1 - OCTOBER 15, SEED WITH 60 LBS/ACRE (1.4 LBS / 1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 - JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS/ACRE (.05 LBS/ 1000 SQ. T.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 - FEBRUARY 28, PROTECT SITE BY: OPTION 1 -TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OPTION 2 - USE SOD. OPTION 3 - SEER: WITH 60 LBS/ACRE KENTUCKY 30 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED

LII CHING — APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

#### TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RE-DISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: - LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: - APPLY 600 LBS/ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.).

EDING: -- FOR PERIODS MARCH 1 -- APRIL 30 AND FROM AUGUST 15 -- OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS 1000 SQ. FT.). FOR THE PERIOD MAY 1-AUGUST 14, SEED WITH 3 LBS/ACRE OF WEEPING LOVEGRASS (.07 LBS / 1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 - FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS/ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE

MULCHING: - APPLY 1-1/2 TO 2 TONS/ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED WEED-FREE, SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING: A NORMAL CHAIN STRAW IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5GAL/ 1000 SQ. FT.) OF MULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL/ 1000 SQ. FT) FOR ANCHORING. REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. FOR ADDITIONAL RATES AND

#### STANDARD SEDIMENT CONTROL NOTES

A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).

ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN

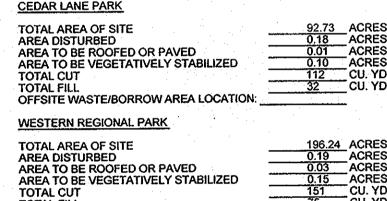
3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH

VOL 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE ALL DISTURBED AREAS MUST BE STABILIZED WITHIN TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52), TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATÉS DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR SITE ANALYSIS:

METHODS NOT COVERED.

REVIOUSLY LOOSENED.



OFFSITE WASTE/BORROW AREA LOCATION:

APPROVAL BY THE INSPECTION AGENCY IS MADE.

ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL

TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORK DAY, WHICHEVER IS SHORTER.

11-5-15

DEPARTMENT OF PUBLIC WORKS

- 1. NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION (313-1855) A MINIMUM OF 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION AT WESTERN REGIONAL PARK.
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 3. INSTALL SILT FENCE AND SUPER SILT FENCE.
- 4. REMOVE TOP SOIL FROM RST-1, HARVESTED WATER SHED, WASH PAD AND OWS-1 & WWST-1 AREAS. STOCKPILE TOPSOIL UPGRADIENT OF SILT FENCE WHERE SHOWN ON DRAWINGS
- 5. EXCAVATE FOR INSTALLATION OF RST-1. IMMEDIATELY HAUL EXCAVATED MATERIAL AND PLACE AS FOR FILL AT WASH PAD AREA, PLACE UNUSED SOIL IN STOCKPILE.
- 6. INSTALL RST-1 AND BACKFILL AS SOON AS PRACTICABLE. IMMEDIATELY HAUL AWAY EXCESS SOIL.
- 7. INSTALL GRAVEL AND HARVESTED WATER SHED.
- 8. INSTALL PIPING AND CONDUIT BETWEEN TANK AND SHED AND SHED AND MAINTENANCE BUILDING.
- 9. PLACE TOPSOIL AROUND SHED, ABOVE RTS-1 AND ABOVE UTILITY TRENCHES. PLACE PERMANENT SEED MIXTURE.
- 10. EXCAVATE FOR OWS-1 AND WWST-1 AND MANHOLES. USE EXCAVATED MATERIAL FOR FILL. IF NEEDED. PLACE OWS-1, WWST-1 MANHOLES, CONNECTING PIPING AND CONDUIT. BACKFILL TANK AND UTILITY EXCAVATIONS. IMMEDIATELY HAUL AWAY EXCESS SOIL
- 11. INSTALL CONCRETE WASH PAD.
- 12. TRENCH AND INSTALL INSIDE TRENCH DRAIN CONNECTION AND YH-1 PIPING FROM MAINTENANCE BUILDING ACROSS ASPHALT. DISCONNECT AND ABANDON EXISTING OIL WATER SEPARATOR AFTER CONNECTION TO NEW OWS-1 IS COMPLETED.
- 13. PLACE REMAINING TOPSOIL ABOVE TANKS, MANHOLES AND UTILITY TRENCHES AND PERFORM PERMANENT SEEDING. USE TEM[PORARY SOIL STABILIZATION MATTING ON SLOPES >25%.
- 14. INSTALL NEW GUTTERS, DOWNSPOUTS AND ABOVE GRADE RAINWATER FILTERS. CONNECT FILTER DISCHARGE PIPES TO SUBSURFACE COLLECTION PIPING. INSTALL INSERT BLINDS TO DIRECT STORMWATER TO SURFACE. INSTALL TEMPORARY PIPING BEYOND DISTURBED
- 15. COMPLETE INSIDE PIPING, PUMP AND EQUIPMENT INSTALLATION, AND ALL WIRING AND CONNECTIONS.
- 16. REMOVE FILTER BLIND INSERTS AND START-UP SYSTEM.
- 17. REMOVE SILT FENCE AFTER STABILIZATION IS COMPLETE.
- 18. REMOVE STABILIZED CONSTRUCTION ENTRANCE AND LEAVE SMALL GRAVEL FOR ROADWAY.

### 50 FT MIN. **MOUNTABLE BERM EXISTING PAVEMENT** (6 IN MIN.) EXISTING GROUND~ **EARTH FILL** NONWOVEN MIN. 6 IN OF 2 TO 3 IN GEOTEXTILE AGGREGATE OVER LENGTH PIPE (SEE NOTE 6) AND WIDTH OF ENTRANCE PROFILE 50 FT MIN. LENGTH \* -EDGE OF **EXISTING PAVEMENT PLAN VIEW**

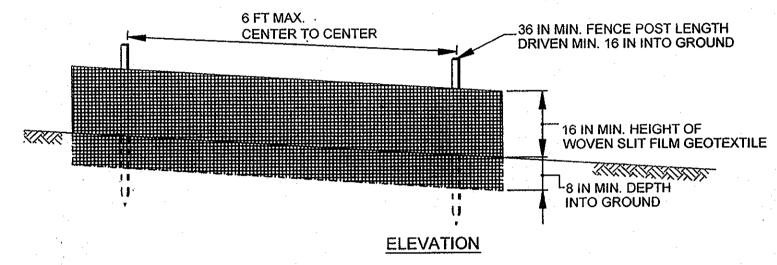
#### **CONSTRUCTION SPECIFICATIONS**

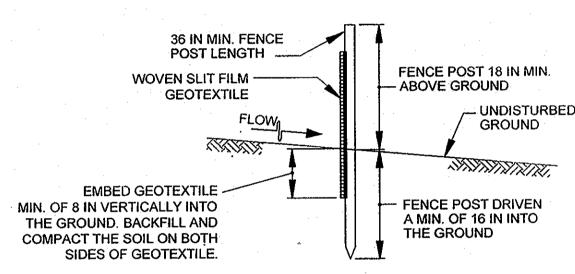
- 1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS
- 2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE, PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCI. IS NOT
- 3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- 4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

#### STABILIZED CONSTRUCTION ENTRANCE (WESTERN & CEDAR) NO SCALE

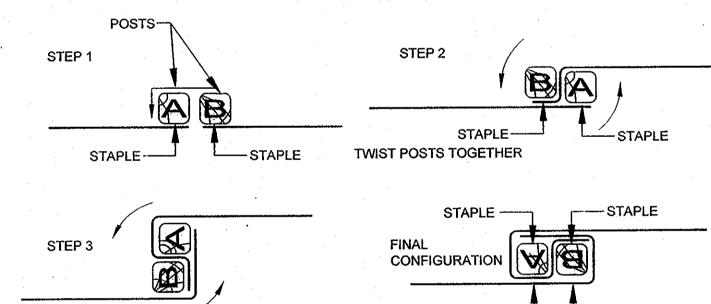
# CEDAR LANE PARK SEQUENCE OF CONSTRUCTION

- 1. NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION (313-1855) A MINIMUM OF 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION AT CEDAR LANE PARK.
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 3. INSTALL SILT FENCE.
- 4. REMOVE TOP SOIL FROM RST-1, HARVESTED WATER SHED, WASH PAD AND OWS-1 AREA. STOCKPILE TOPSOIL UPGRADIENT OF SILT FENCE. WHERE SHOWN ON DRAWINGS
- 5. BEGIN EXCAVATION FOR INSTALLATION OF RST-1. PLACE EXCAVATED MATERIAL AS FILL AT WASH PAD AREA.
- 6. EXCAVATE FOR OWS-1 AND MANHOLES. USE EXCAVATED MATERIAL FOR FILL. IF NEEDED. IMMEDIATELY HAUL AWAY EXCESS SOIL.
- 7. PLACE OWS-1, MANHOLES, BURIED RAINWATER FILTERS, CONNECTING PIPING AND CONDUIT. BACKFILL TANK AND UTILITY TRENCHES AND MMEDIATELY HAUL AWAY EXCESS SOIL.
- 8. INSTALL GRAVEL AND HARVESTED WATER SHED.
- 9. INSTALL PIPING AND CONDUIT BETWEEN TANK AND SHED AND SHED AND MAINTENANCE BUILDING.
- 10. INSTALL CONCRETE WASH PAD.
- 11. COMPLETE EXCAVATION FOR RST-1.
- 12. INSTALL RST-1 AND BACKFILL AS SOON AS PRACTICABLE. IMMEDIATELY HAUL AWAY EXCESS SOIL
- 13. PLACE TOPSOIL ABOVE TANKS, MANHOLES AND UTILITY TRENCHES AND PERFORM PERMANENT SEEDING. USE TEMPORARY SOIL
- 14. INSTALL NEW GUTTERS, DOWNSPOUTS AND ABOVE GRADE RAINWATER FILTERS. CONNECT FILTER DISCHARGE PIPES TO SUBSURFACE COLLECTION PIPING. INSTALL INSERT BLINDS TO DIRECT STORMWATER TO SURFACE. INSTALL TEMPORARY PIPING BEYOND DISTURBED
- 15. COMPLETE INSIDE PIPING, PUMP AND EQUIPMENT INSTALLATION, AND ALL WIRING AND CONNECTIONS.
- 16. REMOVE FILTER BLIND INSERTS AND START-UP SYSTEM.
- 17. REMOVE SILT FENCE AFTER STABILIZATION IS COMPLETE.
- 18. REMOVE STABILIZED CONSTRUCTION ENTRANCE AND LEAVE SMALL GRAVEL FOR ROADWAY





#### **CROSS SECTION**



JOINING TWO ADJACENT SIL FENCE SECTIONS (TOP VIEW)

STAPLE-

#### **CONSTRUCTION SPECIFICATIONS**

- 1. USE WOOD POSTS 1% X 1% ± 1/6 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
- 2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART

PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.

THIS SHEET WAS MODIFIED TO INCLUDE THE

- 3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
- 4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- 5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
- 6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL 7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO
- 8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE:

SILT FENCE (WESTERN & CEDAR) NO SCALE

#### TRIKINIK GROUND 118118118 SURFACE-GALVANIZED CHAIN LINK FENCE 2% IN DIAMETER WITH WOVEN SLIT FILM **GALVANIZED STEEL** GEOTEXTILE OR ALUMINUM POSTS **ELEVATION** CHAIN LINK FENCING **WOVEN SLIT FILM GEOTEXTILE** FLOW \_\_\_\_ N CONTRACTOR EMBED GEOTEXTILE AND CHAIN LINK FENCE 8 IN MIN. INTO GROUND

10 FT MAX.

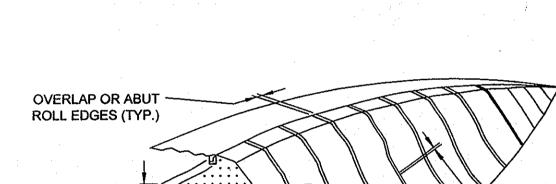
#### CONSTRUCTION SPECIFICATIONS

- INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- 2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
- 3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND

CROSS SECTION

- 4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT
- 5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
- 6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- 7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

#### SUPER SILT FENCE WESTERN) NO SCALE



# ISOMETRIC VIEW

8 IN MIN. OVERLAP

AT ROLL END

#### **CONSTRUCTION SPECIFICATIONS**

PREPARED SLOPE

(SEEDBED) WITH

SEED IN PLACE

KEY IN TRENCH

- 1. LISE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
- 2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL
- 3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1% INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD, WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD,
- 4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.
- 5. UNROLL MATTING DOWNSLOPE, LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE, AVOID STRETCHING THE
- 6. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.

12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTON

- 7. KEY IN THE UPSLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN
- 8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
- 9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

TEMPORARY SOIL STABILIZATION MATTING SLOPE APPLICATION NO SCALE

FULL RAINWATER HARVESTING PARKS FACILITIES DESIGN PACKAGE

CAPITAL PROJECT: C-0313 ELECTION DISTRICT NOS.: 4 & 5 HOWARD COUNTY, MARYLAND

ES-3

SCALE

AS

SHOWN

SHEET

# APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING ( ) BY THE DEVELOPER: "INVE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE

( ) BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF

THE HOWARD SOIL CONSERVATION DISTRICT

10/19/12

HOWARD SOIL CONSERVATION DISTRICT PRINT NAME BELOW SIGNATURE

> 49 EISENHOWER BOULEVARD SUITE 300 ARRISBURG, PA 17111 TEL: (717)232-0593 FAX: (717)232-1799 www.skellyloy.com

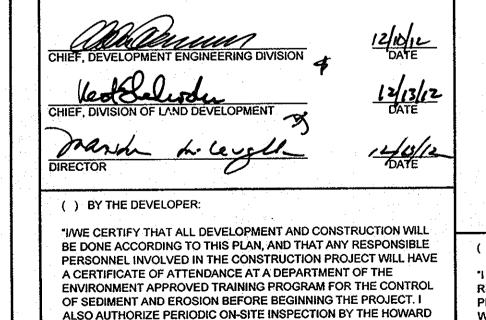
)SN. BY: JTM, JRG

RAINWATER HARVESTING FACILITIES DESIGN INFORMATION. REFER TO THE FULL RAINWATER HARVESTING PARKS FACILITIES DESIGN PACKAGE, CAPITAL PROJECT C-0313, DATED DECEMBER 2011 REVISION

REVISED SITE DEVELOPMENT PLAN DATE 600' SCALE MAP NO. BLOCK NO.

E&S DETAILS AND NOTES

SDP-83-41



SOIL CONSERVATION DISTRICT."

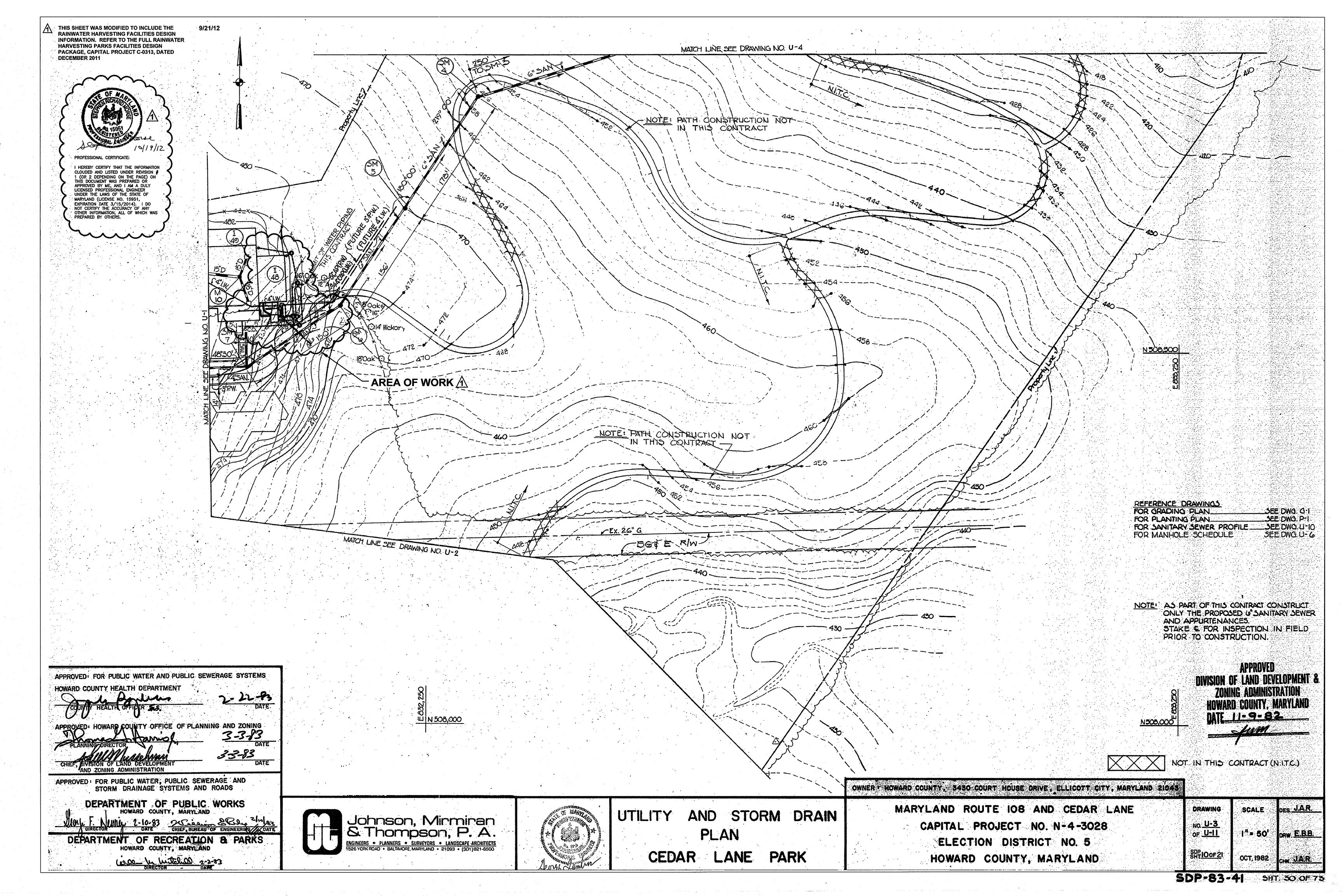
PRINT NAME BELOW SIGNATURE

PRINT NAME BELOW SIGNATURE

( ) FOR THE HOWARD SOIL CONSERVATION DISTRICT:

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND

HEREBY CERTIFY THAT THE INFORMATION CLOUDED AND LISTED UNDER REVISION # OR 2 DEPENDING ON THE PAGE) ON THI ME, AND I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND (LICENSE NO. 15951, EXPIRATION DATE 3/15/2014).
DO NOT CERTIFY THE ACCURACY OF ANY



#### **HOWARD SOIL CONSERVATION DISTRICT**

#### PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE OF THE FOLLOWING SCHEDULES: PREFERRED - APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS/ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.

FT.) BEFORE SEEDING, HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS/ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ. FT.)

ACCEPTABLE - APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 1000 LBS/ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. G - FOR THE PERIODS MARCH 1 - APRIL 30, AND AUGUST 1 - OCTOBER 15, SEED WITH 60 LBS/ACRE (1.4 LBS / 1000 SQ. FT.) OF KENTUCKY 1 TALL FESCUE. FOR THE PERIOD MAY 1 - JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS/ACRE (.05 LBS/ 1000 SQ.

T.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 - FEBRUARY 28, PROTECT SITE BY: OPTION 1 -TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION 2 - USE SOD. OPTION 3 - SEER: WITH 60 LBS/ACRE KENTUCKY 30 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED

- APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEED ANCHOR MUI CH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE -- INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

#### TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RE-DISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: -- LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: -- APPLY 600 LBS/ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.)

- FOR PERIODS MARCH 1 - APRIL 30 AND FROM AUGUST 15 - OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS 7 1000 SQ. FT.). FOR THE PERIOD MAY 1-- AUGUST 14, SEED WITH 3 LBS/ACRE OF WEEPING LOVEGRASS (.07 LBS / 1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 - FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS/ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE

MULCHING: - APPLY 1-1/2 TO 2 TONS/ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED WEED-FREE, SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5GAL/ 1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL/ 1000 SQ. FT) FOR ANCHORING.

REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. FOR ADDITIONAL RATES AND METHODS NOT COVERED.

#### STANDARD SEDIMENT CONTROL NOTES

A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).

ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

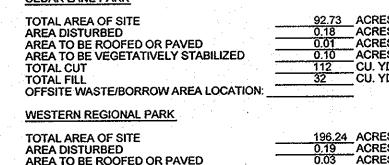
L SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

ALL DISTURBED AREAS MUST BE STABILIZED WITHIN TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54) EMPORARY SEEDING (SEC, 50) AND MULCHING (SEC, 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. SITE ANALYSIS:

#### CEDAR LANE PARK

TOTAL FILL



AREA TO BE VEGETATIVELY STABILIZED

OFFSITE WASTE/BORROW AREA LOCATION:

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL

BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE

PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE

ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL

ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD

OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I

A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE

( ) BY THE DEVELOPER:

SIGNATURE OF DEVELOPER

PRINT NAME BELOW SIGNATURE

ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE

ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL

TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORK DAY, WHICHEVER IS SHORTER.

1. NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION (313-1855) A MINIMUM OF 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION AT WESTERN REGIONAL PARK.

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.

3. INSTALL SILT FENCE AND SUPER SILT FENCE.

4. REMOVE TOP SOIL FROM RST-1, HARVESTED WATER SHED, WASH PAD AND OWS-1 & WWST-1 AREAS. STOCKPILE TOPSOIL UPGRADIENT OF SILT FENCE WHERE SHOWN ON DRAWINGS.

5. EXCAVATE FOR INSTALLATION OF RST-1. IMMEDIATELY HAUL EXCAVATED MATERIAL AND PLACE AS FOR FILL AT WASH PAD AREA, PLACE UNUSED SOIL IN STOCKPILE.

6. INSTALL RST-1 AND BACKFILL AS SOON AS PRACTICABLE. IMMEDIATELY HAUL AWAY EXCESS SOIL.

7. INSTALL GRAVEL AND HARVESTED WATER SHED.

8. INSTALL PIPING AND CONDUIT BETWEEN TANK AND SHED AND SHED AND MAINTENANCE BUILDING

9. PLACE TOPSOIL AROUND SHED, ABOVE RTS-1 AND ABOVE UTILITY TRENCHES. PLACE PERMANENT SEED MIXTURE.

10. EXCAVATE FOR OWS-1 AND WWST-1 AND MANHOLES. USE EXCAVATED MATERIAL FOR FILL. IF NEEDED. PLACE OWS-1, WWST-1, MANHOLES, CONNECTING PIPING AND CONDUIT. BACKFILL TANK AND UTILITY EXCAVATIONS. IMMEDIATELY HAUL AWAY EXCESS SOIL

11. INSTALL CONCRETE WASH PAD.

12. TRENCH AND INSTALL INSIDE TRENCH DRAIN CONNECTION AND YH-1 PIPING FROM MAINTENANCE BUILDING ACROSS ASPHALT. DISCONNECT AND ABANDON EXISTING OIL WATER SEPARATOR AFTER CONNECTION TO NEW OWS-1 IS COMPLETED.

13. PLACE REMAINING TOPSOIL ABOVE TANKS, MANHOLES AND UTILITY TRENCHES AND PERFORM PERMANENT SEEDING. USE TEM[PORARY SOIL STABILIZATION MATTING ON SLOPES >25%.

14. INSTALL NEW GUTTERS, DOWNSPOUTS AND ABOVE GRADE RAINWATER FILTERS. CONNECT FILTER DISCHARGE PIPES TO SUBSURFACE COLLECTION PIPING. INSTALL INSERT BLINDS TO DIRECT STORMWATER TO SURFACE. INSTALL TEMPORARY PIPING BEYOND DISTURBED AREA IF NOT YET STABILIZED.

15. COMPLETE INSIDE PIPING, PUMP AND EQUIPMENT INSTALLATION, AND ALL WIRING AND CONNECTIONS

16. REMOVE FILTER BLIND INSERTS AND START-UP SYSTEM

17. REMOVE SILT FENCE AFTER STABILIZATION IS COMPLETE

18. REMOVE STABILIZED CONSTRUCTION ENTRANCE AND LEAVE SMALL GRAVEL FOR ROADWAY.

## 50 FT MIN. **EXISTING PAVEMENT** MOUNTABLE BERM (6 IN MIN.) **EXISTING** GROUND-**EARTH FILL** NONWOVEN MIN. 6 IN OF 2 TO 3 IN GEOTEXTILE PIPE (SEE NOTE 6. AGGREGATE OVER LENGTH AND WIDTH OF ENTRANCE **PROFILE** 50 FT MIN. LENGTH \* **EXISTING PAVEMENT PLAN VIEW**

#### CONSTRUCTION SPECIFICATIONS

( ) FOR THE HOWARD SOIL CONSERVATION DISTRICT:

NOWARD SOIL CONSERVATION DISTRICT

PRINT NAME BELOW SIGNATURE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND

SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT ... used Standard Flam

1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET ("30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.

PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. F'ROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT

3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.

4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.

5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

> STABILIZED CONSTRUCTION ENTRANCE (WESTERN & CEDAR) NO SCALE

- 1. NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION (313-1855) A MINIMUM OF 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION AT CEDAR LANE PARK.
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 3. INSTALL SILT FENCE.
- 4. REMOVE TOP SOIL FROM RST-1, HARVESTED WATER SHED, WASH PAD AND OWS-1 AREA. STOCKPILE TOPSOIL UPGRADIENT OF SILT FENCE. WHERE SHOWN ON DRAWINGS.
- 5. BEGIN EXCAVATION FOR INSTALLATION OF RST-1. PLACE EXCAVATED MATERIAL AS FILL AT WASH PAD AREA. 6. EXCAVATE FOR OWS-1 AND MANHOLES. USE EXCAVATED MATERIAL FOR FILL. IF NEEDED. IMMEDIATELY HAUL AWAY EXCESS SOIL.
- 7. PLACE OWS-1, MANHOLES, BURIED RAINWATER FILTERS, CONNECTING PIPING AND CONDUIT. BACKFILL TANK AND UTILITY TRENCHES AND IMMEDIATELY HAUL AWAY EXCESS SOIL.

8. INSTALL GRAVEL AND HARVESTED WATER SHED.

9. INSTALL PIPING AND CONDUIT BETWEEN TANK AND SHED AND SHED AND MAINTENANCE BUILDING.

10. INSTALL CONCRETE WASH PAD.

11. COMPLETE EXCAVATION FOR RST-1.

12. INSTALL RST-1 AND BACKFILL AS SOON AS PRACTICABLE. IMMEDIATELY HAUL AWAY EXCESS SOIL.

13. PLACE TOPSOIL ABOVE TANKS, MANHOLES AND UTILITY TRENCHES AND PERFORM PERMANENT SEEDING. USE TEMPORARY SOIL

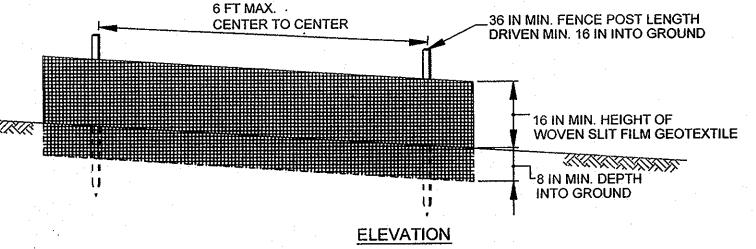
14. INSTALL NEW GUTTERS, DOWNSPOUTS AND ABOVE GRADE RAINWATER FILTERS. CONNECT FILTER DISCHARGE PIPES TO SUBSURFACE COLLECTION PIPING. INSTALL INSERT BLINDS TO DIRECT STORMWATER TO SURFACE. INSTALL TEMPORARY PIPING BEYOND DISTURBED AREA IF NOT YET STABILIZED.

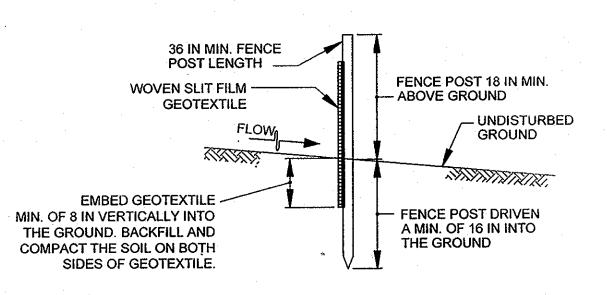
15. COMPLETE INSIDE PIPING, PUMP AND EQUIPMENT INSTALLATION, AND ALL WIRING AND CONNECTIONS.

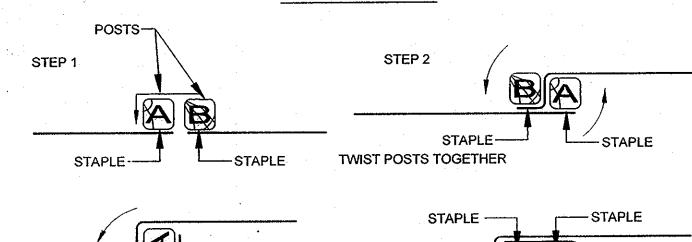
16. REMOVE FILTER BLIND INSERTS AND START-UP SYSTEM.

17. REMOVE SILT FENCE AFTER STABILIZATION IS COMPLETE.

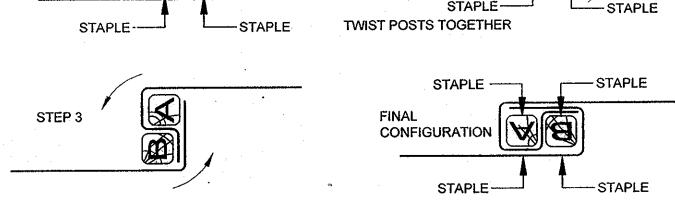
18. REMOVE STABILIZED CONSTRUCTION ENTRANCE AND LEAVE SMALL GRAVEL FOR ROADWAY







**CROSS SECTION** 



#### JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW

#### CONSTRUCTION SPECIFICATIONS

- USE WOOD POSTS 13/4 X 13/4 ± 1/6 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
- 2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART

PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.

- 3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
- 4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- 5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
- 6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL 7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO
- 8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

#### SILT FENCE (WESTERN & CEDAR) NO SCALE

9/21/12

#### 10 FT MAX. -34 IN MIN TINTINTINTIN GROUND 118/18/18 SURFACE--36 IN MIN GALVANIZED CHAIN LINK FENCE 2% IN DIAMETER WITH WOVEN SLIT FILM GALVANIZED STEEL **GEOTEXTILE** OR ALUMINUM POSTS ELEVATION CHAIN LINK FENCING **WOVEN SLIT FILM GEOTEXTILE** FLOW \_\_ NACKININA NACKININA NACKININA EMBED GEOTEXTILE AND **CHAIN LINK FENCE 8 IN** MIN. INTO GROUND **CROSS SECTION**

#### CONSTRUCTION SPECIFICATIONS

INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.

2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

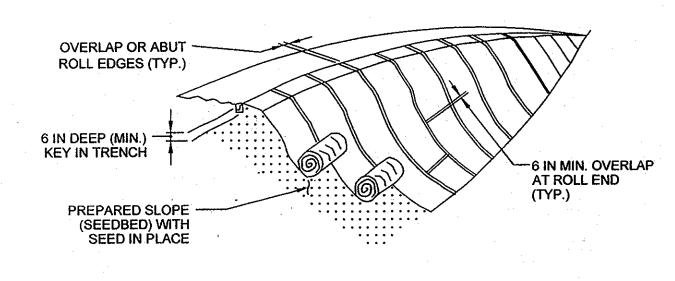
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.

PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

#### SUPER SILT FENCE WESTERN) NO SCALE



#### ISOMETRIC VIEW

#### **CONSTRUCTION SPECIFICATIONS**

1 USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.

2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL

3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1/2 INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH. 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM

4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.

5. UNROLL MATTING DOWNSLOPE, LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE, AVOID STRETCHING THE

6. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.

7. KEY IN THE UPSLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN

8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.

9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

> TEMPORARY SOIL STABILIZATION MATTING SLOPE APPLICATION

> > NO SCALE

FULL RAINWATER HARVESTING PARKS FACILITIES DESIGN PACKAGE

> CAPITAL PROJECT: C-0313 ELECTION DISTRICT NOS.: 4 & 5 HOWARD COUNTY, MARYLAND

ES-3

SCALE

AS

SHOWN

SHEET

DEPARTMENT OF PUBLIC WORKS

11-2-12

( ) BY THE ENGINEER:

SIGNATURE OF ENGINEER

PRINT NAME BELOW SIGNATURE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL

REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY

PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT

WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF

THE HOWARD SOIL CONSERVATION DISTRICT

STEPHEN R. MURSE P.E.

1. Marse



449 EISENHOWER BOULEVARD **SUITE 300** ARRISBURG, PA 17111 TEL: (717)232-0593 FAX: (717)232-1799 www.skellyloy.com

HEREBY CERTIFY THAT THE INFORMATION CLOUDED AND LISTED UNDER REVISION # (OR 2 DEPENDING ON THE PAGE) ON THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND (LICENSE NO. 15951, EXPIRATION DATE 3/15/2014). I DO NOT CERTIFY THE ACCURACY OF ANY

PROFESSIONAL CERTIFICATE:



	DSN. BY: JTM, JRG			THIS SHEET WAS MODIFIED TO INCLUDE THE
	DSN. BY: JIM, JRG			RAINWATER HARVESTING FACILITIES DESIGN
	DRN. BY: JRG			INFORMATION. REFER TO THE FULL RAINWATER
				HARVESTING PARKS FACILITIES DESIGN PACKAGE
	CHK. BY: SRM			CAPITAL PROJECT C-0313, DATED DECEMBER 2011
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7/.1	DATE: DECEMBER 2011	BY	NO.	REVISION

BLOCK NO.

