

EXISTING CONDITIONS

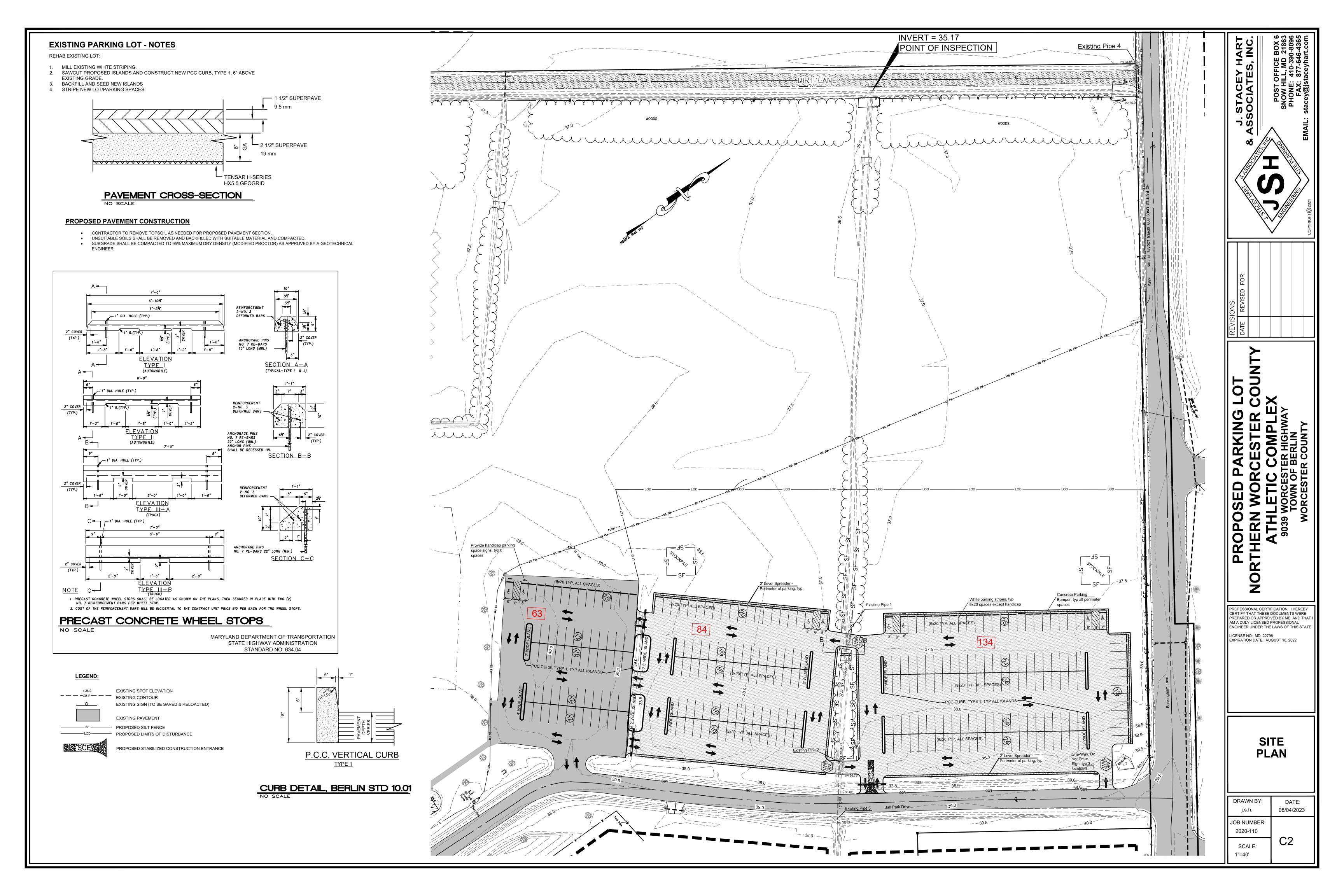
| DRAWN BY: j.s.h. | DATE: 08/04/2023 |
|----------------------|---------------------|
| JOB NUMBER: 2020-110 | |
| SCALE: 1"=50' | C1 |

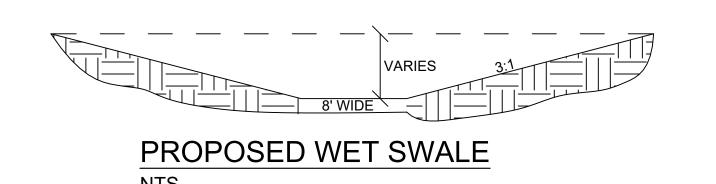
ERTIFY THAT THESE DOCUMENTS WERE REPARED OR APPROVED BY ME, AND THA

M A DULY LICENSED PROFESSIONAL GINEER UNDER THE LAWS OF THIS STAT

PIRATION DATE: AUGUST 10, 2022

ICENSE NO: MD 22798





SWALE INSPECTION, OPERATION& MAINTENANCE - EXISTING & PROPOSED

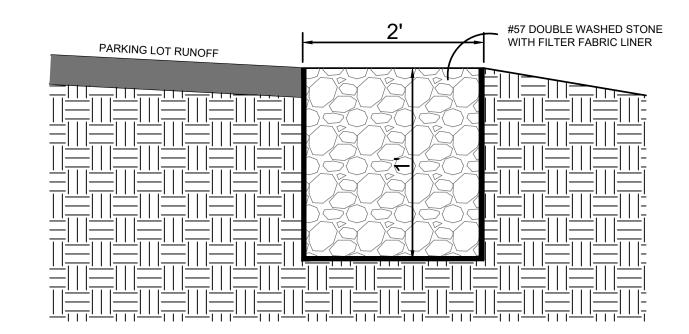
- DURING PLACEMENT AND BACKFILL.
- UPON COMPLETION OF FINAL GRADING ADN ESTABLISHMENT OF PERMANENT STABILIZATION.

LEGEND:

———————— EXISTING CONTOUR

PROPOSED SILT FENCE

- DURING THE ESTABLISHMENT PERIOD, INSPECT CHANNEL AFTER EVERY RAINFALL.
 AFTER GRASS IS ESTABLISHED, CHECK THE CHANNEL AT REGULAR INTERVALS AND AFTER EVERY HEAVY RAINFALL EVENT.
- ORIGINAL DESIGN VOLUME IN ORDER TO MAINTAIN THE CARRYING CAPACITY. MOW GRASS TO MAINTAIN A HEIGHT OF THREE TO FOUR INCHES.



GRAVEL DIAPHRAGM(LEVEL SPREADER) DETAIL NTS

| CHECK DAM # | WEIR INVERT |
|-------------|-------------|
| 1 | 37.50 |
| 2 | 37.75 |
| 3 | 37.00 |
| 4 | 37.00 |
| 5 | 36.00 |

EXISTING SPOT ELEVATION

PROPOSED SPOT ELEVATION

PROPOSED CHECK DAM

EXISTING PAVEMENT

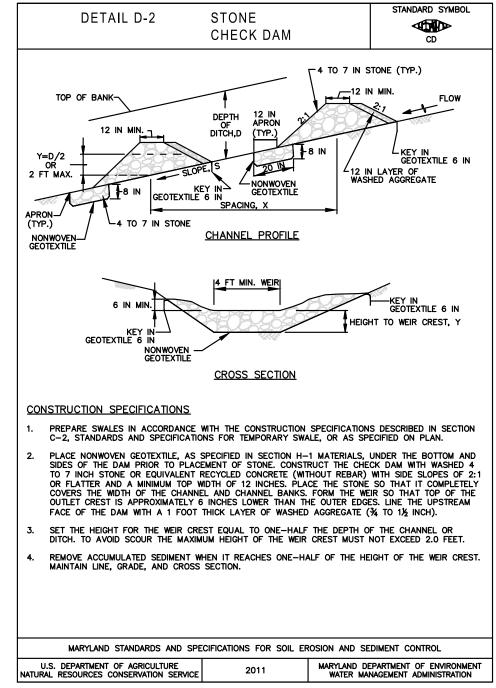
PROPOSED LIMITS OF DISTURBANCE PROPOSED CONTOUR

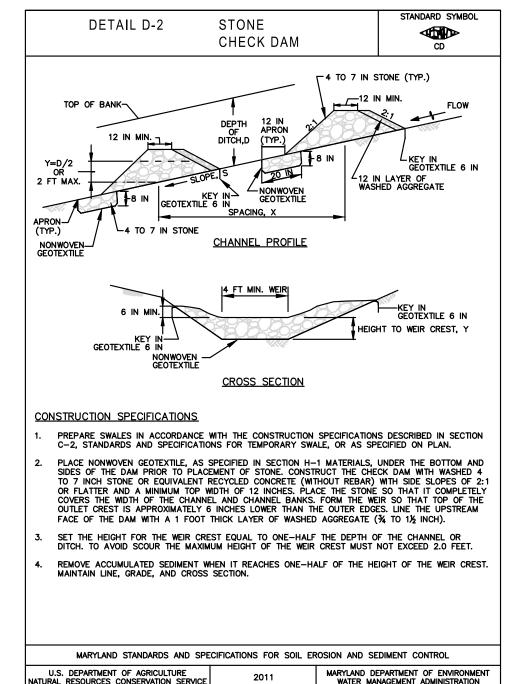
PROPOSED DRAIN PIPE

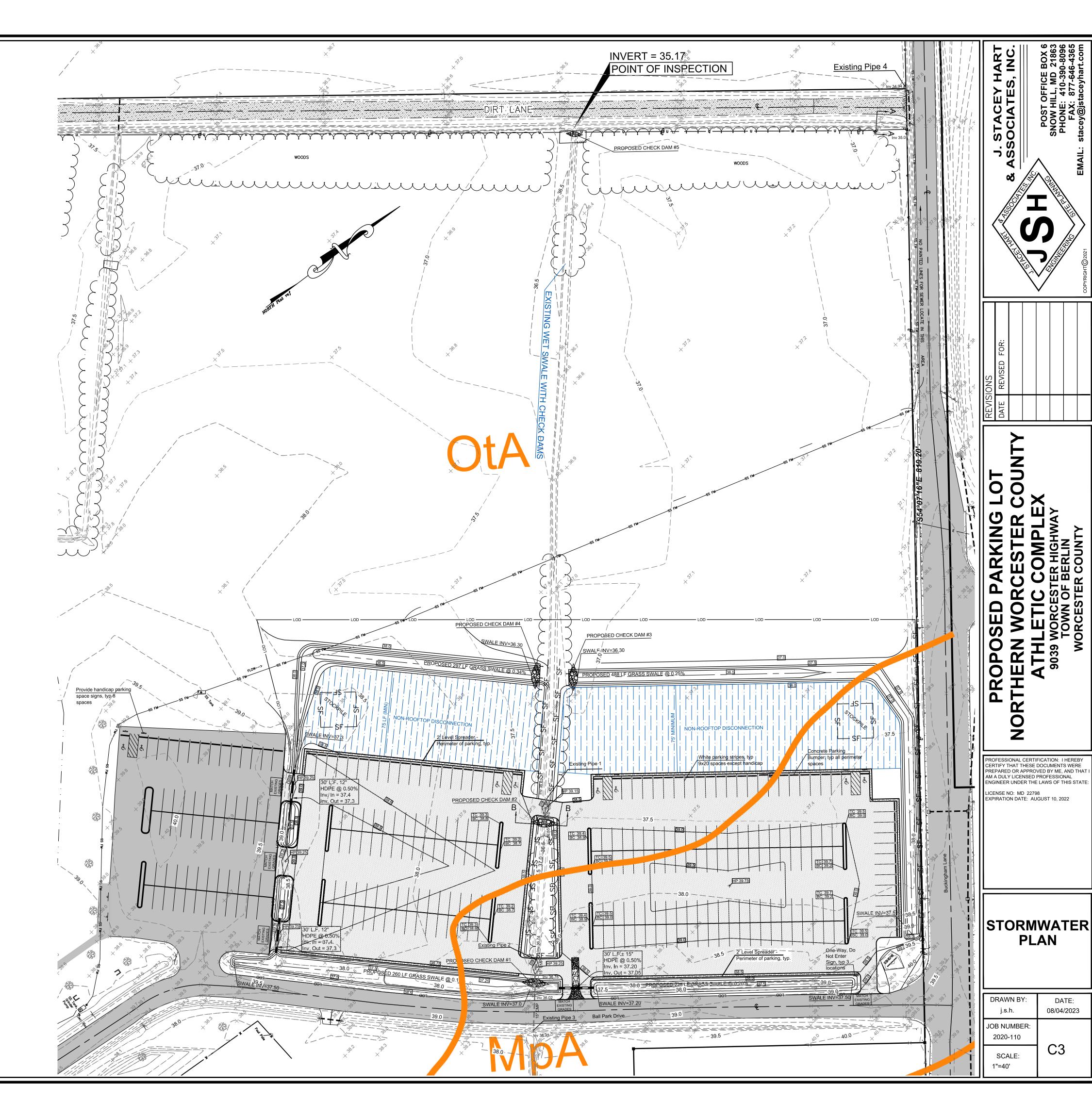
PROPOSED PAVING

EXISTING SIGN (TO BE SAVED & RELOACTED)

PROPOSED STABILIZED CONSTRUCTION ENTRANCE

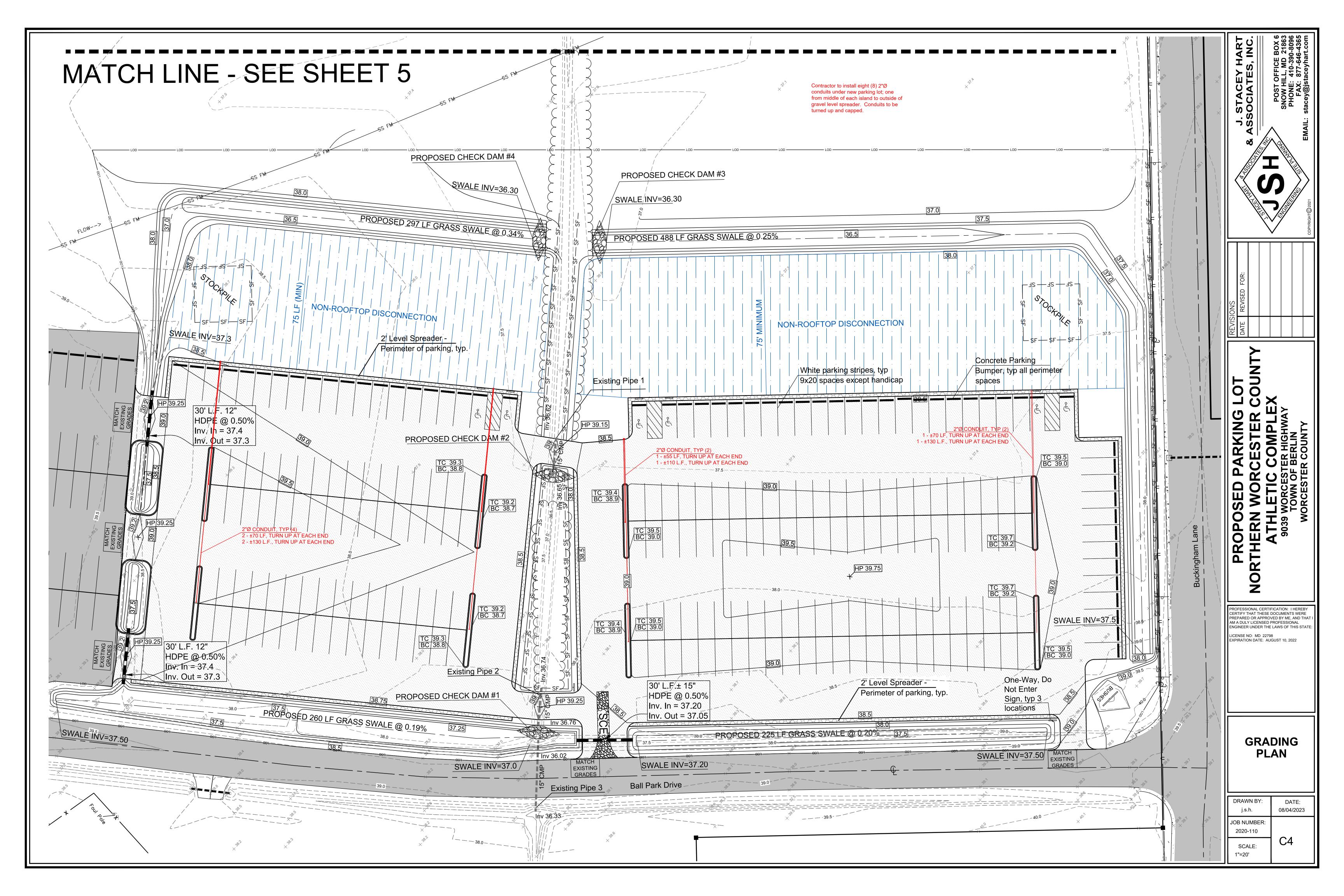


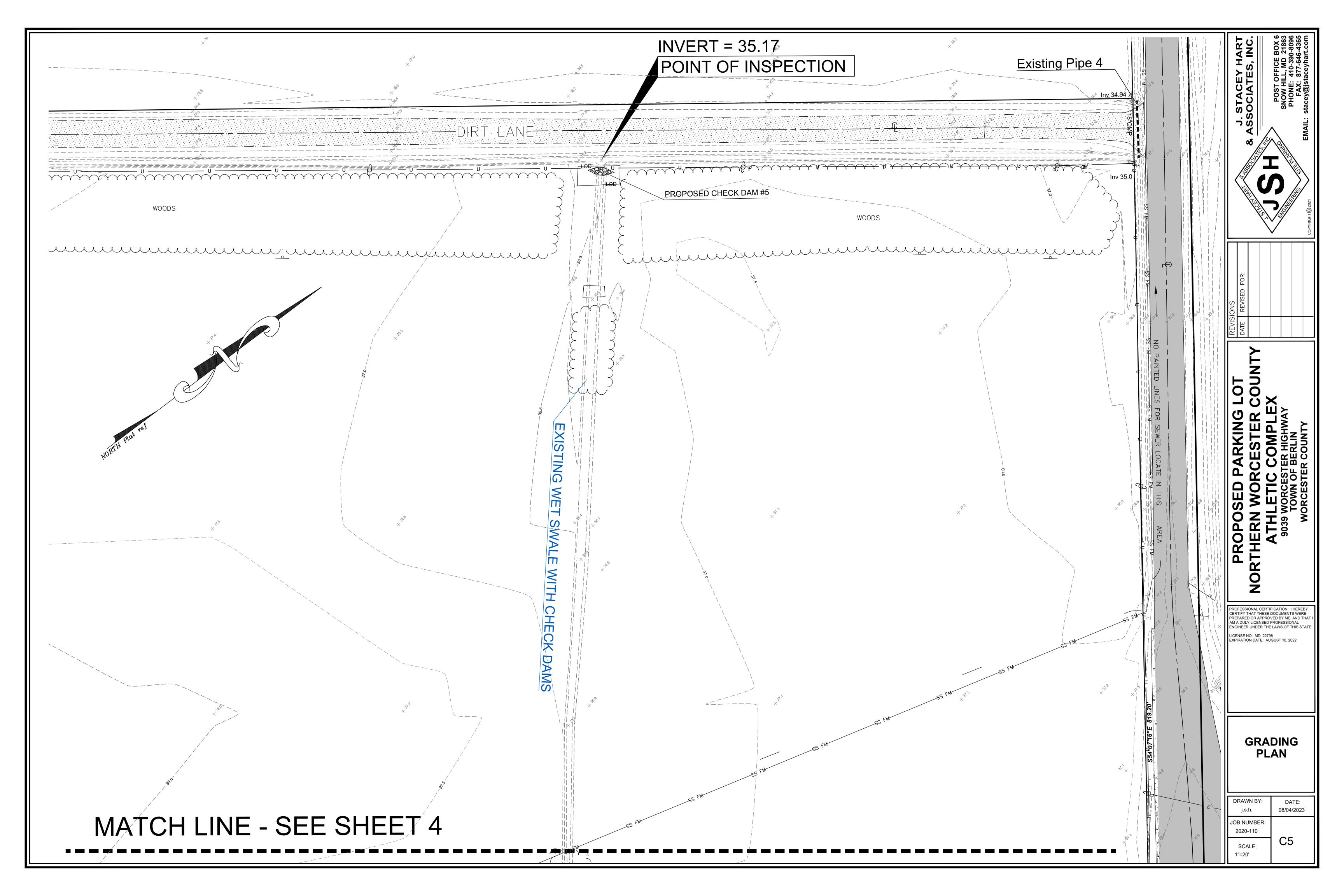




DATE:

08/04/2023





SEDIMENT AND EROSION CONTROL NOTES

- 1. Prior to the start of work, the Contractor is to obtain County approval of any proposed plan changes and sequence of construction, specifically relating to installation, inspection, maintenance and removal of erosion and sediment control measures.
- 2. Sediment control measures are not to be removed until the areas served have established vegetative cover, or with the permission of the Worcester or
- 3. When pumping sediment laden water, the discharge must be directed to an approveD sediment trapping measure prior to release from the site.

4. All temporary stockpiles are to be located within areas protected by sediment control measures, and are to be temporary stabilized.

adjustments are to be made in the field as necessary. The minimum area practical shall be disturbed for the minimum possible time

- 5. All sediment control dikes, swales, basins and flow lines to basins will be temporarily seeded immediately upon installation to reduce the contribution to sediment loading
- 6. Disposal of excess earth materials on State or Federal property requires MDE approval, otherwise materials are to be disposed of at a location approved
- by the local authority. 7. Temporary soil erosion control and sediment control measures are to be provided as per the approved plan prior to grading operations. Location
- 8. If grading is completed out of a seeding season, graded areas are to be temporarily stabilized by mulch and mulch anchoring. Mulch material shall be unweathered, unchopped small grain straw spread at the rate of 1 1/2 to 2 tons per acre. Mulch anchoring to be accomplished by an approved method, us
- 9. Implementation of the sediment control plan shall be in accordance with "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control" of the Department.
- 10. The Contractor is responsible for implementation and maintenance of the approved plan, and all other measures necessary to control, filter, or prevent sediment form leaving the site.
- 11. In case where stormwater management structures as a part of site development, removal of sediment control structures may not be accomplished before the contributing drainage area to the stormwater management structure is stabilized. Also, proper dewatering of the sediment from the site. 12. On sites where infiltration techniques are utilized for the control of stormwater, extreme care must be taken to prevent all runoff from entering the
- structure during construction. 13. Sediment control for utility construction in areas outside of designed controls:

of a mulch anchoring tool is recommended where possible.

- (a) Excavated trench material shall be placed on the high side of the trench. (b) Immediately following pipe installation the trench shall be backfilled, compacted and stabilized at the end of each working day. (c) Temporary silt fence, straw bale dikes, or stone check dams shall be placed immediately downstream of any disturbed area intended to remain disturbed longer than one working day
- 14. All points of construction ingress and egress shall be protected to prevent tracking of mud onto public ways.
- 15. Following initial soil disturbance or redisturbance, permanent or temporary stabilized shall be completed within: a. Three (3) calendar days as to the surface of all perimeter dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1): and
- b. Seven (7) days as to all other disturbed or graded areas on the project site not under active grading. The requirements of Section G-20 (Vegetative Stabilization) do not apply to those areas which are shown on the plan and are currently being used for material storage or for thos areas on which actual construction activities are currently being performed or to interior areas of a surface mine site where the stabilization material would contaminate the recoverable resource. Maintenance shall be performed as necessary to ensure that the stabilized areas continuously meet the appropriate requirements of the "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control"
- 16. Stabilization of all disturbed areas are to meet the requirements of the "2011 Maryland Standards" and Specifications for Soil Erosion and Sediment Control - Section G-20 Vegetative Stabilization"

TEMPORARY SEEDING SUMMARY

| SEED MIXTURE (HARDINESS ZONE <u>7B</u>) From Table B.1 | | | | | * FERTILIZER RATE (10-10-10) | * LIME RATE |
|--|-----------------|-----------------------------|-------------------------------|-------------------|------------------------------|------------------------------|
| No. | Species | Application Rate (lb/ac) | Seeding Dates | Seeding Depths | | |
| 1 | Annual Ryegrass | 40 | 2/15 to 4/30 8/15 to 11/01 | 1/2" | 600 lb/ac (15 lb/1000 sf) | 2 ton/ac (100 lb/1000 sf) |

PERMANENT SEEDING SUMMARY

| HARDINESS ZONE (from Figure B.3): <u>7B</u> SEED MIXTURE (from Table B.3): <u>7B</u> | | | | | * FERTILIZER RATE (10-20-20) | | | * LIME RATE |
|--|--|-----------------------------|-------------------------------|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------|
| No. | Species | Application Rate (lb/ac) | Seeding Dates | Seeding Depths | N | P.0 25 | K ₂ 0 | |
| 1 | Tall Fescue Perennial Ryegrass White Clover | 40 25 5 | 3/01 to 5/15 8/15 to 10/15 | 1/4" to 1/2" | 45 lb/ac (1.0 lb/ 1,000 sf) | 90 lb/ac (2.0 lb/ 1,000 sf) | 90 lb/ac (2.0 lb/ 1,000 sf) | 2 tons/ac (90 lb/ 1,000 sf) |
| 2 | Switch Grass Creeping Red Fescue Partridge Pea | 10 15 4 | 3/01 to 5/15 8/15 to 10/15 | 1/4" to 1/2" | 45 lb/ac (1.0 lb/ 1,000 sf) | 90 lb/ac (2.0 lb/ 1,000 sf) | 90 lb/ac (2.0 lb/ 1,000 sf) | 2 tons/ac (100 lb/ 1,000 sf) |
| 3 | Hard Fescue Perennial Ryegrass Flatpea | 20 10 15 | 3/01 to 5/15 8/15 to 10/15 | 1/4" to 1/2" | 45 lb/ac (1.0 lb/ 1,000 sf) | 90 lb/ac (2.0 lb/ 1,000 sf) | 90 lb/ac (2.0 lb/ 1,000 sf) | 2 tons/ac (100 lb/ 1,000 sf) |

- 17. The inspection agency shall be notified 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 approval by the inspection agency is made; and approval shall be requested upon final stabilization.
- 18. At a minimum as each lot is developed sediment and erosion constrol will include but not limited to a construction entrance, silt fence as needed and protection of the nearest storm drain inlet.
- 19. Lots developed by individuals and/or developers other than those certifying this plan will require that the new owner will be responsible for securing appropriate sediment erosion control approval. At a minimum, the new owner/developer will need to include a construction entrance, silt fence as needed and protection of the closest storm drain inlet in an approved sediment erosion control plan.
- 20. Approved plans remain valid for 2 years from the date of approval, with the exception of surface mine and landfill plans which remain valid for 5 years from the date of approval, unless specifically extended or renewed by the approval authority.
- 21. A Maryland Department of Environment Notice of Intent (NOI) General Permit for Construction Activity is required for all construction activity in
- Maryland with a planned disturbance of 1 acre or more. 22. As mandated by the Notice of Intent (NOI) general permit issued by the Maryland Department of the Environment (MDE), an inspection must be
- performed onsite of all sediment controls on a weekly basis and after every rainfall event. All self-inspections must be maintained along with all applicable governing agency inspection reports in a log book, to be kept onsite at all times.

OWNERS CERTIFICATION

I, THE UNDERSIGNED CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT, OR ALL OF THESE, WILL BE DONE PURSUANT TO THIS PLAN AND THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. AND FURTHER AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT OR THEIR AUTHORIZED AGENTS. RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATION AT A DEPARTMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION.

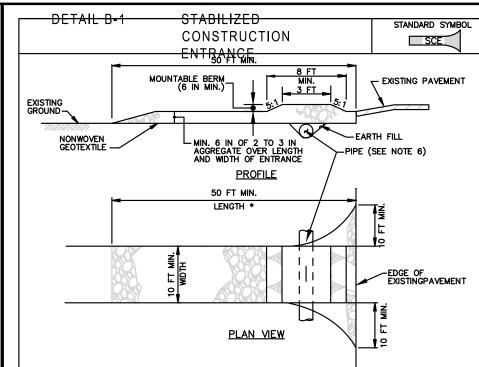
| UTHORIZED REPRESENTATIVE (SIGNATURE) | DATE |
|--------------------------------------|------|
| | |
| RINTED NAME | |

DEVELOPERS CERTIFICATION

PHONE NUMBER

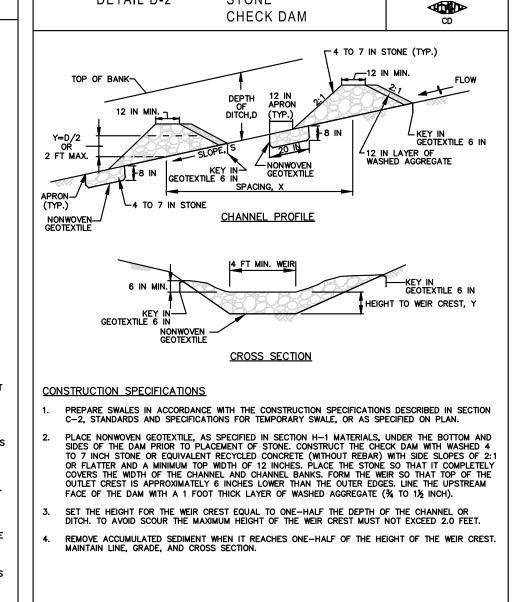
- All phases of stormwater management calculations, structure design and construction will adhere to current Maryland standards and specifications for stormwater management and the stormwater management plan for this site.
- All information set forth in this plan accurately conveys this site's conditions to the best of my knowledge.
- . All structural devices for stormwater management will be protected by proper soil erosion and sediment control devices until all contributing areas have passed final stabilization inspection.
- . UPON COMPLETION OF THE PROJECT, AN AS-CONSTRUCTED SURVEY, NOTICE OF CONSTRUCTION COMPLETION (NOCC), AND LETTER OF CERTIFICATION MUST BE SUBMITTED TO THE DEPARTMENT, EXCEPT INDIVIDUAL SINGLE FAMILY DWELLINGS. ONCE REVIEW IS COMPLETE AND APPROVED, A CERTIFICATE OF OCCUPANCY CAN BE ISSUED.

| AUTHORIZED REPRESENTATIVE (SIGNATURE) | DATE |
|---------------------------------------|------|
| PRINTED NAME | |
| PHONE NUMBER | |



- 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 MIDTH 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. 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 SCE IS NOT NECESSARY.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- 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.
- 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.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE ATURAL RESOURCES CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

MARYLAND DEPARTMENT OF ENVIRONMEN'
WATER MANAGEMENT ADMINISTRATION

STONE

DETAIL D-2

STANDARD SYMBOL

STANDARD SYMBOL DETAIL E-9-3 CURB INLET DETAIL E-9-2 AT-GRADE INLET AGIP PROTECTION PROTECTION MAXIMUM DRAINAGE AREA = 1/4 ACRE MAXIMUM DRAINAGE AREA = 1 — 2 FT MIN. LENGTH OF 2 IN x 4 IN 2 IN x 4 IN WEIR-FT MAX. SPACING OF IN x 4 IN SPACERS ¾ TO 1% STONE —¾ TO 1½ IN STONE 2 IN x 4 IN ANCHORS, 2 FT MIN. LENGTH NONWOVEN GEOTEXTILE -2 IN x 4 IN SPACER 2 IN x 4 IN SPACER ∠2 IN x 4 IN WEIR SECTION A-A PLAN / CUT AWAY VIEW ∠EDGE OF GUTTER PAN **ISOMETRIC** CONSTRUCTION SPECIFICATIONS USE NOMINAL 2 INCH x 4 INCH LUMBER 6 IN-USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.

-INLET GRATE

OVERLAP

CROSS SECTION

LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.

PLACE CLEAN 3/4 TO 11/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.

STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE CENTEYTHE AND STONE

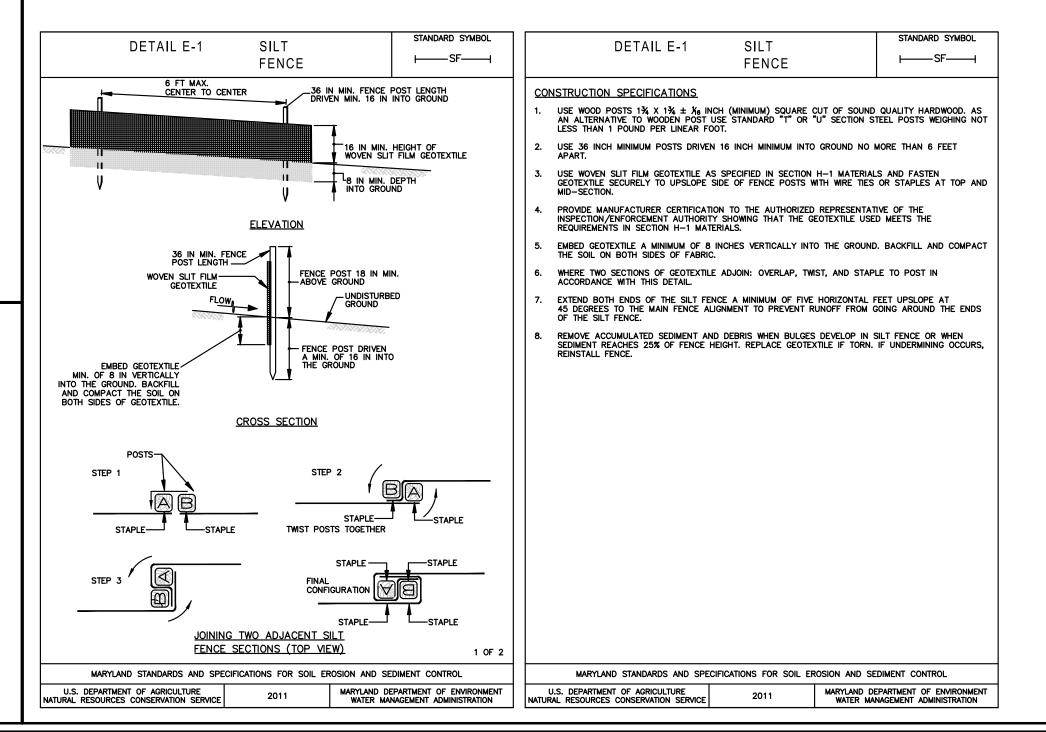
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL 2011

USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.

CONSTRUCTION SPECIFICATIONS

- 3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
- 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
- PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THI HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2×4 WEIR
- PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
- INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
- FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
- AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET
- D. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

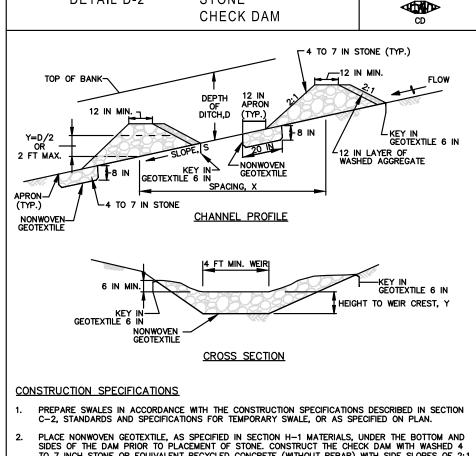
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL



CHECK DAM# WEIR INVERT 37.50 2 37.75 37.00

37.00

36.00



STONE

DETAIL D-2

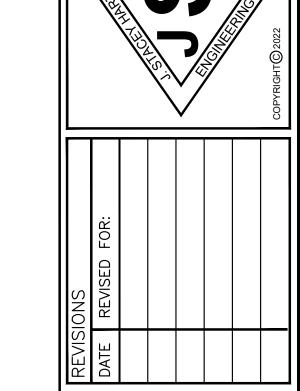
- PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND SIDES OF THE DAM PRIOR TO PLACEMENT OF STONE. CONSTRUCT THE CHECK DAM WITH WASHED 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) WITH SIDE SLOPES OF 2:1 OR FLATTER AND A MINIMUM TOP WIDTH OF 12 INCHES. PLACE THE STONE SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL AND CHANNEL BANKS. FORM THE WEIR SO THAT TOP OF THE OUTLET CREST IS APPROXIMATELY 6 INCHES LOWER THAN THE OUTER EDGES. LINE THE UPSTREAM FACE OF THE DAM WITH A 1 FOOT THICK LAYER OF WASHED AGGREGATE (3/4 TO 1/2 INCH).
- SET THE HEIGHT FOR THE WEIR CREST EQUAL TO ONE—HALF THE DEPTH OF THE CHANNEL OR DITCH. TO AVOID SCOUR THE MAXIMUM HEIGHT OF THE WEIR CREST MUST NOT EXCEED 2.0 FEET. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES ONE—HALF OF THE HEIGHT OF THE WEIR CREST. MAINTAIN LINE, GRADE, AND CROSS SECTION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

SEQUENCE OF CONSTRUCTION: CONTACT THE WORCESTER COUNTY DEPARTMENT OF ENVIRONMENTAL

PROGRAMS AT 410-632-1220 TO SCHEDULE A PRE-CONSTRUCTION MEETING AT LEAST 48 HOURS PRIOR TO COMMENCING ANY SITE WORK. FAILURE TO DO SO MAY RESULT IN AN IMMEDIATE "STOP WORK ORDER".

- 2. INSTALL STABILIZED CONSTRUCTION.
- 3. PERFORM CLEARING AND GRUBBING TO INSTALL PERIMETER CONTROLS.
- 4. INSTALL PERIMETER CONTROLS (SILT FENCE) AND STONE CHECK DAM #5.
- 5. PERFORM REMAINING CLEARING, GRUBBING AND SITE GRADING OF PARKING LOT INSIDE LIMITS OF DISTURBANCE. CONSTRUCT PROPOSED GRASS SWALES AND CHECK DAMS #1, 2, 3 & 4.
- 6. PERFORM FINAL GRADING AND PAVING OPERATIONS AND STRIPING.
- 7. CLEAN SWALE AND CHECK DAMS OF ANY SEDIMENT AND STABILIZE AND SEED ALL AREAS. CHECK DAMS TO REMAIN AFTER CONSTRUCTION.
- 8. REMOVAL OF CONTROLS AND STABILIZATION OF AREAS DISTURBED BY THEIR REMOVAL.



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OFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE REPARED OR APPROVED BY ME, AND THA AM A DULY LICENSED PROFESSIONAL NGINEER UNDER THE LAWS OF THIS STATE

ICENSE NO: MD 22798 XPIRATION DATE: AUGUST 10, 2022

EROSION SEDIMENT

NOTES DRAWN BY: DATE:

08/04/2023 JOB NUMBER 2020-110 SCALE: NONE