

| R/W CENTERLINE CURVE DATA | | | | | | |
|---------------------------|----------------------|---------|---------|---------|-----------|---------------------|
| ROAD | STATION | RADIUS | LENGTH | TANGENT | DELTA | CHORD |
| DROVERS LANE | 0+81.69 TO 1+27.95 | 95.00' | 46.25' | 23.60' | 27°54'00" | N14°48'42"E 45.80' |
| | 4+53.39 TO 7+28.45 | 220.00' | 275.06' | 198.77' | 71°38'08" | N36°38'46"E 257.49' |
| | 8+14.37 TO 9+38.21 | 150.00' | 123.84' | 65.69' | 47°18'07" | N48°48'47"E 120.30' |
| | 13+29.12 TO 14+01.70 | 106.00' | 72.58' | 37.78' | 39°13'46" | N09°32'50"E 71.17' |

| R/W CENTERLINE CONTROL DATA | | |
|-----------------------------|------------|--------------|
| STATIONING | NORTH | EAST |
| 0+00 | 601.987.31 | 1,307.473.76 |
| 0+81.69 | 602.058.96 | 1,307.513.00 |
| 4+53.39 | 602.428.56 | 1,307.529.66 |
| 7+28.45 | 602.675.05 | 1,307.683.55 |
| 8+14.37 | 602.661.11 | 1,307.765.31 |
| 9+38.21 | 602.739.72 | 1,307.856.05 |
| 13+29.12 | 603.095.07 | 1,308.021.00 |
| 14+01.36 | 603.174.78 | 1,308.026.09 |

AS-BUILT CERTIFICATION
 I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications.
 Donald Mason, P.E.
 Date: 1/10/09



APPROVED: DEPARTMENT OF PUBLIC WORKS
 With [Signature] 1-23-09
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Cindy [Signature] 1/20/09
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 1-29-09
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

FOR IMPROVEMENTS WITHIN STATE RIGHT-OF-WAY SEE SHEET 4 AND ACCESS PERMIT PLANS
 SEE AS-BUILT ON STATE HIGHWAY PERMIT IMPROVEMENTS FOR ROUTE 144 IMPROVEMENTS 06APH001913

NOTE: STREET NAME SIGN "D-3(2)" WILL BE INSTALL ALONG MD ROUTE 144 APPROXIMATELY 625' FROM THE INTERSECTION OF DROVERS LANE.

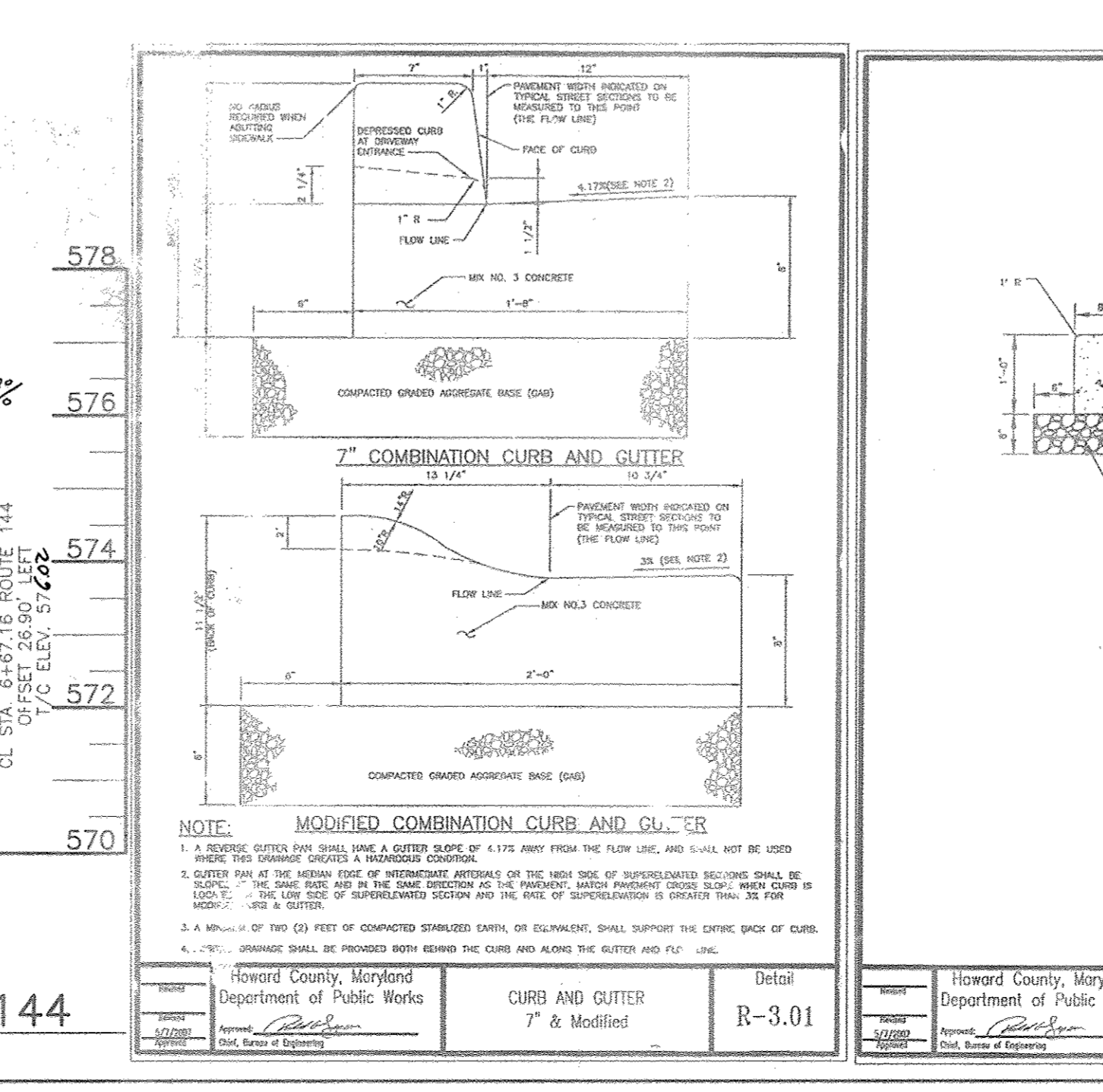
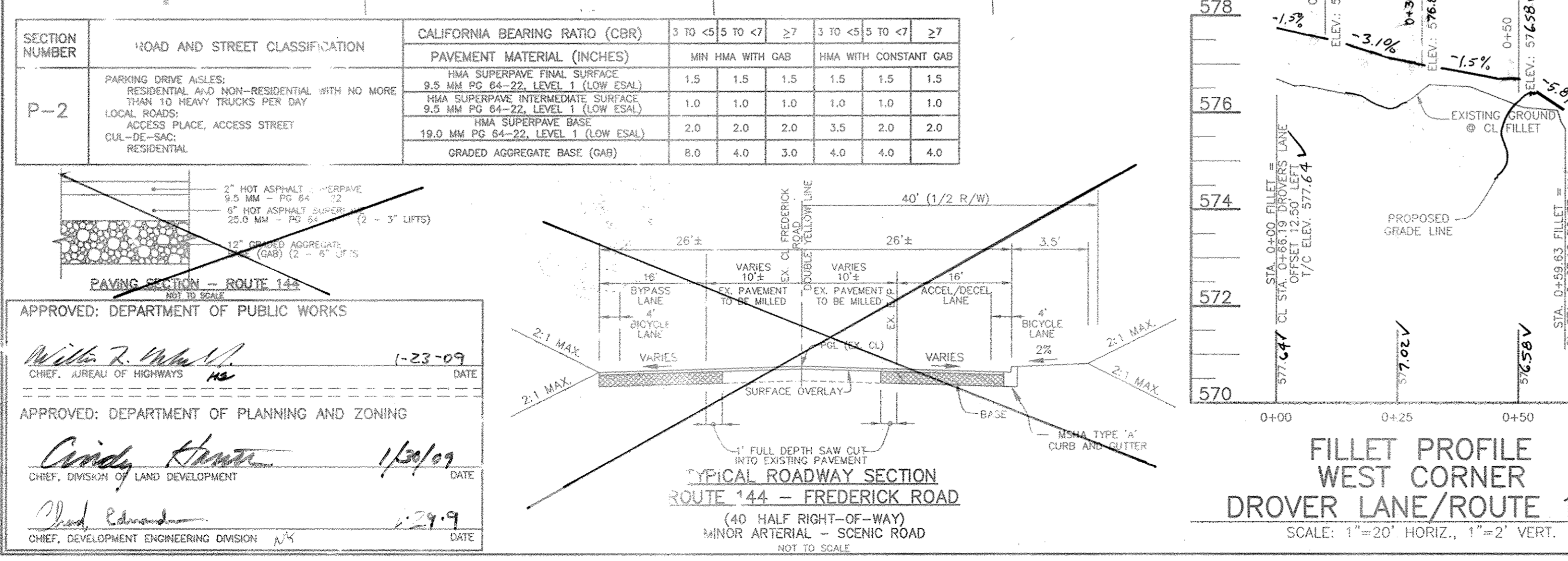
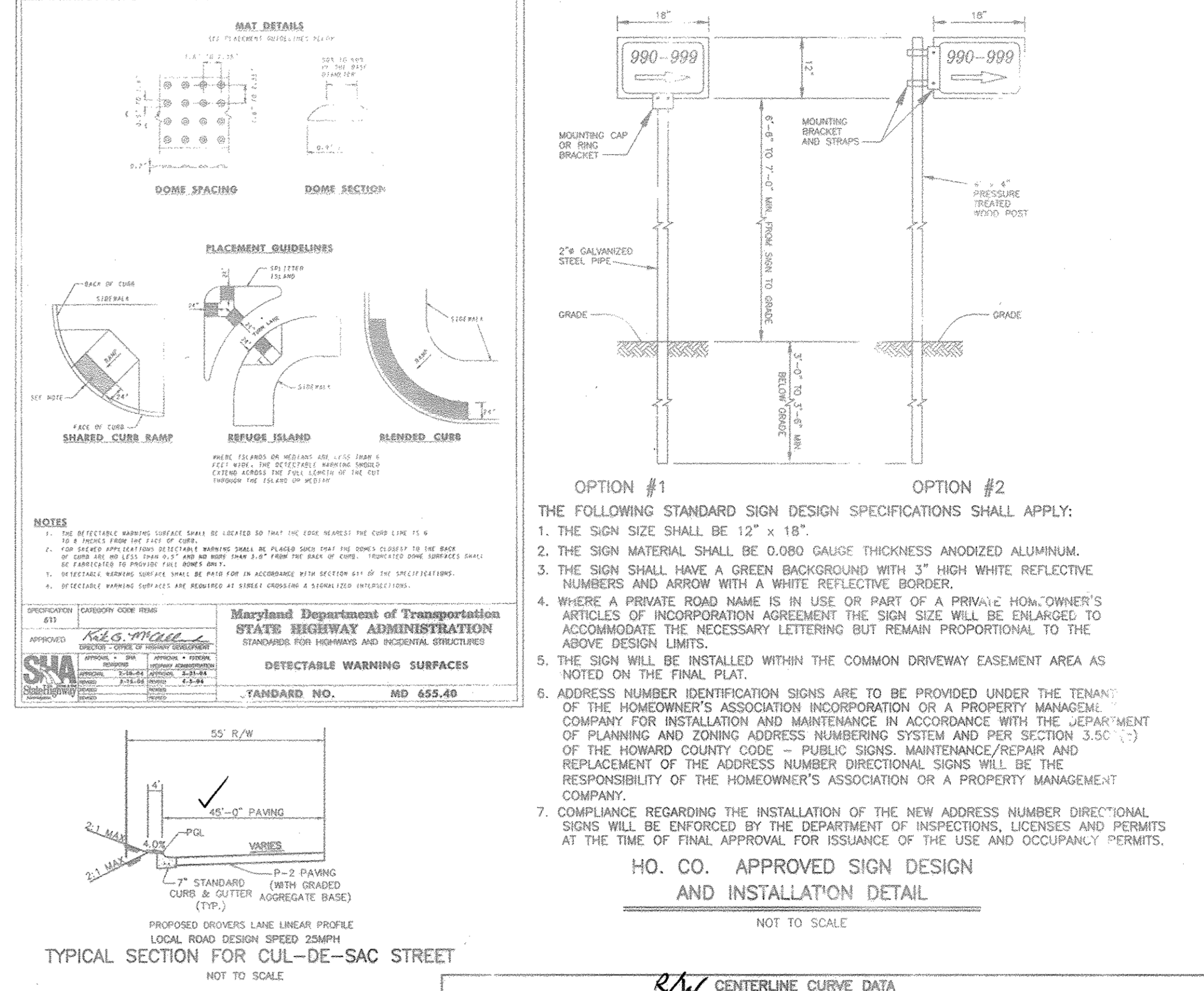
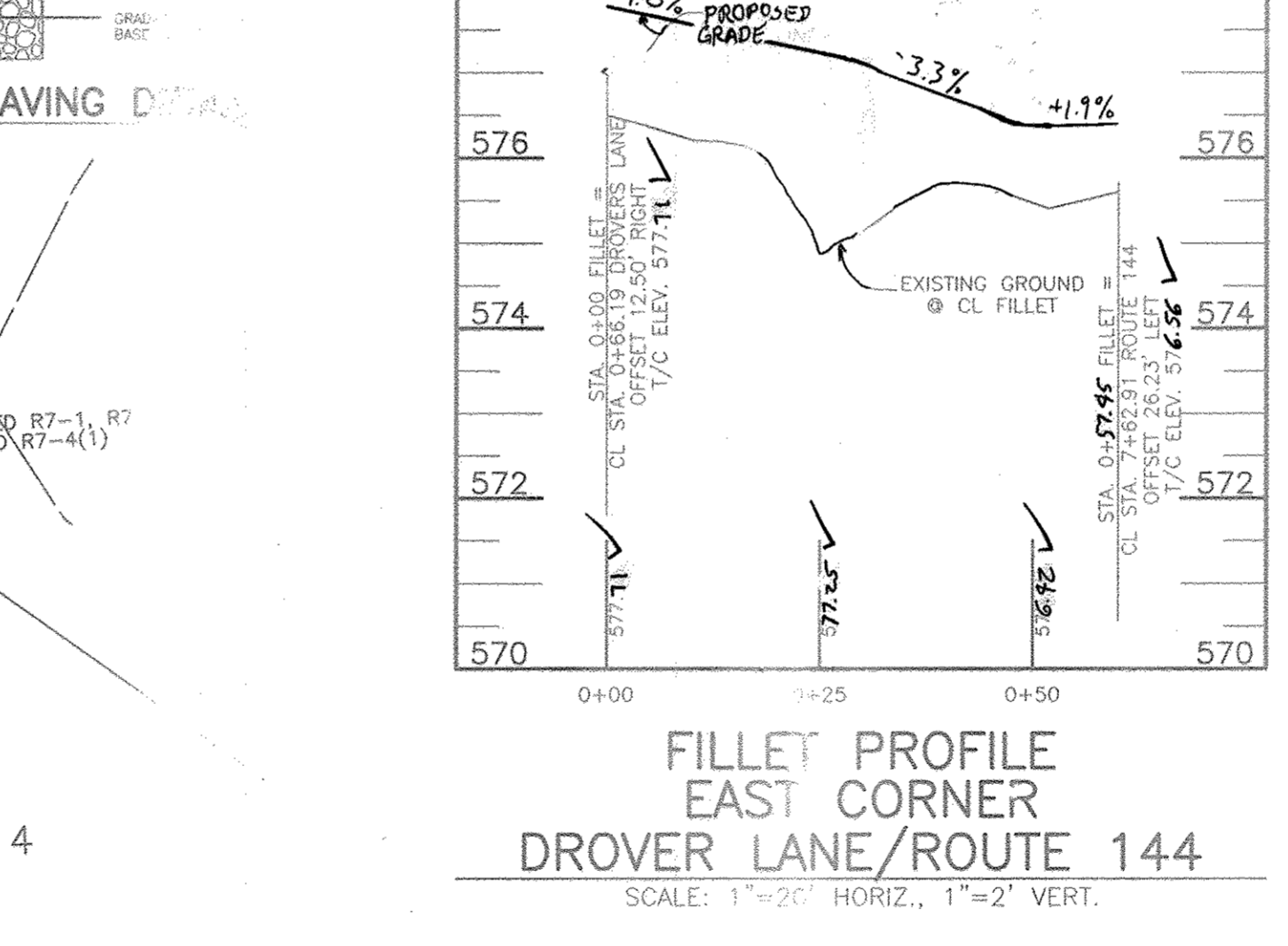
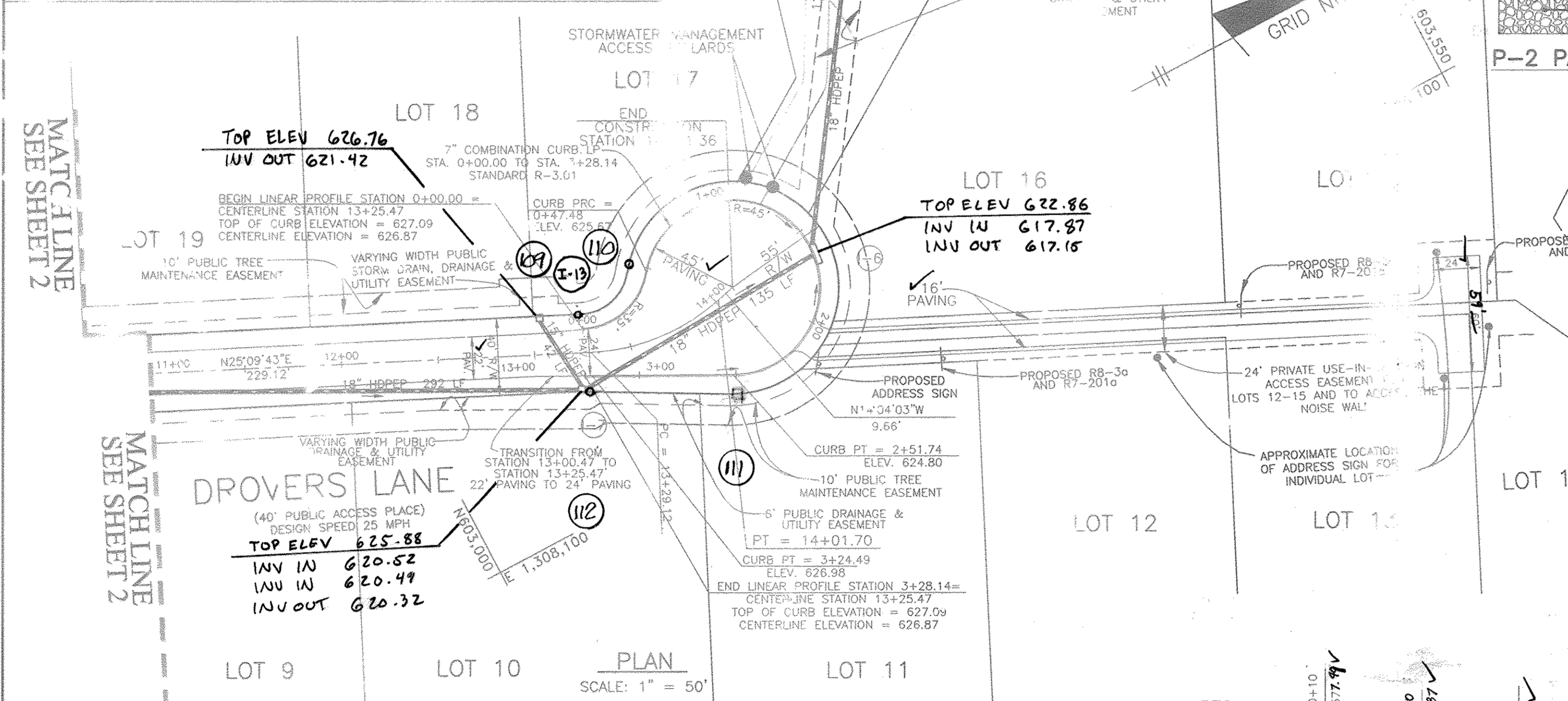
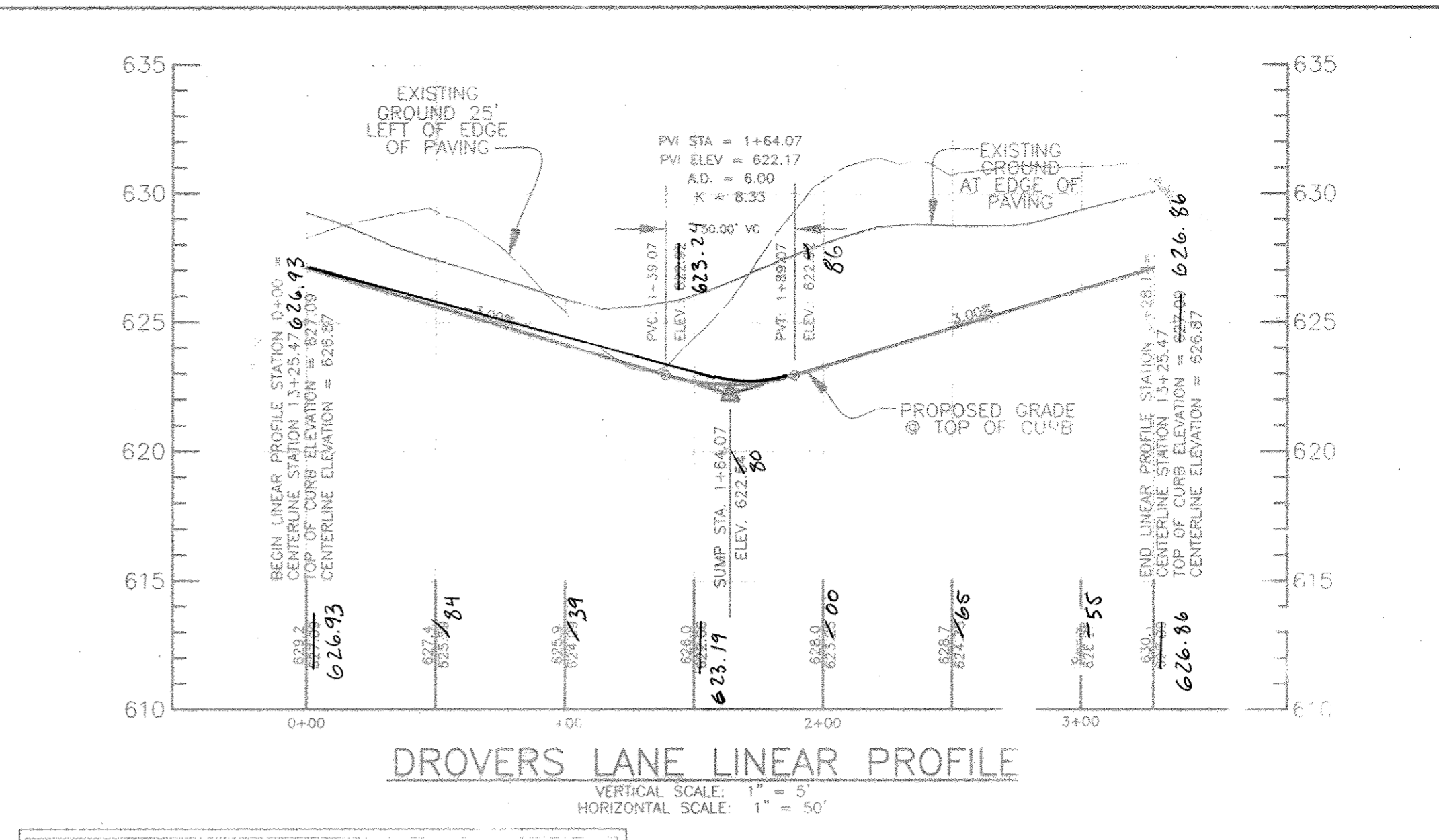
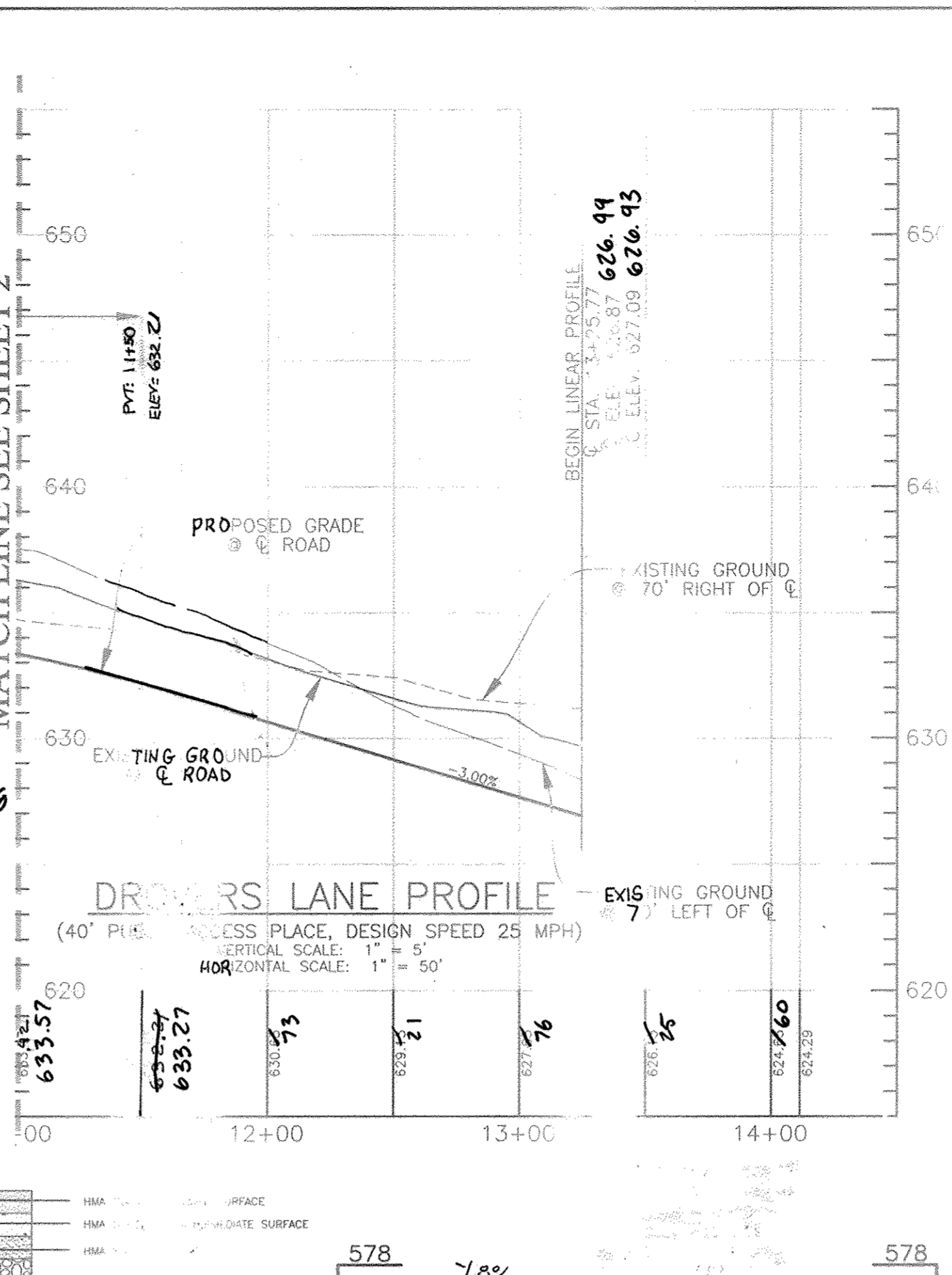
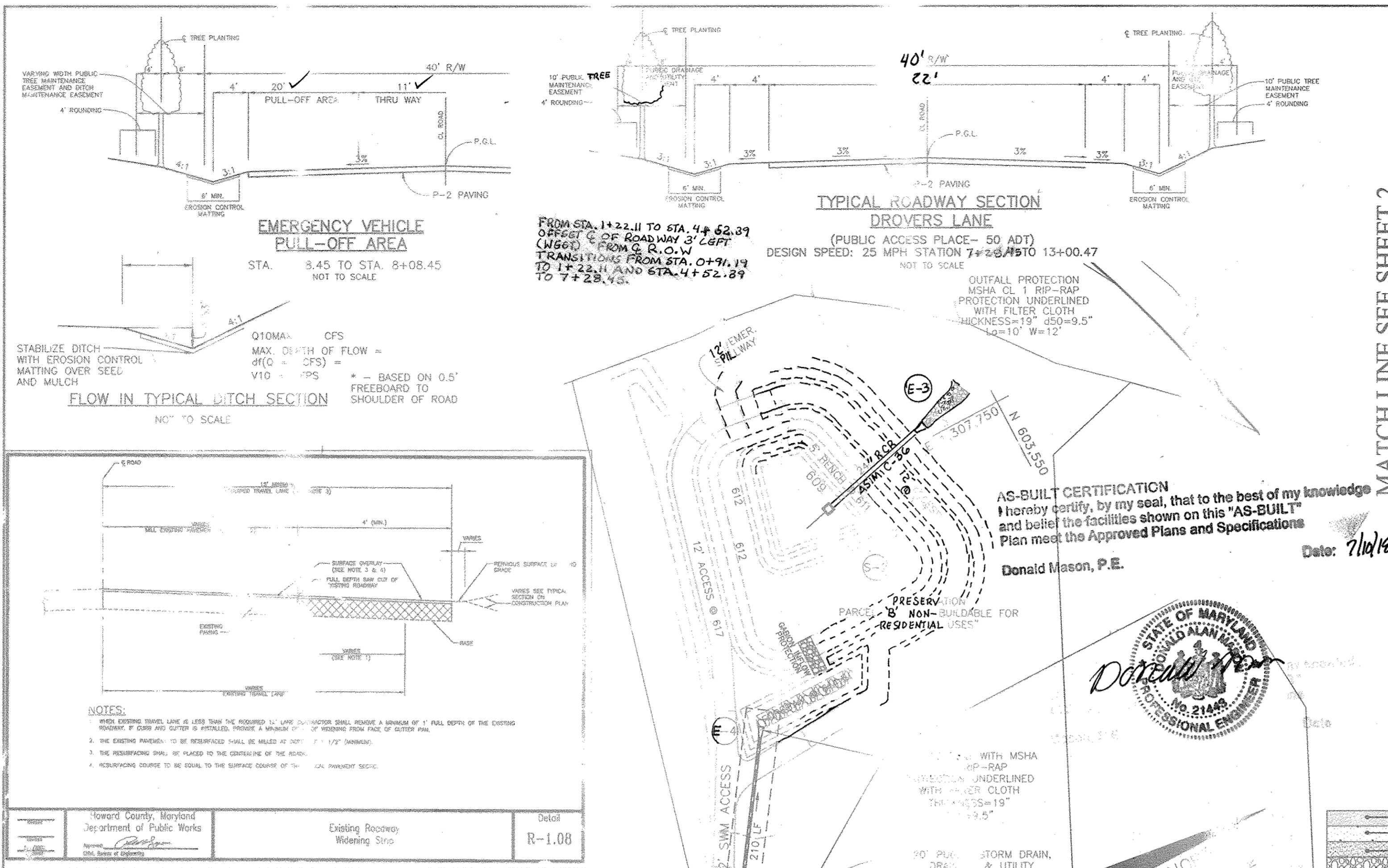
NOTE: CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE AREA OF THE OVERHEAD POWERLINES AND THE GAS MAINS. CONTRACTOR SHALL KEEP THIS HAZARDS CONTINUOUSLY MARKED DURING CONSTRUCTION.

CONTRACTOR TO PROVIDE INGRESS AND EGRESS FOR LOTS 1-3 CONTINUOUS DURING CONSTRUCTION.

NOTE: ANY STREET SIGN POSTS PLACED WITHIN "SHA" RIGHT-OF-WAY SHALL BE TREATED WOOD.

| NO. | DATE | REVISION |
|-----|----------|---|
| 5 | 5-24-18 | REVISE STORM INLET ON FREDERICK RD TO I-15A, FOREBAY TO E6 |
| 4 | 11-1-17 | REVISED STORM DRAIN DESIGNATIONS TO MATCH AS-BUILT |
| 2 | 6-20-13 | REVISE SD AND ROADWAY CENTERLINE |
| 1 | 10-30-12 | SPECIFY WORK IN MSHA RIGHT OF WAY TO BE DONE IN ACCORDANCE WITH SHEET 4 AND ACCESS PERMIT PLAN. |

| | | |
|---|--|---|
| BENCHMARK ENGINEERING, INC. ENGINEERS • LAND SURVEYORS • PLANNERS 8480 BALTIMORE NATIONAL PIKE • SUITE 418 ELLICOTT CITY, MARYLAND 21043 PHONE: 410-465-6105 FAX: 410-465-6644 E-MAIL: bel@bel-civilengineering.com | | |
| DEVELOPER/OWNER LOT 4: D.R. HORTON, INC. 15810 GATHER DRIVE, SUITE 220 GAITHERSBURG, MD 20877 1-301-670-6144 | | PROJECT: VISTA RIDGE A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D" |
| OWNER LOT 1: HECTOR HANNIBAL AND TARYA SELLERS-HANNIBAL 14450 FREDERICK ROAD COOKSVILLE, MD 21723 | | LOCATION: TAX MAP No. 8 - GRID No. 23 PARCEL No. 176 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| OWNER LOT 2: STEVEN AND JULIE CHO 14450 FREDERICK ROAD COOKSVILLE, MD 21723 | | TITLE: ROAD PLAN AND PROFILE DROVERS LANE |
| OWNER LOT 3: ROBERT AND PHYLLIS BULL, JR 14470 FREDERICK ROAD COOKSVILLE, MD 21723 | | DATE: JANUARY, 2009 PROJECT NO.: 1635 Design: JMC Draft: RPS Check: DAM SCALE: 1" = 100' DRAWING: 2 OF 15 |



| R/W CENTERLINE CURVE DATA | | | | | | |
|---------------------------|----------------------|---------|---------|---------|-----------|----------------------|
| ROAD | STATION | RADIUS | LENGTH | TANGENT | DELTA | CHORD |
| DROVERS LANE | 0+81.09 TO 1+27.95 | 95.00' | 46.28' | 23.80' | 27°34'00" | N14°-12'E 45.80' |
| | 4+53.39 TO 7+28.45 | 220.00' | 275.06' | 158.77' | 71°38'08" | N36°38'46"E 257' 19" |
| | 8+14.37 TO 9+38.21 | 150.00' | 123.84' | 85.89' | 47°18'07" | N48°48'47"E 127' 35" |
| | 13+29.12 TO 14+01.70 | 106.00' | 72.58' | 37.78' | 39°13'48" | N05°32'50"E 71.17' |

3 5-25-18 REVISE FILLET PROFILES TO MATCH AS-BUILT SURVEY
 2 6-20-13 ADJUST SD AND ROAD CENTERLINE
 1 10-30-12 REVISE INLET DESIGNATION & REMOVE SHA PAINT & SECTION

NO. DATE REVISION

BENCHMARK ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-8105 FAX: 410-465-8644
 E-MAIL: ben@ben-engineering.com

Donald Mason
 PROFESSIONAL ENGINEER
 No. 21443
 11/2/09

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21443, Expiration Date: 12-31-2018.

DEVELOPER/OWNER LOT 4: D.R. HORTON, INC. 15810 GAITHERS DRIVE, SUITE 220 GAITHERSBURG, MD 20877 1-301-670-6144

OWNER LOT 1: HECTOR MARIAN AND TANYA SELLERS-HANNIBAL 14450 FREDERICK ROAD COOKSVILLE, MD 21723

OWNER LOT 2: STEVEN AND JULIE CHO 4467 FREDERICK ROAD COOKSVILLE, MD 21723

OWNER LOT 3: ROBERT AND PHYLLIS BULL, JR 1470 FREDERICK ROAD COOKSVILLE, MD 21723

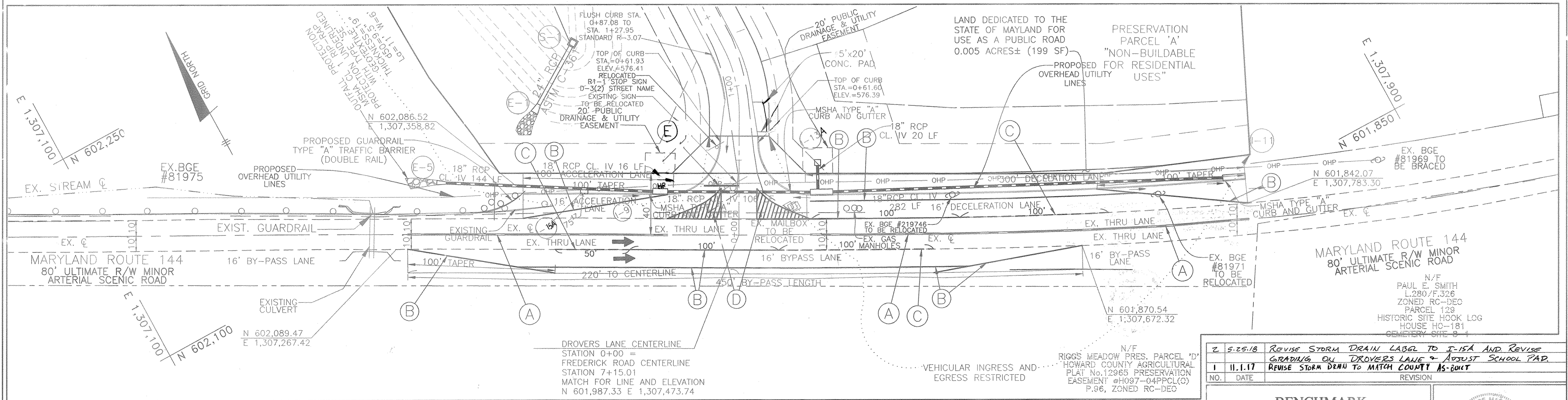
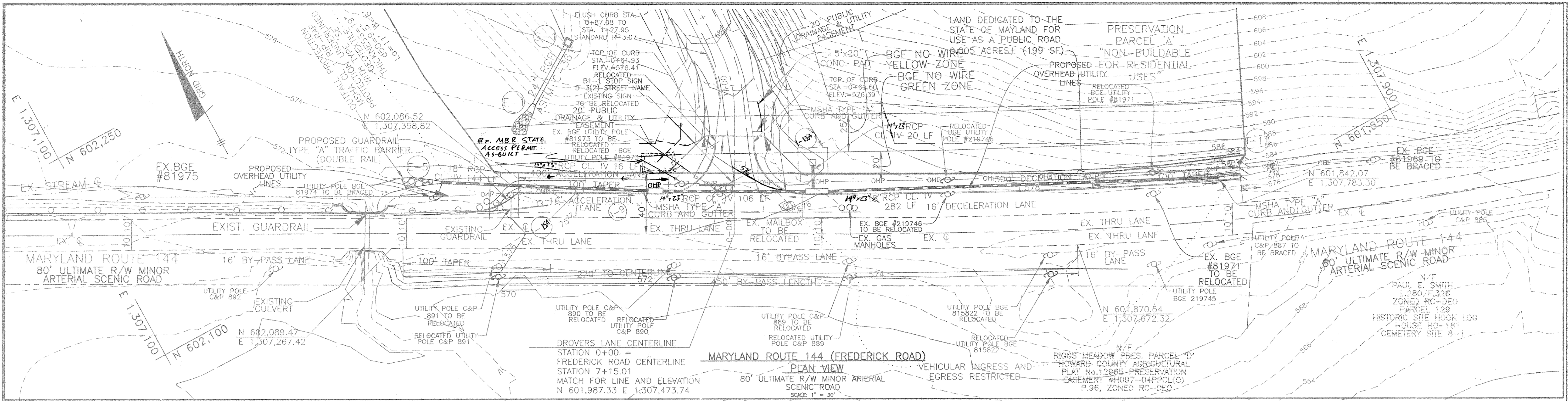
PROJECT: A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D"

LOCATION: TAX MAP NO. 8 - GRID NO. 23 PARCEL 4th, 176 4th ELECTRIC DISTRICT HOWARD COUNTY, MARYLAND

TITLE: ROAD PLAN AND PROFILE DROVERS LANE

DATE: JANUARY, 2009 PROJECT NO. 1635

Design: JMC Draft: RPS Check: DAM SCALE: 1" = 30' DRAWING 3 OF 15

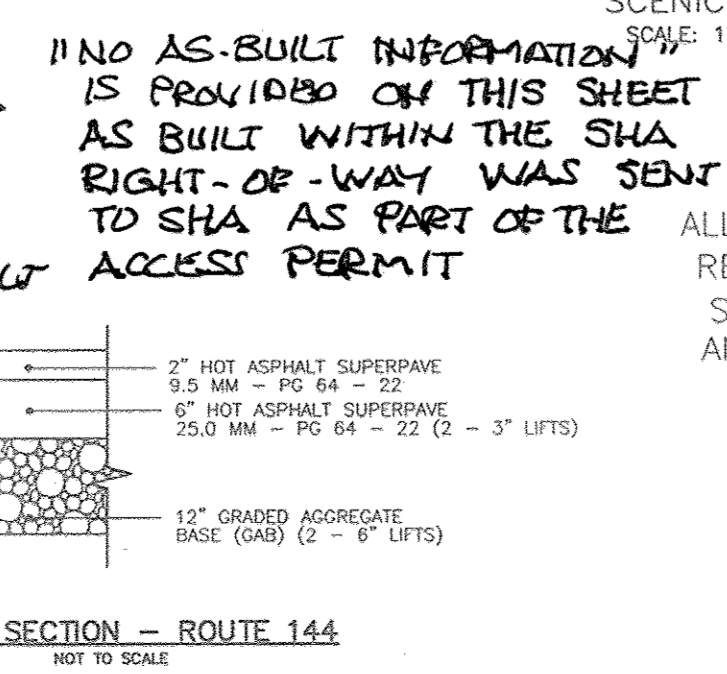


FOR MSHA AS-BUILT SEE PERMIT
 06APH001913

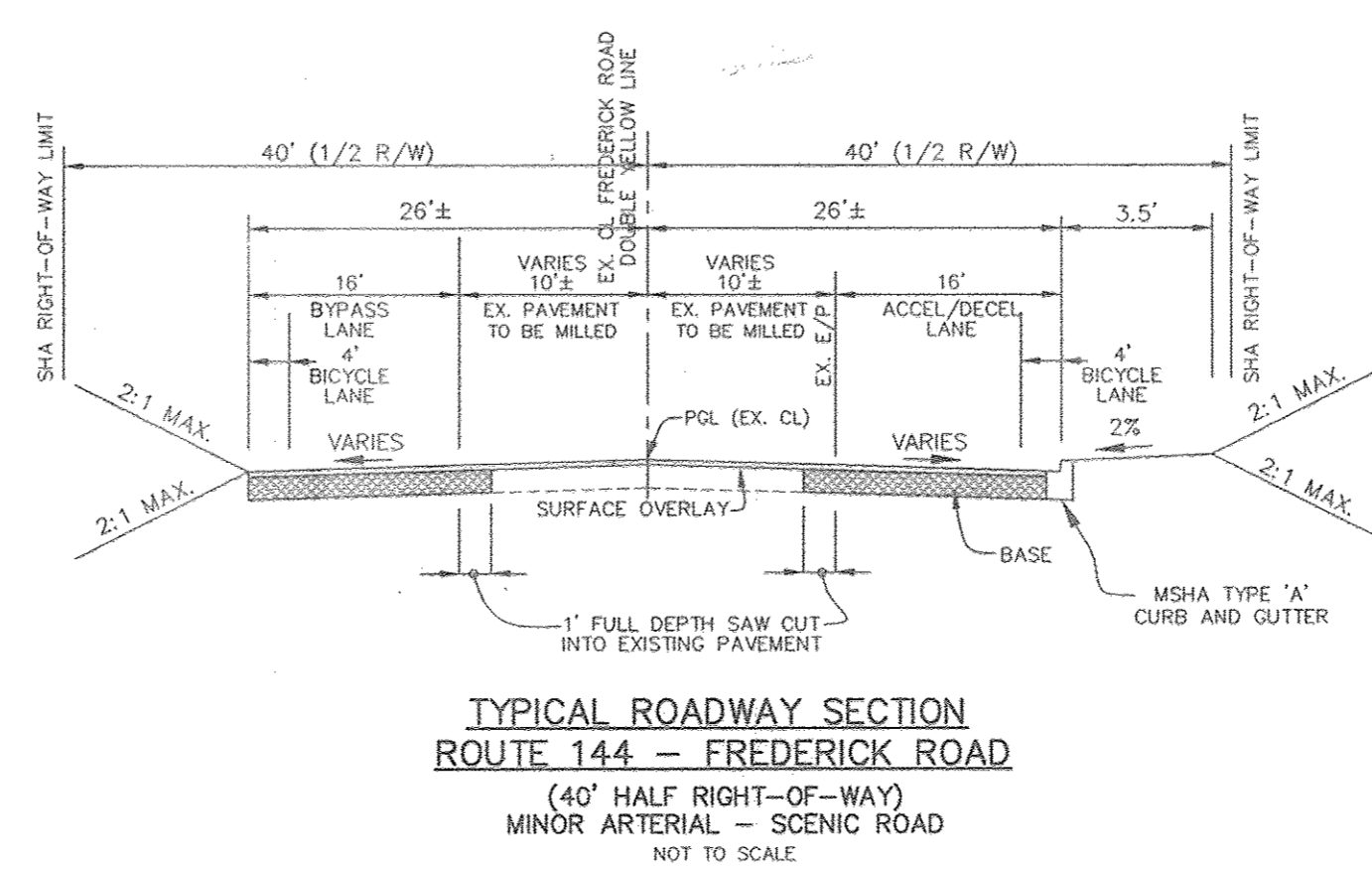
APPROVED: DEPARTMENT OF PUBLIC WORKS
 [Signature] 1-23-09
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 1/26/09
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 1-29-9
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



ALL INFORMATION REGARDING TRAFFIC CONTROL DETAILS REFERENCE TO SECTION 104 OF THE SHA "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS" AND THE APPROPRIATE TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS (TTCTA) FROM THE SHA "STANDARD FOR HIGHWAY AND INCIDENTAL STRUCTURES".



- LINE LEGEND**
- (A) DOUBLE YELLOW CENTERLINE 5" WIDE (EACH LINE)
 - (B) SOLID WHITE (5" WIDE)
 - (C) PUPPY TRACKS (5" WIDE - WHITE) (5" LONG x 9" GAP)
 - (D) HATCH LINES (5" WIDE ON 45° ANGLE EVERY 10" (YELLOW))
 - (E) STOP BAR (24" WIDE - WHITE) (THERMOPLASTIC)

| NO. | DATE | REVISION |
|-----|---------|--|
| 2 | 5.25.18 | REVISE STORM DRAIN LABEL TO I-15A AND REVISE GRADING ON DROVERS LAKE TO ADJUST SCHOOL PAD. |
| 1 | 11.1.17 | REVISE STORM DRAIN TO MATCH COUNTY AS-BUILT |

BENCHMARK ENGINEERING, INC.
 ENGINEERS • LAND SURVEYORS • PLANNERS

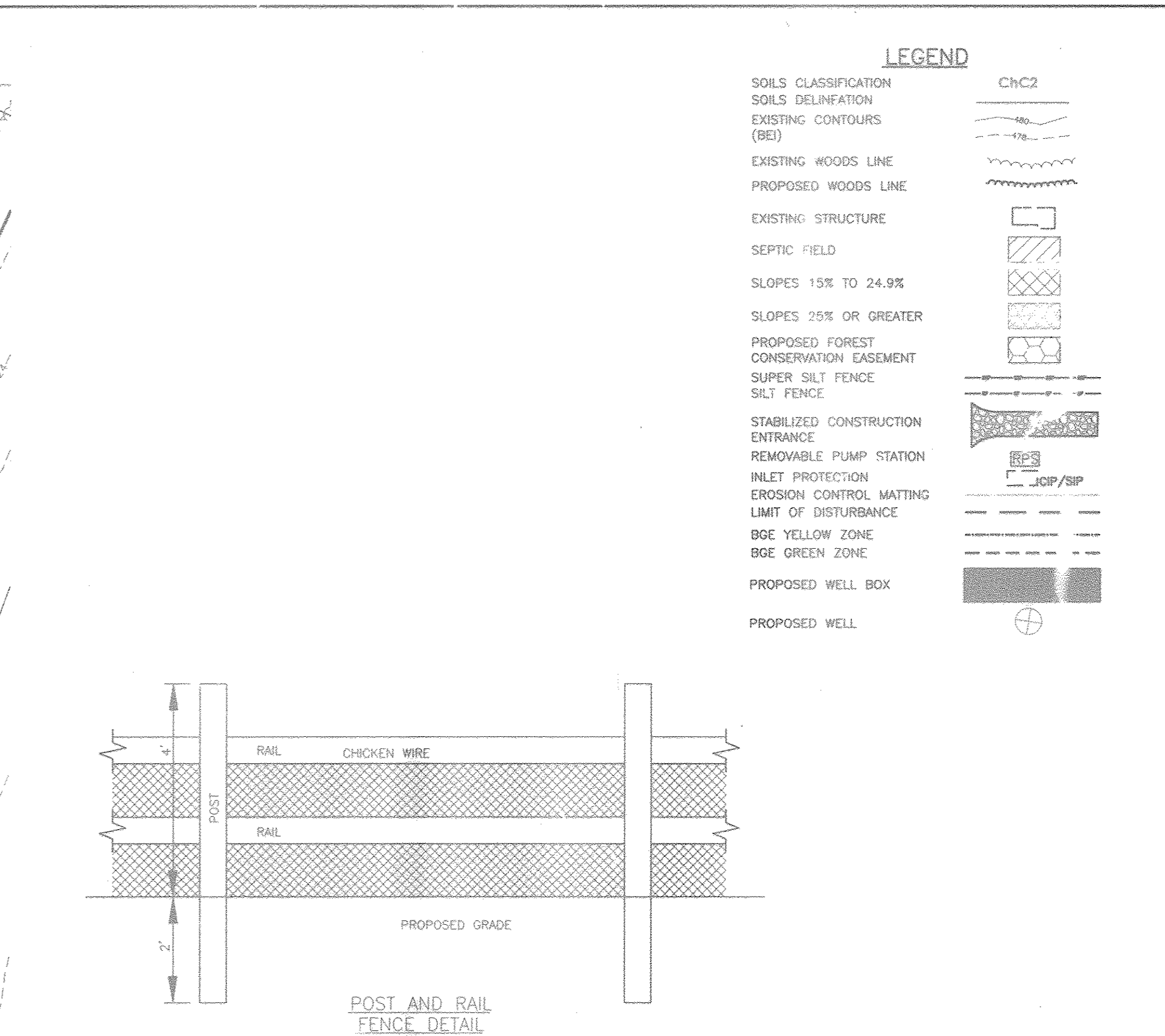
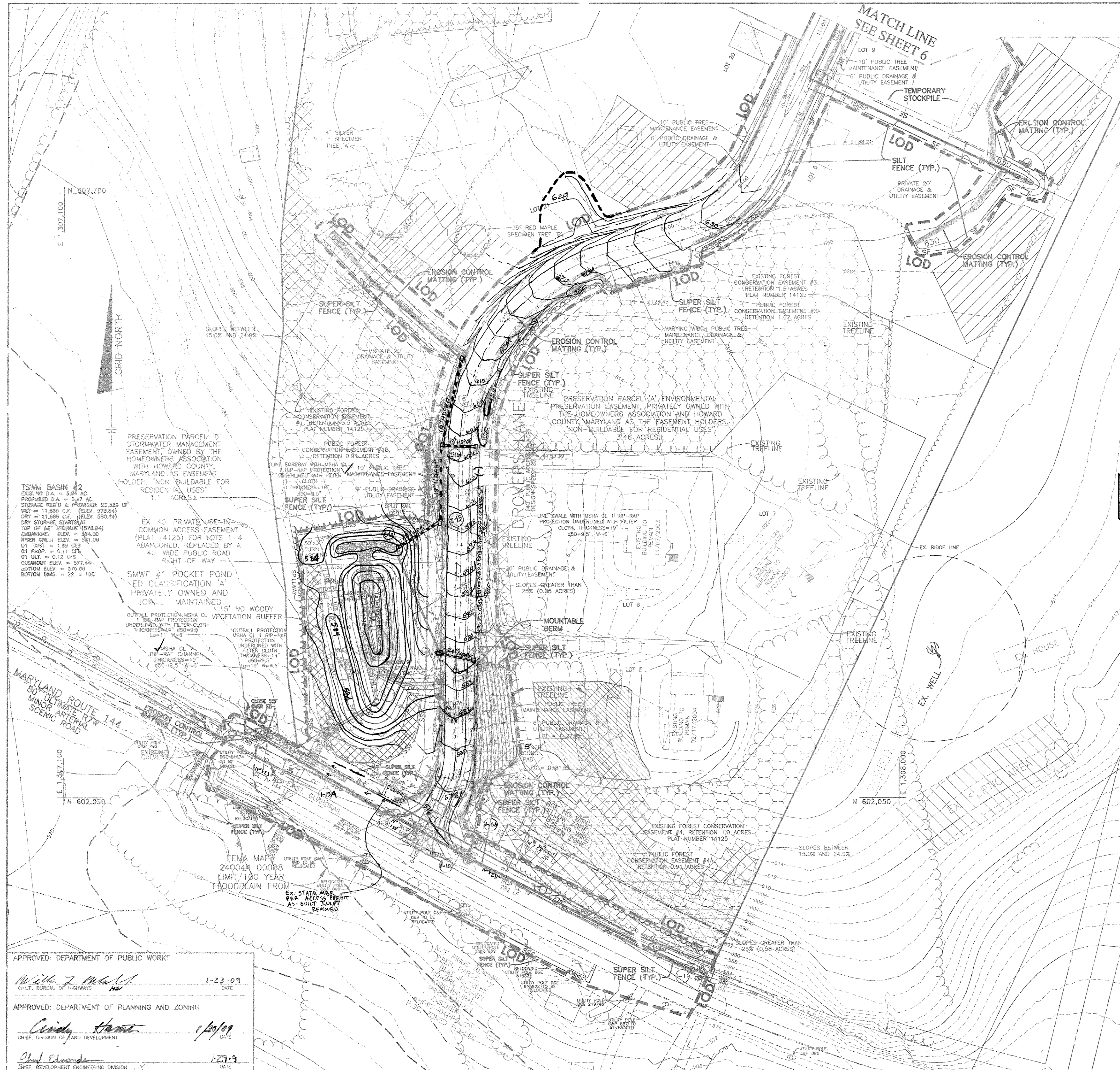
8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-8105 FAX: 410-465-6644
 E-MAIL: ben@benchmark-engineering.com

PROJECT:
 VISTA RIDGE
 A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D"

LOCATION: TAX MAP NO. 8 - GRID NO. 23
 PARCEL NO. 176
 4th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: MARYLAND ROUTE 144 (FREDERICK ROAD) IMPROVEMENT PLAN

DATE: JANUARY, 2009 PROJECT NO. 1635
 SCALE: 1" = 50' DRAWING 4 OF 15



FOR IMPROVEMENTS WITHIN STATE RIGHT-OF-WAY SEE SHEET 4 AND ACCESS PERMIT PLANS.

FOR MSHA IMPROVEMENT AS-BUILTS SEE ACCESS PERMIT 06APH001913 AS-BUILT

AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications.

Donald Mason, P.E. Date: 7/10/09



| | |
|--|-----------------|
| APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. | |
| <i>[Signature]</i> HOWARD SOIL CONSERVATION DISTRICT | 1/20/09 DATE |
| BY THE DEVELOPER: | |
| I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT. | |
| <i>[Signature]</i> DEVELOPER | 1-12-09 DATE |
| BY THE ENGINEER: | |
| I/WE CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. | |
| <i>[Signature]</i> ENGINEER - DONALD MASON, P.E. # 21443 | 1/9/09 DATE |

| NO. | DATE | REVISION |
|-----|----------|--|
| 4 | 5-25-18 | REVISE S.D. LABEL, REVISE GRADE, REVISE CONC. PAD |
| 3 | 11-1-17 | REVISE STORM DRAIN TO MATCH AS-BUILT DESIGNATIONS |
| 2 | 6-20-12 | REVISE C.D. AND CENTERLINE OF ROADWAY AND GRADING |
| 1 | 10-30-12 | SPECIFY MSHA CONSTRUCTION WILL BE IN ACCORDANCE WITH SHEET 4 AND ACCESS PERMIT PLAN. |

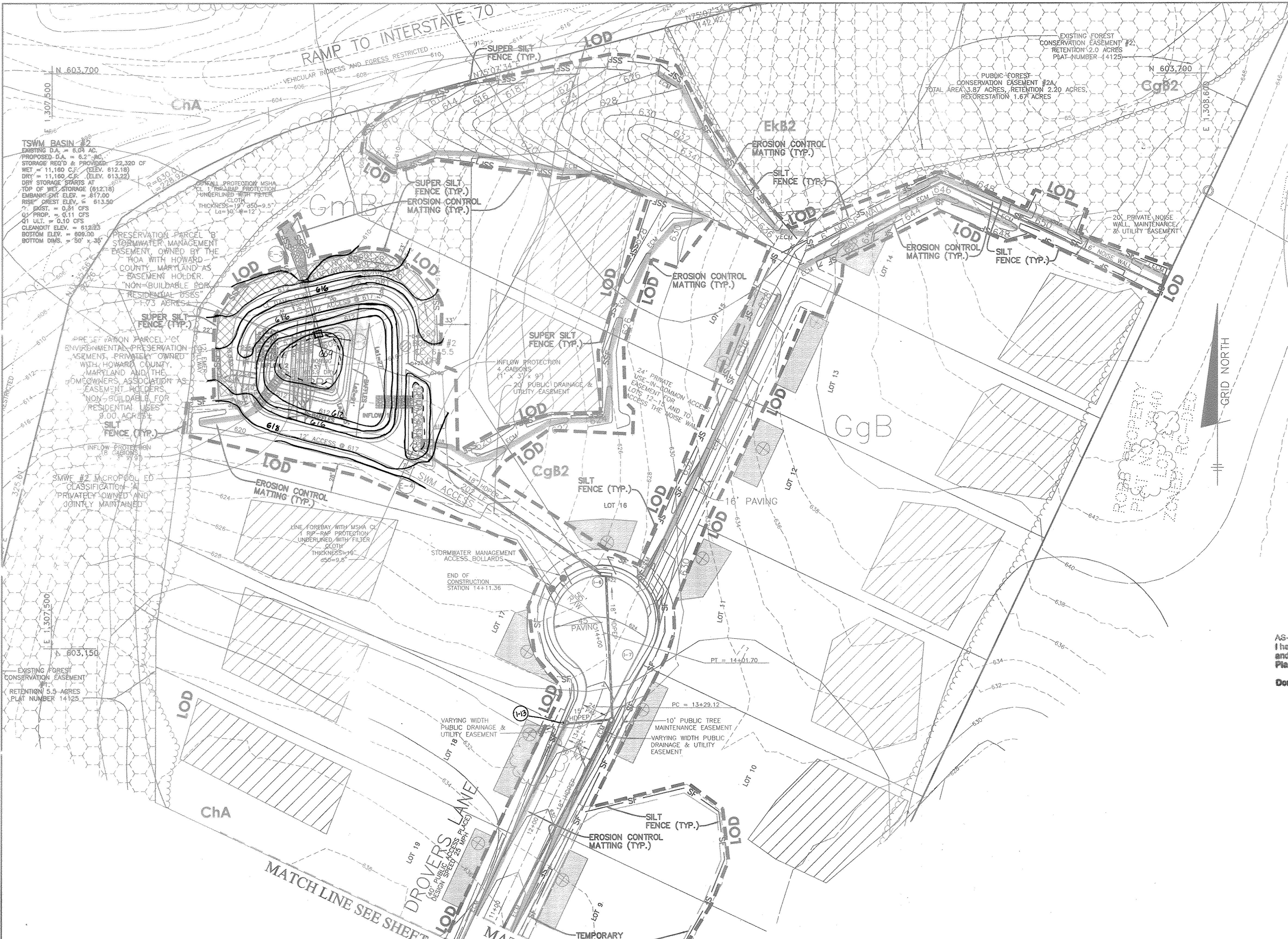
BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE A SUITE 418
ELICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644
E-MAIL: bai@benchmark-engineering.com

[Signature]
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21443, Expiration Date: 12-31-2018

| | |
|---|---------------------------------------|
| APPROVED: DEPARTMENT OF PUBLIC WORKS | <i>[Signature]</i> 1-23-09 DATE |
| APPROVED: DEPARTMENT OF PLANNING AND ZONING | <i>[Signature]</i> 1/20/09 DATE |
| <i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION | 1-27-09 DATE |

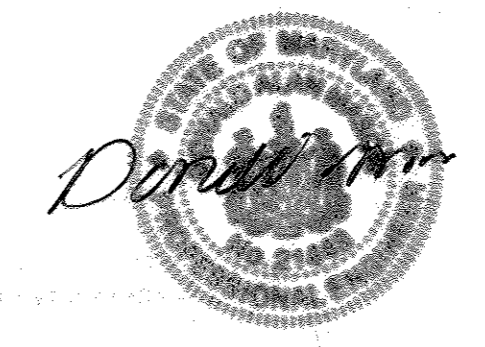
| | |
|---|--|
| DEVELOPER/OWNER LOT 4: D.R. HORTON, INC. 15810 CATHER DRIVE, SUITE 220 GAINERSBURG, MD 20877 1-301-870-6144 | PROJECT: VISTA RIDGE A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D" |
| OWNER LOT 1: HECTOR HANNIBAL AND TANYA SELLERS-HANNIBAL 4450 FREDERICK ROAD COOKSVILLE, MD 21723 | LOCATION: TAX MAP No. B - GRID No. 23 PARCEL No. 177 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| OWNER LOT 2: STEVEN AND JULIE CHO 14460 FREDERICK ROAD COOKSVILLE, MD 21723 | TITLE: GRADING, SEDIMENT AND EROSION CONTROL PLAN |
| OWNER LOT 3: ROBERT AND PHYLLIS BULL, JR. 4470 FREDERICK ROAD COOKSVILLE, MD 21723 | DATE: JANUARY, 2008 PROJECT NO. 1635 |
| Design: JMC Draft: RPS Check: DAM | SCALE: 1" = 50' DRAWING 5 OF 15 |



LEGEND

| | |
|---------------------------------------|----------|
| SOILS CLASSIFICATION | Chc2 |
| SOILS Delineation | (Symbol) |
| EXISTING CONTOURS (BE) | (Symbol) |
| EXISTING WOODS LINE | (Symbol) |
| PROPOSED WOODS LINE | (Symbol) |
| EXISTING STRUCTURE | (Symbol) |
| SEPTIC FIELD | (Symbol) |
| SLOPES 15% TO 24.9% | (Symbol) |
| SLOPES 25% OR GREATER | (Symbol) |
| PROPOSED FOREST CONSERVATION EASEMENT | (Symbol) |
| SUPER SILT FENCE | (Symbol) |
| STABILIZED CONSTRUCTION ENTRANCE | (Symbol) |
| REMOVABLE PUMP STATION | (Symbol) |
| INLET PROTECTION | (Symbol) |
| EROSION CONTROL MATTING | (Symbol) |
| LIMIT OF DISTURBANCE | (Symbol) |
| BGE YELLOW ZONE | (Symbol) |
| BGE GREEN ZONE | (Symbol) |
| PROPOSED WELL BOX | (Symbol) |
| PROPOSED WELL | (Symbol) |

AS-BUILT CERTIFICATION
 I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications.
 Date: 7-10-09
 Donald Mason, P.E.



APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Date: 1/20/09
 HOWARD SOIL CONSERVATION DISTRICT

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Date: 1-12-09

BY THE ENGINEER:
 I/WE CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL, REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTICED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 Date: 1/20/09

| NO. | DATE | REVISION |
|-----|----------|-----------------------|
| 2 | 10-27-07 | REVISE RISER LOCATION |
| 1 | 10-30-07 | REVISE INLET NUMBER |

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-8644
 E-MAIL: bel@bel-civilengineering.com

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21443, Expiration Date: 12-21-2016

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Date: 1-23-09

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Date: 1/20/09

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Date: 1-29-09

| | |
|--|--|
| DEVELOPER/OWNER LOT 8: D.R. HORTON, INC. 15810 GANTHER DRIVE, SUITE 220 GATHERSBURG, MD 20877 1-301-870-6144 | PROJECT: VISTA RIDGE A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D" |
| OWNER LOT 1: HECTOR HANNIBAL AND TANYA SELLERS-HANNIBAL 14450 FREDERICK ROAD COOKSVILLE, MD 21723 | LOCATION: TAX MAP No. 8 - GRID No. 23 PARCEL No. 176 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| OWNER LOT 2: STEVEN AND JULIE CHO 14450 FREDERICK ROAD COOKSVILLE, MD 21723 | TITLE: GRADING, SEDIMENT AND EROSION CONTROL PLAN |
| OWNER LOT 3: ROBERT AND PHYLLIS BULL, JR. 14470 FREDERICK ROAD COOKSVILLE, MD 21723 | DATE: JANUARY, 2009 PROJECT NO. 1635 |
| Design: JMC Draft: RPS Check: DAM | SCALE: 1" = 50' DRAWING 6 OF 15 |

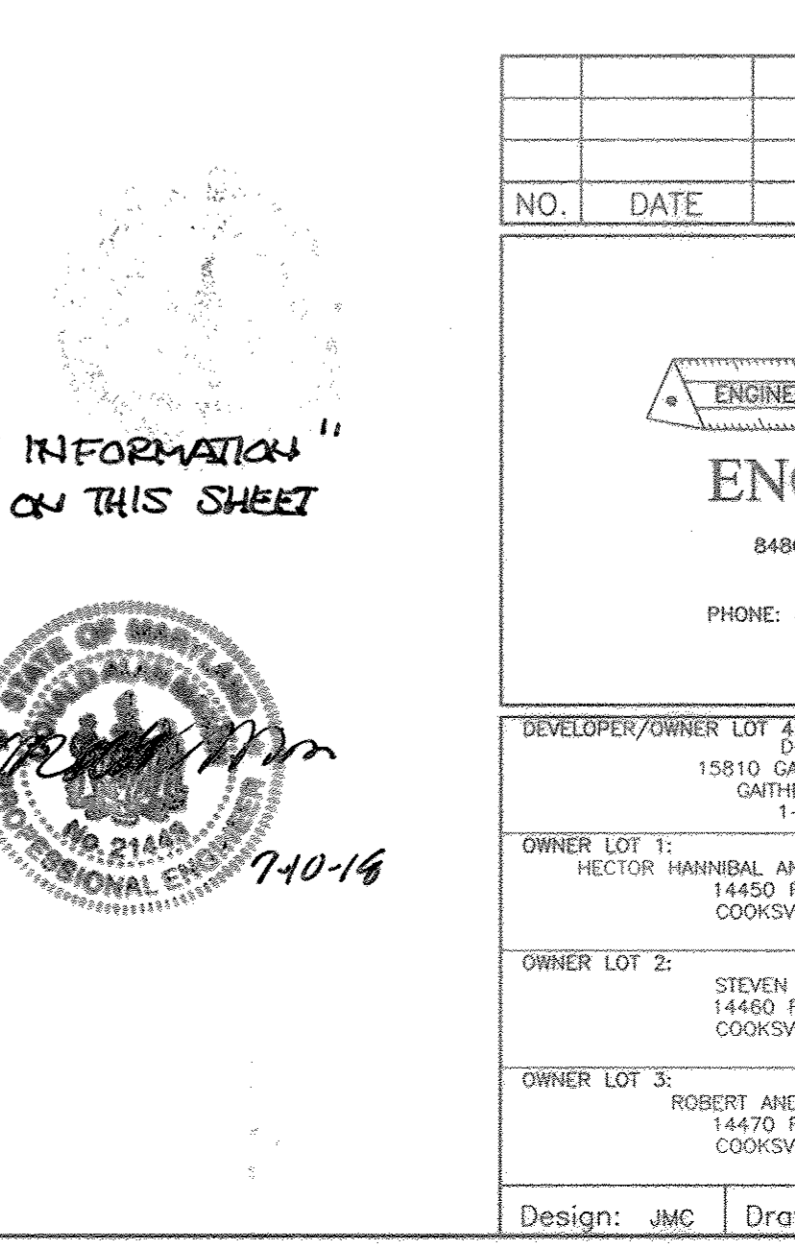
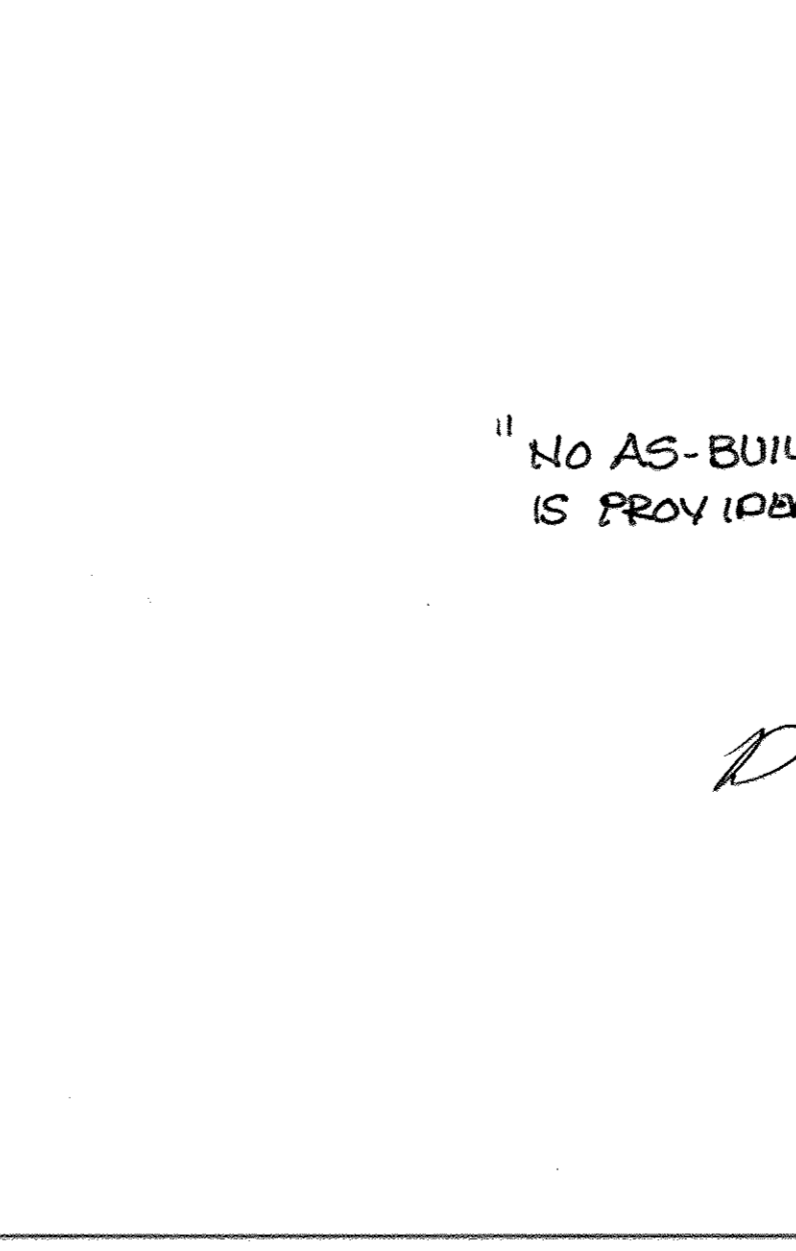
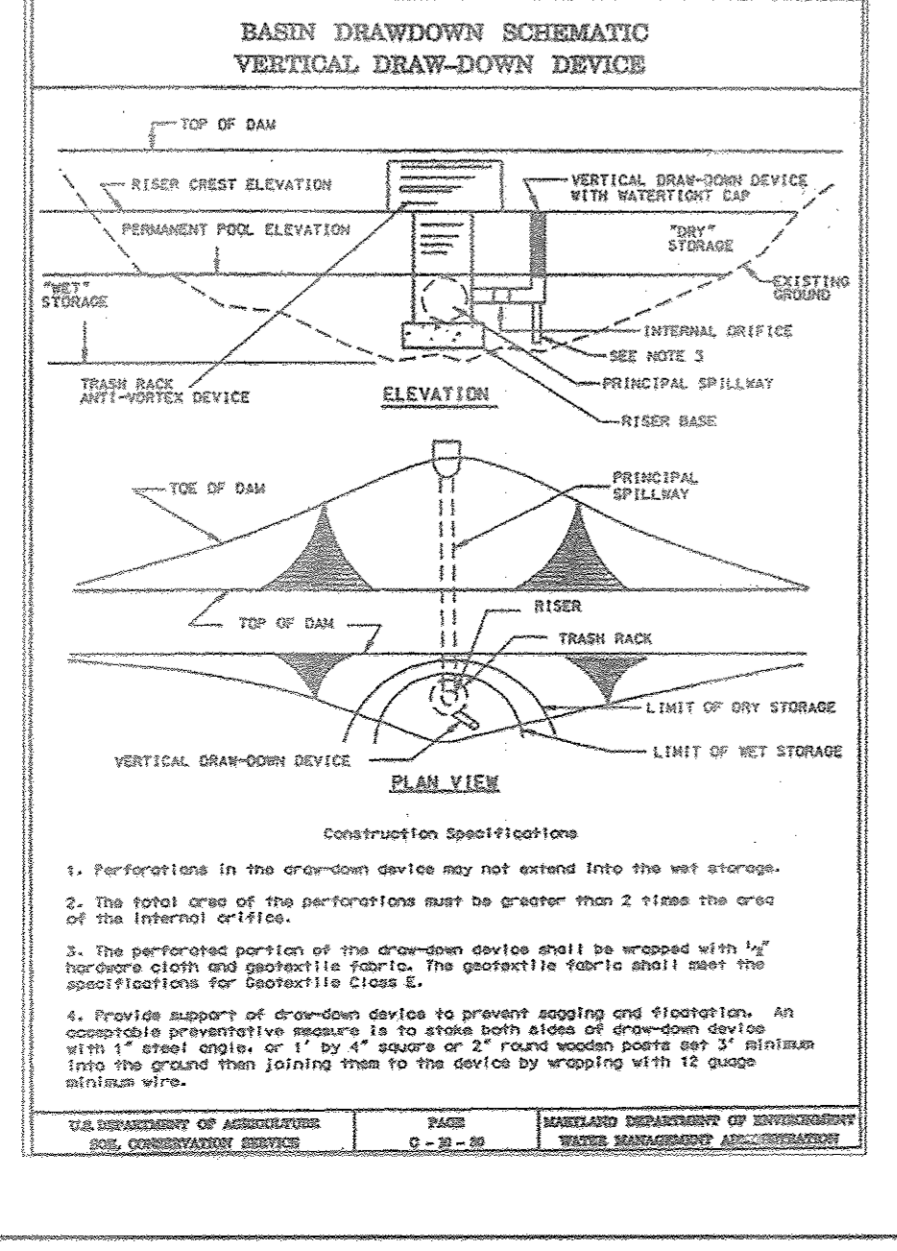
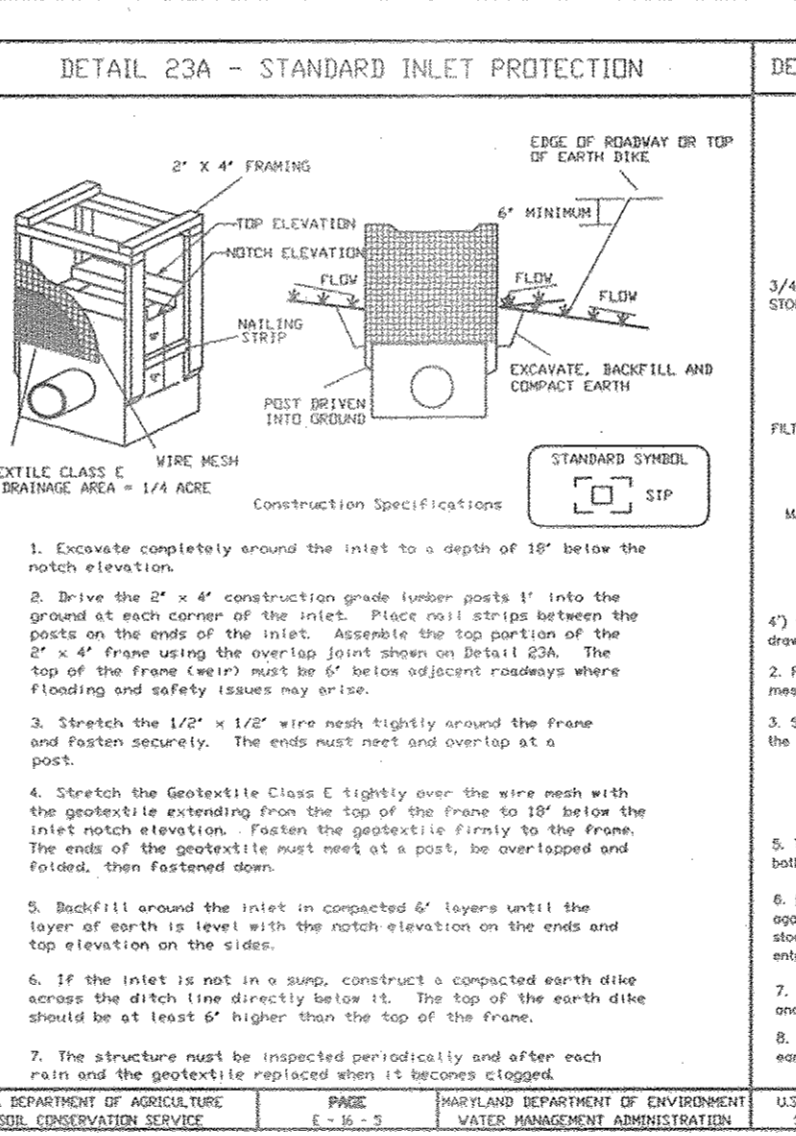
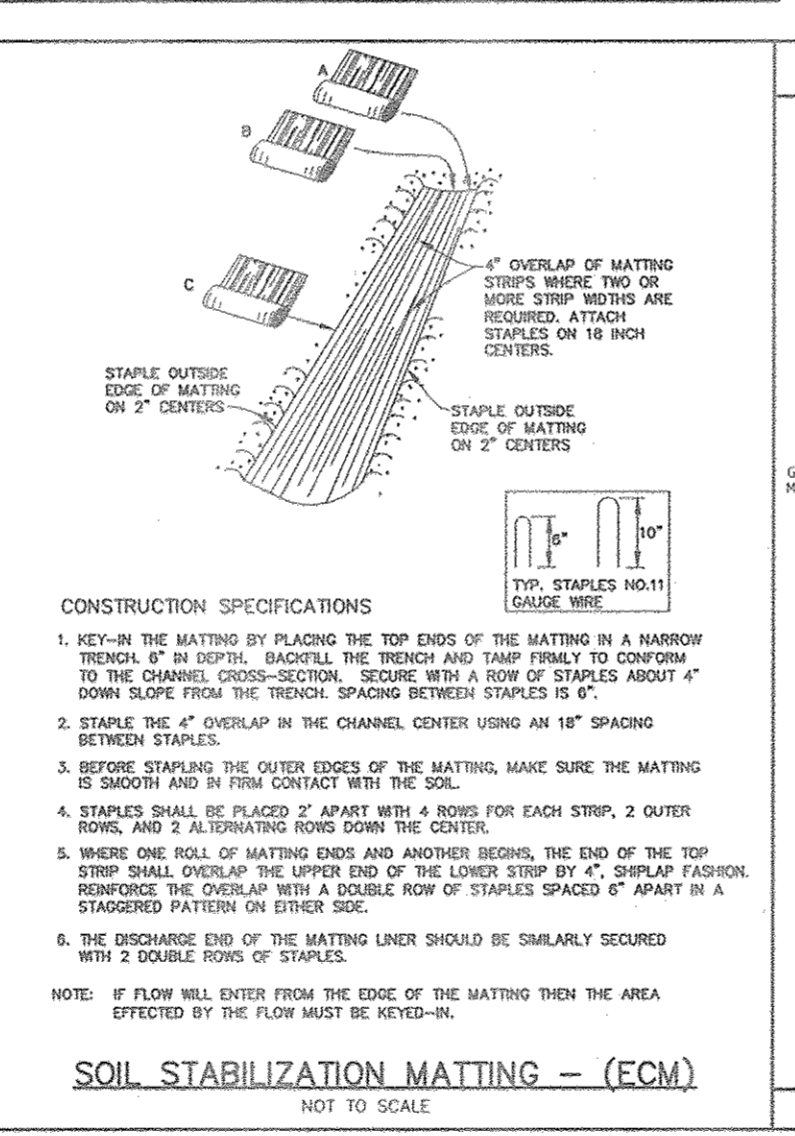
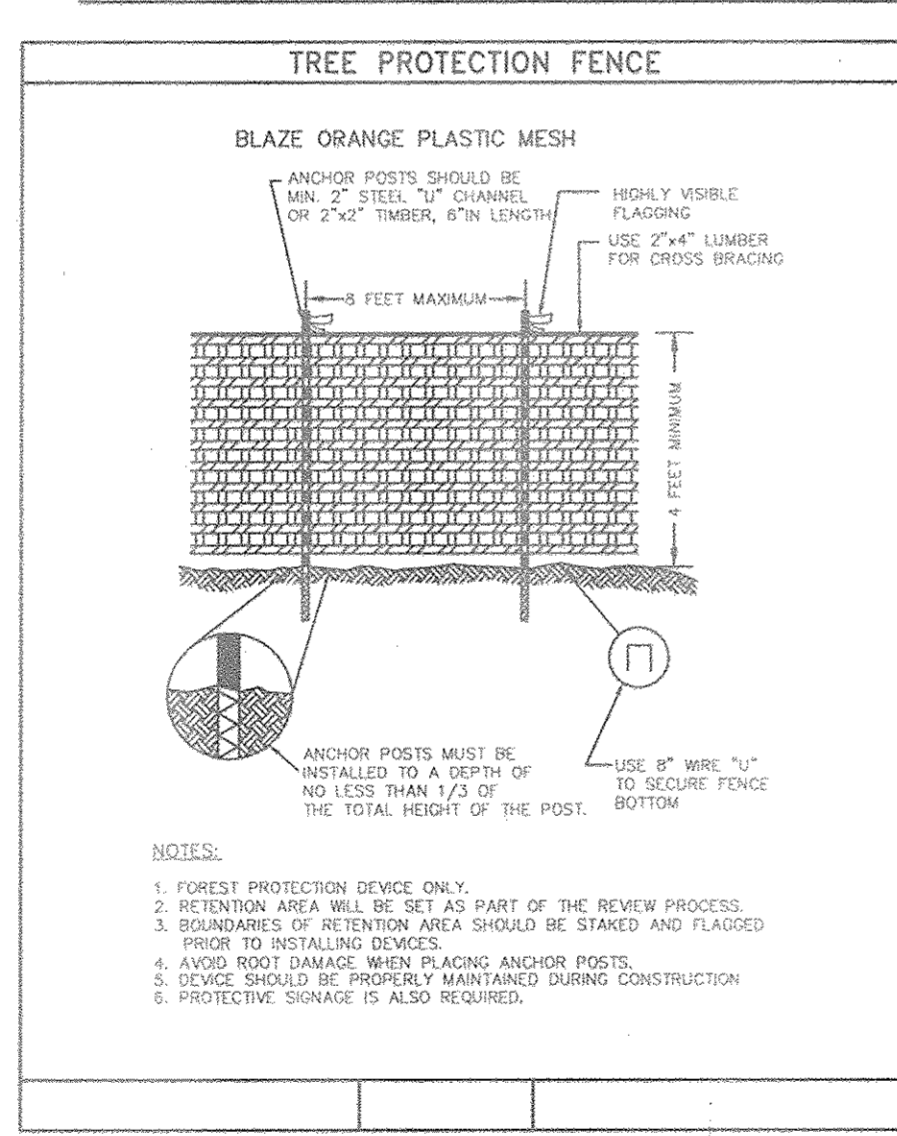
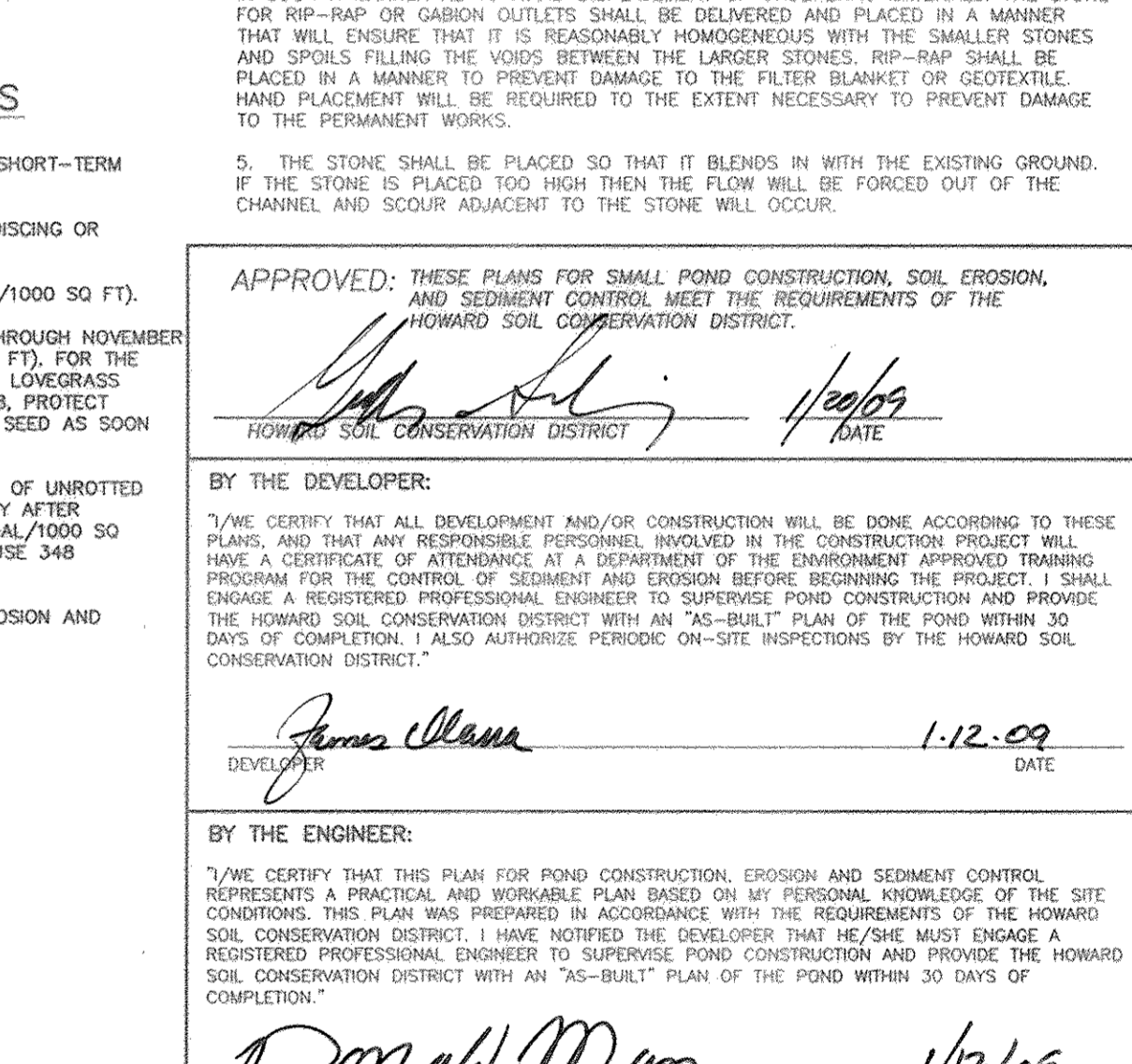
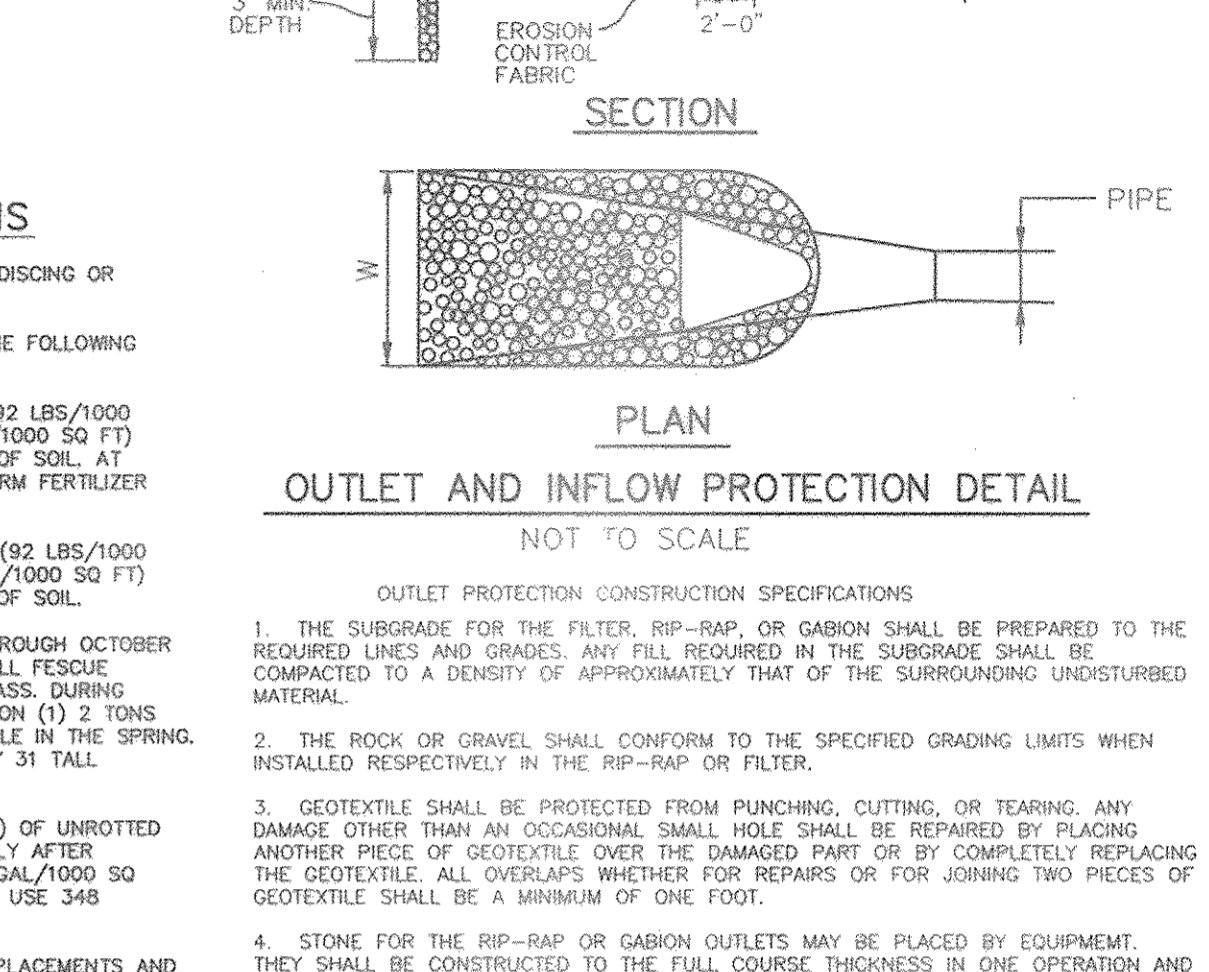
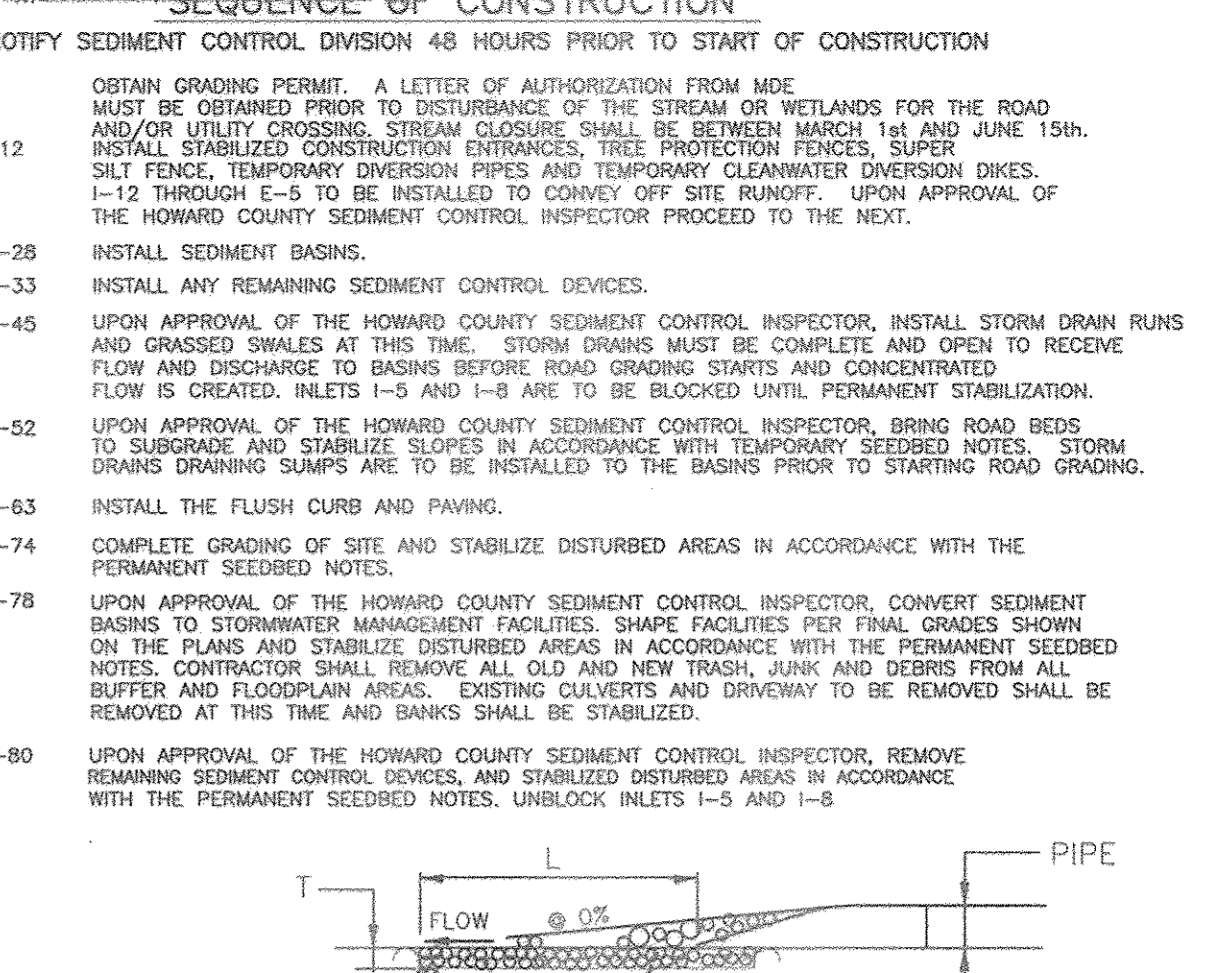
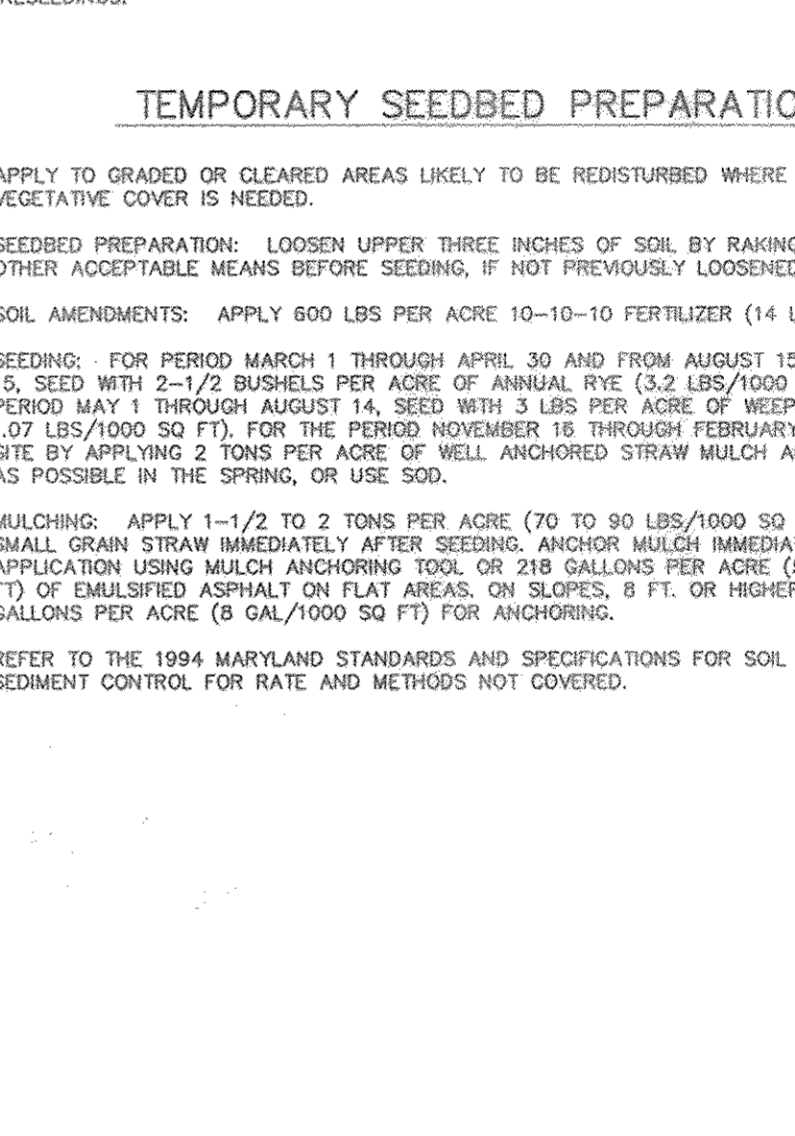
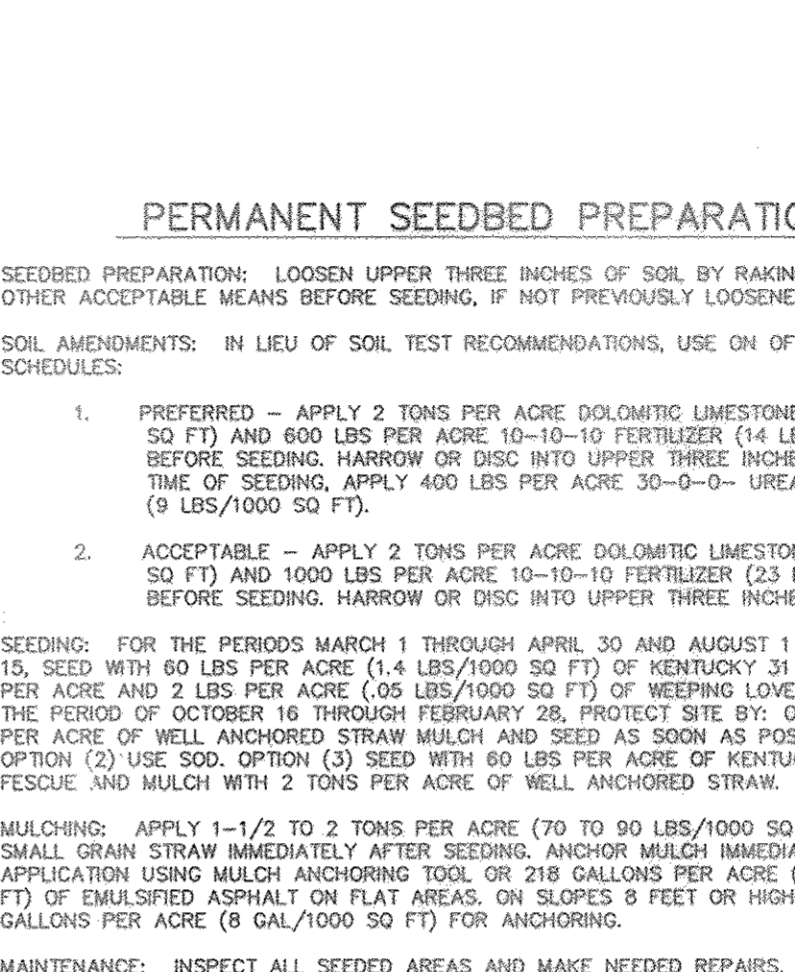
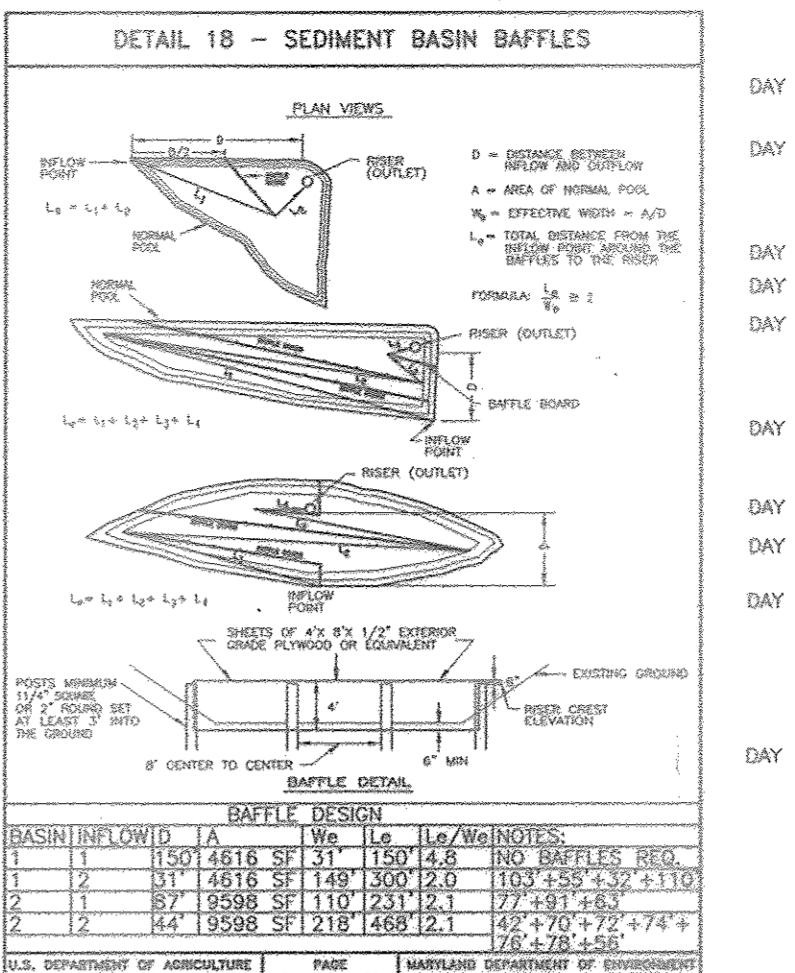
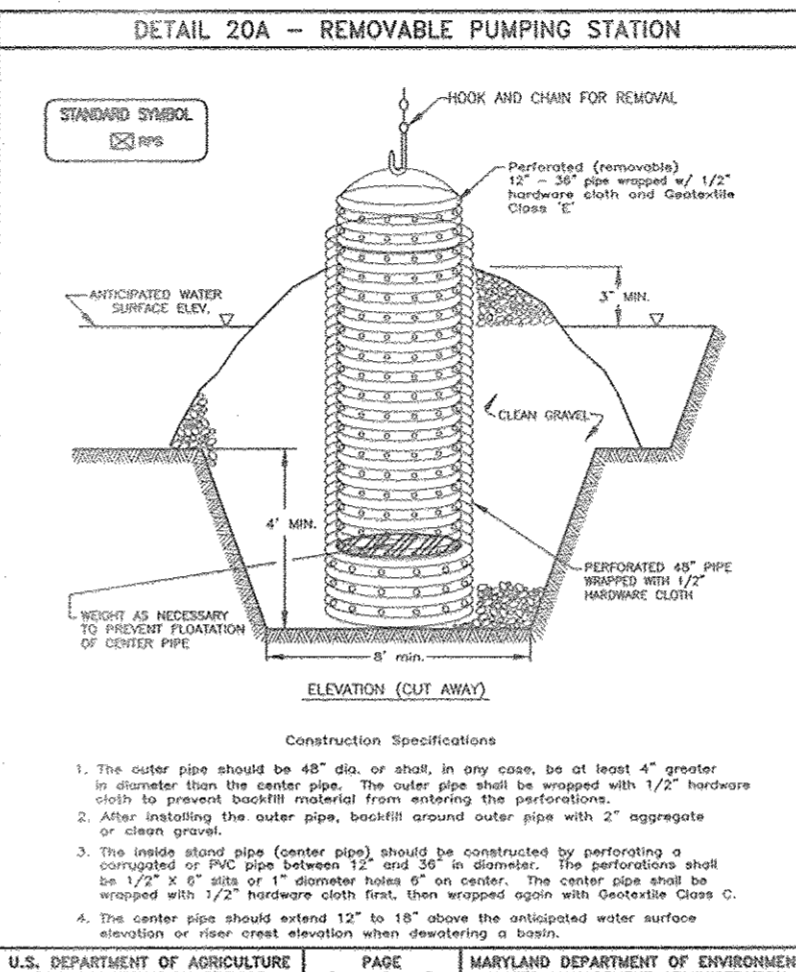
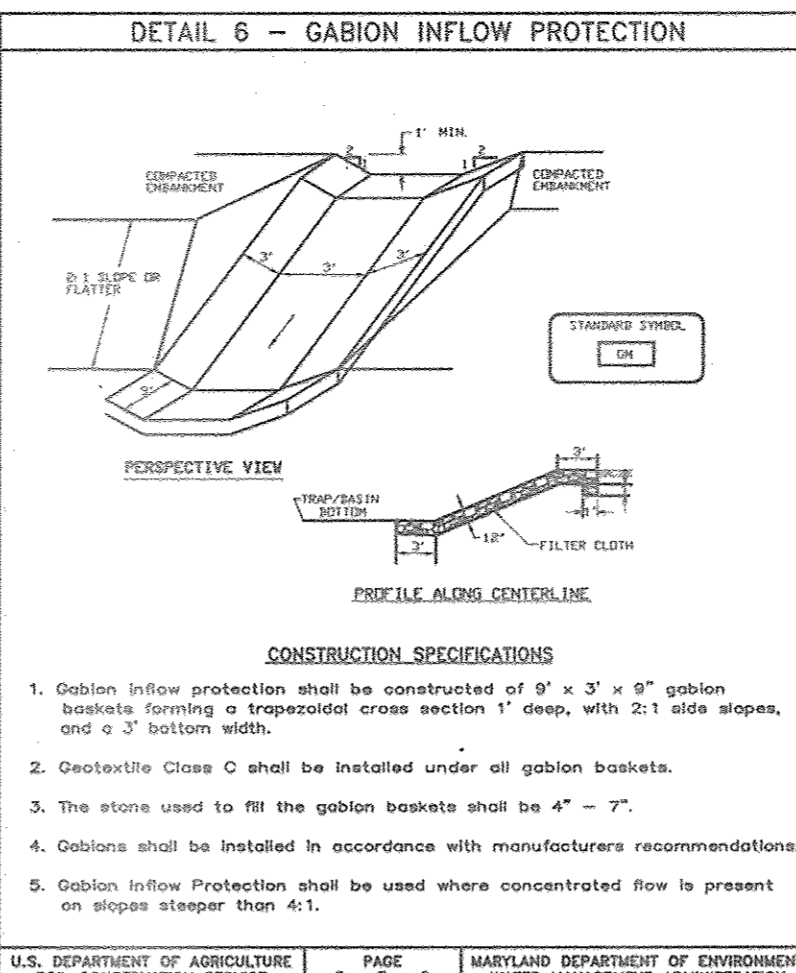
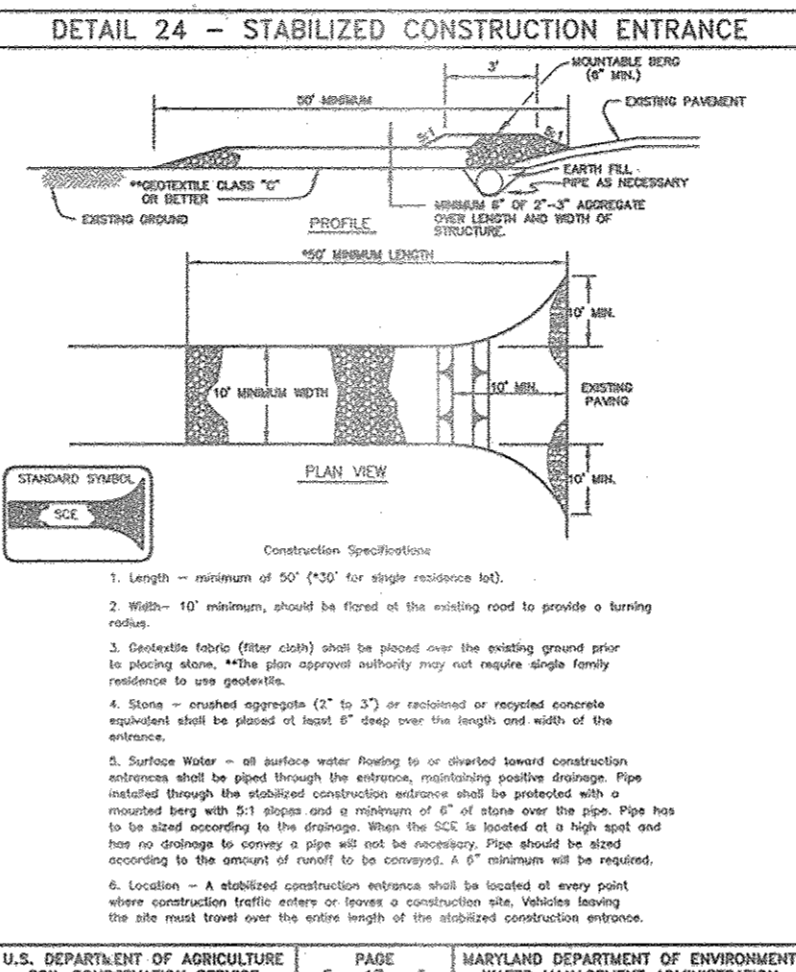
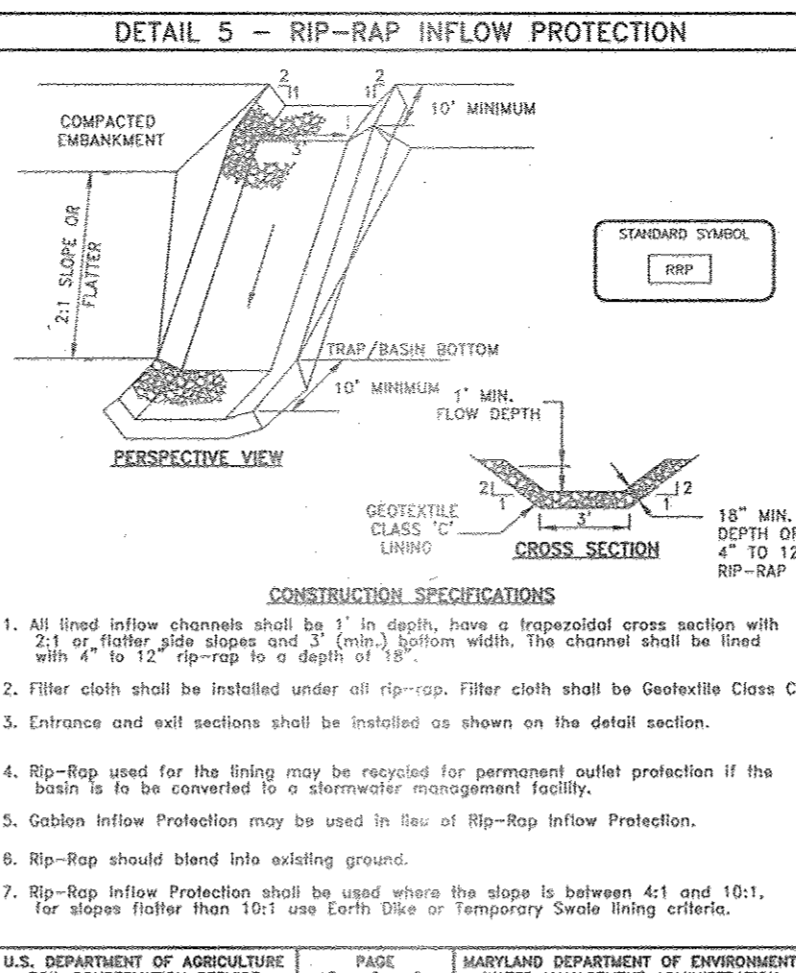
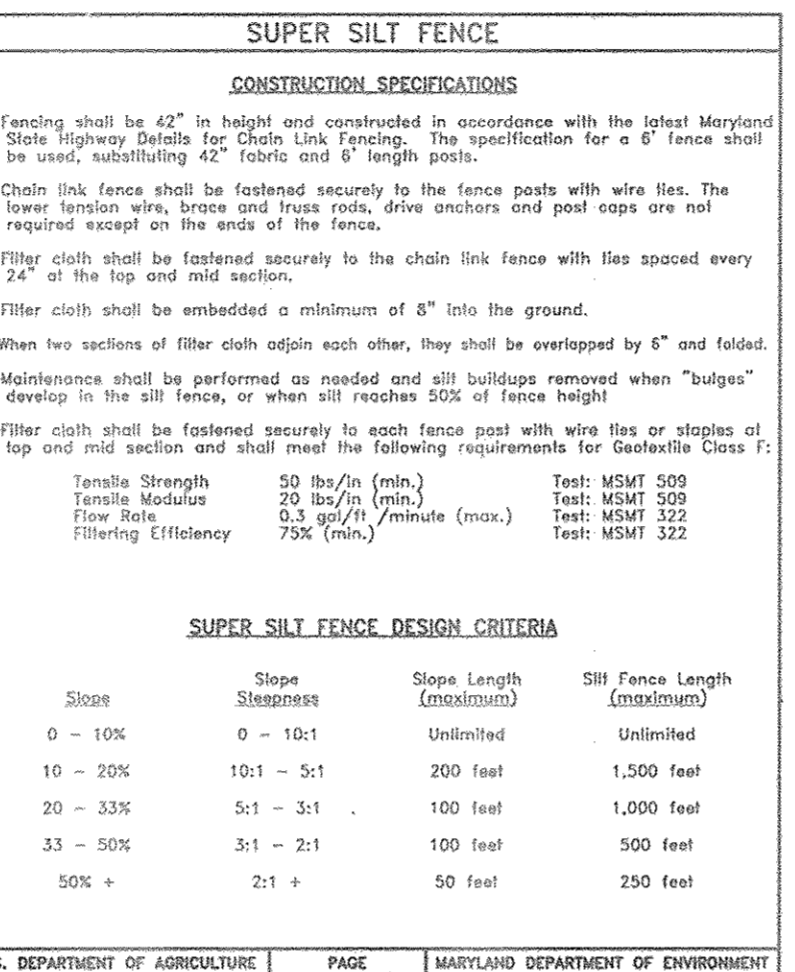
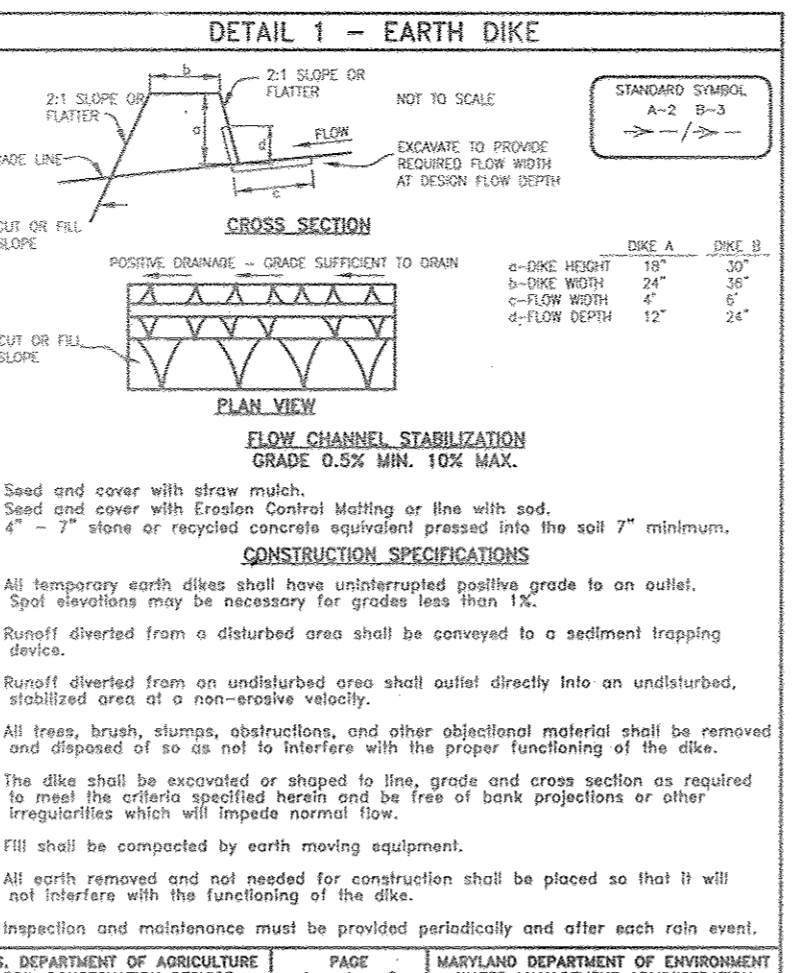
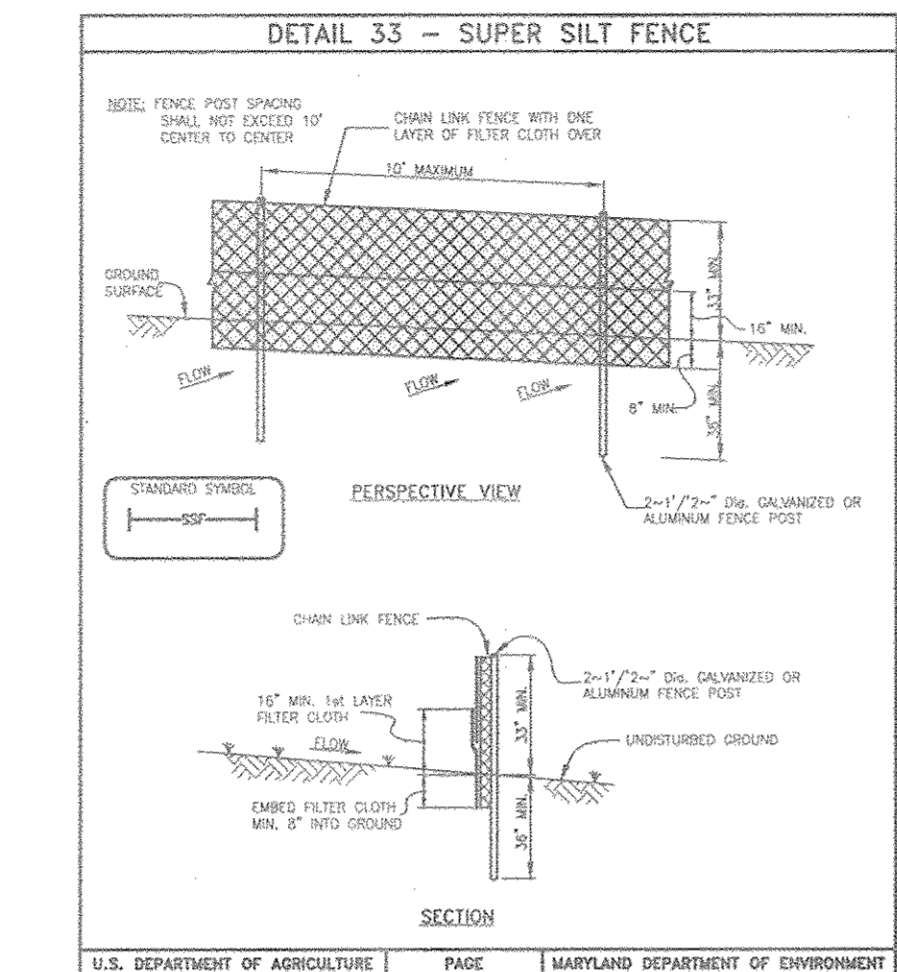
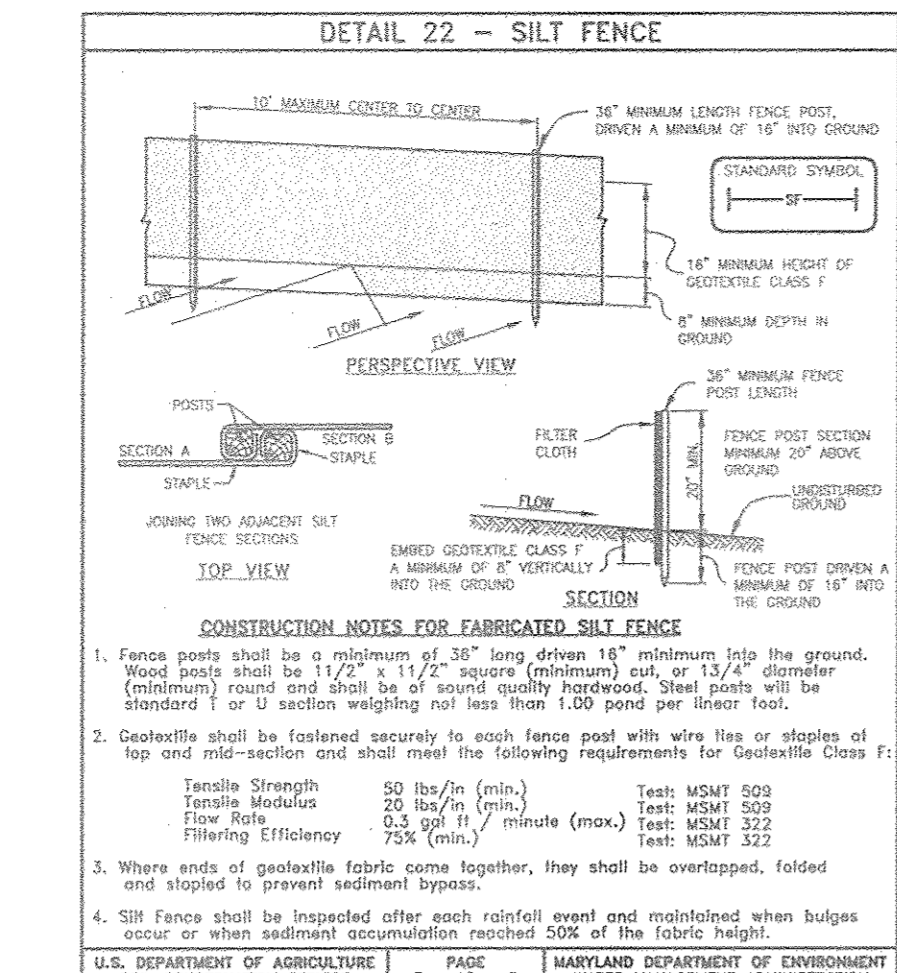
SEDIMENT CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313-1850).
- 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. REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, (B) 1-4 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE OPENED 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 THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOO (SEC. 54), TEMPORARY 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 PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

| | |
|------------------------------------|--------------|
| TOTAL AREA OF SITE | 34.8 ACRES |
| AREA DISTURBED | 8.6 ACRES |
| AREA TO BE ROOFED OR PAVED | 1.4 ACRES |
| AREA TO BE VEGETATIVELY STABILIZED | 7.2 ACRES |
| TOTAL CUT | 7479 CY |
| TOTAL FILL | 3801 CY |
| OFFSITE WASTE/BORROW AREA LOCATION | SEE NOTE #12 |
- 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 APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- WASTE WILL BE HAULED TO AN APPROVED WASTE DISPOSAL SITE, WITH A ACTIVE GRADING PERMIT.

TOPSOIL SPECIFICATIONS

- Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be saved or green soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must be the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting texture subsoils and shall contain less than 5% by volume of clods, flint, slag, coarse fragments, roots, sticks, trash, or other materials larger than 1-1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nutgrass, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground water table is less than 4 feet (400-600 gallons per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
 - For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
 - For sites having disturbed areas over 5 acres:
 - On soil meeting topsoil specifications, obtain test results detailing fertilizer and lime application requirements to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content or topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble soil content greater than 500 parts per million shall not be used.
 - No sand or silt shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
 - Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, silt dikes, slope silt fence and sediment traps and basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, offset 4" - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be done in such a manner that seeding or sodding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from the spreading operation shall be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and sodding preparation.
- Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below.
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.02.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.



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VISTA RIDGE
 A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D"

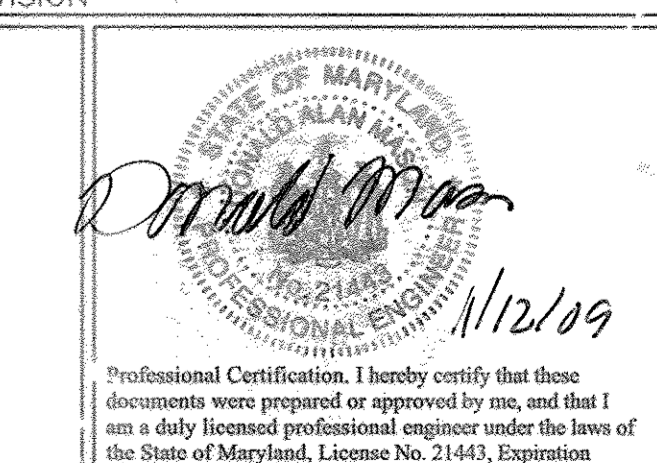
SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

DATE: JANUARY, 2009 PROJECT NO. 1635
 SCALE: 1" = 50' DRAWING 7 OF 15

APPROVED: DEPARTMENT OF PUBLIC WORKS
 With 7.1.09
 CHIEF, BUREAU OF HIGHWAYS 1-23-09 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Cindy Hamilton 1/30/09
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

1-29-09
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



AREA AND "C" FACTOR TABULATION

Vista Ridge DATE: 10/14/2008 BEI JOB # 1635

| INLET # | ZONING (Z) | AREA (Ac) (A) | "C" FACTOR <25 YR (C) | % IMPERVIOUS (P) |
|---------|------------|---------------|-----------------------|------------------|
| I-15 | RC | 0.04 | 0.70 | 73 |
| I-1 | RC | 0.08 | 0.66 | 67 |
| I-2 | RC | 4.67 | 0.25 | 14 |
| I-3 | RC | 0.47 | 0.72 | 77 |
| I-4 | RC | 1.30 | 0.40 | 33 |
| I-5 | RC | 1.49 | 0.29 | 13 |
| I-6 | RC | 3.07 | 0.31 | 27 |
| I-7 | RC | 0.41 | 0.46 | 47 |
| I-8 | RC | 0.63 | 0.26 | 20 |
| I-9 | RC | 0.30 | 0.61 | 60 |
| I-10 | RC | 0.78 | 0.33 | 23 |
| I-11 | RC | 0.72 | 0.31 | 18 |
| I-13A | RC | 0.71 | 0.36 | 27 |
| I-15A | RC | 0.01 | 0.86 | 100.00 |
| I-13 | RC | 0.65 | 0.38 | 36 |
| I-16 | RC | 0.06 | 0.60 | 57 |

SOILS LEGEND

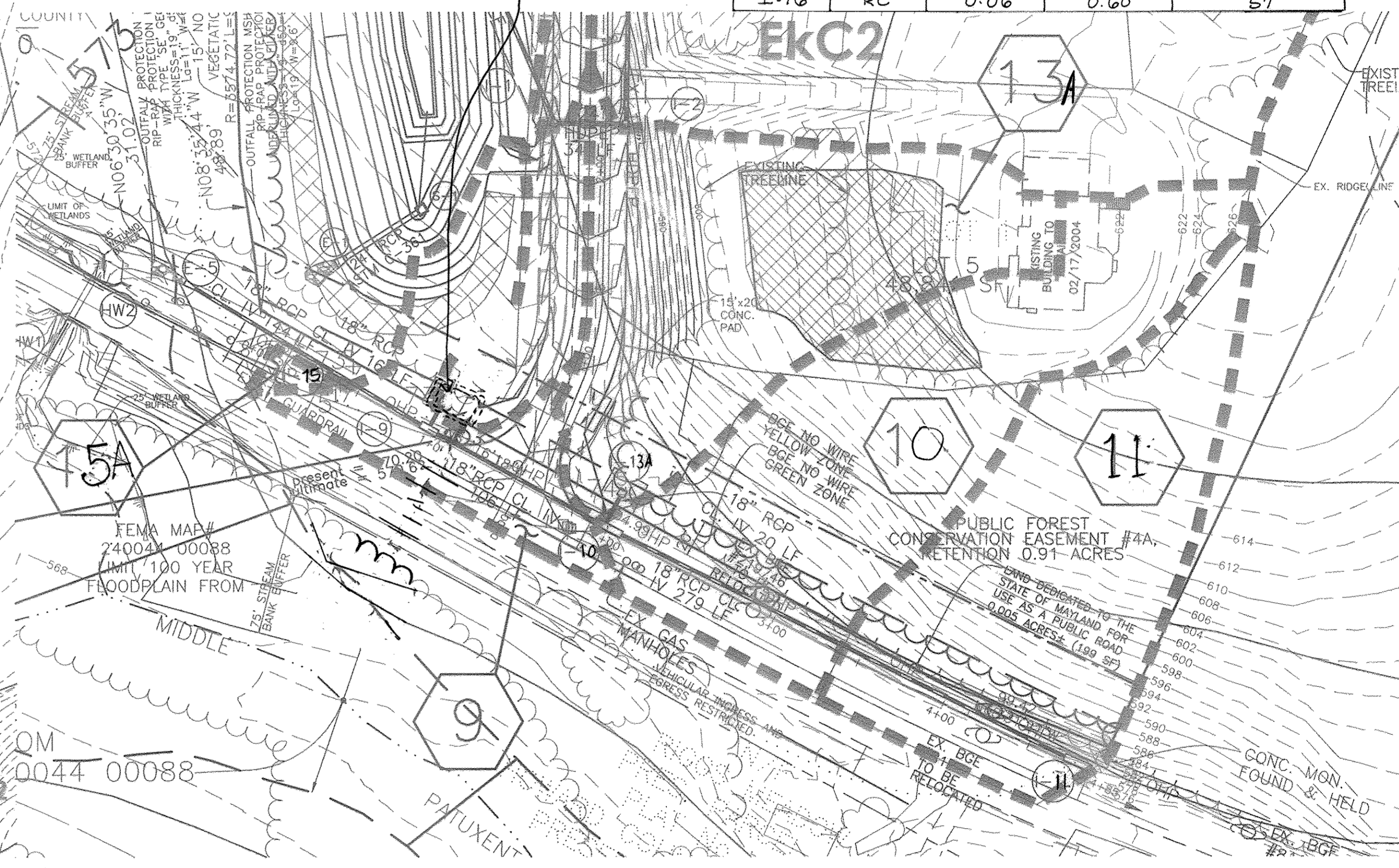
| MAP SYMBOL | SOIL GROUP | SOIL TYPE |
|------------|------------|---|
| CgB2 | B | CHESTER GRAVELLY SILT LOAM, 3 TO 8 % SLOPES, MODERATELY ERODED |
| CgC2 | B | CHESTER GRAVELLY SILT LOAM, 8 TO 15 % SLOPES, MODERATELY ERODED |
| ChA | B | CHESTER SILT LOAM, 0 TO 3 % SLOPES |
| ChB2 | B | CHESTER SILT LOAM, 3 TO 8 % SLOPES, MODERATELY ERODED |
| ChC2 | B | CHESTER SILT LOAM, 8 TO 15 % SLOPES, MODERATELY ERODED |
| ChD2 | B | CHESTER SILT LOAM, 15 TO 25 % SLOPES, MODERATELY ERODED |
| Cs | B | COMUS SILT LOAM |
| EhB2 | C | ELIQUA SILT LOAM, 3 TO 8 % SLOPES, MODERATELY ERODED |
| EhC2 | C | ELIQUA SILT LOAM, 8 TO 15 % SLOPES, MODERATELY ERODED |
| EhD2 | C | ELIQUA SILT LOAM, 15 TO 25 % SLOPES, MODERATELY ERODED |
| EhD3 | C | ELIQUA SILTY CLAY LOAM, 15 TO 25 % SLOPES, SEVERELY ERODED |

NO HYDRIC SOILS
TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 7

FOR IMPROVEMENTS WITHIN THE STATE RIGHT-OF-WAY SEE SHEET 4 AND ACCESS PERMIT PLANS

FOR STATE RIGHT-OF-WAY IMPROVEMENT AS-BUILT INLET PERMIT 06APHD01913 AS-BUILT

EX MSHA MBR PER ACCESS PERMIT AS-BUILT INLET REMOVED



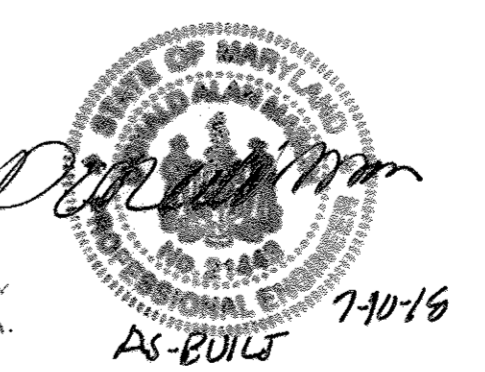
"NO AS BUILT INFORMATION" IS PROVIDED ON THIS SHEET

MSHA PLAN SCALE: 1" = 50'

| NO. | DATE | REVISION |
|-----|----------|--|
| 1 | 10-30-12 | REVISE INLET & DA DESIGNATION AND SPECIFY MSHA PLAN LOCATION |
| 2 | 6-20-13 | ADJUST S.D. |
| 3 | 11-11-17 | REDESIGNATE STORM DRAIN INLETS TO AS-BUILT DESIGNATIONS |

LEGEND

- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING CONTOURS (BE)
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- EXISTING STRUCTURE
- SEPTIC FIELD
- SLOPES 15% TO 24.9%
- SLOPES 25% OR GREATER
- PROPOSED FOREST CONSERVATION EASEMENT
- SUPER SILT FENCE
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- REMOVABLE PUMP STATION
- EROSION CONTROL MATTING
- LIMIT OF DISTURBANCE
- BGE YELLOW ZONE
- BGE GREEN ZONE



APPROVED: DEPARTMENT OF PUBLIC WORKS
 [Signature] 1-23-09
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 1/20/09
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 1-29-09
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

PLAN SCALE: 1" = 100'

- DESIGNATES STORM DRAINAGE AREA ON THE MAP

GENERAL NOTES:
 THE DRIVEWAY CULVERTS WERE DESIGNED BASED ON THE WORST CONDITION WHICH EXISTS IN FRONT OF LOT 16. ALL DRIVEWAY CULVERTS SHALL BE 15" HDPE OR RCP.

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-6644
 E-MAIL: benchmark@eais.com

DEVELOPER/OWNER LOT 4: DR HORTON, INC
 15810 GATHER DRIVE, SUITE 220
 GAITHERSBURG, MD 20877
 1-301-670-6144

OWNER LOT 1: HECTOR HANNIBAL AND TANYA SELLERS-HANNIBAL
 14450 FREDERICK ROAD
 COOKSVILLE, MD 21723

OWNER LOT 2: STEVEN AND JULIE CHO
 14460 FREDERICK ROAD
 COOKSVILLE, MD 21723

OWNER LOT 3: ROBERT AND PHYLLIS BULL, JR
 14470 FREDERICK ROAD
 COOKSVILLE, MD 21723

PROJECT: **VISTA RIDGE**
 A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D"

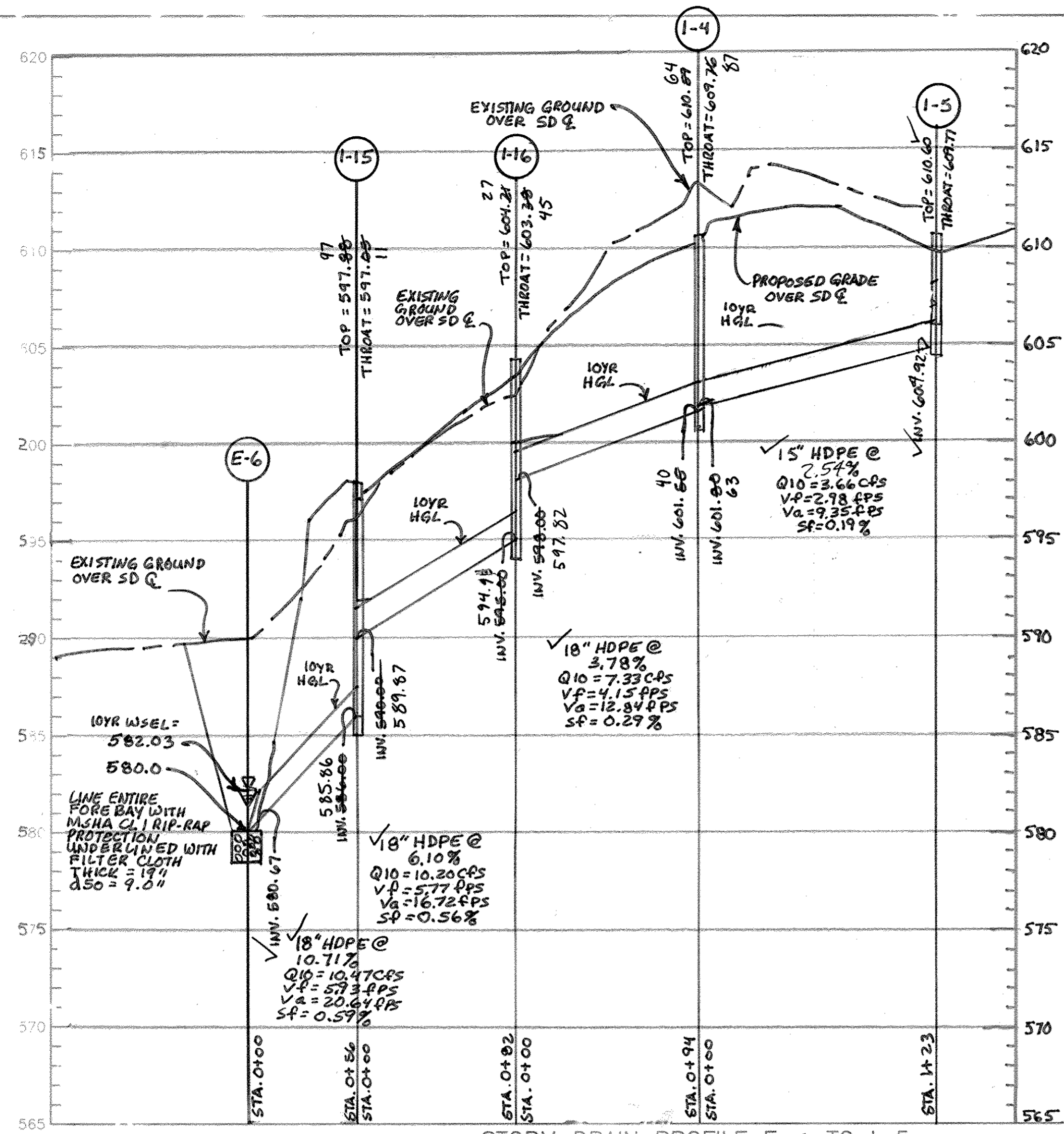
LOCATION: TAX MAP No. 8 - GRID No. 23
 PARCEL No. 176
 4th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **STORM DRAINAGE AREA AND SOILS MAP**

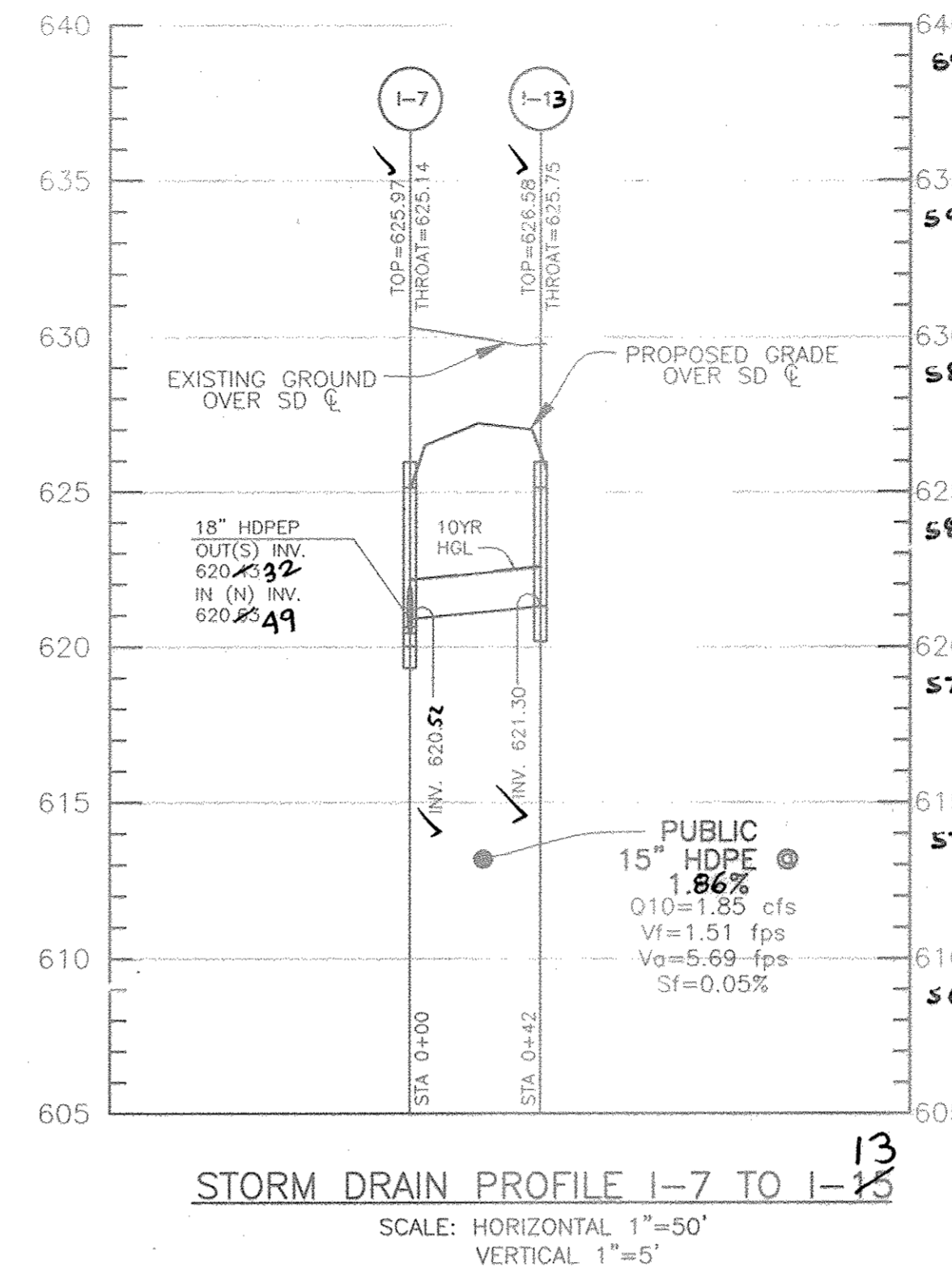
DATE: MAY, 2008
 JANUARY, 2009

PROJECT NO. 1635
 DRAWING 8 OF 15

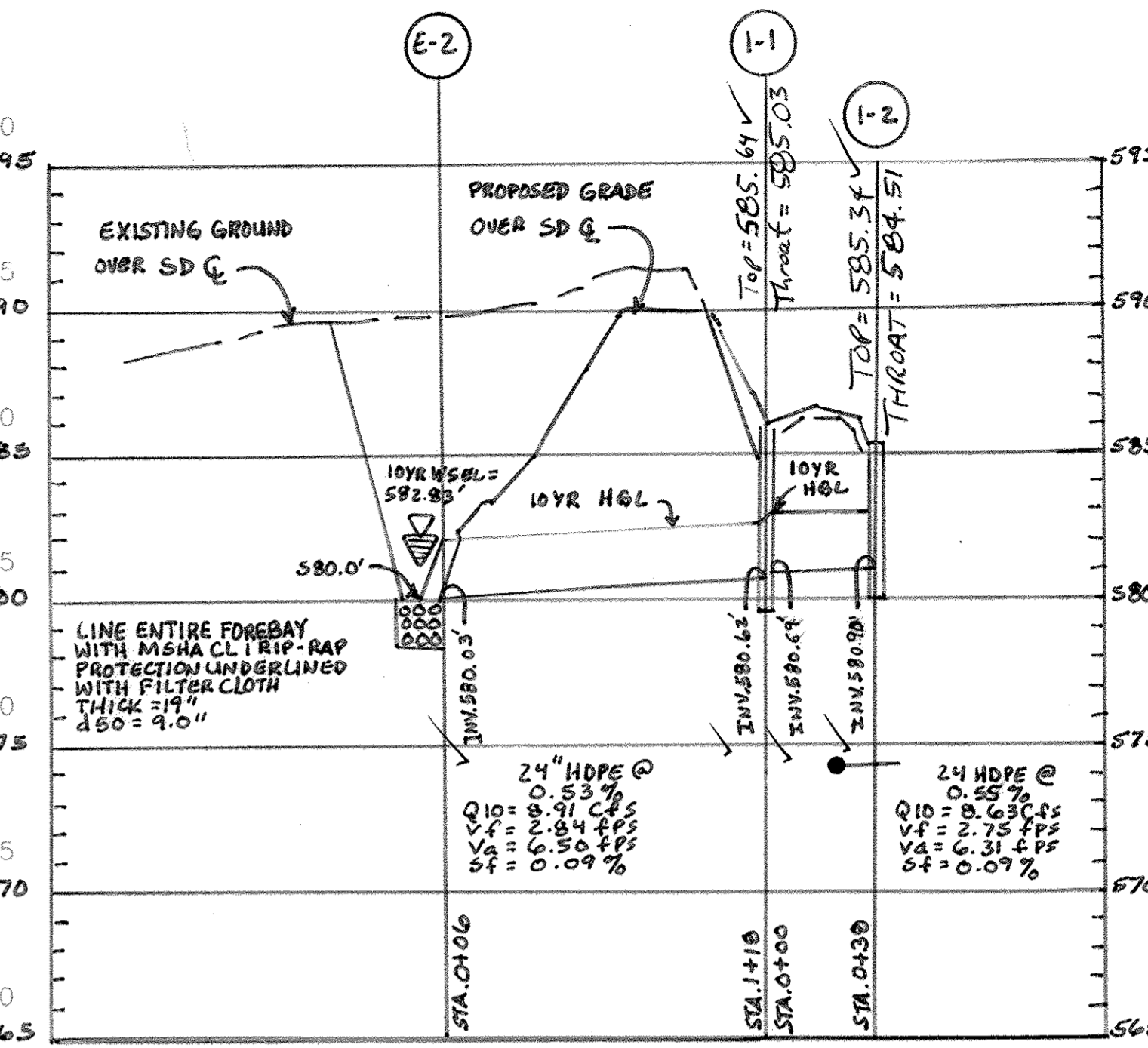
Design: JMC Draft: ANM Check: DAM SCALE: 1" = 100'



STORM DRAIN PROFILE E-6 TO I-5
SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=5'

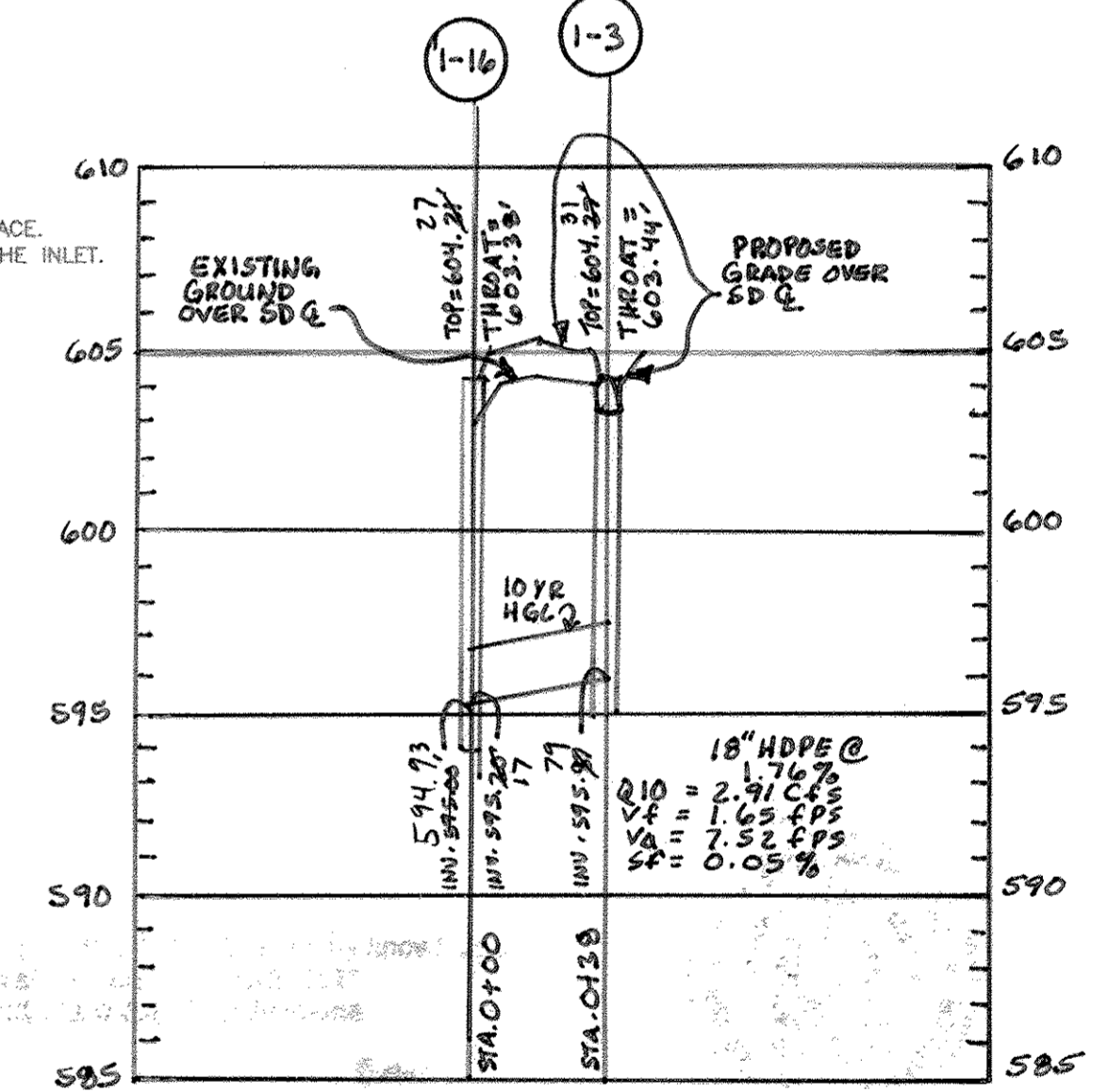


STORM DRAIN PROFILE I-7 TO I-13
SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=5'

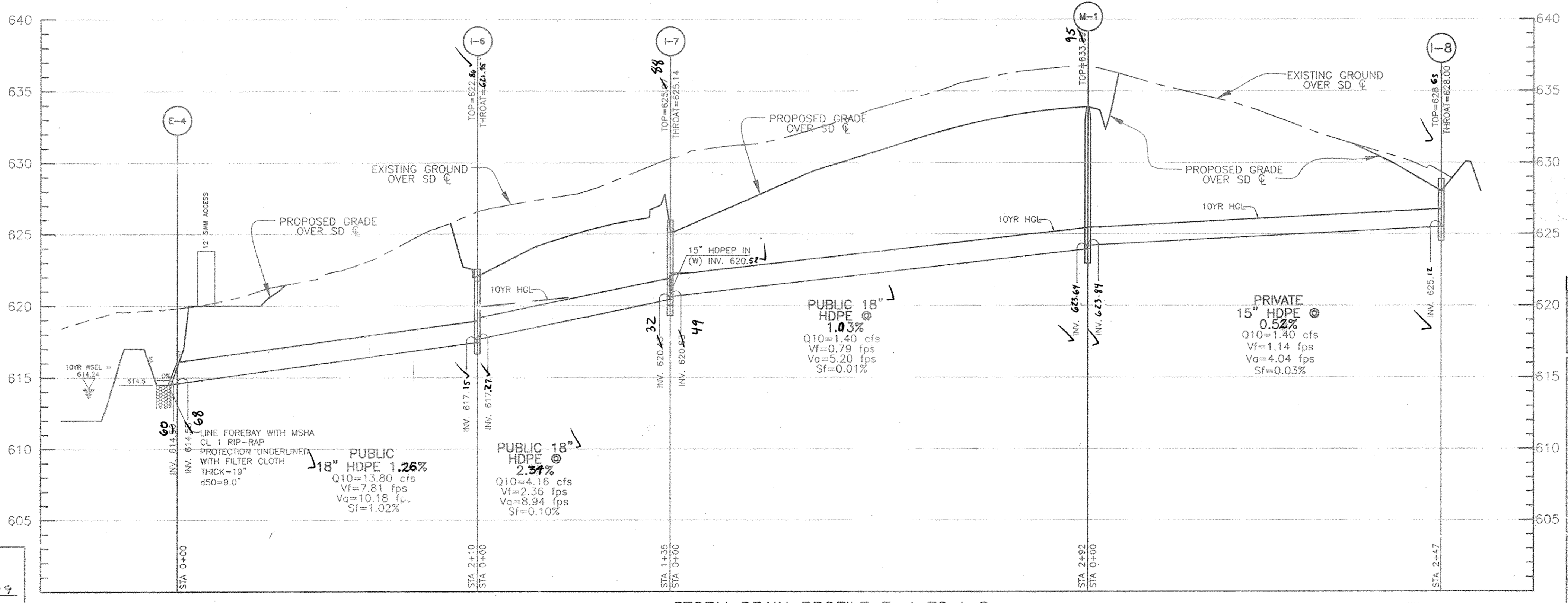


STORM DRAIN PROFILE E-2 TO I-2
SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=5'

- GENERAL NOTES
- 1) STRUCTURE ELEVATION AND LOCATION FOR MANHOLES IS AT THE TOP AND CENTER OF RIM.
 - 2) STRUCTURE ELEVATION AND LOCATION FOR CURB INLETS IS AT THE TOP OF CURB AT MIDPOINT OF THE INLET AT THE FACE.
 - 3) STRUCTURE ELEVATION AND LOCATION FOR TYPE "D" AND "WR" INLETS IS AT THE TOP OF SLAB/GRATE AT CENTER OF THE INLET.
 - 4) PRECAST STRUCTURES MEETING HS-20 LOADING MAY BE USED.
 - 5) STRUCTURE ELEVATION AND LOCATION FOR END SECTIONS ARE AT THE CENTER END OF THE END SECTION.



STORM DRAIN PROFILE I-16 TO I-3
SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=5'



STORM DRAIN PROFILE E-4 TO I-8
SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=5'

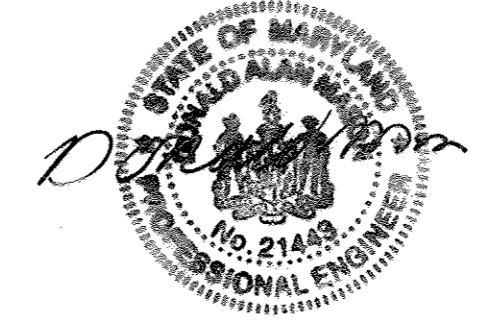
APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. ... 1-23-09
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hunter 1/30/09
CHIEF, DIVISION OF LAND DEVELOPMENT

Paul ... 1/29/09
CHIEF, DEVELOPMENT ENGINEERING DIVISION

AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications

Donald Mason, P.E.
Date: 7-10-18

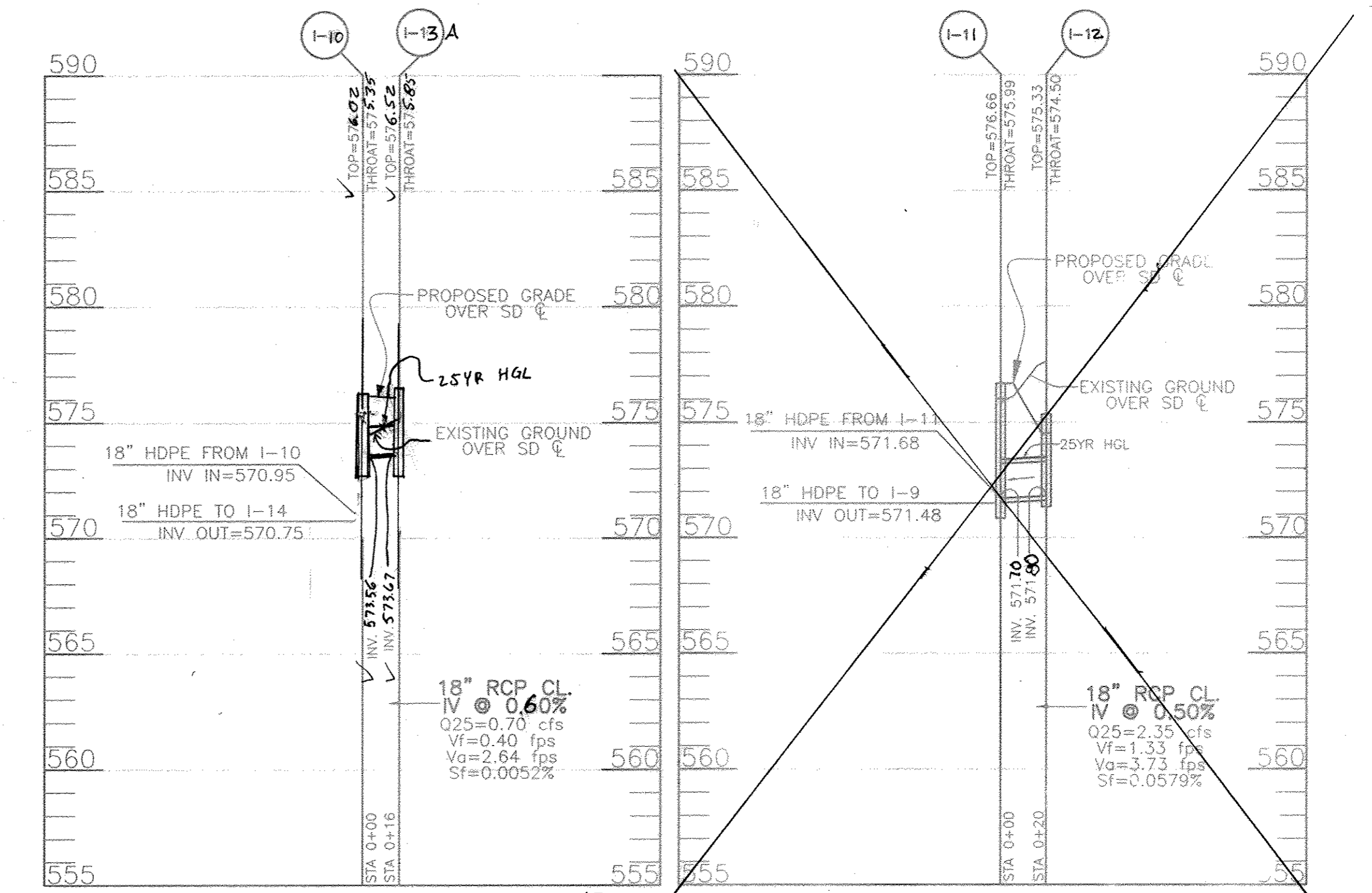
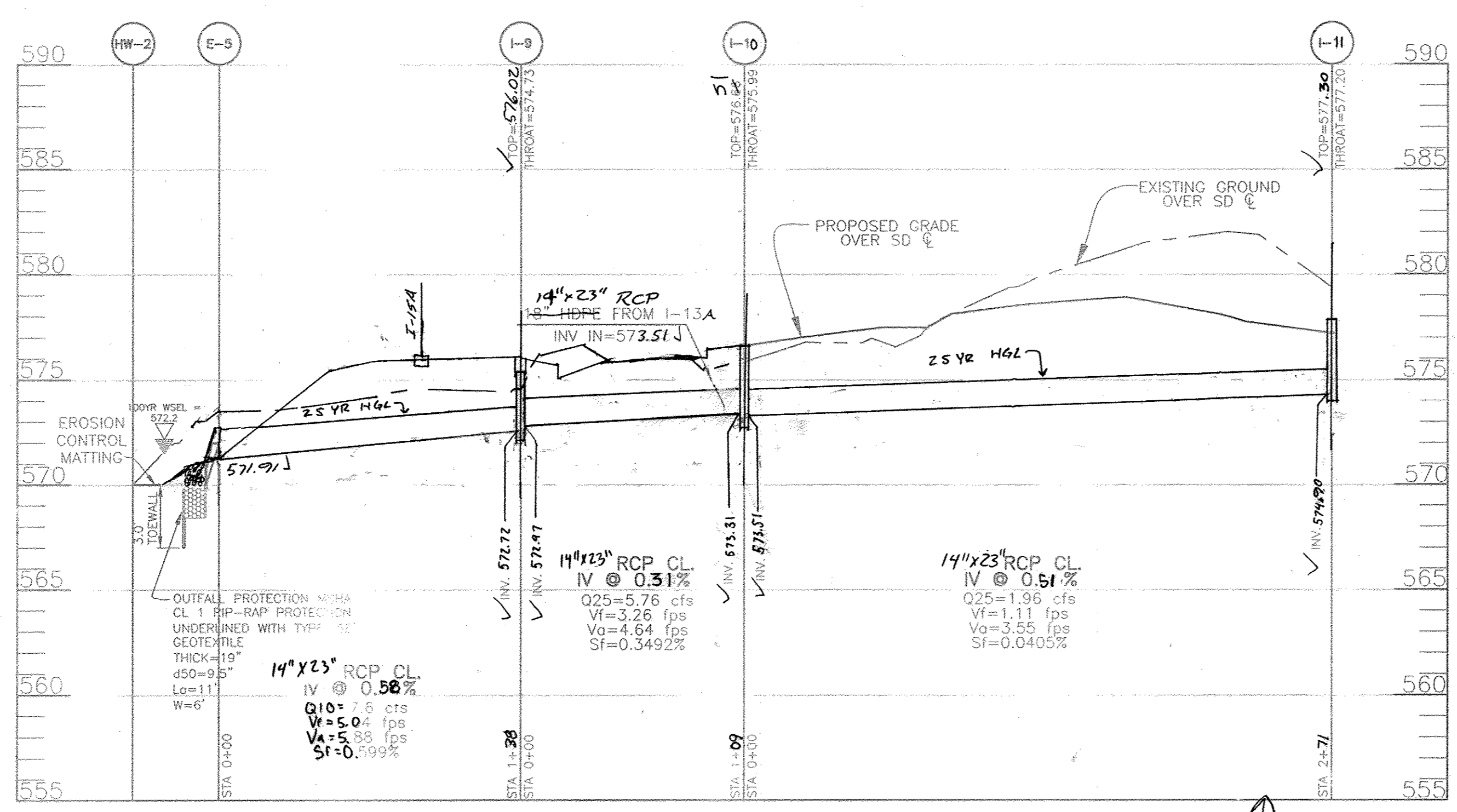
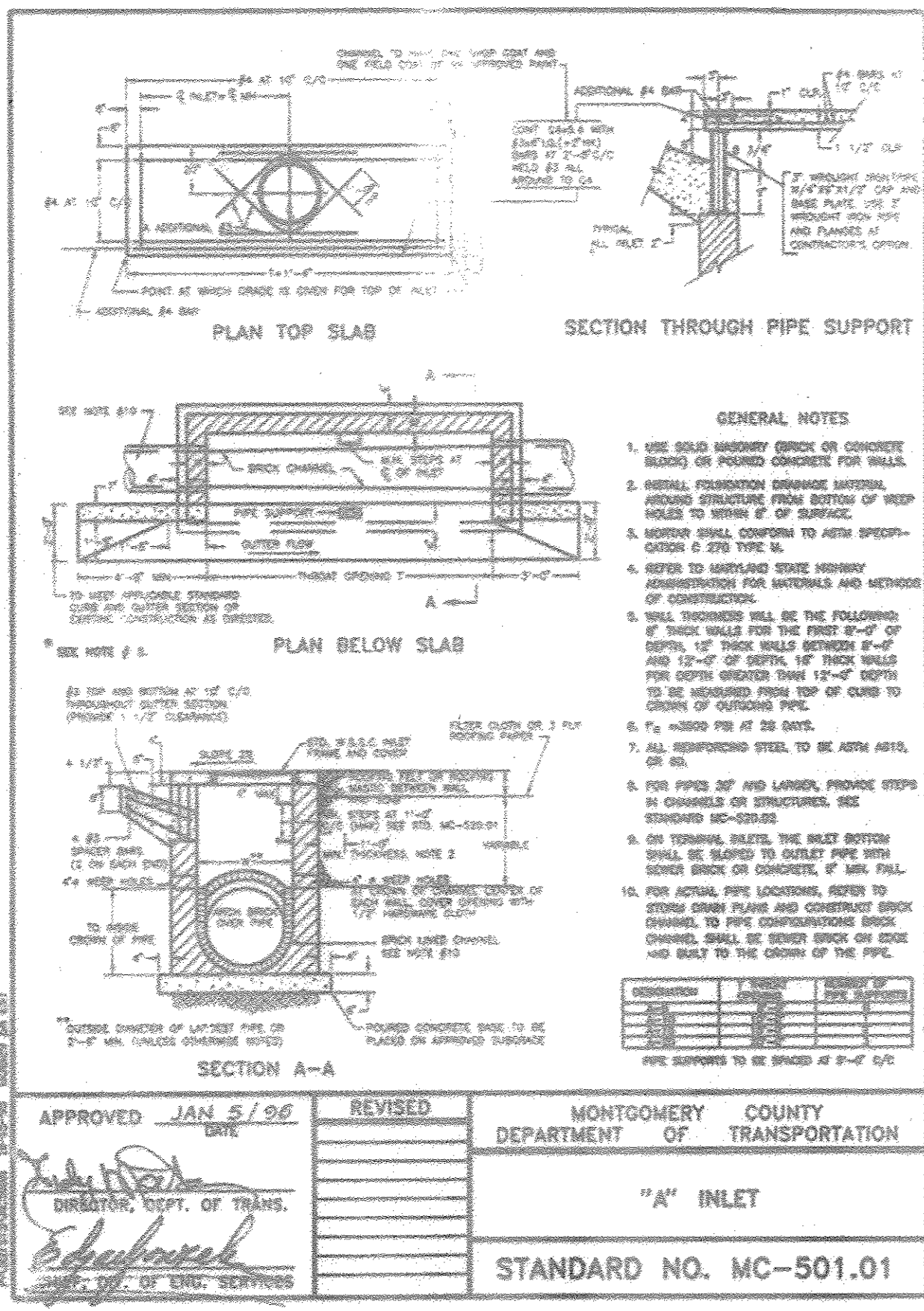


| NO. | DATE | REVISION |
|-----|----------|--------------------------------------|
| 4 | 5-25-18 | REV. I-16 TO I-3 PER AS-BUILT SURVEY |
| 3 | 10-27-17 | REVISE STORM DRAIN ELEVATIONS |
| 2 | 6-20-13 | REVISE STORM DRAIN PROFILES |
| 1 | 10-30-12 | REVISE INLET DESIGNATION |

BENCHMARK ENGINEERING, INC.
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ELLCOTT CITY, MARYLAND 21043
PHONE: 410-485-6105 FAX: 410-485-8844
E-MAIL: bel@bel-civilengineering.com

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21443, E. girardin.
Date: 12-21-2018
Donald Mason
11/18/09

| | |
|---|--|
| DEVELOPER/OWNER LOT 4: DR. HODSON, INC 15810 GATHER DRIVE, SUITE 220 GATHERERSBURG, MD 20877 1-301-670-6144 | PROJECT: VISTA RIDGE A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D" |
| OWNER LOT 1: HECTOR HANNIBAL AND TANYA SELLERS-HANNIBAL 14450 FREDERICK ROAD COOKSVILLE, MD 21723 | LOCATION: TAX MAP No. 8 - GRID No. 23 PARCEL No. 178 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| OWNER LOT 2: STEVEN AND JULIE CHO 460 FREDERICK ROAD COOKSVILLE, MD 21723 | TITLE: STORM DRAIN PROFILES |
| OWNER LOT 3: ROBERT AND PHYLLIS BULL, JR. 14470 FREDERICK ROAD COOKSVILLE, MD 21723 | DATE: JANUARY, 2009 PROJECT NO. 1635 |
| Design: JMC Draft: WO Check: DAM | SCALE: AS SHOWN DRAWING 9 OF 12 |



FOR STATE HIGHWAY IMPROVEMENT AS-BUILT SEE ACCESS PERMIT 06APH00193 AS-BUILT

| NUMBER | TYPE | LOCATION | INVERT IN | INVERT OUT | TOP ELEV. | STANDARD NUMBER |
|------------------------|-----------|--|-----------|------------|-----------|-----------------------------|
| STRUCTURE TABLE | | | | | | |
| INLETS | | | | | | |
| I-1 | D | DROVERS LANE 2+29.85 OFFSET 19.00' LEFT @ ROADWAY | 580.62 | 580.62 | 585.64 | D-4.10 OR 4.11 OPEN 4 SIDES |
| I-2 | D | DROVERS LANE 2+23.22 OFFSET 19.00' RIGHT @ ROADWAY | 580.70 | 580.70 | 585.24 | D-4.10 OR 4.11 OPEN 4 SIDES |
| I-3 | D | DROVERS LANE 4+52.77 OFFSET 19.00' RIGHT @ ROADWAY | 585.27 | 585.27 | 604.27 | D-4.10 OR 4.11 OPEN 4 SIDES |
| I-4 | D | DROVERS LANE 5+40.86 OFFSET 19.00' LEFT @ ROADWAY | 601.80 | 601.80 | 610.89 | D-4.10 OR 4.11 OPEN 4 SIDES |
| I-5 | D | N 602,602.02, E 1,307,435.16 | 604.97 | 604.97 | 610.90 | D-4.10 OR 4.11 OPEN 4 SIDES |
| I-6 | A-10 | DROVERS LANE LP 1+64.22 | 617.84 | 617.15 | 622.86 | D-4.03 OR 4.04 |
| I-7 | D | DROVERS LANE 13+23.59 OFFSET 19.00' RIGHT | 620.84 | 620.83 | 625.87 | D-4.10 OR 4.11 OPEN 4 SIDES |
| I-8 | D | N 602,718.24, E 1,308,126.15 | 625.12 | 625.12 | 628.63 | D-4.10 OR 4.11 OPEN 4 SIDES |
| I-9 | COS 10 | OLD FREDERICK ROAD 6+62.13 OFFSET 17.92' LEFT | 570.98 | 572.42 | 576.02 | MC-501.01 |
| I-10 | COG 15 | OLD FREDERICK ROAD 7+70.41 OFFSET 27.35' LEFT | 573.51 | 573.31 | 576.85 | MC-501.01 |
| I-11 | COG 15 | OLD FREDERICK ROAD 10+43.84 OFFSET 27.62' LEFT | - | 574.90 | 577.30 | MC-501.01 |
| I-13A | D | OLD FREDERICK ROAD 6+67.74 OFFSET 44.91' LEFT | - | 573.67 | 576.52 | D-4.10 OR 4.11 OPEN 2 SIDES |
| I-12 | D | OLD FREDERICK ROAD 7+70.16 OFFSET 43.24' LEFT | - | 574.80 | 576.33 | D-4.10 OR 4.11 OPEN 2 SIDES |
| I-15A | COG 5 | OLD FREDERICK ROAD 6+11.02 OFFSET 18.02' LEFT | - | - | 576.65 | MSHA MD-374.68 |
| I-13 | D | DROVERS LANE 13+03.33 OFFSET 19.00' LEFT | - | 621.30 | 626.58 | D-4.10 OR 4.11 OPEN 4 SIDES |
| MANHOLES | | | | | | |
| M-1 | 4' DIA | DROVERS LANE 10+33.20 OFFSET 7.00' RIGHT | 623.84 | 623.64 | 633.85 | G-5.12 |
| END SECTIONS | | | | | | |
| E-1 | 24" CONC. | N 602,125.23, E 1,307,392.42 | - | 575.91 | - | SD-5.52 |
| E-2 | 24" METAL | N 602,314.82, E 1,307,457.67 | - | 580.00 | - | SEE DETAIL |
| E-3 | 24" CONC. | N 603,505.78, E 1,307,741.72 | - | 608.17 | - | SD-5.52 |
| E-4 | 18" METAL | N 603,340.08, E 1,307,853.19 | - | 614.80 | - | SEE DETAIL |
| E-5 | 18" CONC. | N 602,111.31, E 1,307,317.99 | - | 571.91 | - | SD-5.52 |
| STRUCTURES | | | | | | |
| S-1 | SEE SWM | N 602,153.89, E 1,307,437.47 | - | - | - | SEE SWM DETAILS |
| S-2 | SEE SWM | N 603,433.91, E 1,307,759.41 | - | - | - | SEE SWM DETAILS |

AREA AND "C" FACTOR TABULATION

Vista Ridge DATE: 10/14/2008 BEI JOB # 1832

| INLET # | ZONING (Z) | AREA (Ac) (A) | "C" FACTOR <25 YR (C) | % IMPERVIOUS (P) |
|---------|------------|---------------|-----------------------|------------------|
| I-1 | RC | 0.17 | 0.77 | 84 |
| I-2 | RC | 4.65 | 0.21 | 14 |
| I-3 | RC | 0.27 | 0.68 | 71 |
| I-4 | RC | 1.30 | 0.40 | 33 |
| I-5 | RC | 1.49 | 0.29 | 13 |
| I-6 | RC | 3.07 | 0.31 | 27 |
| I-7 | RC | 0.41 | 0.46 | 47 |
| I-8 | RC | 0.63 | 0.28 | 20 |
| I-9 | RC | 0.30 | 0.61 | 60 |
| I-11 | RC | 0.78 | 0.33 | 23 |
| I-14 | RC | 0.72 | 0.31 | 18 |
| I-10 | RC | 0.15 | 0.54 | 50 |
| I-12 | RC | 0.71 | 0.36 | 27 |
| I-15 | RC | 0.01 | 0.86 | 100.00 |
| I-13 | RC | 0.65 | 0.38 | 36 |

PIPE SCHEDULE

| SIZE | TYPE | LENGTH |
|------|--------------|--------|
| 15" | HDPE | 416 |
| 18" | HDPE | 903 |
| 24" | HDPE | 156 |
| 15" | RCP CLASS IV | 23 |
| 18" | RCP CLASS IV | 554 |

AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications.

Donald Mason, P.E. Date: 7-10-18

| NO. | DATE | REVISION |
|-----|----------|---|
| 4 | 5-25-18 | REVISE I-1 & I-2 PER AS-BUILT, RE-LABEL I-13 TO I-13A |
| 3 | 10-27-17 | REVISE STORM DRAIN ELEVATIONS |
| 2 | 6-20-13 | REVISE S.D. |
| 1 | 10-30-12 | REVISE INLET LOCATIONS AND DESIGNATIONS |

BENCHMARK ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE A SUITE 418
ELICOTT CITY, MARYLAND 21043
PHONE: 410-455-6105 FAX: 410-455-6844
E-MAIL: bel@benchmarkengineering.com

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21443, E.P. Registration. Date: 12-21-2009

DEVELOPER/OWNER LOT 4: DR. HORTON, INC. 15810 GATHER DRIVE, SUITE 220 GAITHERSBURG, MD 20877 1-301-670-8144

OWNER LOT 1: HECTOR HANNIBAL AND TANYA SELLERS-HANNIBAL 14450 FREDERICK ROAD COOKSVILLE, MD 21723

OWNER LOT 2: STEVEN AND JULIE CHO 14450 FREDERICK ROAD COOKSVILLE, MD 21723

OWNER LOT 3: ROBERT AND PHYLLIS BULL, JR. 14470 FREDERICK ROAD COOKSVILLE, MD 21723

PROJECT: **VISTA RIDGE**
A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21 AND PRESERVATION PARCELS "A" THROUGH "D"

LOCATION: TAX MAP No. 8 - GRID No. 23 PARCEL No. 176 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **STORM DRAIN PROFILES**

DATE: JANUARY, 2008 PROJECT NO. 1635

Design: JMC Draft: WO Check: DAM SCALE: AS SHOWN DRAWING 10 OF 15

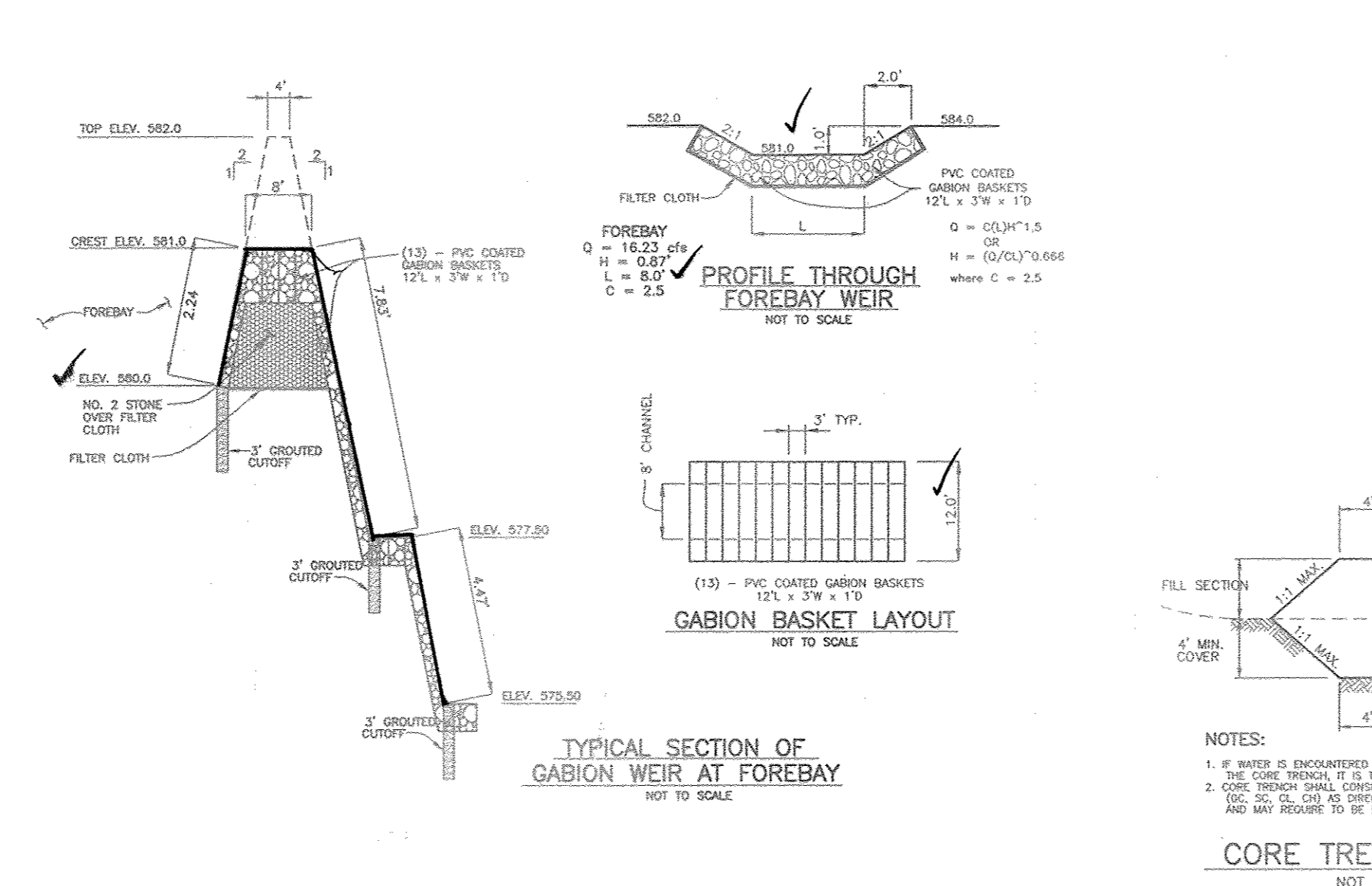
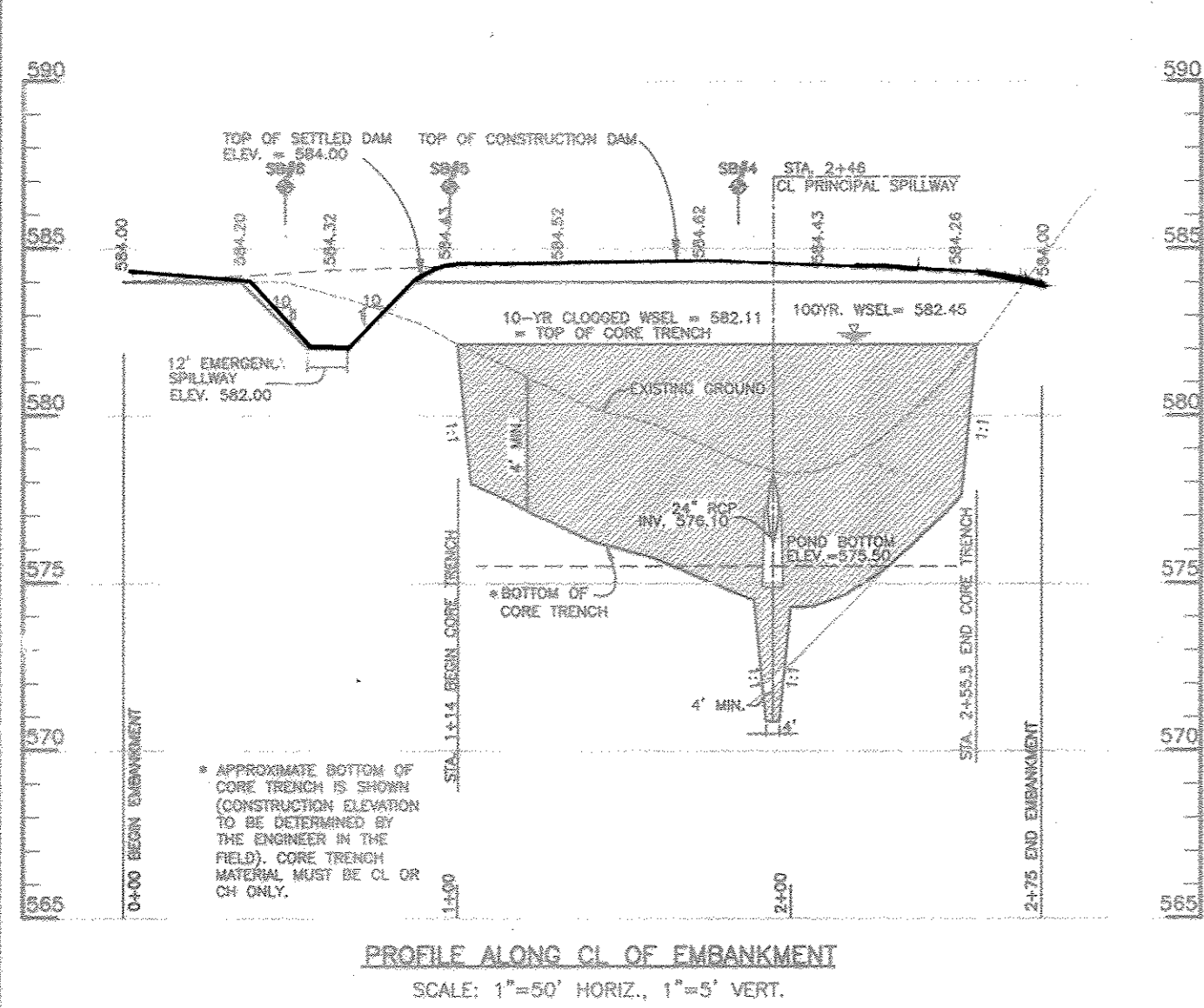
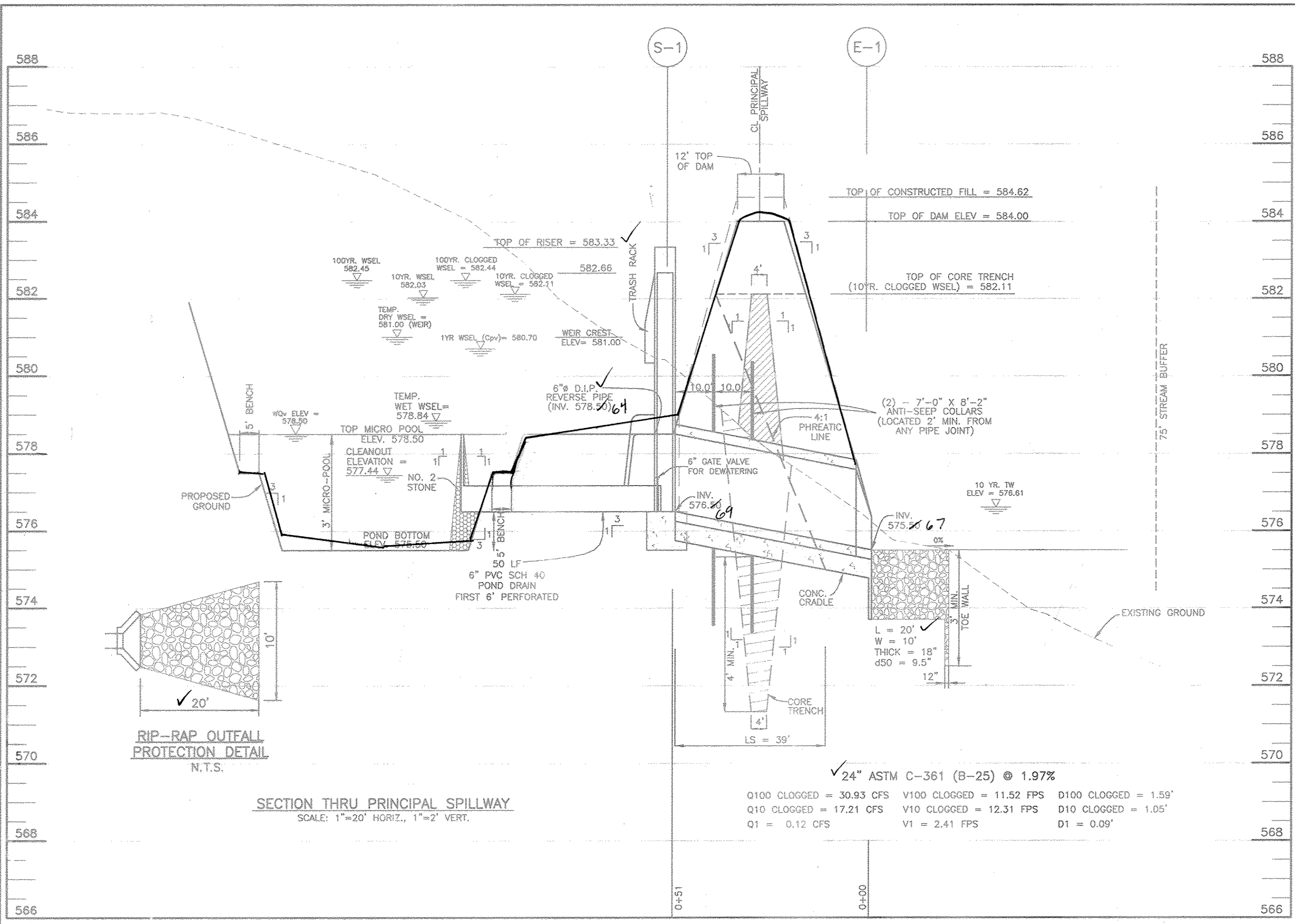
APPROVED: DEPARTMENT OF PUBLIC WORKS
Walter J. M... 1-23-09
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamer 1/30/09
CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chad... 1-29-9
CHIEF, DEVELOPMENT ENGINEERING DIVISION

GENERAL NOTES

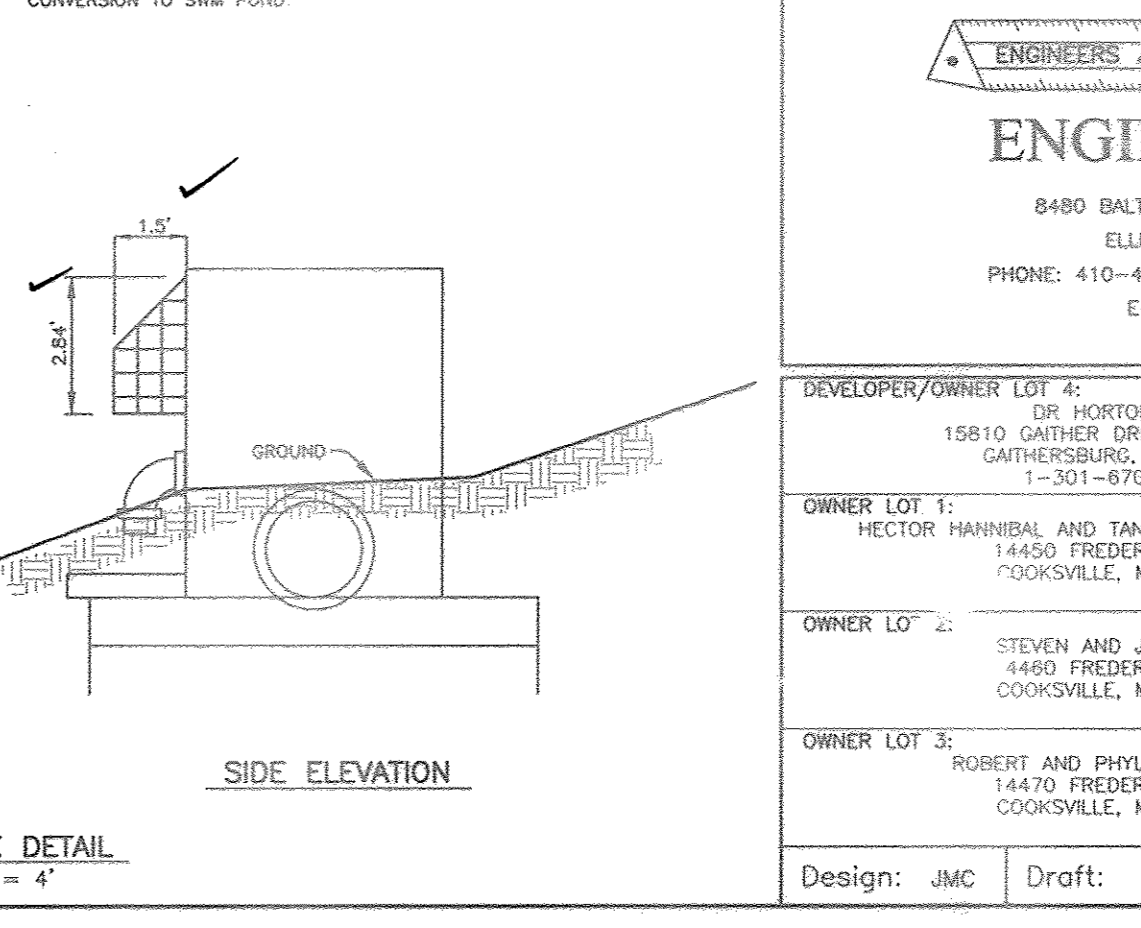
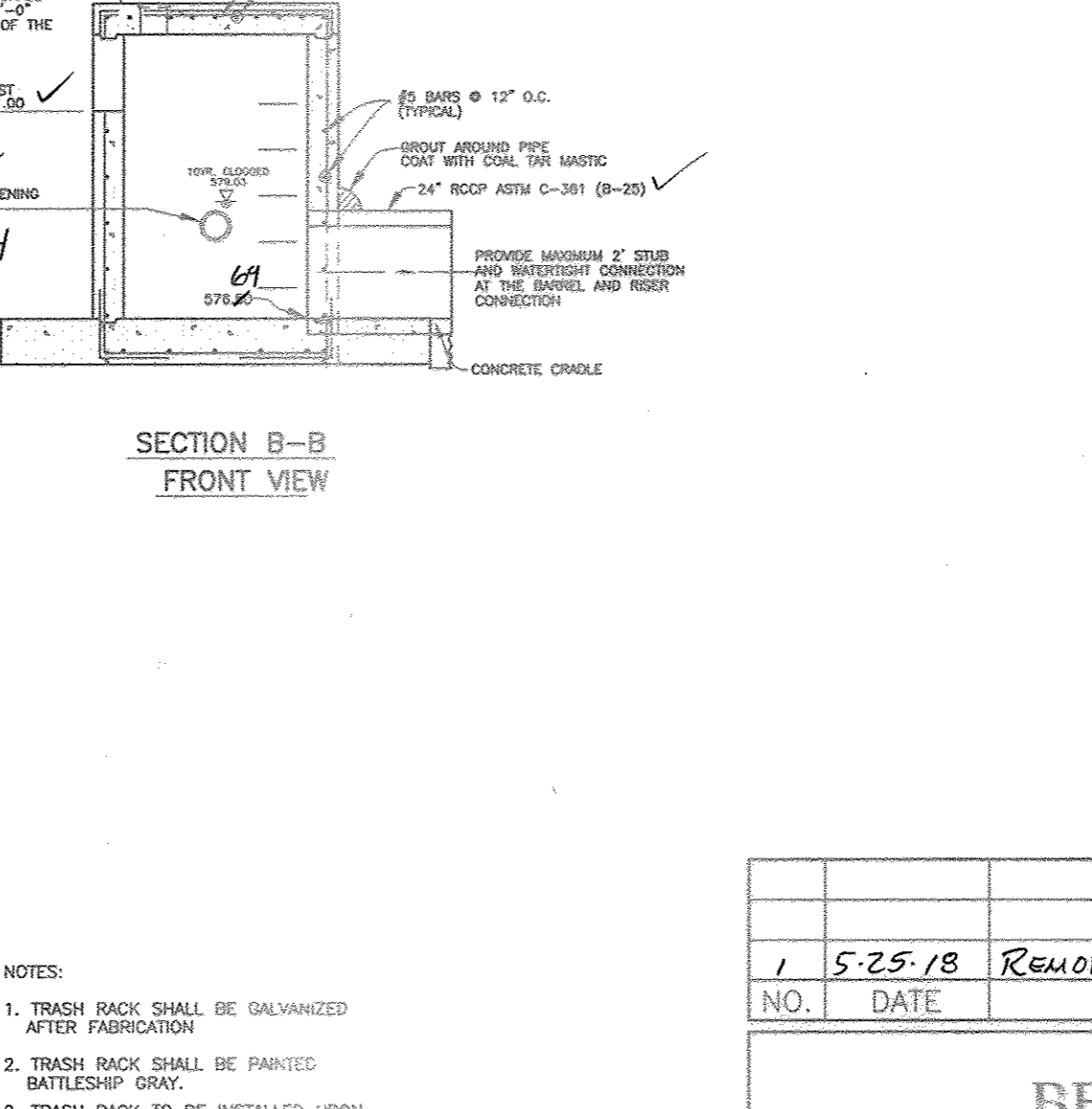
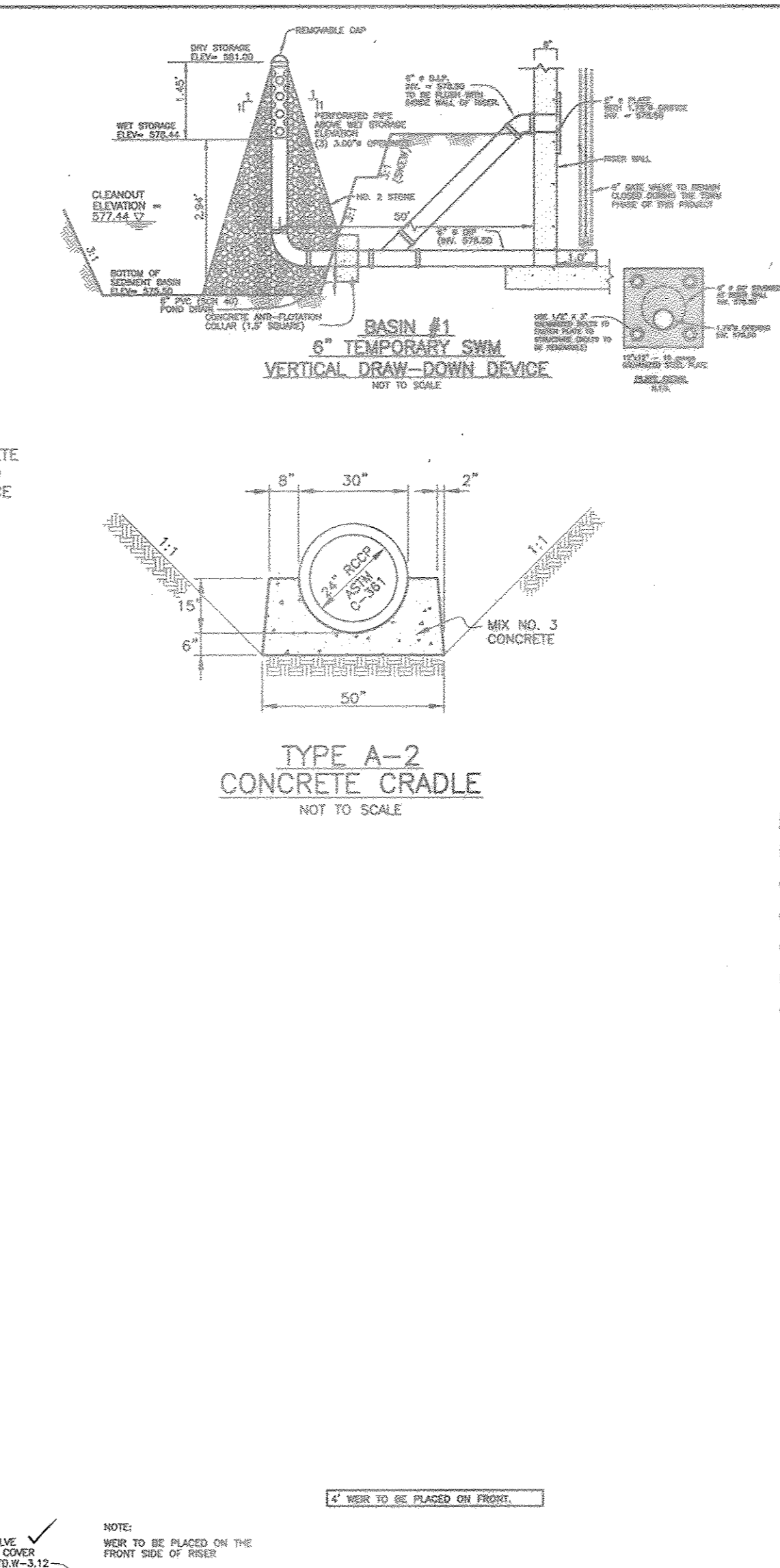
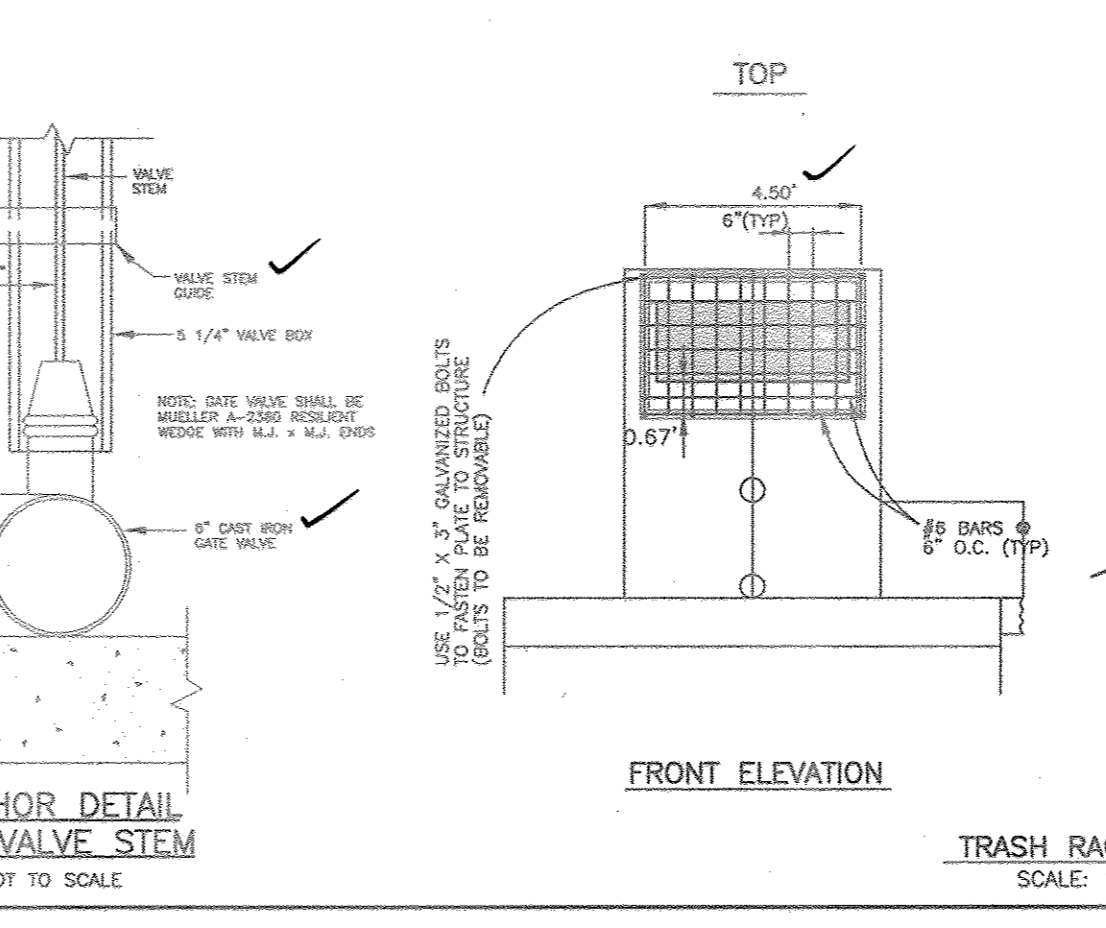
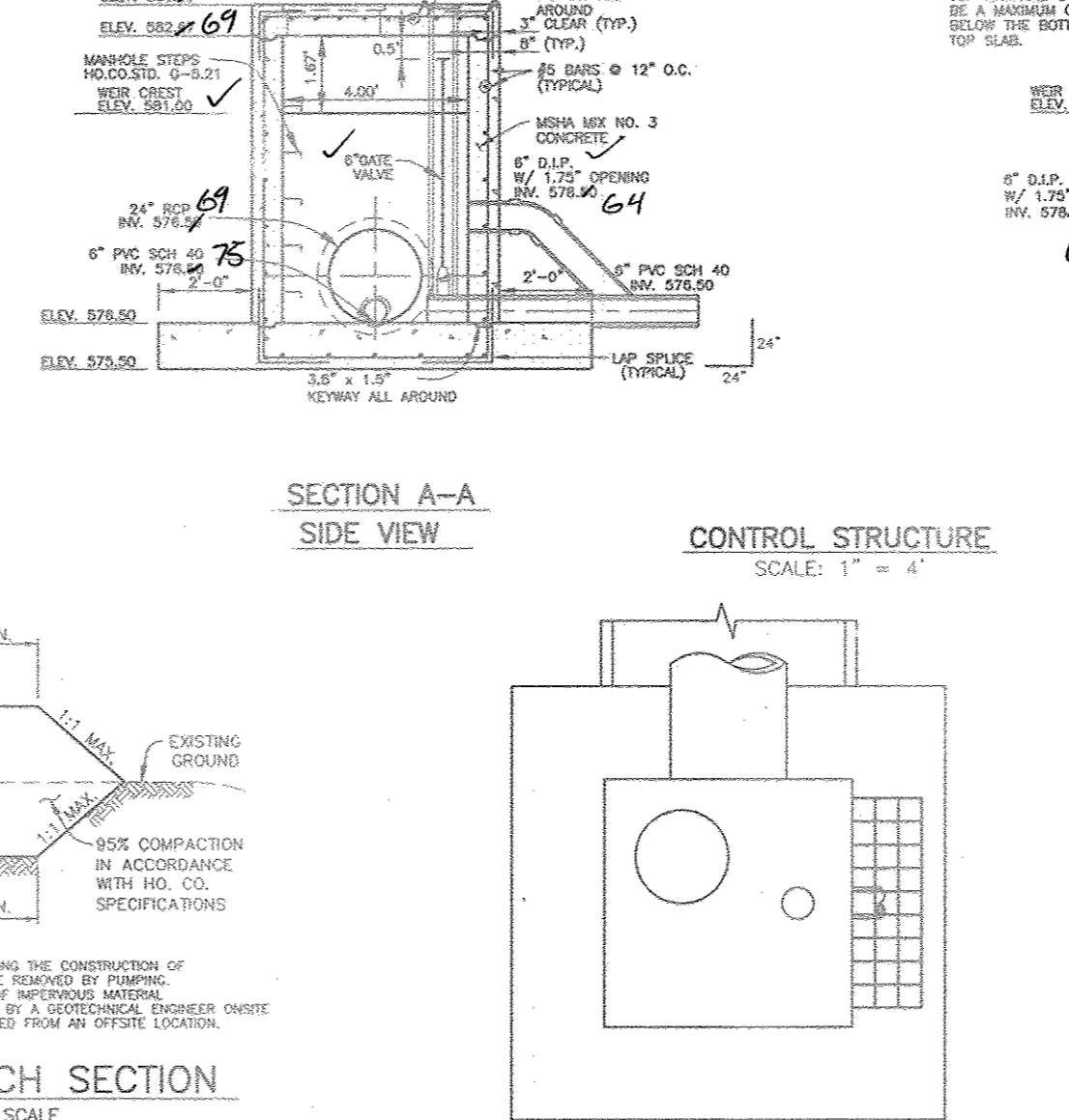
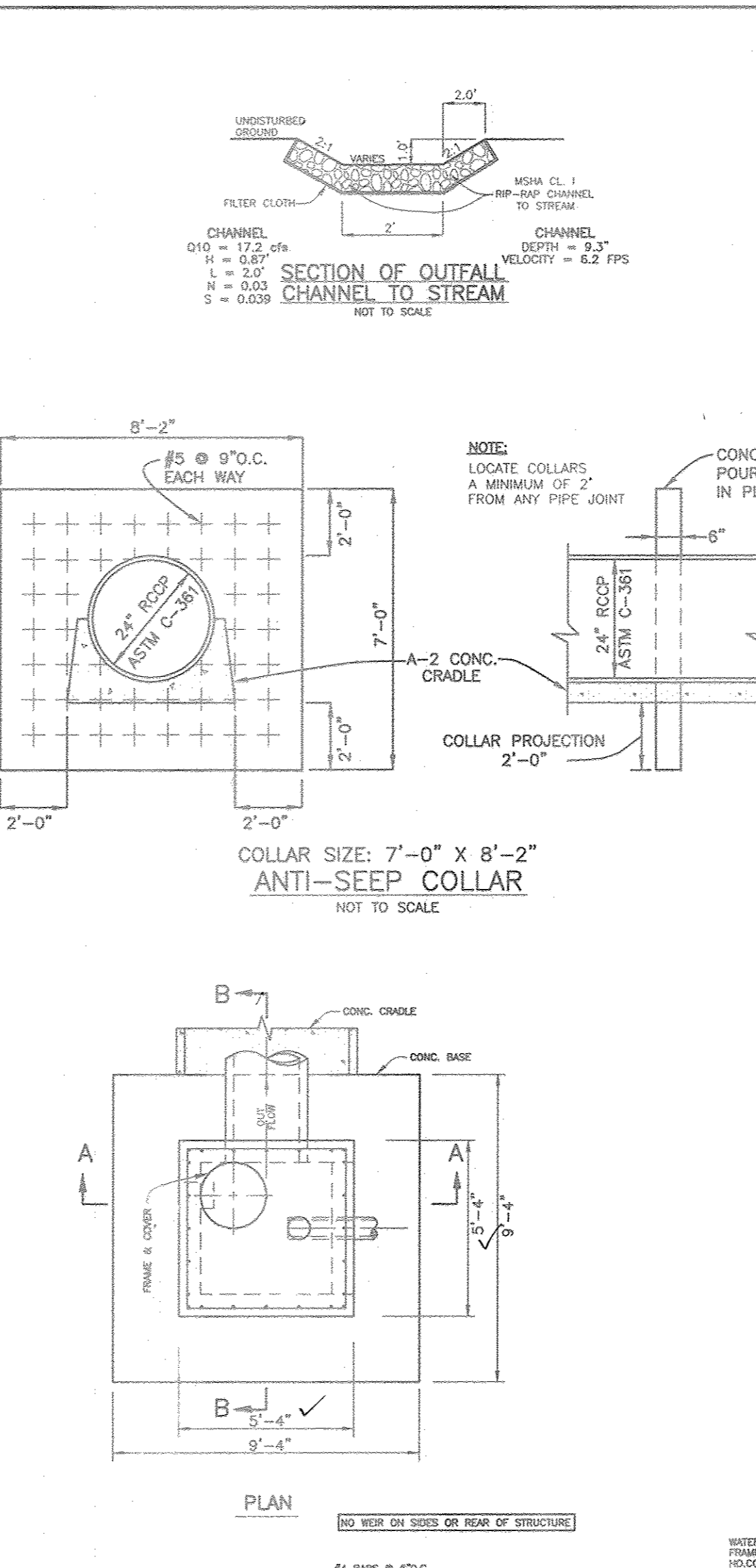
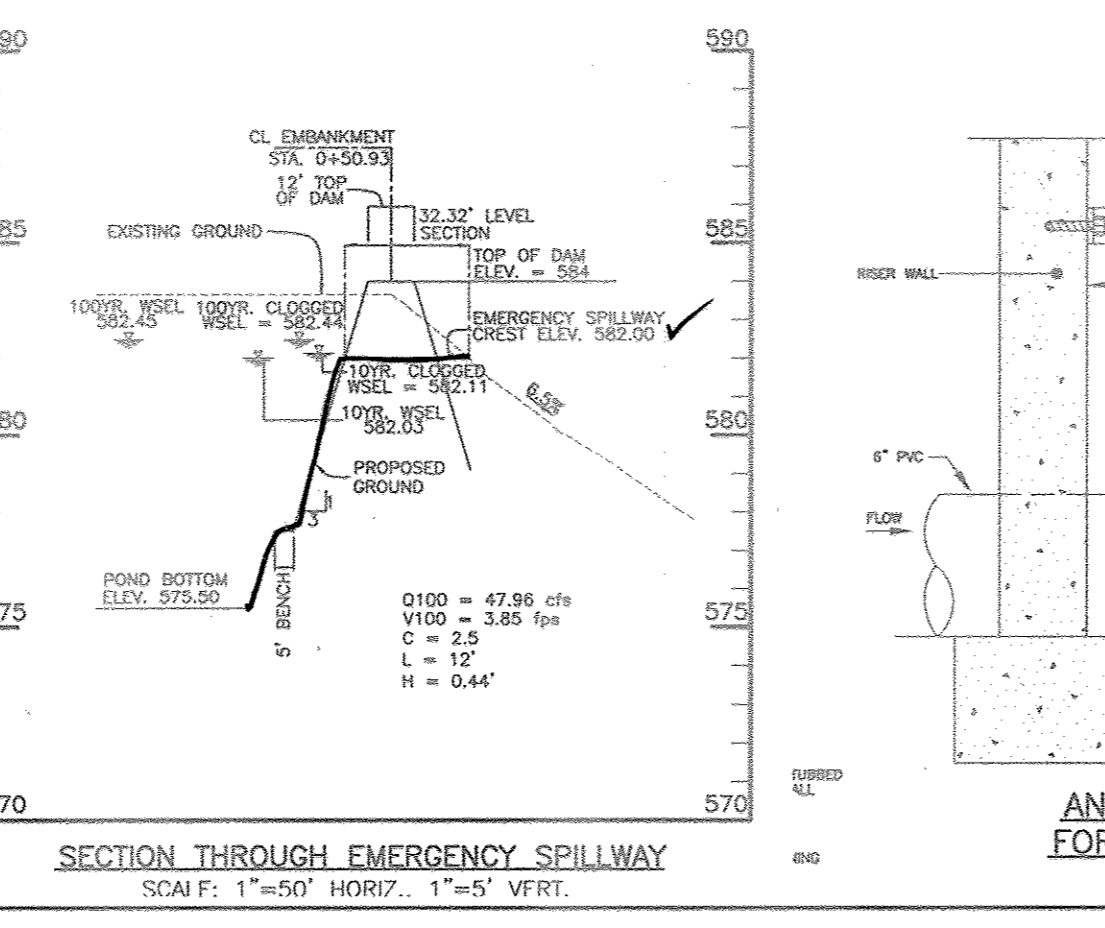
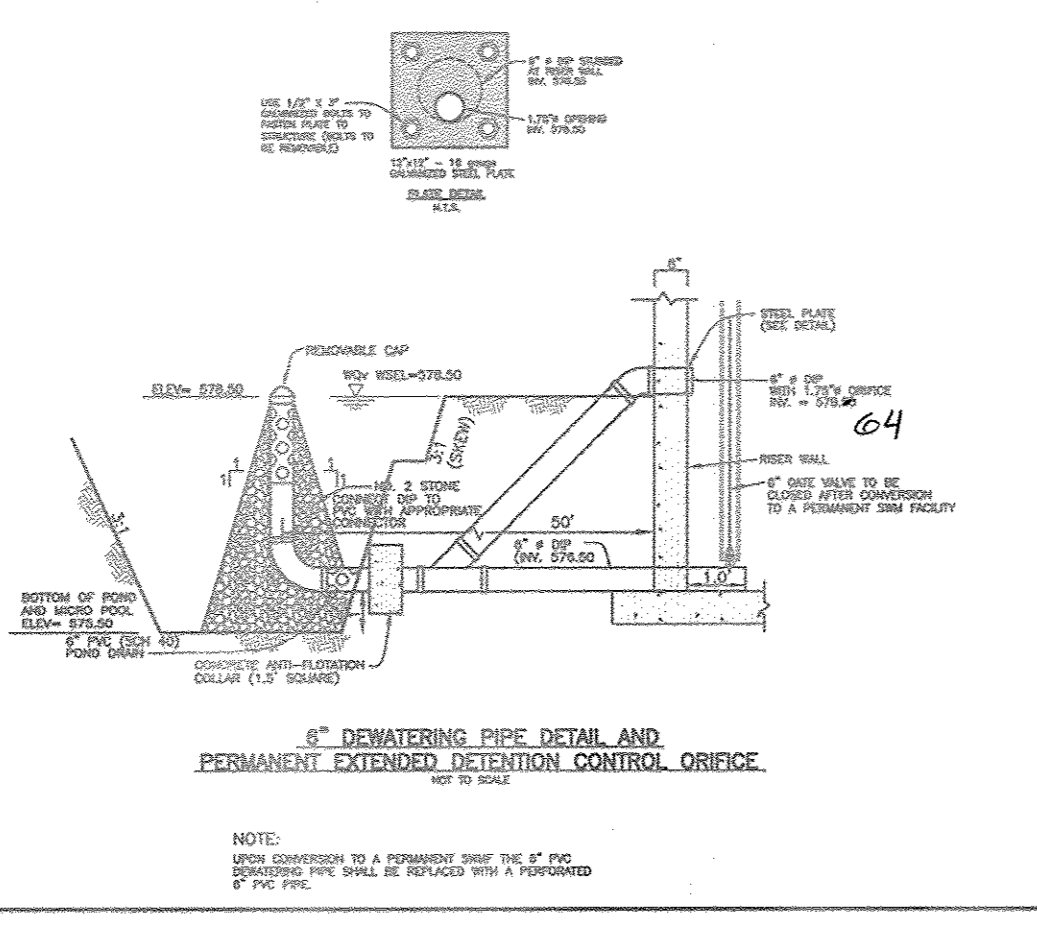
- STRUCTURE ELEVATION AND LOCATION FOR MANHOLES IS AT THE TOP AND CENTER OF RIM.
- STRUCTURE ELEVATION AND LOCATION FOR CURB INLETS IS AT THE TOP OF CURB AT MIDPOINT OF THE INLET AT THE FACE.
- STRUCTURE ELEVATION AND LOCATION FOR TYPE "D" AND "WR" INLETS IS AT THE TOP OF SLAB/GRATE AT CENTER OF THE INLET.
- PRECAST STRUCTURES MEETING HS-20 LOADING MAY BE USED.
- STRUCTURE ELEVATION AND LOCATION FOR END SECTIONS ARE AT THE CENTER END OF THE END SECTION.
- FOR "D" INLETS THE MINIMUM NUMBER OF OPEN SIDES IS TWO. MORE OPEN SIDES IS ACCEPTABLE.



APPROVED: DEPARTMENT OF PUBLIC WORKS
 [Signature] 1-23-09 DATE
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 1/30/09 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 1-23-09 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



EMBANKMENT AND CUT-OFF TRENCH CONSTRUCTION

THE AREAS OF THE PROPOSED SWM FACILITIES SHOULD BE STRIPPED OF TOPSOIL AND ANY OTHER UNSUITABLE MATERIALS FROM THE EMBANKMENT OR STRUCTURE AREAS IN ACCORDANCE WITH SOIL CONSERVATION GUIDELINES. AFTER STRIPPING OPERATIONS HAVE BEEN COMPLETED, THE EXPOSED SUBGRADE MATERIALS SHOULD BE PROTECTED WITH A LOADED DUMP TRUCK OR SIMILAR EQUIPMENT AT THE DISCRETION OF A PROFESSIONAL ENGINEER OF HIS REPRESENTATIVE FOR AREAS THAT ARE NOT ACCESSIBLE TO A DUMP TRUCK. THE EXPOSED MATERIALS SHOULD BE OBSERVED AND TESTED BY A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE USING A DYNAMIC CONE PENETRATION TEST OR LOOSE MATERIALS IDENTIFIED BY PROCELOSING OR PENETROMETER TESTING SHOULD BE EXCAVATED TO SUITABLE FIRM SOIL, AND THEN GRADES RE-ESTABLISHED BY BACKFILLING WITH SUITABLE SOIL.

A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER SHOULD BE PRESENT TO MONITOR PLACEMENT AND COMPACTION OF FILL FOR THE EMBANKMENT AND CUT-OFF TRENCH. IN ACCORDANCE WITH MDCS-10 CODE NO. 378 POND STANDARDS/REGULATIONS, SOILS COVERED SUITABLE FOR THE CENTER OF EMBANKMENT SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION SC, CL, CH, OR CLC AND MUST HAVE AT LEAST 30% PASSING THE #20 SIEVE.

IT IS OUR PROFESSIONAL OPINION THAT IN ADDITION TO THE SOIL MATERIALS DESCRIBED ABOVE, A FINE-GRAINED SOIL, INCLUDING SILT (ML) WITH A PLASTICITY INDEX OF 10 OR MORE CAN BE UTILIZED FOR THE CENTER OF THE EMBANKMENT AND CORE TRENCH. ALL FILL MATERIALS MUST BE PLACED AND COMPACTION IN ACCORDANCE WITH MDCS-10 CODE NO. 378 SPECIFICATIONS.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND JOINTLY MAINTAINED P-5 POCKET POND

ROUTINE MAINTENANCE:

- FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE POND IS FUNCTIONING PROPERLY.
- TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES PER YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES AND MAINTENANCE ACCESS SHALL BE MOWED AS NEEDED.
- DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NECESSARY.
- VISIBLE SIGNS OF EROSION IN THE POND AS WELL AS THE RIP-RAP OR GABION OUTLET AREA SHALL BE REPAIRED AS SOON AS IT IS NOTICED.

NON-ROUTINE MAINTENANCE:

- STRUCTURAL COMPONENTS OF THE POND SUCH AS THE DAM, THE RISER, AND THE PIPES SHALL BE REPAIRED UPON THE DETECTION OF ANY DAMAGE. THE COMPONENTS SHALL BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.
- SEDIMENTS SHALL BE REMOVED FROM THE POND AND FOREBAY, NO LATER THAN WHEN THE CAPACITY OF THE POND, OR FOREBAY, IS HALF FULL OF SEDIMENT, OR, WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, UPON APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS.

E2SI RECOMMENDATIONS

POND EMBANKMENT: The embankments for the ponds should be designed and constructed in accordance with the Maryland Conservation Service Code 378 criteria. There are some silty clays (CL classification) on-site that possibly could be separated and used for backfill for the cutoff trench and embankment core. Use of the on-site silty clays will require that they be carefully excavated and stockpiled and not mixed with other soils. The silty clays as well as the clayey silts, sandy silts and silty sands are suitable for constructing the slopes for the embankments.

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 1/20/09 DATE
 HOWARD SOIL CONSERVATION DISTRICT

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS.

[Signature] 1/20/09 DATE
 ENGINEER - DONALD A. MASON, P.E. # 21443

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, SEDIMENT AND EROSION CONTROL, SEDIMENTATION AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOILS CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

[Signature] 1/12/09 DATE
 DEVELOPER

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOILS CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 1-12-09 DATE
 DEVELOPER

| | | |
|-----|---------|--|
| NO. | DATE | REVISION |
| 1 | 5-25-18 | REMOVE WATERTIGHT REQUIREMENT FROM FRAME & COVER |

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE A SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-485-8105 FAX: 410-485-8644
 E-MAIL: benchmark@earthlink.net

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21443, Expiration Date: 12-21-2018.

[Signature] 1/12/09 DATE
 ENGINEER

DEVELOPER/OWNER LOT 4:
 DR. HORTON, INC.
 15810 GANTHER DRIVE, SUITE 220
 GAITHERSBURG, MD 20877
 1-301-870-6144

OWNER LOT 1:
 HECTOR HANNIBAL AND TANIA SELTERS-HANNIBAL
 14450 FREDERICK ROAD
 COOKSVILLE, MD 21723

OWNER LOT 2:
 STEVEN AND JULIE CHO
 14470 FREDERICK ROAD
 COOKSVILLE, MD 21723

OWNER LOT 3:
 ROBERT AND PHYLLIS BULL, JR.
 14470 FREDERICK ROAD
 COOKSVILLE, MD 21723

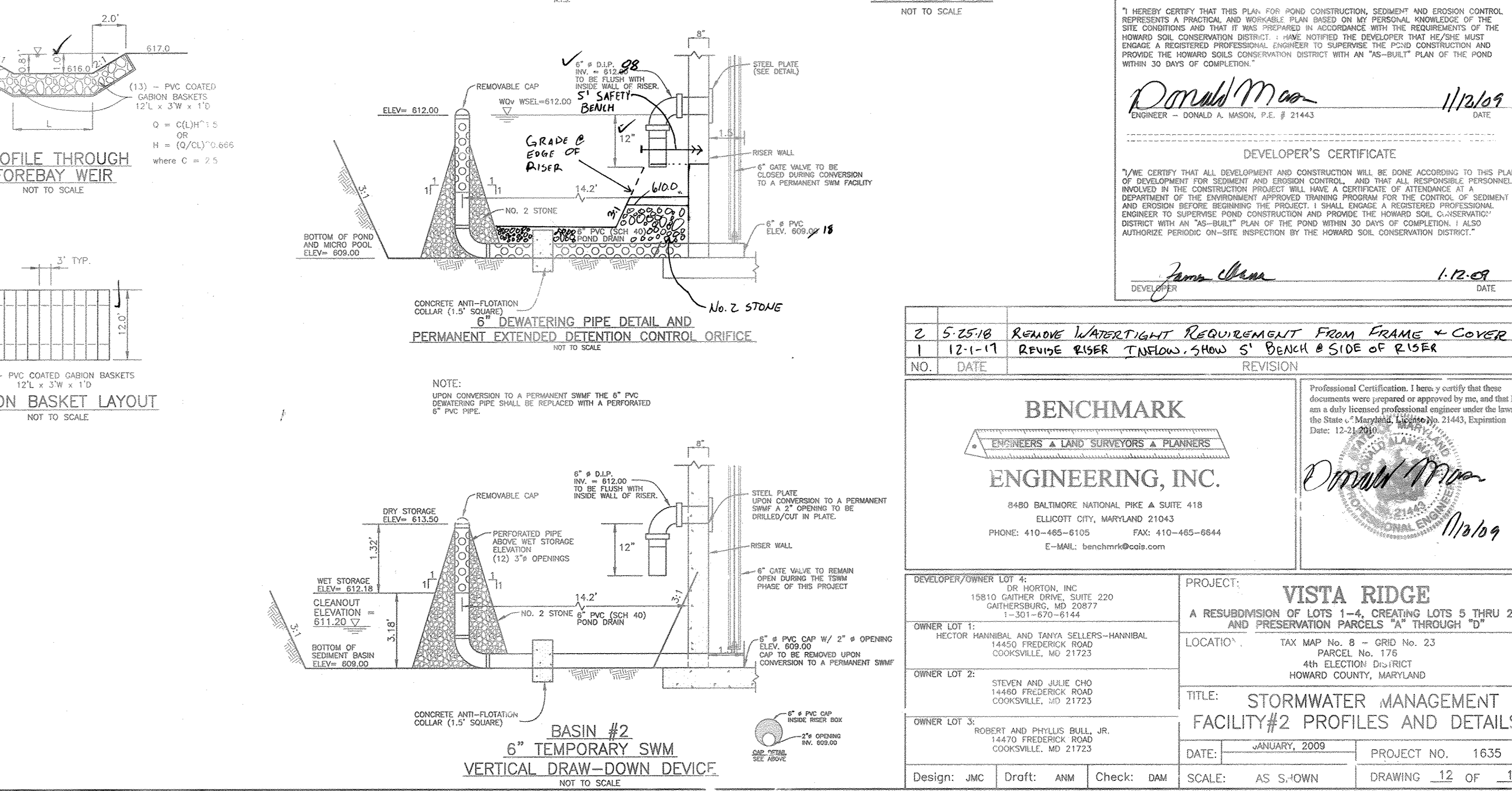
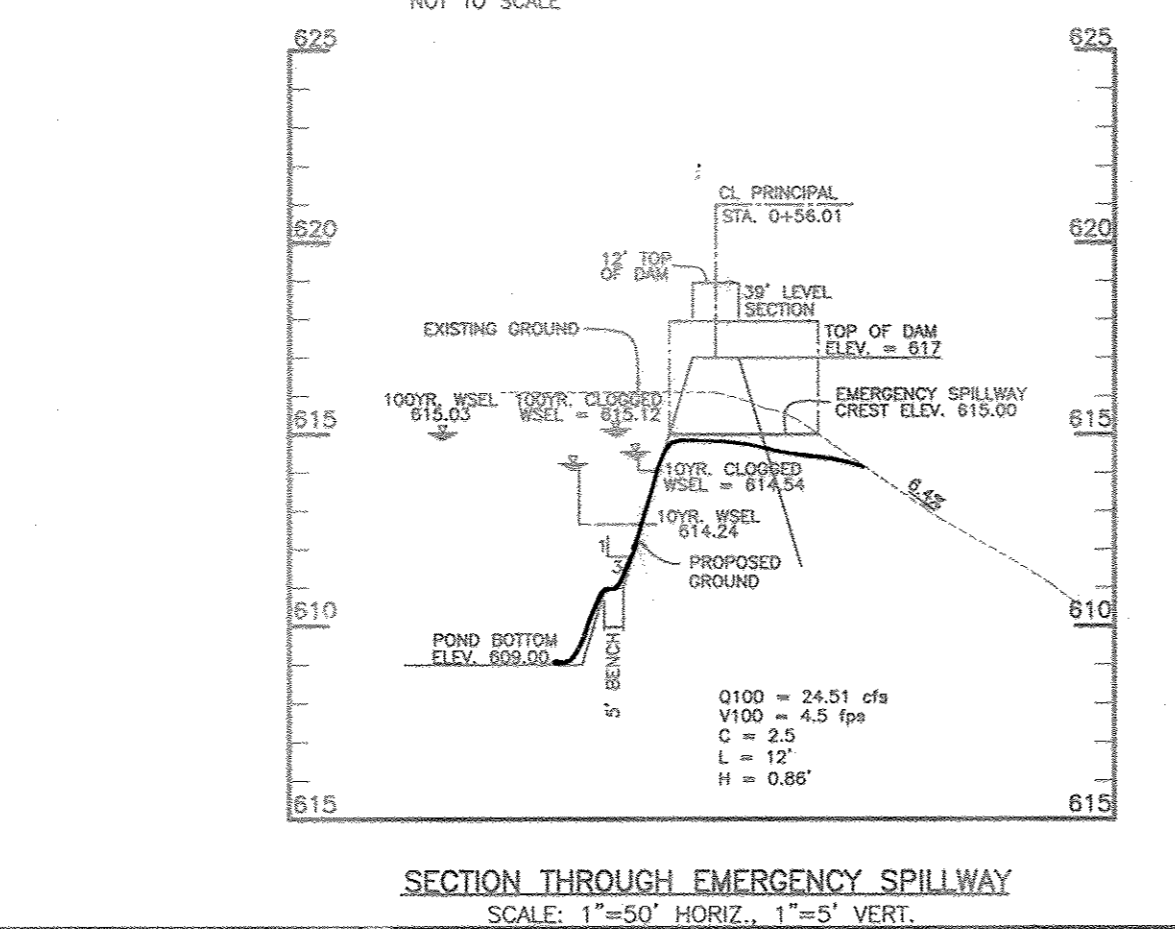
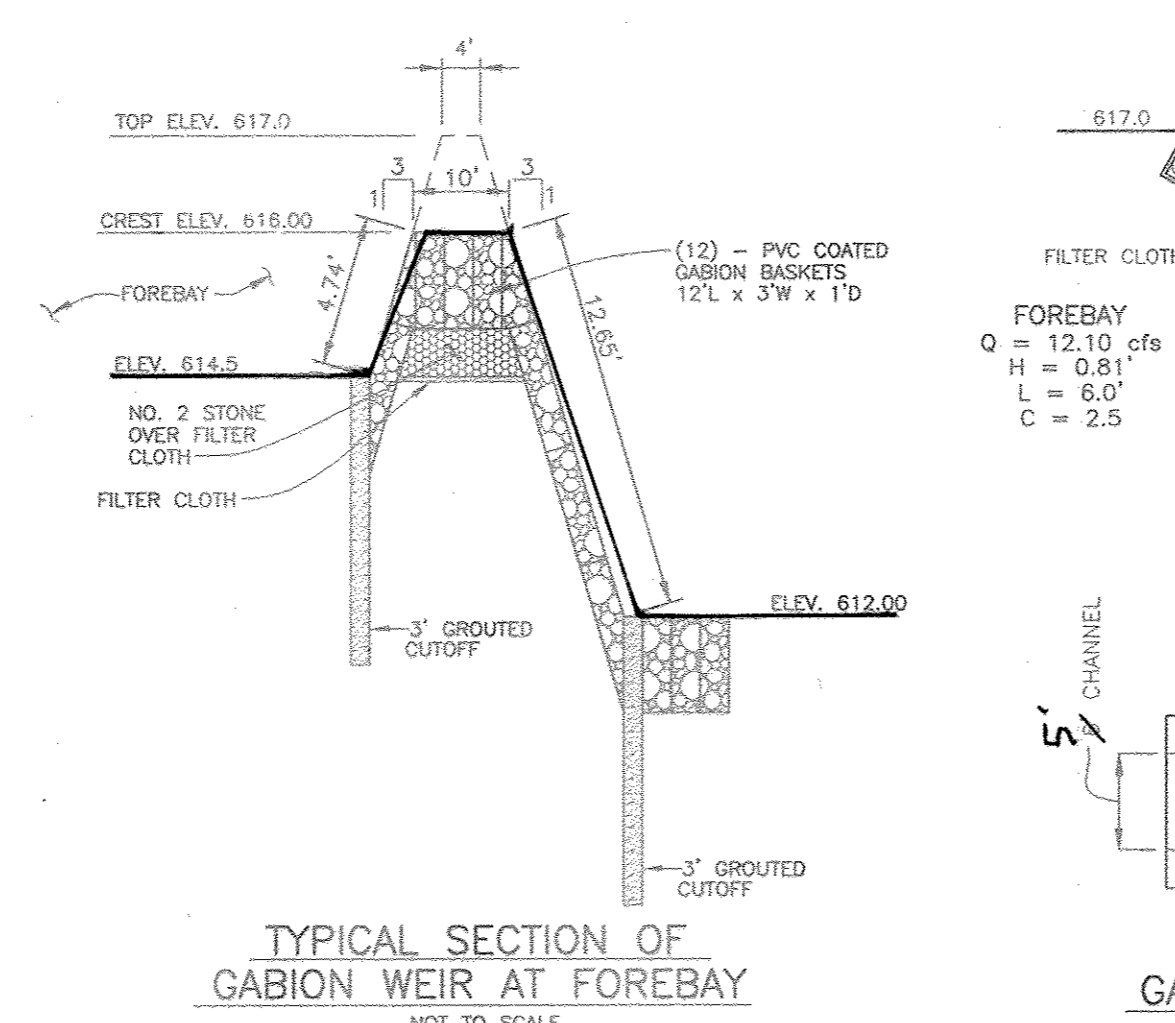
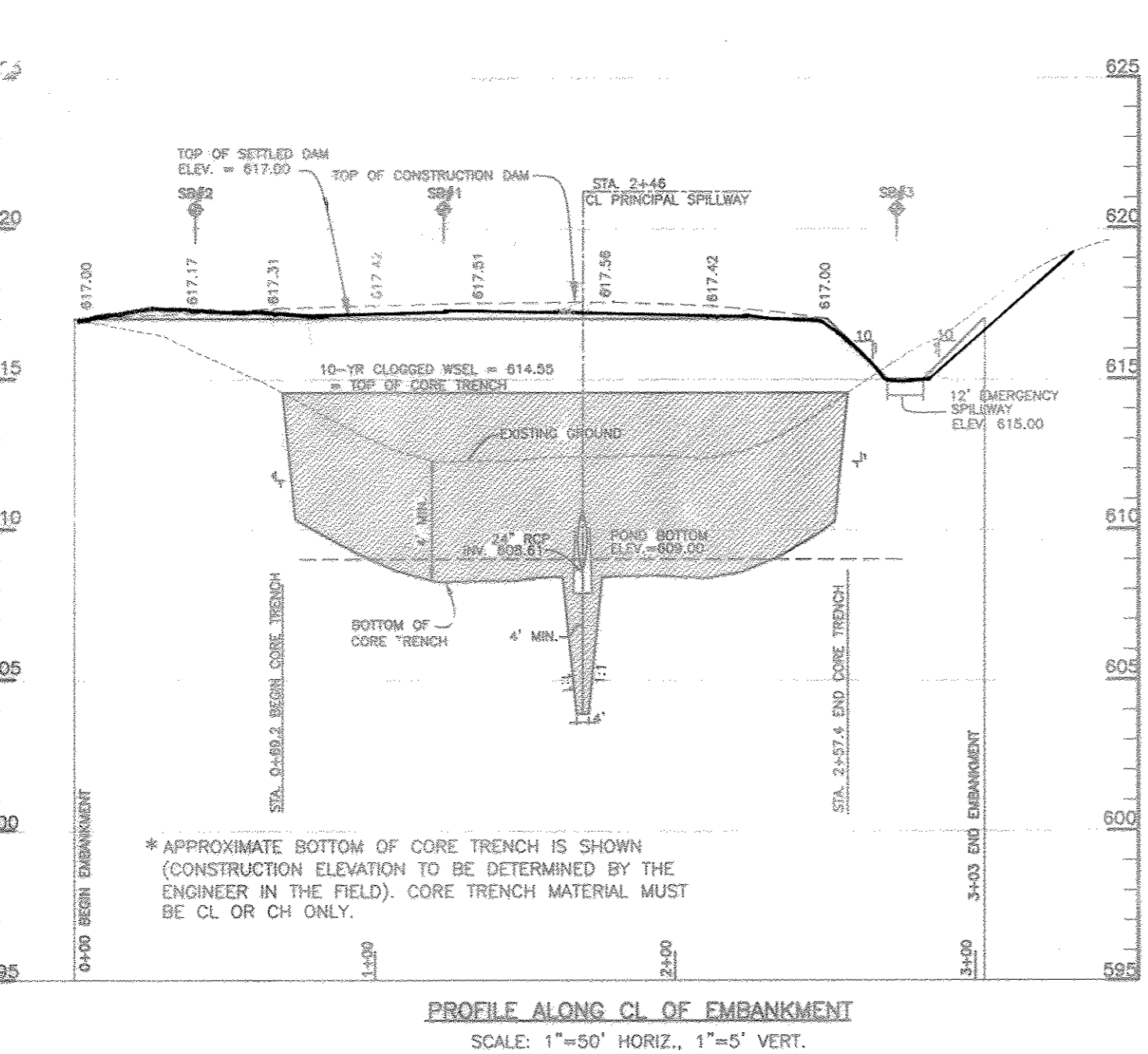
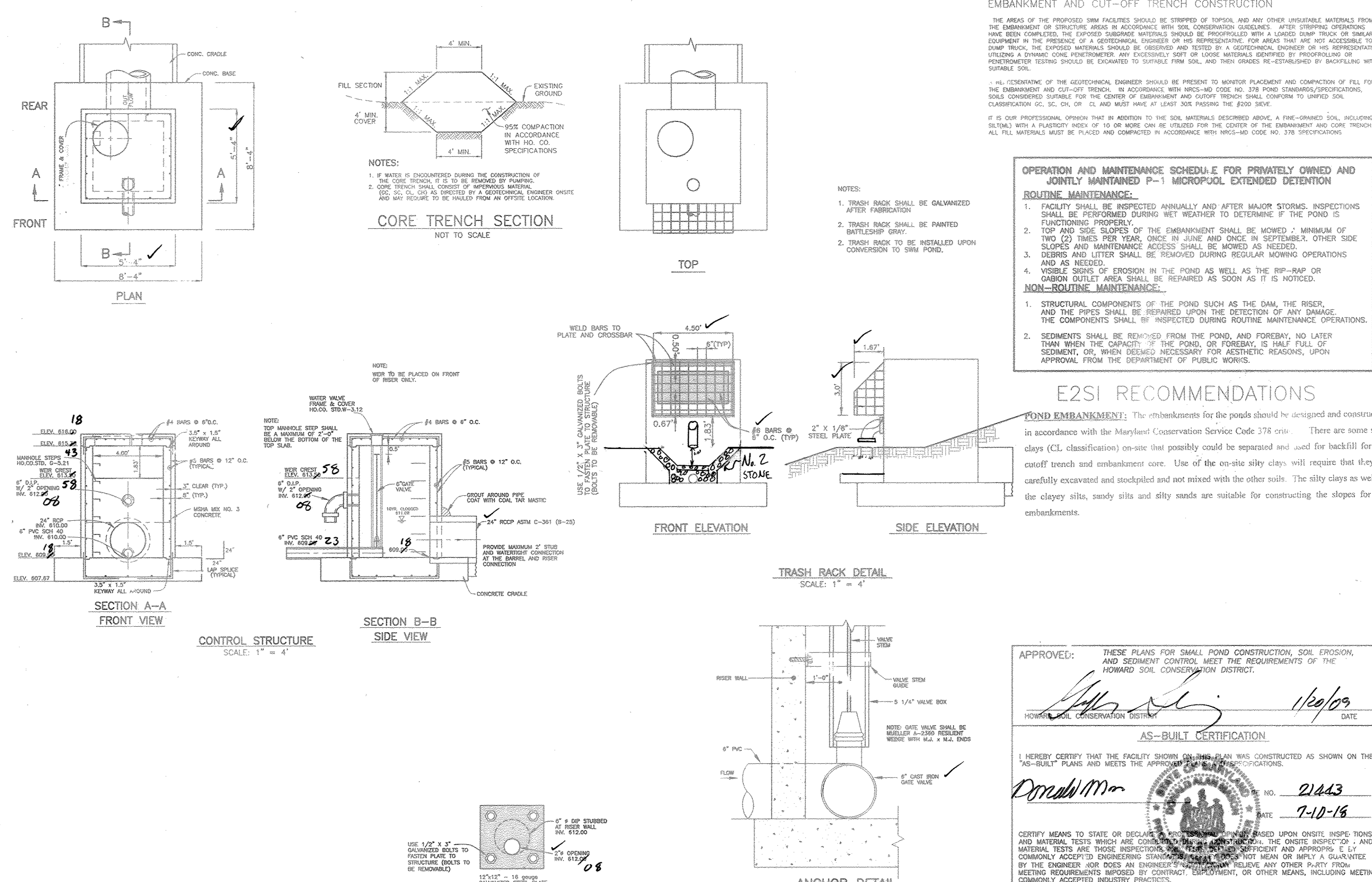
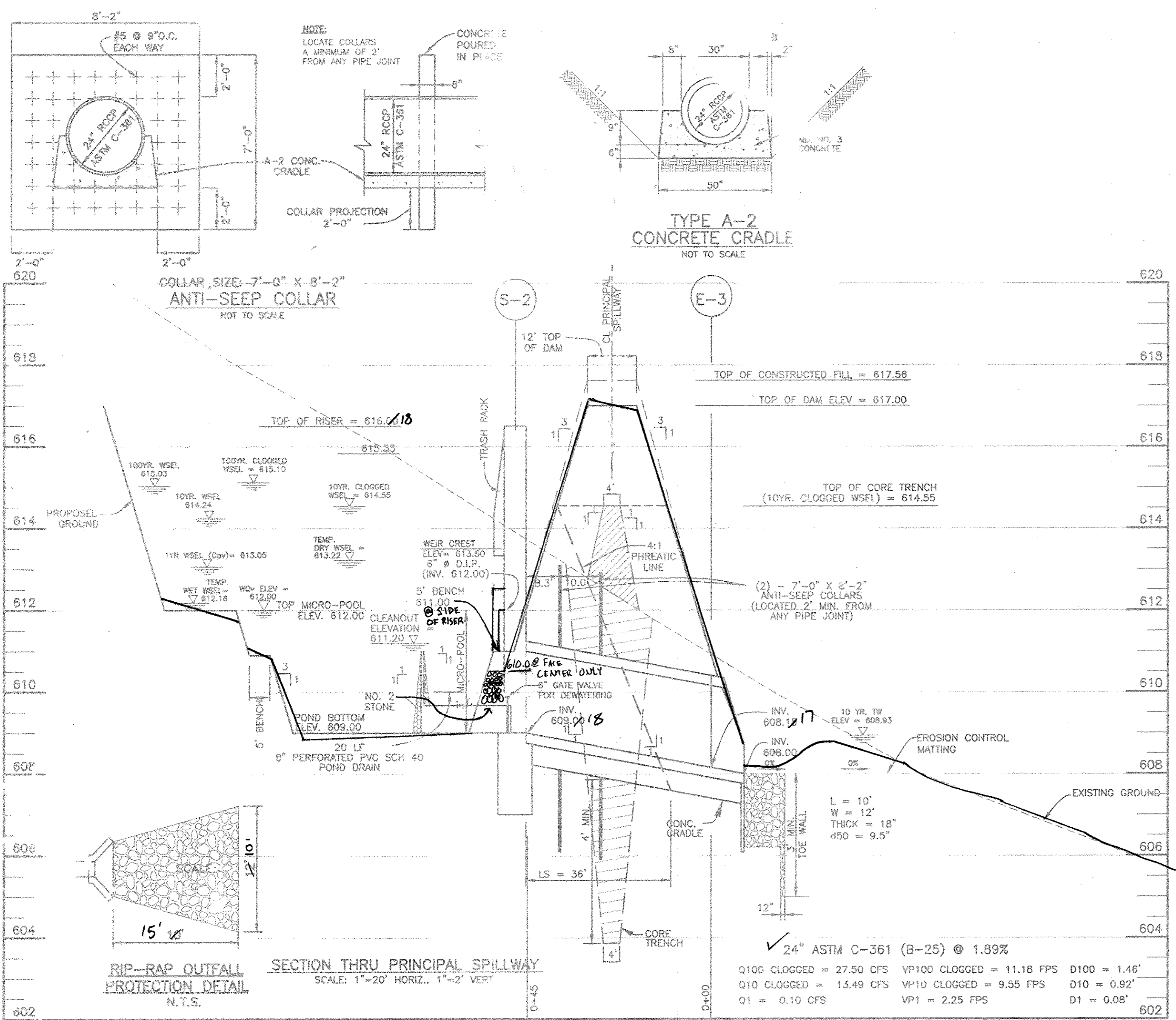
PROJECT: **VISTA RIDGE**
 A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D"

LOCATION: TAX MAP NO. 8 - GRID NO. 23
 PARCEL NO. 176
 4TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **STORMWATER MANAGEMENT FACILITY #1 PROFILES AND DETAILS**

DATE: JANUARY, 2009 PROJECT NO. 1635

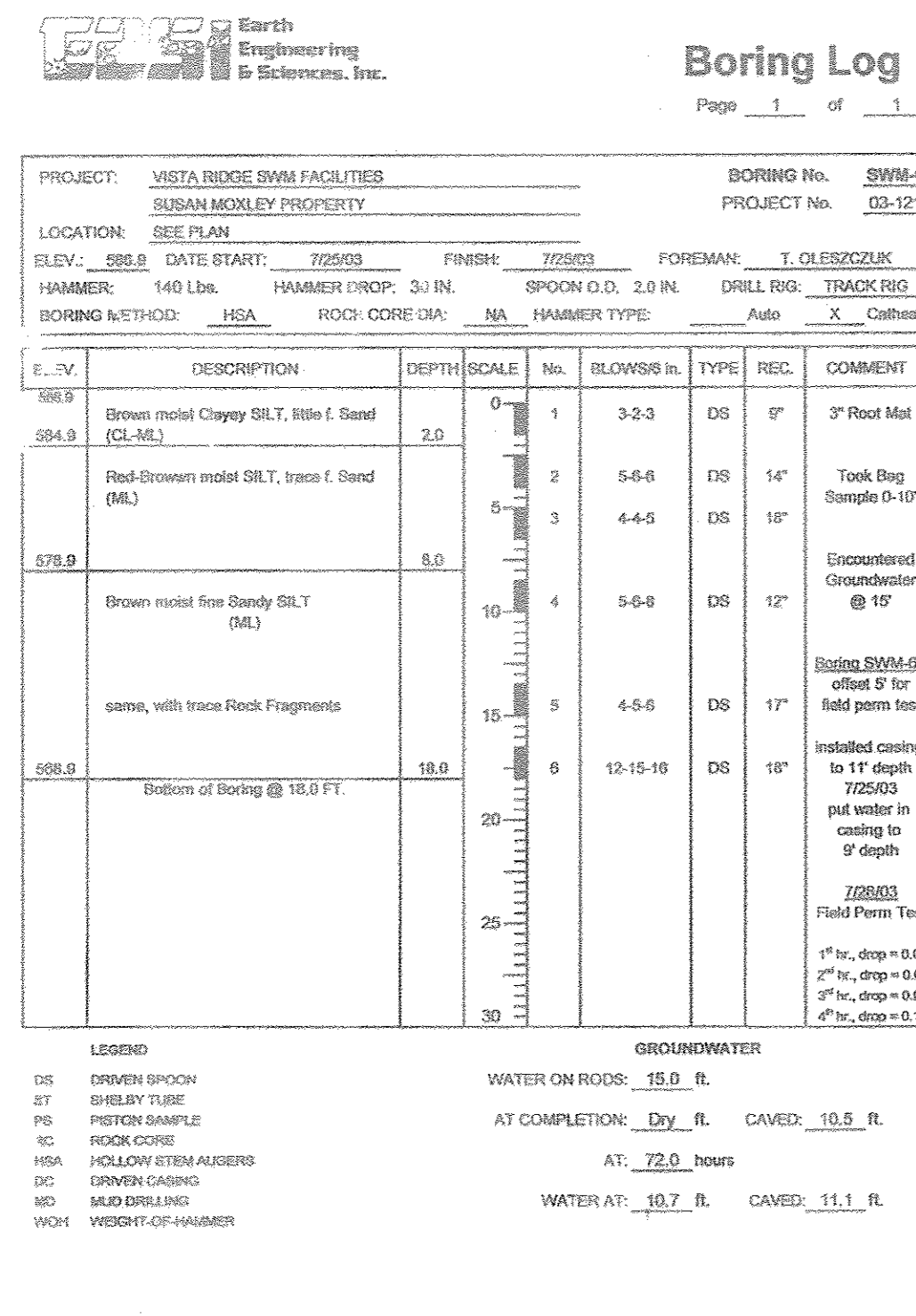
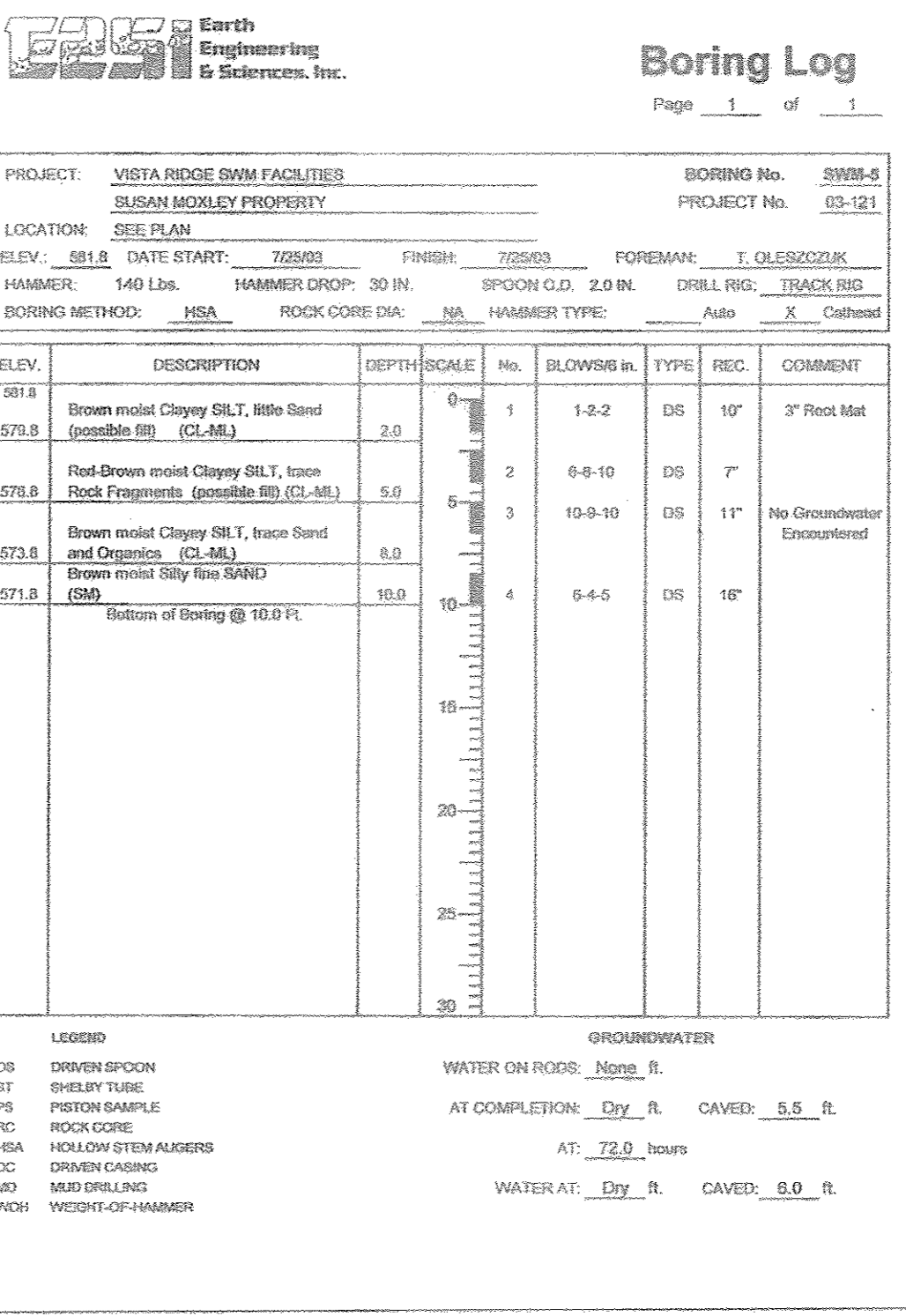
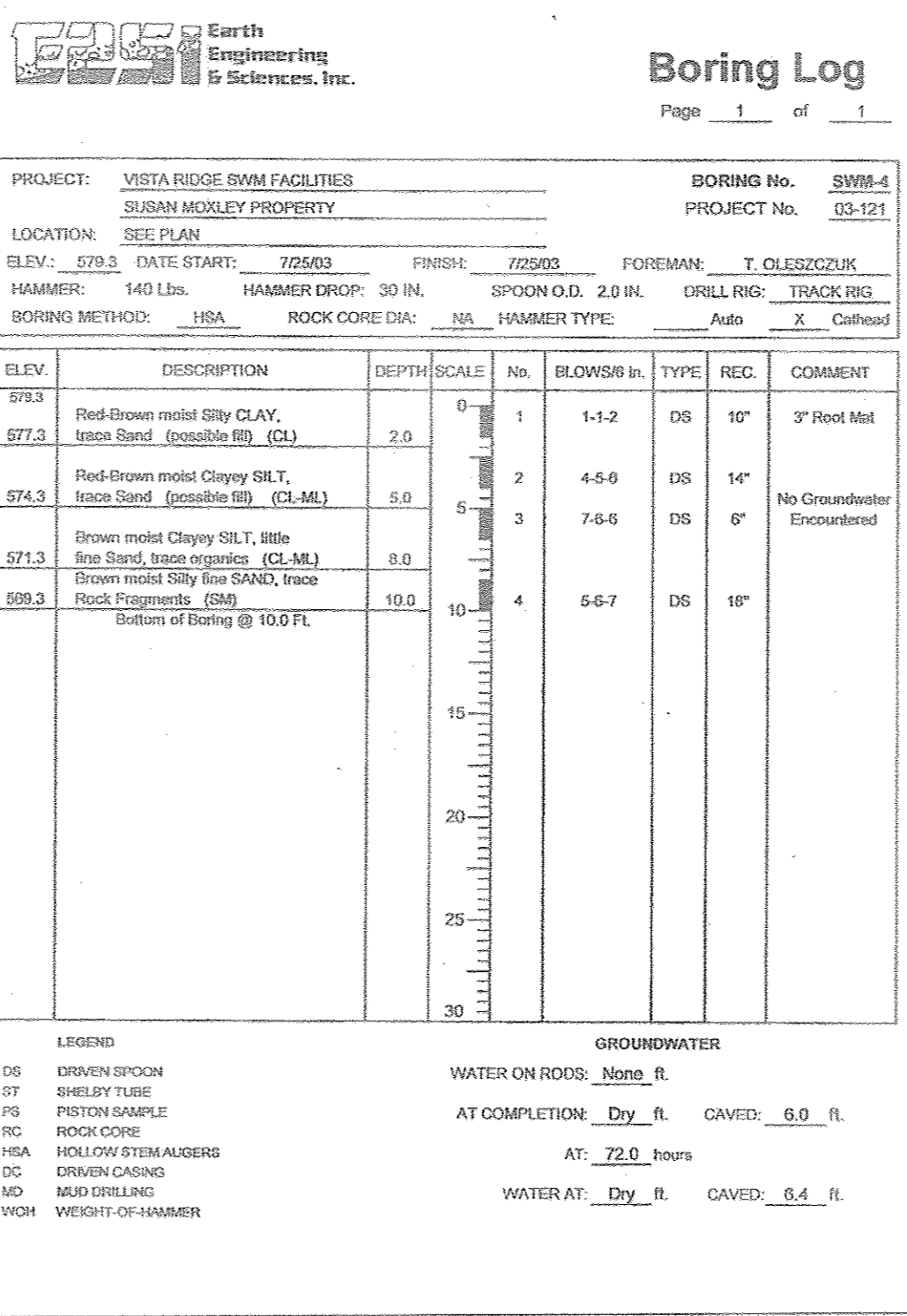
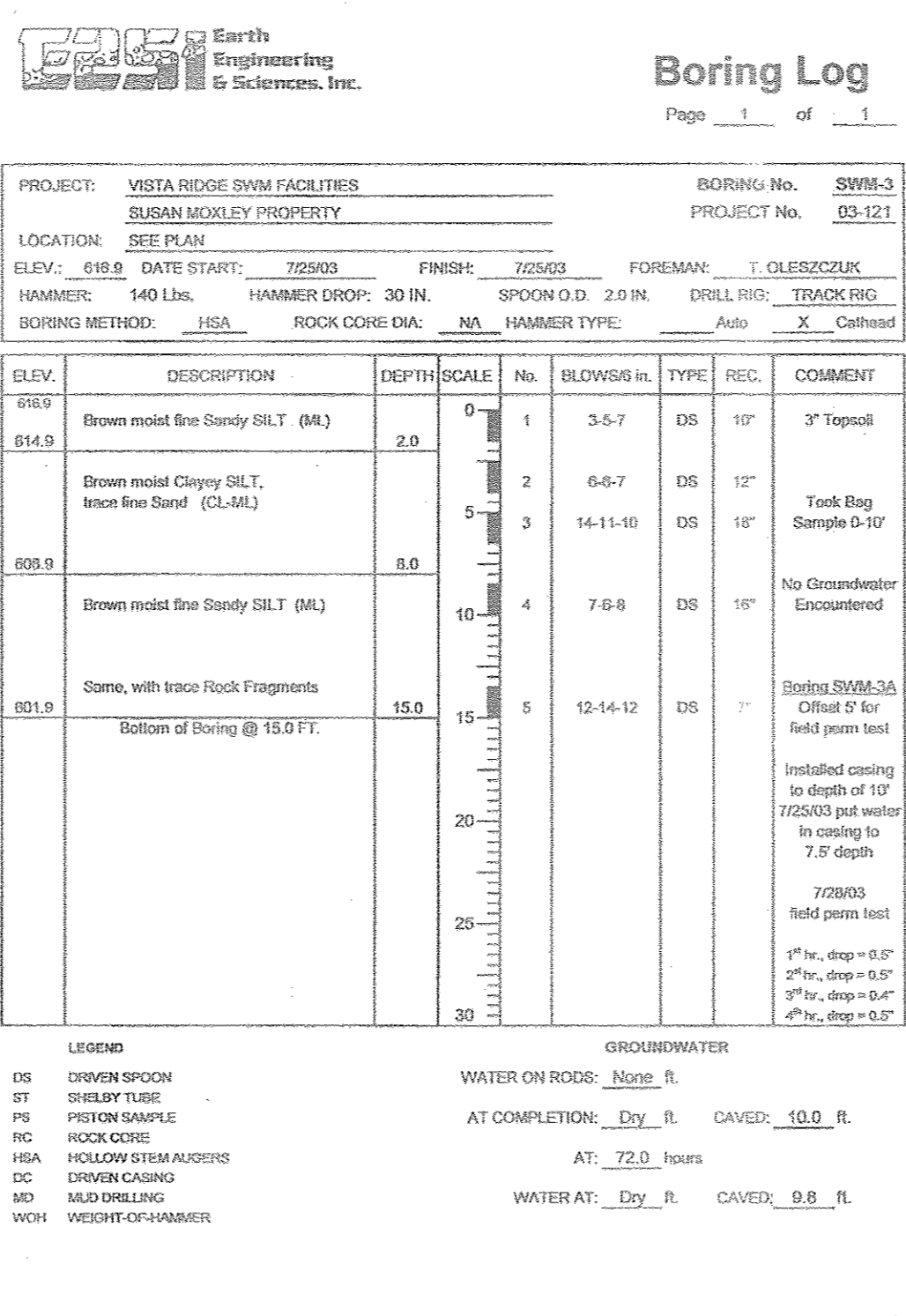
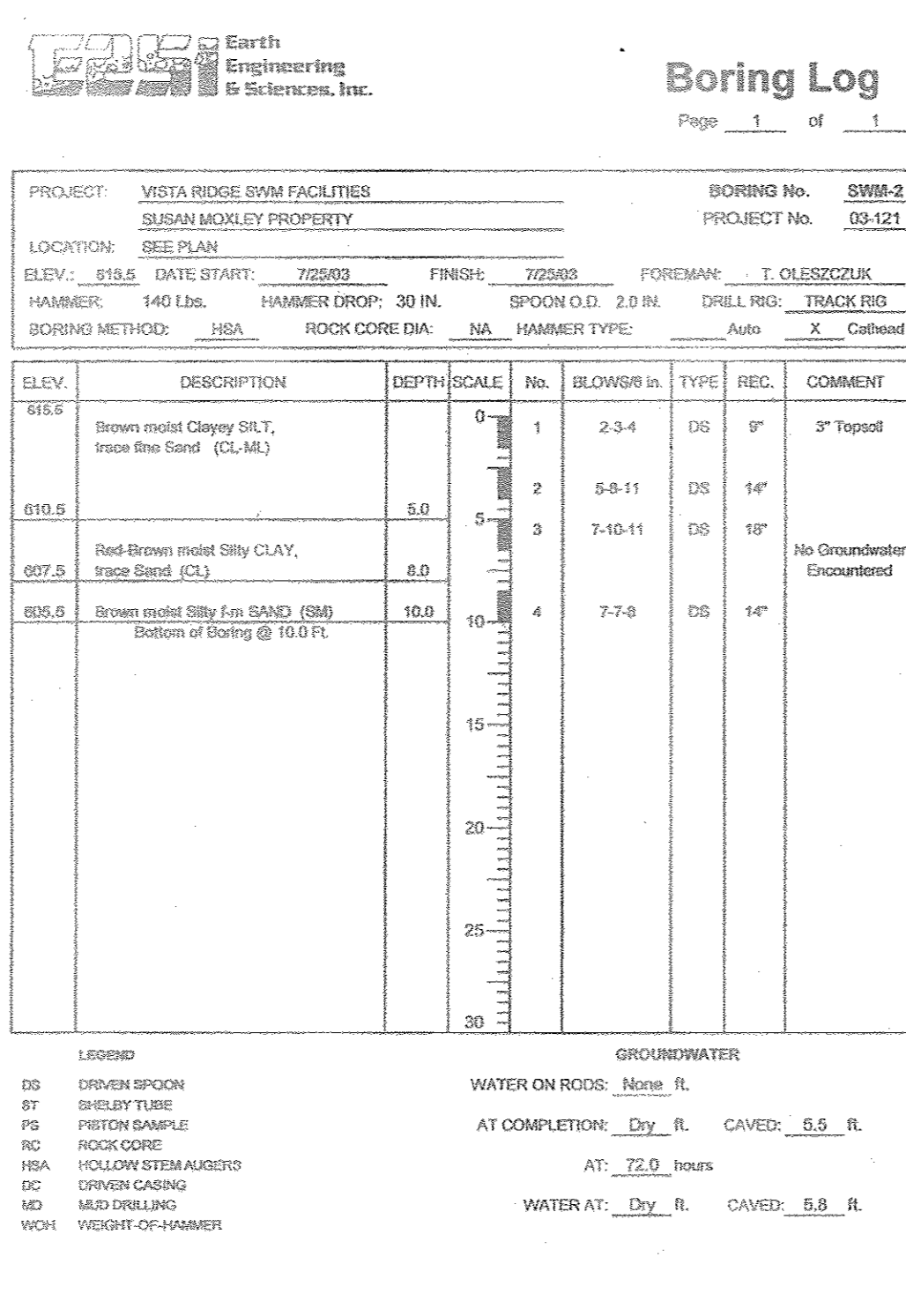
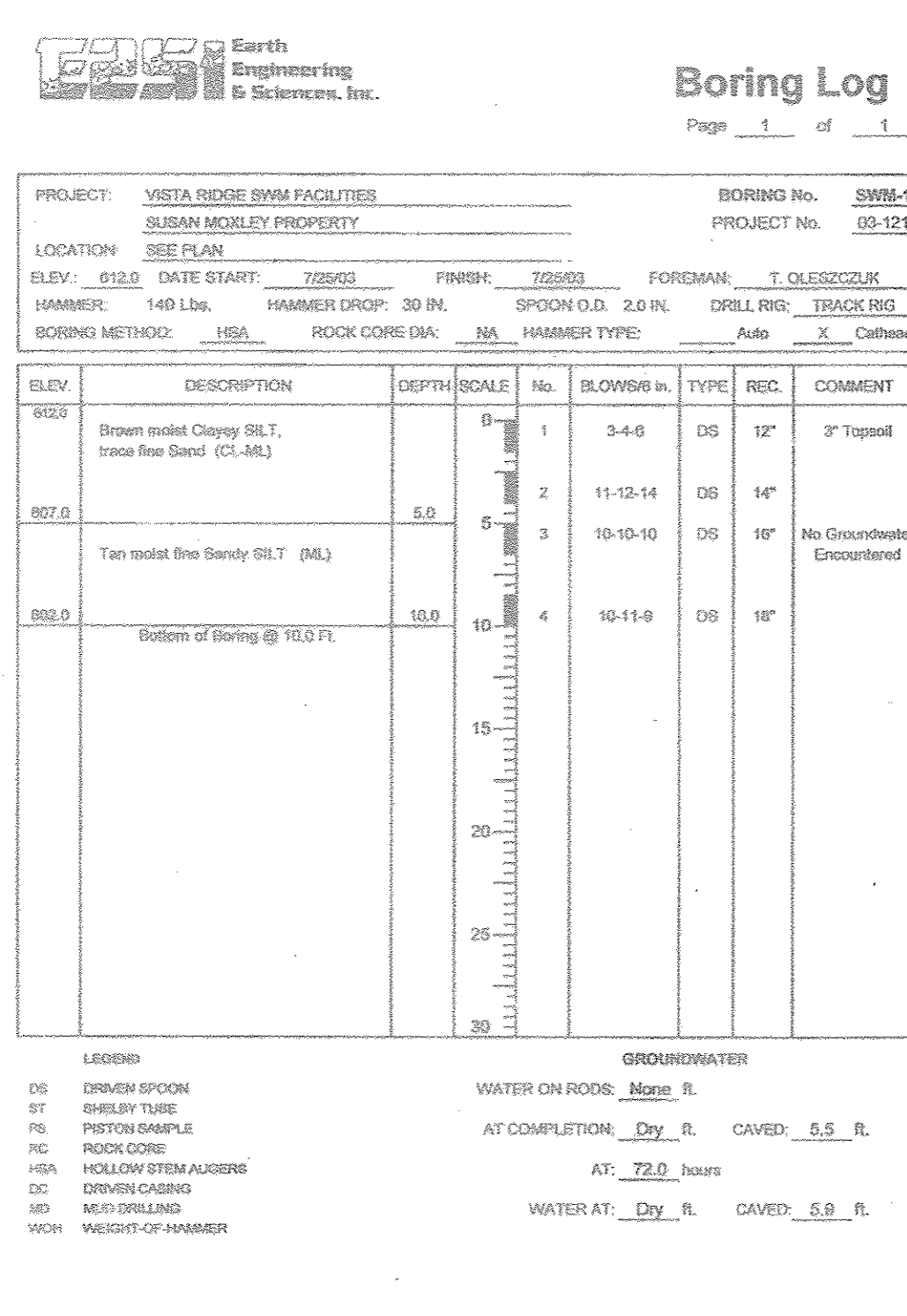
Design: JMC Draft: ANM Check: DAM SCALE: AS SHOWN DRAWING 11 OF 15



APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. ... 1-22-09 DATE
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Candy ... 1/20/09 DATE
EF, DIVISION OF LAND DEVELOPMENT

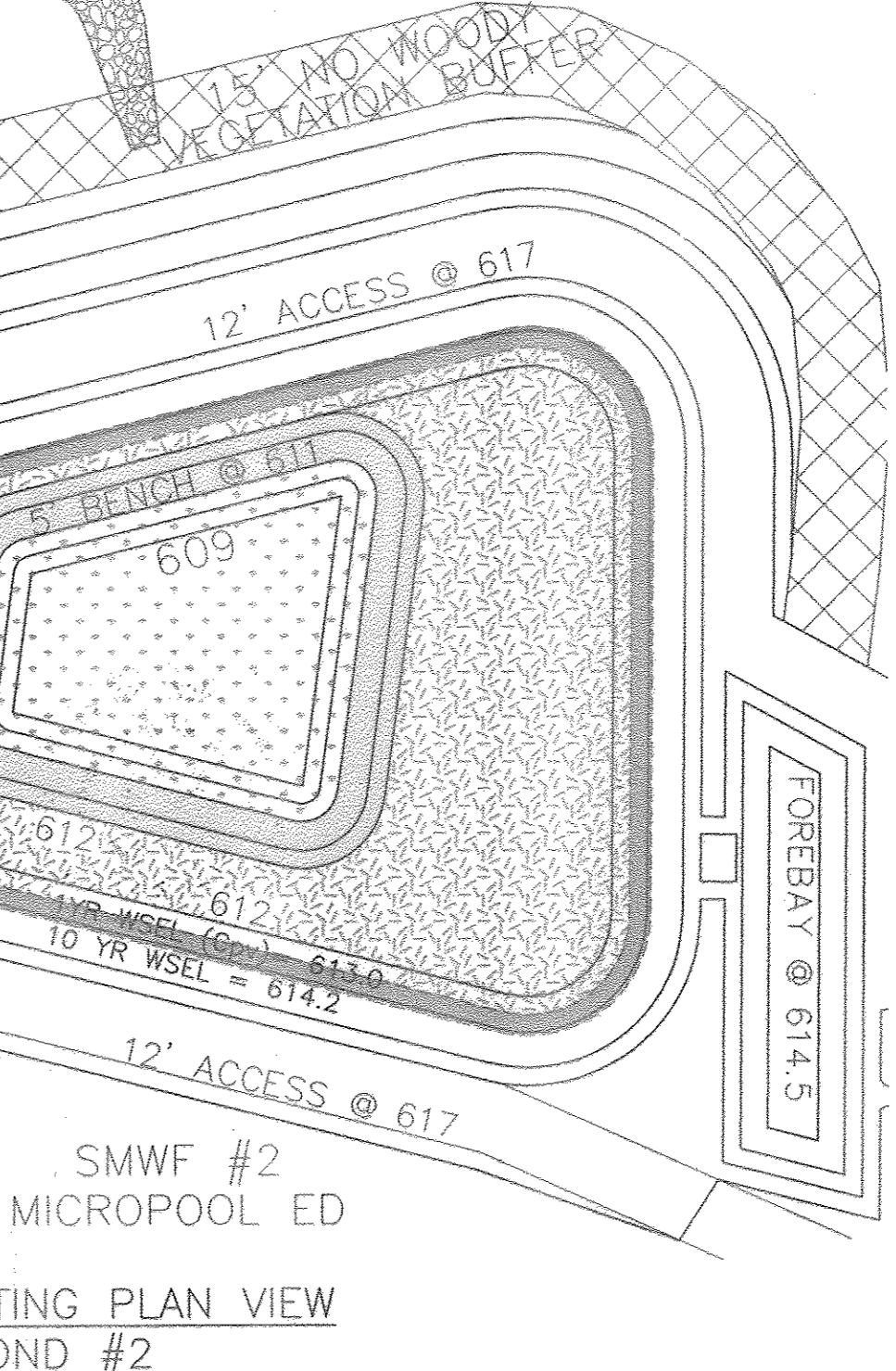
Chad ... 1-22-9 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION



CONSTRUCTION SPECIFICATIONS
These specifications are appropriate to all ponds within the scope of the Standard for practice
MD-378. All references to ASTM and AASHTO specifications

Site Preparation
Areas designated for borrow areas, embankment, and structural works shall be cleared.
Grubbed and stumps shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Approved: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.



AS-BUILT CERTIFICATION
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

E2SI RECOMMENDATIONS
POND EMBANKMENT: The embankments for the ponds should be designed and constructed in accordance with the Maryland Conservation Service Code 378 criteria.

Structure Backfill
Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness.

Approved: DEPARTMENT OF PUBLIC WORKS
Approved: DEPARTMENT OF PLANNING AND ZONING

PLANTING SCHEDULE FOR POCKET POND, POND #1
ZONE AREA (SF) ELEVATION RANGE PLANT MIX

PLANTING SCHEDULE FOR MICROPOL ED POND, POND #2
ZONE AREA (SF) ELEVATION RANGE PLANT MIX

REVISION
NO. DATE

Approved: DEPARTMENT OF PUBLIC WORKS
Approved: DEPARTMENT OF PLANNING AND ZONING

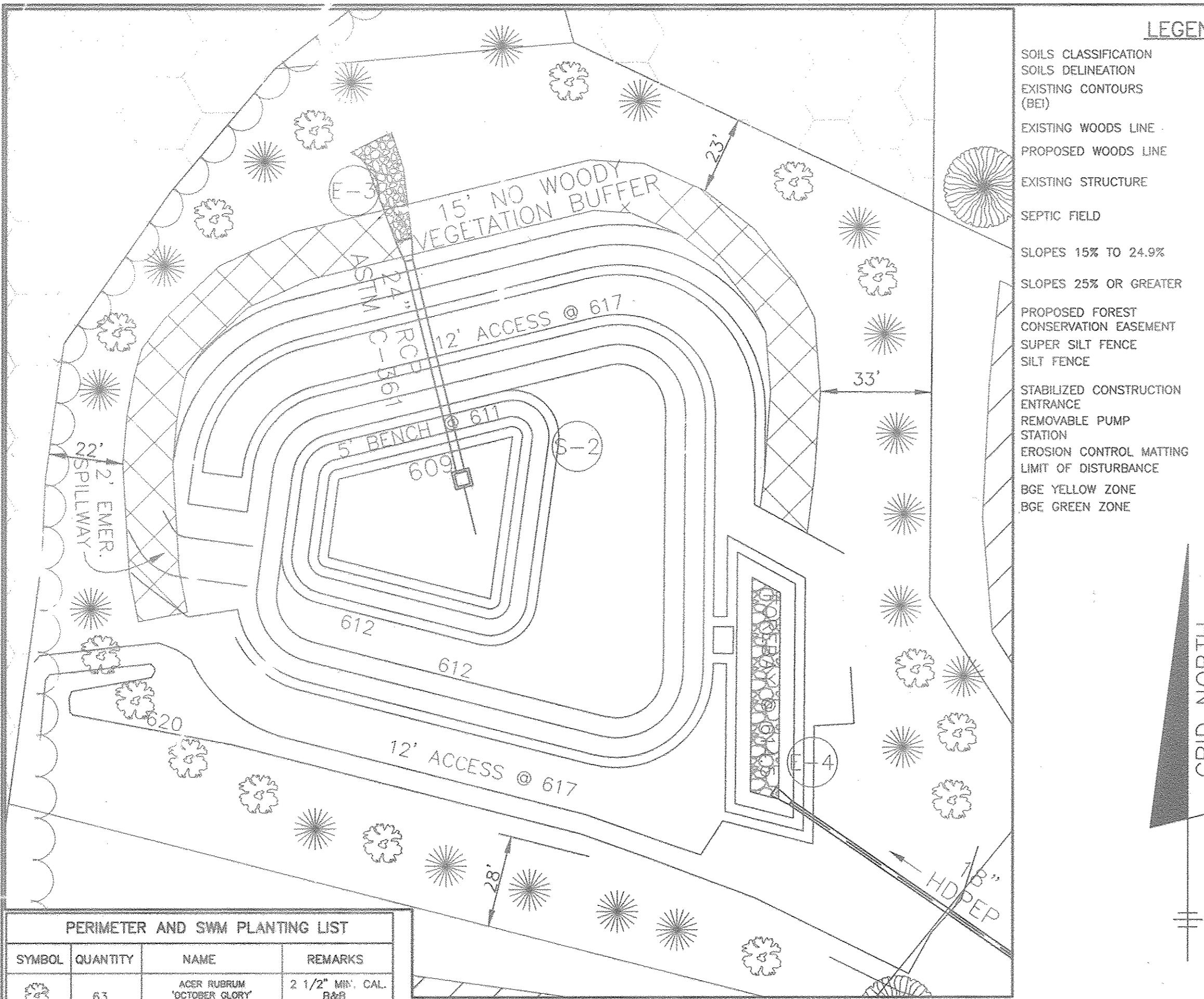
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Approved: DEPARTMENT OF PLANNING AND ZONING

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Approved: DEPARTMENT OF PUBLIC WORKS
Approved: DEPARTMENT OF PLANNING AND ZONING



PERIMETER AND SWM PLANTING LIST

| SYMBOL | QUANTITY | NAME | REMARKS |
|--------|----------|--|--------------------------------------|
| | 63 | ACER RUBRUM "October Glory" (October Glory Red Maple) | 2 1/2" MIN. CAL. B&B FULL HEAD |
| | 5 | PRUNUS SERRULATA "KAWAZAN" (Kawazari Cherry) | 1 1/2" MIN. CAL. B&B FULL HEAD |
| | 32 | PINUS STROBUS (Eastern White Pine) | 6"-8" HL. UNSHEARED |
| | 5 | PINUS THUNBERGIANA (Japanese Black Pine) | 6"-8" HL. UNSHEARED |
| | 39 | ACER SACCHARUM "GREEN MOUNTAIN" (Green Mountain Sugar Maple) | 2 1/2" - 3" cal. B&B FULL HEAD |

POND #2 ENLARGEMENT
SCALE: 1" = 30'

STREET TREE CALCULATIONS - DROVERS LANE
STREET TREES REQUIRED FOR 2,949 LF OF RIGHT-OF-WAY WITH 690 LF OF CREDIT FOR PRESERVING EXISTING VEGETATION (2,949 - 690) / 40 = 56 TREES REQUIRED
56 TREES PROVIDED

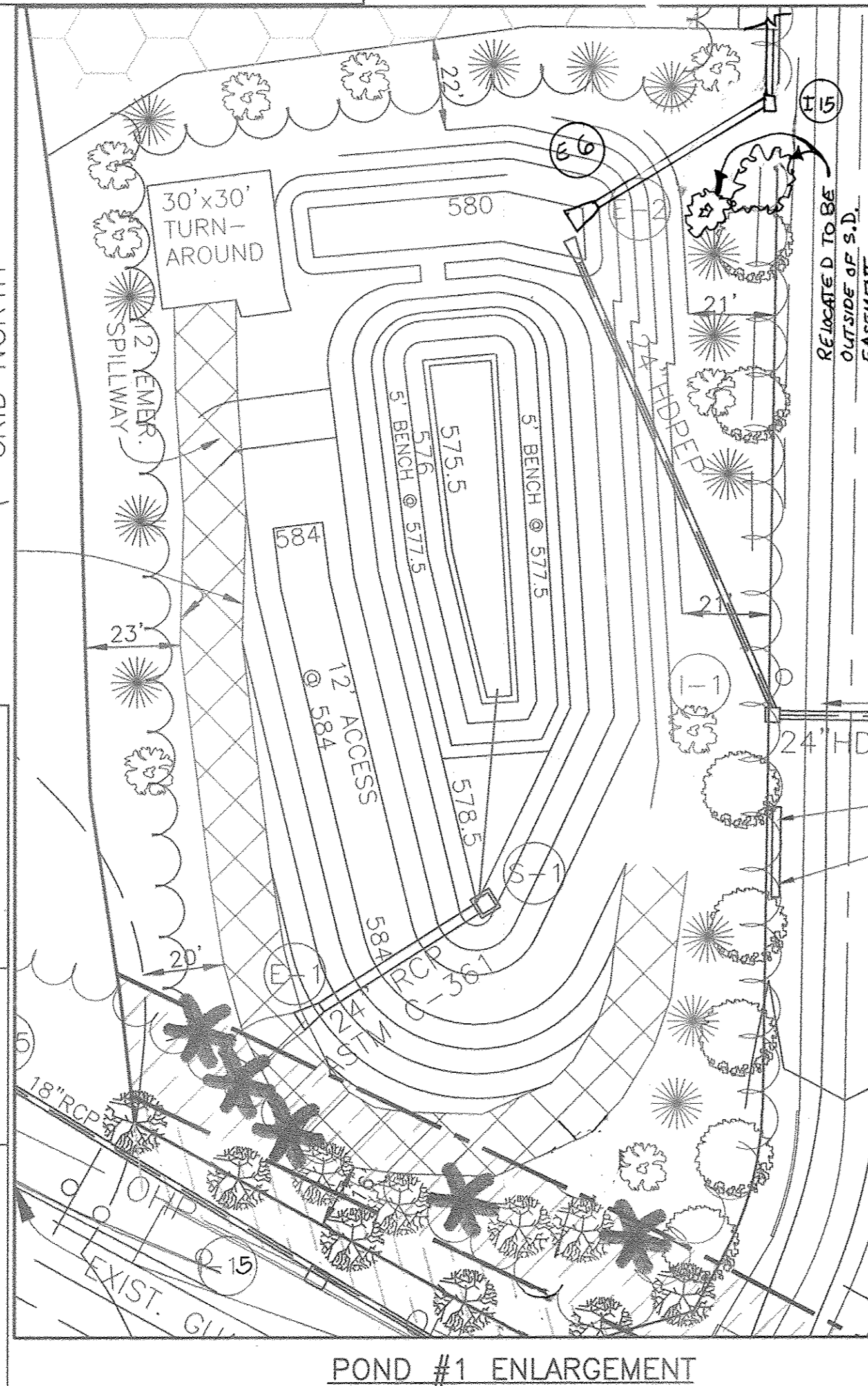
DEVELOPER'S/BUILDER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

James Barra
JAMES J. BARRA
PRESIDENT - D.R. HORTON, INC. MARYLAND/DELAWARE DIVISION
1/2-09
DATE

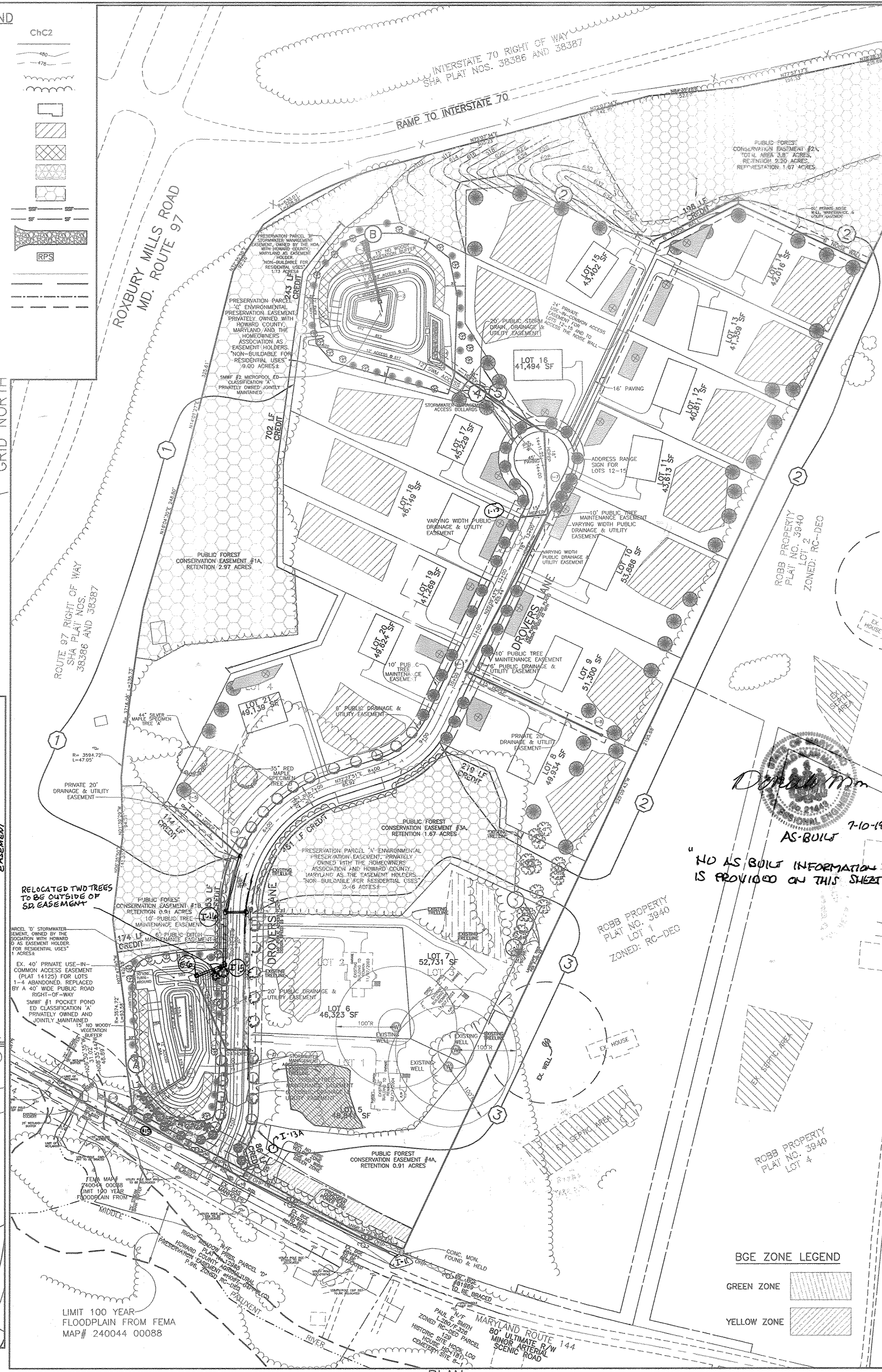
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Willis J. Munn
CHIEF, BUREAU OF HIGHWAYS
1-23-09
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Cindy Hester
CHIEF, DIVISION OF LAND DEVELOPMENT
1/23/09
DATE

Chad Conrad
CHIEF, DEVELOPMENT ENGINEERING DIVISION
1-29-9
DATE



POND #1 ENLARGEMENT
SCALE: 1" = 30'



PLAN
SCALE: 1" = 100'

BGE ZONE LEGEND

| | |
|-------------|--|
| GREEN ZONE | |
| YELLOW ZONE | |

SCHEDULE 'D' - SWM AREA LANDSCAPING

| CATEGORY | SYMF #1 (A) | SYMF #2 (B) | TOTAL |
|--|-------------|-------------|-------|
| LINEAR FEET OF PERIMETER BUFFER TYPE | 885' | 991' | 1876' |
| CREDIT FOR EXISTING VEGETATION (NO, YES AND %) | 174' | 243' | 417' |
| CREDIT FOR OTHER LANDSCAPING (NO, YES AND %) | NO | NO | NO |
| LINEAR FEET OF REQUIRED PLANTING | 711' | 748' | 1459' |
| NUMBER OF TREES REQUIRED | | | |
| SHADE TREES | 14 | 15 | 29 |
| EVERGREEN TREES | 18 | 19 | 37 |
| NUMBER OF TREES PROVIDED | | | |
| SHADE TREES | 14 | 15 | 29 |
| EVERGREEN TREES | 18 | 19 | 37 |
| OTHER TREES (2:1 SUBSTITUTE) | | | |

STREET TREE PLANTING LIST

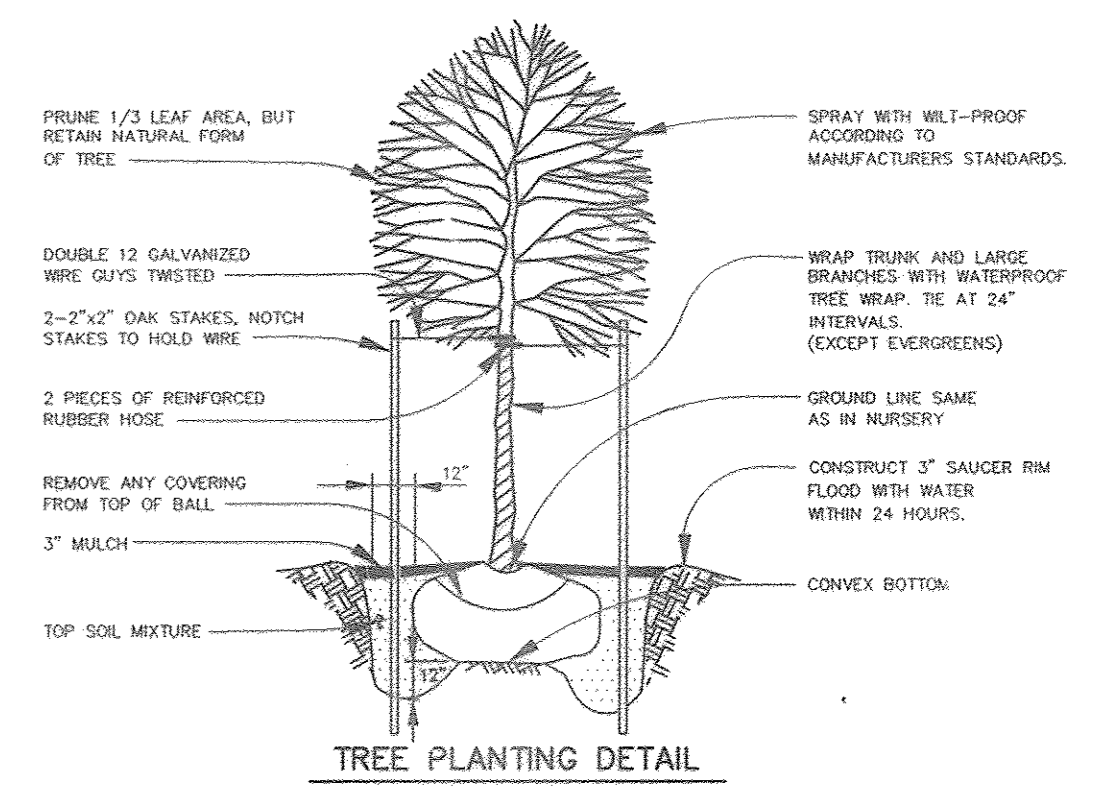
| SYMBOL | QUANTITY | NAME | REMARKS |
|--------|----------|--|--------------------------------------|
| | 28 | ACER SACCHARUM "Green Mountain" (Green Mountain Sugar Maple) | 2 1/2" MIN. CAL. B&B FULL HEAD |
| | 28 | QUERCUS RUBRA (Northern Red Oak) | 2 1/2" MIN. CAL. B&B FULL HEAD |
| | 8 | PRUNUS SERRULATA "KAWAZAN" (Kawazari Cherry) | 1 1/2" MIN. CAL. B&B FULL HEAD |

SCHEDULE A PERIMETER LANDSCAPE EDGE

| CATEGORY | ADJACENT TO PERIMETER PROPERTY | | | | | TOTAL |
|--|--------------------------------|-----------|----------|----------|----------|-----------|
| | 1 TYPE A | 2 TYPE A | 3 TYPE A | 4 TYPE A | 5 TYPE A | |
| LANDSCAPE TYPE | | | | | | |
| LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER | 1090' | 2265' | 1,336' | 131' | 137' | 4859' |
| CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) | YES, 846' | YES, 415' | N/A | NO | NO | 1281' |
| CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) | NO | NO | N/A | NO | NO | NO |
| NUMBER OF PLANTS REQUIRED | 244 L.F. | 1850 L.F. | N/A | 131 L.F. | 137 L.F. | 2342 L.F. |
| SHADE TREES | 4 | 31 | | 2 | 2 | 39 |
| EVERGREEN TREES | 0 | 0 | | 0 | 0 | 0 |
| OTHER TREES (2:1 SUBSTITUTE) SHRUBS | | | | | | |

- 1 EXISTING WOODS WITH WIDTH 20' OR GREATER.
- 2 THE LANDSCAPE OBLIGATION FOR THIS PERIMETER WAS PREVIOUSLY ADDRESSED UNDER F-00-22.

- LANDSCAPE NOTES:**
- TREES SHOULD BE PLANTED A MINIMUM OF 6 FEET FROM THE EDGE OF PAVING AND MUST BE A MINIMUM OF 5 FEET FROM ANY STORM DRAIN.
 - TREES MUST BE PLANTED A MINIMUM OF 5 FEET FROM AN OPEN SPACE ACCESS STRIP AND 10 FEET FROM A DRIVEWAY.
 - SEE TREE PLANTING DETAIL - THIS SHEET.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
 - PERIMETER AND STORM WATER MANAGEMENT LANDSCAPING IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL SHALL BE PROVIDED AS SHOWN ON THE LANDSCAPE PLAN SHEETS OF THE ROAD CONSTRUCTION DRAWINGS FOR THIS PROJECT. SURETY IN THE AMOUNT OF \$25,950.00 FOR 68 SHADE TREES AND 37 EVERGREEN TREES SHALL BE POSTED WITH THE DEVELOPER'S AGREEMENT FOR THIS FINAL PLAN, F-08-136.
 - AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS HEREWIT LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.
 - THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPAIRED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
 - IN THE BGE GREEN ZONE, ONLY TREES WITH A MATURE HEIGHT OF LESS THAN 25 FEET SHALL BE ALLOWED.
 - IN THE BGE YELLOW ZONE, ONLY TREES WITH A MATURE HEIGHT OF LESS THAN 40 FEET SHALL BE ALLOWED.



Donna Munn
7-10-16
AS-BUILT
"NO AS-BUILT INFORMATION" IS PROVIDED ON THIS SHEET

| NO. | DATE | REVISION |
|-----|----------|--|
| 3 | 11-1-17 | REDESIGNATE STORM DRAIN TO MATCH AS-BUILT DESIGNATIONS |
| 2 | 6-20-13 | REVISE S.D. AND ADJUST LANDSCAPING |
| 1 | 10-30-12 | REVISE INLET DESIGNATIONS. |

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Donna Munn
PROFESSIONAL ENGINEER
11/2/09

| | | | |
|---|--|--|--|
| DEVELOPER/OWNER LOT 2: D.R. HORTON, INC. 15810 GAITHER DRIVE, SUITE 220 GAITHERSBURG, MD 20877 1-301-670-6144 | OWNER LOT 1: HECTOR HANNIBAL AND TANYA SELLERS-HANNIBAL 14450 FREDERICK ROAD COOKSVILLE, MD 21723 | OWNER LOT 3: ROBERT AND PHYLLIS BULL, JR. 14470 FREDERICK ROAD COOKSVILLE, MD 21723 | PROJECT: VISTA RIDGE A RESUBDIVISION OF LOTS 1-4, CREATING LOTS 5 THRU 21, AND PRESERVATION PARCELS "A" THROUGH "D" |
| LOCATION: TAX MAP No. 8 - GRID No. 23 PARCEL No. 176 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND | | | TITLE: LANDSCAPE PLAN |
| DATE: JANUARY, 2009 | | | PROJECT NO. 1635 |
| Design: JMC Draft: RPS Check: DAM | | | SCALE: 1" = 100' DRAWING 14 OF 15 |

