

GENERAL NOTES (THESE NOTES PERTAIN TO ALL CIVIL DRAWINGS)

- The subject property is zoned NT-05 per the 02/02/2004 Comprehensive Zoning Plan and the "Comp" Like zoning amendments effective July 28, 2006.
- No grading, removal of vegetative cover or trees, paving and new structures shall be permitted within the required wetlands, stream(s) or their buffers, forest conservation easement areas and 100 year floodplain.
- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and the Landscape Manual.
- Financial surety for the required landscaping has been posted as part of the DPM developer's agreement in the amount of \$1,050 for 0 shade trees, 1 evergreen trees and 0 shrubs.
- This project is exempt from the requirements of Section 16.1200 of the Howard County Code for Forest conservation because this lot was a part of a Planned Unit Development which had preliminary development approval and 50% or more of the land recorded and substantially developed before December 31, 1992.
- This plan complies with the requirements of FDP-5-A-II.
- Environmental Concept Plan ECP-12-064 for this project was approved on September 24, 2012.
- This project is subject to NF-13-1B3 for a waiver of Sections 16.116(a)(2)(iv) requires: "Grading, removal of vegetative cover and trees, paving and new structures shall not be permitted within: (iv) 50 feet of a perennial streambank in nonresidential zoning districts." Approval of the waiver petition was provided on 06/18/2013.
- The Planning Board approved this SDP on 09/12/2013.
- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 318-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-TTTT at least 48 hours prior to any excavation work being done.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- All plan dimensions are to face of curb unless otherwise noted.
- The existing topography was obtained from field run survey with maximum one foot contour intervals prepared by Shanberger & Lane dated 01/13/2012, 08/03/2012.
- The coordinates shown herein are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monument Nos. 21EA and 21EB were used for this project.
- Water is public. (Contract number 214 M45)
- Sewer is public. (Contract number 214 M45)
- Stormwater Management will be provided by environmental site design (ESD) practices, including M-6 Micro-biotretation, M-7 Rain Garden, N-1 Disconnection of Rooftop Runoff, N-2 Disconnection of Non-Rooftop Runoff. The facilities will be owned by Columbia Association and privately maintained.
- Existing utilities are based on County Record Drawings.
- There is a 100 year floodplain easement on site. A sanitary connection to an existing sanitary manhole within the floodplain is proposed. The proposed sanitary line is to be trenchless and constructed with the same day stabilization method. No fill activities will be conducted within the 100 year floodplain easement.
- There are no wetlands within the area of disturbance for this project.
- The traffic study for this project was prepared by "The Traffic Group", dated October 11, 2012. A full traffic analysis is not needed as the proposed clubhouse is only 144 sq. ft. larger than the existing facility. The proposed restaurant portion of the clubhouse will result in a decrease in the number of seats from the existing restaurant, and outdoor seating will also be decreased. As a result, the new clubhouse is not projected to generate any more traffic than the existing clubhouse. Therefore the proposed development satisfies Howard County Adequate Road Facilities Test Evaluation requirements.
- ABBREVIATIONS:

PROP	Proposed*	DIP	Ductile Iron Pipe
EX	Existing	PVC	Polyvinyl Chloride Pipe
BIT	Bituminous	HDPE	High Density Polyethylene Pipe
CONC	Concrete	CMP	Corrugated Metal Pipe
MH	Manhole	RCP	Reinforced Concrete Pipe
SD	Storm Drain	C&G	Concrete Curb & Gutter
I	Inlet	INV	Invert Elevation
SAN	Sanitary Sewer	FF	Finished Floor Elevation
FH	Fire Hydrant	BF	Basement Floor Elevation
TC	Top of Curb	BC	Bottom of Curb
TS	Top of Step	BS	Bottom of Step
TM	Top of Mail	BM	Bottom of Mail
PC	Point of Curvature	PS	Parking Space
PT	Point of Tangency	HC	Handicapped Parking Space
FI	Point of Intersection	TYP	Typical

*Proposed means work included in the base contract unless accompanied by the phrases "N.I.C." or "By Others."
- EXISTING INFORMATION AND CONDITIONS NOT GUARANTEED; VERIFY AND TEST PIT EXISTING UTILITIES: Existing site and utility information shown on these plans has been taken from a combination of the owner's historical records, public information, County GIS, field measurements, and field surveys. Many of these sources contain incomplete and / or conflicting information. Therefore the correctness and completeness of the information showing existing conditions is not guaranteed. Before beginning construction, the Contractor shall perform the following tasks:
 - Notify Miss Utility at 1-800-257-TTTT, and make sure they complete the marking of utilities within the limits of construction at least 48 hours prior to installing sediment control measures. Maintain all markings throughout construction. The Contractor shall also include in his bid price marking of on-site utilities that might not be marked by MISS Utility; the contractor shall either mark these on-site utilities himself or by subcontracting with a private on-site utility location company.

- Verify the general accuracy of the existing conditions shown on the site drawings by visual inspection of the surface of the site and all existing structures, paving and utility appearances visible thereon.
 - With regard to the structures & appearances observed as required per item (b) above, determine the type, size, location and elevation of all those existing utilities (including but not limited to all storm drains, sanitary lines, water lines, gas lines, steam lines, electric lines, telephone lines, and communication ducts, and all manholes, inlets, clean-outs, valves, handholes, etc. related thereto) within the limits of construction in order to: (i) avoid damaging or disrupting service, and (ii) to coordinate and facilitate construction of proposed utilities and other improvements. In addition to the Contractor's visual observation and the utility marking (as required above), the contractor shall schedule and complete Test Pitting of all existing utilities (for the purposes set forth above) and shall do so in a timely manner in order to allow time for analysis and redesign by Site Resources and/or other consultants, without delaying the project schedule.
 - Immediately report to Site Resources, Inc. the results of steps (a), (b) and (c) which might indicate any discrepancy between actual conditions and those shown on the plan, and any potential conflicts between proposed improvements and existing condition.
- Test pitting defined:** For the purposes of this contract, excavation of utility trenches does not constitute test pitting. Test pitting is a separate operation completed at least seven days before utility installation is scheduled to begin. Test pitting means excavation to expose existing utilities in two situations: (i) where proposed improvements cross existing utilities (pipes, lines, structures, appearances) and; (ii) where proposed utilities are designed to connect to existing utilities. Test pitting includes recording the type, size, location and elevation of the exposed utilities, and faxing and mailing the record to Site Resources, Inc. and the Owner. The record may be a legible hand-written field sketch.
- EXISTING AND PROPOSED GAS LINES, ELECTRIC LINES, TELEPHONE LINES, COMMUNICATION LINES AND OTHER UTILITIES: Existing and proposed gas lines, steam lines, electric lines, telephone lines, communication ducts and other such utilities are NOT part of the scope of work shown on these site plans and Site Resources, Inc. has no responsibility for design, specification or installation of said utilities. To the extent that some or all of such utilities (whether existing or proposed) appear on the site drawings, the correctness and completeness of the information showing these utilities is not guaranteed.
 - COORDINATION BETWEEN PROPOSED UTILITIES: The contractor shall adjust the location and elevation of proposed gas lines, electric lines, telephone lines, communication lines, and water lines as needed to construct the proposed storm drains and sanitary sewer with minimum clearances. Coordinate with the Mechanical/Electrical Drawings and Specifications and appropriate utility company.
 - RELOCATION OF EXISTING UTILITIES: In the event that the location or elevation of existing minor underground electric lines and phone lines conflict with proposed storm drains, sanitary sewer lines or water lines, the contractor shall, with the permission of the owner and without an extra cost to the project, adjust these lines to permit installation of the new utilities. In the event that any other utility is relocated to accommodate a new utility, said relocation shall be an extra cost to the project, subject to the terms and conditions of the construction contract.
 - UTILITIES TO REMAIN OPERATIONAL, ADJUSTMENT FOR FINAL GRADE: All existing utilities shall be retained unless marked otherwise. Existing utilities not to be removed are to remain operational at all times. Existing utilities to be replaced or relocated shall remain in service until replaced or relocated utilities are operational. All existing utility appearances shall be adjusted for final grade.
 - UTILITY TRENCHING, BACKFILL AND COMPACTION: All trenching for sanitary sewer, storm drains and water mains shall be done in accordance with the latest Howard County Standard Specifications and Details for Construction.
 - UTILITY CERTIFICATION: The Contractor shall have a professional engineer registered in the State of Maryland certify, on a form provided by the Owner, that all proposed storm drains, sanitary sewers and water lines shown herein were installed in accordance with these plans and Howard County specifications. If said Certification is not possible because the utilities were not installed in accordance with these plans and Howard County specifications, then the Owner has the option of waiving, in writing, this Certification, in whole or part. If the Owner does not elect to waive the Certification, the Contractor shall adjust and, if necessary, reconstruct the utilities to bring them in conformance with these plans and Howard County specifications.
 - UTILITY CAPPING AND PROTECTION: All building connections shall be capped at upstream end, 5 feet from proposed buildings, catwalks or column footings or as noted, and shall be protected by providing three stakes (the height being a minimum of 18 inches above proposed grade) with high visibility flagging around the capped end of the utility.
 - PROPOSED WATER LINES: Proposed water lines shall have a minimum of 4'-0" cover from finished grade, 1'-0" clearance from storm drains and 1'-0" clearance from sanitary sewers, unless otherwise noted on the plans. Turn House to Maintenance Facility water line shall be Type K copper tubing meeting the material, chemical, and mechanical requirements of ASTM B-88. Clubhouse connection to water main in Willow Bottom Drive, shall be DIP as noted on ADO Plan C3.31.
 - PROPOSED STORM DRAINS: All storm drains 12 inches and larger shall be HDPE unless indicated otherwise on these construction drawings.
 - PROPOSED SANITARY SEWERS: All pipe and fittings for sanitary house connection shall be polyvinyl chloride (PVC) meeting material requirements of ASTM D3034, (SDR-35). Joints shall be elastomeric gasketed.
 - STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS: Unless otherwise noted or detailed on the drawings, all construction shall follow the latest Howard County Standard Specifications and Details for Construction.
 - SEDIMENT CONTROL: The contractor shall coordinate installation of all utilities to avoid construction problems/conflicts with sediment and erosion control measures. Any disturbance to sediment and erosion control measures shall be repaired at the end of each working day. Contractor shall, without extra cost to the project, repair and maintain existing sediment control devices until all areas within limits of construction are stabilized. With the approval of sediment control inspector, all sediment control devices shall be removed and areas restored and stabilized. All sediment control measures referred to on these plans shall be in accordance with the publication entitled 2011 Maryland Standards and Specifications For Soil Erosion and Sediment Control.
 - DISTURBED AREAS: All areas disturbed by the contractor during or prior to construction, not designated to receive paving, mulch or solid sod shall be fine graded, seeded and mulched in accordance with the permanent seeding notes and specifications shown on the Sediment Control drawings.
 - REPAIR AND REPLACEMENT OF DAMAGE CAUSED BY CONTRACTOR AND SUBCONTRACTORS: In the event that the contractor or any of his subcontractors damage any existing curb, gutter, paving, utilities, sidewalks, trees, shrubs, lawns, or any other existing conditions (not indicated to be demolished), or any newly installed proposed improvement, the general contractor shall repair and replace said damage to owner's satisfaction, at

general contractor's sole cost and expense.

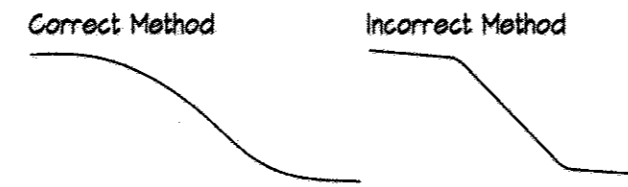
40. BENCHMARKS: See Cover Sheet.

41. ELEVATION AND LABELING: All spot grade elevations in roadways and parking lots are for bottom of curb unless otherwise noted. Elevations on hard surfaces (roads, walks, stairs, steps, manholes, inlets, etc.) are labeled to the hundredth of a foot (e.g. 245.45). Elevations on proposed lawn and planting areas are labeled to the tenth of a foot (e.g. 245.5).

42. DIMENSIONS: Unless otherwise noted on the drawing, all dimensions shown on the site drawings follow these conventions:

- dimensions to a building or retaining wall are to the face of the wall;
- dimensions to a curb are to the face (not the back) of the curb;
- dimensions to a fence are to the centerline of the fence;
- dimensions for sidewalks abutting a curb are from the face of curb to the back edge of the walk;
- dimensions for other sidewalks or open paving sections are measured to the edge of paving;
- dimensions to a manhole, inlet, cleanout, pipe bend, valve, fire hydrant or other utility appearance are to the center of the structure;
- dimensions for steps are to the outer edge of the staircase and the nose of the top or bottom step;
- layout of sediment control measures and plant material shall be scaled.

43. GRADINGS: It is the intent of the grading design to achieve positive drainage and aesthetically pleasing vertical curves and lines. Transitions between existing and proposed pavement shall be smooth and joints flush. Unless otherwise expressly noted on the plan (by arrow with the percent slope labeled), all proposed bituminous paving shall have a slope of at least 2 percent and all concrete shall have a minimum slope of 1.5 percent in the direction indicated by proposed contours. Unpaved areas shall have a minimum slope of 2 percent and a maximum slope of 2:1. Final grading shall achieve positive surface drainage away from buildings, sidewalks, and other structures (swales, gutters, inlets, etc.).



44. COMPACTION: All earth fill material under slabs, footings and paved areas shall be placed in 8" loose layers and compacted to 95% of maximum dry density at optimum moisture content as determined by ASTM D 698. All other fill shall be compacted to 90%.

45. HEADINGS: The headings contained in these General Notes are for the convenience of the reader only and shall not limit the responsibility of the Contractor. It shall be distinctly understood that failure to mention specifically any work which would normally be required to complete the project shall not relieve the Contractor from completing such work.

46. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES): It is the contractor's responsibility to implement all the provisions and requirements of the NPDES permit. The permit has been applied for by the Owner, but no land disturbance is permitted until the NPDES permit has been issued.

47. All sidewalks, paths and other paved areas shall be finish graded with a maximum longitudinal slope of 5% (1:20) and a maximum cross slope of 2% (1:50) unless otherwise noted.

48. It is the contractor's responsibility to ensure that all site elements are constructed in accordance with the ADA 2010 Standards for Accessible Design or most current.

49. Turf seeding per sheet L2.01 shall supercede permanent seeding notes shown on sheet ESC2.05.

50. Refer to architectural and structural drawings for details of all retaining walls connecting to the building and/or over 3' in height.

51. Street light placement and the type of fixture and pole shall be in accordance with the Howard County Design Manual, Volume III (1993) and as modified by "Guidelines for Street Lights in Residential Developments (June 1993)." A minimum spacing of 20' shall be maintained between any proposed streetlight and any tree.

52. All sign posts used for traffic control signs installed in the County right-of-way shall be mounted on a 2" galvanized steel, perforated, square tube post (14 gauge) inserted into a 2-1/2" galvanized steel, perforated, square tube sleeve (12 gauge) - 3' long. A galvanized steel pole cap shall be mounted on top of each post.

53. This plan has been prepared in accordance with Section 16.124 of the Regulations. All work on site must conform to Section 16.121 of the Howard County Code. All soils excavated from the existing hole 1 Black Tee shall be used in the reconstruction of the Black Tee as noted on C1.01, C1.1 and ESC2.03 or in manner in which the soils will not come into contact with patrons or residents.

54. Health Department signature of this site development plan does not ensure building approval of the proposed food service facility. Permit plans for the food service facility will require review and approval by the Health Department.

55. A Knox Box 3200 Series shall be installed on the column of the front entrance vestibule.

LIGHTING FIXTURE SCHEDULE

SYMBOL	TYPE	DESCRIPTION	LAMPS			MAX IN.	MOUNTING	MANU. / MODEL No. (OR APPROVED EQUAL)
			VOLTS	NO.	TYPE			
⊕	STREET	RELOCATION OF EXISTING STREET LIGHTS ON SITE.						

EXISTING VEGETATIVE COMMUNITIES

The site is largely covered by maintained turf grass for golf activities and successional forest approximately 20-40 years of age. The condition of most of this stand is fair with some invasive species. There are a few small stands containing some mature, larger trees.

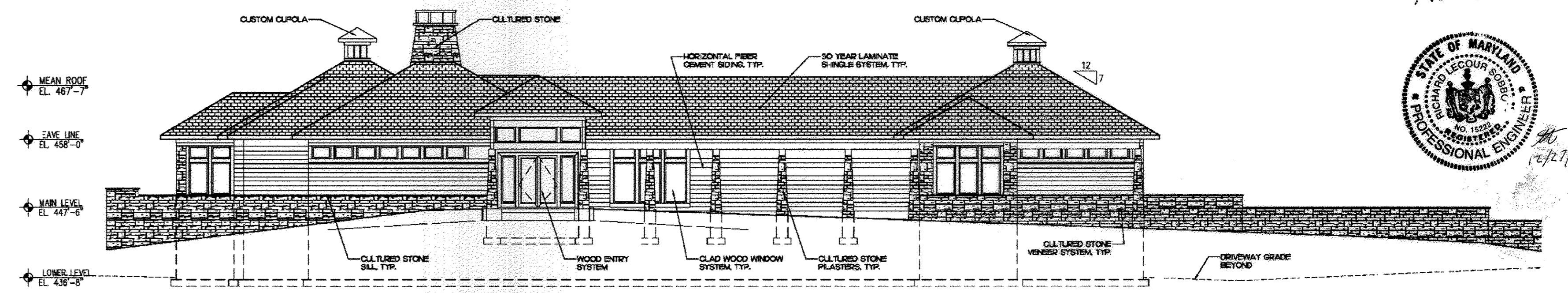
EXISTING FLOODPLAIN EASEMENT

The site includes a 100 year floodplain easement as recorded in Howard County Plat No. 6470 with a flood study performed as a part of F-87-10. For additional information on the floodplain easement or flood study refer to Plat No. 6470 and F87-10. No fill activities are proposed within the 100 year floodplain.

BUILDING INFORMATION TABLE

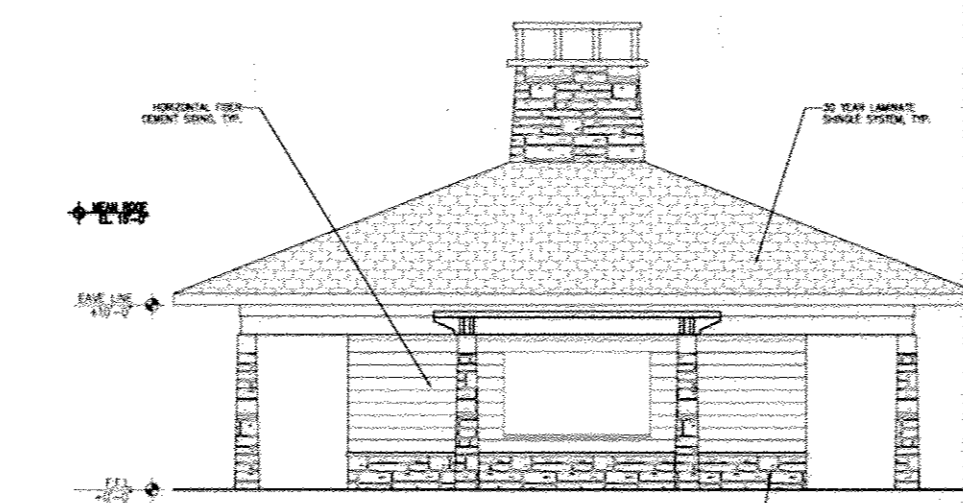
EXISTING STRUCTURE	TYPE	MEAN HEIGHT	STREET ADDRESS	AGE
GOLF CLUB HOUSE & RESTAURANT	PERMANENT BUILDING	25' +/-	1180 WILLOW BOTTOM	30+ YRS
STARTER SHACK	PERMANENT BUILDING	12' +/-	1180 WILLOW BOTTOM	10+ YRS

PROPOSED STRUCTURE	TYPE	MEAN HEIGHT	STREET ADDRESS	AGE
GOLF CLUB HOUSE & RESTAURANT - A	PERMANENT BUILDING	25' +/-	1180 WILLOW BOTTOM	-
TURN HOUSE - B	PERMANENT BUILDING	15' +/-	1180 WILLOW BOTTOM	-



1 CLUBHOUSE (NORTH ELEVATION)

NOT TO SCALE



2 TURN HOUSE (WEST ELEVATION)

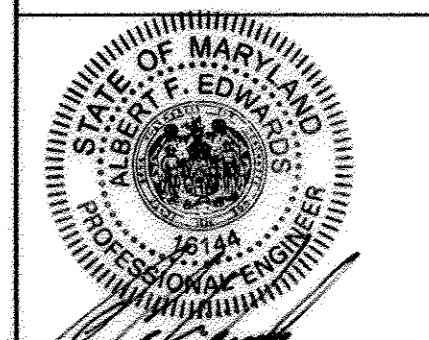
NOT TO SCALE

CIVIL GENERAL NOTES

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS



APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 09/12/13

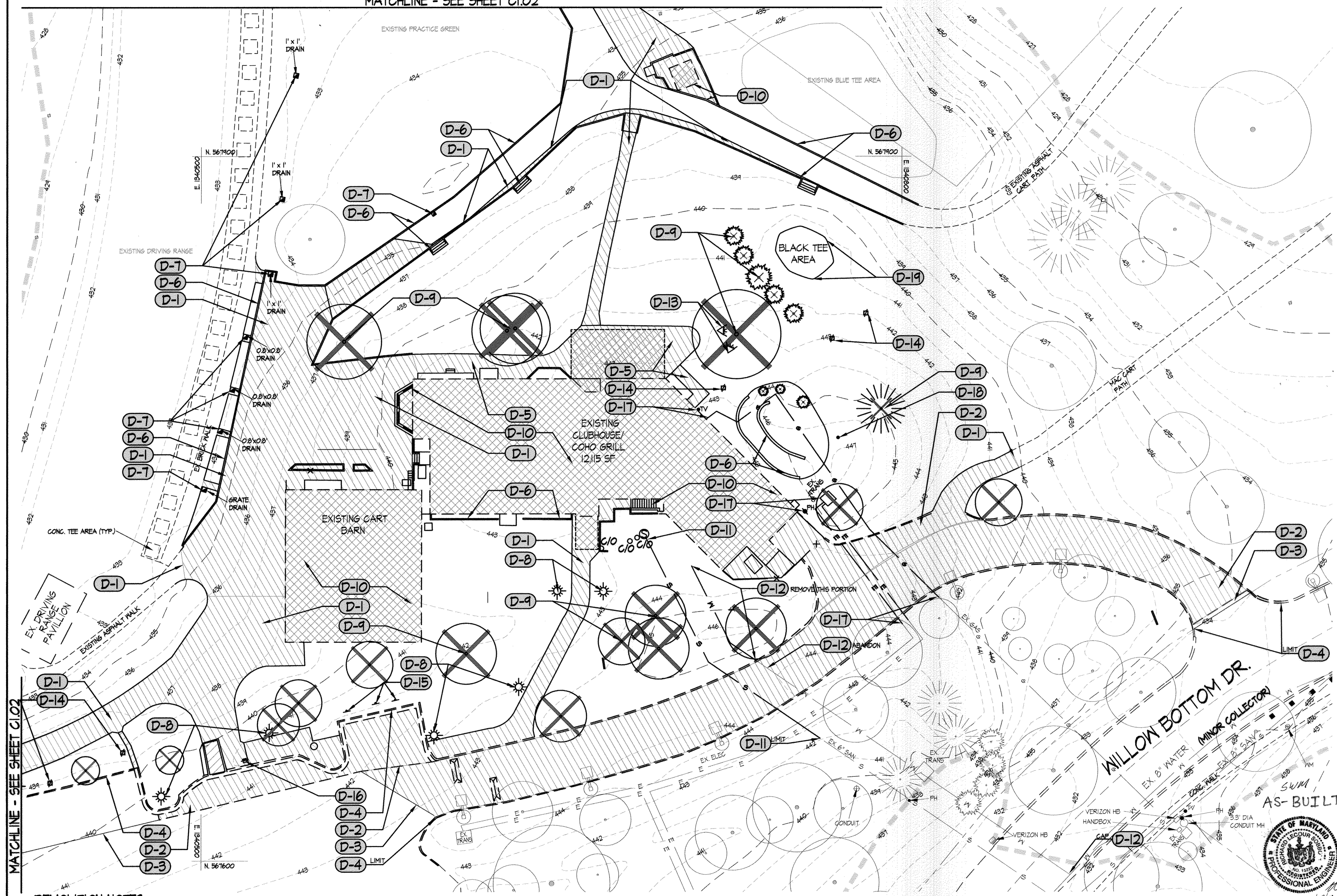
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 DATE: 12/19/2013

ADDRESS CHART		PERMIT INFORMATION CHART			
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	GENUS TRACT
8/135	1180 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1	8/135	603502
		PLAT # OR L/F	GRID #	ZONING	TAX MAP NO. ELECTION DISTRICT
		4308 4304	NA	NT-05	21 5TH
		WATER CODE	SEWER CODE		
		214 M45	214 M45		

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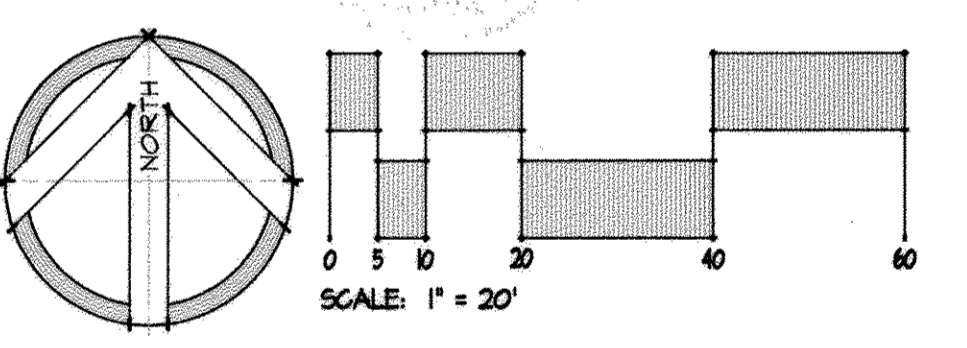
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		4308 4304	NA	NT-05	21 5TH
		WATER CODE	SEWER CODE		
		214 M45	214 M45		



LEGEND

	PROPERTY LINE
	EXISTING CONTOURS
	EXISTING TREES TO REMAIN
	EXISTING TREES TO BE REMOVED
	EXISTING SHRUBS TO REMAIN
	EXISTING SHRUBS TO BE REMOVED
	EXISTING WALK TO REMAIN
	EXISTING ROAD TO REMAIN
	EXISTING CURB TO REMAIN
	EXISTING CURB TO BE REMOVED
	EXISTING PAVING TO BE REMOVED
	EXISTING 15" SD DRAIN TO REMAIN
	EXISTING 15" SD DRAIN TO BE REMOVED
	EXISTING 6" WATER TO REMAIN
	EXISTING 6" WATER TO BE REMOVED
	EXISTING 8" SANITARY SEWER TO REMAIN
	EXISTING 8" SANITARY SEWER TO BE REMOVED
	EXISTING 2" GAS TO REMAIN
	EXISTING 2" GAS TO BE REMOVED
	EXISTING TELEPHONE TO REMAIN
	EXISTING TELEPHONE TO BE REMOVED
	EXISTING ELECTRIC TO REMAIN
	EXISTING ELECTRIC TO BE REMOVED
	EXISTING LIGHTING TO REMAIN
	EXISTING LIGHTING TO BE REMOVED
	EXISTING FENCE TO BE REMOVED
	EXISTING BUILDING TO REMAIN
	EXISTING BUILDING TO BE DEMOLISHED & REMOVED
	FIELD RUN SURVEY LIMITS



DEMOLITION NOTES (THESE NOTES APPLY TO THIS SHEET ONLY)

- | | | | | | |
|---|--|---|--|---|---|
| D-1 SAWCUT & REMOVE EXISTING WALKWAY INCLUDING BASE MATERIAL. | D-4 REMOVE EXISTING CURB AT LIMITS OF REMOVAL & PROTECT REMAINING CURB FROM DAMAGE. | D-7 REMOVE EXISTING INLET AND ASSOCIATED STORM DRAIN. CAREFULLY REMOVE STORM DRAIN PIPE, ENSURING NOT TO DAMAGE ANY CROSSING UTILITIES. CAP AT NEAREST STORM MAIN SHOWN TO REMAIN. | D-9 REMOVE TREE, GRIND & REMOVE ROOT MAT AS NOTED IN SPECIFICATIONS. | D-15 CAREFULLY REMOVE SIGNS, SALVAGE, PROTECT & STORE AT LOCATION DETERMINED BY OWNER. | D-18 CAREFULLY REMOVE BIRDHOUSE. SALVAGE, PROTECT & STORE AT LOCATION DETERMINED BY OWNER. |
| D-2 SAWCUT & REMOVE EXISTING ROAD INCLUDING BASE MATERIAL. | D-5 REMOVE EXISTING PATIO INCLUDING BASE MATERIAL. | D-8 CAREFULLY REMOVE LIGHT POLE. SALVAGE, PROTECT & STORE AT LOCATION DETERMINED BY OWNER. | D-10 REMOVE BUILDING AND ALL ASSOCIATED ITEMS ENTIRELY. CONSULT WITH ARCHITECT AND OWNER TO DETERMINE ANY ITEMS TO BE SALVAGED PRIOR TO DEMOLITION. | D-16 REMOVE & SALVAGE TRASH RECEPTACLE, MOVE TO NEW LOCATION DETERMINED BY OWNER. | D-19 REMOVE BLACK TEE & ASSOCIATED UNDERDRAINS. ALL SOILS EXCAVATED FROM TEE BOX SHALL BE KEPT SEPARATE FROM SURROUNDING EXCAVATED SOILS AND USED ONLY IN THE CONSTRUCTION OF THE NEW BLACK TEE BOX. |
| D-3 SAWCUT & REMOVE EXISTING ROAD TO BASE MATERIAL. KEEP BASE INTACT FOR FUTURE PAVING INSTALLATION. | D-6 DEMOLISH & REMOVE RETAINING WALL / TIMBER CURB. | D-11 CAREFULLY REMOVE SANITARY STRUCTURE & LINE TO POINT SHOWN. CLEAN & PREPARE FOR FUTURE CONNECTION. | D-12 CUT & CAP WATER LINE AT POINT SHOWN ON PLAN. REMOVE / ABANDON REMAINING PORTION AS NOTED. | D-17 SEE M.E.P. PLANS FOR ALL INFORMATION ON ELECTRICAL, GAS & COMMUNICATION LINES & STRUCTURES. | |
| | | D-13 CAREFULLY REMOVE LANDSCAPE LIGHT POLE. SALVAGE, PROTECT & STORE AT LOCATION DETERMINED BY OWNER. | D-14 REMOVE IRRIGATION HEADS & LINES. CONSULT WITH GOLF COURSE MAINTENANCE DIVISION TO DETERMINE LIMITS OF REMOVAL AND CAPPING. | | |

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief Edwards
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 1-17-14 DATE
 1-23-14 DATE
 1/29/14 DATE
 DIRECTOR

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE 09/12/13
 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 Braden for Maura Rossman
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT
 12/19/2013 DATE

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SECTION/AREA	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
PLAT # OR L/F	GRID # ZONING	TAX MAP NO. ELECTION DISTRICT
9308 49304	NA NT-05	24 5TH
WATER CODE	SEWER CODE	GENUS TRACT
214 N45	214 N45	605502

SITE DEMOLITION PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

STATE OF MARYLAND
 PROFESSIONAL ENGINEERING
 12/27/16

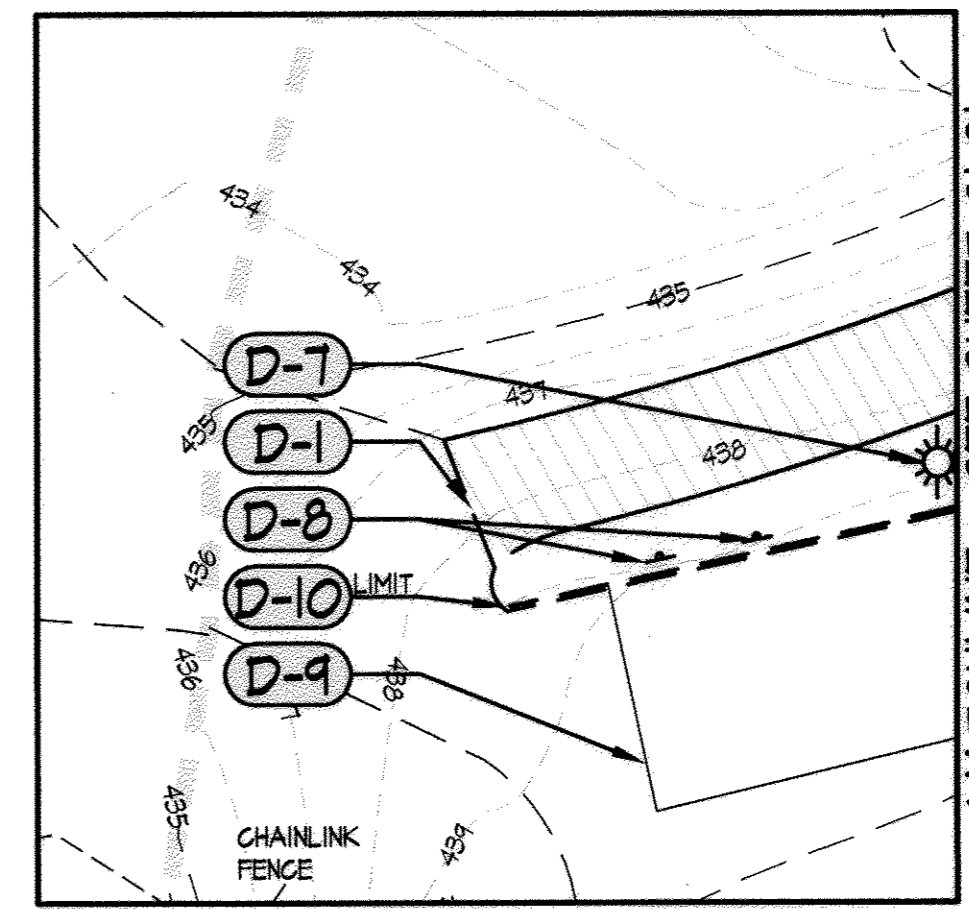
SITE RESOURCES
 Incorporated
 Comprehensive Land Planning & Site Design Services

14815 Invertonville Pike • Phoenix, Maryland 21131
 (410) 683-3300 • Fax (410) 683-3300

DRAWN BY: AM / FJP
 DESIGNED BY: FJP / JLH
 CHECKED BY: AFE
 DATE: SEPTEMBER 13, 2013

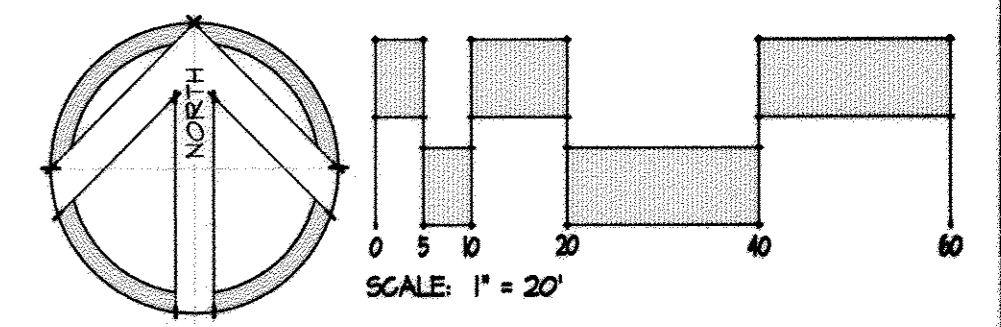
CONTRACT NO.: -
 SCALE: 1"=20'
 SRI PROJECT NO.: 11054
 SHEET C1.01 3 OF 38

MATCHLINE - SEE SHEET C1.03



- LEGEND**
- PROPERTY LINE
 - EXISTING CONTOURS
 - CRITICAL ROOT ZONE
 - EXISTING TREES TO REMAIN
 - EXISTING TREES TO BE REMOVED
 - EXISTING SHRUBS TO REMAIN
 - EXISTING SHRUBS TO BE REMOVED
 - EXISTING WALK TO REMAIN
 - EXISTING ROAD TO REMAIN
 - EXISTING CURB TO REMAIN
 - EXISTING CURB TO BE REMOVED
 - EXISTING PAVING TO BE REMOVED
 - EX 15" SD
 - EX 12" SD
 - EX 6" WATER
 - EX 6" WATER
 - EX 8" SAN
 - EX 8" SAN
 - EX 2" GAS
 - EX 2" GAS
 - EX TELE
 - EX TELE
 - EX ELEC
 - EX ELEC
 - EXISTING LIGHTING TO REMAIN
 - EXISTING LIGHTING TO BE REMOVED
 - FIELD RUN SURVEY LIMITS

SWM AS-BUILT



SITE DEMOLITION PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC. REVISIONS

DEMOLITION NOTES: (THESE NOTES APPLY TO THIS SHEET ONLY)

- D-1 SAN CUT & REMOVE EXISTING WALKWAY INCLUDING BASE MATERIAL.
- D-2 DEMOLISH & REMOVE RETAINING WALL.
- D-3 REMOVE TREE, GRIND & REMOVE ROOT MAT AS NOTED IN SPECIFICATIONS.
- D-4 CAREFULLY REMOVE LANDSCAPE LIGHT POLE. SALVAGE, PROTECT & STORE AT LOCATION DETERMINED BY OWNER.
- D-5 REMOVE IRRIGATION HEADS & LINES. CONSULT WITH GOLF COURSE MAINTENANCE DIVISION TO DETERMINE LIMITS OF REMOVAL AND GAPPING.
- D-6 SEE M.E.P. PLANS FOR ALL INFORMATION ON ELECTRICAL, GAS & COMMUNICATION LINES & STRUCTURES.
- D-7 CAREFULLY REMOVE LIGHT POLE. SALVAGE, PROTECT & STORE AT LOCATION DETERMINED BY OWNER.
- D-8 CAREFULLY REMOVE SIGNS. SALVAGE, PROTECT & STORE AT LOCATION DETERMINED BY OWNER.
- D-9 SANIT & REMOVE EXISTING ROAD TO BASE MATERIAL. KEEP BASE INTACT FOR FUTURE PAVING INSTALLATION.
- D-10 REMOVE EXISTING CURB AT LIMITS OF REMOVAL & PROTECT REMAINING CURB FROM DAMAGE.
- D-11 REMOVE PLANT MATERIALS WITHIN RETAINING WALL. PROTECT FLAG POLE TO REMAIN.

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 09/12/13
 [Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 DATE: 12/18/2013

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	1180 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
PLAT # OR L/F	GRID #	ZONING
9308 49309	NA	NT-05
TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
24	5TH	605502
WATER CODE	SEWER CODE	
214 M45	214 M45	

14315 Jurettville Pike • Plover, Maryland 21131
 (410) 683-3388 • Fax (410) 683-3389

DRAWN BY: AM / FJP
 DESIGNED BY: FJP / JLH
 CHECKED BY: AFE
 DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
 SCALE: 1"=20'
 SRI PROJECT NO.: 11059
 SHEET C1.02 4 OF 38

MATCHLINE - SEE SHEET C1.12

CURVE TABLE

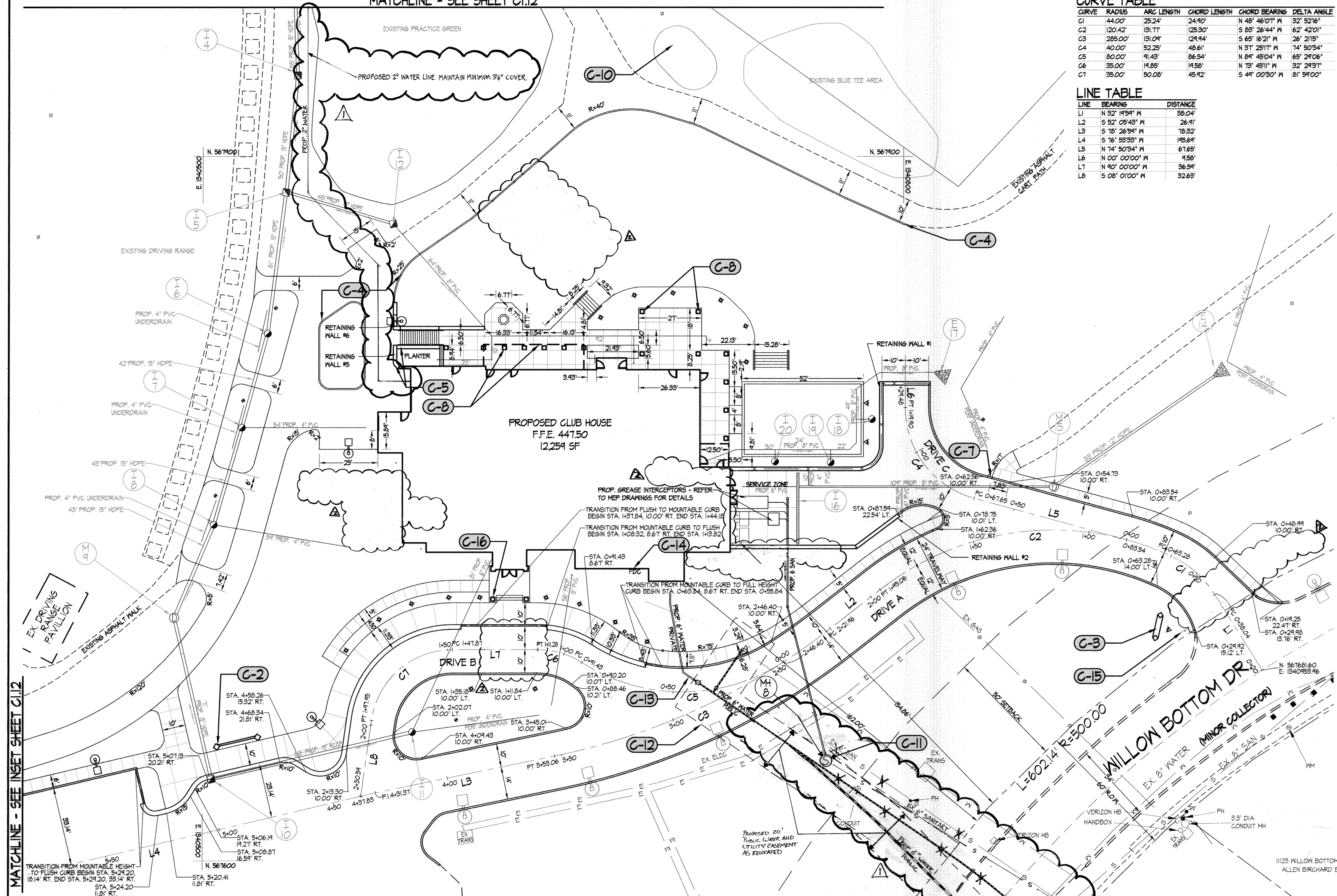
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	44.00'	25.24'	24.90'	N 48° 46'01" W	32° 52'16"
C2	120.42'	191.77'	125.90'	S 83° 26'44" N	62° 42'01"
C3	285.00'	191.04'	124.94'	S 65° 16'21" N	26° 21'15"
C4	40.00'	52.25'	48.61'	N 31° 25'11" N	14° 50'34"
C5	80.00'	91.43'	86.54'	N 84° 45'04" N	65° 29'06"
C6	35.00'	14.85'	14.58'	N 13° 48'11" N	32° 29'31"
C7	35.00'	50.06'	45.42'	S 44° 00'30" W	81° 54'00"

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 32° 14'54" W	38.04'
L2	S 52° 05'43" W	26.91'
L3	S 18° 26'54" N	78.32'
L4	S 16° 53'33" N	145.64'
L5	N 14° 50'34" N	67.65'
L6	N 00° 00'00" W	4.50'
L7	N 40° 00'00" N	36.54'
L8	S 08° 01'00" W	32.63'

LEGEND

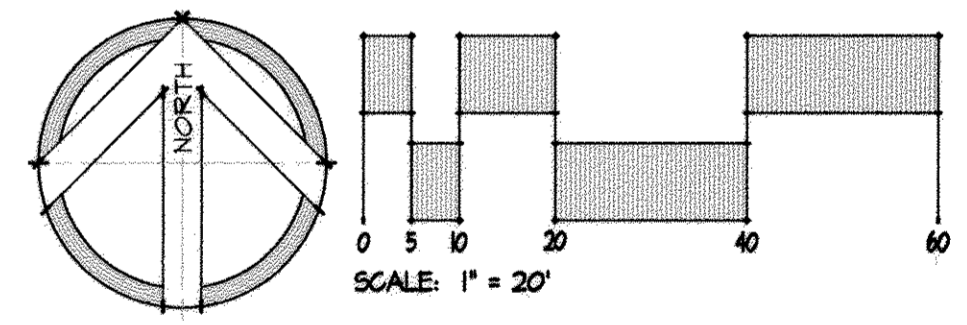
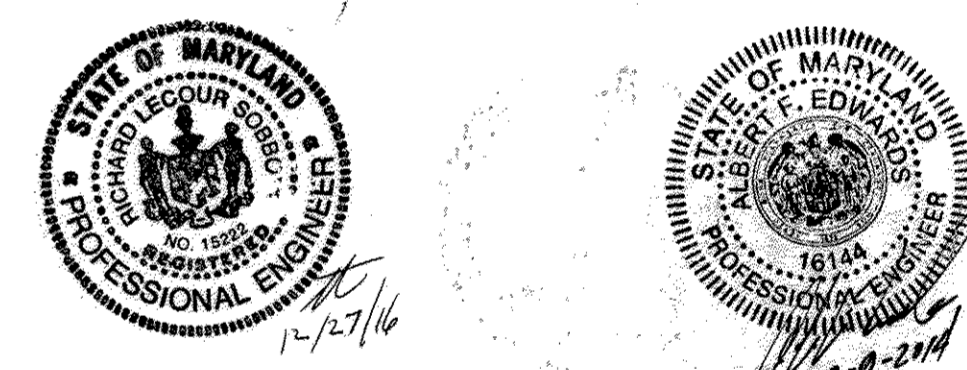
- PROPERTY LINE
- EXISTING WALK
- EXISTING ROAD
- ===== EXISTING CURB
- EX. 15" SD
- EX. 6" WATER
- EX. 8" SAN
- EX. 2" GAS
- EX. ELEC
- EXISTING LIGHTING
- PROPOSED CONCRETE WALK
- PROPOSED BUILDING
- PROP. 15" SD
- PROP. 6" WATER
- PROP. 8" SAN
- PROPOSED STORM DRAIN
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED LIGHTING
- PROPOSED ROAD



THIS SEAL IS FOR REVISION 2 BY SITE RESOURCES, INC. 12/5/2014

AS-BUILT

THIS SEAL IS FOR REVISION 1 BY SITE RESOURCES, INC.



MATCHLINE - SEE INSET SHEET C1.12

SITE LAYOUT PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

10.31.2014 RETAINING WALL ADJUSTMENTS AND VARIOUS SITE FEATURES

10/8/2014 WATER LINE RELOCATION



SITE RESOURCES
Comprehensive Land Planning & Site Design Services

14315 Jarrville Pike • Phoenix, Maryland 21131
(410) 683-3300 • Fax (410) 683-3300

DRAWN BY: AM / FJP
DESIGNED BY: FJP / JLH
CHECKED BY: AFE
DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
SCALE: 1" = 20'
SRI PROJECT NO.: 11054
SHEET C1.11 5 OF 30

LAYOUT NOTES (THESE NOTES APPLY TO THIS SHEET ONLY)

- C-1 UNLESS OTHERWISE SHOWN ON PLAN, ALL PAVING RADII SHALL BE 5'.
- C-2 PROPOSED BAG DROP WALL.
- C-3 PROPOSED ENTRY MALL.
- C-4 PROPOSED LANDSCAPE CURB. SEE DETAIL SHEET C2.03.
- C-5 PROPOSED RETAINING WALL REFER TO ARCHITECTURAL & STRUCTURAL ENGINEERING DRAWINGS & DETAILS IN THIS SET.
- C-6 PROPOSED BLACK TEE. SEE SPECIFICATIONS FOR CONSTRUCTION DETAILS.
- C-7 PROPOSED DEPRESSED CURB. BEGIN STA. 0+54.73. END STA. 0+62.56.
- C-8 BUILDING ELEMENTS TO BE DETAILED BY ARCHITECTURE PLANS AND REVIEWED AS PART OF THE BUILDING PERMIT.
- C-9 REFER TO ARCHITECTURE PLANS FOR ALL LIGHTING INFORMATION & MEP PLANS FOR ELECTRICAL DESIGN.
- C-10 PROPOSED BLACK TEE.
- C-11 CONTRACTOR TO TEST PIT TO LOCATE THE SANITARY LINE IN THIS AREA & NOTIFY THE CIVIL ENGINEER WITH COORDINATES & INVERT INFORMATION. THIS MUST BE COMPLETED AS THE FIRST ITEM OF BUSINESS. SEE GENERAL NOTES.
- C-12 LIMITS OF PROPOSED WATER LINE TO BE INSTALLED UNDER AN ADVANCED DEPOSIT ORDER (ADO).
- C-13 PROPOSED PRIVATE WATER LINE & ASSOCIATED INDOOR METER, NOT INCLUDED WITH ADO SUBMISSION.
- C-14 PROPOSED FDC CONNECTION REFER TO ARCHITECTURE PLANS FOR ADDITIONAL INFORMATION.
- C-15 EXISTING STOP SIGN TO REMAIN.
- C-16 KNOX BOX 3200 SERIES TO BE MOUNTED ON VESTIBULE COLUMN.

APPROVED: DEPARTMENT OF PLANNING & ZONING
Chief, Development Engineering Division
DATE: 12/17/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 9/12/13

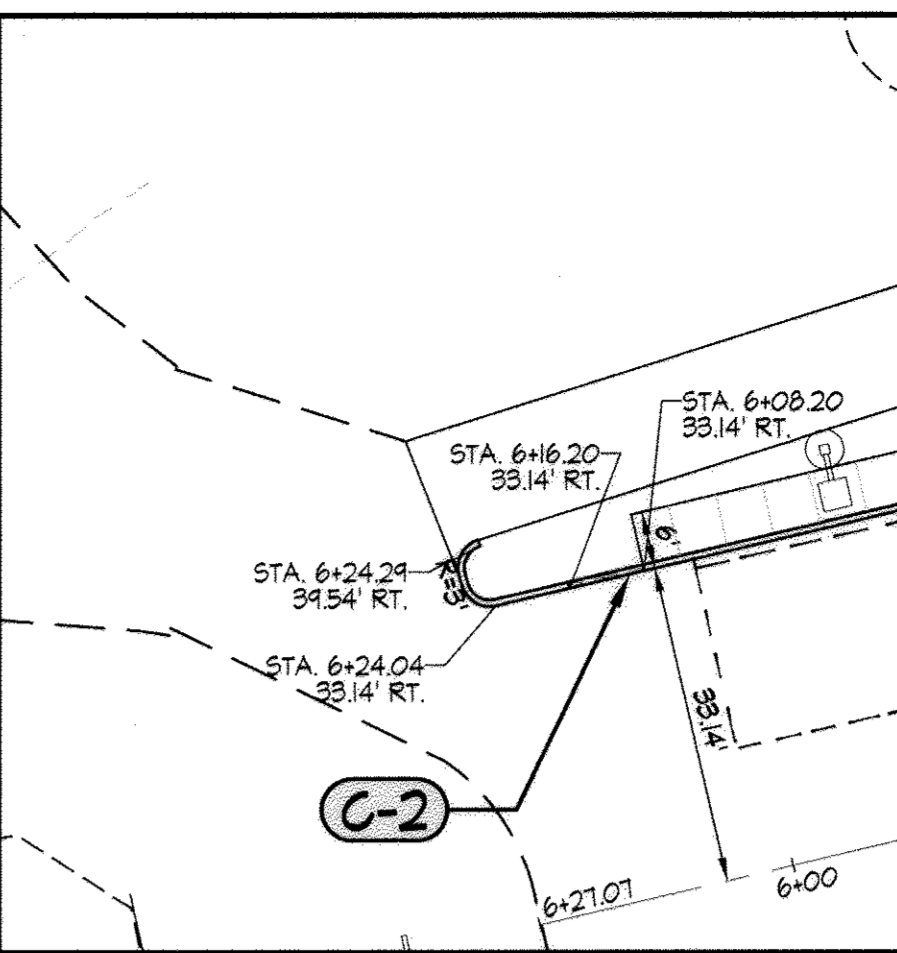
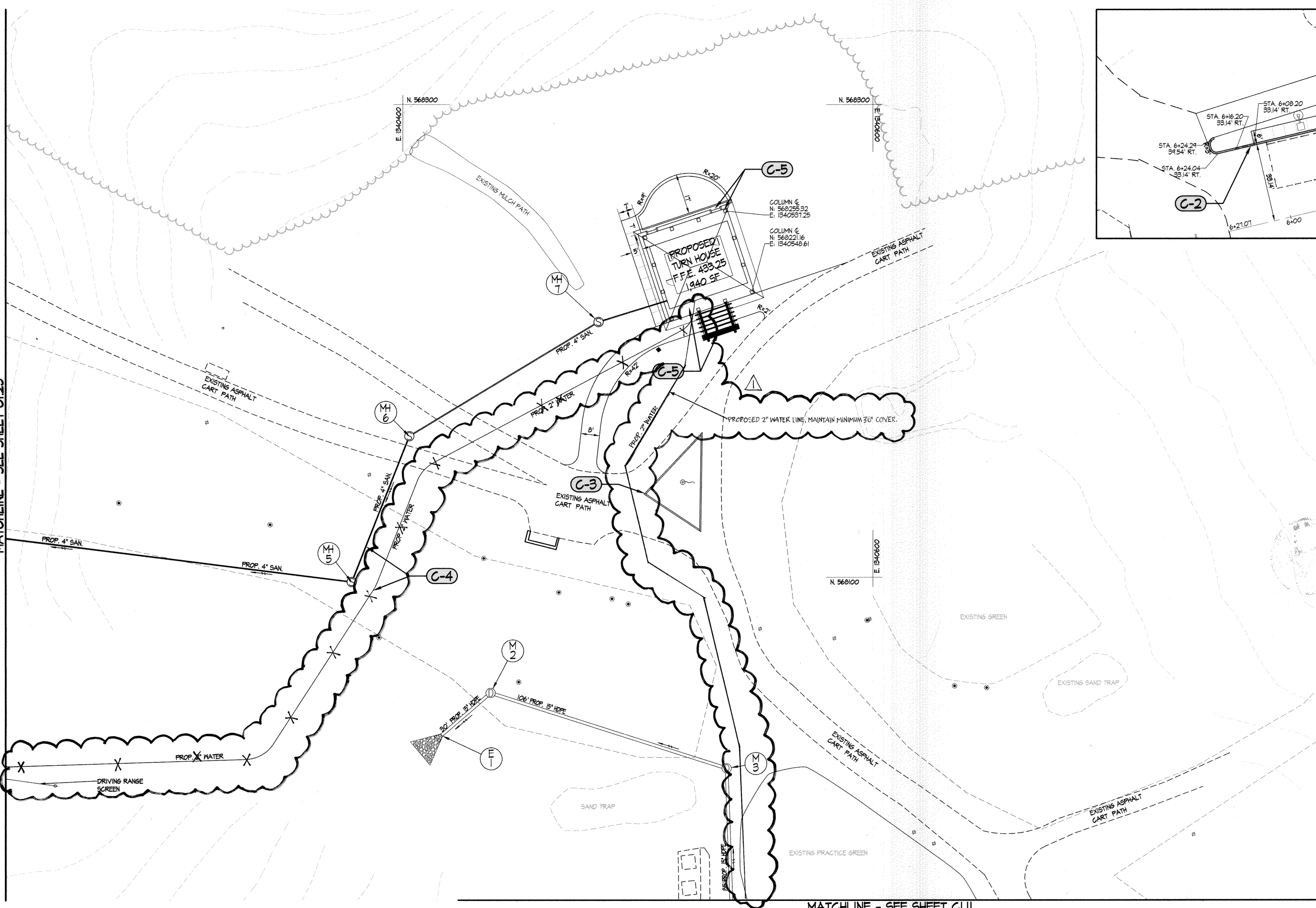
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
B. Niles for Maria Roseman
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 12/17/13

APPROVED: ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART	
SUBDIVISION NAME VILLAGE OF HARPERS CHOICE	SECTION/AREA 2/1
PLAT # OR L/F 4303 & 4304	GRID # NA
ZONING NT-05	TAX MAP NO. 29
WATER CODE 214 N45	SEWER CODE 214 N45
LOT/PARCEL NO. 8/135	ELECTION DISTRICT 5TH
CENSUS TRACT 605502	

MATCHLINE - SEE SHEET C1.23



MATCHLINE - SEE SHEET C1.11

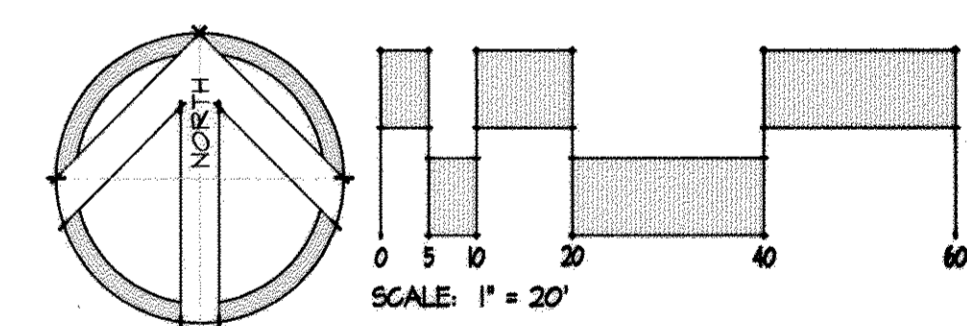
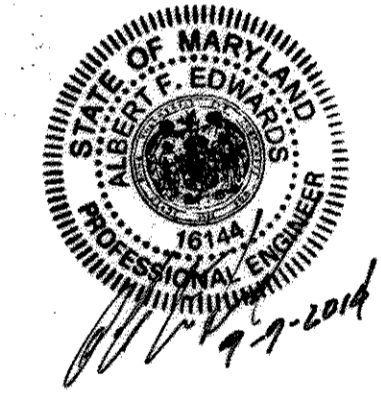
LEGEND

---	PROPERTY LINE
- - - -	EXISTING MALK
- - - -	EXISTING ROAD
====	EXISTING CURB
⊙	EX. 15" SD
⊙	EX. 6" WATER
⊙	EX. 8" SAN
⊙	EX. ELEC
⊙	EXISTING STORM DRAIN
⊙	EXISTING WATER
⊙	EXISTING SANITARY SEWER
⊙	EXISTING ELECTRIC
⊙	EXISTING LIGHTING
▭	PROPOSED CONCRETE MALK
▭	PROPOSED GUARDRAIL
▭	PROPOSED FLAGPOLE
⊙	PROPOSED 15" SD
⊙	PROPOSED STORM DRAIN
⊙	EXISTING IRRIGATION TO REMAIN

SWM
AS-BUILT



THIS SEAL IS FOR REVISION 1 BY SITE RESOURCES, INC.



SITE LAYOUT PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
REVISIONS

10/21/2014 WATER LINE RELOCATION



SITE RESOURCES
INCORPORATED
Comprehensive Land Planning & Site Design Services

14315 Jerrillville Pike • Phoenix, Maryland 21131 (410) 683-3388 • fax (410) 683-3380	CONTRACT NO.:
DRAWN BY: AM / FJP	SCALE: 1"=20'
DESIGNED BY: FJP / JLH	SRI PROJECT NO: 11054
CHECKED BY: AFE	SHEET C1.12
DATE: SEPTEMBER 13, 2013	6 OF 30

LAYOUT NOTES (THESE NOTES APPLY TO THIS SHEET ONLY)

- C-1** UNLESS OTHERWISE SHOWN ON PLAN, ALL PAVING RADII SHALL BE 5'
- C-2** TRANSITION FROM FLUSH CURB TO FULL HEIGHT CURB. BEGIN STA. 6+10.74, END 6+13.74.
- C-3** PROPOSED LANDSCAPE CURB. SEE DETAIL SHEET C2.09.
- C-4** SEE WATER & SEWER PLANS FOR PROFILES.
- C-5** TURN HOUSE, COVERED PORCH, STAIRS AND TRELIS STRUCTURE. REFER TO ARCHITECTURE PLANS FOR ADDITIONAL INFORMATION.

APPROVED: DEPARTMENT OF PLANNING & ZONING
Paul K. Coyle 1/29/14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE **9/12/13**
EM

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 DATE **12/19/2013**
B. Nifon for Manna Rossman
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

MATCHLINE - SEE SHEET C1.11

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	11180 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

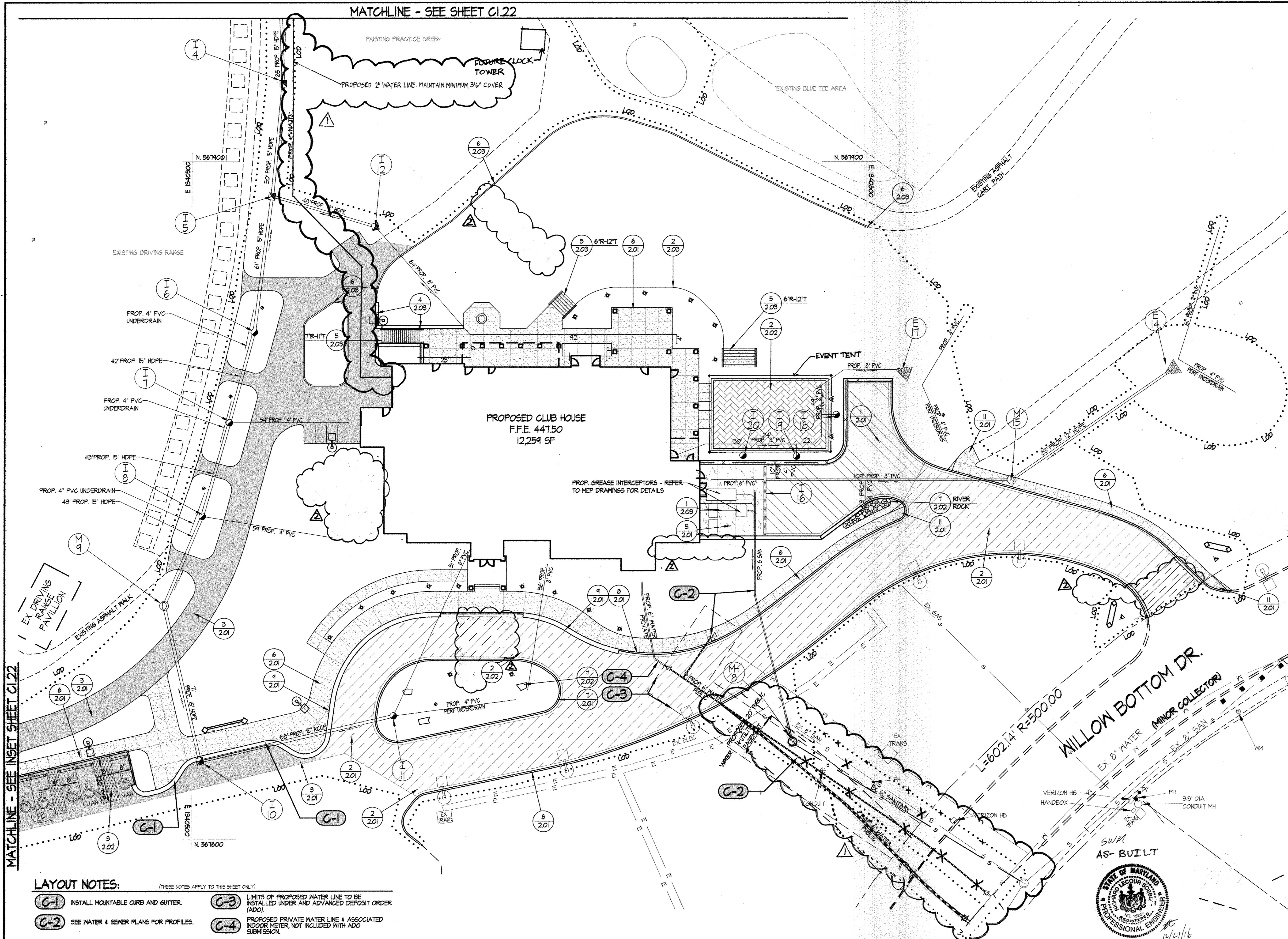
PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
FLAT # OR L/F	GRID #	ZONING
4308 44304	NA	NT-05
TAX MAP NO.	ELECTION DISTRICT	GENUS TRACT
29	5TH	605502
WATER CODE	SEWER CODE	
214 M45	214 M45	

MATCHLINE - SEE SHEET C1.22

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EX. 15" SD EXISTING STORM DRAIN
- EX. 6" WATER EXISTING WATER
- EX. 8" SAN EXISTING SANITARY SEWER
- EX. ELEC EXISTING ELECTRIC
- EX. ELEC OHN EXISTING OVERHEAD ELECTRIC
- EXISTING LIGHTING
- EX. COM EXISTING COMMUNICATIONS
- EX. CATV EXISTING CABLE TV
- PROPOSED CONCRETE WALK
- PROPOSED HEAVY DUTY CONCRETE ROAD
- PROPOSED HEAVY DUTY ASPHALT ROAD
- PROPOSED INTERMEDIATE DUTY ASPHALT ROAD-FULL DEPTH
- PROPOSED LIGHT DUTY ASPHALT ROAD
- PROPOSED PAVERS
- PROPOSED FENCE
- PROPOSED BUILDING
- PROP. 15" SD PROPOSED STORM DRAIN
- PROP. 6" WATER PROPOSED WATER
- PROP. 8" SAN PROPOSED SANITARY SEWER
- PROPOSED LIGHTING
- LOD LIMIT OF DISTURBANCE



Professional Engineer seals for Maryland and the District of Columbia. The Maryland seal is for Edward J. Edwards, License No. 12-5-2014. The D.C. seal is for Site Resources, Inc., License No. 12-5-2014. A north arrow and a graphic scale (1" = 20') are also present.

DETAIL REFERENCE PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
 REVISIONS
 10.31.2014 RETAINING WALL ADJUSTMENTS AND VARIOUS SITE FEATURES
 10/21/2014 WATER LINE RELOCATION

Professional Engineer seal for Edward J. Edwards, License No. 12-5-2014. SITE RESOURCES logo and contact information: 14315 Jarrattville Pike • Phoenix, Maryland 21131 (410) 683-3308 • Fax (410) 683-3309. Project details: DRAWN BY: AM / FJP, DESIGNED BY: FJP / JLH, CHECKED BY: AFE, DATE: SEPTEMBER 13, 2013, SHEET C1.21, 1 OF 38.

LAYOUT NOTES: (THESE NOTES APPLY TO THIS SHEET ONLY)
 C-1 INSTALL MOUNTABLE CURB AND GUTTER.
 C-2 SEE WATER & SEWER PLANS FOR PROFILES.
 C-3 LIMITS OF PROPOSED WATER LINE TO BE INSTALLED UNDER AND ADVANCED DEPOSIT ORDER (ADO).
 C-4 PROPOSED PRIVATE WATER LINE & ASSOCIATED INDOOR METER, NOT INCLUDED WITH ADO SUBMISSION.

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 9/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 HOWARD COUNTY HEALTH DEPARTMENT

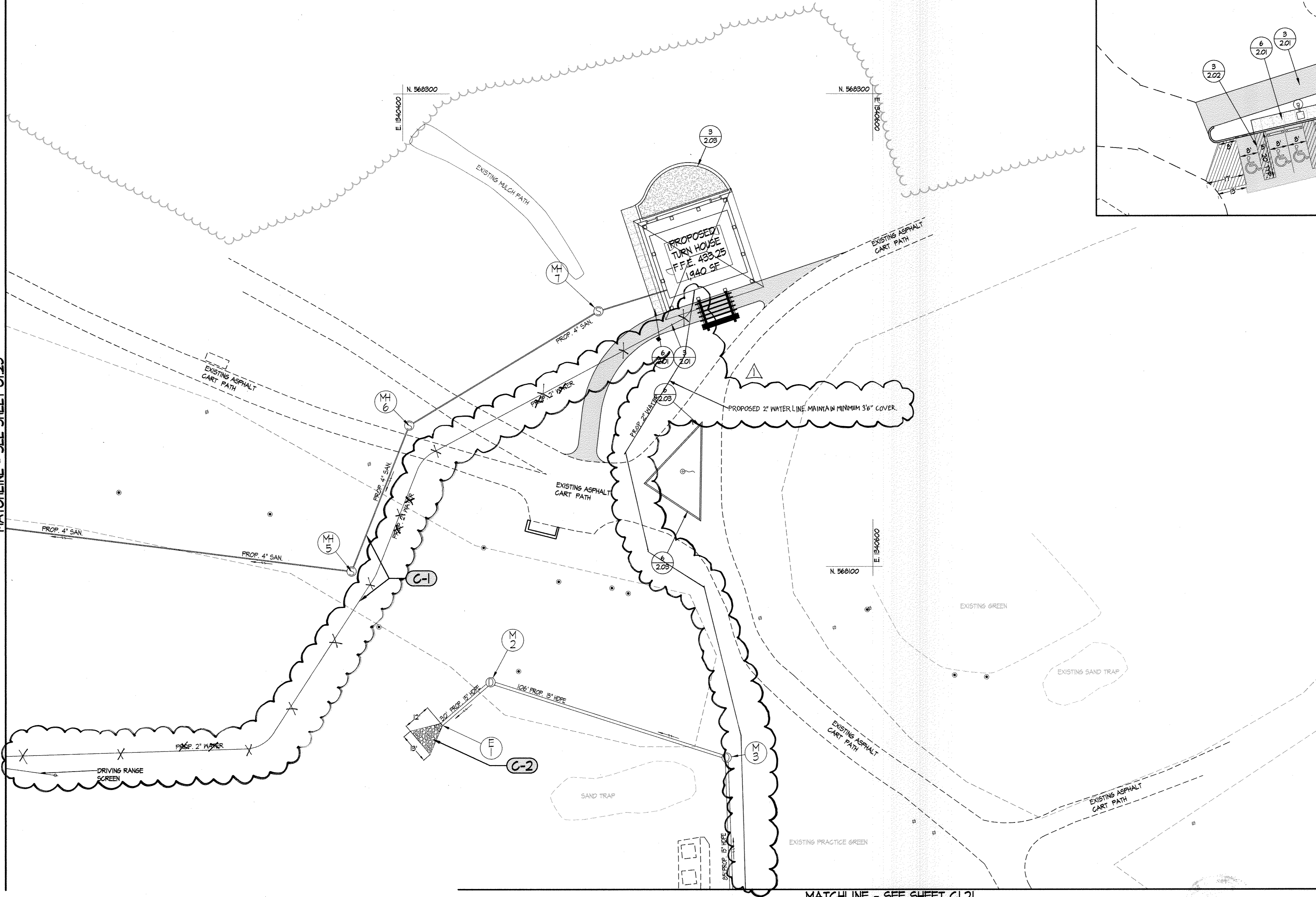
ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
FLAT # OR L/F	GRID #	ZONING
1300 & 1304	NA	NT-05
TAX MAP NO.	ELECTION DISTRICT	GENUS TRACT
24 N45	5TH	605502
SEWER CODE	24 N45	

MATCHLINE - SEE SHEET C1.23



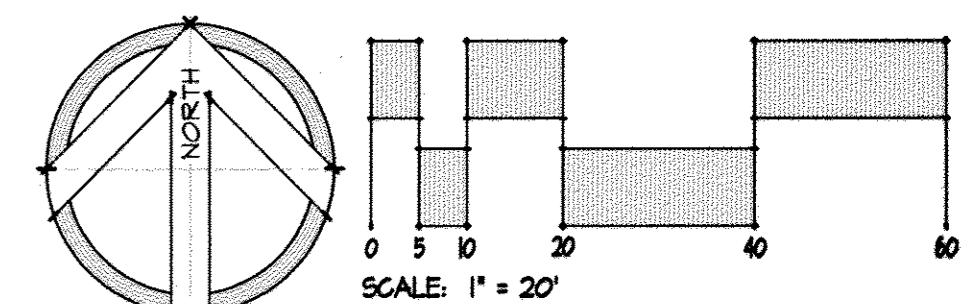
LEGEND

	PROPERTY LINE	
	EXISTING TREELINE	
	EXISTING MALK	
	EXISTING ROAD	
	EXISTING CURB	
	EX. 15" SD	EXISTING STORM DRAIN
	EX. 6" WATER	EXISTING WATER
	EX. 8" SAN	EXISTING SANITARY SEWER
	EX. ELEC	EXISTING ELECTRIC
	EX. ELEC OHM	EXISTING OVERHEAD ELECTRIC
		EXISTING LIGHTING
	EX. COM	EXISTING COMMUNICATIONS
	EX. CATV	EXISTING CABLE TV
		PROPOSED LIGHT DUTY ASPHALT ROAD
		PROPOSED BUILDING
		DETAIL REFERENCE
	PROP. 15" SD	PROPOSED STORM DRAIN
	PROP. 6" WATER	PROPOSED WATER
	PROP. 8" SAN	PROPOSED SANITARY SEWER

SWM AS-BUILT



THIS SEAL IS FOR REVISION 1 BY SITE RESOURCES, INC.



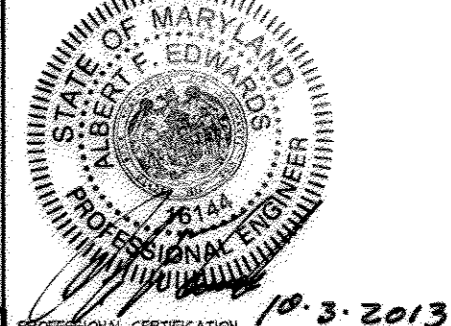
DETAIL REFERENCE PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

10/9/2014 WATER LINE RELOCATION SRZ.



14315 Arrettsville Pike • Poolesville, Maryland 21131 (410) 688-3388 • fax (410) 688-3380	
DRAWN BY: AM / FJP	CONTRACT NO.: -
DESIGNED BY: FJP / JLH	SCALE: 1"=20'
CHECKED BY: AFE	SRI PROJECT NO: 11059
DATE: SEPTEMBER 13, 2013	SHEET C1.22 8 OF 30

LAYOUT NOTES: (THESE NOTES APPLY TO THIS SHEET ONLY)

- C-1** SEE WATER & SEWER PLANS FOR PROFILES.
- C-2** RIP RAP. SEE STORM DRAIN PROFILES FOR ADDITIONAL INFORMATION.

APPROVED: DEPARTMENT OF PLANNING & ZONING
Chad Clark 1/7/14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Keith Blumhagen 1-28-14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Patrick D. Gagliardi 1/29/14
 DIRECTOR DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE *9/12/13*
EM

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
B. Wilson for Maurer Roszman 12/19/2013
 COUNTY HEALTH OFFICER DATE
 HOWARD COUNTY HEALTH DEPARTMENT

MATCHLINE - SEE SHEET C1.21

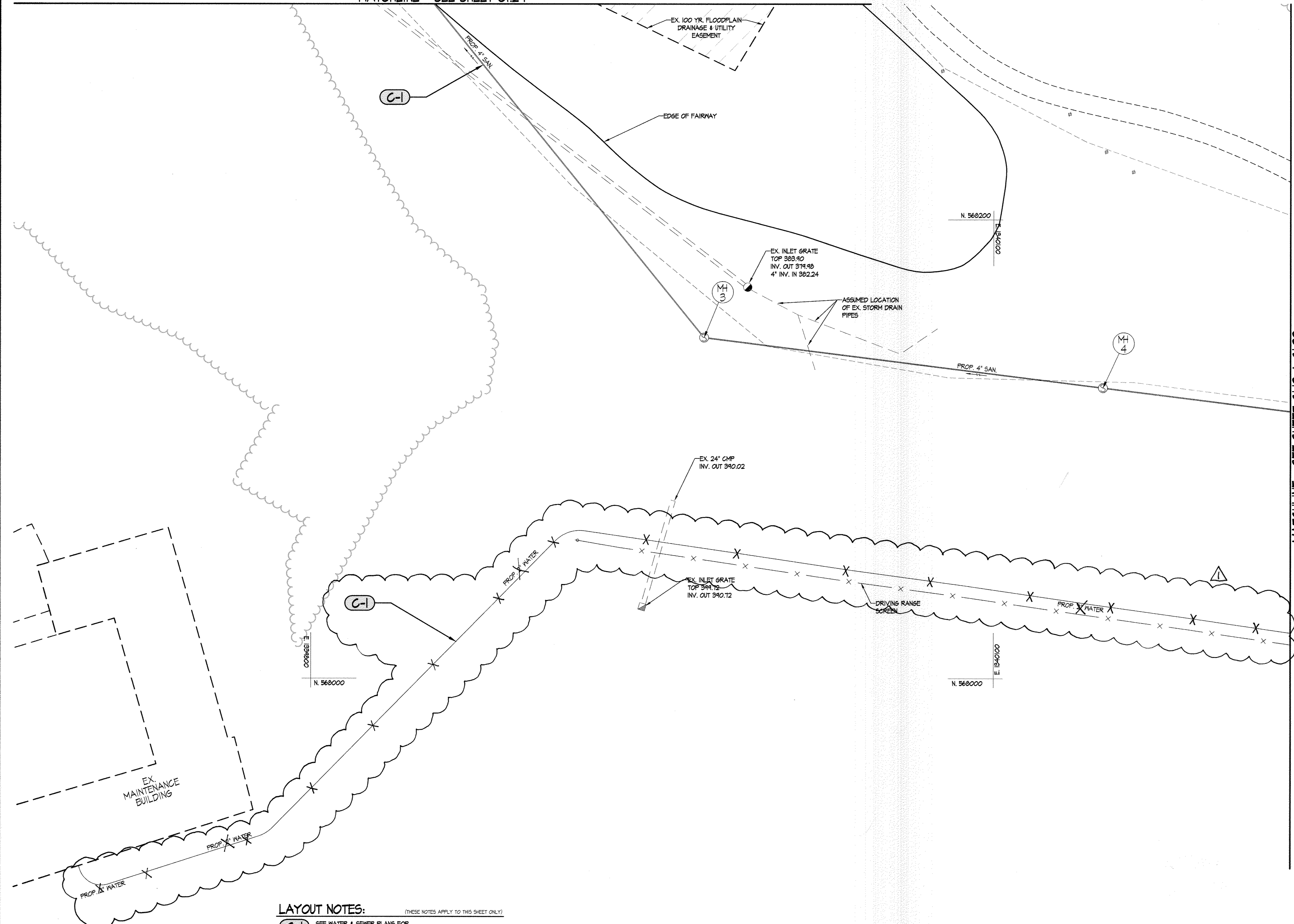
ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	11180 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME VILLAGE OF HARBERS CHOICE	SECTION/AREA 2/1	LOT/PARCEL NO. 8/135
FLAT # OR L/F 4308 41301	GRID # NA	ZONING NT-05
TAX MAP NO. 21	ELECTION DISTRICT 5TH	GENEUS TRACT 602502
WATER CODE 214 M85	SEWER CODE 214 M85	

MATCHLINE - SEE SHEET C1.24



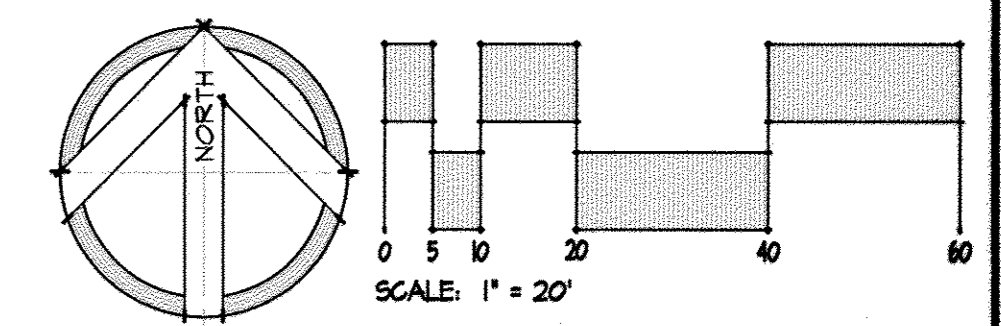
LEGEND

	PROPERTY LINE	
	EXISTING TREELINE	
	EXISTING MALK	
	EXISTING ROAD	
	EXISTING CURB	
	EX. 15" SD	EXISTING STORM DRAIN
	EX. 6" WATER	EXISTING WATER
	EX. 8" SAN	EXISTING SANITARY SEWER
	EX. ELEC	EXISTING ELECTRIC
	EX. ELEC OHV	EXISTING OVERHEAD ELECTRIC
		EXISTING LIGHTING
	EX. COM	EXISTING COMMUNICATIONS
	EX. CATV	EXISTING CABLE TV
		EXISTING BUILDING
	PROP. 15" SD	PROPOSED STORM DRAIN
	PROP. 6" WATER	PROPOSED WATER
	PROP. 8" SAN	PROPOSED SANITARY SEWER

MATCHLINE - SEE SHEET C1.12 & C1.22

SWM
AS-BUILT

THIS SEAL IS FOR REVISION 1 BY SITE RESOURCES, INC.



LAYOUT NOTES: (THESE NOTES APPLY TO THIS SHEET ONLY)
 C-1 SEE WATER & SEWER PLANS FOR PROFILE

DETAIL REFERENCE PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

10/21/2014 WATER LINE RELOCATION

SITE RESOURCES
 Comprehensive Land Planning & Site Design Services

14315 Jaccetowne Pike • Phoenix, Maryland 21151
 (410) 883-3388 • Fax (410) 883-3389

DRAWN BY: FJP / JLH	CONTRACT NO.: -
DESIGNED BY: JLH	SCALE: 1"=20'
CHECKED BY: SRI	SRI PROJECT NO.: 110594
DATE: SEPTEMBER 13, 2013	SHEET C1.23 9 of 38

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 10/7/14 DATE

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development
 1-28-14 DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE 9/12/13
 [Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 [Signature]
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 12/19/2013

ADDRESS CHART

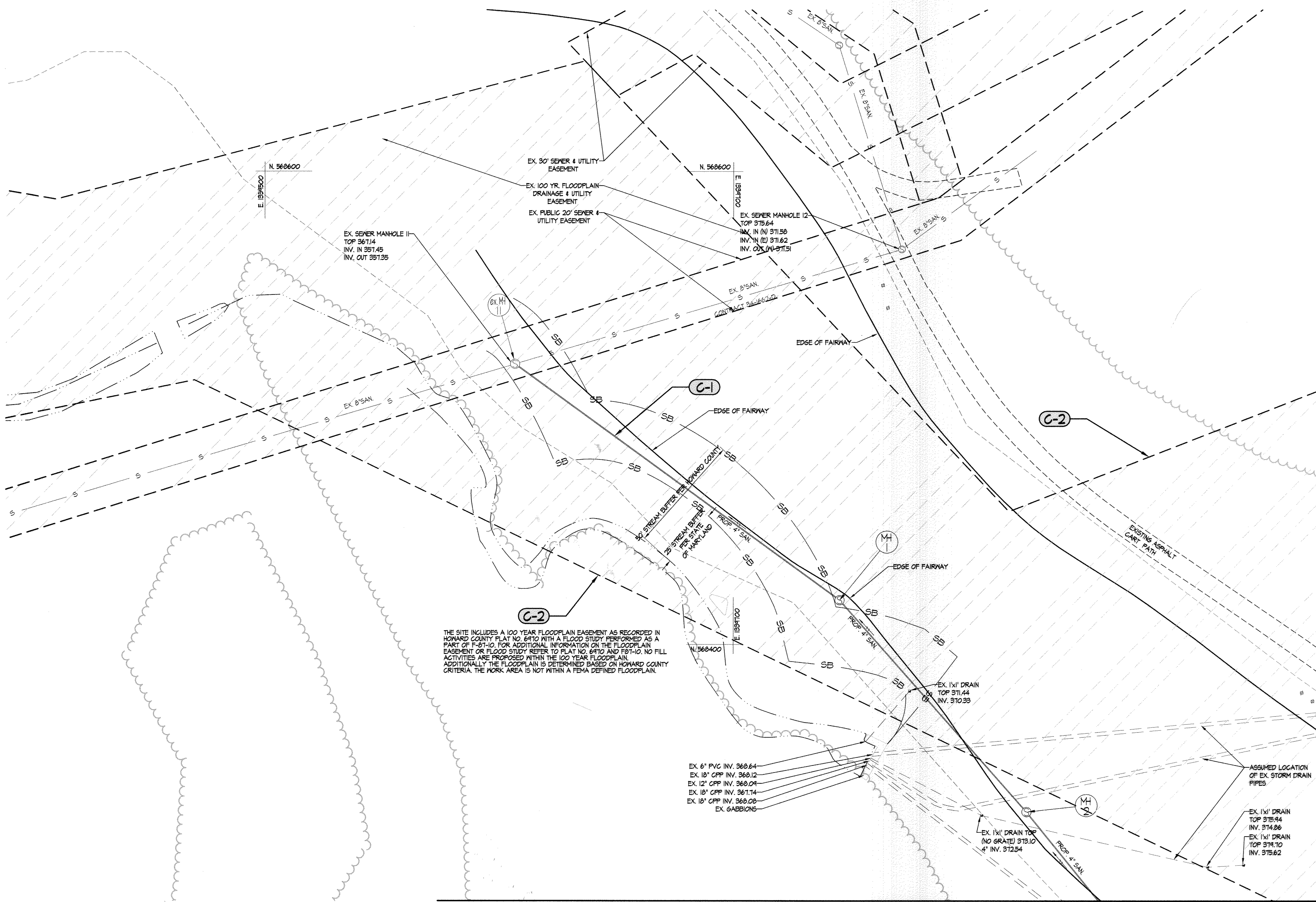
LOT/PARCEL	STREET ADDRESS
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE		2/1	8/135
FLAT # OR L/F	GRID #	ZONING	TAX MAP NO.
4308 49304	NA	NT-05	29
ELECTION DISTRICT		GENUS TRACT	
5TH		605502	
WATER CODE		SEWER CODE	
214 M45		214 M45	

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EX. 15" SD
- EX. 6" WATER
- EX. 8" SAN
- PROP. 8" SAN
- EXISTING STORM DRAIN
- EXISTING WATER
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING STREAM
- EXISTING STREAM BUFFER

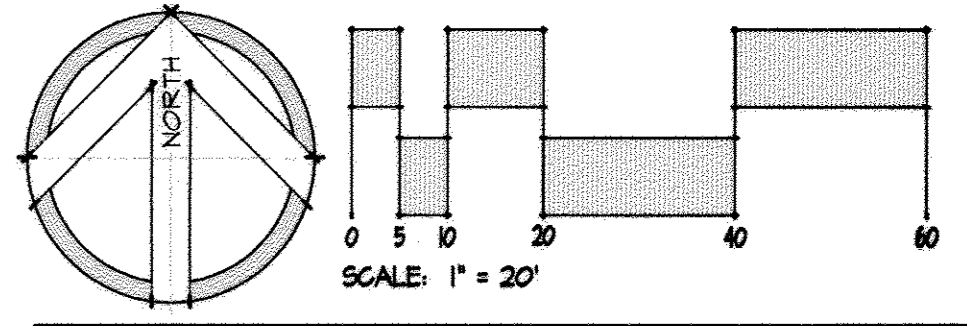


THE SITE INCLUDES A 100 YEAR FLOODPLAIN EASEMENT AS RECORDED IN HOWARD COUNTY FLAT NO. 6410 WITH A FLOOD STUDY PERFORMED AS A PART OF F-87-10. FOR ADDITIONAL INFORMATION ON THE FLOODPLAIN EASEMENT OR FLOOD STUDY REFER TO FLAT NO. 6410 AND F87-10. NO FILL ACTIVITIES ARE PROPOSED WITHIN THE 100 YEAR FLOODPLAIN. ADDITIONALLY THE FLOODPLAIN IS DETERMINED BASED ON HOWARD COUNTY CRITERIA. THE WORK AREA IS NOT WITHIN A FEMA DEFINED FLOODPLAIN.

EX. 6" PVC INV. 368.64
 EX. 18" CPP INV. 368.12
 EX. 12" CPP INV. 368.04
 EX. 18" CPP INV. 361.74
 EX. 18" CPP INV. 368.08
 EX. 6" ABSIONS

MATCHLINE - SEE SHEET C1.23

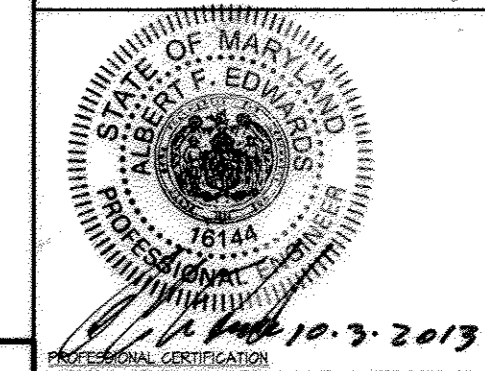
SWM
 AS-BUILT



DETAIL REFERENCE PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
 REVISIONS



SITE RESOURCES
 Comprehensive Land Planning & Site Design Services
 14315 Jurettville Pike • Pikesville, Maryland 21113
 (410) 863-3000 • Fax (410) 863-3000

DRAWN BY: FJP/JLH	CONTRACT NO.: -
DESIGNED BY: FJP/JLH	SCALE: AS SHOWN
CHECKED BY: AFE	SRI PROJECT NO.: 11054
DATE: SEPTEMBER 13, 2013	SHEET C1.24 10 OF 30

LAYOUT NOTES: (THESE NOTES APPLY TO THIS SHEET ONLY)

- C-1** SEE WATER & SEWER PLANS FOR PROFILE.
- C-2** 100 YEAR FLOODPLAIN EASEMENT.

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

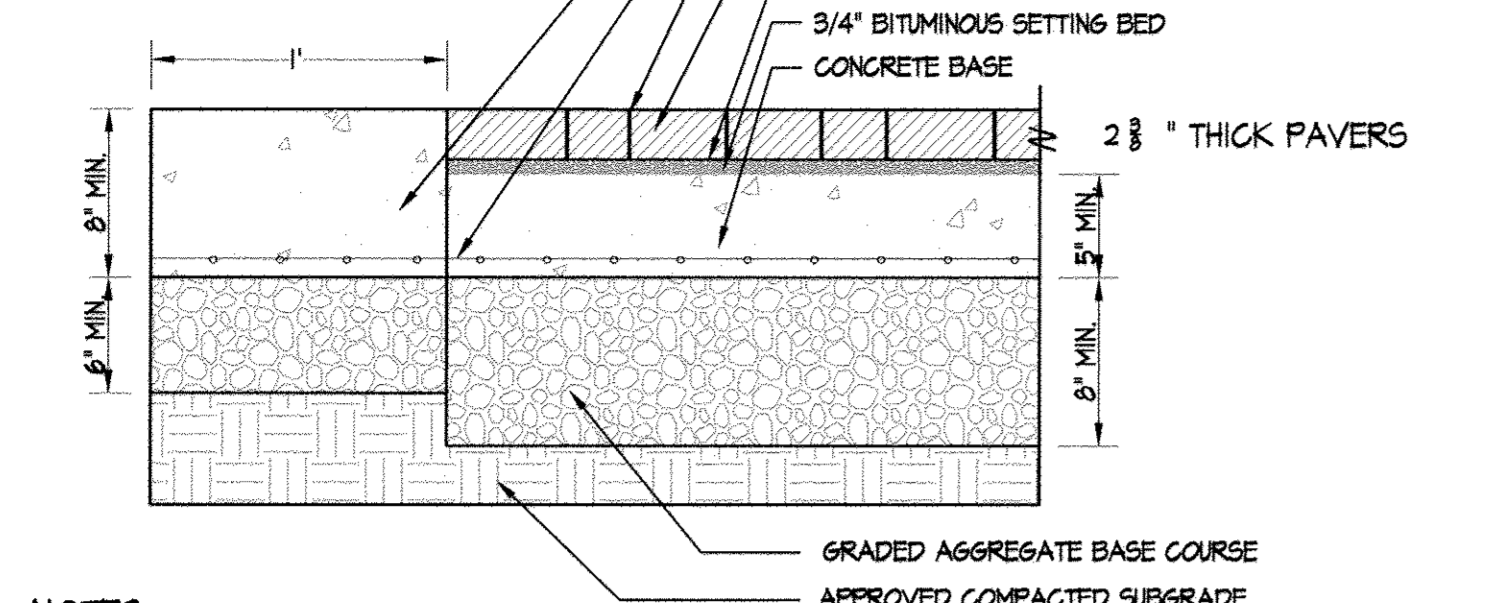
APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 9/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer: MAURICE ROSSMAN
 DATE: 12/19/2013

ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

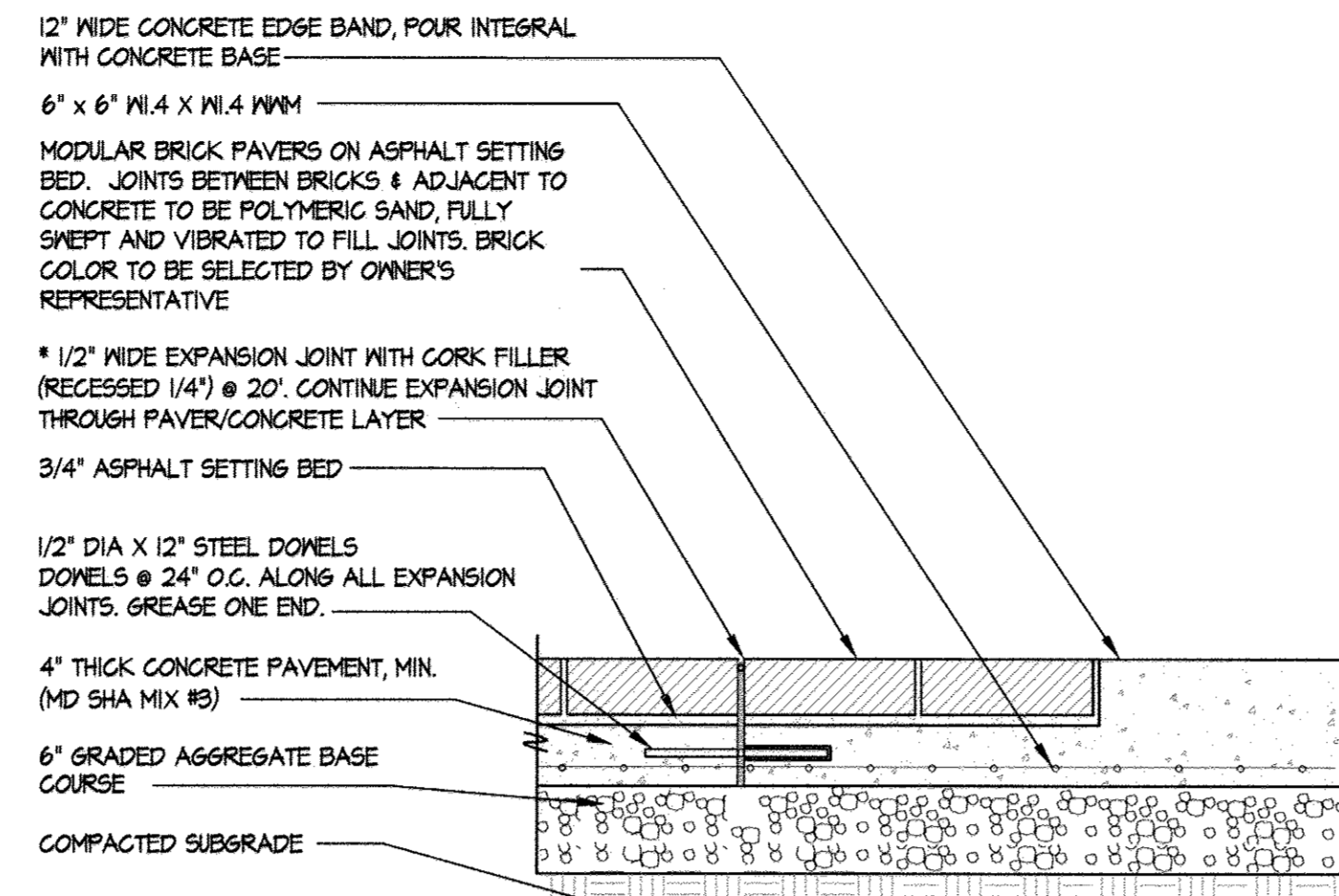
PERMIT INFORMATION CHART			
LOT/PARCEL NO.	SECTION/AREA	TAX MAP NO.	ELECTION DISTRICT
8/135	2/1	29	5TH
FLAT # OR L/F	GRID #	ZONING	GENUS TRACT
4308 49304	NA	NT-05	605502
WATER CODE		SEWER CODE	
214 M45		214 M45	

MANUFACTURER: HANOVER ARCHITECTURAL PRODUCTS
 ADDRESS: 5000 HANOVER ROAD
 HANOVER, PA. 17331
 CONTACT: (P) 717.631.0500
 (F) 717.631.7145
 WEBSITE: WWW.HANOVERPAVERS.COM
 PRODUCT: TRADITION FREST BRICK
 SIZE: 4"x8"
 COLOR: CHOCOLATE / TAN BLEND
 PATTERN: 45° HERRINGBONE



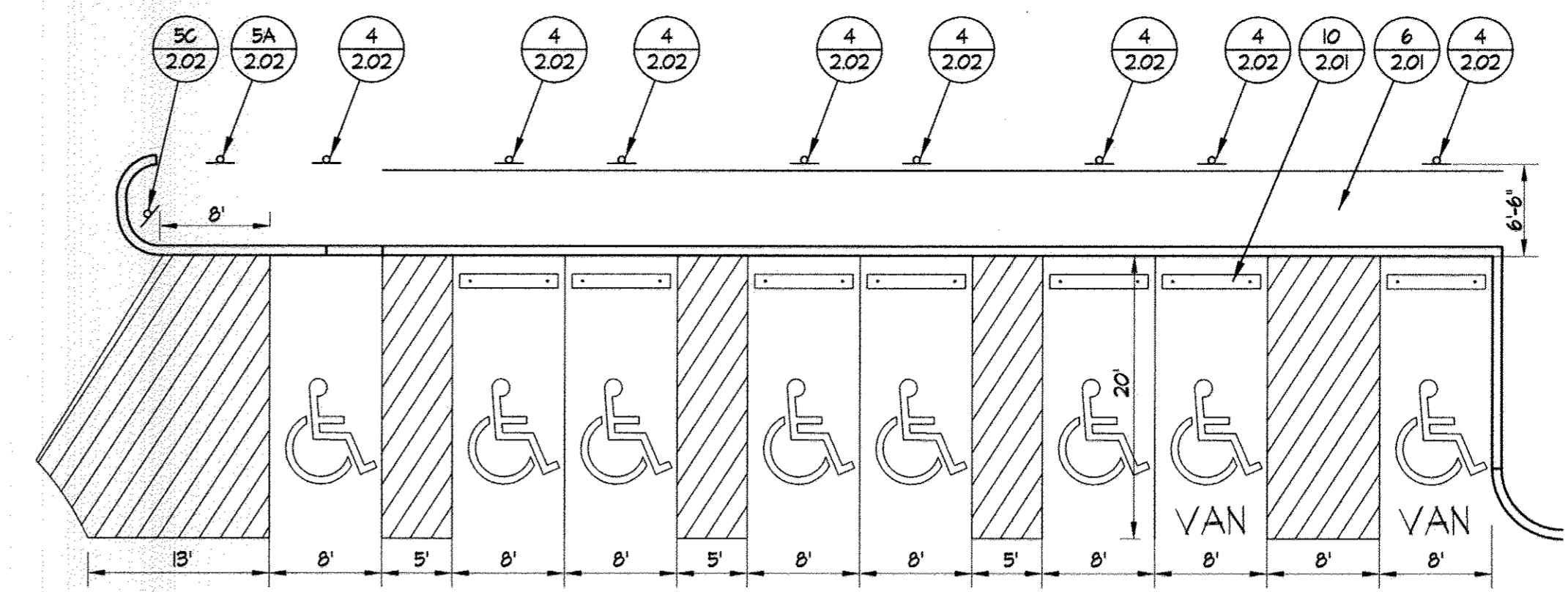
- NOTES:**
- A REPRESENTATIVE FROM THE ON-SITE GEO-TECHNICAL ENGINEER SHALL OBSERVE AND TEST ANY COMPACTED FILL TO BE USED FOR PAVEMENT SUPPORT, AND OBSERVE ANY PROOFROLLING OPERATIONS OF PAVEMENT SUBGRADES.
 - AN ALTERNATE PAVING BASE MAY BE USED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER ON SITE.

1 DRIVEWAY PAVERS NOT TO SCALE



- * NOTE:** EXPANSION JOINT TO BE CONTINUOUS AND RUN ALONG THE LENGTH OF THE PAVER.

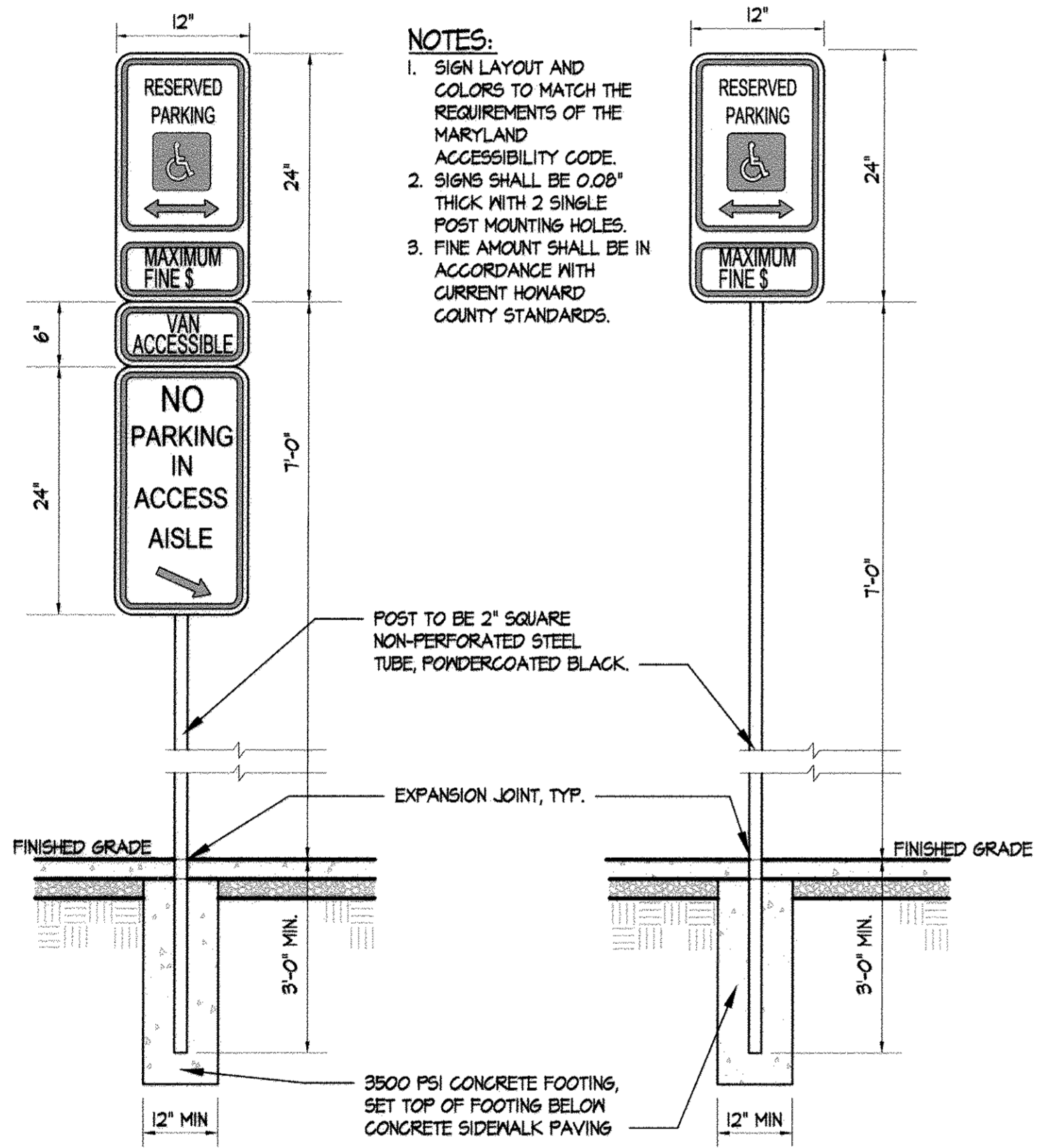
2 BRICK PAVER NOT TO SCALE



STANDARD PARKING VAN PARKING

- NOTES:**
- HANDICAP PARKING AND ACCESS SHALL COMPLY WITH THE CURRENT ADA REQUIREMENTS AT TIME OF CONSTRUCTION.
 - PARKING STALL AND ACCESS AISLE WIDTHS ARE SHOWN AS MINIMUMS.
 - FLUSH CURB PER HOWARD COUNTY DESIGN MANUAL VOLUME IV DETAIL R-3.07.

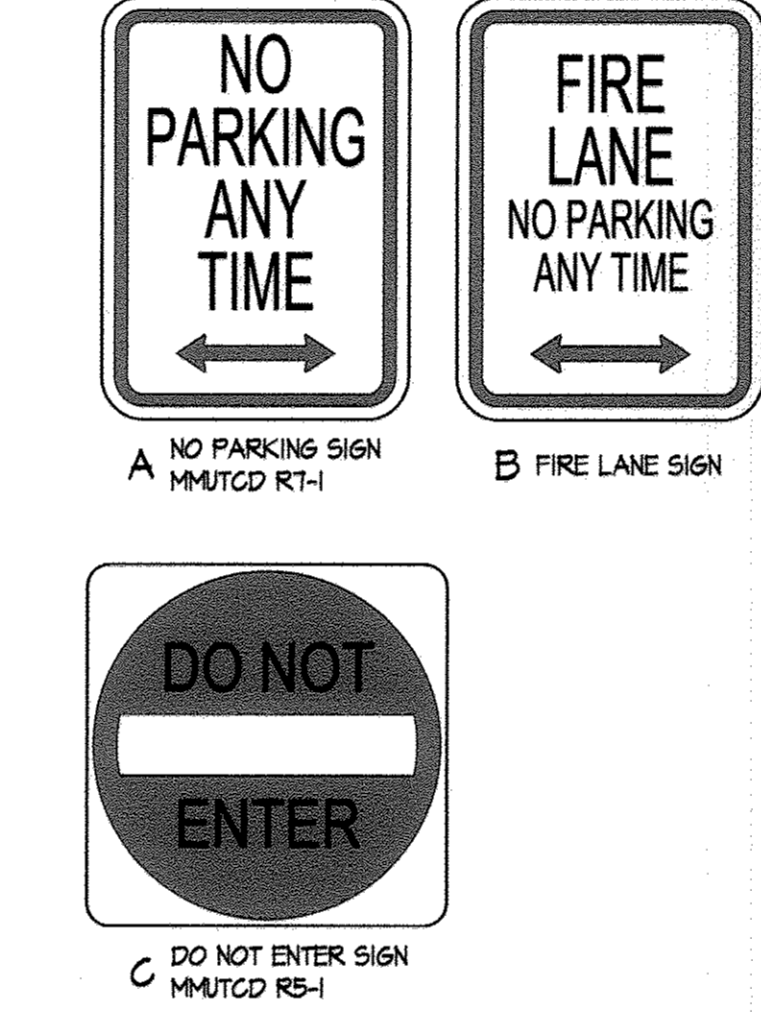
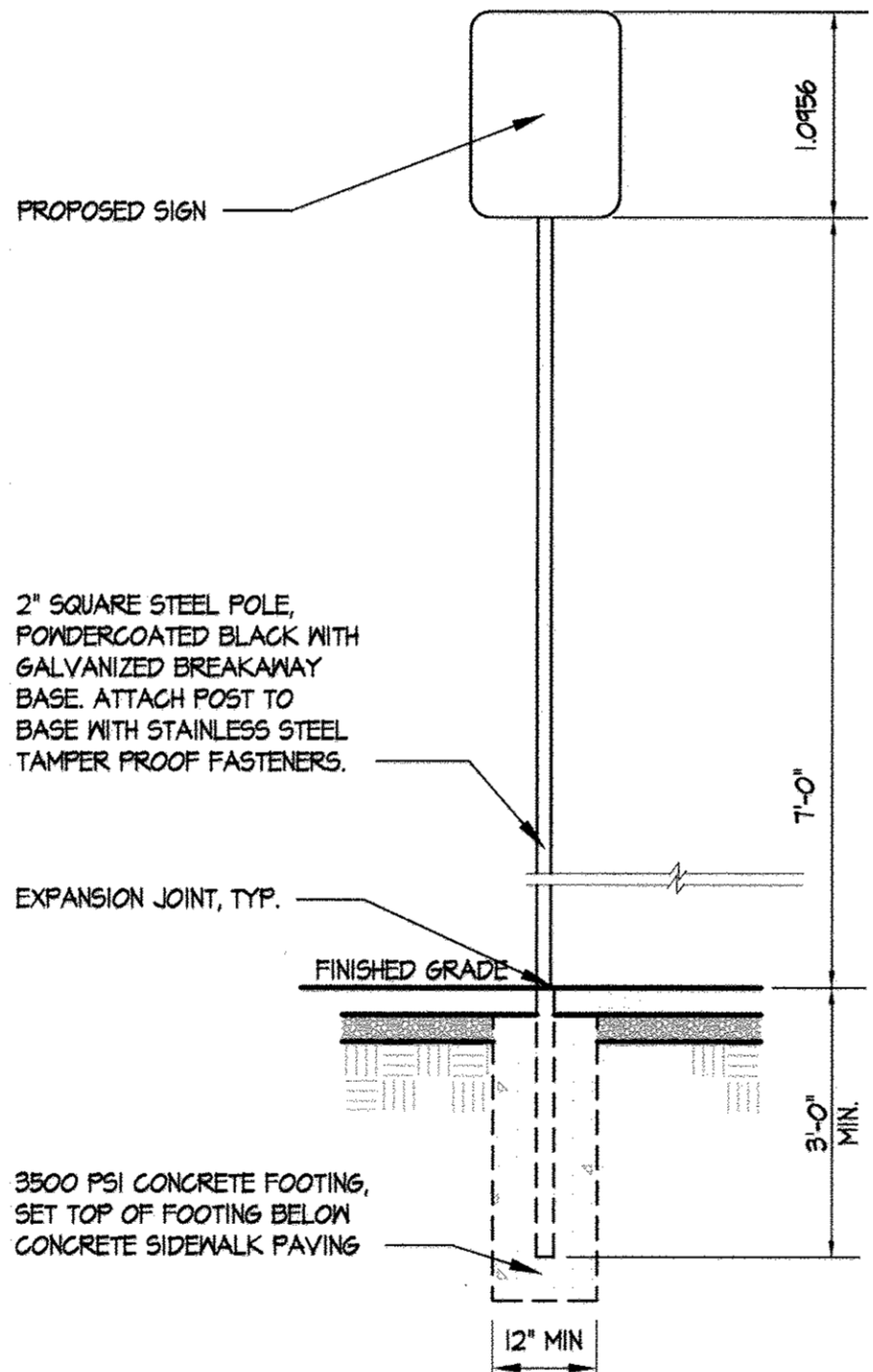
3 HANDICAP PARKING CONFIGURATION NOT TO SCALE



- NOTES:**
- SIGN LAYOUT AND COLORS TO MATCH THE REQUIREMENTS OF THE MARYLAND ACCESSIBILITY CODE.
 - SIGNS SHALL BE 0.08" THICK WITH 2 SINGLE POST MOUNTING HOLES.
 - FINE AMOUNT SHALL BE IN ACCORDANCE WITH CURRENT HOWARD COUNTY STANDARDS.

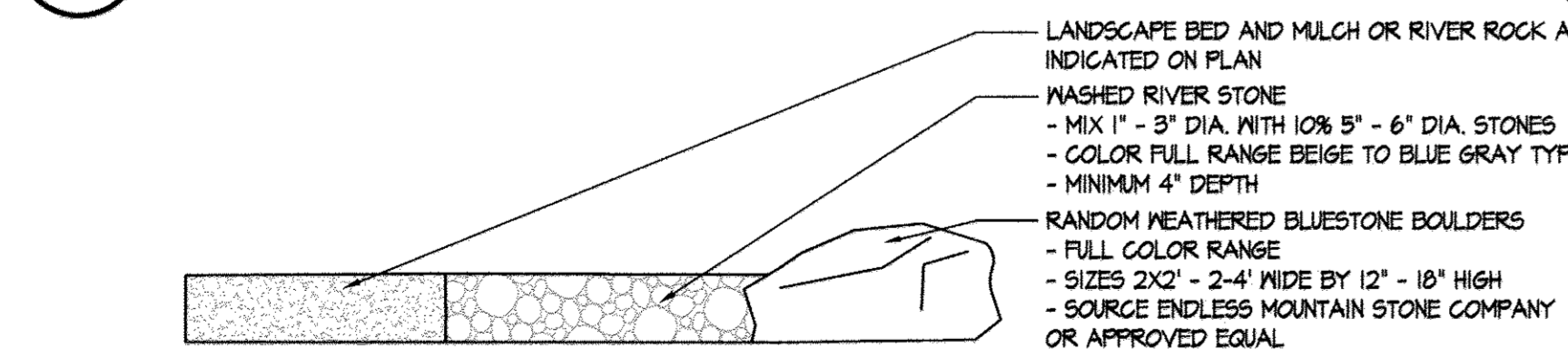
VAN ACCESSIBLE SIGN ACCESSIBLE SIGN

4 ACCESSIBLE PARKING SIGNS NOT TO SCALE

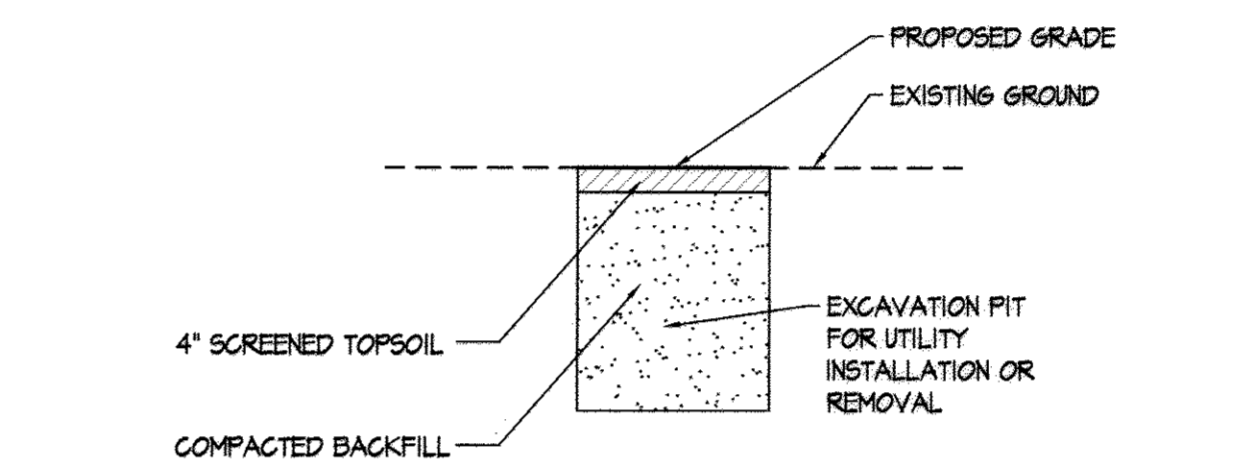


- NOTE:**
- SIGN LAYOUT AND COLORS TO MATCH THE REQUIREMENTS OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - SIGNS SHALL BE 0.08" THICK WITH 2 SINGLE POST MOUNTING HOLES.
 - POSTED MAXIMUM FINE SHALL BE IN ACCORDANCE WITH LOCAL CODE.
 - SIGNS SHALL BE ATTACHED TO POST WITH STAINLESS STEEL TAMPER PROOF FASTENERS.
 - SIGNS SHALL COMPLY WITH APPLICABLE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES GUIDELINES.
 - PROVIDE SHOP DRAWINGS OF SIGN LAYOUTS. FINAL SIGN LAYOUT TO BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO ORDERING AND INSTALLATION.

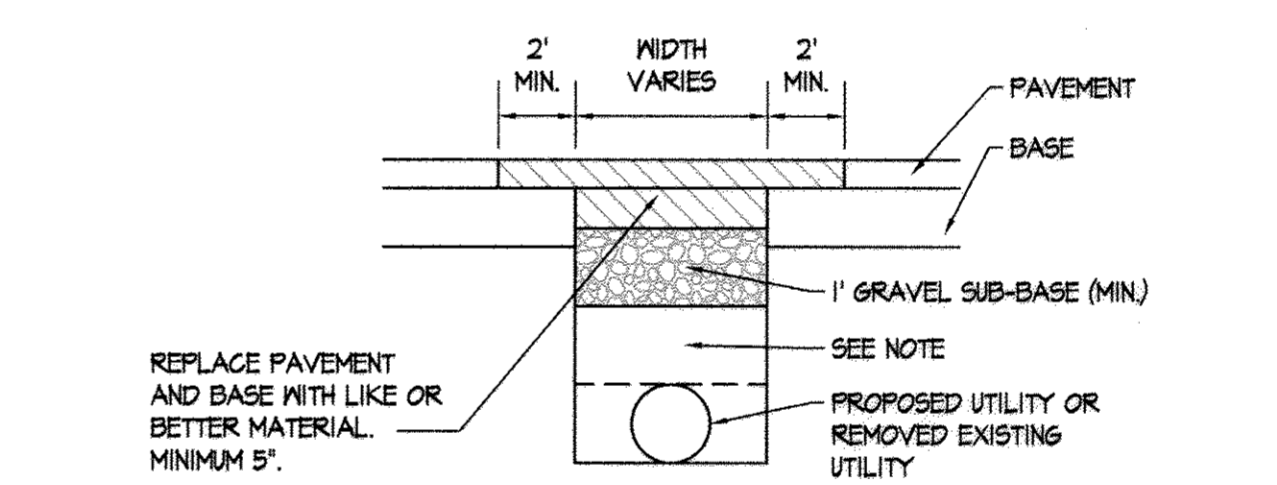
5 PARKING LOT SIGNAGE NOT TO SCALE



7 LANDSCAPE BOULDER DETAIL N.T.S.



- NOTES:**
- Backfill shall be in accordance with MSHA specifications and shall be thoroughly compacted in 6" layers by tamping or by some other approved method to within 4" of the proposed grade.
 - The remaining 4" of depth shall be filled with screened topsoil and permanently seeded using the methods described on sheet EGC2.02.
 - Whenever sheeting or shoring is required to prevent cave-ins or bulging due to the depth of the trench or type of material encountered, the sheeting, wherever found necessary, shall remain in place but cut off 1' below the bottom of the replaced surfacing.
 - All backfill replaced shall be compacted to at least 85% of maximum density in accordance with MSHA specifications and certified by an approved geotechnical testing contractor.



- NOTE:** Backfill in trenches shall be in accordance with MSHA specifications and shall be thoroughly compacted in 6" layers for the full depth of the trenches by tamping or by some other approved method to within 1" of the top of subgrade. The remaining depth of the trench shall be filled with thoroughly compacted crushed stone, slag or gravel. Whenever sheeting or shoring is required to prevent cave-ins or bulging due to the depth of the trench or type of material encountered, the sheeting, wherever found necessary, shall remain in place but cut off 1' below the bottom of the replaced surfacing. All backfill replaced shall be compacted to at least 95% of maximum density in accordance with MSHA specifications and certified by an approved geotechnical testing contractor. In lieu of controlled fill, flowable fill in accordance with MSHA specifications may be utilized.

UTILITY	COVER
TELEPHONE & CABLE	24" MIN.
ELECTRIC CABLE	36" ±
SEWER LINE	48" MIN.
WATER LINE	42" MIN.
CONCRETE, STEEL PIPES	12" MIN.

6 SURFACE RESTORATION DETAIL NOT TO SCALE

SWM
 AS-BUILT
 STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 12/27/16

SITE DETAILS

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

DATE	DESCRIPTION

SITE RESOURCES
 Comprehensive Land Planning & Site Design Services

14315 Jarrattville Pike • Phoenix, Maryland 21131
 (410) 683-3300 • Fax (410) 683-3300

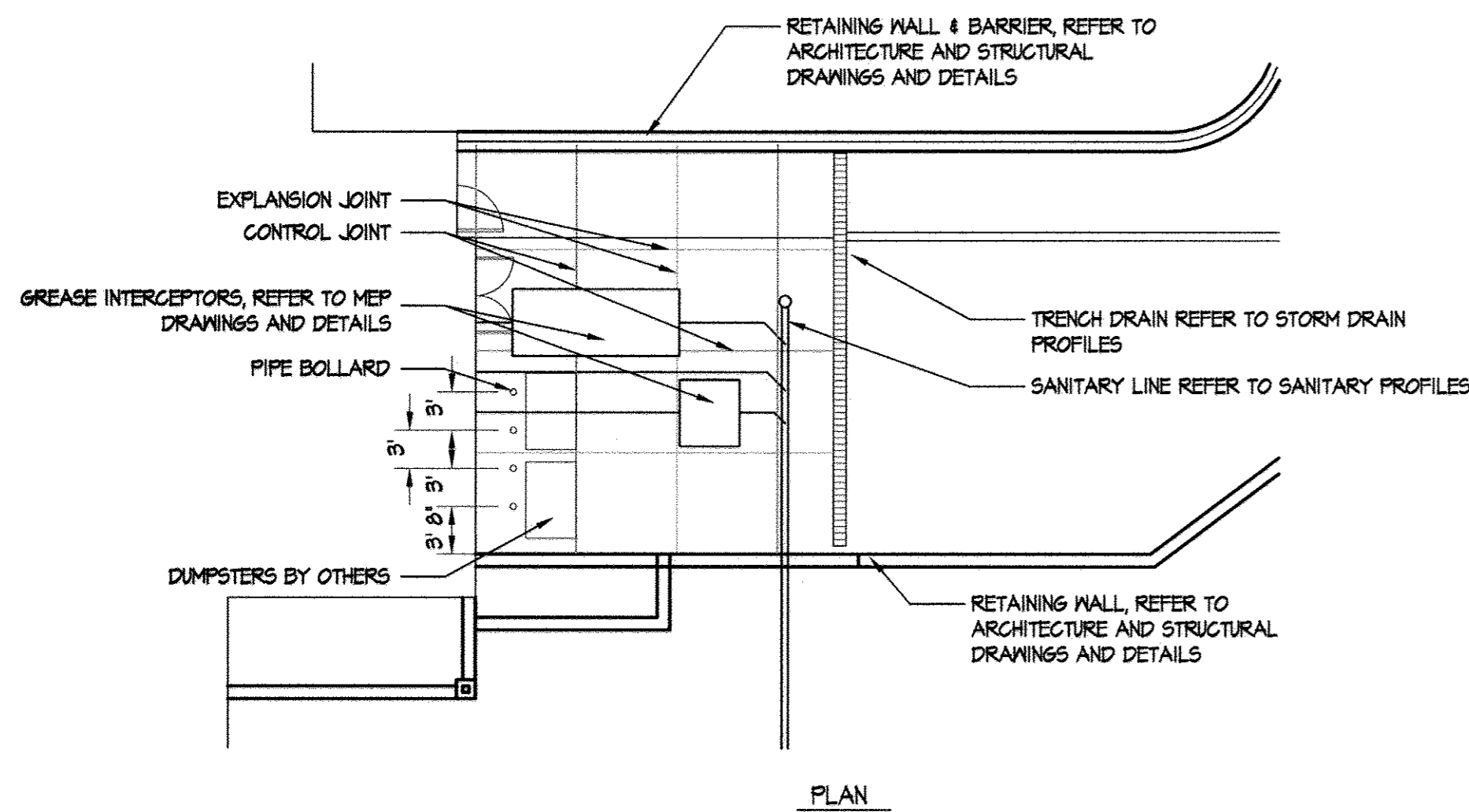
DATE: SEPTEMBER 13, 2013 SHEET: C2.02 12 OF 38

APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 9/12/13

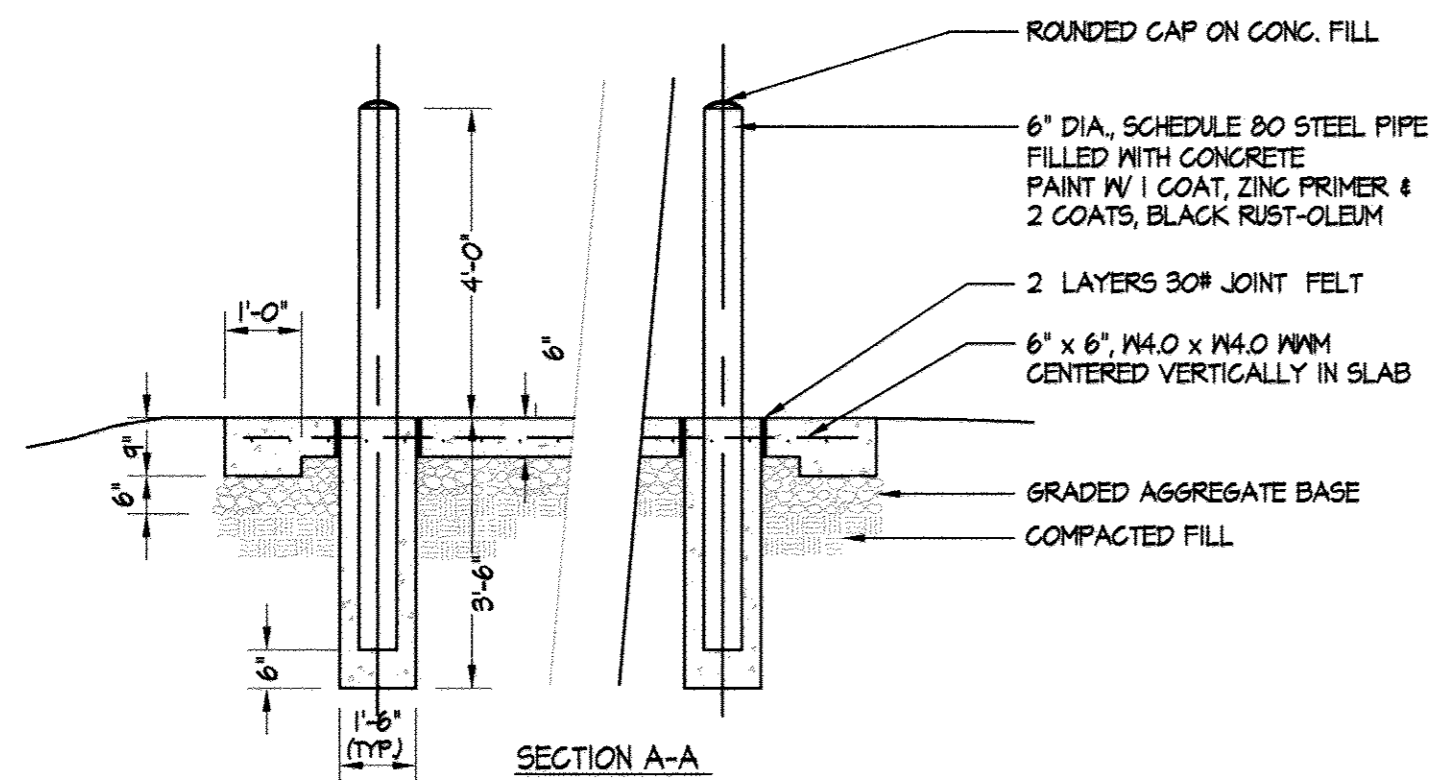
APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 9/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 COUNTY HEALTH OFFICER
 DATE: 12/19/2013

ADDRESS CHART		PERMIT INFORMATION CHART			
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1	8/135	
		FLAT # OR L/F	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
		4308 & 4304	29	5TH	605502
		GRID #	SEWER CODE		
		NA	214 W45		



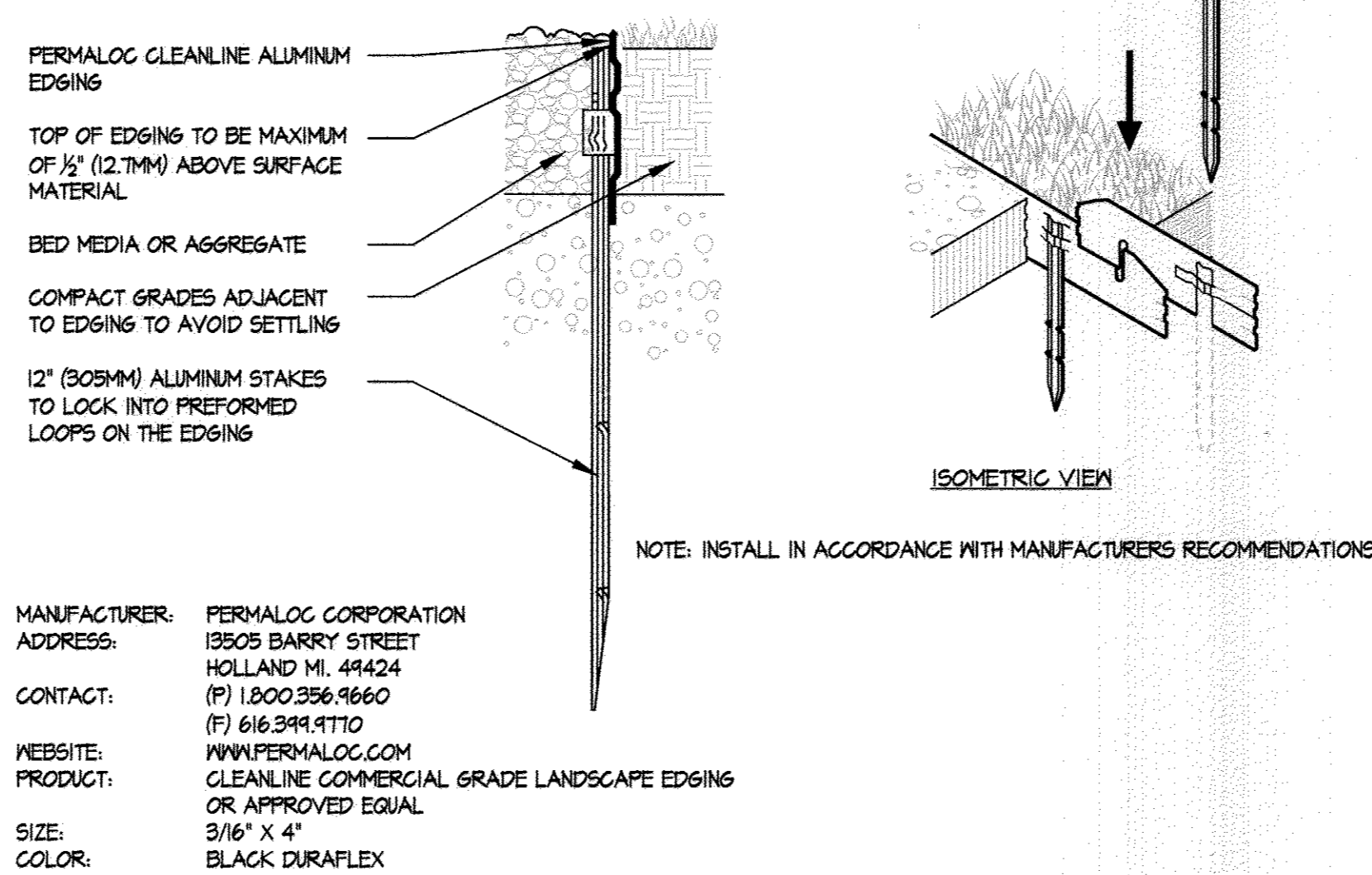
PLAN



SECTION A-A

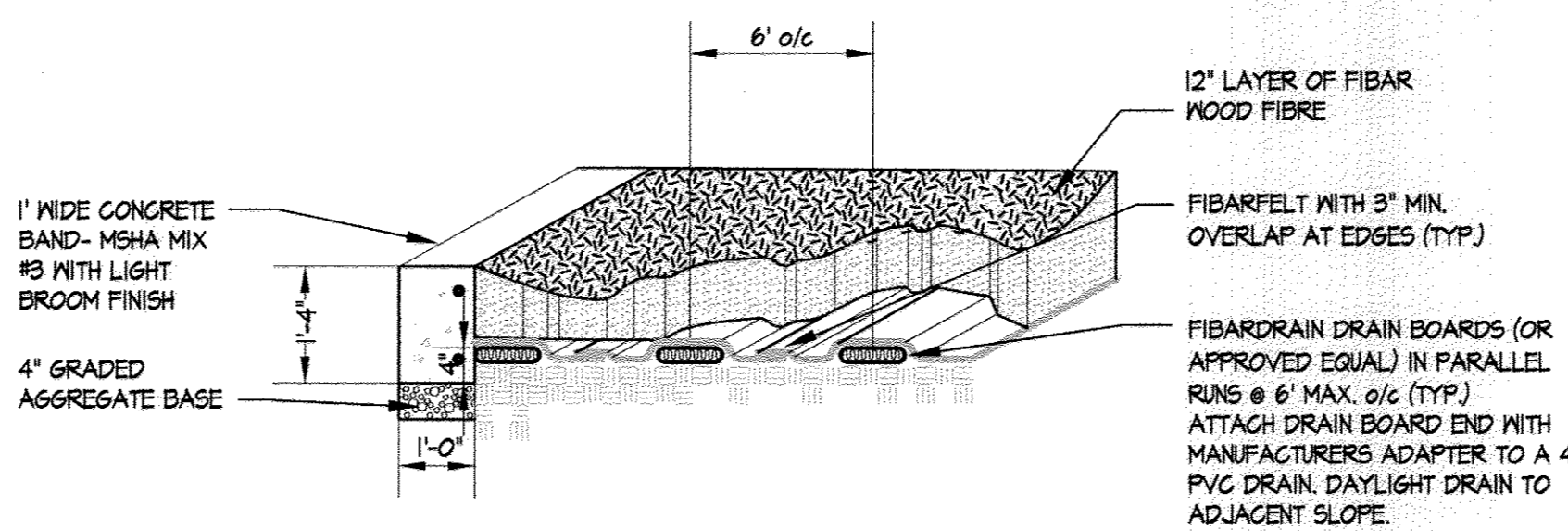
1 DUMPSTER PAD & BOLLARD

N.T.S.



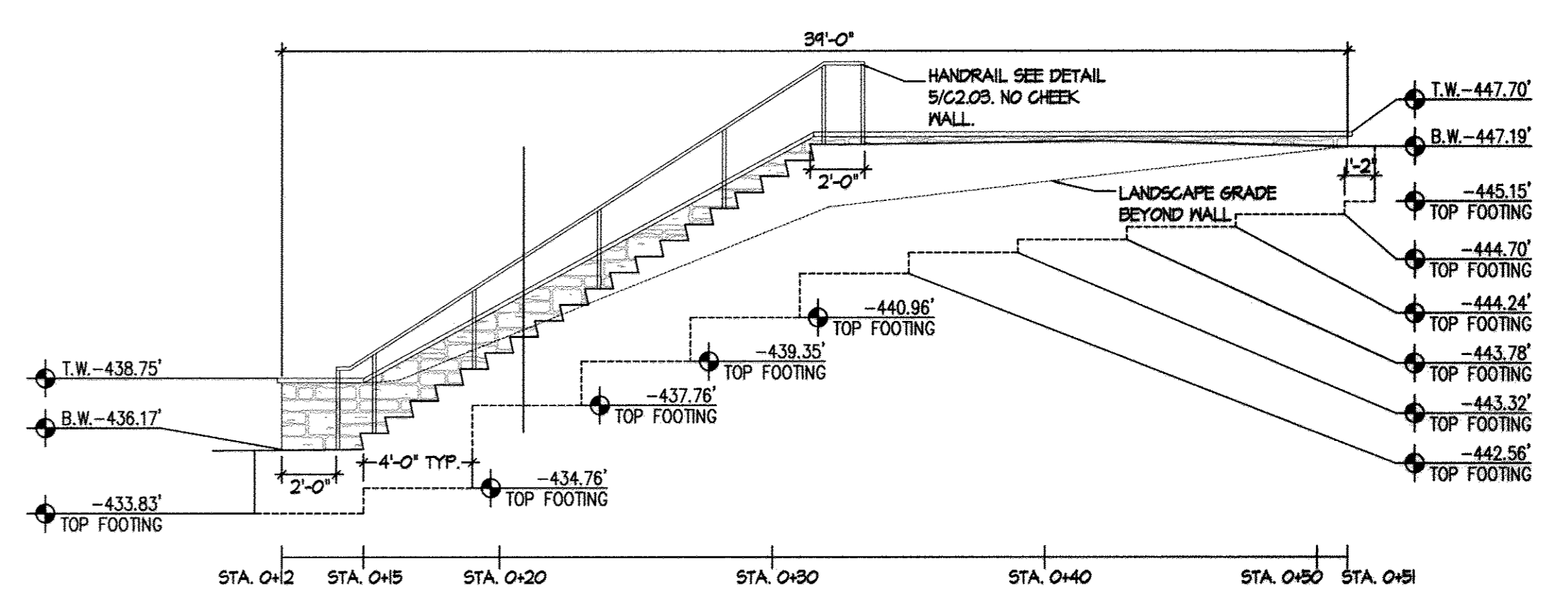
2 LANDSCAPE EDGING

NOT TO SCALE



3 TURN HOUSE PATIO SURFACE

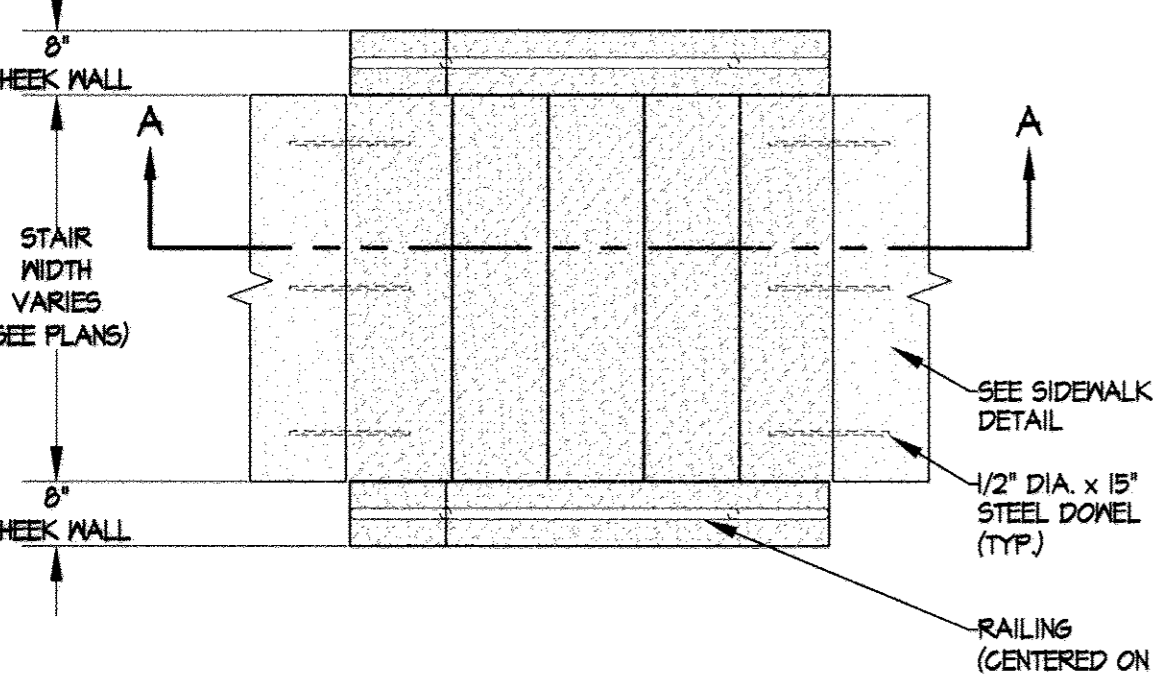
NOT TO SCALE



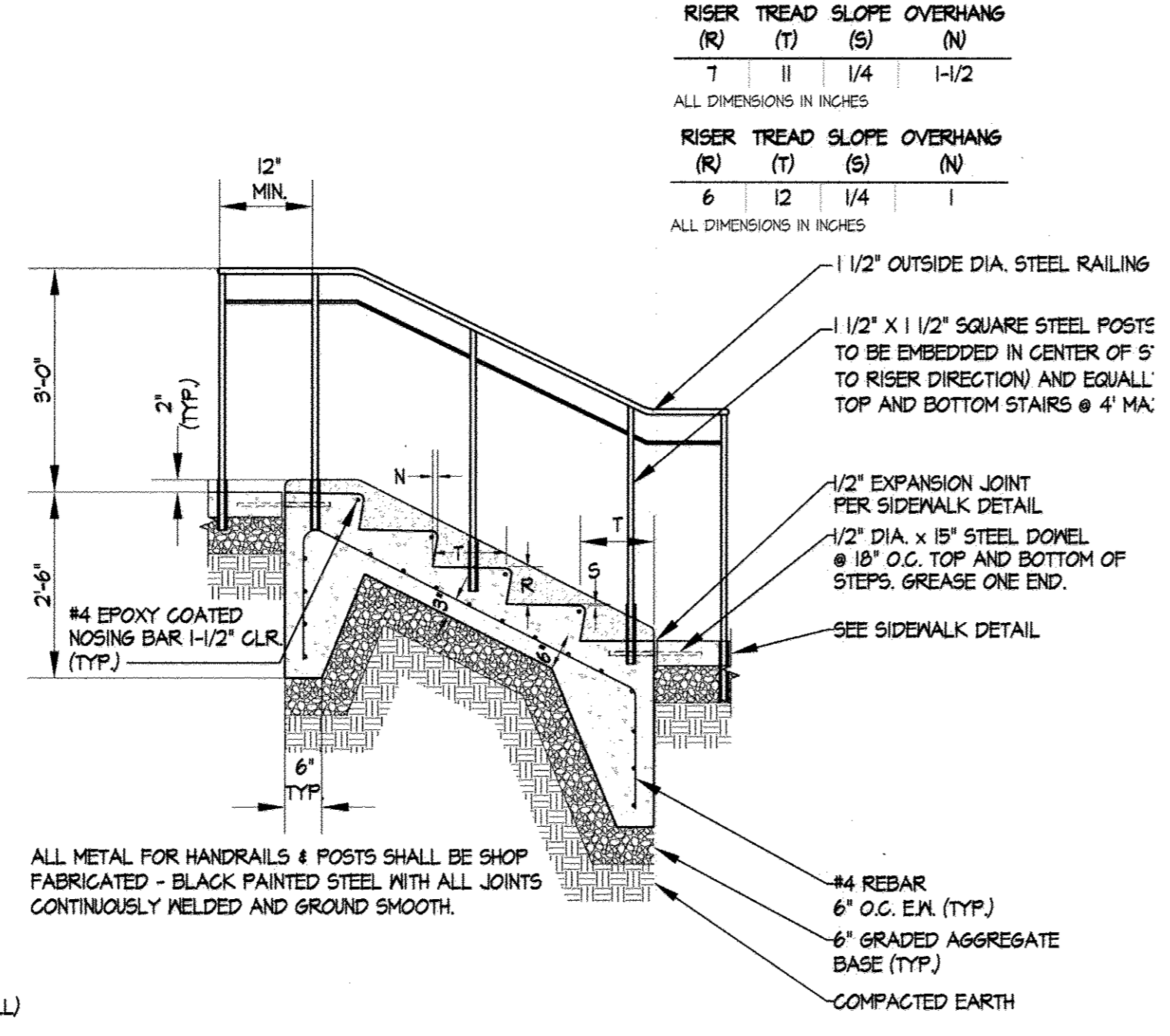
4 RETAINING WALL #6

SCALE 1\"/>

- NOTES:
1. RAILINGS & POST TO BE SHOP FABRICATED OF 1-1/2\"/>
 - 2. TOP OF RAILING TO BE 36\"/>
 - 3. RAILING TO EXTEND A MINIMUM OF 12\"/>
 - 4. ALL CONCRETE TO BE SHA MIX NO. 3.
 - 5. ALL CHEEK WALL AND STAIR NOSE RADI SHALL BE 1/2\"/>
 - 6. CHEEK WALL SHALL BE 8\"/>
 - 7. ALL RAILING EXTERIOR RADI SHALL BE 4\"/>
 - 8. RAILING POSTS SHALL BE INSTALLED AT A DEPTH OF 8\"/>
 - 9. STAIR TREADS TO RECEIVE LIGHT BRUSHED NON-SLIP FINISH. (SEE SPECS)
 - 10. UNLESS OTHERWISE SHOWN ON PLAN, ALL REBAR SHALL HAVE A CLEARANCE OF 3\"/>
 - 11. PROVIDE HORIZONTAL RAILING AT LANDINGS.
 - 12. SLOPE ANCHOR GEMENT AWAY FROM POSTS AND OCNAIN CLEANLY WITHIN 2\"/>



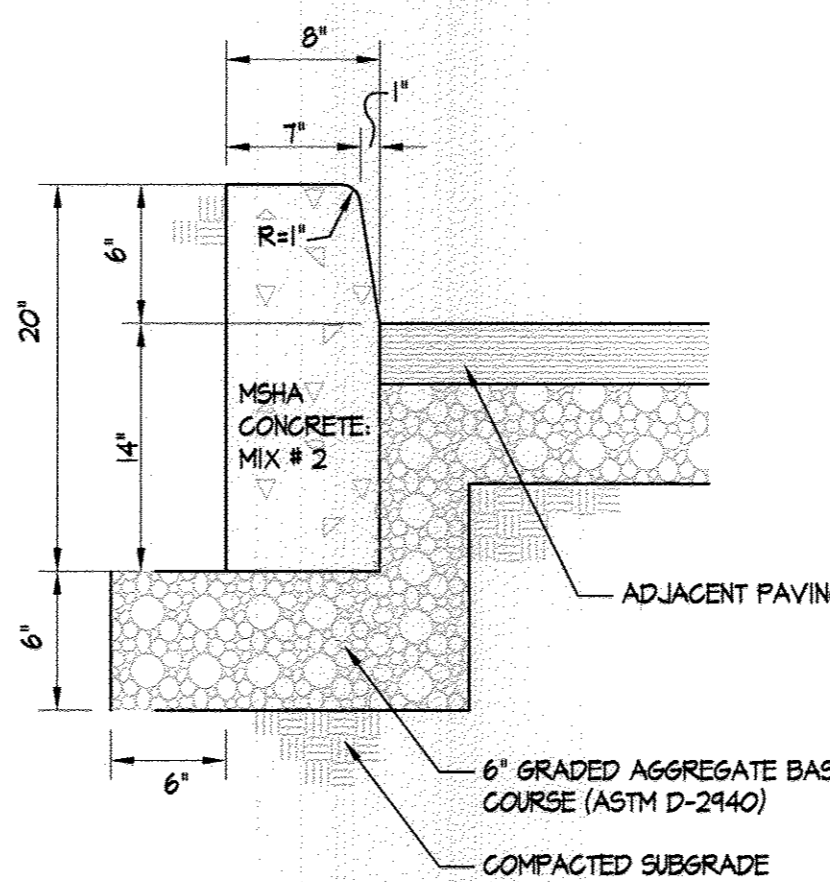
PLAN



SECTION A-A

5 STAIR AND CHEEK WALLS

N.T.S.

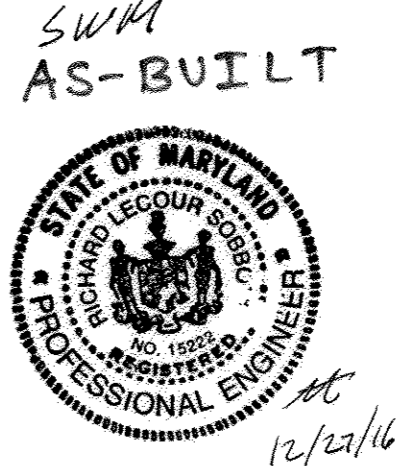


6 LANDSCAPE CURB

N.T.S.

4 RETAINING WALL #6 FOOTING PLAN

SCALE 1\"/>



SITE DETAILS

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

STATE OF MARYLAND PROFESSIONAL ENGINEER

EDWARD J. EDWARDS

NO. 1958

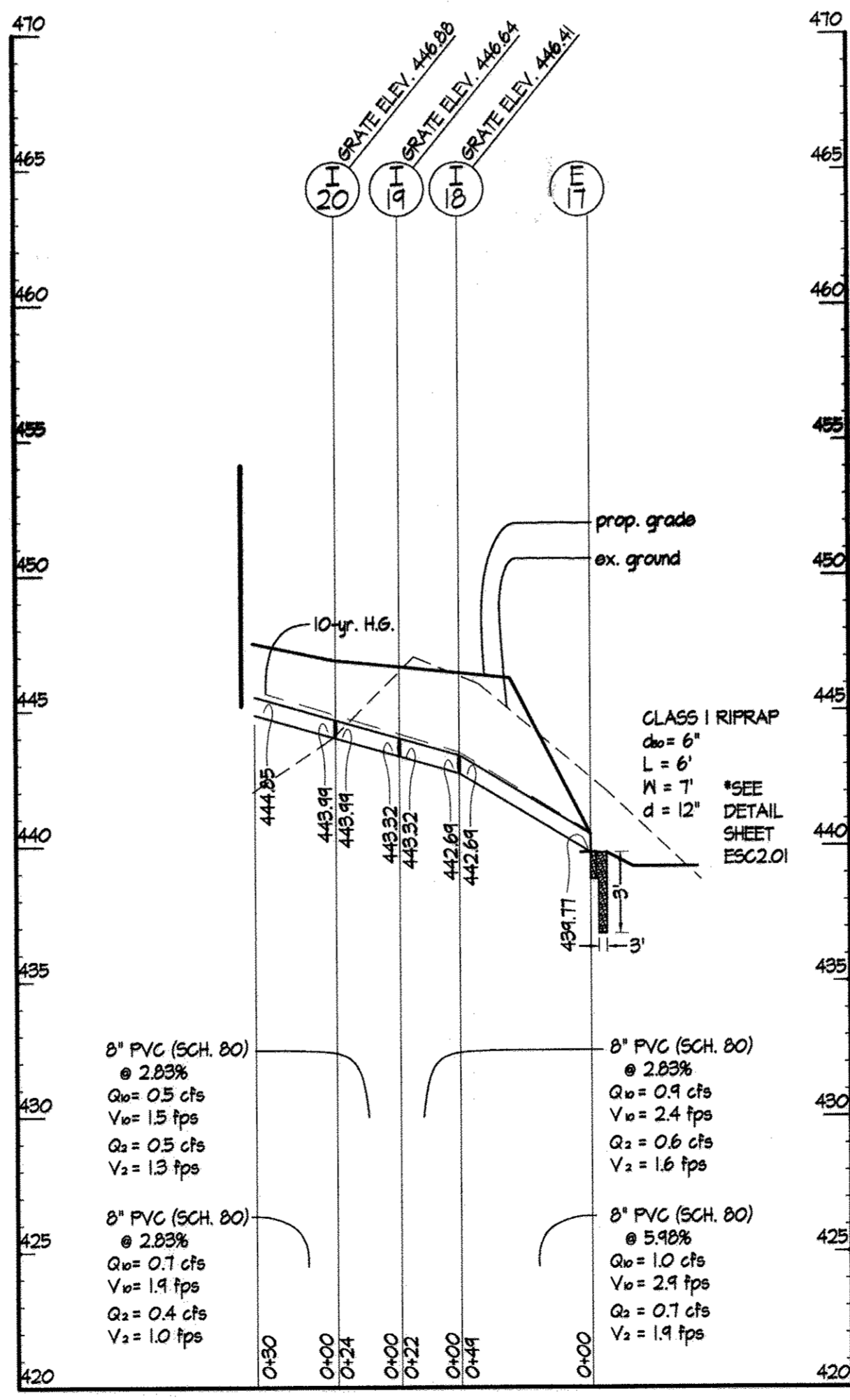
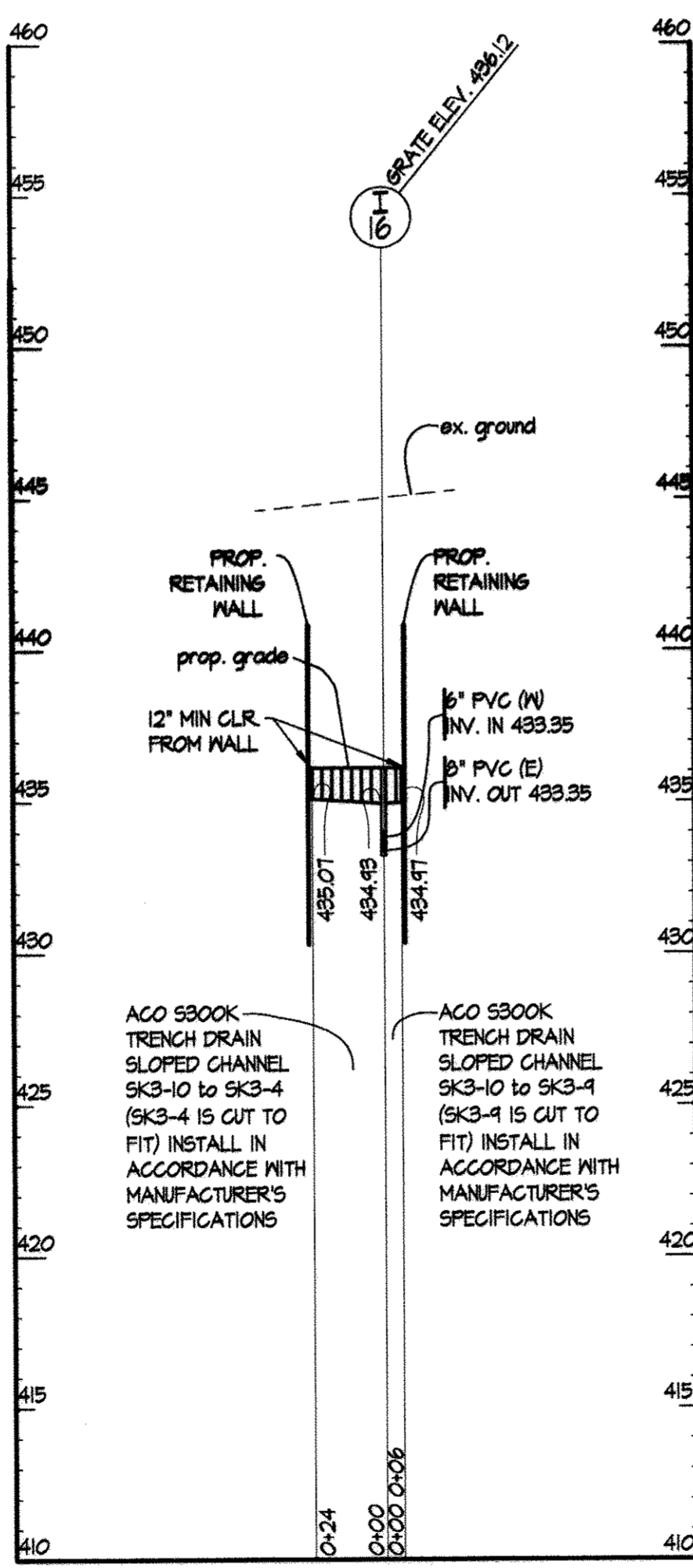
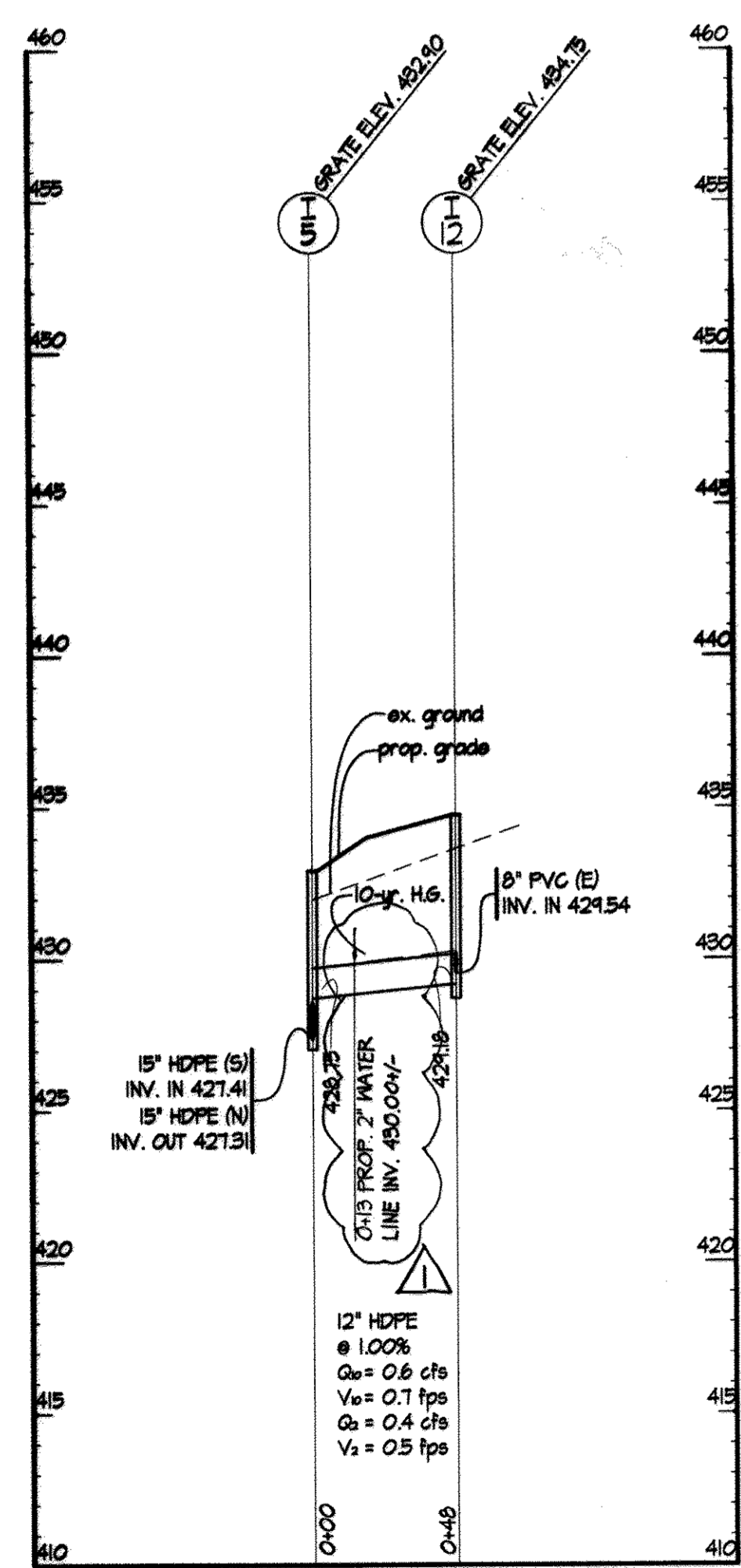
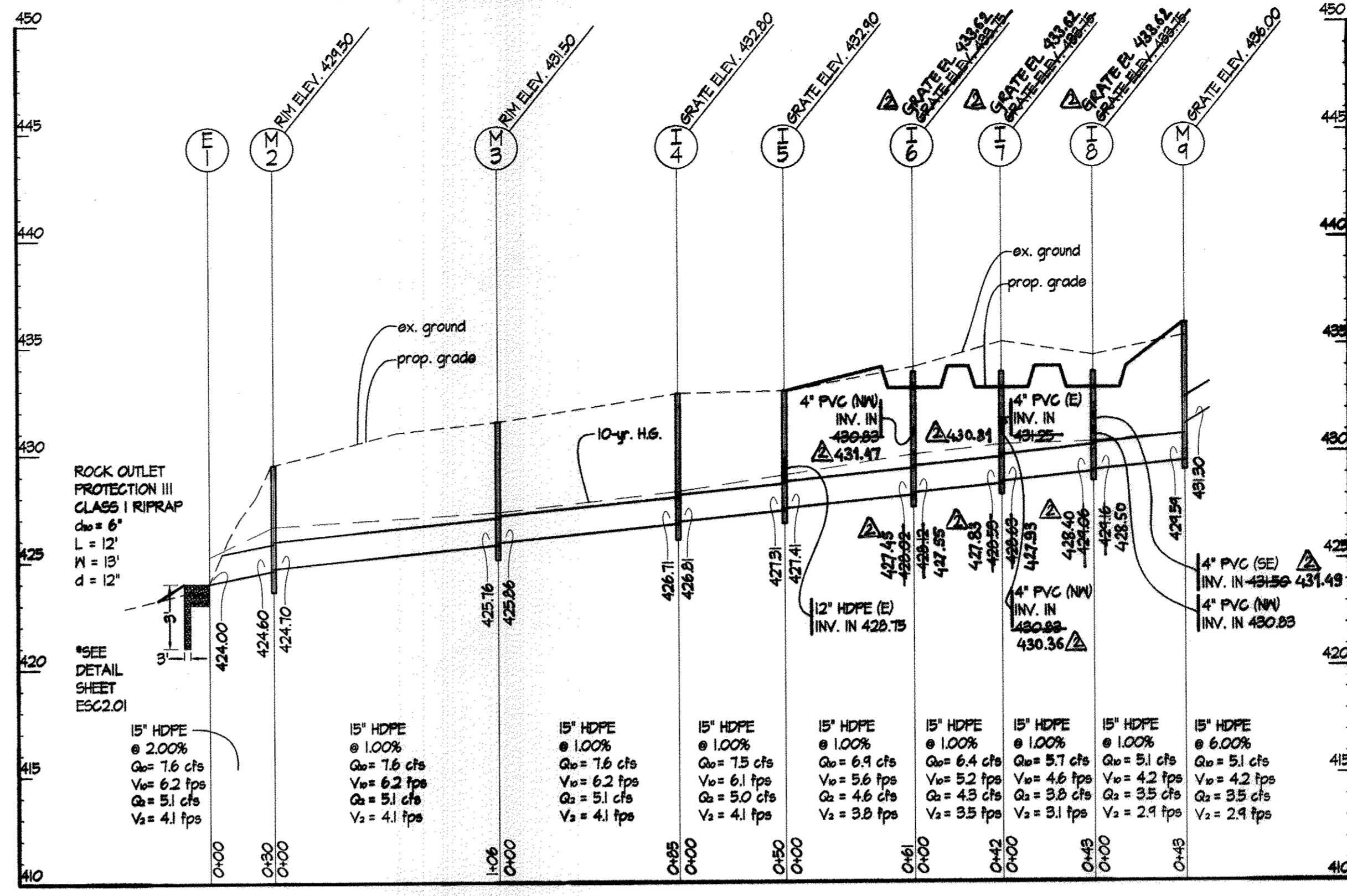
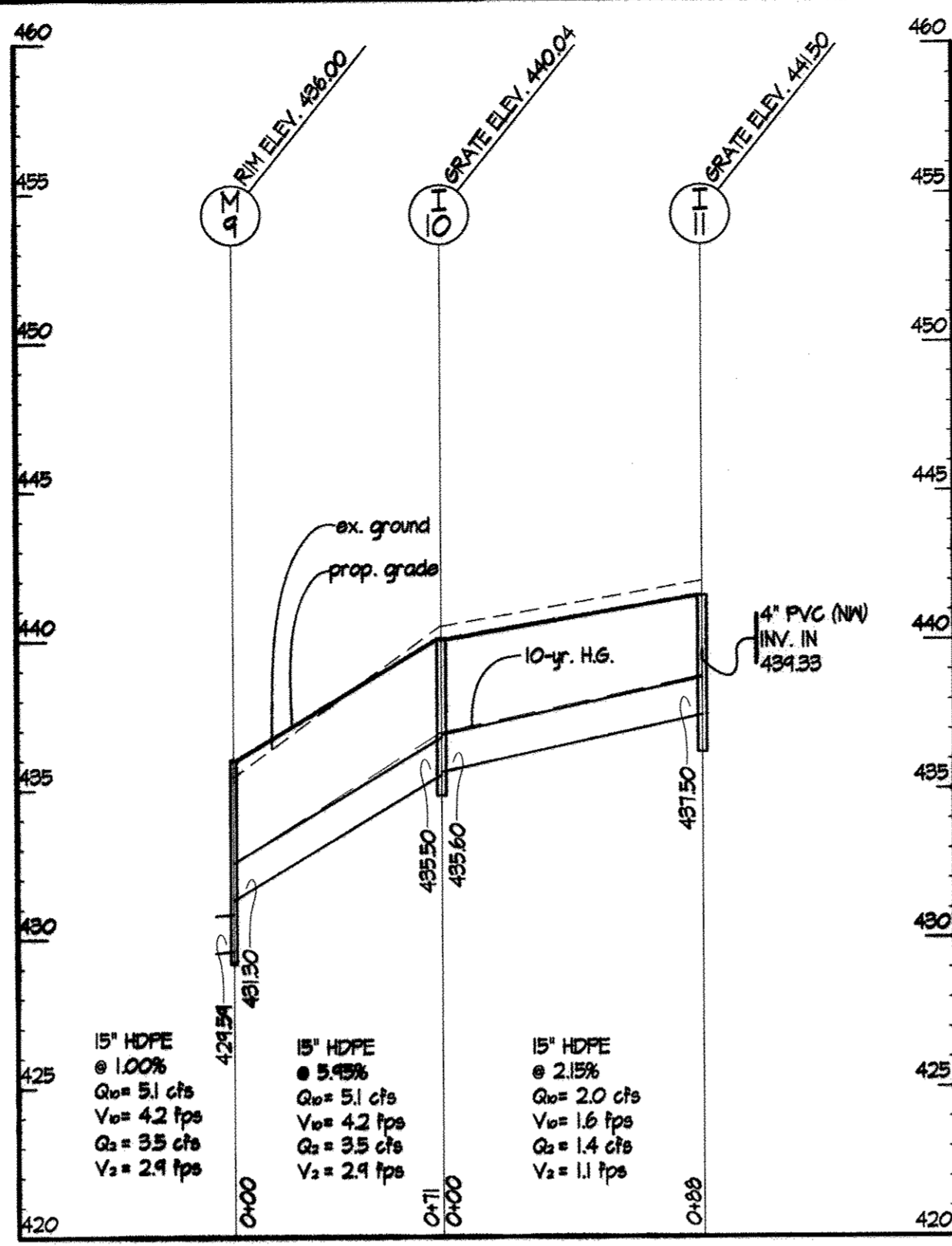
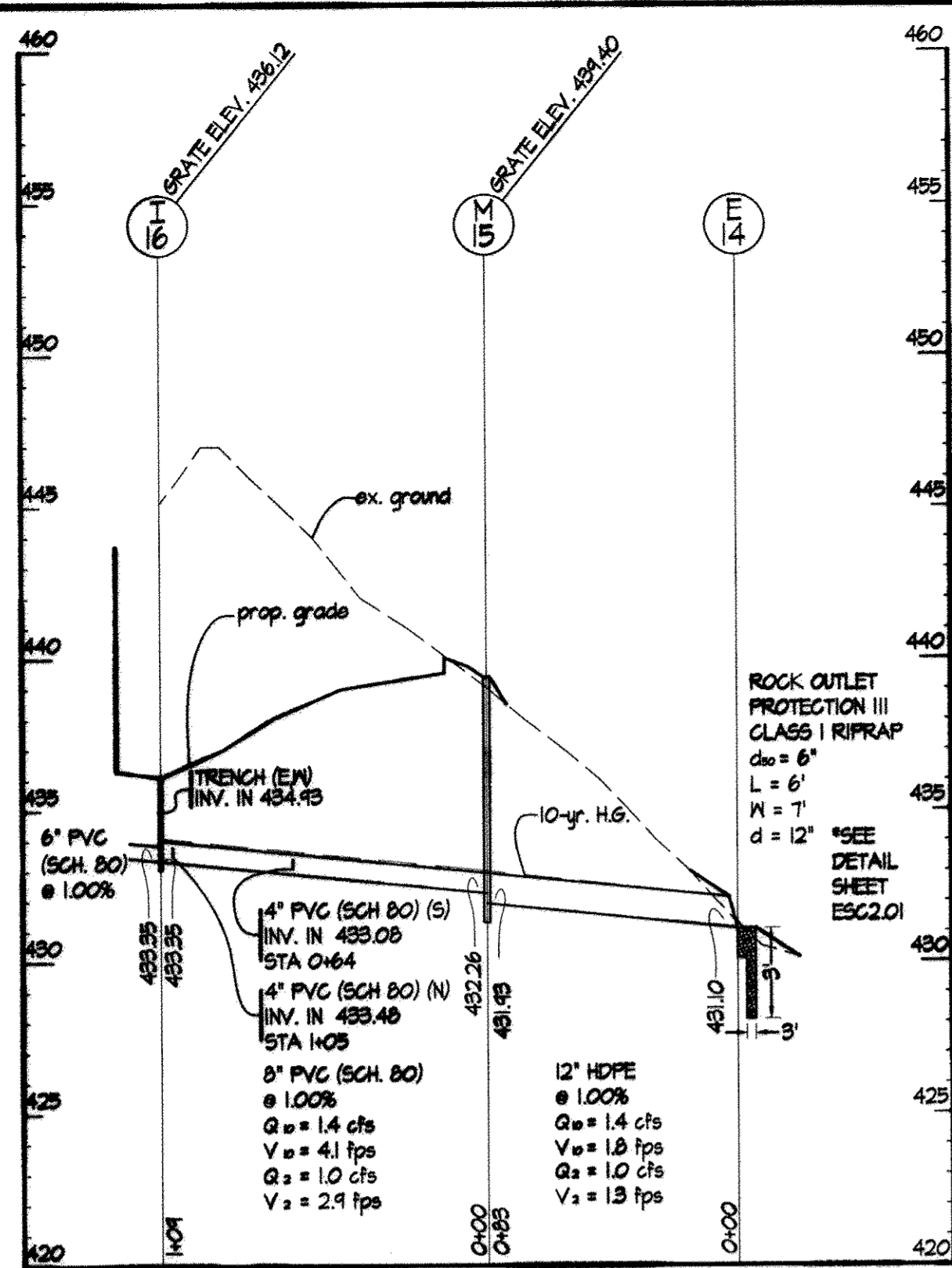
10-3-2013

14315 Jarrattville Pike • Phoenix, Maryland 21131
(410) 683-3300 • Fax (410) 683-3300

DRAWN BY: FJP CONTRACT NO.: -
DESIGNED BY: FJP SCALE: AS SHOWN
CHECKED BY: AFE SRI PROJECT NO.: 11024
DATE: SEPTEMBER 13, 2013 SHEET C2.03 13 OF 38

APPROVED: DEPARTMENT OF PLANNING & ZONING <i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 1/7/14	APPROVED: PLANNING BOARD OF HOWARD COUNTY DATE: 9/12/13 <i>[Signature]</i>	APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS DATE: 12/19/2013 <i>[Signature]</i>
CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 1/6/14		COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT

ADDRESS CHART		PERMIT INFORMATION CHART			
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
8/135	1180 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1	8/135	
		FLAT # OR L/F	GRID #	ZONING	TAX MAP NO. ELECTION DISTRICT
		9308 14304	NA	NT-05	24 5TH
		WATER CODE	SEWER CODE		GENUS TRACT
		214 W45	214 W45		605502

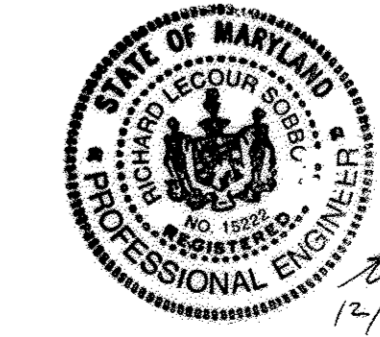
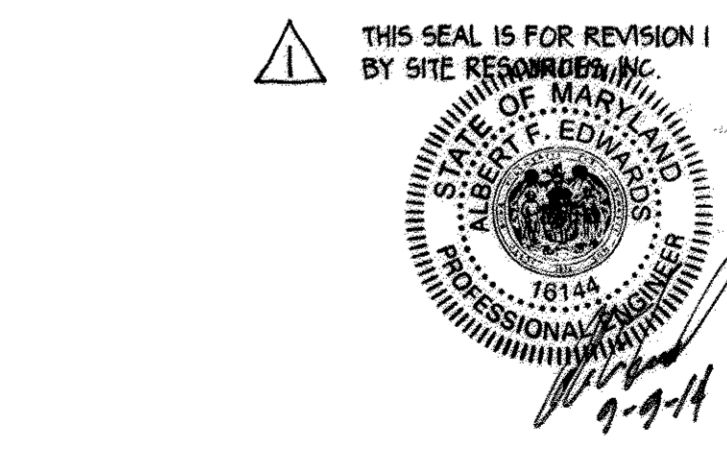


STRUCTURE SCHEDULE

STRUCTURE NO.	DESCRIPTION	DETAIL REFERENCE	COMMENTS	DETAIL REFERENCE	TOP ELEVATION	INV. IN	INV. OUT
E-1	ADS 1210N FLARED END SECTION (OR APPROVED EQUAL)	3 / C2.04				424.00	424.00
M-2	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	2 / C2.04			429.50	424.70	424.60
M-3	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	2 / C2.04			431.50	425.86	425.76
I-4	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			432.80	426.81	426.71
I-5	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			432.90	427.41	427.31
I-6	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			432.90	428.75	428.65
I-7	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			432.90	428.75	428.65
I-8	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			432.90	428.75	428.65
I-9	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			432.90	428.75	428.65
M-4	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	2 / C2.04			436.00	431.30	429.94
I-10	HOCO, D-4.22 TYPE S INLET				440.04	435.60	435.50
I-11	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			443.50	439.38	439.28
I-12	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			434.75	429.54	429.18
E-14	ADS 1210N FLARED END SECTION (OR APPROVED EQUAL)	3 / C2.04				434.4	
M-5	HOCO D-6-5.12 PRECAST MH - SHALLOW 4' DIAMETER				434.64	432.36	432.03
I-16	TRENCH DRAIN - ACO SBOOK (OR APPROVED EQUAL)	4 / C2.04			436.12	434.43	433.35
E-17	ADS 1210N FLARED END SECTION (OR APPROVED EQUAL)	3 / C2.04				434.77	
I-18	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			446.41	442.84	442.84
I-19	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			446.64	443.32	443.32
I-20	NYLOPLAST DRAIN BASIN 2818AG (OR APPROVED EQUAL)	6 / C2.04			446.88	443.91	443.91

PIPE SCHEDULE

PIPE LENGTH	PIPE SIZE	TYPE
234'	8"	PVC
151'	12"	HDPE
614'	15"	HDPE



AS-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS-BUILT" plan meet the Approved Plans and Specifications.

STORM DRAIN PROFILES

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

AS-BUILT SURVEY 12/17/14
 08/21/2014 WATER LINE RELOCATION

STATE OF MARYLAND PROFESSIONAL ENGINEER

10-3-2013

14315 Annettsville Pike • Pikesville, Maryland 21111
 (410) 883-3388 • Fax (410) 883-3380

DESIGNED BY: JLH
 CHECKED BY: AFE
 DATE: SEPTEMBER 13, 2013

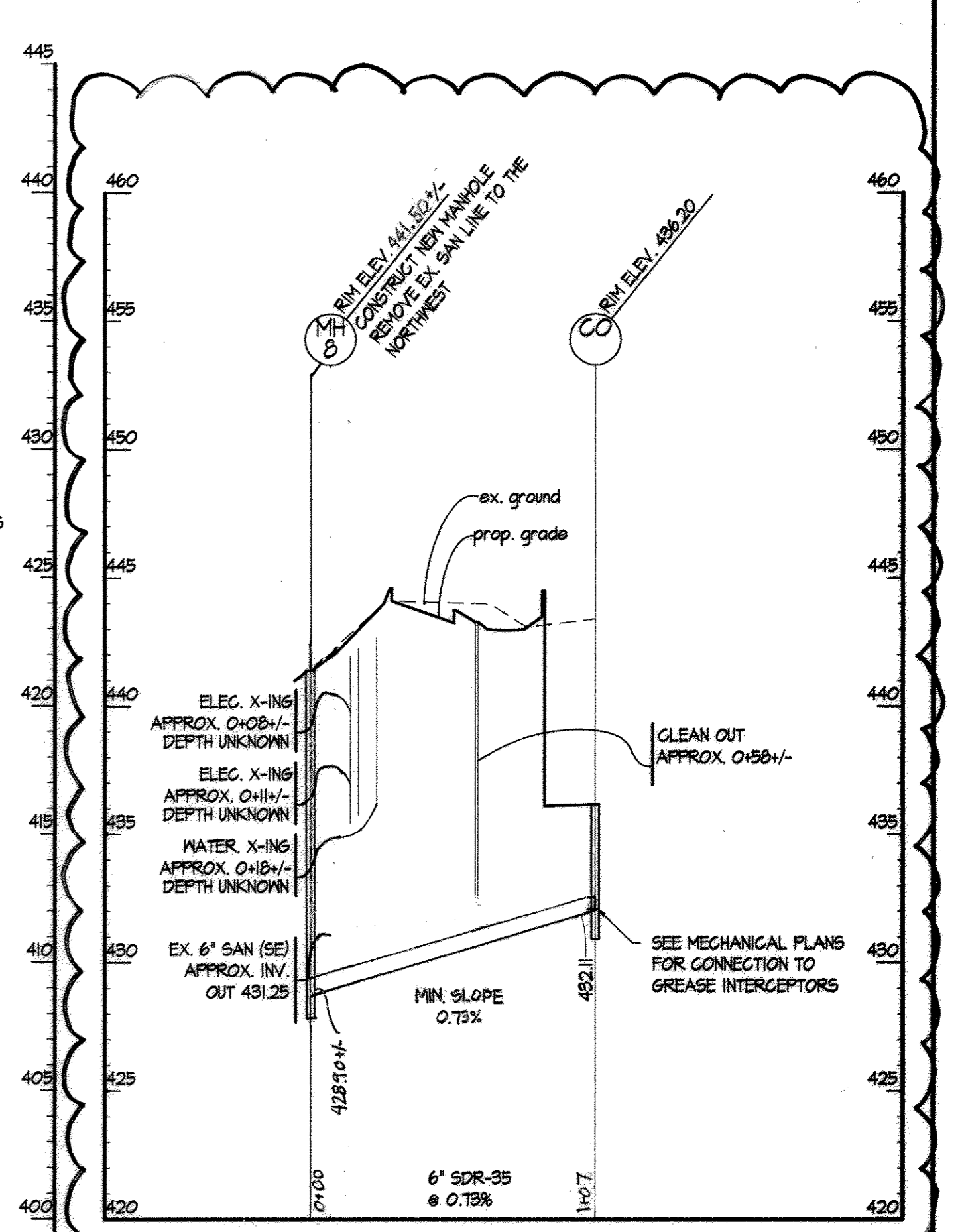
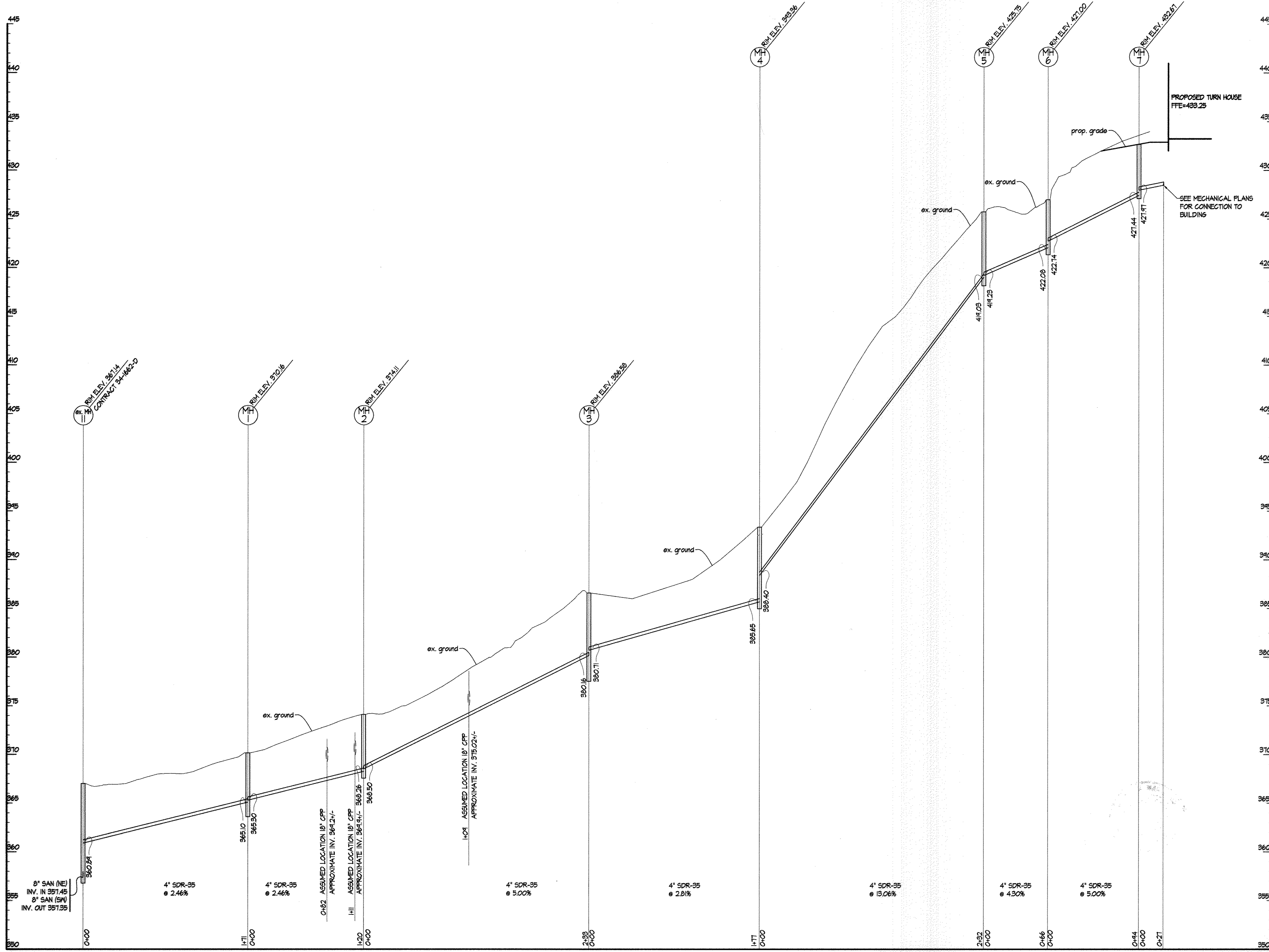
CONTRACT NO: -
 SCALE: AS SHOWN
 SRI PROJECT NO: 11059
 SHEET C3.01 14 OF 38

APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 12/14/14 DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE 9/13/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 COUNTY HEALTH OFFICER
 12/19/2013 DATE

ADDRESS CHART		PERMIT INFORMATION CHART	
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA
81/35	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1
		FLAT # OR L/F	ELECTION DISTRICT
		9308 14909	29
		GRID #	GENUS TRACT
		NA	605502
		ZONING	
		NT-05	
		TAX MAP NO.	
		214 M45	
		SEWER CODE	
		214 M45	



② PROFILE CO TO MH-8
 SCALES: HORIZ. 1" = 50'
 VERT. 1" = 5'

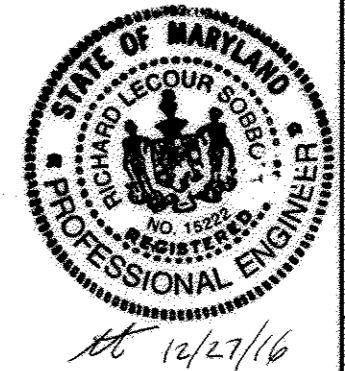
STRUCTURE SCHEDULE

STRUCTURE NO.	DESCRIPTION	COMMENTS
MH-1	HO.CO. 6-5.12 PRECAST MANHOLE	STANDARD PRECAST 4' MANHOLE
MH-2	HO.CO. 6-5.12 PRECAST MANHOLE	STANDARD PRECAST 4' MANHOLE
MH-3	HO.CO. 6-5.12 PRECAST MANHOLE	STANDARD PRECAST 4' MANHOLE
MH-4	HO.CO. 6-5.12 PRECAST MANHOLE	STANDARD PRECAST 4' MANHOLE
MH-5	HO.CO. 6-5.12 PRECAST MANHOLE	STANDARD PRECAST 4' MANHOLE
MH-6	HO.CO. 6-5.12 PRECAST MANHOLE	STANDARD PRECAST 4' MANHOLE
MH-7	HO.CO. 6-5.12 PRECAST MANHOLE	STANDARD PRECAST 4' MANHOLE
MH-8	HO.CO. 6-5.12 PRECAST MANHOLE	STANDARD PRECAST 4' MANHOLE

SANITARY LINE CONTRACTOR NOTE

THE CONTRACTOR SHALL TEST PIT THE AREA OF MH-8 TO LOCATE THE SANITARY LINE AND OBTAIN INVERT INFORMATION. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF RESULTS. SEE NOTES ON CIVIL GENERAL NOTES FOR ADDITIONAL INFORMATION.

SWM AS-BUILT



SANITARY PROFILES

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

10/21/2014 WATER LINE RELOCATION SR

SITE RESOURCES
 Incorporated
 Comprehensive Land Planning & Site Design Services

14315 Inverlille Pike • Pikesville, Maryland 21113
 (410) 683-3308 • Fax (410) 683-3309

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. 10344, EXPIRATION DATE 08/31/14.

10-3-2013

DRAWN BY: JLH
 DESIGNED BY: JLH
 CHECKED BY: AFE
 DATE: SEPTEMBER 13, 2013

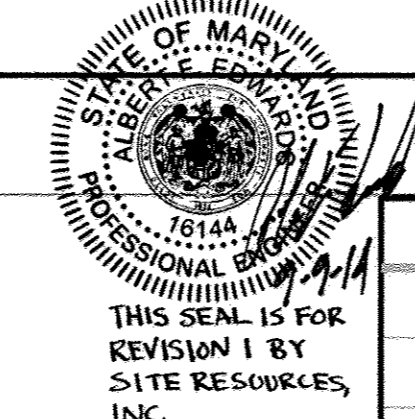
CONTRACT NO.: -
 SCALE: AS SHOWN
 SRI PROJECT NO.: 11054
 SHEET C3.11 15 OF 30

① PROFILE - TURN HOUSE TO EX. MH-11
 SCALES: HORIZ. 1" = 50'
 VERT. 1" = 5'

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 DATE: 1/7/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 09/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 DATE: 12/19/2013

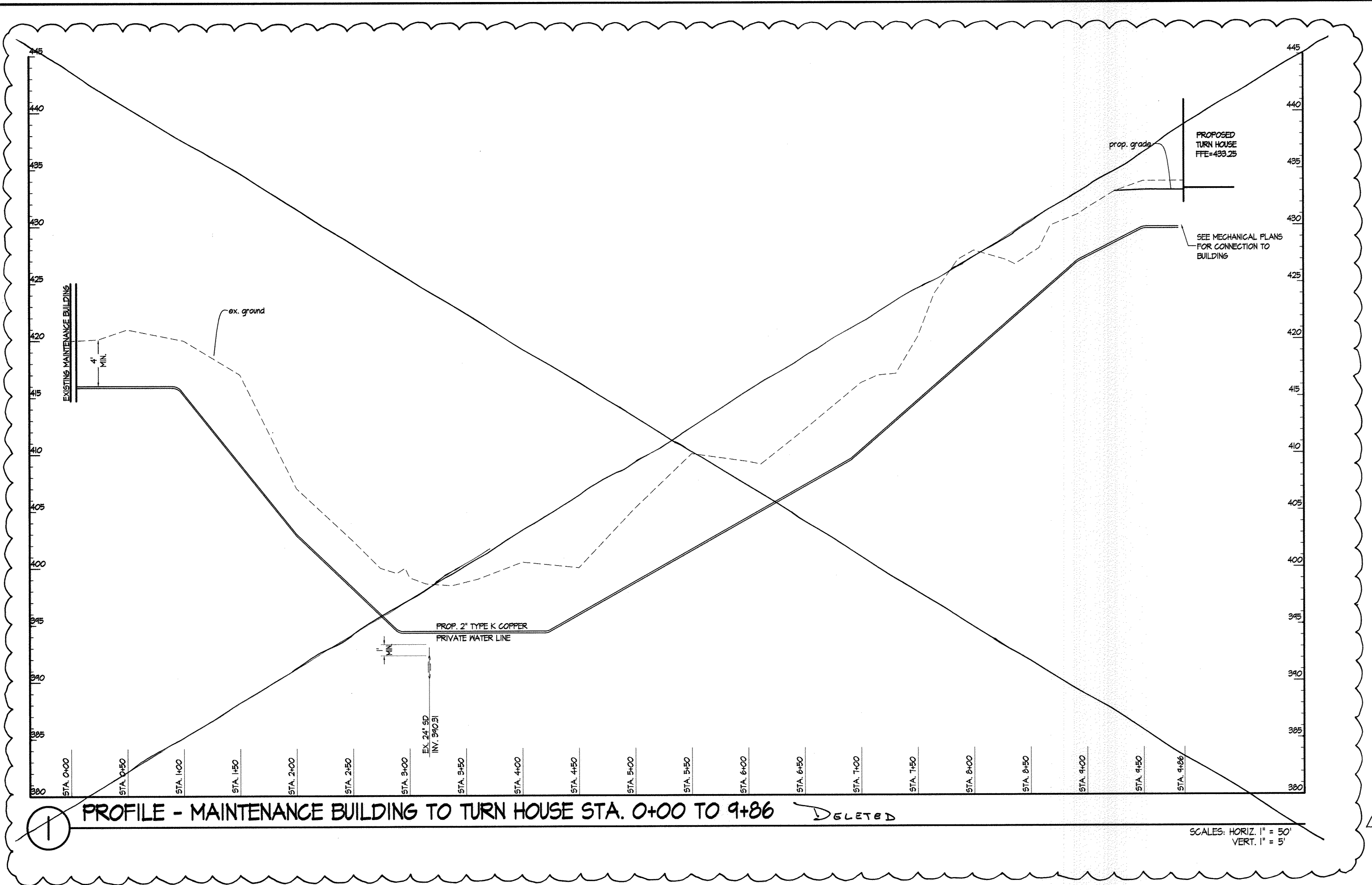


ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
0135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	0135
FLAT # OR L/F	GRID #	ZONING
430B 49204	NA	NT-05
WATER CODE	SEWER CODE	
214 M45	214 M45	

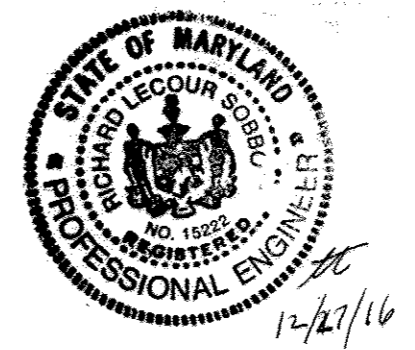


PROFILE - MAINTENANCE BUILDING TO TURN HOUSE STA. 0+00 TO 9+86

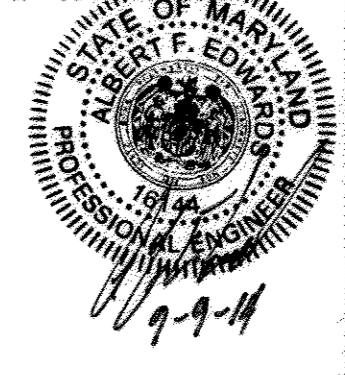
DELETED

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'

SWM
AS-BUILT



THIS SEAL IS FOR REVISION 1
BY SITE RESOURCES INC.



WATER PROFILES	
HOBBIT'S GLEN GOLF CLUBHOUSE	
PROPERTY OF COLUMBIA ASSOCIATION, INC. REVISIONS	
10/21/2014 WATER LINE RELOCATION S.R.E.	
SITE RESOURCES INCORPORATED Comprehensive Land Planning & Site Design Services	
14315 Jarrattville Pike • Phoenix, Maryland 21131 (410) 683-3388 • Fax (410) 683-3389	
DRAWN BY: JLH DESIGNED BY: JLH CHECKED BY: AFE DATE: SEPTEMBER 13, 2013	CONTRACT NO.: - SCALE: AS SHOWN SRI PROJECT NO: 110591 SHEET C3.21 16 OF 38

APPROVED: DEPARTMENT OF PLANNING & ZONING
Frank A. Caugle 1-17-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Frank A. Caugle 1-28-14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 DIRECTOR DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE **09/22/13**
Frank A. Caugle

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
William for Maria Rosman 12/19/2013
 COUNTY HEALTH OFFICER DATE
 HOWARD COUNTY HEALTH DEPARTMENT

ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
8/135	11150 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART				
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.		
VILLAGE OF HARPERS CHOICE	2/1	8/135		
PLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECTION DISTRICT
930B & 930F	NA	NT-05	24	5TH
WATER CODE	SEWER CODE			
214 P45	214 P45			

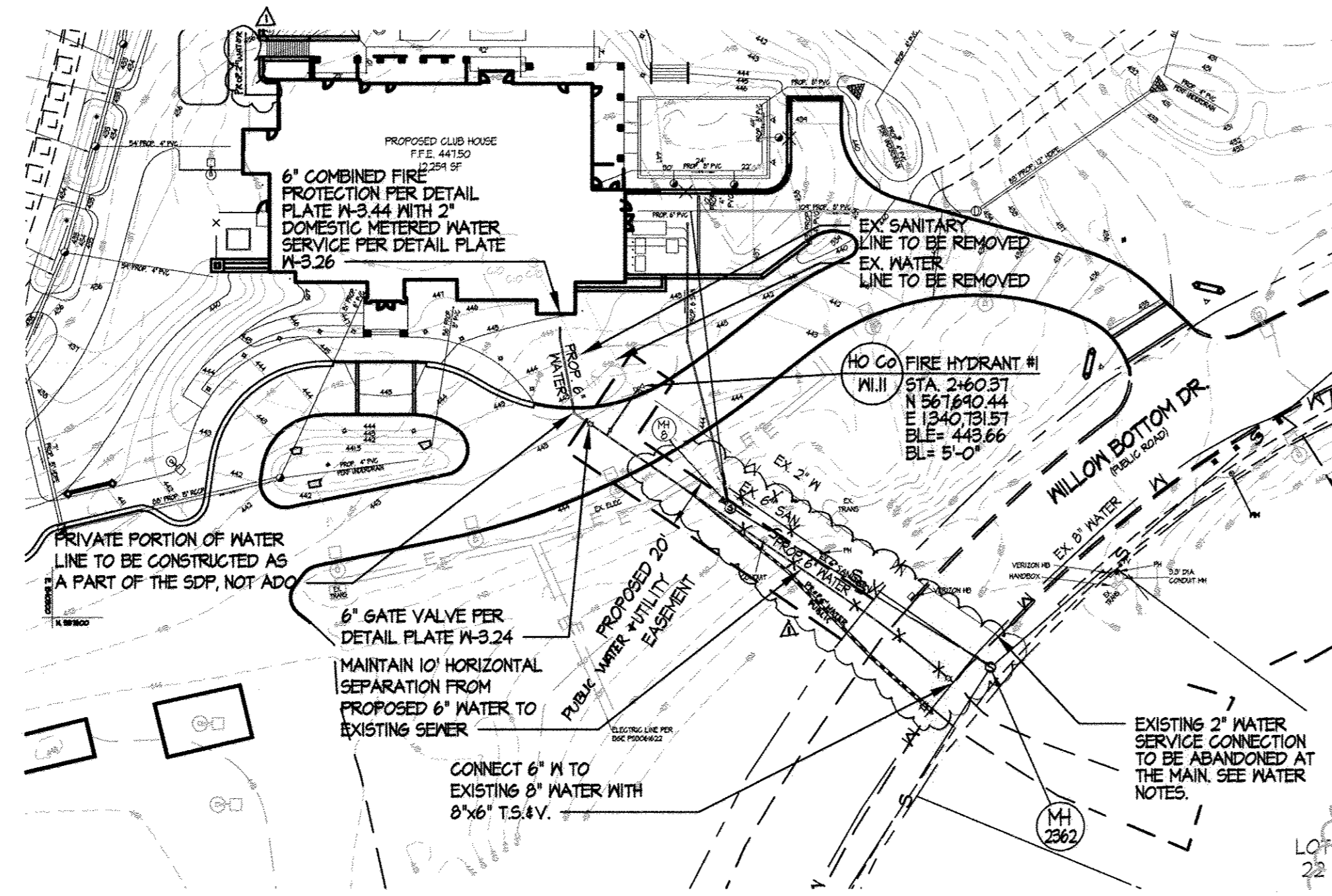
CONSTRUCTION NOTES FOR ADVANCE DEPOSIT ORDER (A.D.O.) WORK IN THE PUBLIC WATER & UTILITY EASEMENT

PART I - GENERAL CONSTRUCTION NOTES

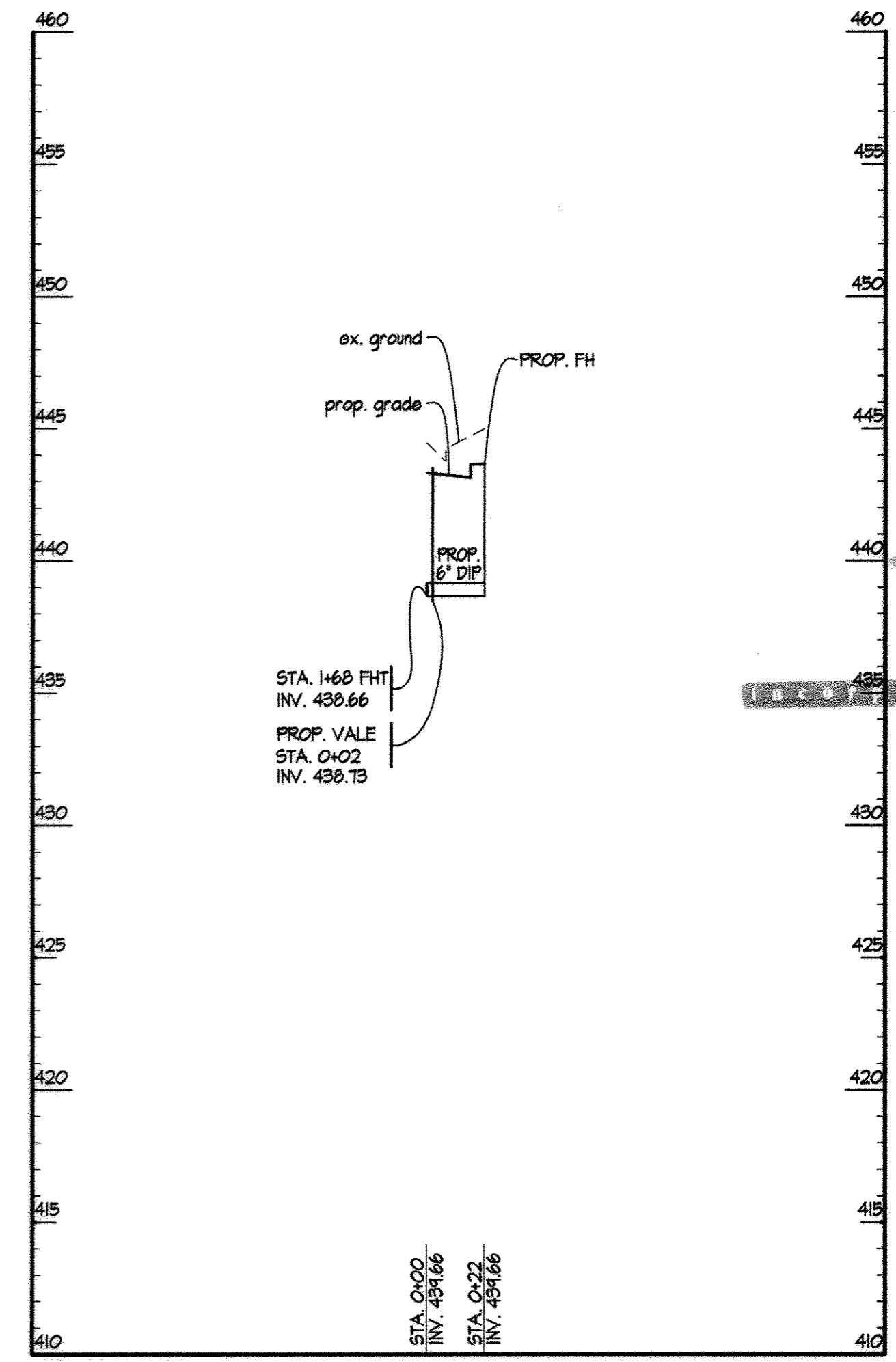
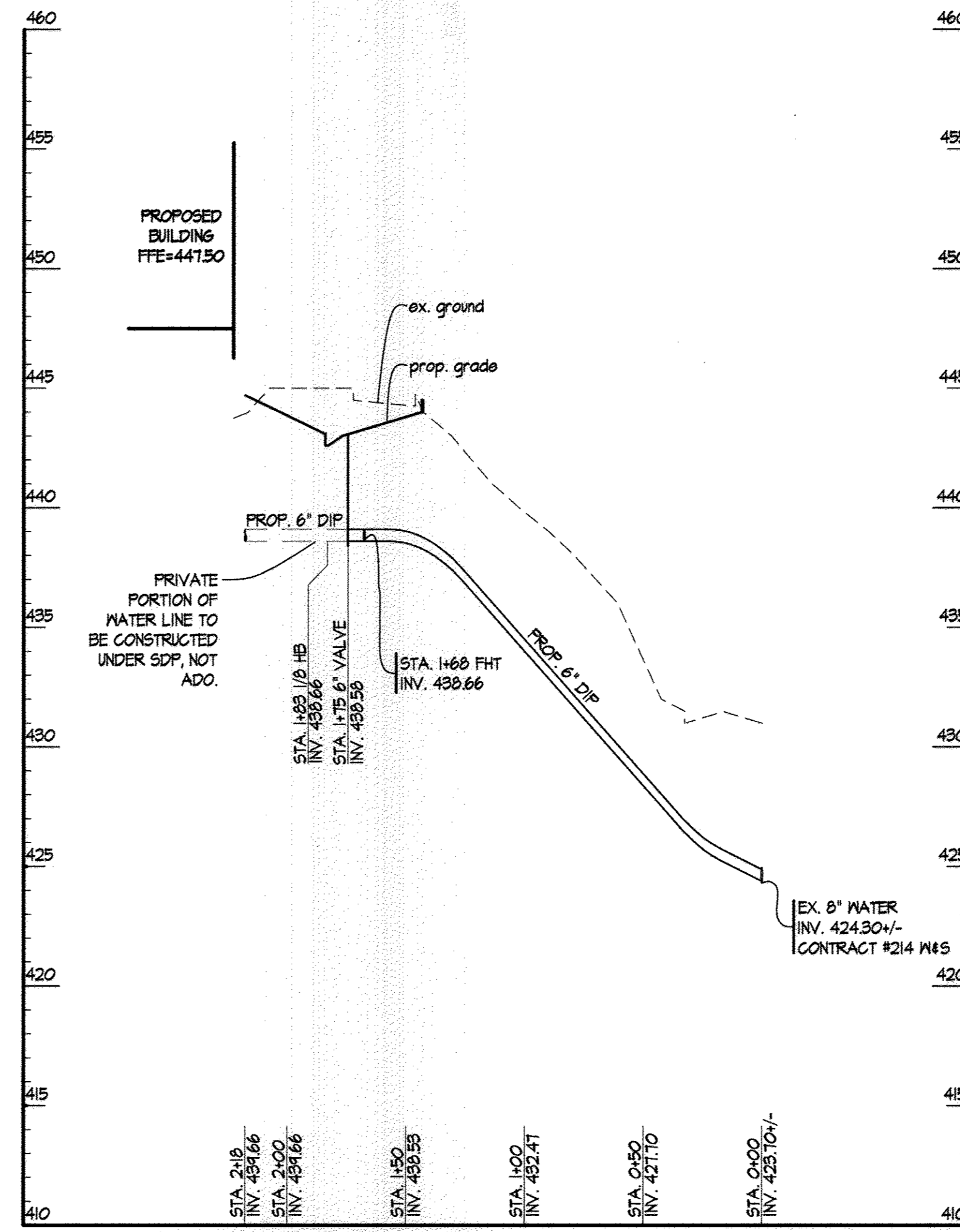
- For details not shown on the drawing, and for materials and construction methods, use Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction (Latest Edition). The contractor shall have a copy of Volume IV on the job.
- The A.D.O. construction work must be performed under the continuous inspection of the Howard County Bureau of Utilities. The contractor shall notify the Bureau of Utilities (Mr. Don Campbell at 410-313-1438) at least five (5) days prior to the start of any construction for this A.D.O.
- Clear all utilities by a minimum of 12 inches. Clear all poles by 5'-0" minimum or tunnel as required unless otherwise noted. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
- The contractor shall notify all utilities and agencies at least two (2) working days before starting work shown on the plans.
- The contractor shall notify the Howard County Bureau of Highways, 410-313-1450, at least five working days before open cutting or boring/lacking of any County road for laying water or sewer mains or service connections.
- Excavations must be supported for the protection of workers, the construction work area and adjacent property. Refer to Temporary Excavation Support Systems under Section 1000.03.03 of the Standard Specifications.
- Excavations must be kept well drained at all times. Dewatering, drainage and pumping is required during construction. Refer to Dewatering, Drainage and Pumping under Section 1000.03.03 of the Standard Specifications. Pumps must be the proper type and capacity to maintain a dry work area.
- The use of steel plates to protect the trench and roadway shall be as specified under Section 1000.03.05, Section 104 and Standard Detail Plate 6-4.02 of the Standard Specifications.
- Temporary and permanent repair of roadway openings shall be as specified under Section 1000.03.08 and Standard Detail Plate 6-4.01 of the Standard Specifications unless otherwise specified by Permit from the authority having jurisdiction. Temporary paving shall consist of not less than 12 (twelve) inches of crushed stone and 2 (two) inches of bituminous cold patch material.

PART II - WATER CONSTRUCTION NOTES

- Tops of all water pipes shall have not less than 4'-0" of cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- All fittings shall be buttressed or anchored with concrete in accordance with Standard Details unless otherwise provided for on the drawings.
- The contractor shall notify the Bureau of Utilities at least 48 hours in advance of scheduled shutdowns of the existing water main. Shutdowns of the existing water main for new connections and removal of existing service connections shall be as specified under Section 1002.06 - Connections of the Standard Specifications.
- The contractor shall not operate any water main valves on the existing water system.
- Water service connections shall be as specified under Section 1004 - Water House Service and Appurtenances of the Standard Specifications and Standard Detail Plate M-3.44. Water service connections include pressure and leak testing, disinfection and bacteriological testing.
- The new water meter assembly shall be the (type) per Howard County Detail Plate M-3.26. The water meter assembly is not part of the A.D.O. construction work.
- If the existing water meter will be moved to the new meter connection inside the building, the contractor shall contact the Meter Division of the Bureau of Utilities at 410-313-4948 to schedule relocation of the meter setting.
- The abandonment of existing water service connections shall be as specified under Section 1015.03 of the Standard Specifications. Removal of the existing corporation stop or tapping saddle requires a scheduled shutdown of the water main. The existing corporation stop shall be removed from the water main and the pipe repaired with a County-approved stainless steel full circle repair clamp such as Ford Meter F52, Mueller 550 or Romac 552 series.
- Tracer wire and continuity test stations shall be installed on all water mains in accordance with Detail Plate 6-8.21 of the Standard Specifications.
- Tees, crosses, bends greater than 5 degrees, and similar fittings for use with C-400 PVC water pipe shall be ductile iron conforming to ANMA C153.
- All changes in horizontal or vertical direction of PVC water pipe shall be made with high-deflection couplings, 5-degree sweeps or standard bends. No bending of pipe or deflection of PVC pipe joints is permitted.



NOTE
THE SEWER SERVICE CONNECTION IS NOT PART OF THE A.D.O. WORK.



APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 DATE: 1/17/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 09/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 DATE: 12/19/2013

ADDRESS CHART		PERMIT INFORMATION CHART			
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARRPERS CHOICE	2/1	8/135	
		FLAT # OR L/F	GRID #	ZONING	TAX MAP NO.
		9308 49304	NA	NT-05	ELECTION DISTRICT
					5TH
		WATER CODE	SEWER CODE		
		214 M45	214 M45		

SWM AS-BUILT

STATE OF MARYLAND PROFESSIONAL ENGINEER

STATE OF MARYLAND PROFESSIONAL ENGINEER

SCALE: 1" = 50'

ADO PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

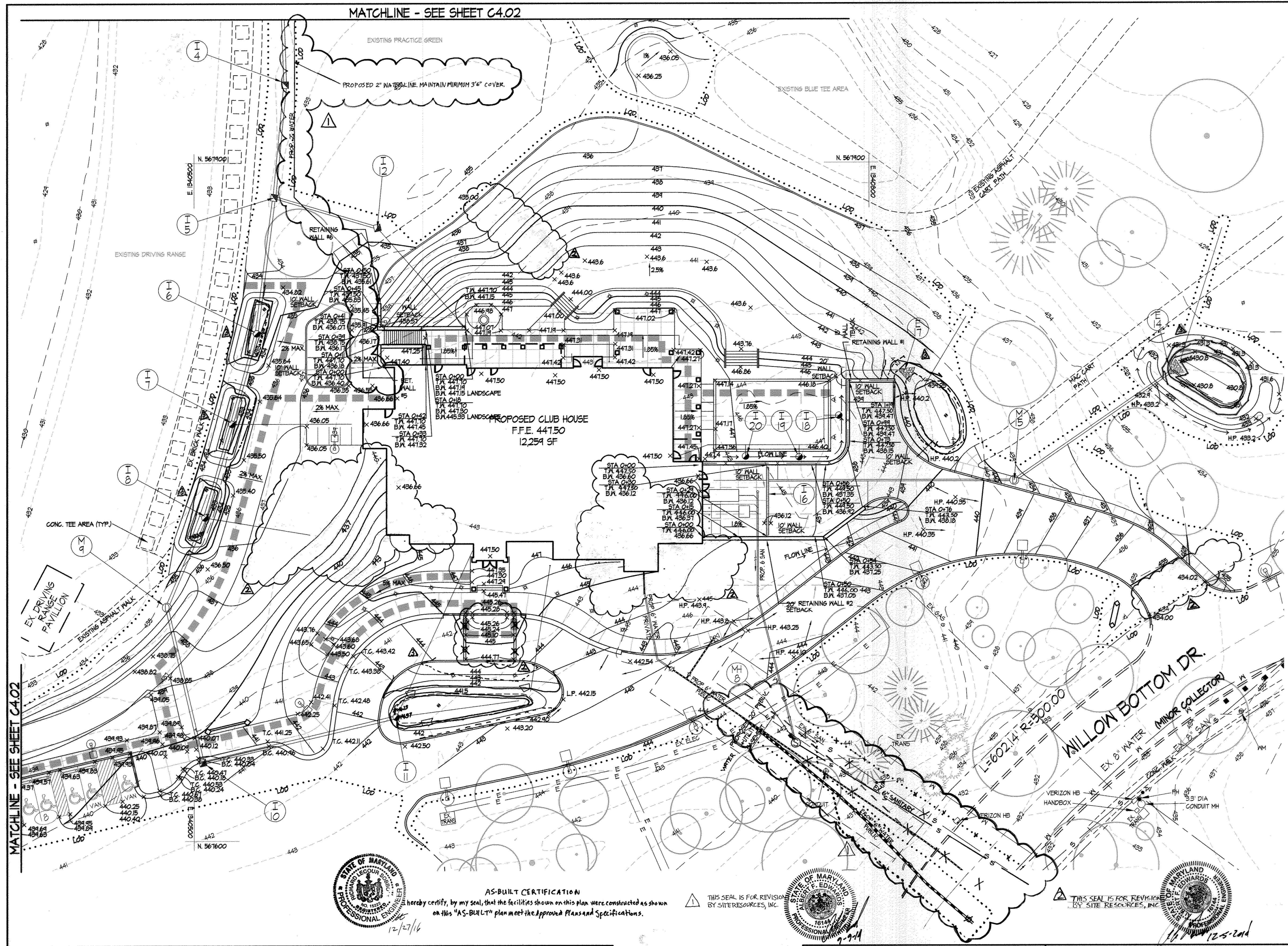
10/11/2014 WATER LINE RELOCATION

SITE RESOURCES

14815 Invertonville Pike • Pikesville, Maryland 21115
 (410) 683-3380 • Fax (410) 683-3380

DATE: SEPTEMBER 13, 2013 SHEET: C3.31

MATCHLINE - SEE SHEET C4.02



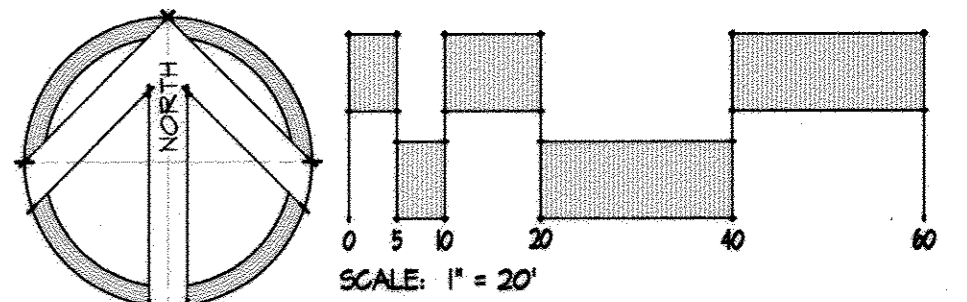
LEGEND

	PROPERTY LINE
	EXISTING CONTOURS
	EXISTING TREELINE
	EXISTING TREES
	EXISTING WALK
	EXISTING ROAD
	EXISTING CURB
	EX. 15" SD
	EX. 6" WATER
	EX. 8" SAN
	EX. ELEC
	EX. ELEC OVERHEAD
	EXISTING LIGHTING
	EXISTING COMMUNICATIONS
	EXISTING CABLE TV
	PROPOSED ROAD
	PROPOSED STORM DRAIN
	PROP. 6" WATER
	PROP. 8" SAN
	PROPOSED CONTOURS
	SPOT ELEVATIONS
	EXISTING
	PROPOSED
	PROPOSED ADA ROUTE
	LIMIT OF DISTURBANCE

BENCHMARKS

ELEVATIONS WITHIN FIELD RUN SURVEY LIMITS ARE BASED ON THE FOLLOWING HOWARD COUNTY TRAVERSE POINTS.

#24EA	N570132.844	E1338106.9544	ELEVATION 436.66
#24EB	N570505.0944	E1340430.1241	ELEVATION 442.94



GRADING PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

AS - BUILT SURVEY 12/27/16

10/21/2014 RETAINING WALL ADJUSTMENTS AND VARIOUS SITE FEATURES

10/21/2014 WATER LINE RELOCATION

SITE RESOURCES

Comprehensive Land Planning & Site Design Services

14315 Jarrettsville Pike • Phoenix, Maryland 21131
(410) 683-3308 • Fax (410) 683-3300

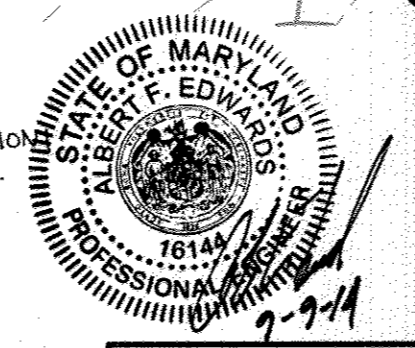
DRAWN BY: FJP CONTRACT NO.: -
DESIGNED BY: FJP SCALE: 1"=20'
CHECKED BY: AFE SRI PROJECT NO.: 11054
DATE: SEPTEMBER 13, 2013 SHEET C4.01 18 OF 38



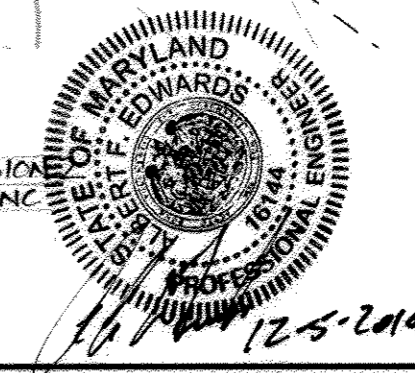
AS-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS-BUILT" plan meet the Approved Plans and Specifications.

THIS SEAL IS FOR REVISION BY SITE RESOURCES, INC.



THIS SEAL IS FOR REVISION BY SITE RESOURCES, INC.



APPROVED: DEPARTMENT OF PLANNING & ZONING

Chief Development Engineering Division

1-18-14 DATE

1-28-14 DATE

1/29/14 DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE 09/12/13

DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

B. Nilon for Maria Rosman 12/19/2013 DATE

COUNTY HEALTH OFFICER

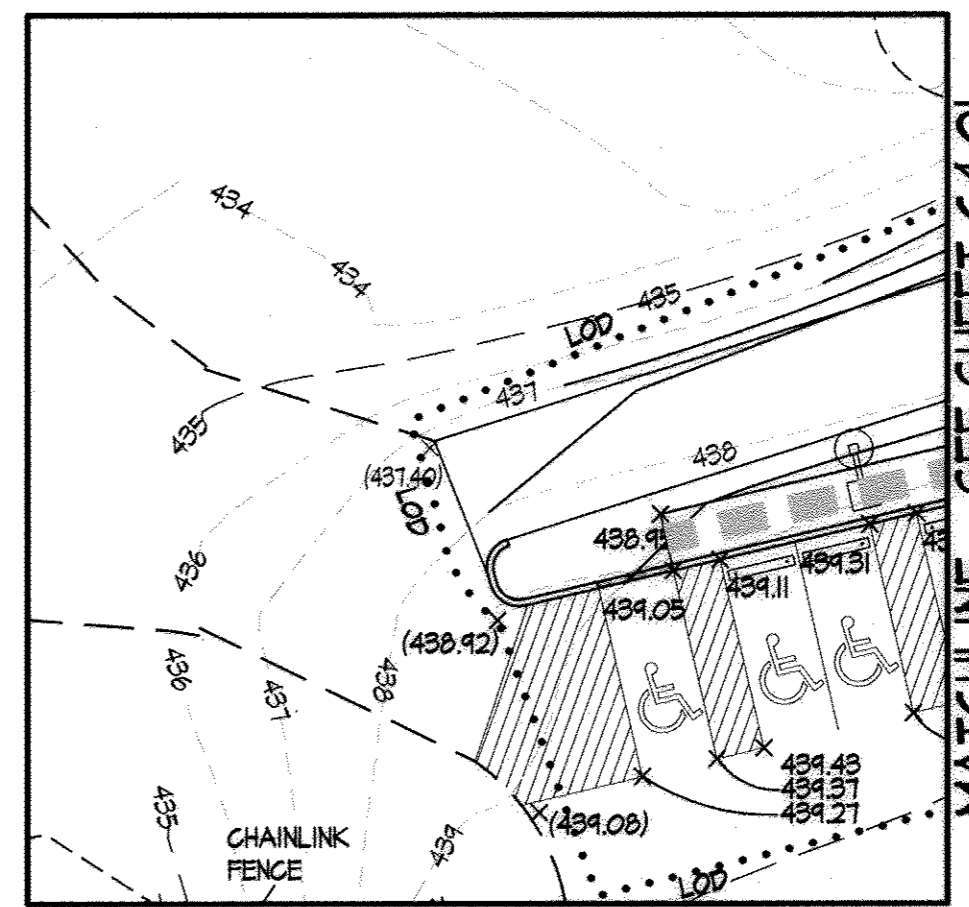
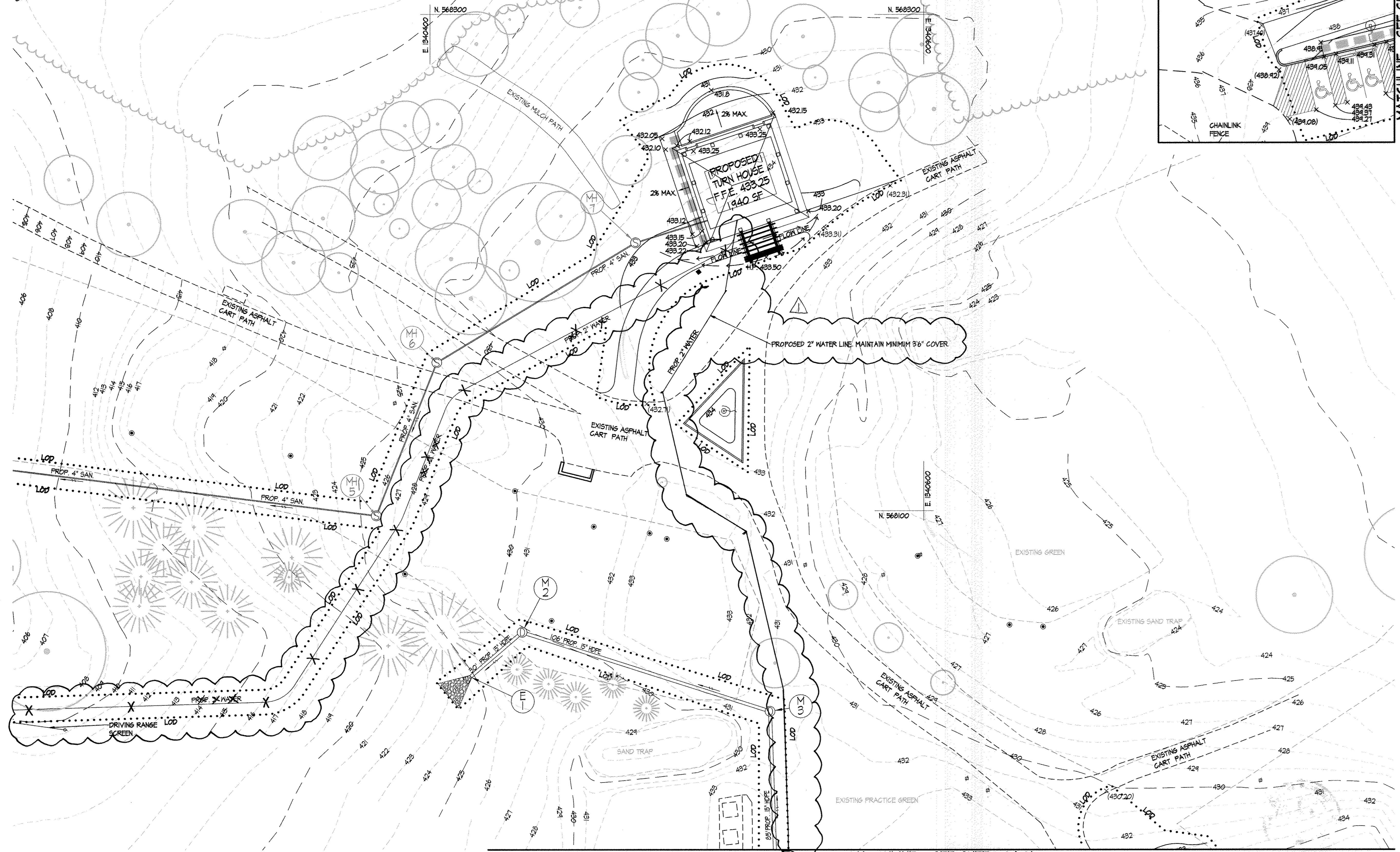
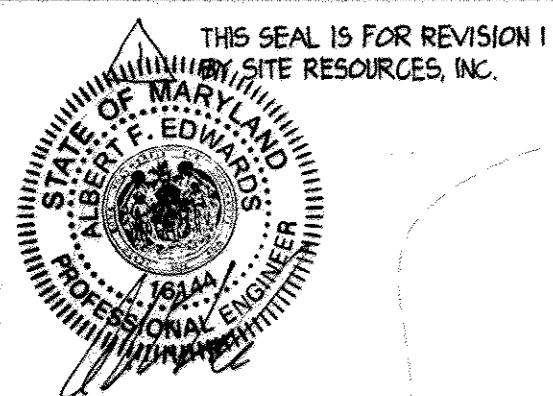
HOWARD COUNTY HEALTH DEPARTMENT

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
FLAT # OR L/F	GRID #	ZONING
930B 49304	NA	NT-05
TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
21	5TH	605502
WATER CODE	SEWER CODE	
214 N45	214 N45	



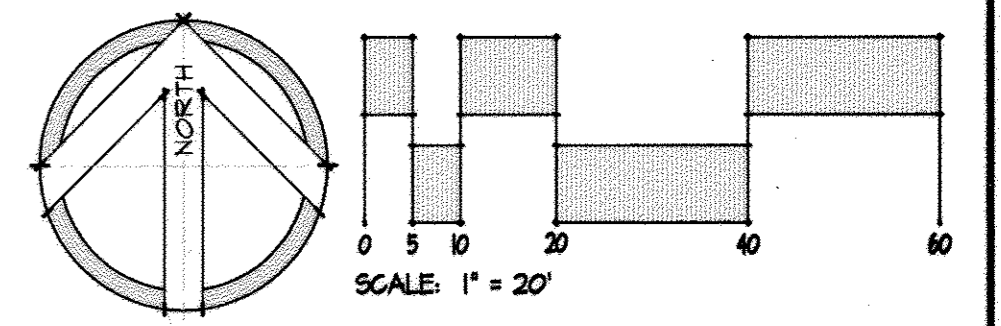
LEGEND

---	PROPERTY LINE
--- 348 --- 350 ---	EXISTING CONTOURS
---	EXISTING TREELINE
⊙	EXISTING TREES
---	EXISTING WALK
---	EXISTING ROAD
---	EXISTING CURB
⊙	EXISTING STORM DRAIN
⊙	EXISTING WATER
⊙	EXISTING SANITARY SEWER
⊙	EXISTING ELECTRIC
⊙	EXISTING OVERHEAD ELECTRIC
⊙	EXISTING LIGHTING
⊙	EXISTING COMMUNICATIONS
⊙	EXISTING CABLE TV
---	PROPOSED ROAD
⊙	PROPOSED STORM DRAIN
⊙	PROPOSED WATER
⊙	PROPOSED SANITARY SEWER
---	PROPOSED CONTOURS
⊙	EXISTING SPOT ELEVATIONS
⊙	PROPOSED SPOT ELEVATIONS
---	PROPOSED ADA ROUTE
---	LIMIT OF DISTURBANCE

BENCHMARKS

ELEVATIONS WITHIN FIELD SURVEY LIMITS ARE BASED ON THE FOLLOWING HOWARD COUNTY TRAVERSE POINTS.

#24EA	N.570192.0414	E.1330186.9544	ELEVATION 436.66
#24EB	N.510505.0944	E.1340430.1241	ELEVATION 442.94



GRADING PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

10/8/2014	WATER LINE RELOCATION
-----------	-----------------------

PROFESSIONAL CERTIFICATION

ALBERT F. EDWARDS
15144
PROFESSIONAL ENGINEER
STATE OF MARYLAND
LICENSE NO. 15144 EXPIRES 10-3-2013

SITE RESOURCES
INCORPORATED
Comprehensive Land Planning & Site Design Services

14515 Arretville Pike • Phoenix, Maryland 21151
(410) 683-3388 • Fax (410) 683-3380

DRAWN BY: FJP
DESIGNED BY: FJP
CHECKED BY: AFE
DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
SCALE: 1"=20'
SRI PROJECT NO.: 11054
SHEET C4.02 19 OF 38

APPROVED: DEPARTMENT OF PLANNING & ZONING

Chief
CHIEF, DEVELOPMENT ENGINEERS DIVISION
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR

DATE: 1/7/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE: 09/12/13

DAF

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

B. Nyman for Maureen Rossman
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

DATE: 12/19/2013



ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

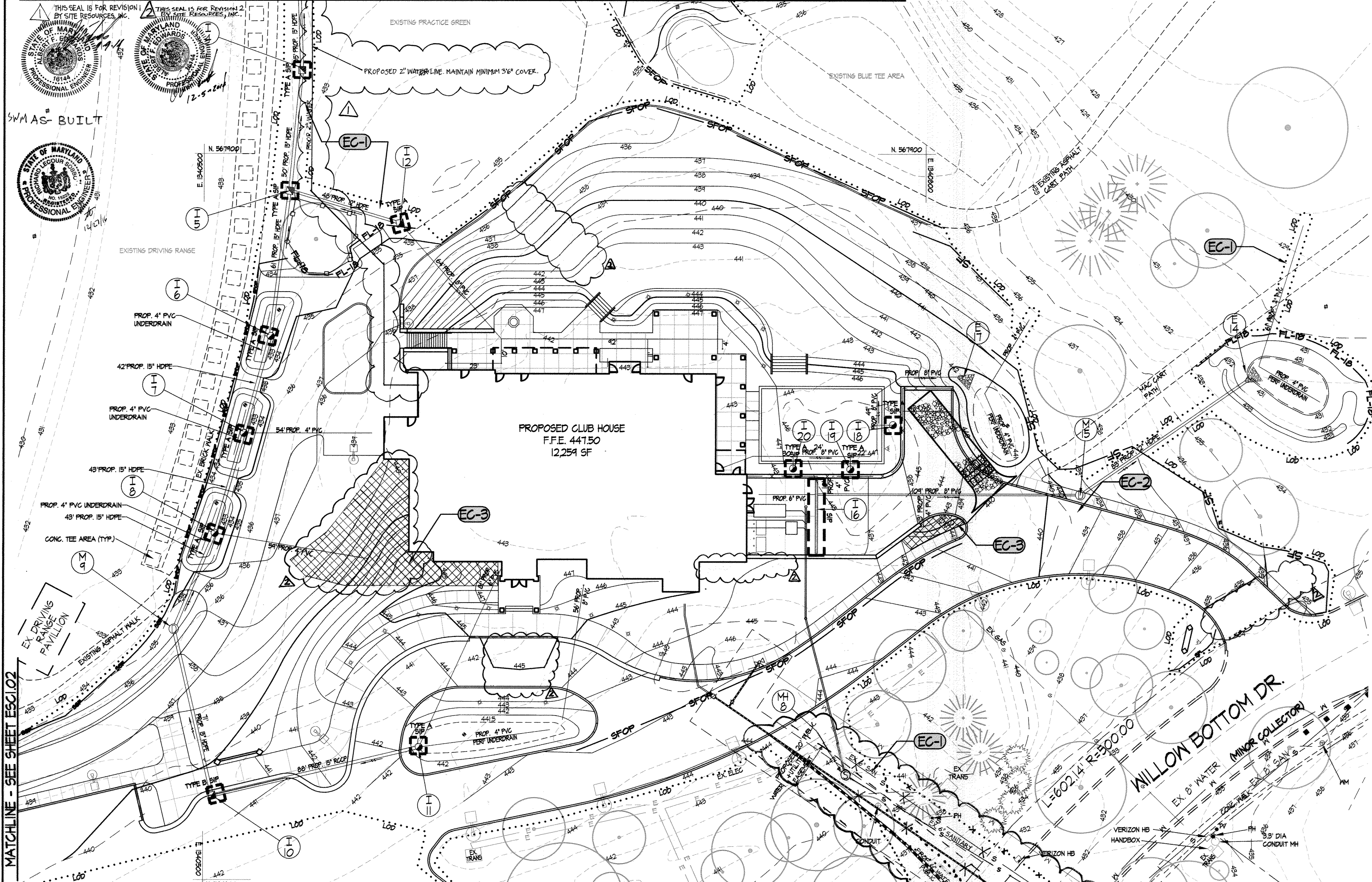
PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
FLAT # OR L/F	TAX MAP NO.	ELECTION DISTRICT
9302 49304	21	5TH
GRID #	ZONING	CENSUS TRACT
NA	NT-05	605502
WATER CODE	SEWER CODE	
214 M45	214 M45	

SWM
AS-BUILT

MATCHLINE - SEE SHEET C4.01

MATCHLINE - SEE SHEET ESC1.02



- LEGEND**
- PROPERTY LINE
 - - - - - EXISTING CONTOURS
 - - - - - EXISTING TREELINE
 - EXISTING TREES
 - - - - - EXISTING WALK
 - - - - - EXISTING ROAD
 - - - - - EXISTING CURB
 - EX. 15" SD
 - EX. 6" WATER
 - EX. 8" SAN
 - EX. ELEC
 - EX. ELEC CHPT
 - EX. LIGHTING
 - EX. COM
 - EX. CATV
 - ▭ PROPOSED ROAD
 - ▭ PROPOSED BUILDING
 - PROP. 15" SD
 - PROP. WATER
 - PROP. SANITARY SEWER
 - - - - - PROPOSED CONTOURS
 - SF SILT FENCE
 - SF/OP SILT FENCE ON PAVING
 - SF/AP SILT FENCE ON ASPHALT
 - SIP STANDARD
 - AGIP AT GRADE
 - CIP CURB
 - SSIF SUPER SILT FENCE
 - INLET PROTECTION
 - STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM
 - TREE PROTECTION FENCE
 - ... LOD ... LIMIT OF DISTURBANCE
- ESC NOTES (THESE NOTES PERTAIN TO THIS SHEET ONLY)**
- EC-1** USE "SAME DAY STABILIZATION" CONSTRUCTION IN THIS AREA. SEE NOTE "SAME DAY STABILIZATION" NOTE, THIS SHEET.
 - EC-2** FULL DEPTH PAVEMENT WORK SHALL BE DONE USING THE METHOD OF "SAME DAY STABILIZATION". SEE "SAME DAY STABILIZATION" NOTE, THIS SHEET.
 - EC-3** SLOPE STABILIZATION MATTING.

DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done according to this plan 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 also authorize periodic on-site inspection by the Howard Soil Conservation District.
 D. Mott
 COLUMBIA ASSOCIATION - DEVELOPER
 DATE: 11.23.13

ENGINEER'S CERTIFICATE
 I certify that this plan for sediment and erosion 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.
 Jennifer Harrington
 JENNIFER HARRINGTON, P.E. - ENGINEER
 DATE: 11.27.13

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 John R. Robertson
 HOWARD SOIL CONSERVATION DISTRICT
 DATE: 11/14/14

SAME DAY STABILIZATION NOTE
 The work in this area shall be done using the method of "Same Day Stabilization". No more area shall be disturbed than can be stabilized by the end of the workday. All disturbed areas that do not drain to a sediment control device shall be stabilized at the end of the workday. No disturbed area shall be left unstabilized overnight unless the runoff is directed to an MDE or County approved sediment control device.
 Stabilization shall be as follows:
 - For areas to be paved: Application of stone subbase.
 - For areas to be vegetatively stabilized: Permanent seed and erosion control matting for all swales/channels and permanent seed and mulch for all other areas.

APPROVED: DEPARTMENT OF PLANNING & ZONING
 DATE: 1.17.14
 DATE: 1-22-14
 DATE: 1/29/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 09/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 B. Nelson for Maura Rossman 12/19/2013
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

LOT/PARCEL	STREET ADDRESS
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.	
VILLAGE OF HARPERS CHOICE		2/1		8/135	
FLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
	NA	NT-05	24	5TH	605502
WATER CODE			SEWER CODE		
214 N#5			214 N#5		

EROSION AND SEDIMENT CONTROL PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
 REVISIONS

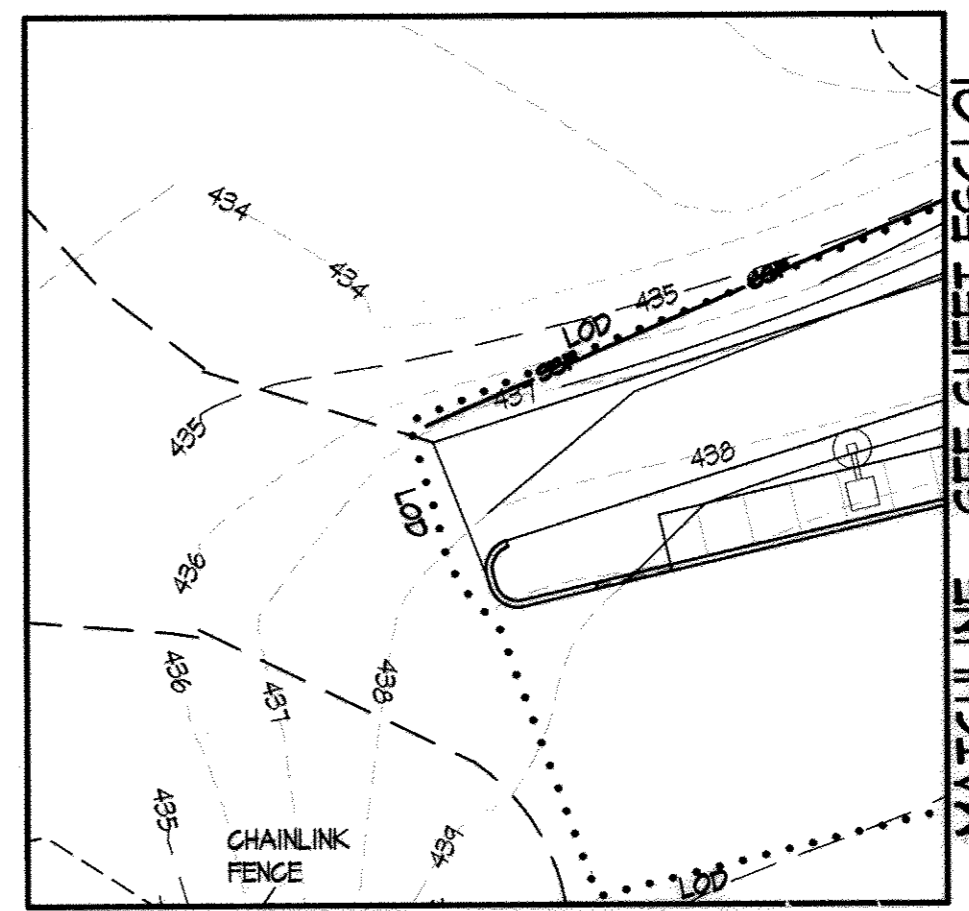
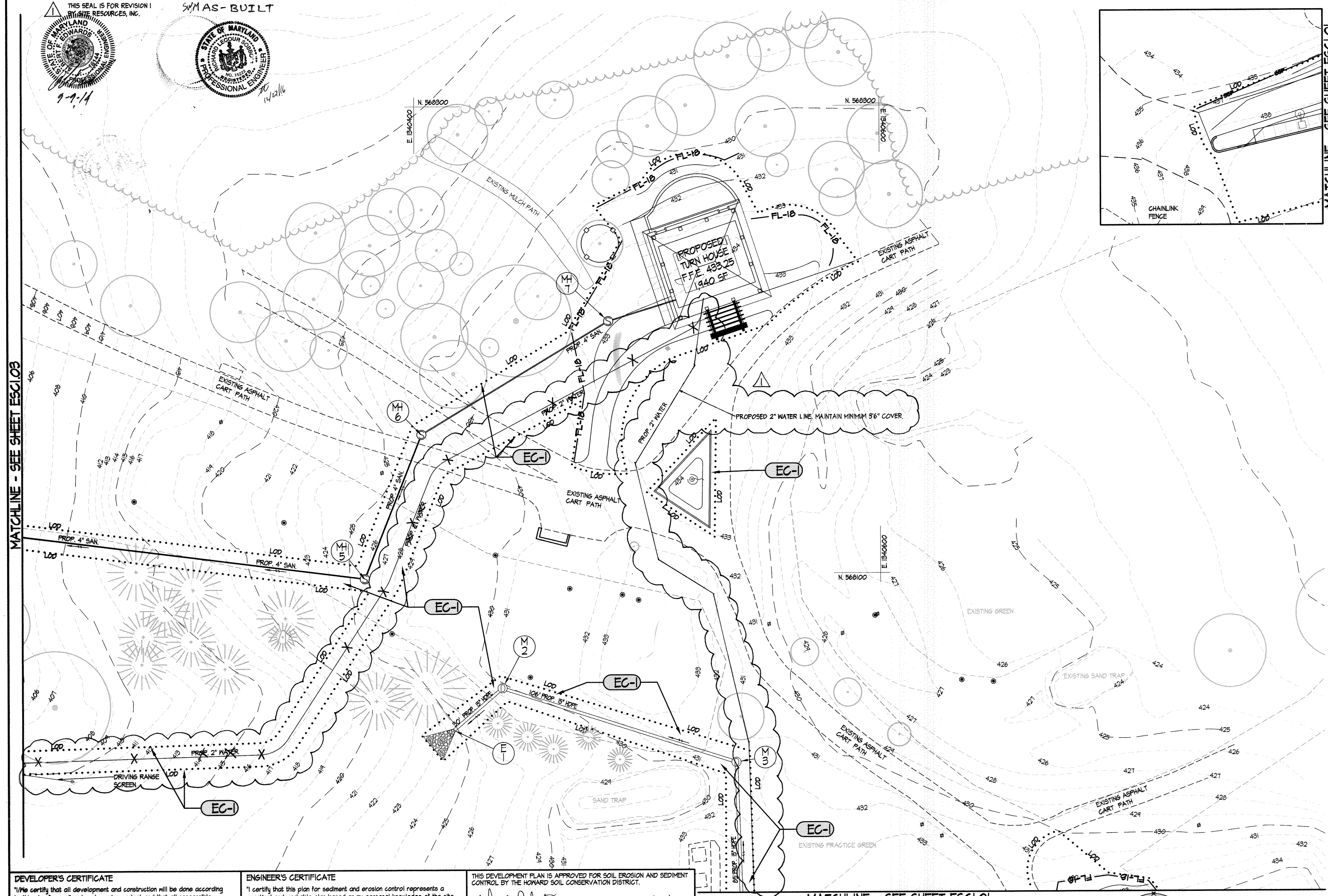
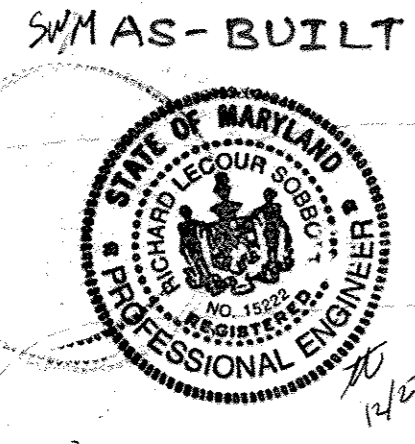
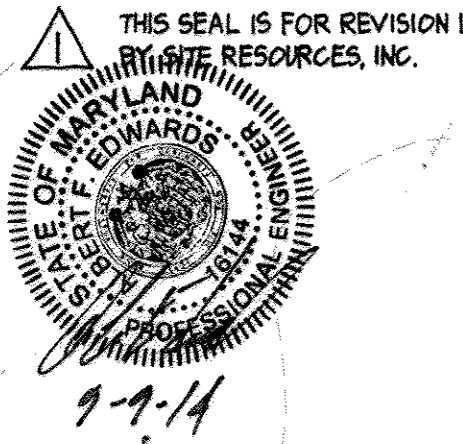
10.31.14 RETAINING WALL ADJUSTMENTS AND VARIOUS SITE FEATURES
 10/21/2014 WATER LINE RELOCATION

SITE RESOURCES
 Comprehensive Land Planning & Site Design Services

14315 Jarrattville Pike • Phoenix, Maryland 21151
 (410) 683-3300 • Fax (410) 683-3300

DRAWN BY: JLH
 DESIGNED BY: JLH
 CHECKED BY: FJP
 DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
 SCALE: 1"=20'
 SRI PROJECT NO.: 11054
 SHEET: ESC1.01 20 OF 38



LEGEND

---	PROPERTY LINE
- - - -	EXISTING CONTOURS
---○---	EXISTING TREELINE
○	EXISTING TREES
- - - -	EXISTING WALK
- - - -	EXISTING ROAD
====	EXISTING CURB
○	EXISTING STORM DRAIN
○	EXISTING WATER
○	EXISTING SANITARY SEWER
○	EXISTING ELECTRIC
○	EXISTING OVERHEAD ELECTRIC
○	EXISTING LIGHTING
○	EXISTING COMMUNICATIONS
○	EXISTING CABLE TV
[]	PROPOSED ROAD
[]	PROPOSED BUILDING
○	PROPOSED STORM DRAIN
○	PROPOSED WATER
○	PROPOSED SANITARY SEWER
- - - -	PROPOSED CONTOURS
---	SILT FENCE
---	SILT FENCE ON PAVING
---	SILT FENCE ON ASPHALT
[]	INLET PROTECTION
[]	STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM
[]	TREE PROTECTION FENCE
...	LIMIT OF DISTURBANCE

ESC NOTES (THESE NOTES PERTAIN TO THIS SHEET ONLY)

EC-1 USE SAME DAY STABILIZATION CONSTRUCTION IN THIS AREA. SEE NOTE "SAME DAY STABILIZATION" NOTE, THIS SHEET.

EROSION AND SEDIMENT CONTROL PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

10/21/2014 WATER LINE RELOCATION

PROFESSIONAL ENGINEER
Jennifer Harrington
STATE OF MARYLAND
LICENSE NO. 100116
EXPIRES 10/3/13

SITE RESOURCES
Comprehensive Land Planning & Site Design Services
14315 Jarrettsville Pike • Pikesville, Maryland 21131
(410) 663-3388 • fax (410) 663-3389

CONTRACT NO.: -
SCALE: 1"=20'
SRI PROJECT NO.: 110591
DATE: SEPTEMBER 13, 2013 SHEET ESC1.02 21 of 38

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan 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 also authorize periodic on-site inspection by the Howard Soil Conservation District."

[Signature]
COLUMBIA ASSOCIATION - DEVELOPER
DATE: 9/19/13

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion 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."

[Signature]
JENNIFER HARRINGTON, P.E. - ENGINEER
DATE: 10.3.13

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature]
HOWARD SOIL CONSERVATION DISTRICT
DATE: 11/14/14

SAME DAY STABILIZATION NOTE

The work in this area shall be done using the method of "Same Day Stabilization". No more area shall be disturbed than can be stabilized by the end of the workday. All disturbed areas that do not drain to a sediment control device shall be stabilized at the end of the workday. No disturbed area shall be left unstabilized overnight unless the runoff is directed to an MDE or County approved sediment control device.

Stabilization shall be as follows:
- For areas to be paved: Application of stone subbase.
- For areas to be vegetatively stabilized: Permanent seed and erosion control matting for all swales/channels and permanent seed and mulch for all other areas.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

[Signature]
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 12/19/2013

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	1180 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
PLAT # OR L/F	GRID #	ZONING
9308 & 9309	NA	NT-05
WATER CODE	SEWER CODE	TAX MAP NO.
214 P45	214 P45	5TH

MATCHLINE - SEE SHEET ESC1.04

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING TREES
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EX. 15" SD
- EX. 6" WATER
- EX. 8" SAN
- EX. ELEC
- EX. ELEC OVERHEAD
- EXISTING LIGHTING
- EX. COM
- EX. CATV
- EXISTING COMMUNICATIONS
- EXISTING CABLE TV
- PROPOSED ROAD
- PROPOSED BUILDING
- PROP. 15" SD
- PROP. 6" WATER
- PROP. 8" SAN
- PROPOSED CONTOURS
- L.O.D.

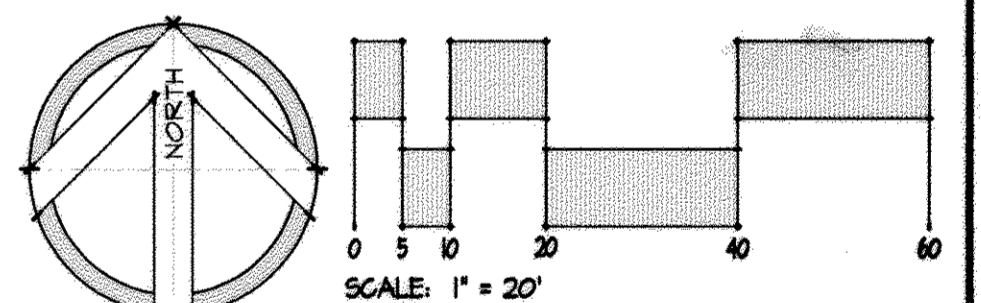
ESC NOTES (THESE NOTES PERTAIN TO THIS SHEET ONLY)

EC-1 USE "SAME DAY STABILIZATION" CONSTRUCTION IN THIS AREA. SEE NOTE "SAME DAY STABILIZATION" NOTE, THIS SHEET.

SAME DAY STABILIZATION NOTE

The work in this area shall be done using the method of "Same Day Stabilization". No more area shall be disturbed than can be stabilized by the end of the workday. All disturbed areas that do not drain to a sediment control device shall be stabilized at the end of the workday. No disturbed area shall be left unstabilized overnight unless the runoff is directed to an MDE or County approved sediment control device. If sediment control is required within a same day stabilization area, the Contractor shall provide these measures at the Contractor's cost.

Stabilization shall be as follows:
 - For areas to be paved: Application of stone subbase.
 - For areas to be vegetatively stabilized: Permanent seed and erosion control matting for all swales/channels and permanent seed and mulch for all other areas.



EROSION AND SEDIMENT CONTROL PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
 REVISIONS

10/21/2014 WATER LINE RELOCATION S&E

SITE RESOURCES
 Incorporated
 Comprehensive Land Planning & Site Design Services

14315 Arretville Pike • Pikesville, Maryland 21113
 (410) 683-3388 • Fax (410) 683-3389

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. 10313 (EXPIRES 09/30/15)

DRAWN BY: F.J.P./J.L.H.
 DESIGNED BY: J.L.H.
 CHECKED BY: A.F.E.
 DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
 SCALE: 1"=20'
 SRI PROJECT NO.: 11054
 SHEET: ESC1.03 22 OF 38

DEVELOPER'S CERTIFICATE
 "I/We certify that all development and construction will be done according to this plan 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 also authorize periodic on-site inspection by the Howard Soil Conservation District."

D. Mark
 COLUMBIA ASSOCIATION - DEVELOPER
 9/19/13
 DATE

ENGINEER'S CERTIFICATE
 "I certify that this plan for sediment and erosion 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."

Jennifer L. Harrington
 JENNIFER L. HARRINGTON, P.E. - ENGINEER
 10.3.13
 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Blanton
 JOHN R. BLANTON, P.E.
 11/4/14
 DATE

APPROVED: DEPARTMENT OF PLANNING & ZONING
Chad Clark
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 1/17/14
 DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 09/12/13
 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
B. Wilson for Maurea Rossman
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT
 12/19/2013
 DATE

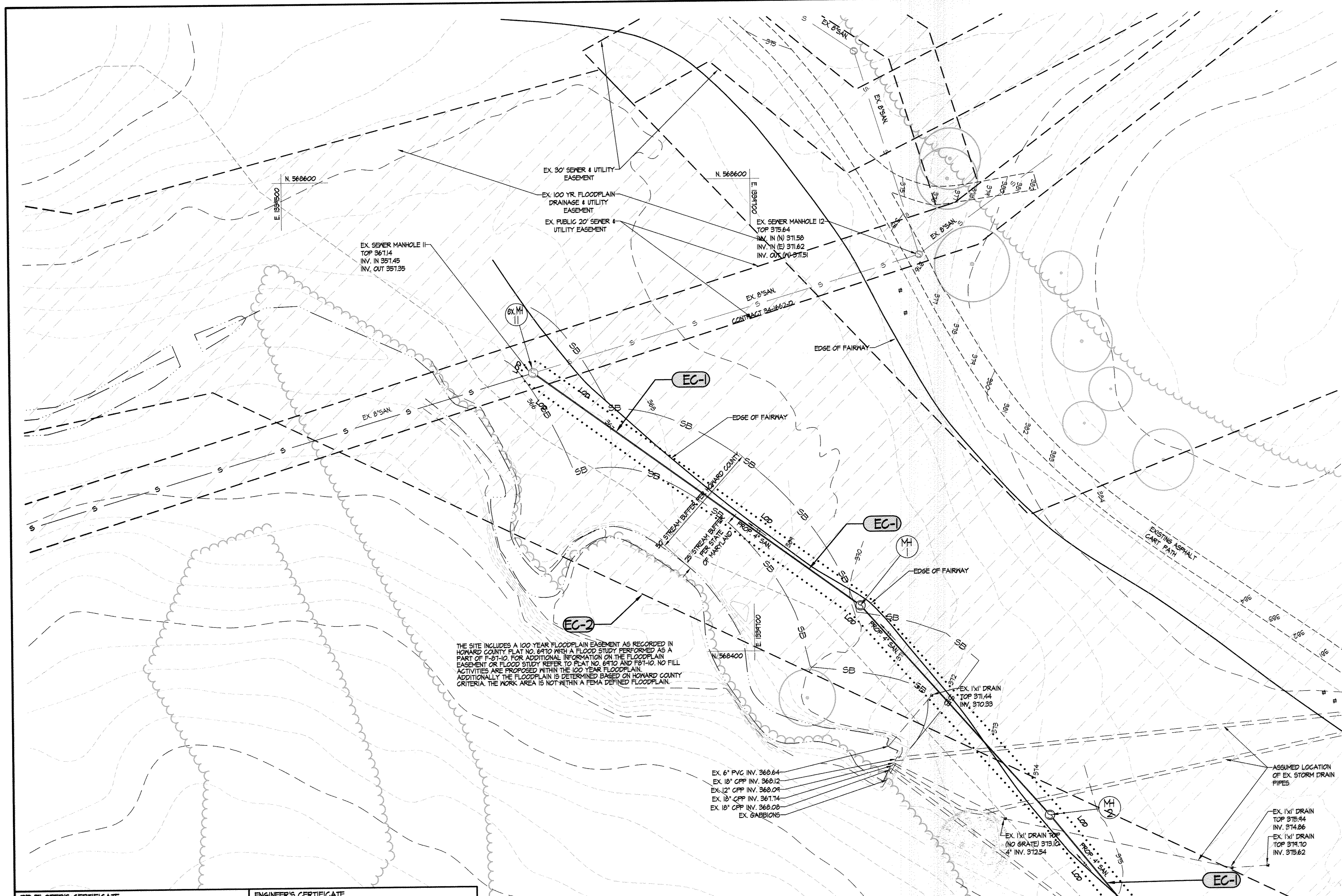
APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 1/17/14
 DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 09/12/13
 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
B. Wilson for Maurea Rossman
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT
 12/19/2013
 DATE

ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
6/135	11130 MILLON BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
VILLAGE OF HARRPERS CHOICE	2/1	6/135	
FLAT # OR L/P	GRID #	ZONING	TAX MAP NO.
9308 49304	NA	NT-05	21
WATER CODE	SEWER CODE	ELECTION DISTRICT	CENSUS TRACT
214 M45	214 M45	5TH	6025502



LEGEND

	PROPERTY LINE
	EXISTING CONTOURS
	EXISTING TREELINE
	EXISTING TREES
	EXISTING MALK
	EXISTING ROAD
	EXISTING CURB
	EX. 15" SD
	EX. 6" WATER
	EX. 8" SAN
	EX. ELEC
	EX. ELEC
	EXISTING LIGHTING
	EXISTING COMMUNICATIONS
	EXISTING CABLE TV
	PROPOSED ROAD
	PROPOSED BUILDING
	PROP. 15" SD
	PROPOSED WATER
	PROPOSED SANITARY SEWER
	PROPOSED CONTOURS
	LIMIT OF DISTURBANCE
	EXISTING STREAM BUFFER

ESC NOTES (THESE NOTES PERTAIN TO THIS SHEET ONLY)

EC-1 USE "SAME DAY STABILIZATION" CONSTRUCTION IN THIS AREA. SEE NOTE "SAME DAY STABILIZATION" NOTE, THIS SHEET.

EC-2 100 YEAR FLOODPLAIN EASEMENT.

SAME DAY STABILIZATION NOTE
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D. Keefe
 COLUMBIA ASSOCIATION - DEVELOPER
 DATE: 7/19/13

ENGINEER'S CERTIFICATE
 "I certify that this plan for sediment and erosion 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."

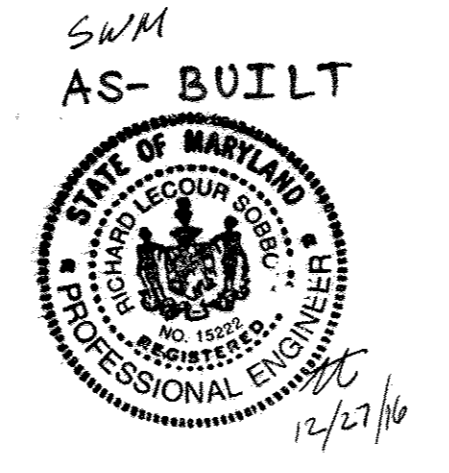
Jennifer L. Harrington
 JENNIFER L. HARRINGTON, P.E. - ENGINEER
 DATE: 10.3.13

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Blawie
 JOHN R. BLAWIE
 HOWARD SOIL CONSERVATION DISTRICT
 DATE: 11/14/14

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

B. Wilson for Maria Rossman
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE: 2/19/2013



MATCHLINE - SEE SHEET ESC1.03

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/125	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

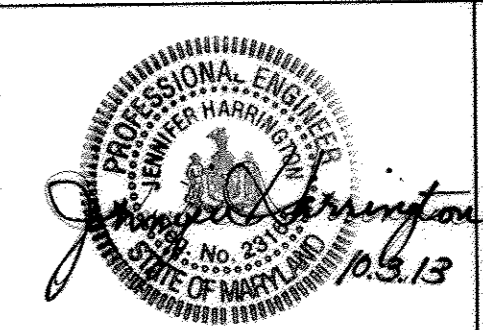
PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/125
PLAT # OR L/F	GRID #	ZONING
4300 & 4304	NA	NT-05
WATER CODE	SEWER CODE	
214 M45	214 M45	

EROSION AND SEDIMENT CONTROL PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
 REVISIONS

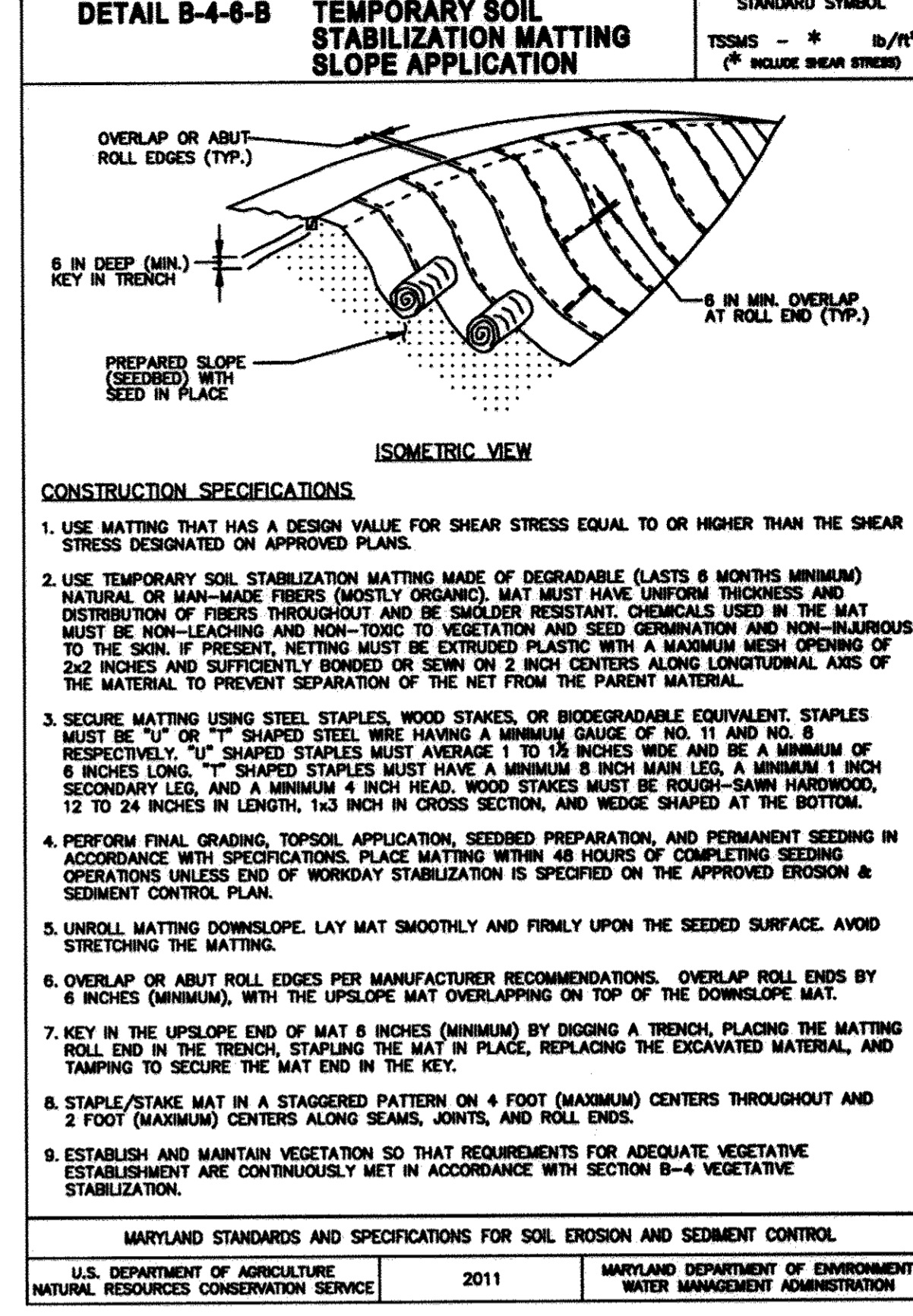
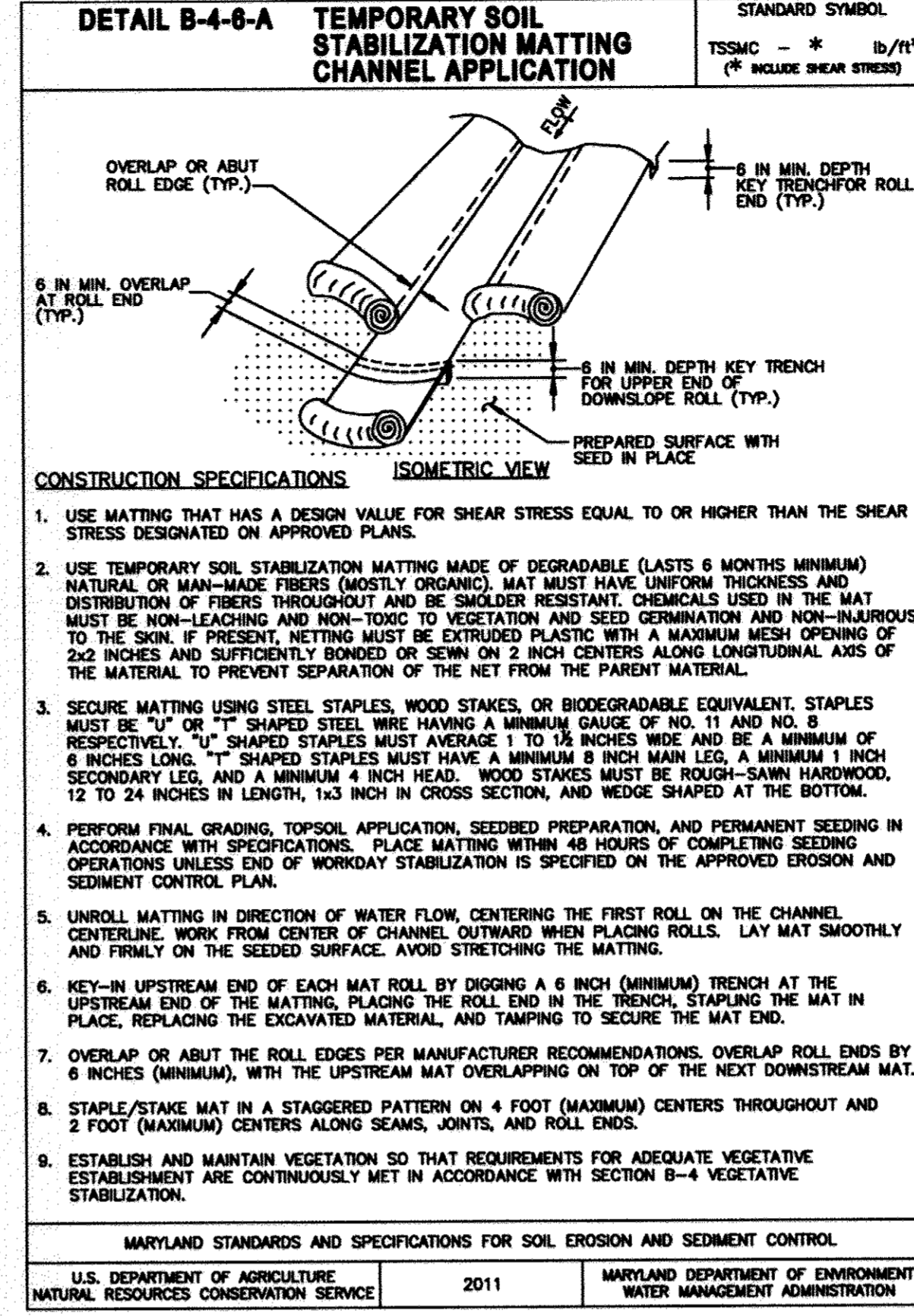
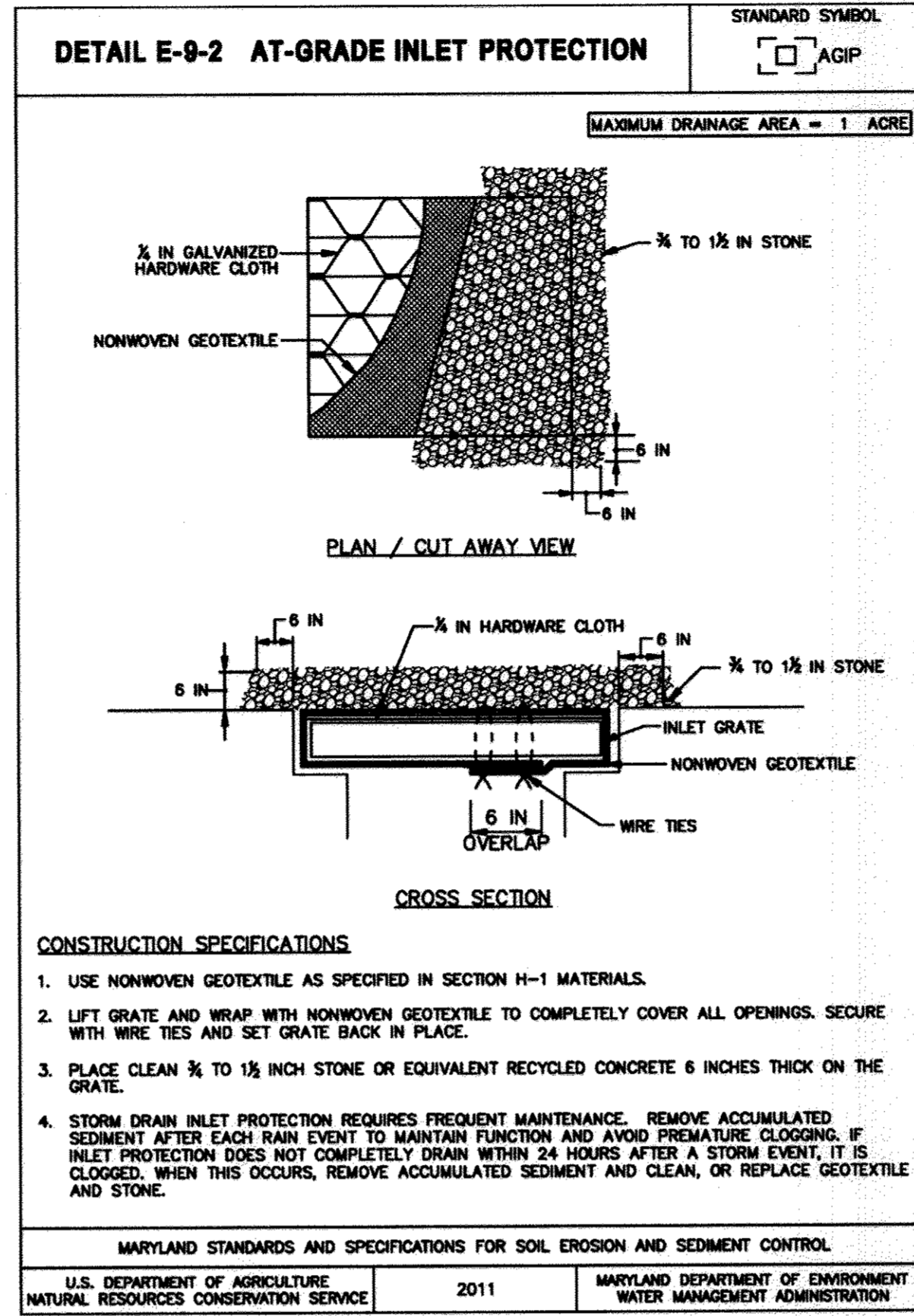
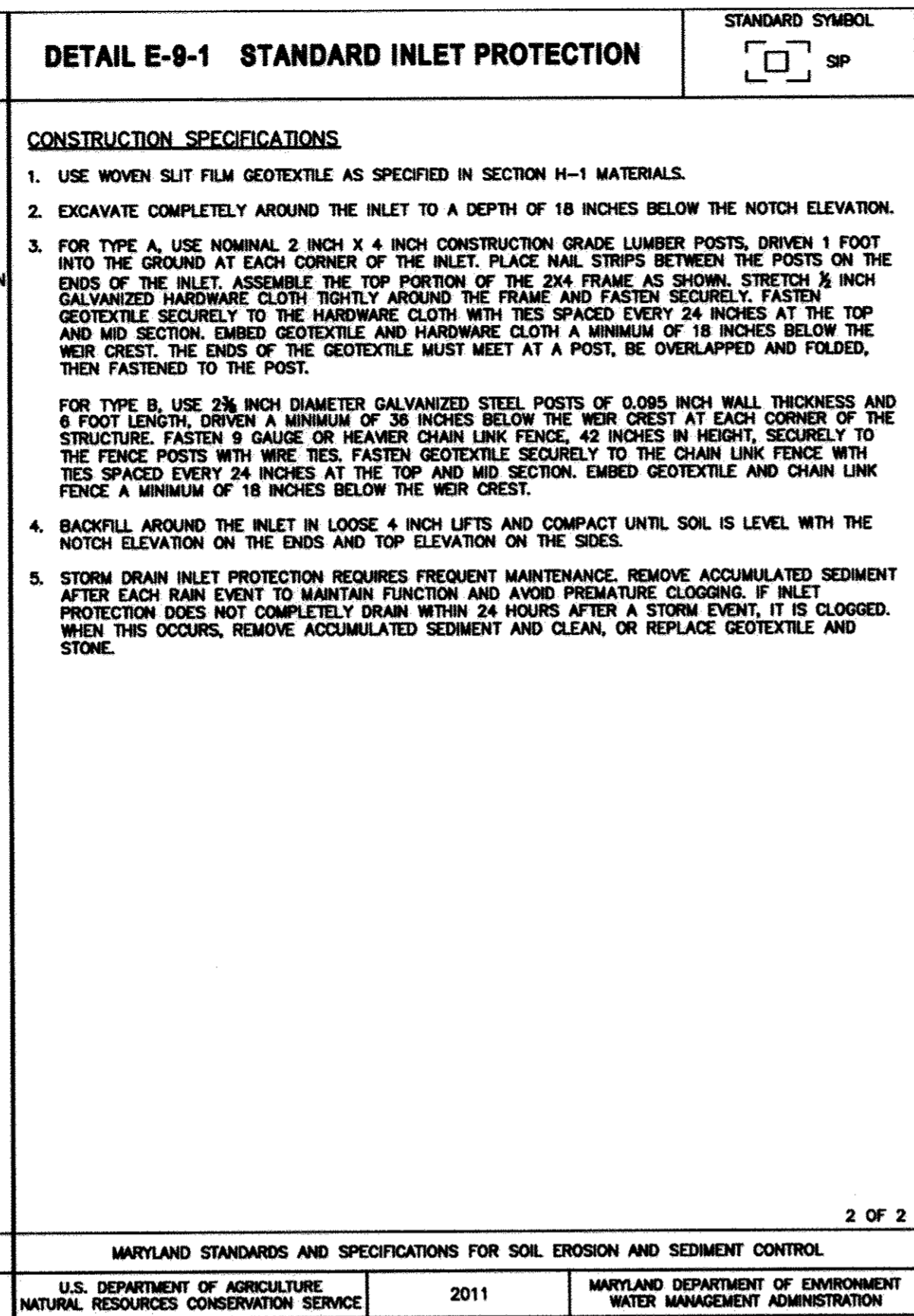
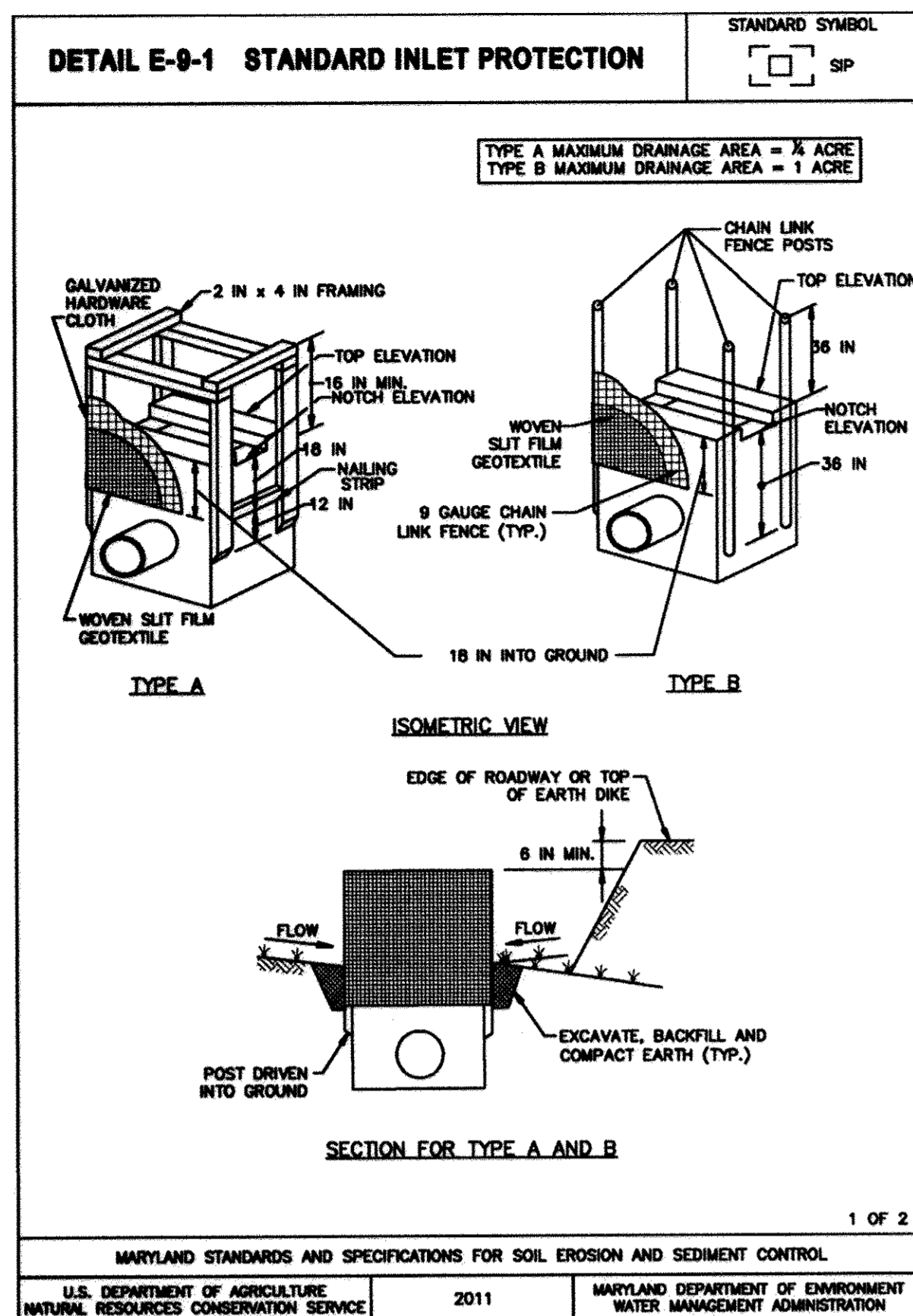


PROFESSIONAL CERTIFICATION: THESE CERTIFICATES ARE VALID ONLY IF THE PROJECTS ARE COMPLETED WITHIN THE EXPIRATION DATE OF THE LICENSE. ANY PROJECTS COMPLETED AFTER THE EXPIRATION DATE OF THE LICENSE WILL BE CONSIDERED UNLAWFUL.

14315 Arrettsville Pike • Pikesville, Maryland 21113
 (410) 663-3088 • Fax (410) 663-3088

DRAWN BY: FJF/JLH
 DESIGNED BY: JLH
 CHECKED BY: AFE
 DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
 SCALE: AS SHOWN
 SRI PROJECT NO.: 11054
 SHEET: ESC1.04 23 OF 30



DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan 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 also authorize periodic on-site inspection by the Howard Soil Conservation District."

D. N. [Signature] 9/19/13 DATE
COLUMBIA ASSOCIATION - DEVELOPER

APPROVED: DEPARTMENT OF PLANNING & ZONING
[Signature] 1/7/14 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 1-28-14 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 4/29/14 DATE
DIRECTOR

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion 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."

Janifer L. Harrington 10.3.13 DATE
JENIFER L. HARRINGTON, P.E. - ENGINEER

APPROVED: PLANNING BOARD OF HOWARD COUNTY
[Signature] 09/12/13 DATE
Garr

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John F. Robinson 11/14/14 DATE
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

William for Maura Rossman 12/19/2013 DATE
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	1180 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
FLAT # OR L/F	GRID #	ZONING
4308 & 4309	NA	NT-05
TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
24	5TH	605502
WATER CODE	SEWER CODE	
214 M45	214 M45	

EROSION AND SEDIMENT CONTROL DETAILS

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

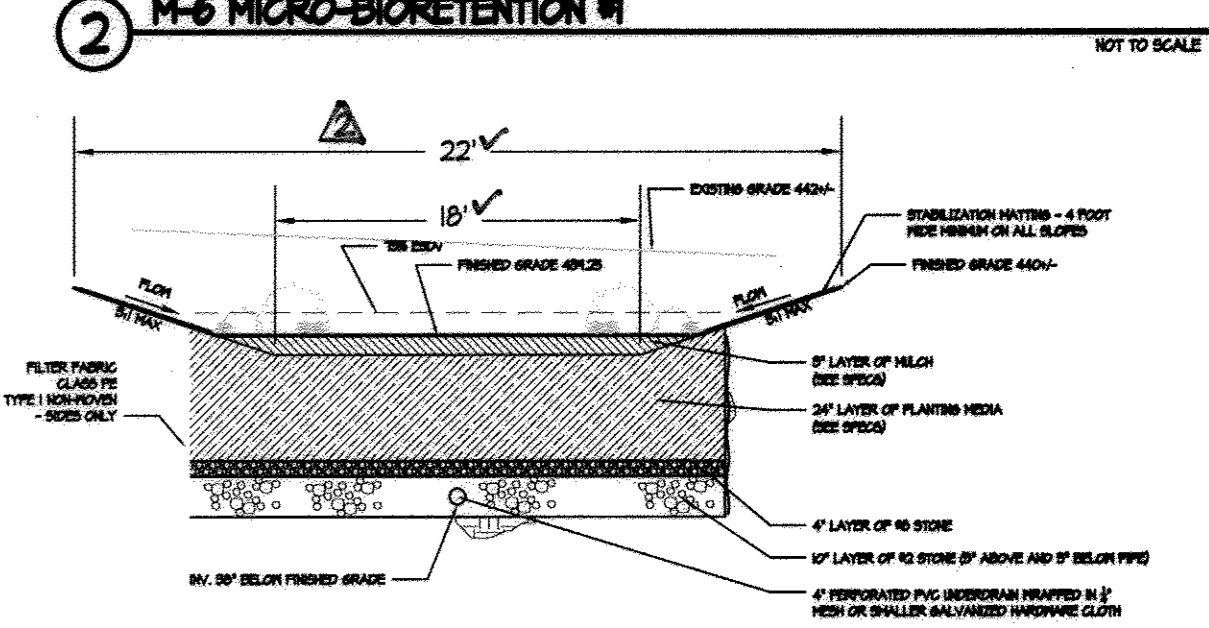
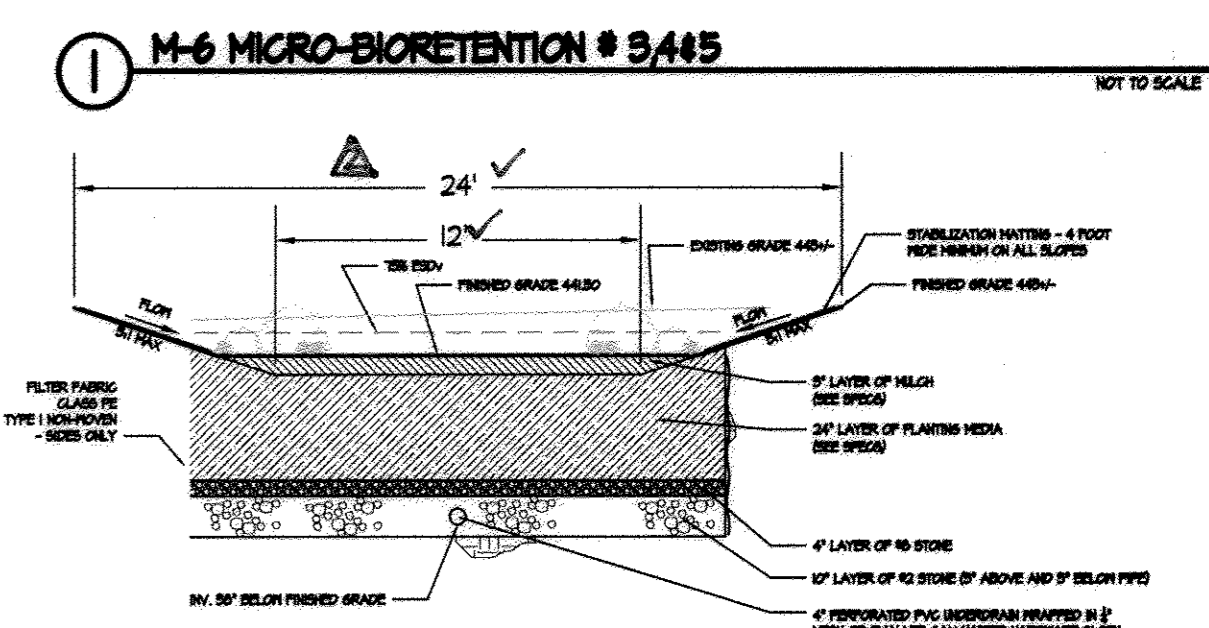
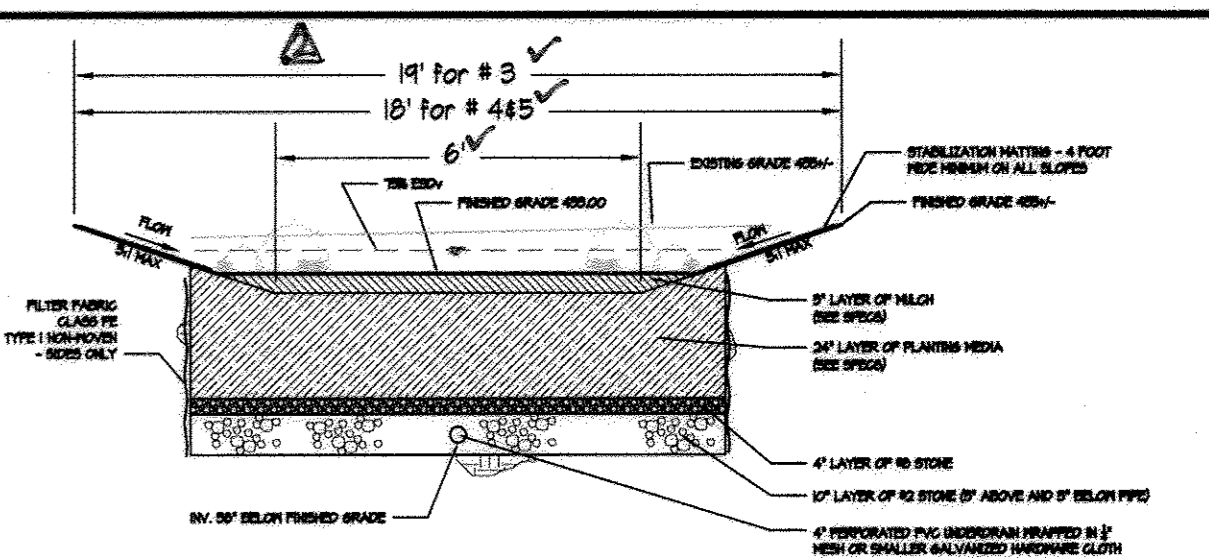
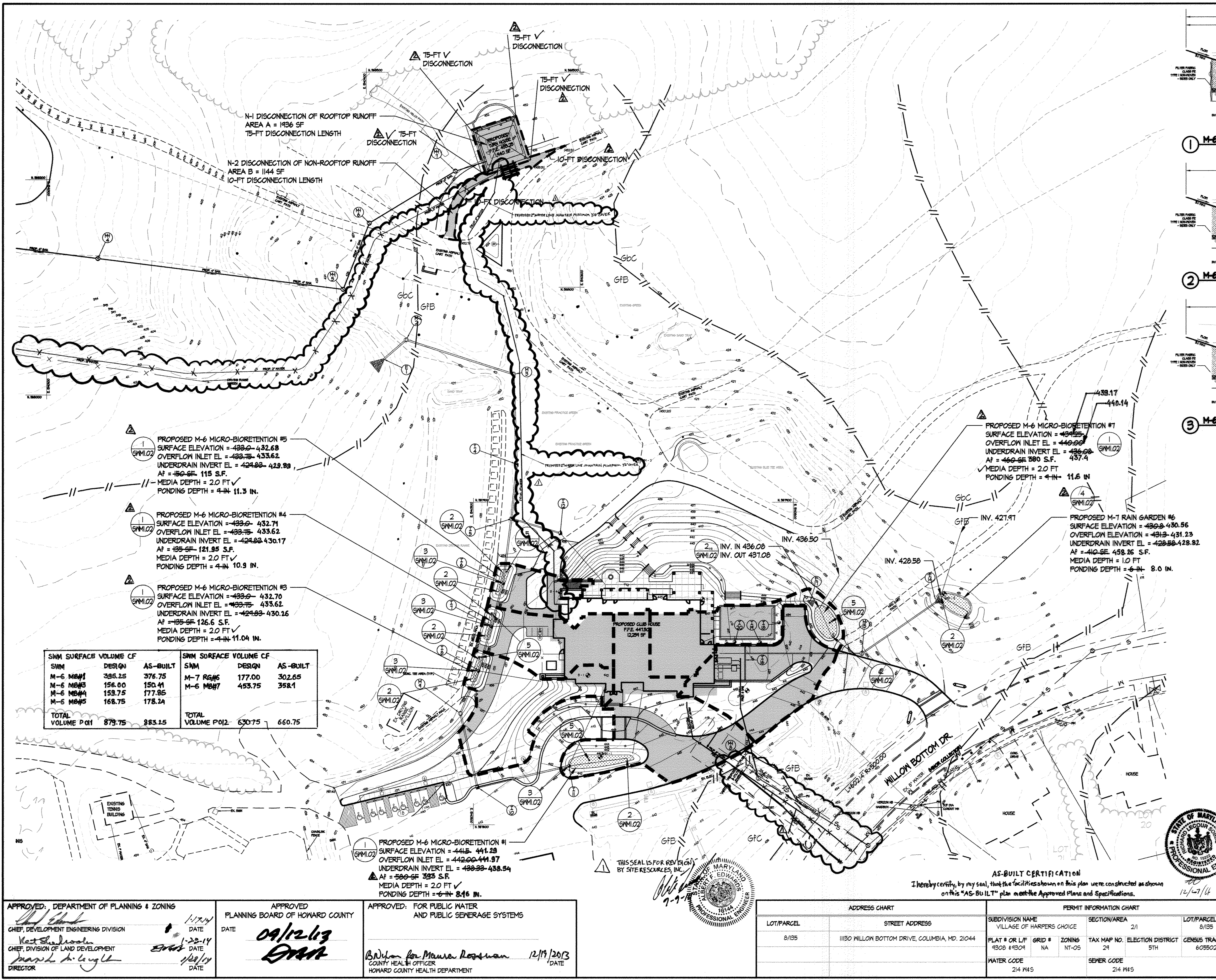
14915 Jarrattville Pike • Phoenix, Maryland 21151
(410) 883-3388 • Fax (410) 883-3389

SITE RESOURCES
Comprehensive Land Planning & Site Design Services

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 10312, EXPIRATION DATE: 09/19/15.

Janifer L. Harrington 10.3.13
PROFESSIONAL ENGINEER

DATE: SEPTEMBER 13, 2013 SHEET: ESC2.02 25 OF 38



- PROPOSED M-6 MICRO-BIORETENTION #5**
 SURFACE ELEVATION = 439.0 - 432.68
 OVERFLOW INLET EL = 433.75 - 433.62
 UNDERDRAIN INVERT EL = 424.83 - 429.89
 Af = 150-SF 115 S.F.
 MEDIA DEPTH = 2.0 FT ✓
 PONDING DEPTH = 4-IN 11.3 IN.
- PROPOSED M-6 MICRO-BIORETENTION #4**
 SURFACE ELEVATION = 439.0 - 432.71
 OVERFLOW INLET EL = 433.75 - 433.62
 UNDERDRAIN INVERT EL = 424.83 - 430.17
 Af = 135-SF 121.95 S.F.
 MEDIA DEPTH = 2.0 FT ✓
 PONDING DEPTH = 4-IN 10.9 IN.
- PROPOSED M-6 MICRO-BIORETENTION #3**
 SURFACE ELEVATION = 439.0 - 432.70
 OVERFLOW INLET EL = 433.75 - 433.62
 UNDERDRAIN INVERT EL = 424.83 - 430.26
 Af = 135-SF 126.6 S.F.
 MEDIA DEPTH = 2.0 FT ✓
 PONDING DEPTH = 4-IN 11.04 IN.

SWM SURFACE VOLUME CF		SWM SURFACE VOLUME CF	
SWM	DESIGN	AS-BUILT	AS-BUILT
M-6 MB#1	396.25	376.75	
M-6 MB#3	156.00	150.41	
M-6 MB#4	153.75	177.85	
M-6 MB#5	168.75	178.24	
TOTAL	VOLUME P01	873.75	883.25
	VOLUME P02	630.75	660.75

LEGEND

- NoB2 --- EXISTING SOILS
- GCB2 --- EXISTING SOILS
- [Dashed Box] DRAINAGE AREA TO SWM
- [Solid Grey Box] IMPERVIOUS AREA FOR SWM TREATMENT
- [Dotted Box] ESD TREATMENT AREA

STORMWATER MANAGEMENT PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

AS - BUILT SURVEY	12/27/16
108/2/2014 WATER LINE RELOCATION	

STATE OF MARYLAND
LAND SURVEYING BOARD
PROFESSIONAL ENGINEER

STATE OF MARYLAND
LAND SURVEYING BOARD
PROFESSIONAL ENGINEER

SITE RESOURCES
 Incorporated
 Comprehensive Land Planning & Site Design Services

14015 Arundelville Pike • Poolesville, Maryland 21131
 (410) 683-3388 • Fax (410) 683-3380

APPROVED: DEPARTMENT OF PLANNING & ZONING

[Signature] 1/7/14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 1-28-14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 1/28/14
 DIRECTOR DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE *09/12/13*

[Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

[Signature] 12/19/2013
 COUNTY HEALTH OFFICER DATE
 HOWARD COUNTY HEALTH DEPARTMENT

THIS SEAL IS FOR REVISION BY SITE RESOURCES, INC.

[Signature] 9-1-13

STATE OF MARYLAND
LAND SURVEYING BOARD
PROFESSIONAL ENGINEER

AS-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS-BUILT" plan next to the Approved Plans and Specifications.

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	1180 WILLOW BOTTOM DRIVE, COLUMBIA, MD, 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
VILLAGE OF HARPERS CHOICE	2/1	8/135
FLAT # OR L/F	TAX MAP NO. ELECTION DISTRICT	GENUS TRACT
4308 4304	21 5TH	602502
WATER CODE	SEWER CODE	
214 M45	214 M45	

PROFESSIONAL CERTIFICATION

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 1844, EXPIRATION DATE: 02/01/14.

10-3-2013

DRAWN BY: JLH	CONTRACT NO.:
DESIGNED BY: JLH	SCALE: 1"=40'
CHECKED BY: AFE	SRI PROJECT NO: 11054
DATE: SEPTEMBER 13, 2013	SHEET SWM1.01 21 OF 38

MARYLAND STORMWATER DESIGN MANUAL
CONSTRUCTION SPECIFICATIONS FOR MICRO-BIORETENTION

B.4.C. SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS, LANDSCAPE INFILTRATION AND INFILTRATION BERMS

1. Material Specifications
 The allowable materials to be used in these practices are detailed in Table B.4.1.

2. Filtering Media or Planting Soil
 The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the micro-bioretenation practice that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass, or other noxious weeds as specified under COMAR 15.08.01.05.

- The planting soil shall be tested and shall meet the following criteria:
- Soil Component - Loamy Sand or Sandy Loam (USDA Soil Textural Classification)
 - Organic Content - Minimum 10% by dry weight (ASTM D 2974). In general, this can be met with a mixture of loamy sand (60%-65%) and compost (35% to 40%) or sandy loam (30%), coarse sand (30%), and compost (40%).
 - Clay Content - Media shall have a clay content of less than 5%.
 - pH Range - Should be between 5.5 - 7.0. Amendments (e.g., lime, iron sulfate plus sulfur) may be mixed into the soil to increase or decrease pH.

There shall be at least one soil test per project. Each test shall consist of both the standard soil test for pH, and additional tests of organic matter, and soluble salts. A laboratory analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the topsoil was excavated.

3. Compaction
 It is very important to minimize compaction of both the base of bio-retention practices and the required backfill. When possible, use excavation hoses to remove original soil. If practices are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with turf type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high-pressure tires will cause excessive compaction resulting in reduced infiltration rates and is not acceptable. Compaction will significantly contribute to design failure.

Compaction can be alleviated at the base of the bio-retention facility by using a primary tilling operation such as a chisel plow, ripper, or subsoiler. These tilling operations are to restructure the soil profile through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically do not till deep enough to reduce the effects of compaction from heavy equipment.

Rototill 2 to 3 inches of sand into the base of the bio-retention facility before backfilling the optional sand layer. Pump any ponded water before preparing (rototilling) base.

When backfilling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand, then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade.

When backfilling the bio-retention facility, place soil in lifts 12" to 16". Do not use heavy equipment within the bio-retention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bio-retention materials with light equipment such as a compact loader or a dozer/loader with marsh tracks.

4. Plant Material
 Recommended plant material for micro-bioretenation practices can be found in Appendix A, Section A.2.3.

5. Plant Installation
 Compost is a better organic material source, is less likely to float, and should be placed in the invert and other low areas. Mulch should be placed in surrounding to a uniform thickness of 2" to 3". Shredded or chipped hardwood mulch is the only accepted mulch. Fine mulch and wood chips will float and move to the perimeter of the bio-retention area during a storm event and are not acceptable. Shredded mulch must be well aged (6 to 12 months) for acceptance.

Rootstock of the plant material shall be kept moist during transport and on-site storage. The plant root ball should be planted so 1/8th of the ball is above final grade surface. The diameter of the planting pit shall be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight during the entire planting process. Thoroughly water ground bed cover after installation.

Trees shall be braced using 2" by 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

Grasses and legume seed should be drilled into the soil to a depth of at least one inch. Grass and legume plugs shall be planted following the non-grass ground cover planting specifications.

The topsoil specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bio-retention structure is to improve water quality. Adding fertilizers defeats, or at a minimum, impedes this goal. Only add fertilizer if wood chips or mulch are used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square feet.

- 6. Underdrains**
 Underdrains should meet the following criteria:
- Pipe - Should be 4" to 6" diameter, slotted or perforated rigid plastic pipe (ASTM F 758, Type PS 28, or AASHTO M-218) in a gravel layer. The preferred material is slotted, 4" rigid pipe (e.g., PVC or HDPE).
 - Perforations - If perforated pipe is used, perforations should be 3/8" diameter located 6" on center with a minimum of four holes per row. Pipe shall be wrapped with a 1/2" (No. 4 or 4x4) galvanized hardware cloth.
 - Gravel - The gravel layer (No. 57 stone preferred) shall be at least 3" thick above and below the underdrain.
 - The main collector pipe shall be at a minimum 0.5% slope.
 - A rigid, non-perforated observation well must be provided (one per every 1000 square feet) to provide a clean-out port and monitor performance of the filter.

The main collector pipe for underdrain systems shall be constructed at a minimum slope of 0.5%. Observation wells and/or clean-out pipes must be provided (one minimum per every 1000 square feet of surface area).

7. Miscellaneous
 These practices may not be constructed until all contributing drainage area has been stabilized.

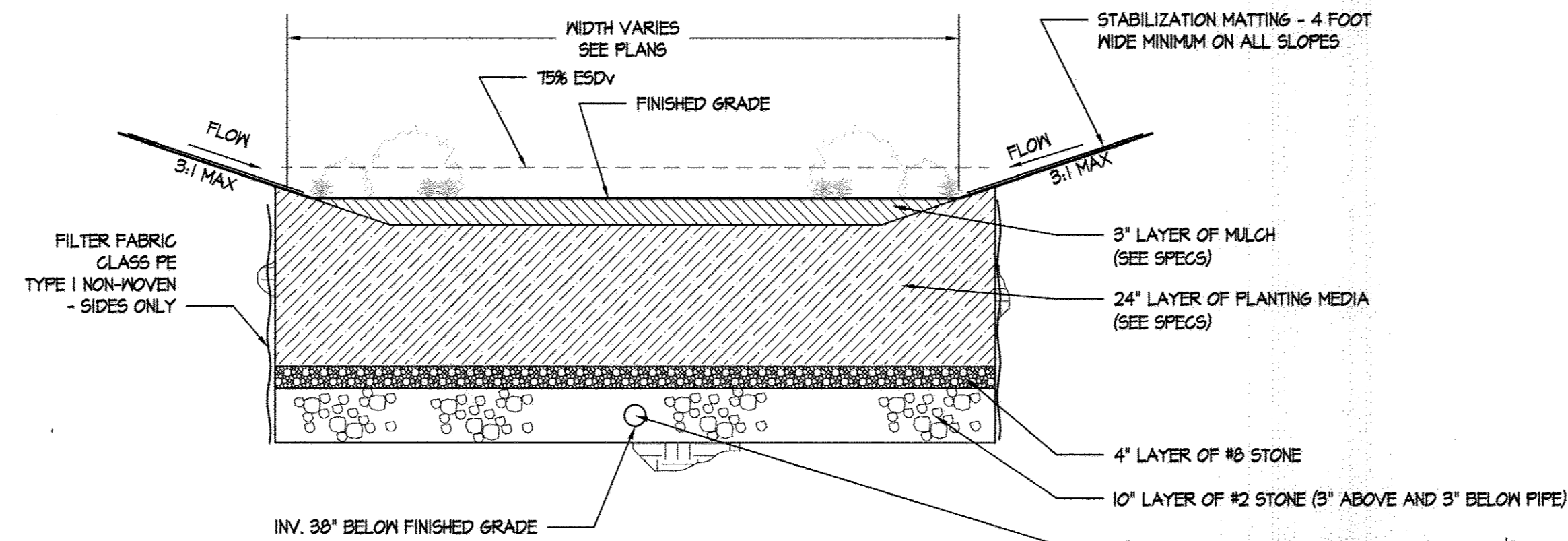
OPERATION AND MAINTENANCE SCHEDULE

- OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION AREAS (M-6) AND RAIN GARDENS (M-4)**
1. Annual maintenance of plant material, mulch layer and soil layer is required. Maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland Stormwater Design Manual Volume II Table A.4.1 and 2.
 2. Schedule of plant inspection will be twice a year in spring and fall. This inspection will include removal of dead and diseased vegetation considered beyond treatment, treatment of all diseased trees and shrubs and replacement of all deficient trees and shrubs.
 3. Mulch shall be inspected each spring. Replace previous mulch layer before applying new layer once every 2 to 3 years.
 4. Soil erosion to be addressed on an as needed basis, with a minimum of once per month and after heavy storm events.

OPERATION AND MAINTENANCE SCHEDULE FOR DISCONNECTION OF ROOFTOP RUNOFF (N-1) AND DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

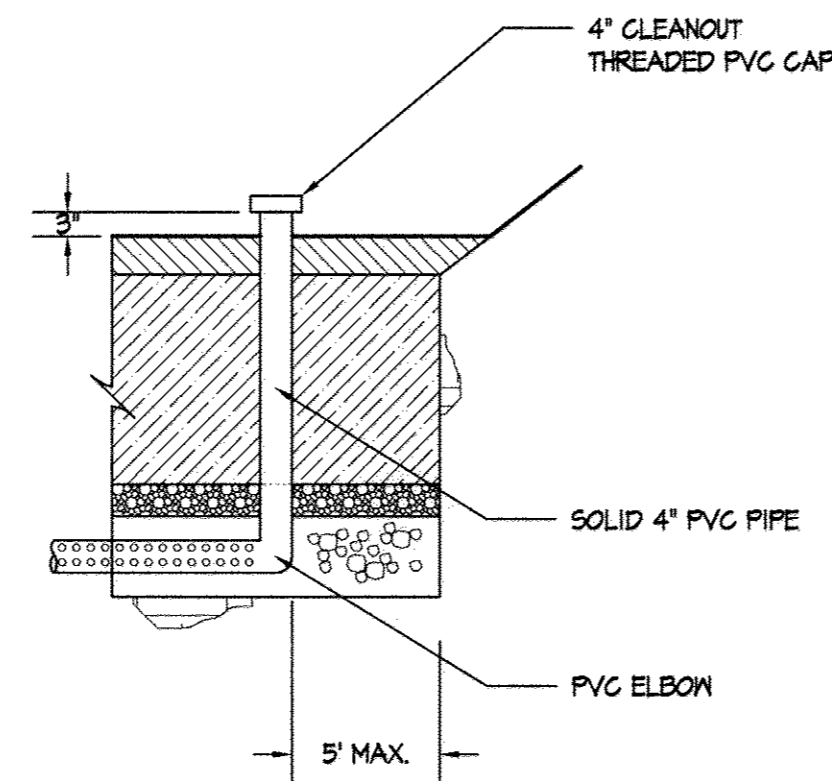
1. Maintenance of areas receiving disconnected runoff is generally no different than that required for other lawn or landscaped areas. The areas receiving runoff should be protected from future compaction or development of impervious area. In commercial area, foot traffic should be discouraged as well.

NOTE: REFER TO SEQUENCE OF CONSTRUCTION ON SHEET ESC 2.03



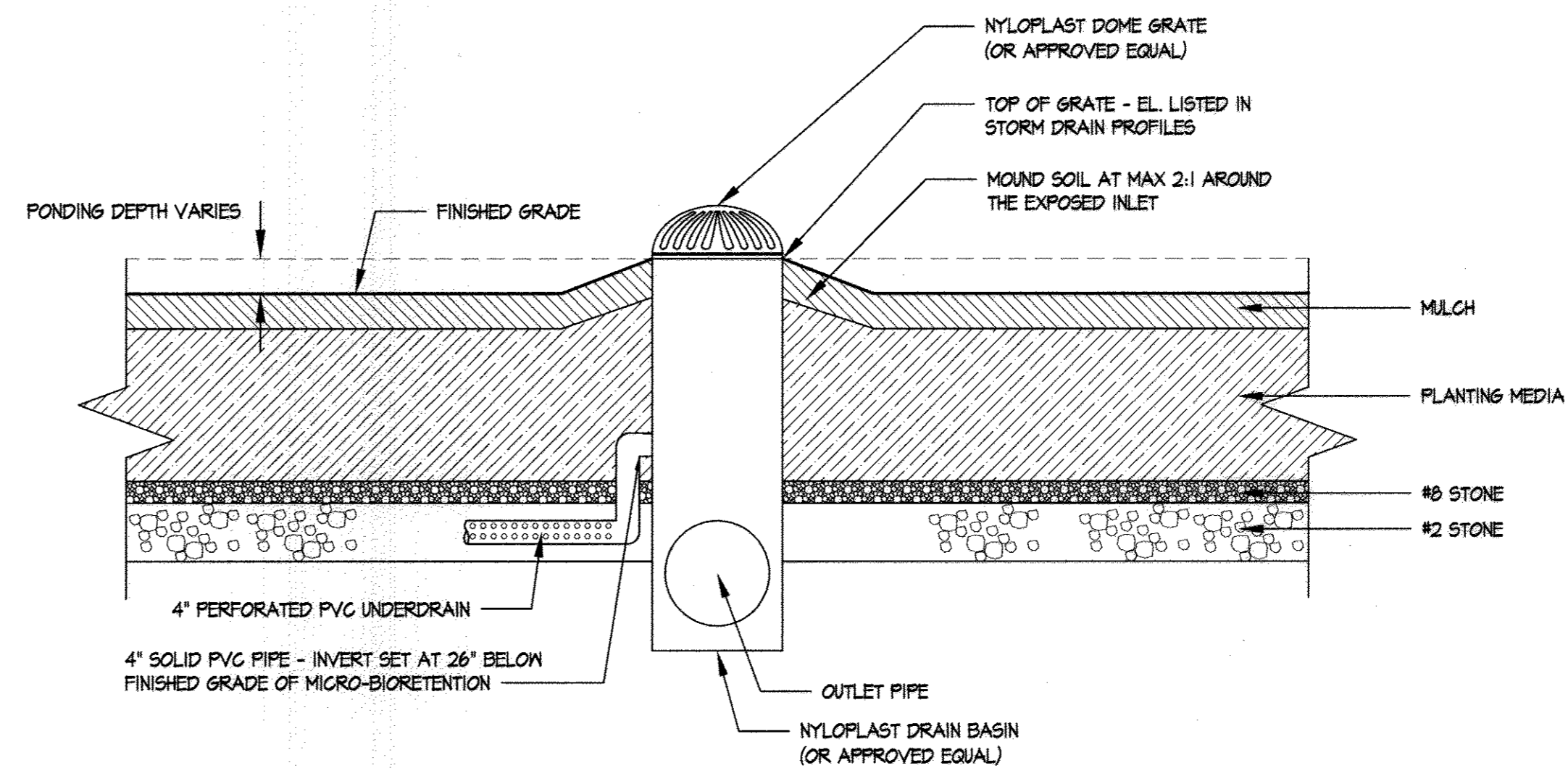
1 M-6 MICRO-BIORETENTION

NOT TO SCALE



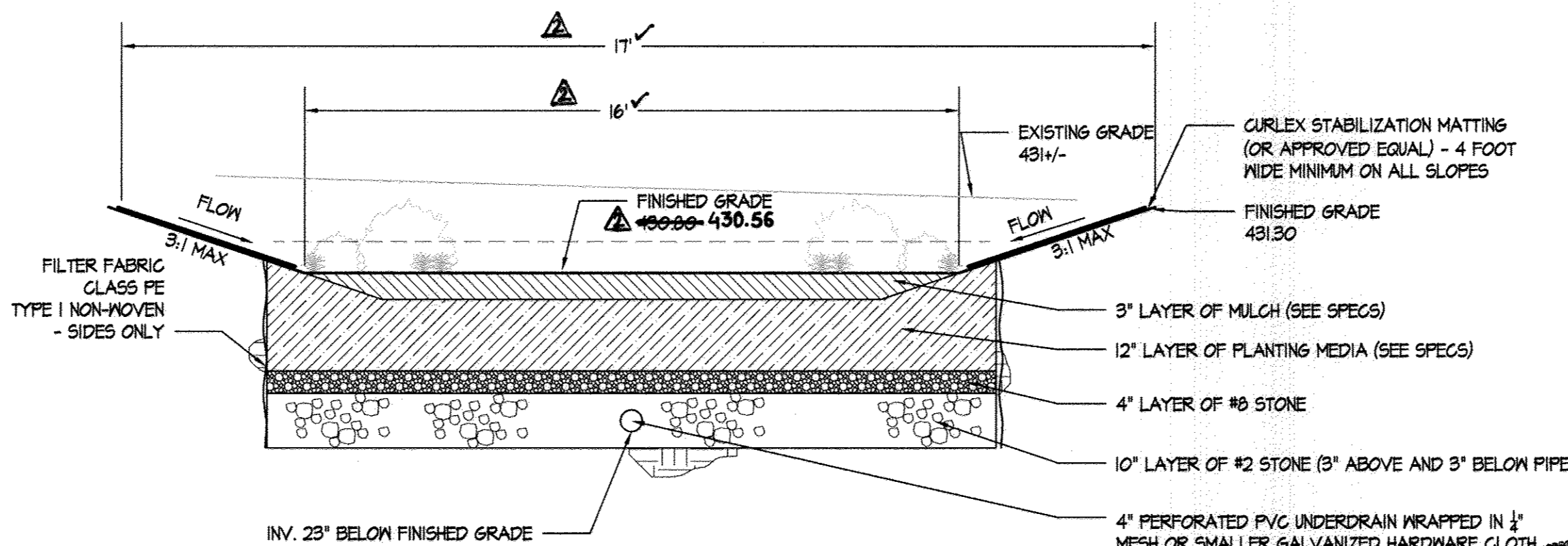
2 4" CAPPED CLEANOUT

NOT TO SCALE

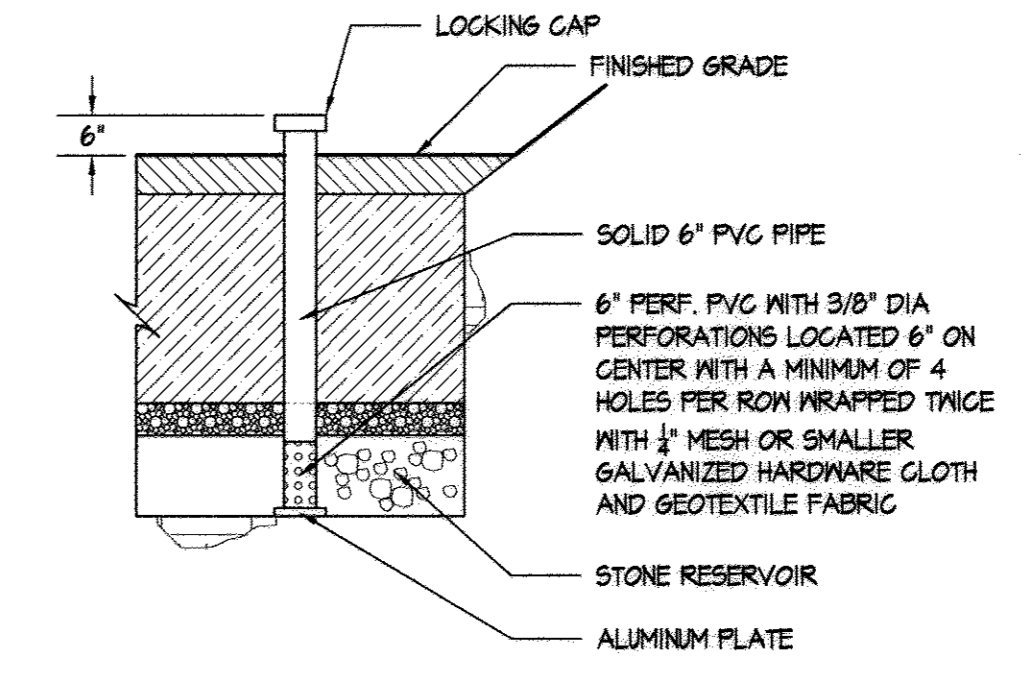


3 OVERFLOW DEVICE - MICRO-BIORETENTION FACILITY

NOT TO SCALE



4 M-7 RAIN GARDEN #6



5 6" OBSERVATION WELL

NOT TO SCALE

TABLE B.4.1 MATERIAL SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS & LANDSCAPE INFILTRATION

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE APPENDIX A, TABLE A.4	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL (2' TO 4' DEEP)	LOAMY SAND (60-65%) & COMPOST (35-40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%)	N/A	USDA SOIL TYPES LOAMY SAND OR SANDY LOAM, CLAY CONTENT < 5%
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D 2974)		
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
PEA GRAVEL DIAPHRAGM	PEA GRAVEL: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
CURTAIN DRAIN	ORNAMENTAL STONE, WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE I NONWOVEN
GRAVEL (UNDERDRAINS AND INFILTRATION BERMS)	AASHTO M-43	NO. 8 (BRIDGING LAYER) NO. 2 (BEDDING LAYER)	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-218	4" TO 6" RIGID PVC OR SDR 35	SLOTTED OR PERFORATED PIPE 3/8" PERFOR. @ 6" ON CENTER & HOLES PER ROW MINIMUM OF 3" OF GRAVEL COVER PIPE. NOT NECESSARY UNDER DRAIN PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4" INCH GALVANIZED HARDWARE CLOTH. ON-SITE TESTING OF POURED-IN PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT BEING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE MEETING ACI CODE 308.2R-04; VERTICAL LOADING (H-40 OR H-20); ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING.
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3; F _c = 2500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60.	N/A	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO #10) ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.
SAND	AASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

USDA - Natural Resources Conservation Service Date

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

John R. Roberts Date 1/14/14

BY THE ENGINEER:
 I 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.

Jennifer Harrington Date 11.27.13

Jennifer Harrington Printed Name of Engineer

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.

D. Malt Date 9/19/13

COLUMBIA ASSOCIATION - DEVELOPER

STORMWATER MANAGEMENT NOTES

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS	DATE
AS - BUILT SURVEY	12/27/14



DRAWN BY:	CONTRACT NO.:
JLH	-
DESIGNED BY:	SCALE:
JLH	AS SHOWN
CHECKED BY:	SRI PROJECT NO.:
AFE	11054
DATE:	SHEET:
SEPTEMBER 13, 2013	SNM1.02 28 OF 30

SITE RESOURCES

14515 Invertonville Pike • Pikesville, Maryland 21115
 (410) 683-3388 • Fax (410) 683-3389

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief Development Engineering Division Date 1/17/14
 Chief Division of Land Development Date 1-28-14
 Director Date 1/29/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 Date 09/12/13

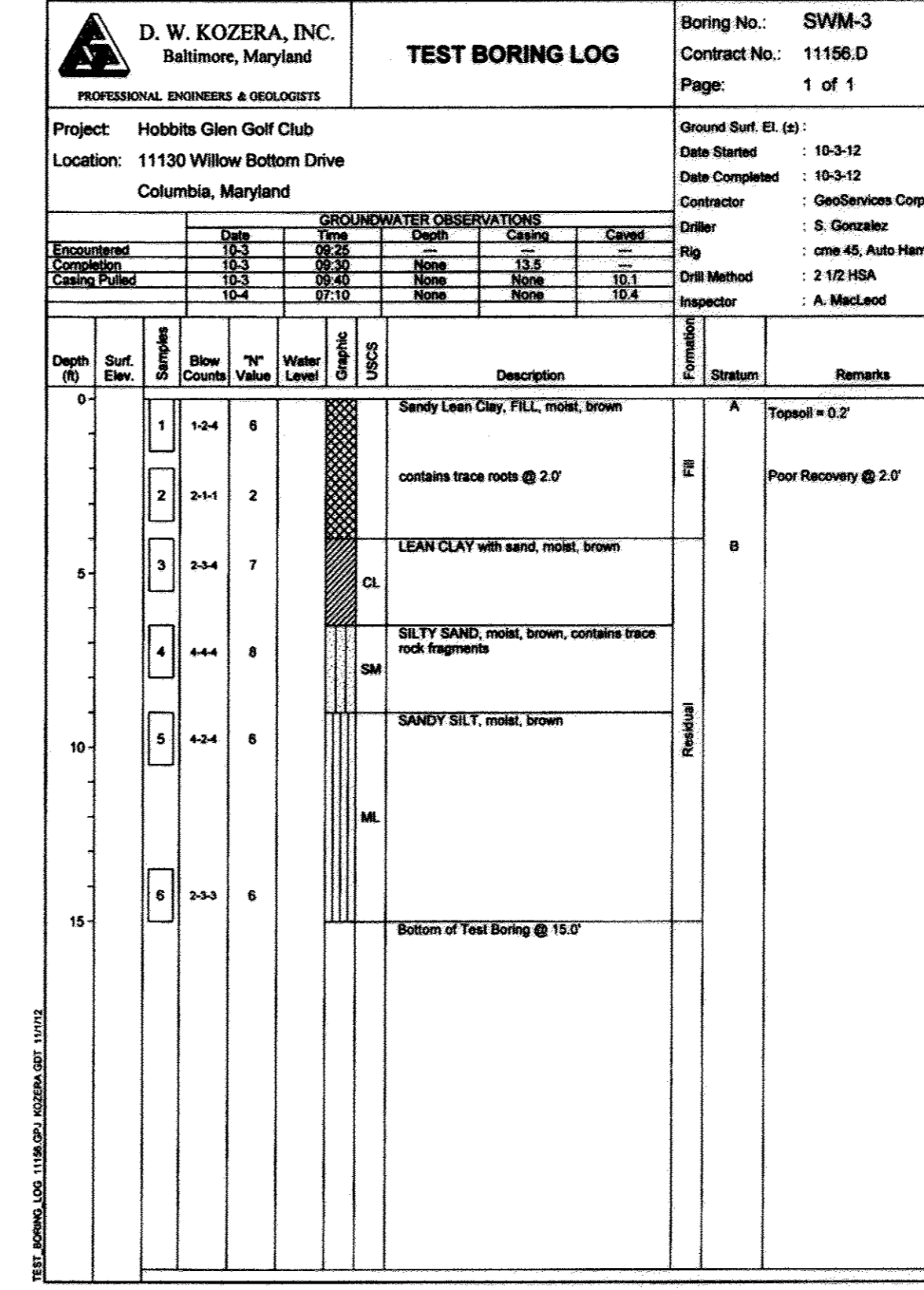
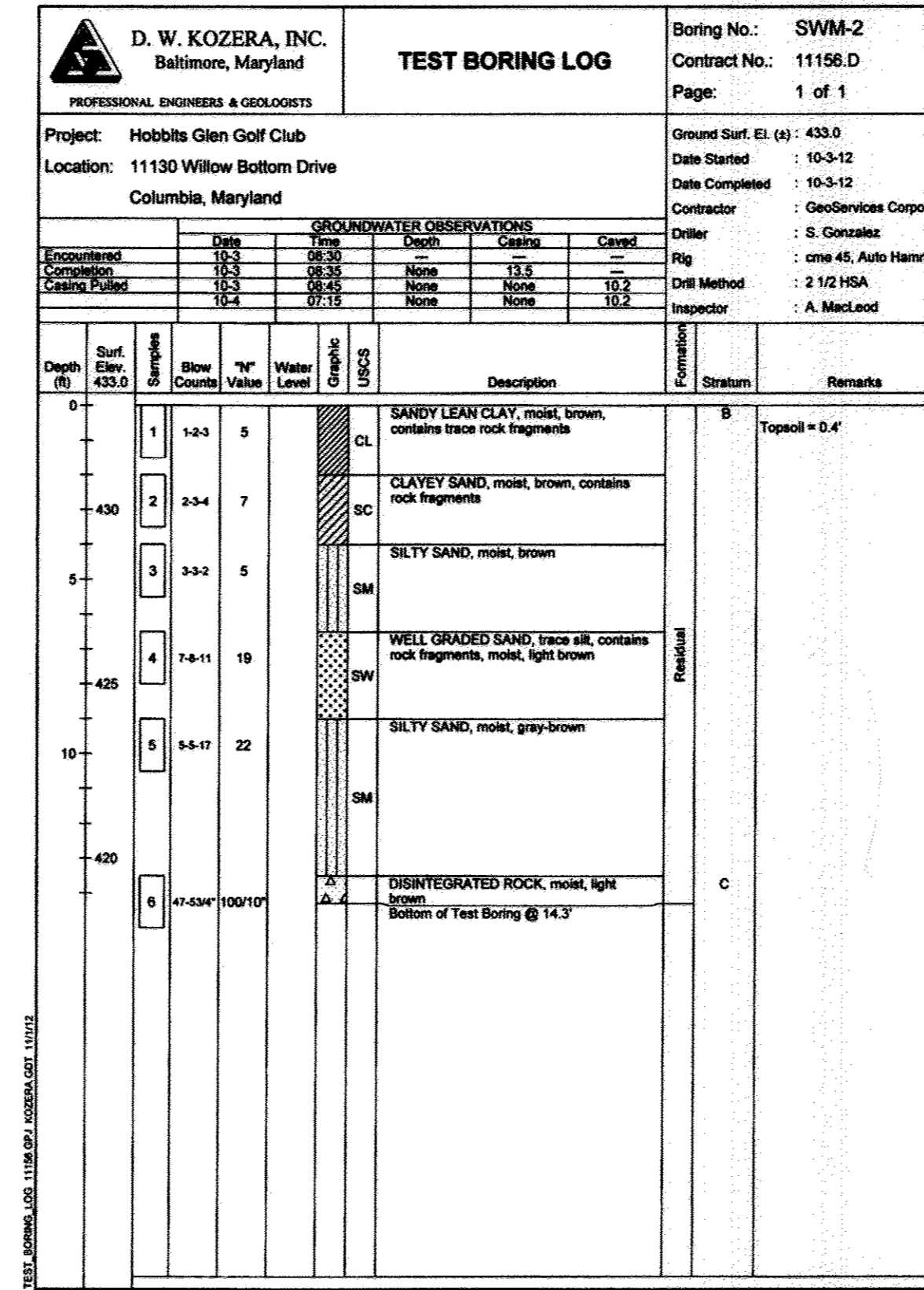
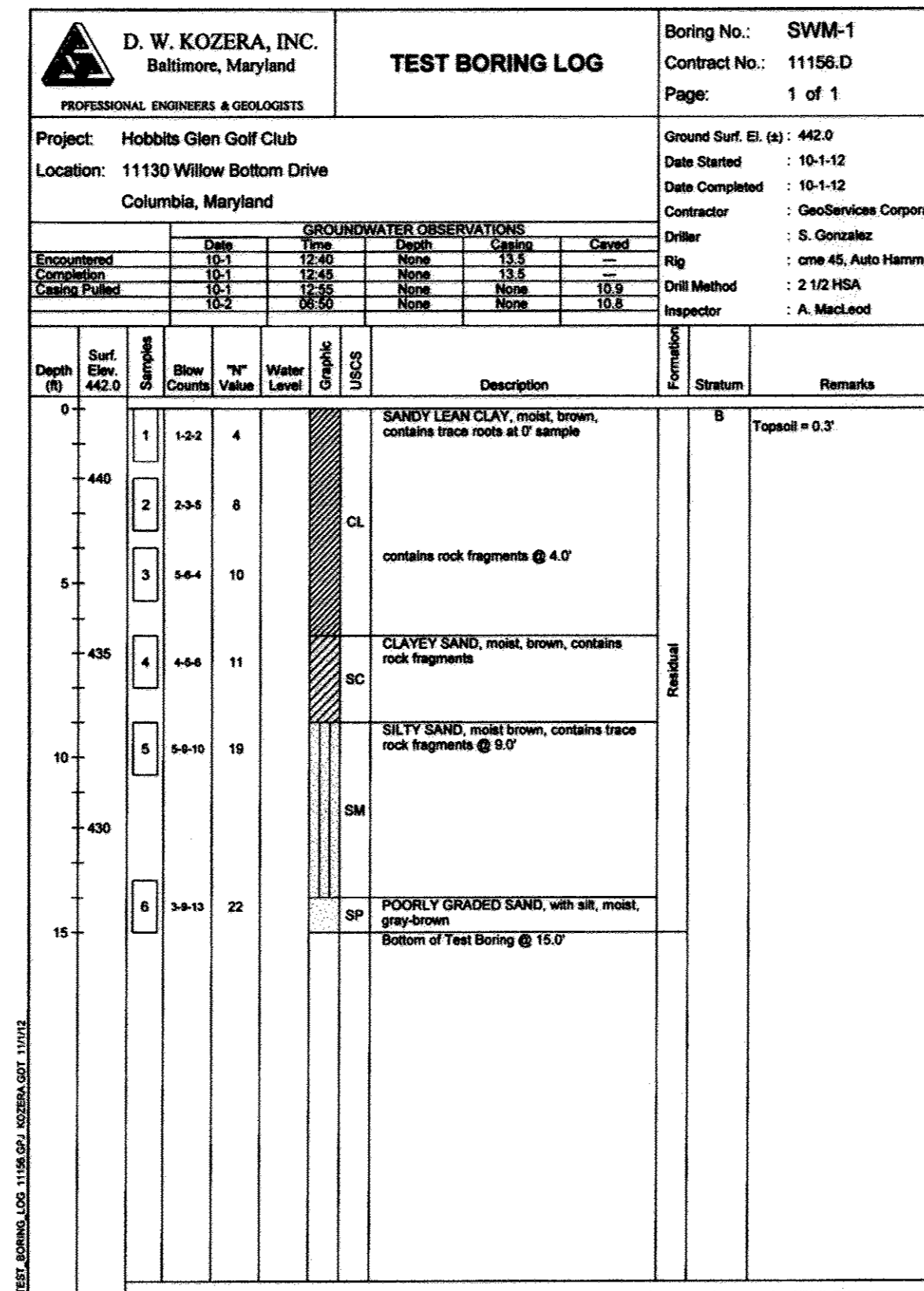
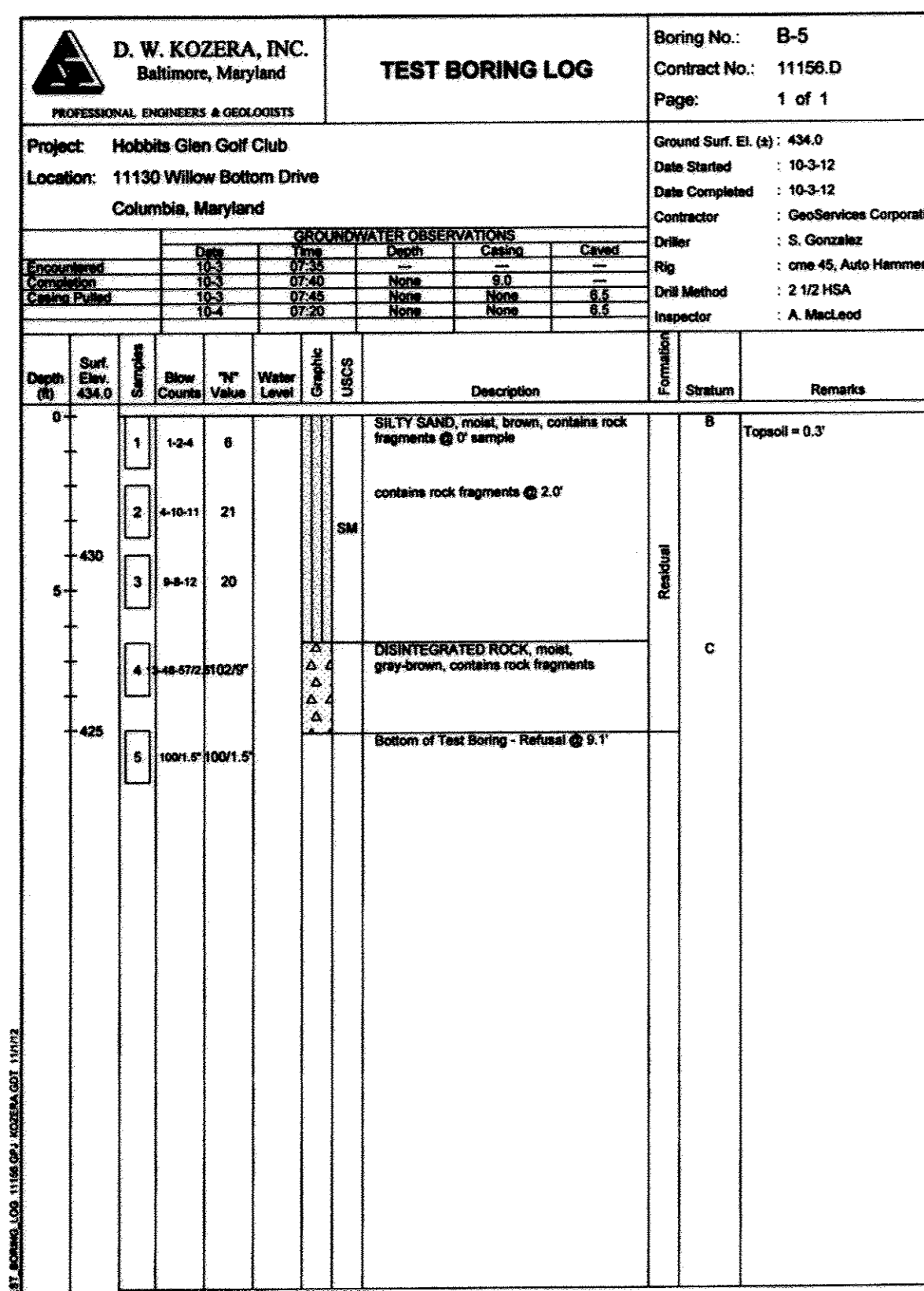
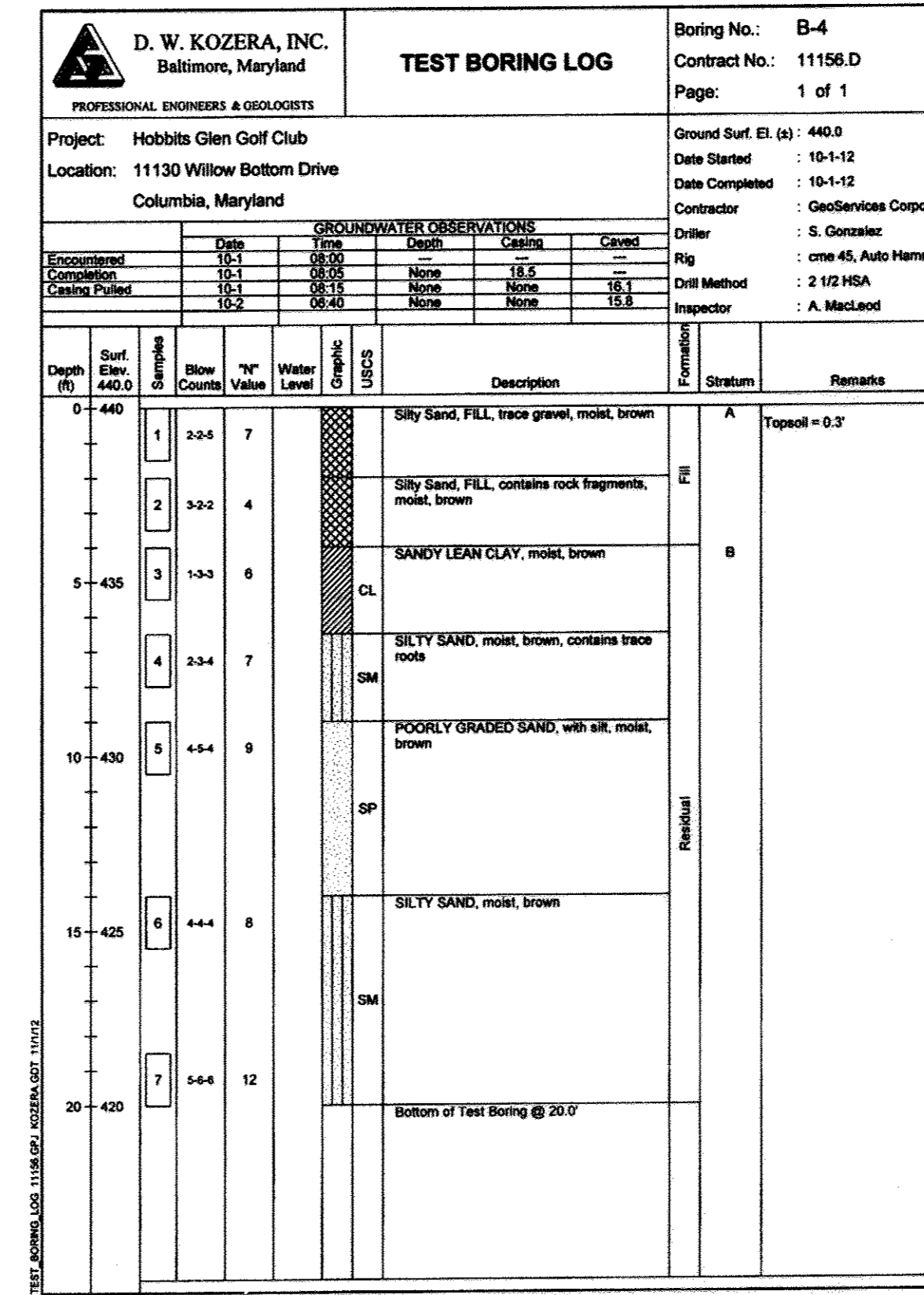
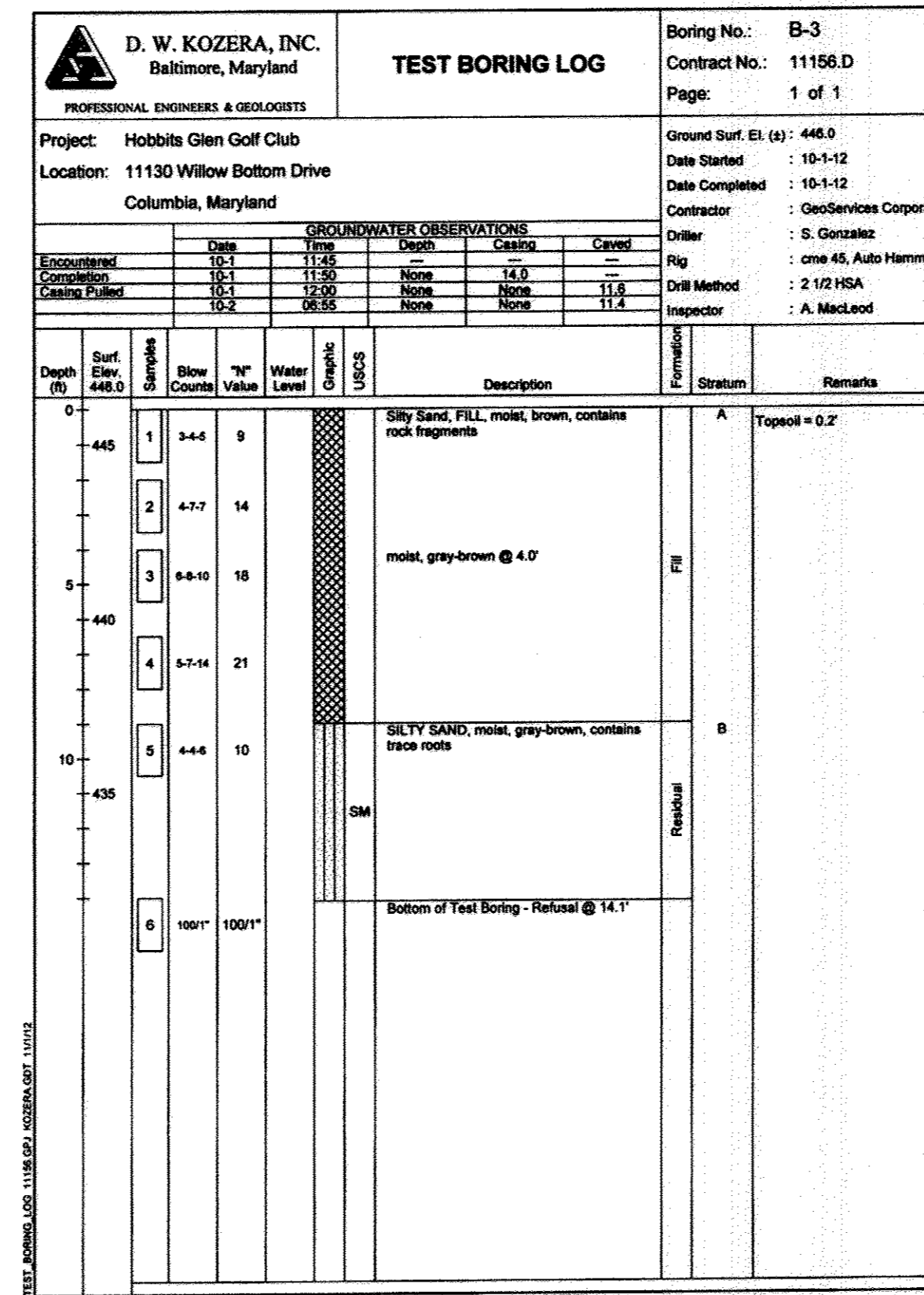
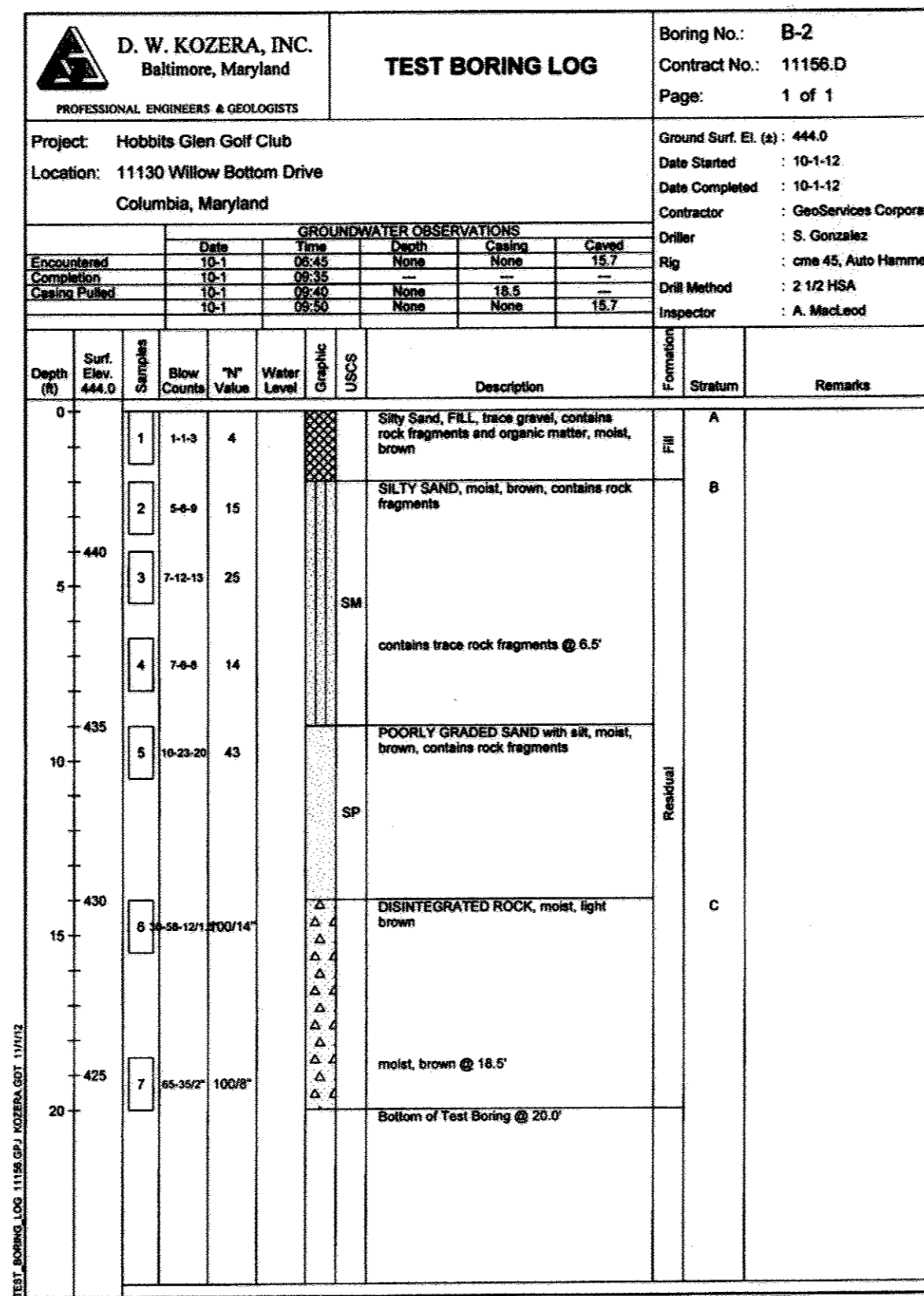
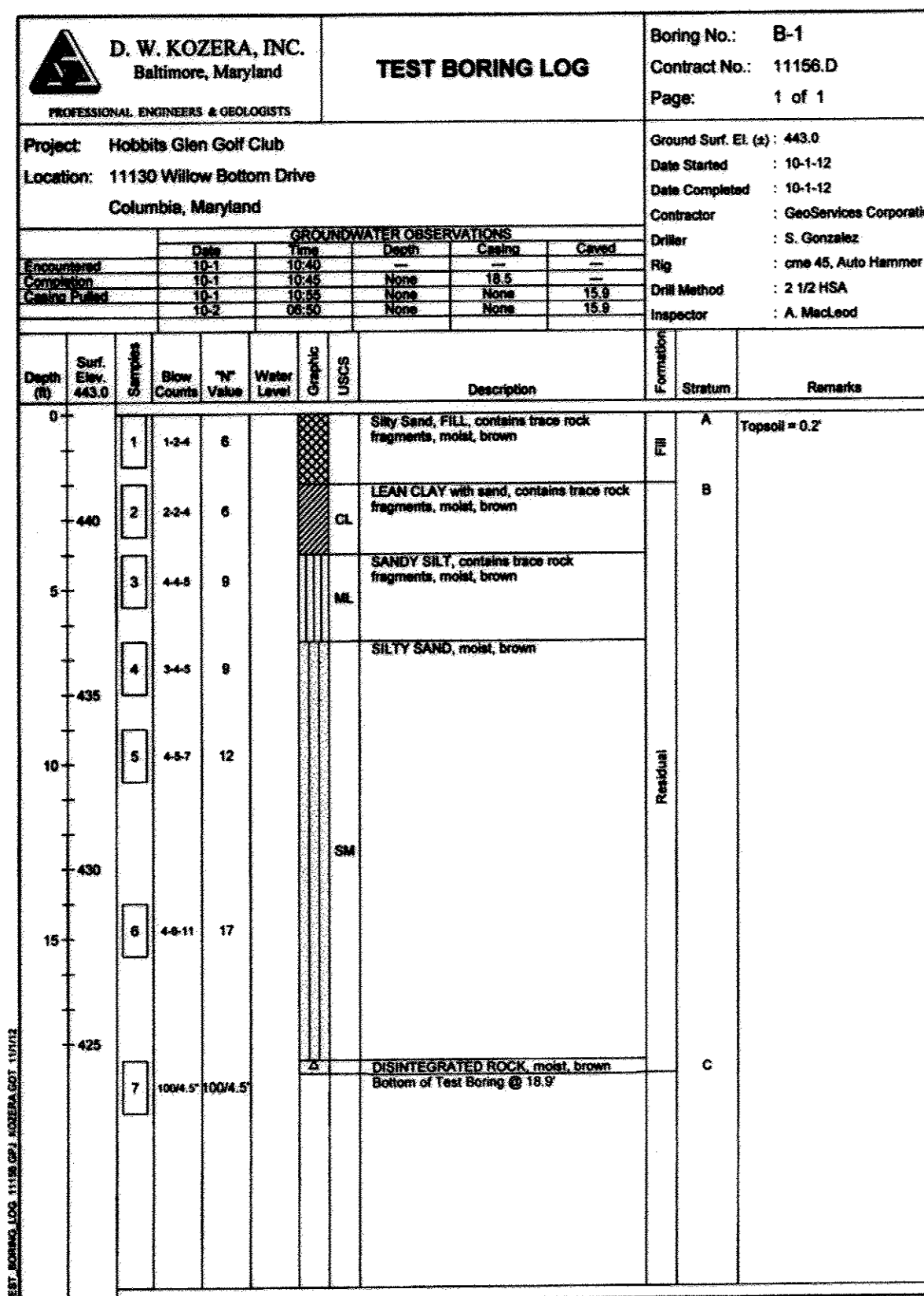
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer Date 12/19/2013

NOT A PROFESSIONAL ENGINEER
 Date 12/27/14

ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
VILLAGE OF HARPERS CHOICE	2/1	8/135	
PLAT # OR LF	GRID #	ZONING	TAX MAP NO.
930B 43204	NA	NT-05	21
WATER CODE	SEWER CODE	ELECTION DISTRICT	GENUS TRACT
214 N45	214 N45	5TH	605502

AS-BUILT CERTIFICATION	
I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS-BUILT" plan in accordance with the approved plans and specifications.	



SOIL BORINGS

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
REVISIONS

STATE OF MARYLAND
DEPARTMENT OF PLANNING & ZONING
PROFESSIONAL ENGINEER

SITE RESOURCES INCORPORATED
Comprehensive Land Planning & Site Design Services

14315 Jarroville Pike • Phoenix, Maryland 21131
(410) 683-3308 • Fax (410) 683-3309

DRAWN BY: FJP
DESIGNED BY: FJP
CHECKED BY: AFE
DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
SCALE: AS SHOWN
SRI PROJECT NO.: 110591
SHEET SWM2.01 29 of 38

APPROVED: DEPARTMENT OF PLANNING & ZONING
1/7/14
DATE
1-28-14
DATE
1/29/14
DATE

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE 09/12/13
DATE

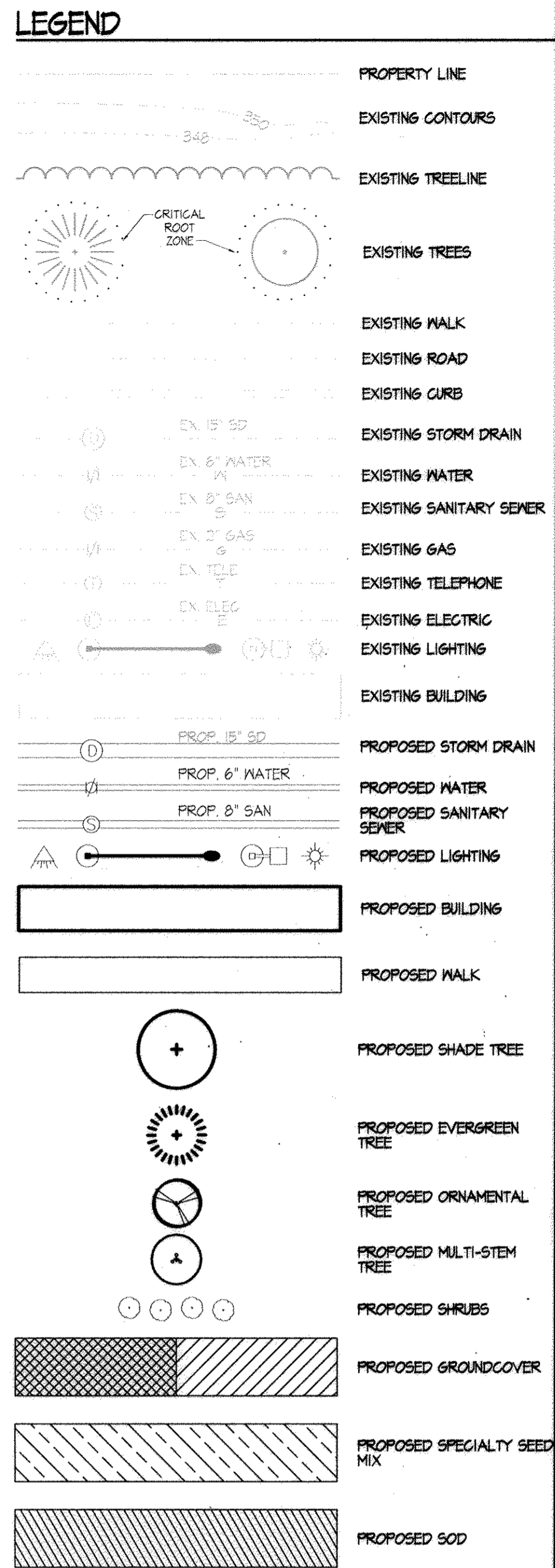
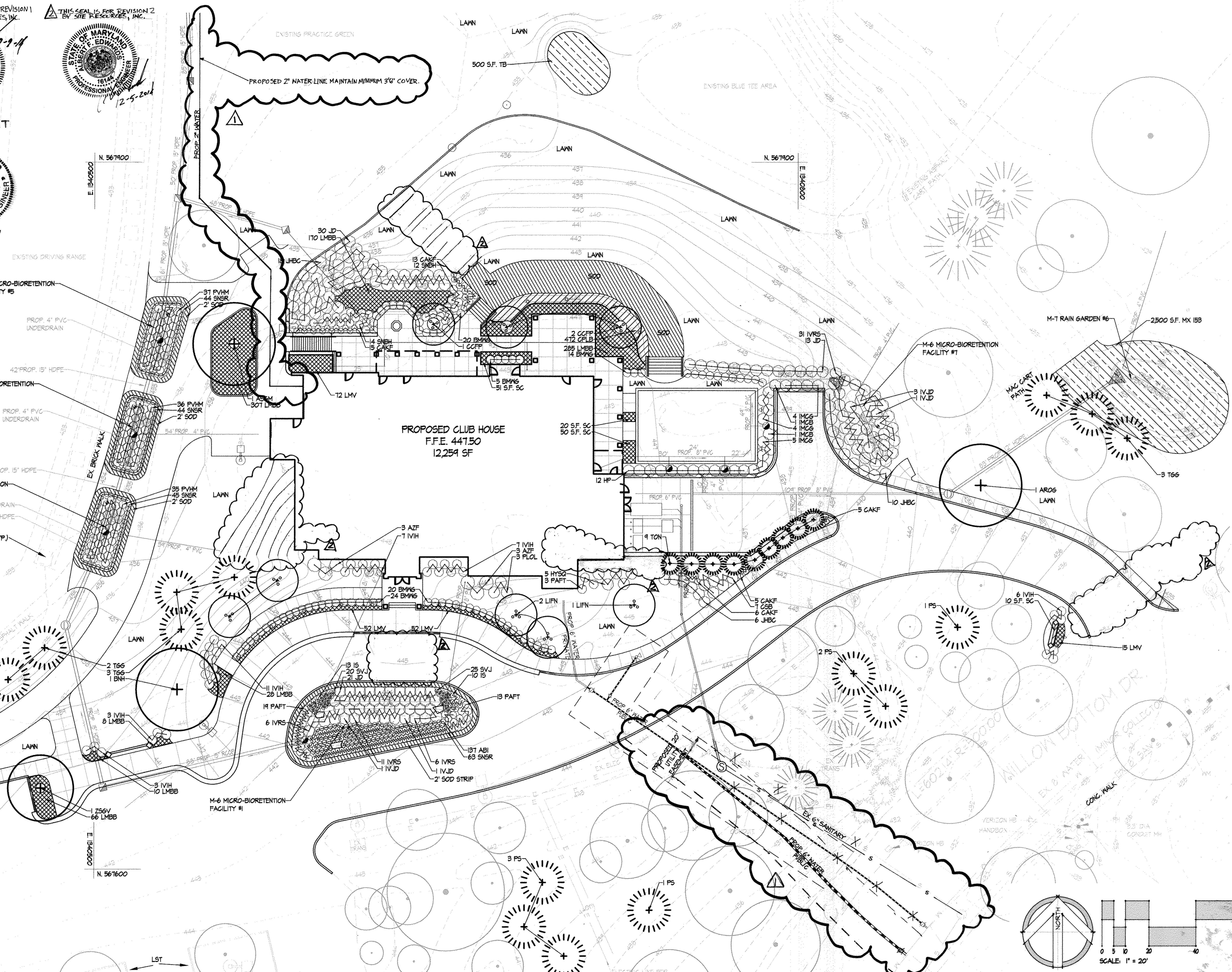
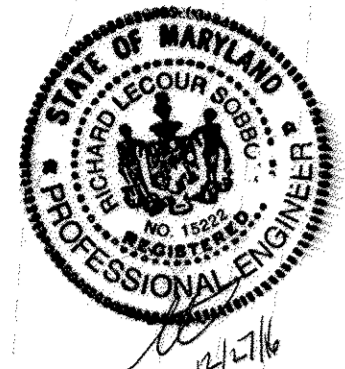
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
12/19/2013
DATE

ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
VILLAGE OF HARPERS CHOICE	2/1	8/135	
FLAT # OR L/F	GRID #	ZONING	TAX MAP NO. ELECTION DISTRICT
430B & 430A	NA	NT-05	24 5TH
WATER CODE	SEWER CODE		
214 P45	214 P45		

THIS SEAL IS FOR REVISION 1 BY SITE RESOURCES, INC.
 THIS SEAL IS FOR REVISION 2 BY SITE RESOURCES, INC.

SWM AS-BUILT



MATCHLINE - SEE SHEET LI.02

PLANTING PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
 REVISIONS

11/20/13

11/20/13

SITE RESOURCES
 Comprehensive Land Planning & Site Design Services

14315 Jarrattville Pike • Phoenix, Maryland 21131
 (410) 683-3388 • Fax (410) 683-3389

DRAWN BY: FJP
 DESIGNED BY: FJP
 CHECKED BY: FJP / FPB
 DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
 SCALE: 1"=20'
 SRI PROJECT NO.: 11054
 SHEET LI.01 30 OF 38

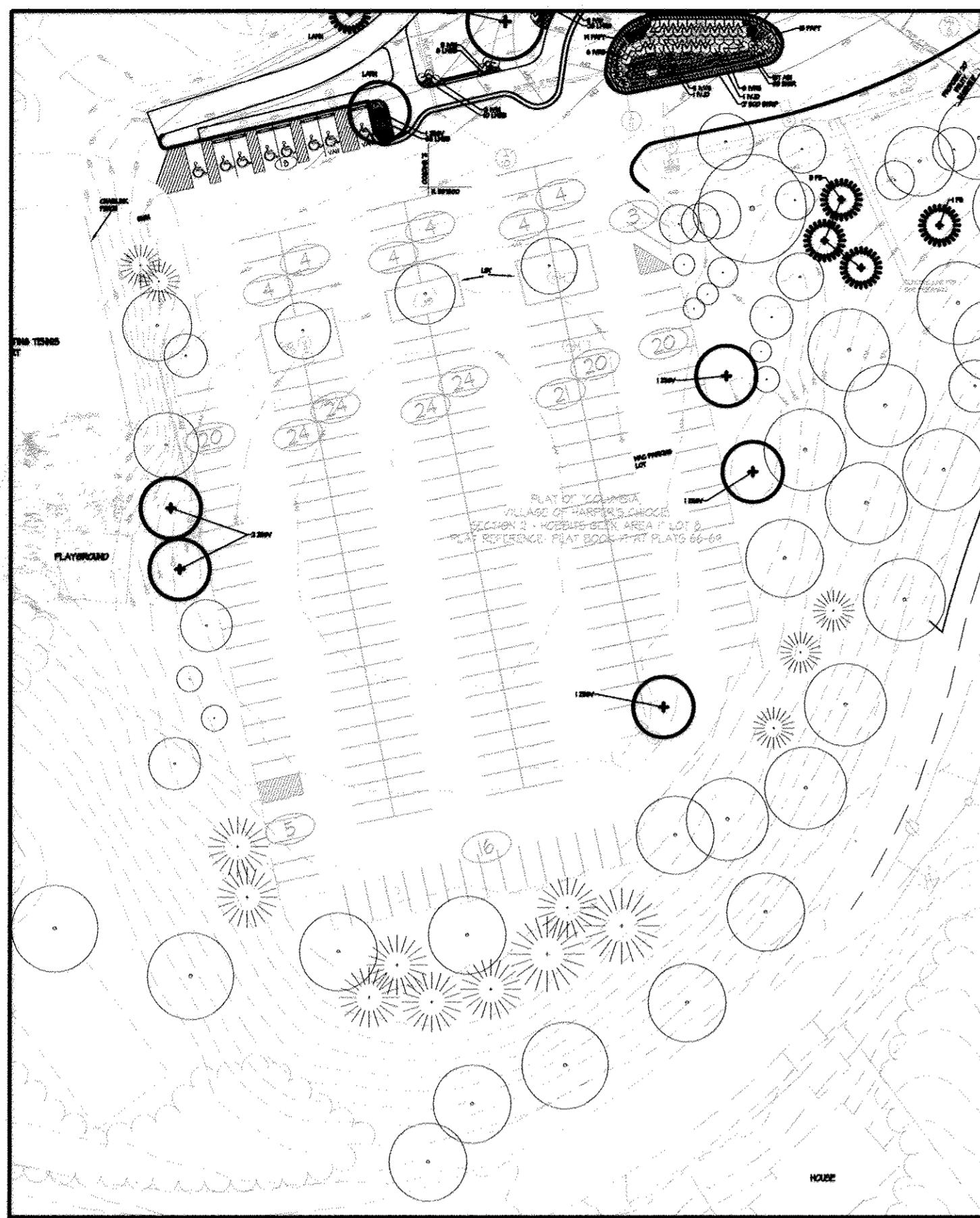
APPROVED: DEPARTMENT OF PLANNING & ZONING
 DATE: 11/7/14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 1-23-14
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 1/29/14
 DIRECTOR

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 09/12/13
 DATE: 09/12/13

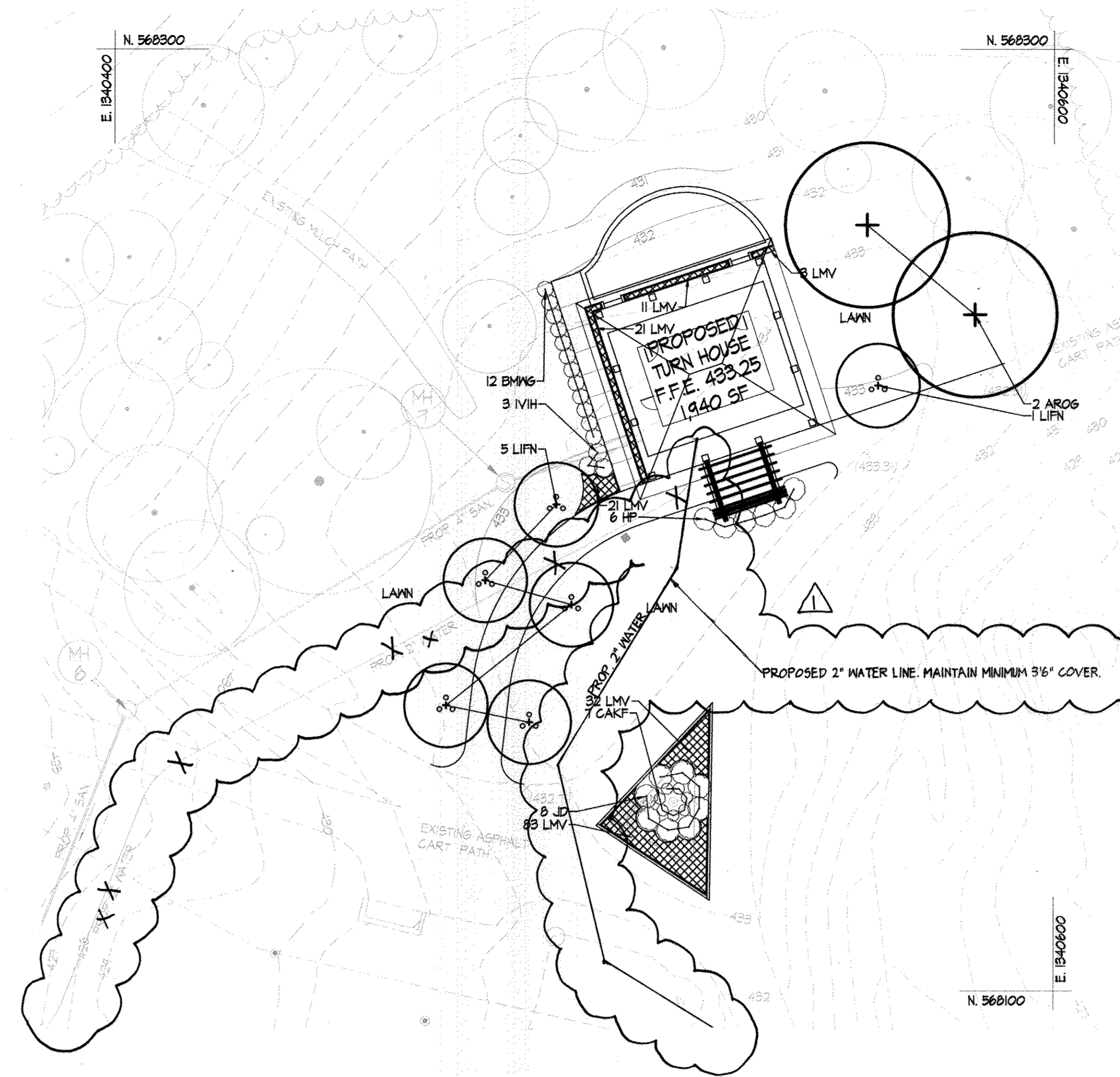
APPROVED: FOR PUBLIC WATER
 AND PUBLIC SEWERAGE SYSTEMS
 DATE: 12/19/2013
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
VILLAGE OF HARPERS CHOICE	2/1	8/135	
FLAT # OR L/F	GRID #	ZONING	TAX MAP NO.
		NA	NT-03
WATER CODE	SEWER CODE	ELECTION DISTRICT	CENSUS TRACT
214 #45	214 #45	5TH	605502



LANDSCAPE SCHEDULE	
SCHEDULE B - PARKING LOT INTERNAL LANDSCAPE	
NUMBER OF PARKING SPACES	233
NUMBER OF TREES REQUIRED	12 SHADE TREES
CREDIT FOR EXISTING TREES	YES, 12+ SHADE TREES, 10+ EVERGREEN TREES AND SHRUBS TO REMAIN
NUMBER OF TREES PROVIDED	6 SHADE TREES



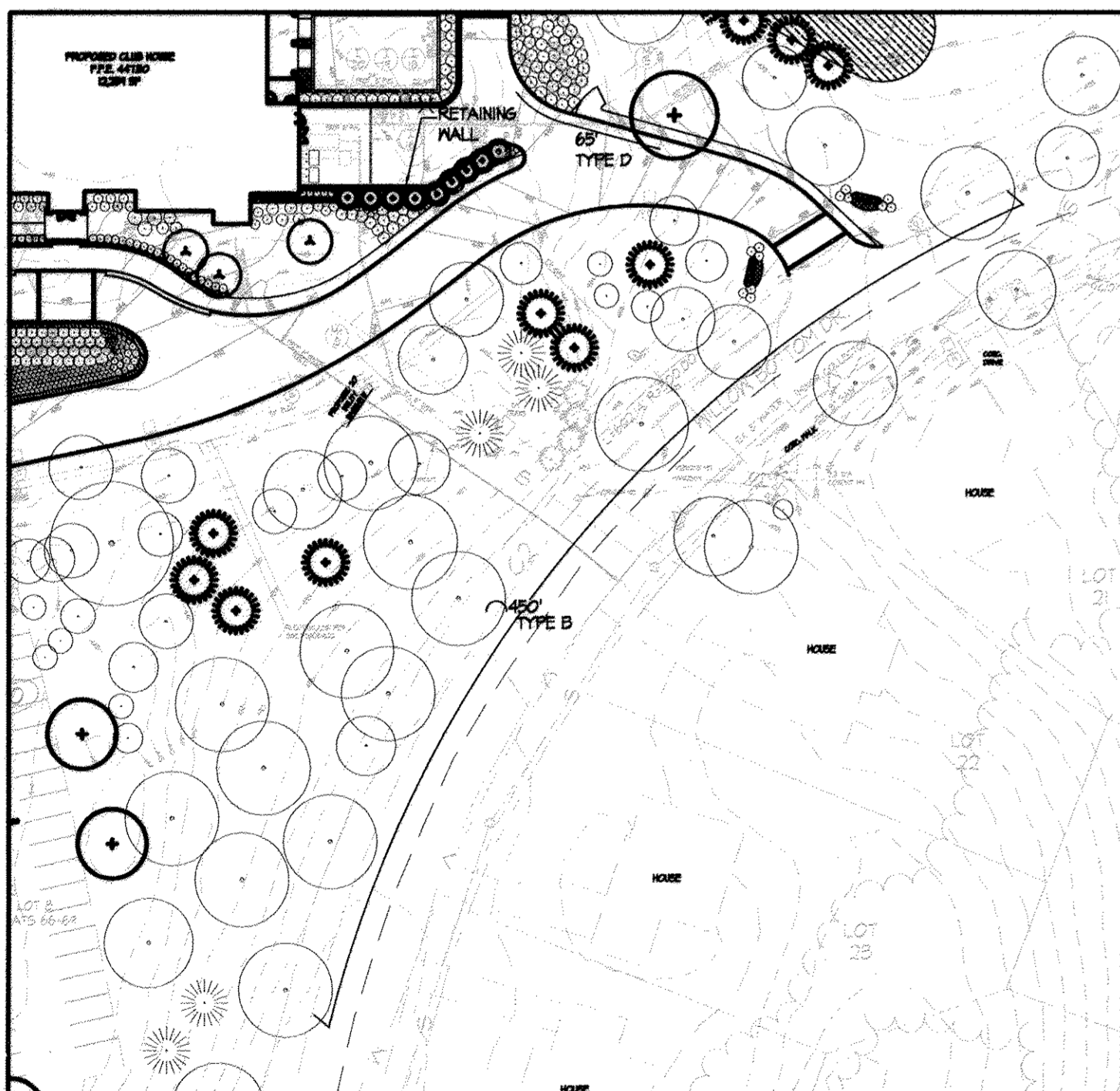
LEGEND	
	PROPERTY LINE
	EXISTING CONTOURS
	EXISTING TREELINE
	EXISTING TREES
	EXISTING WALK
	EXISTING ROAD
	EXISTING CURB
	EXISTING STORM DRAIN
	EXISTING WATER
	EXISTING SANITARY SEWER
	EXISTING GAS
	EXISTING TELEPHONE
	EXISTING ELECTRIC
	EXISTING LIGHTING
	EXISTING BUILDING
	PROPOSED STORM DRAIN
	PROPOSED WATER
	PROPOSED SANITARY SEWER
	PROPOSED LIGHTING
	PROPOSED BUILDING
	PROPOSED WALK
	PROPOSED SHADE TREE
	PROPOSED EVERGREEN TREE
	PROPOSED ORNAMENTAL TREE
	PROPOSED MULTI-STEM TREE
	PROPOSED SHRUBS
	PROPOSED GROUNDCOVER
	PROPOSED SPECIALTY SEED MIX
	PROPOSED SOD

INTERNAL PARKING LOT LANDSCAPE REQUIREMENTS FOR INTERNAL PARKING LOTS per HOWARD COUNTY LANDSCAPE MANUAL

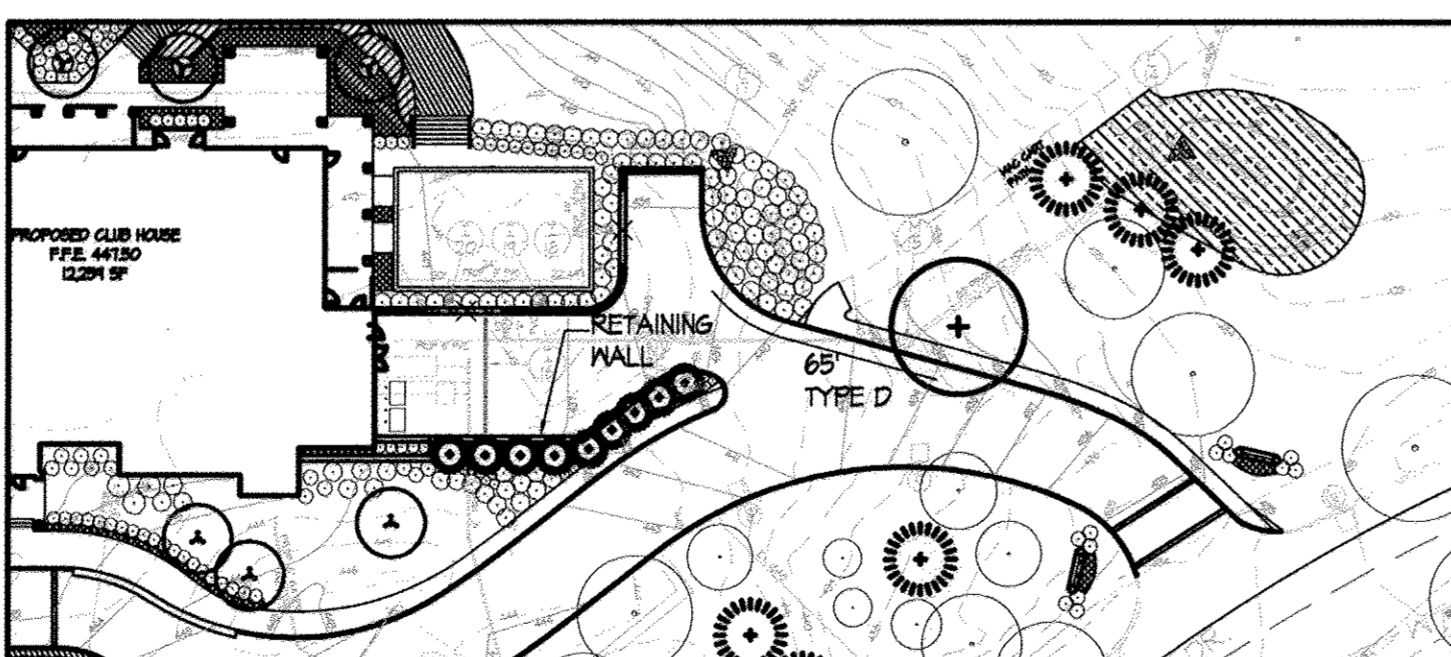
Partial Exemptions to the landscape requirements apply to expansion of existing uses under certain criteria:

- Expansion of an existing parking lot or loading area that increases the area or number of spaces by 50% or more shall be required to provide landscaping for the entire parking lot or loading area in accordance with these regulations. Expansions of less than 50% shall be required to provide landscaping for the additional development only.

The parking lot modifications in this set of plans includes the removal of 3 spaces and restriping of 8 spaces to provide additional handicapped spaces. As no additions are being proposed and the parking will actually be reduced, no additional landscape requirements apply to the parking facility.



LANDSCAPE SCHEDULE	
SCHEDULE A - PERIMETER LANDSCAPE EDGE	
CATEGORY	ADJACENT TO ROADWAYS
LANDSCAPE TYPE	NON-RESIDENTIAL TO ROAD TYPE B
LINEAR FEET OF ROADWAY FRONTAGE	450'
CREDIT FOR EXISTING VEGETATION	YES, 14 SHADE TREES, 5 EVERGREEN TREES TO REMAIN
CREDIT FOR WALL, FENCE OR BERM	NO
NUMBER OF PLANTS REQUIRED	21
SHADE TREES	1 PER 50 LF = 4 REQUIRED
EVERGREEN TREES	1 PER 40 LF = 12 REQUIRED
NUMBER OF PLANTS PROVIDED	7
SHADE TREES	CRITERIA MET WITH EXISTING
EVERGREEN TREES	7



LANDSCAPE SCHEDULE	
SCHEDULE A - PERIMETER LANDSCAPE EDGE	
CATEGORY	ADJACENT TO PERIMETER PROPERTY
LANDSCAPE TYPE	LOADING ADJACENT TO RESIDENTIAL TYPE D
LINEAR FEET OF PERIMETER	65'
CREDIT FOR EXISTING VEGETATION	YES, 3 SHADE TREES
CREDIT FOR WALL, FENCE OR BERM	YES, SOLID WALL CREDIT 100%
NUMBER OF PLANTS REQUIRED	4
SHADE TREES	1 PER 60 LF = 2 REQUIRED
EVERGREEN TREES	1 PER 10 LF = 7 REQUIRED
NUMBER OF PLANTS PROVIDED	13
SHADE TREES	1 PROPOSED
EVERGREEN TREES	12 PROPOSED

NOTE: RETAINING WALLS ARE PROPOSED TO BE STONE FACED TO MATCH THE ARCHITECTURAL STYLE OF THE PROPOSED CLUBHOUSE. SEE WALL ELEVATION 2 ON SHEET C2.05.

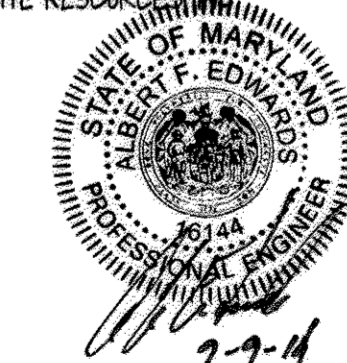
FOREST CONSERVATION

This project is located on existing New Town Open Space lots recorded prior to 1992. The project is exempt from the forest conservation requirements considering the New Town district is a planned unit development which had preliminary development plan approval and was 50% or more developed prior to 12/31/92 in accordance with section 16.1202(b)(1)(iv) of the Howard County Code.

SWM AS-BUILT



THIS SEAL IS FOR REVISION 1 BY SITE RESOURCES

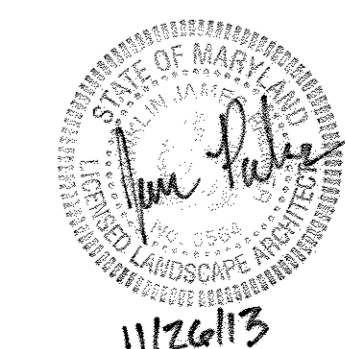


PLANTING PLAN

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.
REVISIONS

10/21/2014 WATER LINE RELOCATION



SITE RESOURCES
CORPORATED
Comprehensive Land Planning & Site Design Services
14315 Jarrattville Pike • Phoenix, Maryland 21131
(410) 683-3308 • fax (410) 683-3300

APPROVED: DEPARTMENT OF PLANNING & ZONING
Chief, Development Engineering Division
Kurt S. Deason
Chief, Division of Land Development
Mark A. Cayle
DIRECTOR

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 09/12/13
[Signature]

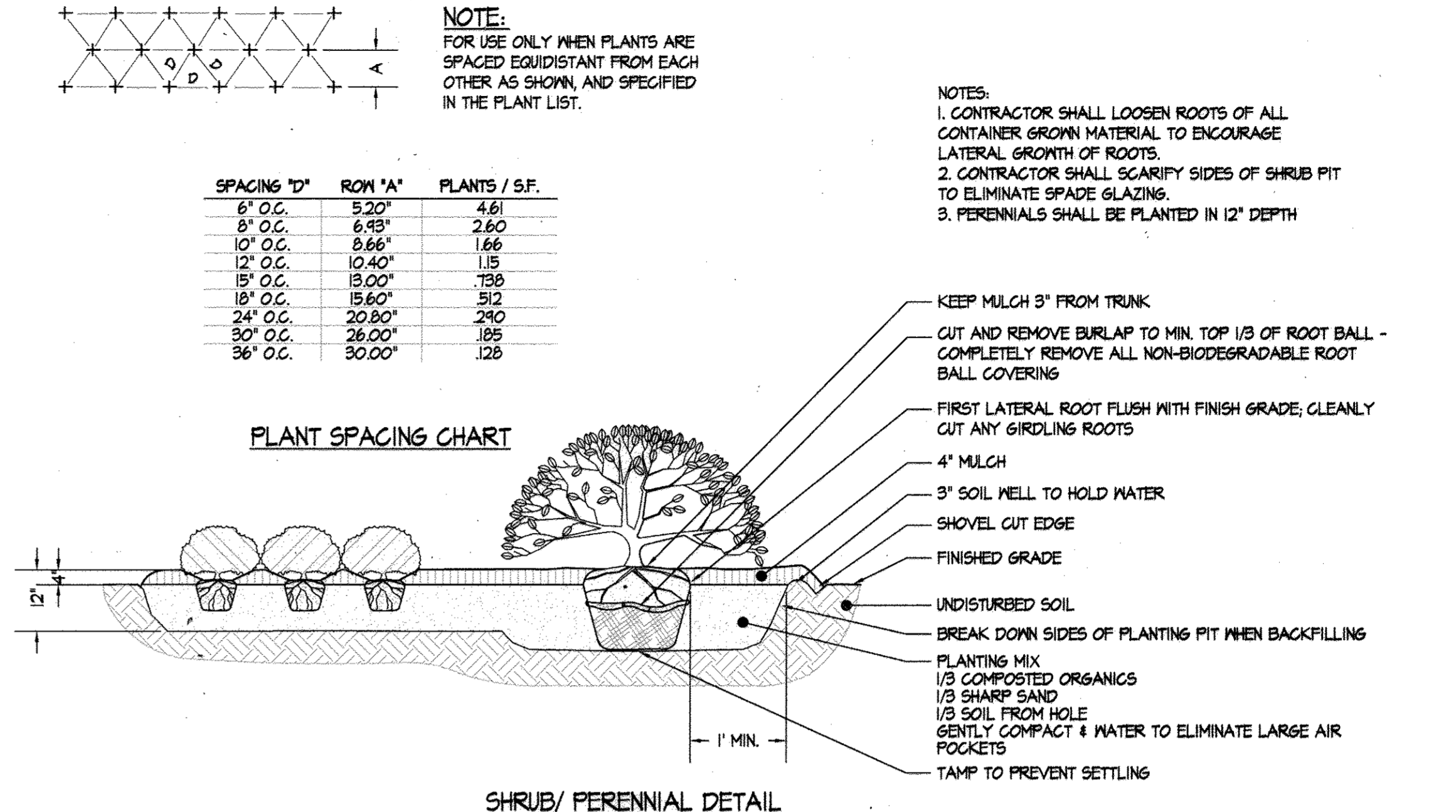
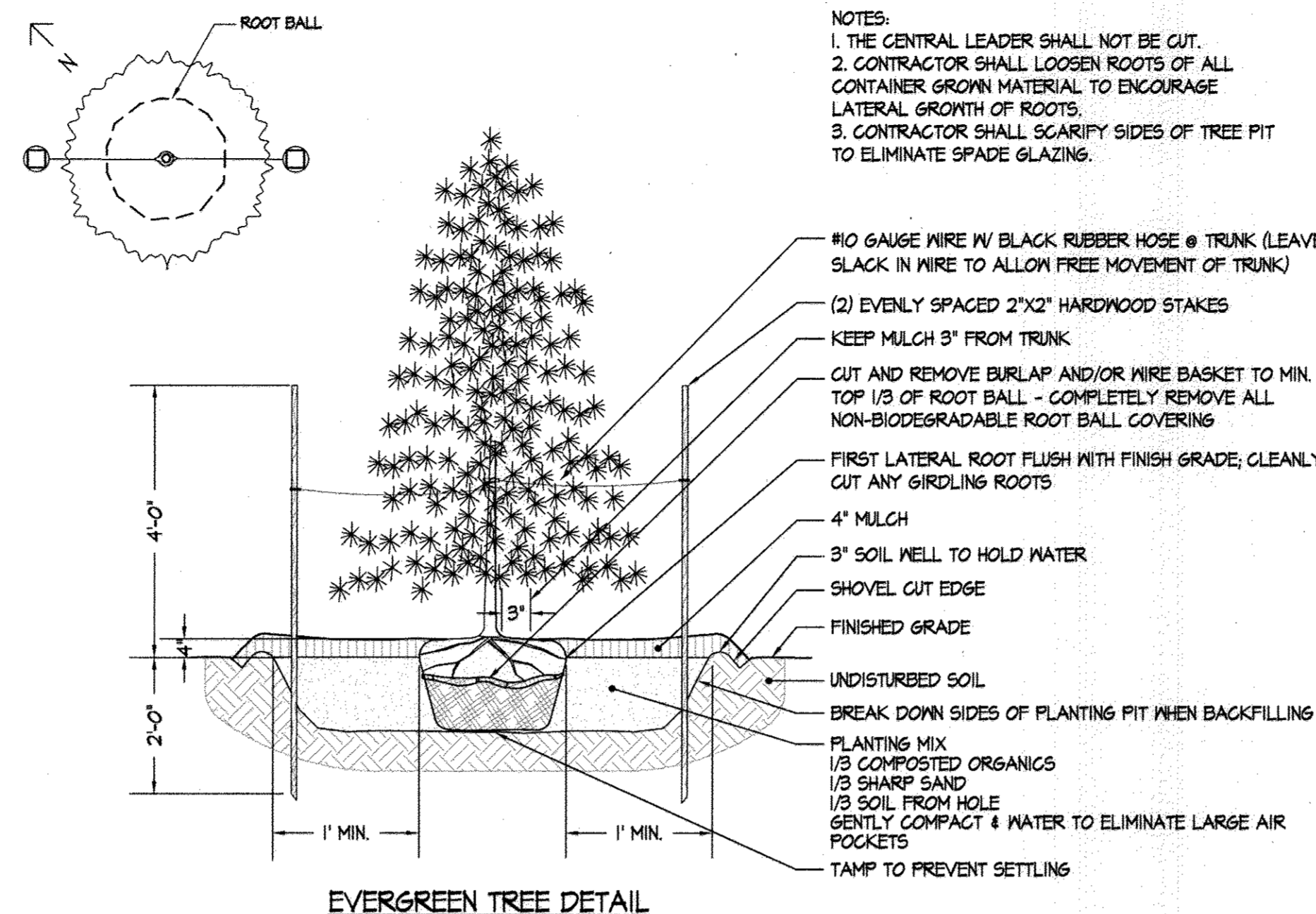
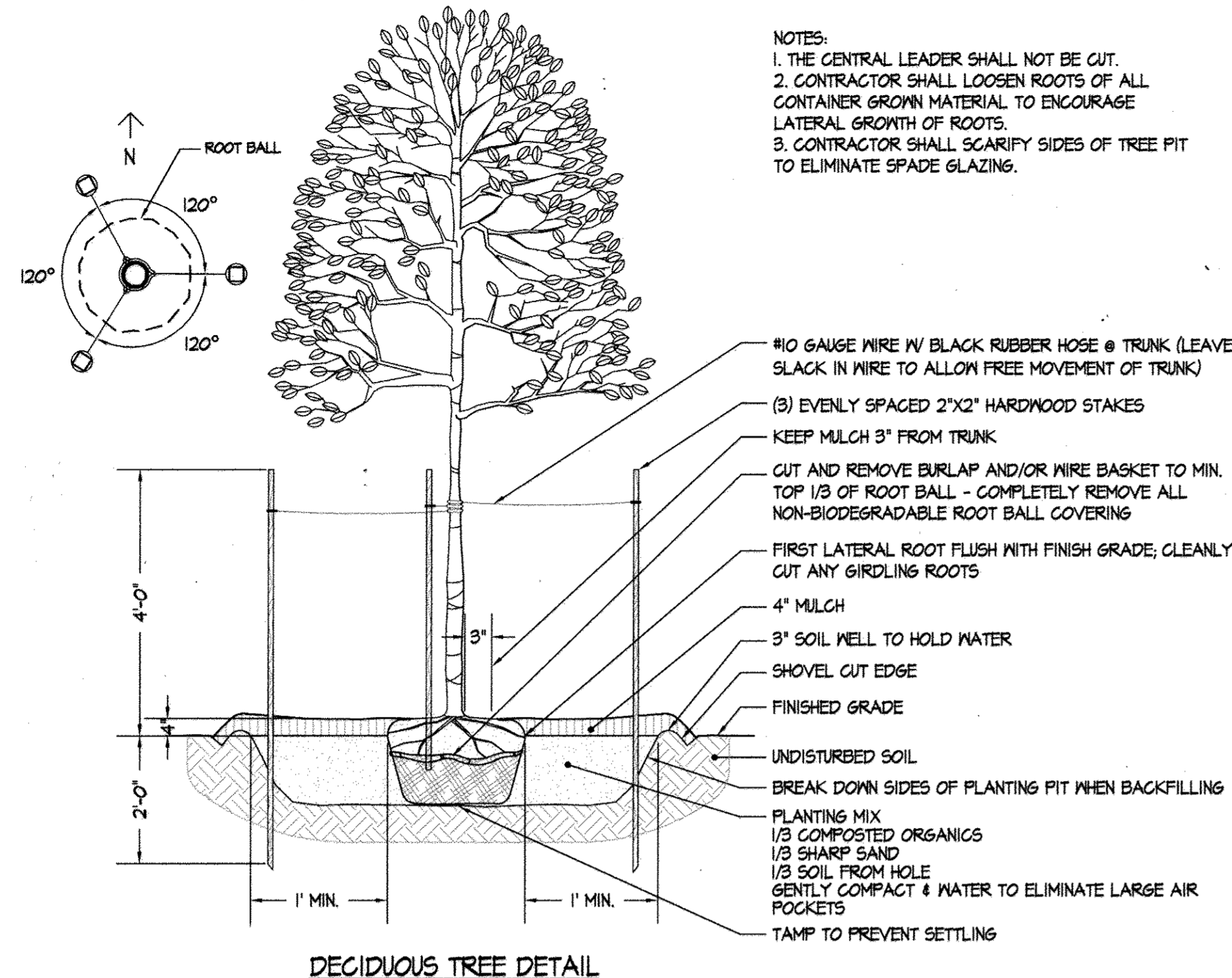
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
[Signature for Maureen Rossman]
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 12/19/2013

ADDRESS CHART		PERMIT INFORMATION CHART			
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1	8/135	
		FLAT # OR L/F	GRID #	ZONING	TAX MAP NO.
		4302 41304	NA	NT-05	21
		WATER CODE	SEWER CODE	ELECTION DISTRICT	CENSUS TRACT
		214 M45	214 M45	5TH	605502

ADDRESS CHART		PERMIT INFORMATION CHART			
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1	8/135	
		FLAT # OR L/F	GRID #	ZONING	TAX MAP NO.
		4302 41304	NA	NT-05	21
		WATER CODE	SEWER CODE	ELECTION DISTRICT	CENSUS TRACT
		214 M45	214 M45	5TH	605502

DRAWN BY: FJP
DESIGNED BY: FJP
CHECKED BY: FJP / FPB
DATE: SEPTEMBER 13, 2013

CONTRACT NO.: -
SCALE: 1"=20'
SRI PROJECT NO.: 11054
SHEET: L1.02 31 of 38



SPACING 'D'	ROW 'A'	PLANTS / S.F.
6" O.C.	5.20'	4.61
8" O.C.	6.43'	2.60
10" O.C.	8.66'	1.66
12" O.C.	10.90'	1.15
15" O.C.	13.00'	.738
18" O.C.	15.60'	.512
24" O.C.	20.80'	.240
30" O.C.	26.00'	.195
36" O.C.	30.00'	.126

PLANTING DETAILS

LANDSCAPING NOTES

- THESE NOTES APPLY TO ALL PLANTING IN THIS CONTRACT:
- QUANTITIES SHOWN ON THE PLANT LIST ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. SYMBOLS ON THE PLAN SHALL TAKE PRECEDENCE. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES TO HIS OWN SATISFACTION.
 - PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
 - PLANT MATERIAL SHALL BE TAGGED AT THE SOURCE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE UNLESS THE REQUIREMENT IS SPECIFICALLY WAIVED.
 - LOCATIONS OF ALL PLANT MATERIAL SHALL BE STAKED FOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
 - ALL SHRUB AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PREPARED BEDS MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILED AND SPECIFIED.
 - PLANTING BEDS SHALL HAVE POSITIVE DRAINAGE WITH A MINIMUM 2% SLOPE.
 - CONTRACTOR SHALL VERIFY ACCURACY OF BASE INFORMATION AND EXISTING CONDITIONS AND UTILITIES IN THE FIELD TO HIS OWN SATISFACTION. UTILITIES BID SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-251-7711 A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING PLANTING AND CONSTRUCTION.
 - DAMAGE TO EXISTING CONDITIONS AND UTILITIES SHALL BE REPAIRED AND RESTORED AT THE EXPENSE OF THE CONTRACTOR.
 - ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND SHALL CONFORM TO AMERICAN NURSERY & LANDSCAPE ASSOCIATION'S AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z601.
 - CONTRACTOR SHALL PROVIDE A WARRANTY ON ALL WORK FOR A MINIMUM OF ONE (1) YEAR INCLUDING ONE CONTINUOUS GROWING SEASON. COMMENCE WARRANTY ON THE DATE IDENTIFIED IN THE CERTIFICATE OF SUBSTANTIAL COMPLETION. WARRANTY TO INCLUDE COVERAGE OF PLANTS FROM DEATH OR PLANT MATERIAL WHICH DECLINES TO LESS THAN 75% OF ITS ORIGINAL HABIT OR CONDITION. REPLACEMENT OF PLANTS SHALL BE THE SAME QUALITY, SIZE AND SPECIES AS SPECIFIED AND PLANTED IN THE NEXT GROWING SEASON WITH A NEW WARRANTY COMMENCING WITH THE DATE OF REPLACEMENT.

TEE BOX SOD (PER COURSE STANDARDS)

- THESE NOTES ONLY APPLY TO TEE BOX CONSTRUCTION:
- 1.21 TEE MIX INSTALLED AT A 6" DEPTH
 - 4" PERFORATED DRAIN PIPING PROTECTED WITH RICE GRAVEL PLACED AT 15" MAXIMUM SPACING.
 - L93 CREEPING BENTGRASS SOD
 - CONSULT WITH DIRECTOR OF GOLF COURSE MAINTENANCE FOR APPROVAL OF TEE BOX STAKE OUT AND DRAIN PIPE LAYOUT PRIOR TO BACKFILLING.

MIX 153

THESE NOTES ONLY APPLY TO MIX 153:
MIX 153 - SHOWY NORTHEAST NATIVE WILDFLOWER & GRASS MIX BY ERNST SEED, 9006 MERCER PIKE, MEADVILLE, PA. 16335. PHONE (800)-973-3321. APPLY SEED MIX IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR METHOD AND RATE OF APPLICATION.

LAWN & SOD AREAS

AREAS INDICATED TO RECEIVE SEED AND SOD (WITH THE EXCEPTION OF TEE BOX & MIX 153) SHALL BE TURF TYPE TALL FESCUE IN ACCORDANCE WITH HOBBIT'S GLEN GOLF COURSE STANDARDS. CONSULT WITH DIRECTOR OF GOLF COURSE MAINTENANCE TO ENSURE SEED AND SOD SELECTIONS ARE ACCEPTABLE PRIOR TO INSTALLATION.

MINIMUM LANDSCAPE MAINTENANCE REQUIREMENTS

- LAWN AREAS SHALL BE MOVED TO A HEIGHT OF 2 TO 3 INCHES AND NOT ALLOWED TO REACH A HEIGHT OF 4 INCHES BEFORE MOWING.
- ALL CURBS AND WALKS SHALL BE EDGED AS NEEDED.
- ALL LAWN AREAS ADJACENT TO BUILDING FACES OR STRUCTURES SHALL BE TRIMMED.
- A SLOW RELEASE NITROGEN BALANCED FERTILIZER WITH A 2-1-1 RATIO SHALL BE APPLIED AT A RATE OF 2 POUNDS OF NITROGEN PER 1000 SQUARE FEET IN SEPTEMBER, OCTOBER, AND FEBRUARY.
- LIME SHALL BE APPLIED AT THE RATE DETERMINED BY A SOILS REPORT.
- IT IS RECOMMENDED THAT LAWN AREAS BE TREATED IN MID-MARCH TO EARLY APRIL WITH PRE-EMERGENT HERBICIDE (SETASAN) OR EQUAL APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE.
- A POST-EMERGENT HERBICIDE (TRIMEC) OR EQUAL IS RECOMMENDED TO BE SPRAYED ON LAWN AREAS IN THE LATE SPRING OR THE EARLY FALL. FOLLOW MANUFACTURER'S RATES AND RECOMMENDATIONS.
- INSECTICIDES AND FUNGICIDES ARE RECOMMENDED FOR INSECT AND DISEASE CONTROL.
- RESOED BARE AREAS OF LAWN AS NECESSARY. YEARLY AERATION IS RECOMMENDED.
- ALL TRASH, LITTER, AND DEBRIS SHALL BE REMOVED FROM LAWN AREAS, PARKING LOTS, AND SHRUB BEDS AS NEEDED.
- MULCH ALL SHRUB AND GROUNDCOVER BEDS YEARLY WITH 3 INCHES OF SHREDDED HARDWOOD BARK.
- PERMIT SHRUBS AND TREES TO GROW AND ENLARGE TO THEIR DESIGN SIZE. CONSULT PROJECT LANDSCAPE ARCHITECT FOR DETAILS.
- PRUNE TREES IN ACCORDANCE WITH LANDSCAPE CONTRACTORS ASSOCIATION GUIDELINES.

STORMWATER MANAGEMENT LANDSCAPE SUMMARY

CODE	QTY.	BOTANICAL NAME	COMMON NAME
M-6 MICRO-BIORETENTION FACILITY #1			
ABI	187	AMSONIA 'BLUE ICE'	BLUE STAR
IVRS	12	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE DWARF WINTERBERRY HOLLY
IVJD	2	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY HOLLY
IS	23	IRIS PSEUDACORUS	YELLOW FLAG IRIS
JD	21	JUNIPERUS DAURICA 'PARSONI'	PARSON'S JUNIPER
SVJ	45	SEDUM VERA JAMESON'	VERA JAMESON SEDUM
PAFT	92	PENNISETUM ALOPECUROIDES 'FOXTROT'	FOXTROT FOUNTAIN GRASS
SOD		TURF TYPE TALL FESCUE	
M-6 MICRO-BIORETENTION FACILITY #3			
PVHM	35	PANICUM VIRGATUM 'HEAVY METAL'	BLUE SWITCHGRASS
SNR	45	SALVIA MEMOROSA 'SENSATION ROSE'	SENSATION ROSE SAGE
SOD		TURF TYPE TALL FESCUE	
M-6 MICRO-BIORETENTION FACILITY #4			
PVHM	36	PANICUM VIRGATUM 'HEAVY METAL'	BLUE SWITCHGRASS
SNR	44	SALVIA MEMOROSA 'SENSATION ROSE'	SENSATION ROSE SAGE
SOD		TURF TYPE TALL FESCUE	
M-6 MICRO-BIORETENTION FACILITY #5			
PVHM	37	PANICUM VIRGATUM 'HEAVY METAL'	BLUE SWITCHGRASS
SNR	44	SALVIA MEMOROSA 'SENSATION ROSE'	SENSATION ROSE SAGE
SOD		TURF TYPE TALL FESCUE	
M-7 RAIN GARDEN FACILITY #6			
MIX-153	2,500 SF	SHOWY NORTHEAST NATIVE WILDFLOWER & GRASS MIX	
M-6 MICRO-BIORETENTION FACILITY #7			
IVRS	31	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE DWARF WINTERBERRY HOLLY
IVJD	4	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY HOLLY
JHBC	10	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP JUNIPER

THIS CHART PROVIDED FOR THE CONVENIENCE OF COUNTY REVIEW ONLY. CONTRACTOR SHALL USE THE PLANT LIST TO THE LEFT OF THIS SHEET.

PLANT LIST	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	REMARKS
SHADE TREES						
AROG	3	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2.5'-3' CAL.	B4B	
ASGM	1	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	4-4.5' CAL.	B4B	
BNH	1	BETULA NIGRA 'HERITAGE'	HERRITAGE RIVER BIRCH	10'-12' HT.	B4B	MULTI-STEM - 3 TRUNK MINIMUM
Z56V	6	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	2.5'-3' CAL.	B4B	
EVERGREEN TREES						
FS	7	FINIS STROBUS	EASTERN WHITE PINE	6-8' HT.	B4B	
T6G	6	THUJA X 'GREEN GIANT'	GREEN GIANT ARBORVITAE	8-10' HT.	B4B	HEAVY
TON	4	THUJA OCCIDENTALIS 'NIGRA'	NIGRA ARBORVITAE	8-10' HT.	B4B	HEAVY
ORNAMENTAL TREES						
CGPP	3	CERCIS CANADENSIS 'FOREST PANSY'	FOREST PANSY REDBUD	12' HT.	B4B	SPECIMEN
LIFN	11	LAGERSTROMIA INDICA 'NATCHEZ'	NATCHEZ GRAPE MYRTLE	10' HT.	B4B	5 TRUNK MINIMUM / SPECIMEN
SHRUBS						
AZF	6	AZALEA 'FLAME'	FLAME AZALEA	24' HT.	#5 CONT.	HEAVY
BMWS	7	BUXUS MICROPHYLLA 'WINTER GEM'	WINTER GEM BOXWOOD	18' HT.	B4B	HEAVY
C5B	7	CORNUS SERICEA 'BAILEY'	RED TIGR DOGWOOD	30' HT.	B4B	HEAVY SPECIMEN / 5 CANE MINIMUM
HP	10	HYDRANGEA PETIOLARIS	CLIMBING HYDRANGEA	24' HT.	#3 CONT.	ON WOOD LATTICE
HYSQ	5	HYDRANGEA QUERCIFOLIA 'SNOW QUEEN'	SNOW QUEEN HYDRANGEA	24' HT.	#3 CONT.	HEAVY
IMCB	2	ILEX MESERVEAE 'CHINA BOY'	CHINA BOY HOLLY	18-24' HT.	#3 CONT.	HEAVY
IMCG	13	ILEX MESERVEAE 'CHINA GIRL'	CHINA GIRL HOLLY	18-24' HT.	#3 CONT.	HEAVY
IVRS	54	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE DWARF WINTERBERRY HOLLY	18-24' HT.	#3 CONT.	HEAVY
IVJD	6	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY HOLLY	18-24' HT.	#3 CONT.	HEAVY
IVH	40	ITEA VIRGINICA 'LITTLE HENRY'	LITTLE HENRY VIRGINIA SWEETSPIRE	18-24' HT.	#3 CONT.	HEAVY
JD	72	JUNIPERUS DAURICA 'PARSONI'	PARSON'S JUNIPER	24' HT.	B4B	HEAVY
JHBC	34	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP JUNIPER	18-24' HT.	#3 CONT.	HEAVY
PLCL	3	FRUNUS LAUROCAROLUS 'OTTO LUYKEN'	OTTO LUYKEN CHERRY LAUREL	24' HT.	#1 CONT.	HEAVY
THH	33	TAXUS MEDIA 'HICKSII'	HICKS' YEM	3' HT.	B4B	HEAVY
PERENNIALS & GROUNDCOVERS						
ABI	187	AMSONIA 'BLUE ICE'	BLUE STAR	#1 CONT.		
CFLB	314	CERATOSTIGMA FLUBAGINOIDES	FLUBAGO	1 QT.		
IS	23	IRIS PSEUDACORUS	YELLOW FLAG IRIS	#1 CONT.		18" SPACING
LMBE	140	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILY TURF	1 PINT		24" SPACING
LMV	268	LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LIRIOPE	1 PINT		24" SPACING
SNBH	26	SALVIA MEMOROSA 'BLUE HILL'	BLUE HILL SAGE	#1 CONT.		
SNR	196	SALVIA MEMOROSA 'SENSATION ROSE'	SENSATION ROSE SAGE	#1 CONT.		
GRASSES & SUCCULENTS						
CAKF	36	CALAMAGROSTRIS ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	1 GAL.		30" SPACING
PAFT	28	PENNISETUM ALOPECUROIDES 'FOXTROT'	FOXTROT FOUNTAIN GRASS	#1 CONT.		30" SPACING
PAH	3	PENNISETUM ALOPECUROIDES 'HAMELIN'	DWARF FOUNTAIN GRASS	#1 CONT.		24" SPACING
PVHM	78	PANICUM VIRGATUM 'HEAVY METAL'	BLUE SWITCHGRASS	#2 CONT.		36" SPACING
SVJ	30	SEDUM VERA JAMESON'	VERA JAMESON SEDUM	1 QT.		18" SPACING
SPECIALTY MIXES						
MIX 153	2,500 SF	ERNST SEED MIX 153	SHOWY NORTHEAST NATIVE WILDFLOWER & GRASS MIX			SEED MIX
TB	500 SF	TEE BOX SOD	L93 CREEPING BENTGRASS SOD			
LAWN		TURF TYPE TALL FESCUE				
SOD		TURF TYPE TALL FESCUE				

APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 09/12/13
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 09/13/13

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 09/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 PREPARED BY: JAMES PALMER, P.L.A.
 STATE OF MARYLAND REGISTERED LANDSCAPE ARCHITECT
 REGISTRATION NO. 3564
 NAME: James Palmer
 DATE: 12/19/2013

ADDRESS CHART

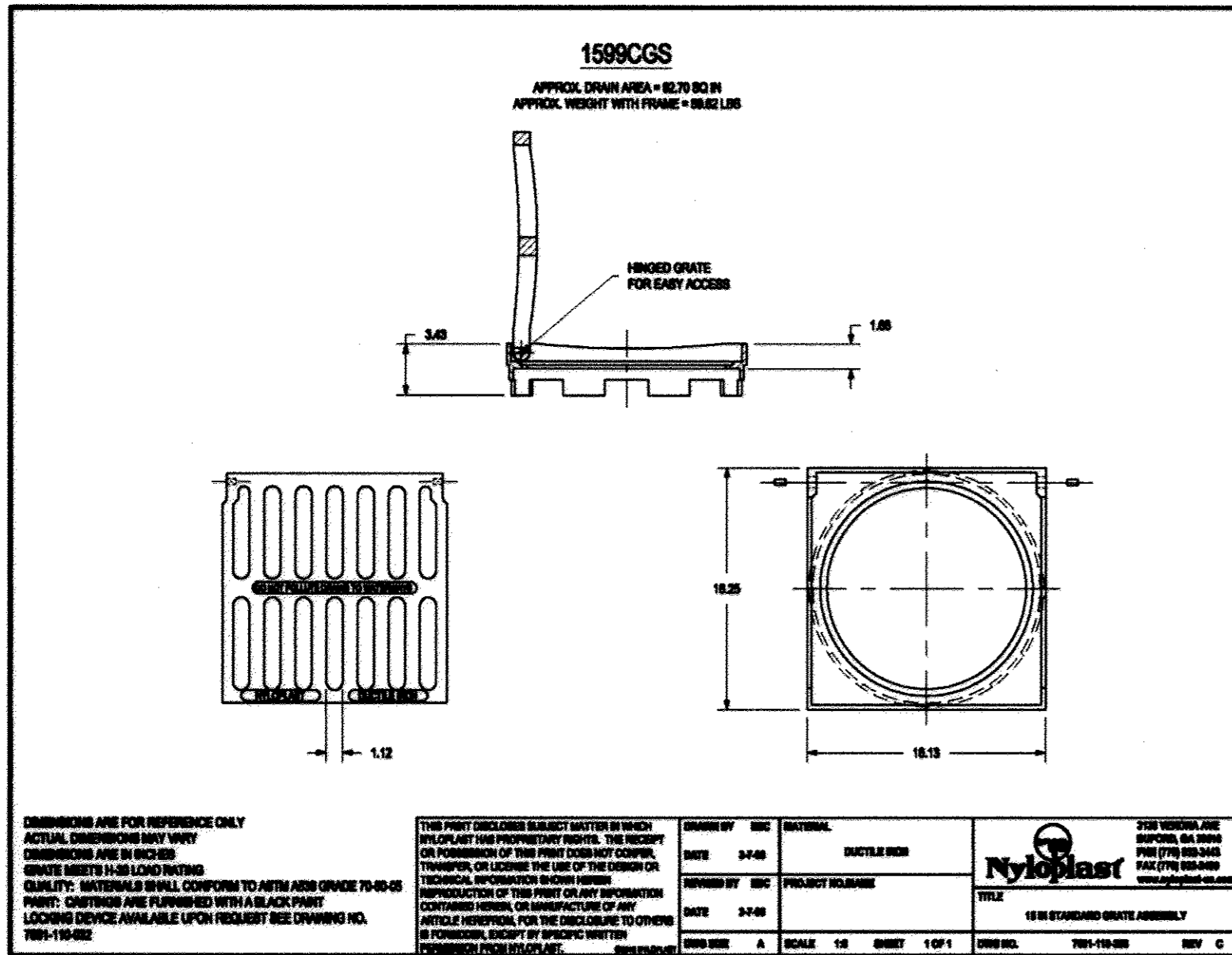
LOT/PARCEL	STREET ADDRESS
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

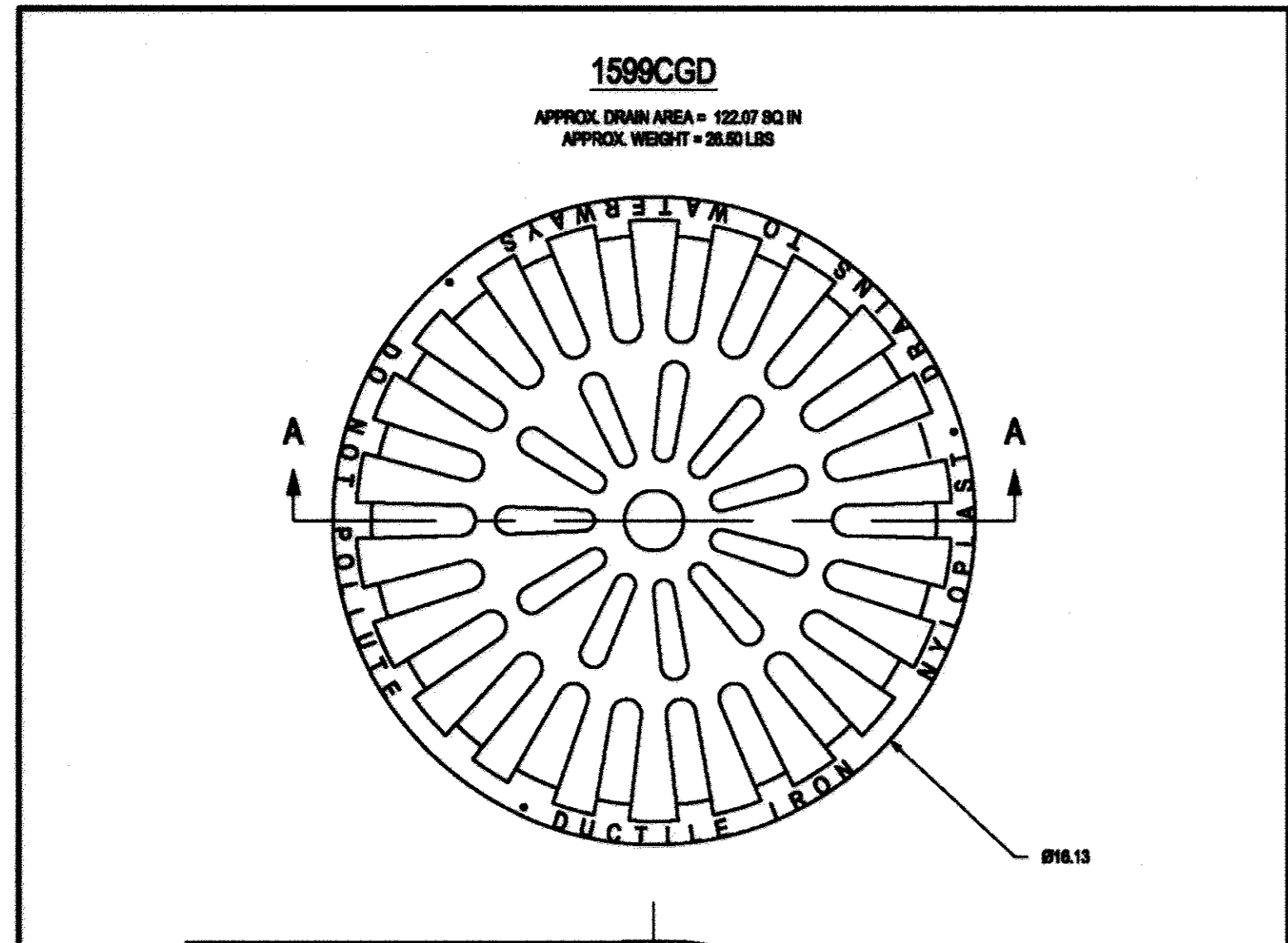
SUBDIVISION NAME VILLAGE OF HARPERS CHOICE	SECTION/AREA 2/1	LOT/PARCEL NO. 8/135
FLAT # OR L/F # #308 & #309	GRID # NA	ZONING NT-OS
TAX MAP NO. 29	ELECTION DISTRICT 5TH	CENSUS TRACT 605502
WATER CODE 214 M65	SEWER CODE 214 M65	

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 Subdivision and Land Development Regulations and the Landscape Manual. I/We further certify that upon completion 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.
 Name: D. Kelly
 Date: 11.13.13

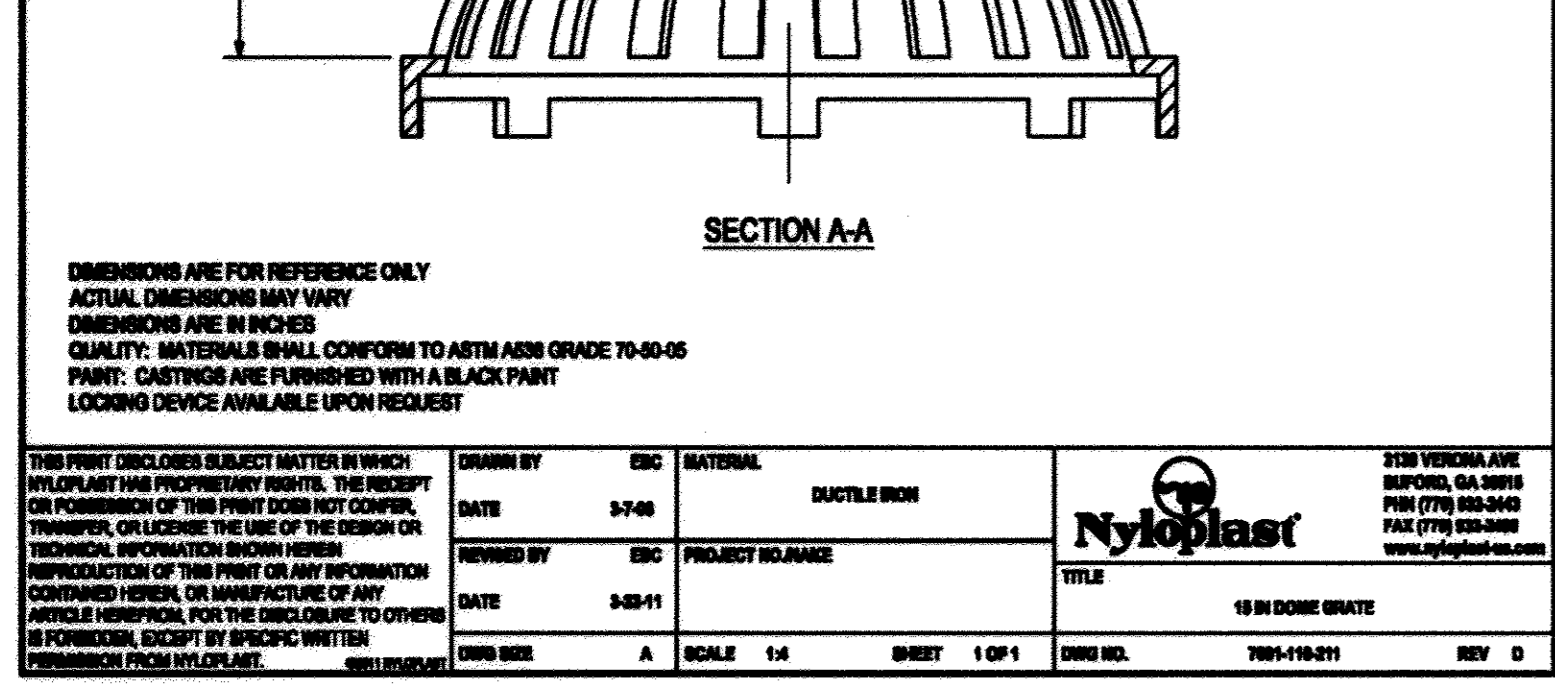
SITE RESOURCES
 Comprehensive Land Planning & Site Design Services
 14315 Jarrattville Pike • Poolesville, Maryland 21131
 (410) 683-3388 • fax (410) 683-3389
 DRAWN BY: F.J.P.
 CONTRACT NO.: -
 DESIGNED BY: F.J.P.
 SCALE: AS SHOWN
 CHECKED BY: F.J.P./FPB
 SRI PROJECT NO.: 11054
 DATE: SEPTEMBER 13, 2013
 SHEET L2.01
 32 OF 38
 SDP-13-027



1 15" STANDARD GRATE ASSEMBLY
NOT TO SCALE



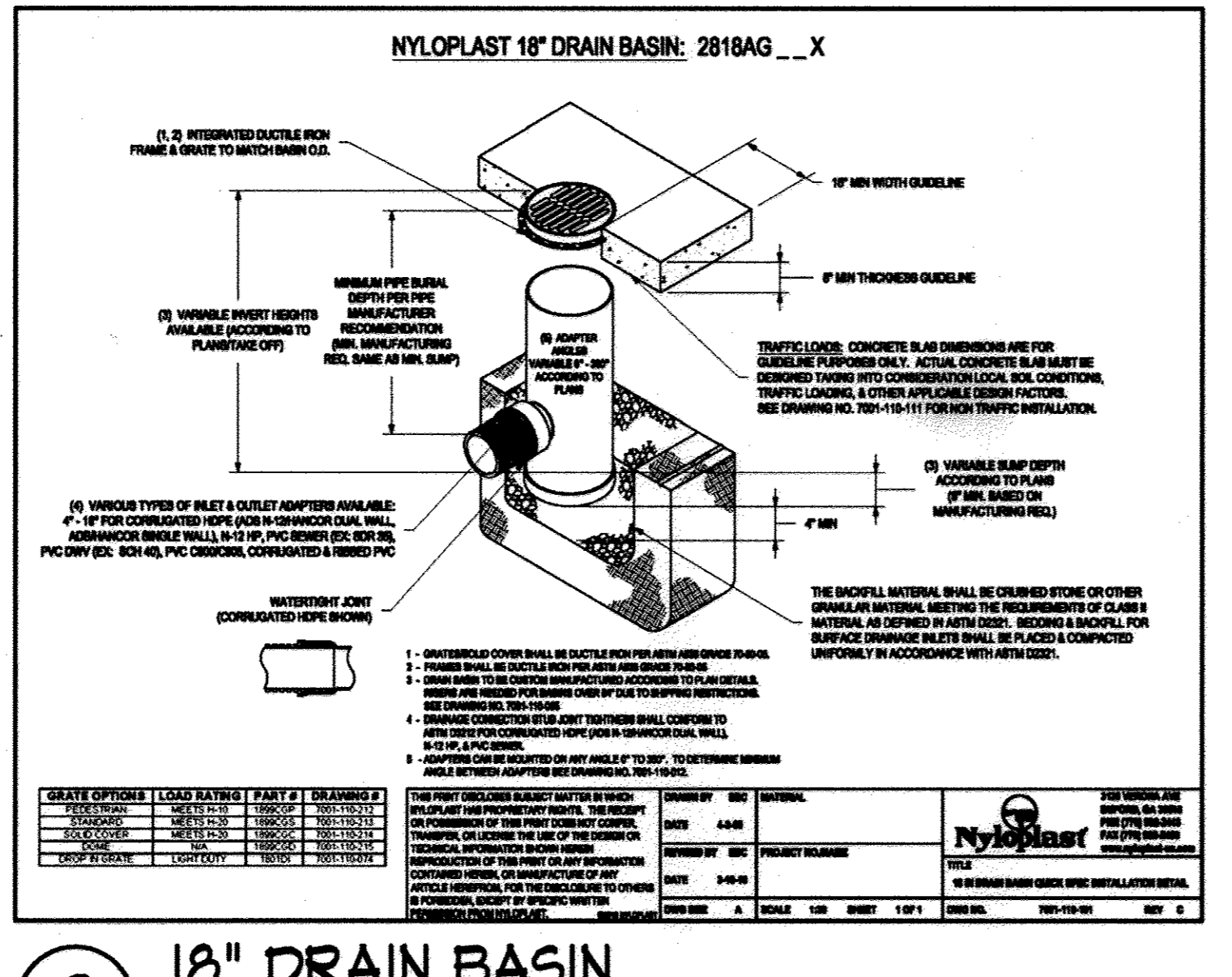
5 15" DOME GRATE
NOT TO SCALE



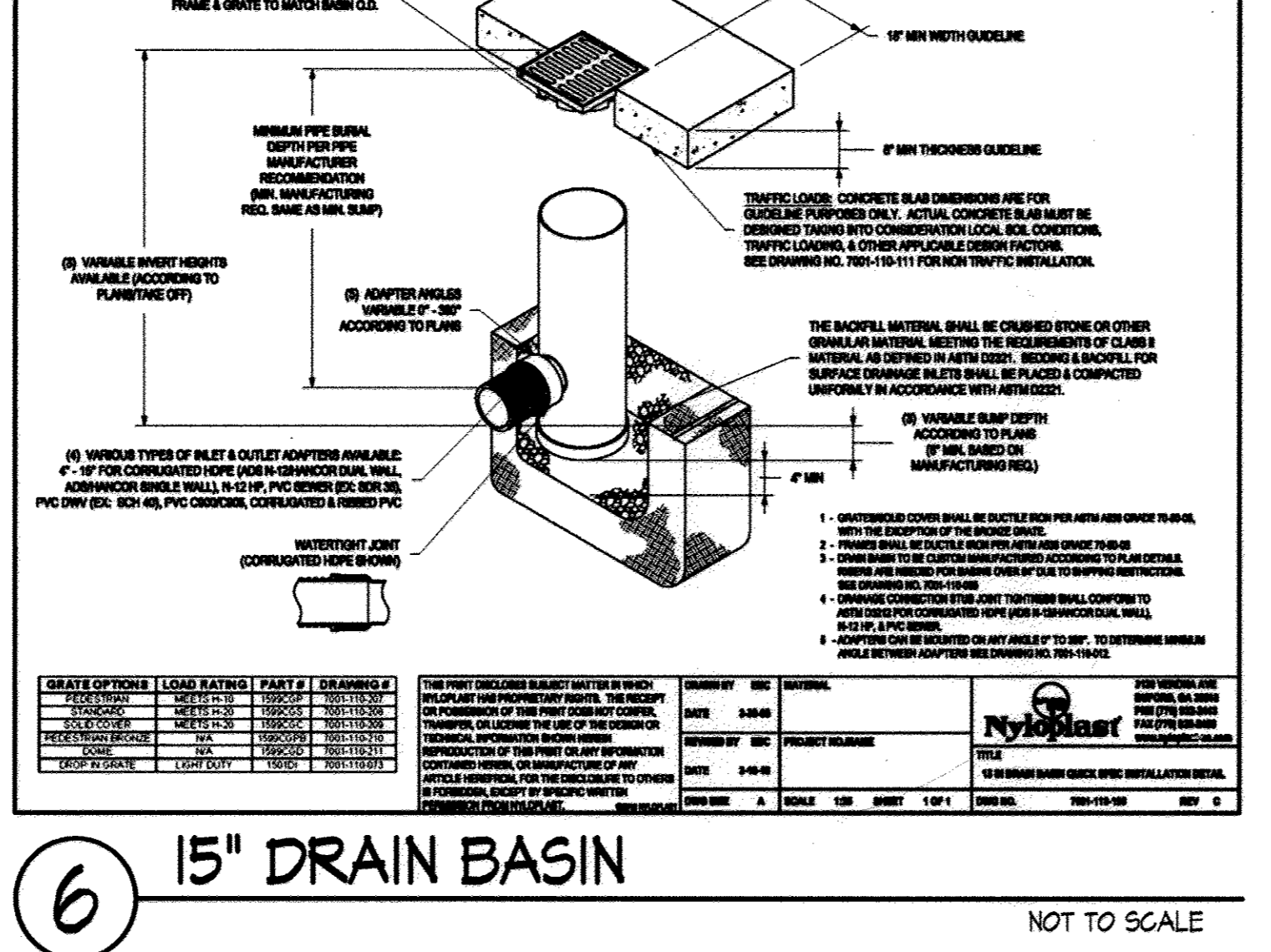
6 15" DRAIN BASIN
NOT TO SCALE



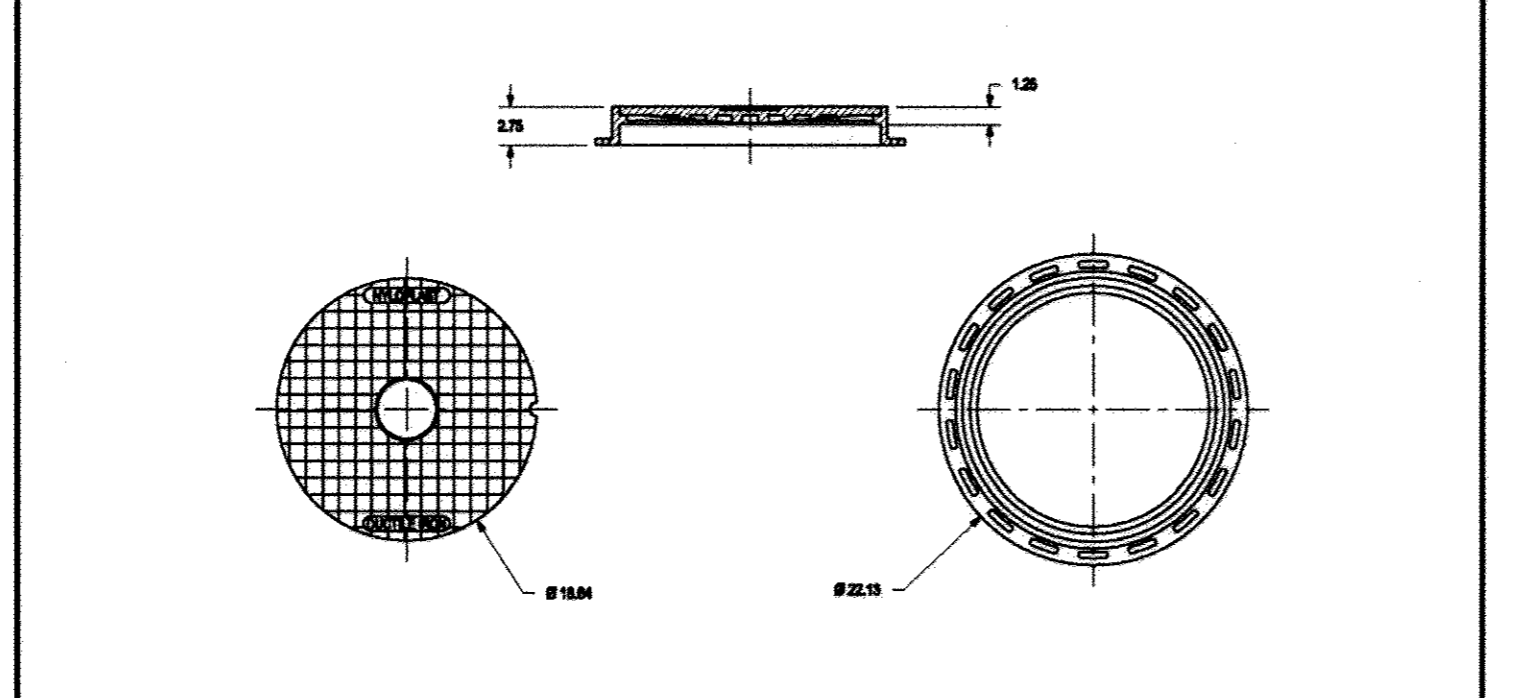
7 15" SOLID COVER
NOT TO SCALE



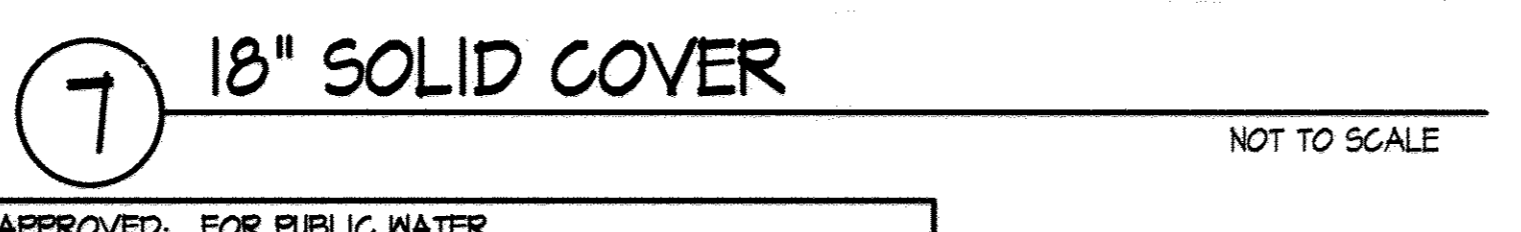
2 18" DRAIN BASIN
NOT TO SCALE



6 15" DRAIN BASIN
NOT TO SCALE



7 18" SOLID COVER
NOT TO SCALE



8 DRAIN BASIN - POWERDRAIN S300K
NOT TO SCALE

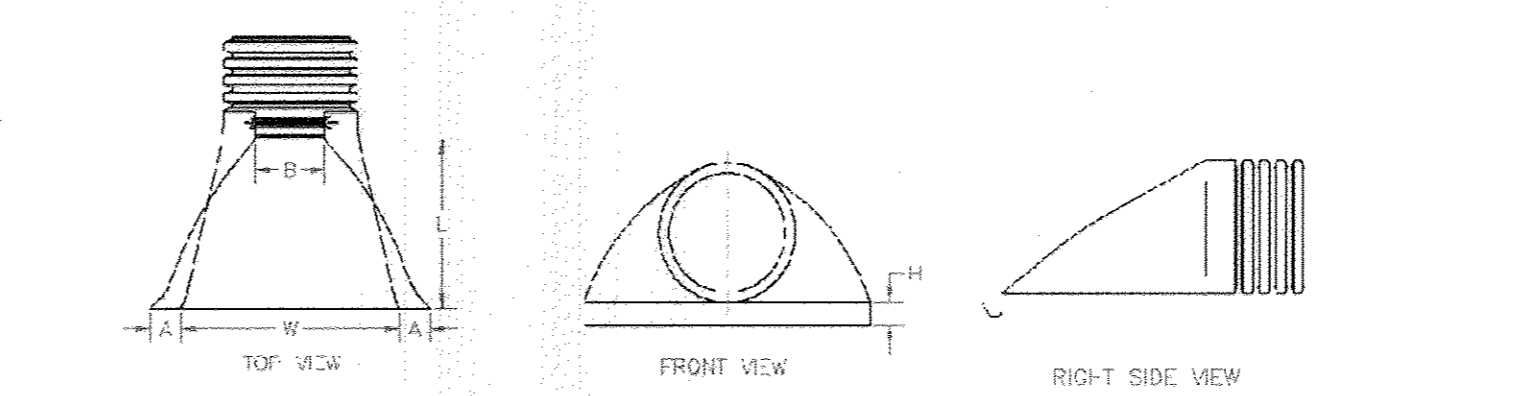
ADS, Inc. Product Specifications Specifications + 1-21

ADS FLARED END SECTION SPECIFICATION

Scope
This specification describes 12- through 36-inch (300 to 900mm) ADS Flared End Sections for use in culvert and drainage outlet applications.

Requirements
The invert of the pipe and the end section shall be at the same elevation. The ADS Flared End Section shall be manufactured with polyethylene resins as described and defined in ASTM D3350.

Part Number	Pipe Diameter	A	B (max)	H	L	W
1210NP	12 in (300 mm)	6.50 in (165 mm)	10.00 in (254 mm)	6.50 in (165 mm)	25.00 in (635 mm)	29.00 in (737 mm)
1510NP	15 in (375 mm)	6.50 in (165 mm)	10.00 in (254 mm)	6.50 in (165 mm)	25.00 in (635 mm)	29.00 in (737 mm)
1810NP	18 in (450 mm)	7.50 in (191 mm)	15.00 in (381 mm)	6.50 in (165 mm)	32.00 in (813 mm)	35.00 in (889 mm)
2410NP	24 in (600 mm)	7.50 in (191 mm)	18.00 in (457 mm)	6.50 in (165 mm)	36.00 in (914 mm)	45.00 in (1143 mm)
3015NP	30 in (750 mm)	7.50 in (191 mm)	20.00 in (508 mm)	6.50 in (165 mm)	42.00 in (1067 mm)	63.00 in (1600 mm)
3615NP	36 in (900 mm)	7.50 in (191 mm)	25.00 in (635 mm)	6.50 in (165 mm)	58.00 in (1473 mm)	83.00 in (2100 mm)



3 FLARED END SECTION
NOT TO SCALE

ACO DRAIN

PowerDrain - S300K

Apr 07

Grates: Slotted-Load Class F, ADA-Load Class E, One meter channel, In-line catch basin, Outlet flow rates.

Outlet	Product	Outlet size	Invert	GPM	CFS
A	Bottom outlet - SK3-01	6" round	11.89'	426	0.94
B	Bottom outlet - SK3-030	8" round	18.98'	533	1.16
C	Bottom outlet - SK3-030	8" round	18.98'	759	1.68
D	Outlet cap - SK3-01	6" round	11.89'	370	0.82
E	Outlet cap - SK3-030	8" round	18.98'	489	1.08
F	Outlet cap - SK3-5	8" round	13.07'	656	1.46
G	Outlet cap - SK3-030	8" round	18.98'	642	1.41
H	Outlet cap - SK3-13	10" round	14.56'	1073	2.39
I	Outlet cap - SK3-030	8" round	18.98'	1271	2.83
J	SK3-600 - 612"	8" round	33.25'	1179	2.59
K	SK3-600 - 612"	8" round	33.25'	673	1.55
L	SK3-900 - 614"	8" round	32.00'	298	0.66
M	SK3-900 - 614"	8" round	46.40'	1417	3.16
N	SK3-900 - 614"	8" round	46.40'	810	1.80
O	SK3-900 - 614"	8" round	46.40'	350	0.80

ACO Polymer Products, Inc. East Sales Office, West Sales Office, Electronic Contact, P.O. Box 285, P.O. Box 12067, info@aco.com, Channahon, IL 61404, Channahon, IL 61404, Tel: (815) 255-7000, Tel: (815) 255-7000, Fax: (815) 255-7005, Fax: (815) 255-7005.

8 DRAIN BASIN - POWERDRAIN S300K
NOT TO SCALE

ACO DRAIN

S300K trench drain system

ACO Specification Information

Description	Part No.	Invert Depth	Weight	Specifications
SK3-01 Neutral channel - 39.37' (1m)	93496 93496	11.89	302	General This surface drainage system shall be ACO Drain S300K complete with Class E ADA/Class F Slotted grates secured with PowerLock locking device as manufactured by ACO Polymer Products, Inc. or equal approved.
SK3-01 Sloped channel - 39.37' (1m)	93500 93500	11.89	302	
SK3-02 Sloped channel - 39.37' (1m)	93511 93512	12.13	308	
SK3-03 Sloped channel - 39.37' (1m)	93523 93524	12.36	314	
SK3-04 Sloped channel - 39.37' (1m)	93535 93536	12.60	321	
SK3-05 Sloped channel - 39.37' (1m)	93547 93547	12.83	327	
SK3-06 Sloped channel - 39.37' (1m)	93559 93560	13.07	333	
SK3-07 Sloped channel - 39.37' (1m)	93571 93572	13.31	339	
SK3-08 Sloped channel - 39.37' (1m)	93583 93584	13.54	344	
SK3-09 Sloped channel - 39.37' (1m)	93595 93596	13.78	350	

Materials:
The trench system bodies shall be manufactured from polypropylene polymer concrete with minimum properties as follows:
Compressive strength: 14,000 psi
Flexural strength: 4,000 psi
Water absorption: 0.07%
Frost proof
Salt proof
Dilute acid and alkali resistant

The nominal clear opening shall be 12" (300mm) with overall width of 14.17" (360mm). The cast units shall be manufactured with either an invert slope of 0.6% or with neutral invert and have a wall thickness of at least 1.18" (30mm). Each unit will feature a full radius in the trench bottom and a male to female interconnecting end profile. Units shall have horizontal cast-in anchoring features on the outside wall to ensure maximum mechanical bond to the surrounding bedding material and pavement structure. The ductile iron edge rail will be integrally cast in by the manufacturer to ensure maximum homogeneity between polymer concrete body and edge rail. Each edge rail shall be at least 1/4" (6mm) thick.

ACO Specification Information

ACO DRAIN

TRENCH DRAIN - POWERDRAIN S300K

ACO Specification Information

Grates: Slotted-Load Class F, ADA-Load Class E, One meter channel, In-line catch basin, Outlet flow rates.

ACO Polymer Products, Inc. East Sales Office, West Sales Office, Electronic Contact, P.O. Box 285, P.O. Box 12067, info@aco.com, Channahon, IL 61404, Channahon, IL 61404, Tel: (815) 255-7000, Tel: (815) 255-7000, Fax: (815) 255-7005, Fax: (815) 255-7005.

SITE DETAILS

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS

SITE RESOURCES

Comprehensive Land Planning & Site Design Services

14315 Jarrattville Pike • Phoenix, Maryland 21131
(410) 683-3388 • Fax (410) 683-3389

DATE: SEPTEMBER 13, 2013 SHEET: C2.04 33 OF 38

APPROVED: DEPARTMENT OF PLANNING & ZONING
DATE: 09/12/13
DATE: 12/19/2013

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 09/12/13
DATE: 12/19/2013

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
DATE: 12/19/2013

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
DATE: 12/19/2013

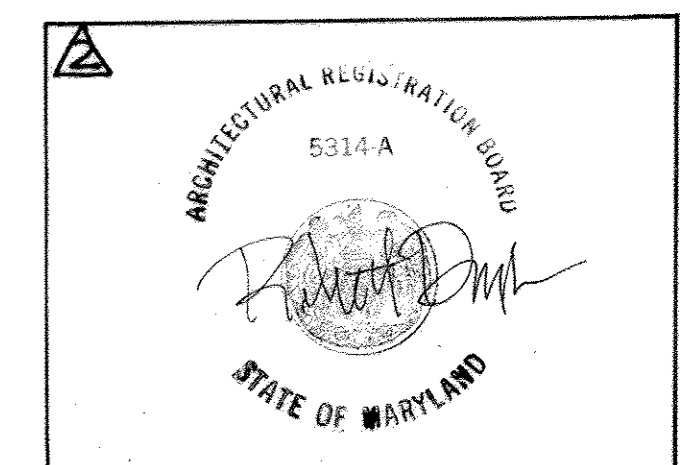
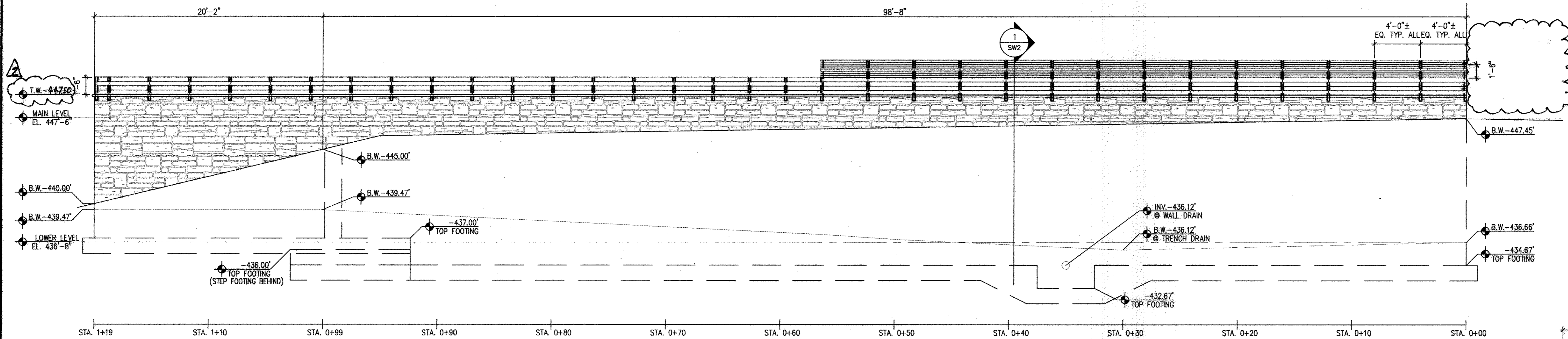
ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.			
VILLAGE OF HARPERS CHOICE	2/1	8/135			
FLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
4308 4309	NA	NT-05	24	5TH	605502
WATER CODE	SEWER CODE				
214 W45	214 W45				

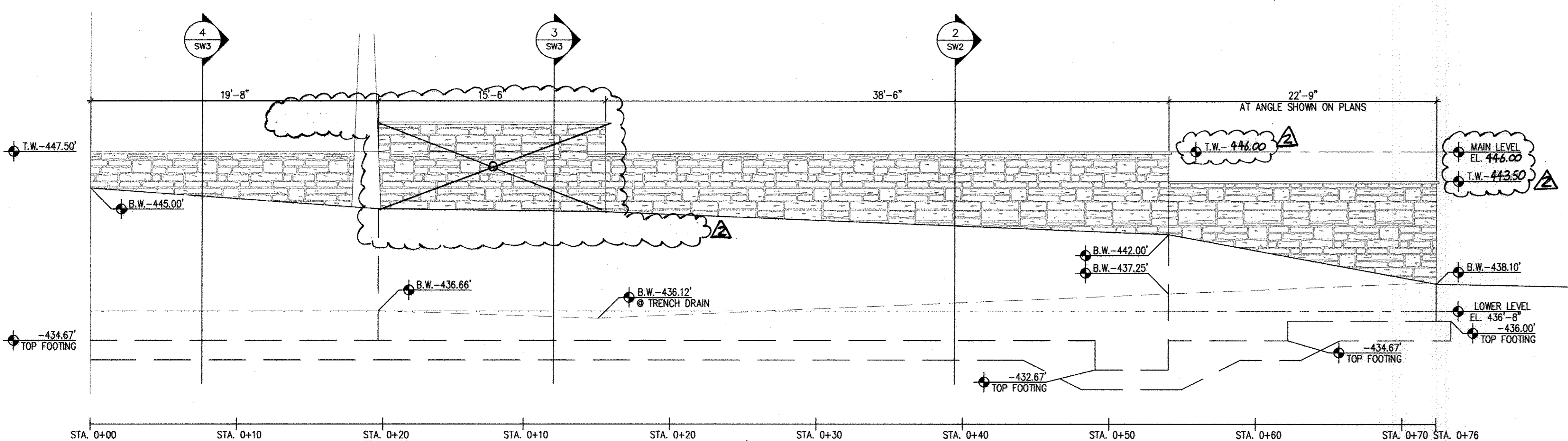
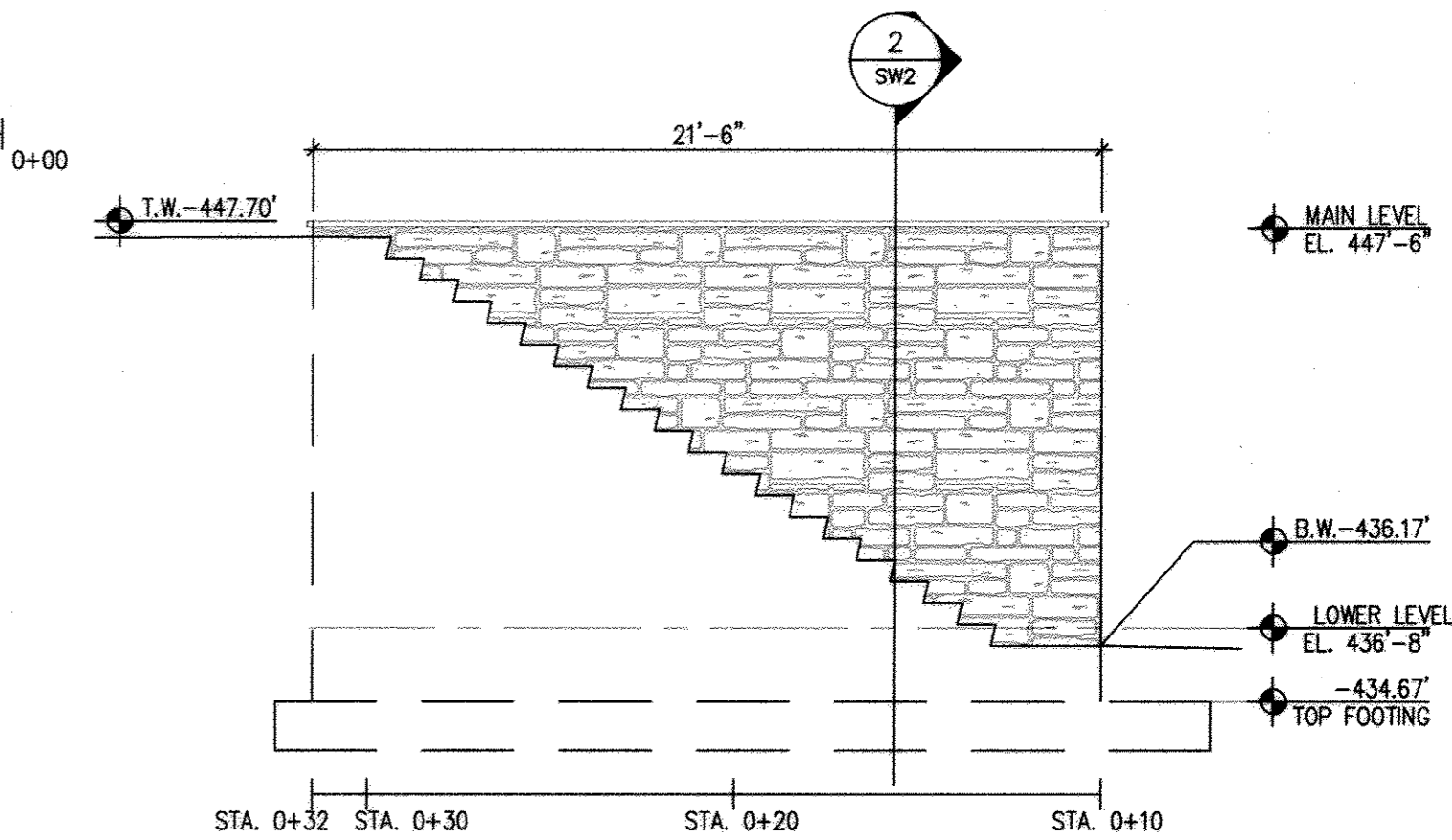
DRAWN BY: FJP
DESIGNED BY: FJP
CHECKED BY: AFE
DATE: SEPTEMBER 13, 2013 SHEET: C2.04 33 OF 38



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED OR APPROVED BY ME AND THAT I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE #5314-A, EXPIRATION DATE 7/13/16

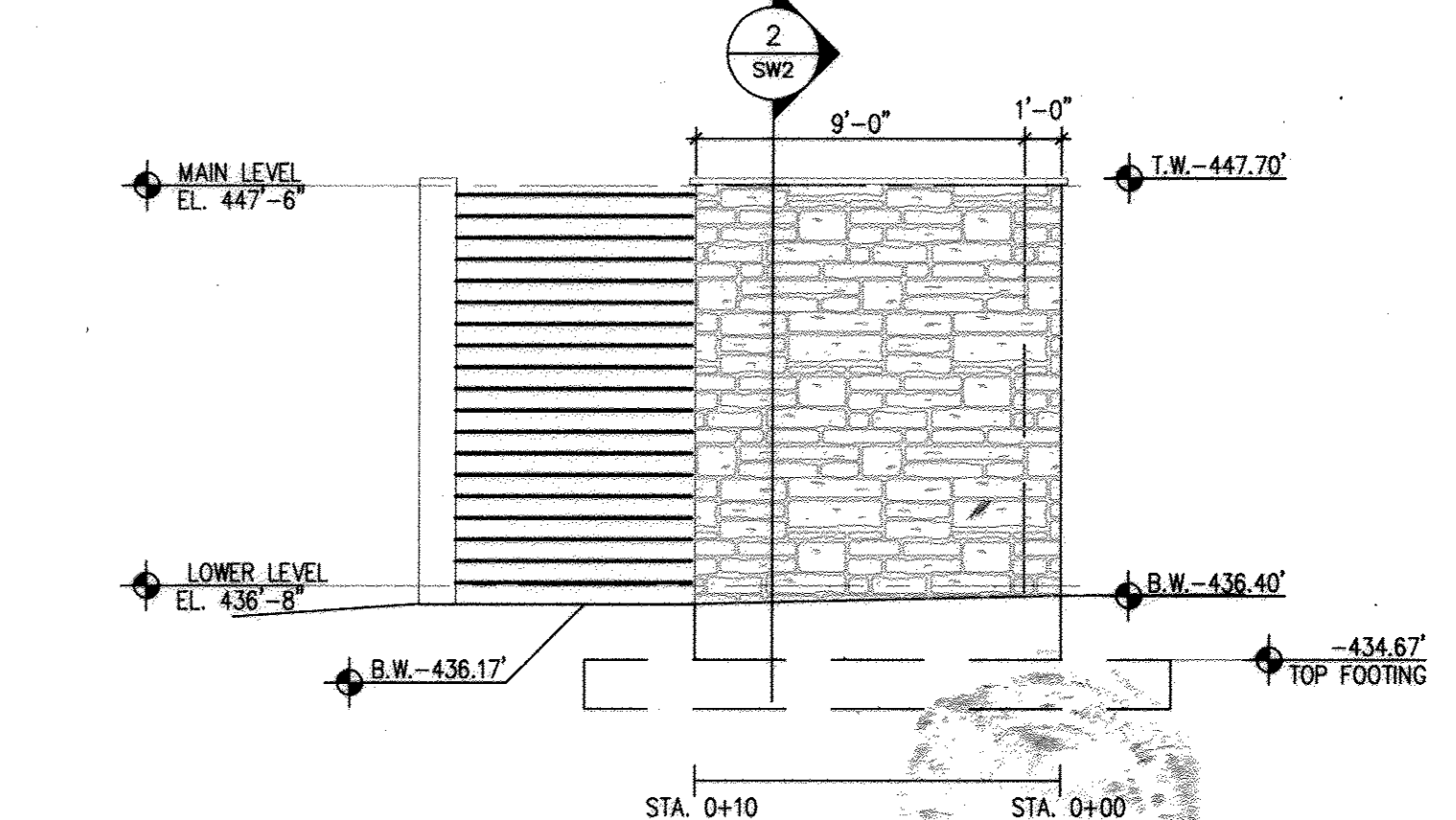
1 RETAINING WALL #1 & BARRIER

SCALE 1"=5'



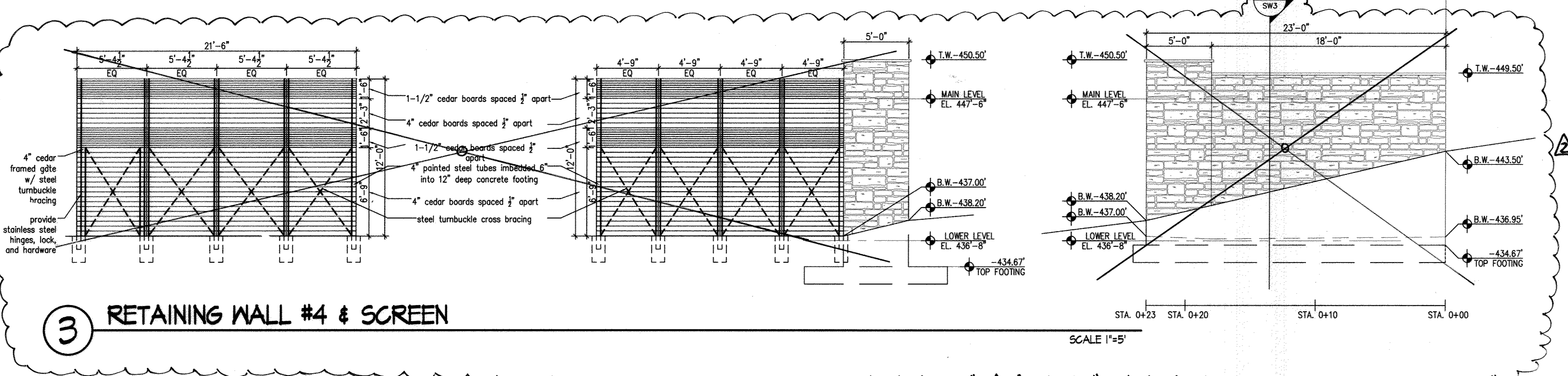
2 RETAINING WALL #2 & 3

SCALE 1"=5'



3 RETAINING WALL #4 & SCREEN

SCALE 1"=5'

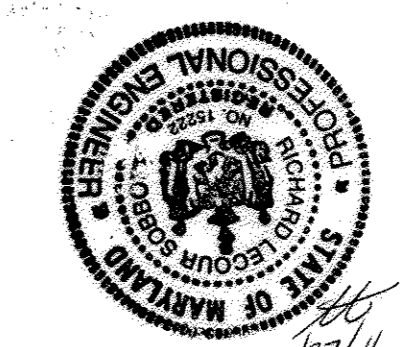


3 RETAINING WALL #4 & SCREEN

4 RETAINING WALL #5

SCALE 1"=5'

AS-BUILT

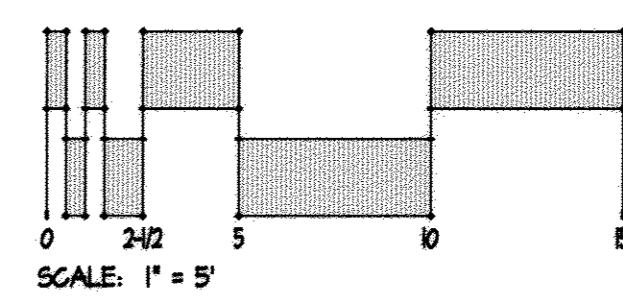


SITE DETAILS

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

REVISIONS



APPROVED: DEPARTMENT OF PLANNING & ZONING
[Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE 1/17/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE 09/12/13
[Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 COUNTY HEALTH OFFICER
 DATE 2/19/2013
[Signature]

ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
8/135	1130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044

PERMIT INFORMATION CHART			
LOT/PARCEL NO.	SECTION/AREA	ELECTION DISTRICT	CENSUS TRACT
8/135	2/1	5TH	605502

10-31-2014 RETAINING WALL ADJUSTMENTS AND VARIOUS SITE FEATURES

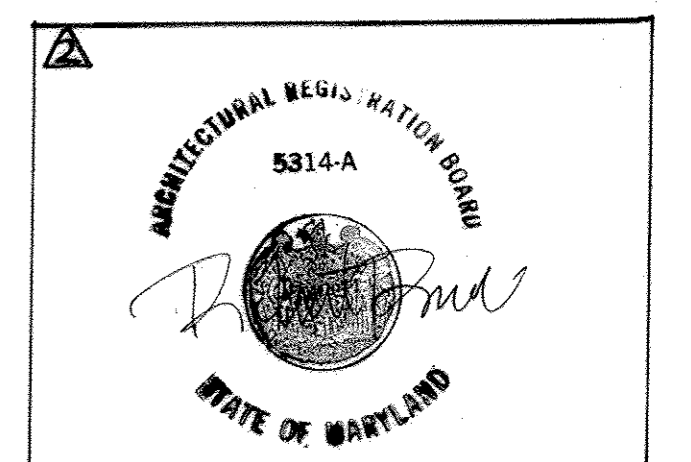
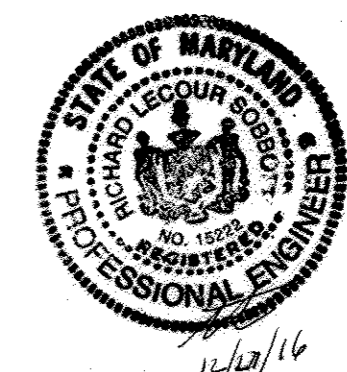
ARCHITECTURAL REGISTRATION BOARD
 5314-A
 STATE OF MARYLAND

SITE RESOURCES

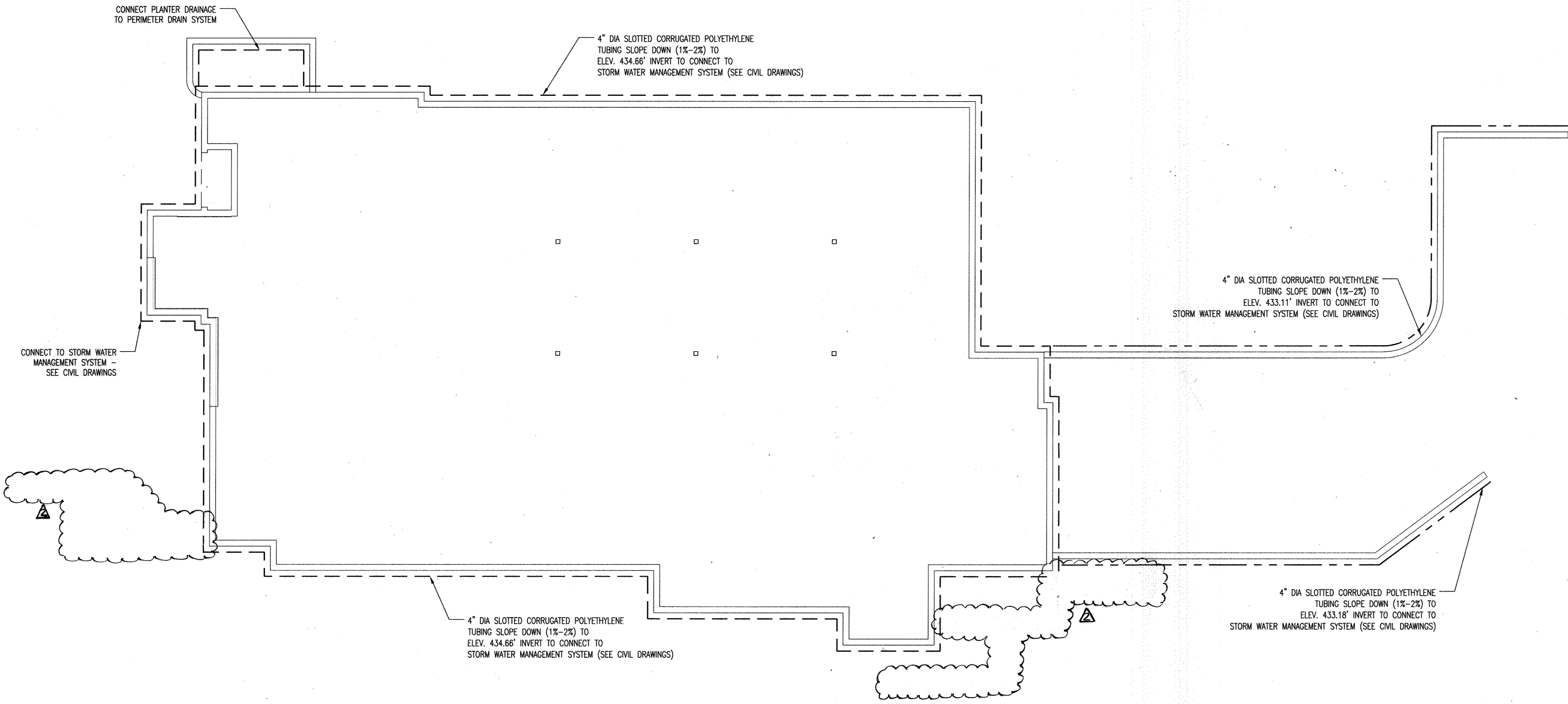
14315 Jazetteville Pike • Phoenix, Maryland 21131
 (410) 683-3388 • Fax (410) 683-3380

DRAWN BY: CONTRACT NO.:
 DESIGNED BY: SCALE: AS SHOWN
 CHECKED BY: SRI PROJECT NO: 110594
 DATE: SEPTEMBER 13, 2013 SHEET C2.05 34 OF 38

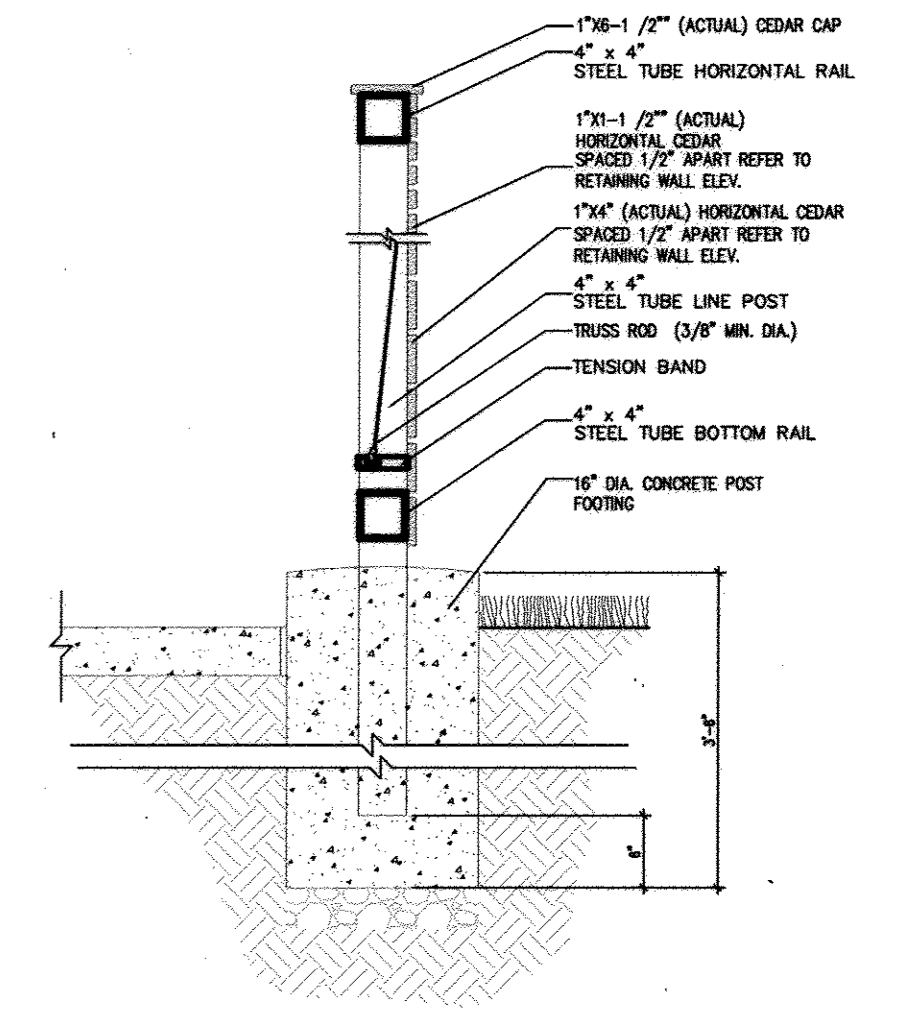
SHM AS-BUILT



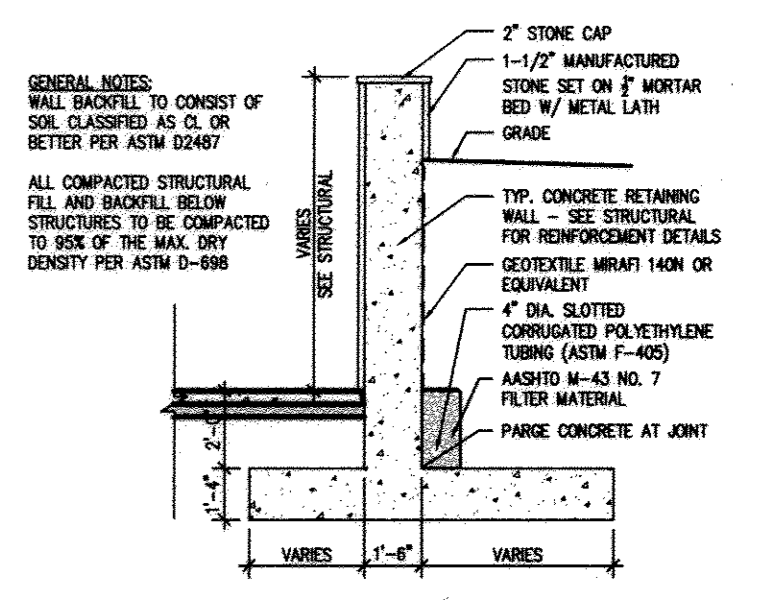
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED OR APPROVED BY ME AND THAT I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE #5314-A EXPIRATION DATE 7.13.19



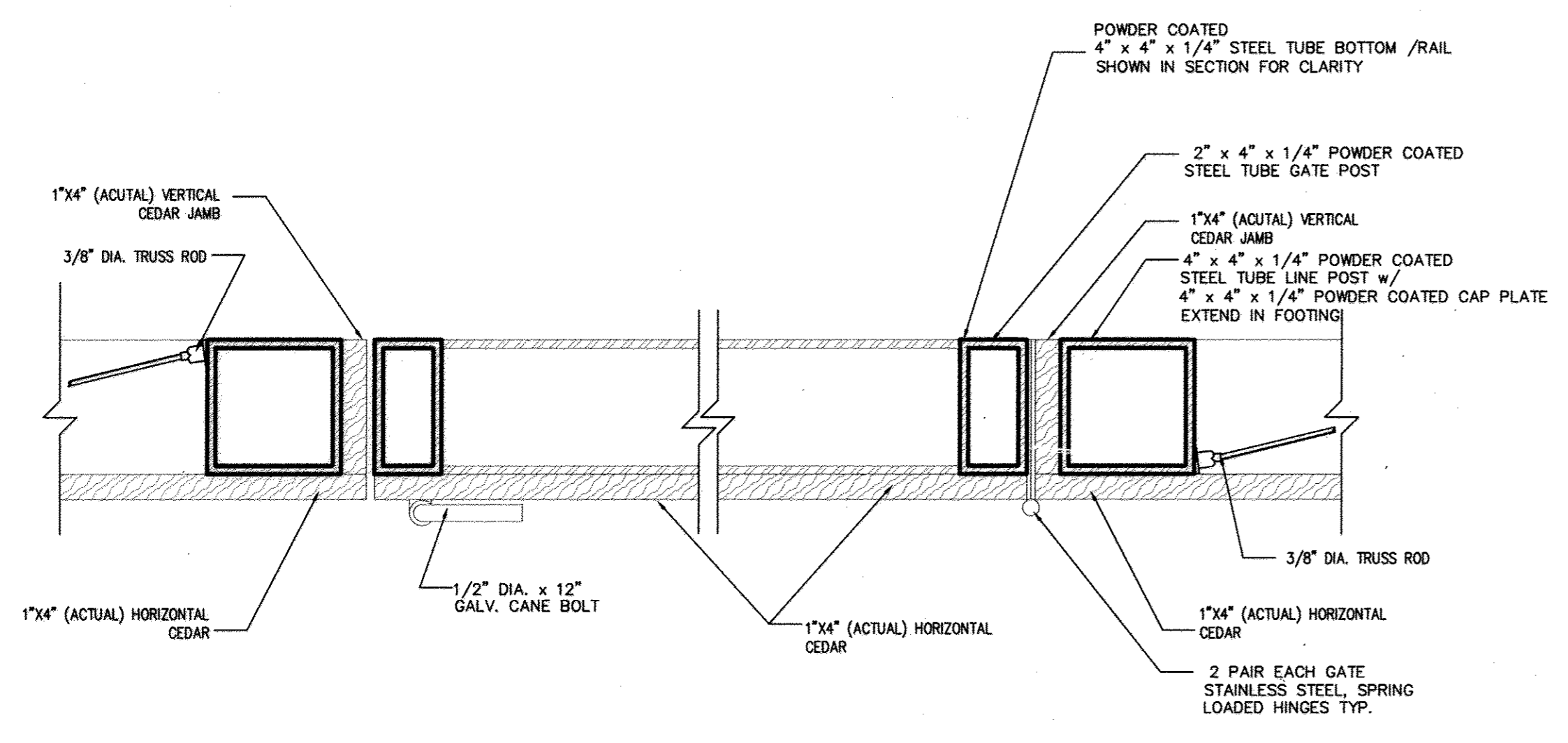
1 FOUNDATION & WALL DRAIN PLAN



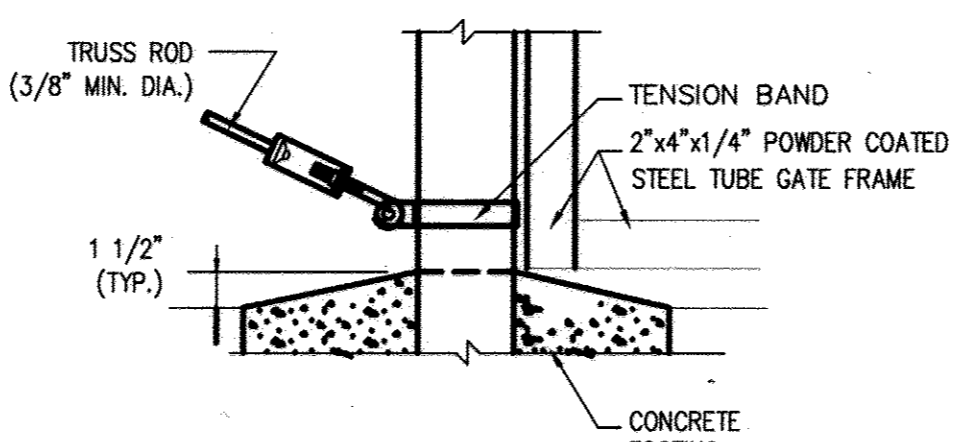
2 FENCE POST SCALE N.T.S.



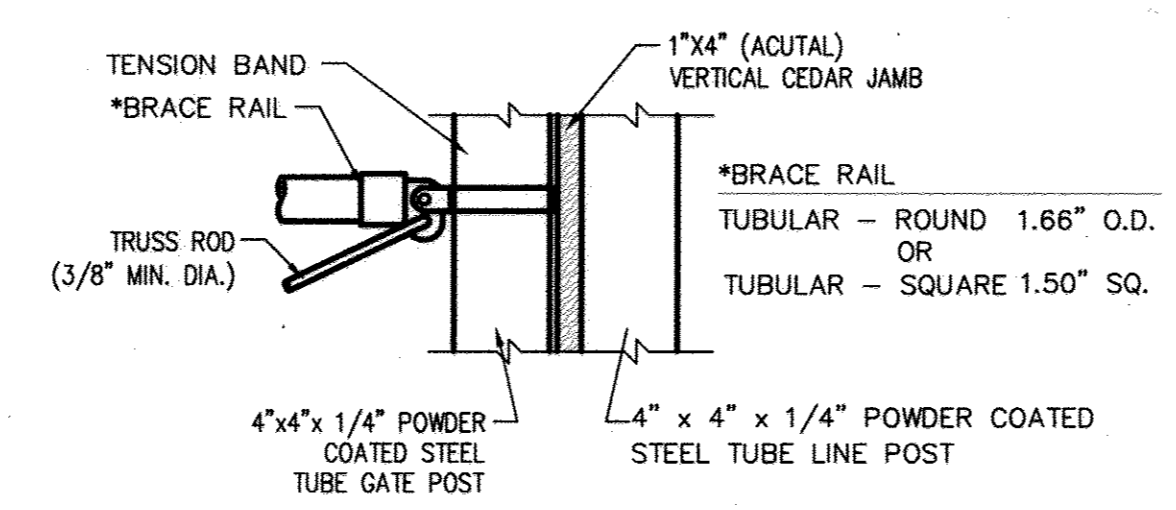
3 TYPICAL WALL SECTION SCALE 1"=5'



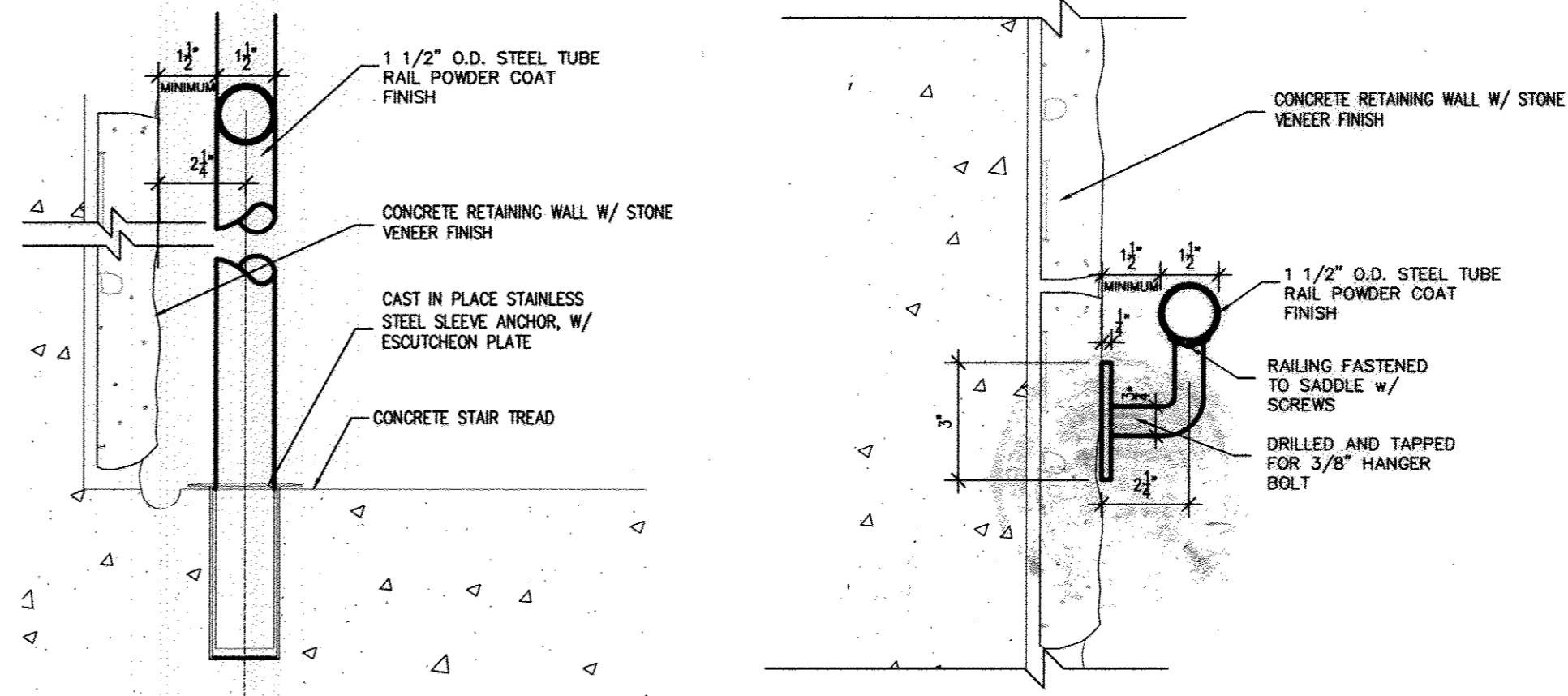
4 GATE SECTION SCALE N.T.S.



5 TRUSS ROD & BAND SCALE N.T.S.



6 POST DETAIL / JAMB SCALE N.T.S.



7 HANDRAIL FLOOR & WALL ANCHOR SCALE N.T.S.

SITE DETAILS

HOBBIT'S GLEN GOLF CLUBHOUSE

PROPERTY OF COLUMBIA ASSOCIATION, INC.

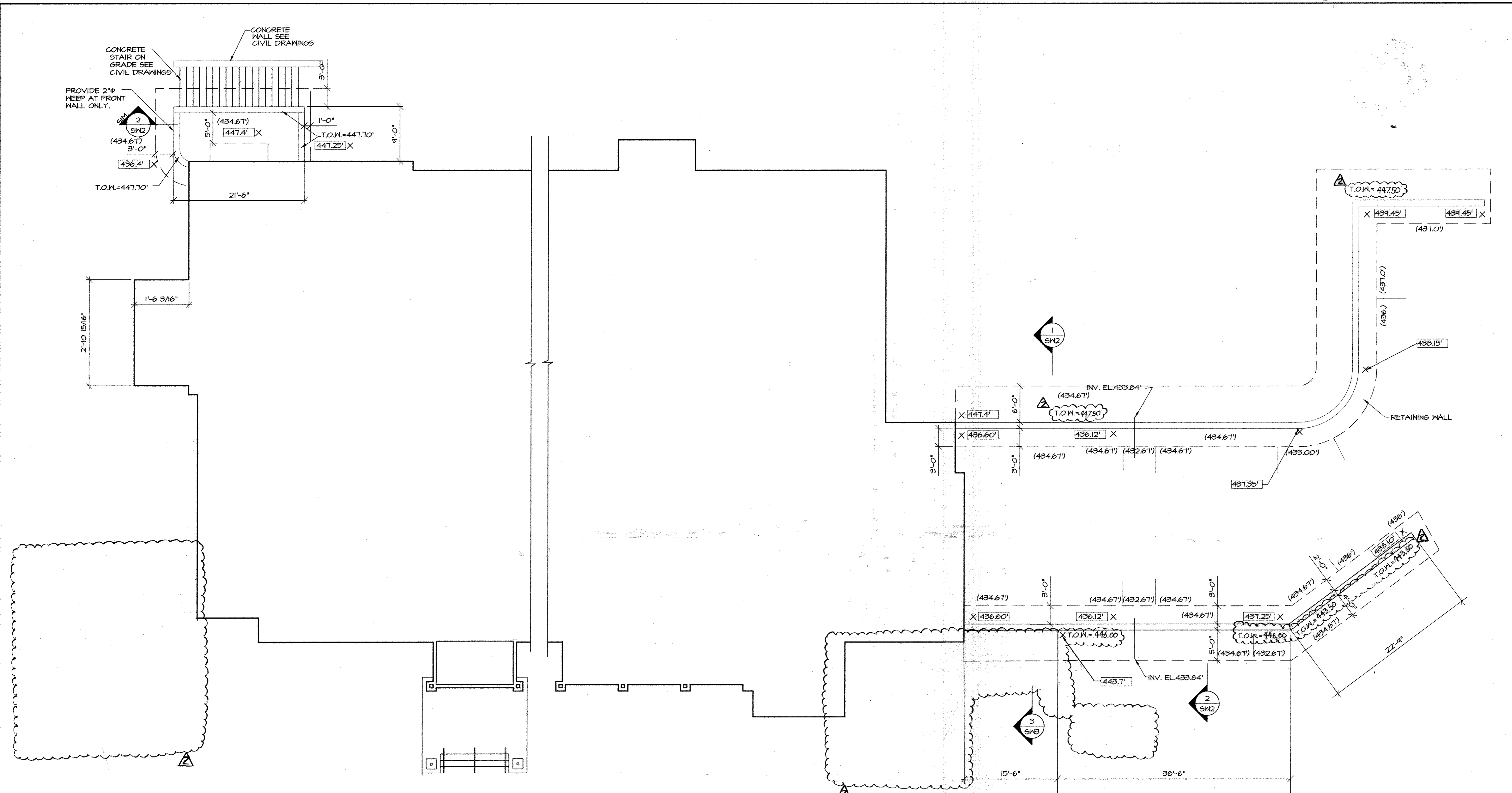
REVISIONS

ARCHITECTURAL REGISTRATION BOARD 5314-A STATE OF MARYLAND	SITE RESOURCES 14315 Jurellville Pike • Phoenix, Maryland 21131 (410) 683-3386 • Fax (410) 683-3389
DRAWN BY:	CONTRACT NO.:
DESIGNED BY:	SCALE: AS SHOWN
CHECKED BY:	SRI PROJECT NO: 11054
DATE: SEPTEMBER 13, 2013	SHEET C2.06 35 OF 38

2:\11\028\hobbit\shp\shp.dwg 02.06 516 12/23/13 08:38am F:\P

APPROVED: DEPARTMENT OF PLANNING & ZONING <i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 1-28-14	APPROVED: PLANNING BOARD OF HOWARD COUNTY DATE: 09/12/13 <i>[Signature]</i>	APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS DATE: 12/19/2013 <i>[Signature]</i> COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT
---	---	--

ADDRESS CHART		PERMIT INFORMATION CHART			
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1	8/135	
		PLAT # OR L/F	GRID #	ZONING	TAX MAP NO.
		4300 & 4304	NA	NT-05	29
					ELECTION DISTRICT
					5TH
					CENSUS TRACT
					605502
					SEWER CODE
					214 M45



PLAN - RETAINING WALL AND STAIR ~ 1/8" = 1'-0"

1. TOP OF SLAB /GRADE ELEVATION NOTED THIS IN PLAN, CORRIDINATE WITH SITE DRAWINGS

2. CORRIDINATE ALL ELEVATIONS AND DIMENSIONS WITH SITE DRAWINGS AND FINAL GRADE ELEVATIONS.

3. TOP OF FOOTINGS ARE NOTED THIS (00.000) IN PLAN.

10-31-2014
RETAINING WALL ADJUSTMENTS
AND VARIOUS SITE FEATURES

Project
HOBBIT'S GLEN GOLF CLUBHOUSE
1130 WILLOW BOTTOM DRIVE

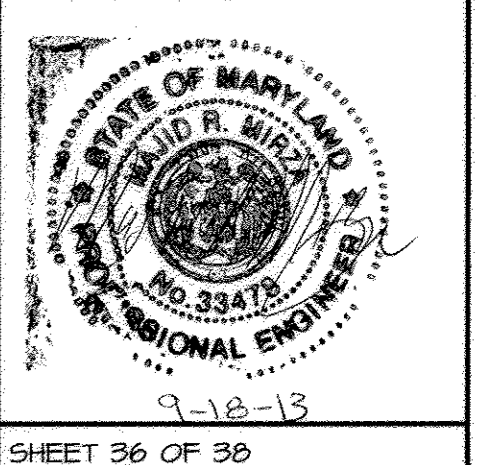
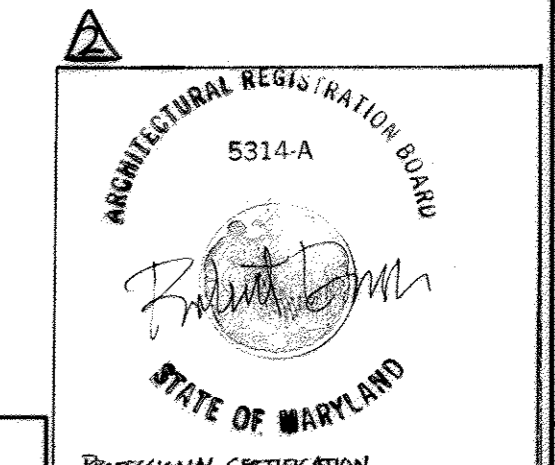
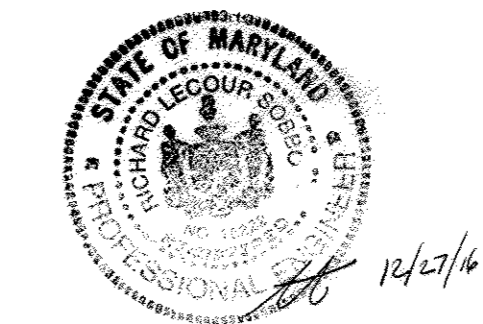
Drawing:
PLAN AND DETAILS

6-7-13

Scale:
SCALE AS NOTED

Adams - Mirza Engineering, Inc.
1308 South Boyls Street Baltimore, MD 21224
Phone 410.563.4131 Fax 410.563.4145
mmirza@adams-mirza-eng.com

SWM
AS-BUILT



APPROVED: DEPARTMENT OF PLANNING & ZONING
1/7/14
1/28/14
1/29/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY
DATE: 09/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
12/19/2013

ADDRESS CHART		PERMIT INFORMATION CHART		
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1	8/135
		BLK # 03 GRID # NA	TAX MAP NO. 29 ELECTION DISTRICT 5TH	CENSUS TRACT 605502
		WATER CODE 214 W&S	SEWER CODE 214 W&S	

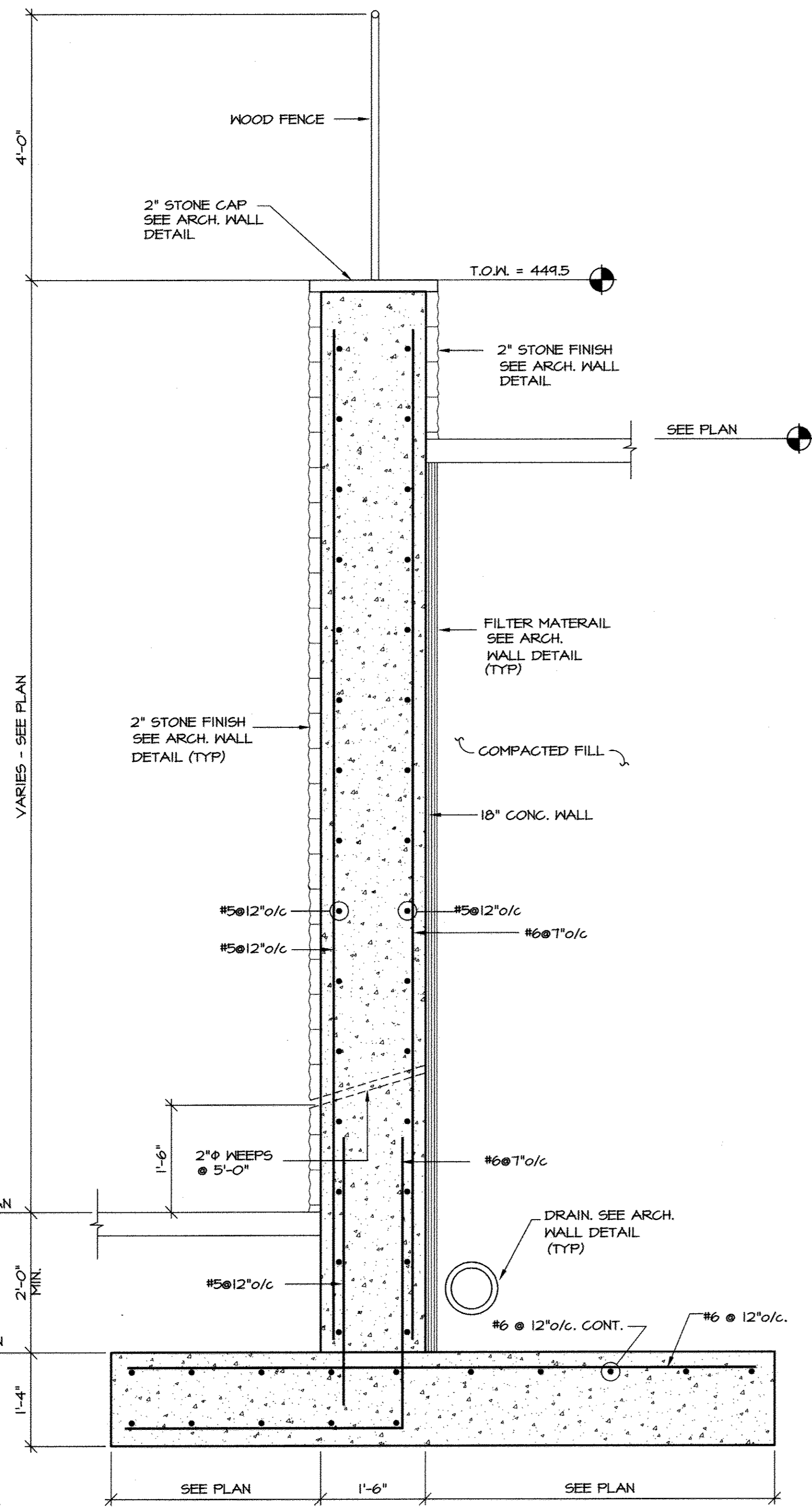
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 33478 EXP. DATE: 9-15-2014

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 33478 EXP. DATE: 9-15-2014

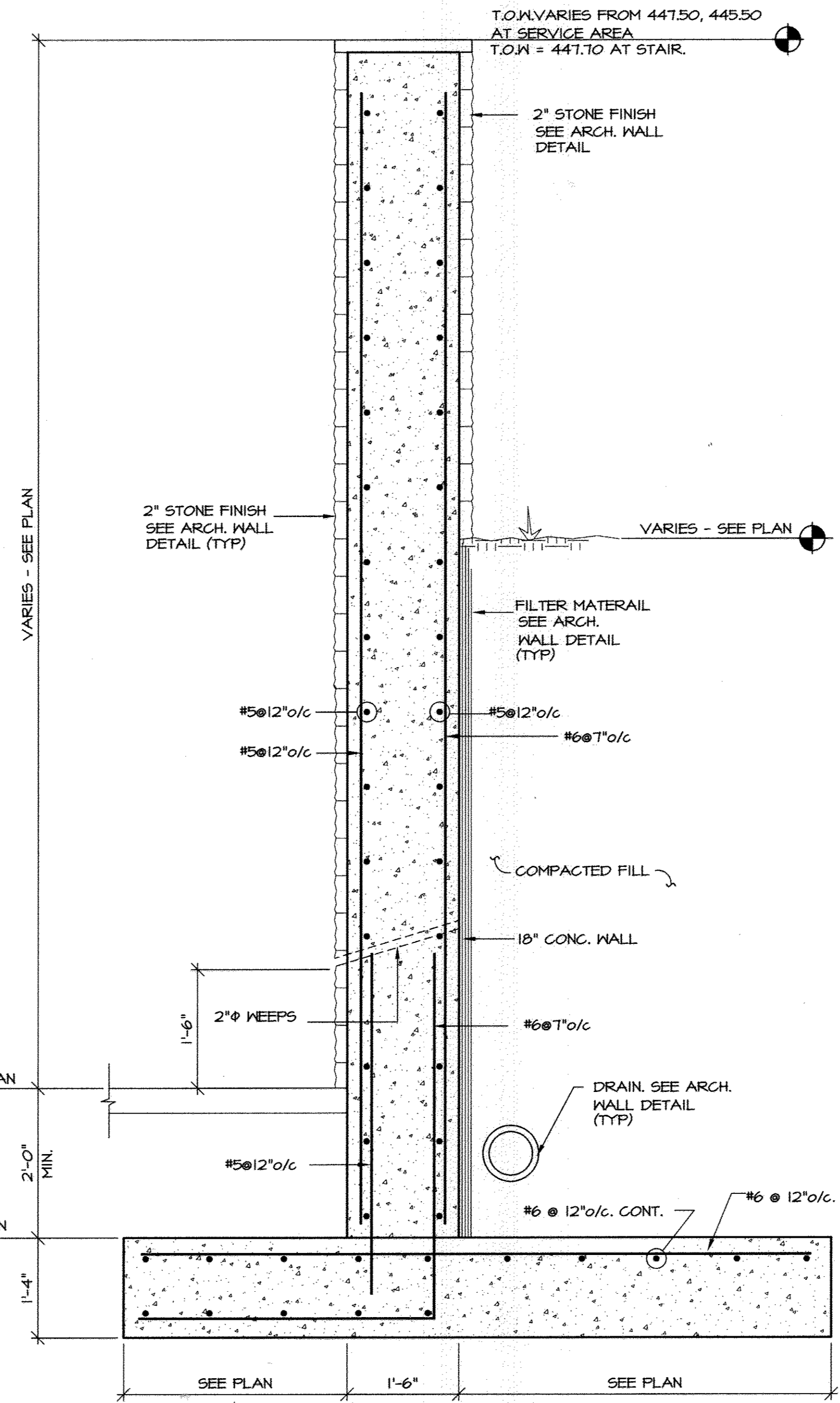
SHEET 36 OF 38
Sheet No:
SW1
AME #: 12001J
SDP 13-02T

GENERAL NOTES

CONCRETE
 1. CEMENT - ASTM C150, TYPE I OR III.
 2. AGGREGATES - ASTM C39 ACI 304, ACI 211.1
 COARSE AGGREGATE - SIZE #57
 3. REINFORCING - ASTM A615, GRADE 60.
CAST IN PLACE CONCRETE AND REINFORCING
 ALL CONCRETE SHALL CONFORM TO ACI 301, ACI 318, ACI 315.
 ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
 REINFORCING - ASTM A 615, GRADE 60.
FOUNDATIONS
 A BEARING CAPACITY OF 3000 PSF HAS BEEN USED BASED ON SOIL REPORT FROM D.J.KOZERA, INC.
 DATED NOVEMBER 2, 2012 FOR FOOTING DESIGN.
 SOIL MT. USED FOR DESIGN = 110 PCF., EG. FLUID PRESSURE=45H PSF
SHOP DRAWINGS
 ORIGINAL SHOP DRAWINGS SHALL BE SUBMITTED FOR ARCHITECT/ENGINEER'S REVIEW FOR THE FOLLOWING ITEMS:
 CONCRETE REINFORCING STEEL
 IF A CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE FIRM, ADAMS-MIRZA ENGINEERING, INC. WILL NOT BE RESPONSIBLE FOR THE CONTRACTORS INTERPRETATION OF THE INTENT OF THE STRUCTURAL DRAWINGS.
 AT THE SAME TIME OF THE SHOP DRAWING SUBMISSION, THE GENERAL CONTRACTOR SHALL STATE IN WRITING ANY DEVIATION OR OMISSION FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVISION ALL SHOP DRAWINGS PRIOR TO SUBMISSION TO THE A/E AND SHALL MAKE ALL CORRECTIONS AS HE DEEMS NECESSARY.
INSPECTION
 AN INDEPENDENT INSPECTION AGENCY, APPROVED BY THE ARCHITECT/ENGINEER, SHALL INSPECT/MONITOR/TEST THE FOLLOWING ITEMS:
 CAST IN PLACE CONCRETE AND REINFORCING STEEL
EARTHWORK OPERATIONS INCLUDING VERIFICATION OF
 SOIL BEARING CAPACITY
 STEEL STAIR
 COPIES OF THE INSPECTORS WEEKLY LOGS AND FINAL REPORTS CERTIFYING THAT THE ITEMS INSPECTED HAVE BEEN INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER.
BUILDING CODE
 ALL BUILDING CODE SHALL CONFORM WITH THE 2012 INTERNATIONAL BUILDING CODE (IBC) AND ALL SUBSEQUENT SUPPLEMENTS
 WIND 120 MPH (VII)



DETAIL 1
 RETAINING WALL
 ~ 3/4" = 1'-0"



DETAIL 2
 RETAINING WALL
 ~ 3/4" = 1'-0"

SWM
 AS-BUILT

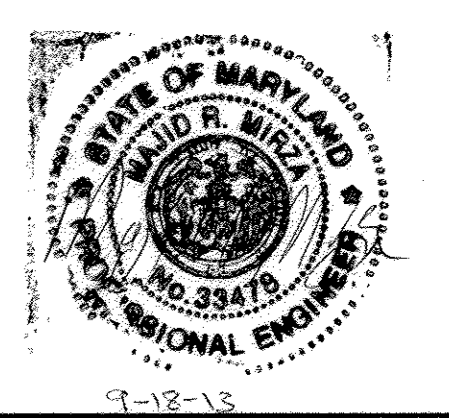


Project
HOBBITT'S GLEN GOLF CLUBHOUSE
 11130 WILLOW BOTTOM DRIVE

Drawing:
DETAILS AND GENERAL NOTES
 6-7-13

Scale:
 SCALE AS NOTED

Adams - Mirza Engineering, Inc.
 1308 South Boyls Street Baltimore, MD 21224
 Phone: 410-528-1145
 mirza@adams-mirza-eng.com



SHEET 37 OF 38
 Sheet No:

SW2
 A/E # 12001.1
 SDP 13-027

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 DATE: 1/21/14

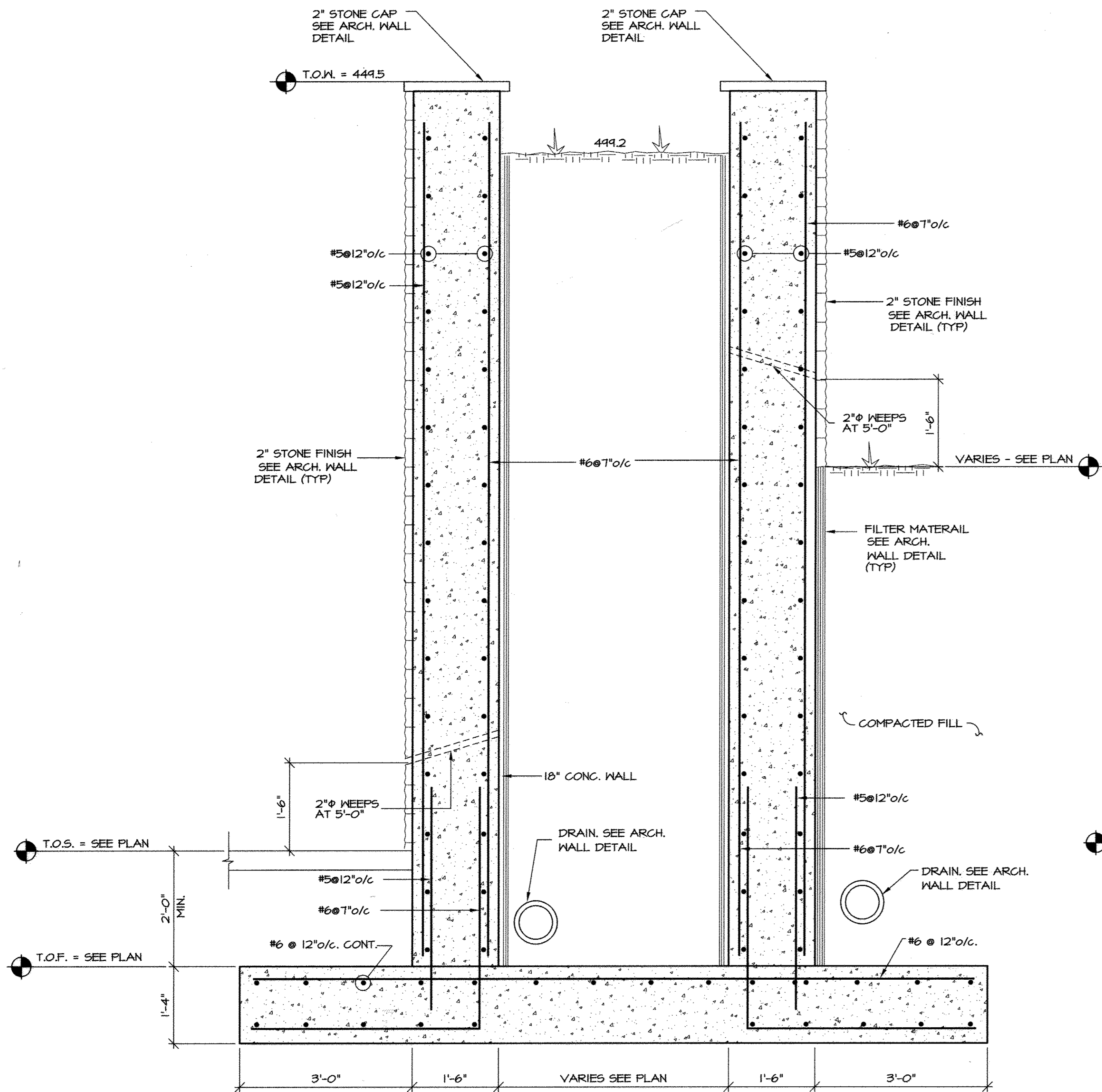
APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE: 09/12/13

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 DATE: 12/19/2013

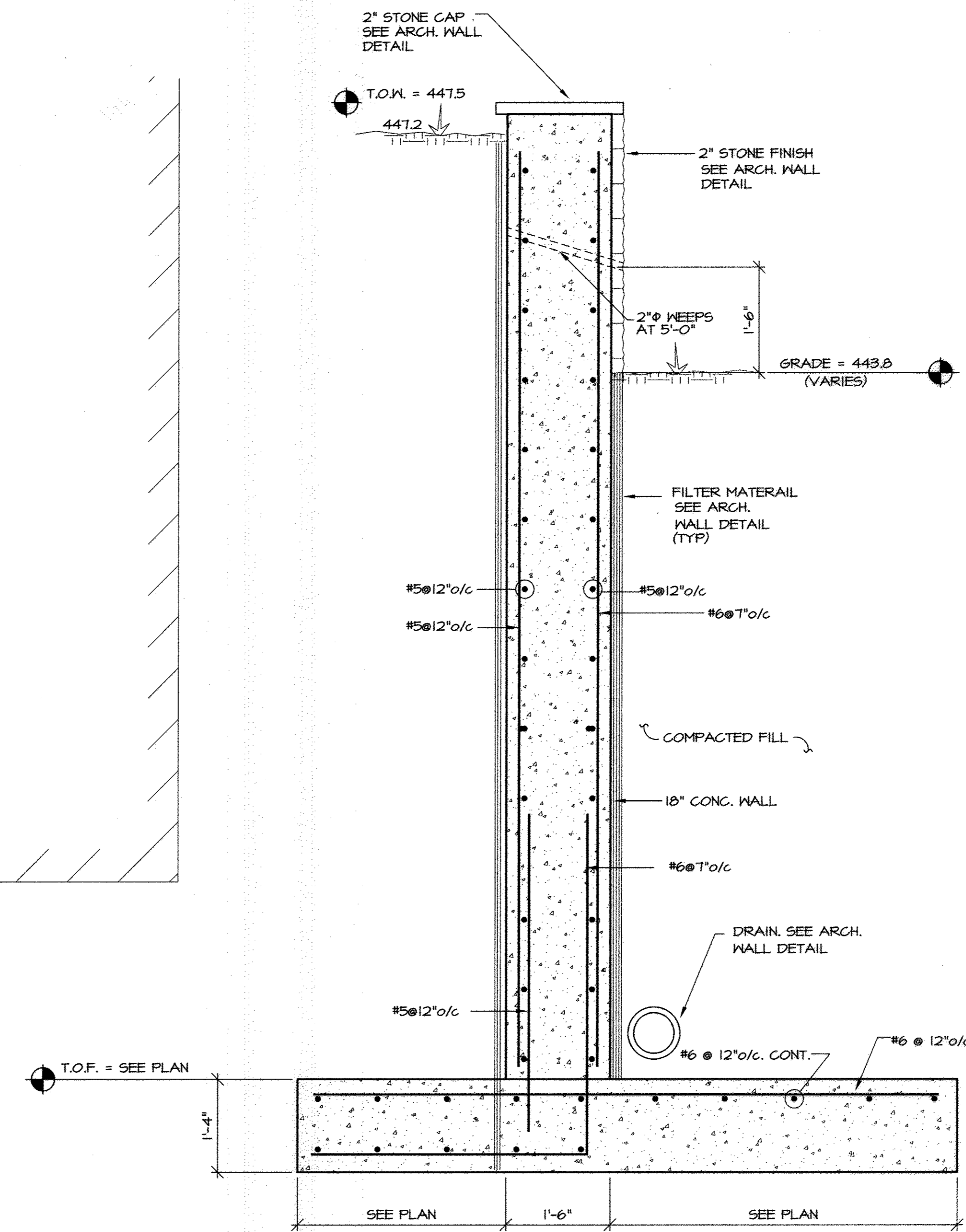
ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD 21044

PERMIT INFORMATION CHART			
SUBMISSION NAME	SECTION/AREA	8/135	
VILLAGE OF HARPERS CHOICE	2/1		
PLAT # OR I.D.#	ZONING	TAX MAP NO.	ELECTION DISTRICT
9308 & 9309	NT-05	29	5TH
WATER CODE	SEWER CODE	CENSUS TRACT	
214 W&S	214 W&S	605502	

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 33475
 EXP. DATE: 9-15-2014



DETAIL 3
SW3 ~ 3/4" = 1'-0"
RETAINING WALL



DETAIL 4
SW3 ~ 3/4" = 1'-0"
RETAINING WALL

APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE 1/7/14
 K. J. Salzman
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE 1-28-14
 M. A. Long
 DIRECTOR
 DATE 1/29/14

APPROVED: PLANNING BOARD OF HOWARD COUNTY
 DATE 09/12/13
 E. M. A.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 12/19/2013
 Maura Roszman

ADDRESS CHART		PERMIT INFORMATION CHART		
LOT/PARCEL	STREET ADDRESS	SUBDIVISION NAME	SECTION/AREA	
8/135	11130 WILLOW BOTTOM DRIVE, COLUMBIA, MD. 21044	VILLAGE OF HARPERS CHOICE	2/1	8/135
		PLAT # 08 8308 09309 NA	ZONING NT-05	TAX MAP NO. 29
				ELECTION DISTRICT 5TH
		WATER CODE 214 W&S	SEWER CODE 214 W&S	CENSUS TRACT 605502



SWM AS-BUILT

Project
HOBBITS GLEN GOLF CLUBHOUSE
 11130 WILLOW BOTTOM DRIVE

Drawing:
DETAILS AND GENERAL NOTES
 6-T-13

Scale:
 SCALE AS NOTED

Adams - Mirza Engineering, Inc.
 1308 South Bayle Street, Baltimore, MD 21224
 Phone 410.563.4131 Fax 410.563.4145
 mmirza@adams-mirza-eng.com



SHEET 38 OF 38
 Sheet No:
SW3
 A.M.E. # 12001.1
 SDP 13-021