

**BENCH MARKS NAD'83 HORIZONTAL**

HO. CO. #2910  
STAMPED (BRASS OR ALUMINUM) DISC SET ON TOP OF A 3" DEEP COLUMN OF CONCRETE. USUALLY THE DISCS ARE SET 1" OR 2" BELOW TERRAIN SURFACE, AND HAVE A PIECE OF IRON TO FACILITATE MAGNETIC DETECTION.

N 571234.3592  
E 1343193.0782  
ELEV. = 473.92

HO. CO. #0064  
STAMPED (BRASS OR ALUMINUM) DISC SET ON TOP OF A 3" DEEP COLUMN OF CONCRETE. USUALLY THE DISCS ARE SET 1" OR 2" BELOW TERRAIN SURFACE, AND HAVE A PIECE OF IRON TO FACILITATE MAGNETIC DETECTION.

N 571248.5442  
E 1344516.0297  
ELEV. = 431.58

**LEGEND**

SOILS CLASSIFICATION  
SOILS DELINEATION  
EXISTING CONTOURS  
PROPOSED CONTOURS  
EXISTING WOODS LINE  
PROPOSED WOODS LINE  
EXISTING SPECIMEN TREE  
EXISTING STRUCTURE  
PROPOSED STRUCTURE  
LIMIT OF DISTURBANCE  
STABILIZED CONSTRUCTION ENTRANCE  
SUPER SILT FENCE  
SILT FENCE DIVERSION  
DRAINAGE AREA  
SUB-DRAINAGE AREA  
PUBLIC WATER, SEWER & UTILITY EASEMENTS

**ABC1**

999  
999  
999

SSF  
SDF

**GENERAL NOTES**

- THE SUBJECT PROPERTY IS ZONED R-SC PER THE 2-2-04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING REGULATION AMENDMENTS EFFECTIVE 7-28-2006.
- THIS PROJECT IS SUBJECT TO THE REVISED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004.
- THE BOUNDARY SURVEY FOR THIS PROJECT WAS PREPARED BY PHRA DATED JANUARY, 2007.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEYS WITH TWO FOOT CONTOUR INTERVALS PREPARED BY BENCHMARK ENGINEERING, INC. DATED APRIL 2009 & SUPPLEMENTED WITH HO. CO. #2 TOPOGRAPHICAL INFORMATION.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. #2910 AND #0064 WERE USED FOR THIS PROJECT.
- EXISTING UTILITIES SHOWN HAVE BEEN TAKEN FROM EX. CONTRACT DRAWINGS AND FIELD SURVEYED LOCATIONS. IF NECESSARY, CONTRACTOR SHALL ADJUST ANY OR ALL STRUCTURE TOP ELEVATIONS TO MATCH PROPOSED GRADES.
- THERE ARE NO ENVIRONMENTAL FEATURES LOCATED ON-SITE PER A FINDINGS LETTER PREPARED BY ECO-SCIENCE PROFESSIONALS DATED MAY, 2009.
- THERE ARE EXISTING STRUCTURES LOCATED ON THIS SITE TO BE REMOVED. THE HOUSE AND ACCESSORY STRUCTURES WERE BUILT CIRCA 1955.
- BASED ON AVAILABLE COUNTY MAPS AND RECORDS, THERE ARE NO HISTORIC STRUCTURES OR KNOWN CEMETERIES LOCATED ON THE SUBJECT PROPERTY.
- A NOISE STUDY IS NOT REQUIRED FOR THIS DEVELOPMENT.
- THIS PROJECT IS SUBJECT TO A TRAFFIC STUDY TO BE PREPARED AND SUBMITTED WITH THE SITE DEVELOPMENT PLAN SUBMISSION.
- THIS SITE IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- WATER & SEWER IS PUBLIC, CONNECTING INTO EX. CONTRACTS #831-W&S & #44-0930; THE DRAINAGE AREA IS PATUXENT RIVER WATERSHED.
- THE FOREST CONSERVATION ACT OBLIGATION FOR THIS PROJECT IS ANTICIPATED TO BE MET BY: PAYMENT OF A FEE-IN-LIEU FOR ANY OBLIGATIONS.
- ADEQUATE SITE DISTANCE IS AVAILABLE AT THE ENTRANCE BASED ON FIELD VERIFICATION. THIS PROJECT IS SUBJECT TO A SIGHT DISTANCE ANALYSIS TO BE PREPARED AND SUBMITTED WITH THE SITE DEVELOPMENT PLAN SUBMISSION.
- THE GEOTECHNICAL REPORT FOR THIS PROJECT IS TO BE PREPARED AND SUBMITTED WITH THE SITE DEVELOPMENT PLAN SUBMISSION.
- THIS PROJECT IS SUBJECT TO THE BOARD OF APPEALS CASE #12-008C WHICH IS A CONDITIONAL USE TO ALLOW FOR A CHILD DAY-CARE FACILITY AND NURSERY SCHOOL, PURSUANT TO SECTION 131.11.13 OF THE HOWARD COUNTY ZONING REGULATIONS WHERE THE PROPERTY IS LOCATED IN AN R-SC ZONING DISTRICT; APPROVAL IS HEREBY GRANTED PROVIDED, HOWEVER, THAT:
  - THE PETITIONER SHALL PROVIDE A SIDEWALK ALONG THE EAST SIDE OF THE PARKING SPACE IN FRONT OF THE DAY-CARE BUILDING AND RE-LOCATE THE ACCESSIBLE PARKING SPACE TO THE CENTER OF THESE SPACES TOO PROVIDE SAFE AREAS FOR DROPPING OFF AND PICKING UP ATTENDEES.
  - PETITIONER SHALL PROVIDE THE TYPE-B LANDSCAPE BUFFER SHRUBS WITHOUT SUBSTITUTION, WITH FLOWERING TREES SUBSTITUTED FOR THE REQUIRED SHADE TREES AND PLACED IN CLOSE PROXIMITY TO THE PARKING AREA.
  - THE CONDITIONAL USE SHALL BE CONDUCTED IN CONFORMANCE WITH AND SHALL APPLY ONLY TO THE STRUCTURES AND USES DESCRIBED IN THE PETITION AND DEPICTED ON THE MAY 2012 AMENDED CONDITIONAL USE AND LANDSCAPE PLANS, AND NOT TO ANY OTHER ACTIVITIES, USES, OR STRUCTURES ON THE PROPERTY.
  - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS AND REGULATIONS.
- APPROVAL OF THIS ECP SHALL NOT BE CONSIDERED TO GRANT APPROVAL OF SHOWN SITE DEVELOPMENT, LANDSCAPING, OR FOREST CONSERVATION REQUIREMENTS WHICH SHALL BE REVIEWED AND APPROVED UNDER ASSOCIATED SUBDIVISION AND SITE DEVELOPMENT PLANS AS APPLICABLE. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE SUBDIVISION AND ZONING REGULATIONS SHALL OCCUR AT THE APPLICABLE PLAN STAGE. ADDITIONAL REVIEW COMMENTS WILL BE GENERATED AND MAY ALTER THE SITE DESIGN AS SHOWN.

**DESIGN NARRATIVE**

The site currently is developed with a single family detached residence including driveway & sidewalks and surrounding lawn/meadow areas. All existing structures are to be removed. The majority of the site drains west to east the Beech Creek Subdivision on the adjoining parcel along the southern & eastern boundary. The site also receives drainage from Clarksville Pike (MD Route 108) which runs parallel with the northern boundary.

The proposed development shall consist of, a single commercial building which will serve as a daycare facility; an outdoor play area; a 25' private access drive utilizing open section roadway design; and a required parking lot. It is understood that a Design Manual Waiver must be obtained to utilize the proposed roadway section. There will also be SHA right-of-way dedication with subsequent roadway improvements including; accel./decel. lanes and inclusive ESD-SWM practices

The area of this submission is all of Tax Map 29, Parcel 348 and is approximately 1.0 acres total. There will also be The property is zoned R-SC located on the south side of Clarksville Pike (MD Route 108), approximately 600' east of the intersection with Cedar Lane. The entire site topography slopes to the east with a ridge area which directs the existing run-off towards the north-northeast with drainage from Clarksville Pike (MD Route 108), and south-southeast towards the adjoining Beech Creek subdivision. The northern drainage generally flows along the public roadway towards an existing headwall at the Beech Creek Subdivision entrance; the southern drainage flows into an existing public storm drain system. Both are then conveyed to an existing SWMF constructed under F-85-136; outfalls in an un-named tributary of the Little Patuxent River (Ho. Co. Watershed 2131105), and eventually into the Patuxent River Area Watershed (2-13-11) A Class IV-P Stream.

There are no existing Environmental features on-site or on the impacted surrounding areas. There is approximately 0.13 acres of existing impervious area on-site, all to be removed. There will be approximately 0.44 acres of proposed impervious area added including; 0.11 ac. for the proposed buildings; 0.12 ac. for the roadway improvements; and 0.21 ac. for driveway & parking areas. The limit of disturbance being proposed for development is approximately 1.59 acres, including the roadway improvements. Sediment and Erosion control shall comply with the latest edition of the MDE Standards and Specifications for Sediment Control as shown on the accompanying plan. Soil for the proposed construction activities will be available on-site.

It is concluded that all ESD to the MEP requirements as defined in the Stormwater Management Act of 2007 have been met for the proposed development. The Water Quality has been provided by the implementation of Micro-bioretenion (M-6) facilities, Grass Swales (M-8), and practical utilization of Disconnection of Impervious Runoff (N-2). The infiltration practices utilized adhere to the USDA Map Hydrologic soils information.

**PROJECT BACKGROUND INFORMATION**

PRESENT ZONING: R-SC  
LOCATION: TAX MAP 29 - GRID 2 - PARCEL 348, LOT 7  
APPLICABLE DPZ FILE REFERENCES: PLAT 6885, F-86-136, #831-W&S, #44-0930  
SHA PLATS 50373 & 48254, BA-12-008C

DEED REFERENCES: L10618/F0019  
PROPOSED USE OF SITE: COMMERCIAL  
PROPOSED WATER AND SEWER SYSTEMS: PUBLIC WATER & SEWER

**SITE DATA TABULATION**

1) TOTAL PROJECT AREA.....	1.00 AC. ±
2) AREA OF 100-YR. FLOODPLAIN.....	0.0 AC.
3) AREA OF STEEP SLOPES (15% OR GREATER).....	0.0 AC.
4) AREA OF EXISTING FOREST.....	0.0 AC.
5) AREA OF ERODIBLE SOILS.....	0.0 AC.
6) AREA OF WETLANDS.....	0.0 AC.
7) NET AREA OF SITE(S).....	1.00 AC. ±
8) NUMBER OF UNITS ALLOWED.....	N/A
9) NUMBER OF RESIDENTIAL UNITS PROPOSED.....	N/A
10) AREA OF PLAN SUBMISSION.....	1.00 AC. ±
11) APPROXIMATE LIMIT OF DISTURBANCE.....	1.59 AC. ±
12) PRESENT ZONING DESIGNATION.....	R-SC
13) PROPOSED USES FOR THE SITE & STRUCTURES.....	COMMERCIAL
14) MINIMUM LOT SIZE.....	N/A
15) OPEN SPACE REQUIRED (25%).....	0.25 AC. ±
16) GREEN SPACE PROVIDED.....	0.26 AC. ±
17) RECREATIONAL OPEN SPACE REQUIRED.....	N/A
18) RECREATIONAL OPEN SPACE PROVIDED.....	3,303 SF (OUTDOOR AREA)
19) NUMBER OF PARKING SPACES REQUIRED.....	15
20) TOTAL NUMBER OF PARKING SPACES PROVIDED.....	16
21) BUILDING COVERAGE AREA (IMPERVIOUS).....	0.24 AC. ± (ON-SITE)
22) TOTAL IMPERVIOUS AREA.....	0.44 AC. ± (44%)

**ESD Micro-Scale Practices Summary Table**

Practice	MDE Type	Total DA	Impervious Area	Qe	ESD/In Flow	A1		ESD/In		Rev	
						Provided	2% MIN	Depth	Required	Provided	Required
MB-1	(M-6)	3,923	3,385	1.49	285	PASS	2.0	486	526		
MB-2	(M-6)	6,871	4,961	1.26	364	PASS	2.3	721	659		
SHA-1	(N-2)	3,730	648	0.37	N/A	N/A	N/A	115	115		
SHA-2	(N-2)	6,570	3,143	0.86	N/A	N/A	N/A	474	474		
DRWY-1	(N-2)	1,510	830	0.98	N/A	N/A	N/A	123	123		841
DRWY-2	(N-2)	1,780	910	0.92	N/A	N/A	N/A	136	136		
SWALE-1	(M-8)	11,805	3,912	0.63	1360	PASS	1.0	617	1870		1870
<b>Totals</b>		<b>36,189</b>	<b>17,789</b>	<b>0.89</b>	<b>0</b>	<b>2,039</b>		<b>2,673</b>	<b>3,904</b>	<b>841</b>	<b>1,870</b>

The use of Grassed Swales is applied to the Rev requirement

**ESD On-lot Practices Summary Table**

Practice	MDE	Type	Number	Ownership/ Maintenance
MB-1	(M-6)	Micro-Bioretenion	1	Private
MB-2	(M-6)	Micro-Bioretenion	1	Private
SHA-1	(N-2)	Non-Rooftop Disconnect	1	PUBLIC
SHA-2	(N-2)	Non-Rooftop Disconnect	1	PUBLIC
DRWY-1	(N-2)	Non-Rooftop Disconnect	1	Private
DRWY-2	(N-2)	Non-Rooftop Disconnect	1	Private
SWALE-1	(M-8)	Grassed Swale Sizing	1	Private

**SOILS LEGEND**

MAP SYMBOL	SOIL TYPE	MAPPING UNIT	K FACTOR
CB8	B	GLENELG URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	0.20 - 0.37

TAKEN FROM USDA-NRCS WEBSITE HOWARD COUNTY MD SOILS MAP #17

**SPECIMEN TREE LIST**

SYMBOL	DBH	TYPE	CONDITION
○	32"	ULMUS PUMILA SIBIRICA ELM NON-NATIVE	GOOD

**SHEET INDEX**

NO.	DESCRIPTION
1	PROPOSED ECP PLAN, NOTES AND DETAILS
2	SEDIMENT & EROSION CONTROL PLAN
3	SEDIMENT & EROSION CONTROL NOTES & DETAILS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]*  
CHIEF, DIVISION OF LAND DEVELOPMENT

DATE: 11/2/12

DATE: 10/31/12

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS

8480 BALTIMORE NATIONAL PIKE SUITE 418 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644

60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702  
(P) 301-371-3505 (F) 301-371-3506

WWW.BEI-CIVLENGINEERING.COM

**PROFESSIONAL CERTIFICATION:**  
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 28559; Expiration Date: 7-22-2013

*[Signature]*  
Professional Engineer

**OWNER/DEVELOPER:** NASEEM KHAN, KHURRAN HANIF, P.O. BOX 6004, ELLICOTT CITY, MARYLAND 21042, 410-461-8111

**PROJECT:** BEECH CREEK LOT 7

**LOCATION:** TAX MAP 29 - GRID 2, PARCEL 348, ZONED: R-SC, 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

**TITLE:** ENVIRONMENTAL CONCEPT PLAN, PROPOSED ECP PLAN, NOTES AND DETAILS

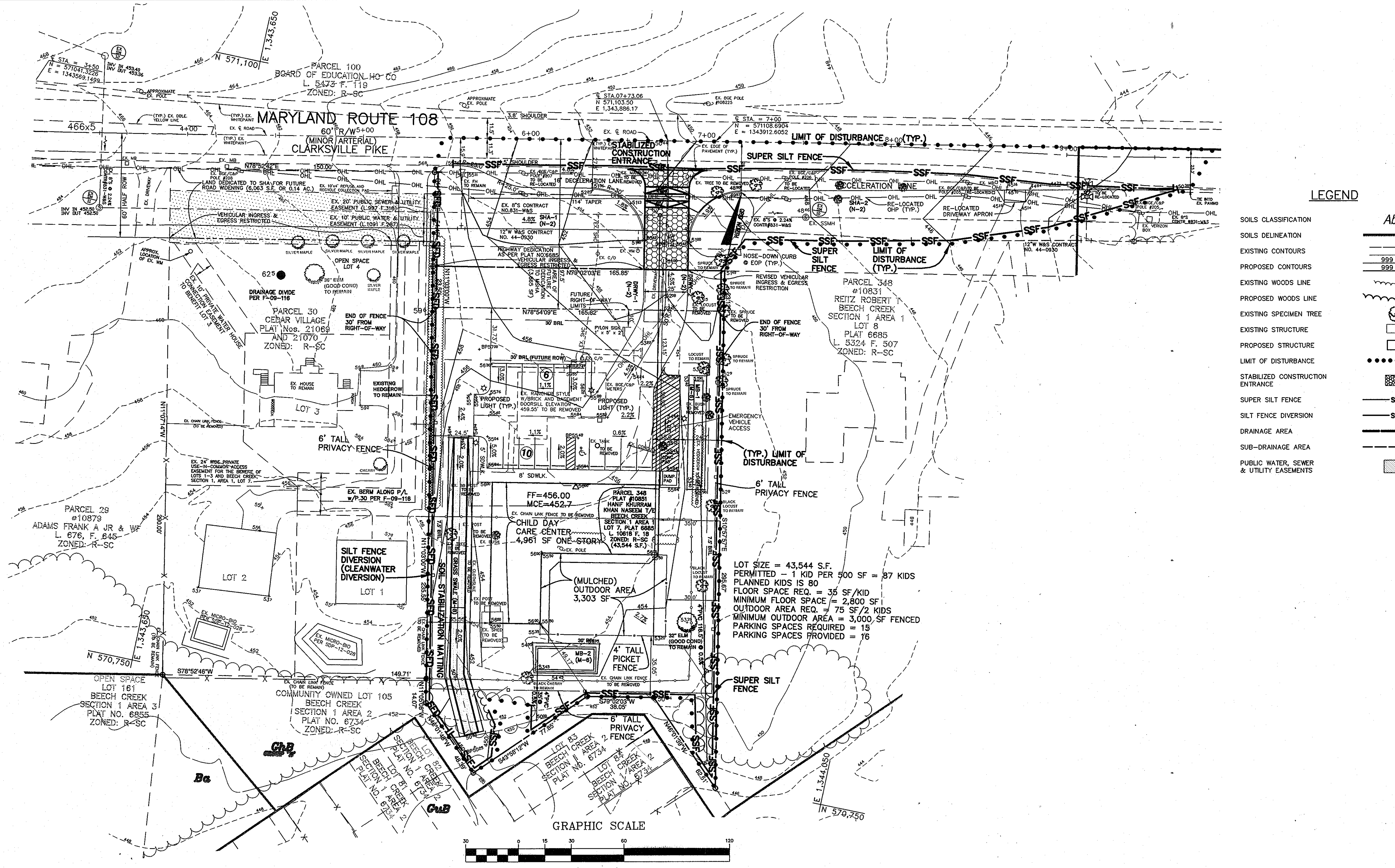
**DATE:** SEPTEMBER, 2012, OCTOBER, 2012

**PROJECT NO.:** 2404

**SCALE:** AS SHOWN

**DRAWING:** 1 OF 3

Design: MCR Draft: MCR Check: JMC



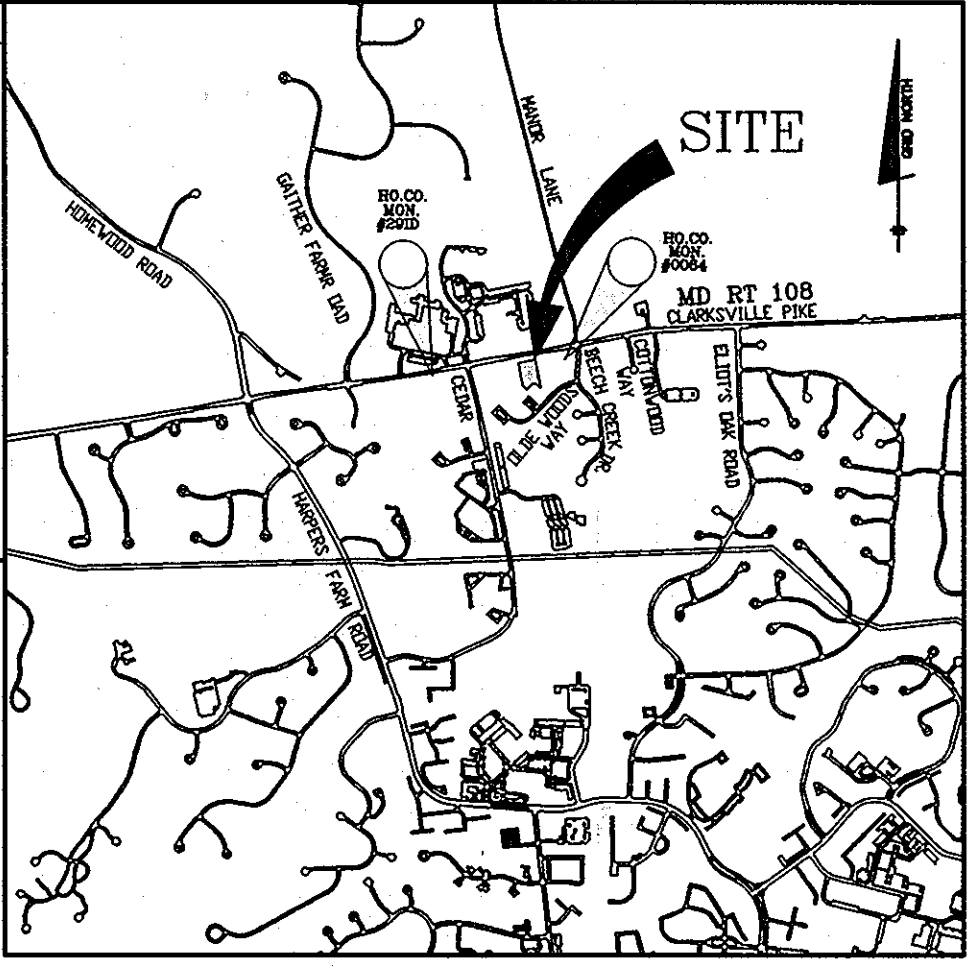
**BENCH MARKS NAD'83 HORIZONTAL**

HO. CO. #2910  
 STAMPED (BRASS OR ALUMINUM) DISC SET ON TOP OF A 3" DEEP COLUMN OF CONCRETE. USUALLY THE DISCS ARE SET 1" OR 2" BELOW TERRAIN SURFACE, AND HAVE A PIECE OF IRON TO FACILITATE MAGNETIC DETECTION.

N 571234.3592 E 1343193.0782  
 ELEV. = 473.92

HO. CO. #0064  
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N 571248.5442 E 1344516.0297  
 ELEV. = 431.58



**LEGEND**

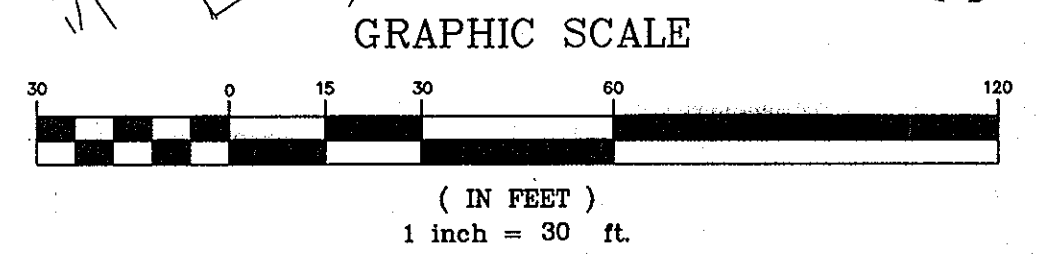
- SOILS CLASSIFICATION *ABC1*
- SOILS DELINEATION
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- EXISTING SPECIMEN TREE
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- SUPER SILT FENCE
- SILT FENCE DIVERSION
- DRAINAGE AREA
- SUB-DRAINAGE AREA
- PUBLIC WATER, SEWER & UTILITY EASEMENTS

**Sequence of Construction**

The sequencing should follow this general outline and shall be in conformance with the latest approved version of the MDE Standards and Specifications for Sediment Control. The contractor shall notify the Sediment Control Division at least 48 hours prior to starting construction activities.

1. Obtain grading permit.
2. Clear and grub site for installation of perimeter sediment control devices established under the approved Site Development Plans.
3. Stabilize all disturbed areas in accordance with the temporary seedbed notes.
3. Begin installation of proposed utilities at existing mains. This process to include daily control measures i.e. trench backfill, installation/removal of silt fence, stabilization, etc. Upon completion, remove and/or abandon existing sewer systems.
4. Upon approval by the sediment control inspector, begin roadway & mass grading through the remainder of site and SHA R/W.
5. Begin installation of all other utilities as applicable.
6. Construct retaining walls and remaining utilities as applicable.
7. Install base course paving for driveway, parking areas and roadway improvements.
8. Once the utility and roadway construction is completed, fully stabilize the remaining areas.
9. Construct proposed building (including manifolds as applicable).
10. Final grade remainder of site and stabilize in accordance with permanent seeding notes.
11. Install final paving and complete ESD construction.
12. Install required landscaping.
13. Upon approval by Howard County sediment control inspector, remove remaining sediment control devices and permanently stabilize any remaining disturbed areas.

Please note that all super silt fences should be checked daily to ensure compliance. The areas of ESD implementation shall have limited access from heavy construction equipment to avoid unnecessary compaction when practical.



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TAKEN FROM USDA-NRCS WEBSITE: HOWARD COUNTY MD SOILS MAP #17

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 11/2/12  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 10/31/12  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

NO.	DATE	REVISION

**BENCHMARK ENGINEERING, INC.**

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WWW.BE-CIVILENGINEERING.COM

PROFESSIONAL CERTIFICATION:  
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 28559; Expiration Date: 7-22-2013

OWNER/DEVELOPER:	PROJECT:
NASEEM KHAN KHURRAN HANIF P.O. BOX 6004 ELLICOTT CITY, MARYLAND 21042 410-461-6111	<b>BEECH CREEK LOT 7</b>
LOCATION:	TAX MAP 29 - GRID 2 PARCEL 348 ZONED: R-SC 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE:	ENVIRONMENTAL CONCEPT PLAN <b>SEDIMENT &amp; EROSION CONTROL PLAN</b>
DATE:	SEPTEMBER, 2012 OCTOBER, 2012
PROJECT NO.:	2404
DESIGN:	MCR
DRAFT:	MCR
CHECK:	JMC
SCALE:	AS SHOWN
DRAWING NO.:	2 OF 3

