

SHEET INDEX table with columns SHEET No., COVER SHEET, and list of sheets from 1 to 2A.

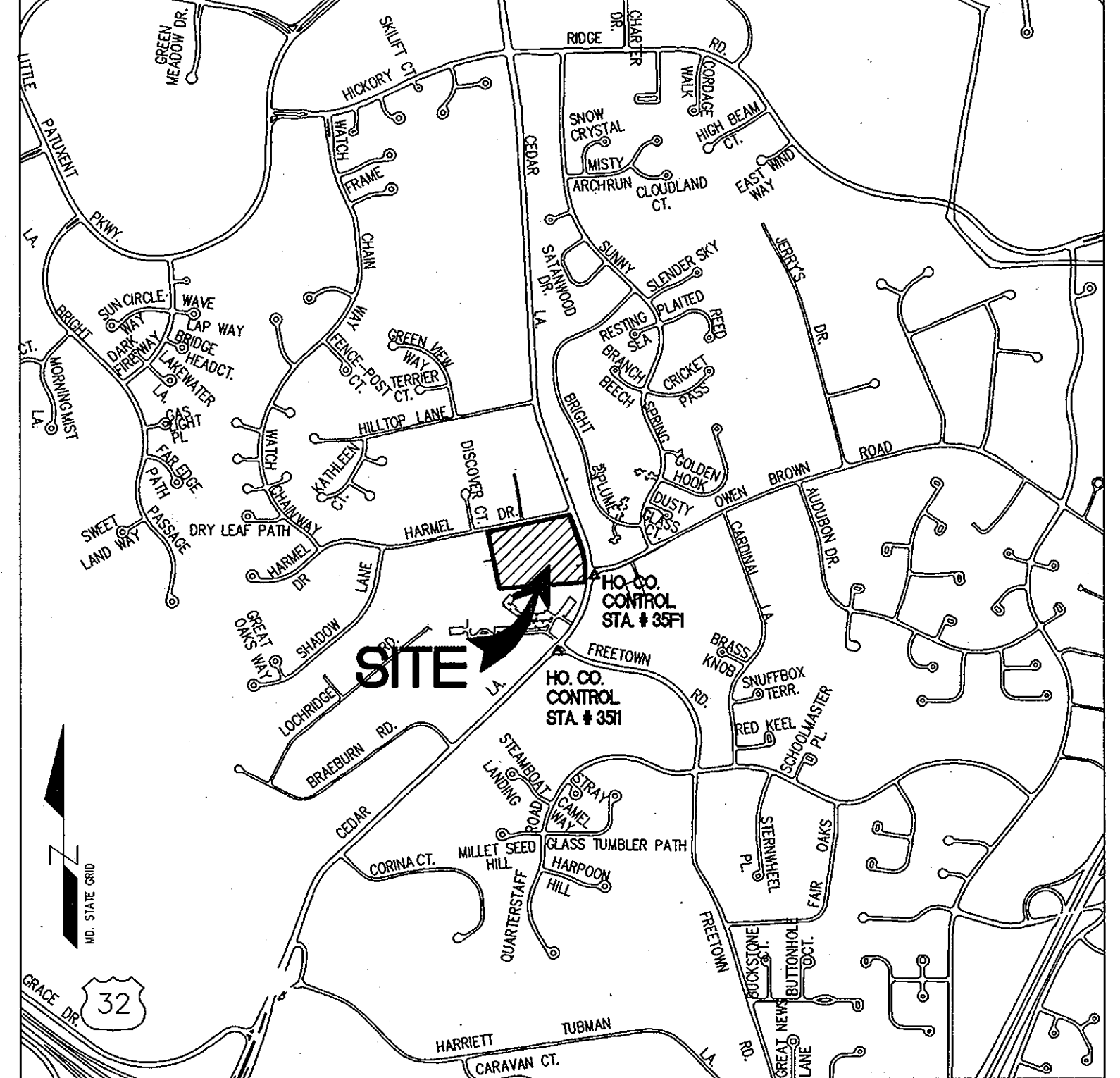
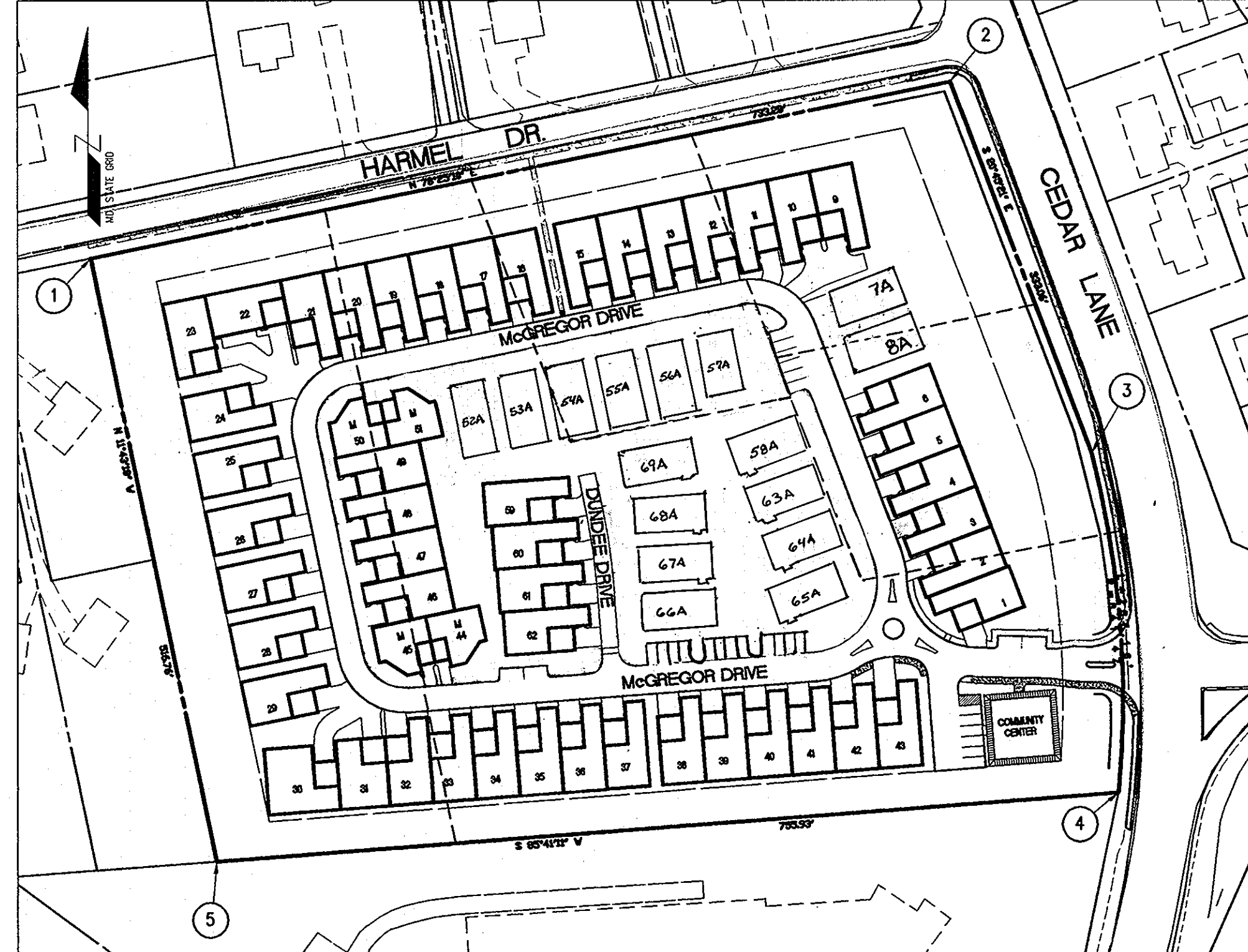
NOTE: SEE GENERAL NOTE NO. 20 FOR REFUSE COLLECTION RESPONSIBILITIES

SITE DEVELOPMENT PLAN
SCOTS GLEN NORTH
BUILDABLE BULK PARCEL "A" - UNITS
1-6, 7A, 8A, 9-51, 52A-58A, 59-62, 63A-69A
AND COMMUNITY CENTER PLANNED SENIOR COMMUNITY (PSC)
- AGE RESTRICTED ADULT HOUSING A RESUBDIVISION OF
CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

Professional Certificate. 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: 7/22/11

- GENERAL NOTES:
- THIS PROPERTY IS ZONED PSC PER Z.B. CASE NUMBER 1029M, DATED SEPTEMBER 25, 2003, AND THE 2/2-04 COMPREHENSIVE ZONING PLAN.
 - PROPOSED USE FOR SITE AND STRUCTURES: AGE RESTRICTED CONDOMINIUM SFA AND SPD HOMES.
 - TOTAL AREA OF PROPERTY = 9.96 AC.
 - TOTAL AREA OF FLOOD PLAIN = 0.
 - TOTAL AREA SLOPES IN EXCESS OF 25% = 0.
 - NET TRACT AREA = 9.96 AC.
 - TOTAL NUMBER OF BUILDABLE UNITS ALLOWED = 79 UNITS (8 PER ACRE)
 - TOTAL NUMBER OF PROPOSED BUILDABLE UNITS = 69 UNITS
A. NUMBER OF SINGLE FAMILY ATTACHED (TOWNHOUSES) = 47
B. NUMBER OF SINGLE FAMILY DETACHED = 22
C. NUMBER OF APARTMENT UNITS = 0
 - TOTAL AREA OF ROADWAY DEDICATION = 0.
 - TOTAL AREA OF DISTURBANCE = 9.96 AC.
TOTAL AREA OF HOUSES = 4.068 AC.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
 - PUBLIC WATER AND PUBLIC SEWER TO BE UTILIZED. EXISTING UTILITIES ARE BASED ON CURRENT HOWARD COUNTY WATER CONTRACT DRAWINGS: EX. 12" WATER & 8" SEWER CONT. 2708-D WYS.
PUBLIC WATER MAIN EXTENSION TO SITE CONT. 284-4219-D.
 - THE TRAFFIC CONTROL PLAN WAS PREPARED BY TRAFFIC CONCEPTS INC. ON FEBRUARY 2004.
 - THERE IS NO WELLD, STREAM OR 100-YEAR FLOOD PLAN ON SITE AS DETERMINED BY STUDY PREPARED BY WILLIAM T. BRIDGES AND 3/7/03.
 - THE PROPERTY SHOWN IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
 - THE BOUNDARY AND TOPOGRAPHY IS BASED ON A FIELD MONUMENTED SURVEY PERFORMED BY JOHN C. MELLEMA SR. INC. ON OR ABOUT MARCH 2003.
 - IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
 - A STRUCTURE AND USE SETBACK LINE HAS BEEN ESTABLISHED PER SECT. 127.1E.2.
 - DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
a. WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE)
b. SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING. (1 1/2" MIN.)
c. GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT TURNING RADIUS;
d. STRUCTURES (GARAGES/DRIVES) - CAPABLE OF SUPPORTING 25 GROSS TONS (425-LOADING);
e. DRAINAGE ELEMENTS - CAPABLE OF SUPPORTING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY;
f. STRUCTURE CLEARANCES - MINIMUM 12 FEET;
g. MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
 - REFUSE COLLECTION, SNOW REMOVAL AND PRIVATE ROAD MAINTENANCE WILL BE PROVIDED BY THE HOMEOWNERS ASSOCIATION. REFUSE COLLECTION WILL BE PROVIDED BY PRIVATE CONTRACTOR. THERE WILL BE INTERNAL TRASH COLLECTION WITHIN THE CONDOMINIUM BUILDINGS TO BE REMOVED BY A PRIVATE JANITORIAL SERVICE FOR CURBSIDE PICK-UP.
 - THIS PROJECT IS SUBJECT TO THE AMENDED SUBDIVISION AND LAND DEVELOPMENT REGULATIONS ADOPTED PER COUNCIL BILL 45-2003 EFFECTIVE OCTOBER 2, 2003.
 - ALL ROADS AND PARKING AREAS ARE TO BE PRIVATELY MAINTAINED BY THE HO-O-A.
 - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:
HOWARD COUNTY MONUMENT 35F1 N 557787.367 ELEV. = 401.165
HOWARD COUNTY MONUMENT 35F1 N 557103.367 E 1345217.309 ELEV. = 400.759
HOWARD COUNTY MONUMENT 35F1 N 557493.547 E 1344983.547 ELEV. = 400.759
 - THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS PROJECT HAVE BEEN FILLED BY PAYMENT OF A FEE-IN-LIEU IN THE AMOUNT OF \$24,670.00 FOR A 1.5 ACRE AFFORESTATION OBLIGATION.
 - WAIVER #P-04-114 WAS APPROVED ON MAY 12, 2004 TO ALLOW SIDEWALK TO BE PLACED ON ONE SIDE ONLY OF THE PROPOSED INTERNAL PRIVATE ROAD. ADDITIONAL WAIVERS WERE APPROVED BY DPW ON APRIL 5 AND MAY 3 2004 TO REPLACE WATER MAIN EASEMENT WIDTH TO 15 FEET.
 - TOTAL NUMBER OF "MODERATE INCOME HOUSING UNITS" REQUIRED FOR THIS SITE PER THE (PSC) ZONING DISTRICT IS 10% OF THE TOTAL NUMBER OF UNITS, TO BE PROVIDED AT TIERER HOUSING UNIT. SGP-04-27. M.H.U. AGREEMENT RECORDED ON 12/16/04 AS LIBER 8955, FOLIO 017.
A. TOTAL NUMBER OF "M.H.U." REQUIRED = 7
 - STORMWATER MANAGEMENT FACILITY IS HAZARDOUS CLASS "A", AND WILL BE PRIVATELY OWNED AND MAINTAINED.
 - ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
 - ALL EXISTING STRUCTURES TO BE RAZED. FURTHER, THE FIVE(5) EXISTING DWELLING UNITS MUST BE RAZED PRIOR TO ISSUANCE OF BUILDING PERMITS FOR THE LAST FIVE(5) CONDOMINIUM UNITS.
 - THERE ARE NO HISTORIC STRUCTURES OR CEMETRIES LOCATED ON THIS PROPERTY.
 - CONDITIONS OF APPROVAL FROM ZB CASE NO.1029M:
1. FIVE (5) PARKING SPACES WILL BE PROVIDED IN THE NORTHEAST CORNER OF THE SITE.
2. THERE WILL BE NO ENTRANCE GATE.
3. A SIGNALIZED TRAFFIC DEVICE WILL BE PROVIDED AT THE ENTRANCE.
 - THIS PSC DISTRICT IS SUBJECT TO COMPLIANCE WITH THE DECISION AND ORDER ISSUED FOR ZB CASE NO. 1029M APPROVED BY THE HOWARD COUNTY ZONING BOARD ON SEP. 25, 2003 ON DECEMBER 15, 2003 THE ZONING BOARD REMOVED CONDITION NUMBER THREE(3) WHICH REQUIRED EIGHT MODERATE INCOME UNITS TO BE BUILT ON SITE.
 - "SCOTS GLEN A CONDOMINIUM" HAS BEEN REGISTERED WITH SECRETARY OF THE STATE OF MARYLAND ON JANUARY 14, 2005.
 - ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$ 87,450. FOR ADDITIONAL DETAIL SEE SHEET 13.
 - UNIMPROVED 65 dbA NOISE LINE BASED ON LOCATION PROVIDED BY STAINO ENGINEERING INC. SERVICES DATED FEBRUARY 2004
 - PARKING IS ONLY ALLOWED WITHIN GARAGES, MARKED PARKING SPACES OR DRIVEWAYS. PARKING IS PROHIBITED ALONG CURBS.
 - A PLAT OF CONSOLIDATION WAS PROCESSED TO COMBINE LOTS 1, 2, 2A, 2B, AND 3 INTO BULK PARCEL "A". SEE PLAT # 17102, RECORDED ON DECEMBER 8, 2004.
NO PHASING IS PROPOSED.
 - THIS PROJECT COMPLES WITH THE COMMUNITY BUILDING REQUIREMENT PER THE PSC ZONING REGULATIONS OF 20 SQUARE FEET PER UNIT OR 1,460 SQUARE FEET BY PROVIDING A COMMUNITY CENTER BUILDING OF 2500 SQUARE FEET IN SIZE.
 - THIS PLAN INCLUDES RECREATION AND COMMUNITY ACTIVITY AREAS FOR RESIDENTS PER THE PSC ZONING REGULATIONS SUCH AS PATHWAYS, SEATING AREAS, AND A COMMUNITY CENTER.
 - THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) WORKING DAYS PRIOR TO THE START OF WORK.

ADDRESS CHART table with columns UNIT / GARAGE NO., STREET ADDRESS, UNIT / GARAGE NO., and STREET ADDRESS. Lists units from 1 to 37 along McGregor Drive and Dundee Drive.



STREET SIGN CHART table with columns STREET NAME, STATION, OFFSET, POSTED SIGN, and SIGN CODE. Details sign placement for McGregor Drive.

STREET LIGHT CHART table with columns STREET NAME, STATION, OFFSET, FIXTURE POLE TYPE, and COMMENTS. Details lighting specifications for McGregor Drive.

COORDINATE TABLE with columns POINT, NORTH, and EAST. Lists coordinate points for the site.

UNIVERSAL DESIGN REQUIREMENTS FOR AGE-RESTRICTED ADULT HOUSING IN HOWARD COUNTY. Includes 8 numbered requirements for accessibility and safety.

OPEN SPACE TABULATION, DENSITY TABULATION, and PARKING ANALYSIS tables. Shows acreage calculations and parking space requirements.

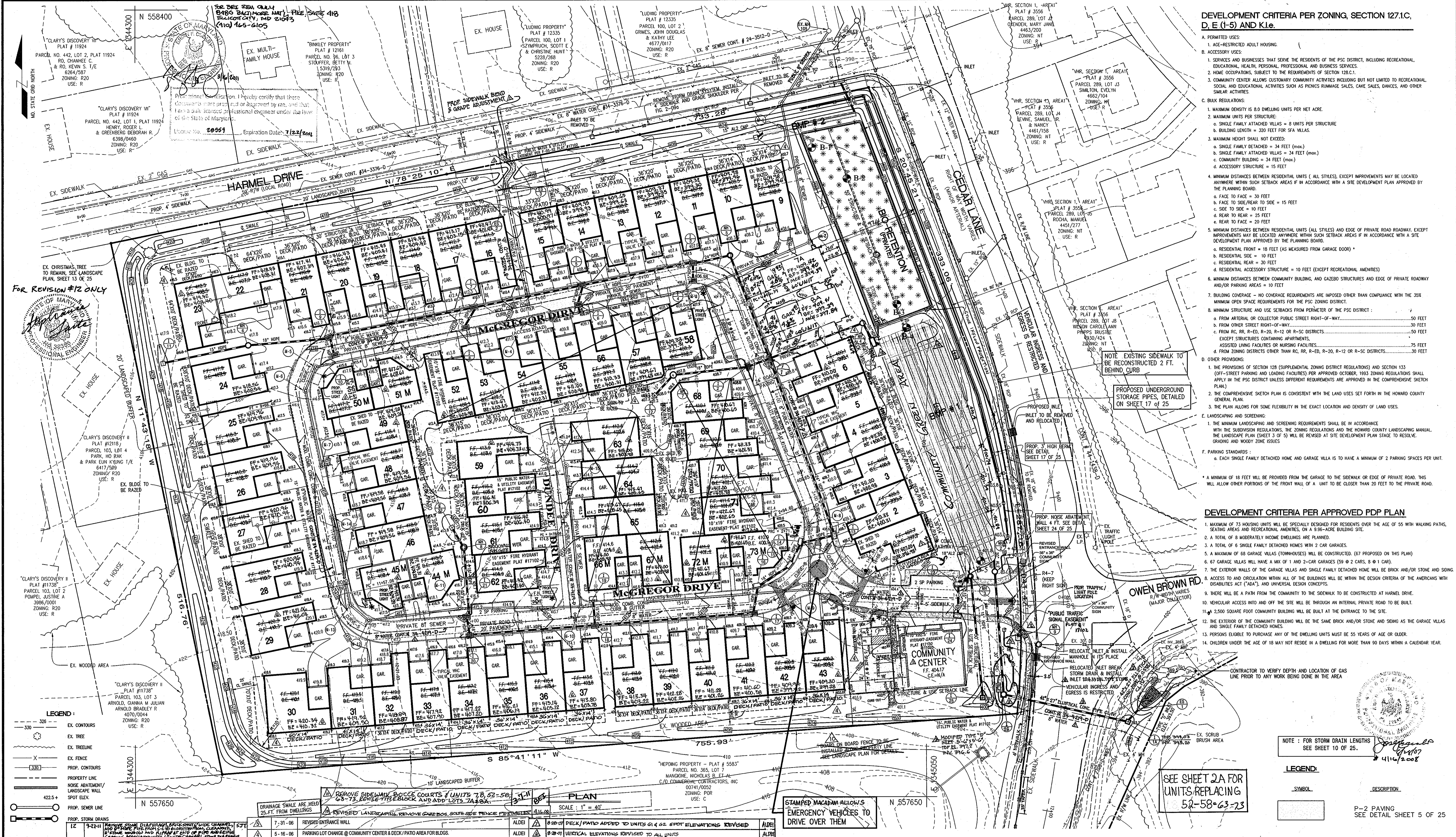
PREPARED BY: American Land Development and Engineering, Inc.
OWNER / DEVELOPER: Harmel PSC, LLC.
3630 Woodside Court Suite A
Columbia, Md. 21046

ENGINEER'S CERTIFICATE: I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY CONSERVATION DISTRICT.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS. APPROVED: DEPARTMENT OF PLANNING AND ZONING.

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for approval.

TITLE: COVER SHEET
PROJECT NAME: SCOTS GLEN NORTH
BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3



DEVELOPMENT CRITERIA PER ZONING, SECTION 127.1.C, D, E (1-5) AND K1.e.

- A. PERMITTED USES:**
 1. AGE-RESTRICTED ADULT HOUSING.
 2. ACCESSORY USES:
- B. SERVICES AND BUSINESSES THAT SERVE THE RESIDENTS OF THE PSC DISTRICT, INCLUDING RECREATIONAL, EDUCATIONAL, HEALTH, PERSONAL, PROFESSIONAL AND BUSINESS SERVICES:**
 3. HOME OCCUPATIONS, SUBJECT TO THE REQUIREMENTS OF SECTION 128.2.1.
 4. COMMUNITY CENTER ALLOWS CUSTOMARY COMMUNITY ACTIVITIES INCLUDING BUT NOT LIMITED TO RECREATIONAL, SOCIAL AND EDUCATIONAL ACTIVITIES SUCH AS PRIZES, RUMMAGE SALES, CAKE SALES, DANCES, AND OTHER SIMILAR ACTIVITIES.
- C. BULK REGULATIONS:**
 1. MAXIMUM DENSITY IS 8.0 DWELLING UNITS PER NET ACRE.
 2. MAXIMUM UNIT STRUCTURE:
 a. SINGLE FAMILY ATTACHED VILLAS = 8 UNITS PER STRUCTURE
 b. BUILDING LENGTH = 320 FEET FOR 5FA VILLAS.
 3. MAXIMUM HEIGHT SHALL NOT EXCEED:
 a. SINGLE FAMILY DETACHED = 34 FEET (MAX.)
 b. SINGLE FAMILY ATTACHED VILLAS = 34 FEET (MAX.)
 c. COMMUNITY BUILDING = 34 FEET (MAX.)
 d. ACCESSORY STRUCTURE = 15 FEET
 4. MINIMUM DISTANCES BETWEEN RESIDENTIAL UNITS (ALL STYLES), EXCEPT IMPROVEMENTS MAY BE LOCATED ANYWHERE WITHIN SUCH SETBACK AREAS IF IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE PLANNING BOARD:
 a. FACE TO FACE = 30 FEET
 b. FACE TO SIDE/REAR TO SIDE = 15 FEET
 c. SIDE TO SIDE = 10 FEET
 d. REAR TO REAR = 25 FEET
 e. REAR TO FACE = 20 FEET
 5. MINIMUM DISTANCES BETWEEN RESIDENTIAL UNITS (ALL STYLES) AND EDGE OF PRIVATE ROAD ROADWAY, EXCEPT IMPROVEMENTS MAY BE LOCATED ANYWHERE WITHIN SUCH SETBACK AREAS IF IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE PLANNING BOARD:
 a. RESIDENTIAL FRONT = 18 FEET (AS MEASURED FROM GARAGE DOOR)
 b. RESIDENTIAL SIDE = 10 FEET
 c. RESIDENTIAL REAR = 30 FEET
 d. RESIDENTIAL ACCESSORY STRUCTURE = 10 FEET (EXCEPT RECREATIONAL AMENITIES)
 6. MINIMUM DISTANCES BETWEEN COMMUNITY BUILDING, AND GAZEBO STRUCTURES AND EDGE OF PRIVATE ROADWAY AND/OR PARKING AREAS = 10 FEET
 7. BUILDING COVERAGE - NO COVERAGE REQUIREMENTS ARE IMPOSED OTHER THAN COMPLIANCE WITH THE 30% MINIMUM OPEN SPACE REQUIREMENTS FOR THE PSC ZONING DISTRICT.
 8. MINIMUM STRUCTURE AND USE SETBACKS FROM PERIMETER OF THE PSC DISTRICT:
 a. FROM ARTERIAL OR COLLECTOR PUBLIC STREET RIGHT-OF-WAY = 50 FEET
 b. FROM OTHER STREET RIGHT-OF-WAY = 30 FEET
 c. FROM RC, RR, R-ED, R-20, R-12 OR R-SC DISTRICTS = 50 FEET
 EXCEPT STRUCTURES CONTAINING APARTMENTS, ASSISTED LIVING FACILITIES OR NURSING FACILITIES. = 75 FEET
 d. FROM ZONING DISTRICTS OTHER THAN RC, RR, R-ED, R-20, R-12 OR R-SC DISTRICTS = 30 FEET
 9. OTHER PROVISIONS:
 1. THE PROVISIONS OF SECTION 128 (SUPPLEMENTAL ZONING DISTRICT REGULATIONS) AND SECTION 133 (OFF-STREET PARKING AND LOADING FACILITIES) PER APPROVED OCTOBER, 1993 ZONING REGULATIONS SHALL APPLY IN THE PSC DISTRICT UNLESS DIFFERENT REQUIREMENTS ARE PROVIDED IN THE COMPREHENSIVE SKETCH PLAN.
 2. THE COMPREHENSIVE SKETCH PLAN IS CONSISTENT WITH THE LAND USES SET FORTH IN THE HOWARD COUNTY GENERAL PLAN.
 3. THE PLAN ALLOWS FOR SOME FLEXIBILITY IN THE EXACT LOCATION AND DENSITY OF LAND USES.
- E. LANDSCAPING AND SCREENING:**
 1. THE MINIMUM LANDSCAPING AND SCREENING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS, THE ZONING REGULATIONS AND THE HOWARD COUNTY LANDSCAPING MANUAL. THE LANDSCAPING PLAN (SHEET 3 OF 5) WILL BE REVISED AT SITE DEVELOPMENT PLAN STAGE TO RESOLVE GRADING AND WOODY ZONE ISSUES
- F. PARKING STANDARDS:**
 a. EACH SINGLE FAMILY DETACHED HOME AND GARAGE VILLA IS TO HAVE A MINIMUM OF 2 PARKING SPACES PER UNIT.
 * A MINIMUM OF 18 FEET WILL BE PROVIDED FROM THE GARAGE TO THE SIDEWALK OR EDGE OF PRIVATE ROAD. THIS WILL ALLOW OTHER PORTIONS OF THE FRONT WALL OF A UNIT TO BE CLOSER THAN 20 FEET TO THE PRIVATE ROAD.

DEVELOPMENT CRITERIA PER APPROVED PDP PLAN

- MAXIMUM OF 73 HOUSING UNITS WILL BE SPECIALLY DESIGNED FOR RESIDENTS OVER THE AGE OF 55 WITH WALKING PATHS, SEATING AREAS AND RECREATIONAL AMENITIES ON A 9.38-ACRE BUILDING SITE.
- A TOTAL OF 8 MODERATELY INCOME DWELLINGS ARE PLANNED.
- A TOTAL OF 6 SINGLE FAMILY DETACHED HOMES WITH 2 CAR GARAGES.
- A MAXIMUM OF 68 GARAGE VILLAS (TOWNHOUSES) WILL BE CONSTRUCTED (67 PROPOSED ON THIS PLAN).
- 67 GARAGE VILLAS WILL HAVE A MIX OF 1 AND 2-CAR GARAGES (59 @ 2 CARS, 8 @ 1 CAR).
- THE EXTERIOR WALLS OF THE GARAGE VILLAS AND SINGLE FAMILY DETACHED HOME WILL BE BRICK AND/OR STONE AND SING.
- ACCESS TO AND CIRCULATION WITHIN ALL OF THE BUILDINGS WILL BE WITHIN THE DESIGN CRITERIA OF THE AMERICANS WITH DISABILITIES ACT (ADA), AND UNIVERSAL DESIGN CONCEPTS.
- THERE WILL BE A PATH FROM THE COMMUNITY TO THE SIDEWALK TO BE CONSTRUCTED AT HARMEL DRIVE.
- VEHICULAR ACCESS INTO AND OFF THE SITE WILL BE THROUGH AN INTERNAL PRIVATE ROAD TO BE BUILT.
- A 2,500 SQUARE FOOT COMMUNITY BUILDING WILL BE BUILT AT THE ENTRANCE TO THE SITE.
- THE EXTERIOR OF THE COMMUNITY BUILDING WILL BE THE SAME BRICK AND/OR STONE AND SING AS THE GARAGE VILLAS AND SINGLE FAMILY DETACHED HOMES.
- PERSONS ELIGIBLE TO PURCHASE ANY OF THE DWELLING UNITS MUST BE 55 YEARS OF AGE OR OLDER.
- CHILDREN UNDER THE AGE OF 18 MAY NOT RESIDE IN A DWELLING FOR MORE THAN 90 DAYS WITHIN A CALENDAR YEAR.

CONTRACTOR TO VERIFY DEPTH AND LOCATION OF GAS LINE PRIOR TO ANY WORK BEING DONE IN THE AREA

NOTE: FOR STORM DRAIN LENGTHS SEE SHEET 10 OF 25.

LEGEND:

SYMBOL	DESCRIPTION
	P-2 PAVING SEE DETAIL SHEET 5 OF 25

PREPARED BY:
American Land Development and Engineering, Inc.
 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
 TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
 Harmel PSC, LLC.
 6300 Woodside Court Suite A
 Columbia, Md. 21046

No.	DATE	REVISION	BY
1	2-16-06	REPLACE MH TO A MOD. INLET & REPLACE 36" RCP TO 48" 12" ELLIPTICAL CONC. PIPE	ALDEI
2	1-5-06	LEFT FILLET RADII, SIDEWALKS TO BE RECONSTRUCTED 3" ON EXISTING CURBS 1/4" PIPE LINE	ALDEI
3	4-25-05	LANDSCAPING ELEVATION BY A FOOT FOR UNITS 1-73 AND PROVIDE 3" TO SIDEWALK CONNECTION, HARMEL DRIVE # REVISED FOOT PRINT FOR COMMUNITY CENTER & ADDED PUBLIC WATER & PUBLIC SEWER CONNECTION NUMBERS.	ALDEI

ENGINEER'S CERTIFICATE
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 SIGNATURE OF ENGINEER: *David C. Woessner*
 DATE: DEC. 10, 2004

DEVELOPER'S CERTIFICATE
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 OF DEVELOPER: *Dale Thompson*
 DATE: DEC. 10, 2004

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John D. Demme 1/5/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Cindy Hanata 1/25/05
 CHIEF, DIVISION OF LAND DEVELOPMENT

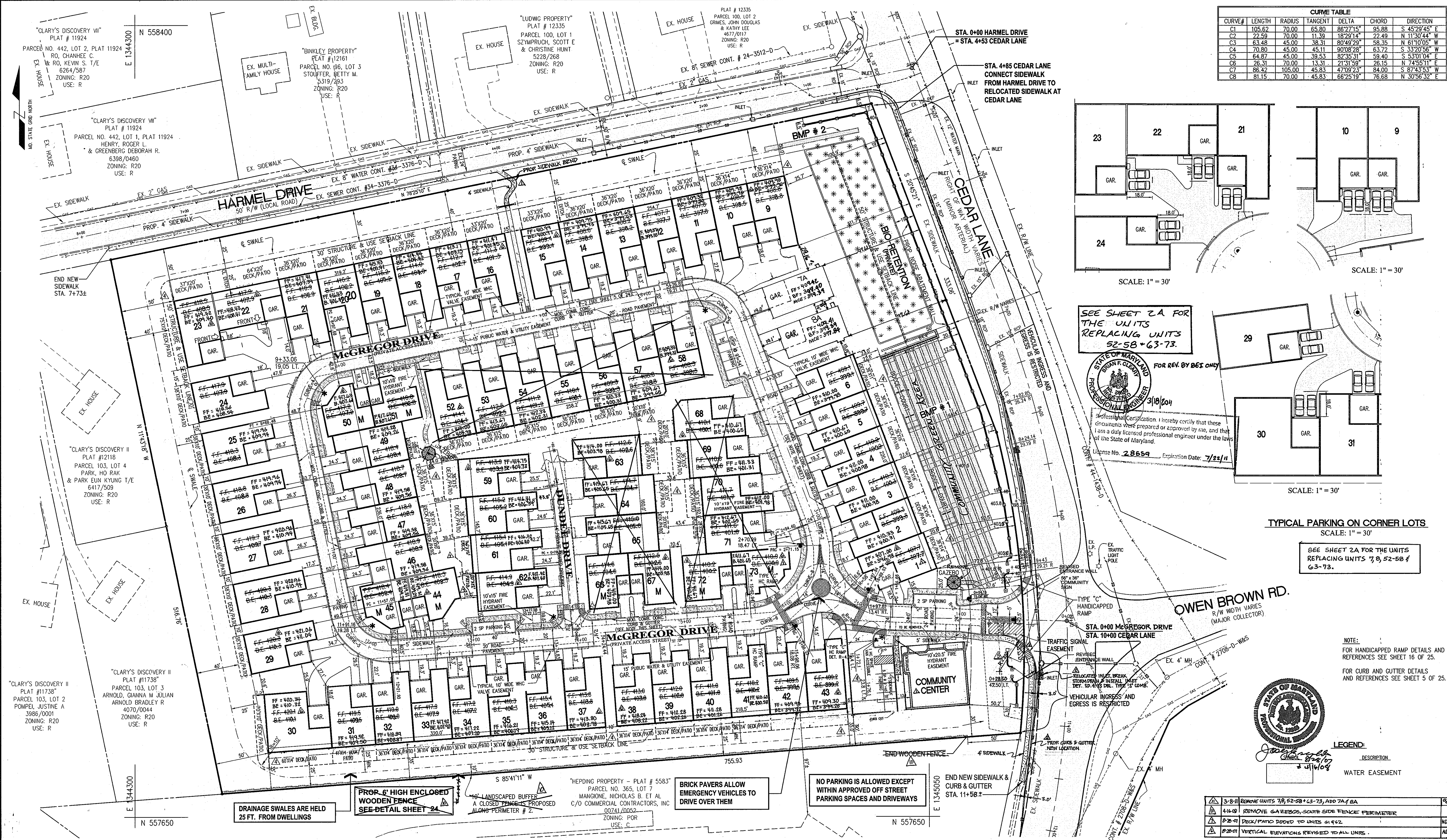
Dale Thompson 2/1/05
 DIRECTOR - DEPARTMENT OF PLANNING AND ZONING

TITLE: SITE DEVELOPMENT PLAN

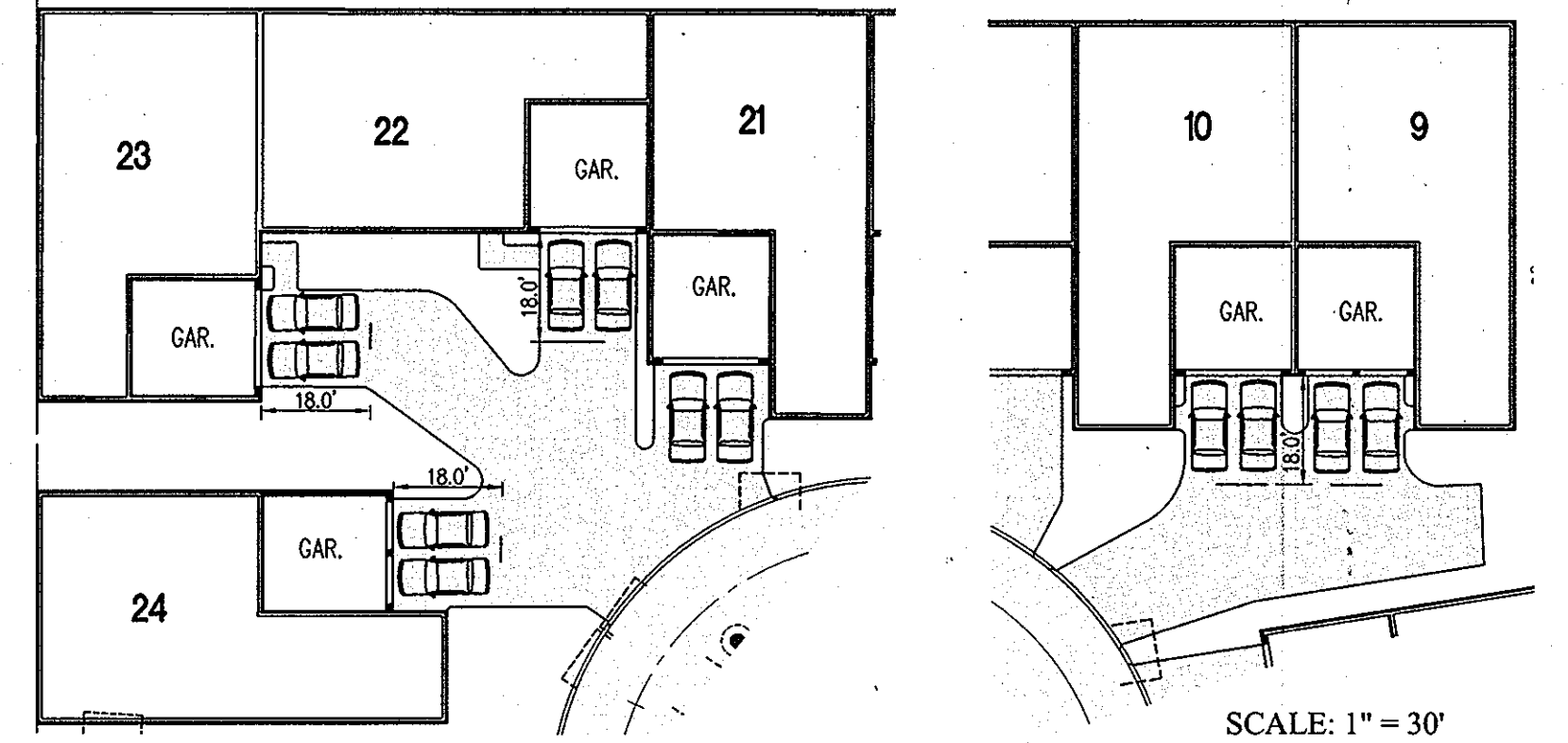
PROJECT NAME: SCOTS GLEN NORTH
 BUILDABLE BULK PARCEL "A" - UNITS 1-67, 84 AND COMMUNITY CENTER PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

MAP-11-108 S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-161

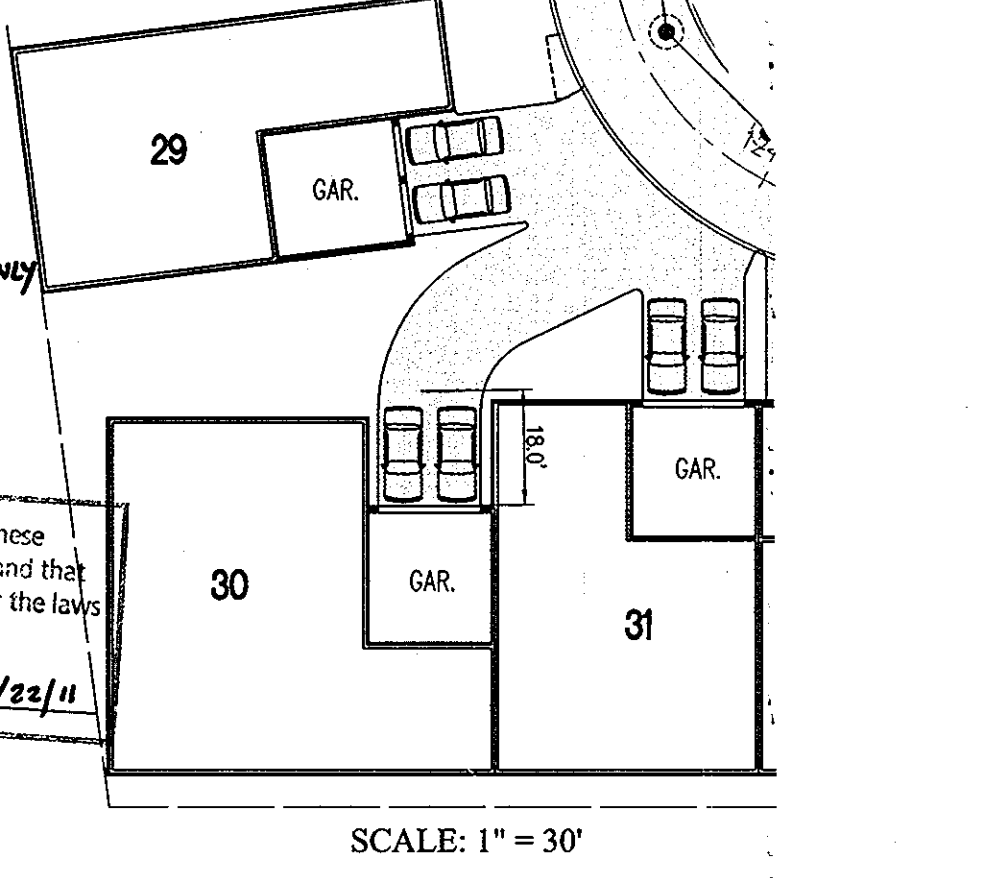
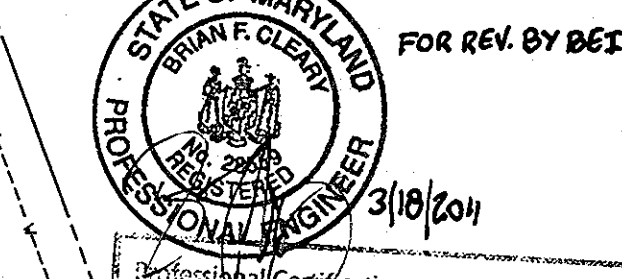
DES.: DCW/JLVG JOB: PROJ.: DATE: 12-10-04
 DRW.: AVG/DJA/JNC CHK.: D.C.W. SCALE: 1"=40' SHEET 2 OF 25



CURVE TABLE						
CURVE#	LENGTH	RADIUS	TANGENT	DELTA	CHORD	DIRECTION
C1	105.62	70.00	65.80	86°27'15"	95.88	S 45°29'45" E
C2	22.59	70.00	11.39	18°29'14"	22.49	N 11°30'44" W
C3	63.48	45.00	38.31	80°49'29"	58.35	N 61°10'05" W
C4	70.80	45.00	45.11	90°08'28"	63.72	S 33°20'56" W
C5	64.87	45.00	39.53	87°35'31"	59.40	S 53°01'04" E
C6	26.31	70.00	13.31	21°31'52"	26.15	N 74°55'11" E
C7	86.42	105.00	48.83	47°09'32"	84.00	S 87°43'53" W
C8	91.15	70.00	45.83	66°25'19"	76.68	N 30°56'32" E



SEE SHEET 2.A FOR THE UNITS REPLACING UNITS 52-58 & 63-73.



TYPICAL PARKING ON CORNER LOTS
SCALE: 1" = 30'

SEE SHEET 2.A FOR THE UNITS REPLACING UNITS 73, 52-58 & 63-73.

NOTE:
FOR HANDICAPPED RAMP DETAILS AND REFERENCES SEE SHEET 16 OF 25.
FOR CURB AND GUTTER DETAILS AND REFERENCES SEE SHEET 5 OF 25.



LEGEND:
DESCRIPTION
WATER EASEMENT

3-8-11	REMOVE UNITS 73, 52-58 & 63-73, ADD 74 & 8A	MR
4-14-09	REMOVE GARAGES, SOUTH SIDE FENCE PERIMETER	MR
8-20-01	DECK/PATIO ADDED TO UNITS 61 & 62	MR
8-20-01	VERTICAL ELEVATIONS REVISED TO ALL UNITS	MR

PREPARED BY:
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
Harmel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

No.	DATE	REVISION	BY
1	8-16-06	REVISED ENTRANCE WALL	ALDEI
2	8-16-06	REVISE PARKING @ COMMUNITY CENTER & DECK/PATIO AREA FOR BUDGS.	ALDEI
3	4-25-05	REVISED FOOT PRINT FOR COMMUNITY CENTER	ALDEI
4	4-25-05	LOWERED BASEMENT ELEVATION BY A FOOT & A SIDEWALK BEND CONNECTING TO HARMEL DR.	ALDEI

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
DAVID C. WOESSNER
DEC. 10, 2004
DATE

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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."
DALE THOMPSON
DEC. 10, 2004
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Mr. Dammann
CHIEF, DEVELOPMENT ENGINEERING DIVISION
1/5/05
DATE

Chris Hammett
CHIEF, DIVISION OF LAND DEVELOPMENT
1/25/05
DATE

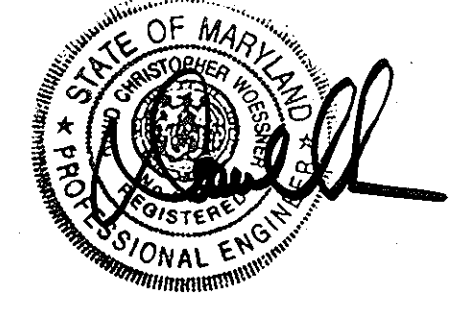
Dale D. Loyell
DIRECTOR - DEPARTMENT OF PLANNING AND ZONING
2/1/05
DATE

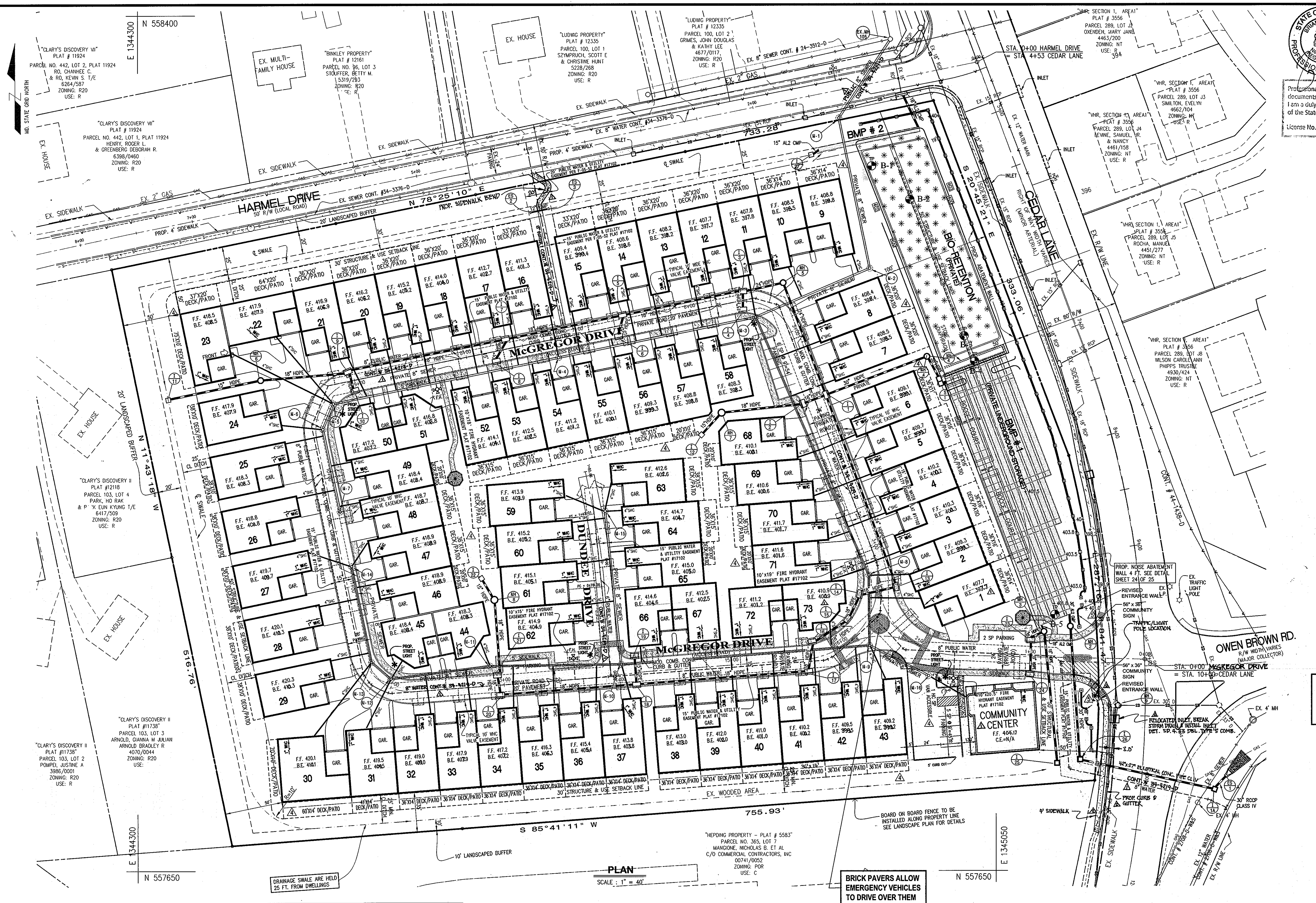
TITLE:
SITE DIMENSION PLAN

PROJECT NAME:
SCOTS GLEN NORTH
BUILDABLE BULK PARCEL "A" - UNITS 1-7, 7A, 8A, AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

W/P-11-108 S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101

DES.: DCW/JL/AVG JOB: PROJ.: DATE: 12-10-04
DRW.: AVG/DJA/JNC CHK.: D.C.W. SCALE: 1" = 40' SHEET 3 OF 25





STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 3/10/01
 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. 28569 Expiration Date: 7/22/11

PLAN
 SCALE: 1" = 40'

NOTE:
 A SIX (6) FEET VERTICAL CLEARANCE IS TO BE MAINTAINED BETWEEN ALL WATER AND SEWER MAINS

PREPARED BY:
American Land Development and Engineering, Inc.
 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
 TEL. (410) 465-7903 FAX. (410) 465-3845

No.	DATE	REVISION	BY
8-16-06		REVISED ENTRANCE WALL	ALDEI
3-9-11		REVISE TITLE BLOCK	BEF
8-16-06		PARKING LOT CHANGE & ADD DECK/PATIO FOR BLDGS	ALDEI
1-5-06		LEFT FILLET RADI, SIDEWALK, CURB & GUTTER TO BE RELOCATED 3' OFF EXISTING CURBS	ALDEI
4-25-05		LOWERED ELEVATION BY A FOOT FOR UNITS 1-75 & PROVIDE BEND TO SIDEWALK CONNECTING HARVEL DRIVE & SEWER FRONTYARD FOR COMMUNITY CENTER, PARKED PUBLIC WATER & PUBLIC SEWER CONTRACT NUMBER	ALDEI

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE OF ENGINEER: DAVID C. WOESSNER
 DATE: DEC. 10, 2004

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 OF DEVELOPER: DALE THOMPSON
 DATE: DEC. 10, 2004

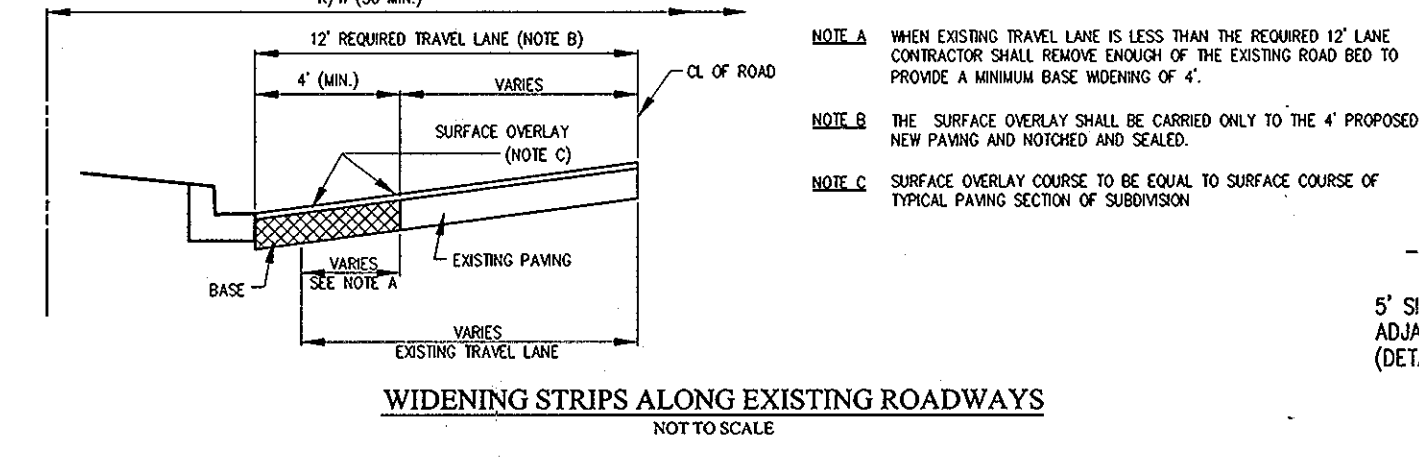
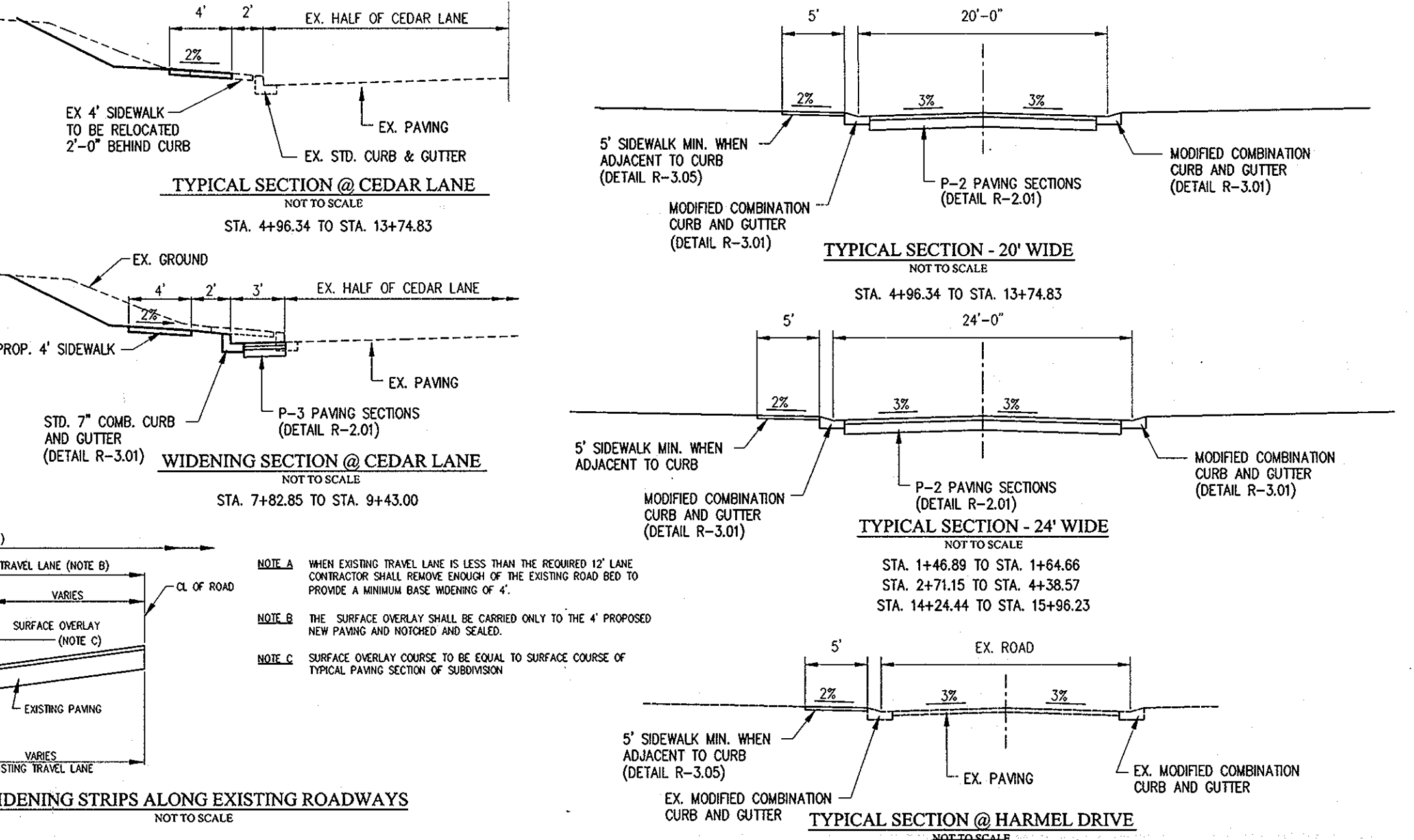


APPROVED: DEPARTMENT OF PLANNING AND ZONING
 SIGNATURE OF CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature]
 DATE: 1/5/05
 SIGNATURE OF CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature]
 DATE: 1/25/05
 SIGNATURE OF DIRECTOR, DEPARTMENT OF PLANNING AND ZONING: [Signature]
 DATE: 2/6/05

TITLE: **UTILITY PLAN**
 PROJECT NAME: **SCOTS GLEN NORTH**
 BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A, AND COMMUNITY CENTER
 PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
 A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3
 DES.: DCW/ILAVG JOB.: PROJ.: DATE: 12-10-04
 DRW.: AVG/DTA/JNC CHK.: D.C.W. SCALE: 1" = 40' SHEET 4 OF 25
 WP-11-108 S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101



CURVE#	LENGTH	RADIUS	TANGENT	DELTA	CHORD	DIRECTION
C1	105.62	70.00	65.80	86°27'15"	95.88	S 45°29'45" E
C2	22.59	70.00	11.39	18°29'14"	22.49	N 11°30'44" W
C3	63.48	45.00	38.31	80°49'29"	58.35	N 61°10'05" W
C4	70.80	45.00	45.11	90°08'28"	63.72	S 33°20'56" W
C5	64.87	45.00	39.53	82°35'31"	59.40	S 53°01'04" E
C6	26.31	70.00	13.31	21°31'59"	26.15	N 74°55'11" E
C7	86.42	105.00	45.83	47°09'23"	84.00	S 87°43'53" W
C8	81.15	70.00	45.83	66°25'19"	76.68	N 30°56'32" E



SECTION NUMBER	ROAD AND STREET CLASSIFICATION	PAVING SECTIONS (DETAIL R-2.01)	PAVING MATERIALS	CONCRETE BASE ALTERNATIVES
P-2	RESIDENTIAL ZONES LOCAL, COL-DE-SAC STS, ALLEYS AND LOCAL, PAVED SIDEWALKS, SIDEWALKS, TRAVELWAYS, APARTMENTS AND COMMERCIAL- INDUSTRIAL ZONES WITH NO MORE THAN 15 HEAVY TRUCKS PER DAY	1 1/2" BIT CONC. SURFACE 5" BIT CONC. BASE	1 1/2" BIT CONC. SURFACE 5" BIT CONC. BASE	1 1/2" BIT CONC. SURFACE 4 1/2" BIT CONC. BASE
P-3	RESIDENTIAL ZONES HIGH AND MAJOR COLLECTORS LOCAL AND COL-DE-SAC STREETS TRAVELWAYS A FUTURE AND COMMERCIAL- INDUSTRIAL ZONES WITH MORE THAN 15 HEAVY TRUCKS PER DAY	1 1/2" BIT CONC. SURFACE 5" BIT CONC. BASE	1 1/2" BIT CONC. SURFACE 5" BIT CONC. BASE	1 1/2" BIT CONC. SURFACE 4 1/2" BIT CONC. BASE

NO.	DATE	REVISIONS
1	6-16-06	REVISED PARKING LOT AT COMMUNITY CENTER
2	1-5-06	LEFT FILLET RADIUS @ ENTRANCE, SIDEWALK, CURB & GUTTER TO BE RELOCATED 3' OFF EXISTING CURB & GUTTER

TITLE: PLAN, PROFILE AND DETAILS

PROJECT NAME: CEDAR VILLAS - PHASE I
BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A, AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

W/P-11-108 S-04-03 PB CASE 362 WP 04-114 E-05-52 E-08-12

American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

Harmel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Leida Hamilton
CHIEF, DIVISION OF LAND DEVELOPMENT

Charles Dammann
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Paul H. ...
DIRECTOR - DEPARTMENT OF PLANNING AND ZONING

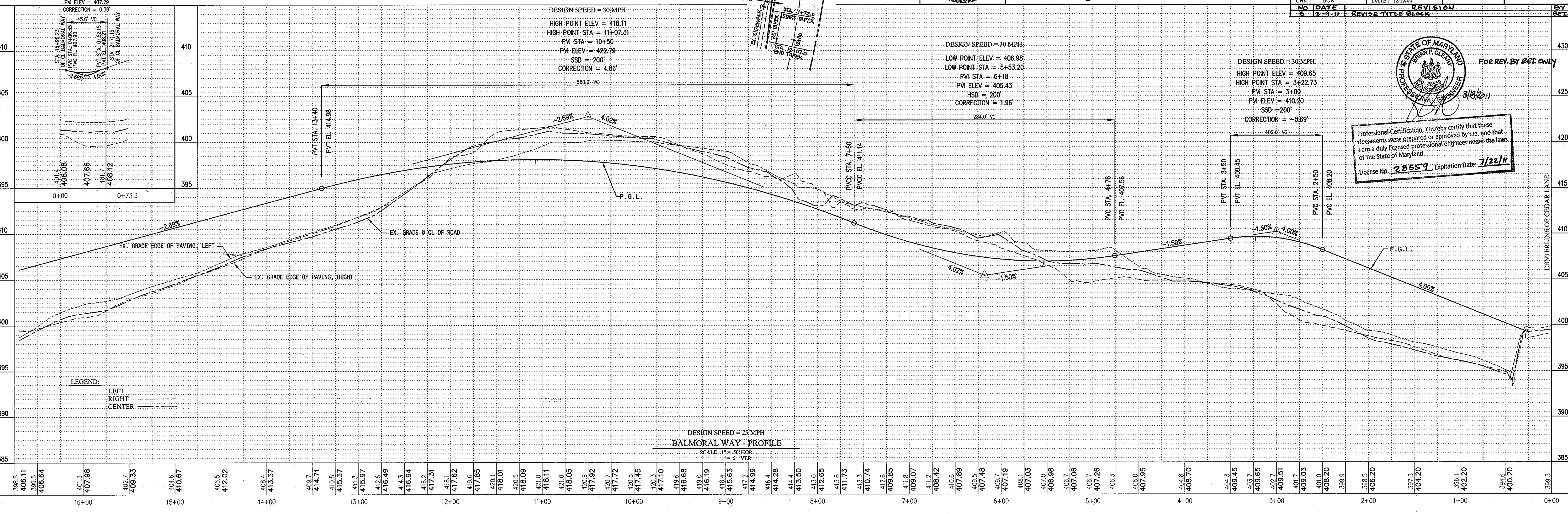
DATE: 1/28/05
DATE: 1/5/05
DATE: 3/1/05

LOW POINT ELEV = 407.66
LOW POINT STA = 0+24.84
PVI STA = 0+29.35
PVI ELEV = 407.29
CORRECTION = 0.39'

DESIGN SPEED = 30 MPH
HIGH POINT ELEV = 418.11
HIGH POINT STA = 11+07.31
PVI STA = 10+50
PVI ELEV = 422.79
SSD = 200'
CORRECTION = 4.86'

DESIGN SPEED = 30 MPH
LOW POINT ELEV = 406.96
LOW POINT STA = 5+53.20
PVI STA = 6+18
PVI ELEV = 405.43
SSD = 200'
CORRECTION = 1.96'

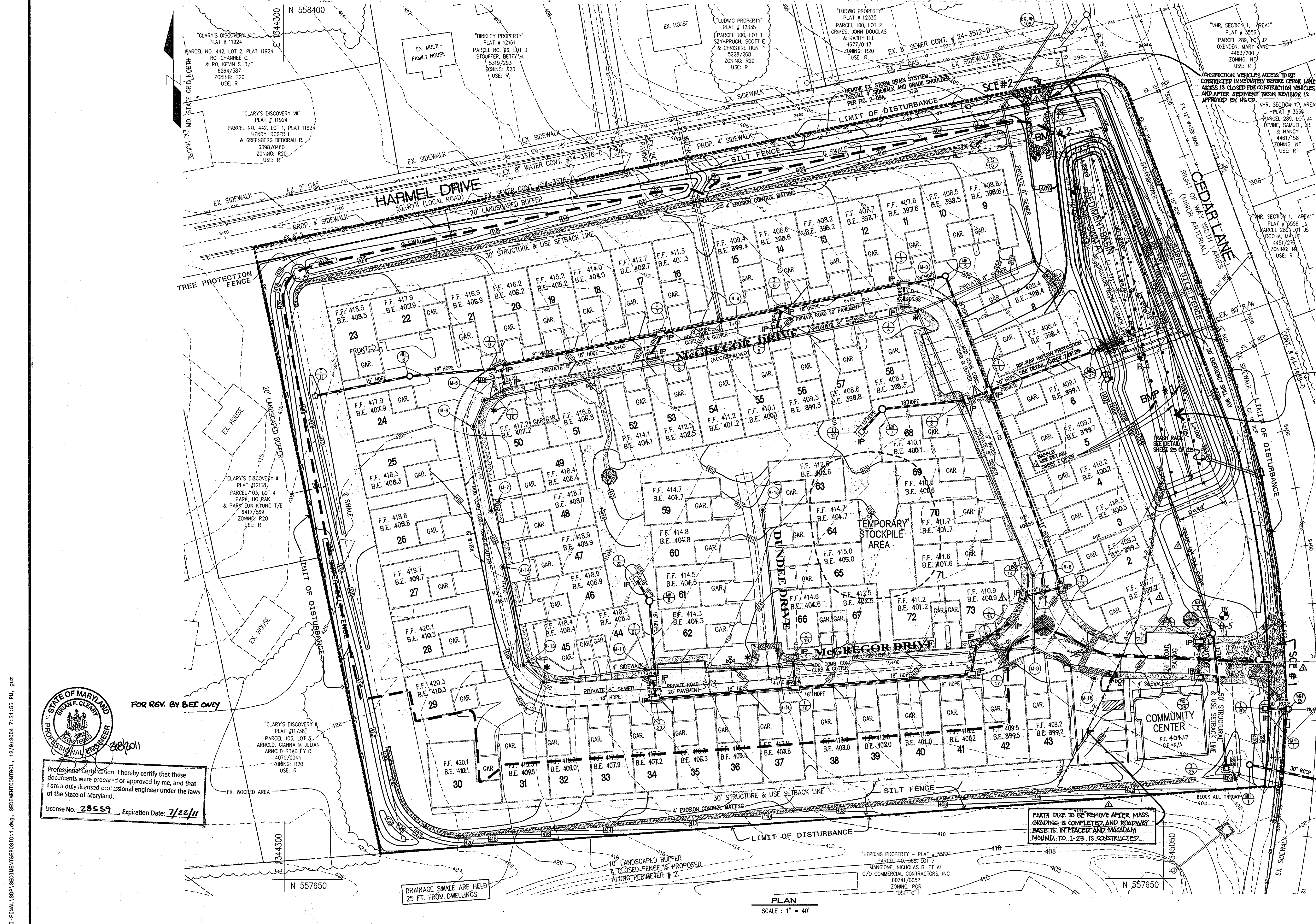
DESIGN SPEED = 30 MPH
HIGH POINT ELEV = 409.65
HIGH POINT STA = 3+22.73
PVI STA = 3+00
PVI ELEV = 410.20
SSD = 200'
CORRECTION = -0.69'



FOR REV. BY BET ONLY

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: 7/22/17



- ### SEQUENCE OF CONSTRUCTION
- OBTAIN A GRADING PERMIT.
 - NOTIFY MISS UTILITY AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-277-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION INSPECTION AT 410-313-1330 24 HOURS BEFORE STARTING WORK.
 - INSTALL ALL TREE PROTECTION FENCE FOR CHRISTMAS TREE (1 DAY)
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, SUPER SILT FENCE, EARTH DIKES AND OTHER SEDIMENT CONTROL DEVICES (1 WEEK)
 - CLEAR AND GRUB AREA OF TEMPORARY SEDIMENT EROSION AND CONSTRUCT RISER AND BARREL (2 WEEKS)
 - CONSTRUCT ROAD TO SUBGRADE, INSTALL STORM DRAIN SYSTEMS, WATER AND SEWER MAINS, INCLUDING BMP #2, BUT EXCLUDING STORM DRAIN PIPE SYSTEM FOR LOTS 23 & 24, THE OUTFALL PIPE AND THE WATER MAIN CROSSING CEDAR LANE (14 WEEKS)
 - INSTALL INLET PROTECTION AT ALL INLETS (2 WEEKS)
 - CONSTRUCT PERIMETER BERMS AND WATER QUALITY SWALES AND STABILIZE WITH PERMANENT SEEDING (2 WEEKS)
 - GRADE BUILDING FOOTPRINTS TO REQUIRED GRADE AND CONSTRUCT BASEMENT FOUNDATIONS (12 WEEKS)
 - CONSTRUCT STORM DRAIN FROM OUTFALL TO MANHOLE MH-1 AND WATER QUALITY INLETS 123 AND 124, AND THE 8" WATER MAIN CROSSING CEDAR LANE (8 WEEKS)
 - WITH THE APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE EARTH DIKES ACROSS MCGREGOR DRIVE (2 DAYS)
 - CONSTRUCT ROAD BASE COURSE AND INSTALL CURB AND GUTTER GRADE SITE TO PROPOSED GRADE AND STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEEDING (3 WEEKS)
 - INSTALL SEDIMENT AND EROSION CONTROL DEVICES AROUND THE TEMPORARY BASIN PRIOR TO ITS REMOVAL (1 DAY)
 - WHEN ALL DISTURBED AREAS ON THE SITE HAVE BEEN STABILIZED WITH PERMANENT SEEDING AND WITH THE APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE TEMPORARY SEDIMENT BASIN INCLUDING OUTFALL STRUCTURE (2 WEEKS)
 - CONSTRUCT STORM DRAIN FROM MANHOLE MH-1 AND FROM INLET 125 TO MANHOLE MH-3 (1 WEEK)
 - INSTALL BMP #1 AND CONSTRUCT BFO RETENTION FACILITY (2 WEEKS)
 - WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, AFTER ALL DISTURBED AREAS ARE STABILIZED WITH PERMANENT SEEDING, REMOVE ALL SEDIMENT AND EROSION CONTROL DEVICES (1 WEEK)
 - THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS. REMOVE SEDIMENT FROM THE POND WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED. ALL SEDIMENT MUST BE PLACED UPSTREAM OF THE APPROVED TRAPPING DEVICE.

SEDIMENT BASIN No. 1

DRAINAGE AREA = 0.96 Ac. 725 C.F.
 VOLUME REQUIRED = 0.96 X 3600 = 3456 C.F. 7.25 X 3600 = 26,100 C.F.
 ACTUAL VOLUME OF BASIN = 106,901 C.F. @ ELEV. 400.0 TO 412 C.F. @ EL. 400.50
 WET VOL. REQUIRED (DEWATERING) = 1800 X 0.96 = 17,928 C.F. 13,050 C.F.
 WET VOL. PROVIDED = 25,857 @ ELEV. 395.2 - 13,347 C.F. @ EL. 396.35
 DRY VOL. REQUIRED = 1800 X 0.96 = 17,928 C.F. 13,050 C.F.
 DRY VOL. PROVIDED = 22,226 C.F. @ ELEV. 397.0 - 13,315 @ EL. 398.5 X (64,119 - 26,859) = (26,062 - 13,347)
 CLEANOUT VOLUME = 0.96 X 900 = 864 C.F. 7.25 Ac. X 900 = 6,525 C.F.
 RISER CREST ELEV. = 397.0 - 398.15
 PERMANENT POOL ELEVATION = 395.2 - 396.35
 DIST. FROM RISER CREST TO PERM. POOL ELEV. = 1.86' 1.80'
 BASIN CLEANOUT ELEV. = 396.90
 DIST. FROM RISER CREST TO CLEANOUT ELEV. = 3.16' 2.77'
 $Q_1 = 19.9 \text{ CFS}$
 $EX. Q_1 = 1.24 \text{ CFS}, Q_2 = 0.60 \text{ CFS}$

SEDIMENT BAFFLE ANALYSIS

AREA, A @ EL. 395.2 - 396.35
 (PERM. POOL = 13,272 S.F.) 0.631
 $D = 42' 45"$
 $L_1 + L_2 + L_3 = 175' + 175' + 30' = 380'$
 $L_e = L_1 + L_2 + L_3 + L_4 = 290' + 275' + 115' + 160' = 780' 380'$
 FACTOR = $\frac{L_e}{D} = \frac{780}{42} = 18.57 > 2.0$
 $\frac{380}{147.4} = 2.57 > 2.0$

STATE OF MARYLAND
 BRUNN F. CLEARY
 PROFESSIONAL ENGINEER
 License No. 28559, Expiration Date: 7/22/11
 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.

PREPARED BY:
American Land Development and Engineering, Inc.
 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
 TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
 Harmel PSC, LLC.
 6300 Woodside Court Suite A
 Columbia, Md. 21046

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 DAVID W. WOSSNER
 DEC. 10, 2004 DATE

DEVELOPER'S CERTIFICATE
 I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 OBSERVE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 DALE THOMPSON
 DEC. 10, 2004 DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
 Jim Moyer
 D.A. NATURAL RESOURCE CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Phil R. R...
 HOWARD SCD

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director - Department of Planning and Zoning

TITLE:		EROSION, SEDIMENT AND EROSION CONTROL PLAN	
PROJECT NAME:		SCOTS GLEN NORTH	
BULDBLE BULK PARCEL "A" UNITS 1-74, 84, AND COMMUNITY CENTER PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2A, 2B AND 32			
W/P-11-108		S-04-03 PB CASE 362 WP 04-114 F-05-32 F-05-101	
DES.:	DCW/JL/VAG	JOB.:	PROJ.:
DRW.:	AVG/DTA/JNC	CHK.:	D.C.W.
DATE: 12-10-04		SCALE: 1" = 40'	
SHEET 6 OF 25		SDP-04-124	

1: SUBDIVISION PROJECTS CEDARVILLE CEDAR VILLA 1-FINAL (SDP) SEDIMENT/EROSION CONTROL, 12/19/2004 7:31:55 PM, DWG

STANDARD SEDIMENT CONTROL NOTES

- 1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
- 2. All vegetative and structural practices to be installed according to the provisions of this plan and are to conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.

20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

DEFINITION Using vegetation as cover for barren soil to prevent it from forces that cause erosion. PURPOSE Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall. Thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and water resources.

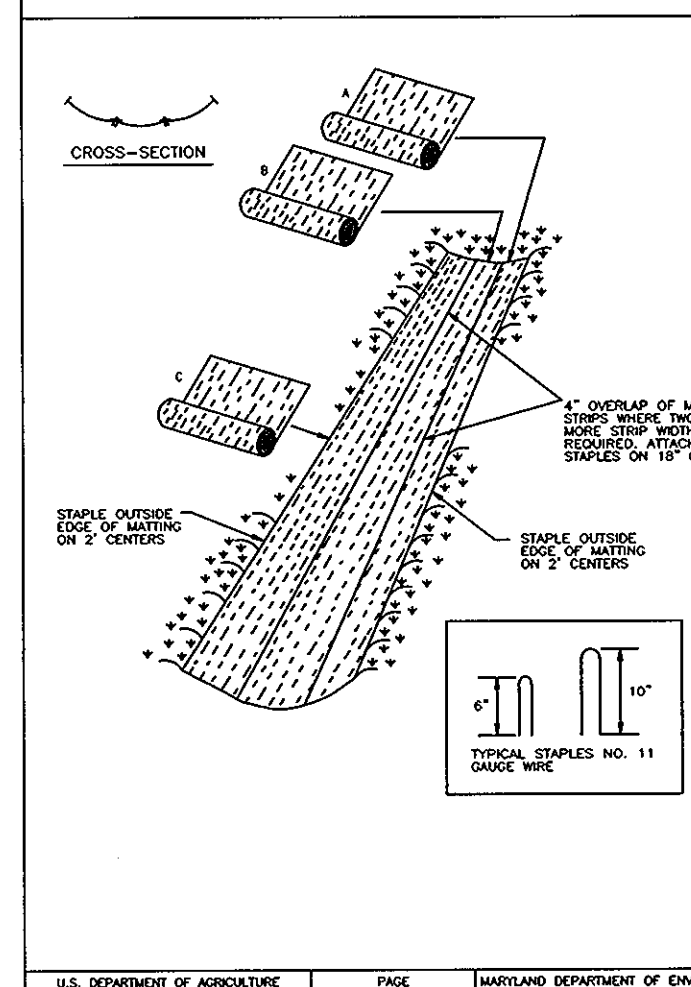
- 1. This practice is limited to areas having 2:1 or flatter slopes where: a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
- 2. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.

STANDARDS AND SPECIFICATIONS FOR TOPSOIL

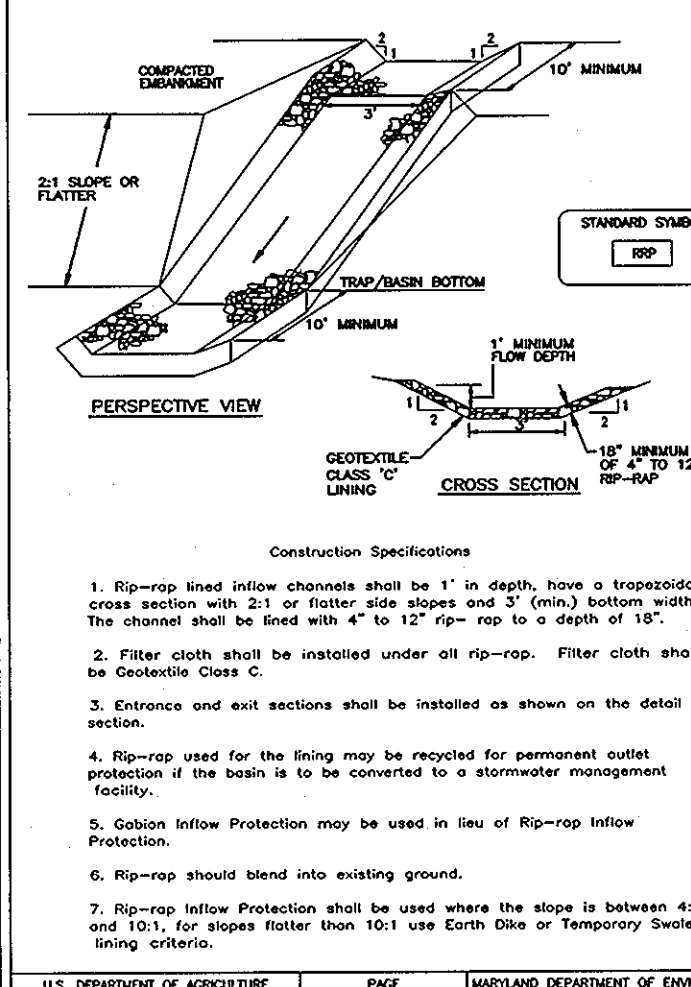
DEFINITION Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation. PURPOSE To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

- 1. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCA in cooperation with Maryland Agricultural Experiment Station.

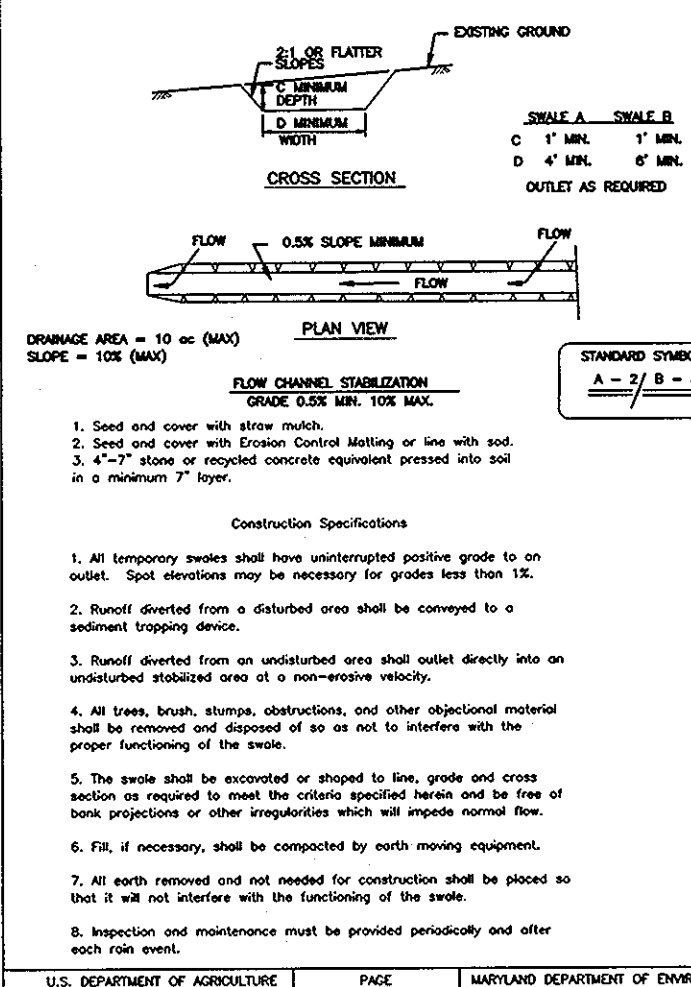
DETAIL 30 - EROSION CONTROL MATTING



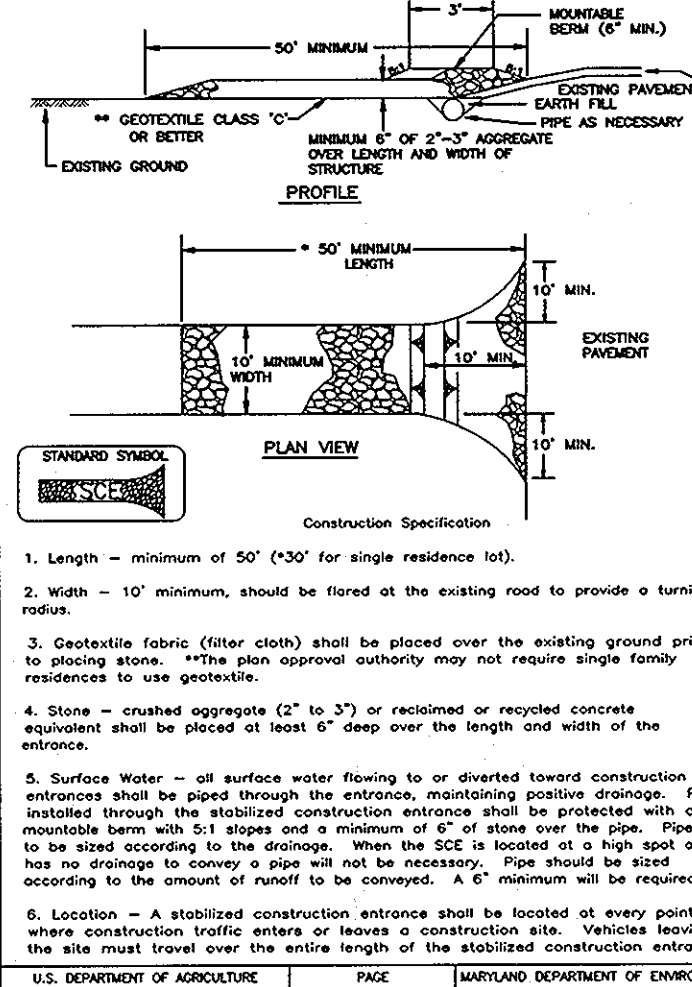
DETAIL 5 - RIP-RAP INFLOW PROTECTION



DETAIL 2 - TEMPORARY SWALE



DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



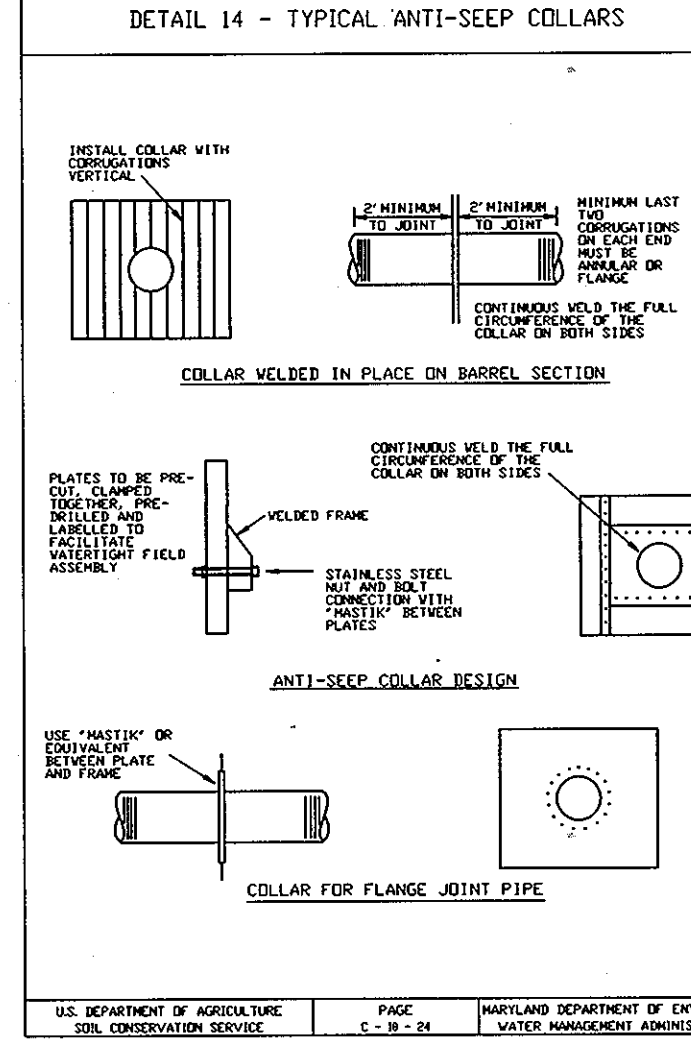
SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- A. Site Preparation 1. Install erosion and sediment control structures (filter terraces or permanent) such as diversion, grade stabilization structures, berms, waterways, or sediment control basins.

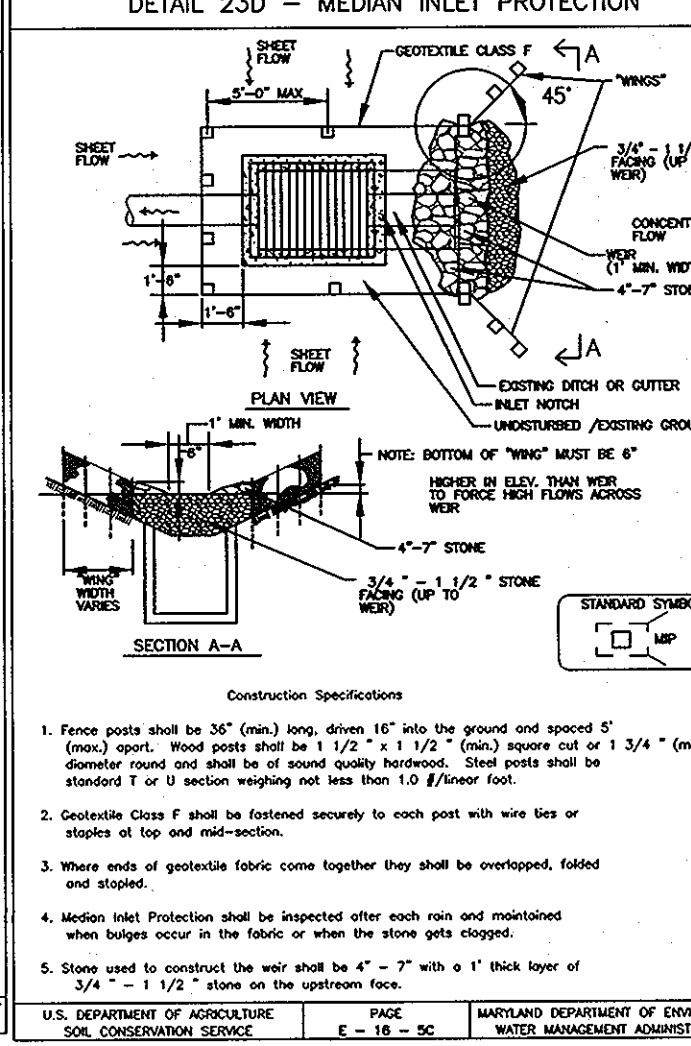
CONSTRUCTION AND MATERIAL SPECIFICATIONS

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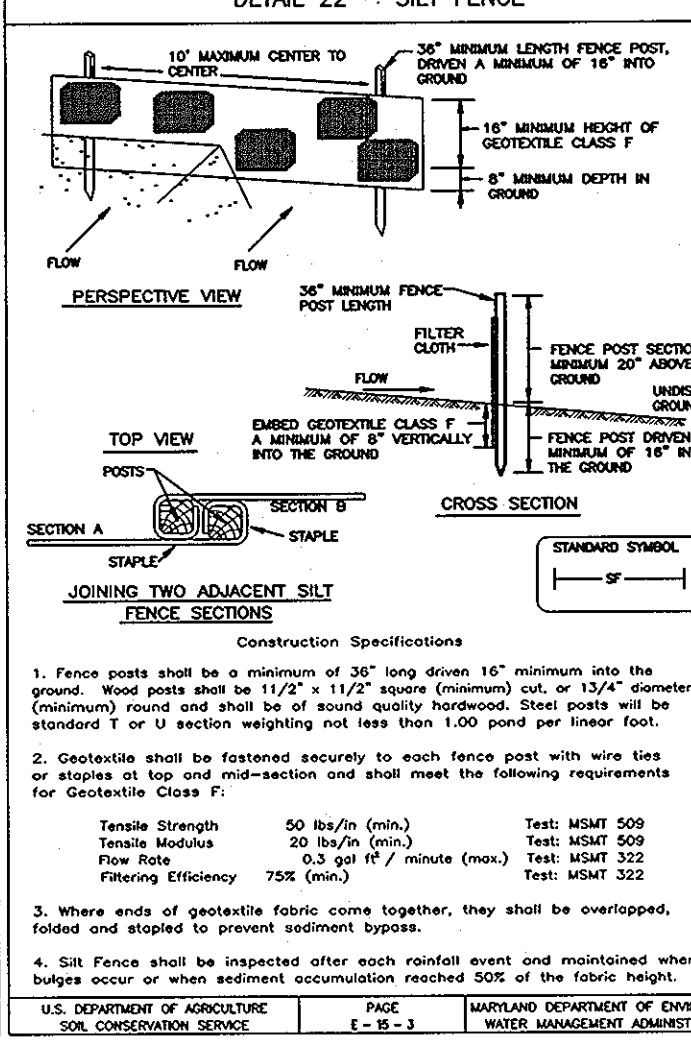
DETAIL 14 - TYPICAL ANTI-SLEEP COLLARS



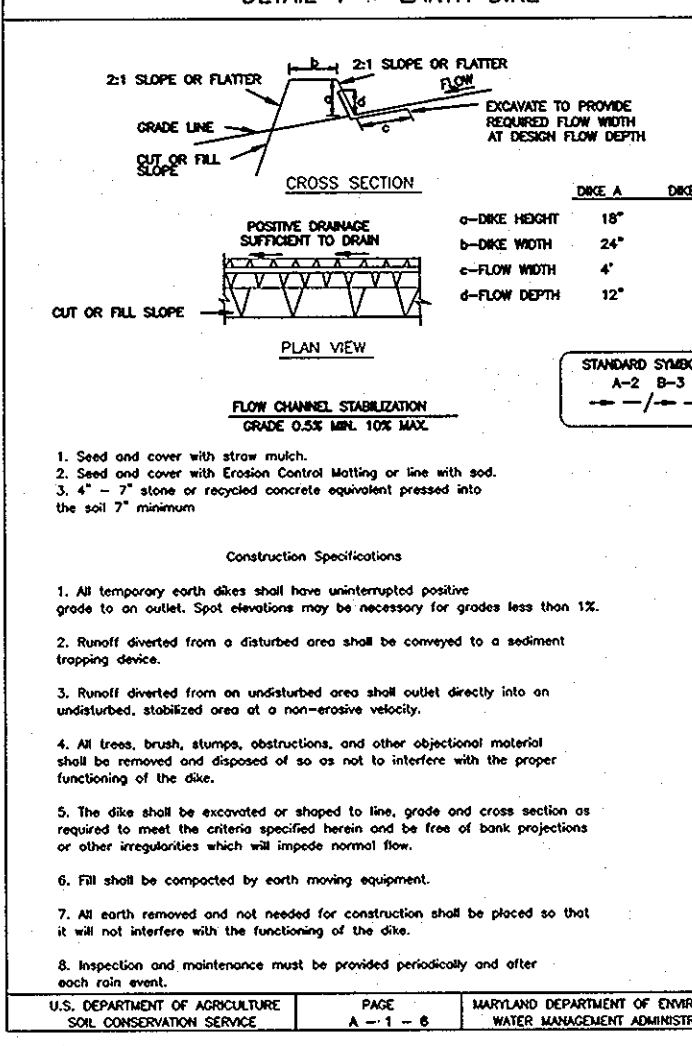
DETAIL 23D - MEDIAN INLET PROTECTION



DETAIL 22 - SILT FENCE



DETAIL 1 - EARTH DIKE



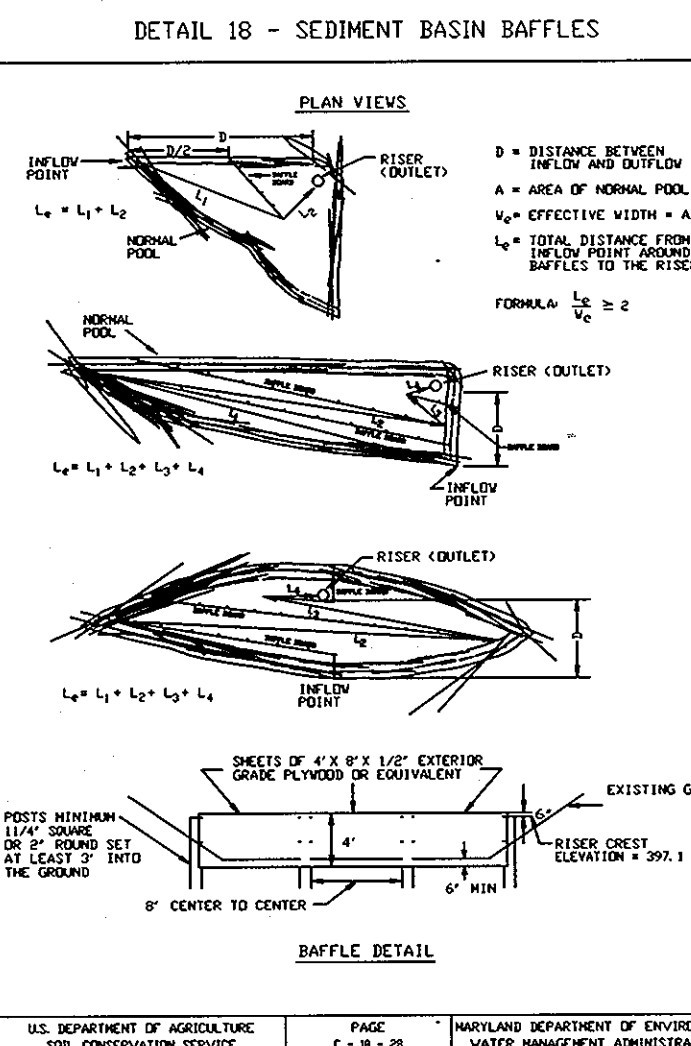
PERMANENT SEEDING NOTES

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

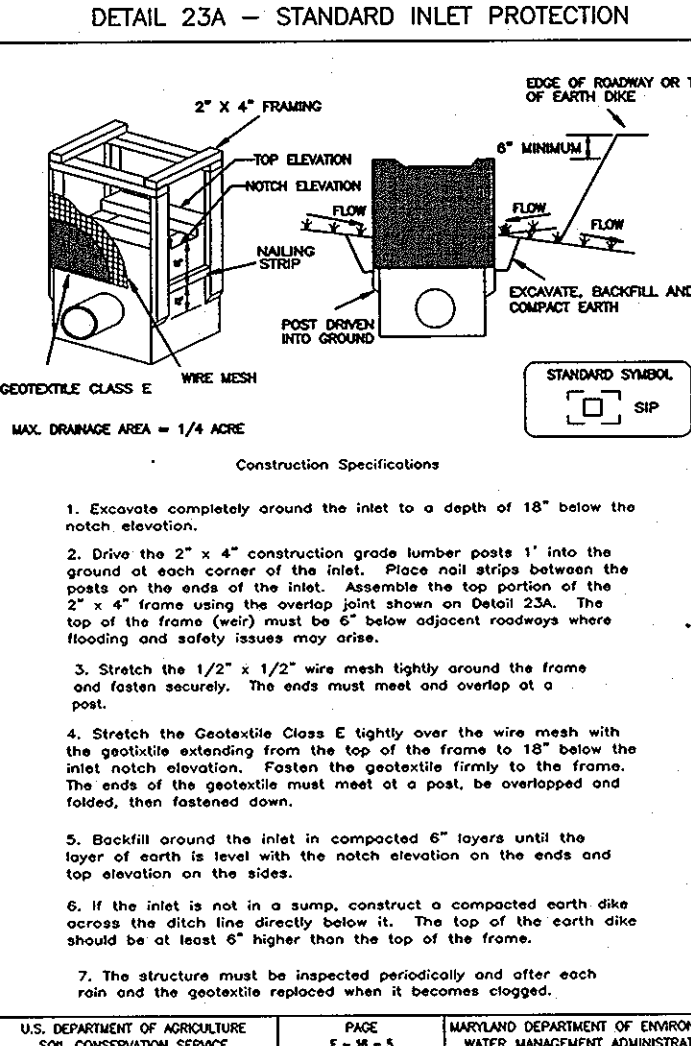
CONSTRUCTION AND MATERIAL SPECIFICATIONS

- I. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCA in cooperation with Maryland Agricultural Experiment Station.

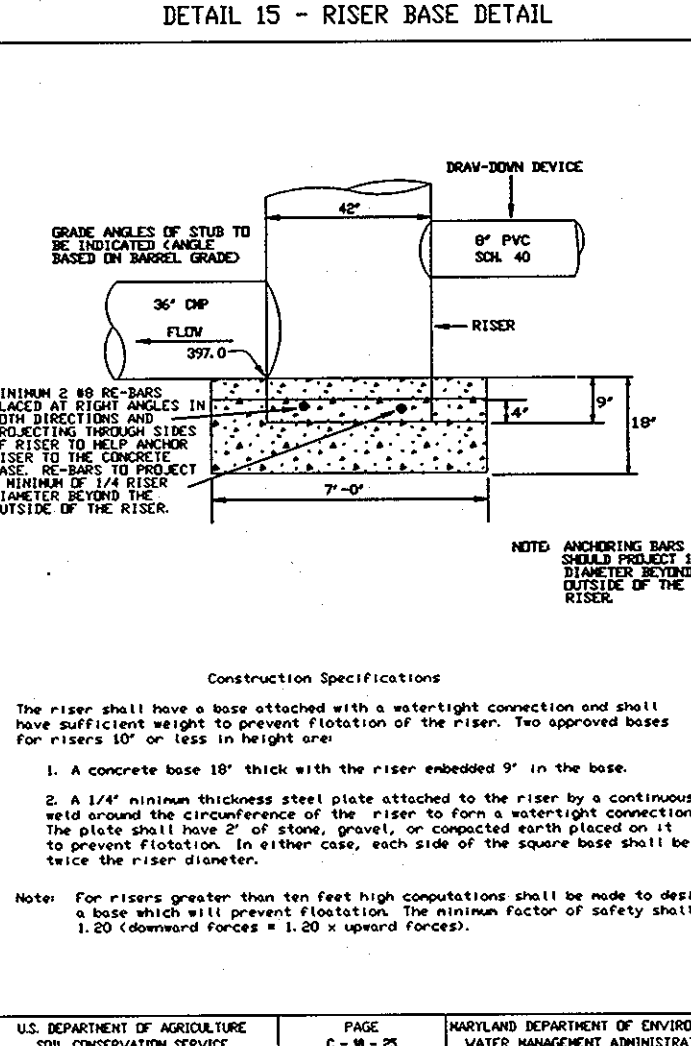
DETAIL 18 - SEDIMENT BASIN BAFFLES



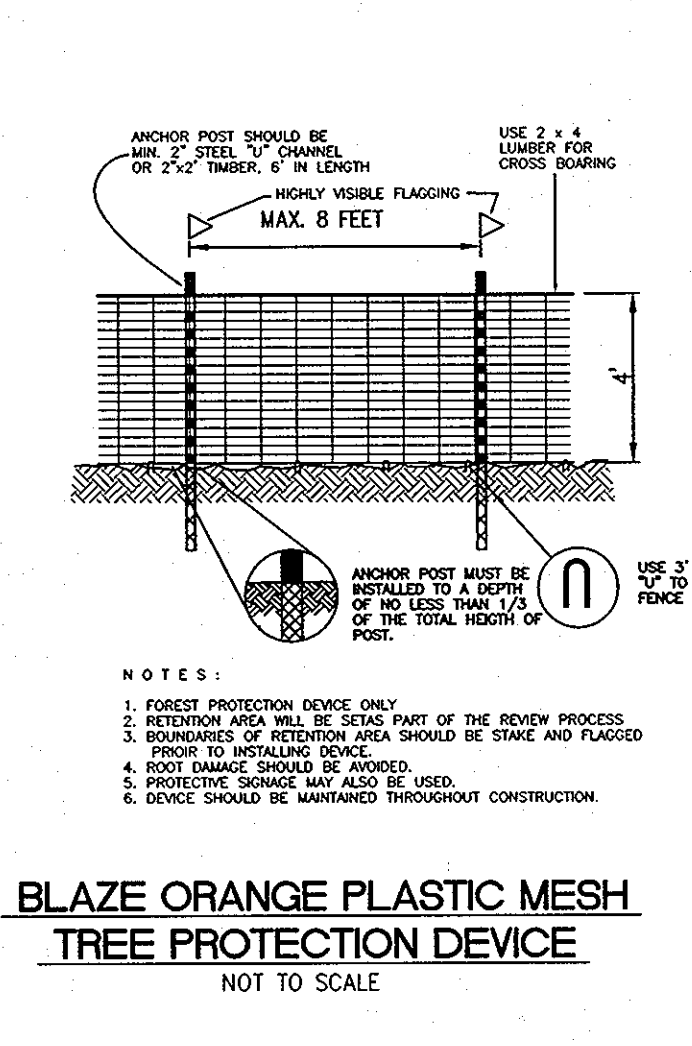
DETAIL 23A - STANDARD INLET PROTECTION



DETAIL 15 - RISER BASE DETAIL



BLAZE ORANGE PLASTIC MESH TREE PROTECTION DEVICE



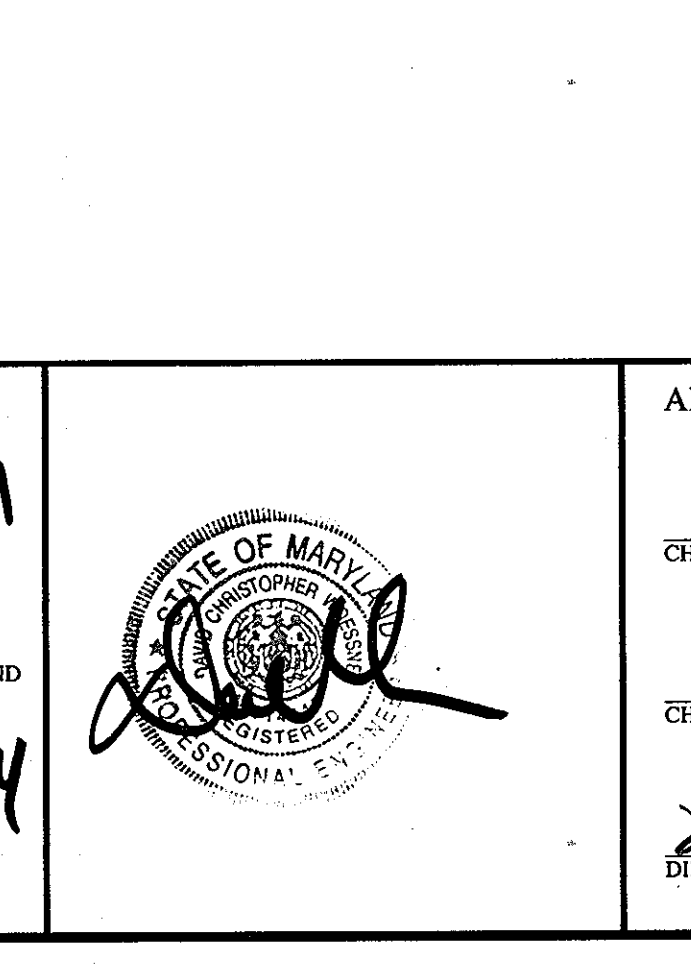
PERMANENT SEEDING NOTES

- Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.
- Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, unless previously loosened.

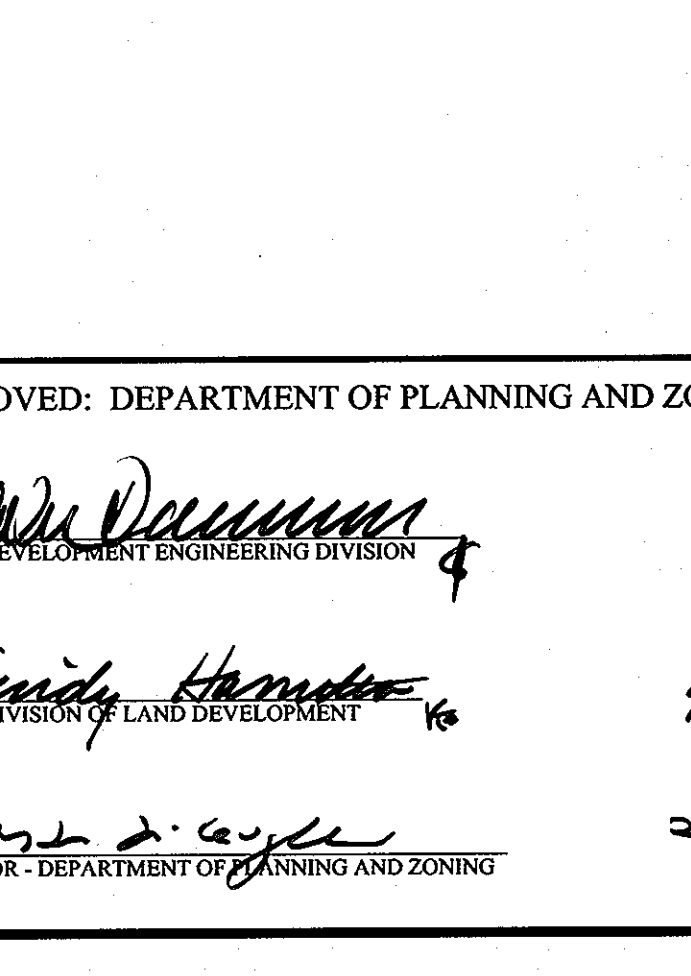
CONSTRUCTION SPECIFICATIONS

- 1. The area under and around mat shall be cleared, graded and stripped of any vegetation or soil. The pool area shall be cleared.

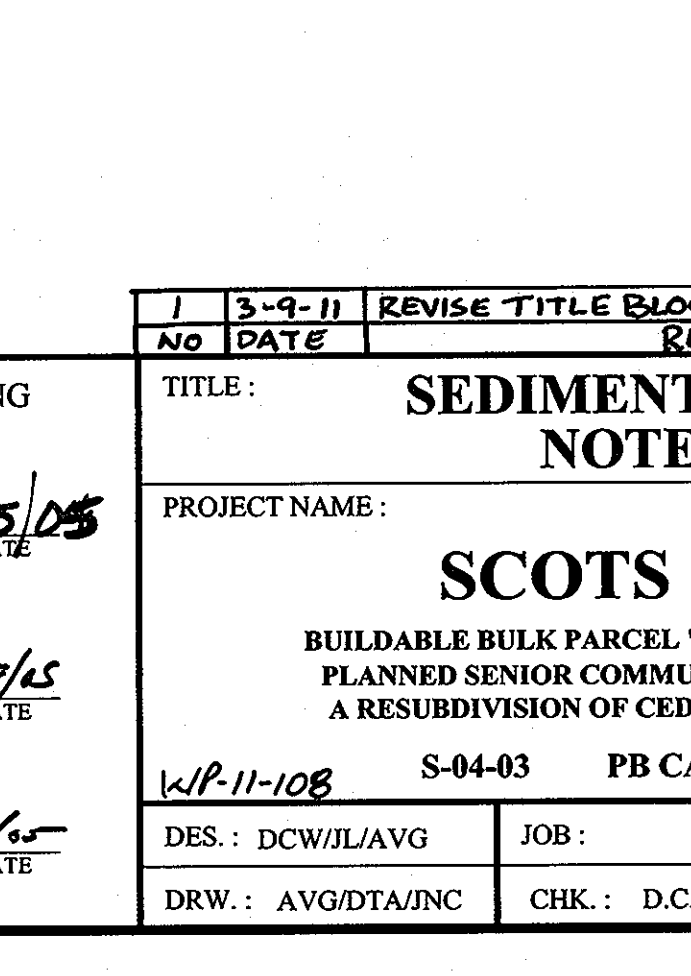
DETAIL 18 - SEDIMENT BASIN BAFFLES



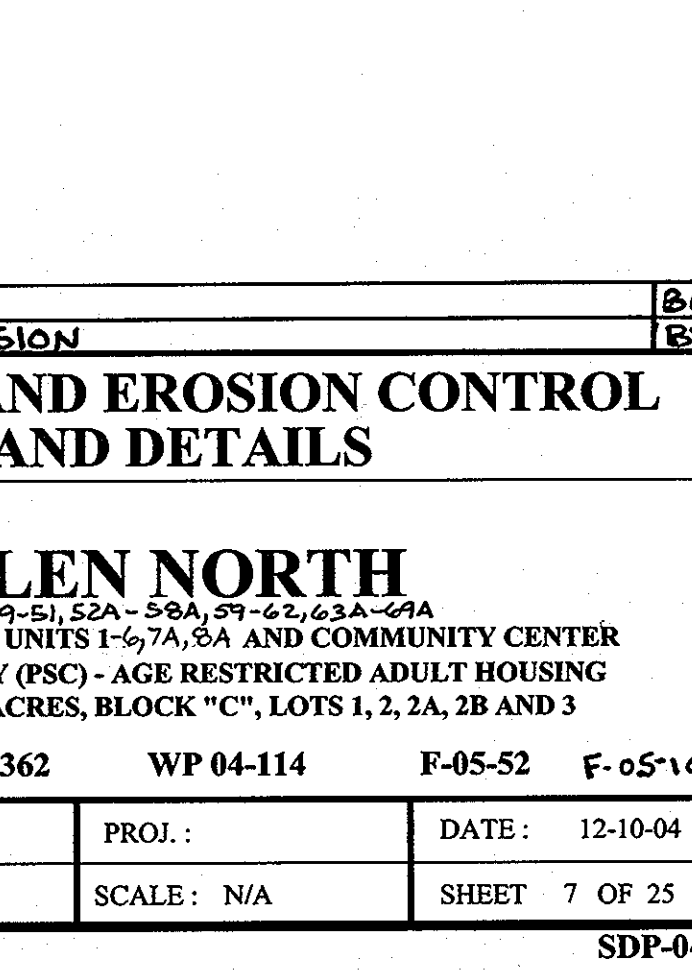
DETAIL 23A - STANDARD INLET PROTECTION



DETAIL 15 - RISER BASE DETAIL



BLAZE ORANGE PLASTIC MESH TREE PROTECTION DEVICE



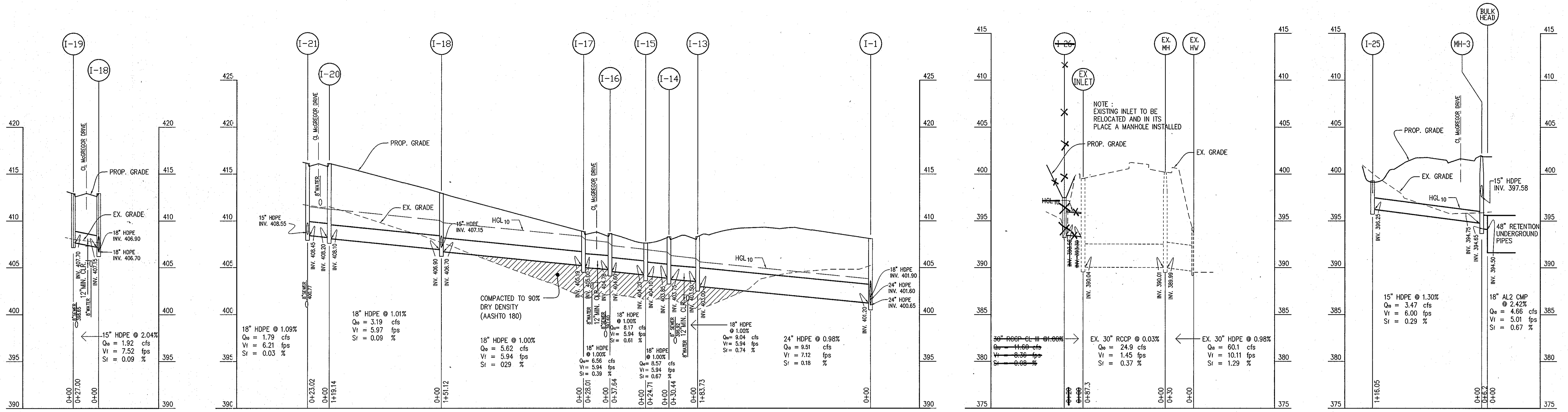
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 20559, Expiration Date: 7/22/14

AMERICAN LAND DEVELOPMENT AND ENGINEERING, INC. 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163. TEL: (410) 465-7903. FAX: (410) 465-3845. Harmel PSC, LLC. 6300 Woodside Court Suite A Columbia, Md. 21046

ENGINEER'S CERTIFICATE AND DEVELOPER'S CERTIFICATE. I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS. APPROVED: DEPARTMENT OF PLANNING AND ZONING. CHIEF, DEVELOPMENT ENGINEERING DIVISION. DATE: 11/5/05.

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS. PROJECT NAME: SCOTS GLEN NORTH. BUILDABLE BULK PARCEL "A" - UNITS 1-67A, 68A AND COMMUNITY CENTER PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2A, 2B AND 3. DESIGNED BY: DCW/JLV. JOB: S-04-03. PB CASE 362. WP 04-114. F-05-101.

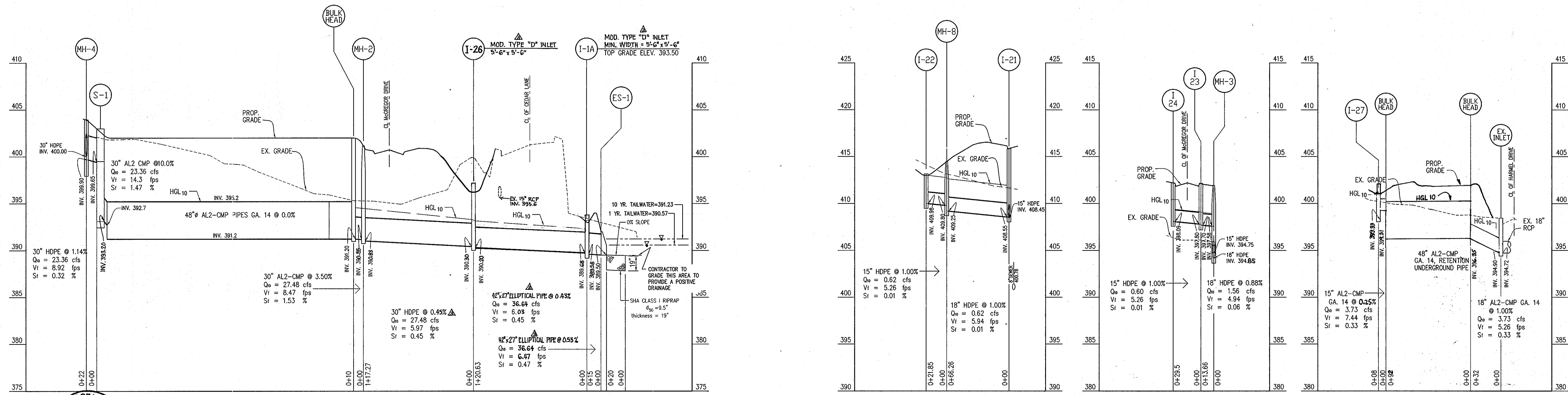


PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VER.

PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VER.

PROFILE
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1" = 5' VER.

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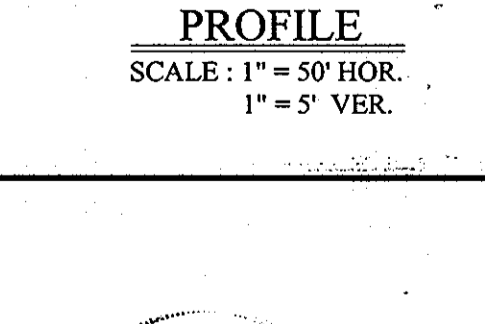


FOR REV. BY BEI ONLY
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 28559, Expiration Date: 7/22/11

NO.	DATE	REVISION	BY
13	7-18-12	REVISE INVERT ELEVATIONS ON I-27 PROFILE TO REFLECT AS-BUILT CONDITIONS	SAA

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
SIGNATURE OF ENGINEER: DAVID C. WOESSNER
DATE: DEC. 10, 2004

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
SIGNATURE OF DEVELOPER: DALE THOMPSON
DATE: DEC. 10, 2004



APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR - DEPARTMENT OF PLANNING AND ZONING

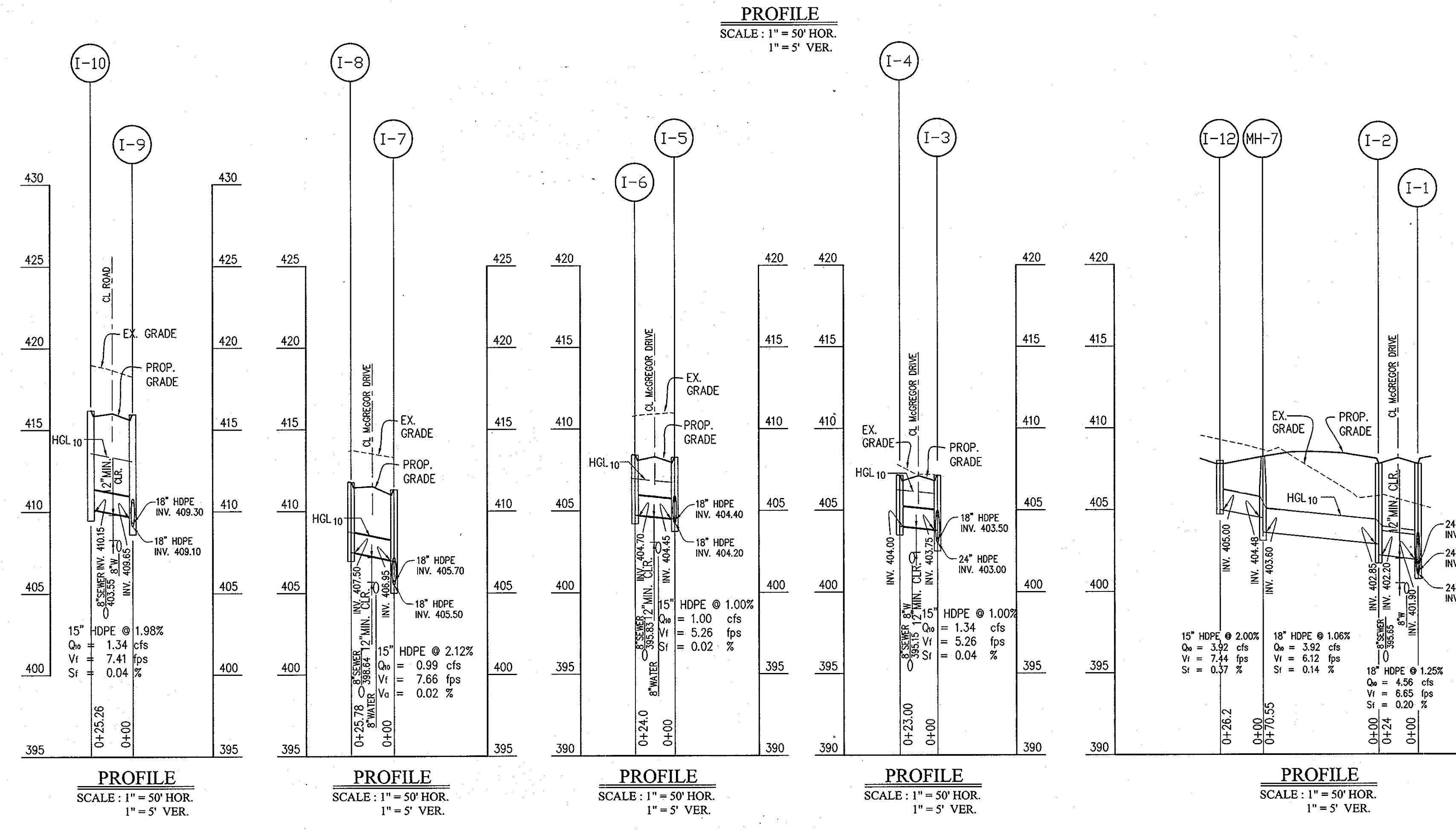
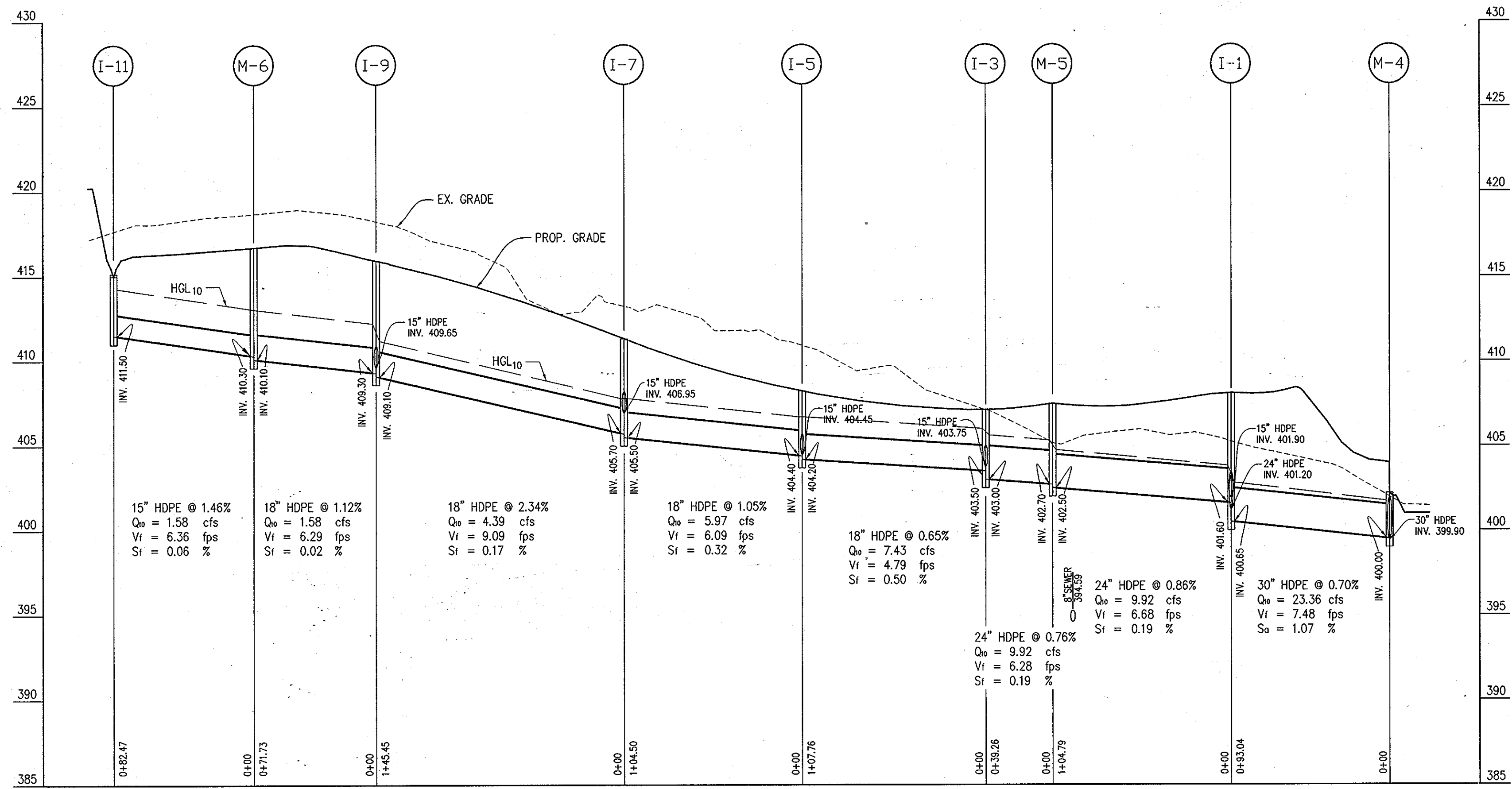
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

Harmel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

NO.	DATE	REVISION	BY
1	11-11-08	REVISE TITLE BLOCK	AVG/DJA/JNC

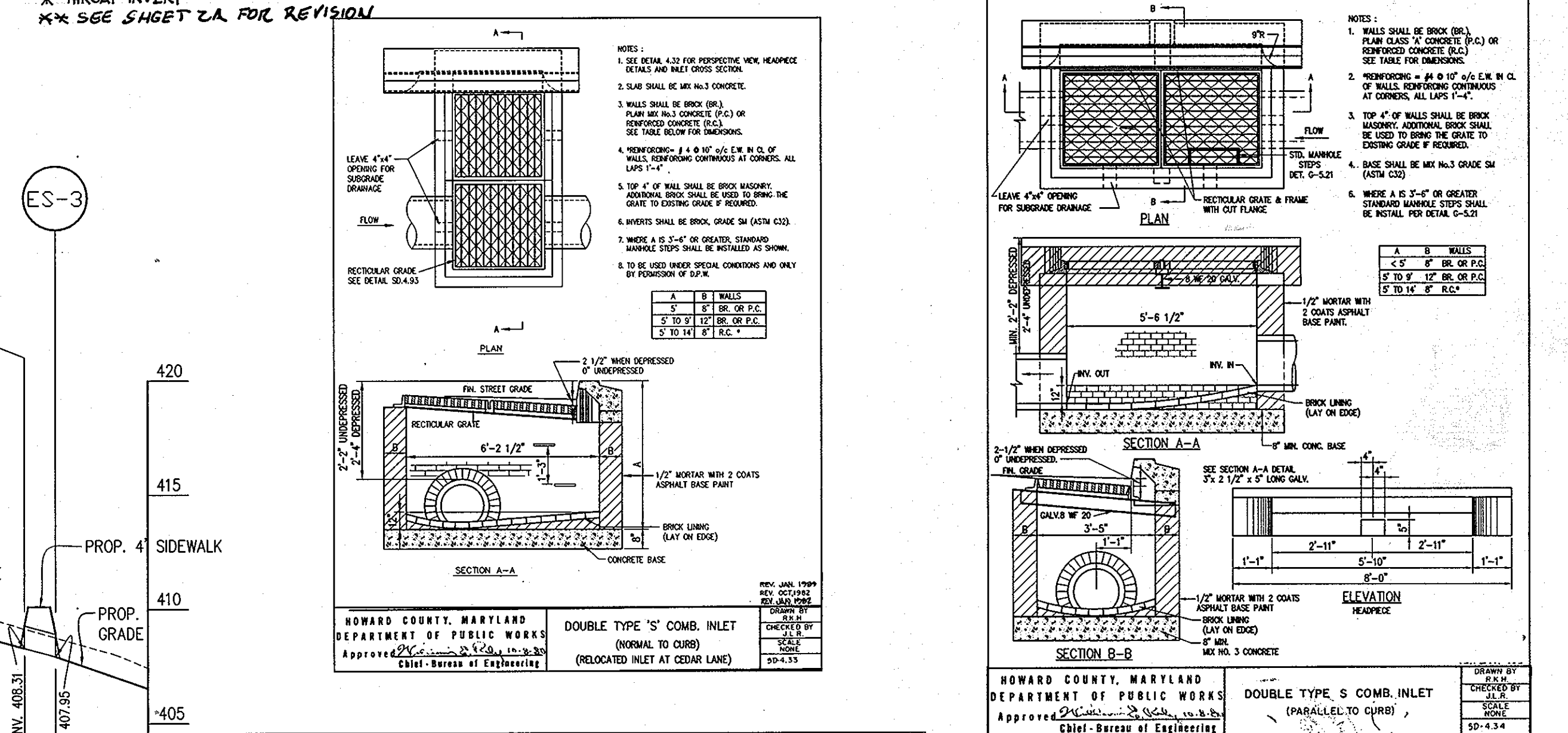
STORM DRAIN PROFILES
PROJECT NAME: SCOTS GLEN NORTH
BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3
W/P-11-108 S-04-03 PB CASE 362 W/P-04-114 F-05-52 F-05-101

DES: DCW/JLAVG JOB: PROJ: DATE: 12-10-04
DRW: AVG/DJA/JNC CHK: D.C.W. SCALE: AS SHOWN SHEET 8 OF 25



STRUCTURE SCHEDULE

STRUCTURE NO.	TYPE	TOP ELEVATION	INV. IN	INV. OUT	ROAD NAME	ROAD STA.	OFFSET	HO. CO. STD.
I-1	DOUBLE TYPE S COMB. INLET	408.37	401.60, 401.90, 401.20	400.65	McGREGOR DRIVE	44+37.66	12' R	S.D. 4.34
I-2	A-5 (2'-6" WIDE)	408.37	402.85	402.00	McGREGOR DRIVE	44+37.66	12' L	S.D. 4.01
I-3	DOUBLE TYPE S COMB. INLET	407.40	403.50, 403.75	403.00	McGREGOR DRIVE	5+53.2	10' R	S.D. 4.34
I-4	A-5 (2'-6" WIDE)	407.40	404.00	404.00	McGREGOR DRIVE	5+53.63	10' L	S.D. 4.01
I-5	DOUBLE TYPE S COMB. INLET	408.51	404.40, 404.45	404.20	McGREGOR DRIVE	6+58.93	10' R	S.D. 4.34
I-6	A-5 (2'-6" WIDE)	408.66	404.00	404.00	McGREGOR DRIVE	6+65.97	10' L	S.D. 4.01
I-7	DOUBLE TYPE S COMB. INLET	411.60, 411.45	405.70, 406.95	405.50	McGREGOR DRIVE	7+63.43	10' R	S.D. 4.34
I-8	A-5 (2'-6" WIDE)	412.04	409.65, 409.30	409.10	McGREGOR DRIVE	7+75.08	10' L	S.D. 4.01
I-9	DOUBLE TYPE S COMB. INLET	416.21	409.65, 409.30	409.10	McGREGOR DRIVE	9+03.20	10' R	S.D. 4.34
I-10	A-5 (2'-6" WIDE)	416.30	409.65, 409.30	409.10	McGREGOR DRIVE	9+02.10	10' L	S.D. 4.01
I-11	TYPE "D" INLET	415.02	414.19*	411.50	McGREGOR DRIVE	N 558063.557, E 1344326.664	---	S.D. 4.11
I-12	TYPE "D" INLET	408.00	405.5*	405.00	McGREGOR DRIVE	N 558082.623, E 1344712.683	---	S.D. 4.11
I-13	DOUBLE TYPE S COMB. INLET	408.83	403.50	403.00	McGREGOR DRIVE	23+GO.34	12' R	S.D. 4.34
I-14	A-5 (2'-6" WIDE)	408.60	403.85	403.75	McGREGOR DRIVE	N 557869.226, E 1344722.543	---	S.D. 4.01
I-15	A-5 (2'-6" WIDE)	407.90	404.20	404.10	McGREGOR DRIVE	N 557892.131, E 1344433.457	---	S.D. 4.01
I-16	A-5 (2'-6" WIDE)	408.94	404.78	404.60	McGREGOR DRIVE	15+73.98	12' L	S.D. 4.01
I-17	DOUBLE TYPE S COMB. INLET	408.00	405.19	405.00	McGREGOR DRIVE	15+65.92	12' R	S.D. 4.34
I-18	DOUBLE TYPE S COMB. INLET	413.22	406.90, 407.15	406.70	McGREGOR DRIVE	14+14.90	11.62' R	S.D. 4.34
I-19	A-5 (2'-6" WIDE)	413.22	405.00	407.70	McGREGOR DRIVE	14+15.86	12.32' L	S.D. 4.01
I-20	DOUBLE TYPE S COMB. INLET	416.40	408.20	408.10	McGREGOR DRIVE	12+96.20	10' R	S.D. 4.34
I-21	A-5 (2'-6" WIDE)	416.43	408.55	408.45	McGREGOR DRIVE	12+94.22	10' L	S.D. 4.01
I-22	TYPE "D" INLET	413.80	---	409.98	McGREGOR DRIVE	N 557906.772, E 1344600.288	---	S.D. 4.11
I-23	A-5 (2'-6" WIDE)	402.13	---	398.09	McGREGOR DRIVE	0+79.77	12.2' L	SPECIAL
I-24	A-5 (2'-6" WIDE)	402.13	397.80	397.70	McGREGOR DRIVE	0+79.77	12.3' R	SPECIAL
I-25	TYPE "D" INLET	399.00	398.17*	396.25	---	N 557744.011, E 1345103.339	---	S.D. 4.11
I-26	TYPE "D" INLET	397.20	396.67*, 390.30	390.20	---	N 557747.322, E 1345123.824	---	S.D. 4.11
I-27	TYPE "D" INLET	402.18	401.06*, 390.52	389.33	---	N 558281.438, E 1344905.412	---	S.D. 4.01
I-28	TYPE "D" INLET	394.03	393.20*, 398.68	389.58	---	N 557721.156, E 1345240.909	---	S.D. 4.36
I-29	TYPE "D" INLET	394.03	393.20*, 398.68	389.58	---	N 557721.156, E 1345240.909	---	S.D. 4.36
MH 2	STD. MANHOLE	401.25	391.10	391.00	---	N 557864.301, E 1345114.929	---	S.D.-5.11
MH 3	STD. MANHOLE	402.19	394.75, 397.58	394.65	---	N 557894.666, E 1345091.858	---	S.D.-5.11
MH 4	STD. MANHOLE	404.00	400.00	399.90	---	N 558100.969, E 1344989.794	---	S.D.-5.11
MH 5	STD. MANHOLE	407.42	402.70	402.50	---	N 558165.776, E 1344864.174	---	S.D.-5.11
MH 6	STD. MANHOLE	416.71	410.30	410.10	---	N 558088.614, E 1344407.300	---	S.D.-5.11
MH 7	STD. MANHOLE	408.30	404.48	403.60	---	N 558051.885, E 1344810.296	---	S.D.-5.11
MH 8	STD. MANHOLE	413.80	409.80	409.25	---	N 557888.044, E 1344611.530	---	S.D.-5.11
MH 9	STD. MANHOLE	399.53	393.30	390.04	---	N 557794.757, E 1345156.552	---	S.D.-5.11
S-1	STRUCTURE	399.65	---	393.20	---	N 558084.931, E 1344989.105	---	PRE-CAST
ES-1	END SECTION	---	---	389.50	---	N 557732.478, E 1345250.711	---	S.D.-5.52
ES-2	END SECTION	---	408.31	---	---	N 558227.719, E 1344644.318	---	S.D.-5.61
ES-3	END SECTION	---	---	407.95	---	N 558230.605, E 1344657.852	---	S.D.-5.61
RELOCATED EX. INLET	DOUBLE TYPE "S" COMBINATION	---	---	---	CEPAR LANE	N 557782.865, E 1344515.192	---	S.D. 4.33



PIPE SCHEDULE

TYPE/CLASS OF PIPE	PIPE SIZE (IN.)	TOTAL LENGTH (FT.)	REMARKS
HDPE, SMOOTH INTERIOR	15	410	
	18	995	
	24	328	
	30	232	
RCCP CL III	30	20	
RCCP CL IV	30	136	
AL2 CMP	15	8	
	18	38	
	30	10	
CMP	12	14	

STATE OF MARYLAND
BARBARA K. CLERY
 PROFESSIONAL ENGINEER
 License No. 28559, Expiration Date: 7/22/11

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.

PREPARED BY:
American Land Development and Engineering, Inc.
 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
 TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
 Harmel PSC, LLC.
 6300 Woodside Court Suite A
 Columbia, Md. 21046

ENGINEER'S CERTIFICATE

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

Signature of Engineer: David C. Woessner
 Date: DEC. 10, 2004

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 of Developer: Dale Thompson
 Date: DEC. 10, 2004



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: Cindy Hamilton
 Date: 1/26/05

Signature: Mark A. Goff
 Date: 2/10/05

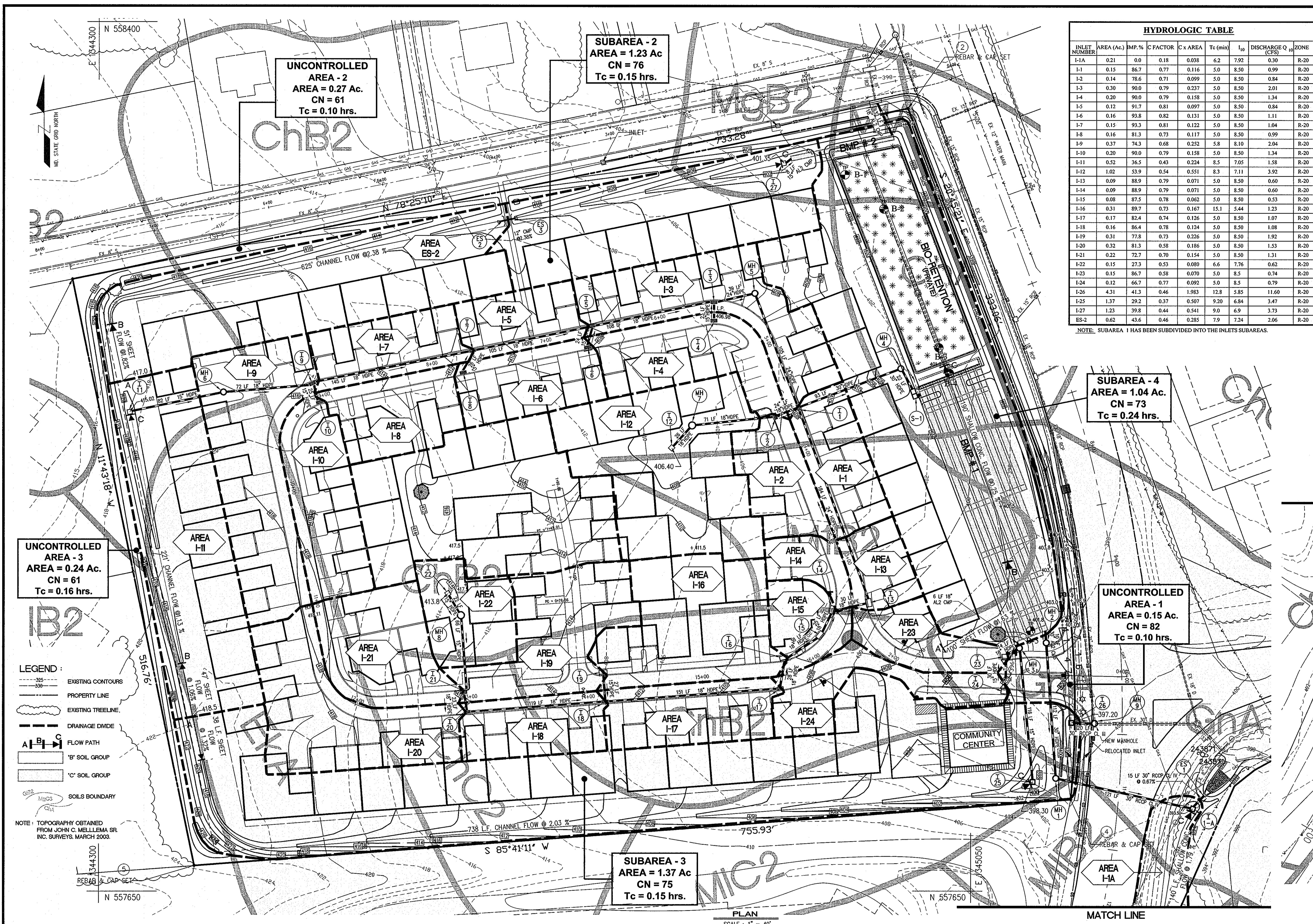
TITLE: **STORM DRAIN PROFILES**

PROJECT NAME: **SCOTS GLEN NORTH**
 BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A, AND COMMUNITY CENTER
 PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
 A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

DES: DCW/JL/AVG JOB: S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101
 DRW: AVG/DJA/JNC CHK: D.C.W. SCALE: AS SHOWN SHEET 9 OF 25

NO.	DATE	REVISION	BY
3-9-11	4	REVISE TITLE BLOCK	DCW
2-16-06	Δ	REVISED INLET INVERTS	ALPEI
1-5-06	Δ	REVISED STRUCTURE SCHEDULE - INLETS LOCATIONS	ALPEI
DATE	NO.	REVISION	BY

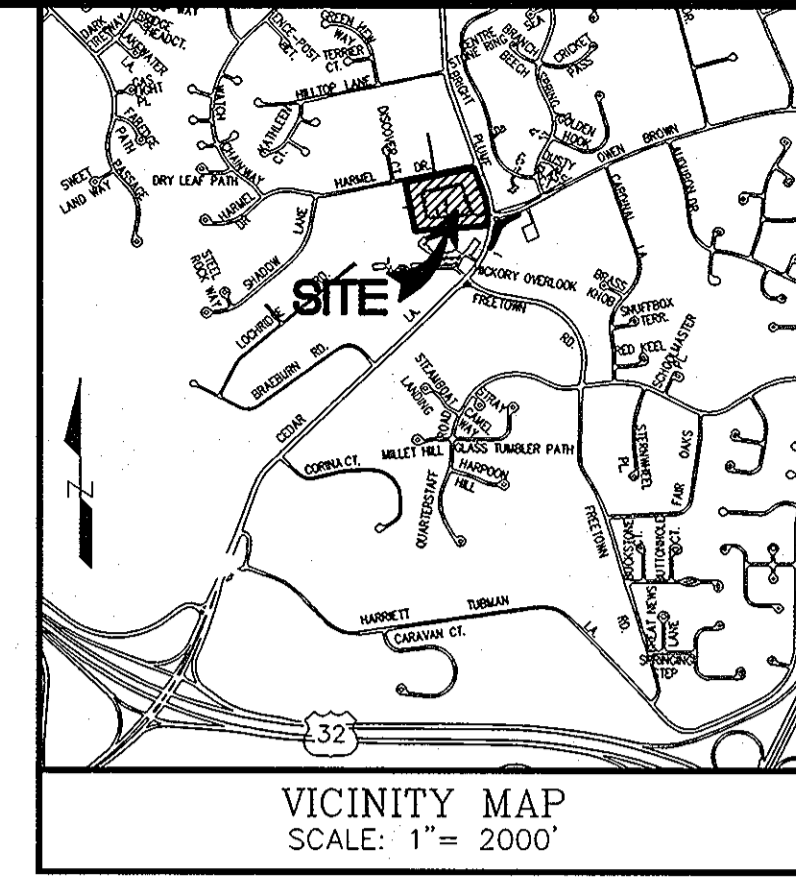
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HYDROLOGIC TABLE

INLET NUMBER	AREA (Ac)	IMP. %	C FACTOR	C x AREA	Tc (min)	I ₁₀	DISCHARGE Q ₁₀ (CFS)	ZONE
I-1A	0.21	0.0	0.18	0.038	6.2	7.92	0.30	R-20
I-1	0.15	86.7	0.77	0.116	5.0	8.50	0.99	R-20
I-2	0.14	78.6	0.71	0.099	5.0	8.50	0.84	R-20
I-3	0.30	90.0	0.79	0.237	5.0	8.50	2.01	R-20
I-4	0.20	90.0	0.79	0.158	5.0	8.50	1.34	R-20
I-5	0.12	91.7	0.81	0.097	5.0	8.50	0.84	R-20
I-6	0.16	93.8	0.82	0.131	5.0	8.50	1.11	R-20
I-7	0.15	93.3	0.81	0.122	5.0	8.50	1.04	R-20
I-8	0.16	81.3	0.73	0.117	5.0	8.50	0.99	R-20
I-9	0.37	74.3	0.68	0.252	5.8	8.10	2.04	R-20
I-10	0.20	90.0	0.79	0.158	5.0	8.50	1.34	R-20
I-11	0.52	36.5	0.43	0.224	8.5	7.05	1.58	R-20
I-12	1.02	53.9	0.54	0.551	8.3	7.11	3.92	R-20
I-13	0.09	88.9	0.79	0.071	5.0	8.50	0.60	R-20
I-14	0.09	88.9	0.79	0.071	5.0	8.50	0.60	R-20
I-15	0.08	87.5	0.78	0.062	5.0	8.50	0.53	R-20
I-16	0.31	89.7	0.73	0.167	15.1	5.44	1.23	R-20
I-17	0.17	82.4	0.74	0.126	5.0	8.50	1.07	R-20
I-18	0.16	86.4	0.78	0.124	5.0	8.50	1.08	R-20
I-19	0.31	77.8	0.73	0.226	5.0	8.50	1.92	R-20
I-20	0.32	81.3	0.58	0.186	5.0	8.50	1.53	R-20
I-21	0.22	72.7	0.70	0.154	5.0	8.50	1.31	R-20
I-22	0.15	27.3	0.53	0.080	6.6	7.76	0.62	R-20
I-23	0.15	86.7	0.58	0.070	5.0	8.5	0.74	R-20
I-24	0.12	66.7	0.77	0.092	5.0	8.5	0.79	R-20
I-26	4.31	41.3	0.46	1.983	12.8	5.85	11.60	R-20
I-25	1.37	29.2	0.37	0.507	9.20	6.84	3.47	R-20
I-27	1.23	39.8	0.44	0.541	9.0	6.9	3.73	R-20
ES-2	0.62	43.6	0.46	0.285	7.9	7.24	2.06	R-20

NOTE: SUBAREA 1 HAS BEEN SUBDIVIDED INTO THE INLETS SUBAREAS.



SOILS TABLE

SYMBOL	MAPPING UNIT	TYPE
ChA	CHESTER SILT LOAM, 0 TO 3% SLOPE	B
ChB2	CHESTER SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
ChC2	CHESTER SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
EkA	EJOK SILT LOAM, 0 TO 3% SLOPE	C
GnA	GLENVILLE SILT LOAM, 0 TO 3% SLOPE	C
GnB2	GLENVILLE SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	C
MIA	MANOR LOAM, 0 TO 3% SLOPE	B
MIB2	MANOR LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
MIC2	MANOR LOAM, 8 TO 15% SLOPE, MODERATELY ERODED	B
MgB2	MANOR GRAVELLY LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B

UNCONTROLLED AREA - 3
AREA = 0.24 Ac.
CN = 61
Tc = 0.16 hrs.

SUBAREA - 2
AREA = 1.23 Ac
CN = 76
Tc = 0.15 hrs.

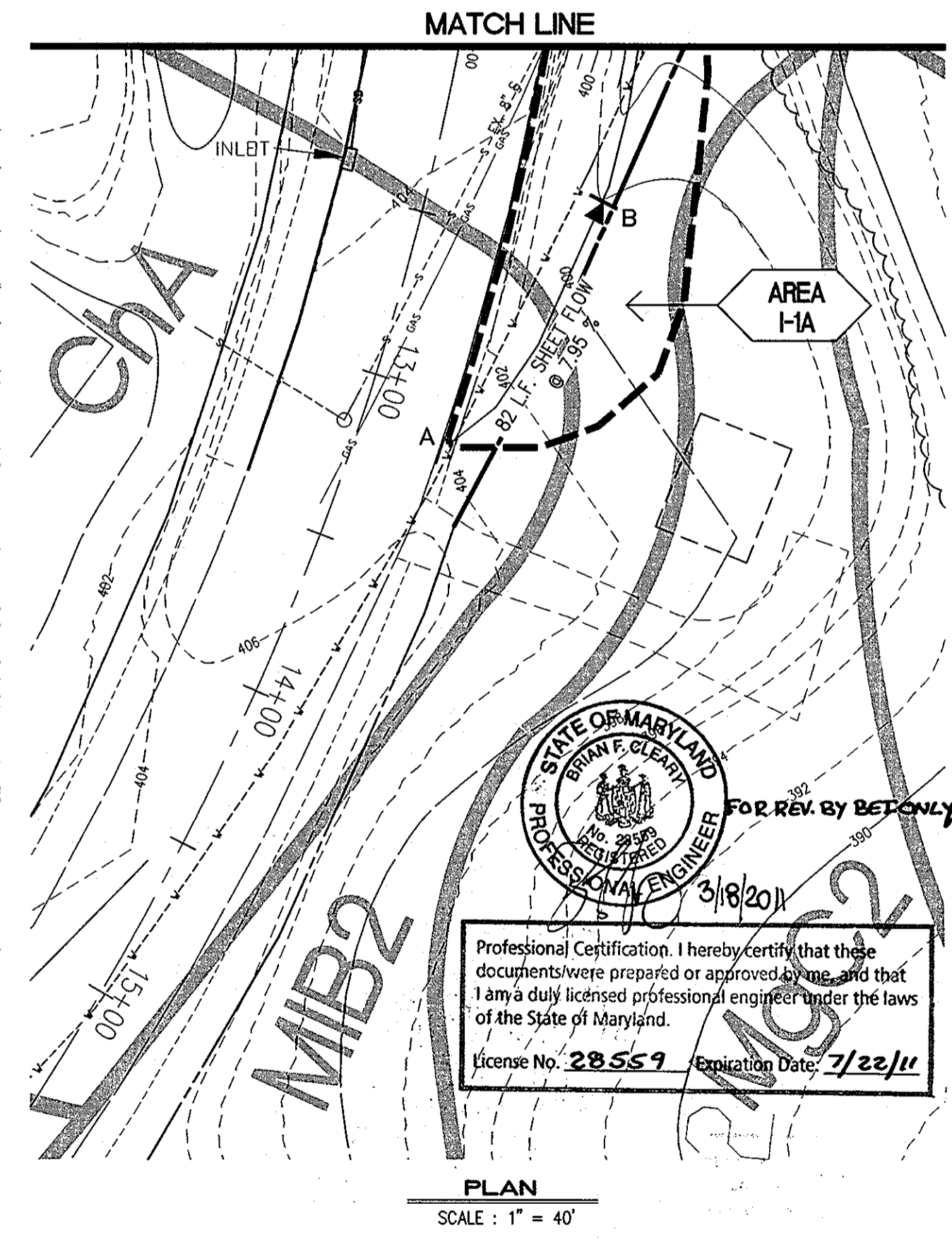
SUBAREA - 4
AREA = 1.04 Ac.
CN = 73
Tc = 0.24 hrs.

UNCONTROLLED AREA - 1
AREA = 0.15 Ac.
CN = 82
Tc = 0.10 hrs.

SUBAREA - 3
AREA = 1.37 Ac
CN = 75
Tc = 0.15 hrs.

- LEGEND:**
- EXISTING CONTOURS
 - PROPERTY LINE
 - EXISTING TREELINE
 - DRAINAGE DIVIDE
 - FLOW PATH
 - 'B' SOIL GROUP
 - 'C' SOIL GROUP
 - SOILS BOUNDARY

NOTE: TOPOGRAPHY OBTAINED FROM JOHN C. MELLEMA SR. INC. SURVEYS, MARCH 2003.



PREPARED BY:
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
Harmel PSC, LLC.
6300 Woodside Court Suite A
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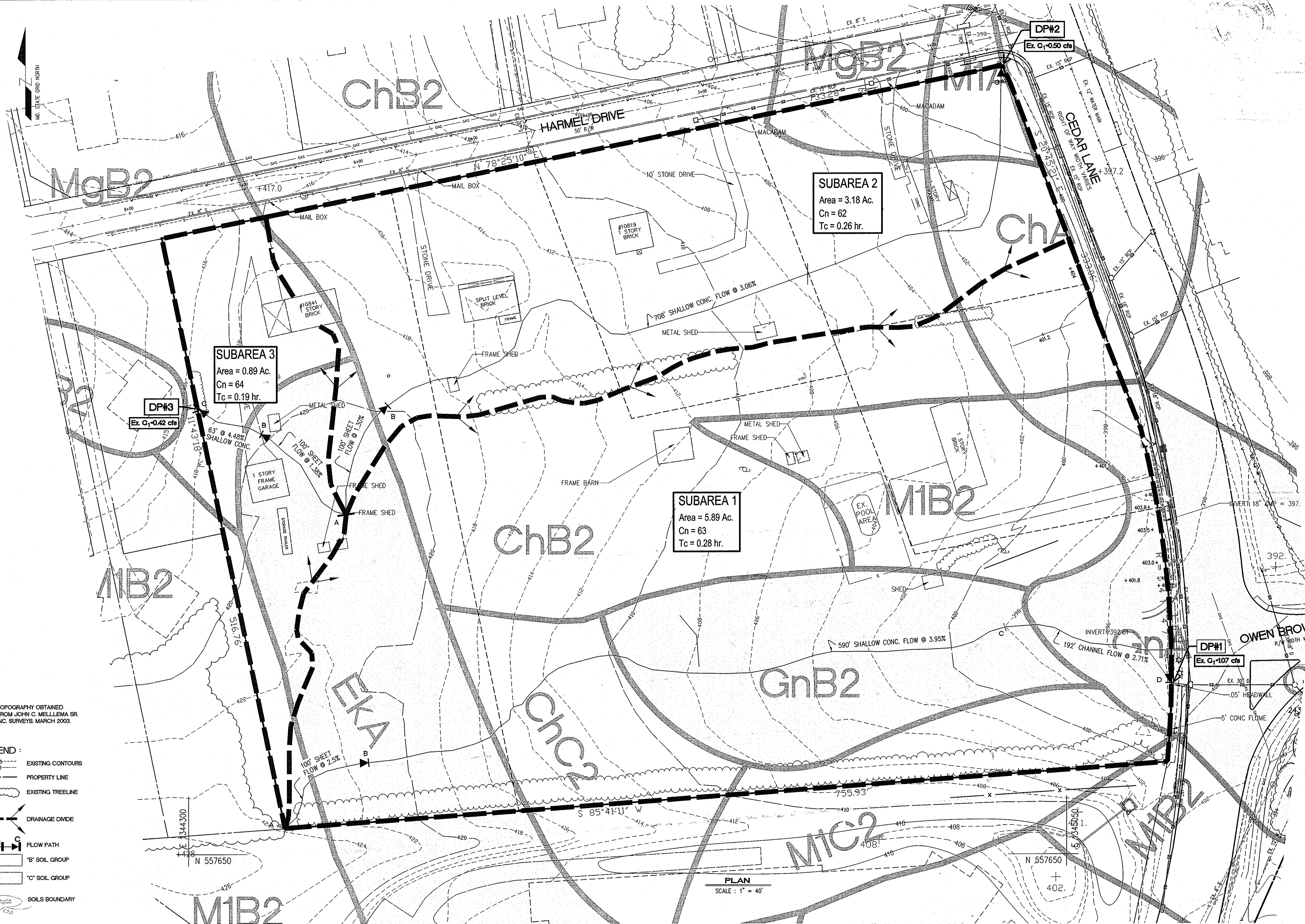
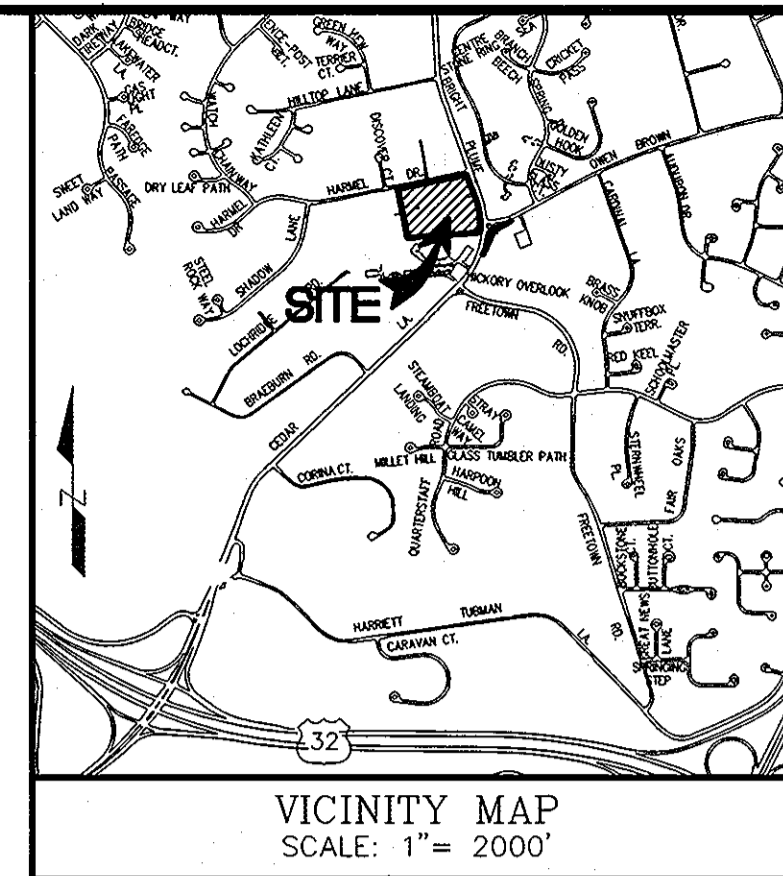
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SIGNATURE OF ENGINEER: [Signature]
DAVID C. WOESSNER
DEC. 10, 2004 DATE

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 OF DEVELOPER: [Signature]
DALE THOMPSON
DEC. 10, 2004 DATE



APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature]
DIRECTOR - DEPARTMENT OF PLANNING AND ZONING

TITLE: DRAINAGE AREA MAP, STORM DRAINS
PROJECT NAME: SCOTS GLEN NORTH
BUILDABLE BULK PARCEL "A" - UNITS I-6, 7A, 8A, AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3
S-04-03 PB CASE 362 WP 04-114 F-05-92 F-05-101
DES.: DCW/JAVG JOB: PROJ.: DATE: 12-10-04
DRW.: AVG/DTA/INC CHK.: D.C.W. SCALE: 1"=40' SHEET 10 OF 25



1: SUBDIVISION PROJECTS CEDAR ACRES VILLA 1 FINAL SDP DRAINAGE AREA MAP.dwg, DAN on site (EX COND), 12/19/2004 7:40:04 PM, guz

NOTE: TOPOGRAPHY OBTAINED FROM JOHN C. MELLEMA SR. INC. SURVEYS, MARCH 2003.

- LEGEND:**
- EXISTING CONTOURS
 - PROPERTY LINE
 - EXISTING TREELINE
 - DRAINAGE DIVIDE
 - FLOW PATH
 - 1' SOIL GROUP
 - 2' SOIL GROUP
 - SOILS BOUNDARY

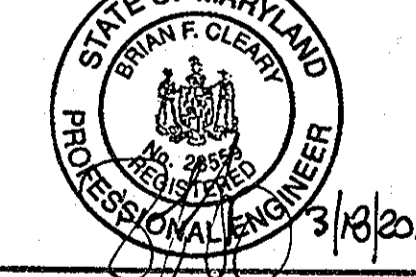
SOILS TABLE

SYMBOL	MAPPING UNIT	TYPE
CHA	CHESTER SILT LOAM, 0 TO 3% SLOPE	B
CHB2	CHESTER SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
CHC2	CHESTER SILT LOAM, 8 TO 15% SLOPE, MODERATELY ERODED	B
EKA	ELOAK SILT LOAM, 0 TO 3% SLOPE	C
GNA	GLENVILLE SILT LOAM, 0 TO 3% SLOPE	C
GNB2	GLENVILLE SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	C
MIA	MANOR LOAM, 0 TO 3% SLOPE	B
MIB2	MANOR LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
MIC2	MANOR LOAM, 8 TO 15% SLOPE, MODERATELY ERODED	B
MgB2	MANOR GRAVELLY LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B

HYDROLOGIC SUMMARY TABLE (EXISTING CONDITION - SITE AREA ONLY)

SUBAREA	AREA, AC.	CN	Tc, HR.	DISCHARGE, CFS (I)		
				1 YR.	2 YR.	10 YR.
SUBAREA 1	5.89	63	0.28	1.07	2.69	9.94
SUBAREA 2	3.18	62	0.26	0.50	1.37	5.31
SUBAREA 3	0.89	64	0.19	0.42	0.79	2.24

(I) DISCHARGES SHOWN FOR SUBAREAS 1, 2, AND 3 ARE AT DP #1 - DP #3 RESPECTIVELY.



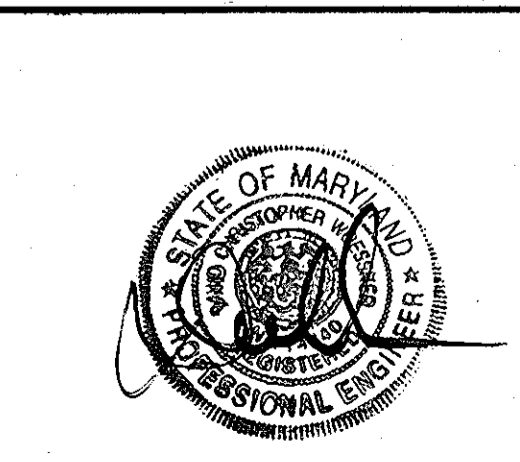
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 28557 Expiration Date: 7/23/11

PREPARED BY:
American Land Development and Engineering, Inc.
 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
 TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
 Harmel PSC, LLC.
 6300 Woodside Court Suite A
 Columbia, Md. 21046

ENGINEER'S CERTIFICATE
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 Signature of Engineer: [Signature]
 DAVID C. WOESSNER
 DEC. 10, 2004 DATE

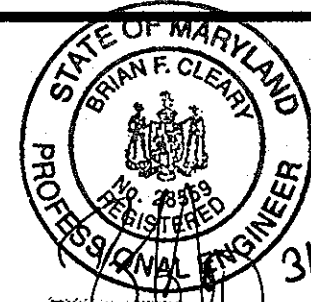
DEVELOPER'S CERTIFICATE
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
 Signature of Developer: [Signature]
 DALE THOMPSON
 DEC. 10, 2004 DATE



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 1/5/05
 Signature: [Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 1/28/05
 Signature: [Signature]
 DIRECTOR - DEPARTMENT OF PLANNING AND ZONING
 DATE: 2/1/05

TITLE: STORMWATER MANAGEMENT DRAINAGE AREA MAP (SITE AREA ONLY) EXISTING CONDITION
PROJECT NAME: SCOTS GLEN NORTH
 BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A, AND COMMUNITY CENTER
 PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
 A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3
 WP-11-108 S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101
 DES.: DCW/JLVG JOB: PROJ.: DATE: 12-10-04
 DRW.: AVG/DTA/JNC CHK.: D.C.W. SCALE: 1" = 40' SHEET 11 OF 25

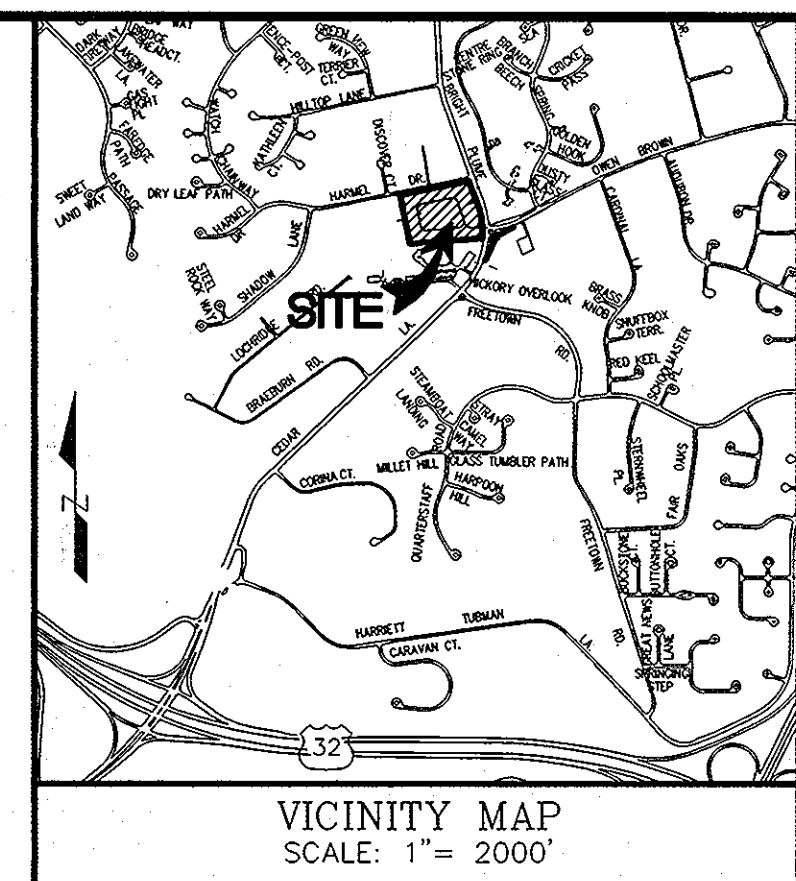
NO	DATE	REVISION	BY
1	3-9-11	REVISE TITLE BLOCK	GET



FOR REV. BY BET ONLY

3/18/2011

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. 28569, Expiration Date: 7/22/11



DESCRIPTION	SUMMARY TABLE							
	No. 1	No. 2	No. 3	No. 4	Unc. 1	Unc. 2	Unc. 3	Comb. 1,2,3,4
HYDROLOGIC DATA								
Area, Ac.	5.30	1.23	1.37	1.04	0.15	0.27	0.24	7.8
CN	89	76	75	73	82	61	61	84
Tc, Hrs.	0.19	0.15	0.15	0.24	0.1	0.1	0.1	0.24
DISCHARGES, CFS								
1 Year	10.23	1.19	1.23	0.58	0.2	0.05	0.05	12.03
2 Year	13.7	1.85	1.95	1.01	0.28	0.14	0.14	16.65
10 Year	24.77	4.25	4.55	2.65	0.55	0.53	0.53	31.97
100 Year	35.92	7.11	7.69	4.68	0.88	1.07	1.07	49.28
SWM CATEGORIES								
WATER QUALITY, WQv								
Required	10,516 SF	1,742 CF	1,525 CF	w/ No. 1	NA	NA	NA	See Left
Provided	10,730 SF	1,773 CF	2,091 CF	w/ No. 1	NA	NA	NA	See Left
RECHARGE VOLUME, Rev								
Required	3,398	w/ WQv	w/ WQv	w/ No. 1	NA	NA	NA	See Left
Provided	w/ WQv	w/ WQv	w/ WQv	w/ WQv	NA	NA	NA	See Left
CHANNEL PROTECTION, Cpv								
Required	21,824 CF	Q<2.0 CFS	Q<2.0 CFS	w/ No. 1	NA	NA	NA	See Left
Provided	23,402 CF	Exempt	Exempt	w/ No. 1	NA	NA	NA	See Left
OVERBANK FLOOD PROTECTION, Cpf								
Required	NA	NA	NA	NA	NA	NA	NA	See Left
Provided	NA	NA	NA	NA	NA	NA	NA	See Left
EXTREME FLOOD, Cf								
Required	NA	NA	NA	NA	NA	NA	NA	NA
Provided	NA	NA	NA	NA	NA	NA	NA	NA

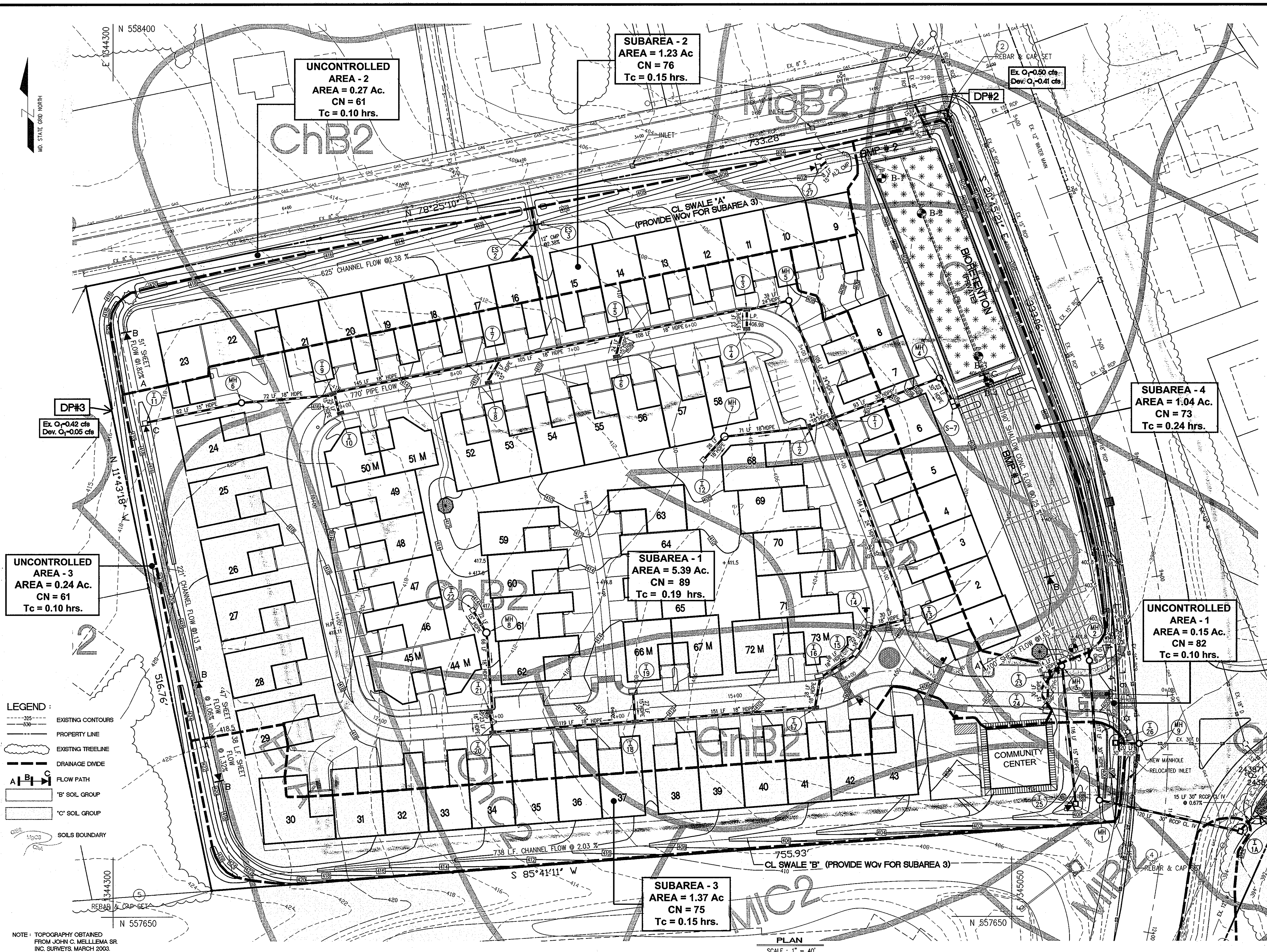
NOTE: NA - Not Applicable

SOILS TABLE

SYMBOL	MAPPING UNIT	TYPE
ChA	CHESTER SILT LOAM, 0 TO 3% SLOPE	B
ChB2	CHESTER SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
ChC2	CHESTER SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
EKA	ELIOAK SILT LOAM, 0 TO 3% SLOPE	C
GnA	GLENVILLE SILT LOAM, 0 TO 3% SLOPE	C
GnB2	GLENVILLE SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	C
MIA	MANOR LOAM, 0 TO 3% SLOPE	B
MB2	MANOR LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
MIC2	MANOR LOAM, 8 TO 15% SLOPE, MODERATELY ERODED	B
MgB2	MANOR GRAVELLY LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B

SWM NOTES:

- GRASS SWALE No. A IS TO PROVIDE WATER QUALITY, WQv, CONTROL FOR SUBAREA No. 2.
- BIORETENTION FACILITY IS TO PROVIDE WATER QUALITY, WQv, CONTROL FOR SUBAREAS 1 & 4. SAND FILTER LAYER, GRAVEL DIAPHRAGM, AND 3" OF MULCH LAYER SHALL BE PROVIDED AS PRE-TREATMENT OF FACILITY.
- THE UNDERGROUND DETENTION SYSTEM No. 1 IS TO PROVIDE Cpv, & Qp(1YR) CONTROL FOR SUBAREA No. 1.
- GRASS SWALE No. B IS TO PROVIDE WATER QUALITY, WQv, CONTROL FOR SUBAREA No. 3.
- THE UNDERGROUND DETENTION SYSTEM No. 2 IS TO PROVIDE Qp(1YR) CONTROL FOR SUBAREA 2.
- AT THE CHECK DAMS, PERFORATED PIPES IMBEDDED IN # 2 STONES 1-FOOT ALL AROUND WILL BE PROVIDED, DESIGNED TO DRAIN SWALES W/IN 24-HOUR PERIOD.
- ALLOWABLE DISCHARGE AT STUDY POINTS ARE:
 - DISCHARGE POINT 1 - EXISTING CONDITION (SITE ONLY) DISCHARGE = 1.07 CFS
 - DISCHARGE POINT 2 - EXISTING CONDITION (SITE ONLY) DISCHARGE = 0.50 CFS
 - DISCHARGE POINT 3 - EXISTING CONDITION (SITE ONLY) DISCHARGE COMPARED WITH UNCONTROLLED AREA 3 DEVELOPED CONDITION DISCHARGE = 0.42 CFS.



UNCONTROLLED AREA - 3
 AREA = 0.24 Ac.
 CN = 61
 Tc = 0.10 hrs.

UNCONTROLLED AREA - 2
 AREA = 0.27 Ac.
 CN = 61
 Tc = 0.10 hrs.

SUBAREA - 2
 AREA = 1.23 Ac
 CN = 76
 Tc = 0.15 hrs.

SUBAREA - 4
 AREA = 1.04 Ac.
 CN = 73
 Tc = 0.24 hrs.

SUBAREA - 1
 AREA = 5.39 Ac.
 CN = 89
 Tc = 0.19 hrs.

UNCONTROLLED AREA - 1
 AREA = 0.15 Ac.
 CN = 82
 Tc = 0.10 hrs.

SUBAREA - 3
 AREA = 1.37 Ac
 CN = 75
 Tc = 0.15 hrs.

- LEGEND:**
- EXISTING CONTOURS
 - PROPERTY LINE
 - EXISTING TREETLINE
 - DRAINAGE DIVIDE
 - FLOW PATH
 - 'B' SOIL GROUP
 - 'C' SOIL GROUP
 - SOILS BOUNDARY

NOTE: TOPOGRAPHY OBTAINED FROM JOHN C. MELLEMA SR. INC. SURVEYS, MARCH 2003.

PLAN SCALE: 1" = 40'

PREPARED BY:
American Land Development and Engineering, Inc.
 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
 TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
 Harmel PSC, LLC.
 6300 Woodside Court Suite A
 Columbia, Md. 21046

ENGINEER'S CERTIFICATE
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 SIGNATURE OF ENGINEER: DAVID C. WOESSNER
 DEC. 10, 2004 DATE

DEVELOPER'S CERTIFICATE
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 OF DEVELOPER: DALE THOMPSON
 DEC. 10, 2004 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: 1/5/05 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT: 1/25/05 DATE

DIRECTOR - DEPARTMENT OF PLANNING AND ZONING: 2/1/05 DATE

TITLE: STORMWATER MANAGEMENT / DRAINAGE AREA MAP DEVELOPED CONDITION

PROJECT NAME: SCOTS GLEN NORTH
 BUILDABLE BULK PARCEL "A" - UNITS 1-67, 8A, AND COMMUNITY CENTER PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

WP-11-108 S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101

DES.: DCW/JL/AVG JOB: PROJ.: DATE: 12-10-04
 DRW.: AVG/DTA/JNC CHK.: D.C.W. SCALE: 1" = 40' SHEET 12 OF 25

1: SUBDIVISION PROJECTS (CEDAR ACRES VILLA) - FINAL (SDP) STORMWATER DRAINAGE AREA MAP, SWM PLAN, DEV. COND., 12/09/2004 7:41:20 PM, B12

PERIMETER	CATEGORY	Linear Feet of Roadway	Credits for Existing Vegetation	Credits for Wall, Fence or Berm	Number of Plants Required	Provided
			(Yes/No, Linear Feet)	(Yes/No, Linear Feet)	Evergreen	Shade
P 1	R	640 FT.	0	*YES 640' BERM & WALL	11	11
P 2	P	757 FT.	0	*YES 757' BERM	14	14
P 3	P	520 FT.	0	*YES 520' BERM	9	9
P 4	R	740 FT.	0	*YES 740' WALL	17	17
TOTAL					51	51

- NOTE:
- FOR PERIMETER 1, A COMBINATION OF 3 FT. BERM AND 4 FT. WALL IS PROPOSED.
 - A CREDIT FOR EVERGREEN PLANTING HAS BEEN TAKEN FOR PERIMETER 3 FOR THE PROPOSED 3 FOOT BERM.
 - NO CREDIT IS TAKEN FOR PERIMETER 4 SINCE THE BERM IS LESS THAN 6 FEET.
 - WE PROPOSE TO TREAT SPD AS SFA FOR THE PURPOSES OF CALCULATING REQUIRED TREES.
 - LANDSCAPE BUFFER HAS BEEN REDUCED TO 10 FT. ALONG PERIMETER AN UPRIGHT EVERGREEN SCREEN OF LEYLAND CYPRESS PROPOSED BEHIND THE RESIDENTIAL UNITS.

Linear Feet of Perimeter	RETENTION AREA #1
Number of Trees Required	420 FT.
Shade Trees 1:50	9
Evergreen Trees 1:40	11
Credit for Existing Vegetation (No. Yes and No)	0
Credit for Other Landscaping (No. Yes and No)	YES 100%

Number of Dwelling Units	2.2 SF/D AND 45 SFA
Number of Trees Required (1:DU SFA; 1:3 DU APFS)	47
Number of Trees Provided (2:1 ratio Evergreen to Shade)	43 = (24.5 SHADES 2:1 RATIO)
TOTAL EQUIVALENT TREES	
48.5	

Number of Parking Units	29 SP
Number of Trees Required (1 PER 10 SPACES)	3
Number of Trees Provided	30 SHRUBS

QUANTITY	SYMBOL	DESCRIPTION	SIZE
37	Ar1	Acer rubrum 'Red Sunset' Red Maple	2 1/2" cal.
6	Ar2	Acer rubrum 'Armstrong' Armstrong Columnar Red Maple	2 1/2" cal.
9	Ar3	Acer rubrum 'October Glory' October Glory Red Maple	2 1/2" cal.
13	Qp	Quercus phellos Willow Oak	2 1/2" cal.
9	Qr	Quercus rubra Northern Red Oak	2 1/2" cal.
0	Sn	Salix nigra Black Willow	2" cal. IN CONTAINER
6	Pa	Platanus acerifolia 'Bloodgood' Bloodgood London Plane Tree	2 1/2" cal.
84	Cl	Cupressocyparis leylandii Leyland Cypress	5'-6" Ht.
19	Io	Ilex opaca American Holly	5'-6" Ht.
28	P	Pinus thunbergii Norway Spruce	6'-8" Ht.
28	Ps	Pinus strobus Eastern White Pine	6'-8" Ht.
5	Bn	Betula nigra 'Heritage' Heritage River Birch	8'-10" Ht.
12	Ck	Cornus kousa Kousa Dogwood	8'-10" Ht.
1	Mf	Morus floribunda 'Harvest Gold' Harvest Gold Flowering Crabapple	2 1/2" cal.
2	Psk	Prunus serotina 'Kwanzan' Kwanzan Cherry	2 1/2" cal.
16	Py	Prunus x. yeodensis Yoshino Cherry	2 1/2" cal.
11	ea	Euonymus alatus 'compactus' Dwarf Winged Euonymus	30" Ht. 36" o.c.

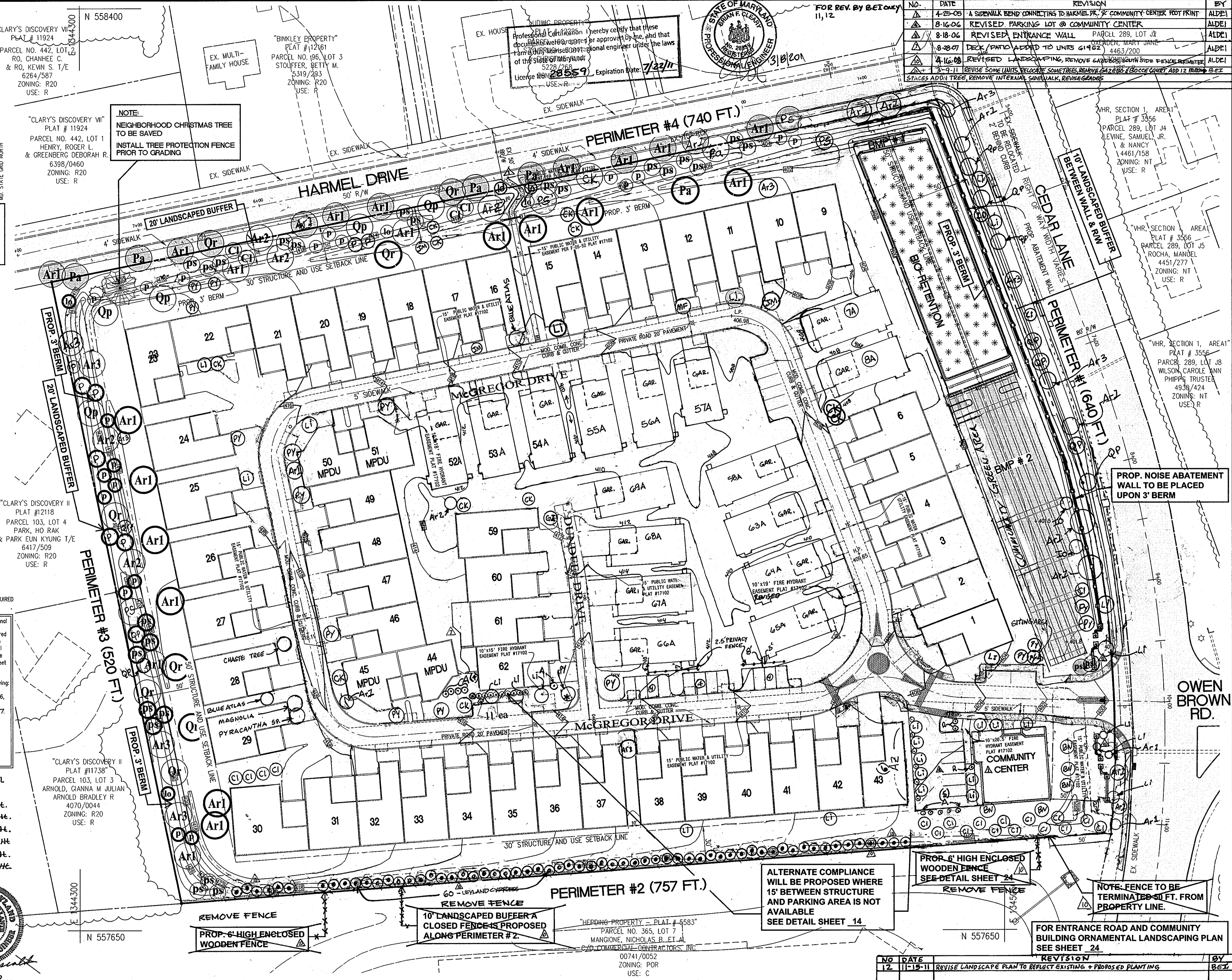
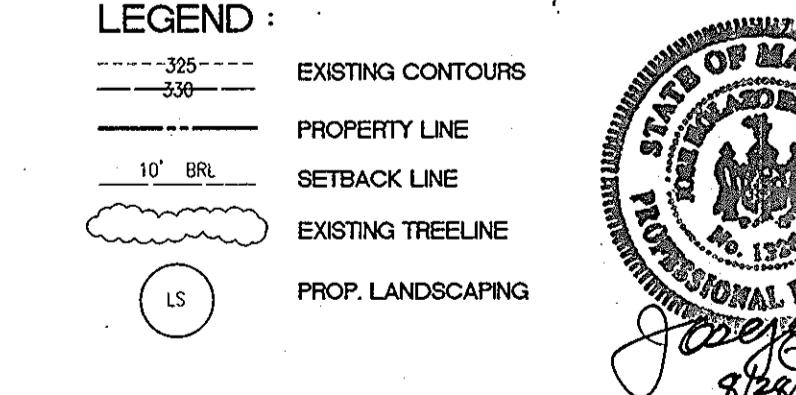
STREET TREES (1:40 FT.)	REQUIRED	PROVIDED
HARMEI DRIVE 733 FT.	18 TREES	18
CEDAR LANE 620 FT.	15 TREES	14 LARGE 2 SMALL
MCGREGOR DRIVE 1640 FT.	54 TREES	41 LARGE 13 SMALL TREES
TOTAL TREES	87 TREES	89

Release of surety will not be granted until all landscaping shown on the approved final plan or site development plan has been completed in accordance with the approved landscape plan. Surety for landscaping shall be based on the total number of required new trees (shade, ornamental and evergreen) or comparable elements shown on the landscape plan. The unit prices to be used for establishing surety requirements shall be in accordance with the adopted County Fee Schedule which is \$300.00 per shade tree, \$150.00 per evergreen/ornamental tree, \$30.00 per shrub, \$10.00 per linear foot of fencing and \$20.00 per linear foot of wall.

Based on all the Planting Schedule, the surety for required landscaping is the following:

151 shade trees x \$300.00 = \$45,300.00 (Schedule A = 46, Sch. B = 2, Sch. C = 46, Large Street Trees = 45)
 29 ornamental/evergreen trees x \$150.00 = \$4,350.00 (Sch. A = 97 Sch. C = 67, All Compliance = 5 and 45 Small Street Trees)
 31 Shrubs x \$30.00 = \$930.00 (All Compliance)
 640 linear feet of wall x \$20.00 = \$12,800.00
 Total = \$63,380.00

- GB Ginkgo Biloba 2 1/2"-3" cal.
- Li Lagerstroemia Indica 'Dynamite' 6'-8" Ht.
- 3M Acer palmatum Japanese Maple 2 1/2"-3" Ht.
- Magnolia 2 1/2"-3" Ht.
- Blue Atlas 2 1/2"-3" Ht.
- Pyracantha sp. 2 1/2"-3" Ht.
- Chaste tree 2 1/2"-3" Ht.
- Arborvitae (Shrub) 2 1/2"-3" Ht.



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 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
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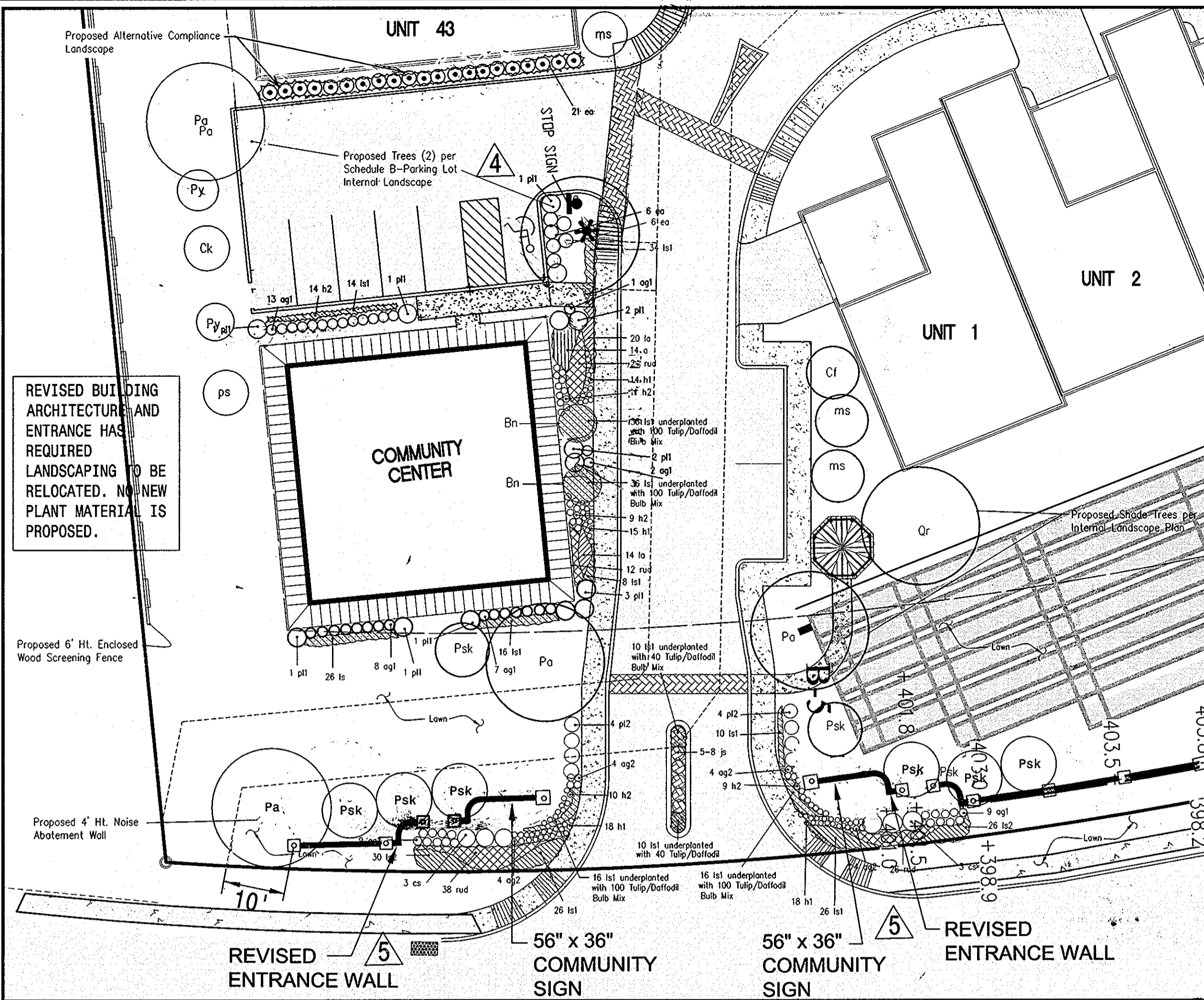
DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATE
 I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.
 DEVELOPER'S/OWNER'S NAME: DALE THOMPSON
 DATE: DEC. 10, 2004

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
 U.S.D.A.-NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 HOWARD SCD DATE:

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR - DEPARTMENT OF PLANNING AND ZONING

TITLE:
LANDSCAPE PLAN
 PROJECT NAME:
SCOTS GLEN NORTH
 BUILDABLE BULK PARCEL "A", UNITS 1-7, 8A, AND COMMUNITY CENTER PLANNED SENIOR COMMUNITY (PSC)-AGE RESTRICTED ADULT HOUSING A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3
 WP-11-108 S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101
 DES.: DCW/JL/AVG JOB: PROJ.: DATE: 12-10-04
 DRW.: AVG/DJA/JNC CHK.: D.C.W. SCALE: 1" = 40' SHEET 13 OF 25

NO. DATE REVISION BY
 1 4-25-06 A SIDEWALK BEND CONNECTING TO HARMEI DR. & COMMUNITY CENTER FOOT PRINT ALDEI
 2 8-16-06 REVISED PARKING LOT @ COMMUNITY CENTER OXLEY, MARK JANE ALDEI
 3 8-18-06 REVISED ENTRANCE WALL PARCEL 289, LOT JX ALDEI
 4 8-28-07 DECK PARTIAL ADDED TO UNITS G14G2 4463/200 ALDEI
 5 4-16-08 REVISED LANDSCAPING REMOVE GARAGE/SCREEN FROM FENCE PERIMETER ALDEI
 6 3-9-11 REVISE SOME UNITS, REMOVE SOME TREES, REMOVE GARAGE/SCREEN FROM FENCE PERIMETER ALDEI
 7 3-9-11 REVISE SOME UNITS, REMOVE SOME TREES, REMOVE GARAGE/SCREEN FROM FENCE PERIMETER ALDEI



NON-BONDED LANDSCAPING - PLAN
SCALE: 1" = 20"

Miscellaneous Entrance & Community Building Landscaping (Not included in Minimum Landscape Submission)

Quantity	Symbol	Name	Size	Comments
2	Bn	Betula nigra 'Heritage'	8' Ht.	Clumped form for Entry Wall. Space on site to avoid future Walking Conflicts
1	Cf	Cornus florida	8-10' Ht.	Flowering Dogwood
1	Ck	Cornus kousa	8-10' Ht.	Kousa Dogwood
2	Py	Prunus x yedoensis	1 1/2' Cal.	Yoshino Cherry
3	ms	Magnolia x soulangiana	8' Ht.	Southern Magnolia
1	ps	Pinus strobus	6' Ht.	6' Ht. Minimum. 6-8' Ht. Desired
49	ca	Azalea 'Dumpe'	18-24" Ht.	Plant spacing @ 24" o.c.
16	ca	Azalea 'Dumpe'	18-24" Ht.	Plant spacing @ 24" o.c.
6	ca	Cornus stolonifera	36" Ht.	Plant spacing @ 48" o.c.
27	ea	Eucalyptus globulus 'Cinerea'	30" Ht.	Plant spacing @ 36" o.c.
5-8	jc	Juniperus chinensis	3' cont.	Plant 18-24" o.c. depending on spread
14	pl	Prunus laurocerasus 'Otto Luyken'	30" Ht.	Plant spacing @ 36" o.c.
8	pl2	Prunus laurocerasus 'Nana'	30" Ht.	Plant spacing @ 36" o.c.
14	a	Astilbe 'Deutchland'	1' cont.	Plant spacing @ 18" o.c.
46	nl	Hemerocallis 'Stella De Oro'	1' cont.	Plant spacing @ 18" o.c.
40	nl2	Hemerocallis 'Happy Returns'	1' cont.	Plant spacing @ 18" o.c.
34	ls	Lovelandia angustifolia 'Tidocla'	1' cont.	Plant spacing @ 15" o.c.
28	lsl	Lilium spicata	1' cont.	Plant spacing @ 15" o.c.
56	lsl2	Lilium spicata 'Silver Dragon'	1' cont.	Plant spacing @ 15" o.c.
100	rg	Rudbeckia 'Goldstrum'	1' cont.	Plant spacing @ 15" o.c.
400	-	Daffodil & Tulip Bulb Mix	Bulb	Plant bulbs between Lilium @ 4-6" o.c.

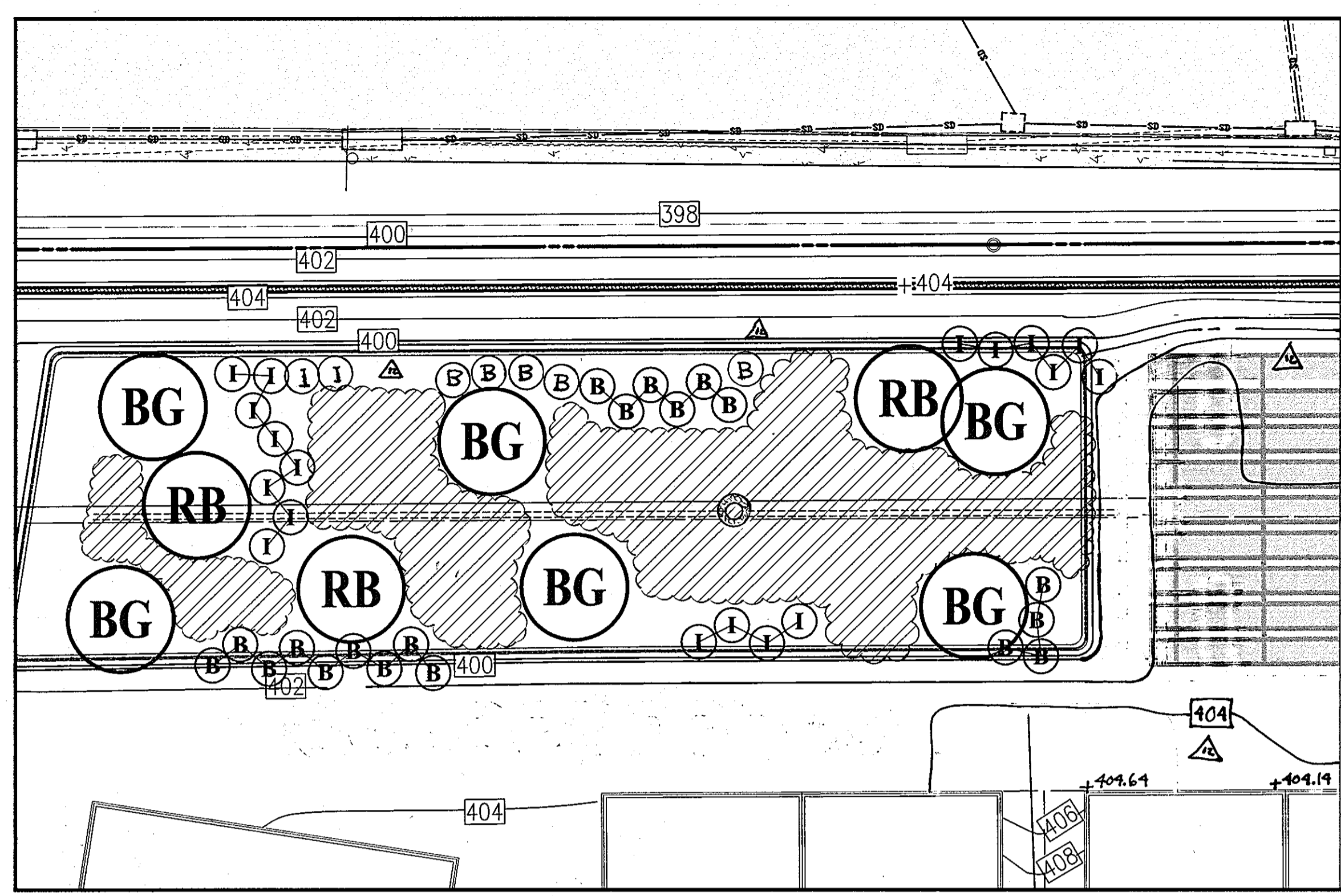
Typical Gazebo Landscaping

Quantity	Symbol	Name	Size	Comments
8	pl	Prunus laurocerasus 'Otto Luyken'	24" Ht.	Plant Spacing @ 30" o.c.

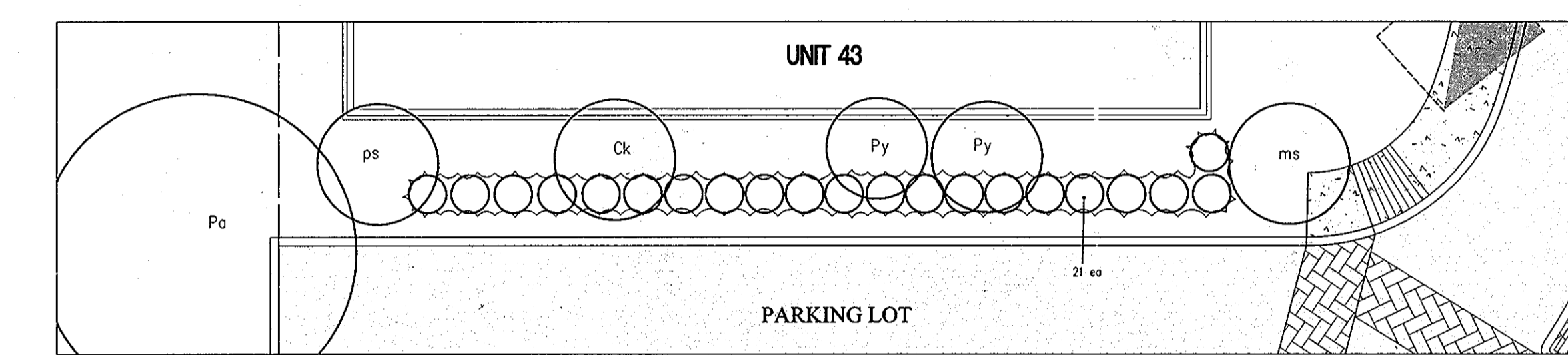
Perennials/Groundcovers/Bulbs

Quantity	Symbol	Name	Size	Comments
32	lm	Lilium muscari	1' cont.	Plant Spacing @ 12" o.c.
20	h	Hemerocallis 'Stella De Oro'	1' cont.	Plant Spacing @ 18" o.c.
140	-	Daffodil & Tulip Bulb Mix	Bulb	Plant bulbs between Lilium @ 4-6" o.c.

ENTRANCE AND COMMUNITY BUILDING LANDSCAPE PLAN (NON-BONDED)



BIORETENTION LANDSCAPING - DETAIL
SCALE: 1" = 20"



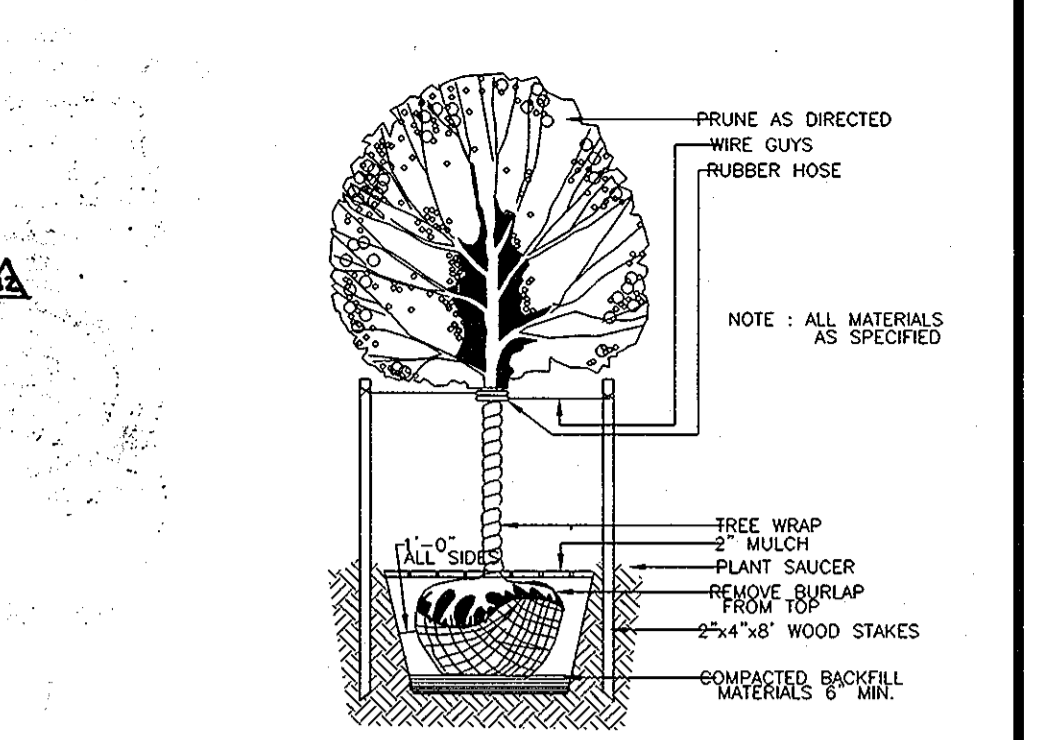
ALTERNATIVE COMPLIANCE LANDSCAPING - PLAN
SCALE: 1" = 10"

Typical Bio-Retention Landscaping

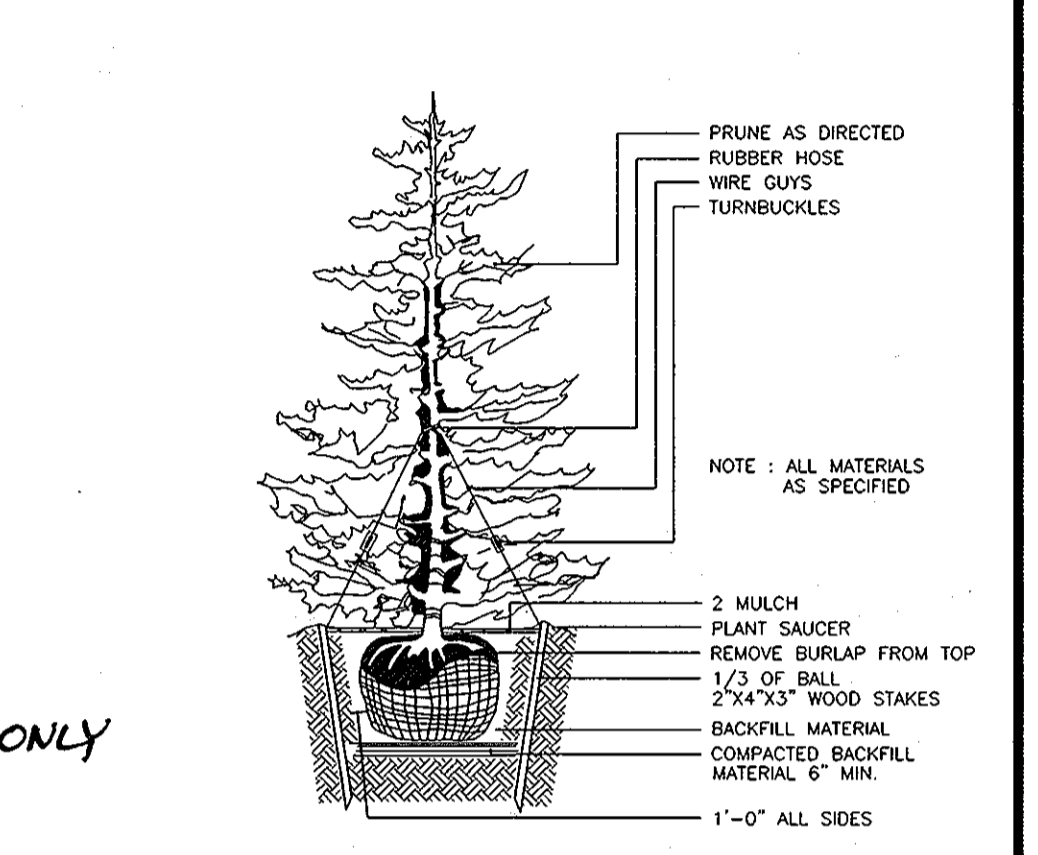
Shrubs Quantity	Symbol	Description	Size
3	RB	Betula nigra River Birch	8' Ht.
6	BC	Nyssa sylvatica Black Gum	8' Ht.
24	DB	Deutzia scabra	1 1/2' Cal.
20	DB	Deutzia scabra	1 1/2' Cal.
450	DB	Deutzia scabra	1 1/2' Cal.
350	DB	Deutzia scabra	1 1/2' Cal.
350	DB	Deutzia scabra	1 1/2' Cal.

PLANTING MATERIAL SELECTED FROM THE LANDSCAPING GUIDELINES FOR STORM WATER BMP'S (APPENDIX "A" TABLE A.4)

MIXED PERENNIALS (CARDINAL FLOWER, CONEFLOWER, BLUE FLAG)



TYPICAL DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

FOR REVIEW BY MPEZ ONLY

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: 7/22/11

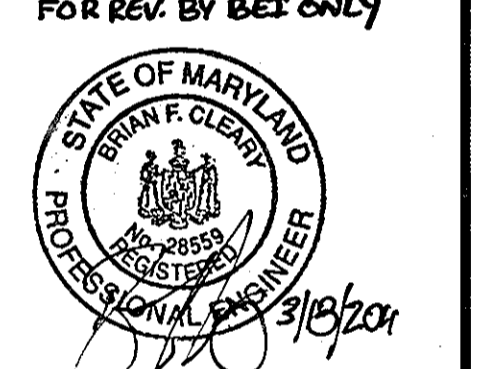


TABLE 1A. TRAFFIC NOISE PREDICTION RESULTS
peak-hour equivalent sound levels for 2008 Cedar Ln. traffic; all values rounded to nearest whole decibel; bold sound levels exceed County design goal

EVALUATION LOCATION ID	Position Coordinates			PRED. SOUND LEVEL (Dba)		IL ¹
	X	Y	Elev.	without Mitigation	with Mitigation*	
L01A	1,345,089	557,915	402.0	71	64	6
L04A	1,345,048	558,017	402.0	68	62	7
L08A	1,344,022	558,083	402.0	66	61	5
L08A	1,344,994	558,167	400.5	59	61	-2
L09A	1,344,932	558,286	402.0	66	63	2

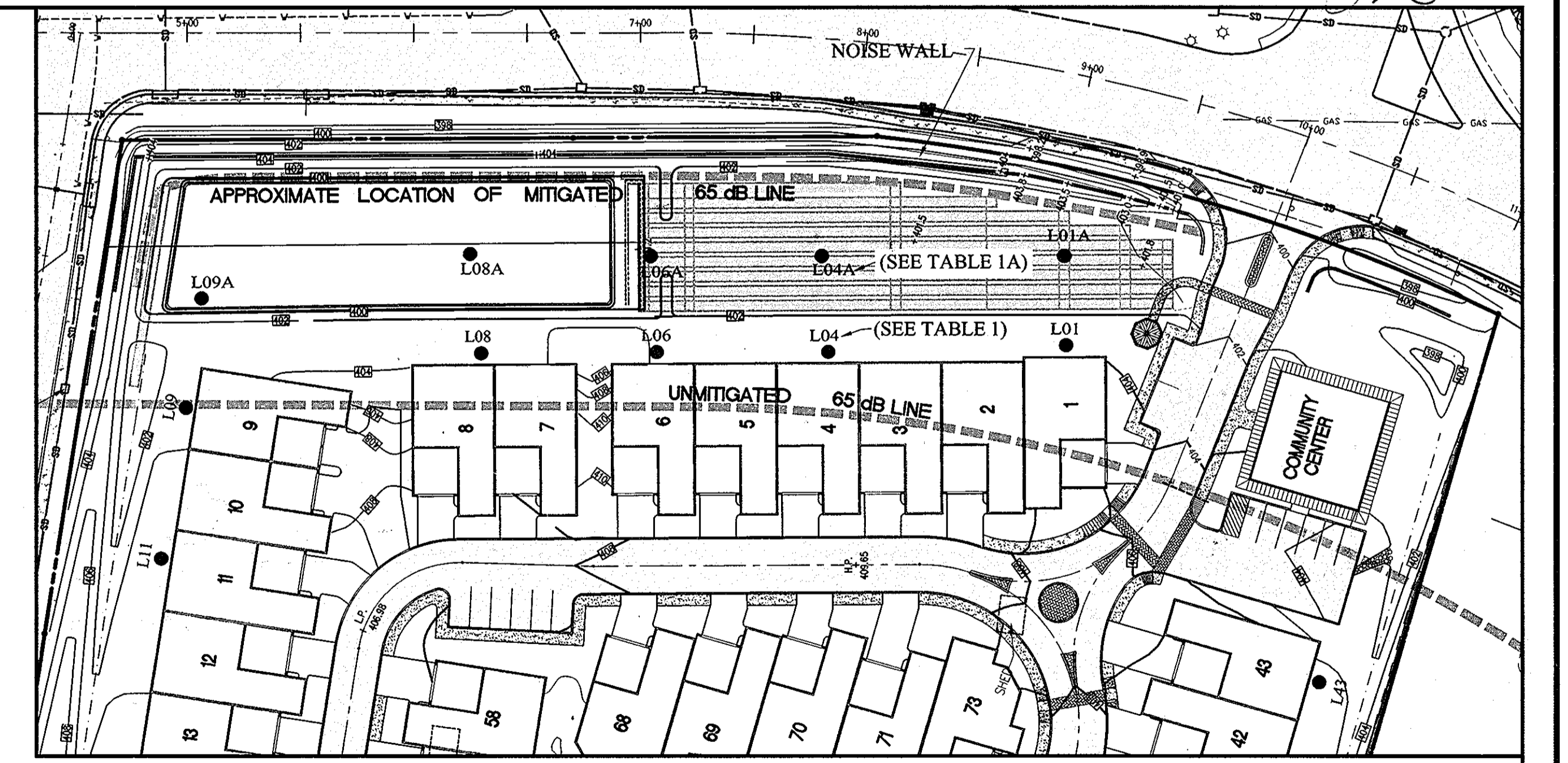
*1-ft barrier wall on 3-ft berm, per Staleno Engineering, Inc. Report No. L 04621
¹Insertion loss (IL) is the sound attenuation provided by a noise barrier

TABLE 1. TRAFFIC NOISE PREDICTION RESULTS
peak-hour equivalent sound levels for 2008 Cedar Ln. traffic; all values rounded to nearest whole decibel; bold sound levels exceed County design goal

EVALUATION LOCATION ID	Position Coordinates			PRED. SOUND LEVEL (Dba)		IL ¹
	X	Y	Elev.	without Mitigation	with Mitigation*	
L01	1345051.0	557884.3	403.5	67	65	3
L04	1345011.9	557990.1	406.5	67	63	4
L06	1344979.8	558090.5	407.5	67	62	5
L08	1344945.2	558173.8	408.5	67	62	5
L09	1344910.0	558257.7	408.5	67	64	3
L11	1344839.8	558243.4	409.5	63	61	3
L43	1344973.5	557756.7	406.5	63	63	0

*1-ft barrier wall on 3-ft berm, per 15-December-2003 Comprehensive Sketch Plan and Figures 1 and 2
¹Insertion loss (IL) is the sound attenuation provided by a noise barrier

• THE 3 FT. BERM AND 4 FT. WALL HAVE REDUCED NOISE TO 65 DB OR LESS IN THE REAR YARDS OF I-11 AND 43.



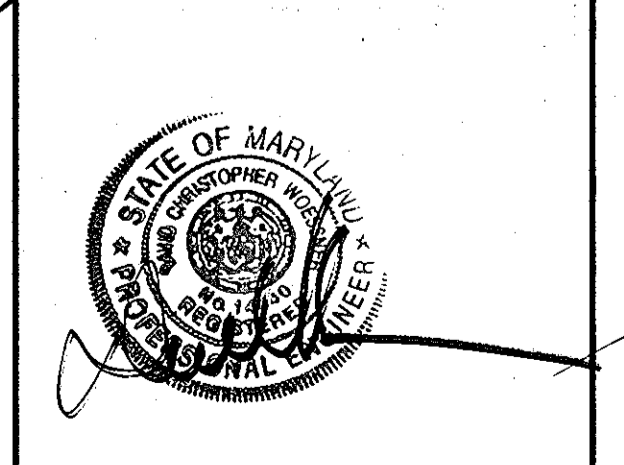
NOISE LEVEL LOCATION PLAN
SCALE: 1" = 50"

PREPARED BY:
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
Harmel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

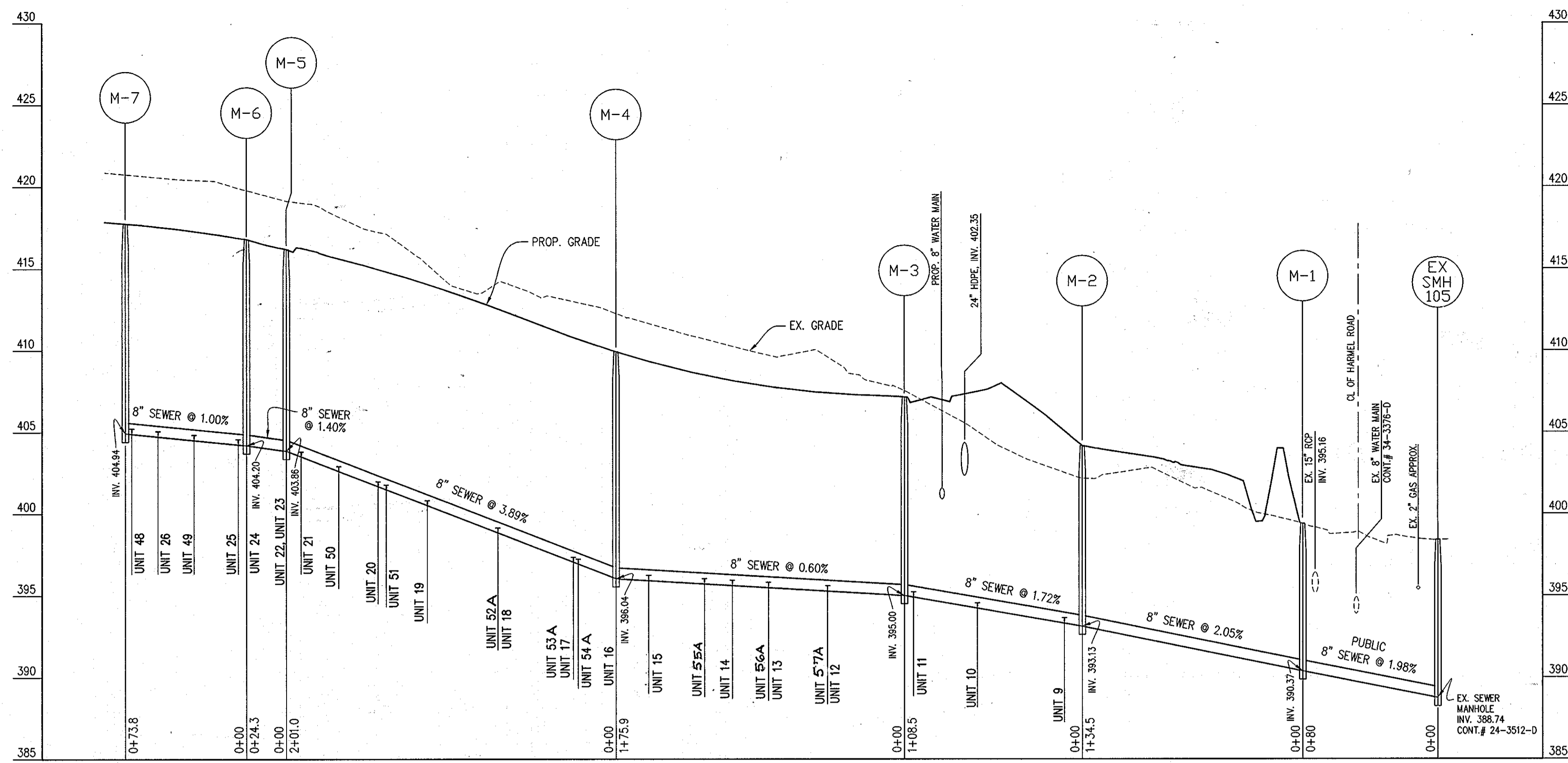
DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.024 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.
DALE THOMPSON
DEC. 10, 2004
DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE
DATE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
HOWARD SCD
DATE

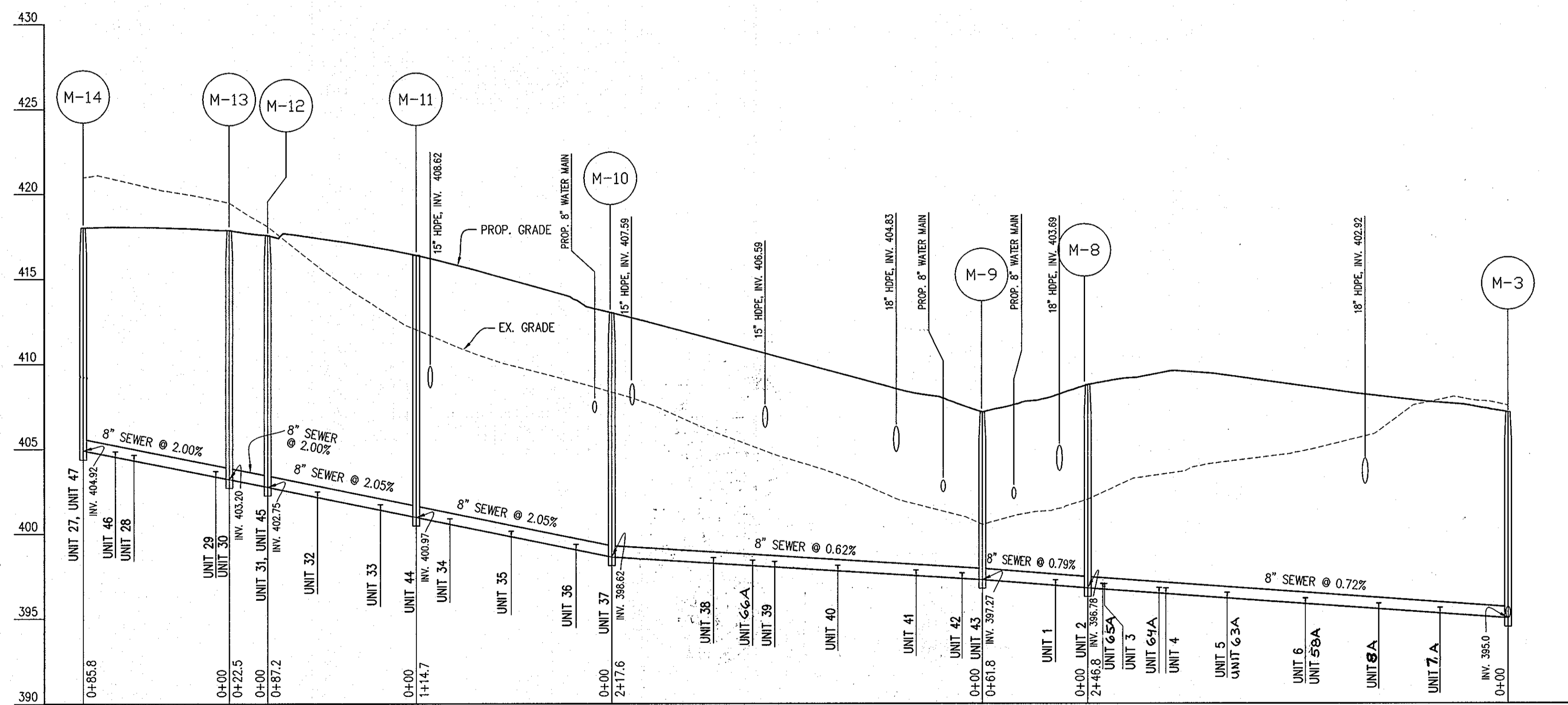


APPROVED: DEPARTMENT OF PLANNING AND ZONING
DATE: 1/6/05
DATE: 1/25/05
DATE: 2/10/05

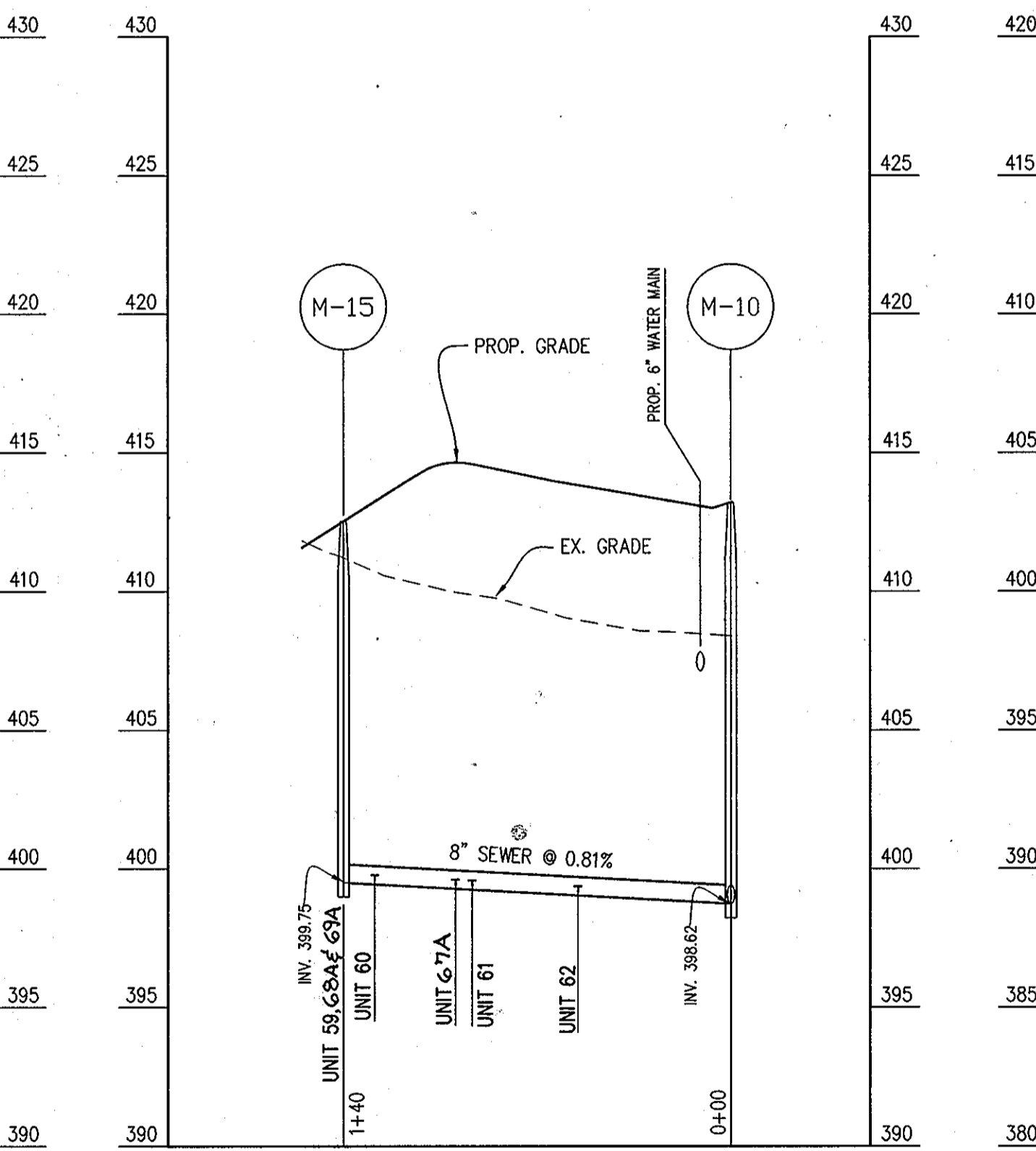
TITLE: NOISE ATTENUATION PLAN AND NON-BONDED LANDSCAPING
PROJECT NAME: SCOTS GLEN NORTH
BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 28A AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3
S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101
DES: DCW/JAVG JOB: PROJ: DATE: 12-10-04
DRW: AVG/DJA/JNC CHK: D.C.W. SCALE: AS SHOWN SHEET 14 OF 25



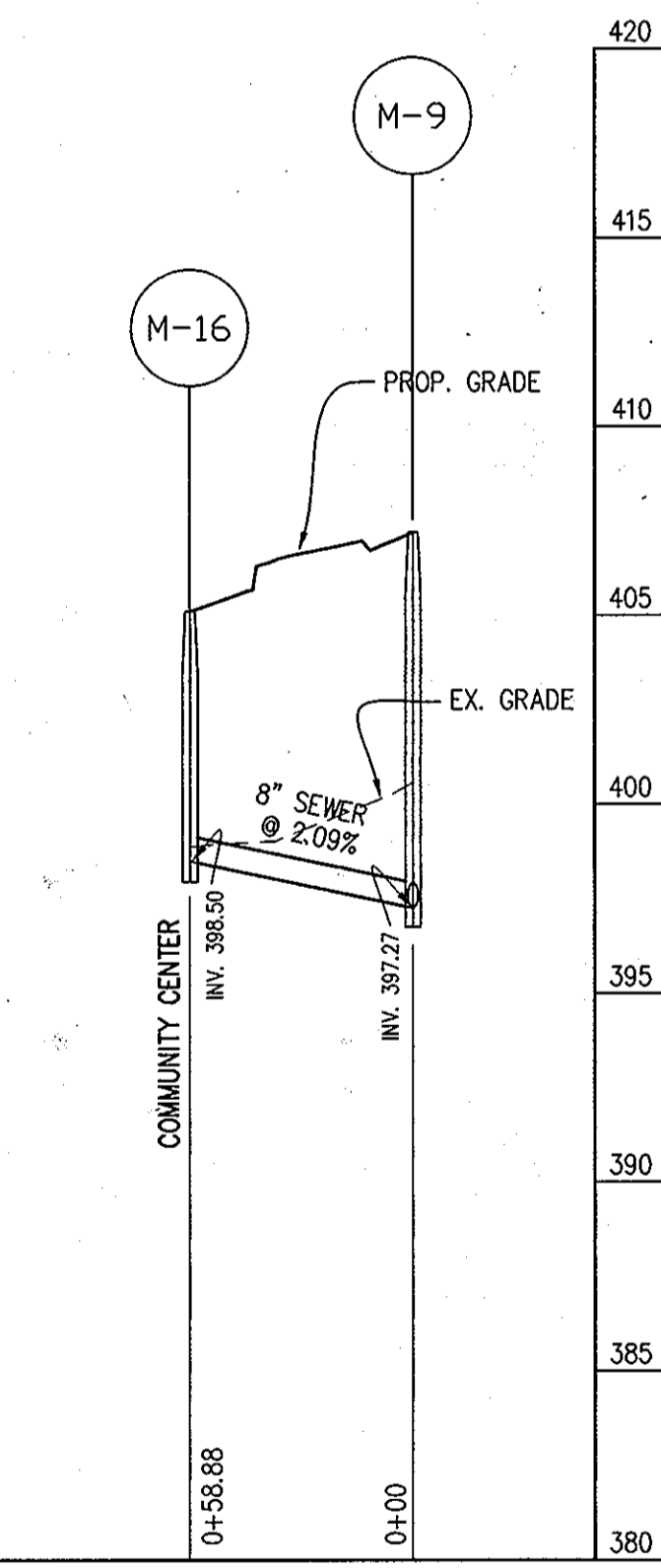
SEWER MAIN PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VER.



SEWER MAIN PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VER.



SEWER MAIN PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VER.

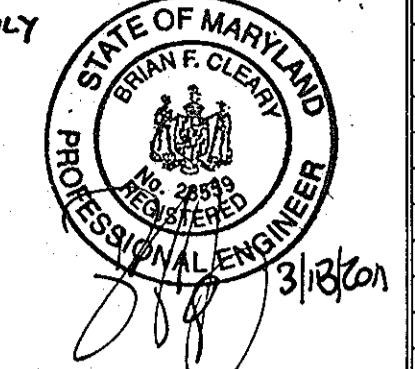


SEWER MAIN PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VER.

MANHOLE TABULATION CHART

STRUCTURE NO.	LOCATION STATION AND OFFSET	TOP ELEVATION	INVERT
M-1	N 558310.215, E 1344912.884	401.0	390.37
M-2	N 558178.464, E 1344939.845	404.16	393.13
M-3	5+38.13, 12.44' R	407.14	395.00
M-4	7+21.18, 16.61' L	409.93	396.04
M-5	9+29.67, 7.44' L	416.20	403.86
M-6	9+58.76, 6.10' L	416.81	404.20
M-7	10+34.00, 7.00' L	417.75	404.94
M-8	2+74.17, 7.98' L	408.77	396.78
M-9	16+22.70, 7.24' R	407.20	397.27
M-10	14+03.72, 8.84' L	413.00	398.62
M-11	12+88.84, 17.26' L	416.39	400.97
M-12	11+96.90, 6.78' L	417.57	402.75
M-13	11+70.62, 5.21' L	417.86	403.20
M-14	10+83.05, 7.00' L	418.03	404.92
M-15	N 557965.673, N 1344708.365	412.53	399.75
M-16	1+83.11, 21.48' L	405.11	398.50
EX-MH 105	N 558379.163, N 1344958.008	--	388.74

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: 7/24/11
FOR REV BY BELOW



SHC INVERT @ STRUCTURE

STATION	UNIT #	ELEVATION	M.C.E.
MH 2 TO MH 3			
0+11	9	393.32	396.82
0+64	10	394.23	398.13
1+03	11	394.90	397.10
MH 3 TO MH 4			
0+47	12	395.28	397.48
0+47	57A	395.28	397.10
0+83	13	395.49	397.67
0+83	56A	395.49	398.99
1+05	14	395.63	397.89
1+22	55A	395.73	399.23
1+56	15	395.94	398.14
MH 4 TO MH 5			
0+23	54A	397.70	400.89
0+26	17	397.05	400.95
0+26	53A	397.05	400.45
0+72	18	398.84	402.74
0+72	52A	398.84	402.24
1+15	19	400.51	404.41
1+40	51	401.48	404.58
1+45	20	401.68	405.58
1+69	50	402.61	405.71
1+92	21	403.51	405.71
@ MH #5	22	403.86	406.56
@ MH #5	23	403.86	408.56
MH 5 TO MH 6			
@ MH #6	24	404.20	408.10
MH 6 TO MH 7			
0+05	25	404.25	406.35
0+32	49	404.52	406.52
0+54	26	404.74	408.40
0+70	48	404.90	408.40
MH 7 TO MH 8			
0+40	7A	395.28	399.39
0+76	5A	395.54	397.84
1+19	6	395.85	398.05
1+19	58A	395.85	399.35
1+65	5	396.19	398.39
1+65	63A	396.19	399.69
2+01	4	396.44	398.64
2+05	64A	396.47	400.07
2+37	3	396.71	398.91
2+38	65A	396.71	398.91
MH 8 TO MH 9			
@ MH #8	2*	396.78	398.91
0+19	1*	396.93	399.23
MH 9 TO MH 10			
@ MH #9	43*	397.62	399.72
0+12	42*	397.35	399.45
MH 10 TO MH 11			
0+39	41	397.53	399.53
0+85	40	397.83	399.93
MH 11 TO MH 12			
1+22	39	398.08	401.78
1+35	66A	398.17	401.47
1+58	38	398.32	402.03
@ MH #10	37	398.62	402.32
MH 12 TO MH 13			
0+21	33	399.02	402.71
0+59	35	399.73	403.53
0+95	34	400.41	404.31
@ MH #11	44	400.97	404.77
MH 13 TO MH 14			
@ MH #13	30	403.20	407.70
0+08	29	403.34	407.24
0+56	28	404.32	408.22
0+67	46	404.54	408.24
@ MH #14	27	404.92	409.02
@ MH #14	47	404.92	408.62
MH 14 TO MH 15			
0+55	62	399.06	402.76
0+93	61	399.37	403.27
0+99	67A	399.68	402.98
1+28	60	400.19	403.49
@ MH #15	59	398.62	402.56
@ MH #15	69A	398.62	402.52
@ MH #15	68A	398.62	402.12

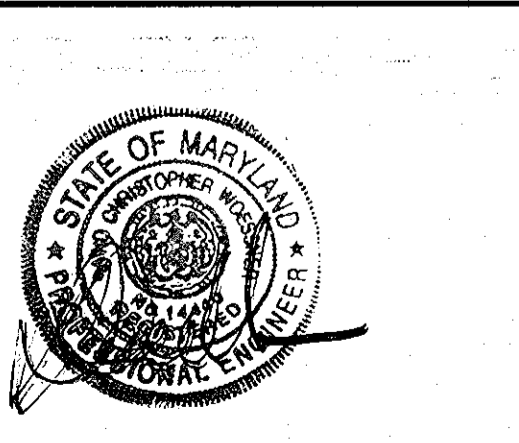
* Install SHC @ 1% and utilize short radius elbow under slab foundation.
Elevation = elevation of shc @ the main. All shc's will be at 2%, unless otherwise stated.

PREPARED BY:
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
Hamel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Signature: David C. Woessner
DATE: DEC. 10, 2004

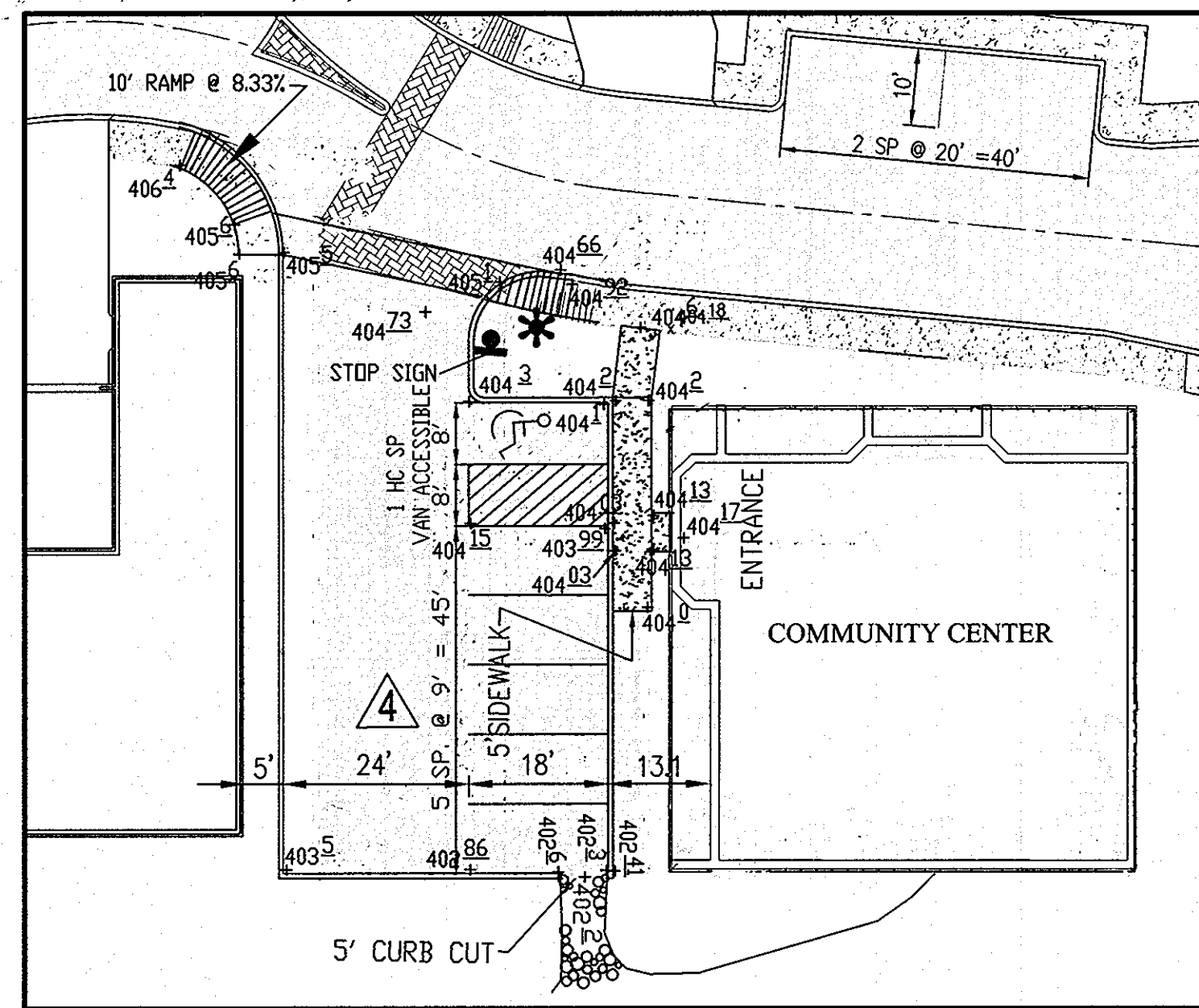
DEVELOPER'S CERTIFICATE
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
Signature: Dale Thompson
DATE: DEC. 10, 2004



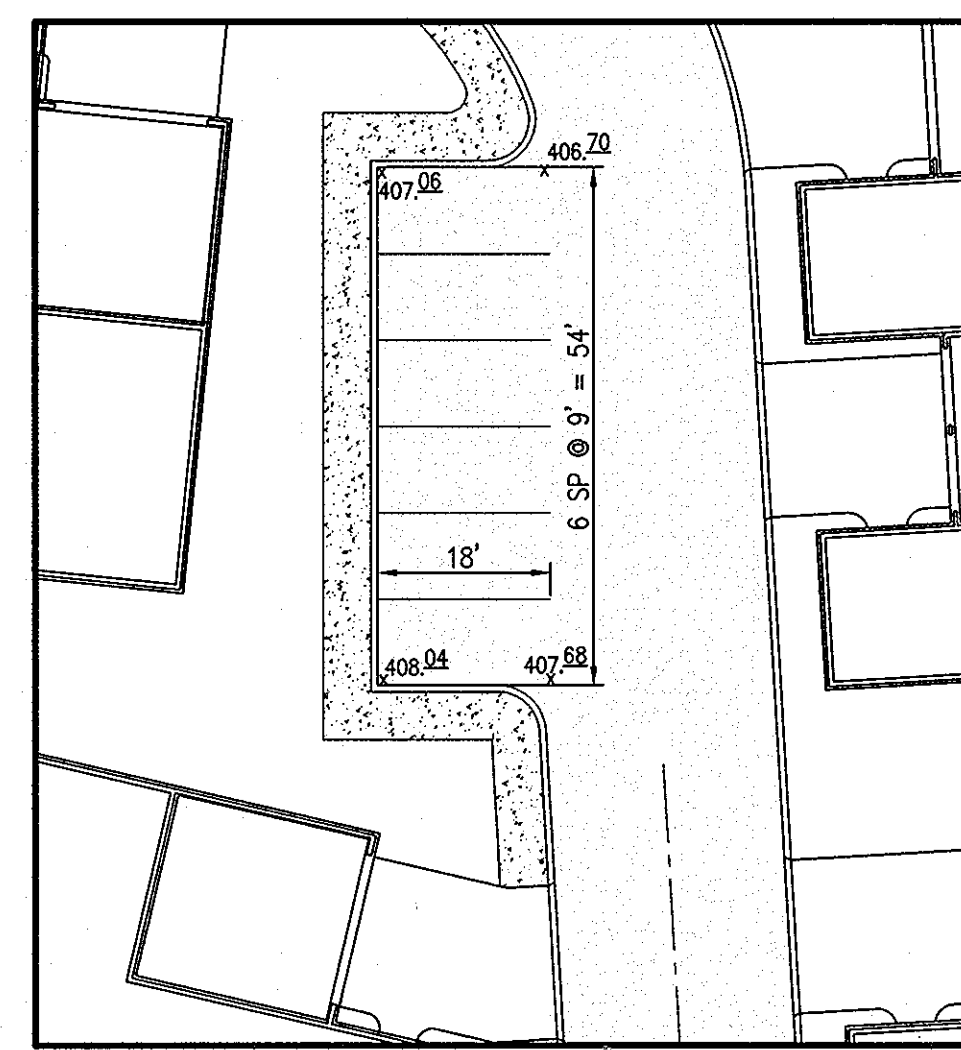
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: [Redacted]
Signature: Cindy Hamner
Signature: [Redacted]

TITLE: **PRIVATE SEWER MAIN PROFILES**
PROJECT NAME: **SCOTS GLEN NORTH**
9-51, 52A, 53A, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63A, 64A
BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A, AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3
WP-11-10B S-04-03 PB CASE 362 WP-04-114 F-05-52 F-05-101
DES.: DCW/JAVG JOB: PROJ.: DATE: 12-10-04
DRW.: AVG/DJA/JNC CHK.: D.C.W. SCALE: AS SHOWN SHEET 15 OF 25

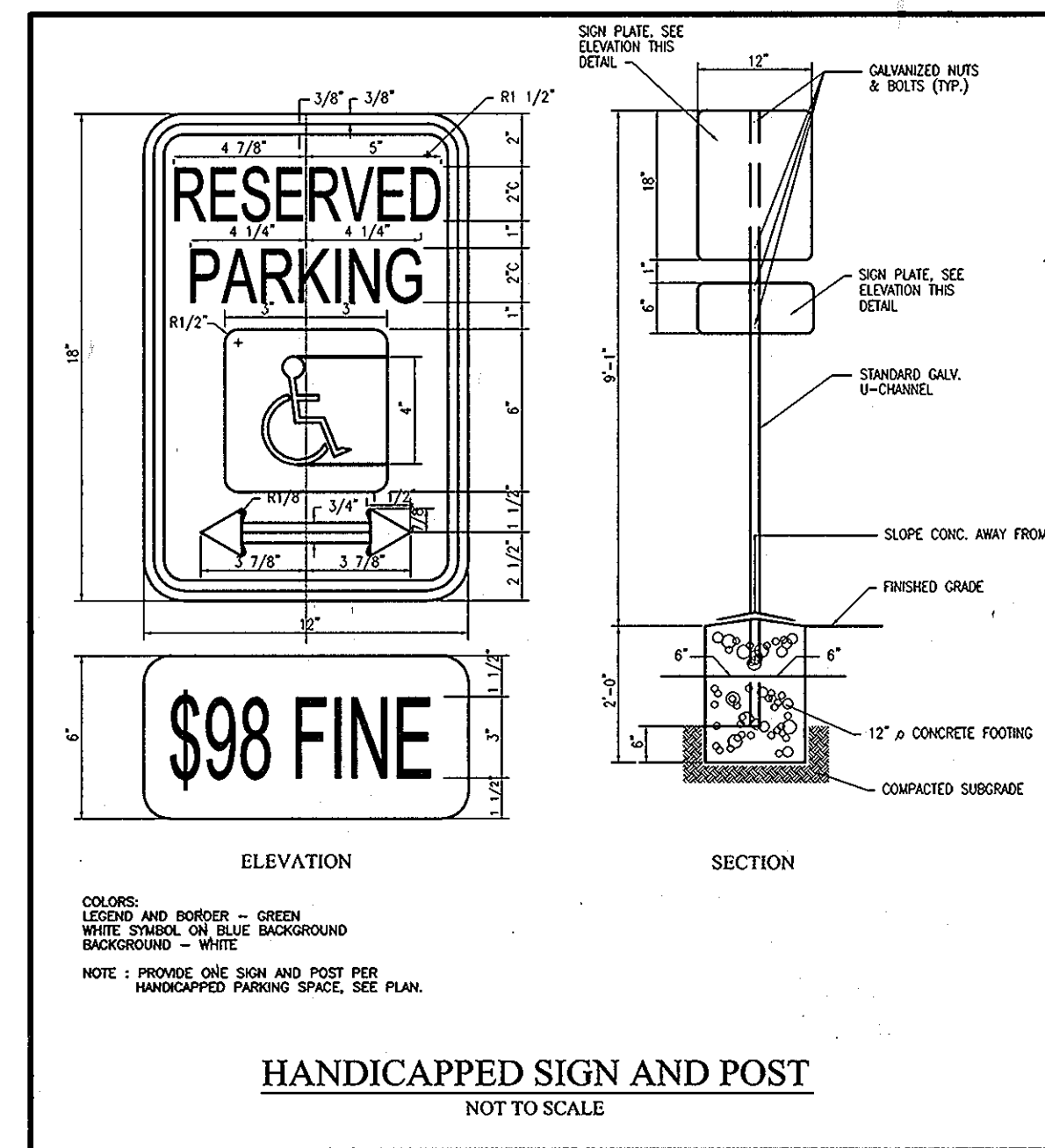
NO.	DATE	REVISION	BY
3-9-11		REVISE LOT NUMBERS AND REMOVE SOME SHC AND REVISE TITLE BLOCK	BET
4-25-08		M.C.E. ADJUSTMENT DUE TO LOWERED BASEMENT	ALB



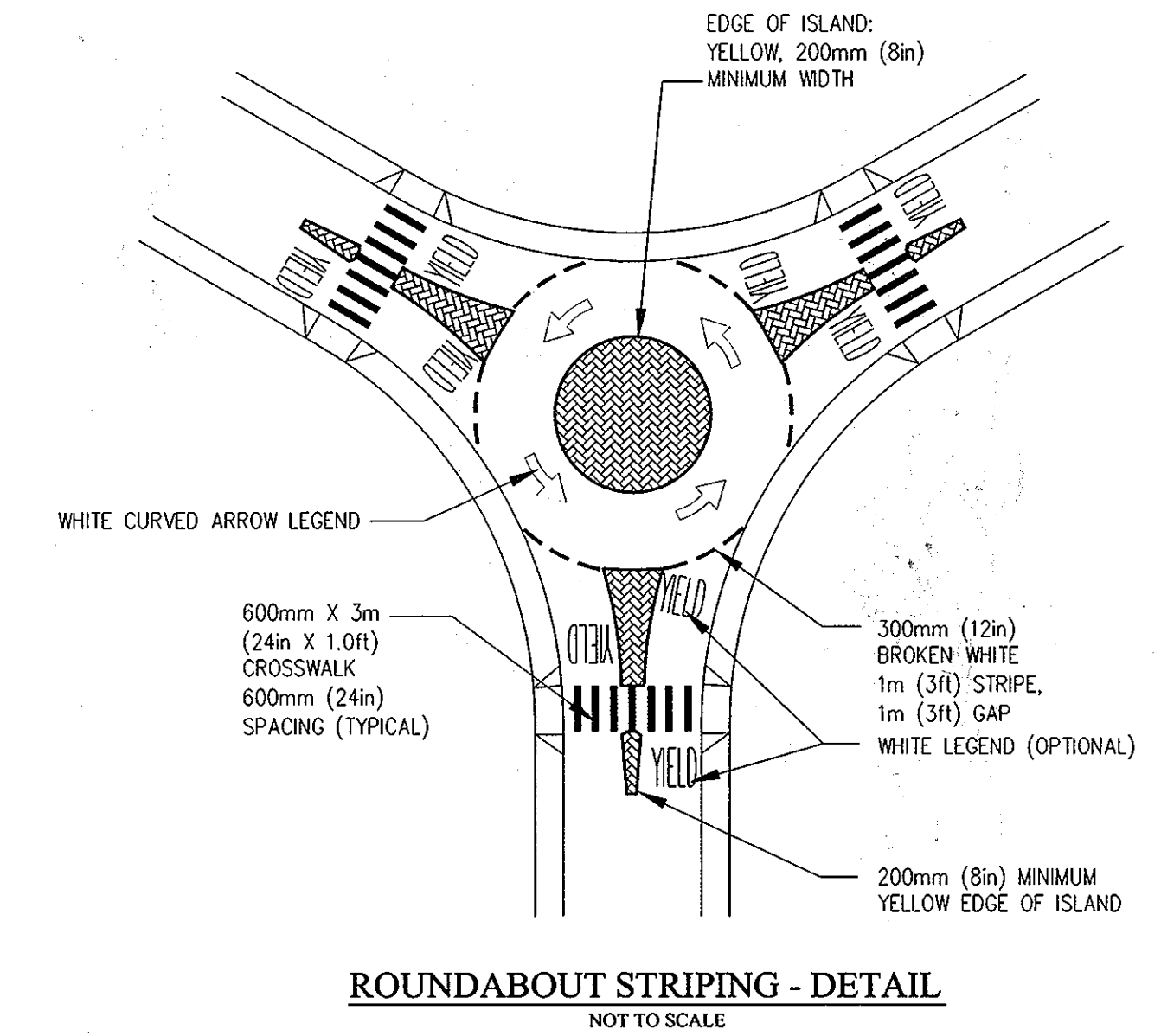
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NOT TO SCALE



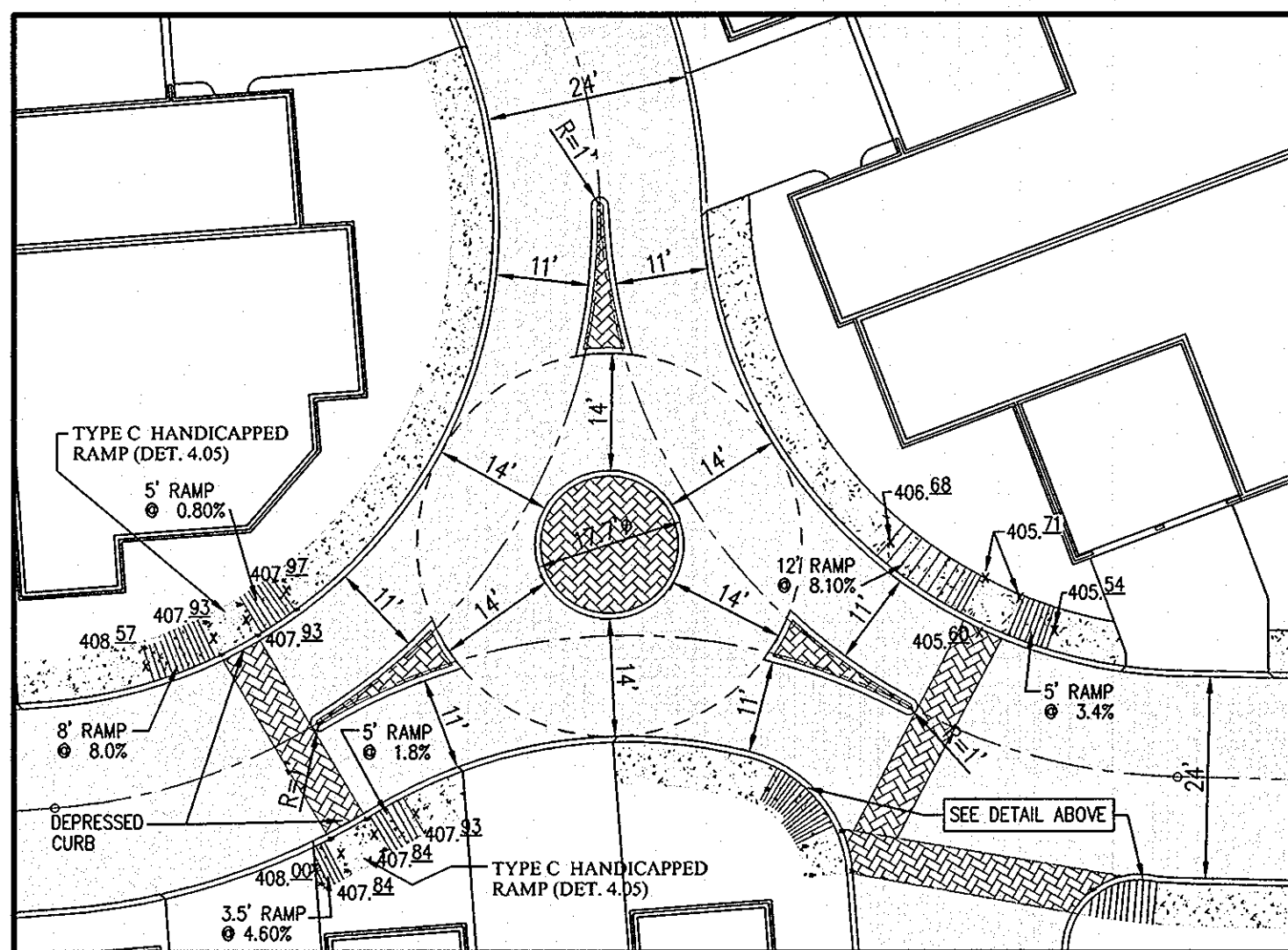
PARKING - DETAIL
NOT TO SCALE



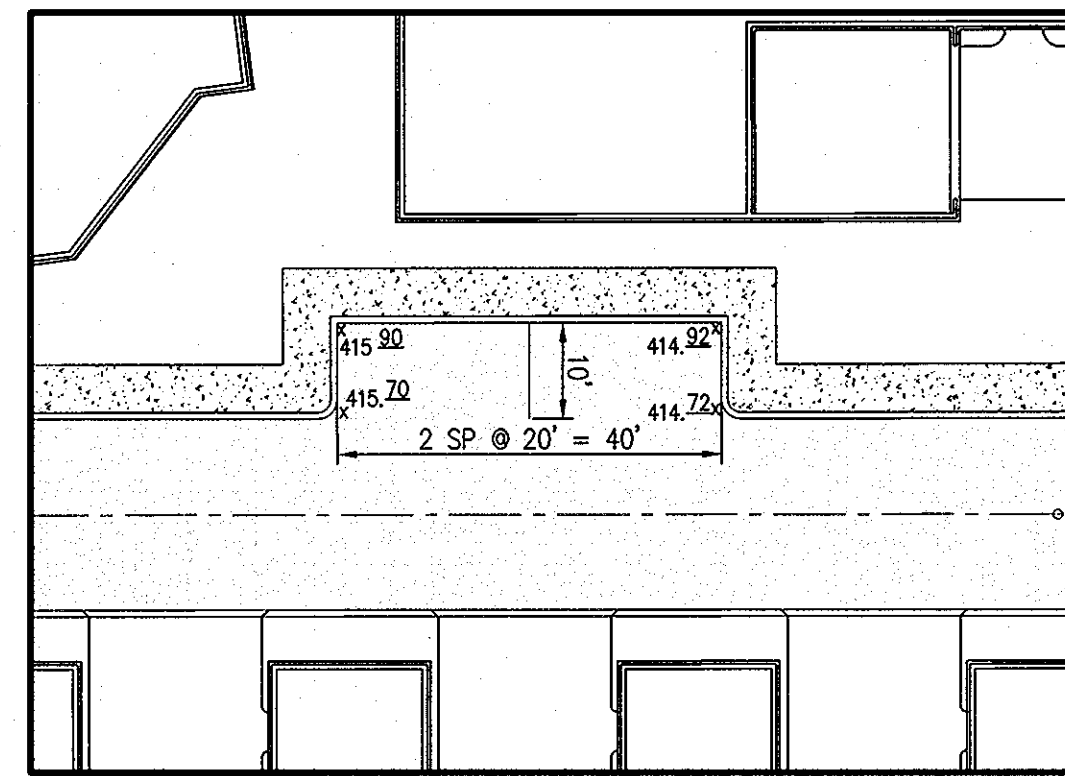
HANDICAPPED SIGN AND POST
NOT TO SCALE



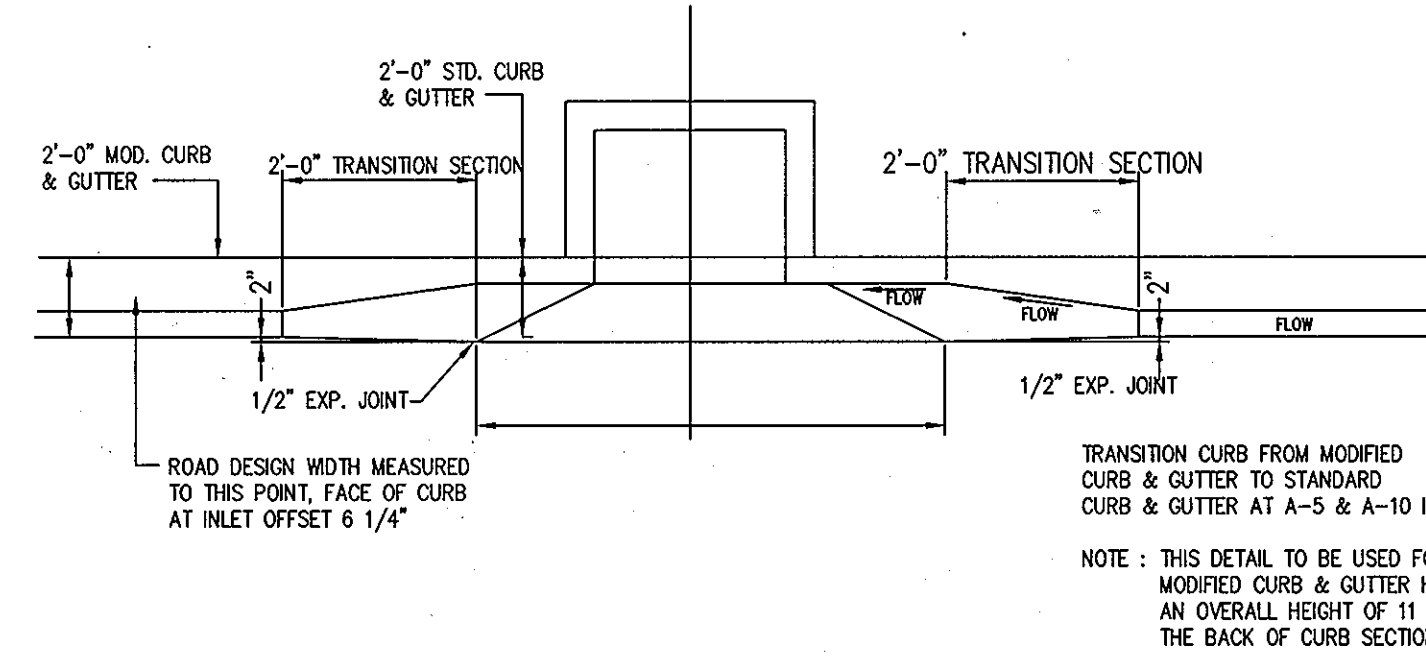
ROUNDAABOUT STRIPING - DETAIL
NOT TO SCALE



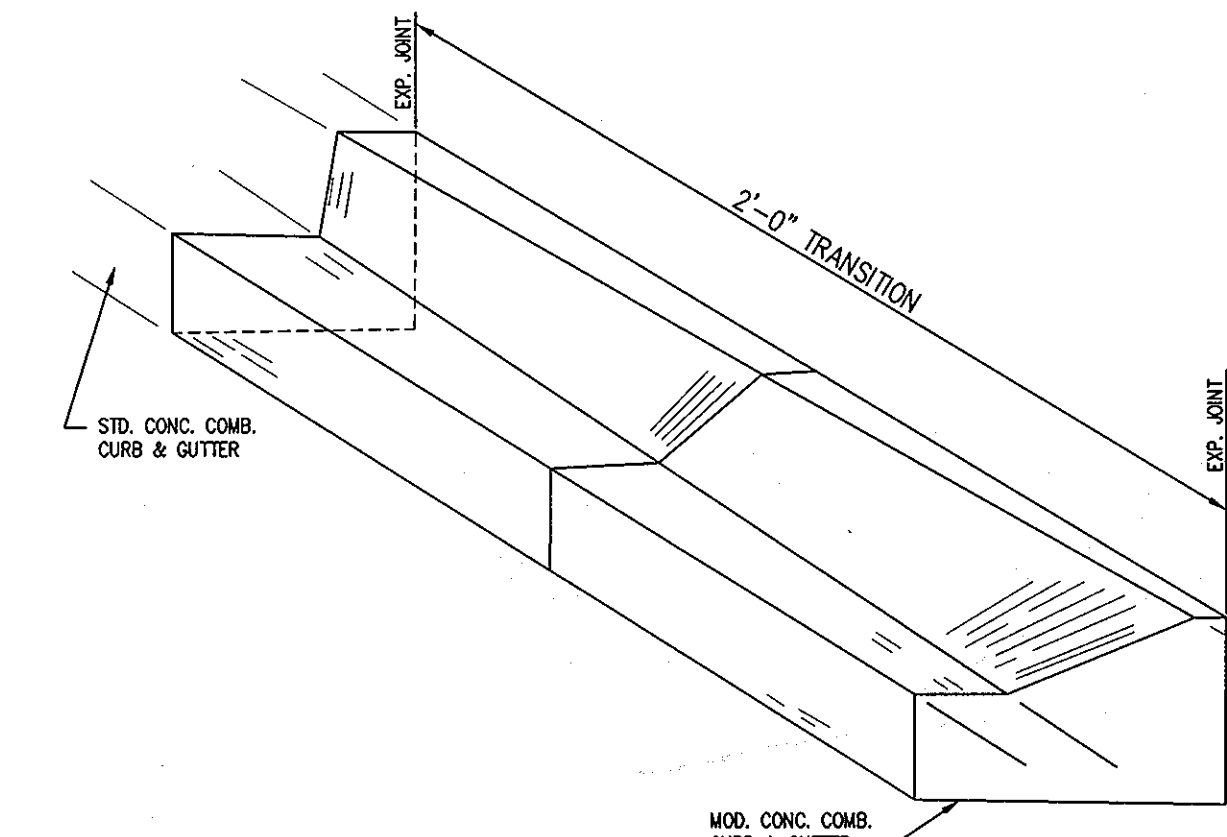
ROUNDAABOUT & HANDICAPPED RAMP - DETAIL
NOT TO SCALE



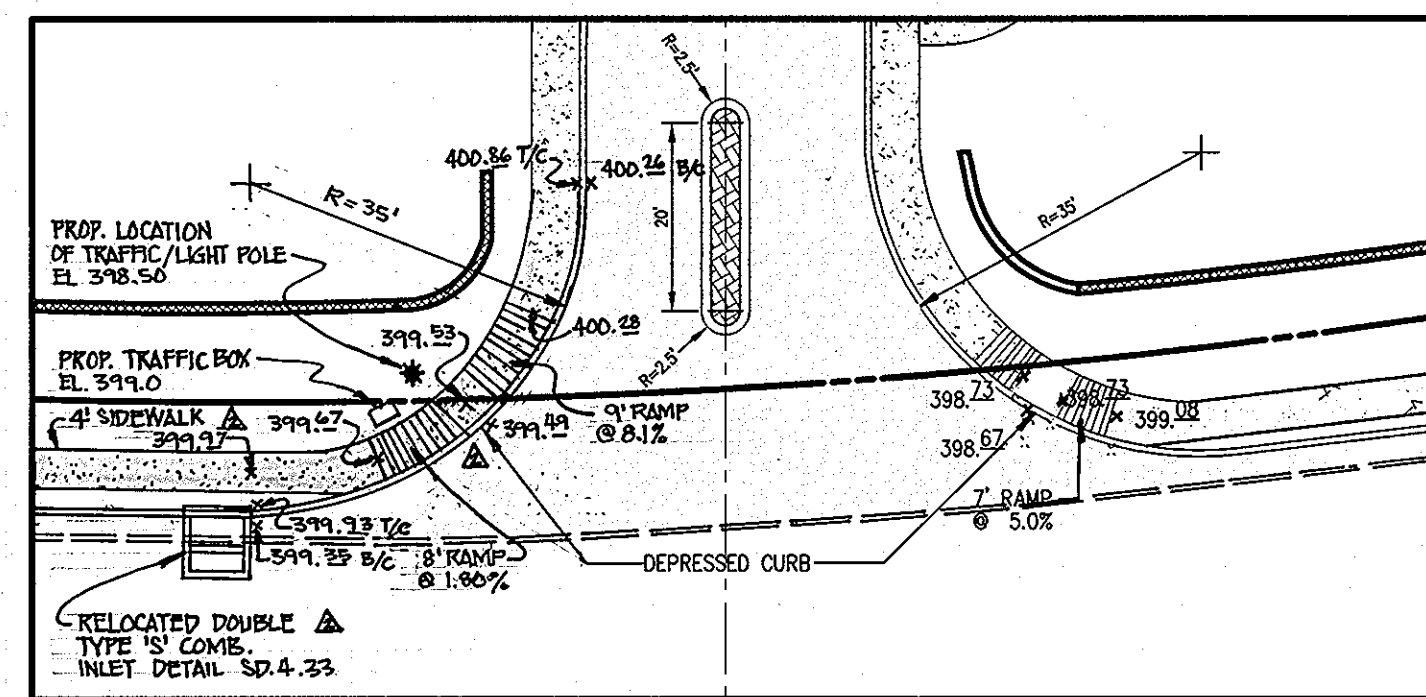
PARKING - DETAIL
NOT TO SCALE



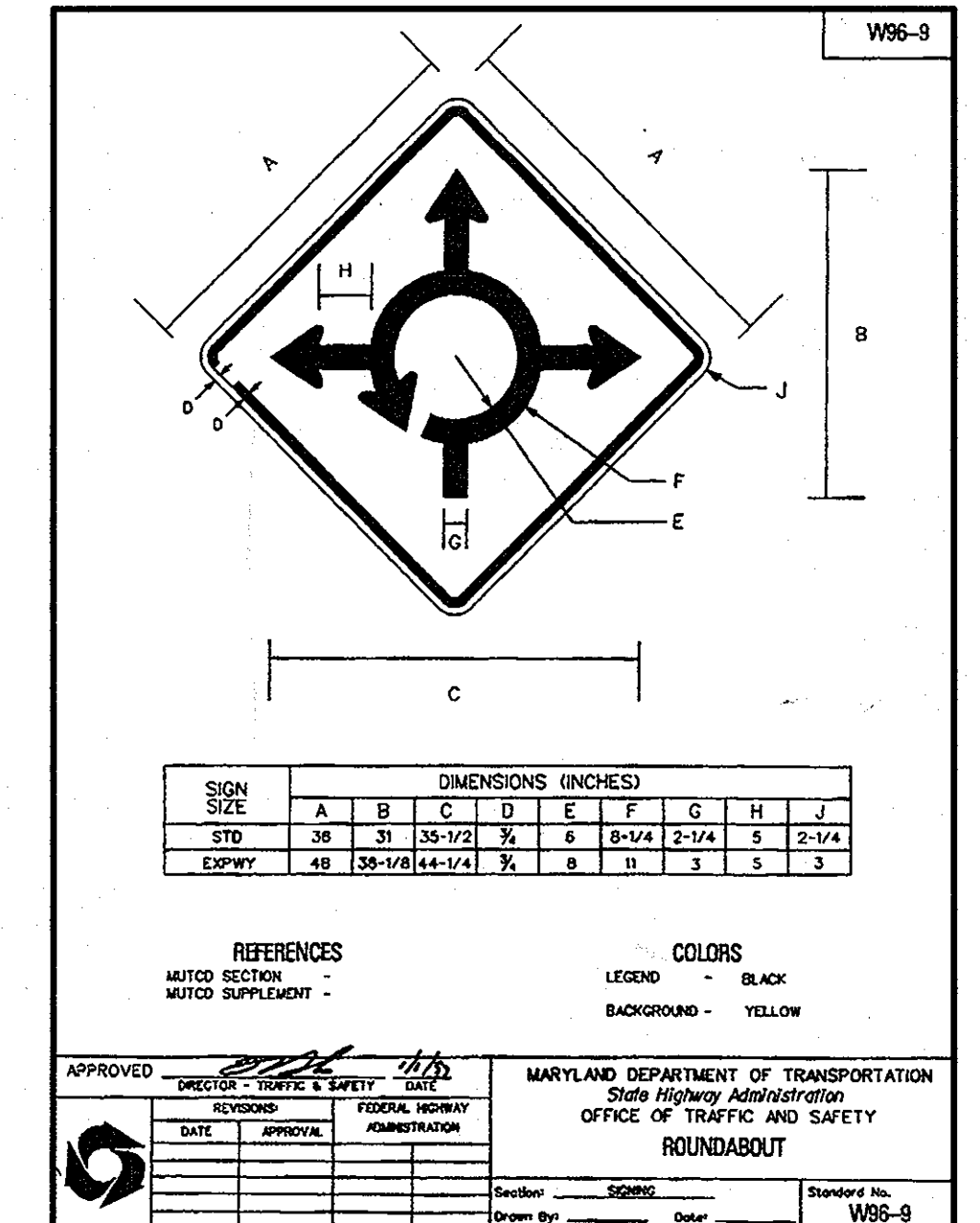
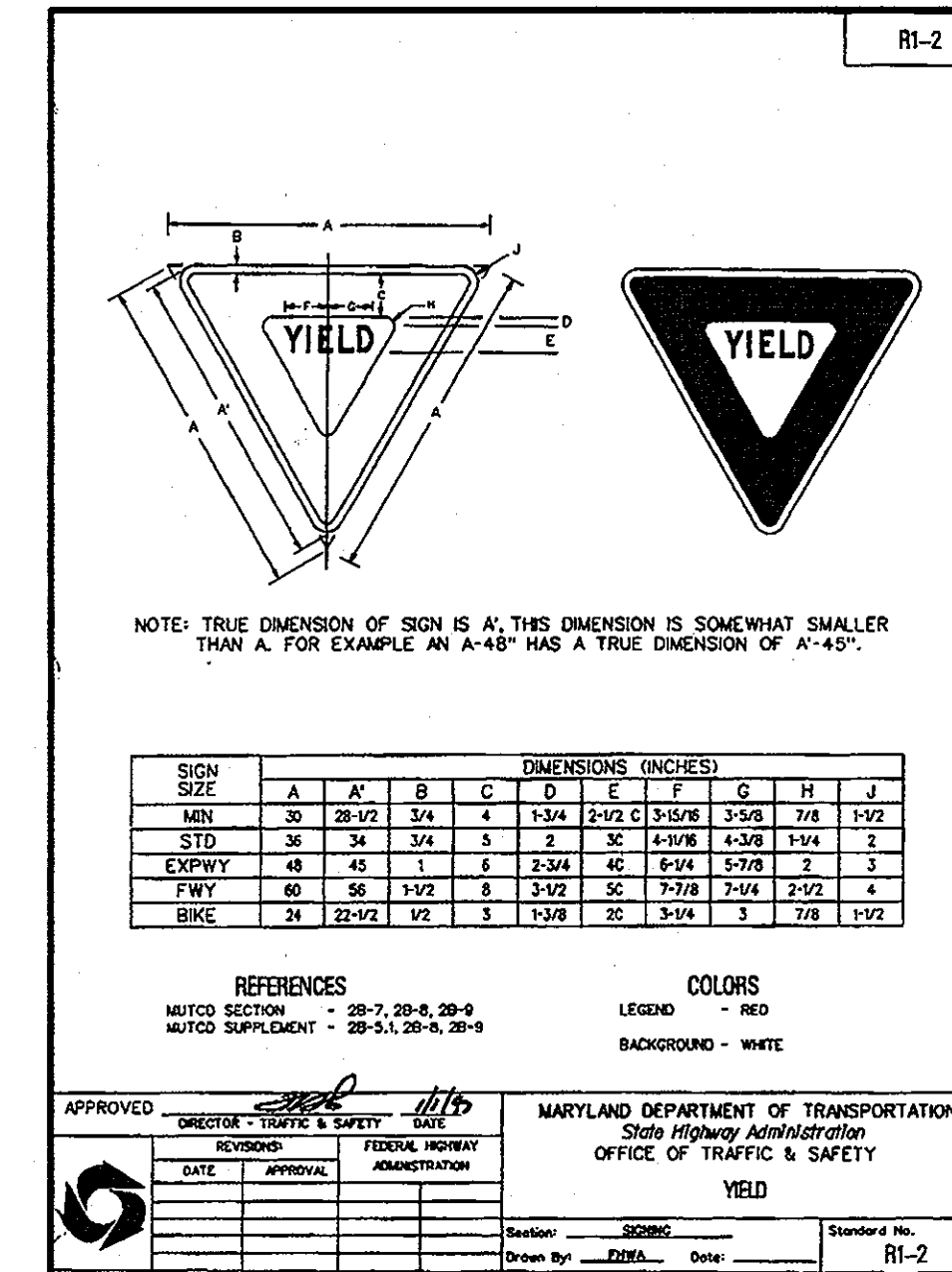
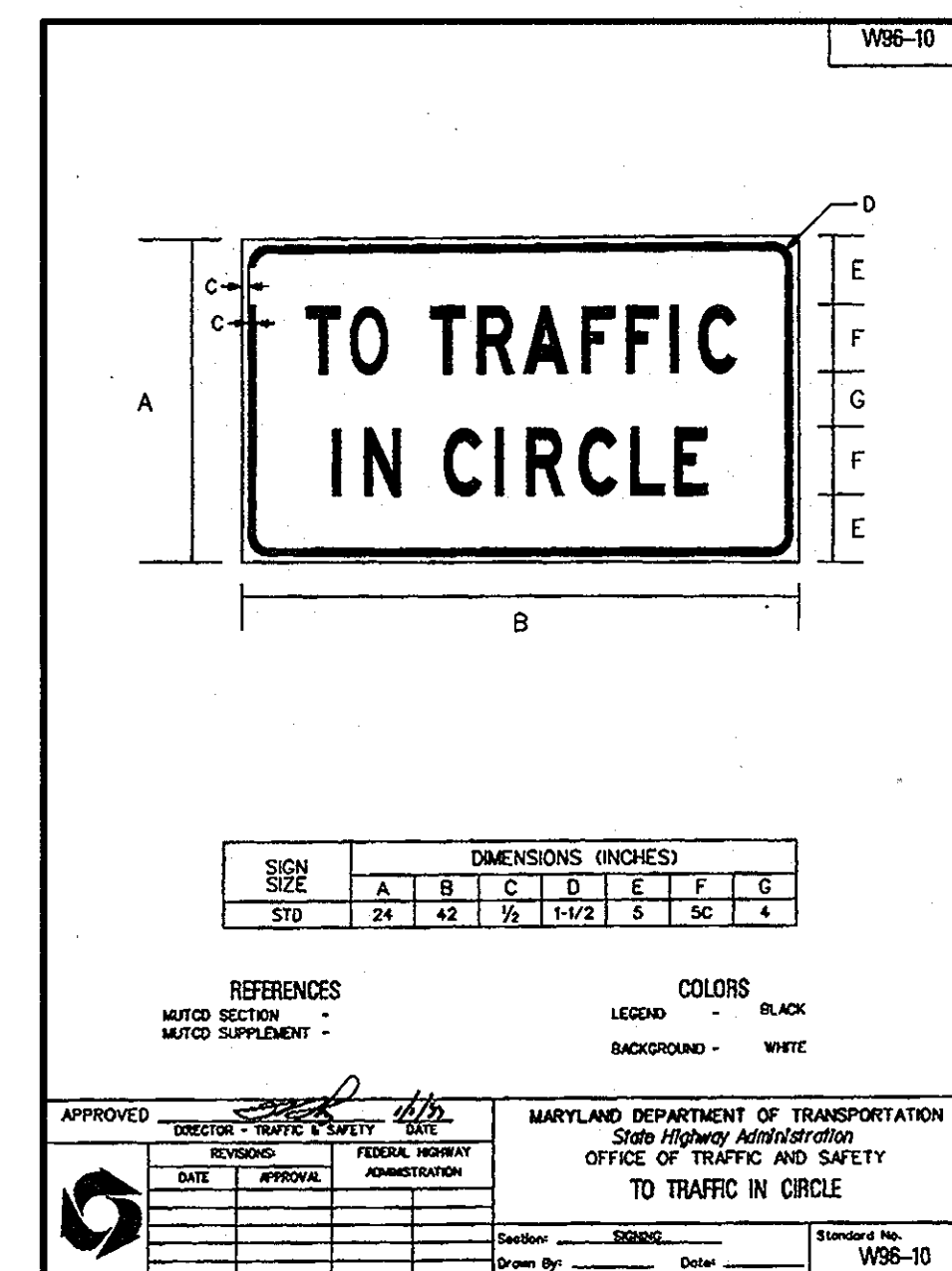
CONCRETE CURB & GUTTER TRANSITION
NOT TO SCALE
(DETAIL - R-3.06)



CONCRETE CURB & GUTTER TRANSITION
NOT TO SCALE
(DETAIL R-3.02)



HANDICAPPED RAMP @ ENTRANCE - DETAIL
NOT TO SCALE
TYPE C RAMP (DETAIL R-4.03)



STATE OF MARYLAND
BRYAN F. CLEMP
PROFESSIONAL ENGINEER
No. 29559
For Rev. By BEI ONLY
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. 29559, Expiration Date: 7/22/11

PREPARED BY:
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
Harmel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

NO	DATE	REVISION	BY
1	8-16-06	REVISED PARKING LOT @ COMMUNITY CENTER	
2	3-9-11	REVISE TITLE BLOCK	BEI
3	1-5-04	LEFT FILLET RADI, SIDEWALK & CURBS TO BE RELOCATED 3' OFF EXISTING CURBS	ALDEI
4			

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Signature: [Signature]
DATE: DEC. 10, 2004

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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: [Signature]
DATE: DEC. 10, 2004



APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: [Signature]
DATE: 1/5/05

Signature: [Signature]
DATE: 1/25/05

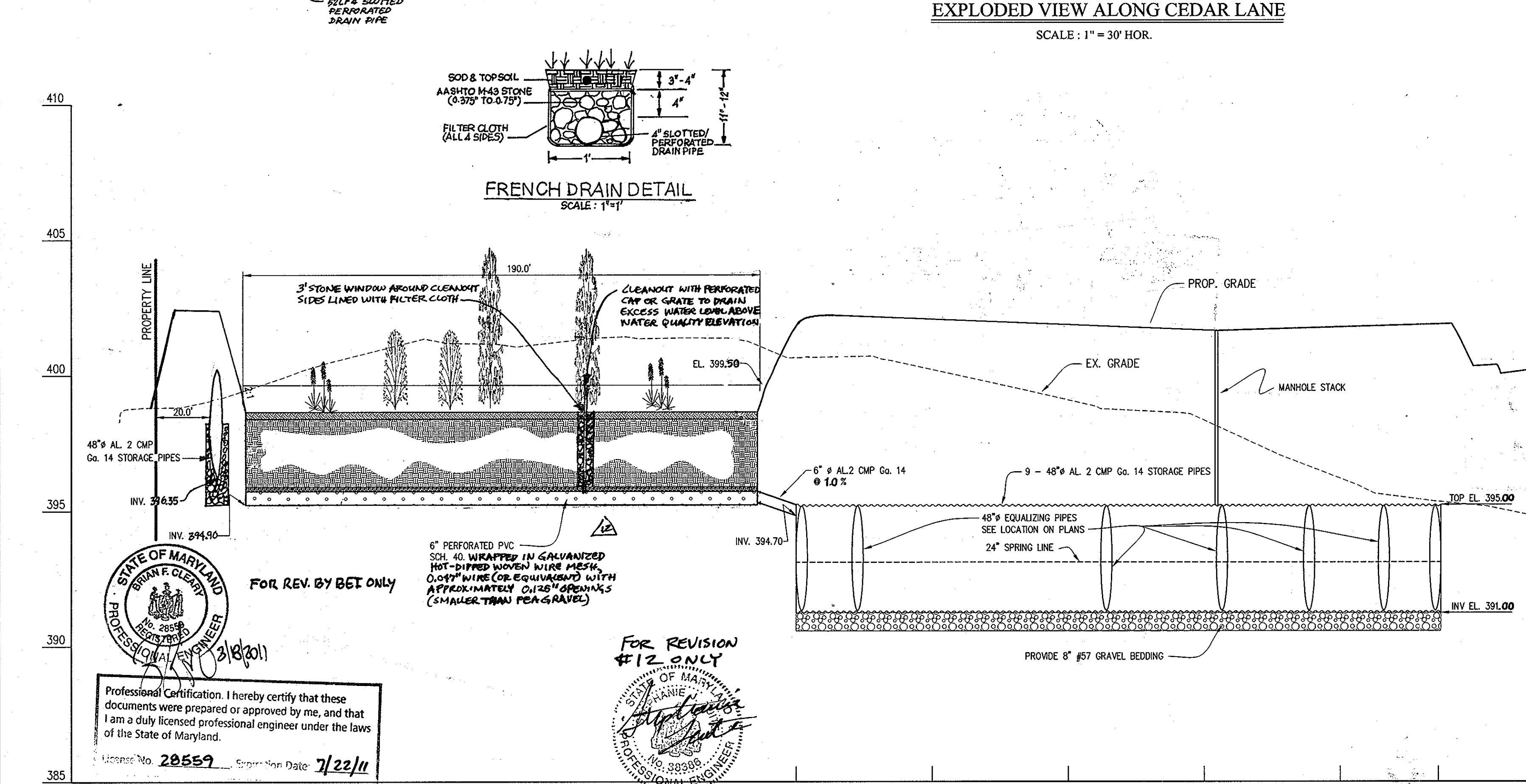
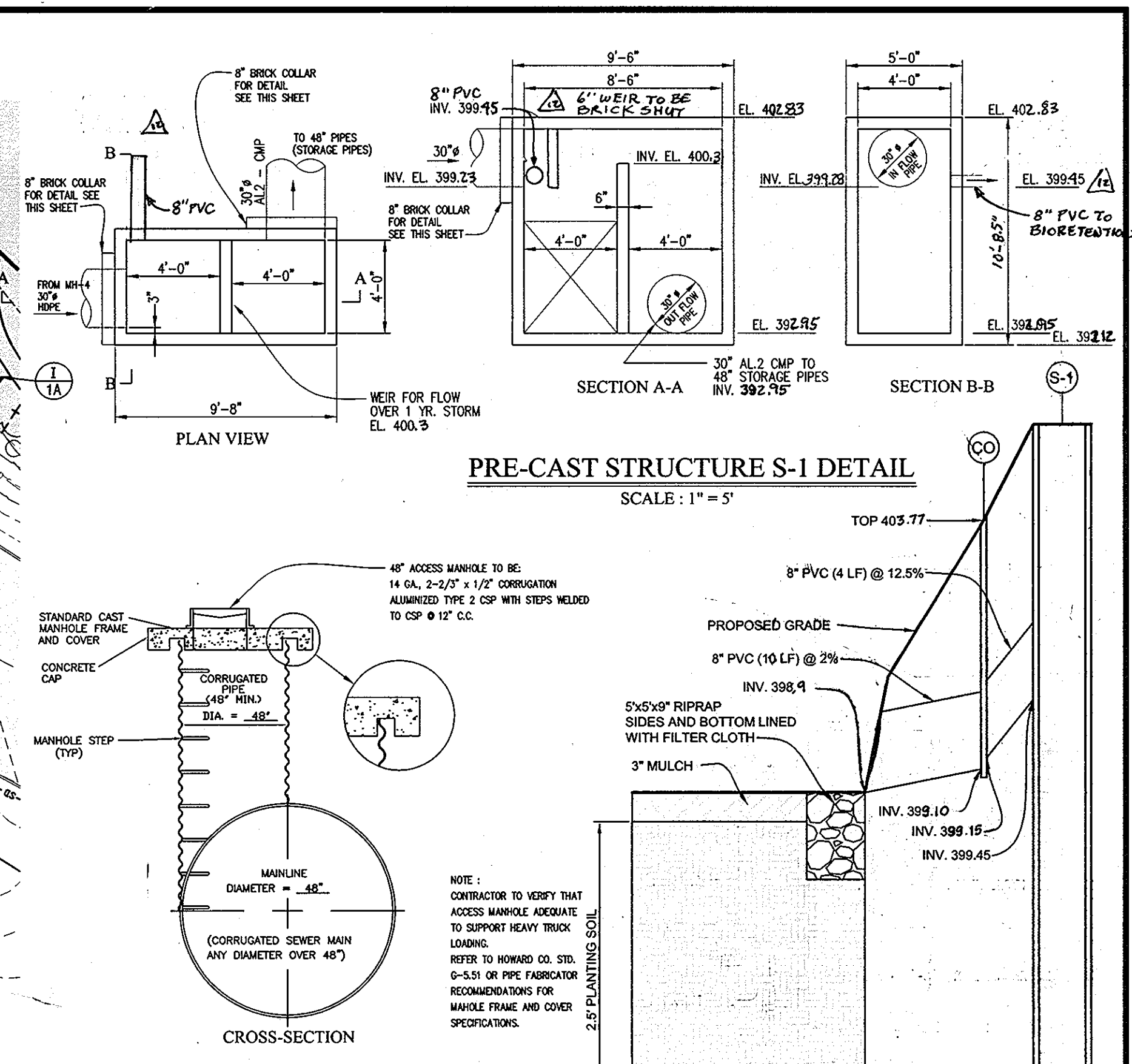
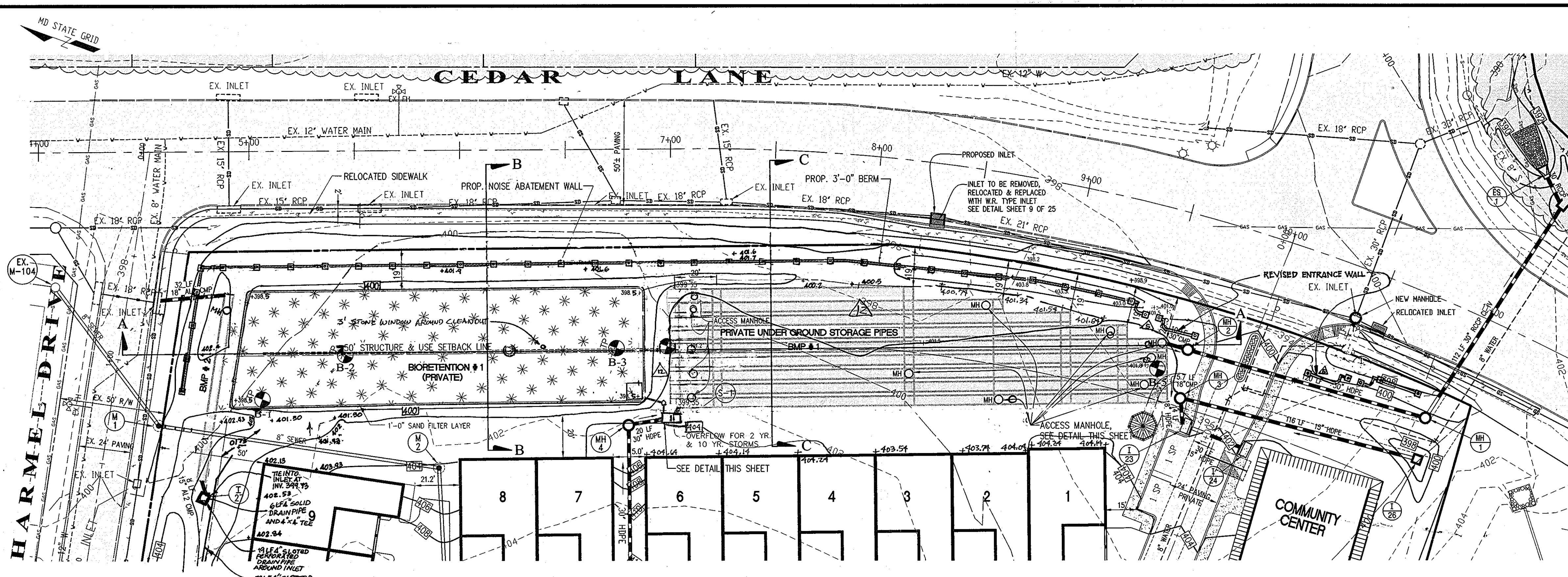
Signature: [Signature]
DATE: 2/4/05

TITLE: **HANDICAPPED DETAILS / TRAFFIC SIGNS**

PROJECT NAME: **SCOTS GLEN NORTH**
BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A, AND COMMUNITY CENTER
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

WP-11-10B S-04-03 PB CASE 362 WP 04-114 F-05-92 F-05-101

DES.: DCW/JL/AVG	JOB:	PROJ.:	DATE: 12-10-04
DRW.: AVG/DTA/INC	CHK.: D.C.W.	SCALE: AS SHOWN	SHEET 16 OF 25



NO.	DATE	DESCRIPTION	BY
7-22-11		DELETE SAND FILTER LAYER, STONE DIAPHRAGM, AND PROVIDE CHANNEL AND 8" PVC CLEANOUT, 3" STONE WINDOW, AND 3" RIPRAP AND REVISE GRADING ASSOCIATED WITH 6" WIDE CHANNEL & STONE DIAPHRAGM TO CREATE SWALE ALONG BIORETENTION	STJ
8-9-11		REVISE TITLE BLOCK	BET
8-16-06		REVISED ENTRANCE WALL	ALDEI
13	7-31-12	REVISE GRADING TO REFLECT AS-BUILT CONDITIONS AND ADD FRENCH DRAIN AROUND INLET 1-27, AND ADD FRENCH DRAIN DETAILS	STJ

PREPARED BY:
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
Harmel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

David M. Wessner 1/27/05
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

David M. Wessner 1/27/05
HOWARD SCD

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chris Hanter 1/27/05
CHIEF, DIVISION OF LAND DEVELOPMENT

David M. Wessner 2/1/05
DIRECTOR - DEPARTMENT OF PLANNING AND ZONING

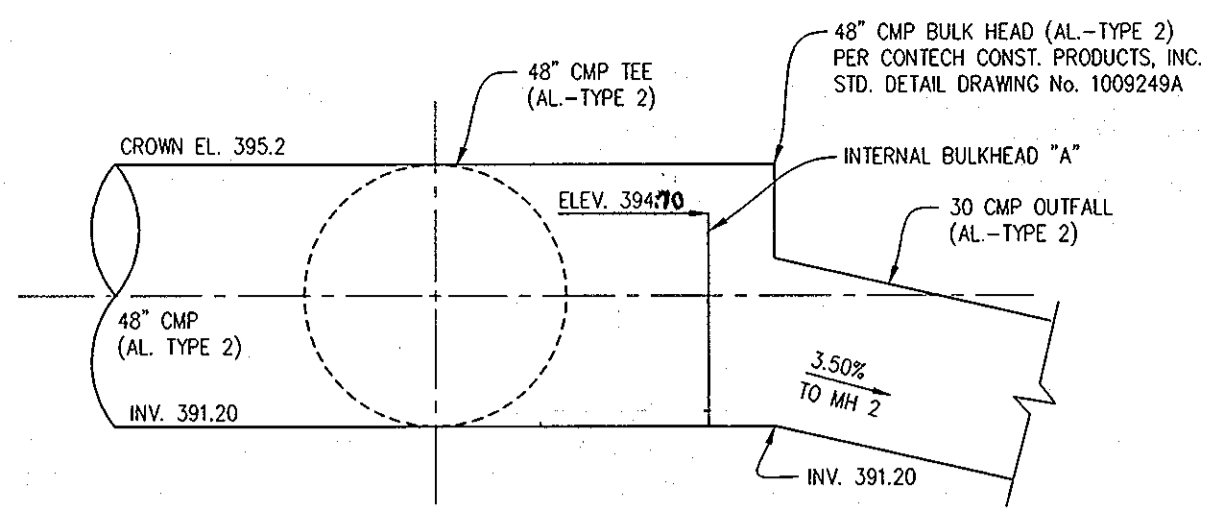
TITLE: STORMWATER MANAGEMENT DETAILS

PROJECT NAME: SCOTS GLEN NORTH
BULLDOG BULK PARCEL "A" - LOTS 1-4, 7A, 8A AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

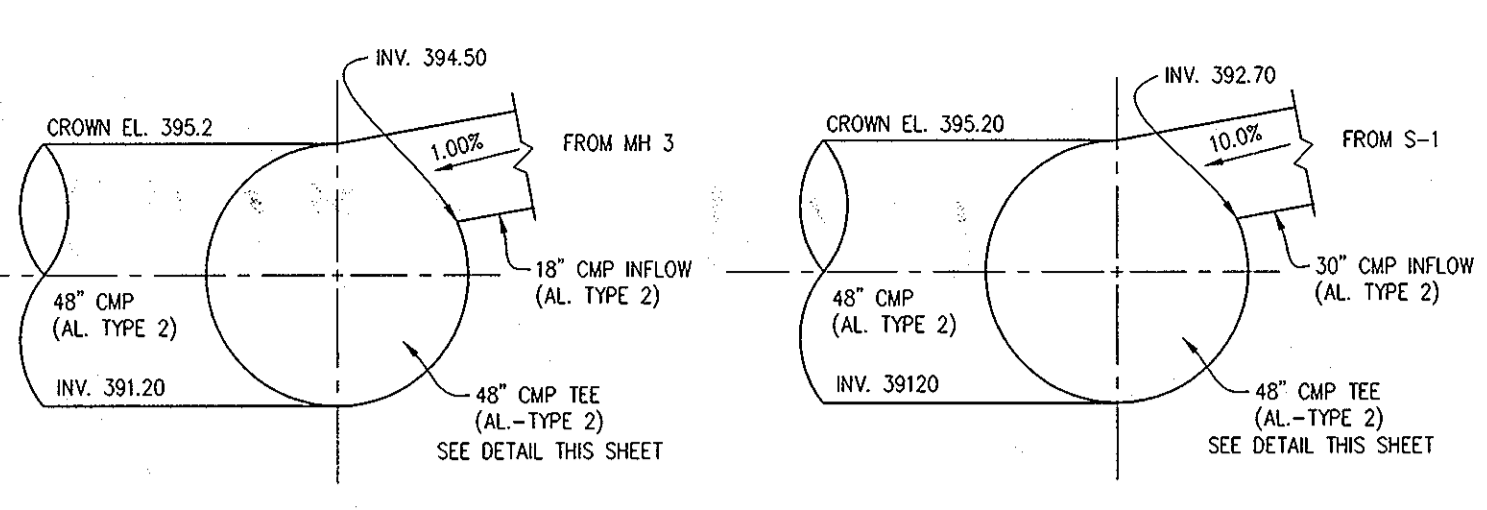
WP-11-108 S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101

DES.: DCW/JAVG	JOB:	PROJ.:	DATE: 12-10-04
DRW.: AVG/JA/JNC	CHK.: D.C.W.	SCALE: AS SHOWN	SHEET 17 OF 25

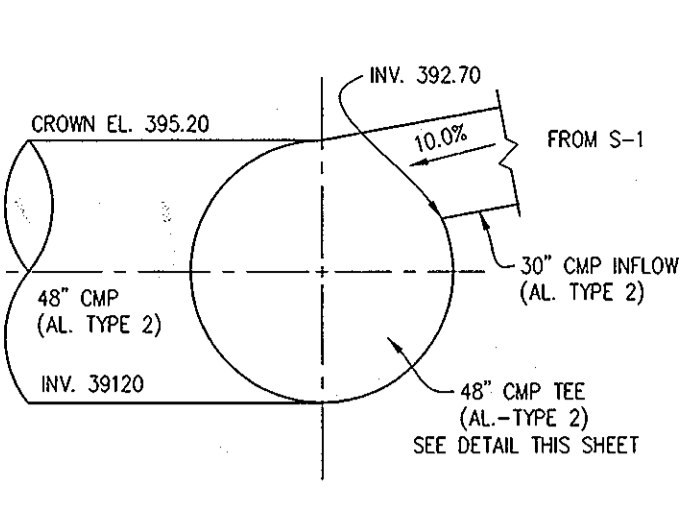
1: SUBDIVISION PROJECTS (CEDARVILLE) CEDAR VILLA 1: FINAL (RFP) (SW) SECTION-DETAILS (DWG) SIM-DETAIL, 12/19/2004 7:50:08 PM, 0/2



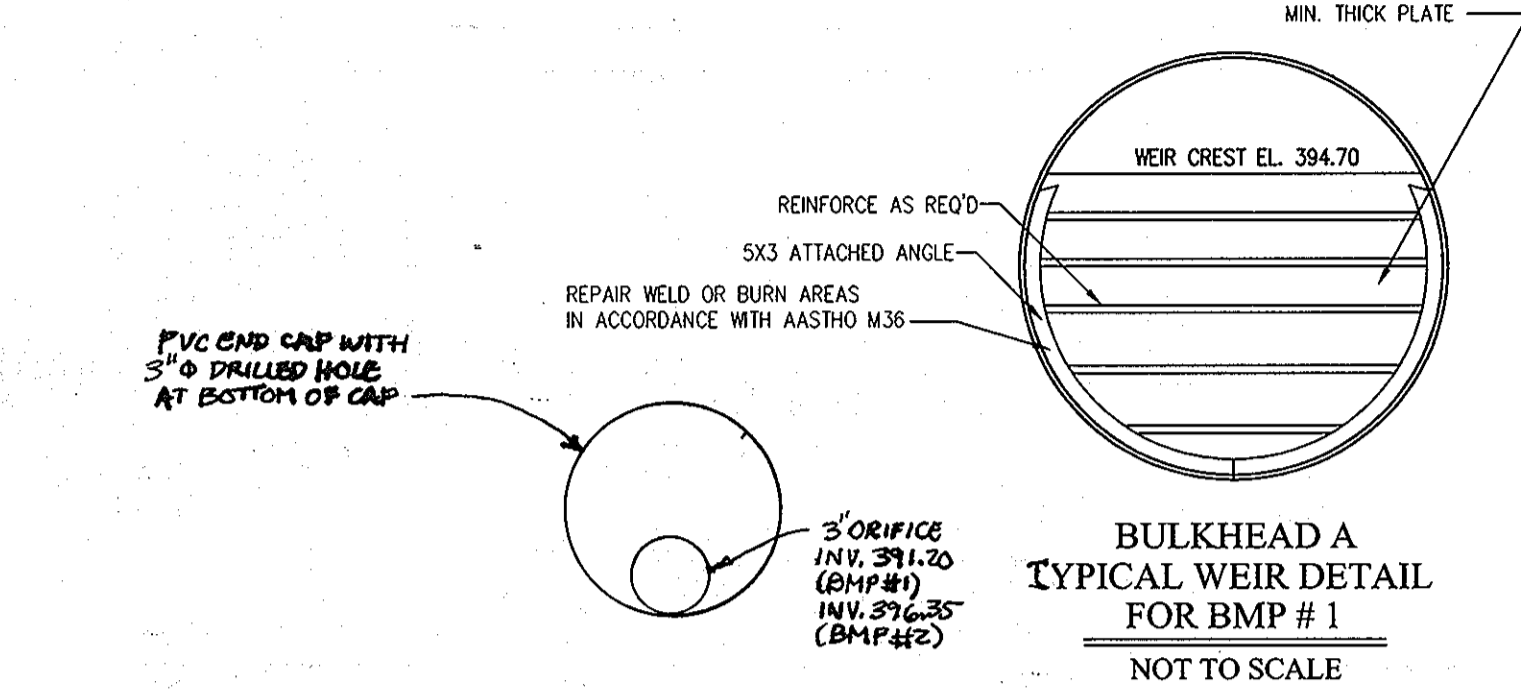
SECTION A-A
OUTFLOW DETAIL - BMP #1
NOT TO SCALE



SECTION B-B
INFLOW DETAIL - BMP #1
NOT TO SCALE



SECTION C-C
INFLOW DETAIL - BMP #1
NOT TO SCALE



BULKHEAD A
TYPICAL WEIR DETAIL
FOR BMP #1
NOT TO SCALE

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1
Cedar Villa 1, Columbia, Maryland. Boring Number B-1, Job # 047E2A

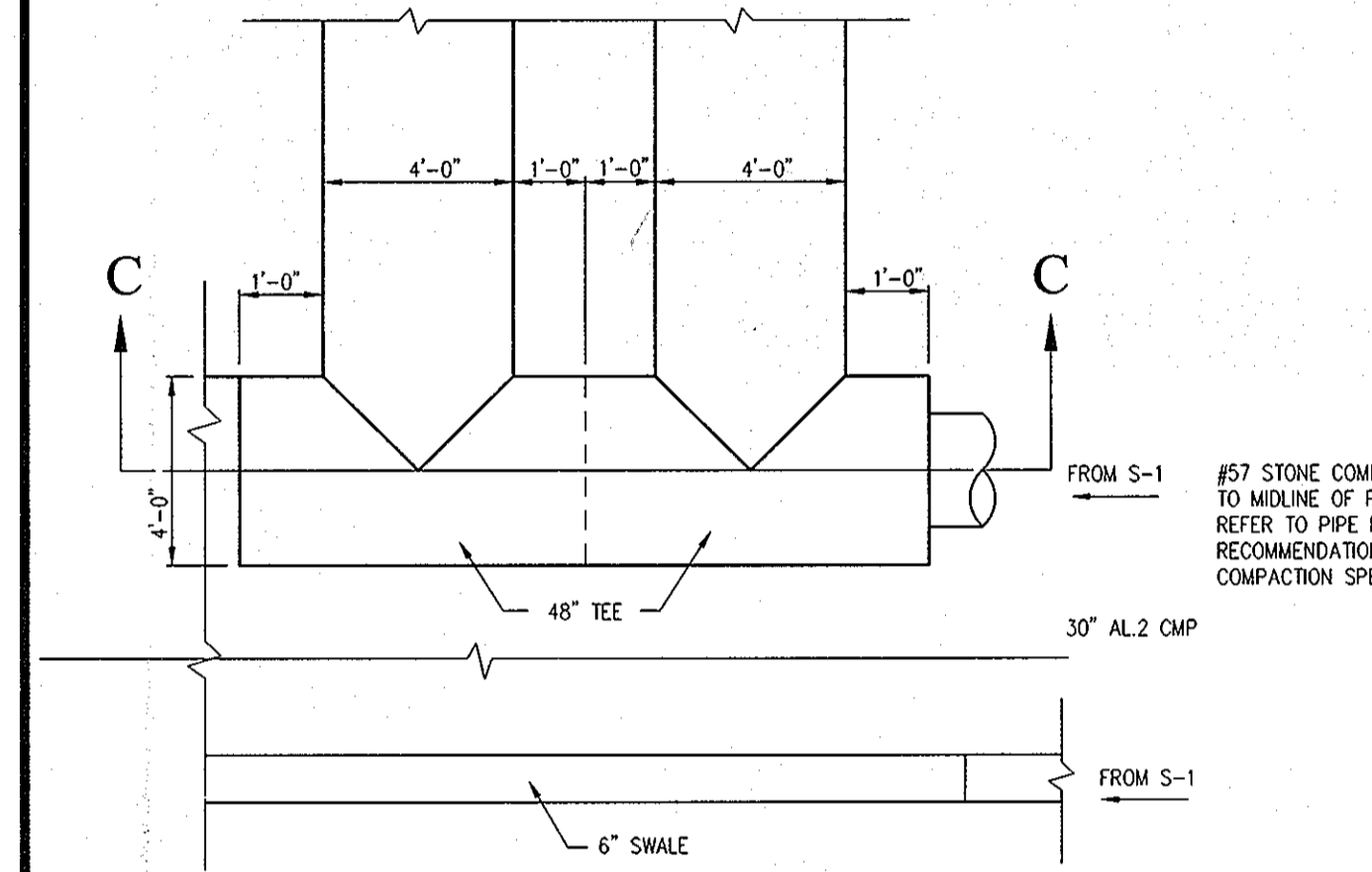
ELEV.	SOIL DESCRIPTION	TEST	DEPTH	SCALE	CON	BLOWS	NO.	REC.	BORING & SAMPLING NOTES
17.0	Dark grey brown, moist, soft to medium stiff, sandy silty, trace clay, trace mica (AL)		0.0					1	17' Topsoil
			1.0			2-3	1	16"	No groundwater encountered while drilling
			5.5			4-9	2	16"	
			8.0			3-3	3	16"	
			10.0			2-4	4	16"	
			12.0			3-4	5	16"	Caved in at 12.0' at Completion
			15.0			2-3	6	16"	Caved in at 14.5' at Completion
			20.0			2-5	6	16"	Caved in at 10.7' after 24 hours

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1
Cedar Villa 1, Columbia, Maryland. Boring Number B-2, Job # 047E2A

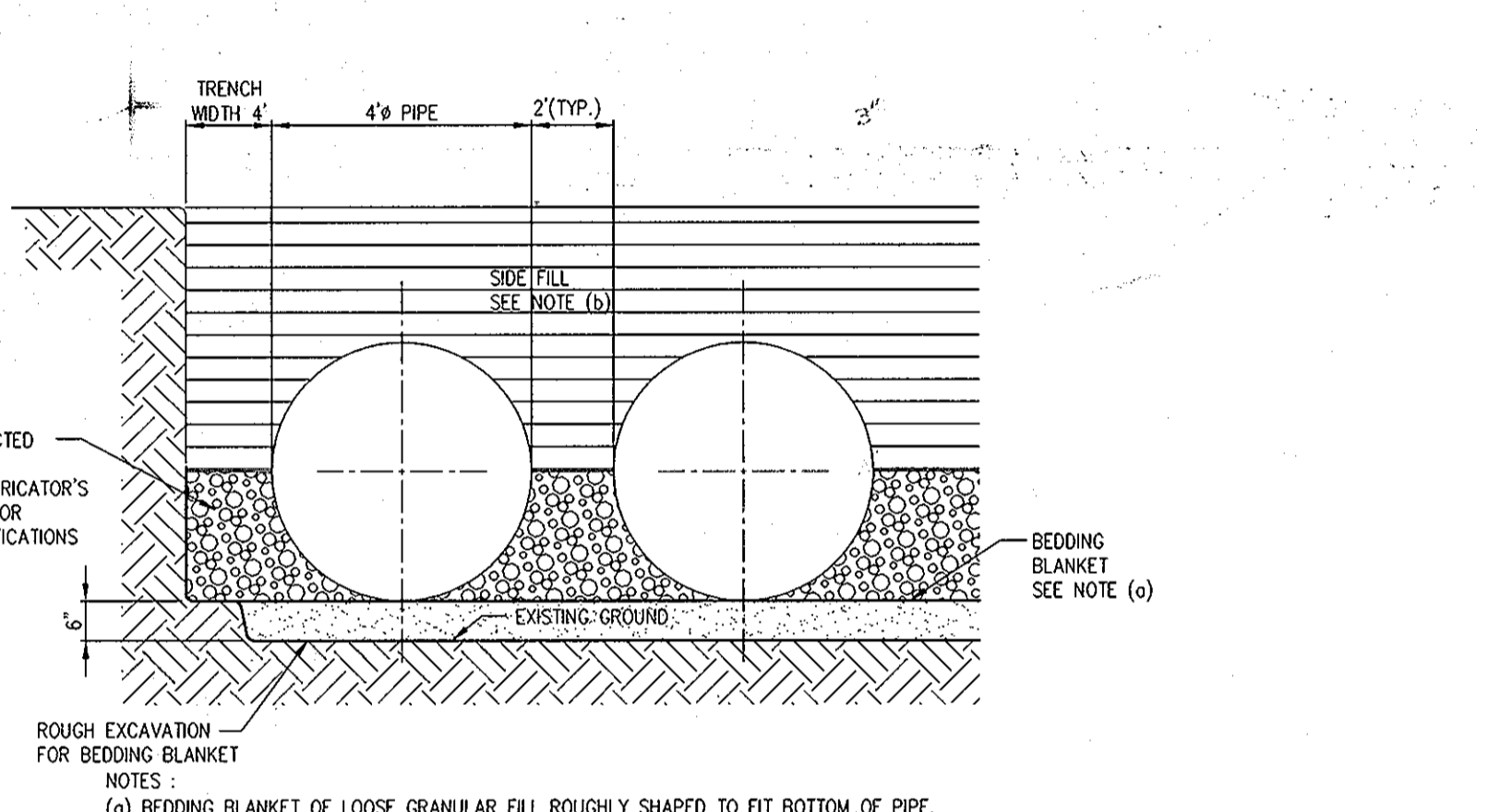
ELEV.	SOIL DESCRIPTION	TEST	DEPTH	SCALE	CON	BLOWS	NO.	REC.	BORING & SAMPLING NOTES
17.0	Dark grey brown, moist, soft to medium stiff, sandy silty, trace clay, trace mica (AL)		0.0					1	17' Topsoil
			1.0			2-3	1	16"	No groundwater encountered while drilling
			5.5			4-9	2	16"	
			8.0			3-3	3	16"	
			10.0			2-4	4	16"	
			12.0			3-4	5	16"	Caved in at 12.0' at Completion
			15.0			2-3	6	16"	Caved in at 10.4' after 24 hours
			20.0			2-5	6	16"	

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1
Cedar Villa 1, Columbia, Maryland. Boring Number B-3, Job # 047E2A

ELEV.	SOIL DESCRIPTION	TEST	DEPTH	SCALE	CON	BLOWS	NO.	REC.	BORING & SAMPLING NOTES
17.0	Dark grey brown, moist, soft to medium stiff, sandy silty, trace clay, trace mica (AL)		0.0					1	17' Topsoil
			1.0			2-3	1	14"	Offset 7.7 towards B-2
			5.5			4-9	2	16"	No groundwater encountered while drilling
			8.0			3-3	3	16"	
			10.0			2-4	4	16"	
			12.0			3-4	5	16"	Caved in at 8.7' after 24 hours
			15.0			2-3	6	16"	Caved in at 12.5' at Completion
			20.0			2-5	6	16"	At completion water reading dry after 20 minutes water at 10.7'



INFLOW FROM S-1 DETAIL - BMP #1
NOT TO SCALE



BEDDING AND BACKFILL DETAIL
NOT TO SCALE

OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (F-6)

- 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.
- 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 wires.
- Mulch shall be inspected each spring. Remove previous mulch layer before applying new layer once every 2 to 3 years.
- 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 PRIVATELY OWNED AND MAINTAINED OPEN CHANNEL SYSTEMS (O-1, AND O-2)

- The open channel system shall be inspected annually and after major storms. Inspections shall be performed during wet weather to determine if the facility is functioning properly.
- The open channel shall be mowed a minimum of as needed during the growing season to maintain a maximum grass height of less than 6 inches.
- Debris and litter shall be removed during regular mowing operations and as needed.
- Visible signs of erosion in the open channel system shall be repaired as soon as it is noticed.
- Remove silt in the open channel system when it exceeds 25% of the original Mv.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND FACILITIES

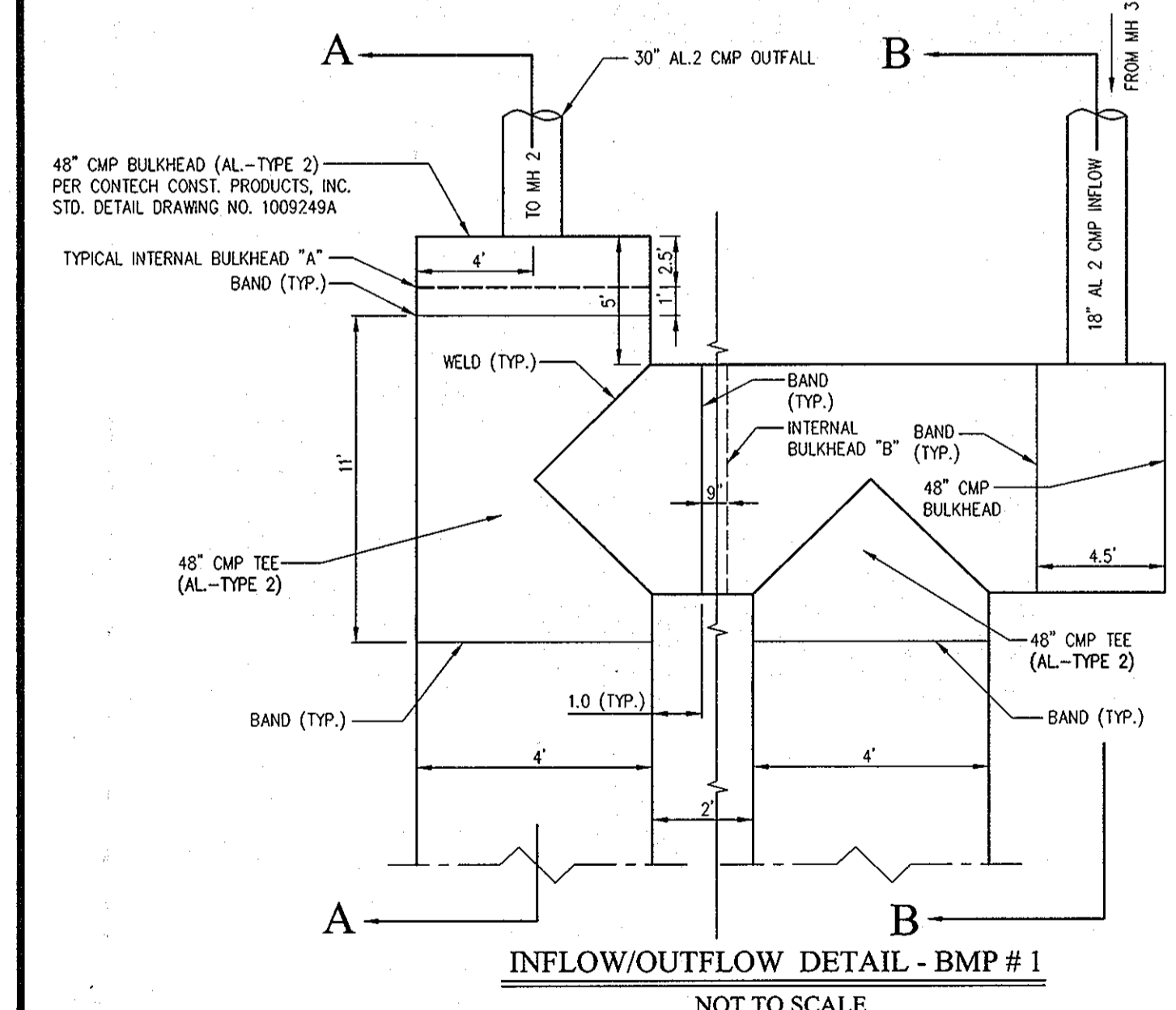
- The underground stormwater management facility is privately owned and it shall be the responsibility of the owner to periodically inspect and clean the facility to maintain its operation and function.
- The underground stormwater management facility shall be inspected yearly at a minimum and after especially severe storm events.
- When sediment accumulation of more than 2" is observed or any debris that might obstruct the outfall is observed, the facility shall be cleaned.
- The facility shall be cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies notifying them of the spill and cleanup operation.
- The sediment and debris shall be removed from the underground stormwater management facility by vacuum truck or other manual means. The owner shall follow proper cleaning and disposal of the removed material and liquid.
- The inlet and outlet pipes shall be checked for any obstruction at least once every six (6) months. If obstructions are found, the owner shall have them removed and properly disposed of.
- The demetering device/outlet structure shall be checked if properly flowing on any heavy rain on at least every six (6) months. If the obstruction / or no flow is observed, the obstruction shall be removed and free flow in the orifice is attained. The obstructions/debris shall be properly disposed.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1
Cedar Villa 1, Columbia, Maryland. Boring Number B-4, Job # 047E2A

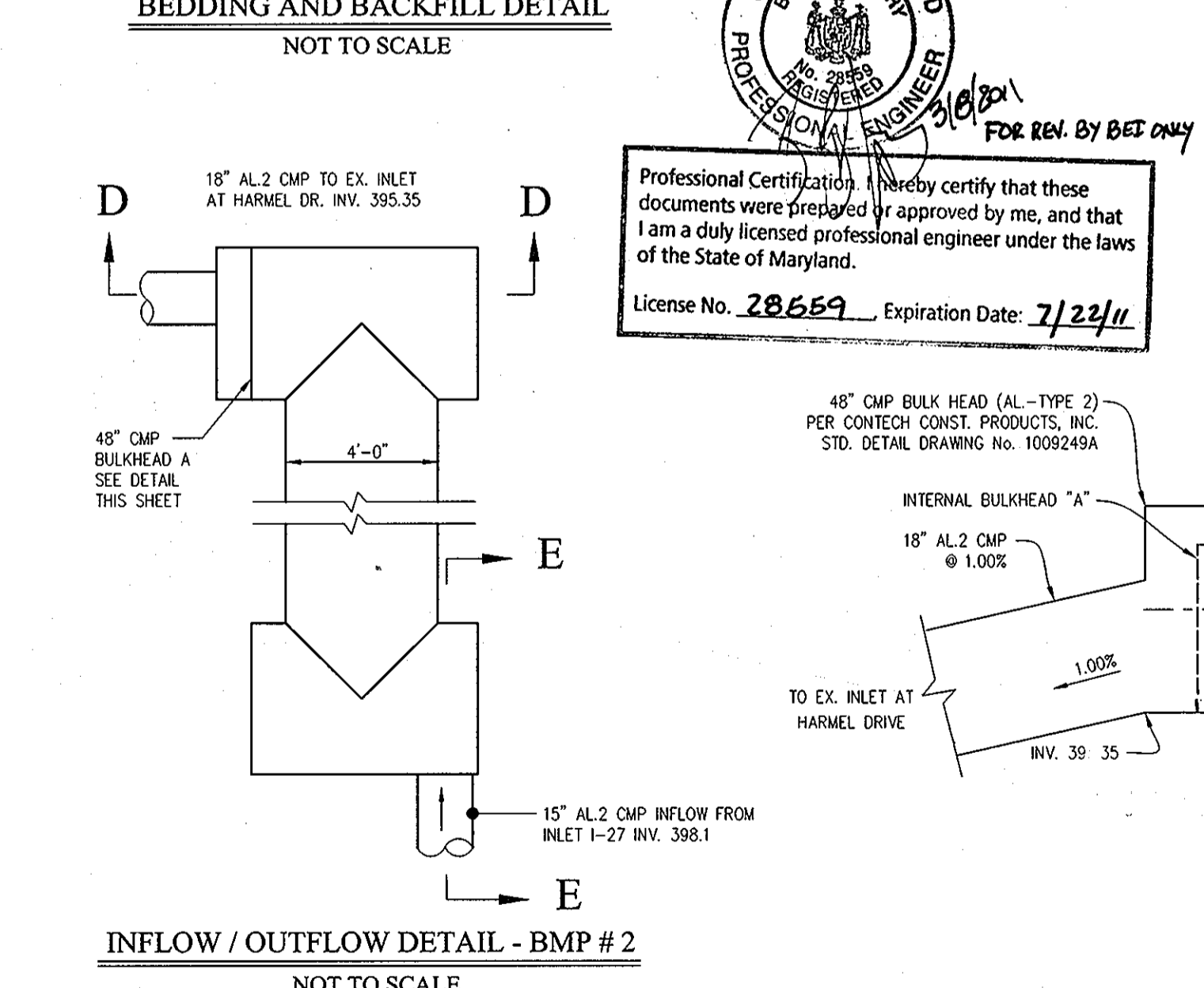
ELEV.	SOIL DESCRIPTION	TEST	DEPTH	SCALE	CON	BLOWS	NO.	REC.	BORING & SAMPLING NOTES
17.0	Dark brown, moist, soft to medium stiff, sandy silty, trace clay, trace mica (AL)		0.0					1	17' Topsoil
			3.0			9-10-10	2	18"	No groundwater encountered while drilling
			5.5			2-3	3	18"	
			10.0			2-4	4	18"	
			15.0			2-4	5	18"	Caved in at 9.0' after 24 hours
			20.0			3-4-5	6	18"	Caved in at 13.0' at Completion

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1
Cedar Villa 1, Columbia, Maryland. Boring Number B-5, Job # 047E2A

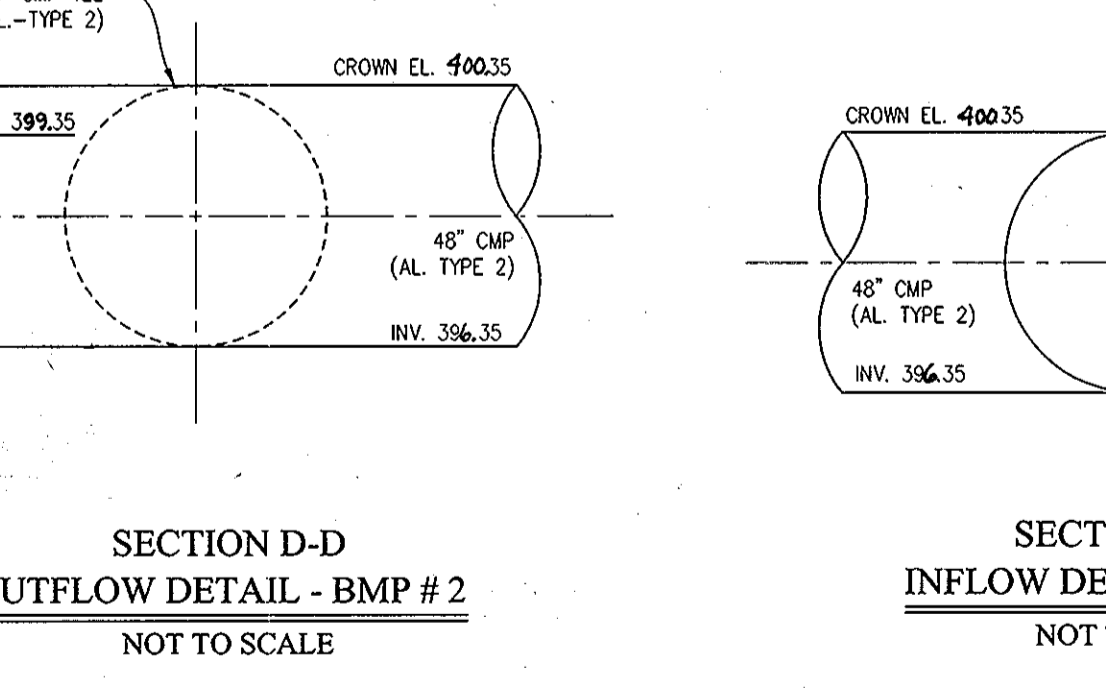
ELEV.	SOIL DESCRIPTION	TEST	DEPTH	SCALE	CON	BLOWS	NO.	REC.	BORING & SAMPLING NOTES
17.0	Dark brown, moist, soft to medium stiff, sandy silty, trace clay, trace mica (AL)		0.0					1	17' Topsoil
			3.0			1-2-2	1	18"	No groundwater encountered while drilling
			5.5			2-5-14	2	18"	
			10.0			21-42-510"	3	12"	
			15.0			514"	4	4"	
			20.0			510.0 Took Auger Sample	5	0"	Caved in at 11.0' after 24 hours
			20.0			510.0 Spoon refusal at 13.5'	6	0"	Caved in at 13.5' at Completion



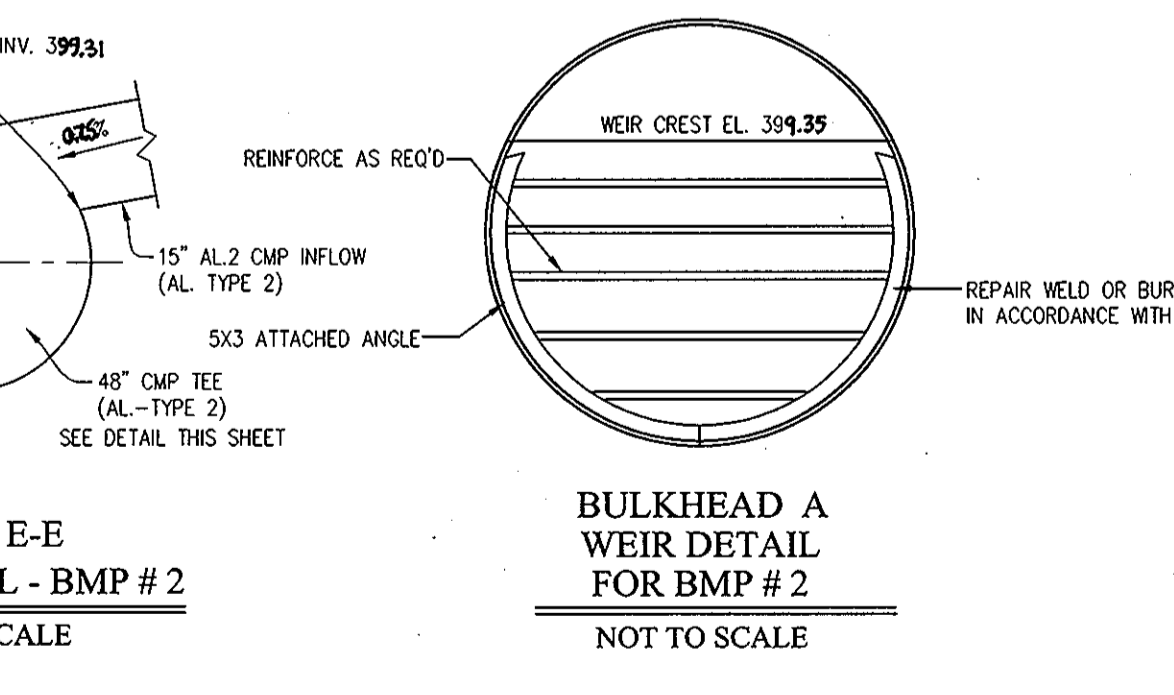
INFLOW/OUTFLOW DETAIL - BMP #1
NOT TO SCALE



INFLOW / OUTFLOW DETAIL - BMP #2
NOT TO SCALE



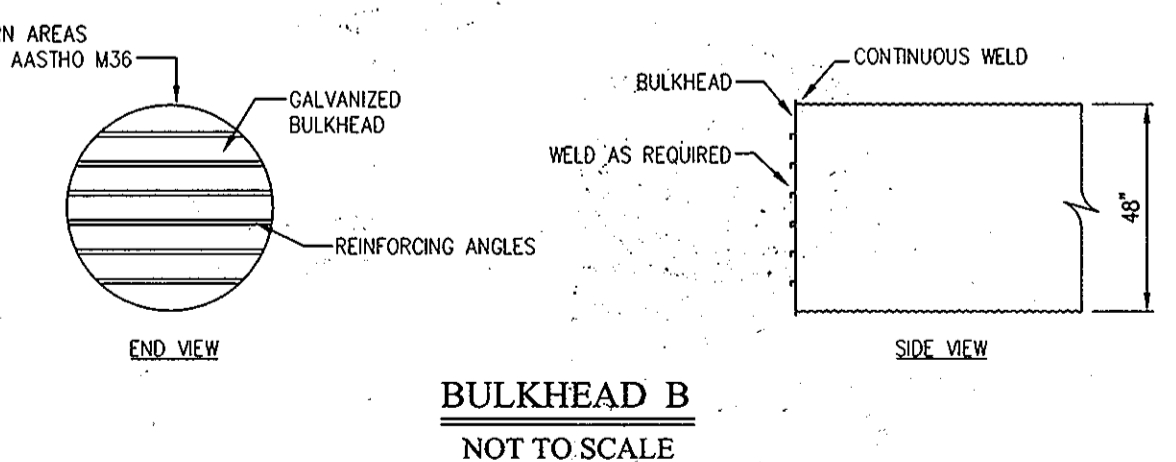
SECTION D-D
OUTFLOW DETAIL - BMP #2
NOT TO SCALE



SECTION E-E
INFLOW DETAIL - BMP #2
NOT TO SCALE

GROUND WATER RESULTS

Boring	Depth Encountered at Completion (ft)	Depth After 24 Hours (ft)
B-1	12.0	8.1
B-2	11.5	10.3
B-3	10.0	8.0
B-4	10.0	8.2
B-5	—	3.0



BULKHEAD B
TYPICAL WEIR DETAIL FOR BMP #2
NOT TO SCALE

PREPARED BY:
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21143
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
Hamel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
DAVID C. WOESSNER
DEC. 10, 2004

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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.
DALE THOMPSON
DEC. 10, 2004

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
HOWARD SCD
DATE

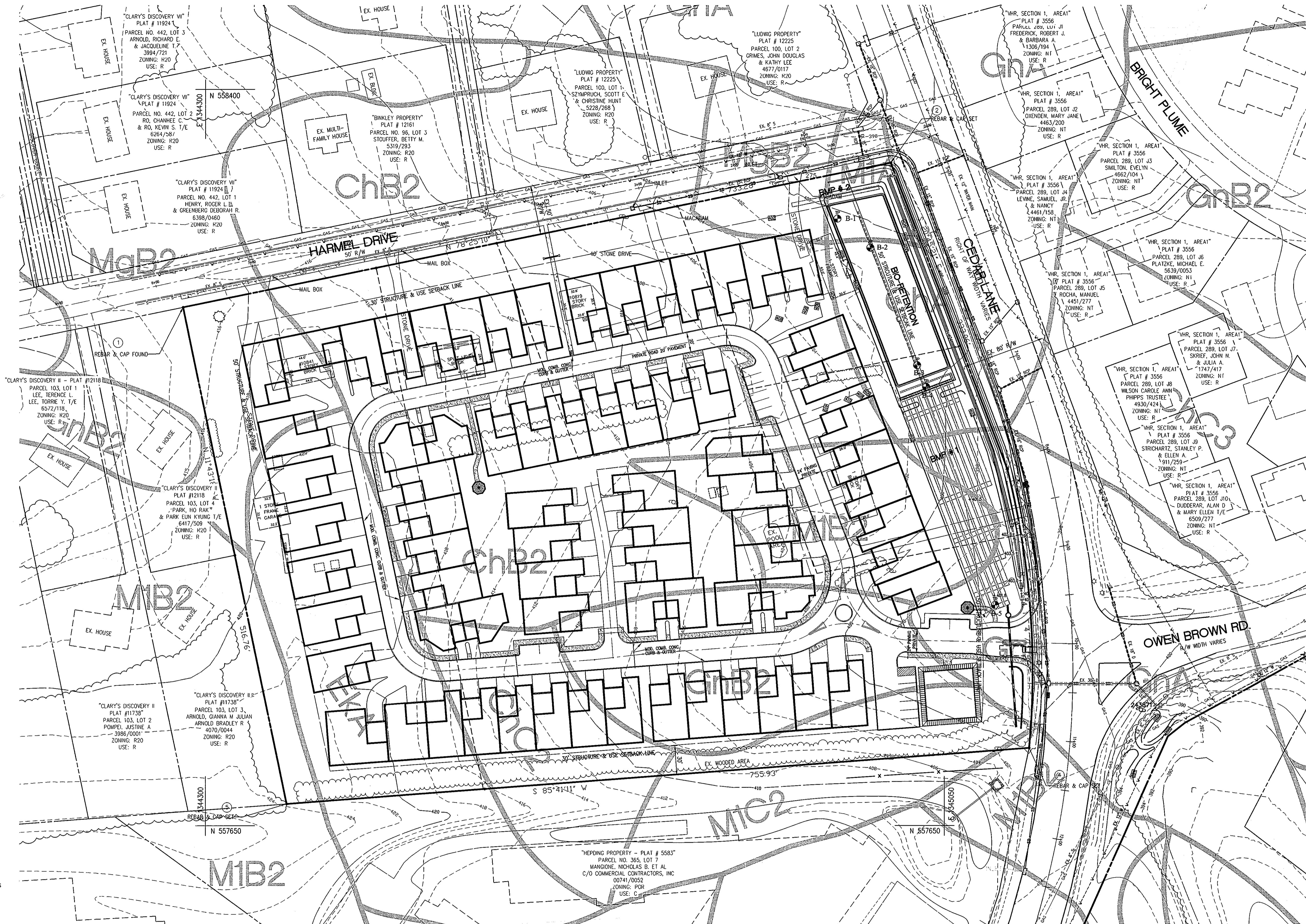
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cheryl Hamner
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 1/5/05

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamner
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 1/20/05

TITLE:
STORMWATER MANAGEMENT NOTES, BORINGS AND DETAILS

PROJECT NAME:
SCOTS GLEN NORTH
BUILDBLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A AND COMMUNITY CENTER PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

DES.: DCW/IL/AVG JOB: S-04-03 PROJ.: PB CASE 362 DATE: 12-10-04
DRW.: AVG/DTA/INC CHK.: D.C.W. SCALE: AS SHOWN SHEET 18 OF 25



SOILS TABLE

SYMBOL	MAPPING UNIT	TYPE
ChA	CHESTER SILT LOAM, 0 TO 3% SLOPE	B
ChB2	CHESTER SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
CgB2	CHESTER GRAVELLY SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
CgC2	CHESTER GRAVELLY SILT LOAM, 8 TO 15% SLOPE, MODERATELY ERODED	B
Cs	COMUS SILT LOAM	B
G1B2	GLENELG LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
G1C2	GLENELG LOAM, 8 TO 15% SLOPE, MODERATELY ERODED	B
G1G3	GLENELG LOAM, 8 TO 15% SLOPE, SEVERELY ERODED	B
G1O2	GLENELG LOAM, 15 TO 25% SLOPE, MODERATELY ERODED	B
G1O3	GLENELG LOAM, 15 TO 25% SLOPE, SEVERELY ERODED	B
GnB2	GLENVILLE SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	C
EkA	ELOAK SILT LOAM, 0 TO 3% SLOPE	C
EkB2	ELOAK SILT LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	C
Bo	BAILE SILT LOAM	D
MID2	MANOR LOAM, 15 TO 25% SLOPE, MODERATELY ERODED	B
MgC2	MANOR GRAVELLY LOAM, 8 TO 15% SLOPE, MODERATELY ERODED	B
MIE	MANOR LOAM, 25 TO 45% SLOPE	B
MgB2	MANOR GRAVELLY LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
MIB2	MANOR LOAM, 3 TO 8% SLOPE, MODERATELY ERODED	B
MgC3	MANOR GRAVELLY LOAM, 8 TO 15% SLOPE, SEVERELY ERODED	B
MID3	MANOR LOAM, 15 TO 25% SLOPE, SEVERELY ERODED	B

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 BRUNN F. CLEARY
 License No. 20659
 FOR REV. BY DES ONLY
 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.
 Expiration Date: 7/22/11

PLAN
 SCALE: 1" = 50'

LEGEND:
 326 EX. CONTOURS
 330 EX. TREE
 EX. TREELINE
 X EX. FENCE
 330 PROP. CONTOURS
 PROPERTY LINE
 MBI
 ChB2

PREPARED BY:
American Land Development and Engineering, Inc.
 10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
 TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
 Harmel PSC, LLC.
 6300 Woodside Court Suite A
 Columbia, Md. 21046

ENGINEER'S CERTIFICATE
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 Signature of Engineer: David C. Woessner
 DATE: DEC. 10, 2004

DEVELOPER'S CERTIFICATE
 "I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."
 Signature of Developer: Dale Thompson
 DATE: DEC. 10, 2004



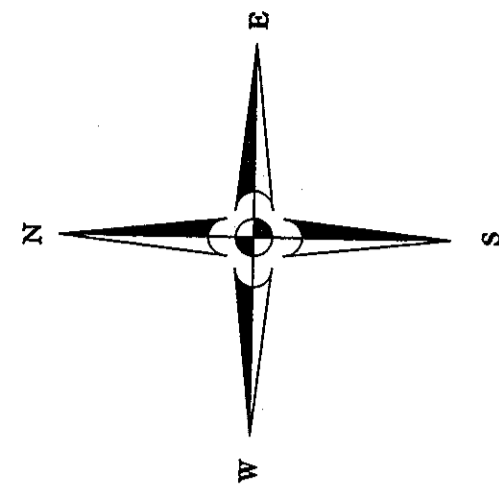
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: [Handwritten Signature]
 DATE: 1/5/15
 Signature: [Handwritten Signature]
 DATE: 1/29/15
 Signature: [Handwritten Signature]
 DATE: 2/10/15

TITLE:
SOILS MAP

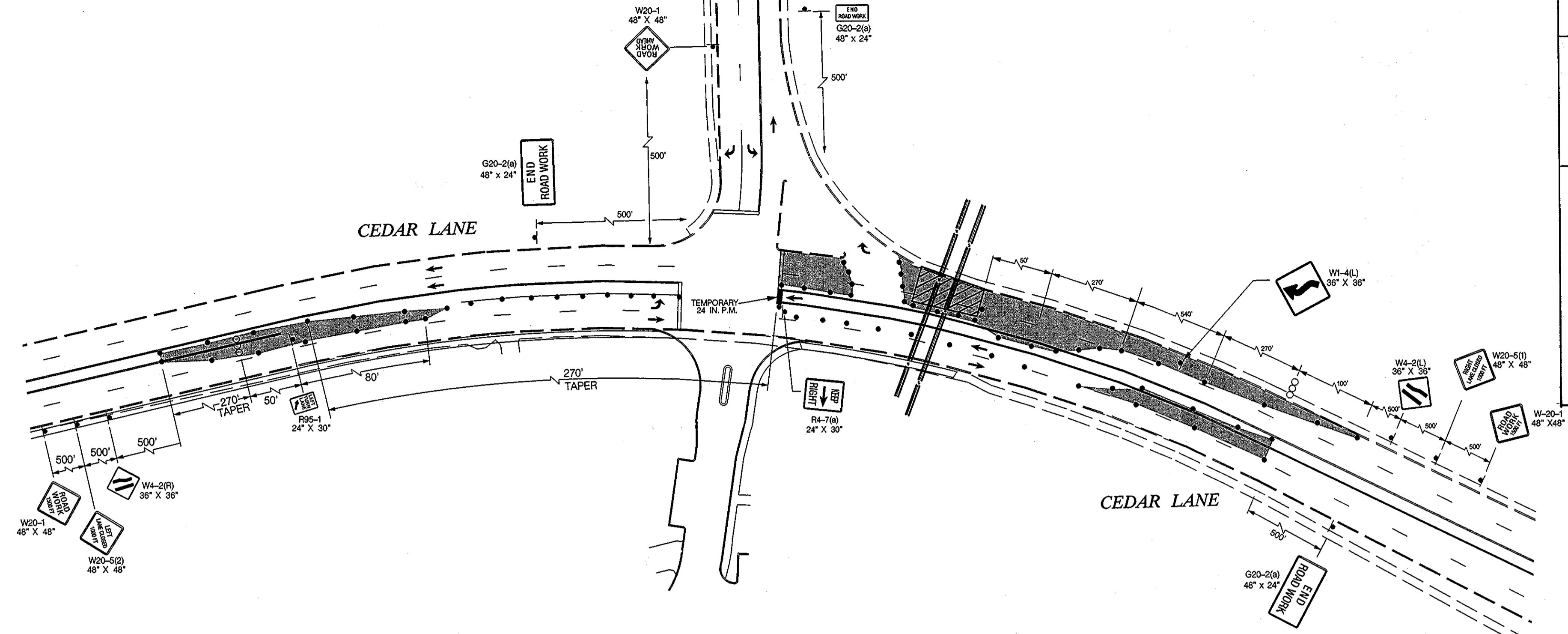
PROJECT NAME:
SCOTS GLEN NORTH
 BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A AND COMMUNITY CENTER
 PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
 A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

W/P-11-10B S-04-03 PB CASE 362 WP 04-114 F-05-52 F-05-101

DES.: DCW/ILAVG JOB: PROJ.: DATE: 12-10-04
 DRW.: AVG/DTA/JNC CHK.: D.C.W. SCALE: 1" = 50' SHEET 19 OF 25



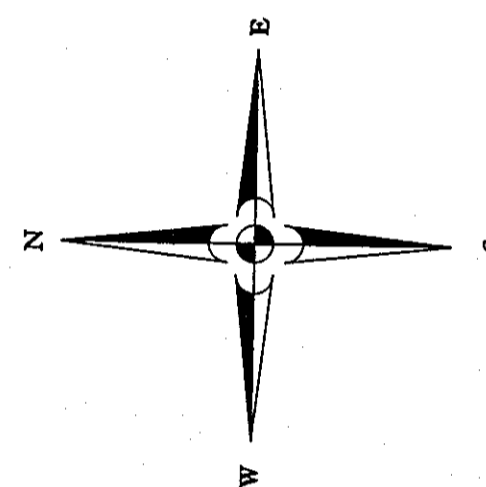
PHASE I OWEN BROWN ROAD



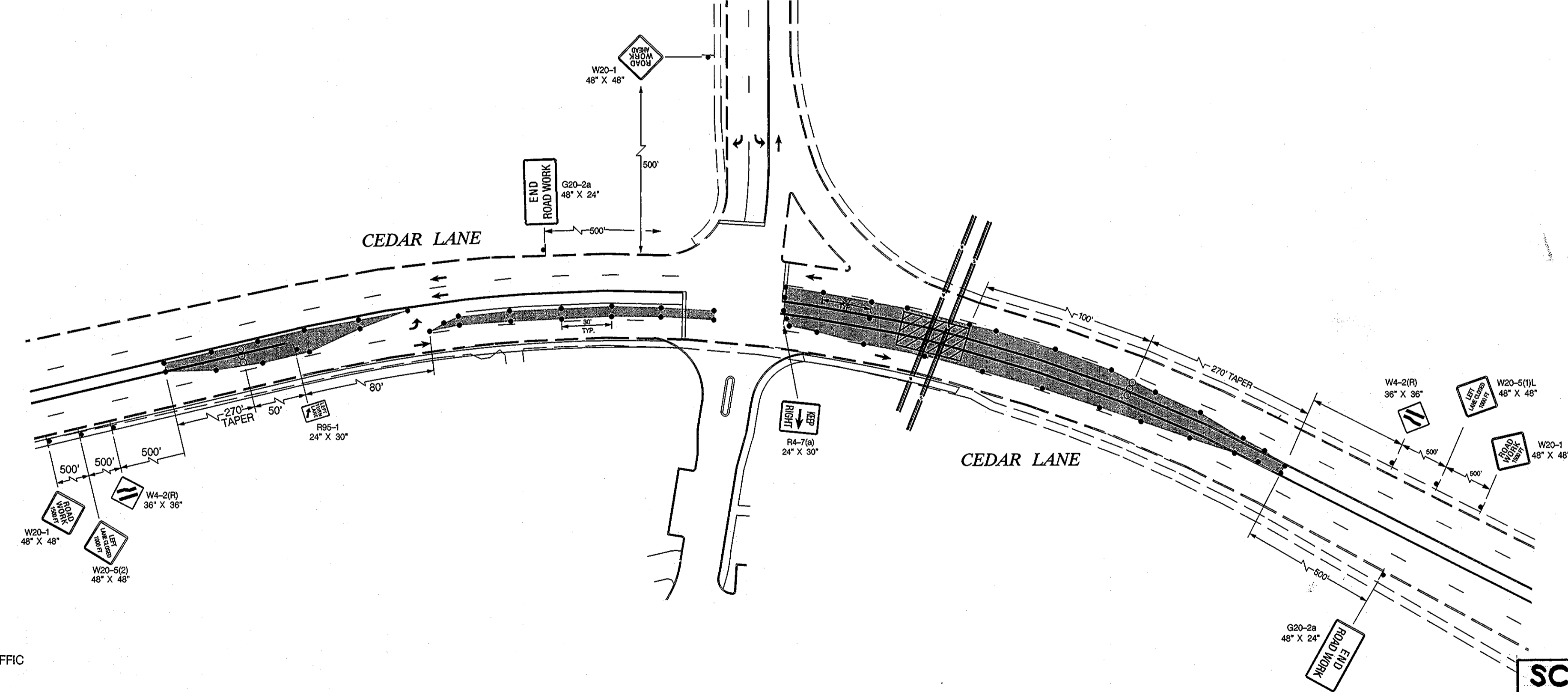
ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE OF ENGINEER: *David Thompson*
 DATE: 12/10/04

DEVELOPER'S CERTIFICATE
 I HAVE CERTIFIED THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE OF DEVELOPER: *Dale Thompson*
 DATE: 12/10/04

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 SIGNATURE: *William...* DATE: 1/5/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 SIGNATURE: *Andy Hamilton* DATE: 12/10/04
 CHIEF, DIVISION OF LAND DEVELOPMENT
 SIGNATURE: *Dale Thompson* DATE: 2/1/05
 DIRECTOR, DEPARTMENT OF PLANNING AND ZONING



PHASE II OWEN BROWN ROAD



LEGEND

- WORK AREA
- ARROW PANEL
- LANE DIRECTION
- PLASTIC DRUM
- PROPOSED SIGN
- PROPOSED GEOMETRICS
- EXISTING GEOMETRICS
- PROPOSED SEWER LINE
- AREA CLOSED TO TRAFFIC

FOR REV. BY GET ONLY

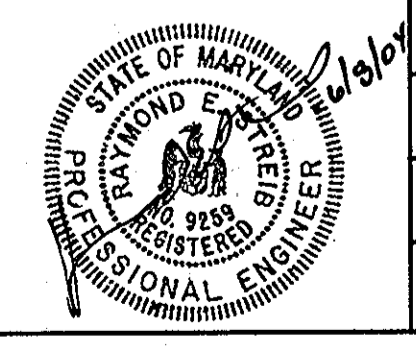
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 20559 Expiration Date: 7/22/11

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 9/19/04

SCOTS GLEN NORTH SDP 04-124
 S-04-03, PB CASE 362 WP 04-114 E-05-52

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 SIGNATURE: *James...* DATE: 6/16/04
 CHIEF, TRAFFIC ENGINEERING DIVISION
 SIGNATURE: *William...* DATE: 6-16-04
 CHIEF, BUREAU OF HIGHWAYS

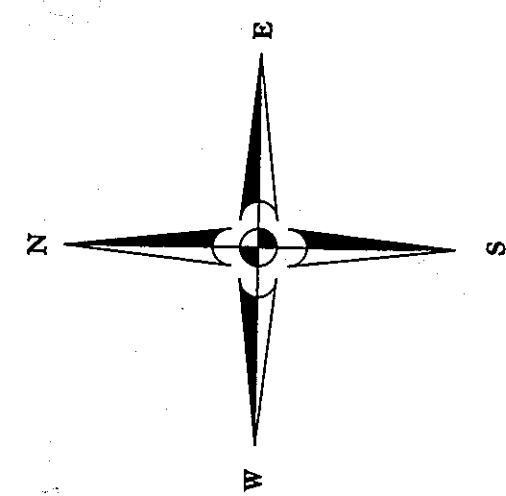
TRAFFIC CONCEPTS, INC.
 325 Gambrills Road
 Suite E
 Gambrills, MD 21054
 (410) 923-7101
 FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM



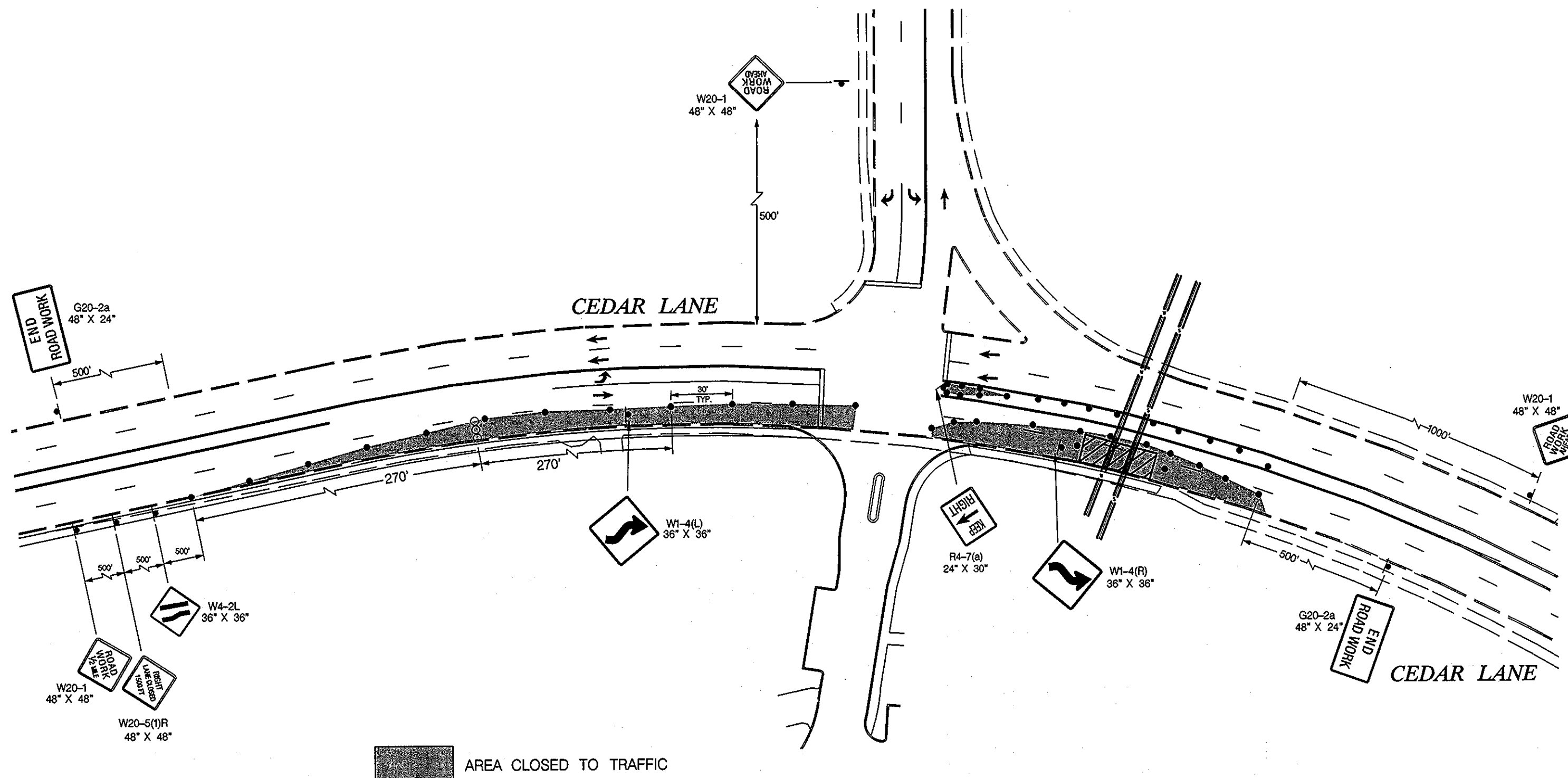
DES:	MO				
DRN:	MO				
CHK:	TZ				
DATE:	JUNE, 2004	BY:	BE1	NO.	1
		REVISION:	Revise Title Block		DATE:
					600' SCALE MAP NO. DATE:

**MAINTENANCE OF TRAFFIC
 CEDAR LANE
 AT
 OWEN BROWN ROAD**

SCALE: NONE
 SHEET: 20 OF 25



PHASE III OWEN BROWN ROAD



ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
DATE: 12/6/04

DEVELOPER'S CERTIFICATE
I HAVE CERTIFIED THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
SIGNATURE OF DEVELOPER: Dale Thompson
DATE: 12/10/04

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: 1/5/05
Chief, Division of Land Development: 1/5/05
Director - Department of Planning and Zoning: 2/1/05

GENERAL CONTROL SHEET

I. General Requirements

Each phase of construction, including the follow up restoration operations shall be provided with appropriate work zone traffic controls.

The contractor will be solely responsible for all accidents and/or damage to persons and/or property damage resulting from his operations.

The contractor shall refer to the attached Traffic Control Plan (TCP) drawings to select the appropriate work zone traffic controls for each phase of construction. Work zone situations which are not addressed in the attached TCP shall conform to the guidelines set forth in Section 6 of the MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAY (MUTCD), most recent edition.

The Inspector has the authority to modify the TCP as deemed necessary.
The Inspector has the authority to order the contractor to stop work and vacate the public right-of-way if the TCP is not complied with.

Road closures of any duration shall require the submittal of a written request to the Inspector with justification as to why work activity cannot occur while traffic is being maintained. Road closure shall require additional traffic controls including advance notification, approach, and detour signage, as approved by the Inspector.

All sidewalk closures shall require the approval of the Inspector. Any sidewalk closure greater than two (2) weeks shall require the submittal of a written request to the Inspector and may require additional traffic controls. Sidewalk closures shall be limited to occur only during the actual work activity. During closure, sidewalks shall be barricaded to physically prevent pedestrian passage and appropriate pedestrian detours shall be posted. During all other times, provisions for safe pedestrian access through the work area, via a temporary walkway shall be provided.

Any work within the traveled portion of roadways shall be restricted to the hours of 9:00 AM to 4:00 PM, Monday through Friday.

Construction activity, loading or unloading of equipment shall not block any traffic lane other than those delineated within the work zone.

Exclusive of emergency work, the permittee shall contact occupants of all adjoining properties and inform them of the scope and the timing of construction. A minimum of 24 hours notification shall be required prior to the commencement of any activity on the site.

Access shall be maintained to all driveways unless permission for closure is granted by the property owner/manager. However, accessibility for emergency vehicles shall be maintained at all times.

Pavement excavation shall be limited to a maximum of one travel lane at any time unless otherwise specified on the TCP.

Hazardous materials shall not be stored within public right-of-way.

Materials or equipment shall not be stored on the roadway surface or sidewalk during non-work periods. All stored materials and equipment shall be set back at least six (6) feet behind the curb along a closed section roadway and at least thirty (30) feet from the edge of open section roadway.

Any excavations in the roadway shall be paved to level grade or placed with cold patch along all four sides and the roadway reopened to its full cross-section prior to the end of each workday. STEEL PLATES AHEAD (W21-9) signs shall be placed approximately 250 feet in advance of any steel plate.

Any excavations in the sidewalk shall be backfilled or plated prior to the end of each workday and sidewalk reopened to its full cross section.

Traffic shall not be permitted within ten (10) feet of any excavation that results in a vertical drop-off of more than five (5) inches in the level of pavement during non-working hours unless protected by temporary concrete barriers or ramped with aggregated material at a 3:1 or flatter slope from the edge of pavement. When ramping is utilized, traffic drums shall be positioned adjacent to the edge of the work area on the traffic side of the slope.

Traffic shall not be permitted within two (2) feet of any excavation that results in a vertical drop-off of more than two (2) inches but no more than five (5) inches in the level of pavement during non-working hours unless either ramped with aggregate material at a 3:1 or flatter slope, provided with an cutting wedge of bituminous material at a 3:1 or flatter slope or protected by traffic drums.

In areas where a drop-off in the level of pavement is two (2) inches or less, traffic may be allowed to freely cross under the following conditions:

- Where longitudinal paving joints of two (2) inches or less are exposed to traffic, warning signs shall be posted indicating "UNEVEN PAVEMENT" (W8-1) (modified). These signs should be placed 250 feet in advance of the uneven joint and be spaced at appropriate intervals throughout the area of the uneven joint.
- Where lateral paving joints of two (2) inches or less are exposed to traffic, a "BUMP" (W8-1) sign shall be posted 100 feet in advance of the joint.
- When milled pavement is left exposed to traffic a "ROUGH ROAD" (W8-9) or "GROOVED PAVEMENT" (W8-8a) sign shall be placed 250 feet in advance of the milled area.

All existing traffic control devices (i.e. signs, marking, etc.) that must be removed shall be replaced in their proper location prior to the completion of the project. Cost for the replacement and/or repair of devices damaged as a result of the project shall be assessed to the contractor.

All traffic control devices shall conform to the most recent edition of the MUTCD.

The implementation date and continuance of work activities may be altered at the discretion of the Inspector in the event of conflicts with previously approved or emergency activities.

At the completion of work activities, conditions within the public space shall be fully restored to those that existed prior to the work activity.

TRAFFIC CONTROL REQUIREMENTS

II. Specific Requirements:

When possible, two-way traffic shall be maintained, otherwise, flaggers shall be used to control traffic with appropriate signage.

At least one 10-foot travel lane shall be available for traffic at all times in each direction.

Provisions shall be made for safe maintenance of pedestrian and bicycle traffic, subject to approval of the Inspector.

Installation of Traffic Control Devices

Signage, traffic drums, traffic cones, and arrow panels shall be placed in accordance with the appropriate MUTCD and spacing chart.

All signs, traffic drums and cones shall be fully reflectorized with high intensity, reflective sheeting as per the MUTCD.

Appropriate distances for sign legends are "AHEAD", "500 FT.", "1000 FT.", "1500 FT.", or "1/2 MILE". For distances less than 500 feet, "AHEAD" shall be used.

All warning signs, unless otherwise specified, shall be a minimum of 48" x 48", black symbol or legend on orange background and diamond shapes.

All portable signs shall be mounted a minimum of one (1) foot above the level of the roadway, with higher mounting heights desirable.

All warning signs not applicable to the actual situation shall be removed or covered during non-applicable periods.

Work Area Ahead (W20-1 modified) signs must be installed at the end of each workday when temporary aggregate ramping is implemented.

Reflectorized traffic drums or cones shall be used to delineate the work zone. These channelizing devices shall be placed in accordance with the typicals and spacing chart. Additionally, channelizing devices shall be placed along excavations at ten (10) foot intervals.

During nighttime operations reflectorized traffic drums should be used. However, for emergency work activities where traffic drums are not readily available, reflectorized traffic cones that are a minimum of twenty eight (28) inches in height and having six (6) inch and four (4) inch reflective collars within the top sixteen (16) inches of the cone may be used. All work areas left unattended at night shall be delineated with reflectorized traffic drums.

Flashing Arrow Panels shall be used at the beginning of any lane closure on a multi-lane roadway.

When temporary concrete barrier (TCB) is used, reflectorized markers are required as per TDP 105.02. Also, a 12" x 36" object marker (vertical panel) as per TDP 105.01 shall be installed.

When pavement markings have been obliterated by the work activity, the contractor shall install any critical interim pavement markings prior to the end of the workday as specified by the Inspector.

On road sections that are not scheduled to be overlaid, all temporary pavement markings shall be (removable) detour grade marking tape. Any conflicting markings, which need to be temporarily removed, are to be masked using "3M Removable Black Lane Mask" or an approved equal.

On road sections that are to be overlaid, temporary markings can be either tape or paint. Any conflicting markings should be removed with a pavement grinder.

LEGEND

	WORK AREA
	ARROW PANEL
	LANE DIRECTION
	PLASTIC DRUM
	PROPOSED SIGN
	PROPOSED GEOMETRICS
	EXISTING GEOMETRICS
	PROPOSED SEWER LINE

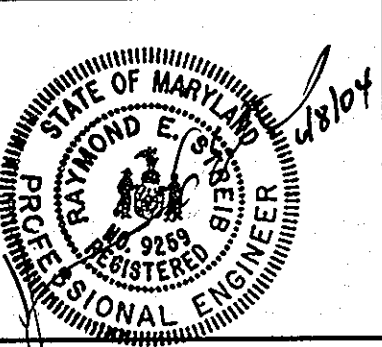
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DATE: 6/16/04
DATE: 6/17/04

DATE: 6-16-04

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
EMAIL: TRACONCEPT@AOL.COM

FAX: (410) 923-6473



DES: MO			
DRN: MO			
CHK: TZ			
DATE: JUNE, 2004	BY: BEI	NO. 1	REVISION: Revise Title Block
			DATE: 3/4/11

600' SCALE MAP NO. _____ DATE: _____

SCOTS GLEN NORTH
S-04-03-107 PB CASE 362 WP 04-114 F-05-22

MAINTENANCE OF TRAFFIC
CEDAR LANE
AT
OWEN BROWN ROAD

SDP 04-124

SCALE: NONE
SHEET 21 OF 25

STATE OF MARYLAND
PROFESSIONAL ENGINEER
FOR REV BY BEI ONLY

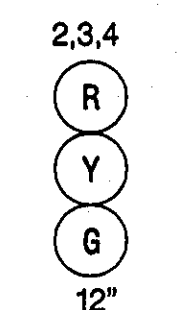
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 20557, Expiration Date: 7/23/10

CEDAR LANE IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

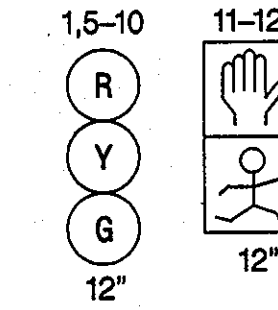
GENERAL NOTES

- DELIVER REMOVED CABINET TO HOWARD COUNTY HIGHWAY SIGNAL SHOP AT 9240 BENDIX ROAD COLUMBIA MD. CONTRACTOR MR. RICHARD WILSON 24 HOURS PRIOR TO DELIVERY AT (410) 913-7917. ALL OTHER SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
- ALL POLE SIGNAL HEAD LOCATIONS TO BE VERIFIED BY HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS PERSONNEL BEFORE INSTALLATION BY THE CONTRACTOR.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES BEFORE STARTING CONSTRUCTION AND HAND EXCAVATE OR TEST PIT ALL UTILITY CROSSINGS.
- ALL EXISTING RIGHT-OF-WAY LINES SHOWN ON THE PLAN ARE APPROXIMATE.
- VERIFY SIGNAL HEAD AND SIGN LOCATIONS PRIOR TO CUTTING MAST ARMS.
- THE LOCATION OF PROPOSED GEOMETRICS MUST BE CONFIRMED PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT.
- LOOP DETECTORS AND CONDUIT SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
- ALL SIGNAL EQUIPMENT SHALL BE INSTALLED TO FINAL GRADE.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- DISCONNECT AND PULL BACK EXISTING INTERCONNECT CABLE AND 2-CONDUCTOR A.S. TO THIS HANDLEHOLE AND RE-ROUTE THROUGH PROPOSED CONDUIT AND RE-CONNECT TO PROPOSED BASE MOUNTED CABINET AND CONTROLLER (SEE WIRING DIAGRAM FOR DETAILS).
- MAST ARM POLES AND MAST ARMS MUST BE CLEANED AND PAINTED AS PER HOWARD COUNTY STANDARDS.

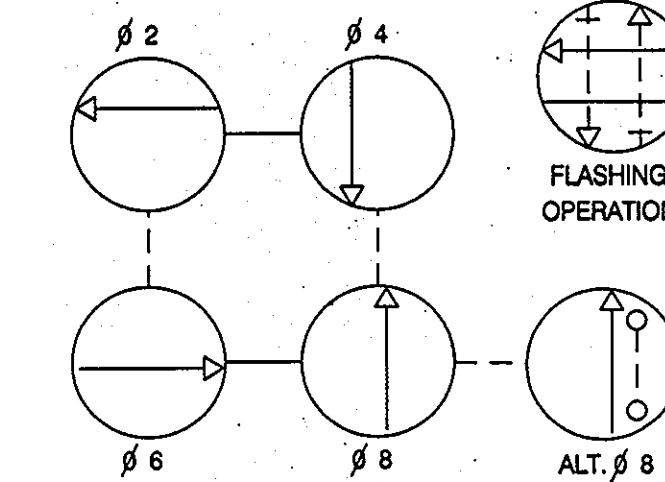
EXISTING SIGNALS



PROPOSED SIGNALS

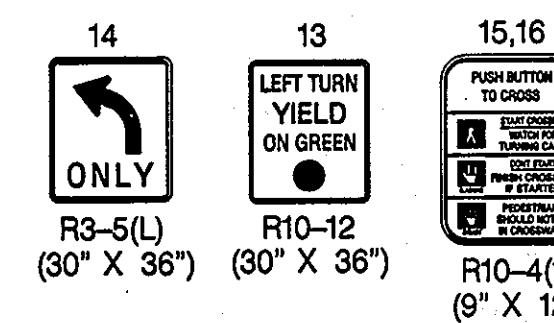


NEMA PHASING



- PHASING NOTES:
- PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
 - PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.

PROPOSED SIGNS



ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE OF ENGINEER: DAVID W. THOMPSON
 DATE: 6/16/04

DEVELOPER'S CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION ERRORS REGARDING THE PROJECT. I ALSO AUTHORIZE FREEDOM SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE OF DEVELOPER: DALE THOMPSON
 DATE: 6/16/04

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief Development Engineering Division: 1/5/05
 Chief, Division of Land Development: 1/23/05
 Director - Department of Planning and Zoning: 2/1/05

STATE OF MARYLAND PROFESSIONAL ENGINEER
 FOR REV. BY GET ONLY
 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: 7/22/11

SCOTS GLEN NORTH
 S-04-07 RB CASE 362 WP-04-114 E-02-82
TRAFFIC SIGNAL PLAN
CEDAR LANE
AT
OWEN BROWN ROAD
 SDP-04-124
 SCALE: 1" = 20'
 SHEET 22 OF 25

LEGEND

PROPOSED	EXISTING
OVERHEAD DETECTION CAMERA	
MAST ARM	
STEEL POLE	
TRAFFIC SIGNAL HEAD	
PEDESTRIAN SIGNAL HEAD	
SIGN	
STREET LIGHT	
HANDBOX	
CONDUIT	
VIDEO DETECTION ZONE	
LOOP DETECTOR	
CONTROLLER	
CONTROLLER WITH PAD	
WOOD POLE	
FIRE HYDRANT	
HANDBOX	
MANHOLE	
W.V. WATER VALVE	
G.V. GAS VALVE	

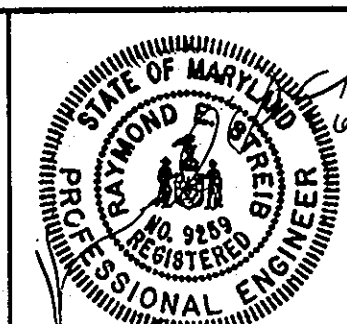
- CONSTRUCTION DETAILS**
- INSTALL 27 FT. STEEL POLE WITH TWIN 80 FT./50 FT. MAST ARMS, SIGNAL HEADS, SIGNS, 15 FT. STREET LIGHTING ARM WITH 250 WATT H.P.S. VAPOR COBRA (SAG LENS) FIXTURE, PEDESTRIAN SIGNAL HEAD, PUSHBUTTON, AND R10-4(1) SIGN (NOTE: INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BEND) CUT MAST ARM CROSSING CEDAR LN. TO 40 FT. IN LENGTH
 - INSTALL 27 FT. STEEL POLE WITH 38 FT. MAST ARM, SIGNAL HEADS, 15 FT. STREET LIGHTING ARM WITH 250 WATT H.P.S. VAPOR COBRA (SAG LENS) FIXTURE, PEDESTRIAN SIGNAL HEAD, PUSHBUTTON, R10-4(1) SIGN (NOTE: INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE CONDUIT BEND) CUT MAST ARM TO 30 FT. IN LENGTH
 - INSTALL BASE MOUNTED CABINET AND CONTROLLER WITH (2) DISCONNECT SWITCHES NEMA TYPE 4 30 AMP STAINLESS STEEL (NOTE: INSTALL 1-3 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE CONDUIT BENDS)
 - INSTALL TRAFFIC SIGNAL HANDBOX
 - INSTALL 8 FT. X 40 FT. QUADRIPOLE TYPE VEHICLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING (2+2 TURNS)
 - INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT (DETECTOR WIRE SLEEVE)
 - INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
 - INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - PUSHED
 - INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
 - INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED (PROPOSED ELECTRICAL SERVICE)
 - INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - PUSHED (PROPOSED ELECTRICAL SERVICE)
 - INSTALL 12 IN. HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
 - INSTALL 24 IN. HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
 - INSTALL 5 IN. WHITE THERMOPLASTIC PAVEMENT MARKING
 - INSTALL 5 IN. YELLOW THERMOPLASTIC PAVEMENT MARKING
 - INSTALL HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW 50 FT. FROM STOPBAR
 - USE EXISTING HANDLEHOLE AND SPLICE 2-CONDUCTOR A.S. TO EXISTING LOOP WIRE
 - USE AND MAINTAIN EXISTING HANDLEHOLE
 - USE AND MAINTAIN EXISTING CONDUIT
 - REMOVE EXISTING SIGNAL POLE AND ALL ASSOCIATED SIGNAL EQUIPMENT
 - REMOVE EXISTING HANDBOX
 - CAP AND ABANDON EXISTING CONDUIT
 - REMOVE EXISTING PAVEMENT MARKING (- - - - -)
 - REMOVE EXISTING BASE MOUNTED CABINET AND CONTROLLER AND REMOVE CONCRETE FOUNDATION 12" BELOW GRADE (SEE GENERAL NOTE 1.)
 - INSTALL PROPOSED HANDBOX OVER EXISTING CONDUIT AS SHOWN (SEE GENERAL NOTE 10.)
 - INSTALL 5 IN. WHITE SKIP THERMOPLASTIC PAVEMENT MARKING (10 FT. LINE, 30 FT. GAP)
 - INSTALL 2 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED

UTILITY LEGEND

G	GAS MAIN
W	WATER MAIN
S	SEWER MAIN
Q	STORM DRAIN
TV	CABLE TELEVISION
E	ELECTRIC CABLES
T	TELEPHONE CABLES
A	APRIL CABLES

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Chief Traffic Engineering Division: 6/17/04
 Chief, Bureau of Highways: 6-16-04

TRAFFIC CONCEPTS, INC.
 325 Gambrills Road
 Suite E
 Gambrills, MD 21054
 (410) 923-7101
 FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM



DES:	MO:	DRN:	MO:	CHK:	TZ:	DATE:	JUNE, 2004	BY:	NO.:	REVISION:	DATE:	600' SCALE MAP NO.:	DATE:
								BEI	1	Revise Title Block	3/16/11		

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF CEDAR LANE AND OWEN BROWN ROAD IN HOWARD COUNTY. CEDAR LANE IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE ACROSS THE SOUTHLEG OF CEDAR LANE.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH LOOP DETECTOR AMPLIFIER HOUSED IN A NEMA "P" BASE MOUNTED CABINET.

PHASING

PHASE AND SEQUENCE DIAGRAM	SIGNAL HEADS												
	1	2	3	4	5	6	7	8	9	10	11	12	
PHASE 2+P	G	G	G	G	G	R	R	R	R	DW	DW		
PHASE 2+P CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW		
PHASE 4+R	R	R	R	R	R	G	G	G	G	DW	DW		
PHASE 4+R CHANGE	R	R	R	R	R	G	G	G	G	DW	DW		
PHASE 4+ALT. B	R	R	R	R	R	G	G	G	G	FLDW	FLDW		
PHASE 4+ALT. B CHANGE	R	R	R	R	R	G	G	G	G	FLDW	FLDW		
PHASE 4+ALT. B CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW		
FLASH OPEN	Y	Y	Y	Y	Y	FL	FL	FL	FL	DARK	DARK		

EQUIPMENT LIST "A"

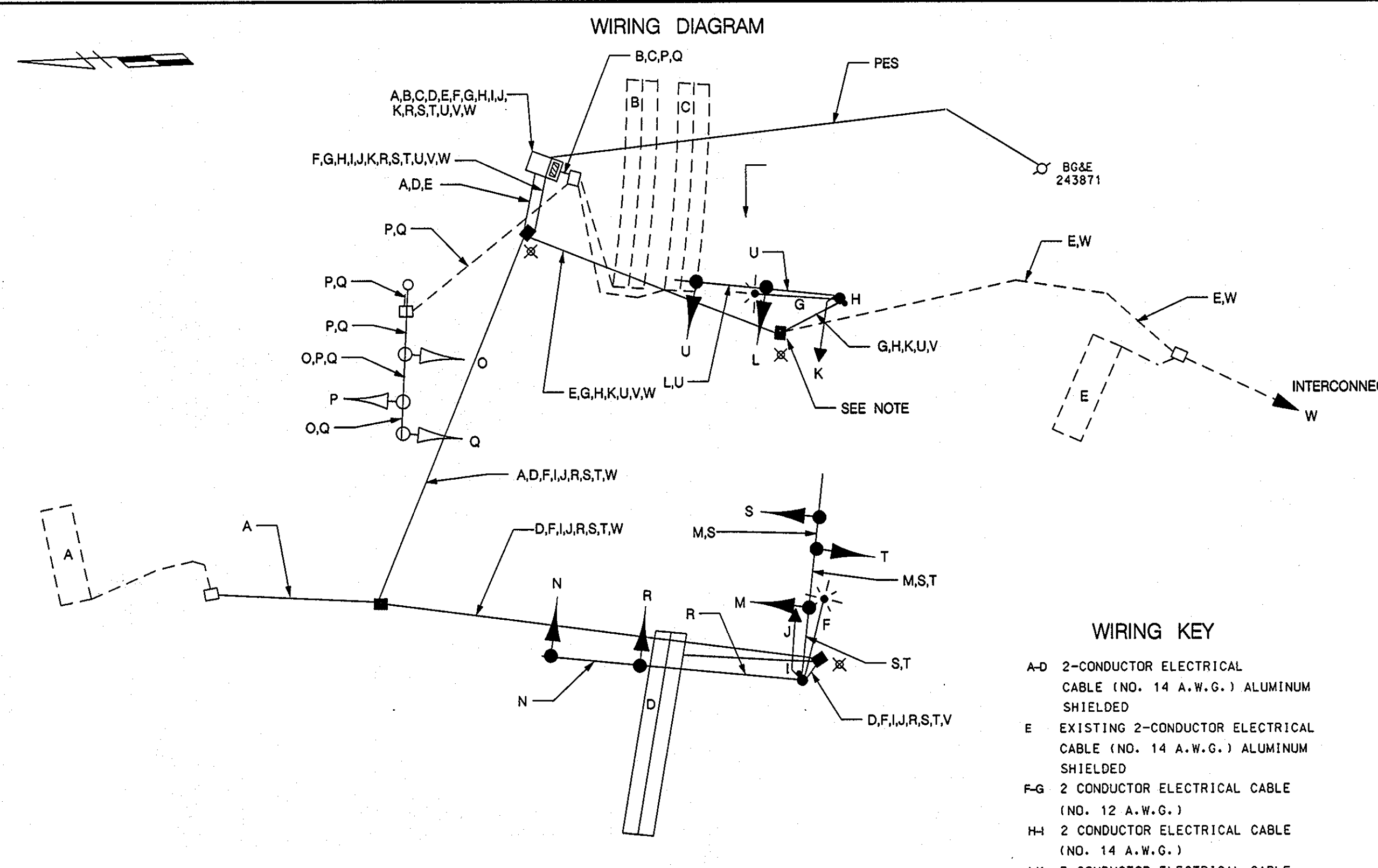
A. EQUIPMENT TO BE PURCHASED FROM HOWARD COUNTY HIGHWAY SIGNAL SHOP AND INSTALLED BY THE CONTRACTOR.

QUANTITY	DESCRIPTION
1 EACH	BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT
7 EACH	12 IN. VEHICULAR 3-SECTION (R,Y,G) SIGNAL HEAD
2 EACH	12 IN. PEDESTRIAN SIGNAL HEAD
2 EACH	27 FT. STEEL POLE WITH TWIN 50 FT./50 FT. MAST ARMS
1 EACH	27 FT. STEEL POLE WITH 38 FT. MAST ARM
2 EACH	PEDESTRIAN SIGN R10-4(1)
1 EACH	R10-12 SIGN (30" X 36") MAST ARM MOUNT
1 EACH	R3-5(L) SIGN (30" X 36") MAST ARM MOUNT
2 EACH	15 FT. LIGHTING ARM FOR SIGNAL STRUCTURE
2 EACH	250 WATT H.P.S. VAPOR COBRA (SAG LENS) FIXTURE
2 EACH	PEDESTRIAN PUSHBUTTON

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED UPON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
DATE: 6/16/04
DALE THOMPSON

DEVELOPER'S CERTIFICATE
I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT SHALL 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 PERSONS TO BE IN CHARGE OF THE PROJECT TO BE CONDUCTED BY THE HOWARD SOIL CONSERVATION DISTRICT.
DATE: 6/16/04
DALE THOMPSON

APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION: 6/16/05
CHIEF, DIVISION OF LAND DEVELOPMENT: 6/16/05
DIRECTOR - DEPARTMENT OF PLANNING AND ZONING: 6/16/05



WIRING KEY

- A-D 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
- E EXISTING 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
- F-G 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- H-I 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- J-K 3 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- L-M 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- N EXISTING 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- O 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- P-Q 6-PAIR COMMUNICATION CABLE, JELLY FILLED UNDERGROUND
- R PROPOSED ELECTRICAL SERVICE
- S LOOP WIRE (NO. 14 A.W.G.)
- T EXISTING LOOP WIRE (NO. 14 A.W.G.)
- U GROUND ROD IN HANDBOX
- V
- W
- X

NOTE: DISCONNECT IC CABLE (W) AND 2-CONDUCTOR A.S. (E) FROM EXISTING CONTROLLER AND PULL BACK TO THIS PROPOSED HANDBOX RE-ROUTE THROUGH PROPOSED CONDUIT AND RE-CONNECT TO PROPOSED CONTROLLER.

EQUIPMENT LIST "B"

EQUIPMENT TO BE FURNISH AND/OR INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT MUST HAVE CATALOG CUTS SUBMITTED TO HOWARD COUNTY FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION	ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC-FULLY	8090	2 EACH	INSTALL MAST ARM POLE
2001	3 CY	TEST PIT EXCAVATION	8092	3 EACH	INSTALL MAST ARM
8001	10 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION	8100	2 EACH	GROUT EXISTING/NEW POLE BASE
8008	15 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT, FLEXIBLE, NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	8107	7 EACH	INSTALL VEHICULAR SIGNAL HEAD
			8110	2 EACH	INSTALL PEDESTRIAN SIGNAL HEAD
8029	200 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED	8111	2 EACH	INSTALL PEDESTRIAN PUSHBUTTON AND SIGN
8033	220 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - PUSHED	8117	1 EACH	INSTALL CONTROLLER AND CABINET BASE MOUNT
8034	40 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED	8119	4 EACH	FURNISH AND INSTALL TRAFFIC SIGNAL HANDBOX
8036	3 EACH	FURNISH AND INSTALL 3 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BEND	8120	1 EACH	INSTALL TRAFFIC SIGNAL HANDBOX OVER EXISTING CONDUIT
8038	20 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED	8121	490 LF	PULL-BACK AND RE-ROUTE EXISTING CABLE
8040	2 EACH	FURNISH AND INSTALL 4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BEND	8123	145 LF	FURNISH AND INSTALL SAW CUT FOR LOOP DETECTOR
8047	2 EACH	FURNISH AND INSTALL DISCONNECT SWITCH NEMA TYPE 4 - 30 AMP STAINLESS STEEL	8127	2 EACH	CLEAN AND PAINT MAST ARM POLE
8049	3 EACH	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH AND CLAMP	8128	3 EACH	CLEAN AND PAINT MAST ARM
8056	550 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN 1/4 IN. FLEXIBLE TUBING (NO. 14 AWG)	8129	2 EACH	CLEAN AND PAINT LIGHTING ARM
8059	530 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR ALUMINUM SHIELDED	8141	2 CY	REMOVE AND DISPOSE OF FOUNDATION 12 IN. BELOW GRADE
8060	310 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR NO. 14 AWG	8144	1 EACH	REMOVE AND SALVAGE CABINET AND CONTROLLER
8061	330 LF	FURNISH AND INSTALL ELECTRICAL CABLE 3-CONDUCTOR NO. 14 AWG	8145	3 EACH	REMOVE SIGNAL HANDBOX
8063	70 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR NO. 14 AWG	NEG.	3 EACH	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING ARROW
8064	1140 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR NO. 14 AWG	NEG.	2 EACH	REMOVE EXISTING PAVEMENT MARKING LETTER OR ARROW
8068	390 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR NO. 12 AWG	NEG.	125 LF	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
8071	340 LF	FURNISH AND INSTALL NO. 8 AWG (THWN) - COPPER	NEG.	175 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
8080	16 SF	INSTALL SIGN (OVERHEAD)	NEG.	335 LF	FURNISH AND INSTALL 5 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
8085	2 EACH	INSTALL LIGHTING ARM ON MAST ARM POLE	NEG.	560 LF	FURNISH AND INSTALL 5 IN. YELLOW HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
8086	2 EACH	INSTALL 250 WATT HPS VAPOR COBRA (SAG LENS) FIXTURE	NEG.	1265 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKING - ANY WIDTH CUT AND CAP TRAFFIC SIGNAL STRUCTURE
			NEG.	LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT

STATE OF MARYLAND PROFESSIONAL ENGINEER
DALE THOMPSON
LICENSE NO. 28559, EXPIRATION DATE: 7/22/11

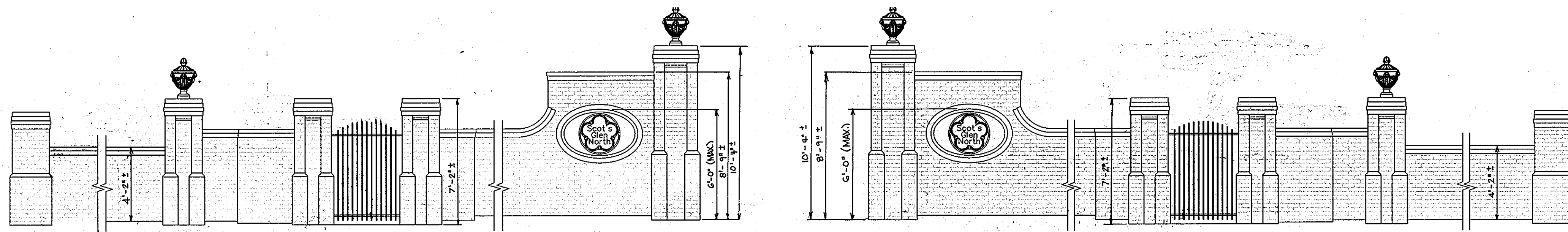
FOR REV. BY BEI ONLY
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 28559, Expiration Date: 7/22/11

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CHIEF, TRAFFIC ENGINEERING DIVISION: 6/16/04
CHIEF, BUREAU OF HIGHWAYS: 6/16/04

TRAFFIC CONCEPTS, INC.
325 Gambrells Road
Suite E
Gambrells, MD 21054
(410) 923-7101
FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM

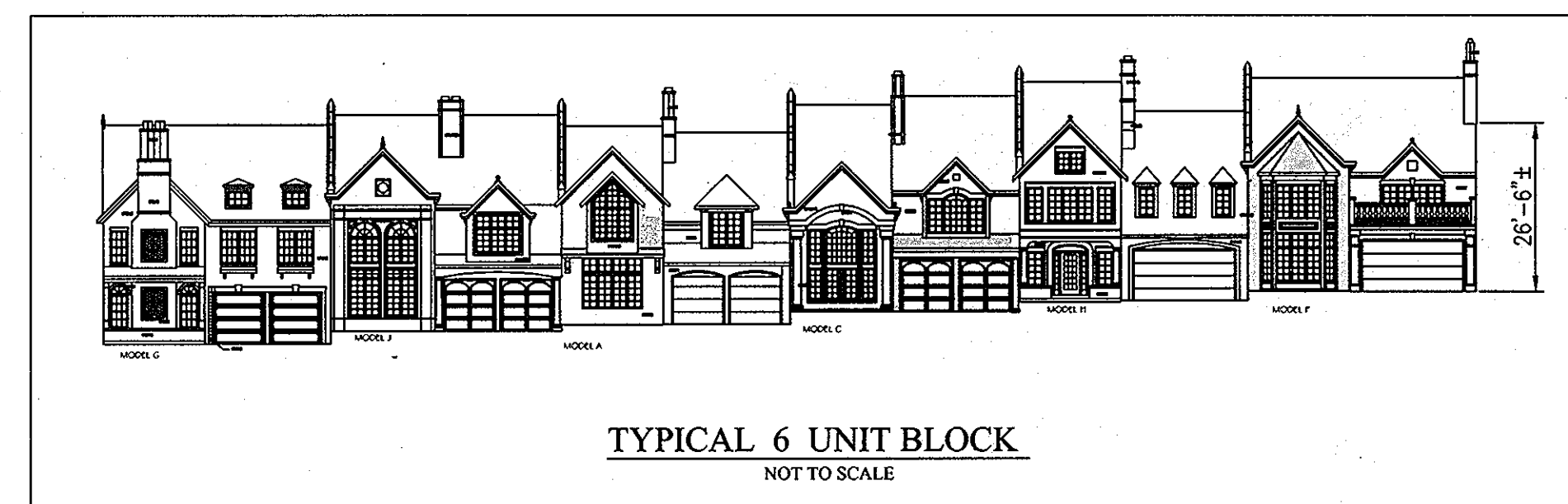
DES: MO
DRN: MO
CHK: TZ
DATE: JUNE, 2004
BY: BEI
NO. 1
REVISION: Revise Title Block
DATE: 7-16-11

SCOTS GLEN NORTH SDP-04-124
TRAFFIC SIGNAL PLAN
GENERAL INFORMATION SHEET
CEDAR LANE
AT
OWEN BROWN ROAD
SCALE: NONE
SHEET 23 OF 25



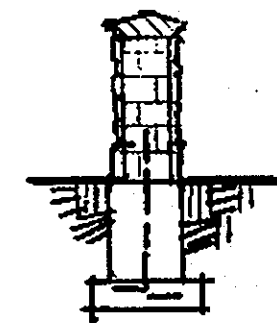
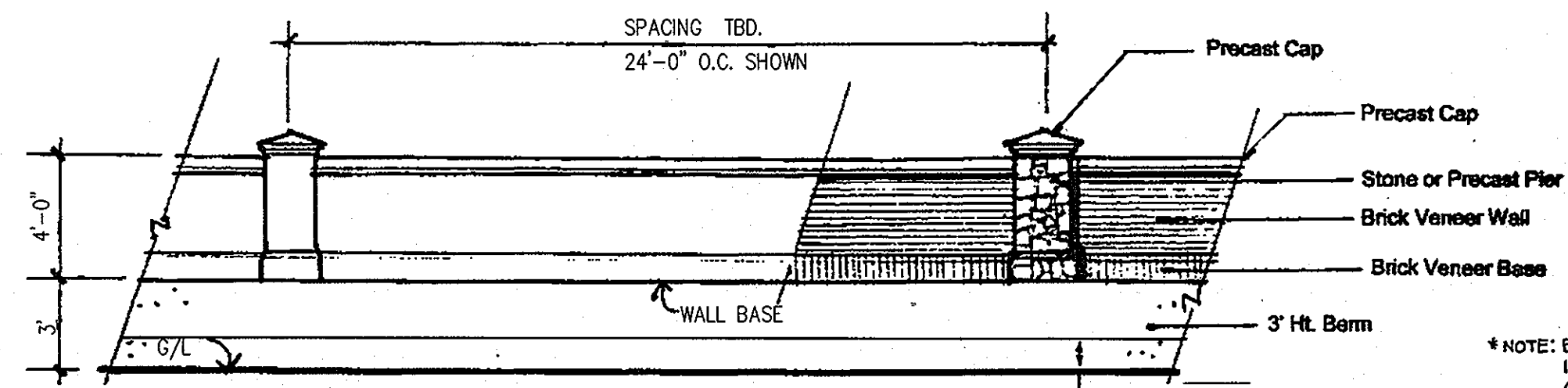
WALL ELEVATION SOUTH
SCALE: NOT TO SCALE

WALL ELEVATION NORTH
SCALE: NOT TO SCALE



TYPICAL 6 UNIT BLOCK
NOT TO SCALE

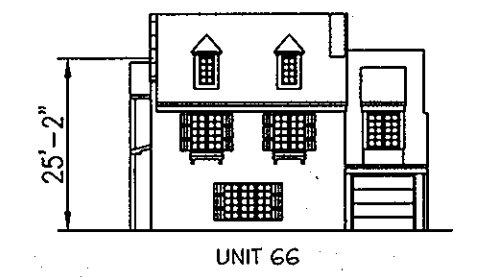
COMMUNITY ENTRANCE WALL ELEVATION (ALSO ACTS AS NOISE ABATEMENT)
NOT TO SCALE



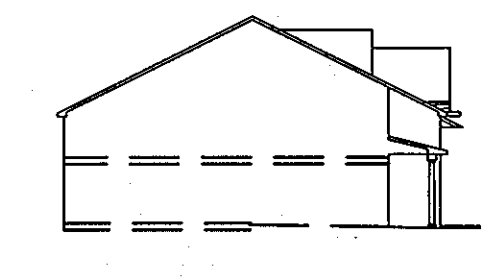
* NOTE: BERM TO BE RAISED TO ULTIMATE GRADE PRIOR TO INSTALLATION OF NOISE ABATEMENT WALL. GRADING SHOWN ON SHEET 17 IS FOR THE INTERIM CONDITION ONLY. SEE SHEETS 2 & 14 FOR ULTIMATE GRADE AT TOP OF BERM.

NOISE ABATEMENT WALL ELEVATION
NOT TO SCALE

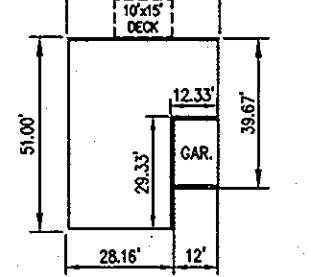
TYPICAL VILLA UNIT (1 CAR GARAGE) (UNIT 66)



FRONT ELEVATION
NOT TO SCALE

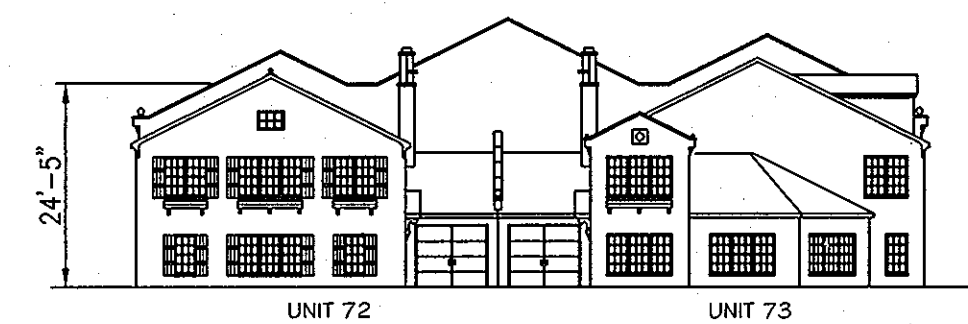


SIDE ELEVATION
NOT TO SCALE

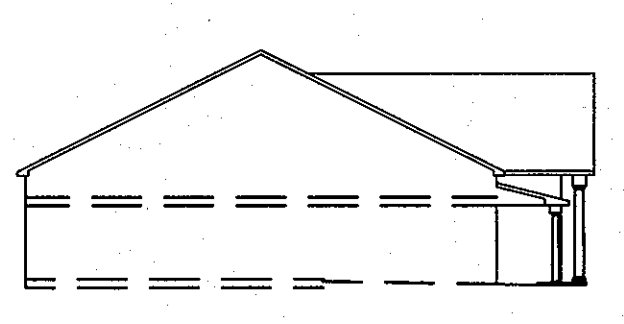


FOOT PRINT
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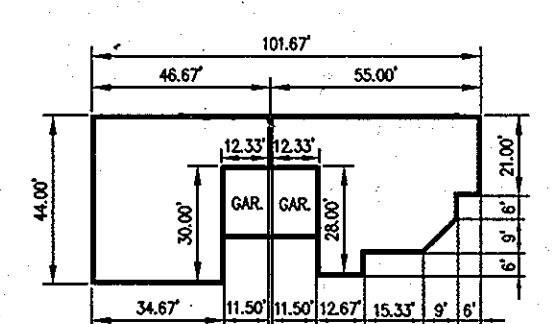
TYPICAL VILLA UNIT (1 CAR GARAGE) (UNIT 72 & 73)



FRONT ELEVATION
NOT TO SCALE

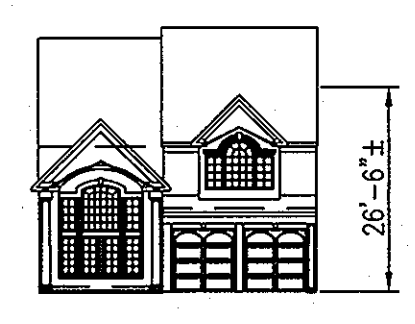


SIDE ELEVATION
NOT TO SCALE

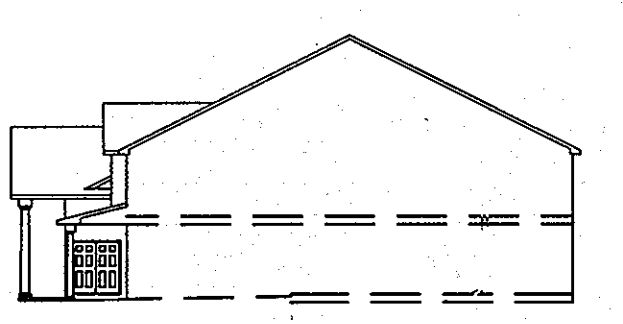


FOOT PRINT
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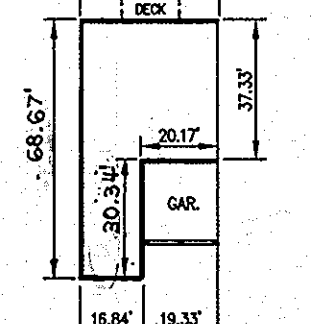
TYPICAL VILLA UNIT (2 CAR GARAGE) (BOTH SFA AND SFD)



FRONT ELEVATION
NOT TO SCALE



SIDE ELEVATION
NOT TO SCALE

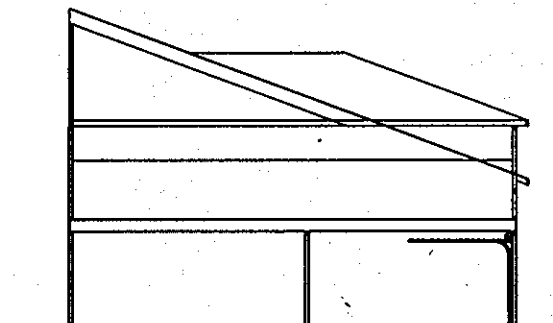


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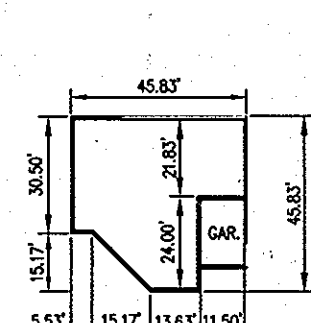
TYPICAL VILLA UNIT (1 CAR GARAGE) (UNIT #45)



FRONT ELEVATION
NOT TO SCALE



SIDE ELEVATION
NOT TO SCALE

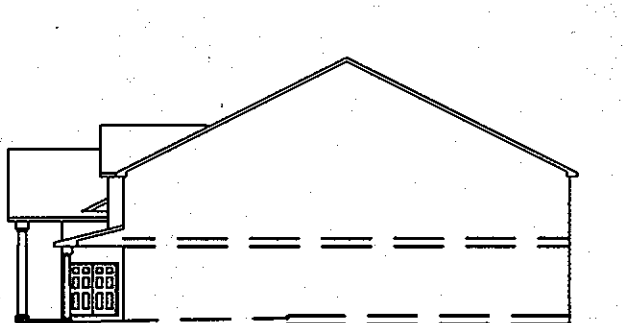


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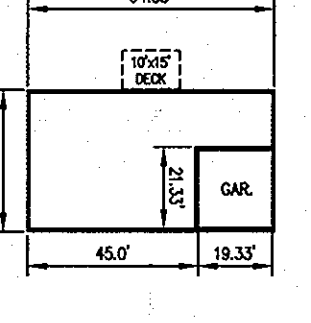
TYPICAL SFA CORNER UNIT (UNIT #22)



FRONT ELEVATION
NOT TO SCALE



SIDE ELEVATION
NOT TO SCALE



FOOT PRINT
NOT TO SCALE

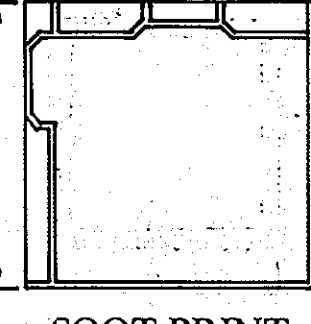
COMMUNITY BUILDING



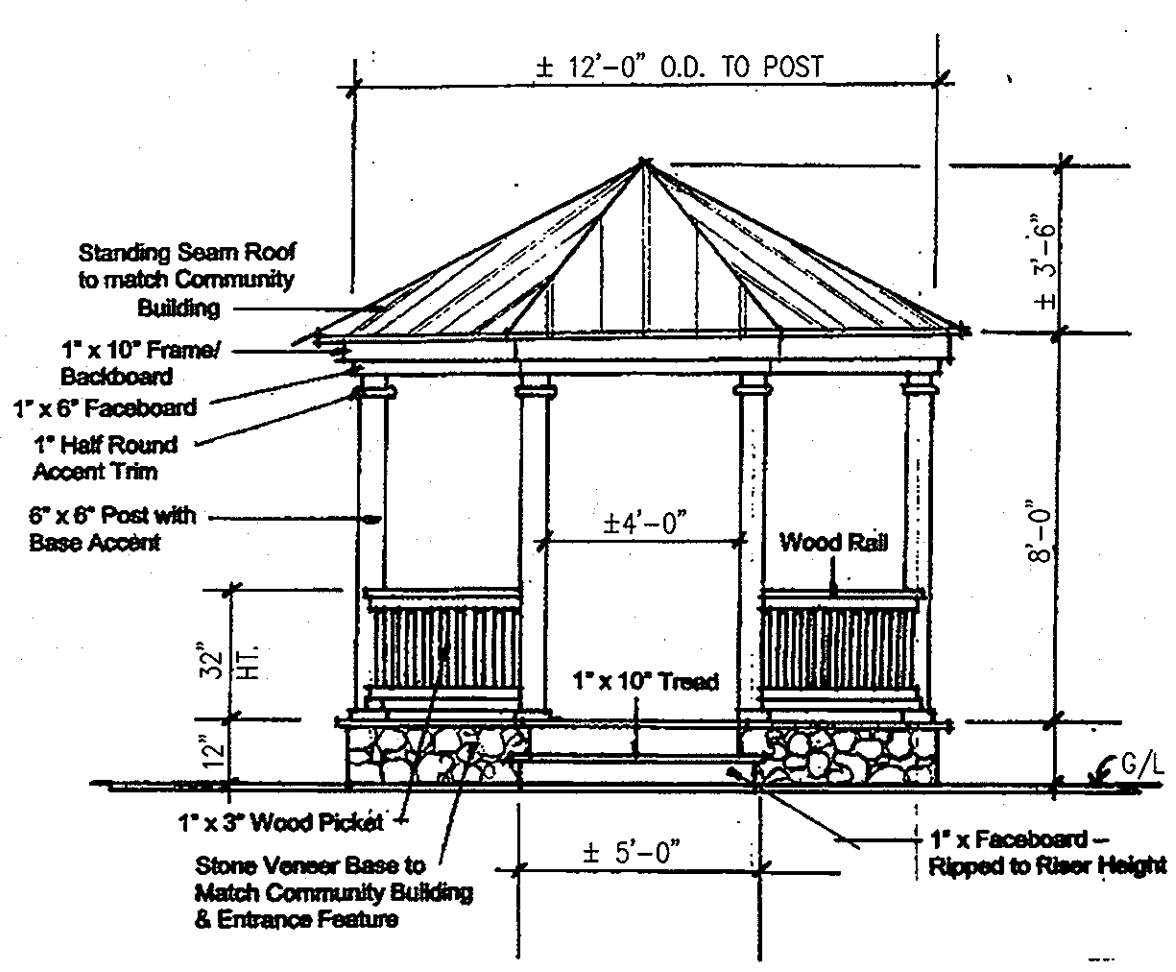
FRONT ELEVATION
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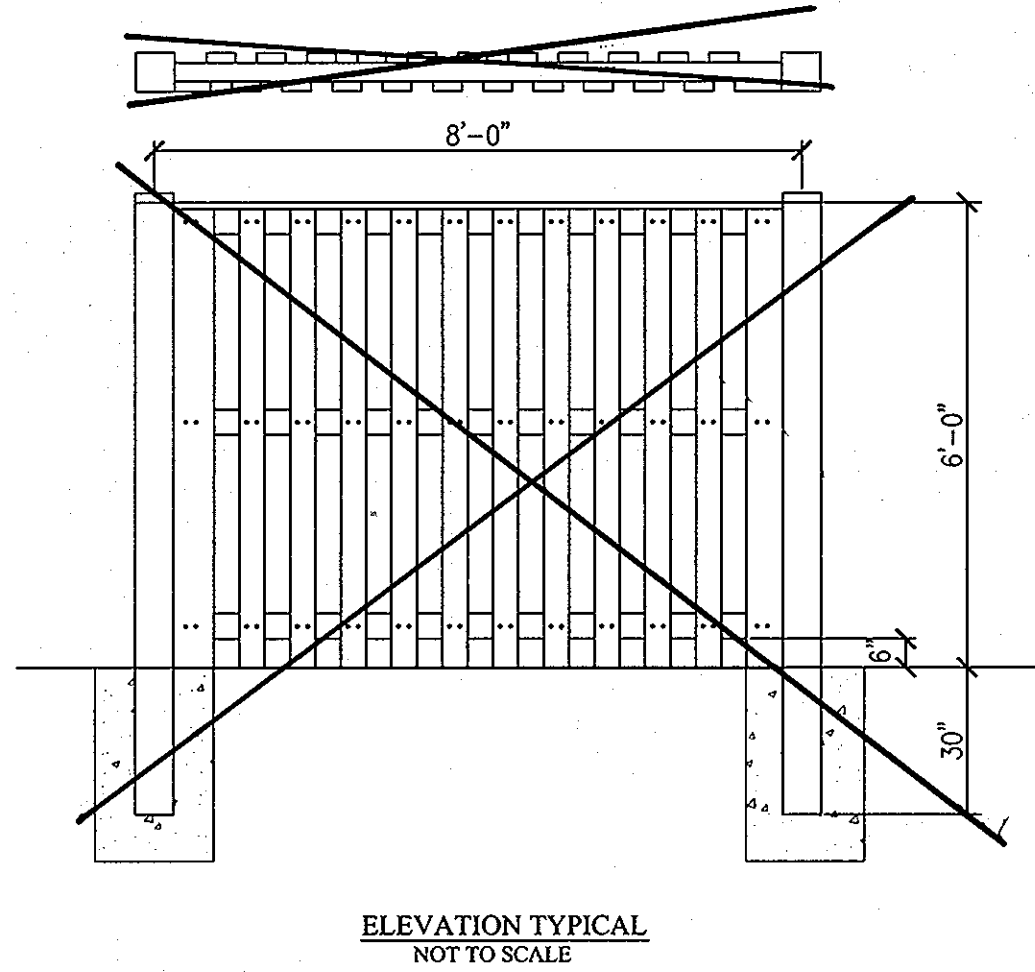
SIDE ELEVATION
NOT TO SCALE



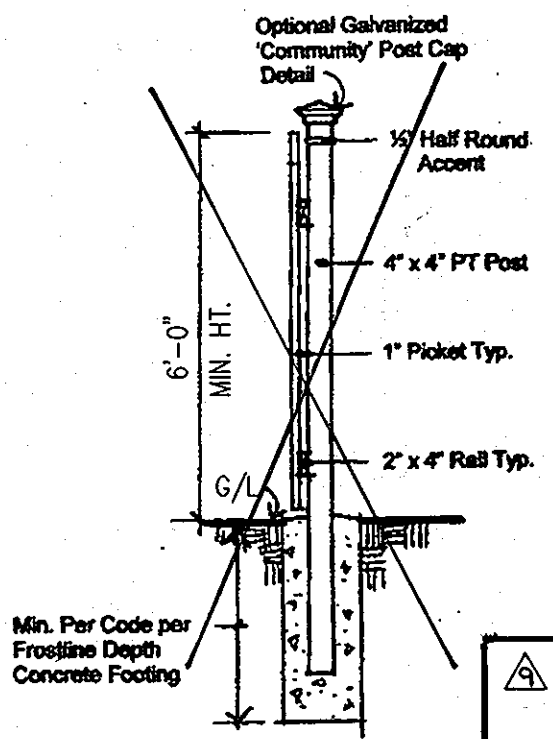
FOOT PRINT
NOT TO SCALE



GAZEBO ELEVATION
NOT TO SCALE

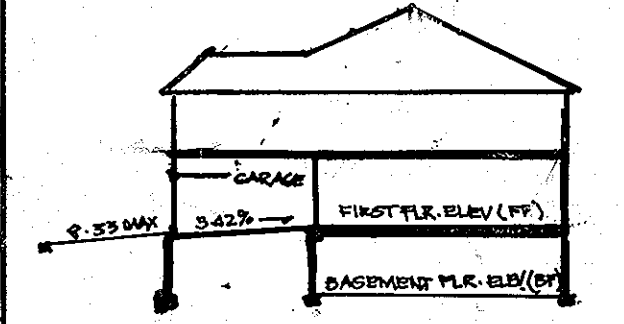


ELEVATION TYPICAL
NOT TO SCALE
SECTION TYPICAL
NOT TO SCALE



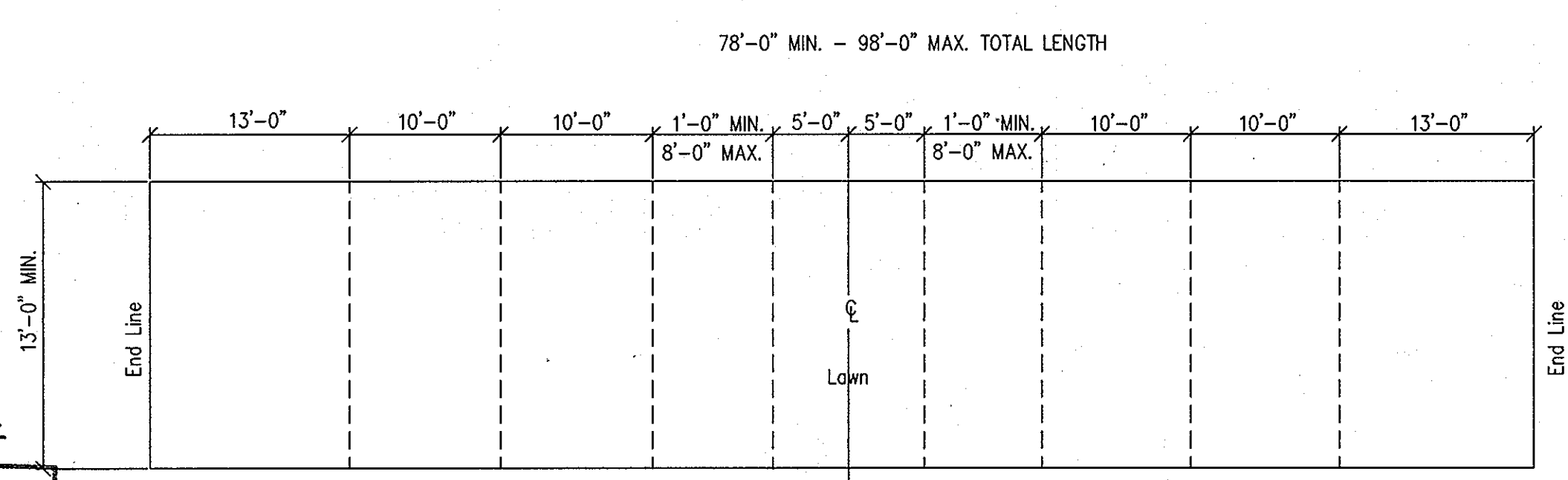
SECTION TYPICAL
NOT TO SCALE

TYPICAL VILLA UNIT (2 CAR GARAGE) (BOTH SFA AND SFD)

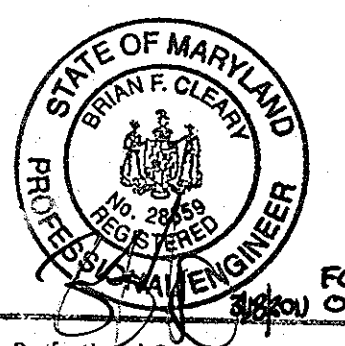


BUILDING SECTION
NOT TO SCALE

NOTE: BARRIER-FREE ENTRY TO BE ACHIEVED THRU THE GARAGE. MAX. GARAGE FLOOR SLOPE NOT TO EXCEED 5.5%. MAX. DRIVEWAY SLOPE NOT TO EXCEED 8.3%.



BOCCE COURT - TYPICAL PLAN
NOT TO SCALE



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: 7/22/11

PREPARED BY:
American Land Development and Engineering, Inc.
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER:
Harmel PSC, LLC.
6300 Woodside Court Suite A
Columbia, Md. 21046

No.	DATE	REVISION	BY
3-9-11		REVISE TITLE BLOCK	DEF
4-10-08		DELETE CLOSED WOOD FENCE DETAIL PERIMETER 2	ALDEI
8-23-07		TYPICAL BUILDING SECTION ADDED	ALDEI
8-16-04		REVISED ENTRANCE WALL	ALDEI
4-25-05		COMMUNITY CENTER FOOTPRINT & ELEVATION	ALDEI

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Signature of Engineer: DAVID C. WOESSNER
DEC. 10, 2004 DATE

DEVELOPER'S CERTIFICATE
"I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 of Developer: DALE THOMPSON
DEC. 10, 2004 DATE



APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: Chief, Development Engineering Division
4/5/05 DATE

Signature: Chief, Division of Land Development
1/28/05 DATE

Signature: Director - Department of Planning and Zoning
2/1/05 DATE

TITLE: ENTRANCE FEATURES AND BUILDING ELEVATIONS AND DETAILS
PROJECT NAME: SCOTS GLEN NORTH
BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3
WP-11-108 S-04-03 PB CASE 362 WP-04-114 F-05-52 F-05-101
DES.: DCW/JAVG JOB: PROJ.: DATE: 12-10-04
DRW.: AVG/DTA/INC CHK.: D.C.W. SCALE: AS SHOWN SHEET 24 OF 25

POND CONSTRUCTION SPECIFICATIONS

Pond MD-378-14
NRCS - MARYLAND JANUARY 2000
CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the toe of the embankment.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir or directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification CC, SC, CH, or CL and must have at least 30% passing the #20 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer.

Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.

When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within ±2% of the optimum. Each layer of fill shall be compacted as specified on this plan and to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

Cut Off Trench - The cutoff trench shall be excavated to impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or better. The backfill shall be compacted with construction equipment, rollers, or hand tampers to obtain maximum density and minimum permeability.

Embankment Core - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or better. The core shall be constructed with construction equipment, rollers, or hand tampers to obtain maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psc, 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to ensure flowability of the material.

Adequate measures shall be taken (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipes shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

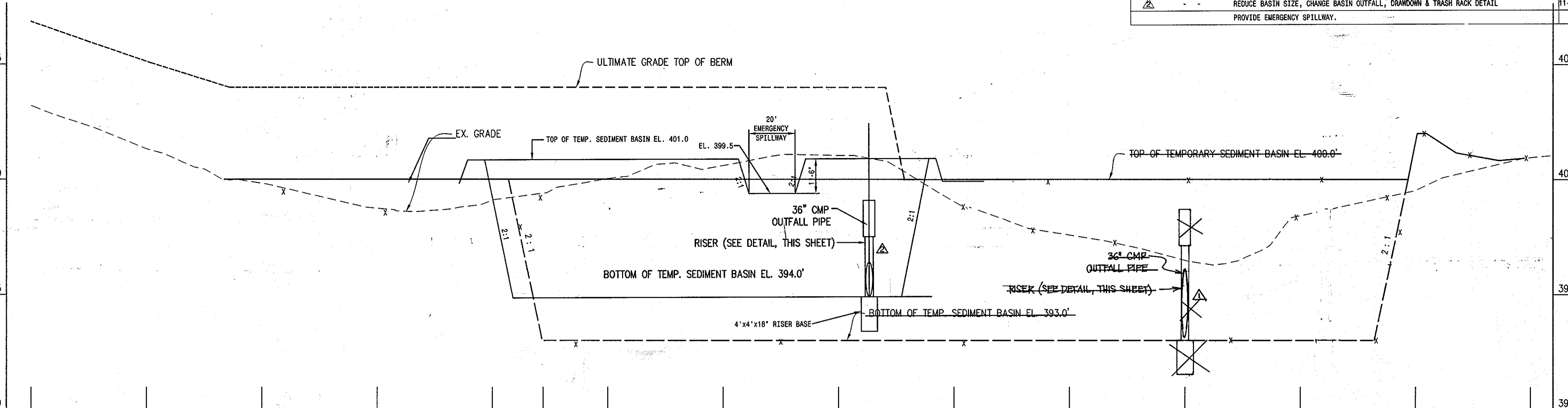
Pipe Conduits

All pipes shall be circular in cross section.

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

1. Materials - (Polymer Coated Steel Pipe) - Steel pipes with polymer coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-245 & M-246 with watertight coupling bands or flanges.
2. Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Aluminum Coated Steel Pipe, when used with flowable fill or when soil and/or water conditions warrant the need for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Aluminum surfaces that are to be in contact with concrete shall be primed with one coat of zinc chromate primer or two coats of asphalt. Aluminum surfaces that are to be in contact with concrete shall be primed with one coat of zinc chromate primer or two coats of asphalt. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.
3. Coupling bands, anti-seep collars, and sections, etc., must be composed of the same material and loss of the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

NO	DATE	REVISION
1	4-25-03	CHANGE OUTFALL PIPE LOCATION & PROFILE, REVISED ELEVATION FOR HORIZONTAL DRAWDOWN & ANTI-VORTEX DEVICES
2		REDUCE BASIN SIZE, CHANGE BASIN OUTFALL, DRAINROOM & TRASH RACK DETAIL
		PROVIDE EMERGENCY SPILLWAY.



4. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

5. Backfilling shall conform to "Structure Backfill".

6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 311. Geotextile shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09, Class C.

Core of Water during Construction

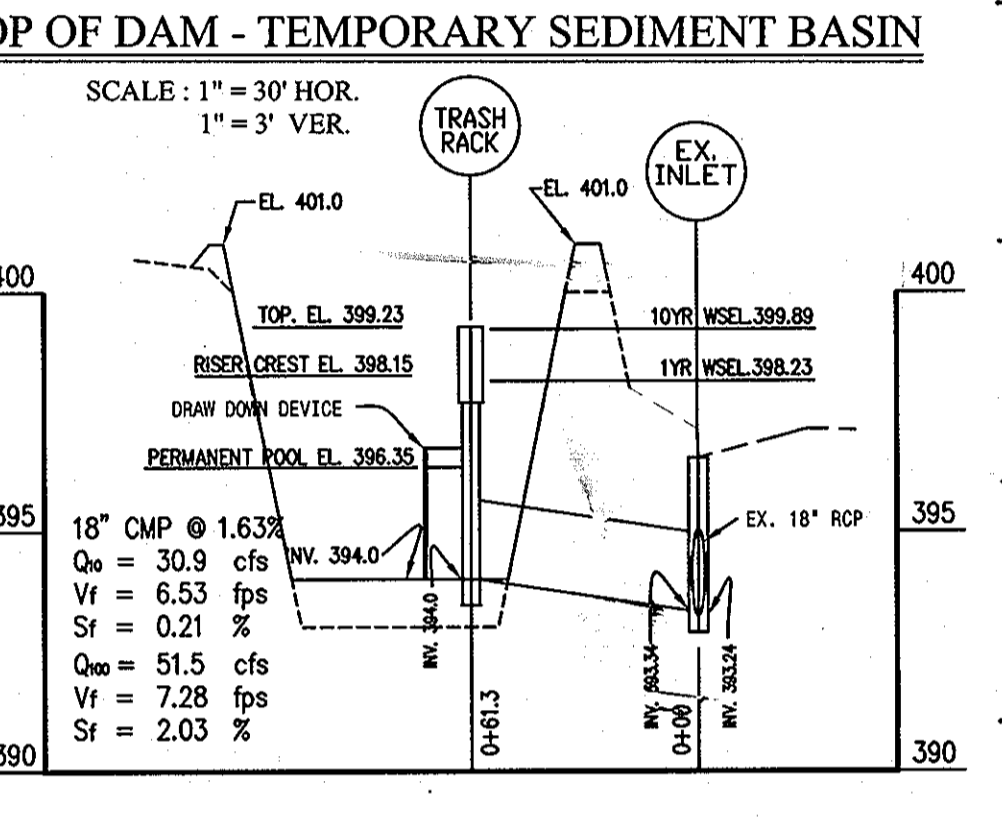
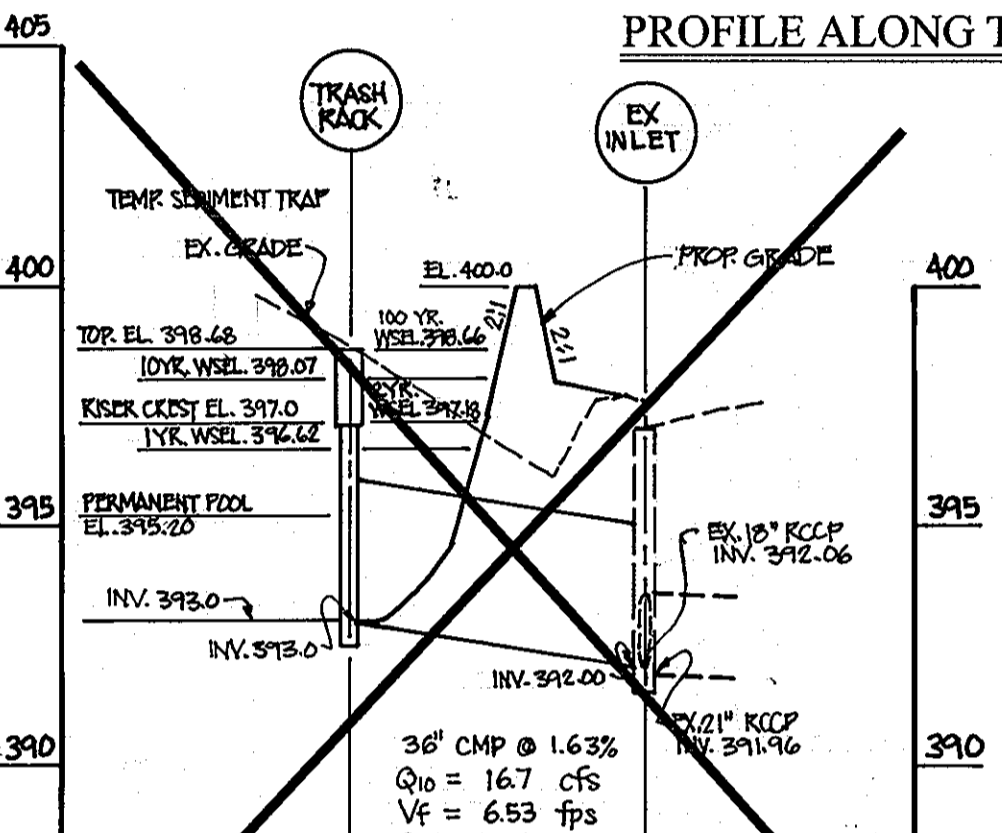
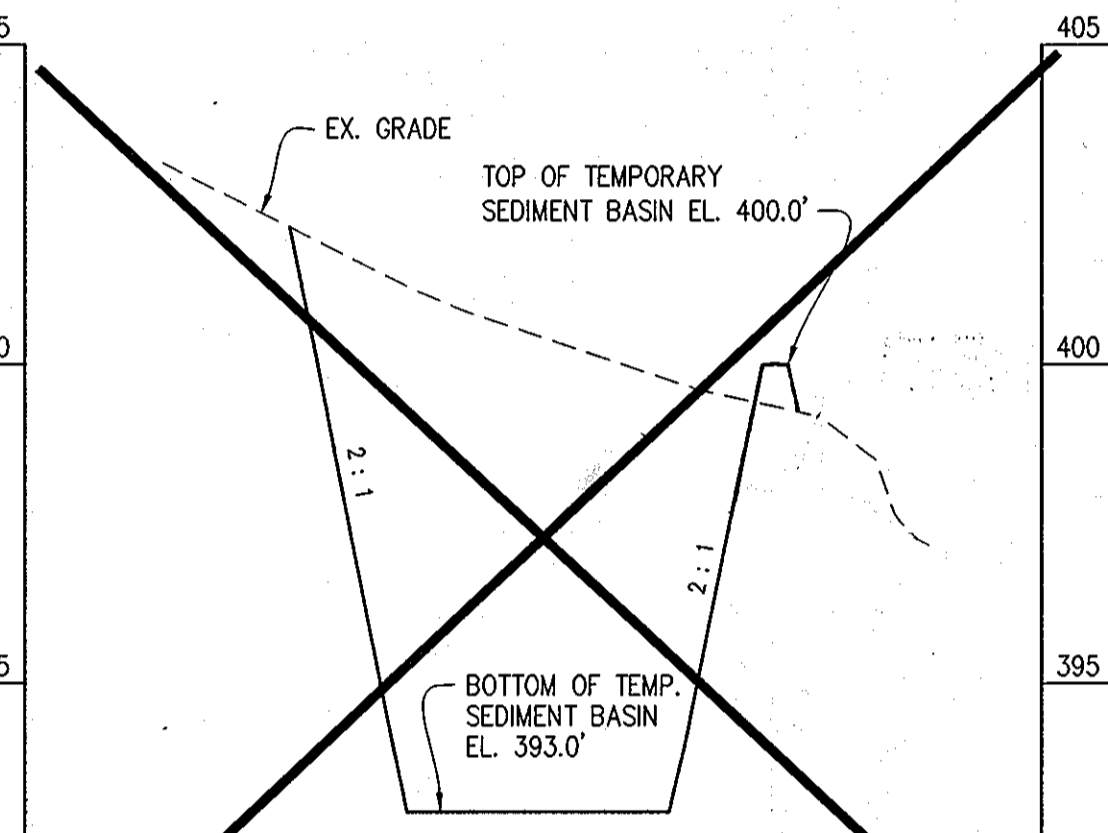
All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation of such locations which may require draining the water spurs from which the water shall be pumped.

Stabilization

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, or berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Natural Resources Conservation Service Standards and Specifications for Critical Area Planting (MD-342) as shown on the accompanying drawings.

Erosion and Sediment Control

Construction operations will be carried out in such a manner that erosion will be controlled and water or air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures.



Excavated Ponds

General - Excavated ponds that create a failure potential through a constructed or created embankment will be designed as embankment ponds. Excavated ponds that include a pipe or weir outlet control system for urban stormwater management shall be designed using the principal and emergency spillway hydrologic criteria for Embankment Ponds, Table 1.

Side Slopes - Side slopes of excavated ponds shall be such that they will be stable and shall not be steeper than 1 horizontal to 1 vertical. Flatter slopes are to be utilized where safety for children, livestock watering, etc. is a design factor.

Perimeter Form - Where the structures are used for recreation or are located in high public view, the perimeter or edge should be shaped to a curvilinear form.

Inlet Protection - When the excavated pond is a bypass type and water is being diverted from a stream, the minimum size inlet line shall be a 4-inch diameter pipe. All stone walls concerning water use and downstream rights shall be strictly adhered to. Where surface water enters the pond in a natural or excavated channel, the side slope of the pond shall be protected against erosion.

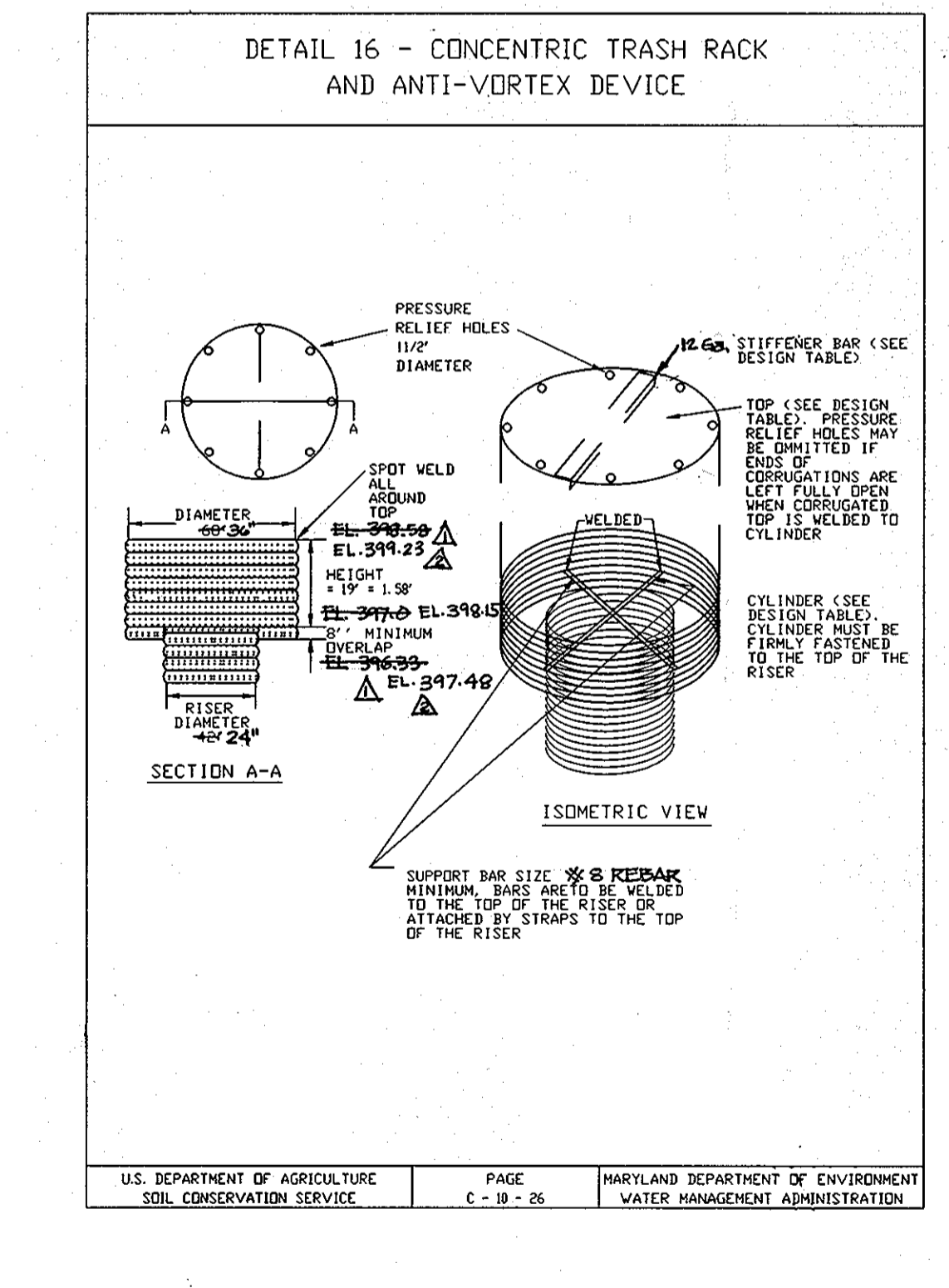
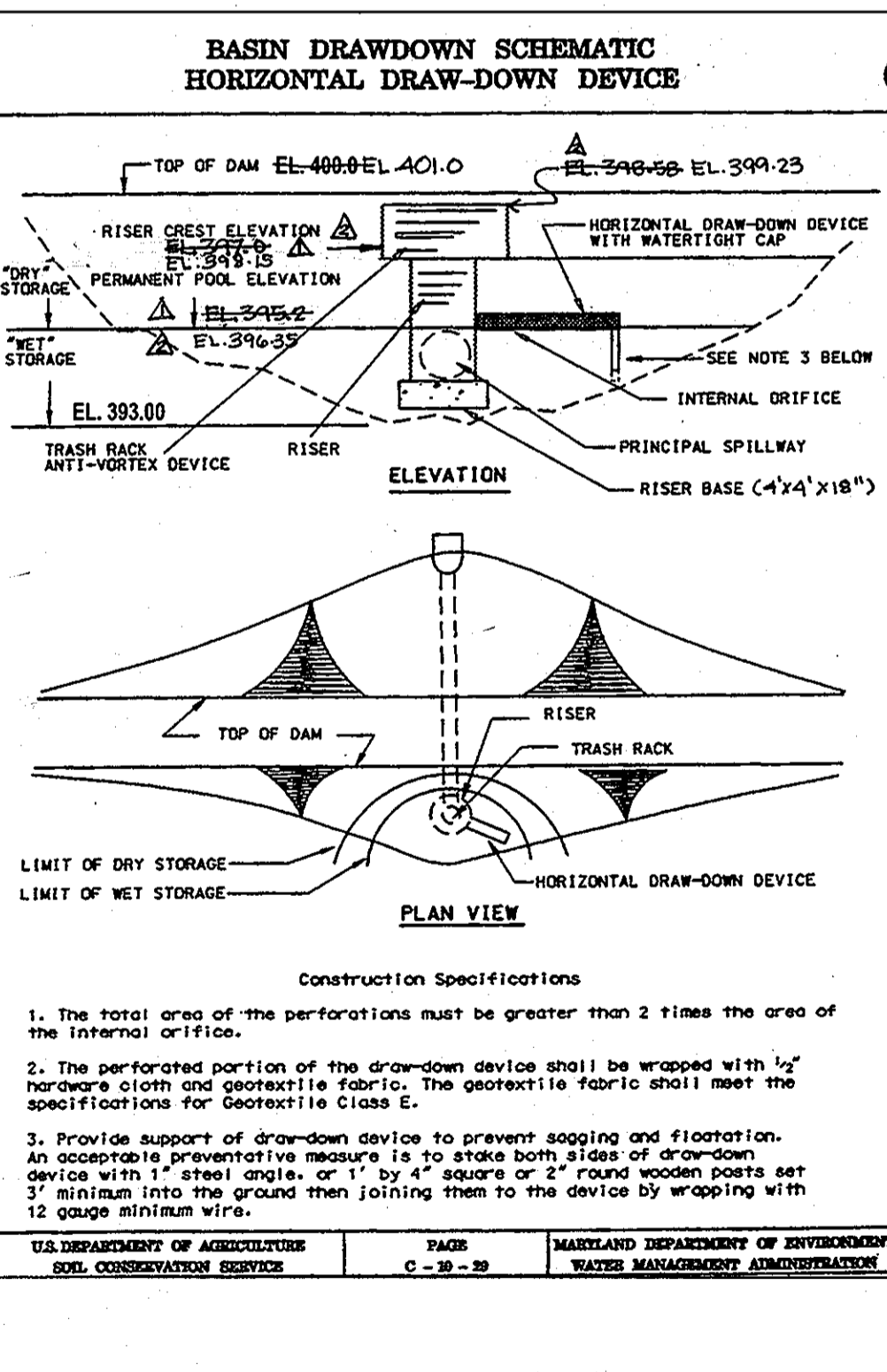
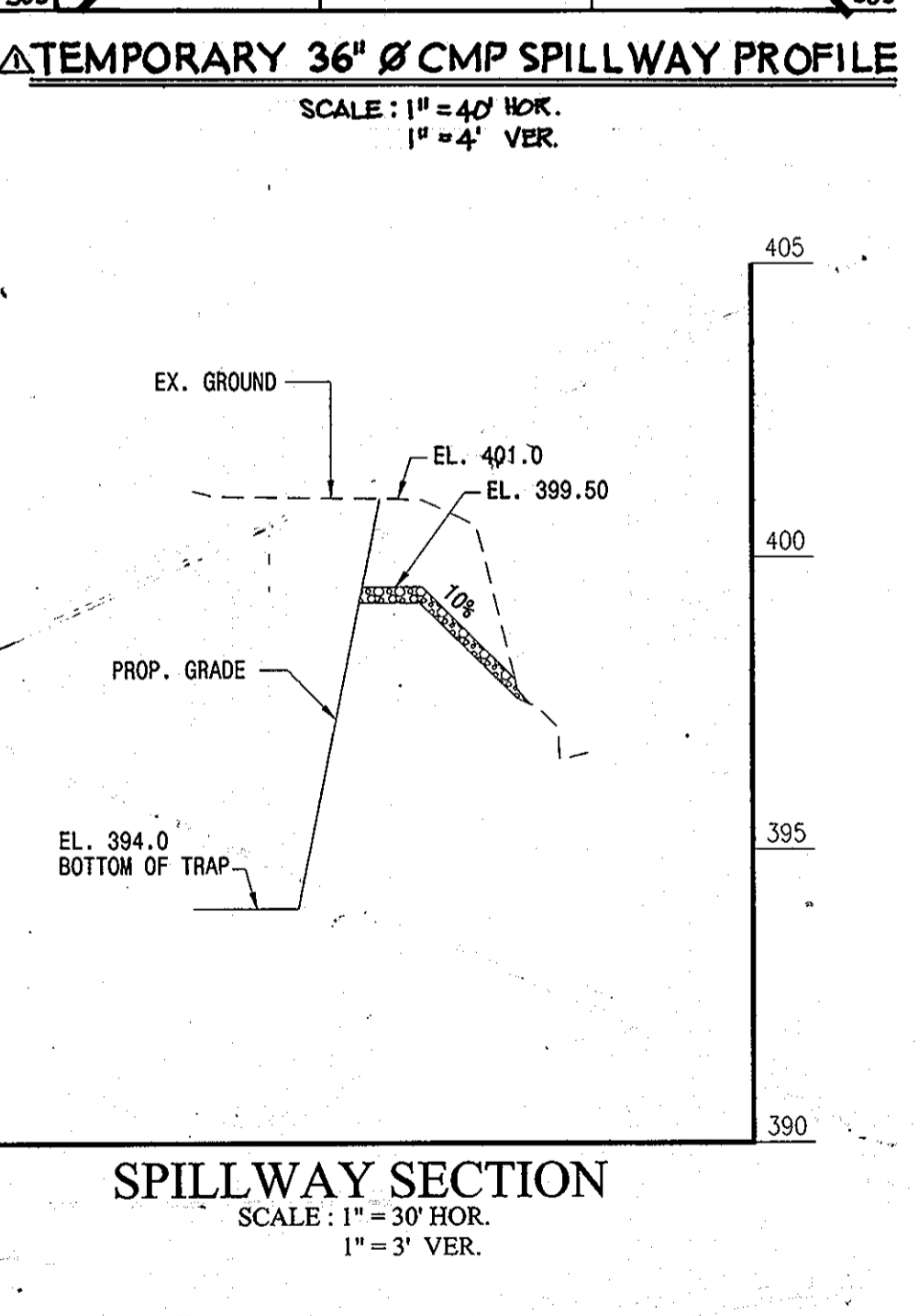
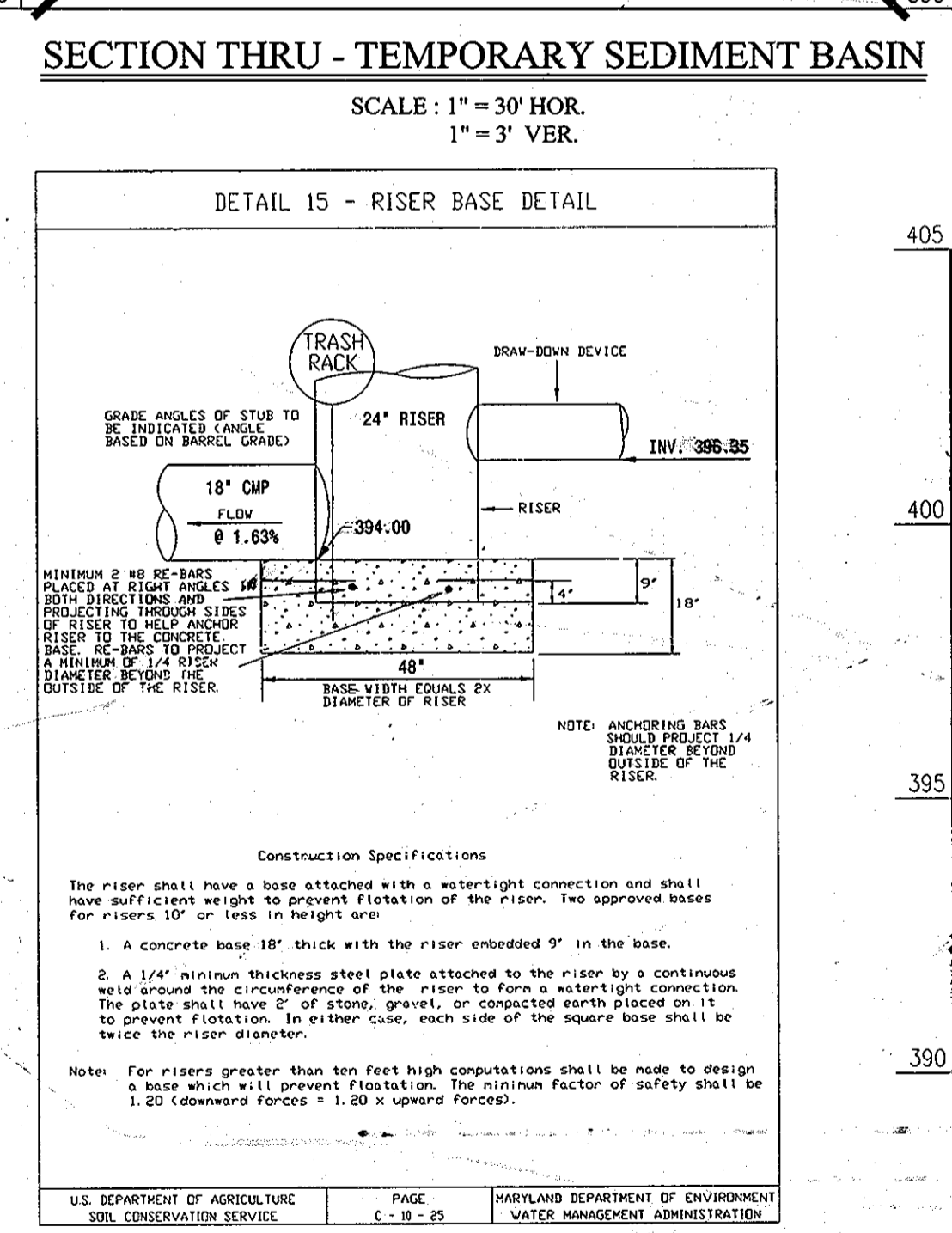
Outlet Protection - An excavated pond with a low embankment (combination excavation / embankment pond) shall be designed to ensure a stable outlet for the 10-year, 24-hour frequency storm.

Placement of Excavated Material - The material excavated from the pond shall be placed in one of the following ways so that its weight will not endanger the stability of the pond side slopes and where it will not be washed back into the pond by rainfall:

1. Uniformly spread to a height not exceeding 3 feet with the top graded to a continuous slope away from the pond;
2. Uniformly placed or shaped reasonably well with side slopes no steeper than 2 to 1. The excavated material will be placed at a distance equal to the depth of the pond, but not less than 12 feet from the edge of the pond;
3. Shaped to a designed form that blends visually with the landscape;
4. Used for low embankment and leveling; or
5. Hauled away.

Reservoir Area for Wet Ponds

For most ponds, the topography of the site shall permit storage of water at depth and volume that ensures a dependable supply, considering beneficial use, sedimentation, season of use, and evaporation and seepage losses. Sods in the reservoir shall be impervious enough to minimize seepage losses or shall be of a type that sealing is practical. Excavation and shaping required to permit the reservoir area to suitably serve the planned purpose shall be included in the construction plans. Reservoirs designed specifically for fish production or wildlife management shall follow design criteria in the standards and specifications for Fish Pond Management (MD-399) and Wildlife Wetland Habitat Management (MD-644), as appropriate.



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: 7/22/11

STATE OF MARYLAND
BRYAN R. CLARK
REGISTERED PROFESSIONAL ENGINEER

PREPARED BY: **American Land Development and Engineering, Inc.**
10749 BIRMINGHAM WAY, WOODSTOCK, MD 21163
TEL. (410) 465-7903 FAX. (410) 465-3845

OWNER / DEVELOPER: **Hamel PSC, LLC.**
6300 Woodside Court Suite A
Columbia, Md. 21046

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Signature of Engineer: DAVID C. WOESSNER
DATE: DEC. 10, 2004

DEVELOPER'S CERTIFICATE
"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE 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 VISITS INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
Signature of Developer: DALE THOMPSON
DATE: DEC. 10, 2004

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
Signature: Dale Thompson
DATE: 12/7/05

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: Dale Thompson
DATE: 1/5/06

TITLE: **TEMPORARY STORMWATER MANAGEMENT BASIN SECTIONS, NOTES & DETAILS**

PROJECT NAME: **SCOTS GLEN NORTH**
9-51, 52A, 58A, 59-62, 63A-69A
BUILDABLE BULK PARCEL "A" - UNITS 1-6, 7A, 8A AND COMMUNITY CENTER
PLANNED SENIOR COMMUNITY (PSC) - AGE RESTRICTED ADULT HOUSING
A RESUBDIVISION OF CEDAR ACRES, BLOCK "C", LOTS 1, 2, 2A, 2B AND 3

WP-11-108 S-04-03 PB CASE 362 WP 04-114 F-05-92 F-05-101

DES.: DCW/JAVG JOB: PROJ.: DATE: 12-10-04
DRW.: AVG/DTA/JNC CHK.: D.C.W. SCALE: AS SHOWN SHEET 25 OF 25