GENERAL NOTES

1. SURVEY DONE BY THE RBA GROUP, AUGUST 26, 1993, 2 FOOT CONTOUR INTERVAL.

2. ALL WORK SHALL BE PREFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

3. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PR IOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.

4. ADJUSTMENTS TO THE SEQUENCE OF THE CONSTRUCTION SHALL BE APPROVED BY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS. LICENSES AND PERMITS PRIOR TO SUCH ADJUSTMENTS.

5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

6. THE CONTRACTOR SHALL COMPLY WITH SEDIMENT CONTROL NOTES AS DOCUMENTED ON THESE PLANS.

7. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITIES NOT SHOWN ON THESE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AND MAINTAIN MINIMUM COVER REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION

8. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS BEFORE STARTING WORK ON THESE DRAWINGS:

'MISS UTILITY'	1-(800) 257-7777
BALTIMORE GAS & ELECTRIC COMPANY	(410) 954-6260
C & P TELEPHONE COMPANY	(410) 393-3648

9. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NOT NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PREFORN SUCH WORK.

10. THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FOR CONSTRUCTION.

11. ALL UTILITIES ARE TO BE RETAINED UNLESS MARKED OTHERWISE AND APPURTENANCES ARE TO BE ADJUSTED TO FINISH GRADE.

12. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK.

13. PRIOR TO START OF ANY CONSTRUCTION, THE CONTRACTOR SHALL STAKE OUT ALL CONSTRUCTION AND VERIFY ALL OFFSETS, SETBACKS, EXISTING UTILITY LOCATIONS (HORIZONTAL AND VERTICAL) AND DIMENSIONS.

14. THE CONTRACTOR SHALL USE THE DIMENSIONS SHOWN, SCALING OF THESE PLANS IS DISCOURAGED UNLESS DIRECTED BY THE ENGINEER.

15. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER. A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.

16. THE DEVELOPER MUST REQUEST THAT THE DEPARTMENT OF INSPECTIONS LICENSES AND PERMITS APPROVE WORK COMPLETED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND THE GRADING OR BUILDING PERMIT.

17. ALL FILL SHALL BE IN ACCORDANCE WITH SOILS REPORT PREPARED BY HERBST & ASSOCIATES DATED NOVEMBER 23, 1993.

18. STRUCTURES NOTED FOR REMOVAL SHALL BE REMOVED ENTIRELY AND COMPLETELY. REMOVAL OF UTILITIES OR MATERIALS THAT ARE BE LOW GRADE SHALL HAVE THE SURFACE ABOVE RESTORED TO MATCH ADJACENT GRADES.

19. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN WETLAND OR STREAM BUFFERS. UNLESS APPROVED BY THE APPROPRIATE AGENCIES.

20. THE DEVELOPER SHALL IMPLEMENT AND ADEQUATELY MAINTAIN SED IMENT AND EROSION CONTROL MEASURES INCLUDING LIMITING THE DISTURBANCE TO EXISTING VEGETATION AND STEEP SLOPES FOR AREA ADJACENT TO WETLANDS AND STREAMS.

21. IN ACCORDANCE WITH THE FDP NO.197A-II, PART II, FOR OPEN SPACE LAND STRUCTURE SHALL BE LOCATED WITHIN 30 FEET OF A PUBLIC STR EET, ROAD OR HIGHWAY RIGHT-OF-WAY: OR WITHIN 25 FEET OF ANY PROPERTY LINE; EXCEPT, HOWEVER, IF SHOWN ON THE SDP APPRO VED BY THE HOWARD COUNTY PLANNING BOARD.

22. ALL PROPOSED IMPROVEMENTS SHALL BE MAINTAINED BY THE OWNE R. WATER AND SEWER LINES ARE PRIVATE.

23. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.

24. ALL PLAN DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

25. BENCH MARKS (LOCATION SHOWN ON VICINITY MAP)
HOWARD CO. #2544001: ELEV. 401.098 (CONC. MONUMENT)
HOWARD CO. #2643003: ELEV. 385.659 (CONC. MONUMENT)

26. 100 YEAR FLOOD PLAN SHOWN ON THESE PLANS IS BASED ON FEMA MAP 240044 0035B.

27. THE PORTION OF OLD MONTGOMERY ROAD WHICH CROSSES LOT 5 WAS PERMANENTLY CLOSED AND ABANDONED BY THE COUNTY COUNCIL BY RESOLUTION #5 OF THE 1988 LEGISLATIVE SESSION.

28. STORMWATER MANAGEMENT CONTROL IS A PROPOSED PRIVATE SWM POND CONTROLING 2- & 10-YEAR STORMS & PROVIDING EXTENDED DETENTION (CLASS A EMBANKMENT POND). IT IS TO MAINTAINED BY THE OWNER.

29. UTILITIES WERE LOCATED THROUGH RESEARCH IN COUNTY RECORDS. GEOTRACK, INC. UNDERTOOK TEST PITS TO LOCATE THE C&P CONDUIT CROSSING THE SITE ON MARCH 24,1994.

30. THE STOCKPILE AREA IS TO REMAIN UNDISTURBED OUTSIDE OF THE LIMITS OF DISTURBANCE. AS APPROVED BY HOWARD RESEARCH AND DEVELOPMENT COMPANY AND THE VILLAGE BOARD OF LONG REACH., AND HOWARD COUNTY DEPT. OF PLANNING & ZONING.

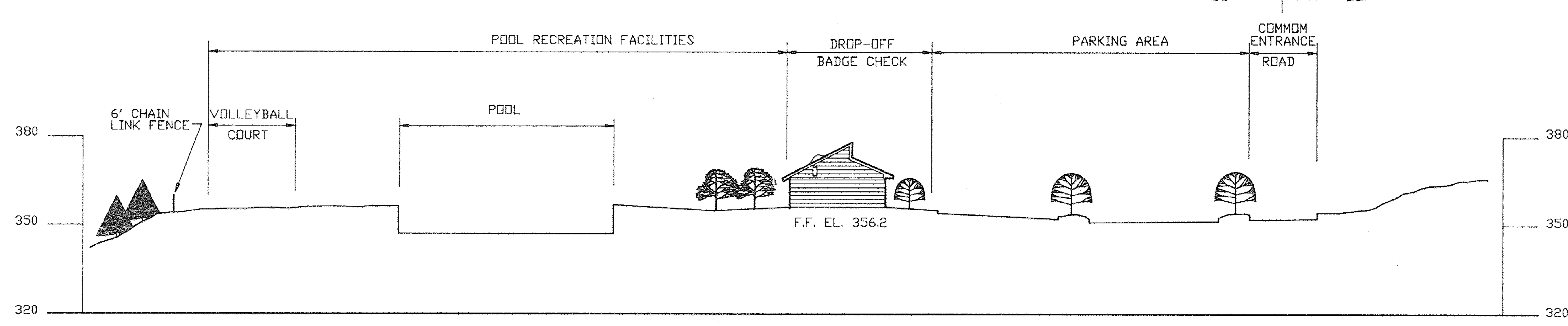
31. THE DIRECTOR OF THE DEPARTMENT OF PLANNING & ZONING APPROVED W-94-80 TO WAIVE SECTION 16.156.F.2 TO SUBMIT REVISED PLANS AFTER 45 DAYS; SECTION 16.116.B.1 TO GRADE SLOPES GREATER THAN 25% (AS SHOWN ON APPLICATION); AND FROM SECTION 16.116.A.1 TO GRADE 3500 S. F. OF WETLAND BUFFER.

32. NO APFO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT ACCORDING TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

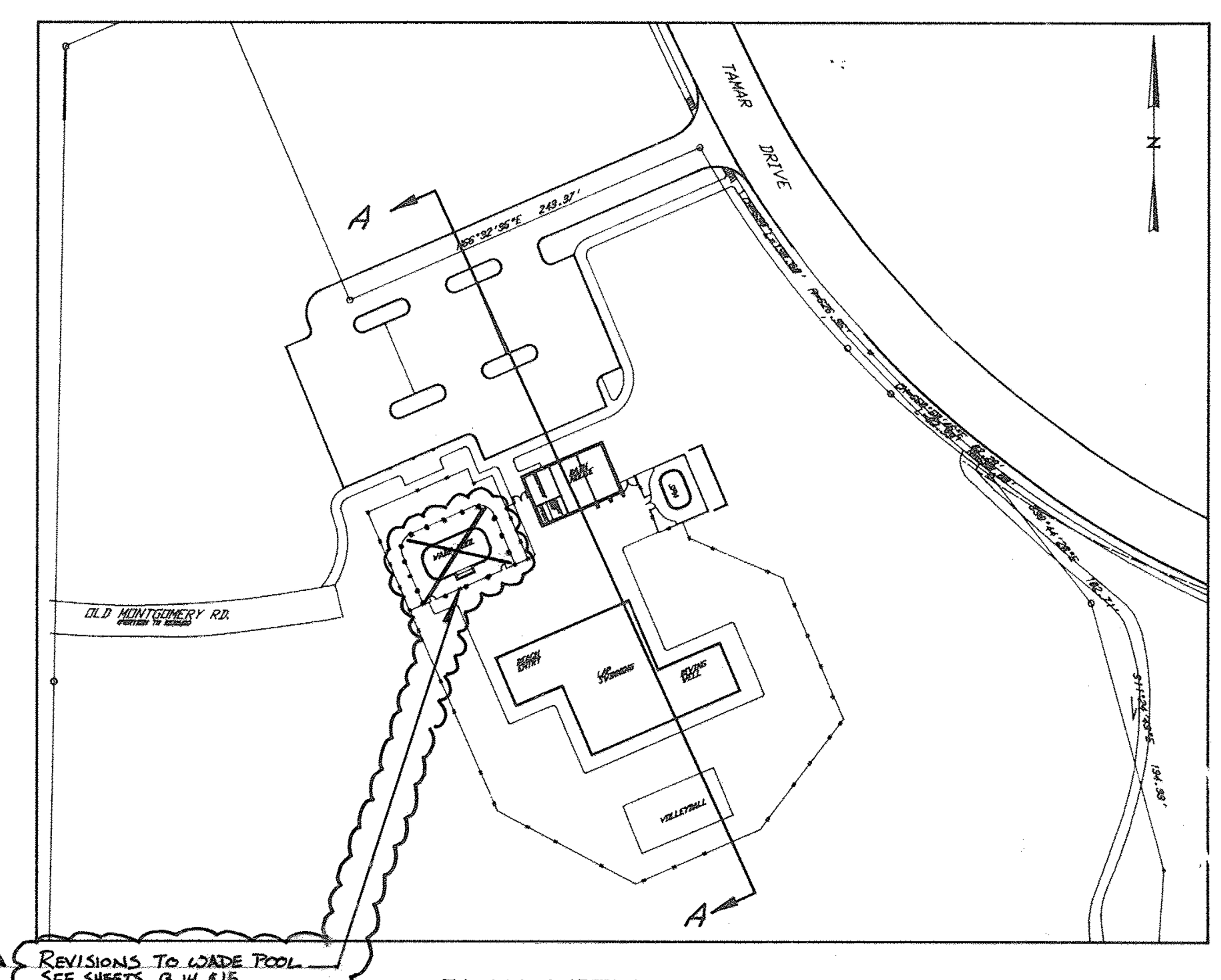
33. THE WETLANDS DELINEATION STUDY DATED APRIL 20, 1994 WAS APPROVED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

34. THIS SITE IS PART OF F-88-171 RECORDED 9/14/88 AS PLATS 8102 THROUGH 8111.

KENDALL RIDGE COMMUNITY POOL

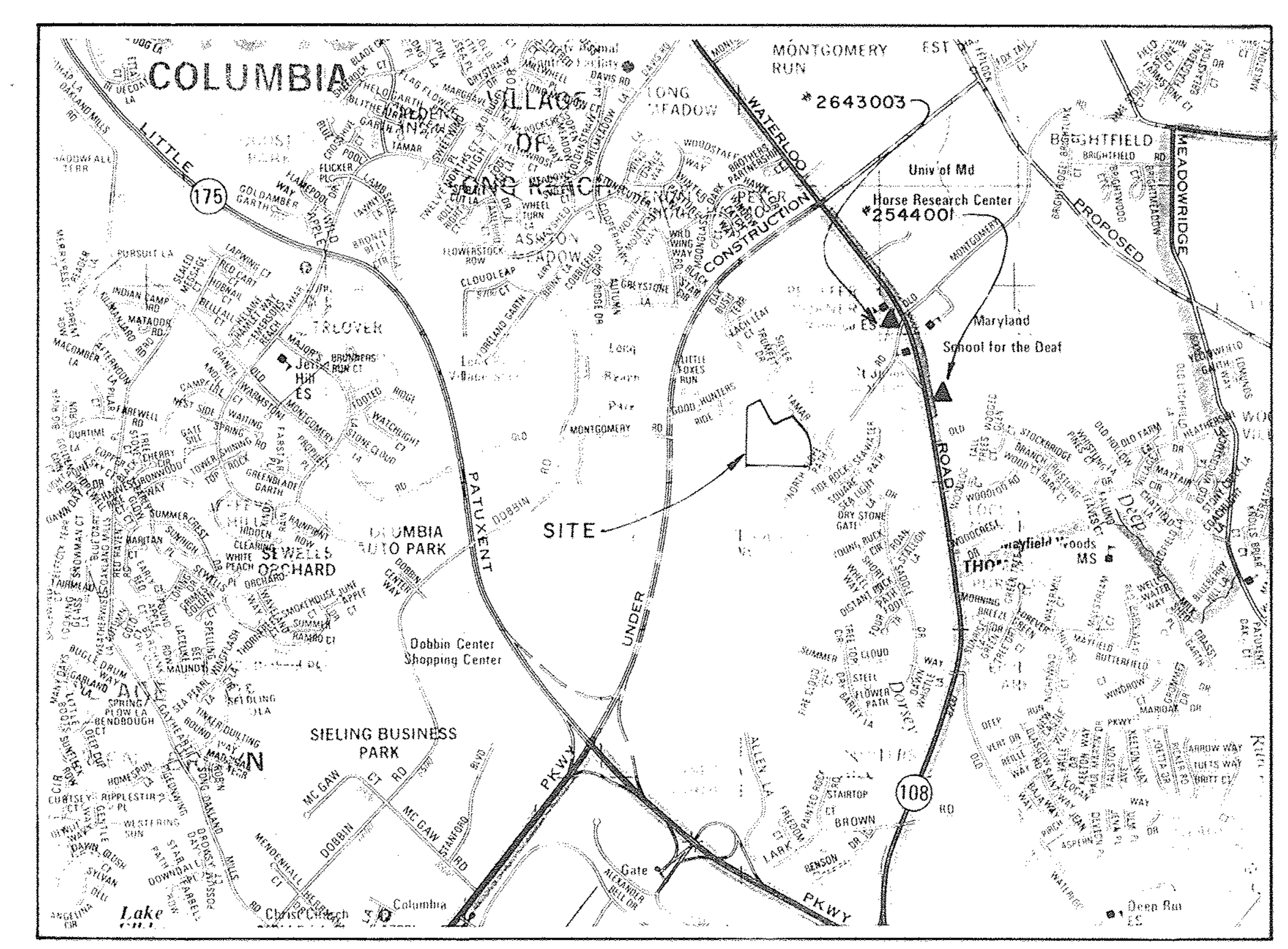


SECTION A-A
SCALE: HORIZ. 1"=30'
VERT. 1"=30'



Revisions to wade pool see sheets 13,14,&15

PLAN VIEW
SCALE: 1"=800'



VICINITY MAP
SCALE: 1" = 2000'

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] 10/4/94
DIRECTOR DATE

[signature] 10/4/94
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

[signature] 10/17/94
DIRECTOR DATE

[signature] 10/12/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

[signature] 10-6-94
COUNTY HEALTH OFFICER DATE

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

4 PURPOSE STATEMENT

To remove existing wade pool and associated structures, accomodating the installation of a 'zero-deph entry' ADA-compliant pool and associated features. Amend sheets 13, 14, and 15 to SDP-94-65.

SHEET INDEX

TITLE	SHEET NO.
TITLE SHEET	1 OF ~~12~~ 15
EXISTING CONDITIONS	2 OF ~~12~~ 15
SITE LAYOUT PLAN	3 OF ~~12~~ 15
GRADING PLAN	4 OF ~~12~~ 15
SEDIMENT CONTROL PLAN	5 OF ~~12~~ 15
LANDSCAPE PLAN	6 OF ~~12~~ 15
LANDSCAPE DETAILS	7 OF ~~12~~ 15
PROFILES	8 OF ~~12~~ 15
DETAILS	9 OF ~~12~~ 15
DETAILS	10 OF ~~12~~ 15
DETAILS	11 OF ~~11~~ 15
DRAINAGE AREA MAP	12 OF ~~12~~ 15
Demo., Detail Ref., and Materials - Pool	13 OF 15
Layout, Grading, and Planting - Pool	13 OF 15
Site Details - Pool	13 OF 15

SITE ANALYSIS

1) AREA OF PARCEL: 6.402 ACRES (CREDITED OPEN SPACE)
0.0 ACRES (NON-CREDITED OPEN SPACE)

IN ACCORDANCE WITH FDP-197A PART II, AN FDP AMENDMENT IS REQUIRED TO REFLECT THAT THIS DEVELOPMENT WILL REDUCE THE AMOUNT OF CREDITED OPEN SPACE WITHIN THE FDP BY 0.513 ACRES.

PROPOSED AREA OF PARCEL 5.889 ACRES (CREDITED OPEN SPACE)
0.513 ACRES (NON-CREDITED OPEN SPACE)

2) ZONING OF PROPERTY: NEW TOWN OPEN SPACE
FDP 197A-II PART II
F-88-171

3) PROPOSED USE OF STRUCTURE: BATH HOUSE TO CONTAIN EQUIPMENT ROOM, OFFICE, SNACK BAR, RESTROOM FACILITIES

4) PROPOSED FLOOR SPACE: ONE LEVEL 1829 S.F.

5) PARKING SPACES PROVIDED: TYPICAL STALLS 43
BARRIER FREE 3
TOTAL 46

PARKING CALCULATIONS: BASED ON DATA FROM EXISTING VLR POOLS
AVERAGE NO. OF POOL USES PER PARKING SPACE PROVIDED= 616
EXPECTED ANNUAL NO. OF POOL USES AT KENDALL RIDGE= 26,000
PARKING NEEDED AT KENDALL RIDGE POOL: 26,000/616= 42 SPACES
(FDP 197A-I PART II INCLUDES NO PARKING REQUIREMENT FOR OPEN SPACE)

6) PROPOSED OPEN SPACE ON SITE: (CREDITED) 5.889 AC.
91% OF GROSS AREA

7) PROPOSED BUILDING COVERAGE (9159 S.F.): (INCLUDING BATH HOUSE, POOLS AND SPA) .21 AC.
3.3% OF GROSS AREA

8) PROPOSED OTHER IMPERVIOUS AREA: (34865 S.F.) .8 AC.
12.7% OF GROSS AREA

9) TOTAL LIMIT OF DISTURBANCE: 3.62 AC. (ON-SITE & OFF-SITE)
3.30 AC. (ON-SITE ONLY)

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. '94

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VILLAGE OF LONG REACH	3 2	5

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
CMP 8111		NT	37	6	6066.02

WATER CODE | SEWER CODE

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. 16144, EXPIRATION DATE: 08/19/16.

3-5-2015

revisions		
no.	description	date
4	Revise wade pool, add sheets 13,14,&15	2/2015

prepared by:
The RBA Group
ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

TITLE SHEET

KENDALL RIDGE
COMMUNITY POOL
REVISED SITE PLAN
HOWARD COUNTY MARYLAND

SCALE	
DRAWN: JAC	CHECKED: JWC
PROJ. NO.: J0905	DATE: 6/94
SHEET: 1	OF: ~~12~~ 15

SDP-94-65

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10/4/94

CHIEF, BUREAU OF ENGINEERING — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/12/94

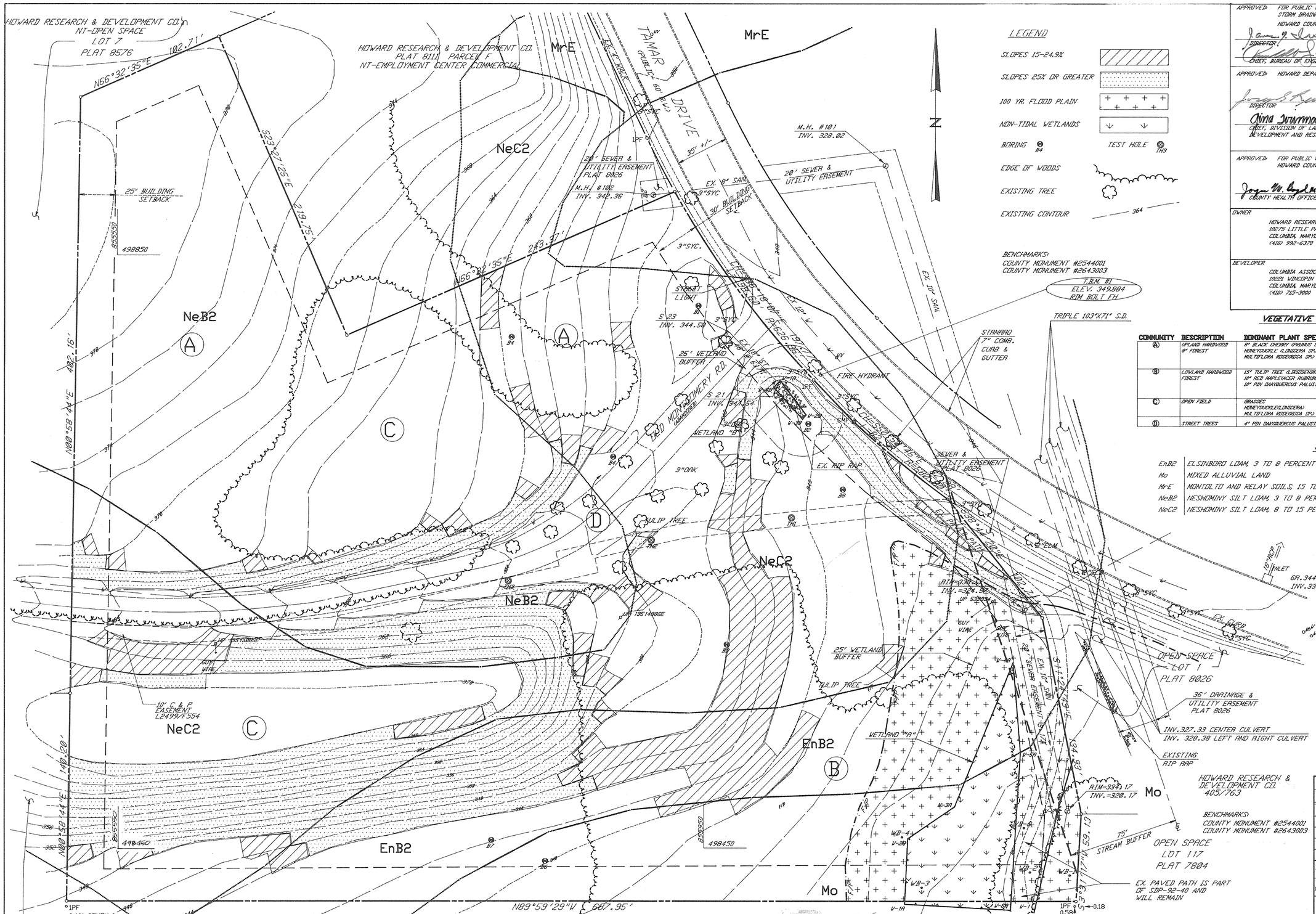
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 10/12/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000



LEGEND

- SLOPES 15-24.9%
- SLOPES 25% OR GREATER
- 100 YR. FLOOD PLAIN
- NON-TIDAL WETLANDS
- BORING B4 — TEST HOLE TH3
- EDGE OF WOODS
- EXISTING TREE
- EXISTING CONTOUR 364

BENCHMARKS:
COUNTY MONUMENT #2544001
COUNTY MONUMENT #2643003

T.B.M. #1
ELEV. 349.884
RIM BOLT FH

GRAPHIC SCALE: 1" = 30'

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. 94

VEGETATIVE COMMUNITIES

COMMUNITY	DESCRIPTION	DOMINANT PLANT SPECIES	REMARKS
(A)	UPLAND HARDWOOD FOREST	8" BLACK CHERRY (PRUNUS SEROTINA) HONEYSUCKLE (LONICERA SP.) MULTIFLORA ROSE(ROSA SP.)	MANY TREES HAVE BROKEN LIMBS AND ARE COVERED WITH VINES. NO SPECIMEN TREES.
(B)	LOWLAND HARDWOOD FOREST	15" TULIP TREE (LIRIODENDRON TULIPITERA) 10" RED MAPLE(ACER RUBRUM) 10" PIN OAK(QUERCUS PALUSTRIS)	SEVERAL SPECIMEN TREES >24"DBH. FEW BROKEN LIMBS
(C)	OPEN FIELD	GRASSES HONEYSUCKLE(LONICERA) MULTIFLORA ROSE(ROSA SP.)	HONEYSUCKLE IS DOMINANT COVER NORTH OF EX. ROAD. GRASSES ARE DOMINANT TO SOUTH OF EX. ROAD
(D)	STREET TREES	4" PIN OAK(QUERCUS PALUSTRIS)	TREES APPEAR HEALTHY

SOILS

EnB2	ELSINBORO LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
Mo	MIXED ALLUVIAL LAND
MrE	MONTOLTO AND RELAY SOILS, 15 TO 45 PERCENT SLOPES
NeB2	NESHOMINY SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
NeC2	NESHOMINY SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED

ADDRESS CHART

BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VILLAGE OF LONG REACH	3 2 5	

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
CMP 8111		NT	37	6	6066.02

WATER CODE — SEWER CODE

no.	description	date
1	REVISE LANDE Road. ADD SHEETS 13,14 & 15	2/2015

prepared by: The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7930

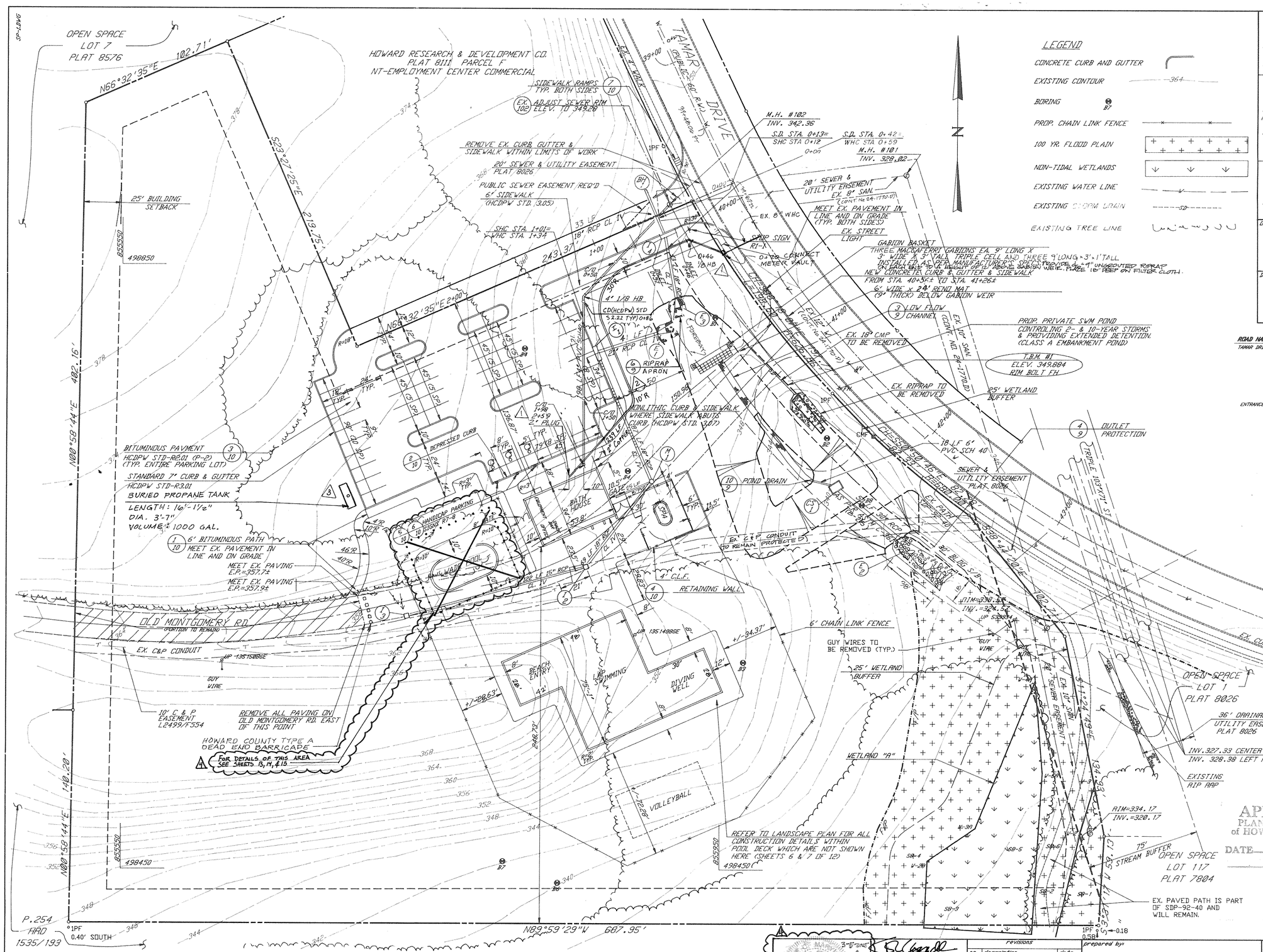
EXISTING CONDITIONS

KENDALL RIDGE
COMMUNITY POOL
REVISED SITE PLAN

HOWARD COUNTY — MARYLAND

SCALE	
1" = 30'	
DRAWN: JAC	CHECKED: JWC
PROJ. NO.: J0905	DATE: 6/94
SHEET 2	OF 125

SDP-94-65



LEGEND

- CONCRETE CURB AND GUTTER
- EXISTING CONTOUR — 364
- BORING — B7
- PROP. CHAIN LINK FENCE
- 100 YR. FLOOD PLAIN
- NON-TIDAL WETLANDS
- EXISTING WATER LINE
- EXISTING STORM DRAIN — SD
- EXISTING TREE LINE

APPROVED: FOR PUBLIC WATER PUBLIC SEWERAGE SYSTEMS STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10/4/94

CHIEF, BUREAU OF ENGINEERING — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/17/94

Alina Stummann — CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 10/12/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER

HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER

COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

ROAD NAME	STA	OFFSET	ELEVATION	DESCRIPTION
TAMAR DRIVE	39+43.18	18.0' RT	349.64	TC AT FILLET PC (SHEET EX. CURB)
	39+87.22	0.0	---	ZERO STATION OF ENTRANCE ROAD
	40+21.72	18.0' RT	348.74	TC AT FILLET PC (SHEET EX. CURB) ①
	40+56	18.0' RT	348.34	TC AT CURB REPAIR (SHEET EX. CURB) ①
	40+56	25.0' RT	348.64	MEET EXISTING WALK ②
	41+26	18.0' RT	347.64	TC AT CURB REPAIR (SHEET EX. CURB) ①
	41+26	25.0' RT	347.94	MEET EXISTING WALK ②
ENTRANCE DRIVE	0+00	0.00	---	STATION 39+87.22 TAMAR DRIVE
	0+18	0.0	348.74	FLOW LINE AT TAMAR DRIVE
	0+42.73	12.0' LT	349.49	TC AT FILLET PT
	0+43.00	0.0	349.20	C/L ELEVATION AT PVC
	0+68.00	12.0' LT	350.13	TC AT PVI STATION
	0+68.00	0.00	349.83	C/L ELEVATION AT PVI STATION
	0+91.01	12.0' RT	350.20	TC AT FILLET PT
	0+68.00	12.0' RT	350.67	TC AT PVI STATION
	0+93.00	12.0' LT	351.00	TC AT PVT STATION
	0+93.00	0.0	350.70	C/L AT PVT STATION
	0+93.00	12.0' RT	351.06	TC AT PVT STATION

① CONTRACTOR SHALL MAKE ADJUSTMENTS TO STATIONS AND ELEVATIONS GIVEN IN ORDER TO ACCOMPLISH A SMOOTH CONNECTION.

NOTES

1.) ALL ISLAND CURB RADII ARE 5' UNLESS NOTED OTHERWISE.

2.) BUILDING HAS INSIDE METER WHICH WILL BE PRIVATE.

3.) ALL PROPOSED UTILITIES WILL BE PRIVATE.

4.) BATH HOUSE IS BARRIER FREE AT MEN'S & WOMEN'S ROOMS ENTRANCES. A SPOT GRADE IS LOCATED AT THESE ENTRANCES WHICH IS COINCIDENT WITH THE FINISHED FLOOR ELEVATION OF BATH HOUSE.

5.) GUY WIRES TO BE REMOVED.

NOTE: EXISTING OVERHEAD LINES AND UTILITY POLES SHALL BE REMOVED BY OTHERS PRIOR TO BEGINNING WORK.

30' 15' 0 30' 60'
GRAPHIC SCALE: 1" = 30'

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. '94

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME			SECTION/AREA	LOT/PARCEL
VILLAGE OF LONG REACH			3	2 5
PLAT	BLOCK	ZONE	TAX/ZONE	MAP	ELEC. DIST.	CENSUS TR
CMP 8111		NT	37		6	6066.02
WATER CODE			SEWER CODE			

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER

revisions		
no.	description	date
1	REV. WHC SIZE SHOW METER VAULT	12/94
2	REVISED WATER LINE ALIGNMENT	1/95
3	ADDED PROPANE TANK	5/95
4	REVISE LADE POOL, ADD SHEETS 13,14,&15	2/2005

prepared by:
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

SITE LAYOUT PLAN

KENDALL RIDGE COMMUNITY POOL

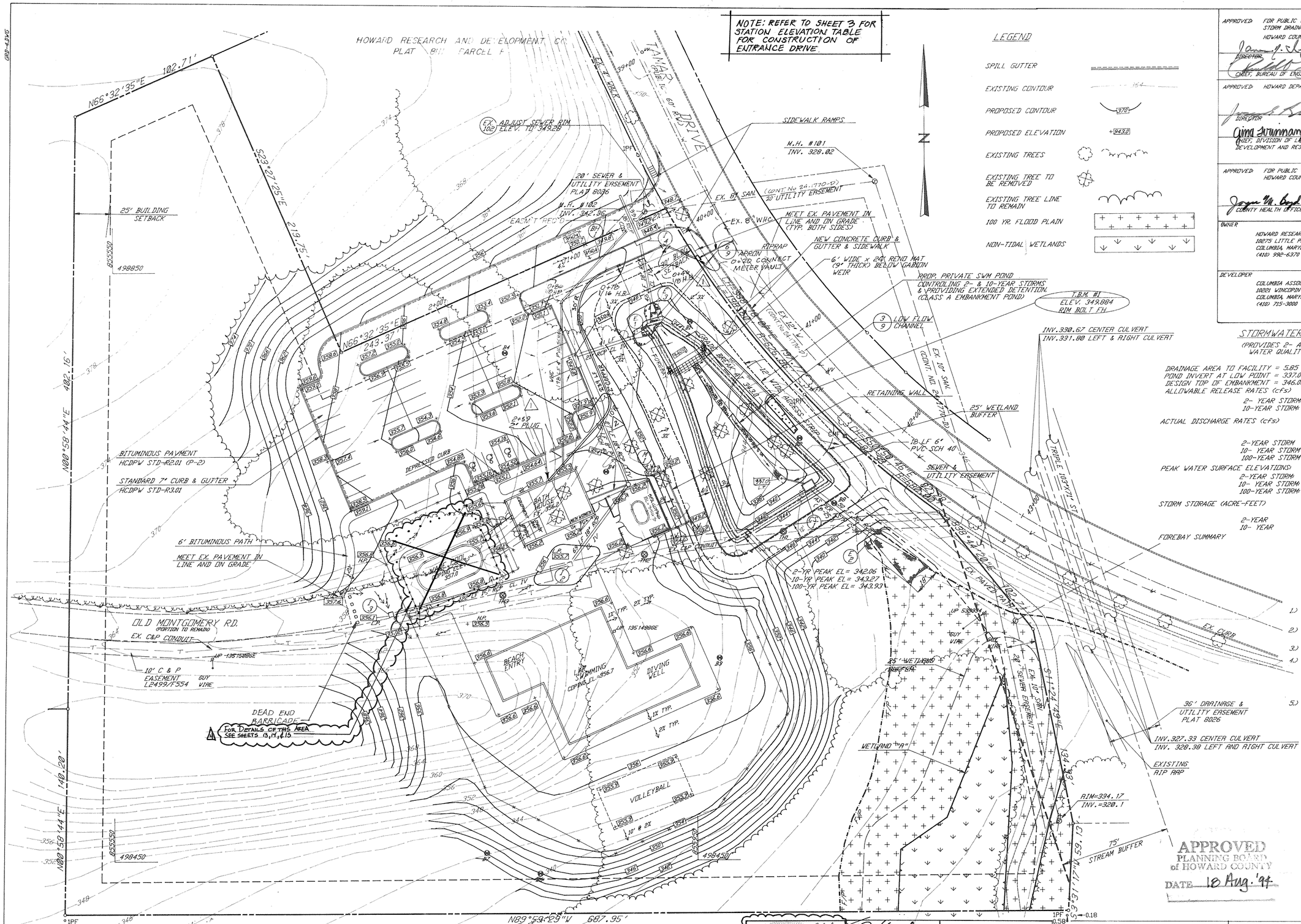
REVISED SITE PLAN

HOWARD COUNTY — MARYLAND

SCALE	
1" = 30'	
DRAWN: JAC	CHECKED: JWC
PROJ. NO.: J0905	DATE: 6/94
SHEET: 3	OF: 4 (125)

SDP-94-65

NOTE: REFER TO SHEET 3 FOR STATION ELEVATION TABLE FOR CONSTRUCTION OF ENTRANCE DRIVE.



LEGEND

- SPILL GUTTER
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED ELEVATION
- EXISTING TREES
- EXISTING TREE TO BE REMOVED
- EXISTING TREE LINE TO REMAIN
- 100 YR. FLOOD PLAIN
- NON-TIDAL WETLANDS

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10/4/94

CHIEF, BUREAU OF ENGINEERING — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/17/94

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 10/12/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

STORMWATER POND SUMMARY TABLE

(PROVIDES 2- AND 10- YEAR MANAGEMENT AND WATER QUALITY BY EXTENDED DETENTION)

DRAINAGE AREA TO FACILITY = 5.85 ACRES (0.00914 SQ. MI.)
POND INVERT AT LOW POINT = 337.00
DESIGN TOP OF EMBANKMENT = 346.00
ALLOWABLE RELEASE RATES (cfs)

2- YEAR STORM:	2.4
10-YEAR STORM:	11.6

ACTUAL DISCHARGE RATES (cfs)

	POND ONLY	TRADE OFF AREA	COMBINED (ADD HYD)
2-YEAR STORM	0.4	0.9	0.9
10- YEAR STORM	7.6	8.7	8.3
100-YEAR STORM	39.8	(NOT COMPUTED)	

PEAK WATER SURFACE ELEVATIONS:

2-YEAR STORM:	342.06 EXTENDED DETENTION: 342.0
10- YEAR STORM:	343.27 EXTENDED DETENTION VOL.
100-YEAR STORM:	343.93 REQ'D = 0.26 Ac ft PROVIDED = 0.26 Ac ft

STORM STORAGE (ACRE-FEET)

	REQUIRED	PROVIDED
2-YEAR	0.285	0.285
10- YEAR	0.455	0.455

FOREBAY SUMMARY

IMPERVIOUS SURFACE = 1.94 ACRES
REQUIRED VOLUME (1/10 INCH) = 704 FT 3
VOLUME PROVIDED = 884 FT 3
HAZARD CLASS = A
DANGER REACH = 218'

NOTES

1.) ALL ISLAND CURB RADII ARE 5' UNLESS BE PRIVATE.
2.) BUILDING HAS INSIDE METER WHICH WILL BE PRIVATE.
3.) ALL PROPOSED UTILITIES WILL BE PRIVATE.
4.) BATH HOUSE IS BARRIER FREE AT MEN'S & WOMEN'S ROOMS ENTRANCES. A SPOT GRADE IS LOCATED AT THESE ENTRANCES IS COINCIDENT WITH THE FINISHED ELEVATION OF THE BATH HOUSE.
5.) THE LOCATION OF THE C&P CONDUIT WITHIN THE EASEMENT IS APPROXIMATE.

30' 15' 0 30' 60'
GRAPHIC SCALE: 1" = 30'

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 10 Aug. '94

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VILLAGE OF LONG REACH	3	2 5

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST.	CENSUS TR
CMP 811		NT	37	6	6066.02

WATER CODE — SEWER CODE

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. 16956, EXPIRATION DATE: 05/09/95.

no.	revisions description	date
1	REV. WHC SIZE SHOW METER VAULT	12/94
2	REV. WHC ALIGNMENT	1/95
3	REVISE WADE POOL ADD SHEETS 13, 14, & 15	2/2015

prepared by:

The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

GRADING PLAN

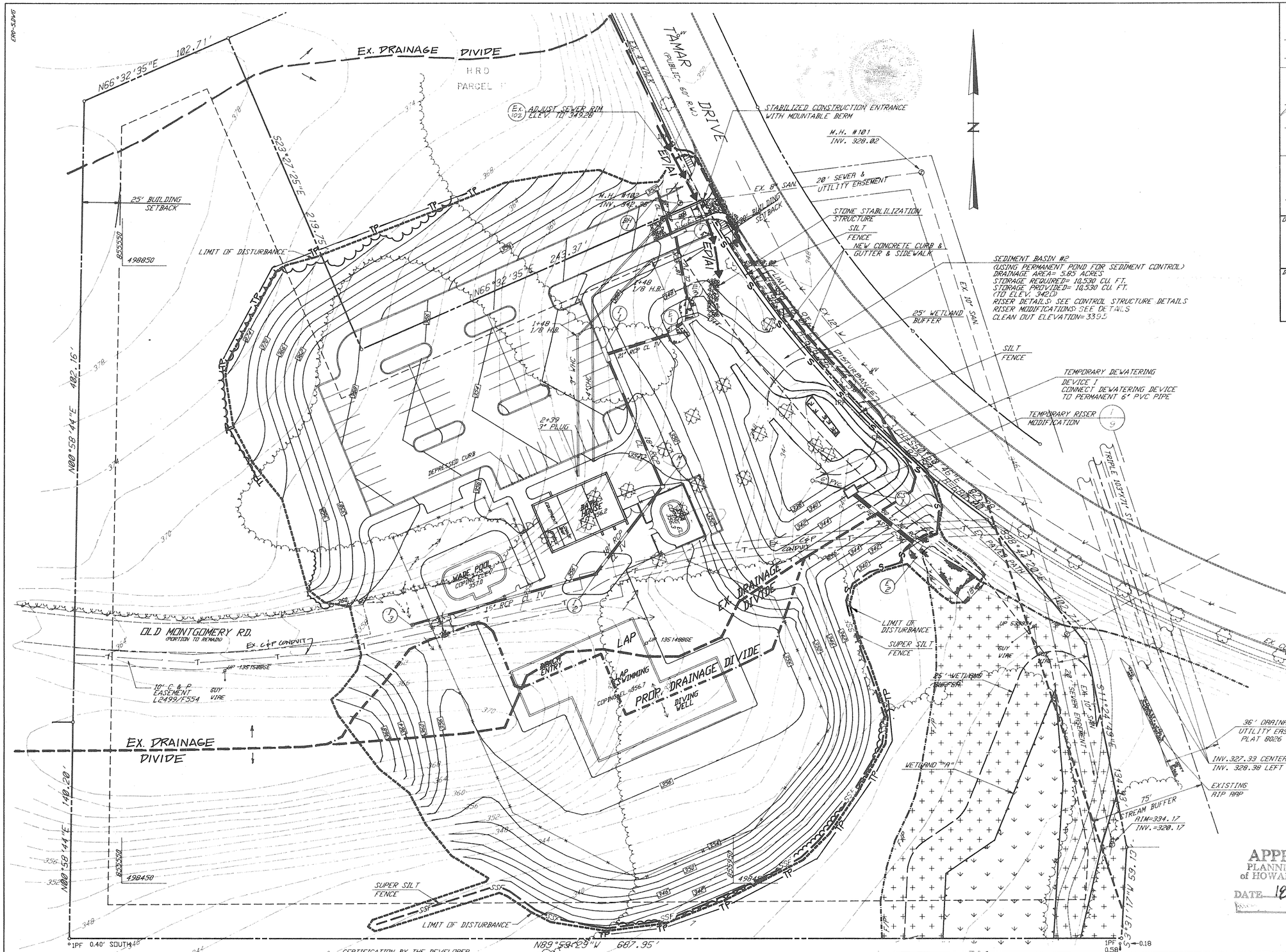
KENDALL RIDGE COMMUNITY POOL

REVISED SITE PLAN

HOWARD COUNTY MARYLAND

SCALE	
1" = 30'	
DRAWN: JAC	CHECKED: JWC
PROJ. NO. J0905	DATE: 6/94
SHEET 4	OF 15

SDP-94-65



APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10/4/94

CHIEF, BUREAU OF ENGINEERING — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/17/94

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 10/12/94

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

COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

LEGEND

- EXISTING DRAINAGE DIVIDE
- PROPOSED DRAINAGE DIVIDE
- SILT FENCE —S— —S—
- SUPER SILT FENCE —SSF— —SSF—
- LIMIT OF DISTURBANCE
- EARTH DIKE (WITH TYPE SHOWN) — ED/A-1
- 100 YR. FLOOD PLAIN
- NON-TIDAL WETLANDS
- STONE STABILIZATION STRUCTURE
- EXISTING CONTOUR — 370
- PROPOSED CONTOUR — 370
- EXISTING TREES
- EXISTING TREE TO BE REMOVED
- EXISTING TREELINE TO REMAIN
- TREE PROTECTION FENCE —TP— —TP—
- EXISTING TELEPHONE CONDUIT —T— —T—

30' 15' 0 30' 60'
GRAPHIC SCALE: 1" = 30'

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. '94

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VILLAGE OF LONG REACH	3 2	5

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST.	CENSUS TR
CMP 8111		NT	37	6	6066.02

WATER CODE — SEWER CODE

( ) THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

APPROVED — U.S. SOIL CONSERVATION SERVICE — DATE 6-29/94

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

APPROVED — HOWARD SOIL CONSERVATION DISTRICT — DATE 9/29/94

CERTIFICATION BY THE DEVELOPER

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

SIGNATURE OF DEVELOPER — DATE 9/1/94
(PRINT NAME BELOW SIGNATURE)

CERTIFICATION BY THE ENGINEER

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

SIGNATURE OF ENGINEER — DATE 6/29/94
(PRINT NAME BELOW SIGNATURE) JOHN W. CLAPSADDLE, P.E.

JOHN WHITFIELD CLAPSADDLE — No. 15595 — STATE OF MARYLAND — PROFESSIONAL ENGINEER

revisions		
no.	description	date
1	REVISE WADE POOL ADD SHEETS 13, 14, & 15	2/2015

prepared by:
RBA ENGINEERS • ARCHITECTS • PLANNERS
John Whitfield Clapsaddle, P.E. President
Jack Barry, AIA Carl A. Ecker
Thomas Robbins AIA Carl A. Ecker
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

SEDIMENT CONTROL PLAN

KENDALL RIDGE COMMUNITY POOL
REVISED SITE PLAN

HOWARD COUNTY — MARYLAND

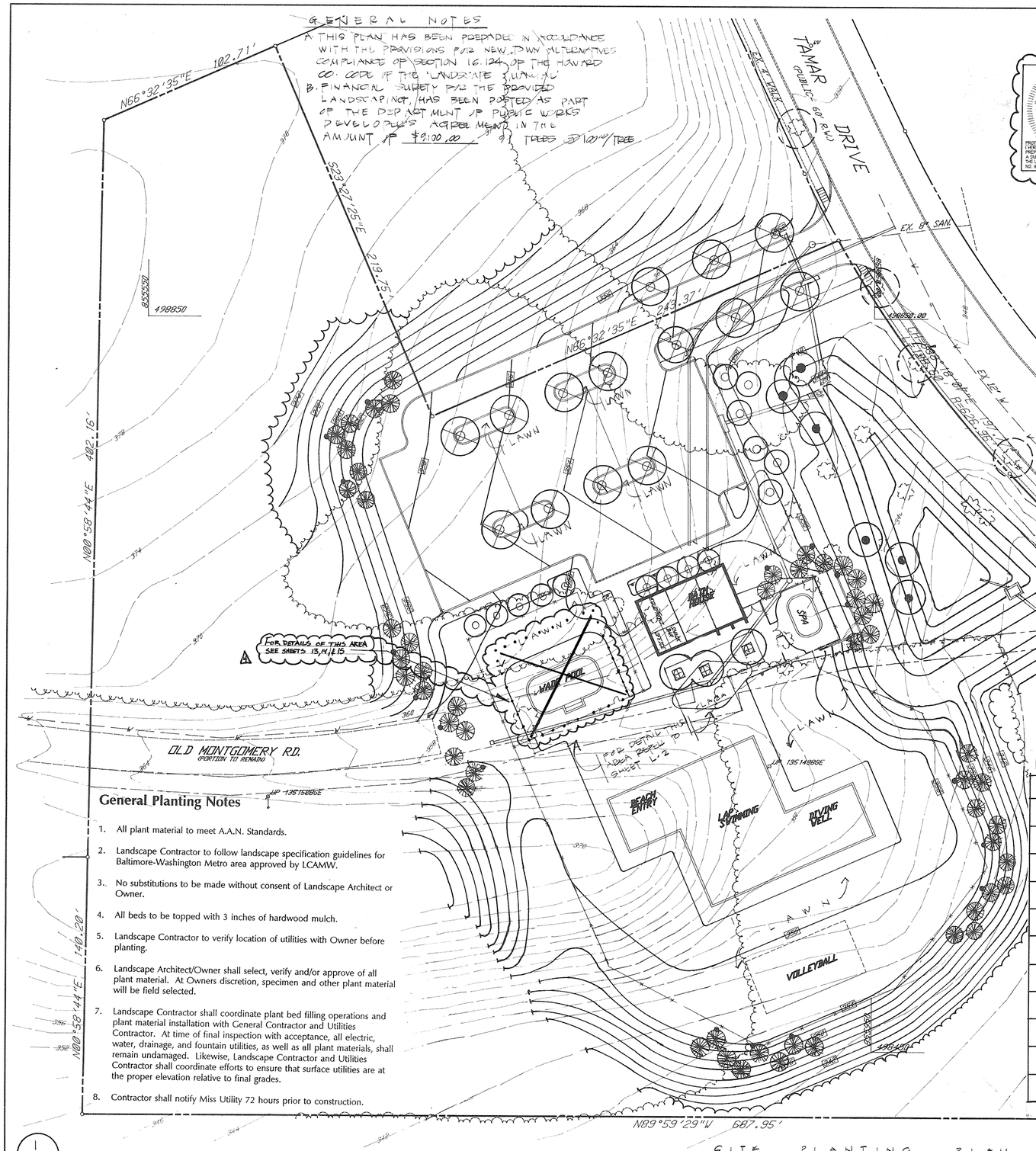
SCALE	DRAWN	CHECKED
1" = 30'	JAC	JWC
PROJ. NO.	DATE	
J0905	6/94	
SHEET	OF	
5	4	125

SDP-94-65

GENERAL NOTES

A. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS FOR NEW TOWN ALTERNATIVES COMPLIANCE OF SECTION 16.124 OF THE HOWARD CO. CODE OF THE 'LANDSCAPE MANUAL'

B. FINANCIAL SURETY FOR THE PROVIDED LANDSCAPING, HAS BEEN POSTED AS PART OF THE DEPARTMENT OF PUBLIC WORKS DEVELOPER'S AGREEMENT IN THE AMOUNT OF $9100.00 TREES @ 100.00/TREE



General Planting Notes

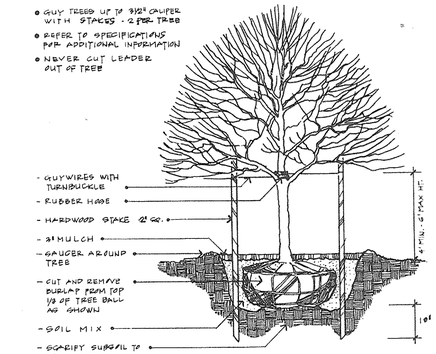
1. All plant material to meet A.A.N. Standards.
2. Landscape Contractor to follow landscape specification guidelines for Baltimore-Washington Metro area approved by LCAMW.
3. No substitutions to be made without consent of Landscape Architect or Owner.
4. All beds to be topped with 3 inches of hardwood mulch.
5. Landscape Contractor to verify location of utilities with Owner before planting.
6. Landscape Architect/Owner shall select, verify and/or approve of all plant material. At Owners discretion, specimen and other plant material will be field selected.
7. Landscape Contractor shall coordinate plant bed filling operations and plant material installation with General Contractor and Utilities Contractor. At time of final inspection with acceptance, all electric, water, drainage, and fountain utilities, as well as all plant materials, shall remain undamaged. Likewise, Landscape Contractor and Utilities Contractor shall coordinate efforts to ensure that surface utilities are at the proper elevation relative to final grades.
8. Contractor shall notify Miss Utility 72 hours prior to construction.

1 / L-1 SITE PLANTING PLAN
SCALE 1" = 30'0"

NOTE: PLAN FOR PLANTING PURPOSES ONLY

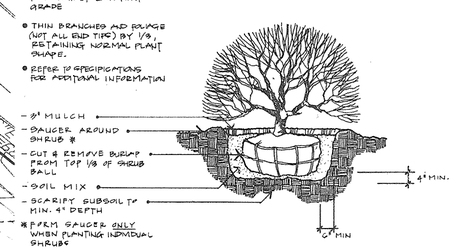
STATE OF MARYLAND — LICENSED PROFESSIONAL ENGINEER — ROBERT A. HOWARD — No. 18144

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. 18144, EXPIRATION DATE: 20/NOV.

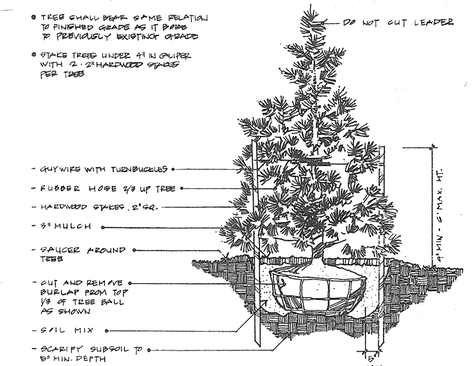


A / L-1 DECIDUOUS TREE PLANTING DETAIL
NTS.

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. '94



B / L-1 SHRUB PLANTING DETAIL
NTS.



C / L-1 EVERGREEN TREES PLANTING DETAIL
NTS

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS:
DIRECTOR — DATE 10/4/94
CHIEF, BUREAU OF ENGINEERING — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING
DIRECTOR — DATE 10/17/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 10/12/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 VINCENTIAN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

PLANT LIST SHEET 1 OF 2

NO	SYMBOL	QUAN	PLANT NAME	SIZE	ROOT	REMARK
1.		14	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY MAPLE	2½-3" CAL	B&B	FULL HEADS
2		11	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN	2-2½" CAL 8-10' HT	B&B	FULL HEADS
3.		62	EUONYMUS ALATUS 'COMPACTA' COMPACT BURNING BUSH	36" HT	B&B	FULL
4		3	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' SHADEMASTER HONEYLOCUST	2½-3" CAL	B&B	FULL HEADS
5.		29	ILEX CORNUTA BURFORDI NANA DWARF BURFORD HOLLY	24-36" HIGH	B&B	
6		33	JUNIPERUS HORIZONTALIS 'WILTONI' BLUE RUG JUNIPER	15-18" SPR	CAN	PLANT 36" O.C.
7.		4	MAGNOLIA STELLATA STAR MAGNOLIA	2-2½" CAL	B&B	MULTI STEM MATCHED
8.		36	PINUS STROBUS WHITE PINE	6-8 HT	B&B	
9		17	PINUS STROBUS WHITE PINE	8-10' HT	B&B	
10		6	SALIX BABYLONICA 'NIOBE' 'NIOBE' WEEPING WILLOW	2½-3" CAL	B&B	
11.		3	TAXUS MEDIA WARDII WARDS YEW	24-30" SPR	B&B	FULL TO BASE

HOWARD COUNTY LANDSCAPING NOTES

1. This plan has been prepared in accordance with the provisions for the New Town alternative compliance of Section 16.124 of the Howard County and the Landscape Manual.
2. Financial surety for the required landscaping has been posted as part of the Department of Public Works Developer's Agreement in the amount of $9100. 91 trees @ 100.00/tree.

NORTH

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
KENDALL RIDGE	3 2	5

PLAT	BLOCK	ZONE	TAX/ZONE	MAP	ELEC. DIST.	CENSUS TR
CMP 811		NT	37		6	

WATER CODE — SEWER CODE

no	description	date
1	REMOVE TREES FROM POND EMB.	6/9/94
2	ADD NOTE	6/9/94
3	REVISE WADE POOL ADD SHEETS 13, 14, & 15	2/2015

prepared by:
The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
Willow Grove, PA 215-659-3600 Fax 659-8125
Warren Berkshire, NJ 201-689-7500 Fax 689-7501
Warner Robbins, GA 912-923-7500 Fax 923-0604
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

LANDSCAPE PLAN

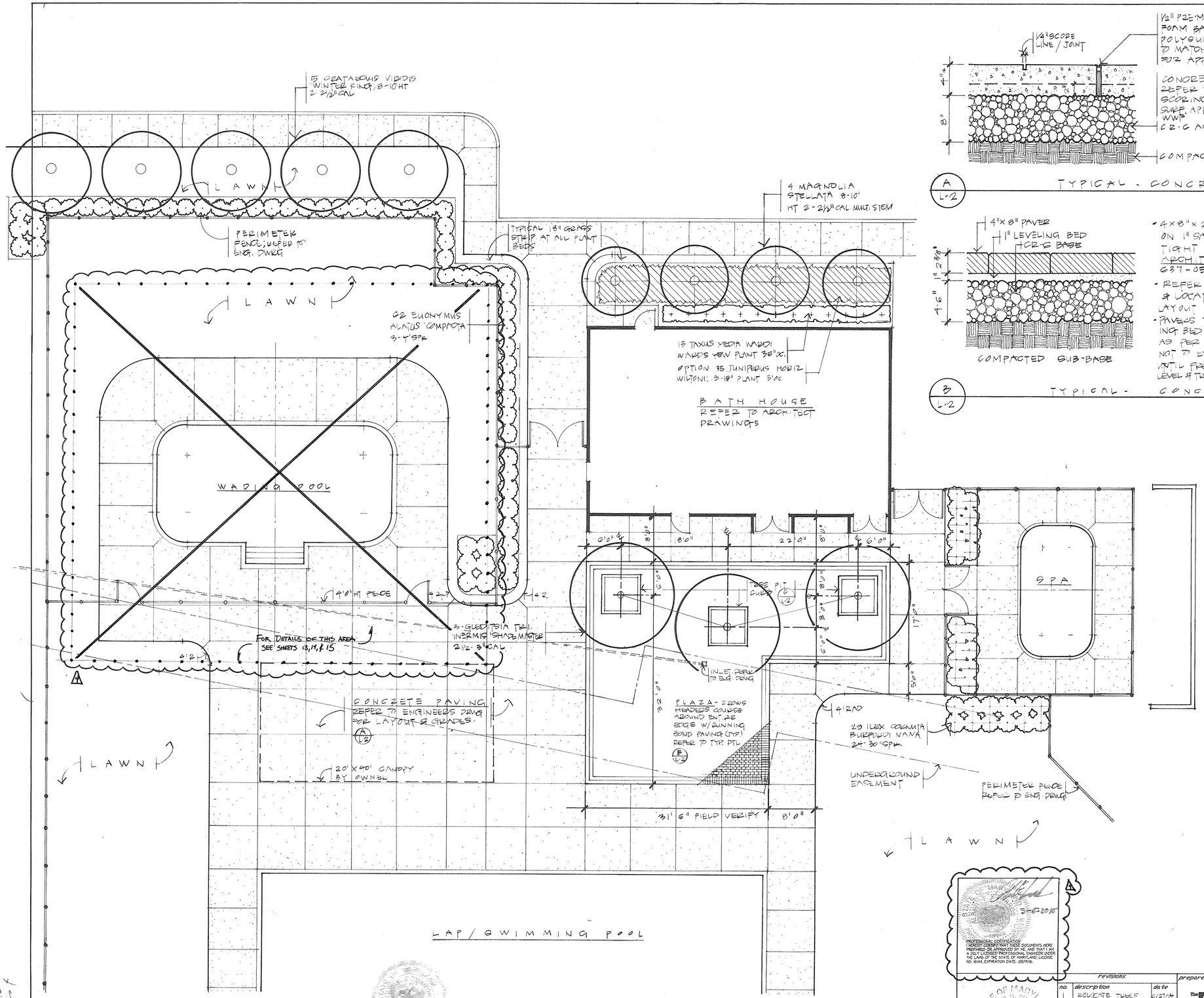
KENDALL RIDGE COMMUNITY POOL

REVISED SITE PLAN

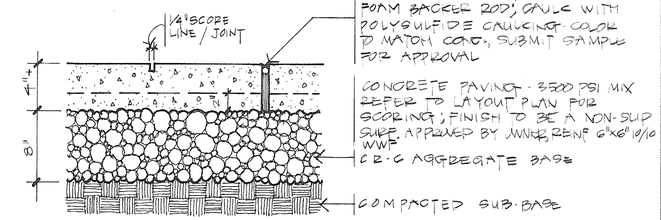
HOWARD COUNTY MARYLAND

SCALE 1" = 30'	
DRAWN	CHECKED
PROJ. NO. J0905	DATE 4/94
SHEET 6	OF 25

SDP-94-65



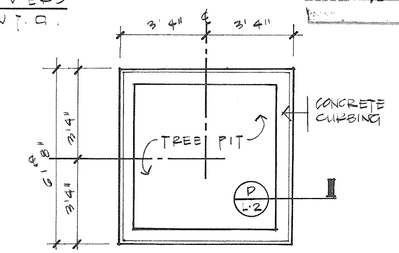
1/L-2 DETAIL LAYOUT & PLANTING PLAN
SCALE 1/8" = 1'-0"



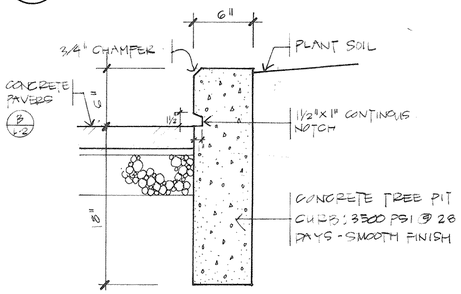
A/L-2 TYPICAL - CONCRETE PAVING
N.T.S.

- 4x8" x 2 3/8" CONCRETE PAVER, LAID ON 1" SAND LEVELING BED; HAND TIGHT JOINT; MANUF BY HANOVER ARCHITECTURAL PRODUCTS 1-717 637-0500
- REFER TO SHT L-2 FOR LAYOUT & LOCATION; REFER TO PLAN FOR LAYOUT PATTERN
- PAVERS TO BE LAID ON 1" SAND LEVELING BED; ALL PAVERS TO BE INSTALLED AS PER MANUFACTURS SPEC; JOINS NOT TO EXCEED 1/8", TAMP ALL PAVERS UNTIL FREE OF MOVEMENT; UNIFORMLY LEVEL & TRUE TO GR; SWEEP SAND IN JOINT

B/L-2 TYPICAL - CONCRETE PAVERS
N.T.S.



C/L-2 PLAN - TREE PIT CURB
NTS



D/L-2 SECTION TREE PIT CURB
SCALE 1 1/2" = 1'-0"

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10/4/94
CHIEF, BUREAU OF ENGINEERING — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/7/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 10/12/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. '94

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. 16144, EXPIRATION DATE: 06/11/96.
3-30-95

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME		SECTION/AREA	LOT/PARCEL
KENDALL RIDGE		3	5

PLAT	BLOCK	ZONE	TAX/ZONE	MAP	ELEC. DIST.	CENSUS
CMP 8111		NT	37		6	

WATER CODE — SEWER CODE

revisions		
no.	description	date
1	RELOCATE TREES IN PLAZA	6/27/94
2	REVISE WADE POOL. ADD SHEETS 13, 14, & 15	2/2015

prepared by:
The RBA GROUP — ENGINEERS • ARCHITECTS • PLANNERS
3560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

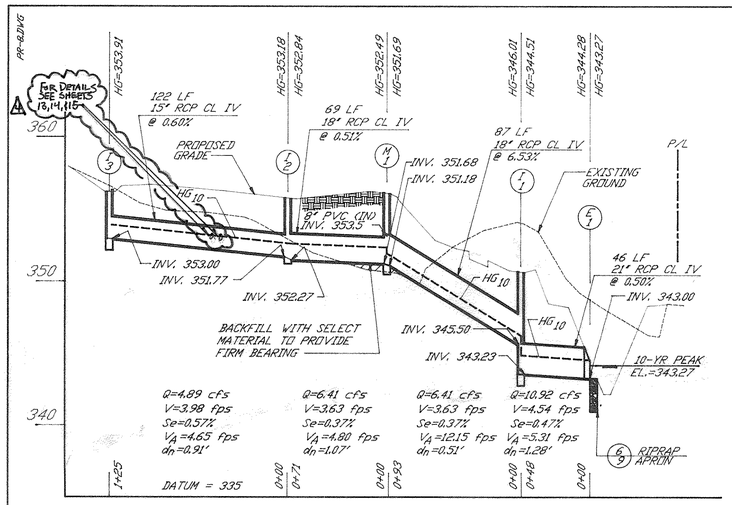
LANDSCAPE DETAILS

KENDALL RIDGE COMMUNITY POOL
REVISED SITE PLAN

HOWARD COUNTY — MARYLAND

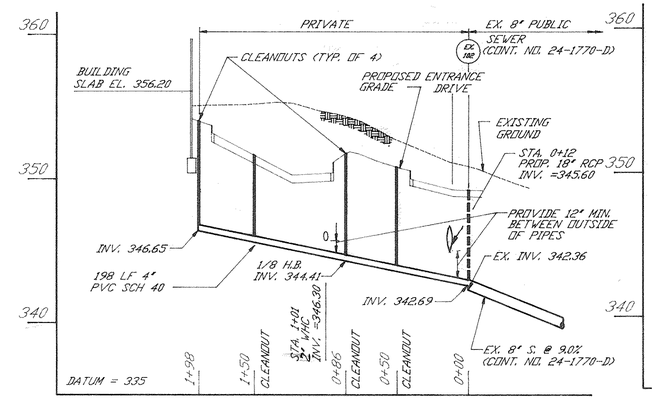
SCALE: AS SHOWN
DRAWN: — CHECKED:
PROJ. NO.: J0905 — DATE: 4/94
SHEET 7 OF 125

SDP-94-65



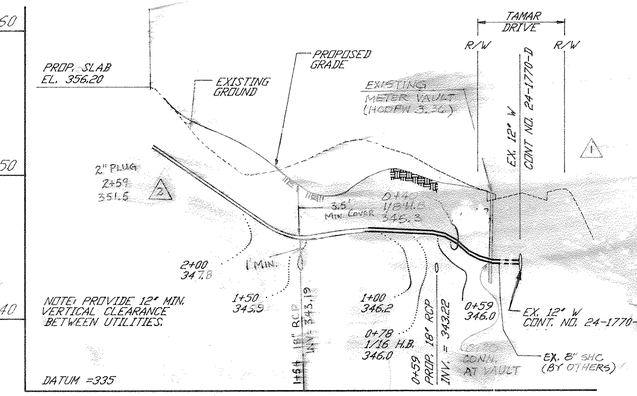
STORM DRAIN PROFILE

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



SANITARY HOUSE CONNECTION PROFILE

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



WATER HOUSE CONNECTION PROFILE

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

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE
CHIEF, BUREAU OF ENGINEERING — DATE 10/18/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/17/94
Jim Simmons — 10/12/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

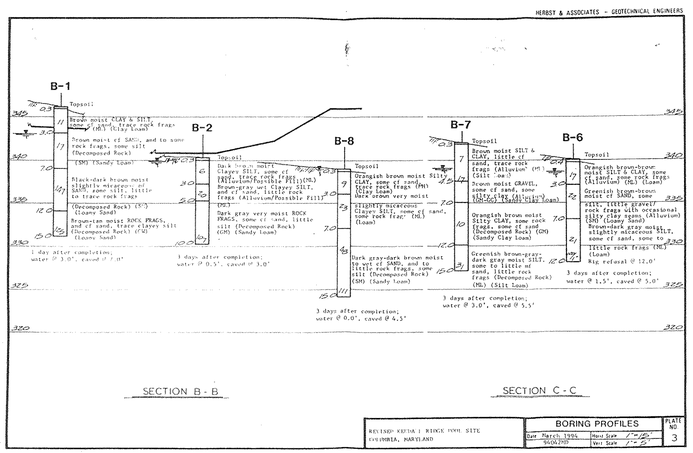
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

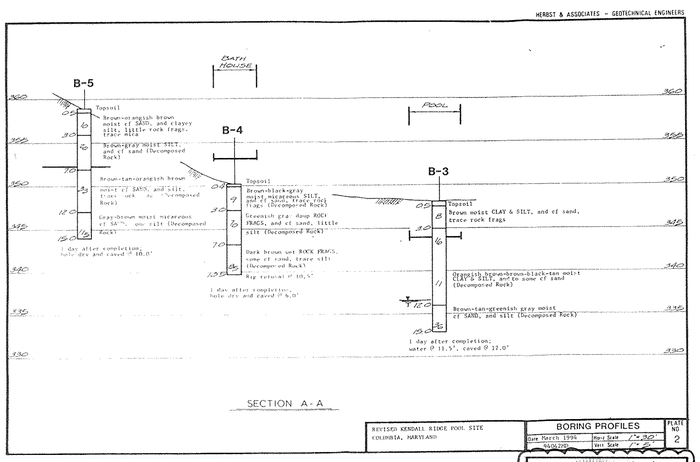
COUNTY HEALTH OFFICER — DATE 10-6-94

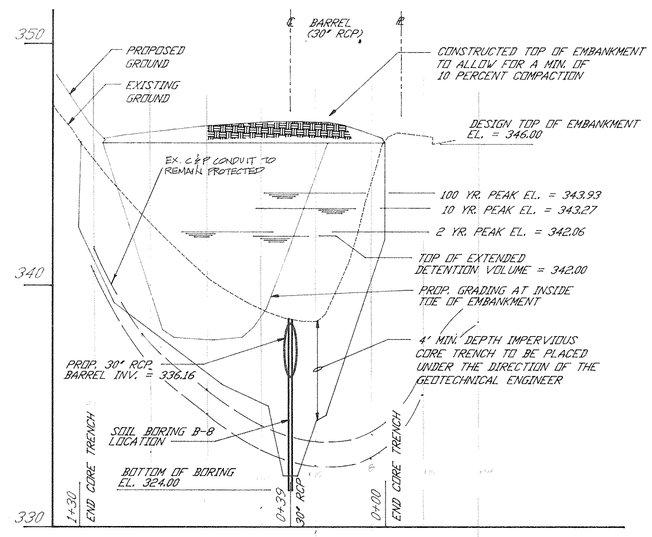
OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

DATE 18 Aug. 94

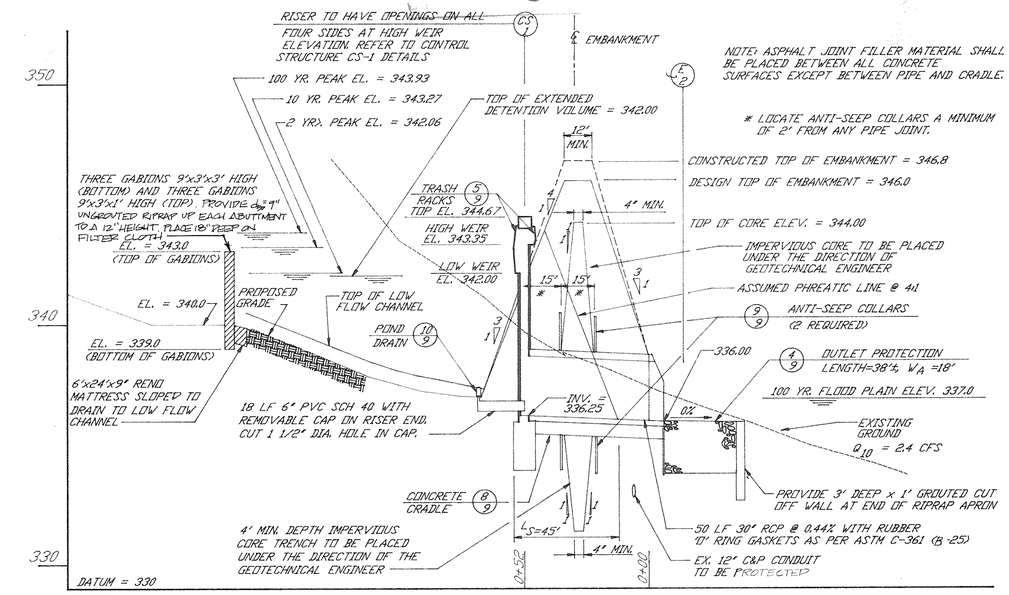






PROFILE THROUGH CENTERLINE OF EMBANKMENT

HORIZ. 1"=30'
VERT. 1"=3'

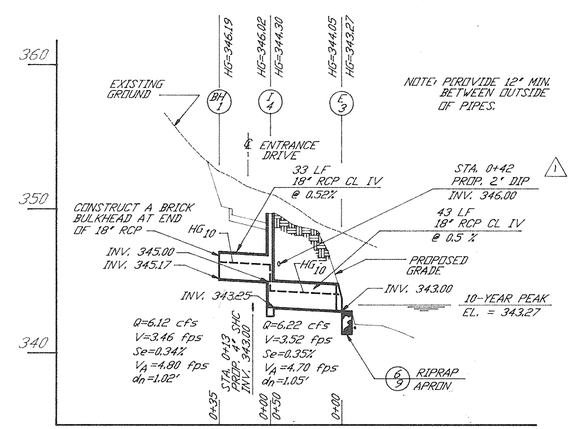


NOTE: ASPHALT JOINT FILLER MATERIAL SHALL BE PLACED BETWEEN ALL CONCRETE SURFACES EXCEPT BETWEEN PIPE AND CRADLE.

* LOCATE ANTI-SEEP COLLARS A MINIMUM OF 2' FROM ANY PIPE JOINT.

PROFILE THROUGH PRINCIPAL SPILLWAY

HORIZ. 1"=30'
VERT. 1"=3'



STORM DRAIN PROFILE

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

PIPE SCHEDULE

SIZE	TYPE	QUANTITY	SIZE	TYPE	QUANTITY
15"	RCP CL IV	122 L.F.	6"	PVC SCH 40	18 LF
18"	RCP CL IV	232 LF	2"	D.I.P.	219 (WHC)
30"	RCP (ASTM C-361)	46 LF (A-25)	4"	PVC	198 (SHC)
21"	RCP CL IV	41 LF	8"	PVC	25 LF (BACKWASH)

STRUCTURE SCHEDULE

NUMBER	TYPE	TYPE IN	TYPE OUT	TOP ELEVATION UPPER	TOP ELEVATION LOWER	REMARKS ① (SEE NOTES BELOW)
I-1	"A-10" INLET	345.50	343.30	350.40	350.40	HCDPW STD SD4.02
I-2	"S" INLET	352.27	351.17	TOP OF GRATE=355.7		HCDPW STD SD4.22
I-3	"D" INLET		353.00	SLOT EL=356.10		HCDPW STD SD4.11
I-4	"A-10" INLET	345.00	343.25	349.82	349.56	HCDPW STD SD4.02
M-1	48" PRECAST MANHOLE	351.42	351.18	356.00		HCDPW STD GS1.11
E-1	END SECTION (21")		343.00			HCDPW STD SD5.51
E-2	END SECTION (30")		336.00			HCDPW STD SD5.51
E-3	END SECTION (18")		343.00			HCDPW STD SD5.51
CS-1	CONTROL STRUCTURE	②	②	②	②	② (SEE NOTES BELOW)

HORIZ. 30' 15' 0 30' 60'
VERT. 6' 5' 4' 3' 2' 1' 0 3' 6'

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME			SECTION/AREA	LOT/PARCEL
VILLAGE OF LONG REACH			3	2 5
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
CMP 8111		NT	37	6	6066.02
WATER CODE			SEWER CODE		

NOTES:
① ALL STRUCTURES ARE HOWARD COUNTY STANDARD STRUCTURES UNLESS OTHERWISE NOTED.
② STRUCTURE CS-1 IS A SPECIAL DESIGN STRUCTURE. SEE DETAIL ON SHEET 9 OF 12.

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. 16956, EXPIRATION DATE 6/30/96
3-5-2015

JOHN W. CLAPSADDLE, P.E.
MD. NO. 16956

no.	revisions description	date
1	REV. WHC SIZE SHOWN METER VAULT	12/94
2	REV. WHC PROFILE	1/95
3	REVISE WATER POOL. ADD SHEETS 13, 14, & 15	2/2015

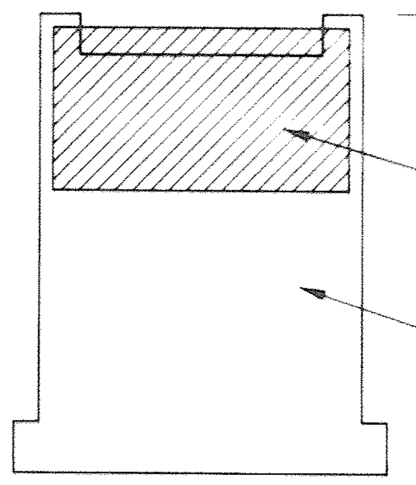
prepared by:
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7930

PROFILES
KENDALL RIDGE COMMUNITY POOL
REVISED SITE PLAN
HOWARD COUNTY MARYLAND

SCALE AS SHOWN
DRAWN JAC
CHECKED JWC
PROJ. NO. J0905
DATE 6/94
SHEET 8 OF 15

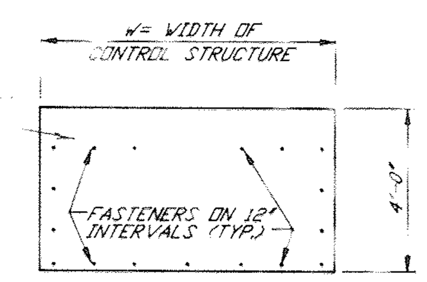
SDP-94-65

DET-9.DWG

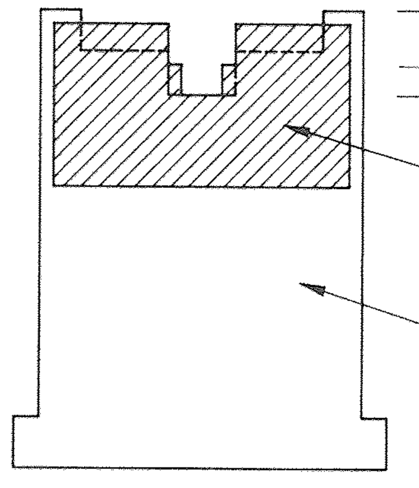


NOTE:
DELAY CONSTRUCTION OF TOP SLAB UNTIL RISER MODIFICATIONS ARE REMOVED. SEE SEQUENCE OF CONSTRUCTION.

SOUTH, EAST, AND WEST FACES
NO SCALE

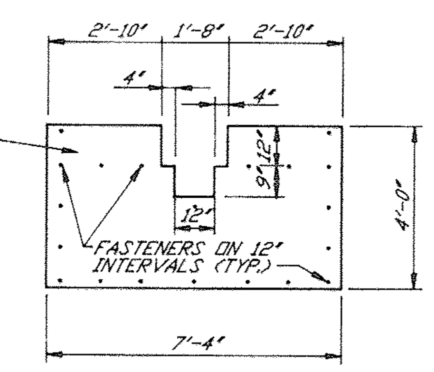


11 PLYWOOD PANEL
(THREE REQ'D)
NO SCALE



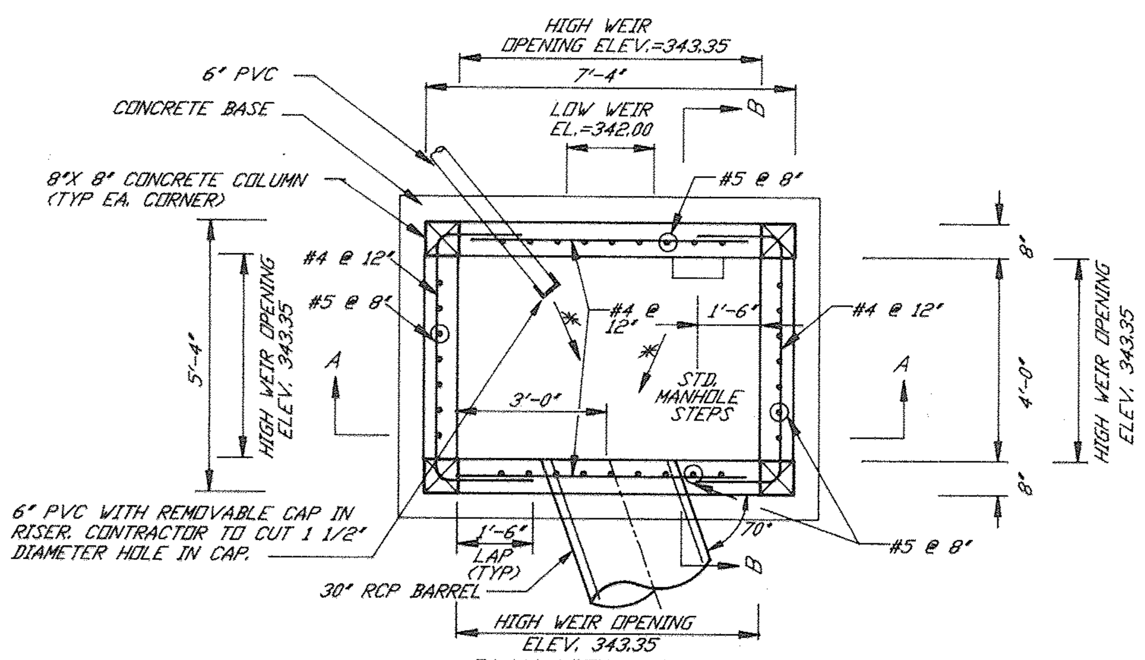
NOTE:
DELAY CONSTRUCTION OF TOP SLAB UNTIL RISER MODIFICATIONS ARE REMOVED. SEE SEQUENCE OF CONSTRUCTION.

NORTH FACE
(FACING POND)
NO SCALE

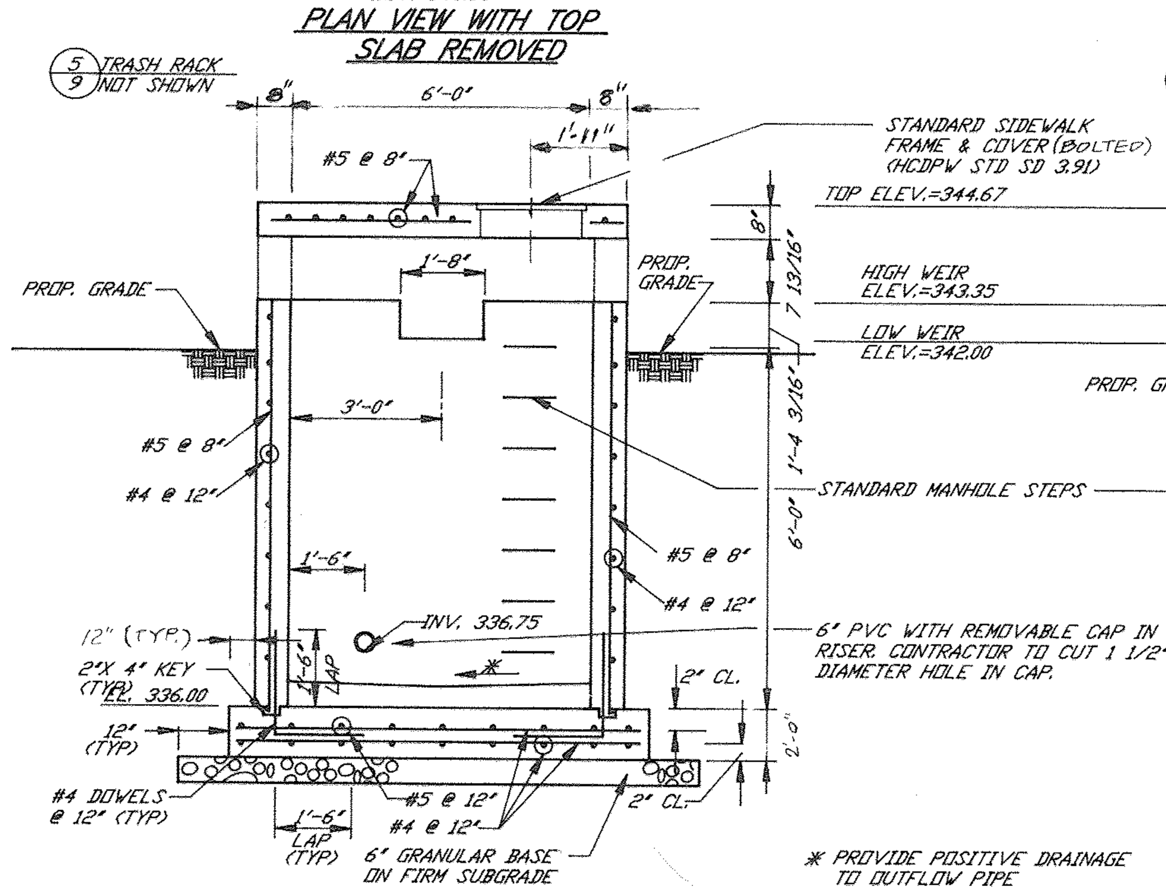


12 PLYWOOD PANEL
(ONE REQ'D)
NO SCALE

1 TEMPORARY RISER MODIFICATION
NO SCALE

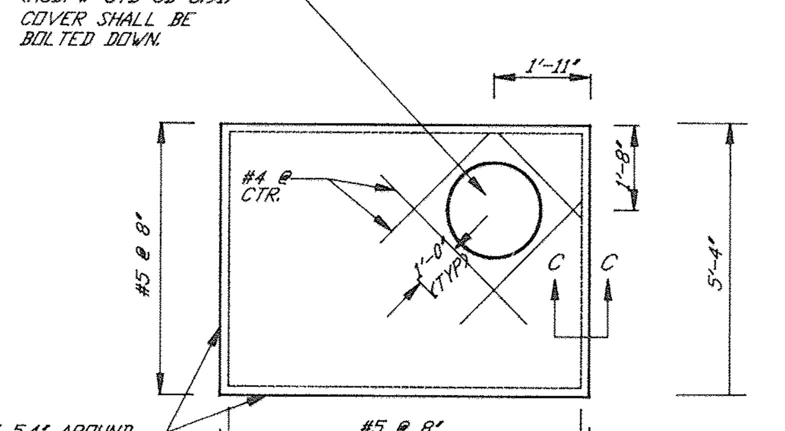


PLAN VIEW WITH TOP SLAB REMOVED



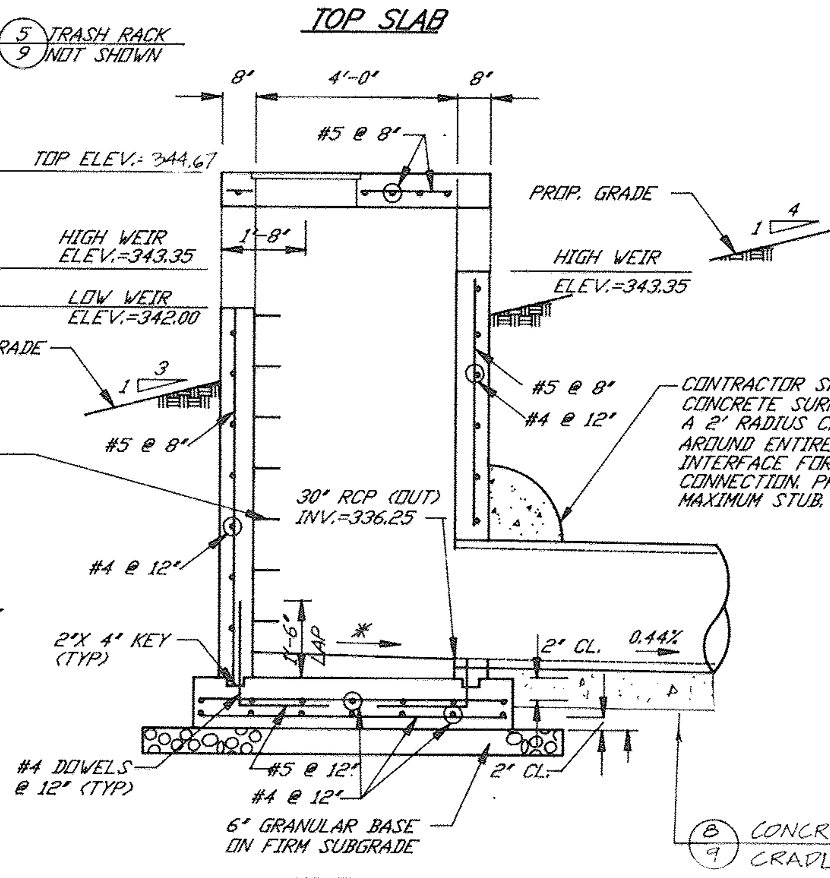
* PROVIDE POSITIVE DRAINAGE TO OUTFLOW PIPE

SECTION A–A



NOTE: HIGH WEIR SET AT ELEV.=344.0 RISER HAS HIGH WEIR OPENING ON ALL FOUR SIDES.

TOP SLAB

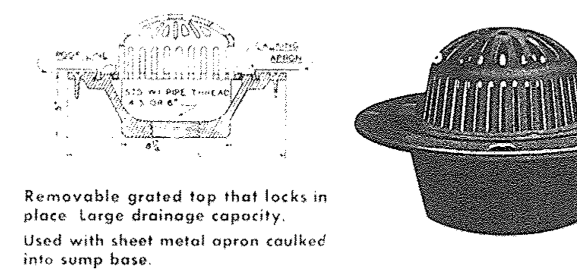


SECTION B–B

2 CONTROL STRUCTURE CS-1
NO SCALE

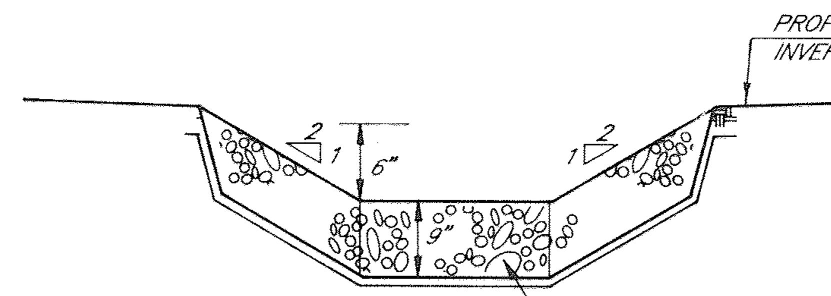
R-4920 Series

Catalog No.	Notes and Description	Pipe Size
R-4920-A1	For Inside Caulk	4
R-4920-A2	For Inside Caulk	5
R-4920-A3	For Inside Caulk	6
R-4920-B1	Long Spigot	4
R-4920-B2	Long Spigot	5
R-4920-B3	Long Spigot	6
R-4920-C1	Tapped for Pipe Thread	4
R-4920-C2	Tapped for Pipe Thread	5
R-4920-C3	Tapped for Pipe Thread	6



Removable grated top that locks in place. Large drainage capacity.
Used with sheet metal apron caulked into sump base.

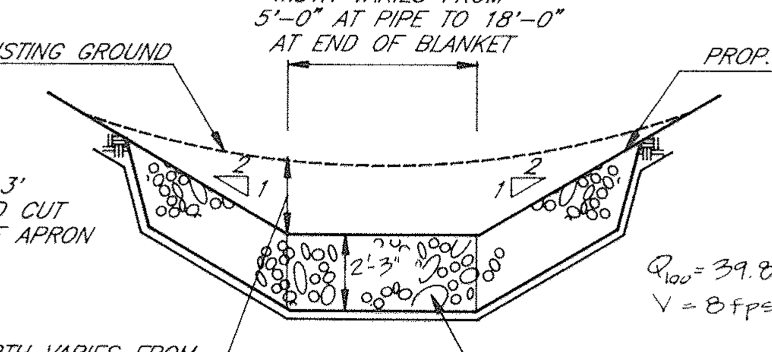
10 NEENAH DRAIN CAP
NO SCALE



TYPICAL SECTION

MSHA d50= 6" UNGROUTED RIPRAP PLACED ON POLYFILTER X FILTER CLOTH OR EQUAL

3 LOW FLOW CHANNEL
NO SCALE



NOTE: CONSTRUCT A 3' DEEP BY 1' GROUTED CUT OFF WALL AT END OF APRON

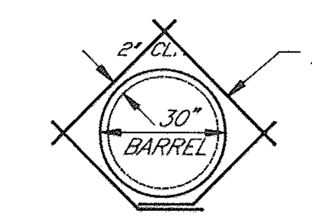
Q_{100}= 39.8 cfs
V = 8 fps

DEPTH VARIES FROM 2'-6" AT PIPE TO ZERO AT END OF BLANKET

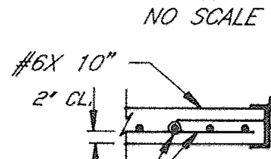
TYPICAL SECTION

MSHA CLI (d50= 12") RIPRAP PLACED 27" DEEP ON POLYFILTER X FILTER CLOTH OR EQUAL

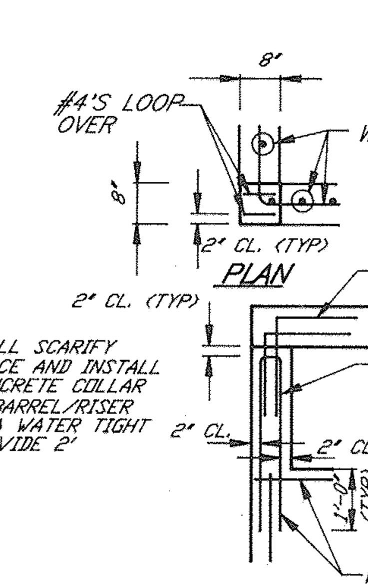
4 OUTLET PROTECTION
NO SCALE



ADDITIONAL REINFORCING AT BARREL
NO SCALE



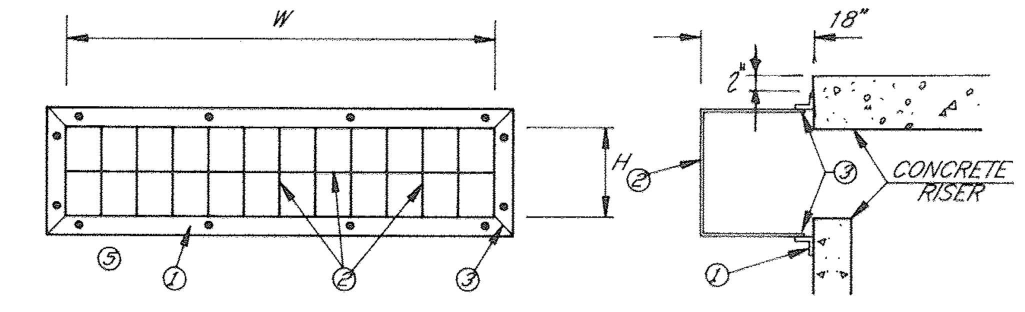
SECTION C–C
NO SCALE



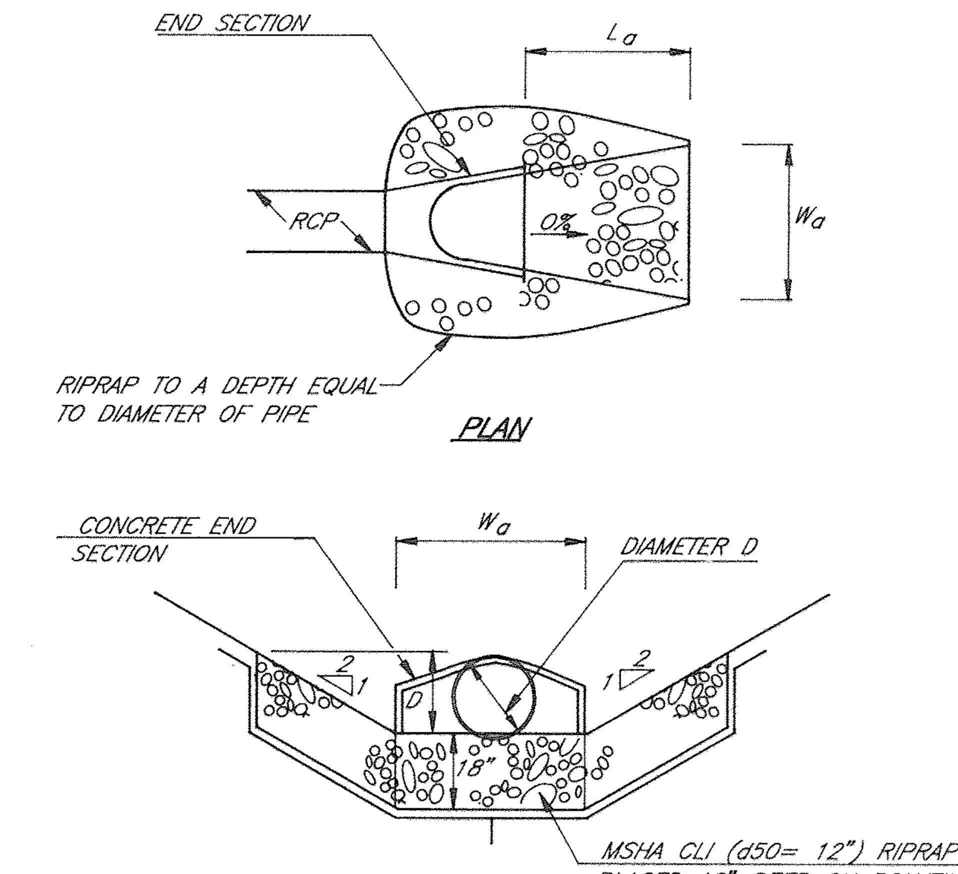
COLUMN REINFORCING
NO SCALE

DIMENSION TABLE ⑥	W	H
RISER FACE		
NORTH (FACING POND)	6'-2"	2'-4"
SOUTH (FACING DAM)	6'-2"	1'-0"
EAST (SIDE)	4'-2"	1'-0"
WEST (SIDE)	4'-2"	1'-0"

NOTES
① 4" X 3" METAL ANGLE FABRICATED TO THE GIVEN DIMENSIONS & BOLTED TO RISER EVERY 24" MIN.
② 1/2" METAL ROD OR RE-BAR ON 6" CENTERS WELDED TO FRAME.
③ WELDED
④ ALL MATERIAL TO BE GALVANIZED AFTER FABRICATION AND PAINTED BATTLESHIP GRAY.
⑤ CENTER ALL RACKS OVER RISER OPENINGS.
⑥ DIMENSIONS ARE INSIDE OF FRAME DIMENSIONS.

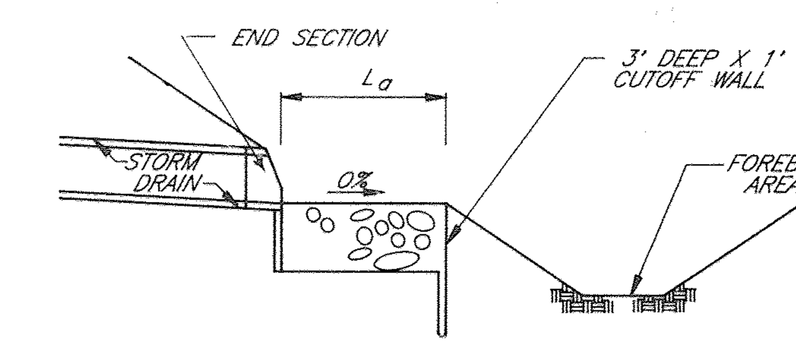


5 TRASH RACK (FOR RISER)
NO SCALE



TYPICAL SECTION

MSHA CLI (d50= 12") RIPRAP PLACED 18" DEEP ON POLYFILTER X FILTER CLOTH OR EQUAL. PROVIDE 3' DEEP X 1' GROUTED CUTOFF WALL AT END OF APRON.



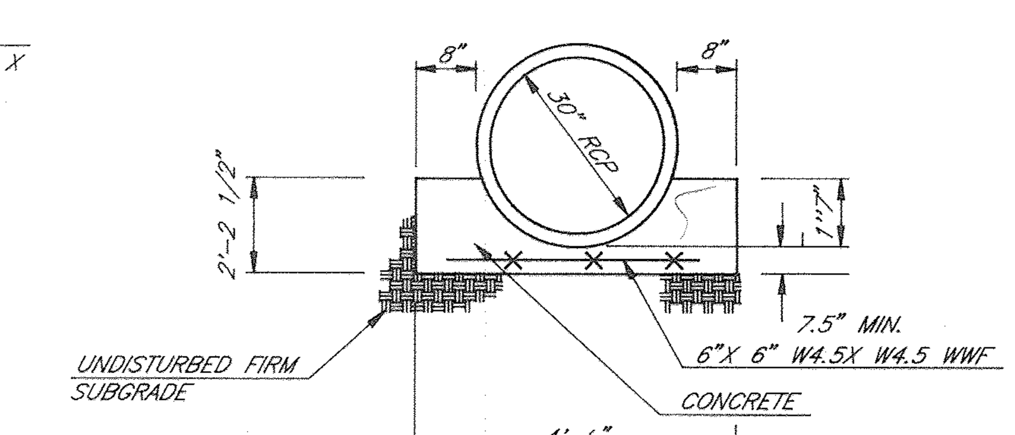
PROFILE

DATA CHART

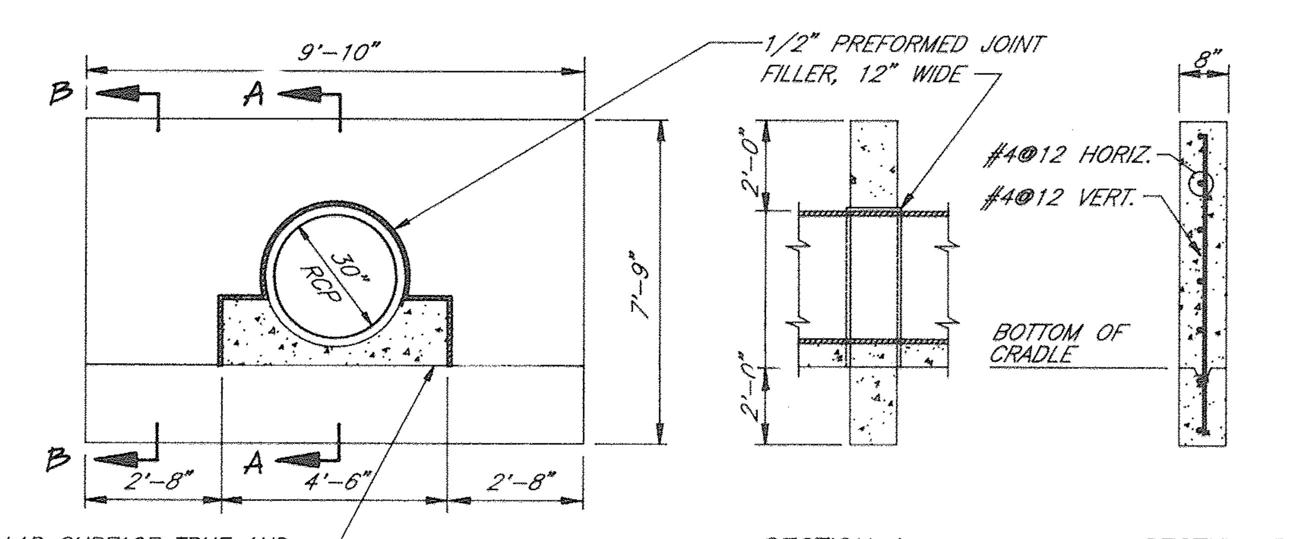
LOCATION	L_a	W_a	Q_{10}(cfs)	V(fps)
E–1	8'	5'	10.92	6.0
E–3	6'	4'	6.22	5.0

6 RIPRAP APRON
NO SCALE

NOTE: ASPHALT JOINT FILLER MATERIAL SHALL BE PLACED BETWEEN ALL CONCRETE SURFACES EXCEPT BETWEEN PIPE AND CRADLE



8 CONCRETE CRADLE (TR 46 A-2)
NO SCALE



FINISH COLLAR SURFACE TRUE AND SMOOTH. ONE LAYER OF HEAVY, SMOOTH SURFACE, ASPHALT TREATED ROOFING FELT. APPROX. WT. 55 LBS. PER SQUARE

9 CONCRETE ANTI-SEEP COLLAR (TWO REQ'D)
NO SCALE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10/4/94
CHIEF, BUREAU OF ENGINEERING 10/4/94 — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING
DIRECTOR — DATE 10/17/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — 10/12/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. '94

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME	SECTION/AREA		LOT/PARCEL
VILLAGE OF LONG REACH	3	2	5

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
CMP 8111		NT	37	6	6066.

WATER CODE | SEWER CODE

STATE OF MARYLAND JOHN WINFRED CLAPP No. 16956 REGISTERED PROFESSIONAL ENGINEER

no.	description	date
1	REVISE WADE POOL ADD SHEETS 13, 14, & 15	2/2015

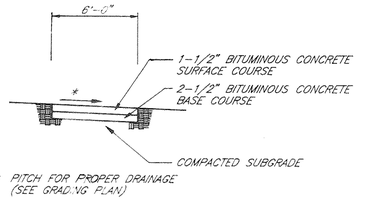
prepared by:
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

DETAILS

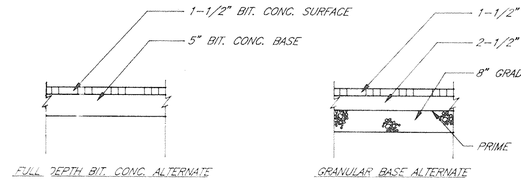
KENDALL RIDGE
COMMUNITY POOL
REVISED SITE PLAN
HOWARD COUNTY MARYLAND

SCALE	
DRAWN JAC	CHECKED JWC
PROJ. NO. J0905	DATE 6/94
SHEET 9	OF 15

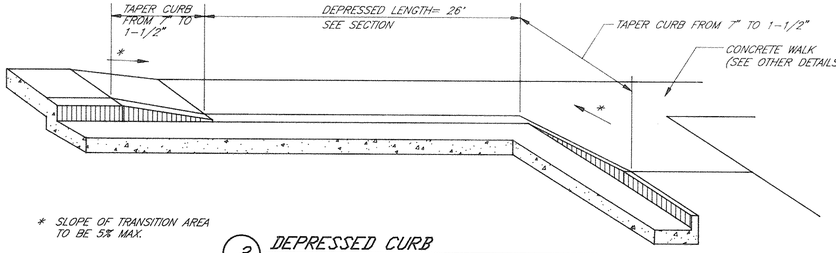
SDP. 94-65



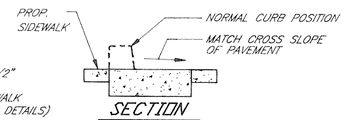
1 BITUMINOUS PATH
NO SCALE



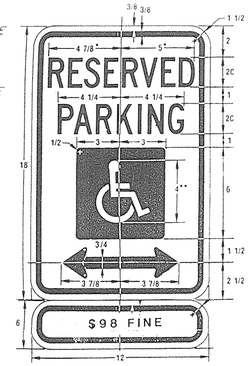
3 BITUMINOUS PAVING (P-2 SECTION)
(HCDPW STD. NO. R2.01) NO SCALE



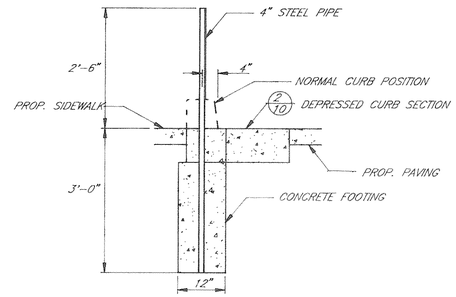
2 DEPRESSED CURB
NO SCALE



SECTION
NO SCALE



5 HANDICAP PARKING SIGN
R7-8
NO SCALE



6 RESERVED PARKING-SIGN POST MOUNTING
NO SCALE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10/4/94
CHIEF, BUREAU OF ENGINEERING — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/17/94
Lima Sunnimony — 10/12/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

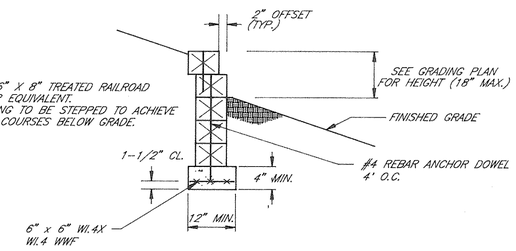
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

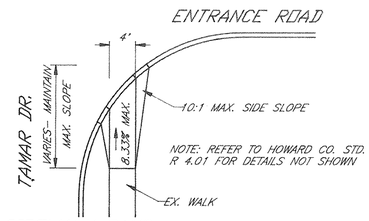
DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. '94



NOTES
1. USE 6" X 8" TREATED RAILROAD TIES OR EQUIVALENT.
2. FOOTING TO BE STEPPED TO ACHIEVE MIN. 3 COURSES BELOW GRADE.

4 RETAINING WALL
NO SCALE



7 SIDEWALK RAMP
NO SCALE

MD 378 STORMWATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS

NOTE: CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT BY HERBST & ASSOCIATES DATED MARCH 1994 AND FOLLOW ALL RECOMMENDATIONS MADE IN REFERENCE TO THE CONSTRUCTION OF THIS POND. CONTRACTOR SHALL ENGAGE A GEOTECHNICAL ENGINEER TO BE PRESENT ON SITE DURING CONSTRUCTION.

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.

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 50 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 as 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 GC, SC, CH, or CL. Consideration may be given to the use of other materials in the embankment if design and construction are supervised by a geotechnical engineer.

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 tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, 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.

Where a minimum required density is specified, it 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 necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

Cut Off Trench - The cutoff trench shall be excavated into 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 flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

Structure Backfill

Backfill adjacent to pipes & 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. It is 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.

Pipe Conduits

All pipes shall be circular in cross section.

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

Materials - (Steel Pipe) This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings or an approved equal may be used: Nexon, Plasti-Cote, Bar-Kiad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

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. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

Coupling bands, anti-seep collars, end sections, etc., must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the band width. The following type connections are acceptable for pipes less than 24" in diameter: flanges on both ends of the pipe, a 12" wide standard lap type band with 12" wide by 3/8" thick closed cell circular neoprene gasket; and a 12" wide hugger type band with O-ring gaskets having a minimum diameter of 1/2" greater than the corrugation depth. Pipes 24" in diameter and larger shall be connected by a 24" long annular corrugated band using rods and lugs. A 12" wide by 3/8" thick closed cell circular neoprene gasket will be installed on the end of each pipe for a total of 24".

Helically corrugated pipe shall have either continuously welded seams or have lock seams with internal caulking or a neoprene bead.

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.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361.
2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the drawings.
3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.
4. Backfilling shall conform to "Structure Backfill."
5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Polyvinyl Chloride (PVC) Pipe - All of the following criteria shall apply for polyvinyl chloride (PVC) pipe:

1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241.
2. Joints and connections to anti-seep collars shall be completely watertight.
3. 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.
4. Backfilling shall conform to "Structure Backfill."
5. 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 608, 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 905.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth 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 919.12.

Care 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. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. 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 of 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 at such locations which may require draining the water to sumps from which the water shall be pumped.

Stabilization

All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or 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 and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

DAM INSPECTION CHECKLIST

NOTES:
1.) OWNER SHALL PERFORM INSPECTIONS USING THE PROVIED CHECKLIST ON THE FOLLOWING SCHEDULE:
FIRST YEAR TWO INSPECTIONS ON SIX MONTH INTERVALS
FOLLOWING YEARS ONE INSPECTION ANNUALLY UNLESS RESULTS OF ANY INSPECTION WARRANT ADDITIONAL INSPECTIONS AND MONITORING.

2.) MAKE ALL REPAIRS AS DEEMED NECESSARY BY A QUALIFIED SPECIALIST AS NEEDED.

Pond 378 - 17

APPENDIX A
DAM INSPECTION CHECKLIST

To help the dam owner perform periodic safety inspections of the structure, a checklist is provided. Each item of the checklist should be completed. Repair is required when obvious problems are observed. Monitoring is recommended if there is potential for a problem to occur in the future. Investigation is necessary if the reason for the observed problem is not obvious.

A brief description should be made of any noted irregularities, needed maintenance, or problems. Abbreviations and short descriptions are recommended. Space at the bottom of the form should be used for any items not listed.

The following chart may be used as a guide by the dam owner in determining the frequency of inspections for the dam. Each program is dependent on the particular condition of the dam. The Dam Safety Division is available to assist owners in tailoring a program for their facility.

DAM _____ DATE _____
OWNER _____ WEATHER _____
INSPECTED BY _____ POOL LEVEL _____

Item	Comments	A	B	C	D
1. CREST					
a. Visual settlement?					
b. Misalignment?					
c. Cracking?					
2. UPSTREAM SLOPE					
a. Erosion?					
b. Ground cover in good condition?					
c. Trees, shrubs, or other woody vegetation?					
d. Longitudinal/Vertical cracks?					
e. Adequate riprap protection?					
f. Slope deterioration?					
g. Settlements, depressions, or bulges?					
3. DOWNSTREAM SLOPE					
a. Erosion?					
b. Ground cover in good condition?					
c. Trees, shrubs, or other woody vegetation?					
d. Longitudinal/Vertical cracks?					
e. Riprap condition adequate?					
f. Settlements, depressions, or bulges?					
g. Soft spots or boggy areas?					
h. Corroded or bent?					
i. Bolts at top?					
4. INTERNAL SEEPAGE CONTROL					
a. Internal drains flowing?	Ext. left ___ gpm Ext. right ___ gpm				
b. Seepage at toe?	Estimated ___ gpm				
c. Does seepage contain fines?					

SCS - MARYLAND — NOVEMBER 1987

Pond 378 - 18 Pond

INSPECTION CHECKLIST - PAGE 2
INSPECTED BY _____ DATE _____

Item	Comments	A	B	C	D
5. ABUTMENT CONTACTS					
a. Erosion?					
b. Differential movement?					
c. Cracks?					
d. Seepage?	Estimated ___ gpm				
e. Adequate erosion protection for ditches?					
6. INLET STRUCTURE	Concrete or Metal Pipe (circle one)				
a. Seepage into structure?					
b. Debris or obstructions?					
c. If concrete, do surfaces show:					
1. Spalling?					
2. Cracking?					
3. Erosion?					
4. Scaling?					
5. Exposed reinforcement?					
6. Other?					
d. If metal, do surfaces show:					
1. Corrosion?					
2. Protective Coating deficient?					
3. Misalignment or split seams?					
e. Do the joints show:					
1. Displacement or offset?					
2. Loss of joint material?					
3. Leakage?					
f. Are the trash racks:					
1. Broken or bent?					
2. Corroded or rusted?					
3. Obstructed?					
4. Operational?					
g. Sluice/Drain gates:					
1. Broken or bent?					
2. Corroded or rusted?					
3. Leaking?					
4. Not seated correctly?					
5. Partially activated?					
6. Operational?					

SCS - MARYLAND — NOVEMBER 1987

Pond 378 - 19

INSPECTION CHECKLIST - PAGE 3
INSPECTED BY _____ DATE _____

Item	Comments	A	B	C	D
7. PERIPHERAL SPILLWAY PIPE	Concrete or Metal Pipe (circle one)				
a. Seepage into conduit?					
b. Debris present?					
c. Do concrete surfaces show:					
1. Spalling?					
2. Cracking?					
3. Erosion?					
4. Scaling?					
5. Exposed reinforcement?					
6. Other?					
d. Do the joints show:					
1. Displacement or offset?					
2. Loss of joint material?					
3. Leakage?					
8. SPILLWAY BASIN/POOL	Riprap or Concrete (circle one)				
a. If concrete, condition of surfaces?					
b. Deterioration or displacement of joints?					
c. Outlet channel obstructed?					
d. Is released water:					
1. Undermining the outlet?					
2. Eroding the embankment?					
3. Displacing riprap?					
e. Adequate the riprap pool?					
9. Tailwater elevation and flow condition:					
10. EMERGENCY SPILLWAY					
a. In the channel:					
1. Eroding or backcutting?					
2. Obstructed?					
b. Trees or shrubs in the channel?					
c. Seepage present?					
d. Soft spots or boggy areas?					
e. Channel slopes eroding or sloughing?					
11. RESERVOIR					
a. High water marks?					
b. Erosion/Slides into pool area?					
c. Sediment accumulation?					
d. Floating debris present?					
e. Adequate riprap protection for ditches?					

SCS - MARYLAND — NOVEMBER 1987

AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plans and meets the approved plans and specifications

Signature _____ PE No. _____ Date _____

Certify means to state or declare a professional opinion based upon onsite inspections and material tests which are conducted during construction. The onsite inspections and material tests are those inspections and tests deemed sufficient and appropriate by commonly accepted engineering standards. Certify does not mean or imply a guarantee by the engineer nor does an engineer's certification relieve any other party from meeting requirements imposed by contract, employment, or other means, including meeting commonly accepted industry practices.

OPERATION, MAINTENANCE AND INSPECTION

Inspection of the pond(s) shown hereon shall be performed at least annually, in accordance with the checklist and requirements contained within USDA, SCS "Standards And Specifications For Ponds" (MD-378). The pond owner(s) and any heirs, successors, or assigns shall be responsible for the safety of the pond and the continued operation, surveillance, inspection, and maintenance thereof. The pond owner(s) shall promptly notify the Soil Conservation District of any unusual observations that may be indications of distress such as excessive seepage, turbid seepage, sliding or slumping.

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME			SECTION/AREA	LOT/PARCEL
VILLAGE OF LONG REACH			3 2 5	
PLAT	BLOCK	ZONE	TAX/ZONE	MAP	ELEC DIST.	CENSUS TR
CMP 8111		NT	37		6	6066.02
WATER CODE			SEWER CODE	

no.	revisions description	date
1	REVISE WADE POOL ADD SHEETS 13,14,&15	

prepared by
The RBA GROUP — ENGINEERS • ARCHITECTS • PLANNERS
Wilbur Burns, AIA, Chairman Emeritus
Wilbur Burgess, AIA, Chairman Emeritus
Warren Bradshaw, AIA, Chairman Emeritus
Thomas Bradshaw, AIA, Chairman Emeritus
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

DETAILS

KENDALL RIDGE
COMMUNITY POOL
REVISED SITE PLAN

HOWARD COUNTY MARYLAND

SCALE	
DRAWN JAC	CHECKED JWC
PROJ. NO. J0905	DATE 6/94
SHEET 10	OF 125

SDP-94-65

SEDIMENT AND EROSION 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 ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE INCONFORMANCE WITH THE MOST CURRENT "MD STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND REVISIONS HERETO.
3. FOLLOWING THE INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETE WITHIN: A) SEVEN (7) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTILL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

TOTAL AREA OF THE SITE:	6.40	ACRES
AREA DISTRUBED:	3.62	ACRES (3.3 ACRES ON LOT 5)
AREA TO BE ROOFED OR PAVED:	1.08	ACRES
AREA TO BE VEGETATIVELY STABILIZED:	2.54	ACRES
TOTAL CUT:	18,864	CU. YDS.
TOTAL FILL:	15,402	CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION: COUNTY LANDFILL		

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY DEPT. OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR.
10. ON ALL SITES, DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEOFRE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
12. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN THE SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
13. ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO HOWARD COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
14. ANY VARIATION FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
15. AT THE END OF EACH WORK DAY ALL SEDIMENT CONTROL PRACTICEWILL BE INSPECTED AND LEFT IN THE OPERATIONAL CONDITION.
16. ALL SEDIMENT AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE AGREEMENT MADE BETWEEN COLUMBIA ASSOCIATION AND HSCD AND AS AMENDED 8/1/90.
17. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, AND/OR RIGHTS-OF-WAYS THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORMWATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHT S-OF-WAYS THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
18. THE SEDIMENT CONTROL APPROVALS ON THIS PLAN EXTEND ONLY TO AREAS AND PRACTICES IDENTIFIED AS PROPOSED WORK AND SHALL APPLY AS IF SHOWN ON ALL PLANS.
19. THE APPROVAL OF THE PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH ANY FEDERAL/STATE/COUNTY REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TESTS RECOMMENDATIONS. USE ONE OF THE FOLLOWING SCHEDULES:

1. PREFERRED - APPLY 2 TONS PER ARCE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL AT THE TIME OF SEEDING APPLY 400 LB. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT.)

2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMETRIC LIMESTONE ((2 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING- FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/100 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1 1/2 TO TO TONS PER ACRE (70 TO 90 LBS /1000 SQ. FT.) OF UNROTTED SMALL GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE - INSPECT AL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

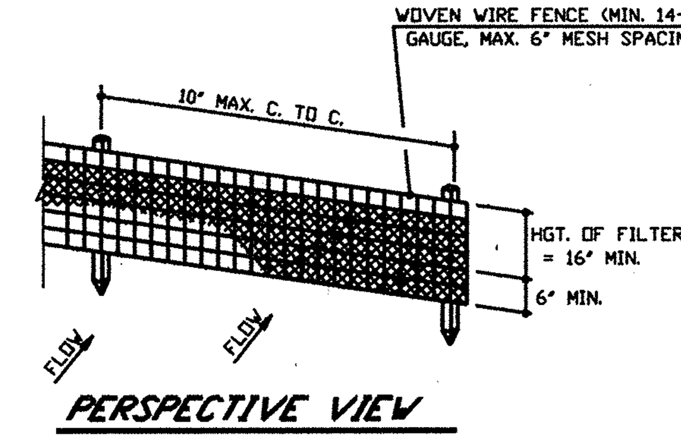
SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.)

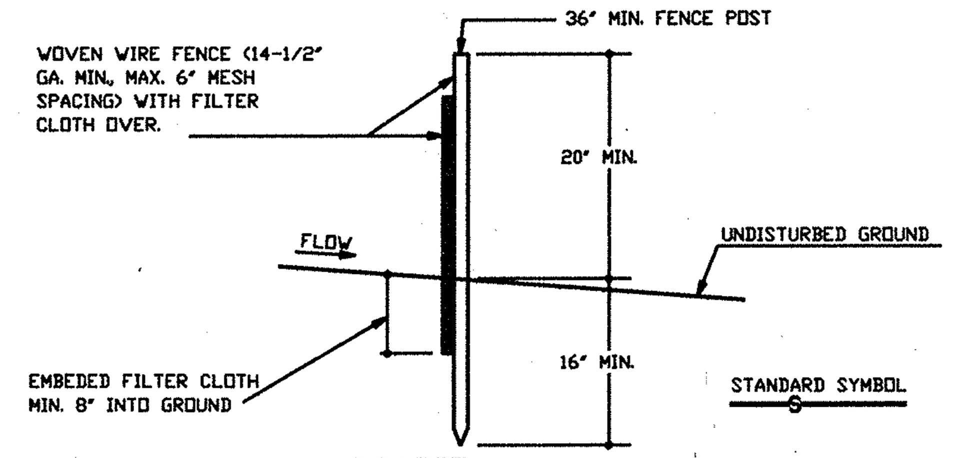
SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/100 SQ. FT.) FOR THE PERIOD OF MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ. FT.) FOR THE PERIOD OF NOVEMBER 16 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOD.

MULCHING - APPLY 1 1/2 TO TO OTONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL /1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



PERSPECTIVE VIEW



SECTION

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING

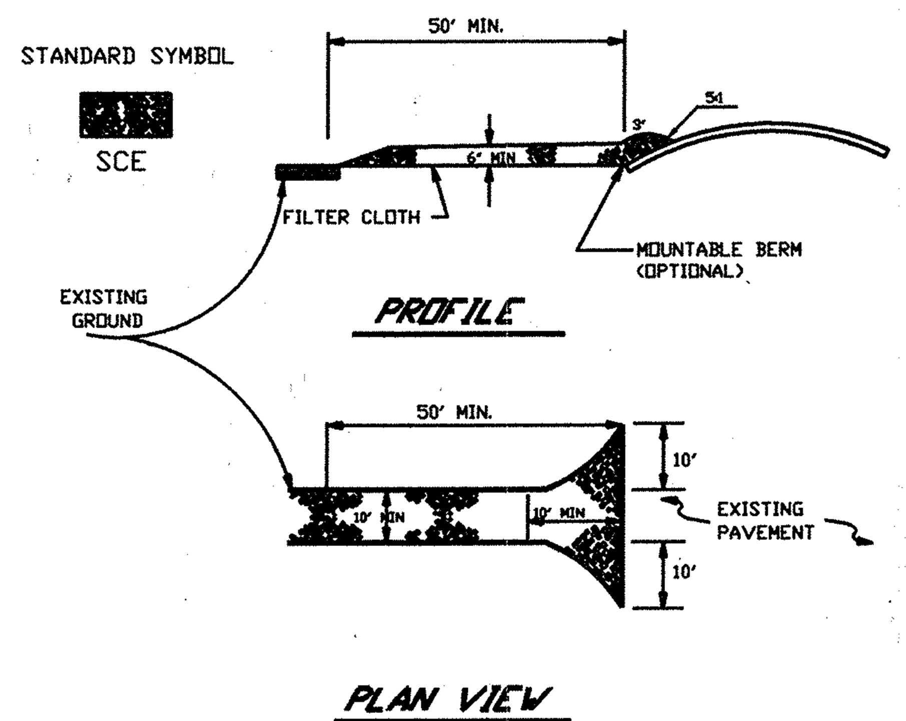
FILTER CLOTH: FILTER X MIRAFI 100X, STABI-LINKA T140N OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE
N.T.S.

STANDARD SYMBOL

SCE

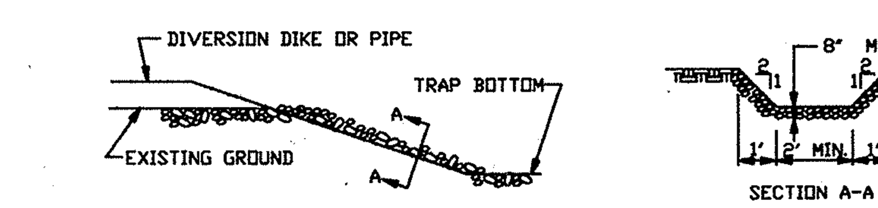


PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED. BUT NOT LESS THAN 50 FEET (EXCEPT ON A RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TEN (10) FOOT MINIMUM BUT NOT LESS THAN FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWRD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL A MOUNTABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF WAY. THIS MAY REQUIRE PERIODIC DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEM AND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE IN AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTAINANCE SHALL BE PROVIDED AFTER EACH RUN.

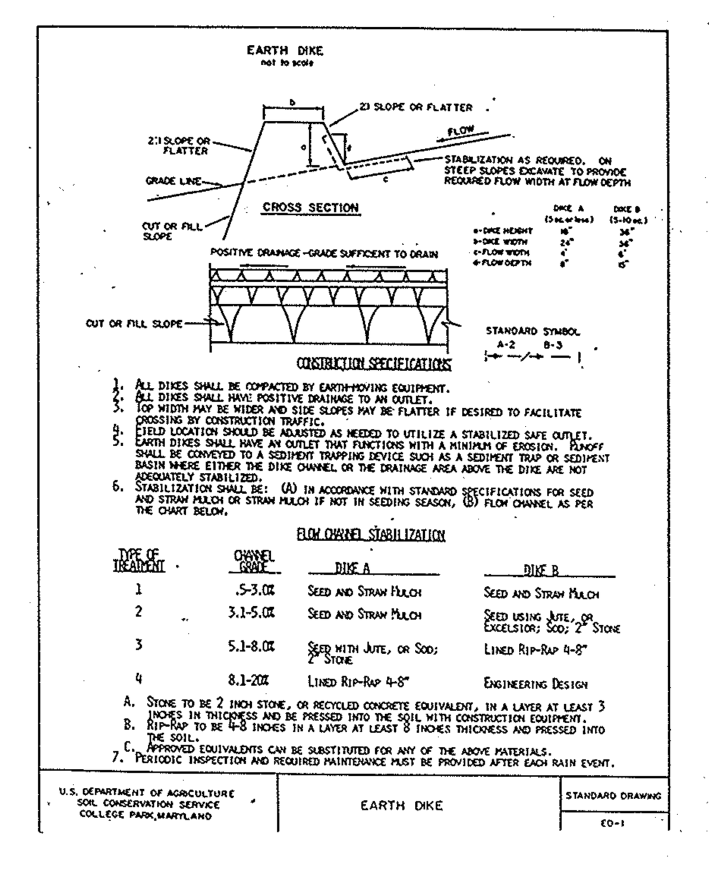
STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



STONE STABILIZATION STRUCTURE
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE 2"-4"
2. LENGTH - AS EFFECTIVE
3. THICKNESS - NOT LESS THAN 8"
4. WIDTH - NOT LESS THAN 4"
5. PERIODIC INSPECTION AND REQUIRED MAIN-TENANCE SHALL BE PROVIDED.
6. COMPACT STONE AFTER PLACEMENT WITH AVAILABLE EQUIPMENT.


EARTH DIKE
not to scale

	DIKE A (5 ac. or less)	DIKE B (5-10 ac.)
a-DIKE HEIGHT	18"	36"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	8"	15"

CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

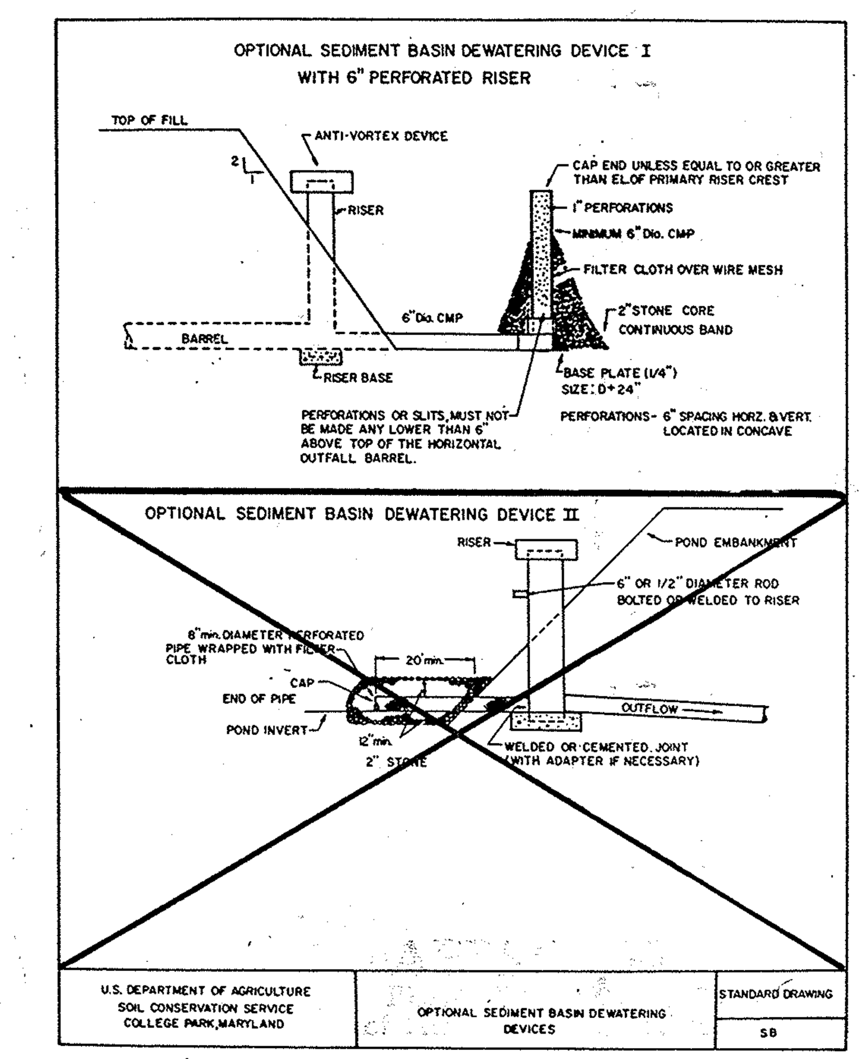
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

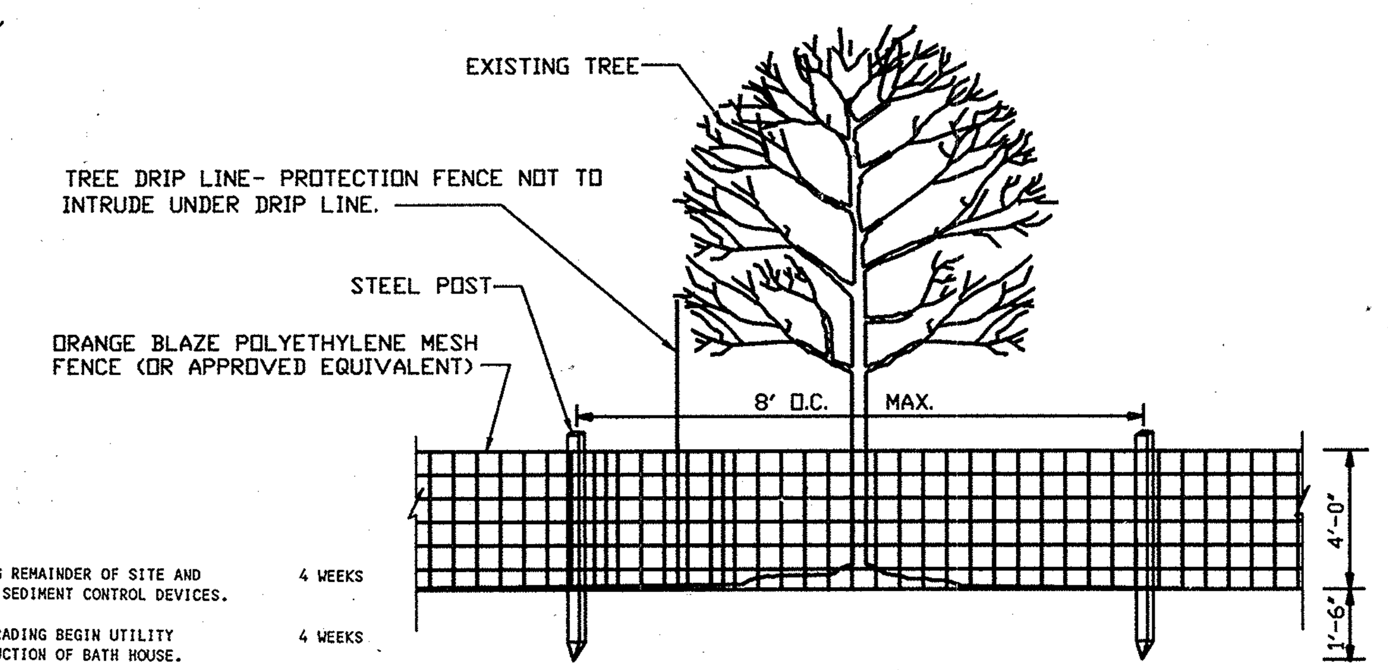
A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND | EARTH DIKE | STANDARD DRAWING EO-1

EARTH DIKE
N.T.S.


OPTIONAL SEDIMENT BASIN DEWATERING DEVICE I
WITH 6" PERFORATED RISER

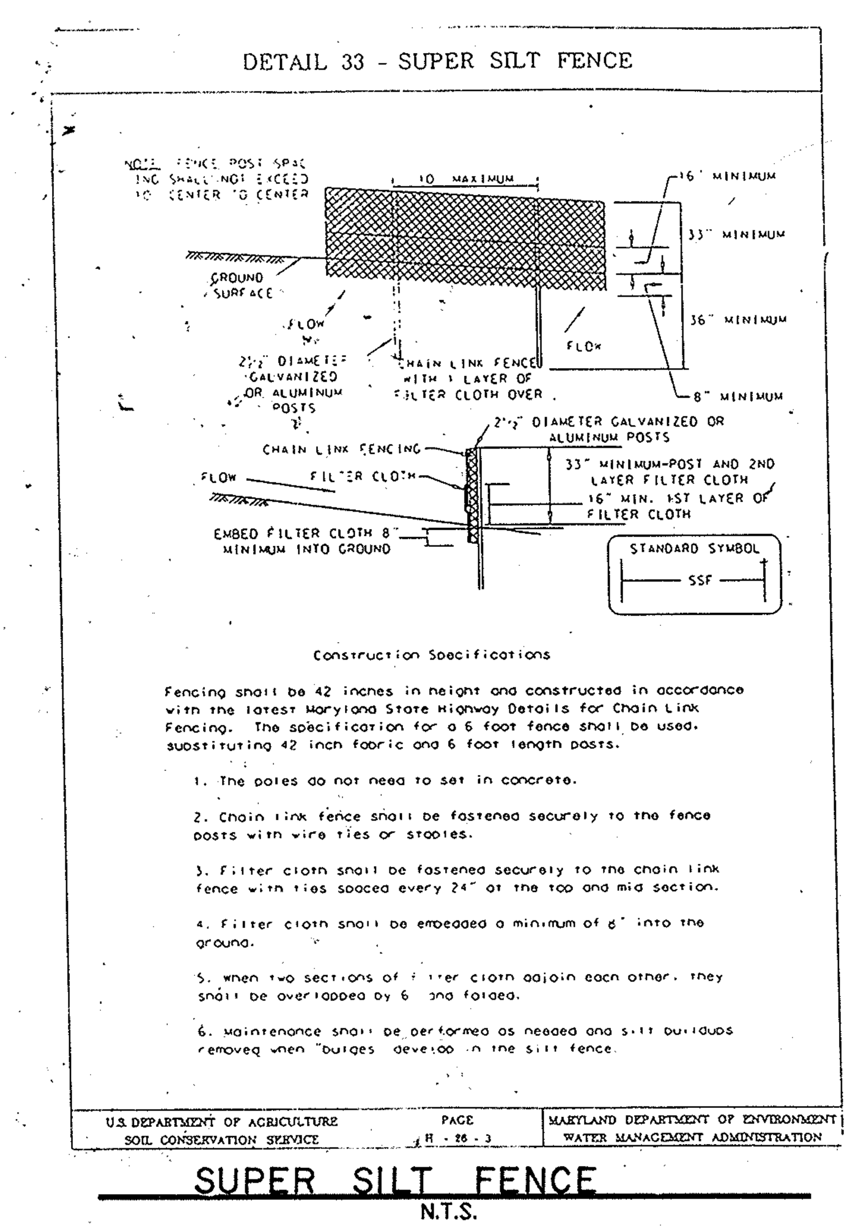
OPTIONAL SEDIMENT BASIN DEWATERING DEVICES
N.T.S.



TREE PROTECTION FENCE
N.T.S.

TREE PROTECTION PROCEDURES

1. TREE PROTECTION FENCE SHALL BE INSTALLED AT THE DRIP LINE OF THE TREES TO BE PROTECTED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
2. THE GENERAL CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR TREE PROTECTION. HE SHALL TAKE CARE TO PROTECT TREE ROOT SYSTEMS FROM DAMAGE INCLUDING SMOTHERING, FLOODING, AND SPILLAGE.
3. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA WILL BE PROHIBITED.
4. FOOT AND VEHICULAR TRAFFIC SHALL BE KEPT TO MINIMUM IN THE TREE PROTECTION THE FOLLOWING CONSTRUCTION ACTIVIITES ARE PROHIBITED: PLACING BACKFILL IN THE PROTECTED AREA; BURNING IN OR IN CLOSE PROXIMITY TO PROTECTED AREAS, FELLING TREES IN THE PROTECTED AREA; STORING SUPPLIES IN THE PROTECTED AREA; OR CONDUCT-TRENCHING OPERATIONS IN THE PROTECTED AREA.
5. ALL TREES TO BE REMOVED WITHIN 50 FEET OF THE TREE PROTECTION AREA ARE TO TO BE REMOVED IN A MANNER THAT WILL NOT DAMAGE THE TREES OR ROOTS OF THE TREES IN THE TREE PROTECTION AREA.


DETAIL 33 - SUPER SILT FENCE

Construction Specifications

Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6 foot fence shall be used, substituting 42 inch fabric and 6 foot length posts.

1. The poles do not need to set in concrete.
2. Chain link fence shall be fastened securely to the fence posts with wire ties or staples.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE H - 26 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE
N.T.S.

SEQUENCE OF CONSTRUCTION

1.	OBTAIN THE APPROPRIATE PERMITS AND REQUEST UTILITY MARKINGS FROM THE APPROPRIATE UTILITY OWNERS.	4 WEEKS	10.	BEGIN CLEARING AND GRUBBING REMAINDER OF SITE AND BEGIN GRADING.MAINTAIN ALL SEDIMENT CONTROL DEVICES.	4 WEEKS
2.	SCHEDULE AND CONDUCT A PRE CONSTRUCTION MEETING WITH THE ASSIGNED COUNTY INSPECTOR AND RESOLVE ANY ISSUES PRIOR TO BEGINNING.	2 WEEKS	11.	UPON COMPLETION OF ROUGH GRADING BEGIN UTILITY CONSTRUCTION. BEGIN CONSTRUCTION OF BATH HOUSE.	4 WEEKS
3.	INSTALL TREE PROTECTION FENCES.	1 WEEK	12.	UPON COMPLETION OF UNDERGROUND UTILITIES BEGIN CURB AND GUTTER CONSTRUCTION, POOLS, DECKS, ETC.	2 WEEKS
4.	INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE AND SUPER SILT FENCE AS SHOWN ON PLANS.	1 WEEK	13.	FINE GRADE AND BEGIN PAVING CONSTRUCTION (BASE COURSE ONLY).STABILIZE ALL AREAS UPON COMPLETION OF WORK IN THOSE AREAS.	2 WEEKS
5.	OBTAIN INSPECTOR APPROVAL FOR ALL INSTALLED SEDIMENT CONTROL DEVICES PRIOR TO CONTINUING.	1 WEEK	14.	COMPLETE BUILDING AND POOL CONSTRUCTION.	4 WEEKS
6.	BEGIN CONSTRUCTION OF STORMWATER POND RISER AND BARREL AS PER PLANS WITH THE NECESSARY MODIFICATIONS TO THE RISER FOR TEMPORARY STORMWATER MANAGEMENT/SEDIMENT CONTROL. INSTALL 6 INCH PVC AND DEWATERING DEVICE.	4 WEEKS	15.	UPON COMPLETE STABILIZATION OF ENTIRE SITE FLUSH ALL STORM DRAIN CLEAN. OBTAIN INSPECTOR APPROVAL PRIOR TO CONTINUING.	4 WEEKS
7.	GRADING OF POND SHALL BE ACCOMPLISHED AS PER MODIFIED GRADING ON THE SEDIMENT CONTROL PLAN.	2 WEEKS	16.	BEGIN RESTORATION OF STORMWATER MANAGEMENT POND AS PER THE CONSTRUCTION PLANS. ACHIEVE ALL FINAL GRADING AS PER THE GRADING PLANS AND REMOVE ALL TEMPORARY SEDIMENT/STORMWATER DEVICES FROM RISER. COMPLETE ANY REMAINING ITEMS PERTAINING TO RISER OR STORMWATER POND.	2 WEEKS
8.	OBTAIN INSPECTOR APPROVAL UPON COMPLETION OF POND WITH ALL TEMPORARY MODIFICATIONS PRIOR TO CONTINUING.	1 WEEK	17.	UPON COMPLETION OF ALL GRADING STABILIZE ALL LAWN AREAS. COMPLETE ANY REMAINING ITEMS STILL UN-FINISHED. APPLY SURFACE PAVING AFTER HEAVY EQUIPMENT HAS LEFT THE SITE.	1 WEEK
9.	UPON COMPLETE INSTALLATION OF ALL SEDIMENT CONTROL DEVICES APPLY TEMPORARY SEEDING TO STABILIZE EARTH AREAS.	2 WEEKS			

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] 10/4/94
DIRECTOR — DATE

[signature] 10/4/94
CHIEF, BUREAU OF ENGINEERING (initials) 10/4/94 — DATE

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

[signature] 10/17/94
DIRECTOR — DATE

[signature] 10/12/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

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

[signature] 10-6-94
COUNTY HEALTH OFFICER — DATE

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. '94

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL			
KENDALL RIDGE	3	2	5		
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
CMP 8111		NT	37	6	
WATER CODE			SEWER CODE		

CERTIFICATION BY THE DEVELOPER

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

[signature] 9/1/94
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) Dennis Mattey — DATE

CERTIFICATION BY THE ENGINEER

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

[signature] 8/25/94
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) JOHN CLAPSADDLE PE — DATE

( ) THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

APPROVED [signature] 9/29/94
U.S. SOIL CONSERVATION SERVICE — DATE

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

APPROVED [signature] 9/29/94
HOWARD SOIL CONSERVATION DISTRICT — DATE

STATE OF MARYLAND — JOHN WINFRED CLAPSADDLE — No. 16956 — REGISTERED PROFESSIONAL ENGINEER

revisions		
no.	description	date

prepared by:
The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

DETAILS

KENDALL RIDGE
COMMUNITY POOL

HOWARD COUNTY — MARYLAND

SCALE	
DRAWN	CHECKED
JAC	JWC
PROJ. NO.	DATE
J0905	4/94
SHEET	OF
11	15

SDP-94-65

LEGEND

DRAINAGE DIVIDE	
STORM DRAIN SYSTEM	21" RCP
EXISTING CONTOUR	364
PROPOSED CONTOUR	370
PROPOSED ELEVATION	+342.0
EXISTING TREES	
EXISTING TREE TO BE REMOVED	
MODIFIED PORTION OF TREE LINE	
SOIL GROUP	B
FLOW PATH	

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10/4/94

CHIEF, BUREAU OF ENGINEERING — DATE 10/4/94

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/17/94

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 10/12/94

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

COUNTY HEALTH OFFICER — DATE 10-6-94

OWNER
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PKWY
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER
COLUMBIA ASSOCIATES
10221 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 18 Aug. 94

NOTES

1) PARCEL F WAS CONSIDERED DEVELOPED FOR SIZING THE 18" RCP FROM BH-1 TO E-3. PARCEL F WAS CONSIDERED UNDEVELOPED (EXISTING CONDITIONS) FOR DESIGN OF INLETS I. 1 AND I. 4, AND PIPING FROM I. 4 TO POND. DEVELOPED DRAINAGE DIVIDE ENCLOSES THE FUTURE AREA DRAINING TO THE SYSTEM.

ADDRESS CHART	
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
KENDALL RIDGE	3 2	5

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
CHP 8111		NT	37	6	

WATER CODE — SEWER CODE

revisions

no.	description	date

prepared by:
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7930

STATE OF MARYLAND — JOHN WINFIELD GILMANDAVID — No. 16956 — REGISTERED PROFESSIONAL ENGINEER

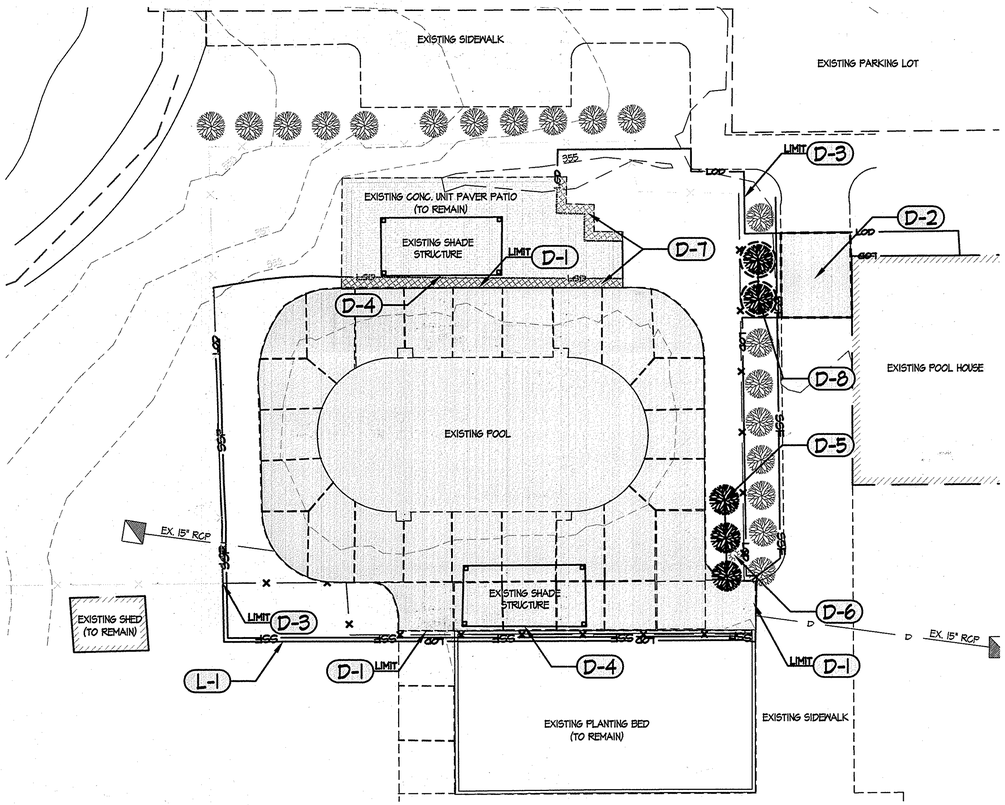
STORM DRAIN DRAINAGE AREA MAP

KENDALL RIDGE
COMMUNITY POOL

HOWARD COUNTY — MARYLAND

SCALE	
1" = 30'	
DRAW'N	CHECKED
PROJ. NO. J0905	DATE 4/94
SHEET 12	OF 15

SDP-94-65



1 DEMOLITION PLAN

1" = 10'

DEMOLITION NOTES

- D-1 REMOVE EXISTING POOL DECK TO LIMITS SHOWN
- D-2 REMOVE EXISTING WALK TO NEAREST JOINT. SEE POOL ARCHITECTS PLANS FOR LOCATION OF PROP. PLUMBING LINES.
- D-3 REMOVING EXISTING 4' FENCE TO LIMITS SHOWN
- D-4 REMOVE EXISTING SHADE STRUCTURES AND FOOTINGS BELOW GRADE. REPLACE WITH APPROVED COMPACTED FILL.
- D-5 REMOVE EXISTING SHRUBS
- D-6 REMOVE EXISTING LIGHT POLE
- D-7 REMOVE AND SALVAGE EXISTING DOUBLE HEADER COURSE OF CONCRETE UNIT PAVERS TO LIMITS SHOWN
- D-8 CAREFULLY REMOVE, BALL AND BURLAP PRIOR TO INSTALLATION OF POOL PLUMBING LINES. WATER PLANTS DURING CONSTRUCTION. TRANSPLANT IN EXISTING LOCATION AFTER INSTALLATION.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

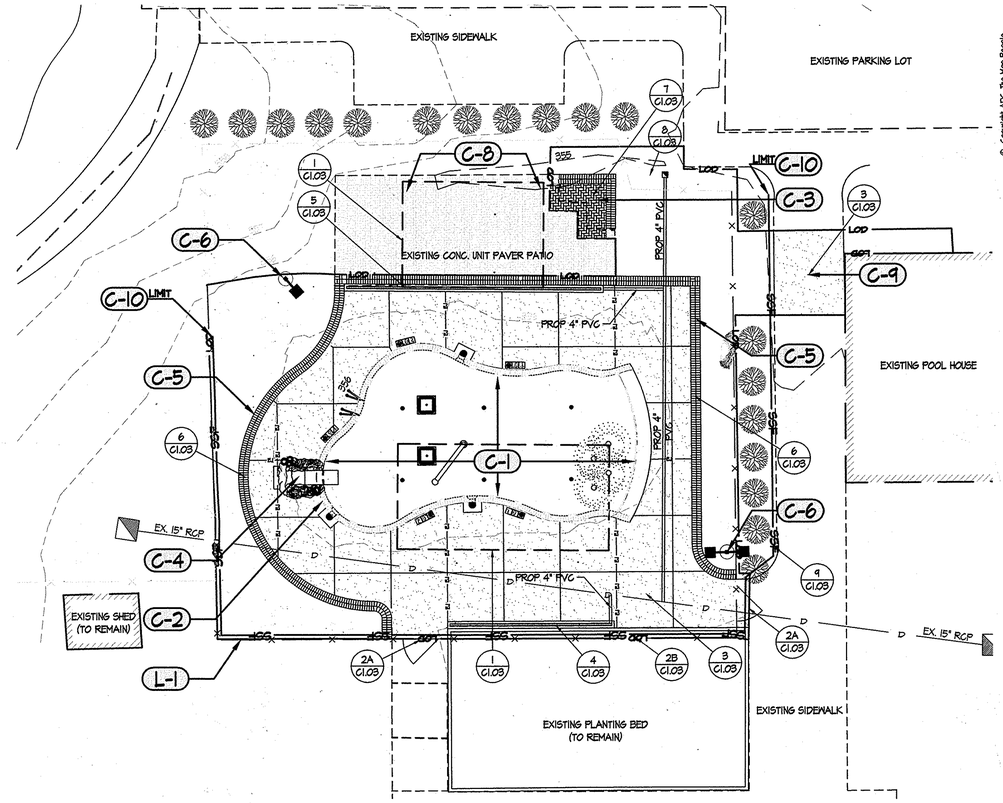
Definition
To stabilize disturbed soils with permanent vegetation.

Purpose
To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils.

Conditions Where Practice Applies
Exposed soils where ground cover is needed for 6 months or more.

Criteria

A. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).
1. General Specifications
   a. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
   b. Sod must be machine cut at a uniform soil thickness of ¾ inch, plus or minus ¼ inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
   c. Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
   d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
   e. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.
2. Sod Installation
   a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
   b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
   c. Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.
   d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.
3. Sod Maintenance
   a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
   b. After the first week, sod watering is required as necessary to maintain adequate moisture content.
   c. Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.



2 DETAIL REFERENCE & MATERIALS PLAN

1" = 10'

CONSTRUCTION NOTES

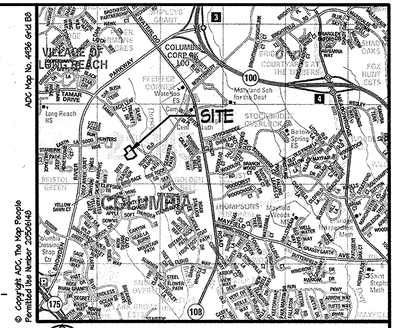
- C-1 PROPOSED POOL (SEE POOL DRAWINGS)
- C-2 PROPOSED COPING (SEE POOL DRAWINGS)
- C-3 PROPOSED CONCRETE PAVER PATIO EXPANSION
- C-4 PROPOSED SLIDE (SEE POOL DRAWINGS)
- C-5 DECORATIVE CONCRETE UNIT PAVER BANDING
- C-6 PROPOSED LIGHT FIXTURE (SEE MEP DRAWINGS)
- C-7 ALL GRATES SHALL BE ACO TYPE 4450 GREY PLASTIC LONGITUDINAL PART # 47385.
- C-8 RESTORE BRICK PAVERS OVER SHADE STRUCTURE FOUNDATIONS PER DETAILS.
- C-9 INSTALL CONCRETE WALK. SEE POOL ARCHITECTS PLANS FOR LOCATION OF PROP. PLUMBING LINES.
- C-10 INSTALL SUPER SILT FENCE AS SHOWN ON PLANS

GENERAL NOTES

- G-1 ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL MEET HOWARD COUNTY STANDARDS AND SPECIFICATIONS.

LIMIT OF DISTURBANCE NOTE

- L-1 AREA OF LIMIT OF DISTURBANCE (LOD) = 4,491 SF, AND THEREFORE IS EXEMPT FROM STORMWATER MANAGEMENT. CONTRACTOR MUST MAINTAIN LOD BELOW 5,000 SF AT ALL TIMES DURING CONSTRUCTION. ANY ADDITIONAL DISTURBANCE OVER 5,000 SF (INCLUDING THIS PLAN) SHALL MEET CURRENT STORMWATER MANAGEMENT REQUIREMENTS.



VICINITY MAP

1"=2000'

LEGEND

- EXISTING CONTOURS
- EXISTING SHRUBS
- EXISTING WALK
- EXISTING ROAD
- EXISTING LIGHTING
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING STORM DRAIN
- EXISTING SHRUBS TO BE REMOVED
- EXISTING SHRUBS TO BE REMOVED AND TRANSPLANTED
- EXISTING PAVING TO BE REMOVED
- EXISTING FENCE TO BE REMOVED
- PROPOSED LIGHTING
- PROPOSED EXPANSION JOINT
- PROPOSED WALK
- PROPOSED DECORATIVE CONCRETE UNIT PAVER BANDING
- PROPOSED CONCRETE UNIT PAVING
- PROPOSED FENCE
- LIMIT OF DISTURBANCE
- SUPER SILT FENCE
- PROPOSED STORM DRAIN
- DETAIL REFERENCE

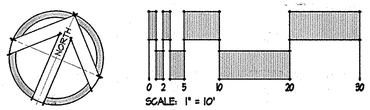
DATA SOURCES (SHEETS 13 & 14 ONLY)

EXISTING CONDITIONS SHOWN ON THESE PLANS ARE FROM A FIELD RUN SURVEY PREFORMED BY HIGHLAND SURVEY ASSOCIATES, INC., DATED 1/7/15.

COORDINATES SHOWN HEREON ARE BASED ON THE MARYLAND COORDINATE SYSTEM NAD 1983/2011 AND WERE ESTABLISHED BY GPS OBSERVATION. THE ELEVATIONS AND THE CONTOURS SHOWN HEREON ARE BASED ON NAVD 88 VERTICAL DATUM AND WERE ESTABLISHED BY GPS OBSERVATION . BOTH HORIZONTAL AND VERTICAL DATUMS ARE REFERRED TO THE FOLLOWING HOWARD COUNTY SURVEY CONTROL STATIONS:

P.K. NAIL
NORTHING: 554612.812
EASTING: 1360163.656
ELEVATION: 365.616

8" X 3/8" GALV. NAIL
NORTHING: 554269.436
EASTING: 1360242.103
ELEVATION: 355.901



APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 4/9/15
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 4.8.15
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 4.09.15

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER — DATE 4/6/15
HOWARD COUNTY HEALTH DEPARTMENT

ADDRESS / PERMIT INFORMATION
PARCEL 3
ADDRESS: 8245 TAMAR DRIVE

OWNER:
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE, SUITE 100
COLUMBIA, MD 21044
PHONE (410) 381-0541

DEVELOPER:
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PARKWAY
COLUMBIA MARYLAND 21044
PHONE (410) 422-6370

SITE RESOURCES incorporated
Comprehensive Land Planning & Site Design Services
14315 Jarrettsville Pike • Phoenix, Maryland 21131
(410) 683-3388 • Fax (410) 683-3389

STATE OF MARYLAND — SEAN F. EDWARDS — No. 30341 — 3-17-15

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. 30341, EXPIRATION DATE: 03/17/15.

DES: BVM	SRI	4	REVISE WADE POOL. ADD SHEETS 13, 14, & 15	02/15
DRN: BVM				
CHK: AFE				
DATE: 02/20/15	BY	NO.	REVISION	DATE

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
VILLAGE OF LONG REACH			3 / 2	5	
PLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
CMP 811		NT	0031	06	6066.02
WATER CODE			SEWER CODE		

DEMOLITION, DETAIL REFERENCE, & MATERIALS PLAN
KENDALL RIDGE POOL

OWNER: COLUMBIA ASSOCIATION

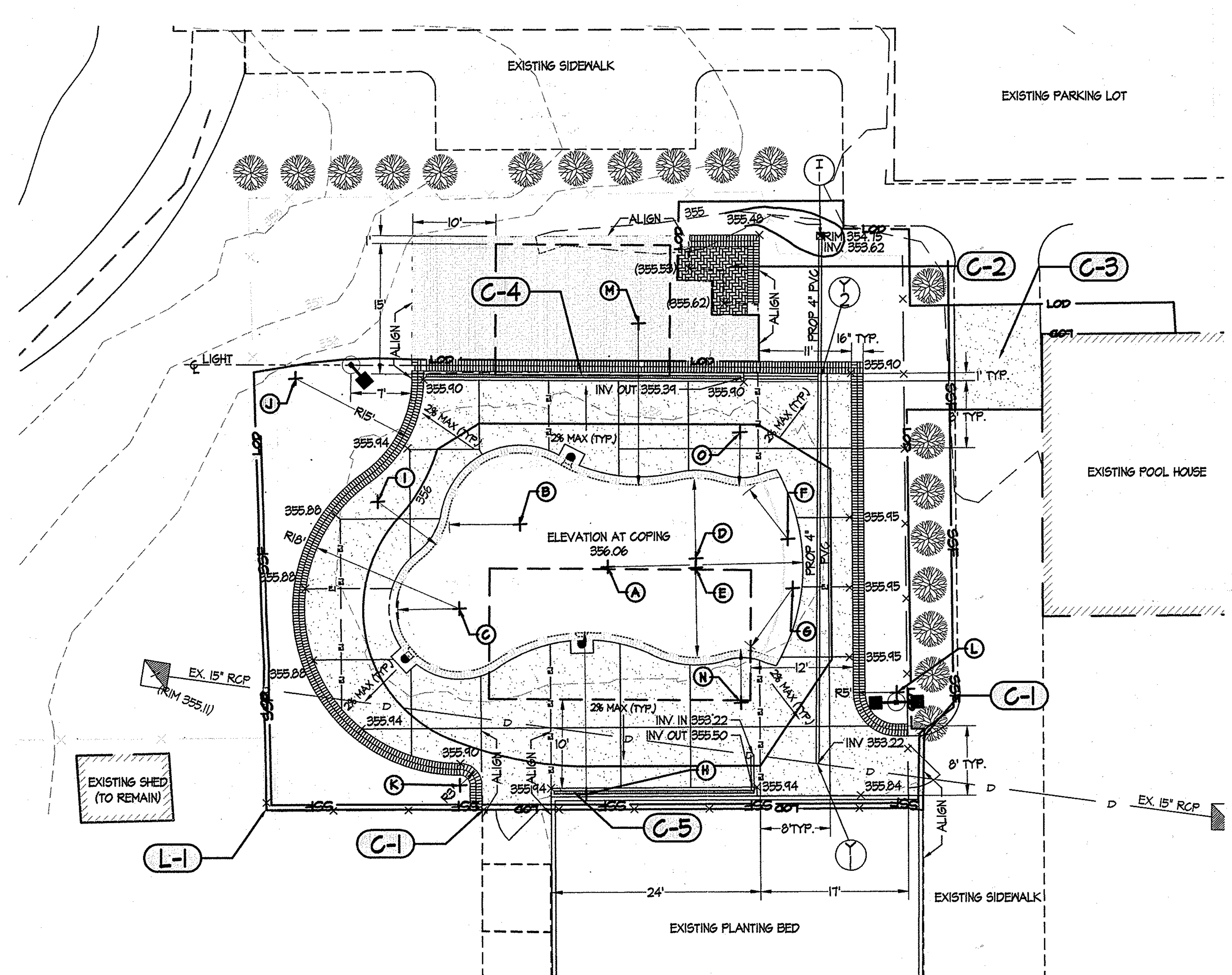
SRI NO: 14058 — HOWARD COUNTY, MARYLAND

SCALE 1" = 10'

C1.01
SHEET 13 OF 15

SDP-94-065

Z:\14\14058-CA-Kendall Ridge Swimming Pool Renovations\Dwg\C1.01 Demolition, Detail Reference & Materials Plan.dwg-Layout1 Mar 16, 2015 04:05pm bvm



LAYOUT, GRADING, & DRAINAGE PLAN

1" = 10'

LAYOUT COORDINATES

POINT	COORDINATE
A	N: 559399.18 E: 1368201.45
B	N: 559399.72 E: 1368190.24
C	N: 559388.05 E: 1368187.69
D	N: 559404.07 E: 1368210.35
E	N: 559403.11 E: 1368210.72
F	N: 559410.33 E: 1368219.16
G	N: 559405.35 E: 1368221.90
H	N: 559388.05 E: 1368209.46
I	N: 559395.69 E: 1368174.22
J	N: 559405.00 E: 1368159.96
K	N: 559369.41 E: 1368195.74
L	N: 559399.00 E: 1368237.62
M	N: 559426.34 E: 1368193.60
N	N: 559396.87 E: 1368221.64
O	N: 559419.44 E: 1368209.26

NOTE: COORDINATES REFER TO CENTER POINT(S) OF ASSOCIATED RADII. SEE POOL ARCHITECTS PLANS FOR POOL DIMENSIONS

GENERAL NOTES

G-1 ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL MEET HOWARD COUNTY STANDARDS AND SPECIFICATIONS.

LIMIT OF DISTURBANCE NOTE

L-1 AREA OF LIMIT OF DISTURBANCE (LOD) = 4,491 SF, AND THEREFORE IS EXEMPT FROM STORMWATER MANAGEMENT. CONTRACTOR MUST MAINTAIN LOD BELOW 5,000 SF AT ALL TIMES DURING CONSTRUCTION. ANY ADDITIONAL DISTURBANCE OVER 5,000 SF (INCLUDING THIS PLAN) SHALL MEET CURRENT STORMWATER MANAGEMENT REQUIREMENTS.

CONSTRUCTION NOTES

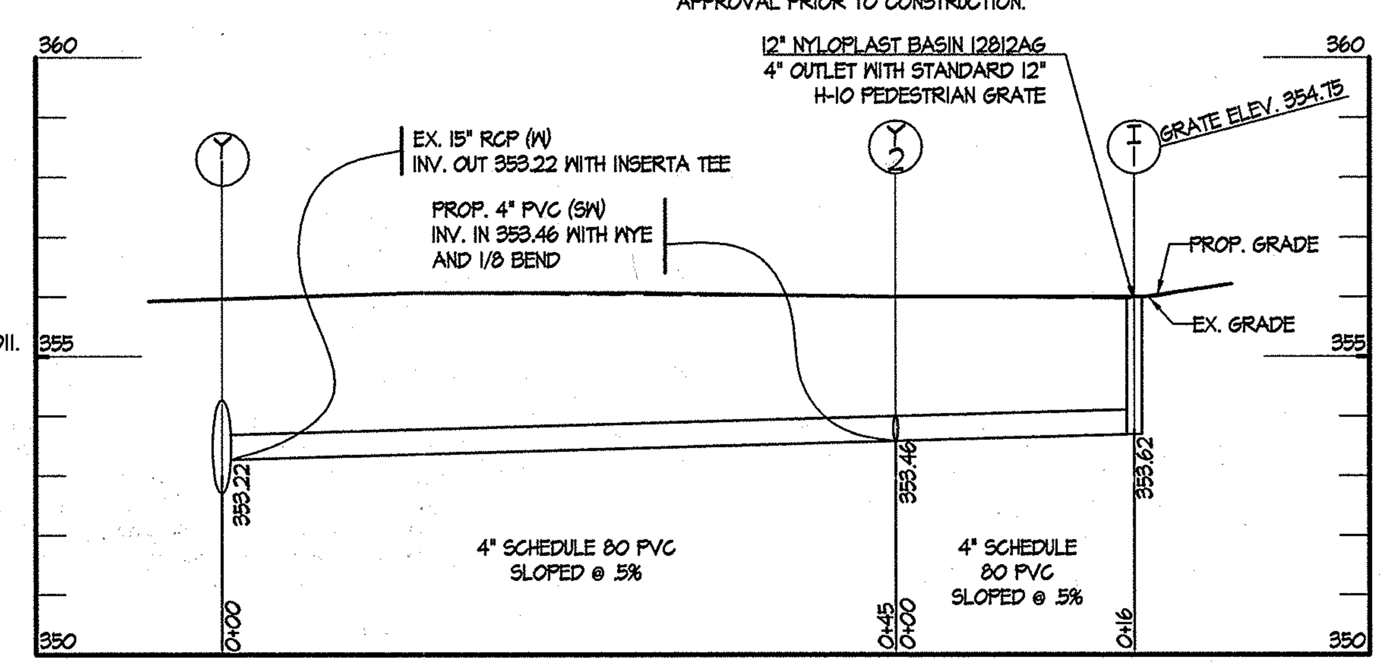
C-1 MEET EXISTING PAVEMENT IN LINE AND GRADE

C-2 CONCRETE UNIT PAVING, MATCH EXISTING PATTERN

C-3 CONCRETE WALK, MATCH EXISTING IN LINE AND GRADE. SEE POOL ARCHITECTS PLANS FOR LOCATION OF PROP. PLUMBING LINES.

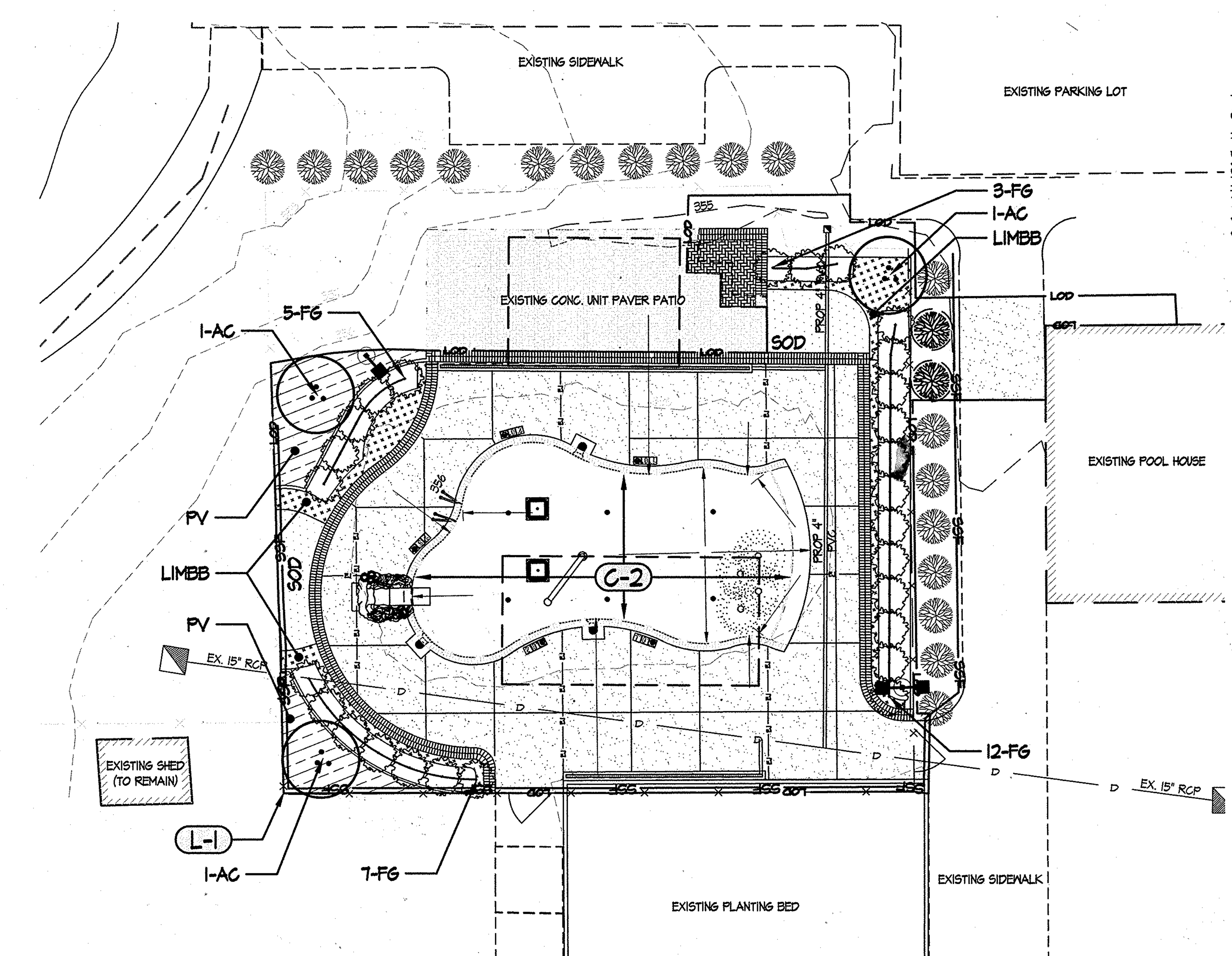
C-4 INSTALL ACO-K100 TRENCH DRAIN SECTIONS 1 THROUGH 11 AS OUTLINED IN MANUFACTURER'S PARTS TABLE. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.

C-5 INSTALL ACO-K100 TRENCH DRAIN SECTIONS 1 THROUGH 7 AS OUTLINED IN MANUFACTURER'S PARTS TABLE. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.



PIPE PROFILE

SCALES: HORIZ. 1" = 10'
VERT. 1" = 2.5'



PLANTING PLAN

1" = 10'

LANDSCAPE NOTES

(THESE NOTES APPLY TO ALL PLANTING IN THIS CONTRACT)

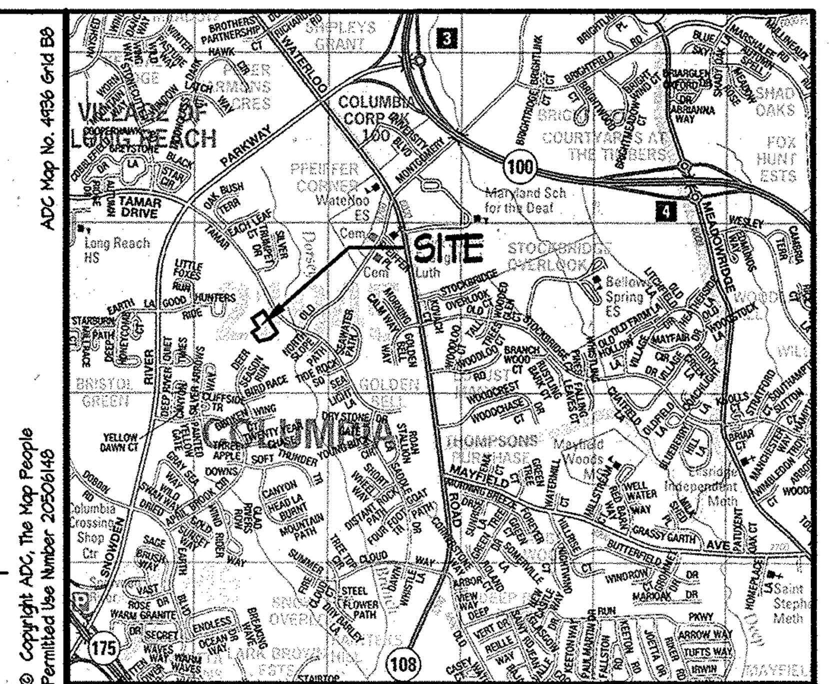
1. QUANTITIES SHOWN ON THE PLANT LIST ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. SYMBOLS ON THE PLAN SHALL TAKE PRECEDENCE. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES TO HIS OWN SATISFACTION.
2. PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
3. PLANT MATERIAL SHALL BE TAGGED AT THE SOURCE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE UNLESS THE REQUIREMENT IS SPECIFICALLY WAIVED.
4. LOCATIONS OF ALL PLANT MATERIAL SHALL BE STAKED FOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
5. ALL SHRUB AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PREPARED BEDS MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILED AND SPECIFIED. REFER TO PLANTING DETAILS ON SHEET 6 OF 15.
6. PLANTING BEDS SHALL HAVE POSITIVE DRAINAGE WITH A MINIMUM 2% SLOPE.
7. CONTRACTOR SHALL VERIFY ACCURACY OF BASE INFORMATION AND EXISTING CONDITIONS AND UTILITIES IN THE FIELD TO HIS OWN SATISFACTION, PRIOR TO PLACING HIS BID. UTILITIES BID SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.
8. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING PLANTING AND CONSTRUCTION.
9. DAMAGE TO EXISTING CONDITIONS AND UTILITIES SHALL BE REPAIRED AND RESTORED AT THE EXPENSE OF THE CONTRACTOR.
10. ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND SHALL CONFORM TO AMERICAN NURSERY & LANDSCAPE ASSOCIATION'S AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1.

MINIMUM LANDSCAPE MAINTENANCE REQUIREMENTS

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

PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY	COMMENTS
FG	FOTHERGILLA GARDENII	WITCH ALDER	36" HT CONT.	AS SHOWN	27	5-CANE MINIMUM, FULLY ROOTED CONTAINER
AC	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	8'-10' HT	-	3	MATCH SPECIMENS, MULTI-STEM, 3 TRUNKS, FULL
PV	PANCIUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCHGRASS	#1 CONT.	24" O.C.	60	FULLY ROOTED CONTAINER
LIMBB	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILY TURF	1 PINT	8" O.C.	530	FULLY ROOTED PLUG, MINIMUM 5" DEEP PLUG

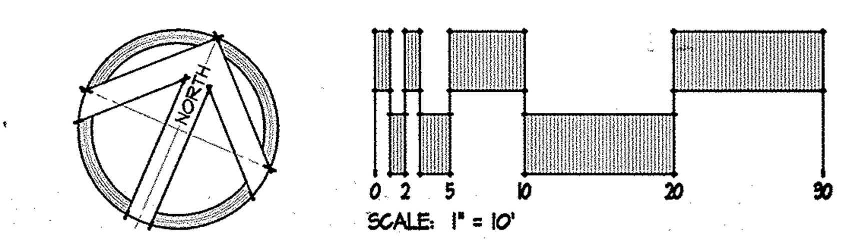


VICINITY MAP

1"=2000'

LEGEND

SYMBOL	DESCRIPTION
350 / 348	EXISTING CONTOURS
	EXISTING SHRUBS
	EXISTING WALK
	EXISTING ROAD
	EXISTING LIGHTING
CLF — CLF	EXISTING FENCE
	EXISTING BUILDING
EX. 15" SD	EXISTING STORM DRAIN
	PROPOSED WALK
	PROPOSED CONCRETE UNIT PAVING
	PROPOSED DECORATIVE CONCRETE UNIT PAVER BANDING
	PROPOSED FENCE
	PROPOSED LIGHTING
350 / 348	PROPOSED CONTOURS
(220.8) ← EXISTING; 220.8 ← PROPOSED	SPOT ELEVATIONS
LOD — LOD	LIMIT OF DISTURBANCE
SSF	SUPER SILT FENCE
PROP. 15" SD	PROPOSED STORM DRAIN
	PROPOSED SHRUBS
	TRANSPLANTED SHRUBS
	PROPOSED SOD
	PROPOSED GROUNDCOVER
	COORDINATE LOCATION



SCALE: 1" = 10'

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 4/9/15

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 4-8-15

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 4-09-15

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

for COUNTY HEALTH OFFICER, HOWARD COUNTY HEALTH DEPARTMENT — DATE 4/6/15

ADDRESS / PERMIT INFORMATION
PARCEL 5
ADDRESS: 8245 TAMAR DRIVE
OWNER:
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE, SUITE 100
COLUMBIA, MD 21044
PHONE (410) 381-0591
DEVELOPER:
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PARKWAY
COLUMBIA MARYLAND 21044
PHONE (410) 922-6370

SITE RESOURCES incorporated
Comprehensive Land Planning & Site Design Services
14315 Jarrettsville Pike • Phoenix, Maryland 21131
(410) 683-3388 • fax (410) 683-3389

STATE OF MARYLAND — ALBERT F. EDWARDS — PROFESSIONAL ENGINEER — 16144

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. 16144, EXPIRATION DATE: 08/19/16.

DES: BVW	SRI	4	REVISE WADE POOL. ADD SHEETS 13, 14, & 15	02/15
DRN: BVW				
CHK: AFE				
DATE: 02/20/15	BY	NO.	REVISION	DATE

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
VILLAGE OF LONG REACH			3 / 2		5
PLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
CMP 8111		NT	0037	06	6066.02
WATER CODE			SEWER CODE		

LAYOUT, DRAINAGE, GRADING, AND PLANTING PLAN

KENDALL RIDGE POOL

OWNER: COLUMBIA ASSOCIATION

SRI NO: 14058 — HOWARD COUNTY, MARYLAND

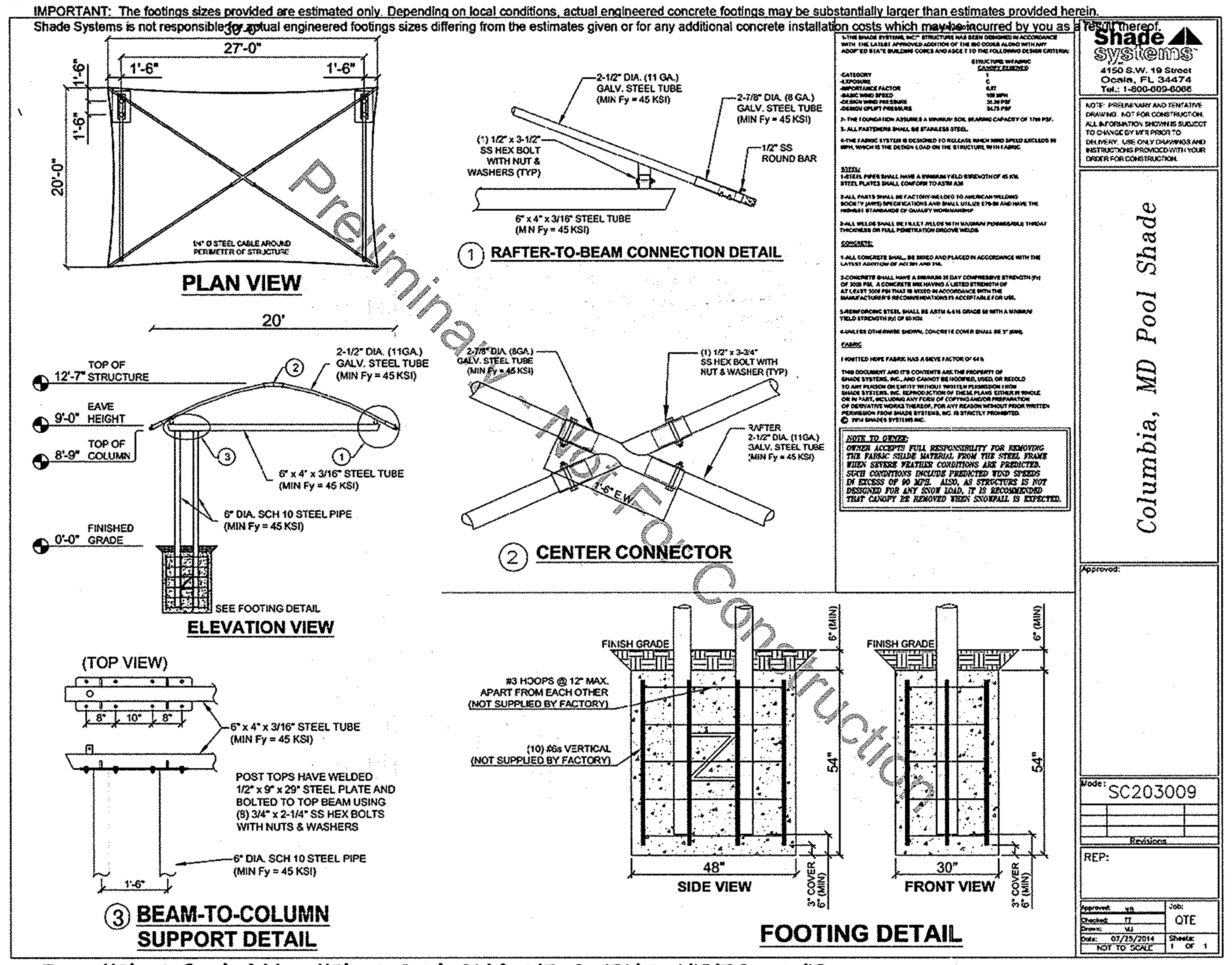
SCALE 1" = 10'

C1.02

SHEET 14 OF 15

SDP-94-065

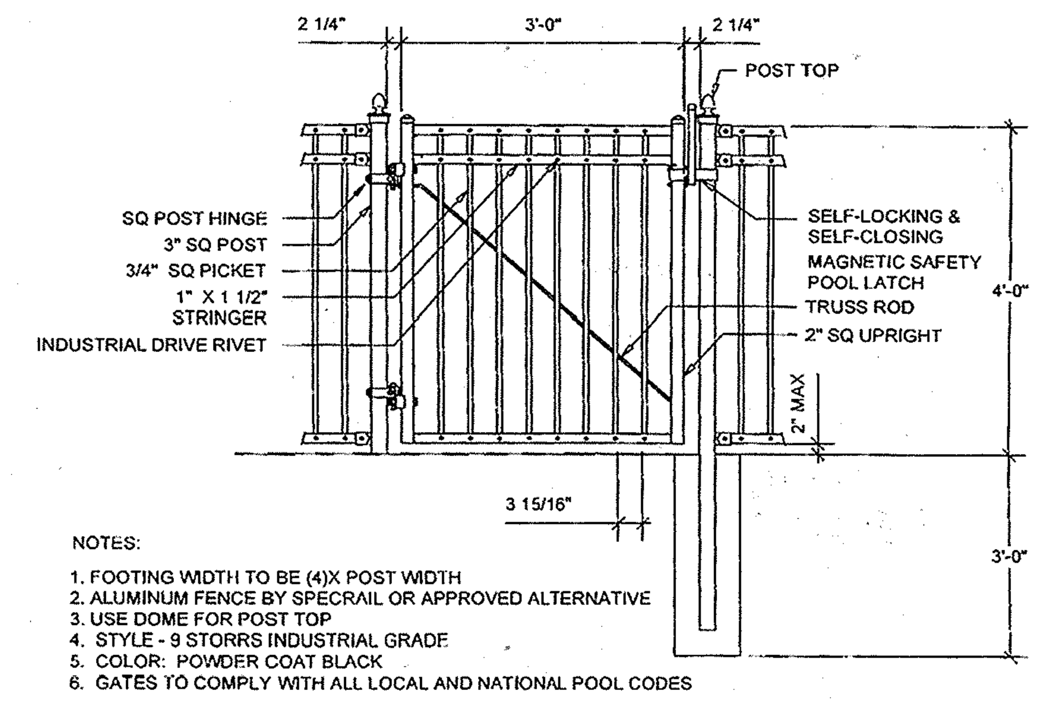
Z:\14\14058-CA-Kendall Ridge Swimming Pool Renovations\Dwg\C1.02 Layout, Grading, Drainage & Planting Plan.dwg-Layout1 Mar 16, 2015 04:08pm bvw



NOTES:
1. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
2. CONDITION VARIES PER LOCATION, TOP OF CONCRETE FOOTING SHALL MEET BOTTOM OF COMPACTED AGGREGATE BASE OF PROPOSED PAVEMENT SECTION. SEE SETAILS 3 AND 7 THIS SHEET.

1 15' X 30' AND 15' X 20' SHADE STRUCTURES, TYP.

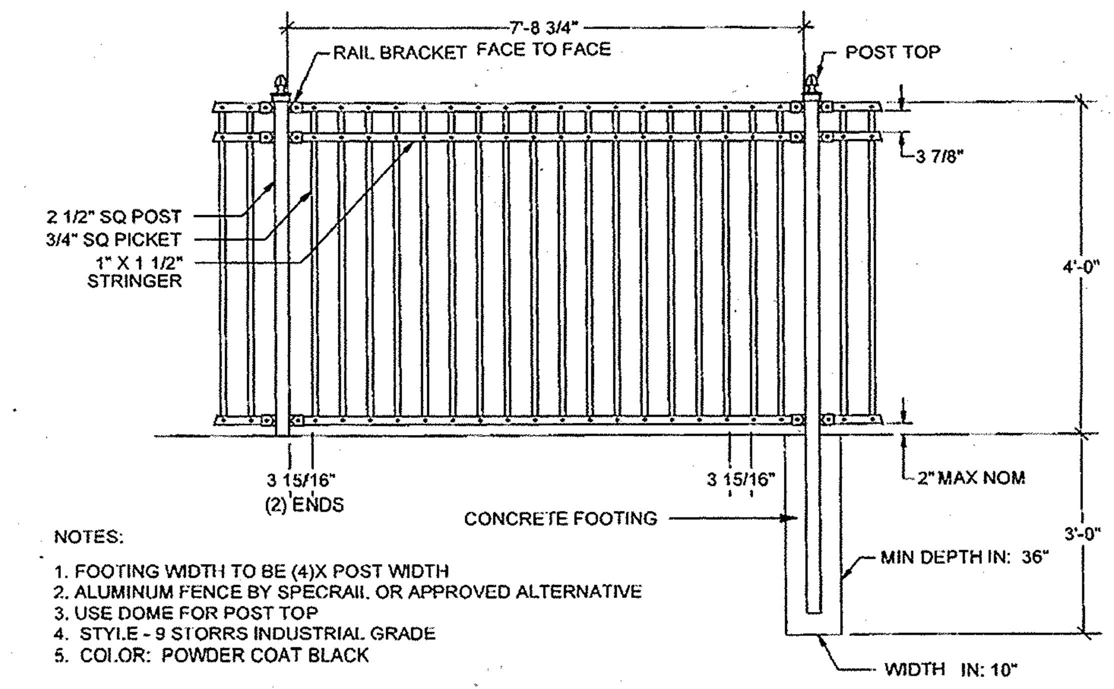
NOT TO SCALE



NOTES:
1. FOOTING WIDTH TO BE (4)X POST WIDTH
2. ALUMINUM FENCE BY SPECRAIL OR APPROVED ALTERNATIVE
3. USE DOME FOR POST TOP
4. STYLE - 9 STORRS INDUSTRIAL GRADE
5. COLOR: POWDER COAT BLACK
6. GATES TO COMPLY WITH ALL LOCAL AND NATIONAL POOL CODES

2A GATE DETAIL

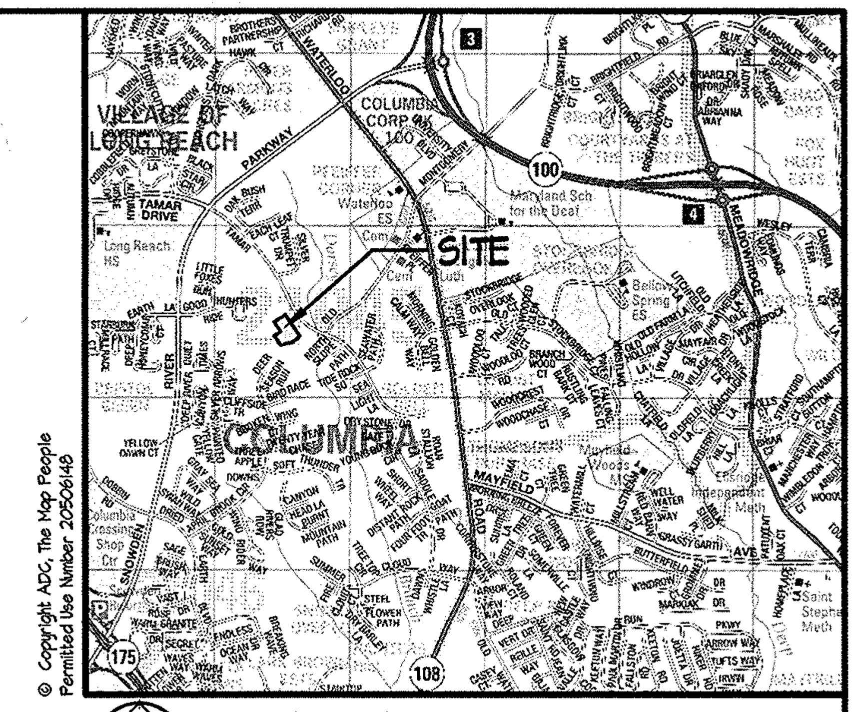
NOT TO SCALE



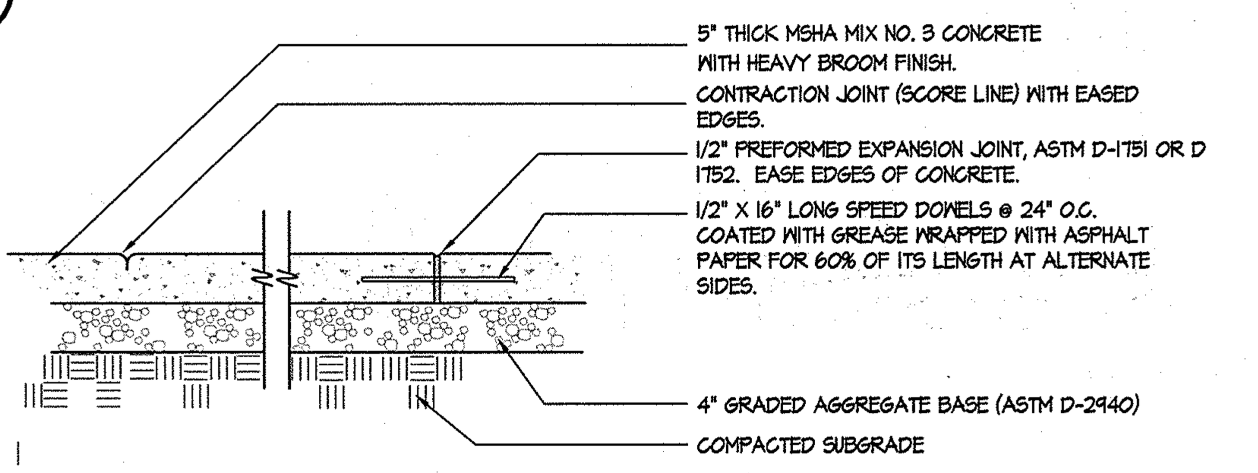
NOTES:
1. FOOTING WIDTH TO BE (4)X POST WIDTH
2. ALUMINUM FENCE BY SPECRAIL OR APPROVED ALTERNATIVE
3. USE DOME FOR POST TOP
4. STYLE - 9 STORRS INDUSTRIAL GRADE
5. COLOR: POWDER COAT BLACK

2B FENCE DETAIL

NOT TO SCALE



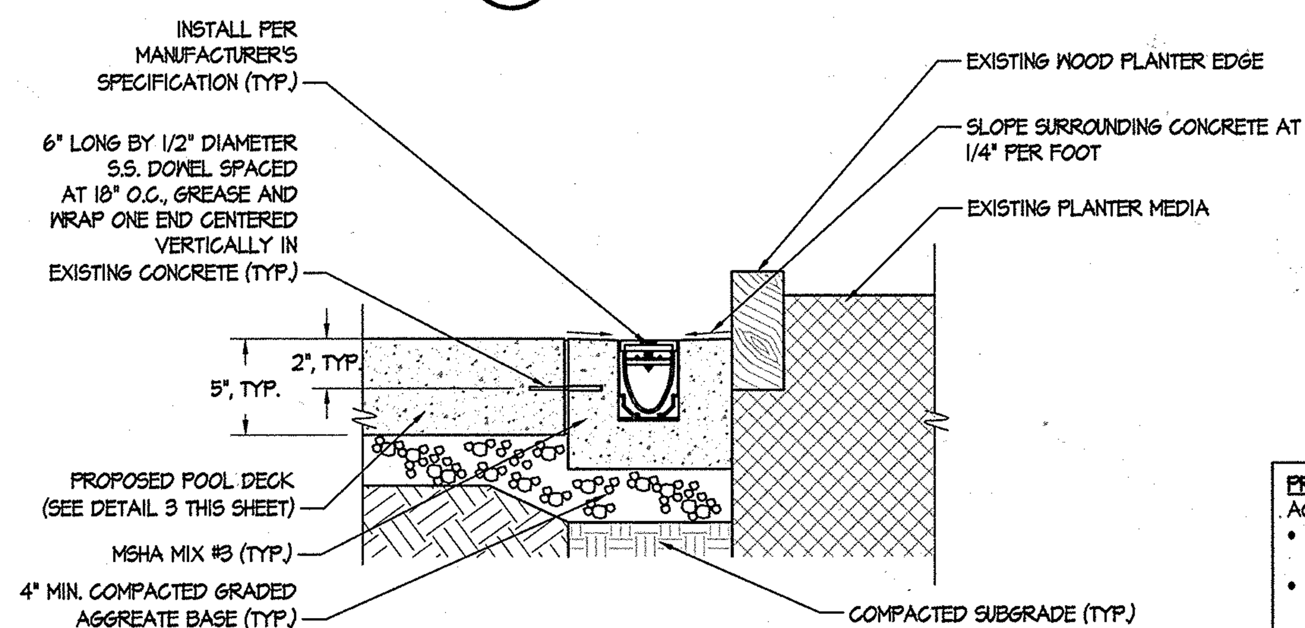
VICINITY MAP 1"=2000'



NOTES:
1. Place expansion joints where indicated on plan and at the end of each contiguous pour.
2. Place contraction joints where indicated on plan.
3. Provide expansion joints where pour meets existing concrete paving or curb.
4. Expansion joints to be recessed 1/4" below surface of concrete paving.
5. When sidewalk abuts back of street curb, walk shall be 1/4" above top of curb.
6. When sidewalk abuts existing concrete walk, core drill and install dowels per detail.
7. Match score pattern of adjacent sidewalk where practical, unless otherwise shown.
8. Unless otherwise shown on plan, contractor to submit layout of proposed contraction expansion joints for approval prior to pouring concrete.
9. Concrete to be electrically grounded to surrounding subsoil. (See MEP plans)

3 CONCRETE POOL DECK

NOT TO SCALE



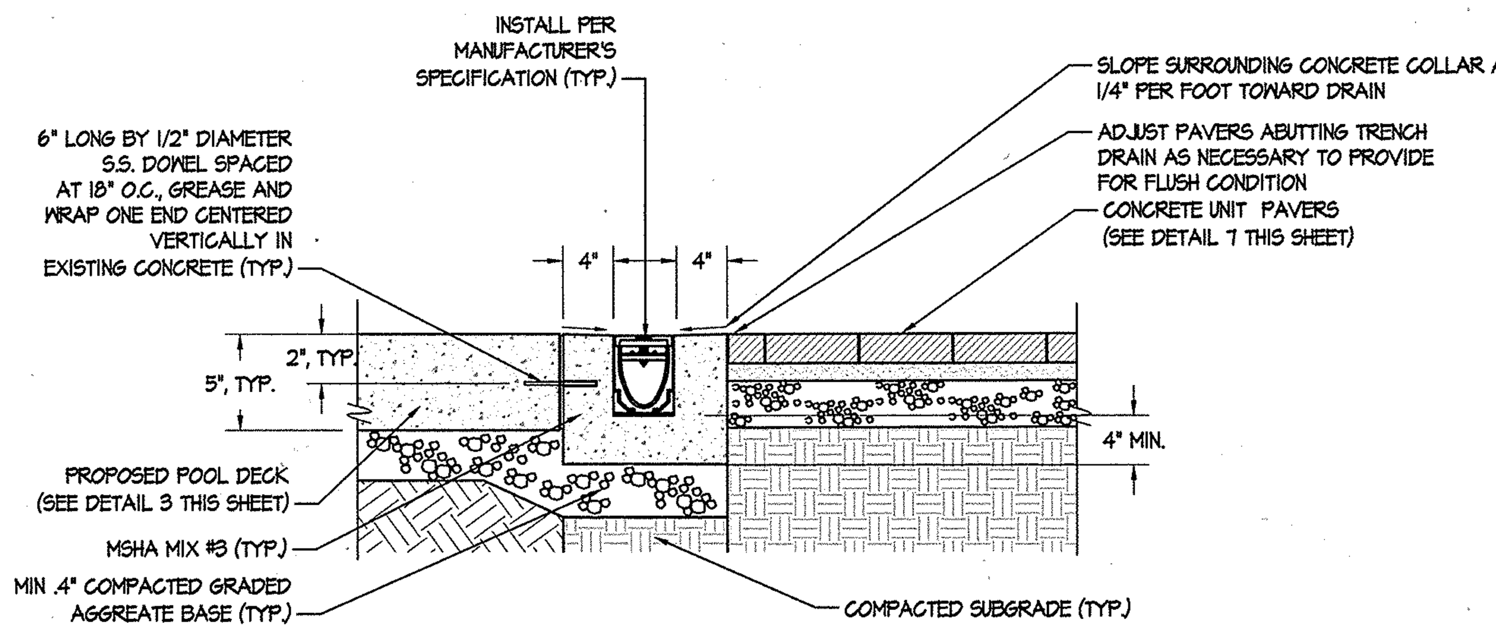
PRODUCT INFO:
ACO DRAIN - KLASSIK DRAIN
- ACO K100 GALVANIZED TRENCH DRAIN
- TYPE 4950 GREY PLASTIC LONGITUDINAL PART # 97385. PLASTIC LONGITUDINAL GRATES

ACO POLYMER PRODUCTS, INC.
1-800-543-4764
WWW.ACOUSA.COM
INFO@ACOUSA.COM

NOTES:
1. End of trench run shall terminate with 4" inlet/outlet cap ACO K100 Part# 96822
2. Bottom knockout and 4" DWV 1/4 bend PVC pipe shall be provided at end of trench run for connection to existing storm drain.

4 TRENCH DRAIN AT POOL DECK AND EXISTING PLANTER

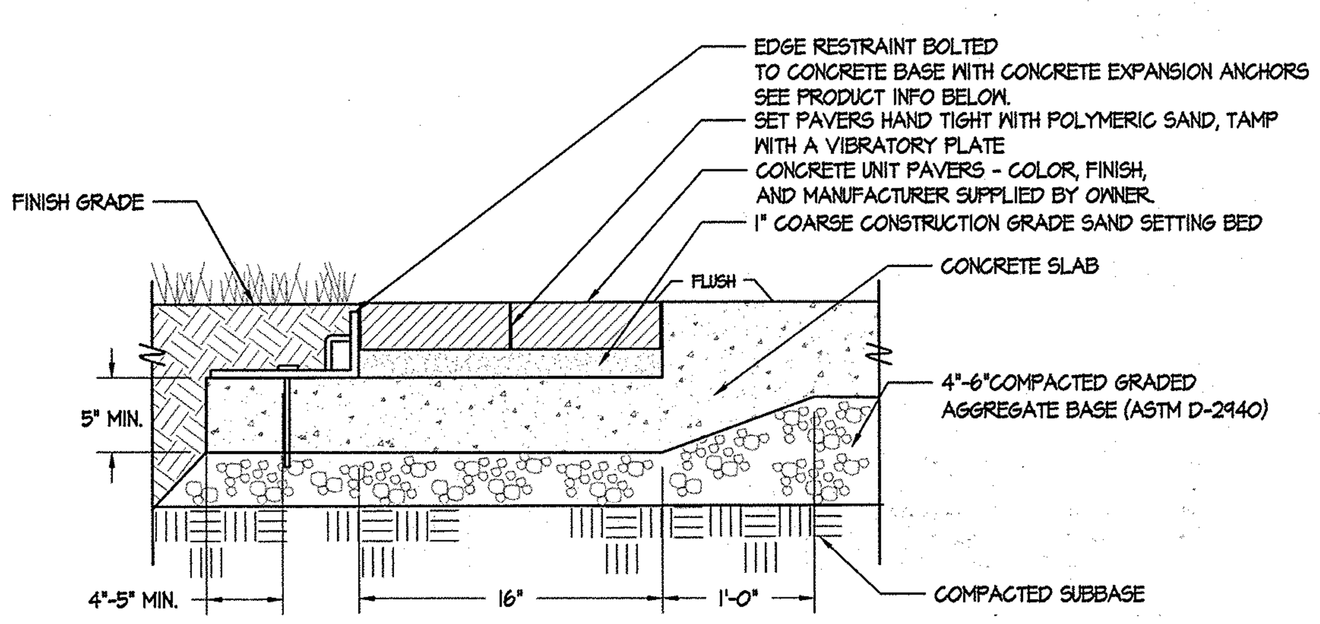
NOT TO SCALE



NOTES:
1. End of trench run shall terminate with 4" inlet/outlet cap ACO K100 Part# 96822

5 TRENCH DRAIN AT POOL DECK AND PATIO

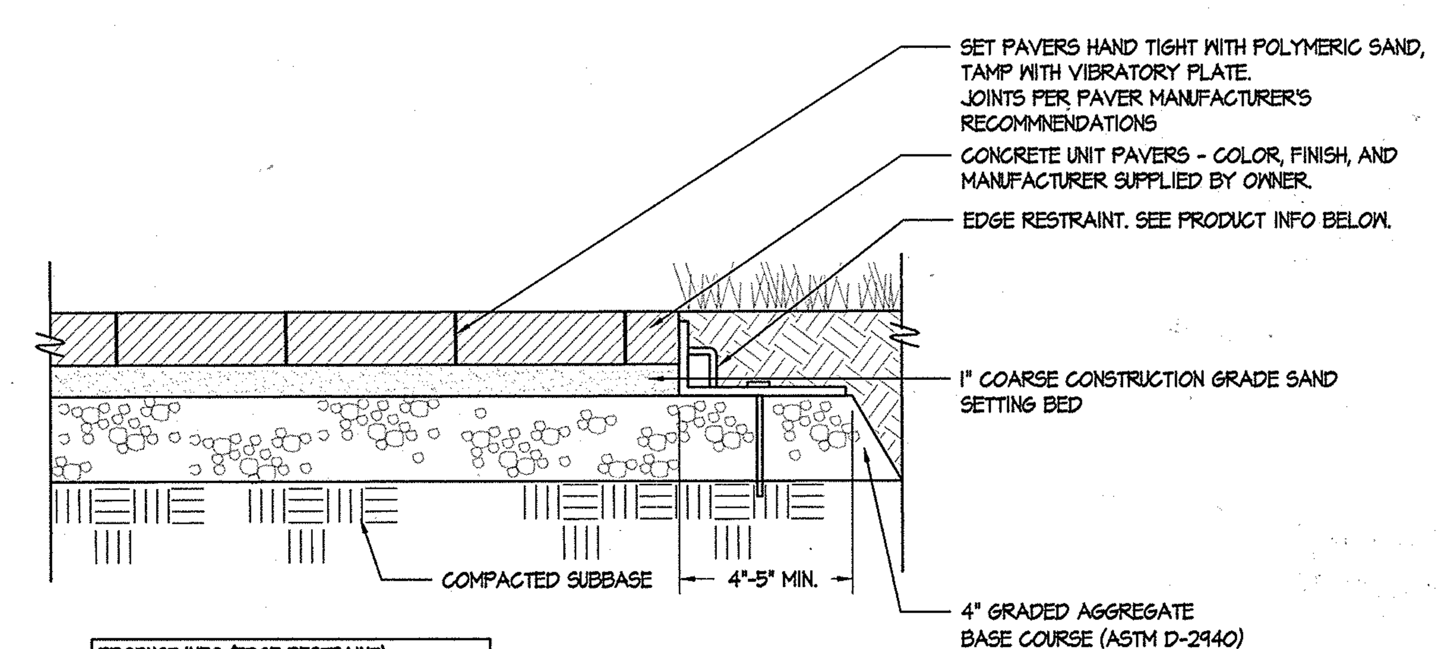
NOT TO SCALE



PRODUCT INFO (EDGE RESTRAINT):
HANOVER EDGE 300 - OR APPROVED EQUAL
HANOVER ARCHITECTURAL PRODUCTS
717.637.0500
WWW.HANOVERPAVERS.COM

6 CONCRETE PAVER BAND AT POOL DECK

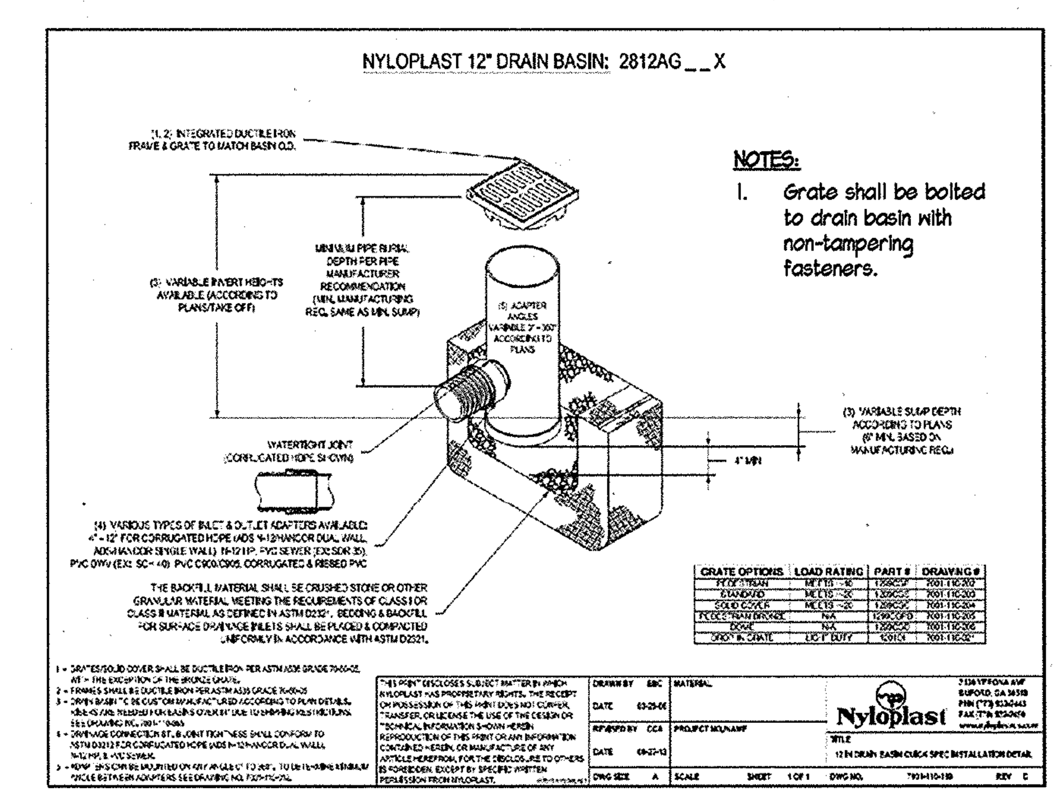
NOT TO SCALE



PRODUCT INFO (EDGE RESTRAINT):
HANOVER EDGE 300 - OR APPROVED EQUAL
HANOVER ARCHITECTURAL PRODUCTS
717.637.0500
WWW.HANOVERPAVERS.COM

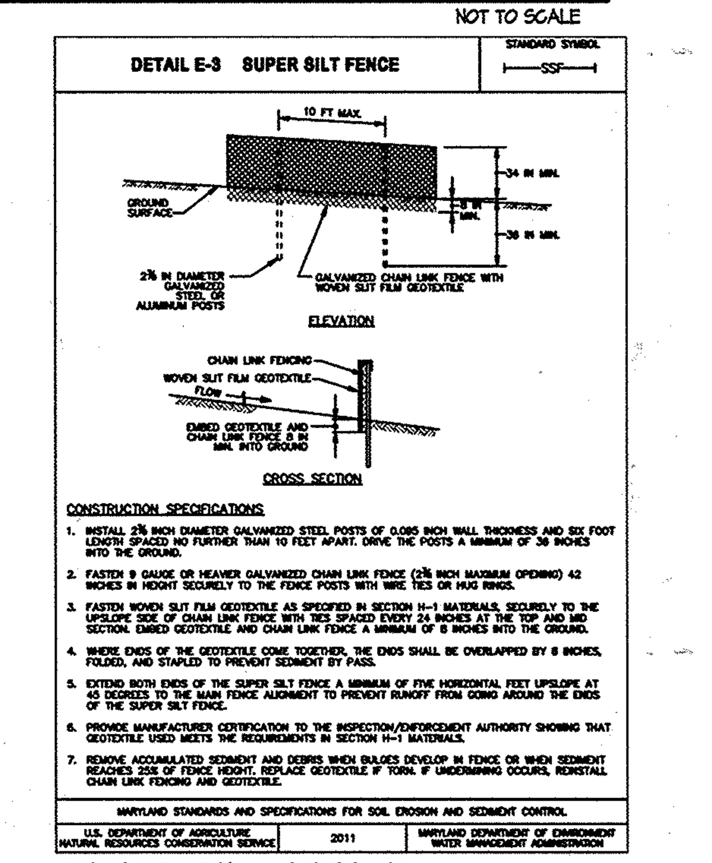
7 CONCRETE UNIT PAVERS

NOT TO SCALE



8 AREA DRAIN

NOT TO SCALE



9 SUPER SILT FENCE

NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING	DATE
DIRECTOR	7/9/15
CHIEF, DEVELOPMENT ENGINEERING DIVISION	4-8-15
CHIEF, DIVISION OF LAND DEVELOPMENT NH	4-09-15

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

For COUNTY HEALTH OFFICER — 4/6/15 DATE
HOWARD COUNTY HEALTH DEPARTMENT

ADDRESS / PERMIT INFORMATION
PARCEL 5
ADDRESS: 8245 TAMAR DRIVE
OWNER:
COLUMBIA ASSOCIATION
10221 WINCOPIN CIRCLE, SUITE 100
COLUMBIA, MD 21044
PHONE (410) 381-0591
DEVELOPER:
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATUXENT PARKWAY
COLUMBIA MARYLAND 21044
PHONE (410) 922-6370

SITE RESOURCES incorporated
Comprehensive Land Planning & Site Design Services
14315 Jarrettsville Pike • Phoenix, Maryland 21131
(410) 683-3388 • fax (410) 683-3389

STATE OF MARYLAND — ALBERT F. EDWARDS — PROFESSIONAL ENGINEER — 17-15
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. 16144, EXPIRATION DATE: 08/19/16.

	BY	NO.	REVISION	DATE
DES: BVW	SRI	4	REVISE WADE POOL. ADD SHEETS 13, 14, & 15	02/15
DRN: BVW				
CHK: AFE				
DATE: 02/20/15				

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
VILLAGE OF LONG REACH			3 / 2		5
PLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
CMP 8111		NT	0037	06	6066.02
WATER CODE			SEWER CODE		

SITE DETAILS
KENDALL RIDGE POOL
OWNER: COLUMBIA ASSOCIATION
SRI NO: 14058 — HOWARD COUNTY, MARYLAND

SCALE AS NOTED
C1.03
SHEET 15 OF 15

SDP-94-065

Z:\14\14058-CA-Kendall Ridge Swimming Pool Renovations\Dwg\C1.03 Site Details.dwg-Layout1 Mar 16, 2015 03:54pm bvw