

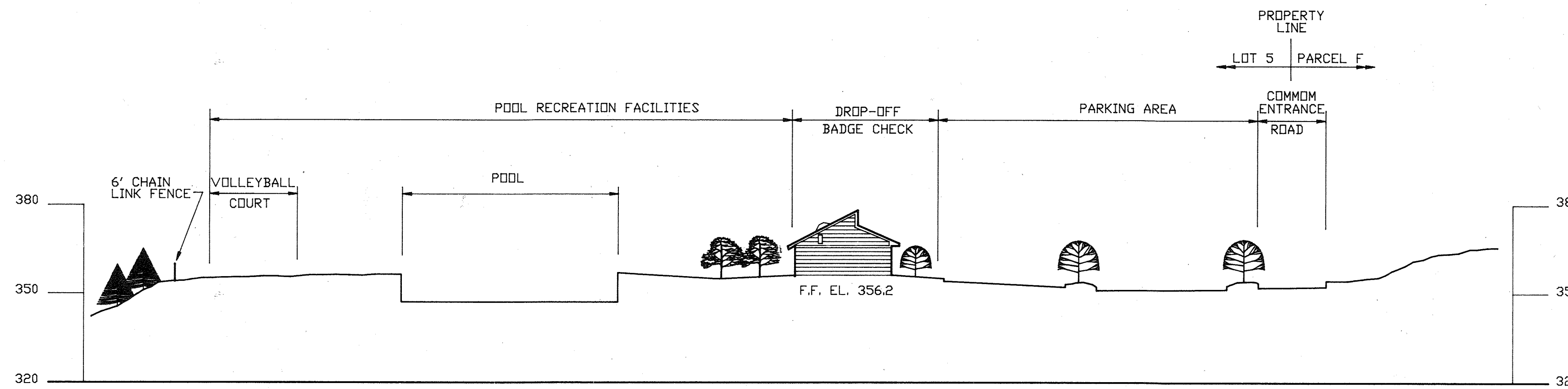
GENERAL NOTES

1. SURVEY DONE BY THE RBA GROUP, AUGUST 26, 1993, 2 FOOT CONTOUR INTERVAL.
2. ALL WORK SHALL BE PERFORMED 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 PRIOR 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 UNINTERRUPTED 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:

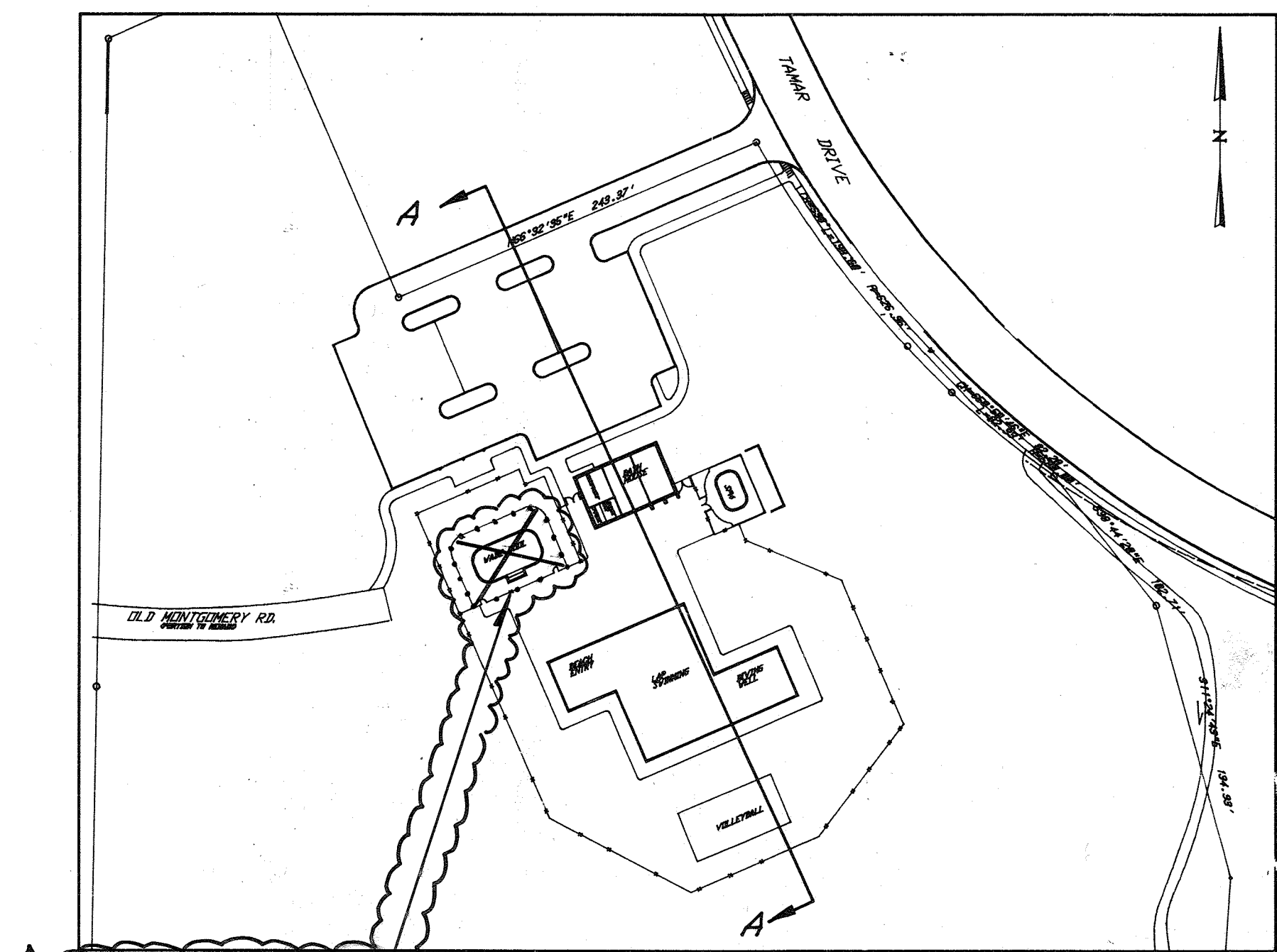
MISS UTILITY 1-(800) 257-7777
BALTIMORE GAS & ELECTRIC COMPANY (410) 954-6260
C & P TELEPHONE COMPANY (410) 393-3648

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 PERFORM 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 SEDIMENT 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 STREET, ROAD OR HIGHWAY RIGHT-OF-WAY, OR WITHIN 25 FEET OF ANY PROPERTY LINE EXCEPT, HOWEVER, IF SHOWN ON THE SDP APPROVED BY THE HOWARD COUNTY PLANNING BOARD.
22. ALL PROPOSED IMPROVEMENTS SHALL BE MAINTAINED BY THE OWNER. 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 CD. #2544001 ELEV. 401.098 (CONC. MONUMENT)
HOWARD CD. #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 CONTROLLING 2- & 10-YEAR STORMS & PROVIDING EXTENDED DETENTION (CLASS A EMBANKMENT POND). IT IS TO BE 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 IN 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 V-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 APFD 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.

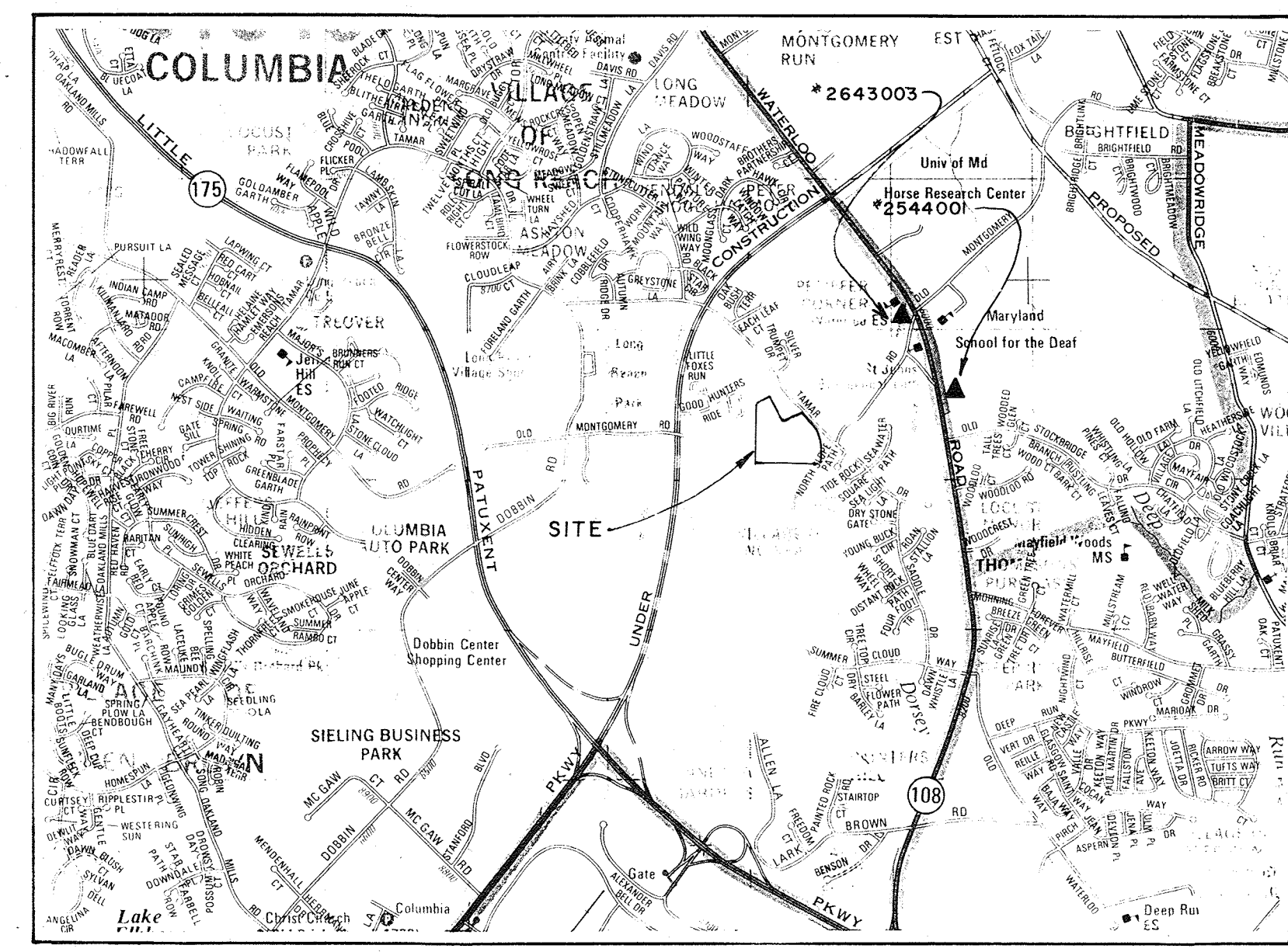
KENDALL RIDGE COMMUNITY POOL



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



PLAN VIEW
SCALE: 1"=800'



VICINITY MAP
SCALE: 1" = 2000'

PURPOSE STATEMENT
TO REMOVE EXISTING LAKE POOL AND ASSOCIATED STRUCTURES, ACCOMMODATING THE INSTALLATION OF A ZERO-DEPTH 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 15
EXISTING CONDITIONS	2 OF 15
SITE LAYOUT PLAN	3 OF 15
GRADING PLAN	4 OF 15
SEDIMENT CONTROL PLAN	5 OF 15
LANDSCAPE PLAN	6 OF 15
LANDSCAPE DETAILS	7 OF 15
PROFILES	8 OF 15
DETAILS	9 OF 15
DETAILS	10 OF 15
DETAILS	11 OF 15
DRAINAGE AREA MAP	12 OF 15
DEMO, DETAIL, REF. AND MATERIALS - Pool	13 OF 15
LAYOUT, GRADING, AND PLANTING - Pool	14 OF 15
SITE DETAILS - Pool	15 OF 15

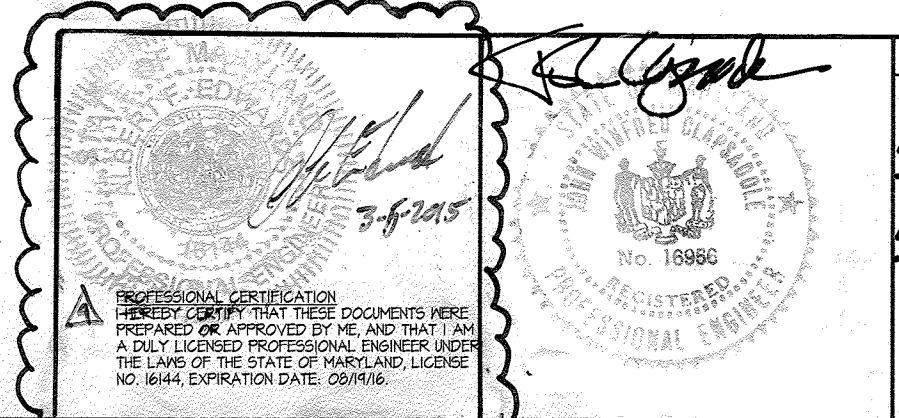
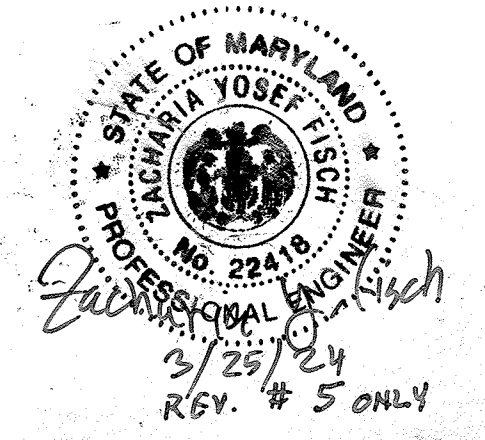
SITE ANALYSIS

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: .21 AC. (9159 S.F.) 3.3% OF GROSS AREA (INCLUDING BATH HOUSE, POOLS AND SPA)
8. PROPOSED OTHER IMPERVIOUS AREA: .8 AC. (34865 S.F.) 12.7% OF GROSS AREA
9. TOTAL LIMIT OF DISTURBANCE: 3.62 AC. (ON-SITE & OFF-SITE) 3.30 AC. (ON-SITE ONLY)

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.
CMP 8111	NT 37	6 6066.02
WATER CODE		SEWER CODE

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE 18 Aug. 94



no.	description	date	prepared by
1	REVISE LAKE POOL, ADD SHEETS 13, 14 & 15	2/2015	
2	ADDED PROP. 21x25' CONCRETE PAD.	3/2024	FSH

TITLE SHEET		SCALE	
DRAWN	CHECKED	PROJ. NO.	DATE
JAC	JWC	J0905	6/94
SHEET	OF	1	125

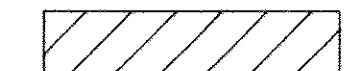
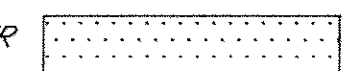
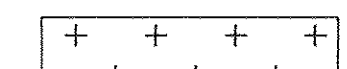
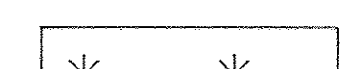




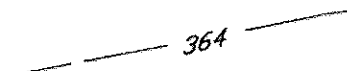
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410/730-7950

JP 94. 105

HOWARD RESEARCH & DEVELOPMENT CO.
NT-OPEN SPACE
LOT 7
PLAT 8576

HOWARD RESEARCH & DEVELOPMENT CO.
PLAT 8111 PARCELS F
NT-EMPLOYMENT CENTER COMMERCIAL

LEGEND

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

BENCHMARKS:
COUNTY MONUMENT #2544001
COUNTY MONUMENT #2643003

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

TRIPLE 103"x71" S.D.

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

James J. Sullivan 10/4/94
DIRECTOR DATE

Charles J. ... 10/4/94
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING

Joseph ... 10/17/94
DIRECTOR DATE

China ... 10/2/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

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

John W. ... 10-6-94
COUNTY HEALTH OFFICER DATE

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

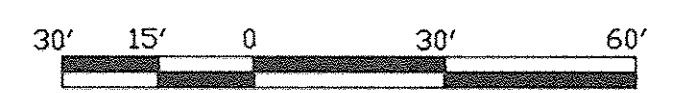
DEVELOPER
COLUMBIA ASSOCIATION
10275 LITTLE PATRIENT PKWY
COLUMBIA, MARYLAND 21044
(410) 715-3000

VEGETATIVE COMMUNITIES

COMMUNITY	DESCRIPTION	DOMINANT PLANT SPECIES	REMARKS
A	UPLAND HARDWOOD FOREST	HONEYUCKLE (LINGONERA SP.) MULTIFLORA ROSEODORA SP.	MANY TREES HAVE BROKEN LIMBS AND ARE COVERED WITH LICHENS; NO SPECIEN TREES.
B	LOWLAND HARDWOOD FOREST	15' TULIP TREE (LIRIODENDRON TULIPITERA) 10' RED MAPLE (ACER RUBRUM) 10' PIN OAK (QUERCUS PALUSTRIS)	SEVERAL SPECIEN TREES SOME BROKEN LIMBS
C	OPEN FIELD	GRASSES HONEYUCKLE (LINGONERA) MULTIFLORA ROSEODORA SP.	HONEYUCKLE 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 ELSINBORD LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
- Mo MIXED ALLUVIAL LAND
- MrE MONTGLO 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



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 LING REACH	3	2 5

PLAT	BLOCK	ZONE	TAX ZONE	MARSHALS DIST.	CENSUS TR.
CMP 8111	NT	37	6	6	6066.02

WATER CODE _____ SEWER CODE _____

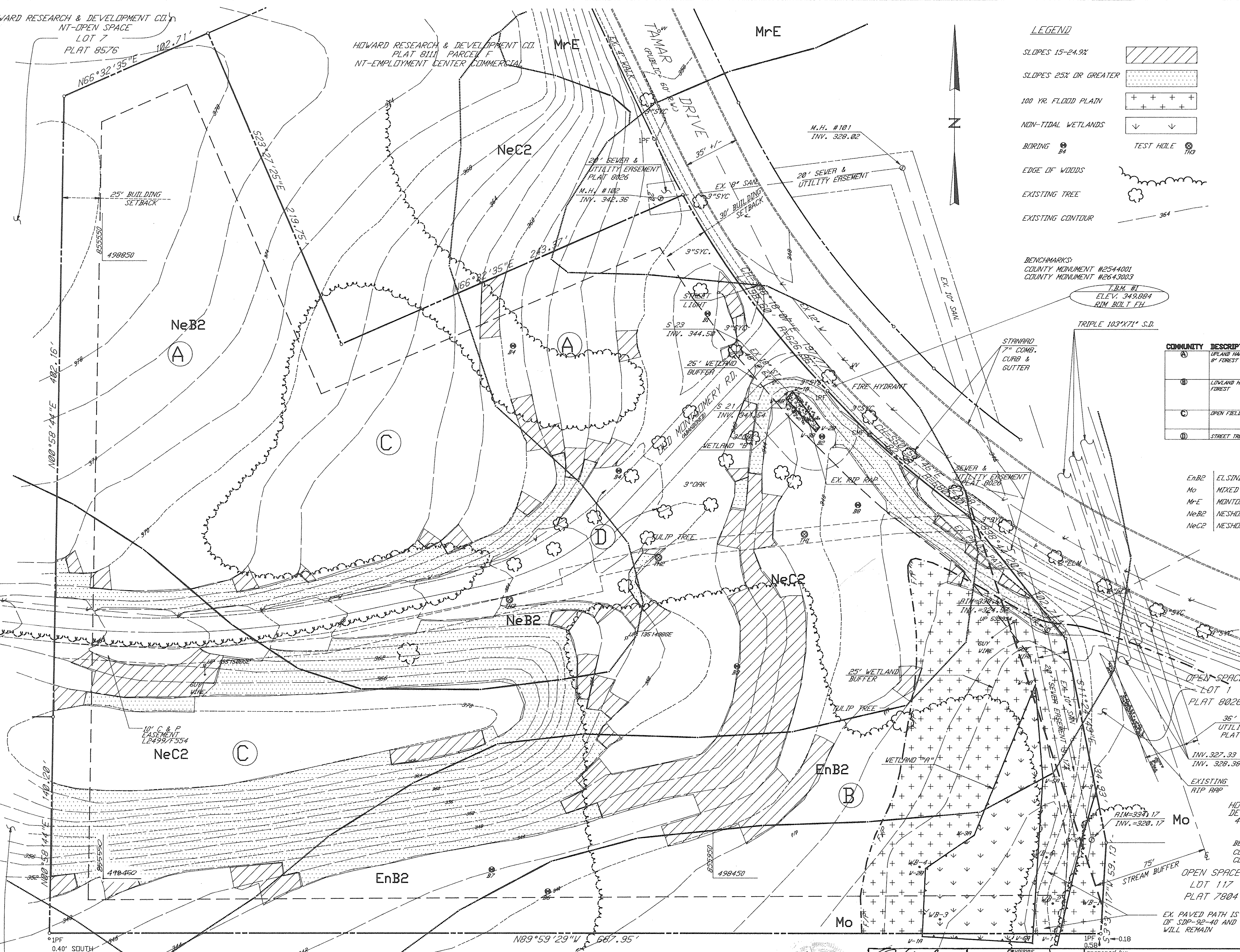
EXISTING CONDITIONS

KENDALL RIDGE
COMMUNITY POOL
REVISED SITE PLAN

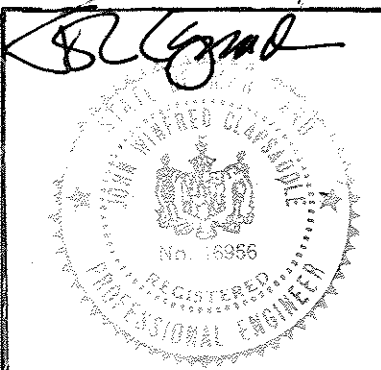
SCALE 1" = 30'

DRAWN	CHECKED
JAC	JWC
PRJ. NO. J0905	DATE 6/94
SHEET 2	OF 125

HOWARD COUNTY MARYLAND

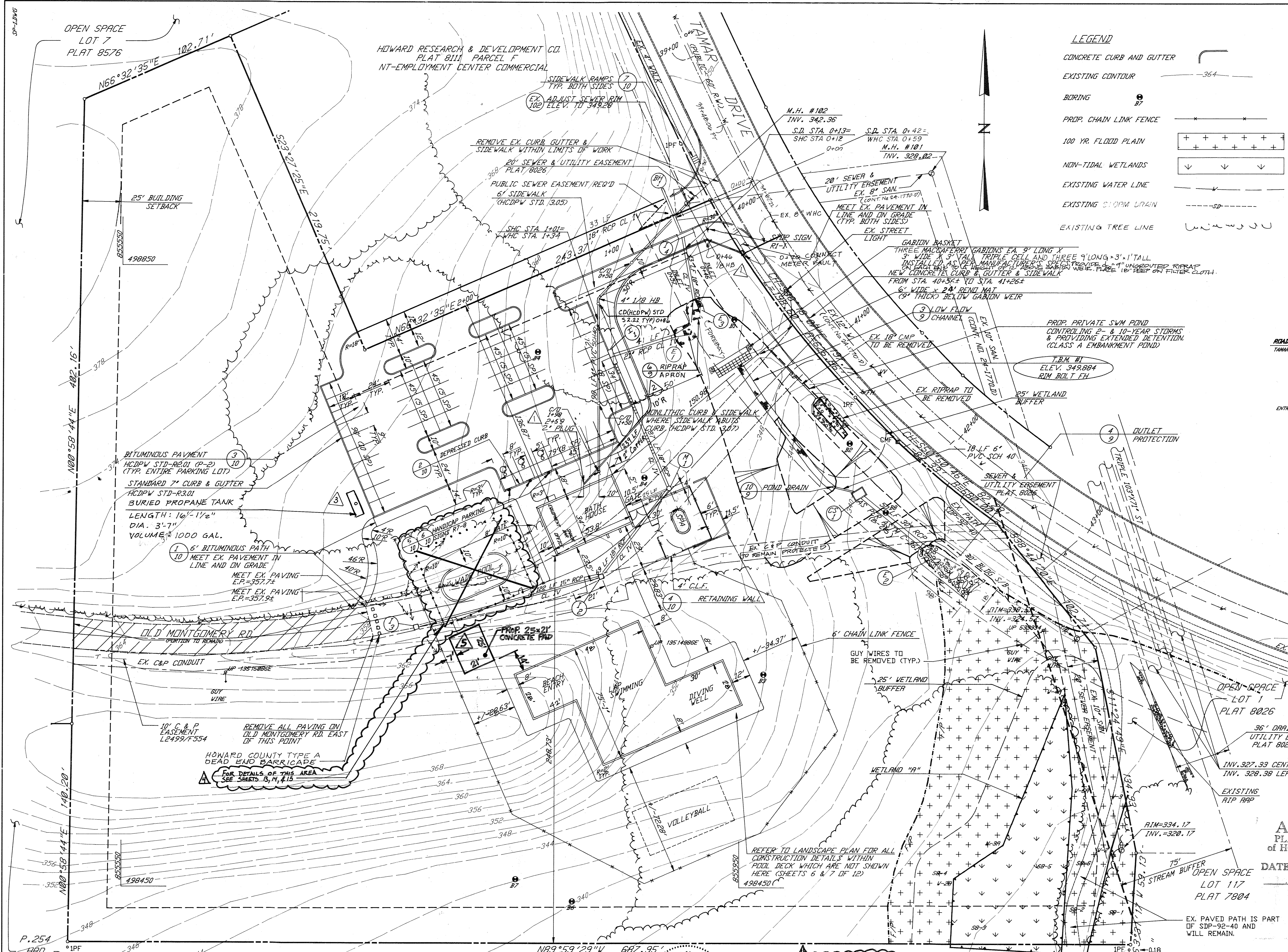


HOWARD RESEARCH & DEVELOPMENT CO.
NT-OPEN SPACE
1535/193
P. 254



Revisions:
no. description date
1 REVISE WASTE Pools ADD SHEETS 13, 14 & 15 2/2015

RBA ENGINEERS • ARCHITECTS • PLANNERS
5580 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410.730-7950



LEGEND

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

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 10/4/94
 DATE

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

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 10/17/94
 DATE

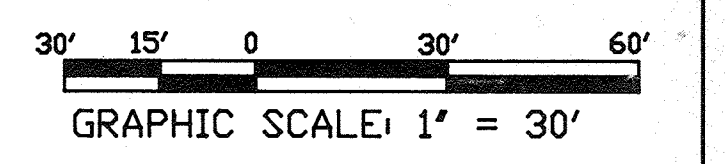
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 10/12/94
 DATE

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

DEVELOPER
 COLUMBIA ASSOCIATION
 10201 WINGUPIN CIRCLE
 COLUMBIA, MARYLAND 21044
 (410) 715-3000

ROAD NAME	STA	OFFSET	ELEVATION	DESCRIPTION
TAMAR DRIVE	39+43.18	18' RT	348.64	TC AT FILLET PC MEET EX. CURB
	39+47.22	0.00	---	ZERO STATION OF ENTRANCE ROAD
	40+21.72	18' RT	348.74	TC AT FILLET PC MEET EX. CURB
	40+56	18' RT	348.84	TC AT CURB REPAIR MEET EX. CURB
	40+56	25' RT	348.65	MEET EXISTING WALK
	41+26	18' RT	348.84	TC AT CURB REPAIR MEET EX. CURB
41+26	25' RT	348.84	MEET EXISTING WALK	
ENTRANCE DRIVE	0+00	0.00	---	STATION 39+47.22 TAMAR DRIVE
	0+18	0.00	348.74	FLOW LINE AT TAMAR DRIVE
	0+46.73	12' LT	348.49	TC AT FILLET PT
	0+43.00	0.00	348.89	C/L ELEVATION AT PVC
	0+68.00	18' LT	350.12	TC AT PVI STATION
	0+68.00	0.00	348.89	C/L ELEVATION AT PVI STATION
	0+51.01	12' LT	350.20	TC AT FILLET PT
	0+68.00	18' RT	350.67	TC AT PVI STATION
	0+68.00	12' LT	350.00	TC AT PVI STATION
	0+68.00	0.00	350.79	C/L AT PVI STATION

- NOTES**
- ALL ISLAND CURB RADII ARE 5' UNLESS NOTED OTHERWISE.
 - BUILDING HAS INSIDE METER WHICH WILL BE PRIVATE.
 - ALL PROPOSED UTILITIES WILL BE PRIVATE.
 - 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.
 - GUY WIRES TO BE REMOVED.
 - THE CUMULATIVE LOD OF 4,785 SFT IS EXEMPT FROM PROVIDING STORM-WATER MANAGEMENT. ANY FUTURE INCREASE IN THE CUMULATIVE LOD EXCEEDING 5,000 SFT SHALL REQUIRE THAT STORMWATER MANAGEMENT BE PROVIDED.
- NOTE: EXISTING OVERHEAD LINES AND UTILITY POLES SHALL BE REMOVED BY OTHERS PRIOR TO BEGINNING WORK.



ADDRESS CHART

BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME
VILLAGE OF LONG REACH

SECTION/AREA	LOT/PARCEL
3	2 5

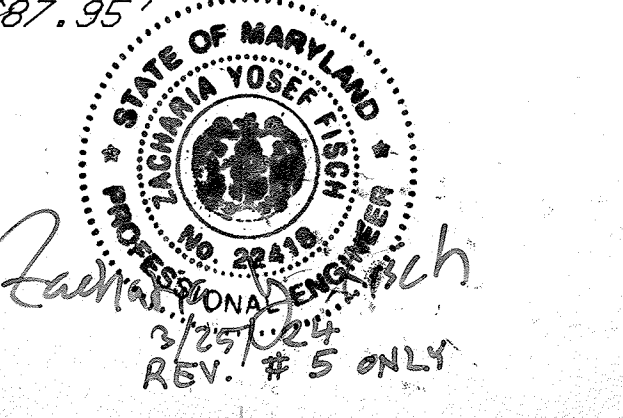
PLAT/BLOCK
CMP 8111

ZONE/TAX ZONE	MAP/ELEC. DIST.	CENSUS TR.
NT 37	6	6066.02

WATER CODE
SEWER CODE

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

P.254
 HRD
 1535/193



3-5 SHEETS

REVISIONS

NO.	DESCRIPTION	DATE
1	REV. NHC SIZE SHOW METER VAULT	12/94
2	REVISED WATER LINE ALIGNMENT	1/95
3	ADDED PROPANE TANK	5/95
4	REVISE LADE FOOT ADD SHEETS 13, 14, 15	2/2005
5	ADDED PROP 21x25' CONCRETE PAD.	3/2004

PREPARED BY
 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

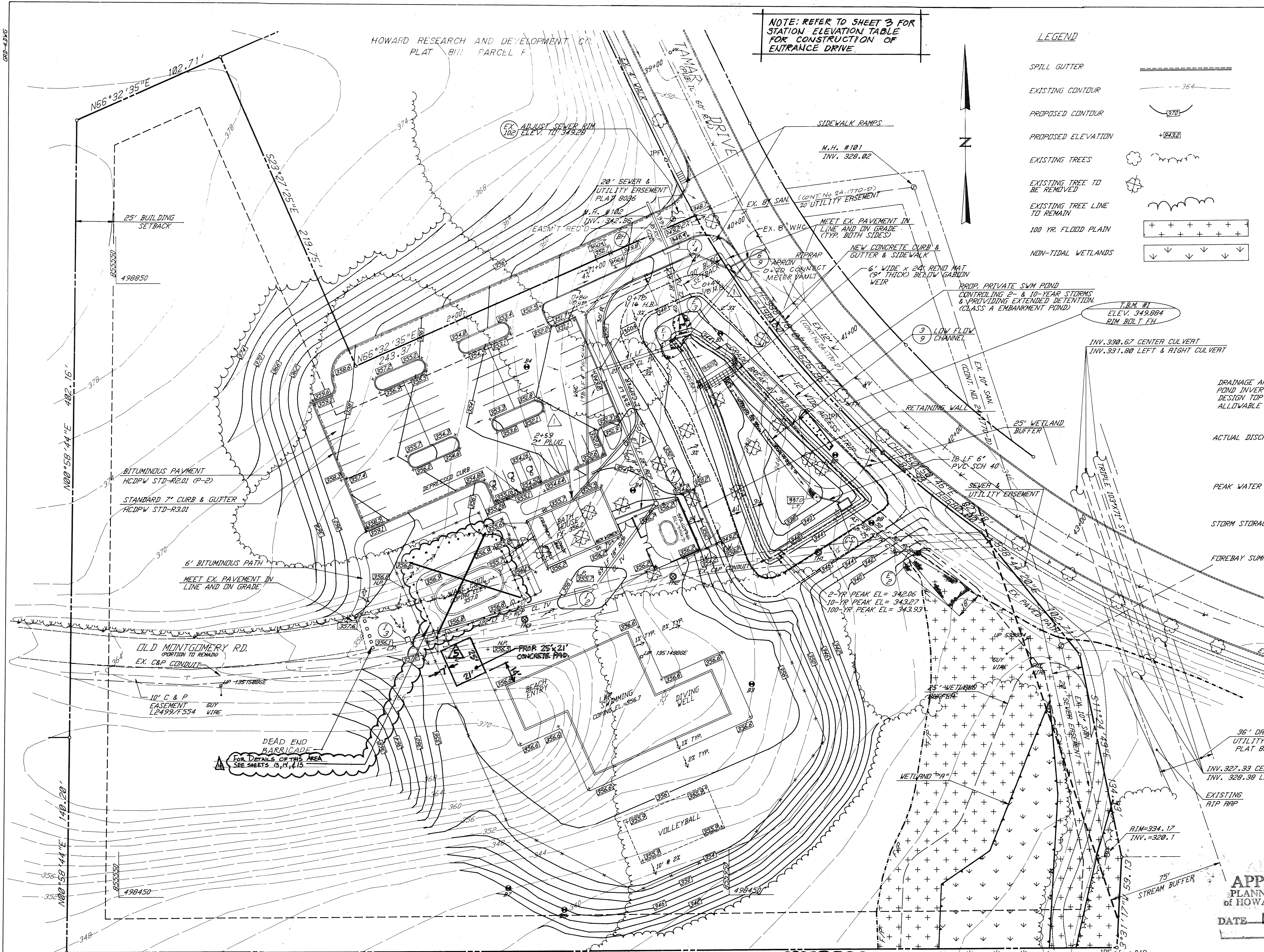
SCALE: 1" = 30'

DRAWN	CHECKED
JAC	JWC

PROJ. NO. J0905
 DATE 6/94

SHEET 3 OF 125

HOWARD COUNTY MARYLAND



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

James J. Lee 10/4/94
 DIRECTOR DATE

Charles J. Brown 10/4/94
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING

James R. Smith 10/17/94
 DIRECTOR DATE

Cindy Stumm 10/12/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH SA

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

James M. Boyd 10-6-94
 COUNTY HEALTH OFFICER DATE

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

DEVELOPER
 COLUMBIA ASSOCIATION
 10221 WINDOPIN CIRCLE
 COLUMBIA, MARYLAND 21044
 (410) 735-3000

STORMWATER POND SUMMARY TABLE
 (PROVIDES 2- AND 10- YEAR MANAGEMENT AND WATER QUALITY BY EXTENDED DETENTION)

DRAINAGE AREA TO FACILITY = 5.65 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	2.7	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. 343.93
 100-YEAR STORM 343.93 REQ'D 0.26 Ac FT PROVIDED 0.26 Ac FT

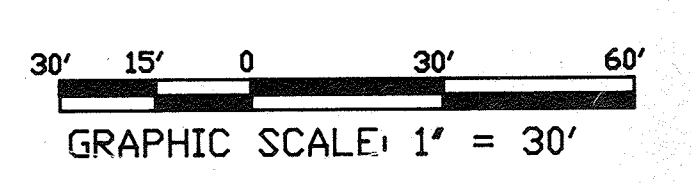
STORM STORAGE (ACRE-Feet)

	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 FT³
 VOLUME PROVIDED = 884 FT³
 HAZARD CLASS = A
 DANGER REACH = 218'

- NOTES
- ALL ISLAND CURB RADII ARE 5' UNLESS BE PRIVATE.
 - BUILDING HAS INSIDE METER WHICH WILL BE PRIVATE.
 - ALL PROPOSED UTILITIES WILL BE PRIVATE.
 - 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.
 - THE LOCATION OF THE C&P CONDUIT WITHIN THE EASEMENT IS APPROXIMATE.



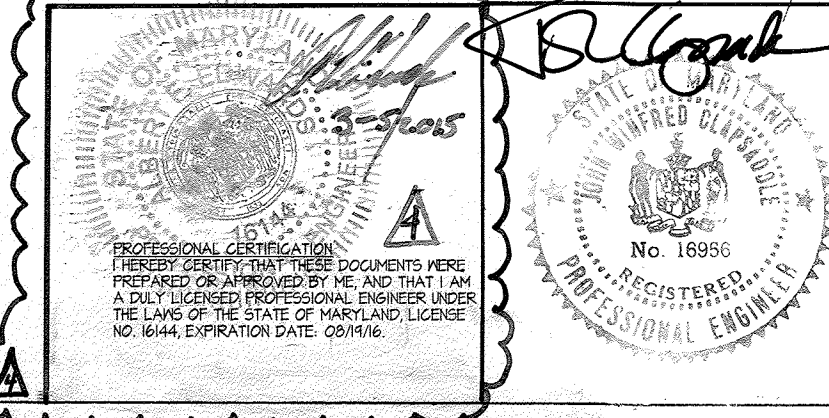
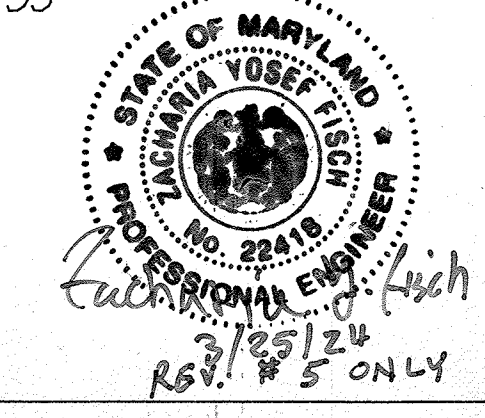
ADDRESS CHART

BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

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

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 10 Aug '94

0.40' SOUTH



revisions

no.	description	date
1	REV. W.H.C. SIZE SHOW METER VAULT	12/94
2	REV. W.H.C. ALIGNMENT	1/95
3	REVISE W.H.C. POOL ADD SHEETS 13, 14, 15	2/2005
4	ADDED PROP. 21x25' CONCRETE PAD	3/2004

prepared by

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

GRADING PLAN

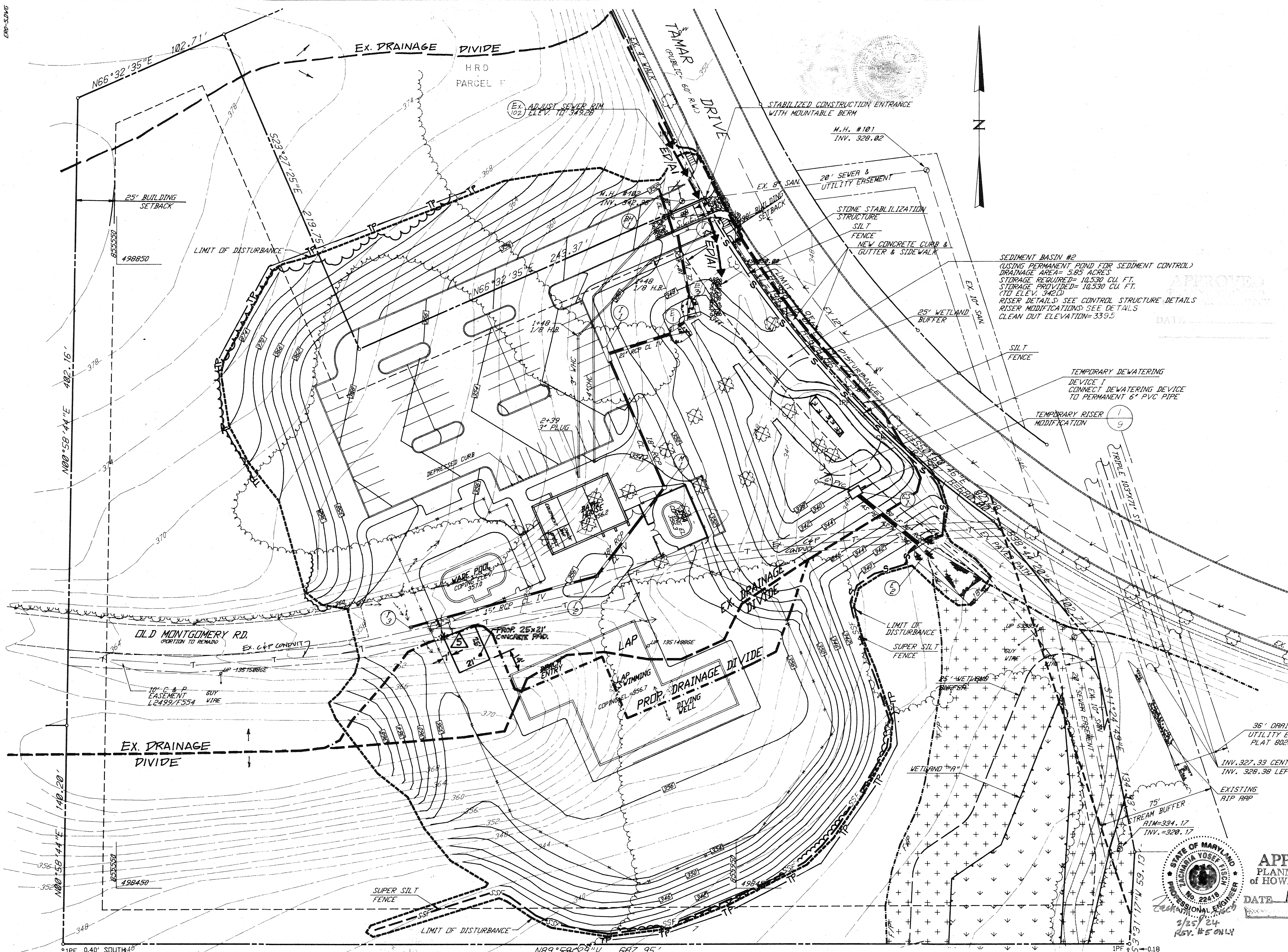
KENDALL RIDGE
 COMMUNITY POOL
 REVISED SITE PLAN

SCALE: 1" = 30'

DRAWN JAC	CHECKED JWC
PRJ. NO. J0905	DATE 6/94
SHEET 4	OF 125

HOWARD COUNTY MARYLAND

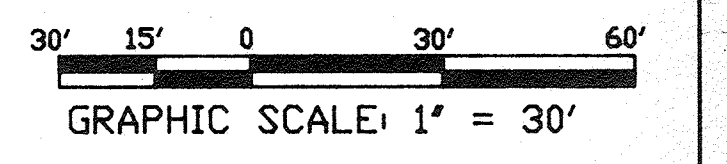
SEP 94 65



APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director: *James J. Egan* 10/4/94 DATE
 Chief, Bureau of Engineering: *William J. Egan* 10/4/94 DATE
 APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING
 Director: *James J. Egan* 10/17/94 DATE
 Chief, Division of Land Development and Research: *Clara Surranovic* 10/12/94 DATE
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 County Health Officer: *James M. Kaplan* 10-6-94 DATE
 OWNER: HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
 10275 LITTLE PATENT PKWY
 COLUMBIA, MARYLAND 21044
 (410) 992-6370
 DEVELOPER: COLUMBIA ASSOCIATION
 10221 VINCIPIN CIRCLE
 COLUMBIA, MARYLAND 21044
 (410) 735-3000

LEGEND

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



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	MAR/LEC. DIST.	CENSUS TR.
CMP 8111	NT	37	6	6066.02

WATER CODE	SEWER CODE

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

CERTIFICATION BY THE DEVELOPER

() 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.

() 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.

APPROVED: *Catharina Andler* 9/29/94 DATE
 U.S. SOIL CONSERVATION SERVICE

APPROVED: *James J. Egan* 9/29/94 DATE
 HOWARD SOIL CONSERVATION DISTRICT

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.

John W. Clapsaddle 6/29/94 DATE
 SIGNATURE OF ENGINEER
 (PRINT NAME BELOW SIGNATURE) JOHN W. CLAPSADDE, P.E.

revisions

no.	description	date
1	REVISE UNDER POOL	2/2015
2	ADD SHEETS B, M, & S	3/2024
3	ADDED PROP. 21x25' CONCRETE PAD	FSH

prepared by: **RBA ENGINEERS - ARCHITECTS - PLANNERS**

3560 STERRETT PLACE SUITE 300
 COLUMBIA, MARYLAND 21044
 410.730-7950

SEDIMENT CONTROL PLAN

KENDALL RIDGE COMMUNITY POOL
 REVISED SITE PLAN

SCALE: 1" = 30'

DRAWN	CHECKED
JAC	JWC

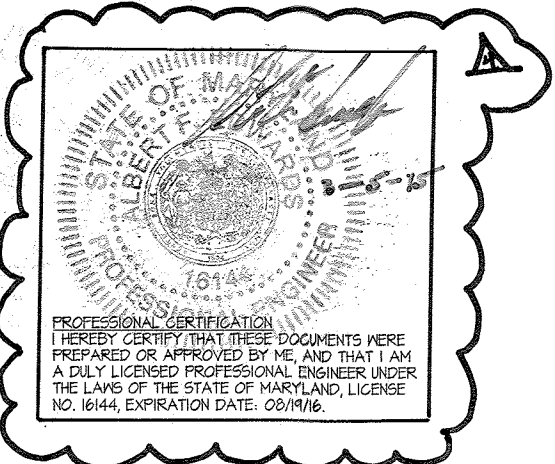
PROJ. NO.	DATE
J0905	6/94

SHEET 5 OF 125

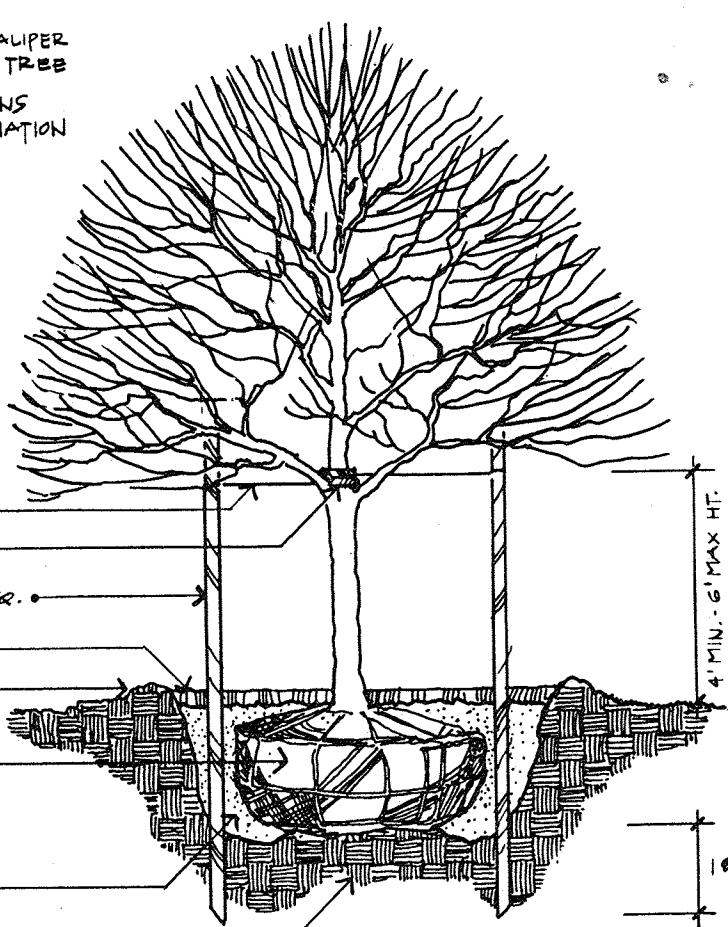
HOWARD COUNTY MARYLAND

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 COUNTY 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 \$9,100.00 @ 9% TREES @ 100.00/TREE



- GUY WIRES UP TO 3/4" DIAMETER WITH STAKES - 2 PER TREE
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION
- NEVER CUT LEADER OUT OF TREE



DECIDUOUS TREE PLANTING DETAIL

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 18 Aug. 94

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director: *James P. Shaw* 10/4/94
 Chief, Bureau of Engineering: *Charles E. Egan* 10/6/94

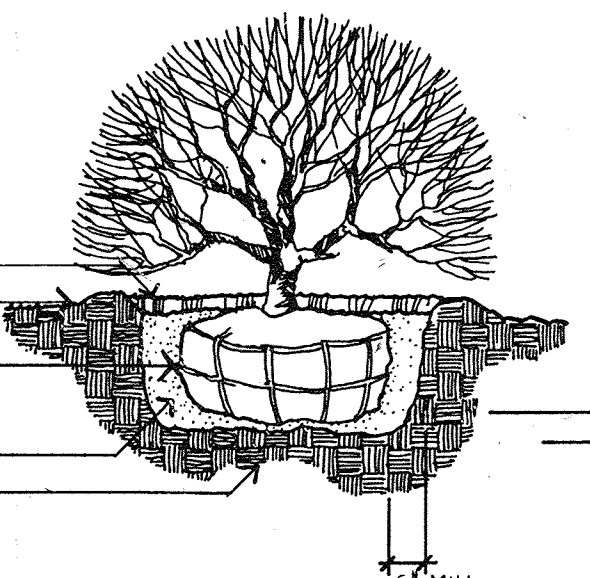
APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING
 Director: *James P. Shaw* 10/17/94
 Chief, Division of Land Development and Research: *Anna L. Manning* 10/12/94

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 County Health Officer: *James M. Dept. Mays, Sr.* 10-C-94

OWNER:
 HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
 10275 LITTLE PATUXENT PKWY
 COLUMBIA, MARYLAND 21044
 (410) 592-6370

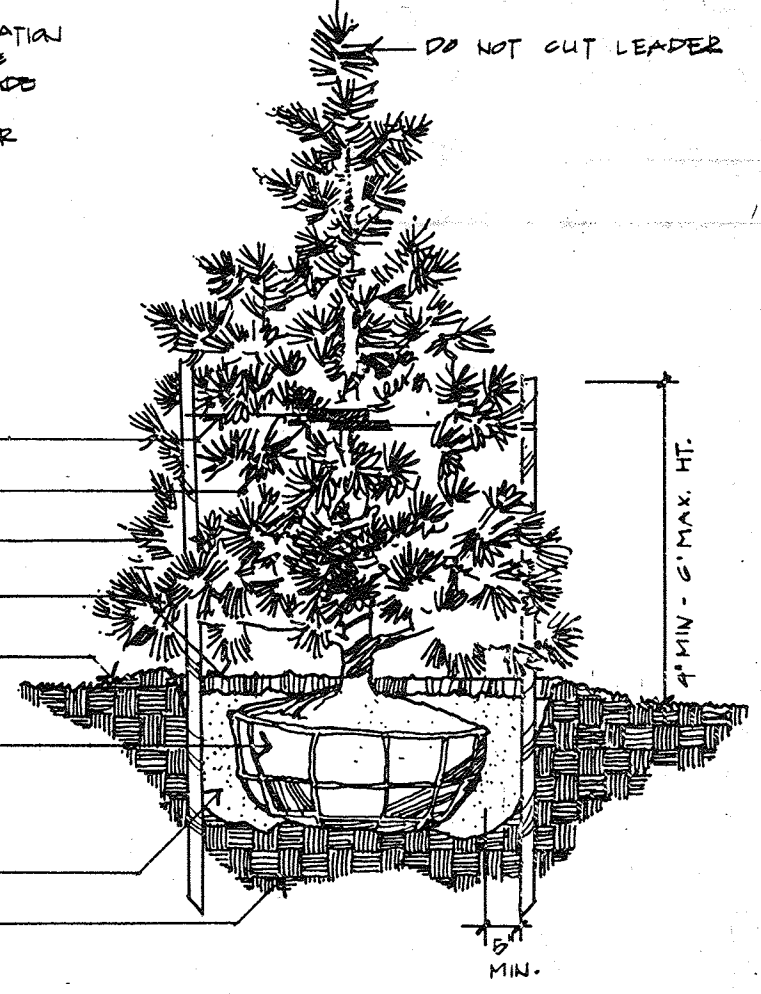
DEVELOPER:
 COLUMBIA ASSOCIATION
 10221 WINDCIPIN CIRCLE
 COLUMBIA, MARYLAND 21044
 (410) 715-3000

- SHRUBS SHALL BE AT SAME ELEVATION TO FINISH GRADE AS IT BORES TO PREVIOUSLY EXISTING GRADE
- THIN BRANCHES AND BRUISES (NOT ALL END TIPS) BY 1/8", RETAINING NORMAL PLANT SHAPE.
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION



SHRUB PLANTING DETAIL

- TREES SHALL BE AT SAME ELEVATION TO FINISHED GRADE AS IT BORES TO PREVIOUSLY EXISTING GRADE
- STAKE TREES UNDER 4" IN GUY WIRE WITH 2" HARDWOOD STAKES PER TREE



EVERGREEN TREE PLANTING DETAIL

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 \$9,100. @ 9% TREES @ 100.00/TREE



PLANT LIST SHEET 1 OF 2

NO	SYMBOL	QUAN	PLANT NAME	SIZE	ROOT	REMARK
1	⊗	14	ACER RUBRUM 'OCTOBER GLORY'	12-30"	B&B	FULL HEADS
2	⊙	11	CRATAEGUS VIRIDIS 'WINTER KING'	2-20" W	B&B	FULL HEADS
3	⊗	62	EUONYMUS ALATUS 'COMPACTA'	36" HT	B&B	FULL
4	⊕	3	QUERCUS ALBA 'NEMOROSA'	2 1/2-30" CAL	B&B	FULL HEADS
5	⊕	29	ILEX CORNUTA 'BURFORDI'	24-30" W	B&B	
6	⊗	33	JUNIPERUS HORIZONTALIS 'WILSONI'	15-18" SP	CAN	PLANT 36" O.C.
7	⊕	4	MAGNOLIA STELLATA	2-20" W	B&B	MULTI TRUNK MATCHES
8	⊗	36	PINUS STROBUS	6-8"	P&B	
9	⊗	17	PINUS STROBUS	8-10"	P&B	
10	⊙	6	SALIX BABYLONICA 'NIOBE'	2 1/2-30" CAL	B&B	
11	⊗	13	TAXUS MEDIA 'WARDII'	24-30"	B&B	FULL HEADS

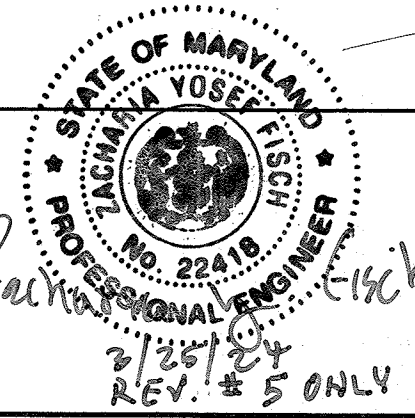
ADDRESS CHART

BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

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

General Planting Notes

- All plant material to meet A.A.N. Standards.
- Landscape Contractor to follow landscape specification guidelines for Baltimore-Washington Metro area approved by LCAMW.
- No substitutions to be made without consent of Landscape Architect or Owner.
- All beds to be topped with 3 inches of hardwood mulch.
- Landscape Contractor to verify location of utilities with Owner before planting.
- 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.
- 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.
- Contractor shall notify Miss Utility 72 hours prior to construction.



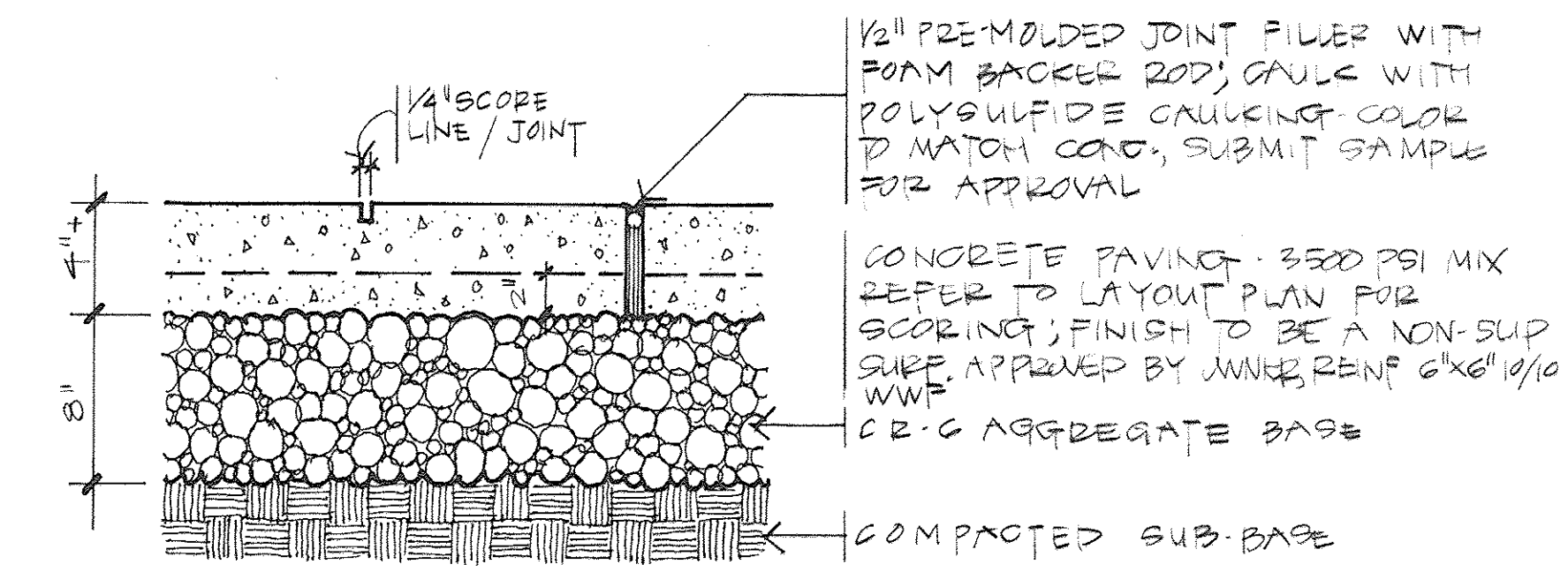
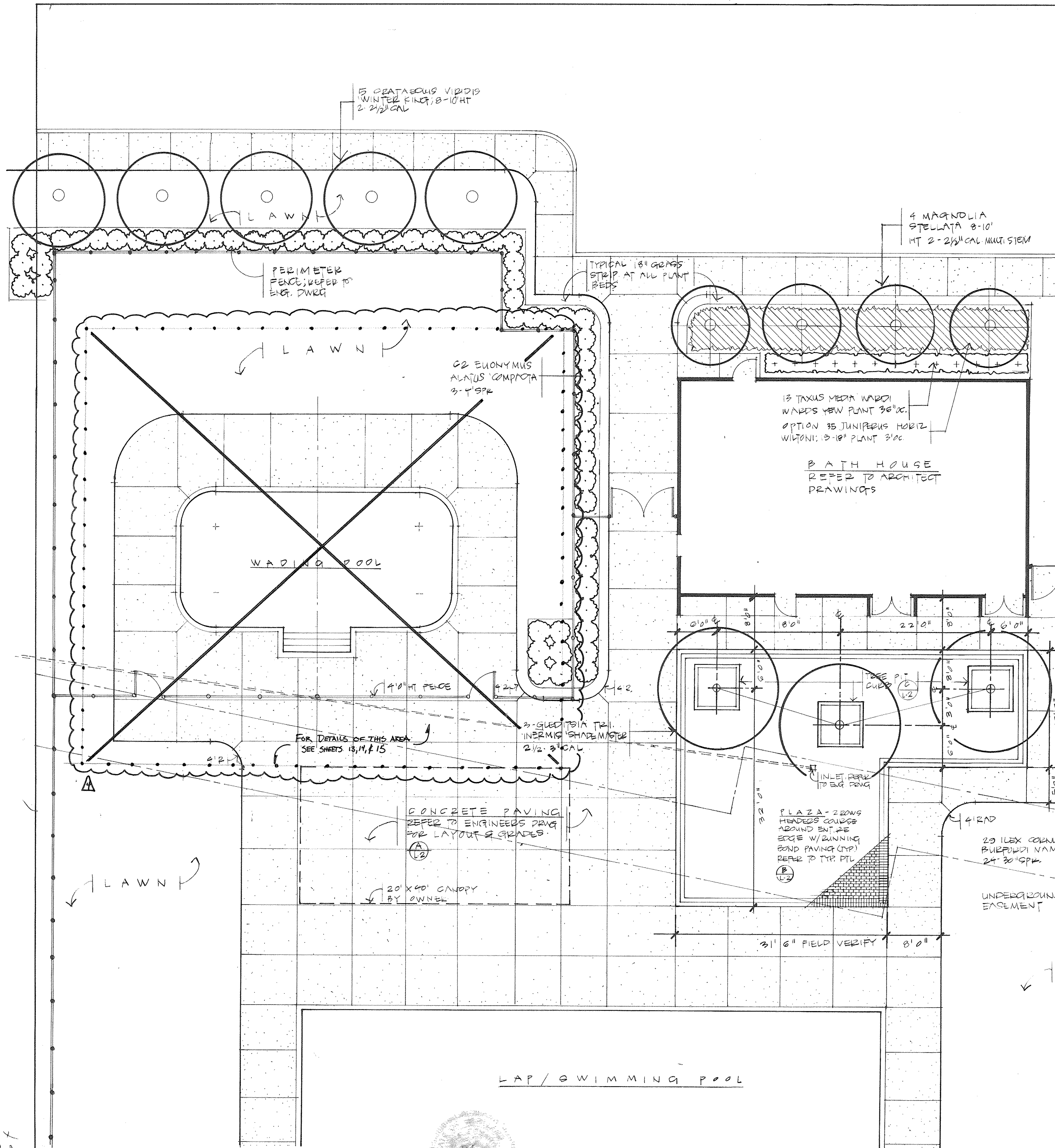
SITE PLANTING PLAN
 SCALE 1" = 30'
 NOTE: PLAN FOR PLANTING PURPOSES ONLY

Revisions

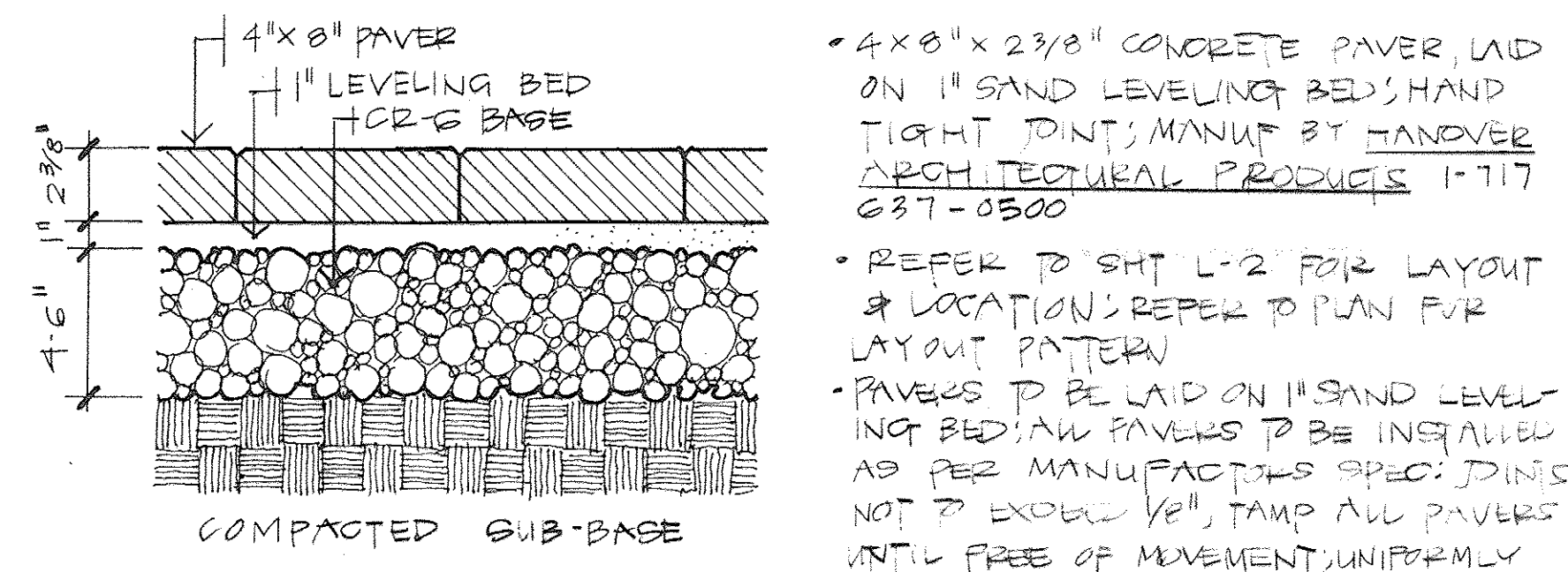
no	description	date
1	REMOVE TREES FROM POND ENB.	4/9/94
2	ADD NFE	6/9/94
3	REVISE CONE POOL, ADD SHEETS 13, 14, 15	2/20/95
4	ADD PROP. 21x25' CONCRETE PAD.	3/20/94

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

LANDSCAPE PLAN
 SCALE 1" = 30'
 DRAWN: JRO
 CHECKED: JRO
 PROJ. NO.: J0905
 DATE: 4/94
 SHEET: 6
 125

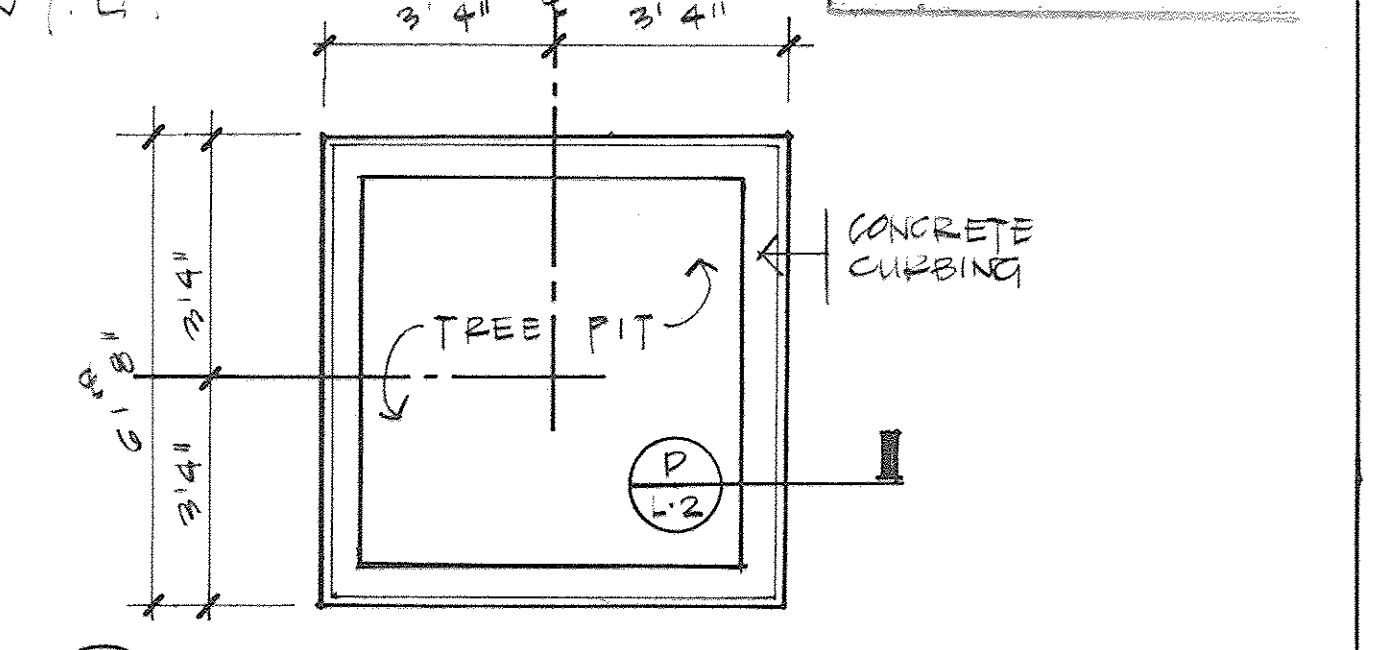


A
L/2
TYPICAL - CONCRETE PAVING
N.T.D.

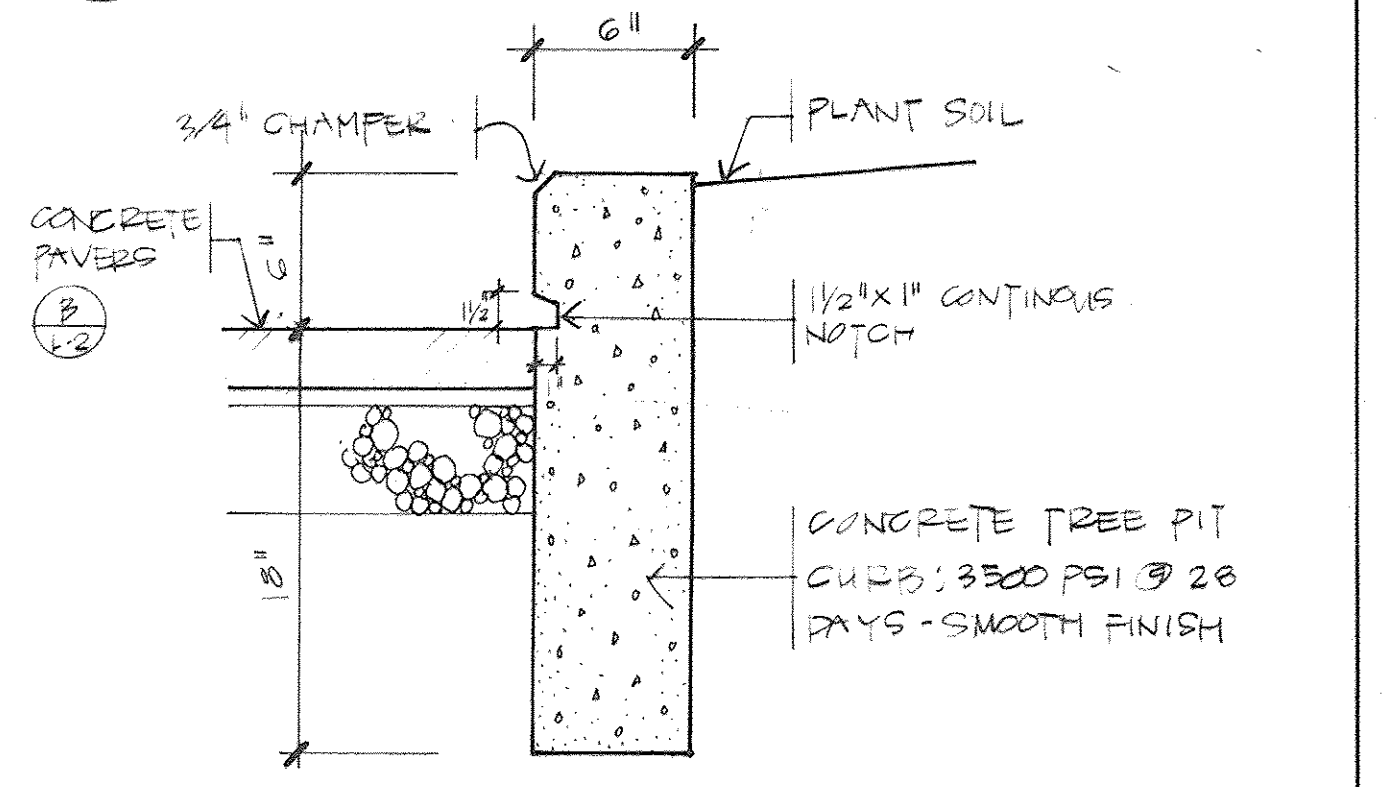


B
L/2
TYPICAL - CONCRETE PAVERS
N.T.D.

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

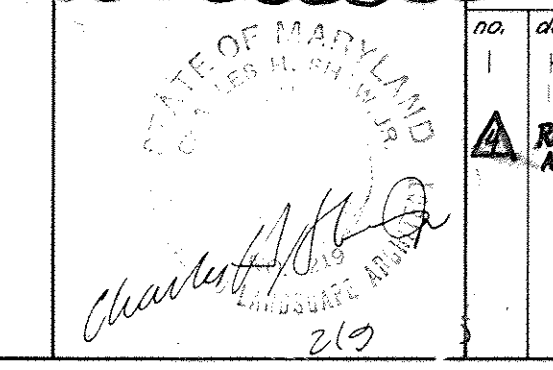
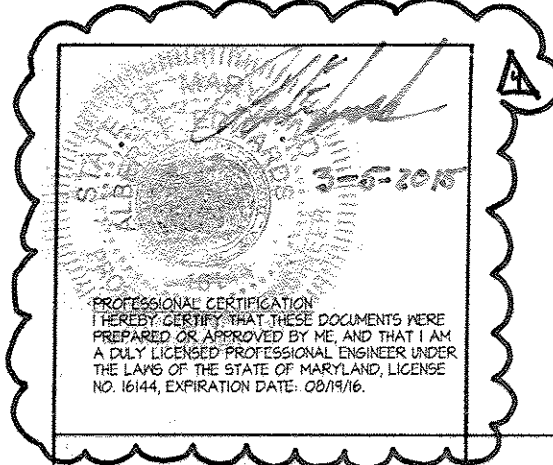


C
L/2



D
L/2

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
CMP 8111	NT 37	6	
WATER CODE		SEWER CODE	

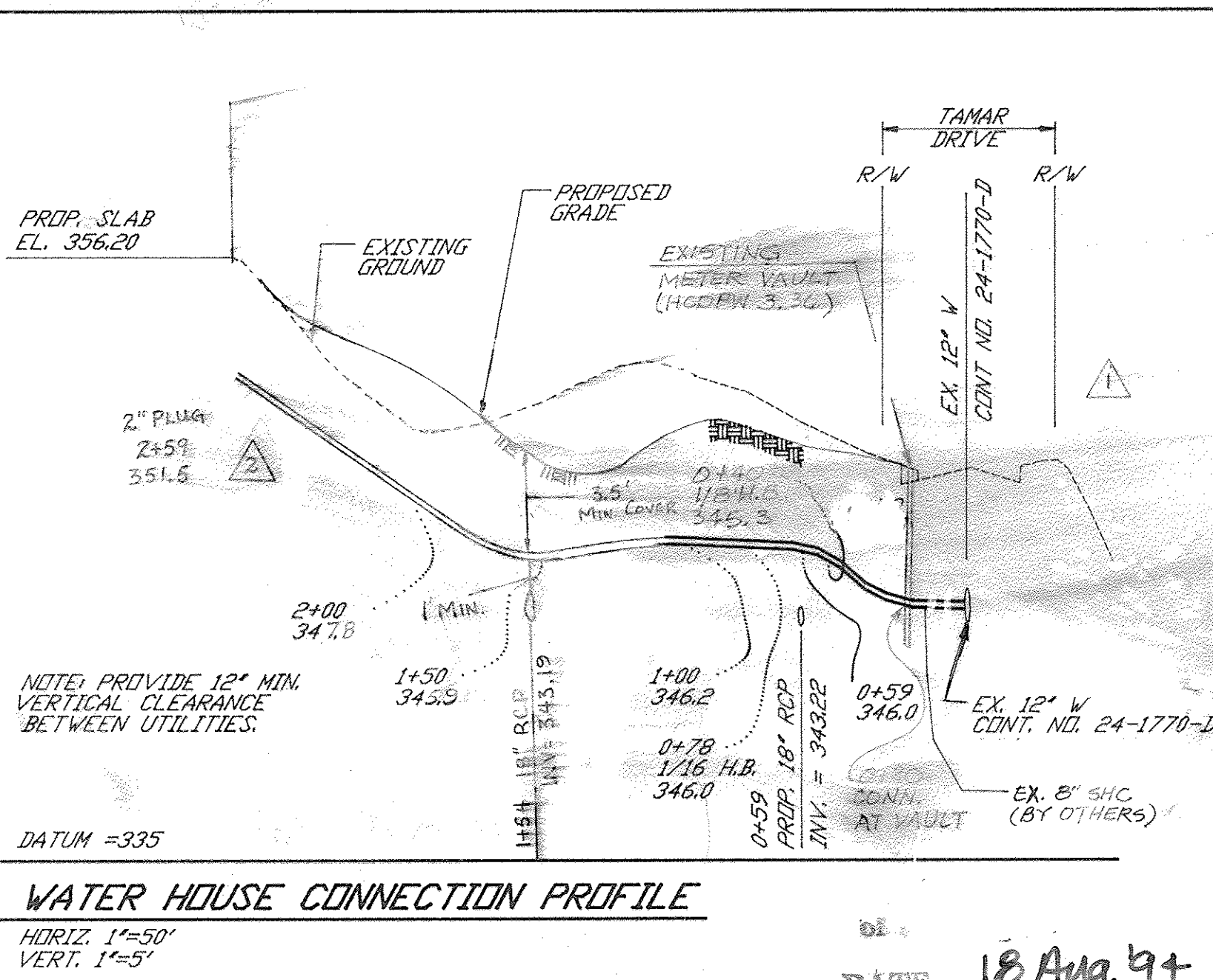
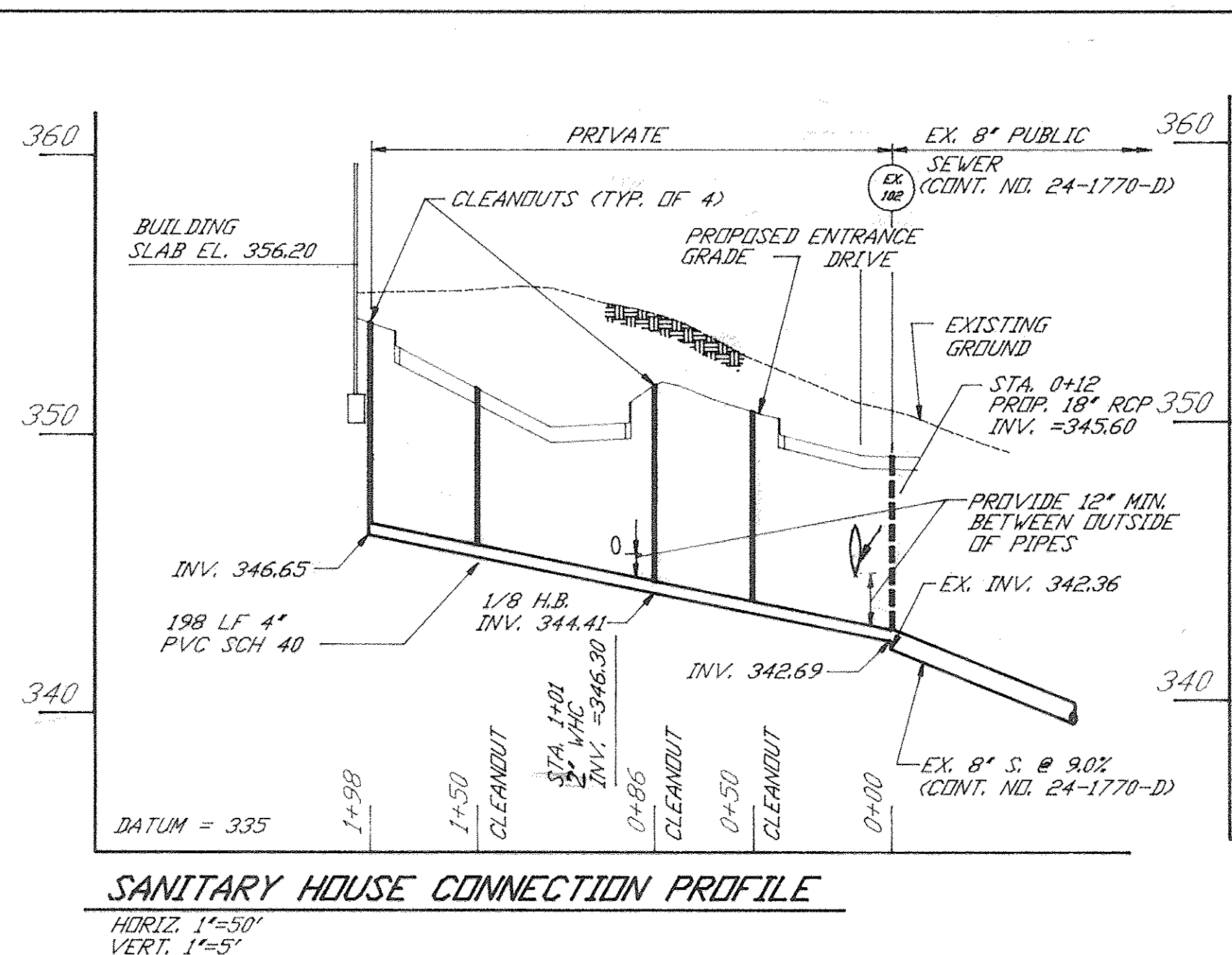
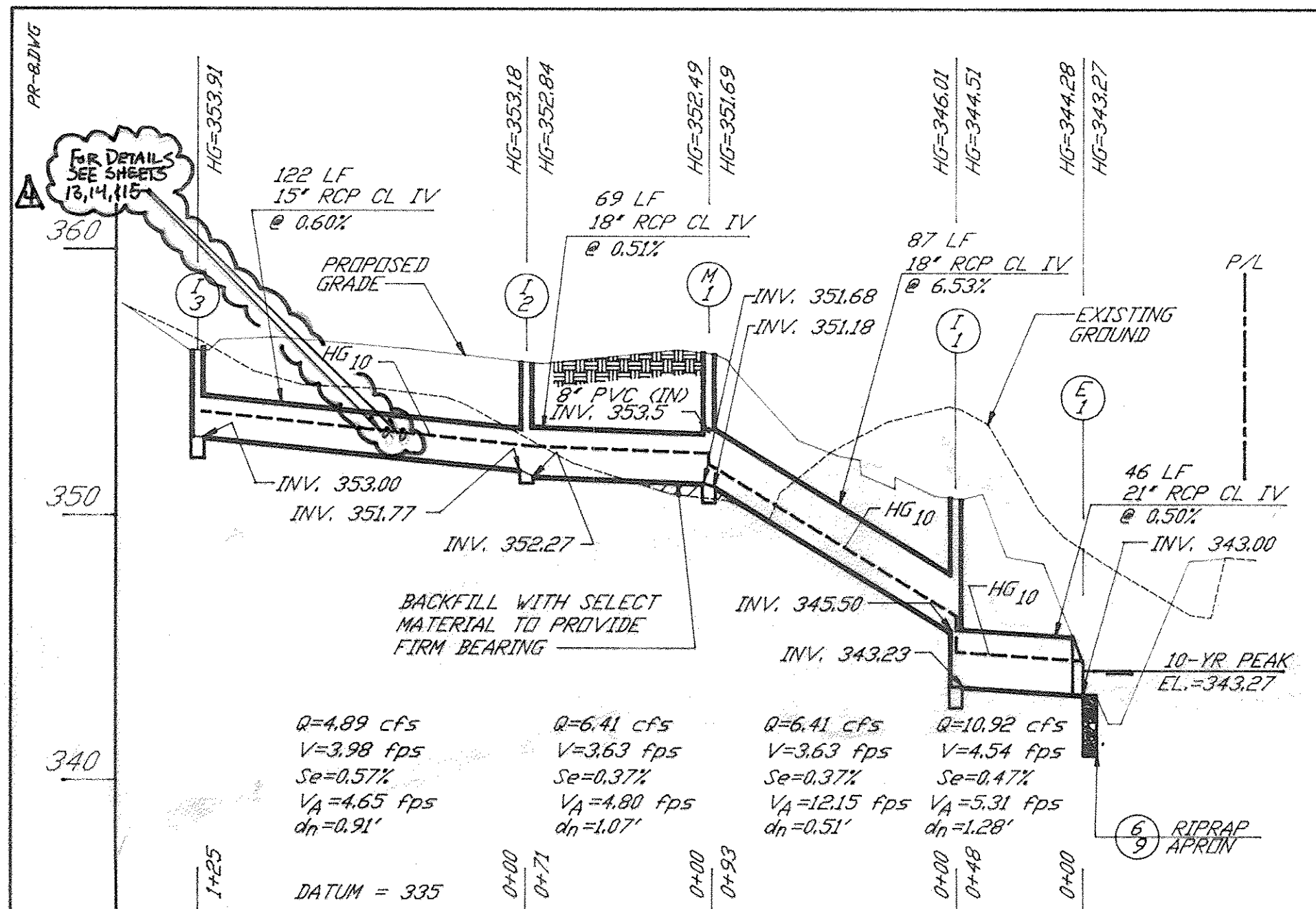


no.	description	date	prepared by
1	REVISE TABLES IN PLAZA	6/27/94	
2	REVISE GRADE FOR ADD SHEETS 13, 14, & 15	2/20/95	

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

LANDSCAPE DETAILS		SCALE AS SHOWN	
DRAWN	CHECKED	PROJ. NO.	DATE
		J0905	4/94
KENDALL RIDGE COMMUNITY POOL REVISED SITE PLAN		SHEET	OF
HOWARD COUNTY MARYLAND		7	125

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



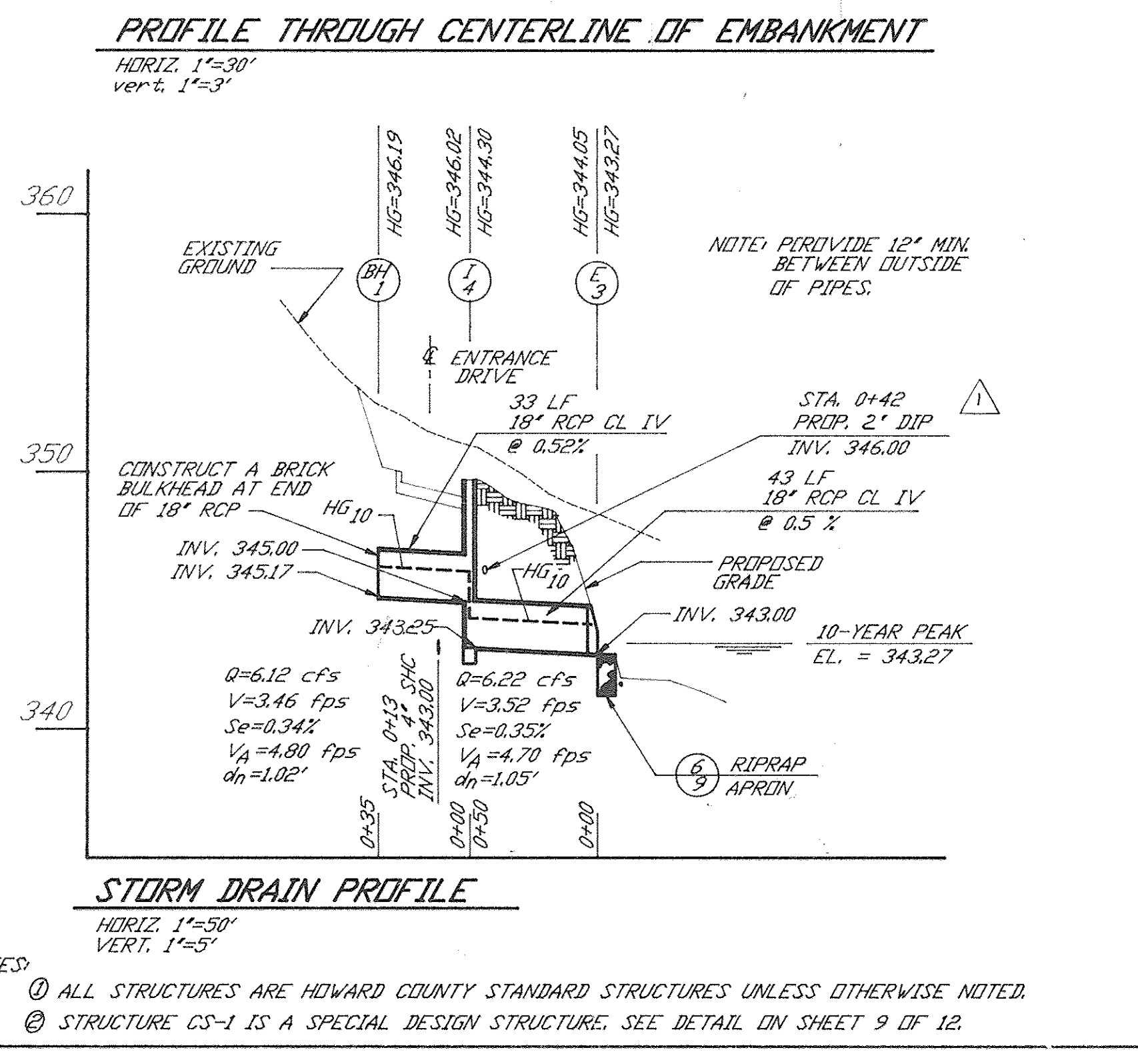
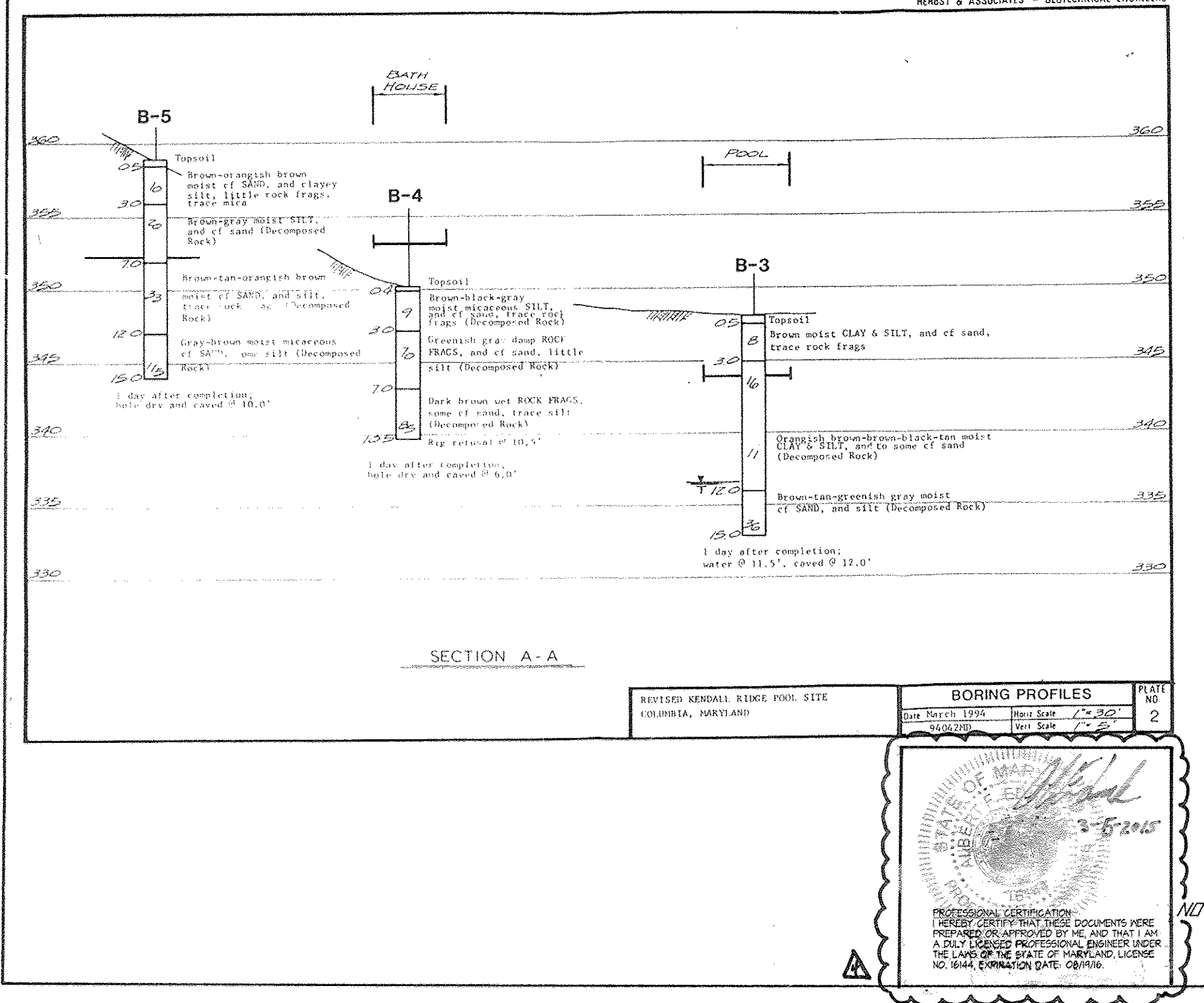
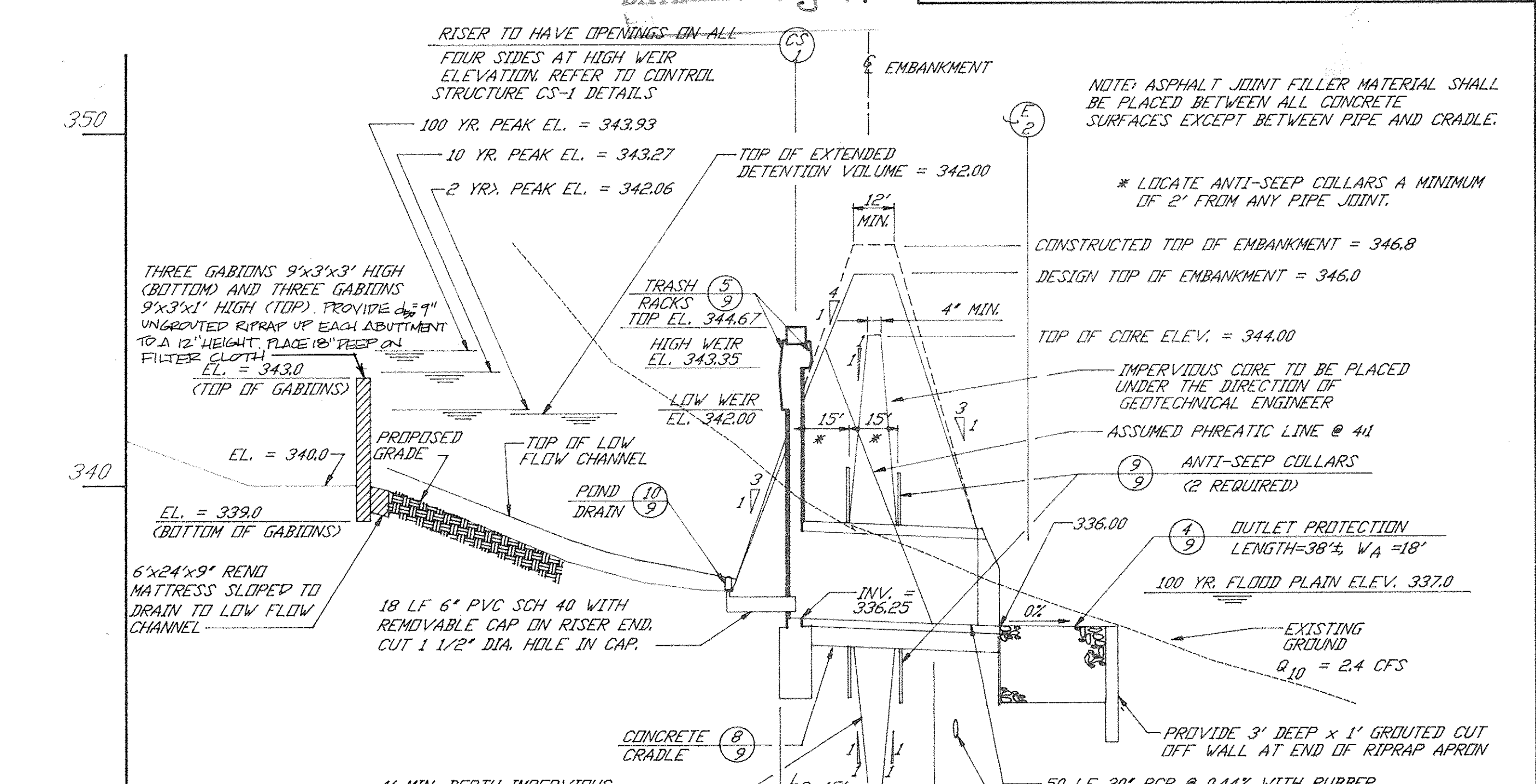
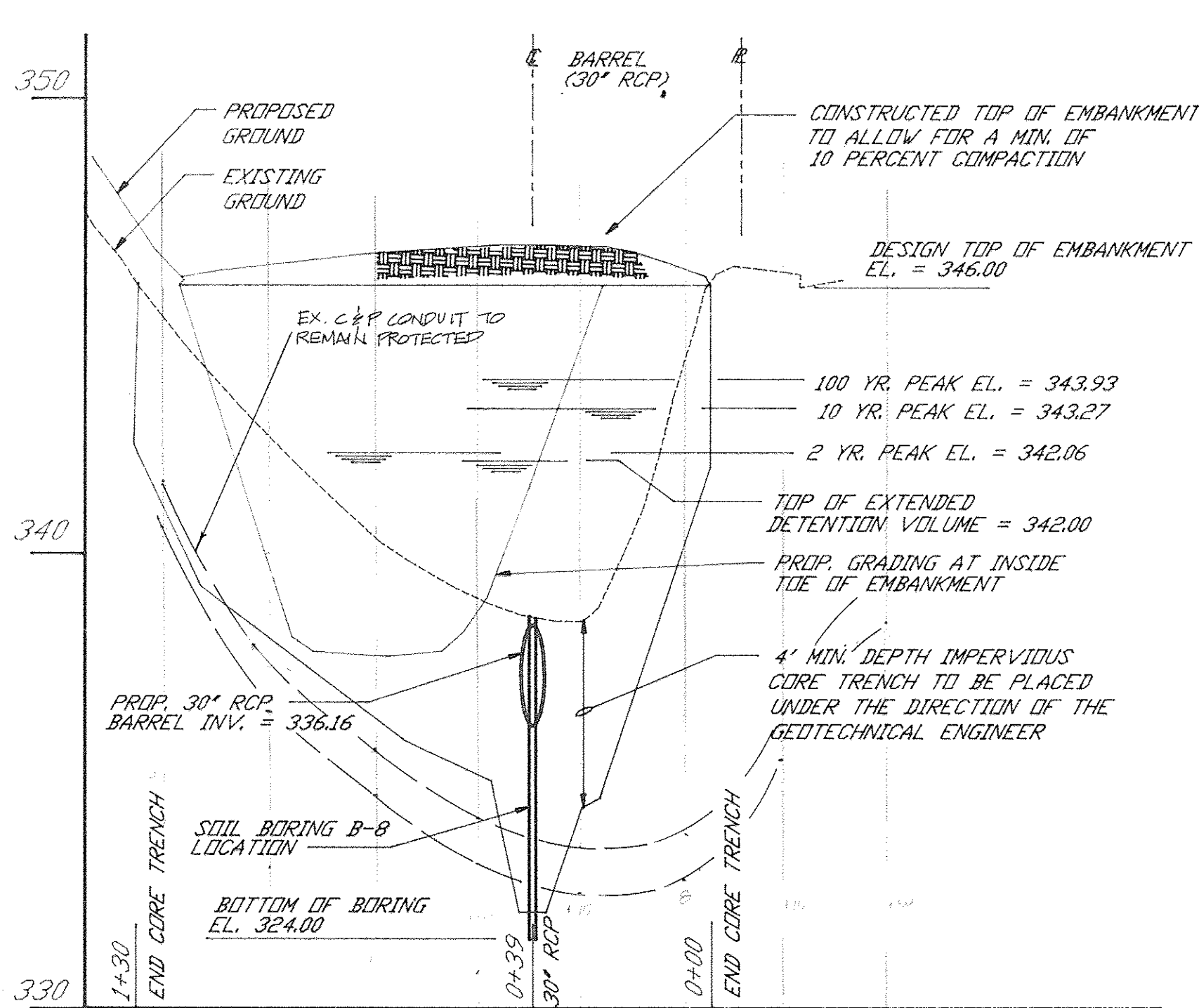
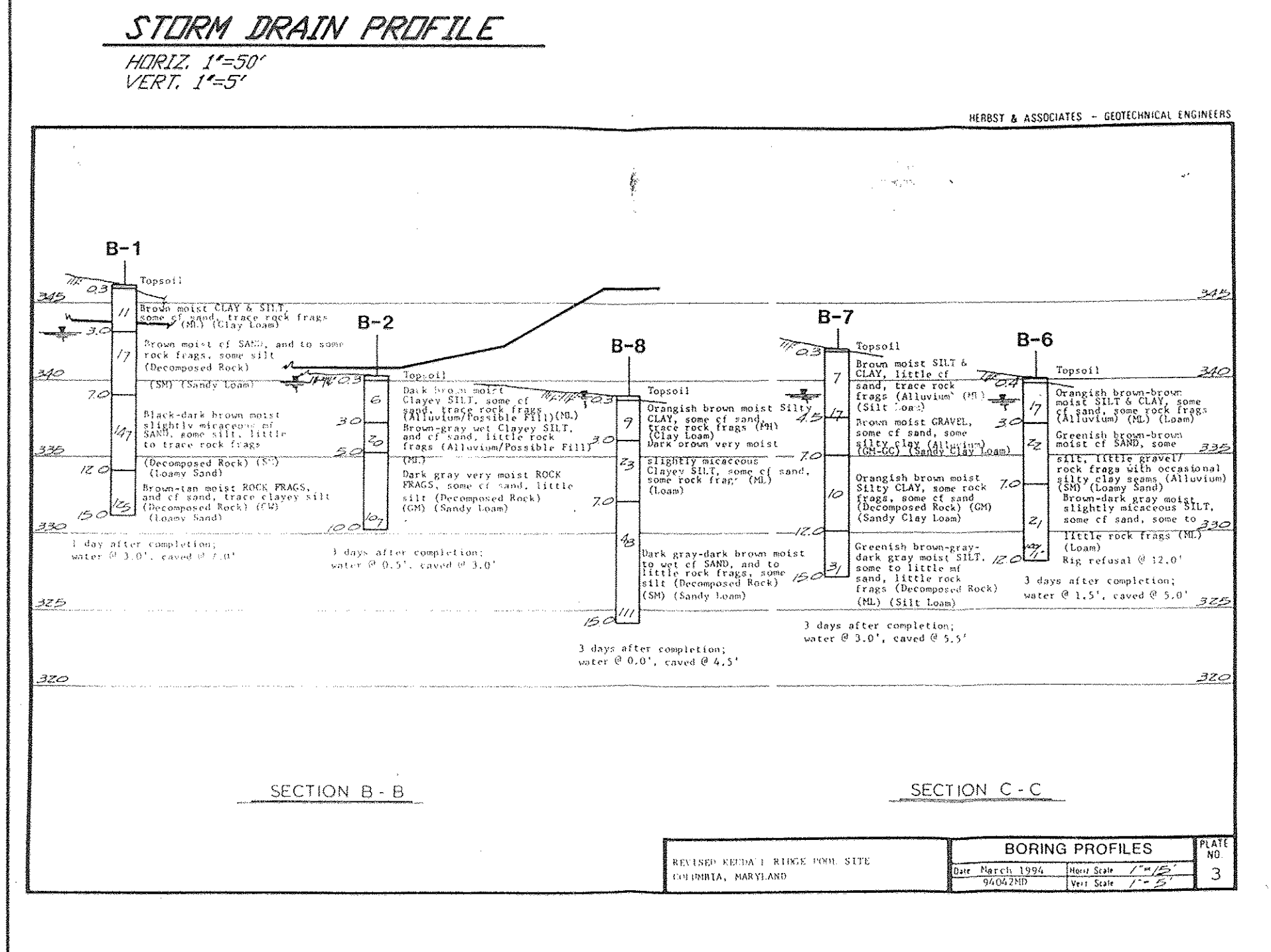
APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 10/12/94

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 DATE 10/12/94

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 10-6-94

OWNER: HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
 10275 LITTLE PATENT RD
 COLUMBIA, MARYLAND 21044
 (410) 592-6370

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



PIPE SCHEDULE

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

STRUCTURE SCHEDULE

NUMBER	TYPE	IN	OUT	REMARKS
I-1	1'-10" INLET	345.50	343.30	TOP OF GRATE=355.7
I-2	1'-5" INLET	352.27	351.17	SLOT EL.=356.10
I-3	1'-0" INLET	345.00	343.25	
I-4	1'-10" INLET	345.00	349.82	
M-1	18" PRECAST MANHOLE	351.42	351.18	
E-1	END SECTION (21")		343.00	
E-2	END SECTION (30")		336.00	
E-3	END SECTION (18")		343.00	
CS-1	CONTROL STRUCTURE			(SEE NOTES BELOW)

ADDRESS CHART

BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

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

WATER CODE:
SEWER CODE:

PROFILES AS SHOWN

KENDALL RIDGE COMMUNITY POOL REVISED SITE PLAN

SCALE: AS SHOWN
 DRAWN: JAC
 CHECKED: JWC
 PREP. NO.: J0905
 DATE: 6/94
 SHEET: 8 OF 175

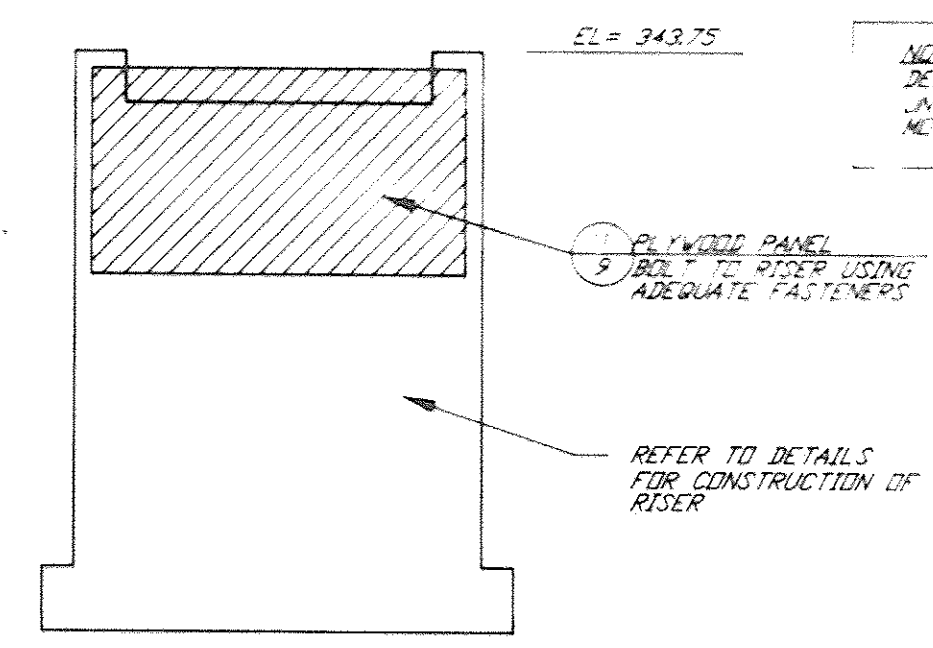
NOTES:
 1. ALL STRUCTURES ARE HOWARD COUNTY STANDARD STRUCTURES UNLESS OTHERWISE NOTED.
 2. STRUCTURE CS-1 IS A SPECIAL DESIGN STRUCTURE. SEE DETAIL ON SHEET 9 OF 12.

PROFESSIONAL ENGINEER
 JOHN W. CLAPSADLE, P.E.
 NO. 16956

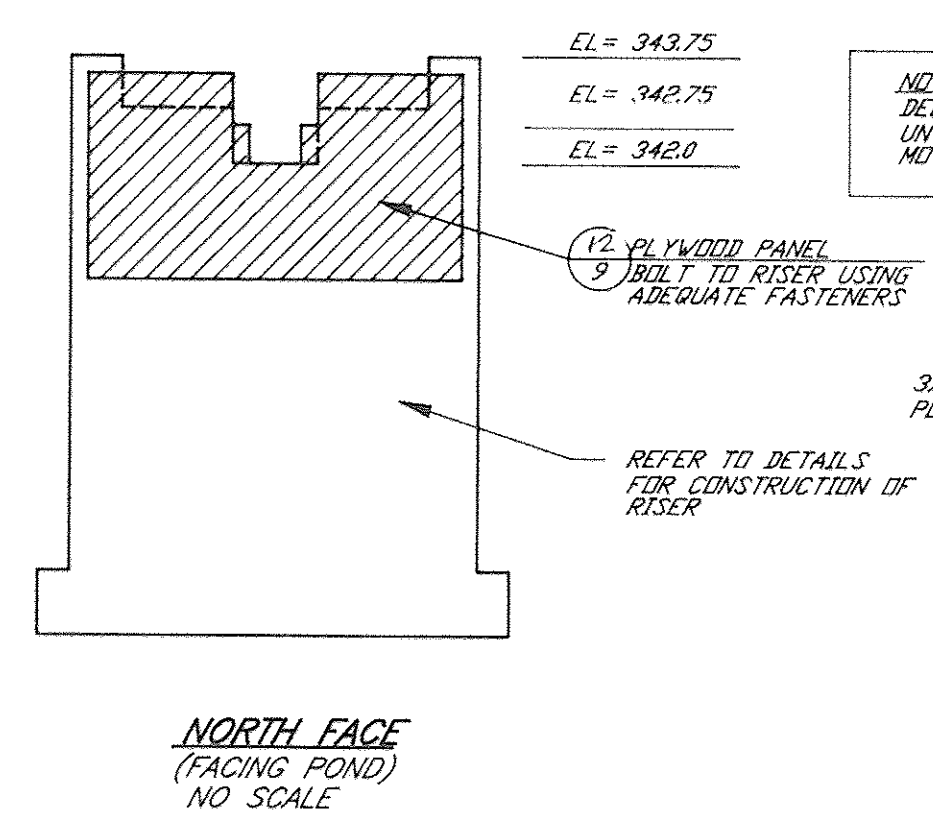
REVISIONS:
 1. REV. W/C 512E SHOWN METER VAULT 10/94
 2. REV. W/C PROFILE 1/95
 3. REVISE LOST POOL. ADD SHEETS 13, 14, 15 2/01/95

PREPARED BY:
 RBA ENGINEERS-ARCHITECTS-PLANNERS
 5560 STERRETT PLACE SUITE 300
 COLUMBIA, MARYLAND 21044
 410/730-7950

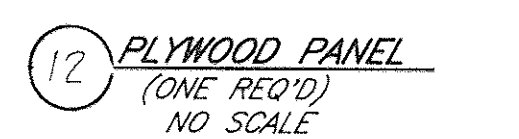
DET-BLWING



1 TEMPORARY RISER MODIFICATION
NO SCALE



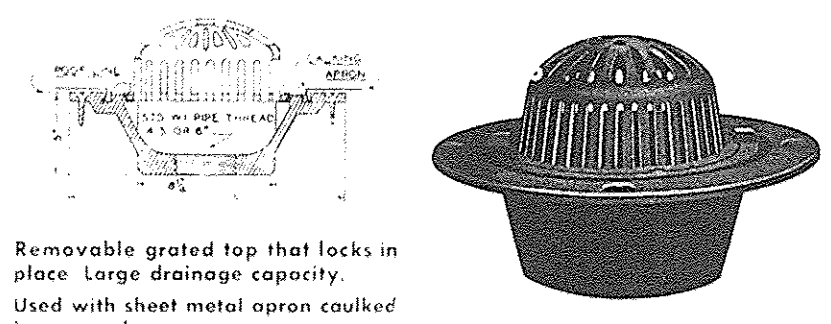
11 PLYWOOD PANEL (THREE REQ'D)
NO SCALE



12 PLYWOOD PANEL (ONE REQ'D)
NO SCALE

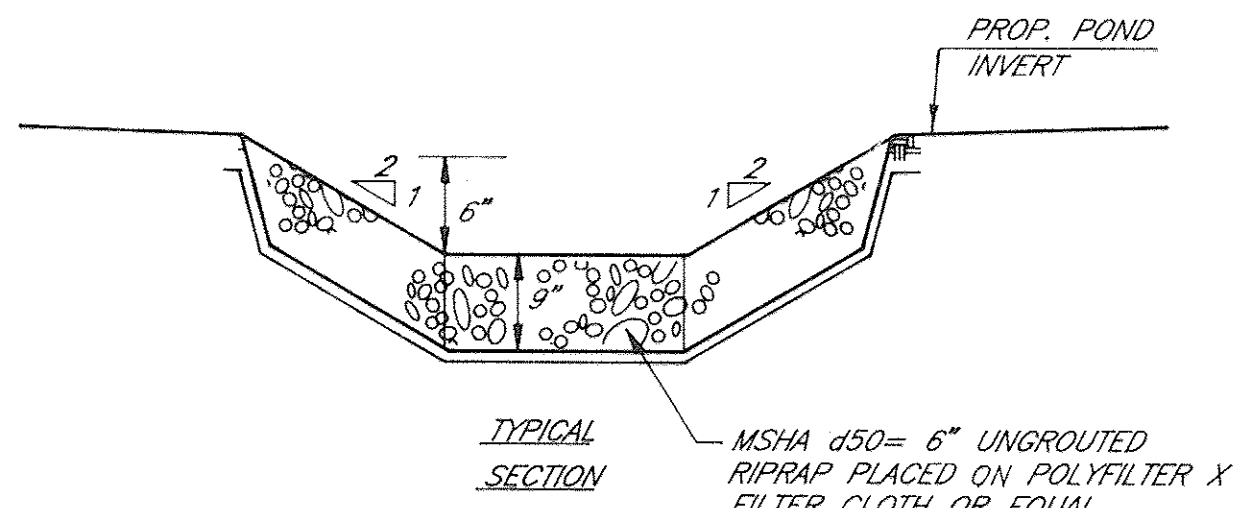
R-4920 Series

Category No.	Notes and Description	Pipe Size
R-4920-A1	For Inside Cowl	4
R-4920-A2	For Inside Cowl	5
R-4920-A3	For Inside Cowl	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

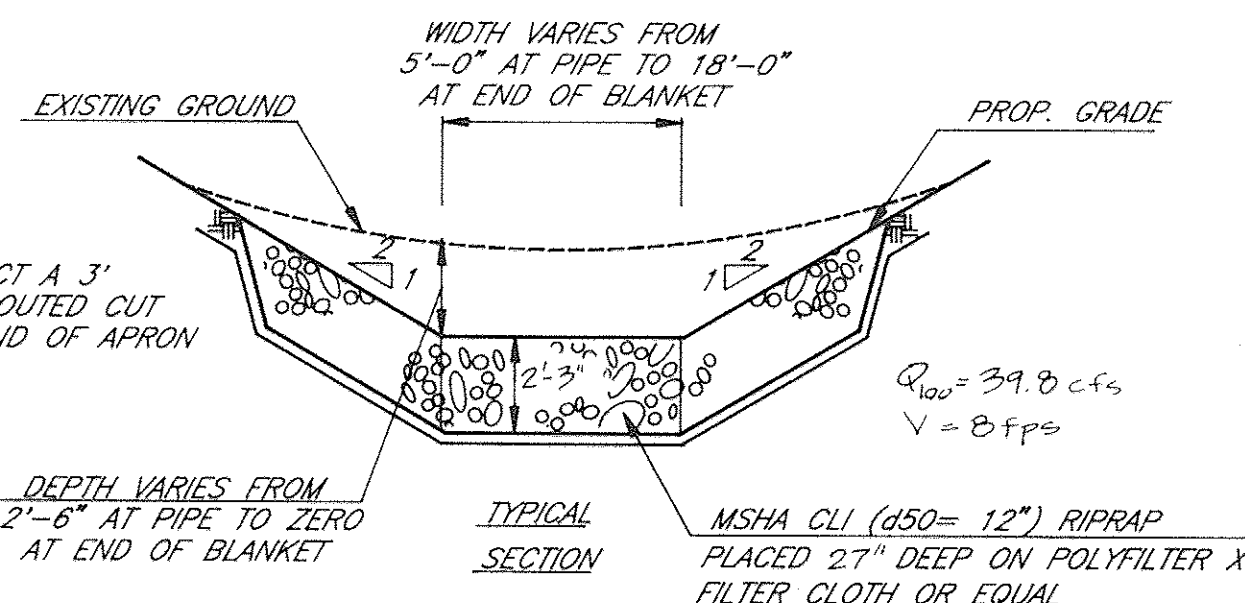


Removable grated top that locks in place. Large drainage capacity. Used with sheet metal apron caulked into sump base.

10 NEENAH DRAIN CAP
NO SCALE



3 LOW FLOW CHANNEL
NO SCALE

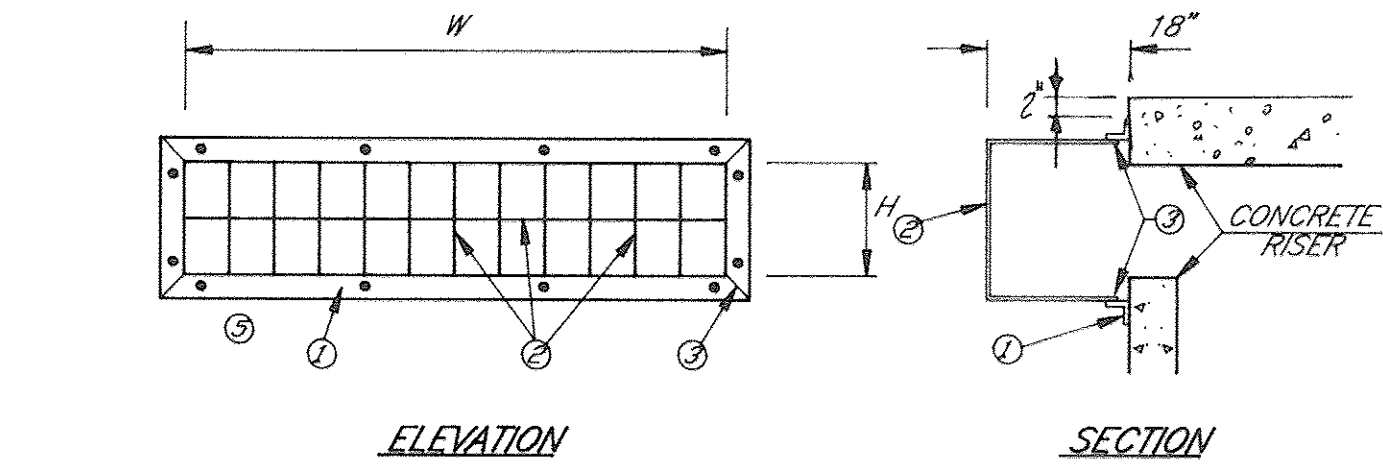


4 OUTLET PROTECTION
NO SCALE

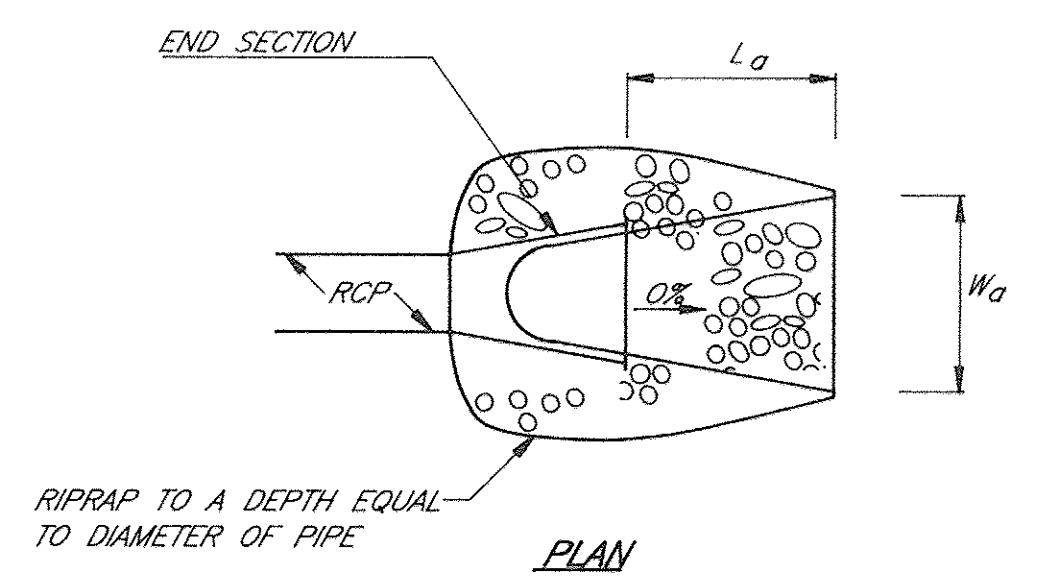
DIMENSION TABLE

RISER FACE	W	H
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"

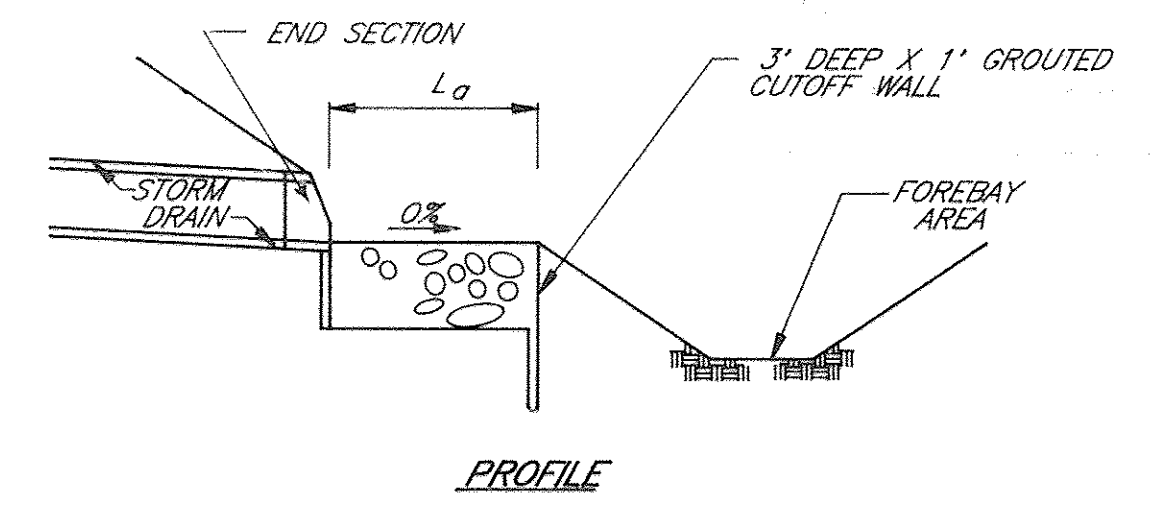
- NOTES**
- 4" X 3" METAL ANGLE FABRICATED TO THE GIVEN DIMENSIONS & BOLTED TO RISER EVERY 24" MIN.
 - 1/2" METAL ROD OR RE-BAR ON 6" CENTERS WELDED TO FRAME.
 - WELDED
 - ALL MATERIAL TO BE GALVANIZED AFTER FABRICATION AND PAINTED BATTLESHIP GRAY.
 - CENTER ALL RACKS OVER RISER OPENINGS.
 - DIMENSIONS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



5 TRASH RACK (FOR RISER)
NO SCALE



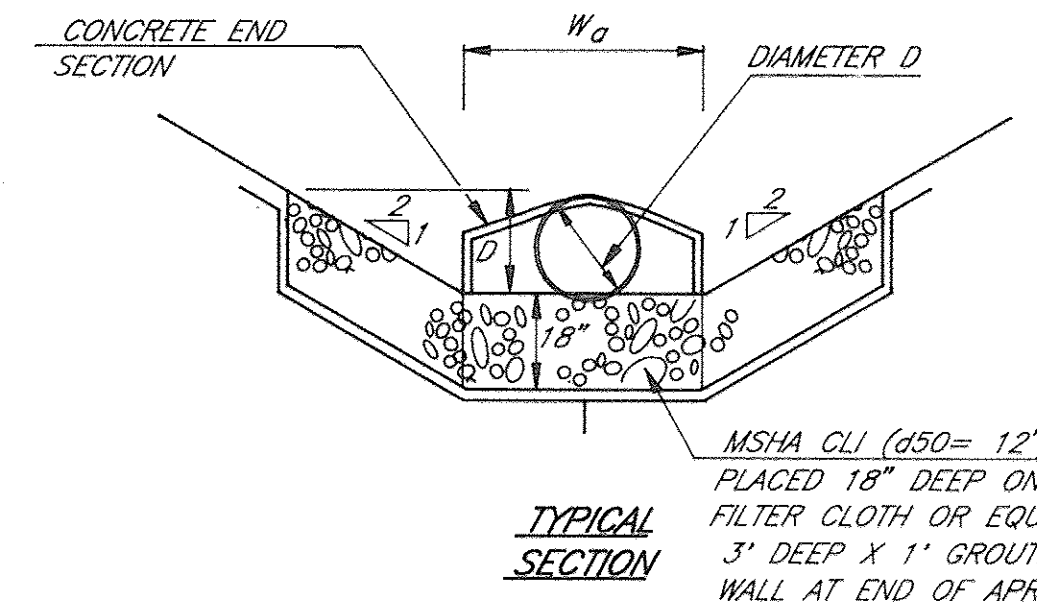
6 RIPRAP APRON
NO SCALE



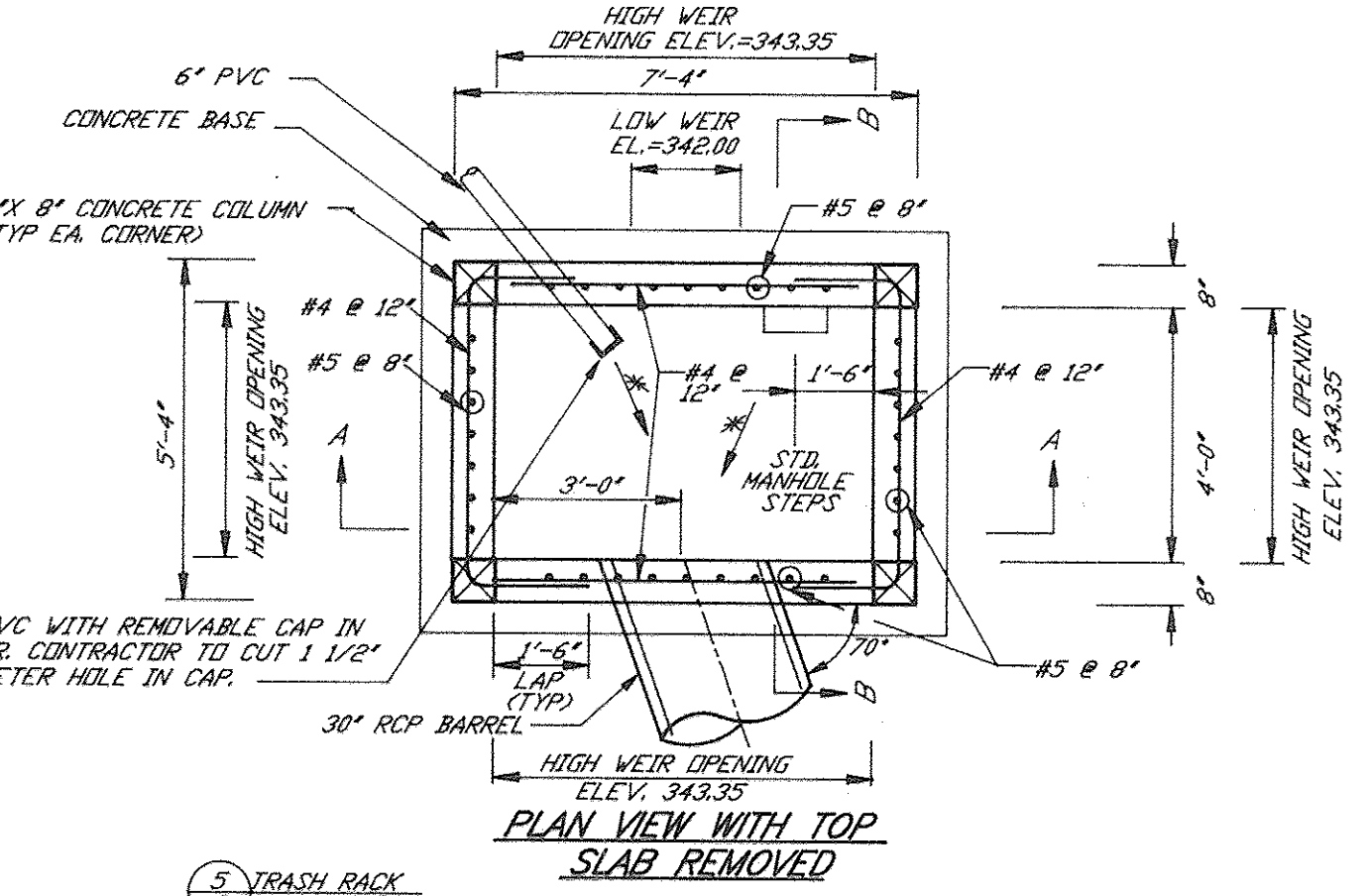
8 CONCRETE CRADLE (TR 46 A-2)
NO SCALE

DATA CHART

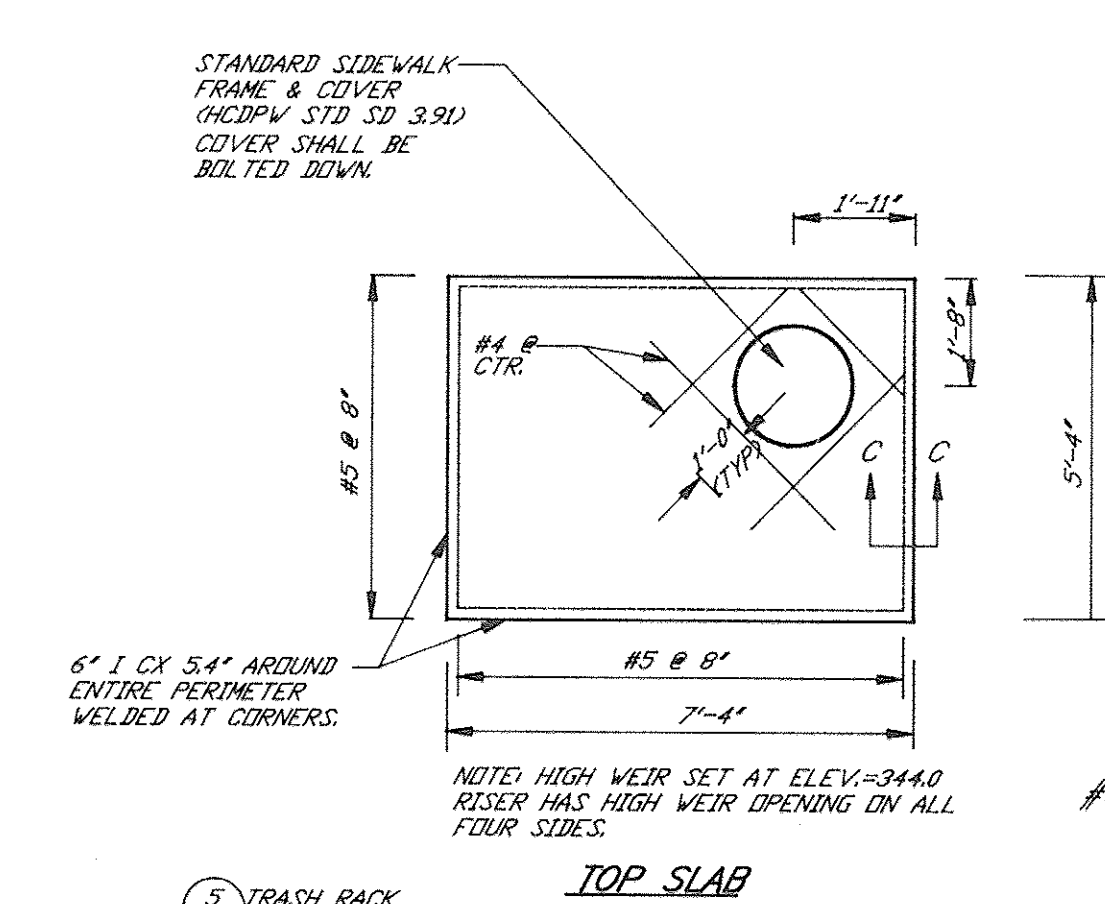
LOCATION	L_a	W_a	Q_{10} (cfs)	V (fps)
E-1	8'	5'	10.92	6.0
E-3	6'	4'	6.22	5.0



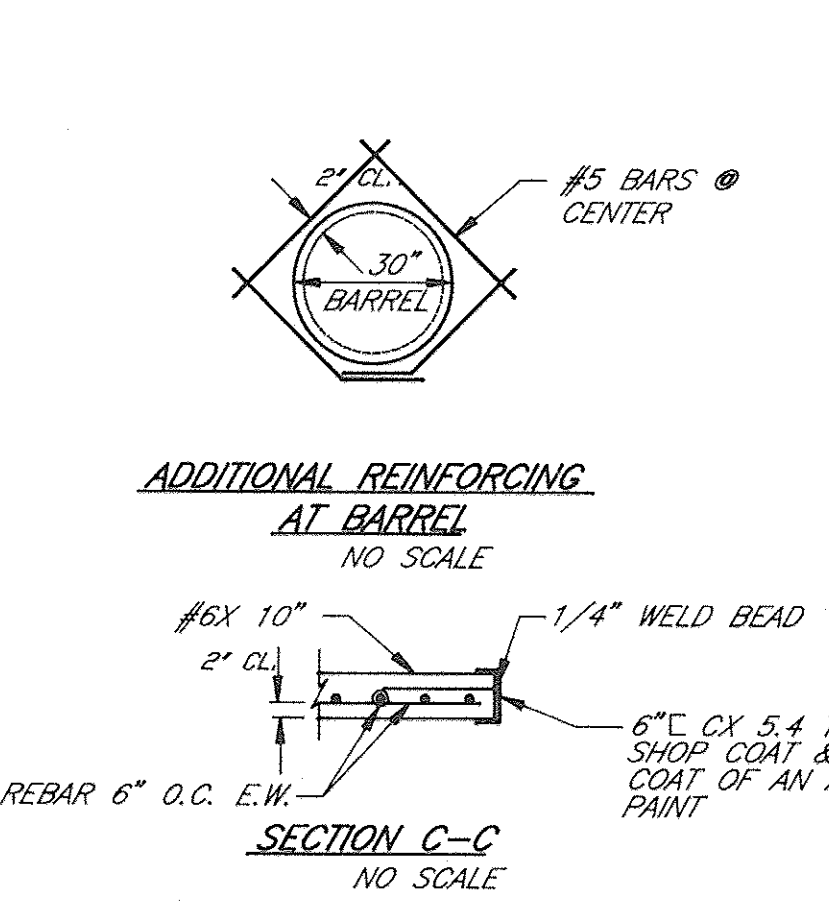
9 CONCRETE ANTI-SEEP COLLAR (TWO REQ'D)
NO SCALE



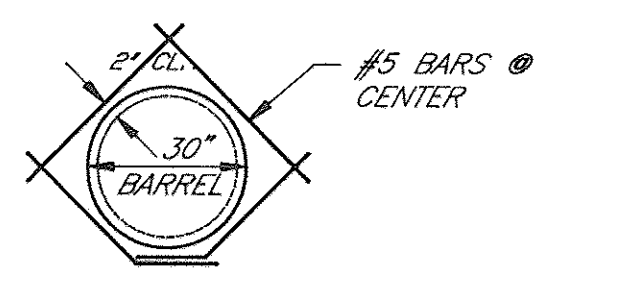
1 PLAN VIEW WITH TOP SLAB REMOVED



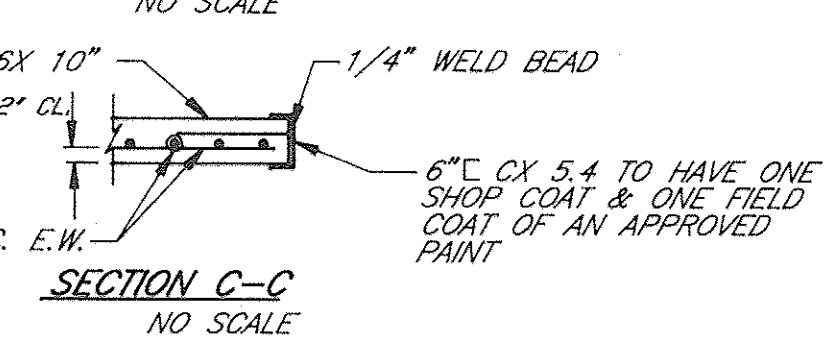
2 CONTROL STRUCTURE CS-1
NO SCALE



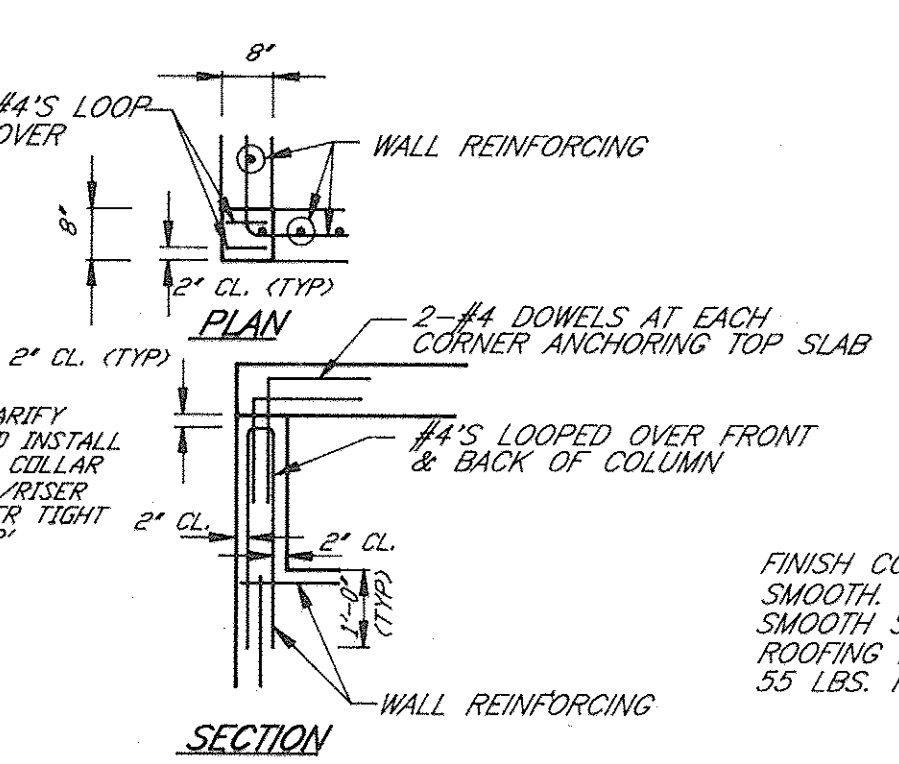
3 TOP SLAB



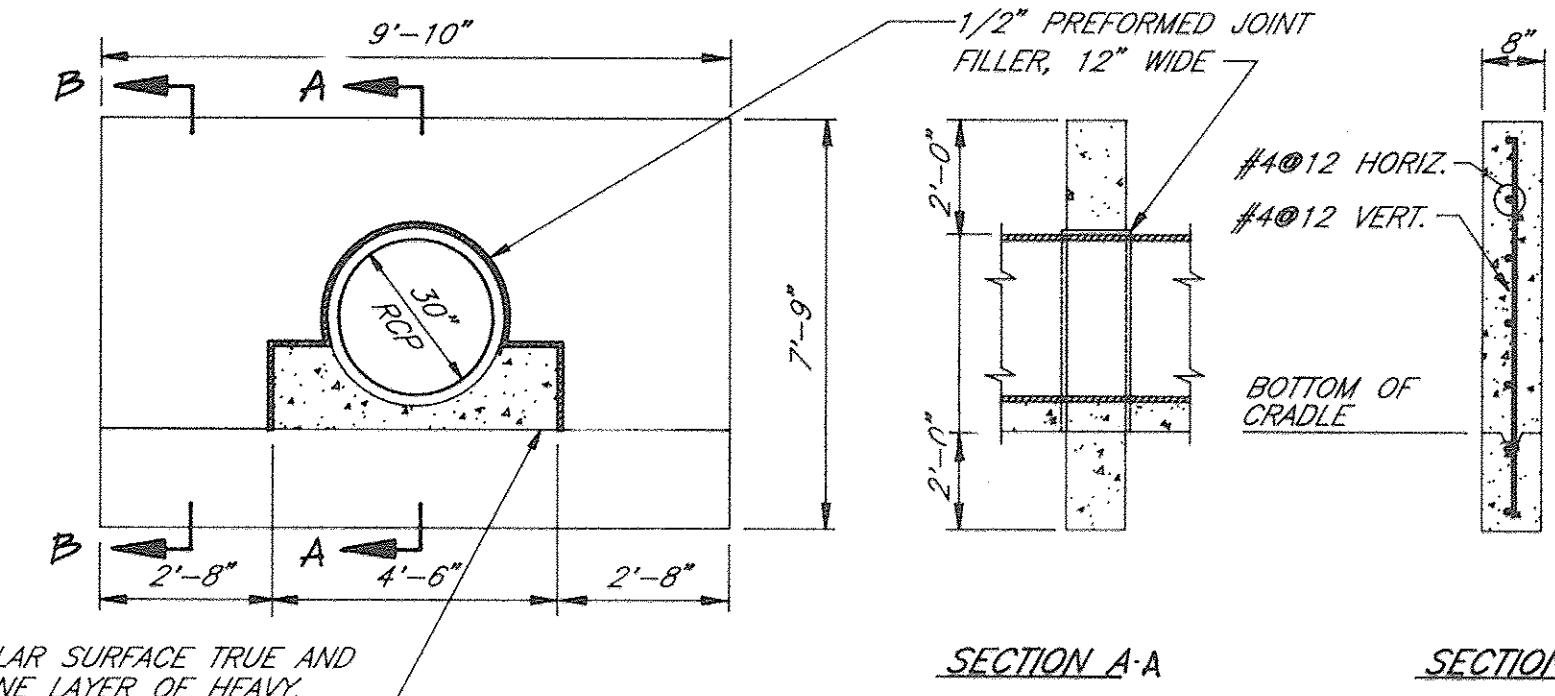
4 ADDITIONAL REINFORCING AT BARREL
NO SCALE



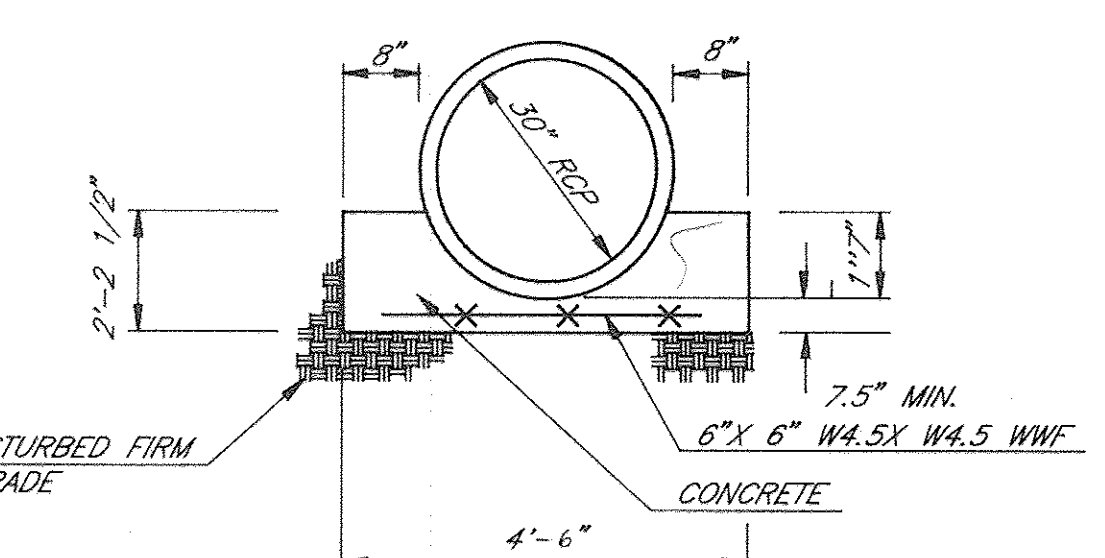
5 SECTION C-C
NO SCALE



6 COLUMN REINFORCING
NO SCALE



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



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

ADDRESS CHART

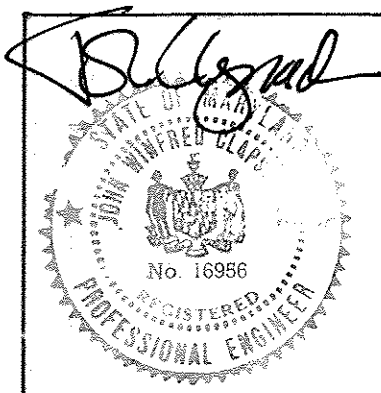
BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

PLANNING BOARD OF HOWARD COUNTY
DATE: 18 Aug. 94

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

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

WATER CODE	SEWER CODE



DESCRIPTION: REVISE LANE POOL AND SHEETS 13, 14 & 15
DATE: 2/2015
PREPARED BY: RBA

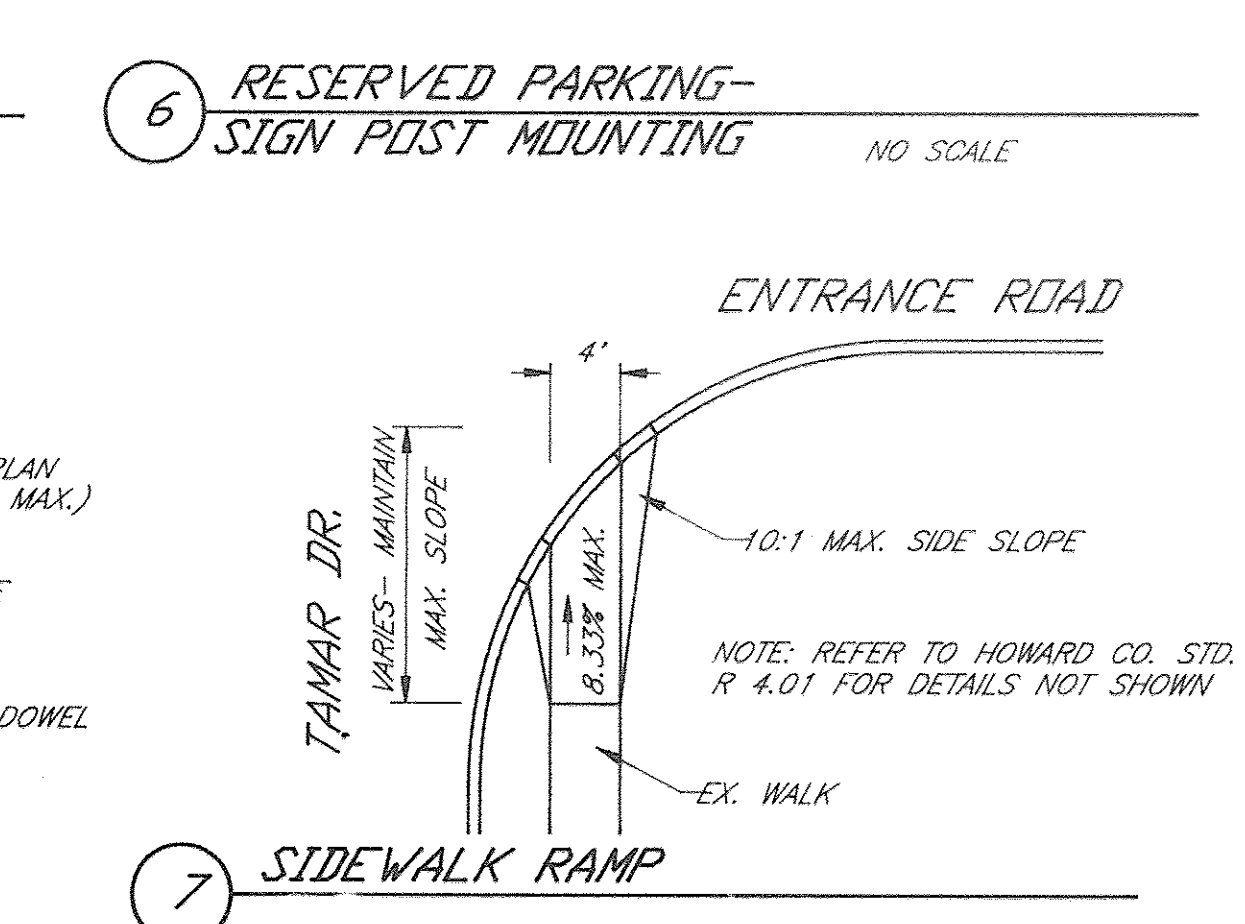
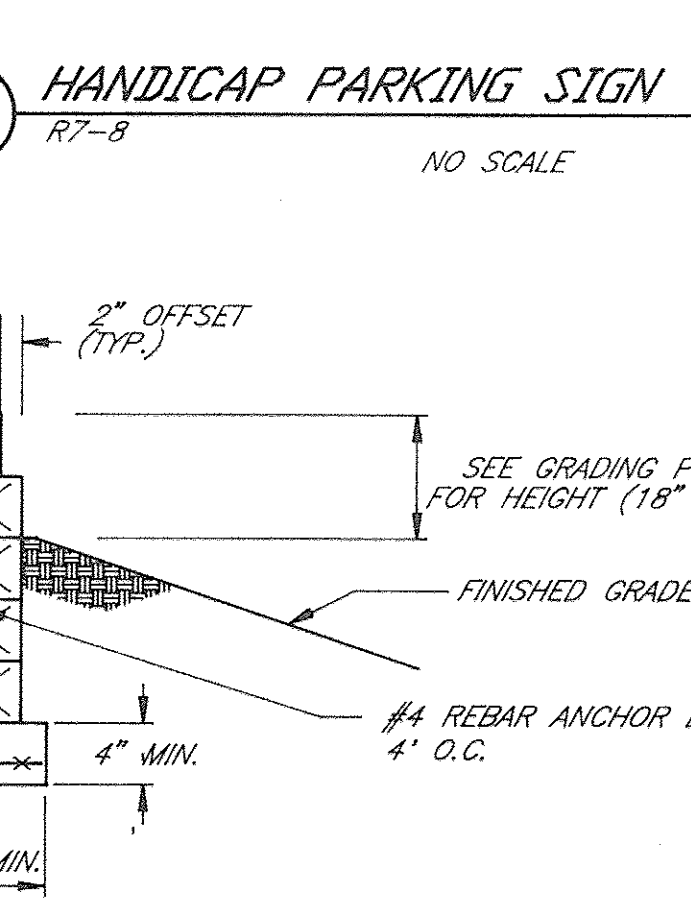
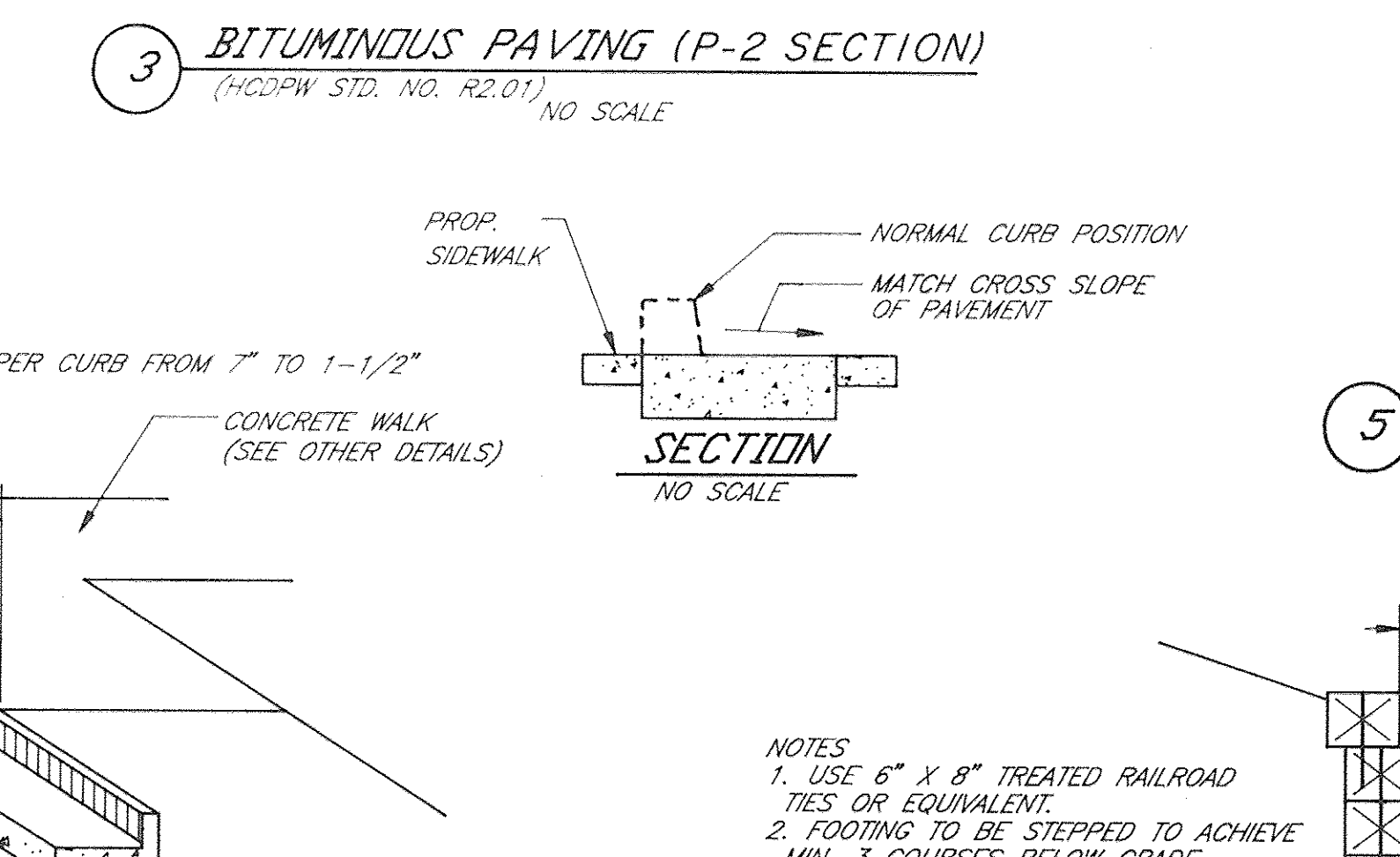
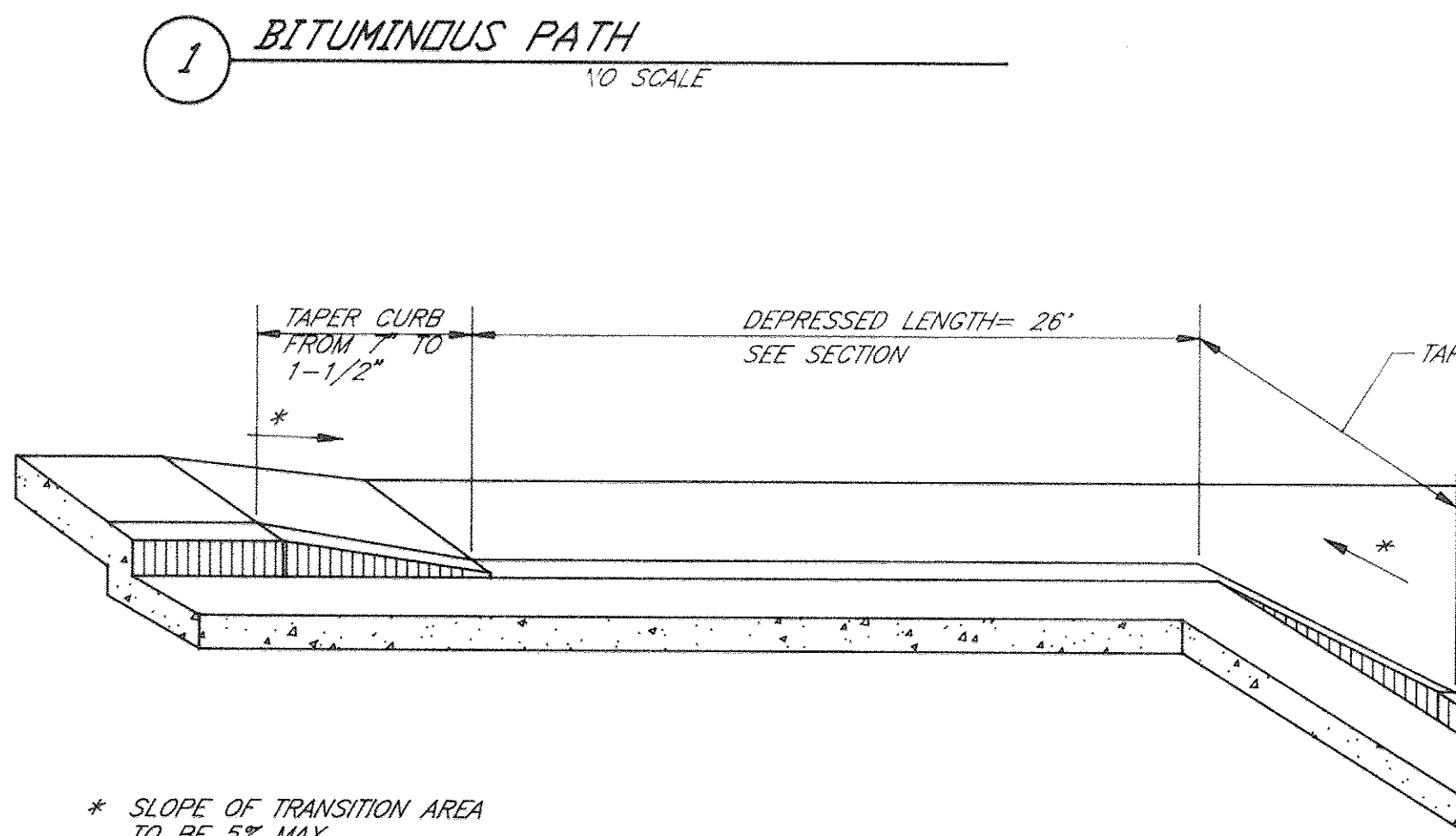
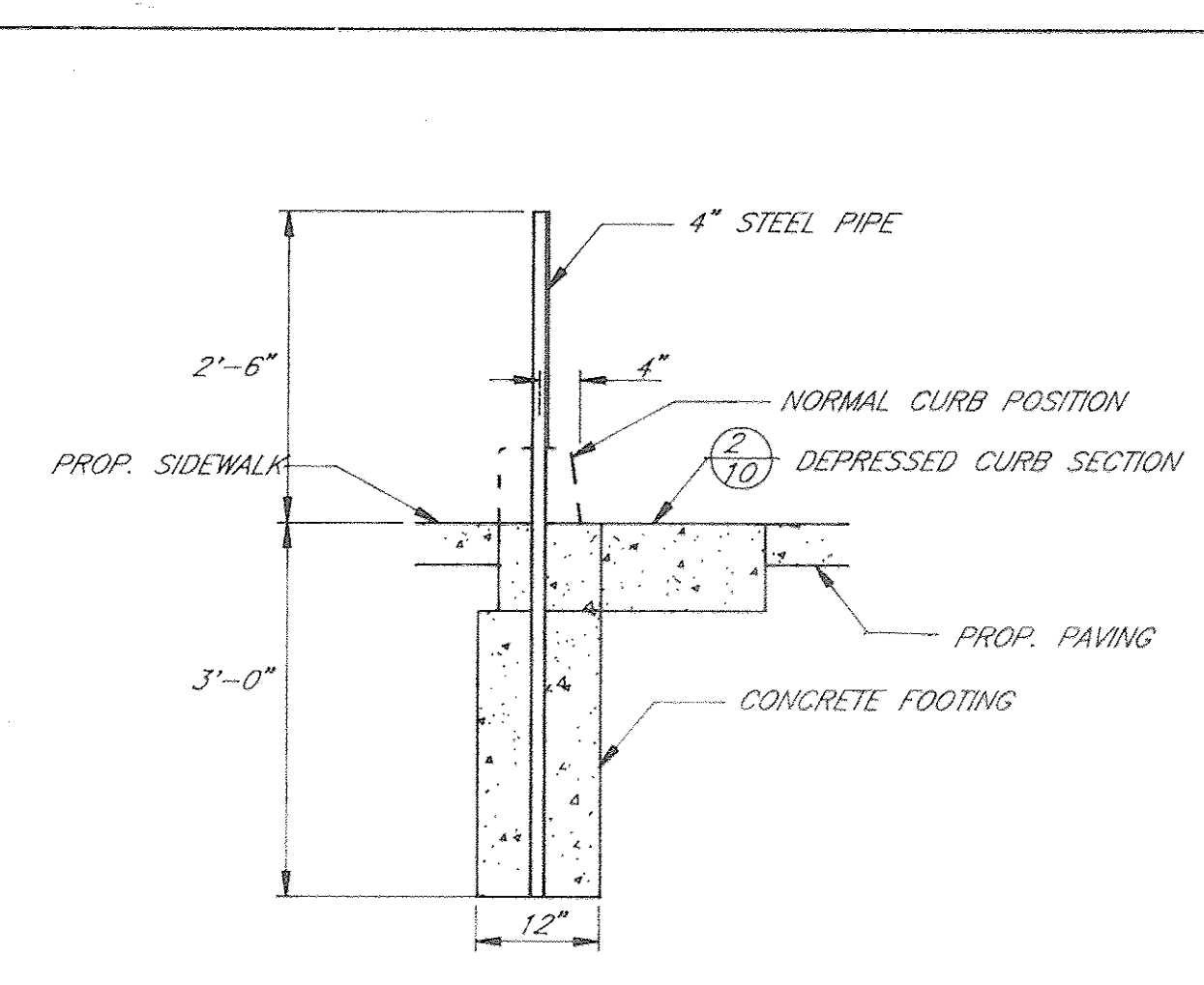
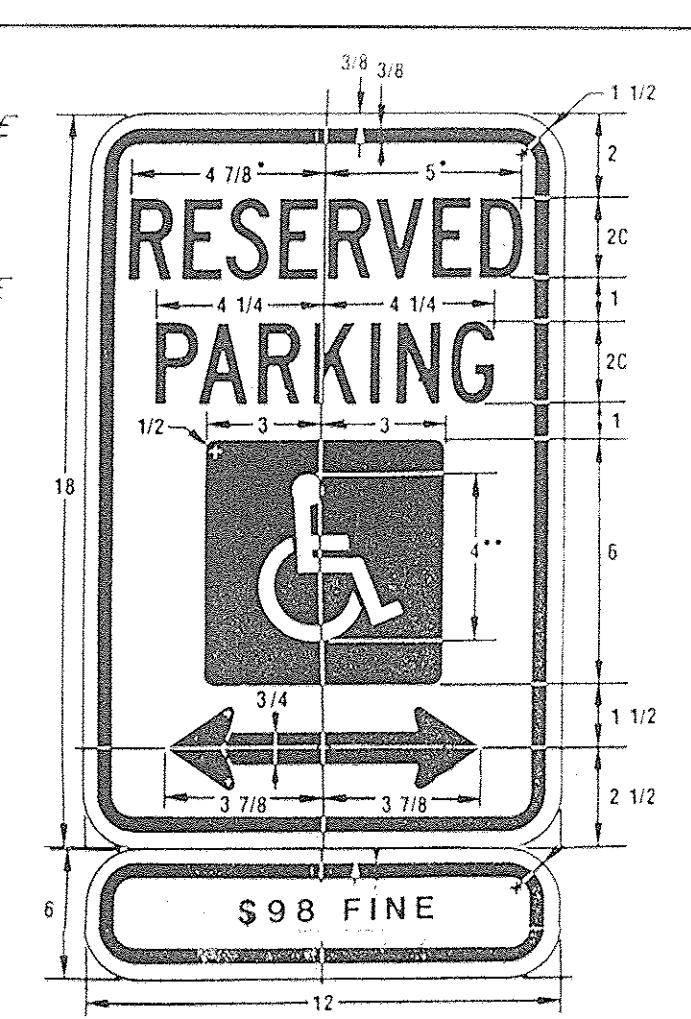
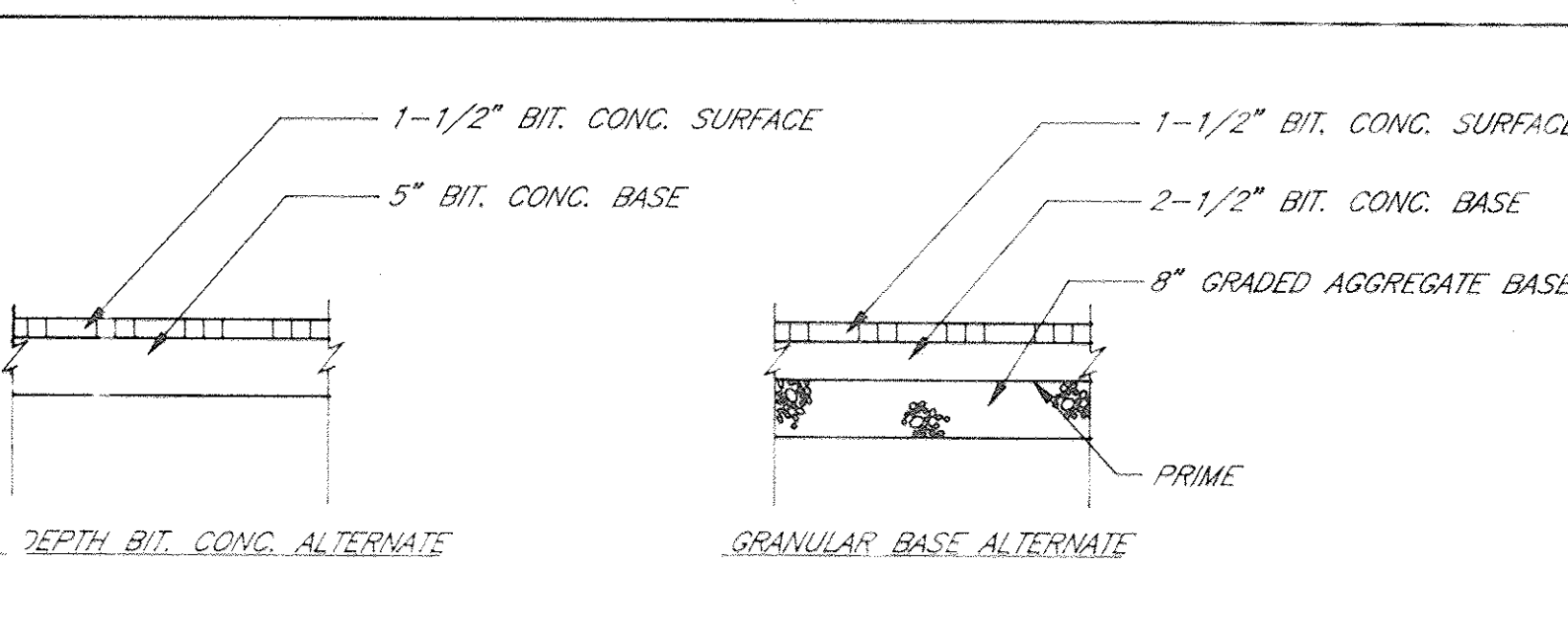
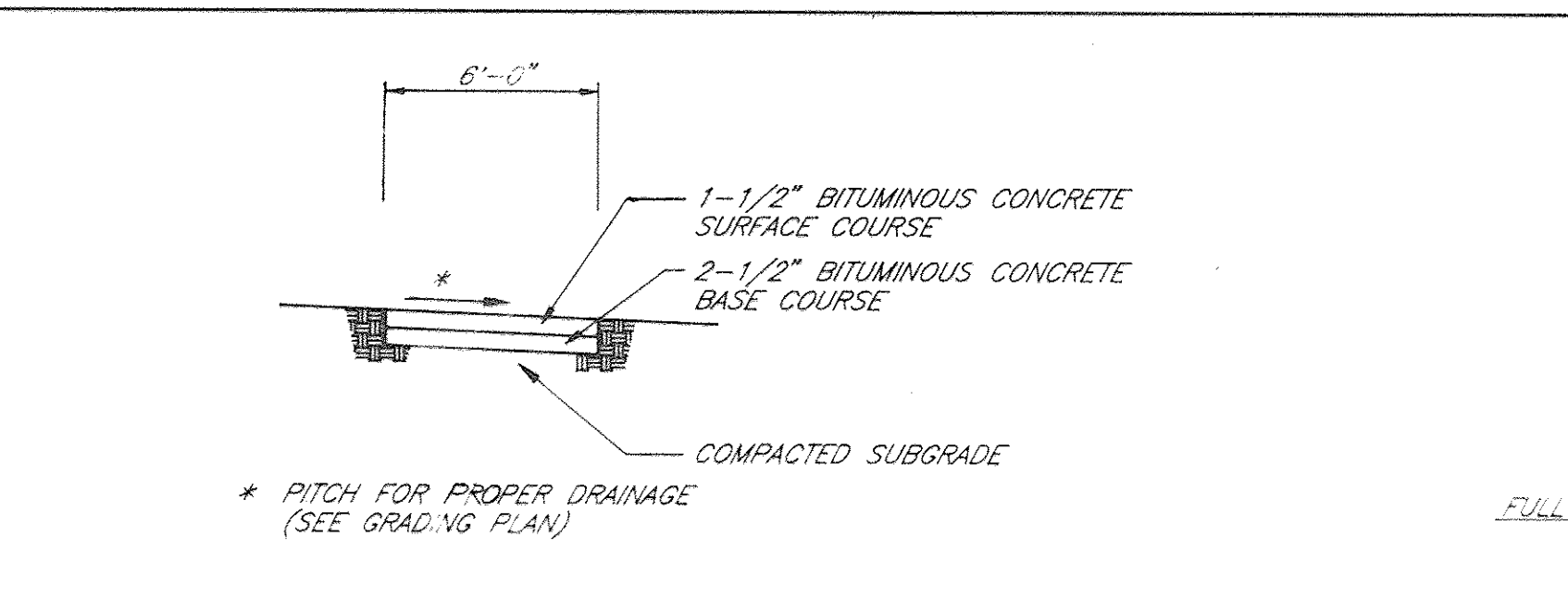
5560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
410-730-7900

DETAILS

DRAWN	CHECKED
JAC	JWC
PROJ. NO.	DATE
J0905	6/94
SHEET	OF
9	125

SCALE: 9
KENDALL RIDGE COMMUNITY POOL
REVISED SITE PLAN
HOWARD COUNTY MARYLAND

REF-10/10/94



APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	DATE: 10/4/94
DIRECTOR: [Signature]	DATE: 10/4/94
CHIEF, BUREAU OF ENGINEERING: [Signature]	DATE: 10/4/94
APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING	DATE: 10/17/94
DIRECTOR: [Signature]	DATE: 10/17/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH: [Signature]	DATE: 10/17/94
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT	DATE: 10-6-94
COUNTY HEALTH OFFICER: [Signature]	DATE: 10-6-94
OWNER: HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY, 10225 LITTLE PATUMON PARKWAY, COLUMBIA, MARYLAND 21044, (410) 592-6370	
DEVELOPER: COLUMBIA ASSOCIATION, 10225 LITTLE PATUMON PARKWAY, COLUMBIA, MARYLAND 21044, (410) 715-3000	

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

* SLOPE OF TRANSITION AREA TO BE 5% MAX.

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

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2. FOOTING TO BE STEPPED TO ACHIEVE MIN. 3 COURSES BELOW GRADE.

NOTE: REFER TO HOWARD CO. STD. R 4.01 FOR DETAILS NOT SHOWN.

MD 378 STORMWATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS

NOTE: CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT BY HERSTY & 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.

NOTE: CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT BY HERSTY & 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.

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NOTES:
1. OWNER SHALL PERFORM INSPECTIONS USING THE PROVIDED CHECKLIST ON THE FOLLOWING SCHEDULE:
FIRST YEAR: TWO INSPECTIONS IN 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.

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, rocks 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 designed of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut to 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

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 out of 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 the 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 crumble but not 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 $\pm 2\%$ 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 embankment 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 or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

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-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, Plast-Coat, Bio-Rigid, and Bent-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, and 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 inches 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.

As connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be rolled in 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 1/2" wide by 3/8" thick closed cell circular neoprene gasket; and a 12" wide huggar type band with 0-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 nuts. 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.

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.

Backfilling

shall conform to "Structure Backfill".

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:

Materials

Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361.

Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

Stabilization

All borrow areas shall be graded to provide proper drainage and left in a soggy 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 Planning (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 soil 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.

Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct

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, noted maintenance, or problems. Observations 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 structural condition of the dam. The Dam Safety Division is available to assist owners in initiating a program for their facility.

INSPECTION CHECKLIST - PAGE 2

INSPECTED BY	DATE	WEATHER	POOL LEVEL
1. Abnormal vibrations			
2. Abnormal movement			
3. Cracking			
4. Settlement			
5. Abnormal seepage			
6. Abnormal noise			
7. Abnormal odors			
8. Abnormal temperature			
9. Abnormal color			
10. Abnormal appearance			
11. Abnormal behavior			
12. Abnormal condition			
13. Abnormal condition			
14. Abnormal condition			
15. Abnormal condition			
16. Abnormal condition			
17. Abnormal condition			
18. Abnormal condition			
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48. Abnormal condition			
49. Abnormal condition			
50. Abnormal condition			

INSPECTION CHECKLIST - PAGE 3

INSPECTED BY	DATE	WEATHER	POOL LEVEL
1. Abnormal vibrations			
2. Abnormal movement			
3. Cracking			
4. Settlement			
5. Abnormal seepage			
6. Abnormal noise			
7. Abnormal odors			
8. Abnormal temperature			
9. Abnormal color			
10. Abnormal appearance			
11. Abnormal behavior			
12. Abnormal condition			
13. Abnormal condition			
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47. Abnormal condition			
48. Abnormal condition			
49. Abnormal condition			
50. Abnormal condition			

ADDRESS CHART

BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE
SUBDIVISION NAME	SECTION/AREA
VILLAGE OF LONG REACH	3 2 5
PLAT BLOCK	ZONE TAX/ZONE MAP/ELEC. DIST. CENSUS TR.
CHP 8111	NT 37 6 6066.02
WATER CODE	SEWER CODE

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: _____ PB 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, engineering, 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 bidders, 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.

REVISIONS

NO.	DESCRIPTION	DATE	PREPARED BY
1	REMOVE LAWN TOOL, ADD SHEETS 13, 14, 15		

Signature: [Signature]
Professional Engineer
No. 16566

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

DETAILS

KENDALL RIDGE COMMUNITY POOL
REVISED SITE PLAN

SCALE: 10' = 1" (125)

DRAWN: JAC
CHECKED: JWC
DATE: 6/94
SHEET 10 OF 125

HOWARD COUNTY MARYLAND

SEDIMENT AND EROSION CONTROL NOTES

- 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 (319-1655).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "M" STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," AND REVISIONS HERETO.
- 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. BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 5A), SED (SEC. 5A), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTILL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF THE SITE:	6.40	ACRES
AREA DISTURBED:	3.62	ACRES (3.3 ACRES ON LOT 5)
AREA TO BE REEDED OR PAVED:	1.08	ACRES
AREA TO BE VEGETATIVELY STABILIZED:	2.94	ACRES
TOTAL CUT:	18864	CU. YDS.
TOTAL FILL:	15402	CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION:	COUNTY LANDFILL	
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY DEPT. OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR.
- 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 BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- 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.
- ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO HOWARD COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
- 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.
- AT THE END OF EACH WORK DAY ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN THE OPERATIONAL CONDITION.
- ALL SEDIMENT AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE AGREEMENT MADE BETWEEN COLUMBIA ASSOCIATION AND HSCD AND AS AMENDED 8/1/90.
- 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 RIGHTS-OF-WAYS THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
- 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.
- 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:

- PREFERRED - APPLY 2 TONS PER ACRE DOLMETHIC 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.)
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLMETHIC LIMESTONE (92 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK 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 (14 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 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TDL 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.

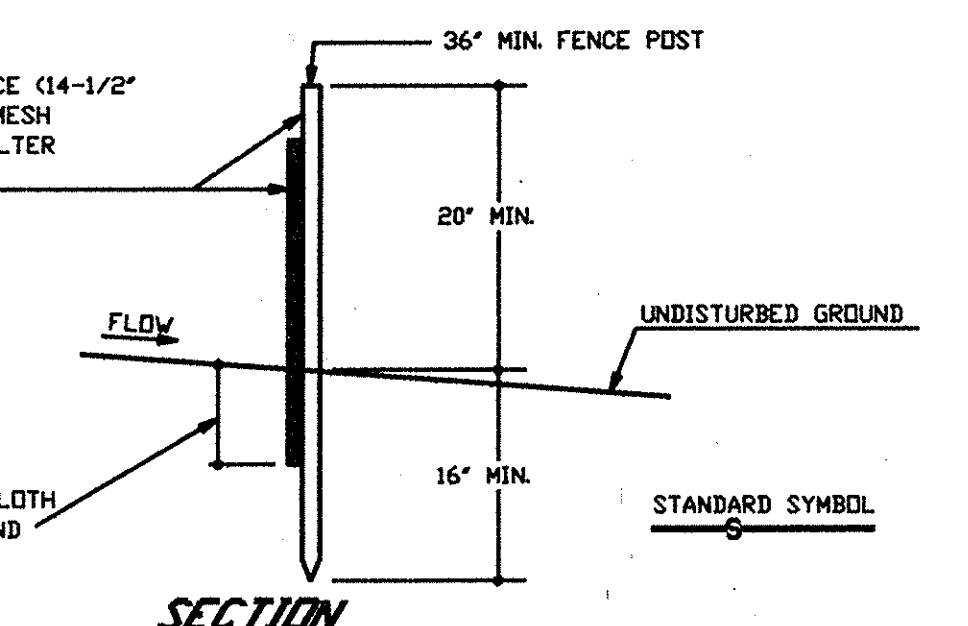
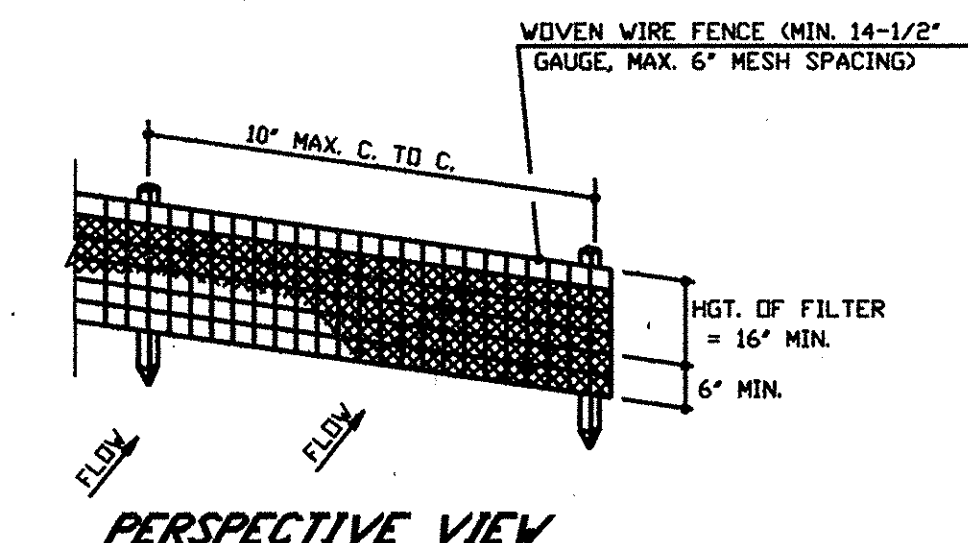
SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING IF NOT PREVIOUSLY LOOSENED.

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 1 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 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TDL 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.

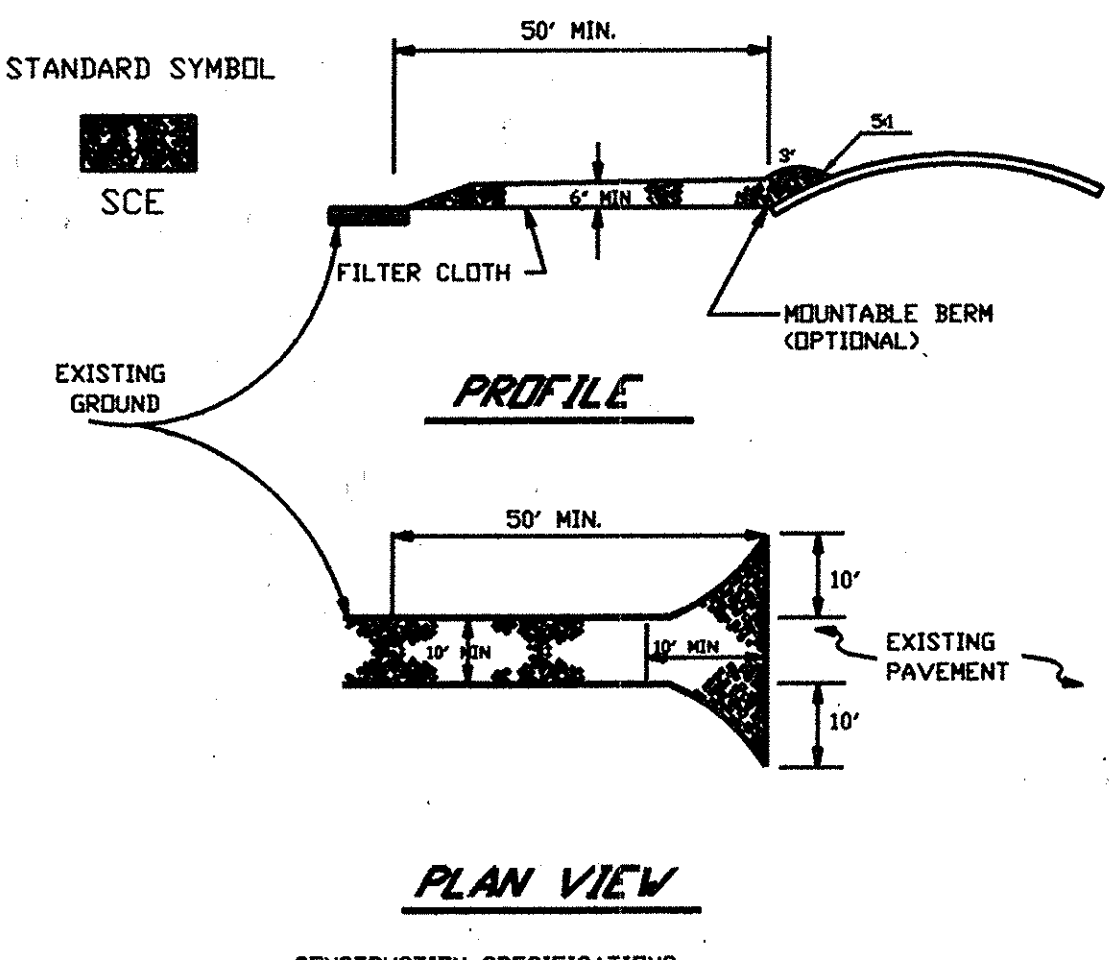
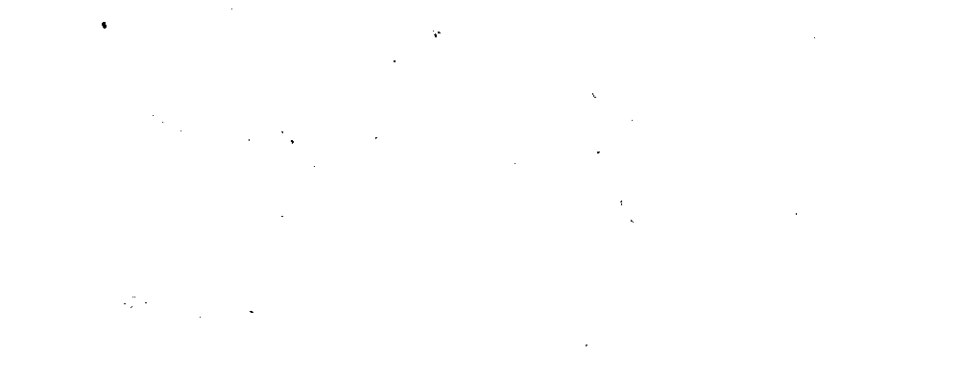
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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

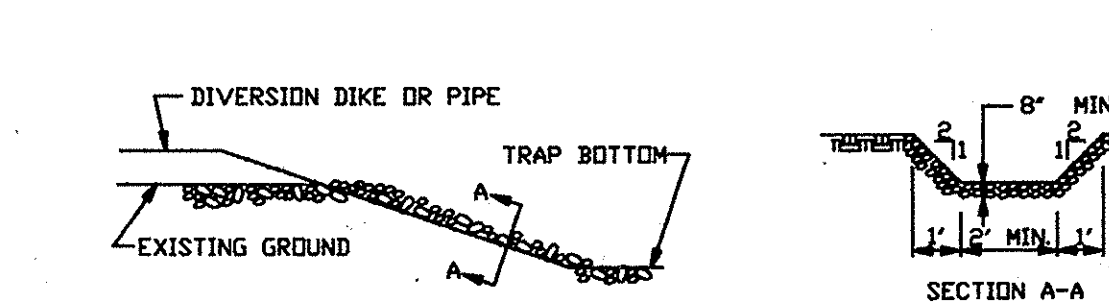
SILT FENCE



CONSTRUCTION SPECIFICATIONS

- STONE SIZE - USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM BUT NOT LESS THAN FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- 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.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL A MOUNTABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
- 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 DEMAND 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.
- WASHING - VEHICLES 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.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RUN.

STABILIZED CONSTRUCTION ENTRANCE



CONSTRUCTION SPECIFICATIONS

- STONE SIZE 2"-4"
- LENGTH - AS EFFECTIVE
- THICKNESS - NOT LESS THAN 8"
- WIDTH - NOT LESS THAN 4'
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED.
- COMPACT STONE AFTER PLACEMENT WITH AVAILABLE EQUIPMENT.

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *[Signature]* DATE: 10/14/94
CHIEF, BUREAU OF ENGINEERING: *[Signature]* DATE: 10/14/94

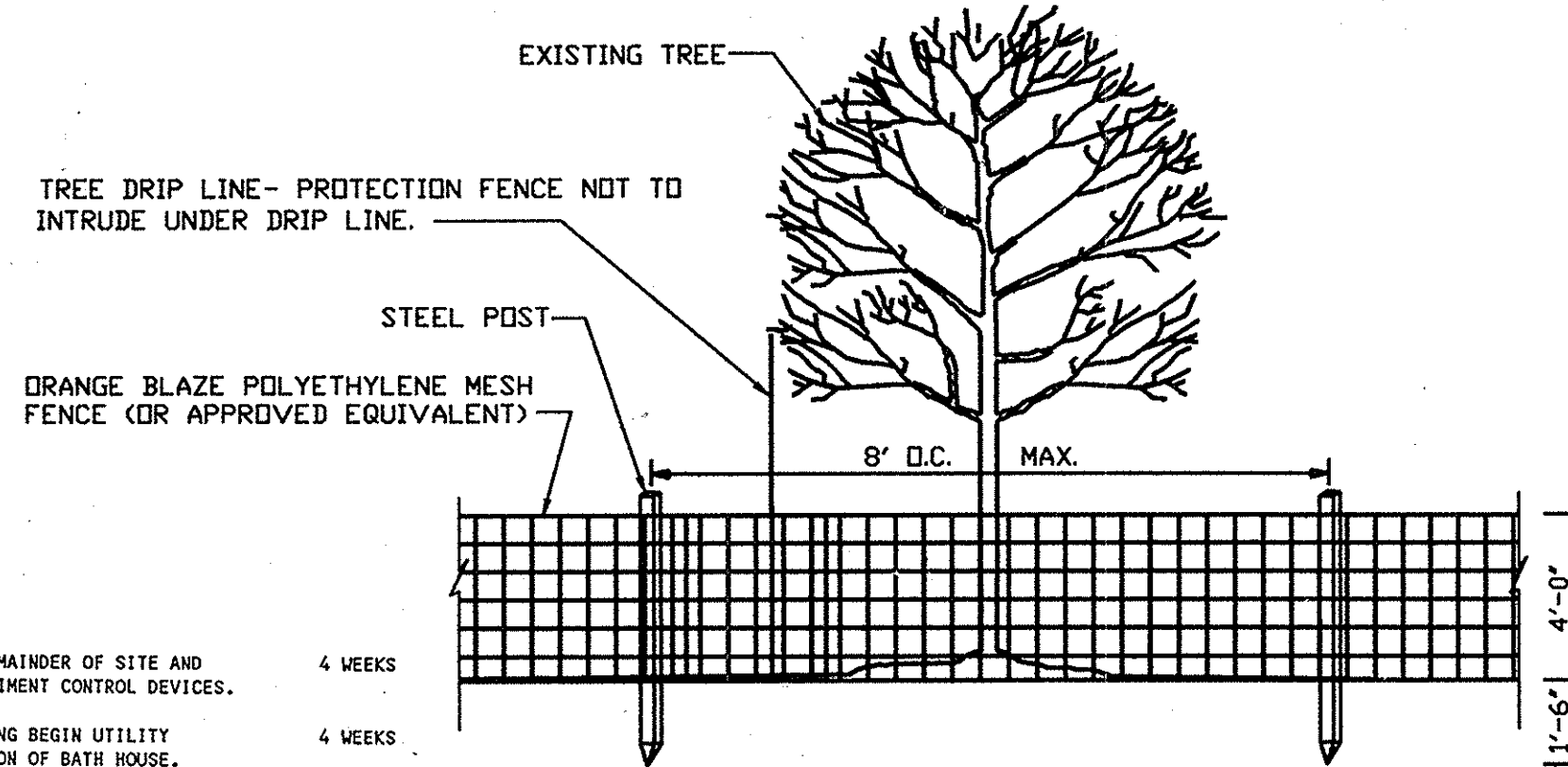
APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING
DIRECTOR: *[Signature]* DATE: 10/17/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH: *[Signature]* DATE: 10/12/94

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DIRECTOR: *[Signature]* DATE: 10-6-94
COUNTY HEALTH OFFICER: *[Signature]*

OWNER: HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
10275 LITTLE PATENT PKVY
COLUMBIA, MARYLAND 21044
(410) 292-6370

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

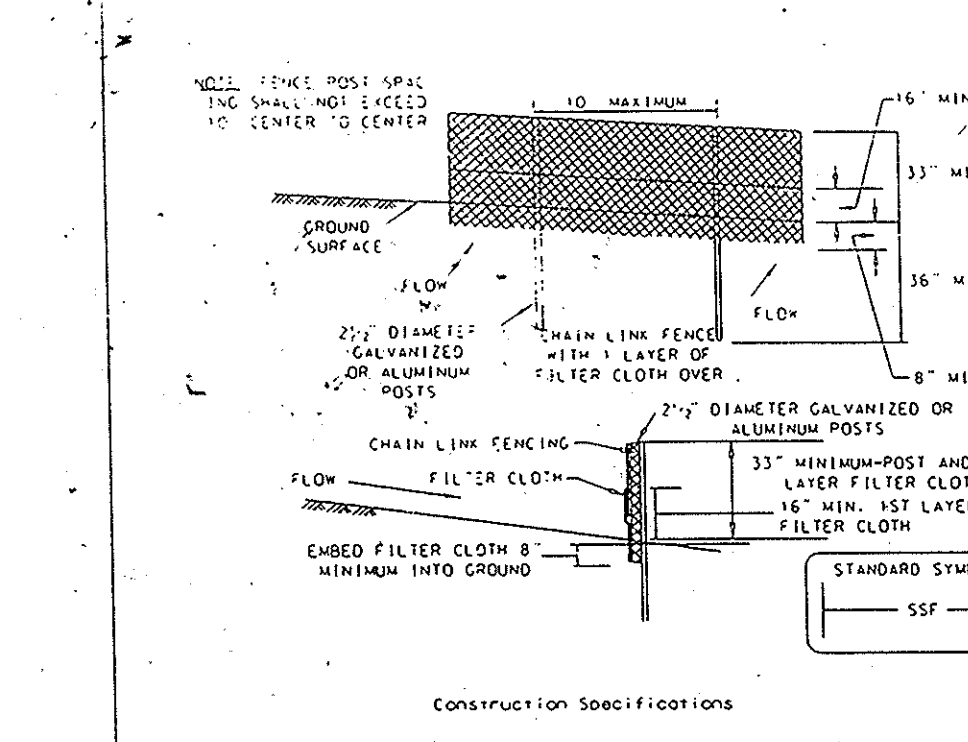
APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: 18 Aug 94



TREE PROTECTION PROCEDURES

- TREE PROTECTION FENCE SHALL BE INSTALLED AT THE TRIP LINE OF THE TREES TO BE PROTECTED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
- 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.
- REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA WILL BE PROHIBITED.
- FEET AND VEHICULAR TRAFFIC SHALL BE KEPT TO MINIMUM IN THE TREE PROTECTION THE FOLLOWING CONSTRUCTION ACTIVITIES ARE PROHIBITED: PLACING BACKFILL IN THE PROTECTED AREA BURNING IN OR IN CLOSE PROXIMITY TO PROTECTED AREAS, FELLING TREES IN THE PROTECTED AREA STUMPING SUPPLIES IN THE PROTECTED AREA OR CONDUCTING TRUCKING OPERATIONS IN THE PROTECTED AREA.
- ALL TREES TO BE REMOVED WITHIN 50 FEET OF THE TREE PROTECTION AREA ARE TO BE REMOVED IN A MANNER THAT WILL NOT DAMAGE THE TREES OR ROOTS OF THE TREES IN THE TREE PROTECTION AREA.

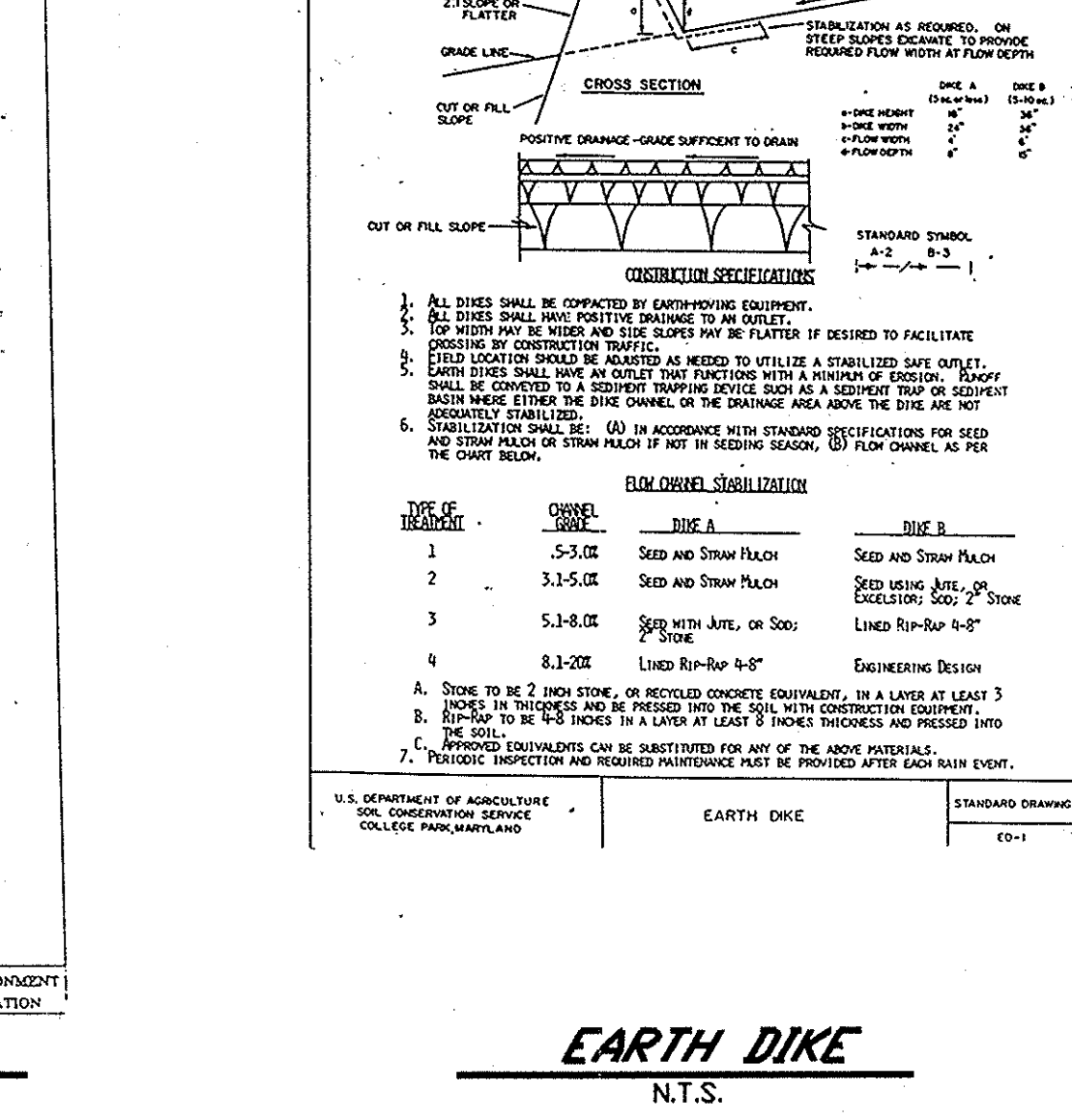
DETAIL 33 - SUPER SILT FENCE



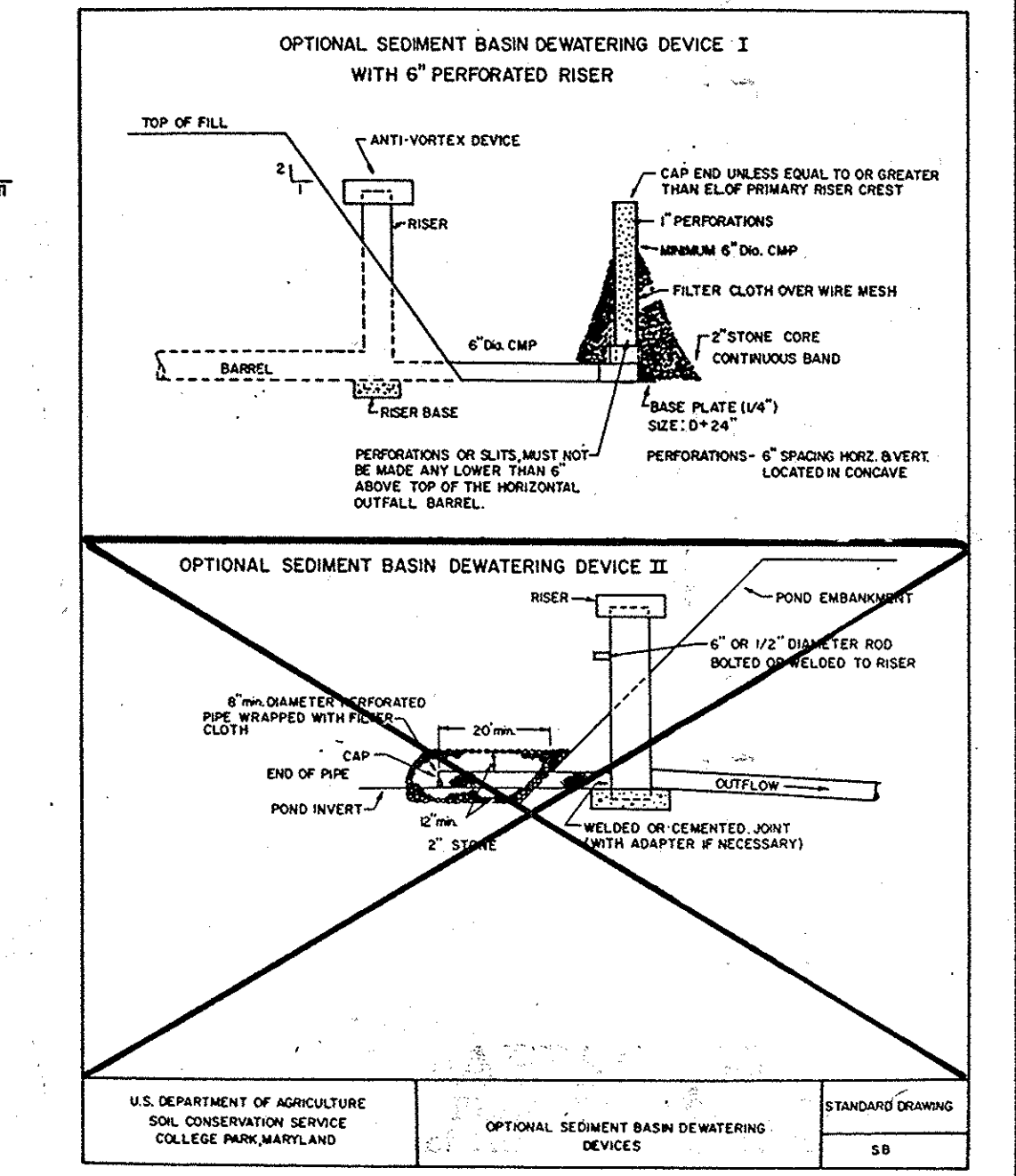
- The posts do not need to be set in concrete.
- Chain link fence shall be fastened securely to the fence posts with wire ties or staples.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" of the top and mid section.
- Filter cloth shall be embedded a minimum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

SUPER SILT FENCE

EARTH DIKE



EARTH DIKE



OPTIONAL SEDIMENT BASIN DEWATERING DEVICES

ADDRESS CHART

BUILDING	STREET ADDRESS
	8245 TAMAR DRIVE

SUBDIVISION NAME: KENDALL RIDGE
SECTION/AREA: 3 2 5
LOT/PARCEL: 3 2 5
PLAT/BLOCK: NT
ZONE: 37
CENSUS DISTRICT: 6
WATER CODE: NT
SEWER CODE: NT

SEQUENCE OF CONSTRUCTION

NO.	DESCRIPTION	PERIOD	NO.	DESCRIPTION	PERIOD
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). START STABILIZATION 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 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. ALSO ADVISE THE HOWARD SOIL CONSERVATION DISTRICT OF ANY CHANGES TO THE PLAN.	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 UNFINISHED. 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			

CERTIFICATION BY THE DEVELOPER: I, *[Signature]*, 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 during the project. I shall employ 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 advise the Howard Soil Conservation District of any changes to the plan.

CERTIFICATION BY THE ENGINEER: I, *[Signature]*, certify that this plan for pond construction, erosion control, 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 MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO ADVISE THE HOWARD SOIL CONSERVATION DISTRICT OF ANY CHANGES TO THE PLAN.

DATE: 9/18/94
SIGNATURE OF DEVELOPER: *[Signature]*
DATE: 9/25/94
SIGNATURE OF ENGINEER: *[Signature]*

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]* DATE: 9/29/94
HOWARD SOIL CONSERVATION DISTRICT

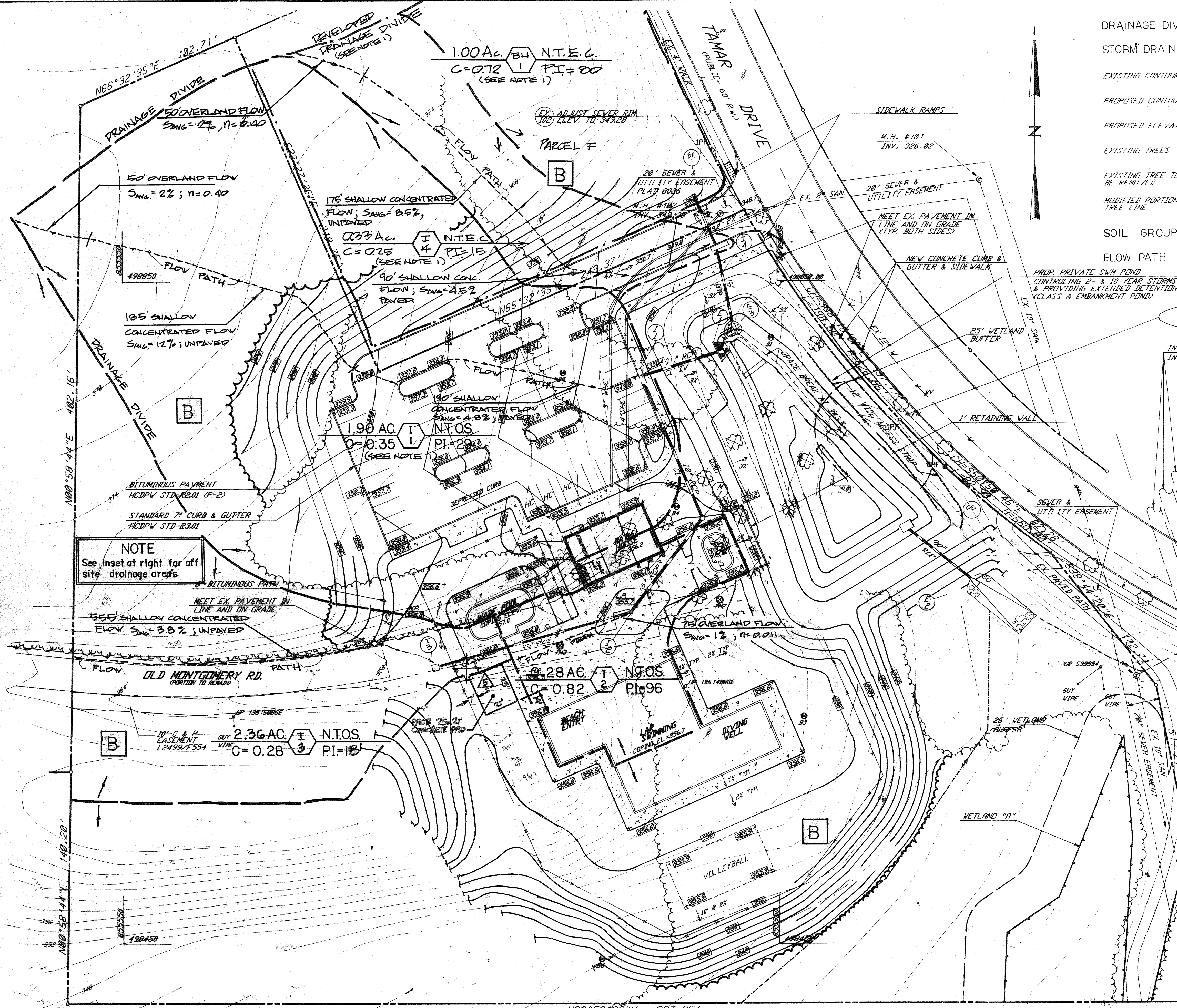
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *[Signature]* DATE: 9/29/94
HOWARD SOIL CONSERVATION DISTRICT

RECEIVED
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
NOV 1 1994

PREPARED BY: RBA ENGINEERS - ARCHITECTS - PLANNERS
3560 STERRETT PLACE SUITE 300
COLUMBIA, MARYLAND 21044
(410) 730-7950

DETAILS: KENDALL RIDGE COMMUNITY POOL
SCALE: DRAWN: JAC, CHECKED: JWC, PROJ. NO: J0905, DATE: 4/94, SHEET: 11 OF 15
HOWARD COUNTY, MARYLAND



LEGEND

DRAINAGE DIVIDE

STORM DRAIN SYSTEM

EXISTING CONTOUR

PROPOSED CONTOUR

PROPOSED ELEVATION

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. DATE 10/2/94. DIRECTOR James L. Lane. CHIEF, BUREAU OF ENGINEERING Paul J. Sposon.

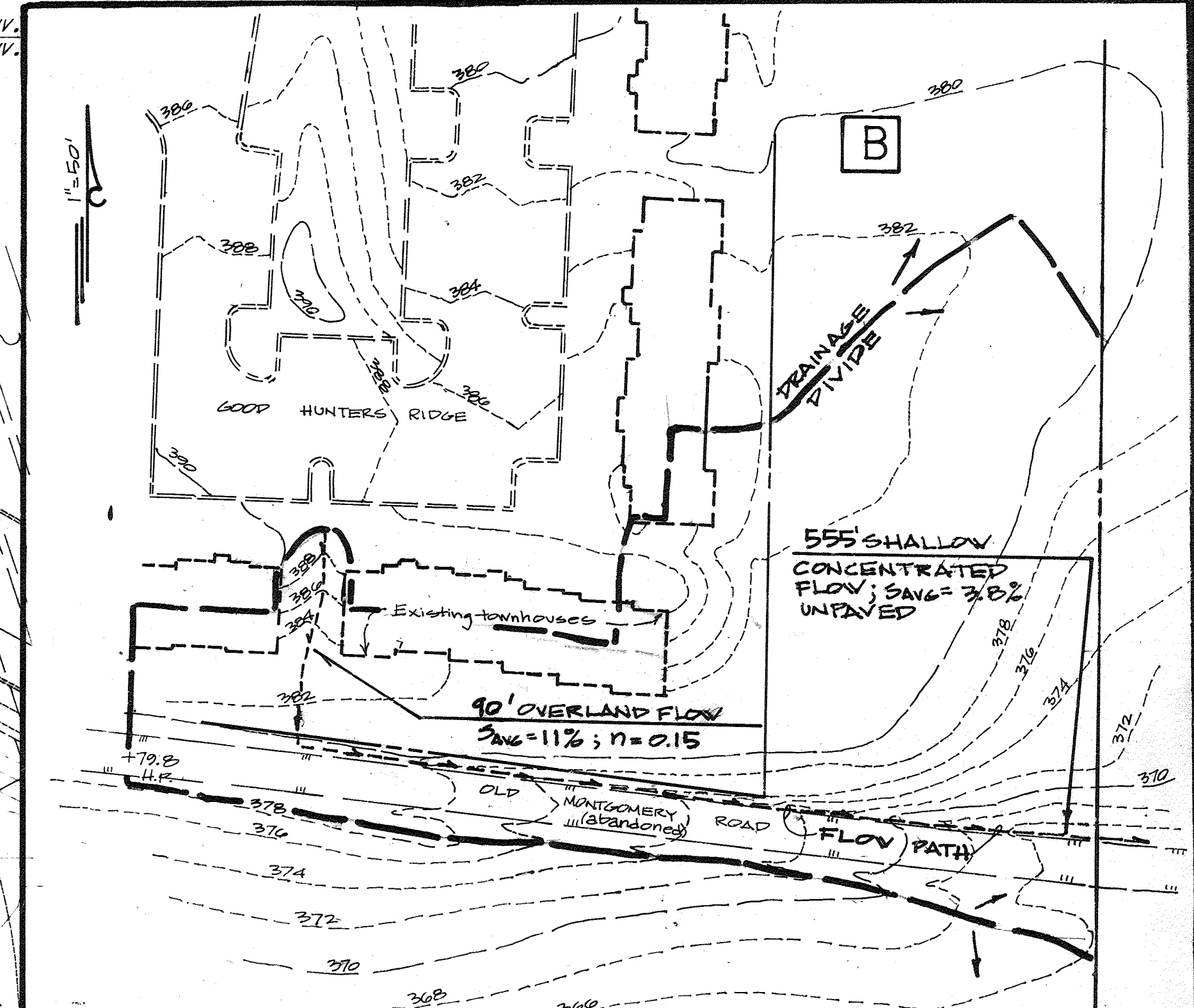
APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING. DATE 10/17/94. DIRECTOR Joseph R. Butler.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT. DATE 10/12/94. DIRECTOR Gina Drummey.

APPROVED COUNTY HEALTH OFFICER. DATE 10-6-94. JAMES M. RYAN, Sr.

OWNER: HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY, 1827 LITTLE PATUKENT PKWY, COLUMBIA, MARYLAND 21044, (410) 592-6370.

DEVELOPER: COLUMBIA ASSOCIATES, 1827 WINDOPIN CIRCLE, COLUMBIA, MARYLAND 21044, (410) 715-3000.



NOTE
See inset at right for off site drainage areas

APPROVED PLANNING BOARD OF HOWARD COUNTY. DATE 18 Aug 94.

36' DRAINAGE & UTILITY EASEMENT PLAT 8026. INV. 327.33 CENTER CULVERT. INV. 328.38 LEFT AND RIGHT CULVERT. EXISTING RIP RAP.

NOTES

1) PARCEL F WAS CONSIDERED DEVELOPED FOR S_{wg} 12% 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

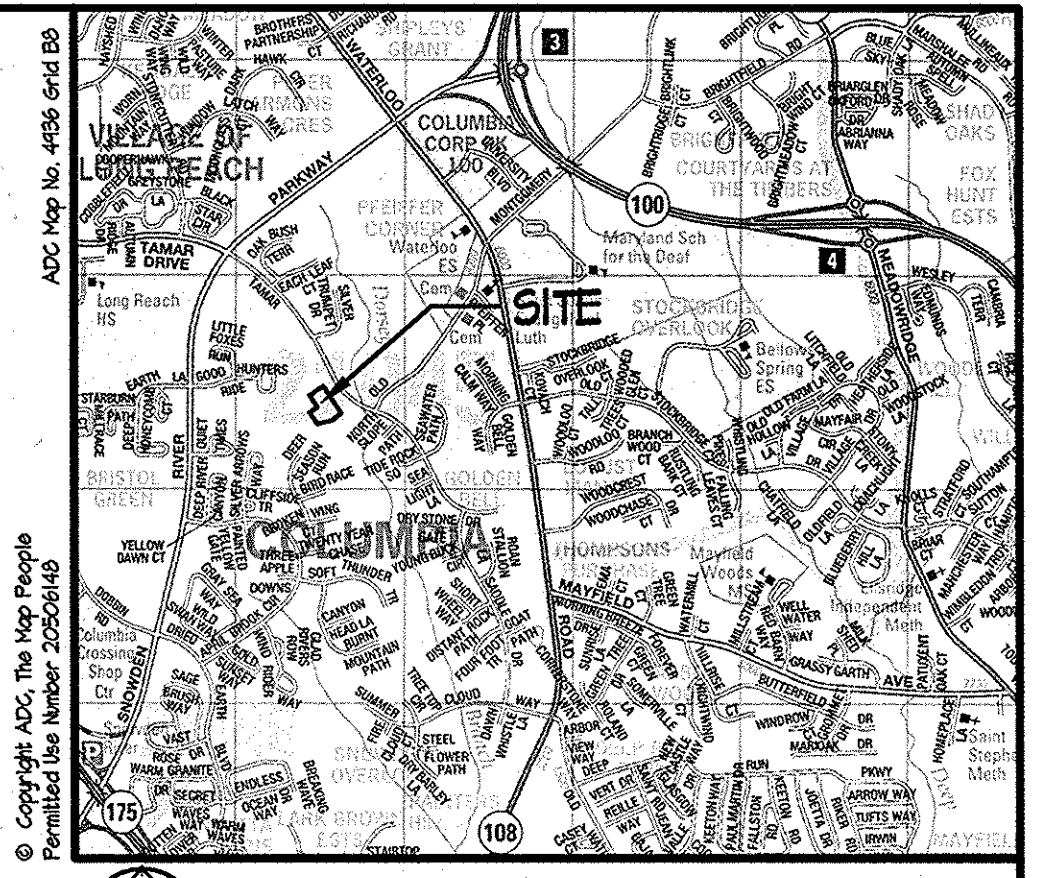
PLAT	BLOCK	ZONE	TAX ZONE	MAR/LEC	DIST	CENSUS TR
CHP 8111		NT	37	6		

WATER CODE: SEWER CODE:

STATE OF MARYLAND PROFESSIONAL ENGINEER. RBA ENGINEERS - ARCHITECTS - PLANNERS. 5560 STERRETT PLACE SUITE 300, COLUMBIA, MARYLAND 21044, 410/730-7950.

STORM DRAIN DRAINAGE AREA MAP. KENDALL RIDGE COMMUNITY POOL. SCALE 1" = 30'. DRAWN BY: CHECKED BY: PROJ. NO. J0905, DATE 4/94. SHEET 12 OF 15.

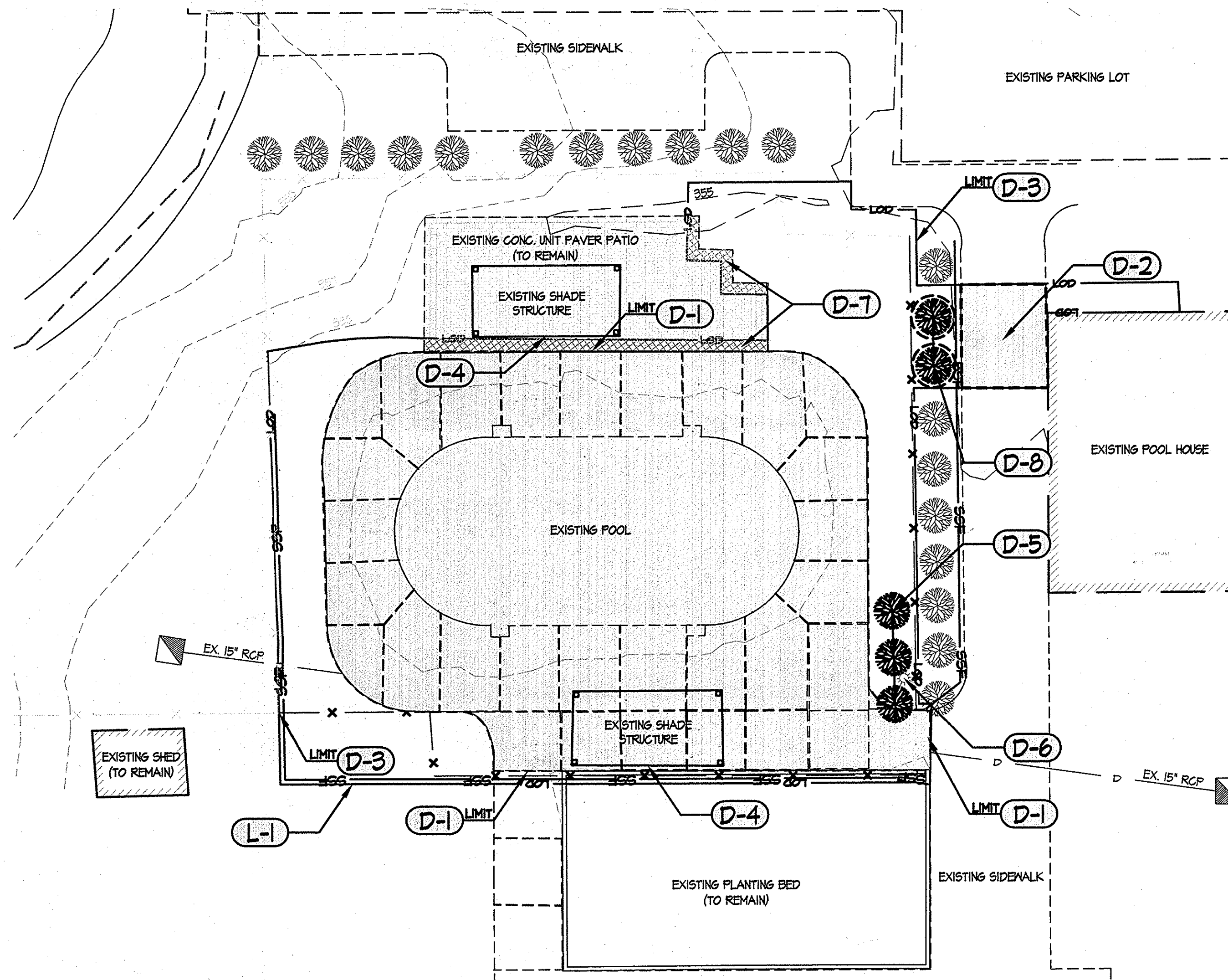
4/94.65



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 PAVEMENT BANDING
- PROPOSED CONCRETE UNIT PAVING
- PROPOSED FENCE
- LIMIT OF DISTURBANCE
- SUPER SILT FENCE
- PROPOSED STORM DRAIN
- DETAIL REFERENCE



1 DEMOLITION PLAN

- 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 1/4 inch, plus or minus 1/8 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
- B. prior to laying the sod. 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 ground cover 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. Whenever 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.
- C. 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.
- D. 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 move 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

- CONSTRUCTION NOTES**
- C-1** PROPOSED POOL (SEE POOL DRAWINGS)
 - C-2** PROPOSED COPING (SEE POOL DRAWINGS)
 - C-3** PROPOSED CONCRETE PAVEMENT PATIO EXPANSION
 - C-4** PROPOSED SLIDE (SEE POOL DRAWINGS)
 - C-5** DECORATIVE CONCRETE UNIT PAVEMENT BANDING
 - C-6** PROPOSED LIGHT FIXTURE (SEE MEP DRAWINGS)
 - C-7** ALL GRATES SHALL BE ACO TYPE 4450 GREY PLASTIC LONGITUDINAL PART # 47305.
 - 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.

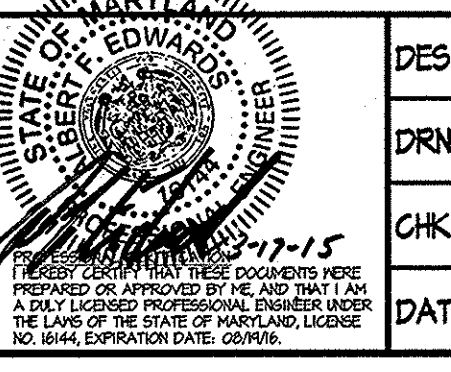
LIMIT OF DISTURBANCE NOTE

L-1 AREA OF LIMIT OF DISTURBANCE (LOD) IS 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.

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Director: *Josh M. Gyll* 4/9/15
 Chief, Development Engineering Division: *Chad Anderson* 4/8/15
 Chief, Division of Land Development: *Kurt L. Brown* 4/8/15

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer: *Michael J. Davis* 4/6/15
 Howard County Health Department

ADDRESS / PERMIT INFORMATION
 PARCEL # 0245 TAHAR DRIVE
 OWNER: COLUMBIA ASSOCIATION
 10221 HINCHOP CIRCLE, SUITE 100
 COLUMBIA, MD 21044
 PHONE (410) 581-0941
 DEVELOPER: HOWARD RESEARCH AND DEVELOPMENT
 LAND COMPANY
 2000 PATENT PARKWAY
 COLUMBIA, MARYLAND 21044
 PHONE (410) 922-6970



DES: BVN	SRI: A	REVISE MADE POOL. ADD SHEETS 13, 14, & 15	02/15
DRN: BVN			
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
CMP 0111	NT	NT	0037 06
WATER CODE		SEWER CODE	CENSUS TRACT
			6066.02

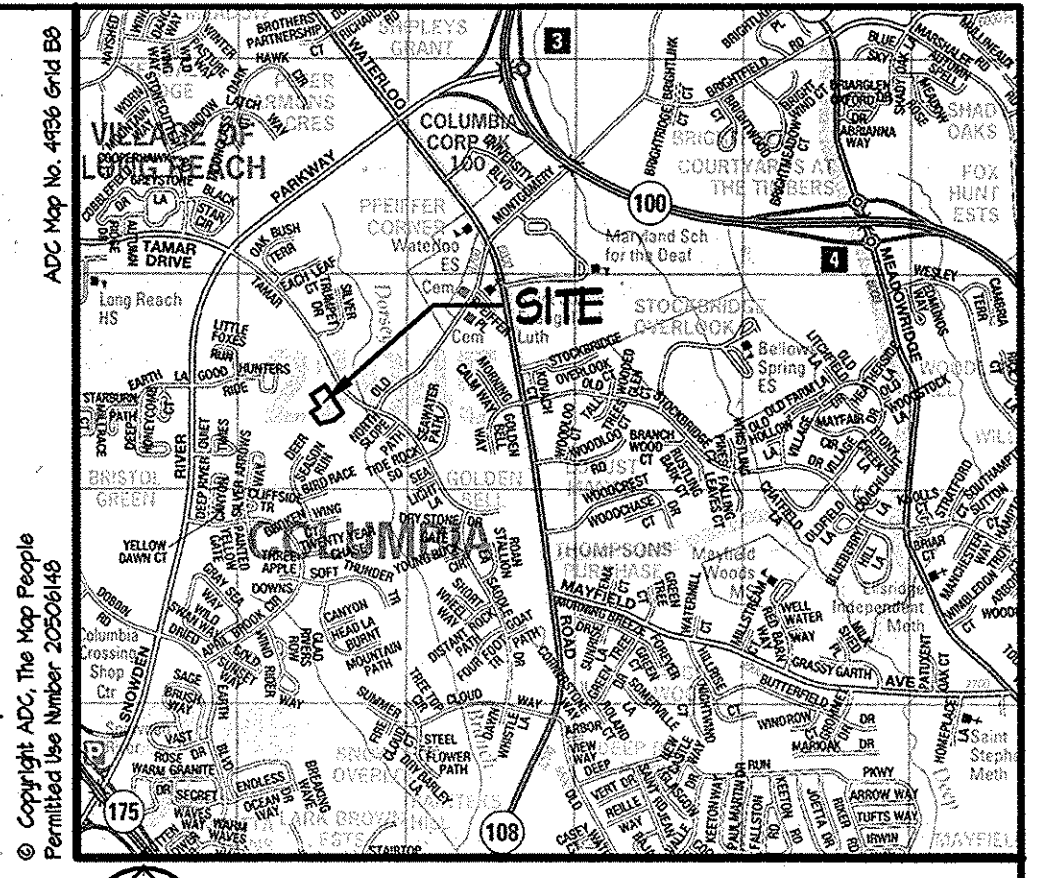
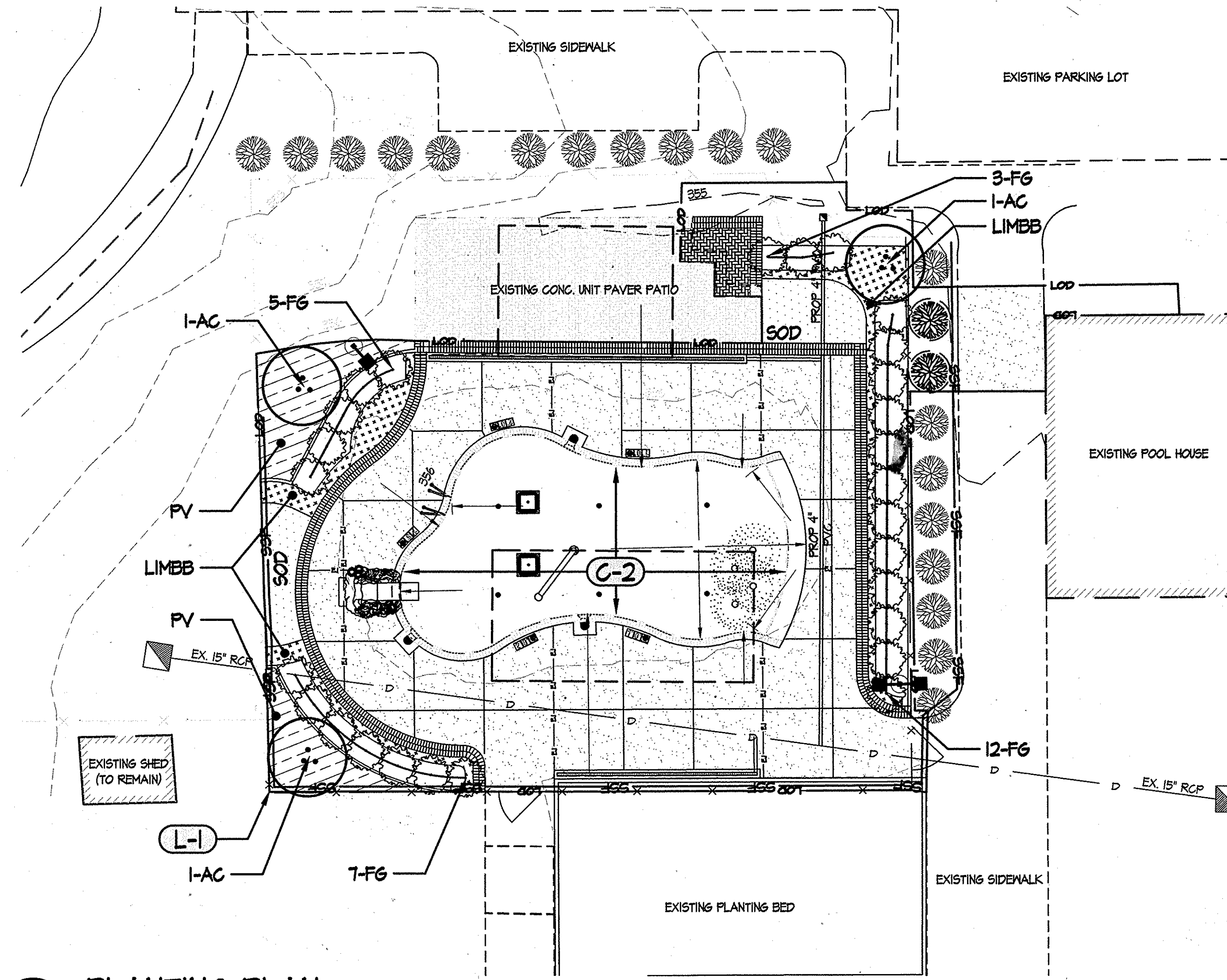
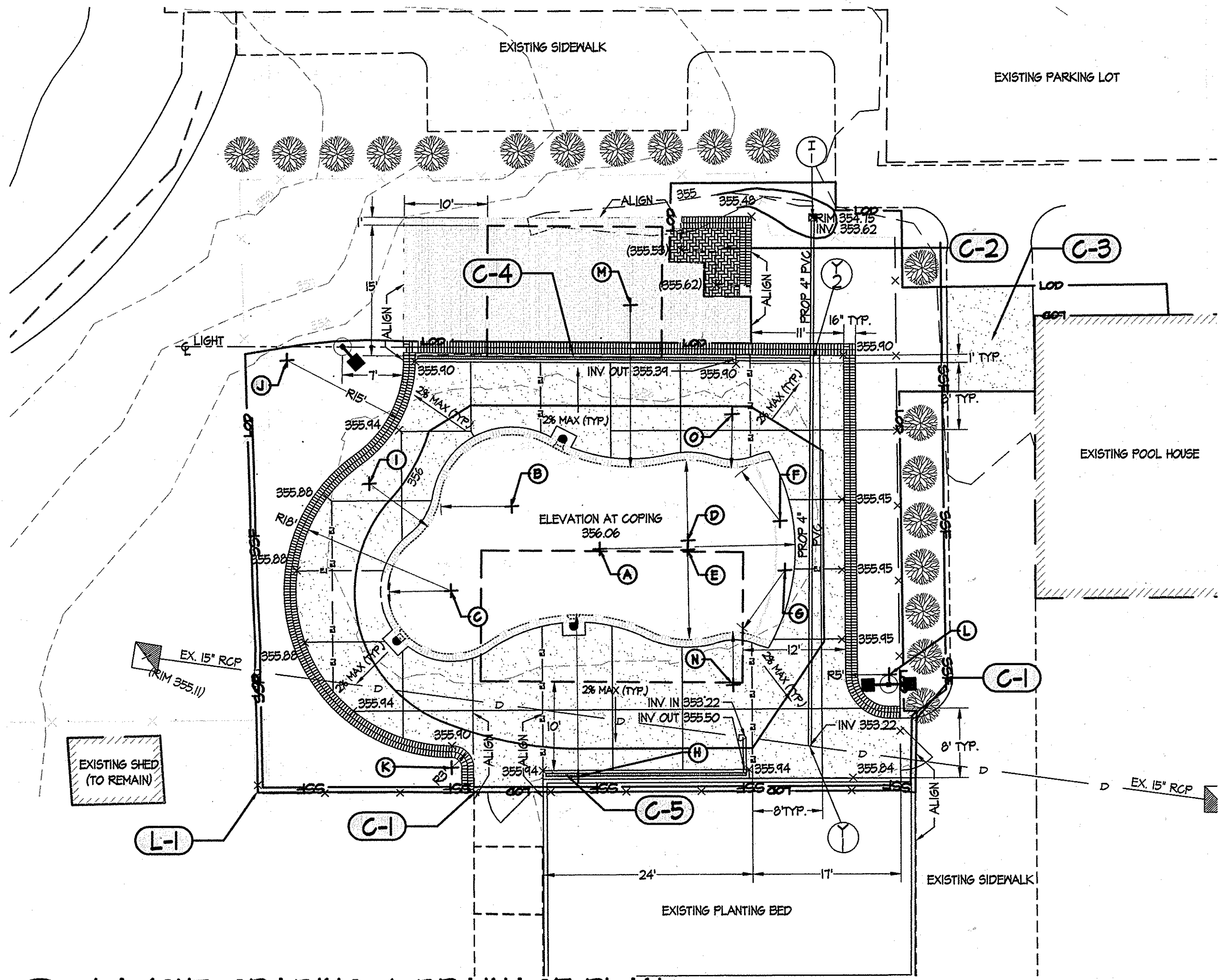
DEMOLITION, DETAIL REFERENCE, & MATERIALS PLAN
KENDALL RIDGE POOL
 OWNER: COLUMBIA ASSOCIATION

SCALE 1" = 10'

C1.01 SHEET 13 OF 15

SRI NO: 14058 HOWARD COUNTY, MARYLAND

2:1/14/2015-C:\Kendall Ridge Swimming Pool Renovations\Eng\13\13 Demolition, Detail Reference & Materials Plan.dwg - Plot 16, 2015 04:05pm - b.m.



VICINITY MAP 1"=2000'

LEGEND

	EXISTING CONTOURS
	EXISTING SHRUBS
	EXISTING WALK
	EXISTING ROAD
	EXISTING LIGHTING
	EXISTING FENCE
	EXISTING BUILDING
	EXISTING STORM DRAIN
	PROPOSED WALK
	PROPOSED CONCRETE UNIT PAVING
	PROPOSED DECORATIVE CONCRETE UNIT PAVING BANDING
	PROPOSED FENCE
	PROPOSED LIGHTING
	PROPOSED CONTOURS
	SPOT ELEVATIONS
	LIMIT OF DISTURBANCE
	SUPER SILT FENCE
	PROPOSED STORM DRAIN
	PROPOSED SHRUBS
	TRANSPLANTED SHRUBS
	PROPOSED SOD
	PROPOSED GROUNDCOVER
	COORDINATE LOCATION

1 LAYOUT, GRADING, & DRAINAGE PLAN

LAYOUT COORDINATES

POINT	COORDINATE
A	N: 559491.10 E: 1368201.45
B	N: 559491.12 E: 1368190.24
C	N: 559490.05 E: 1368181.64
D	N: 559404.01 E: 1368210.35
E	N: 559403.11 E: 1368210.72
F	N: 559410.33 E: 1368214.16
G	N: 559405.35 E: 1368221.90
H	N: 559488.05 E: 1368201.46
I	N: 559495.61 E: 1368174.22
J	N: 559405.00 E: 1368154.96
K	N: 559464.41 E: 1368145.74
L	N: 559491.00 E: 1368231.62
M	N: 559426.34 E: 1368193.60
N	N: 559496.87 E: 1368221.64
O	N: 559491.44 E: 1368209.26

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 AGO-K100 TRENCH DRAIN SECTIONS I THROUGH II AS OUTLINED IN MANUFACTURER'S PARTS TABLE. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
- (C-5)** INSTALL AGO-K100 TRENCH DRAIN SECTIONS I THROUGH I AS OUTLINED IN MANUFACTURER'S PARTS TABLE. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.

2 PLANTING PLAN

LANDSCAPE NOTES

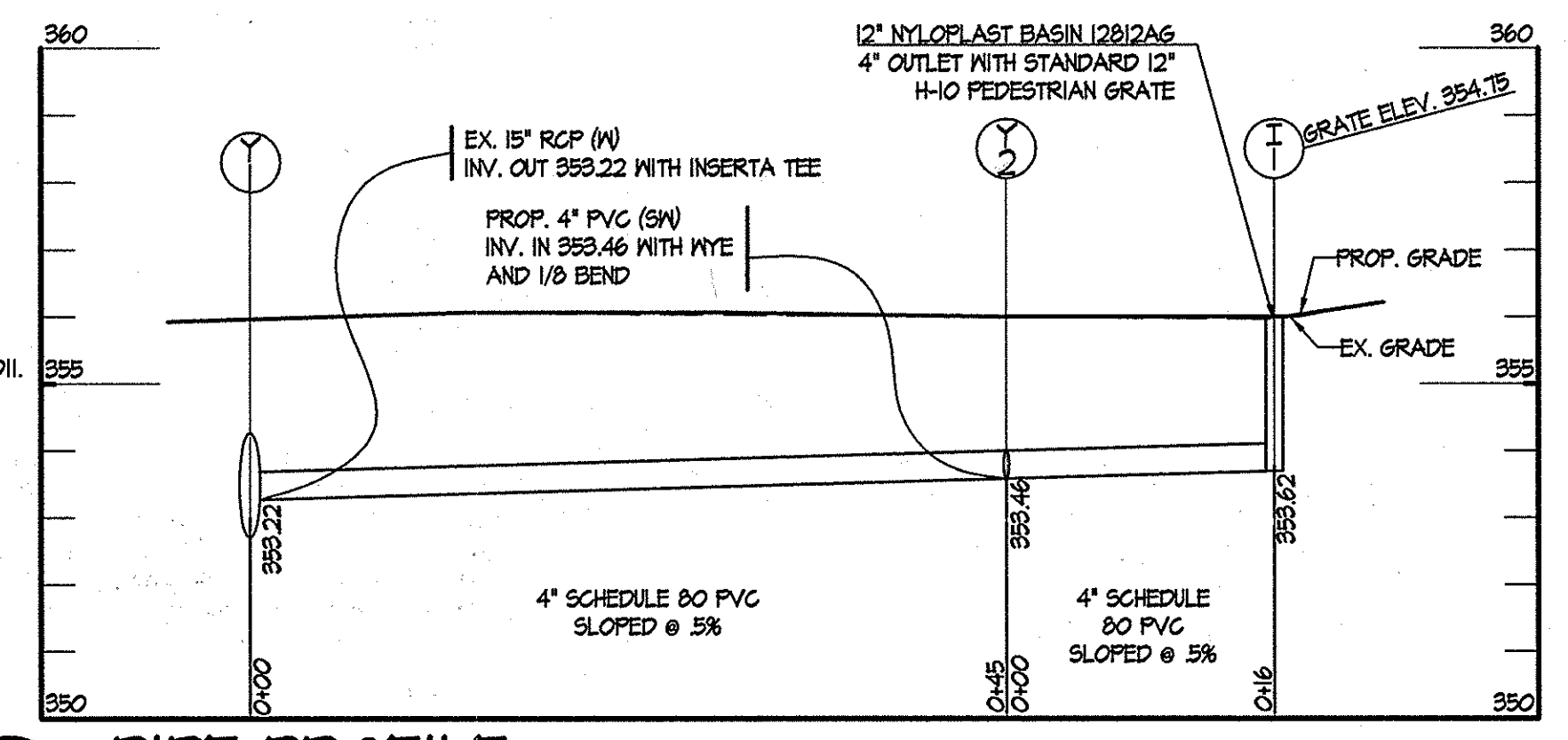
- (THESE NOTES APPLY TO ALL PLANTING IN THIS CONTRACT)
- QUANTITIES SHOWN ON THE PLANT LIST ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. SYMBOLS ON THE PLAN SHALL TAKE PRECEDENCE. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES TO HIS OWN SATISFACTION.
 - PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
 - PLANT MATERIAL SHALL BE TAGGED AT THE SOURCE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE UNLESS THE REQUIREMENT IS SPECIFICALLY WAIVED.
 - LOCATIONS OF ALL PLANT MATERIAL SHALL BE STAKED FOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
 - ALL SHRUB AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PREPARED BEDS MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILED AND SPECIFIED. REFER TO PLANTING DETAILS ON SHEET 6 OF 15.
 - PLANTING BEDS SHALL HAVE POSITIVE DRAINAGE WITH A MINIMUM 2% SLOPE. CONTRACTOR SHALL VERIFY ACCURACY OF BASE INFORMATION AND EXISTING CONDITIONS AND UTILITIES IN THE FIELD TO HIS OWN SATISFACTION 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.
 - THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-251-7711 A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING PLANTING AND CONSTRUCTION. DAMAGE TO EXISTING CONDITIONS AND UTILITIES SHALL BE REPAIRED AND RESTORED AT THE EXPENSE OF THE CONTRACTOR.
 - ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND SHALL CONFORM TO AMERICAN NURSERY & LANDSCAPE ASSOCIATION'S AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z601.

MINIMUM LANDSCAPE MAINTENANCE REQUIREMENTS

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

PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY	COMMENTS
FG	FOTHERGILLA GARDENII	MITCH ALDER	36" HT CONT.	AS SHOWN	21	5-GAL. MINIMUM, FULLY ROOTED CONTAINER
AC	AMELANCHIER CANADENSIS	SHADELOW 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



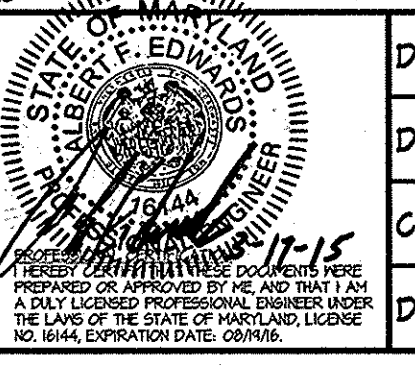
2 PIPE PROFILE

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

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Director: *[Signature]*
 DATE: 4/9/15

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer: *[Signature]*
 DATE: 4/9/15

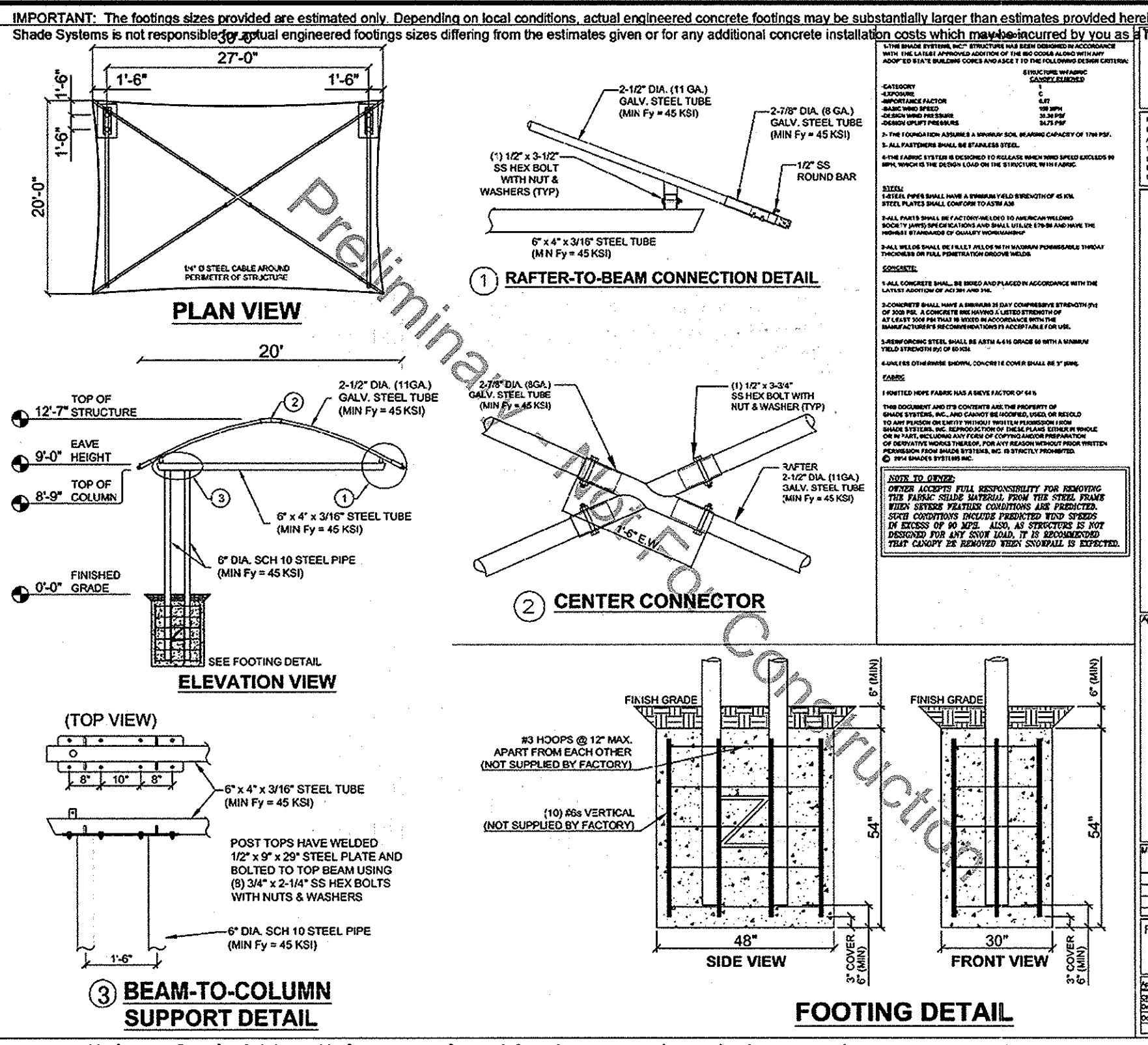
ADDRESS / PERMIT INFORMATION
 8245 TAMAR DRIVE
 OWNER: COLUMBIA ASSOCIATION
 10221 HINCKFORD CIRCLE, SUITE 100
 COLUMBIA, MD 21044
 PHONE (410) 381-0941



DES: BVM
 DRN: BVM
 CHK: AFE
 DATE: 02/20/15

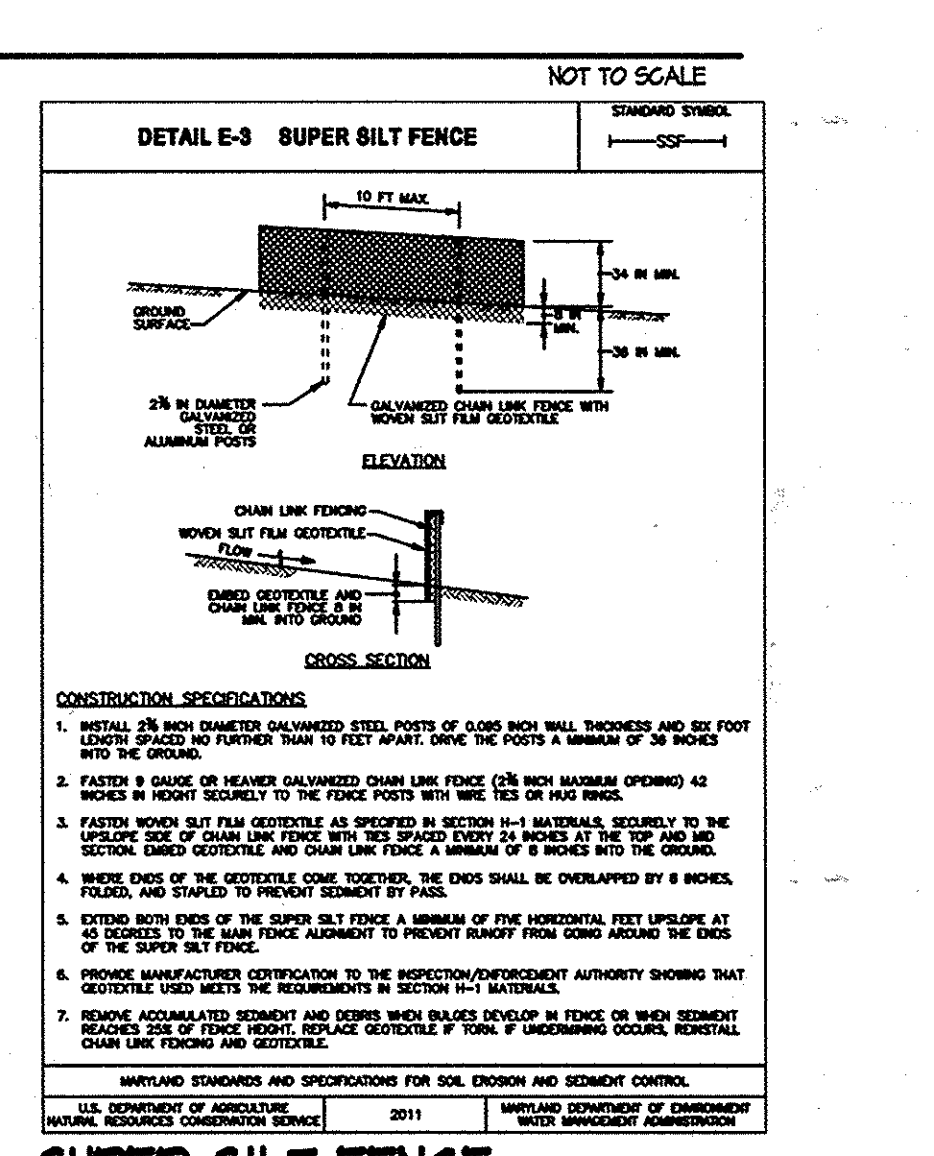
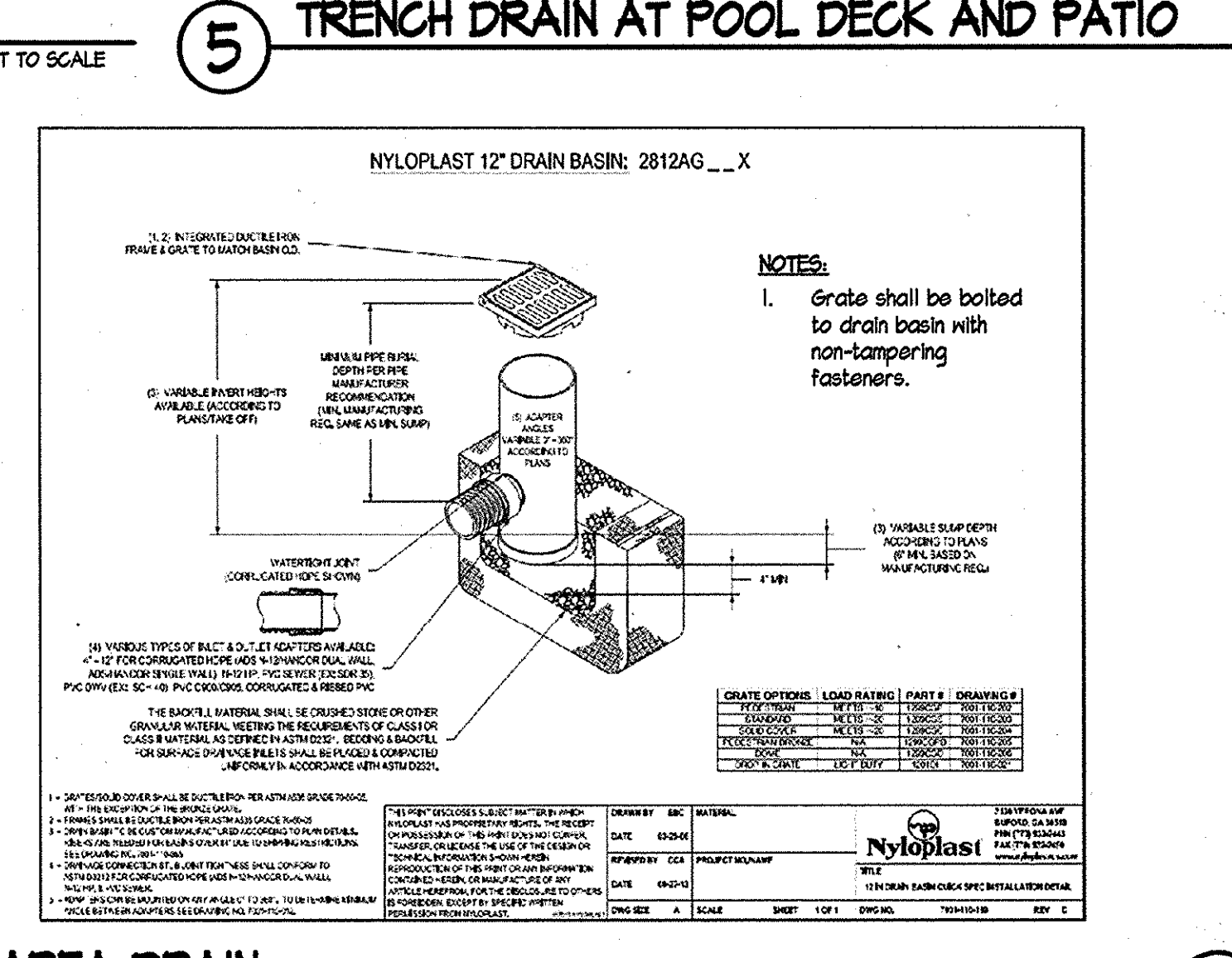
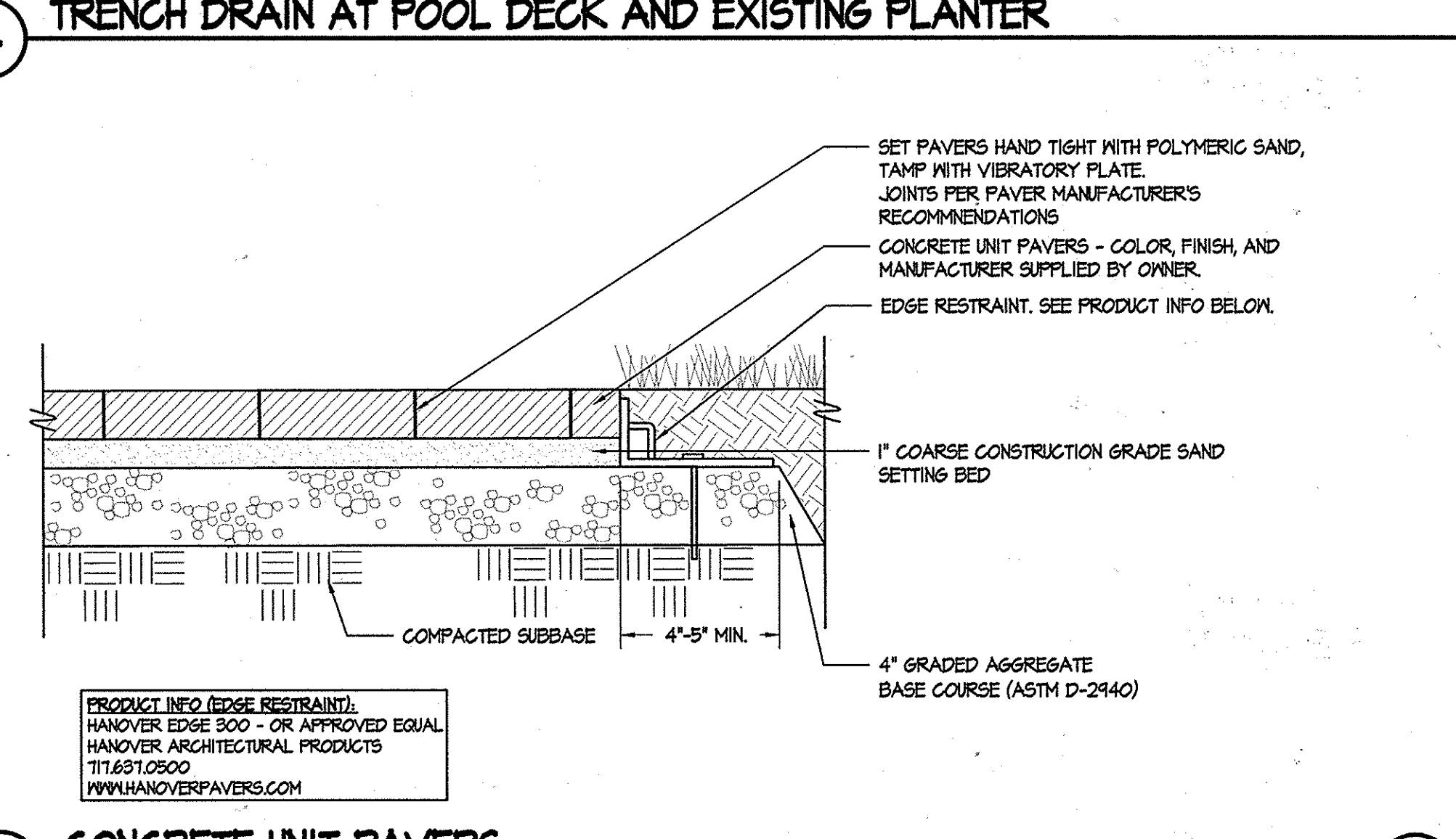
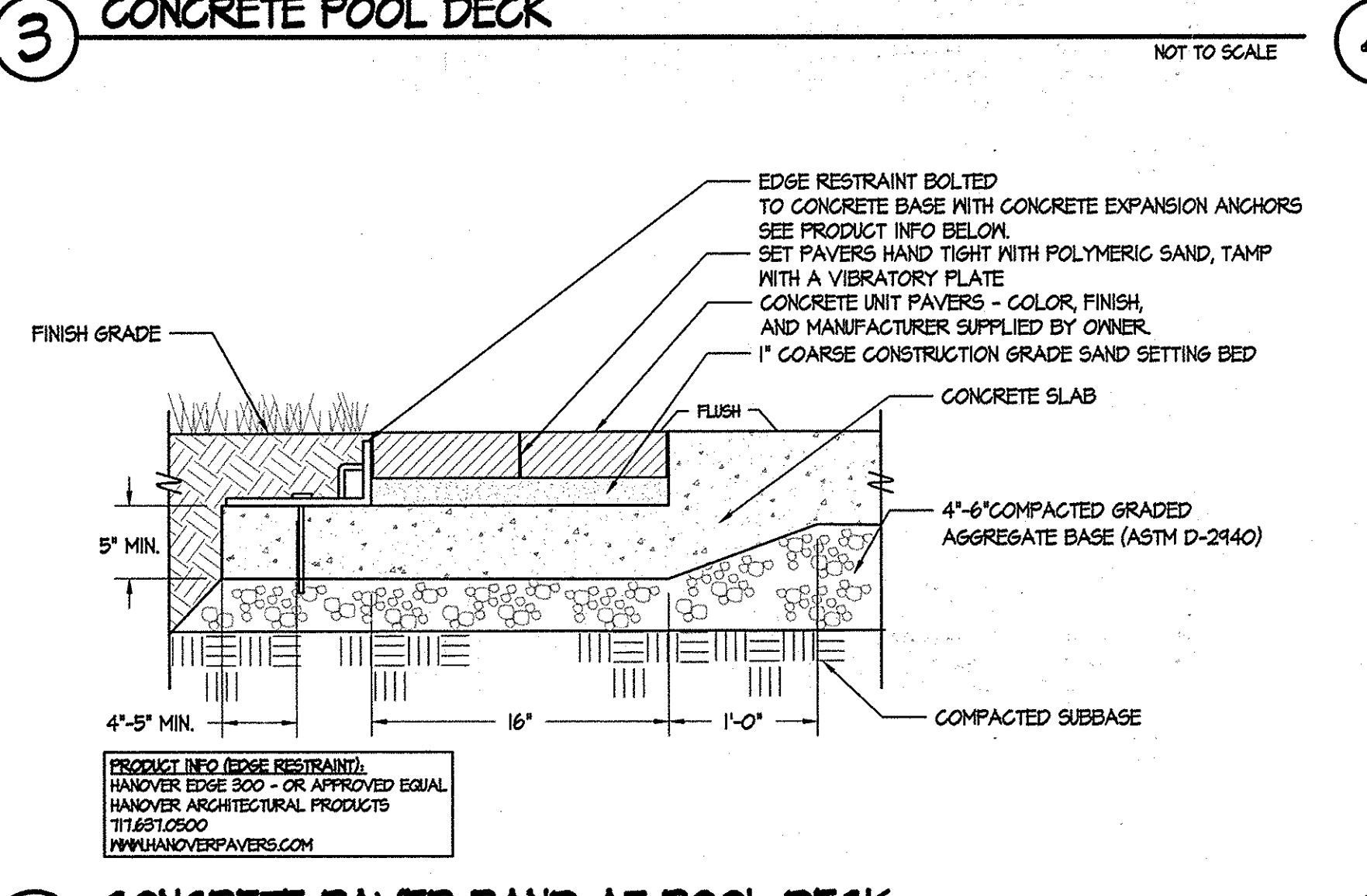
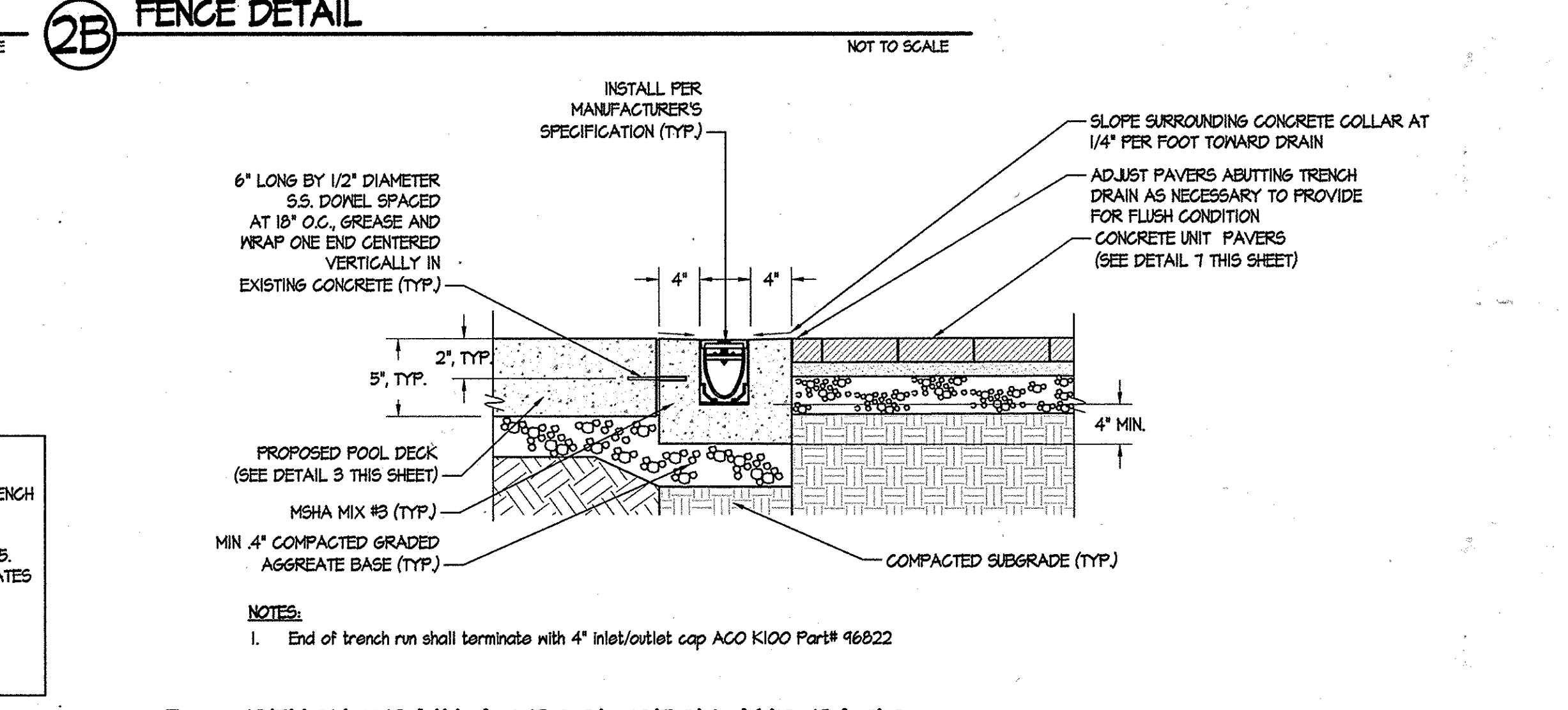
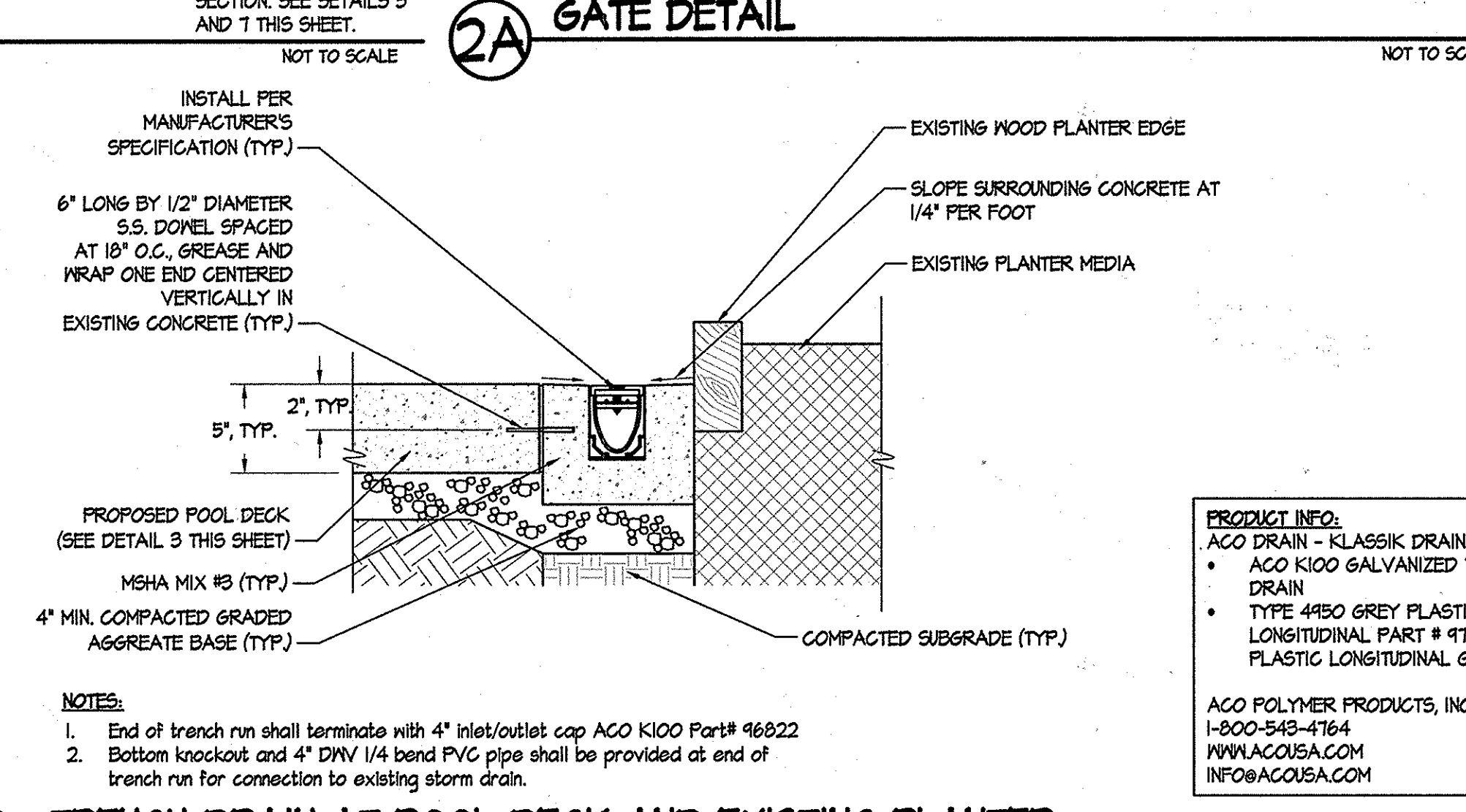
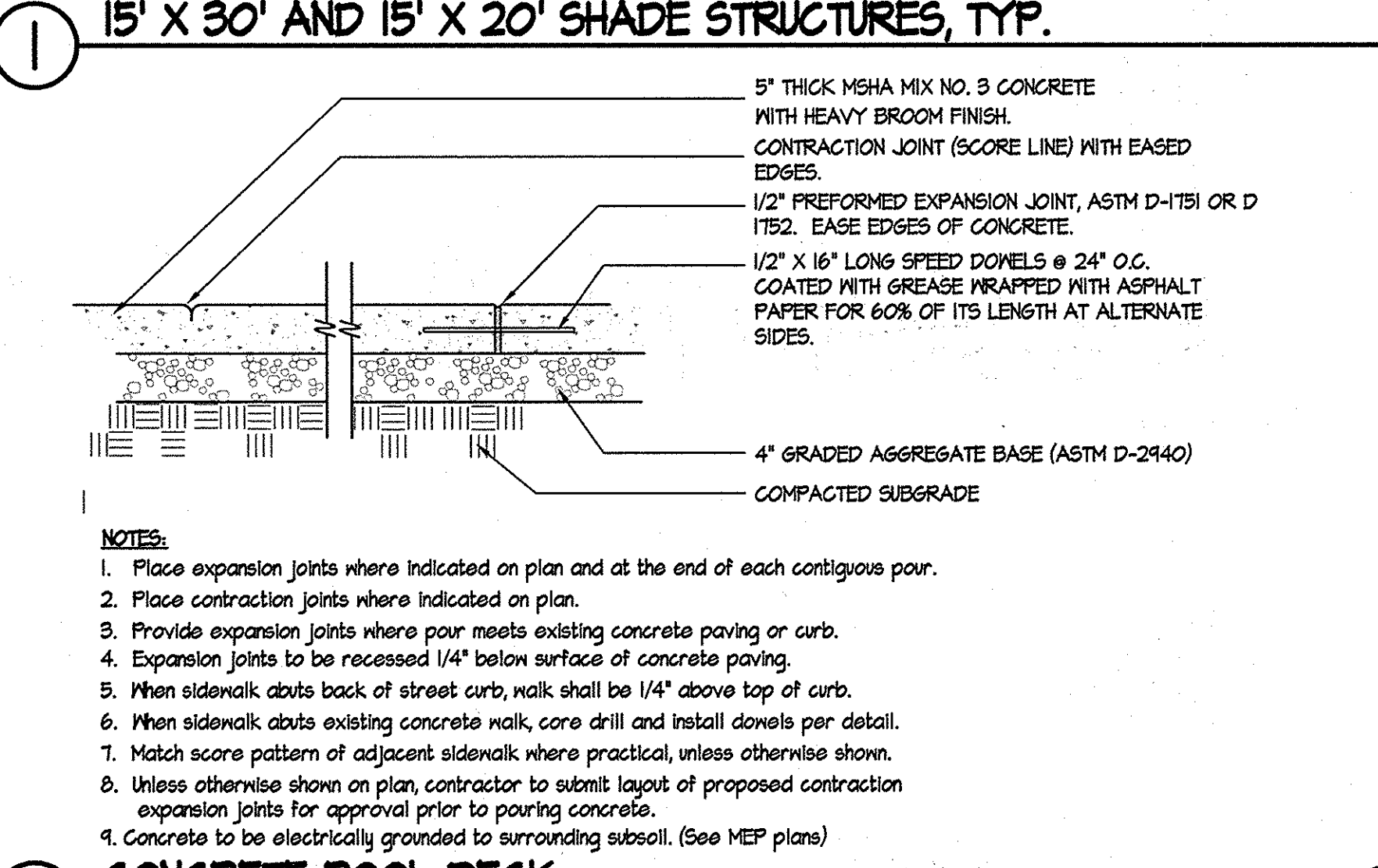
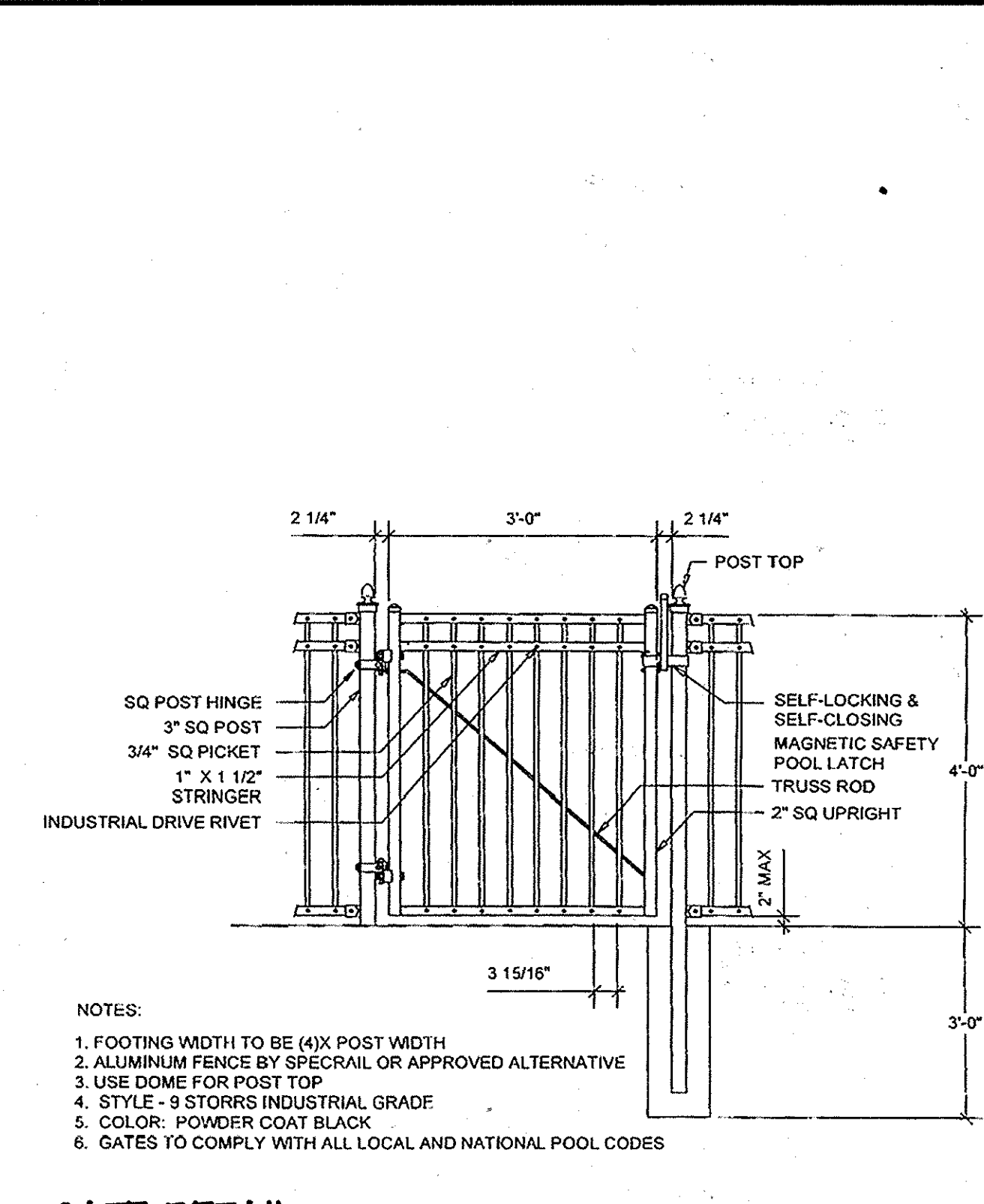
PERMIT INFORMATION CHART
 SUBDIVISION NAME: VILLAGE OF LONG REACH
 SECTION/AREA: 3 / 2
 LOT/PARCEL NO.: 5
 PLAT # OR L/F: CMP 011
 GRID # ZONING: NT
 TAX MAP NO. ELECTION DISTRICT: 0037 06
 CENSUS TRACT: 6066.02
 WATER CODE: SEWER CODE:

LAYOUT, DRAINAGE, GRADING, AND PLANTING PLAN
KENDALL RIDGE POOL
 OWNER: COLUMBIA ASSOCIATION
 SCALE: 1" = 10'
 SHEET 14 OF 15
 SDP-94-065



Shade Systems
 4100 S. 1st Street
 Columbia, MD 21044
 Tel: 410-730-0000
 Fax: 410-730-0001
 www.shadesystems.com

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 DETAILS 3 AND 1 THIS SHEET.



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

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer: [Signature]
 Howard County Health Department

ADDRESS / PERMIT INFORMATION
 PARCEL 2
 ADDRESS: 8245 TAMAR DRIVE
 OWNER: COLUMBIA ASSOCIATION
 10221 WINCOPIN CIRCLE, SUITE 100
 COLUMBIA, MD 21044
 PHONE (410) 380-0541

DEVELOPER:
 HOWARD RESEARCH AND DEVELOPMENT
 LAND COMPANY
 10221 LITTLE PATENT PARKWAY
 COLUMBIA, MARYLAND 21044
 PHONE (410) 422-6970

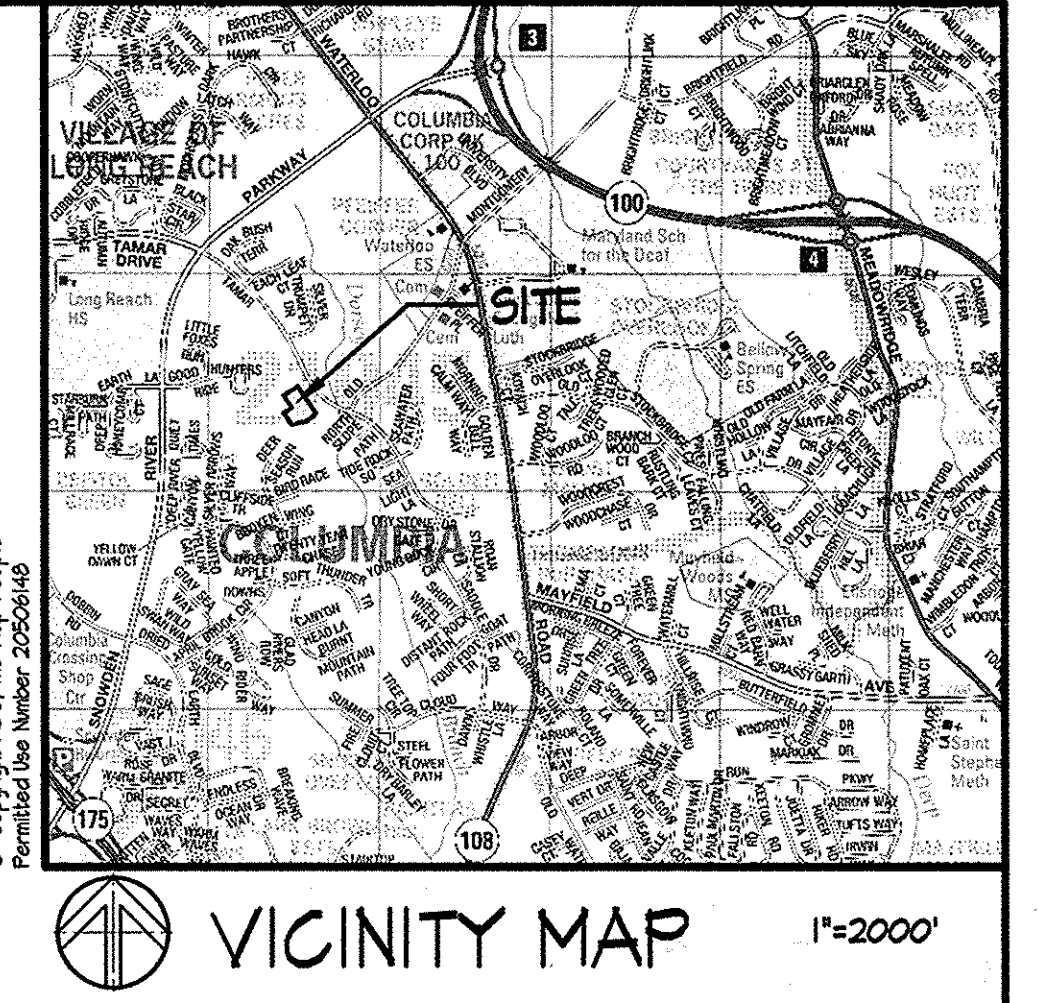
DES: BVM	SRI	REVISE MADE POOL. ADD SHEETS 13, 14, 15	02/15
DRN: BVM			
CHK: AFE			
DATE: 02/20/15	BY: NO.	REVISION	DATE

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
VILLAGE OF LONG REACH	3 / 2	5	
FLAT # OR L/F	GRID #	TAX MAP NO.	ELECTION DISTRICT
CMP 0111	NT	0051	06
WATER CODE	SEWER CODE	CENSUS TRACT	
		6066.02	

SITE DETAILS
KENDALL RIDGE POOL
 OWNER: COLUMBIA ASSOCIATION

SRI NO: 14058
 HOWARD COUNTY, MARYLAND

SCALE AS NOTED
 C1.03
 SHEET 15 OF 15
 SDP-44-065



21/14/15/2015 - Columbia Ridge Swimming Pool Renovation - Design/Construct - 10/16/2015 - 10/16/2015 - 10/16/2015