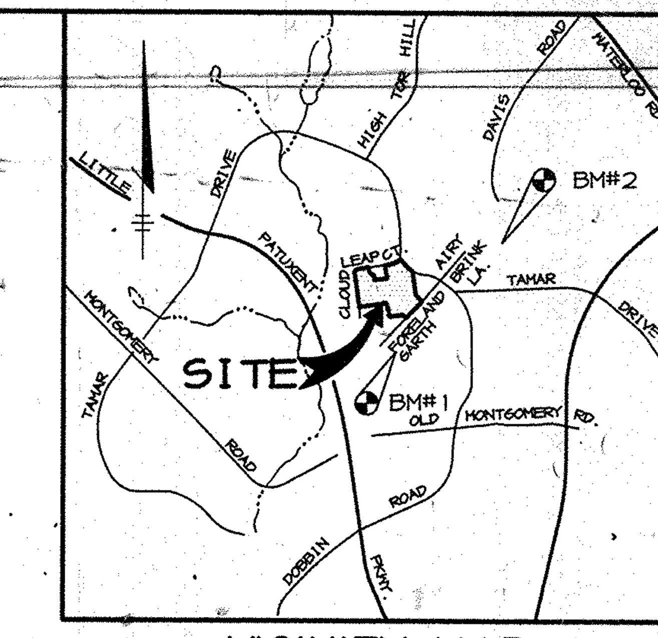
NO	SHEET INDEX DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	SITE DEVELOPMENT PLAN
4	SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP
5	SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP
6	PROFILES, NOTES, AND DETAILS
7	LANDSCAPING AND LIGHTING PLAN
8	LANDSCAPING AND LIGHTING PLAN

SITE DEVELOPMENT PLAN
LONG REACH VILLAGE CENTER EXPANSION
PARCELS B-1, D-1, E-1, & LOT 6
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. 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.
5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
6. THE EXISTING TOPOGRAPHY IS BASED ON A FIELD SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY BEN DYER ASSOCIATES, INC. DATED NOVEMBER, 1992.
7. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 36F1 AND 36C6 WERE USED FOR THIS PROJECT.
8. WATER IS PUBLIC. CONTRACT NO. 432-D-W&S.
9. SEWER IS PUBLIC. SEWER DRAINAGE AREA: LITTLE PATUXENT WWTP CONTRACT NO. 432-D-W&S.
10. STORMWATER QUANTITY MANAGEMENT IS PROVIDED BY A PRIVATELY OWNED AND MAINTAINED DETENTION FACILITY.
11. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
12. A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
13. A TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT.
14. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
15. THERE IS NO GEOTECHNICAL STUDY FOR THIS PROJECT.
16. THE BOUNDARY INFORMATION FOR THIS PROJECT IS BASED ON A FIELD-RUN BOUNDARY SURVEY BY RIEMER MUEGGE & ASSOCIATES DATED MAY 30, 1996.
17. SUBJECT PROPERTY ZONED NT PER 10-18-93 COMPREHENSIVE ZONING PLAN.
18. ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
19. SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S F-71-65C, SDP-72-98, FDP-106-A, F-91-97, F-91-56, F-72-56c, F-81-68, F-97-52
20. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
21. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
22. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
23. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
24. ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
25. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
26. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
27. STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, i.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
28. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
29. ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.

PARKING PROVIDED

6 (revision 5)
~~PARKING AREA 1 (OFF SITE CA LOT 3): 78 SP.~~
~~PARKING AREA 2: 26 SP.~~
(revision 7)
PARKING AREA 1: 74 SP.
PARKING AREA 2: 289 SP.
PARKING AREA 3: 21 SP.
PARKING AREA 4: 22 SP. (17+5)
TOTAL: 406 (~~510~~) SP.

~~GENERAL NOTES (CONTINUED)~~

~~1. A SHARED PARKING AGREEMENT IS IN PLACE TO ALLOW CHURCH PARKING ON LOT 3 IN PARKING AREA 1.~~
~~2. PARKING AREA 4 WILL BE SUBJECT TO A TEMPORARY PARKING LICENSE AGREEMENT. PERMANENT PARKING SUBJECT TO APPROVAL OF SDP-15-021 ON THE EAST SIDE OF FORELAND GARTH.~~
~~3. PARKING AREA 2 IN LOT 6 OWNED BY CELEBRATION CHURCH TO ALLOW SHARED PARKING USE. ANY FUTURE SALE OF THE PROPERTY DURING THE PERIOD THE TEMPORARY PARKING LICENSE AGREEMENT REFERENCED IN NOTE 2 ABOVE IS IN EFFECT, SHOULD HAVE PROVISIONS FOR AN AGREEMENT THAT PARKING IS TO BE SHARED FOR FUTURE CHURCH USE POST SALE.~~

SITE ANALYSIS

AREA OF PARCELS:	
B-1	7.58 ACRES
D-1	0.48 ACRES
E-1	1.40 ACRES
PRESENT ZONING	NT
EXISTING USE	RETAIL CENTER
PROPOSED USE	RETAIL CENTER

NOTE: THE FINAL DEVELOPMENT PLAN PHASE 106-A FOR THIS PROJECT MEASURES RETAIL PARKING ACCORDING TO NET LEASEABLE AREA (NLA). EQUATING NLA TO SELLING SPACE AND APPLYING FACTORS TYPICAL TO RETAIL SELLING SPACE COMPARED TO TOTAL SPACE THE PARKING REQUIRED IS AS SHOWN;

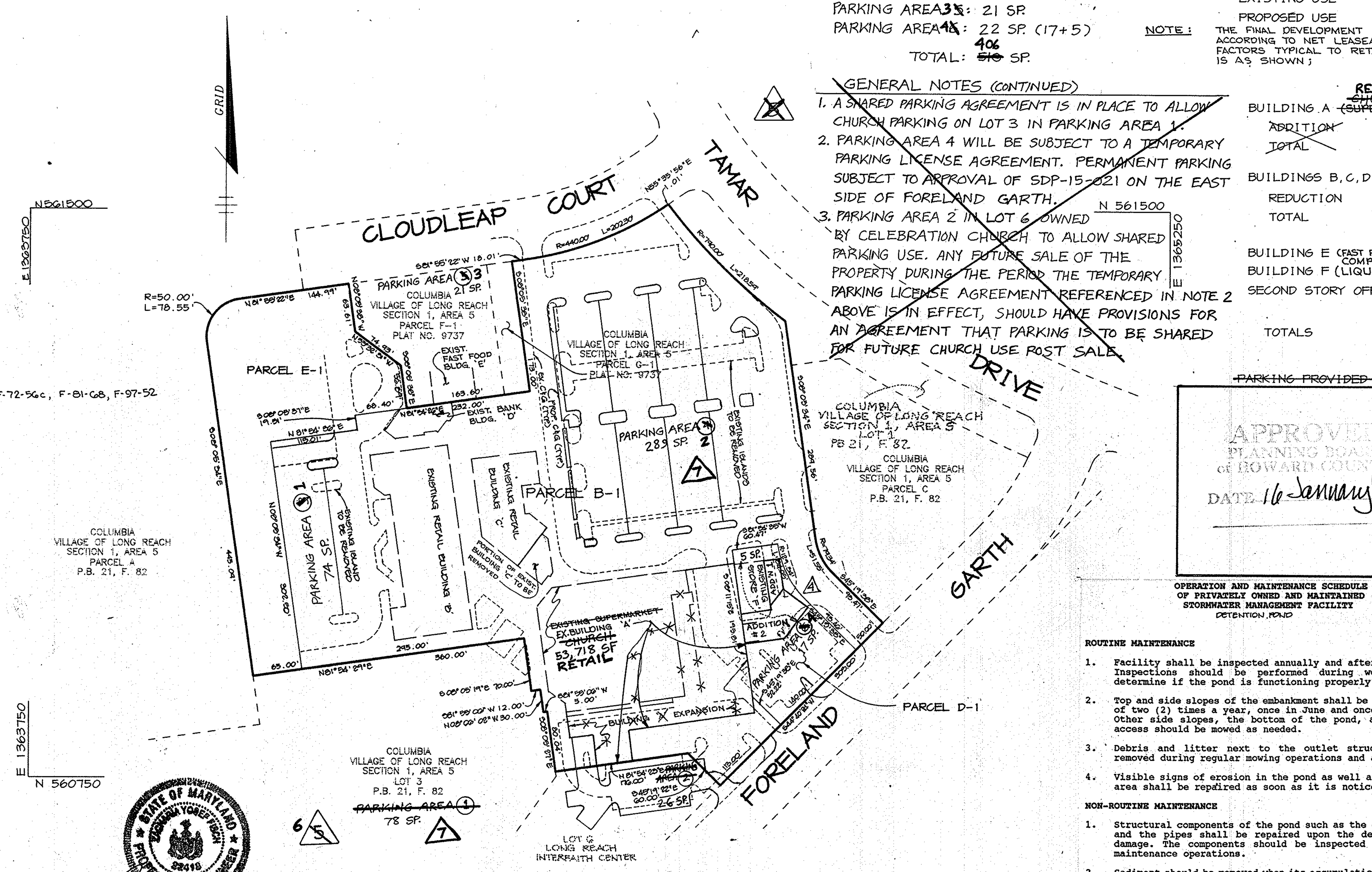
	BUILDING COVERAGE	REQUIRED PARKING
BUILDING A RETAIL (~~CHURCH~~) (~~SUPERMARKET~~)	53,718 SF @ 80% x 5 SP/1000 SF = 215 SP ~~28,649 SF MAIN ASSEMBLY AREA = 30,000 SF~~	
~~ADDITION~~	~~24,704 SF 10 SPACES PER/1000 SF = 300 SP REQ'D.~~	
~~TOTAL~~	~~53,353 SF @ 70% x 5 SP/1000 SF = 187 SP~~	
BUILDINGS B, C, D (RETAIL)	34,355 SF	
REDUCTION	1,605 SF	
TOTAL	32,750 SF @ 80% x 5 SP/1000 SF = 131 SP	
BUILDING E (FAST FOOD SHARED COMPONENT)	1,989 SF	8 SP
BUILDING F (LIQUOR STORE)	6,893 SF (~~3,470~~) (~~2,470~~) SF @ 80% x 5 SP/1000 SF =	28 (~~14~~) (~~10~~) SP
SECOND STORY OFFICE SPACE	15,000 SF @ 1 SP/2 EMP x 1 EMP/200 SF: 38 SP	
TOTALS	105,062 (~~110,350 SF~~) (~~105,562 SF~~) (~~106,562 SF~~) (~~109,985 SF~~) * SEE SHARED PARKING TABULATION THIS SHEET.	420 * (~~374 SP~~) (~~505~~) SPACES (~~378 SP~~) (~~392 SP~~)

~~PARKING PROVIDED~~
~~380 SP + 26 SPACES ON LOT 6 = 406 SP~~
~~378~~ ~~404~~
~~[7 P.S. DEDUCTED FROM PARCEL D-1 FOR ADDITION TO STORE 'F']~~

BENCHMARKS

BM# 1
MONUMENT NO. 36F1 — ELEV. 426.93
N 560289.03 — E 1364532.07

BM #2:
MONUMENT NO. 36C6 — ELEV. 437.42
N 561734.35 — E 1365025.40



PLAN
SCALE: 1"=100'

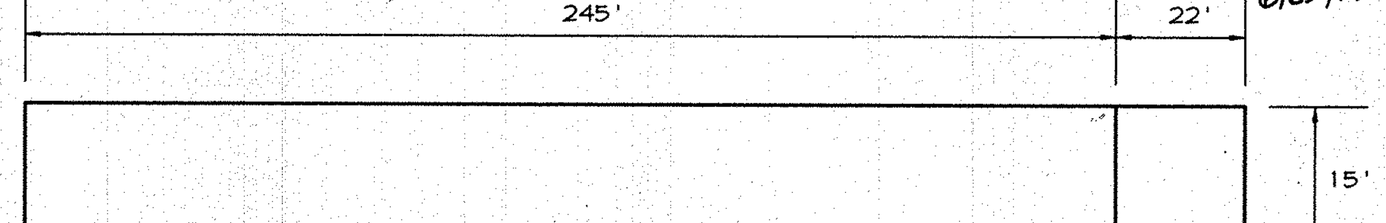
Stamp: STATE OF MARYLAND — ZACHARIA YOSEF FISCH — 22418 — PROFESSIONAL ENGINEER
FOR REVISION # 5 ONLY 10/21/14
FOR REVISION # 7 ONLY 6/25/15

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 16 January '97

* SHARED PARKING TABULATION (revision 7)

PARKING REQUIR. BEFORE ADJUSTMENT	WEEKDAY MORNING 6AM-8AM	WEEKDAY MID-DAY 8AM-3PM	WEEKDAY AFTERNOON 3PM-5PM	WEEKDAY EVENING 5PM-MID	WEEKEND DAYTIME 6AM-6PM	WEEKEND EVENING 6PM-MID	NIGHTTIME MID-6AM
OFFICE/INDUSTRIAL 38 SPACES	80% 31 SPACES	100% 38 SPACES	100% 38 SPACES	10% 4 SPACES	10% 4 SPACES	5% 2 SPACES	5% 2 SPACES
RETAIL 374 SPACES	20% 75 SPACES	60% 225 SPACES	60% 225 SPACES	90% 337 SPACES	100% 374 SPACES	70% 262 SPACES	5% 19 SPACES
FAST FOOD	8 SPACES						
TOTAL:	114 SPACES	271 SPACES	271 SPACES	349 SPACES	386 SPACES	272 SPACES	29 SPACES

NOTE: TOTAL PARKING PROVIDED EXCLUDES EXISTING 26 PARKING SPACES WITHIN ADJACENT LOT 6.



~~SAFEWAY~~ SOUTH ELEVATION
BUILDING 'A' NO SCALE (revision 7)

OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

1. Stormceptor water quality structures will require periodic inspection and cleaning to maintain operation and function. Owners will have the Stormceptor unit inspected yearly or as required by Howard County, utilizing the Stormceptor Inspection/Monitoring Form. Inspections can be done by using a clear Plexiglas tube ("sludge judge") to extract a water column sample. When sediment depths exceed the specified level (Table 6 of Technical Manual) then cleaning of the unit is required.
2. Stormceptor water quality structures must will be checked and cleaned immediately after petroleum spills, contact appropriate regulatory agencies.
3. Maintenance of Stormceptor units should be done by a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in unit. The proper cleaning and disposal of the removed materials and liquid must be followed.
4. Inlet and outlet pipes must be checked for any obstructions and if any obstructions are found they must be removed. Structural parts of the Stormceptor will be repaired as needed.
5. Owner shall retain and make Stormceptor Inspection/Monitoring Forms available to Howard County officials upon their request.

OPERATION AND MAINTENANCE SCHEDULE OF PRIVATELY OWNED AND MAINTAINED STORMWATER MANAGEMENT FACILITY
DETENTION POND

ROUTINE MAINTENANCE

1. Facility shall be inspected annually and after major storms. Inspections should be performed during wet weather to determine if the pond is functioning properly.
2. Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September. Other side slopes, the bottom of the pond, and maintenance access should be mowed as needed.
3. Debris and litter next to the outlet structure shall be removed during regular mowing operations and as needed.
4. Visible signs of erosion in the pond as well as riprap outlet area shall be repaired as soon as it is noticed.

NON-ROUTINE MAINTENANCE

1. Structural components of the pond such as the dam, the riser, and the pipes shall be repaired upon the detection of any damage. The components should be inspected during routine maintenance operations.
2. Sediment should be removed when its accumulation significantly reduces the design storage, interfere with the function of the riser, when deemed necessary for aesthetic reasons, or when deemed necessary by the Howard County's Department of Public Works.

ADDRESS CHART

PARCEL	STREET ADDRESS
B-1	8775 CLOUDLEAP COURT
D-1	6030 FORELAND GARTH
E-1	8795 CLOUDLEAP COURT

SUBDIVISION NAME	SECT./AREA	PARCELS			
VILLAGE OF LONG REACH	1/5	B-1, D-1, E-1			
PLAT #	BLOCK #	ZONING	TAX MAP NO.	ELECT. DIST.	CENSUS TRACT
12409	12	NT	36	6th	6066.02
WATER CODE -	SEWER CODE -				

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
DIRECTOR — DATE 4/4/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK — DATE 3/7/97
~~CHIEF~~, DIVISION OF LAND DEVELOPMENT JA — DATE 4/4/97

DATE	NO.	REVISION	
9-24-14	5	REVISE SUPERMARKET USE TO CHURCH & UPDATE PARKING	FSH
12-14-05	4	ADDITION TO STORE 'F'	KCE
12-30-98	1	ADDITION TO STORE 'F'	

DATE	NO.	REVISION
6-8-15	7	REVISE CHURCH USE TO RETAIL AND ADJUST PARKING TABULATION. -FSH
02/23/11	5	ADDITION OF 5 PARKING SPACES TO LOT D1

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT
LONG REACH VILLAGE CENTER EXPANSION

AREA
TAX MAP 36 BLOCK 12
6th ELECTION DISTRICT ZONED NT
VILLAGE OF LONG REACH, S/1 A/5
PARCELS B-1, D-1, E-1 & LOT 6
HOWARD COUNTY, MARYLAND

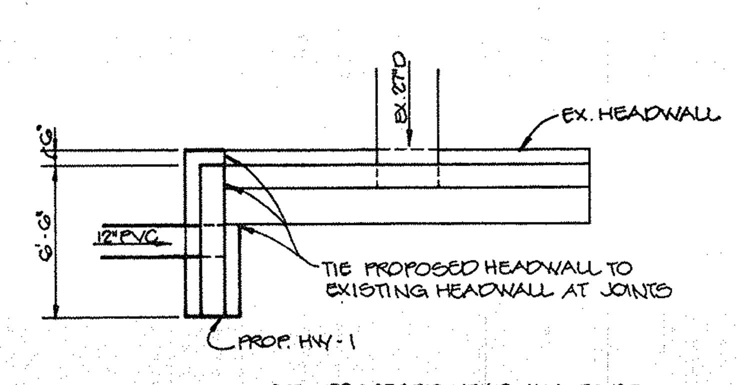
TITLE
TITLE SHEET

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

1-29-97
DATE
Stamp: STATE OF MARYLAND — JAYKANT D. PAREKH — NO. 19148 — REGISTERED PROFESSIONAL ENGINEER
JAYKANT D. PAREKH #19148

DESIGNED BY: CJR
DRAWN BY: RPP
PROJECT NO: 96E5100 SDP1.DWG
DATE: JANUARY 29, 1997
SCALE: AS SHOWN
DRAWING NO. 1 OF 8

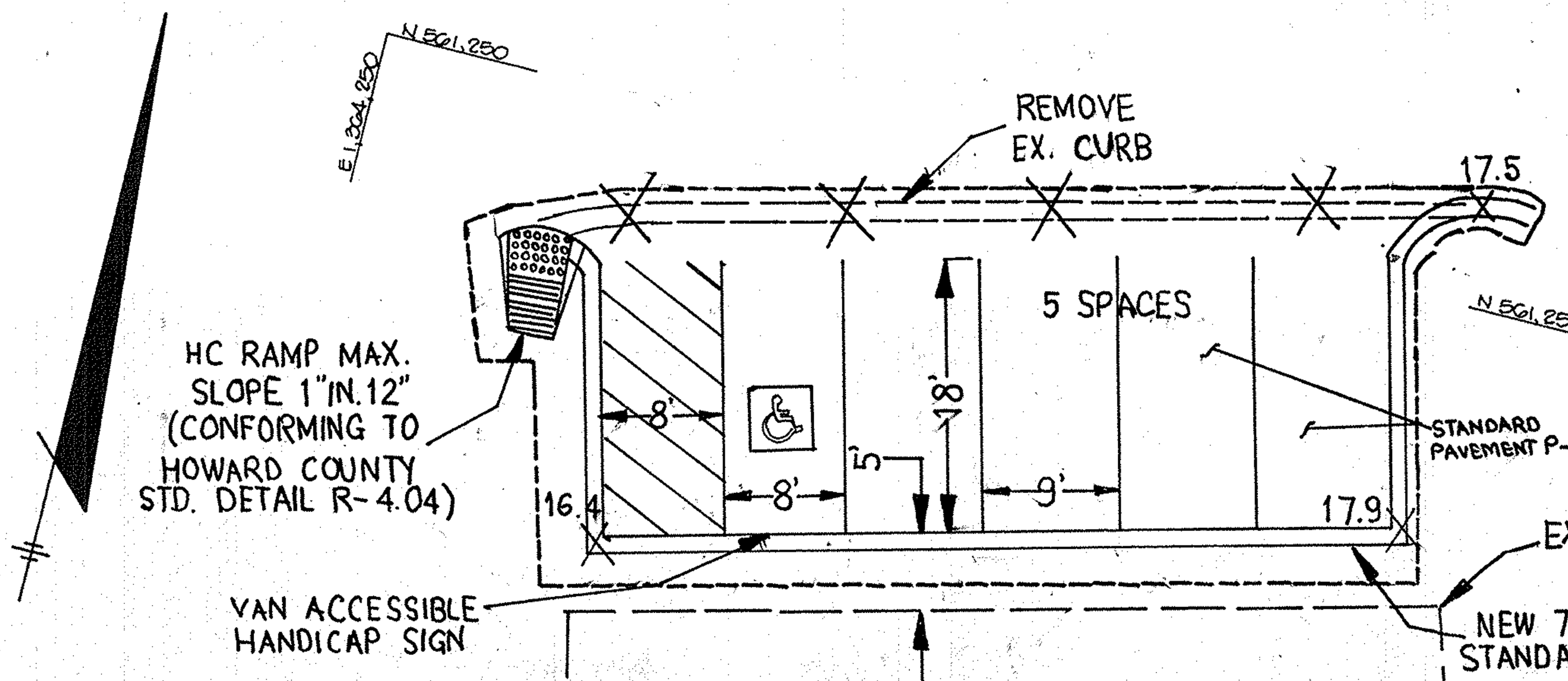
SDP-97-18



NOTE: PROPOSED HEADWALL TO BE CONSTRUCTED IN ACCORDANCE WITH HO. CO. STD. DETAIL SD 5.21.

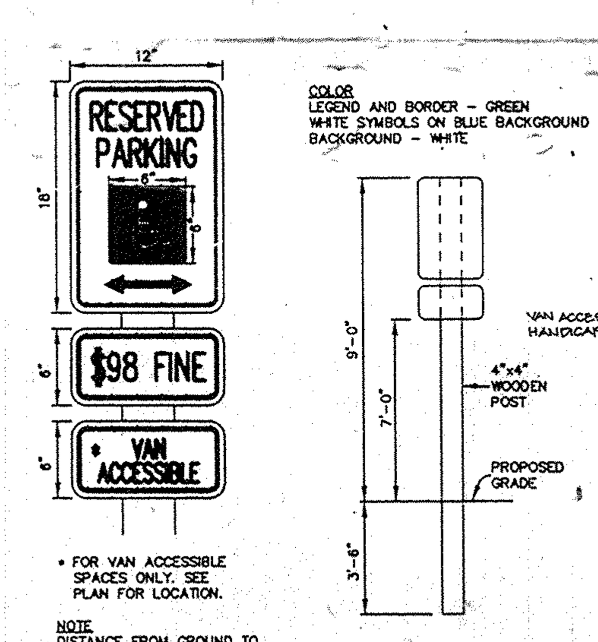
HEADWALL DETAIL

NO SCALE



ADDITIONAL PARKING DETAIL - PARCEL D-1

SCALE - 1"= 10'



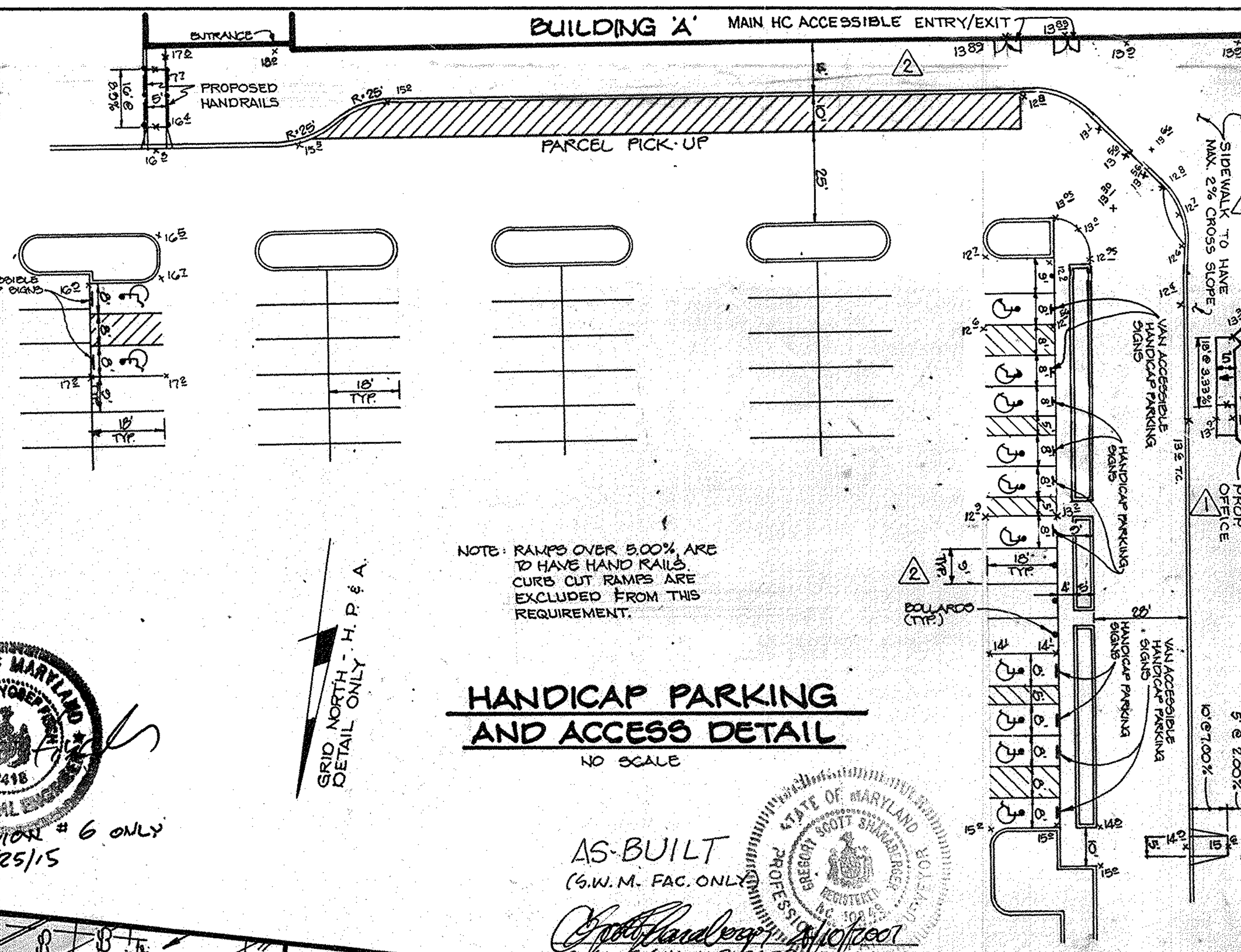
COLOR
LEGEND AND BORDER - GREEN
WHITE SYMBOLS ON BLUE BACKGROUND
BACKGROUND - WHITE

* FOR VAN ACCESSIBLE SPACES ONLY. SEE PLAN FOR LOCATION.

NOTE
DISTANCE FROM GROUND TO BOTTOM OF SIGN TO BE 7'.

HANDICAP SIGN DETAIL

NO SCALE



NOTE: RAMPS OVER 5.00% ARE TO HAVE HAND RAILS. CURB CUT RAMPS ARE EXCLUDED FROM THIS REQUIREMENT.

HANDICAP PARKING AND ACCESS DETAIL

NO SCALE

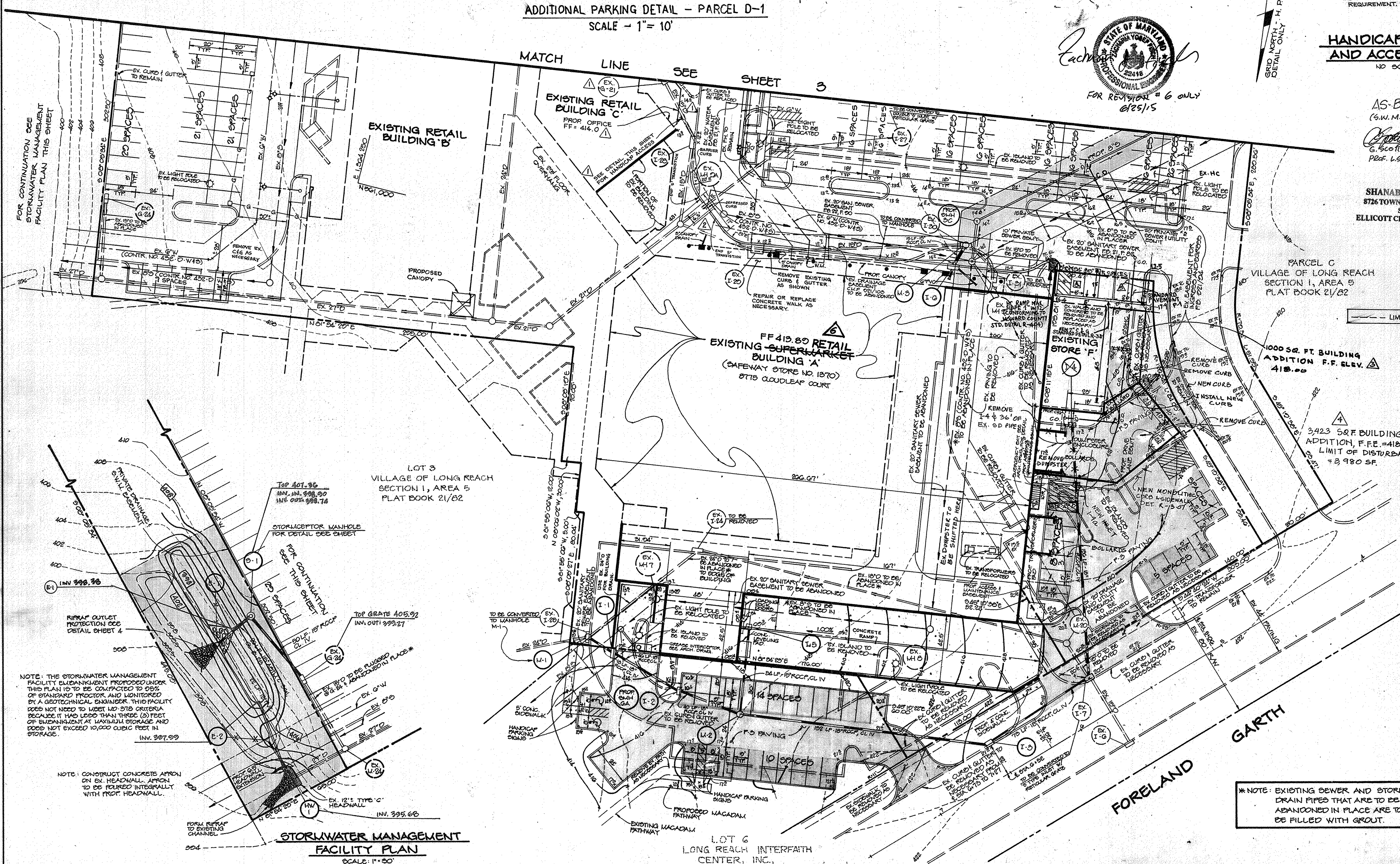
FOR REVISION # 6 ONLY
6/25/15

AS-BUILT
(S.W.M. FAC. ONLY)
G. SCOTT SHANABERGER DATE
PROF. L.S. # 10849

DATE	NO.	BY	REVISION
6-8-15	6	FSH	REVISED SUPERMARKET TO RETAIL.
02/23/11	5	KCE	ADDITION OF 5 PARKING SPACES TO LOT D1
12.14.05	4	KCE	ADDITION TO STORE 'F'

SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLICOTT CITY, MARYLAND 21043

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 16 January '97



LIMIT OF DISTURBANCE

* NOTE: EXISTING SEWER AND STORM DRAIN PIPES THAT ARE TO BE ABANDONED IN PLACE ARE TO BE FILLED WITH GROUT.

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR	DATE 4/14/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK	DATE 3/7/97
~~CHIEF~~, DIVISION OF LAND DEVELOPMENT JA.	DATE 4/4/97

DATE	NO.	REVISION
12-30-98	3	ADDITION TO STORE 'F'
3-10-98	2	REVISED CURB & HC RAMP @ HC PARKING NEAR BLD'G 'A'. ADDED ENTRY/EXIT TO BLDG 'A'
11-12-97	1	ADDED PROP. OFFICE AREA (OFF EX. BLDG. 'C'), EX. C&G, EX. INLET G-21 & HANDICAP ACCESS PROVISIONS TO DETAIL.

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT

LONG REACH VILLAGE CENTER EXPANSION

AREA TAX MAP 36 PARCELS B-1, D-1, E-1 & LOT 6
VILLAGE OF LONG REACH, 5/1 A/5
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE

SITE DEVELOPMENT PLAN

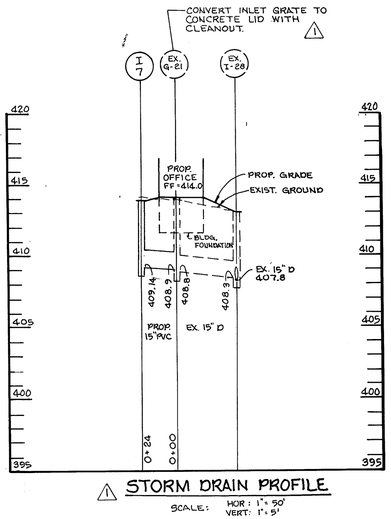
RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

1.29.97

JAYKANT D. PAREKH #19148

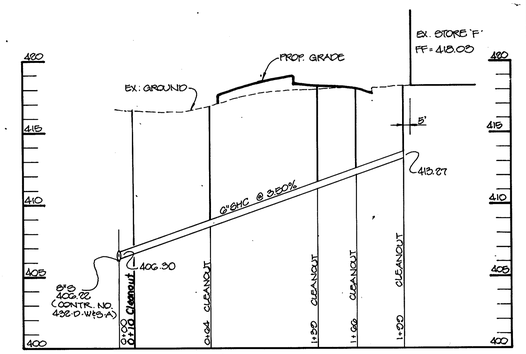
DESIGNED BY :	CJR
DRAWN BY:	MAD
PROJECT NO :	096 5100
DATE :	JANUARY 29, 1997
SCALE :	1" = 30'
DRAWING NO.	2 OF 8

SDP-97-18



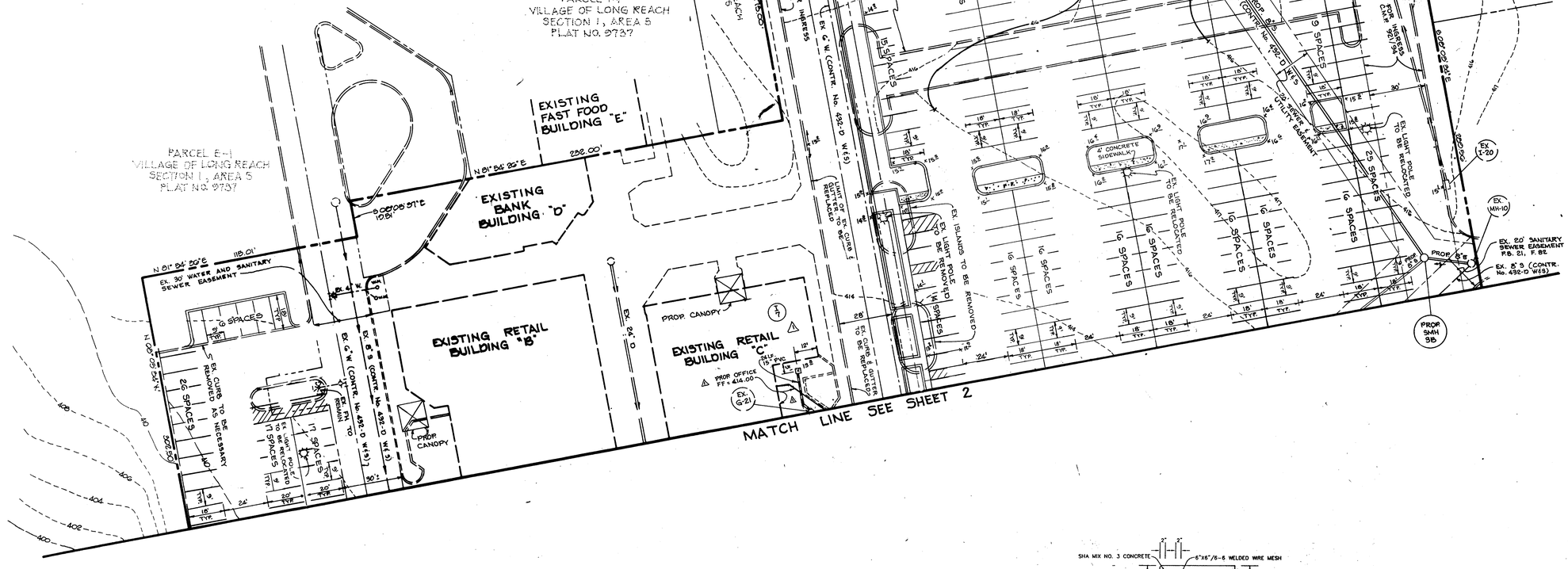
⚠ STORM DRAIN PROFILE

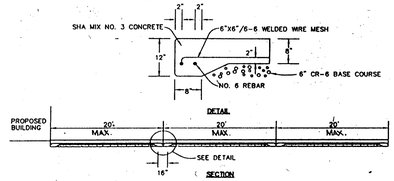
SCALE: HOR: 1"=50' VERT: 1"=5'



SEWER PROFILE

SCALE: HOR.: 1"=50' VERT.: 1"=5'





1. SAW JOINTS AT 15' SPACING IN BOTH DIRECTIONS WITH DEPTH AT JOINT EQUAL TO 1/4 DEPTH OF SLAB.
2. CONSTRUCTION JOINTS AS NEEDED, USING 3/4" DIA. SMOOTH DOWELS COATED TO PREVENT BOND @ 12" O/C (MAX) WITH SMOOTH CUT EDGE. DOWEL EXTENDS 8" INTO CONCRETE ON EACH SIDE OF JOINT.
3. CONTRACTOR TO USE ANTI-SPALLING COMPOUND.

CONCRETE SECTION FOR TRUCK LOADING AREA

NO SCALE

APPROVED
HOWARD COUNTY
DEPARTMENT OF PLANNING AND ZONING
DATE 16 January '97

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Lawrence Lichter 4/4/97
DIRECTOR DATE

[illegible] 3/12/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE

Cindy Hamilton 4/4/97
~~CHIEF~~, DIVISION OF LAND DEVELOPMENT JH DATE

DATE	NO.	REVISION
11-13-97	⚠	ADDED PROP OFFICE AREA; EXIST. & PROP SD INLETS & PIPE; PROP 8" S. & PROP SD PROFILE.

OWNER/DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT:
LONG REACH VILLAGE CENTER EXPANSION

AREA: TAX MAP 36 PARCEL B-1, D-1, E-1 & LOT G
VILLAGE OF LONG REACH, 5/1 A/5
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

1.29.97

STATE OF MARYLAND JAYKANT D. PAREKH NO. 10146 REGISTERED PROFESSIONAL ENGINEER

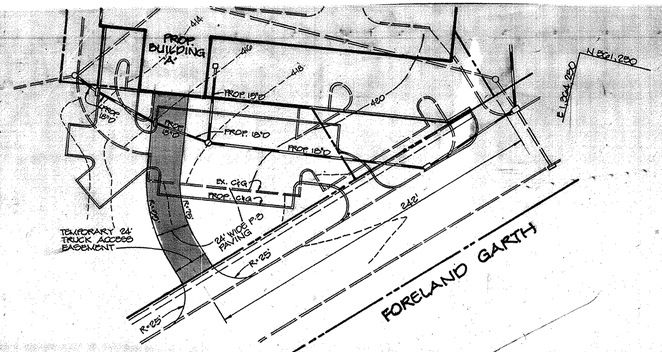
J. Parekh

JAYKANT D. PAREKH #10146

DESIGNED BY:	CJR
DRAWN BY:	MAD/RJC
PROJECT NO:	96E5100
DATE:	JANUARY 29, 1997
SCALE:	1" = 30'
DRAWING NO.	3 OF 8

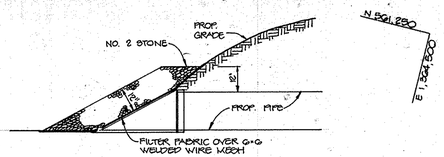
SDP 97-18

MARYLAND BLUEPRINT CO., INC. 112700



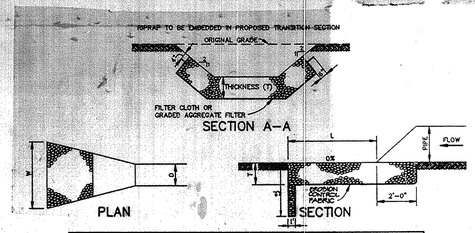
TEMPORARY TRUCK ACCESS PLAN

SCALE: 1"=50'



END SECTION BLOCKING FOR E-2

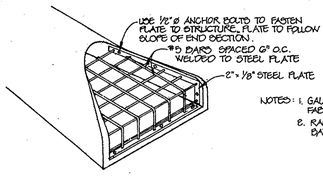
NO SCALE



STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	0.5'	10'	14'	15"
HW-1	2.5'	25'	10'	15"

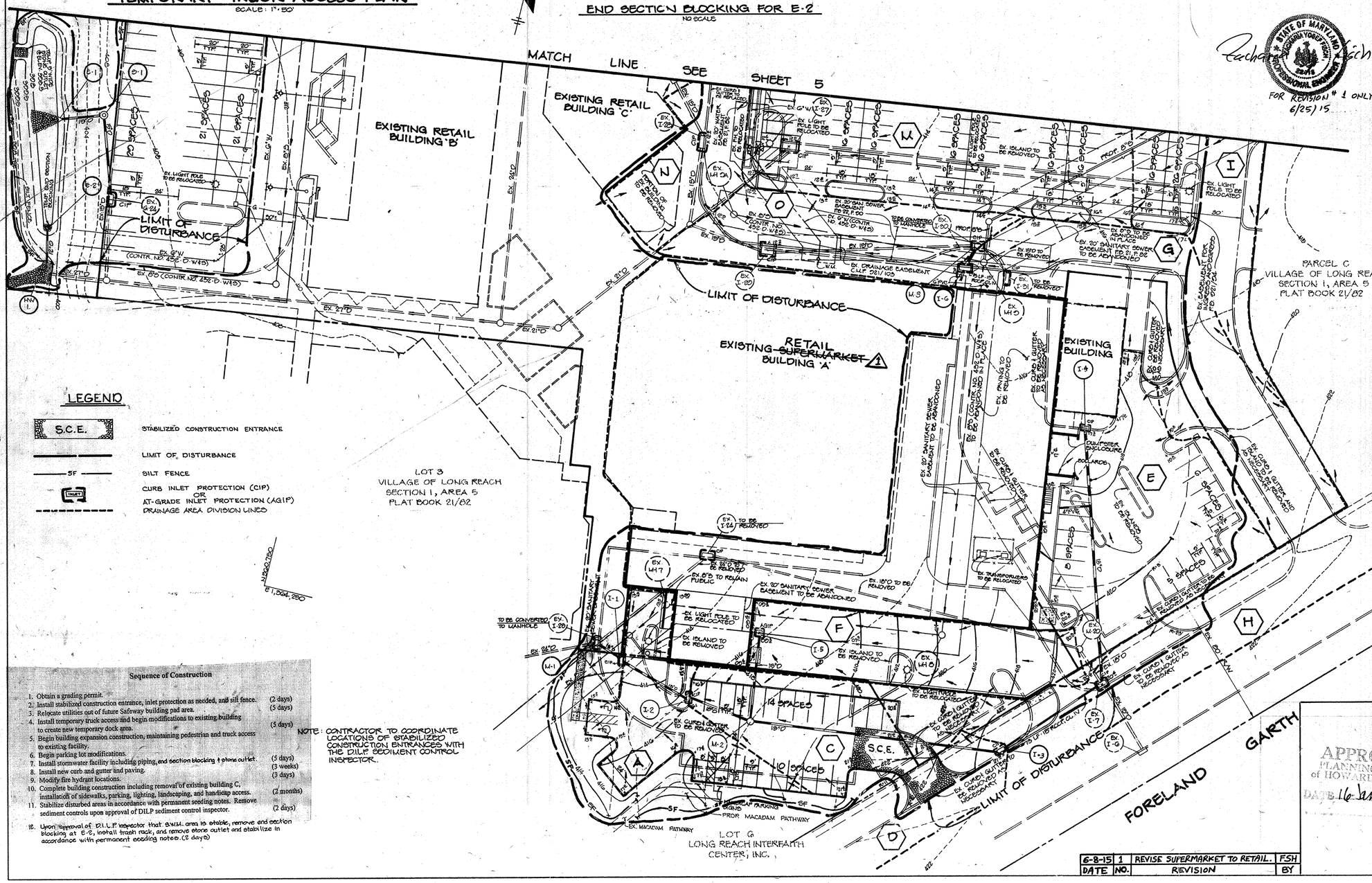
RIPRAP OUTLET PROTECTION

NO SCALE



TRASH RACK FOR E-2

NO SCALE



LEGEND

- S.C.E. — STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- SF — SILT FENCE
- CURB INLET PROTECTION (CIP) OR AT-GRADE INLET PROTECTION (AGIP)
- DRAINAGE AREA DIVISION LINES

Sequence of Construction

1. Obtain a grading permit. (2 days)
2. Install stabilized construction entrance, inlet protection as needed, and silt fence. (5 days)
3. Relocate utilities out of future Safeway building pad area. (5 days)
4. Install temporary truck access and begin modifications to existing building to create new temporary dock area. (5 days)
5. Begin building expansion construction, maintaining pedestrian and truck access to existing facility.
6. Begin parking lot modifications.
7. Install stormwater facility including piping, end section blocking & stone outlet. (5 days)
8. Install new curb and gutter and paving. (3 weeks)
9. Modify fire hydrant locations. (3 days)
10. Complete building construction including removal of existing building C, installation of sidewalks, parking, lighting, landscaping, and handicap access. (2 months)
11. Stabilize disturbed areas in accordance with permanent seeding notes. Remove sediment controls upon approval of DILP sediment control inspector. (2 days)
18. Upon approval of D.I.L.P. inspector that S.W.M. area is stable, remove end section blocking at E-2, install trash rack, and remove stone outlet and stabilize in accordance with permanent seeding notes. (5 days)

NOTE: CONTRACTOR TO COORDINATE LOCATIONS OF STABILIZED CONSTRUCTION ENTRANCES WITH THE D.I.L.P. SEDIMENT CONTROL INSPECTOR.

DATE	NO.	REVISION	BY
6-8-15	1	REVISE SUPERMARKET TO RETAIL.	FSH

Rachael Fisch
STATE OF MARYLAND — RACHAEL YOSEF FISCH — 22975 — PROFESSIONAL ENGINEER
FOR REVISION # 1 ONLY
6/25/15

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 16 January 97

BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER — DATE 1/29/97

BY THE ENGINEER :

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

J. Parekh — 1.29.'97
ENGINEER — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Cheryl Simmons for LGS — 2/20/97
NATURAL RESOURCES CONSERVATION SERVICE — DATE

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

HOWARD SOIL CONSERVATION DISTRICT — DATE 2/20/97

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 4/4/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION MK — DATE 3/7/97

~~CHIEF~~, DIVISION OF LAND DEVELOPMENT JA — DATE 4/4/97

DATE	NO.	REVISION

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT

LONG REACH VILLAGE CENTER EXPANSION

AREA TAX MAP 39 — PARCELS B-1, D-1, E-1 & LOT G
VILLAGE OF LONG REACH, 6/1 A/B
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE

SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

1.29.97
STATE OF MARYLAND — JAYKANT D. PAREKH — NO. 19148 — REGISTERED PROFESSIONAL ENGINEER
J. Parekh
JAYKANT D. PAREKH #19148

DESIGNED BY :	CJR
DRAWN BY:	MAD
PROJECT NO :	505.9100
DATE :	JANUARY 29, 1997
SCALE :	1"=80'
DRAWING NO.	4 OF 8

SDP-97-18

DRAINAGE AREA CHART

D.A.	AREA (AC.)	% IMPERVIOUS	'C' FACTOR
A I-1	0.14	90	0.81
C I-2	0.20	70	0.68
D I-3	0.17	71	0.68
E I-4	0.36	78	0.73
F I-5	0.20	100	0.87
G I-6	0.35	80	0.74
H EX I-7	0.62	82	0.76
I EX I-20	0.28	85	
J EX I-21	0.65	94	
K EX I-22	0.10	30	
L EX I-23	0.60	88	
M EX I-27	0.93	92	
N EX I-28	0.24	100	
O EX I-29	0.19	100	

Concrete Storm*ceptor*® Order Request Form *

Contractor Information
Name
Address
City
State
Zip Code
Contact
Phone
Fax

Office Use Only
Order #
Date
Internal Sale

90° / 180° / 0° I / 270° O / 18" RCCP / 90°

Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Owner Information
Name HOWARD RESEARCH & DEVEL. CORP.
Phone (410) 992-6000
Fax

Storm*ceptor*® Model
900 ☐ 3600 ☐
1200 ☐ 4800 ☐
1800 ☒ 6000 ☐
2400 ☐ 7200 ☐

Insert Size
22" ☒
32" ☐
44" ☐
Custom ___

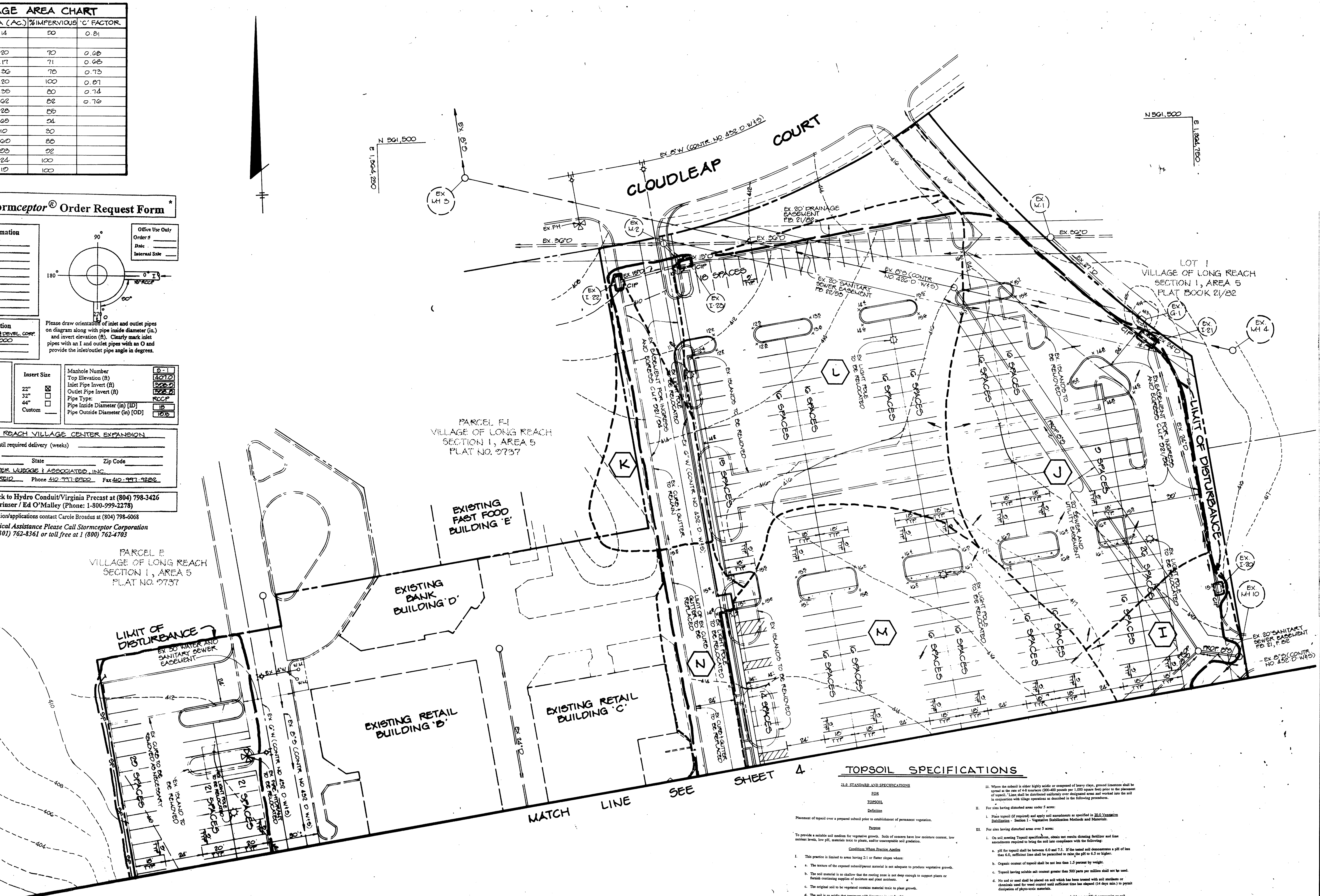
Manhole Number: S-1
Top Elevation (ft): 407.0
Inlet Pipe Invert (ft): 398.9
Outlet Pipe Invert (ft): 398.8
Pipe Type: RCCP
Pipe Inside Diameter (in) [ID]: 15
Pipe Outside Diameter (in) [OD]: 18.5

Project Name LONG REACH VILLAGE CENTER EXPANSION
Approximate time frame until required delivery (weeks)
Delivery Address : Street
City State Zip Code
Designer Company RIEMER MUEGGE & ASSOCIATES, INC.
Designer Contact CHRIS REID Phone 410-997-8900 Fax 410-997-9282

Please fax this sheet back to Hydro Conduit/Virginia Precast at (804) 798-3426
Attn : Dave Brinser / Ed O'Malley (Phone: 1-800-999-2278)

For credit information/applications contact Carole Broadus at (804) 798-6068

For Technical Assistance Please Call Stormceptor Corporation at (301) 762-8361 or toll free at 1 (800) 762-4703



E 1,364,250
N 561,000

TOPSOIL SPECIFICATIONS

21.0 STANDARD AND SPECIFICATIONS
FOR
TOPSOIL

Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

I. This practice is limited to areas having 2:1 or flatter slopes where:

a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.

b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.

c. The original soil to be vegetated contains material toxic to plant growth.

d. The soil is so acidic that treatment with limestone is not feasible.

II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

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

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:

i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1½" in diameter.

ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

II. For sites having disturbed areas under 5 acres:

i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

III. For sites having disturbed areas over 5 acres:

i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:

a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be perscribed to raise the pH to 6.5 or higher.

b. Organic content of topsoil shall be not less than 1.5 percent by weight.

c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.

d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientistand approved by the appropriate approval authority, may be used in lieu of natural topsoil.

ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.

ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.

iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

VI. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

i. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.

b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a Ph of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.

c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.

iv. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 16 January '97

BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER 1/29/97 DATE

BY THE ENGINEER :

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

J. Parekh
ENGINEER 1.29.97 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Cheryl Simmons /as 2/20/97
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

HOWARD SOIL CONSERVATION DISTRICT 2/20/97 DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR 4/4/97 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION MK 3/7/97 DATE

Cindy Hamilton
~~CHIEF~~, DIVISION OF LAND DEVELOPMENT JA 4/4/97 DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT
LONG REACH VILLAGE CENTER EXPANSION

AREA TAX MAP 36 PARCELS B-1, D-1, E-1 & LOT 6
VILLAGE OF LONG REACH, S/1 A/5
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

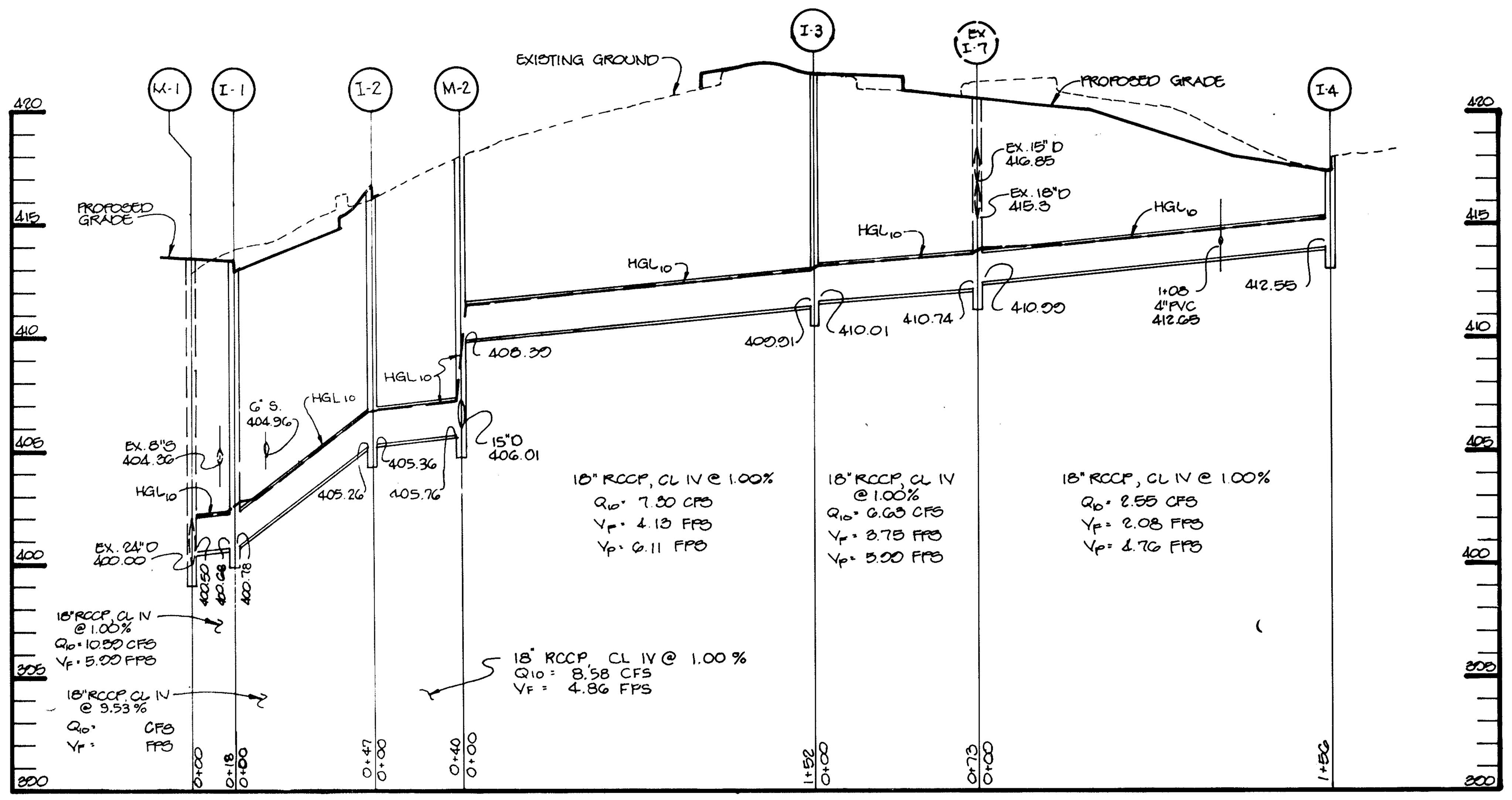
1.29.97
DATE

STATE OF MARYLAND
JAYKANT D. PAREKH
NO. 19148
REGISTERED
PROFESSIONAL ENGINEER

J. Parekh
JAYKANT D. PAREKH #19148

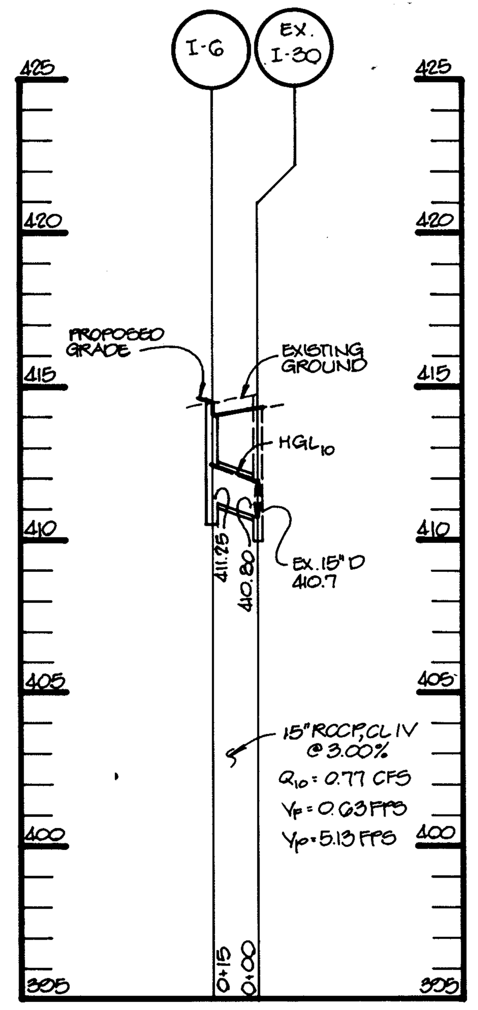
DESIGNED BY : CJR
DRAWN BY: MAD
PROJECT NO : 96E5100
DATE : JANUARY 29, 1997
SCALE : 1" = 30'
DRAWING NO. 5 OF 8

SDP-97-18



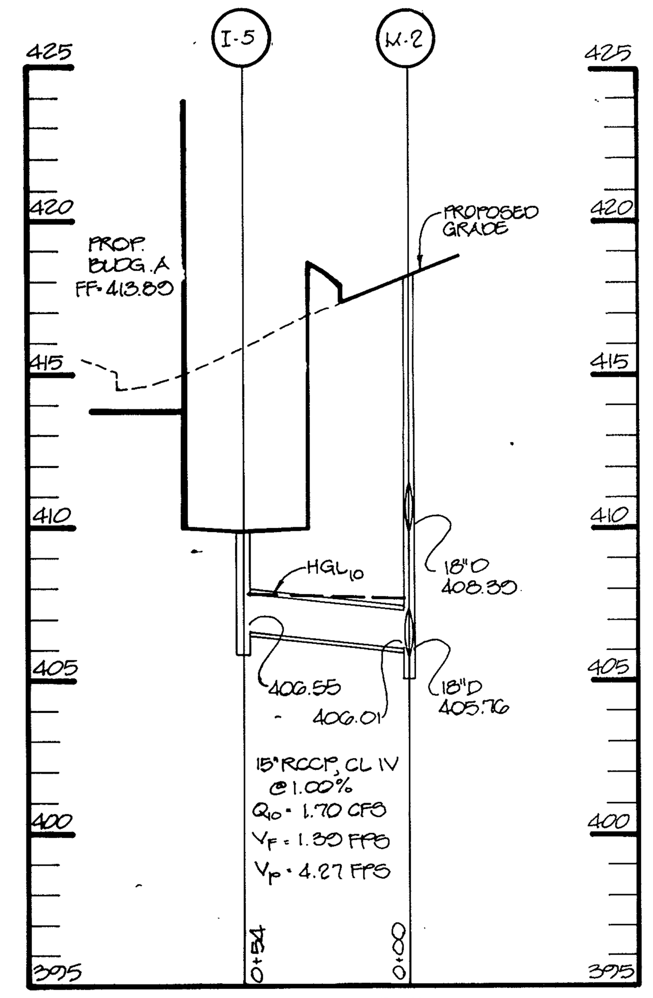
STORM DRAIN PROFILE

SCALE: HOR.: 1"=50' VERT.: 1"=5'



STORM DRAIN PROFILE

SCALE: HOR.: 1"=50' VERT.: 1"=5'

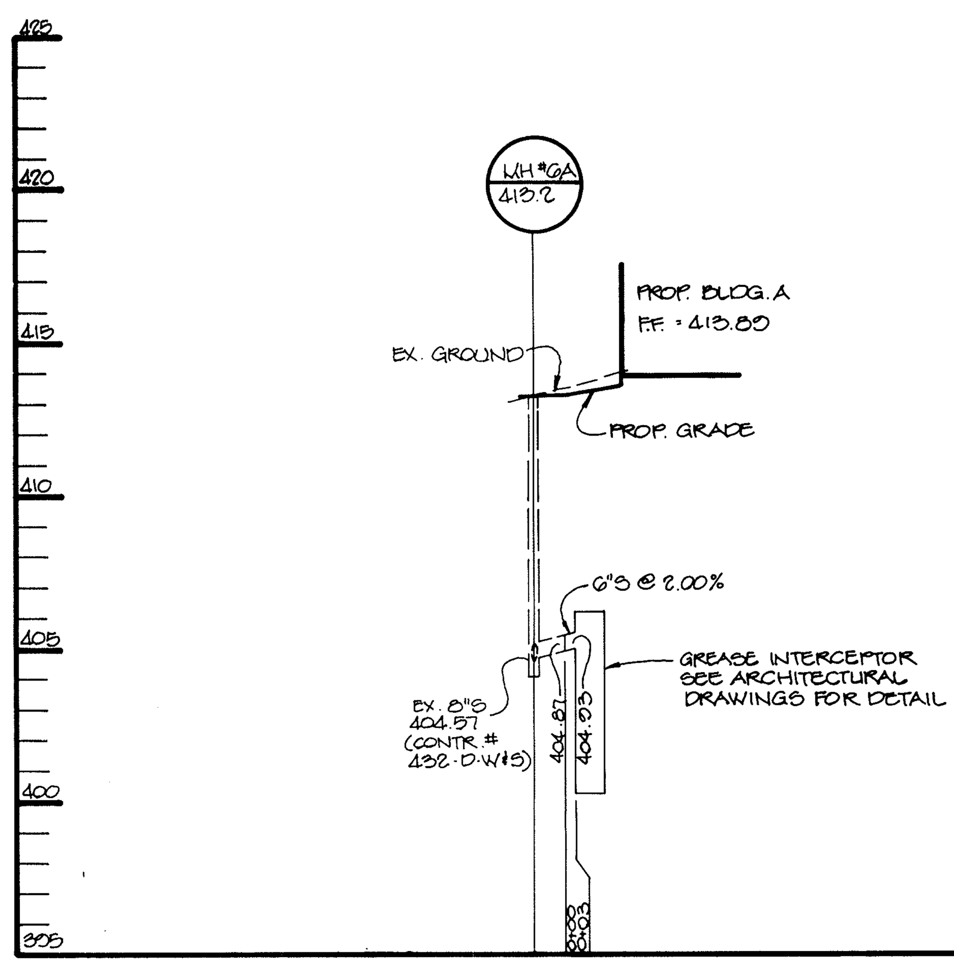


STORM DRAIN PROFILE

SCALE: HOR.: 1"=50' VERT.: 1"=5'

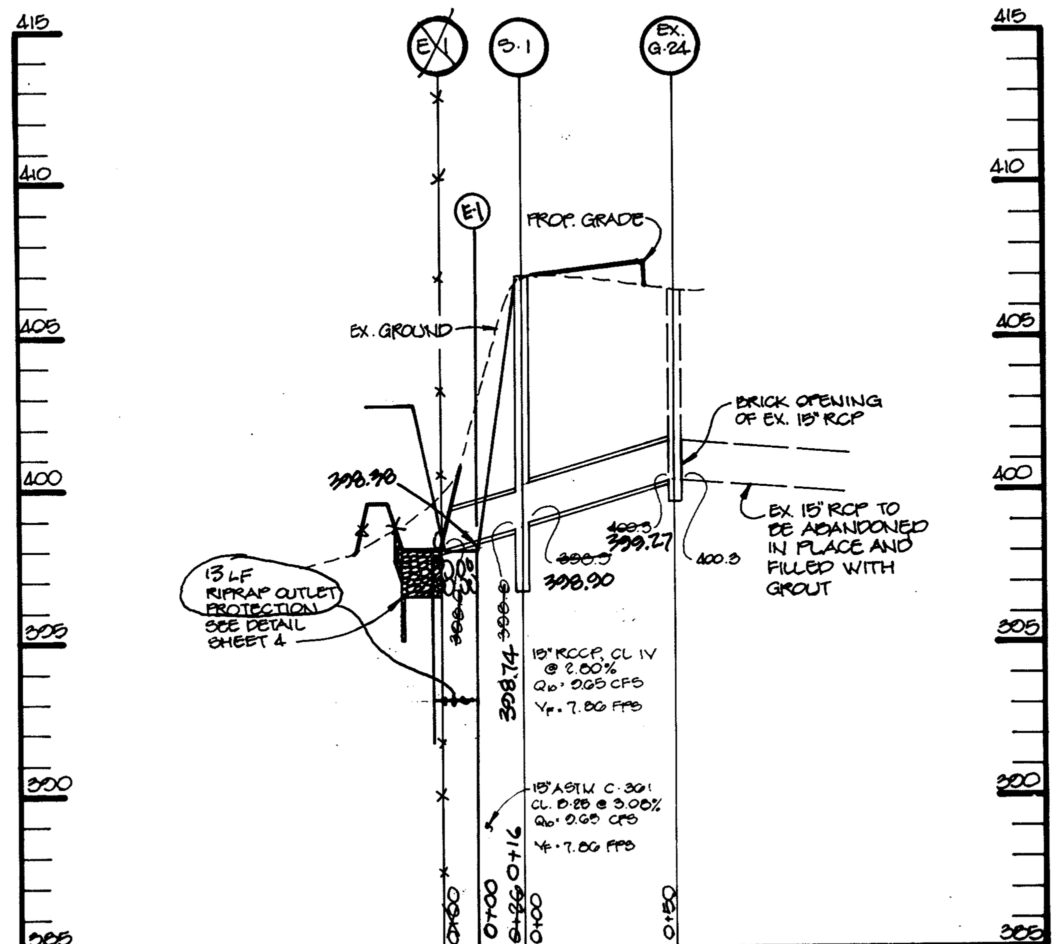
STRUCTURE SCHEDULE

STRUCTURE	TYPE	INVERT IN	INVERT OUT	TOP OF CURB/ GRATE/RIM	HO.CO STD DETAIL
I-1	'S' COMB.	400.78	400.68	413.6	SD 4.32
I-2	A-5	405.36	405.26	416.7	SD 4.01
I-3	A-5	410.01	409.91	421.6	SD 4.01
I-4	S	–	412.55	420.4	SD 4.22
I-5	A-5	–	406.55	409.3	SD 4.01
I-6	A-5	–	411.25	414.6	SD 4.01
M-1	4' MH	400.50	400.00	413.5	G 5.01
M-2	4' MH	(18") 408.39 (15") 406.01	405.76	418.0	G 5.01
E-1	15" CONC. END SECTION	–	~~398.0~~ 398.38	–	SD 5.51
E-2	ADS N-12 POLYETHYLENE FLARED END SECTION FOR 12" PIPE	~~398.0~~ 397.79 –		–	–
S-1	STORMCEPTOR	~~398.9~~ 398.90	~~398.8~~ 398.74	~~407.0~~ 407.36	–
HW-1	TYPE 'C' HEADWALL	–	~~395.2~~ 395.68	–	SD 5.21



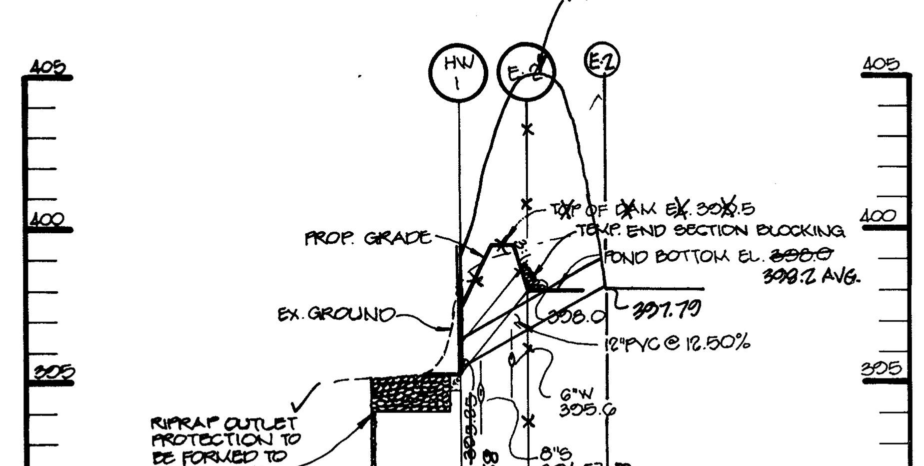
SEWER PROFILE

SCALE: HOR.: 1"=50' VERT.: 1"=5'



STORM DRAIN PROFILE

SCALE: HOR.: 1"=50' VERT.: 1"=5'



PROFILE THRU PRINCIPLE SPILLWAY

SCALE: HOR.: 1"=50' VERT.: 1"=5'

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A)7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

TOTAL AREA OF SITE	9.46 ACRES
AREA DISTURBED	5.75 ACRES
AREA TO BE ROOFED OR PAVED	4.90 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.85 ACRES
TOTAL CUT	1000 CU.YDS.
TOTAL FILL	1000 CU.YDS.

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
11. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
12. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.
13. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 AC., 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.
14. 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.

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, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments : Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.).

Seeding : For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period 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. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 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.

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, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments : In lieu of soil test recommendations, use one of the following schedules :

1) Preferred – Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.).

2) Acceptable – Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding : For the period March 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs. per 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 (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru February 28, protect site by one of the following options :

1) 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.

2) Use sod.

3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw.

Mulching : Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Maintenance : Inspect all seeded areas and make needed repairs, replacements and reseedings.

BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER — 1/29/97 DATE

BY THE ENGINEER :

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

J. Parekh — ENGINEER — 1.29.97 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE — 2/20/97 DATE

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

HOWARD SOIL CONSERVATION DISTRICT — 2/20/97 DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — 4/4/97 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION MK — 3/7/97 DATE

~~CHIEF~~, DIVISION OF LAND DEVELOPMENT JA — 4/4/97 DATE

DATE	NO.	REVISION

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT

LONG REACH VILLAGE CENTER EXPANSION

AREA TAX MAP 30 — PARCELS B-1, D-1, E-1 & LOT 6

VILLAGE OF LONG REACH, S/1 A/5
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE

PROFILES, NOTES AND DETAILS

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

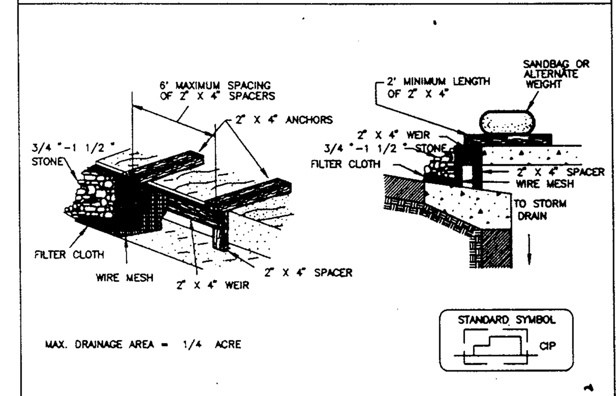
1.29.97 DATE	DESIGNED BY : CJR
	DRAWN BY: MAD
	PROJECT NO : 96E 5100
	DATE : JANUARY 29, 1997
	SCALE : AS SHOWN
JAYKANT D. PAREKH #19148	DRAWING NO. 6 OF 8

STATE OF MARYLAND — JAYKANT D. PAREKH — NO. 19148 — REGISTERED PROFESSIONAL ENGINEER

SDP-97-18

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 16 January '97

DETAIL 23C – CURB INLET PROTECTION



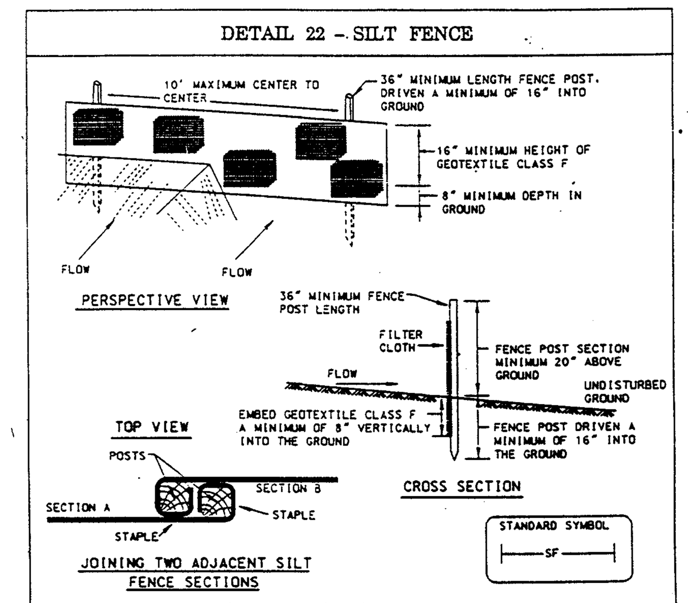
MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.
2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.
3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).
4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
6. Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 – SILT FENCE



Construction Specifications

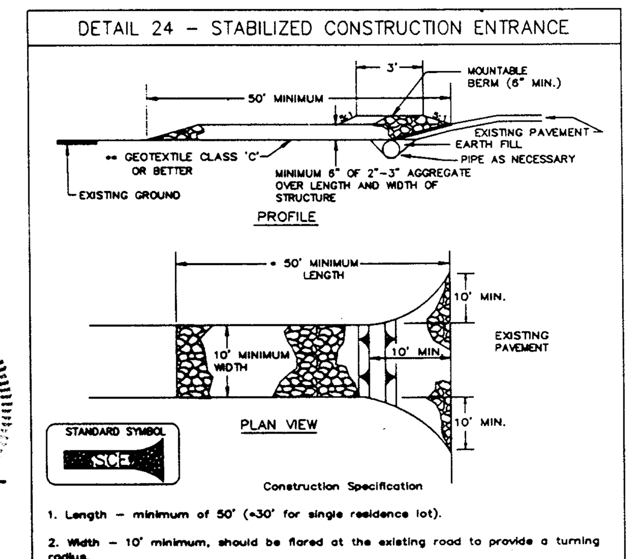
1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum) cut, or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length – minimum of 50' (*30' for single residence lot).
2. Width – 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
4. Stone – crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water – all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

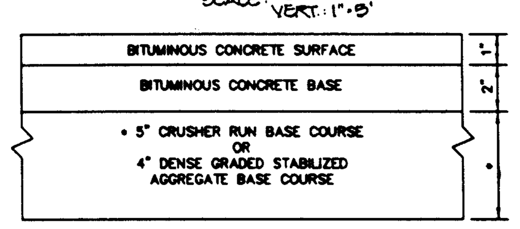
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

AS-BUILT
(S.W.M. FAC. ONLY)

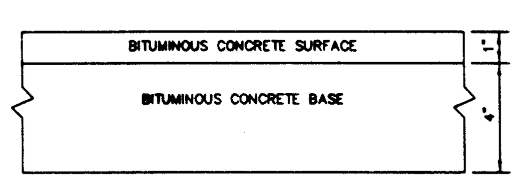
G. SCOTT SHANABERGER — DATE
PROF. L.S. # 10849

STATE OF MARYLAND — GREGORY SCOTT SHANABERGER — REGISTERED PROFESSIONAL LAND SURVEYOR

SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLICOTT CITY, MARYLAND 21043



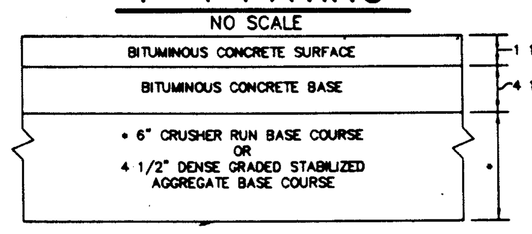
(ALTERNATE)



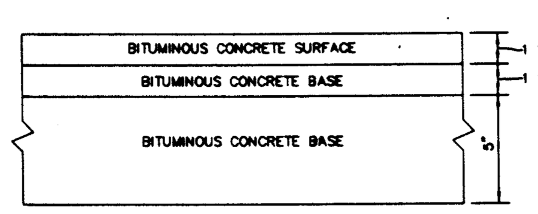
HOWARD COUNTY DESIGN MANUAL VOLUME IV- STANDARD SPECIFICATIONS AND DETAILS FOR CONSTUCTION (DRAWING R-2.01)

P-1 PAVING

NO SCALE



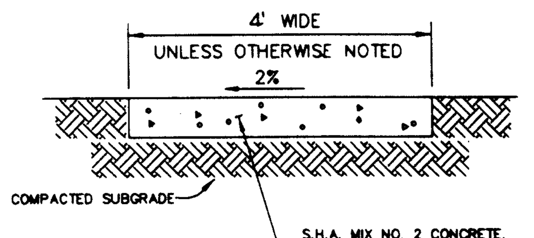
(ALTERNATE)



HOWARD COUNTY DESIGN MANUAL VOLUME IV- STANDARD SPECIFICATIONS AND DETAILS FOR CONSTUCTION (DRAWING R-2.01)

P-3 PAVING

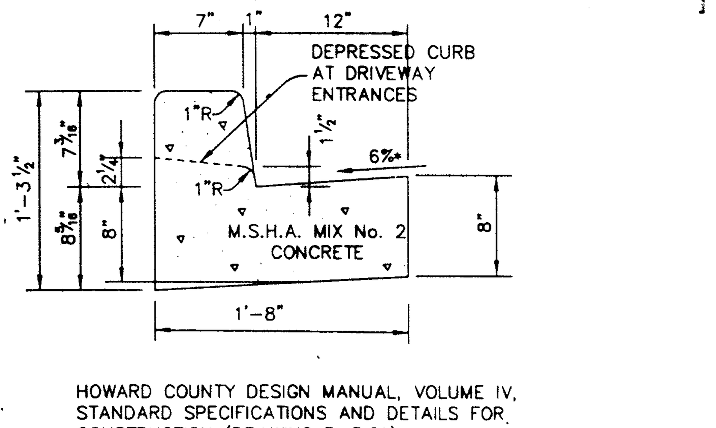
NO SCALE



NOTES :
PROVIDE LATITUDINAL EXPANSION JOINTS AT 15' O.C. (MAX.)
PROVIDE CONTRACTION (DUMMY) JOINT AT 5' O.C. INTERVALS BETWEEN EXPANSION JOINTS. SIDEWALK TO BE SCRIBED IN 5' MAX. SQUARES.

SIDEWALK DETAIL

NO SCALE

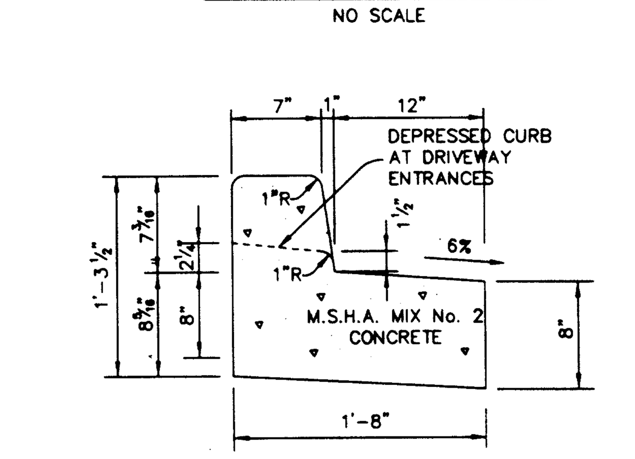


HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01).

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

STANDARD 7" COMBINATION CURB AND GUTTER

NO SCALE



REVERSE 7" COMBINATION CURB AND GUTTER

NO SCALE

PLANT MATERIAL LIST

KEY	QTY.	BOTANICAL / COMMON NAME	SIZE	REMARKS
		TREES		
QP	10	QUERCUS PALUSTRIS PIN OAK	3"- 3½" CAL.	B&B
⚠5 PO	51 ~~49~~	PLATANUS ACERIFOLIA "BLOODGOOD" SYCAMORE	3"- 3½" CAL.	B&B
GV	6	GRATAEGUS VIRIDIS WINTERBERRY HAWTHORN	3"- 3½" CAL.	B&B
CL	12	CYPRESSOCYPRESS LELANDI LELAND CYPRESS	10'-12' HT.	B&B
M	9	MALUS CRAB APPLE	8'-10' HT.	B&B
A	6	AMELANCHLOR SERVICE BERRY	3"-3½" CAL.	B&B
		SHRUBS		
PF	66	PHOTINIA FRASERI FRASER PHOTINIA RED TIP	30"- 36" HT.	B&B
EA	146	EUONYMUS ALATUS - COMPACTUS WINGED EUONYMUS	36"- 48" HT.	B&B
TM	189	TAXUS X MEDIA 'WARDII' WARD'S YEW	24"- 30" HT.	B&B
TD	15	TAXUS DENSIFORMUS JAPANESE DENSE YEW	24"- 30" HT.	B&B

LIGHTING SCHEDULE

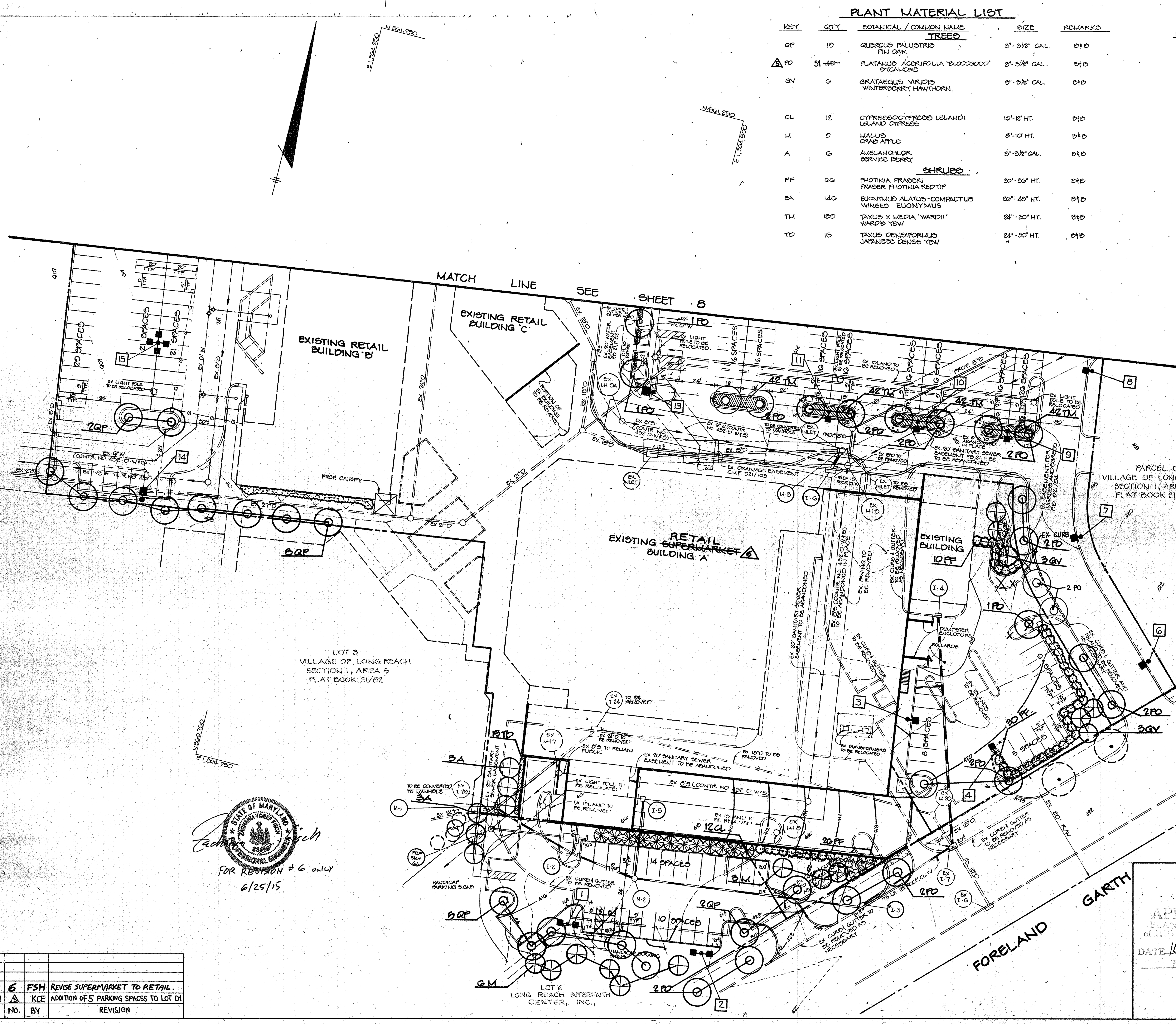
No.	LUMINAIRE LABEL	HEIGHT	No. OF LAMPS	DESCRIPTION
1	A2F	25'	2	EMCO ECA 1823H 400 MH FORWARD
2	A2F	25'	2	EMCO ECA 1823H 400 MH FORWARD
3	A	25'	1	EMCO ECA 1813H 400 MH
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14	A	25'	1	EMCO ECA 1813H 400MH
15	B4	30'	4	EMCO ECA 184QH 400MH
16	B4	30'	4	EMCO ECA 184QH 400MH
17	A	25'	1	EMCO ECA 1813H 400MH
18				
19				
20				
21				
22				
23				
24	A	25'	1	EMCO ECA 1813H 400 MH
25	B4	35'	4	EMCO ECA 184QH 400 MH
26				
27				
28	B4	35'	4	EMCO ECA 184QH 400MH
29	A	25'	1	EMCO ECA 1813H 400 MH
30				
31				
32				
33	A	25'	1	EMCO ECA 1813H 400MH

LABEL "A" TYPE LUMINAIRES ARE AS FOLLOWS:
91-4477 EMCO LIGHTING EC3H4M, IES 04/02/91
CLEAR 400MH/HOR (SUPER) RATED 1000 LUMENS (W/LAMP STABILIZER)
STANDARD TYPE III OPTICS (18")
CLEAR FLAT TEMPERED GLASS IN EMCO ECOLUME DOOR FRAME
LUMENS/LAMP = 1000 PHOTOMETRIC TYPE = 1 WATTS = 455

LABEL "B" TYPE LUMINAIRES ARE AS FOLLOWS:
93-4897 EMCO LIGHTING ECQH4M, IES 06/29/93
CLEAR 400MH/HOR (SUPER) RATED 1000 LUMENS (W/LAMP STABILIZER)
STANDARD TYPE QH OPTICS (18")
CLEAR FLAT TEMPERED GLASS IN EMCO ECOLUME DOOR FRAME
LUMENS/LAMP = 1000 PHOTOMETRIC TYPE = 1 WATTS = 455

LIGHTING KEY

LIGHT POLE LOCATION & IDENTIFYING NUMBER BLOCK



"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

" FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF $ 14,000.00

FOR REVISION # 6 ONLY
6/25/15

DATE	NO.	BY	REVISION
6-8-15	6	FSH	REVISE SUPERMARKET TO RETAIL.
02/23/11	⚠5	KCE	ADDITION OF 5 PARKING SPACES TO LOT D1

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 4/4/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION MK — DATE 3/7/97

~~CHIEF~~, DIVISION OF LAND DEVELOPMENT ~~AND RESEARCH~~ — DATE 4/4/97

DATE	NO.	REVISION

OWNER / DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT
LONG REACH VILLAGE CENTER EXPANSION

AREA TAX MAP 36 PARCELS B1, D1, E1 & LOT 6
VILLAGE OF LONG REACH, S/1 A/5
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
LANDSCAPING AND LIGHTING PLAN

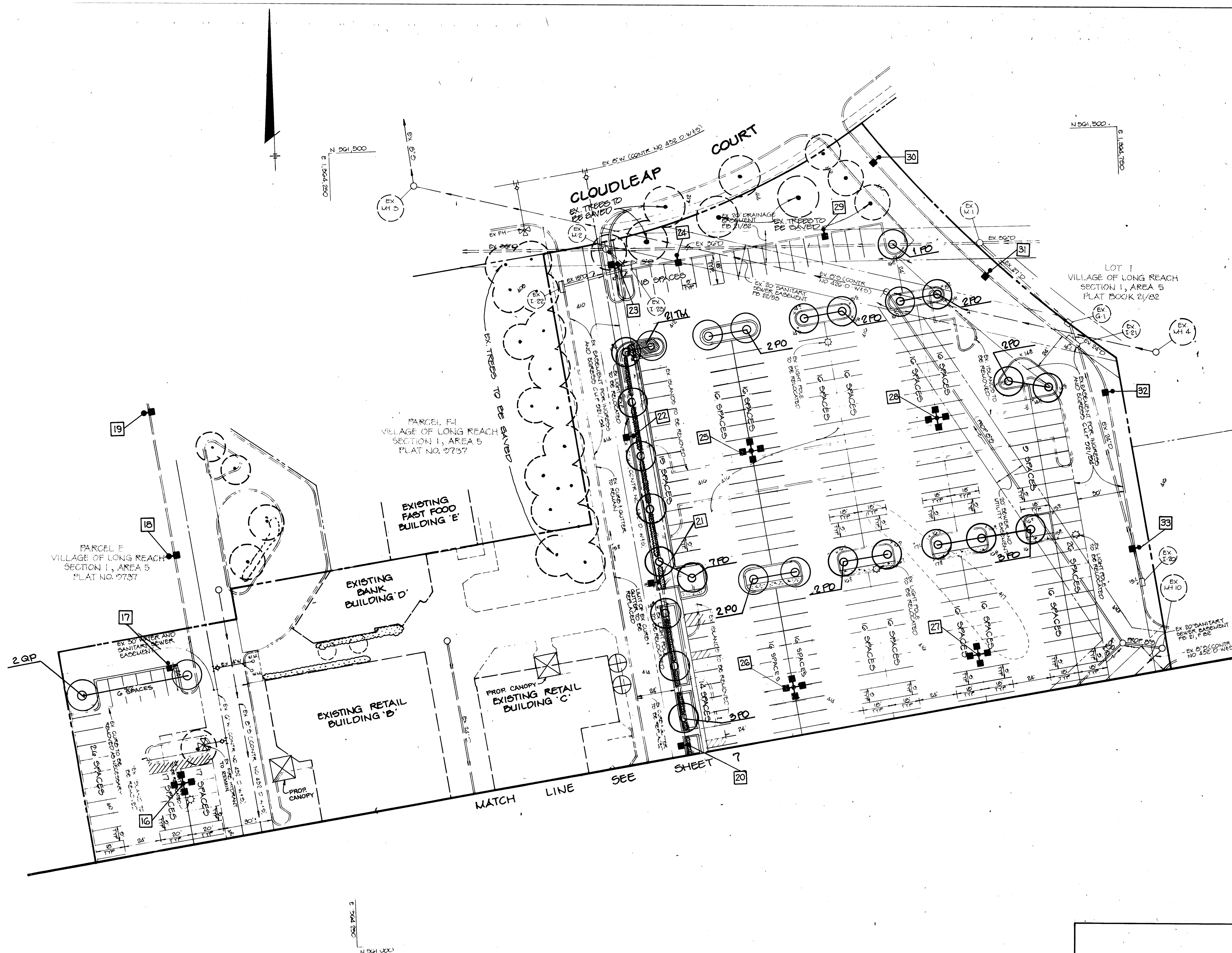
APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 16 January '97

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

1.29.97
DATE

DESIGNED BY :
DRAWN BY: WAD
PROJECT NO : 965 5100
DATE : JANUARY 29, 1997
SCALE : 1" = 30'
DRAWING NO. 7 OF 8

SDP-97-18



LIGHTING KEY

LIGHT POLE LOCATION & IDENTIFYING NUMBER BLOCK [16]

SEE SHEET 7 OF 8 FOR LIGHTING SCHEDULE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[signature] DIRECTOR	4/4/97 DATE
[signature] CHIEF, DEVELOPMENT ENGINEERING ~~DIVISION~~ MK	3/7/97 DATE
[signature] DIVISION OF LAND DEVELOPMENT JA	4/4/97 DATE

DATE NO. REVISION

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APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 16 January 97

1.29.97
DATE

[signature]

DESIGNED BY:	
DRAWN BY:	MAD
PROJECT NO.	96E5100
DATE:	JANUARY 29, 1997
SCALE	1" = 30'
DRAWING NO.	8 OF 8

SDP-97-18