SITE DEVELOPMENT PLAN

OWEN BROWN

ASSISTED LIVING FACILITY

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

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3	SEDIMENT CONTROL AND DRAINAGE AREA MAP
4	NOTES AND DETAILS
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6	LANDSCAPING PLAN
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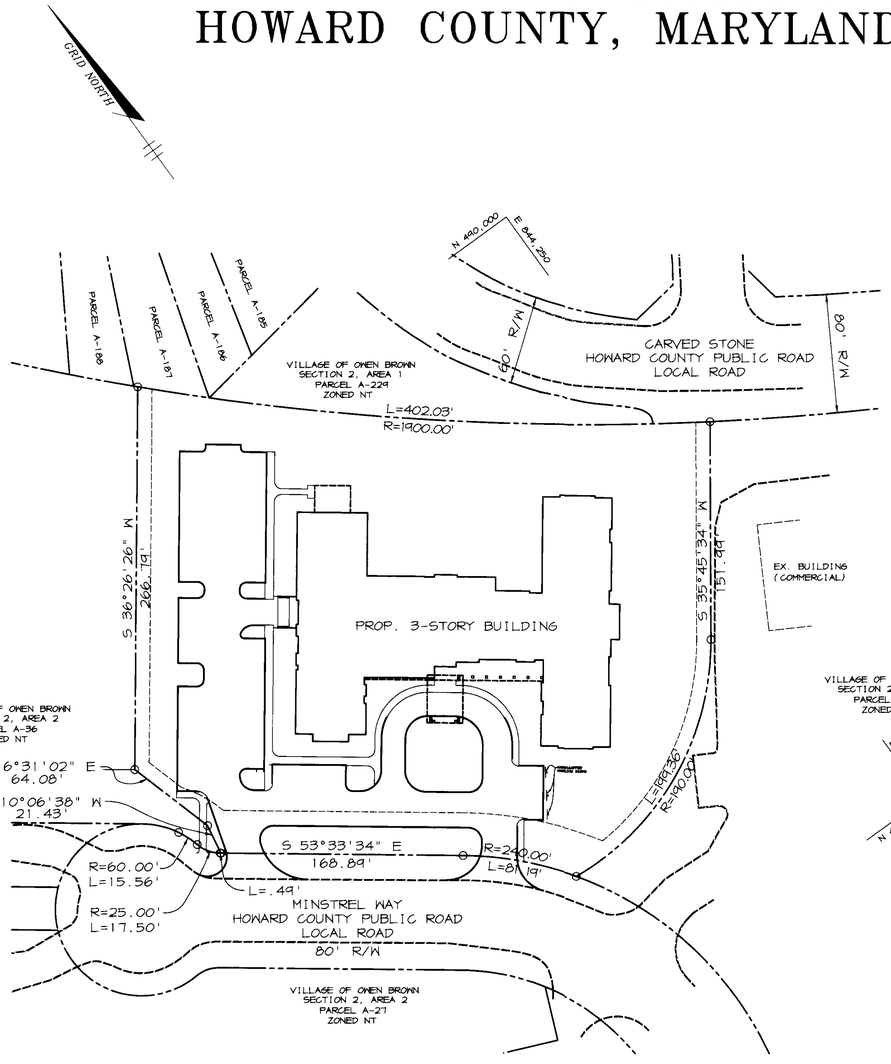
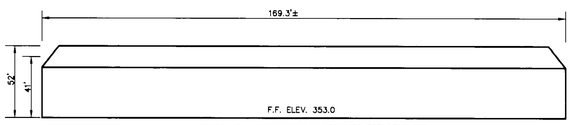
GENERAL NOTES

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 TAKEN FROM FIELD SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOC. DATED OCTOBER, 1996.
7. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
8. WATER IS PUBLIC, CONTRACT NO. C-2616-D.
9. SEWER IS PUBLIC. SEWER DRAINAGE AREA: PATUXENT. TREATMENT PLANT: LITTLE PATUXENT CONTRACT NO. C-2616-D.
10. THE STORMWATER MANAGEMENT QUANTITY FACILITY IS OFF-SITE UNDER F-82-96. WATER QUALITY IS PROVIDED BY AN ON-SITE, PRIVATELY MAINTAINED ISOLATER.⚠1
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. THE GEOTECHNICAL STUDY FOR THIS PROJECT WAS PREPARED BY HILLIS CARNES CO. DATED DEC 1996.
16. THE BOUNDARY FOR THIS PROJECT IS BASED ON PREVIOUSLY RECORDED PLAT NO. 12685.
17. SUBJECT PROPERTY ZONED NEW TOWN 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 FDP 118A-III-PART II, F-90-29, F-82-96, F-97-140 & F-97-170.
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. PROFILES 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.
30. LANDSCAPE ARCHITECTURE PROVIDED BY:
ANSHEN AND ALLEN, 250 W. PRATT ST.
BALTIMORE, MARYLAND 21201 PH: 410-528-7700
31. REINFORCED CONCRETE CIRCULAR PIPE (RCCP) MAY BE USED AS AN ALTERNATE TO ADS N-12 PIPING FOR THE STORM DRAIN SYSTEM ONLY.

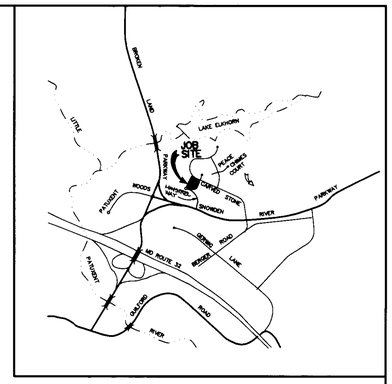


PLAN
SCALE: 1" = 50'



NOTE: SEE ARCHITECTURAL DRAWINGS FOR COMPLETE BUILDING DETAILS AND ELEVATIONS.

EAST BUILDING ELEVATION
NO SCALE



VICINITY MAP
SCALE: 1" = 2000'

BENCHMARKS

BM#1	ELEV. 397.37
N 495745.30	E 833423.67
PIN & CAP	
BM#2	ELEV. 391.45
N 495919.21	E 833573.14
PIN & CAP	

SITE ANALYSIS

AREA OF PARCEL	2.74 ACRES (119,354 SF)
DISTURBED AREA	2.77 ACRES (120.775 SF)
PRESENT ZONING	NT (EMPLOYMENT CENTER COMMERCIAL) FDP PHASE 118A-III-PART II
PROPOSED USE	ASSISTED LIVING FACILITY (102 BEDS)
MAXIMUM HEIGHT	52'
BUILDING COVERAGE	25,551 SF (21.4% OF SITE)
# OF PARKING SPACES REQUIRED @ 1 SP./2 BEDS*	51 SPACES
# OF PARKING SPACES PROVIDED	51 SPACES (INCL. 3 HC)
PAVED PARKING LOT AREA	26,187 SF (21.9% OF SITE)
ON-SITE GREEN AREA	69,281 SF (58.0% OF SITE>25.0% REQUIRED)**

* PER HOWARD COUNTY ZONING REGULATIONS SECT. 133.D.7(f)
** PER OWEN BROWN SOUTH COMMERCIAL PARK DESIGN AND DEVELOPMENT CRITERIA

NOTE: PLANNING BOARD APPROVED BUILDING COVERAGE & HEIGHT AS THE FDP DOES NOT IMPOSE ANY LIMITS.

⚠ OPERATION AND MAINTENANCE SCHEDULE FOR ISOLATER WATER QUALITY DEVICE

1. Isolater water quality structures will require periodic inspection and cleaning to maintain operation and function. Owners will have the Isolater unit inspected yearly or as required by Howard County, utilizing the Isolater 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 V of Technical Manual) then cleaning of the unit is required.
2. Isolater water quality structures must be checked and cleaned immediately after petroleum spills. Contact appropriate regulatory agencies.
3. Maintenance of Isolater units should be done by a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons, and other materials in the 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 Isolater will be repaired as needed.
5. Owner shall retain and make Isolater Inspection/Monitoring Forms available to Howard County officials upon their request.

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR	11/5/97 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION	10/29/97 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	11/5/97 DATE

DATE	NO.	REVISION
1-16-98	⚠1	REV. OF'M SCHEDULE & GEN. NOTE 10 FOR ISOLATER ADDITION

OWNER\DEVELOPER:

MARRIOTT SENIOR LIVING SERVICES, INC.
MARRIOTT DRIVE
WASHINGTON, D.C. 20058
(301) 380-5515

PROJECT OWEN BROWN ASSISTED LIVING FACILITY

AREA VILLAGE OF OWEN BROWN SOUTH
SECTION 2, AREA 2, PART II, PARCEL A-37
TAX MAP 42, BLOCK 3
ZONED NT 6th ELECTION DISTRICT

TITLE TITLE SHEET

ADDRESS CHART	
PARCEL	STREET ADDRESS
A-37	7110 MINSTREL WAY

SUBDIVISION NAME - VILLAGE OF OWEN BROWN			SECT./AREA - 2/2		PARCEL - A-37
PLAT # - 12806	BLOCK # - 3	ZONING - NT	TAX MAP NO. - 42	ELECT. DIST. - 6th	CENSUS TRACT - 6067.02
WATER CODE - E12			SEWER CODE - 5212200		

APPROVED
ANSHEN + ALLEN
DATE 13 March '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

10.17.97
DATE

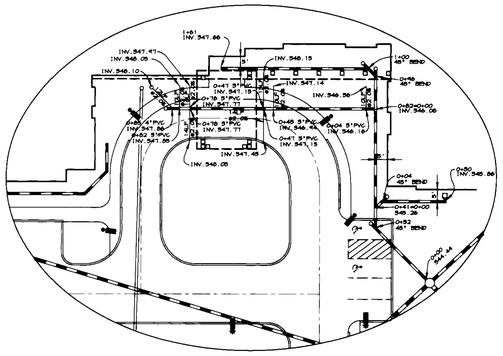
J. Parekh
JAYKANT D. PAREKH #19148

DESIGNED BY :	CJR
DRAWN BY:	RPP/DAM
PROJECT NO :	96082 SDP1.DWG
DATE :	OCTOBER 17, 1997
SCALE :	AS SHOWN
DRAWING NO.	1 OF 7

SDP-97-78

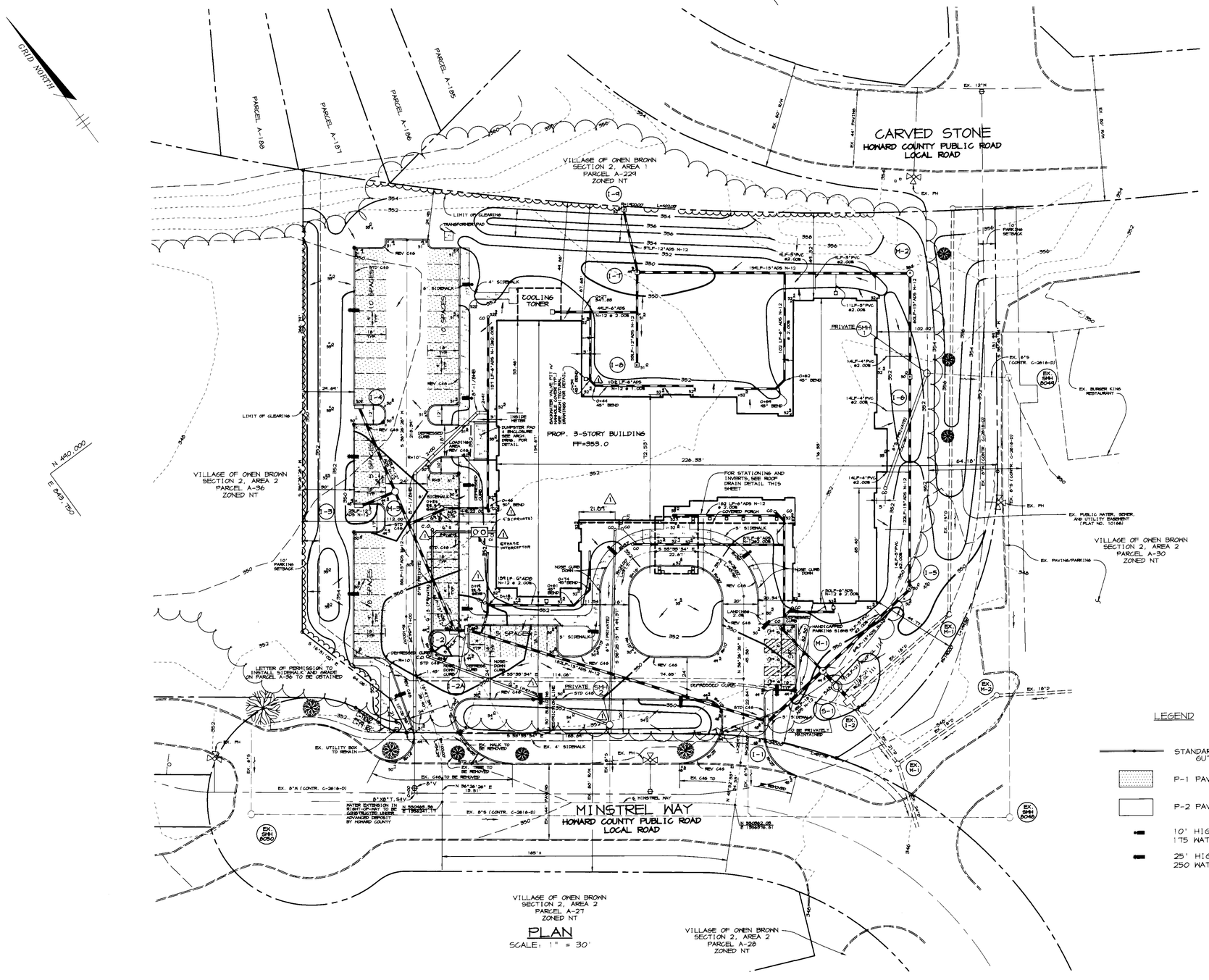
NOTES

1. ALL CURB RADII ARE 5' UNLESS OTHERWISE LABELED.
2. ALL SITE LIGHTING TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT RESIDENTIALLY ZONED PROPERTIES AND PUBLIC ROADS.
3. ALL ON-SITE ROADS ARE PRIVATE.
4. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB OR BUILDING FACE UNLESS OTHERWISE NOTED.
5. THIS BUILDING WILL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
6. SETBACKS AS SHOWN ARE PER FDP 118A-III, PART II.
7. THE STORM DRAIN SYSTEM SHALL BE BUILT ACCORDING TO THE CRITERIA IN SECTION 908 OF THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV: "NONMETALLIC PIPES AND DRAINAGE TILES".



ROOF DRAIN DETAIL

SCALE: 1"=30'



PLAN

SCALE: 1" = 30'

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR	11/5/97 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION	10/29/97 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	11/3/97 DATE

DATE	NO.	REVISION
1-16-98	1	RELOCATED GREASE INTERCEPTOR, MOD. G'S LINE LOCATION, MODIFIED ADS SD LINES FOR ROOF DRAINS

OWNER\ DEVELOPER:

MARRIOTT SENIOR LIVING SERVICES, INC.
MARRIOTT DRIVE
WASHINGTON, D.C. 20058
(301) 380-5515

PROJECT OWEN BROWN ASSISTED LIVING FACILITY

AREA VILLAGE OF OWEN BROWN SOUTH
SECTION 2, AREA 2, PART 11, PARCEL A-37
TAX MAP 42, BLOCK 3
ZONED NT 6th ELECTION DISTRICT

TITLE SITE DEVELOPMENT PLAN

13 March '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

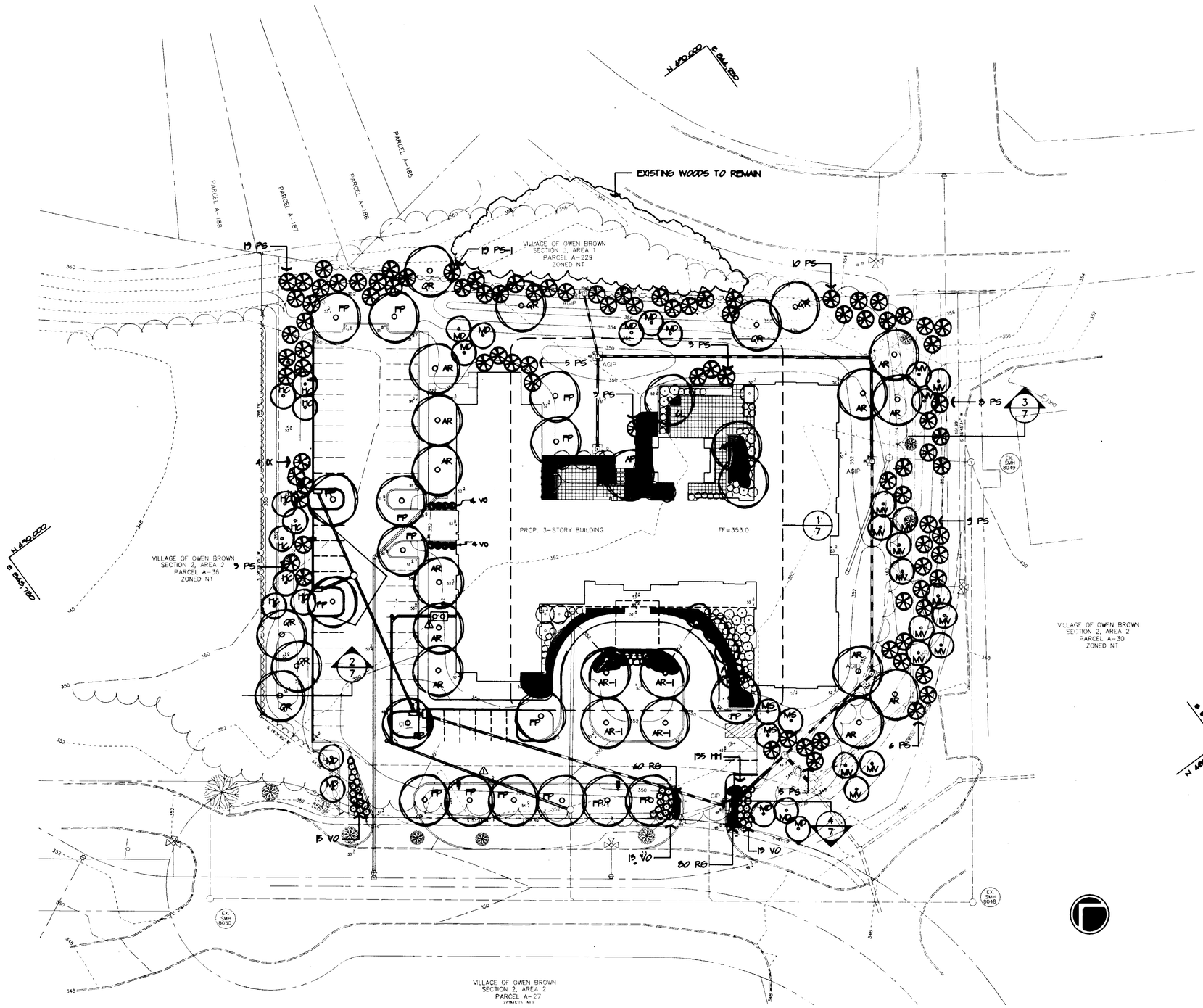
10-17-97
DATE

J. Parekh

JAYKANT D. PAREKH #19148

DESIGNED BY : CJR	
DRAWN BY: RPP/DAM	
PROJECT NO : 96082 SDP2.DWG	
DATE : OCTOBER 17, 1997	
SCALE : 1"=30'	
DRAWING NO. 2 OF 7	

SDP-97-78



PLAN
SCALE: 1" = 30'

NOTE: PLANTS IDENTIFIED ON THIS SHEET ARE INCLUDED IN THE PLANT LIST ON SHEET 7
THIS DRAWING FOR LANDSCAPE PURPOSES ONLY

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 11/6/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/29/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 11/3/97

DATE	NO.	REVISION
1-10-98	1	ADDED SEWER, RELOCATED GREASE INTERCEPTOR

OWNER\ DEVELOPER:

MARRIOTT SENIOR LIVING SERVICES, INC.
MARRIOTT DRIVE
WASHINGTON, D.C. 20058
(301) 380-5515

ANSHEN + ALLEN
ARCHITECTURE
PLANNING
INTERIOR DESIGN
LANDSCAPE ARCHITECTURE
250 WEST PRATT STREET
BALTIMORE
MARYLAND 21201
410 528 7700

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 13 March '97

PROJECT: OWEN BROWN ASSISTED LIVING FACILITY

AREA: VILLAGE OF OWEN BROWN
SECTION 2, AREA 2, PARCEL A-37
TAX MAP 42, BLOCK 3
ZONED NT

TITLE: LANDSCAPE 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

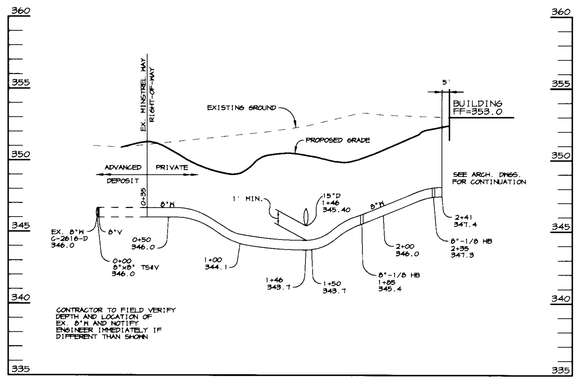
9.12.97
DATE

STATE OF MARYLAND
CAROL D. MACHT
No. 548
REGISTERED LANDSCAPE ARCHITECT

CAROL D. MACHT RLA-548

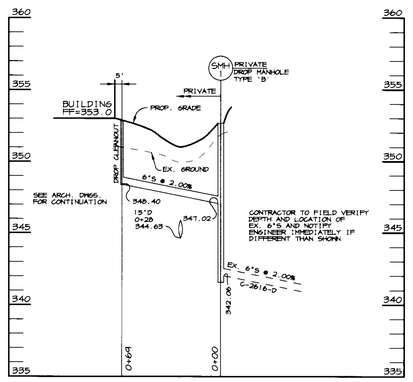
DESIGNED BY : CDM
DRAWN BY: JRB
PROJECT NO : 96069.00
DATE :
SCALE : AS NOTED
DRAWING NO. 6 OF 7

SDP-97-78



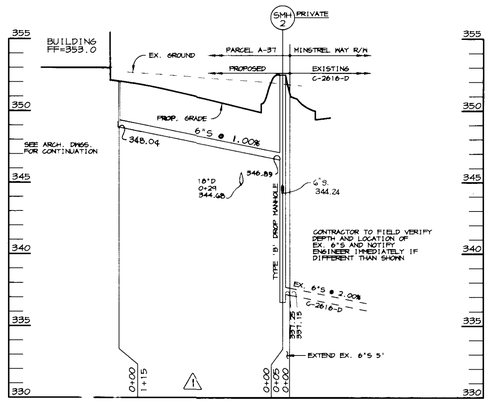
WATER PROFILE

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



SEWER PROFILE

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



SEWER PROFILE

SCALE :
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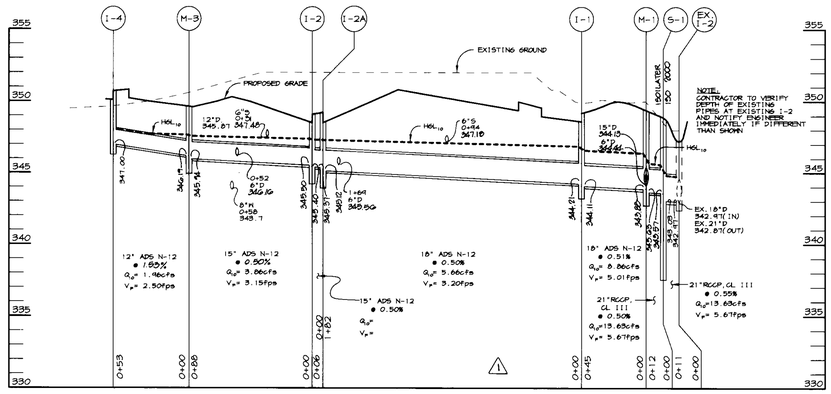
VERT. -1"=5'



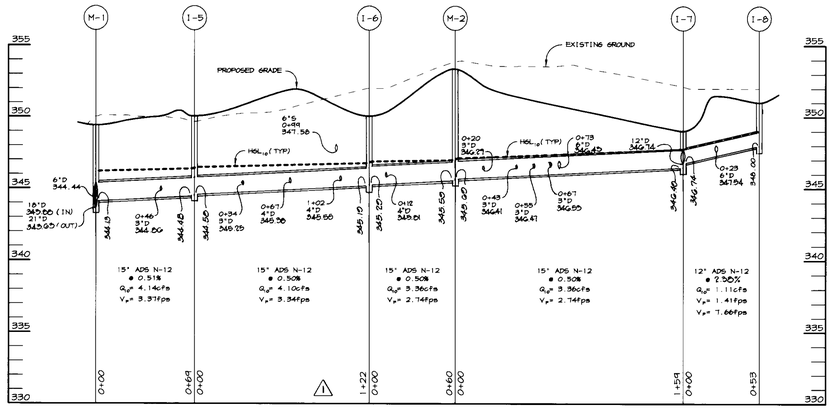
STORM DRAIN PROFILE

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

STRUCTURE SCHEDULE

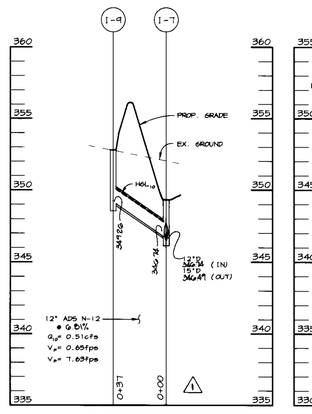
STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
I-1	A-5	N 489,641.21 E 843,998.44 ⚠1	344.21	344.11	349.2	HOCO. STD. DETAIL SD 4.01
I-2	A-5	N 489,709.75 E 845,004.97 ⚠1	345.50	345.40	349.1	HOCO. STD. DETAIL SD 4.01
I-2A	A-5	N 489,784.50 E 843,892.10 ⚠1	345.37	345.12	349.1	HOCO. STD. DETAIL SD 4.01
I-3	A-5	N 489,881.12 E 843,884.08	-	346.33	349.5	HOCO. STD. DETAIL SD 4.01
I-4	A-5	N 489,926.98 E 843,917.44	-	347.00	350.7	HOCO. STD. DETAIL SD 4.01
I-5	S W/RET. GRATE	N 489,653.06 E 844,111.45 ⚠1	344.58	344.48	350.0	HOCO. STD. DETAIL SD 4.92 & 4.93
I-6	S W/RET. GRATE	N 489,751.43 E 844,184.91 ⚠1	345.29	345.19	350.0	HOCO. STD. DETAIL SD 4.92 & 4.93
I-7	S W/RET. GRATE	N 489,843.44 E 844,092.73 ⚠1	346.74(2-12")	346.49	349.3	HOCO. STD. DETAIL SD 4.92 & 4.93
I-8	S W/RET. GRATE	N 489,850.59 E 844,061.07	-	348.00	351.0	HOCO. STD. DETAIL SD 4.92 & 4.93
I-9	S W/RET. GRATE	N 489,927.30 E 844,108.13	-	349.26	352.8	HOCO. STD. DETAIL SD 4.92 & 4.93
M-1	4' MH	N 489,644.62 E 844,043.34 ⚠1	344.13(15") 343.88(18") 344.44(6")	343.63	349.4	HOCO. STD. DETAIL 6 5.01
M-2	4' MH	N 489,798.36 E 844,220.28 ⚠1	345.69	345.59	353.4	HOCO. STD. DETAIL 6 5.01
M-3	4' MH	N 489,874.05 E 843,904.44 ⚠1	346.19(12") 346.19(12")	345.94	349.6	HOCO. STD. DETAIL 6 5.01
S-1	150 2000	N 489,602.70 E 844,044.70 ⚠1	343.57	343.03	347.9	SEE DETAIL, SHEET 4
SMH-1	TYPE B DROP 4' MH	N 489,747.28 E 844,194.13	347.02	342.06±	352.7	HOCO. STD. DETAIL 6 5.01
SMH-2	TYPE B DROP 4' MH	N 489,642.39 E 843,925.12 ⚠1	344.24 346.39	337.25	352.5	HOCO. STD. DETAIL 6 5.01 & S 1.32

NOTES: LOCATION IS AT CENTER OF THROAT OPENING AT FACE OF CURB FOR CURB INLETS.
TOP ELEVATION IS TOP OF CURB/GRATE.



STORM DRAIN PROFILE

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



STORM DRAIN PROFILE

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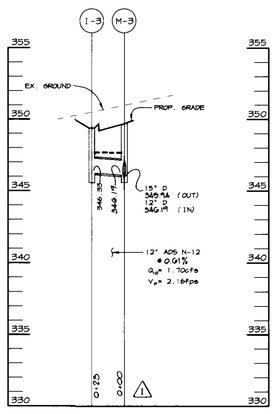

STORM DRAIN PROFILE

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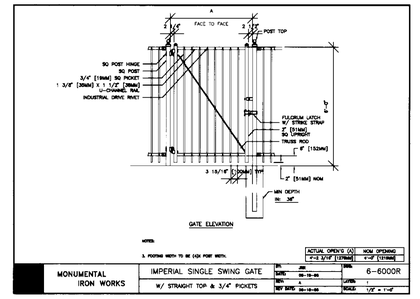
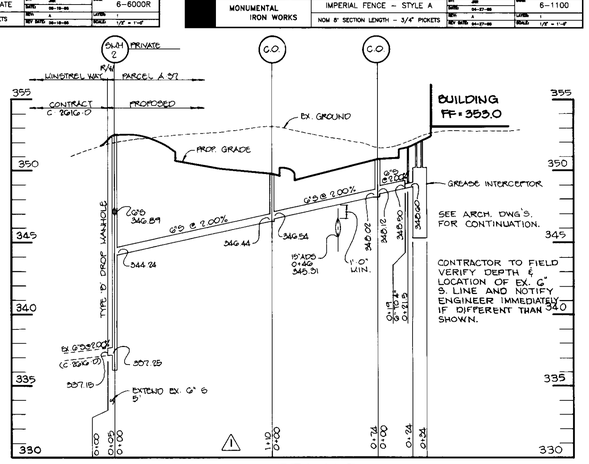
VERT. -1"=5'

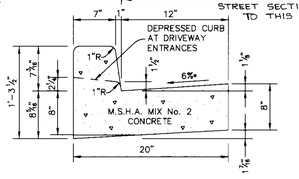


MONUMENTAL IRON WORKS	IMPERIAL SINGLE SWING GATE W/ STRAIGHT TOP & 3/4" PICKETS	DR. JRR DSN'D. RH-10-88 CHK'D. REV DATE 10-10-88	SHEET 1 SCALE 1/2" = 1'-0"	6-6000R
MONUMENTAL IRON WORKS	IMPERIAL FENCE - STYLE A NOM 8' SECTION LENGTH - 3/4" PICKETS	DR. JRR DSN'D. RH-07-88 CHK'D. REV DATE 04-27-88	SHEET 1 SCALE 1/2" = 1'-0"	6-1100



SEWER PROFILE

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

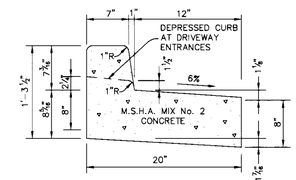


HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01).

- 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

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 11/3/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/29/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 11/3/97

DATE	NO.	REVISION
1-10-98	1	REVISED STRUCTURE SCHEDULE & MARKED PROFILES ADDED S. PROFILE ABOVE

OWNER/DEVELOPER:

MARRIOT SENIOR LIVING SERVICES, INC.
MARRIOTT DRIVE
WASHINGTON, D.C. 20058
(301) 380-5519

PROJECT OWEN BROWN ASSISTED LIVING FACILITY

AREA VILLAGE OF OWEN BROWN SOUTH SECTION 2, AREA 2, PART II, PARCEL A-37 TAX MAP 42, BLOCK 3 ZONED NT 6th ELECTION DISTRICT

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

10.17.97 DATE

JAYKANT D. PAREKH #19148

DESIGNED BY : CJR	
DRAWN BY: RPP/DAM	
PROJECT NO : 96082 SDP5.DWG	
DATE : OCTOBER 17, 1997	
SCALE : AS SHOWN	
DRAWING NO. 5 OF 7	

DATE 13 March '97

SDP-97-78

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.

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 ONT HE 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	2.74 ACRES
AREA DISTURBED	2.77 ACRES
AREA TO BE ROOFED OR PAVED	1.29 ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.48 ACRES
TOTAL CUT	4000 CU. YARDS
TOTAL FILL	4000 CU. YARDS

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.

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 Experimentation 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 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.

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 prescribed 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 to amendments, as recommended by a qualified agronomist or soil scientist and 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.

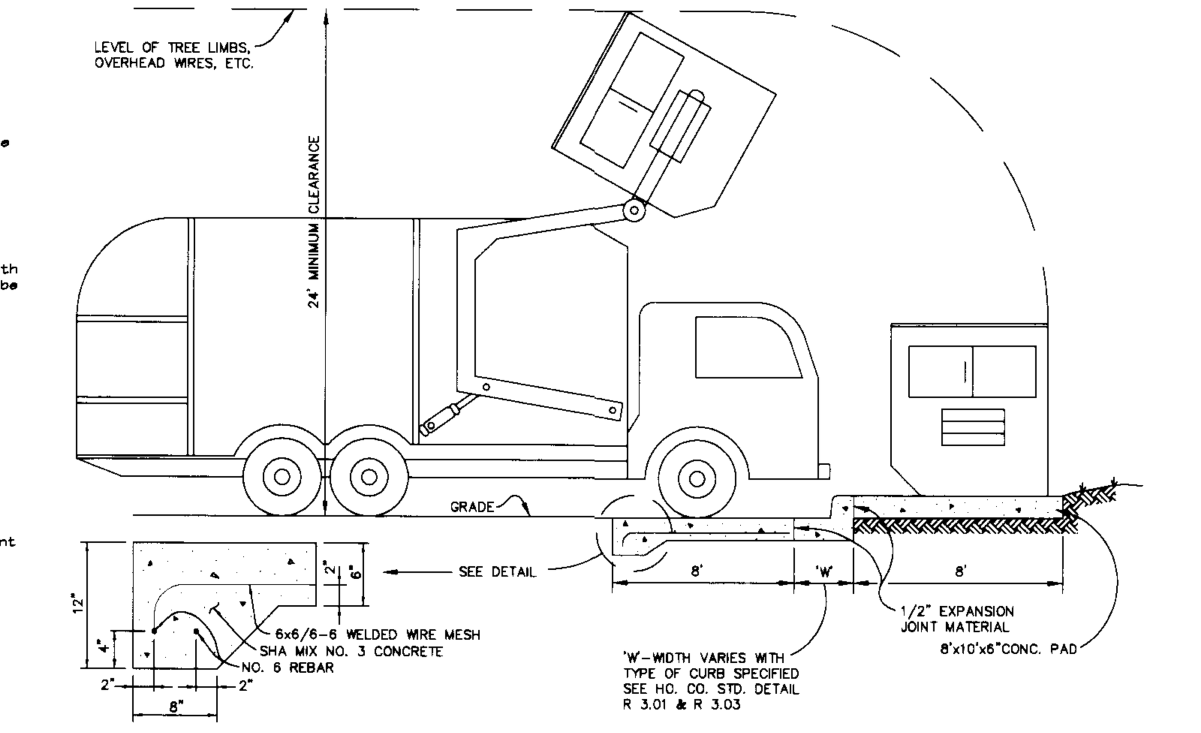
iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

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 site having disturbed areas under 5 acres shall conform to the following requirements:

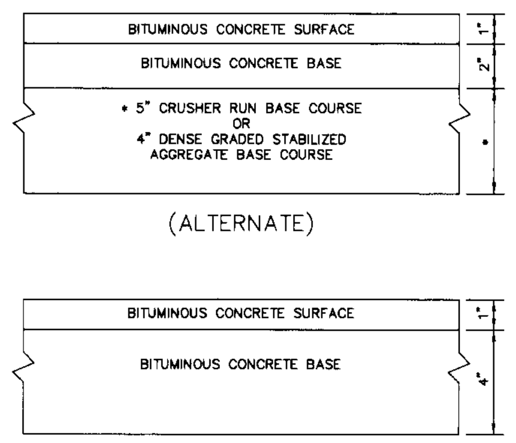
a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 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.
d. 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.



DUMPSTER PAD

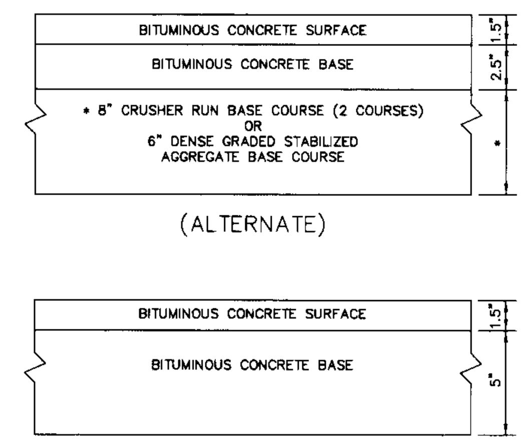
NO SCALE



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

P–1 PAVING

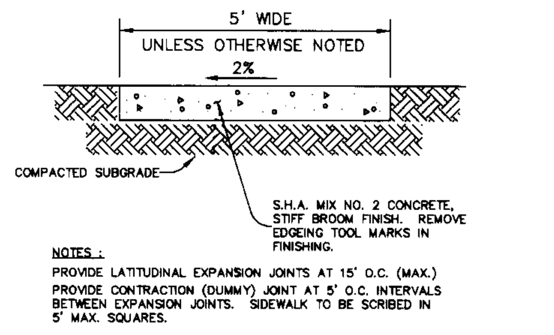
NO SCALE



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

P–2 PAVING

NO SCALE



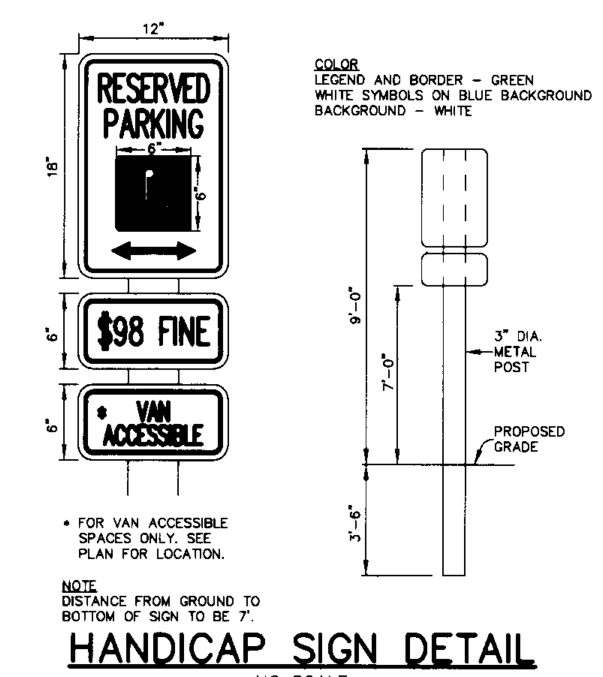
NOTES :

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



* 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

AMERICAST
Ashland Plant.
11352 Virginia Precast Road
Ashland, Virginia 23005

ISOILATER
ORDER REQUEST FORM

STRUCTURE INFO	
Structure Number:	S-1
Top Elevation:	347.9
Model	Insert
☐ ISO 1000	☐ TYPE I
☐ ISO 1500	☐ TYPE I ☐ TYPE 2
☒ ISO 2000	☐ TYPE I ☒ TYPE 2
☐ ISO 3000	☐ TYPE I ☐ TYPE 2 ☐ TYPE 3
☐ ISO 4000	☐ TYPE 2 ☐ TYPE 3
☐ ISO 5000	☐ TYPE 3
☐ ISO 6000	☐ TYPE 3
☐ ISO 7500	☐ TYPE 3

Please draw the orientation of the outgoing pipe(s) on the diagram to the right and indicate the angle in degrees between the incoming pipe and the outgoing pipe(s).

IN PIPE — 90° — 180° — 270° — OUT PIPE

Refer to User's Guide for valid pipe sizes & locations

IN PIPE		OUT PIPE	
Inside Diameter	21"	Inside Diameter	21"
Outside Diameter	26.50"	Outside Diameter	26.50"
Type	RCCP CL. III	Type	RCCP CL. III
Invert Elevation	343.57	Invert Elevation	343.03
Slope	0.50%	Slope	0.55%

☒ FLEXIBLE GASKETS REQUIRED, 24" Ø & SMALLER PIPES

Project Name: OWEN BROWN ASSISTED LIVING FACILITY
Estimated Delivery Request Date: JANUARY 28, 1998
Delivery Address: Street 7110 MINSTREL WAY
City COLUMBIA State MD Zip Code 21045

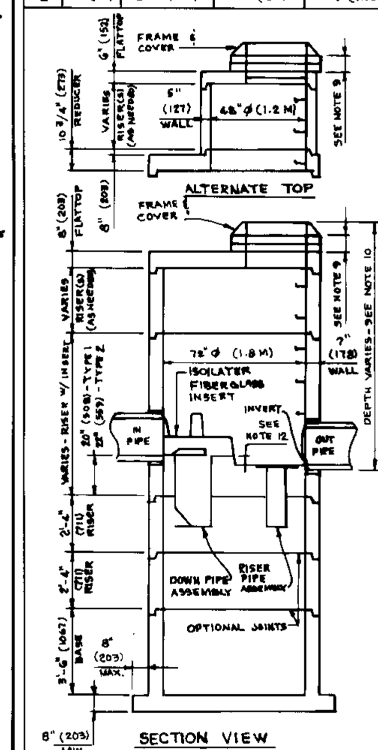
Contractor: GLEN CONSTRUCTION
Address: 9055 COMPRINT COURT, SUITE 100
City GAITHERSBURG State MD Zip Code 20877
Contact: MATT SHEA
Phone: 301 · 258 · 2700 Fax: 301 · 590 · 9072

Owner information	
Name:	MARRIOT SENIOR LIVING SERV., INC
Phone	301 · 380 · 5515
Fax	301 · 380 · 8173

Designer Company:	RIEMER MUEGGE & ASSOC. Inc.
Designer Contact	CHRIS REID
Phone	410 · 997 · 8900
Fax	410 · 997 · 9282

For Technical Assistance, Call (804)798-6068 or (800)999-2278 (VA)
Fax Number - (804)798-3426

INSERT TYPE	MAXIMUM PIPE SIZE IN. (MM)	TOTAL CAPACITY GALS. (LITERS)	OIL HOLDING CAPACITY**** GALS. (LITERS)	SEDIMENT HOLDING CAPACITY**** CU.FT. (CU.METERS)	MAX. TREATABLE FLOW RATE CFS (LITERS/SEC)	MAX. TREATABLE ACREAGE*** ACRES (HECTARES)	MAX. BYPASS FLOW RATE** CFS (LITERS/SEC)	SEDIMENT REMOVAL* PERCENTAGE
~~1~~	~~18 (450)~~	~~2000 (7570)~~	~~300 (1134)~~	~~201 (5.70)~~	~~0.64 (18)~~	~~1.41 (0.57)~~	~~16 (453)~~	~~74.31~~
2	24 (610)	2000 (7570)	500 (1893)	174 (4.93)	1.30 (36)	2.90 (1.18)	34.4 (974)	64.16



SECTION VIEW

* DETERMINED USING EPA PARTICAL SIZE DISTRIBUTION & OBSERVED LABORATORY DATA.
** ASSUMING RCP ON A 2% MAX. GRADE PIPE FLOWING FULL.
*** BASED ON THE RATIONAL FORMULA USING AN INTENSITY OF 1/2" (13MM) OF RAINFALL PER HOUR & A "C" VALUE OF 0.90.
**** REFER TO MAINTENANCE SECTION FOR REMOVAL PROCEDURES.

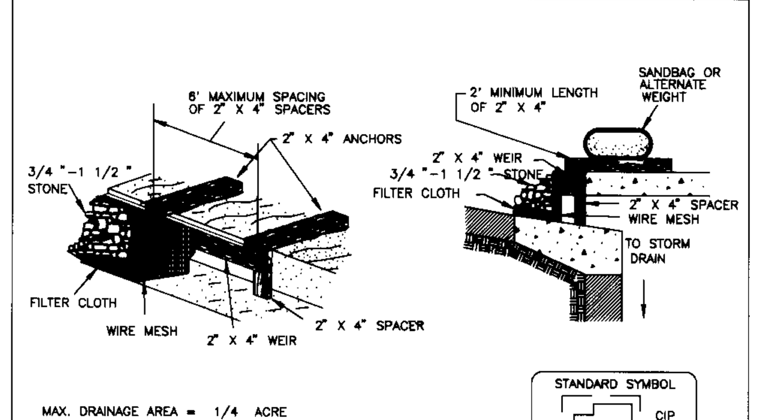
GENERAL NOTES

1. PATENT PENDING.
2. PRECAST CONCRETE ISOILATER SECTIONS CONFORM TO ASTM C-478.
3. REINFORCEMENT MEETS OR EXCEEDS AASHTO M-199 & ASTM C-478 FOR ALL SECTIONS.
4. JOINTS TO BE MADE WATERTIGHT USING GASKETS MEETING ASTM C-443.
5. FLEXIBLE PIPE CONNECTORS CONFORMING TO ASTM C-923 OR ROUGH OPENINGS ARE PROVIDED FOR PIPE-TO-ISOILATER CONNECTIONS. ANNULAR SPACE BETWEEN PIPE & HOLE TO BE FILLED WITH AN APPROVED NON-SHRINK GROUT IN THE FIELD BY OTHERS.
6. STEPS TO BE COPOLYMER POLYPROPYLENE PLASTIC ENCAPSULATED GRADE 60 STEEL. STEPS TO BE ALIGNED VERTICALLY @ A MAX. DESIGNED SPACING OF 16" (406 MM) C.C. STEPS TO BE SUPPLIED & INSTALLED BY AMERICAST.
7. FRAME & COVER & ACCESS OPENING TO BE MIN. OF 30"Ø (762 MM). FRAME & COVER TO BE SUPPLIED BY AMERICAST & INSTALLED IN THE FIELD BY OTHERS.
8. ISOILATER FIBERGLASS INSERT TO BE SUPPLIED & BOLTED TO MANHOLE WALL BY AMERICAST. DOWN PIPE ASSEMBLY & RISER PIPE ASSEMBLY TO BE SUPPLIED BY AMERICAST & INSTALLED BY OTHERS. (SEE INSTALLATION SECTION).
9. ADJUSTMENT RINGS AVAILABLE FOR ADJUSTMENT TO FINISHED GRADE.
10. 5'-0" ± (1.5 M) OF 72"Ø (1.8M) MANHOLE PROVIDED WHENEVER POSSIBLE, ABOVE LOWER SHELF OF FIBERGLASS INSERT FOR ACCESS. GREATER DEPTHS MAY BE REDUCED IN DIAMETER AS SHOWN IN THE "ALTERNATE TOP" VIEW. FOR SHALLOW INSTALLATION A HATCH IS AVAILABLE IN LIEU OF FRAME & COVER.
11. LIFT HOLES (IF APPLICABLE), TO BE FILLED WITH AN APPROVED NON-SHRINK GROUT IN THE FIELD BY OTHERS.
12. FALL FROM THE IN PIPE TO THE OUT PIPE TO BE 4 7/8" (124 MM) FOR INSERT TYPE 1 & 6 1/2" (165 MM) FOR INSERT TYPE 2.
13. DIMENSIONS IN PARENTHESIS ARE MILLIMETERS UNLESS NOTED OTHERWISE.

30

AMERICAST A Division of VALLEY BLOX, Inc.
DATE: 09-22-97 DWG. No.: ISO.
ISOILATER MODEL – ISO 2000

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.

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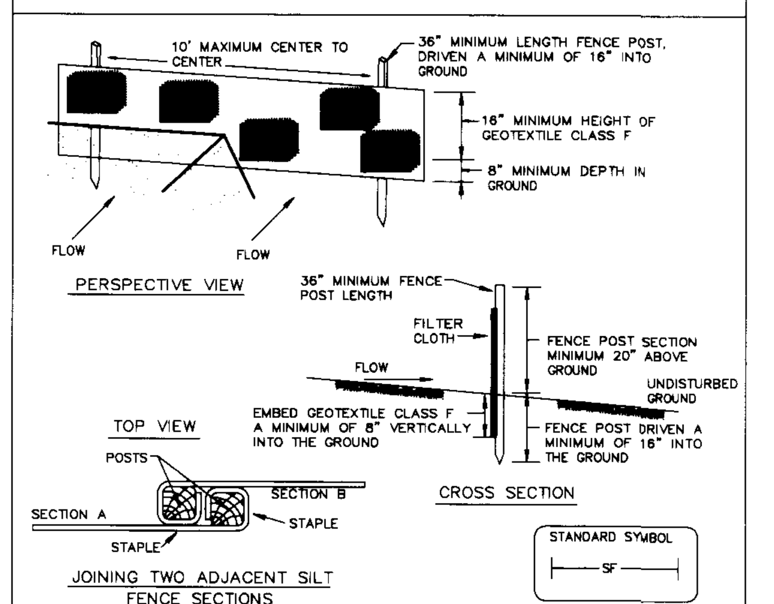
DETAIL 22 – SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" 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 ft ²/ 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.

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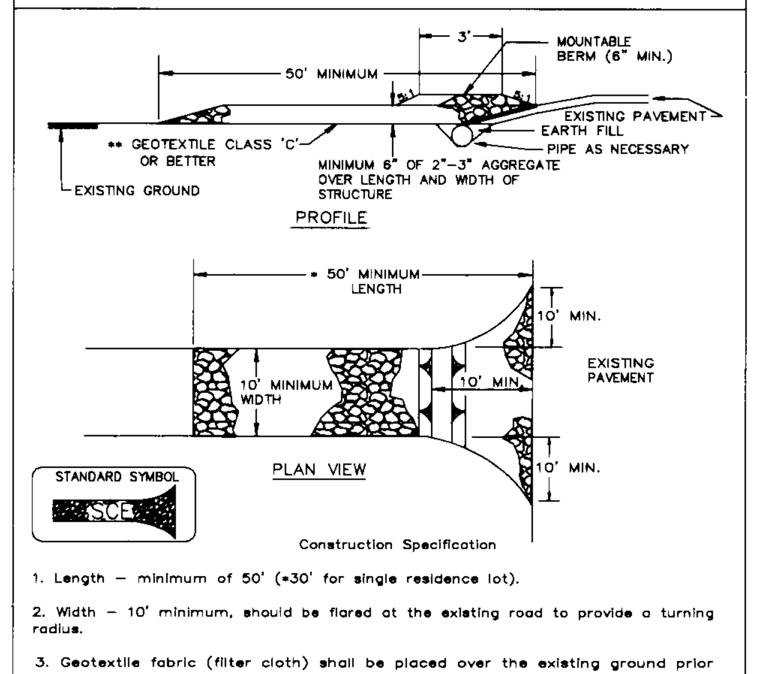
DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE



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.

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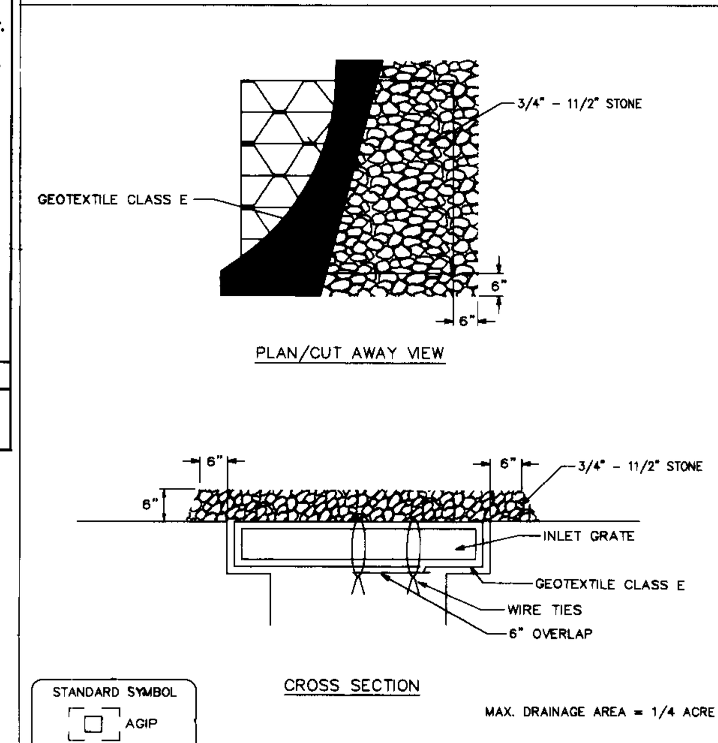
DETAIL 23B – AT GRADE INLET PROTECTION



MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
2. Place 3/4" to 11/2" stone, 4"–6" thick on the grate to secure the fabric and provide additional filtration.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E – 18 – 5A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

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.

[signature] 10/20/97
DEVELOPER 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 10·17·97
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 10/27/97
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R Robertson 10/27/97
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[signature] 11/5/97
DIRECTOR DATE

[signature] 10/29/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION VJC DATE

Cindy Hamilton 11/3/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION
1·16·98	1	REPLACED "STORMCEPTOR" ORDER FORM AND DATA SHEET WITH THOSE FOR ISOILATER

OWNER / DEVELOPER

MARRIOTT SENIOR LIVING SERVICES, INC.
MARRIOTT DRIVE
WASHINGTON, D.C. 20058
(301·380·5515

PROJECT OWEN BROWN ASSISTED LIVING FACILITY

AREA VILLAGE OF OWEN BROWN SOUTH
SECTION 2, AREA 2, PART II, PARCEL A-37
TAX MAP 42, BLOCK 3
ZONED NT 6th ELECTION DISTRICT

TITLE NOTES AND DETAILS

DATE 13 March '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

10·17·97
DATE

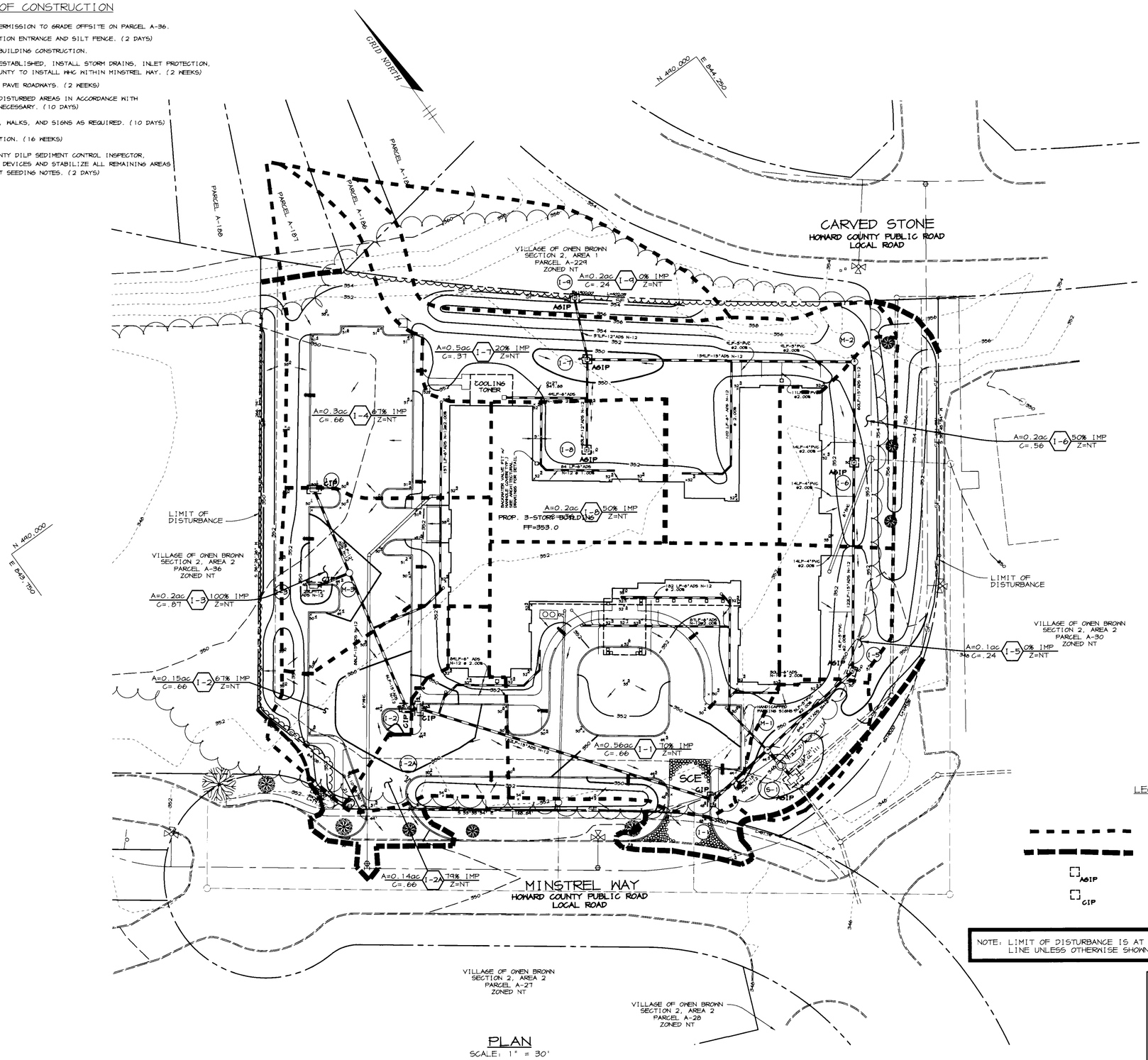
J. Parekh
JAYKANT D. PAREKH #19148

DESIGNED BY :	CJR
DRAWN BY:	RPP/DAM
PROJECT NO :	96082 SDP4.DWG
DATE :	OCTOBER 17, 1997
SCALE :	AS SHOWN
DRAWING NO.	4 OF 7

SDP-97-78

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT AND PERMISSION TO GRADE OFFSITE ON PARCEL A-36.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SILT FENCE. (2 DAYS)
3. ROUGH GRADE SITE AND BEGIN BUILDING CONSTRUCTION.
4. AS SUBGRADE ELEVATIONS ARE ESTABLISHED, INSTALL STORM DRAINS, INLET PROTECTION, WATER, AND SEWER. HOWARD COUNTY TO INSTALL WHC WITHIN MINSTREL WAY. (2 WEEKS)
5. INSTALL CURB AND GUTTER AND PAVE ROADWAYS. (2 WEEKS)
6. FINE GRADE SITE. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES AS NECESSARY. (10 DAYS)
7. INSTALL LIGHTS, LANDSCAPING, WALKS, AND SIGNS AS REQUIRED. (10 DAYS)
8. COMPLETE REMAINING CONSTRUCTION. (16 WEEKS)
9. UPON APPROVAL OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE ALL REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (2 DAYS)



PLAN
SCALE: 1" = 30'

LEGEND

- DRAINAGE DIVIDE
- LIMIT OF DISTURBANCE
- A6IP — AT GRADE INLET PROTECTION
- G1P — CURB INLET PROTECTION

NOTE: LIMIT OF DISTURBANCE IS AT PROPERTY LINE UNLESS OTHERWISE SHOWN

DATE: 13 March '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 10/20/97

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.

ENGINEER — DATE 10.17.'97

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 — DATE 10/27/97

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

HOWARD SOIL CONSERVATION DISTRICT — DATE 10/27/97

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 11/5/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/29/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 11/3/97

DATE	NO.	REVISION

OWNER/ DEVELOPER:

MARRIOTT SENIOR LIVING SERVICES, INC.
MARRIOTT DRIVE
WASHINGTON, D.C. 20058
(301) 380-5515

PROJECT: OWEN BROWN ASSISTED LIVING FACILITY

AREA: VILLAGE OF OWEN BROWN SOUTH
SECTION 2, AREA 2, PART II, PARCEL A-37
TAX MAP 42, BLOCK 3
ZONED NT 6th ELECTION DISTRICT

TITLE: DRAINAGE AREA MAP AND SEDIMENT CONTROL PLAN

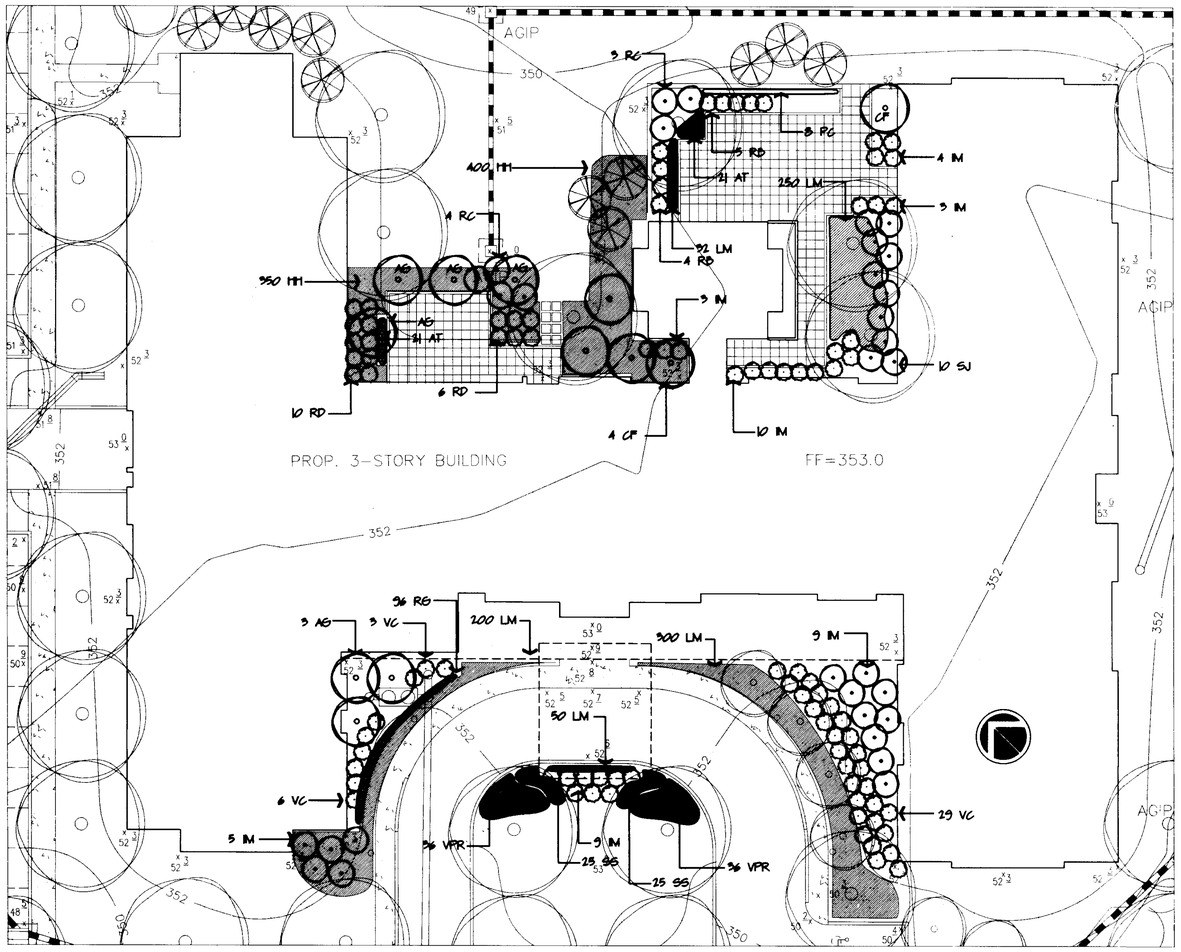
RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

10.17.'97 — DATE

JAYKANT D. PAREKH #19148

DESIGNED BY : CJR	
DRAWN BY: RPP/DAM	
PROJECT NO : 96082 SDP3.DWG	
DATE : OCTOBER 17, 1997	
SCALE : 1"=30'	
DRAWING NO. 3 OF 7	

SDP-97-78



DETAIL PLAN

1/7

1/16" = 1' - 0"

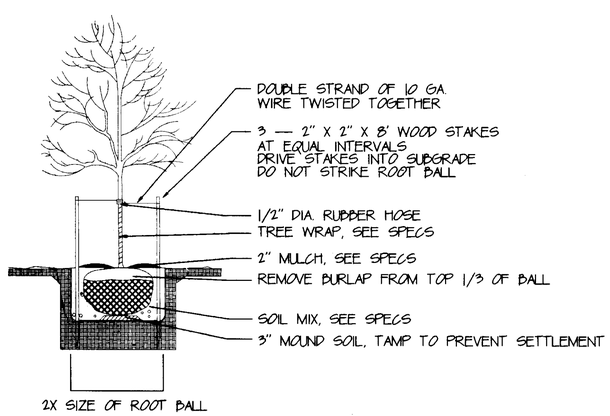
PLANT LIST FOR SHEETS 6 AND 7

	SYMBOL	QUANTITY	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
	SHADE & FLOWERING TREES				
	AG	7	Amelanchier grandiflora 'Autumn Brilliance',Apple Serviceberry	8'-10'ht.	Specimen,heavy
	AP	3	Acer plamatum, Japanese Maple	2" - 2 1/2" cal	Specimen, Green Color Leaf
**	AR	12	Acer rubrum, Red Maple	2 1/2" - 3" cal	Specimen, Street-tree Form
	AR-1	4	Acer rubrum, Red Maple	12'-14'ht.	Clump form,heavy,specimens matched
	CF	9	Cornus florida, Flowering Dogwood	2-2 1/2 cal.	Specimen
**	CL	1	Cladrastis lutea, American Yellowwood	3 - 3 1/2" cal.	Specimen
**	FP	18	Fraxinus pennsylvanica "Marshall's", Marshall's Seedless Ash	3" - 3 1/2" cal.	Specimen
	HC	9	Halesia carolina, Carolina Silverbell	2" - 2 1/2" cal.	Specimen
	MD	11	Malus 'Donald Wyman', Donald Wyman Crabapple	2"-2 1/2"cal.	Specimen
	MS	3	Magnolia x soulaniana, Saucer Magnolia	2"-2 1/2"cal.	Specimen
	MV	16	Magnolia virginiana, Sweetbay Magnolia	2"-2 1/2"cal.	Specimen
**	PS-1	19	Pinus strobus, White Pine	8' - 10' HT.	Specimen
	PS	71	Pinus strobus, White Pine	6' - 7' HT.	Specimen,unsheared
**	QR	7	Quercus rubra, Red Oak	2 1/2" - 3" cal.	Specimen
	IX	4	Ilex x "Nellie R. Stevens", Nellie R. Stevens Holly	2" - 2 1/2" cal.	Specimen
	SHRUBS & VINES				
	IM	43	Ilex x meserveae 'Blue Princess', Blue Holly	2 - 2 1/2' ht.	
	PC	8	Pyracantha coccinea, Espalier Firethorn	4 - 5' ht.	Espalier, Red Berries Only
	RB	9	Rosa "Bonica", Bonica Shrub Rose	2' - 2 1/2' ht.	
	RC	7	Rhododendron catawbiense 'Album Elegans',Album Elegans Rhododendron	2 - 2 1/2' ht.	
	RD	16	Rhododendron 'Delaware Valley White', Azalea D.V.W.	2 - 2 1/2' ht.	
	SJ	10	Spiraea japonica "Little Princess", Little Princess Spiraea	2 - 2 1/2' ht.	
	VC	37	Viburnum carlesii, Korean Spice Viburnum	2' - 2 1/2' ht.	
+ P	VO	49	Viburnum opulus "Compactum" , European Cranberrybush Viburnum	2' - 2 1/2' ht.	
	GROUNDCOVER & PERENNIALS				
	AT	42	Astilbe taquetii "Superba", Astilbe (Perennial Spiraea)	1 gal.	15" OC
	HH	885	Hedera Helix, English Ivy	2.5" pot	8" OC
	LM	832	Liriope muscari "Border gem", Lily Turf	4" pot	8" OC
	RG	236	Rudbeckia fulgida speciosa "Goldsturm", Black Eyed Susan	1 gal.	15" - 18" OC
	SS	50	Salvia superba "Mainacht", Meadow Sage	1 gal.	15" OC
	VPR	72	Veronica prostata(rupestris), Prostrate Speedwell	4" pot	12" OC

GENERAL NOTES:

1. HRD PLANTING REQUIREMENTS FOR A COMMERCIAL ACTIVITY FROM 0 - 3 ACRES IS:
   30 SHADE TREES
   ALL SHADE TREES TO BE NURSERY STOCK 21/2" - 3" MIN CAL, 12' - 14MIN HT, W/ FULL HEADS, B & B
   THOSE PLANTS LISTED ABOVE WITH THE ASTERISK NEXT TO THEIR SYMBOL (**)
   SHALL BE IN COMPLIANCE WITH THE HRD PLANTING SPECIFICATIONS.
2. ALL PLANT QUANTITIES TO BE VERIFIED BY CONTRACTOR ON THE DRAWINGS.
   IF A DESCREPANCY OCCURS, NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY.
   PLANT LIST IS PROVIDED AS A CONVENIENCE ONLY.
3. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
4. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF $ 19,400.00.

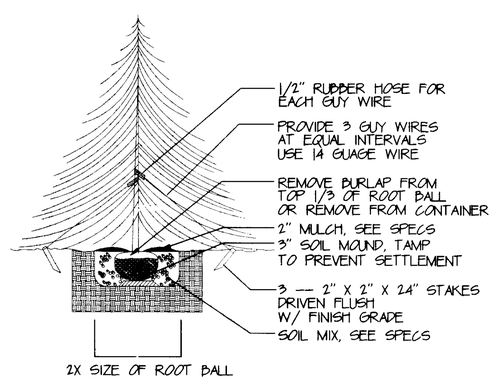
NOTE: THIS DRAWING FOR LANDSCAPE PURPOSES ONLY



DECIDUOUS TREE PLANTING DETAIL

2/7

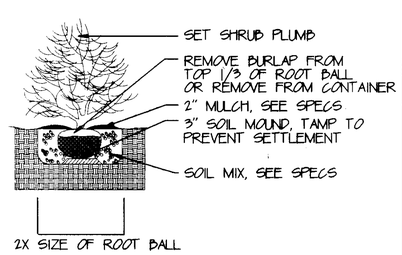
NTS



EVERGREEN TREE PLANTING DETAIL

3/7

NTS



SHRUB PLANTING DETAIL

4/7

NTS

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 11/5/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/29/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 11/3/97

DATE	NO.	REVISION

OWNER/DEVELOPER:

MARRIOTT SENIOR LIVING SERVICES, INC.
MARRIOT DRIVE
WASHINGTON, D.C. 20058
(301) 380-5515

ANSHEN + ALLEN
ARCHITECTURE
PLANNING
INTERIOR DESIGN
LANDSCAPE ARCHITECTURE
250 WEST PRATT STREET
BALTIMORE
MARYLAND 21201
410 528 7700

PROJECT: OWEN BROWN ASSISTED LIVING FACILITY

AREA: VILLAGE OF OWEN BROWN
SECTION 2, AREA 2, PARCEL A-57
TAX MAP 42, BLOCK 3
ZONED NT

TITLE: **LANDSCAPE DETAILS**

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
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PLANNING
OF HOWARD COUNTY
DATE 13 March '97

9-16-97
STATE OF MARYLAND CAROL D. MACHT
REGISTERED LANDSCAPE ARCHITECT

CAROL D. MACHT RLA-548

DESIGNED BY : CDM
DRAWN BY: JRB
PROJECT NO : 96069.00
DATE :
SCALE : AS NOTED
DRAWING NO. 7 OF 7

SDP-97-78

SDP6.DWG