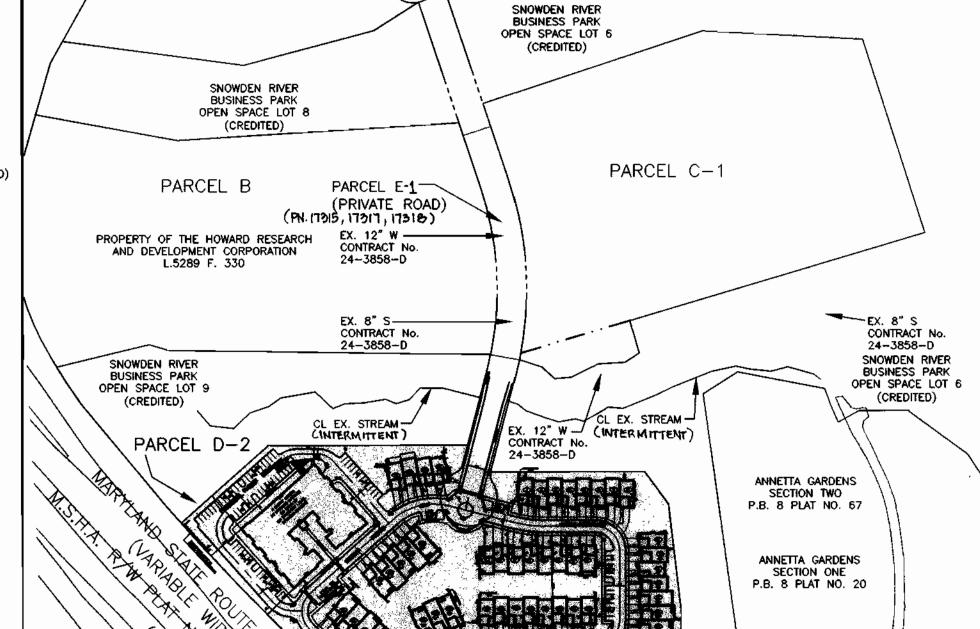
# SITTE IDIEVIEILOPMENT PILAN SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1

PARCEL D-2

KENDALL OVERLOOK

# 6th ELECTION DISTRICT

# HOWARD COUNTY, MARYLAND



TOTAL PROJECT AREA

SITE ANALYSIS

PARCEL D-2 9.8707 AC RECORDED UNDER PLAT NUMBER: F-04-190

BENCHMARKS

SHEET INDEX

C-1 TITLE SHEET
C-2 SITE DEVELOPMENT PLAN
C-3 SITE DEVELOPMENT PLAN

C-10 STORM DRAIN PROFILES

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C-19 LANDSCAPE DETAILS

C-18 LANDSCAPE PLAN

C-5 SITE DETAILS

C-6 PAVING PLAN

C-9 UTILITY PLAN

C-7 ROAD PROFILES C-8 ROAD PROFILES

BENCHMARK # 37GB
HOWARD COUNTY GEODETIC SURVEY CONTROL

BENCHMARK # 37GC HOWARD COUNTY GEODETIC SURVEY CONTROL

BENCHMARK # 37DA HOWARD COUNTY GEODETIC SURVEY CONTROL

N 553.452.828 E 1.368.503.19 ELEVATION=325.233'

N 555,250.797 E 1,370,946.37 ELEVATION=331.192'

N 558,667.518 E 1,366,857.48 ELEVATION=379.786'

C-4 ARCHITECTURAL FOOTPRINTS AND ELEVATIONS

C-13 SEDIMENT & EROSION CONTROL PHASE

C-14 SEDIMENT & EROSION CONTROL PHASE I

C-15 SEDIMENT & EROSION CONTROL NOTES & DETAILS

C-16 SEDIMENT & EROSION CONTROL NOTES & DETAILS

DOBBO

/SHOPPING

SIŢĔ

CONFORATE

COMMERCE

VICINITY MAP

SCALE: 1" = 2,000'

MAP NO. 16 GRIDS E.10

COPYRIGHT ADC THE MAP PEOPLE PERMITTED USE NO. 20602149

(108)

PARK 8HOPPING

**GATEWAY** 

PRESENT ZONING PARCEL D-2: NT-EMPLOYMENT CENTER, INDUSTRIAL (FDP 239).

TOTAL NUMBER OF UNITS PROPOSED: (DENSITY PERMITTED UNDER COLUMBIA AUTHORIZATION PLAN) 17-30'x70' SFA UNITS 37-30'x56' SFA UNITS

TOTAL: 54 SFA UNITS (UNITS 1-54) 56-CONDO UNITS TOTAL: 110 UNITS

NUMBER OF PARKING SPACES REQUIRED: FROM APPROVED FDP-239: 1 SPACE PER 3 LIVING UNITS

(1 SPACE/3 UNITS)  $\times$  110 UNITS = 37 SPACES ZONING REGULATIONS: 2.0 SPACES PER UNIT

(2 SPACES/1 UNIT)  $\times$  110 UNITS = 220 SPACES 0.5 SPACES PER UNIT FOR OVERFLOW (0.5 SPACES/1 UNIT) x 110 UNITS = 55 SPACES TOTAL REQUIRED PARKING SPACES = 275 SPACES

NUMBER OF PARKING SPACES PROVIDED SFA GARAGE: ONE CAR: 11 SFA UNITS  $\times$  1 SPACE = 11 SPACES

43 SFA UNITS x 2 SPACES = 86 SPACES 11 + 86 = 97 SPACES SFA DRIVEWAY: 11 SFA UNITS HAVE 1 PARKING SPACE (TOTAL=11)

43 SFA UNITS HAVE 2 PARKING SPACES(TOTAL=86) 54 SFA UNITS WITH A TOTAL OF 97 DRIVEWAY SPACES 60 SPACES PROVIDED IN PARKING GARAGE

70 SURFACE PARKING SPACES VISITOR: 41 COMMON PARKING SPACES TOTAL PROVIDED PARKING SPACES = 365 SPACES

TOTAL SQUARE FOOT BUILDING COVERAGE/PERCENTAGE OF COVERAGE

PARCEL D-1 30x70 SFA UNITS (17) 62,160 SF 30x56 SFA UNITS (37) 25,700 SF 56-CONDO UNITS 123,560 SF TOTAL BUILDING AREA 429,967.69 SF TOTAL PARCEL AREA

H.R.D. APPROVALS - CONCEPTUAL SITE PLAN, SHEET 4. - PRELIMINARY LANDSCAPE PLAN. SHEET 19.

TOTAL BUILDING COVERAGE 28.74%

PERMIT INFORMATION CHART SECTION 1/ AREA 1 D-2 & PART OF #-Tax Map No. Elect Distr. | Census Tract 6067.03 3450000

OWNER/DEVELOPER/APPLICANT

FAX ND: (410) 480-0543 B. DAYTIME TELEPHONE: (410) 480-2467

NAME: BRIAN KNAUFF

COMPANY: THE RYLAND GROUP, INC

D. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260

ZIP: 21043

C-1



### MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 14280 PARK CENTER DRIVE, SUITE A

LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395



SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING TITLE SHEET

AX MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385) ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

ATE	REVISIONS	JOB NO:	12735.02
15-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	AS SHOWN
31-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
15-05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	HRW
19-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KDH
23-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
		SHEET: 1	OF 19

#### **DOCUMENT RECORDING REFERENCES:**

- 1. H.O.A. ARTICLES OF INCORPORATION. FILING NUMBER: 1000361990866051
- 2. SHARED ACCESS/PARKING EASEMENT ON DRIED EARTH BLVD. F-05-175 / 17681-17687
- 3. MAINTENANCE AGREEMENT FOR THE PRIVATE SECTION OF DRIED EARTH BLVD. LIBER 8983 / FOLIO 426
- 4. GRADING AND LANDSCAPE MAINTENANCE EASEMENTS. LIBER 9170 FOLIO 627
- 5. PLAT RECORDING NO. F-05-175 / 17681-17687 6. AGE RESTRICTION DOCUMENTS. LIBER 9341 FOLIO 131
- 7. SNOWDEN OVERLOOK COMMUNITY ASSOC. INC. DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS L 8983 F-426, L-9378 F-271 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND MSHA STANDARDS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT (800) 257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL TREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED
- THE EXISTING TOPOGRAPHY AND BOUNDARY INFORMATION WERE PROVIDED BY PLANS PREPARED BY GUTSCHICK LITTLE & WEBER, P.A.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NOS. 37GB, 37GC AND 37DA WERE USED FOR THIS PROJECT.
- EXISTING WATER IS PUBLIC (CONTRACT NO: 24-3858-D, LITTLE PATUXENT).
- EXISTING SEWER IS PUBLIC (CONTRACT NO: 24-3858-D, LITTLE PATUXENT).
- 0. STORMWATER MANAGEMENT FOR THIS SITE WAS INCLUDED IN THE DESIGN FOR THE SNOWDEN RIVER BUSINESS PARK SECTION 1. AREA 1. PARCELS 'A' THRU 'D'. & LOTS 1 THRU 5. PRAINAGE FROM PARCEL C-1 IS TREATED IN THREE FACILITIES. FACILITY 1 IS A DETENTION FACILITY (DRY POND) LOCATED ON OPEN SPACE LOT 9, WHICH IS TO BE DEDICATED TO THE COLUMBIA ASSOCIATION FOR PUBLIC MAINTENANCE. FACILITY 8 IS THE SAME AS FACILITY 1, LOCATED ON OPEN SPACE LOT 8. FACILITY 2 IS A DETENTION/RETENTION FACILITY (WET POND) ON OPEN SPACE LOT 6 TO BE CONVEYED TO COLUMBIA ASSOCIATION AND PUBLICLY MAINTAINED. SUBDIVISION PLAN FILE NUMBER F-01-142.
- 1. EXISTING UTILITY INFORMATION WAS PROVIDED BY PLANS PREPARED BY GUTSCHICK, LITTLE & WEBER, P.A. APPROVED BY HOWARD COUNTY, DPZ REFERENCE NUMBER F-01-142 AND
- 12. THERE ARE NO FLOODPLAINS ON THIS SITE.
- 3. THERE ARE NO WETLANDS ON THIS SITE.
- 4. THE TRAFFIC STUDY PERFORMED BY WELLS AND ASSOCIATES APPROVED FOR THE FINAL PLAN WAS UPDATED FOR THIS PROJECT.
- FDP-239 SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1 FINAL DEVELOPMENT PLAN (ALLOWS USE BY RIGHT) F-01-142 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D' & LOTS 1 THRU 5 RECORDED AS PLAT NO. 15182 THRU 15188
- F-01-142 SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D' & LOTS 1 THRU 5 CONSTRUCTION PLAN F-04-15 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A-1', 'B-1', 'C-1', 'D-1', AND E & LOTS 6 THRU 10 RECORDED AS PLAT NO. 16185 THRU
- 16191 (RESUBDIVISION OF PLATS 15182 THRU 15188) F-04-73 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'C-1' AND E & LOTS 6 RECORDED AS PLAT NO. 16493 THRU 16498 (RESUBDIVISION OF PLATS 16185 THRU 16191)
- F-04-190 SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A-2', 'D-2', & 'E-1' AND OPEN SPACE LOT 6 CONTRACT NO. 24-4235-D PROPOSED PUBLIC WATER AND SEWER PLANS
- WP-03-110 WAIVER PETITION FOR REDUCTION OF MINIMUM PUBLIC ROAD FRONTAGE F-05-175 - PN 17681-17687 6. STREET LIGHTS - BGE CONTRACT.
- . To the Best of our knowledge and per public record, no cemeteries or burial grounds exist on—site
- 8. SPOT ELEVATIONS SHOWN FOR CURB ARE BOTTOM OF CURB UNLESS OTHERWISE NOTED
- 9. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN ININTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN
- O. TRASH COLLECTION FOR THE SFA UNITS WILL BE PRIVATE.
- 21. A GEOTECHNICAL STUDY WAS PREPARED BY GEO-TECHNOLOGY ASSOCIATES, INC. ON JANUARY 30, 2003.
- 22. The contractor shall test pit all existing utilities at least five (5) days prior to starting any work shown on these drawings.
- 23. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- 4. THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION BY VIRTUE OF THE FACT THAT IT IS PART OF THE COLUMBIA NEW TOWN, SUBDIVISION SECTION 16.1202(b)(1)(iv), A PUD APPROVED PRIOR TO 12/31/92.
- ALL CURB RADII 5' UNLESS OTHERWISE NOTED.
- 6. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER A. WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE);
- B. SURFACE 6" OF COMPACTED CRUSHER RUN BASE W/ TAR AND CHIP COATING (1-1/2" MIN.) GEOMETRY -- MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS;
- STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN I FOOT DEPTH OVER DRIVEWAY SURFACE; MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- 27. Financial surety for the required landscaping in the amount of \$75,570.00 has been posted as a part of the developer's agreement.
- 28. THIS PLAN HAS BEEN PREPARED TO MEET THE NEW TOWN "GUIDELINES FOR RESIDENTIAL PLANTING", PREPARED BY THE ROUSE COMPANY FOR COLUMBIA, MD.
- 29. ARTICLES OF INCORPORATION FOR THE AGE RESTRICTED ADULT HOUSING COMMUNITY, THE KENDALL OVERLOOK CONDOMINIUM, INC, WERE RECORDED ON 12/16/03, RECORDING
- NUMBER(S) LIBER B00592 FOLIO 1660. THE KENDALL OVERLOOK DECLARATIONS WERE RECORDED ON 2/10/04, 30. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION REGULATIONS.
- . WAIVER PETITION, WP-03-110, WAS APPROVED BY THE PLANNING DIRECTOR ON SEPTEMBER 4, 2003. THE PETITION WAIVES SECTIONS 16.120(c)(1) TO PERMIT THE REQUIRED MINIMUM PUBLIC ROAD FRONTAGE OF 60 FEET TO BE REDUCED TO ZERO FEET FOR COMMERCIAL, INDUSTRIAL OR APARTMENT PARCELS/LOTS, AND 16.121(e)(1) TO PERMIT THE REQUIRED MINIMUM PUBLIC ROAD FRONTAGE OF 40 FEET TO BE REDUCED TO ZERO FEET FOR OPEN SPACE LOTS. THE APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
  - SIDEWALKS AND STREET TREES SHALL BE PROVIDED ALONG BOTH SIDES AND THE CUL-DE-SAC OF THE PROPOSED PRIVATE ROAD
  - PRIVATE ACCESS AND MAINTENANCE EASEMENTS SHALL PROVIDE VEHICULAR ACCESS TO ALL OF THE PARCELS AND OPEN SPACE LOTS THAT WILL NOT HAVE FRONTAGE ON THE PUBLIC ROAD.
- 2. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE NEW TOWN ALTERNATIVE COMPLIANCE PROVISIONS SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARI county landscape manual. Age restriction. Documents. L-9341 f-131
- S. RECORDATION NUMBERS FOR ALL LEGAL DOCUMENTS PERTAINING TO THIS PARCEL WILL BE PROVIDED PRIOR TO APPROVAL. IT IS UNDERSTOOD THAT FINAL APPROVAL OF THIS SDP. IS SUBJECT TO THE DEVELOPER/OWNER FURNISHING THIS INFORMATION TO THE DEPARTMENT OF
- 34. THE PRIVATE LANDSCAPE AND MAINTENANCE EASEMENTS SHOWN ON THIS PLAN WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
- 35. PER SUBDIVISION SECTION 16.120(B)(9)(ii) THE REQUIRED STRUCTURE SETBACK FROM A PUBLIC WATER AND SEWER EASEMENT IS 10 FEET.
- 36. IN ACCORDANCE WITH SUBDIVISION SECTION 16.116.(a)(2), CLEARING, GRADING, THE REMOVAL OF VEGETATIVE COVER AND/OR DEVELOPMENT ARE NOT PERMITTED WITH THE REQUIRED 50' STREAM BUFFER.
- 7. THE H.O.A. WILL BE RESPONSIBLE FOR THE UPKEEP AND MAINTENANCE OF OPEN SPACE LOT 10.

APPROVED: DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION CHIEF, DIVISI**ØN O**F LAND DEV**ELOPME**NI

38. THE PRIVATE MAINTENANCE ACCESS ESM'T INE PUBLIC ROAD TO OPEN SPACE LOT 107
REQUIRED BY WP-03-110 IS NO LONGER NEEDED BECAUSE OF A CHANGE IN OWNERSHIP 9. THIS SUBDIVISION IS SUBJECT TO SECTION 18,122B OF THE HOMARD COUNTY CODE. PUBLIC SEWER SERVICE HAS BEEN GRANTED UNDER THE TERMS AND PROVISIONS THEREOF EFFECTIVE 7-21-05, I ON WHICH DATE DEVELOPER'S AGREEMENT No. 24 4235-20 WAS FILED AND ACCEPTED.

TYPICAL FRONT ELEVATION

OLUMBIA GATEWAY DRIVE (PUBLIC)

INTERCHANGE RAMPS

PLAT NO. 7226

BUSINESS PARK OPEN SPACE LOT 10

LOCATION MAP

SDP-05-037

mark to legger

5/4/05 DATE

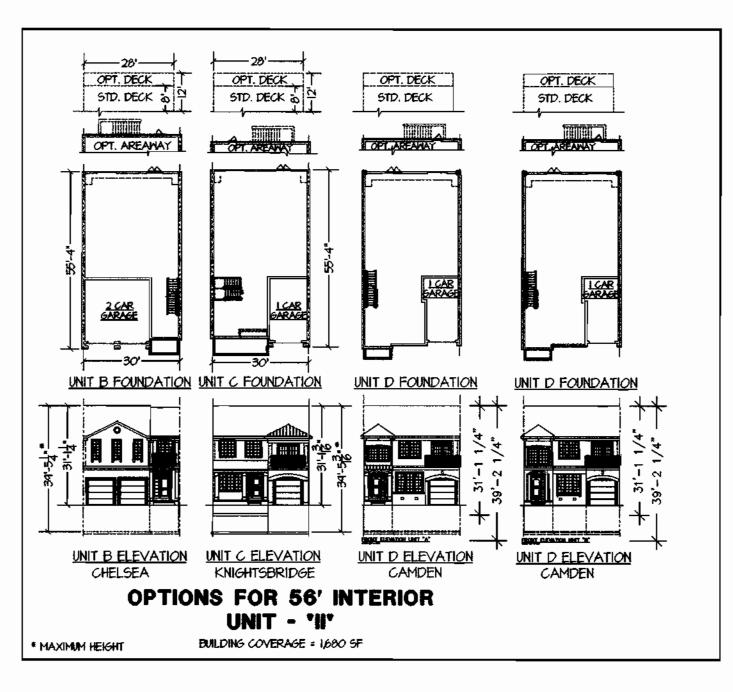
DESIGN BY: KDH

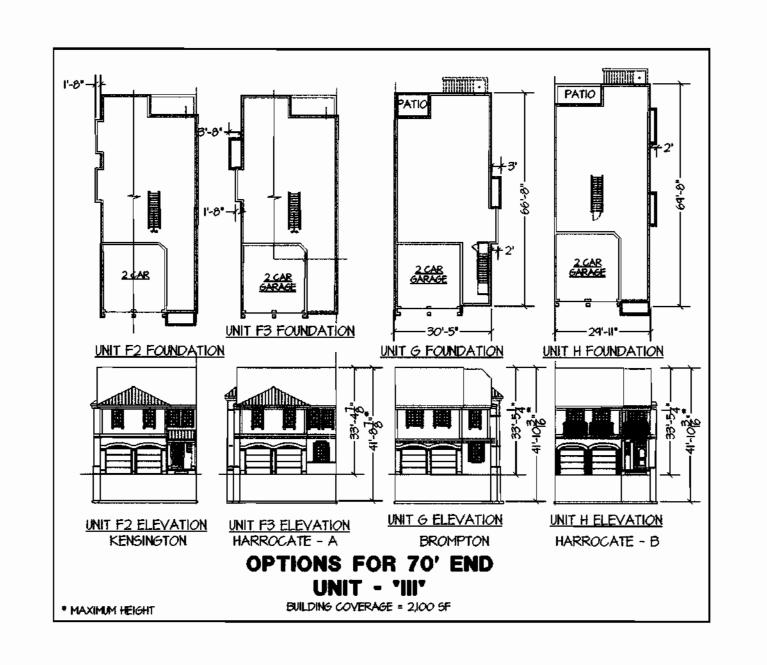
REVIEW BY: PVM SHEET: 2 OF 19

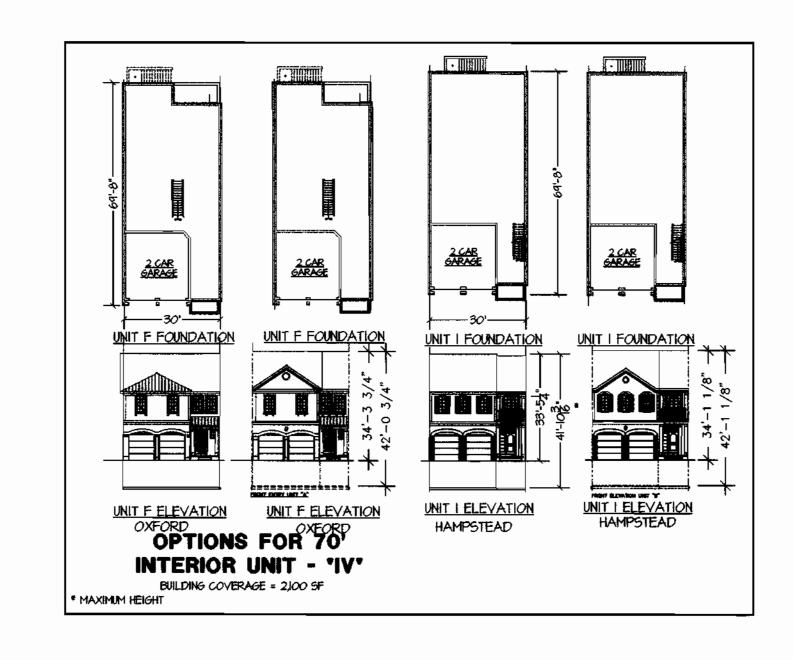
4-19-05 PER HOWARD COUNTY COMMENTS

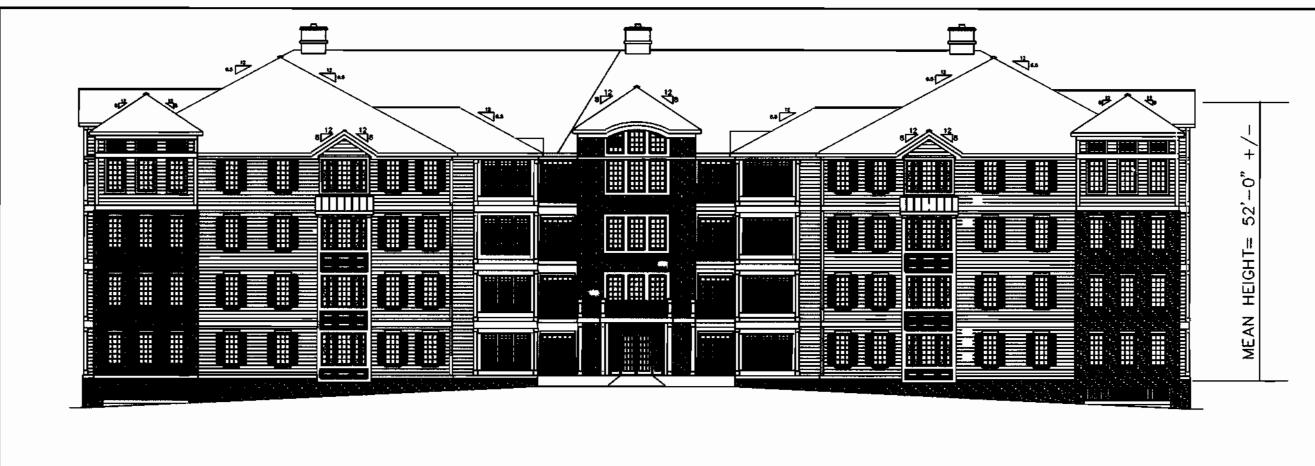
5-23-05 GRADING & UTILITIES PER DESIGN ENGINEER

REVIEW BY: PVM SHEET: 3 OF 19



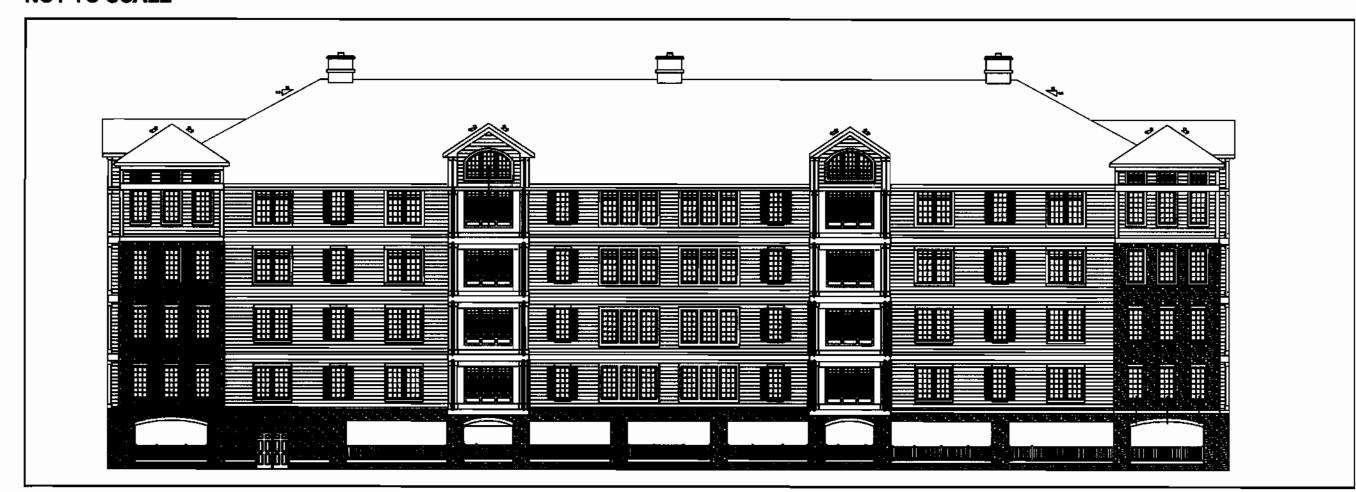






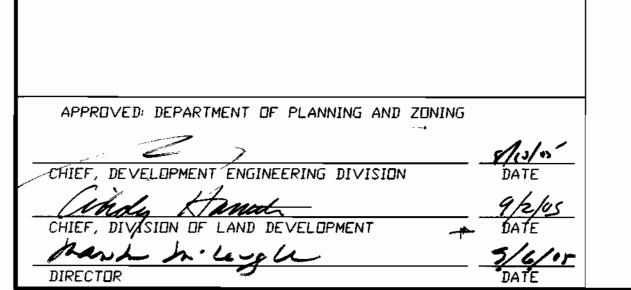
#### SNOWDEN OVERLOOK CONDOMINIUM FRONT ELEVATION

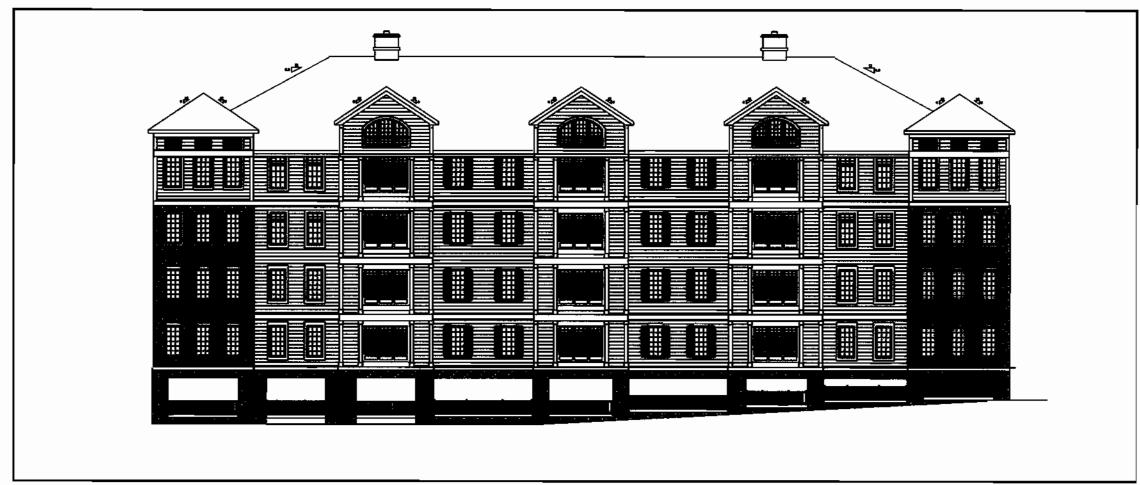
NOT TO SCALE



### SNOWDEN OVERLOOK CONDOMINIUM REAR ELEVATION

NOT TO SCALE

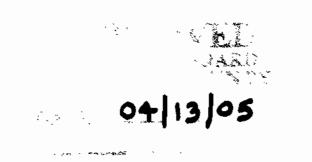




## SNOWDEN OVERLOOK CONDOMINIUM SIDE ELEVATION NOT TO SCALE



## SNOWDEN OVERLOOK CONDOMINIUM COURTYARD ELEVATION NOT TO SCALE



DWNER/DEVELOPER/APPLICANT

A. NAME: BRIAN KNAUFF

B. DAYTIME TELEPHONE: (410) 480-2467

C. COMPANY: THE RYLAND GROUP, INC.

D. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260

E. CITY: ELLICOTT CITY

STATE: MD

ZIP: 21043

SHEET: C-4



MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
14280 PARK CENTER DRIVE, SUITE A

14280 PARK CENTER DRIVE, SUITE A LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395 SNOWDEN RIVER BUSINESS PARK

SECTION 1 AREA 1, PARCEL D-2
KENDALL OVERLOOK
AGE RESTRICTED ADULT HOUSING

ARCHITECTURAL FOOTPRINTS/ ELEVATIONS

L. 5289 F. 330

ZONED: NT TAY MAD: 37 CDID: 10 DADCEL 705 (D/O DAD 50 255 4: DAD 212 795)

DATE REVISIONS

JOB NO: 12735.02

11-15-04 PER HRD COMMENTS & HO. CO. COMMENTS

SCALE: 1" = 10'

1-31-05 PER HRD COMMENTS & HO. CO. COMMENTS

DATE: 08/27/04

3-15-05 PER HOWARD COUNTY COMMENTS

DRAWN BY: HRW

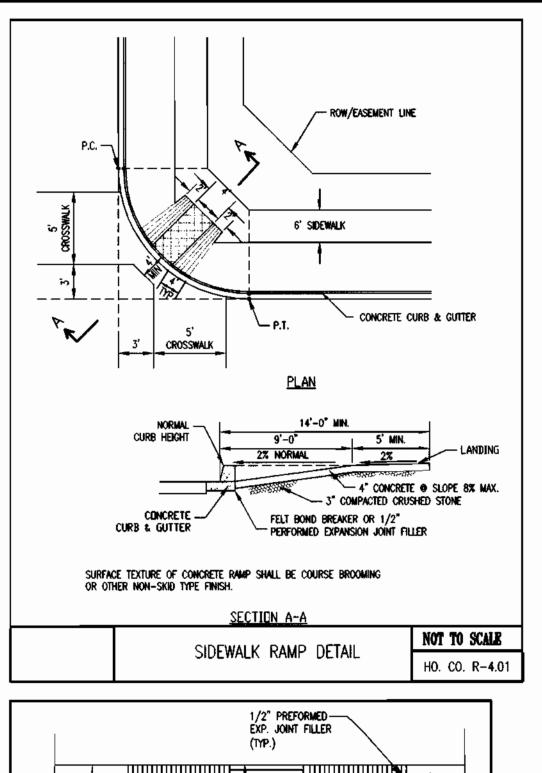
4-19-05 PER HOWARD COUNTY COMMENTS

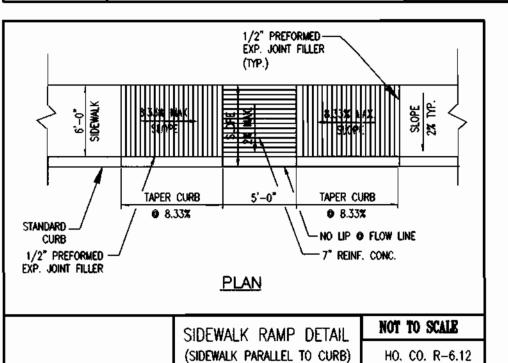
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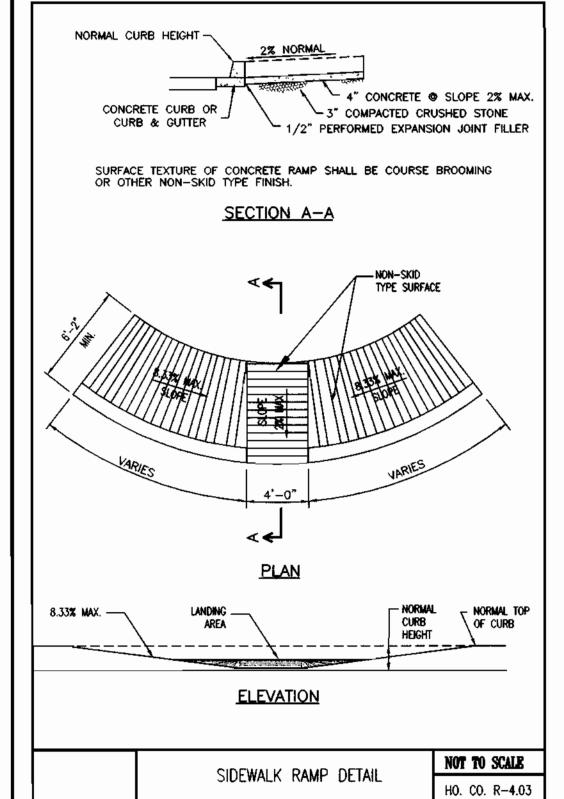
5-23-05 GRADING & UTILITIES PER DESIGN ENGINEER

REVIEW BY: PVM

SHEET: 4 OF 19







APPROVED: DEPARTMENT OF PLANNING AND ZONING

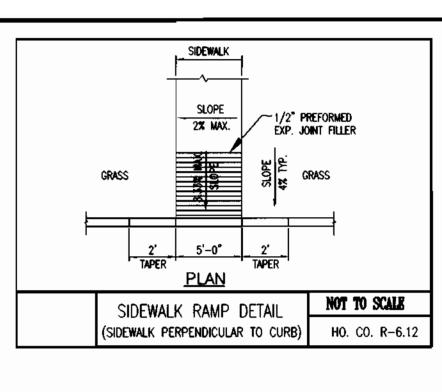
CHIEF, DEVELOPMENT ENGINEERING DIVISION

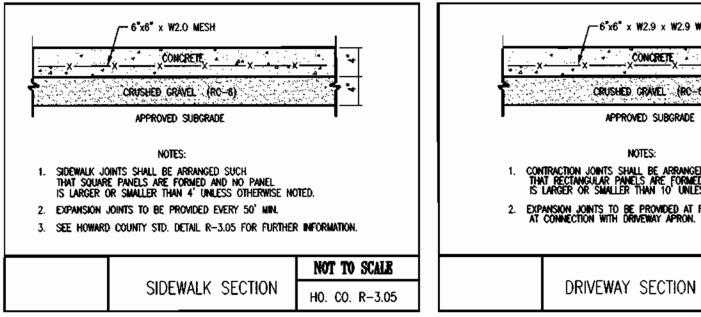
CHIEF, DIVISION/OF LAND DEVELOPMENT

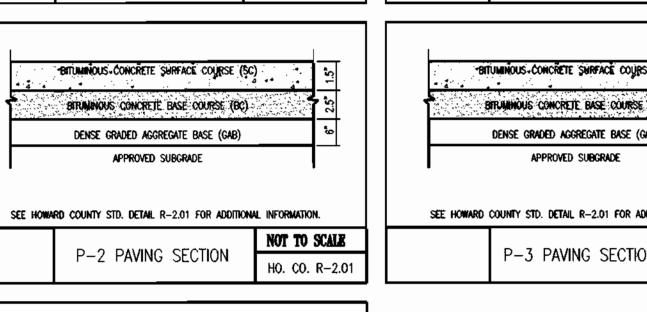
March Ja. large

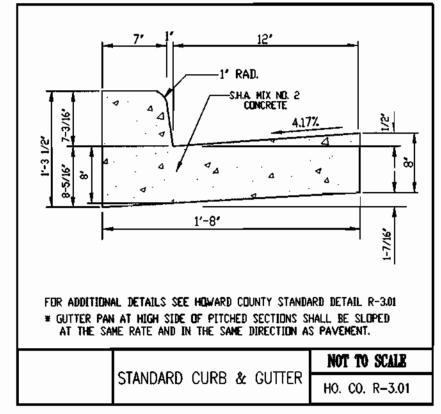
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9/2/05 DATE

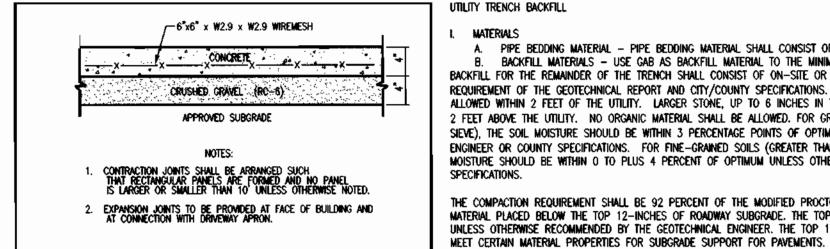


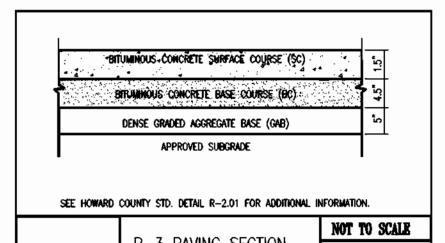


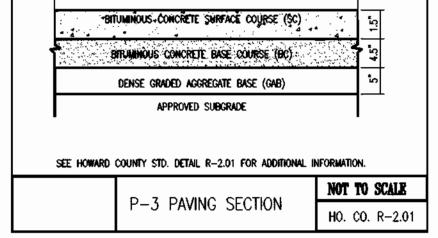


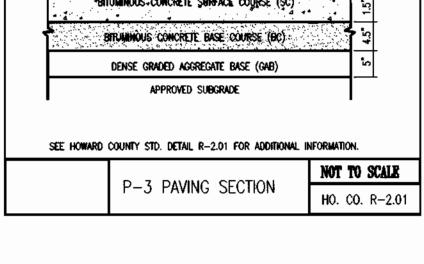


SEE SHEET 8 FOR CURB TRANSITION DETAILS









COMPACTED WITH A VIBRATORY TYPE COMPACTION EQUIPMENT. THE LOOSE LIFT THICKNESS SHOULD NOT EXCEED 4 INCHES FOR hand operated equipment. Hand equipment will be required around manholes, structures and adjacent to and ABOVE THE UTILITY. IF HEAVY VIBRATORY COMPACTION EQUIPMENT IS USED, THEN THE LOOSE LIFT THICKNESS CAN BE INCREASED TO 8 INCHES. EACH LIFT SHOULD BE UNIFORMLY COMPACTED WITH A SUFFICIENT NUMBER OF PASSES TO OBTAIN THE RECOMMENDED DEGREE OF COMPACTION. 3. THE BACKFILL SHOULD BE WORKED USING HAND TOOLS AROUND PIPE HAUNCH TO PROVIDE UNIFORM AND FIRM B. IF A LIFT FAILS TO MEET THE REQUIRED COMPACTION, THEN THE LIFT SHOULD BE RE-COMPACTED AND RETESTED. IF THE MATERIAL IS TOO WET OR TOO DRY, THE MOISTURE SHOULD BE ADJUSTED TO WITHIN THE REQUIRED RANGE PRIOR TO RE-COMPACTION.

NOT TO SCALE

EACH LIFT OF FILL SHOULD BE MONITORED FOR STABILITY, LIFT THICKNESS AND COMPACTIVE EFFORT. A DENSITY TEST SHOULD BE PERFORMED FOR EACH LIFT OF FILL PLACED PER EVERY 150 FEET OF TRENCH. THIS REQUIREMENT INCLUDES THE UTILITY LATERAL CONNECTIONS. THE TEST PROCEDURE SHOULD BE THE SAND CONE METHOD (ASTM D-1556) OR THE NUCLEAR GAUGE METHOD (ASTM D-2922). THE TEST RESULTS SHOULD BE MADE AVAILABLE TO THE CONTRACTOR UPON THE COMPLETION OF THE TEST. FOR EACH TEST, THE TECHNICIAN SHOULD RECORD THE FOLLOWING: DATE; TEST LOCATION; TEST ELEVATION; MATERIAL TYPE; DEGREE OF COMPACTION; ONE-POINT RESULTS; LIFT THICKNESS; AND MOISTURE CONTENT. CONTROLLED COMPACTED FILL APPROVED BY GEOTECH -EXCAVATION LINE AS REQUIRED - PIPE SPRING LINE

GAB BACKFILL -

MATERIALS

II. BACKFILLING PROCEDURES

RCP STORM DRAIN PIPE BACKFILL DETAIL

MIN. FIRM AND STABLE

SUBGRADE, APPROVED BY GEOTECHINCAL ENGINEER

PIPE BEDDING

A. PIPE BEDDING MATERIAL - PIPE BEDDING MATERIAL SHALL CONSIST OF GRADED ASPHALT BASE (GAB).

BACKFILL FOR THE REMAINDER OF THE TRENCH SHALL CONSIST OF ON-SITE OR OFF-SITE SOILS CONFORMING TO THE

B. BACKFILL MATERIALS - USE GAB AS BACKFILL MATERIAL TO THE MINIMUM EXTENT SHOWN ON THE PLANS. THE

REQUIREMENT OF THE GEOTECHNICAL REPORT AND CITY/COUNTY SPECIFICATIONS. NO STONES LARGER THAN 2 INCHES SHOULD BE

ALLOWED WITHIN 2 FEET OF THE UTILITY. LARGER STONE, UP TO 6 INCHES IN THE LARGEST DIMENSION CAN BE USED IN LIFTS

2 FEET ABOVE THE UTILITY. NO ORGANIC MATERIAL SHALL BE ALLOWED. FOR GRANULAR SOILS (LESS THAN 35% PASSING #200

THE COMPACTION REQUIREMENT SHALL BE 92 PERCENT OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM DRY DENSITY FOR

MATERIAL PLACED BELOW THE TOP 12-INCHES OF ROADWAY SUBGRADE. THE TOP 12 INCHES SHOULD BE COMPACTED TO 95% UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER. THE TOP 12 TO 24 INCHES OF SOIL MAY BE REQUIRED TO

A. CONTRACTOR SHALL PLACE LEVEL LIFTS OF SOIL ADJACENT AND ABOVE THE UTILITY. THE LIFT THICKNESS SHALL BE

FINE-GRAINED MATERIALS - FINE-GRAINED MATERIALS (MATERIALS WITH MORE THAN 35% PASSING #200 SIEVE)

GRANULAR SOILS - GRANULAR SOILS (MATERIALS WITH LESS THAN 35 % PASSING \$200 SIEVE) SHOULD BE

DEPENDENT UPON THE TYPE OF EQUIPMENT BEING USED FOR COMPACTION AND THE MATERIALS. THE FOLLOWING SHALL BE

SHOULD BE COMPACTED WITH SHEEPS-FOOT TYPE ROLLER. THE LIFT THICKNESS SHOULD NOT EXCEED 4 INCHES IF HAND OPERATED EQUIPMENT IS USED. HAND EQUIPMENT WILL BE REQUIRED FOR COMPACTION AROUND MANHOLES, STRUCTURES AND

ADJACENT TO AND OVER THE UTILITY. IF HEAVY CONSTRUCTION SHEEPS-FOOT COMPACTION EQUIPMENT IS USED, A MAXIMUM

LOOSE LIFT THICKNESS SHOULD BE NO GREATER THAN THE LENGTH OF THE SHEEPS-FOOT OR A MAXIMUM OF EIGHT INCHES.

EACH LIFT SHOULD BE UNIFORMLY COMPACTED WITH A SUFFICIENT NUMBER OF PASSES TO OBTAIN THE REQUIRED DEGREE OF

COMPACTION. THE SOIL CLODS AND VOIDS MUST BE ELIMINATED DURING BACKFILLING, RESULTING IN A HOMOGENEOUS SOIL

SIEVE), THE SOIL MOISTURE SHOULD BE WITHIN 3 PERCENTAGE POINTS OF OPTIMUM UNLESS OTHERWISE DIRECTED BY PROJECT

ENGINEER OR COUNTY SPECIFICATIONS. FOR FINE-GRAINED SOILS (GREATER THAN 35% PASSING #200 SIEVE), THE SOIL

MOISTURE SHOULD BE WITHIN 0 TO PLUS 4 PERCENT OF OPTIMUM UNLESS OTHERWISE DIRECTED BY ENGINEER OR COUNTY

GENERAL SITEWORK NOTES

1. THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE (LOD). ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR

2. EXISTING UTILITIES ARE TO REMAIN AND SHALL BE ADJUSTED TO PROPOSED FINISH GRADE UNLESS NOTED OTHERWISE ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS AND WORK REQUIRED TO ADJUST EXISTING AND INSTALL PROPOSED UTILITIES TO FINISH GRADE WITHIN

THE LIMIT OF DISTURBANCE (LOD), INCLUDING OFF-SITE EASEMENTS AND PUBLIC RIGHTS-OF-WAY, AS APPLICABLE. 3. THE CONTRACTOR SHALL STAKE OUT THE LIMIT OF DISTURBANCE (LOD), THE LOCATION OF PROPOSED BUILDING AND RETAINING WALL LINES AND

CORNERS, UTILITIES, ROAD AND DRIVEWAY CENTERLINES, AND PARKING AREAS FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR

4. EXISTING CURB AND GUTTER, PAVING AND BASE, WALKWAYS, STEPS, AND OTHER EXISTING SURFACES AND FEATURES WITHIN THE LIMIT OF DISTURBANCE (LOD) SHALL BE REMOVED UNLESS NOTED OTHERWISE ON THE DRAWINGS, OR AS SPECIFIED BY THE APPLICABLE SPECIAL

5. Construction shall be in accordance with howard county standard details and specifications along with applicable federal, STATE, COUNTY AND LOCAL REGULATIONS, STANDARDS AND SPECIFICATIONS. REFER TO THE DRAWINGS, AND PROJECT MANUAL IF PART OF THE CONTRACT DOCUMENTS, FOR DESIGNATED MODIFICATIONS AND ADDITIONAL INFORMATION. CONTRACTOR SHALL COMPLY WITH APPLICABLE OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) LAWS AND REGULATIONS FOR WORK ON THIS PROJECT.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, NOT OBTAINED AND FURNISHED TO THE CONTRACTOR BY THE OWNER, AND PAYING RELATED FEES REQUIRED TO COMPLETE THE WORK ON THIS PROJECT.

7. THE CONTRACTOR SHALL REPLACE AT NO ADDITIONAL COST TO THE OWNER, EXISTING CURB AND GUTTER, PAVING, SIDEWALKS, TREES, PLANT MATERIAL AND OTHER ITEMS DESIGNATED TO REMAIN ON THE SITE AND WITHIN THE PUBLIC RIGHTS-OF-WAY WHICH ARE DAMAGED DURING CONSTRUCTION. AREAS DISTURBED, BUT NOT DESIGNATED FOR PAVING OR PLANTING AREAS, SHALL BE PERMANENTLY STABILIZED BY SEEDING OR SODDING IN ACCORDANCE WITH THE VEGETATIVE STABILIZATION NOTES ON THE DRAWINGS, AND SPECIFICATIONS IN THE PROJECT MANUAL WHEN

8. CURB AND GUTTER SHALL BE CONSTRUCTED WITH "REGULAR CROSS SLOPE" OR "REVERSE CROSS SLOPE" AS REQUIRED TO REFLECT THE DIRECTION OF SLOPE ON ADJACENT PAVING. REFER TO THE DRAWINGS FOR CURB AND GUTTER DETAILS. CURB AND GUTTER SHALL BE CONSTRUCTED WITH SMOOTH VERTICAL CURVE TRANSITIONS AT ALL HIGH POINT, LOW POINT AND INLET LOCATIONS.

9. SANITARY SEWER AND STORM DRAIN PIPE ELEVATIONS ARE TO THE INVERT UNLESS NOTED OTHERWISE ON THE DRAWINGS. UTILITY MANHOLES AND STORM DRAIN STRUCTURE FRAMES, GRATES, AND INLET HEADPIECES SHALL BE ADJUSTED AND INSTALLED AT THE SAME LINE, GRADE AND CROSS SLOPE OF PROPOSED FINISH GRADE IN ADJACENT LAWN AND PAVED AREAS.

10. WATER LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF THREE AND A HALF FEET (3'-6") ABOVE THE TOP OF PIPE UNLESS NOTED OTHERWISE ON THE DRAWINGS.

11. SANITARY SEWER, ROOF AND STORM DRAIN CLEANOUTS LOCATED WITHIN PAVED AREAS SHALL BE A "FLUSH TYPE" INSTALLED AT THE SAME ELEVATION AS THE SURROUNDING PAVEMENT. REFER TO THE DRAWINGS FOR ADDITIONAL INFORMATION.

12. AREAS ADJACENT TO BUILDINGS, UNLESS OTHERWISE NOTED ON THE DRAWINGS, SHALL BE GRADED TO DIVERT WATER AWAY AT THE FOLLOWING MINIMUM GRADIENTS:

LAWN AND PERVIOUS SURFACES: 2 % MINIMUM 13. WHERE NEW CURB AND GUTTER MEETS EXISTING CURB AND GUTTER, THE EXISTING SHALL BE REMOVED TO THE NEAREST JOINT, OR SAW CUT TO PROVIDE A CLEAN, UNIFORM JOINT WITH THE NEW CURB AND GUTTER.

14. PROPOSED SPOT ELEVATIONS SHOWN IN DRIVEWAYS, SERVICE AND PARKING AREAS ARE THE TOP OF PAVED SURFACES AND BOTTOM OF CURBS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

15. WHERE NEW CURB IS INSTALLED ADJACENT TO EXISTING PAVEMENT WHICH IS TO RECEIVE AN OVERLAY, THE OVERLAY THICKNESS MAY VARY AS REQUIRED (MINIMUM OF 1-INCH) IN ORDER TO MAINTAIN THE SPECIFIED CURB REVEAL AS SHOWN ON THE DETAILS. IT IS ANTICIPATED THAT MINOR FIELD ADJUSTMENT TO THE TOP OF CURB ELEVATIONS NOTED ON THE DRAWINGS MAY BE NECESSARY IN ORDER TO PROVIDE. A UNIFORM CURB REVEAL, PROVIDE SMOOTH TRANSITION OF THE FINISHED SURFACE AND MAINTAIN FLOW ALONG THE CURBLINE INTO DRAINAGE STRUCTURES. CONTACT THE OWNER'S REPRESENTATIVE FOR APPROVAL OF ADJUSTMENTS PRIOR TO INSTALLING NEW CURB.

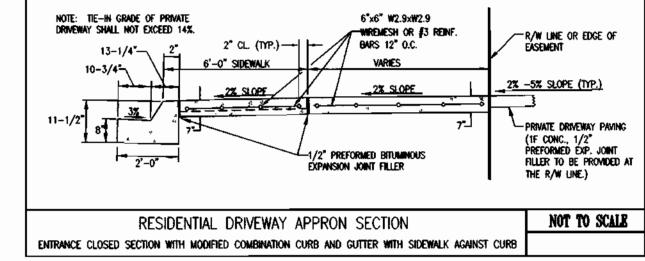
16. REFER TO CONSTRUCTION DOCUMENTS PREPARED BY THE MECHANICAL OR ELECTRICAL ENGINEER FOR DISPOSITION OF EXISTING AND CONSTRUCTION OF NEW LIGHTING, COMMUNICATION, AND ELECTRICAL SERVICES, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

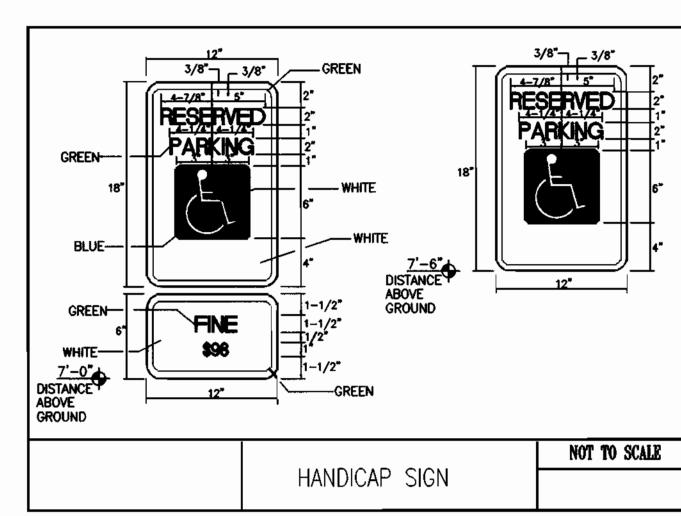
17. THE STORM DRAIN PIPES SHOULD BE FURNISHED AND INSTALLED WITH "O-RING GASKETED" BELL AND SPIGOT JOINTS TO PROVIDE A WATERTIGHT

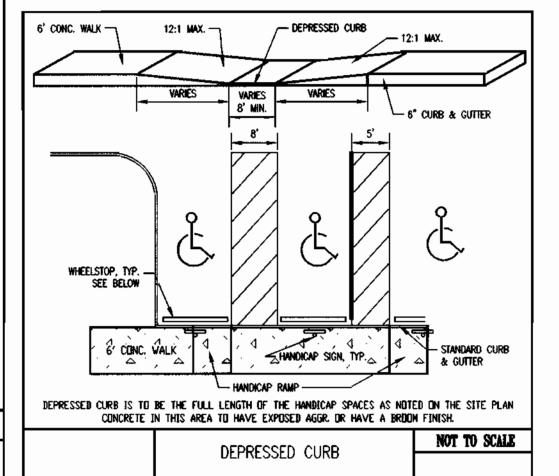
18. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT (800) 257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

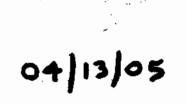
19. CONTRACTOR TO ADHERE TO ALL FEDERAL, STATE, AND LOCAL CODE AND PERMIT REQUIREMENTS.

CONCRETE AND IMPERVIOUS SURFACES: 1 % MINIMUM









FAX ND.: (410) 480-0543 A. NAME: <u>BRIAN KNAUFF</u> B. DAYTIME TELEPHONE: (410) 480-2467 C. COMPANY: THE RYLAND GROUP, INC D. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260 E. CITY: ELLICOTT CITY STATE: MD \_ ZIP:<u> 21043 </u>

C-5



### MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

14280 PARK CENTER DRIVE, SUITE A LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395

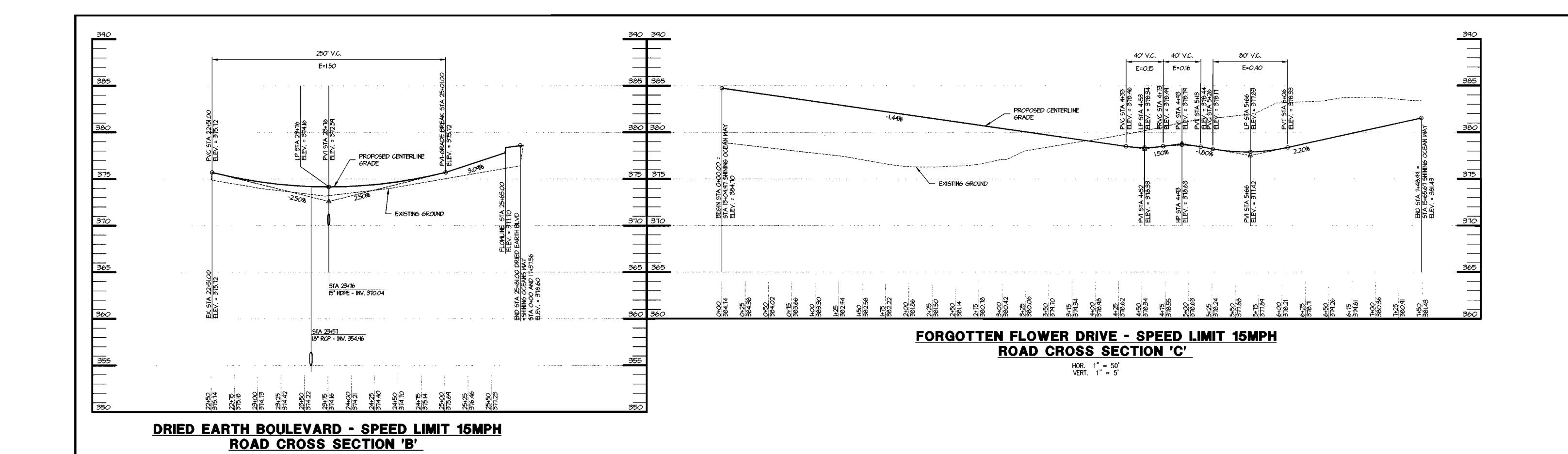


SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING SITE DETAILS

L. 5289 F. 330 MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385) ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO:	12735.02
11-15-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	AS SHOWN
1-31-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
3-15-05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	HRW
4-19-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KDH
5-23-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
		_	

SHEET: 6 OF 19



04 | 13 | 05

PROVIDE CONTROLLED FILL TO 95%
COMPACTION PER AASHTO T-180.
PLACEMENT TO BE APPROVED BY THE
GEOTECHNICAL ENGINEER.

OWNER/DEVELOPER/APPLICANT FAX NO.: (410) 480-0543

A. NAME: BRIAN KNAUFF B. DAYTIME TELEPHONE: (410) 480-2467

C. COMPANY: THE RYLAND GROUP, INC.

D. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260

E. CITY: ELLICOTT CITY STATE: MD ZIP: 21043

C-7

SHEET: 7 OF 19



### MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

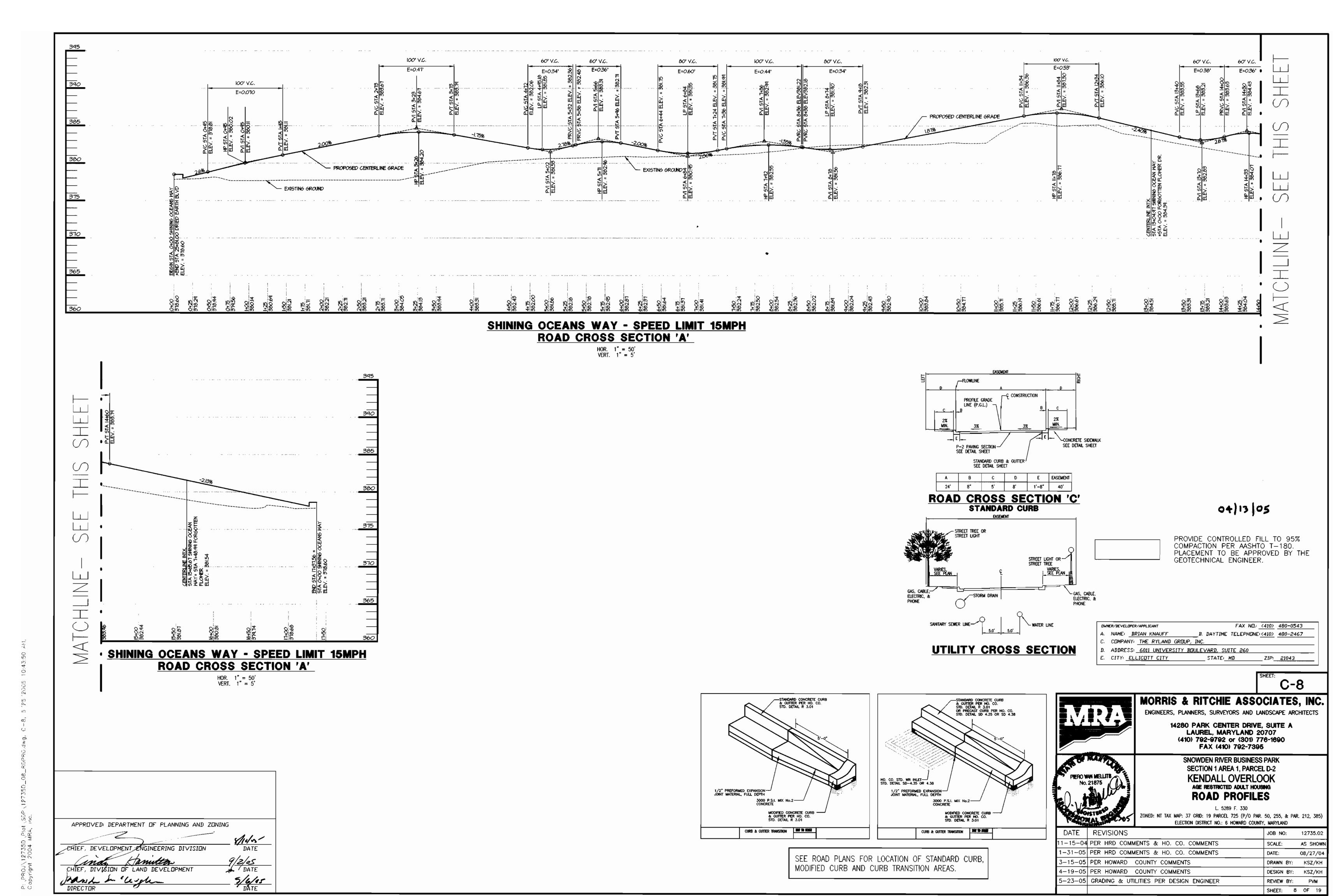
14280 PARK CENTER DRIVE, SUITE A LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7396



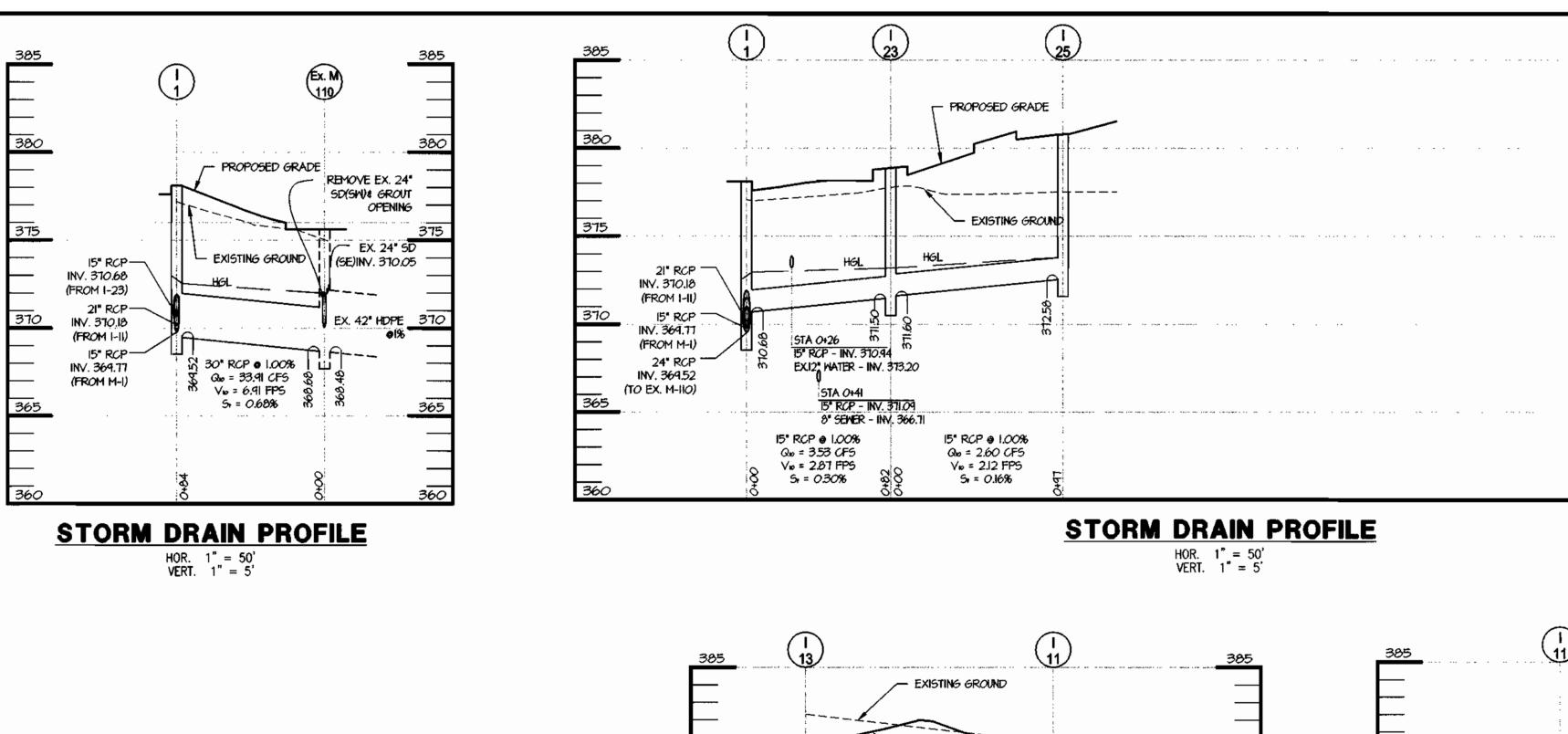
SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING ROAD PROFILES

L. 5289 F. 330 ZONED: NT TAX MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385)

	ELECTION DISTRICT NO.: 6 HOWARD COUNTY,	MARYLAND	
TE	REVISIONS	JOB NO:	12735.02
5-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	AS SHOWN
-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
5-05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	KSZ/KH
-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KSZ/KH
3-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM



SHEET: 9 OF 19



PROPOSED GRADE

12" RCP @ 1.00%

Qw = 1.81 CFS Vw = 2.30 FPS

S. = 0.26%

STORM DRAIN PROFILE

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

INV. 374.78 (FROM 1-21)

INV. 372.28

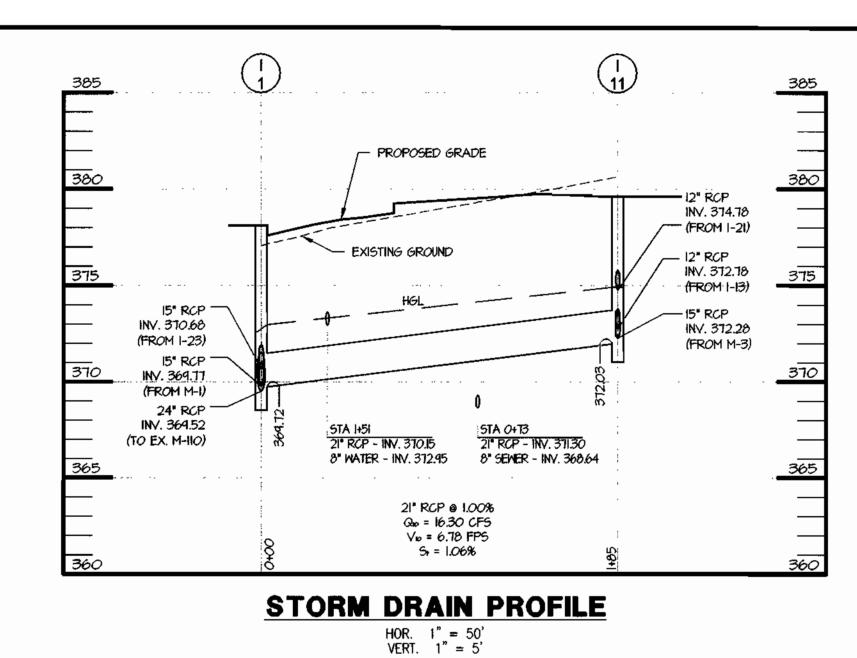
(FROM M-3)

INV. 372.03

(TO I-I)

— 15" RCP

— 21" RCP



PROPOSED GRADE - EXISTING GROUND 12" RCP -INV. 372.78 (FROM 1-13) 15" RCP " INV. 372.28 (FROM M-3) 21" RCP

12" RCP @ 1.00%

Qw = 1.90 CFS Vw = 2.42 FPS Sr = 0.28%

STORM DRAIN PROFILE

STA 0+30 21" RCP - INV. 371,08

8" SEMER - INV. 364.33

INV. 372.03

04/13/05

OWNER/DEVELOPER/APPLICANT B. DAYTIME TELEPHONE: (410) 480-2467 A. NAME: BRIAN KNAUFF C. COMPANY: THE RYLAND GROUP, INC. D. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260 \_ STATE: MD E. CITY: ELLICOTT CITY ZIP: 21043

C-10

## COORDINATES TO CENTER OF STRUCTURE AT FACE OF CURB FOR INLETS SET WITH THE CURB, CENTER OF STRUCTURE FOR MANHOLES, YARD INLETS, AND INLETS SET IN THE PAVEMENT. \* TOP OF GRATE ELEVATION AT CENTER OF STRUCTURE AT FACE OF CURB, UNLESS TOP OF CURB (TC) ELEVATION IS NOTED. MANHOLE AND YARD INLET ELEVATIONS ARE AT CENTER OF RIM AND GRATE.

MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 14280 PARK CENTER DRIVE, SUITE A LAUREL, MARYLAND 20707

(410) 792-9792 or (301) 776-1690 FAX (410) 792-7395 SNOWDEN RIVER BUSINESS PARK

SECTION 1 AREA 1, PARCEL D-2 ). 21875 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING STORM DRAIN PROFILES

TAX MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385)

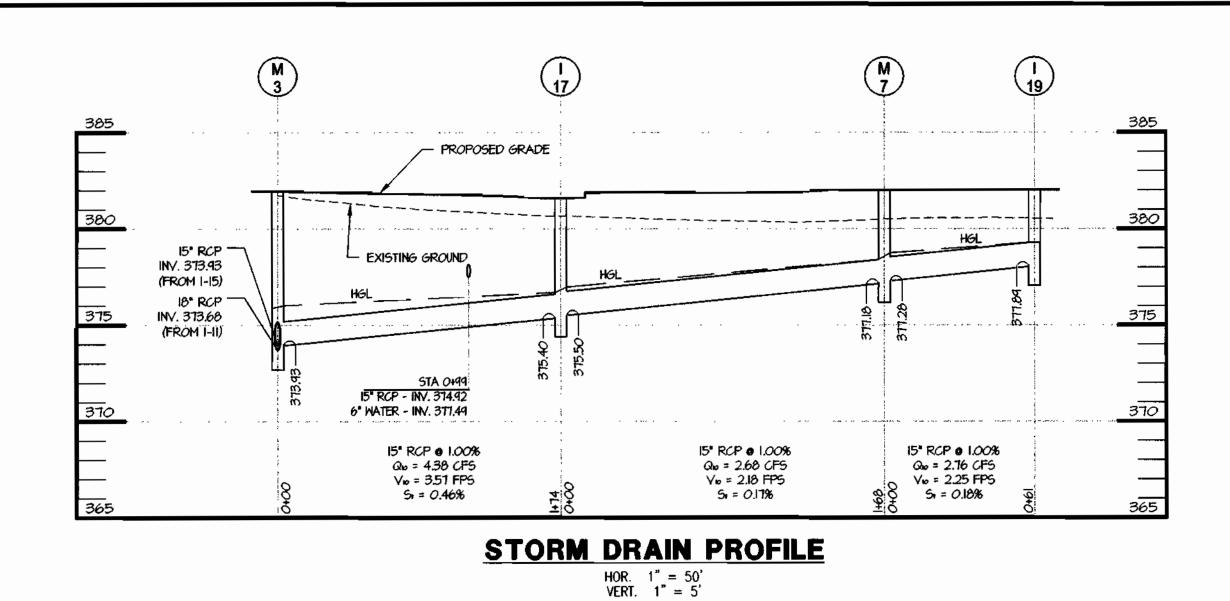
X.	MAL, MEXOS	ELECTION DISTRICT NO.: 6 HOWARD COUNTY,	MARYLAND	
	REVISIONS		JOB NO:	12735.02
)4	PER HRD COMM	ENTS & HO. CO. COMMENTS	SCALE:	AS SHOWN
5	PER HRD COMM	ENTS & HO. CO. COMMENTS	DATE:	08/27/04
5	PER HOWARD	COUNTY COMMENTS	DRAWN BY:	KSZ/KH
5	PER HOWARD	COUNTY COMMENTS	DESIGN BY:	KSZ/KH
5	GRADING & UTI	LITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
			SHEET: 10	OF 19

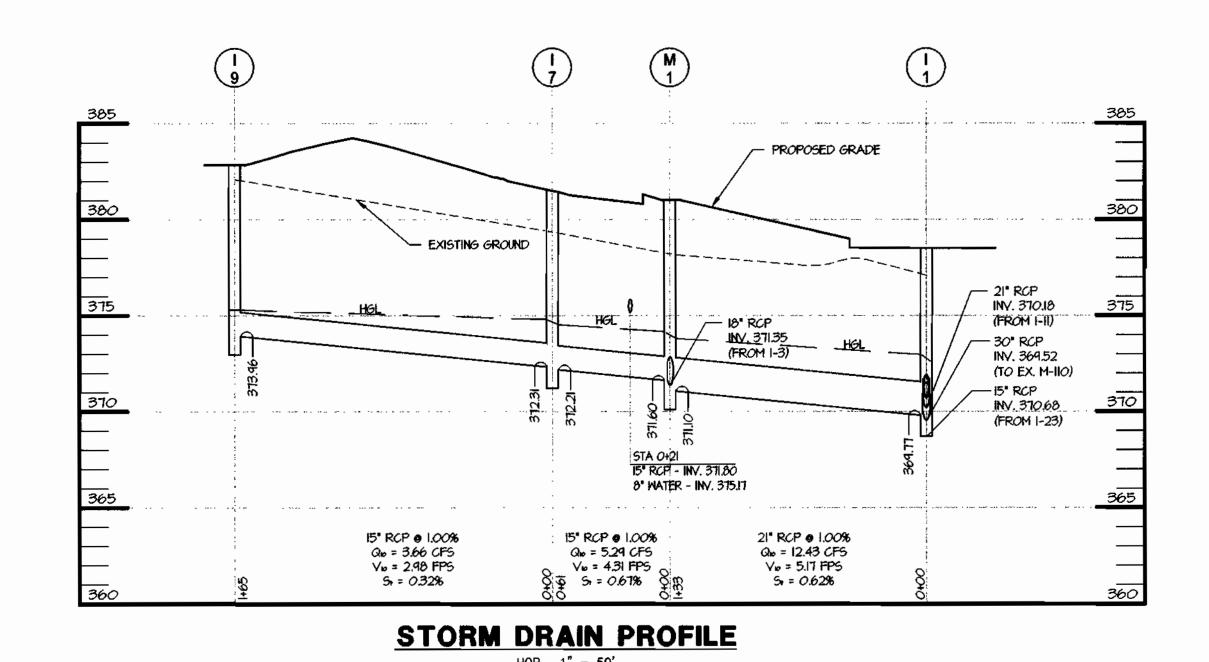
APPROVED: DEPARTMENT OF PLANNING AND ZONI	NG
	8/1/2
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
indy Hamilia	9/2/05
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE

STORM DRAIN PIPE SCHEDULE						
SIZE	TYPE	LENGTH				
12"	RCP CL IV	627'				
15"	RCP CL IV	961'				
18"	RCP CL IV	302'				
21"	RCP CL IV	318'				
30"	RCP CL IV	84'				

				● LOCATION					
STR NO.	* TOP ELEV	INV IN	INV IN	INV IN	INV OUT	TYPE	WIDTHS	NORTHING	EASTING
1-1	TC 378.10	370.68	370.18	639.77	369.52	PRECAST STANDARD TYPE A-10 INLET, HOWARD CO. STD. DETAIL SD4.41	5'	554,778.48	1,367,095.74
M-1	381.00	371.60	371.35	1	371.10	STANDARD 4' PRECAST MANHOLE, HOWARD CO. STD. DETAIL G5.12	48"	554,752.28	1,366,965.30
1–3	TC 377.50	373.22	1		372.97	PRECAST STANDARD TYPE WR INLET, HOWARD CO. STD. DETAIL SD4.35		554,861.50	1,366,840.74
I-5	TC 378.20			1	374.40	PRECAST STANDARD DOUBLE TYPE S INLET, HOWARD CO. STD. DETAIL SD4.23	_	554,867.61	1,366,721.02
1_7	381 30	370 31			372 21	PRECAST STANDARD TYPE WE INLET HOWARD CO STD DETAIL SD4 35		EE 4 702 40	1 366 020 47

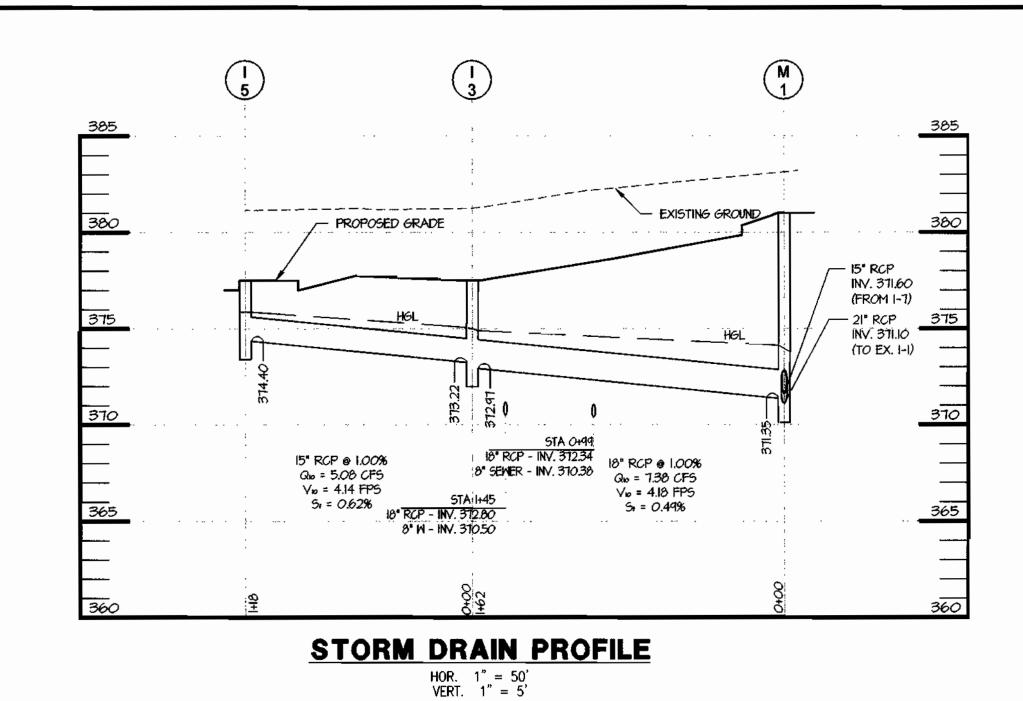
					STORM DRAIN STRUCTURE SCHEDULE		LOCATION			
STR NO			INV IN	INV IN	INV OUT	TYPE	WIDTHS	NORTHING	EASTING	
1-1					369.52	PRECAST STANDARD TYPE A-10 INLET, HOWARD CO. STD. DETAIL SD4.41	5'	554,778.48	1,367,095.74	. 10 To
M-1	381.00					STANDARD 4' PRECAST MANHOLE, HOWARD CO. STD. DETAIL G5.12	48"	554,752.28	1,366,965.30	I THE CO
1–3	TC 377.50				372.97	PRECAST STANDARD TYPE WR INLET, HOWARD CO. STD. DETAIL SD4.35	-	554,861.50	1,366,840.74	Sale Line
1-5	TC 378.20				374.40	PRECAST STANDARD DOUBLE TYPE S INLET, HOWARD CO. STD. DETAIL SD4.23	_	554,867.61	1,366,721.02	] [\$\displaysing]
I <b>-</b> 7	381.30	372.31	1		372.21	PRECAST STANDARD TYPE WR INLET, HOWARD CO. STD. DETAIL SD4.35	_	554,702.49	1,366,929.47	<b>E</b> .
1-9	382.80				373.96	PRECAST STANDARD TYPE WR INLET, HOWARD CO. STD. DETAIL SD4.35		554,593.05	1,366,806.39	<b>E</b> ^_
I <b>−11</b>	379.60	372.78	372.28		372.03	STANDARD TYPE 'K' INLET, HOWARD CO. STD. DETAIL SD4.13	_	554,592.98	1,367,107.11	
I-13	380.50				374.19	STANDARD TYPE 'K' INLET, HOWARD CO. STD. DETAIL SD4.12	_	554,539.65	1,366,972.55	<b>33</b> 6 \(
M-3	382.00	373.93				STANDARD 4' PRECAST MANHOLE, HOWARD CO. STD. DETAIL G5.12	48"	554,457.27	1,367,143.93	
I-15	381.50					PRECAST STANDARD TYPE WR INLET, HOWARD CO. STD. DETAIL SD4.35	_	554,443.12	1,367,093.80	1 1
I17	380.87	375.50			375.40	PRECAST STANDARD DOUBLE TYPE S INLET, HOWARD CO. STD. DETAIL SD4.23		554,449.35	1,367,285.19	DATE
M-7	382.00	377.28			377.18	STANDARD 4' PRECAST MANHOLE, HOWARD CO. STD. DETAIL G5.12	48"	554,449.54	1,367,453.26	DATE
I-19	382.00					PRECAST STANDARD TYPE A-5 INLET, HOWARD CO. STD. DETAIL SD4.40	5'	554,527.68	1,367,449.03	11-15-0
I-21	381.00					STANDARD TYPE 'K' INLET, HOWARD CO. STD. DETAIL SD4.12	_	554,591.53	1,367,331.55	1-31-05
1-23	TC 379.12	371.60				PRECAST STANDARD TYPE A-5 INLET, HOWARD CO. STD. DETAIL SD4.40	5,	554,745.49	1,367,170.94	1 ———
I-25	380.79	372.83				PRECAST STANDARD TYPE WR INLET, HOWARD CO. STD. DETAIL SD4.35		554,720.80	1,367,265.30	3-15-05
			1		1.2.00			33.,,,20.00	1,007,200.00	4-19-05
			1							5-23-05
						<u> </u>		•	•	· -

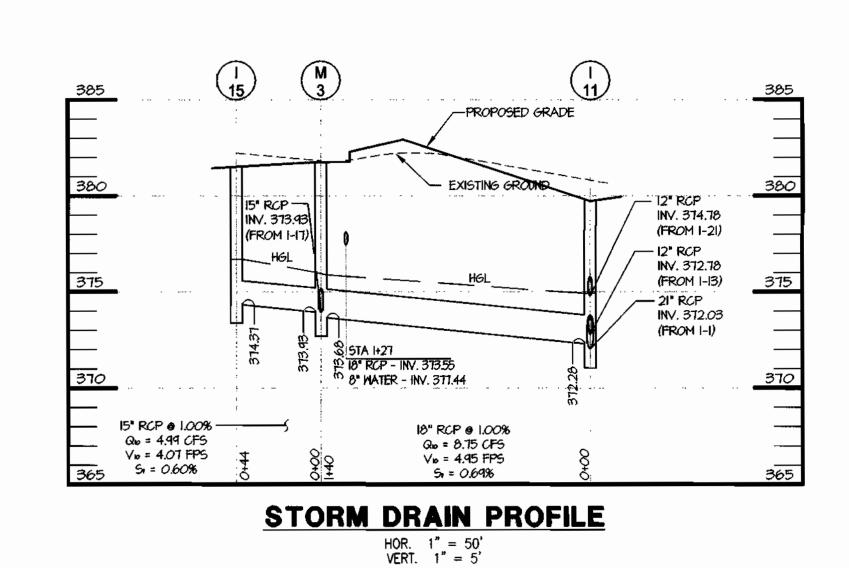




INLET I-11 DETAIL

SCALE: 1" = 5'





04|13|05

COMPANY: THE RYLAND GROUP, INC.

D. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260

NAME: BRIAN KNAUFF B. DAYTIME TELEPHONE: (410) 480-2467

PROP. SIDEMALK

1' MIN.TYP.

1' MIN.TYP.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR

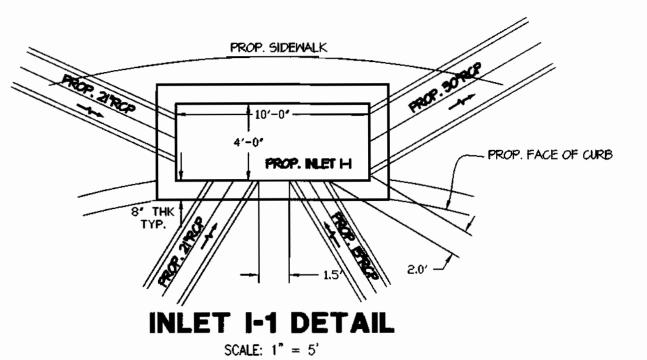
DEPARTMENT OF PLANNING AND ZONING

1/2/05

DATE

DATE

DATE



MORRIS & RITCHIE ASSOCIATES, INC.

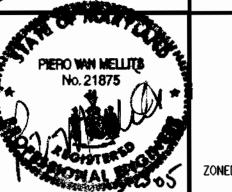
\_STATE: MD

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

14280 PARK CENTER DRIVE, SUITE A
LAUREL, MARYLAND 20707

(410) 792-9792 or (301) 776-1690

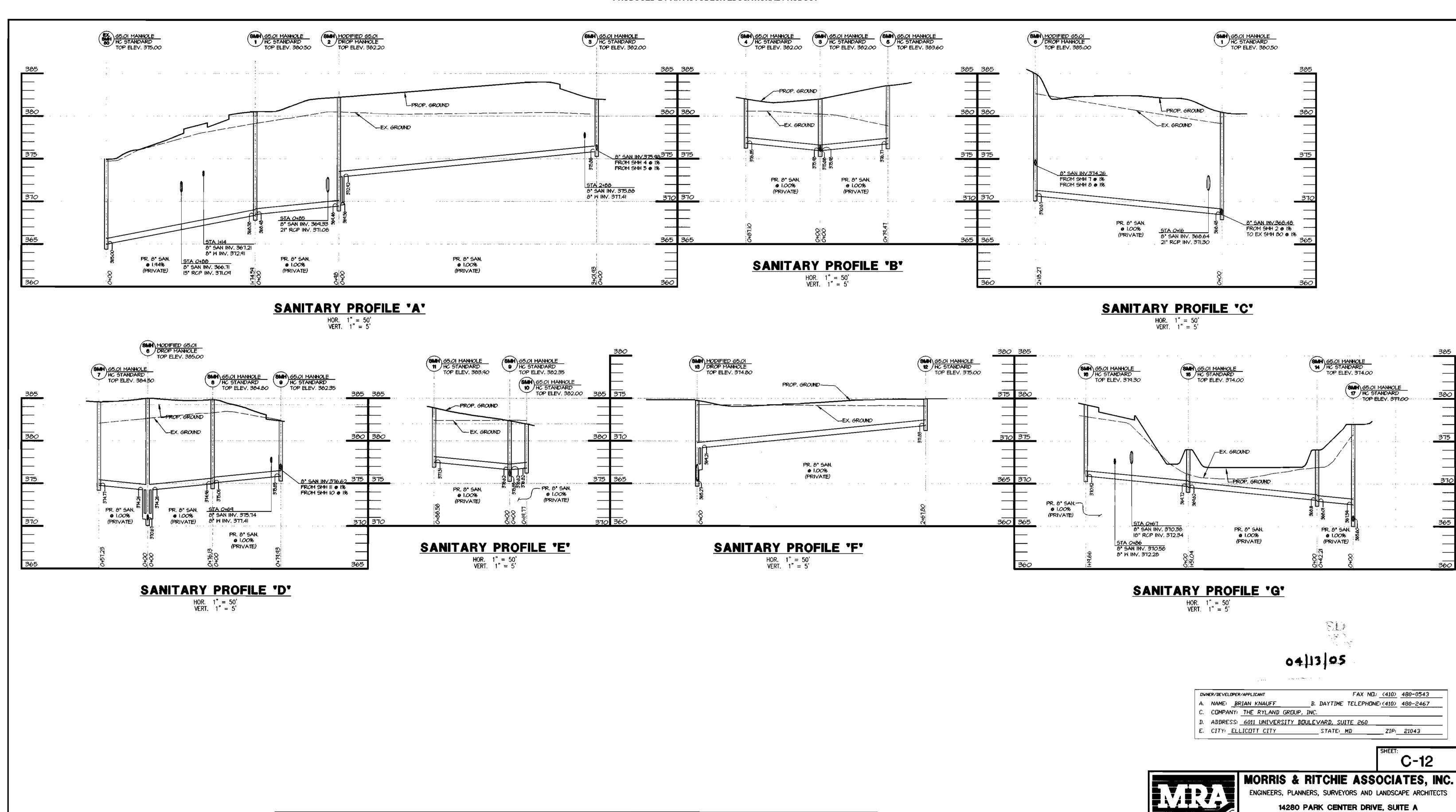
FAX (410) 792-7395



SNOWDEN RIVER BUSINESS PARK
SECTION 1 AREA 1, PARCEL D-2
KENDALL OVERLOOK
AGE RESTRICTED ADULT HOUSING
STORM DRAIN PROFILES

L. 5289 F. 330
NED: NT TAX MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385)
ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

Ē	REVISIONS	JOB NO:	12735.02
-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	AS SHOWN
-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
-05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	KSZ/KH
-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KSZ/KH
-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
		SHEET: 1	1 OF 19



	SANITARY STRUCTURE SCHEDULE						● LOCATION		
STR NO.	TOP ELEV.	INV. IN	INV. IN	INV. OUT	TYPE	REMARKS	NORTHING	EASTING	
SMH-1	380.50	368.48		368.38	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,674	1,367,112	
SMH-2	382.20	372.92		369.46	MODIFIED G5.01 DROP MANHOLE		554,581	1,367,142	
SMH-3	382.00	375.98	375.98	375.88	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,576	1,367,443	
SMH-4	382.00			376.85	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,489	1,367,443	
SMH-5	383.60			376.77	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,656	1,367,443	
SMH-6	385.00	374.26		370.67	MODIFIED G5.01 DROP MANHOLE		554,531	1,366,947	
SMH-7	384.50			374.77	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01	_	554,570	1,366,905	
SMH-8	384.80	375.06		374.96	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,479	1,367,003	
SMH-9	382.35	376.62	376.62	375.85	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,422	1,367,059	
SMH-10	382.00			376.82	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,436	1,367,072	
SMH-11	383.90			377.51	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,358	1,366,998	
SMH-12	375.00			371.83	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,821	1,367,470	
SMH-13	374.80	369.21		365.27	MODIFIED G5.01 DROP MANHOLE		554,821	1,367,202	
SMH-14	374.00	368.11		368.01	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,875	1,367,096	
SMH-15	374.00	369.72		369.62	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,874	1,366,945	
SMH-16	379.30			370.92	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,795	1,366,855	
SMH-17	377.00	367.59		365.60	STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01		554,835	1,367,106	

STO	RM	DRAIN	PIPE	S	CHEDULE
SIZE		TYPE			LENGTH
8"		PVC SD	R-35		1,861.71

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT

DATE REVISIONS

11-15-04 PER HRD COMMENTS & HO. CO. COMMENTS

1-31-05 PER HRD COMMENTS & HO. CO. COMMENTS

5-23-05 GRADING & UTILITIES PER DESIGN ENGINEER

3-15-05 PER HOWARD COUNTY COMMENTS

4-19-05 PER HOWARD COUNTY COMMENTS

LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395

SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING **SANITARY PROFILES** 

ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385)

JOB NO:

SCALE:

DATE:

12735.02

AS SHOWN

08/27/04

DRAWN BY: KSZ/KH

DESIGN BY: KSZ/KH

REVIEW BY: PVM

SHEET: 12 OF 19

SHEET: 13 OF 19

<u>LEGEND</u>

PROPOSED 10' CONTOUR
PROPOSED 2' CONTOUR
PROPOSED SPOT ELEVATIONS

ALL VEGETATION AND STRUCTURAL ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF this plan and are to be in conformance with the most current maryland standards and SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

. 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND

. 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 HOWARD COUNTY SEDIMENT CONTROL INSPECTOR

SITE ANALYSIS: TOTAL AREA OF THE SITE AREA TO BE DISTURBED 10.70 AC AREA TO BE STRUCTURALLY STABILIZED AREA TO BE VEGETATIVELY STABILIZED 3.21 AC 507.37 CY TOTAL FILL TOTAL IMPORT 507.37 CY.

. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTRIBUTED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST REPAIR ON THE SAME DAY OF DISTURBANCE.

ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

10. ON ALL SITES WITH DISTURBED AREAS IN ACCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

11. TRENCHES FOR THE UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORK DAY, WHICHEVER IS SHORTER.

#### STANDARDS AND SPECIFICATION FOR TOPSOIL

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIAL TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

#### CONDITIONS WHERE PRACTICE APPLIES THIS PRACTICE IS LIMITED TO AREAS HAVING 21 OR FLATTER

SLOPES WHERE

THE TEXTURE OF THE EXPOSED SUBSCIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. 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.

THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2/1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREA HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE

#### CONSTRUCTION AND MATERIAL SPECIFICATIONS

STABILIZATION SHOWN ON THE PLANS.

TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SUIL TYPE CAN BE FOUND IN REPRESENTATIVES SUIL PROFILE SECTION IN THE SUIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND

II. TOPSOIL SPECIFICATIONS-SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. DITHER SOILS MAY 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 SUBSDILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVELS, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2' IN DIAMETER.

TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUICKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

III. WHERE THE SUBSUIL 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 SF) 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 SITE HAVING DISTURBED AREAS UNDER 5 ACRE

PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION—SECTION I-VEGETATIVE STABILIZATION METHODS AND MATERIALS. III. TOPSOIL APPLICATION

WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT

II. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN REVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4'-8' HIGHER IN ELEVATION.

III. TOPSOIL SHALL BE UNIFORMLY DISTURBED IN A 4'-8' LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4'. SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT ODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSDILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER

TOPSOIL SHALL NOT PLACED WHILE THE TOPSOIL OR SURSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERVISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED

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:

COMPOSTED SLUDGE MATERIAL FOR USE A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRE SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE

> COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOSTS BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.

COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOROUS, 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.

II. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4LB/1,000 SF, AND 1/3 THE NORMAL LIME APPLICATION RATE.

ICES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND REPERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA. PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTE. REVISED 1973.

COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF TON/1.000 SF.

STANDARDS AND SPECIFICATIONS FOR LAND GRADING

RESHAPING OF THE EXISTING LAND SURFACE IN ACCORDANCE WITH A PLAN AS DETERMINED BY ENGINEERING SURVEY AND LAYOUT.

THE PURPOSE OF A LAND GRADING SPECIFICATION IS TO PROVIDE FOR EROSION CONTROL AND VEGETATIVE ESTABLISHMENT ON THOSE AREAS WHERE THE EXISTING LAND SURFACE IS TO BE RESHAPED BY GRADING

THE GRADING PLAN SHOULD BE BASED UPON THE INCORPORATION OF BUILDING DESIGNS AND STREET LAYOUTS THAT FIT AND UTILIZE EXISTING TOPOGRAPHY AND DESIRABLE NATURAL SURROUNDINGS TO AVOID EXTREME GRADE MIDDIFICATIONS. INFORMATION SUBMITTED MUST PROVIDE SUFFICIENT THROUGHOUS SUBVEYS AND SHIP INVESTIGATIONS. SUFFICIENT TOPOGRAPHIC SURVEYS AND SOIL INVESTIGATIONS TO DETERMINE LIMITATIONS THAT MUST BE IMPOSED ON THE GRADING OPERATION RELATED TO SLOPE STABILITY, EFFECT ON ADJACENT PROPERTIES AND DRAINAGE PATTERNS, MEASURES FOR DRAINAGE AND

DESIGN CRITERIA

MANY COUNTIES HAVE REGULATIONS AND DESIGN PROCEDURES ALREADY ESTABLISHED FOR LAND GRADING AND CUT AND FILL SLOPES. WHERE THESE REQUIREMENTS EXIST, THEY SHALL BE FOLLOWED. THE PLAN MUST SHOW EXISTING AND PROPOSED CONTOURS OF THE AREA(S) TO BE GRADED. THE PLAN SHALL ALSO INCLUDE PRACTICES FOR EROSION CONTROL, SLOPE STABILIZATION, SAFE DISPOSAL OF RUNOFF WATER AND DRAINAGE, SUCH AS WATERWAYS, LINED DITCHES. REVERSE SLOPE BENCHES (INCLUDE GRADE AND CROSS SECTION), GRADE STABILIZATION STRUCTURES, RETAINING WALLS, AND SURFACE AND SUBSURFACE DRAINS. THE PLAN SHALL ALSO INCLUDE PHASING OF THESE PRACTICES. THE FOLLOWING

SHALL BE INCORPORATED INTO THE PLAN:

PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE RUNDEF TO STORM DRAINS, PROTECTED DUTLETS OR TO STABLE WATER COURSES TO INSURE THAT SURFACE RUNDEF WILL NOT DAMAGE SLOPES OR OTHER GRADED AREAS.

CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASSES SHALL NOT BE STEEPER THAN 24. (WHERE THE SLOPE IS TO BE MOWED THE SLOPE SHOULD BE NO STEEPER THAN 31, 41 IS PREFERRED BECAUSE OF SAFETY FACTORS RELATED TO MOVING STEEP SLOPES.) SLOPES EXCEEDING 21 SHALL REQUIRE SPECIAL DESIGN AND STABILIZATION

III. REVERSE BENCHES SHALL BE PROVIDED WHENEVER THE VERTICAL INTERVAL (HEIGHT) OF ANY 2:1 SLOPE EXCEEDS 20 FEET) FOR 3:1 SLOPE IT SHALL BE INCREASED TO 30 FEET AND FOR 44 TO 40 FEET. BENCHES SHALL BE LOCATED TO DIVIDE THE SLOPE FACE AS EQUALLY AS POSSIBLE AND SHALL CONVEY THE WATER TO A STABLE DUTLET. SOILS, SEEPS, ROCK DUTCROPS, ETC., SHALL ALSO BE TAKEN INTO CONSIDERATION WHEN DESIGNING BENCHES.

A. BENCHES SHALL BE A MINIMUM OF SIX FEET WIDE TO PROVIDE FOR EASE OF MAINTENANCE.

B. BENCHES SHALL BE DESIGNED WITH A REVERSE SLOPE OF 6:1 OR FLATTER TO THE TOE OF THE UPPER SLOPE AND WITH A MINIMUM OF ONE FOOT IN DEPTH. BENCH GRADIENT TO THE OUTLET SHALL BE BETWEEN 2 PERCENT AND 3 PERCENT, UNLESS ACCOMPANIED BY APPROPRIATE

C. THE FLOW LENGTH WITHIN A BENCH SHALL NOT EXCEED 800' UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS. FOR FLOW CHANNEL STABILIZATION SEE

IV. SURFACE WATER SHALL BE DIVERTED FROM THE FACE OF ALL CUT AND/OR FILL SLOPES BY THE USE OF EARTH DIKES, DITCHES AND SWALES OR CONVEYED DOWNSLOPE BY THE USE OF A DESIGNED STRUCTURE, EXCEPT WHERE:

A. THE FACE OF THE SLOPE IS OR SHALL BE STABILIZED AND THE FACE OF ALL GRADED SLOPES SHALL BE PROTECTED FORM SURFACE RUNOFF UNTIL THEY ARE

B. THE FACE OF SLOPE SHALL NOT BE SUBJECT TO ANY CONCENTRATED FLOWS OF SURFACE WATER SUCH AS FROM NATURAL DRAINAGEWAYS, GRADED SWALES, DOWNSPOUTS,

C. THE FACE OF THE SLOPE WILL BE PROTECTED BY SPECIAL EROSION CONTROL MATERIALS, TO INCLUDE, BUT NOT LIMITED TO APPROVED VEGETATIVE STABILIZATION PRACTICES (SEE SECTION G), RIP-RAP OR OTHER APPROVED STABILIZATION METHODS.

CUT SLOPES OCCURRING IN RIPABLE ROCK SHALL BE SERRATED AS SHOWN ON THE FOLLOWING DIAGRAM. THESE SERRATIONS SHALL BE MADE WITH CONVENTIONAL EQUIPMENT AS THE EXCAVATION IS MADE. EACH STEP OR SERRATION SHALL BE CONSTRUCTED ON THE CONTOUR AND WILL HAVE STEPS CUT AT CONSTRUCTED ON THE CONTOUR AND WILL HAVE STEPS CUT AT NOMINAL TWO-FOOT INTERVALS WITH NOMINAL THREE-FOOT HORIZONTAL SHELVES. THESE STEPS WILL VARY DEPENDING ON THE SLOPE RATIO OR THE CUT SLOPE. THE NOMINAL SLOPE LINE IS 11. THESE STEPS WILL WEATHER AND ACT TO HOLD MOISTURE, LIME, FERTILIZER AND SEED THUS PRODUCING A MUCH QUICKER AND LONGER LIVED VEGETATIVE COVER AND BETTER SLOPE STABILIZATION. OVERLAND FLOW SHALL BE DIVERTED FROM THE TOP OF ALL SERRATED CUT SLOPES AND CARRIED TO A SUITABLE DUTLET.

VI. SUBSURFACE DRAINAGE SHALL BE PROVIDED WHERE NECESSARY TO INTERCEPT SEEPAGE THAT WOULD OTHERWISE ADVERSELY AFFECT SLOPE STABILITY OR CREATE EXCESSIVELY WET SITE

VII. SLOPES SHALL NOT BE CREATED SO CLOSE TO PROPERTY LINES
AS TO ENDANGER ADJOINING PROPERTIES WITHOUT ADEQUATELY
PROTECTING SUCH PROPERTIES AGAINST SEDIMENTATION,
EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER

VIII. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIAL. IT SHOULD BE FREE OF STONES OVER TWO (2) INCHES IN DIAMETER WHERE COMPACTED BY HAND OR MECHANICAL TAMPERS OR OVER EIGHT (8) INCHES IN DIAMETER WHERE COMPACTED BY ROLLERS OR OTHER EQUIPMENT. FROZEN MATERIAL SHALL NOT BE PLACED IN THE FILL NOR SHALL THE FILL MATERIAL BE PLACED ON A FROZEN FOUNDATION

IX. STOCKPILES, BORROW AREAS AND SPOIL SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATIONS.

X. ALL DISTURBED AREAS SHALL BE STABILIZED STRUCTURALLY OR VEGETATIVELY IN COMPLIANCE WITH 20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION.

#### VEGETATIVE STABILIZATION

PERMANENT OR TEMPORARY VEGETATION SHALL BE ESTABLISHED VITHIN SEVEN (7) DAYS ON THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, SEDIMENT CONTROL BASINS, AND

PERMANENT AND TEMPORARY SEEDING, SODDING AND MULCHING

ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1)
AND WITHIN 14 DAYS FOR ALL DITHER DISTURBED OR GRADED AREAS
ON THE PROJECT SITE. MULCHING MAY ENLY BE USED ON
DISTURBED AREAS AS TEMPORARY COVER WHERE VEGETATION IS NOT "EASIBLE OR WHERE SEEDING CAN NOT BE COMPLETED BECAUSE OF

II. SEEDED PREPARATION AND SEEDING APPLICATION

LOOSEN THE TOP LAYER OF THE SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT SUCH AS DISC HARROWS, CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. INCORPORATE THE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF THE SOIL BY DISCING OR BY OTHER SUITABLE MEANS. ROUGH AREAS SHOULD NOT BE ROLLED OR DRAGGED SMOOTH, BUT LEFT IN A ROUGHENED CONDITION. STEEP SUPERS OFFER THAN 24 SHOULD BE TRACKED. CONDITION. STEEP SLOPES GREATER THAN 31 SHOULD BE TRACKED BY A DOZER, LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL SHOULD BE LOOSE AND FRIABLE. PERMANENT COVER MAY REQUIRE AN APPLICATION OF TOPSDIL. SD, IT MUST MEET THE REQUIREMENTS SET FORTH IN SECTION 21.0 STANDARDS AND SPECIFICATIONS FOR TOPSDIL FROM THE 1994 STANDARDS AND SPECIFICATIONS

SOIL TESTS SHALL BE MADE ON SITES OVER FIVE ACRES TO DETERMINE THE EXACT REQUIREMENTS FOR BOTH LIME AND FERTILIZER. FOR SITES UNDER 5 ACRES, IN LIEU OF A SOIL FERTILIZER NITROGEN 2 LBS/1000 SF (90 LBS/AC) 4 LBS/1000 SF (175 LBS/AC) 4 LBS/1000 SF (174 LBS/AC)

GROUND LIMESTONE 2 TONS/AC

USING APPROPRIATE CHART BELOW.

FOXTAIL MILLET

FESCUE (85%)

FESCUE (10%)

VI. TURFORASS ESTABLISHMENT

RECOMMENDATIONS FOR MARYLAND".

GEDTEXTILE CLASS E

STANDARD SYMBO

\_\_\_\_AGIP

provide additional filtration

CHEWINGS

IV. SEDMENT CONTROL PRACTICE SEEDING

SELECT A SEEDING MIXTURE FROM TABLE 25 DR 26 IN SECTION 'G' OF THE 1994 STANDARDS AND SPECIFICATIONS. DOCUMENT SEEDING ON THE EROSION AND SEDIMENT CONTROL PLAN USING APPROPRIATE CHART BELOW.
NOTE: IF SEDIMENT CONTROL PRACTICES ARE IN FOR LONGER THAN 12 MONTHS, PERMANENT SEEDING IS REQUIRED.

v. Temporary/Permanent seeding mixtures and rates SELECT A SEEDING MIXTURE FROM APPROPRIATE TABLE 25 OR 26 IN SECTION "G" OF THE 1994 STANDARDS AND SPECIFICATIONS.
DOCUMENT SEEDING ON THE EROSION AND SEDIMENT CONTROL PLAN

SEED SEXTUREGIARDMESS ZONE 7a)

APPLICATION

RATE (LB/AC)

8/15-11/30

RATE (LE/AC) DATE

THIS INCLUDES LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. AREA TO RECEIVE SEED SHALL BE TILLED BY DISCING OR BY OTHER APPROVED METHODS TO A DEPTH OF 3 TO 5 INCHES. LEVELED AND RAKED TO PREPARE A PROPER SEEDBED. STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER SHALL BE REMOVED. THE RESULTING SEEDBED SHALL BE IN SUCH CONDITION THAT FUTURE MOWING OF CHOOSE A TURFGRASS MIXTURE FROM PATE G-20 OF THE 1994 STANDARDS AND SPECIFICATIONS OR SELECT FROM THE 1ST IN THE MIST CURRENT INVERSITY OF MARYLAND

FROM THE LIST IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, TURFGRASS CULTIVAR

8/15-11/30 8/15-11/30 1/4'-1/2'

8/15-11/30 | 8/15-11/30 | 1/4'-1/2"

8/15-11/30

**PERMANENET SEEDING SUMMAR**T

DEPTH

8/15-11/30 1/4\*-1/2\*

DETAIL 23B - AT GRADE INLET PROTECTION

PLAN/CUT AWAY VIEW

CROSS SECTION

Construction Specifications

1/4'-1/2'

FROM TABLE 26

FROM YABLE 25

8/15-11/30

A. IRRIGATE-APPLY MINIMUM 1' OF WATER EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE, WHEN SOIL MOISTURE BECOMES DEFICIENT TO PREVENT LOSS OF STAND OF PROTECTIVE

REPAIRS- IF STAND PROVIDES BETWEEN 40% TO 94% GROUND COVERAGE, OVERSEED AND FERTILIZER USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND PROVIDES LESS THAN 40% COVERAGE, REESTABLISH AND STAND FOLLOWING ORIGINAL AND PROCEDURES.

STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL VEGETATIVE PRACTICES.

ALL SEEDING REQUIRE MULCHING. ALSO MULCH DURING NON-SEEDING DATES UNTIL SEEDING CAN BE DONE. MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF A 2 TONS/ACRE OR 90 LBS/1000 SF (2 BALES). IF A MULCH ANCHORING TOOL IS USED, APPLY 2.5
TONS/ACRE, MULCH MATERIAL SHALL BE RELATIVELY FREE OF ALL
KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED
NOXIOUS WEEDS, SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, WOOD CELLULOSE FIBER OR LIQUID MULCH

APPLY VOOD CELLULOSE FIBER AT A DRY VEIGHT OF 1,500 LBS/ACRE. IF MIXED WITH WATER, USE 50 LBS. OF WOOD CELLULOSE FIBER PER 1000 GALLONS OF WATER. LIQUID BINDER SHOULD BE APPLIED HEAVIER AT THE EDGE, WHERE WIND CATCHES MULCH IN VALLEYS, AND ON CREST OF BANKS. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. APPLY RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR AND MULCH. STABLE LIGHT WEIGHT, PLASTIC METTING OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR USING STAGGERED JOINTS WITH ALL ENDS TIGHTLY ABUTTED AND NOT OVER LAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED AFTER INSTALLATION. DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST VEEK IS REQUIRED IN THE ABSENCE OF RAINFALL. SOD IS NOT TO BE APPLIED ON FROZEN GROUND.

PERTILIZER RATE LIME RATE

600 LB/AC | 2 TUNS/AC

(15 LB/1000 SF) k100 LB/1000 SF)

2 LB/ 4 LB/ 4 LB/ 2 TONS/AC

1000 SF) 1000 SF) 1000 SF) 1000 SF)

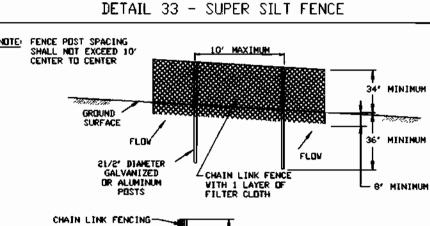
≠900 LBS/AC DF 10-20-20

(10-10-10)

FERTILIZER RATE

(10-20-20)

USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE 1994 MARYLAND



FLOW \_\_\_\_ FILTER CLOTH-34" MINIMUM - 16' MIN. 1ST LAYER DF STANDARD SYMBOL REQUIRED TO ATTAIN 42' Construction Specifications

Fencing shall be 42" in height and constructed in accordance with the tatest Manyland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42' fabric and 6' length

The lower tension wire, brace and truss rods, drive anchors and post caps are not 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24' at the top and nid section.

2. Chain link fence shall be fastened securely to the fence posts with wire ties.

4. Filter cloth shall be embedded a minimum of 8' into the ground. 5. When two sections of filter cloth adjoin each other, they shall be overlapped

. Maintenance shall be performed as needed and sitt buildups removed when 'bulges' develop in the silt fence, or when silt reaches 50% of fence height 7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall neet the following requirements for Geotextile Class Fi

Tensile Strength 50 (bs/in (min.) Test: MSMT 509 Testi MSMT 509 20 (bs/in (min.) Tensite Modulus 0.3 gal/ft\*/minute (max.) Fittering Efficiency 75% (min.) Test MSMT 322 U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMEN SOIL CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS) -2" MINIMUM LENGTH OF 2" X 4" STANDARD SYMBOL MAX. DRAINAGE AREA = 1/4 ACRE

the weir and the inlet face (max. 4' apart).

. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4") to the 2"  $\times$  4" weir (measuring throat length plus 2") as shown on the standard

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  $2^* \times 4^*$  weir. 3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between

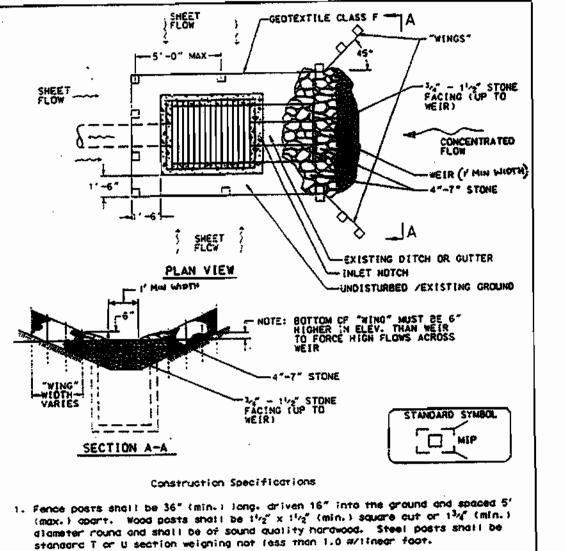
4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the welr at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

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 "  $\times$  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 clothand stone replaced when clagged 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 PAGE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE E - 16 - 58 WATER MANAGEMENT ADMINISTRATION



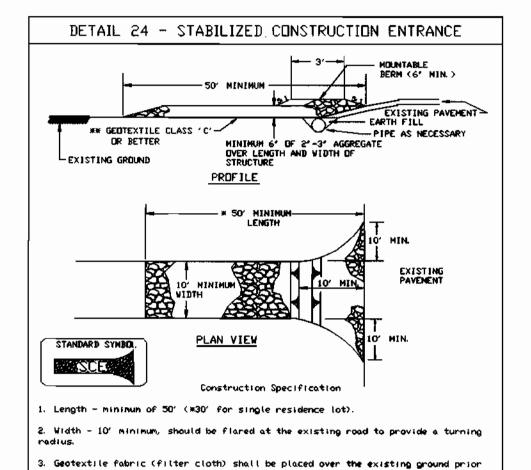
DETAIL 23D - MEDIAN INLET PROTECTION

2. Georestile Class F shall be fastened securely to each post with wire ties or staples at top and mid-section.

. Where ends of georextile fabric come together they shall be overlapped, folded i. Median inlet Protection shall be inspected after each rain and maintained when bulges occur in the fabric or when the stone gets clogged.

. Stone used to construct the weir shall be 4" - 7" with a t' thick layer of  $3_4$ " -  $1\frac{1}{2}$ " stone on the upstream face.

MARTIAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION SOUL CONSERVATION SERVICE



to placing stone. \*\*The plan approval authority may not require single family 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

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 nountable bern with 5:1 slopes and a ninimum 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

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
SUIL CONSERVATION SERVICE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT F - 17 - 3 WATER MANAGEMENT ADMINISTRATION

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL ESQUECES CONSERVATION SERVICE THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT

THE HOWARD SOIL CONSERVATION DISTRICT.

OWNER/DEVELOPER/APPLICANT FAX ND.: (410) 480-0543 NAME: BRIAN KNAUFF B. DAYTIME TELEPHONE: (410) 480-2467 - COMPANY: THE RYLAND GROUP, INC. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260

C-15

\_\_ ZIP:<u>21043</u>

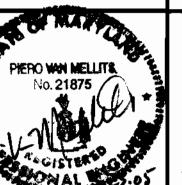


CITY: ELLICOTT CITY

MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

14280 PARK CENTER DRIVE, SUITE A LAUREL. MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395

STATE: MD



SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING SEDIMENT & EROSION CONTROL **NOTES & DETAILS** 

MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385) ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO:	12735.02
11-15-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	1" = 40'
1-31-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
3-15-05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	HRW
4-19-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KDH
5 <del>-</del> 23-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
		SHEET: 15	OF 19

APPROVED: DEPARTMENT OF PLANNING AND ZONING <u>{/\v\s\</u> CHIEF. DEVELOPMENT ÉNGINEERING DIVISION DATE CHIEF, DIVISION OF LAND DEVELOPMENT 9/2/US DATE march picarde DIRECTOR

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, 2. Place 3/4' to 11/2' stone, 4'-6' thick on the grate to secure the fabric and

GEUTEXTILE CLASS E

MAX. DRAINAGE AREA = 1/4 ACRE

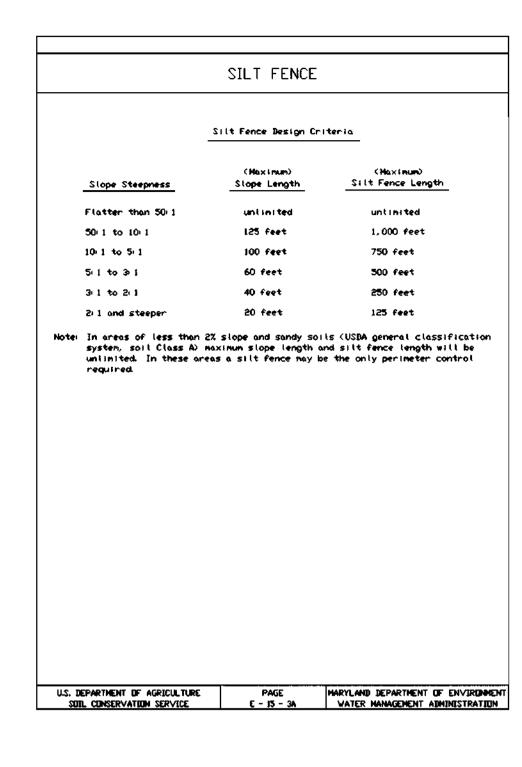
-WIRE TIES

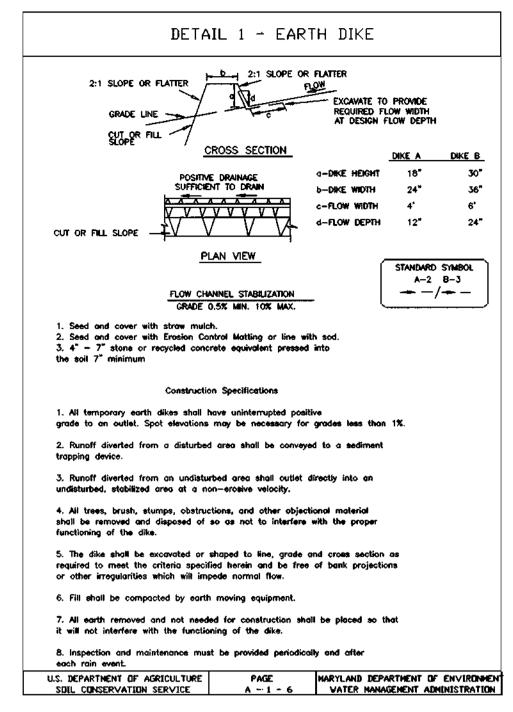
-6' OVERLAP

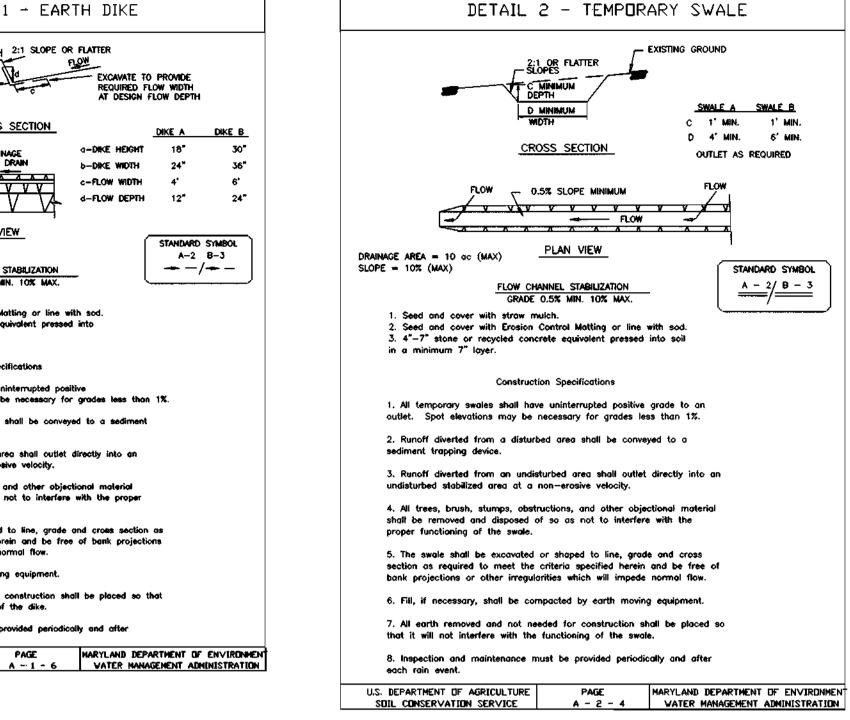
has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6' minimum will be required.

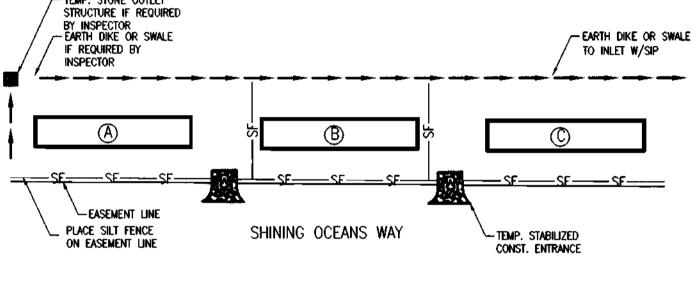
SDP. DS-037

DETAIL 22 - SILT FENCE









INSURE THAT EARTH DIKE OR SWALES WITH TEMPORARY STONE OUTLET STRUCTURES ARE INSTALLED AT THE HIGH & LOW ENDS AND TO THE REAR OR FRONT (DEPENDING UPON DRAINAGE FLOW) OF THE LOT

WHICHEVER GROUP IS TO BE CONSTRUCTED FIRST CAN BE DONE SO WITHOUT ANY MODIFICATIONS.

. IF THE GROUPS ARE CONSTRUCTED 'A' THAN 'B' THAN 'C', NO MODIFICATIONS WILL HAVE TO BE

• IF GROUP 'C' IS CONSTRUCTED AND STABILIZED FIRST, EARTH DIKE OR SWALE AND T.S.O.S. WILL

HAVE TO BE INSTALLED ON THE LOW SIDE OF GROUP 'B'. If GROUP 'B' IS CONSTRUCTED AND STABILIZED NEXT OR FIRST, THEN AN EARTH DIKE OR SWALE

AND T.S.O.S. WILL HAVE TO BE INSTALLED ON THE LOW SIDE OF GROUP 'A'.

• IF EARTH DIKE IS EXISTING, IT IS TO BE BROKEN AND THE T.S.O.S. IS TO BE INSTALLED. • A CLEAN WATER EARTH DIKE OR SWALE AND T.S.O.S. MAY BE NECESSARY ON THE UPHILL SIDE OF A PROPOSED LOT IF THE DRAINAGE AREA TO THE PROPOSED GROUP IS GREATER THAN ½ ACRE.

NOTE: IF HOMES ARE TO BE BUILT IN A DRAINAGE AREA CONTROLLED BY DIKES AND TRAP / BASIN, BREAK THE DIKE IN HALF ACRE DRAINAGE INCREMENTS ABOVE THE FIRST GROUP TO BE BUILT.

NOTE: IF HOMES ARE BUILT ON LOTS WITHOUT EARTH DIKES / SWALES, THEN SILT FENCE SHALL BE INSTALLED AS NECESSARY AROUND THE PERIMETER OF THE GROUP TO PREVENT ANY SEDIMENT LADEN MATERIAL FROM LEAVING THE LOT.

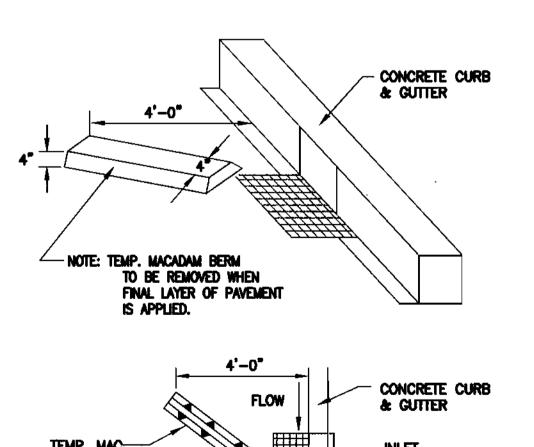
APPROVED: DEPARTMENT OF PLANNING AND ZONING

ĆHIEF, DEVELOPMENT ÉNGINEERING DIVISION

#### SEDIMENT CONTROL FOR TOWN HOUSE CONSTRUCTION

NOT TO SCALE

9 plus DATE



MACADAM BERM DETAIL

#### SEQUENCE OF CONSTRUCTION

SWALE A SWALE B C 1'MIN. 1'MIN. D 4° MIN. 6° MIN.

OUTLET AS REQUIRED

STANDARD SYMBOL

A - 2/B - 3

<del>---</del>/----

1. OBTAIN ALL NECESSARY PERMITS. CONTACT THE HOWARD COUNTY OFFICE OF INSPECTIONS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY WORK. CONTACT MISS UTILITY. 2. CLEAR AND GRUB ONLY AREAS REQUIRED FOR INSTALLATION OF SEDIMENT CONTROLS. 3. INSTALL ALL PERIMETER SEDIMENT AND EROSION CONTROL DEVICES PER PLAN. INSTALL STONE 5 DAYS CONSTRUCTION ENTRANCE AS SHOWN ON THESE PLANS. 4. WITH SEDIMENT CONTROL INSPECTOR'S APPROVAL, CLEAR AND GRUB SITE. PROVIDE TEMPORARY

STABILIZATION AS REQUIRED BY INSPECTOR. 5. BEGIN ROUGH GRADING OF SITE, AS SHOWN ON THESE PLANS, INCLUDING FORMATION OF THE

6. BEGIN INSTALLATION OF SANITARY SEWERS AS SHOWN ON THE SANITARY SEWER PLAN, AND SANITARY SEWER PROFILE PLAN.

7. BEGIN INSTALLATION OF STORM DRAINAGE, AS SHOWN ON THE SITE DEVELOPMENT PLANS, AND THE STORM DRAIN PROFILE PLAN. STRUCTURES 1-1, 1-3, 1-5, 1-7, 1-9, 1-11, 1-13, 1-15, 1-17, I-19, I-21, I-23, AND I-25 SHOULD BE CONSTRUCTED PRIOR TO IMPLEMENTING THE ROUGH GRADING IN THE AREA OF THESE INLETS. THE PROPOSED "K" INLET NOTCH ELEVATIONS SHALL BE SET TEMPORARILY TO THE ELEVATIONS SHOWN ON THESE PLANS. PLACE INLET PROTECTION AT INLETS UPON COMPLETION.

8. BEGIN INSTALLATION OF THE WATER MAIN AND SERVICES, AS SHOWN ON THE WATER MAIN PLAN AND PROFILE PLANS.

9. BEGIN INSTALLATION OF THE REMAINING UNDERGROUND UTILITIES.

10. BEGIN BUILDING CONSTRUCTION PROVIDING EROSION AND SEDIMENT CONTROLS PER SEDIMENT CONTROL FOR TOWNHOUSE CONSTRUCTION DETAIL (SEE SHEET THIS SHEET).

AND ANY OTHER FEATURES AS SHOWN ON THESE PLANS. AFTER THE BASE COURSE IS COMPLETED, 60 DAYS INSTALL SILT FENCE AT THE EASEMENT LINE ON BOTH SIDES OF WARM WAVES LANE, SHINING OCEANS WAY AND SECRET WAVES DRIVE FOR THEIR ENTIRE LENGTHS. REMOVE THE CURB INLET PROTECTION (CIP) AND AT-GRADE INLET PROTECTION (AGIP) FROM INLETS LOCATED IN THE STREET THIS SHEET). FOR INLETS I-1, I-3, I-5, I-7, I-9, I-11, I-13, I-15, I-17, I-19, I-21, I-23, AND 1-25.- ADJUST THE GRATE ELEVATION TO THE FINAL GRADE UTILIZING BRICK AND MORTAR. COMPLETE THE FINAL GRADING TO EACH INLET AND RE-INSTALL INLET PROTECTION.

12. COMPLETE THE FINAL STREET PAVING, AS THE SURFACE COURSE PAVING PROGRESSES, REMOVE THE TEMPORARY MACADAM BERMS. 10 DAYS

13. PROVIDE FINAL PERMANENT STABILIZATION FOR ALL DISTURBED AREAS. 14. WITH SEDIMENT CONTROL INSPECTOR'S APPROVAL, REMOVE ANY REMAINING INLET PROTECTION AND FLUSH THE STORM DRAIN SYSTEM. REMOVE ANY REMAINING SEDIMENT.

15. UPON SEDIMENT CONTROL INSPECTOR'S APPROVAL, REMOVE ANY REMAINING SEDIMENT CONTROL DEVICES AND PROVIDE PERMANENT STABILIZATION OF ANY REMAINING DISTURBED AREAS.

A CONTRACTOR OF THE CONTRACTOR

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS - NATURAL RESTURCES CONSERVATION SERVICE THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT THE HOWARD SOIL CONSERVATION DISTRICT.

#### ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

Pir-Mulle

5.23.05 SIGNATURE OF ENGINEER - PRINTED, NAME BELOW PIERO V. MELLIS, P.E. #21875

DEVELOPER'S CERTIFICATE

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



GWNER/DEVELOPER/APPLICANT FAX NO.: (410) 480-0543 B. DAYTIME TELEPHONE: (410) 480-2467 NAME: <u>BRIAN KNAUFF</u> COMPANY: THE RYLAND GROUP, INC D. ADDRESS: <u>6011 UNIVERSITY BOULEVARD, SUITE 260</u> CITY: ELLICOTT CITY STATE: MD ZIP: 21043

C-16



20 DAYS

### MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 14280 PARK CENTER DRIVE, SUITE A

LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395 SNOWDEN RIVER BUSINESS PARK

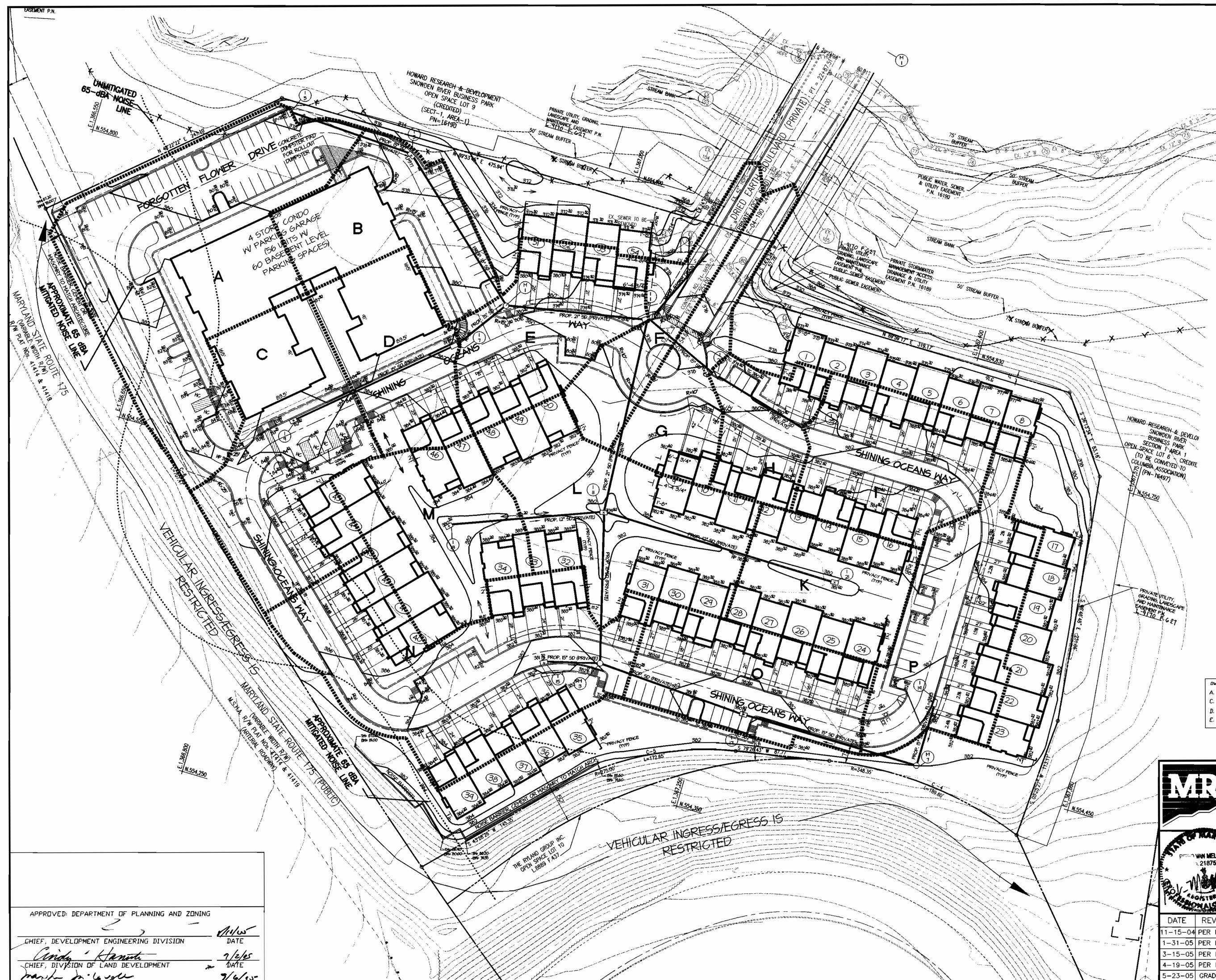
SECTION 1 AREA 1, PARCEL D-2

O WAN MELLITS D. 21875

KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING SEDIMENT & EROSION CONTROL **NOTES & DETAILS** 

TAX MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385) ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

DATE | REVISIONS 12735.02 JOB NO: 1-15-04 PER HRD COMMENTS & HO. CO. COMMENTS 1" = 401-31-05 PER HRD COMMENTS & HO. CO. COMMENTS 08/27/04 3-15-05 PER HOWARD COUNTY COMMENTS DRAWN BY: 4-19-05 PER HOWARD COUNTY COMMENTS DESIGN BY: 5-23-05 GRADING & UTILITIES PER DESIGN ENGINEER SHEET: 16 OF ... 19



## AREA AND 'C' FACTOR TABULATION

INLET #	ZONING	SUBAREA	AREA	"C" FACTOR
I—1	NT	£	0.46	0.72
1–3	NT	B	0.47	0.72
1–5	NT	A	1.12	0.72
i-7	NT	D	0.39	0.72
1-9	NT	c	0.77	0.72
I—11	NT	L	0.67	0.72
I-13	NT	М	0.38	0.72
I-15	NT	N	1.05	0.72
I-17	NT	0	0.42	0.72
l-19	NT	P	0.67	0.72
I21	NT	К	0.40	0.72
1-23	NT	н	0.25	0.72
i-25	NT	1	0.48	0.72

#### NOTE:

MASS GRADING WAS PERFORMED BY THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION AS DESIGNED BY GUTSCHICK, LITTLE & WEBER, P.A., CONSTRUCTION PLANS F-01-142 DATED REV. 3/28/03. SOIL GROUPS WERE DETERMINED TO CONSIST PRIMARILY OF HYDROLOGIC GROUPS B AND C AS STATED BY GLW'S STORMWATER MANAGEMENT REPORT FOR SNOWDEN RIVER BUSINESS PARK DATED JUNE, 2001. DRAINAGE FROM THE PRIVATE PORTION OF DRIED EARTH BLVD. FLOWS INTO EXISTING INLETS 1-102 AND 1-103 TO THE NORTH OF THE EXISTING TEE TURNAROUND AND TO EXISTING INLETS 1-104 AND 1-105 TO THE SOUTH OF THE PROPOSED TEMPORARY DEAD END. THE DRAINAGE AREAS TO THESE INLETS AS DESIGNED BY GLW, HAVE BEEN SLIGHTLY ALTERED. HOWEVER, THE DEVIATIONS ARE NEGLIGIBLE.

### 04/13/05

DWNER/DEVELOPER/APPLICANT FAX NO.: (410) 480-0543

A. NAME: BRIAN KNAUFF B. DAYTIME TELEPHONE: (410) 480-2467

C. COMPANY: THE RYLAND GROUP, INC.

. COMPANY: THE RYLAND GROUP, INC.

D. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260

E. CITY: ELLICOTT CITY STATE: MD ZIP: 21043

# MORRIS & RITCHIE ASSOCIATES, INC.

SHEET: 17 OF 19

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

14280 PARK CENTER DRIVE, SUITE A LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395

> SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING

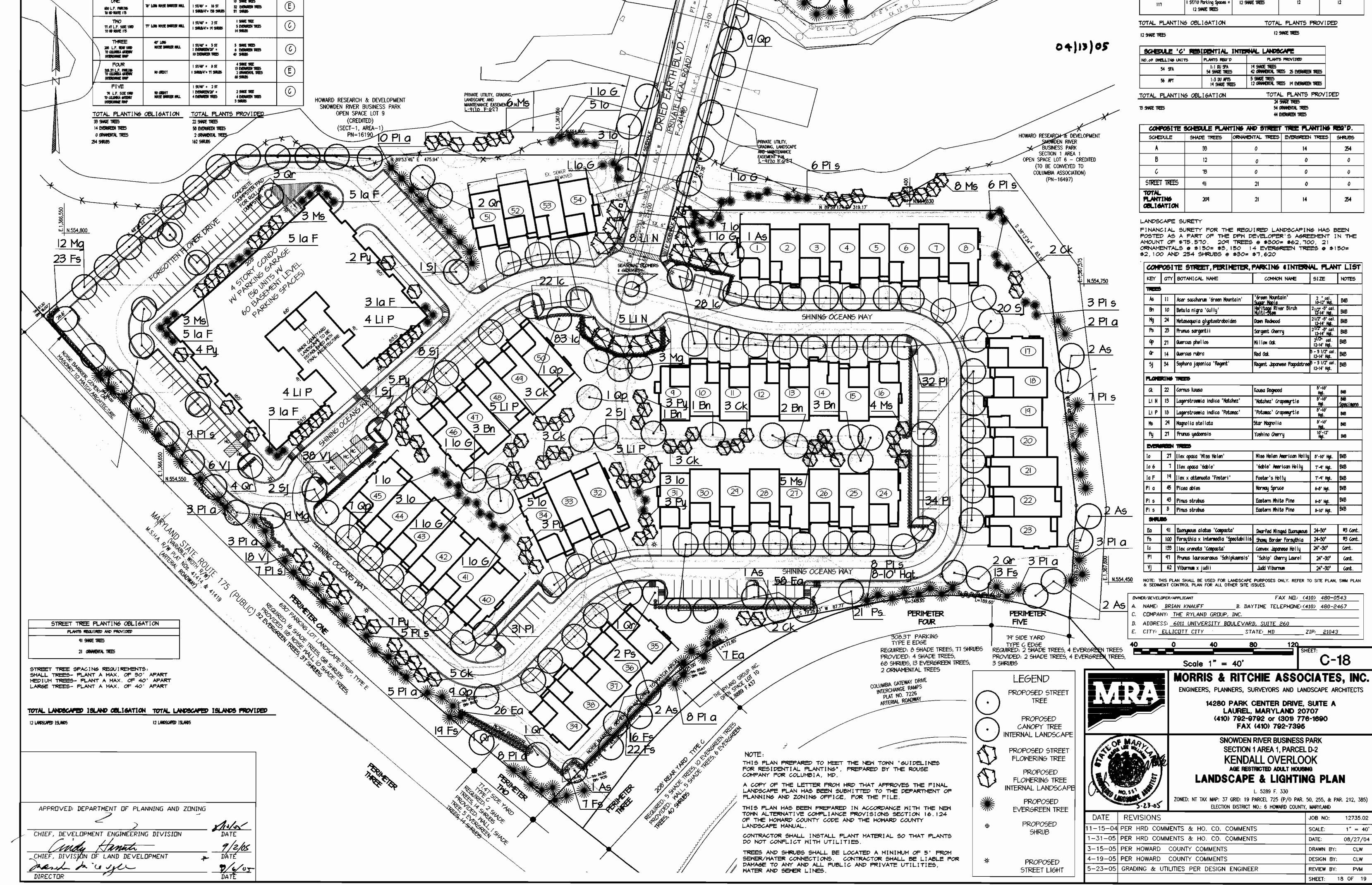
AGE RESTRICTED ADULT HOUSING
DRAINAGE AREA MAP

L. 5289 F. 330

MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385)

ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

	REVISIONS	JOB NO:	12735.02
4	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	1" = 40'
5	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
5	PER HOWARD COUNTY COMMENTS	DRAWN BY:	HRW
5	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KDH
5	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM



SCHEDULE 'A' PERIMETER LANDSCAPE EDGE

PERINETER & LENGTH

PLANTS REQ'D PLANTS PROVIDED EDGE TYPE

PROPOSED TREES ON PARCEL

SDP-05-037

SCHEDULE 'B' PARKING LOT INTERNAL LANDSCAPE

ISLANDS REQ'D. ISLANDS PROV'D.

IF NECESSARY, THE CONTRACTOR MAY SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. FINISHED PLANTING BEDS SHALL BE GRADED SO AS NOT TO IMPEDE DRAINAGE AWAY FROM BUILDINGS.

ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF NURSERY STOCK OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

TREES AND SHRUBS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED, DENSELY FOLIATED BRANCHES, AND VIGOROUS, FIBROUS ROOT SYSTEMS

TREES AND SHRUBS SHALL BE FRESHLY DUG AND NURSERY GROWN. THEY SHALL HAVE BEEN GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT OR PROPERLY ACCLIMATED TO CONDITIONS OF THE LOCALITY OF THE PROJECT.

4. TREES AND SHRUBS SHALL BE FREE FROM DEFECTS AND INJURIES AND CERTIFIED BY APPROPRIATE FEDERAL AND STATE AUTHORITIES TO BE FREE OF DISEASES AND INSECT INFESTATIONS.

5. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) FULL YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION AGAINST DEFECTS UNSATISFACTORY GROWTH, DISEASE OR DEATH. UNSATISFACTORY, UNHEALTHY, DYING OR DEAD PLANT MATERIAL (IN THE OPINION OF THE LANDSCAPE ARCHITECT) SHALL BE REPLACED WITH THE SAME SIZE AND SPECIES.

6. IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO ADEQUATELY AND PROPERLY MAINTAIN THE LANDSCAPED AREAS, WHICH SHALL INCLUDE WATERING, CLEANING OF WEEDS AND DEBRIS, PRUNING AND TRIMMING, REPLACEMENT OF DEAD OR DISEASED PLANTINGS, AND FERTILIZING TO MAINTAIN HEALTHY GROWTH.

7. THE LANDSCAPE CONTRACTOR SHALL STAKEOUT PLANT LOCATIONS IN THE FIELD. THE LANDSCAPE ARCHITECT OR HIS REPRESENTATIVE SHALL OBSERVE THESE LOCATIONS PRIOR TO COMMENCING PLANT PIT EXCAVATION. THE LANDSCAPE CONTRACTOR SHALL MAKE ANY ADJUSTMENTS AS REQUESTED BY THE LANDSCAPE ARCHITECT.

8. ALL PLANT SAUCERS AND PLANT BEDS SHALL BE MULCHED WITH DOUBLE SHREDDED HARDWOOD MULCH, A MINIMUM OF 3" IN DEPTH.

9. NO SUBSTITUTIONS OF PLANT MATERIAL SHALL BE PERMITTED WITHOUT WRITTEN AUTHORIZATION OF THE LANDSCAPE ARCHITECT OR HIS REPRESENTATIVE. THIS SHALL APPLY TO SUBSTITUTIONS OF SPECIES, SIZE AND QUANTITY.

10. THE LANDSCAPE CONTRACTOR SHALL INSTALL SHREDDED HARDWOOD BARK MULCH TO A DEPTH OF 3" UNDER AND SURROUNDING ALL NEW LANDSCAPED MASS PLANTING AREAS TO PROVIDE A UNIFORM AND CONTINUOUS SURFACE AND APPEARANCE BETWEEN AND AROUND ALL PLANT MATERIAL, BUILDING LINES AND PAVED AREAS. IN GENERAL, THIS PERTAINS TO ALL PLANT MATERIAL THAT IS PLANTED CLOSER THAN SIX (6) FEET CENTER TO CENTER. IT IS THE INTENT OF THIS CONTRACT TO INSTALL LANDSCAPE MAT UNDER THE ENTIRE AREA OF SHREDDED BARK MULCH.

11. TREES SHALL BE LOCATED: 1. A MINIMUM OF 5' FROM SEMER/MATER CONNECTIONS. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC AND PRIVATE UTILITIES, WATER AND SEWER LINES. 2. TREES SHALL BE LOCATED 3' FROM SIDEWALKS.

12. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

13. CONTRACTOR SHALL SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. FINISHED PLANTING BEDS SHALL BE graded so as not to impede drainage away from structures.

14. TREE STAKING AND GUYING SHALL BE DONE PER DETAILS. CONTRACTOR SHALL ENSURE THAT TREES REMAIN PLUMB AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.

15. ALL TREE PITS, SHRUB BEDS, AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS.

16. CROWN OF ROOT BALL SHALL BE HIGHER (AFTER SETTING) THAN ADJACENT SOIL.

SHADE TREES: HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT BALL TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH, SINGLE TRUNK TREES SHALL BE FREE OF 'V' CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.

18. CONTRACTOR MUST CONTACT THE OWNER AT LEAST TEN WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTION(S). CONTRACTOR MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASON.

19. TREES & SHRUBS SHALL BE PLANTED DURING ACCEPTABLE PLANTING SEASONS: BETWEEN MARCH 15 AND MAY 15 AND BETWEEN AUGUST 15 AND NOVEMBER 15 OR AS APPROVED BY OWNERS REPRESENTATIVE.

ALL TREE STAKING AND GUYING SHALL BE REMOVED BY THE CONTRACTOR AFTER THE TREES ARE ESTABLISHED.

21. SEEDED AREAS THAT WASH OUT MUST BE FILLED AND GRADED AS NECESSARY AND THE RESEEDED. SOME TYPE OF ANCHORING METHOD SHOULD THEN BE USED TO HOLD SEED AND MULCH IN PLACE; THIS IS ESPECIALLY IMPORTANT AROUND WATER COURSED, IN SWALES AND AREAS OF CONCENTRATED FLOWS, AND ON SLOPES.

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

23. QUANTITIES SHOWN ON THE PLANT LIST ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY AND ARE NOT GUARANTEED TO BE ACCURATE. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLAN AND QUANTITIES SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN SHALL APPLY.

24. ALL PLANT BEDS SHALL BE CONTAINED WITH A SPADED EDGE UNLESS OTHERWISE NOTED

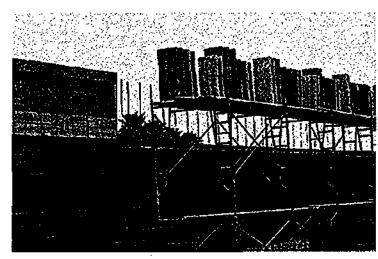
25. DEBRIS, RUBBISH & SUBSOIL SHALL BE CLEANED & REMOVED FROM THE SITE UPON COMPLETION OF PLANTING.

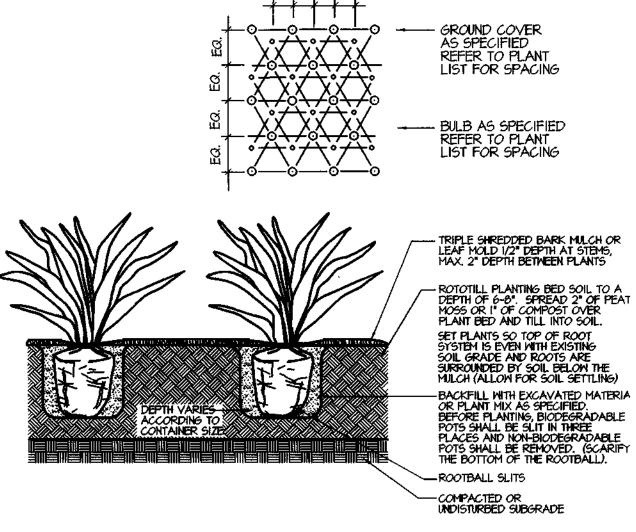
APPROVED: DEPARTMENT OF PLANNING AND ZONING 1/10/0--CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE Anda Hanute DATE CHIEF, DIV**X**SION OF LAND DEVELOPMENT MANUL L'age DATE

#### **NOISE BARRIER WALL DETAILS**

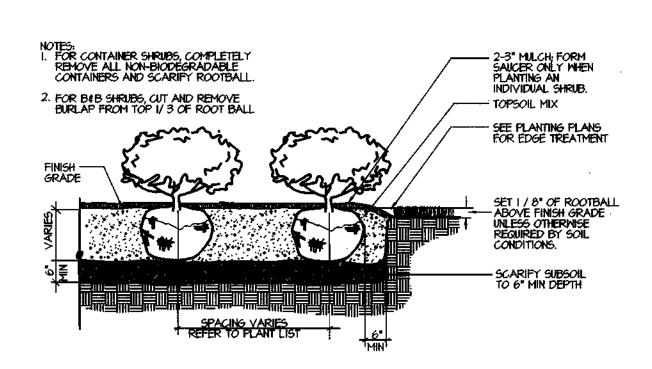
- THE NOISE BARRIER WALL IS TO BE A CONCRETE MASONRY TYPE CONSTRUCTION USING A CONTINUOUS SPREAD FOOTING AS A BASE.
- THE BARRIER FINISH IS TO BE DETERMINED BY THE OWNER.
- THE BARRIER HEIGHT IS TO BE A MINIMUM OF FIVE (5) FEET AS RECOMMENDED BY THE ENGINEER'S NOISE STUDY DATED MARCH 17, 2004 AND PREPARED BY STAIANO ENGINEERING, INC.
- CONFORMITY WITH LOCAL CODE REQUIREMENTS REGARDING NOISE RESTRICTIONS IS REQUIRED.



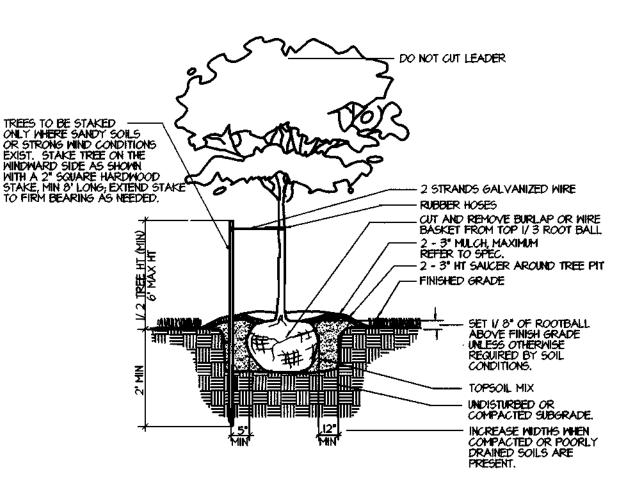




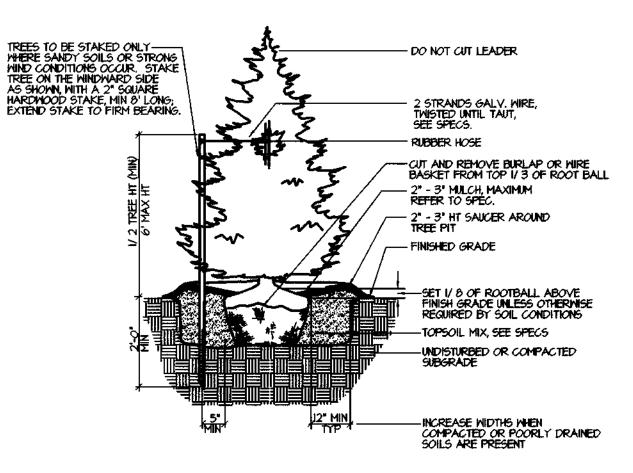
PERENNIAL PLANTINGS & PERENNIAL/GROUNDCOVER SPACING NOT TO SCALE



SHRUB BED PLANTING NOT TO SCALE



DECIDUOUS TREE PLANTING NOT TO SCALE



EVERGREEN TREE PLANTING NOT TO SCALE

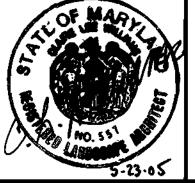
FAX ND: (410) 480-0543 DVNER/DEVELOPER/APPLICANT A. NAME: BRIAN KNAUFF B. DAYTIME TELEPHONE: (410) 480-2467 C. COMPANY: THE RYLAND GROUP, INC. D. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260 E. CITY: ELLICOTT CITY \_\_\_\_ STATE: MD \_ ZIP:<u> 21043 </u>

C-19

### MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

14280 PARK CENTER DRIVE, SUITE A LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395



SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING LANDSCAPE DETAILS

**SNOWDEN RIVER BUSINESS PARK** 

L. 5289 F. 330 TAX MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385) ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO:	12735.02
11-15-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	1" = 40'
1-31-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
3-15-05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	CLW
4-19-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	CLW
5-23-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
		SHEET: 19 OF 19	

ENTRANCE PIER TO MEET ALL COUNTY CODES. OWNER TO APPROVE STAKEOUT IN FIELD PRIOR TO CALL "MISS UTILITY", 48 HRS. PRIOR TO CONSTRUCTION FOR UNDERGROUND UTILITY LAYOUT. TPRECAST CAP STONE OR BRICK VENEER (TO BE SELECTED BY OWNER) "MATERIAL TO MATCH ADJACENT ARCHITECTURE --- 12"x12" SQUARE METAL SIGN WALL TIES EVERY OTHER CMU COURSE -FILL C.M.U. CORE SOLID WITH GROUT CMU BLOCK - FILL CELLS WITH 3,000 PSI GROUT AT REINFORCING -FINISH GRADE CARRY STONE MIN. 6" BELOW FINISHED GRADE \_\_ CONCRETE FOOTING 3500 PSI ENTRANCE PIER DETAIL SCALE: 1/2"=1' -0"

parisher to be again

REVIEW BY:

SHEET: 14 OF 19

5-23-05 GRADING & UTILITIES PER DESIGN ENGINEER

3-24-06 REVISED PRIVATE SANITARY SEWER

SDP-05-037

SHEET: 13 OF 19

3-24-06 REVISED PRIVATE SANITARY SEWER

SMH-17 | 377.00 | 367.59 --- | 365.60 STD. SAN MANHOLE, HC DETAIL STD. DETAIL G5.01

REVIEW BY: PVM

SHEET: 12 OF 19

5-23-05 GRADING & UTILITIES PER DESIGN ENGINEER

3-24-06 REVISED PRIVATE SANITARY SEWER

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554,835

PVC SDR-35

1,861.71

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50P-05-037

SHEET: 3 OF 19

3.24.06 REVISED PRIVATE SANITARY SEWER

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area of the same

SHEET: 2 OF 19

# SITTE IDIEVEILOPMIENT IPILAN SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1

PARCEL D-2

IKIENIDAILIL OVERILOOK

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

> SNOWDEN RIVER BUSINESS PARK

OPEN SPACE LOT 6

(CREDITED)

PARCEL C-1

L EX. STREAM-

EX. 12" W - (INTERMITTENT)

COLUMBIA GATEWAY DRIVE (PUBLIC)

INFERCHANGE RAMPS

BUSINESS PARK

OPEN SPACE LOT 10

(ÉREDITED)

24-3858-D

EX. 8" S CONTRACT No.

ANNETTA GARDENS

SECTION TWO

P.B. 8 PLAT NO. 67

ANNETTA GARDENS

SECTION ONE P.B. 8 PLAT NO. 20

24-3858-D

SNOWDEN RIVER

BUSINESS PARK

OPEN SPACE LOT 6

(CREDITED)

SNOWDEN RIVER

BUSINESS PARK

OPEN SPACE LOT 8

PARCEL E-1

24-3858-D

CONTRACT No

24-3858-D

L EX. STREAM

(PN. 17315, 17317, 17318)

(PRIVATE ROAD)

(CREDITED)

PARCEL B

PROPERTY OF THE HOWARD RESEARCH

AND DEVELOPMENT CORPORATION

L.5289 F. 330

BUSINESS PARK

OPEN SPACE LOT 9

PARCEL D-2

(CREDITED)

#### **△ BENCHMARKS** BENCHMARK # 37GB

HOWARD COUNTY GEODETIC SURVEY CONTROL N 553,452.828 E 1,368,503.19 ELEVATION=325.233' BENCHMARK # 37GC HOWARD COUNTY GEODETIC SURVEY CONTROL

N 555,250.797 E 1,370,946.37 ELEVATION=331.192 BENCHMARK # 37DA HOWARD COUNTY GEODETIC SURVEY CONTROL N 558,667.518 E 1,366,857.48 ELEVATION=379.786'

SHEET NDEX

- C-1 TITLE SHEET
  C-2 SITE DEVELOPMENT PLAN C-3 SITE DEVELOPMENT PLAN C-4 ARCHITECTURAL FOOTPRINTS AND ELEVATIONS C-5 SITE DETAILS C-7 ROAD PROFILES
- C-8 ROAD PROFILES C-9 UTILITY PLAN C-10 STORM DRAIN PROFILES C-11 STORM DRAIN PROFILES
- C-12 SANITARY PROFILES C-13 SEDIMENT & EROSION CONTROL PHASE I C-14 SEDIMENT & EROSION CONTROL PHASE I C-15 SEDIMENT & EROSION CONTROL NOTES & DETAILS C-16 SEDIMENT & EROSION CONTROL NOTES & DETAILS
- C-17 DRAINAGE AREA MAP C-18 LANDSCAPE PLAN C-19 LANDSCAPE DETAILS

CENTER CRÓ(SSEVG SHOPPING CENTER AUTO !! SEMMOES' PARK COLUMBIA COMPORATE PARK COLUMBIA **BUSINESS** HESTURANT PARK PAFK //SHOPPING COLUMBIA CATEWAY DR. CENTER COMMERCE SNOWDEN SOUARE COLUMBIA -SHOPPING CATEWAY CENTER

DOSSA

/ SHOFFEVG \

> SQUARE

SCALE: 1'' = 2,000'COPYRIGHT ADC THE MAP PEOPLE PERMITTED USE NO. 20602149 MAP NO. 16 GRIDS E,10

#### SITE ANALYSIS

- TOTAL PROJECT AREA: PARCEL D-2 9.8707 AC RECORDED UNDER PLAT NUMBER: F-04-190
- 2. PRESENT ZONING PARCEL D-2: NT-EMPLOYMENT CENTER, INDUSTRIAL (FDP 239).
- 3. TOTAL NUMBER OF UNITS PROPOSED: (DENSITY PERMITTED UNDER COLUMBIA AUTHORIZATION PLAN) 17-30'x70' SFA UNITS 37-30'x56' SFA UNITS TOTAL: 54 SFA UNITS (UNITS 1-54) 56-CONDO UNITS TOTAL: 110 UNITS
- NUMBER OF PARKING SPACES REQUIRED: FROM APPROVED FDP-239: 1 SPACE PER 3 LIVING UNITS (1 SPACE/3 UNITS)  $\times$  110 UNITS = 37 SPACES ZONING REGULATIONS:
  - 2.0 SPACES PER UNIT (2 SPACES/1 UNIT) x 110 UNITS = 220 SPACES 0.5 SPACES PER ÚNIT FOR OVERFLOW  $(0.5 \text{ SPACES}/1 \text{ UNIT}) \times 110 \text{ UNITS} = 55 \text{ SPACES}$ TOTAL REQUIRED PARKING SPACES = 275 SPACES
- NUMBER OF PARKING SPACES PROVIDED: SFA GARAGE:
- ONE CAR: 11 SFA UNITS  $\times$  1 SPACE = 11 SPACES 43 SFA UNITS  $\times$  2 SPACES = 86 SPACES 11 + 86 = 97 SPACES
- SFA DRIVEWAY: 11 SFA UNITS HAVE 1 PARKING SPACE (TOTAL=11) 43 SFA UNITS HAVE 2 PARKING SPACES(TOTAL=86)
- 54 SFA UNITS WITH A TOTAL OF 97 DRIVEWAY SPACES 60 SPACES PROVIDED IN PARKING GARAGE 70 SURFACE PARKING SPACES VISITOR: 41 COMMON PARKING SPACES

TOTAL PROVIDED PARKING SPACES = 365 SPACES TOTAL SQUARE FOOT BUILDING COVERAGE/PERCENTAGE OF COVERAGE:

30x70 SFA UNITS (17) 35.700 SF 30×56 SFA UNITS (37) 62,160 SF

56-CONDO UNITS 25,700 SF TOTAL BUILDING AREA 123,560 SF TOTAL PARCEL AREA 429,967.69 SF TOTAL BUILDING COVERAGE 28.74%

H.R.D. APPROVALS - CONCEPTUAL SITE PLAN. SHEET 4. - PRELIMINARY LANDSCAPE PLAN. SHEET 19.

PERMIT INFORMATION CHART Subdivision Name Section/Area Parcel No. SNOWDEN RIVER BUSINESS PARK | SECTION 1/ AREA 1 | D-2 & PART OF E-1 Grid # Zoning Tax Map No Elect Distr. | Census Tract 6 6067.03 17691-17687 19 Sewer Code 3450000

DWNER/DEVELOPER/APPLICANT

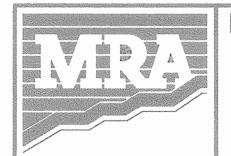
A. NAME: BRIAN KNAUFF

FAX NO.: (410) 480-0543 B. DAYTIME TELEPHONE (410) 480-2467

C. COMPANY: THE RYLAND GROUP, INC

D. ADDRESS: <u>6011 UNIVERSITY BOULEVARD, SUITE 26</u>0 STATE: MD

ZIP: 21043

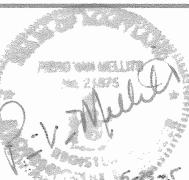


#### MORRIS & RITCHIE ASSOCIATES, INC ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

14280 PARK CENTER DRIVE, SUITE A

LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395

SNOWDEN RIVER BUSINESS PARK



SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING TITLE SHEET

L. 5289 F. 330 ZONED: NT TAX MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385) ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

DAIL	REVISIONS	JOB NO:	12735.02
1-15-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	AS SHOWN
-31-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
-15-05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	HRW
-19-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KDH
-23-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
-24.06	REVISED PRIVATE SANITARY SEWER	SHEET: 1	OF 19

DOCUMENT RECORDING REFERENCES

1. H.O.A. ARTICLES OF INCORPORATION. FILING NUMBER: 1000361990866951

2. SHARED ACCESS/PARKING EASEMENT ON DRIED EARTH BLVD. F-05-175 / 17681-17687

3. MAINTENANCE AGREEMENT FOR THE PRIVATE SECTION OF DRIED EARTH BLVD. LIBER 8983 / FOLIO 420

4. GRADING AND LANDSCAPE MAINTENANCE EASEMENTS. LIBER 9170 FOLIO 627

5. PLAT RECORDING NO. F-05-175 / 17681-17687

6. AGE RESTRICTION DOCUMENTS. LIBER 934 FOLIO [3] 7. SNOWDEN OVERLOOK COMMUNITY ASSOC. INC. DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS L 8983 F.426, L.9378 F.271 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND MSHA STANDARDS, IF APPLICABLE.

THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING AYS PRIOR TO THE START OF WORK.

. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT (800) 257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL

TREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT ALL PLAN DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED.

THE EXISTING TOPOGRAPHY AND BOUNDARY INFORMATION WERE PROVIDED BY PLANS PREPARED BY GUTSCHICK LITTLE & WEBER, P.A.

THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM, HOWARD COUNTY MONUMENTS NOS. 37GB, 37GC AND 37DA WERE USED FOR THIS PROJECT.

EXISTING WATER IS PUBLIC (CONTRACT NO: 24-3858-D, LITTLE PATUXENT)

EXISTING SEWER IS PUBLIC (CONTRACT NO: 24-3858-D, LITTLE PATUXENT)

D. STORMWATER MANAGEMENT FOR THIS SITE WAS INCLUDED IN THE DESIGN FOR THE SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D', & LOTS 1 THRU 5. RAINAGE FROM PARCEL C-1 IS TREATED IN THREE FACILITIES. FACILITY 1 IS A DETENTION FACILITY (DRY POND) LOCATED ON OPEN SPACE LOT 9, WHICH IS TO BE DEDICATED TO THE COLUMBIA ASSOCIATION FOR PUBLIC MAINTENANCE. FACILITY 8 IS THE SAME AS FACILITY 1, LOCATED ON OPEN SPACE LOT 8. FACILITY 2 IS A DETENTION/RETENTION FACILITY (WET POND) ON OPEN SPACE LOT 6 TO BE CONVEYED TO COLUMBIA ASSOCIATION AND PUBLICLY MAINTAINED. SUBDIVISION PLAN FILE NUMBER F-01-142.

. EXISTING UTILITY INFORMATION WAS PROVIDED BY PLANS PREPARED BY GUTSCHICK, LITTLE & WEBER, P.A. APPROVED BY HOWARD COUNTY, DPZ REFERENCE NUMBER F-01-142 AND ONTRACT NO. 24-3858-D.

2. THERE ARE NO FLOODPLAINS ON THIS SITE.

3. THERE ARE NO WETLANDS ON THIS SITE.

GENERAL NOTES

14. THE TRAFFIC STUDY PERFORMED BY WELLS AND ASSOCIATES APPROVED FOR THE FINAL PLAN WAS UPDATED FOR THIS PROJECT.

FDP-239 - SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1 FINAL DEVELOPMENT PLAN (ALLOWS USE BY RIGHT) F-01-142 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D' & LOTS 1 THRU 5 RECORDED AS PLAT NO. 15182 THRU 15188

F-01-142 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D' & LOTS 1 THRU 5 CONSTRUCTION PLAN F-04-15 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A-1', 'B-1', 'C-1', 'D-1', AND E & LOTS 6 THRU 10 RECORDED AS PLAT NO. 16185 THRU 16191 (RESUBDIVISION OF PLATS 15182 THRU 15188)

F-04-73 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'C-1' AND E & LOTS 6 RECORDED AS PLAT NO. 16493 THRU 16498 (RESUBDIVISION OF PLATS 16185 THRU 16191)

F-04-190 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A-2', 'D-2', & 'E-1' AND OPEN SPACE LOT 6 CONTRACT NO. 24-4235-D PROPOSED PUBLIC WATER AND SEWER PLANS

WP-03-110 - WAIVER PETITION FOR REDUCTION OF MINIMUM PUBLIC ROAD FRONTAGE F-05-175 - PN 17681-17687

7. TO THE BEST OF OUR KNOWLEDGE AND PER PUBLIC RECORD, NO CEMETERIES OR BURIAL GROUNDS EXIST ON-SITE.

18. SPOT ELEVATIONS SHOWN FOR CURB ARE BOTTOM OF CURB UNLESS OTHERWISE NOTED.

9. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN ININTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN

20. TRASH COLLECTION FOR THE SFA UNITS WILL BE PRIVATE.

1. A GEOTECHNICAL STUDY WAS PREPARED BY GEO-TECHNOLOGY ASSOCIATES, INC. ON JANUARY 30, 2003.

22. THE CONTRACTOR SHALL TEST PIT ALL EXISTING UTILITIES AT LEAST FIVE (5) DAYS PRIOR TO STARTING ANY WORK SHOWN ON THESE DRAWINGS.

ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS

24. THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION BY VIRTUE OF THE FACT THAT IT IS PART OF THE COLUMBIA NEW TOWN, SUBDIVISION SECTION 16.1202(b)(1)(iv), A PUD APPROVED PRIOR TO 12/31/92.

25. ALL CURB RADII 5' UNLESS OTHERWISE NOTED.

6. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER HE FOLLOWING MINIMUM REQUIREMENTS:

A. WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE): B. SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/ TAR AND CHIP COATING (1-1/2" MIN.);

C. GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS; D. STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)

DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE; F. MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.

7. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$75,570.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.

28. THIS PLAN HAS BEEN PREPARED TO MEET THE NEW TOWN "GUIDELINES FOR RESIDENTIAL PLANTING", PREPARED BY THE ROUSE COMPANY FOR COLUMBIA, MD.

9. ARTICLES OF INCORPORATION FOR THE AGE RESTRICTED ADULT HOUSING COMMUNITY, THE KENDALL OVERLOOK CONDOMINIUM, INC, WERE RECORDED ON 12/16/03, RECORDING NUMBER(S) LIBER BO0592 FOLIO 1660. THE KENDALL OVERLOOK DECLARATIONS WERE RECORDED ON 2/10/04,

30. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION REGULATIONS.

1. WAIVER PETITION, WP-03-110, WAS APPROVED BY THE PLANNING DIRECTOR ON SEPTEMBER 4, 2003. THE PETITION WAIVES SECTIONS 16.120(c)(1) TO PERMIT THE REQUIRED MINIMUM PUBLIC ROAD FRONTAGE OF 60 FEET TO BE REDUCED TO ZERO FEET FOR COMMERCIAL, INDUSTRIAL OR APARTMENT PARCELS/LOTS, AND 16.121(e)(1) TO PERMIT THE REQUIRED MINIMUM PUBLIC ROAD FRONTAGE OF 40 FEET TO BE REDUCED TO ZERO FEET FOR OPEN SPACÉ LOTS. THE APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: SIDEWALKS AND STREET TREES SHALL BE PROVIDED ALONG BOTH SIDES AND THE CUL-DE-SAC OF THE PROPOSED PRIVATE ROAD

THE ENCLOSED SHA COMMENTS.

PRIVATE ACCESS AND MAINTENANCE EASEMENTS SHALL PROVIDE VEHICULAR ACCESS TO ALL OF THE PARCELS AND OPEN SPACE LOTS THAT WILL NOT HAVE FRONTAGE ON THE PUBLIC ROAD. 2. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE NEW TOWN ALTERNATIVE COMPLIANCE PROVISIONS SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD

COUNTY LANDSCAPE MANUAL. AGE RESTRICTION DOCUMENTS L-934 F-131 3. RECORDATION NUMBERS FOR ALL LEGAL DOCUMENTS PERTAINING TO THIS PARCEL WILL BE PROVIDED PRIOR TO APPROVAL

IS UNDERSTOOD THAT FINAL APPROVAL OF THIS SDP. IS SUBJECT TO THE DEVELOPER/OWNER FURNISHING THIS INFORMATION TO THE DEPARTMENT OF

34. THE PRIVATE LANDSCAPE AND MAINTENANCE EASEMENTS SHOWN ON THIS PLAN WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

35. PER SUBDIVISION SECTION 16.120(B)(9)(ii) THE REQUIRED STRUCTURE SETBACK FROM A PUBLIC WATER AND SEWER EASEMENT IS 10 FEET.

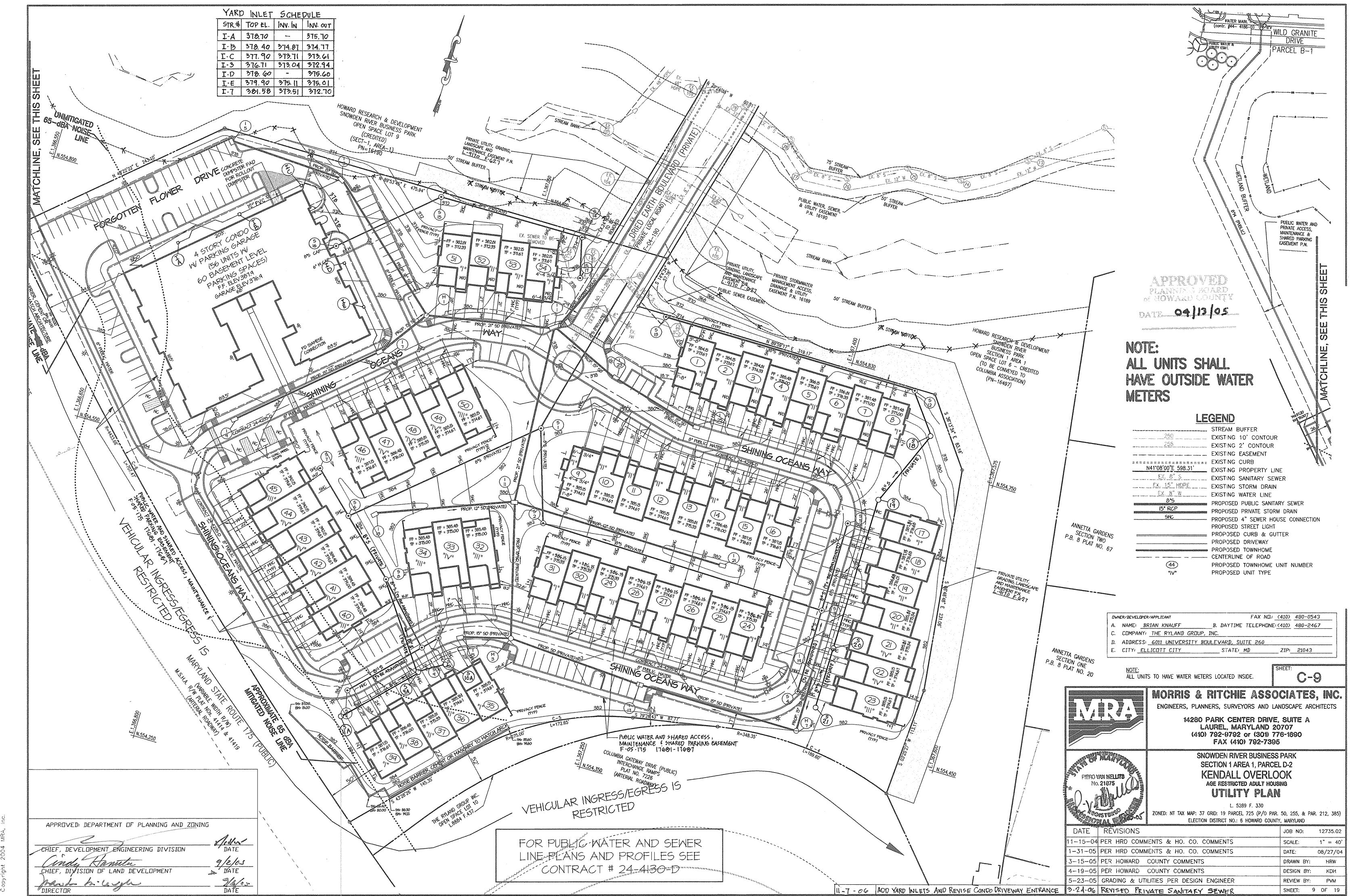
36. IN ACCORDANCE WITH SUBDIVISION SECTION 16.116.(a)(2), CLEARING, GRADING, THE REMOVAL OF VEGETATIVE COVER AND/OR DEVELOPMENT ARE NOT PERMITTED WITH THE REQUIRED 50' STREAM BUFFER.

7. THE H.O.A. WILL BE RESPONSIBLE FOR THE UPKEEP AND MAINTENANCE OF OPEN SPACE LOT 10.

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

36. THE PRIVATE MAINTENANCE ACCESS ESM'T THE PUBLIC ROAD TO OPEN SPACE LOT 10 REGULTED BY WP-03-110 15 NO LONGER NEEDED BECAUSE OF A CHANGE IN OWNERSHIP OF THE LOT. THE SNOWDEN OVERLOOK COMMUNITY ASSOC. WILL MAINTAIN THE LOT. OF THE HOWARD COUNTY CODE . PUBLIC SEWER SERVICE HAS BEEN CRANTED UNDER THE TERMS AND PROVISIONS THEREOF EFFECTIVE 1-21-05, ICH DATE DEVELOPER'S AGREEMENT No. 24-4295-0 WAS FILED AND ACCEPTED.





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50P-05-037

SHEET: 2 OF 19

STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.

COUNTY MONUMENTS NOS. 37GB, 37GC AND 37DA WERE USED FOR THIS PROJECT

EXISTING WATER IS PUBLIC (CONTRACT NO: 24-3858-D, LITTLE PATUXENT).

. EXISTING SEWER IS PUBLIC (CONTRACT NO: 24-3858-D, LITTLE PATUXENT).

16191 (RESUBDIVISION OF PLATS 15182 THRU 15188)

WP-03-110 - WAIVER PETITION FOR REDUCTION OF MINIMUM PUBLIC ROAD FRONTAGE

18. SPOT ELEVATIONS SHOWN FOR CURB ARE BOTTOM OF CURB UNLESS OTHERWISE NOTED.

23. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS

CONTRACT NO. 24-4235-D PROPOSED PUBLIC WATER AND SEWER PLANS

ALL PLAN DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED.

DAYS PRIOR TO THE START OF WORK.

CONTRACT NO. 24-3858-D.

15. DPZ REFERENCE NUMBERS:

12. THERE ARE NO FLOODPLAINS ON THIS SITE.

13. THERE ARE NO WETLANDS ON THIS SITE.

F-05-175 - PN 17681- 17687 16. STREET LIGHTS - BGE CONTRACT.

APPROVED PRIOR TO 12/31/92.

20. TRASH COLLECTION FOR THE SFA UNITS WILL BE PRIVATE.

A. WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE):

MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.

ALL CURB RADII 5' UNLESS OTHERWISE NOTED.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND MSHA STANDARDS, IF APPLICABLE.

THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT (800) 257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE

THE EXISTING TOPOGRAPHY AND BOUNDARY INFORMATION WERE PROVIDED BY PLANS PREPARED BY GUTSCHICK LITTLE & WEBER, P.A.

ON OPEN SPACE LOT 6 TO BE CONVEYED TO COLUMBIA ASSOCIATION AND PUBLICLY MAINTAINED. SUBDIVISION PLAN FILE NUMBER F-01-142,

F-01-142 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D' & LOTS 1 THRU 5 CONSTRUCTION PLAN

22. THE CONTRACTOR SHALL TEST PIT ALL EXISTING UTILITIES AT LEAST FIVE (5) DAYS PRIOR TO STARTING ANY WORK SHOWN ON THESE DRAWINGS.

DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE;

27. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$75,570.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.

28. THIS PLAN HAS BEEN PREPARED TO MEET THE NEW TOWN "GUIDELINES FOR RESIDENTIAL PLANTING", PREPARED BY THE ROUSE COMPANY FOR COLUMBIA, MD.

PUBLIC ROAD FRONTAGE OF 40 FEET TO BE REDUCED TO ZERO FEET FOR OPEN SPACÉ LOTS. THE APPROVAL IS SUBJECT TO THE FOLLOWING CÓNDITIONS:

F-04-190 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A-2', 'D-2', & 'E-1' AND OPEN SPACE LOT 6

14. THE TRAFFIC STUDY PERFORMED BY WELLS AND ASSOCIATES APPROVED FOR THE FINAL PLAN WAS UPDATED FOR THIS PROJECT.

FDP-239 - SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1 FINAL DEVELOPMENT PLAN (ALLOWS USE BY RIGHT)

7. TO THE BEST OF OUR KNOWLEDGE AND PER PUBLIC RECORD, NO CEMETERIES OR BURIAL GROUNDS EXIST ON-SITE.

21. A GEOTECHNICAL STUDY WAS PREPARED BY GEO-TECHNOLOGY ASSOCIATES, INC. ON JANUARY 30, 2003.

B. SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/ TAR AND CHIP COATING (1-1/2" MIN.); GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS; STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING);

NUMBER(S) LIBER B00592 FOLIO 1660. THE KENDALL OVERLOOK DECLARATIONS WERE RECORDED ON 2/10/04,

30. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIMISION REGULATIONS.

THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING

TRAFFIC CONTROL DEVICES. MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL

第E COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM. HOWARD

10. STORMWATER MANAGEMENT FOR THIS SITE WAS INCLUDED IN THE DESIGN FOR THE SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D', & LOTS 1 THRU 5.

F-01-142 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D' & LOTS 1 THRU 5 RECORDED AS PLAT NO. 15182 THRU 15188

F-04-15 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A-1', 'B-1', 'C-1', 'D-1', AND E & LOTS 6 THRU 10 RECORDED AS PLAT NO. 16185 THRU

19. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN

24. THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION BY VIRTUE OF THE FACT THAT IT IS PART OF THE COLUMBIA NEW TOWN, SUBDIVISION SECTION 16.1202(b)(1)(iy), A PUD

29. ARTICLES OF INCORPORATION FOR THE AGE RESTRICTED ADULT HOUSING COMMUNITY, THE KENDALL OVERLOOK CONDOMINIUM, INC. WERE RECORDED ON 12/16/03, RECORDING

. WAIVER PETITION, WP-03-110, WAS APPROVED BY THE PLANNING DIRECTOR ON SEPTEMBER 4, 2003. THE PETITION WAIVES SECTIONS 16.120(c)(1) TO PERMIT THE REQUIRED MINIMUM PUBLIC ROAD FRONTAGE OF 60 FEET TO BE REDUCED TO ZERO FEET FOR COMMERCIAL, INDUSTRIAL OR APARTMENT PARCELS/LOTS, AND 16.121(e)(1) TO PERMIT THE REQUIRED MINIMUM

F-04-73 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'C-1' AND E & LOTS 6 RECORDED AS PLAT NO. 16493 THRU 16498 (RESUBDIVISION OF PLATS

# SITTE IDIEVIEILOIPMIENT IPILAN SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1

PARCEL D-2

IKENDALL OVERLOOK

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

SITE ANALYSIS

TOTAL PROJECT AREA: PARCEL D-2

9.8707 AC RECORDED UNDER PLAT NUMBER: F-04-190

**△ BENCHMARKS** 

SHEET INDEX

C-2 SITE DEVELOPMENT PLAN C-3 SITE DEVELOPMENT PLAN

C-10 STORM DRAIN PROFILES C-11 STORM DRAIN PROFILES

C-12 SANITARY PROFILES

C-17 DRAINAGE AREA MAP

C-18 LANDSCAPE PLAN

C-19 LANDSCAPE DETAILS

HOWARD COUNTY GEODETIC SURVEY CONTROL

HOWARD COUNTY GEODETIC SURVEY CONTROL

BENCHMARK # 37DA HOWARD COUNTY GEODETIC SURVEY CONTROL

N 553,452,828 E 1,368,503,19 ELEVATION=325,233'

N 555,250.797 E 1,370,946.37 ELEVATION=331.192'

N 558,667.518 E 1,366,857.48 ELEVATION=379.786'

C-4 ARCHITECTURAL FOOTPRINTS AND ELEVATIONS

C-13 SEDIMENT & EROSION CONTROL PHASE

C-14 SEDIMENT & EROSION CONTROL PHASE II

C-15 SEDIMENT & EROSION CONTROL NOTES & DETAILS

C-16 SEDIMENT & EROSION CONTROL NOTES & DETAILS

BENCHMARK # 37GB

BENCHMARK # 37GC

C-1 TITLE SHEET

C-5 SITE DETAILS

C-6 PAVING PLAN

C-7 ROAD PROFILES

C-8 ROAD PROFILES

C-9 UTILITY PLAN

PRESENT ZONING PARCEL D-2: NT-EMPLOYMENT CENTER, INDUSTRIAL (FDP 239)

3. TOTAL NUMBER OF UNITS PROPOSED: (DENSITY PERMITTED UNDER COLUMBIA AUTHORIZATION PLAN) 17-30'x70' SFA UNITS 37-30'x56' SFA UNITS

TOTAL: 54 SFA UNITS (UNITS 1-54) 56-CONDO UNITS TOTAL: 110 UNITS

 NUMBER OF PARKING SPACES REQUIRED: FROM APPROVED FDP-239: 1 SPACE PER 3 LIVING UNITS (1 SPACE/3 UNITS) x 110 UNITS = 37 SPACES ZONING REGULATIONS: 2.0 SPACES PER UNIT

> (2 SPACES/1 UNIT) x 110 UNITS = 220 SPACES 0.5 SPACES PER UNIT FOR OVERFLOW (0.5 SPACES/1 UNIT) x 110 UNITS = 55 SPACES TOTAL REQUIRED PARKING SPACES = 275 SPACES

NUMBER OF PARKING SPACES PROVIDED: SFA GARAGE:

> ONE CAR: 11 SFA UNITS x 1 SPACE = 11 SPACES 43 SFA UNITS x 2 SPACES = 86 SPACES 11 + 86 = 97 SPACES

11 SFA UNITS HAVE 1 PARKING SPACE (TOTAL=11) 43 SFA UNITS HAVE 2 PARKING SPACES(TOTAL=86)

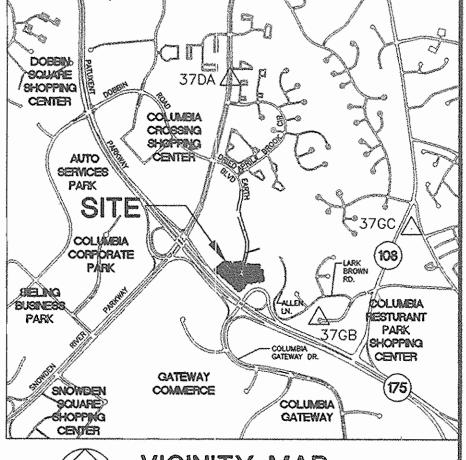
54 SFA UNITS WITH A TOTAL OF 97 DRIVEWAY SPACES CONDO: 60 SPACES PROVIDED IN PARKING GARAGE

70 SURFACE PARKING SPACES VISITOR: 41 COMMON PARKING SPACES TOTAL PROVIDED PARKING SPACES = 365 SPACES

TOTAL SQUARE FOOT BUILDING COVERAGE/PERCENTAGE OF COVERAGE 3Dx7D SFA UNITS (17)

30x56 SFA UNITS (37) 62,160 SF 56-CONDO UNITS 25,700 SF TOTAL BUILDING AREA 123,56D SF TOTAL PARCEL AREA 429,967.69 SF TOTAL BUILDING COVERAGE 28.74%

H.R.D. APPROVALS - CONCEPTUAL SITE PLAN. SHEET 4. - PRELIMINARY LANDSCAPE PLAN. SHEET 19.



VICINITY MAP COPYRIGHT ADC THE MAP PEOPLE PERMITTED USE NO. 20602149

MAP NO. 16 GRIDS E.10

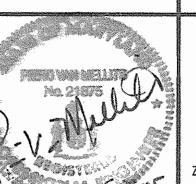
PERMIT INFORMATION CHART 1 D-2 & PART OF€ Tax Map No Elect Distr. Census Tract 19 37 6067.03 6 Water Code 3450000

**OVNER/DEVELOPER/APPLICANT** FAX NO: (410) 480-0543 B. DAYTIME TELEPHONE: (410) 480-2467 COMPANY: THE RYLAND GROUP, INC. ADDRESS: 6011 UNIVERSITY BOULEVARD, SUITE 260 ZIP: 21043



#### MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

14280 PARK CENTER DRIVE, SUITE A LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395



SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING

MONED: NT TAX MAP: 37 GRID: 19 PARCEL 725 (P/O PAR. 50, 255, & PAR. 212, 385) ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO:	12735.02
11-15-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	AS SHOWN
1-31-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
3-15-05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	HRW
4-19-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KDH
5-23-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
3-24-06	REVISED PRIVATE SANITARY SEWER	SHEET: 1	OF 19

SNOWDEN RIVER BUSINESS PARK OPEN SPACE LOT 6 (CREDITED) OPEN SPACE LOT 8 DRAINAGE FROM PARCEL C-1 IS TREATED IN THREE FACILITIES. FACILITY 1 IS A DETENTION FACILITY (DRY POND) LOCATED ON OPEN SPACE LOT 9, WHICH IS TO BE DEDICATED TO THE COLUMBIA ASSOCIATION FOR PUBLIC MAINTENANCE. FACILITY 8 IS THE SAME AS FACILITY 1, LOCATED ON OPEN SPACE LOT 8. FACILITY 2 IS A DETENTION/RETENTION FACILITY (WET POND) PARCEL C-1 PARCEL E-1-(PRIVATE ROAD) 11. EXISTING UTILITY INFORMATION WAS PROVIDED BY PLANS PREPARED BY GUTSCHICK, LITTLE & WEBER, P.A. APPROVED BY HOWARD COUNTY, DPZ REFERENCE NUMBER F-01-142 AND (PN. 17315, 17317, 17318) EX. 12" W ----PROPERTY OF THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
L.5289 F. 330 CONTRACT No 24-3858-D EX. 8" S CONTRACT No. 24-3858-D CONTRACT No. 24-3858-D SNOWDEN RIVER SNOWDEN RIVER BUSINESS PARK OPEN SPACE LOT 6 OPEN SPACE LOT 9 (CREDITED) CL EX. STREAM - (INTERMITTENT) EX. 12" W - (INTERMITTENT) 24-3858-D ANNETTA GARDENS P.B. 8 PLAT NO. 67 UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN ANNETTA GARDENS SECTION ONE P.B. 8 PLAT NO. 20 COLUMBIA GATEWAY DRIVE (PUBLIC) INFERCHANGE RAMPS PLAT NO. 7226 26. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER BUSINESS PARK OPEN SPACE LOT 10

SIDEWALKS AND STREET TREES SHALL BE PROVIDED ALONG BOTH SIDES AND THE CUL-DE-SAC OF THE PROPOSED PRIVATE ROAD PRIVATE ACCESS AND MAINTENANCE EASEMENTS SHALL PROVIDE VEHICULAR ACCESS TO ALL OF THE PARCELS AND OPEN SPACE LOTS THAT WILL NOT HAVE FRONTAGE ON THE PUBLIC ROAD. . THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE NEW TOWN ALTERNATIVE COMPLIANCE PROVISIONS SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. AGE RESTRICTION DOCUMENTS L-9341 F-131 33. RECORDATION NUMBERS FOR ALL LEGAL DOCUMENTS PERTAINING TO THIS PARCEL WILL BE PROVIDED PRIOR TO APPROVAL. T IS UNDERSTOOD THAT FINAL APPROVAL OF THIS SDP, IS SUBJECT TO THE DEVELOPER/OWNER FURNISHING THIS INFORMATION TO THE DEPARTMENT OF

34. THE PRIVATE LANDSCAPE AND MAINTENANCE EASEMENTS SHOWN ON THIS PLAN WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

35. PER SUBDIVISION SECTION 16.120(B)(9)(ii) THE REQUIRED STRUCTURE SETBACK FROM A PUBLIC WATER AND SEWER EASEMENT IS 10 FEET 36. IN ACCORDANCE WITH SUBDIVISION SECTION 16.116.(a)(2), CLEARING, GRADING, THE REMOVAL OF VEGETATIVE COVER AND/OR DEVELOPMENT ARE NOT

PERMITTED WITH THE REQUIRED 50' STREAM BUFFER. THE H.O.A. WILL BE RESPONSIBLE FOR THE UPKEEP AND MAINTENANCE OF OPEN SPACE LOT 10.

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

38. THE PRIVATE MAINTENANCE ACCESS ESM'T I THE PUBLIC ROAD TO OPEN SPACE LOT 10 REQUIRED BY WP-03-110 IS NO LONGER NEEDED BECAUSE OF A CHANGE IN OWNERSHIP OF THE LOT. THE SNOWDEN OVERLOOK COMMONITY ASSOC. WILL MAINTAIN THE LOT.

DOCUMENT RECORDING REFERENCES

5. PLAT RECORDING NO. F-05-175 / 17681 - 17687

6. AGE RESTRICTION DOCUMENTS, LIBER 9341 FOLIO [3]

1. H.O.A. ARTICLES OF INCORPORATION. FILING NUMBER: 1000361990866851

4. GRADING AND LANDSCAPE MAINTENANCE EASEMENTS. LIBER 9170 FOLIO 627

7. SNOWDEN QUERLOOK COMMUNITY ASSOC. INC. DECLARATION OF COVENANTS,

CONDITIONS AND RESTRICTIONS L 8983 F-426, 1-9378 F-271

2. SHARED ACCESS/PARKING EASEMENT ON DRIED EARTH BLVD. F-05-175 / 17681-17687

3. MAINTENANCE AGREEMENT FOR THE PRIVATE SECTION OF DRIED EARTH BLVD. LIBER 8983 / FOLIO 420

M. THIS SUPDIVISION IS SUBJECT TO SECTION 18,122 P OF THE HOWARD COUNTY CODE. PUBLIC SEWER SERVICE HAS BEEN GRANTED UNDER THE TERMS AND PROVISIONS THEREOF EFFECTIVE 1-21-05, ON WHICH DATE DEVELOPER'S AGREEMENT No. 24-4775 D WAS FILED AND ACCEPTED.

TYPICAL FRONT ELEVATION

111-7-06 ADD YARD INLETS AND REVISE CONDO DRIVEWAY ENTRANCE

SDP-05-037

9/6/05 DATE

REVIEW BY: PVM

SHEET: 2 OF 19

5-23-05 GRADING & UTILITIES PER DESIGN ENGINEER

3-24-06 REVISED TRIVATE SANITARY SEWER

11-7-06 ADD YARD INLETS AND REVISE CONDO DRIVEWAY ENTRANCE

# SITTE DEVELOPMENT PLAN SNOWDEN RIVER BUSINESS PARK

SECTION 1 AREA 1

PARCEL D-2

KENDALL OVERLOOK

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

> SNOWDEN RIVER BUSINESS PARK

OPEN SPACE LOT 6

(CREDITED)

PARCEL C-1

CL EX. STREAM -

EX. 12" W CINTER MITTENT)

INTERCHANGE RAMPS

BUSINESS PARK OPEN SPACE LOT 10

LOCATION MAP

Same and

EX. 8" S CONTRACT No.

ANNETTA GARDENS

P.B. 8 PLAT NO. 67

ANNETTA GARDENS

SECTION ONE P.B. 8 PLAT NO. 20

24-3858-D

OPEN SPACE LOT 6

(CREDITED)

SNOWDEN RIVER

BUSINESS PARK OPEN SPACE LOT 8

PROPERTY OF THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION L.5289 F. 330

SNOWDEN RIVER BUSINESS PARK

OPEN SPACE LOT 9

(CREDITED)

PARCEL E-1

(PRIVATE ROAD)

CONTRACT No.

CONTRACT No. 24-3858-D

CL EX. STREAM - (INTERMITTENT)

(PN. 17315, 17317, 17318)

#### HOWARD COUNTY GEODETIC SURVEY CONTROL N 558,667.518 E 1,366,857.48 ELEVATION=379.786'

BENCHMARK # 37DA

#### SHEET INDEX

**△ BENCHMARKS** 

HOWARD COUNTY GEODETIC SURVEY CONTROL

HOWARD COUNTY GEODETIC SURVEY CONTROL

N 553,452.828 E 1,368,503.19 ELEVATION=325,233'

N 555,250.797 E 1,370,946.37 ELEVATION=331.192'

BENCHMARK # 37GB

- C-1 TITLE SHEET
  C-2 SITE DEVELOPMENT PLAN SITE DEVELOPMENT PLAN C-4 ARCHITECTURAL FOOTPRINTS AND ELEVATIONS C-5 SITE DETAILS C-6 PAVING PLAN
- C-7 ROAD PROFILES C-8 ROAD PROFILES C-9 UTILITY PLAN C-10 STORM DRAIN PROFILES
- C-11 STORM DRAIN PROFILES C-12 SANITARY PROFILES C-13 SEDIMENT & EROSION CONTROL PHASE C-14 SEDIMENT & EROSION CONTROL PHASE II C-15 SEDIMENT & EROSION CONTROL NOTES & DETAILS
- C-16 SEDIMENT & EROSION CONTROL NOTES & DETAILS C-17 DRAINAGE AREA MAP C-18 LANDSCAPE PLAN C-19 LANDSCAPE DETAILS

SERVICES Park SIŢĒ COLUMBIA CORPORATE SELING BUSINESS COLUMBIA RESTURANT COMMERCE COLUMBIA GATEWAY

VICINITY MAP

SCALE: 1'' = 2,000'COPYRIGHT ADC THE MAP PEOPLE PERMITTED USE NO. 20602149 MAP NO. 16 GRIDS E,10

9.8707 AC RECORDED UNDER PLAT NUMBER: F-04-190

SHOPPING

3. TOTAL NUMBER OF UNITS PROPOSED: (DENSITY PERMITTED UNDER COLUMBIA AUTHORIZATION PLAN)

56-CONDO UNITS TOTAL: 110 UNITS

SITE ANALYSIS

TOTAL PROJECT AREA:

PARCEL D-2

NUMBER OF PARKING SPACES REQUIRED FROM APPROVED FDP-239: 1 SPACE PER 3 LIVING UNITS (1 SPACE/3 UNITS)  $\times$  110 UNITS = 37 SPACES

(2 SPACES/1 UNIT) x 110 UNITS = 220 SPACES 0.5 SPACES PER UNIT FOR OVERFLOW

NUMBER OF PARKING SPACES PROVIDED:

ONE CAR: 11 SFA UNITS x 1 SPACE = 11 SPACES

11 + 86 = 97 SPACES SFA DRIVEWAY: 11 SFA UNITS HAVE 1 PARKING SPACE (TOTAL=11)

60 SPACES PROVIDED IN PARKING GARAGE 70 SURFACE PARKING SPACES

TOTAL PROVIDED PARKING SPACES = 365 SPACES TOTAL SQUARE FOOT BUILDING COVERAGE/PERCENTAGE: OF COVERAGE

PARCEL D-1 30x70 SFA UNITS (17) 30x56 SFA UNITS (37) 62,160 SF 56-CONDO UNITS 25,700 SF 123,560 S TOTAL BUILDING AREA

- CONCEPTUAL SITE PLAN. SHEET 4.

2. PRESENT ZONING PARCEL D-2: NT-EMPLOYMENT CENTER, INDUSTRIAL (FDP 239).

17-30'x70' SFA UNITS 37-30'x56' SFA UNITS TOTAL: 54 SFA UNITS (UNITS 1-54)

ZONING REGULATIONS: 2.0 SPACES PER UNIT

(0.5 SPACES/1 UNIT) x 110 UNITS = 55 SPACES TOTAL REQUIRED PARKING SPACES = 275 SPACES

SFA GARAGE:

43 SFA UNITS x 2 SPACES = 86 SPACES

43 SFA UNITS HAVE 2 PARKING SPACES(TOTAL=86) 54 SFA UNITS WITH A TOTAL OF 97 DRIVEWAY SPACES

VISITOR: 41 COMMON PARKING SPACES

TOTAL PARCEL AREA 429,967.69 SF TOTAL BUILDING COVERAGE

REVISIONS

10-25-07 GRADE REVISION WITS 35-39, 51-54

H.R.D. APPROVALS - PRELIMINARY LANDSCAPE PLAN. SHEET 19.

PERMIT INFORMATION CHART SECTION 1/ AREA 1 D-2 & PART OF # Census Tract 37 19 3450000

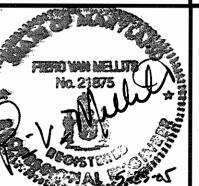
FAX ND.: <u>(410)</u> <u>480-0543</u> B. DAYTIME TELEPHONE: (410) 480-2467 C. COMPANY: THE RYLAND GROUP, INC. D. ABDRESS: <u>6011 UNIVERSITY BOULEVARD, SUITE 260</u> STATE: MD



#### MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 14280 PARK CENTER DRIVE, SUITE A

LAUREL, MARYLAND 20707 (410) 792-9792 or (301) 776-1690 FAX (410) 792-7395



SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1, PARCEL D-2 KENDALL OVERLOOK AGE RESTRICTED ADULT HOUSING TITLE SHEET

L. 5289 F. 330

ELECTION DISTRICT NO.: 6 HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO:	12735.02
1-15-04	PER HRD COMMENTS & HO. CO. COMMENTS	SCALE:	AS SHOWN
-31-05	PER HRD COMMENTS & HO. CO. COMMENTS	DATE:	08/27/04
S-15 <b>-</b> 05	PER HOWARD COUNTY COMMENTS	DRAWN BY:	HRW
-19-05	PER HOWARD COUNTY COMMENTS	DESIGN BY:	KDH
5-23-05	GRADING & UTILITIES PER DESIGN ENGINEER	REVIEW BY:	PVM
-24.06	REVISED PRIVATE SANITARY SEWER	SHEET: 1	OF 19
	•		

DOCUMENT RECORDING REFERENCES:

1. H.O.A. ARTICLES OF INCORPORATION. FILING NUMBER: 1000361990866851 2. SHARED ACCESS/PARKING EASEMENT ON DRIED EARTH BLVD. F-05-175 / 17681-17687

3. MAINTENANCE AGREEMENT FOR THE PRIVATE SECTION OF DRIED EARTH BLVD. LIBER 8983 / FOLIO 420

4. GRADING AND LANDSCAPE MAINTENANCE EASEMENTS. LIBER 9170 FOLIO 627

5. PLAT RECORDING NO. F-05-175 / 17681-17687 5. AGE RESTRICTION DOCUMENTS. LIBER 934 FOLIO [3]

7. SNOWDEN OVERLOOK COMMUNITY ASSOC. INC. DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS L 8983 F.426, L9378 F.271 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND MSHA STANDARDS, IF APPLICABLE.

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.

THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT (800) 257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

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.

ALL PLAN DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED

THE EXISTING TOPOGRAPHY AND BOUNDARY INFORMATION WERE PROVIDED BY PLANS PREPARED BY GUTSCHICK LITTLE & WEBER, P.A.

前E COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NOS. 37GB, 37GC AND 37DA WERE USED FOR THIS PROJECT.

EXISTING WATER IS PUBLIC (CONTRACT NO: 24-3858-D, LITTLE PATUXENT).

EXISTING SEWER IS PUBLIC (CONTRACT NO: 24-3858-D, LITTLE PATUXENT).

10. STORMWATER MANAGEMENT FOR THIS SITE WAS INCLUDED IN THE DESIGN FOR THE SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D', & LOTS 1 THRU 5. DRAINAGE FROM PARCEL C-1 IS TREATED IN THREE FACILITIES. FACILITY 1 IS A DETENTION FACILITY (DRY POND) LOCATED ON OPEN SPACE LOT 9, WHICH IS TO BE DEDICATED TO THE COLUMBIA ASSOCIATION FOR PUBLIC MAINTENANCE. FACILITY 8 IS THE SAME AS FACILITY 1, LOCATED ON OPEN SPACE LOT 8. FACILITY 2 IS A DETENTION/RETENTION FACILITY (WET POND) ON OPEN SPACE LOT 6 TO BE CONVEYED TO COLUMBIA ASSOCIATION AND PUBLICLY MAINTAINED. SUBDIVISION PLAN FILE NUMBER F-01-142.

1. EXISTING UTILITY INFORMATION WAS PROVIDED BY PLANS PREPARED BY GUTSCHICK, LITTLE & WEBER, P.A. APPROVED BY HOWARD COUNTY, DPZ REFERENCE NUMBER F-01-142 AND CONTRACT NO. 24-3858-D.

12. THERE ARE NO FLOODPLAINS ON THIS SITE.

13. THERE ARE NO WETLANDS ON THIS SITE.

14. THE TRAFFIC STUDY PERFORMED BY WELLS AND ASSOCIATES APPROVED FOR THE FINAL PLAN WAS UPDATED FOR THIS PROJECT.

FDP-239 - SNOWDEN RIVER BUSINESS PARK SECTION 1 AREA 1 FINAL DEVELOPMENT PLAN (ALLOWS USE BY RIGHT) F-01-142 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D' & LOTS 1 THRU 5 RECORDED AS PLAT NO. 15182 THRU 15188 F-01-142 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A' THRU 'D' & LOTS 1 THRU 5 CONSTRUCTION PLAN

F-04-15 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A-1', 'B-1', 'C-1', 'D-1', AND E & LOTS 6 THRU 10 RECORDED AS PLAT NO. 16185 THRU 16191 (RESUBDIVISION OF PLATS 15182 THRU 15188) F-04-73 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'C-1' AND E & LOTS 6 RECORDED AS PLAT NO. 16493 THRU 16498 (RESUBDIVISION OF PLATS

F-04-190 - SNOWDEN RIVER BUSINESS PARK SECTION 1, AREA 1, PARCELS 'A-2', 'D-2', & 'E-1' AND OPEN SPACE LOT 6 CONTRACT NO. 24-4235-D PROPOSED PUBLIC WATER AND SEWER PLANS

WP-03-110 - WAIVER PETITION FOR REDUCTION OF MINIMUM PUBLIC ROAD FRONTAGE F-05-175 - PN 17681-17687 6. STREET LIGHTS - BGE CONTRACT.

15. DPZ REFERENCE NUMBERS:

. TO THE BEST OF OUR KNOWLEDGE AND PER PUBLIC RECORD, NO CEMETERIES OR BURIAL GROUNDS EXIST ON-SITE.

8. SPOT ELEVATIONS SHOWN FOR CURB ARE BOTTOM OF CURB UNLESS OTHERWISE NOTED.

9. 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 DÚE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE, EXISTING UTILITIES ARE SHOWN

20. TRASH COLLECTION FOR THE SFA UNITS WILL BE PRIVATE.

21. A GEOTECHNICAL STUDY WAS PREPARED BY GEO-TECHNOLOGY ASSOCIATES, INC. ON JANUARY 30, 2003.

GEOMETRY -- MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS;

22. The contractor shall test pit all existing utilities at least five (5) days prior to starting any work shown on these drawings.

23. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.

24. THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION BY VIRTUE OF THE FACT THAT IT IS PART OF THE COLUMBIA NEW TOWN, SUBDIVISION SECTION 16.1202(b)(1)(iv), A PUD APPROVED PRIOR TO 12/31/92.

25. ALL CURB RADII 5' UNLESS OTHERWISE NOTED.

6. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER

SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/ TAR AND CHIP COATING (1-1/2" MIN.);

STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING); DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE; MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.

27. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$75,570.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.

28. THIS PLAN HAS BEEN PREPARED TO MEET THE NEW TOWN "GUIDELINES FOR RESIDENTIAL PLANTING", PREPARED BY THE ROUSE COMPANY FOR COLUMBIA, MD.

29. ARTICLES OF INCORPORATION FOR THE AGE RESTRICTED ADULT HOUSING COMMUNITY, THE KENDALL OVERLOOK CONDOMINIUM, INC, WERE RECORDED ON 12/16/03, RECORDING

11. WAIVER PETITION, WP-03-110, WAS APPROVED BY THE PLANNING DIRECTOR ON SEPTEMBER 4, 2003. THE PETITION WAIVES SECTIONS 16.120(c)(1) TO PERMIT THE REQUIRED MINIMUM PUBLIC ROAD FRONTAGE OF 60 FEET TO BE REDUCED TO ZERO FEET FOR COMMERCIAL, INDUSTRIAL OR APARTMENT PARCELS/LOTS, AND 16.121(e)(1) TO PERMIT THE REQUIRED MINIMUM PUBLIC ROAD FRONTAGE OF 40 FEET TO BE REDUCED TO ZERO FEET FOR OPEN SPACE LOTS. THE APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: SIDEWALKS AND STREET TREES SHALL BE PROVIDED ALONG BOTH SIDES AND THE CUL-DE-SAC OF THE PROPOSED PRIVATE ROAD

PRIVATE ACCESS AND MAINTENANCE EASEMENTS SHALL PROVIDE VEHICULAR ACCESS TO ALL OF THE PARCELS AND OPEN SPACE LOTS THAT WILL NOT HAVE FRONTAGE ON THE PUBLIC ROAD.

12. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE NEW TOWN ALTERNATIVE COMPLIANCE PROVISIONS SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. AGE RESTRICTION DOCUMENTS L-934 F-131

RECORDATION NUMBERS FOR ALL LEGAL DOCUMENTS PERTAINING TO THIS PARCEL WILL BE PROVIDED PRIOR TO APPROVAL. IT IS UNDERSTOOD THAT FINAL APPROVAL OF THIS SDP. IS SUBJECT TO THE DEVELOPER/OWNER FURNISHING THIS INFORMATION TO THE DEPARTMENT OF

34. THE PRIVATE LANDSCAPE AND MAINTENANCE EASEMENTS SHOWN ON THIS PLAN WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION. 35. PER SUBDIVISION SECTION 16.120(B)(9)(ii) THE REQUIRED STRUCTURE SETBACK FROM A PUBLIC WATER AND SEWER EASEMENT IS 10 FEET.

APPROVED: DEPARTMENT OF PLANNING AND ZONING - CHIEF, DEVELOPMENT ENGINEERING DIVISION CHIEF, DIVISI**ZÍ**N OF LAND DEVELOPMENT

8. THE PRIVATE MAINTENANCE ACCESS ESM'T !
THE PUBLIC ROAD TO OPEN SPACE LOT 10
REQUIRED BY WP-03-110 IS NO LONGER NEEDED BECAUSE OF A CHANGE IN OWNERSHIP

OF THE HOWARD COUNTY CODE . PUBLIC SEWER SERVICE HAS BEEN GRANTED UNDER THE TERMS AND PROVIDIONS THEREOF EFFECTIVE 7:21-05, ON WHICH DATE DEVELOPER'S AGREEMENT NO. 24-4295-0 WAS FILED AND ACCEPTED.

TYPICAL FRONT ELEVATION

111-7-06 ADD YARD INLETS AND REVISE CONDO DRIVEWAY ENTRANCE

SDP-05-037

