

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- 2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 4. THE EXISTING TOPOGRAPHY AS SHOWN ON THIS PLAN WAS DEVELOPED FROM THE FINAL CONSTRUCTION PLANS (F-03-87).
- 5. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM - HOWARD COUNTY MONUMENT NOS. 30FA AND 30CA WERE USED FOR THIS PROJECT.
- 6. WATER IS PUBLIC. HOWARD COUNTY CONTRACT #24-4064-D.
- 7. SEWER IS PUBLIC. HOWARD COUNTY CONTRACT #24-4064-D.
- 8. STORMWATER MANAGEMENT OBLIGATIONS ARE FULFILLED UNDER F-03-87. LEVEL SPREADERS FOR ROOF DRAINAGE IS PROVIDED PER DETAILS ON THIS PLAN.
- 9. EXISTING UTILITIES ARE BASED ON HOWARD COUNTY CONTRACT DRAWINGS AND SUPPLEMENTAL FIELD SURVEY INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM THE EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
- 10. THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY RODGERS CONSULTING, INC. DECEMBER 2002 AND APPROVED ON 5/12/03.
- 11. THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY MCCARTHY & ASSOCIATES, INC. DATED NOVEMBER 2000 AND WAS APPROVED PER SKETCH PLAN S-01-20.
- 12. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP DATED JANUARY 24, 2002.
- 13. THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. THE FOREST CONSERVATION OBLIGATION FOR THIS SDP HAVE BEEN MET UNDER F-03-87.
- 14. FINAL HOUSE LOCATIONS TO BE ESTABLISHED UNDER THE S.D.P. SHALL BE A MINIMUM OF 10' FROM ANY EASEMENTS.
- 15. THE EXISTING DWELLING (MAIN DWELLING) LOCATED ON PROPOSED LOT 119 IS LISTED AS HO-145 ON THE HOWARD COUNTY HISTORIC SITE INVENTORY. THIS DWELLING WILL BE RETAINED AND RENOVATED. TWO OTHER EXISTING STRUCTURES LOCATED ON LOT 119 (KITCHEN AND BATH) WILL BE RETAINED FOR THEIR HISTORICAL SIGNIFICANCE (SLAVE QUARTERS AND TOBACCO HOUSE). THESE TWO STRUCTURES ARE STRUCTURALLY UNSTABLE AND APPROPRIATE MEASURE WILL BE TAKEN TO EITHER STABILIZE THE STRUCTURES OR PRESERVE THE REMNANTS IN AN APPROPRIATE MANNER. ALL OTHER STRUCTURES LOCATED ON THE PROPERTY WILL BE DEMOLISHED EXCEPT FOR THE EXISTING BARN LOCATED AT THE SOUTHERN PORTION OF THE SITE WHICH WILL BE RELOCATED TO THE HOWARD COUNTY CONSERVANCY, MT. PLEASANT, TAX MAP 10, GRID 24, PARCEL 316.
- 16. THE WAIVER PETITION, WP-01-117, WAS APPROVED ON AUGUST 1, 2001 TO WAIVE SECTION 16.115 AND 16.116(A) TO ALLOW WORK IN THE FLOODPLAIN AND IN THE STREAM BUFFER FOR THE CONSTRUCTION OF A PUBLIC ACCESS PLACE CROSSING TO SERVE 15 PROPOSED RESIDENTIAL, R-20 ZONED LOTS, AND SECTION 15-120(C)(4) TO ALLOW SIDE LOTS TO FRONT ON A PRIVATE ROAD GREATER THAN 200 FEET IN LENGTH (APPLIES TO ROAD IN FRONT OF PROPOSED LOTS 89 - 103). APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) CONSTRUCT THE CROSSING USING THE BOTTOMLESS CULVERT PROPOSED WITH THE WAIVER DOCUMENTATION. (2) LIMIT THE DISTURBANCE TO THE ENVIRONMENTAL AREAS TO THE MINIMUM EXTENT NECESSARY FOR CONSTRUCTION OF THE STREAM CROSSING. (3) IN PREPARATION OF THE FOREST CONSERVATION PLAN PROPOSAL, PROVIDE AFFORESTATION WITHIN THE UNWOODED AREA OF THE PRIORITY STREAM BUFFER SHOWN ON THE STREAM CROSSING EXHIBIT.
- 17. A WAIVER OF DESIGN MANUAL, VOLUME I, SECTION 5.2.4.1 TO ALLOW POND TOP OF CUT TO BE LOCATED LESS THAN THE REQUIRED 25' MINIMUM DISTANCE FROM A RIGHT-OF-WAY WAS APPROVED ON AUGUST 7, 2002. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) INTERLOCKING IS REQUIRED FOR OPEN SPACE LOTS 89 AND 113 AS PER THE 2000 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL VOLUMES I AND II. EACH POND PERIMETER SHALL AT A MINIMUM MEET THE REQUIREMENTS OF THE HOWARD COUNTY LANDSCAPE MANUAL, TYPE B LANDSCAPE BUFFER. (2) STATE ON THE EXHIBIT THAT THE DESIGN MANUAL WAIVER REQUEST IS ON SHEETS 5, 6, AND 7 OF THE PRELIMINARY PLAN P-02-17. (3) THE PROPOSED ALIGNMENT OF WATER AND SEWER EASEMENT ACROSS LOTS 138-140 AND LOTS 162-163 COMBINED WITH THE PROPOSED STORM DRAIN EASEMENT RESULTS IN AN UNACCEPTABLE ENCUMBRANCE OF USABLE LOT SPACE FOR THESE LOTS. AN APPROVAL OF THIS DESIGN MANUAL WAIVER REQUEST CANNOT RESULT IN THE LOT LAYOUTS AS PROPOSED. ALTERNATIVE LOCATIONS OF THE STORM DRAIN SYSTEM AND ASSOCIATED EASEMENT MUST BE SHOWN ON THE PRELIMINARY PLANS P-02-17 TO REDUCE THE LOT ENCUMBRANCES OF LOTS 86-88 AND LOTS 115-116.
- 18. THE WAIVER PETITION, WP-03-78 WAS APPROVED ON JUNE 26, 2003 TO WAIVE SECTION 16.116(G) TO ALLOW GRADING AND DISTURBANCE WITHIN 75 FEET OF A PERENNIAL STREAM FOR THE PURPOSE OF RELOCATING THE ALIGNMENT OF 60 LF OF AN EXISTING AT&T EASEMENT.

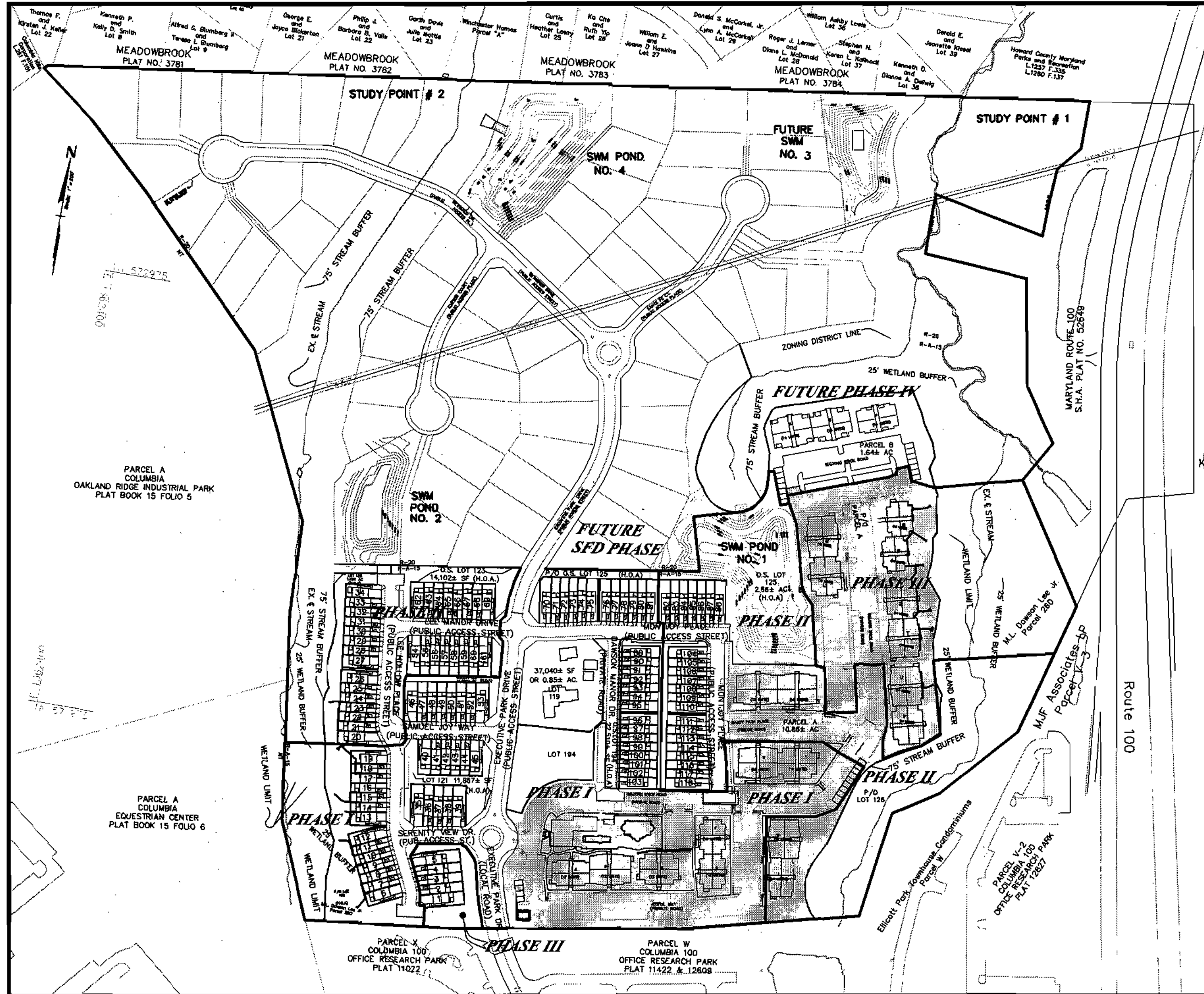
CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start Of Construction

Montjoy

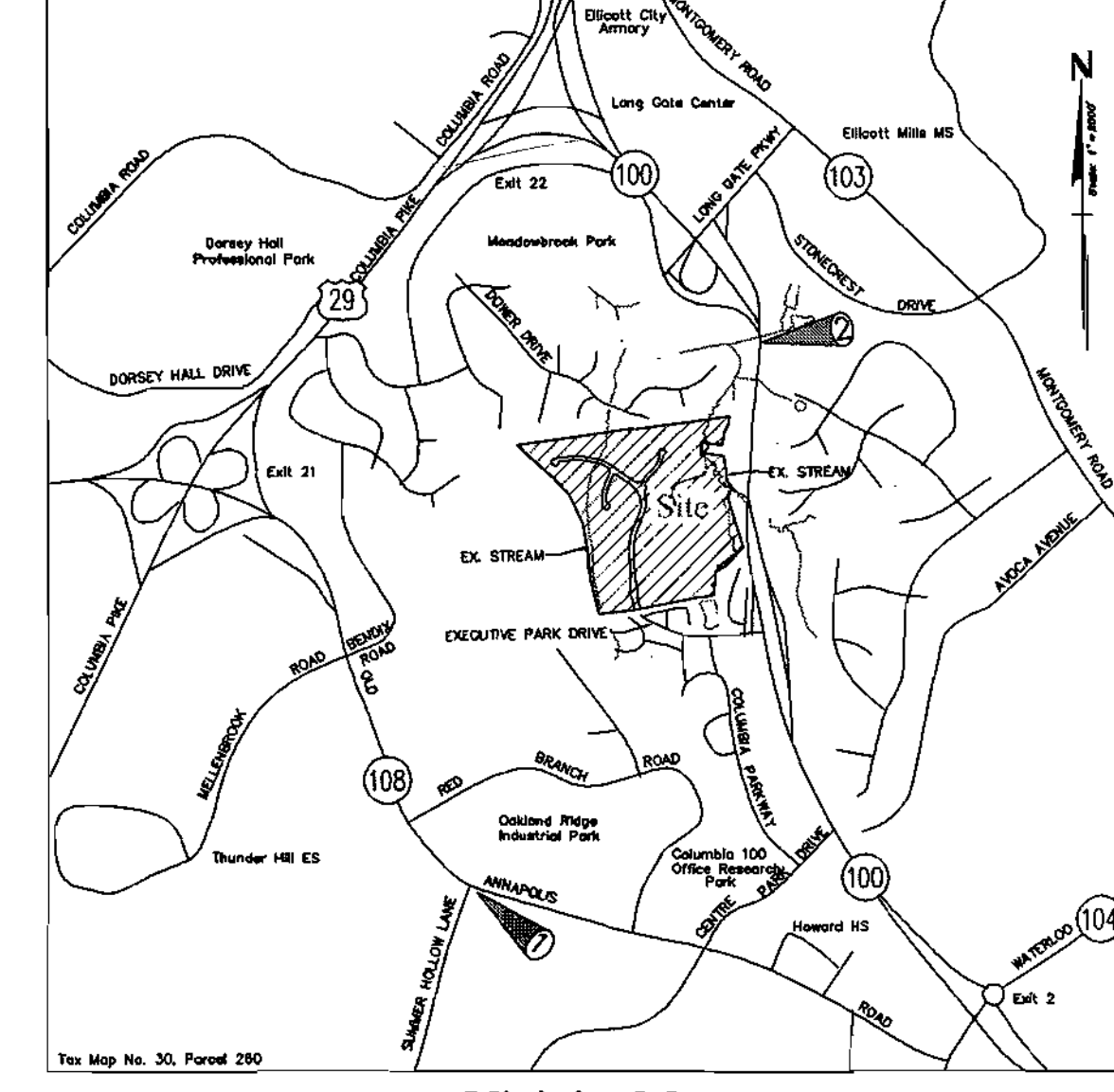
PHASES I, II & III APARTMENTS

ELECTION DISTRICT NO.2 HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN



- LEGEND**
- SOILS CLASSIFICATION
 - SOILS DELINEATION
 - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - LIMIT OF WETLANDS
 - FOREST CONSERVATION EASEMENT
 - EXISTING WOODS LINE
 - PROPOSED WOODS LINE
 - EXISTING STRUCTURE
 - PROPOSED STRUCTURE
 - LIMITS OF DISTURBANCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - SILT FENCE
 - SUPER SILT FENCE
 - EARTH DIKE
 - INLET PROTECTION
 - ENTRANCE LOCATION
 - EXISTING LIGHT POLE LOCATION (PUBLIC STREETS PER F-03-87)



SHEET INDEX

NO.	DESCRIPTION	INDEX NO.
1	COVER SHEET	CS-1
2	BUILDING FOOTPRINTS	CS-2
3	SITE DEVELOPMENT AND GRADING PLAN	SG-1
4	SITE DEVELOPMENT AND GRADING PLAN	SG-2
5	LANDSCAPE PLAN	LS-1
6	LANDSCAPE PLAN	LS-2
7	LANDSCAPE NOTES & DETAILS	LS-3
8	RETAINING WALL NOTES AND DETAILS	W-1
9	RETAINING WALL #5 PLAN, PROFILE AND SECTIONS	W-5
10	RETAINING WALL #6 PLAN, PROFILE AND SECTIONS	W-6
11	SEDIMENT & EROSION CONTROL NOTES & DETAILS	SC-1

SITE ANALYSIS DATA

- a) TOTAL PROJECT AREA = 76.43 AC.
- b) AREA OF THIS SDP SUBMISSION = 10.86 AC.
- c) LIMIT OF DISTURBANCE = 10.86 AC.
- d) ZONING = RA-15
- e) PROPOSED USE IS RESIDENTIAL (APARTMENT UNITS)
- f) TOTAL NUMBER OF UNITS ALLOWED FOR PROJECT PER F-03-87 = 405
- g) TOTAL NUMBER OF UNITS PROVIDED WITH THIS SDP = 244 UNITS
- h) REQUIRED PARKING CALCULATIONS:
 - 1) APARTMENTS = 2 SPACES/UNIT = 2(244) = 488 SPACES
 - 2) CLUBHOUSE AND POOL:
 - PER HOWARD CO. HEALTH DEPT.: 12SF/PERSON FOR SHALLOW POOL
 - 15SF/PERSON FOR 5FT OR GREATER DEPTH
- i) PROPOSED POOL IS 2242SF AND ASSUMED 75% IS SHALLOW THEN:
 - 1,682SF/12 = 140 PERSONS (SHALLOW)
 - 566SF/15 = 38 PERSONS (>5FT DEEP)
 - TOTAL PERSONS = 178 PERSONS
- j) AT 10 PERSONS PER PARKING SPACE, THEN 178/10 = 18 SPACES REQUIRED
- k) TOTAL REQUIRED PARKING FOR APARTMENTS AND POOL = 506 SPACES REQUIRED
- l) TOTAL PARKING PROVIDED FOR APARTMENTS AND POOL = 527 SPACES INCLUDING 14 HANDICAP SPACES, 4 OF WHICH ARE VAN ACCESSIBLE SPACES.
- m) OPEN SPACE REQUIREMENTS FOR PHASES I, II & III ARE PROVIDED ON LOTS 124, 125, 126 AND LOT 194 AS RECORDED UNDER F-03-87.
- n) RECREATIONAL OPEN SPACE REQUIREMENTS FOR PHASES I, II & III ARE PROVIDED ON LOTS 120, 121, PARCEL A AND LOT 194 AS RECORDED UNDER F-03-87.
- o) DPZ FILE REFERENCES:
 - S-01-20, P-02-10, P-02-17,
 - P-03-03, F-03-87, F-03-100,
 - WP-01-117, WP-03-78, A#03-17

OPEN SPACE CALCULATIONS

TOTAL AREA OF PHASES I, II, & III	= 32.75 AC.
TOTAL OPEN SPACE REQUIRED @ 25%	= 8.19 AC.
TOTAL OPEN SPACE PROVIDED	= 8.46 AC.
RECREATIONAL OPEN SPACE:	
118 TOWNHOUSES @ 200 SF/UNIT	= 23,600 SF OR 0.54 AC.
244 APARTMENTS @ 175 SF/UNIT	= 42,700 SF OR 0.98 AC.
1 SINGLE FAMILY DET @ 250 SF/UNIT	= 66,550 SF OR 1.53 AC.
TOTAL PROVIDED	= 1.75 AC. (0.22 AC. TO BE CREDITED TOWARD PHASE IV REC. REQUIREMENT)

LOCATION MAP
SCALE: 1"=200'

ADDRESS - ELLICOTT CITY, MD ZIP CODE: 21043

BLDG.	STREET ADDRESS	BLDG.	STREET ADDRESS
A	4801 JOYFUL WAY	P (FUT)	
B	4811 JOYFUL WAY	Q	5000 WALKING STICK ROAD
C	4821 JOYFUL WAY	R	4990 WALKING STICK ROAD
D	4831 JOYFUL WAY	S	4980 WALKING STICK ROAD
E	4841 JOYFUL WAY	T	4970 WALKING STICK ROAD
F	4830 JOYFUL WAY	U	4960 WALKING STICK ROAD
G	4840 JOYFUL WAY	V	4950 WALKING STICK ROAD
H	4800 SHADY PATH PLACE		
I	4801 SHADY PATH PLACE		
J	4801 SHADY PATH PLACE		
K	4811 SHADY PATH PLACE		
L	4901 WALKING STICK ROAD		
M	5001 WALKING STICK ROAD		
N (FUT)			
O (FUT)			

BENCH MARKS (NAD83)

BENCHMARK NO. 1---HO. CO. NO. 30FA	ELEV. 441.619
HOWARD CO. STD. STAMPED DISC LOCATED SW CORNER OF RT. 108 AND SUMMER HOLLOW LANE.	
N 568621.336, E 1361563.983	
BENCHMARK NO. 2---HO. CO. NO. 30CA	ELEV. 380.087
HOWARD CO. STD. STAMPED DISC LOCATED ON THE EAST SIDE OF THE N.B.L. OF RT. 100	
N 575083.465, E 1364681.801	

PERMIT INFORMATION CHART

Subdivision Name	Section/Area	Lot/Parcel No
MONTJOY	APARTMENTS	260

Plot No. or L/F	Grid #	Zoning	Tax Map No.	Elect. Distr.	Census Tract
#16351 thru #16359	12	R-A-15 R-20	30	2nd	602302

Water Code	Sewer Code
F-09	5750639

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/19/03
Chief, Development Engineering Division

[Signature] 12/24/03
Chief, Division of Land Development

[Signature] 12/30/03
Director

NOTES:

THIS SURVEY IS IN THE MARYLAND STATE PLANE COORDINATE SYSTEM BASED ON GPS OBSERVATIONS INCORPORATING THE FOLLOWING HOWARD COUNTY, MARYLAND CONTROL STATIONS:

STATION 30FA N.568621.336' E.1361563.983'
STATION 378B N.553452.821' E.1368503.167'
STATION 30CA N.575083.465' E.1364681.801'
STATION 30CB N.576541.342' E.1361211.296'
STATION 30IA N.567750.958' E.1364842.598'

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:

Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

SITE DEVELOPMENT PLAN

COVER SHEET

RODGERS CONSULTING

Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Galther Road
Gallersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

Montjoy

ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND

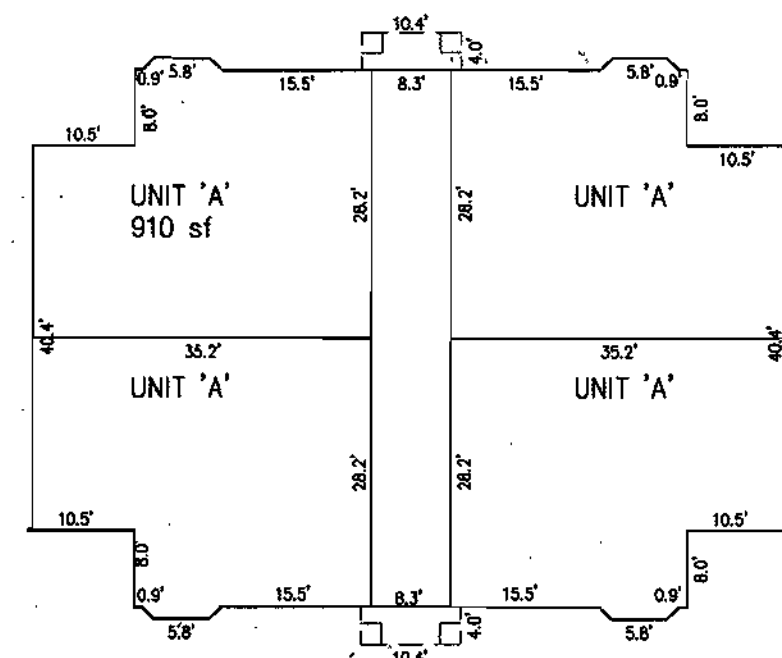
TAX MAP: 30 GRID:12 PARCEL 260

DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-08, F-03-87

SCALE: AS SHOWN
JOB No. **643G**
DATE: 7-10-03
INDEX No. **CS-1**
SHEET No. **1** OF 11



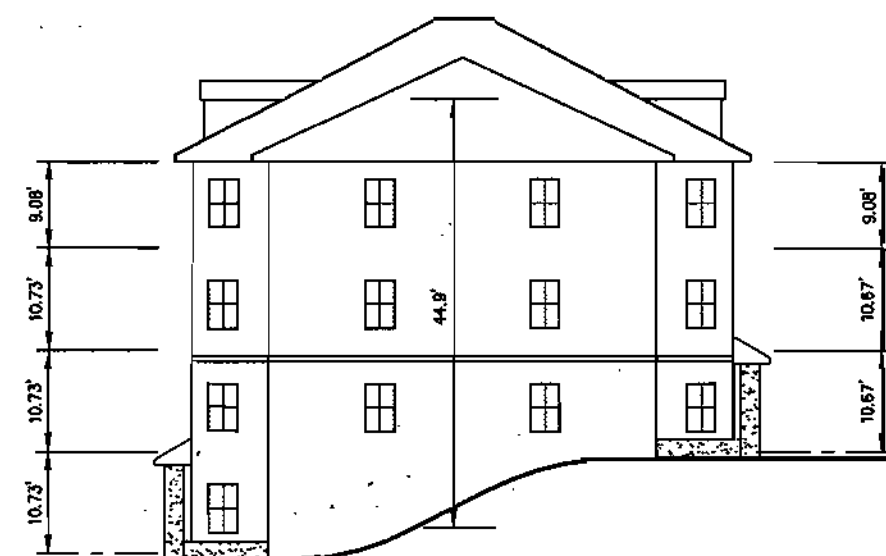
FRONT ELEVATION



FIRST FLOOR - PLAN VIEW



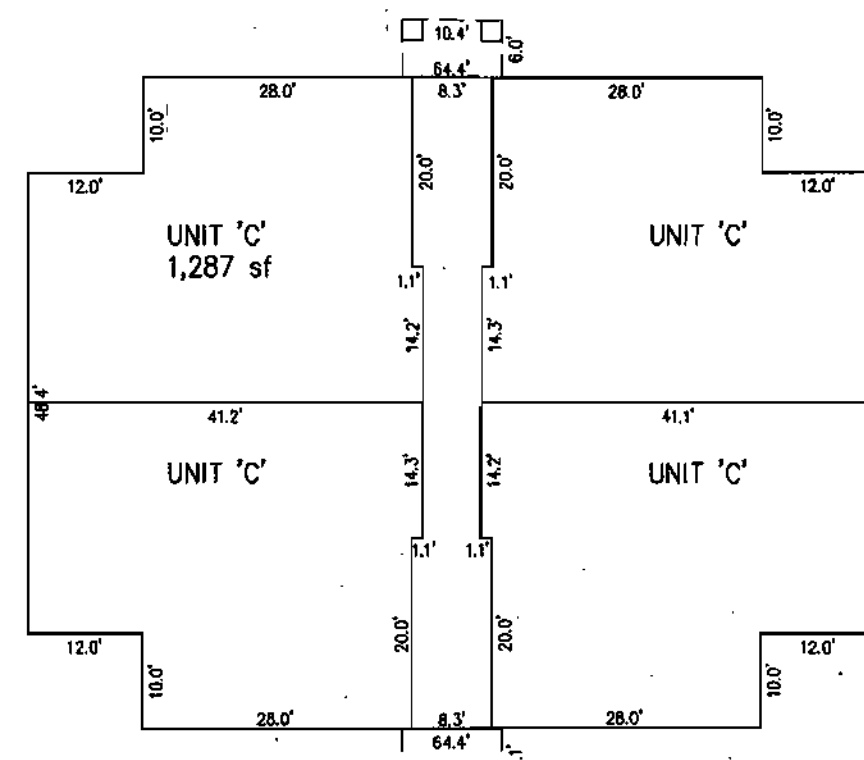
SIDE ELEVATION



SIDE ELEVATION - 3/4 SPLIT

BUILDING TYPE 'A' FOOTPRINTS

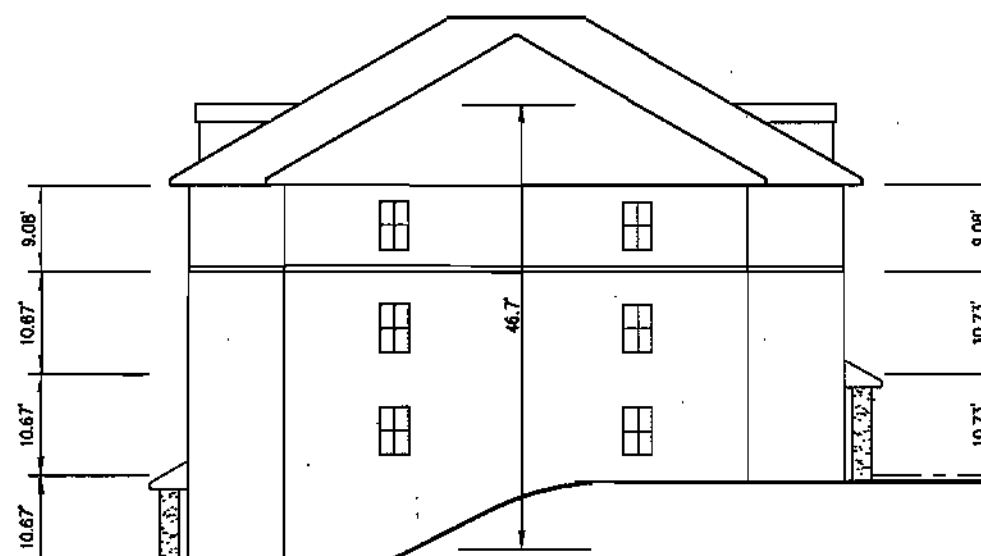
SCALE: 1"=20'



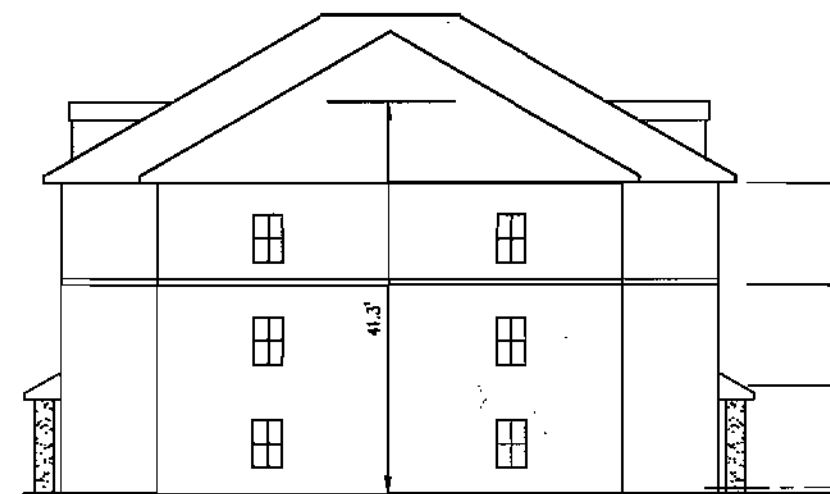
FIRST FLOOR - PLAN VIEW



FRONT ELEVATION



SIDE ELEVATION - 3/4 SPLIT



SIDE ELEVATION

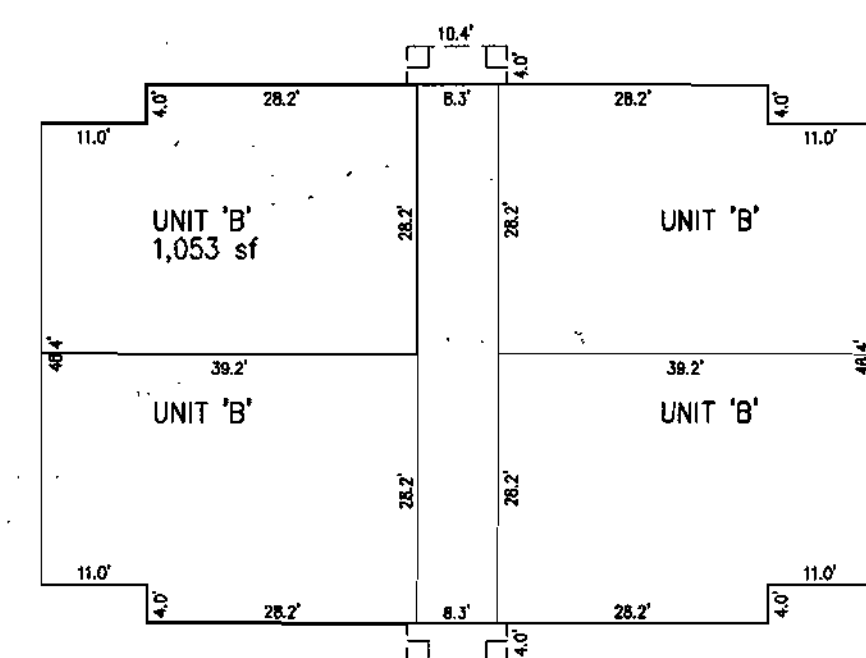
BUILDING TYPE 'C' FOOTPRINTS

SCALE: 1"=20'

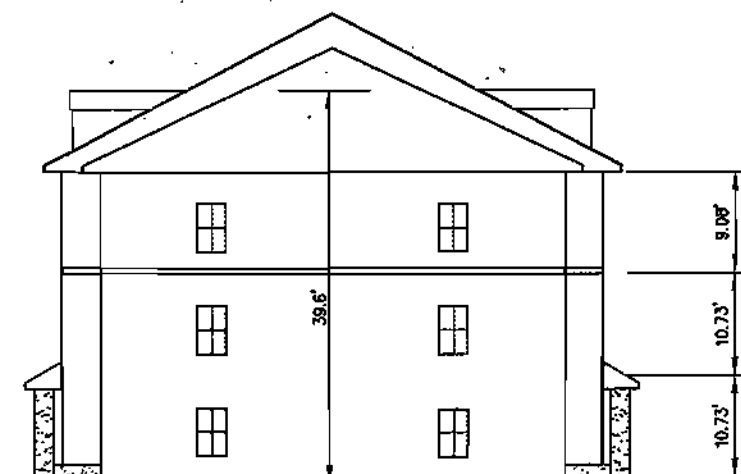
NOTE: TYPICAL UNIT SQUARE FOOTAGE GIVEN IS GROSS FLOOR AREA



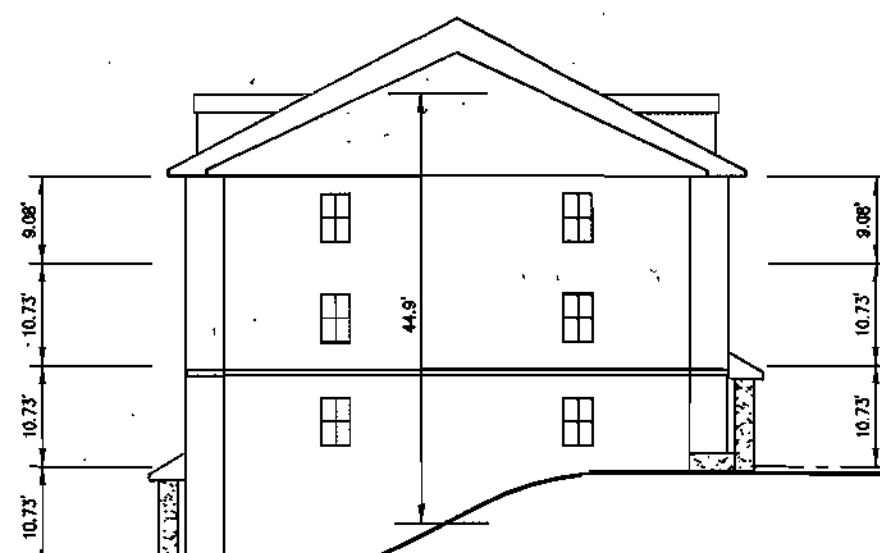
FRONT ELEVATION



FIRST FLOOR - PLAN VIEW



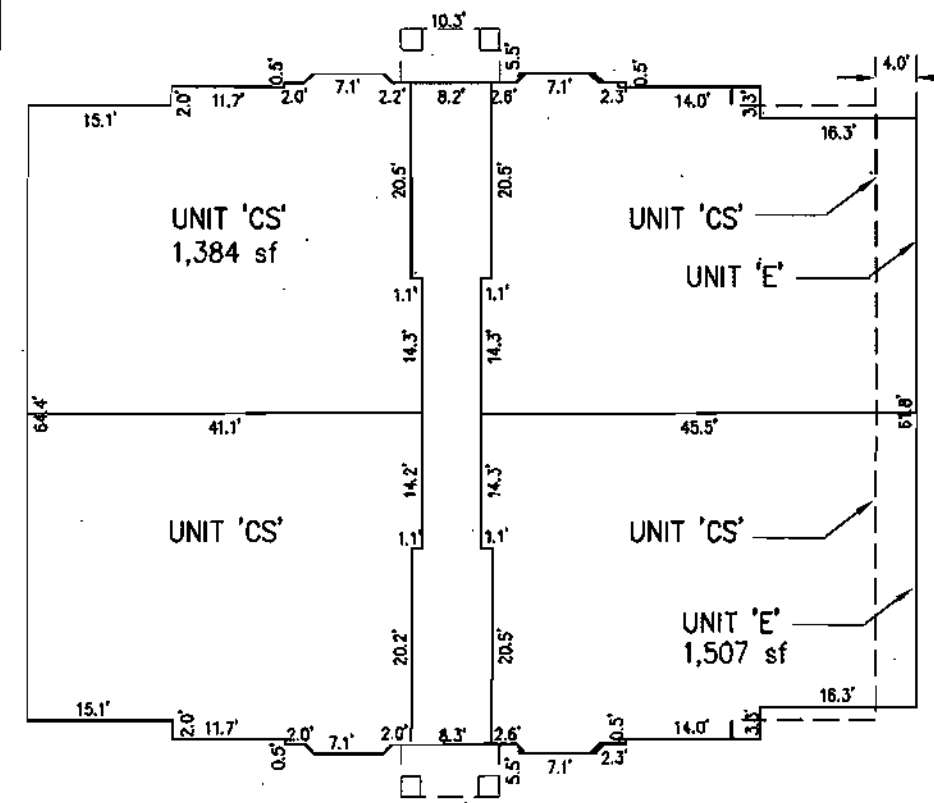
SIDE ELEVATION



SIDE ELEVATION - 3/4 SPLIT

BUILDING TYPE 'B' FOOTPRINTS

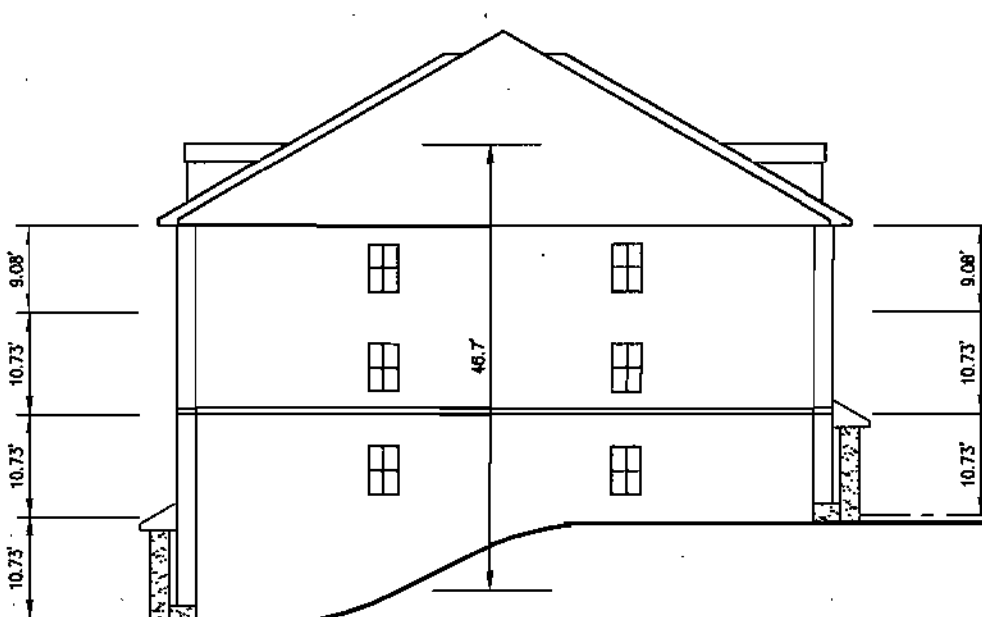
SCALE: 1"=20'



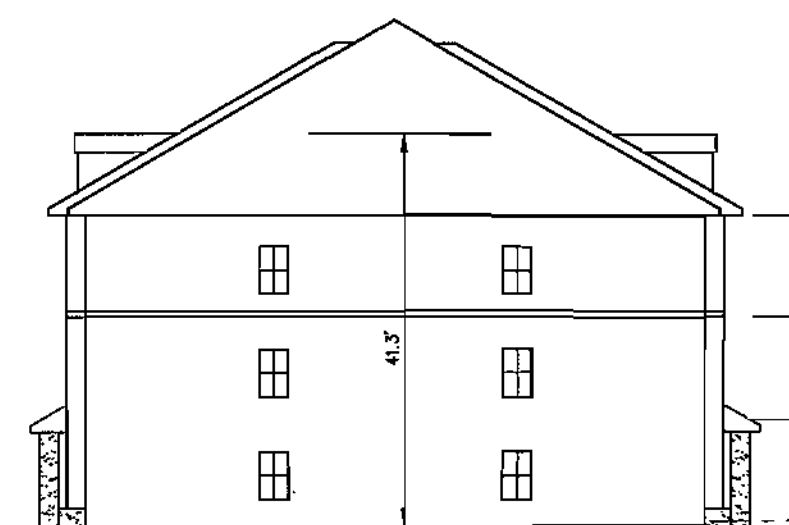
FIRST FLOOR - PLAN VIEW



FRONT ELEVATION



SIDE ELEVATION - 3/4 SPLIT



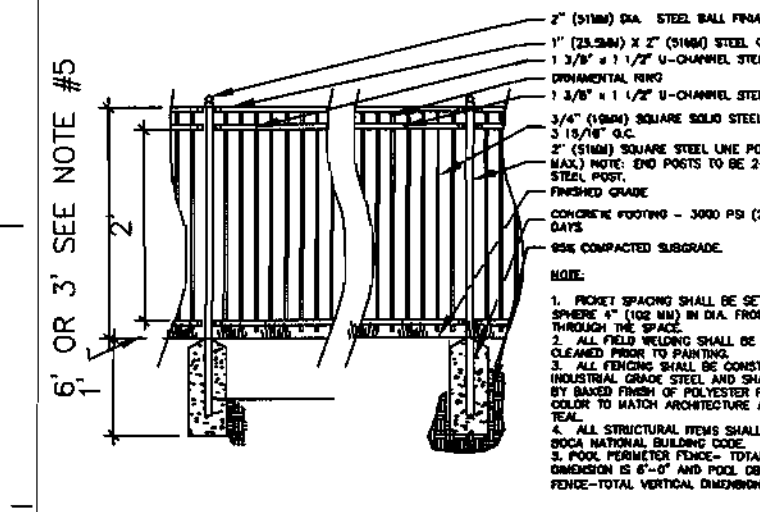
SIDE ELEVATION

BUILDING TYPE 'CS&E' FOOTPRINTS

SCALE: 1"=20'



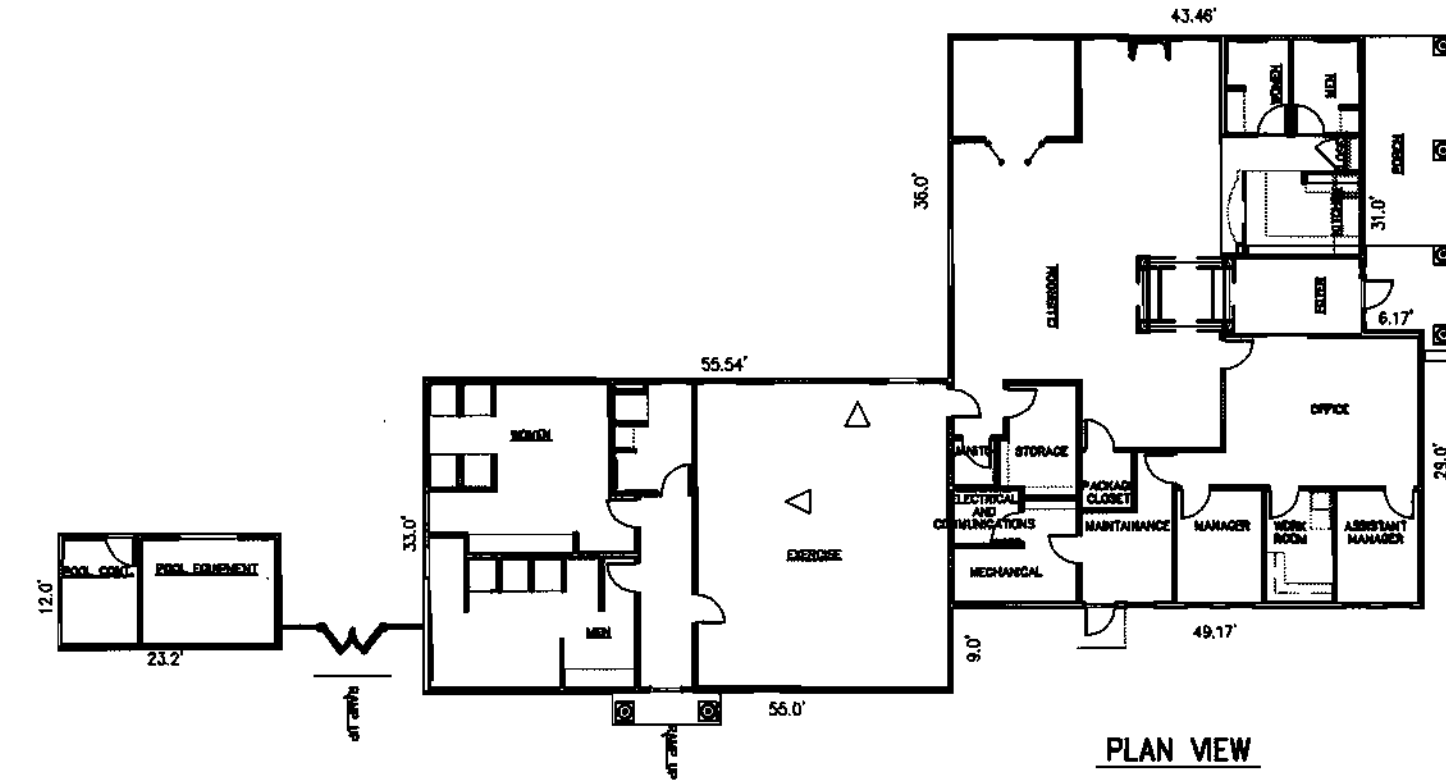
EAST ELEVATION



POOL FENCE DETAIL - NO SCALE

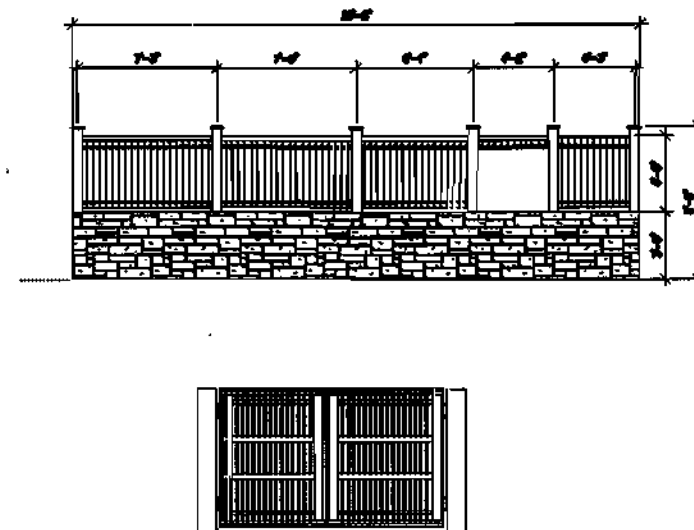


NORTH ELEVATION



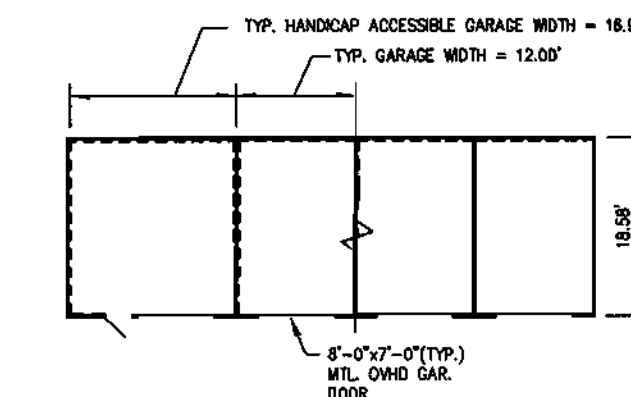
CLUBHOUSE FOOTPRINT

SCALE: 1"=20'



COMPACTOR DETAIL

SCALE: 1"=10'



GARAGE DETAIL

SCALE: 1"=20'



MAINTENANCE SHED DETAIL

SCALE: 1"=10'

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Approval signatures and dates for Department of Planning and Zoning, including Chief, Development Engineering Division and Chief, Division of Land Development.

ARCHITECTURAL INFORMATION FROM LEMAY-ERICKSON ARCHITECTS RESTON, VIRGINIA

Developer/Owner: Stringtown Investment, LLC, 6820 Elm Street Suite 200 McLean, Va. 22101 Mr. Russell Dickens (703) 734 - 9730

SITE DEVELOPMENT PLAN BUILDING FOOTPRINTS



Enhancing the value of land assets

Rodgers Consulting, Inc. 9260 Galther Road Gaithersburg, MD 20877 301.948.4700 301.948.6256 (fax) 301.253.6609 www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

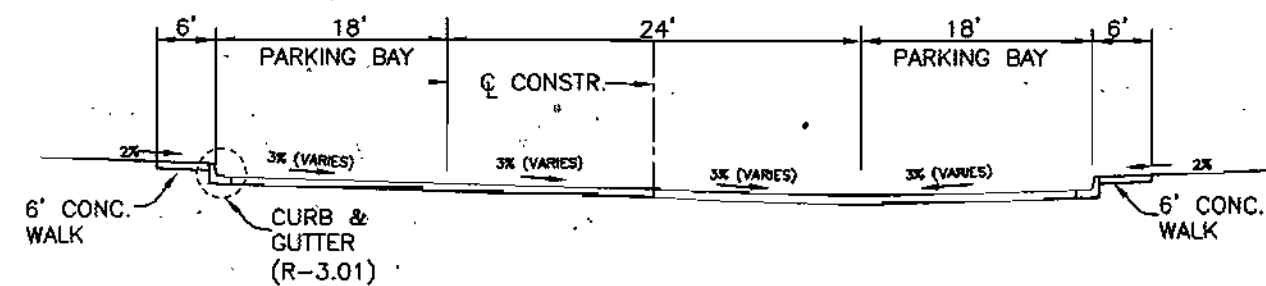
Montjoy

ELECTION DISTRICT No. #2 HOWARD COUNTY, MARYLAND

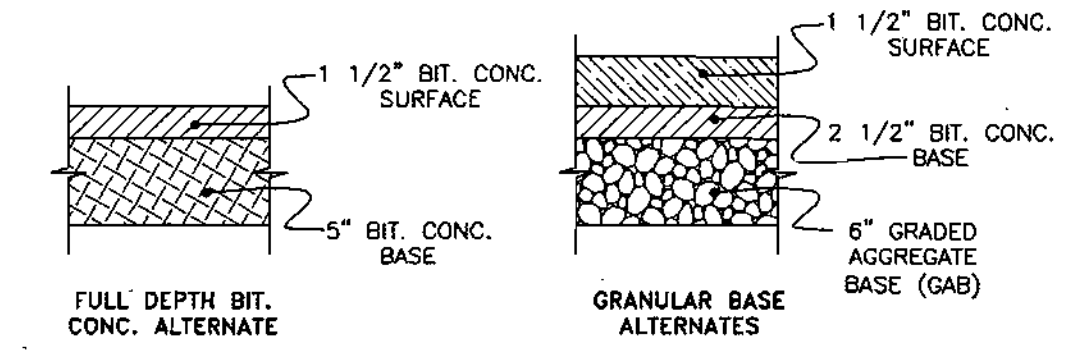
TAX MAP: 30 GRID:12 PARCEL 260

DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-07

Scale: AS SHOWN, Job No: 643G, Date: 7-10-03, Index No: CS-2, Sheet No: 2 OF 11



TYPICAL ROADWAY SECTION
(RESIDENTIAL PRIVATE STREET)



SECTION NUMBER	ROAD AND STREET CLASSIFICATION
P-2	RESIDENTIAL ZONES LOCAL, CUL-DE-SAC STS, ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY*

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE

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

HOWARD SCD DATE

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 COUNTY SOIL CONSERVATION DISTRICT

[Signature] 12/3/03
DATE

12/3/03
DATE

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 COUNTY SOIL CONSERVATION DISTRICT

[Signature] 12/3/03
DATE

12/3/03
DATE

SHC DATA (CONTR. No. 24-4064-D)

BLDG.	SQC INV.	MIN. SERVICE EL.	REMARKS
A	433.08	228.88	FROM 36 TO 35
B	432.08	227.08	FROM 34 TO 33
C	431.08	218.78	FROM 34 TO 33
D	430.08	218.78	FROM 34 TO 33
E	429.08	218.78	FROM 34 TO 33
F	428.08	218.78	FROM 34 TO 33
G	427.08	218.78	FROM 34 TO 33
H	426.08	218.78	FROM 34 TO 33
I	425.08	218.78	FROM 34 TO 33
J	424.08	218.78	FROM 34 TO 33
K	423.08	218.78	FROM 34 TO 33

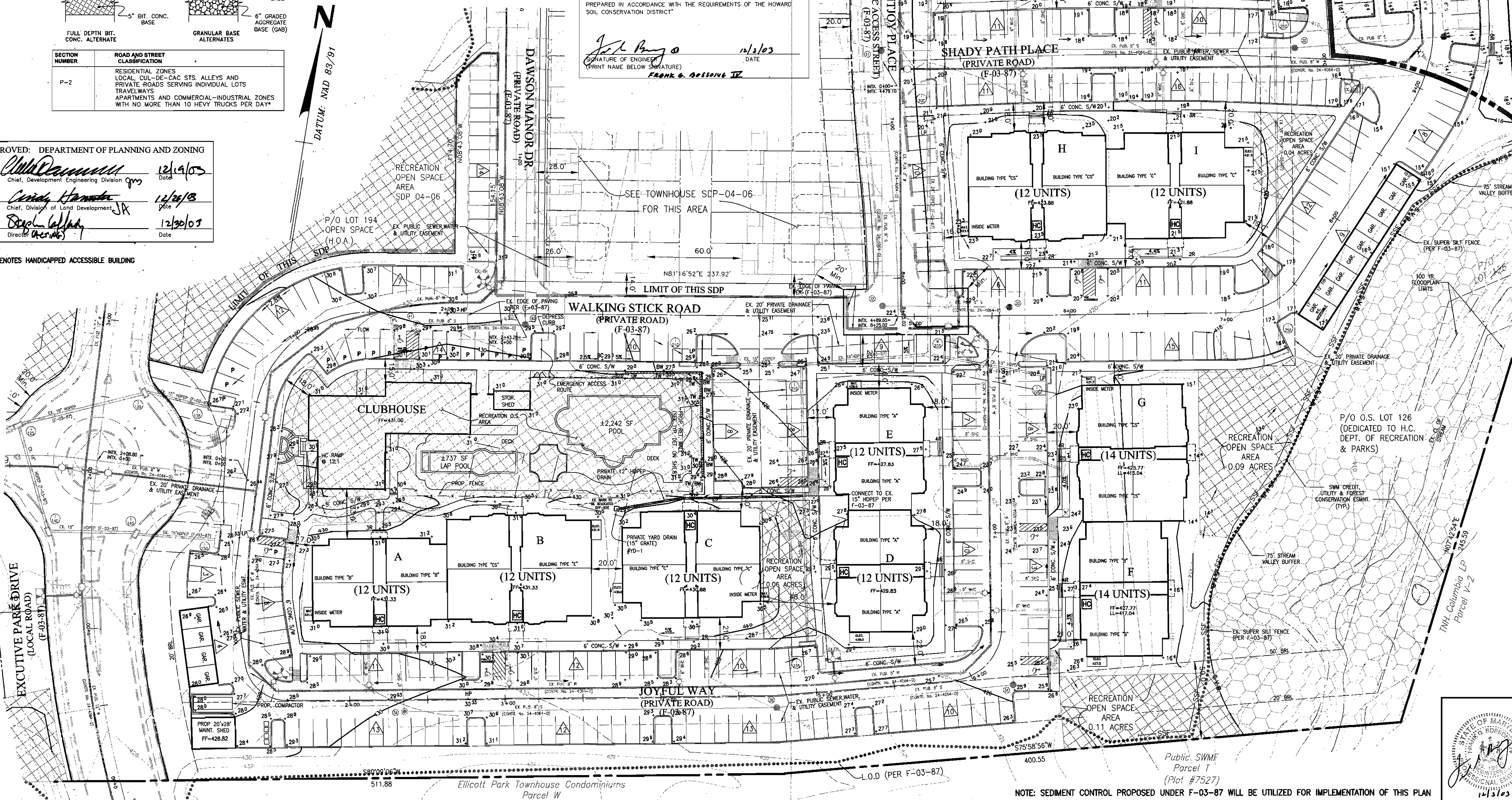
APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/19/03
Chief, Development Engineering Division gms Date

[Signature] 12/26/03
Chief, Division of Land Development JX Date

[Signature] 12/30/03
Director (A.C.A.B.) Date

HC DENOTES HANDICAPPED ACCESSIBLE BUILDING



DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB,RC	
	DRAWN		CoV	
	REVIEWED		PFB	
	RELEASE FOR			
	BY			

Developer/Owner:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734-9730

SITE DEVELOPMENT PLAN
GRADING & SEDIMENT CONTROL



Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III APARTMENT SDP

Montjoy

ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID.12 PARCEL 280
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-08, F-03-87

SCALE: 1" = 30'

JOB No: 643G

DATE: 07/10/03

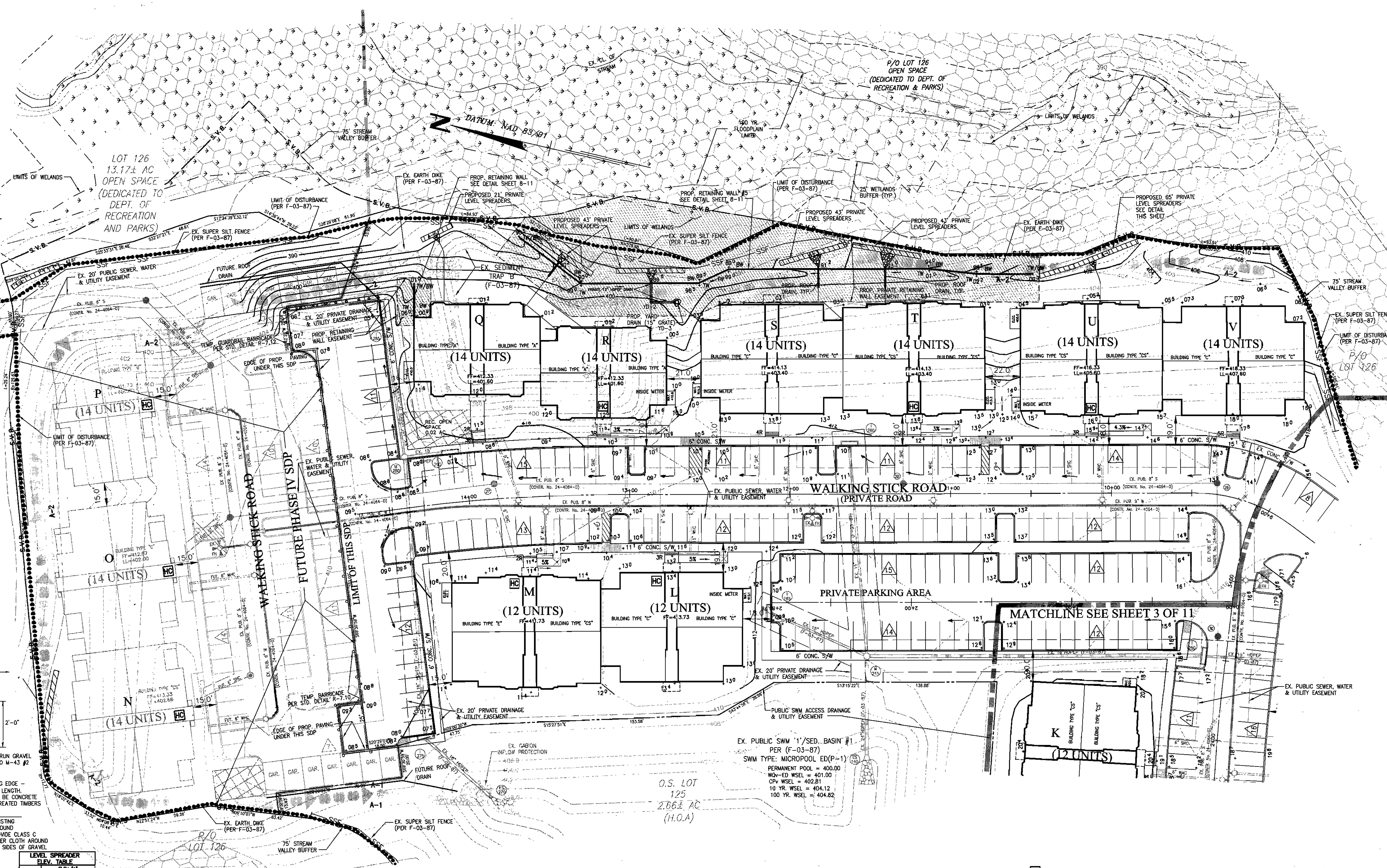
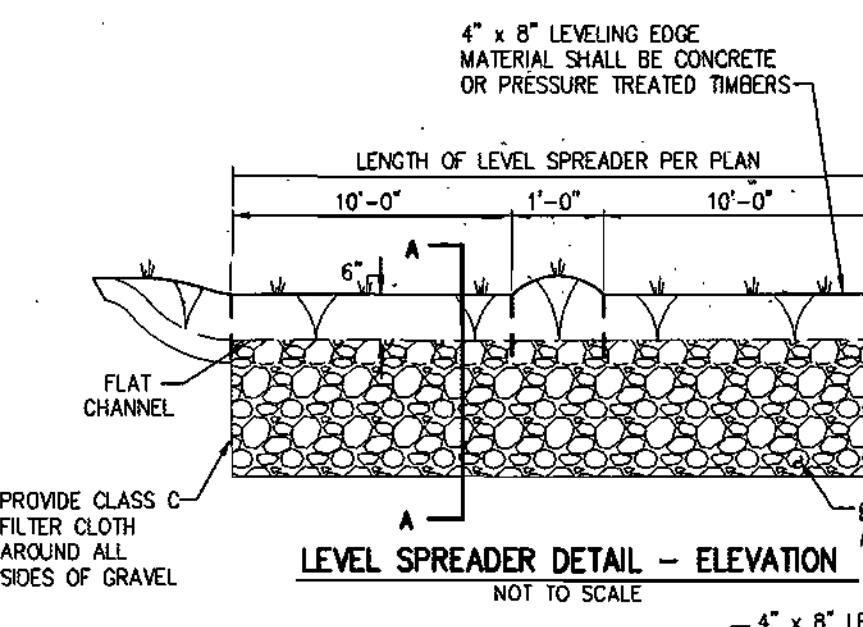
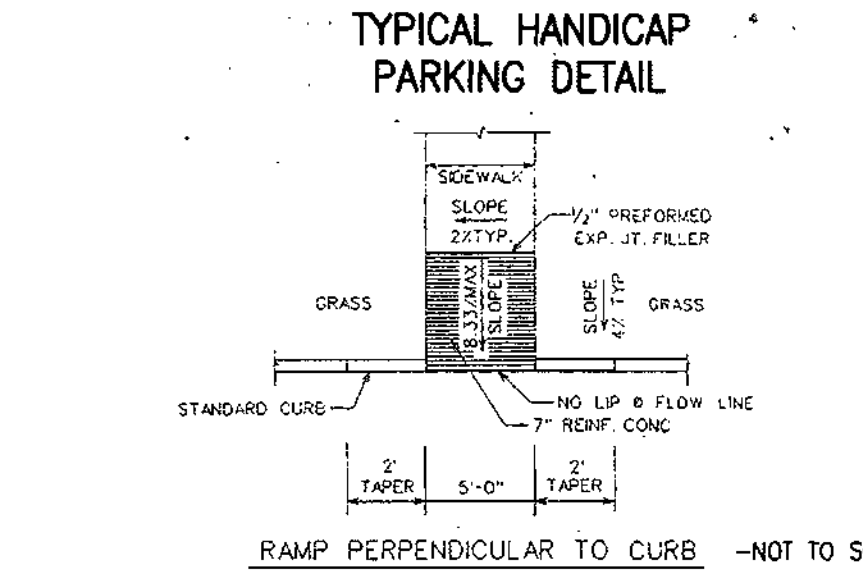
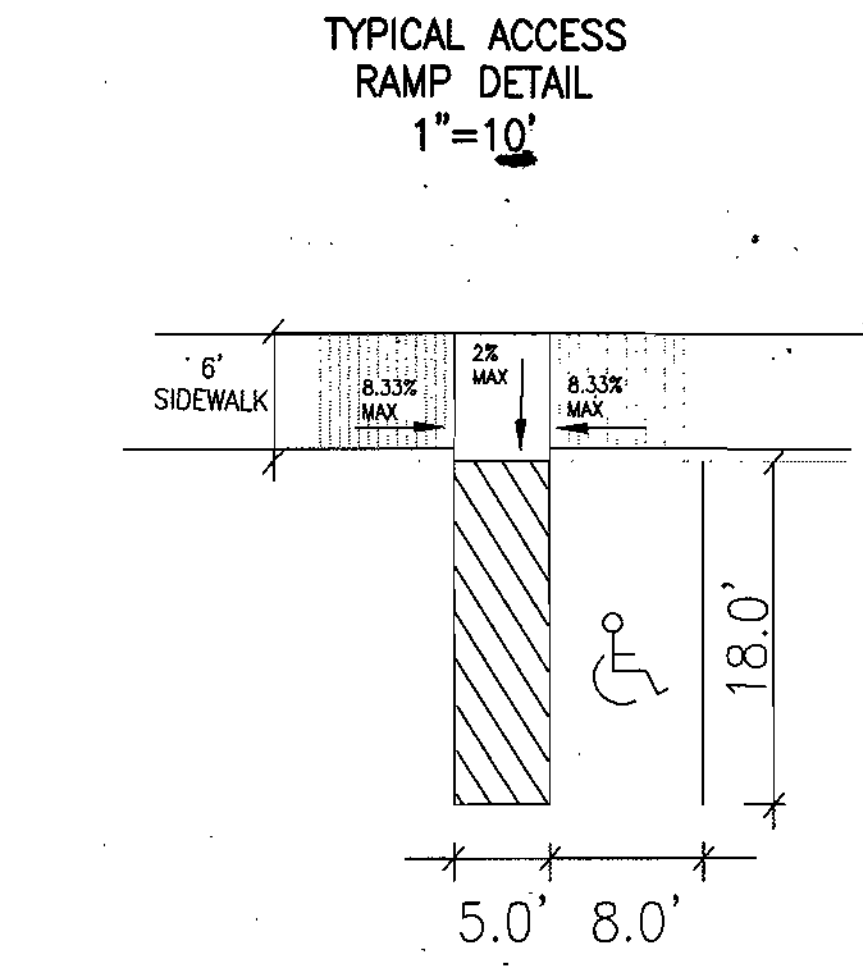
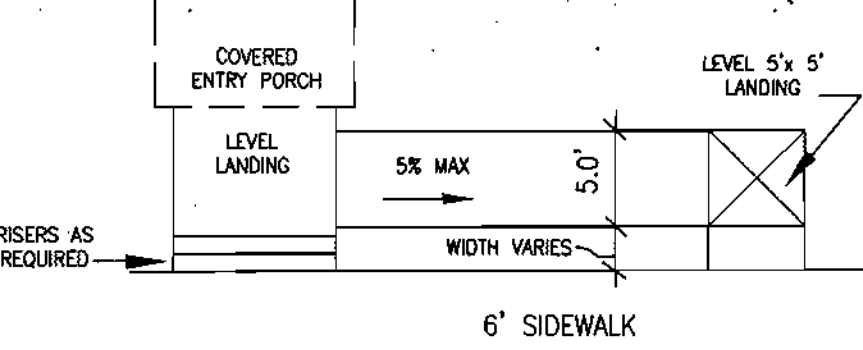
INDEX No: SG-1

SHEET No: 3 OF 11

SDP-04-07

NOTE: SEDIMENT CONTROL PROPOSED UNDER F-03-87 WILL BE UTILIZED FOR IMPLEMENTATION OF THIS PLAN

BLDG.	SHC NO.	MIN. SERVICE EL.	REMARKS
L	388.01	403.07	FROM 38 TO 27
M	387.38	402.46	FROM 38 TO 28
N	387.74	402.86	FROM 24 TO 25
O	389.83	401.80	FROM 24 TO 25
P	392.87	400.47	FROM 24 TO 25
Q	389.83	401.80	FROM 27 TO 26
R	387.83	401.60	FROM 28 TO 27
S	387.53	402.29	FROM 28 TO 27
T	389.38	403.45	FROM 28 TO 27
U	389.89	404.99	FROM 29 TO 28
V	421.38	408.38	FROM 29 TO 28
POOL	424.42	428.82	FROM 41 TO 40



APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/19/03
Chief, Development Engineering Division

[Signature] 12/19/03
Chief, Division of Land Development

[Signature] 12/30/03
Director (Acting)

NO.	DATE	BY	REVISION
1	12/19/03	JR	ISSUE FOR PERMITS
2	12/20/03	JR	REVISED PER HOWARD COUNTY COMMENTS
3	12/20/03	JR	REVISED PER HOWARD COUNTY COMMENTS
4	12/20/03	JR	REVISED PER HOWARD COUNTY COMMENTS
5	12/20/03	JR	REVISED PER HOWARD COUNTY COMMENTS
6	12/20/03	JR	REVISED PER HOWARD COUNTY COMMENTS

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 COUNTY SOIL CONSERVATION DISTRICT

[Signature] 12/19/03
USDA - NATURAL RESOURCES CONSERVATION SERVICE

[Signature] 12/10/03
HOWARD COUNTY

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 COUNTY SOIL CONSERVATION DISTRICT

[Signature] 12/19/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) FRANK G. ROSSIGNOL

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PF,RC	
	DRAWN		CoV	
	REVIEWED		PF	
	RELEASE FOR			

Developer/Owner:
Elm Street Development
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 9730

SITE DEVELOPMENT PLAN GRADING & SEDIMENT CONTROL

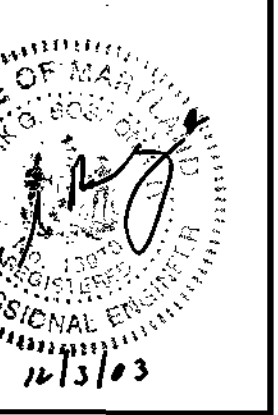


Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

Montjoy

ELECTION DISTRICT #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-07



NOTE: SEDIMENT CONTROLS PROPOSED UNDER F-03-87 AS SHOWN WILL BE UTILIZED FOR IMPLEMENTATION OF THIS PLAN

SCALE: 1"=30'

JOB NO: 643G
DATE: 07/10/03
INDEX NO: SG-2
SHEET NO: 4 OF 11
SDP-04-07

- Legend**
- TREE SYMBOL KEY
SEE SHEET 7 FOR SCHEDULE & DETAILS
- ACER RUBUM (RED MAPLE)
 - TILIA CORDATA (LITTLELEAF LINDEN)
 - QUERCUS RUBRA (RED OAK)
 - FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)
 - PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)
 - FRUNUS CERASIFERA (THUNDERCLOUD PLUM)
 - CUPRESSOCYPARIS 'LEYLANDII' (LEYLAND CYPRESS)
 - PINUS STROBUS (WHITE PINE)
 - AMALANCHIER CANADENSIS (SHADDBLOW SERVICEBERRY)
 - CRATAEGUS VIRIDIS 'WINTER KING' (WINTER KING HAWTHORN)
 - PRUNUS YEDOENSIS (YOSHINO CHERRY)
- NOTE: TREES APPROVED BY PREVIOUS PLANS (F-03-87) SHOWN IN LIGHT GREY.

- STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- WETLAND
- FOREST CONSERVATION EASEMENT
- PUBLIC TREE MAINTENANCE EASEMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

William Dammann 12/19/03
Chief, Development Engineering Division Date

Carole Hamilton 12/16/03
Chief, Division of Land Development Date

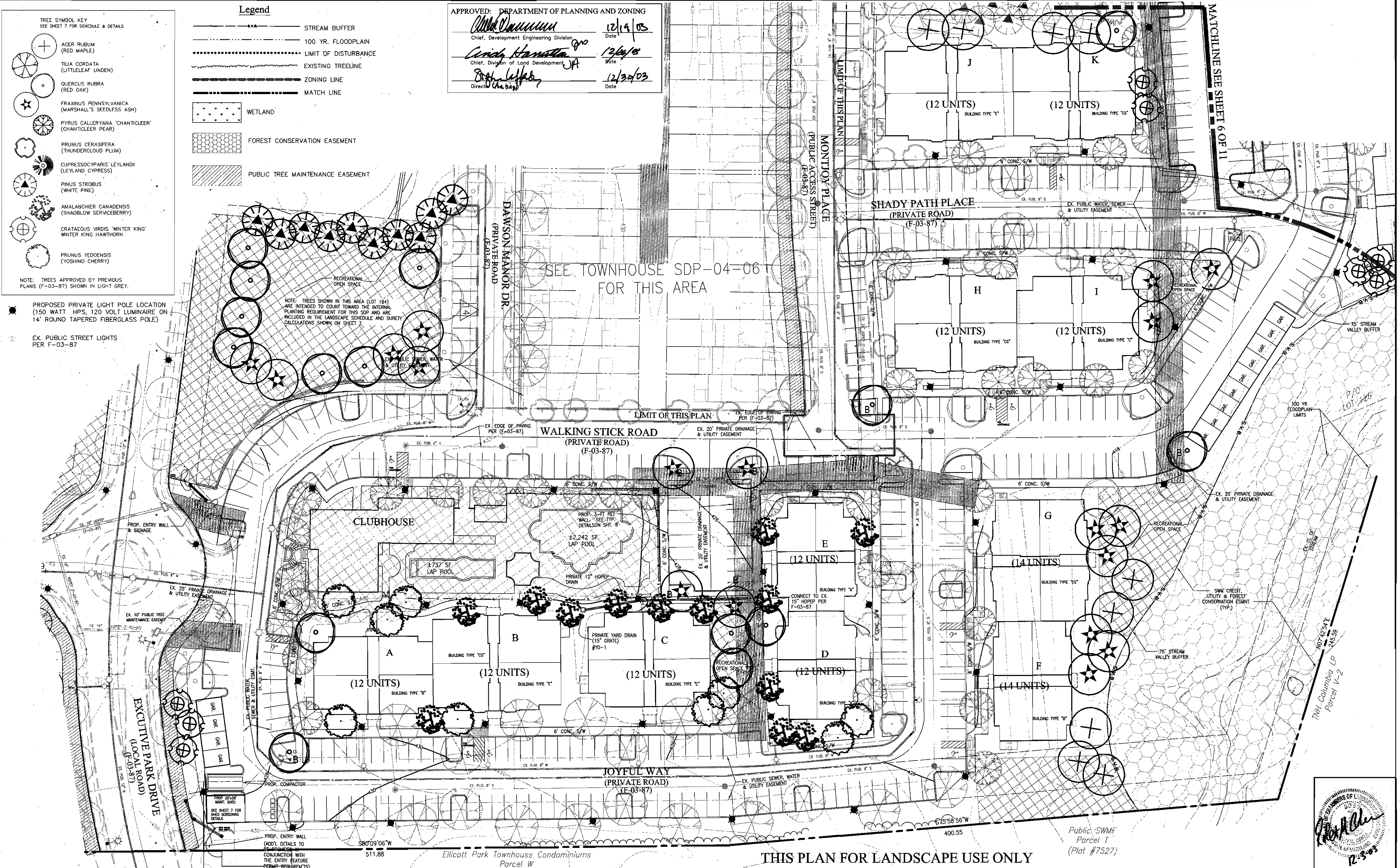
Paul Hefley 12/22/03
Director Date

PROPOSED PRIVATE LIGHT POLE LOCATION (150 WATT HPS, 120 VOLT LUMINAIRE ON 14' ROUND TAPERED FIBERGLASS POLE)

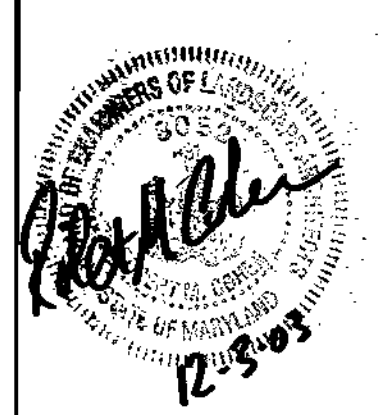
EX. PUBLIC STREET LIGHTS PER F-03-87

NOTE: TREES SHOWN IN THIS AREA (LOT 194) ARE INTENDED TO COUNT TOWARD THE INTERNAL PLANTING REQUIREMENT FOR THIS SDP AND ARE INCLUDED IN THE LANDSCAPE SCHEDULE AND SURETY CALCULATIONS SHOWN ON SHEET 7.

SEE TOWNHOUSE SDP-04-06 FOR THIS AREA



THIS PLAN FOR LANDSCAPE USE ONLY



DATE	REVISION	DATE	BY	DATE
			BASE DATA	CADD
			DESIGNED	RC
			DRAWN	CgV
			REVIEWED	PFB
			RELEASE FOR	
			BY	DATE

Owner/Developer:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

**SITE DEVELOPMENT PLAN
LANDSCAPE**



Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP
Montjoy
ELECTION DISTRICT No. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, F-03-87

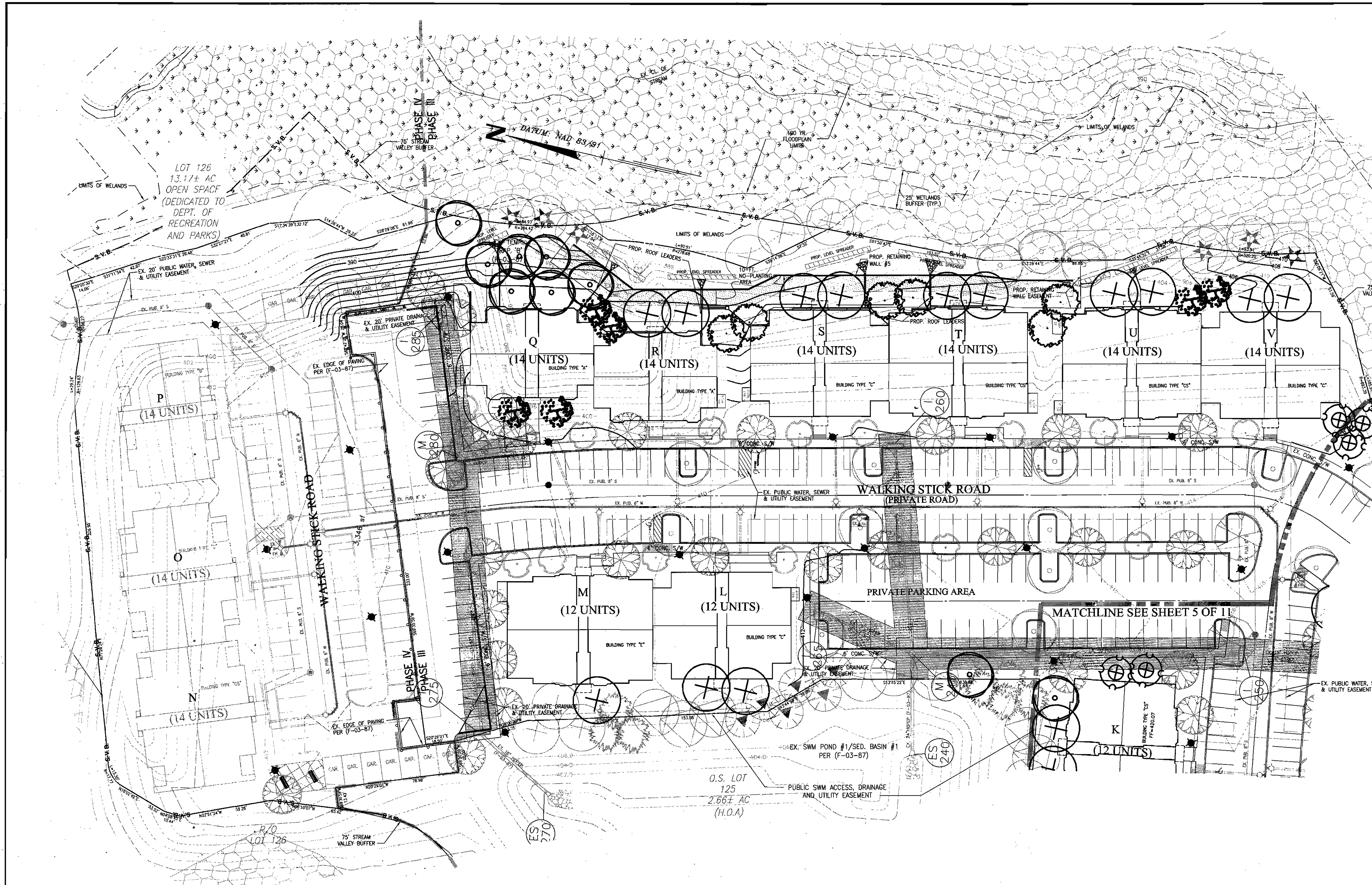
SCALE: 1" = 30'

JOB No.	643G
DATE:	07/10/03
INDEX No.	LS-1
SHEET No.	5 OF 11

Legend

- STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- WETLAND
- FOREST CONSERVATION EASEMENT
- PUBLIC TREE MAINTENANCE EASEMENT
- PROPOSED LIGHT POLE LOCATION

- TREE SYMBOL KEY**
SEE SHEET 7 FOR SCHEDULE & DETAILS
- ACER RUBRUM (RED MAPLE)
 - TILIA CORDATA (LITTLELEAF LINDEN)
 - QUERCUS RUBRA (RED OAK)
 - FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)
 - PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)
 - PRUNUS CERASIFERA (THUNDERCLOUD PLUM)
 - CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)
 - PINUS STROBUS (WHITE PINE)
 - AMALANCHIER CANADENSIS (SHADBLOW SERVICEBERRY)
 - CRATAEGUS VIRDIS 'WINTER KING' (WINTER KING HAWTHORN)
 - PRUNUS YEDOENSIS (YOSHINO CHERRY)
- NOTE: TREES APPROVED BY PREVIOUS PLANS (F-03-87) SHOWN IN LIGHT GREY.



APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/19/03
Chief, Development Engineering Division Date

[Signature] 12/26/03
Chief, Division of Land Development Date

[Signature] 12/30/03
Director (Chairman) Date

DATE	REVISION	DATE	BY	DATE	Owner/Developer:
	BASE DATA		CADD		Stringtown Investment, LLC 6820 Elm Street Suite 200 McLean, Va. 22101 Mr. Russell Dickens (703) 734 - 9730
	DESIGNED		RC		
	DRAWN		CoV		
	REVIEWED		PFB		
	RELEASE FOR				
	FINAL W/LAR SUBMITTAL FOR SIGNATURE	12-04-03			
	REVISED PER HOWARD COUNTY COMMENTS	11-13-03			
	REVISED PER HOWARD COUNTY COMMENTS	07-20-03			
	SUBMITTED FOR REVIEW	07-10-03			

**SITE DEVELOPMENT PLAN
LANDSCAPE**



Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260

SCALE: 1"=30'
JOB NO: 643G
DATE: 07/10/03
INDEX NO: LS-2
SHEET NO: 6 OF 11

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
Number of Parking Spaces	528
Number of trees Required @ 1/10 spaces	53
Number of Trees Provided:	
Shade Trees	53
Other Trees (2:1 substitution) =	

NOTE: Internal parking landscape requirements have been met by approved street tree landscape plan under F-03-87, with the exception seven additional trees, provided under this landscape plan. Schedule 'B' trees identified by **B** on plan.

SCHEDULE C RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING	
Number of Dwelling Units	244
Number of trees Required @ 1/3 DU	82
Number of Trees Provided:	
Shade Trees	56
Other Trees (2:1 substitution) =	52 (credit = 26)

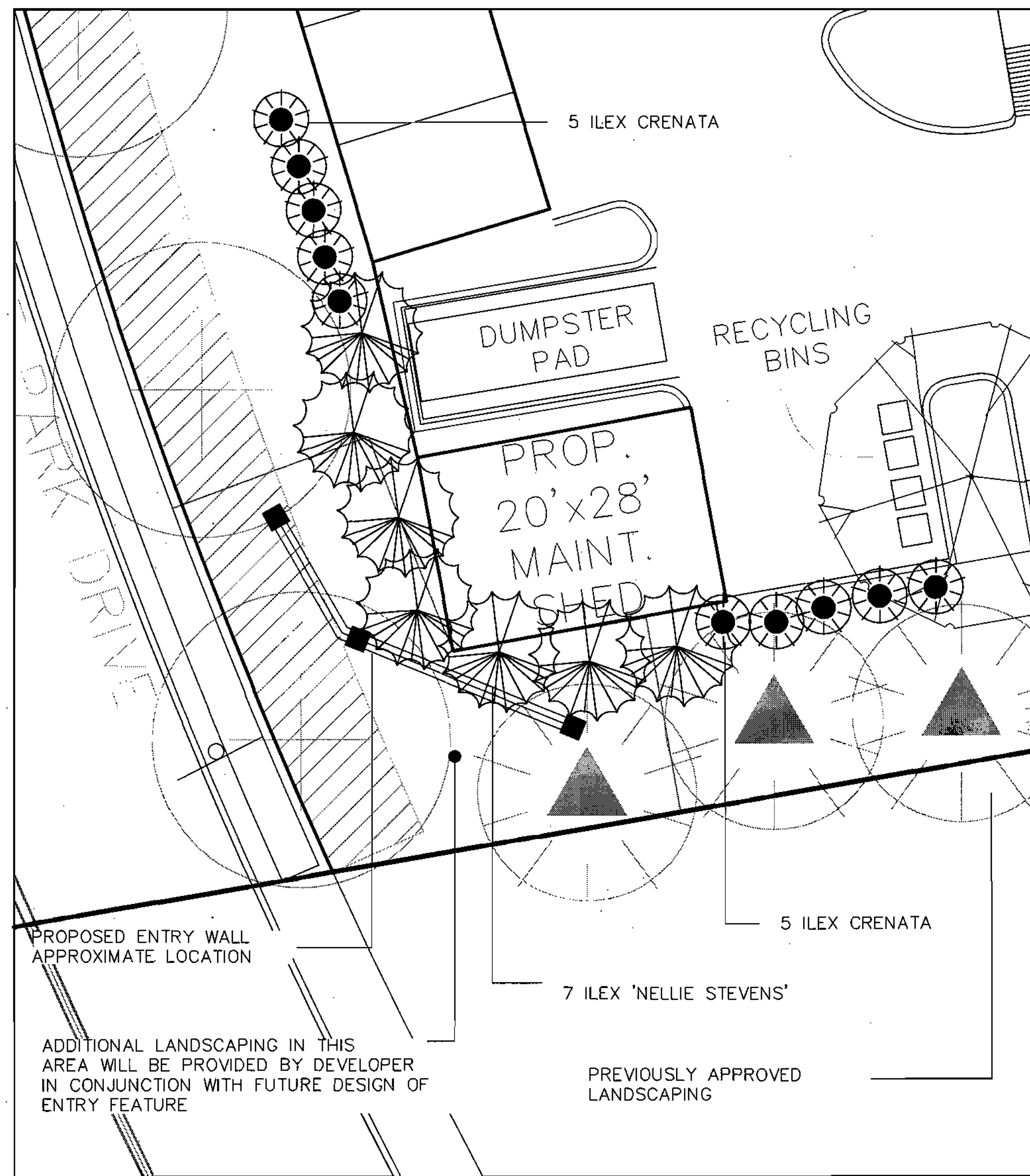
PLANTING SCHEDULE - RESIDENTIAL INTERNAL *				
SYMBOL	BOTANICAL NAME (COMMON NAME)	Q'TY	SIZE	ROOT
LARGE TREES				
+	ACER RUBUM (RED MAPLE)	22	2 1/2"-3" cal	B&B
☆	FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)	18	2 1/2"-3" cal	B&B
○	QUERCUS RUBRA (RED OAK)	23	2 1/2"-3" cal	B&B
SMALL TREES & EVERGREENS				
⊗	AMALANCHIER CANADENSIS (SHADBLOW SERVICEBERRY)	19	8' - 10' ht.	B&B
⊕	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN	8	1 1/2"-2" cal	B&B
⊙	PRUNUS YEDOENSIS (YOSHINO CHERRY)	15	1 1/2"-2" cal	B&B
⊖	PINUS STROBUS (WHITE PINE)	10	6'-8' ht.	B&B

*Includes 7 supplemental internal parking trees

MAINTENANCE SHED SCREENING SCHEDULE (NOT BONDED)				
⊗	ILEX 'NELLIE STEVENS' NELLIE STEVENS HOLLY	7	5'-6' ht.	B&B
⊖	ILEX CRENATA 'GREEN LUSTRE' GREEN LUSTRE HOLLY	10	2 1/2"-3" ht.	B&B

SURETY CALCULATION-RESIDENTIAL INTERNAL LANDSCAPING TREES			
SHADE TREES *	63 @ \$300 ea	\$ 18,900	
ORNAMENTAL/EVERGREENS	52 @ \$150 ea	7,800	
TOTAL		\$ 26,700	

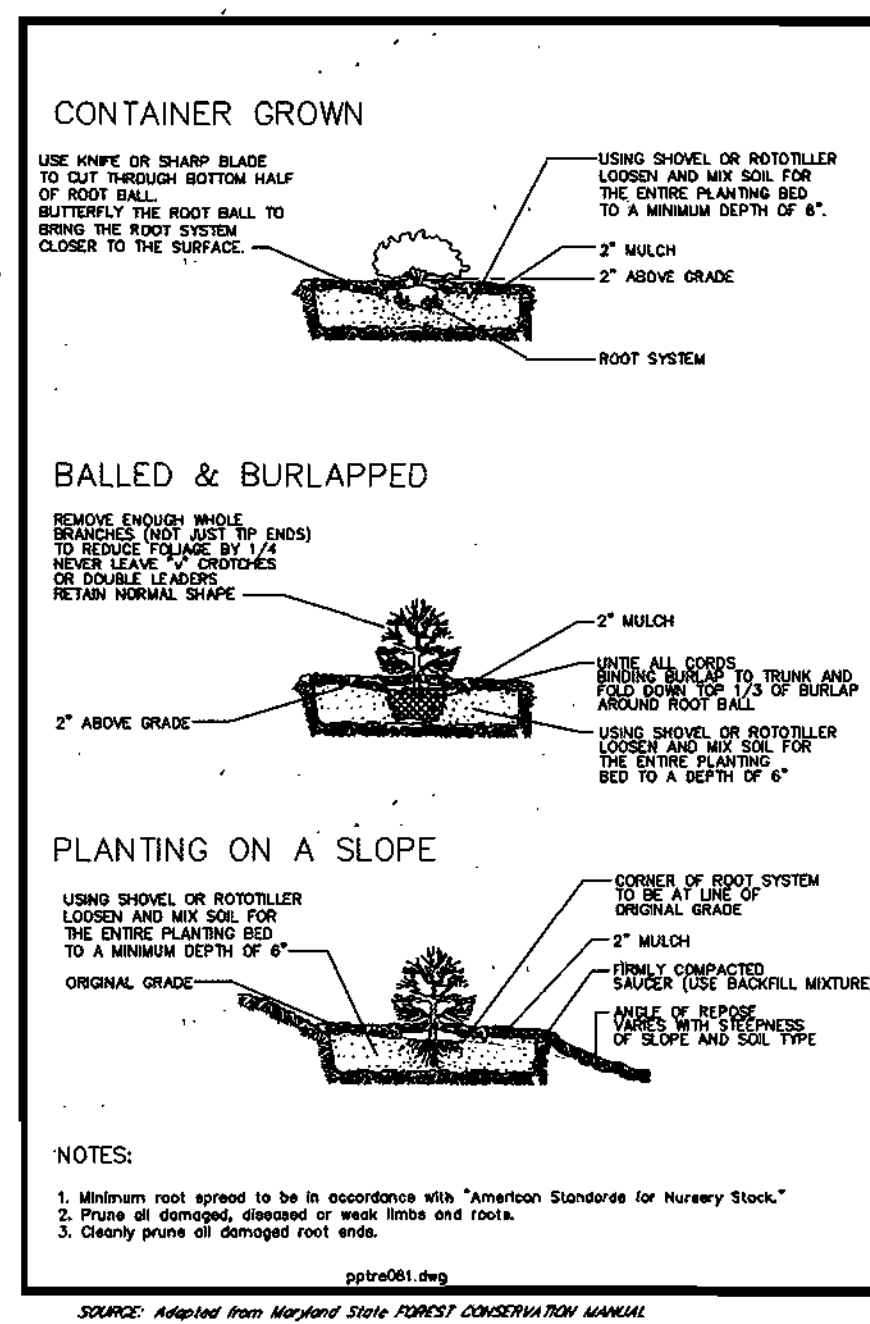
*Includes 7 supplemental internal parking trees



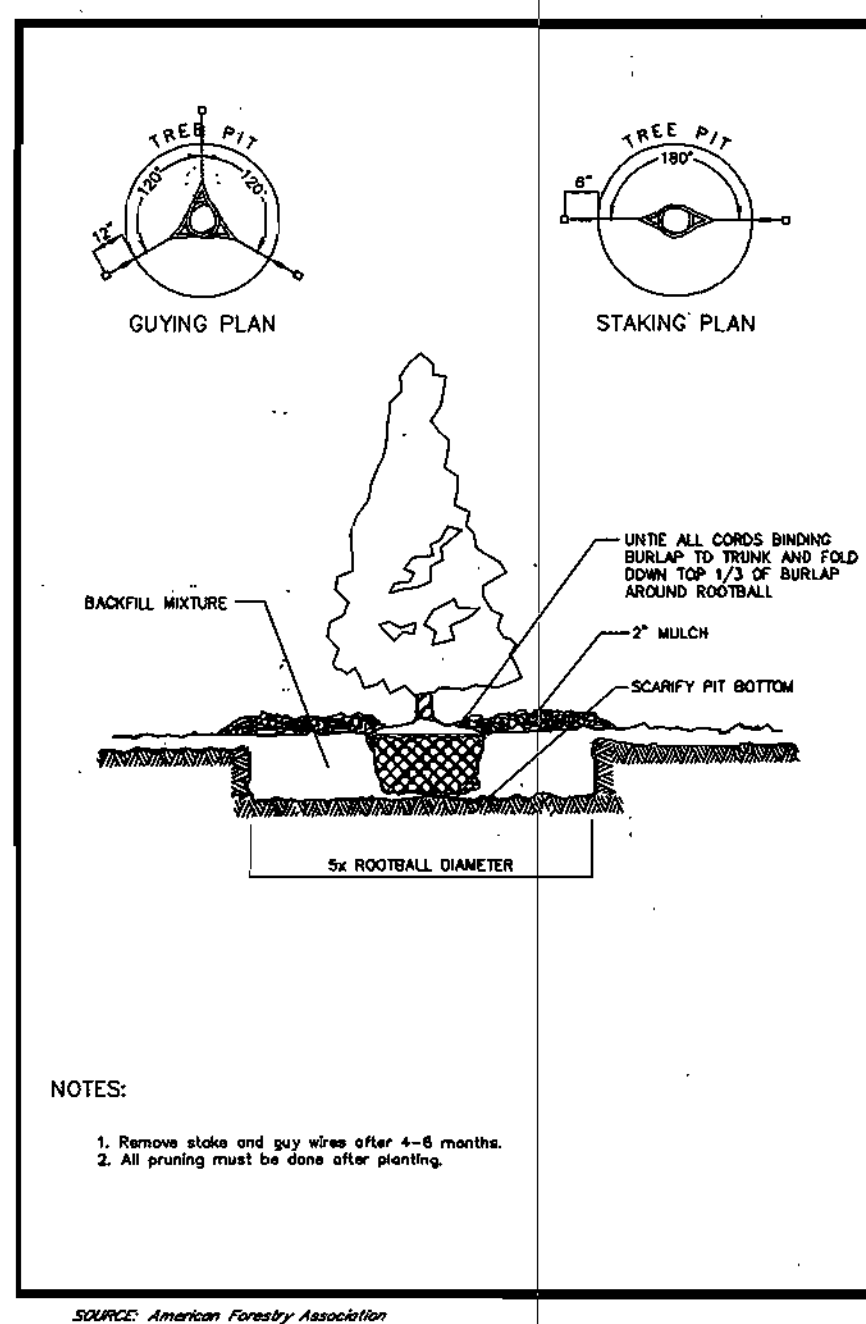
Landscape Notes:

- ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL AS ADOPTED 1/4/93 AND AMENDED 3/2/98.
- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (AAN), particularly with regards to site, growth, and size of ball and density of branch structure. Contractor to insure conformance to national and local building codes and ordinances.
- All plants (B&B or container) shall be properly identified by weatherproof labels securely attached hereto before delivery to project site. Labels shall identify plants by name, species and size. Labels shall not be removed until the final inspection by the owners representative.
- Any material and/or work may be rejected by the owners representative if it does not meet the requirements of the specifications. The contractor shall remove all rejected materials from the site.
- The contractor shall furnish all plants in quantities and sizes to complete the work as specified in plant schedule. The landscape contractor shall be responsible to verify all plant quantities on the plans prior to commencement of work. Quantities in the plant schedule are for the contractors convenience only and do not constitute the final count.
- Substitutions in plant species or size shall not be permitted except with the written approval of the owners representative.
- Plants shall be located as shown on the drawings and by scaling or as designated in the field by the owners representative. All locations are to be approved by the owners representative before excavation.
- Contractor shall locate and mark all underground utility lines and irrigation systems prior to excavating plant beds or pits. All utility easement areas where no planting shall take place shall also be marked on the site, prior to locating and digging the tree pits. If utility lines are encountered in excavation of tree pits, other locations for the trees shall be selected by the owners representative. Such changes shall be made by the contractor without additional compensation. No changes of location shall be made without the approval of the owners representative.
- All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow.
- During planting operations, excess and waste materials shall be promptly and frequently removed from the site.
- All plant shrub beds are to be dug to a minimum of 24" deep and all existing soil, construction debris, roots and other foreign material are to be removed and discarded off site. All plant shrub beds are to be excavated to the width shown on the plans.
- All tree pits are to be excavated to a minimum depth to allow the tree root ball to be a minimum of 4" higher than finish grade. The tree root ball is to rest on undisturbed soil, or a compacted bed must be prepared for the tree root ball to rest on and which will not subside causing the tree to sink below finish grade. All tree pits are to be a minimum of 12" larger on every side of the trees root ball.
- The planter beds are to be entirely cleaned out to the undisturbed soil level. All existing soil, construction debris, roots and other foreign material are to be removed and discarded offsite.
- The topsoil to be used to fill the tree pits, shrub beds and planters is to be plant specific. The topsoil for the trees, shrubs and planter shall consist of a maximum 2/3 existing topsoil from the site, which is cleaned and free of clay, a minimum of 1/3 peat moss, or other approved organic material or imported new loamy topsoil and 10% cow manure. All of these materials are to be mixed prior to placing in the planter or backfilling when planting.
- The contractor is responsible to ensure that all tree pits, shrub beds and planter are well drained. No landscape contractor without cost to the owner will replace all plant material, which is affected by poor drainage.
- All lawn areas are to be seeded with grass seed appropriate for each of the sunlight conditions, which exist on the site.
- All lawn areas are to be tilled to a depth of 6" and all foreign material removed which will inhibit the healthy growth of the lawn. All old grass and grass roots are to be removed from the site. New topsoil of a minimum 4" is to be placed over the areas to be sodded. The grass areas are to be fine graded to ensure that no undulations occur in the lawn. The lawns are to be graded in such a way as to appear perfectly well tilled and even. The lawn topsoil is to be rolled and lightly irrigated prior to placing of the seed. The seed is not to be laid on frozen or soaked soil.
- The existing trees are to be protected during the preparation of the lawn areas. The roots of the trees are to be undisturbed during the cleaning of the topsoil.
- The trees and shrubs are to be handled with the best care and attention to ensure that the plants are not bruised, broken, torn, damaged in any way which will affect the plants general appearance and well being.
- The trees and shrubs are to be planted with the accepted standards of the American Association of Nurserymen. The plants are to be properly watered and backfilled during the planting. All care must be taken to ensure that the plants are upright, a plant's best side is exposed to the point of the plants greatest visibility.
- The trees must be staked in accordance with acceptable nursery practice to ensure that they are secure in the ground and will grow straight and uniform. The trees are to be wrapped if the contractor deems it necessary to protect the trees from sun scald or insect attack.
- The Landscape Contractor is to provide a 1-year guarantee for all plant material and other work done on site.
- Large growing plants are not to be planted in front of windows, under building overhangs, or in drainage swales. Shrubs planted near H.V.A.C units to be located so that shrubs at maturity will maintain 1 foot airspace between unit and plant.
- Contractor to 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 buildings.
- Trees in public rights of way shall be located at least 3 feet from sidewalks. When the distance between the curb and the sidewalk is less than 6 feet, trees shall be planted 3 feet from sidewalk in the direction away from the road. (See road sections, below)
- Quantities as shown on the plan shall govern over plant list quantities. Contractor to verify plant list totals with quantities shown on plan.
- Groups of shrubs shall be placed in a continuous raised mulch bed with smooth continuous lines. All mulched bed edges shall be curvilinear in shape following the contour of the plant mass. Trees located within 4 feet of shrub beds shall share some mulch bed.

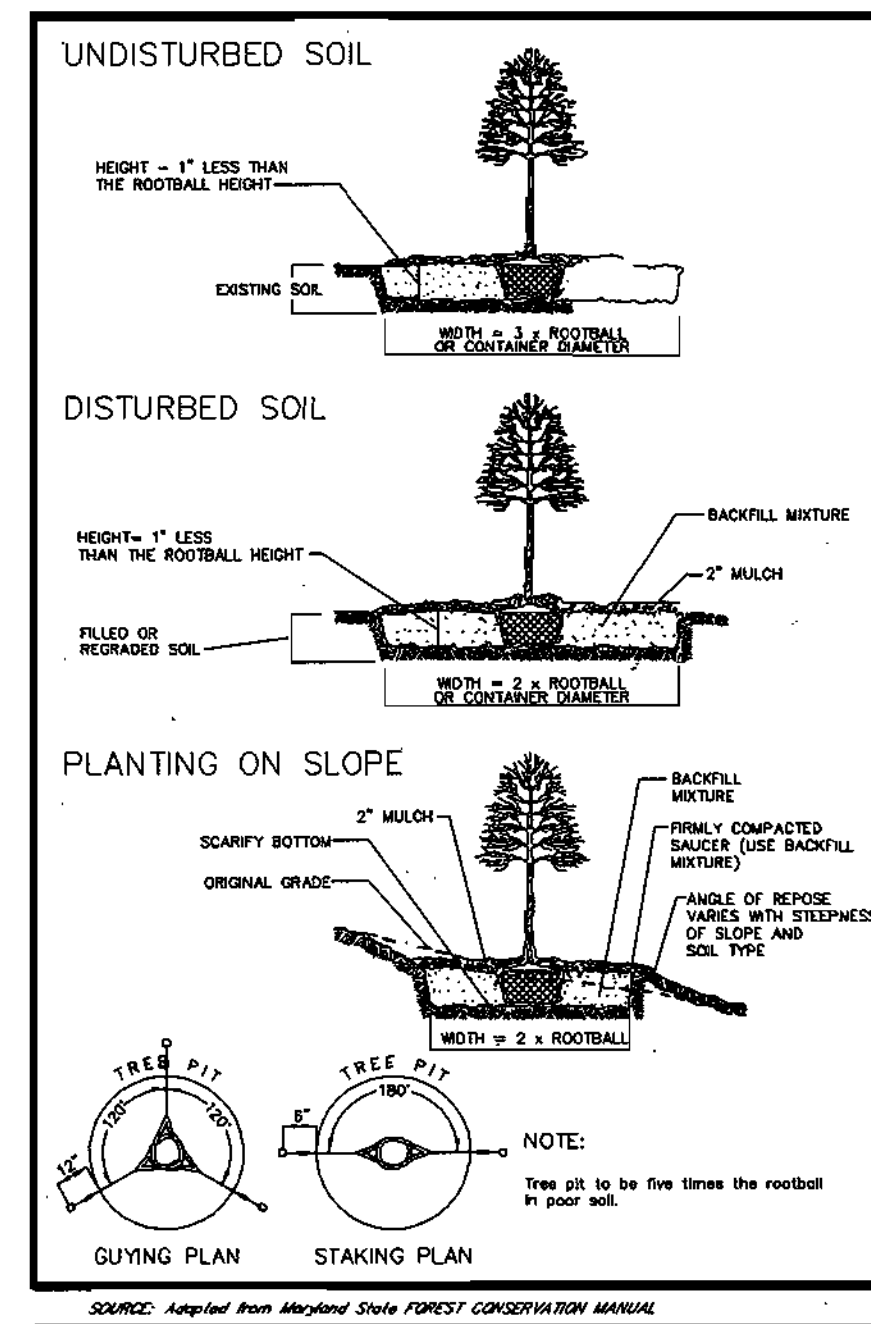
SHRUB PLANTING



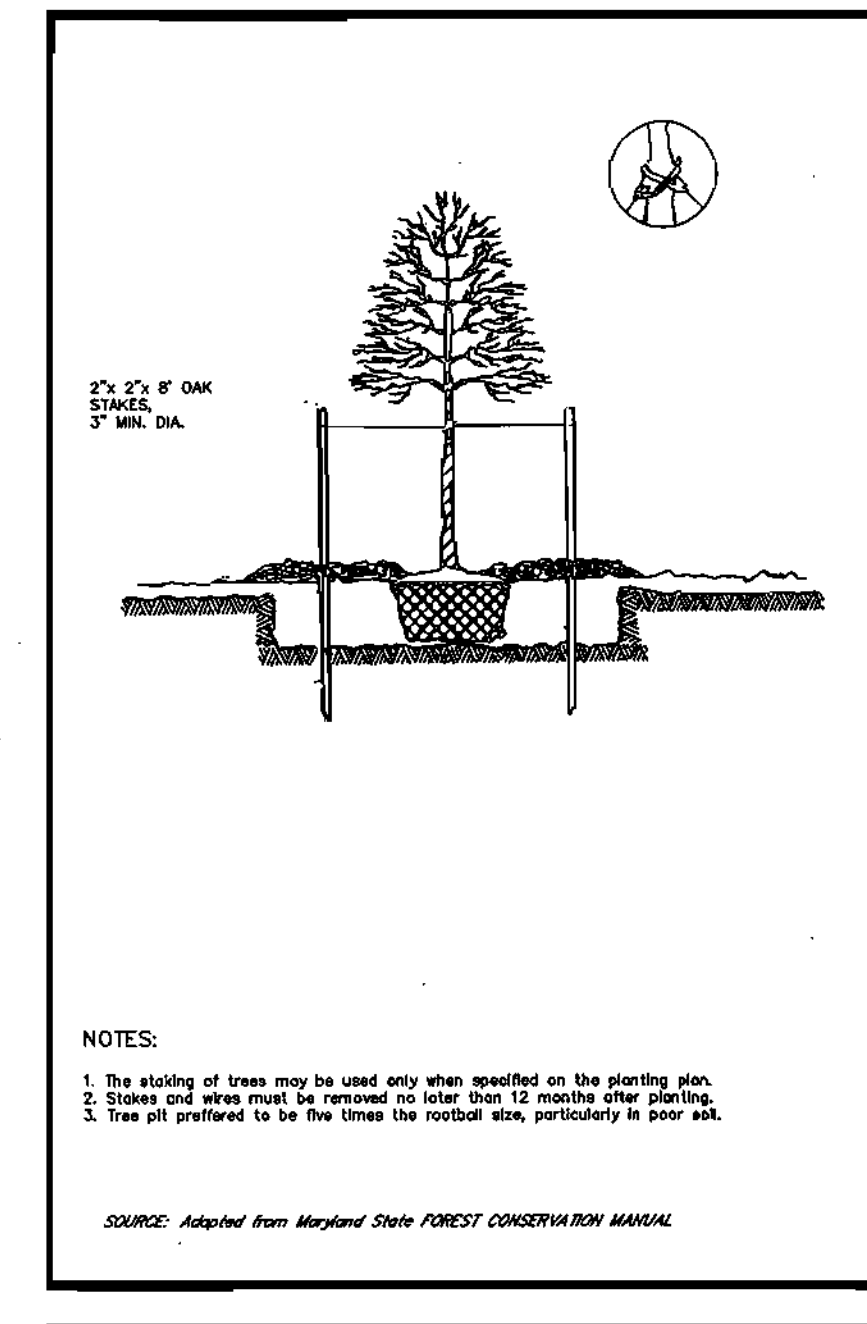
EVERGREEN TREE PLANTING



DECIDUOUS TREE PLANTING CONTAINER GROWN AND BALLED & BURLAPPED STOCK



STAKED TREE SPECIFICATION (2)



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division 12/19/03
Chief, Division of Land Development 12/24/03
Director (Acting) 12/30/03

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		RC	
	DRAWN		RC	
	REVIEWED		PFB	
	RELEASE FOR			
	BY		DATE	

Owner/Developer:
Stringtown Investment, LLC
 6820 Elm Street
 Suite 200
 McLean, Va. 22101
 Mr. Russell Dickens
 (703) 734 - 9730

SITE DEVELOPMENT PLAN
 LANDSCAPE DETAILS

RODGERS CONSULTING
 Enhancing the value of land assets

Rodgers Consulting, Inc.
 9260 Gaither Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

Montjoy

ELECTION DISTRICT No. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-07

SCALE:	AS SHOWN
JOB No.	643G
DATE:	07/10/03
INDEX No.	LS-3
SHEET No.	7 OF 11

SEGMENTAL RETAINING WALL SPECIFICATIONS

PART 1 - GENERAL

- Work includes furnishing and installing segmental retaining wall units, geogrid reinforcement, wall fill and backfill to the lines and grades shown on the construction drawings and as specified herein. The contractor also includes the furnishing and installing of all pertinent materials, equipment, and labor required for construction of the geogrid reinforced, segmental retaining wall. All existing and proposed construction and site grading information was referenced from the overall site plans prepared by Rodgers Consulting, original scale: 1"=50'
- REFERENCE STANDARDS
 - ASTM C90-75 (1981 rev) - Hollow Load Bearing Masonry Units
 - ASTM C140-75 (1981 rev) - Sampling and Testing Concrete Masonry Units
 - ASTM C145-75 (1981 rev) - Solid Load Bearing Concrete Masonry Units
 - Geosynthetic Research Institute (GRI), GRI-GC4 - Determination of Long-Term Design Strength of Geogrids
 - ASTM D 638 - Test Method for Tensile Properties of Plastic
 - ASTM D 1248 - Specification of Polyethylene Plastics-Molding and Extrusion Materials
 - ASTM D 4248 - Test Method for Carbon Black Content in Polyethylene Compounds by the Muffle Furnace Technique
 - ASTM D 3034 - Specification for Polyvinyl Chloride (PVC) Pipe
 - ASTM C 1372 - Specifications for Segmental Retaining Wall Units

1.3 DELIVERY, STORAGE AND HANDLING

- Contractor should check the materials upon delivery to assure that proper material has been received.
- Contractor should prevent excessive mud, wet cement, epoxy, and like materials which may affix themselves, from coming in contact with the materials.
- Geogrids should be stored above -20 degrees F.
- Contractor should protect the materials from damage. Damaged material should not be incorporated into the reinforced retaining wall.

1.4 SUBMITTALS/CERTIFICATION

The contractor shall submit a Manufacturer's certification, prior to the start of the work, that the retaining wall system components meet the requirements of ASTM C 1372 and the structure design. This certification should be provided to the geotechnical engineer for review and approval prior to wall construction.

PART 2 - PRODUCTS

2.1 DEFINITIONS

- Geogrid is a high density polyethylene grid, specifically fabricated for use as a soil reinforcement.
- Concrete retaining wall units are as detailed on the drawings and as specified herein.
- Geosynthetic Drainage Composites are polyethylene net structure with non-woven geotextiles bonded to both sides.
- Erosion Control Blankets consist of a web of polyolefin fibers securely bounded by polyolefin threads between two high strength polyolefin nets.
- Backfill is the soil which is used as fill for the reinforced soil mass.
- Foundation soil is the in-situ soil or controlled compacted fill placed below the bottom of the retaining wall and geogrid zone.

2.2 MATERIALS

The contractor should submit manufacturer's catalog and samples of the proposed materials for approval by the project geotechnical engineer a minimum of seven days before the start of construction. Materials should be transported to the site only after approval of the proposed materials by the project geotechnical engineer.

A. Concrete Units

- Masonry units should be Keystone Standard Retaining Wall Units. Substitution of other concrete units including Keystone Standard II Units may be allowed with the prior approval of the Geotechnical Engineer.
- Concrete wall units should have a minimum 28 day compressive strength of 3000 psi, in accordance with ASTM C-90. The concrete should have adequate freeze/thaw protection with a maximum moisture absorption of 6 percent.
- Modular concrete materials shall conform to the requirements of ASTM C 1372 - Standard Specifications for Segmental Retaining Wall Units.
- The units shall pass 100 freeze/thaw cycles in water with less than 1% weight loss in accordance with ASTM C 1372.
- Exterior dimensions may vary. Units are required to have a minimum of one square foot of face area each.
- Units should have angled sides and be capable of attaining concave and convex alignment curves in accordance with manufacturer's recommendations.
- Units should be interlocked with non-corrosive reinforced fiberglass pins.
- Units should be interlocked as to provide a maximum of 1 inch of setback per block, where required.

B. Leveling Pad

Material for leveling pad/footing should consist of compacted free-draining coarse aggregates meeting the requirements of ASTM #57 Stone or Graded Aggregate Base (GAB) per Maryland State Highway Administration Standard Specifications for Construction and Materials. A minimum of 6 inches deep and 36 inches wide compacted leveling pad is required.

C. Fiberglass Connecting Pins

- Thermoset isophthalic polyester resin pultruded fiberglass reinforcement rods, a minimum one-half inch in diameter.
- Pins should have a minimum flexural strength of 128,000 psi and short beam shear of 6400 psi.
- For substitute concrete units, use of other compatible connector systems may be allowed with the prior approval of the geotechnical engineer.

D. Geogrid

Geogrid should be Syntex SF 55 or equivalent as approved by the geotechnical engineer. The geogrid should have an allowable strength of 1,332 pounds per foot for SF 55 geogrid. The allowable strength is defined as the Ultimate Strength divided by reduction factors for creep, durability, installation damage and an overall factor of safety.

E. Reinforced Backfill

Reinforced backfill for Wall #1 should consist of #57 Stone. Reinforced backfill soils for the remaining walls should be non-plastic, controlled fill meeting the requirements of AASHTO A-4, A-2-4 or more granular, unless noted otherwise. The geotechnical report for the project indicates that A-4 and A-2-4 material is present on site. However, the material may not be readily available and also may be wet of optimum moisture. The contractor should be prepared to dry the on-site soils or import suitable AASHTO A-2-4 materials if these materials are not available from on-site sources at the time of construction.

F. Controlled Fill

Controlled Fill soils to be placed outside the Reinforced Backfill area and where specified should be soils meeting the requirements of AASHTO A-4 or more granular.

G. Drainage Pipe

The drainage pipes should be perforated or slotted PVC pipe manufactured in accordance with ASTM D-3034.

H. Filter Fabric

Filter Fabric should be non-woven, polypropylene geotextile, 140 N manufactured by Nicotex Mirafix Group or approved equivalent.

PART 3 - EXECUTION

A. Sequence of Construction (Buffer Protection)

- The contractor should install the soil fence to establish the limit of disturbance (LOD) as shown on the construction plans. The L.O.D. and all buffers must be maintained throughout wall construction.
- The wall can likely be constructed from the backside using relatively compact equipment. At no time should any materials or construction equipment be stored outside the L.O.D. Equipment traffic should be confined to areas such that buffers are not disturbed.
- Penetration testing should be performed on the leveling pad subgrade prior to the placement of stone and compaction testing should be performed on each lift of reinforced and controlled backfill as specified below.

B. Excavation

- The contractor should excavate to the lines and grades shown on the construction drawings. Under no circumstances should the excavation lines and grades be exceeded, except with owner's approval. The contractor should protect the excavation from sloughing by placing a membrane over the face of the excavation.
- Excavations should be sloped or otherwise supported in accordance with Occupational Safety and Health Administration (OSHA) and other local and state regulations.

C. Foundation Subgrade Preparation

- Foundation soil should be excavated as required for installation of leveling pad, geogrid and other elements and as shown on the construction drawings.
- Foundation soil should be examined by the Engineer to assure that the actual foundation soil strength meets or exceeds assumed design strength. Soils not meeting required strength should be removed and replaced with controlled, compacted material.
- Over-excavated areas should be filled with select and approved material and compacted to 95 percent of maximum dry density in accordance with the Standard Proctor, ASTM D-698.
- Allowable bearing pressure for natural and controlled, compacted fill soils should be as specified in Part 5.
- The exposed foundation subgrade should be proofrolled with a loaded dump truck. Any soft or unstable areas identified during proofrolling should be overexcavated and backfilled with Controlled Fill.
- Any fills required to establish sloping surfaces in front of the walls should consist of Controlled Fill and should be placed, compacted and field tested in accordance with the requirements specified herein.

D. Leveling Pad

- The leveling pad should be placed as shown on the construction drawings with a minimum thickness of 6 inches.
- Leveling pad materials should be installed upon undisturbed in-situ soils or controlled, compacted backfill.
- Leveling Pad should be prepared to insure complete contact of retaining wall unit with base. Gaps should not be allowed.

E. Unit Installation

- First course of concrete wall units should be placed on the leveling pad. The units should be checked for level and alignment. The first course is the most important to insure accurate and acceptable results.
- Units should be laid out to create the minimum radius possible.
- Units are placed side by side for full length of wall alignment. Alignment may be done by means of a string line or offset from base line.
- Install fiberglass connecting pin.
- Lay up each course insuring that the connecting pins are inserted through front slot of the unit, and into the receiving slot in the course beneath. Repeat procedure to the extent of wall height.
- At the end of each course where the wall changes elevation, units should be turned into the backfill. Units should be laid as to create the minimum radius possible. Unless otherwise shown on the drawings, a minimum of one unit should be installed into the grade. Only the front face of the units should be visible from the side of the wall.
- Standard Units should be used to make convex and concave curves in accordance with manufacturer's recommendations.
- Cap units should be installed and bonded with construction adhesive or epoxy cement as required by manufacturer.
- Contractor should provide positive drainage for the back of the retaining wall during construction.

F. Geogrid Installation

- All utilities in the vicinity of any retaining wall or geogrid reinforcement must be installed and properly backfilled prior to placing the geogrid soil reinforcement or constructing the wall.
- The geogrid soil reinforcement should be laid horizontally on compacted backfill, connected to the concrete wall units. Hook grid over the fiberglass connecting pin, pull taut, and anchor before backfill is placed on the geogrid.
- Stack in the geogrid at the wall unit connections should be removed in a manner, and to such a degree, as approved by the Engineer.
- Geogrid should be laid at the proper elevation and orientation as shown on the construction drawings or as directed by the Engineer.
- Correct orientation (roll direction) of the geogrid should be verified by the Contractor.
- Geogrid should be secured in-place with staples, pins, sand bags, or backfill as required by fill properties, fill placement procedures, or weather conditions, or as directed by the Engineer.
- Overlaps
 - Uniaxial geogrid does not need to be overlapped in the across the roll direction, except to contain the fill at the slope face when wrap-around facing is used. Uniaxial grid should be overlapped 48" in the rolled direction.
 - A layer of soil a minimum of 4 inches in thickness should be spread between uniaxial geogrid layers in the area to be overlapped, or as directed.

G. Fill Placement

- Wall backfill material should be placed in no more than 8-inch lifts and compacted to 95 percent of the Standard Proctor (ASTM D-698).
- Backfill should be placed, spread, and compacted in such a manner that minimizes the development of wrinkles in and/or movement of the geogrid.
- Only hand-operated compaction equipment should be allowed within 4 feet of the wall face.
- Backfill should be placed from the wall outward to insure that the geogrid remains taut.
- Tracked construction equipment should not be operated behind or above the wall.
- Rubber-tired equipment may pass over the geogrid reinforcement at slow speeds, less than 10 MPH. Sudden braking and sharp turning should be avoided.
- Place filter fabric between the unit core fill and the reinforced backfill as shown on plans. The filter fabric should be embedded a minimum of two feet into the reinforced fill.
- The finished sloping surface on the toe side of retaining walls should be protected by installing the permanent erosion control blanket and seeding in accordance with project requirements.

H. DRAINAGE

- Drainage fill should be placed behind the wall to the limits shown. The drainage fill should be a minimum of 12-inches thick. The drainage fill should be ASTM #57 stone. The drainage fill should be wrapped in filter fabric (Mirafix 140N or equal) as shown on the drawings.
- Positive drainage should be maintained during and after construction. Soils within the reinforced zone that become wet during construction should be dried to optimum moisture or removed.
- Install the perforated drainage pipes and lateral drainage pipes incrementally along with the installation of concrete units and placement of fill. Install backdrainage where shown on plans.

PART 4 - CONSTRUCTION OBSERVATION AND TESTING

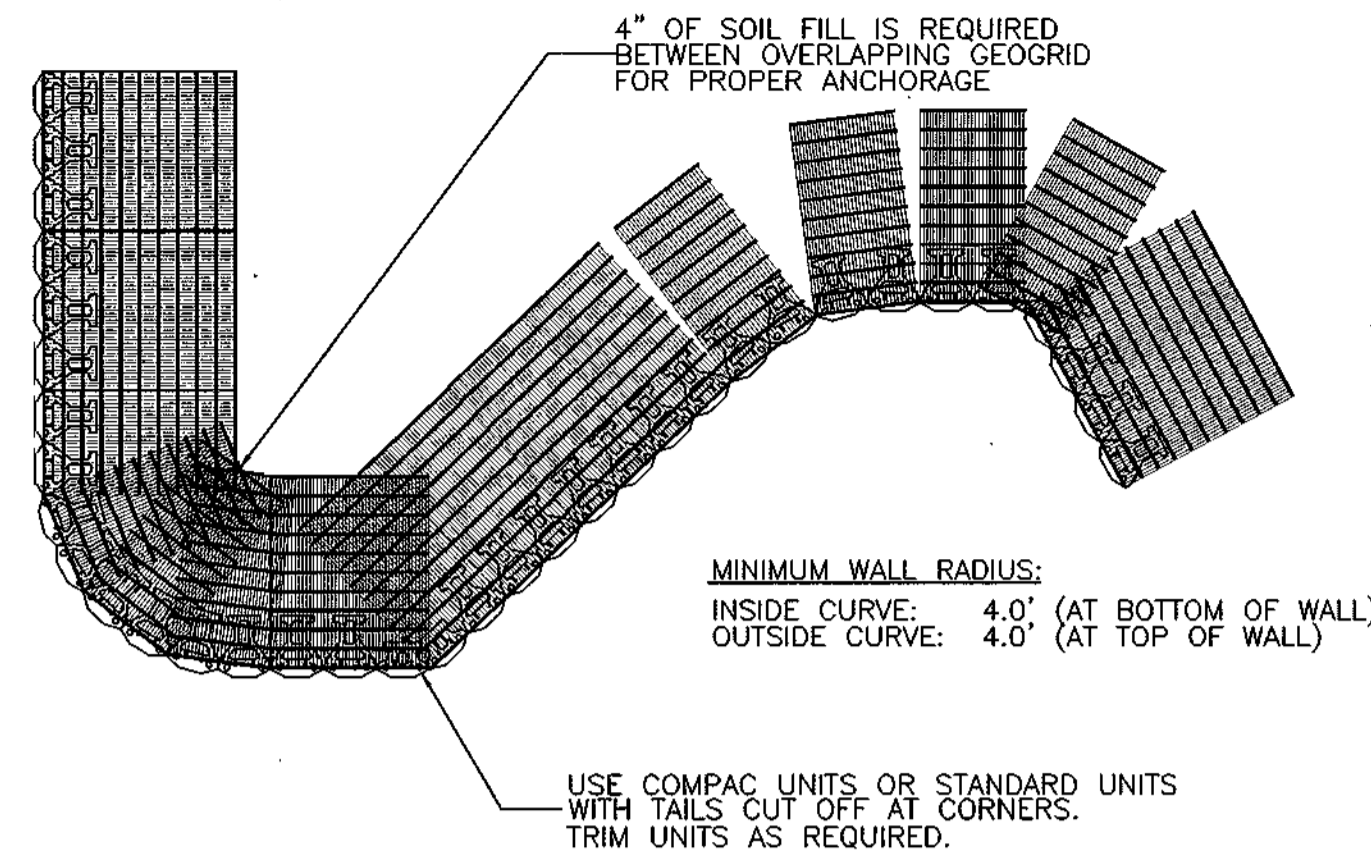
- Retaining walls shall only be constructed under the observation of a Registered Professional Engineer and a (NICET, WACEL, or equivalent) certified soils technician.
- The required bearing pressure beneath the footing of the wall shall be verified in the field by a certified soils technician. Testing documentation must be provided to the county inspector prior to the start of construction. The required test procedure shall be the Dynamic Cone Penetrometer (DCP) Test ASTM SP-399.
- The suitability of fill material shall be confirmed by the on-site soils technician. Each 8-inch lift must be compacted to a minimum of 95% of the Standard Proctor Density and the testing reports shall be made available to the county inspector upon completion of construction.
- For walls over ten feet in height, one soil boring is required every 100' along the length of the wall, copies of the boring reports shall be provided to the inspector prior to the start of construction.

PART 5 - DESIGN CRITERIA

- Required minimum allowable foundation bearing pressure is 2,500 psf.
- Design internal friction angle = 30 degrees.
- Design moist unit weight = 125 pcf.
- Retaining walls are not designed to resist hydrostatic pressure.
- Foundation soil internal friction angle = 30 degrees and cohesion = 0 psf.

NOTE:

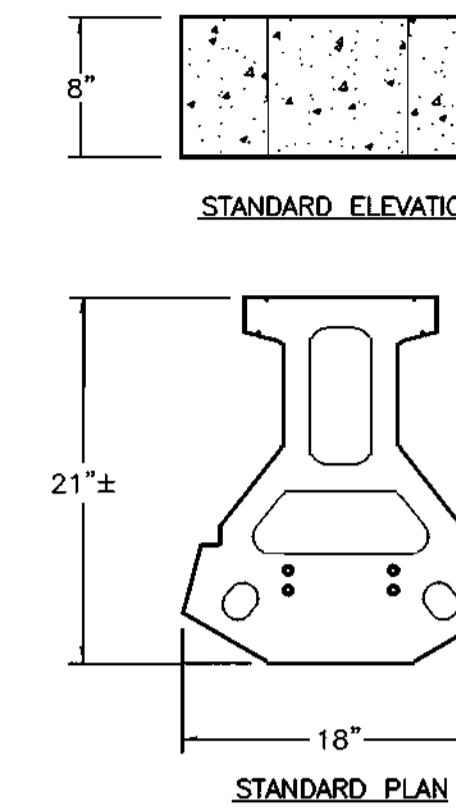
- USE KEYSTONE KAPSEAL ADHESIVE TO JOIN THE TRIMMED KEYSTONE UNITS AT CORNERS.



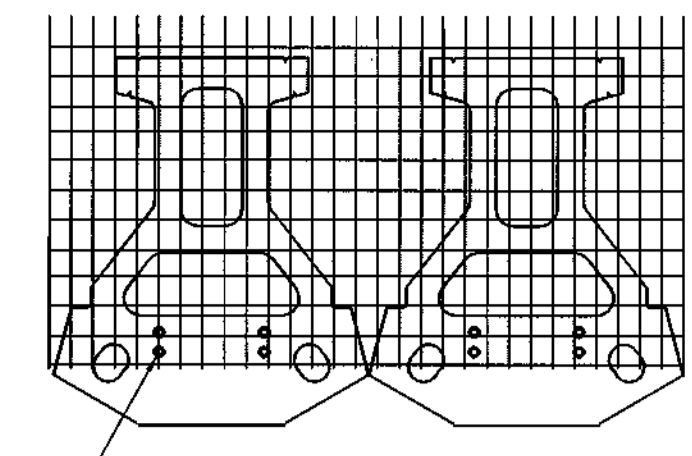
GEOGRID INSTALLATION ON CURVES/CORNERS
NOT TO SCALE

NOTE:

ALTERNATIVE UNITS, SUCH AS THE STRAIGHT FACE TYPE ARE AVAILABLE AND SHOULD BE USED IF PREFERRED BY THE CLIENT. THE UNIT TEXTURE, SHAPE AND COLOR SHOULD BE APPROVED BY THE OWNER.



STANDARD UNIT

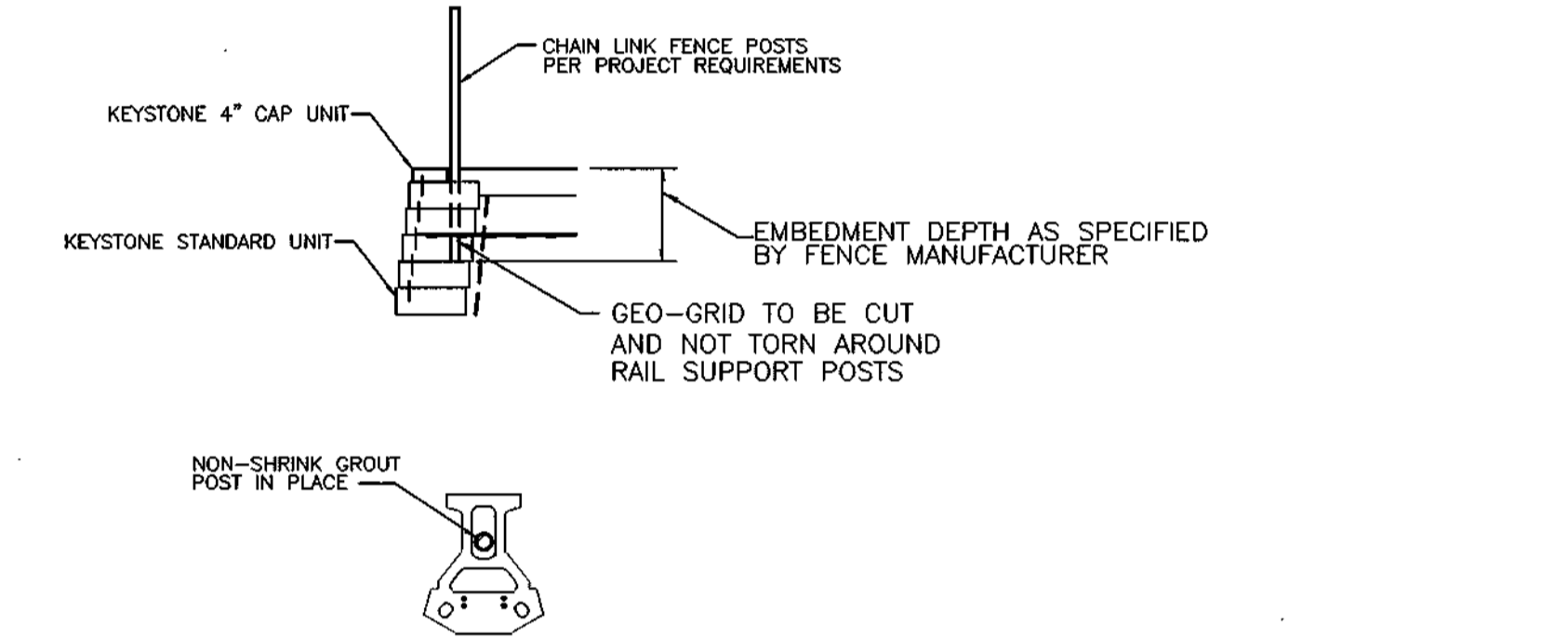


GRID & PIN CONNECTION
NOT TO SCALE

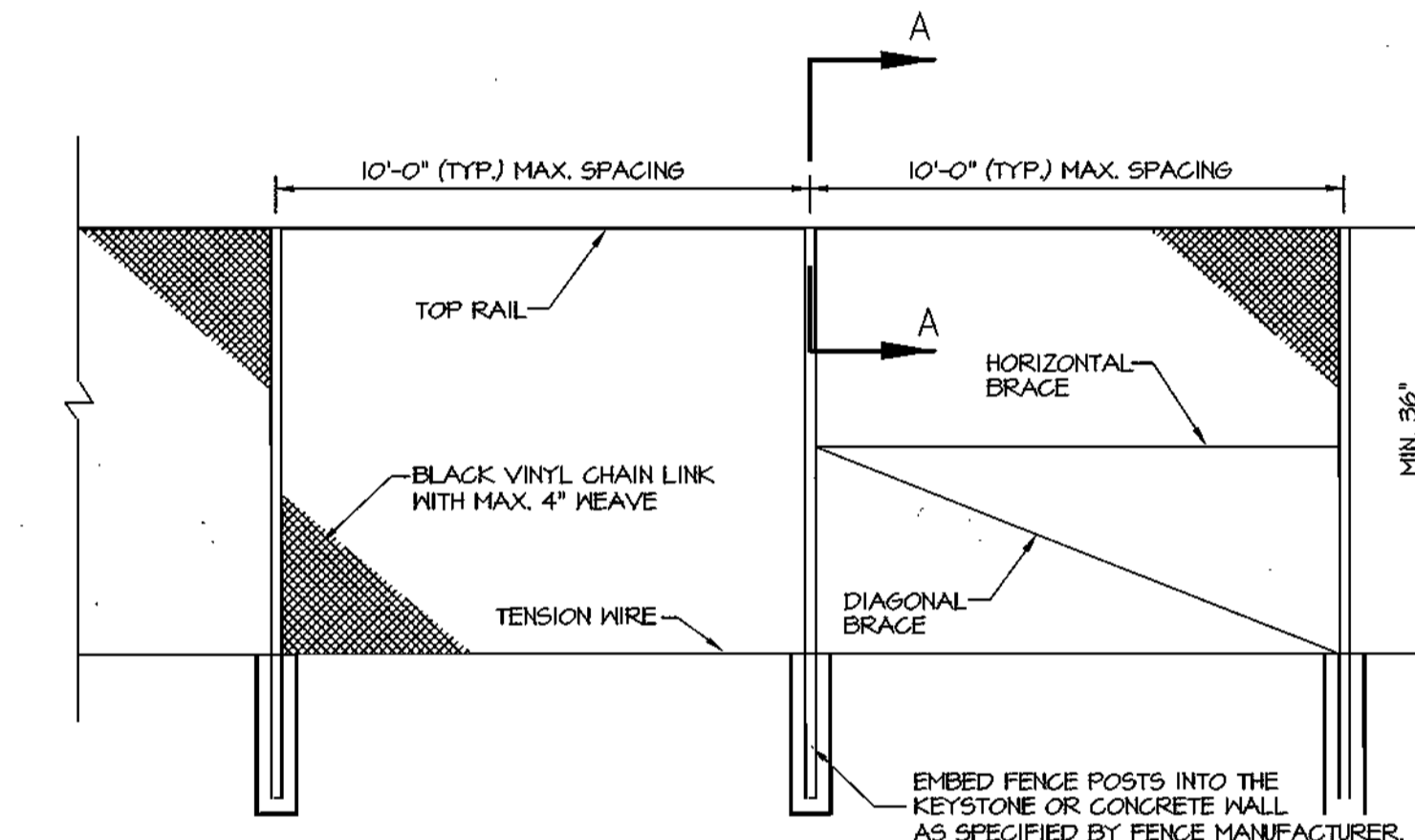
GRID/PIN CONNECTION DETAIL
NOT TO SCALE

NOTE:

- AUGER THROUGH GEOGRID LAYERS.
- BACKFILL OR CONCRETE RAILING POST IN PLACE



SAFETY FENCE SECTION & PLAN
DETAIL FOR KEYSTONE WALL
NOT TO SCALE



- CONNECT FENCE POSTS TO THE RETAINING WALL UNITS PER THE SAFETY FENCE SECTION 4 PLAN DETAIL (THIS SHEET).
- CORNER POST SHALL BE 3" DIA. (MIN)
- LINE POST SHALL BE 2.5" DIA. (MIN)
- ALTERNATIVE FENCE SPECIFICATIONS/DETAILS MAY BE USED WITH THE PRIOR APPROVAL OF ELM STREET DEVELOPMENT.

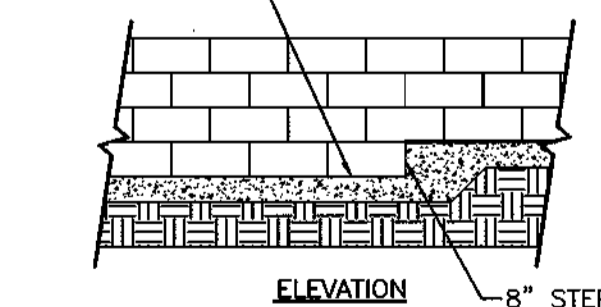
36" CHAIN LINK FENCE AND POST DETAIL
NOT TO SCALE

MINI CAP UNIT

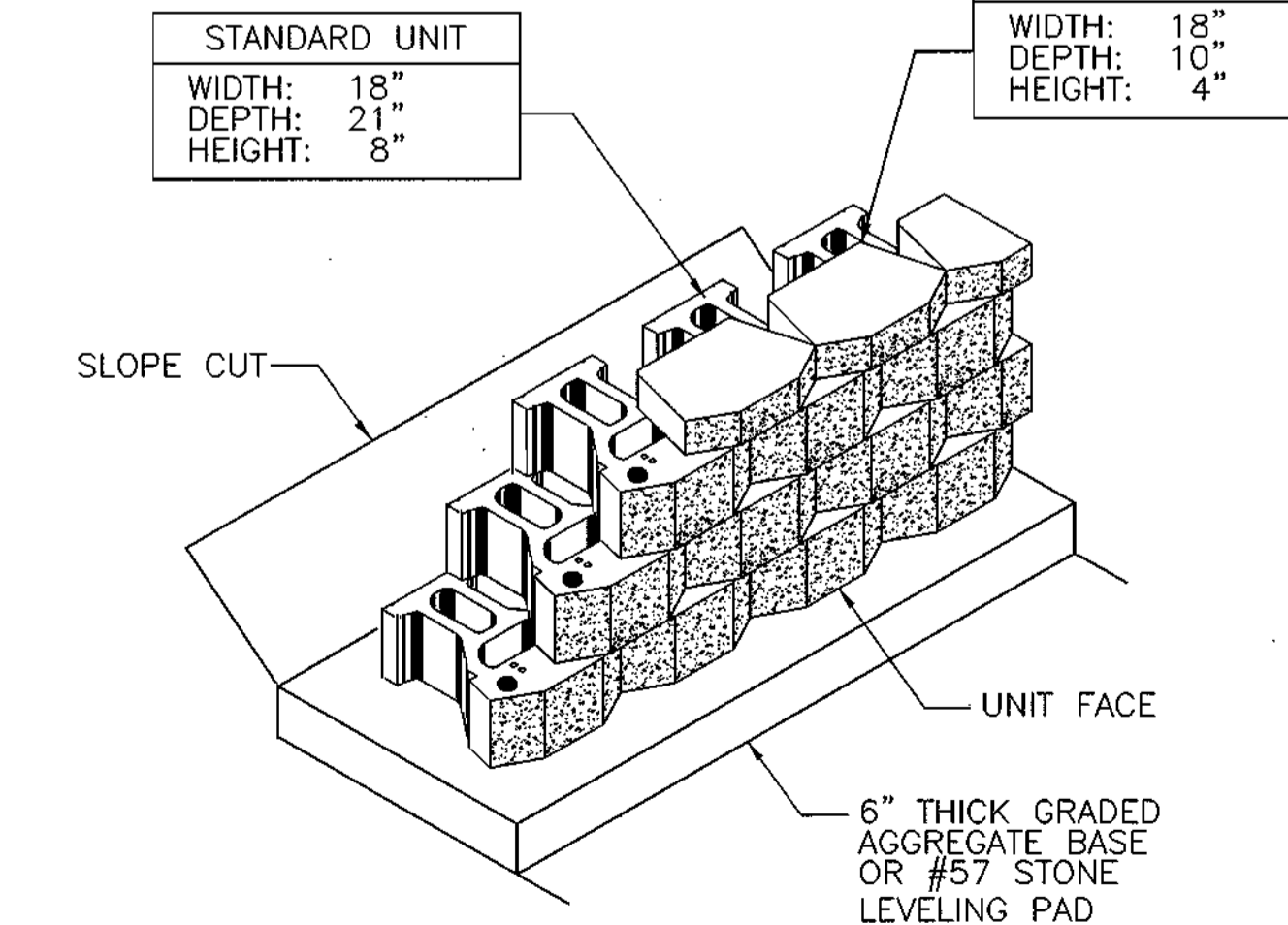
WIDTH: 18"
DEPTH: 10"
HEIGHT: 4"

STANDARD UNIT
WIDTH: 18"
DEPTH: 21"
HEIGHT: 8"

6" CRUSHED ROCK OR UNREINFORCED CONCRETE LEVELING PAD



LEVELING PAD DETAIL



STANDARD UNIT/BASE PAD ISOMETRIC VIEW
NOT TO SCALE

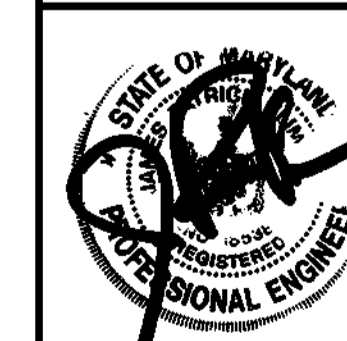
SAFETY FENCE POST CONNECTION
DETAIL FOR C.I.P. CONCRETE WALL
NOT TO SCALE

RETAINING WALL NOTES & DETAILS

W-1



GEO-TECHNOLOGY ASSOCIATES, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
9000 Junction Drive, Suite 9
Annapolis Junction, MD 20701
(410) 782-8446 or (301) 478-4470
Fax: (410) 782-7585



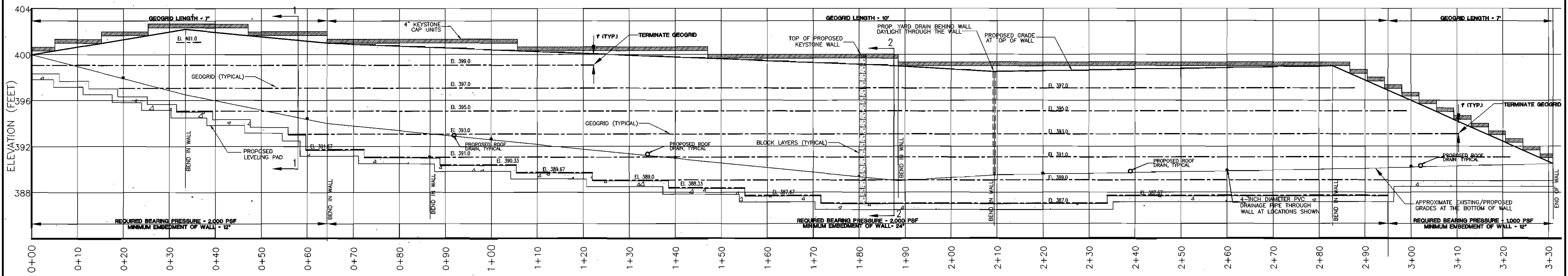
PHASES I, II & III - APARTMENTS SDP
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DP2 FILES: 8-01-80, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-07

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chris Dammer
Chief, Development Engineering Division
Date 12/19/03

Condy Heath
Chief, Division of Land Development
Date 12/16/03

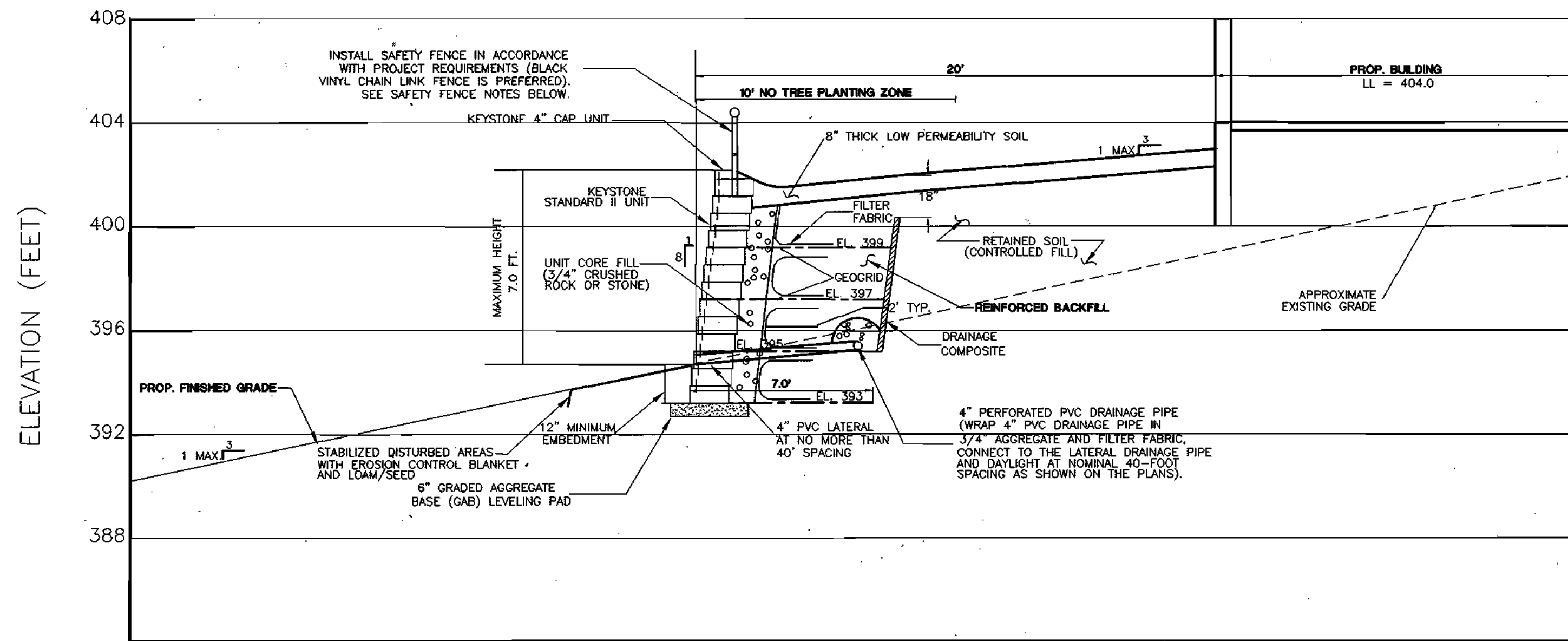
Donna Leffler
Director of Planning
Date 12/30/03



RETAINING WALL #5 - PROFILE

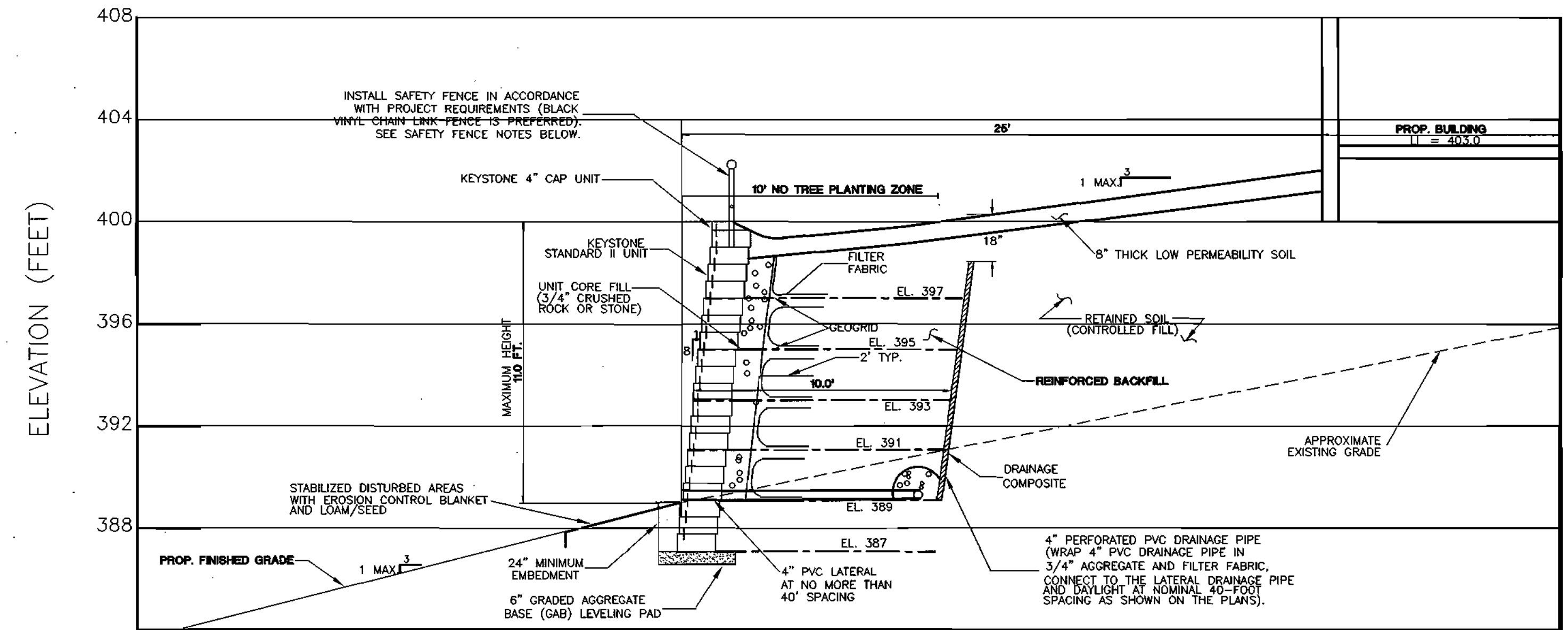
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 4'

Notes:
1. Refer to sheet W-1 for specifications and additional details.



RETAINING WALL #5 - SECTION 1

HORIZONTAL SCALE: 1" = 4'
VERTICAL SCALE: 1" = 4'

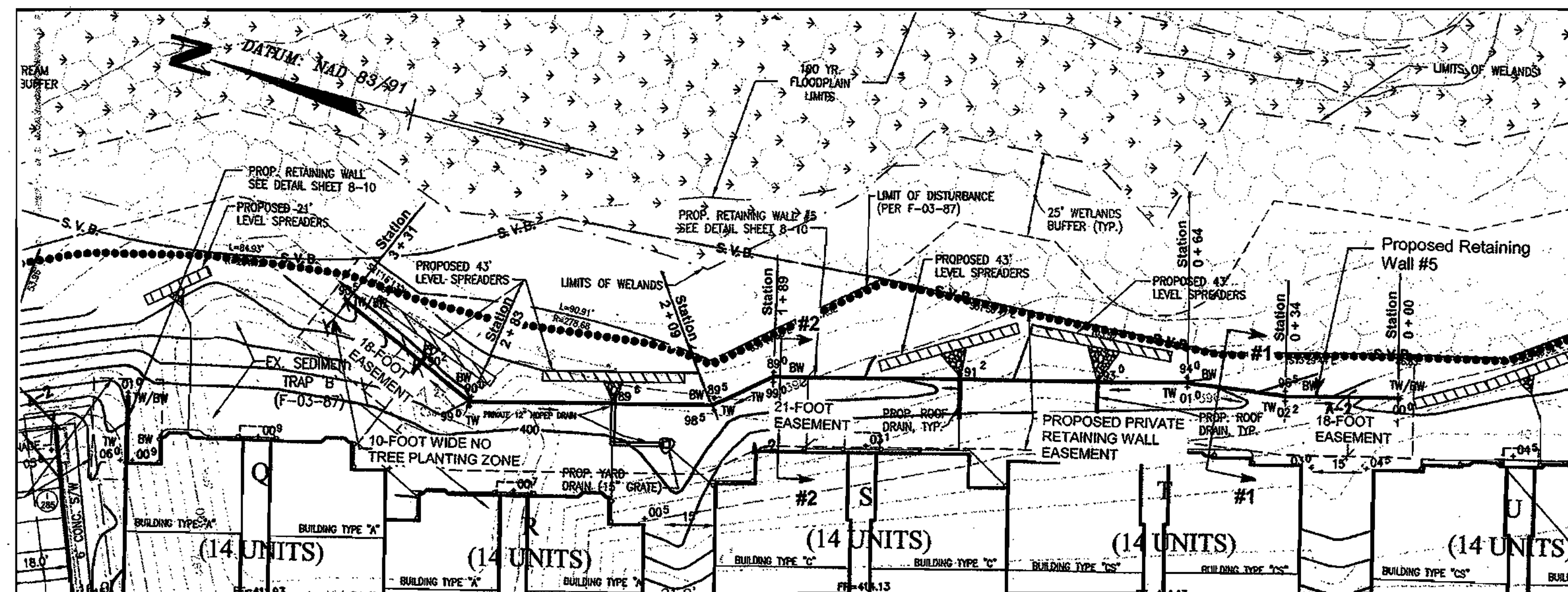


RETAINING WALL #5 - SECTION 2

HORIZONTAL SCALE: 1" = 4'
VERTICAL SCALE: 1" = 4'

SAFETY FENCE NOTES:
1. The fence should be a minimum of 36 inches in height.
2. The openings in the fence must be small enough to prevent the passage of a four-inch diameter sphere.
3. The fence posts should be properly secured in concrete footings in accordance with the manufacturer's requirements.

SAFETY FENCE NOTES:
1. The fence should be a minimum of 36 inches in height.
2. The openings in the fence must be small enough to prevent the passage of a four-inch diameter sphere.
3. The fence posts should be properly secured in concrete footings in accordance with the manufacturer's requirements.



RETAINING WALL LOCATION PLAN

SCALE: 1" = 30'

Notes:
1. This location plan was adopted from the overall site plan prepared by Rodgers Consulting.
2. No trees should be planted within a zone of 10-foot width measured from the face of the retaining wall.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

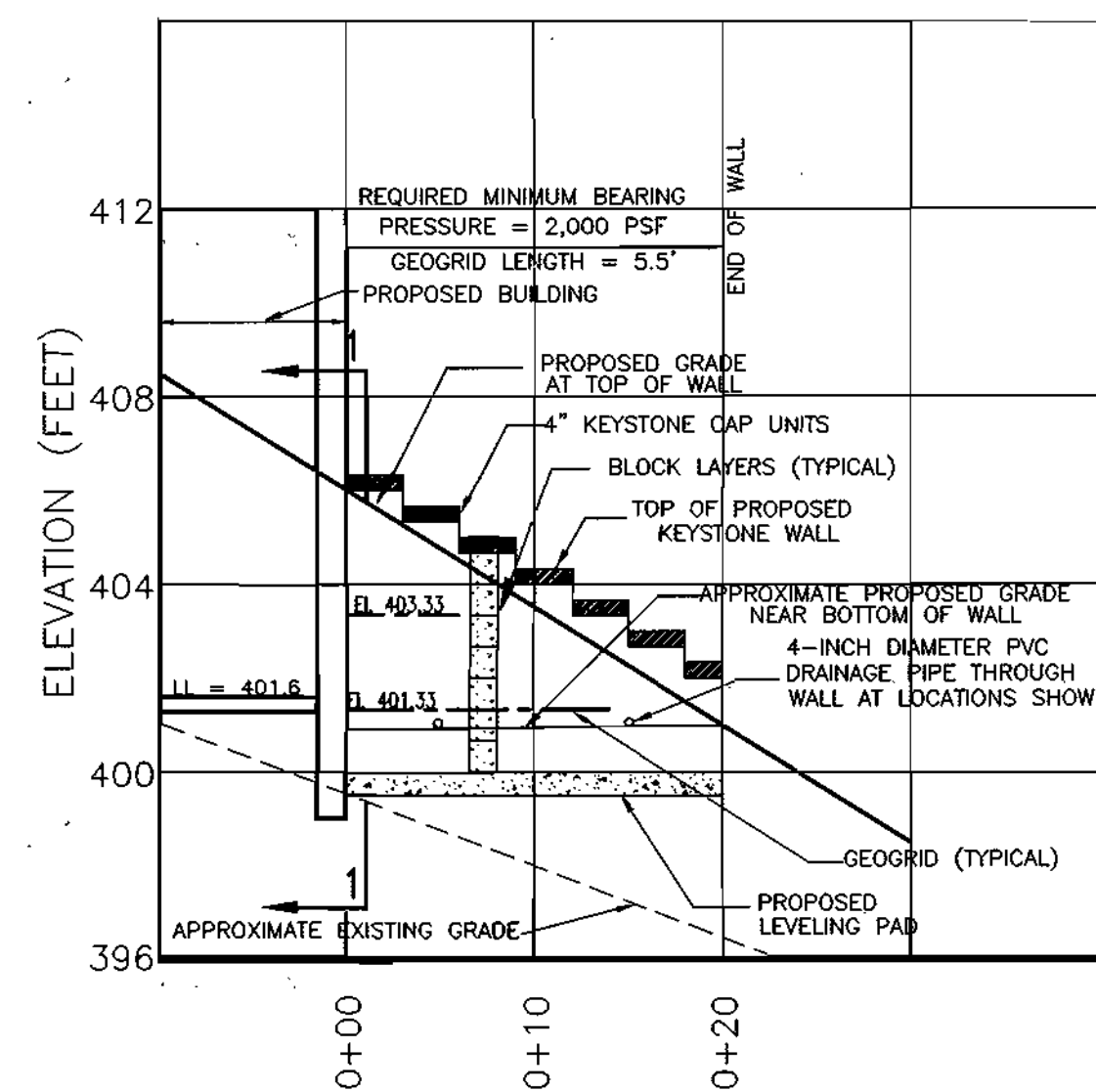
[Signature] 12/19/03
Chief, Development Engineering Division
[Signature] 12/20/03
Chief, Division of Land Development
[Signature] 12/30/03
Director (Acting)

RETAINING WALL NO. 5 PLAN, PROFILE & CROSS SECTION W-5

GTA
GEO-TECHNOLOGY ASSOCIATES, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
9000 Junction Drive, Suite 9
Montgomery, Maryland 20814
(410) 792-8448 or (301) 470-4470
Fax: (410) 792-7385

PHASES I, II & III - APARTMENTS SDP
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID.12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-07

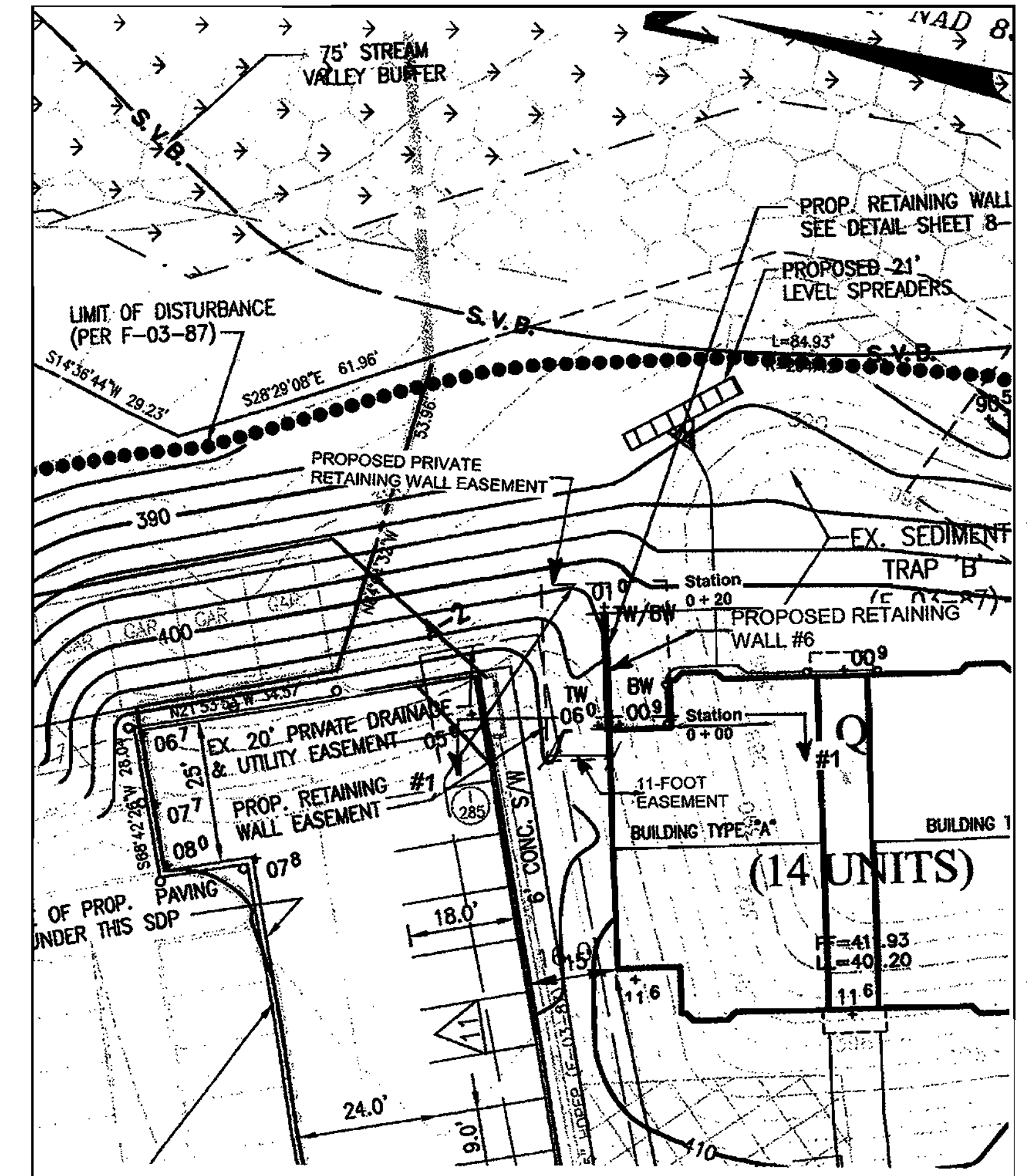
DATE	REVISIONS	JOB NO.:
9/30/03	REVISED TO ADDRESS COUNTY COMMENTS.	00372.2
12/4/03	MYLAR SUBMISSION FOR SIGNATURE APPROVAL	SCALE: AS SHOWN DATE: 07-7-03 DRAWN BY: BD/RPM DESIGN BY: RPM REVIEW BY: JPK SHEET: 9 OF 11



Notes:
1. Refer to Sheet W-1 for specifications and additional details.

RETAINING WALL #6 - PROFILE

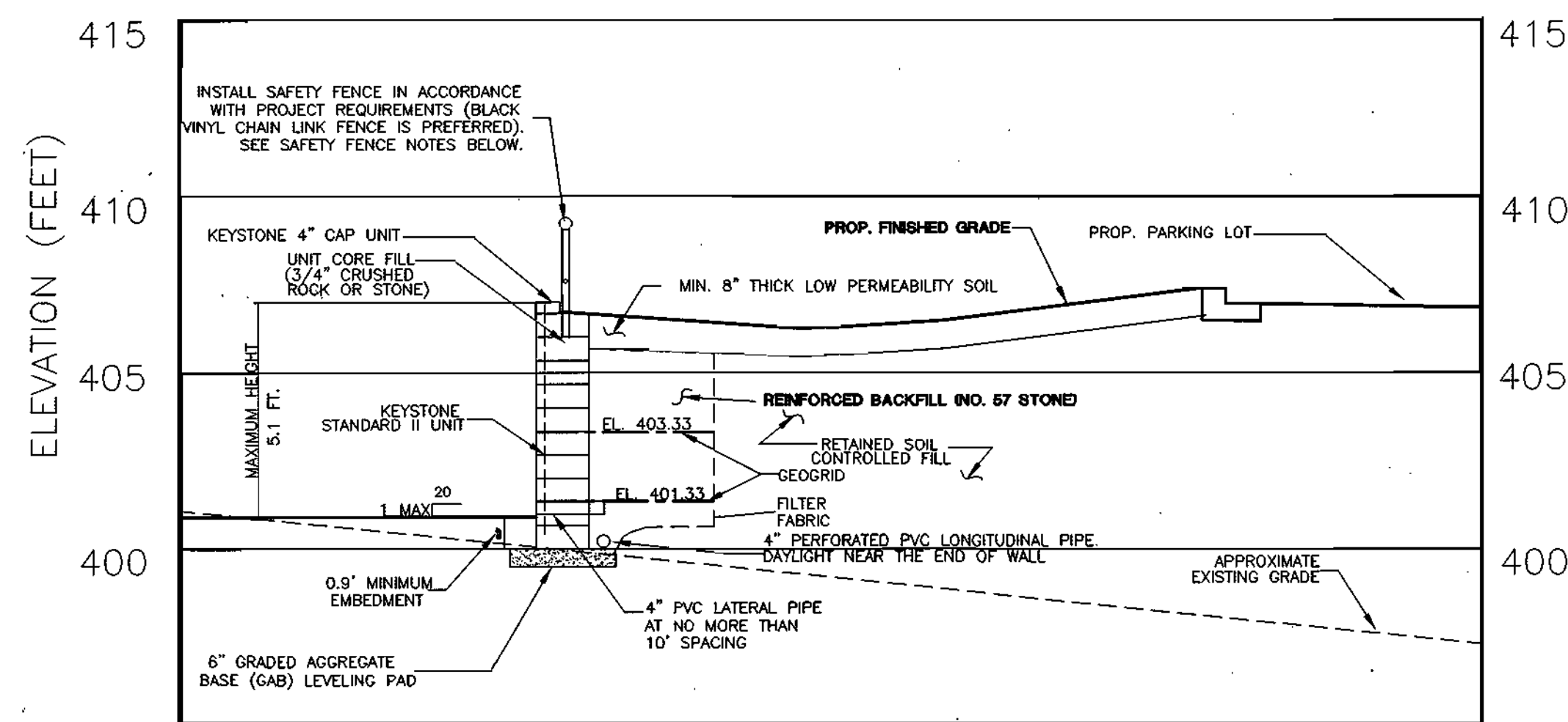
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 4'



RETAINING WALL LOCATION PLAN

SCALE: 1" = 20'

Notes:
1. This location plan was adopted from the overall site plan prepared by Rodgers Consulting.
2. No trees should be planted within a zone of 10-foot width measured from the face of the retaining wall.



SAFETY FENCE NOTES:
1. The fence should be a minimum of 36 inches in height.
2. The openings in the fence must be small enough to prevent the passage of a four-inch diameter sphere.
3. The fence posts should be properly secured in concrete footings in accordance with the manufacturer's requirements.

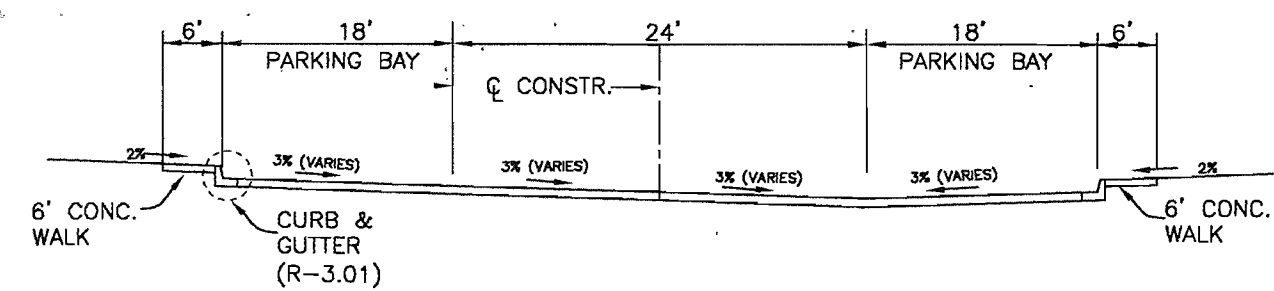
RETAINING WALL #6 - SECTION 1

HORIZONTAL SCALE: 1" = 4'
VERTICAL SCALE: 1" = 4'

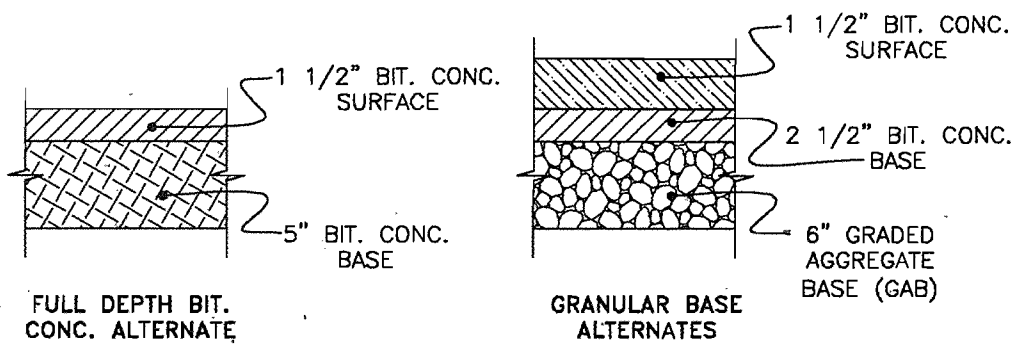
RETAINING WALL NO. 6 PLAN, PROFILE & CROSS SECTION W-6

	GEO-TECHNOLOGY ASSOCIATES, INC. GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS 2020 Junction Drive, Suite 2 Annapolis Junction, MD 20701 (410) 762-4444 or (301) 470-4470 Fax (410) 762-7366	PHASES I, II & III - APARTMENTS SDP Montjoy ELECTION DISTRICT NO. #2 HOWARD COUNTY, MARYLAND TAX MAP: 30 GRID:12 PARCEL 260 DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, F-03-87
DATE 9/30/03 12/4/03	REVISIONS REVISED TO ADDRESS COUNTY COMMENTS MYLAR SUBMISSION FOR SIGNATURE APPROVAL	JOB NO.: 00372.2 SCALE: AS SHOWN DATE: 7-7-03 DRAWN BY: BD/RPM DESIGN BY: RPM REVIEW BY: JPK SHEET: 10 OF 11

APPROVED: DEPARTMENT OF PLANNING AND ZONING Chief, Development Engineering Division	12/19/03 Date
 Chief, Division of Land Development	12/24/03 Date
 Director	12/30/03 Date



TYPICAL ROADWAY SECTION
(RESIDENTIAL PRIVATE STREET)



SECTION NUMBER	ROAD AND STREET CLASSIFICATION
P-2	RESIDENTIAL ZONES LOCAL, CUL-DE-SACS, ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY*

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/19/03
Chief, Development Engineering Division gms Date

[Signature] 12/26/03
Chief, Division of Land Development JK Date

[Signature] 12/30/03
Director (A/C/PLK) Date

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE

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

HOWARD SCD DATE

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 COUNTY SOIL CONSERVATION DISTRICT"

[Signature] 12/9/03
SIGNATURE OF DEVELOPER DATE
P. J. DICKENS

ENGINEER'S CERTIFICATE

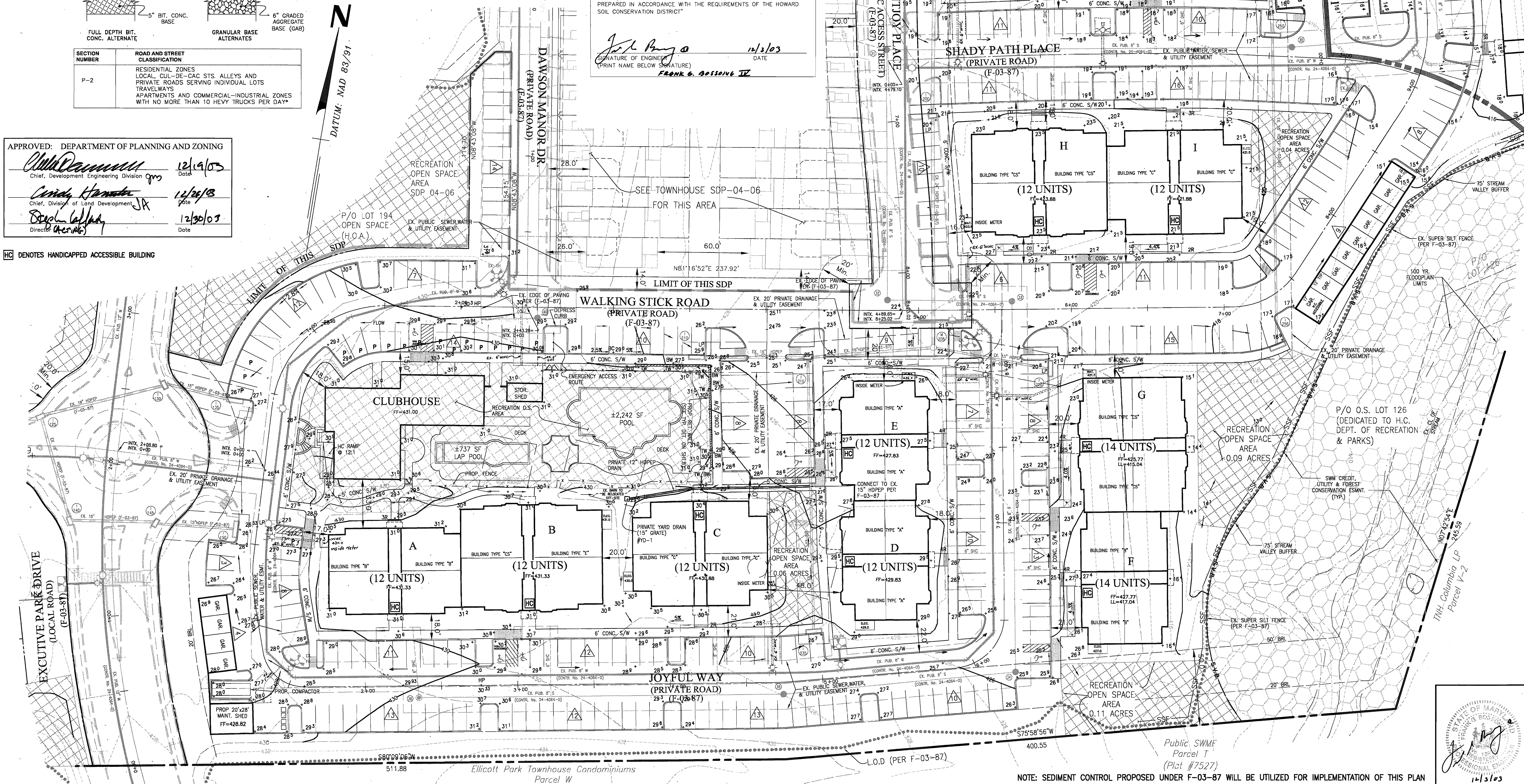
"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT"

[Signature] 12/3/03
SIGNATURE OF ENGINEER DATE
FRANK G. BOSSING IV

SHC DATA (CONTR. No. 24-4064-D)

BLDG.	SHC INV.	MIN. SERVICE EL.	REMARKS
A	424.08	428.88	FROM 36 TO 35
B	423.15	428.25	
C	422.08	427.08	
D	413.08	418.78	FROM 34 TO 33
E	410.48	415.18	
F	411.97	418.77	
G	410.29	413.10	
H	408.33	411.43	FROM 31 TO 30
I	409.89	410.89	
J	414.51	419.57	
K	413.51	418.57	

P = PARKING SPACES FOR CLUBHOUSE & POOL



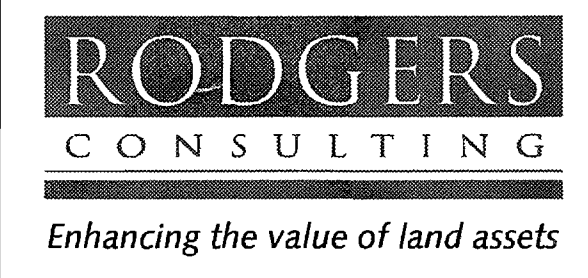
HC DENOTES HANDICAPPED ACCESSIBLE BUILDING

NOTE: SEDIMENT CONTROL PROPOSED UNDER F-03-87 WILL BE UTILIZED FOR IMPLEMENTATION OF THIS PLAN

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB,RC	
	DRAWN		CoV	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

SITE DEVELOPMENT PLAN
GRADING & SEDIMENT CONTROL



Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III APARTMENT SDP

Montjoy

ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND

TAX MAP: 30 GRID:12 PARCEL 260

DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, F-03-87

SCALE: 1" = 30'

JOB No. 643G

DATE: 07/10/03

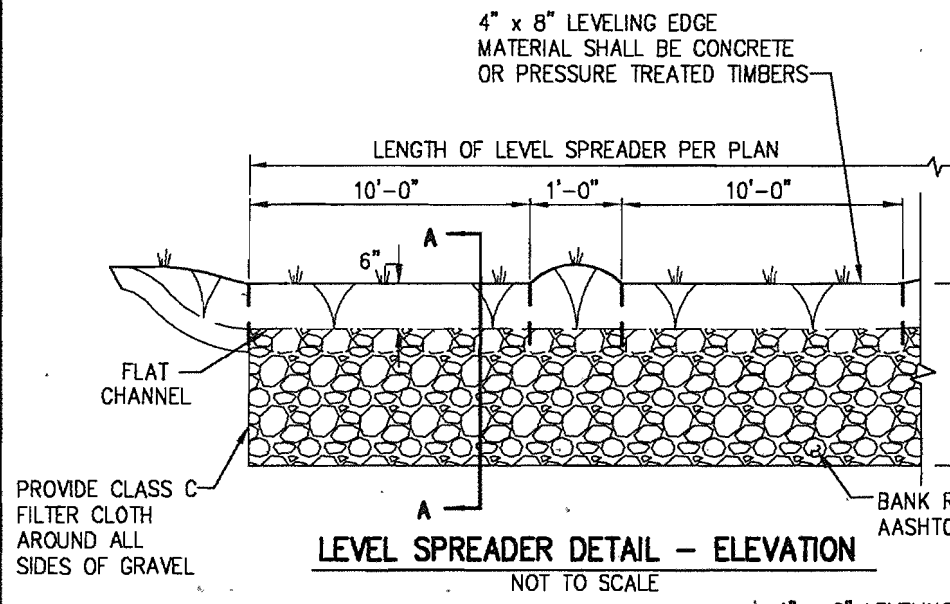
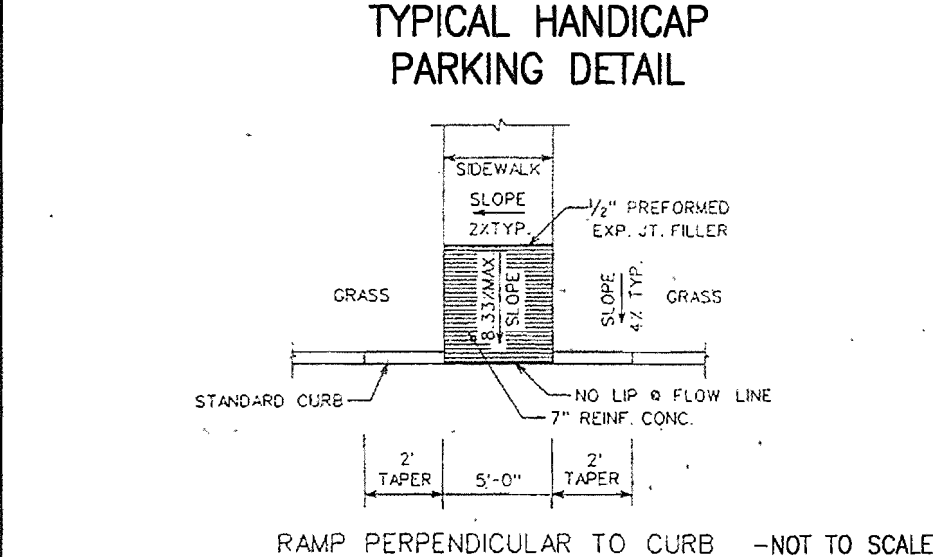
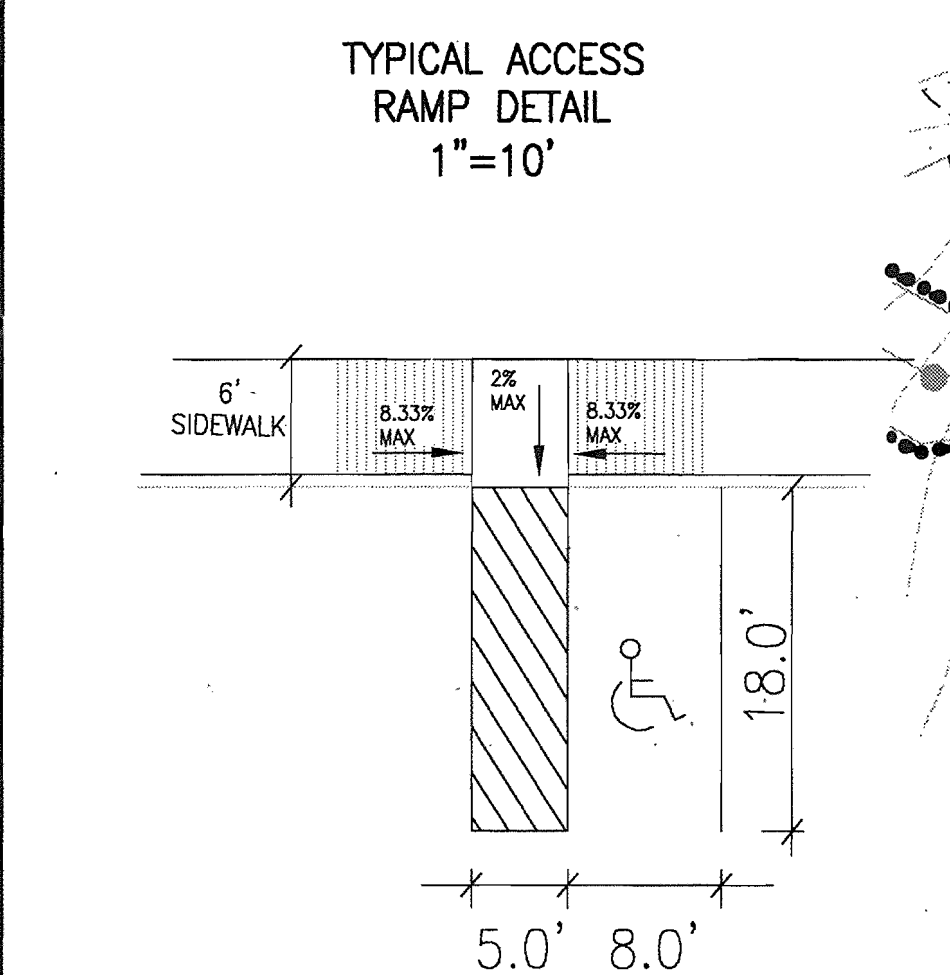
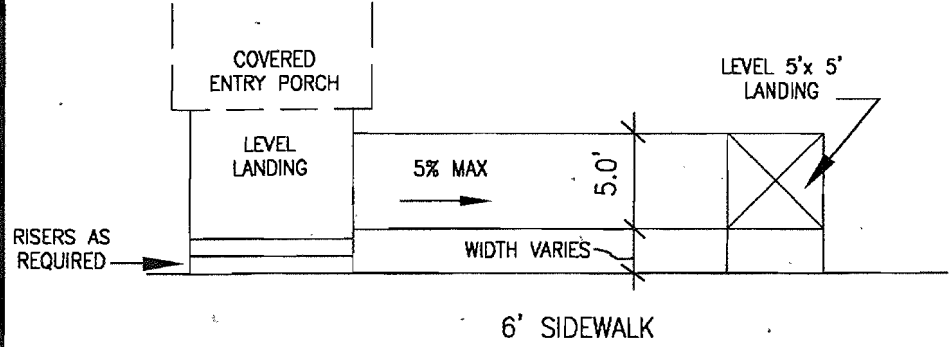
INDEX No. SG-1

SHEET No. 3 OF 11

SDP-04-07

SHC DATA (CONTR. No. 24-4064-D)

BLDG.	SHC INV.	MIN. SERVICE EL.	REMARKS
L	398.01	403.07	FROM 28 TO 27
M	392.38	402.48	FROM 28 TO 27
N	392.74	402.88	FROM 28 TO 25
O	398.82	403.27	FROM 24 TO 23
P	395.87	403.27	FROM 24 TO 25
Q	398.80	401.80	FROM 27 TO 25
R	392.83	401.80	FROM 28 TO 27
S	397.43	402.49	
T	398.39	403.58	
U	399.89	404.99	FROM 29 TO 28
V	401.39	406.39	FROM 41 TO 40
W	424.62	428.92	FROM 41 TO 40



NO.	ELEV. (SEE DETAIL BELOW)	REMARKS
A-1	420.00	
A-2	392.00	
A-3	390.10	
A-4	392.00	
A-5	389.00	
A-6	393.25	

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John D. Williams 12/19/03
Chief, Development Engineering Division

Cindy Hammett 12/19/03
Chief, Division of Land Development

Deborah Williams 12/30/03
Director (AEN/MS)

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

Jim Noyes 12/10/03
USDA - NATURAL RESOURCES CONSERVATION SERVICE

J.R. Robertson 12/10/03
HOWARD SCD

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

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 COUNTY SOIL CONSERVATION DISTRICT"

R.S. Williams 12/10/03
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE)

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 COUNTY SOIL CONSERVATION DISTRICT"

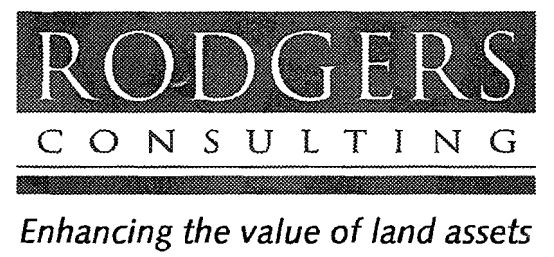
Frank G. Rossant II 12/10/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE)

NOTE: SEDIMENT CONTROLS PROPOSED UNDER F-03-87 AS SHOWN WILL BE UTILIZED FOR IMPLEMENTATION OF THIS PLAN

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB,RC	
	DRAWN		CoV	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Elm Street Development
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 9730

SITE DEVELOPMENT PLAN
GRADING & SEDIMENT CONTROL



Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-03-08, P-03-08, P-03-08

SCALE: 1"=30'
JOB No. 643G
DATE: 07/10/03
INDEX No. SG-2
SHEET No. 4 OF 11

- TREE SYMBOL KEY**
SEE SHEET 7 FOR SCHEDULE & DETAILS
- ACER RUBUM (RED MAPLE)
 - TILIA CORDATA (LITTLELEAF LINDEN)
 - QUERCUS RUBRA (RED OAK)
 - FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)
 - PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)
 - PRUNUS CERASIFERA (THUNDERCLOUD PLUM)
 - CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)
 - PINUS STROBUS (WHITE PINE)
 - AMALANCHIER CANADENSIS (SHADBLOW SERVICEBERRY)
 - GRATAEGUS VIBRIS 'WINTER KING' WINTER KING HAWTHORN
 - PRUNUS YEDDENSIS (YOSHINO CHERRY)
- NOTE: TREES APPROVED BY PREVIOUS PLANS (F-03-87) SHOWN IN LIGHT GREY.

- Legend**
- STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - WETLAND
 - FOREST CONSERVATION EASEMENT
 - PUBLIC TREE MAINTENANCE EASEMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

William Cummings 12/19/03
Chief, Development Engineering Division Date

Cecilia Hamilton 12/24/03
Chief, Division of Land Development Date

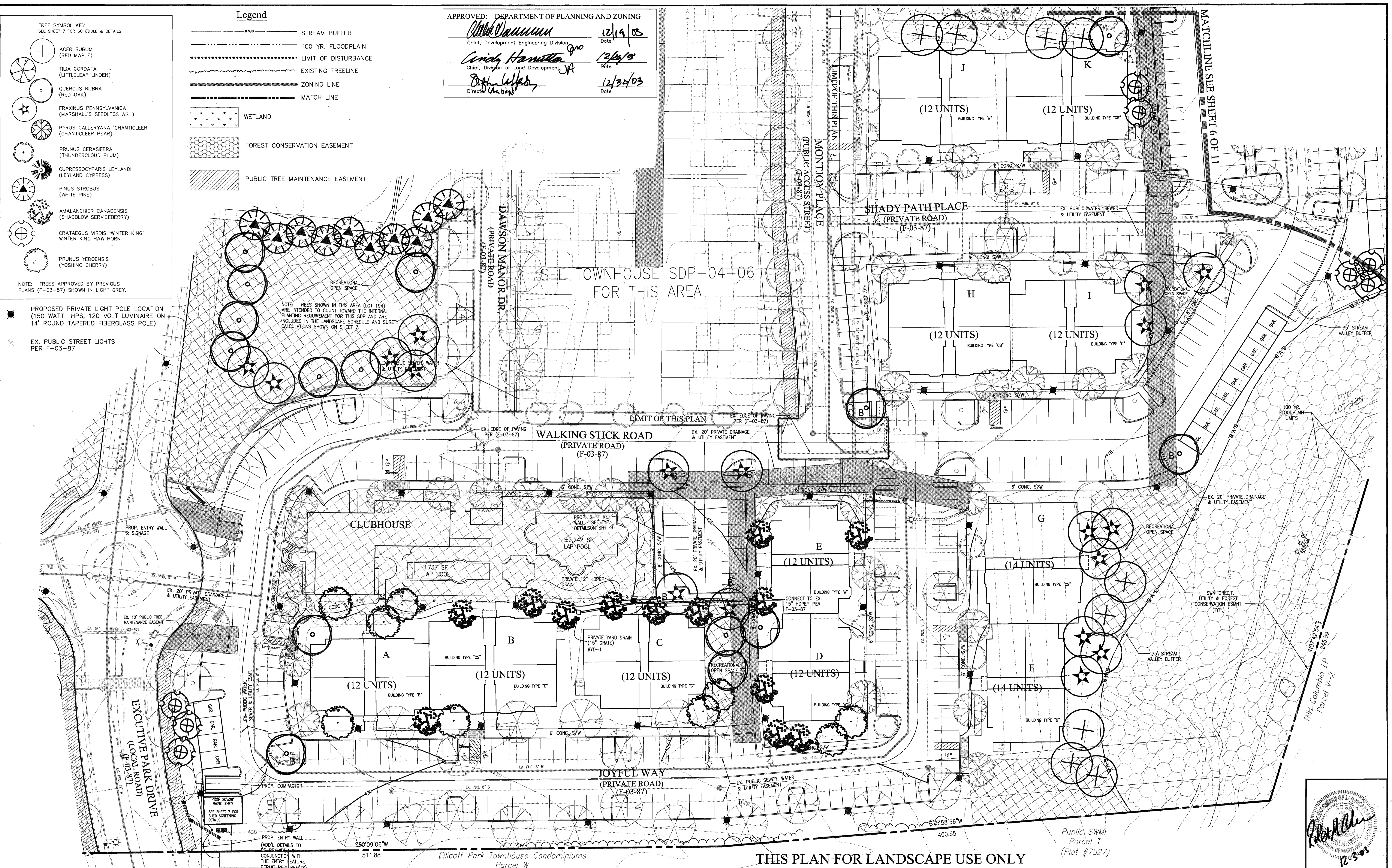
Debra Lefebvre 12/24/03
Director Date

PROPOSED PRIVATE LIGHT POLE LOCATION (150 WATT HPS, 120 VOLT LUMINAIRE ON 14' ROUND TAPERED FIBERGLASS POLE)

EX. PUBLIC STREET LIGHTS PER F-03-87

NOTE: TREES SHOWN IN THIS AREA (LOT 194) ARE INTENDED TO COUNT TOWARD THE INTERNAL PLANTING REQUIREMENT FOR THIS SDP AND ARE INCLUDED IN THE LANDSCAPE SCHEDULE AND SURETY CALCULATIONS SHOWN ON SHEET 7.

SEE TOWNHOUSE SDP-04-06 FOR THIS AREA

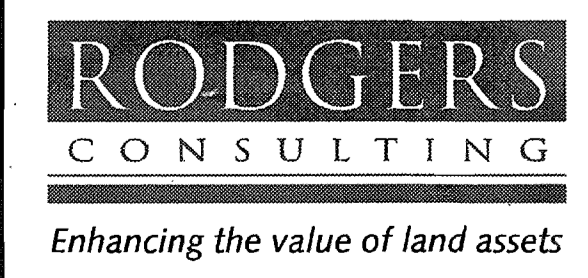


THIS PLAN FOR LANDSCAPE USE ONLY

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		RC	
	DRAWN		CoV	
	REVIEWED		PFB	
	RELEASE FOR			
	CONJUNCTION WITH THE ENTRY FEATURE PERMIT REQUIREMENTS			

Owner/Developer:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

**SITE DEVELOPMENT PLAN
LANDSCAPE**

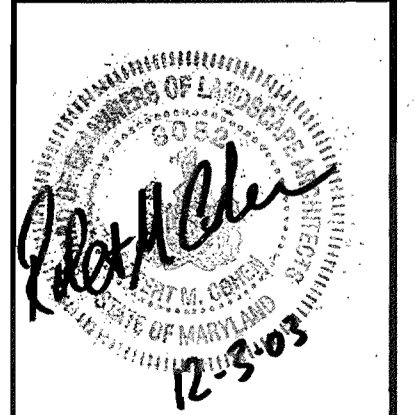


Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-87

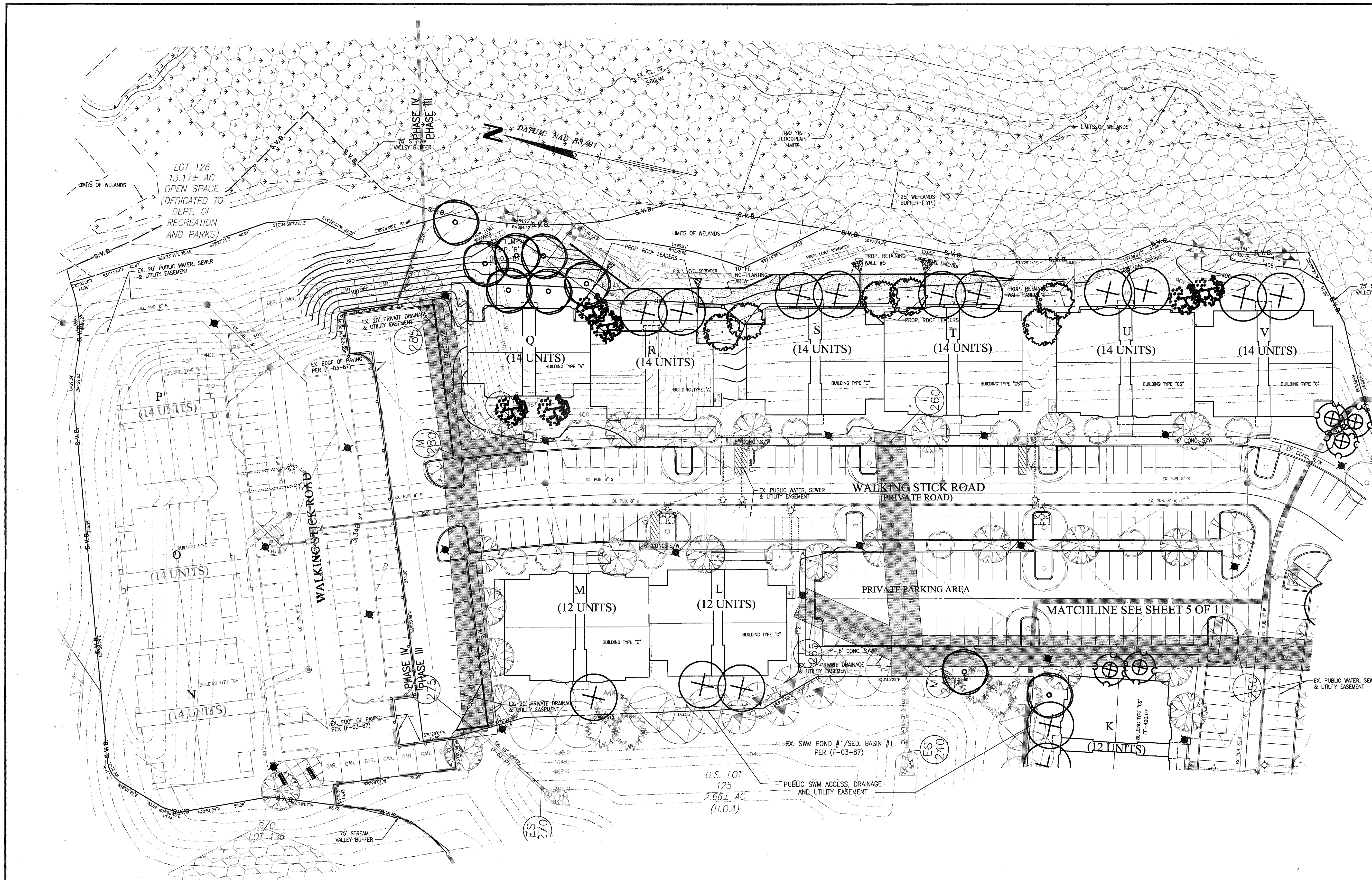
SCALE: 1"=30'
JOB No. 643G
DATE: 07/10/03
INDEX No. LS-1
SHEET No. 5 of 11

Public SWMF Parcel T (Plot #7527)



Legend

- STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- WETLAND
- FOREST CONSERVATION EASEMENT
- PUBLIC TREE MAINTENANCE EASEMENT
- PROPOSED LIGHT POLE LOCATION



TREE SYMBOL KEY
SEE SHEET 7 FOR SCHEDULE & DETAILS

- ACER RUBUM (RED MAPLE)
- TILIA CORDATA (LITTLELEAF LINDEN)
- QUERCUS RUBRA (RED OAK)
- FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)
- PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)
- PRUNUS CERASIFERA (THUNDERCLOUD PLUM)
- CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)
- PINUS STROBUS (WHITE PINE)
- AMALANCHIER CANADENSIS (SHADBLow SERVICEBERRY)
- CRATAEGUS VIRIDIS 'WINTER KING' (WINTER KING HAWTHORN)
- PRUNUS YEDOENSIS (YOSHINO CHERRY)

NOTE: TREES APPROVED BY PREVIOUS PLANS (F-03-07) SHOWN IN LIGHT GREY.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/19/03
Chief, Development Engineering Division

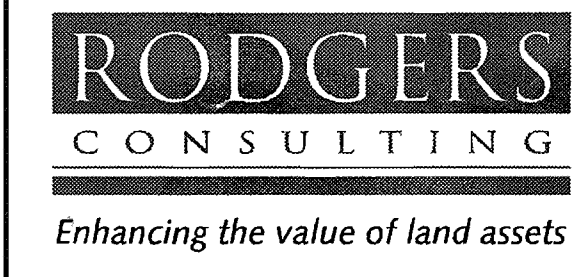
[Signature] 12/16/03
Chief, Division of Land Development

[Signature] 12/30/03
Director (Planning)

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		RC	
	DRAWN		CoV	
	REVIEWED		PFB	
	RELEASE FOR			
	BY			

Owner/Developer:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

**SITE DEVELOPMENT PLAN
LANDSCAPE**



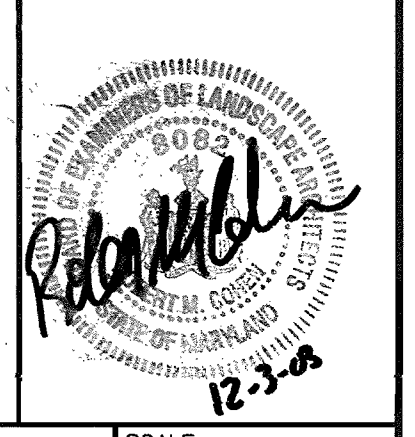
Rodgers Consulting, Inc.
9260 Galther Road
Galthersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

Montjoy

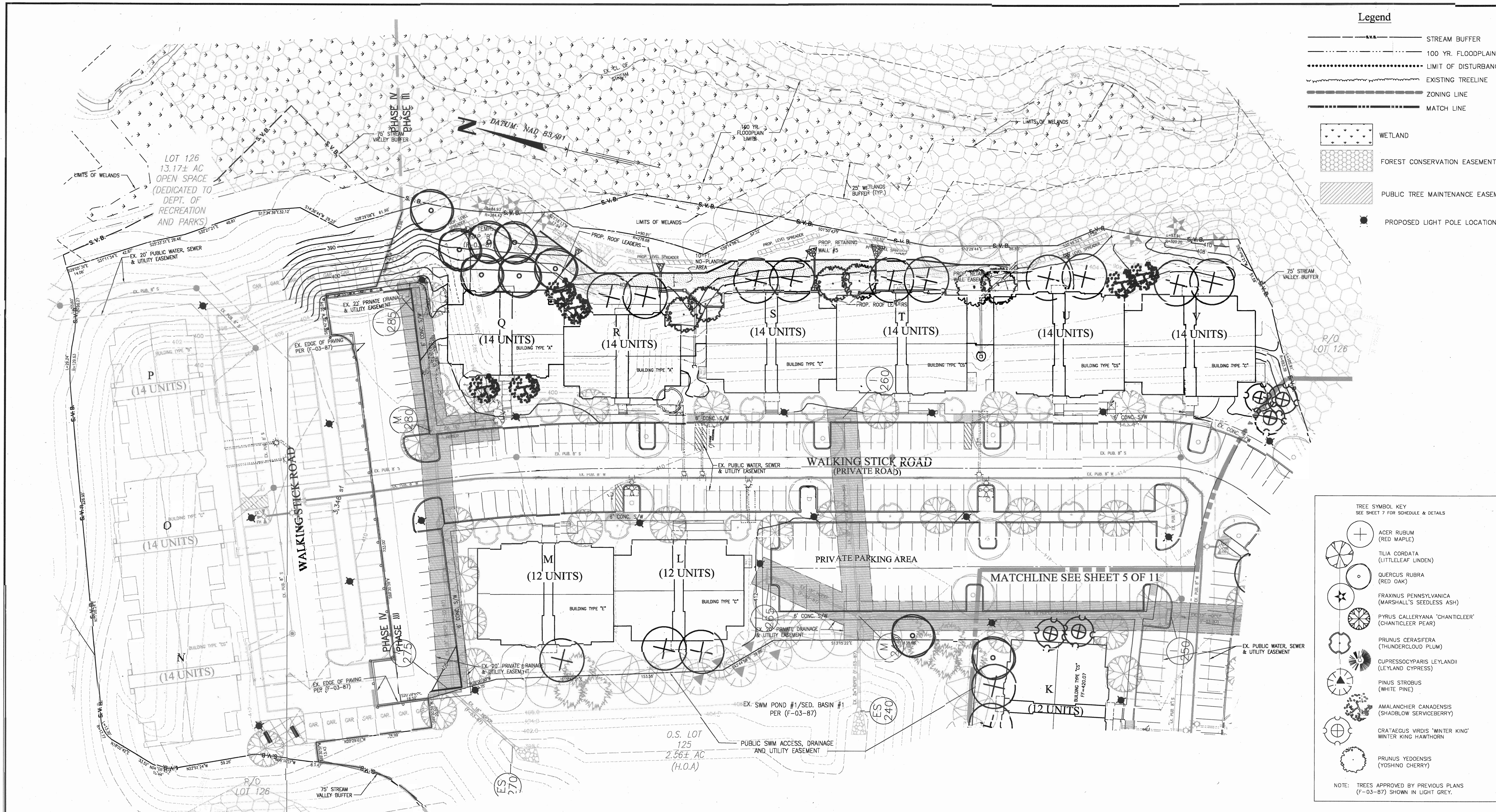
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-08, F-03-07

SCALE: 1" = 30'
JOB No. 643G
DATE: 07/10/03
INDEX No. LS-2
SHEET No. 6 OF 11



Legend

- STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- WETLAND
- FOREST CONSERVATION EASEMENT
- PUBLIC TREE MAINTENANCE EASEMENT
- PROPOSED LIGHT POLE LOCATION



TREE SYMBOL KEY
SEE SHEET 7 FOR SCHEDULE & DETAILS

- ACER RUBUM (RED MAPLE)
- TILIA CORDATA (LITTLELEAF LINDEN)
- QUERCUS RUBRA (RED OAK)
- FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)
- PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)
- PRUNUS CERASIFERA (THUNDERCLOUD PLUM)
- CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)
- PINUS STROBUS (WHITE PINE)
- AMALANCHIER CANADENSIS (SHADBLOW SERVICEBERRY)
- CRATAEGUS VARDIS 'WINTER KING' (WINTER KING HAWTHORN)
- PRUNUS YEDOENSIS (YOSHINO CHERRY)

NOTE: TREES APPROVED BY PREVIOUS PLANS (F-03-B7) SHOWN IN LIGHT GREY.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Alfred Williams 12/19/03
Chief, Development Engineering Division
Dctrl

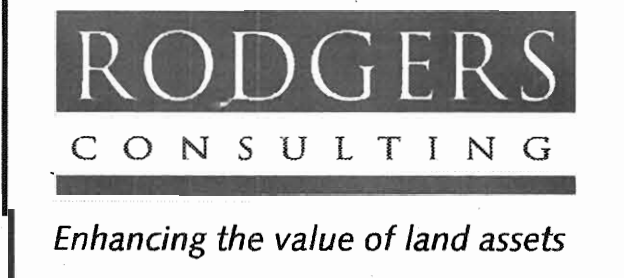
Cindy Starnes 12/26/03
Chief, Division of Land Development
Dctr

Joseph LaHaye 1/2/04
Director
Dctg

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		RC	
	DRAWN		CaV	
	REVIEWED		PFB	
	RELEASE FOR			
	BY			

Owner/Developer:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

**SITE DEVELOPMENT PLAN
LANDSCAPE**



Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

Montjoy

ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-87

SCALE: 1"=30'
JOB No. 643G
DATE: 07/10/03
INDEX No. 1S-2
SHEET No. 6 of 11



- Legend**
- TREE SYMBOL KEY
SEE SHEET 7 FOR SCHEDULE & DETAILS
- ACER RUBUM (RED MAPLE)
 - TILIA CORDATA (LITTLELEAF LINDEN)
 - QUERCUS RUBRA (RED OAK)
 - FRAXINUS PENNSYLVANICA (MARSHAL'S SEEDLESS ASH)
 - PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)
 - PRUNUS CERASIFERA (THUNDERCLOUD PLUM)
 - CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)
 - PINUS STROBUS (WHITE PINE)
 - AMALANCHIER CANADENSIS (SHADBLow SERVICEBERRY)
 - CRATAEGUS VIRIDIS 'WINTER KING' (WINTER KING HAWTHORN)
 - PRUNUS YEDOENSIS (YOSHINO CHERRY)
- NOTE: TREES APPROVED BY PREVIOUS PLANS (F-03-87) SHOWN IN LIGHT GREY.

- STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- WETLAND
- FOREST CONSERVATION EASEMENT
- PUBLIC TREE MAINTENANCE EASEMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cliff Dammann 12/19/03
Chief, Development Engineering Division Date

Conch Hamilton 12/24/03
Chief, Division of Land Development Date

John Leiby 12/24/03
Director Date

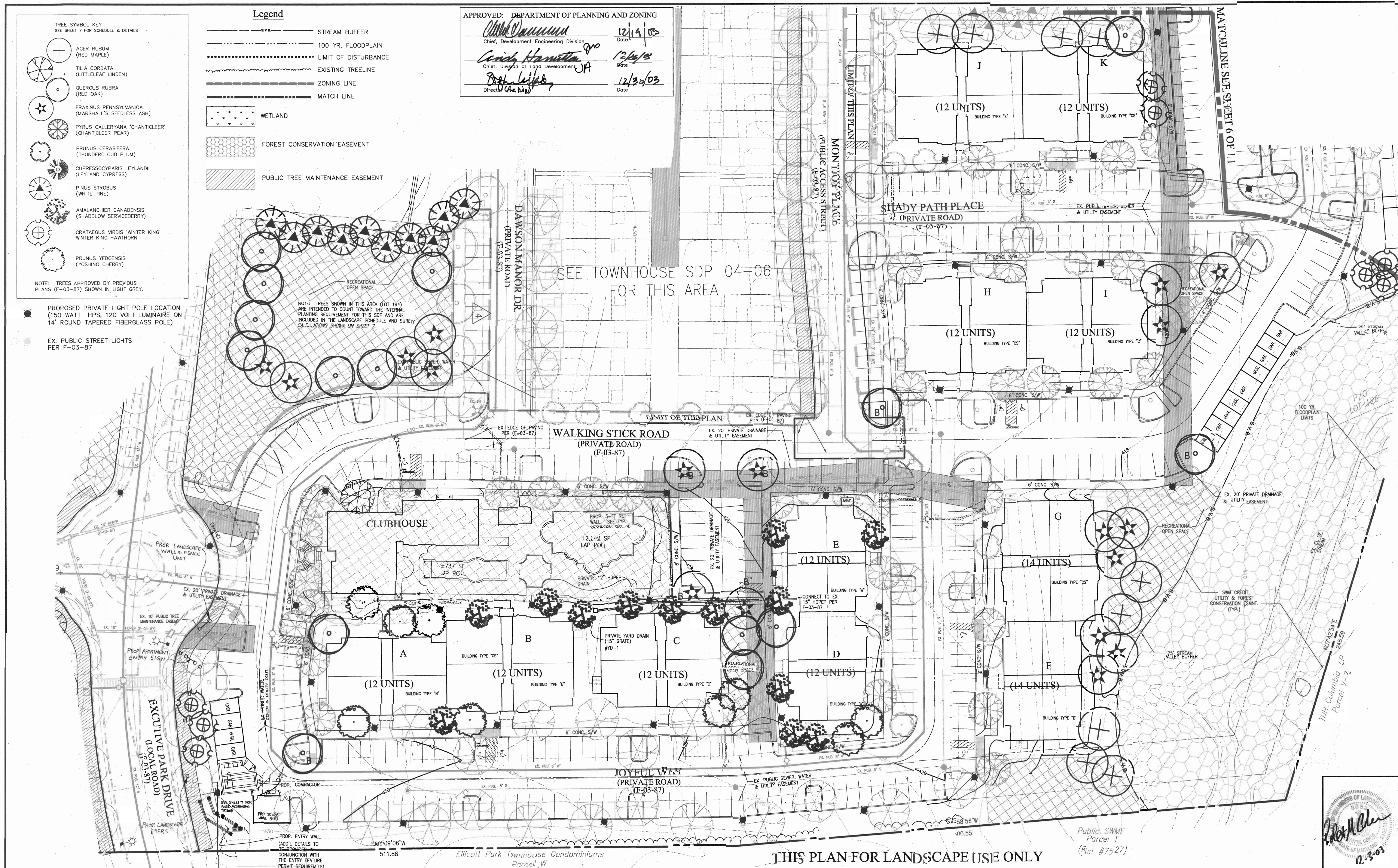
PROPOSED PRIVATE LIGHT POLE LOCATION (150 WATT HPS, 120 VOLT LUMINAIRE ON 14' ROUND TAPERED FIBERGLASS POLE)

EX. PUBLIC STREET LIGHTS PER F-03-87

NOTE: TREES SHOWN IN THIS AREA (LOT 194) ARE INTENDED TO COUNT TOWARD THE INTERNAL PLANNING REQUIREMENT FOR THIS SDP AND ARE INCLUDED IN THE LANDSCAPE SCHEDULE AND SURETY CALCULATIONS SHOWN ON SHEET 7.

SEE TOWNHOUSE SDP-04-06 FOR THIS AREA

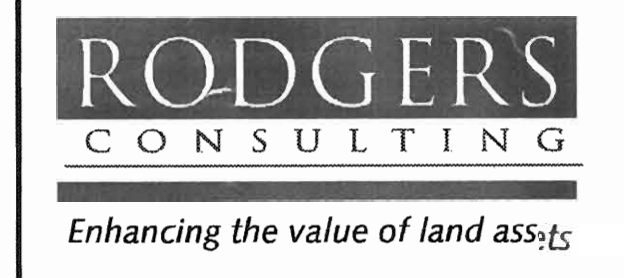
THIS PLAN FOR LANDSCAPE USE ONLY



DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		RC	
	DRAWN		CoV	
	REVIEWED		PFB	
	RELEASE FOR			
	BY		DATE	

Owner/Developer:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

**SITE DEVELOPMENT PLAN
LANDSCAPE**



Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

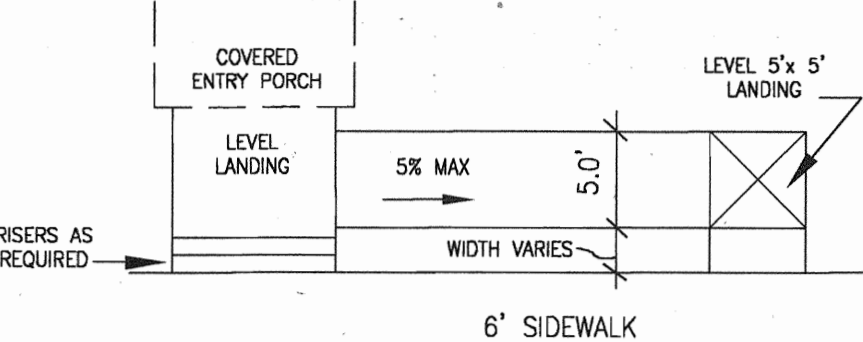
PHASES I, II & III - APARTMENTS SDP

Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, F-03-87

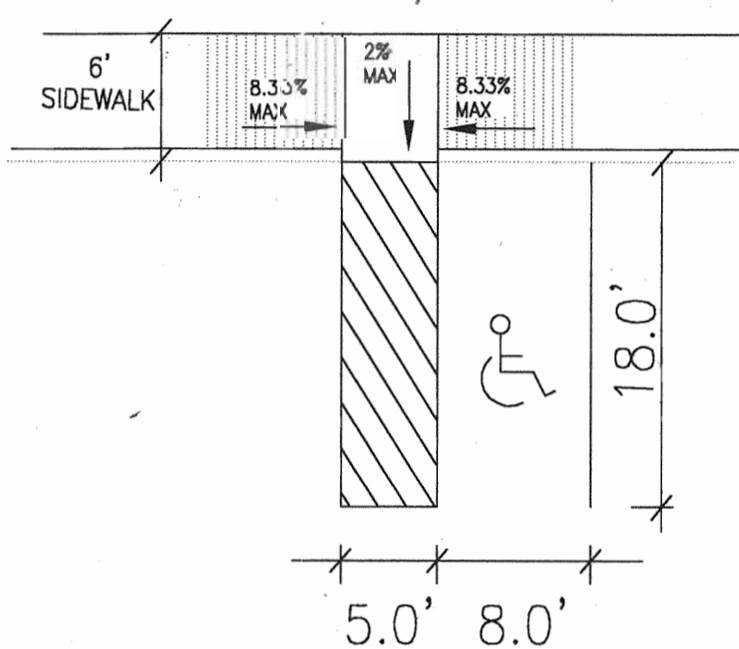
SCALE: 1" = 30'
JOB No. 643G
DATE: 07/10/03
INDEX No. LS-1
SHEET No. 5 OF 11

SHC DATA (CONTR. No. 24-4064-D)

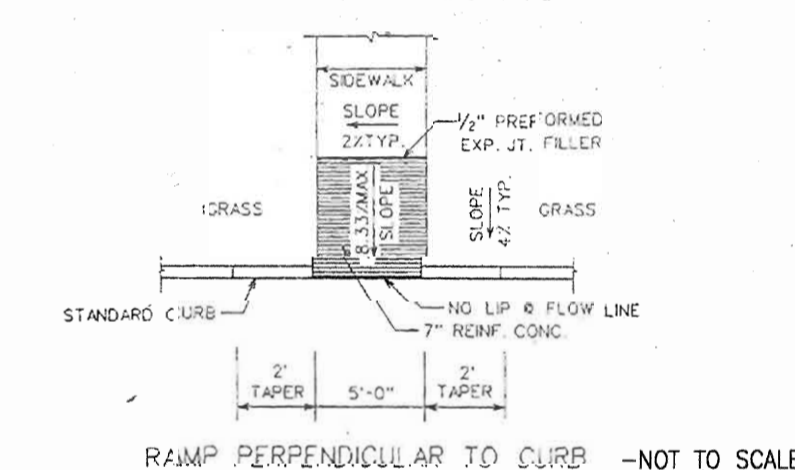
BUDG.	SHC INV.	MIN. SERVICE EL.	REMARKS
L	251.57	402.13	FROM 28 TO 27
M	387.36	402.46	
FUT. N	387.74	402.00	FROM 28 TO 26
FUT. O	389.23	401.29	FROM 27 TO 25
FUT. P	389.87	400.47	FROM 24 TO 23
Q	389.80	401.60	FROM 27 TO 26
R	387.21	401.28	FROM 28 TO 27
S	387.13	402.21	
T	389.39	403.46	
U	389.89	404.99	FROM 29 TO 28
V	401.28	405.38	
POOL	429.62	430.34	



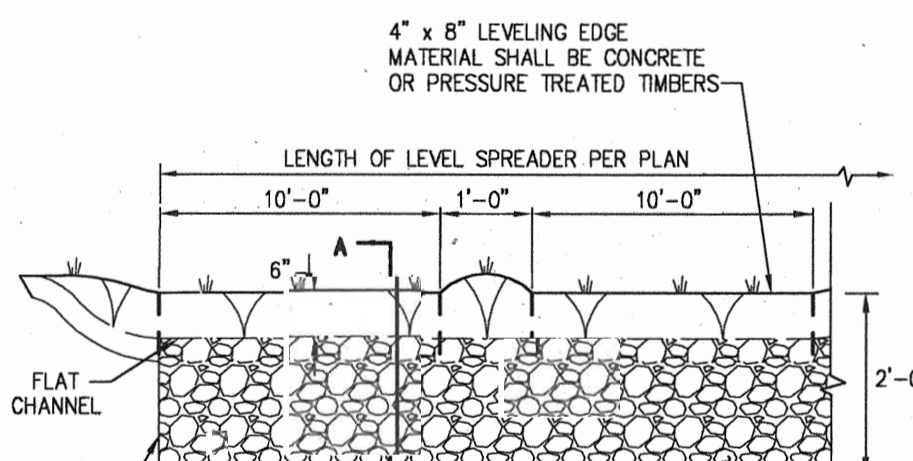
TYPICAL ACCESS RAMP DETAIL
1"=10'



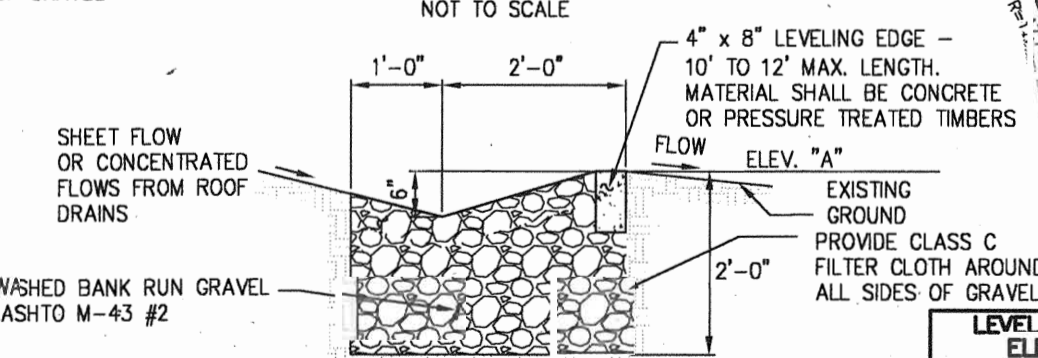
TYPICAL HANDICAP PARKING DETAIL



RAMP PERPENDICULAR TO CURB - NOT TO SCALE



LEVEL SPREADER DETAIL - ELEVATION
NOT TO SCALE



LEVEL SPREADER DETAIL - SECTION A
NOT TO SCALE

NO.	ELEV. (SEE DETAIL BELOW)
A-1	440.50
A-2	392.0
A-3	389.1
A-4	387.75
A-5	388.0
A-6	383.25

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/19/03
Chief, Development Engineering Division
[Signature] 12/19/03
Chief, Division of Land Development
[Signature] 12/31/03
Director (ACT/ODS)

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

[Signature] 12/10/03
USDA - NATURAL RESOURCES CONSERVATION SERVICE
[Signature] 12/10/03
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
[Signature] 12/10/03
HOWARD COUNTY

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 COUNTY SOIL CONSERVATION DISTRICT"

[Signature] 12/19/03
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE)
DATE

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 COUNTY SOIL CONSERVATION DISTRICT"

[Signature] 12/19/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE)
DATE

NOTE: SEDIMENT CONTROLS PROPOSED UNDER F-03-87 AS SHOWN WILL BE UTILIZED FOR IMPLEMENTATION OF THIS PLAN

NO.	DATE	REVISION	DATE	BY	DATE
1	11/14/03	BASE DATA		CADD	
2	11/14/03	DESIGNED		PF,RC	
3	11/14/03	DRAWN		CoV	
4	12-04-03	REVIEWED		PF, B	
5	11-13-03	RELEASE FOR			
6	09-30-03				
7	07-10-03				

Developer/Owner:
Elm Street Development
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 9730

SITE DEVELOPMENT PLAN
GRADING & SEDIMENT CONTROL



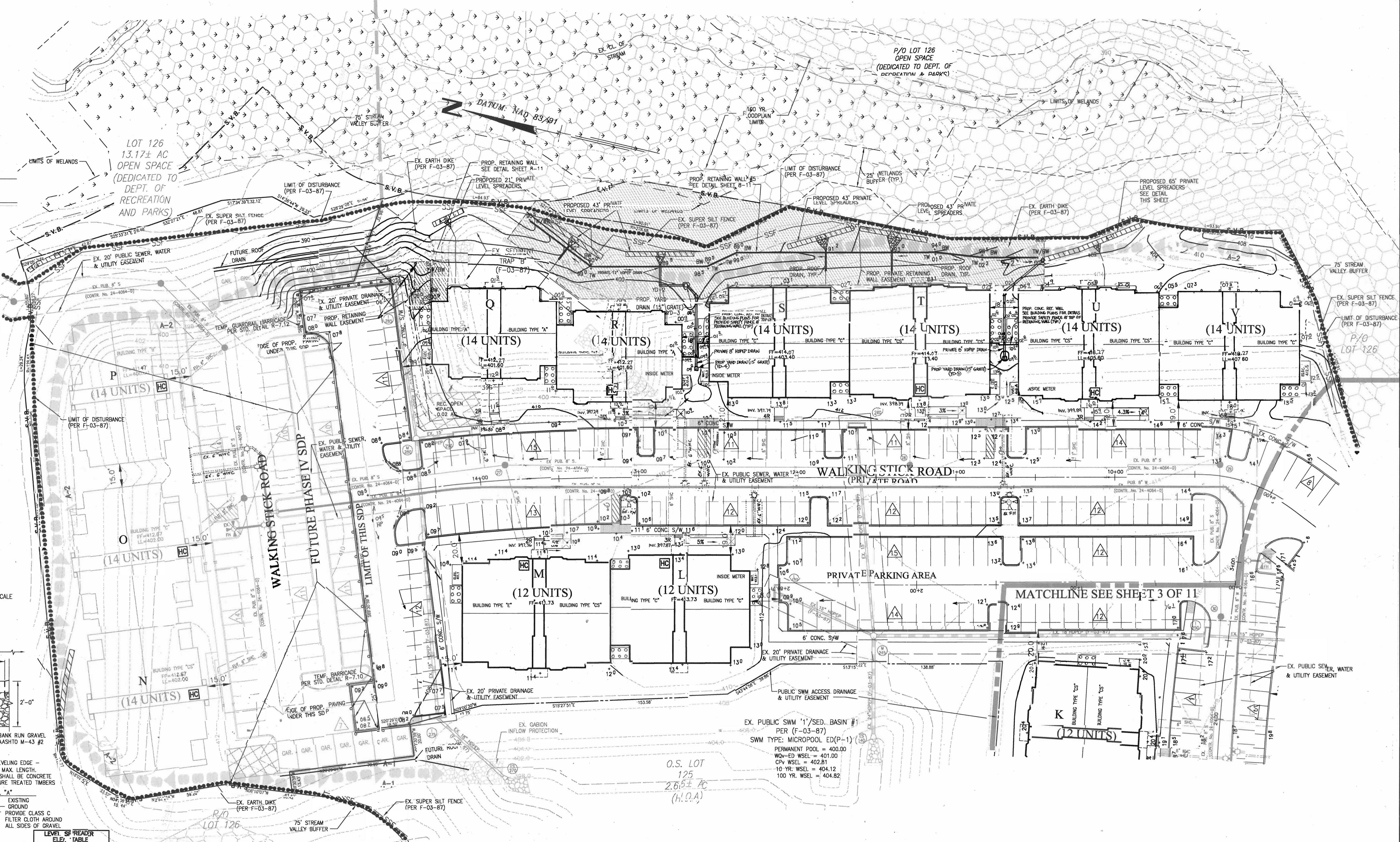
Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Galloway Road
Gathersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

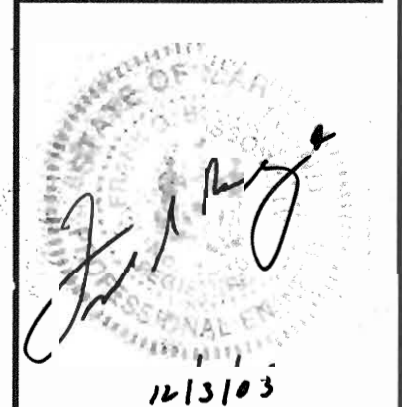
PHASES I, II & III - APARTMENTS SDP

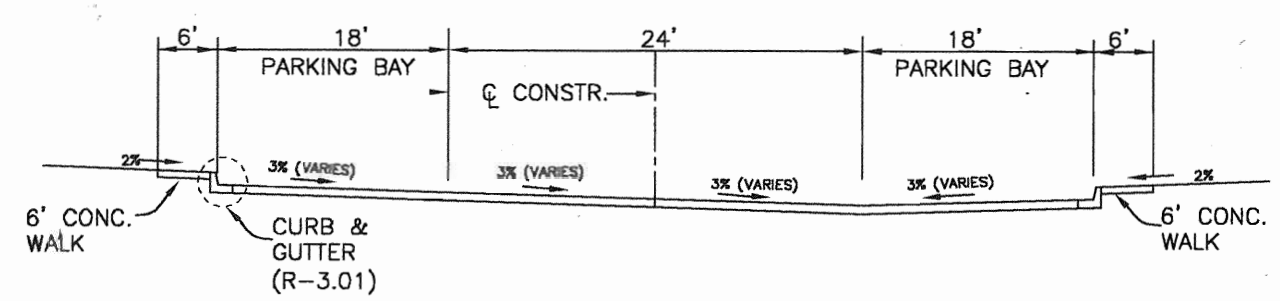
Montjoy
ELECTION DISTRICT No. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-08, F-03-87

SCALE: 1"=30'
JOB No. 643C
DATE: 07/10/03
INDEX No. SG-2
SHEET No. 4 OF 1
SDP-04-07

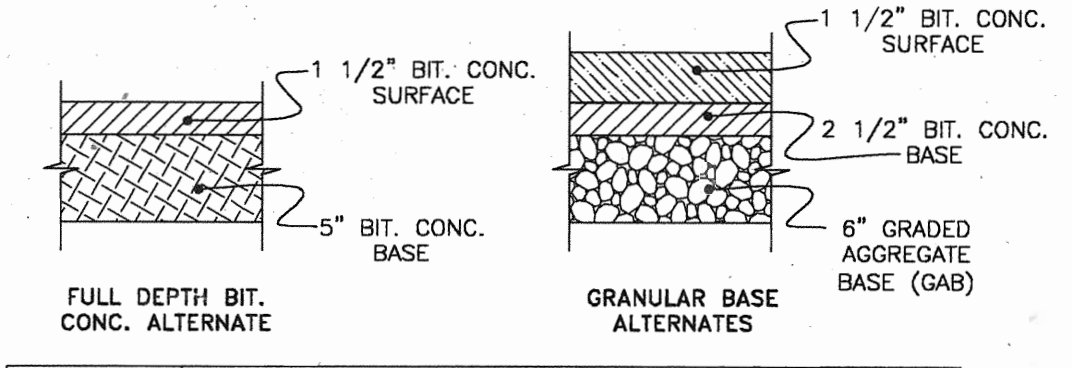


DE NOTES HANDICAPPED ACCESSIBLE BUILDINGS





TYPICAL ROADWAY SECTION
(RESIDENTIAL PRIVATE STREET)



SECTION NUMBER	ROAD AND STREET CLASSIFICATION
P-2	RESIDENTIAL ZONES LOCAL, CUL-DE-SAC STS. ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY*

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE

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

HOWARD SCD DATE

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 COUNTY SOIL CONSERVATION DISTRICT"

[Signature] 12/3/03
DATE

Signature of Developer
(PRINT NAME BELOW SIGNATURE)
P. J. DICKENS

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 COUNTY SOIL CONSERVATION DISTRICT"

[Signature] 12/3/03
DATE

Signature of Engineer
(PRINT NAME BELOW SIGNATURE)
FRANK C. BOSSONE IV

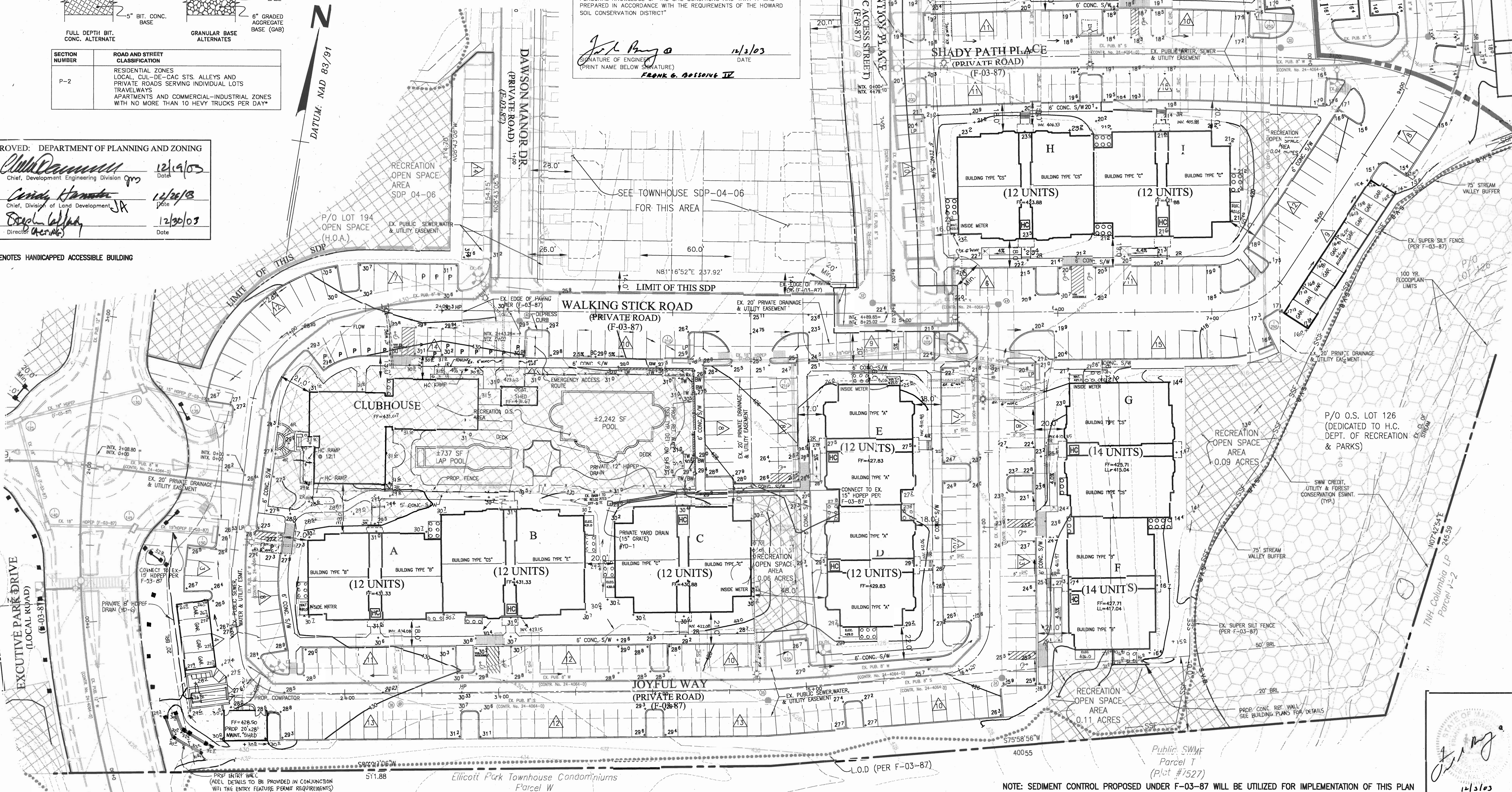
APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/19/03
Chief, Development Engineering Division gm Date

[Signature] 12/26/03
Chief, Division of Land Development JK Date

[Signature] 12/30/03
Director (A.S.A.G.) Date

HC DENOTES HANDICAPPED ACCESSIBLE BUILDING



SHC DATA (CONTR. No. 24-4064-D)

BLDG.	SHC INV.	MIN. SERVICE EL.	REMARKS
A	424.08	428.88	FROM 36 TO 35
B	423.15	428.88	
C	422.08	427.08	
D	412.08	416.78	FROM 34 TO 33
E	410.58	416.18	
F	411.87	416.77	
G	410.58	414.28	
H	408.33	411.43	FROM 31 TO 30
I	408.88	411.43	
J	414.51	419.87	
K	413.51	418.87	

P = PARKING SPACES FOR CLUBHOUSE & POOL

Ellicott Park Townhouse Condominiums Parcel W

NOTE: SEDIMENT CONTROL PROPOSED UNDER F-03-87 WILL BE UTILIZED FOR IMPLEMENTATION OF THIS PLAN

DATE	REVISION	DATE	BY	DATE	Developer/Owner:
	BASE DATA		CADD		Stringtown Investment, LLC 6820 Elm Street Suite 200 McLean, Va. 22101 Mr. Russell Dickens (703) 734 - 9730
	DESIGNED		PFB,RC		
	DRAWN		CoV		
	REVIEWED		PFB		
	RELEASE FOR				

Developer/Owner:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

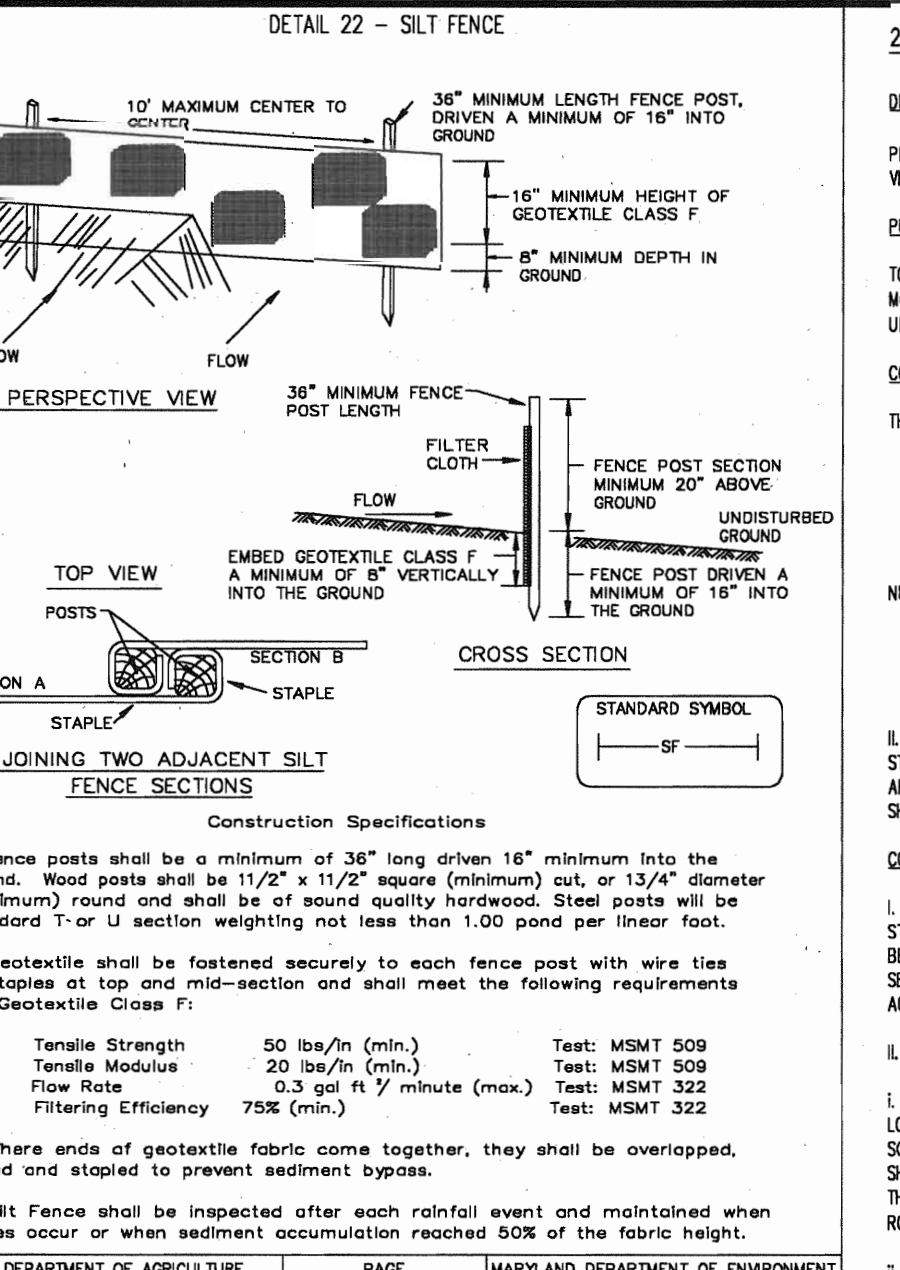
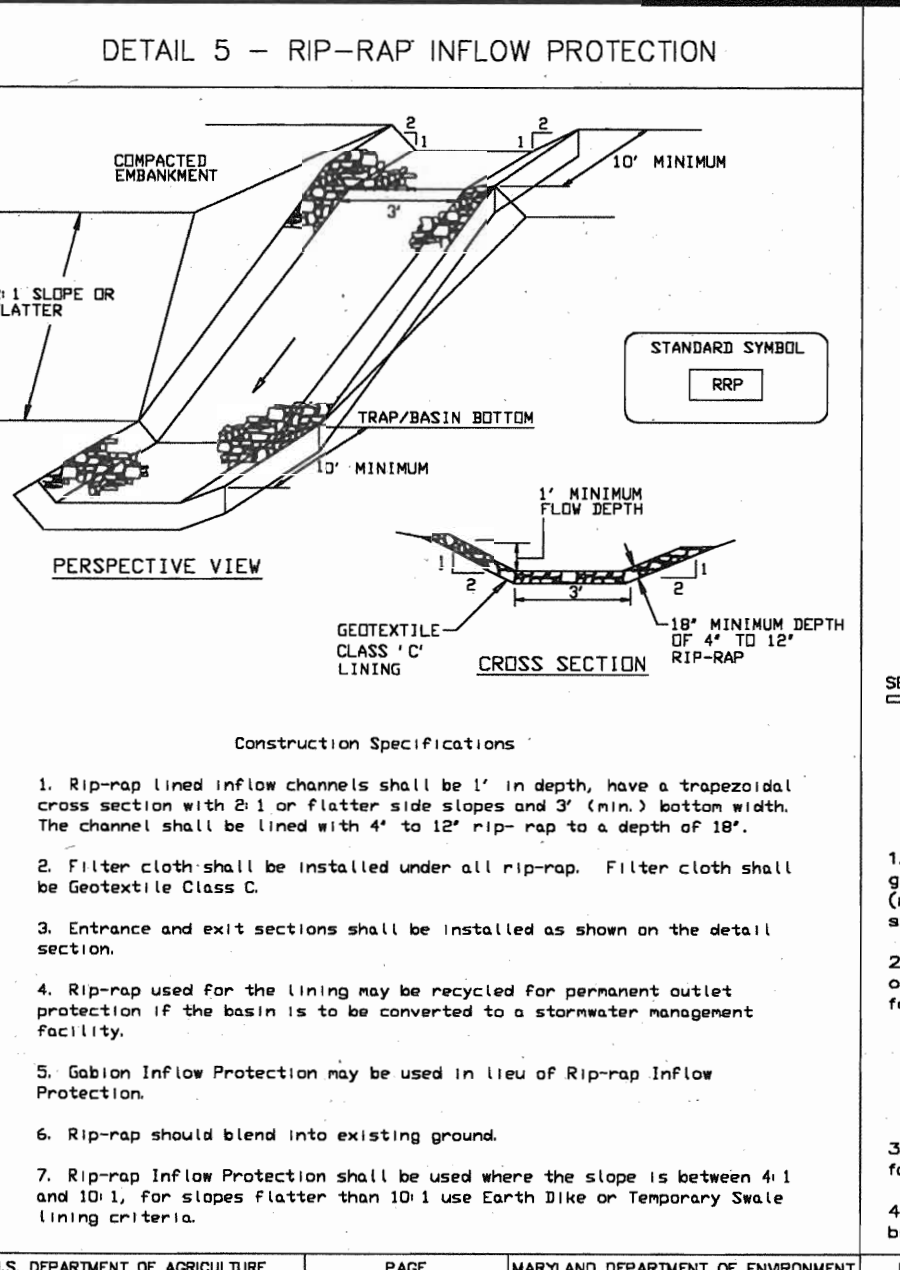
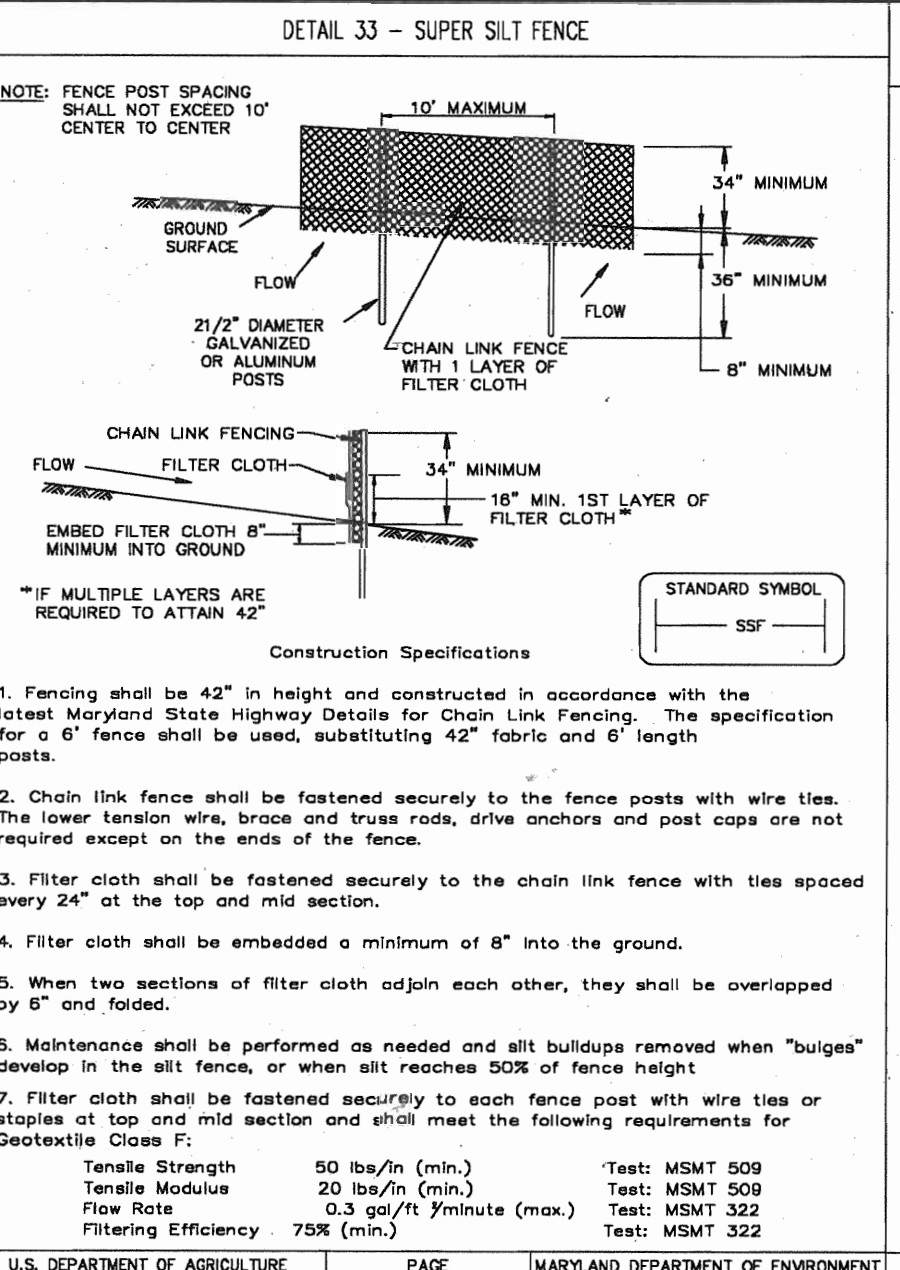
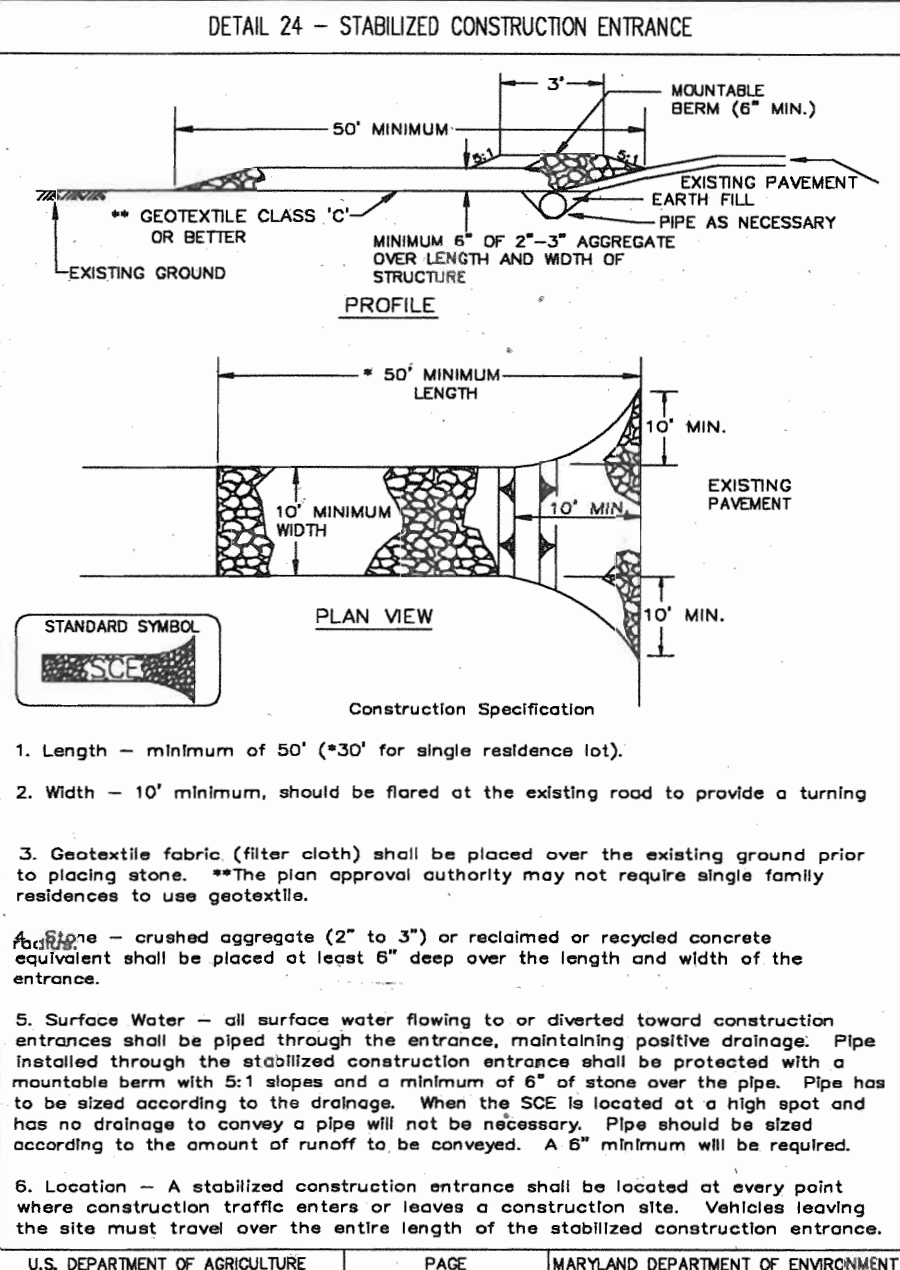
SITE DEVELOPMENT PLAN
GRADING & SEDIMENT CONTROL

RODGERS CONSULTING
Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Gaither Road
Calhoun, MD 20877
301.948.4700
301.948.5256 (fax)
301.363.6609
www.rodgers.com

PHASES I, II & III APARTMENT SDP
Montjoy
ELECTION DISTRICT No. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID-12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-87

SCALE: 1" = 30'
JOB No. 643C
DATE: 07/10/03
INDEX No. SG-1
SHEET No. 3 OF 11



21.0 STANDARD & SPECIFICATIONS FOR TOPSOIL

DEFINITION

TOPOSOIL: A layer of soil that is in contact with the parent material and has not been subjected to any other process than that of weathering of the parent material.

CONSTRUCTION & MATERIAL SPECIFICATIONS

1. TOPOSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED, PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPOSOIL TO BE SALVAGED FOR USE SHALL BE A MINIMUM OF 18\"/>

21.0 MATERIALS SPECIFICATIONS TABLE 27 GEOTEXTILE FABRICS

CLASS	APPROXIMATE OPENING SIZE	TENSILE STRENGTH	BURST STRENGTH
A	0.30	250	500
B	0.60	200	320
C	0.60	200	320
D	0.60	200	145
E	0.30	80	145
F (SILT FENCE)	0.40 - 0.80*	90	190

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the HOWARD COUNTY DEPARTMENT OF INSPECTIONS & PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).

2. ALL VEGETATION & STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN & ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS & SPECIFICATIONS FOR SOIL EROSION & SEDIMENT CONTROL & REVISIONS THERE TO.

3. FLOWING INTENSIVE SOIL DISTURBANCES OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, PERIMETER SLOPES & ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

14 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, PERIMETER SLOPES & ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4. ALL SEDIMENT TRAPS/BASINS SHOWN ON THE PLAN MUST BE FENCED & WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOLUME 1, CHAPTER 17 OF THE MARYLAND COUNTY DESIGN MANUAL - "STORM DRAINAGE".

5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE MOST CURRENT MARYLAND STANDARDS & SPECIFICATIONS FOR SOIL EROSION & SEDIMENT CONTROL & REVISIONS THERE TO. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION & ESTABLISHMENT OF GRASSES.

6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE & ARE TO BE MAINTAINED IN OPERATING CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

7. SITE ANALYSIS:

AREA	7.28 ACRES
7.11 ACRES	7.28 ACRES
7.11 ACRES	7.28 ACRES

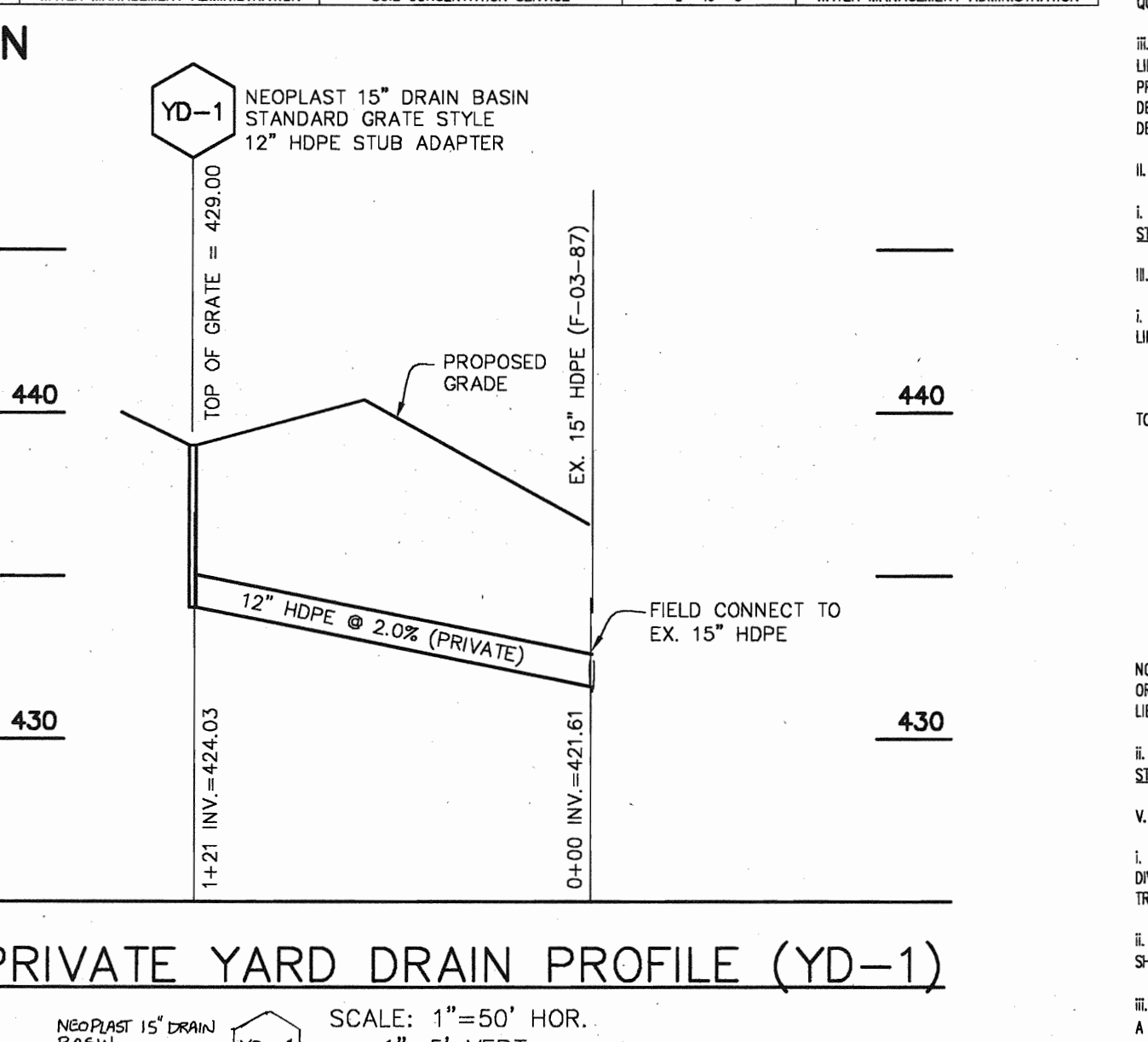
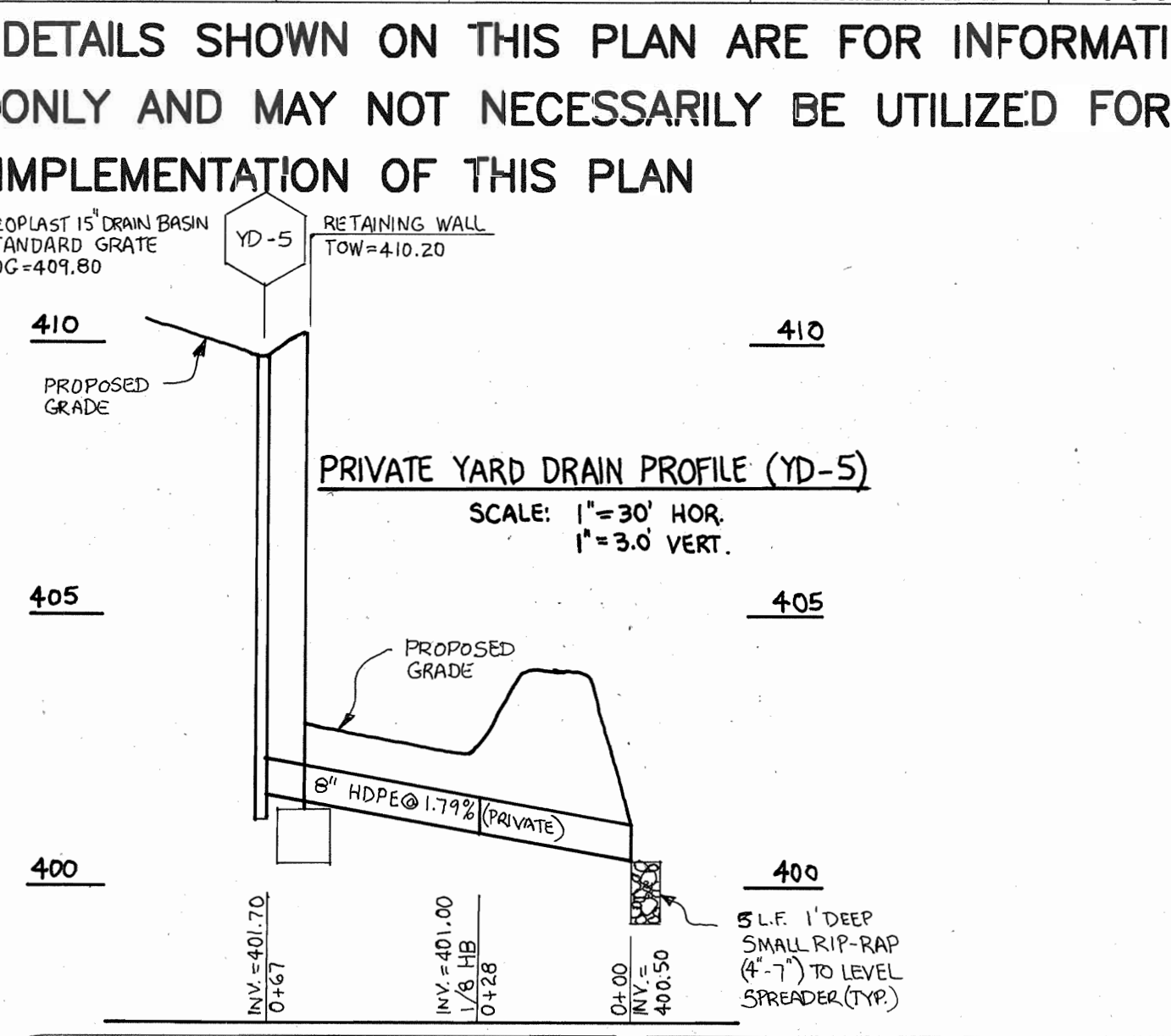
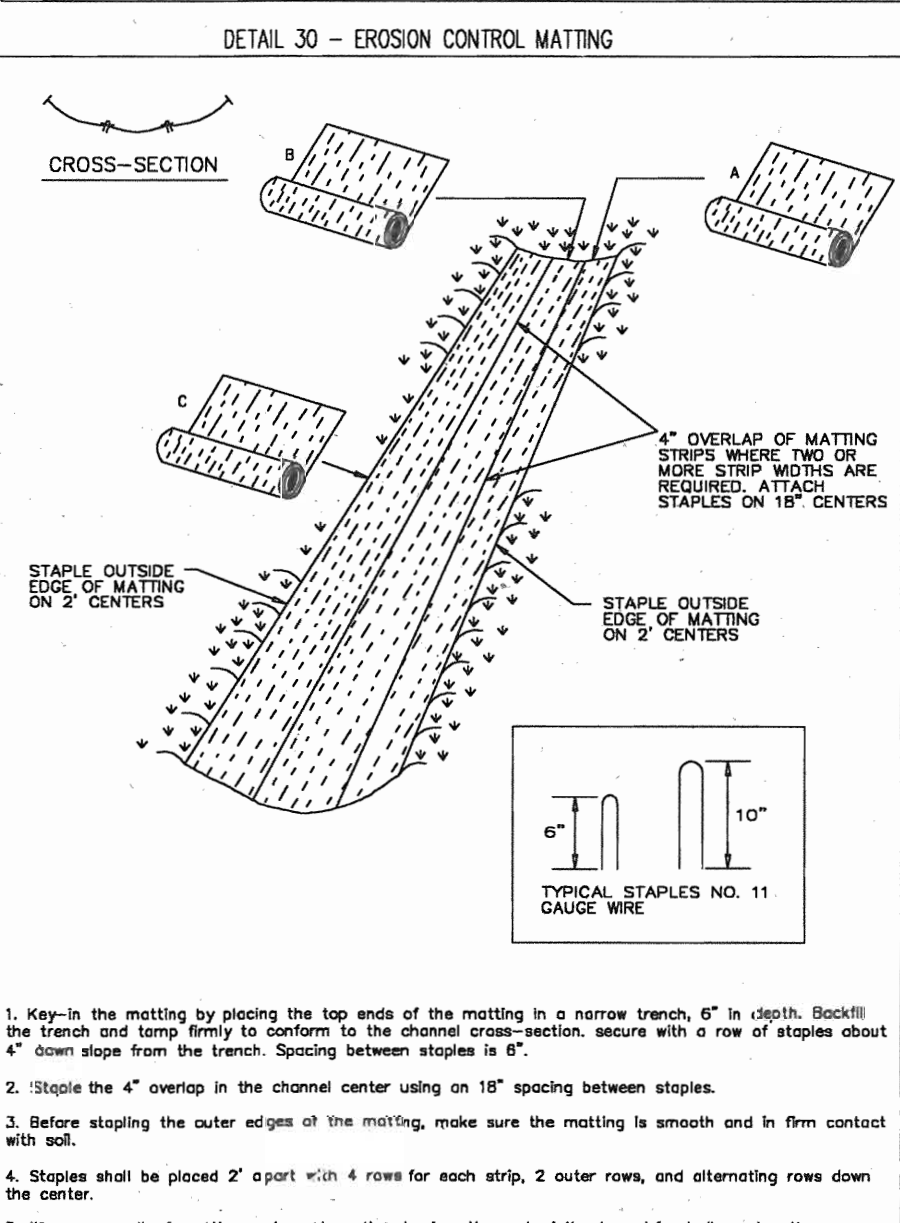
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR FULFILLMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED OF DETAILED SPECIFICATIONS BY THE HOWARD COUNTY SIPW SEDIMENT CONTROL INSPECTOR.

10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE SEDIMENT CONTROL DIVISION SHALL BE OBTAINED PRIOR TO THE START OF ANY CONSTRUCTION.

11. TRUCKS FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE (3) PNEUMATIC TIRES WHICH MUST BE COVERED & STABILIZED WITHIN ONE WORKING DAY, IF NECESSARY.

12. QUANTITIES & ESTIMATES SHOWN ARE FOR SEDIMENT CONTROL PURPOSES ONLY. CONTRACTOR SHALL PREPARE HIS/HER OWN QUANTITY ESTIMATES TO HIS/HER SATISFACTION.



22.0 TOPSOIL APPLICATION

1. TOPOSOIL SHALL BE APPLIED TO ALL DISTURBED AREAS IN ACCORDANCE WITH THE STANDARDS & SPECIFICATIONS SET FORTH IN SECTION 21.0.

2. TOPOSOIL SHALL BE APPLIED TO ALL DISTURBED AREAS IN ACCORDANCE WITH THE STANDARDS & SPECIFICATIONS SET FORTH IN SECTION 21.0.

3. TOPOSOIL SHALL BE APPLIED TO ALL DISTURBED AREAS IN ACCORDANCE WITH THE STANDARDS & SPECIFICATIONS SET FORTH IN SECTION 21.0.

4. TOPOSOIL SHALL BE APPLIED TO ALL DISTURBED AREAS IN ACCORDANCE WITH THE STANDARDS & SPECIFICATIONS SET FORTH IN SECTION 21.0.

5. TOPOSOIL SHALL BE APPLIED TO ALL DISTURBED AREAS IN ACCORDANCE WITH THE STANDARDS & SPECIFICATIONS SET FORTH IN SECTION 21.0.

DUST CONTROL SPECIFICATIONS

Controlling dust blowing and movement on construction sites and roads.

To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Temporary Methods

1. Mulches - See standards for vegetative stabilization with mulches only. Mulch should be crimped or tacked to prevent blowing.

2. Vegetative Cover - See standards for temporary vegetative cover.

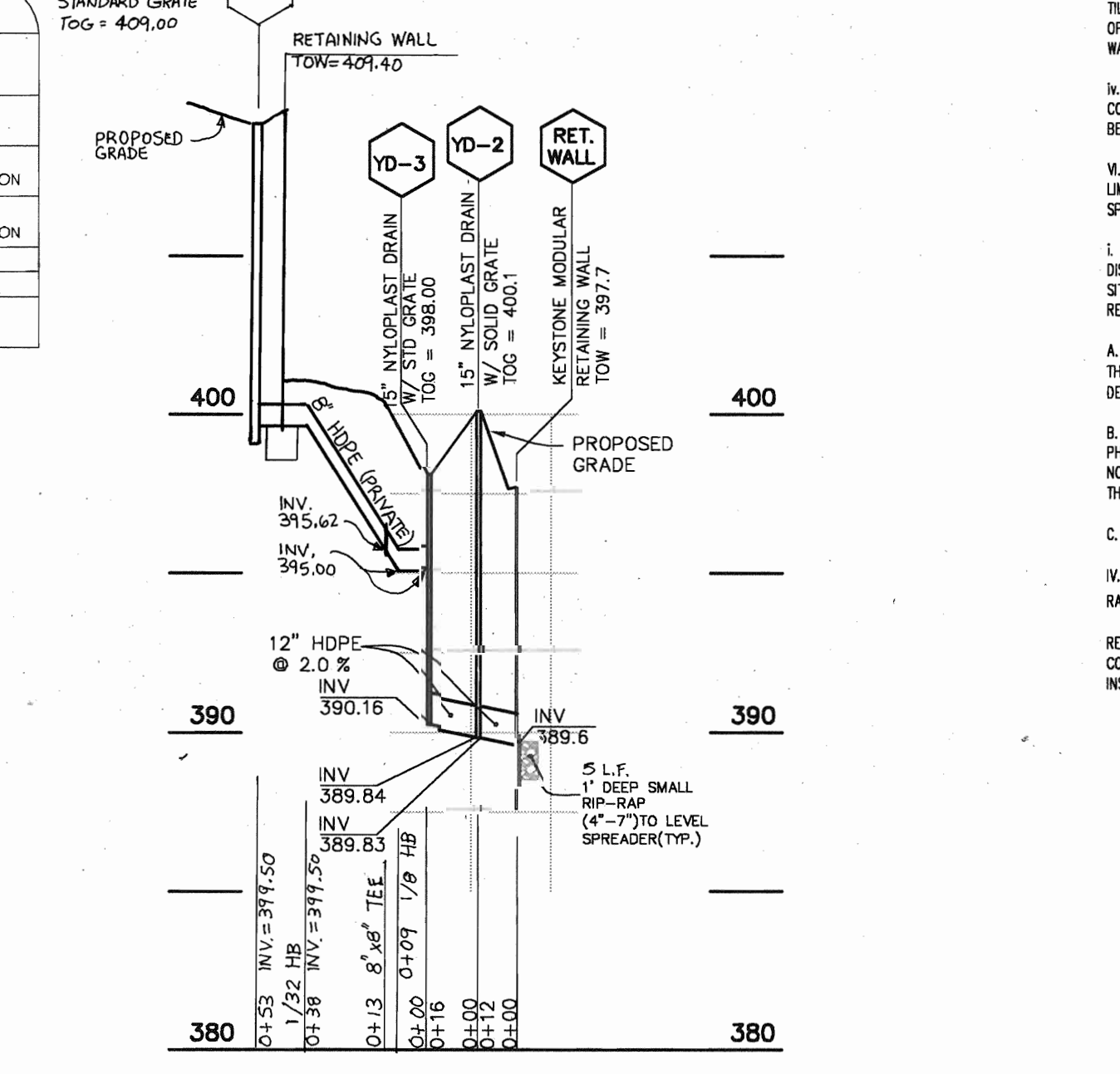
3. Tillage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12\"/>

PIPE SCHEDULE (PRIVATE)

SIZE	TYPE	LENGTH
12"	HDPEP	149 L.F.
8"	HDPEP	234 L.F.

STRUCTURE SCHEDULE (PRIVATE)

STRUCTURE NUMBER	STRUCTURE TYPE	LOCATION	COORDINATES	TOP OF GRATE ELEV.	REMARKS
YD-1	NEOPLAST 15" DRAIN BASIN	BETWEEN BUILDING B & C	N571871.21 E1363804.90	429.00	W/ STANDARD GRATE STYLE
YD-2	NEOPLAST 15" DRAIN BASIN	BEHIND BUILDING R	N572627.17 E1364310.64	400.10	W/ SOLID GRATE STYLE
YD-3	NEOPLAST 15" DRAIN BASIN	BETWEEN BUILDING K & S	N572611.43 E1364314.84	398.00	W/ STANDARD GRATE STYLE
YD-4	NEOPLAST 15" DR. BASIN	BET. BUILDINGS R-S	N572627.17 E1364310.64	409.00	W/ STD. GRATE FOR ROOF DRAIN CONNECTION
YD-5	NEOPLAST 15" DR. BASIN	BET. BUILDINGS T-U	N572627.17 E1364310.64	409.00	W/ STD. GRATE STYLE W/ 8" STUB



REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE: 12/10/03

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

HOWARD COUNTY ENGINEER DATE: 12/10/03

DEVELOPER'S CERTIFICATE

I, **Mr. Russel Dickens**, 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 COUNTY 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 COUNTY SOIL CONSERVATION DISTRICT.

PHASES I, II & III - APARTMENTS SDP

DATE	REVISION
12/10/03	BASE DATA CADD
12/10/03	DESIGNED
12/10/03	DRAWN
12/10/03	REVIEWED PFB
12/10/03	RELEASE FOR

Developer/Owner:

Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russel Dickens
(703) 734 - 9730

SITE DEVELOPMENT PLAN

SEDIMENT & EROSION CONTROL

NOTES & DETAILS

RODGERS CONSULTING

Enhancing the value of land assets

RODGERS CONSULTING, INC.
9260 Galtier Road
Gaitherburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609

Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260

CALL "MISS UTILITY" AT 1-800-257-7777
48 Hours Before Start of Construction

AS SHOWN

JOB No: 6436
DATE: 12/20/02
INDEX No: SC1
SHEET No: 11 of 11

**SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING**

Number of Parking Spaces	528
Number of trees Required @ 1/10 spaces	53
Number of Trees Provided:	
Shade Trees	53
Other Trees (2:1 substitution) =	

NOTE: Internal parking landscape requirements have been met by approved street tree landscape plan under F-03-87, with the exception seven additional trees, provided under this landscape plan. Schedule 'B' trees identified by **B** on plan.

**SCHEDULE C
RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING**

Number of Dwelling Units	244
Number of trees Required @ 1/3 DU	82
Number of Trees Provided:	
Shade Trees	56
Other Trees (2:1 substitution) =	52 (credit = 26)

PLANTING SCHEDULE - RESIDENTIAL INTERNAL *

SYMBOL	BOTANICAL NAME (COMMON NAME)	Q'TY	SIZE	ROOT
LARGE TREES				
+	ACER RUBUM (RED MAPLE)	22	2 1/2"-3" cal	B&B
*	FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)	18	2 1/2"-3" cal	B&B
o	QUERCUS RUBRA (RED OAK)	23	2 1/2"-3" cal	B&B
SMALL TREES & EVERGREENS				
+	AMALANCHIER CANADENSIS (SHADBLOW SERVICEBERRY)	19	8' - 10' ht.	B&B
+	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN	8	1 1/2"-2" cal	B&B
+	PRUNUS YEDONENSIS (YOSHINO CHERRY)	15	1 1/2"-2" cal	B&B
+	PINUS STROBUS (WHITE PINE)	10	6'-8' ht.	B&B

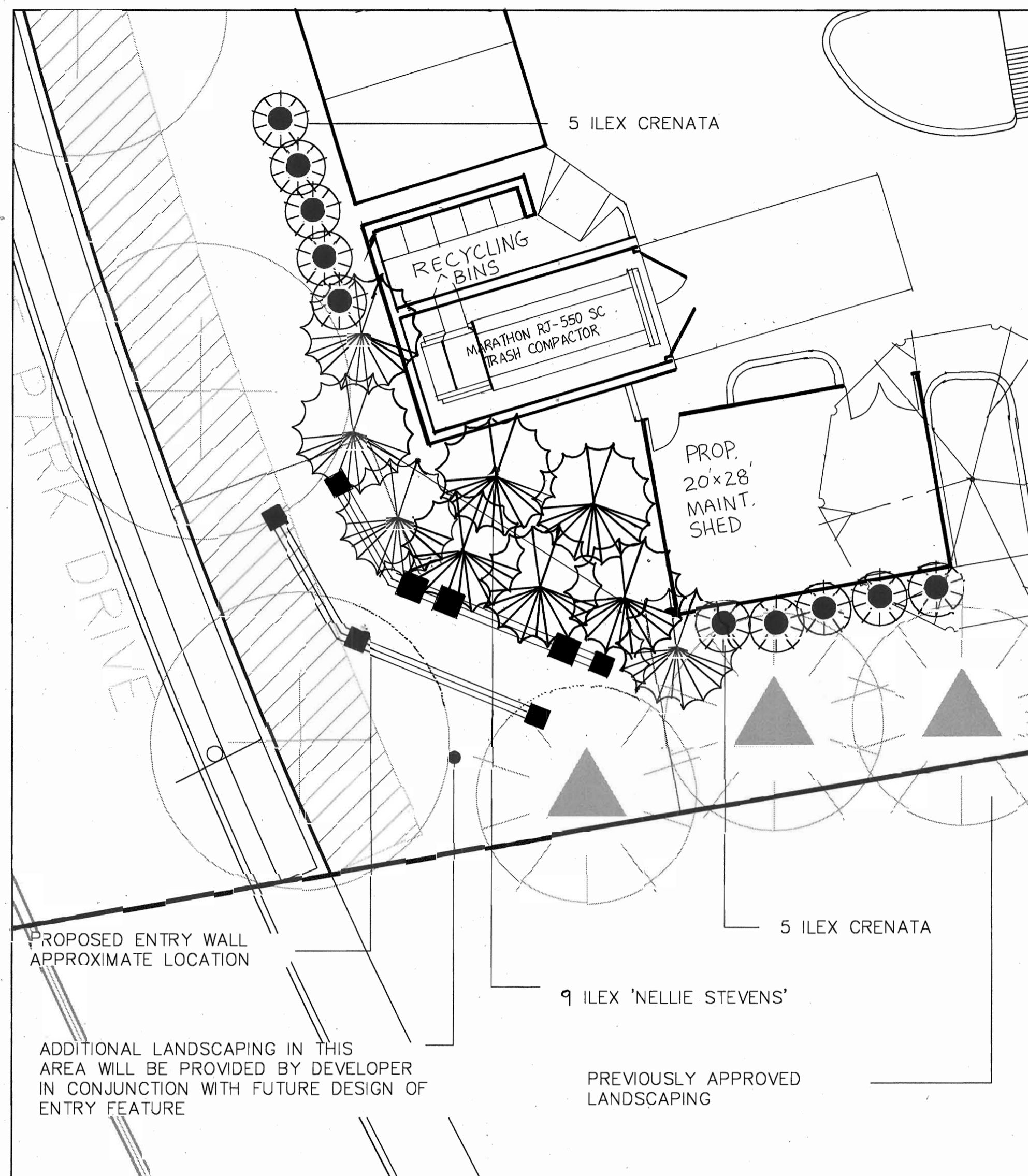
*Includes 7 supplemental internal parking trees

MAINTENANCE SHED SCREENING SCHEDULE (NOT BONDED)				
+	ILEX 'NELLIE STEVENS', NELLIE STEVENS HOLLY	9	5'-6' ht.	B&B
+	ILEX CRENATA 'GREEN LUSTRE', GREEN LUSTRE HOLLY	10	2 1/2"-3" ht.	B&B

SURETY CALCULATION-RESIDENTIAL INTERNAL LANDSCAPING TREES

SHADE TREES *	63 @ \$300 ea	\$ 18,900
ORNAMENTAL/EVERGREENS	52 @ \$150 ea	\$ 7,800
TOTAL		\$ 26,700

*Includes 7 supplemental internal parking trees



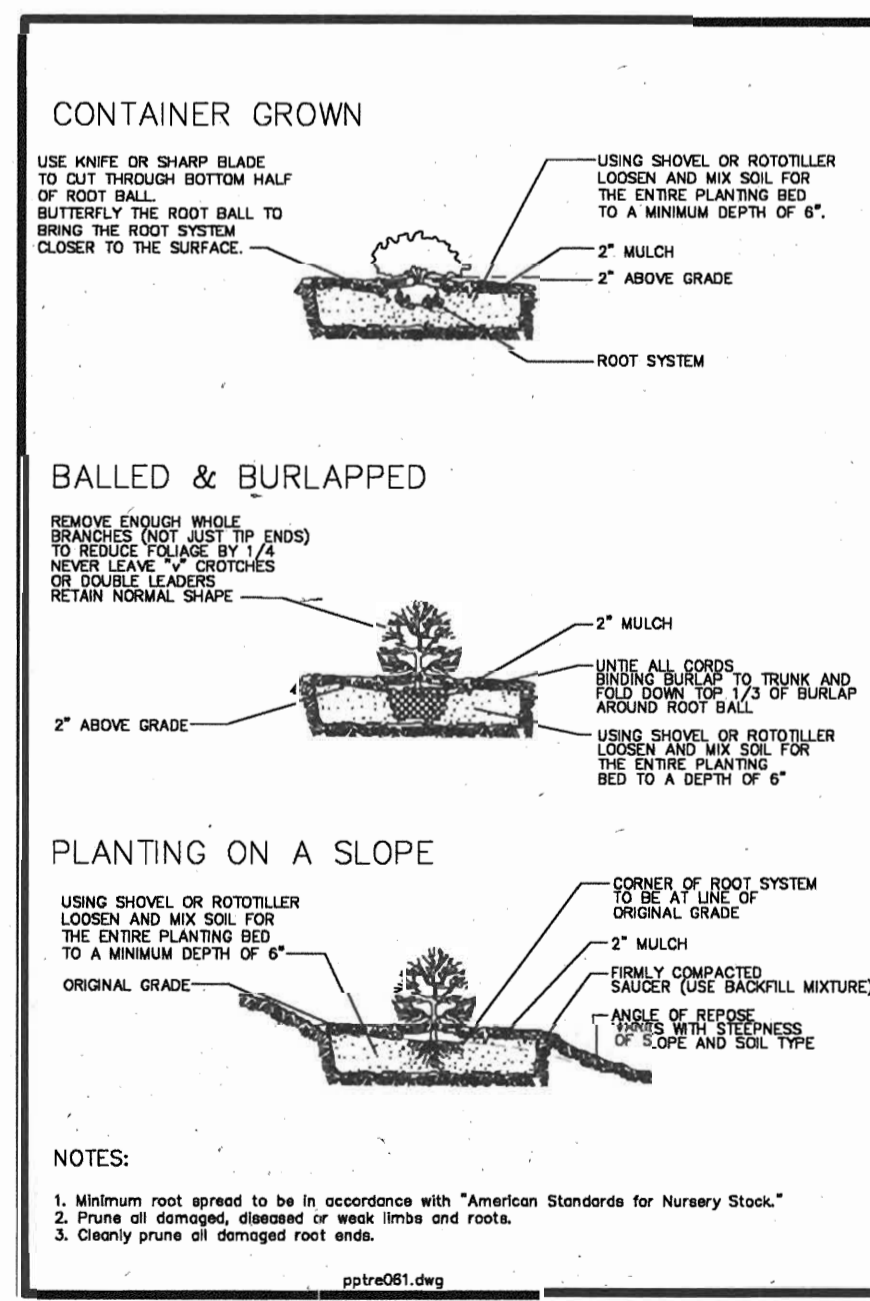
Landscape Notes:

- ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL AS ADOPTED 1/4/93 AND AMENDED 3/2/98.
- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (AAN), particularly with regards to site, growth, and size of ball and density of branch structure. Contractor to insure conformance to national and local building codes and ordinances.
- All plants (B&B or container) shall be properly identified by weatherproof labels securely attached hereto before delivery to project site. Labels shall identify plants by name, species and size. Labels shall not be removed until the final inspection by the owners representative.
- Any material and/or work may be rejected by the owners representative if it does not meet the requirements of the specifications. The contractor shall remove all rejected materials from the site.
- The contractor shall furnish all plants in quantities and sizes to complete the work as specified in plant schedule. The landscape contractor shall be responsible to verify all plant quantities on the plans prior to commencement of work. Quantities in the plant schedule are for the contractors convenience only and do not constitute the final count.
- Substitutions in plant species or size shall not be permitted except with the written approval of the owners representative.
- Plants shall be located as shown on the drawings and by scaling or as designated in the field by the owners representative. All locations are to be approved by the owners representative before excavation.
- Contractor shall locate and mark all underground utility lines and irrigation systems prior to excavating plant beds or pits. All utility easement areas where no planting shall take place shall also be marked on the site, prior to locating and digging the tree pits. If utility lines are encountered in excavation of tree pits, other locations for the trees shall be selected by the owners representative. Such changes shall be made by the contractor without additional compensation. No changes of location shall be made without the approval of the owners representative.
- All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow.
- During planting operations, excess and waste materials shall be promptly and frequently removed from the site.
- All plant shrub beds are to be dug to a minimum of 24" deep and all existing soil, construction debris, roots and other foreign material are to be removed and discarded off site. All plant shrub beds are to be excavated to the width shown on the plans.
- All tree pits are to be excavated to a minimum depth to allow the tree root ball to be a minimum of 4" higher than finish grade. The tree root ball is to rest on undisturbed soil, or a compacted bed must be prepared for the tree root ball to rest on and which will not subside causing the tree to sink below finish grade. All tree pits are to be a minimum of 12" larger on every side of the tree root ball.
- The planter beds are to be entirely cleaned out to the undisturbed soil level. All existing soil, construction debris, roots and other foreign material are to be removed and discarded offsite.
- The topsoil to be used to fill the tree pits, shrub beds and planters is to be plant specific. The topsoil for the trees, shrubs and planters shall consist of a maximum 2/3 existing topsoil from the site, which is cleaned and free of clay, a minimum of 1/3 peat moss, or other approved organic material or imported new loamy topsoil and 10% cow manure. All of these materials are to be mixed prior to placing in the planter or backfilling when planting.
- The contractor is responsible to ensure that all tree pits, shrub beds and planter are well drained. No The landscape contractor without cost to the owner will replace all plant material, which is affected by poor drainage.
- All lawn areas are to be seeded with grass seed appropriate for each of the sunlight conditions, which exist on the site.
- All lawn areas are to be tilled to a depth of 6" and all foreign material removed which will inhibit the healthy growth of the lawn. All old grass and grass roots are to be removed from the site. New topsoil of a minimum 4" is to be placed over the areas to be sodded. The grass areas are to be fine graded to ensure that no undulations occur in the lawn. The lawns are to be graded in such a way as to appear perfectly well tailored and even. The lawn topsoil is to be rolled and lightly irrigated prior to placing of the seed. The seed is not to be laid on frozen or soaked soil.
- The existing trees are to be protected during the preparation of the lawn areas. The roots of the trees are to be undisturbed during the cleaning of the topsoil.
- The trees and shrubs are to be handled with the best care and attention to ensure that the plants are not bruised, broken, torn, damaged in any way which will affect the plants general appearance and well being.
- The trees and shrubs are to be planted with the accepted standards of the American Association of Nurserymen. The plants are to be properly watered and backfilled during the planting. All care must be taken to ensure that the plants are upright, a plant's best side is exposed to the point of the plants greatest visibility.
- The trees must be staked in accordance with acceptable nursery practice to ensure that they are secure in the ground and will grow straight and uniform. The trees are to be wrapped if the contractor deems it necessary to protect the trees from sun scald or insect attack.
- The Landscape Contractor is to provide a 1-year guarantee for all plant material and other work done on site.
- Large growing plants are not to be planted in front of windows, under building overhangs, or in drainage swales. Shrubs planted near H.V.A.C units to be located so that shrubs at maturity will maintain 1 foot clearance between unit and plant.
- Contractor to 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 buildings.
- Trees in public rights of way shall be located at least 3 feet from sidewalks. When the distance between the curb and the sidewalk is less than 6 feet, trees shall be planted 3 feet from sidewalk in the direction away from the road. (See road sections, below)
- Quantities as shown on the plan shall govern over plant list quantities. Contractor to verify plant list totals with quantities shown on plan.
- Groups of shrubs shall be placed in a continuous raised mulch bed with smooth continuous lines. All mulched bed edges shall be curvilinear in shape following the contour of the plant mass. Trees located within 4 feet of shrub beds shall share same mulch bed.

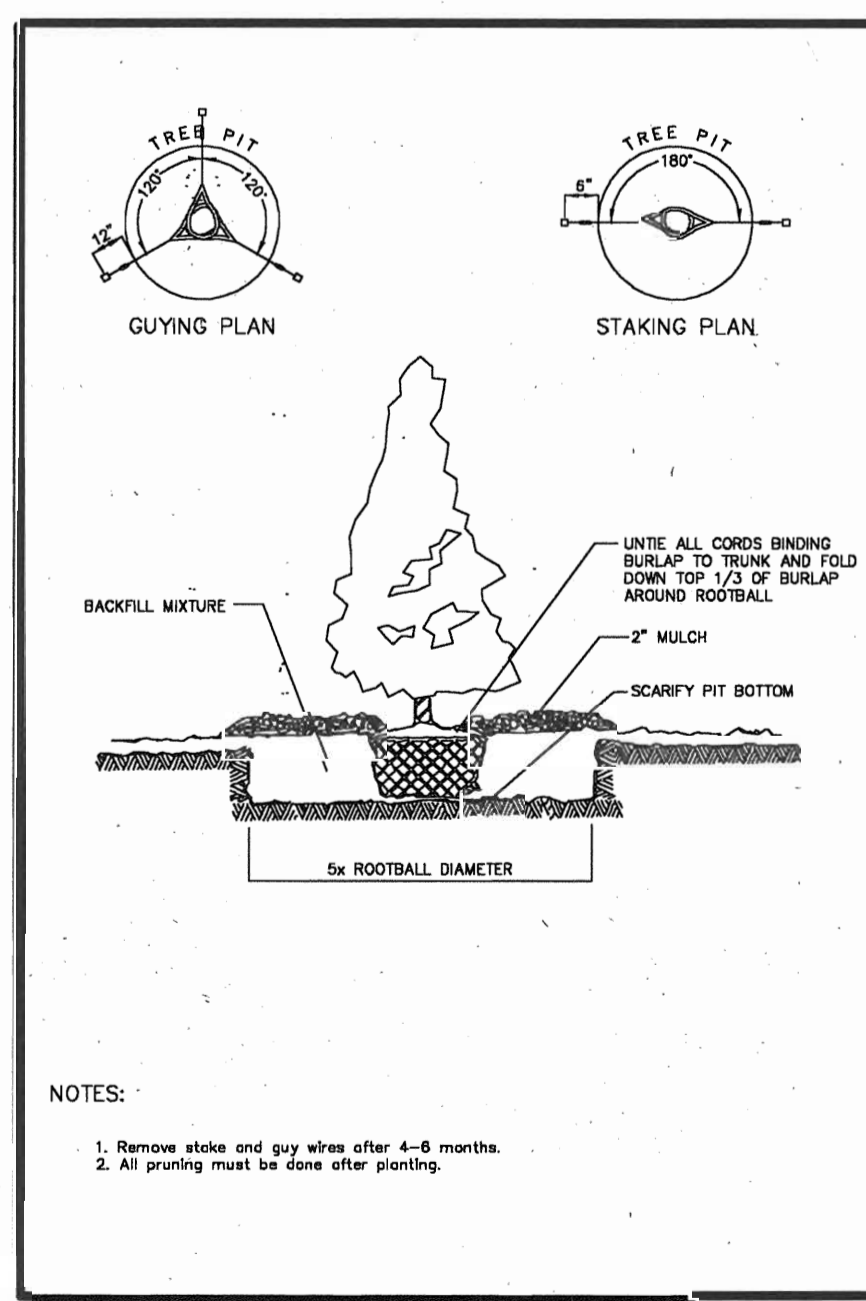
SCREENING DETAIL AT MAINTENANCE SHED

1" = 10'

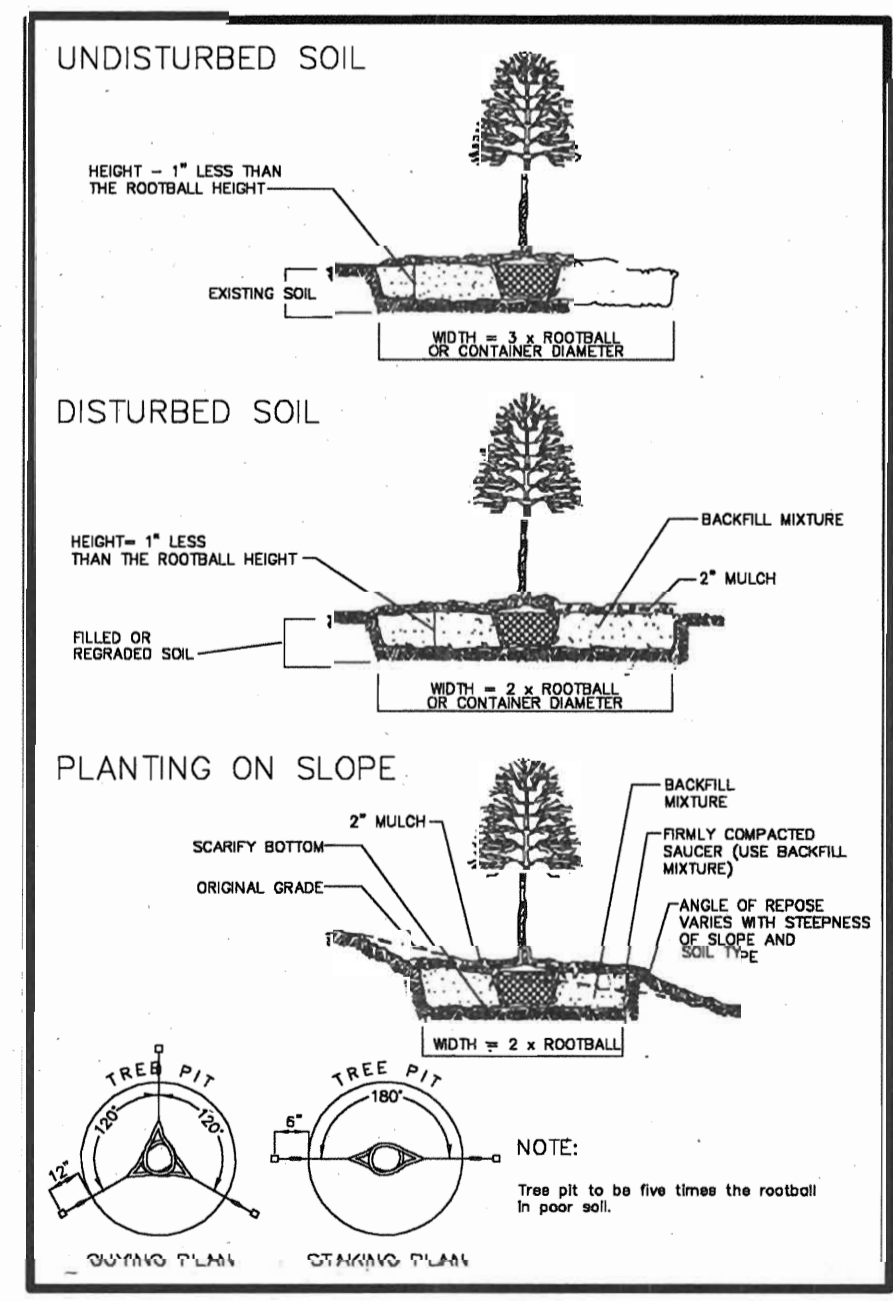
SHRUB PLANTING



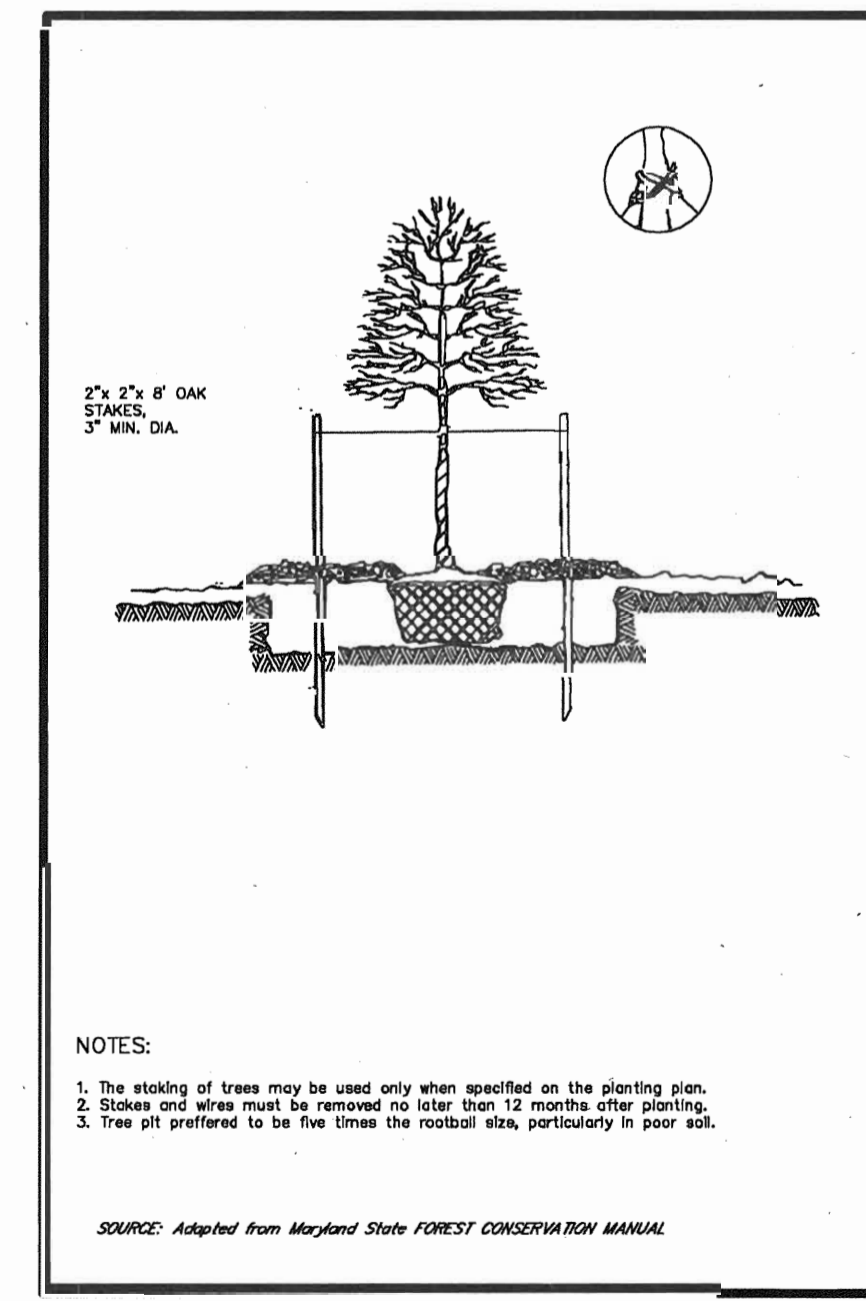
EVERGREEN TREE PLANTING



**DECIDUOUS TREE PLANTING
CONTAINER GROWN AND BALLED & BURLAPPED STOCK**



STAKED TREE SPECIFICATION (2)



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chris Dammann 12/19/03
Chief, Development Engineering Division
Conrad Klemm 12/14/03
Chief, Division of Land Development
Daphne Adams 12/30/03
Director (Admin)

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		RC	
	DRAWN		RC	
	REVIEWED		PFB	
	RELEASE FOR			

Owner/Developer:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

**SITE DEVELOPMENT PLAN
LANDSCAPE DETAILS**

**RODGERS
CONSULTING**
Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4770
301.948.6272 (fax)
301.253.6699
www.rodgers.com

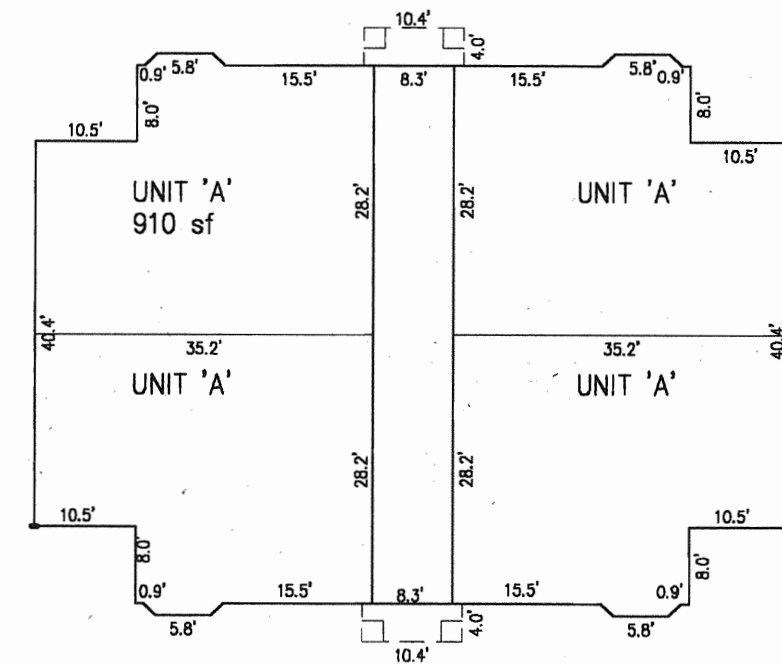
PHASES I, II & III - APARTMENTS SDP

Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-03-08, P-03-87

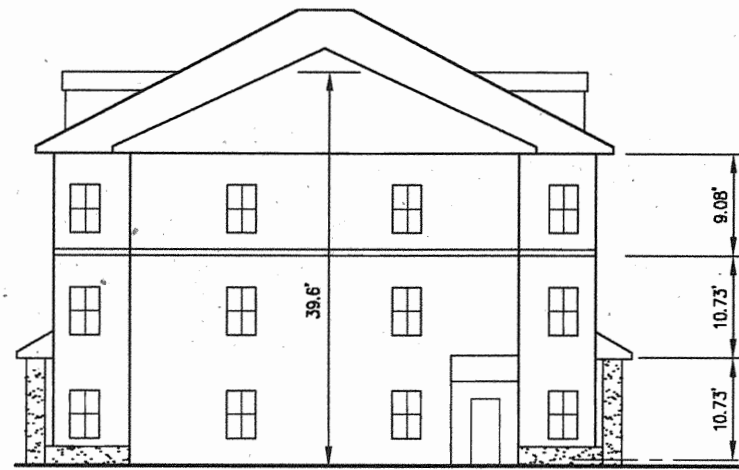
SCALE: AS SHOWN
JOB No. 643C
DATE: 07/10/03
INDEX No. LS-3
SHEET No. 7 OF 11
SDP-04-07



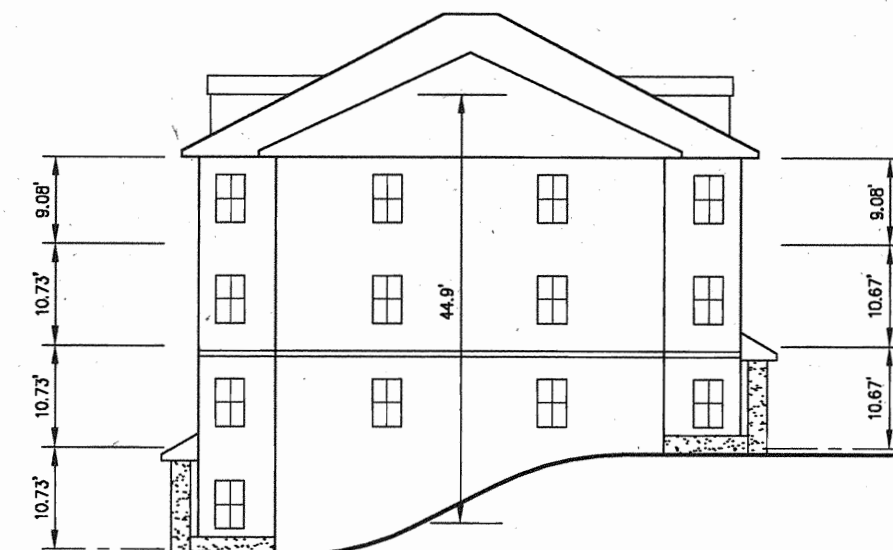
FRONT ELEVATION



FIRST FLOOR - PLAN VIEW



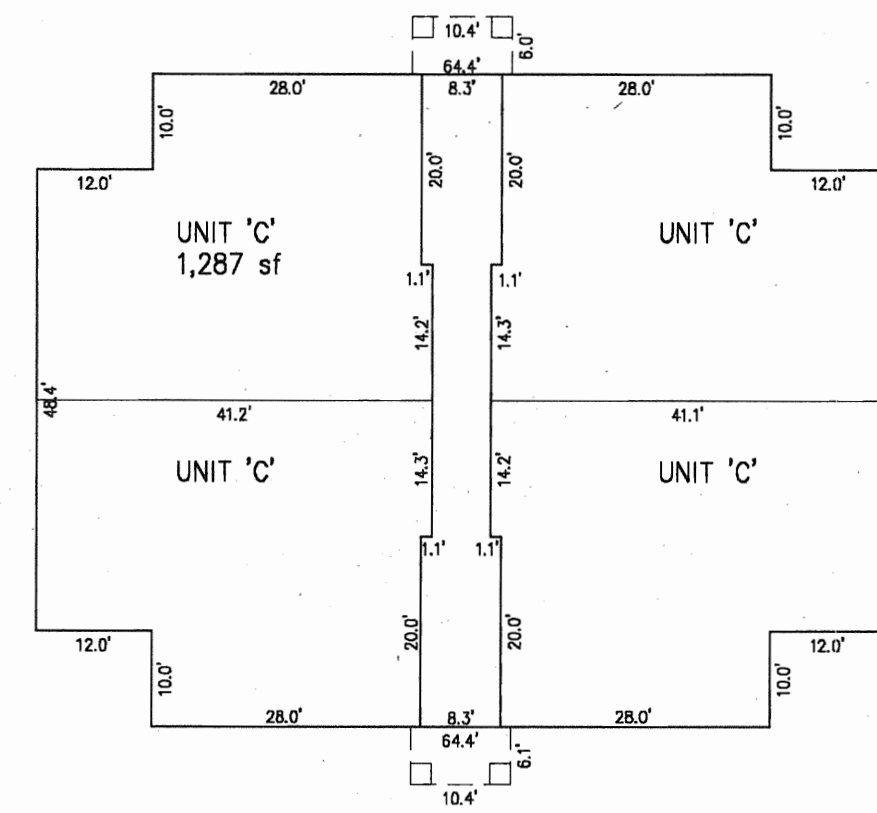
SIDE ELEVATION



SIDE ELEVATION - 3/4 SPLIT

BUILDING TYPE 'A' FOOTPRINTS

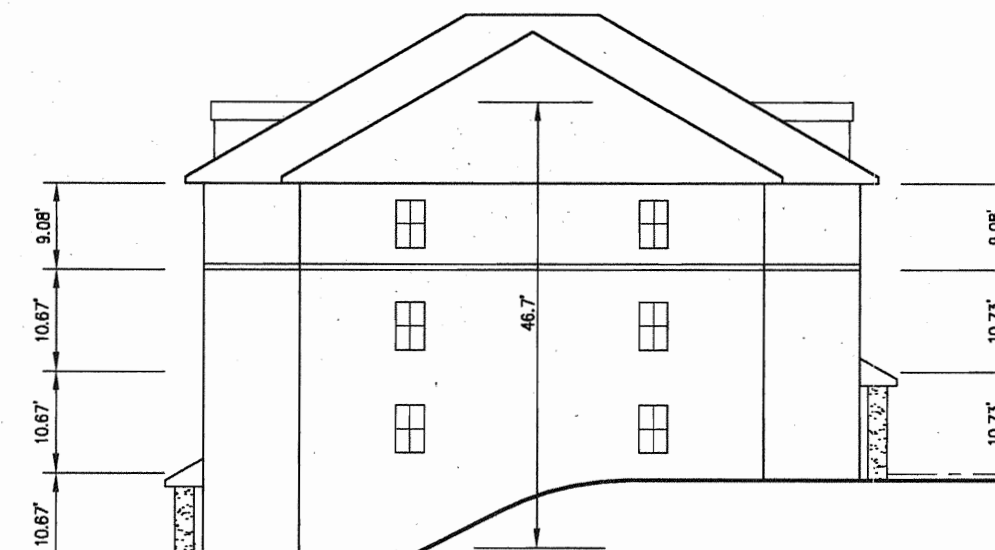
SCALE: 1"=20'



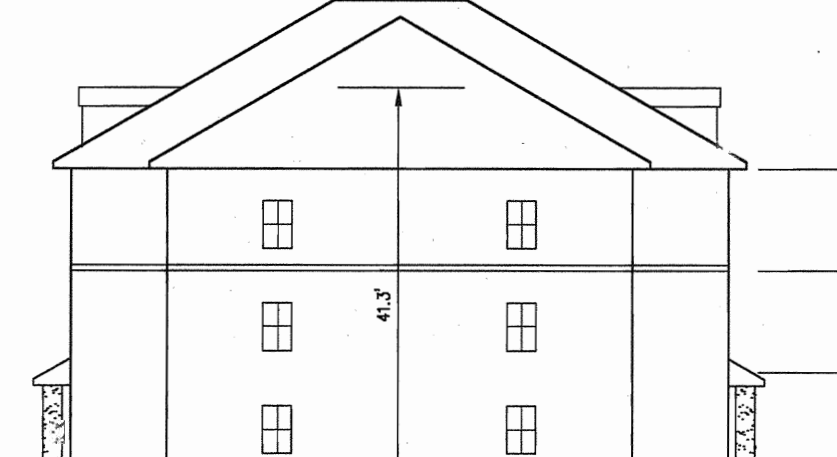
FIRST FLOOR - PLAN VIEW



FRONT ELEVATION



SIDE ELEVATION - 3/4 SPLIT



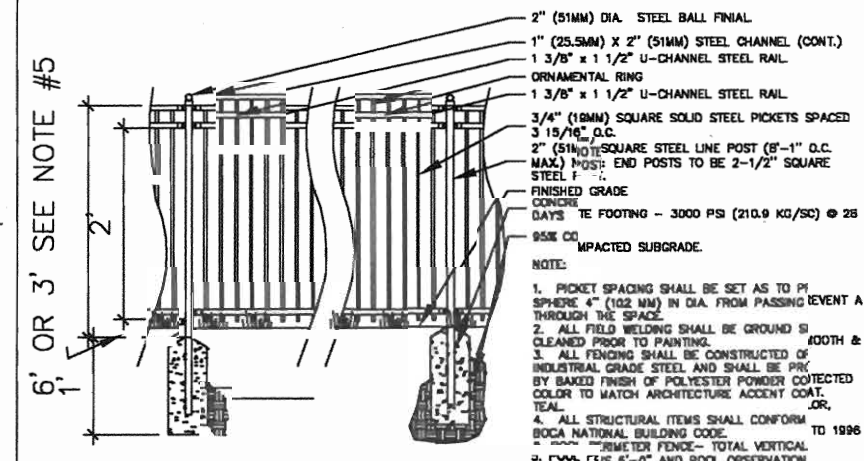
SIDE ELEVATION

BUILDING TYPE 'C' FOOTPRINTS

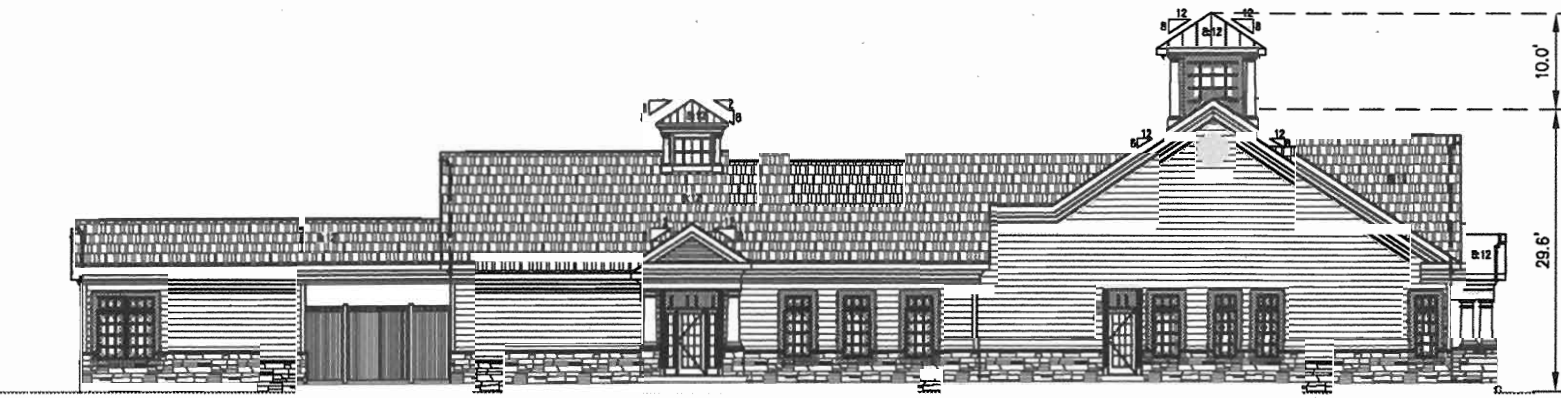
SCALE: 1"=20'



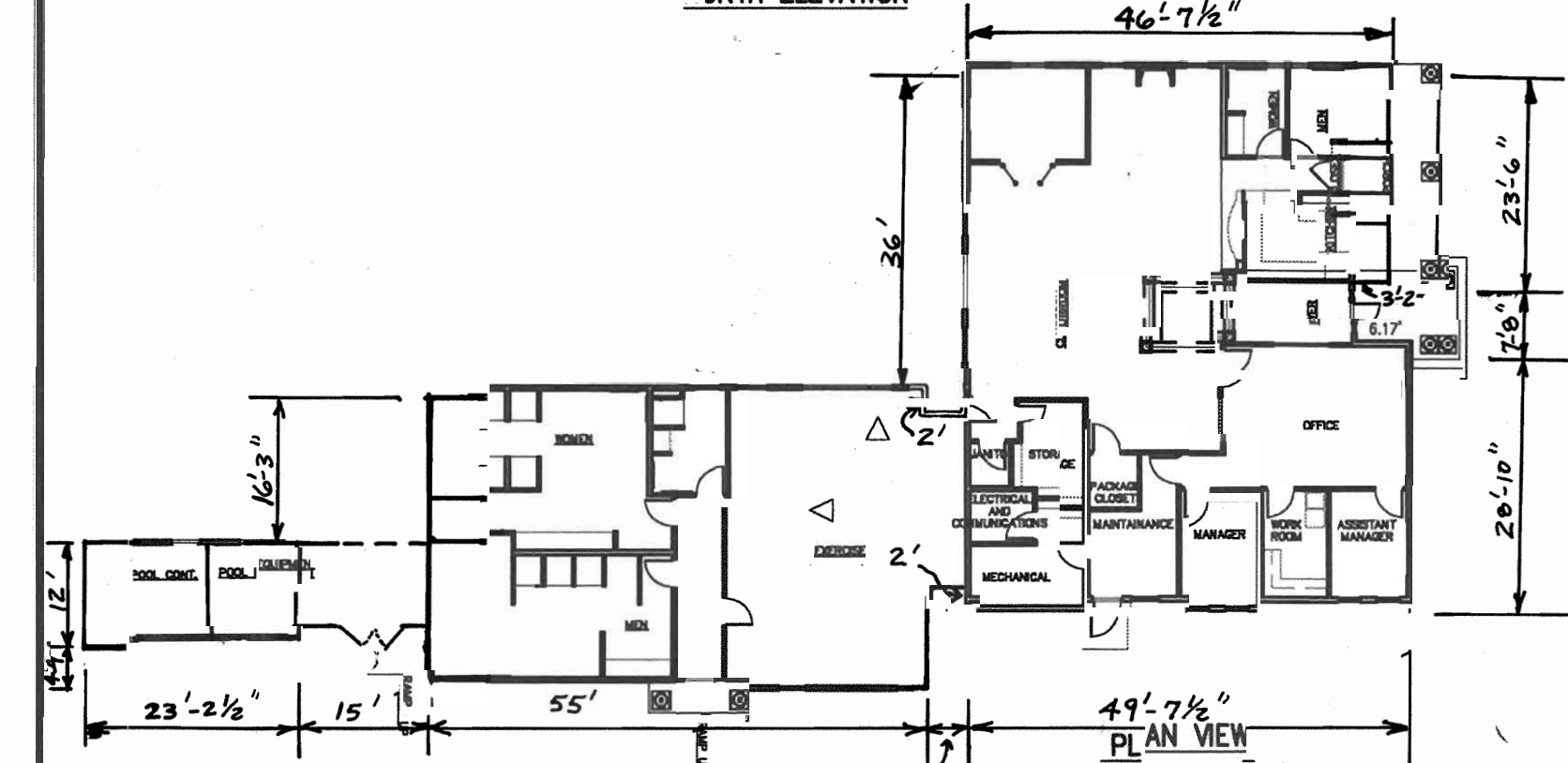
EAST ELEVATION



POOL FENCE DETAIL - NO SCALE



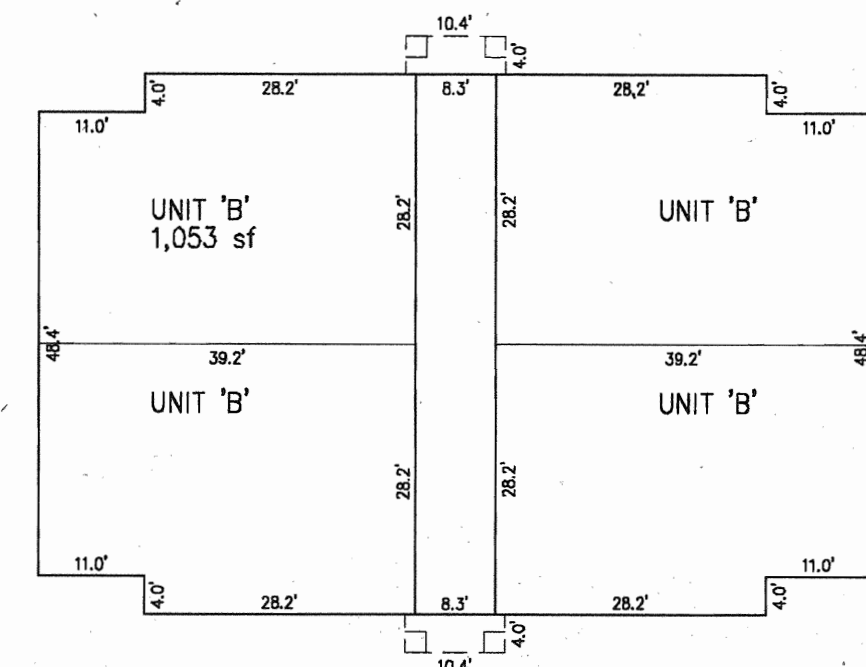
NORTH ELEVATION



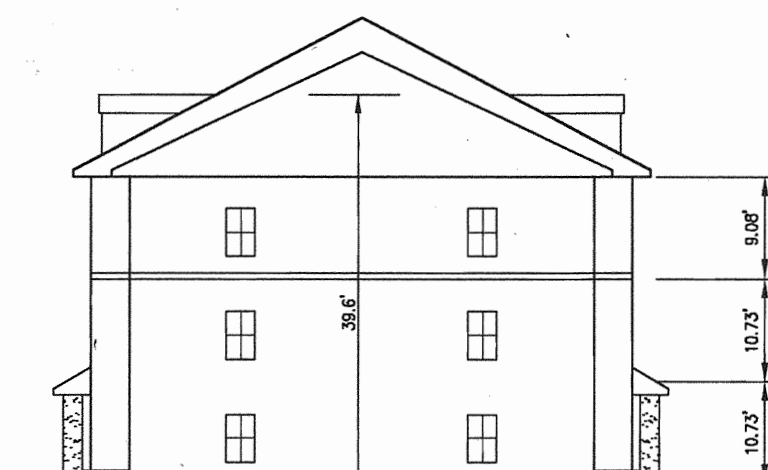
CLUBHOUSE FOOTPRINT



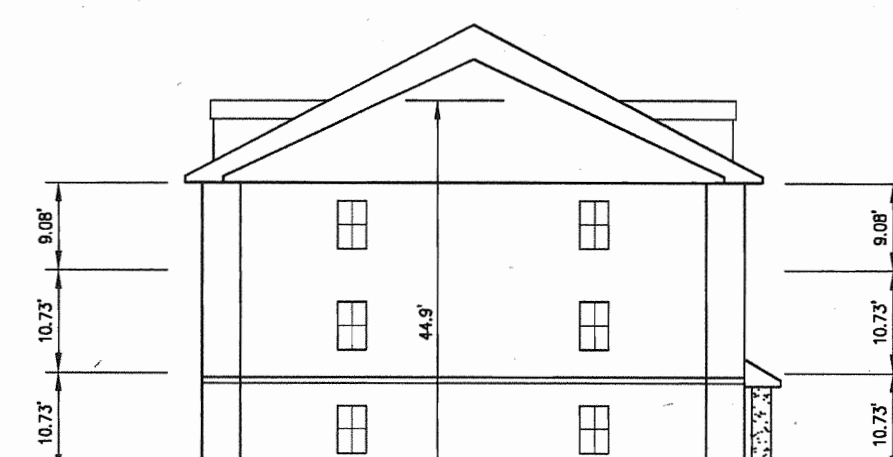
FRONT ELEVATION



FIRST FLOOR - PLAN VIEW



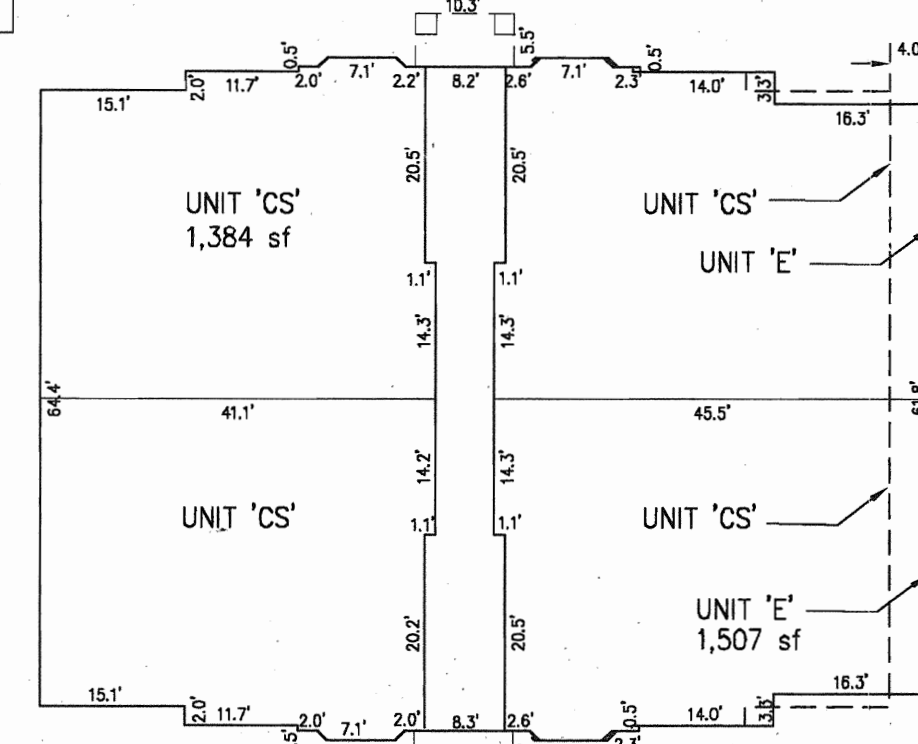
SIDE ELEVATION



SIDE ELEVATION - 3/4 SPLIT

BUILDING TYPE 'B' FOOTPRINTS

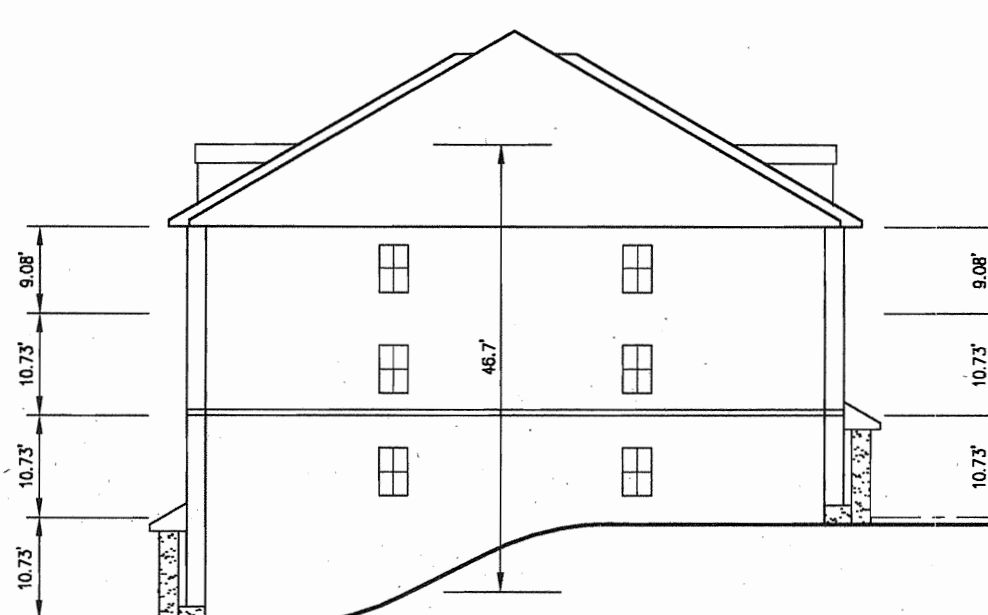
SCALE: 1"=20'



FIRST FLOOR - PLAN VIEW



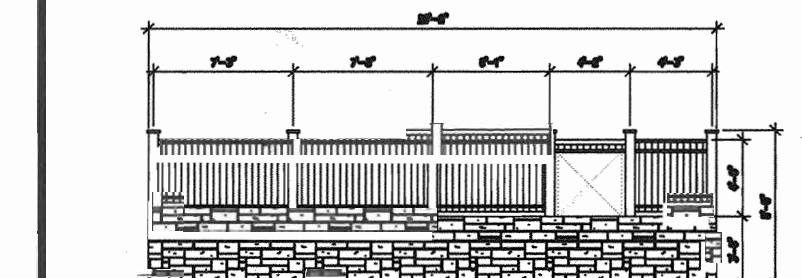
FRONT ELEVATION



SIDE ELEVATION - 3/4 SPLIT

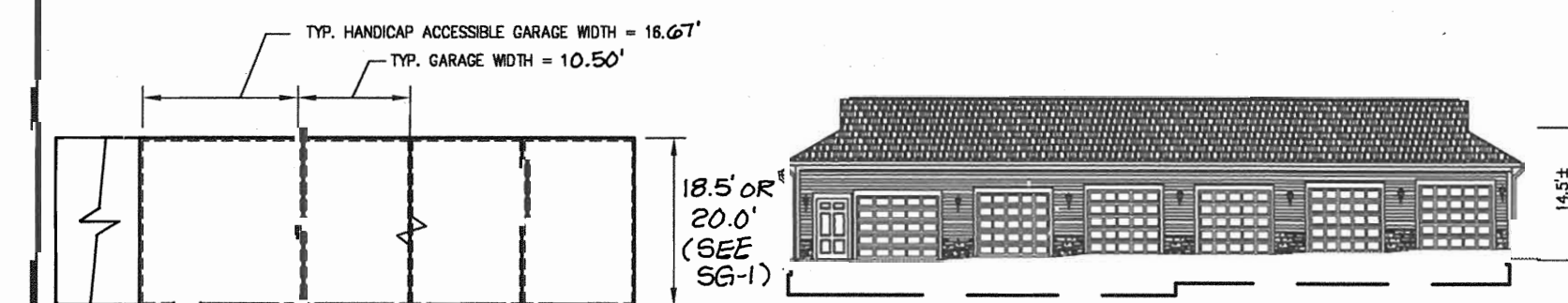
BUILDING TYPE 'CS&E' FOOTPRINTS

SCALE: 1"=20'



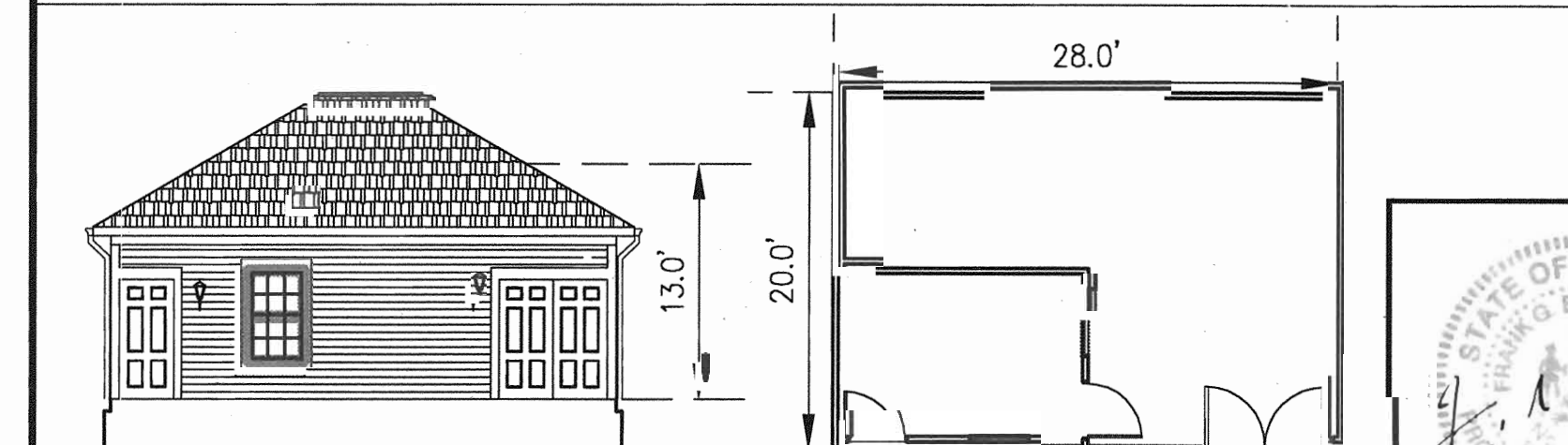
COMPACTOR DETAIL

SCALE: 1"=10'



GARAGE DETAIL

SCALE: 1"=20'



MAINTENANCE SHED DETAIL

SCALE: 1"=10'

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Approval signatures and dates for Department of Planning and Zoning, including Chief of Development Engineering Division and Chief of Division of Land Development.

ARCHITECTURAL INFORMATION FROM LEMAY-ERICKSON ARCHITECTS RESTON, VIRGINIA

Developer/Owner: Stringtown Investment, LLC, 6820 Elm Street, Suite 200, McLean, Va. 22101, Mr. Russell Dickens (703) 734-9730

SITE DEVELOPMENT PLAN BUILDING FOOTPRINTS



Enhancing the value of land assets

Rodgers Consulting, Inc. 9260 Galther Rd #103, Gaithersburg, MD 20877

PHASES I, II & III - APARTMENTS SDP

Montjoy

ELECTION DISTRICT NO. #2 HOWARD COUNTY, MARYLAND TAX MAP: 30 GRID:12 PARCEL 260

Scale: AS SHOWN, Job No. 643G, Date: 7-10-03, Index No. CS-2, Sheet No. 2 of 11

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE EXISTING TOPOGRAPHY AS SHOWN ON THIS PLAN WAS DEVELOPED FROM THE FINAL CONSTRUCTION PLANS (F-03-87).
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 30FA AND 30CA WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. HOWARD COUNTY CONTRACT #24-4064-D.
- SEWER IS PUBLIC. HOWARD COUNTY CONTRACT #24-4064-D.
- STORMWATER MANAGEMENT OBLIGATIONS ARE FULFILLED UNDER F-03-87. LEVEL SPREADERS FOR ROOF DRAINAGE IS PROVIDED PER DETAILS ON THIS PLAN.
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY CONTRACT DRAWINGS AND SUPPLEMENTAL FIELD SURVEY INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM THE EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
- THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY RODGERS CONSULTING, INC. DECEMBER 2002 AND APPROVED ON 5/12/03.
- THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY MCCARTHY & ASSOCIATES, INC. DATED NOVEMBER 2000 AND WAS APPROVED PER SKETCH PLAN 5-01-20.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP DATED JANUARY 24, 2002.
- THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY ZONING ORDINANCE. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. THE FOREST CONSERVATION OBLIGATION FOR THIS SDP HAVE BEEN MET UNDER F-03-87.
- FINAL HOUSE LOCATIONS TO BE ESTABLISHED UNDER THE S.D.P. SHALL BE A MINIMUM OF 10' FROM ANY EASEMENTS.
- THE EXISTING DWELLING (MAIN DWELLING) LOCATED ON PROPOSED LOT 119 IS LISTED AS HO-145 ON THE HOWARD COUNTY HISTORIC SITE INVENTORY. THIS DWELLING WILL BE RETAINED AND RENOVATED. TWO OTHER EXISTING STRUCTURES LOCATED ON LOT 119 (NORTHEAST OF DWELLING) WILL BE RETAINED FOR THEIR HISTORICAL SIGNIFICANCE (SLAVE QUARTERS AND TOBACCO HOUSE). THESE TWO STRUCTURES ARE STRUCTURALLY UNSTABLE AND APPROPRIATE MEASURE WILL BE TAKEN TO EITHER STABILIZE THE STRUCTURES OR PRESERVE THE REMNANTS IN AN APPROPRIATE MANNER. ALL OTHER STRUCTURES LOCATED ON THE PROPERTY WILL BE DEMOLISHED EXCEPT FOR THE EXISTING BARN LOCATED AT THE SOUTHERN PORTION OF THE SITE WHICH WILL BE RELOCATED TO THE HOWARD COUNTY CONSERVANCY, MT. PLEASANT, TAX MAP 10, GRID 24, PARCEL 316.
- THE WAIVER PETITION, WP-01-117, WAS APPROVED ON AUGUST 1, 2001 TO WAIVE SECTION 16.115 AND 16.116(A) TO ALLOW WORK IN THE FLOODPLAIN AND IN THE STREAM BUFFER FOR THE CONSTRUCTION OF A PUBLIC ACCESS PLACE CROSSING TO SERVE 15 PROPOSED RESIDENTIAL R-20 ZONED LOTS, AND SECTION 15-1200(A) TO ALLOW SIDE LOTS TO FRONT ON A PRIVATE ROAD GREATER THAN 200 FEET IN LENGTH (APPLIES TO ROAD IN FRONT OF PROPOSED LOTS 89 - 103). APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) CONSTRUCT THE CROSSING USING THE BOTTOMLESS CULVERT PROPOSED WITH THE WAIVER DOCUMENTATION. (2) LIMIT THE DISTURBANCE TO THE ENVIRONMENTAL AREAS TO THE MINIMUM EXTENT NECESSARY FOR CONSTRUCTION OF THE STREAM CROSSING. (3) IN PREPARATION OF THE FOREST CONSERVATION PLAN PROPOSAL, PROVIDE AFFORESTATION WITHIN THE UNWOODED AREA OF THE PRIORITY STREAM BUFFER SHOWN ON THE STREAM CROSSING EXHIBIT.
- A WAIVER OF DESIGN MANUAL, VOLUME I, SECTION 5.2.4.1 TO ALLOW POND TOP OF CUT TO BE LOCATED LESS THAN THE REQUIRED 25' MINIMUM DISTANCE FROM A RIGHT-OF-WAY WAS APPROVED ON AUGUST 7, 2002. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) INTERNAL POND LANDSCAPING IS REQUIRED FOR OPEN SPACE LOTS 89 AND 113 AS PER THE 2000 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL VOLUMES I AND II. EACH POND PERIMETER SHALL, AT A MINIMUM, MEET THE REQUIREMENTS OF THE HOWARD COUNTY LANDSCAPE MANUAL, TYPE B LANDSCAPE BUFFER. (2) STATE ON THE EXHIBIT THAT THE DESIGN MANUAL WAIVER REQUEST IS ON SHEETS 5, 6, AND 7 OF THE PRELIMINARY PLAN F-03-17 (3). THE PROPOSED ALIGNMENT OF THE WATER AND SEWER EASEMENT ACROSS LOTS 138-140 AND LOTS 162-163 COMBINED WITH THE PROPOSED STORM DRAIN EASEMENT RESULTS IN AN UNACCEPTABLE ENCUMBRANCE OF USABLE LOT SPACE FOR THESE LOTS. AN APPROVAL OF THIS DESIGN MANUAL WAIVER REQUEST CANNOT RESULT IN THE LOT LAYOUTS AS PROPOSED. ALTERNATIVE LOCATIONS OF THE STORM DRAIN SYSTEM AND ASSOCIATED EASEMENT MUST BE SHOWN ON THE PRELIMINARY PLANS P-02-17 TO REDUCE THE LOT ENCUMBRANCES OF LOTS 88-89 AND LOTS 115-116.
- THE WAIVER PETITION, WP-03-78 WAS APPROVED ON JUNE 26, 2003 TO WAIVE SECTION 16.116(d) TO ALLOW GRADING AND DISTURBANCE WITHIN 75 FEET OF A PERENNIAL STREAM FOR THE PURPOSE OF RELOCATING THE ALIGNMENT OF 80 LF OF AN EXISTING AT&T EASEMENT.
APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
1.) COMPLY WITH ATTACHED REQUIREMENT FROM THE SOIL CONSERVATION DISTRICT FOR MITIGATION OF THE DISTURBANCE CAUSED BY THE RELOCATION OF THE AT&T LINE AND EASEMENT. THIS ENLARGEMENT OF THE FOREST CONSERVATION EASEMENT APPLIES TO THE CROSSING OF WETHERED DRIVE OVER THE STREAM BEHIND LOT 145.
2.) THE MITIGATION (AN EXPANDED PLANTING AREA ON THE FACE ADJACENT TO THE BOTTOMLESS ARCH CULVERT) REQUIRED BY THE SOIL CONSERVATION DISTRICT IS NOT TO BE CONSIDERED AS OFF-SITE PLANTING MITIGATION FOR ANY OTHER SITE NOR AS A FOREST CONSERVATION BANK FOR ANY OTHER PROPERTY.
3.) THE PROPOSED REALIGNMENT OF THE AT&T FIBER OPTIC CABLE MUST BE COORDINATED WITH WATER, SEWER, AND OTHER PUBLIC UTILITIES, AS REQUIRED BY THE ATTACHED COMMENTS FROM THE DISTRICT.
- THIS PLAN IS SUBJECT TO COMPLIANCE WITH THE FOURTH EDITION OF THE SUBDIVISION REGULATIONS. IN ADDITION, BECAUSE IT DID NOT HAVE PRELIMINARY PLAN APPROVED PRIOR TO NOVEMBER 1, 2001, IT IS SUBJECT TO COMPLIANCE WITH COUNTY COUNCIL BILL 50-2001 EFFECTIVE JANUARY 8, 2002 WHICH AMENDS PORTIONS OF THE ZONING REGULATIONS.
- 95% COMPACTION REQUIRED IN FILL AREA PER ASTM-D1557 SPECIFICATION.
- A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED # OF TREES IN THE AMOUNT OF \$26,700 IS PART OF THE BUILDERS GRADING PERMIT APPLICATION FOR BUILDING. OTHER LANDSCAPE REQUIREMENTS ARE BONDABLE UNDER A DEVELOPER'S AGREEMENT WITH F-03-87.
- PER SECTION 112.01(Y) OF ZONING ORDINANCE THE MAXIMUM LENGTH ALLOWED WITHOUT SPECIAL CONSIDERATION OF DETAIL IS 120 FEET. THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING PREVIOUSLY HAS APPROVED A GREATER LENGTH UP TO A MAXIMUM OF 185 FEET UNDER S-01-20.
- H.O.A. TO BE RESPONSIBLE FOR MAINTENANCE OF RETAINING WALLS
- A DECISION AND ORDER FOR ADMINISTRATIVE ADJUSTMENT TO INCREASE THE 40-FT. MAXIMUM BUILDING HEIGHT UP TO 46.7 FEET FOR THE PROPOSED APARTMENT BUILDINGS WAS ISSUED ON AUGUST 29, 2003 (A/CASE # 03-17), SUBJECT TO THE FOLLOWING CONDITIONS:
1.) THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS AND REGULATIONS.
2.) THE GRANTED ADMINISTRATIVE ADJUSTMENT SHALL APPLY SOLELY TO THE PROPOSED APARTMENT BUILDING UNITS AS DEPICTED ON THE PLAN SUBMITTED BY THE PETITIONER ON JULY 10, 2003 AND NOT TO ANY OTHER STRUCTURE, ADDITION, BUILDING OR USE.
3.) THE PETITIONER SHALL SUBMIT A COPY OF THIS DECISION AND ORDER TO THE DIVISION OF LAND DEVELOPMENT IN ASSOCIATION WITH SDP-04-007, AND ALSO WITH THE BUILDING PERMIT APPLICATION(S) FOR THE APARTMENT BUILDINGS.
- THE NUMBER OF APARTMENT UNITS TO BE HANDICAPPED ACCESSIBLE HAS BEEN MODIFIED AS DETERMINED BY SITE IMPRACTICALITY STUDY SUMMARIZED IN MEMORANDUM FROM LEMAY ERICKSON ARCHITECTS TO THE PLANS EXAMINER DATED OCTOBER 17, 2003.

SITE ANALYSIS DATA

- TOTAL PROJECT AREA = 78.43 AC.
- AREA OF THIS SDP SUBMISSION = 10.86 AC.
- LIMIT OF DISTURBANCE = 10.86 AC.
- ZONING = RA-15
- PROPOSED USE IS RESIDENTIAL (APARTMENT UNITS)
- TOTAL NUMBER OF UNITS ALLOWED FOR PROJECT PER F-03-87 = 405
- TOTAL NUMBER OF UNITS PROVIDED WITH THIS SDP = 244 UNITS
- REQUIRED PARKING CALCULATIONS:
1.) APARTMENTS = 2 SPACES/UNIT = 2(244) = 488 SPACES
2.) CLUBHOUSE AND POOL:
PER HOWARD CO. HEALTH DEPT.: 125SF/PERSON FOR SHALLOW POOL
15SF/PERSON FOR 5FT OR GREATER DEPTH
PROPOSED POOL IS 2242SF AND ASSUMED 75% IS SHALLOW THEN:
1,862SF/12 = 140 PERSONS (SHALLOW)
560SF/15 = 38 PERSONS (5FT DEEP)
TOTAL PERSONS = 178 PERSONS
AT 10 PERSONS PER PARKING SPACE, THEN 178/10 = 18 SPACES REQUIRED
3.) TOTAL REQUIRED PARKING FOR APARTMENTS AND POOL = 506 SPACES REQUIRED
- TOTAL PARKING PROVIDED FOR APARTMENTS AND POOL = 527 SPACES INCLUDING 14 HANDICAP SPACES, 4 OF WHICH ARE VAN ACCESSIBLE SPACES.
- OPEN SPACE REQUIREMENTS FOR PHASES I, II & III ARE PROVIDED ON LOTS 124, 125, 126 AND LOT 194 AS RECORDED UNDER F-03-87.
- RECREATIONAL OPEN SPACE REQUIREMENTS FOR PHASES I, II & III ARE PROVIDED ON LOTS 120, 121, PARCEL A AND LOT 194 AS RECORDED UNDER F-03-87.
- DPZ FILE REFERENCES:
S-01-20, P-02-10, P-02-17,
P-03-03, F-03-87, F-03-100,
WP-01-117, WP-03-78, A#03-17

OPEN SPACE CALCULATIONS

TOTAL AREA OF PHASES I, II, & III = 32.75 AC.
TOTAL OPEN SPACE REQUIRED @ 25% = 8.19 AC.
TOTAL OPEN SPACE PROVIDED = 8.46 AC.
RECREATIONAL OPEN SPACE:
118 TOWNHOUSES @ 200 SF/UNIT = 23,600 SF OR 0.54 AC.
244 APARTMENTS @ 175 SF/UNIT = 42,700 SF OR 0.98 AC.
1 SINGLE FAMILY DET @ 250 SF/UNIT = 66,550 SF OR 1.53 AC.
TOTAL REQUIREMENT = 1.75 AC. (0.22 AC. TO BE CREDITED TOWARD PHASE IV REC. REQUIREMENT)
TOTAL PROVIDED

NOTES:

THIS SURVEY IS IN THE MARYLAND STATE PLANE COORDINATE SYSTEM BASED ON GPS OBSERVATIONS INCORPORATING THE FOLLOWING HOWARD COUNTY, MARYLAND CONTROL STATIONS:

STATION 30FA N.568621.336' E.1361563.983'
STATION 37GB N.553452.821' E.1368503.167'
STATION 30CA N.575083.465' E.1364681.801'
STATION 30CB N.576541.342' E.1361211.296'
STATION 30IA N.567750.958' E.1364842.598'

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 2/19/03
Chief, Development Engineering Division
[Signature] 12/24/02
Chief, Division of Land Development
[Signature] 12/30/03
Director

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	FINAL MVAR SUBMITTAL FOR SIGNATURE	11-15-04		
	REVISOR PER HOWARD COUNTY COMMENTS	11-12-03		
	REVISOR PER HOWARD COUNTY COMMENTS	09-30-03		
	SUBMITTED FOR REVIEW	07-19-03		

Developer/Owner:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734 - 9730

Montjoy

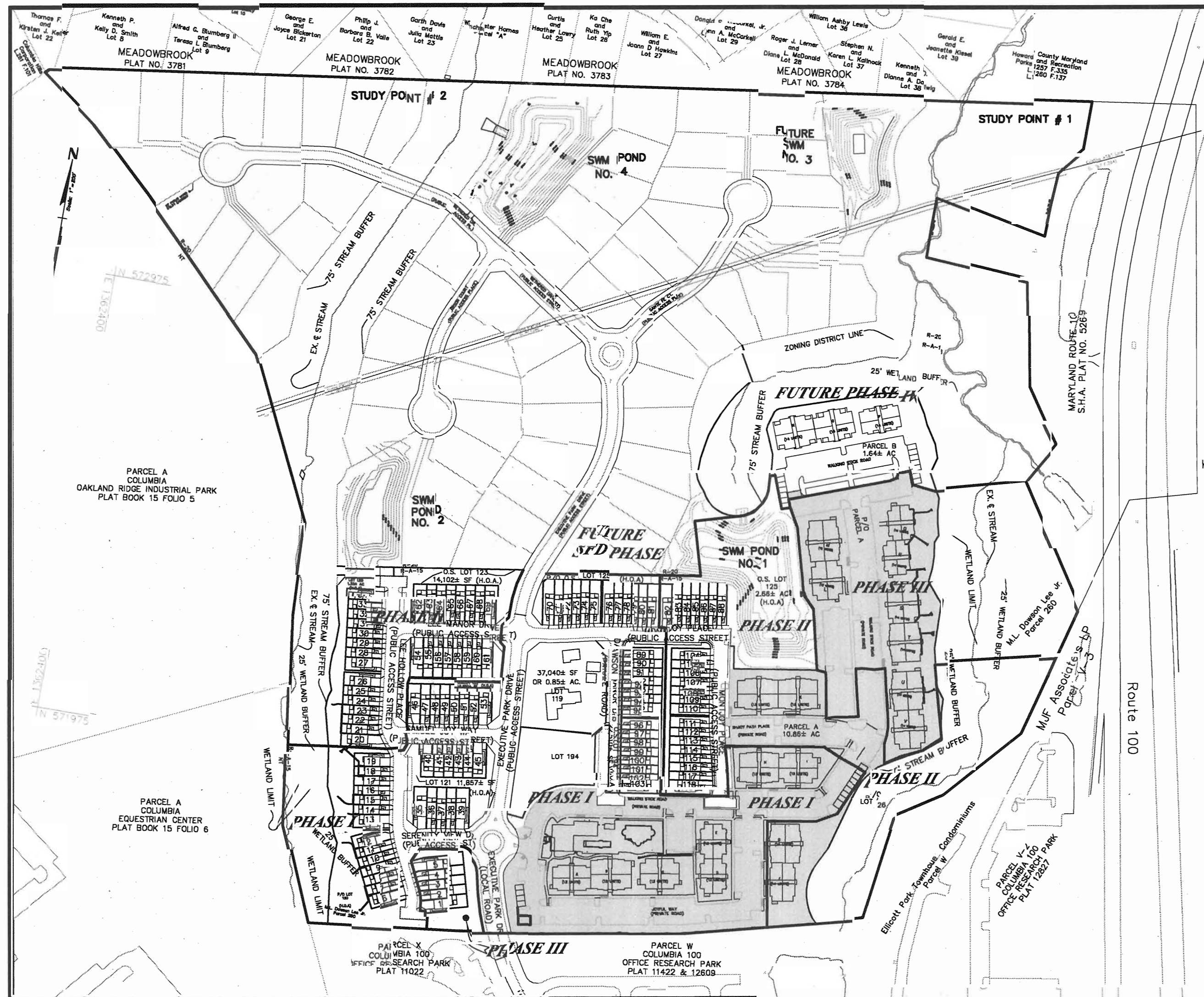
PHASES I, II & III

APARTMENTS

ELECTION DISTRICT NO.2

HOWARD COUNTY, MARYLAND

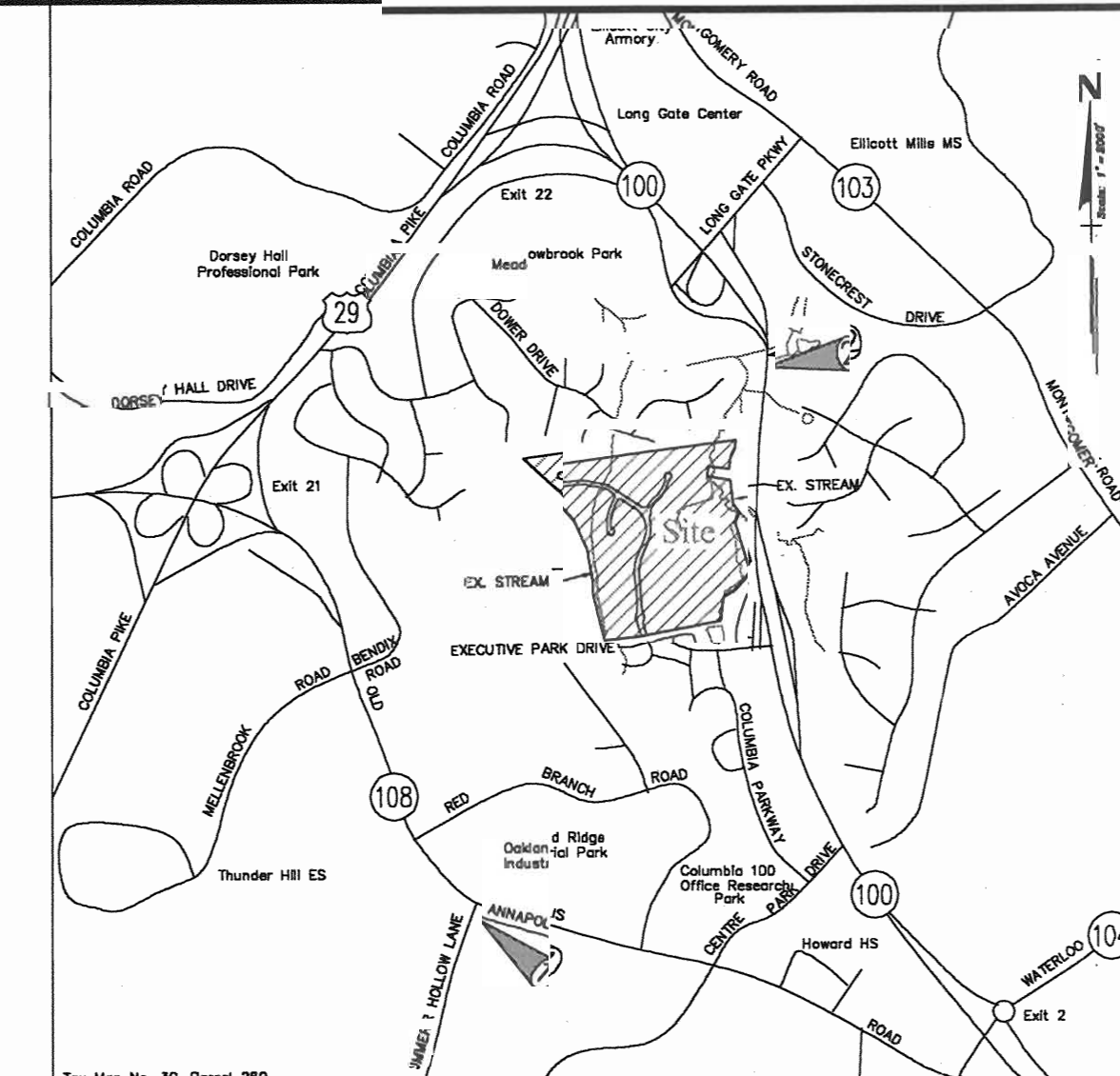
SITE DEVELOPMENT PLAN



LOCATION MAP
SCALE: 1"=200'

LEGEND

- SOILS CLASSIFICATION: AbC1
- SOILS DELINEATION: Dotted line
- EXISTING CONTOURS: Solid line
- PROPOSED CONTOURS: Dashed line
- LIMIT OF WETLANDS: Wavy line
- FOREST CONSERVATION EASEMENT: Stippled area
- EXISTING WOODS LINE: Solid line with trees
- PROPOSED WOODS LINE: Dashed line with trees
- EXISTING STRUCTURE: Solid outline
- PROPOSED STRUCTURE: Dashed outline
- LIMITS OF DISTURBANCE: Thick solid line
- STABILIZED CONSTRUCTION ENTRANCE: Solid line with cross-hatch
- SILT FENCE: Solid line with cross-hatch
- SUPER SILT FENCE: Solid line with cross-hatch
- EARTH DIKE: Solid line with cross-hatch
- INLET PROTECTION: Solid line with cross-hatch
- ENTRANCE LOCATION: Triangle symbol
- EXISTING LIGHT POLE LOCATION: Circle with cross
- (PUBLIC STREETS PER F-03-87)



Vicinity Map
Scale: 1" = 200'

NO.	DESCRIPTION	REV. NO.
1	COVER SHEET	CS-1
2	BUILDING FOOTPRINTS	CS-2
3	SITE DEVELOPMENT AND GRADING PLAN	SG-1
4	SITE DEVELOPMENT AND GRADING PLAN	SG-2
5	LANDSCAPE PLAN	LS-1
6	LANDSCAPE PLAN	LS-2
7	LANDSCAPE NOTES & DETAILS	LN-1
8	RETAINING WALL NOTES AND DETAILS	W-1
9	RETAINING WALL #5 PLAN, PROFILE AND SECTIONS	W-5
10	RETAINING WALL #6 PLAN, PROFILE AND SECTIONS	W-6
11	SEDIMENT & EROSION CONTROL NOTES & DETAILS	SC-1

SWM SUMMARY FOR PHASES I, II & III (Apartments)		
SWM REQUIREMENTS FOR	SWM PROVIDED UTILIZING	SWM PROVIDED UNDER
Rev	Rev for study points provided by grass swales & sheet flow to buffer credits for by-pass areas**	PLAN F-03-87*, F-03-100* & SDP-04-07
WQv	WQv provided within pond #1 (Micropool-ED), pond #2 (sand filter) and sheet flow to buffer credit for by-pass areas**	PLAN F-03-87* & SDP-04-07
Cpv	Cpv provided within pond #1 (Micropool-ED) & pond #4 (wet pond)	PLAN F-03-87*

* Refer to associated SWM Computation for specific detailed information.
** Level spreaders (to be constructed under the Site Development Plan) are utilized to maintain sheet flow to buffer credit in by-pass areas that do not drain to the SWM ponds.

BLDG.	STREET ADDRESS	BLDG.	STREET ADDRESS
A	4801 JOYFUL WAY	P (FUT)	
B	4811 JOYFUL WAY	Q	5000 WALKING STICK ROAD
C	4821 JOYFUL WAY	R	4990 WALKING STICK ROAD
D	4831 JOYFUL WAY	S	4980 WALKING STICK ROAD
E	4841 JOYFUL WAY	T	4970 WALKING STICK ROAD
F	4830 JOYFUL WAY	U	4960 WALKING STICK ROAD
G	4840 JOYFUL WAY	V	4950 WALKING STICK ROAD
H	4930 WALKING STICK RD		
I	4940 WALKING STICK RD		
J	4801 SHADY PATH PLACE		
K	4811 SHADY PATH PLACE		
L	4901 WALKING STICK ROAD		
M	5001 WALKING STICK ROAD		
N (FUT)			
O (FUT)			

PERMIT INFORMATION CHART				
Subdivision Name	Section/Area	Lot/Parcel No		
MONTJOY	APARTMENTS	260		
Plot No. or L/F #16351 thru #16359	Grid # 12	Zoning. R-A-15 R-20	Tax Map No. 30	Elect. Distr. 2nd
Water Code F-09	Sewer Code 5750639	Census Tract 602302		

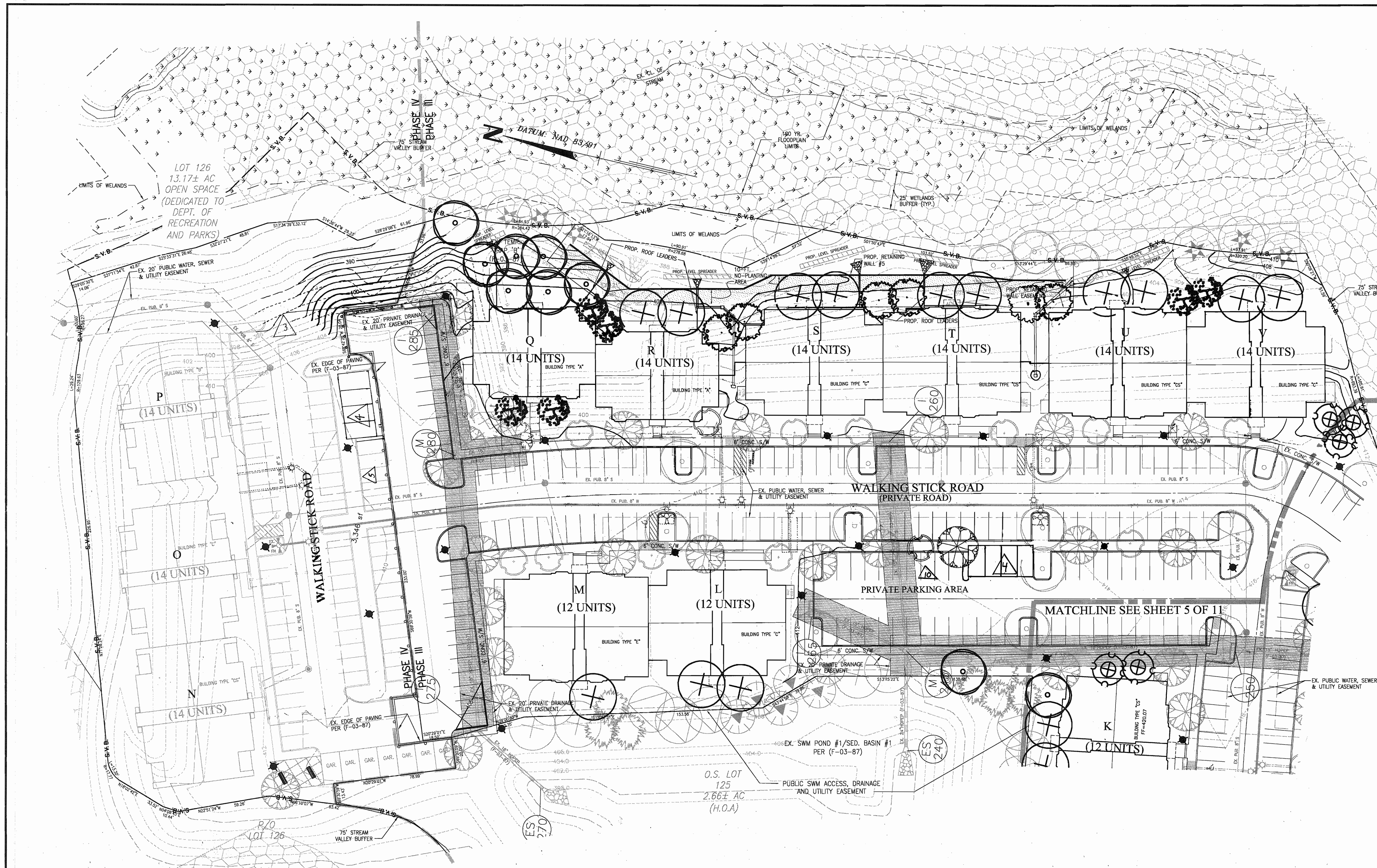
BENCH MARKS (NAD83)		
BENCHMARK NO. 1---HO. CO. NO. 30FA	HOWARD CO. STD. STAMPED DISC LOCATED SW CORNER OF RT. 108 AND SUMMER HOLLOW LANE.	N 568621.336, E 1361563.983 ELEV. 441.619
BENCHMARK NO. 2---HO. CO. NO. 30CA	HOWARD CO. STD. STAMPED DISC LOCATED ON THE EAST SIDE OF THE N.B.L. OF RT. 100	N 575083.465, E 1364681.801 ELEV. 380.087

RODGERS CONSULTING
Enhancing the value of land assets
Rodgers Consultin, Inc.
3260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID: 12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, F-03-87
SCALE: AS SHOWN
JOB No. 643G
DATE: 7-10-03
INDEX No. CS-1
SHEET No. 1 OF 11

Legend

- STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TRELINE
- ZONING LINE
- MATCH LINE
- WETLAND
- FOREST CONSERVATION EASEMENT
- PUBLIC TREE MAINTENANCE EASEMENT
- PROPOSED LIGHT POLE LOCATION



TREE SYMBOL KEY
SEE SHEET 7 FOR SCHEDULE & DETAILS

- ACER RUBUM (RED MAPLE)
- TILIA CORDATA (LITTLELEAF LINDEN)
- QUERCUS RUBRA (RED OAK)
- FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)
- PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)
- PRUNUS CERASIFERA (THUNDERCLOUD PLUM)
- CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)
- PINUS STROBUS (WHITE PINE)
- AMALANCHIER CANADENSIS (SHADBLOW SERVICEBERRY)
- CRATAEGUS VIRIDIS 'WINTER KING' (WINTER KING HAWTHORN)
- PRUNUS YEDOENSIS (YOSHINO CHERRY)

NOTE: TREES APPROVED BY PREVIOUS PLANS (F-03-B7) SHOWN IN LIGHT GREY.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John Dammann 12/19/03
Chief, Development Engineering Division Date

Cindy Hamrick 12/26/03
Chief, Division of Land Development Date

Stephen Lafferty 12/30/03
Director (acting) Date

DATE	REVISION	DATE	BY	DATE
	Redline Revision: All Notes of Parking Garage	02/26/05	CADD	
	Redline Rev: REV. BLDG. LOCATIONS	11/15/04	RC	
	Redline Rev: REV. VMC COLOCATION	07/10/04	CoV	
	FINAL M/LAR SUBMITTAL FOR SIGNATURE	12-04-03	PFB	
	REVISED PER HOWARD COUNTY COMMENTS	11-13-03		
	REVISED PER HOWARD COUNTY COMMENTS	07-20-03		
	SUBMITTED FOR REVIEW	07-10-03		

Owner/Developer:
Stringtown Investment, LLC
6820 Elm Street
Suite 200
McLean, Va. 22101
Mr. Russell Dickens
(703) 734-9730

**SITE DEVELOPMENT PLAN
LANDSCAPE**



Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

PHASES I, II & III - APARTMENTS SDP

Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-08, F-03-B7

SCALE: 1" = 30'

JOB No. 643G

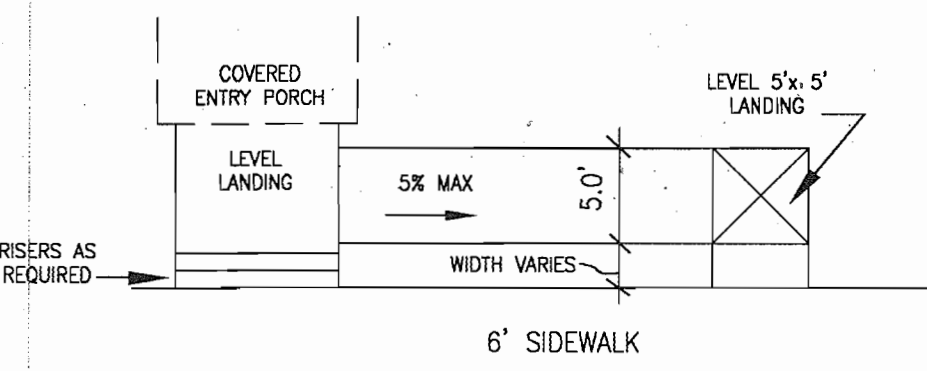
DATE: 07/10/03

INDEX No. LS-2

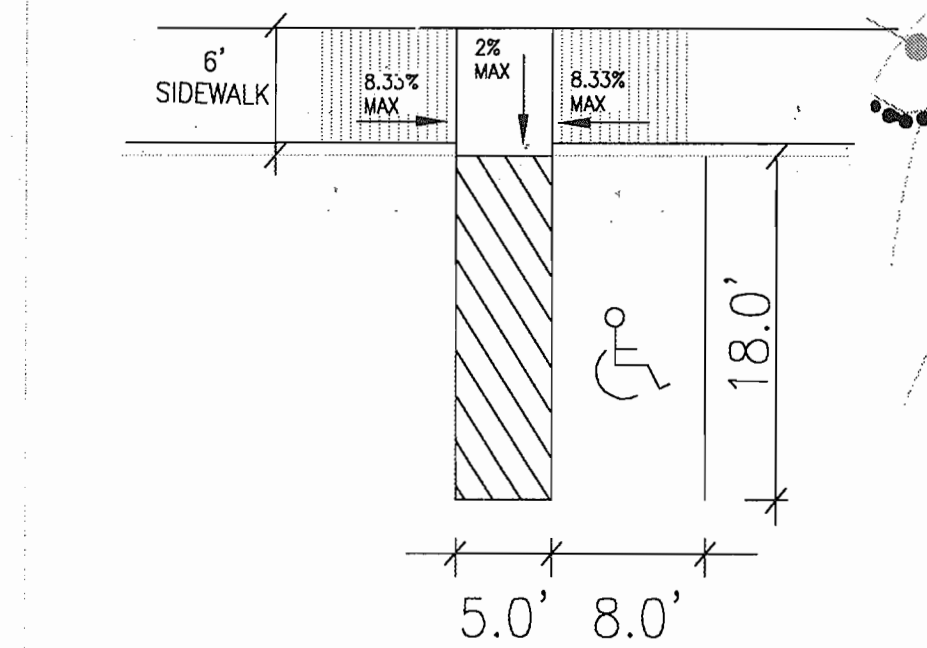
SHEET No. 6 OF 11

12-3-03

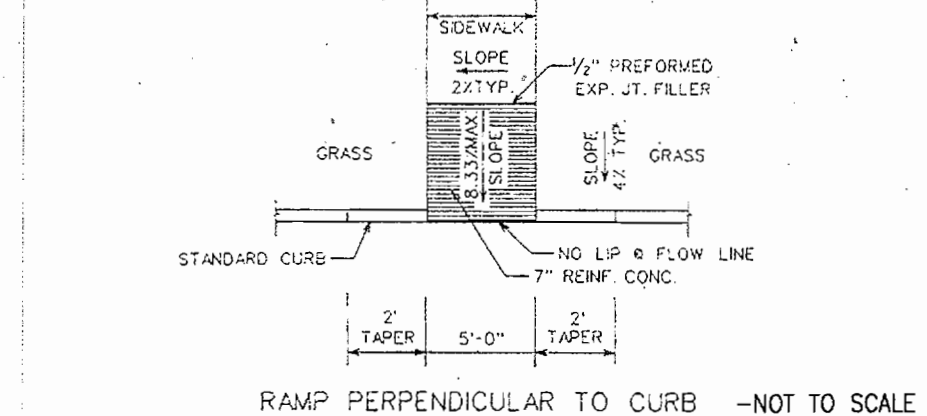
BLDG.	SHC INV.	MIN. SERVICE EL.	REMARKS
L	297.57	422.73	FROM 28 TO 27
M	327.36	422.66	
N	327.74	422.50	FROM 28 TO 25
O	328.23	421.29	FROM 24 TO 23
P	328.67	420.47	FROM 27 TO 25
Q	328.83	421.29	FROM 27 TO 25
R	327.29	421.29	FROM 28 TO 27
S	327.15	422.74	
T	328.35	423.45	
U	328.89	424.59	FROM 29 TO 28
V	421.28	426.38	
W	423.62	430.32	



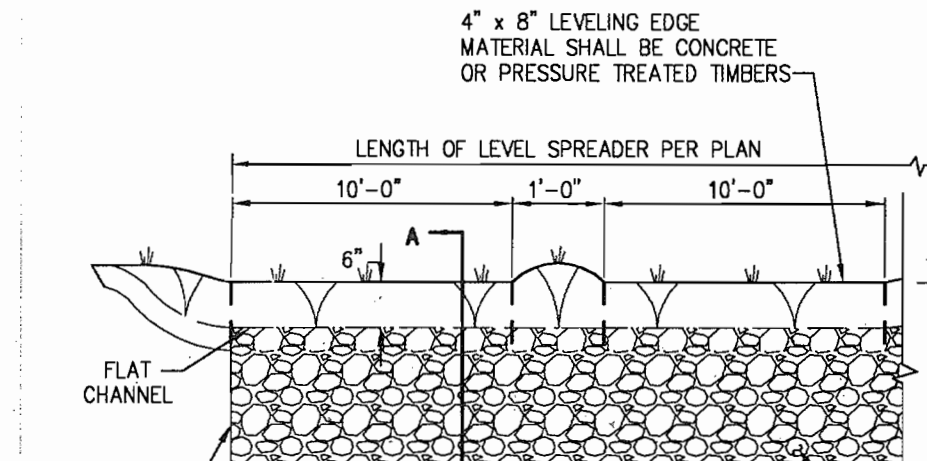
TYPICAL ACCESS RAMP DETAIL
1"=10'



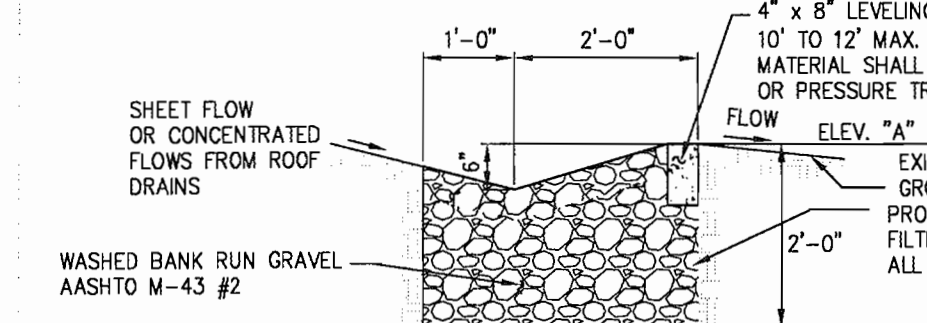
TYPICAL HANDICAP PARKING DETAIL



RAMP PERPENDICULAR TO CURB - NOT TO SCALE



LEVEL SPREADER DETAIL - ELEVATION



LEVEL SPREADER DETAIL - SECTION A

NO.	ELEV. "A"	(SEE DETAIL BELOW)
A-1	440.50	
A-2	392.00	
A-3	380.10	
A-4	387.75	
A-5	392.00	
A-6	393.25	

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John M. ... 12/19/03
 Chief, Development Engineering Division
Cindy Hamant 12/19/03
 Chief, Division of Land Development
Stephen ... 12/30/03
 Director

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 COUNTY SOIL CONSERVATION DISTRICT.

John M. ... 12/10/03
 DEVELOPER
 DATE

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 COUNTY SOIL CONSERVATION DISTRICT.

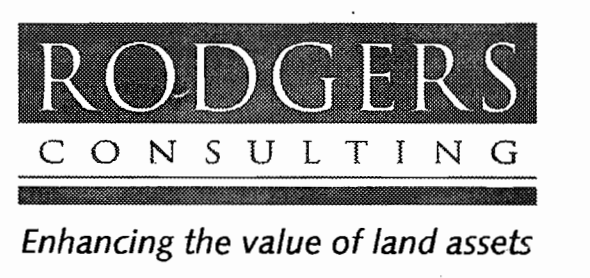
Frank G. ... 12/10/03
 ENGINEER
 DATE

NOTE: SEDIMENT CONTROLS PROPOSED UNDER F-03-87 AS SHOWN WILL BE UTILIZED FOR IMPLEMENTATION OF THIS PLAN

NO.	DATE	REVISION	DATE	BY	DATE
1	12/19/03	Rev. Addition of spaces and changes	12/19/03	JM	
2	11/18/04	Revisions to Rev. Bldg. as U. Comments	11/18/04	JM	
3	4/19/04	Red Line Rev. REV. M.K. Location	4/19/04	JM	
4	12-04-03	FINAL WALK SUBMITTAL FOR SIGNATURE	12-04-03	JM	
5	11-13-03	REVISED PER HOWARD COUNTY COMMENTS	11-13-03	JM	
6	06-30-03	REVISED PER HOWARD COUNTY COMMENTS	06-30-03	JM	
7	07-10-03	SUBMITTED FOR REVIEW	07-10-03	JM	

Developer/Owner:
Elm Street Development
 6820 Elm Street
 Suite 200
 McLean, Va. 22101
 Mr. Russell Dickens
 (703) 734 9730

**SITE DEVELOPMENT PLAN
 GRADING & SEDIMENT CONTROL**



Rodgers Consulting, Inc.
 9260 Galthers Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

PHASES I, II & III -- APARTMENTS SDP
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, P-02-10, P-02-17, P-03-03, P-03-87

SCALE: 1"=30'
 JOB No. 643G
 DATE: 07/10/03
 INDEX No. SG-2
 SHEET No. 4 of 11

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE EXISTING TOPOGRAPHY AS SHOWN ON THIS PLAN WAS DEVELOPED FROM THE FINAL CONSTRUCTION PLANS (F-03-B7).
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM - HOWARD COUNTY MONUMENT NOS. 30FA AND 30CA WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. HOWARD COUNTY CONTRACT #24-4064-D.
- SEWER IS PUBLIC. HOWARD COUNTY CONTRACT #24-4064-D.
- STORMWATER MANAGEMENT OBLIGATIONS ARE FULFILLED UNDER F-03-B7. LEVEL SPREADERS FOR ROOF DRAINAGE IS PROVIDED PER DETAILS ON THIS PLAN.
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY CONTRACT DRAWINGS AND SUPPLEMENTAL FIELD SURVEY INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CORROBORATE THE EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
- THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY RODGERS CONSULTING, INC. DECEMBER 2002 AND APPROVED ON 5/12/03.
- THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY MCCARTHY & ASSOCIATES, INC. DATED NOVEMBER 2000 AND WAS APPROVED PER SKETCH PLAN S-01-20.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP DATED JANUARY 24, 2002.
- THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. THE FOREST CONSERVATION OBLIGATION FOR THIS SDP HAVE BEEN MET UNDER F-03-B7.
- FINAL HOUSE LOCATIONS TO BE ESTABLISHED UNDER THE S.D.P. SHALL BE A MINIMUM OF 10' FROM ANY EASEMENTS.
- THE EXISTING DWELLING (MAIN DWELLING) LOCATED ON PROPOSED LOT 119 IS LISTED AS HO-145 ON THE HOWARD COUNTY HISTORIC SITE INVENTORY. THIS DWELLING WILL BE RETAINED AND RENOVATED. TWO OTHER EXISTING STRUCTURES LOCATED ON LOT 119 NORTHWEST CORNER WILL BE RETAINED FOR THEIR HISTORICAL SIGNIFICANCE (SLAVE QUARTERS AND TOBACCO HOUSE). THESE TWO STRUCTURES ARE STRUCTURALLY UNSTABLE AND APPROPRIATE MEASURE WILL BE TAKEN TO EITHER STABILIZE THE STRUCTURES OR PRESERVE THE REMNANTS IN AN APPROPRIATE MANNER. ALL OTHER STRUCTURES LOCATED ON THE PROPERTY WILL BE DEMOLISHED EXCEPT FOR THE EXISTING BARN LOCATED AT THE SOUTHERN PERIMETER OF THE SITE WHICH WILL BE RELOCATED TO THE HOWARD COUNTY CONSERVANCY, MT. PLEASANT, TAX MAP 10, GRID 24, PARCEL 318.
- THE WAIVER PETITION, WP-01-117, WAS APPROVED ON AUGUST 1, 2001 TO WAIVE SECTION 16.115 AND 16.116(A) TO ALLOW WORK IN THE FLOODPLAIN AND IN THE STREAM BUFFER FOR THE CONSTRUCTION OF A PUBLIC ACCESS PLACE CROSSING TO SERVE 15 PROPOSED RESIDENTIAL R-20 ZONED LOTS, AND SECTION 15-1200(C) TO ALLOW SPA LOTS TO FRONT ON A PRIVATE ROAD GREATER THAN 200 FEET IN LENGTH (APPLIES TO ROAD IN FRONT OF PROPOSED LOTS 89 - 103). APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) CONSTRUCT THE CROSSING USING THE BOTTOMLESS CULVERT PROPOSED WITH THE WAIVER DOCUMENTATION. (2) LIMIT THE DISTURBANCE TO THE ENVIRONMENTAL AREAS TO THE MINIMUM EXTENT NECESSARY FOR CONSTRUCTION OF THE STREAM CROSSING. (3) IN PREPARATION OF THE FOREST CONSERVATION PLAN PROPOSAL, PROVIDE ATTESTATION WITHIN THE UNWOODED AREA OF THE PRIORITY STREAM BUFFER SHOWN ON THE STREAM CROSSING EXHIBIT.
- A WAIVER OF DESIGN MANUAL, VOLUME I, SECTION 5.2.4.1 TO ALLOW POND TOP OF CUT TO BE LOCATED LESS THAN THE REQUIRED 25' MINIMUM DISTANCE FROM A RIGHT-OF-WAY WAS APPROVED ON AUGUST 7, 2002. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) INTERNAL POND IS REQUIRED FOR OPEN SPACE LOTS 69 AND 113 AS PER THE 2000 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL VOLUMES I AND II. EACH POND PERIMETER SHALL, AT A MINIMUM, MEET THE REQUIREMENTS OF THE HOWARD COUNTY LANDSCAPE MANUAL, TYPE B LANDSCAPE BUFFER. (2) STATE ON THE EXHIBIT THAT THE DESIGN MANUAL WAIVER REQUEST IS ON SHEETS 5, 6, AND 7 OF THE PRELIMINARY PLAN F-02-17. (3) THE PROPOSED ALIGNMENT OF THE WATER AND SEWER EASEMENT ACROSS LOTS 138-140 AND LOTS 162-163 COMBINED WITH THE PROPOSED STORM DRAIN EASEMENT RESULTS IN AN UNACCEPTABLE ENCUMBRANCE OF USABLE LOT SPACE FOR THESE LOTS. AN APPROVAL OF THIS DESIGN MANUAL WAIVER REQUEST CANNOT RESULT IN THE LOT LAYOUTS AS PROPOSED. ALTERNATIVE LOCATIONS OF THE STORM DRAIN SYSTEM AND ASSOCIATED EASEMENT MUST BE SHOWN ON THE PRELIMINARY PLANS P-02-17 TO REDUCE THE LOT ENCUMBRANCES OF LOTS 88-89 AND LOTS 115-116.
- THE WAIVER PETITION, WP-03-78 WAS APPROVED ON JUNE 26, 2003 TO WAIVE SECTION 16.116(G) TO ALLOW GRADING AND DISTURBANCE WITHIN 75 FEET OF A PERENNIAL STREAM FOR THE PURPOSE OF RELOCATING THE ALIGNMENT OF 60 LF OF AN EXISTING AT&T EASEMENT.

APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

- CONFORM WITH ATTACHED REQUIREMENT FROM THE SOIL CONSERVATION DISTRICT FOR MITIGATION OF THE DISTURBANCE CAUSED BY THE RELOCATION OF THE AT&T LINE AND EASEMENT. THIS ENLARGEMENT OF THE FOREST CONSERVATION EASEMENT APPLIES TO THE CROSSING OF WETHERED DRIVE OVER THE STREAM BEHIND LOT 145.
- THE MITIGATION (AN EXPANDED PLANTING AREA ON THE FACE ADJACENT TO THE BOTTOMLESS ARCH CULVERT) REQUIRED BY THE SOIL CONSERVATION DISTRICT IS NOT TO BE CONSIDERED AS OFF-SITE PLANTING MITIGATION FOR ANY OTHER SITE NOR AS A FOREST CONSERVATION BANK FOR ANY OTHER PROPERTY.
- THE PROPOSED REALIGNMENT OF THE AT&T FIBER OPTIC CABLE MUST BE COORDINATED WITH WATER, SEWER, AND OTHER PUBLIC UTILITIES, AS REQUIRED BY THE ATTACHED COMMENTS FROM DCED.

- THIS PLAN IS SUBJECT TO COMPLIANCE WITH THE FOURTH EDITION OF THE SUBDIVISION REGULATIONS. IN ADDITION, BECAUSE IT DID NOT HAVE PRELIMINARY PLAN APPROVED PRIOR TO NOVEMBER 1, 2001, IT IS SUBJECT TO COMPLIANCE WITH COUNTY COUNCIL BILL 50-2001 EFFECTIVE JANUARY 8, 2002 WHICH AMENDS PORTIONS OF THE ZONING REGULATIONS.
- 95% COMPACTION REQUIRED IN FILL AREA PER ASTM-D793 SPECIFICATIONS.
- A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED # OF TREES IN THE AMOUNT OF \$26,700 IS PART OF THE BUILDERS GRADING PERMIT APPLICATION FOR BUILDING. OTHER LANDSCAPE REQUIREMENTS ARE BONDED UNDER A DEVELOPER'S AGREEMENT WITH F-03-B7.
- PER SECTION 112.01(E) OF ZONING ORDINANCE THE MAXIMUM LENGTH ALLOWED WITHOUT SPECIAL CONSIDERATION OF DETAIL IS 120 FEET. THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING PREVIOUSLY HAS APPROVED A GREATER LENGTH UP TO A MAXIMUM OF 185 FEET UNDER S-01-20.
- H.O.A. TO BE RESPONSIBLE FOR MAINTENANCE OF RETAINING WALLS
- A DECISION AND ORDER FOR ADMINISTRATIVE ADJUSTMENT TO INCREASE THE 40-FT. MAXIMUM BUILDING HEIGHT UP TO 48.7 FEET FOR THE PROPOSED APARTMENT BUILDINGS WAS ISSUED ON AUGUST 29, 2003 (44 CASE # 03-17), SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS AND REGULATIONS.
 - THE GRANTED ADMINISTRATIVE ADJUSTMENT SHALL APPLY SOLELY TO THE PROPOSED APARTMENT BUILDING UNITS AS DEPICTED ON THE PLAN SUBMITTED BY THE PETITIONER ON JULY 10, 2003 AND NOT TO ANY OTHER STRUCTURE, ADDITION, BUILDING OR USE.
 - THE PETITIONER SHALL SUBMIT A COPY OF THIS DECISION AND ORDER TO THE DIVISION OF LAND DEVELOPMENT IN ASSOCIATION WITH SDP-04-007, AND ALSO WITH THE BUILDING PERMIT APPLICATION(S) FOR THE APARTMENT BUILDINGS.
- THE NUMBER OF APARTMENT UNITS TO BE HANDICAPPED ACCESSIBLE HAS BEEN MODIFIED AS DETERMINED BY SITE IMPRACTICALITY STUDY SUMMARIZED IN MEMORANDUM FROM LEMAY ERICKSON ARCHITECTS TO THE PLANS EXAMINER DATED OCTOBER 17, 2003.

SITE ANALYSIS DATA

- TOTAL PROJECT AREA = 76.43 AC.
- AREA OF THIS SDP SUBMISSION = 10.86 AC.
- LIMIT OF DISTURBANCE = 10.86 AC.
- ZONING = RA-15
- PROPOSED USE IS RESIDENTIAL (APARTMENT UNITS)
- TOTAL NUMBER OF UNITS ALLOWED FOR PROJECT PER F-03-B7 = 405
- TOTAL NUMBER OF UNITS PROVIDED WITH THIS SDP = 244 UNITS
- REQUIRED PARKING CALCULATIONS:
 - APARTMENTS = 2 SPACES/UNIT = 2(244) = 488 SPACES
 - CLUBHOUSE AND POOL: PER HOWARD CO. HEALTH DEPT.: 125F/PERSON FOR SHALLOW POOL, 155F/PERSON FOR 5FT OR GREATER DEPTH. PROPOSED POOL IS 22425F AND ASSUMED 75% IS SHALLOW THEN: 1,6625F/12 = 140 PERSONS (SHALLOW) 5825F/15 = 39 PERSONS (>5FT DEEP) TOTAL PERSONS = 178 PERSONS
 - AT 10 PERSONS PER PARKING SPACE, THEN 178/10 = 18 SPACES REQUIRED
- TOTAL REQUIRED PARKING FOR APARTMENTS AND POOL = 506 SPACES REQUIRED
- TOTAL PARKING PROVIDED FOR APARTMENTS AND POOL = 521 SPACES (INCLUDING 5 SPACES WHICH ARE FOR PHASE IV, 501-04-120) PROVIDED INCLUDING 14 HANDICAP SPACES, 4 OF WHICH ARE VAN ACCESSIBLE SPACES.
- OPEN SPACE REQUIREMENTS FOR PHASES I, II & III ARE PROVIDED ON LOTS 124, 125, 126 AND LOT 194 AS RECORDED UNDER F-03-B7.
- RECREATIONAL OPEN SPACE REQUIREMENTS FOR PHASES I, II & III ARE PROVIDED ON LOTS 120, 121, PARCEL A AND LOT 194 AS RECORDED UNDER F-03-B7.
- DPZ FILE REFERENCES:
 - S-01-20, P-02-10, P-02-17,
 - P-03-03, F-03-B7, F-03-100,
 - WP-01-117, WP-03-78, A#03-17

OPEN SPACE CALCULATIONS

TOTAL AREA OF PHASES I, II, & III	= 32.75 AC.
TOTAL OPEN SPACE REQUIRED @ 25%	= 8.19 AC.
TOTAL OPEN SPACE PROVIDED	= 8.46 AC.
RECREATIONAL OPEN SPACE:	
118 TOWNHOUSES @ 200 SF/UNIT	= 23,600 SF OR 0.54 AC.
244 APARTMENTS @ 175 SF/UNIT	= 42,700 SF OR 0.98 AC.
1 SINGLE FAMILY DET @ 250 SF/UNIT	= 250 SF OR 0.01 AC.
TOTAL REQUIREMENT	= 66,550 SF OR 1.53 AC.
TOTAL PROVIDED	= 1.75 AC. (0.22 AC. TO BE CREDITED TOWARD PHASE IV REC. REQUIREMENT)

NOTES:

THIS SURVEY IS IN THE MARYLAND STATE PLANE COORDINATE SYSTEM BASED ON GPS OBSERVATIONS INCORPORATING THE FOLLOWING HOWARD COUNTY, MARYLAND CONTROL STATIONS:

STATION 30FA	N.568821.336'	E.1361563.983'
STATION 376B	N.553452.821'	E.1368503.167'
STATION 30CA	N.575033.455'	E.1364681.801'
STATION 30CB	N.576541.342'	E.1361211.298'
STATION 30IA	N.567750.958'	E.1364842.598'

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: *[Signature]* 12/19/03
 Chief, Division of Land Development: *[Signature]* 12/26/03
 Director: *[Signature]* 12/30/03

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	REVISION PER HOWARD COUNTY COMMENTS	11-12-03		
	REVISION PER HOWARD COUNTY COMMENTS	08-20-03		
	SUBMITTED FOR REVIEW	07-10-03		

Developer/Owner:
Stringtown Investment, LLC
 6820 Elm Street
 Suite 200
 McLean, Va. 22101
 Mr. Russell Dickens
 (703) 734 - 9730

Montjoy

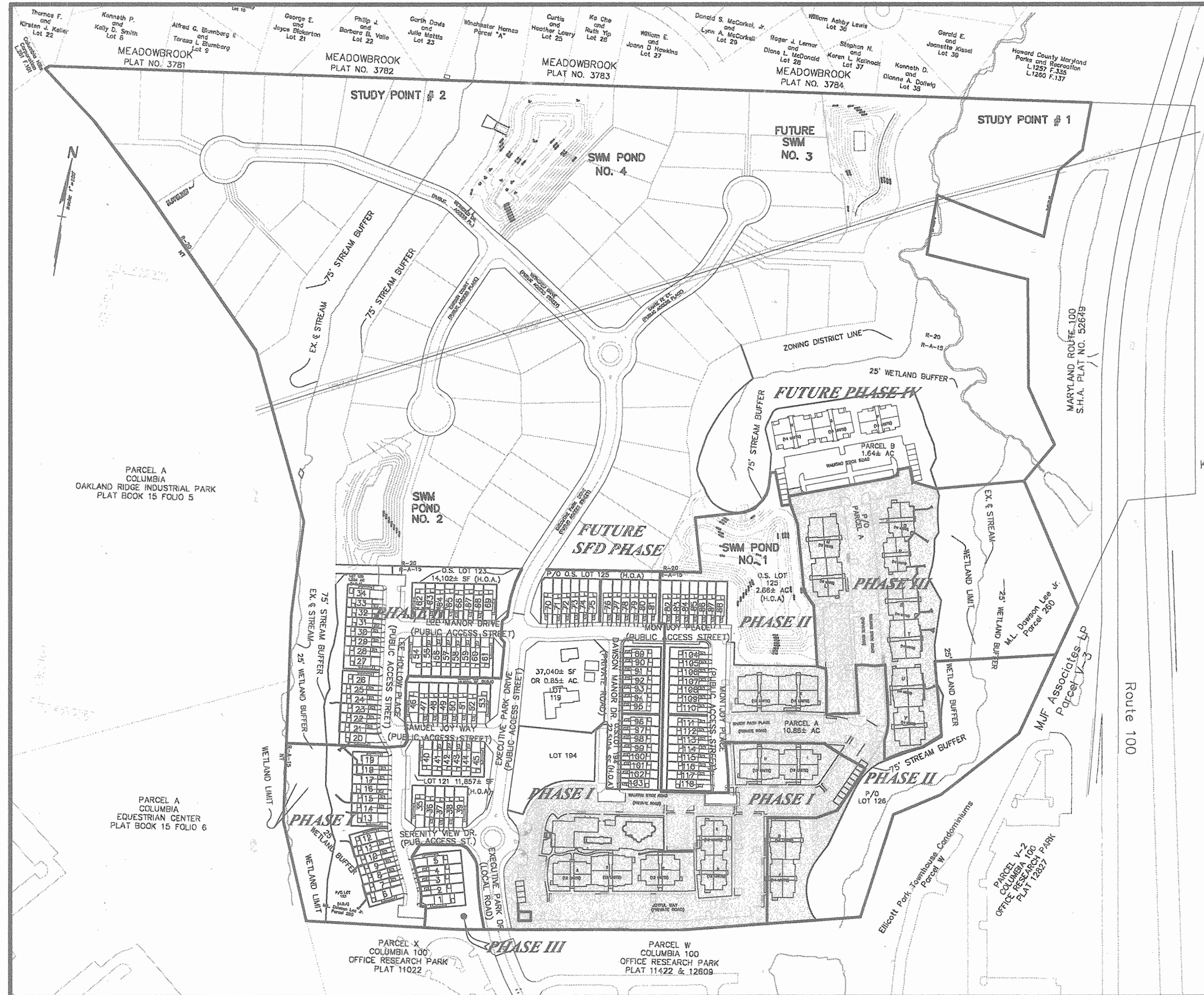
PHASES I, II & III

APARTMENTS

ELECTION DISTRICT NO.2

HOWARD COUNTY, MARYLAND

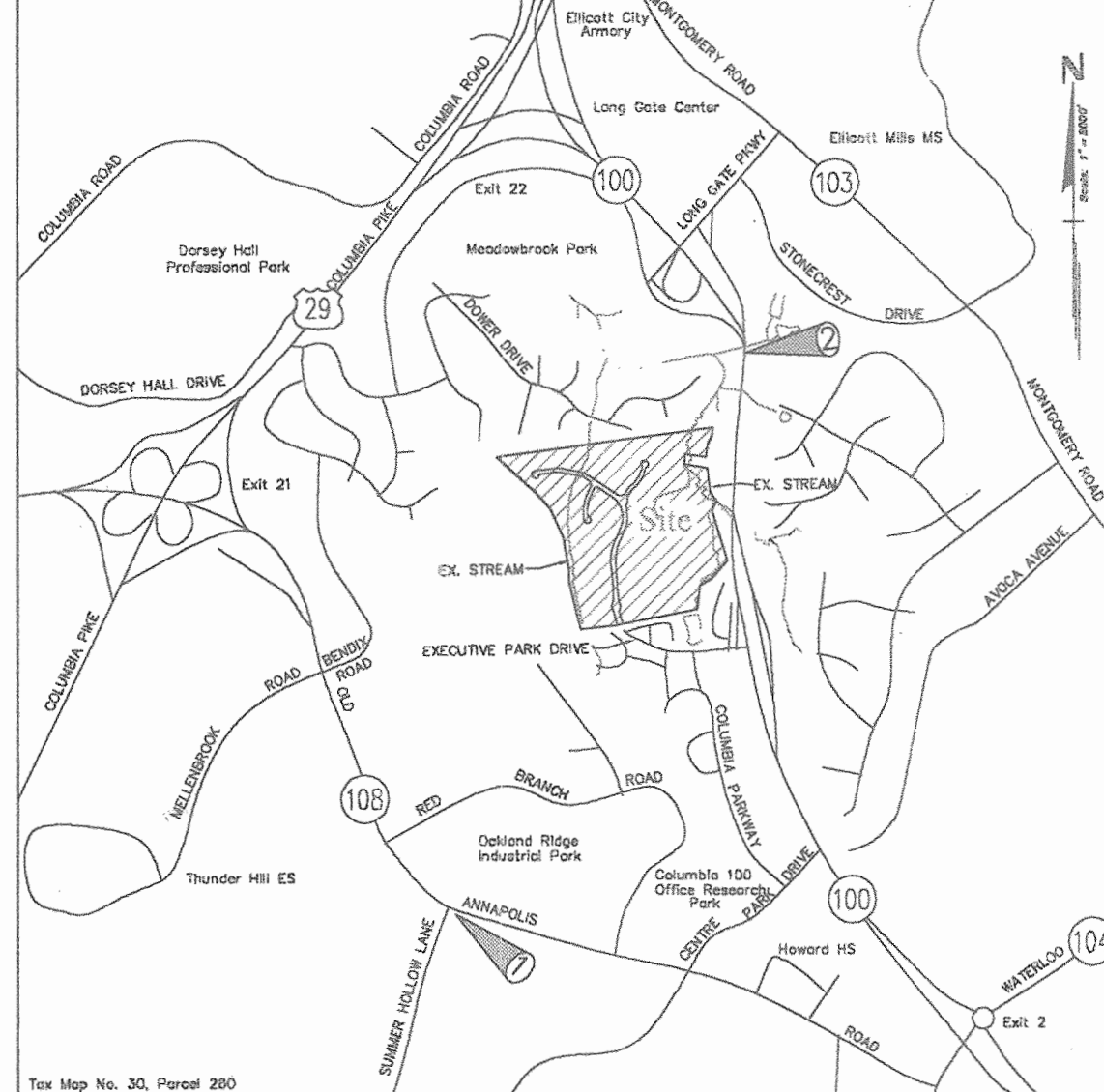
SITE DEVELOPMENT PLAN



LOCATION MAP
SCALE: 1"=200'

LEGEND

- SOILS CLASSIFICATION: AbC1
- SOILS DELINEATION: [Symbol]
- EXISTING CONTOURS: [Symbol]
- PROPOSED CONTOURS: [Symbol]
- LIMIT OF WETLANDS: [Symbol]
- FOREST CONSERVATION EASEMENT: [Symbol]
- EXISTING WOODS LINE: [Symbol]
- PROPOSED WOODS LINE: [Symbol]
- EXISTING STRUCTURE: [Symbol]
- PROPOSED STRUCTURE: [Symbol]
- LIMITS OF DISTURBANCE: [Symbol]
- STABILIZED CONSTRUCTION ENTRANCE: [Symbol]
- SILT FENCE: SF
- SUPER SILT FENCE: SSF
- EARTH DIKE: [Symbol]
- INLET PROTECTION: [Symbol]
- ENTRANCE LOCATION: [Symbol]
- EXISTING LIGHT POLE LOCATION (PUBLIC STREETS PER F-03-B7): [Symbol]



SHEET INDEX

NO.	DESCRIPTION	INDEX NO.
1	COVER SHEET	CS-1
2	BUILDING FOOTPRINTS	CS-2
3	SITE DEVELOPMENT AND GRADING PLAN	SG-1
4	SITE DEVELOPMENT AND GRADING PLAN	SG-2
5	LANDSCAPE PLAN	LS-1
6	LANDSCAPE PLAN	LS-2
7	LANDSCAPE NOTES & DETAILS	LS-3
8	RETAINING WALL NOTES AND DETAILS	W-1
9	RETAINING WALL #5 PLAN, PROFILE AND SECTIONS	W-5
10	RETAINING WALL #6 PLAN, PROFILE AND SECTIONS	W-6
11	SEDIMENT & EROSION CONTROL NOTES & DETAILS	SC-1

SWM SUMMARY FOR PHASES I, II & III (Apartments)

SWM REQUIREMENTS FOR	SWM PROVIDED UTILIZING	SWM PROVIDED UNDER
Rev	Rev for study points provided by grass swales & sheet flow to buffer credits for by-pass areas**	PLAN F-03-87*, F-03-100* & SDP-04-07
WQv	WQv provided within pond #1 (Micropool-ED), pond #2 (sand filter) and sheet flow to buffer credit for by-pass areas**	PLAN F-03-87* & SDP-04-07
Cpv	Cpv provided within pond #1 (Micropool-ED) & pond #4 (wet pond)	PLAN F-03-87*

* Refer to associated SWM Computation for specific detailed information.
 ** Level spreaders (to be constructed under the Site Development Plan) are utilized to maintain sheet flow to buffer credit in by-pass areas that do not drain to the SWM ponds.

ADDRESS - ELLICOTT CITY, MD ZIP CODE: 21043

BLDG.	STREET ADDRESS	BLDG.	STREET ADDRESS
A	4801 JOYFUL WAY	P (FUT)	
B	4811 JOYFUL WAY	Q	5000 WALKING STICK ROAD
C	4821 JOYFUL WAY	R	4930 WALKING STICK ROAD
D	4831 JOYFUL WAY	S	4980 WALKING STICK ROAD
E	4841 JOYFUL WAY	T	4970 WALKING STICK ROAD
F	4830 JOYFUL WAY	U	4960 WALKING STICK ROAD
G	4840 JOYFUL WAY	V	4950 WALKING STICK ROAD
H	4830 WALKING STICK RD		
I	4940 WALKING STICK RD		
J	4801 SHADY PATH PLACE		
K	4811 SHADY PATH PLACE		
L	4891 WALKING STICK ROAD		
M	5001 WALKING STICK ROAD		
N (FUT)			
O (FUT)			

PERMIT INFORMATION CHART

Subdivision Name	Section/Area	Lot/Parcel No			
MONTJOY	APARTMENTS	260			
Plot No. or L/F	Grid #	Zoning	Tax Map No.	Elect. Distr.	Census Tract
#16351 thru #16359	12	R-A-15 R-20	30	2nd	602302
Water Code	F-09	Sewer Code	5750639		

BENCH MARKS (NAD83)

BENCHMARK NO. 1	---HO. CO. NO. 30FA		
HOWARD CO. STD. STAMPED DISC LOCATED SW CORNER OF RT. 108 AND SUMMER HOLLOW LANE.			
N 568621.336	E 1361563.983	ELEV.	441.619
BENCHMARK NO. 2	---HO. CO. NO. 30CA		
HOWARD CO. STD. STAMPED DISC LOCATED ON THE EAST SIDE OF THE N.B.L. OF RT. 100			
N 575063.465	E 1364681.801	ELEV.	380.087

PHASES I, II & III - APARTMENTS SDP
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, W2-01-117, P-02-10, P-02-10, P-03-08, F-03-B7

SCALE: AS SHOWN
 JOB NO: 643G
 DATE: 7-10-03
 INDEX NO: CS-1
 SHEET NO: 1 OF 11

RODGERS CONSULTING
 Enhancing the value of land assets
 Rodgers Consulting, Inc.
 9260 Galther Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

SITE DEVELOPMENT PLAN
COVER SHEET