

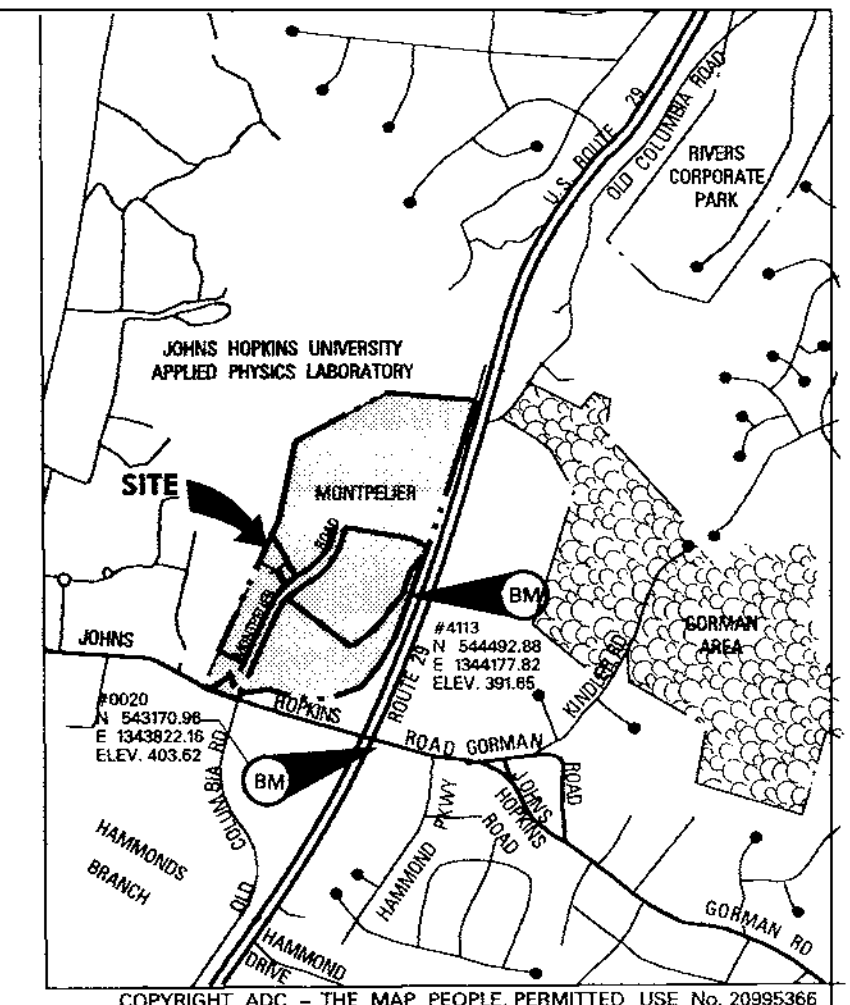
SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	SITE PLAN
3	SEDIMENT & EROSION CONTROL PLAN AND DRAINAGE AREA MAP
4	SEDIMENT & EROSION DETAILS
5	UTILITY PROFILES
6	LANDSCAPE PLAN
7	SITE & LANDSCAPE DETAILS

Site Development Plan for Childrens Discovery Center at Montpelier Research Park-Parcel D-1

GENERAL NOTES

- All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable or as specified.
- Approximate location of existing utilities are based solely on available records. Contractor shall verify the location of any utilities which may be impacted by the work. The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage incurred due to contractors operation shall be repaired immediately at the contractor's expense.
- The contractor shall test pit existing utilities at least five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
- The contractor shall notify 'Miss Utility' at 1-800-257-7777 at least 48 hours prior to any excavation work being done, and shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- Any damage caused by the Contractor to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be repaired at the Contractors expense.
- Topo taken from mass grading per SDP 98-11(revised) dated April 9, 1998 by Dart McCune Walker, Inc.
- Public water and sewer provided by contract No. 34-3654-D
- All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-180.
- Regional stormwater management and water quality are provided in a retention facility located on Parcel F. plans were approved per SDP 98-11.
- Forest Conservation requirements are provided per SDP98-11, F98-45 and SDP98-137.
- There are no wetlands, floodplain, or streams on this site.
- Traffic Study by Lee Cunningham and Associates was previously approved for this use per F98-45. Date: December 1997. See update provided with this submission
- Operating existing valves, switches, services or start up of new services shall be coordinated with the owners representative.
- The building will be provided with a sprinkler system.
- Trench compaction for storm drains shall be in accordance with Howard County Design Manual IV, Std. No. G-2.01.
- Unless otherwise noted, dimensions from curb are measured at face of curb.
- Refer to architectural drawings for building dimensions.
- The Contractor shall coordinate the location of all water, sewer, and drain house connections with the mechanical drawings.
- The Contractor shall maintain 2.0 feet minimum cover over all utilities during construction.
- Unless otherwise noted, all utility connections shall be capped or plugged five feet from buildings.
- Electric, telephone, gas, cable, lighting, and retaining walls to be designed by others. Where those facilities are shown, they are for coordination purposes only.
- All Curb radii 5' unless otherwise noted.
- There are no known cemeteries or burial grounds on this site. However, upon discovery of any evidence of burial or graves, the developer will be subject to Section 16.1305 of the Howard County Subdivision and Land Development Regulations.
- All exterior lighting fixtures shall be installed in compliance with Section 134 of the Zoning Regulations.
- Geotechnical investigation by Giles Engineering Associates, Inc. Dated 4/29/99.



LOCATION MAP

SCALE: 1" = 2000'

BENCHMARK

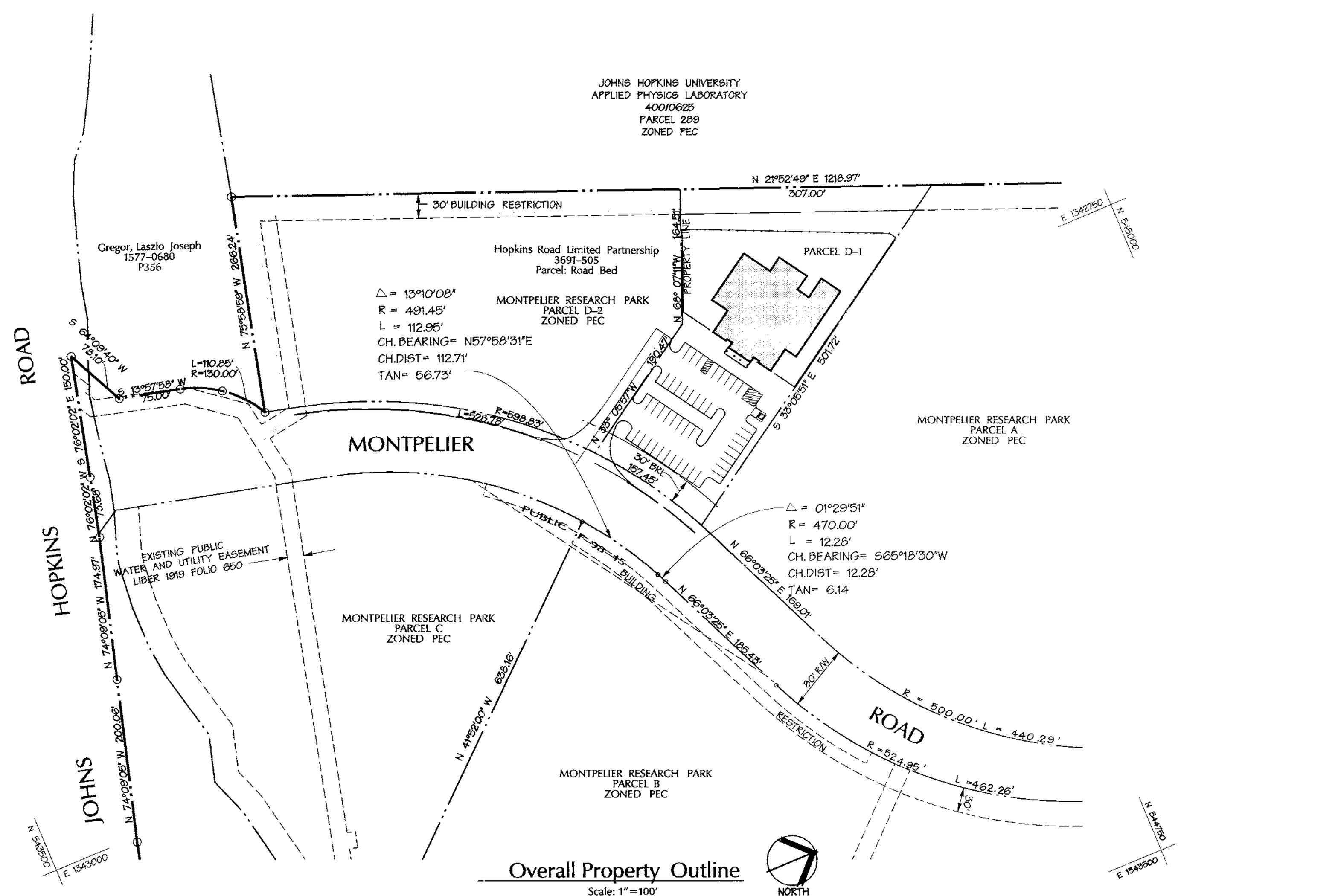
DESCRIPTION

Coordinates and bearing shown are referred to the system of coordinates established in the Maryland Coordinate System as projected by Howard County Geodesic Control Stations: NAD 83. Elevations shown herein are referred to the North American Vertical Datum-NVD 29 and are based on the following Howard County Survey Control Stations: (Translated meters to feet.)

DESIGNATION	NORTH (±FT)	EAST(±FT)	Elevation (±FT)
4113	544482.88	1344177.82	391.65
0020	543170.96	1343822.16	403.62

ADDRESS CHART

LOT NUMBERS	STREET ADDRESS
D-1	7551 MONTEPELIER ROAD



Overall Property Outline
Scale: 1" = 100'

SITE ANALYSIS DATA CHART

- General Site Data
 - Present Zoning: PEC
 - Applicable DPZ File References: SDP 98-11, F-98-45, F98-168
 - Proposed Use of Site or Structure(s): DayCare
 - Proposed Water and Sewer Systems: X Public Private
 - Any Other Information Which May be Relevant: N/A
- Area Tabulation
 - Total Project Area: 1.8 Acres (Indicate by Section and Area As Shown on Final Plat or As Shown on Deed)
 - Net Area of Site: 1.8 Acres (Indicate by Section and Area As Shown on Final Plat)
 - Area of This Plan Submission: 1.26 Acres
 - Limit of Disturbed Area: 1.26 Acres
 - Building Coverage of Site: 0.31 Acres and 17.3 % of Gross Area (Proposed)
 - Other Area: _____
- Open Space Data
 - Open Space on Site: 0 Acres 0 % of Gross Area (Proposed on This Submission or As Shown on the Final Plat)
 - Area of Recreation Open Space Required by Subdivision and Land Development Regulations: 0 Acres 0 Acres Provided (Proposed on This Submission or As Shown on the Final Plat)
 - Other: N/A
- Parking Space Data
 - Floor Space on Each Level per Building(s) per Use: 13,166 SF
 - Maximum Number of Employees, Tenants On-Site per Use: N/A
 - Number of Parking Spaces Required by Zoning Regulations and Criteria: 13,166 SF X 3.0 SP/1000 = 40 SPACES
 - Total Number of Parking Spaces Provided On-Site: 49
 - Number of Handicapped Parking Spaces Provided: 2



Building Elevation
Not to Scale

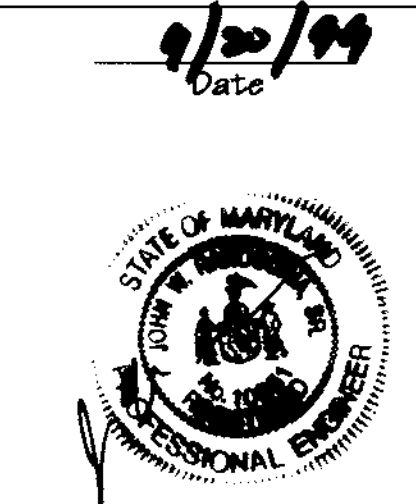
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>W. D. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	11/2/97 DATE
<i>C. ...</i> CHIEF, DIVISION OF LAND DEVELOPMENT	11/5/99 DATE
<i>J. ...</i> DIRECTOR	11/15/99 DATE

Childrens Discovery Center
at Montpelier Research Park - Parcel D-1

OWNER: HOPKINS ROAD LIMITED PARTNERSHIP
DEVELOPER: KNOWLEDGE CHILDCARE REAL ESTATE, LLC, A DELAWARE LIMITED LIABILITY COMPANY

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue
Towson, Maryland 21286
410 293 3333
Fax 296 4705



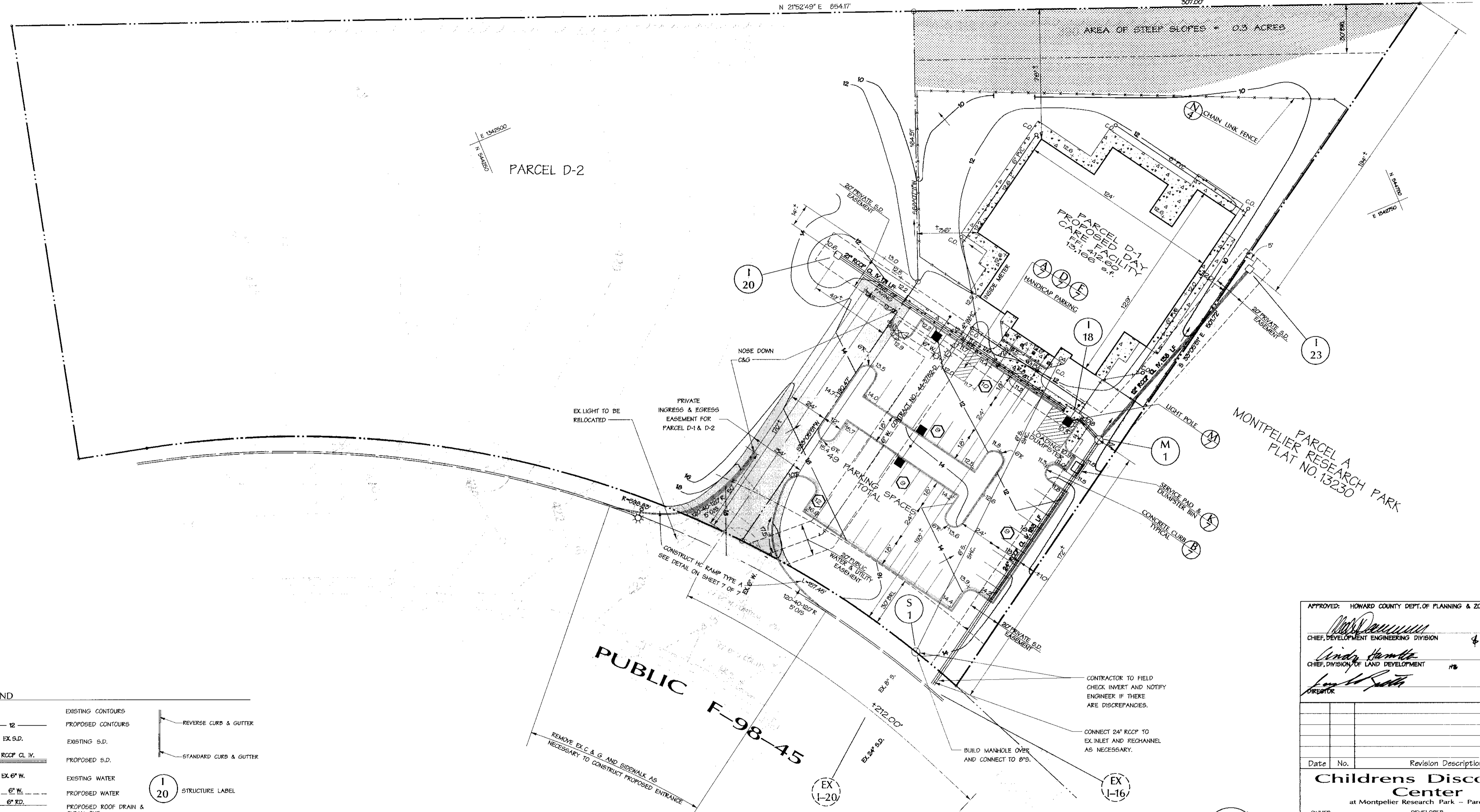
COVER SHEET		
Drn By: CSC	Scale: AS SHOWN	Proj. No. 94171.G
Des By: CSC	Date: 7-29-99	1 of 7
Chk By:	Approved:	

THE JOHNS HOPKINS UNIVERSITY
LIBER 400 FOLIO 625
ZONED PEC

N 21°52'49" E 854.17'

307.00'

AREA OF STEEP SLOPES = 0.3 ACRES



PARCEL D-2

PARCEL D-1
PROPOSED FACILITY
AREA: 412.60
13,166 s.f.

PARCEL A
MONTPELIER RESEARCH PARK
PLAT NO. 13230

PUBLIC
F-98-45

LEGEND

	EXISTING CONTOURS		REVERSE CURB & GUTTER
	PROPOSED CONTOURS		STANDARD CURB & GUTTER
	EXISTING S.D.		STRUCTURE LABEL
	PROPOSED S.D.		EXISTING LIGHT
	EXISTING WATER		PRIVATE INGRESS & EGRESS EASEMENT FOR PARCEL D-1 & D-2
	PROPOSED WATER		AREA OF STEEP SLOPE
	PROPOSED ROOF DRAIN & CLEAN OUT		
	PROPOSED SEWER		
	PROPOSED FENCE		
	EXISTING WOODS		
	EXISTING LIGHT		
	EXISTING TREES		
	PARKING COUNT		
	HANDICAP PARKING SYMBOL		
	CONCRETE WALK		

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

	11/2/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
	11/5/99
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
	11/5/99
DIRECTOR	DATE

Date	No.	Revision Description

Childrens Discovery Center
at Montpelier Research Park - Parcel D-1

OWNER: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DEVELOPER: KNOWLEDGE CHILD CARE REAL ESTATE, LLC
LIMITED PARTNERSHIP
9030 Red Branch Road, Suite 200, Columbia, MD 21045
A DELAWARE LIMITED LIABILITY COMPANY
RICHARD SANDLER, MANAGER
2444 Morriss Drive
Los Angeles, Ca 90049

DMW
Daft - McCune - Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax 296 4705

SUBDIVISION NAME: Montpelier Research Park	SECTION AREA: N/A	PARCEL #
PLAT NO. 13230	BLOCK # 41	PARCEL D-1
WATER CODE: E-21	SEWER CODE: 6440000	CHANG TRACK: 6051.02

Professional Engr. No. 1651

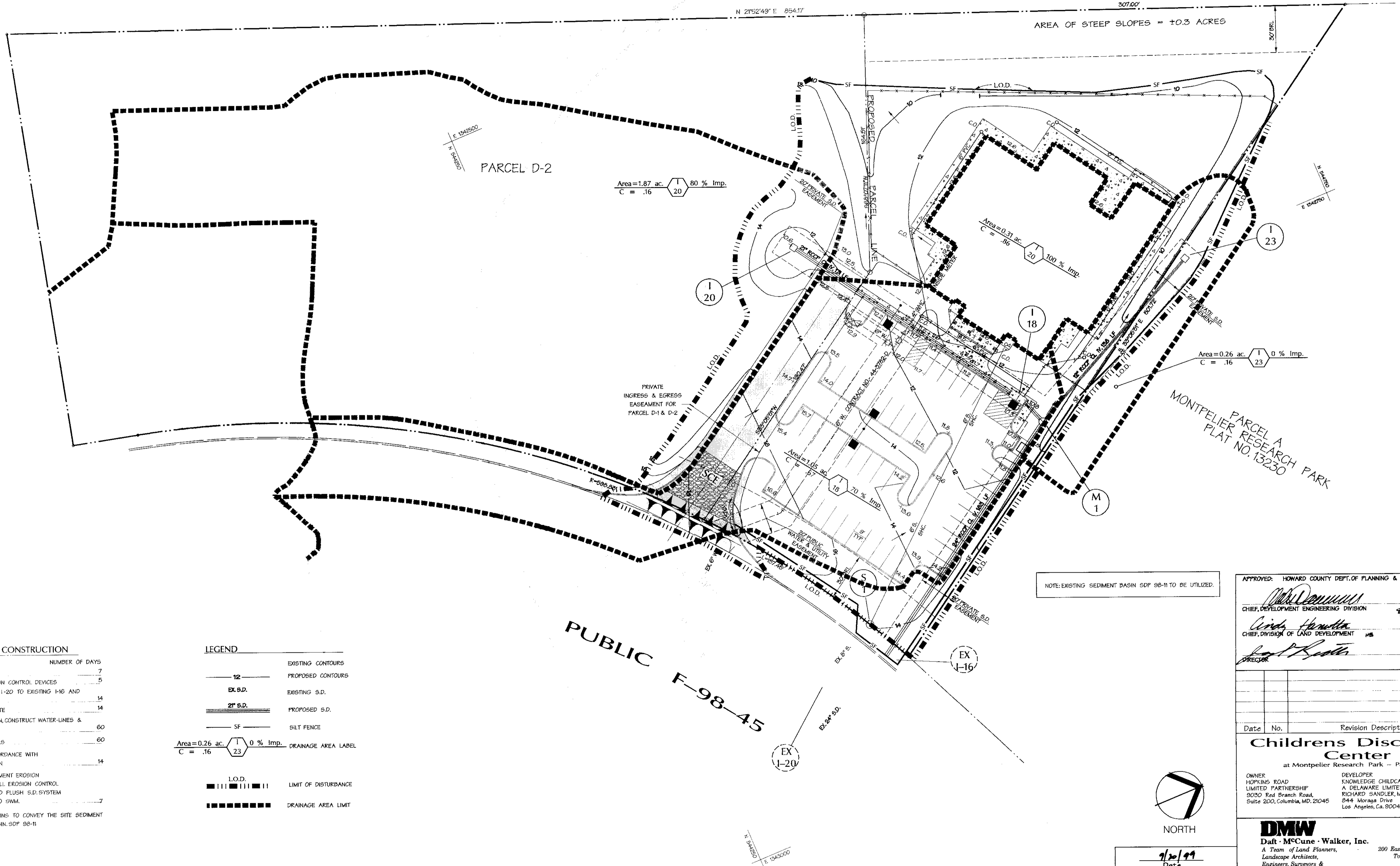
9-27-99
Date

SDP-99-145

SITE PLAN

Drn By: CSC/ADL	Scale: 1"=30'	Proj.No. 94171.G
Des By: B15	Date: 9.10.99	2 of 7
Chk By:	Approved:	

THE JOHNS HOPKINS UNIVERSITY
LIBER 400 FOLIO 625
ZONED PEC



SEQUENCE OF CONSTRUCTION

SEQUENCE	NUMBER OF DAYS
1. OBTAIN A GRADING PERMIT	7
2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES	5
3. CONSTRUCT STORM DRAINAGE 1-20 TO EXISTING 1-16 AND 1-1 TO 1-23	14
4. CLEAR AND ROUGH GRADE SITE	14
5. BEGIN BUILDING CONSTRUCTION, CONSTRUCT WATER-LINES & SEWER LINE.	60
6. CONSTRUCT PAVING AND WALKS	60
7. STABILIZE ALL AREAS IN ACCORDANCE WITH STANDARDS AND SPECIFICATION	14
8. UPON APPROVAL OF THE SEDIMENT EROSION CONTROL INSPECTOR, REMOVE ALL EROSION CONTROL MEASURES AND STABILIZE AND FLUSH S.D. SYSTEM PRIOR TO BASIN CONVERSION TO SWM.	7

* NOTE: CONSTRUCTED STORM DRAINS TO CONVEY THE SITE SEDIMENT TO THE EXISTING SEDIMENT BASIN, SDP 98-11

LEGEND

	EXISTING CONTOURS
	PROPOSED CONTOURS
	EXISTING S.D.
	PROPOSED S.D.
	SILT FENCE
	DRAINAGE AREA LABEL
	LIMIT OF DISTURBANCE
	DRAINAGE AREA LIMIT

NOTE: EXISTING SEDIMENT BASIN SDP 98-11 TO BE UTILIZED.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

	11/2/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
	11/5/99
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
	11/5/99
DIRECTOR	DATE

Date	No.	Revision Description

Childrens Discovery Center
at Montpelier Research Park - Parcel D-1

OWNER: HOPKINS ROAD LIMITED PARTNERSHIP, 3030 Red Branch Road, Suite 200, Columbia, MD, 21045

DEVELOPER: KNOWLEDGE CHILDCARE REAL ESTATE, LLC, A DELAWARE LIMITED LIABILITY COMPANY, RICHARD SANDLER, MANAGER, 844 Moraga Drive, Los Angeles, Ca, 90049

DMW
Daft - McCune - Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue
Touson, Maryland 21286
410 296 3333
Fax 296 4705



9/20/99
Date

Professional Engr. No. 10551

<p>REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.</p> <p></p> <p>CHERYL SIMMONS 10/28/99 U.S. NATURAL RESOURCE CONSERVATION SERVICE DATE</p>	<p>CERTIFICATION BY THE ENGINEER:</p> <p>"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."</p> <p></p> <p>JOHN W. RASMUSSEN 9/20/99 DATE</p>	<p>CERTIFICATION BY THE DEVELOPER:</p> <p>"I MEANFULLY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."</p> <p></p> <p>KNOWLEDGE CHILD CARE REAL ESTATE, LLC Cecilia Ward 9/13/99 DATE</p>
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21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

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

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

Conditions Where Practice Applies
I. This practice is limited to areas having 2:1 or flatter slopes where:
a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
c. The original soil to be vegetated contains material toxic to plant growth.
d. The soil is so acidic that treatment with limestone is not feasible.

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

Construction and Material Specifications
I. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
II. Topsoil Specifications - Soil to be used as topsoil must meet the following:
I. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel sticks, roots, trash, and other materials larger than 1 1/2 inch in diameter.
II. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutedge, poison ivy, thistle, or others as specified.
III. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

III. For sites having disturbed areas under 5 acres:
I. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
III. For sites having disturbed areas over 5 acres:
I. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
b. Organic contents of topsoil shall be not less than 1.5 percent by weight.
c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
II. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section F - Vegetative Stabilization Methods and Materials.
V. Topsoil Application
I. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
II. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
III. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
IV. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

Topsoil Specifications

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

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

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:
1. PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.) BEFORE SEEDING. HARKOW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREA FORM FERTILIZER (9 LBS./1000 SQ. FT.)
2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (20 LBS./1000 SQ. FT.) BEFORE SEEDING. HARKOW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (14 LBS./1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE FOR THE PERIOD MAY 1 THRU JULY 31 SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ. FT.) OF WEEPING LOVEGRASS, DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY OPTION (1) - 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE SOD. (3) - SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1/2 TO 2 TONS PER ACRE (70 - 90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 288 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

TEMPORARY SEEDING NOTES
APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

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

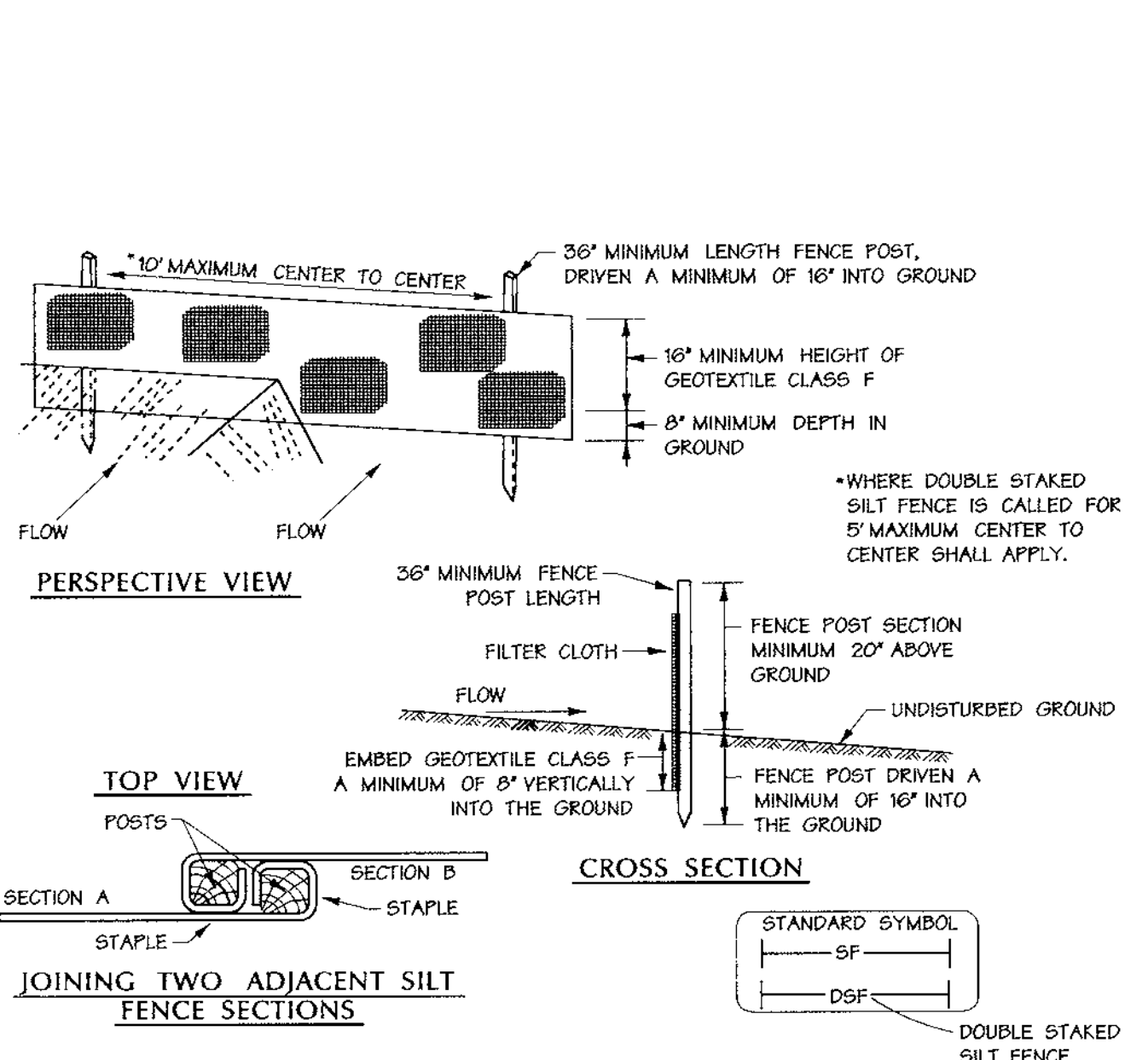
SOIL AMENDMENTS - APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.)

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 15 THRU OCTOBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ. FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.7 LBS./1000 SQ. FT.) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING - APPLY 1/2 TO 2 TONS PER ACRE (70 - 90 LBS./1000 SQ. FT.) OF UNROTTED WHEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 288 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

Permanent/Temporary Seeding Notes



CONSTRUCTION SPECIFICATIONS

- FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1 1/2" x 1 1/2" SQUARE (MINIMUM) CUT, OR 1 1/2" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 100 POUNDS PER LINEAR FOOT.
- GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:
TENSILE STRENGTH 50 LBS./IN (MIN) TEST: MSMT 509
TENSILE MODULUS 20 LBS./IN (MIN) TEST: MSMT 509
FLOW RATE 0.3 GAL FT/MIN (MAX) TEST: MSMT 322
FILTERING EFFICIENCY 75% (MIN) TEST: MSMT 322
- WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
- SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

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

Silt Fence

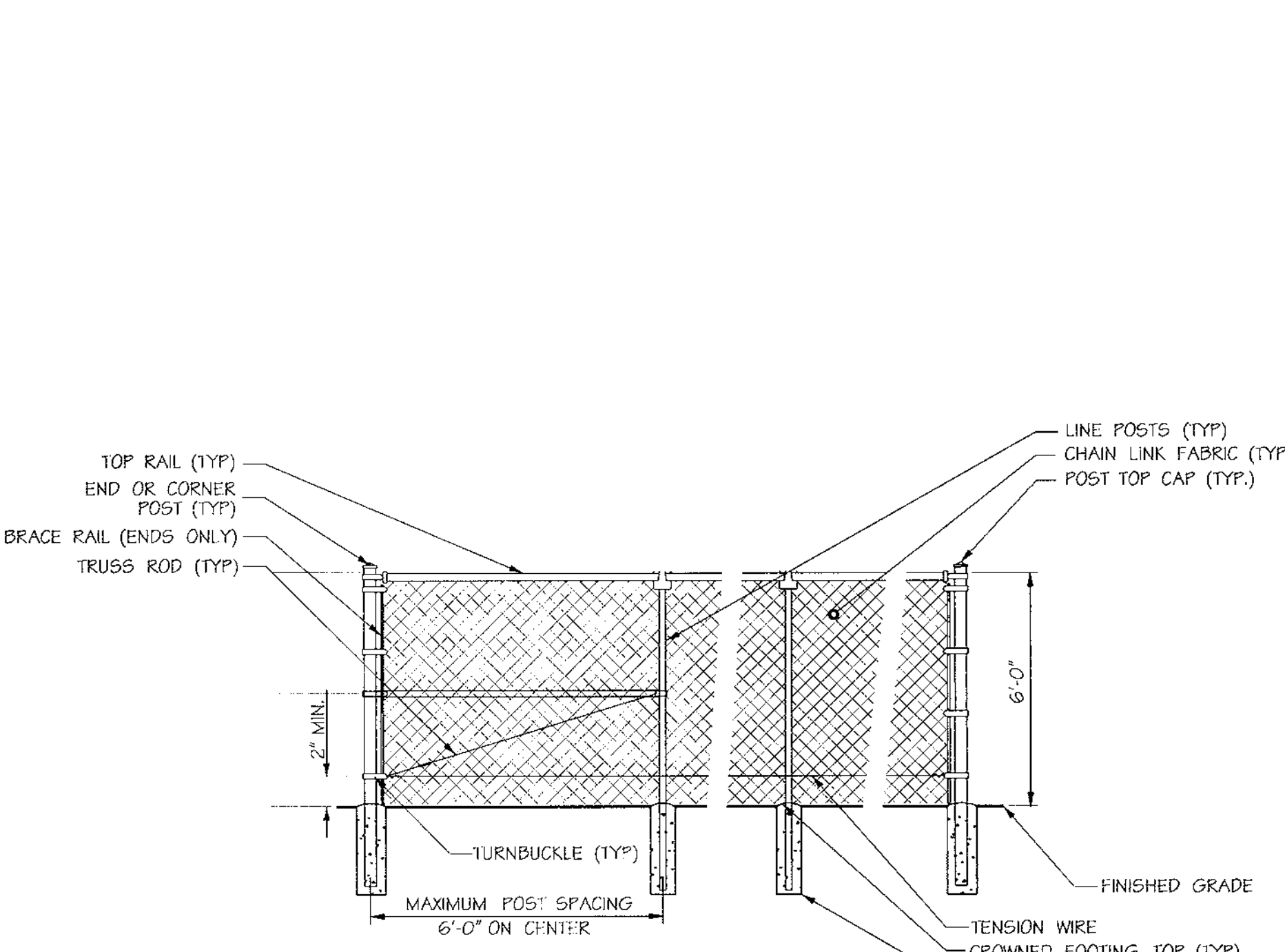
CERTIFICATION BY THE ENGINEER:
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

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

John W. Romack, Sr. 9/10/99
Knowledge Challenge Rem 1246.126
Quinn W. Wood 9/10/99

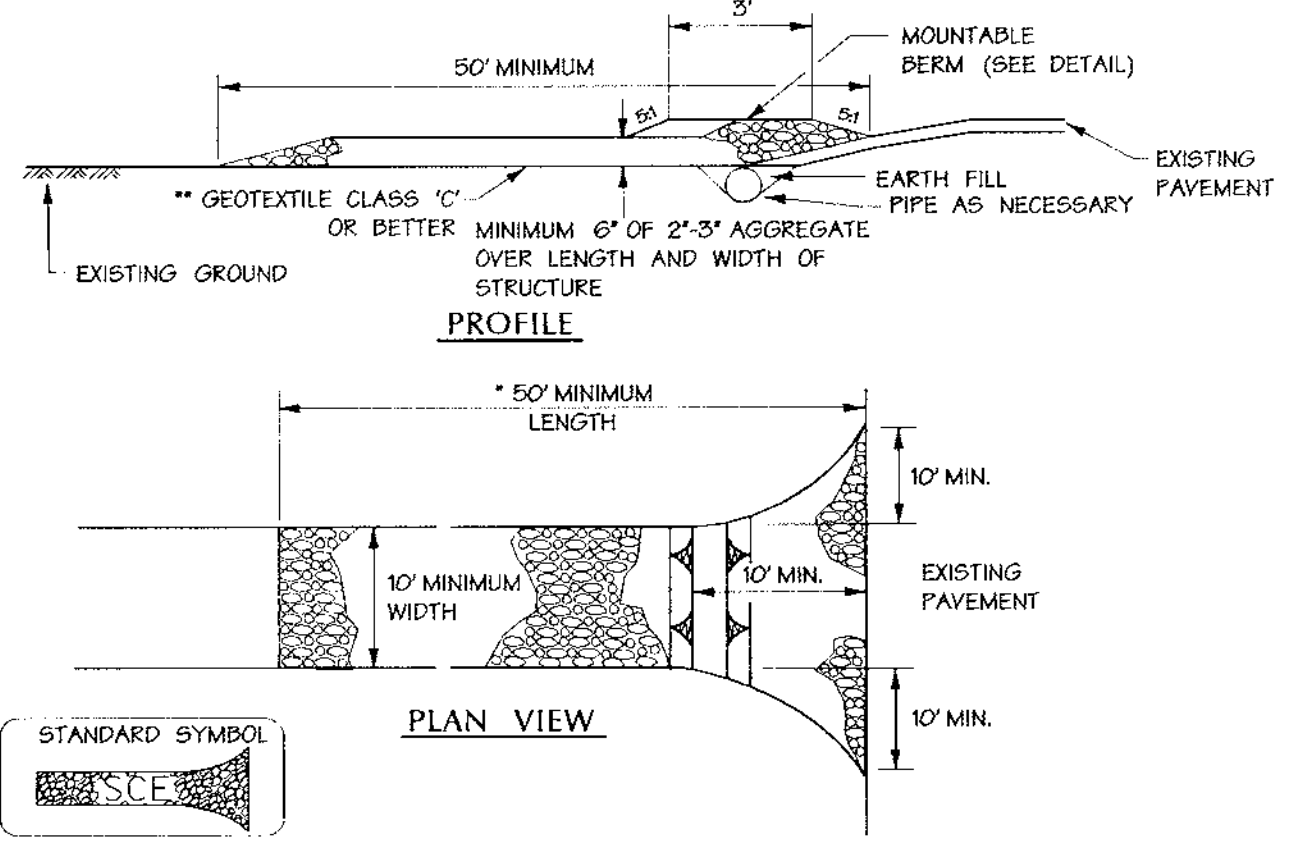
- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-2437).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
A. SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
B. FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I, CHAPTER 12 OF THE "HOWARD COUNTY MANUAL," STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. FOR PERMANENT SEEDINGS, SODS, TEMPORARY SEEDING AND MULCHING (SECTION G), TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
TOTAL AREA OR SITE 1.01 ACRES
AREA DISTURBED 1.76 ACRES
AREA TO BE ROOFED OR PAVED 0.89 ACRES
AREA TO BE VEGETATIVELY STABILIZED 0.87 ACRES
TOTAL CUT 234 CUBIC YARDS
TOTAL FILL 3962 CUBIC YARDS
OFF-SITE WASTE/BORROW AREA LOCATION WASTE - UNDETERMINED
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

Sediment Control General Notes



Chain Link Fence

NOT TO SCALE



- CONSTRUCTION SPECIFICATIONS**
- LENGTH - MINIMUM OF 50' (50' FOR SINGLE RESIDENCE LOT).
 - WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
 - GEOTEXTILE FABRIC CLASS C (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
 - STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
 - SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SITE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.
 - LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

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

Stabilized Construction Entrance

Not To Scale

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
John W. Romack, Sr. 11/2/99
CHIEF, DIVISION OF ENGINEERING DIVISION
John W. Romack, Sr. 11/5/99
CHIEF, DIVISION OF LAND DEVELOPMENT
John W. Romack, Sr. 11/5/99
DIRECTOR

Childrens Discovery Center
at Montpelier Research Park - Parcel D-1
OWNER: HOPKINS ROAD LIMITED PARTNERSHIP, 9030 Red Branch Road, Suite 200, Columbia, MD, 21045
DEVELOPER: KNOWLEDGE CHILD CARE REAL ESTATE, LLC, A DELAWARE LIMITED LIABILITY COMPANY, RICHARD SANDLER, MANAGER, 044 Moraga Drive, Los Angeles, Ca, 90049

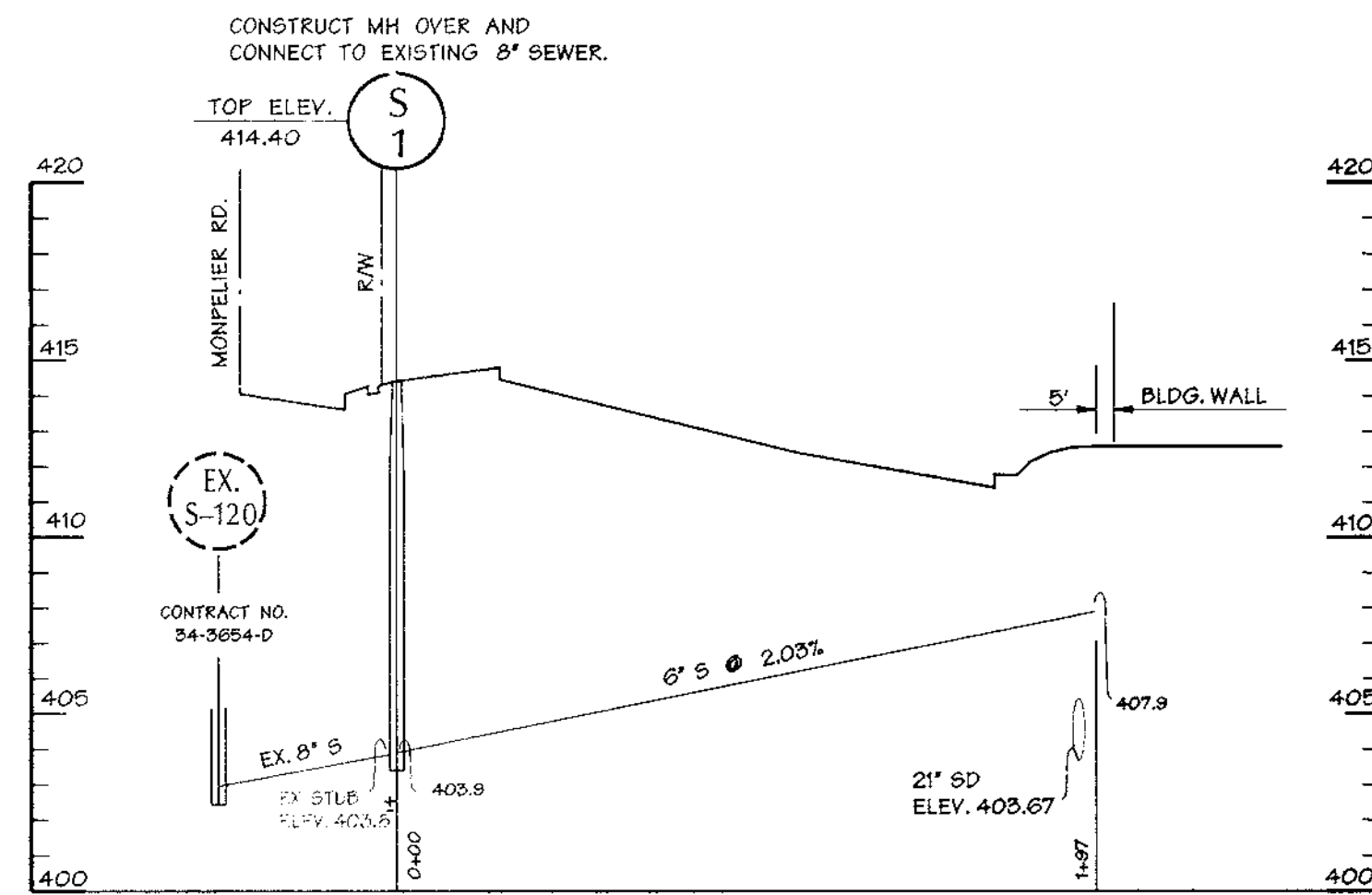
DMW
Daft - McCune - Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue, Towson, Maryland 21286
410 296 3333 Fax 296 4705

SUBDIVISION NAME	Montpelier Research Park	SECTION AREA	N/A	PARCEL #	PARCEL D-1
PLAT #	13437	BLK. #	17	ELECT. DISTRICT	6051.02
WATER CODE	E-21	SEWER CODE	6440000		

SEDIMENT & EROSION CONTROL DETAILS

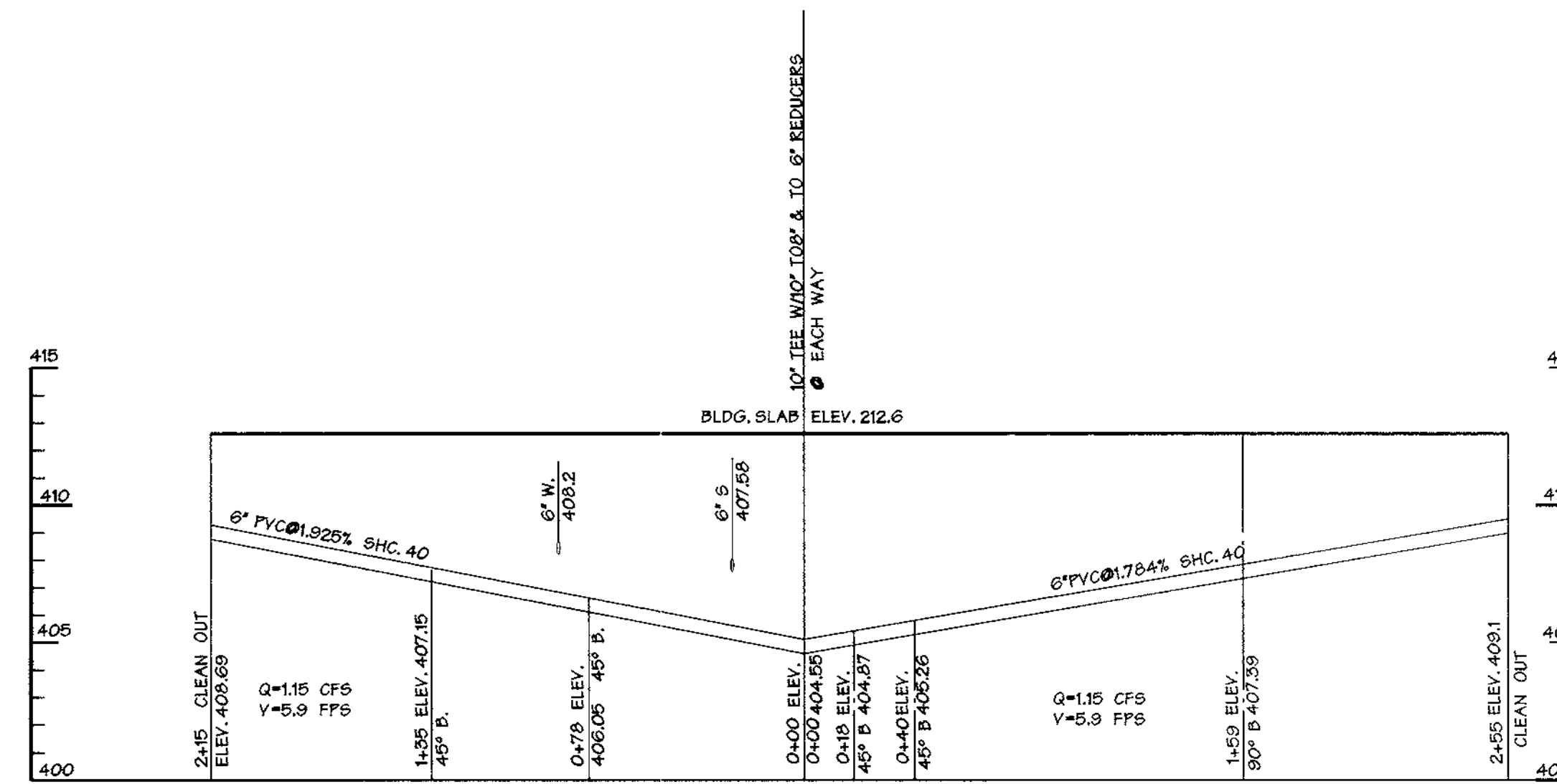
Drn By: Scale: AS SHOWN Proj. No. 94171.G
Des By: Date: 9.10.99
Chk By: Approved: 4 of 7





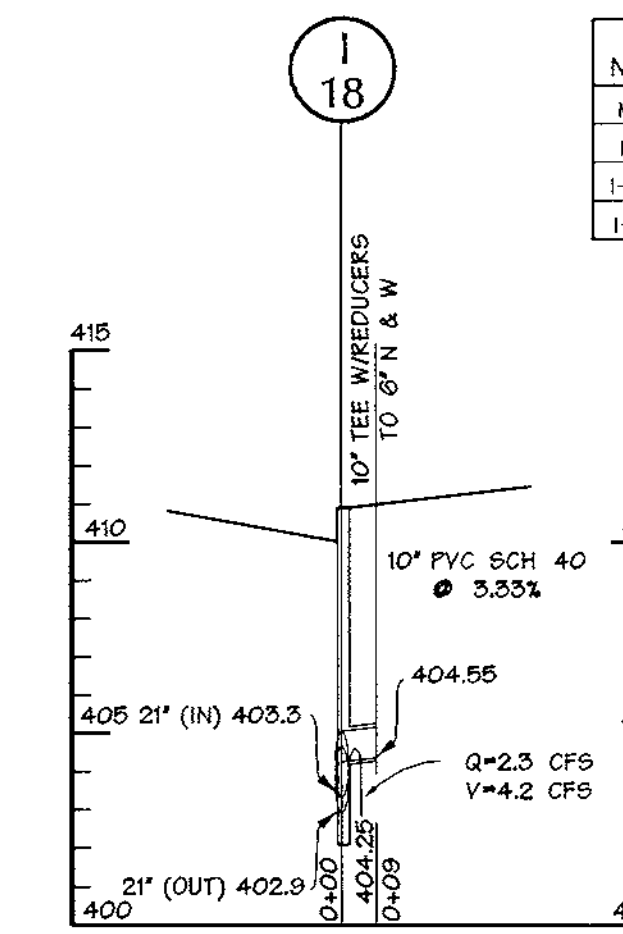
Private Sewer

Scale: Horz. 1" = 50'
Vert. 1" = 5'



Roof Drain System

Scale: Horz. 1" = 50'
Vert. 1" = 5'

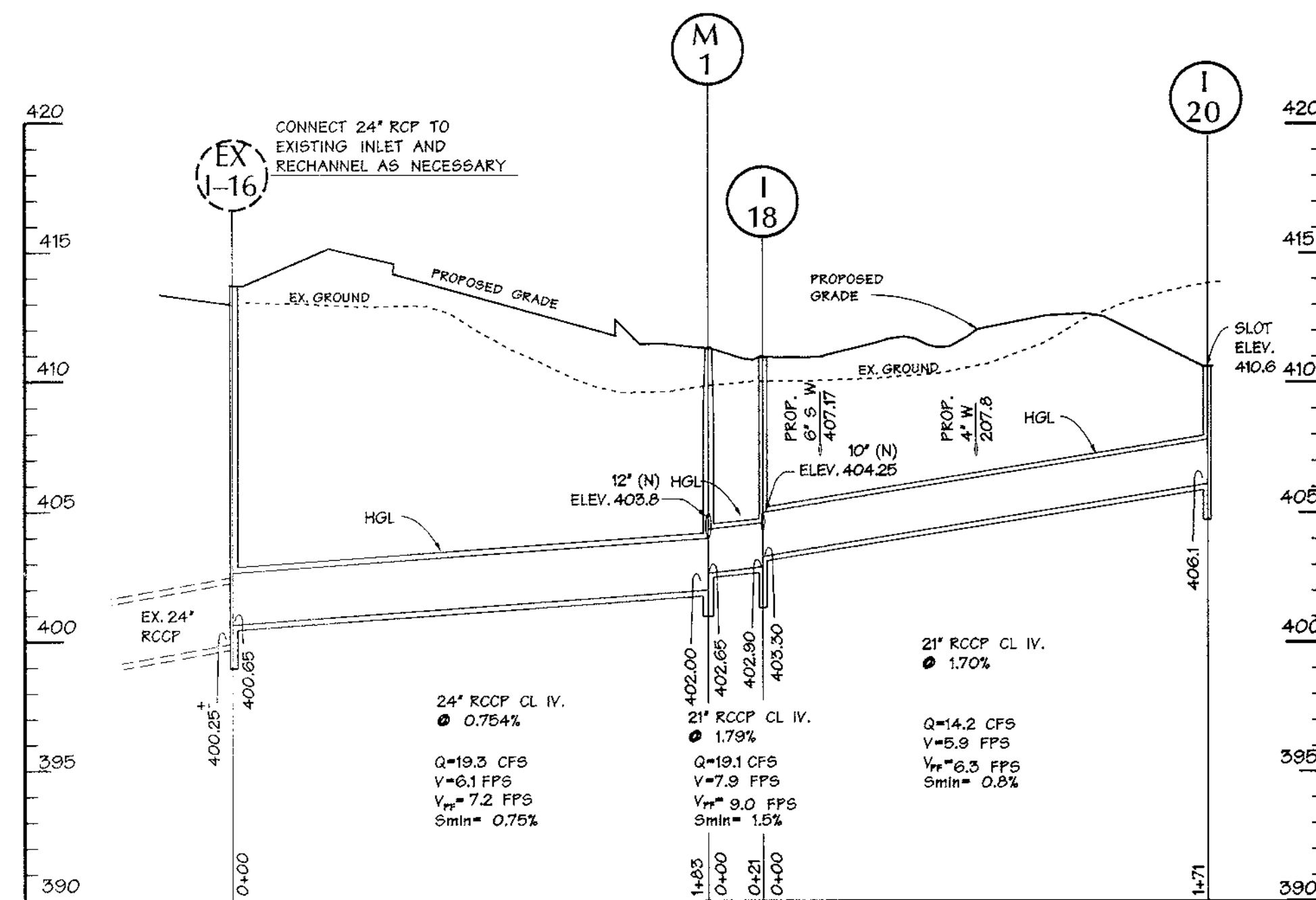


Roof Drain System

Scale: Horz. 1" = 50'
Vert. 1" = 5'

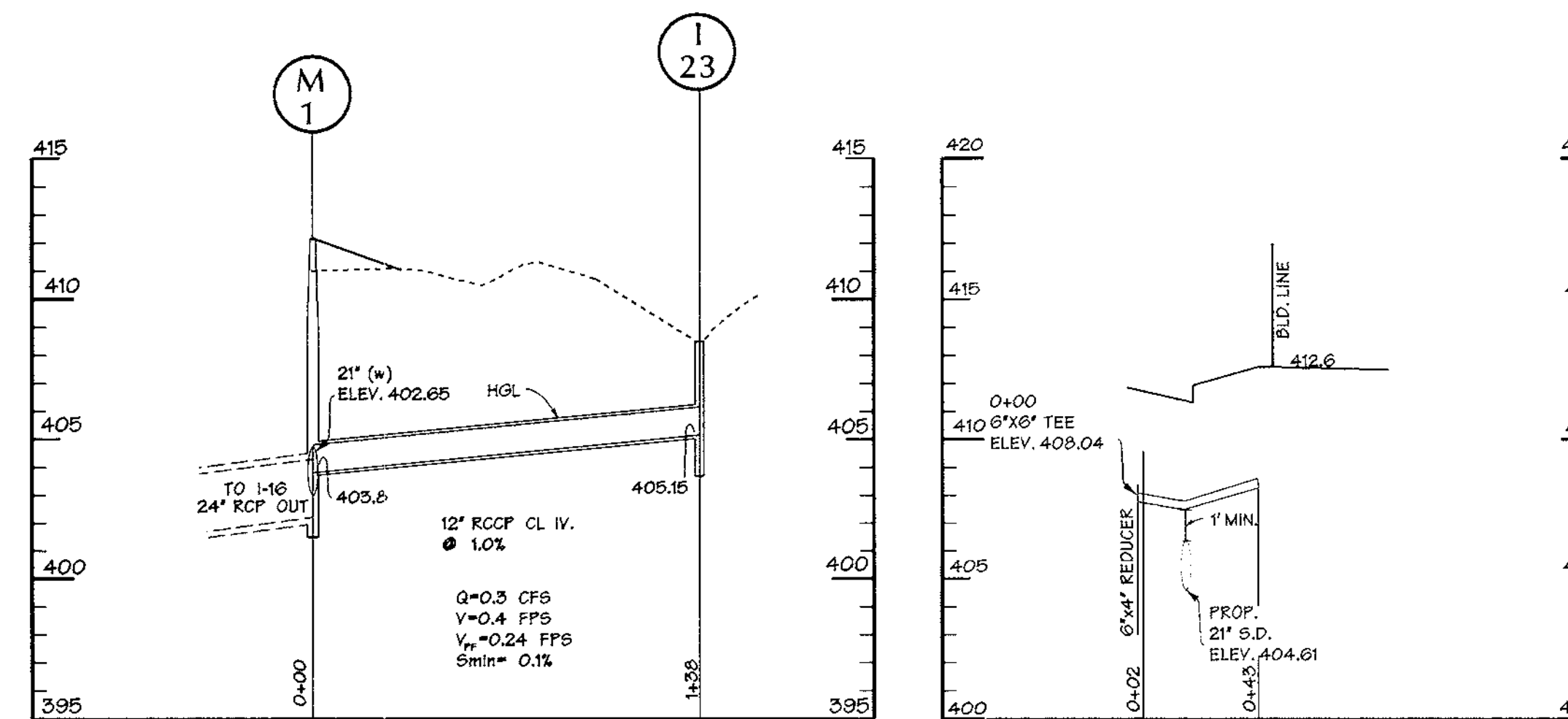
STRUCTURE SCHEDULE

NO.	TYPE	INV. IN	INV. OUT	TOP ELEVATION UPPER	REMARKS
M-1	STD. MANHOLE DIA. 4'-0"	402.65	402.00	413	HO.CO. STD. G 5.12
I-18	A-10 INLET W= 2'-6"	408.3	402.90	410.98/410.80	HO.CO. STD. G 4.41
I-20	STD. 10" INLET GRATE		406.1	411.43	HO.CO. STD. S.D. 4.11 SLOTS 4 SIDES
I-23	STD. 15" INLET		405.15	408.50	HO.CO. STD. S.D. 4.22



Storm Drain Profile

Scale: Horz. 1" = 50'
Vert. 1" = 5'



Storm Drain Profile

Scale: Horz. 1" = 50'
Vert. 1" = 5'

Private Water Line

Scale: Horz. 1" = 50'
Vert. 1" = 5'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 11/26/99 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 11/5/99 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 11/5/99 DATE

DIRECTOR

Date No. Revision Description

Childrens Discovery Center
at Montpelier Research Park - Parcel D-1

OWNER: HOPKINS ROAD LIMITED PARTNERSHIP, 9030 Red Branch Road, Suite 200, Columbia, MD 21045

DEVELOPER: KNOWLEDGE CHILD CARE REAL ESTATE, L.L.C., A DELAWARE LIMITED LIABILITY COMPANY, RICHARD SANDLER, MANAGER, 844 Moraga Drive, Los Angeles, CA 90049

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax 296 4705

SUBMITTAL NAME	SECTION AREA	LOT/PARCEL #
Montpelier Research Park	N/A	PARCEL D-1
PLAT # OR LP #	BLOCK #	ZONE
13437	17	PEC
WATER CODE	ELECT. DISTRICT	GENUS TRACT
E-21	41	605102
	SEWER CODE	
	6440000	

9/21/99
Date

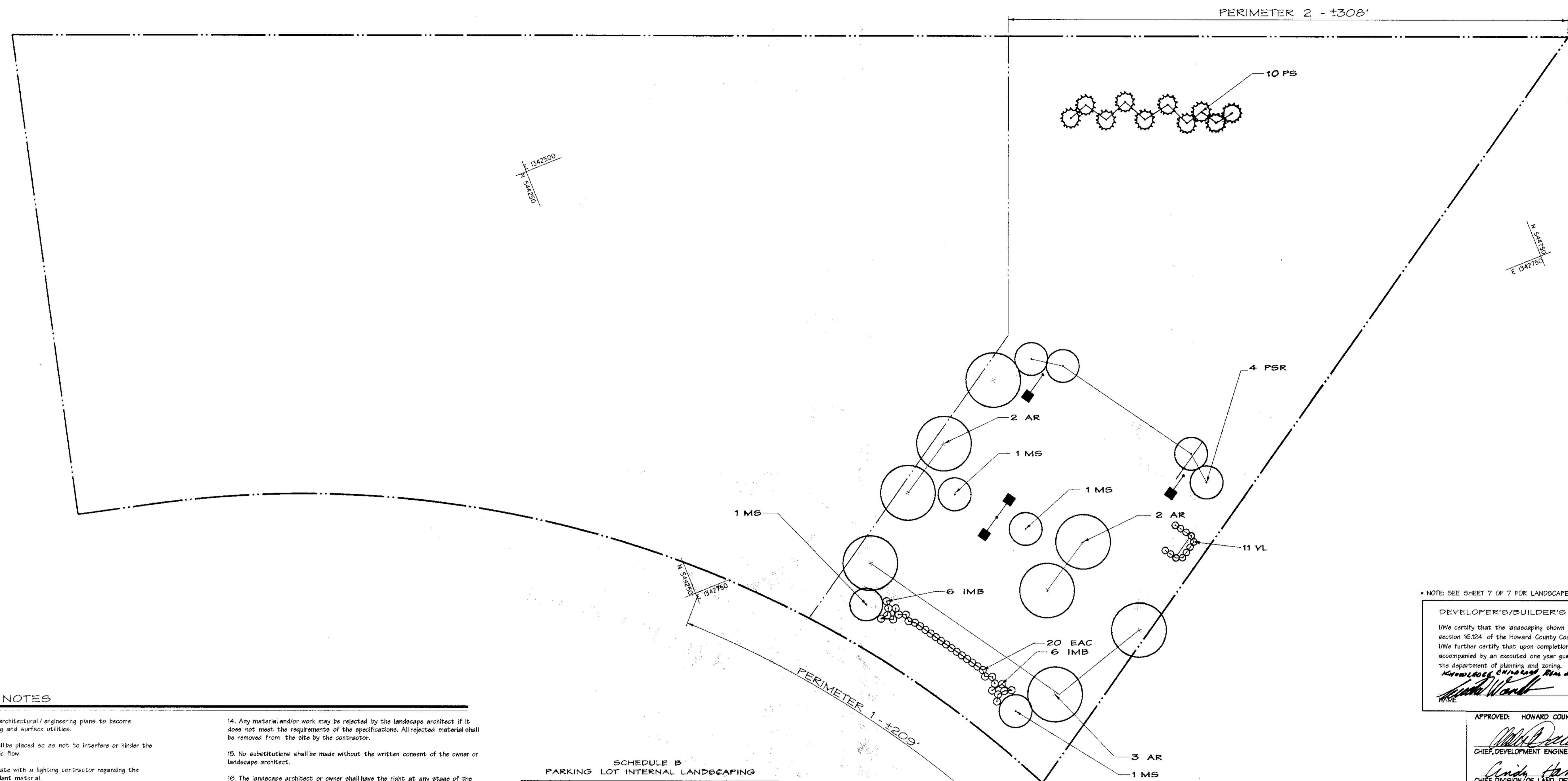
Professional Engr. No. 1551

TITLE: **UTILITY PROFILES**

Drn By: ADL Scale: 1"=50' Proj. No. 94171.G

Des By: BIS Date: 7-29-99

Chk By: Approved: **5** of 7



LANDSCAPE NOTES

- The contractor shall review architectural/engineering plans to become thoroughly familiar with grading and surface utilities.
- All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow.
- The contractor shall coordinate with a lighting contractor regarding the timing of the installation of plant material.
- The contractor shall insure that his work does not interrupt established or projected drainage patterns.
- During planting operations, excess waste materials shall be promptly and frequently removed from the site.
- The contractor is advised of the existence of underground utilities on the site. Their exact location shall be verified in the field with the owner or general contractor prior to the commencement of any digging operations. In the event they are uncovered, the contractor shall be held responsible for all damage to utilities and such damage shall not result in any additional expenses to the owner.
- If utility lines are encountered in excavation of tree pits, other locations for trees shall be made by the contractor without additional compensation. No changes of location shall be made without approval of the landscape architect.
- Maintain positive drainage out of planting beds at a minimum 2% slope. All grades, dimensions, and existing conditions shall be verified by the contractor on site before construction begins. Any discrepancies shall be brought to the attention of the landscape architect or owner.
- Every possible safeguard shall be taken to protect building surfaces, equipment, and furnishings. The contractor shall be responsible for any damage or injury to person or property which may occur as a result of his negligence in the execution of the work.
- In the event of variation between quantities shown on the plant list and the plans, the plans shall control. The contractor is responsible for verifying all plant quantities prior to the commencement of work. All discrepancies shall be reported to the landscape architect, for clarification prior to bidding. The contractor shall furnish plant materials in sizes as specified in the plant list.
- The contractor shall stake all materials located on the site for review and/or adjustment by the landscape architect prior to planting. All locations are to be approved by the landscape architect before excavation.
- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (A.A.N.), particularly with regard to size, growth, size of ball, and density of branch structure. Plant material shall be tagged at the source by the landscape architect unless this requirement is specifically waived.
- All plants (B & B or container) shall be properly identified by weather-proof labels securely attached thereto 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 landscape architect or agent in charge.
- Any material and/or work may be rejected by the landscape architect if it does not meet the requirements of the specifications. All rejected material shall be removed from the site by the contractor.
- No substitutions shall be made without the written consent of the owner or landscape architect.
- The landscape architect or owner shall have the right at any stage of the operations, to reject any and all work and material which, in his opinion, does not meet the requirements of these plans and specifications.
- The contractor shall be wholly responsible for stability and conditions of all trees and shrubs and shall be legally liable for any damage caused by instability or any plant material.
- All proposed trees to be installed either entirely in or entirely out of planting beds. Planting beds lines are not to obstructed. All shrubs and ground cover areas shall be planted in continuous prepared beds and top dressed with 3-inch shredded hardwood mulch. Mulch shall be shredded within the last six months.
- All planting beds adjacent to law, sod, or seeded areas shall be spade edged.
- Maintenance shall begin after each plant has been installed and shall continue until 90 days after final acceptance by the architect or owner representative. Maintenance includes mowing of turf, watering, pruning, weeding, fertilizing, mulching, replacement of sick or dead plants, and other care necessary for the proper growth of the plant material. The contractor must be able to provide continued maintenance if requested by the owner.
- Upon completion of all landscaping, an acceptance of the work shall be held. The contractor shall notify the landscape architect or owner for scheduling the inspection at least seven (7) days prior to the anticipated inspection date.
- All trees shall be guaranteed for 12 months from the date of acceptance. All shrubs and ground covers shall be guaranteed for 12 months from the date of acceptance.
- The contractor shall dispose of stumps and major roots of all plants to be removed. Any depression caused by the removal operations shall be refilled with fertile, friable soil placed and compacted so as to reestablish proper grade for new planting and / or lawn areas.
- The contractor shall insure adequate vertical drainage in all plant beds and planters.
- All disturbed areas on the site not planted with shrubs or ground cover shall be fine graded and seeded as noted on the landscape plan.
- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and Landscape Manual.
- Financial surety for the required landscaping has been posted as part of the DPW Developers agreement in the amount of \$5,070.00. The surety includes 11 shrubs for the dumpster enclosure.

**SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING**

NUMBER OF PARKING SPACES	49
NUMBER OF TREES REQUIRED @ 1/20 PKG. SPACES	3
NUMBER OF TREES PROVIDED	
SHADE TREES	0
OTHER TREES (2:1 SUBSTITUTION)	6
ISLANDS REQUIRED 1/20 PARKING SPACES	3
ISLANDS PROVIDED 1/20 PARKING SPACES	6

SUBSTITUTIONS: 6 FLOWERING FOR 3 SHADE.

**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

PERIMETER	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	'E'	'A'
LINEAR FEET OF ROAD	209 L.F.	
LINEAR FEET OF PERIMETER		307 L.F.
CREDIT FOR EXISTING VEGETATION	N/A	N/A
CREDIT FOR FENCE (DESCRIBE BELOW IF NEEDED)	N/A	N/A
NUMBER OF PLANTS REQUIRED		
SHADE TREES	5	5
EVERGREEN TREES	0	
SHRUBS	52	
NUMBER OF PLANTS PROVIDED		
SHADE TREES	8	0
EVERGREEN TREES	2*	10**
OTHER TREES (2:1 SUBSTITUTION)	2**	
SHRUBS (10:1 SUBSTITUTION)	32	
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)		

*SUBSTITUTIONS: (2) FLOWERING TREES FOR (10) SHRUBS & (2) EVERGREENS FOR (10) SHRUBS
** 10 Evergreens substituted for 5 shade trees.

PLANT LIST

QTY	SYM	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
TREES				
8	AR	Acer rubrum 'OCTOBER GLORY'	2 1/4"-3" CAL. 12'-14" HT.	B & B FULL HEAD
FLOWERING & EVERGREEN TREES				
4	MS	Magnolia stellata STAR MAGNOLIA	8'-10" HT.	B & B MULTISTEMMED
10	PS	Pinus strobus WHITE PINE	6'-8" HT.	B & B UNSHEADED
4	PSR	Prunus serrulata 'Kwanzan' KWANZAN CHERRY	8'-10" HT.	B & B
SHRUBS				
20	EAC	Euonymus alatus 'Compactus' DWARF WINGED BURNING BUSH	24"-30" HT.	B & B 3.5' O.C.
12	IMB	Ilex x meserveae 'BLUE PRINCESS' BLUE PRINCESS HOLLY	30"-36" HT.	B & B (TWO MALES)
11	VL	Viburnum hybridophyllum LEATHERLEAF VIBURNUM	30"-36" HT.	B & B 4.5' O.C.

* NOTE: SEE SHEET 7 OF 7 FOR LANDSCAPE PLANTING DETAILS

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that the landscaping shown on this plan will be done according to the plan, section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion, a certification of landscape installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the department of planning and zoning.

Knowledge Childrens Real Estate, LLC
 NAME: *Michael Ward* DATE: 9/13/99

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Michael Ward 11/2/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION \$ DATE

David H. Smith 11/5/99
 CHIEF, DIVISION OF LAND DEVELOPMENT \$ DATE

David H. Smith 11/5/99
 DIRECTOR \$ DATE

Date No. Revision Description

Childrens Discovery Center

at Montpelier Research Park - Parcel D-1

OWNER: HOPKINS ROAD LIMITED PARTNERSHIP, 8030 Red Branch Road, Suite 200, Columbia, MD, 21045

DEVELOPER: KNOWLEDGE CHILDCARE REAL ESTATE, L.L.C., A DELAWARE LIMITED LIABILITY COMPANY, RICHARD SANDLER, MANAGER, 844 Moraga Drive, Los Angeles, Ca, 90049

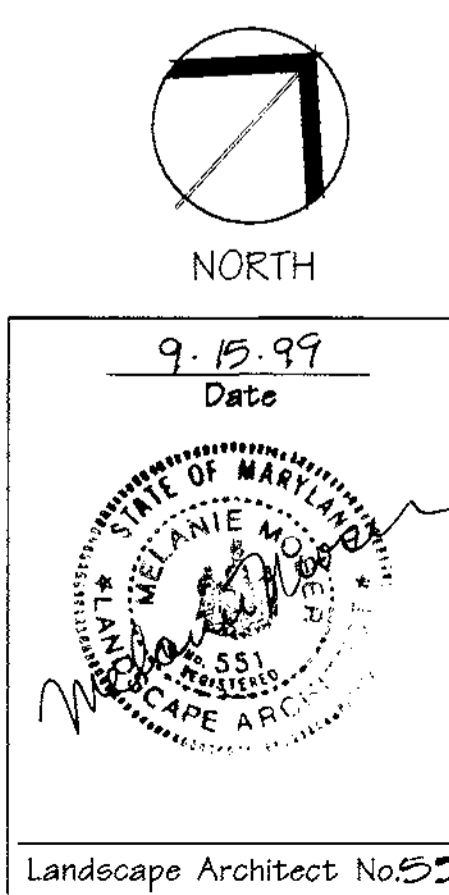
DMW
 Daft - McCune - Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

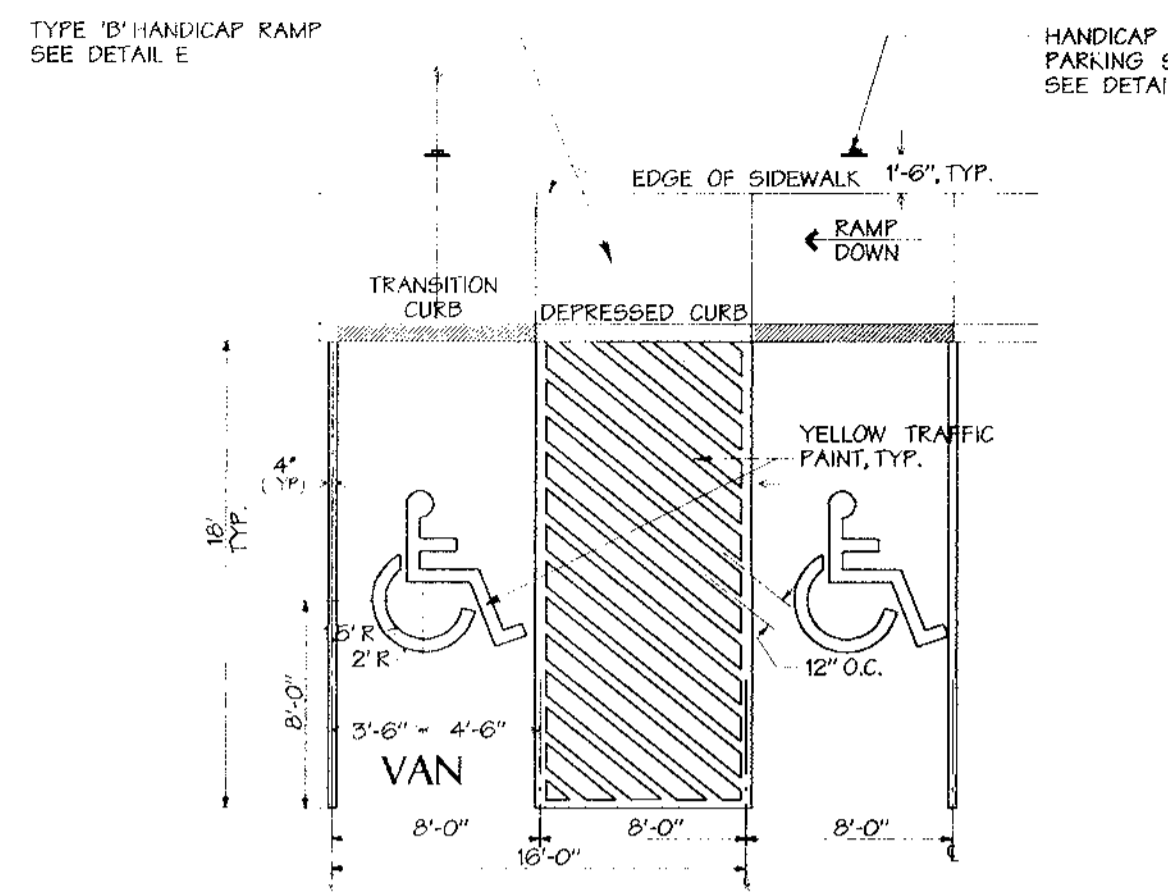
300 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 296 4705

SUBDIVISION NAME	SECTION AREA	LOT/FACEL #
Montpelier Research Park	N/A	PARCEL D-1
PLAT OR L.P. #	BLOCK #	ZONE
13437	17	REC
WATER CODE	FAZONNE MAP #	ELECT. DISTRICT
	41	9th
		GENUS TRACT #
		6061.02
	SEWER CODE	
E-21	6440000	

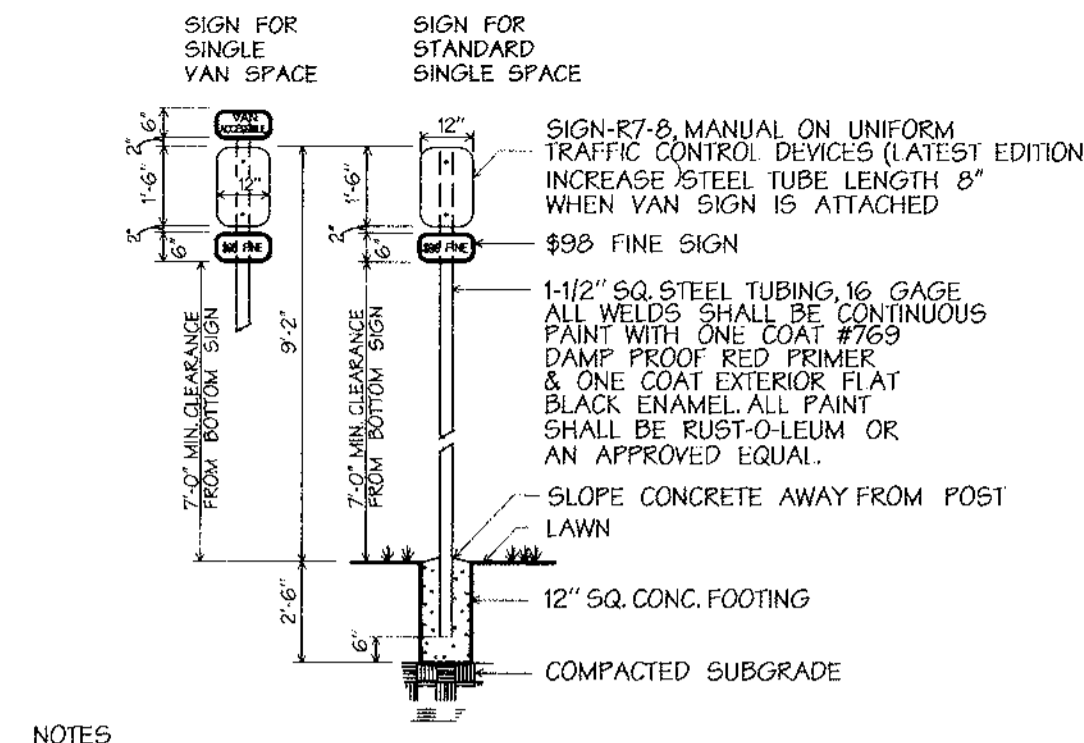
LANDSCAPE PLAN

Des By: CSC Scale: 1"=30' Proj. No. 94171.G
 Des By: CSC Date: 7-29-99
 Chk By: MM Approved: **6** of 7





A Handicap Parking: Van & Standard
NOT TO SCALE

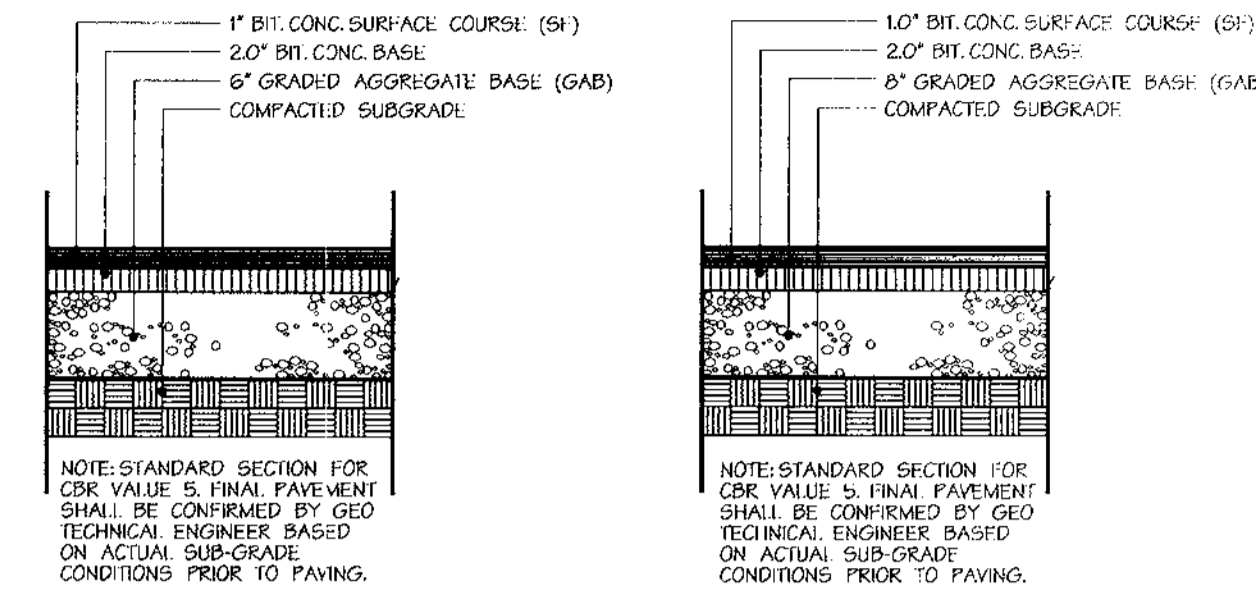


NOTES

- DISTANCE FROM GROUND TO BOTTOM OF SIGN SHALL BE 7'
- SEE HANDICAPPED PARKING SPACE DETAIL THIS SHEET FOR LOCATION OF HANDICAPPED SIGN.
- SPACE MARKED "V" ON SITE PLAN SHALL INCLUDE "VAN SIGN" AS REQUIRED
- SIGNS SHALL CONFORM TO CURRENT ADA CRITERIA.

SIGN COLORS
LETTERS AND BORDER - GREEN
WHITE H.C. SYMBOLS ON BLUE BACKGROUND
BACKGROUND - WHITE

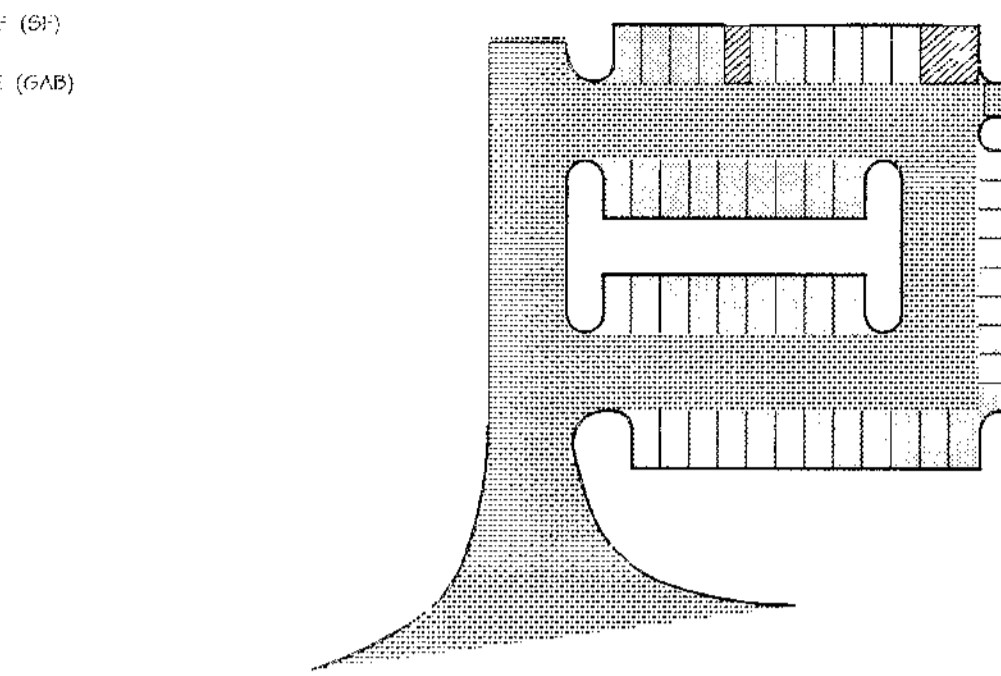
D Handicapped Parking Signs
NOT TO SCALE



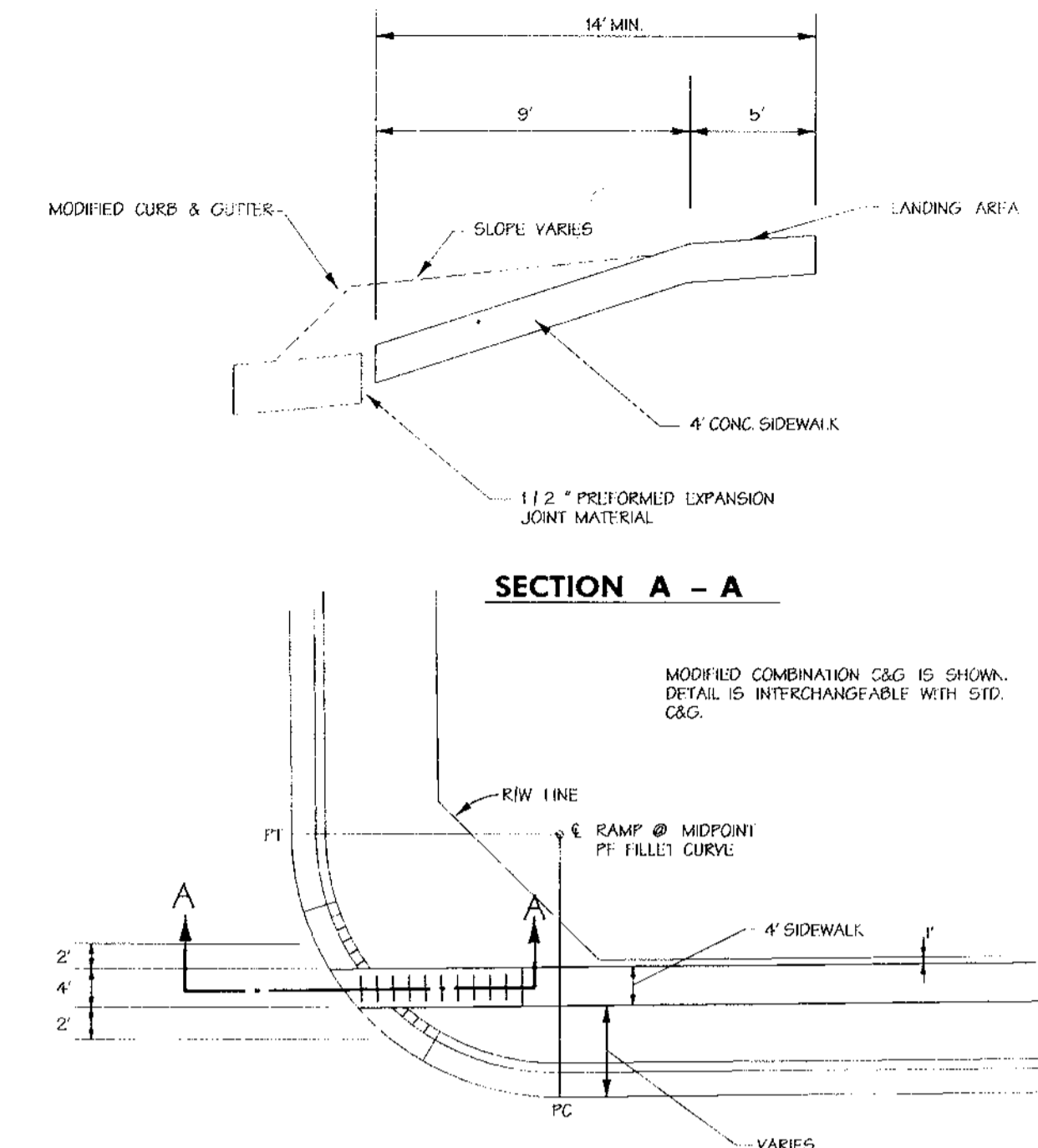
PARKING STALLS
PAVEMENT DESIGN BASED ON REPORT BY GILLS ENGINEERING ASSOCIATES, INC. DATED APRIL 29, 1999.

DRIVE LANES

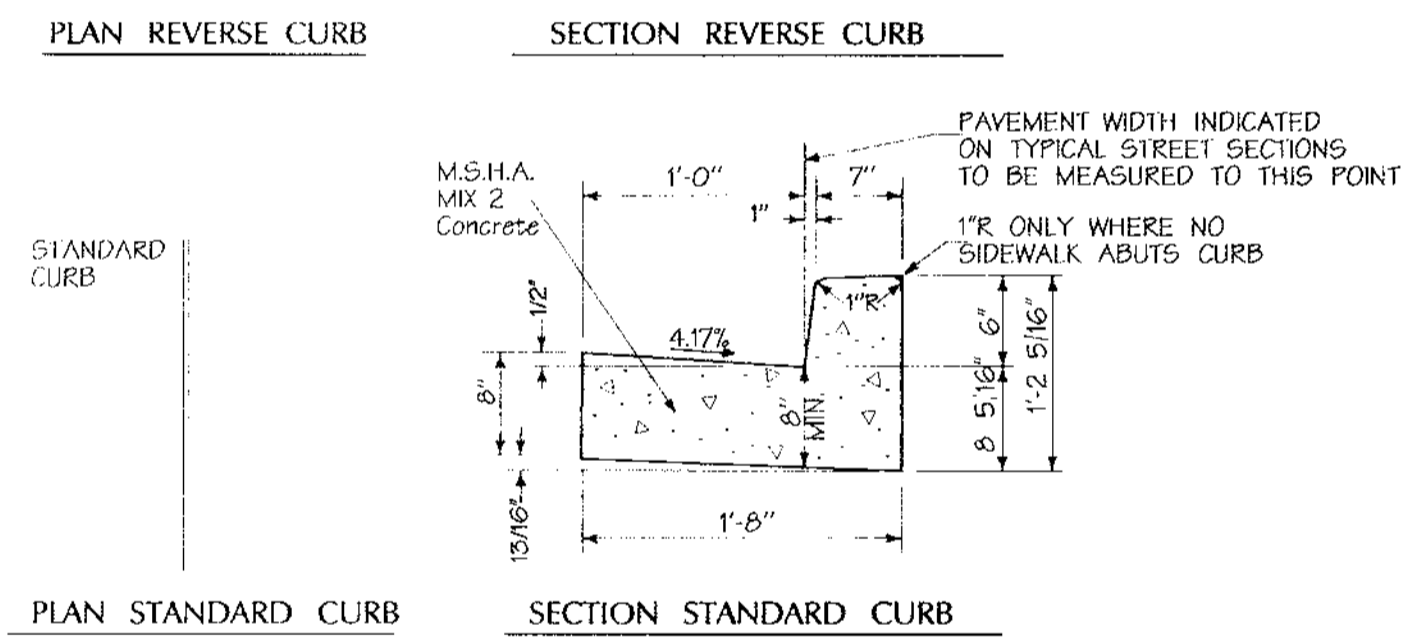
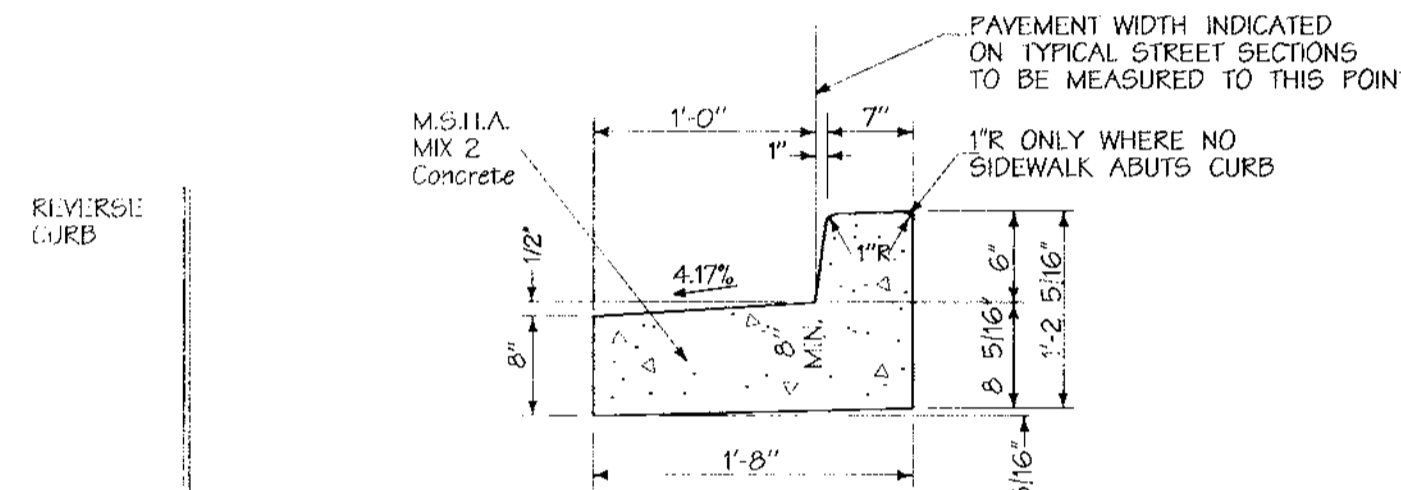
G Paving
NOT TO SCALE



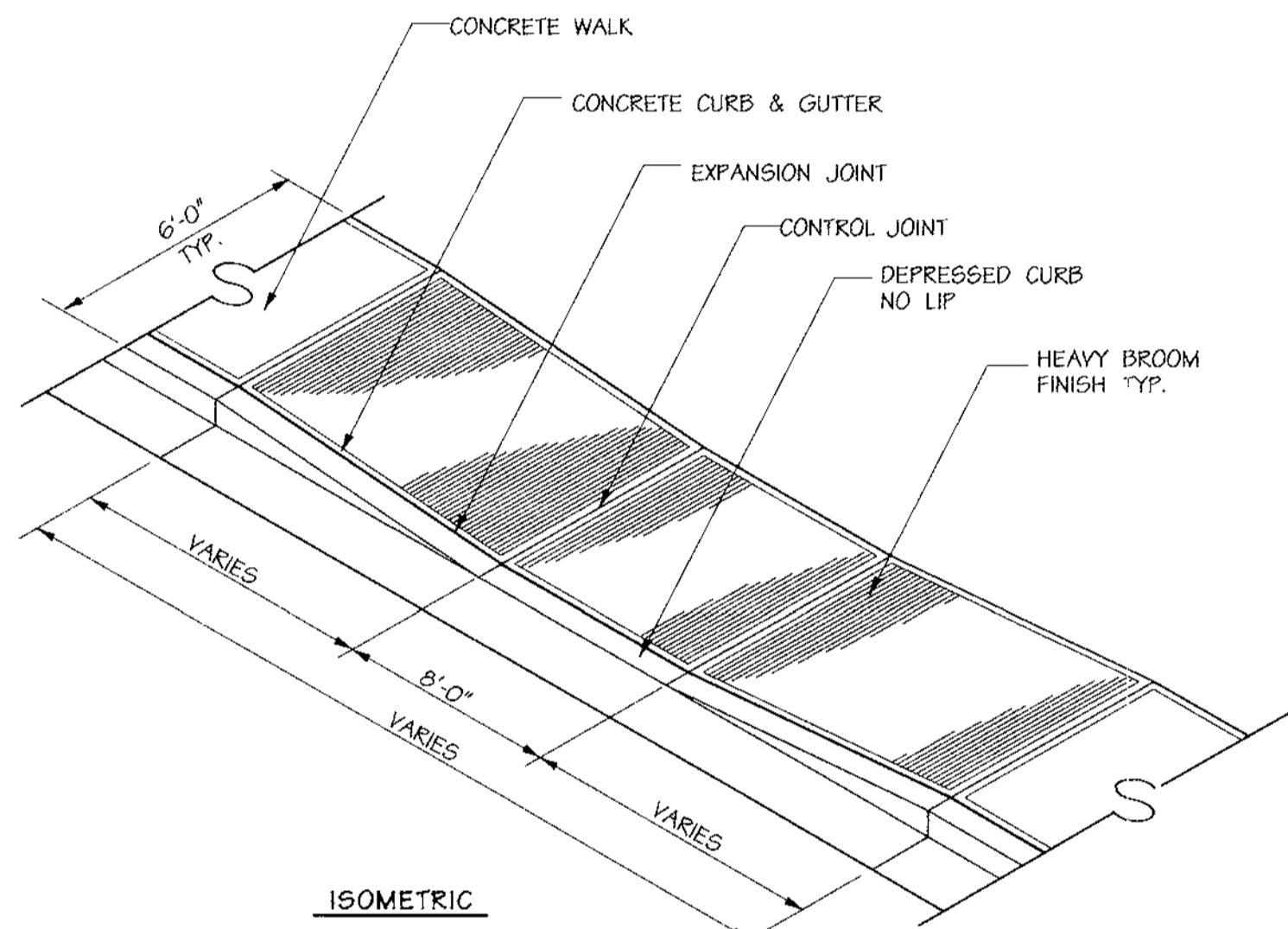
I Paving Plan
NOT TO SCALE



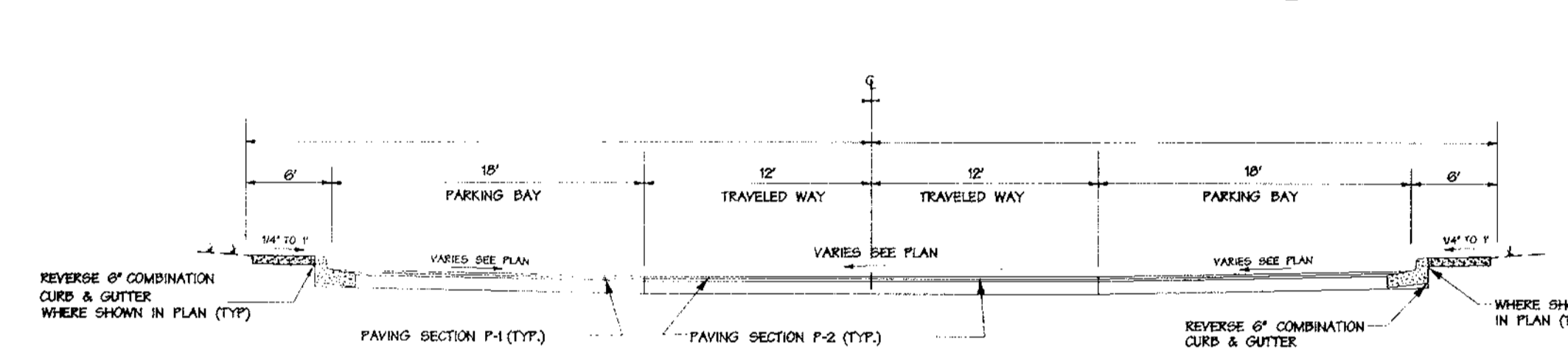
L Type 'A' Handicapped Ramp
NOT TO SCALE



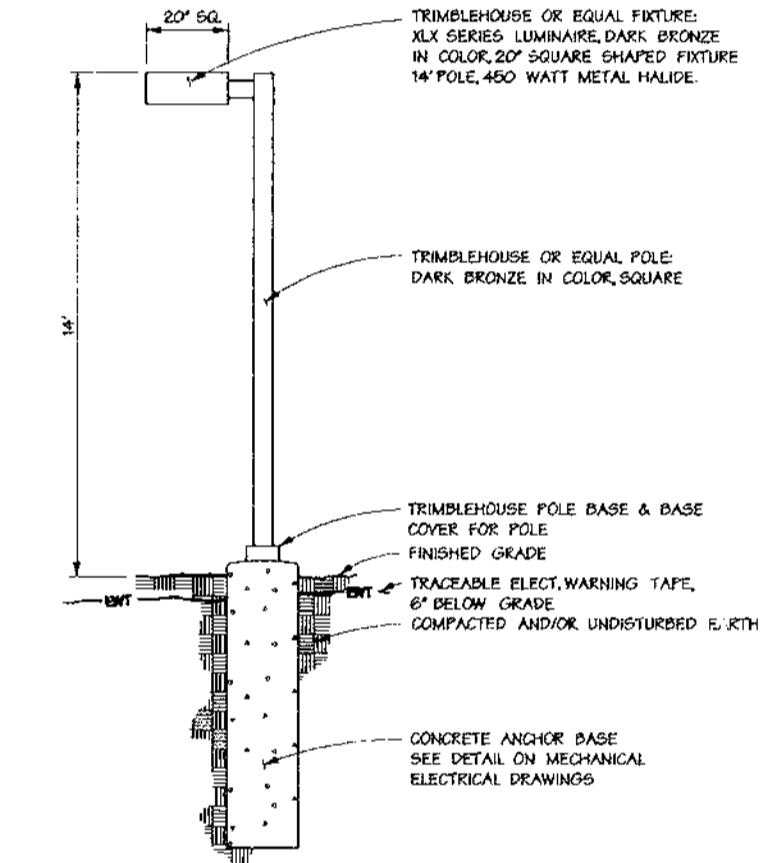
B Concrete Curb Typical
NOT TO SCALE



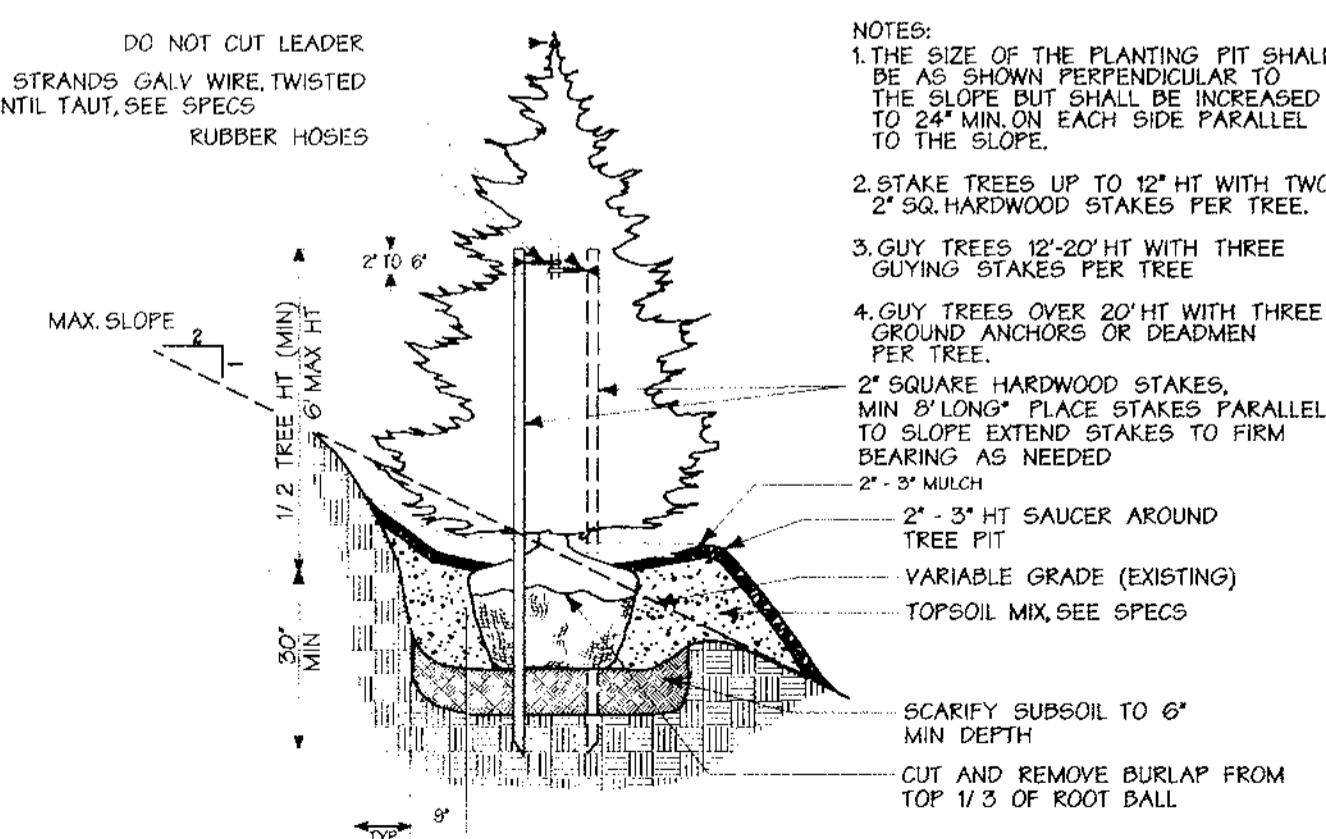
E Type 'B' Handicapped Ramp
NOT TO SCALE



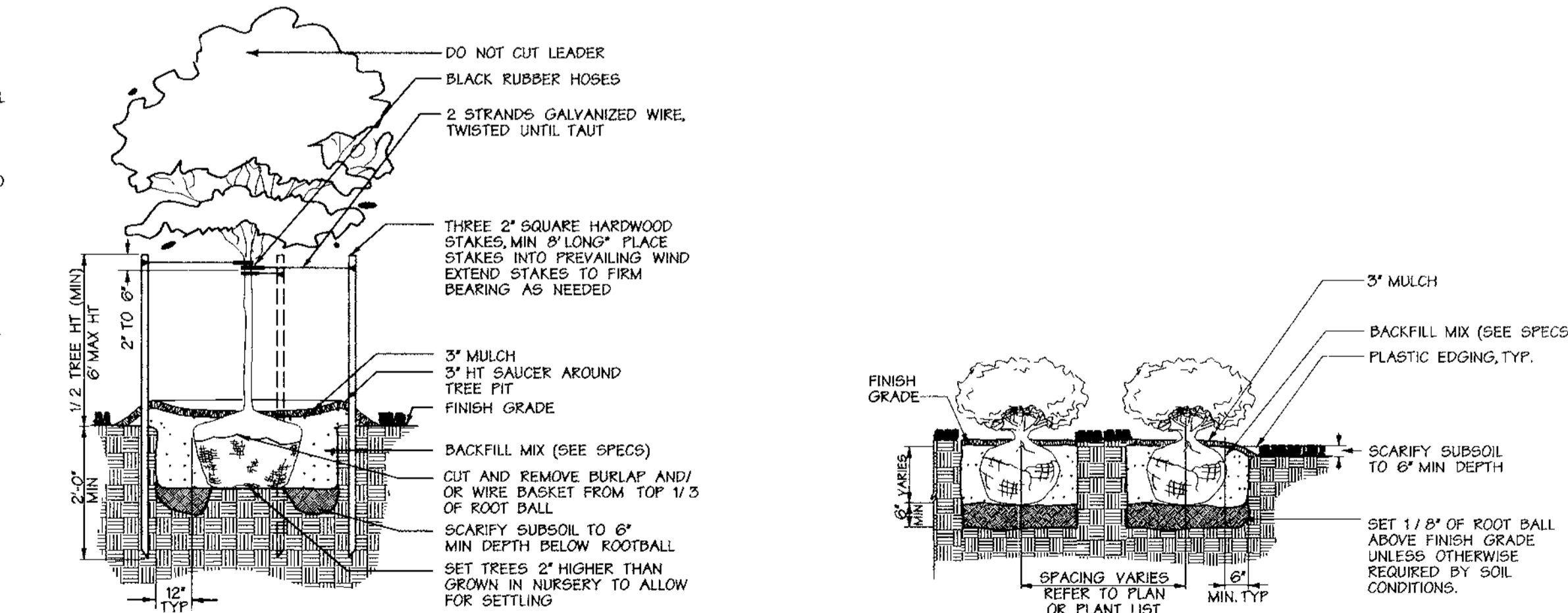
J Parking Lot Section
NOT TO SCALE



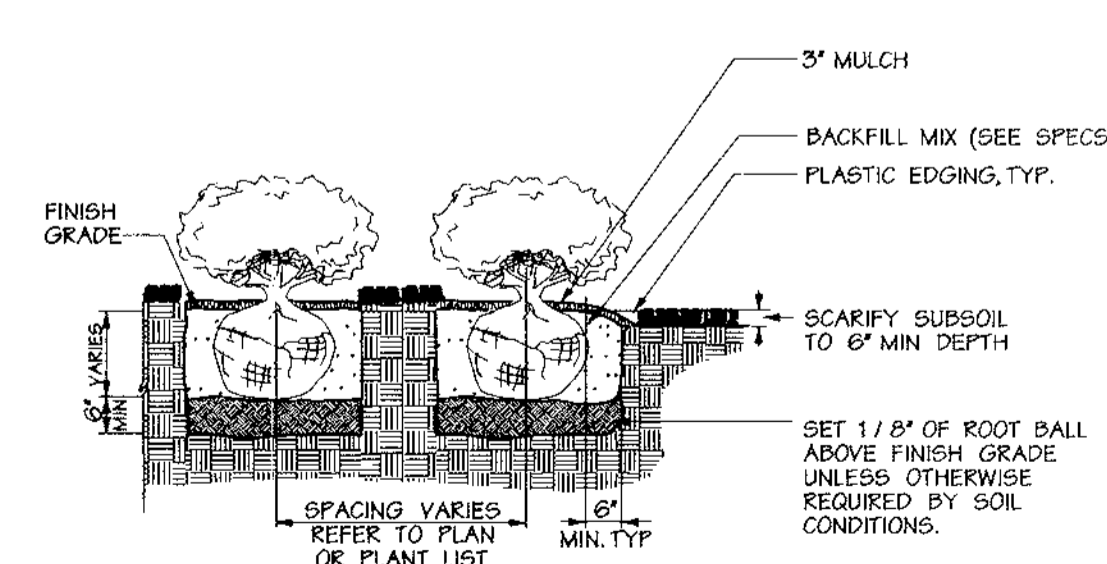
M Light Pole
NOT TO SCALE



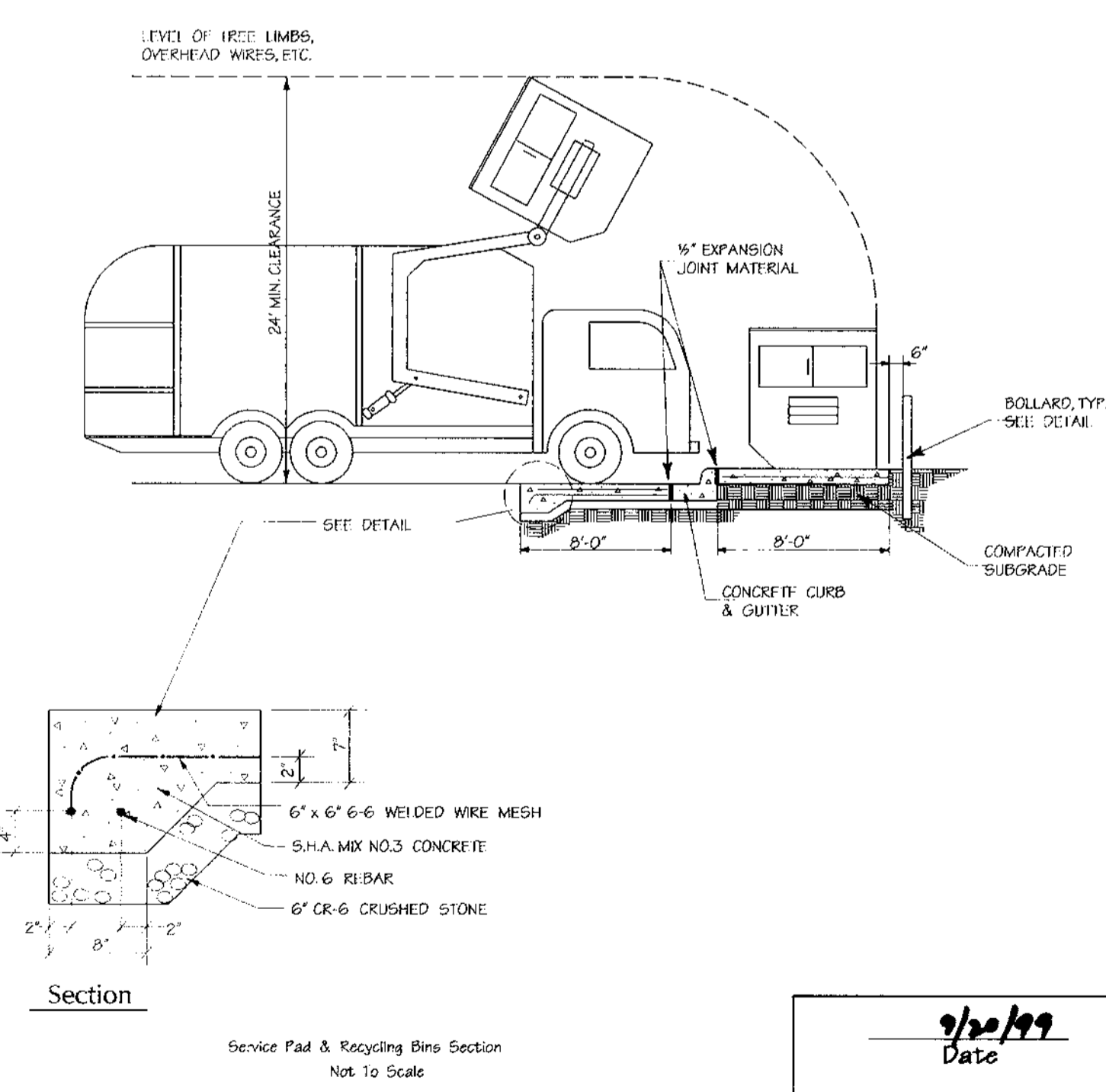
C Evergreen Tree Planting on Slope
NOT TO SCALE



F Tree Planting 2 1/2"-3" Caliper
NOT TO SCALE



H Shrub Bed Planting
NOT TO SCALE



K Service Pad & Dumpster Bin
NOT TO SCALE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>Howard County</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	11/2/99 DATE
<i>Linda Kermita</i> CHIEF, DIVISION OF LAND DEVELOPMENT	11/5/99 DATE
<i>John Smith</i> DIRECTOR	11/5/99 DATE

Date	No.	Revision Description

Childrens Discovery Center
at Montpelier Research Park - Parcel D-1

OWNER: HOPKINS ROAD LIMITED PARTNERSHIP, 9030 Red Branch Road, Suite 200, Columbia, MD. 21045

DEVELOPER: KNOWLEDGE CHILDCARE REAL ESTATE, LLC, A DELAWARE LIMITED LIABILITY COMPANY, RICHARD SANDLER, MANAGER, 844 Moraga Drive, Los Angeles, Ca. 90048

DMW Daft - McCune - Walker, Inc. A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals		200 East Pennsylvania Avenue Towson, Maryland 21286 410 296 3333 Fax: 296 4705
SUBDIVISION NAME: Montpelier Research Park	SECTION AREA: N/A	LOT/PARCEL # PARCEL D-1
PLAT OR L.P. BLOCK # ZONE: 13137 17 PEC	TAXATION MAP: 41	ELECT. DISTRICT: 5th
WATER CODE: E-21	SEWER CODE: 6440000	CENSUS TRACT: 605102
TITLE: SITE & LANDSCAPE DETAILS		
Drn By: CSC	Scale: AS SHOWN	Proj. No. 94171.G
Des By:	Date: 9.10.99	
Chk By:	Approved:	7 of 7

9/20/99
Date

Professional Engr. No. 10000

SHEET INDEX	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	MARYLAND ROUTE 97 PLAN AND PROFILE
3	ROLLING HILLS DRIVE PLAN AND PROFILE
4	COUNTRY CLUB DRIVE PLAN AND PROFILE
5	CLEAR DRIVE COURT PLAN AND PROFILE
6	WINDING PATH COURT PLAN AND PROFILE
7 - 9	STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
10	S.W.M. GRADING AND SEDIMENT CONTROL PLAN
11	TRAFFIC CONTROL AND STRIPING PLAN
12 - 13	CROSS-SECTIONS (MD ROUTE 97)
14 - 16	STORM DRAIN PROFILES
17	DRAINAGE AREA MAP
18	LANDSCAPE PLAN
19	DETAIL SHEET
20 - 21	SEDIMENT CONTROL NOTES AND DETAILS
22 - 23	S.W.M. NOTES AND DETAILS
24	FOREST CONSERVATION PLAN
25	FOREST CONSERVATION NOTES AND DETAILS
26	S.W.M. ACCESS ROAD PROFILE
27	S.W.M. SOIL BORINGS

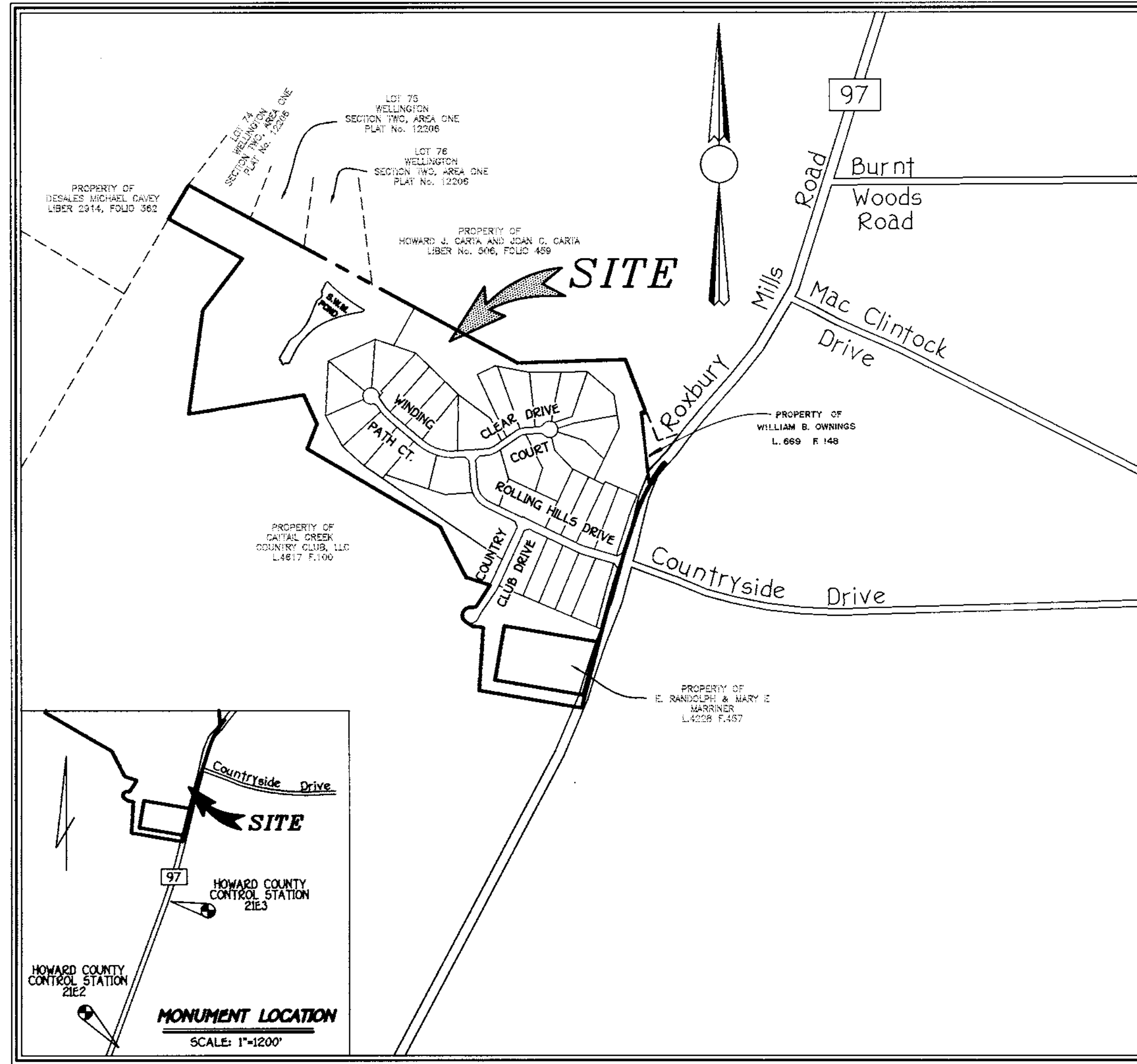
**FINAL ROAD CONSTRUCTION, GRADING AND
 STORMWATER MANAGEMENT PLANS**
CATTAIL RIDGE
LOTS 4 THRU 37
AND
PRESERVATION PARCELS 'A' THRU 'C'
**(A RESUBDIVISION OF "CATTAIL RIDGE", LOTS 1 THRU 3, PLAT NO. 13626,
 AND THE RESIDUE OF SYNDACON PROPERTY, INC., LIBER 4228, FOLIO 464)**
ZONING "RC-DEO"
TAX MAP No. 21, PARCEL NO. 228, GRID NO. 3
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard M. Casper 12-1-99
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chris Hamilton 12/17/99
 CHIEF, DIVISION OF LAND DEVELOPMENT
 APPROVED: DEPARTMENT OF ENGINEERING
W. J. ... 12/3/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

MINIMUM LOT SIZE CHART				
LOT No.	GROSS AREA	PIPESTEM AREA	REMAINING AREA	MINIMUM LOT SIZE
13	55,521 SQ.FT.*	4,211 SQ.FT.*	51,310 SQ.FT.*	51,310 SQ.FT.*

ROAD CLASSIFICATION		
ROAD NAME	CLASSIFICATION	R/W
ROLLING HILLS DRIVE	MINOR COLLECTOR / ACCESS STREET	50' / 40'
COUNTRY CLUB DRIVE	ACCESS STREET	40'
CLEAR DRIVE COURT	ACCESS PLACE	40'
WINDING PATH COURT	ACCESS PLACE	40'

TRAFFIC CONTROL SIGNS				
STREET NAME	CL. STATION	OFFSET	POSTED SIGN	SIGN CODE
ROLLING HILLS DRIVE	7+95	13'R	ROAD NARROWS	W5-1
ROLLING HILLS DRIVE	8+65	13'L	ROAD NARROWS	W5-1
COUNTRY CLUB DRIVE	5+15	14'R	ROAD NARROWS	W5-1
COUNTRY CLUB DRIVE	5+85	14'L	ROAD NARROWS	W5-1
CLEAR DRIVE COURT	2+45	11'R	ROAD NARROWS	W5-1
CLEAR DRIVE COURT	3+15	11'L	ROAD NARROWS	W5-1
WINDING PATH COURT	0+75	11'R	ROAD NARROWS	W5-1
WINDING PATH COURT	1+45	11'L	ROAD NARROWS	W5-1
WINDING PATH COURT	3+85	11'R	ROAD NARROWS	W5-1
WINDING PATH COURT	4+55	11'L	ROAD NARROWS	W5-1
ROLLING HILLS DRIVE	0+72	32'L	STOP	R1-1
ROLLING HILLS DRIVE	12+26	20'R	STOP	R1-1
COUNTRY CLUB DRIVE	0+32	24'L	STOP	R1-1
ROLLING HILLS DRIVE	2+00	14'R	SPEED LIMIT 25	R2-1
ROLLING HILLS DRIVE	7+00	13'R	SPEED LIMIT 25	R2-1
COUNTRY CLUB DRIVE	2+00	13'R	SPEED LIMIT 25	R2-1
CLEAR DRIVE COURT	2+00	11'R	SPEED LIMIT 25	R2-1
WINDING PATH COURT	2+00	11'R	SPEED LIMIT 25	R2-1
ROLLING HILLS DRIVE	0+45	0' C	KEEP RIGHT	R4-7
ROLLING HILLS DRIVE	2+00	14' L	STOP AHEAD	W5-10



- 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 (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.
 - TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
 - 2 FOOT CONTOUR TOPOGRAPHY AND EXISTING CONDITIONS BASED ON AERIAL TOPOGRAPHIC SURVEY PREPARED BY AERIAL MAPPING CO., INC., FLOWN IN 1998.
 - THE COORDINATES SHOWN HEREON ARE BASED UPON HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT Nos. 21E2 AND 21E3 WERE USED FOR THIS PROJECT.

21E2	N 583.065.3000	21E3	N 584.559.1765
	E 1,300,868.4336		E 1,302,074.5340
 - WATER IS PRIVATE.
 - SEWER IS PRIVATE.
 - THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, INC. (APPROVED UNDER 598-09).
 - BACKGROUND INFORMATION:
 - A. SUBDIVISION NAME: CATTAIL RIDGE
 - B. TAX MAP NO.: 21
 - C. PARCEL NO.: 228
 - D. ZONING: RC-DEO
 - E. ELECTION DISTRICT: FOURTH
 - F. TOTAL TRACT AREA: 88.359 AC. +
 - G. NO. OF BUILDABLE LOTS: 32
 - H. NO. OF PRESERVATION PARCELS: 3
 - I. NO. OF OPEN SPACE LOTS: 2
 - J. PRELIMINARY PLAN APPROVAL DATE: FEBRUARY 8, 1999
 - K. PREVIOUS FILE Nos.: 598-09 AND P99-02
 - L. TOTAL AREA OF OPEN SPACE REQUIRED: (88.359 AC. x 5%) = 4.419 AC. +
 - M. TOTAL AREA OF OPEN SPACE PROVIDED: 4.419 AC. +
 - REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE TO BE PROVIDED AT THE JUNCTION OF THE PIPE / FLAG STEM AND THE ROAD R/W AND NOT ONTO THE PIPE / FLAG STEM DRIVEWAY.
 - NO CEMETERIES EXIST ON THE PROPERTY.
 - ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF ASTM T-100.
 - THE WETLAND AND FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. AND APPROVED UNDER 598-09.
 - NOISE STUDY WAS PREPARED BY WILDMAN ENVIRONMENTAL SERVICES AND APPROVED UNDER P99-02.
 - THE FOREST CONSERVATION EASEMENTS HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 161200 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. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
 - STORMWATER MANAGEMENT FACILITY:
 - TYPE - WET POOL DETENTION FACILITY
 - OWNER - HOMEOWNER'S ASSOCIATION (PRIVATE)
 - MAINTENANCE - HOMEOWNER'S ASSOCIATION (PRIVATE)
 - PROPERTY SUBJECT TO MDE DAM SAFETY FILE NO. 99-PO-2096.
 - FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT ARE BEING PROVIDED BY 0.097 ACRES OF REFORESTATION AS SHOWN ON SHEETS 24 AND 25. IN ADDITION TO THIS REFORESTATION REQUIREMENT THERE IS 20.603 ACRES OF FOREST RETENTION AREAS WHICH INCLUDE FLOODPLAIN AREAS AND THE EXISTING 1.344 ACRES OF RETENTION AREA PLATED UNDER P-99-21.

VICINITY MAP
SCALE: 1"=600'

OWNERS

SYNDACON PROPERTY, INC.
 c/o BRS DEVELOPERS, LLC
 ATTENTION: Mr. J. THOMAS SCRIVENER
 8909 CENTER PARK DRIVE, SUITE 209
 COLUMBIA, MARYLAND 21045

WILLIAMSBURG GROUP, L.L.C.
 ATTENTION: Mr. CHRIS LUNDE
 P.O. BOX 1038
 COLUMBIA, MARYLAND 21044

GOODER BUILDERS, INC.
 ATTENTION: Mr. ROBERT GOODER
 10705 CHARTER DRIVE, SUITE 320
 COLUMBIA, MARYLAND 21044

ROSEHARK CUSTOM HOMES, INC.
 ATTENTION: Mr. S. ROBERT LAUFMAN
 13620 BALTIMORE BOULEVARD
 LAUREL, MARYLAND 20707

DEVELOPER

SYNDACON PROPERTY, INC.
 c/o BRS DEVELOPERS, LLC
 ATTENTION: Mr. J. THOMAS SCRIVENER
 8909 CENTER PARK DRIVE, SUITE 209
 COLUMBIA, MARYLAND 21045

CATTAIL RIDGE
LOTS 4 - 37
AND PRESERVATION PARCELS 'A' - 'C'
 (A RESUBDIVISION OF "CATTAIL RIDGE", LOTS 1 THRU 3, PLAT NO. 13626,
 AND THE RESIDUE OF SYNDACON PROPERTY, INC., LIBER 4228, FOLIO 464)
 ZONED RC-DEO
 TAX MAP NO. 21 PARCEL NO. 228 GRID NO. 3
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: JUNE 1, 1999
 SHEET 1 OF 27



