GENERAL NOTES

1. Maximum building height = 50'.
2. All areas not being paved or receiving building coverage shall be stabilized in accordance with the plans approved by the Howard Soil Conservation District.
3. Any damage to public rights-of-way and/or adjacent properties shall be repaired immediately at the contractor's expense.
4. The contractor shall maintain at least a 2' level bench behind all curb and gutter in fill areas.
5. The contractor shall verify all existing utilities to his own satisfaction before starting construction.
6. All slopes shall be 2:1 or flatter.
7. All work shall be done in accordance with Howard County Standard Specifications and Details for Construction, or as shown on these plans.
8. The contractor shall notify the C & P Telephone Co. and the Gas and Electric Company five days prior to starting work shown on these plans by calling "Miss Utility". Call collect 1-559-0100.
9. For details of ramps and signs for the handicapped see the Maryland Building Code for the handicapped and Aged and as shown hereon.
10. The contractor shall maintain a minimum of 3.5' cover over all proposed water lines.
11. All rip-rap shall be placed on filter cloth.
12. The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 992-2417 or 792-7272.
13. The contractor shall remove all existing paving, curb and gutter, etc. that may interfere with proposed construction.
14. All utilities installed shall receive full trench compaction.
15. All water main tees, bends, caps, etc. shall be buttressed in accordance with Howard County Design requirements.
16. SERVICE CLAMPS ARE TO HAVE STAINLESS STEEL CLAMPS.

FOR BUILDING PROFILES SECT A-A, B-B, C-C & D-D SEE SHEET 9 OF 11

REVISION #2
△2 INCREASED HIGHT OF EXISTING BUILDING BY 18.5 ±
REVISION #2 PREPARED BY: BALTIMORE LAND DESIGN GROUP INC. CONSULTING ENGINEERS, 222 SCHILLING CIRCLE SUITE 105 HUNT VALLEY, MARYLAND, 21030

REVISION #3
△3 ADDED TWO 8'x40' CHILLERS (8' HIGH), AND TWO TRANSFORMERS, ADDED STEEL POSTS WITH CHAIN, ADDED CONCRETE SLAB AND GUARD POST BOLLARD (LOCATIONS AND DETAIL), REVISED PARKING TABULATION.
REVISION #3 PREPARED BY BALTIMORE LAND DESIGN GROUP INC. CONSULTING ENGINEERS, 222 SCHILLING CIRCLE SUITE 105, HUNT VALLEY, MARYLAND 21030

Revision #2 only — 6/1/04
Rev. #3 only — 7/26/04

SITE DATA

TOTAL AREA OF SITE:-	19.109 AC±
AREA OF PARCEL E-1	8.801 AC±
AREA OF PARCEL E-2	10.308 AC±
AREA OF PARCEL E-2 (PHASE I)	2.639 AC±
EXISTING ZONING:	M-2
EXISTING USE:	VACANT
PROPOSED USE:	OFFICE/WAREHOUSE
PARKING REQUIRED AS TABULATED	164 SPACES
PARKING PROVIDED (INCLUDES 8 HDCP)	209 SPACES
BLDG. COVERAGE - PARCEL E-1 :- 3.523 / 8.801 =	40%
BLDG. COVERAGE - PARCEL E-2 (PHASE I) 0.845 / 2.639 =	32%
% OPEN SPACE - PARCEL E-1 - 2.050 / 8.801 =	23%
% OPEN SPACE - PARCEL E-2 (PHASE I) - 0.805 / 2.639 =	30%
AREA TO BE DISTURBED - PARCEL E-1	= 8.600 AC±
AREA TO BE DISTURBED - PARCEL E-2	= 10.308 AC±
AREA TO BE VEGETATIVELY STABILIZED (E-1)	= 2.050 AC±
AREA TO BE VEGETATIVELY STABILIZED (E-2)	= 8.473 AC±
BUILDING & PAVING COVERAGE (E-1)	6.217 AC±
BUILDING & PAVING COVERAGE (E-2) - PHASE I	1.835 AC±

AREA PARKING LOTS E-1	46,188 S.F.
AREA PARKING LOTS E-2 - PHASE I	15,187 S.F.
AREA LANDSCAPED ISLANDS E-1	2,351 S.F.
AREA LANDSCAPED ISLANDS E-2 - PHASE I	1,010 S.F.
% LANDSCAPED ISLANDS TO PARKING E-1	= 5.1%
% LANDSCAPED ISLANDS TO PARKING E-2 - PHASE I	= 6.7%

PARKING TABULATION
PARCEL E-2 (PHASE I) BLDG "C"

TOTAL FLOOR AREA 36,800 S.F.
(20%) OFFICE = 7,360 SF. @ 1 EMPL./200 S.F. = 37 EMPL.
37 EMPL @ 7 P.S./10 EMPL. = 26 PS
(80%) WAREHOUSE = 29,440 SF. @ 1 EMPL./1000 S.F. = 29 EMPL.
29 EMPL @ 1 PS./2 EMPL = 15 P.S.
TOTAL PARKING SPACE REQ'D. = 41
(INCL. 2 HDCP) TOTAL PARKING SPACE PROVD. = 49
ALL PARKING SPACES EXCEPT HDCP SHALL BE 9'x18'

PARKING TABULATION
PARCEL E-1 BLDG. B

TOTAL FLOOR AREA 153,480 S.F.
(10%) OFFICE = 15,348 S.F. @ 1 EMPL./200 SF. = 77 EMPL.
77 EMPL. @ 7 P.S./10 EMPL. = 54 PS
WAREHOUSE = 123,732 SF @ 1 EMPL/1000 S.F. 124 EMPL.
124 EMPL @ 1 P.S./2 EMPL 62 PS
△1 MANUFACTURING 14,400 SF @ 1PS/500SF 29 PS
TOTAL PARKING SPACE REQD. 145 P.S. △3
(INCL. 10 HDCP) TOTAL PARKING SPACE PROVD 152 P.S.
51 ADDT'NL POTENTIAL PARKING SPC'S 202 P.S.

NOTE:- THE SQUARE FEET AREAS OF SPECIFIC USES AND THE MAXIMUM NUMBERS OF EMPLOYEES PER USE STATED ON THIS PLAN SHALL NOT BE CHANGED OR INCREASED WITHOUT THE OFFICE OF PLANNING AND ZONING'S REVIEW AND APPROVAL.

LEGEND

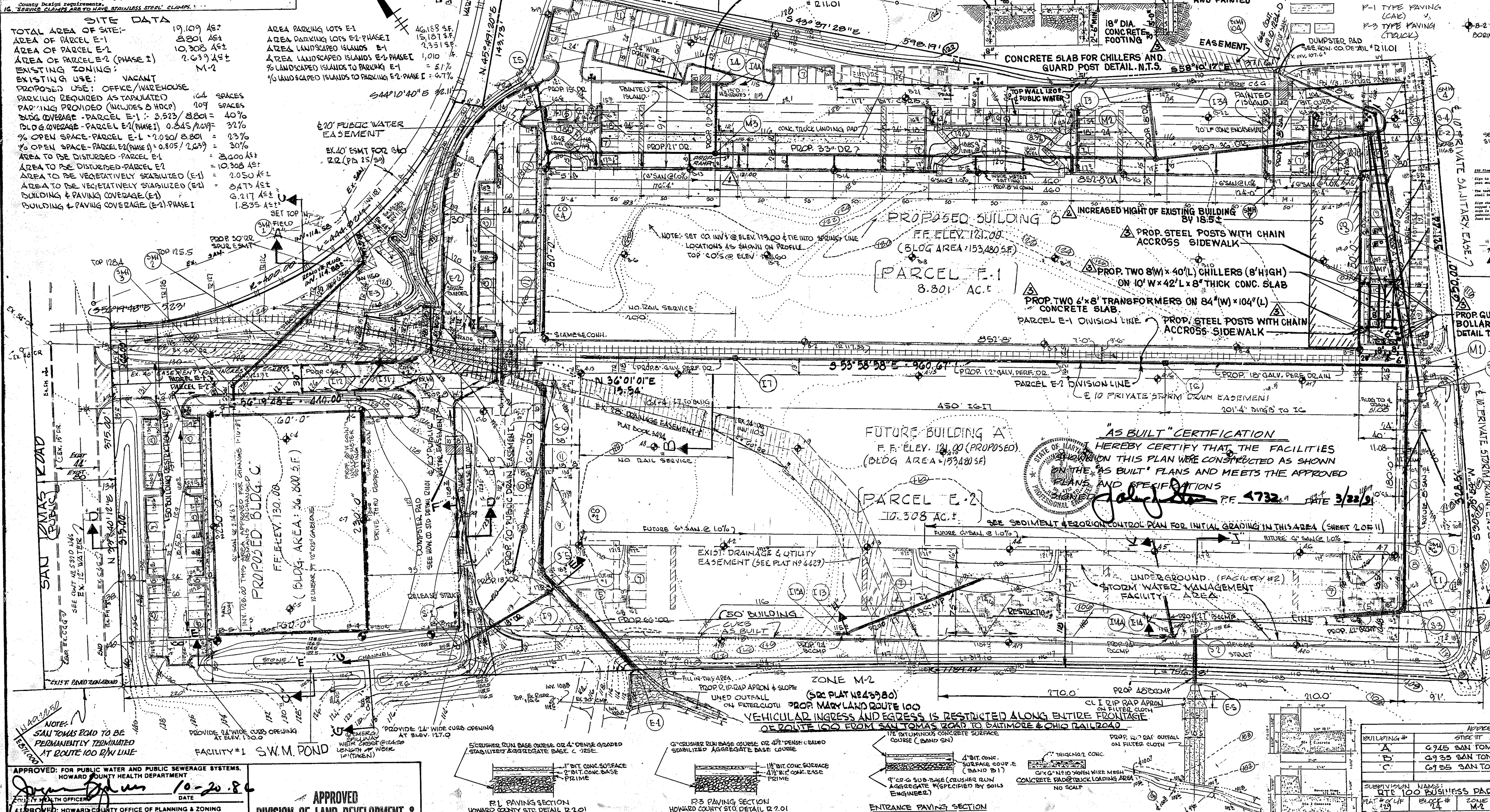
- EXISTING GROUND
- PROPOSED GRADE
- EX. CURB AND GUTTER
- PROP. CURB AND GUTTER
- NO. OF PARKING SPACES
- EX. SANITARY SEWER
- PROP. SANITARY SEWER
- EX. STORM DRAIN
- PROP. STORM DRAIN
- PROP. GRADE (BY OTHERS)
- EX. WATER
- HDCP. PARKING (SEE DETAILS THIS SHEET)
- EXIST. PUBLIC DRAINAGE & UTILITY EASEMENTS (SEE PLAT Nº 6429)

ENTRANCE PAVING
P-1 TYPE PAVING (CAR)
P-3 TYPE PAVING (TRUCK)

B-2 BORINGS

BENCH MARK: TOP ROAD SIDE FLANGE NUT FIRE HYDRANT ELEV. 140.44

VICINITY MAP SCALE 1" = 2000'
WATER CODE A04
SEWER CODE 2151500 & 2151524



$50 Fine Sign
Sign to utilize an aluminium blank 6" x 12" x 0.080 inch thick with two single post mounting holes.
The text and border shall be standard green to match that on R7-8 and the background shall be reflective white. Text shall be in 3" characters.
Sign shall be mounted directly below the standard R7-8 Reserved Parking for Handicapped sign. Its bottom edge shall be no less than 7 feet above ground. If the sign is placed against a building, structure, or other location where vehicle or pedestrian traffic is not obstructed the bottom edge of sign shall be at least 6 feet but not more than 10 feet above ground.

COLORS: GREEN - LEGEND AND BORDER; WHITE SYMBOL ON BLUE BACKGROUND; WHITE - BACKGROUND

SANITARY SEWER NOTE
The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building, shown on this site development plan, who will discharge non-domestic waste to the public sewerage system if this waste is regulated under Section 18.122A of the Howard County Code. Each separate and independent sewer connection shall include a standard manhole and other waste pretreatment devices as required and approved by Howard County. Waste lines on the interior of the building shall be designed, constructed or modified such that non-domestic waste will be discharged to the separate and independent sewer connection. No owner or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior waste lines. The above requirements shall apply to all initial and future occupants or tenants.

"AS BUILT" CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "AS BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS
SIGNED [signature] P.E. 4732 DATE 3/22/91

S.D.P. 86-249

ADDRESS CHART

BUILDING #	STREET ADDRESS
A	6945 SAN TOMAS ROAD
B	6935 SAN TOMAS ROAD
C	6955 SAN TOMAS ROAD

SUBDIVISION NAME: RTE 100 BUSINESS PARK - BLOCK - F		SECT./AREA	LOT/PARCEL # E-1 & E-2
PLAT # or L/F 129	BLOCK # 24	ZONE M-2	TAX/ZONE MAP 37
ELECT. DIST. 1st	CENSUS TRACT 6012		
WATER CODE A04		SEWER CODE	2151500 / 2151524

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER [signature] DATE 10-20-86
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR Acting [signature] DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION [signature] DATE 10-21-86
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR [signature] DATE 10-16-86
CHIEF BUREAU OF ENGINEERING [signature] DATE 10-15-86

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

GWS
GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

OWNER - PARCEL E-1
SAN TOMAS LIMITED PARTNERSHIP

OWNER - PARCEL E-2
S.T.P. 100 LIMITED PARTNERSHIP

110 WEST ROAD TOWSON, MD. 21204
301-321-6436

DEVELOPER
JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON, MARYLAND 21204
301-321-643

REVISIONS
EG ADDED BLDG "C" DL. 5-20-87
△1 REVISED PARKING TABULATION (BLDG B) & ADDED RAMP. 2.27.92 V.Z.

DESIGNED: C.K.S.
DRAWN: G.Y.
CHECKED: C.K.S.
REVISIONS
Approved 1-16-87 J.W. Lower Grades, BLDG "C" raise grades Rear Bldg "C" (Drive thru) Also 8" W Conn. Loc.
PN 05260

SITE PLAN
PARCEL E-1 & PARCEL E-2 "BLOCK F"
PLAT # 6429
ROUTE 100 BUSINESS PARK
1ST ELECTION DISTRICT - HOWARD COUNTY, MD.
TAX MAP # 37, 38 PARCEL # 601 / 28
SCALE: 1" = 50' DATE: APRIL 30, 1986
SHEET 1 of 11

AS-BUILT MARCH 12-91
SDP 86-249

GENERAL NOTES

1. Maximum building height = 80'.
2. All areas not being paved or receiving building coverage shall be stabilized in accordance with the plans approved by the Howard Soil Conservation District.
3. Any damage to public rights-of-way and/or adjacent properties shall be repaired immediately at the contractor's expense.
4. The contractor shall maintain at least a 2' level bench behind all curb and gutter in fill areas.
5. The contractor shall verify all existing utilities to his own satisfaction before starting construction.
6. All slopes shall be 3:1 or flatter.
7. All work shall be done in accordance with Howard County Standard Specifications and Details for Construction, or as shown on these plans.
8. The contractor shall notify the C & P Telephone Co. and the Gas and Electric Company five days prior to starting work shown on these plans by calling "Miss Utility". Call collect 1-559-0100.
9. For details of ramps and signs for the handicapped see the Maryland Building Code for the Handicapped and Aged and as shown hereon.
10. The contractor shall maintain a minimum of 4' cover over all proposed water lines.
11. All rip-rap shall be placed on filter cloth.
12. The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 992-2417 or 792-7772.
13. The contractor shall remove all existing paving, curb and gutter, etc. that may interfere with proposed construction.
14. All utilities installed shall receive full trench compaction.
15. All water main tees, bends, caps, etc. shall be buttressed in accordance with Howard County Design requirements.

LEGEND

- SBD — STRAW BALE DIKES
- EARTH DIKES
- LIMIT OF DISTURB.
- STABILIZED CONSTRUCT. ENTRANCE

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
U.S. Soil Conservation Service — Date 10-10-86

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
APPROVED: Howard Soil Conservation District — Date 10-10-86
Plan Number

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 10-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86

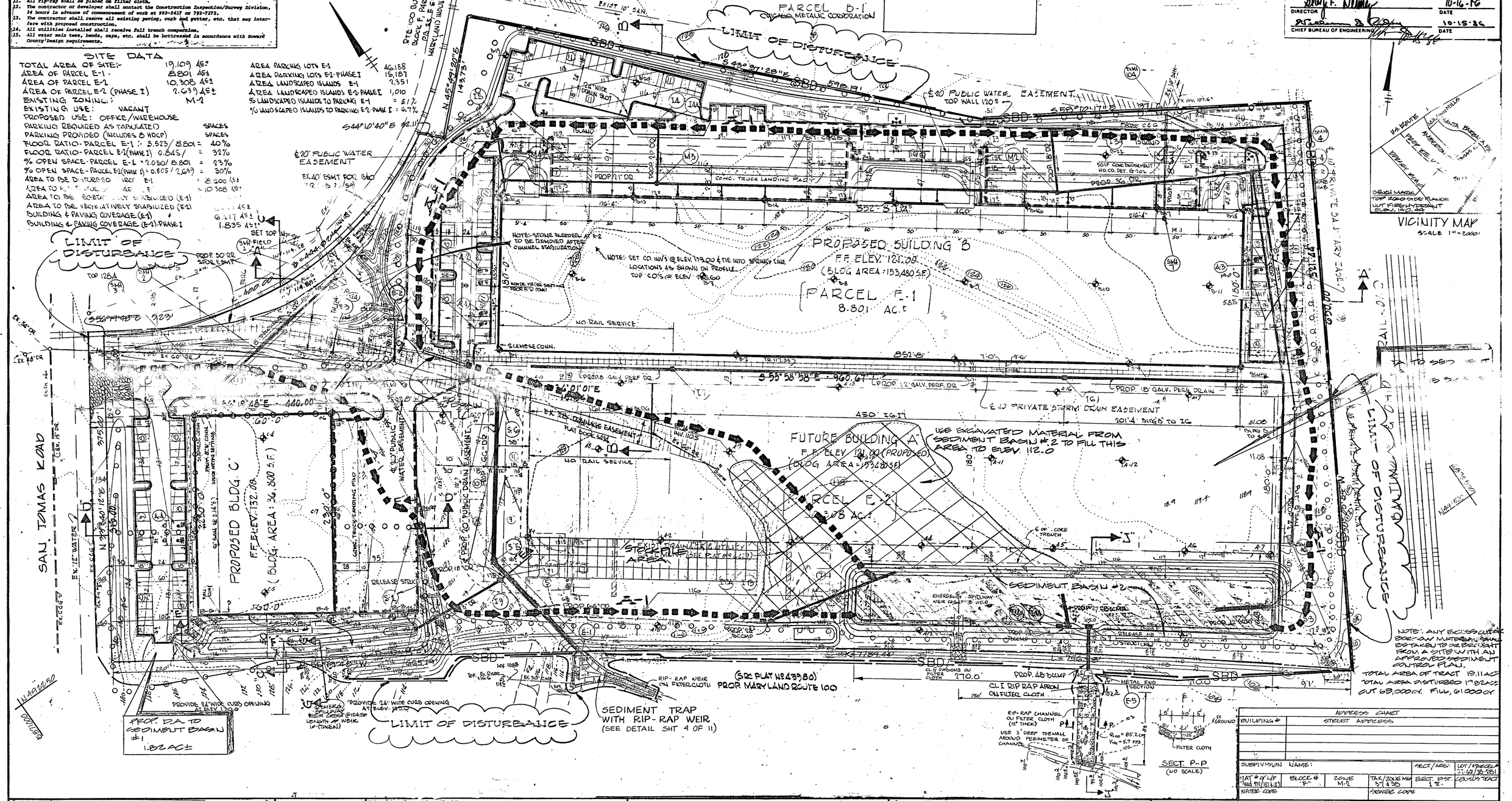
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10-16-86
CHIEF BUREAU OF ENGINEERING — DATE 10-15-86

SITE DATA

TOTAL AREA OF SITE:	19.109 AC±
AREA OF PARCEL E-1	8.801 AC±
AREA OF PARCEL E-2	10.308 AC±
AREA OF PARCEL E-2 (PHASE I)	2.639 AC±
EXISTING ZONING:	M-2
EXISTING USE:	VACANT
PROPOSED USE:	OFFICE/WAREHOUSE

PARKING REQUIRED AS TABULATED	SPACES
PARKING PROVIDED (INCLUDES 8 HDCP)	SPACES
FLOOR RATIO-PARCEL E-1 : 3.523/8.801 =	40%
FLOOR RATIO-PARCEL E-2 (PHASE I) 0.845/ =	32%
% OPEN SPACE-PARCEL E-1 : 2.050/8.801 =	23%
% OPEN SPACE-PARCEL E-2 (PHASE I) : 0.805/2.639 =	30%
AREA TO BE DISTURBED (PARCEL E-1)	= 8.200 AC±
AREA TO BE FUTURE DISTURBED (PARCEL E)	= 10.308 AC±
AREA TO BE VEGETATIVELY STABILIZED (E-1)	6.617 AC±
AREA TO BE VEGETATIVELY STABILIZED (E-2)	1.835 AC±
BUILDING & PAVING COVERAGE (E-1)	
BUILDING & PAVING COVERAGE (E-2) PHASE I	

AREA PARKING LOTS E-1	46,188
AREA PARKING LOTS E-2 PHASE I	15,187
AREA LANDSCAPED ISLANDS E-1	2,351
AREA LANDSCAPED ISLANDS E-2 PHASE I	1,010
% LANDSCAPED ISLANDS TO PARKING E-1	= 5.1%
% LANDSCAPED ISLANDS TO PARKING E-2 PHASE I	: 6.7%



ADDRESS CHART	
BUILDING #	STREET ADDRESS

SUBDIVISION NAME:				ELECT/ADD.	LOT/PARCEL #
PLAT # OF LOT (ADD 100/101 & 107)	BLOCK # "F"	ZONE M-2	TAX/ZONE MAP 37 #38	ELECT. DIST. 1 "B"	2 BLDGS/TRACT
WATER CODE			SEWER CODE		

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120
PN 51260

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.
ENGINEER — 4132 — 9/5/86 — DATE

OWNER-PARCEL E-1: SAN TOMAS LIMITED PARTNERSHIP, 110 WEST ROAD TOWSON MD. 21204, 301-321-6450
OWNER-PARCEL E-2: S.R. 100 LIMITED PARTNERSHIP, 110 WEST ROAD TOWSON MARYLAND 21204, 301-321-6436
DEVELOPER: JAMES F. KNOTT DEVELOPMENT CORPORATION, 110 WEST ROAD TOWSON MARYLAND 21204, 301-321-6436

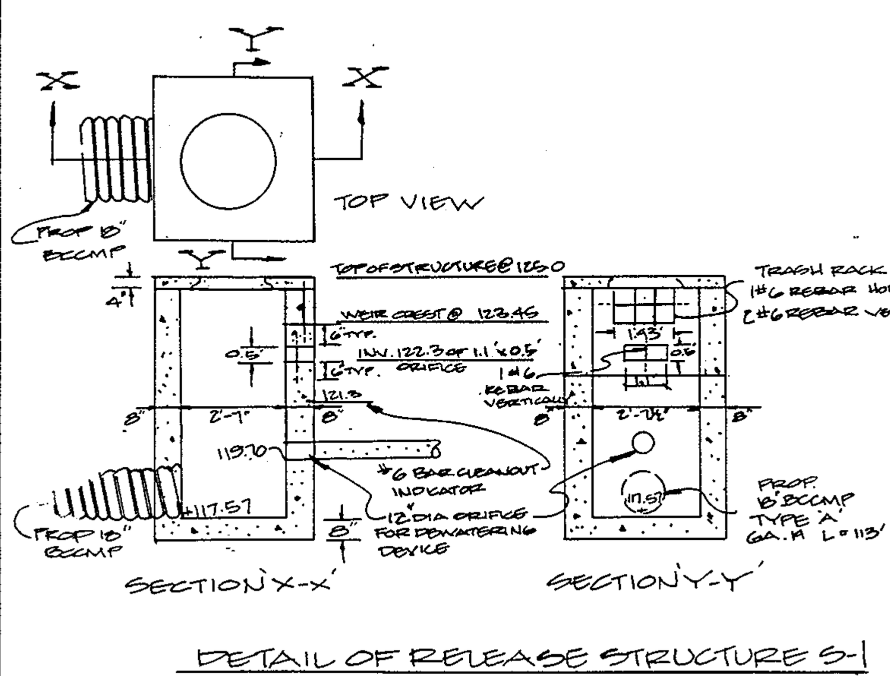
DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. PERMITTING FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.
DEVELOPER — DATE: 10/7/86

DESIGNED: J.R.I.
DRAWN: J.L.B.
CHECKED:

SEDIMENT & EROSION CONTROL PLAN FOR PARCEL E-1 & PARCEL E-2, PLAT #4430
ROUTE 100 BUSINESS PARK "BLOCK F"
ELECT. DIST. #1 — HOWARD CO. MD.
TAX MAP #37/38 — PARCEL # 201/221
SCALE: 1" = 50' — DATE: APRIL 30, 1986
SHEET 2 of 11 — F.N. 092601

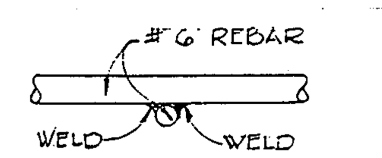
SDP-86-219

PROFILES & DETAILS FOR SEDIMENT BASIN #1



DETAIL OF RELEASE STRUCTURE S-1

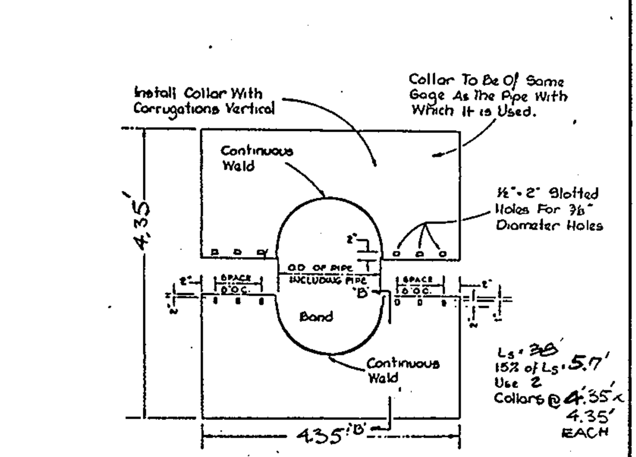
NO SCALE



WELDING DETAIL

NO SCALE

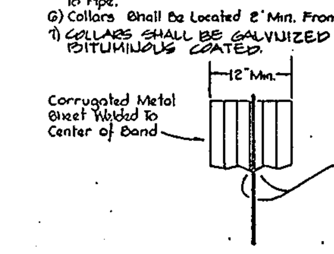
1. NO RUST SHALL BE PERMITTED ON REBAR SURFACES TO BE WELDED.



ANTI-SEEP COLLAR DETAIL

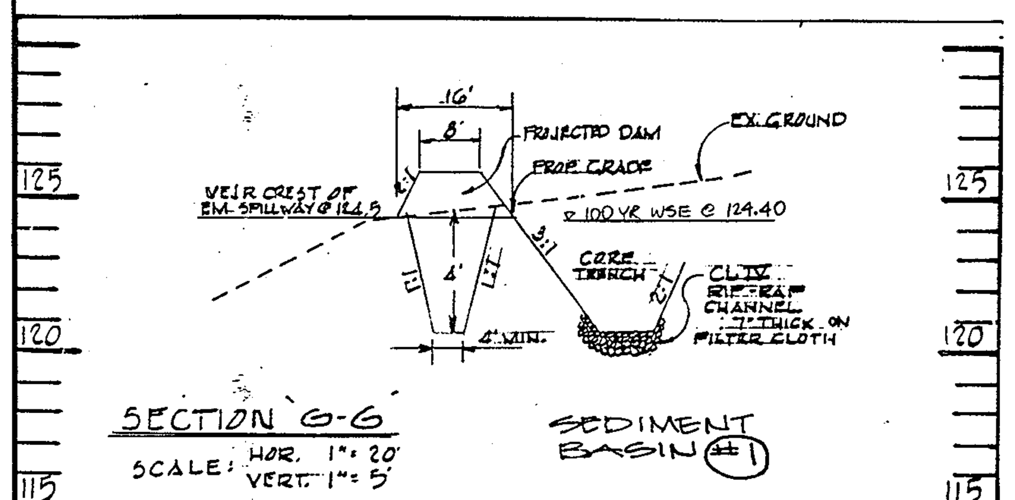
SEDIMENT BASIN #1

NOTES: ANTI-SEEP COLLARS
1) All Materials To Be in Accordance With Construction and Construction Material Specifications.
2) When Specified on The Plans, Coating of Collars Shall Be in Accordance With Construction and Construction Material Specifications.
3) Unassembled Collars Shall Be Marked By Painting or Tagging To Identify Matching Pairs.
4) The Lap Between The Two Half Sections And Between The Pipe And Connecting Band Shall Be Caulked With Asphalt Mastic At Time of Installation.
5) Each Collar Shall Be Furnished With Two ½" Diameter Rods With Standard Tank Lugs For Connecting Collars To Pipe.
6) Collars Shall Be Located 2' Min. From All Pipe Joints.
7) COLLARS SHALL BE GALVANIZED AND FULLY BITUMINOUS COATED.



SECTION 'B'-'B'

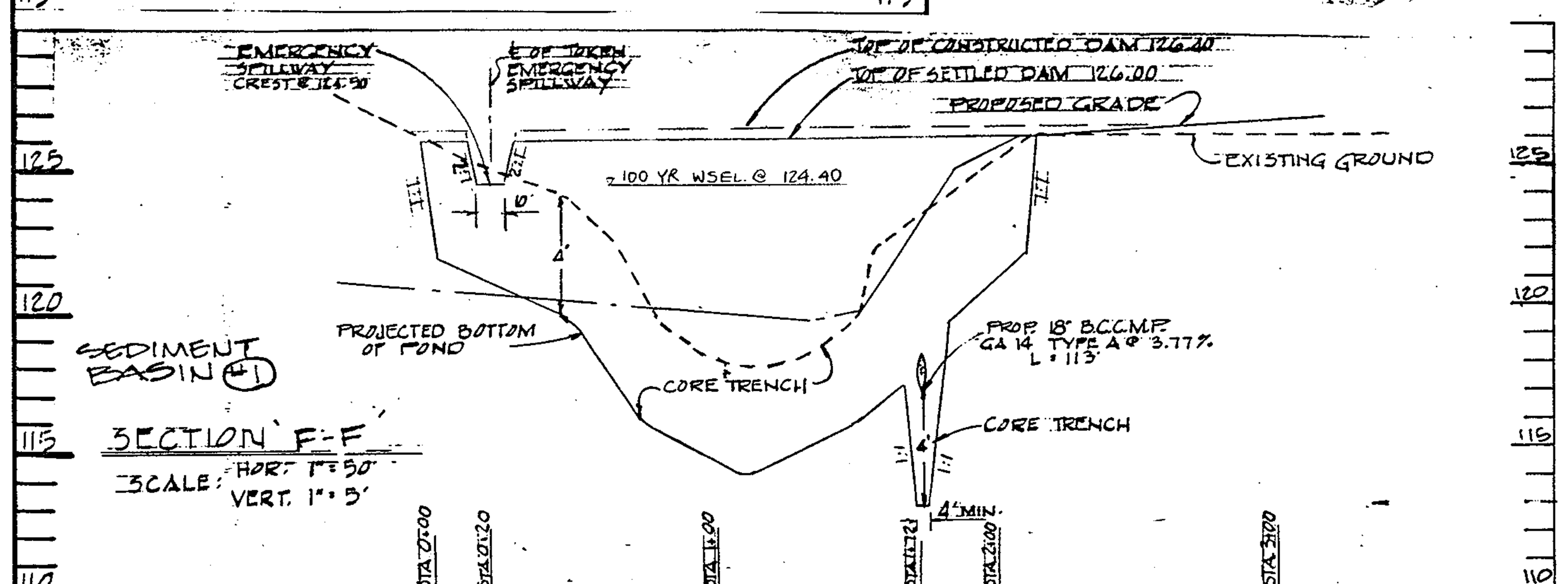
NO SCALE



SECTION 'G-G'

SCALE: HOR. 1" = 20' VERT. 1" = 5'

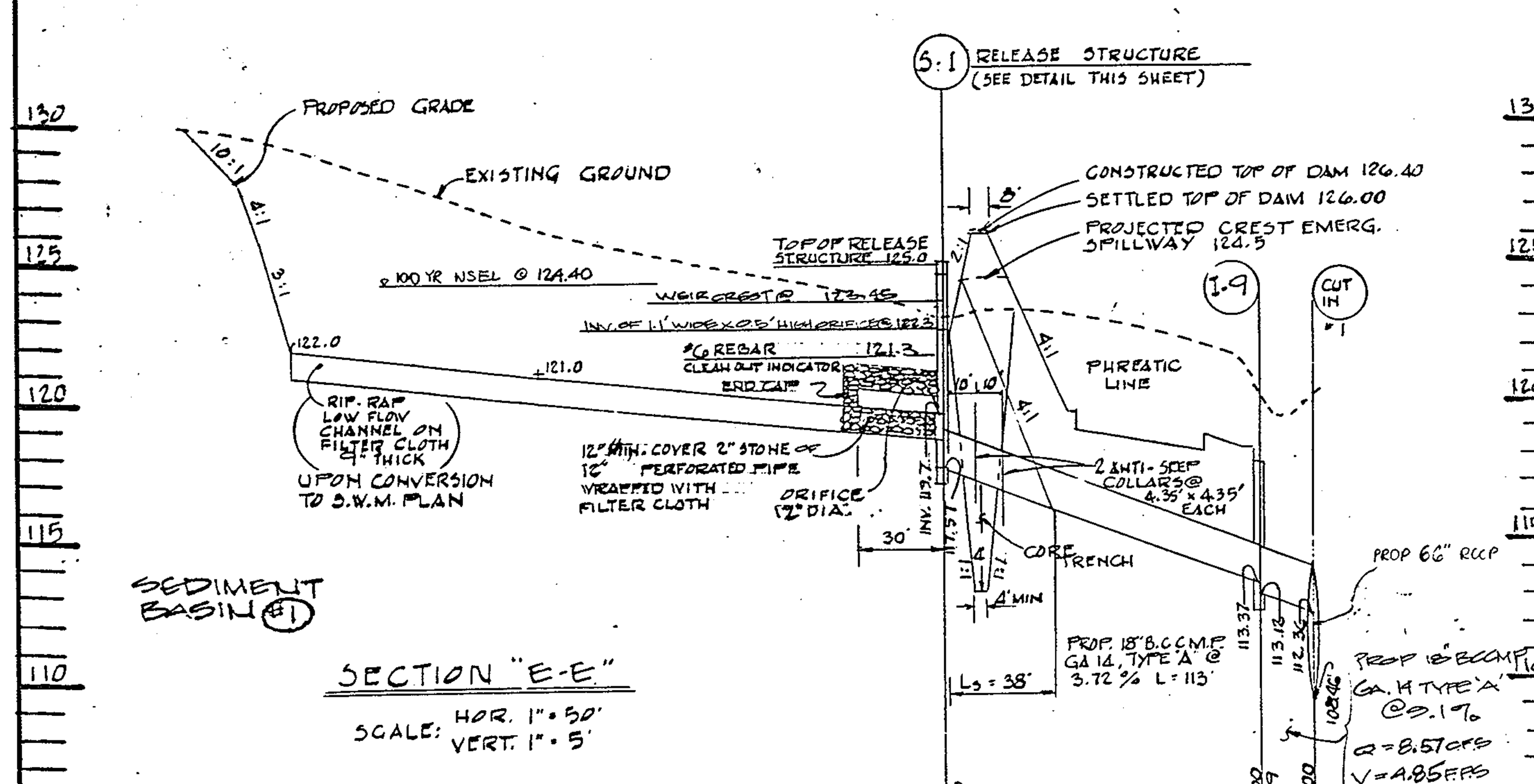
SEDIMENT BASIN #1



SEDIMENT BASIN #1

SECTION 'F-F'

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

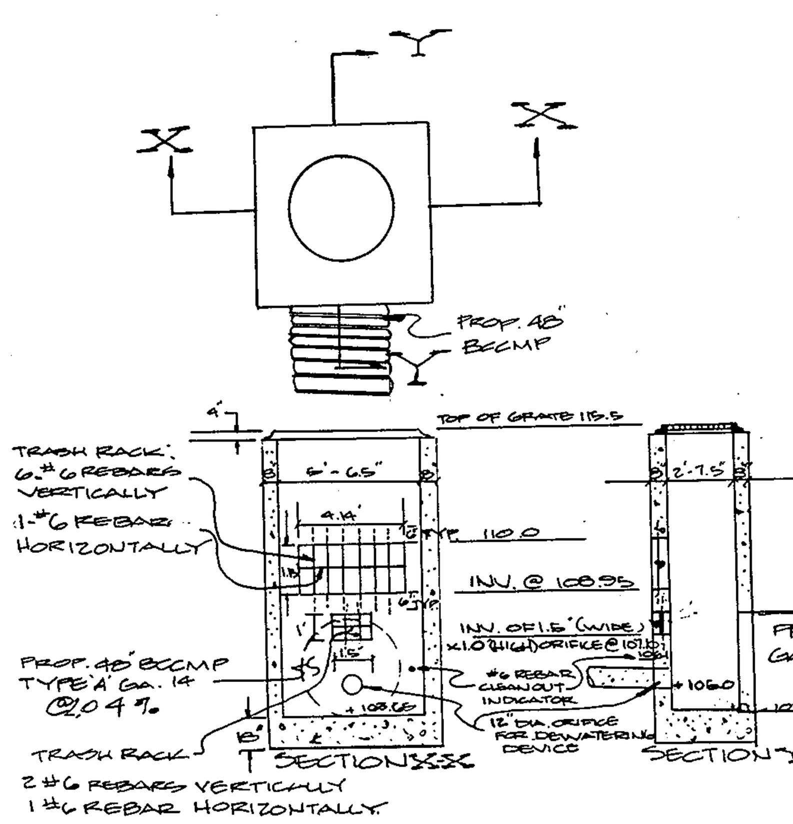


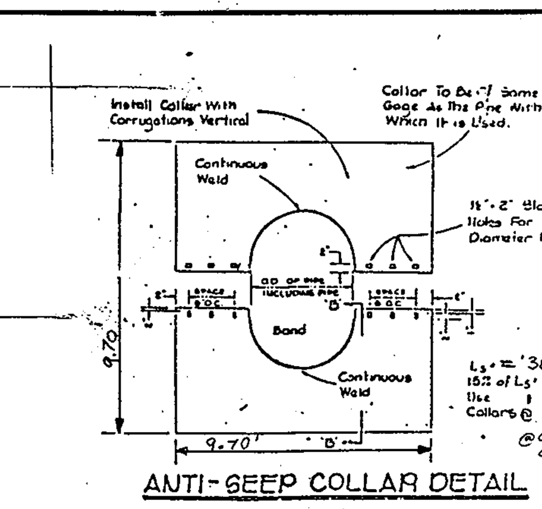
SEDIMENT BASIN #1

SECTION "E-E"

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

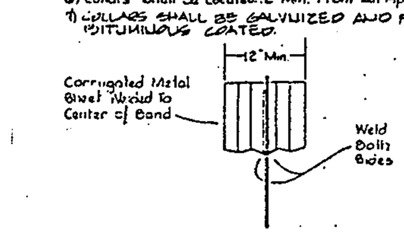
PROFILES & DETAILS FOR SEDIMENT BASIN #2





ANTI-SEEP COLLAR DETAIL

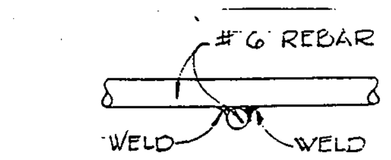
NOTES: ANTI-SEEP COLLARS
1) All Materials To Be in Accordance With Construction and Construction Material Specifications.
2) When Specified on The Plans, Coating of Collars Shall Be in Accordance With Construction and Construction Material Specifications.
3) Unassembled Collars Shall Be Marked By Painting or Tagging To Identify Matching Pairs.
4) The Lap Between The Two Half Sections And Between The Pipe And Connecting Band Shall Be Caulked With Asphalt Mastic At Time of Installation.
5) Each Collar Shall Be Furnished With Two ½" Diameter Rods With Standard Tank Lugs For Connecting Collars To Pipe.
6) Collars Shall Be Located 2' Min. From All Pipe Joints.
7) COLLARS SHALL BE GALVANIZED AND FULLY BITUMINOUS COATED.



SECTION 'B'-'B'

NO SCALE

SEDIMENT BASIN #2

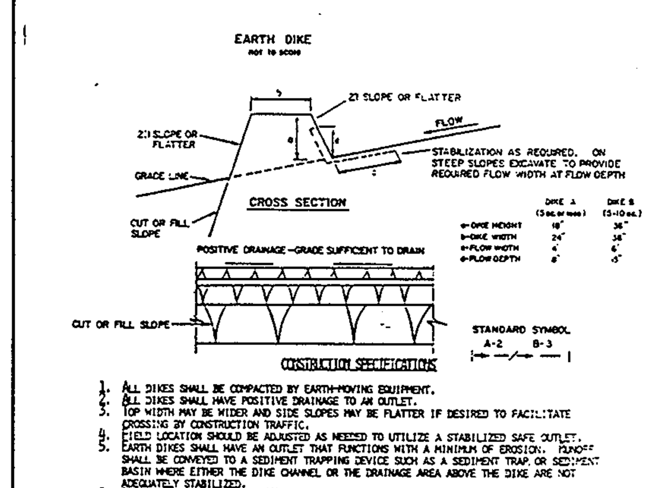


WELDING DETAIL

NO SCALE

1. NO RUST SHALL BE PERMITTED ON REBAR SURFACES TO BE WELDED.

EARTH DIKE



CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

PERMANENT SEEDING NOTES

Seedbed Preparation: Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Use one of the following schedules:

1.) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 square ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9lbs./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 (23 lbs./1000 sq. ft.) before seeding. Harrow or disc 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 (1.4 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. Option (3) Seed with 60 lbs./acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 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 seeded areas and make needed repairs, replacements and reseedings.

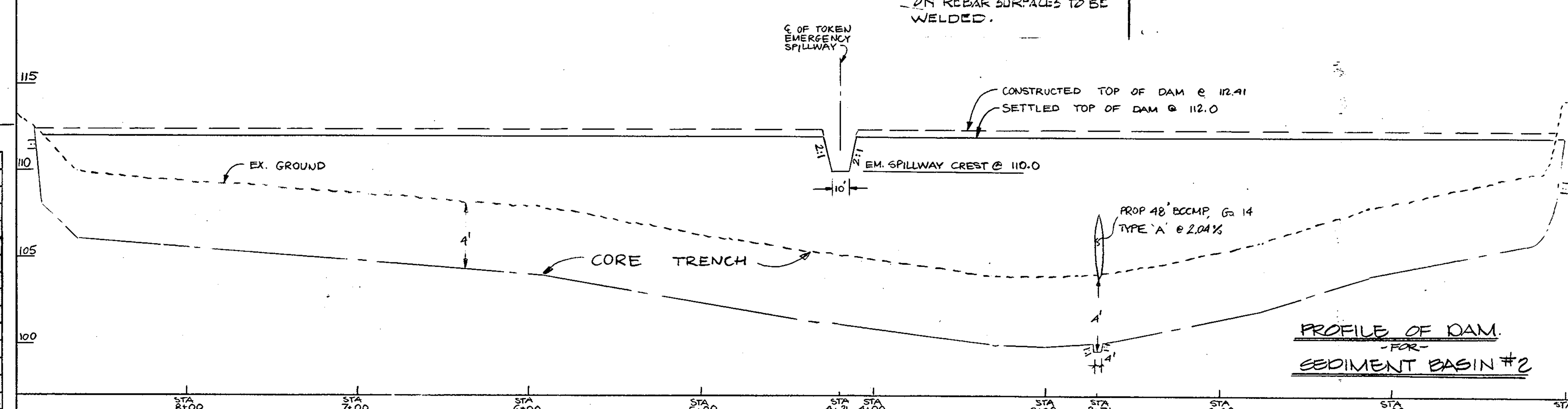
TEMPORARY SEEDING NOTES

Seedbed Preparation: Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding.

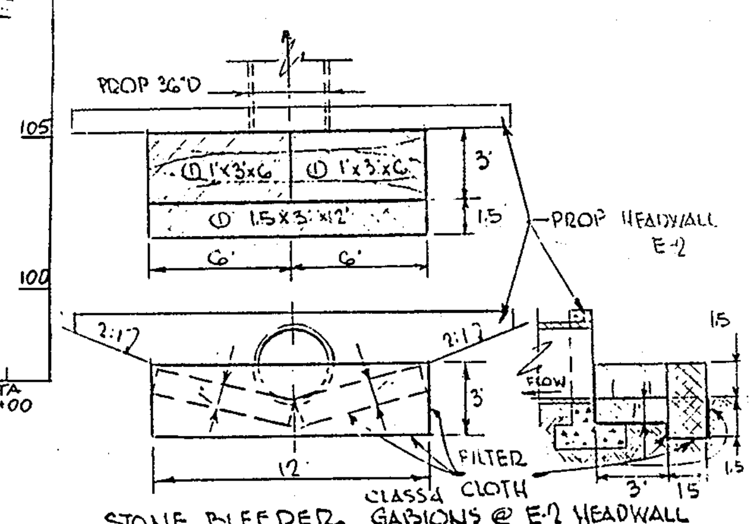
Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.)

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bu. 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 (.07 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.

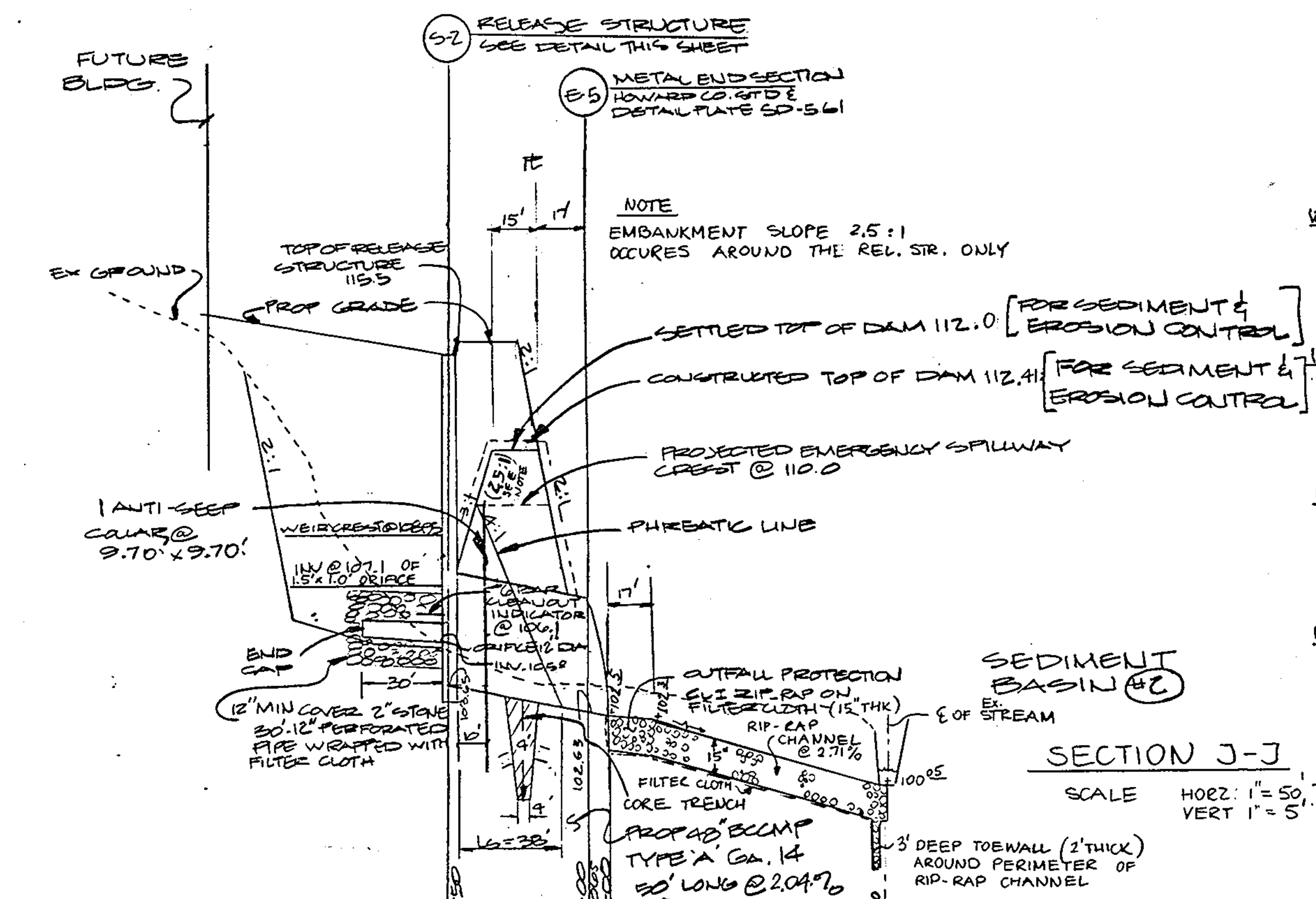
Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs./1000 sq,ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal./1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 348 gal. per acre (8 gal./1000 sq,ft.) for anchoring.



PROFILE OF DAM -FOR- SEDIMENT BASIN #2



STONE BLEEDER GABIONS @ E-2 HEADWALL TO BE REMOVED AFTER STABILIZATION OF CHANNEL (NO SCALE)



SEDIMENT BASIN #2

SECTION J-J

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

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

James M. Nelson — U.S. SOIL CONSERVATION SERVICE — 10-10-86 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: Stephen L. [signature] HOWARD SOIL CONSERVATION DISTRICT — 10-10-86 DATE

PLAN NUMBER

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEM HOWARD COUNTY DEPT. OF PUBLIC WORKS

[signature] COUNTY HEALTH OFFICER — 1-21-86 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Acting [signature] DIRECTOR — 10-21-86 DATE

John W. [signature] CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — 10-21-86 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] DIRECTOR — 10-16-86 DATE

William B. [signature] CHIEF BUREAU OF ENGINEERING — 10-15-86 DATE

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.

CIVIL ENGINEERS & LAND SURVEYORS

303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301)825-8120

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED 'AS BUILT' OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE — 4732 REG. NO. — 5/5/86 DATE

OWNER-PARCEL E-1: SAN TOMAS LIMITED PARTNERSHIP
OWNER-PARCEL E-2: S.T.R. 100 LIMITED PARTNERSHIP
110 WEST ROAD TOWSON MD. 21204
301-321-6436

DEVELOPER
JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON MARYLAND 21204
301-321-6436

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES" 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.

DEVELOPER — 10/7/86 DATE

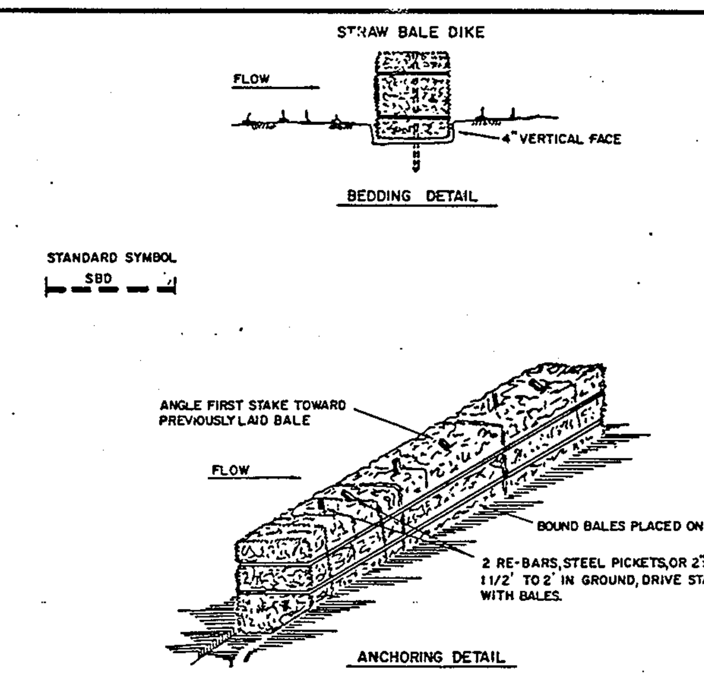
DESIGNED: I.R.Z.
DRAWN: J.L.B.
CHECKED:

SEDIMENT & EROSION CONTROL PROFILES & DETAILS
PARCEL E-1 & PARCEL E-2
PLAT # 6429

ROUTE 100 BUSINESS PARK "BLOCK F"

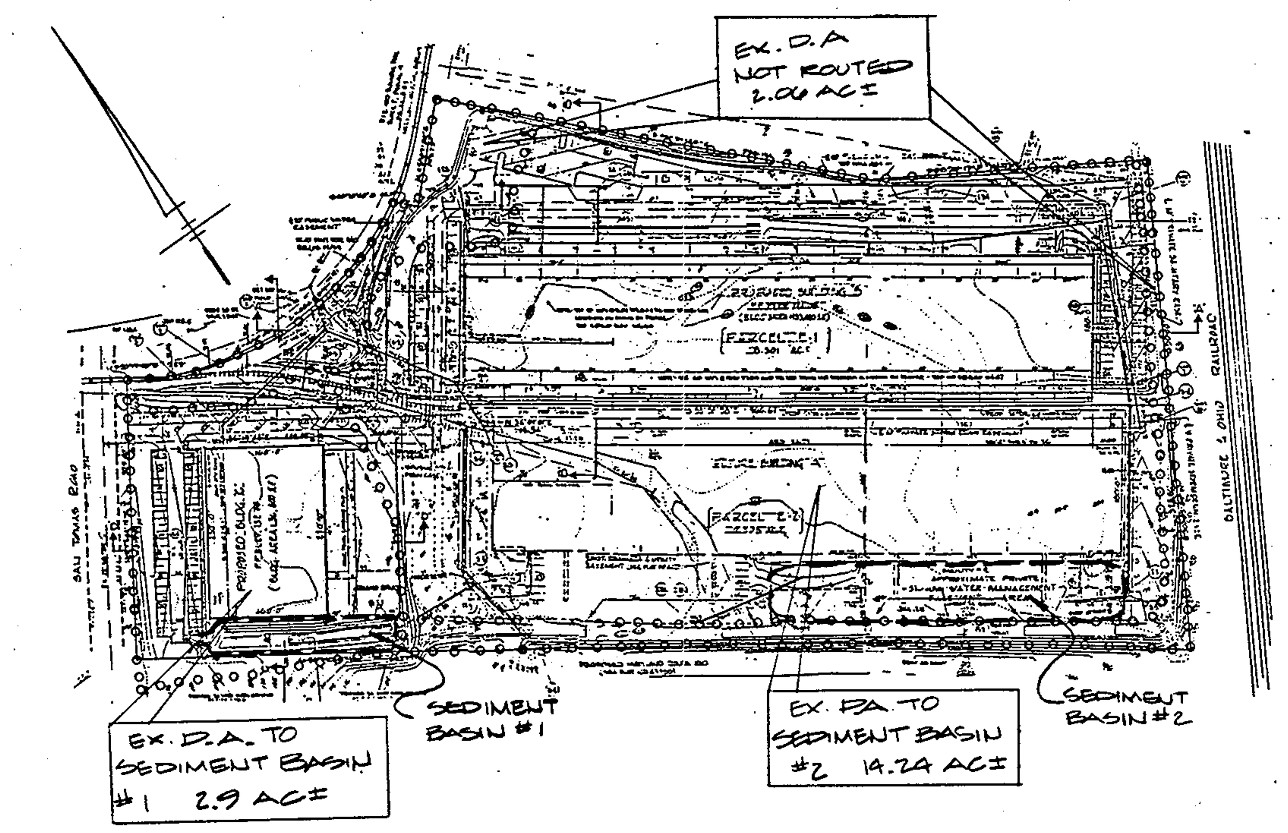
ELECT. DIST. #1 — HOWARD CO. MD.
TAX MAP # 37/38 — PARCEL # 601/281
SCALE: 1" = 50' — DATE: APRIL 30, 1986
SHEET 3 of 11 — F.N. 08260

S.D.P. 86-249

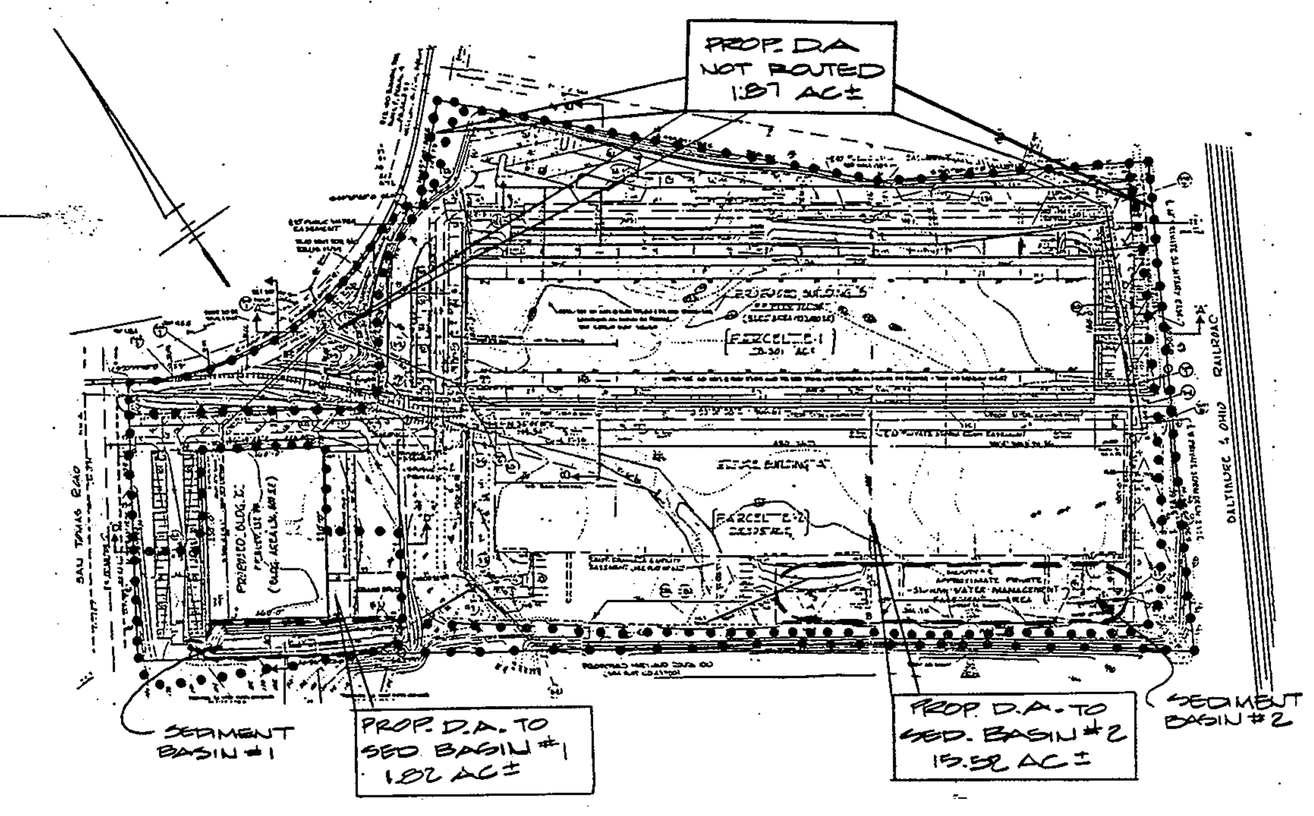


CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

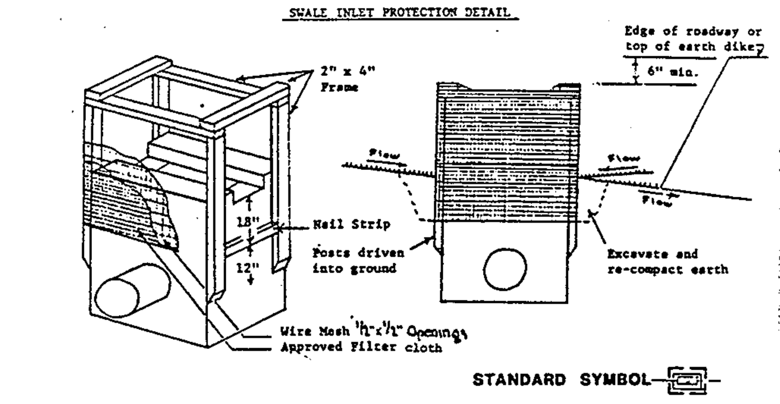


EXISTING DRAINAGE AREA MAP
SCALE: 1"=200'

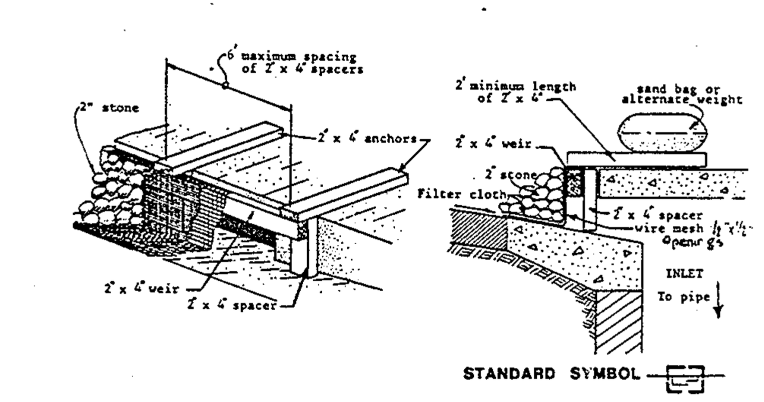


PROP. DRAINAGE AREA MAP
SCALE 1"=200'

SWALE INLET PROTECTION DETAIL



CURB INLET PROTECTION DETAIL



Construction Specifications

I. Materials

A. Wooden frame is to be constructed of 2" x 4" construction grade lumber.

B. Wire mesh must be of sufficient strength to support filter fabric and stone for curb inlets, with water fully impounded against it.

C. Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, EOS, 40-85, to allow sufficient passage of water and removal of sediment.

4. Stone is to be 2" in size and clean, since fines would clog the cloth.

II. Procedure

A. A swale, ditchline or yard inlet protection.

1. Excavate completely around inlet to a depth of 18" below notch elevation.
2. Drive 2 x 4 post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
3. Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
4. Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
5. Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
6. If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
7. This structure must be inspected frequently and the filter fabric replaced when clogged.

B. Curb Inlet Protection.

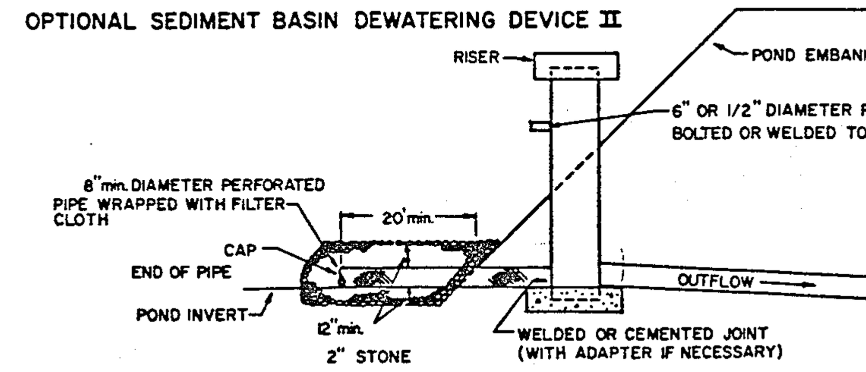
1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.
2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
3. Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

GENERAL NOTES

1. Refer to "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" for standard details and detailed specifications of each practice specified herein.
2. With the approval of the sediment control inspector, minor field adjustments can and will be made to insure the control of any sediment. Changes in sediment control practices require prior approval of the sediment control inspector and the Baltimore County Soil Conservation District.
3. At the end of each working day, all sediment control practices will be inspected and left in operational condition.
4. Following initial soil disturbance or redisturbance, permanent or temporary stabilizataon shall be completed within: a) seven calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and b) fourteen days as to all other disturbed or graded areas on the project site.
5. Any change to the grading proposed on this plan requires re-submission to Baltimore County Soil Conservation District for approval.
6. Dust control will be provided for all disturbed areas. Refer to "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control", pp 62.01 and 62.02 for acceptable methods and specifications for dust control.
7. Any variation from the sequence of operations stated on this plan requires the approval of the sediment control inspector and the Baltimore County Soil Conservation District prior to the initiation of the change.

1. Notify Howard County, Department of Inspections, permit inspector 48 hours prior to beginning work.
2. Clear and grub for sediment control measures only.
3. Install stabilized construction entrance.
3a. Install storm drains E-1 to S-6 and remove existing 60" drain (S-6 to the outfall.
B. INSTALL SEDIMENT TRAP AT THE END OF E-1
4. Construct sediment basin #1 and storm drains S-1 to I-9 to cut in #1.
5. Install embankment along south property line according to approved sediment and erosion control plan.
6. Install sediment basin #2, use excavated material to fill area adjacent to it to elev. 112.0. (Area marked on the plan). Install outfall channel.
7. Install all earth dikes and straw bale dikes maintaining positive drainage to sediment basins at all times.
7a. Install storm drains:
From the basin #2 to S-3
From S-3 to M-4
M-4 to I-5
M-3 to I-4A
M-2 to I-3A
8. Begin major grading and adjust diversion dikes as work progresses maintaining positive drainage to the sediment basins at all times.
9a. Grade rest of the site.
9b. Install the remaining storm drains and all utilities.
10. Stabilize all areas outside of building and paving with permanent seeding.
11. Fine grade and install subbase material in parking and building areas (Building B and Building C).
12. Stabilize all remaining areas of parcel E-2 (Building A) with permanent seeding.
13. Excavate enough swale to install stone bleederat entrance to endwall E-2 according to details.
14. Regrade existing swale along northwest property line and according to plan and seed with jute or excelsion mattings.
15. Install railroad spur.
16. After obtaining permission from the Sediment Control Inspector, flushout storm drains listed in sequence #7a, clean out and covert the sediment basins to storm water management facilities. Make the necessary changes to the release structures according to the approved storm water management plans.
17. After obtaining permission from the Sediment Control Inspector, remove the remaining sediment control devices and stabilize.

OPTIONAL SEDIMENT BASIN DEWATERING DEVICE II



CONSTRUCTION SPECIFICATIONS

I. SITE PREPARATION
The fill area and borrow area shall be cleared and grubbed to remove all trees, vegetation, roots and other objectionable material. The topsoil from the embankment area and borrow area shall be removed and stockpiled. The topsoil shall be spread on the completed fill area.

II. EARTH FILL
A) FILL MATERIAL shall be obtained from on-site under the supervision of a soils engineer. It shall be free from roots, stumps, wood rubbish, oversized stones frozen or other objectionable material. Fill areas shall be constructed to the elevation shown on the plan to allow for anticipated settlement.
B) PLACEMENT: Areas on which fill will be placed shall be scarified prior to placement of fill. Fill materials shall be placed in layers 6" thick maximum (before construction) and shall be continuous over the entire length of fill. The most porous material shall be placed in areas not adjacent to ponded water.
C) COMPACTION: The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be compacted to the specified density. Fill material shall contain sufficient moisture so that the required degree of compaction can be obtained with the equipment used
D) CORE TRENCH SHALL BE MADE OF SC OR CL MATERIAL COMPACTED TO 95% OF ASHTO T-99 DENSITY.

III STRUCTURAL BACKFILL
Backfill material shall be the type and quality specified for the adjoining fill material. The fill shall be placed in horizontal layers 4" thick maximum and compacted by hand tamping or manually directed power tampers or plate vibrators. At no time during backfilling operations shall driven equipment by allowed to operate any closer than four feet measured horizontally to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Materials shall fill completely all spaces under and adjacent to newly installed pipe.

IV. CONCRETE
Concrete shall meet the minimum requirements set forth in the Maryland State Highway Administration "Specifications for Construction and Materials" January 1981 Section 918.06 - "Portland Cement Concrete Mixtures", Mix No. 3 Reinforcing steel shall be A.S.T.M. A 615, Grade 60.

V. STABILIZATION
The storm water management facility will be stabilized with "Permanent Slope Seeding" as follows:
After spreading 4" topsoil seed with a mixture of 30% innoculated crown vetch and 70% Kentucky 31 Tall Fescue applied at a rate of 60 lbs./Ac., 10-20-20 fertilizer shall be applied at a rate of 25 lbs./1000 square feet, lime at a rate of 92 lbs./1000 square feet, mulch area with unweathered small grain straw at a rate of 1.5 T/Ac., anchor with rapid curing asphalt (R.C.-70, R.C.-250 or R.C.-800) at a rate of 0.1 Gal. S.Y.

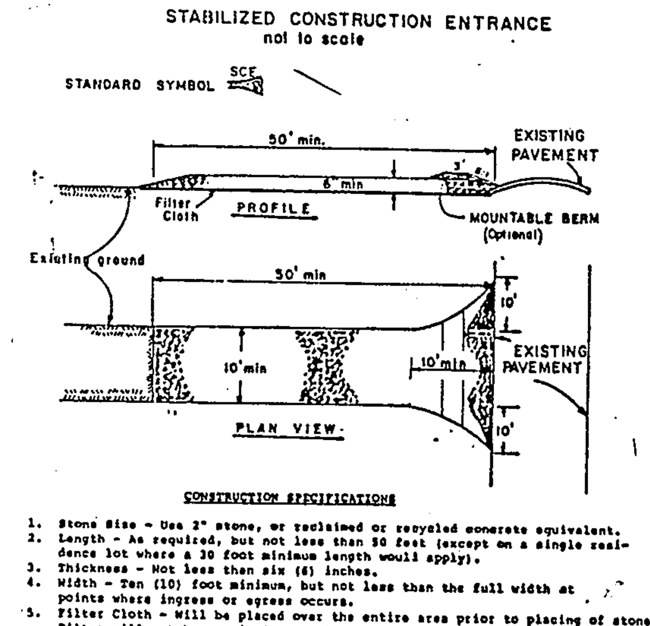
VI. PIPE CONDUITS 18" BCCMP TYPE 'A' GA. 14 @ BASIN #1
48" BCCMP TYPE 'A' GA. 14 @ BASIN #2
A. Corrugated Metal Pipe
1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-90 with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.
2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.
3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
5. Backfilling shall conform to structural backfill as shown above.
6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

VII. FILTER CLOTH
MIRAFI 140S or equivalent shall be used.

VIII. SEDIMENT CONTROL
Construction to be in accordance with "1983 Maryland Standards and Specifications For Soil Erosion and Sediment Control". In release structure install dewatering device by connecting 30 L.F. of 12" perforated underdrain to the low flow pipe. The 12" underdrain shall be wrapped in filter cloth and covered with minimum 12" thick #2 stone.

NOTE: (SPECIFIED DENSITY)
SUITABLE MATERIAL SHALL BE USED FOR THE EMBANKMENT AND ROLLED TO A MINIMUM DEGREE OF COMPACTION OF 95% OF THE DRY UNIT WEIGHT AS DETERMINED BY A.A.S.H.T.O. T-99. CONSTRUCTION OF SWM POND SHALL BE PERFORMED UNDER STRICT SUPERVISION OF A SOILS ENGINEER.

STABILIZED CONSTRUCTION ENTRANCE
not to scale



CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

SEDIMENT CONTROL NOTES

1) 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)
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec.50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7) Site Analysis:

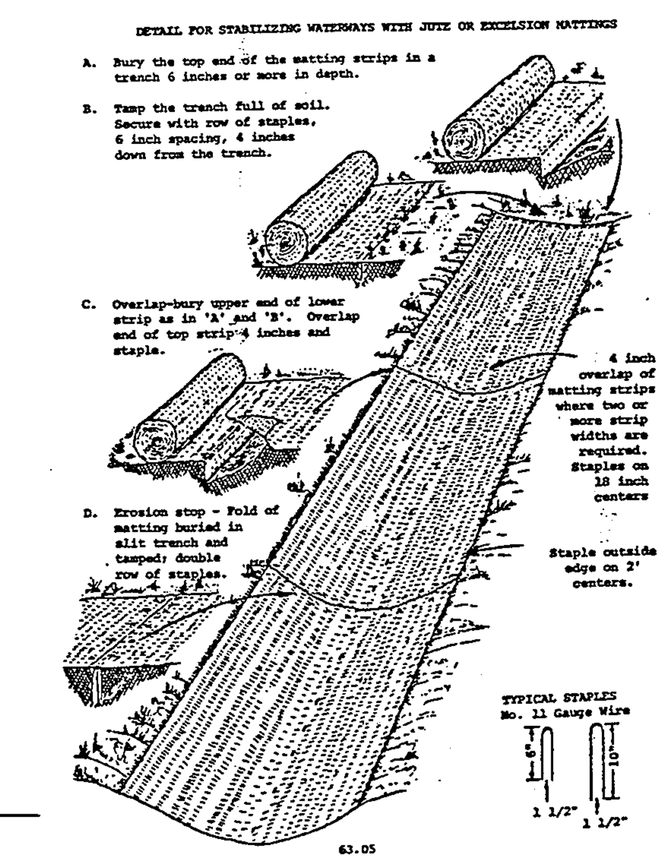
Total Area of Site	19.11	acres
Area Disturbed	19.82	acres
Area to be roofed or paved	8.96	acres
Area to be vegetatively stabilized	10.52	acres
Total Cut	69,000	Cu. yds
Total Fill	61,000	Cu. yds
Offsite waste/~~borrow~~ area location		

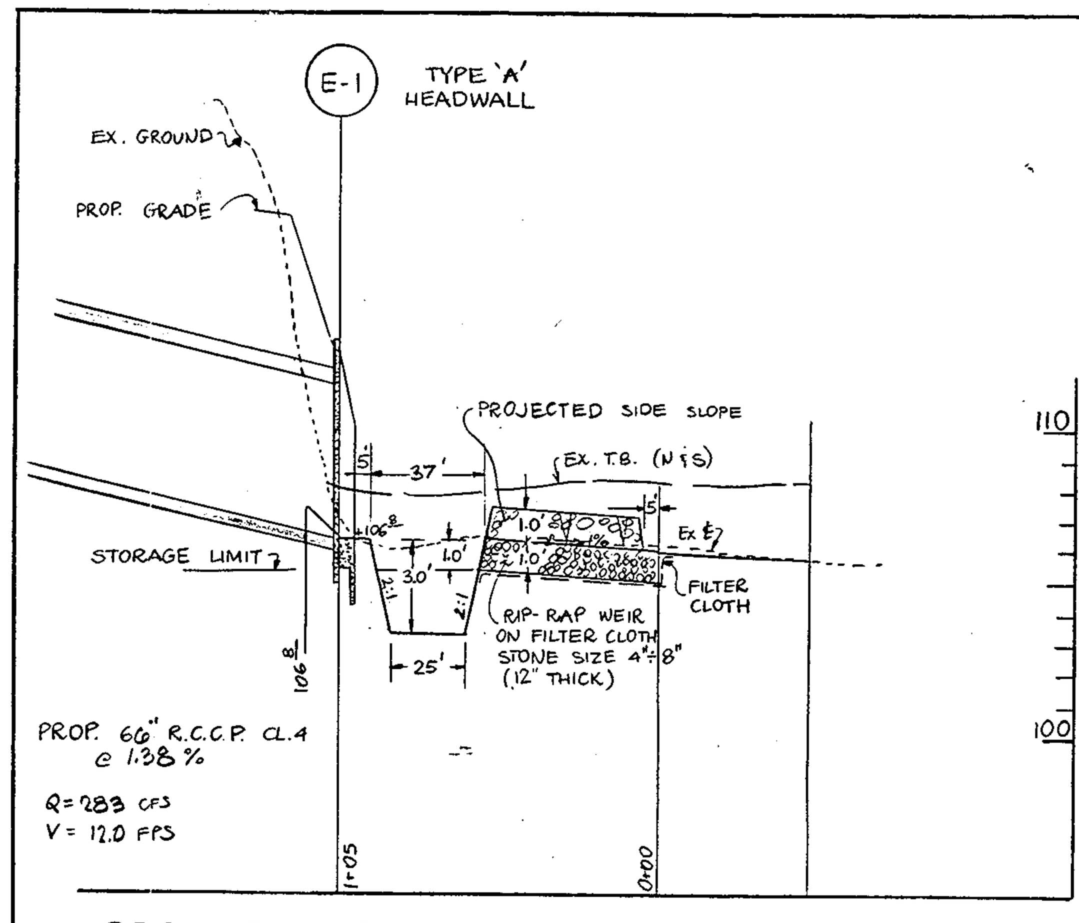
8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be REPAIRED ON THE same day of disturbance.
9) Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.

Maryland SCS/WRA April 1983

DETAIL FOR STABILIZING WATERWAYS WITH JUTE OR EXCELSION MATTINGS

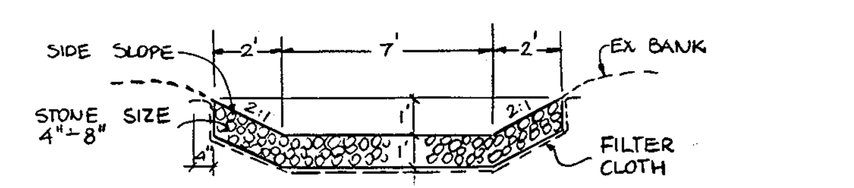
A. Bury the top end of the matting strips in a trench 6 inches or more in depth.
B. Tamp the trench full of soil. Secure with row of staples, 6 inch spacing, 4 inches down from the trench.
C. Overlap-bury upper end of lower strip as in 'A' and 'B'. Overlap end of top strip 4 inches and staple.
D. Erosion stop - Fold of matting buried in slit trench and tamped; double row of staples.





PROFILE ALONG SEDIMENT TRAP WITH RIP-RAP WEIR

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



SECTION THRU RIP-RAP WEIR
(NO SCALE)

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT MEET THE TECHINAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
U.S. SOIL CONSERVATION SERVICE — 10-10-86 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: HOWARD SOIL CONSERVATION DISTRICT — 10-10-86 DATE

PLAN NUMBER

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEM HOWARD COUNTY DEPT. OF PUBLIC WORKS
COUNTY HEALTH OFFICER — 10-21-86 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Acting DIRECTOR — 10-21-86 DATE
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — 10-21-86 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — 10-16-86 DATE
CHIEF BUREAU OF ENGINEERING — 10-15-86 DATE

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301)825-8120

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED 'AS-BUILT' OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE — 4732 REG. NO. — 10/8/86 5/5/86 DATE

OWNER-PARCEL E-1
SAII TOMAS LIMITED PARTNERSHIP

OWNER-PARCEL E-2
S.T.R. 100 LIMITED PARTNERSHIP

110 WEST ROAD TOWSON MD. 21204
301-321-6436

DEVELOPER
JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON MARYLAND 21204
301-321-6436

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES" 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.

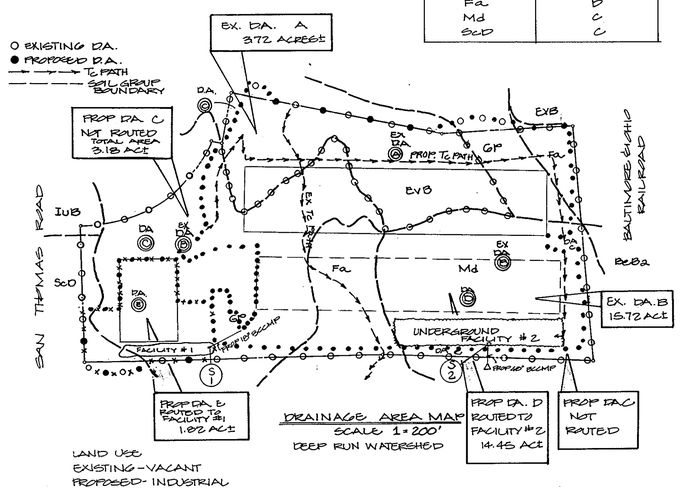
DEVELOPER — 10/7/86 DATE

DESIGNED: I.R.Z.
DRAWN: J.L.B.
CHECKED:

SEDIMENT & EROSION CONTROL PROFILES & DETAILS
PARCEL E-1 & PARCEL E-2
PLAT #6425
ROUTE 100 BUSINESS PARK "BLOCK F"
ELECT. DIST. #1
TAX MAP # 37/38
SCALE: AS SHOWN
HOWARD CO. MD.
PARCEL # 601/281
DATE: APRIL 30, 1986
SHEET 4 of 11
P.N. 05260

SDP 86-249

SOIL TYPE	HYDROLOGIC SOIL GROUPS
EVB	A
GB	C
Fa	D
Md	C
ScD	C



DRAINAGE AREA MAP
SCALE 1 = 200'
DEEP RUN WATERSHED

LAND USE
EXISTING - VACANT
PROPOSED - INDUSTRIAL

STORM WATER MANAGEMENT DATA

SOIL GROUPS A, C, D.
EXISTING CONDITIONS DA. A
DA. = 3.72 AC±
RCN = 89
2 YR FLOW = 0 CFS
10 YR FLOW = 0.01 CFS } NEGLECTED
100 YR FLOW = 0.43 (CFS) } IN COMPS
EXISTING CONDITIONS DA. B
DA = 15.72 AC±
RCN = 72
2 YR FLOW = 21.62 CFS
10 YR FLOW = 52.78 CFS
100 YR FLOW = 93 CFS
PROPOSED CONDITIONS (NOT ROUTED)
DA C + RELEASE FROM FACILITY # 1
DA. = 3.18 AC±
RCN = 84
2 YR FLOW = 7.96 + 0.51 = 8.47 CFS
10 YR FLOW = 15.97 + 0.80 = 16.77 CFS
100 YR FLOW = 25.26 + 2.34 = 27.6 CFS
ALLOWABLE RELEASE (FROM UNDERGROUND FACILITY):
Q (FROM AREA DA B) - Q (FROM AREA NOT ROUTED)
2 YR STORM = 21.62 - 8.47 = 13.15 CFS
10 YR STORM = 52.78 - 16.77 = 36.01 CFS
100 YR STORM = 93 - 27.6 = 65.4 CFS
HYDROLOGIC CRITERIA
REQUIRED - 2 & 10 YR. S.W.M.
PROVIDED - 2 & 10 YR. S.W.M.
PROPOSED CONDITIONS (ROUTED) FACILITY #1
ROUTED DA. B
SWM FACILITY - DRY POND
D.A. = 1.82 AC±
RCN = 91

BEFORE MANAGEMENT	AFTER MANAGEMENT
2 YR FLOW = 6.12 CFS	0.51 CFS (W.S. ELEV @ 122.8)
10 YR FLOW = 11.26 CFS	0.80 CFS (W.S. ELEV @ 123.7)
100 YR FLOW = 16.64 CFS	2.34 CFS (W.S ELEV @ 124.4)

PROPOSED CONDITIONS (ROUTED) FACILITY #2
ROUTED DA. D
SWM FACILITY - UNDERGROUND STORAGE
DA. = 14.45 AC±
RCN = 96

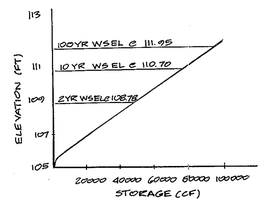
BEFORE MANAGEMENT	AFTER MANAGEMENT
2 YR FLOW = 59.46 CFS	13.26 CFS (W.S. ELEV @ 128.78)
10 YR FLOW = 99.45 CFS	34.2 CFS (W.S ELEV @ 114.7)
100 YR FLOW = 144.96 CFS	85.2 CFS (W.S ELEV @ 111.95)

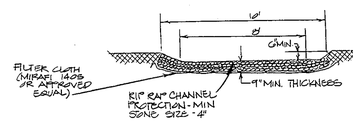
HYDROLOGIC CRITERIA FOR FACILITY #1
- EMBANKMENT, POND
- STRUCTURE CLASSIFICATION - A
- MAXIMUM DEPTH OF WATER - 4.7'
- STORAGE REQUIREMENT
  2 YR STORM = 7,400 CF
  10 YR STORM = 12,350 CF
  100 YR STORM = 17,350 CF

HYDROLOGIC CRITERIA FOR FACILITY #2
- UNDERGROUND FACILITY
- STRUCTURE CLASSIFICATION - A
- STORAGE REQUIREMENT
  2 YR STORM - 48,000 CF
  10 YR STORM - 75,500 CF
  100 YR STORM - 93,600 CF

ELEV. VS STORAGE FOR UNDERGROUND FACILITY

ELEV.	AREA	AVG AREA	CONTOUR INTERVAL	VOL. OF STONE	CUMUL. VOLUME OF STONE	STORAGE IN #2 STONE
109.0	0				0	
		1662.5	0.1	166.25		
109.1	3325				166.25	66.5
		5412.5	0.1	541.25		
109.2	7500				707.50	283
		10187.5	0.1	1018.75		
109.3	12875				1726.25	690.5
		15875	0.1	1587.5		
109.4	18875				3313.75	1325.5
		21062.5	0.1	2106.25		
109.5	23250				5420	2168
		25250	0.1	2525.0		
109.6	27250				7940	3176
		28625	0.1	2862.5		
109.7	30000				10802.5	4321
		33000	0.3	9900		
109.0	36000				20702.5	8281
		36000	2.0	72000		
108.0	36000				92702.5	37081
		36000	2.0	72000		
110.0	36000				164702.5	65881
		36000	2.0	72000		
112.0	36000				236702.5	94681





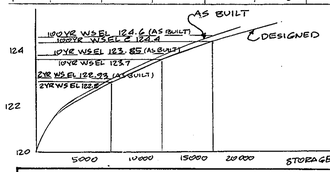
LOW FLOW CHANNEL SECTION
NO SCALE

ELEV. VS STORAGE FOR POND #1

ELEV	AREA	AVG AREA	INTERVAL	VOLUME	CUM. VOLUME	REMARKS
119.7	0				0	
		150	0.3	45		
120.0	300				45	
		1,050	1.0	1050		
121.0	1800				1095	
		2,875	1.0	2875		
122.0	3950				3970	
		5,275	2.0	10550		
124.0	6600				14920	
		8,825	2.0	17650		
126.0	11050				32170	

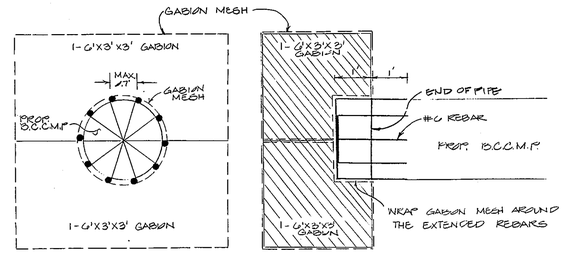
AS - BUILT

ELEV	AREA	AVG AREA	INTERVAL	VOLUME	CUM. VOLUME	REMARKS
119.8	0				0	
		463	0.7	324		
120.5	925				324	
		2588	2.0	5176		
122.5	4250				5500	
		5613	2.0	11226		
124.5	6975				16726	
		9175	1.5	13763		
126.0	11375				30489	

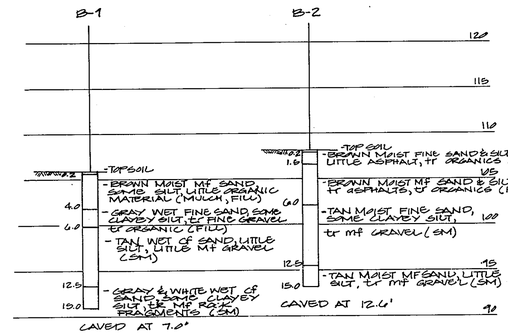


STRUCTURAL SCHEDULE

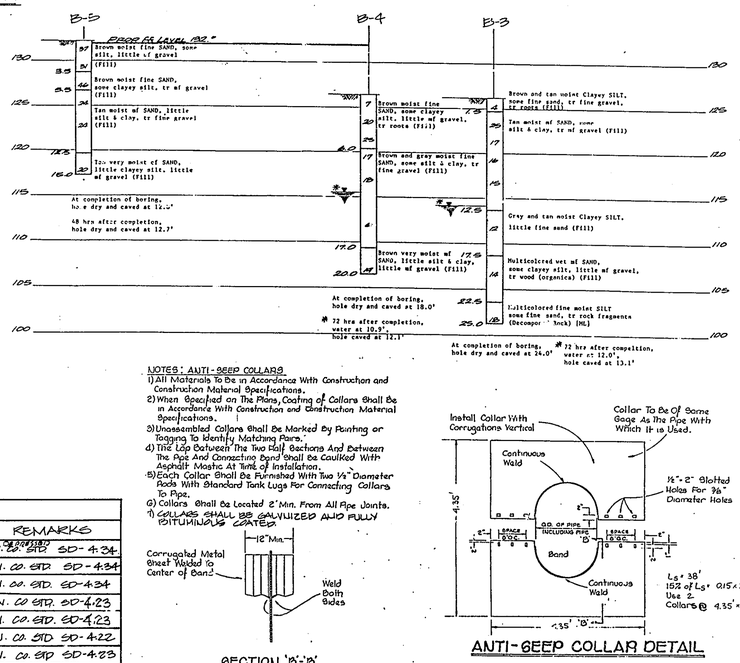
	TYPE	GRATE TOP ELEV	INV IN	INV OUT	REMARKS
I-9	DOUBLE 'S' COMB INLET	117.80	113.37	113.12	HOW. CO. STD. SD-4.24 (MODIFIED)
I-13	DOUBLE 'S' COMB INLET	114.73	112.78	112.68	HOW. CO. STD. SD-4.34
I-13A	DOUBLE 'S' COMB INLET	114.73	—	112.78	HOW. CO. STD. SD-4.34
I-14	DOUBLE 'S' INLET	114.92	109.11	109.02	HOW. CO STD. SD-4.23
I-14A	DOUBLE 'S' INLET	114.92	—	109.42	HOW. CO. STD. SD-4.23
S-1	MOD. SINGLE 'S' GRATE	124.89	—	117.00	HOW. CO. STD SD-4.22
S-2	MOD. DOUBLE 'S' GRATE	115.26	—	103.24	HOW. CO. STD SD-4.23
E-5	METAL END SECTION	—	102.45	103.50	HOW. CO. STD. SD-5.41



PIPE OPENING DETAIL
(NO SCALE)



SOIL BORINGS



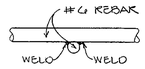
NOTES: ANTI-SEEP COLLARS
1) All Materials To Be In Accordance With Construction and Construction Material Specifications.
2) When Specified on The Plans, Coating of Collars Shall Be in Accordance With Construction and Construction Material Specifications.
3) Unassembled Collars Shall Be Marked By Painting or Tagging To Identify Matching Pairs.
4) The Lap Between The Two Half Sections And Between The Pipe And Connecting Band Shall Be Caulked With Asphalt Mastic At Time of Installation.
5) Each Collar Shall Be Furnished With Two ½" Diameter Rods With Standard Tank Lugs For Connecting Collars To Pipe.
6) Collars Shall Be Located 2' Min. From All Pipe Joints.
7) COLLARS SHALL BE GALVANIZED AND FULLY BITUMINOUS COATED.

SECTION 'B'-'B'
NO SCALE

ANTI-SEEP COLLAR DETAIL

SEQUENCE OF DEVELOPMENT

1. After obtaining permission from Sediment Control Inspector, clean out sediment basins and make necessary changes to the release structures according to the approved storm water management plans.
2. Build up embankment along south property line and grade the ponds according to approved storm water management plans.
3. Install other storm drains keeping them totally plugged.
4. Install filter cloth, gabions and #2 stones (during 5 day dry weather forecast) in underground facility and then backfill with suitable material and stabilize. Extreme caution must be exercised during construction so that no sediment enters the stone storage area.
5. After the total site is stabilized, remove plugs from drain system with permission from the Sediment Control Inspector.



WELDING DETAIL
NO SCALE
1. NO RUST SHALL BE PERMITTED ON REBAR SURFACES TO BE WELDED.

STORMWATER MANAGEMENT MAINTENANCE SCHEDULE

MAINTENANCE ITEM	1	2	3	4	5	6	
MAINTENANCE FREQUENCY	8	7	8	8	7	8	
REPAIR DURATION	9	10	9	9	10	9	
1. CLEAN OUT SILT							POND #1 ONLY
2. CLEAN OUT TRASH							POND #1 ONLY
3. CHECK WEIR CLOGGING							POND #1 ONLY
4. CHECK SLOPE STABILATION							BOTH FACILITIES
5. CUT GRASS							POND #1 ONLY
6. CHECK STRUCTURAL INTEGRITY							BOTH FACILITIES
7. EVERY TWO WEEKS							
8. EVERY THREE MONTHS							
9. ONE WEEK MAXIMUM							
10. TWO DAYS							

* ALL MAINTENANCE, INSPECTION AND REPAIR SHALL BE THE RESPONSIBILITY OF THE OWNER.
* INSPECT ALL ABOVE ITEMS AFTER EACH MAJOR RAINFALL AND REPAIR IF NECESSARY.

CONSTRUCTION SPECIFICATIONS

I. SITE PREPARATION

Areas under the works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. To facilitate clean out and restoration, it is recommended that the permanent pool area be cleared of all brush and trees.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free from roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. Fill material shall be unified soil Class Sc or Cl.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture so that it can be formed into a ball without crumbling. If water can be squeezed out of the ball, it is too wet to compact properly. Fill material has to be compacted to 95% of AASHTO Spec. T-99 or equivalent. Use unified soil classification Sc or Cl.

III. CORE TRENCH & CUT-OFF TRENCH

Where specified, a core trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the core trench shall be the most impervious material available and shall be compacted with equipment or rollers to 95% of AASHTO Spec. T-99 or equivalent. Use unified soil classification Sc or Cl.

IV. PIPE CONDUITS

1. Materials - (Steel Pipe) - Pipes shall be galvanized and shall conform to the requirements of AASHO Specification M-190 Type 'A' with watertight coupling bands. Dimple bands shall not be used.

V. CONCRETE

Concrete shall meet minimum requirements set forth in Maryland State Highway Administration Specifications for Construction & Materials, Sect. 918 (Portland Cement Concrete Mixtures), Mix #3. Reinforcing steel must be ASTM A615, Grade 60.

VI. GRAVEL

Washed gravel shall meet MSHA #2 stone standards for use in stone storage pits.

VII. FILTER CLOTH

Polyfilter - X or equivalent.

VIII. GABIONS

Shall be Cl. IV, PVC coated.

IX. FENCE

Construct fencing in accordance with the State Highway Administration Standard Details 490.01 and 490.02. Use specifications for a 6-foot fence, substituting 42" fabric and 6'8" line posts. Construct the gate in accordance with SHA Standard Detail 692.01 with 42" fabric. The fabric used for the fence and gate must conform to AASHTO Designation M181-74.

X. STABILIZATION

The storm water management facility will be stabilized with "Permanent Slope Seeding" as follows:
After spreading 4" topsoil seed with a mixture of 30% inoculated crown vetch and 70% Kentucky 31 Tall fescue applied at a rate of 60 lbs./ac., 10-20-20 fertilizer shall be applied at a rate of 25 lbs./1000 square feet, lime at a rate of 92 lbs./1000 square feet, mulch area with unweathered small grain straw at a rate of 1.5 T/ac., anchor with rapid curing asphalt (R.C.-70, R.C.-250 or R.C.-800) at a rate of 0.1 Gal. S.Y.

NOTE: THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF:
1. BACKFILLING OF RELEASE STRUCTURE BARREL FOR ANTI SEEP COLLAR INSPECTION.
2. PLACING FILTER CLOTH, GABIONS AND #2 STONE IN THE U.G. S.W.M. FACILITY.
3. PLACING BACKFILL OVER THE COMPLETED #2 STONE FILLED U.G. S.W.M. FACILITY.
4. BACKFILLING CORE TRENCHES

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
U.S. Soil Conservation Service — Date 10-10-86

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
APPROVED: Howard Soil Conservation District — Date 10-10-86
Plan Number

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 10-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10-16-86
CHIEF BUREAU OF ENGINEERING — DATE 10-15-86

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

ENGINEER'S CERTIFICATE
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SIGNATURE — REG. NO. 4832 — DATE 10/3/86 — 9/2/86

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SAJI-TOWARD LIMITED PARTNERSHIP
110 WEST ROAD TOWSON MD. 21204
301-321-6436

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SIR 100 LIMITED PARTNERSHIP
110 WEST ROAD TOWSON MD. 21204
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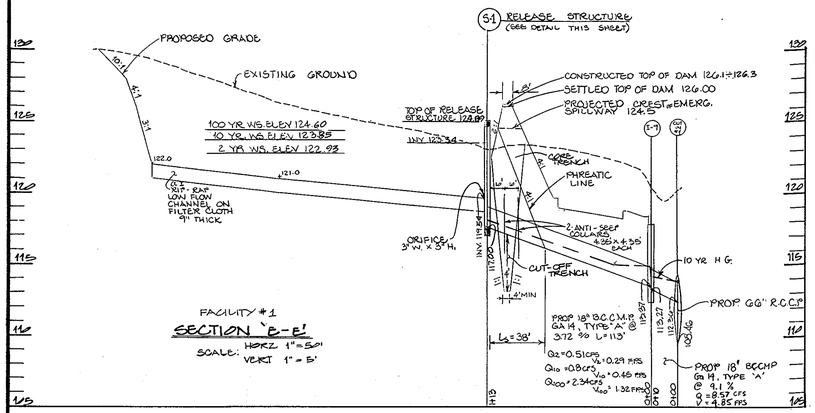
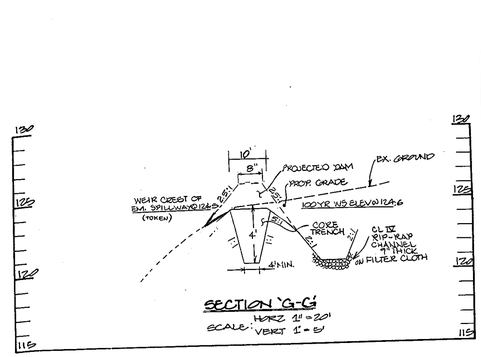
DEVELOPER — DATE 10/1/86

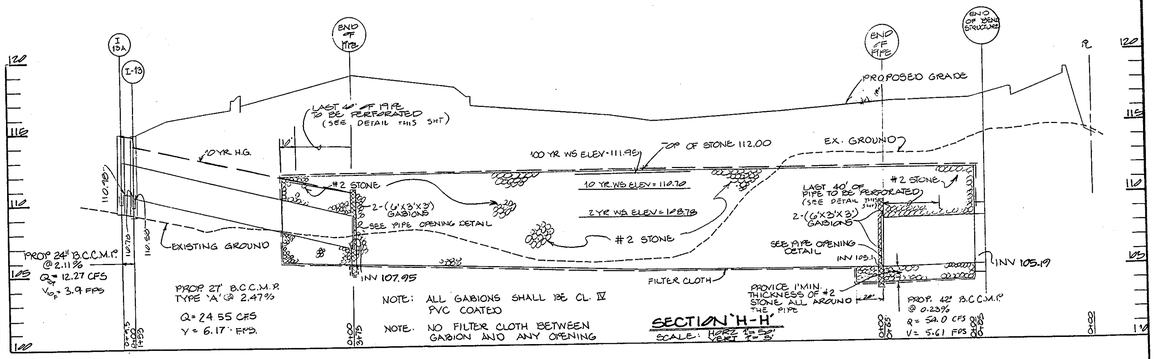
REVISIONS

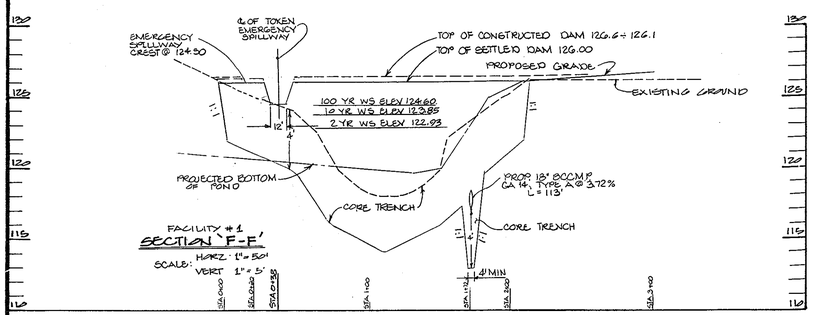
PROFILES & DETAILS FOR STORMWATER MANAGEMENT
PARCEL E-1 & PARCEL E-2, PLAT #6429
ROUTE 100 BUSINESS PARK BLOCK "F"
HOWARD COUNTY, MD — ELECTION DISTRICT - 1ST
TAX MAP #31/20 — PARCEL #601/681
SCALE: AS SHOWN — APRIL 30, 1986
SHEET 5 OF 11

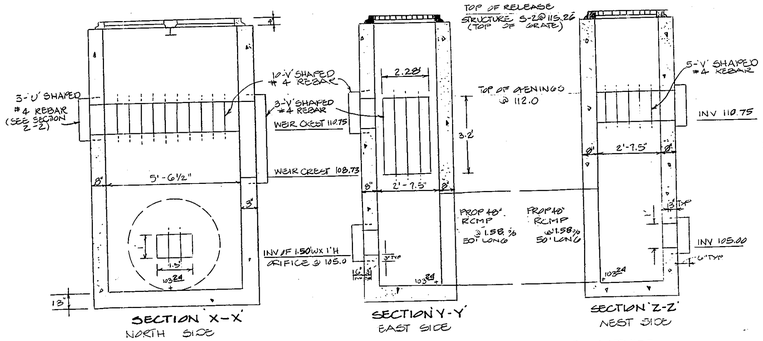
AS-BUILT MARCH-12-91 S.D.P. 86-243





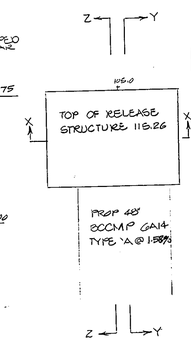


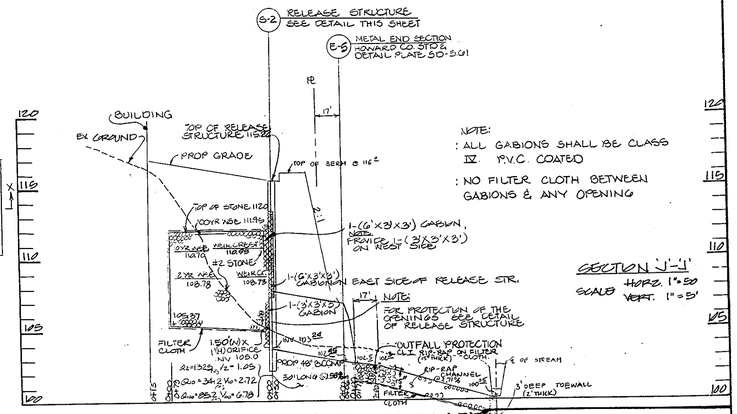




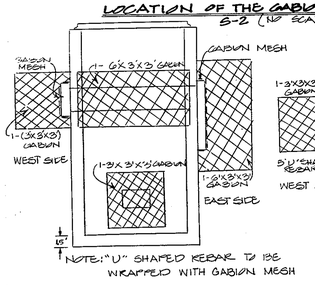
DETAIL OF RELEASE STRUCTURE
5-2 (NO SCALE)

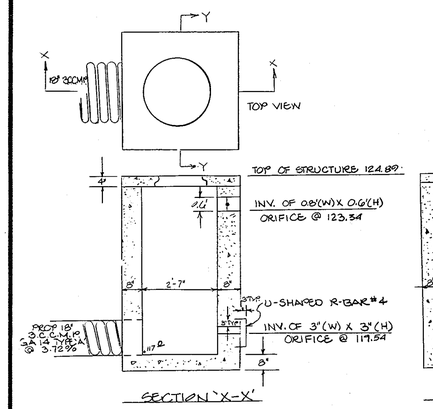
(UNLESS OTHERWISE NOTED, INLET SHALL BE BUILT-IN ACCORDANCE WITH HOWARD CO STD PLATE SD-4.23 "DOUBLE TYPE S INLET")





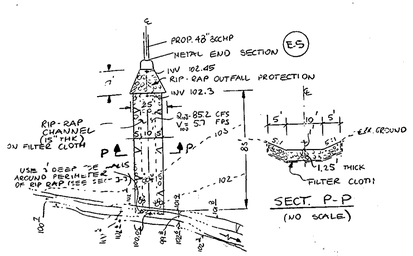
LOCATION OF THE GABION ON RELEASE STRUCTURE
5-2 (NO SCALE)



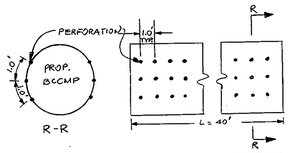


DETAIL OF RELEASE STRUCTURE
5-1 (NO SCALE)

(UNLESS OTHERWISE NOTED INLET SHALL BE BUILT-UP IN ACCORDANCE WITH HOWARD CO. STD. PLATE SD-4.22) TYPE 'S' INLET

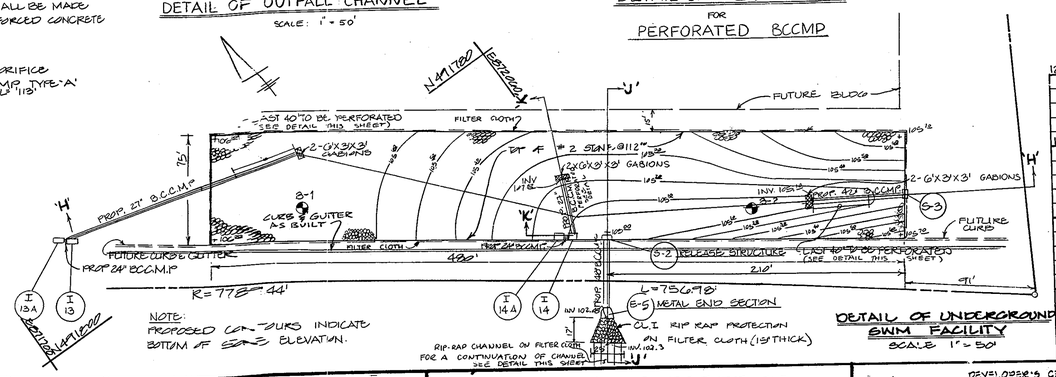


DETAIL OF OUTFALL CHANNEL
SCALE: 1"=50'

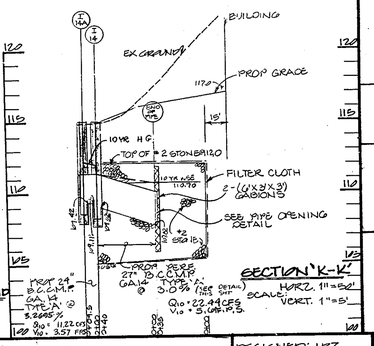


PERFORATIONS
PROVIDE 6-1" DIA HOLES AT THE LOCATION AS SHOWN. IF PROP 8CCMP IS FIELD DRILLED PLACE BITUMINOUS COAT ALONG A CIRCUMFERENCE OF EACH HOLE.

DETAIL OF PERFORATION FOR PERFORATED 8CCMP



DETAIL OF UNDERGROUND SWM FACILITY
SCALE 1"=50'



APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
U.S. Soil Conservation Service — Date 10-10-86

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
APPROVED: Howard Soil Conservation District — Date 10-10-86

Plan Number

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 11-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10-16-86
CHIEF BUREAU OF ENGINEERING — DATE 10-15-86

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER — 10/9/86

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A REDLINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION."
10/9/86 — 3/5/86 — 4732 — REG. NO.

OWNER-PARCEL E-1: SAXI-TOWAS LIMITED PARTNERSHIP, 110 WEST ROAD, TOWSON MD. 21204, 301-321-6436
OWNER-PARCEL E-2: GIR 100 LIMITED PARTNERSHIP, 110 WEST ROAD, TOWSON MD. 21204, 301-321-6436
DEVELOPER: JAMES F. KNOTT DEVELOPMENT CORPORATION, 110 WEST ROAD, TOWSON MARYLAND 21204, 301-321-6436

DEVELOPER'S CERTIFICATE
"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION."
DEVELOPER — DATE 10/7/86

DESIGNED: IRZ
DRAWN: D.A.L.
CHECKED: IRZ

PROFILES & DETAILS FOR STORMWATER MANAGEMENT
PARCEL E-1 & PARCEL E-2
PLAT #6429
ROUTE 100 BUISNESS PARK BLOCK 'F'
HOWARD COUNTY, MD — ELECTION DISTRICT - 1ST
TAX MAP #31/30 — PARCEL #601/281
SCALE: AS SHOWN — AF 281.30, 1986
SHEET 6 OF 11

AS-BUILT MARCH 12-91 SDP 86-249

INLET SCHEDULE

* TOP GRATE ELEV.

NO.	TYPE	Q cfs	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-1	DBL 'S' COMB	2.0	105.45	105.75	116.90	20 YR. - HO. CO. STD. DET. SD. 4.32
I-2	DBL 'S' COMB	2.7	—	107.62	117.40	HO. CO. MODIFIED SD 1.01 / 4.34
I-3	DBL 'S' COMB	4.2	110.07	110.07	115.10	20 YR. - HO. CO. STD. DET. SD 4.34
I-3A	DBL 'S' COMB	4.2	—	110.30	115.10	20 YR. " " " " SD 4.34
I-4	DBL 'S' COMB	4.1	111.66	111.66	115.10	20 YR. " " " " SD 4.34
I-4A	DBL 'S' COMB	4.2	—	111.69	115.10	20 YR. " " " " SD 4.34
I-5	DBL 'S' COMB	3.8	—	112.15	117.00	(DEPRESSED) " " " " SD 4.34
I-6	'E' INLET	1.7	111.75	111.50	*116.67	20 YR. " " " " SD 4.21
I-7	'E' INLET	1.9	113.68	113.10	*116.67	20 " " " " SD 4.21
I-8	—					
I-9	DBL 'S' COMB					SEE SWM DWGS
I-10	—					
I-11	'S' COMB	0.6	120.50	120.40	124.60	H. CO. STD. DET. SD. 4.32
I-12	DBL 'S' COMB	2.9	—	121.48	125.40	H. CO. STD. DET. SD-4.34
I-13	DBL 'S' COMB					SEE SWM DWGS.
I-13A	DBL 'S' COMB					
I-14	DBL 'S' COMB					
I-14A	DBL 'S' COMB					

STRUCTURE SCHEDULE

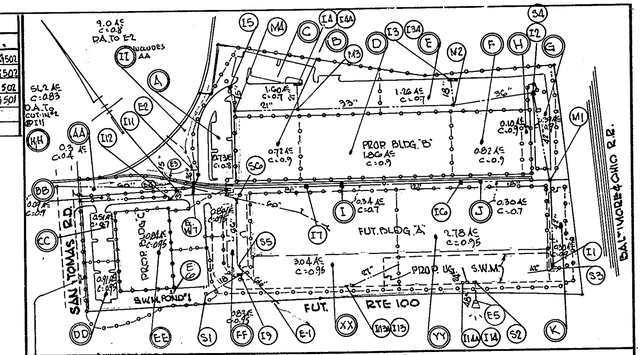
NO.	TYPE	IN	OUT	INV. OUT	TOP MH	REMARKS
S-1	MODIFIED 'S' INLET					SEE SWM DWGS
S-2	MODIFIED 'S' INLET					SEE SWM DWGS
S-3	BEND	42"	42"	105.75		HO. CO. STD. DET. SD. 1.01
S-4	BEND/MODIFIED	36"	42"	107.12		HO. CO. MODIFIED SD 4.34 / 1.01
S-5	BEND/IN MH	66"	66"	108.76	118.50	HO. CO. STD. DET. SD 1.01
S-6	BEND/W MH	60"	66"	111.65	120.75	" " " " SD 1.01

ENDWALL SCHEDULE

NO.	TYPE	SIZE	INV. IN.	INV. OUT	TOP ELEV.	REMARKS
E-1	TYPE 'A' HDWL	66"	106.40	-	MODIFIED SURVEY DATA	HO. CO. STD DET SD 5.11
E-2	TYPE 'C' END WL	36"	-	116.64		" " " " SD 5.21
E-3	TYPE 'C' ENDWL	15"	120.00	-		" " " " SD. 5.21
E-4	TYPE 'C' ENDWL	15"	-	120.50		" " " " SD. 5.21
E-5	METAL END SECT.					SEE SWM DWGS
E-6	TYPE 'C' ENDWL	18	-	125.9		HO. CO. STD. DET. SD. 5.2

MANHOLE SCHEDULE

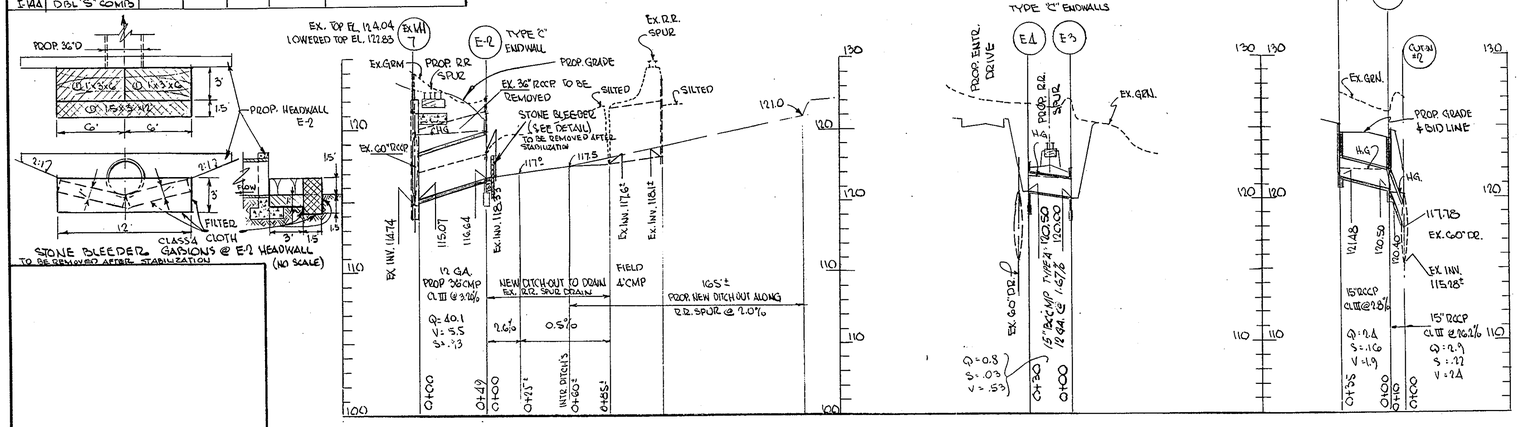
NO.	TYPE	SIZE	INV. IN	INV. OUT	TOP ELEV.	REMARKS.
M-1	STANDARD	60"	106.59	106.19	117.00	HO. CO. STD. DET. SD 5.01
M-2	STANDARD	60"	108.35	108.30	116.60	" " " " SD 5.01
M-3	STANDARD	60"	110.93	109.93	116.60	" " " " SD 5.01
M-4	STANDARD	48"	111.94	111.44	119.00	" " " " SD 5.01

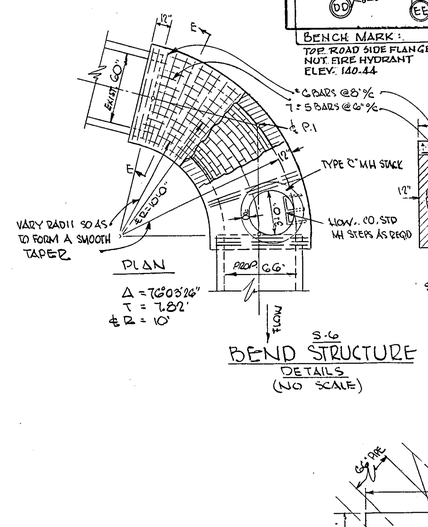


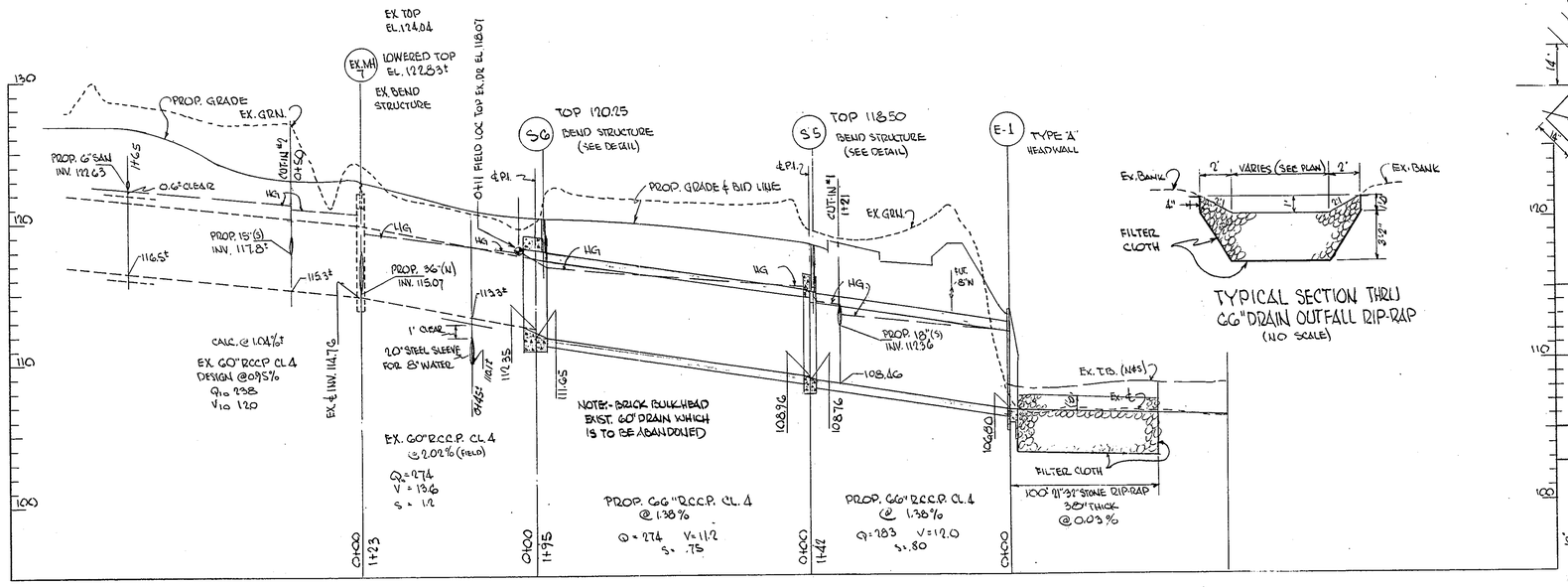
BENCH MARK:
TOP. ROAD SIDE FLANGE
NOT. FIRE HYDRANT
ELEV. 140.44

DRAINAGE AREA MAP

SCALE: 1" = 200'



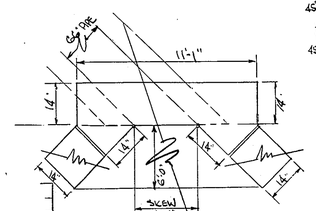




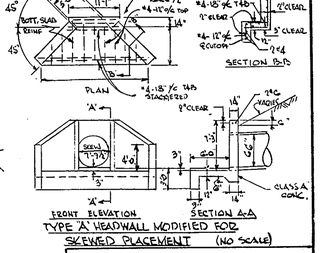
PROFILE

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

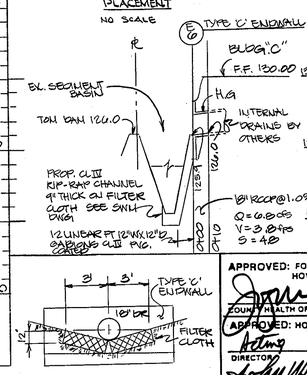
TYPICAL SECTION THRU 66" DRAIN OUTFALL RIP-RAP
(NO SCALE)



DETAIL OF SKEWED WALL PLACEMENT
NO SCALE



TYPE 'A' HEADWALL MODIFIED FOR SKEWED PLACEMENT (NO SCALE)



DETAIL GABION OUTFALL @ E-6

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 10-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DIRECTOR — DATE 10-21-86

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10-16-86

CHIEF BUREAU OF ENGINEERING — DATE 10-15-86

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

OWNER - PARCEL E-1
SAN TOMAS LIMITED PARTNERSHIP
110 WEST ROAD TOWSON, MD. 21204
301-321-6436

OWNER - PARCEL E-2
S.T.R. 100 LIMITED PARTNERSHIP

DEVELOPER
JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON, MARYLAND 21204
301-321-6436

DESIGNED: J.W.
DRAWN: G.Y.
CHECKED: C.K.S.

P.N. 05260

BY	NO.	REVISION	DATE
JSS	—	—	7-23-86
J.W.		CHANGE 60" I.D. TO 66" DR. ADD SKEWED HEADWALL PLAN / HEALTH COMMENTS	9-19-86
E.L.		ADD E6 DR. OUTFALL FROM BLDG. 'C'	5-25-87

PROFILES & DETAILS FOR STORM DRAINS

CONTRACT NO:

600' SCALE MAP NO. 37-38-43-44 BLOCK NO. 10

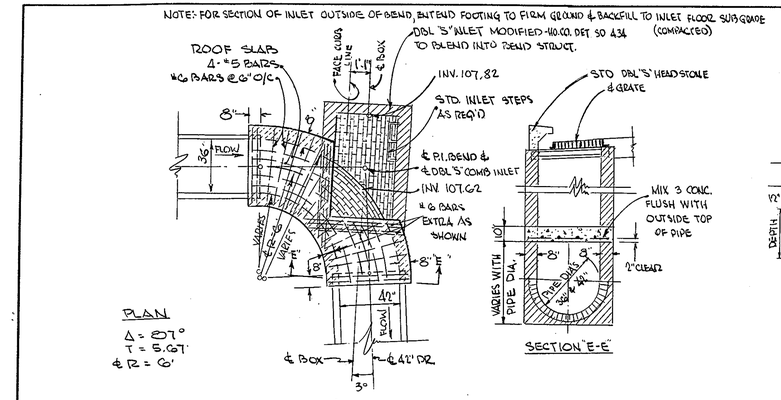
PROPOSED OFFICE & WAREHOUSE
PARCEL E-1 & PARCEL E-2
PLAT # 6429
ROUTE 100 BUSINESS PARK BLOCK F
1ST ELECTION DISTRICT · HOWARD COUNTY, MD.
TAX MAP 37/38 PARCEL # 601/281
SCALE: AS SHOWN
DATE: APRIL 30, 1986
SHEET 7 OF 11 S.D.P.-86-249

SCALE AS SHOWN

SHEET NO. 7 OF 11

SDP-86-249

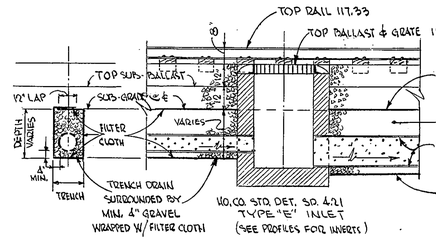
NOTE: FOR SECTION OF INLET OUTSIDE OF BEND, BATTEND FOOTING TO FIRM GROUND & BACKFILL TO INLET FLOOR SUBGRADE (COMPACTED)



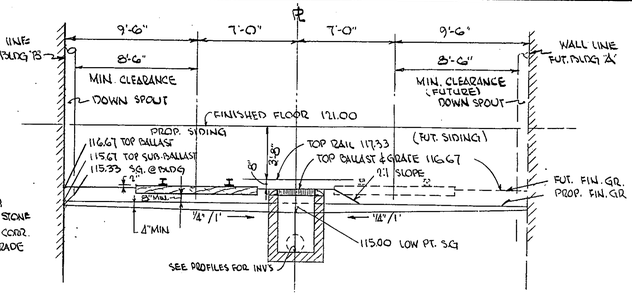
MODIFIED BEND STRUCTURE & DBL 'S' COMB. INLET
DETAILS
(NO SCALE)

I-2 & S-4

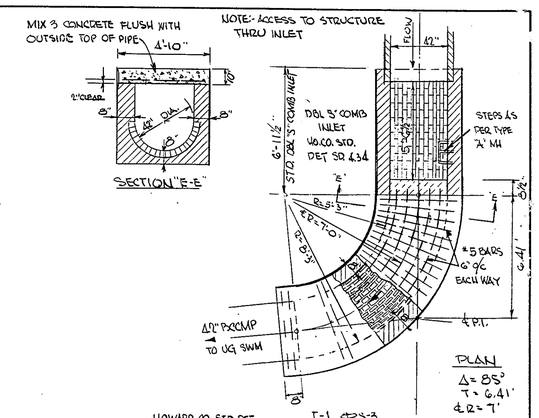
HOWARD CO. DET. SD 1.01 / SD 4.34



SECTION THRU INLET & SUB-BALLAST TRENCH DRAIN
NO SCALE



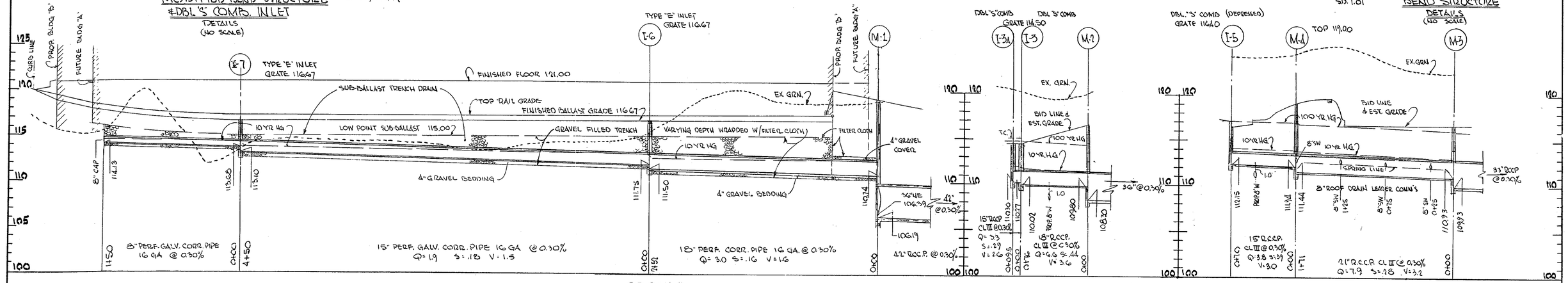
SECTION THRU R.R. SIDINGS BETWEEN BUILDINGS
(NO SCALE)



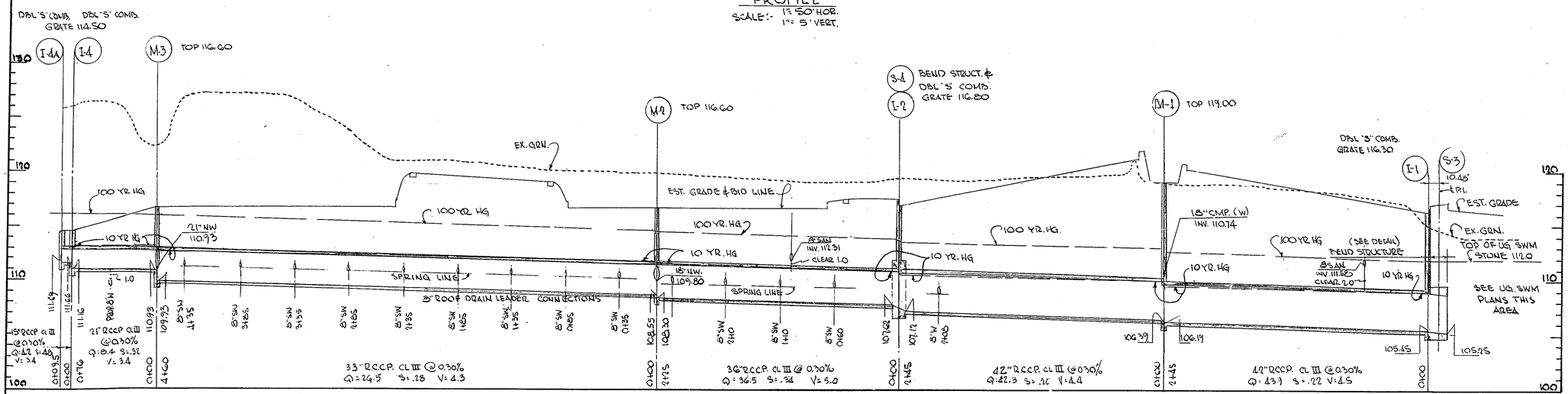
HOWARD CO. STD. DET. SD. 1.01

I-1 & S-3

BEND STRUCTURE DETAILS
(NO SCALE)



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



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

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 10-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10-16-86
CHIEF BUREAU OF ENGINEERING — DATE 10-15-86

GWS
GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120
PN 5260

OWNER - PARCEL E-1
SAN TOMAS LIMITED PARTNERSHIP
110 WEST ROAD TOWSON, MD. 21204
301-321-6436

OWNER - PARCEL E-2
S.T.R. 100 LIMITED PARTNERSHIP

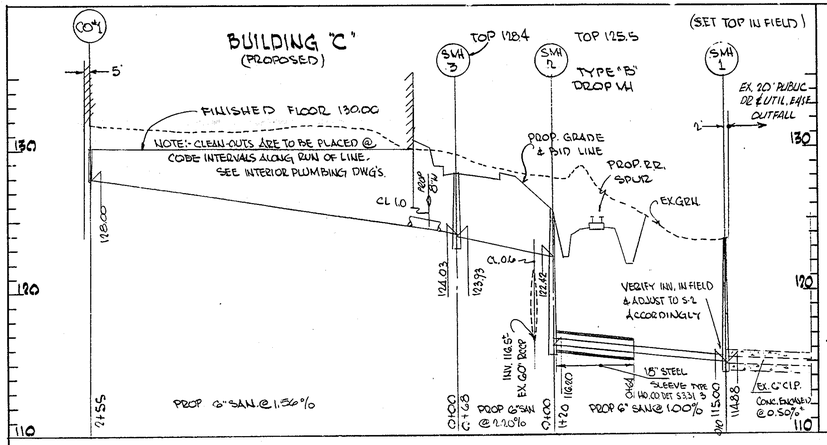
DEVELOPER
JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON, MARYLAND 21204
301-321-6436

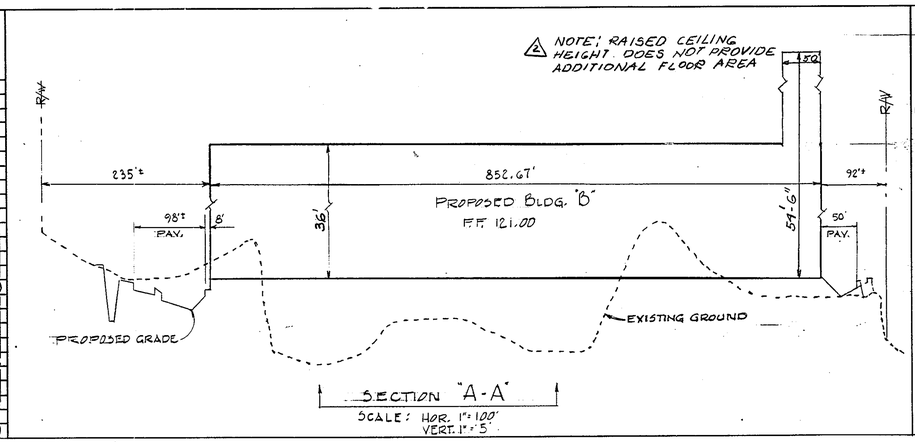
PROFILES & DETAILS FOR STORM DRAINS

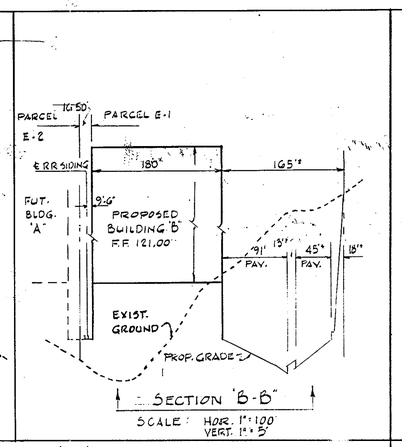
REVISIONS

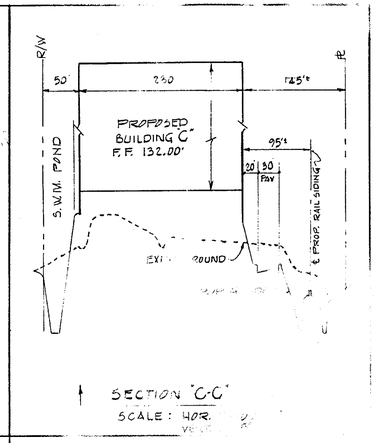
STORM DRAIN PROFILES & DETAILS
PARCEL E-1 & PARCEL E-2
PLAT # 6429
ROLITE 100 BUSINESS PARK - BLOCK F
1ST ELECTION DISTRICT - HOWARD COUNTY, MD.
TAX MAP # 37/38 PARCEL - 601/28
SCALE: AS SHOWN DATE: APRIL 30, 1986
SHEET 8 OF 11 S.D.P.-86-249

SDP-86-249

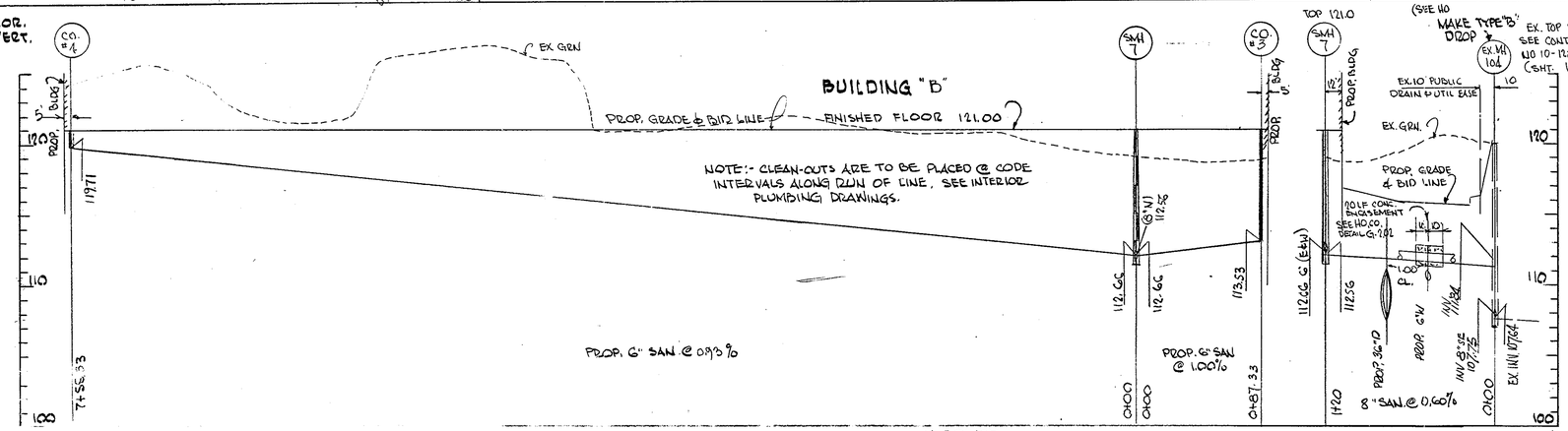








PROFILE:- 1" = 50' HOR. 1" = 5' VERT.



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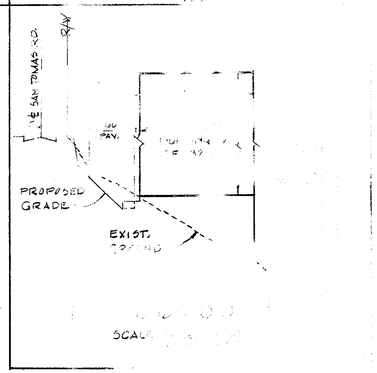

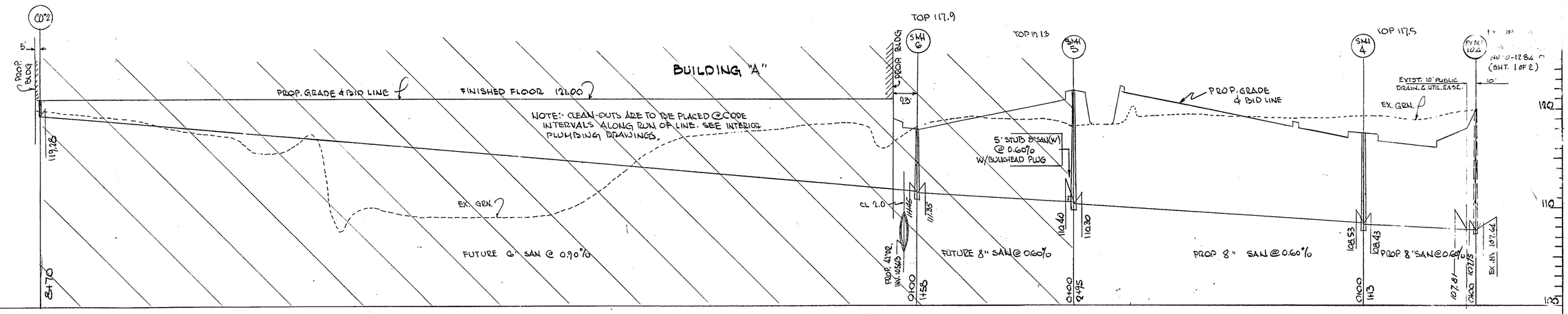

REVISION #2 6/1/2004

△ INCREASED HEIGHT OF EXISTING BUILDING BY 18.5'±

REVISION #2 PREPARED BY:

BALTIMORE LAND DESIGN GROUP INC.
CONSULTING ENGINEERS
222 SCHILLING CIRCLE, SUITE 105 HUNT VALLEY, MD 21030

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

Revision #2 only

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 10-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DIRECTOR — DATE 10-21-86

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 10-16-86

CHIEF BUREAU OF ENGINEERING — DATE 10-15-86

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-3-86

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
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DEVELOPER
JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON, MARYLAND 21204
301-321-6436

REVISIONS
323-87 Lower Bldg. & San. Bldg. "E"

SANITARY PROFILES & DETAILS
PARCEL E-1 & PARCEL E-2
PLAT # 6429
ROUTE 100 BUSINESS PARK-BLOCK F
1ST ELECTION DISTRICT - HOWARD COUNTY, MD.
TAX MAP 47/58 PARCEL 601/281
SCALE: AS SHOWN DATE: APRIL 30, 1983
SHEET 9 OF 11 S.D.P. 86-244

SDP-86-244

PROP. RAIL SPUR CURVE DATA

CURVE No	Δ	RADIUS	DE	T	L (ARC)	R.R.L (ARC)
1	13°55'26"	459.28'	12°30'	56.08'	111.61'	111.39'
2	8°56'14.4"	459.28'	12°30'	35.89'	71.64	71.50'
3	10°05'24.4"	459.28'	12°30'	64.72	128.93	128.72

GENERAL NOTES

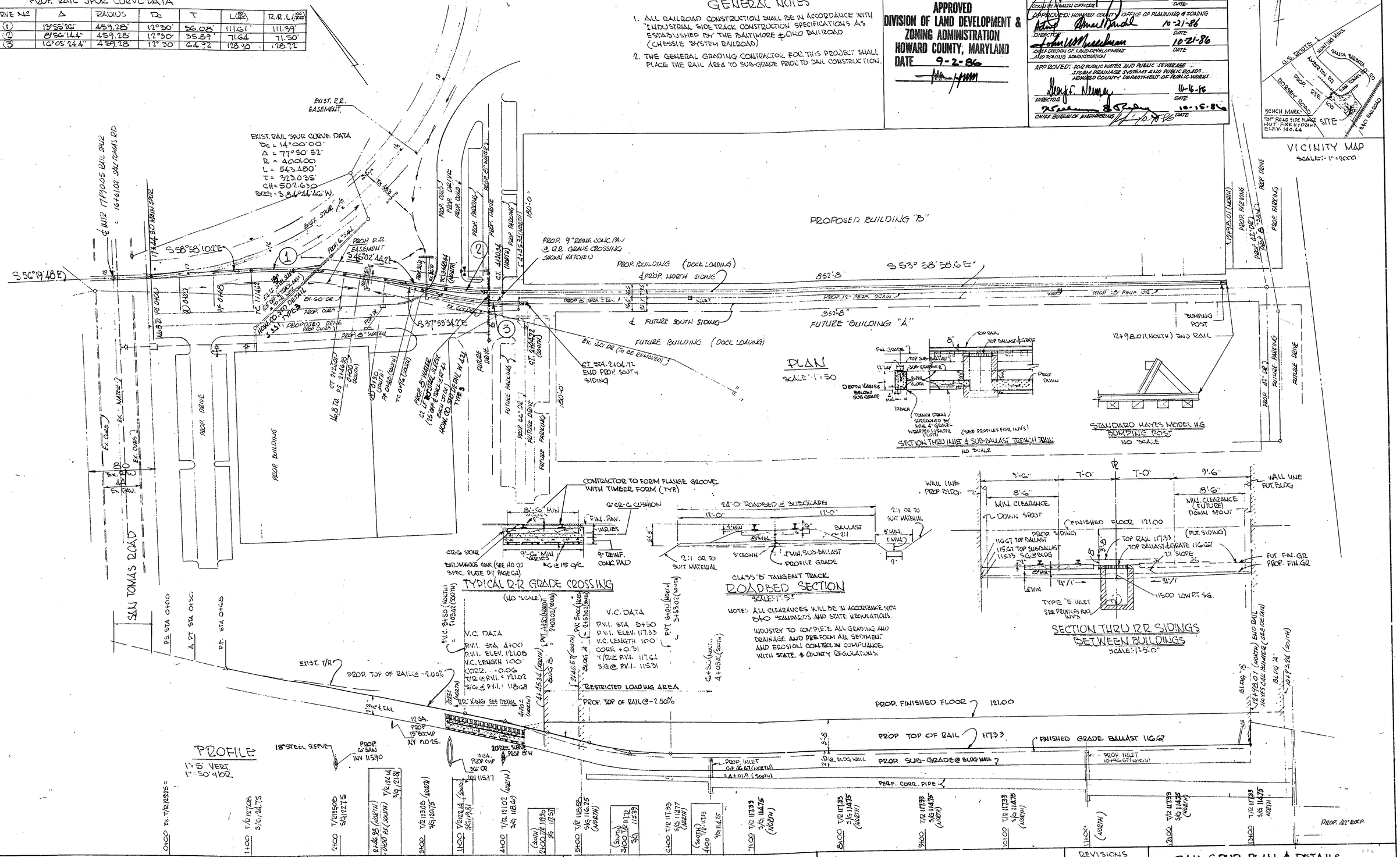
1. ALL RAILROAD CONSTRUCTION SHALL BE IN ACCORDANCE WITH "INDUSTRIAL SIDE TRACK CONSTRUCTION SPECIFICATIONS AS ESTABLISHED BY THE BALTIMORE & OHIO RAILROAD (CHESSIE SYSTEM RAILROAD)
2. THE GENERAL GRADING CONTRACTOR FOR THIS PROJECT SHALL PLACE THE RAIL AREA TO SUB-GRADE PRIOR TO RAIL CONSTRUCTION.

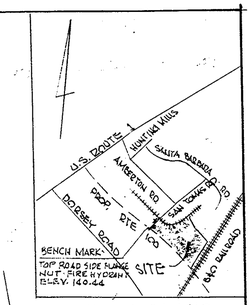
APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE: 10-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE: 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE: 10-21-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE: 10-16-86
CHIEF BUREAU OF ENGINEERING — DATE: 10-15-86





VICINITY MAP
SCALE: 1" = 2000'

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

PROFESSIONAL ENGINEER
4732 — REG. No.
11/3/86 — DATE

OWNER - PARCEL E-1
SAN TOMAS LIMITED PARTNERSHIP
110 WEST ROAD TOWSON, MD. 21204
301-321-6436

OWNER - PARCEL E-2
S.T.R. 100 LIMITED PARTNERSHIP
110 WEST ROAD TOWSON, MD. 21204
301-321-6436

DEVELOPER
JAMES E. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON, MARYLAND 21204
301-321-6436

REVISIONS
DRAWN:
DESIGN:
CHECK:
FILE: 05260

RAIL SPUR PLAN & DETAILS
FOR
PARCEL E1 & PARCEL E-2
ROUTE 100 BUSINESS PARK-BLOCK F
PLAT # 6429

HOWARD COUNTY, MARYLAND
SCALE: - AS SHOWN
SHEET 10 OF 11
ELECTION DISTRICT # 1
DATE: FEB 10, 1986

S.D.P. - 86-249

GENERAL NOTES

1. Maximum building height = 50'.
2. All areas not being paved or receiving building coverage shall be established in accordance with the plans approved by the Howard Soil Conservation District.
3. Any damage to public rights-of-way and/or adjacent properties shall be repaired immediately at the contractor's expense.
4. The contractor shall maintain at least 2' level bench behind all curb and gutter to fill areas.
5. The contractor shall verify all existing utilities to his own satisfaction before starting construction.
6. All slopes shall be 3:1 or flatter.
7. All work shall be done in accordance with Howard County Standard Specifications and Details for Construction, or as shown on these plans.
8. The contractor shall notify the C & P Telephone Co. and the Gas and Electric Company five days prior to starting work shown on these plans by calling "Miss Utility". Call collect 1-559-0100.
9. For details of ramps and signs for the handicapped see the Maryland Building Code for the Handicapped and Aged and as shown hereon.
10. The contractor shall maintain a minimum of 4' cover over all proposed water lines.
11. All rip-rap shall be placed on filter cloth.
12. The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 992-2417 or 792-2173.
13. The contractor shall remove all existing paving, curb and gutter, etc. that may interfere with proposed construction.
14. All utilities installed shall receive full trench compaction.
15. All water main tees, bends, caps, etc. shall be buttressed in accordance with Howard County Design requirements.

SITE DATA

TOTAL AREA OF SITE:-	19.109 AC±
AREA OF PARCEL E-1	8.801 AC±
AREA OF PARCEL E-2	10.308 AC±
AREA OF PARCEL E-2 (PHASE I)	2.639 AC±
EXISTING ZONING:	M-2
EXISTING USE:	VACANT
PROPOSED USE:	OFFICE/WAREHOUSE
PARKING REQUIRED AS TABULATED	SPACES
PARKING PROVIDED (INCLUDES 8 HDCP)	SPACES
FLOOR RATIO - PARCEL E-1 : 3,523/8801	= 40%
FLOOR RATIO - PARCEL E-2 (PHASE I) 0.845/	= 32%
% OPEN SPACE - PARCEL E-1 : 2,050/8,801	= 23%
% OPEN SPACE - PARCEL E-2 (PHASE I) : 0.805/2.639	= 30%
AREA TO BE DISTURBED - PARCEL E-1	: 8.000 AC±
AREA TO BE DISTURBED - PARCEL E-2	= 10.308 AC±
AREA TO BE VEGETATIVELY STABILIZED (E-1)	: 2.050 AC±
AREA TO BE VEGETATIVELY STABILIZED (E-2)	: 8.479 AC±
BUILDING & PAVING COVERAGE (E-1)	: 6.217 AC±
BUILDING & PAVING COVERAGE (E-2) PHASE I	: 1.835 AC±

AREA PARKING LOTS E-1	AC. 1.88
AREA PARKING LOTS E-2 PHASE I	1.187
AREA LANDSCAPED ISLANDS E-1	2.351
AREA LANDSCAPED ISLANDS E-2 PHASE I	1.010
% LANDSCAPED ISLANDS TO PARKING E-1	= 51%
% LANDSCAPED ISLANDS TO PARKING E-2 PHASE I	= 47%

PARKING TABULATION
PARCEL E-2 (PHASE I) BLDG. "C"

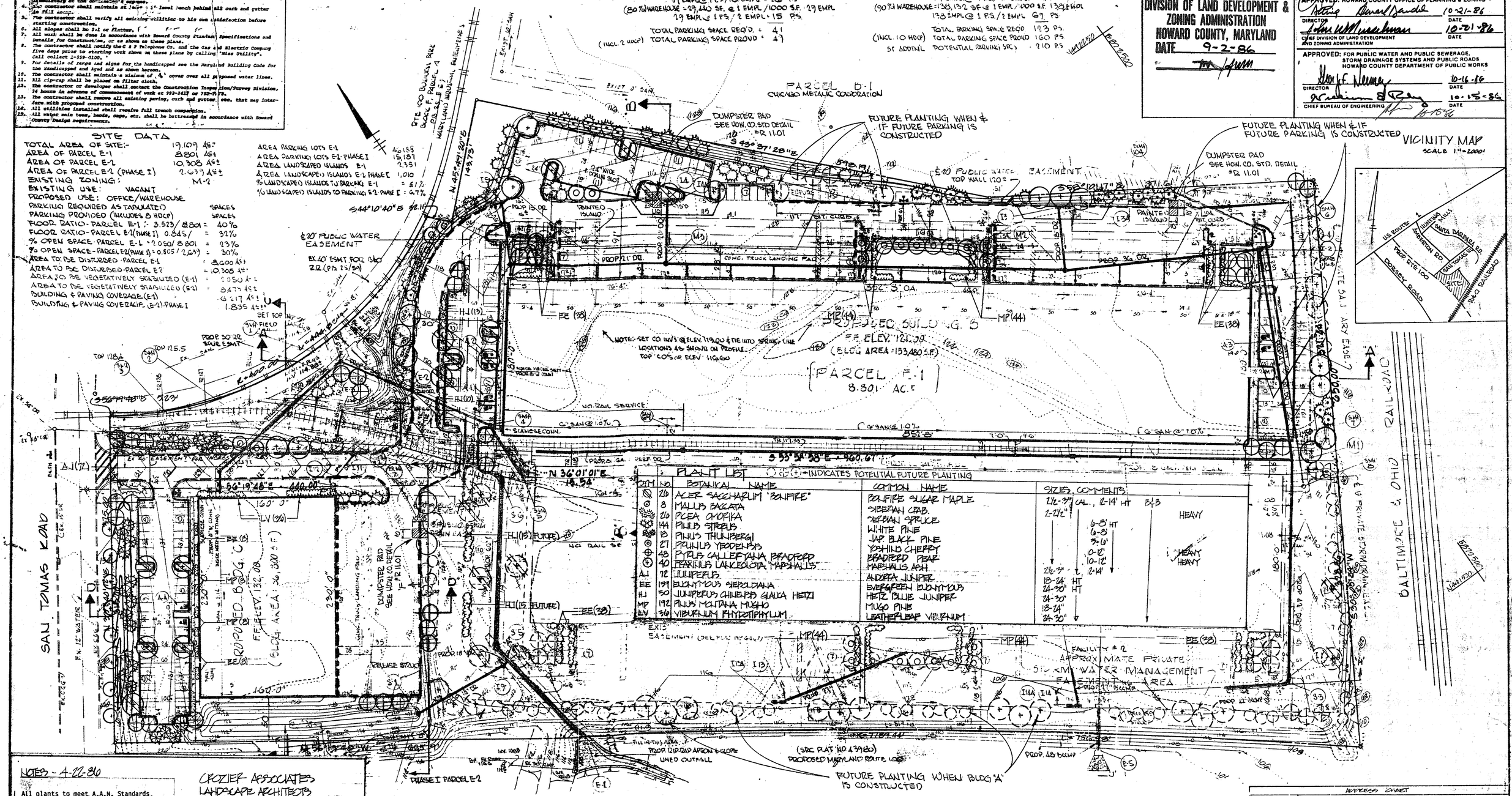
TOTAL FLOOR AREA 36,800 SF
(20%) OFFICE = 7,360 SF @ 1 EMPL./200 S.F. = 37 EMPL.
37 EMPL. @ 7 PS/10 EMPL. = 26 PS
(80%) WAREHOUSE = 29,440 S.F. @ 1 EMPL./1000 S.F. 29 EMPL.
29 EMPL. @ 1 PS/2 EMPL. = 15 PS
TOTAL PARKING SPACE REQ'D. = 41
(INCL. 2 HDCP) TOTAL PARKING SPACE PROV'D = 43

PARKING TABULATION
PARCEL E-1 BLDG. B

TOTAL FLOOR AREA 153,480 S.F.
(10%) OFFICE = 15,348 S.F. @ 1 EMPL./200 S.F. = 77 EMPL.
77 EMPL. @ 7 PS/10 EMPL. = 54 PS
(90%) WAREHOUSE = 138,132 S.F. @ 1 EMPL./1000 S.F. 138 EMPL.
138 EMPL. @ 1 PS/2 EMPL. 69 PS
TOTAL PARKING SPACE REQ'D 123 PS
(INCL. 10 HDCP) TOTAL PARKING SPACE PROV'D 160 PS
5% ADDITNL POTENTIAL PARKING SPC. 210 PS

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 8-20-86
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10-16-86
CHIEF BUREAU OF ENGINEERING — DATE 10-15-86



PLANT LIST

(+) INDICATES POTENTIAL FUTURE PLANTING

SYM	NO.	BOTANICAL NAME	COMMON NAME	SIZES, COMMENTS
	26	ACER SACCHARUM 'BONFIRE'	BONFIRE SUGAR MAPLE	2½-3" CAL., 12-14' HT B&B
	8	MALUS BACCATA	SIBERIAN CRAB	2-2½" HEAVY
	26	PICEA OMORIKA	SERBIAN SPRUCE	6-8' HT
	144	PINUS STROBUS	WHITE PINE	6-8
	18	PINUS THUNBERGI	JAP. BLACK PINE	3-4'
	27	PRUNUS YEDOENSIS	YOSHINO CHERRY	8-10'
	48	PYRUS CALLERYANA BRADFORD	BRADFORD PEAR	10-12'
	40	FRAXINUS LANCEOLOTA MARSHALLS	MARSHALLS ASH	2½-3" CAL., 12-14'
AJ	72	JUNIPERUS	ANDORRA JUNIPER	18-24" HT
EE	199	EUONYMOUS SIEBOLDIANA	EVERGREEN EUONYMOUS	24-30" HT
HJ	50	JUNIPERUS CHINENSIS GLAUCA HETZI	HETZ BLUE JUNIPER	24-30"
MP	192	PINUS MONTANA MUGHO	MUGO PINE	18-24"
LV	36	VIBURNUM RHYTIDIPHYLLUM	LEATHERLEAF VIBURNUM	24-30"

NOTES - 4-22-86

1. All plants to meet A.A.N. Standards.
2. Landscape Contractor to follow 'Landscape Specification Guidelines for Baltimore-Washington Metro Area' approved by LCAMW.
3. No substitutions to be made without consent of Landscape Architect.
4. All beds to be topped with 3" shredded hardwood mulch.
5. Landscape Contractor to verify location of utilities with owner before planting.

6. NOTE GRADING ALONG SAN TOMAS RD. ON LANDSCAPED BLVD. ON BLDG. "B" & FUTURE BLDG. "A"

CROZIER ASSOCIATES
LANDSCAPE ARCHITECTS
3000 CHESTNUT AVE
BALTIMORE, MD
(301) 366-3330

STATE OF MARYLAND — JULIE B. HIGGINS — NO. 526 — REGISTERED LANDSCAPE ARCHITECT — 10-7-86

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120
PN 5160

STATE OF MARYLAND — JULIE B. HIGGINS — NO. 526 — REGISTERED LANDSCAPE ARCHITECT — 10-7-86

OWNER - PARCEL E-1	OWNER - PARCEL E-2
SAN TOMAS LIMITED PARTNERSHIP	S.T.R. 100 LIMITED PARTNERSHIP
110 WEST ROAD TOWSON, MD. 21204	
301-321-6436	

DEVELOPER
JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON, MARYLAND 21204
301-321-6436

ADDRESS CHART

BUILDING #	STREET ADDRESS

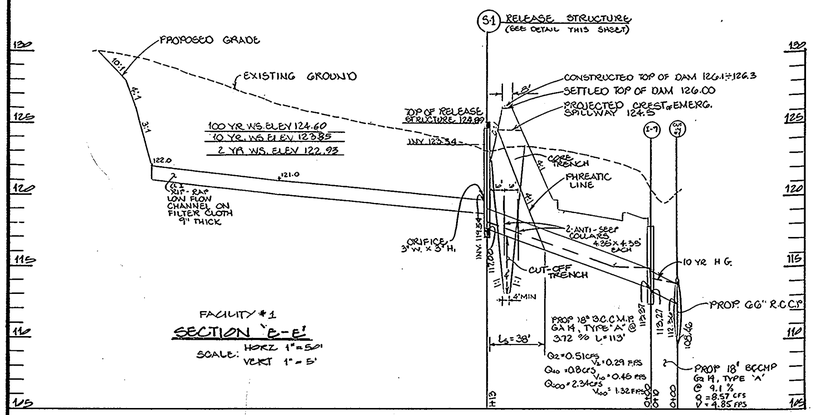
SUBDIVISION NAME:

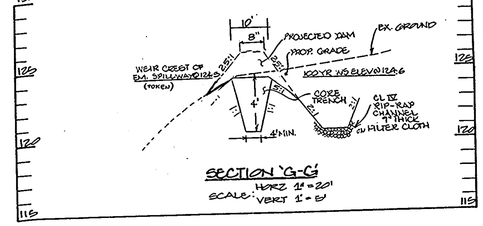
LOT # OF LOT	BLOCK #	ZONE	TAX/ZONE MAP	ELECT. DIST.	LOT/PARCEL
WATER CODE		M-2	37 & 38 SEWER CODE	1 E	37-69 38-181 CENSUS TRACT

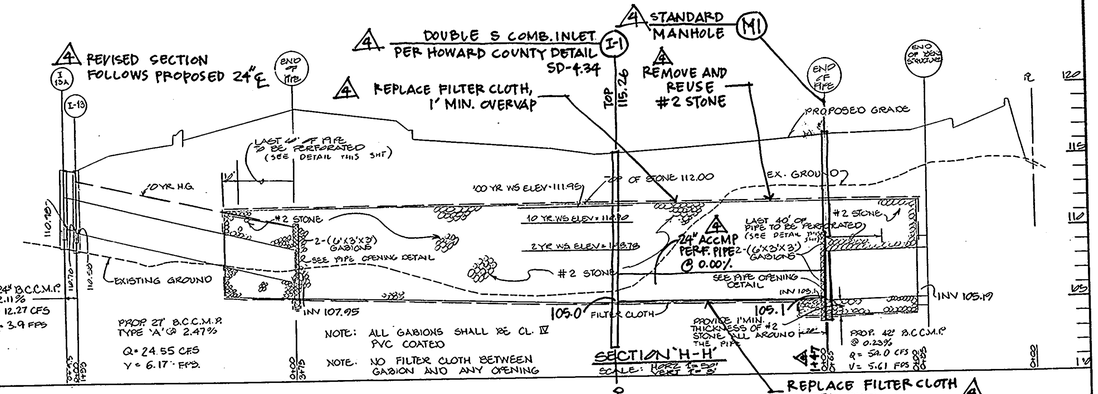
DESIGNED: C.K.S.
DRAWN: G.Y.
CHECKED: C.K.S.

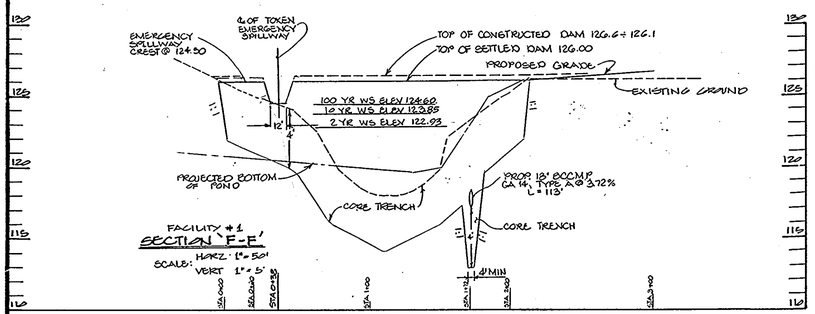
LANDSCAPE PLAN
PARCEL E-1 & PARCEL E-2 PHASE I
PLAT #6429
ROUTE 100 BUSINESS PARK: BLOCK F
1ST ELECTION DISTRICT · HOWARD COUNTY, MD.
TAX MAP #37/38 PARCEL E-001/181
SCALE: 1" = 50' DATE: APRIL 30, 1986
SHEET 11 of 11 SDP-86-249

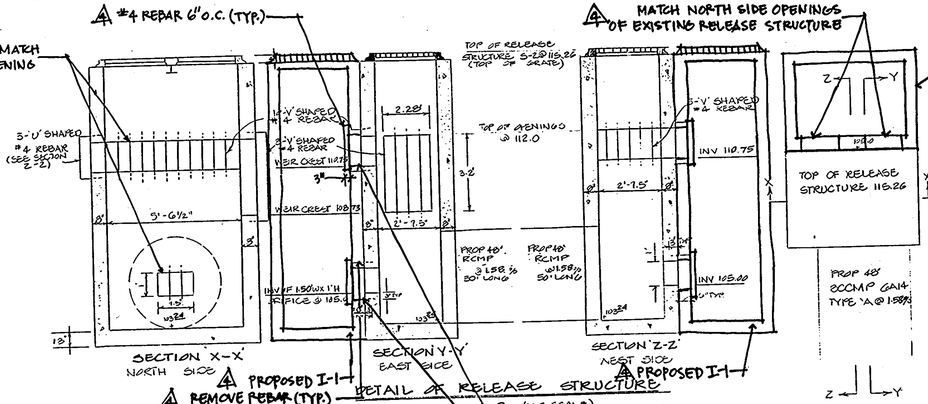
SDP-86-249

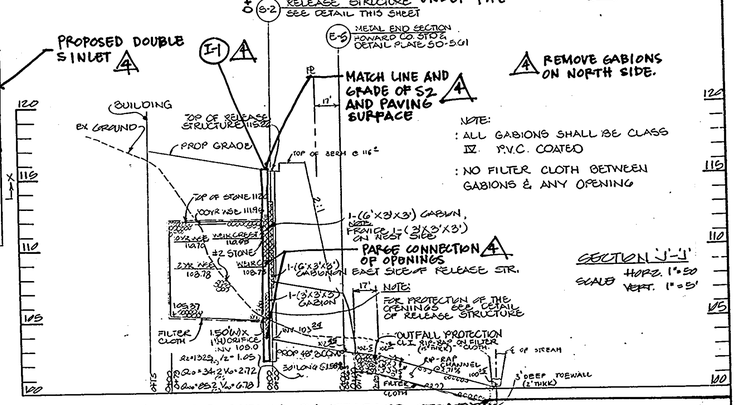


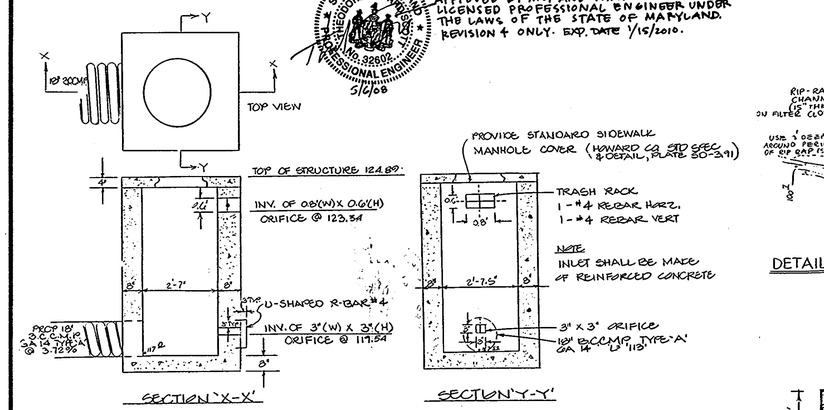








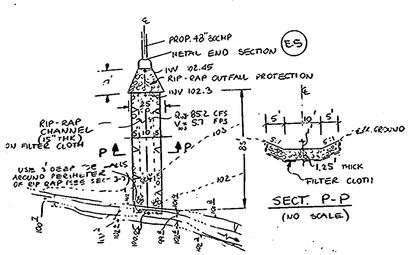




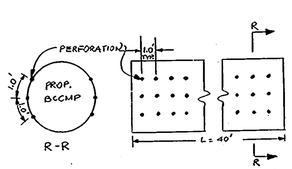
DETAIL OF RELEASE STRUCTURE
S-1 (NO SCALE)

(UNLESS OTHERWISE NOTED INLET SHALL BE BUILT-UP IN ACCORDANCE WITH HOWARD CO STD, PLATE SD-4.22) TYPE 'S' INLET

ADDITION OF ONE DOUBLE S COMBINATION INLET, ONE ACCESS MANHOLE, AND 24" ACCMP TO UNDERGROUND SWM FACILITY #2. REVISION 4 PREPARED BY TE SCOTT + ASSOCIATES, 128 COCKEYSVILLE ROAD, SUITE 200, HUNT VALLEY, MARYLAND 21030.

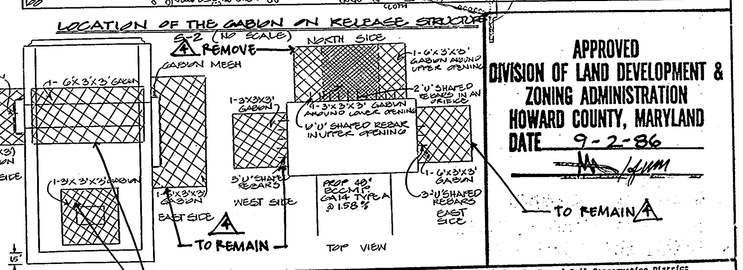


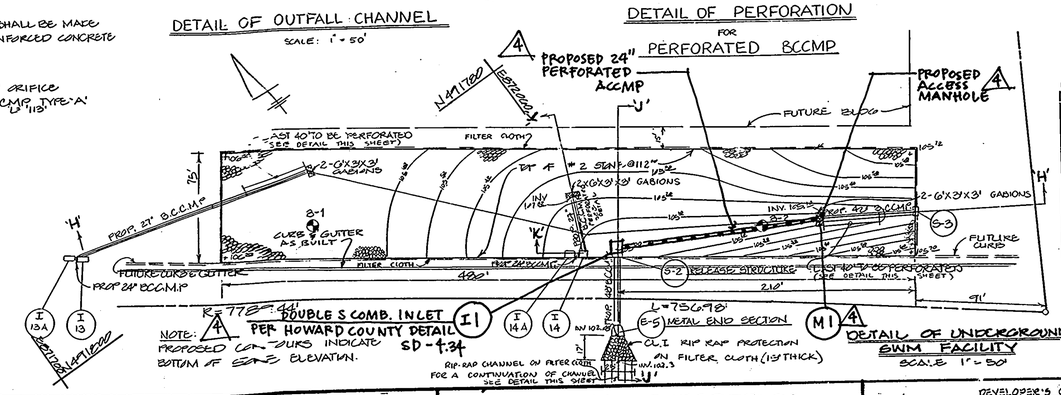
DETAIL OF OUTFALL CHANNEL
SCALE: 1" = 50'

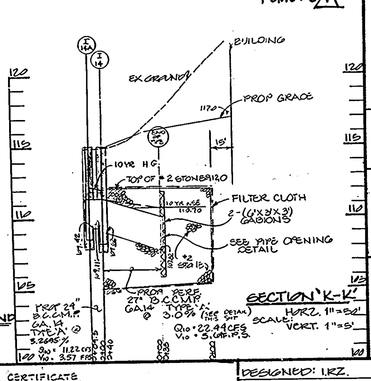


PERFORATIONS
PROVIDE 6-1" DIA HOLES AT THE LOCATION AS SHOWN. IF PROP. BCCMP IS FIELD DRILLED. PLACE BITUMINOUS COAT ALONG A CIRCUMFERENCE OF EACH HOLE.

DETAIL OF PERFORATION FOR PERFORATED BCCMP







APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

TO REMAIN

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
U.S. Soil Conservation Service — Date 10-10-86

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
APPROVED: Howard Soil Conservation District — Date 10-10-86
Plan Number

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 11-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10-16-86
CHIEF BUREAU OF ENGINEERING — DATE 10-15-86

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. REVISION 4 ONLY. EXP. DATE 1/15/2010.
STATE OF MARYLAND — THEODORE EDWARD SCOTT — No. 32892 — PROFESSIONAL ENGINEER — 5/6/08

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A REDLINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION."
SIGNATURE — DATE 10/8/86
4732 — REG. NO. — DATE 5/5/86

OWNER-PARCEL E-1: SASI-TOWSON LIMITED PARTNERSHIP, 110 WEST ROAD, TOWSON, MD. 21204, 301-321-6436
OWNER-PARCEL E-2: SASI 100 LIMITED PARTNERSHIP, 301-321-6436
DEVELOPER: JAMES F. KNOTT DEVELOPMENT CORPORATION, 110 WEST ROAD, TOWSON, MARYLAND 21204, 301-321-6436

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A "DEPARTMENT OF NATURAL RESOURCES" 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.
DEVELOPER — DATE 10/7/86

DESIGNED: IRZ.
DRAWN: D.A.L.
CHECKED: IRZ.

PROFILES & DETAILS FOR STORMWATER MANAGEMENT
PARCEL E-1 & PARCEL E-2
PLAT # 6429
ROUTE 100 BUSINESS PARK BLOCK 'F'
HOWARD COUNTY, MD.
TAX MAP # 31/20
SCALE: AS SHOWN
SHEET 6 OF 11
ELECTION DISTRICT - 1ST
PARCEL # 601/281
AS OF JUL 30, 1986

AS-BUILT MARCH 12-91 SDP 86-249

GENERAL NOTES

1. Maximum building height = 50'.
2. All areas not being paved or receiving building coverage shall be stabilized in accordance with the plans approved by the Howard Soil Conservation District.
3. Any damage to public rights-of-way and/or adjacent properties shall be repaired immediately at the contractor's expense.
4. The contractor shall maintain at least a 2' level bench behind all curb and gutter in fill areas.
5. The contractor shall verify all existing utilities to his own satisfaction before starting construction.
6. All slopes shall be 2:1 or flatter.
7. All work shall be done in accordance with Howard County Standard Specifications and Details for Construction, or as shown on these plans.
8. The contractor shall notify the C & P Telephone Co. and the Gas and Electric Company five days prior to starting work shown on these plans by calling "Miss Utility". Call collect 1-559-0100.
9. For details of ramps and signs for the handicapped see the Maryland Building Code for the handicapped and Aged and as shown hereon.
10. The contractor shall maintain a minimum of 3.5' cover over all proposed water lines.
11. All rip-rap shall be placed on filter cloth.
12. The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 992-2417 or 792-7272.
13. The contractor shall remove all existing paving, curb and gutter, etc. that may interfere with proposed construction.
14. All utilities installed shall receive full trench compaction.
15. All water main tees, bends, caps, etc. shall be buttressed in accordance with Howard County Design requirements.
16. SERVICE CLAMPS ARE TO HAVE STAINLESS STEEL CLAMPS.

FOR BUILDING PROFILES SECT A-A, B-B, C-C & D-D SEE SHEET 9 OF 11

REVISION #2
△ INCREASED HIGHT OF EXISTING BUILDING BY 18.5 ±
REVISION #2 PREPARED BY: BALTIMORE LAND DESIGN GROUP INC. CONSULTING ENGINEERS, 222 SCHILLING CIRCLE SUITE 105 HUNT VALLEY, MARYLAND, 21030

REVISION #3
△ ADDED TWO 8x40' CHILLERS (8' HIGH), AND TWO TRANSFORMERS, ADDED STEEL POSTS WITH CHAIN, ADDED CONCRETE SLAB AND GUARD POST BOLLARD (LOCATIONS AND DETAIL), REVISED PARKING TABULATION.
REVISION #3 PREPARED BY BALTIMORE LAND DESIGN GROUP INC. CONSULTING ENGINEERS, 222 SCHILLING CIRCLE SUITE 105, HUNT VALLEY, MARYLAND 21030

△ ADDITION OF ONE DOUBLE S COMBINATION INLET, ONE ACCESS MANHOLE, AND 24" ACCMP TO UNDERGROUND SWM FACILITY #2. REVISION 4 PREPARED BY T.E. SCOTT + ASSOCIATES, 128 COCKEYSVILLE ROAD, SUITE 200, HUNT VALLEY, MARYLAND 21030.

SITE DATA

TOTAL AREA OF SITE:	19.109 AC±
AREA OF PARCEL E-1	8.801 AC±
AREA OF PARCEL E-2	10.308 AC±
AREA OF PARCEL E-2 (PHASE I)	2.639 AC±
EXISTING ZONING:	M-2
EXISTING USE:	VACANT
PROPOSED USE:	OFFICE/WAREHOUSE
PARKING REQUIRED AS TABULATED	164 SPACES
PARKING PROVIDED (INCLUDES 8 HDCP)	209 SPACES
BLDG COVERAGE - PARCEL E-1: 3.523/8.801 =	40%
BLDG COVERAGE - PARCEL E-2 (PHASE I) 0.845/2.639 =	32%
% OPEN SPACE - PARCEL E-1 = 2.050/8.801 =	23%
% OPEN SPACE - PARCEL E-2 (PHASE I) = 0.805/2.639 =	30%
AREA TO BE DISTURBED - PARCEL E-1	= 8.600 AC±
AREA TO BE DISTURBED - PARCEL E-2	= 10.308 AC±
AREA TO BE VEGETATIVELY STABILIZED (E-1)	= 2.050 AC±
AREA TO BE VEGETATIVELY STABILIZED (E-2)	= 8.473 AC±
BUILDING & PAVING COVERAGE (E-1)	6.217 AC±
BUILDING & PAVING COVERAGE (E-2) - PHASE I	1.835 AC±

AREA PARKING LOTS E-1	46,188 S.F.
AREA PARKING LOTS E-2 - PHASE I	15,187 S.F.
AREA LANDSCAPED ISLANDS E-1	2,351 S.F.
AREA LANDSCAPED ISLANDS E-2 PHASE I	1,010 S.F.
% LANDSCAPED ISLANDS TO PARKING E-1	= 5.1%
% LANDSCAPED ISLANDS TO PARKING E-2 PHASE I	= 6.7%

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. REVISION 4 ONLY. EXP DATE 1/15/2010

PARKING TABULATION
PARCEL E-2 (PHASE I) BLDG "C"

TOTAL FLOOR AREA 36,800 S.F.
(20%) OFFICE = 7,360 SF @ 1 EMPL./200 S.F. = 37 EMPL.
37 EMPL @ 7 P.S./10 EMPL. = 26 PS
(80%) WAREHOUSE = 29,440 SF @ 1 EMPL./1000 S.F. = 29 EMPL.
29 EMPL @ 1 PS./2 EMPL. = 15 P.S.
TOTAL PARKING SPACE REQ'D. = 41
(INCL. 2 HDCP) TOTAL PARKING SPACE PROVD. = 49
ALL PARKING SPACES EXCEPT HDCP SHALL BE 9'x18'

PARKING TABULATION
PARCEL E-1 BLDG B

TOTAL FLOOR AREA 153,480 S.F.
(10%) OFFICE = 15,348 S.F. @ 1 EMPL./200 SF = 77 EMPL.
77 EMPL @ 7 P.S./10 EMPL. = 54 PS
WAREHOUSE = 123,732 SF @ 1 EMPL/1000 S.F. 124 EMPL.
124 EMPL @ 1 P.S./2 EMPL 62 PS
△ MANUFACTURING 14,400 SF @ 1PS/500SF 29 PS
TOTAL PARKING SPACE REQD. 145 P.S.
(INCL. 10 HDCP) TOTAL PARKING SPACE PROVD 152 P.S.
51 ADDTN'L POTENTIAL PARKING SPC'S 202 P.S.

NOTE: THE SQUARE FEET AREAS OF SPECIFIC USES AND THE MAXIMUM NUMBERS OF EMPLOYEES PER USE STATED ON THIS PLAN SHALL NOT BE CHANGED OR INCREASED WITHOUT THE OFFICE OF PLANNING AND ZONING'S REVIEW AND APPROVAL.

LEGEND

- EXISTING GROUND
- PROPOSED GRADE
- EX. CURB AND GUTTER
- PROP. CURB AND GUTTER
- NO. OF PARKING SPACES
- EX. SANITARY SEWER
- PROP. SANITARY SEWER
- EX. STORM DRAIN
- PROP. STORM DRAIN
- PROP. GRADE (BY OTHERS)
- EX. WATER
- HDCP. PARKING (SEE DETAILS THIS SHEET)
- EXIST. PUBLIC DRAINAGE & UTILITY EASEMENTS (SEE PLAT No 6429)
- ENTRANCE PAVING
- P-1 TYPE PAVING (CAR)
- P-3 TYPE PAVING (TRUCK)
- B-2 BORINGS

BENCH MARK: TOP ROAD SIDE FLANGE NUT FIRE HYDRANT, ELEV. 140.44

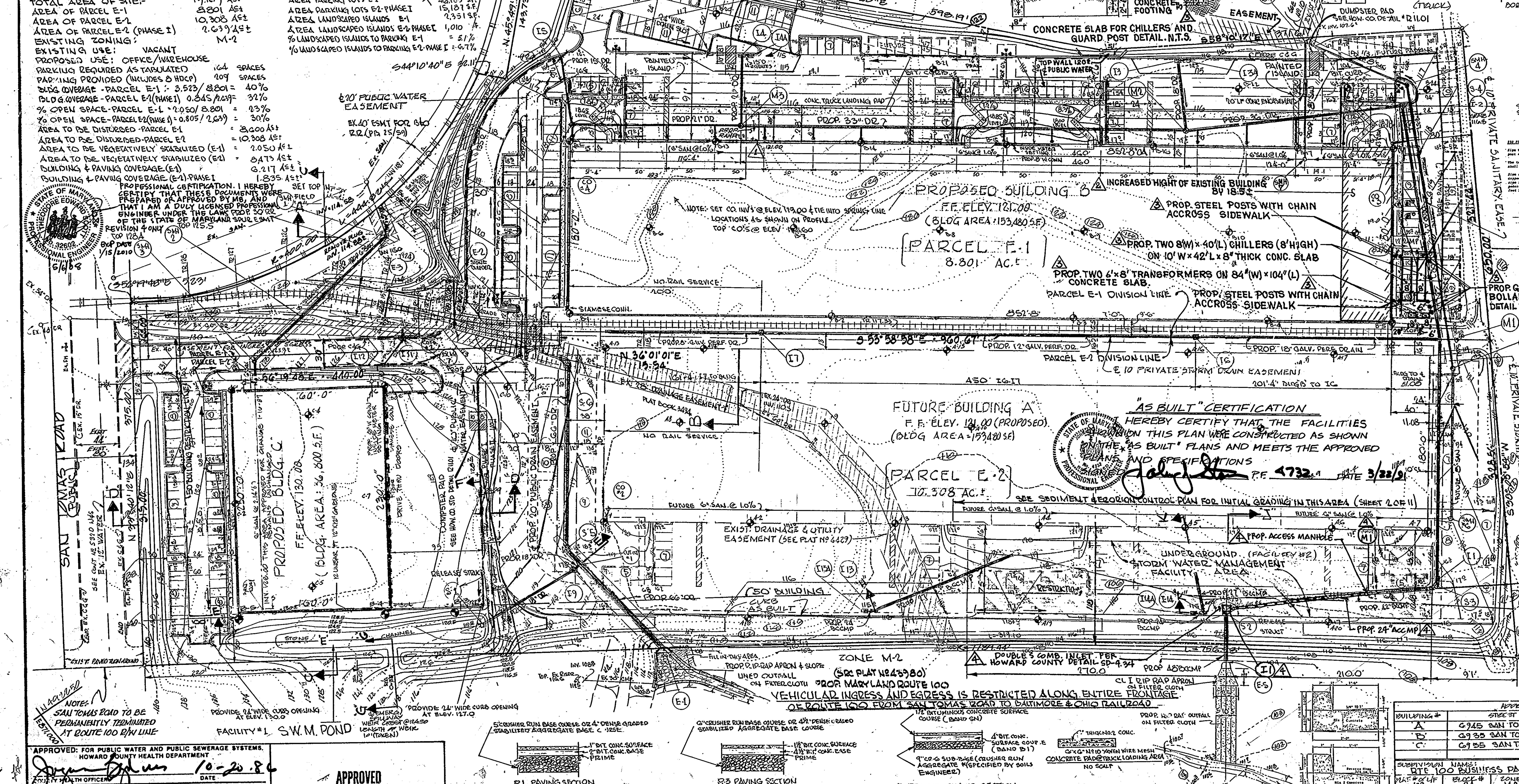
WATER CODE A04
SEWER CODE 2151500 & 2151524

VICINITY MAP
SCALE 1" = 2000'

NOTE: CURB DEPRESSES FROM NO REVEAL TO FULL REVEAL (0.6') IN 7.2' EACH SIDE OF AISLE

RAMP DETAIL
NO SCALE

$50 FINE SIGN
Sign to utilize an aluminum blank 6" x 12" x 0.080 inch thick with two single post mounting holes.
The text and border shall be standard green to match that on R7-8 and the background shall be reflective white. Text shall be in 3" characters.
Sign shall be mounted directly below the standard R7-8 Reserved Parking for Handicapped sign. Its bottom edge shall be no less than 7 feet above ground. If the sign is placed against a building, structure, or at a location where vehicle or pedestrian traffic is not obstructed the bottom edge of sign shall be at least 4 feet but not more than 10 feet above ground.



"AS BUILT" CERTIFICATION
I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "AS BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS
SIGNED [signature] P.E. 4732 DATE 3/28/91

SANITARY SEWER NOTE
The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building, shown on this site development plan, who will discharge non-domestic waste to the public sewerage system if this waste is regulated under Section 18.122A of the Howard County Code. Each separate and independent sewer connection shall include a standard manhole and other waste pretreatment devices as required and approved by Howard County. Waste lines on the interior of the building shall be designed, constructed or modified such that a non-domestic waste will be discharged to the separate and independent sewer connection. No tenant or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior lines. The above requirements shall apply to all initial and future occupants or tenants.

S.D.P. 86-249

ADDRESS CHART	
BUILDING #	STREET ADDRESS
A	6945 SAN TOMAS ROAD
B	6935 SAN TOMAS ROAD
C	6955 SAN TOMAS ROAD

SUBDIVISION NAME: RTE 100 BUSINESS PARK "BLOCK-F"			SECT./AREA	LOT/PARCEL E-1 & E-2
PLAT # or L/F 129	BLOCK # 24	ZONE M-2	TAX/ZONE MAP 37	ELECT. DIST. 1st	CENSUS TR. 6012
WATER CODE A04			SEWER CODE 2151500/2151524	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER [signature] DATE 10-20-86
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Acting DIRECTOR [signature] DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION [signature] DATE 10-21-86
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR [signature] DATE 10-16-86
CHIEF BUREAU OF ENGINEERING [signature] DATE 10-15-86

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

GWS
GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

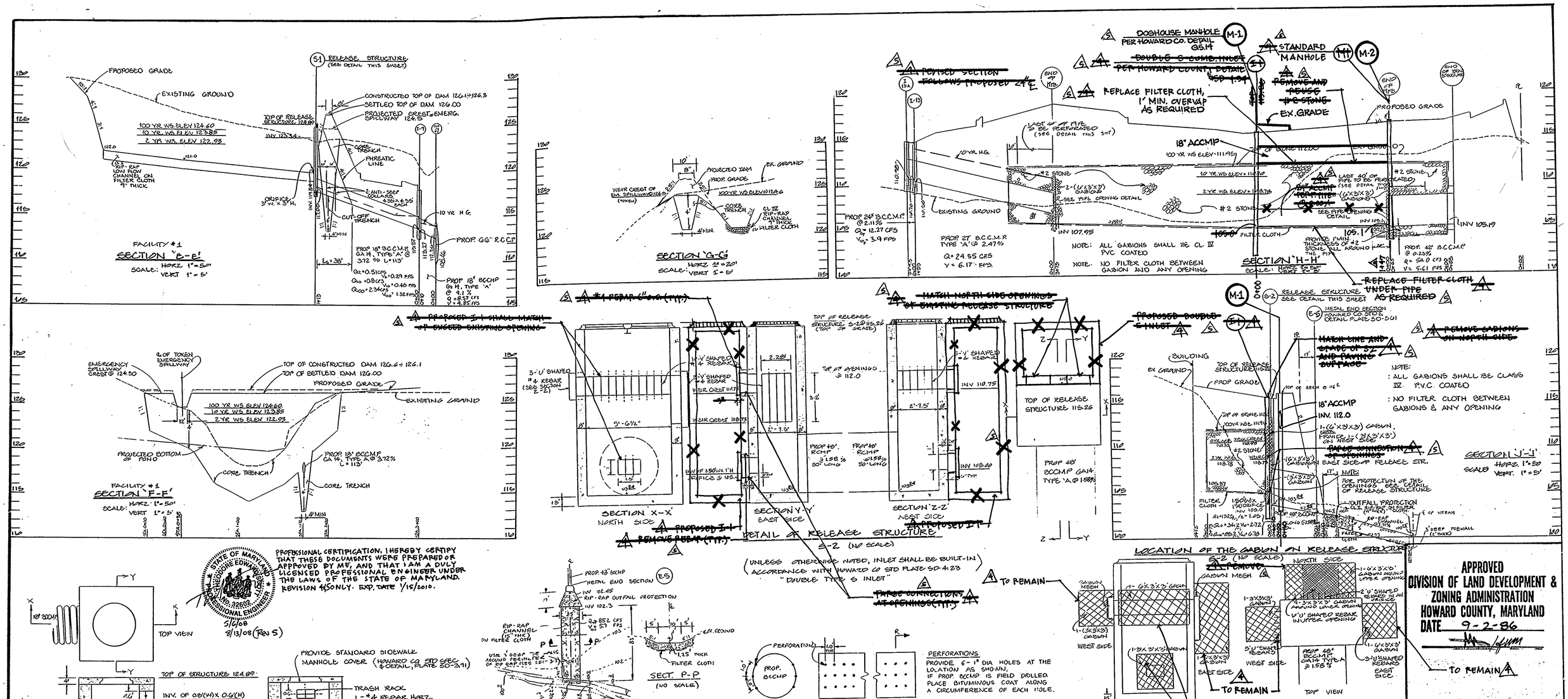
OWNER - PARCEL E-1: SAN TOMAS LIMITED PARTNERSHIP
OWNER - PARCEL E-2: S.R. 100 LIMITED PARTNERSHIP
110 WEST ROAD TOWSON, MD. 21204
301-321-6436
DEVELOPER: JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON, MARYLAND 21204
301-321-643[illegible]

REVISIONS
EG ADDED BLDG "C" DL. 5-20-87
△ REVISED PARKING TABULATION (BLDG B) & ADDED RAMP. 2.27.92 V.Z.

DESIGNED: C.K.S.
DRAWN: G.Y.
CHECKED: C.K.S.
REVISIONS
Approved 7-16-87 J.W. Lower Grades, BLDG "C", raise grades Rear Bldg "C" (Drive thru) Also 8" W conn. Loc.
PN 05260

SITE PLAN
PARCEL E-1 & PARCEL E-2 "BLOCK F"
PLAT # 6429
ROUTE 100 BUSINESS PARK
1ST ELECTION DISTRICT - HOWARD COUNTY, MD.
TAX MAP # 37/38 PARCEL # 601/602
SCALE: 1" = 50'
DATE: APRIL 30, 1986
SHEET 1 of 11

AS-BUILT MARCH 12-91
SDP 86-249



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. REVISION 4 ONLY. EXP. DATE 1/15/2010.

STATE OF MARYLAND — THEODORE EDWARD TE — No. 32602 — PROFESSIONAL ENGINEER

5/6/08

8/13/08 (REV 5)

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. Soil Conservation Service — 10-10-86 Date

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

APPROVED: Howard Soil Conservation District — 10-10-86 Date

Plan Number

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — 11-20-86 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DIRECTOR — 10-21-86 DATE

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — 10-21-86 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — 10-16-86 DATE

CHIEF BUREAU OF ENGINEERING — 10-15-86 DATE

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND — GEORGE W. STEPHENS, JR. — No. 8731 — PROFESSIONAL ENGINEER — 10/2/86

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION CONTROL, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE ENGINEERING STANDARDS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A REPRODUCIBLE "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.

10/2/86 — SIGNATURE — DATE
8/5/86 — DATE
4732 — REG. NO.

OWNER-PARCEL E-1
SASI-TOWSON
LIMITED PARTNERSHIP
110 WEST ROAD TOWSON MD. 21204
301-321-6436

OWNER-PARCEL E-2
S.R. 100
LIMITED PARTNERSHIP

DEVELOPER
JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON MARYLAND 21204
301-321-6436

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.

DEVELOPER — 10/2/86 DATE

DESIGNED: IRZ
DRAWN: D.A.L.
CHECKED: IRZ

PROFILES & DETAILS FOR STORMWATER MANAGEMENT

PARCEL E-1 & PARCEL E-2
PLAT #6429
ROUTE 100 BUSINESS PARK BLOCK 'E'

HOWARD COUNTY, MD
TAX MAP #31/38
SCALE: AS SHOWN
SHEET 6 OF 11

ELECTION DISTRICT - 1ST
PARCEL #601/281
AS 21-80, 1986

AS-BUILT MARCH 12-91 SDP 86-249

4 ADDITION OF ONE DOUBLE S COMBINATION INLET, ONE ACCESS MANHOLE, AND 24" ACCMP TO UNDERGROUND SWM FACILITY #2. REVISION 4 PREPARED BY TE SCOTT + ASSOCIATES, 128 COCKEYSVILLE ROAD, SUITE 200, HUNT VALLEY, MARYLAND 21030.

5 RENOVAL OF REVISION 4. ADDITION OF ONE ACCESS MANHOLE, RELIEF PIPE, AND ONE DOGHOUSE MANHOLE. REVISION 5 ALSO PREPARED BY T.E. SCOTT & ASSOC. INC.

GENERAL NOTES

1. Maximum building height = 50'.
2. All areas not [illegible]ing paved or receiving building coverage shall be stabilized in accordance with the plans approved by the Howard Soil Conservation District.
3. Any damage to public rights-of-way and/or adjacent properties shall be repaired immediately at the contractor's expense.
4. The contractor shall maintain at least a 2' level bench behind all curb and gutter in fill areas.
5. The contractor shall verify all existing utilities to his own satisfaction before starting construction.
6. All slopes shall be 2:1 or flatter.
7. All work shall be done in accordance with Howard County Standard Specifications and Details for Construction, or as shown on these plans.
8. The contractor shall notify the C & P Telephone Co. and the Gas and Electric Company five days prior to starting work shown on these plans by calling "Miss Utility". Call collect 1-559-0100.
9. For details of ramps and signs for the handicapped see the Maryland Building Code for the handicapped and Aged and as shown hereon.
10. The contractor shall maintain a minimum of 3.5' cover over all proposed water lines.
11. All rip-rap shall be placed on filter cloth.
12. The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 992-2417 or 792-7272.
13. The contractor shall remove all existing paving, curb and gutter, etc. that may interfere with proposed construction.
14. All utilities installed shall receive full trench compaction.
15. All water main tees, bends, caps, etc. shall be buttressed in accordance with Howard County Design requirements.
16. Service clamps are to have stainless steel clamps.

FOR BUILDING PROFILES SECT A-A, B-B, C-C & D-D SEE SHEET 9 OF 11

REVISION #2
(2) INCREASED HIGHT OF EXISTING BUILDING BY 18.5±
REVISION #2 PREPARED BY: BALTIMORE LAND DESIGN GROUP INC. CONSULTING ENGINEERS, 222 SCHILLING CIRCLE SUITE 105 HUNT VALLEY, MARYLAND, 21030

REVISION #3
(3) ADDED TWO 8x40' CHILLERS (8' HIGH), AND TWO TRANSFORMERS, ADDED STEEL POSTS WITH CHAIN, ADDED CONCRETE SLAB AND GUARD POST BOLLARD (LOCATIONS AND DETAIL), REVISED PARKING TABULATION.
REVISION #3 PREPARED BY BALTIMORE LAND DESIGN GROUP INC. CONSULTING ENGINEERS, 222 SCHILLING CIRCLE SUITE 105, HUNT VALLEY, MARYLAND 21030

(4) ADDITION OF ONE DOUBLE S COMBINATION INLET, ONE ACCESS MANHOLE, AND 24" ACCMP TO UNDERGROUND SWM FACILITY #2. REVISION 4 PREPARED BY T.E. SCOTT + ASSOCIATES, 128 COCKEYSVILLE ROAD, SUITE 200, HUNT VALLEY, MARYLAND 21030.

(5) REMOVAL OF REVISION 4. ADDITION OF ONE ACCESS MH, RELIEF PIPE, AND DOGHOUSE MH. REVISION 5 PREPARED BY T.E. SCOTT & ASSOC., INC.

SITE DATA

TOTAL AREA OF SITE:	19.109 Ac±
AREA OF PARCEL E-1	8.801 Ac±
AREA OF PARCEL E-2	10.308 Ac±
AREA OF PARCEL E-2 (PHASE I)	2.639 Ac±
EXISTING ZONING:	M-2
EXISTING USE:	VACANT
PROPOSED USE:	OFFICE/WAREHOUSE
PARKING REQUIRED AS TABULATED	164 SPACES
PARKING PROVIDED (INCLUDES 8 HDCP)	209 SPACES
BLDG. COVERAGE - PARCEL E-1 : 3.523/8.801 =	40%
BLDG. COVERAGE - PARCEL E-2 (PHASE I) 0.845/2.639 =	32%
% OPEN SPACE - PARCEL E-1 2.050/8.801 =	23%
% OPEN SPACE - PARCEL E-2 (PHASE I) 0.805/2.639 =	30%
AREA TO BE DISTURBED - PARCEL E-1	8.600 Ac±
AREA TO BE DISTURBED - PARCEL E-2	10.308 Ac±
AREA TO BE VEGETATIVELY STABILIZED (E-1)	2.050 Ac±
AREA TO BE VEGETATIVELY STABILIZED (E-2)	8.473 Ac±
BUILDING & PAVING COVERAGE (E-1)	6.217 Ac±
BUILDING & PAVING COVERAGE (E-2) - PHASE I	1.835 Ac±

AREA PARKING LOTS E-1	46,188 S.F.
AREA PARKING LOTS E-2 - PHASE I	15,187 S.F.
AREA LANDSCAPED ISLANDS E-1	2,351 S.F.
AREA LANDSCAPED ISLANDS E-2 PHASE I	1,010
% LANDSCAPED ISLANDS TO PARKING E-1	= 5.1%
% LANDSCAPED ISLANDS TO PARKING E-2 PHASE I	= 6.7%

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. REVISION 4 ONLY. EXP DATE 1/15/2010. 5/6/08, 8/13/08 (REV 5)

PARKING TABULATION
PARCEL E-2 (PHASE I) BLDG "C"

TOTAL FLOOR AREA 36,800 S.F.
(20%) OFFICE = 7,360 SF @ 1 EMPL./200 S.F. = 37 EMPL.
37 EMPL @ 7 P.S./10 EMPL. = 26 PS
(80%) WAREHOUSE = 29,440 SF @ 1 EMPL./1000 S.F. = 29 EMPL.
29 EMPL @ 1 PS/2 EMPL = 15 P.S.
TOTAL PARKING SPACE REQ'D. = 41
(INCL. 2 HDCP) TOTAL PARKING SPACE PROVD. = 49
ALL PARKING SPACES EXCEPT HDCP SHALL BE 9'x18'

PARKING TABULATION
PARCEL E-1 BLDG. B

TOTAL FLOOR AREA 153,480 S.F.
(10%) OFFICE = 15,348 S.F. @ 1 EMPL./200 SF. = 77 EMPL.
77 EMPL @ 7 P.S./10 EMPL. = 54 PS
WAREHOUSE = 123,732 SF @ 1 EMPL/1000 S.F. 124 EMPL.
124 EMPL @ 1 P.S./2 EMPL 62 PS
(1) MANUFACTURING 14,400 SF @ 1PS/500SF 29 PS
TOTAL PARKING SPACE REQD. 145 P.S.
(INCL. 10 HDCP) TOTAL PARKING SPACE PROVD 152 P.S.
51 ADDTN'L POTENTIAL PARKING SPC'S 202 P.S.

NOTE: THE SQUARE FEET AREAS OF SPECIFIC USES AND THE MAXIMUM NUMBERS OF EMPLOYEES PER USE STATED ON THIS PLAN SHALL NOT BE CHANGED OR INCREASED WITHOUT THE OFFICE OF PLANNING AND ZONING'S REVIEW AND APPROVAL.

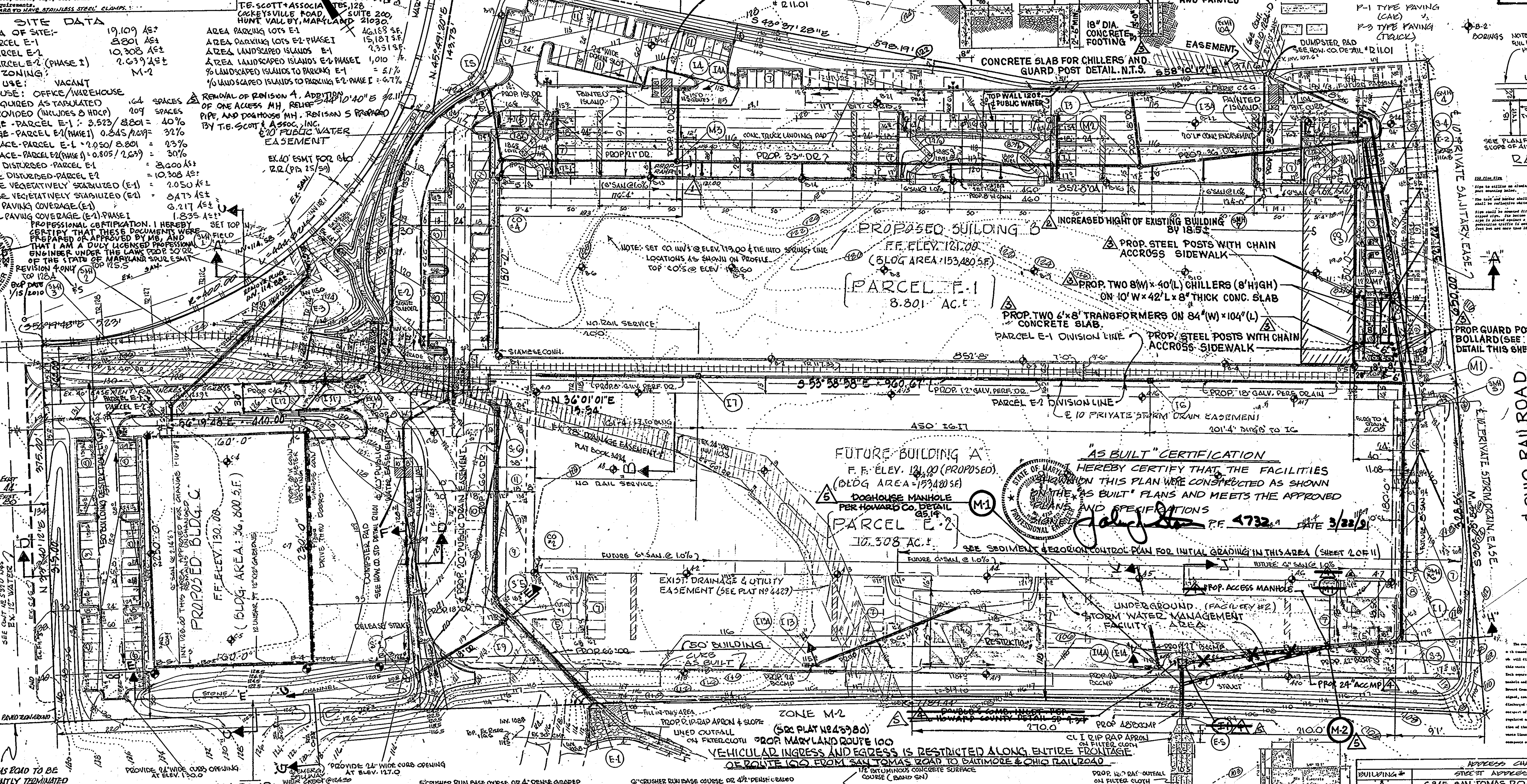
LEGEND

EXISTING GROUND
PROPOSED GRADE
EX. CURB AND GUTTER
PROP. CURB AND GUTTER
NO. OF PARKING SPACES
EX. SANITARY SEWER
PROP. SANITARY SEWER
EX. STORM DRAIN
PROP. STORM DRAIN
PROP. GRADE (BY OTHERS)
EX. WATER
HDCP. PARKING (SEE DETAILS THIS SHEET)
EXIST. PUBLIC DRAINAGE & UTILITY EASEMENTS (SEE PLAT NO 6429)
ENTRANCE PAVING
P-1 TYPE PAVING (CAR)
P-3 TYPE PAVING (TRUCK)
B-2 BORINGS

BENCH MARK: TOP ROAD SIDE FLANGE NUT FIRE HYDRANT. ELEV. 140.44

VICINITY MAP
SCALE 1" = 2000'

WATER CODE A04
SEWER CODE 2151500 & 2151524



"AS BUILT" CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "AS BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.
P.E. 4732 DATE 3/28/91

SANITARY SEWER NOTE

S.D.P. 86-249

BUILDING #	STREET ADDRESS
A	6945 SAN TOMAS ROAD
B	6935 SAN TOMAS ROAD
C	6955 SAN TOMAS ROAD

SUBDIVISION NAME:			SECT./AREA	LOT/PARCEL
RTE 100 BUSINESS PARK BLOCK-F				E-1 & E-2
PLAT # or L/F 129	BLOCK # 24	ZONE M-2	TAX/ZONE MAP 37	ELECT. DIST. 1st	CENSUS TR. 6012
WATER CODE A04		SEWER CODE	2151500/2151524	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 10-20-86
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Acting DIRECTOR — DATE 10-21-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 10-21-86
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10-16-86
CHIEF BUREAU OF ENGINEERING — DATE 10-15-86

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-2-86

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

OWNER - PARCEL E-1 SAN TOMAS LIMITED PARTNERSHIP
OWNER - PARCEL E-2 S.T.P. 100 LIMITED PARTNERSHIP
110 WEST ROAD TOWSON, MD. 21204
DEVELOPER - JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD
TOWSON, MARYLAND 21204

REVISIONS
EG ADDED BLDG "C" DL 5-20-87
(1) REVISED PARKING TABULATION (BLDG B) & ADDED RAMP. 2.27.92 V.Z.

DESIGNED: C.K.S.
DRAWN: G.Y.
CHECKED: C.K.S.
REVISIONS
Approved 10-16-87 J.W. Lower Grades, BLDG "C" raise grades Rear Bldg "C" (Drive thru) Also 8" W Conn. Loc.
PN 05260

SITE PLAN
PARCEL E-1 & PARCEL E-2 "BLOCK F"
PLAT # 6429
ROUTE 100 BUSINESS PARK
1ST ELECTION DISTRICT - HOWARD COUNTY, MD.
TAX MAP 37 P. 321 — PARCEL # 601/282
SCALE: 1" = 50' — DATE: APRIL 30, 1986
SHEET 1 of 11

AS-BUILT MARCH 12-91 SDP 86-249