

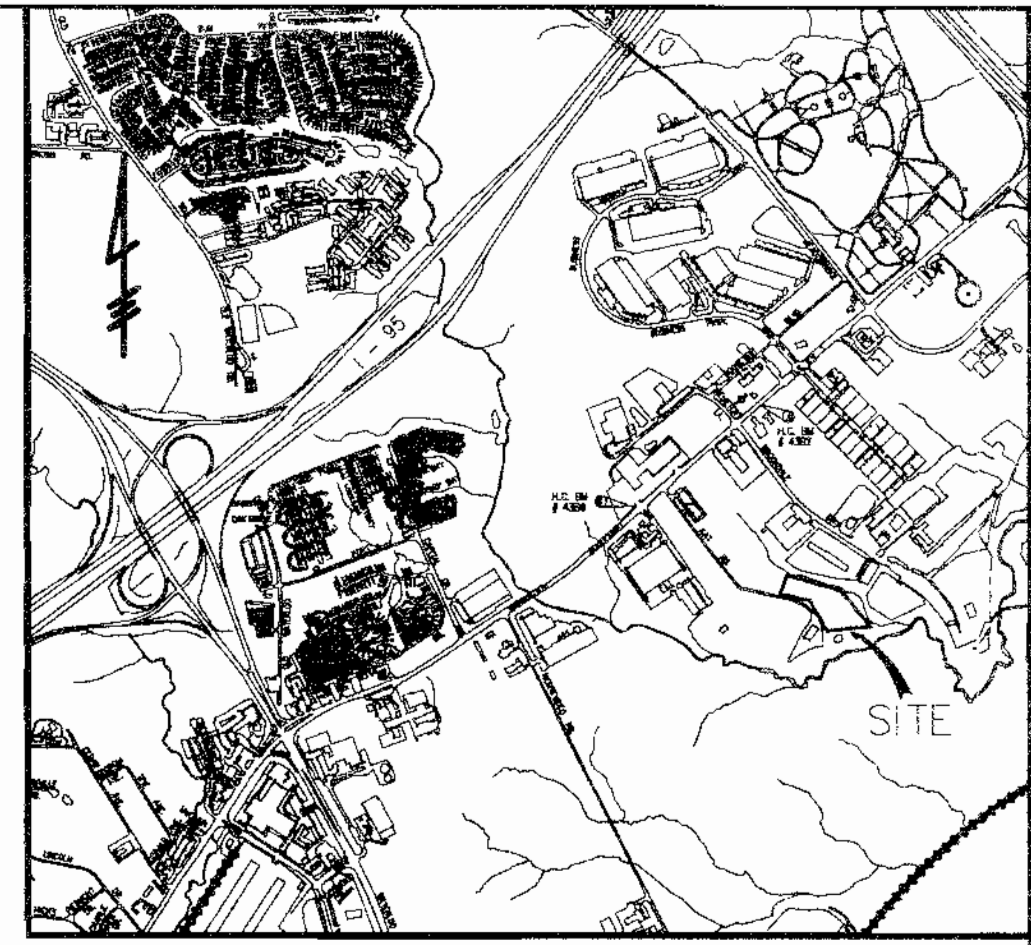
# KIT KAT CENTER

## 1 ST ELECTION DISTRICT

### HOWARD COUNTY, MARYLAND

BM #43B2 ELEV. 209.601  
 X-CUT IN BRASS DISC IN MEDIAN ISLAND OF US ROUTE #1  
 46.62' NORTHEAST OF C&P POLE # 100  
 NORTHING 551654.993  
 EASTING 1378176.951

BM #43B6 ELEV. 210.559  
 BRASS DISC IN MEDIAN ISLAND OF US ROUTE#1 86.8' EASTERLY  
 OF BG&E POLE #131860  
 NORTHING 550601.597  
 EASTING 1376066.072

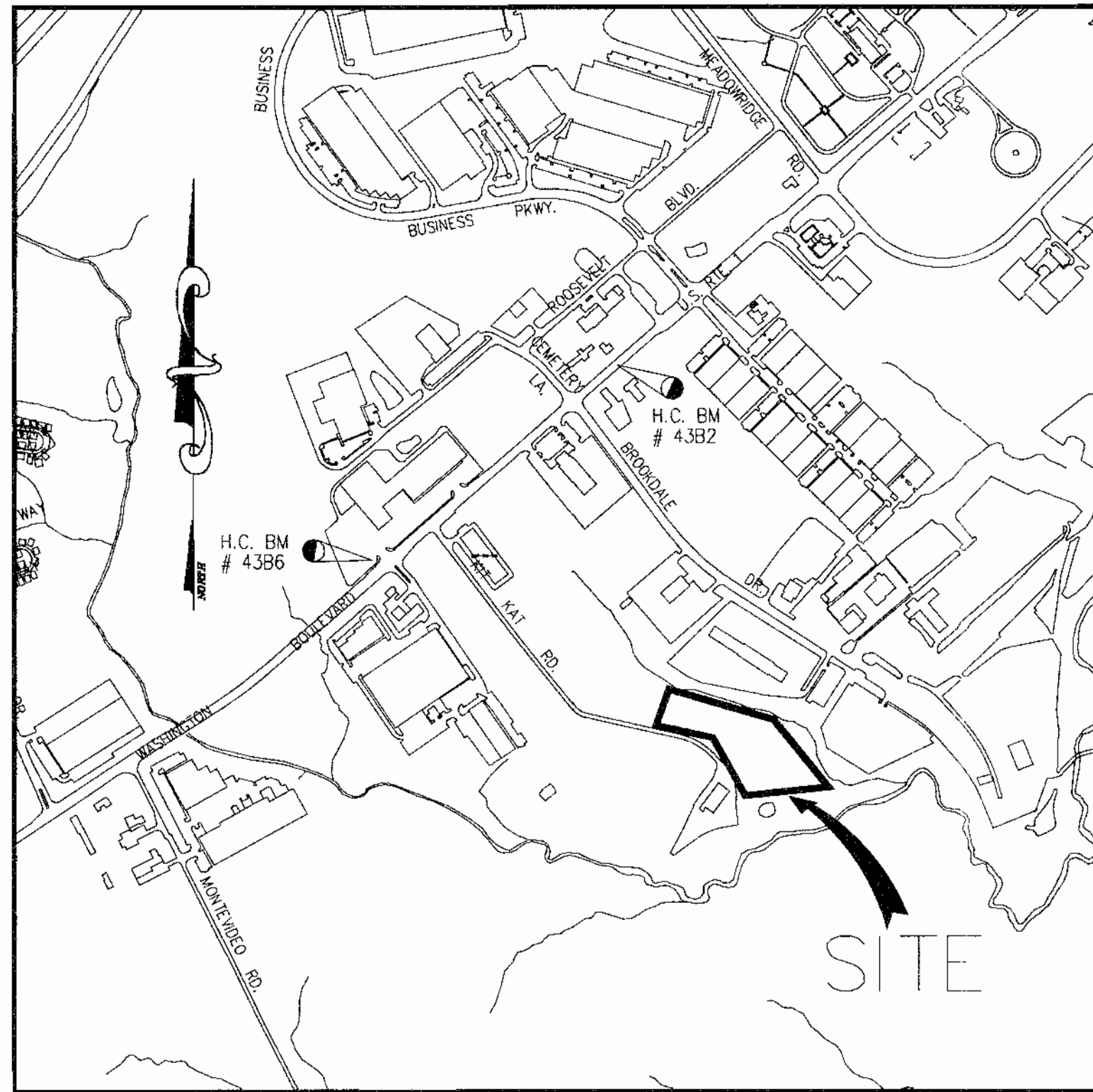


VICINITY MAP  
 SCALE: 1" = 2000'

SHEET INDEX	
NO.	DESCRIPTION
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	SEDIMENT CONTROL PLAN
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**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS M.S.H.A. STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE LOCATIONS OF THE UTILITIES SHOWN IS APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION AND DEPTH OF ANY UTILITIES AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEERING OFFICE, PHOENIX ENGINEERING, INC. AT (410) 247-8833 IN THE EVENT OF ANY DISCREPANCIES IN THE PLANS OR IN THE RELATIONSHIP OF FINISHED GRADES TO EXISTING GRADES, PRIOR TO BEGINNING ANY WORK.
- THE CONTRACTOR SHALL NOTE THAT IN THE CASE OF DISCREPANCY BETWEEN THE SCALED AND FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSIONS SHALL GOVERN.
- IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:  
 "MISS UTILITY".....1(800) 257-7777  
 BALTIMORE GAS & ELECTRIC COMPANY.....(410) 685-0123  
 VERIZON TELEPHONE.....(410) 725-9976  
 AT&T CABLE LOCATION DIVISION.....(410) 393-3553  
 HOWARD COUNTY BUREAU OF UTILITIES.....(410) 313-4900  
 HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK).....(410) 313-1890
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINE OF EXCAVATION HAS BEEN BROUGHT TO SUBGRADE.
- ALL SPOT ELEVATIONS SHOWN ARE TOP OF PROPOSED PAVING OR CONCRETE. WHEN ADJACENT TO CURB, ELEVATION SHOWN IS BOTTOM OF CURB FLOWLINE.
- STORM WATER QUANTITY AND QUALITY MANAGEMENT WAS PROVIDED ON SITE UNDER SDP 04-024
- HANDICAP RAMPS SHALL MEET ADA REQUIREMENTS.
- THE CONTRACTOR SHALL OBTAIN THE NECESSARY BUILDING PERMITS FOR CONSTRUCTION.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY GUTSCHICK, LITTLE AND WEBER P.A., AND A FIELD RUN UPDATE SURVEY BY ERIK MARKS INC. IN NOVEMBER, 2003. GRADING SHOWN ON PARCEL B IS TAKEN FROM PROPOSED GRADES AS SHOWN ON SDP 04-024.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE GRID COORDINATES, (NAD 83). ALL VERTICAL CONTROLS ARE BASED ON NGVD29 DATUM.
- CONTRACTOR SHALL USE DIMENSIONS SHOWN. SCALING OF THESE PLANS IS DISCOURAGED UNLESS DIRECTED BY THE CIVIL ENGINEER.
- ANY DAMAGE TO COUNTY RIGHT-OF-WAY AND PAVING OF PUBLIC ROADS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE IN ACCORDANCE WITH THE HOWARD COUNTY SPECIFICATIONS AND STANDARDS.
- THERE ARE NO KNOWN CEMETERIES LOCATED ON THIS SITE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 43B2 AND 43B6 WERE USED FOR THIS PROJECT.
- WATER AND SEWER ARE (PUBLIC) AND ARE IN THE LITTLE PATUXENT DRAINAGE AREA, AND ARE DESIGNATED AS CONTRACT NUMBER 14-3306-D, 579-S, AND CAPITAL PROJECT W-8148.
- THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY GUTSCHICK LITTLE AND WEBER P.A. IN AUGUST, 1993 AND WAS APPROVED BY HOWARD COUNTY, SEE PLAT NO. 11226
- THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY EXPLORATION RESEARCH INC. DATED OCTOBER, 1993
- A TRAFFIC STUDY FOR THIS PROJECT WAS APPROVED ON MARCH 1, 2004.
- THIS PROPERTY IS ZONED M-2 PER THE 1993 COMPREHENSIVE ZONING PLAN.
- NO CLEARING GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAMS(S) OR THEIR REQUIRED BUFFERS AND FOREST CONSERVATION EASEMENT.
- THIS PLAN IS SUBJECT TO WP-02-18, ALSO SEE SDP 94-18 AND SDP 04-024
- FOREST CONSERVATION REQUIREMENTS FOR THIS SITE WERE ADDRESSED UNDER SDP 04-024.
- A FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS A PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$6,000. THE SURETY IS BASED ON 12 SHADE TREES AT \$300 PER TREE, 1 EVERGREEN TREE AT \$150 PER TREE, AND 75 SHRUBS AT \$75 PER SHRUB.



LOCATION MAP  
 SCALE: 1" = 1000'

ZONING HISTORY: WP-02-18, WHICH ASKED FOR A WAIVER TO THE SITE DEVELOPMENT PLAN PROCESS, WAS DENIED ON OCTOBER 1, 2001.

**SITE ANALYSIS**

- TOTAL AREA OF SITE = 11,748 AC. OR 511,743 SQ. FT.  
 TOTAL AREA OF THIS SUBMISSION = 2,75AC OR 119,800 SQ. FT.
  - ZONING: M-2
  - EXISTING USE- BUILDING A = CONTRACTOR STORAGE & OFFICE  
 BUILDING B = OFFICE AND RECYCLING FACILITY  
 PROPOSED USE- BUILDINGS C, D, & E = INDUSTRIAL- WAREHOUSE
  - THE SOILS TYPES SHOWN ON THESE PLANS ARE AS SHOWN IN THE "HOWARD COUNTY SOILS SURVEY." THE SITE IS PREDOMINATELY TYPE B AND C SOILS WITHIN THE DEVELOPED AREA
  - THERE ARE EXISTING FLOODPLAINS AND WETLANDS ON THIS SITE AND ARE SHOWN ON THE DRAWINGS. NO WETLANDS OR FLOODPLAINS ARE BEING DISTURBED BY THIS DEVELOPMENT.
  - EXISTING VEGETATION ON SITE IS IN THE FORM OF LAWN OR WOODLAND.
  - OPEN SPACE (GREEN AREA) TO REMAIN ON SITE = 321,735 SQ. FT. OR 64.7% OF GROSS AREA.
  - BUILDING COVERAGE OF SITE: BLDG A 1,315 SF (EXISTING)  
 BLDG B 47,800 SF (SDP 04-024)  
 BLDG C 3,132 SF (WAREHOUSE)  
 BLDG D 3,132 SF (WAREHOUSE)  
 BLDG E 6,372 SF (WAREHOUSE)  
 TOTAL 61,751 SF OR <12.1 % OF SITE
- TOTAL AREA TO BE DISTURBED = 2.08 ACRES OR 90,605 SQ. FT.

**EARTH QUANTITIES**

TOTAL CUT 482 C.Y.  
 TOTAL FILL 8482 C.Y.

NOTE:  
 CIVIL ENGINEER DOES NOT GUARANTEE OR WARRANT THIS INFORMATION. CONTRACTOR IS RESPONSIBLE FOR SOIL QUANTITY CALCULATIONS.

**PARKING TABULATIONS**

- A. BUILDING AREA  
 EXISTING BUILDING A:  
 OFFICE-1,315 SQ. FT. @ 3.3 SPACES/1,000 SQ. FT. = 5 SPACES REQUIRED  
 PROPOSED BUILDING B: (SDP 04-024)  
 WAREHOUSE-OVER 160' DEEP, 47,800 SQ. FT.  
 @ 0.5 SPACES/1,000 SQ. FT. = 24 SPACES REQUIRED  
 OFFICE-6,000 SQ. FT. @ 3.3 SPACES/1,000 SQ. FT. = 20 SPACES REQUIRED  
 PROP. BLDG. C  
 WAREHOUSE- 3,132 SQ.FT @ 2.5 SPACES/1000 SQ.FT = 8 SPACES REQUIRED  
 PROP. BLDG. D  
 WAREHOUSE- 3,132 SQ.FT @ 2.5 SPACES/1000 SQ.FT = 8 SPACES REQUIRED  
 PROP. BLDG. E  
 WAREHOUSE- 6,372 SQ.FT @ 2.5 SPACES/1000 SQ.FT = 16 SPACES REQUIRED  
 TOTAL NUMBER OF PARKING SPACES REQUIRED = 81 SPACES REQUIRED  
 (SDP 04-024) PHASE 1 = 50 SPACES PROVIDED  
 B. TOTAL NUMBER OF PARKING SPACES PROVIDED(INCL. PHASE 1)= 93 SPACES PROVIDED  
 C. TOTAL HANDICAP SPACES REQUIRED = 4 SPACES  
 "REGULAR HANDICAP SPACES PROVIDED = 1 SPACE  
 5'X16" TYPICAL (WITH 5' AISLE)  
 VAN ACCESSIBLE HANDICAP SPACES PROVIDED = 6 SPACES  
 5'X20' TYPICAL (WITH 8' AISLE)  
 TOTAL HANDICAP SPACES PROVIDED = 7 SPACES

**LEGEND**

- 188--- EX. CONTOUR
- 188— PROP. CONTOUR
- 52 X 61 SPOT ELEVATION
- — — — PROP. STORM DRAIN
- — — — PROPERTY LINE

**ADDRESS CHART**

LOT No.	STREET ADDRESS
PARCEL 49	7151 KIT KAT ROAD (BLDG. C) (PARCEL A)
	7155 KIT KAT ROAD (BLDG. E) (PARCEL A)
	7159 KIT KAT ROAD (BLDG. D) (PARCEL A)
	7167 KIT KAT ROAD (BLDG. A) (PARCEL A)

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECT/AREA	PARCEL
KIT KAT CENTER- PARCEL A	N/A	P/O 49

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST	CENSUS TR.
E 04-81	11	M-2	43	1 ST	6011.01

WATER CODE: B-01  
 SEWER CODE: 2370000

1.11.05  
 Date

JOHN R. HEINRICHS  
 Professional Engr. No. 14920

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*William* 1/20/05  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Cindy Hamilton* 3/3/05  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Frank Kasper* 3/1/05  
 DIRECTOR DATE

Date	No	Revision	Description

OWNER/DEVELOPER:  
 D. ERIC SELINE  
 14852 OLD GUNPOWDER ROAD  
 LAUREL, MARYLAND 20707  
 410-792-2999

PROJECT: **KIT KAT CENTER**  
 PARCEL A  
 7167 KIT KAT ROAD ELLICOTT CITY, MD.  
 Tax Map No. 43, Crid 11, Elec. Dist. No 1, Parcel 49  
 HOWARD COUNTY, MARYLAND

PREPARED BY:  
**PHOENIX ENGINEERING, INC.**  
 CONSULTING ENGINEERS  
 1420-A JOH AVENUE  
 BALTIMORE, MARYLAND 21227  
 (410) 247-8833 FAX 247-9397

AREA:  
 P/O PARCEL: 49 TAX MAP: 43  
 CENSUS TRACT: 6011.01 1 ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

PLAT: 11226 DEED: L 5368, P 154

TITLE:

**COVER SHEET**

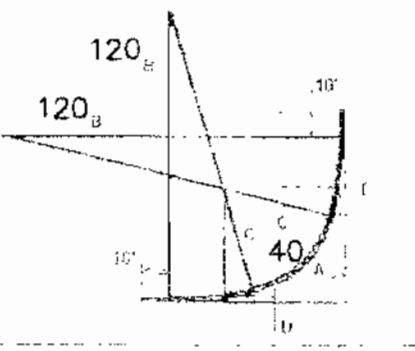
SEE SDP 04-024  
 SEE WP-02-18  
 PREVIOUSLY SDP# 94-18

Des By	R.J.W.	Scale	AS SHOWN	Proj No	03-006
Drn By	S.E.W.	Date	APRIL 2004	DRAWING NO	H01KITKA-099
Chk By	J.R.H.	SDP	04-039		1 OF 10

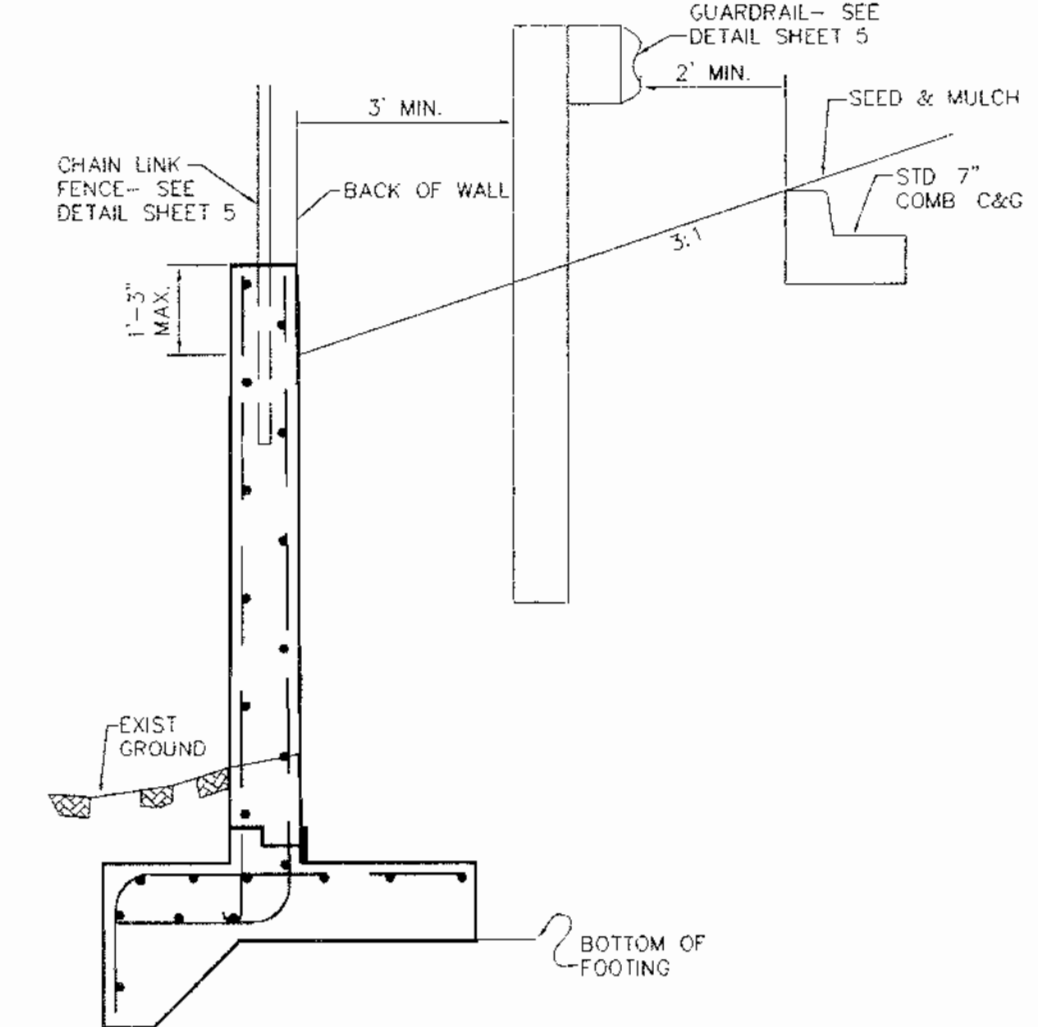
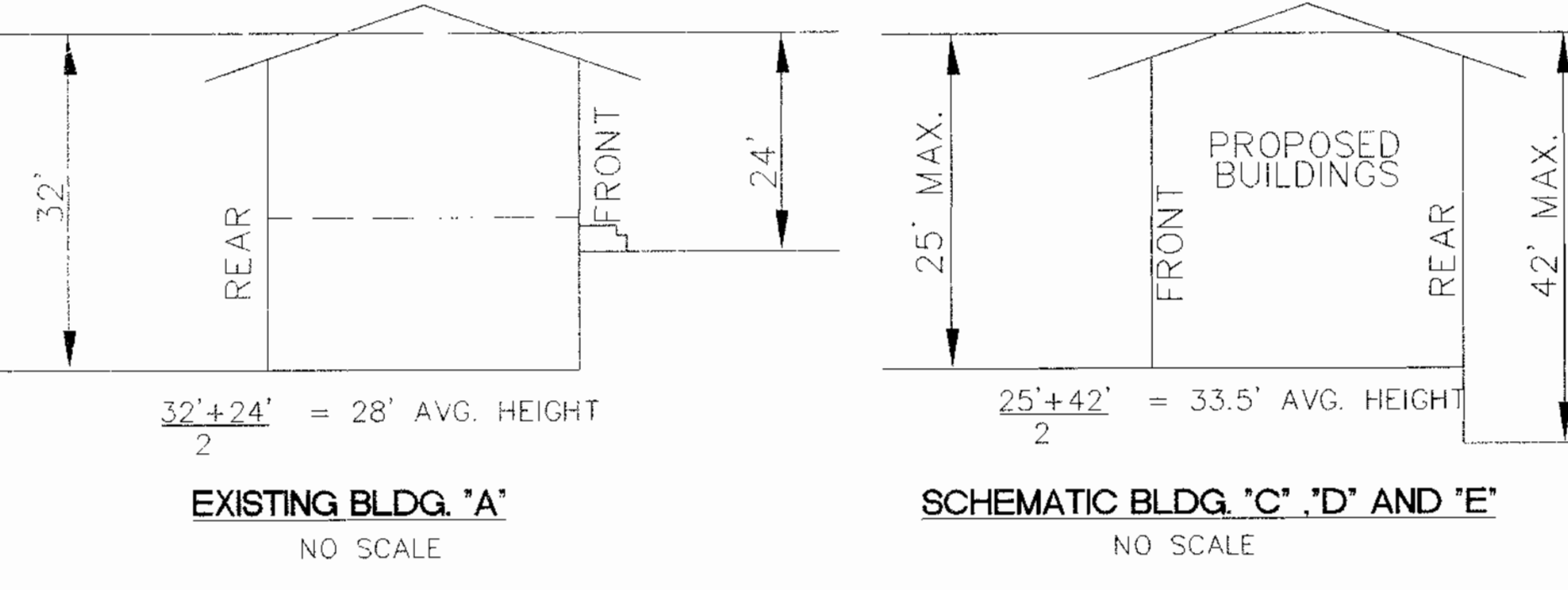
Channelization of Commercial Entrances

3 - Centered Curve Data

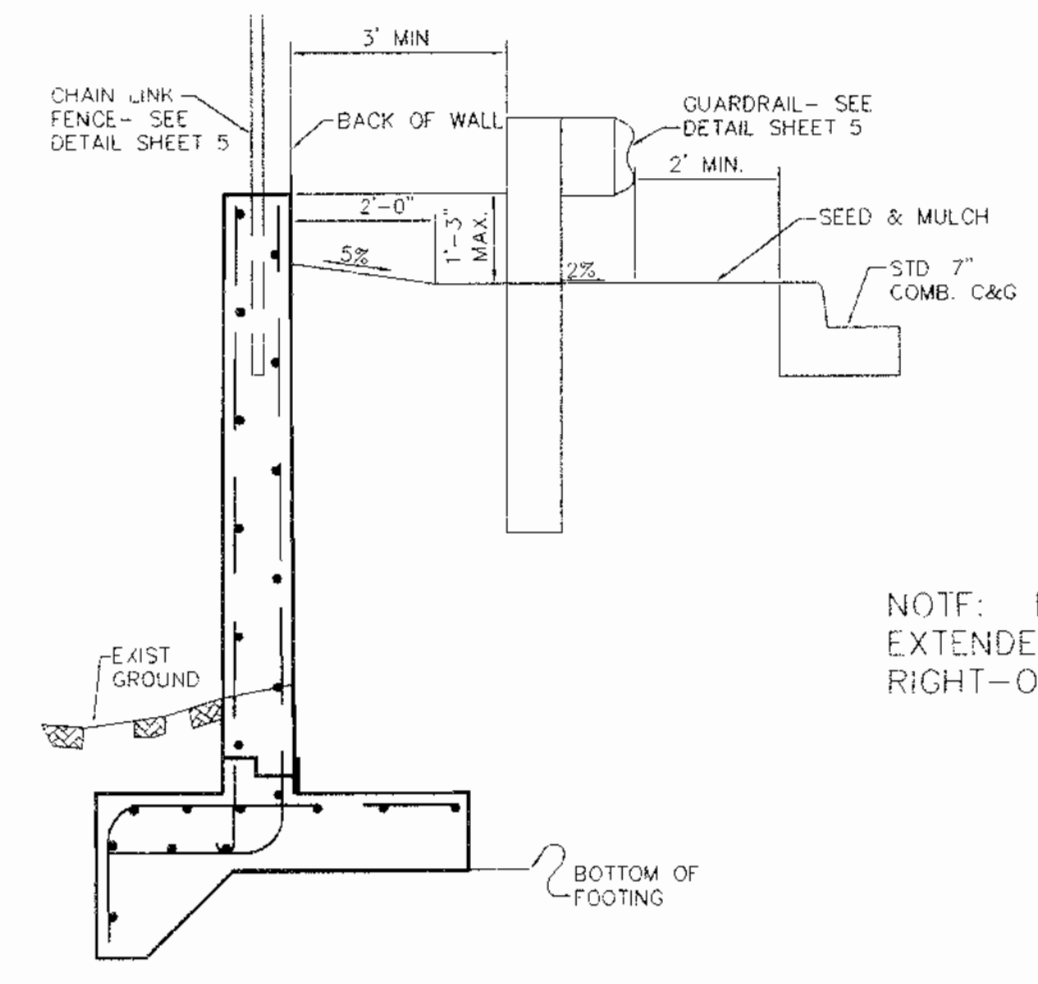
Curve No.	Stationing	Radius (ft)	Delta (deg)	Chord (ft)	Offset (ft)
1	10+00 to 10+40	120	40	100.00	10.00
2	10+40 to 10+80	120	40	100.00	10.00
3	10+80 to 11+20	120	40	100.00	10.00



P=3 INDICATES A 3-CENTERED COMPOUND CURVE. SEE HOWARD COUNTY DESIGN MANUAL VOLUME III FIGURE 2.18 USING A SINGLE UNIT TRUCK WHICH USES A RADIUS OF 120', 40', AND 120' RESPECTIVELY.



TYPICAL DETAIL: RETAINING WALL, CURB + GUARDRAIL BETWEEN BUILDINGS C,D+E  
NO SCALE

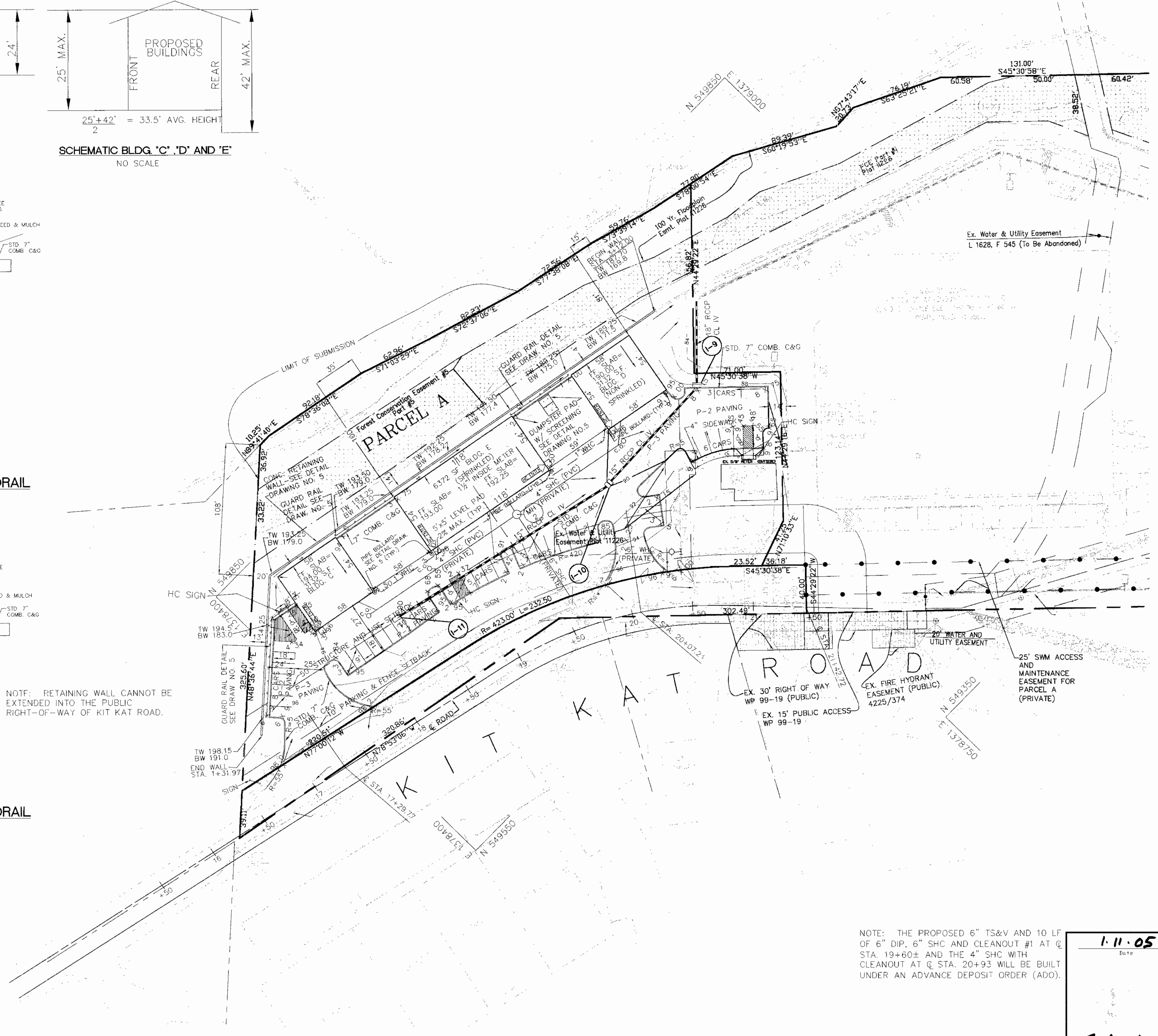


TYPICAL DETAIL: RETAINING WALL, CURB + GUARDRAIL WEST OF BLDG. C  
NO SCALE

NOTE: RETAINING WALL CANNOT BE EXTENDED INTO THE PUBLIC RIGHT-OF-WAY OF KIT KAT ROAD.

LEGEND

- EX. CONTOUR
- PROP. CONTOUR
- P-2 PAVING
- P-3 PAVING
- STREET LIGHT  
250 WATT HPS VAPOR  
PENDANT FIXTURE (SAG)  
MOUNTED AT 30' ON A  
BRONZE FIBERGLASS  
POLE W/12' ARM



NOTE: THE PROPOSED 6" TS&V AND 10 LF OF 6" DIP, 6" SHC AND CLEANOUT #1 AT Q STA. 19+60± AND THE 4" SHC WITH CLEANOUT AT Q STA. 20+93 WILL BE BUILT UNDER AN ADVANCE DEPOSIT ORDER (ADO).

1.11.05  
Date

STORMWATER MANAGEMENT FOR THIS SITE IS PROVIDED BY A PRIVATELY OWNED AND MAINTAINED EXTENDED DETENTION FACILITY ON SITE, BUILT UNDER SDP 04-024.

John R. Henrichs  
Professional Eng. No. 14920

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division	1/20/05
Chief, Division of Land Development	3/3/05
Director	3/9/05

Date	No.	Revision Description

OWNER/DEVELOPER:  
D. ERIC SELINE  
14852 OLD GUNPOWDER ROAD  
LAUREL, MARYLAND 20707  
410-792-2999

PROJECT:  
KIT KAT CENTER  
7167 KIT KAT ROAD  
TAX MAP No. 43, Grid 11, Elec. Dist No 1, Parcel 49  
HOWARD COUNTY, MARYLAND

PREPARED BY:  
PHOENIX ENGINEERING, INC.  
CONSULTING ENGINEERS  
1420 JOH AVENUE, SUITE A  
BALTIMORE, MARYLAND 21227  
(410) 247-8833 FAX 247-9397

AREA:  
P/O PARCEL: 49 TAX MAP: 43  
CENSUS TRACT 6011 01 1 ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

PLAT 11226 DEED L 5368, F 54

TITLE:  
SITE DEVELOPMENT PLAN

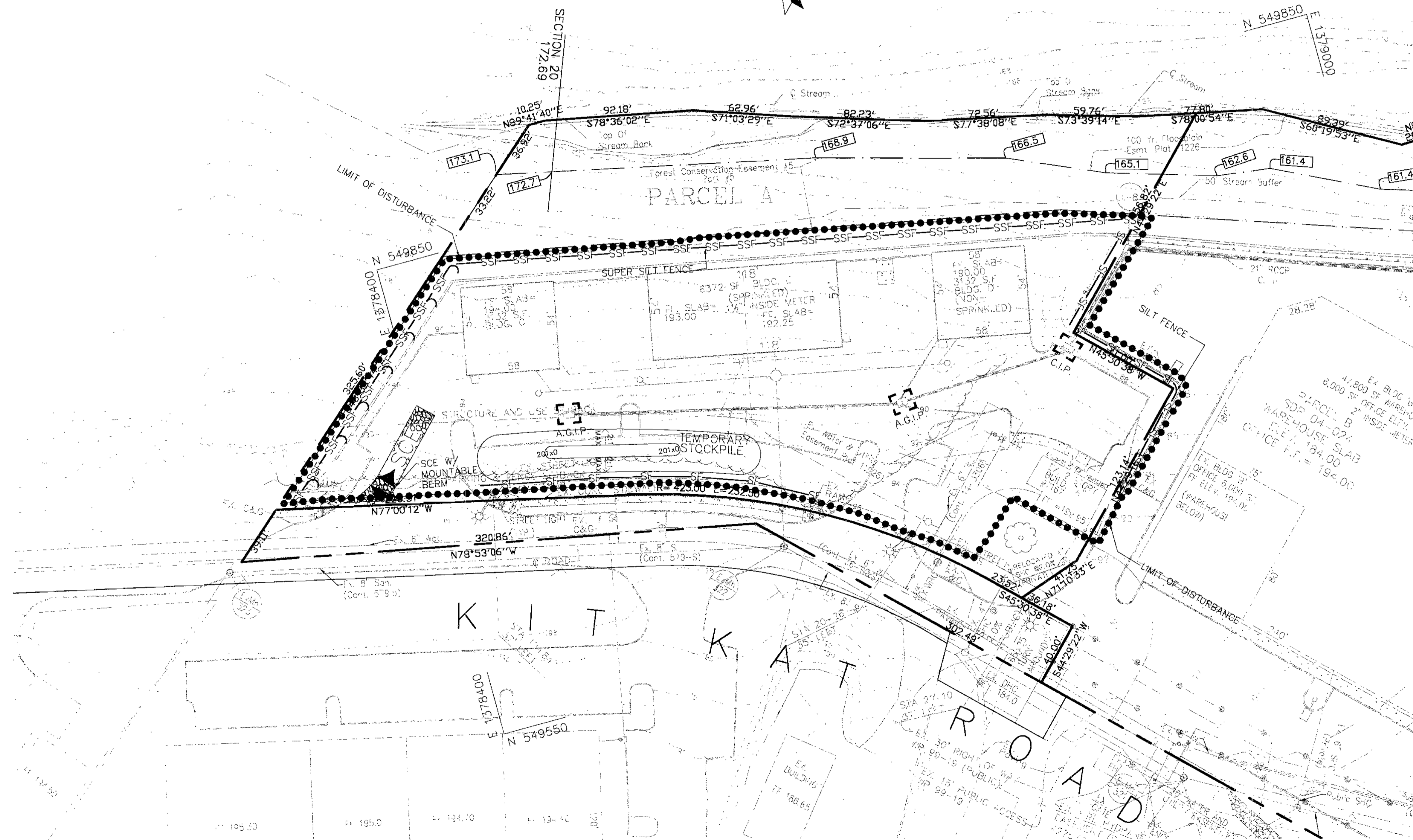
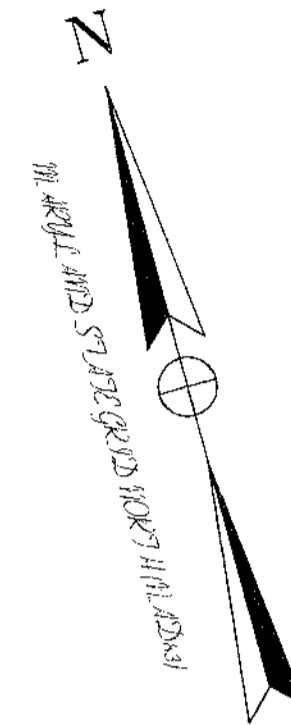
SEE F 04-081  
SEE SDP 04-024  
SEE WP-02-18  
PREVIOUSLY SDP# 94-18

Des By: R.J.W.	Scale: 1" = 40'	Proj No: 02-006
Drn By: S.E.W.	Date: APRIL 2004	DRAWING NO: ps01seline.dwg
Chk By: J.R.H.	SDP 04-039	2 OF 10

SDP 04-039

**LEGEND**

- EXISTING
- PROPOSED
- SF— SILT FENCE
- SSF— SUPER SILT FENCE
- C.I.P. A.G.I.P. AGIP/CIP
- MOUNTABLE BERM
- STABILIZED CONSTRUCTION ENTRANCE
- WOODS LINE



**PLAN**  
SCALE: 1"=40'

**ENGINEER'S CERTIFICATE**  
I, WE CERTIFY THAT THIS PLAN FOR 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.

*John R. Heinrichs* 1-11-05  
ENGINEER: JOHN R. HEINRICHS, VICE PRESIDENT DATE  
PE#14920

**DEVELOPER'S CERTIFICATE**  
I, WE 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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*D. Eric Seline* 1-11-05  
OWNER: D. ERIC SELINE DATE  
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

*Jim Meyer* 1/26/05  
NATURAL RESOURCES CONSULTATION SERVICES DATE  
THIS DEVELOPMENT PLAN WAS REVIEWED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John K. Whitson* 1/26/05  
HOWARD S.C.D. DATE  
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chris Stannum* 1/26/05  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Cindy Hamilton* 3/3/05  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Melvin K. Layton* 2/4/05  
DIRECTOR DATE

Date	No	Revision Description

OWNER/DEVELOPER:  
D. ERIC SELINE  
14852 OLD GUNPOWDER ROAD  
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PARCEL: 49 TAX MAP: 43  
CENSUS TRACT 6011.01 1 ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

PLAT: 11226 DEED: L 5368, F 154

TITLE:  
**SEDIMENT CONTROL PLAN**

SEE F 04-081  
SEE SDP 04-024  
SEE HP-02-18  
PREVIOUSLY SDP# 94-18

Des By	R.J.W.	Scale	1" = 40'	Proj No	03-006
Drn By	S.E.W.	Date	APRIL, 2004	DRAWING NO	es07setline.dwg
Chk By	J.R.H.	SDP	04-039		3 OF 10

SDP 04-039

1-11-05  
Date  
*John R. Heinrichs*  
JOHN R. HEINRICHS  
Professional Engr. No. 14920

**SEDIMENT CONTROL NOTES**

- 1) A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (313-1855)
- 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3) FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, 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 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- 5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, FOR PERMANENT SEEDINGS SO, TEMPORARY SEEDING AND MULCHING (SEC. 3) TEMPORARY STABILIZATION WITH MULCH ALONE SHALL 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 PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 7) SITE ANALYSIS: TOTAL AREA OF SITE: 11.746 ACRES; AREA DISTURBED: 2.08 ACRES; AREA TO BE ROOFED OR PAVED: 0.35 ACRES; AREA TO BE VEGETATIVELY STABILIZED: 0.82 ACRES; TOTAL CUT: 482 CU. YDS.; TOTAL FILL: 842 CU. YDS.; OFFSITE WASTE/BORROW AREA LOCATION TO BE DETERMINED.
- 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.
- 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

**PERMANENT SEEDING NOTES**

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

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

**SOIL AMENDMENTS:** IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- 1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FT) AND 800 LBS PER ACRE 14-14-14 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 (9 LBS/1000 SQ FT).
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (10 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 (14 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE PER ACRE (100 LBS/1000 SQ FT) OF MEADOW LEGUMES. DURING THE PERIODS OF OCTOBER TO FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELLED ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OPTION (2) USE SOO, OPTION (3) SEED WITH 80 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELLED ANCHORED STRAW.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNKILLED SMALL GRASS 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 6 FEET OR HIGHER, USE 346 GAL PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**TEMPORARY SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED UNDER A SHORT-TERM VEGETATIVE COVER IS NEEDED.

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

**SOIL AMENDMENTS:** APPLY 800 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).

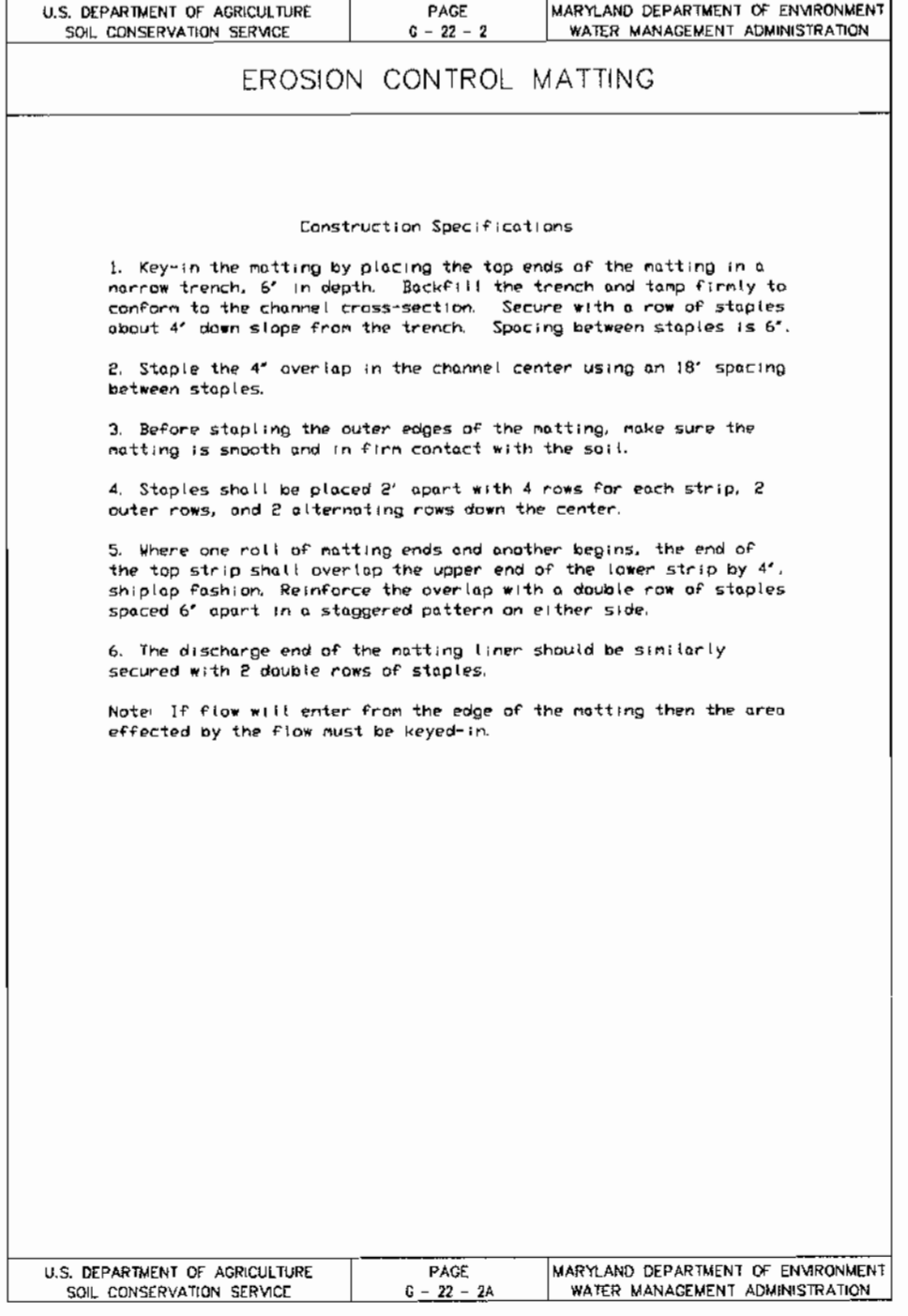
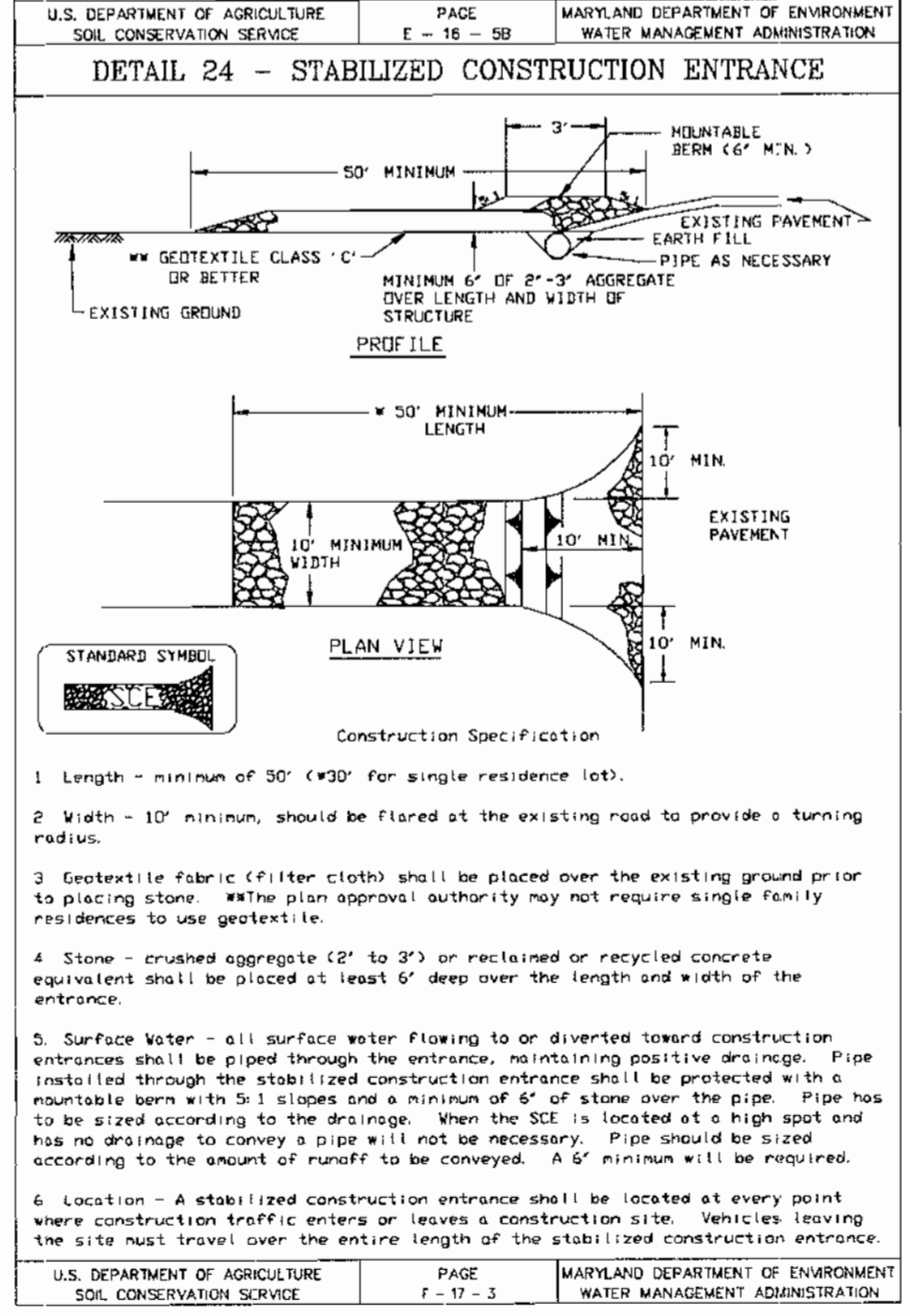
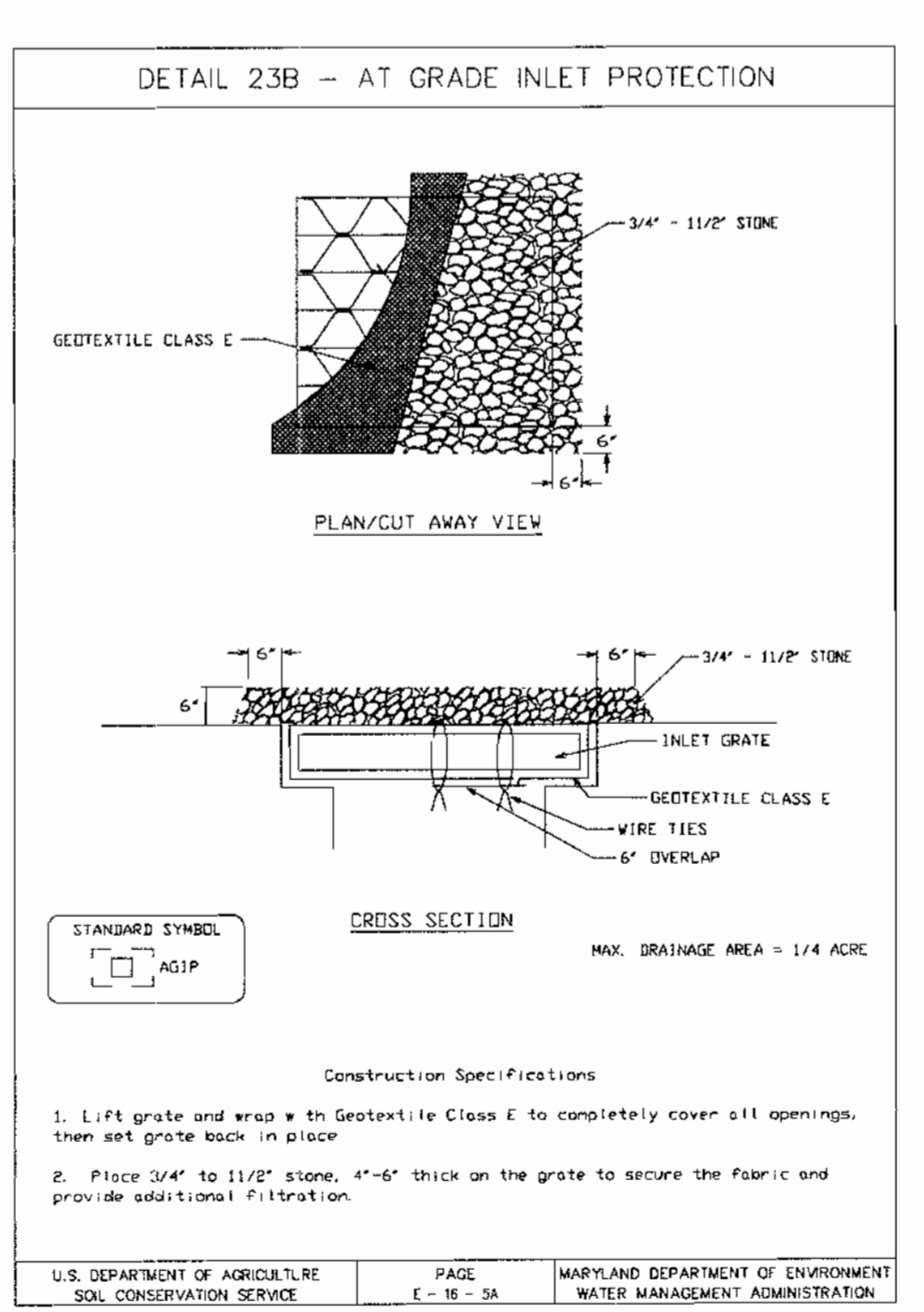
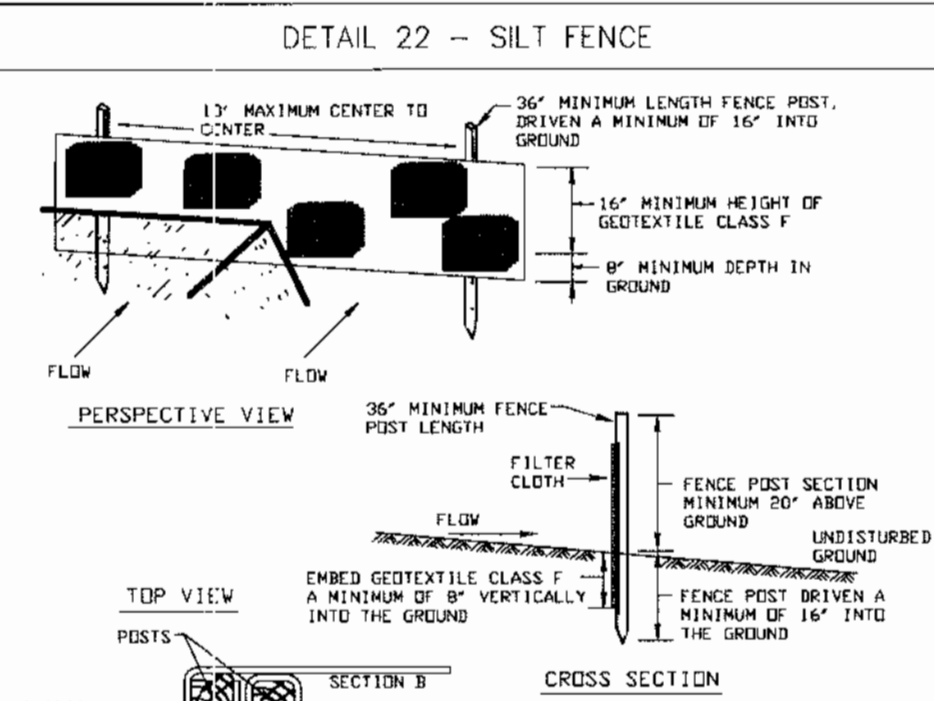
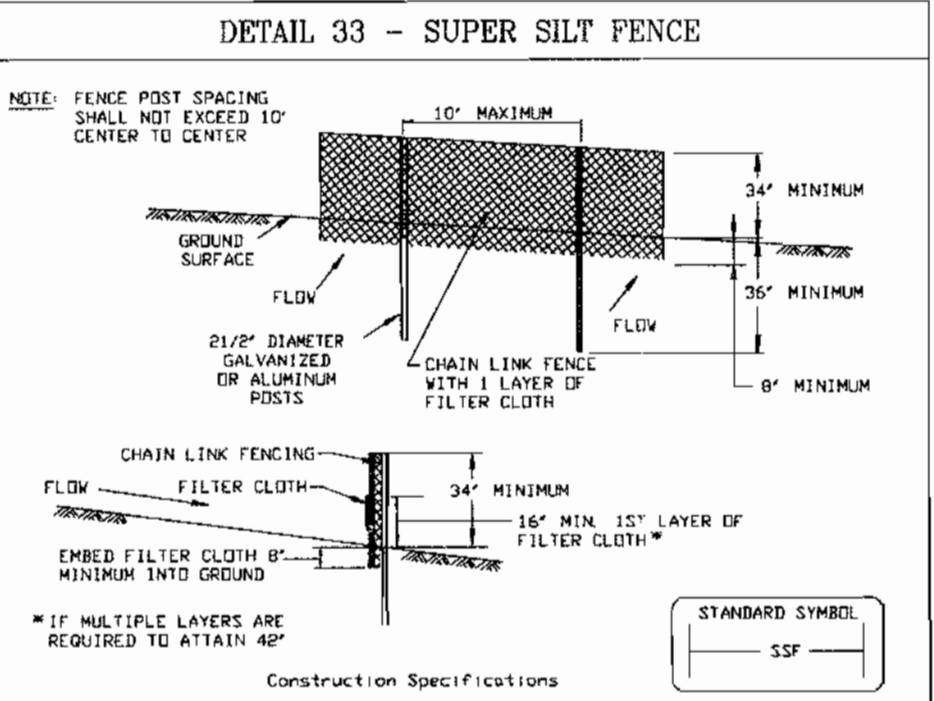
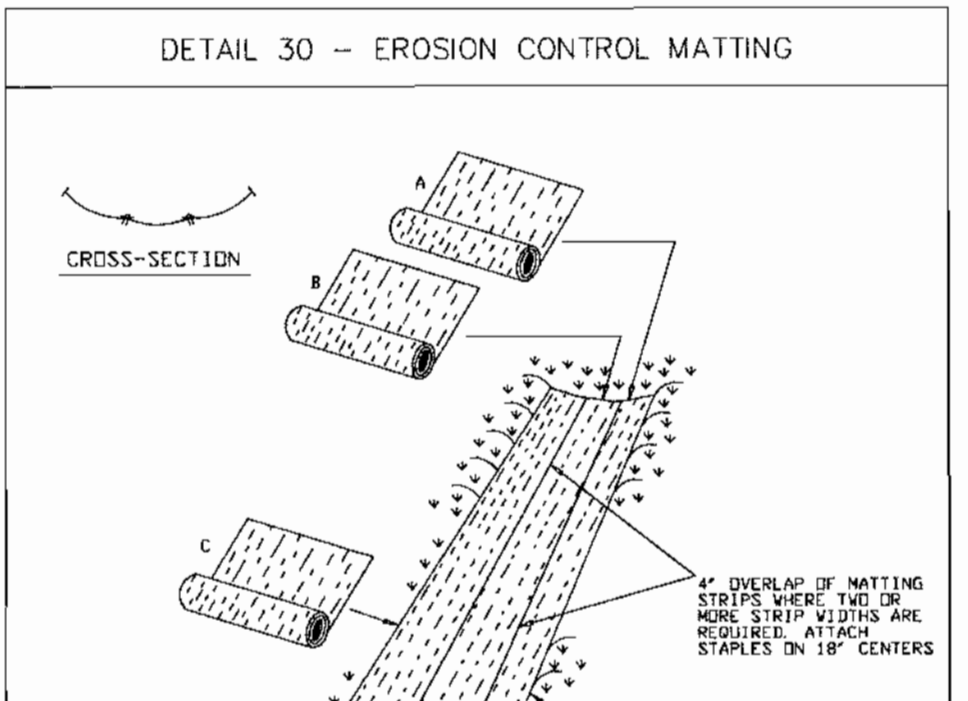
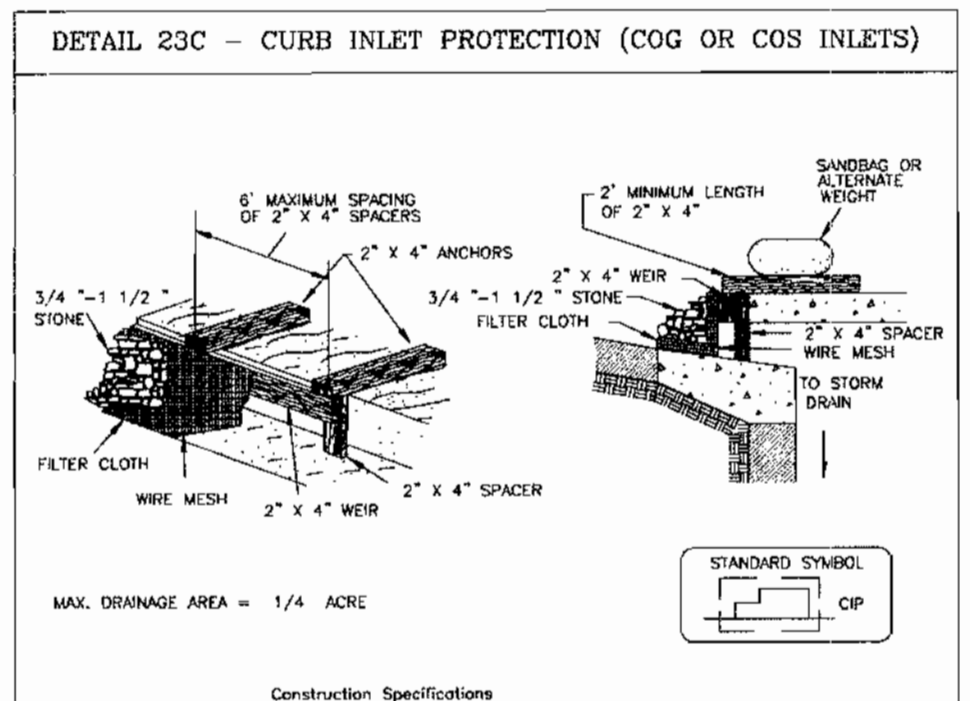
SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF HEIFER LOGGRASS (80 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELLED ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OF SOO.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNKILLED SMALL GRASS 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 6 FEET OR HIGHER, USE 346 GAL PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

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

**SEQUENCE OF CONSTRUCTION**

(1 DAY)	DAY 1	OBTAIN A GRADING PERMIT - VERIFY THAT EX. SWM SEDIMENT BASIN BUILT UNDER SDP 04-024 IS OPERATIONAL BEFORE PROCEEDING TO NEXT STEP.
(2 DAYS)	DAY 2-3	CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE WITH A MOUNTABLE BERM (SCE).
(5 DAYS)	DAY 4-8	CLEAR AND GRUB AREA FOR, AND INSTALL REMAINING SEDIMENT CONTROL DEVICES, AND GET PERMISSION FROM SEDIMENT CONTROL INSPECTOR BEFORE PROCEEDING.
(51 DAYS)	DAY 9-60	CONSTRUCT RETAINING WALL WHILE BEING CAREFUL TO NOT DISTURB THE 'Z' CONFIGURATION OF THE SUPER SILT FENCE. ANY DAMAGE TO SEDIMENT CONTROL MEASURES IS TO BE REPAIRED IMMEDIATELY.
(15 DAYS)	DAY 61-76	ROUGH GRADE SITE AND STABILIZE AS PER TEMPORARY SEEDING NOTES.
(20 DAYS)	DAY 77-97	INSTALL ALL UTILITIES, IE, WATER AND SEWER CONNECTIONS, STORM DRAINS, ETC. INSTALL INLET PROTECTION AROUND INLETS IMMEDIATELY AFTER INSTALLATION.
(60 DAYS)	DAY 98-185	CONSTRUCT BUILDINGS.
(15 DAYS)	DAY 159-174	CONSTRUCT CURBS, PAVING AND SIDEWALKS.
(5 DAYS)	DAY 175-180	STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
(3 DAYS)	DAY 181-184	FINE GRADE SITE AND SED. DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
(5 DAYS)	DAY 185-190	WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED AND UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.



**SUPER SILT FENCE**

Design Criteria

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 Feet	1,500 Feet
20 - 30%	5:1 - 3:1	100 Feet	1,000 Feet
30 - 50%	3:1 - 2:1	100 Feet	500 Feet
50% +	2:1 +	50 Feet	250 Feet

**SILT FENCE**

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

**ENGINEER'S CERTIFICATE**  
I/WE CERTIFY THAT THIS PLAN FOR 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.

John A. Heinrichs 1-11-05  
DATE: 1-11-05  
ENGINEER: JOHN R. HEINRICHS, VICE PRESIDENT  
PHOENIX ENGINEERING, INC. PE#14920

**DEVELOPER'S CERTIFICATE**  
I/WE 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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

D. Eric Seline 1-11-05  
DATE: 1-11-05  
OWNER: D. ERIC SELINE  
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MET THE TECHNICAL REQUIREMENTS.  
Jim Mayer 1/26/05  
DATE: 1/26/05  
JURAL RESOURCES CONSULTING SERVICES  
John R. Heinrichs 1/26/05  
DATE: 1/26/05  
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, DEVELOPMENT ENGINEERING DIVISION  
Cindy Hamilton 2/3/05  
DATE: 2/3/05  
CHIEF, DIVISION OF LAND DEVELOPMENT  
Mark A. Joyce 2/3/05  
DATE: 2/3/05  
DIRECTOR

Date	No.	Revision Description

**OWNER/DEVELOPER:**  
D. ERIC SELINE  
14852 OLD GUNPOWDER ROAD  
LAUREL, MARYLAND 20707  
410-792-2999

**PROJECT:**  
KIT KAT CENTER  
PARCEL A  
7167 KIT KAT ROAD ELIJACOTT CITY, MD.  
Tax Map No. 43, Grid 11, Elec. Dist. No. 1, Parcel 49  
HOWARD COUNTY, MARYLAND

**PREPARED BY:**  
PHOENIX ENGINEERING, INC.  
CONSULTING ENGINEERS  
1420-A JOH AVENUE  
BALTIMORE, MARYLAND 21227  
(410) 247-8833 FAX 247-9397

**AREA:**  
PARCEL: 49 TAX MAP: 43  
CENSUS TRACT 6011.01 1 ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**PLAT:** 11226 **DEED:** L 5368, F 154

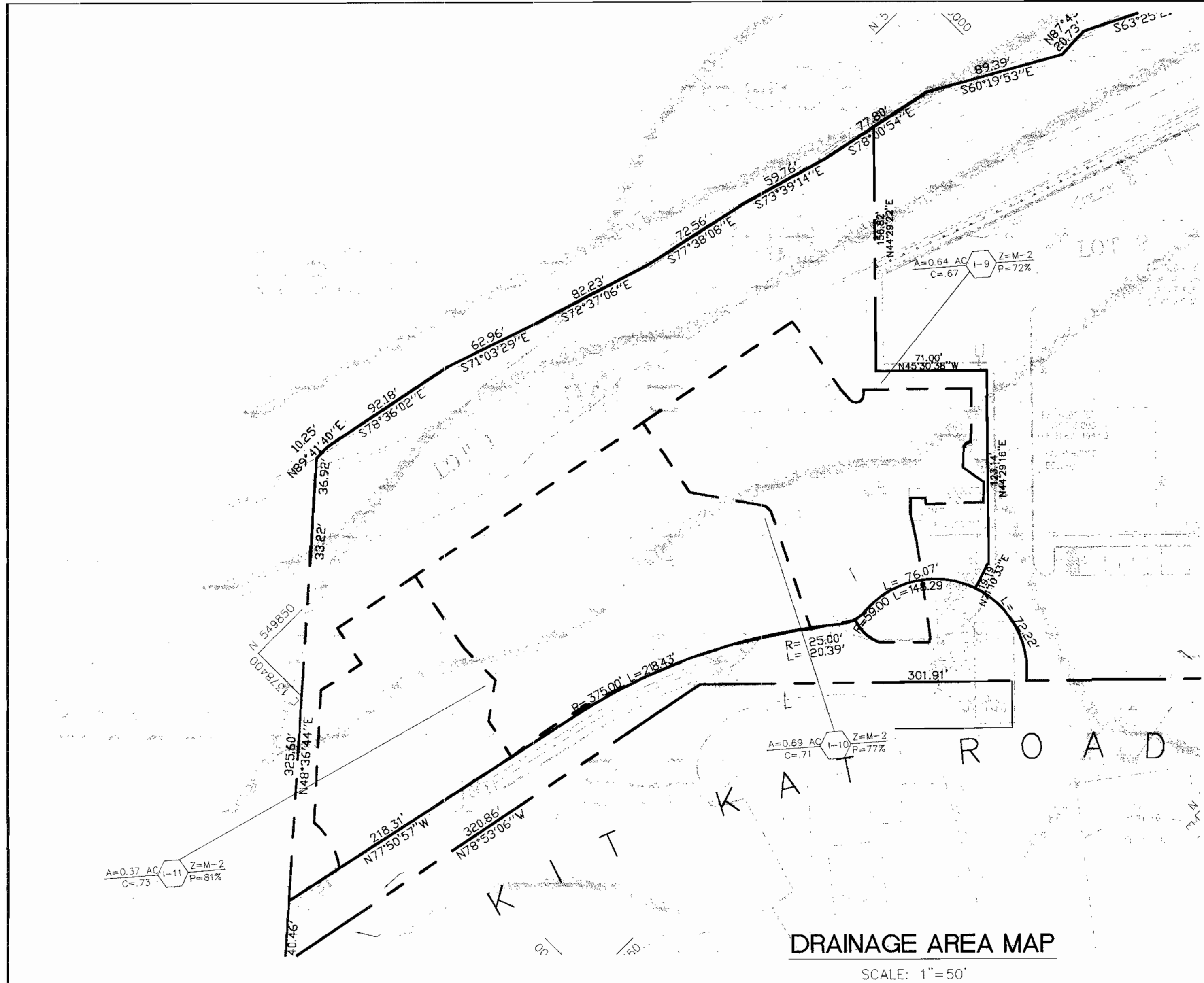
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SEDIMENT CONTROL NOTES AND DETAILS

SEE F 04-081  
SEE SDP 04-024  
SEE MP-02-18  
PREVIOUSLY SDP# 94-18

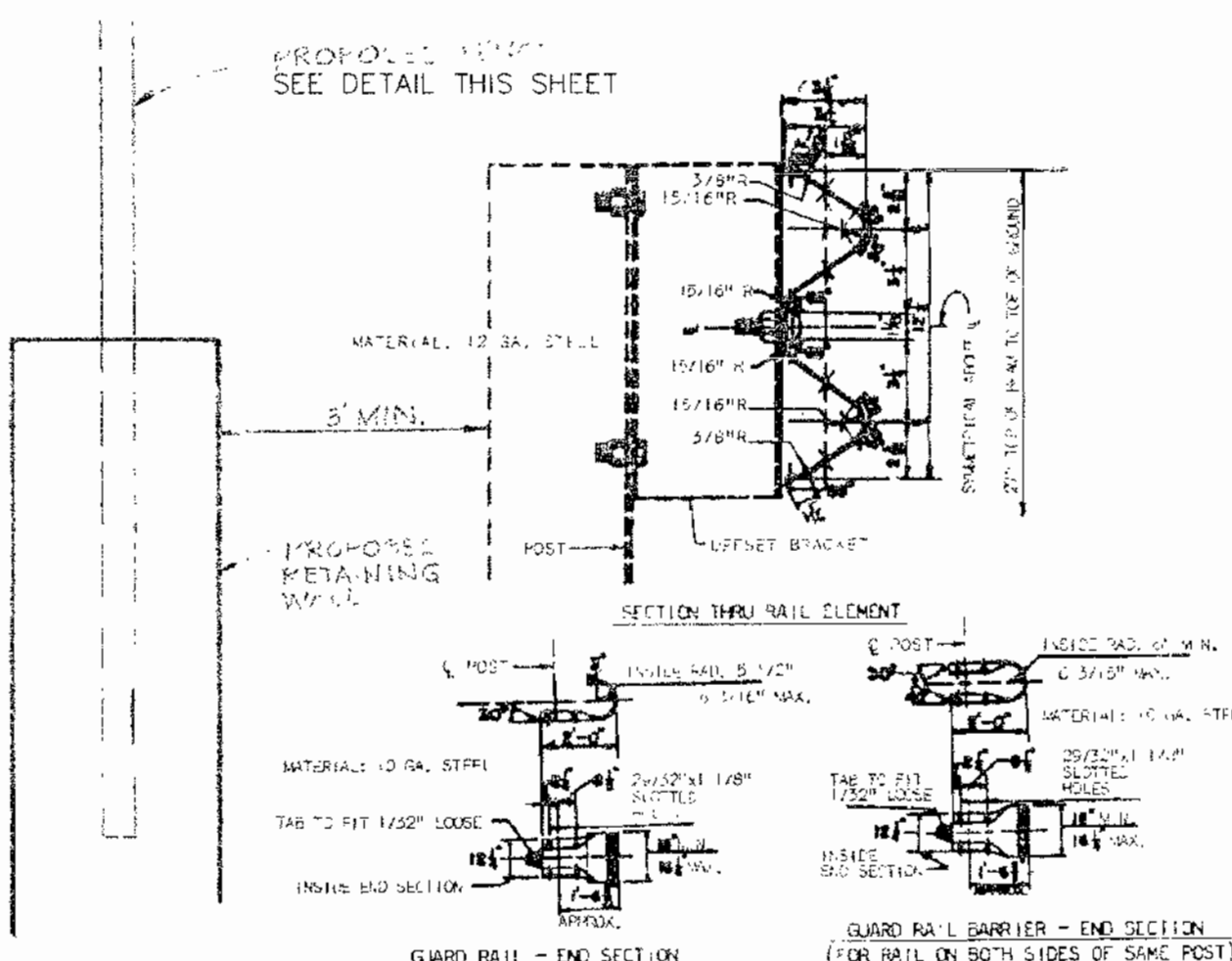
Des By R.A.W. Scale AS SHOWN Proj No 03-006  
Dn By S.E.W. Date APRIL, 2004 DRAWING NO D01KITKA\*  
Ok By J.R.H. SDP-04-039 4 OF 10

John A. Heinrichs  
Professional Engr. No. 14920

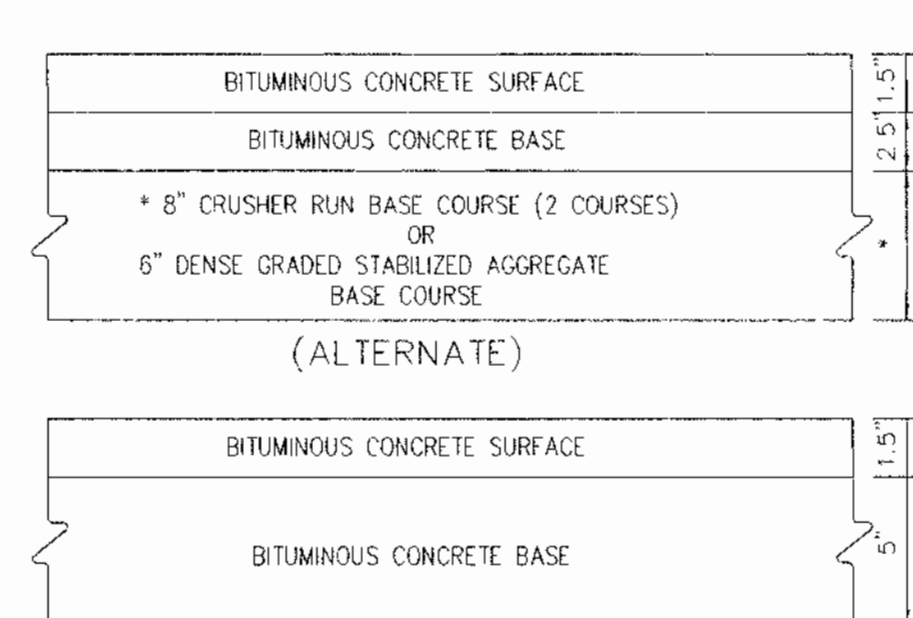
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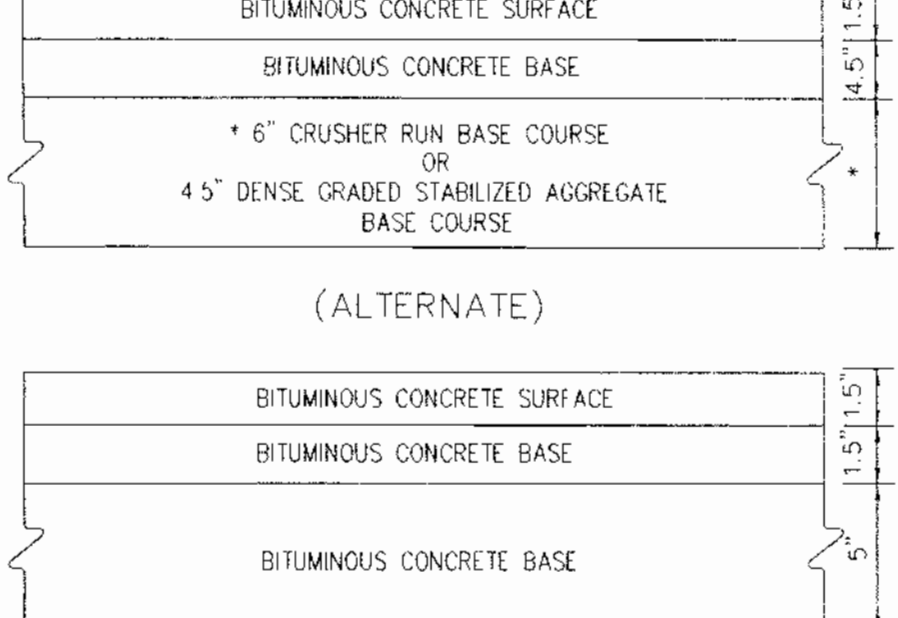
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SCALE: 1"=50'



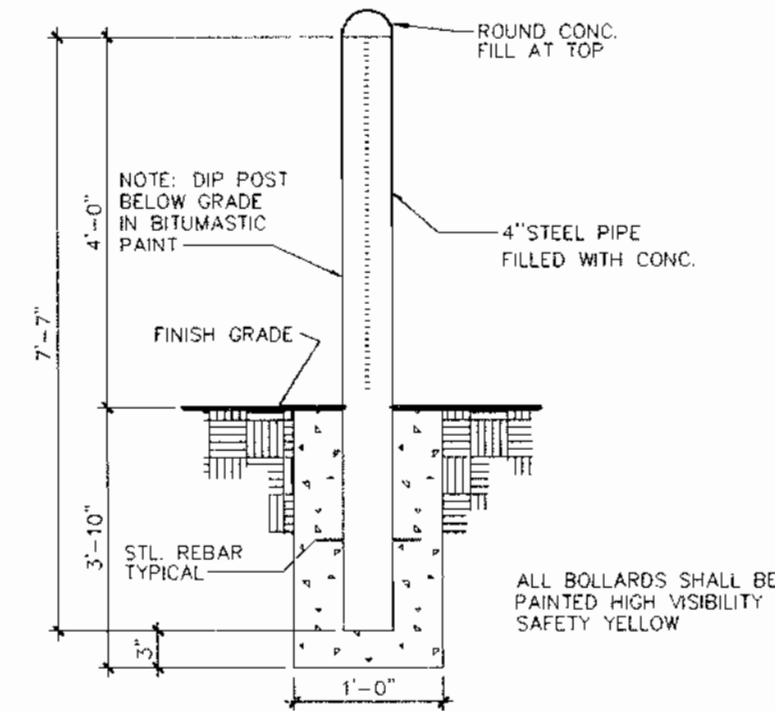
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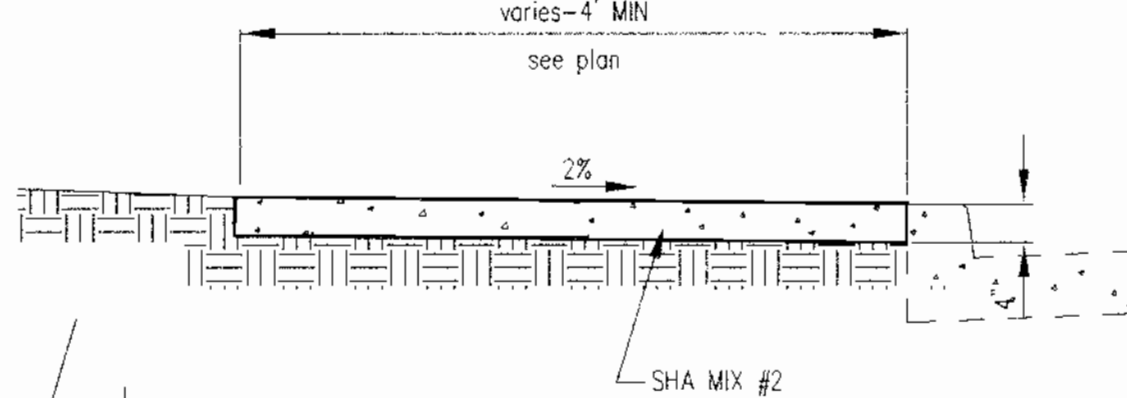
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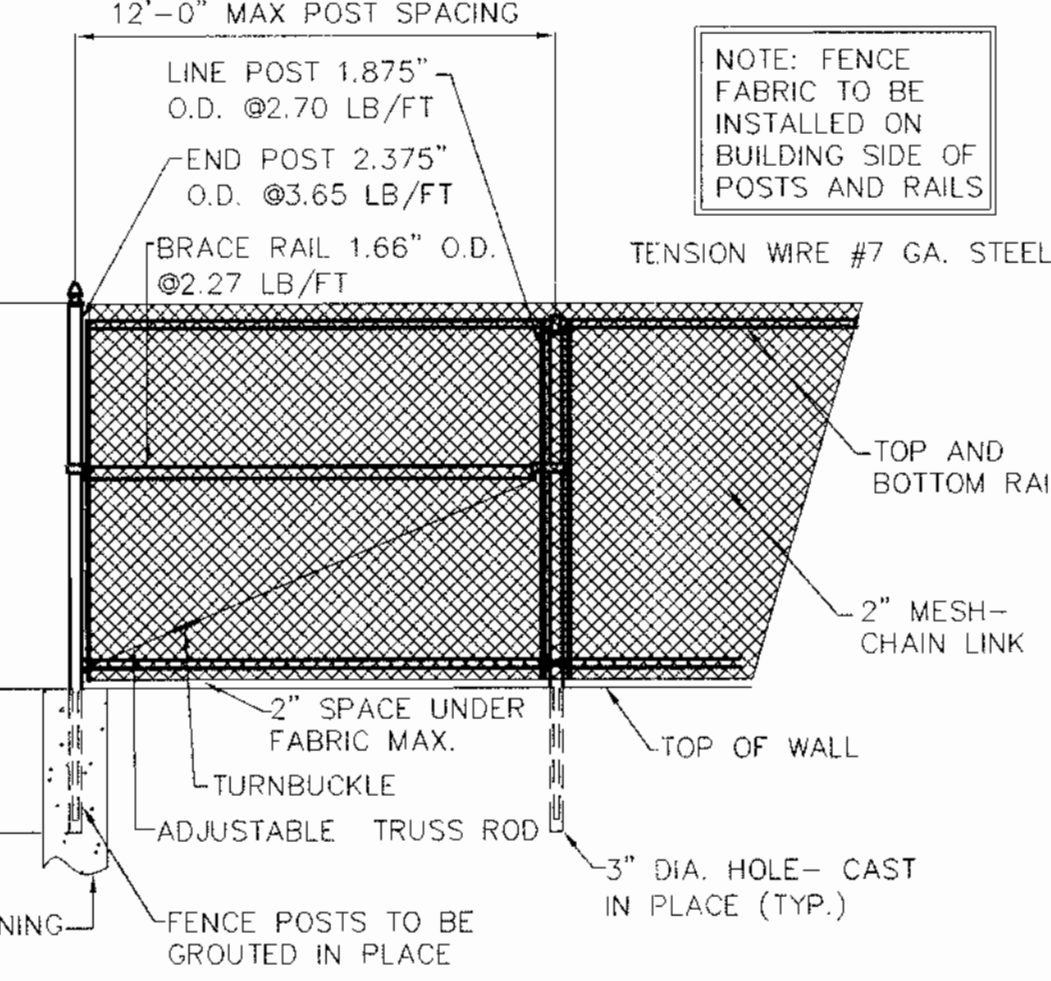
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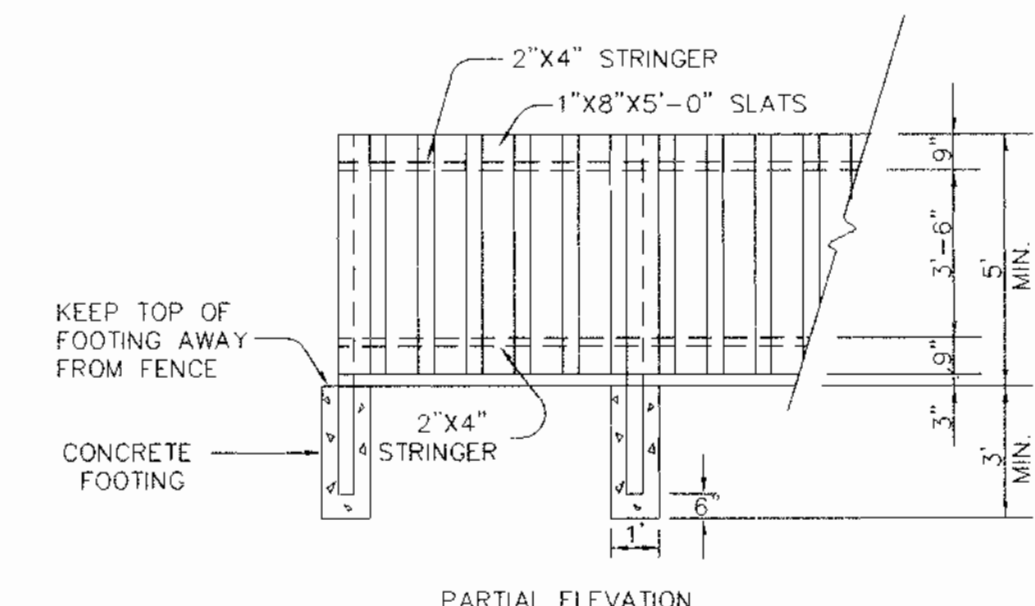
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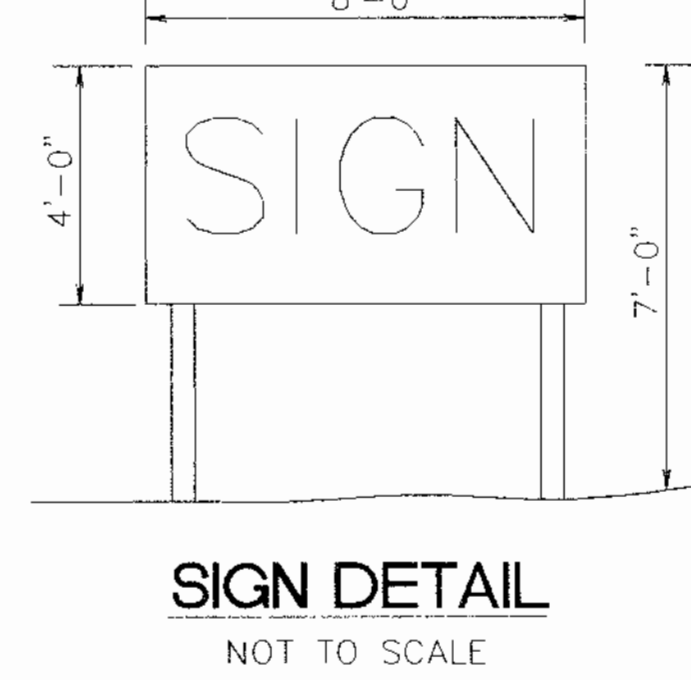
**SIDEWALK DETAIL**  
NOT TO SCALE



**CHAIN LINK FENCE DETAIL**  
NOT TO SCALE



**DUMPSTER ENCLOSURE**  
NOT TO SCALE

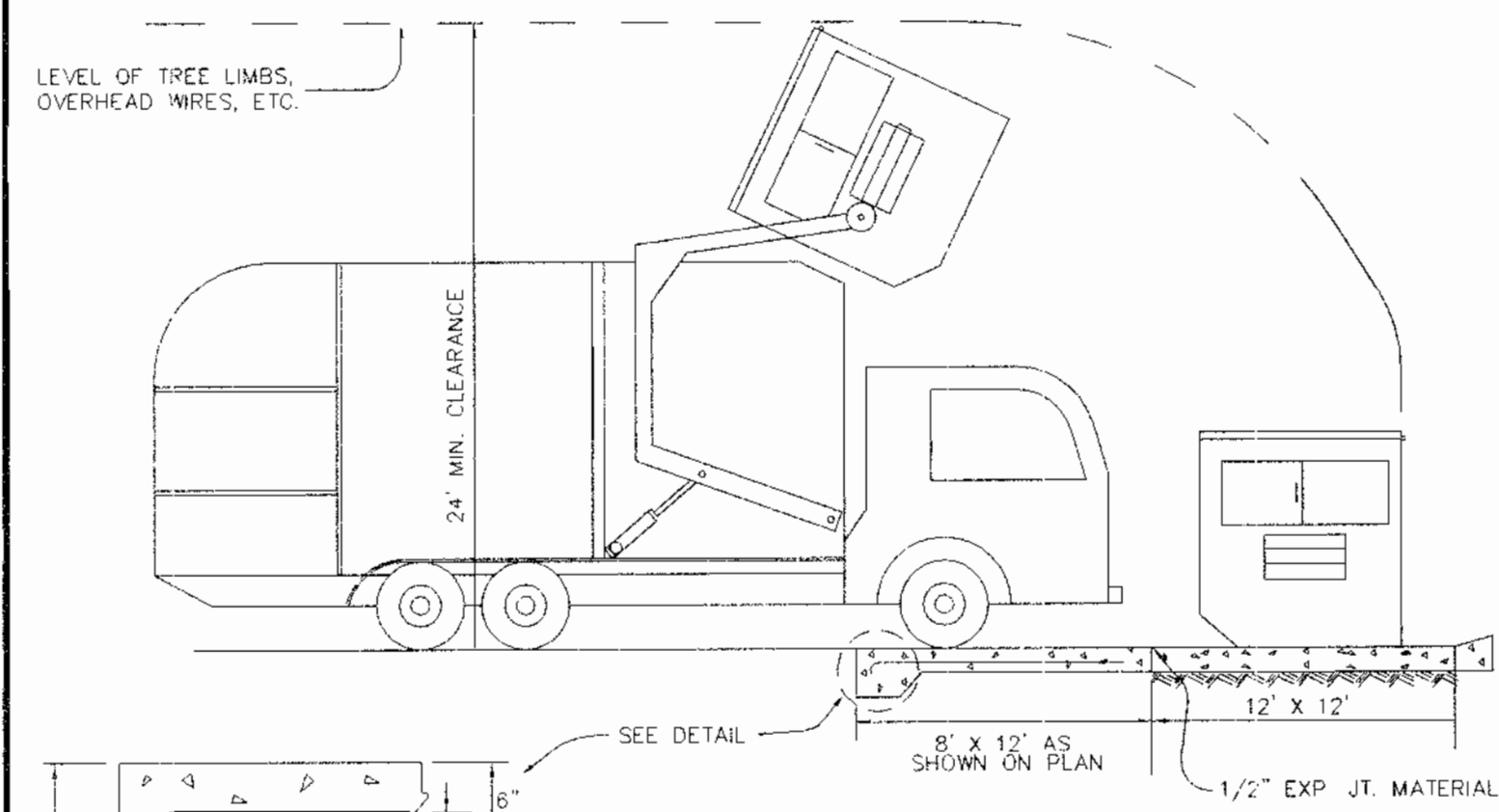


**SIGN DETAIL**  
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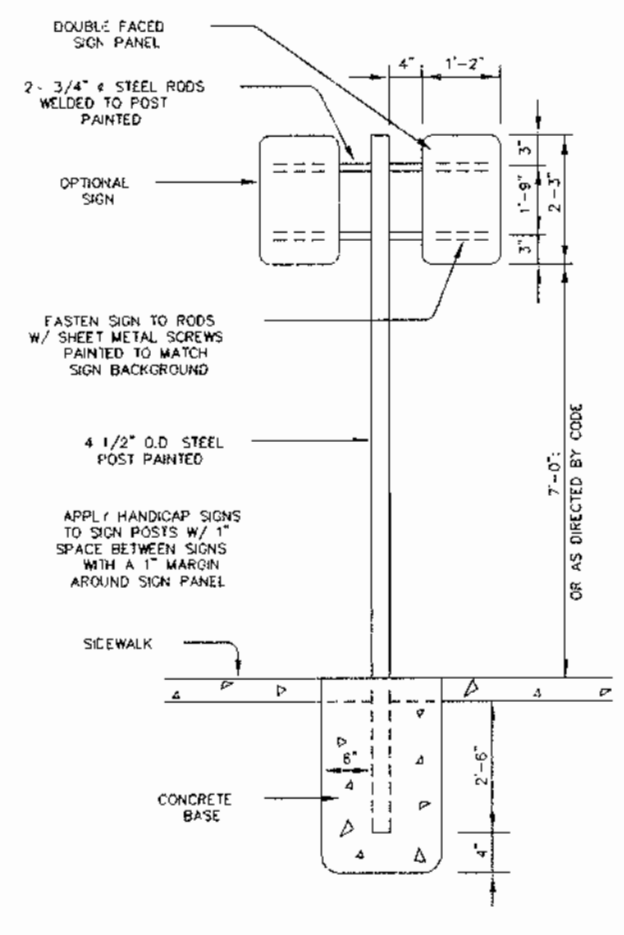
STRUCTURE SCHEDULE					PIPE SCHEDULE					
NO.	TYPE	LOCATION	INV. IN	INV. OUT	* THROAT TOP ELEV.	REMARKS	LOCATION	SIZE	LENGTH	TYPE
I-9	A-5 INLET	SEE PLAN	178.58	178.38	• 188.15	H.C. STD. SD 4.01	EX. I-8 ~ I-9	18"	87'	RCCP CL IV
I-10	DOUBLE S INLET	SEE PLAN	184.67	184.47	• 190.0	H.C. STD. SD 4.23	I-9 ~ I-10	15"	104'	RCCP CL IV
I-11	DOUBLE S INLET	SEE PLAN	-	186.73	• 192.90	H.C. STD. SD 4.23	I-10 ~ I-11	15"	204'	RCCP CL IV

ALL STORM DRAIN BEDDING TO BE CLASS "C" UNLESS OTHERWISE NOTED

SOIL CLASSIFICATION		
SYMBOL	TYPE	DESCRIPTION
B#B2	C	BELTSVILLE SILT LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED
B#C2	C	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
B#C3	C	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED
B#D2	C	BELTSVILLE SILT LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED
ChD3	C	CHILLUM-FAIRFAX LOAMS, 5 TO 15 PERCENT SLOPES, SEVERELY ERODED
IuB	B	IUKA LOAM LOCAL ALLUVIUM, 1 TO 5 PERCENT SLOPES
M#E	C	MONTALTO AND RELAY SOILS, 15 TO 45 PERCENT SLOPES
S#E	B	SASSAFRAS SOILS, 15 TO 40 PERCENT SLOPES



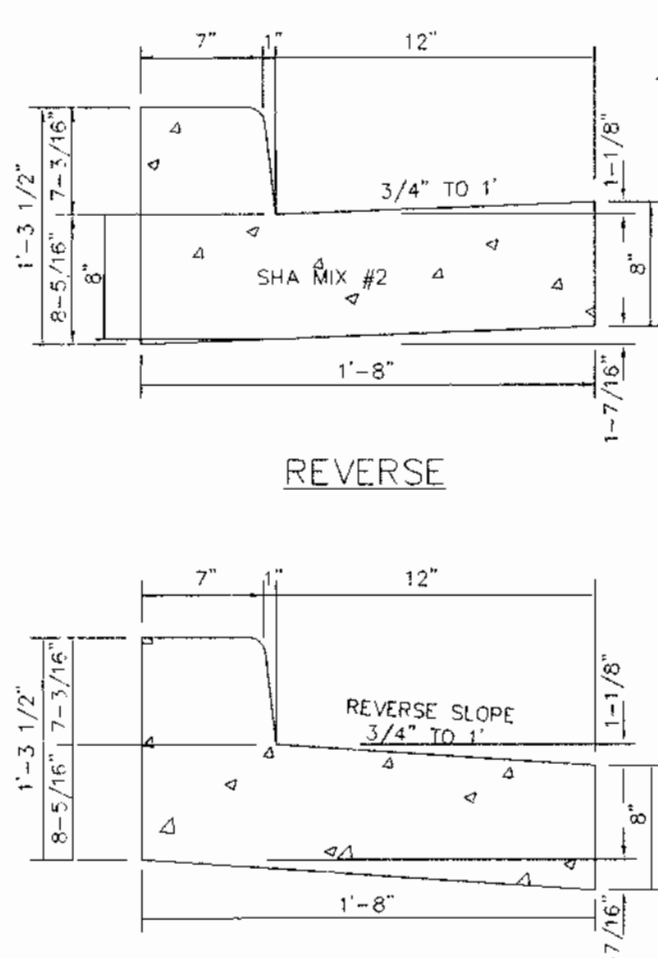
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NOT TO SCALE



**HANDICAP SIGN DETAIL**  
NOT TO SCALE



**STANDARD 7\"/>**



**REVERSE**

Date	No.	Revision Description
1/28/05		
2/2/05		
2/11/05		

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

D. ERIC SELINE  
 14852 OLD GUNPOWDER ROAD  
 LAUREL, MARYLAND 20707  
 410-792-2999

**KIT KAT CENTER**  
 PARCEL A  
 7167 KIT KAT ROAD  
 Tax Map No. 43, Grid 11, Elec. Dist. No. 1, Parcel 49  
 HOWARD COUNTY, MARYLAND

PREPARED BY:  
**PHOENIX ENGINEERING, INC.**  
 CONSULTING ENGINEERS  
 1420-A JOH ANN AVENUE  
 BALTIMORE, MARYLAND 21227  
 (410) 247-8833 FAX 247-8997

AREA:  
 PARCEL, 49 TAX MAP: 43  
 CENSUS TRACT 6011.01 1 ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

PLAT: 11226 DEED: L 5368, F 154  
 TITLE:  
**DRAINAGE AREA MAP AND DETAILS**

SEE F.04-081  
 SEE SDP 04-024  
 SEE WP-02-18  
 PREVIOUSLY SDP# 94-18

Des By: P.J.W. Scale: AS SHOWN Proj No: 03-006  
 Dn By: S.E.W. Date: MARCH, 2004 DRAWING NO: dcd01hkat.dwg  
 Ck By: J.R.H. SDP-04-039 5 OF 10

1.11.05  
 Date  
 JOHN R. HEINRICHS  
 Professional Engr. No. 14920

**Schedule A - Perimeter Landscape Edge**

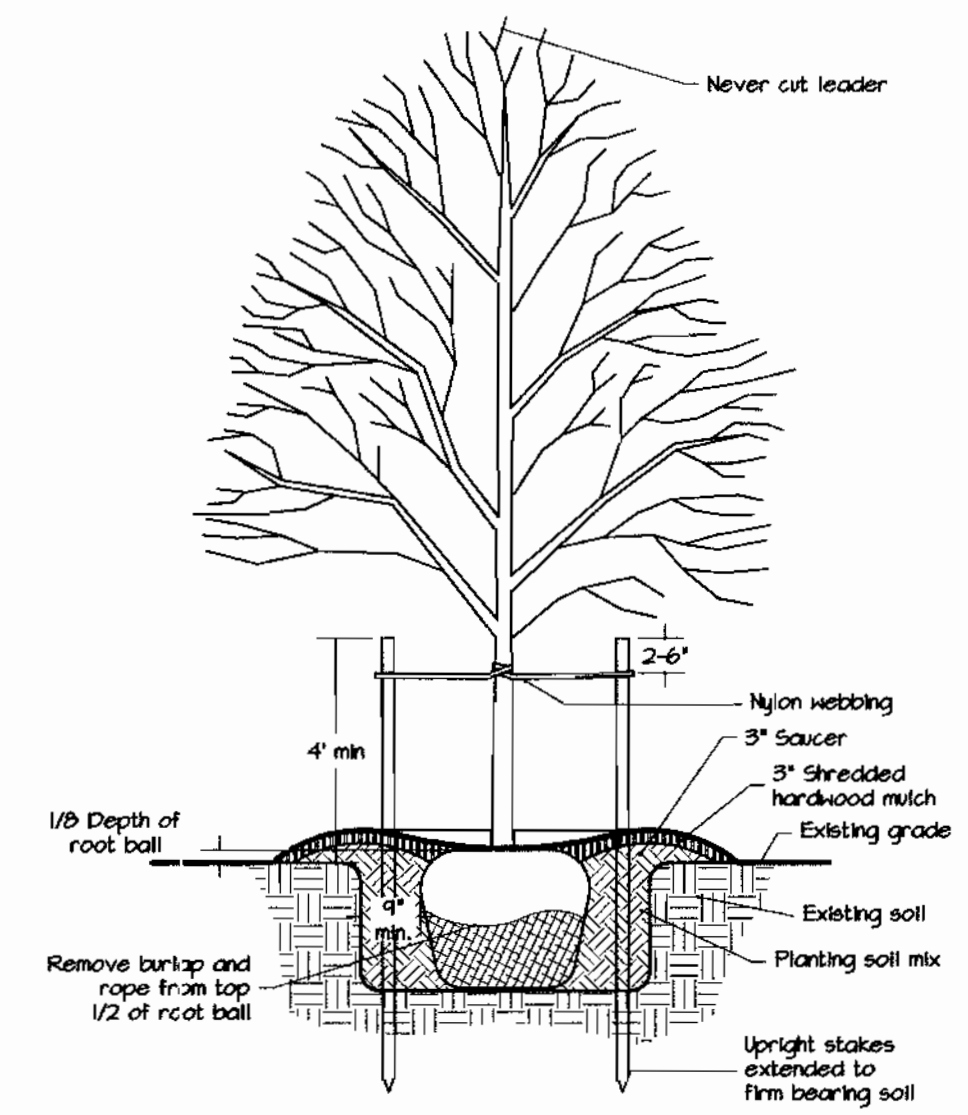
Category	Non-Res/ Non-Res	Non-Res/ Non-Res	Non-Res/ Non-Res	Parking/ Roadway	Parking/ Roadway	Parking/ Roadway	Non-Res/ Non-Res	TOTAL
Perimeter Label	P-1	P-2	P-3	P-4	P-5	P-6	P-7	
Landscape Type	A	A	A	E	E	E	B	
Linear Feet of Roadway Frontage/Perimeter	196	98	357	20	251	15	47	
Credit for Existing Vegetation (Yes, No, Linear Feet)	N/A	Yes 98	Yes 357	N/A	N/A	N/A	N/A	
Credit for Wall, Fence, or Berm (Yes, No, Linear Feet)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Number of Plants Required								
Shade Trees	3	0	0	0	6	0	1	10
Evergreen Trees	0	0	0	0	0	0	1	1
Shrubs	0	0	0	5	63	4	0	72
Number of Plants Provided								
Shade Trees	3	0	0	0	6	0	1	10
Evergreen Trees	0	0	0	0	0	0	1	1
Shrubs	0	0	0	5	66	4	0	75
Other Trees (2:1 Sub.)	0	0	0	0	0	0	0	0

**Schedule B - Parking Lot Internal Landscaping**

Number of Parking Spaces	43
Number of Trees Required	2
Number of Trees Provided	
Shade Trees	2
Other Trees (2:1 Sub.)	0

**Plant List**

Quan.	Key	Botanical Name	Common Name	Size	Remarks
<b>Trees</b>					
1	LP	Platanus x acerifolia 'Bloodgood'	Bloodgood Londonplane Tree	2 1/2-3" cal.	B&B or cont.
5	MS	Fraxinus pennsylvanica 'Marshall's Seedless'	Marshall's Seedless Ash	2 1/2-3" cal.	B&B or cont.
1	NS	Ilex x 'Nellie R. Stevens'	Nellie Stevens Holly	6-8' ht.	B&B or cont.
6	RM	Acer rubrum 'October Glory'	Red Maple	2 1/2-3" cal.	B&B or cont.
<b>Shrubs</b>					
75	BB	Euonymus alatus 'Compacta'	Dwarf Winged Euonymus	24-30" ht.	B&B or cont.



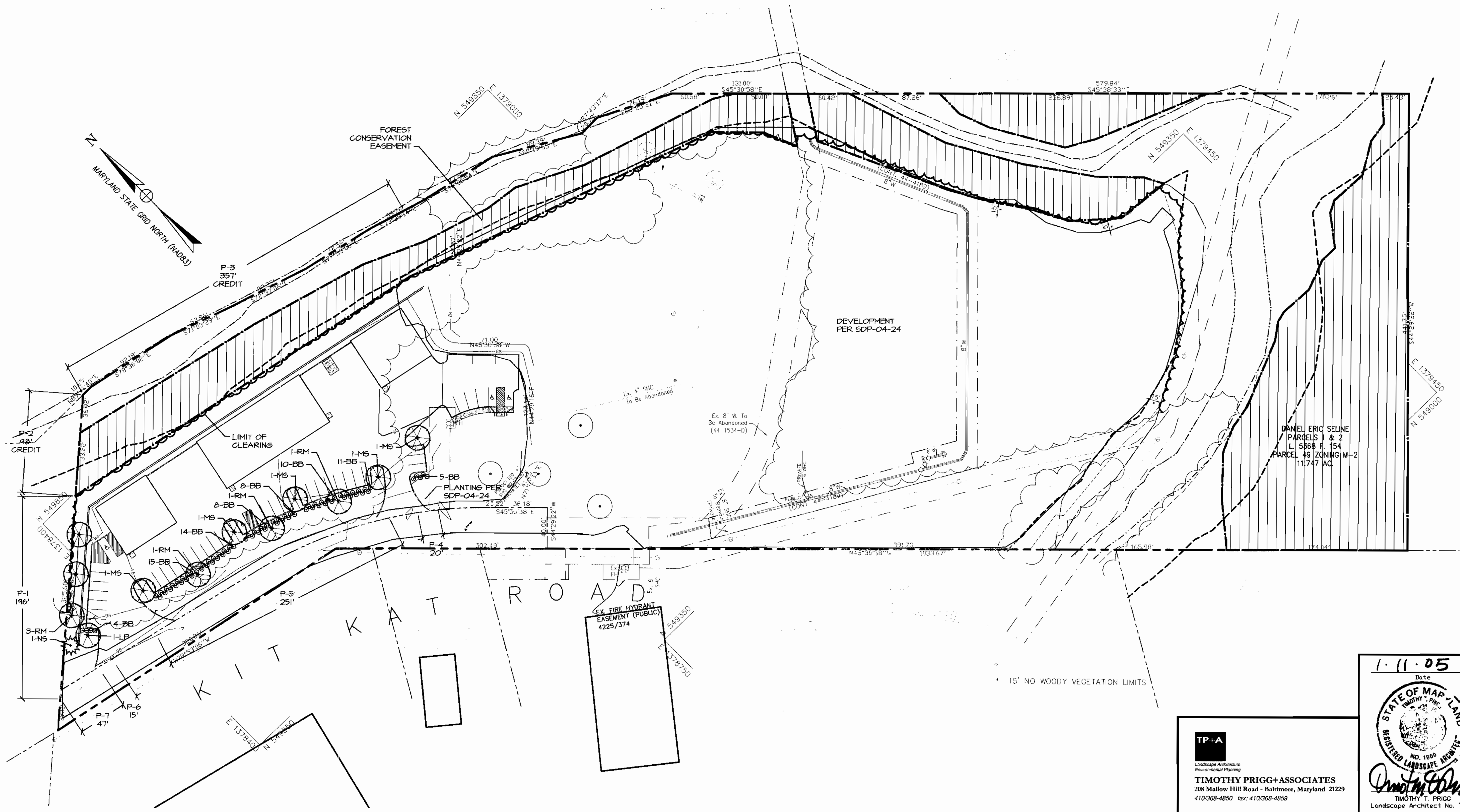
**1 Tree Planting Detail**  
N.T.S.

**Landscape Notes**

- Contractor shall be responsible for making himself familiar with all existing on-site conditions prior to submission of bid. The contractor is responsible for the location of all underground utilities, pipes, and structures. Contractor shall take sole responsibility for any cost incurred due to damage of said utilities. Call Miss Utility, 48 hours, prior to digging. (1-800-257-7777)
- Size and standards of plant materials shall conform to latest edition of "USA Standards For Nursery Stock", by the American Association of Nurserymen, Inc. (AAN).
- All planting procedures and specifications shall conform to "Landscape Guidelines for Baltimore-Washington Metropolitan Area" latest edition.
- Contractor shall guarantee all plant material for one (1) year from planting approval/acceptance.
- Contractor shall confirm quantity of plant materials by plant count.
- Plant pit backfill shall be a uniform mixture of one (1) part topsoil, two (2) parts existing soil and one (1) part Leafgrow® or approved alternative organic compost.
- All mulch to be shredded hardwood mulch.
- All plants shall be thoroughly watered by the contractor immediately following installation.
- Contractor to adjust plant locations in field as necessary.
- All plants shall be placed as not to obstruct drainage.
- No plant substitutes without prior approval.
- Where field conditions exist which would adversely affect plant performance, or interfere with proper planting procedures, the contractor shall notify the Engineer prior to installation of plant material.
- All areas not otherwise indicated are to be seeded or sodded as per plan project specifications and in accordance with the Maryland Standards and Specifications for Soil Erosion and Sediment Control.
- A financial surety for the required landscaping has been posted as a part of the DPW Developers Agreement in the amount of \$6,000. This surety is based on 12 shade trees at \$300 per tree, 1 evergreen tree at \$150 per tree, and 75 shrubs at \$30 per shrub.
- The owner, tenant, and their respective agents, if any, shall jointly and severally be responsible for the maintenance of the required landscaping. All required plantings shall be maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable regulations.

**LEGEND**

- PROPERTY LINE
- - - EXISTING EASEMENT
- - - EXISTING CONTOURS (2')
- ~ ~ ~ EXISTING TREELINE
- - - EXISTING STREAM TOP OF BANK
- - - 50' STREAM BUFFER
- [Hatched Box] FOREST CONSERVATION EASEMENT
- [Circle with Star] PROPOSED SHADE TREE
- [Circle with Dots] PROPOSED EVERGREEN TREE
- [Circle with Dot] PROPOSED SHRUB



APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>[Signature]</i>	1/26/05	DATE
CHEF, DEVELOPMENT ENGINEERING DIVISION		
<i>[Signature]</i>	3/3/05	DATE
CHEF, DIVISION OF LAND DEVELOPMENT		
<i>[Signature]</i>	2/11/05	DATE
DIRECTOR		
Date	No	Revision Description

OWNER/DEVELOPER:  
D. ERIC SELINE  
14852 OLD GUNPOWDER ROAD  
LAUREL, MARYLAND 20707  
410-792-2999

PROJECT:  
**KIT KAT CENTER**  
PARCEL A  
7167 KIT KAT ROAD ELLICOTT CITY, MD.  
Tax Map No. 43, Grid 11, Elec. Dist. No. 1, Parcel 49  
HOWARD COUNTY, MARYLAND

PREPARED BY:  
**PHOENIX ENGINEERING, INC.**  
CONSULTING ENGINEERS  
1420 JOH AVENUE, SUITE A  
BALTIMORE, MARYLAND 21227  
(410) 247-8833 FAX 247-9397

AREA:  
P/O PARCEL: 49 TAX MAP: 43  
CENSUS TRACT 8011.01 1 ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
PLAT 11226 DEED L 5368, F 154

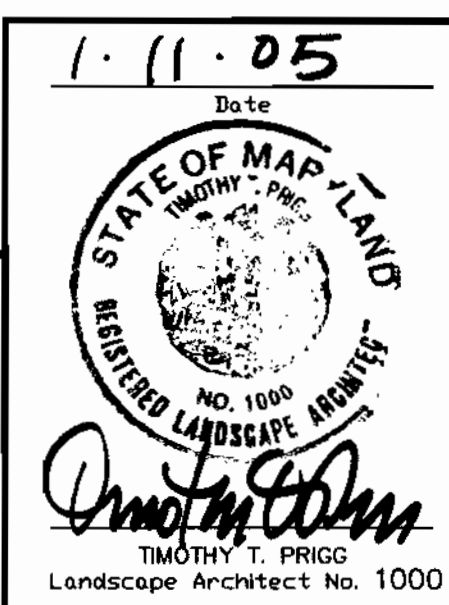
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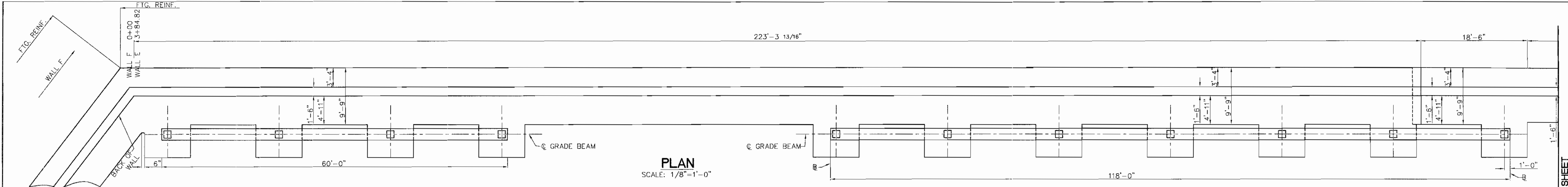
SEE F 04-081  
SEE SDP 04-024  
SEE WP-02-18  
PREVIOUSLY SDP 94-18

Des By	TTP	Scale	1" = 50'	Proj No	02-033
Drn By	DJM	Date	JUNE 2004	DRAWING NO	
Chk By	TTP	SDP	04-039		

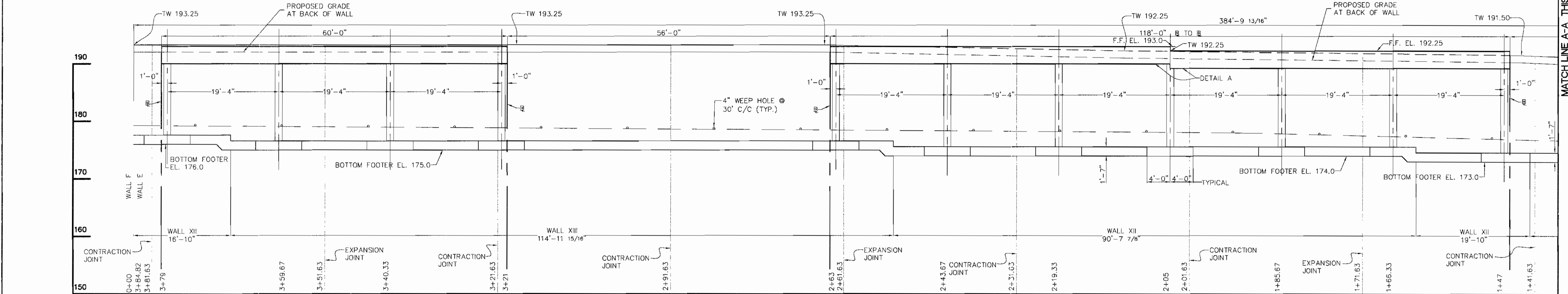
6 OF 10

**TP+A**  
Landscape Architecture  
Environmental Planning  
**TIMOTHY PRIGG+ASSOCIATES**  
208 Mallow Hill Road - Baltimore, Maryland 21229  
410-368-4850 fax: 410-368-4850

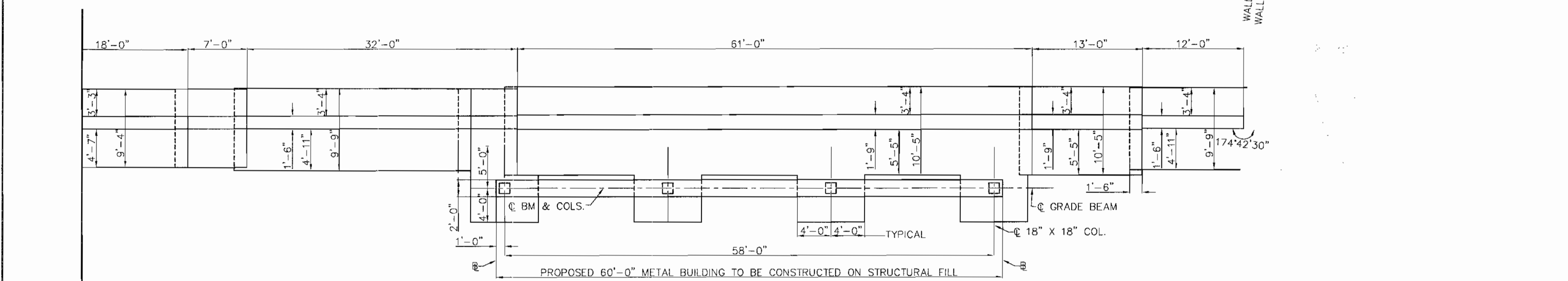




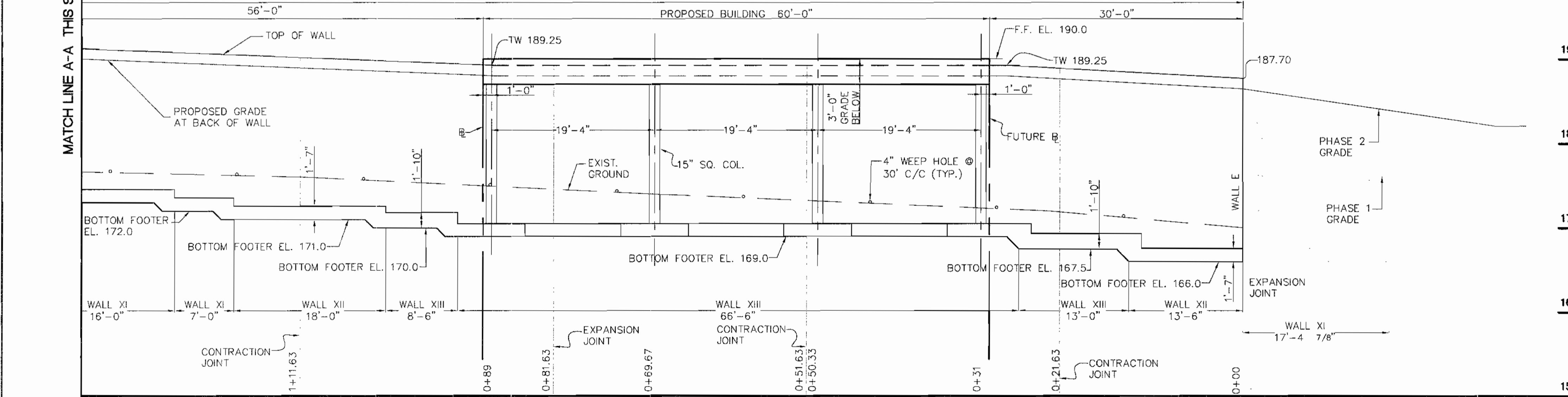
**PLAN**  
SCALE: 1/8"=1'-0"



**ELEVATION**  
SCALE: 1/8"=1'-0"



**PLAN**  
SCALE: 1/8"=1'-0"



**ELEVATION**  
SCALE: 1/8"=1'-0"

190  
180  
170  
160  
150

- A. RETAINING WALLS SHALL ONLY BE CONSTRUCTED UNDER THE OBSERVATION OF A REGISTERED PROFESSIONAL ENGINEER AND A (NICET, WAGEL, OR EQUIVALENT) CERTIFIED SOILS TECHNICIAN.
- B. THE REQUIRED BEARING PRESSURE BENEATH THE FOOTING OF THE WALL SHALL BE VERIFIED IN THE FIELD BY A CERTIFIED SOILS TECHNICIAN. TESTING DOCUMENTATION SHALL BE PROVIDED TO THE HOWARD COUNTY INSPECTOR PRIOR TO THE START OF CONSTRUCTION. THE REQUIRED TEST PROCEDURE SHALL BE THE DYNAMIC CONE PENETROMETER TEST ASTM STP-399.
- C. THE SUITABILITY OF THE FILL MATERIAL SHALL BE CONFIRMED BY THE ON-SITE SOILS TECHNICIAN. EACH EIGHT INCH LIFT MUST BE COMPACTED TO 95% STANDARD PROCTOR DENSITY AND THE TESTING REPORT SHALL BE MADE AVAILABLE TO THE HOWARD COUNTY INSPECTOR UPON COMPLETION OF CONSTRUCTION.

- 1. FOR GENERAL NOTES SEE DRAWING #.
- 2. FOR RETAINING WALL NOTES SEE DRAWING #B.
- 3. FOR RETAINING WALLS AND THEIR REINFORCING SEE DRAWING #B.
- 4. FOR GRADE BEAM DETAILS SEE DRAWING #B.
- 5. FOR WALL GEOMETRY LAYOUT SEE DRAWING #B.

1.11.05  
Date  
*John R. Heinrichs*  
Professional Engr. No 14920

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*David DeWitt* 1/20/05  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*Condy Hamilton* 3/9/05  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*David DeWitt* 2/4/05  
 DIRECTOR

OWNER/DEVELOPER:  
 D. ERIC SELINE  
 14852 OLD GUNPOWDER ROAD  
 LAUREL MD 20707  
 410-792-2999

PROJECT:  
**KIT KAT CENTER**  
 PARCEL A  
 7167 KIT KAT ROAD ELLICOTT CITY, MD  
 Tax Map No. 43, Grid 11, Elec. Dist. No. 1, Parcel 49  
 HOWARD COUNTY, MARYLAND

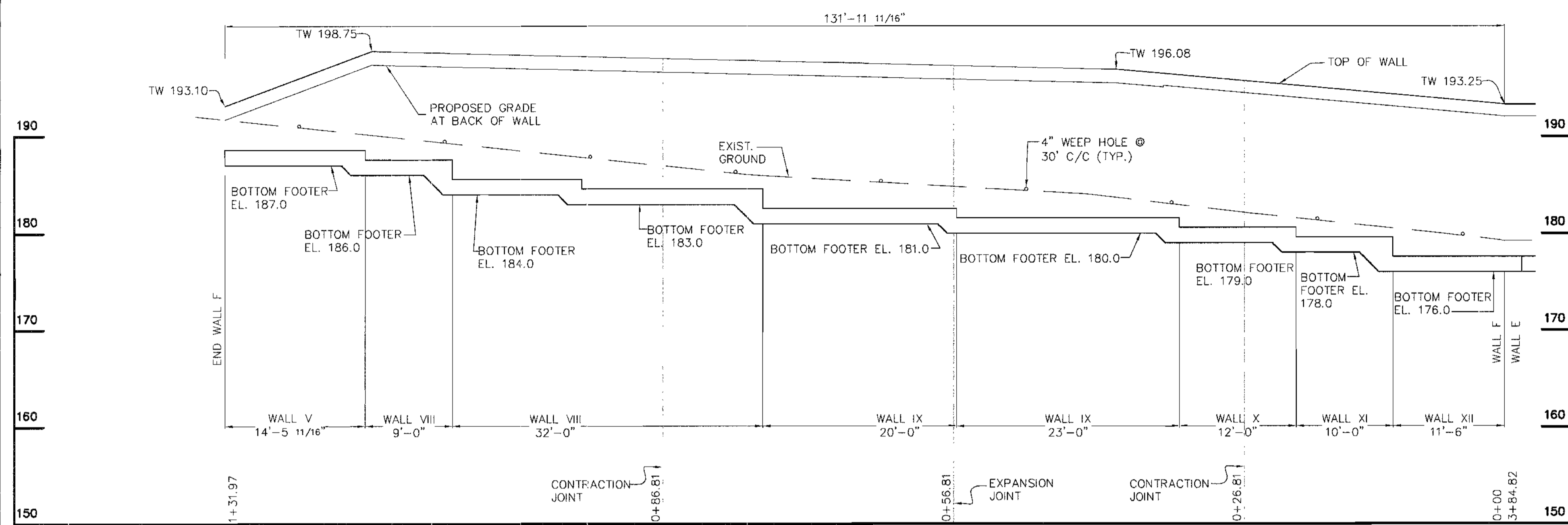
PREPARED BY:  
**PHOENIX ENGINEERING, INC.**  
 CONSULTING ENGINEERS  
 1420 JOH AVENUE, SUITE A  
 BALTIMORE, MARYLAND 21227  
 (410) 247-8833 FAX 247-9397

AREA:  
 PARCEL: 49 TAX MAP: 43  
 CENSUS TRACT 6011.01 1 ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 PLAT: 11226 DEED: L 5368, F 154

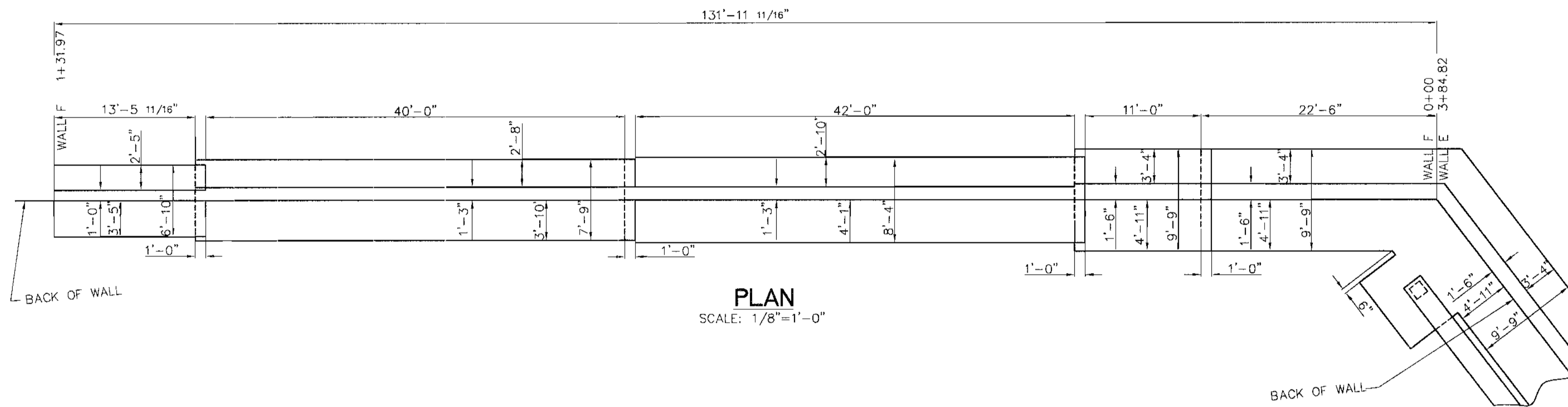
TITLE:  
**RETAINING WALL 'E' PROFILE**

SEE F 04-081  
 SEE SDP 04-024  
 SEE HP 02-18  
 PREVIOUSLY SDP 94-18

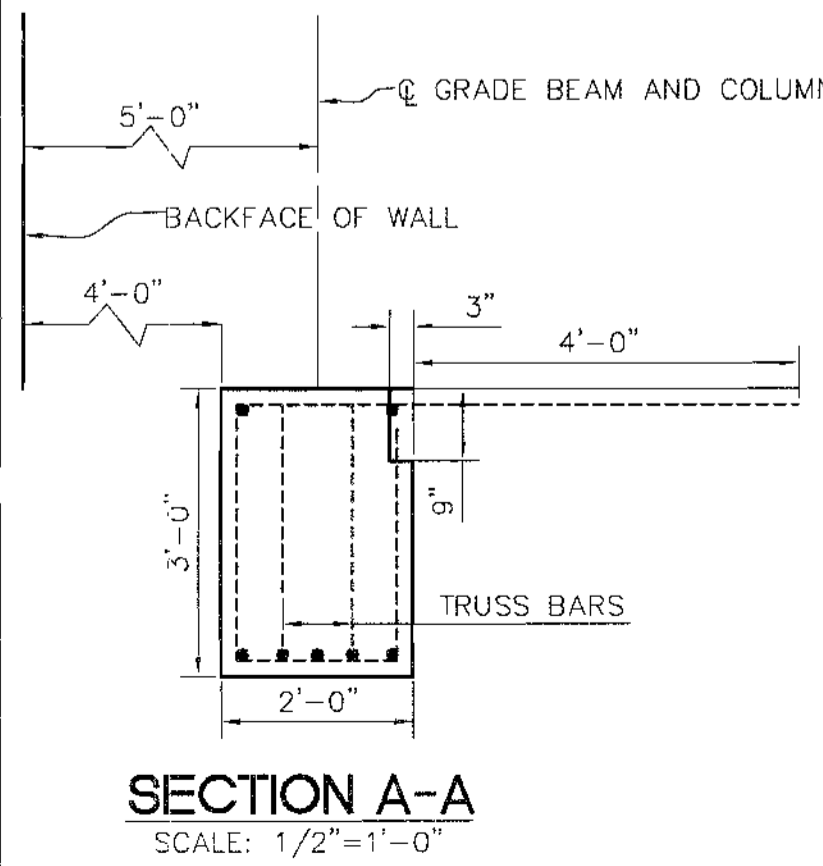
Des By: R.J.W. Scale: 1/8" = 1'-0" Proj No: 03-006  
 Dim By: S.E.W. Date: APRIL, 2004 DRAWING NO: PROJ:seline.dwg  
 Chk By: J.R.H. SDP 04-039 7 OF 10



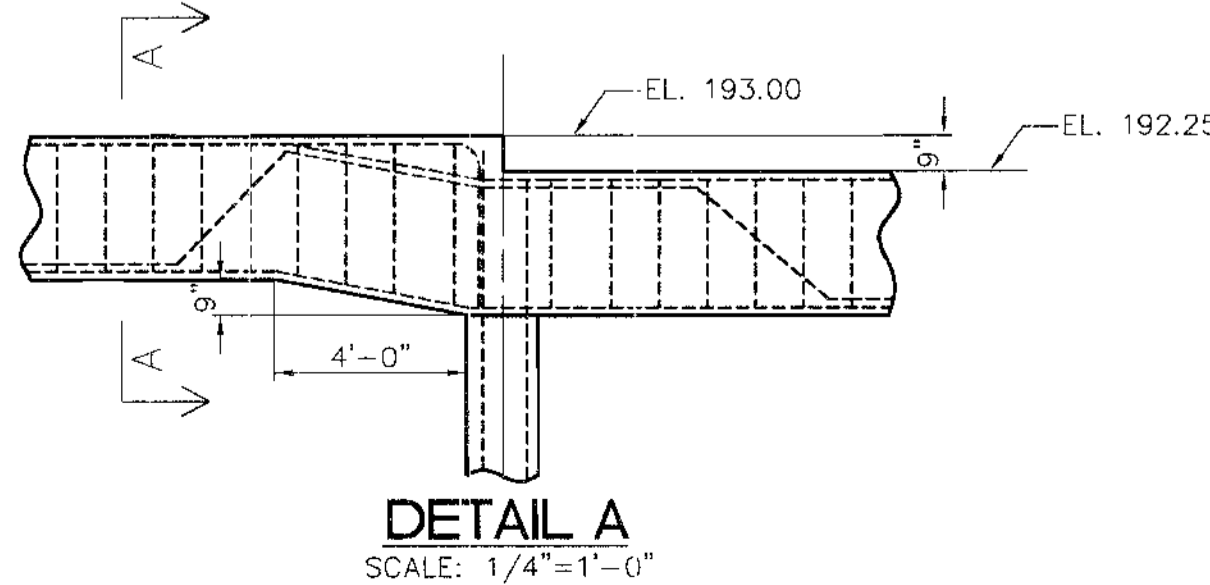
**ELEVATION**  
SCALE: 1/8"=1'-0"



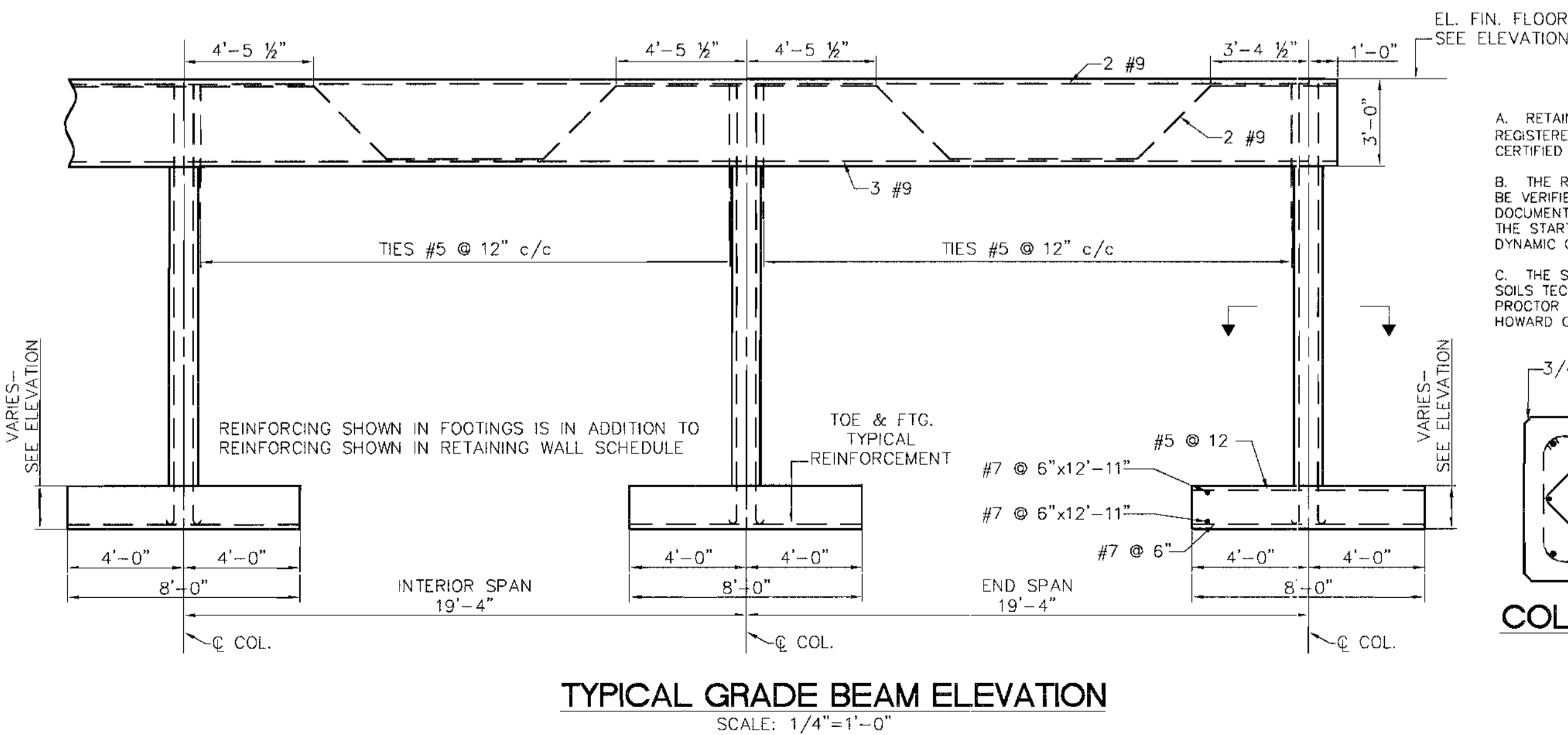
**PLAN**  
SCALE: 1/8"=1'-0"



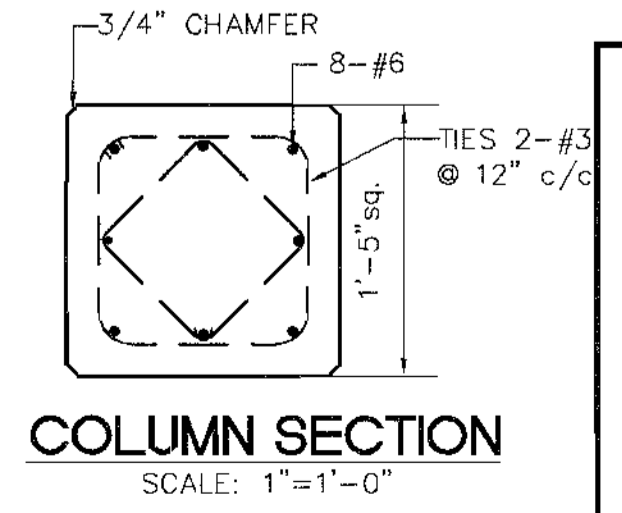
**SECTION A-A**  
SCALE: 1/2"=1'-0"



**DETAIL A**  
SCALE: 1/4"=1'-0"



**TYPICAL GRADE BEAM ELEVATION**  
SCALE: 1/4"=1'-0"



**COLUMN SECTION**  
SCALE: 1"=1'-0"

- RETAINING WALL NOTES**
- All work shall comply with all local applicable ordinances.
  - Reinforced concrete work shall comply with the latest ACI specifications.
  - All concrete shall have a minimum compressive strength of 3,500 psi at 28 days.
  - Reinforcing steel shall conform to ASTM A615 Grade 60. All reinforcing steel shall have 2" clear cover, except where noted otherwise.
  - All keys are nominal size.
  - All concrete corners shall have 3/4" chamfer unless otherwise noted.
  - Contractor shall verify all dimensions before proceeding with foundation excavation.
  - Retaining wall foundation is to be placed on a soil competent to support minimum 3,000 psf load.
  - Should opened excavation indicate, in engineers judgement, that encountered material is incapable to support this load or within footprints of the footing any soft material is encountered, such material shall be removed and replaced with well-tamped CR-6 or concrete.
  - Should the depth of soft material in engineers opinion be in excess of 1'-0", the footing shall be lowered and different wall sections selected.
  - Contractor shall protect excavation (at least six inches) from any surface water flow. He shall complete finished excavation with confidence that the foundation concrete can be placed prior to new precipitation.
  - Retaining wall to have a min. 36" high fence along entire top of wall. No opening in fence shall be larger than 4".
  - All exposed concrete corners to have 3/4" chamfer unless noted otherwise.
  - For general notes see sheet 1.
  - Submit reinforcing steel shop drawings as early as practical for engineers review.
  - Retaining walls shall only be constructed under the observation of a Registered Professional Engineer and a (NICET, WACEL, or equivalent) certified soils technician.
  - The required bearing pressure beneath the footing of the wall shall be verified in the field by a certified soils technician. Testing documentation shall be provided to the Howard County Inspector prior to the start of construction. The required test procedure shall be the Dynamic Cone Penetrometer Test ASTM STP-399.

- DESIGN NOTES**
- Wall height 'h' shall not exceed dimension given in Wall Schedule.
  - Design based on 3' elevation changes for 100 pcf soil (300 lbs/sq. ft.) at repose angle of 30°40'.
  - Safety against overturning is between 2.07 to 2.10.
  - For soil information see Geotechnical investigation report by E2CR Inc. on 6/25/03. Maximum allowable soil pressure for retaining walls (3' below natural grade) is 3.5 K/Sf. Maximum allowable soil pressure for structural fill is 2.5 K/Sf. (Actual maximum soil pressure is listed for each section in the Wall Schedule.)
  - The minimum 3" key engages passive earth pressure, providing sliding safety factor in excess of 2. Design used:  $f_c=12,000$  psi and  $f_t=24,000$  psi.
  - Grade Beam designed for 1.3 K/Sf uniform load or equivalent concentrated load. Column and footing load capacity is 100 K max. soil pressure for 100 K slope column load is 3.33 K/Sf. 3.5 K/Sf soil pressure all walls.

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
Chief, Development Engineering Division <i>John Henrichs</i>	1/20/05 DATE
Chief, Division of Land Development <i>Caroly Hamilton</i>	7/2/05 DATE
Director <i>Frank L. Taylor</i>	2/11/05 DATE
Date	No
Revision Description	
OWNER/DEVELOPER: D. ERIC SELINE 14852 OLD GUNPOWDER ROAD LAUREL, MD 20707 410-792-2999	
PROJECT: <b>KIT KAT CENTER</b> PARCEL A 7167 KIT KAT ROAD TAX MAP No. 43, Grid 11, Elec. Dist. No. 1, Parcel 49 HOWARD COUNTY, MARYLAND	
PREPARED BY: <b>PHOENIX ENGINEERING, INC.</b> CONSULTING ENGINEERS 1420 JOH AVENUE, SUITE A BALTIMORE, MARYLAND 21227 (410) 247-8833 FAX 247-9397	
AREA: PARCEL: 49 CENSUS TRACT 6011.01 HOWARD COUNTY, MARYLAND	TAX MAP: 43 1 ST ELECTION DISTRICT
PLAT: 11226	DEED: L 5368, F 154
TITLE: <b>RETAINING WALL 'F' PROFILE</b>	
SEE F 04-081 SEE SDP 04-024 SEE WP 02-18 PREVIOUSLY SDP 94-18	DATE: 1.11.05
Des By: R.J.W.	Scale: 1/8" = 1'-0"
Drn By: S.E.W.	Date: APRIL 2004
Chk By: J.R.H.	SDP 04-039
Proj No: 03-006	DRAWING NO: PRO2seline.dwg
8 OF 10	



A. RETAINING WALLS SHALL ONLY BE CONSTRUCTED UNDER THE OBSERVATION OF A REGISTERED PROFESSIONAL ENGINEER AND A (NICET, WACEL, OR EQUIVALENT) CERTIFIED SOILS TECHNICIAN.

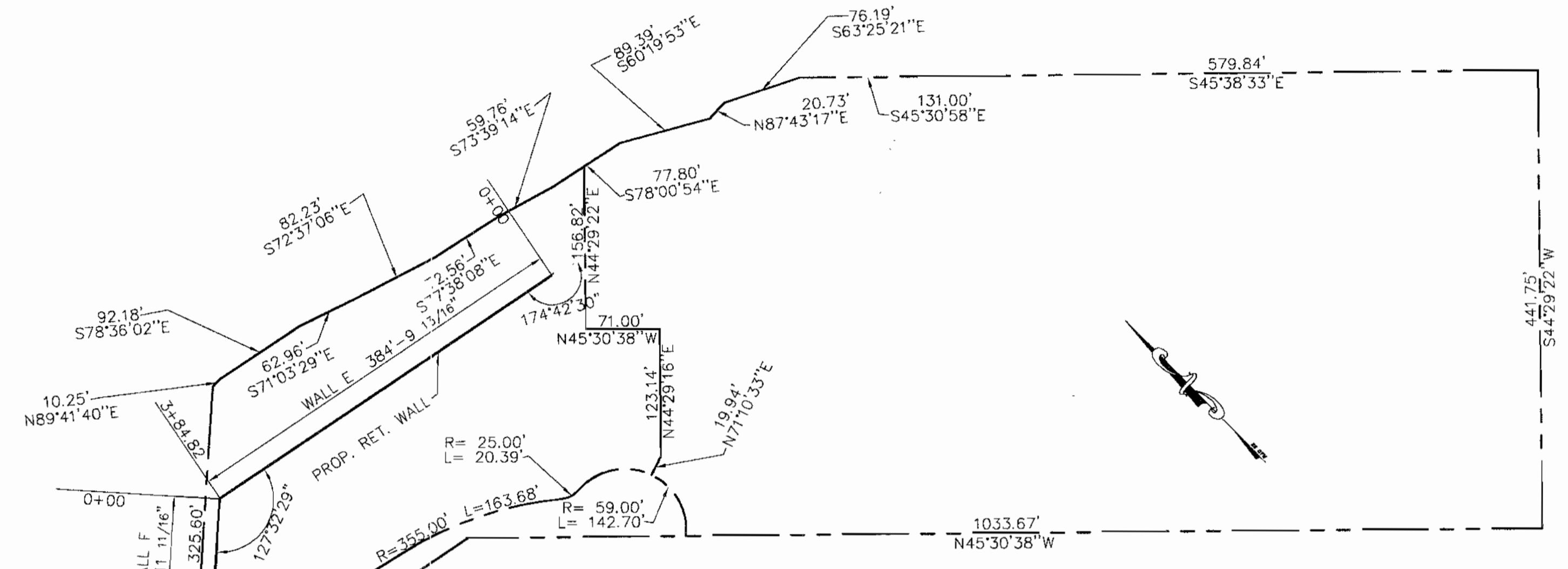
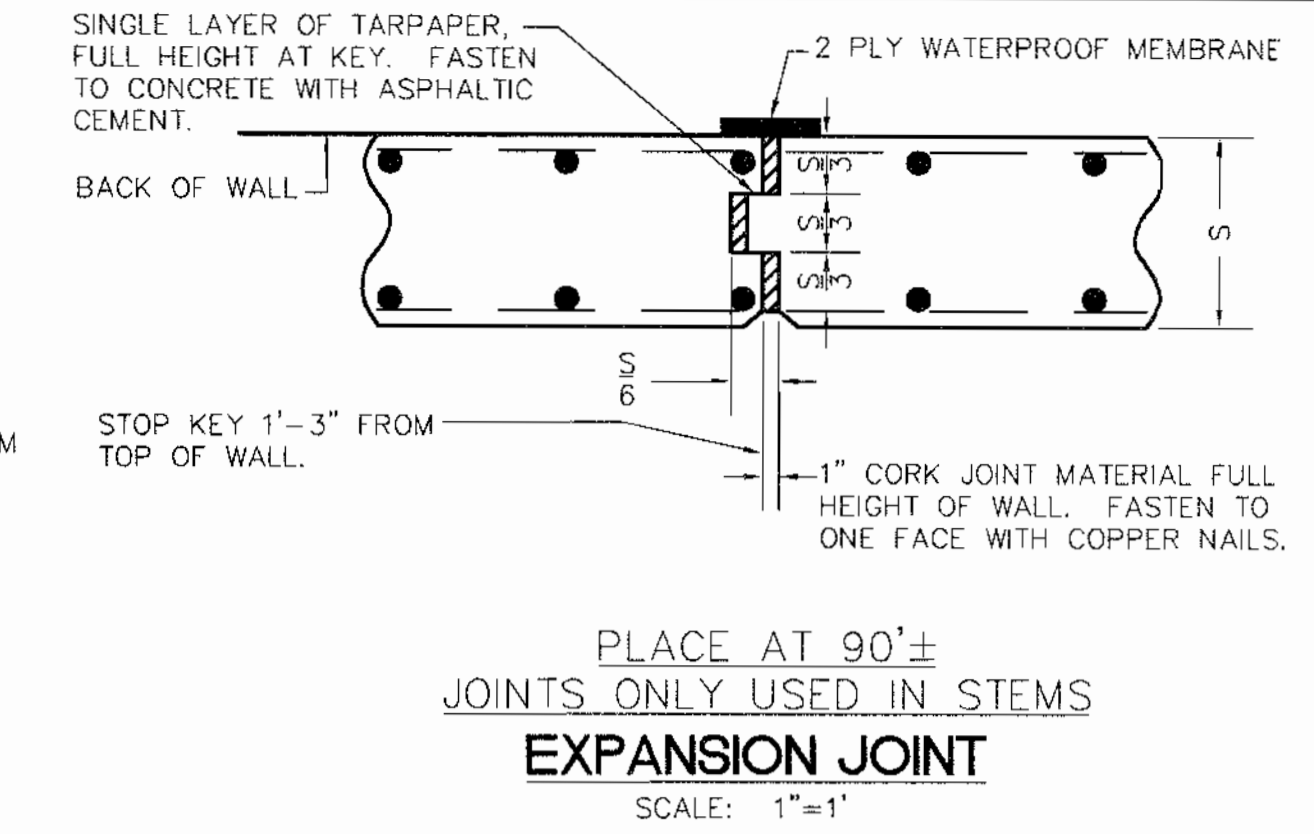
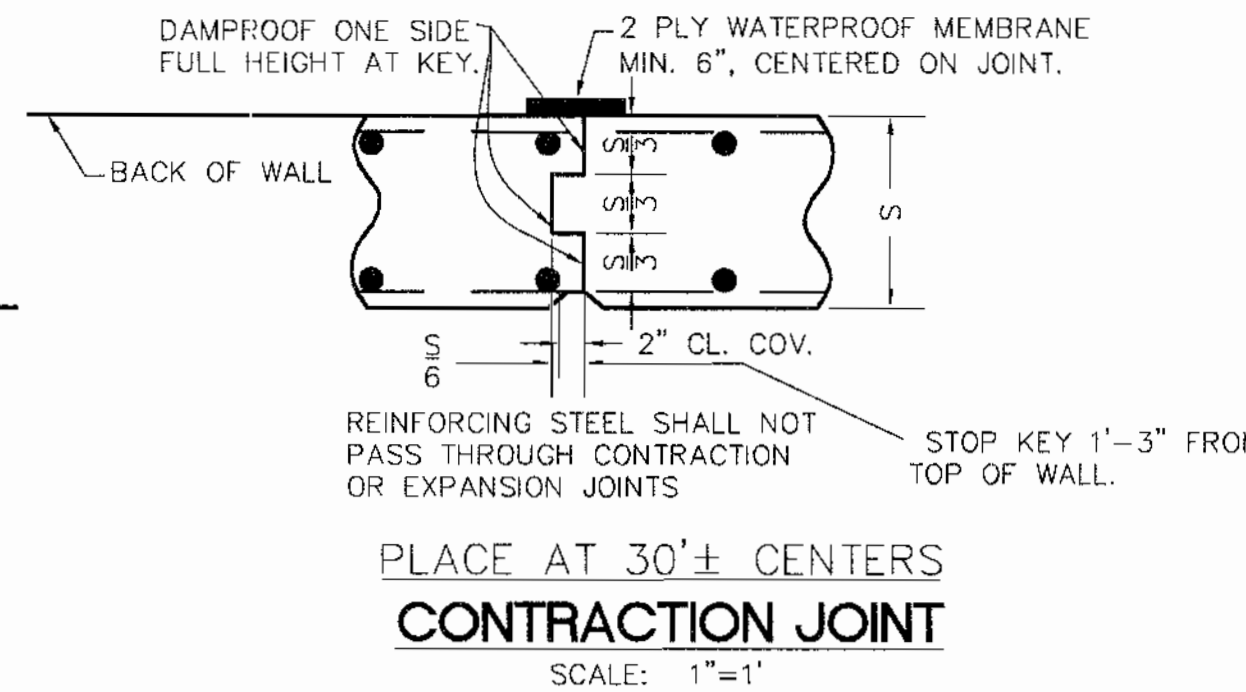
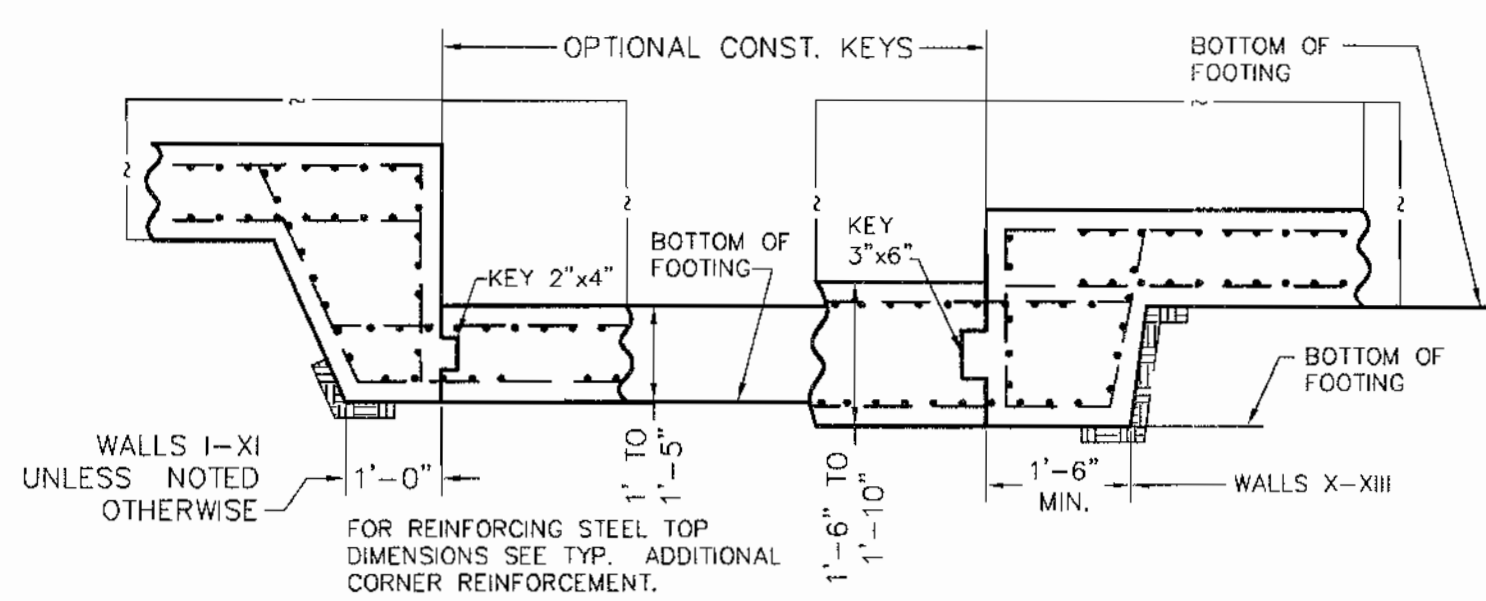
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RETAINING WALLS V-IX													
WALL	h'	H	W	T	S	F	B	a	d	b	c	f	Max Soil Pressure K/Sf
V	9'-0"	11'-4"	6'-3"	2'-2"	1'-0"	1'-1"	3'-1"	#6@10		#6@10	#5@12	#4@12	1.7
VI	10'-0"	12'-4"	6'-10"	2'-2"	1'-0"	1'-1"	3'-5"	#6@7		#6@7	#6@12	#4@12	1.9
VII	11'-0"	13'-4"	7'-4"	2'-7"	1'-0"	1'-1"	3'-9"	#6@18	#6@18	#6@9	#6@9	#4@12	2.0
VIII	12'-0"	14'-7"	7'-9"	2'-8"	1'-3"	1'-4"	3'-10"	#6@14	#6@14	#6@7	#7@12	#4@12	2.2
IX	13'-0"	15'-7"	8'-4"	2'-10"	1'-3"	1'-4"	4'-1"	#6@12	#6@12	#6@6	#7@11	#4@12	2.3
X	14'-0"	16'-10"	8'-10"	3'-0"	1'-6"	1'-7"	4'-4"	#6@10	#6@10	#6@5	#7@10	#5@12	2.5
XI	15'-0"	17'-10"	9'-4"	3'-3"	1'-6"	1'-7"	4'-7"	#7@11	#7@11	#7@5½	#9@12	#5@12	2.6
XII	16'-0"	18'-10"	9'-9"	3'-4"	1'-6"	1'-7"	4'-11"	#7@10	#7@10	#7@5	#9@10	#5@12	2.8
XIII	17'-0"	20'-1"	10'-6"	3'-4"	1'-9"	1'-10"	5'-5"	#8@12	#8@12	#8@6	#9@9	#5@12	2.9

h- Soil Pressure Height ( Fin. El. to Top of Ftg.)  
H- Wall Height ( Top of Stem to Bott. of Ftg.)  
W- Footing Width  
T- Toe Protection  
S- Stem Thickness  
F- Footing Thickness  
B- Heel Protection  
a- Stem Reinf.  
b- Toe Reinf.  
c- Heel Reinf.  
d- Additional Stem Reinf.  
f- Temp. Reinf.  
Constr. Jt.- Construction Joint (Reinforcing passes through joint)  
Contr. Jt.- Contraction Joint (See detail this sheet)  
Exp. Jt.- Expansion Joint (See detail this sheet)

Maximum Design Height for given sections represent the highest permissible dimension for specified retaining wall and shall never exceed 'h' height from top of footing to finished grade.



DIMENSIONS ARE GIVEN FOR BACKFACE OF STEM		
STATION	NORTHING	EASTING
WALL 'E' 0+00	549756.2168	1378821.2784
WALL 'E' 3+84.82 / WALL 'F' 0+00	549830.0319	1378443.6014
WALL 'F' 1+31.97	549742.7800	1378344.5918

APPROVED: DEPARTMENT OF PLANNING AND ZONING		
CHIEF, DEVELOPMENT ENGINEERING DIVISION	<i>[Signature]</i>	1/20/05
CHIEF, DIVISION OF LAND DEVELOPMENT	<i>[Signature]</i>	7/3/05
DIRECTOR	<i>[Signature]</i>	5/19/05

Date	No.	Revision	Description

OWNER/DEVELOPER:  
D. ERIC SELINE  
14852 OLD GUNPOWDER ROAD  
LAUREL, MD 20707  
410-792-2999

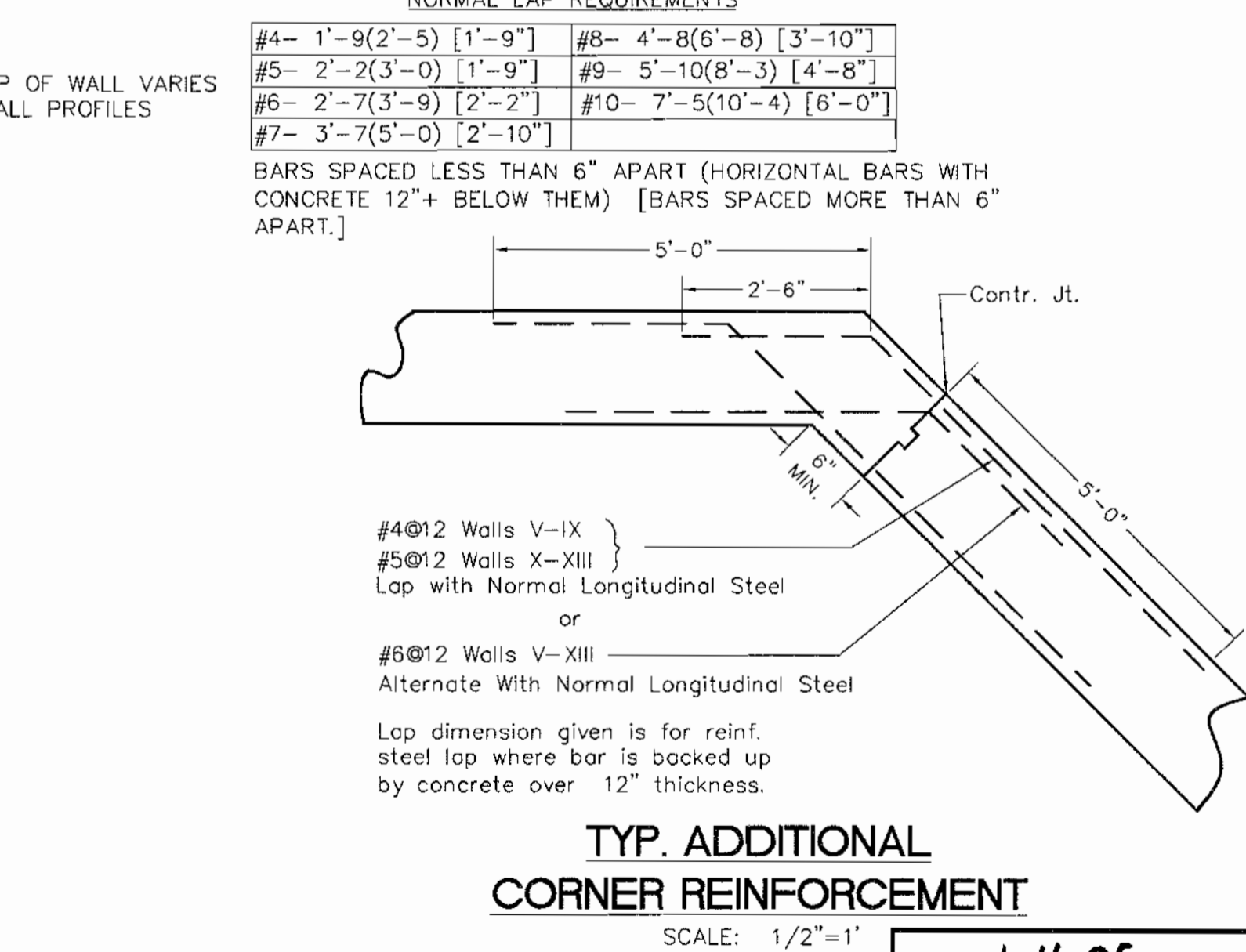
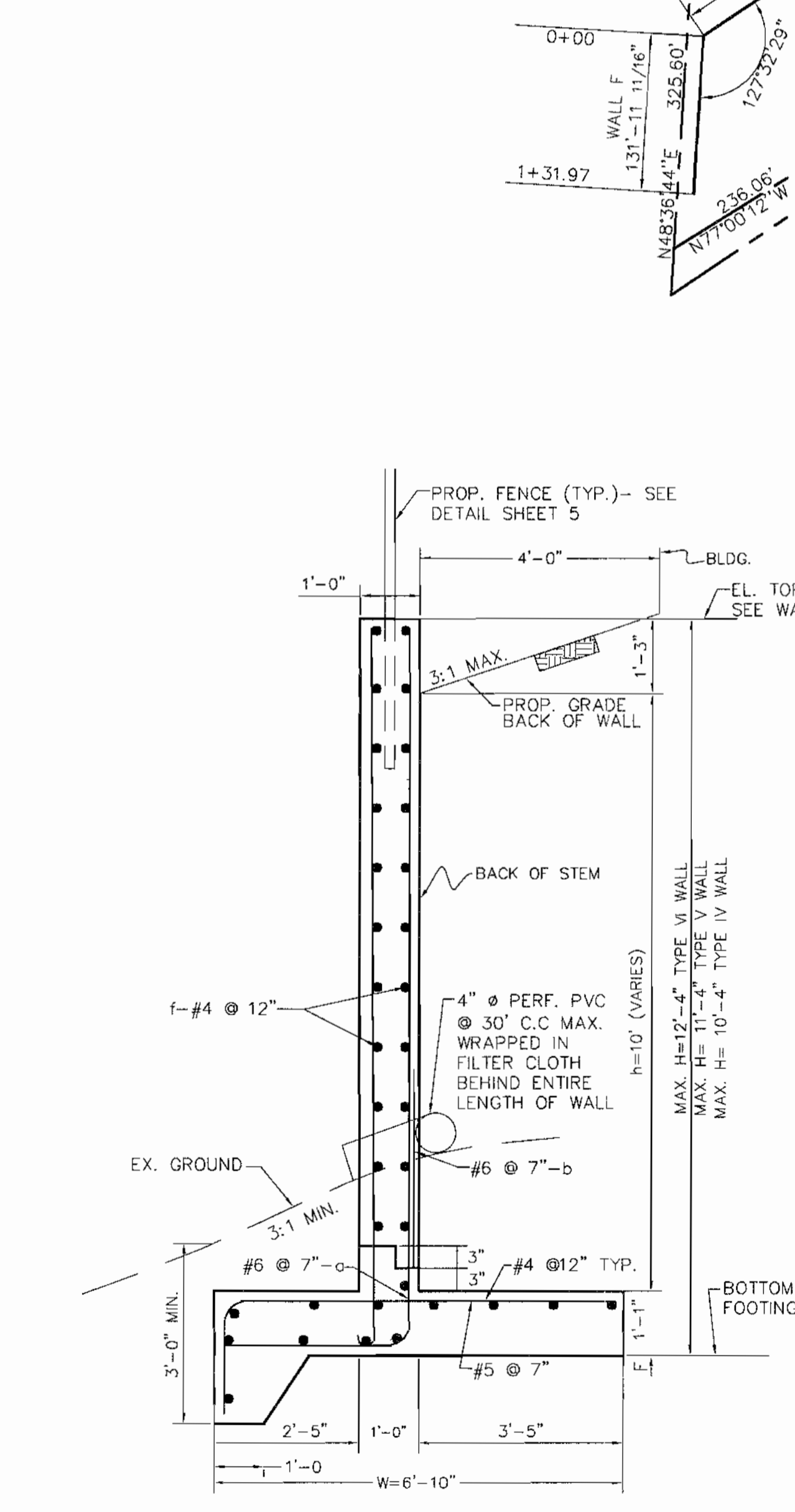
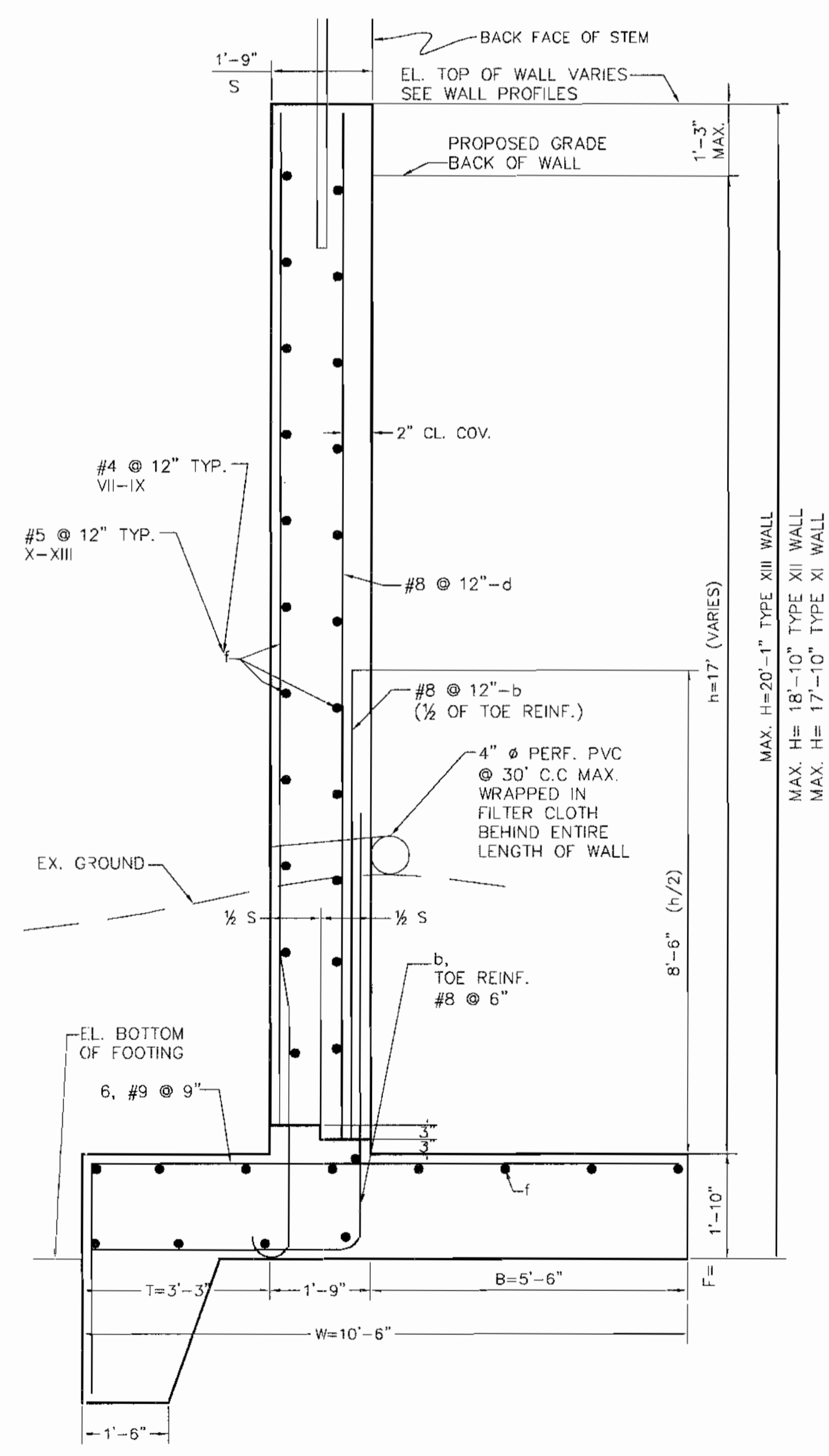
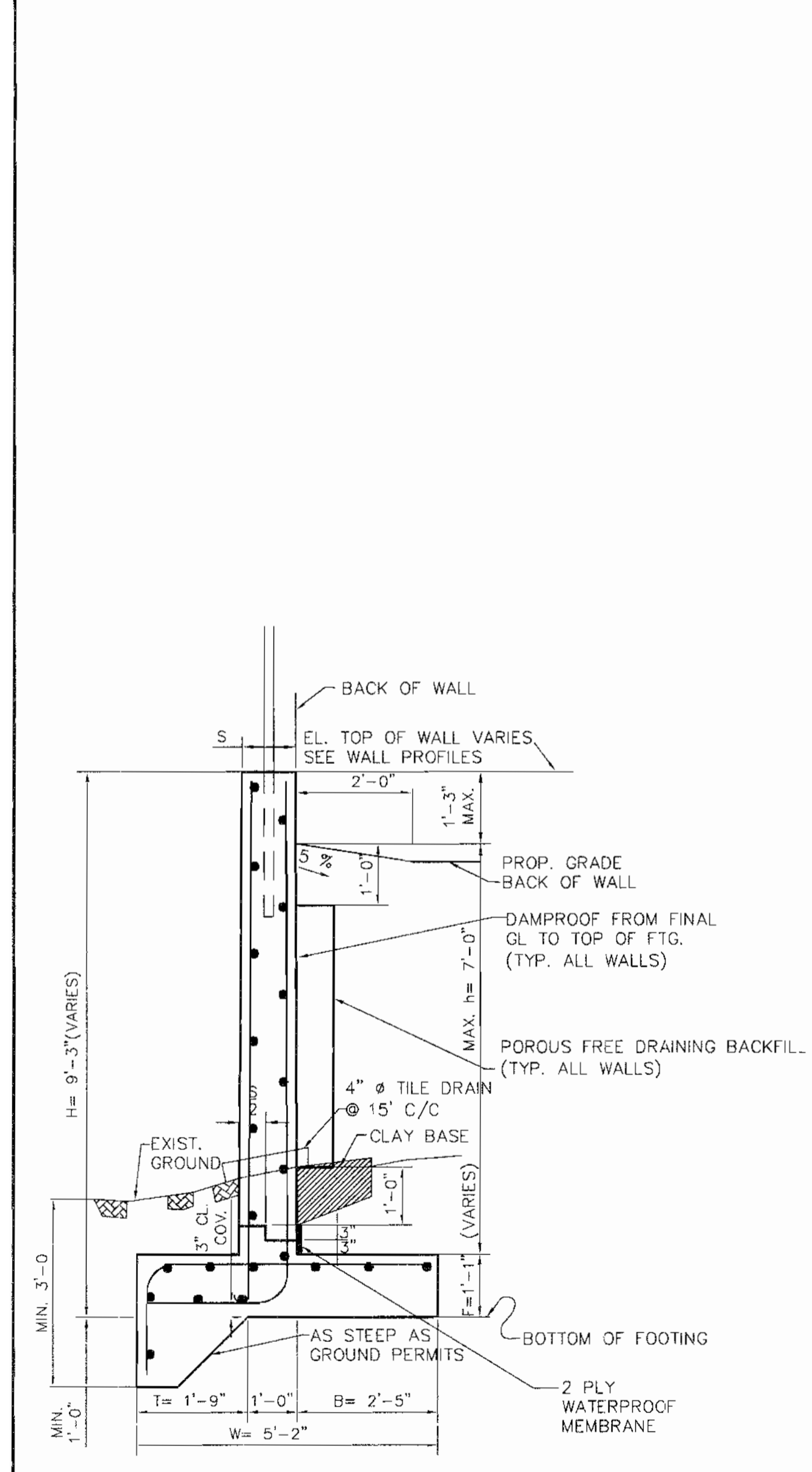
PROJECT:  
**KIT KAT CENTER**  
PARCEL A  
7167 KIT KAT ROAD  
Tax Map No. 43, Grid II, Elec. Dist. No. 1, Parcel 49  
HOWARD COUNTY, MARYLAND

PREPARED BY:  
**PHOENIX ENGINEERING, INC.**  
CONSULTING ENGINEERS  
1420 JOH ANNUE, SUITE A  
BALTIMORE, MARYLAND 21227  
(410) 247-8833 FAX 247-8997

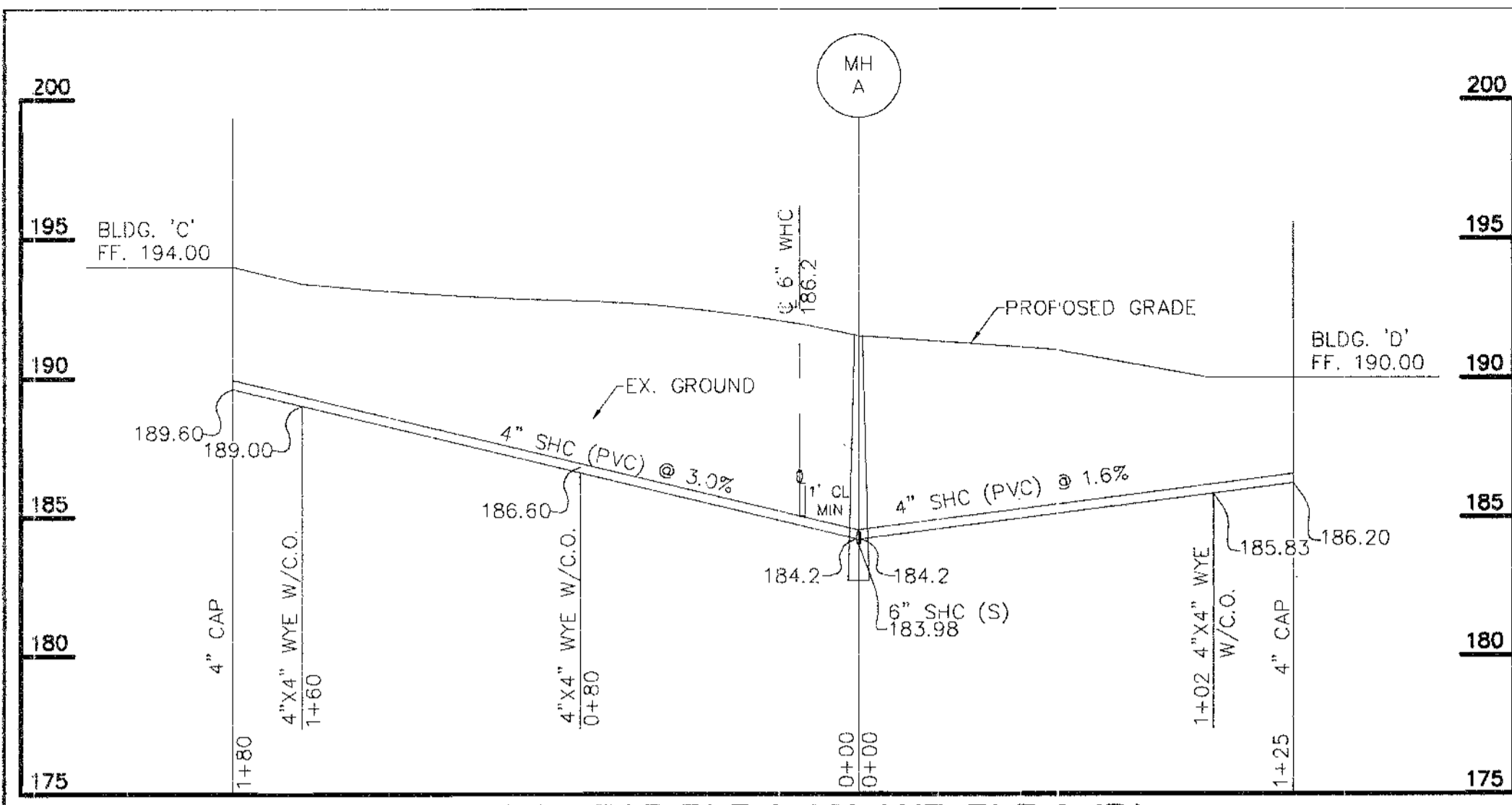
AREA:  
PARCEL: 49 TAX MAP: 43  
CENSUS TRACT 6011.01 1 ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE:  
**RETAINING WALL DETAILS**

SEE F 04-081 SEE SDP 04-024 SEE WP 02-18 PREVIOUSLY SDP 94-18	Des By R.J.W.	Scale AS SHOWN	Proj No 03-006
	Drn By S.E.W.	Date APRIL 2004	DRAWING NO det02seline.dwg
	Chk By J.R.H.	SDP 04-039	9 OF 10

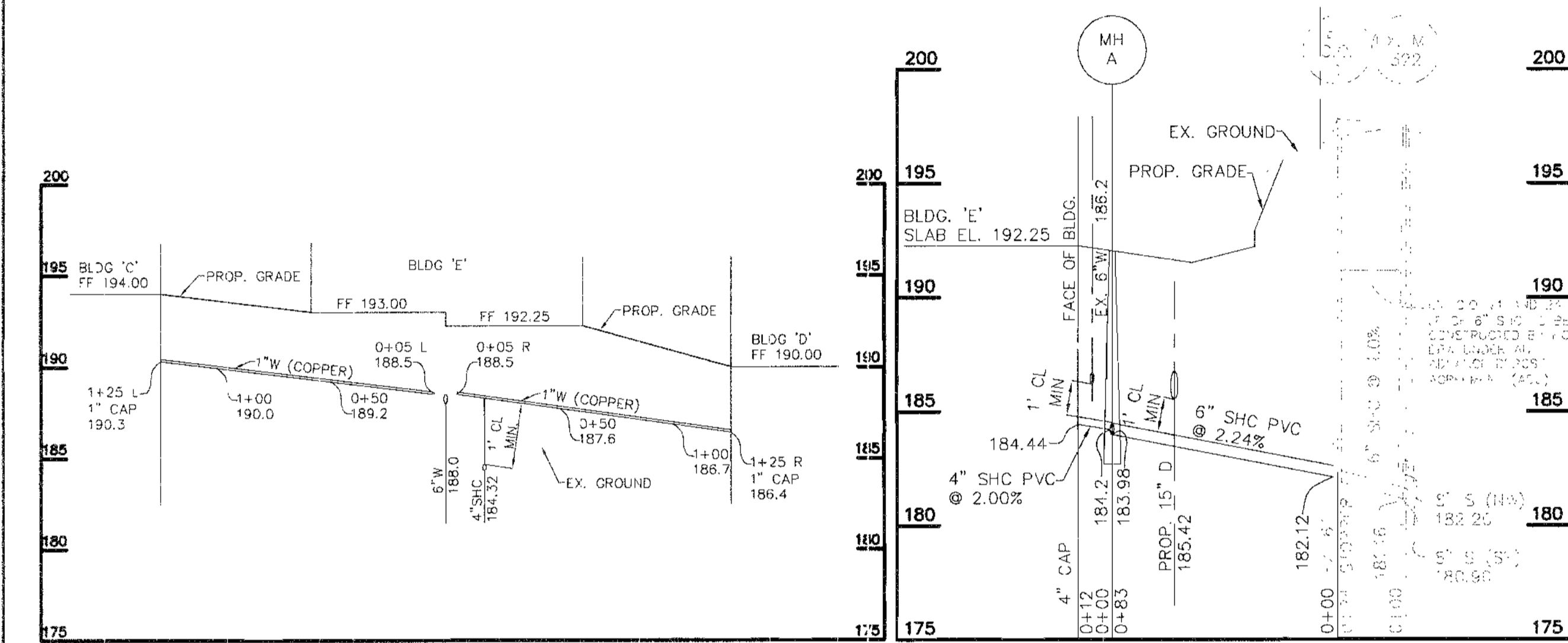


Date **1-11-05**  
Professional Engr. No. 14920



SHC FOR BLDG. 'C' AND BLDG. 'D'

SCALE: H: 1"=40'  
V: 1"=5'

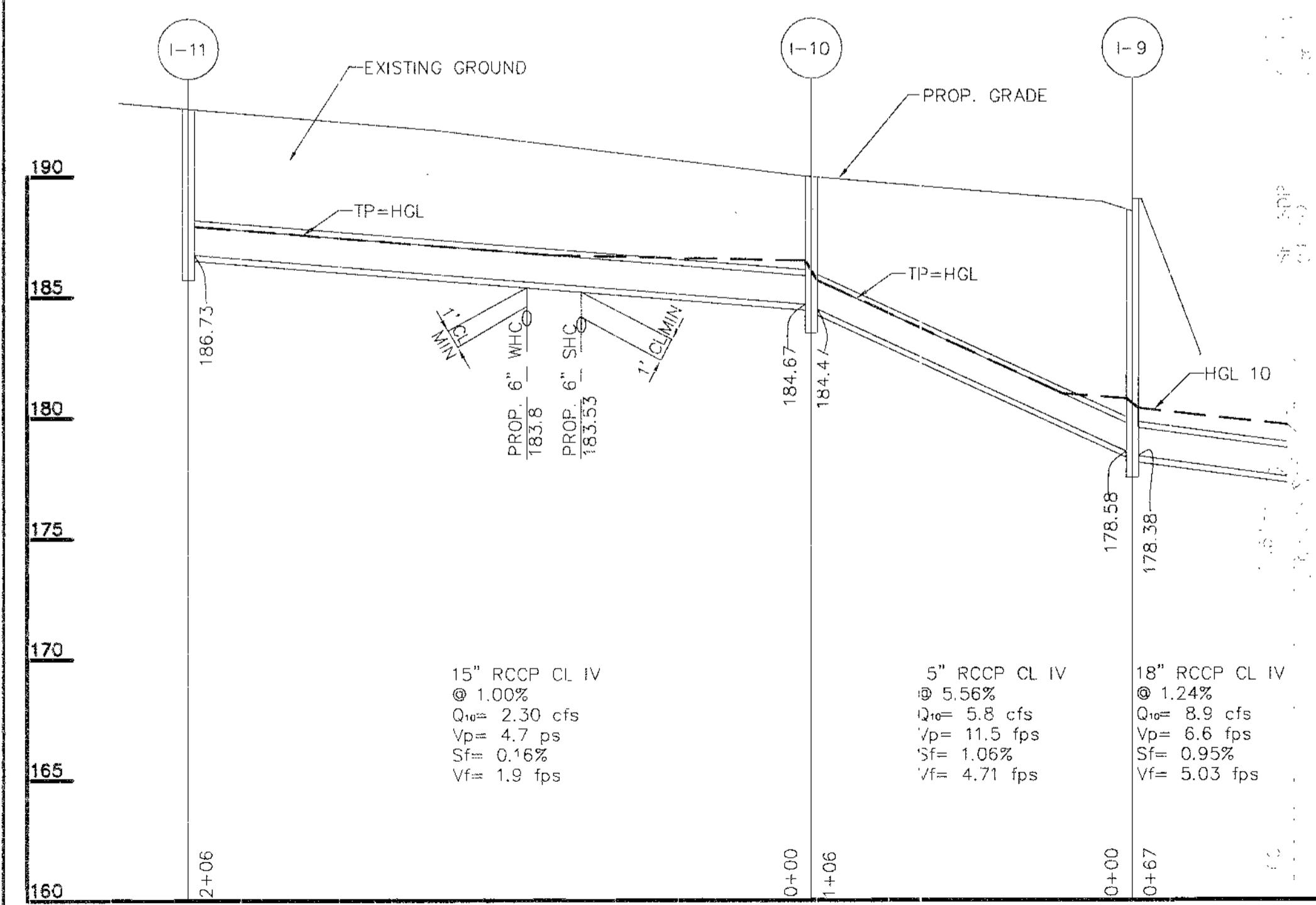


WHC TO BLDGS. 'D' + 'E'

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V: 1"=5'

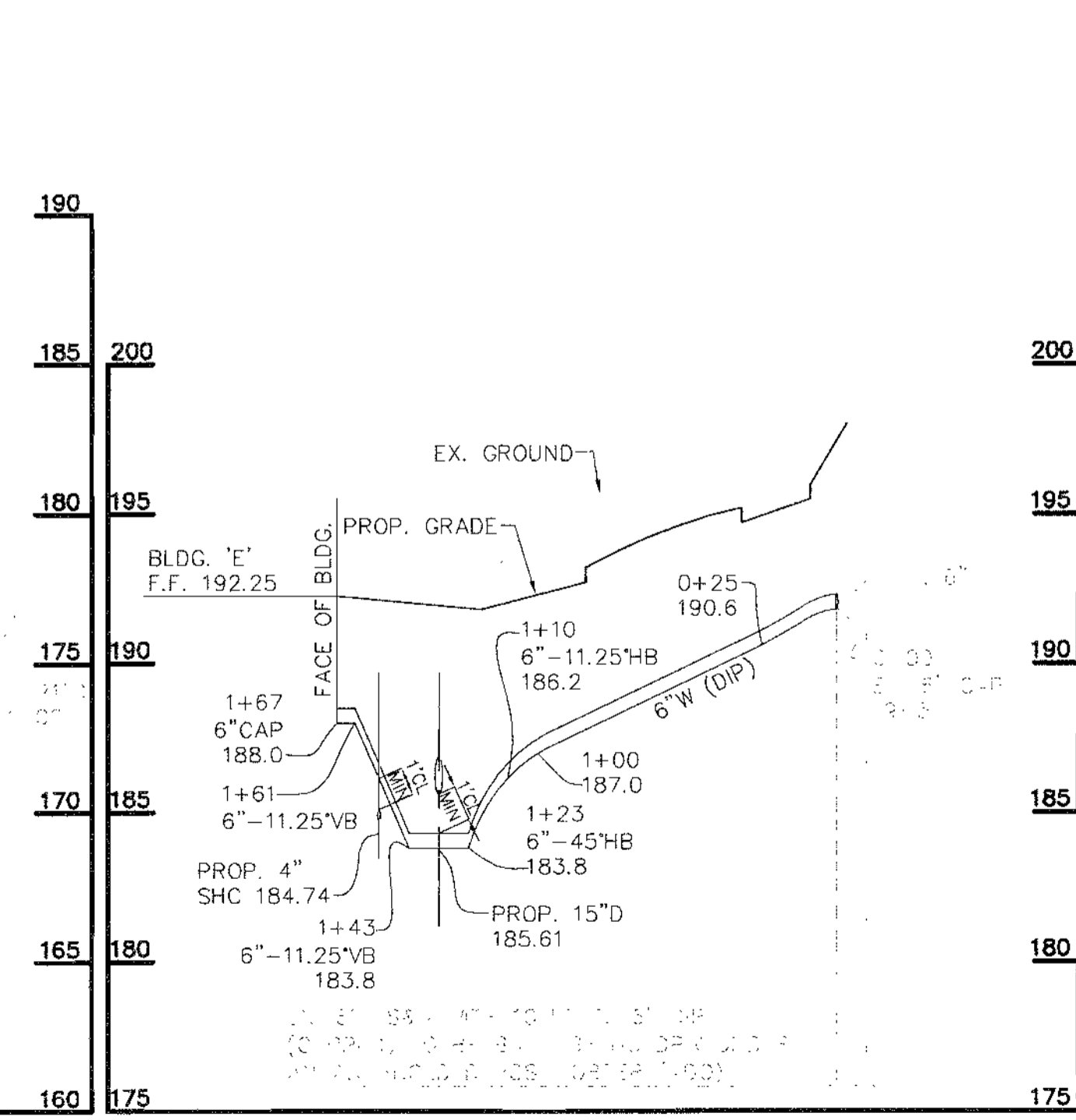
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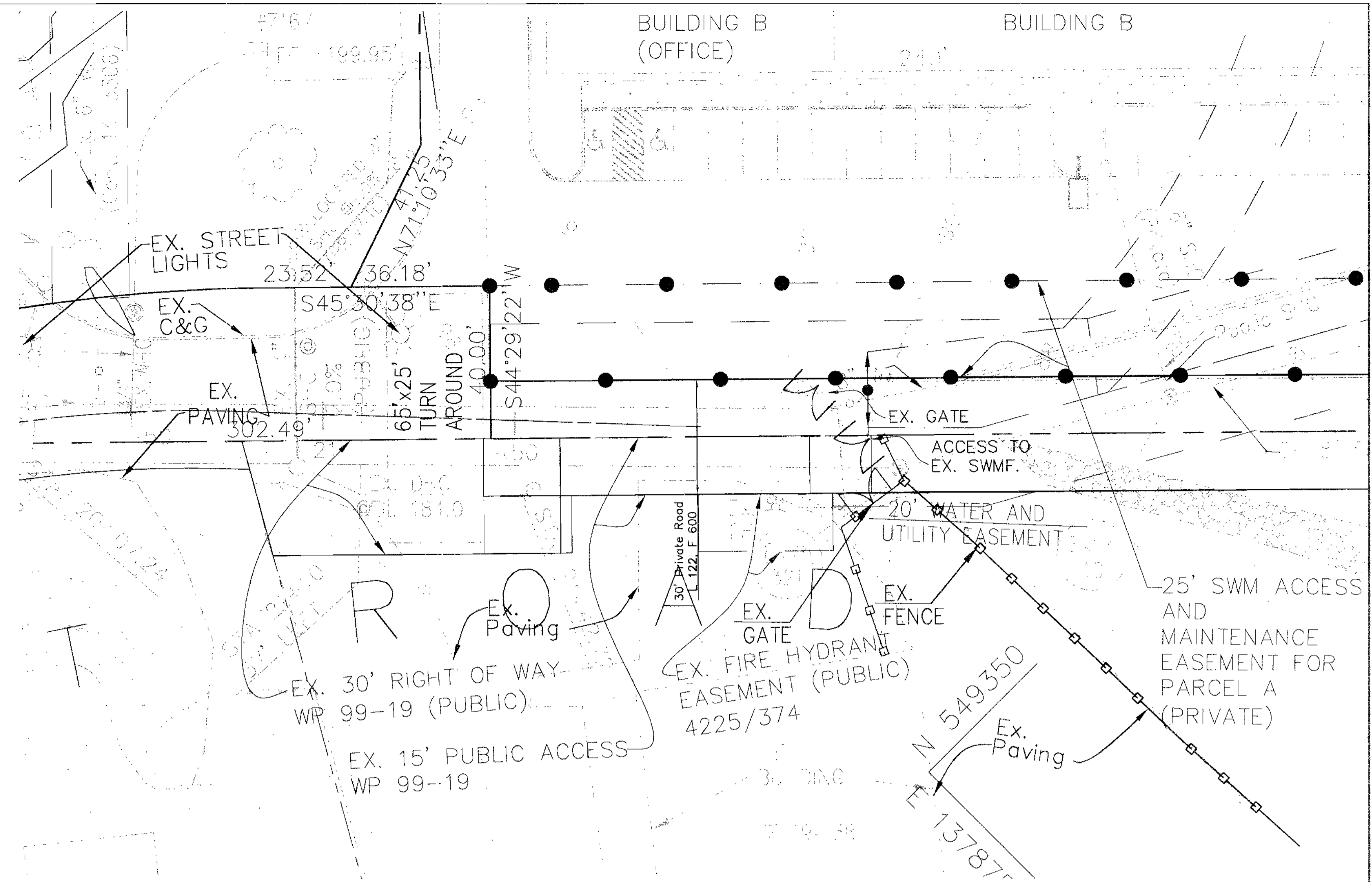
PROP. I-11 TO EX. I-8

SCALE: H: 1"=40'  
V: 1"=5'



WHC TO BLDG. 'E'

SCALE: H: 1"=50'  
V: 1"=5'



ACCESS AT CUL-DE-SAC BULB

SCALE: 1" = 20'

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>John Henrichs</i>	1/20/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Andy Stewart</i>	3/6/05
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>David L. Taylor</i>	5/1/05
DIRECTOR	DATE

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PLAT: 11226 DEED: I 5368, F 154

TITLE:  
**PROFILES**

Des By: R.J.W.	Scale: AS SHOWN	Proj No: 03-006
Drn By: S.E.W.	Date: APRIL 2004	DRAWING NO: PPH02e1e.dwg
Chk By: J.P.H.	SDP 04-039	10 OF 10

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JOHN R. HENRICHS  
Professional Eng. No. 14920