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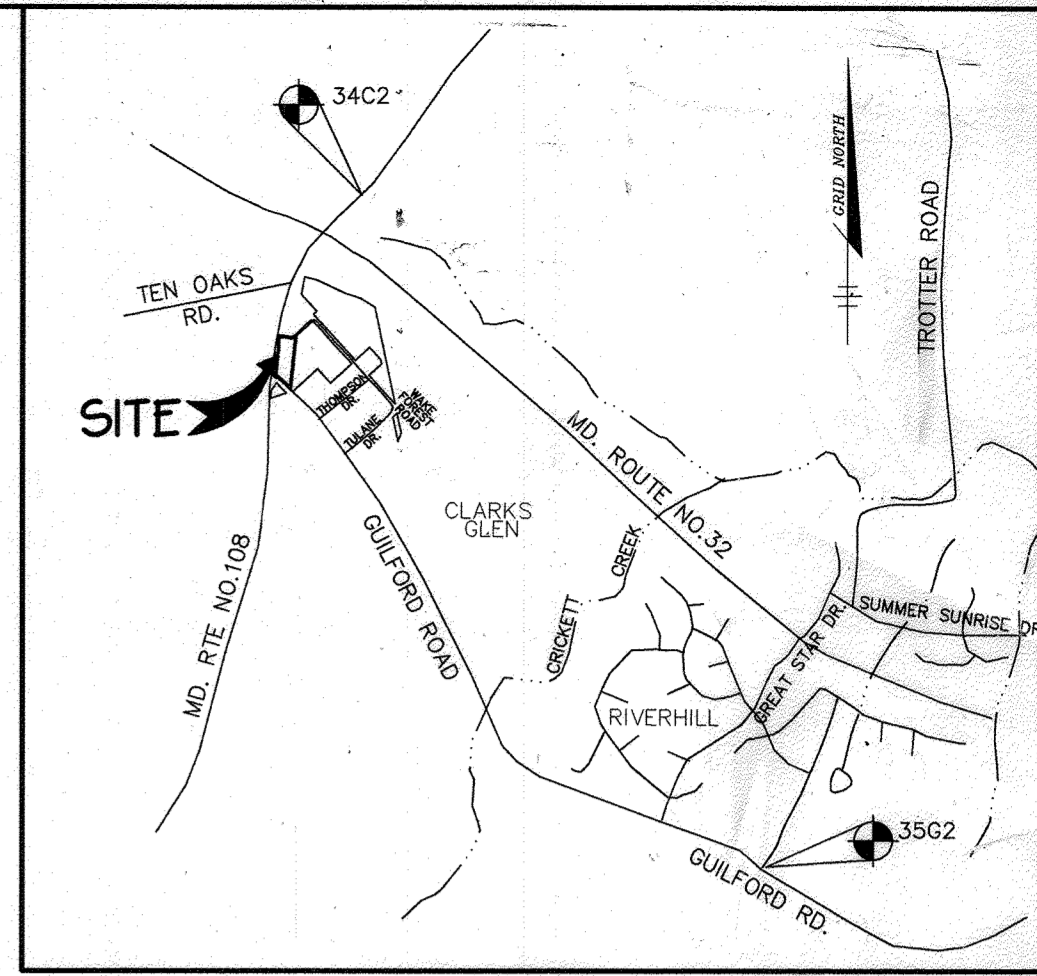
SITE DEVELOPMENT PLAN

CLARKS GLEN NORTH

PARCEL B-1

5th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY WINGS MAPPING, INC. DATED JANUARY, 1997 IN ADDITION TO THE FINAL ROAD CONSTRUCTION PLANS.
- 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. 41GC AND 41GA WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 34-3689-D.
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: MIDDLE PATUXENT. CONTRACT NO. 30-3690-D.
- THE STORMWATER MANAGEMENT QUANTITY AND WATER QUALITY PROPOSED FOR THIS SITE WILL BE ACHIEVED VIA AN UNDERGROUND DETENTION FACILITY AND BAYSAVERS AND WILL BE PRIVATELY MAINTAINED.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THERE ARE NO WETLANDS ON THIS SITE.
- A CHAPTER 5 TRAFFIC STUDY HAS BEEN PREPARED BY THE LEE CUNNINGHAM & ASSOCIATES, INC. DATED APRIL 1999.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A GEOTECHNICAL STUDY HAS BEEN PREPARED BY ECS INC., APRIL 1999.
- THE BOUNDARY SURVEY FOR THIS PROJECT HAS BEEN PREPARED BY RIEMER MUEGGE & ASSOC., JULY 1997.
- SUBJECT PROPERTY ZONED B-2 PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS F-99-52, P-98-20, S-97-15, F-00-121
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.
- THE PAVEMENT DETAILS SHOWN FOR THIS SITE REFLECT THE HOWARD COUNTY STANDARD PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING THE FINAL PAVEMENT SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE.
- FOREST CONSERVATION REQUIREMENTS FOR THIS PARCEL WERE MET UNDER F-99-52.
- ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.

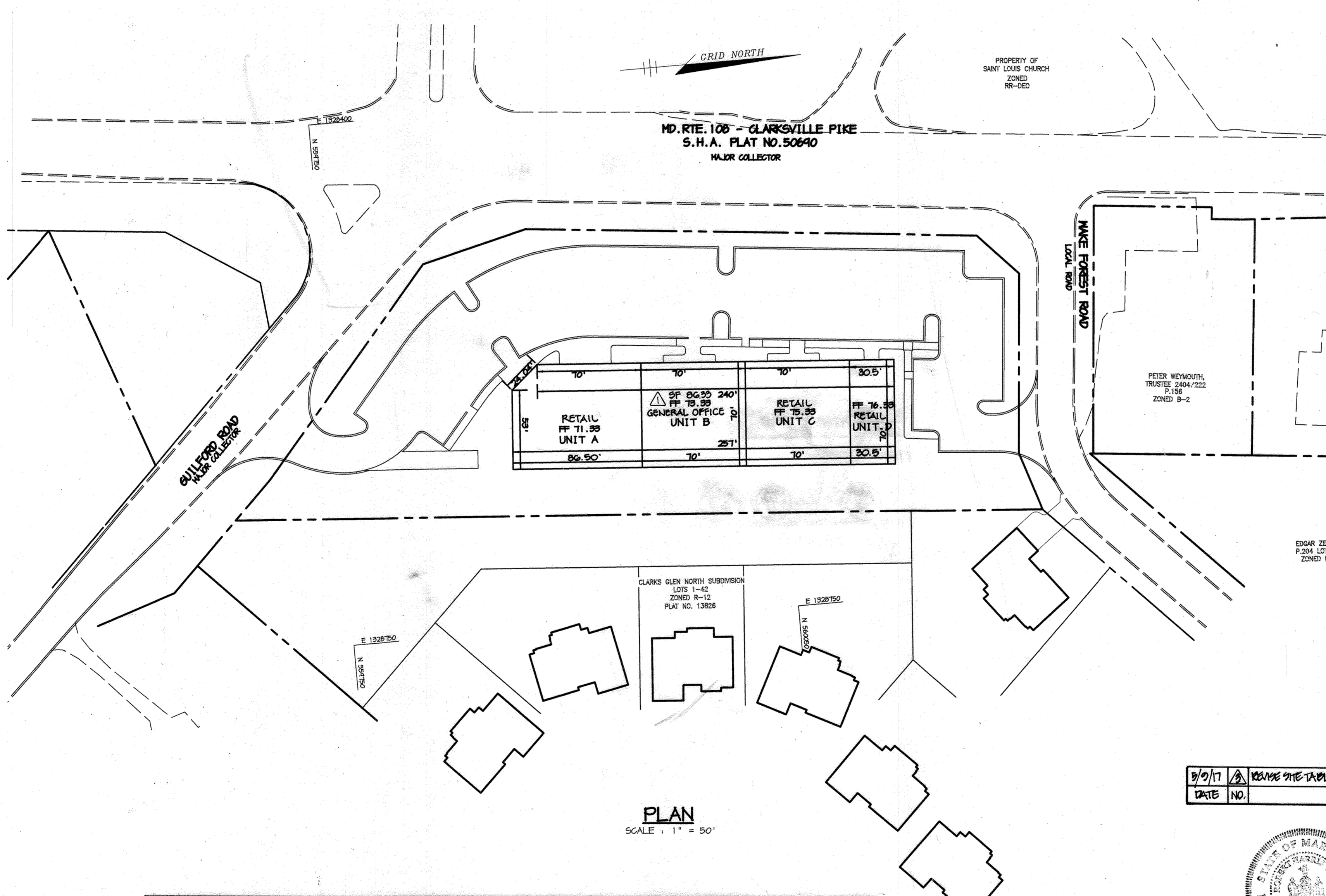
BENCHMARKS

BM#1
HOWARD COUNTY SURVEY CONTROL STATION: 34C2
N 962,322.972 E 1,329,793.353
ELEV.: 475.76 FT.

BM#2
HOWARD COUNTY SURVEY CONTROL STATION: 3562
N 554,966.770 E 1,332,437.606
ELEV.: 371.60 FT.

VICINITY MAP

SCALE: 1" = 200'



SITE TABULATION

BUILDING AREA/USE	FIRST FLOOR: 1,095 SF RESTAURANT (CARRY OUT)
	8,000 SF DAY CARE
	7,000 SF RESTAURANT
	2,000 SF MEDICAL OFFICE
	TOTAL: 17,840 SF
	SECOND FLOOR: 4,000 SF GENERAL OFFICE
	TOTAL RETAIL: 7,223 SF DAY CARE 6,000 SF RESTAURANT 1,095 SF
	TOTAL MEDICAL OFFICE: 2,000 SF GENERAL OFFICE 4,000 SF
TOTAL AREA	1.954 AC. (85,131 SF)
CURRENT ZONING	B-2
PROPOSED USE	RETAIL / GENERAL OFFICE / DAY CARE
BUILDING COVERAGE	17,840 SQ. FT. (21% OF SITE)

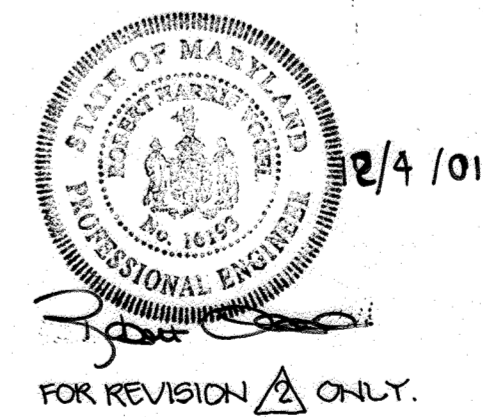
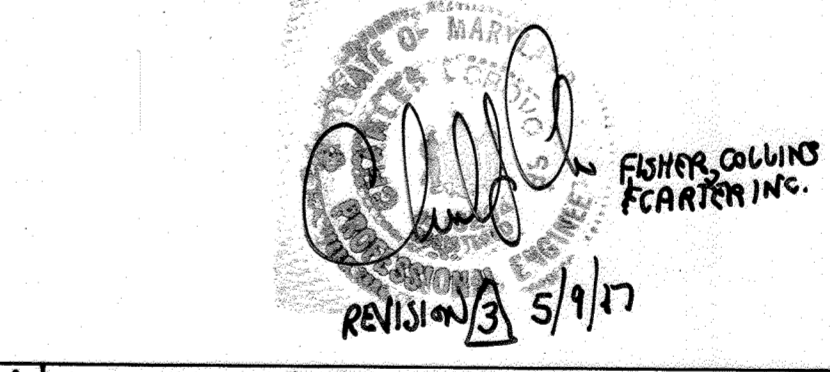
REQUIRED PARKING SEE SHARED PARKING CHART ON THIS SHEET

PROPOSED PARKING 89 SPACES (INCLUDES 4 HC SPACES)

PAVED AREA 19,012 SF (103% OF SITE)

* PER HOWARD COUNTY ZONING REGULATIONS SECTION 133
NOTE: A PARKING STUDY WAS DONE ON NIGHT AND PARKING WAS BASED ON THE STUDY PROVIDED ON THIS SHEET.

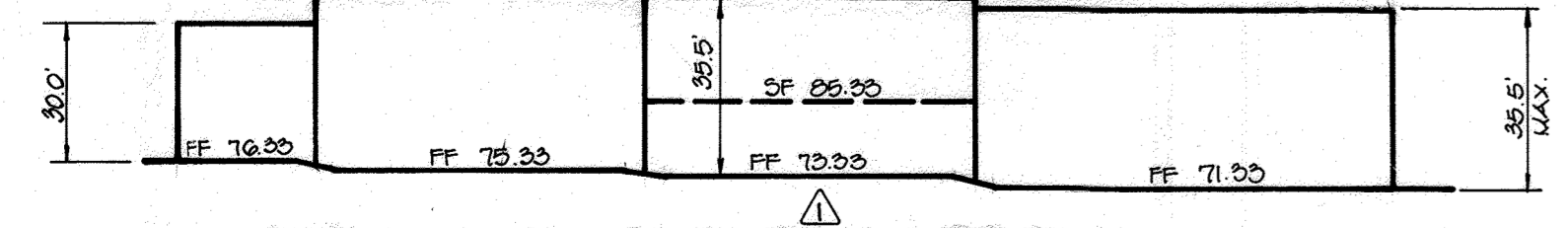
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.	
<i>John M. ...</i>	3/12/00
COUNTY HEALTH OFFICER	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>...</i>	3/24/00
DIRECTOR	DATE
<i>...</i>	3/16/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>...</i>	3/22/00
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
11/26/01	REVISION: REVISE SITE TABULATION
6-12-00	REVISION: REVISED ELEVATION & SITE TABULATION & ADDRESS
DATE NO.	REVISION
OWNER / DEVELOPER	
WILBEN LLLP c/o ANDREW L. ISAACSON 5450 WHITLEY PARK TERRACE SUITE 410 BETHESDA, MARYLAND 20814	



SHARED PARKING ADJUSTMENT CHART

BASED ON PERMITTED REDUCTIONS IN OFF-STREET PARKING REQUIREMENTS

USE	SPACES REQUIRED PER ZONING REGULATIONS	WEEKDAY			WEEKEND		NIGHTTIME
		MORNING 8AM - 8AM	MID-DAY 8AM - 3PM	AFTERNOON 3PM - 5PM	DAYTIME 8AM - 6PM	EVENING 6PM - MIDNIGHT	MIDNIGHT 6AM
RESTAURANT - 1,095 SF (CARRY OUT)	11 SPACES	50%	50%	50%	100%	100%	10%
OFFICE - 4,000 SF (2ND FLOOR)	14 SPACES	80%	100%	100%	10%	5%	5%
MEDICAL OFFICE - 2,925 SF	15 SPACES	80%	100%	100%	10%	5%	5%
MONTESSORI SCHOOL - 6,003 SF	17 SPACES	100%	100%	100%	100%	10%	10%
RETAIL - 7,223 SF	36 SPACES	20%	60%	90%	100%	70%	5%
TOTAL REQUIRED PARKING = 93 SPACES		55 SPACES	74 SPACES	77 SPACES PEAK	60 SPACES	41 SPACES	0 SPACES
TOTAL PROVIDED PARKING = 89 SPACES		89 SPACES	89 SPACES	89 SPACES	89 SPACES	89 SPACES	89 SPACES



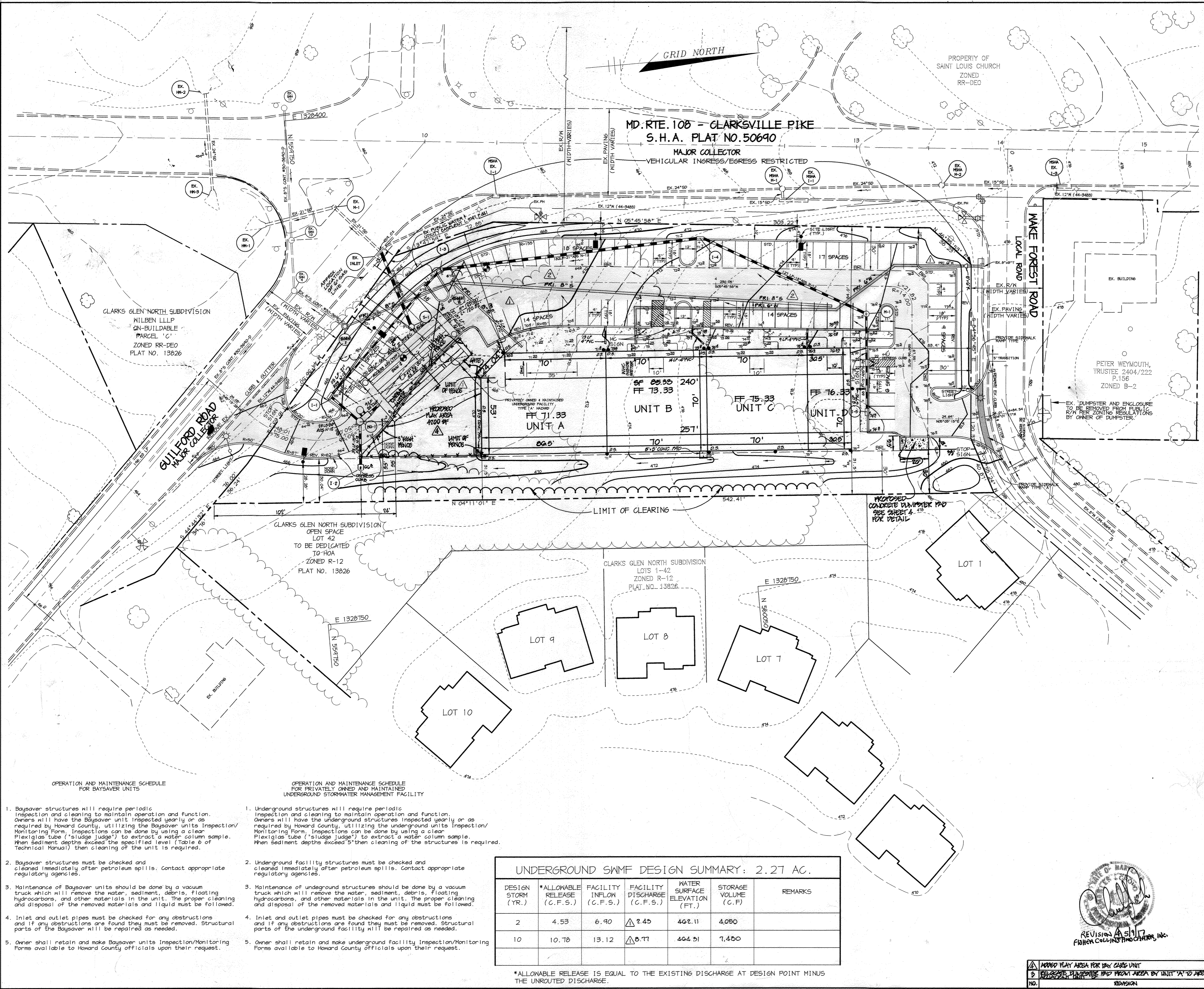
BUILDING ELEVATION
(NOT TO SCALE)

ADDRESS CHART

PARCEL	STREET ADDRESS
B-1	12345 WAKE FOREST ROAD

SUBDIVISION NAME: CLARKS GLEN NORTH	SECT./AREA: B-1
PLAT #: 1414B	BLOCK #: 12
ZONE: B-2	TAX MAP NO.: 5 TH
ELECT. DIST.: 6055	CENSUS TRACT:
WATER CODE: I-11	SEWER CODE: 6650000

DATE	DESIGNED BY: C.J.R.
STATE OF MARYLAND PROFESSIONAL ENGINEER	DRAWN BY: D.R.D.
PROJECT NO: SDP1.DWG	DATE: FEBRUARY 18, 2000
SCALE: AS SHOWN	DRAWING NO. 1 OF 8
ARTHUR E. MUEGGE #8707	



LEGEND

- P-1 PAVING
- P-2 PAVING
- STREET LIGHT-SEE NOTE
- SITE LIGHT (SINGLE)-SEE NOTE

NOTES:

1. 250-WATT HPS VAPOR PENDANT FIXTURE (CUTOFF) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12' ARM POINTED TOWARDS CENTER OF INTERSECTION AT BOTH ENTRANCES. AT THE GUILFORD ROAD ENTRANCE FROM GUILFORD ROAD, DRIVEWAY STATION 0+35, 28 FT. RT., AND FROM WAKE FOREST ROAD, DRIVEWAY STATION 0+25, 20 FT. RT.
2. ALL LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.
3. ALL CURB RADIUS ARE 5' UNLESS OTHERWISE LABELED.
4. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE LABELED.
5. * INDICATES TRANSITION FROM STANDARD 7" CURB & GUTTER TO REVERSE 7" CURB & GUTTER AND VICE-VERSA.
6. UNDERGROUND STORMWATER MANAGEMENT PIPES TO BE ALUMINIZED CORRUGATED METAL PIPE TYPE 11 12 6A.

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

Donna M. ... 3/13/17
 COUNTY HEALTH OFFICER / DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

John B. ... 3/24/17
 DIRECTOR / DATE

Michael ... 3/16/17
 CHIEF, DEVELOPMENT ENGINEERING DIVISION / DATE

Cindy ... 3/23/17
 CHIEF, DIVISION OF LAND DEVELOPMENT / DATE

3-30-01 MODIFIED PRIVATE WATER & SEWER LAYOUT
 6-12-00 REV. STORM DRAIN, SWM, SHC, WHC 1 SWM DESIGN DULWYCHART

DATE	NO.	REVISION

OWNER / DEVELOPER
 MILBEN LLLP
 c/o ANDREW L. ISAACSON
 5450 WHITLEY PARK TERRACE SUITE 410
 BETHESDA, MARYLAND 20814

PROJECT: **CLARKS GLEN NORTH PARCEL B-1**

AREA: PARCEL 205 & P/O 204
 TAX MAP 34 ZONED B-2
 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: **SITE DEVELOPMENT PLAN**

RIEMER MUEGGE & ASSOCIATES INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, MD 21045
 tel 410.997.8900 fax 410.997.9282

DATE	DESIGNED BY:
3/9/17	C.J.R.
3/9/17	D.R.D.
3/9/17	PROJECT NO. 99032 SDP2.DWG
	DATE: FEBRUARY 18, 2000
	SCALE: 1" = 30'
	DRAWING NO. 2 OF 8

ARTHUR E. MUEGGE #8707

UNDERGROUND SWMF DESIGN SUMMARY: 2.27 AC.

DESIGN STORM (YR.)	*ALLOWABLE RELEASE (C.F.S.)	FACILITY INFLOW (C.F.S.)	FACILITY DISCHARGE (C.F.S.)	WATER SURFACE ELEVATION (FT.)	STORAGE VOLUME (C.F.)	REMARKS
2	4.53	6.90	△ 2.45	462.11	4,050	
10	10.78	13.12	△ 5.77	464.51	7,480	

*ALLOWABLE RELEASE IS EQUAL TO THE EXISTING DISCHARGE AT DESIGN POINT MINUS THE UNROUTED DISCHARGE.

- | | |
|---|--|
| <p>OPERATION AND MAINTENANCE SCHEDULE FOR BAYSAYER UNITS</p> <ol style="list-style-type: none"> 1. Baysaver structures will require periodic inspection and cleaning to maintain operation and function. Owners will have the Baysaver unit inspected yearly or as required by Howard County, utilizing the Baysaver units Inspection/Monitoring Form. Inspections can be done by using a clear Plexiglas tube ("sludge judge") to extract a water column sample. When sediment depths exceed the specified level (Table 6 of Technical Manual) then cleaning of the unit is required. 2. Baysaver structures must be checked and cleaned immediately after petroleum spills. Contact appropriate regulatory agencies. 3. Maintenance of Baysaver units should be done by a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons, and other materials in the unit. The proper cleaning and disposal of the removed materials and liquid must be followed. 4. Inlet and outlet pipes must be checked for any obstructions and if any obstructions are found they must be removed. Structural parts of the Baysaver will be repaired as needed. 5. Owner shall retain and make Baysaver units Inspection/Monitoring Forms available to Howard County officials upon their request. | <p>OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER MANAGEMENT FACILITY</p> <ol style="list-style-type: none"> 1. Underground structures will require periodic inspection and cleaning to maintain operation and function. Owners will have the underground structures inspected yearly or as required by Howard County, utilizing the underground units Inspection/Monitoring Form. Inspections can be done by using a clear Plexiglas tube ("sludge judge") to extract a water column sample. When sediment depths exceed 5" then cleaning of the structures is required. 2. Underground facility structures must be checked and cleaned immediately after petroleum spills. Contact appropriate regulatory agencies. 3. Maintenance of underground structures should be done by a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons, and other materials in the unit. The proper cleaning and disposal of the removed materials and liquid must be followed. 4. Inlet and outlet pipes must be checked for any obstructions and if any obstructions are found they must be removed. Structural parts of the underground facility will be repaired as needed. 5. Owner shall retain and make underground Facility Inspection/Monitoring Forms available to Howard County officials upon their request. |
|---|--|

NOTE: ALL ON-SITE SOILS ARE ASSUMED TYPE 'C' DUE TO MASS GRADING.

DRAINAGE CHART

INLET	DRAINAGE AREA (AC)	%IMP	'C'
I-1	0.15	72%	0.85
I-2	1.10	17%	0.81
I-3	0.45	70%	0.85
I-4	0.25	94%	0.84
I-5	0.24	88%	0.85

BY THE DEVELOPER :
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF 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.

Andrew L. Isaacson 2-18-00
 DEVELOPER DATE

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

Arthur E. Muegge 2-18-00
 ENGINEER DATE

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

Cheyl Summard 3-2-00
 NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John P. Johnston 3/14/00
 HOWARD SOIL CONSERVATION DISTRICT DATE

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

Donna M. Murray 3/13/00
 COUNTY HEALTH OFFICER DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

John J. Sato 3/24/00
 DIRECTOR DATE

William J. DeMunn 3/16/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Linda Hamata 3/22/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

0-18-00 REV. UTILITIES, TRAP #1 & DRAINAGE AREAS
 DATE NO. REVISION

OWNER / DEVELOPER
 WILBEN LLLP
 c/o ANDREW L. ISAACSON
 5450 WHITLEY PARK TERRACE SUITE 410
 BETHESDA, MARYLAND 20814

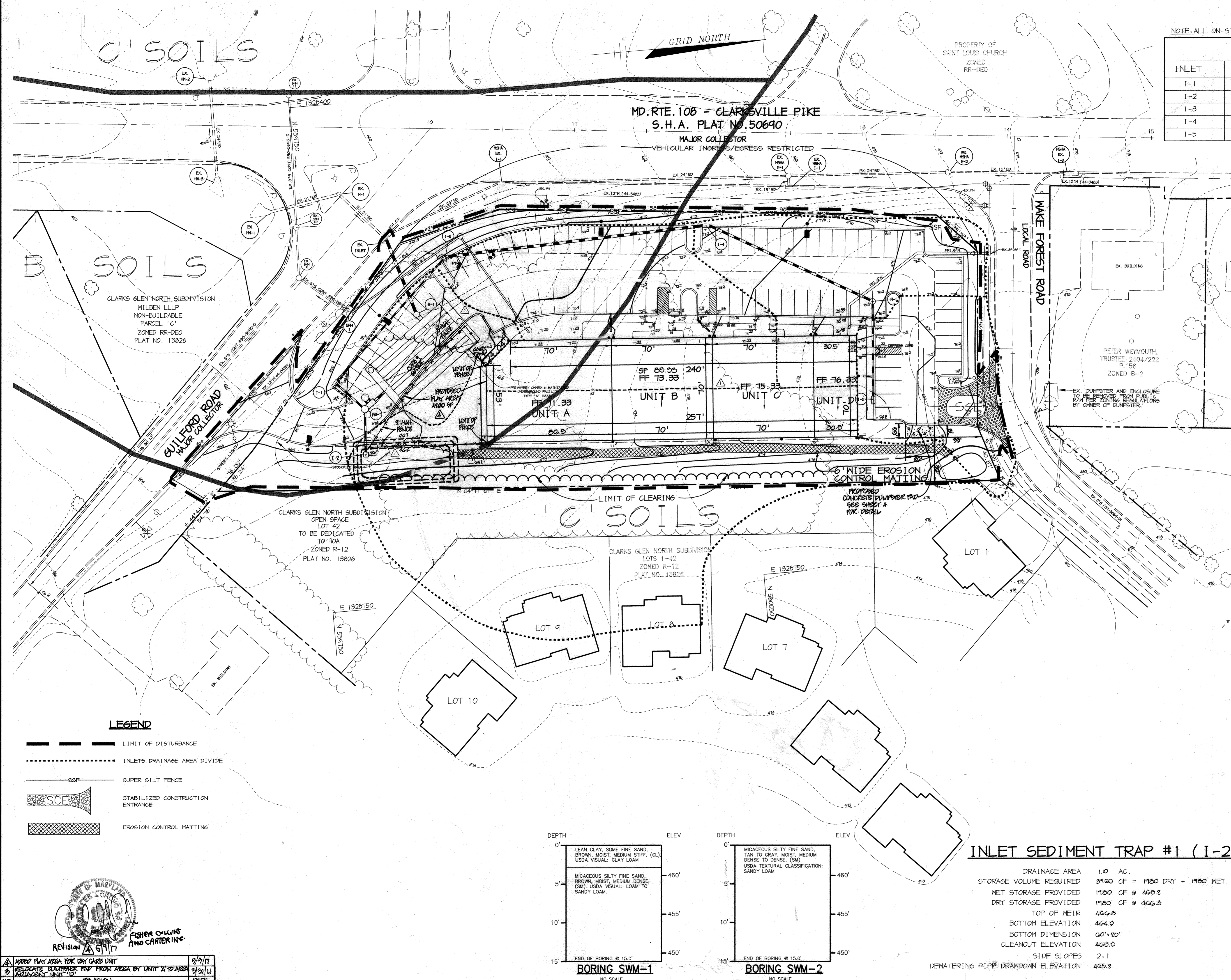
PROJECT CLARKS GLEN NORTH
 PARCEL B-1

AREA PARCEL 205 & P/O 204
 TAX MAP 34 ZONED B-2
 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE GRADING, SEDIMENT CONTROL
 & DRAINAGE AREA PLAN

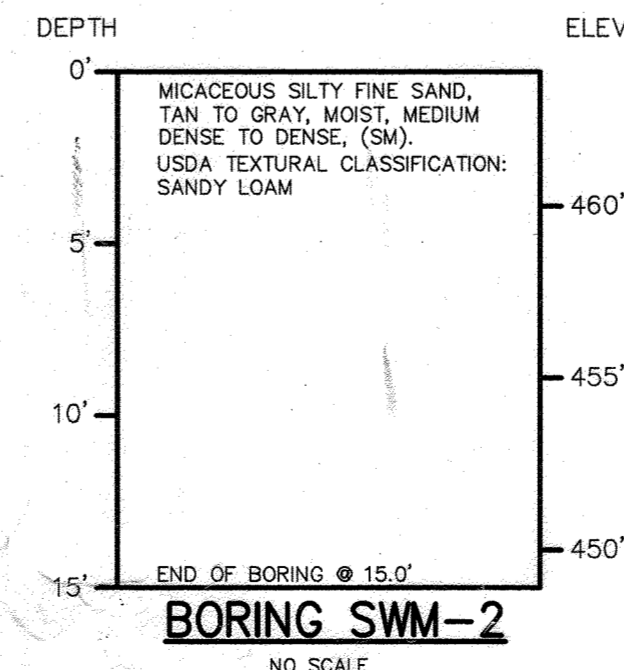
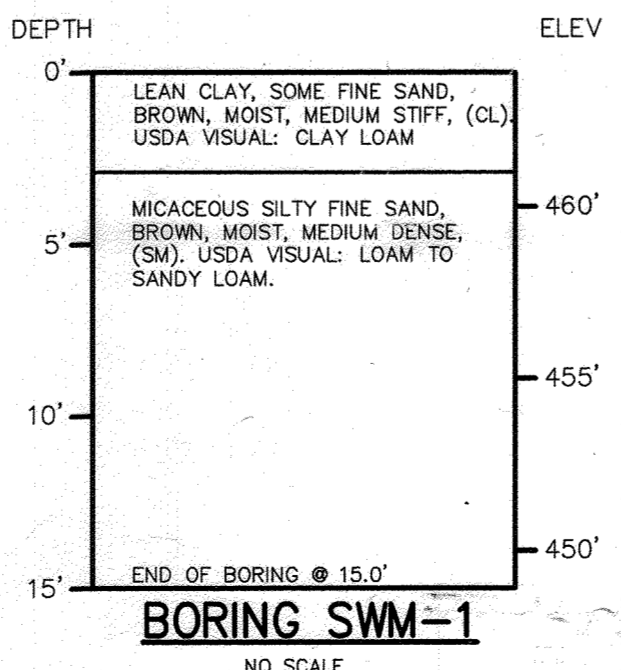
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 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, MD 21045
 tel 410.997.8800 fax 410.997.8282

DATE
 DESIGNED BY : C.J.R.
 DRAWN BY : D.R.D.
 PROJECT NO : 99032
 : SDP3.DWG
 DATE : FEBRUARY 18, 2000
 SCALE : 1" = 30'
 DRAWING NO. 3 OF 8
 ARTHUR E. MUEGGE #8707



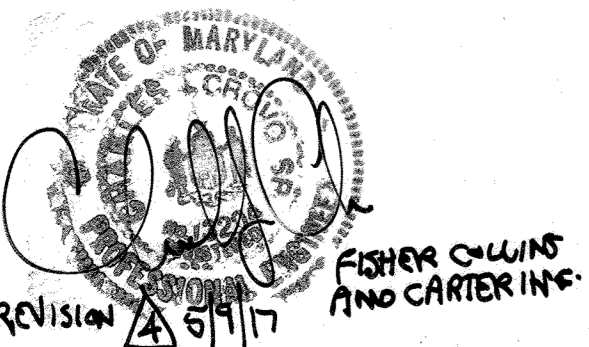
LEGEND

- LIMIT OF DISTURBANCE
- INLETS DRAINAGE AREA DIVIDE
- SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- EROSION CONTROL MATTING



INLET SEDIMENT TRAP #1 (I-2)

DRAINAGE AREA	1.10 AC.
STORAGE VOLUME REQUIRED	9160 CF = 1900 DRY + 1960 WET
NET STORAGE PROVIDED	1180 CF @ 460.2
DRY STORAGE PROVIDED	1180 CF @ 460.5
TOP OF WEIR	466.8
BOTTOM ELEVATION	464.0
BOTTOM DIMENSION	60' x 20'
CLEANOUT ELEVATION	465.0
SIDE SLOPES	2:1
DEMATERING PIPE DRAINAGE ELEVATION	465.2

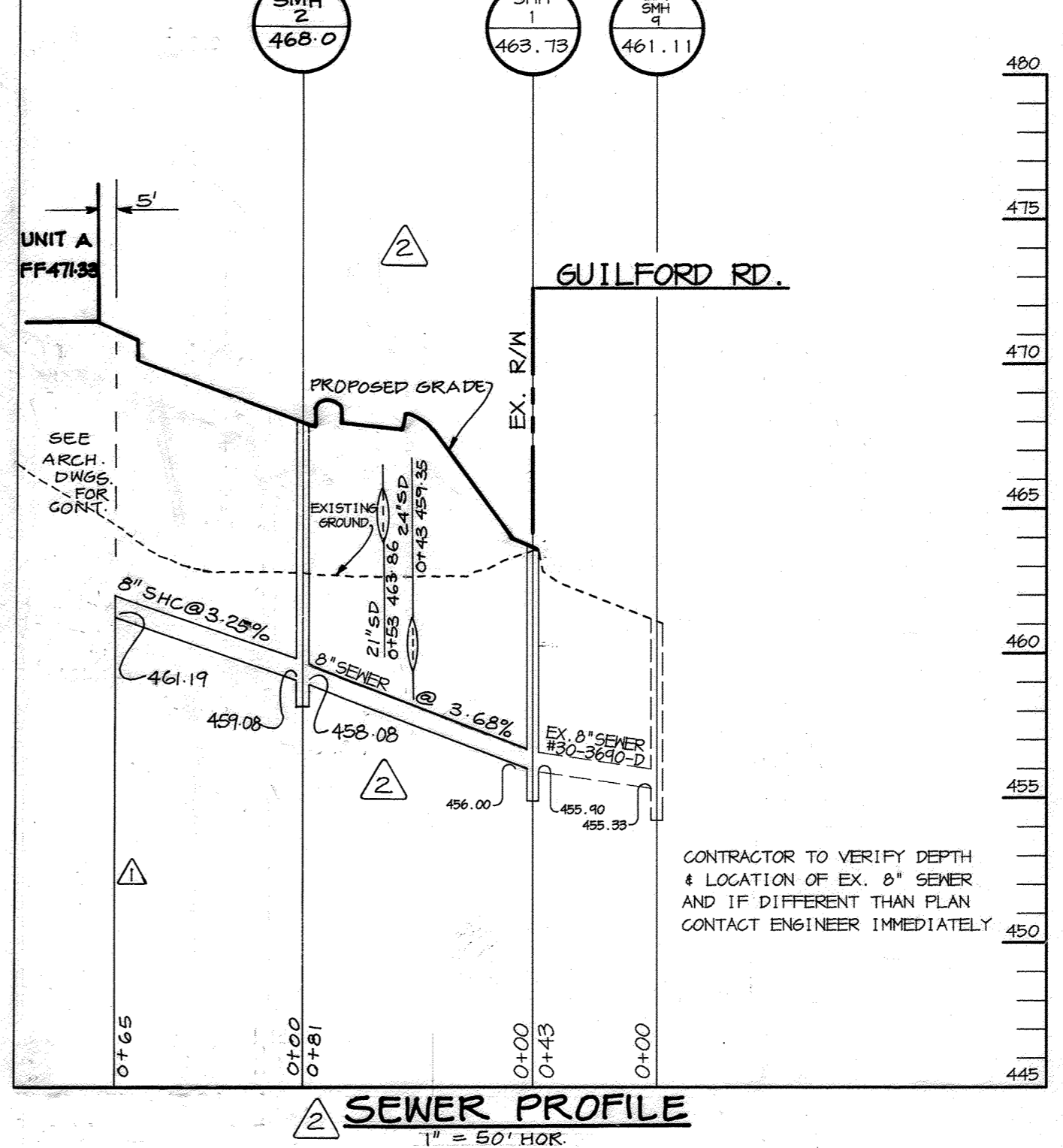
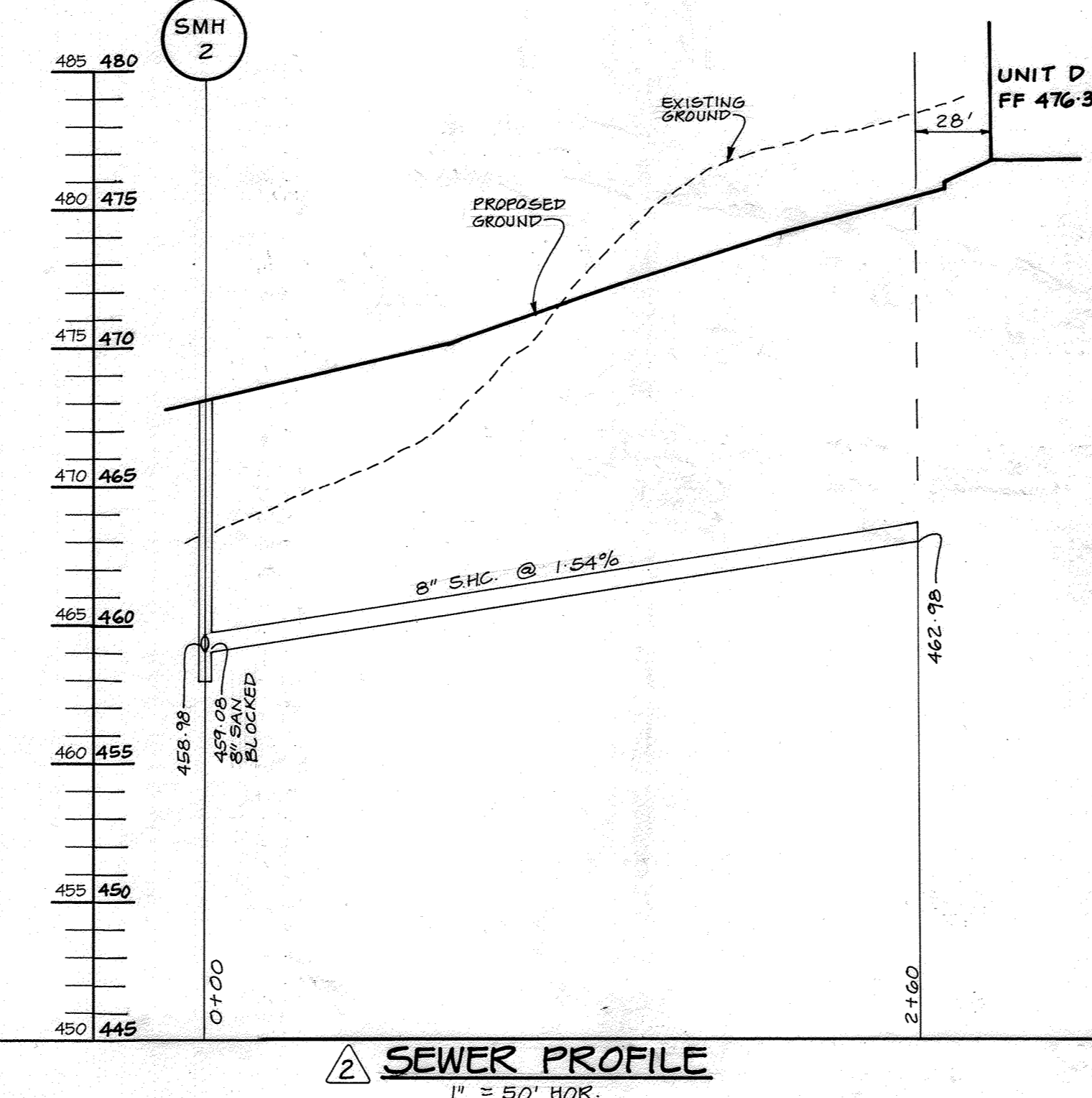
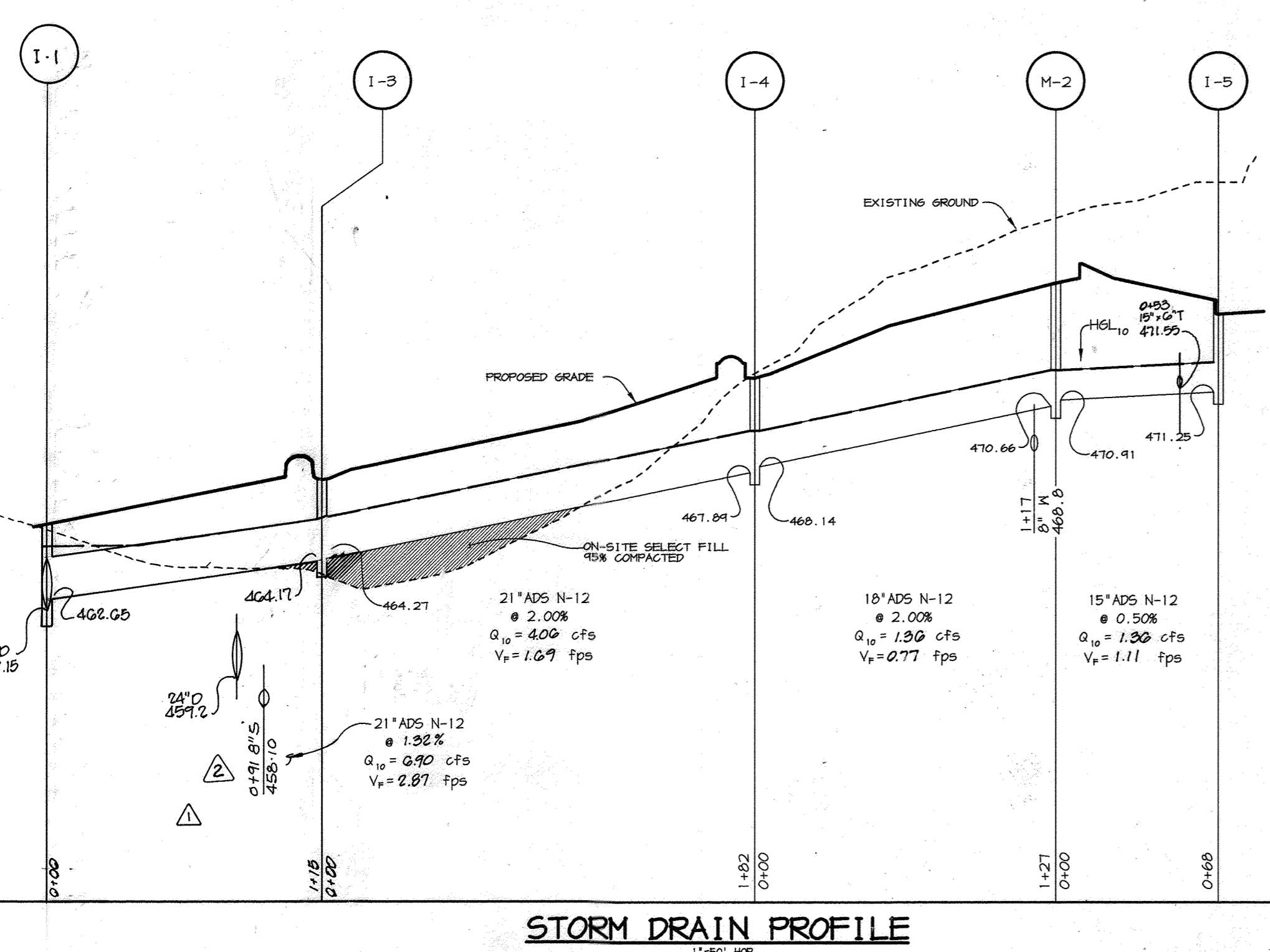
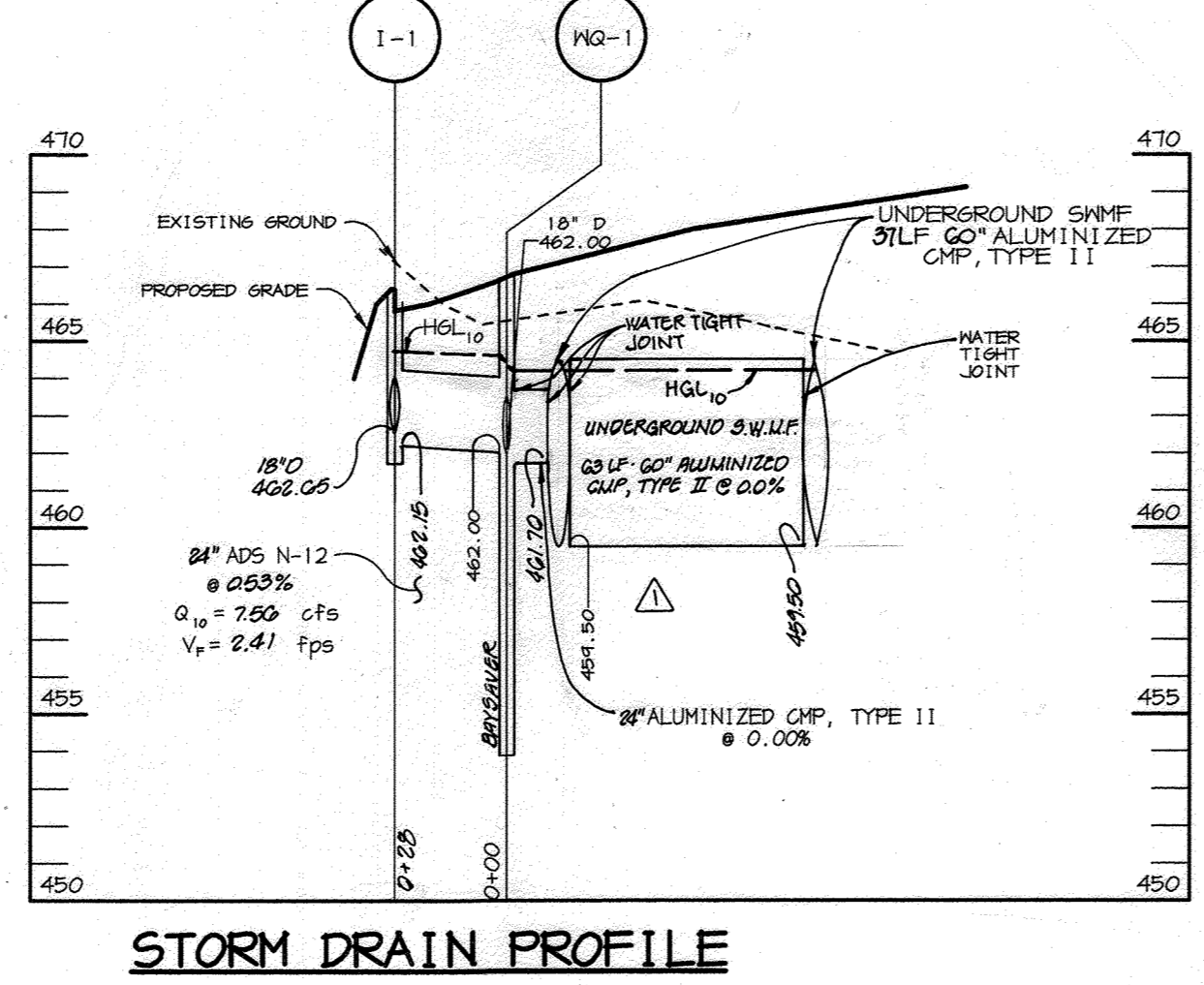
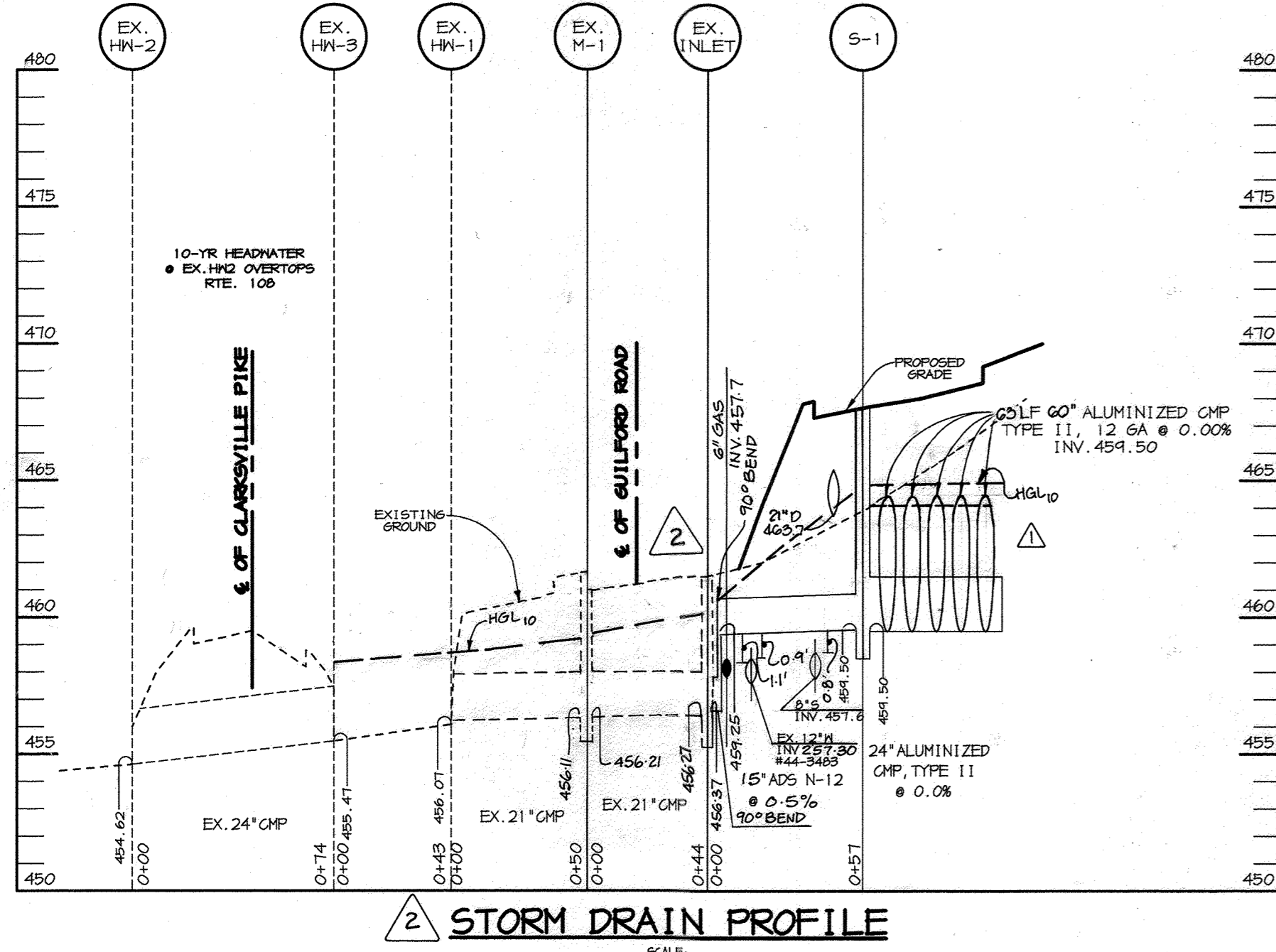
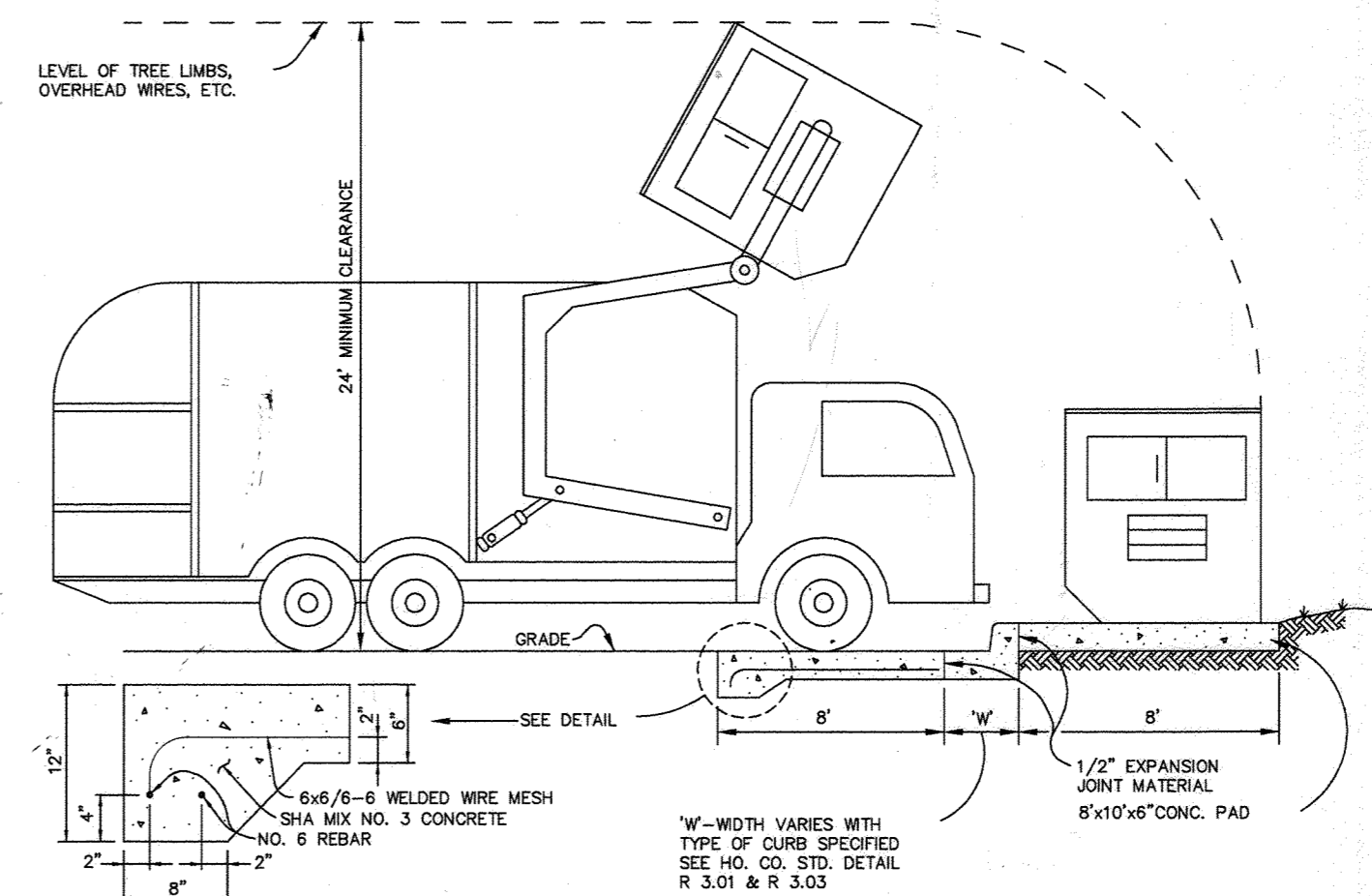
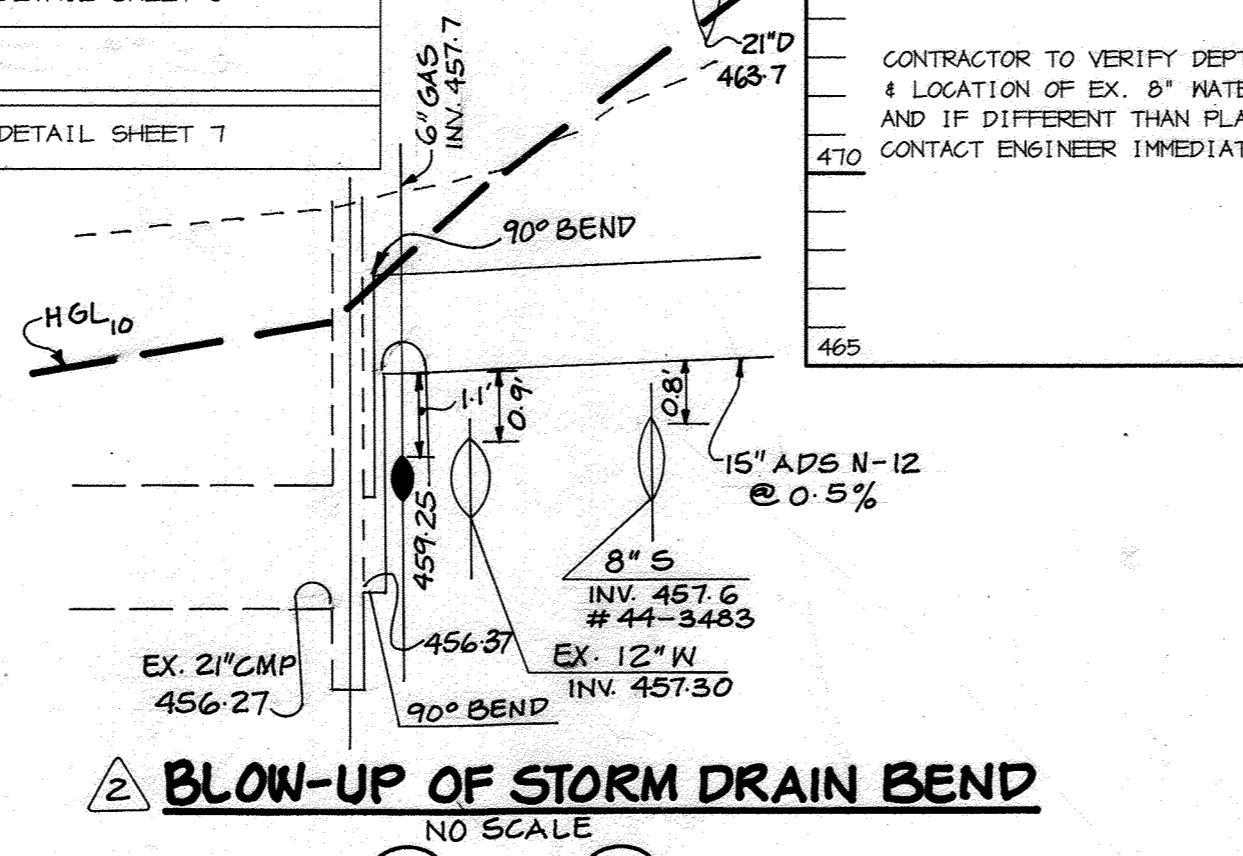
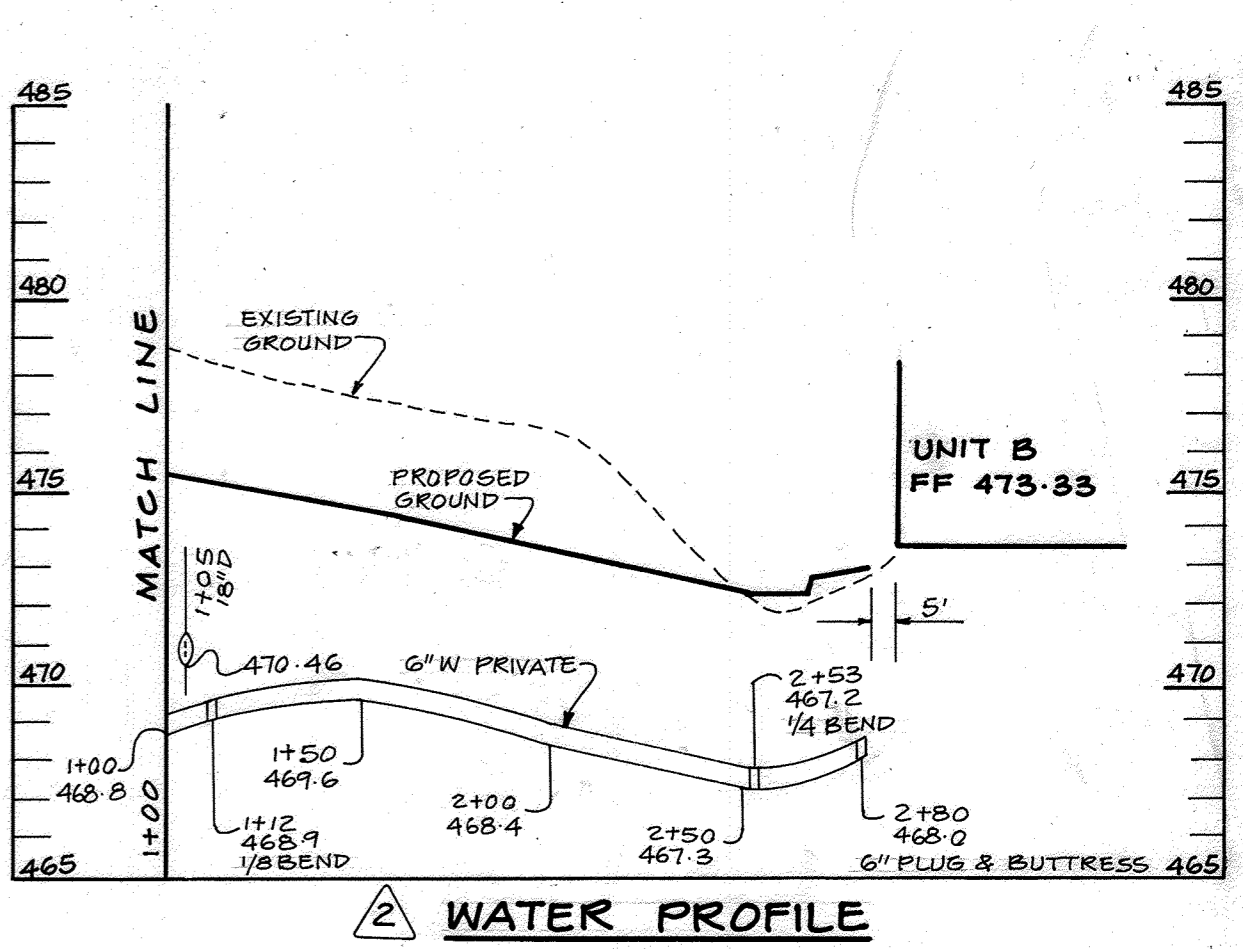
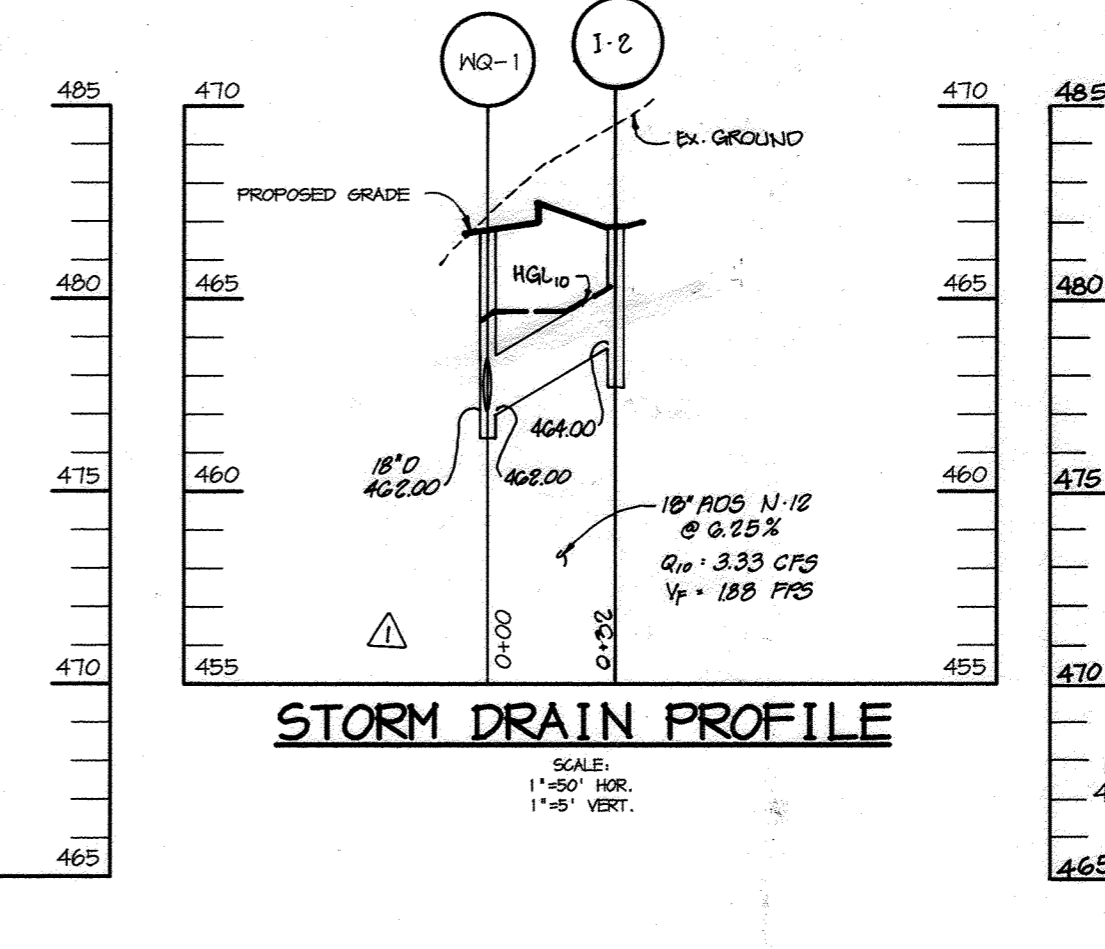
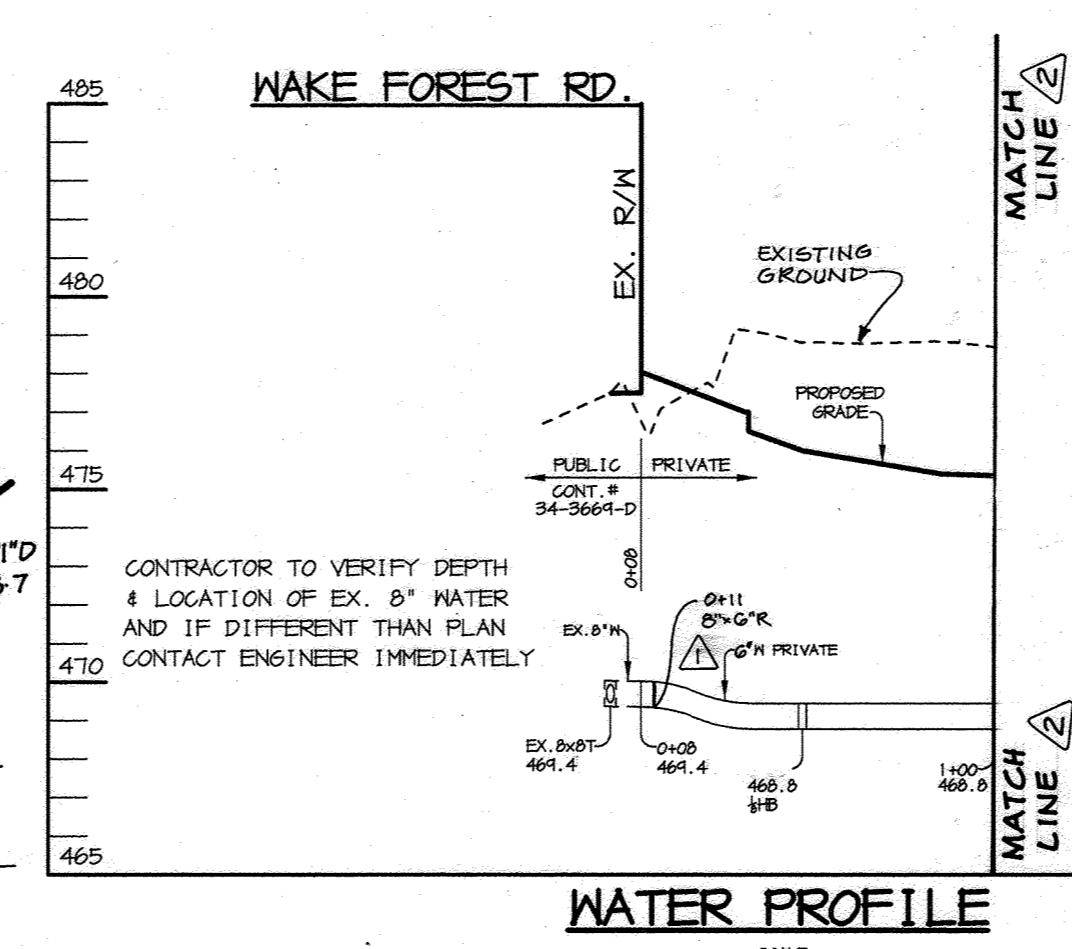


NO.	REVISION	DATE
1	ADD PLAY AREA FOR DAY CARE UNIT	2/9/00
2	RELOCATE DUMPSTER PAD FROM AREA BY UNIT 'A' TO AREA ADJACENT UNIT 'D'	2/21/00
3	REVISION	DATE

STRUCTURE SCHEDULE

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	INSIDE DIMENSION	REMARKS
I-1	A-5	*N 559,766.18 E 1,320,543.35	462.05	462.15	465.8	3'-5"x2'-7"	HOCO STD. DETAIL SD 4.01
I-2	△K	SEE PLAN	-	464.00	466.8	3'-0"x3'-0"	HOCO STD. DETAIL SD 4.12
I-3	A-5	*N 559,849.34 E 1,320,514.15	464.27	464.17	467.6	2'-6"x5'-0"	HOCO STD. DETAIL SD 4.01
I-4	A-5	*N 560,030.77 E 1,320,507.85	466.14	467.84	471.7	2'-6"x5'-0"	HOCO STD. DETAIL SD 4.01
I-5	A-5	*N 560,137.42 E 1,320,636.42	-	471.25	475.08	2'-6"x5'-0"	HOCO STD. DETAIL SD 4.01
M-1	4' MH	*N 560,141.32 E 1,320,560.51	470.91	470.66	475.8	-	HOCO STD. DETAIL SD 5.12
MG-1	BAYSAVER	SEE PLAN	-	-	466.8	-	SEE DETAIL SHEET 6
S-1	CONTROL STRUCTURE	*N 559,825.67 E 1,320,544.82	-	-	467.5	-	SEE DETAIL SHEET 7

NOTES: * LOCATION OF 'S' AND MANHOLES IS AT CENTER OF TOP COVER; FOR 'A' INLETS LOCATION IS GIVEN FOR CENTER OF THROAT OPENING AT FACE OF CURB. TOP ELEVATION IS TOP OF CURB/GRATE/RIM.



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
 [Signature] 3/13/00
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 [Signature] 3/24/00
 DIRECTOR DATE

[Signature] 2/16/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 3/22/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

3-30-01/2 REV. WATER, SEWER & STORM DRAIN PROFILES.
 6-12-00/1 REV. PROFILES & SCHEDULE
 DATE NO. REVISION

OWNER / DEVELOPER
 WILBEN L.L.P.
 c/o ANDREW L. ISAACSON
 5450 WHITLEY PARK TERRACE SUITE 410
 BETHESDA, MARYLAND 20814

PROJECT **CLARKS GLEN NORTH**
 PARCEL B-1

AREA PARCEL 205 & P/O 204
 TAX MAP 34 ZONED B-2
 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE **PROFILES & DETAILS SHEET**

RIEMER MUEGGE & ASSOCIATES INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, MD 21045
 tel 410.997.8900 fax 410.997.9282

DATE
 [Seal] PROFESSIONAL ENGINEER
 ARTHUR E. MUEGGE #8707

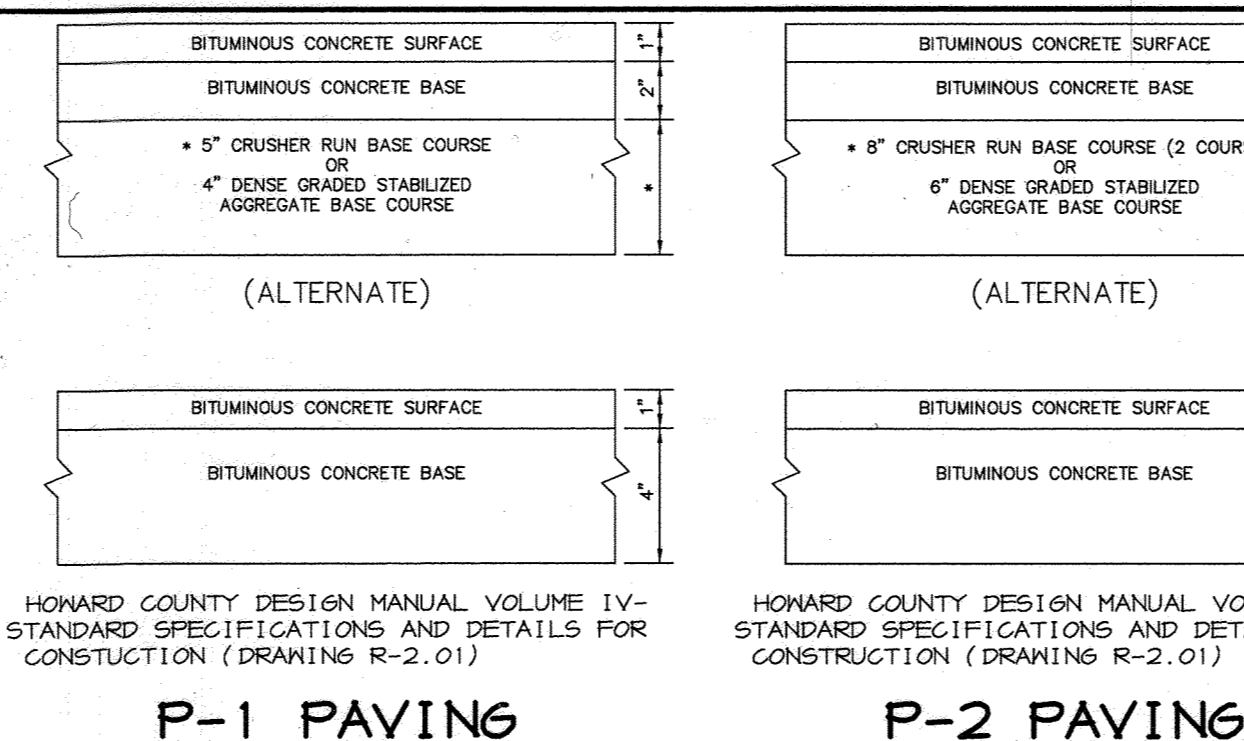
DESIGNED BY: C.J.R.
 DRAWN BY: D.R.D.
 PROJECT NO: 99032
 DATE: FEBRUARY 18, 2000
 SCALE: AS SHOWN
 DRAWING NO. 4 OF 8

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

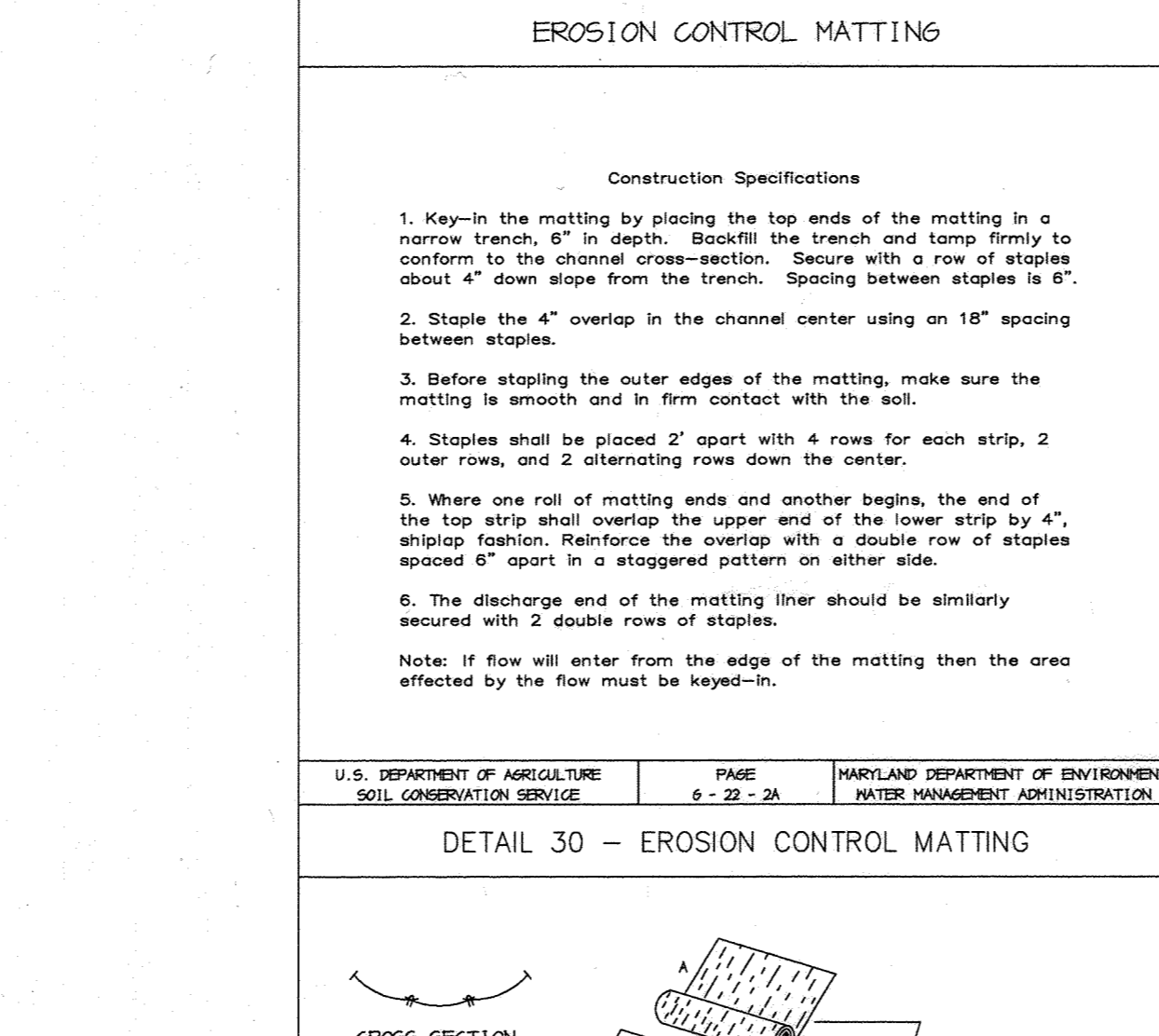
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.



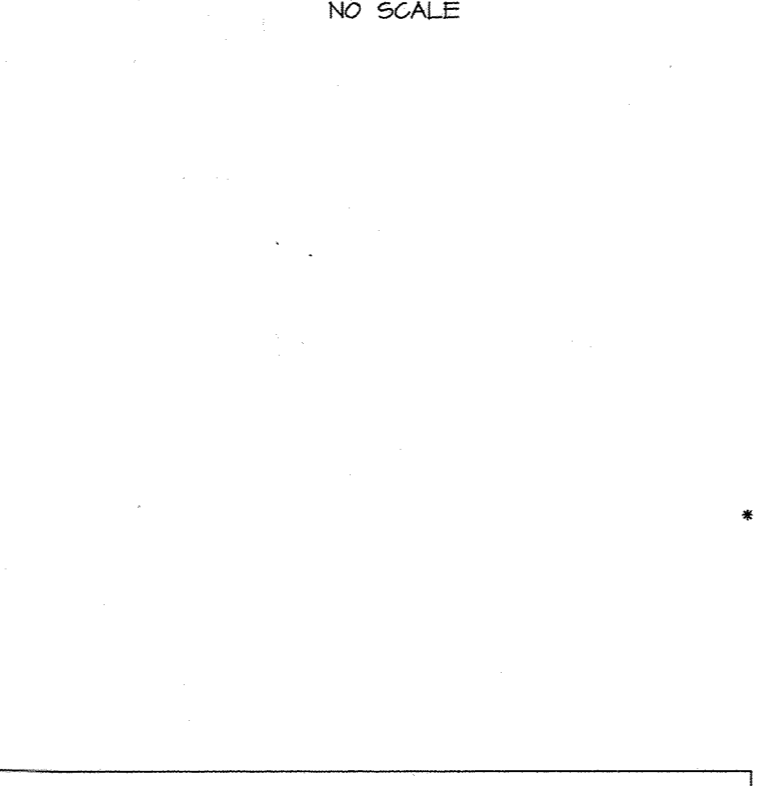
PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

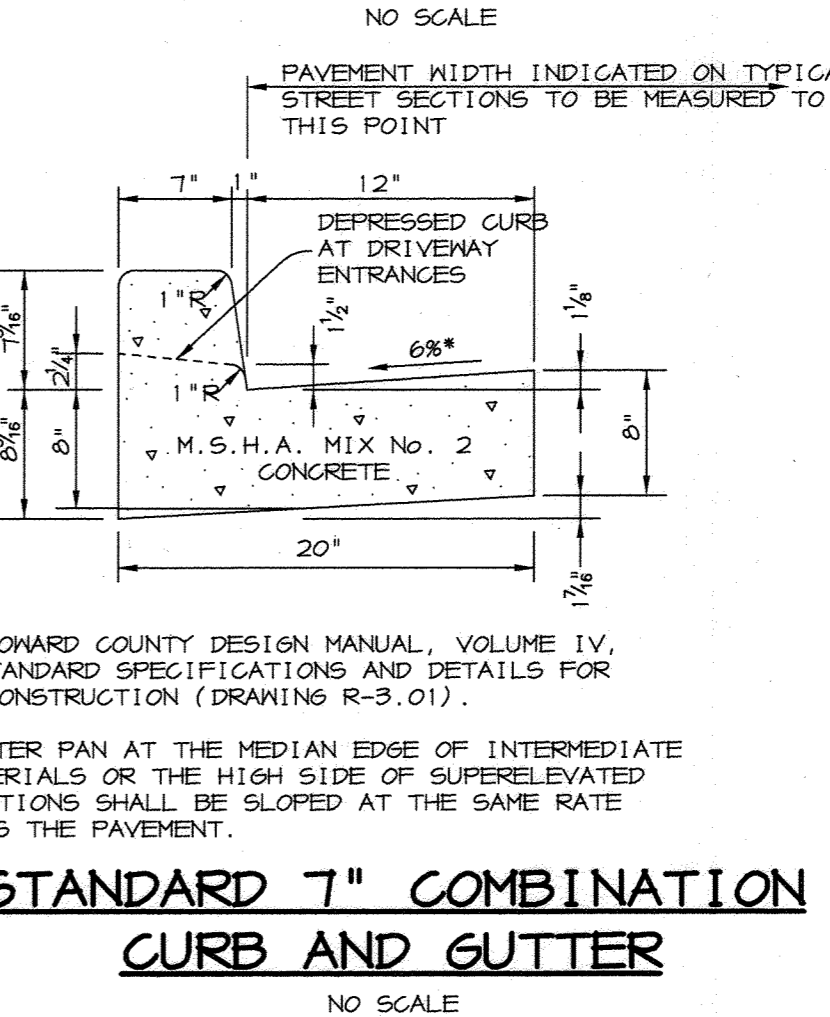
Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications.



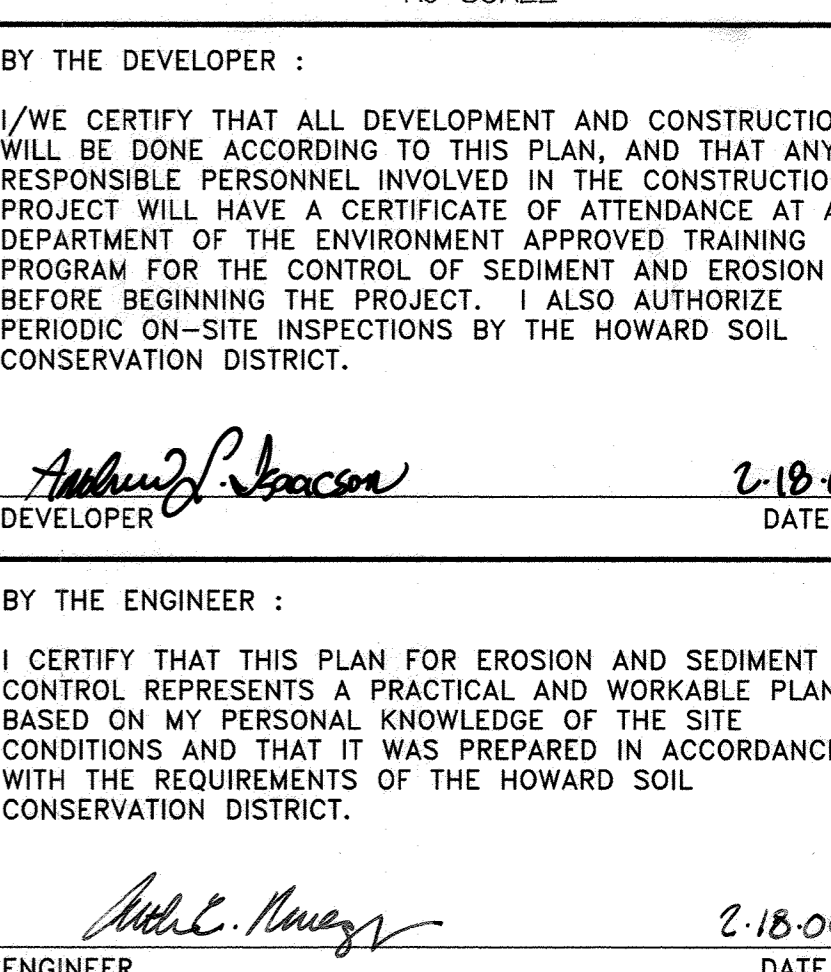
HANDICAP SIGN DETAIL



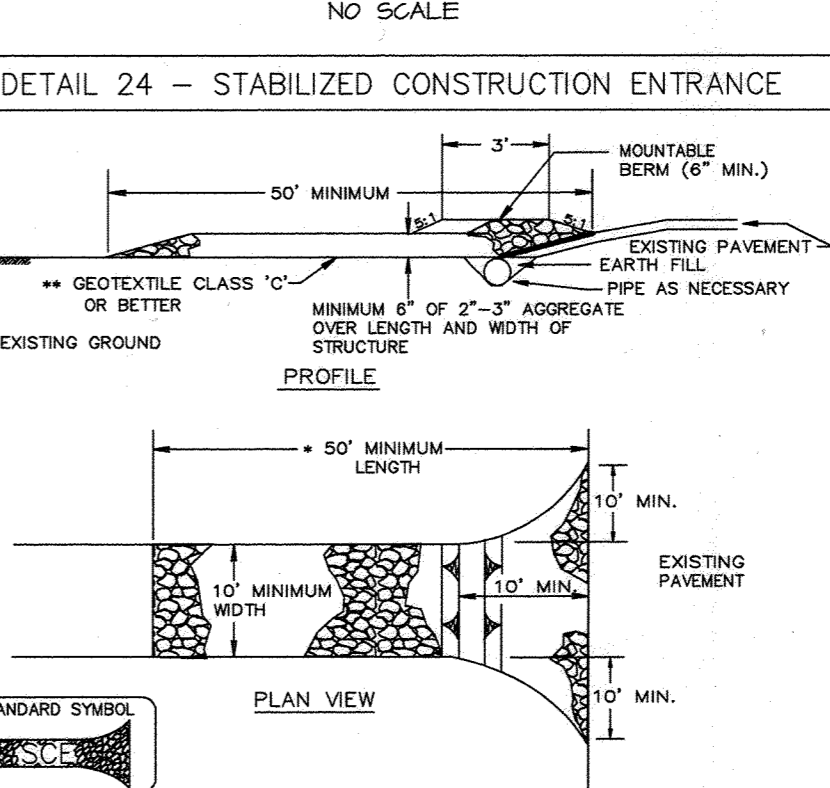
REVERSE 7" COMBINATION CURB AND GUTTER



SIDEWALK DETAIL



STANDARD 7" COMBINATION CURB AND GUTTER

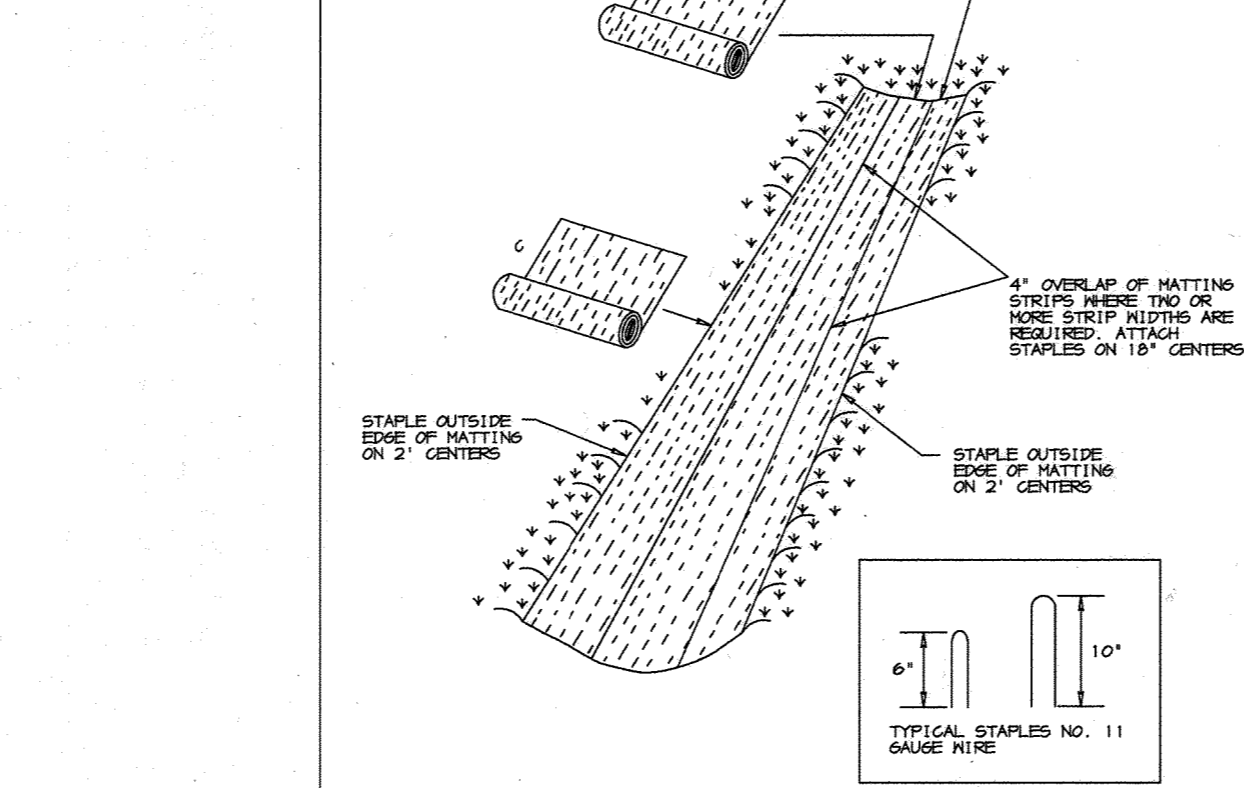


STANDARD SEDIMENT CONTROL NOTES

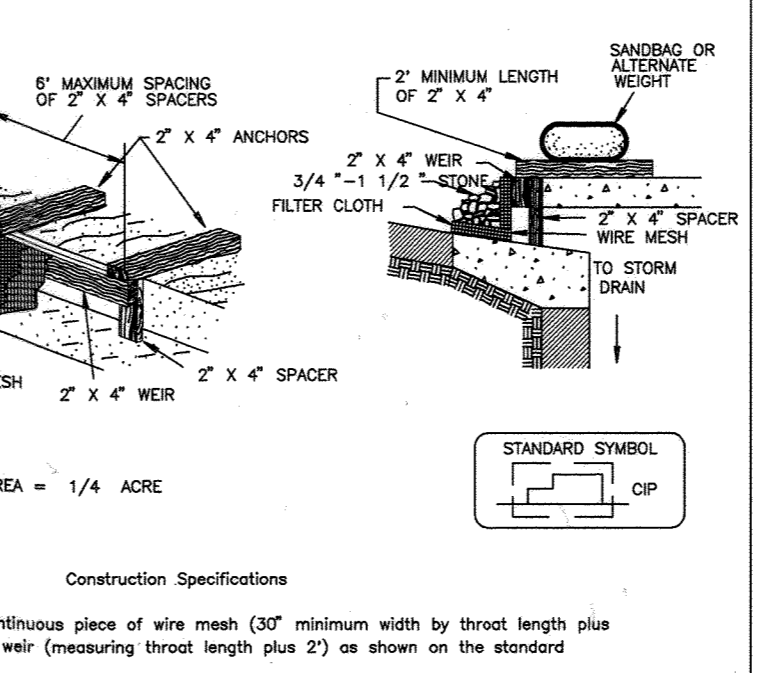
A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, HOWARD COUNTY DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION.

22.0 STANDARD AND SPECIFICATIONS FOR STORM INLET SEDIMENT TRAP

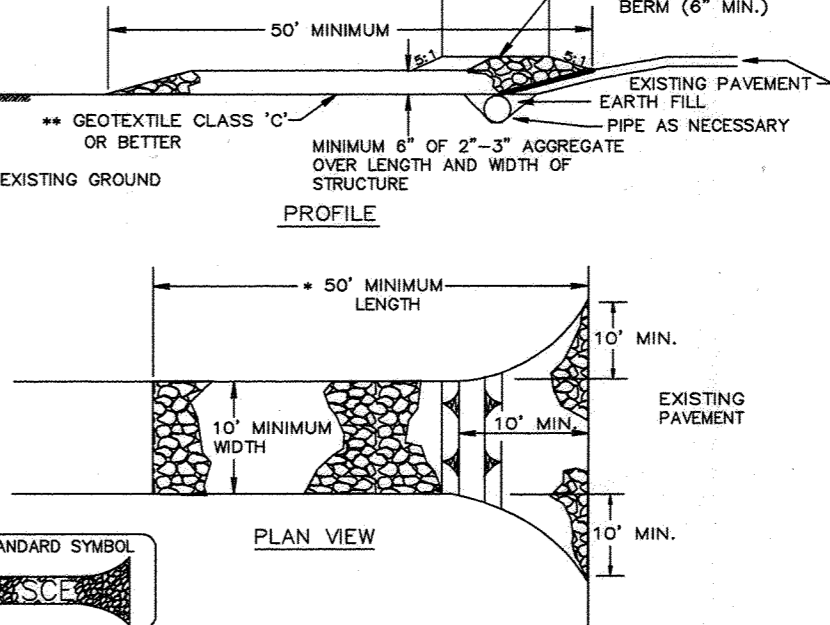
Storm inlet sediment traps shall be installed on all storm inlets having a catchment area of 100 square feet or greater.



DETAIL 23C - CURB INLET PROTECTION



DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

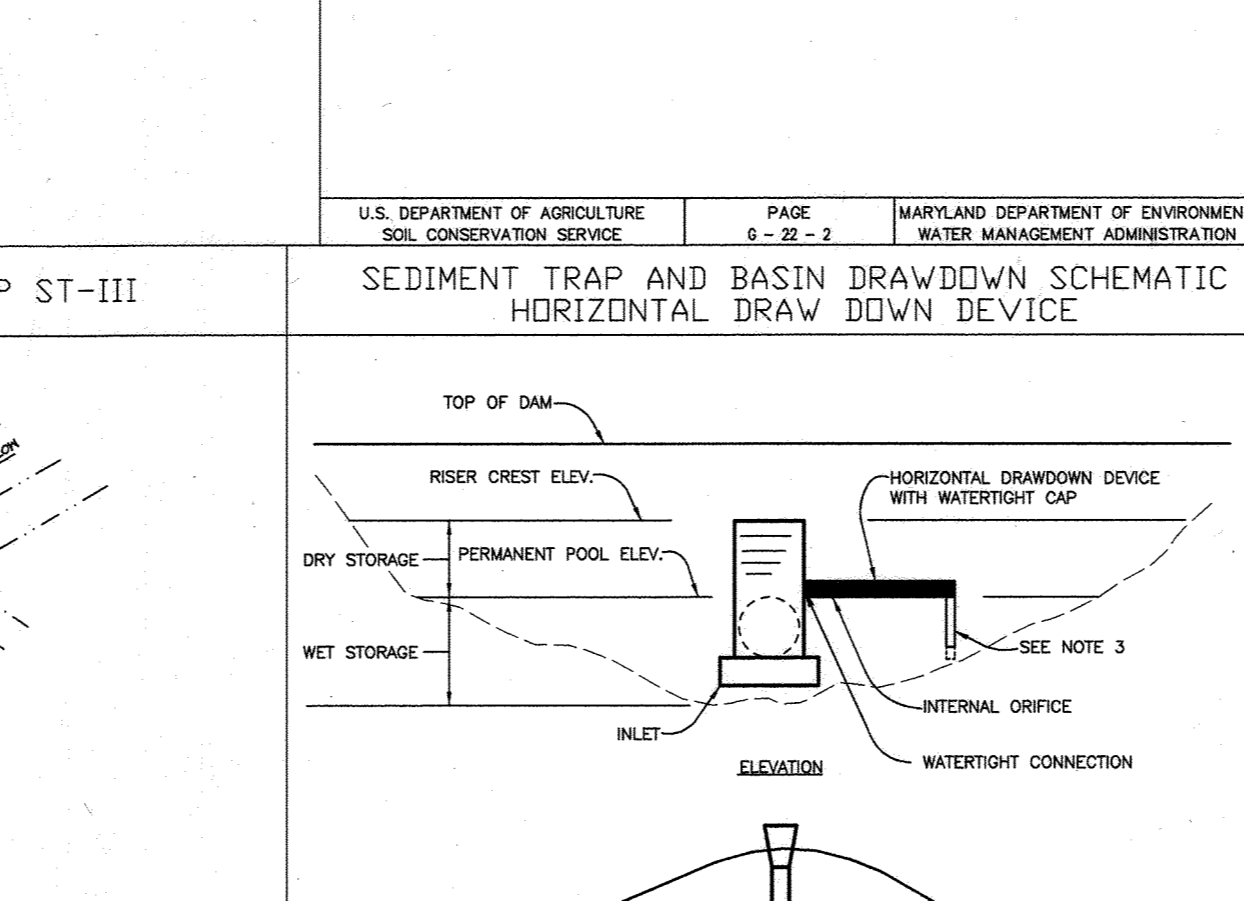


SEQUENCE OF CONSTRUCTION

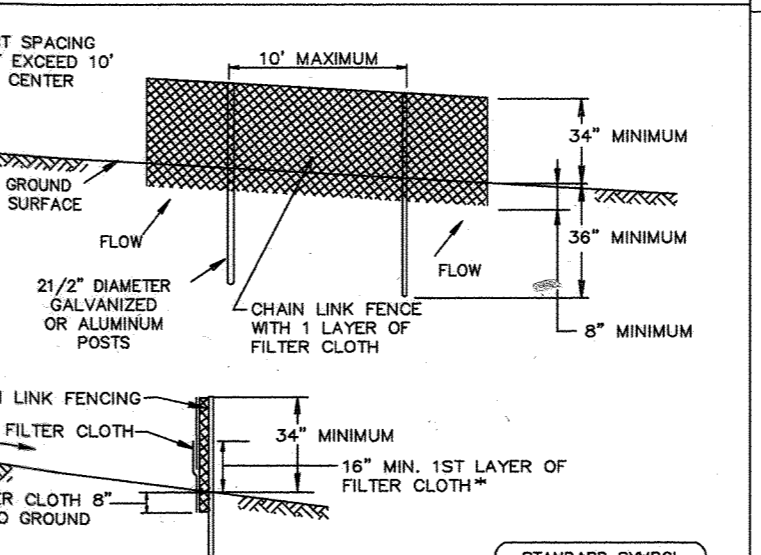
1. OBTAIN GRADING PERMIT. 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SUPER SILT FENCE. (2 DAYS)

23.0 STANDARD AND SPECIFICATIONS FOR SEDIMENT TRAP AND BASIN DRAWDOWN DEVICE

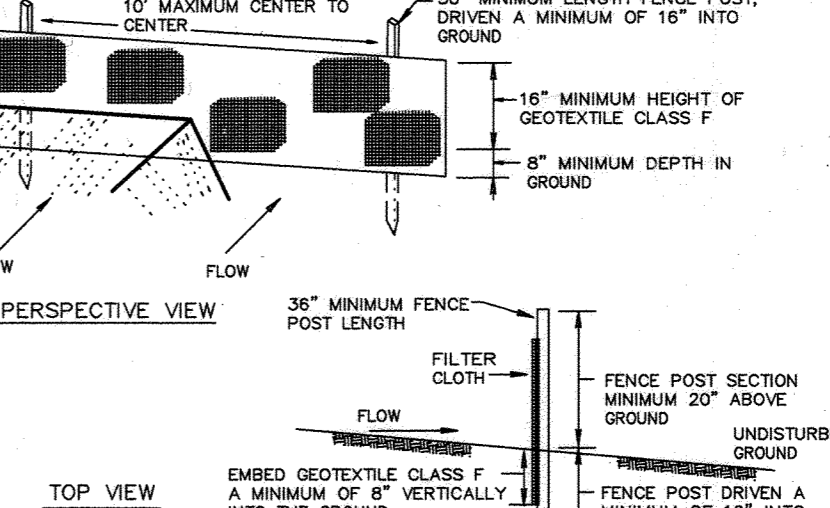
Sediment traps and basin drawdown devices shall be installed on all storm inlets having a catchment area of 100 square feet or greater.



DETAIL 33 - SUPER SILT FENCE



DETAIL 22 - SILT FENCE



BY THE DEVELOPER: I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

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

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

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

APPROVED FOR HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. CHIEF, DEVELOPMENT ENGINEERING DIVISION

OWNER / DEVELOPER: WILBEN LLLP, c/o ANDREW L. ISAACSON, 5450 WHITLEY PARK TERRACE, SUITE 410, BETHESDA, MARYLAND 20814

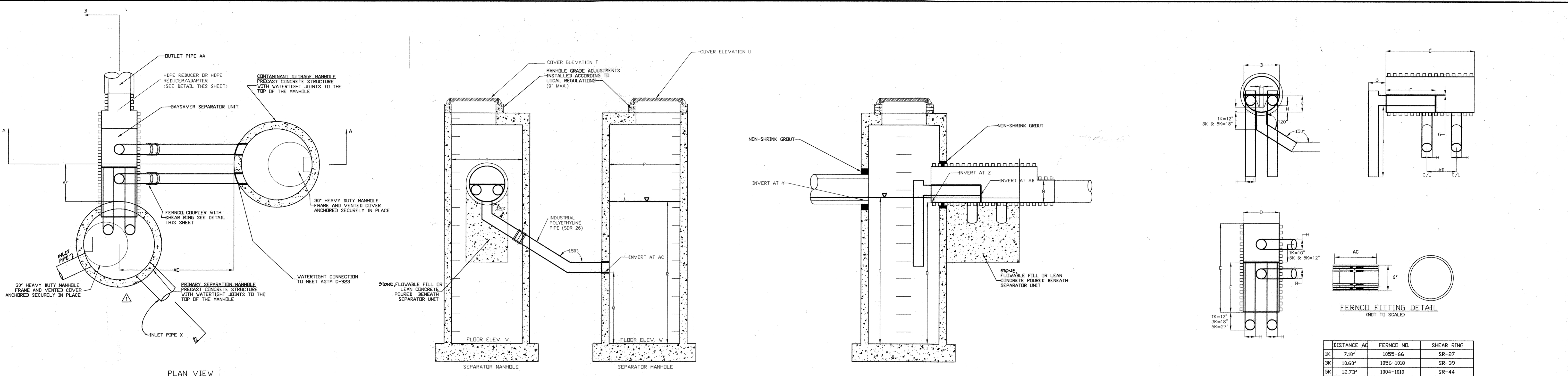
PROJECT: CLARKS GLEN NORTH PARCEL B-1

AREA: PARCEL 205 & P/O 204 TAX MAP 34 ZONED B-2 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: SEDIMENT CONTROL NOTES AND DETAILS

RIEMER MUEGGE & ASSOCIATES INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING

DATE: DESIGNED BY: C.J.R. DRAWN BY: D.R.D. PROJECT NO: SDPS.DWG DATE: FEBRUARY 18, 2000 SCALE: AS SHOWN DRAWING NO. 5 OF 8



GENERAL CONSTRUCTION NOTES

- ALL WORK MUST BE DONE WITH REGARD FOR THE SAFETY OF THE CONSTRUCTION CREW.
- ALL WORK AND MATERIALS MUST COMPLY WITH APPLICABLE STATE AND LOCAL REGULATIONS.
- KNOW THE LOCATION AND DEPTH OF ANY UNDERGROUND UTILITIES BEFORE EXCAVATION BEGINS.

BAYSAYER MAINTENANCE

BAYSAYER SYSTEMS MUST BE INSPECTED AND MAINTAINED PERIODICALLY. INSPECTION IS MADE BY CHECKING THE DEPTH OF SEDIMENT IN EACH MANHOLE WITH A GRADE STICK OR SIMILAR DEVICE. MAINTENANCE IS REQUIRED WHEN THE SEDIMENT DEPTH IN EITHER MANHOLE EXCEEDS 2 FEET. MINIMUM INSPECTION IS REQUIRED TWICE A YEAR TO MAINTAIN OPERATION AND FUNCTION OF BAYSAYER.

MAINTENANCE CONSISTS OF THE FOLLOWING:

A. CONTAMINANT STORAGE MANHOLE

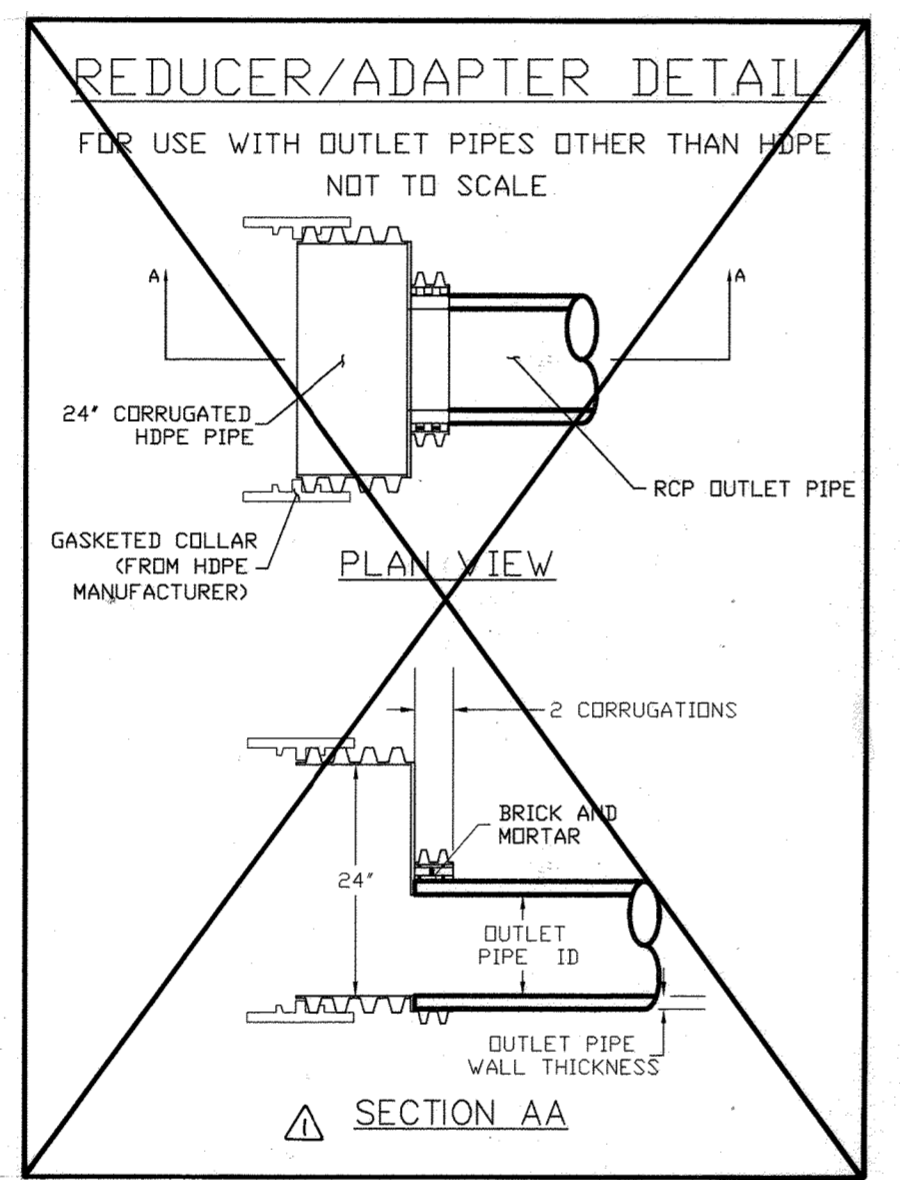
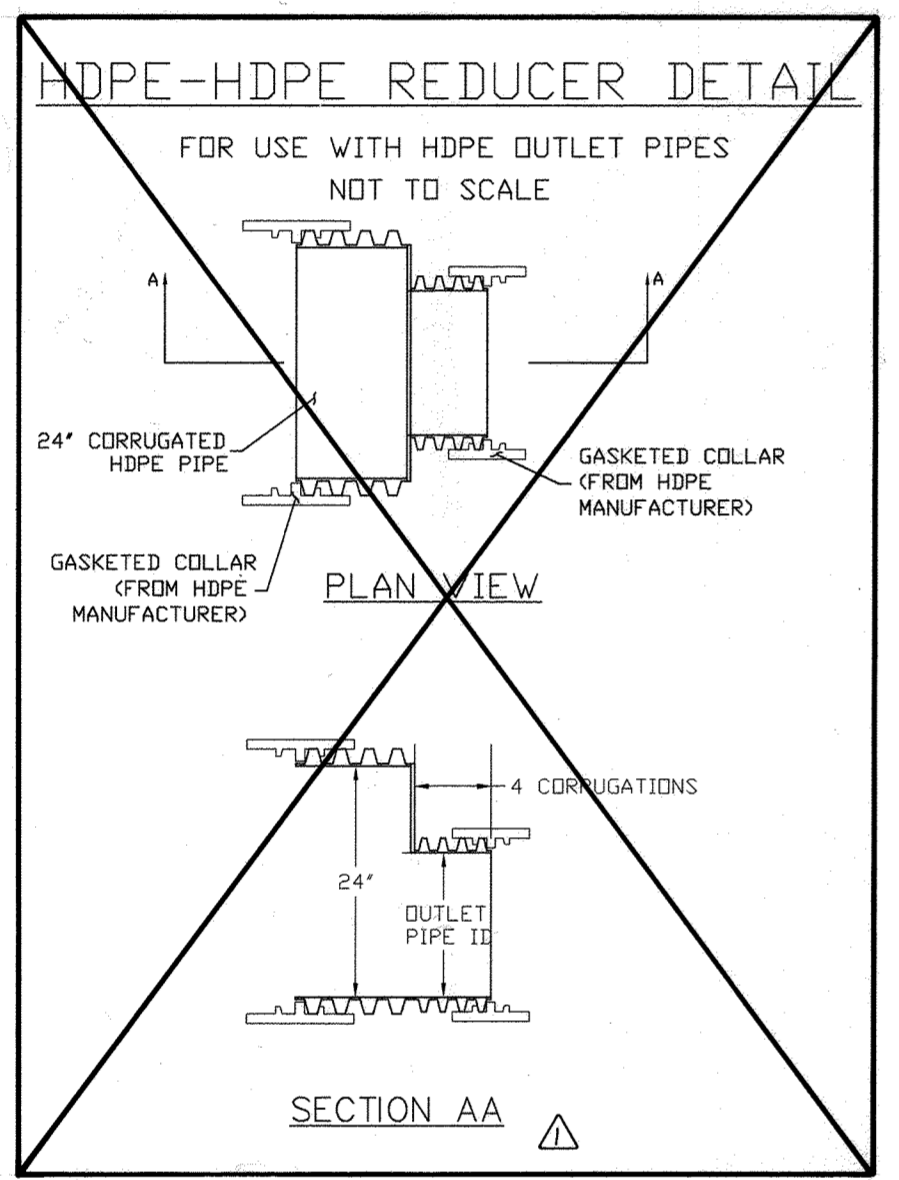
- REMOVE THE ENTIRE VOLUME OF THE CONTAMINATED WATER BY VACUUM TRUCK.
- CLEAN THE MANHOLE WALLS AND FLUSH OUT THE MANHOLE USING A HIGH PRESSURE HOSE AND REMOVE FLUSHING WATER BY VACUUM TRUCK. MAKE CERTAIN MANHOLE IS CLEAN.

B. PRIMARY SEPARATION MANHOLE

- USING A SUBMERSIBLE PUMP, PUMP THE CLEAN WATER FROM THE CENTER OF THE MANHOLE DIRECTLY INTO THE EMPTY STORAGE MANHOLE UNTIL THE WATER LEVEL FALLS TO 1 FOOT ABOVE THE SEDIMENT LAYER.
- REMOVE THE SETTLED SEDIMENT AND REMAINING WATER BY VACUUM TRUCK.
- CLEAN THE MANHOLE WALLS AND FLUSH OUT THE MANHOLE USING A HIGH PRESSURE HOSE AND REMOVE FLUSHING WATER BY VACUUM TRUCK. MAKE CERTAIN MANHOLE IS CLEAN.
- CONTAMINATED MATERIAL REMOVED FROM THE MANHOLES MUST BE DISPOSED OF RESPONSIBLY AND LEGALLY BY THE OPERATOR OF THE VACUUM TRUCK.

BAYSAYER INSTALLATION INSTRUCTIONS

- EXCAVATION MUST PROVIDE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO SEPARATOR MANHOLE AND BAYSAYER UNIT. INSTALL PRECAST DROP STRUCTURES ON SOLID GROUND AS VERIFIED BY A GEOTECHNICAL ENGINEER.
- VERIFY THE SUBGRADE ELEVATION AGAINST THE MANHOLE DIMENSIONS AND CONNECTING STORM DRAIN INVERTS.
- MAKING SURE THE BASES ARE LEVEL AND THE STORAGE MANHOLE OPENINGS ARE ALIGNED WITH THE SEPARATOR UNIT, INSTALL PRIMARY AND STORAGE MANHOLES. INSTALL RUBBER GASKETS ON BASE UNITS AND GAT WITH LUBRICATING GREASE. INSTALL ADDITIONAL MANHOLE SECTIONS AS REQUIRED. SEAL LIFT HOLES WITH NON-SHRINK GROUT.
- BACKFILL BASE SECTIONS OF MANHOLES TO INVERT OF STORAGE MANHOLE CONNECTING PIPES. USING APPROVED BACKFILL MATERIAL, BACKFILL AND COMPACT IN 8 INCH LIFTS. BACKFILL AND COMPACTION SHOULD BE MONITORED BY A GEOTECHNICAL ENGINEER.
- INSTALL BAYSAYER SEPARATOR UNIT AND CONNECTING PIPES. SEAL ALL CONNECTING JOINTS AND INSTALL SEPARATOR UNIT/STORM DRAIN JOINT COLLAR. CUT EXCESS LENGTH OFF CONNECTING PIPES INSIDE STORAGE MANHOLE.
- BACKFILL SEPARATOR UNIT AND MANHOLES. AREAS NOT ACCESSIBLE TO COMPACTION EQUIPMENT MUST BE BACKFILLED WITH LEAN CONCRETE OR FLOWABLE FILL.
- INSTALL AND SET MANHOLE COVER GRADE ADJUSTMENT RINGS AS NECESSARY.
- INSTALL AND SET MANHOLE FRAME AND COVER UNITS.



Project: CLARKS GLEN NORTH PARCEL B
 Designer: RMA, INC.
 Address: _____
 Contact: CHRIS REID
 Phone: (410) 997-8900
 Fax: (410) 997-9282

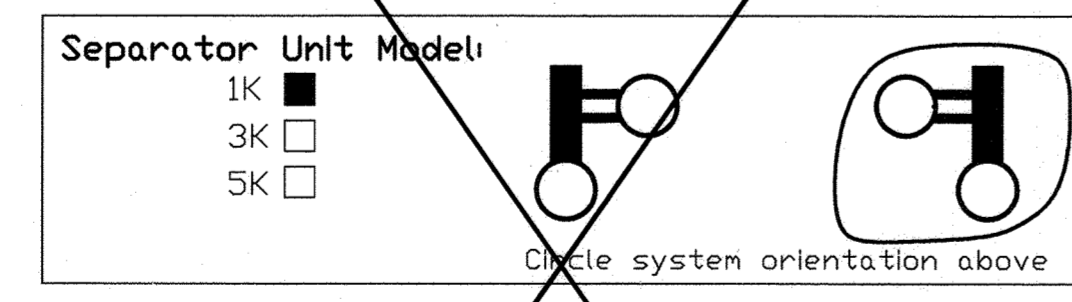
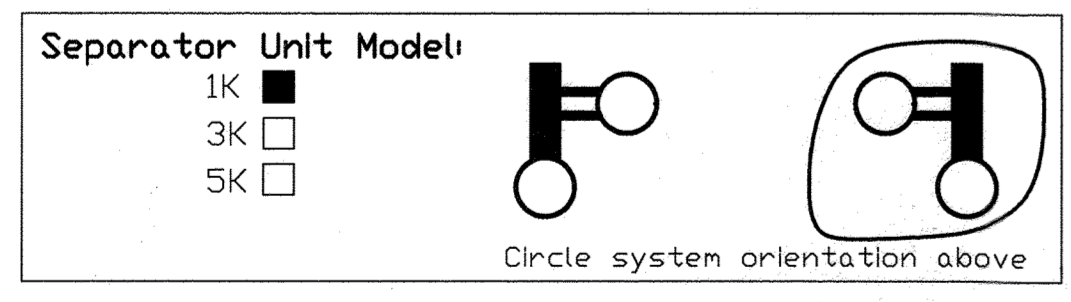
Delivery Date: _____

Owner: WILBEN LLLP
 Contractor: _____
 Contact: ANDREW L. ISAACSON
 Address: 5450 WHITLEY PARK TERRACE SUITE 410
 Address: BETHESDA, MD 20814
 Contact: _____
 Phone: _____
 Fax: _____

Project: CLARKS GLEN NORTH PARCEL B
 Designer: RMA, INC.
 Address: _____
 Contact: CHRIS REID
 Phone: (410) 997-8900
 Fax: (410) 997-9282

Delivery Date: _____

Owner: WILBEN LLLP
 Contractor: _____
 Contact: ANDREW L. ISAACSON
 Address: 5450 WHITLEY PARK TERRACE SUITE 410
 Address: BETHESDA, MD 20814
 Contact: _____
 Phone: _____
 Fax: _____



Manhole Specifications:

Primary Manhole Diameter: 48 inches
 Storage Manhole Diameter: 48 inches

Floor Elevations:
 Primary Manhole: 453.90
 Storage Manhole: 457.90

Primary Manhole Inverts:
 Separator Unit: 461.90
 Inlet Pipe(s): 462.00 (24")
 462.00 (18")

Please show orientation (including angle), size and material of inlet pipes above.

Cover Elevations:
 Primary Manhole: 460.0
 Storage Manhole: 460.7

WQ-1/WQ-1A

Manhole Specifications:

Primary Manhole Diameter: 48 inches
 Storage Manhole Diameter: 48 inches

Floor Elevations:
 Primary Manhole: 455.90
 Storage Manhole: 459.90

Primary Manhole Inverts:
 Separator Unit: 463.90
 Inlet Pipe(s): 464.00

Please show orientation (including angle), size and material of inlet pipes above.

Cover Elevations:
 Primary Manhole: 461.8
 Storage Manhole: 462.7

WQ-2/WQ-2A

SEQUENCE OF CONSTRUCTION AND INSPECTOR'S CHECK-OFF LIST FOR DUAL MANHOLE SEPARATORS

Stage (X = Approval Required)	Developer's/Engineer Approval		Inspector		Geotechnical Engineer	
	Initials	Date	Initials	Date	Initials	Date
1. Pre-Construction Meeting.			X		X	
2. Install Manholes and associated storm drainage: a. Obtain approval of subgrade from Geotechnical Engineer. (Subgrade to have a minimum of 95% compaction)						X
b. Installation of precast base, lower tank and lower piping.	X		X			
c. Backfill and min. 95% compaction around lower tank and lower piping.					X	
d. Installation of precast middle section(s) with separator unit and remaining piping.	X		X			
e. Installation of precast top slab.	X		X			
f. Installation of adjustment rings and frame and cover.	X		X			
g. Installation of flowable fill or concrete backfill.					X	
3. Backfilling operation and compaction.					X	
4. Site is permanently stabilized. Sediment control measures removed and all sediment and debris removed from dual manhole separators.				X		
5. Final inspection.				X		

Baysaver Separator Unit	Baysaver Manhole Sizes (prim. x stor.)	Maximum Treatment (cfs)*1	Maximum Treatment (gpm)*1	Impervious Area (acres)
1K Baysaver Separator	48x48	2.4	1076	1.2
	48x50	2.4	1076	1.4
	48x72	2.4	1076	1.6
3K Baysaver Separator	60x60	7.2	3231	3.6
	60x72	7.2	3231	4.1
	60x84	7.2	3231	4.6
5K Baysaver Separator	72x72	11.1	4981	5.5
	72x84	11.1	4981	6.5
	72x96	11.1	4981	7.5
	96x96	11.1	4981	8.0

NOTE:

BAYSAYER ARE TO BE INSTALLED WITH THE STORM DRAIN SYSTEM AND WILL FUNCTION AS SECONDARY SEDIMENT CONTROL DEVICES. UPON COMPLETION OF SITE STABILIZATION, EACH BAYSAYER SYSTEM SHALL BE FLUSHED CLEAN & THE MANHOLES CLEANED OUT AND REFILLED WITH CLEAN WATER.

NOTE: DIMENSIONAL SHOP DRAWINGS ARE TO BE APPROVED BY THE DESIGN ENGINEER

BAYSAYER SYSTEM DIMENSIONS

DESCRIPTION	1K SYSTEM	3K SYSTEM	5K SYSTEM
SEPARATOR MANHOLE DIMENSIONS			
A PRIMARY MANHOLE DIAMETER	48"	60"	72"
B MANHOLE DEPTH BELOW OUTLET	8' - 0"	8' - 0"	8' - 0"
C MINIMUM FLUID DEPTH	8' - 3"	8' - 4 1/2"	8' - 6"
STANDARD SEPARATOR UNIT DIMENSIONS			
D SEPARATOR UNIT ID	24"	36"	48"
E SEPARATOR UNIT LENGTH	60"	78.2"	75.4"
F BYPASS PLATE LENGTH	34"	45"	45"
G WEIR/BYPASS PLATE THICKNESS	3/4"	3/4"	3/4"
H ELBOW AND CONNECTING PIPE OD	7.125"	10.75"	12.75"
I ELBOW LENGTH	48"	48"	48"
J WEIR HEIGHT ABOVE INVERT	3"	4"	6"
K BYPASS PLATE HEIGHT ABOVE INVERT	12"	18"	24"
L WIDTH OF WEIR AT BASE	3"	4 1/2"	6"
M OUTLET PIPE DIAMETER	M	M	M
N ELBOW INVERT HEIGHT ABOVE UNIT INVERT	4 1/2"	7 1/2"	11"
O ELBOW PIPE OVERHANG	12"	18"	24"
STORAGE MANHOLE DIMENSIONS			
P STORAGE MANHOLE DIAMETER	48"	60"	72"
Q MANHOLE DEPTH BELOW INLET/OUTLET	48"	48"	48"
R FLUID DEPTH	8' - 0"	8' - 0"	8' - 0"
S TOTAL STORAGE VOLUME	200 CF	300 CF	450 CF
SYSTEM DIMENSIONS AND ELEVATIONS			
T SEPARATOR MANHOLE COVER ELEVATION	T	T	T
U STORAGE MANHOLE COVER ELEVATION	U	U	U
V SEPARATOR MANHOLE FLOOR ELEVATION	V	V	V
W STORAGE MANHOLE FLOOR ELEVATION	W	W	W
X INLET PIPE ID AND MATERIAL	X1 X2	X1 X2	X1 X2
Y INLET PIPE INVERT	Y1 Y2	Y1 Y2	Y1 Y2
Z SEPARATOR UNIT INVERT	Z	Z	Z
AA OUTLET PIPE ID AND MATERIAL	AA	AA	AA
AB ELBOW INVERT ELEVATION	AB	AB	AB
AC CONNECTING PIPE INVERT ELEVATION	AC	AC	AC
AD CONNECTION PIPE SPACING	20"	24"	24"
AE STORAGE MANHOLE SIDE OFFSET	72 ± 6"	72 ± 6"	72 ± 6"
AF STORAGE MANHOLE DOWNSTREAM OFFSET	23"	31"	25"

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

Donie M. ... 3/13/00
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

... 3/13/00
 DIRECTOR DATE

... 3/13/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

... 3/2/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

OWNER / DEVELOPER

WILBEN LLLP
 c/o ANDREW L. ISAACSON
 5450 WHITLEY PARK TERRACE SUITE 410
 BETHESDA, MARYLAND 20814

PROJECT: CLARKS GLEN NORTH PARCEL B-1

AREA: PARCEL 205 & P/O 204
 TAX MAP 34 ZONED B-2
 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: BAYSAYER DETAILS AND NOTES

RIEMER MUEGGE & ASSOCIATES INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, MD 21045
 tel 410.997.8900 fax 410.997.9282

DATE: _____

DESIGNED BY: C.J.R.

DRAWN BY: D.R.D.

PROJECT NO: 99032 SDP6.DWG

DATE: FEBRUARY 18, 2000

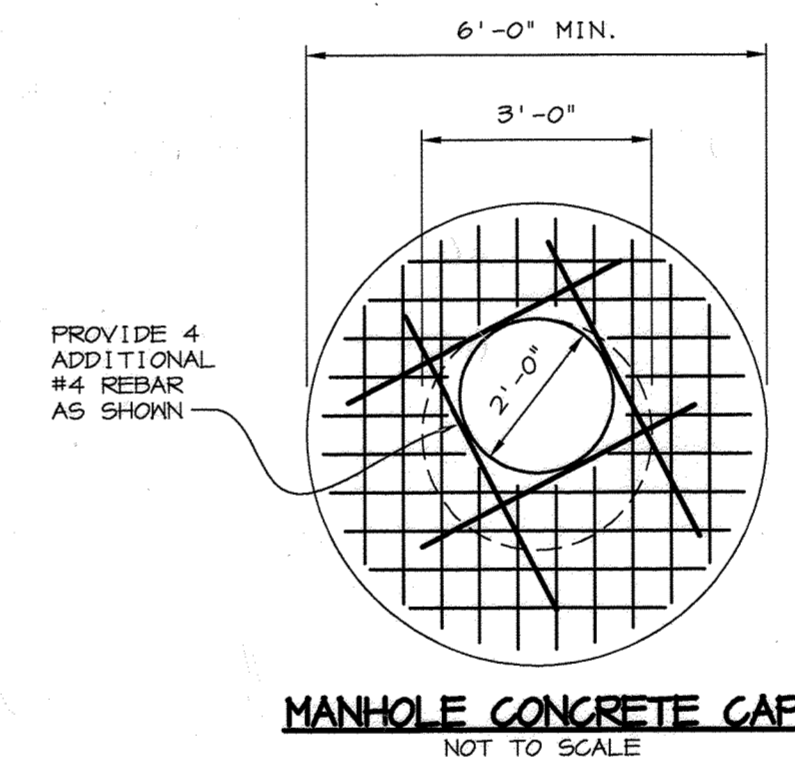
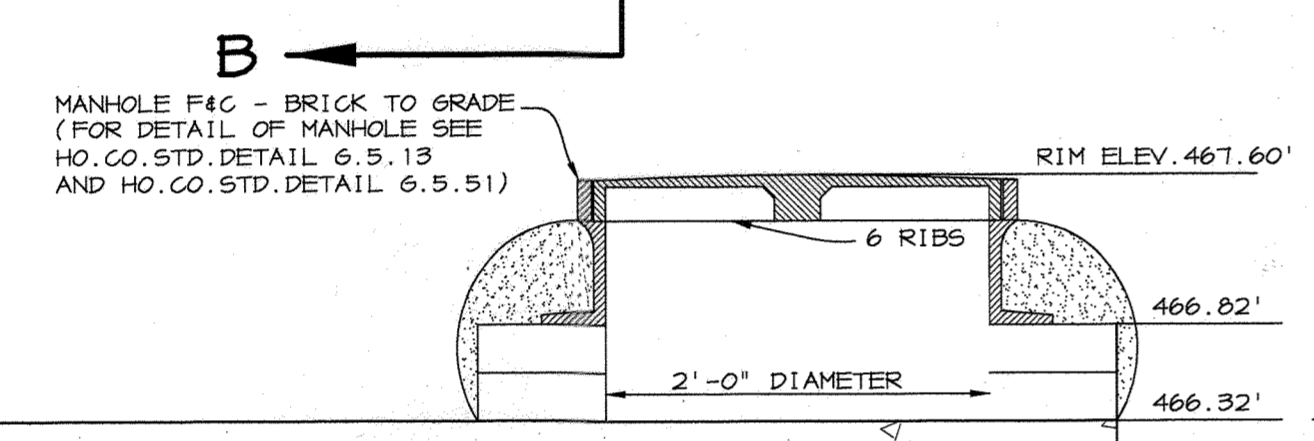
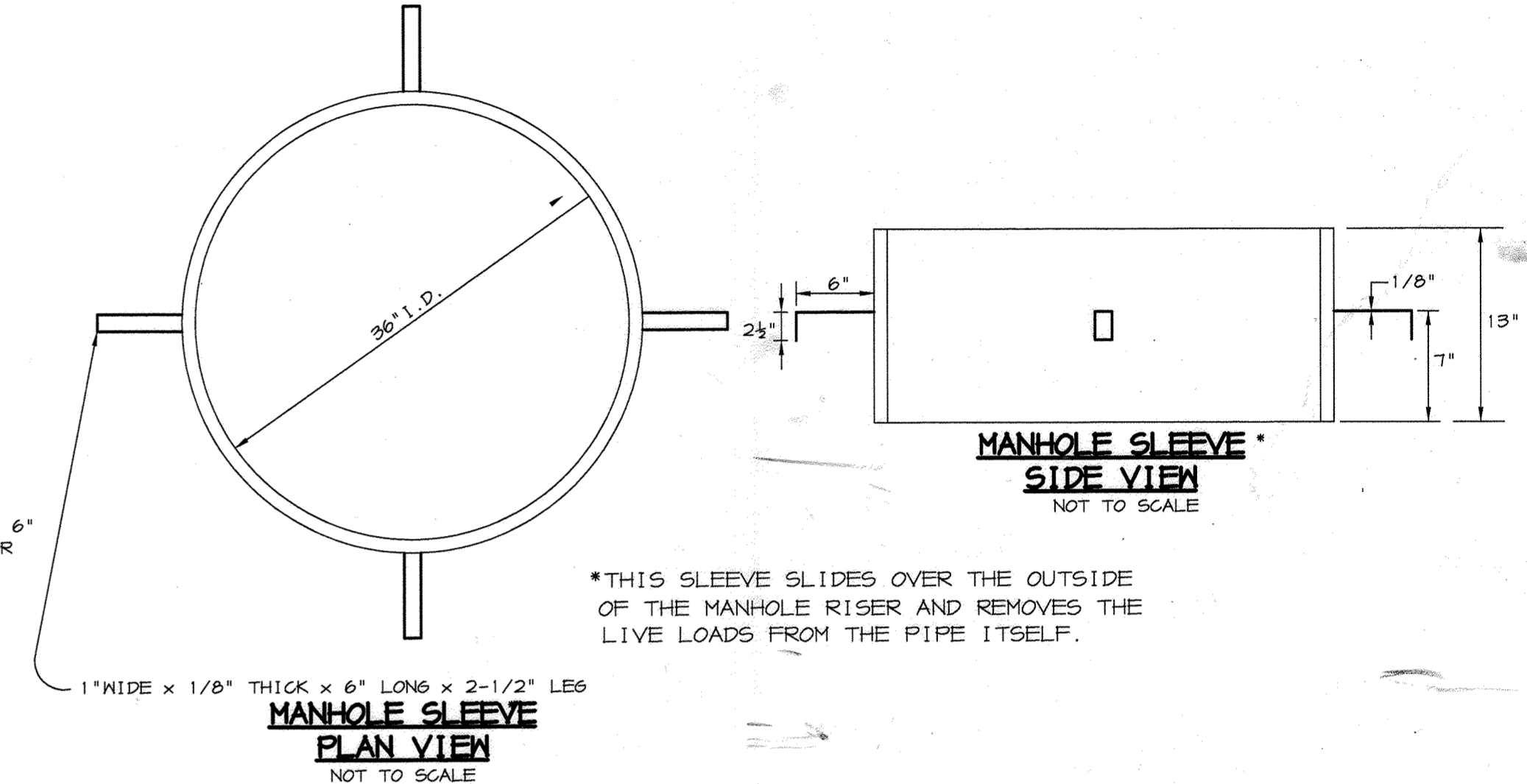
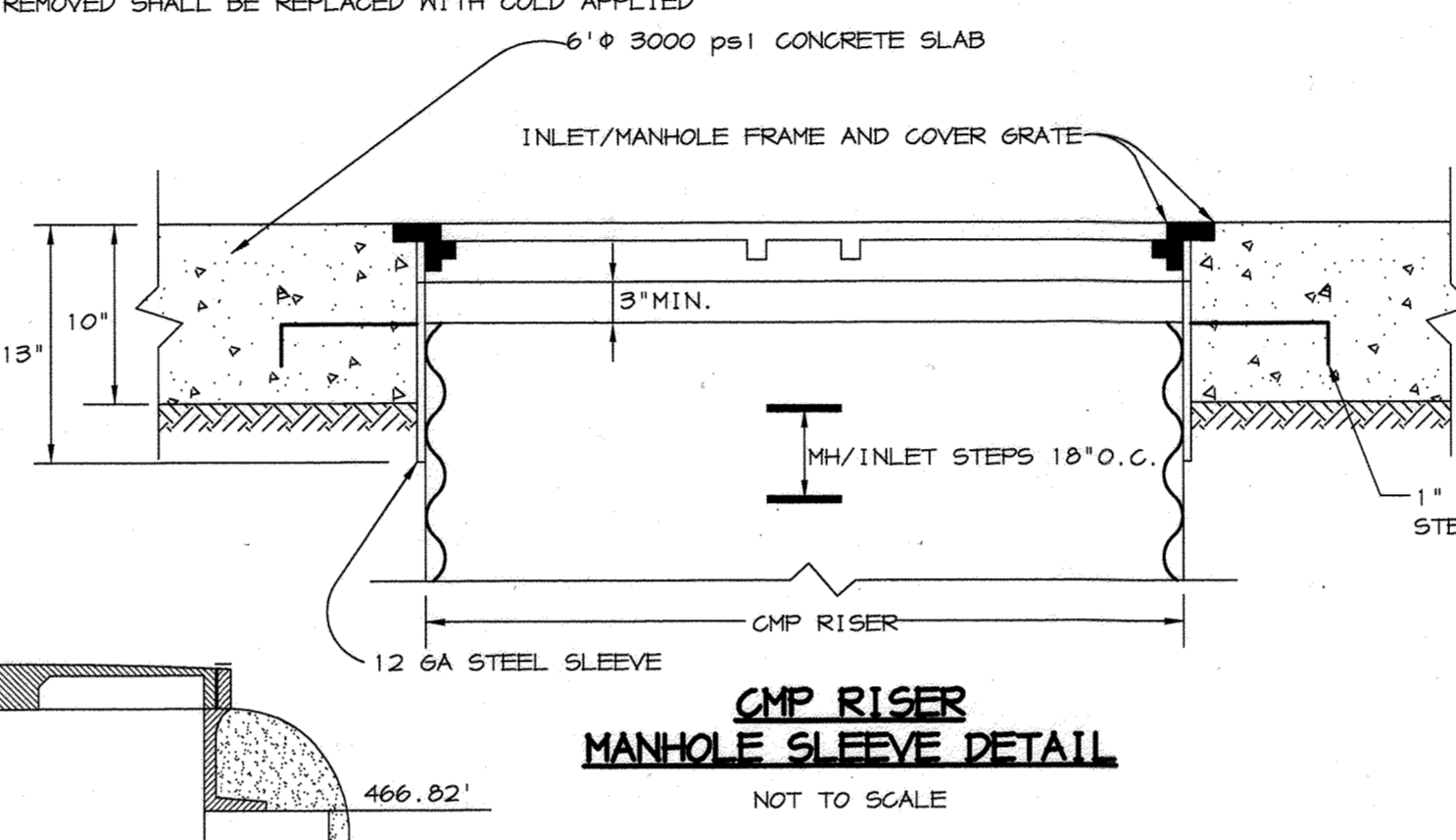
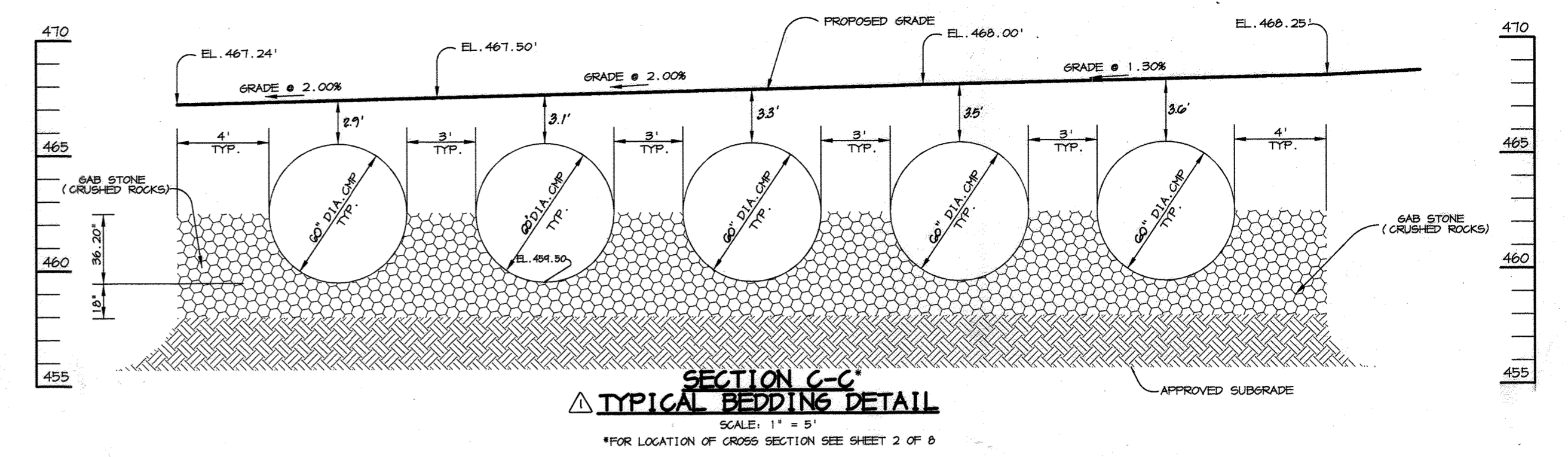
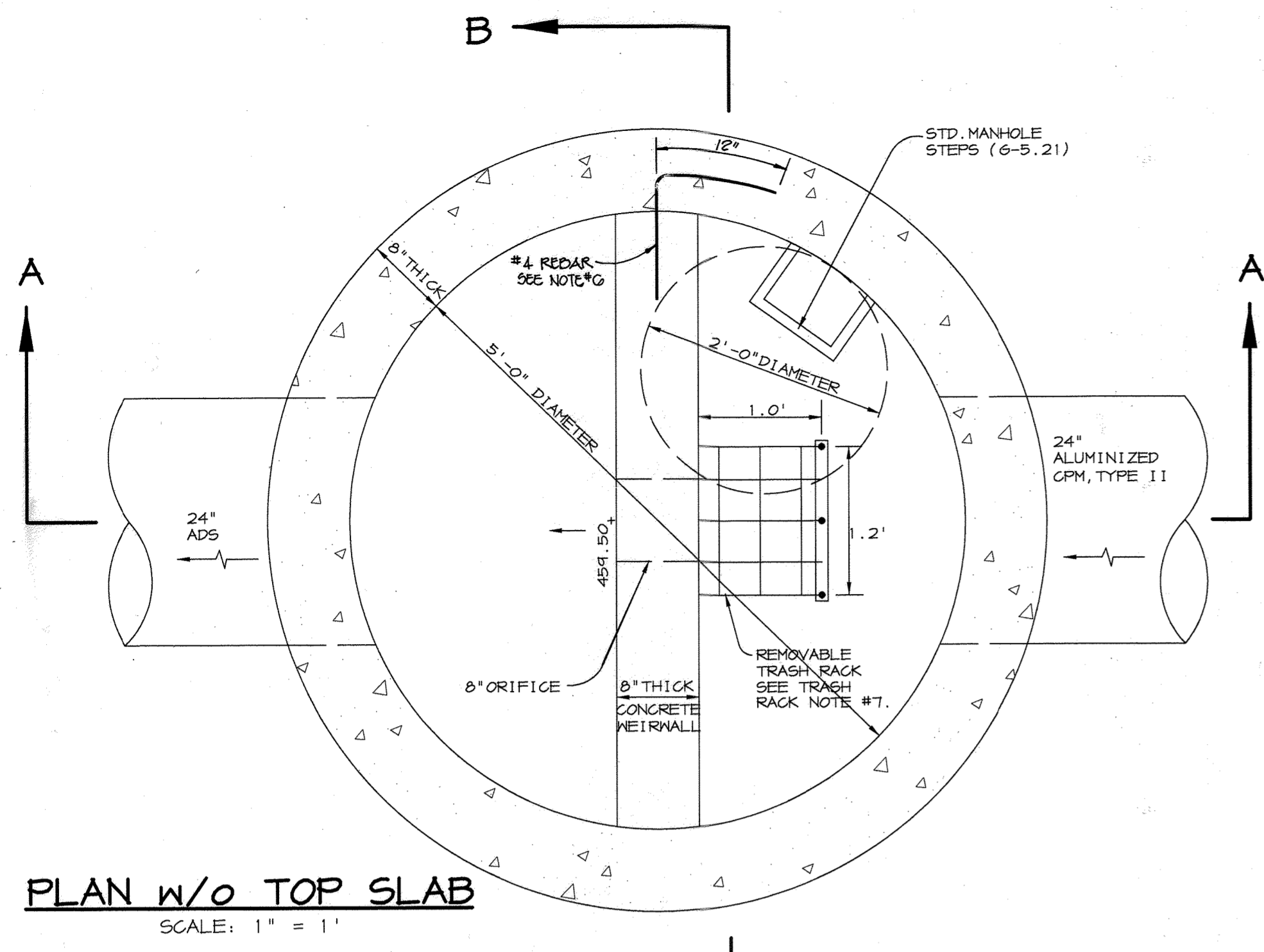
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DRAWING NO. 6 OF 8

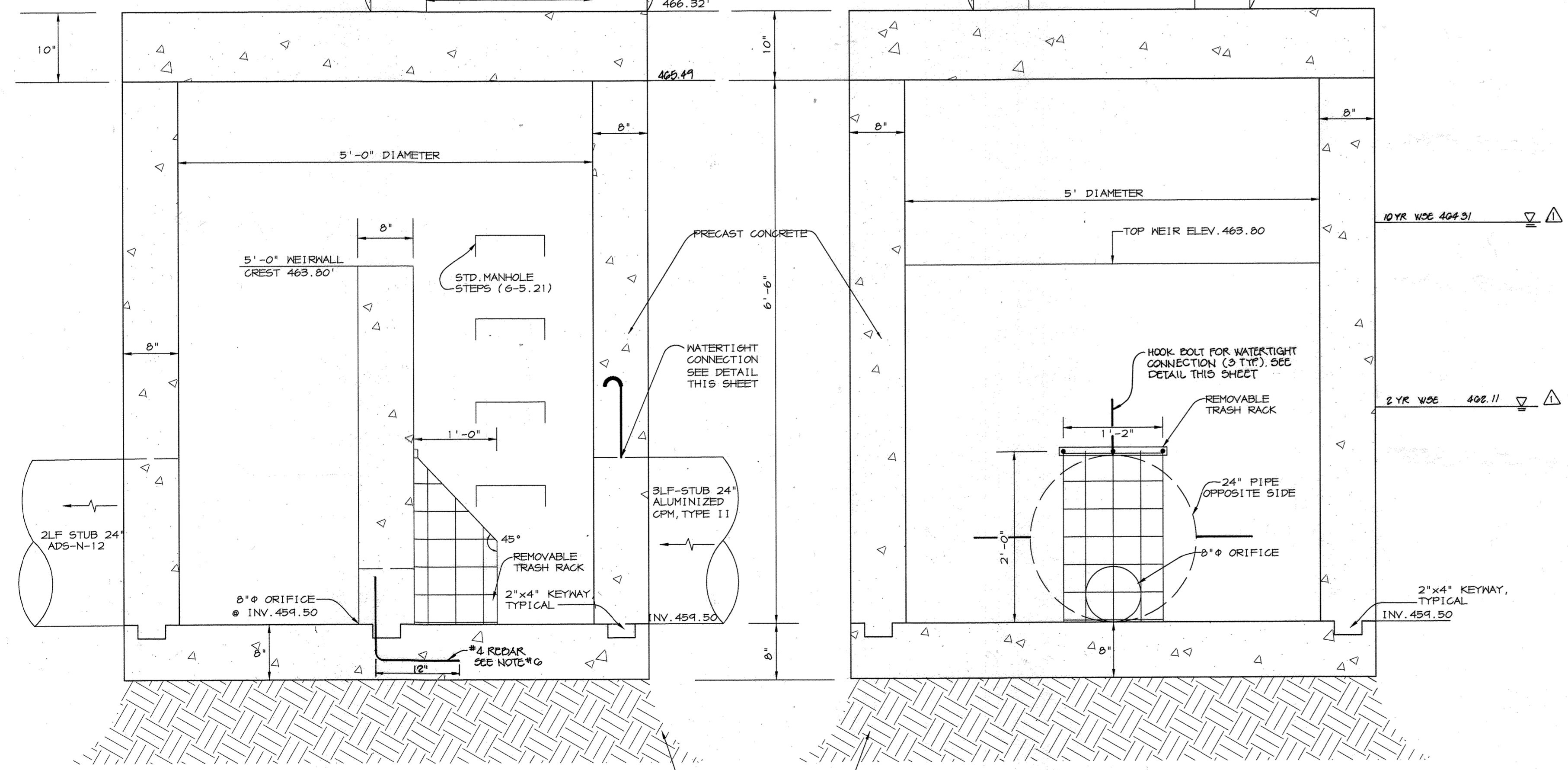
ARTHUR E. MUEGGE #8707

CORRUGATED METAL PIPE BACKFILL AND BEDDING SPECIFICATIONS

- BACKFILL**
 - BACKFILL MATERIAL SHALL BE A WELL GRADED GRANULAR MATERIAL AND SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS FOR FILL UNDER ROADS.
 - HIGHLY PLASTIC SILTS, HIGHLY PLASTIC CLAYS, ORGANIC SILTS, ORGANIC CLAYS, AND PEATS SHALL NOT BE USED AS BACKFILL MATERIALS.
 - BACKFILL SHALL BE PLACED SYMMETRICALLY ON EACH SIDE OF THE STRUCTURE IN 6" TO 8" LOOSE LAYERS TO 1 FOOT ABOVE THE TOP OF THE PIPE. EACH LAYER IS TO BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY. ALL COMPACTION SHALL BE AASHTO T-99-C.
- 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. THE FILL MATERIAL SHALL BE FREE OF ROCKS, FROZEN LUMPS, AND FOREIGN MATTER THAT COULD CAUSE HARD SPOTS IN BACKFILL OR THAT COULD DECOMPOSE AND CREATE VOIDS.
 - THE BED SHALL BE PLACED TO UNIFORM GRADE AND LINE TO ENSURE GOOD VERTICAL ALIGNMENT AND TO AVOID EXCESSIVE STRESSES AT PIPE JOINTS. THE BEDDING SHALL BE FREE OF ROCK FORMATIONS, PROTRUDING STONES, FROZEN LUMPS, ROOTS, AND OTHER FOREIGN MATERIAL. THE BEDDING FOUNDATION MUST BE A STABLE, WELL GRADED GRANULAR MATERIAL. ANY MATERIAL THAT HAS INADEQUATE BEARING CAPABILITY MUST BE REMOVED AND REPLACED WITH A COMPACTED SELECT FILL APPROVED BY THE ENGINEER.
 - BEDDING MATERIALS SHALL BE GAB STONE PER MSHA SPECIFICATIONS OR AN APPROVED EQUAL. SEE BEDDING DETAIL THIS SHEET.
- MATERIALS**
 - PIPE - ALUMINIZED STEEL PIPE, TYPE II. THIS PIPE AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-274 WITH WATERTIGHT COUPLING BANDS OR FLANGES. ANY ALUMINUM COATING DAMAGED OR OTHERWISE REMOVED SHALL BE REPLACED WITH COLD APPLIED BITUMINOUS COATING COMPOUND.



- MANHOLE NOTES**
- CONCRETE TO BE MIX NO. 3
 - MANHOLE RISER TO BE SAME GA. AS MAINLINE PIPE.
 - STEPS TO BE INSTALLED BELOW MANHOLE PER MANUFACTURER SPECIFICATIONS COMPACT TOP 1" OF SUBGRADE TO 100% OF MAXIMUM DRY DENSITY. (PER AASHTO T-99-C) UNDER
 - CONCRETE CAP SHALL BE REINFORCED WITH #4 REBAR @ 6" C/C.
 - SEE GEOMETRY PLAN FOR MANHOLE LOCATIONS AND RIM ELEVATIONS.

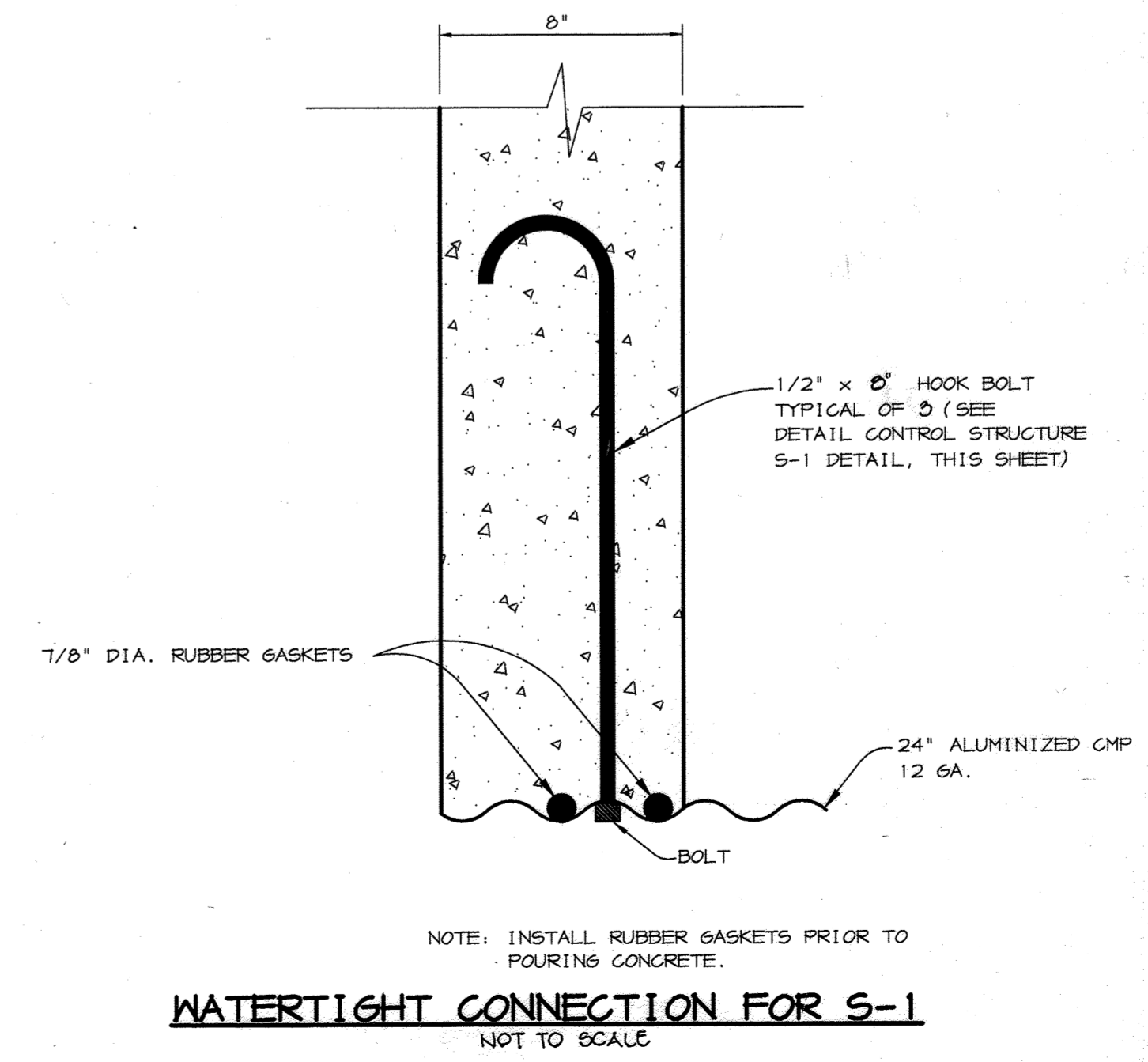


CONTROL STRUCTURE 1 STRUCTURE S-1 NOTES

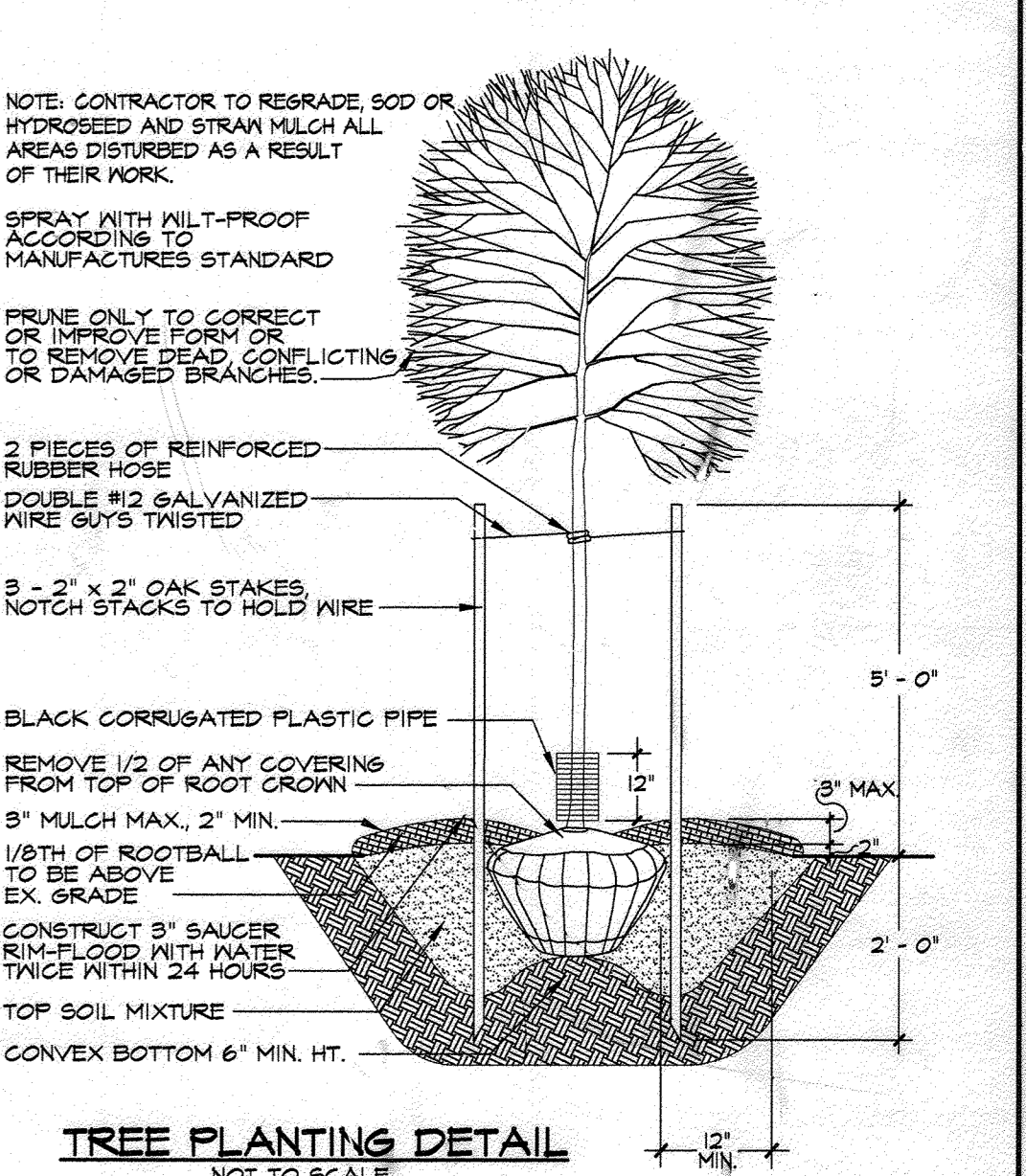
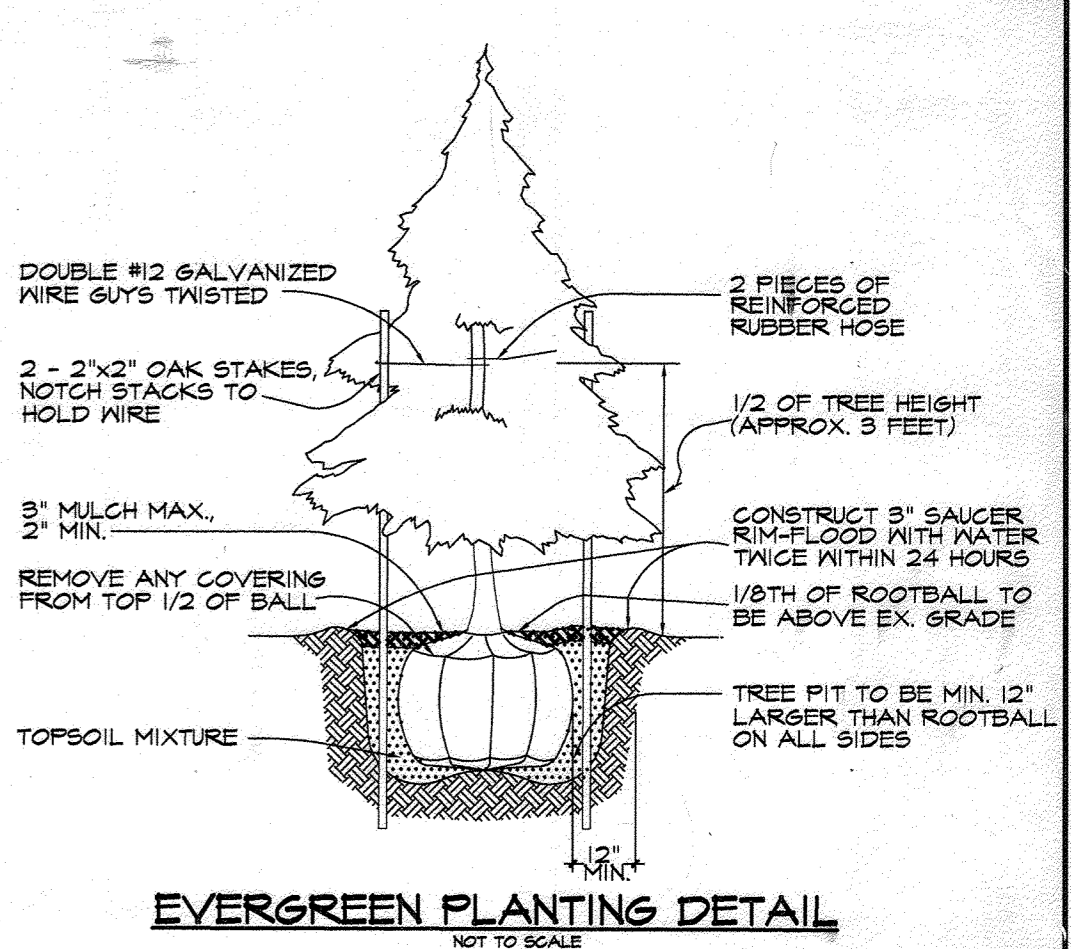
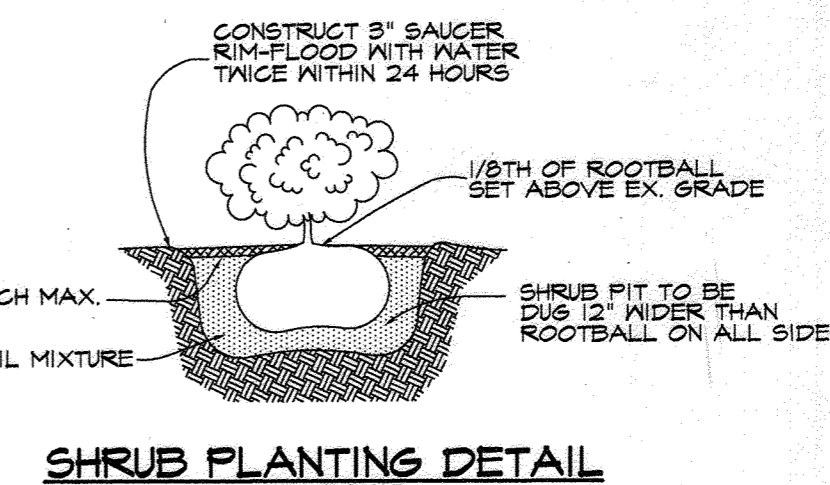
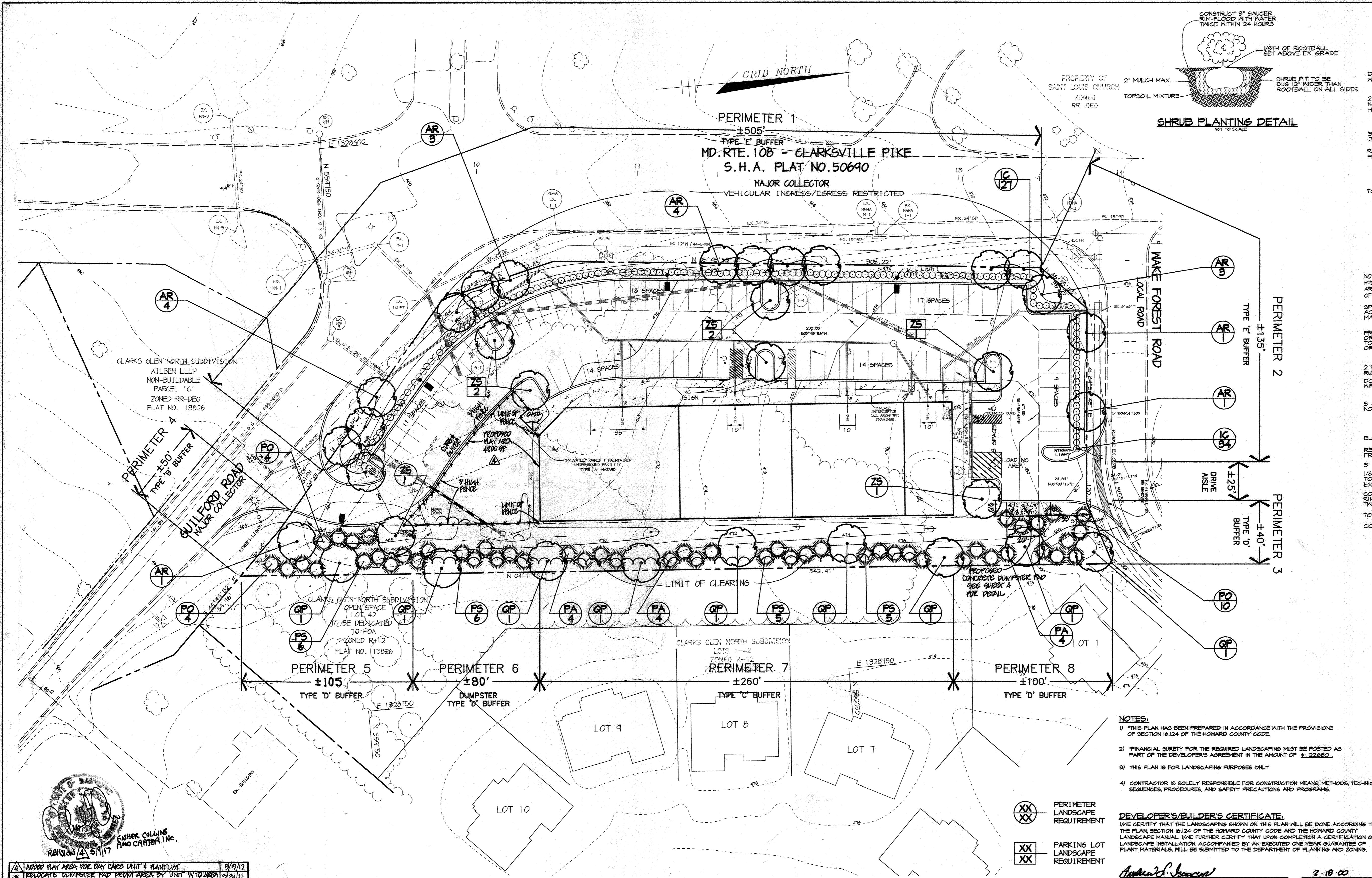
- STRUCTURE S-1 TO BE DESIGNED TO MEET ROADWAY LOAD STANDARDS. STRUCTURE TO BE DESIGNED PER HO. CO. STD. DETAIL 6.5.13.
- ALL CONSTRUCTION SHALL MEET THE HOWARD CO. STANDARDS AND SPECIFICATIONS.
- CONCRETE STRENGTH TO BE 4,000 PSI MIN. AT 28 DAYS.
- REINFORCEMENT SHALL BE CLEAN AND FREE OF RUST AND MEET ASTM-615 GRADE 60.
- ALL REINFORCEMENT SHALL HAVE 2" MINIMUM COVER.
- REINFORCING FOR WEIR SHALL BE #4 REBAR @ 10" C/C, 0/N. #4 REBAR SHALL EXTEND A MINIMUM OF 12 INCHES INTO WALLS AND FLOOR OF MANHOLE. ALL OTHER REINFORCING AS PER STANDARD DETAIL 6.5.13.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
- THE STRUCTURE FOUNDATION SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
- ALL DEBRIS IS TO BE KEPT OUT OF THE FACILITY DURING AND AFTER CONSTRUCTION.

TRASH RACK NOTES:

- STEEL TO CONFORM TO ASTM A-36. BARS TO BE SMOOTH.
- #5 REBARS @ 4" O/C HORIZONTALLY AND 4" O/C VERTICALLY.
- ALL REBAR TO BE WELDED AT ALL INTERSECTIONS.
- ALL BENDS TO BE 2" RADIUS.
- WELD BARS TO 4" x 1/8" STEEL PLATE AND BOLT STEEL PLATE TO STRUCTURE WITH 1/2" ANCHOR BOLTS.
- GALVANIZE TRASH RACK AFTER FABRICATION.
- PAINTED WITH 2 COATS OF BATTLESHIP GRAY AFTER FABRICATION.



AS BUILT CERTIFICATE	
DATE	
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.	DATE: 3/13/00
<i>Donna M. ...</i> CHIEF, HEALTH DEPARTMENT	
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	DATE: 3/24/00
<i>...</i> DIRECTOR	
APPROVED: CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE: 3/16/00
<i>...</i> CHIEF, DIVISION OF LAND DEVELOPMENT	DATE: 3/23/00
0-12-00 REV. WISE ON 5-11 REV. SECTION C-C	
DATE NO. REVISION	
OWNER / DEVELOPER	WILBEN LLP c/o ANDREW L. ISAACSON 5450 WHITLEY PARK TERRACE SUITE 410 BETHESDA, MARYLAND 20814
PROJECT	CLARKS GLEN NORTH PARCEL B-1
AREA	PARCEL 205 & P/O 204 TAX MAP 34 ZONED B-2 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
TITLE	STORMWATER MANAGEMENT DETAILS & NOTES
RIEMER MUEGGE & ASSOCIATES INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, MD 21045 tel 410.997.8900 fax 410.997.9282	
DATE	DESIGNED BY: C.J.R.
STATE OF MARYLAND PROFESSIONAL ENGINEER	DRAWN BY: K.E.V.
	PROJECT NO: 99032 SDPT.DWG
<i>Arthur E. Muegge</i> ARTHUR E. MUEGGE #8707	DATE: FEBRUARY 18, 2000
	SCALE: AS SHOWN
	DRAWING NO. 7 OF 8



NOTE: CONTRACTOR TO RESHADE, SOO OR HYDROSEED AND STRAW MULCH ALL AREAS DISTURBED AS A RESULT OF THEIR WORK.
 SPRAY WITH WILT-PROOF ACCORDING TO MANUFACTURER'S STANDARD
 PRUNE ONLY TO CORRECT OR IMPROVE FORM OR TO REMOVE DEAD, CONFLICTING OR DAMAGED BRANCHES.

- NOTES:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$22,880.
 - THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
 - CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.

DEVELOPER'S/BUILDER'S CERTIFICATE:
 I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Andrew J. Isaacson
 NAME DATE 2-18-00

NO.	REVISION	DATE
1	ADDED PLAY AREA FOR DAY CARE UNIT & MAIN UNIT	2/2/07
2	RELOCATED DUMPSTER PAD FROM AREA BY UNIT 'A' TO AREA ADJACENT UNIT 'D'	2/2/07

PERIMETER	ADJACENT TO ROADWAYS				ADJACENT TO PERIMETER PROPERTIES			
	1	2	3	4	5	6	7	8
LANDSCAPE TYPE	E	E	D	B	D	D	C	D
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	±505'	±135'	±40'	±50'	±105'	±80'	±260'	±100'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	No	No	No	No	No	No	No	No
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	No	No	No	No	No	No	No	No
NUMBER OF PLANTS REQUIRED								
SHADE TREES	1/40' = 13	1/40' = 3	1/50' = 1	1/50' = 1	1/50' = 2	1/50' = 2	1/40' = 7	1/50' = 2
EVERGREEN TREES	1/10' = 1	1/10' = 4	1/10' = 1	1/10' = 1	1/10' = 11	1/10' = 8	1/20' = 13	1/10' = 10
SHRUBS	1/4' = 127	1/4' = 34	-	-	-	-	-	-
NUMBER OF PLANTS PROVIDED								
SHADE TREES	13	3	1	1	2	2	5	2
EVERGREEN TREES	-	-	4	1	11	8	13	10
SMALL FLOWERING TREES	-	-	-	-	-	-	-	-
SHRUBS	127	34	-	-	-	14	-	-

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING	
PARKING LOT	1
NUMBER OF PARKING SPACES	57
NUMBER OF SHADE TREES REQUIRED (1/20 SPACES)	5
NUMBER OF TREES PROVIDED	5
SHADE TREES	5
OTHER TREES (2:1 SUBSTITUTION)	5
NUMBER OF ISLANDS REQUIRED	5
NUMBER OF ISLANDS PROVIDED	5
* 200 SF PLANTING AREA / ISLAND	
SUBSTITUTION NOTES:	
PERIMETER 7: (4) EVERGREEN TREES WERE SUBSTITUTED FOR 2 SHADE TREES	

PLANT LIST						
SYMBOL	QTY.	SCIENTIFIC / COMMON NAME	SIZE	ROOT	REMARKS	
AR	17	ACER RUBRUM / OCTOBER GLORY / OCTOBER GLORY RED MAPLE	2 1/2" - 3" CAL	B & B	CENTRAL LEADER	
GP	4	QUERCUS PALUSTRIS / PIN OAK	2 1/2" - 3" CAL	B & B	CENTRAL LEADER	
ZS	7	ZELKOVA SERRATA / GREEN VASE ZELKOVA	2 1/2" - 3" CAL	B & B	CENTRAL LEADER	
PS	22	PINUS STROBUS / WHITE PINE	6'-8" HT	B & B	SHEARED	
PA	12	FICEA ABIES / NORWAY SPRUCE	6'-8" HT	B & B	STRAIGHT LEADER	
PO	18	FICEA OMORICA / SERBIAN SPRUCE	6'-8" HT	B & B	STRAIGHT LEADER	
IC	161	ILEX CRENATA 'COMPACTA' / COMPACT JAPANESE HOLLY	24" - 30" HT	CONT	NONE	

PLANTING LEGEND	
PROP. SHADE TREE	
PROP. ORNAMENTAL TREE	
PROP. EVERGREEN TREE	
PROP. EVERGREEN SHRUB	
PROP. DECIDUOUS SHRUB	
EXISTING SHADE TREE	
EXISTING PLANTS	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
David L. Masterson 3/13/00
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Paul R. Smith 3/24/00
 DIRECTOR DATE

Chad Dammann 3/6/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Hammett 3/22/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO. REVISION

OWNER / DEVELOPER
 NILBEN LLLP
 c/o ANDREW L. ISAACSON
 5450 WHITLEY PARK TERRACE SUITE 410
 BETHESDA, MARYLAND 20814

PROJECT
CLARKS GLEN NORTH
 PARCEL B-1

AREA
 PARCEL 205 & P/O 204
 TAX MAP 34 ZONED B-2
 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE
LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES INC
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, MD 21045
 tel 410.997.8900 fax 410.997.9282

DATE 2-18-00

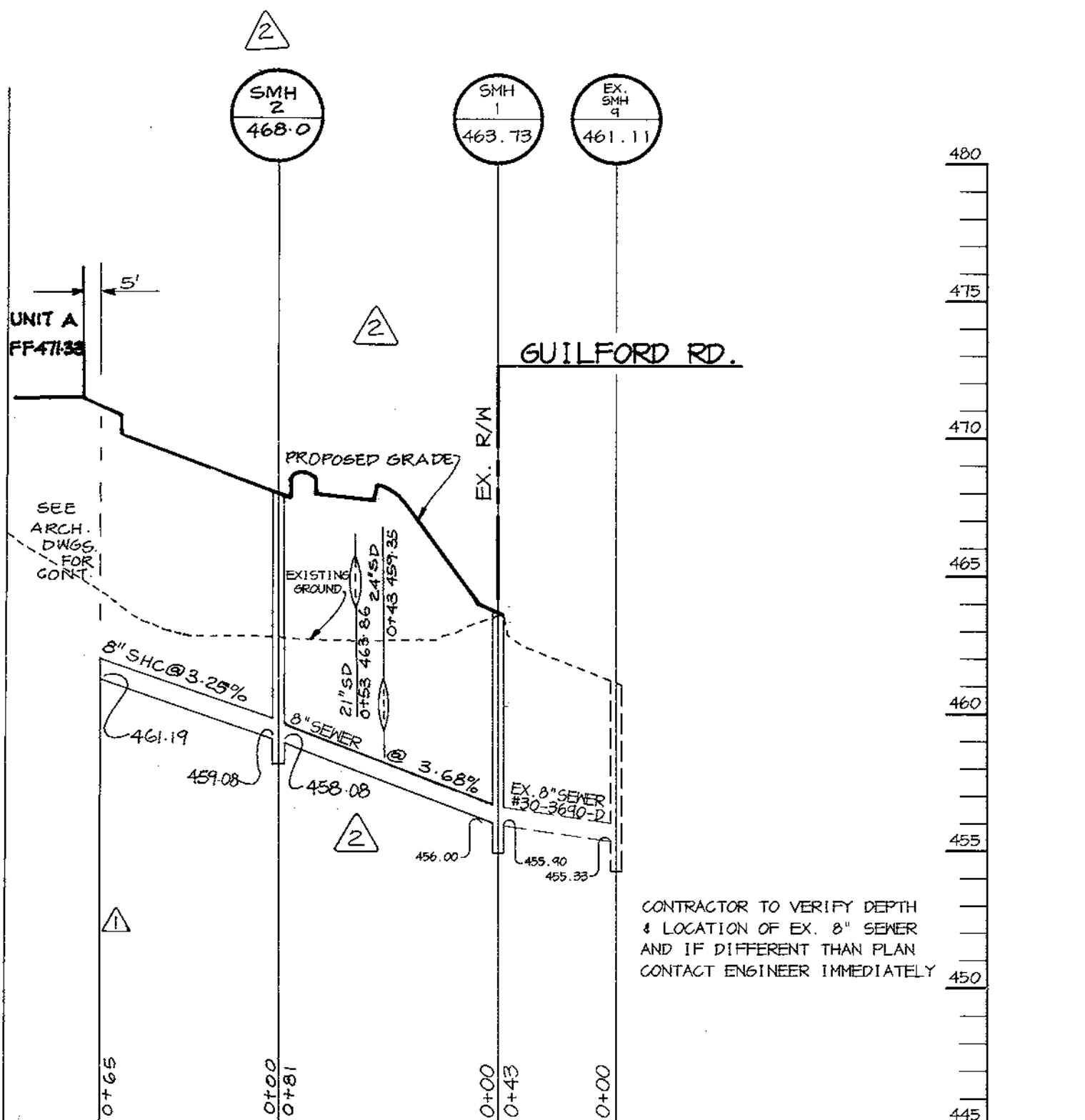
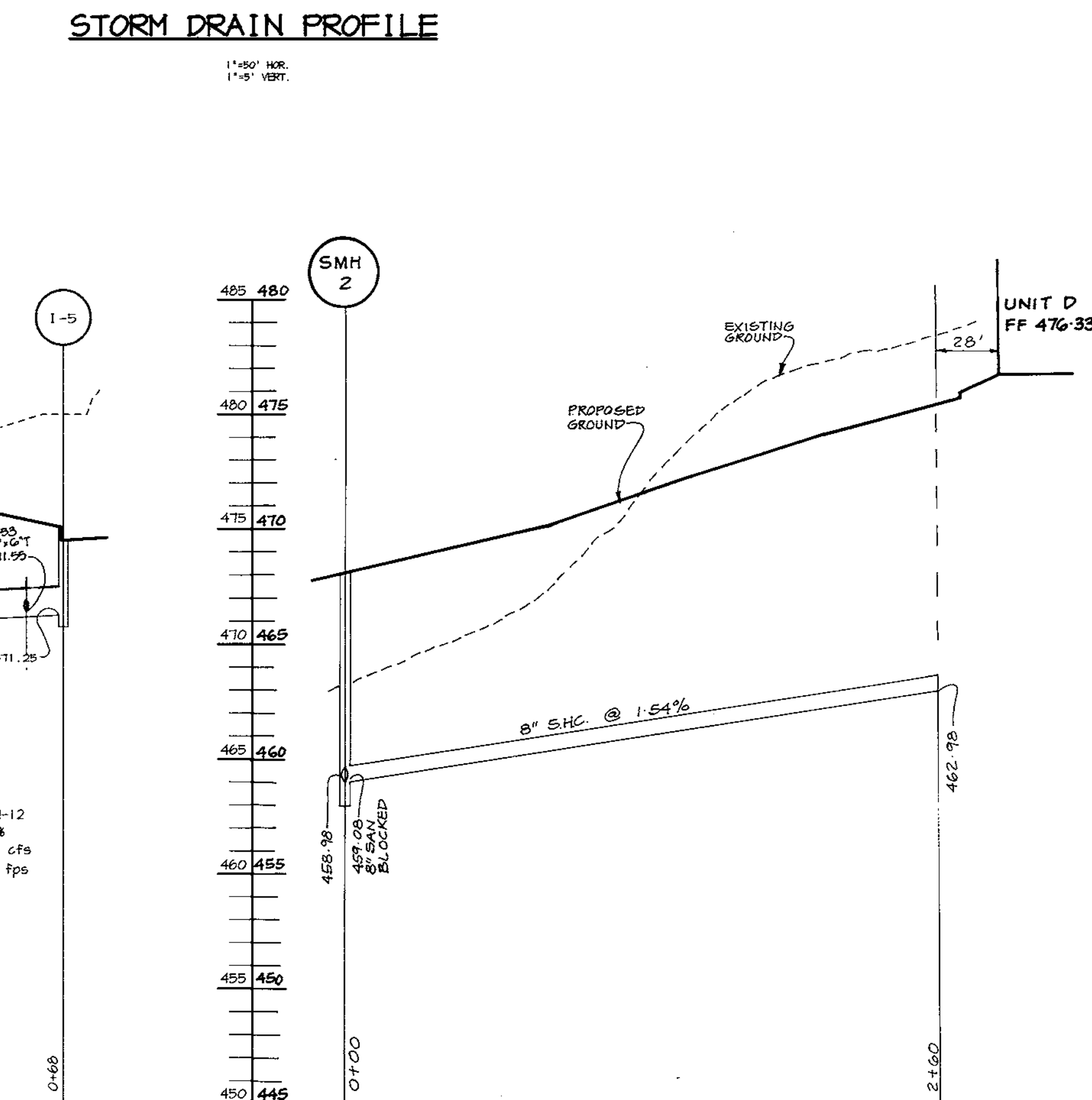
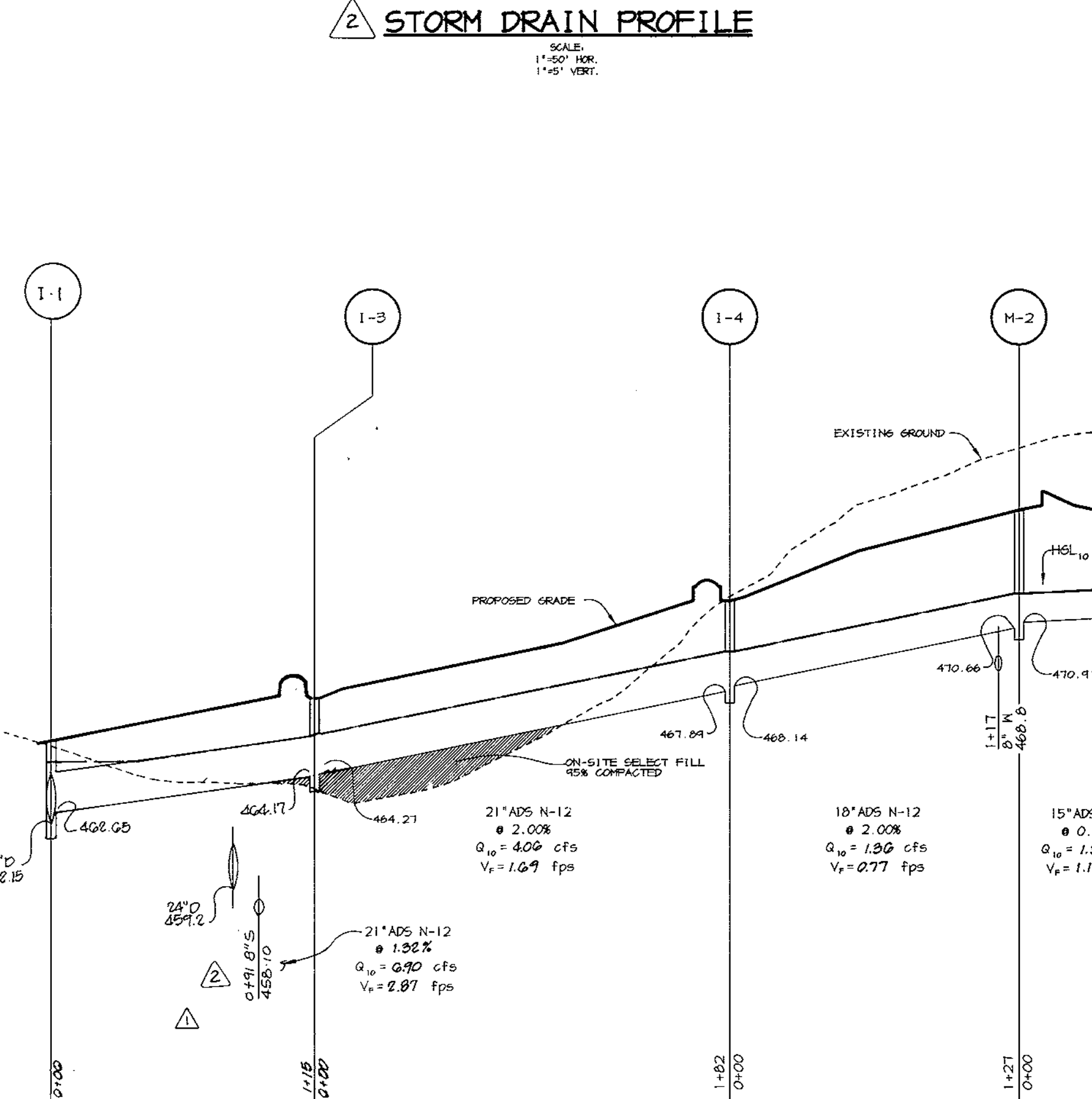
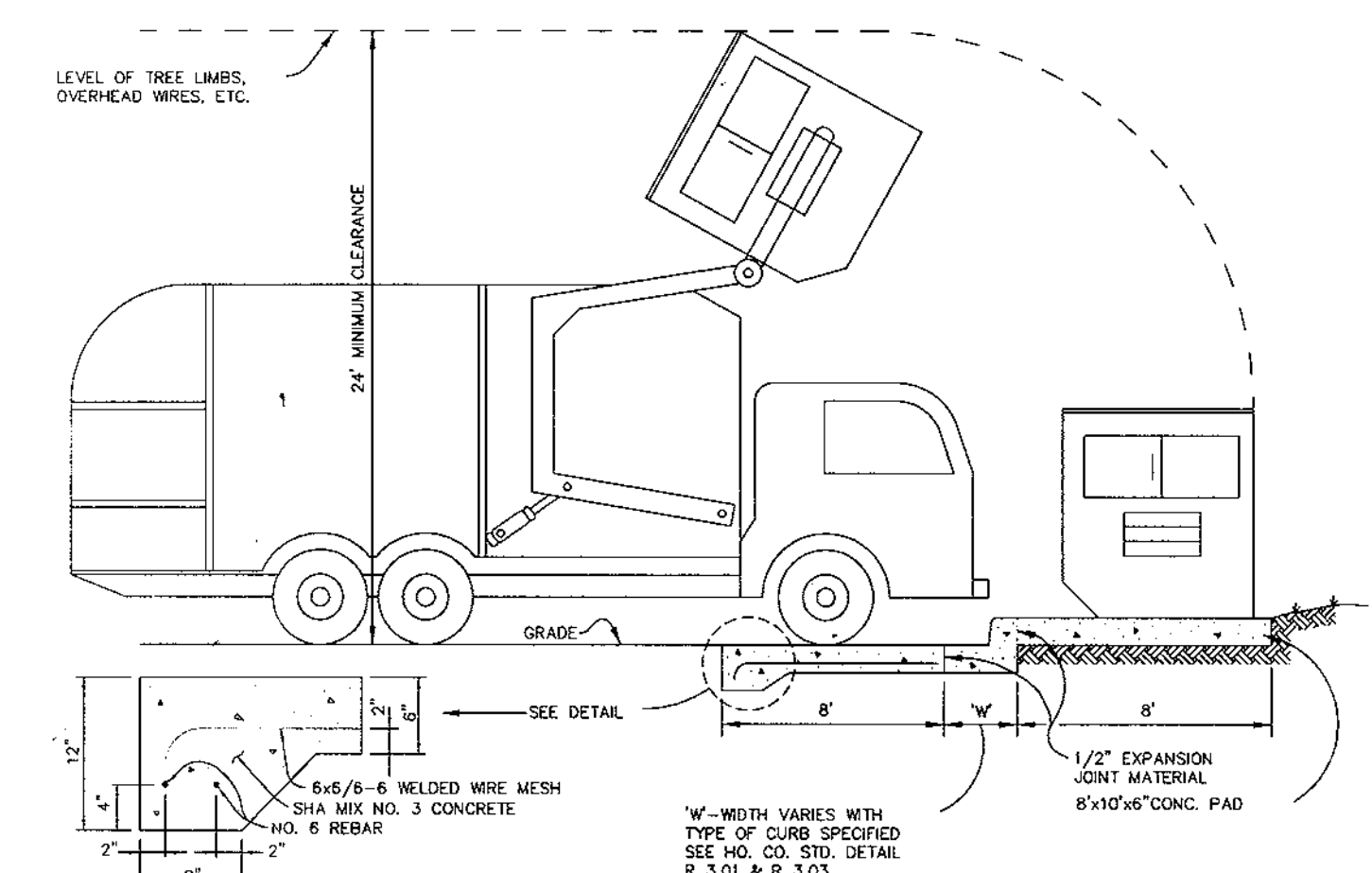
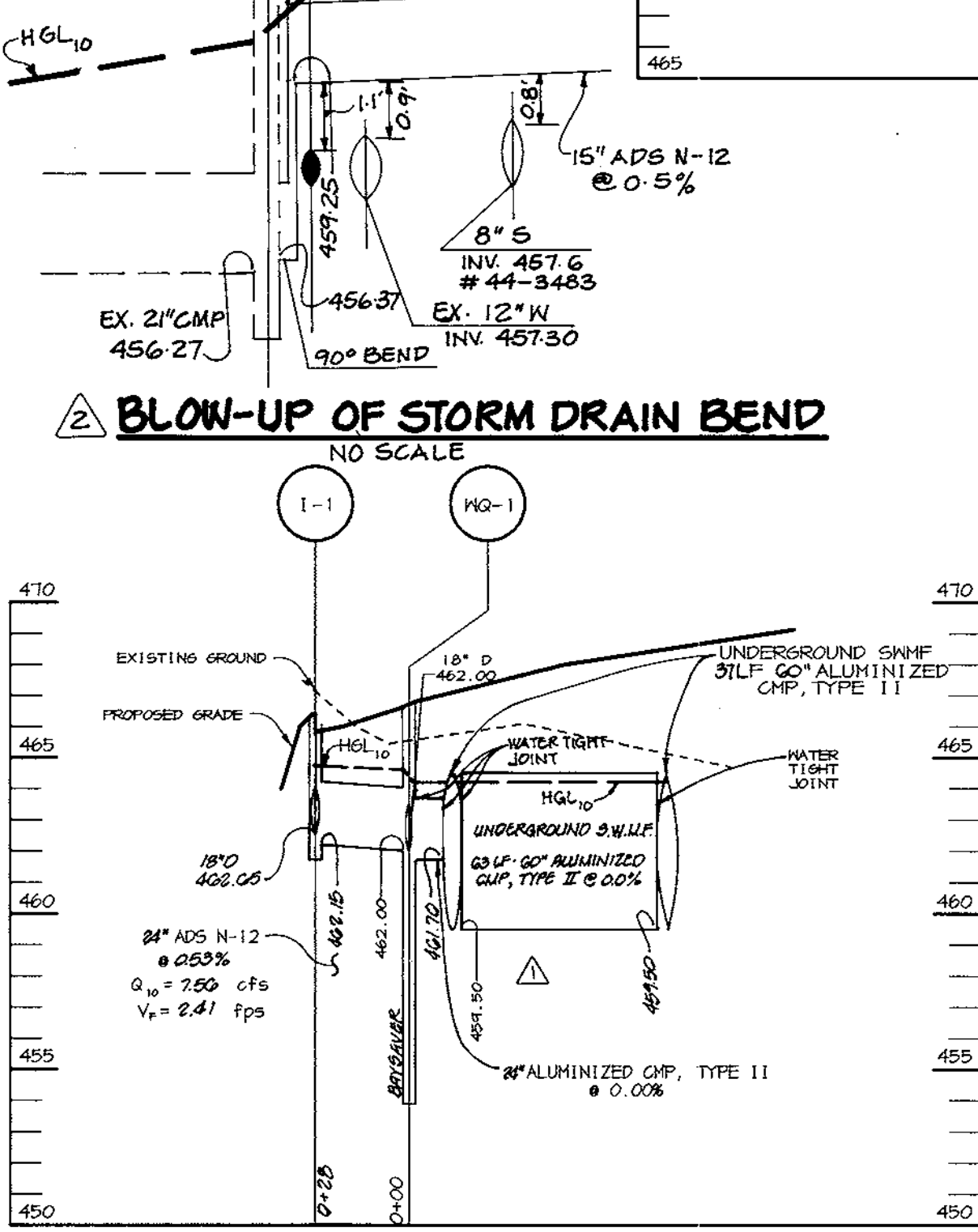
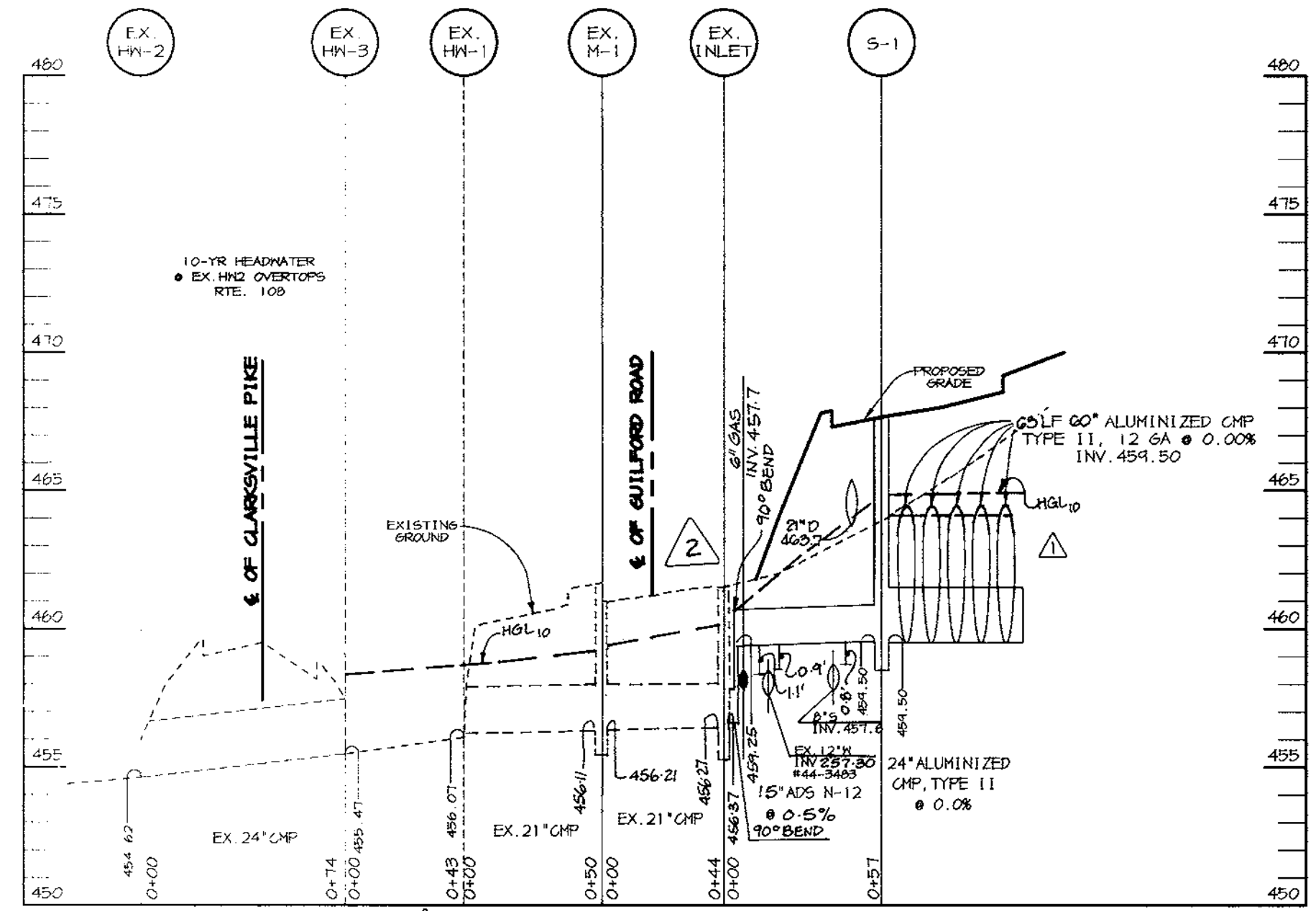
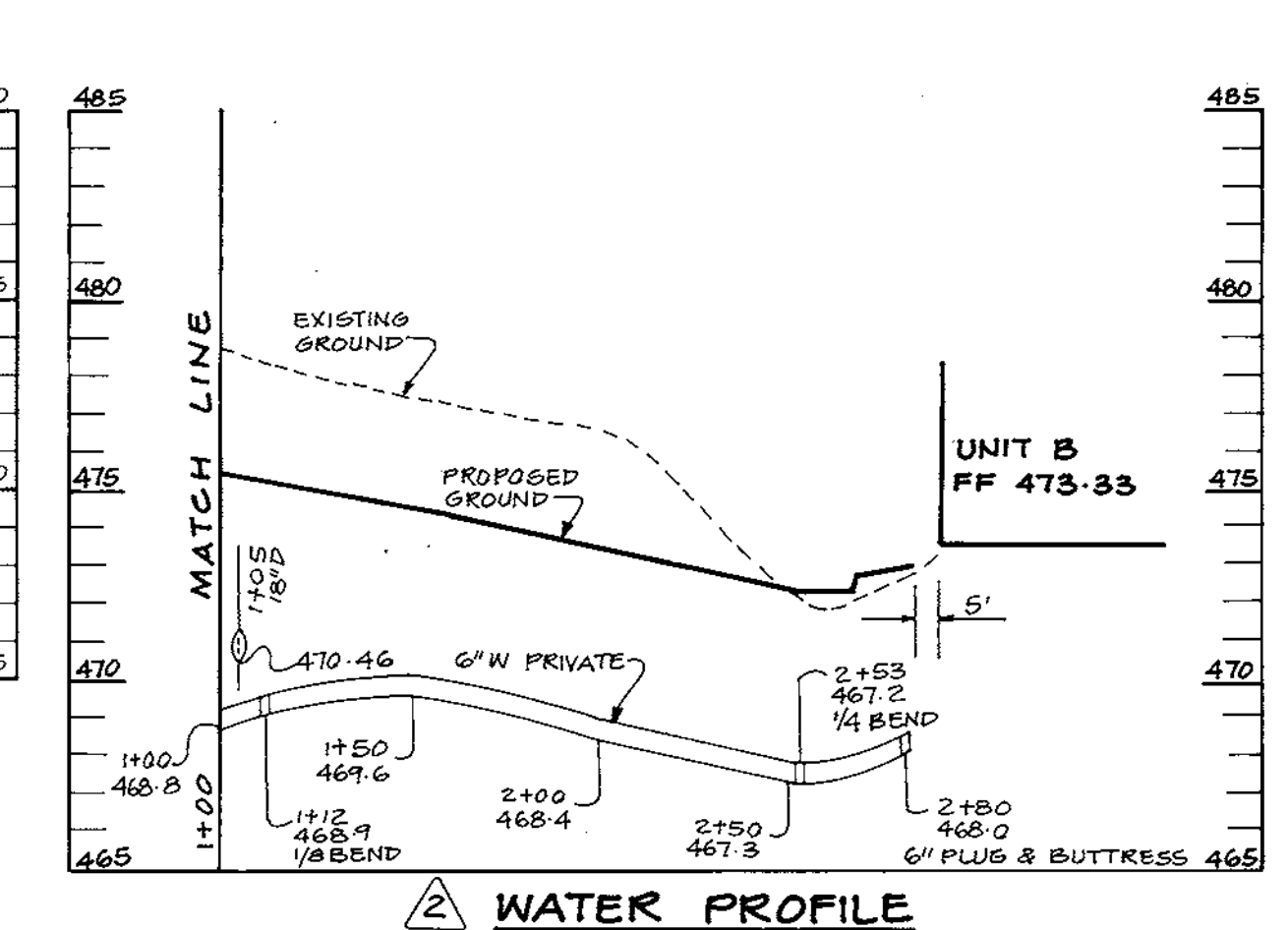
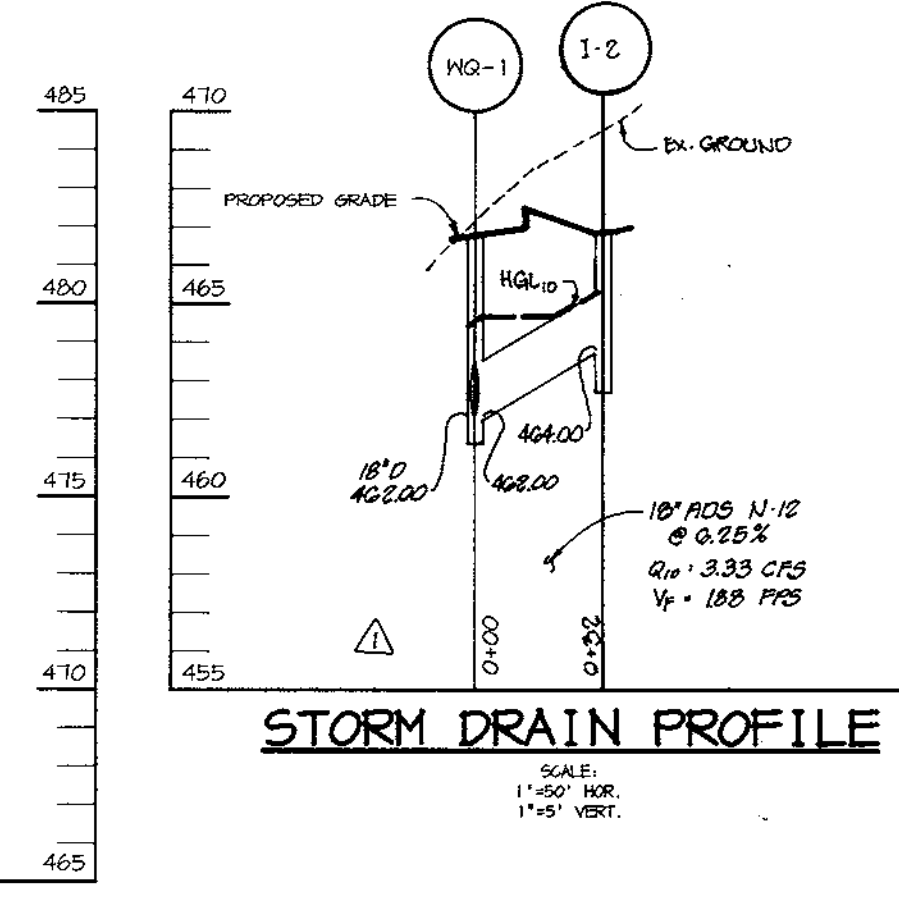
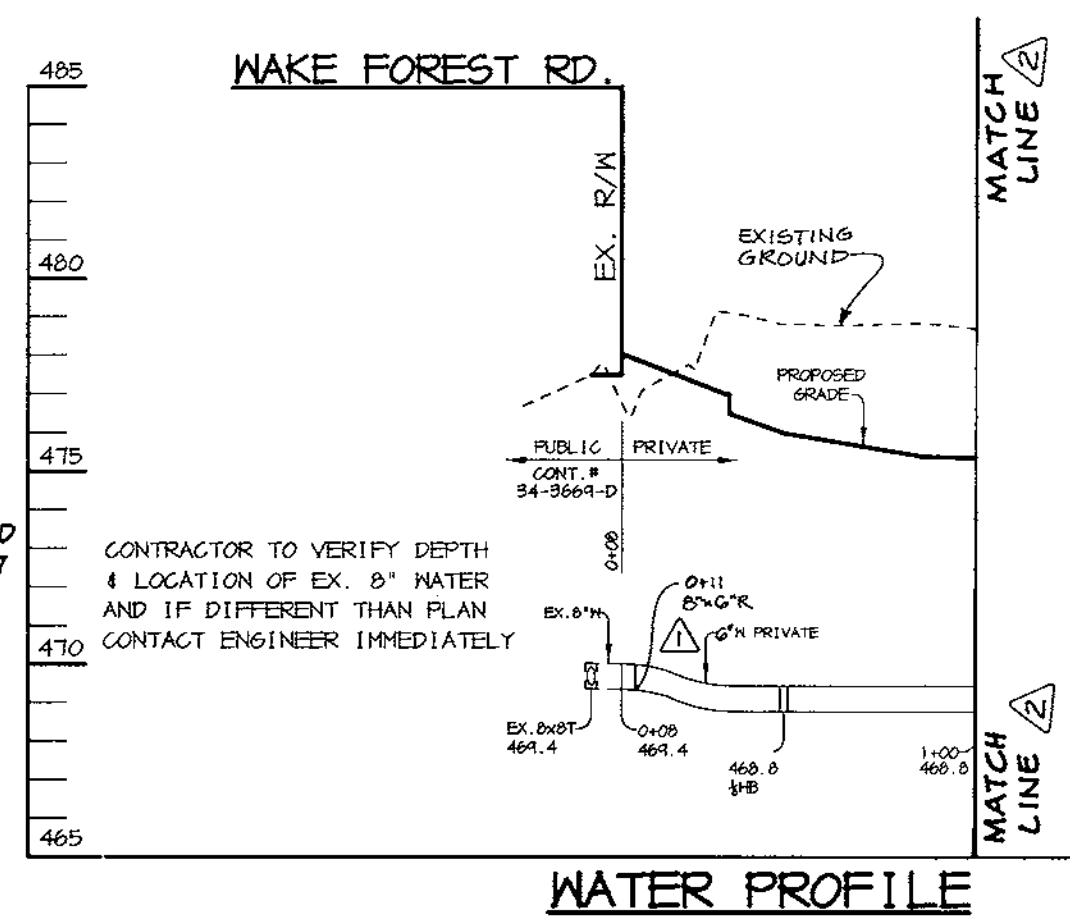
DESIGNED BY: D.T.D.
 DRAWN BY: A.J.L.
 PROJECT NO: 99032
 DATE: FEBRUARY 18, 2000
 SCALE: 1" = 30'
 DRAWING NO. 8 OF 8

DAVID T. DOWS #830

STRUCTURE SCHEDULE

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	INSIDE DIMENSION	REMARKS
I-1	A-5	*N 55° 0' 0" E 1,328,593.35	462.05	462.15	465.8	3'-5"x2'-7"	HOCO STD. DETAIL SD 4.01
I-2	△K	SEE PLAN	-	464.00	466.8	3'-0"x3'-0"	HOCO STD. DETAIL SD 4.12
I-3	A-5	*N 55° 0' 0" E 1,328,514.15	464.27	464.17	467.6	2'-6"x5'-0"	HOCO STD. DETAIL SD 4.01
I-4	A-5	*N 56° 0' 0" E 1,328,507.85	468.14	467.89	471.7	2'-6"x5'-0"	HOCO STD. DETAIL SD 4.01
I-5	A-5	*N 56° 13' 42" E 1,328,636.42	-	471.25	475.08	2'-6"x5'-0"	HOCO STD. DETAIL SD 4.01
M-1	4'-4"	*N 56° 14' 32" E 1,328,568.51	470.91	470.66	475.8	-	HOCO STD. DETAIL SD 5.12
NG-1	BAYSAYER	SEE PLAN	-	-	466.8	-	SEE DETAIL SHEET 6
S-1	CONTROL STRUCTURE	*N 55° 0' 0" E 1,328,549.82	-	-	467.5	-	SEE DETAIL SHEET 7

NOTES: * LOCATION OF "S" AND MANHOLES IS AT CENTER OF TOP COVER; FOR "A" INLETS LOCATION IS GIVEN FOR CENTER OF THROAT OPENING AT FACE OF CURB. TOP ELEVATION IS TOP OF CURB/GRATE/RIM.



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

Steve M... 3/13/00
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

John R... 3/24/00
 DIRECTOR DATE

Chris D... 3/10/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Linda H... 3/24/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

8-20-01 △ REV. WATER, SEWER & STORM DRAIN PROFILES.
 6-18-00 △ REV. PROFILES & SCHEDULE

DATE NO. REVISION

OWNER / DEVELOPER
 WILBEN LLLP
 c/o ANDREW L. ISAACSON
 5450 WHITLEY PARK TERRACE SUITE 410
 BETHESDA, MARYLAND 20814

PROJECT
 CLARKS GLEN NORTH
 PARCEL B-1

AREA
 PARCEL 205 & P/O 204
 TAX MAP 34 ZONED B-2
 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE
 PROFILES & DETAILS SHEET

RIEMER MUEGGE & ASSOCIATES INC
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, MD 21046
 tel 410.997.8800 fax 410.997.9282

DATE
 DESIGNED BY: C.J.R.
 DRAWN BY: D.R.D.
 PROJECT NO: 99032
 SDP4.DWG
 DATE: FEBRUARY 18, 2000
 SCALE: AS SHOWN
 DRAWING NO. 4 OF 8

ARTHUR E. MUEGGE 18707