ENGINEER'S CERTIFICATE

[illegible] THIS PLAN FOR EROSION AND SEDIMENT CONTROL [illegible] AL AND WORKABLE PLAN BASED ON MY PERSONAL [illegible] CONDITIONS AND THAT IT WAS PREPARED IN [illegible] EQUIREMENTS OF THE HOWARD SOIL CONSERVA-

Charles J. Crovo Sr. 8/21/85

CHARLES J. CROVO, SR. REG. # 13204 DATE

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLANS FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY."

Richard Azrael 10/29/85

CHATEAU WOODLAND INC. DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. Helm 2/7/86

U.S. SOIL CONSERVATION SERVICE DATE

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

Stephen L. Hahn 2/7/86

CONSERVATION DISTRICT DATE

GENERAL NOTES

1) ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2) ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HRS. IN ADVANCE OF ANY CONSTRUCTION.
3) ANY DAMAGE TO PUBLIC RIGHTS-OF-WAYS OR PAVING WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
4) CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION AND SURVEY DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS; TELEPHONE: 792-7272.
5) ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH THE MUTCD, 1979 EDITION.

PLAN	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
NOTE BOOK	
NO.	
BY	
DATE	

APPROVED
DEPARTMENT OF PUBLIC WORKS

2-11-86

CHIEF, [illegible] ENGINEERING DATE 2-10-86

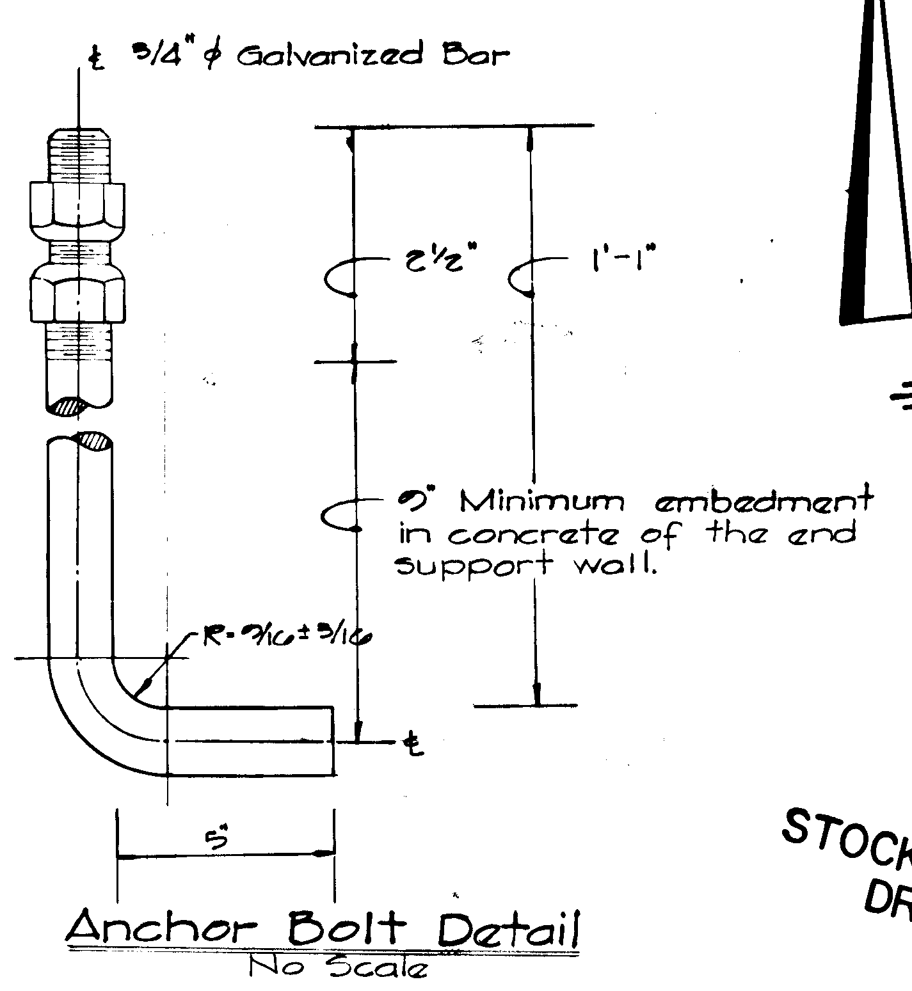
APPROVED
OFFICE OF PLANNING AND ZONING

John W. Buchanan 2-7-86

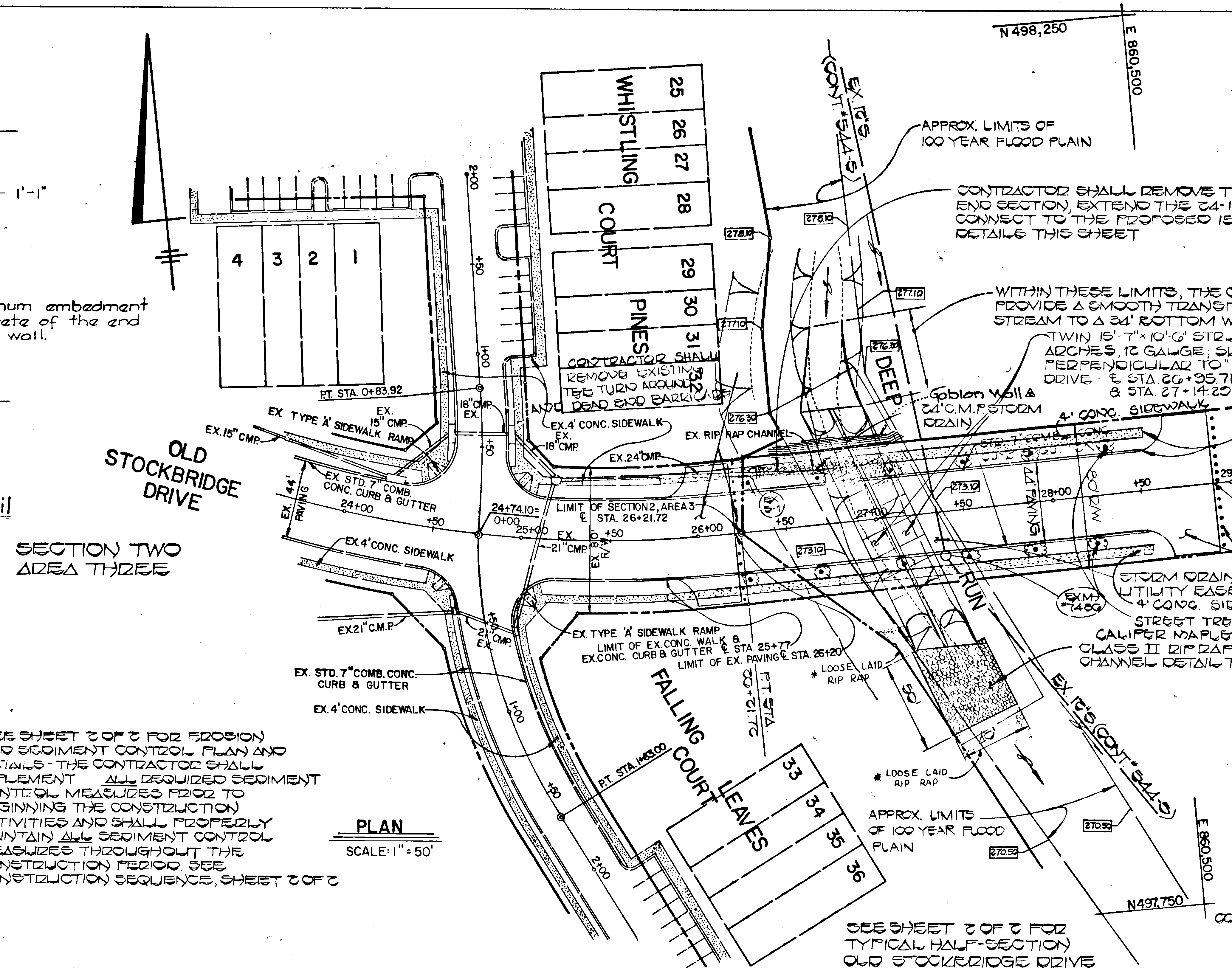
[illegible] ZONING ADMINISTRATION DATE

Charles J. Crovo 8/21/85

CHARLES CROVO, SR PE #13204

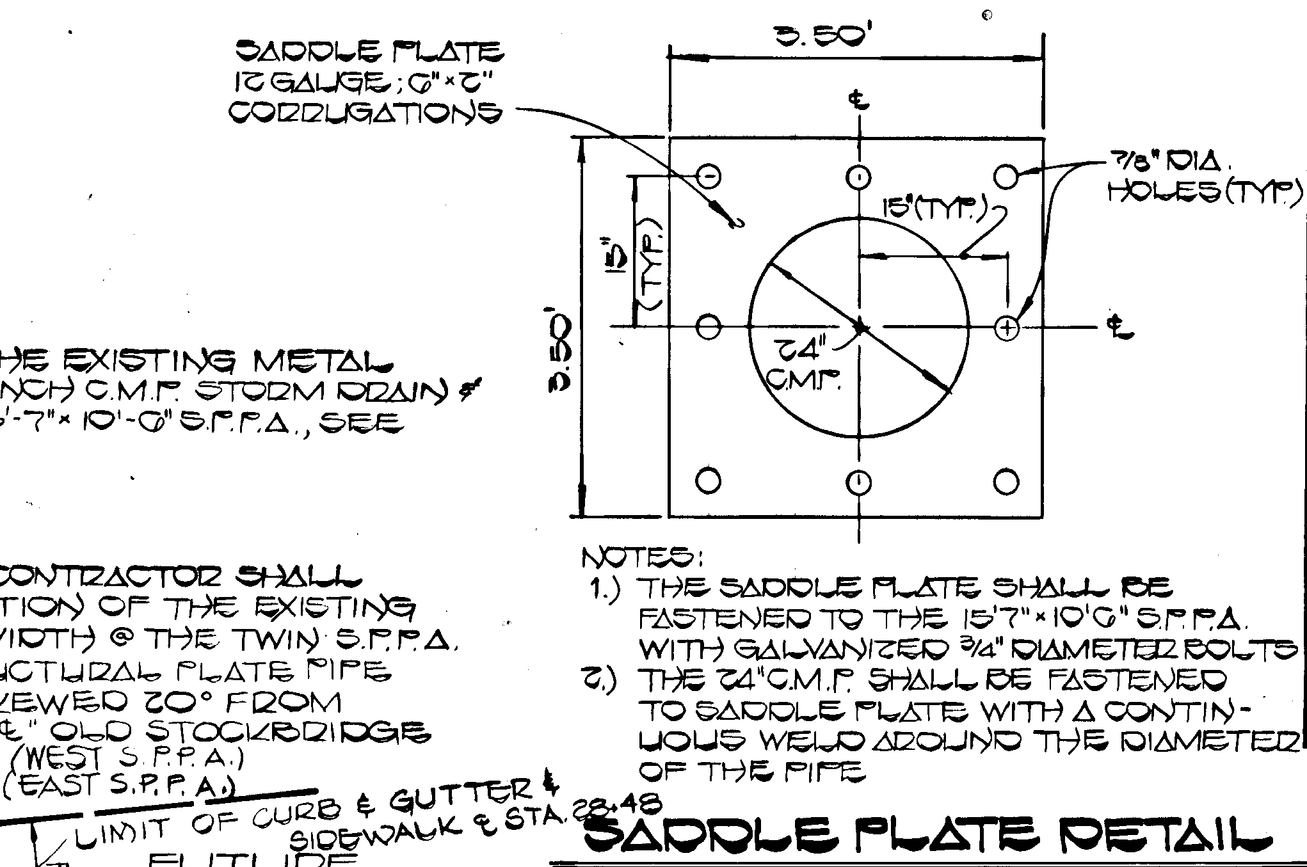


Anchor Bolt Detail
No Scale



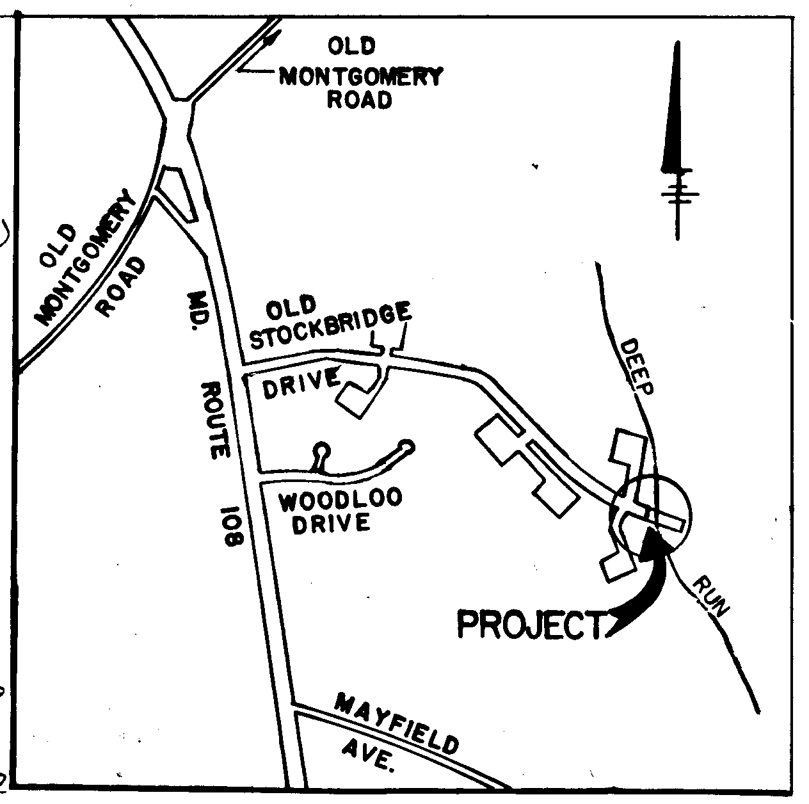
NOTE: SEE SHEET 2 OF 2 FOR EROSION AND SEDIMENT CONTROL PLAN AND DETAILS - THE CONTRACTOR SHALL IMPLEMENT ALL REQUIRED SEDIMENT CONTROL MEASURES PRIOR TO BEGINNING THE CONSTRUCTION ACTIVITIES AND SHALL PROPERLY MAINTAIN ALL SEDIMENT CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD. SEE CONSTRUCTION SEQUENCE, SHEET 2 OF 2

PLAN
SCALE: 1" = 50'

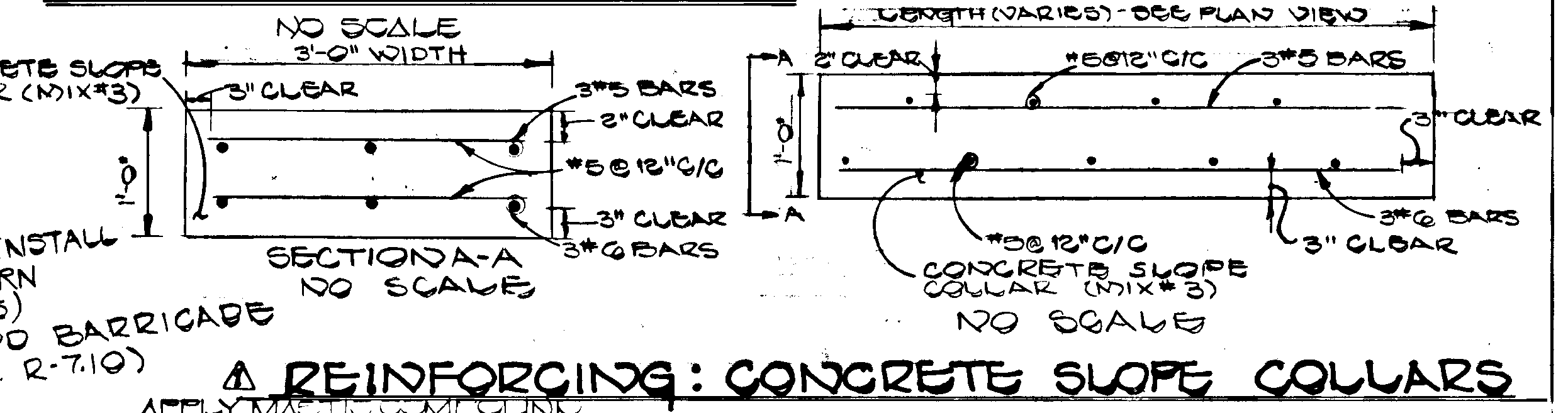


NOTES:
1.) THE SADDLE PLATE SHALL BE FASTENED TO THE 15'7" × 10'6" S.P.P.A. WITH GALVANIZED 3/4" DIAMETER BOLTS
2.) THE 24" C.M.P. SHALL BE FASTENED TO SADDLE PLATE WITH A CONTINUOUS WELD AROUND THE DIAMETER OF THE PIPE

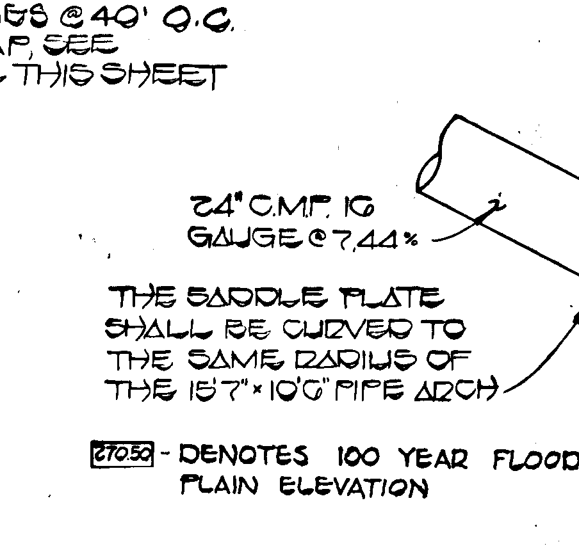
SADDLE PLATE DETAIL



VICINITY MAP
SCALE: 1" = 1200'



△ REINFORCING: CONCRETE SLOPE COLLARS



CUT-IN DETAIL
24" CMP @ WEST S.P.P.A.
NO SCALE

WOODLAND PARK

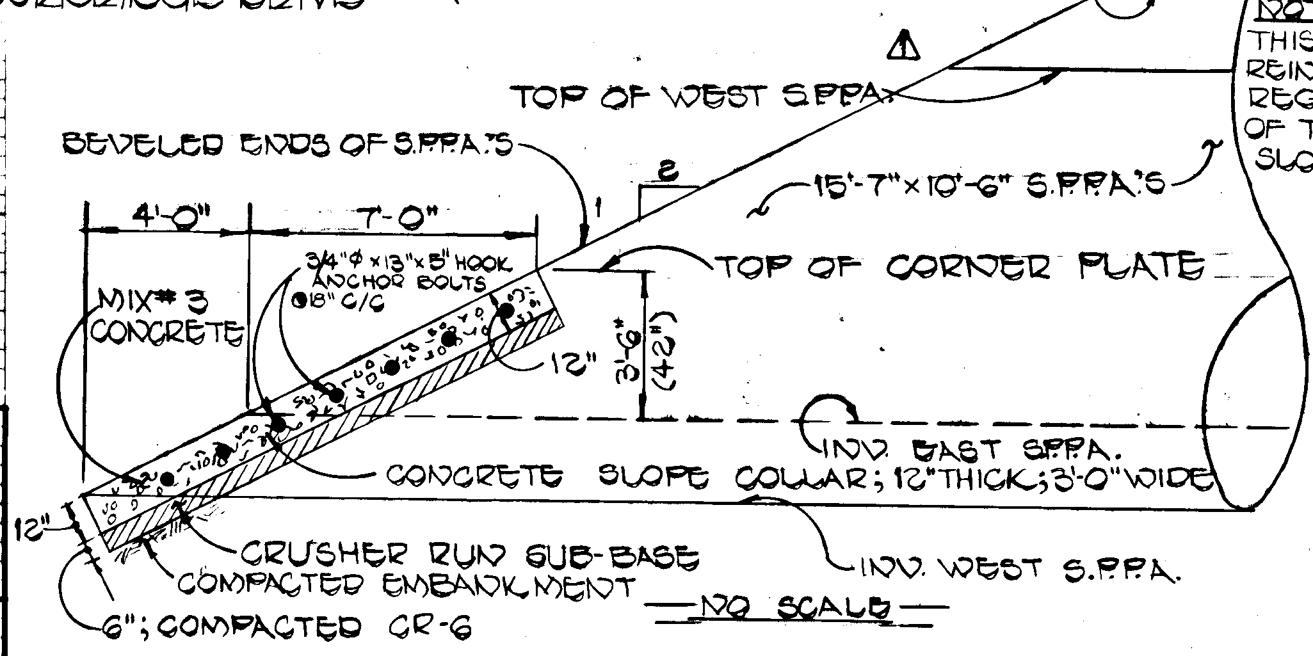
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

STORM DRAIN CROSSING FOR OLD STOCKBRIDGE DRIVE AT DEEP RUN

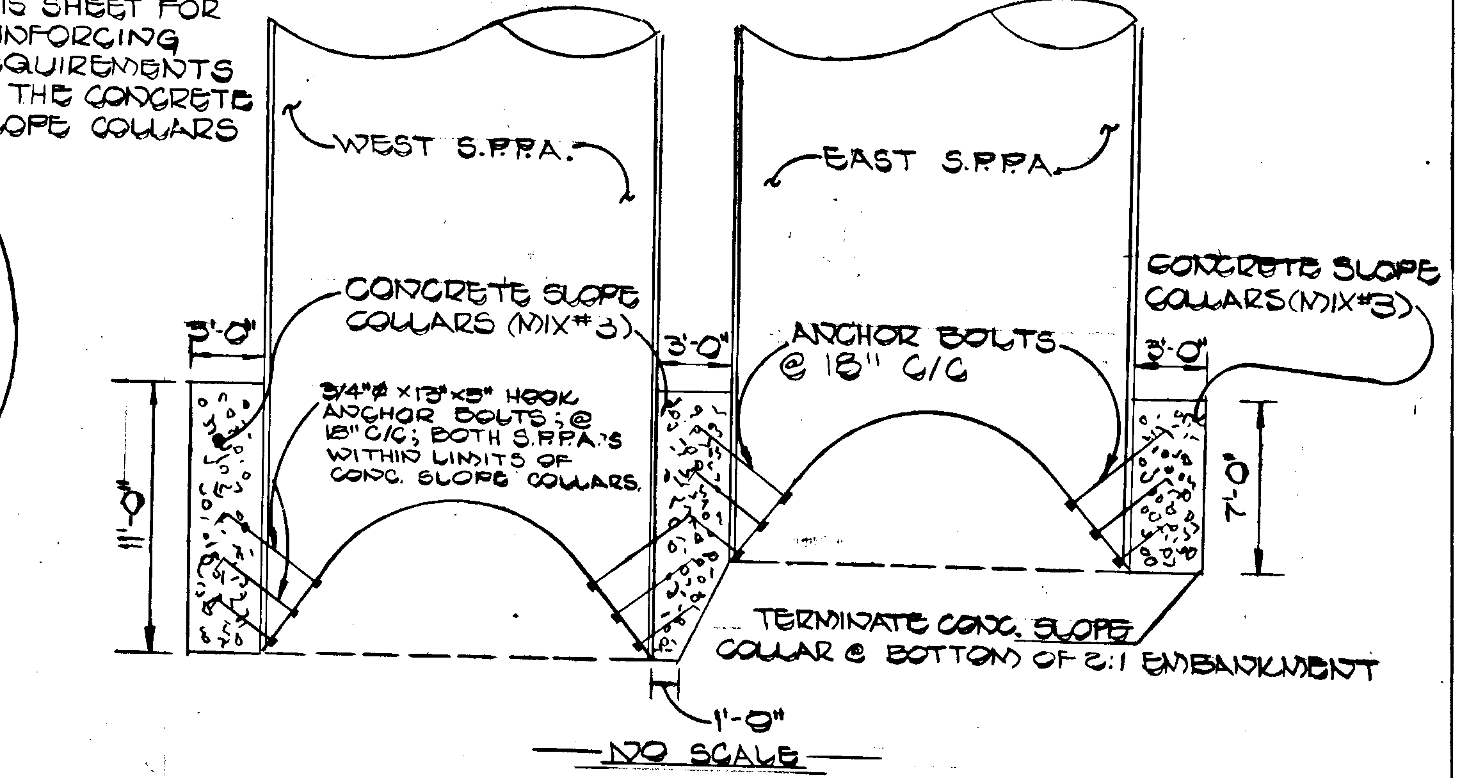
OWNER AND DEVELOPER
CHATEAU WOODLAND INC.
8100 WOODED GLEN COURT
ELLICOTT CITY, MD. 21043

SCALE AS SHOWN	DATE AUGUST 1985	DWG. NO. 1 OF 2
DES. C. CROVO	DRN. R. ISAACS	CHK. R.B. CARTER

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

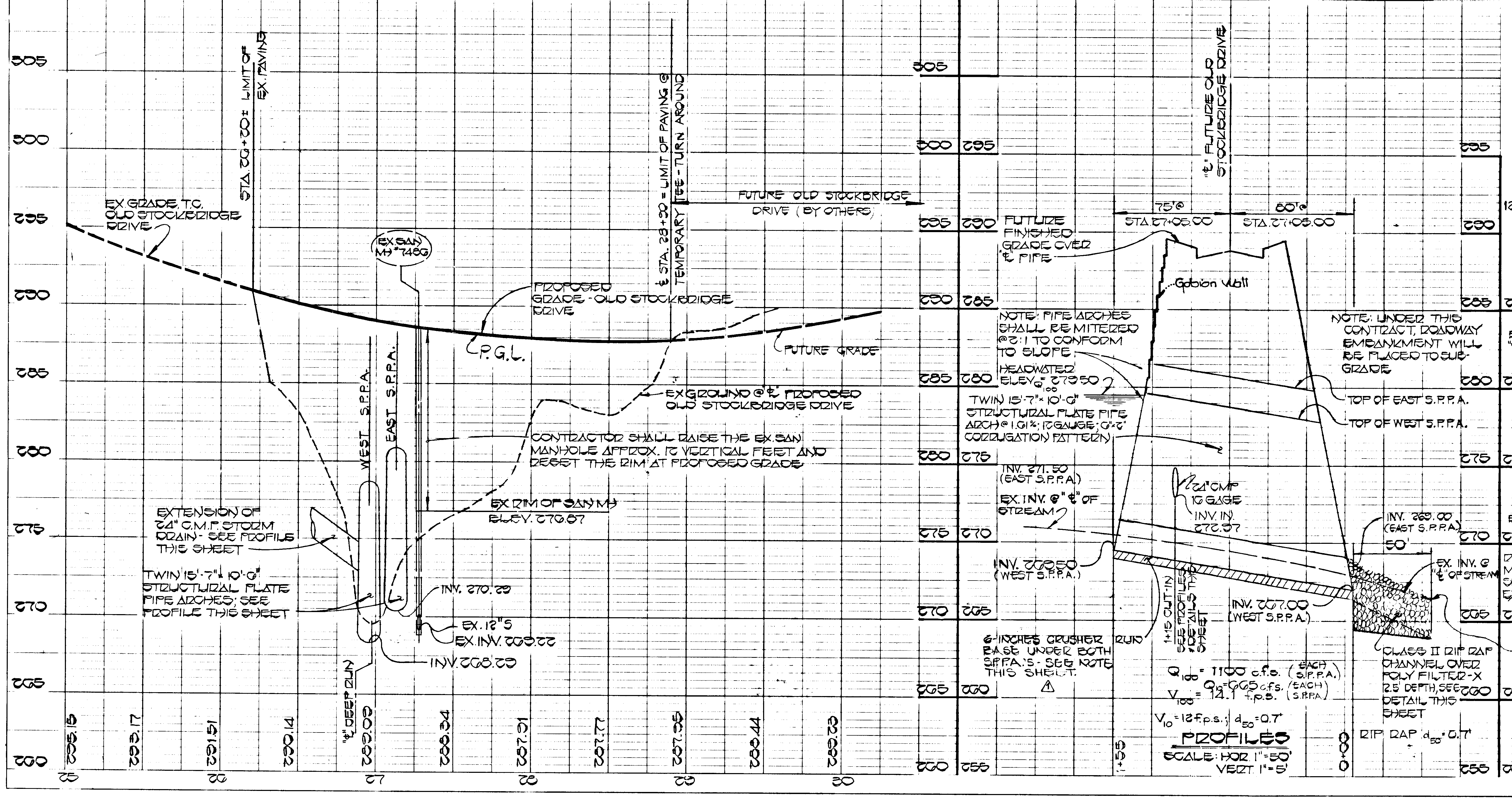


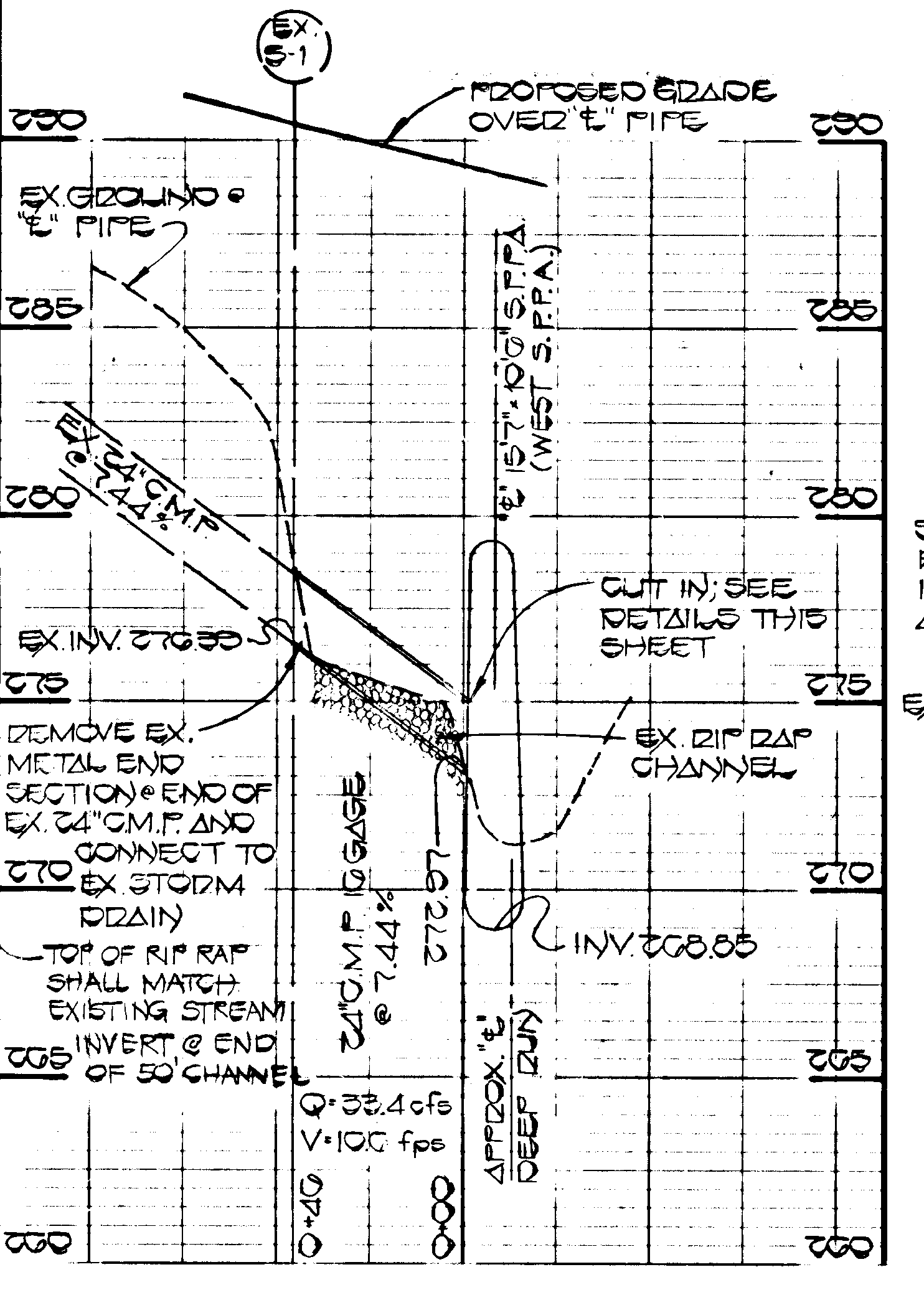
NOTE: SEE DETAILS THIS SHEET FOR REINFORCING REQUIREMENTS OF THE CONCRETE SLOPE COLLARS



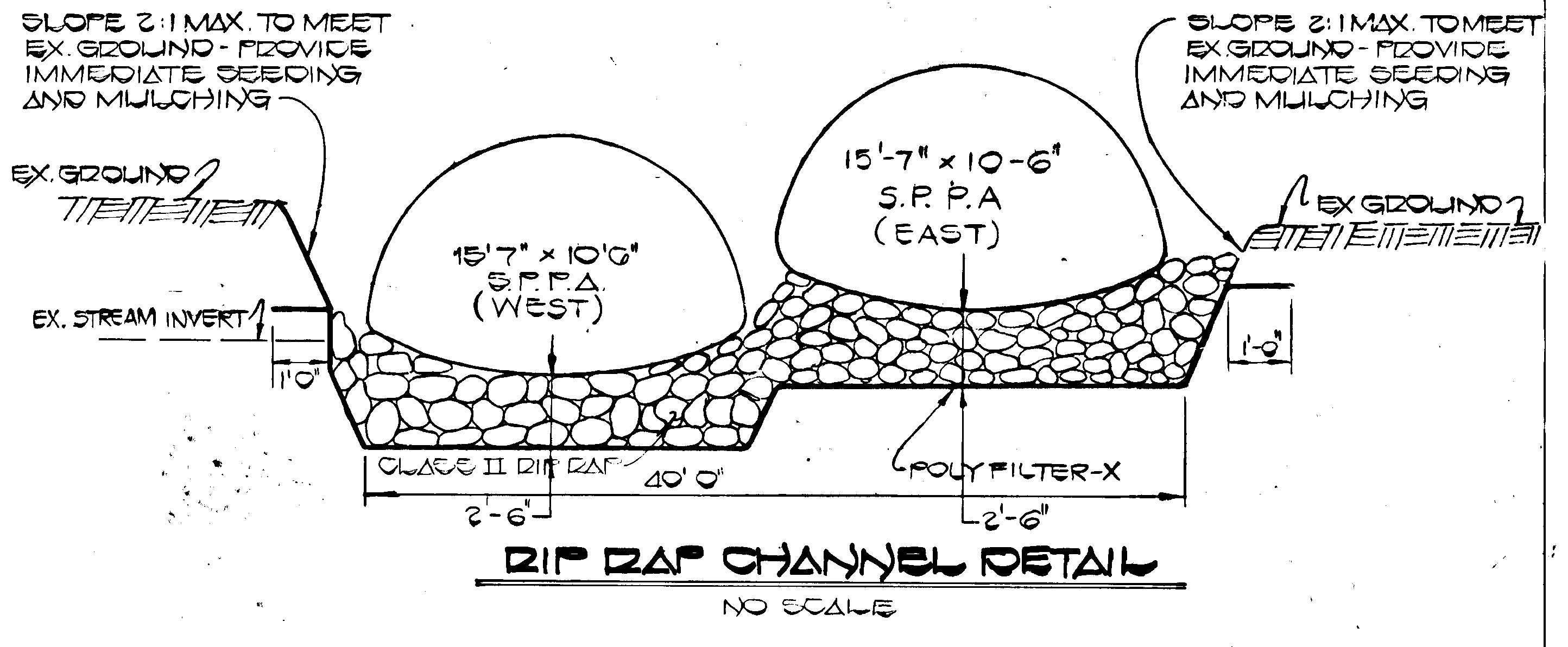
△ CONCRETE SLOPE COLLARS DETAILS

NOTE: BEDDING FOUNDATION FOR THE S.P.P.A.'S SHALL CONSIST OF A MINIMUM OF 6 INCHES OF CRUSHER RUN BASE MEETING THE GRADATION REQUIRMENTS OF GA S/B AS SHOWN IN TABLE 903 OF THE S.H.A. STANDARD SPECIFICATIONS. IF ROCK IS ENCOUNTERED, IT SHALL BE REMOVED & REPLACED WITH CRUSHER-RUN TO PROVIDE THE 6-INCH MINIMUM BEDDING BELOW THE OUTSIDE OF THE S.P.P.A.'S. EXCAVATION & BACKFILL SHALL BE IN ACCORDANCE WITH THE S.H.A. STANDARD SPECIFICATIONS.





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



RIP RAP CHANNEL DETAIL
NO SCALE

PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
B.M.s NOTED	
STRUCTURE NOTAT'NS CH'KD	
NOTE BOOK	
NO.	
BY	
DATE	

#976

BY	REVISION	DATE
D.A.N.	△ DELETE END SUPPORT WALL; ADD DETAILS FOR CONCRETE SLOPE COLLARS	4-19-86
S.F.H.	* ADDED LOOSE LAID RIP RAP	5-1-89
M.C.F.	△ Delete Loose Laid Rip-Rap; Add Gabion Wall	5/19/89

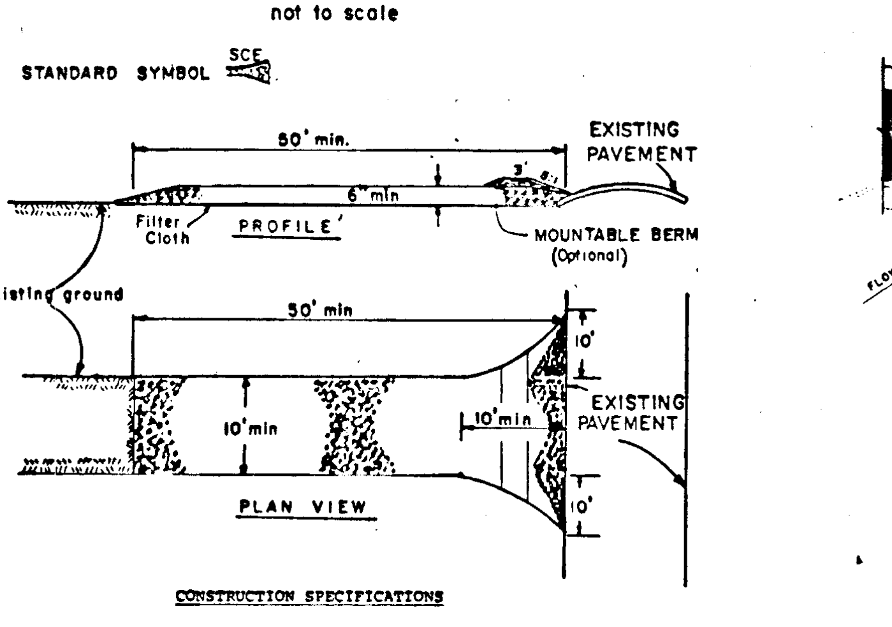
F86-72

CONSTRUCTION SEQUENCE:

1. OBTAIN HOWARD COUNTY GRADING PERMIT-REVIEW AND IMPLEMENT REQUIREMENTS OF PERMIT.
2. REVIEW AND IMPLEMENT REQUIREMENTS OF THE WATERWAY CONSTRUCTION PERMIT-AS ISSUED BY THE STATE OF MARYLAND-WATER RESOURCES ADMINISTRATION.
3. PLACE STABILIZED CONSTRUCTION ENTRANCE (SCE) UP TO THE AREA OF THE PROPOSED STREAM DIVERSION CHANNEL.
4. INSTALL THE STRAW BALE DIKE ALONG THE UPGRADE SIDE OF THE STABILIZED CONSTRUCTION ENTRANCE.
5. INSTALL THE SILT FENCES ALONG THE EAST AND WEST SIDES OF DEEP RUN (ALONG LIMITS OF DISTURBANCE) AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.
6. BEGIN EXCAVATION/CONSTRUCTION OF THE STREAM DIVERSION CHANNEL AT THE DOWNSTREAM END - INSTALL SANDBAG COFFERDAM ACROSS THE DIVERSION CHANNEL AT THE DOWNSTREAM END TO PREVENT SEDIMENT FROM ENTERING DEEP RUN.
7. CONTINUE EXCAVATION/CONSTRUCTION OF THE STREAM DIVERSION CHANNEL FROM DOWNSTREAM END TO UPSTREAM END.
8. UPON COMPLETION OF THE EXCAVATION/CONSTRUCTION OF THE STREAM DIVERSION CHANNEL (AT THE UPSTREAM END) INSTALL SANDBAG COFFERDAM ACROSS THE DIVERSION CHANNEL AT THE UPSTREAM END TO PREVENT STREAM FLOW OF DEEP RUN FROM ENTERING THE DIVERSION CHANNEL.
9. STABILIZE THE STREAM DIVERSION CHANNEL BY INSTALLING THE GEOTEXTILE FABRIC AND GABION STONE LINING AS SHOWN IN THE PLAN DETAIL.
10. INSTALL THE TEMPORARY ACCESS CULVERT(S) IN THE STREAM DIVERSION CHANNEL AT THE STABILIZED CONSTRUCTION ENTRANCE.
11. COMPLETE INSTALLATION OF THE STABILIZED CONSTRUCTION ENTRANCE ACROSS THE STREAM DIVERSION CHANNEL.
12. REMOVE THE SANDBAG COFFERDAMS ACROSS THE STREAM DIVERSION CHANNEL AT THE UPSTREAM AND DOWNSTREAM ENDS.
13. INSTALL THE SANDBAG COFFERDAM ACROSS DEEP RUN AT THE UPSTREAM LIMIT OF THE CONSTRUCTION AREA, THEREBY DIRECTING THE STREAM FLOW OF DEEP RUN INTO THE DIVERSION CHANNEL.
14. INSTALL THE SANDBAG COFFERDAM ACROSS DEEP RUN AT THE DOWNSTREAM LIMIT OF THE CONSTRUCTION AREA TO PREVENT ANY STREAM BACKWATER FROM ENTERING THE CONSTRUCTION AREA.
15. EXCAVATE THE SETTLING AND DEWATERING BASIN TO DIMENSIONS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN; CONSTRUCT STONE OUTLET DAM ALONG DOWNSTREAM FACE OF THE BASIN.
16. DEWATER S.P.P.As INSTALLATION AREA-PUMP ALL WATER INTO THE SETTLING AND DEWATERING BASIN.
17. CONSTRUCT CONCRETE END SUPPORT WALLS.
18. INSTALL BOTTOM PLATES OF THE TWIN S.P.P.As FOR ENTIRE LENGTH-BEGIN BACKFILL OF S.P.P.As.
19. AS ROADWAY FILL IS PLACED, INSTALL SILT FENCES ALONG THE ENTIRE LENGTH OF THE TOE OF SLOPE OF THE EMBANKMENT-UPSTREAM AND DOWNSTREAM FACES.
20. INSTALL THE CLASS II RIP RAP CHANNEL AT THE DOWNSTREAM END OF THE S.P.P.As.
21. REMOVE THE UPSTREAM AND DOWNSTREAM SANDBAG COFFERDAMS ACROSS DEEP RUN AND ALLOW STREAM FLOW OF DEEP RUN TO ENTER THE WEST S.P.P.A.
22. RAISE TOP OF EX. SANITARY MH #7486 TO ELEVATION OF PROPOSED SUBGRADE.
23. INSTALL 24" CMP STORM DRAIN-CONNECT TO S.P.P.A.
24. COMPLETE INSTALLATION OF THE TWIN S.P.P.As.-PLACE ROADWAY EMBANKMENT TO SUBGRADE.
25. BACKFILL SETTLING AND DEWATERING BASIN AND PORTIONS OF THE STREAM DIVERSION CHANNEL AS REQUIRED.
26. STABILIZE, SEED AND MULCH EMBANKMENT SLOPES AND ALL OTHER DISTURBED AREAS IN ACCORDANCE WITH THE SEDIMENT CONTROL NOTES.
27. THROUGHOUT THE CONSTRUCTION PERIOD, AND ESPECIALLY AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE ALL NECESSARY MAINTENANCE OF THE SEDIMENT CONTROL DEVICES TO INSURE THAT ALL DEVICES ARE IN SATISFACTORY WORKING ORDER.
28. FOLLOWING COMPLETE STABILIZATION AND SUBJECT TO THE APPROVAL OF THE ON-SITE INSPECTOR, THE SILT FENCES AND STRAW BALE DIKES MAY BE REMOVED.

STABILIZED CONSTRUCTION ENTRANCE

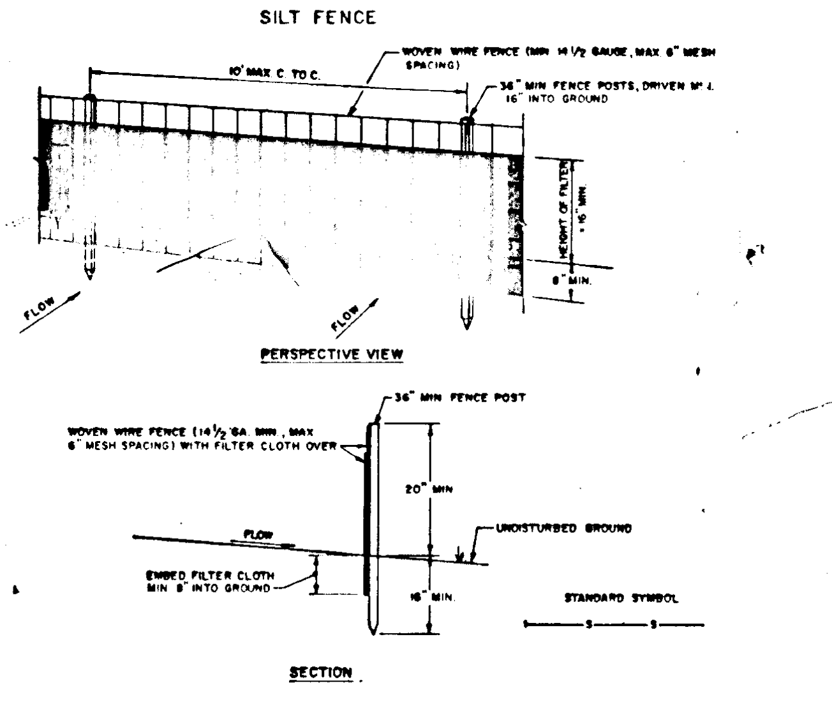
not to scale



CONSTRUCTION SPECIFICATIONS

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

SILT FENCE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

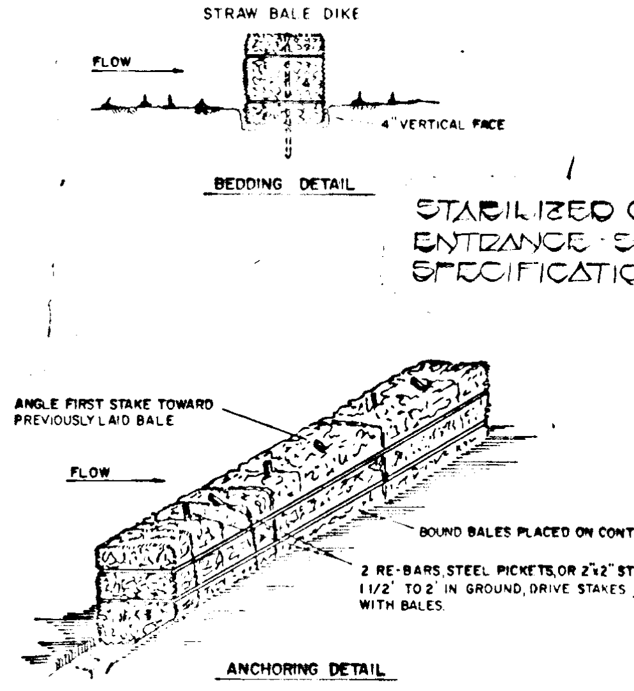
POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL

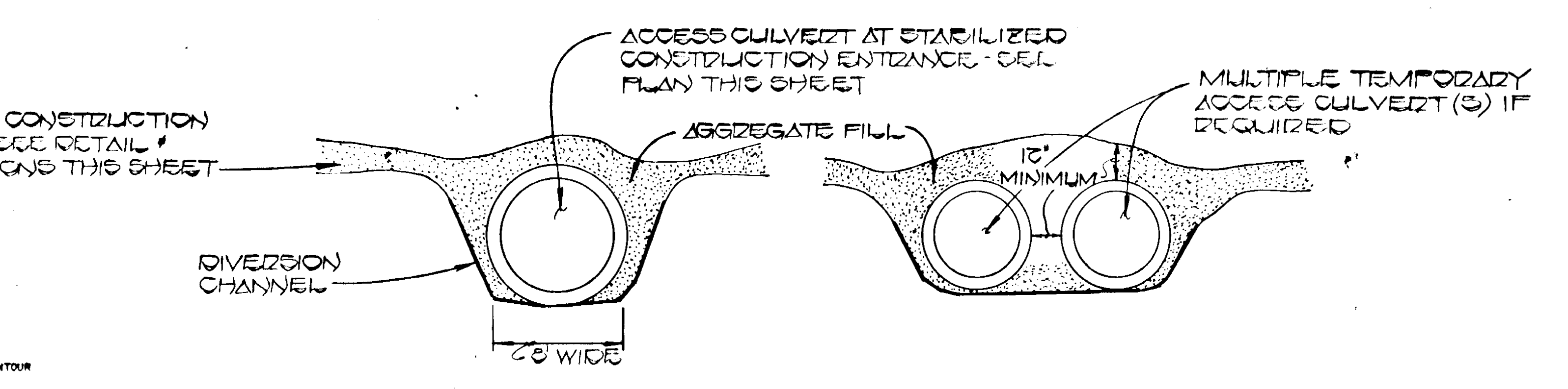
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

STRAW BALE DIKE



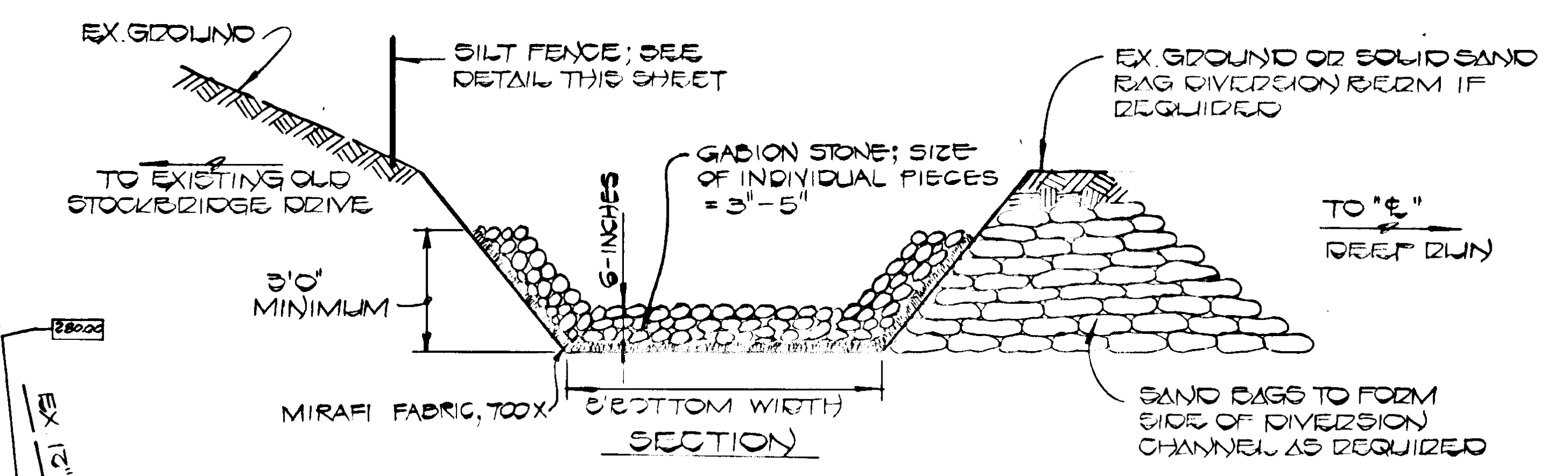
CONSTRUCTION SPECIFICATIONS

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



TEMPORARY ACCESS CULVERT(S) AT DIVERSION CHANNEL

NO SCALE

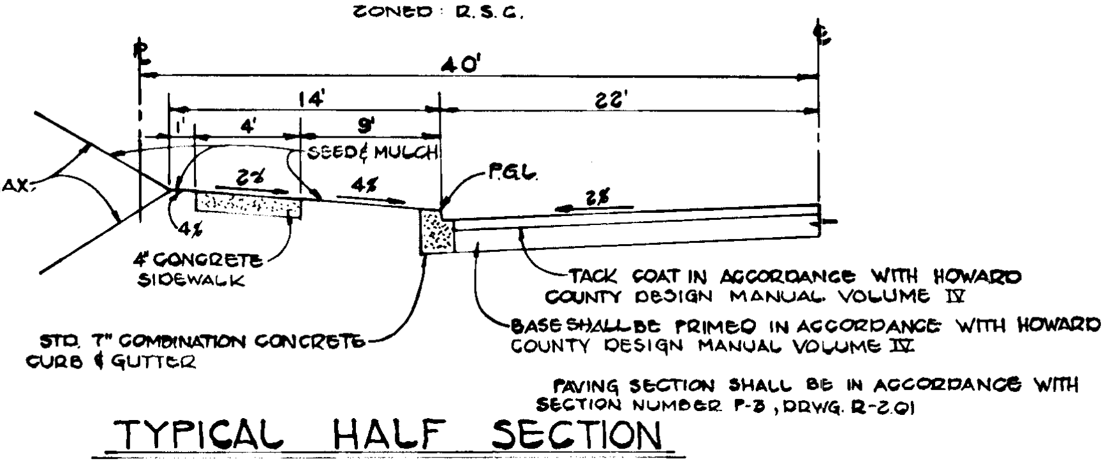


DETAIL: STREAM DIVERSION CHANNEL

NO SCALE

OLD STOCKBRIDGE DRIVE

TYPE OF TRAFFICWAY: MAJOR COLLECTOR   DESIGN SPEED: 40 M.P.H.
ZONED: R.S.C.



TYPICAL HALF SECTION

NO SCALE

ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.

CONSTRUCTION SPECIFICATIONS

TEMPORARY ACCESS CULVERT(S) AT THE DIVERSION CHANNEL

A. CULVERT STRENGTH - THE CULVERTS SHALL BE STRONG ENOUGH TO SUPPORT THEIR CROSS SECTIONAL AREA UNDER MAXIMUM EXPECTED LOADS.

B. CULVERT SIZE - THE SIZE OF THE CULVERT PIPE SHALL BE THE LARGEST PIPE DIAMETER THAT WILL FIT INTO THE DIVERSION CHANNEL WITHOUT MAJOR EXCAVATION OF THE DIVERSION CHANNEL OR WITHOUT MAJOR APPROACH FILLS. SINCE THE CHANNEL WIDTH EXCEEDS 3 FEET, ADDITIONAL PIPES MAY BE USED UNTIL THE CROSS SECTIONAL AREA OF THE PIPES IS GREATER THAN 60 PERCENT OF THE CROSS SECTIONAL AREA OF THE DIVERSION CHANNEL. THE MINIMUM SIZE CULVERT THAT MAY BE USED IS A 12" DIAMETER PIPE.

C. CULVERT LENGTH - THE CULVERT(S) SHALL EXTEND A MINIMUM OF ONE FOOT BEYOND THE UPSTREAM AND DOWNSTREAM TOE OF THE AGGREGATE PLACED AROUND THE CULVERT. IN NO CASE SHALL THE CULVERT EXCEED 40 FEET IN LENGTH.

D. CULVERT PLACEMENT - THE INVERT ELEVATION OF THE CULVERT SHALL BE INSTALLED FLUSH WITH THE TOP OF THE GABION STONE OF THE DIVERSION CHANNEL TO MINIMIZE INTERFERENCE WITH FISH MIGRATION (FREE PASSAGE OF FISH).

E. CULVERT PROTECTION - THE CULVERT(S) SHALL BE COVERED WITH A MINIMUM OF ONE FOOT OF AGGREGATE. IF MULTIPLE CULVERTS ARE USED THEY SHALL BE SEPARATED BY AT LEAST 12" OF COMPACTED AGGREGATE FILL.

F. STABILIZATION - ALL AREAS DISTURBED DURING CULVERT INSTALLATION SHALL BE STABILIZED WITHIN 14 DAYS OF THE DISTURBANCE IN ACCORDANCE WITH THE STANDARD FOR "CRITICAL AREA STABILIZATION WITH PERMANENT SEEDING".

G. INSPECTION - PERIODIC INSPECTION SHALL BE PERFORMED TO ENSURE THAT THE CULVERTS AND DIVERSION CHANNEL ARE NOT DAMAGED, AND THAT SEDIMENT IS NOT ENTERING THE STREAM OR BLOCKING FISH PASSAGE OR MIGRATION.

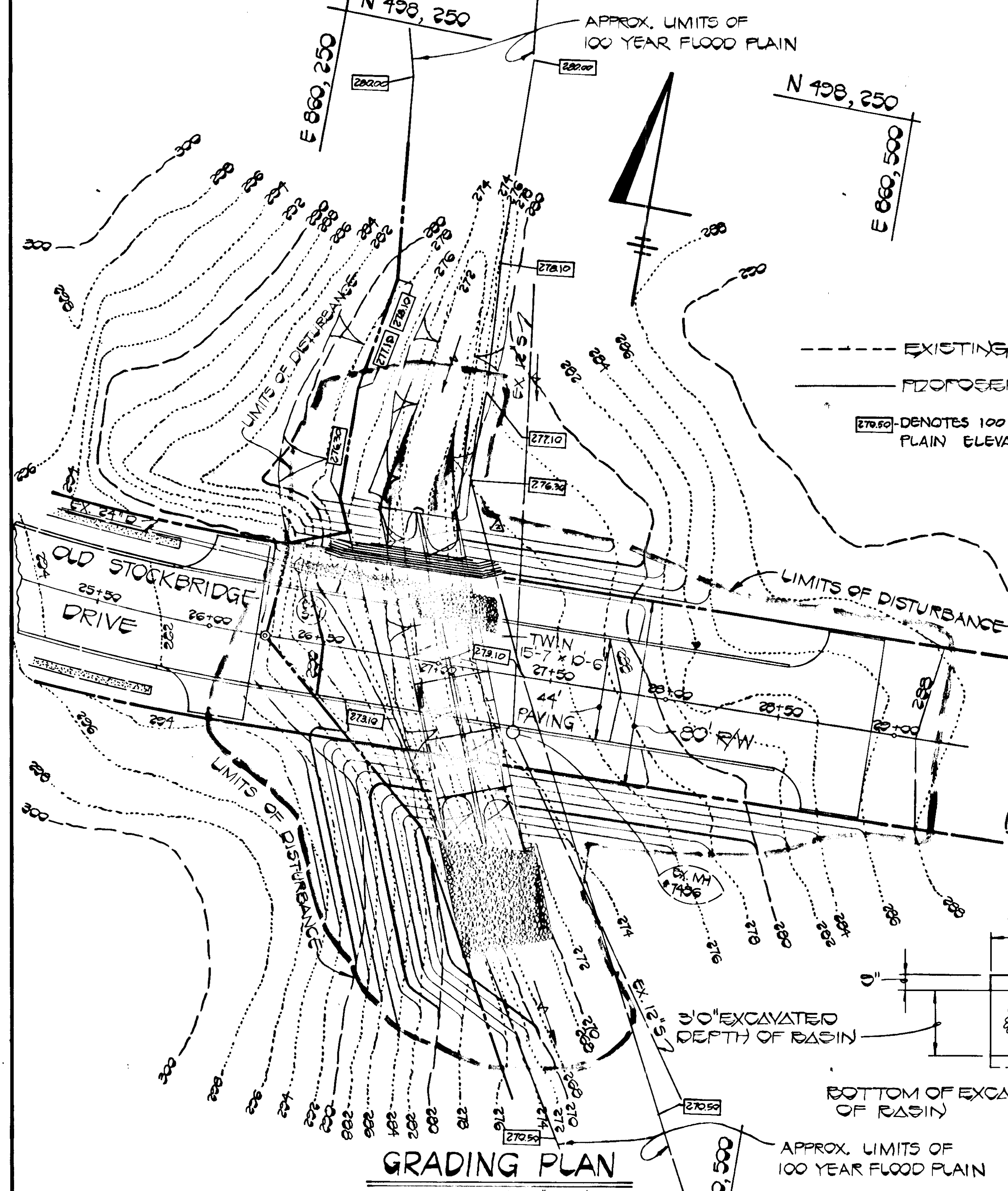
H. MAINTENANCE - MAINTENANCE SHALL BE PERFORMED, AS NEEDED IN A TIMELY MANNER TO ENSURE THAT STRUCTURES ARE IN COMPLIANCE WITH THIS STANDARD AND SPECIFICATION. THIS SHALL INCLUDE REMOVAL AND DISPOSAL OF ANY TRAPPED SEDIMENT OR DEBRIS. SEDIMENT SHALL BE DISPOSED OF AND STABILIZED OUTSIDE THE WATERWAY FLOOD PLAIN.

I. REMOVAL - WHEN THE CHANNEL HAS SERVED ITS PURPOSE, ALL STRUCTURES INCLUDING CULVERTS AND BEDDING SHALL BE REMOVED WITHIN 14 CALENDAR DAYS. IN ALL CASES, THE CULVERT MATERIALS SHALL BE REMOVED WITHIN ONE YEAR OF INSTALLATION. NO STRUCTURE SHALL BE REMOVED DURING THE SPAWNING SEASON (MARCH 15 THROUGH JUNE 15).

J. FINAL CLEAN-UP - FINAL CLEAN-UP SHALL CONSIST OF REMOVAL OF THE TEMPORARY STRUCTURE FROM THE WATERWAY, REMOVAL OF ALL CONSTRUCTION MATERIALS, RESTORATION OF ORIGINAL STREAM CHANNEL CROSS SECTION, AND PROTECTION OF THE STREAM BANKS FROM EROSION. REMOVED MATERIAL SHALL BE STORED OUTSIDE OF THE WATERWAY FLOOD PLAIN.

K. METHOD - REMOVAL OF THE STRUCTURE AND CLEAN-UP OF THE AREA SHALL BE ACCOMPLISHED WITHOUT CONSTRUCTION EQUIPMENT WORKING IN THE WATERWAY CHANNEL.

FINAL STABILIZATION - ALL AREAS DISTURBED DURING CULVERT REMOVAL SHALL BE STABILIZED WITHIN 14 CALENDAR DAYS OF THE DISTURBANCE IN ACCORDANCE WITH THE STANDARD FOR "CRITICAL AREA STABILIZATION WITH PERMANENT SEEDING".



------ EXISTING CONTOUR

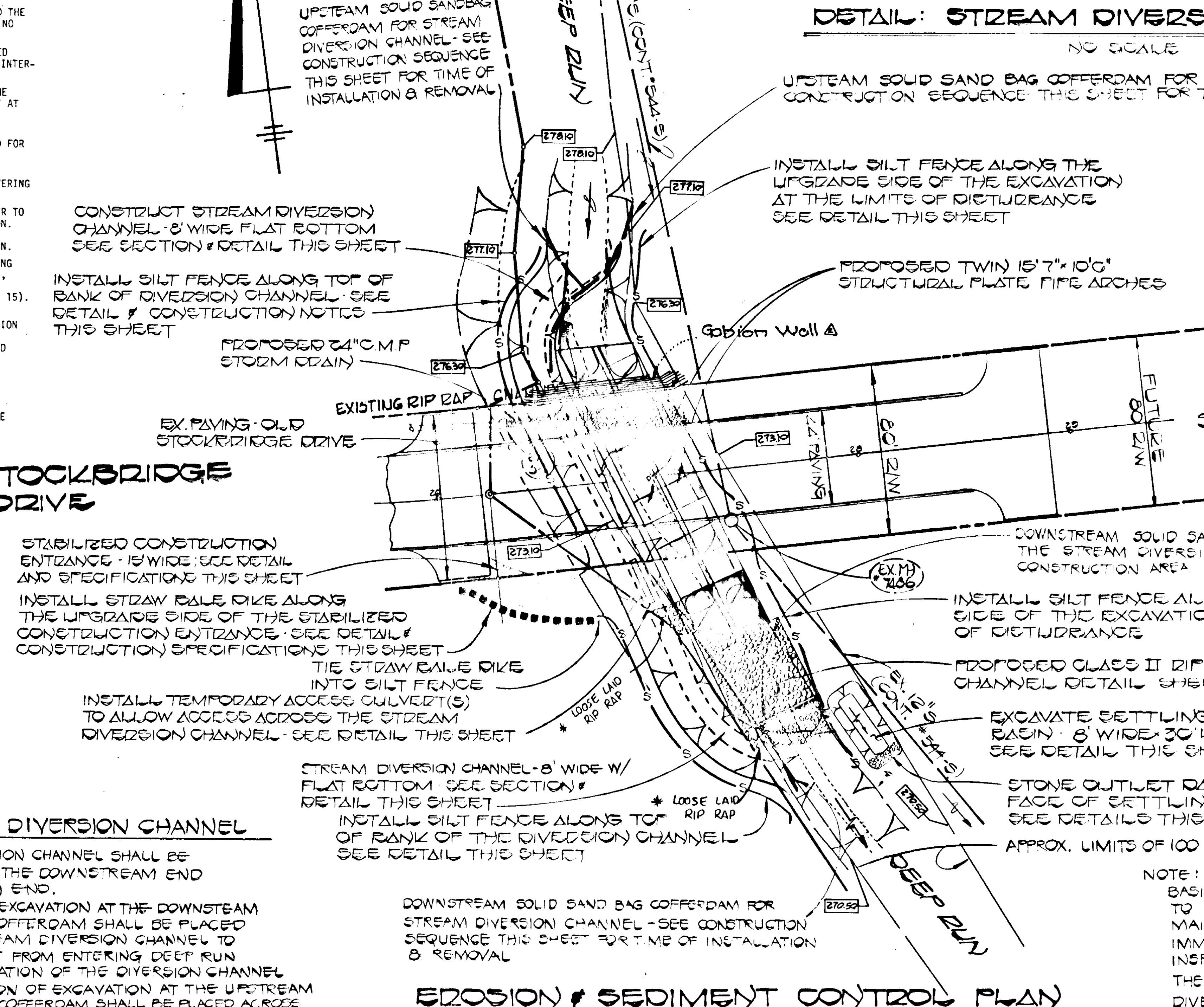
———— PROPOSED CONTOUR

270.50 - DENOTES 100 YEAR FLOOD PLAIN ELEVATION.

GRADING PLAN

SCALE: 1"=50'

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND
LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
TELEPHONE (301) 461-2855



270.50 - DENOTES 100 YEAR FLOOD PLAIN ELEVATION.

EROSION & SEDIMENT CONTROL PLAN

1"=50'

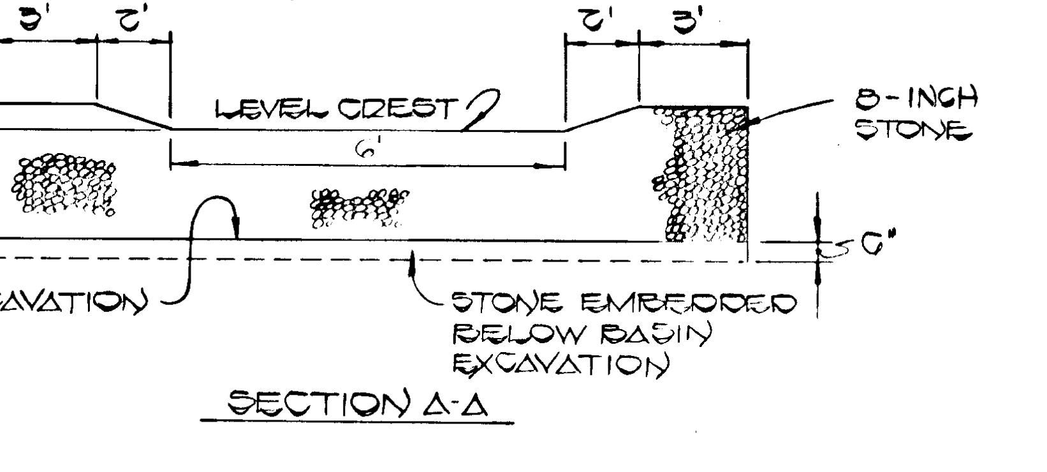
NOTE: DURING EXCAVATION FOR THE SETTLING & DEWATERING BASIN, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE INTEGRITY OF THE ADJACENT 12" SEWER MAIN. ANY DAMAGE TO THE EX. 12" SEWER MAIN SHALL BE IMMEDIATELY REPAIRED TO THE FULL SATISFACTION OF THE ON-SITE INSPECTOR AT THE CONTRACTOR'S EXPENSE. ADDITIONALLY, IF THE CONTRACTOR ELECTS TO CONSTRUCT THE STREAM DIVERSION CHANNEL ON THE EAST SIDE, THE INTEGRITY OF THE 12 INCH SEWER MAIN SHALL BE MAINTAINED.

NOTE: SEE GRADING PLAN THIS SHEET FOR EXISTING & PROPOSED CONTOURS.

NOTE: IF FIELD CONDITIONS WARRANT & SUBJECT TO THE APPROVAL OF THE ON-SITE INSPECTOR, THE CONTRACTOR MAY ELECT TO CONSTRUCT THE STREAM DIVERSION CHANNEL ON THE EAST BANK. REGARDLESS OF THE SIDE CHOSEN, THE DIVERSION CHANNEL, SAND BAG COFFERDAMS & THE EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS SHOWN IN THE ABOVE PLAN & DETAILS.

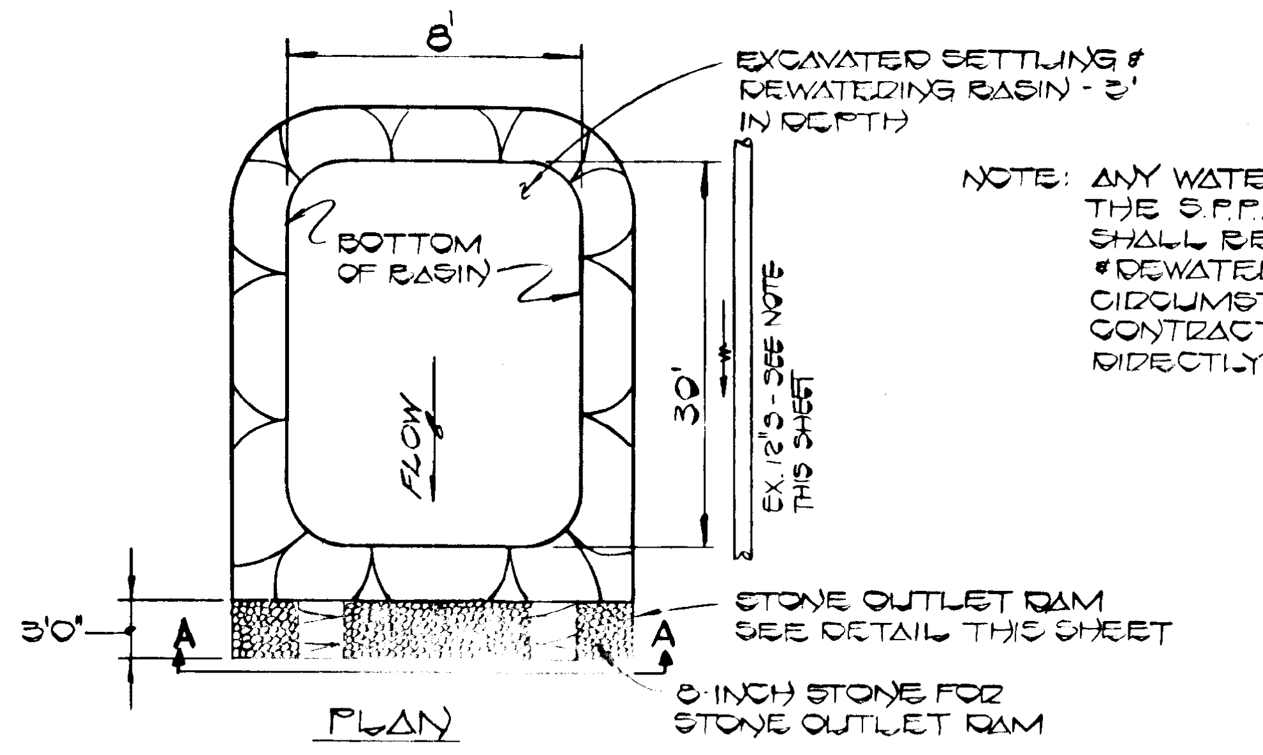
NOTES: STREAM DIVERSION CHANNEL

1. THE STEAM DEVERSION CHANNEL SHALL BE EXCAVATED FROM THE DOWNSTREAM END TO THE UPSTREAM END.
2. WHEN BEGINNING EXCAVATION AT THE DOWNSTEAM END. A SANDBAG COFFERDAM SHALL BE PLACED ACROSS THE STREAM DIVERSION CHANNEL TO PREVENT SEDIMENT FROM ENTERING DEEP RUN PRIOR TO STABILIZATION OF THE DIVERSION CHANNEL.
3. AT THE COMPLETION OF EXCAVATION AT THE UPSTREAM END, A SANDBAG COFFERDAM SHALL BE PLACED ACROSS THE STREAM DIVERSION CHANNEL TO PREVENT STREAM FLOW FROM ENTERING THE DIVERSION CHANNEL PRIOR TO STABILIZATION OF THE DIVERSION CHANNEL.
4. SEE LIST THIS SHEET FOR COMPLETE SEQUENCE OF ALL CONSTRUCTION ACTIVITIES.



DETAIL: STONE OUTLET DAM

@ SETTLING/DEWATERING BASIN
NO SCALE



DETAIL: SETTLING & DEWATERING BASIN

NO SCALE
NOTE: SEE PLAN FOR APPROXIMATE LOCATION

NOTE: ANY WATER PUMPED FROM WITHIN THE S.P.P.A'S INSTALLATION AREA SHALL BE PUMPED INTO THE SETTLING & DEWATERING BASIN; UNDER NO CIRCUMSTANCES, SHALL THE CONTRACTOR PUMP ANY WATER DIRECTLY INTO DEEP RUN.

ENGINEER'S CERTIFICATE

I HEREBY 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.

SIGNATURE OF ENGINEER   DATE 10/28/85

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Richard Azrael   10/29/85
SIGNATURE OF DEVELOPER   DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. Helm   2/7/86
U.S. SOIL CONSERVATION SERVICE   DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:
Stephen L.   2/7/86
DISTRICT   DATE
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS.

2-11-86
CHIEF, BUREAU OF ENGINEERING   DATE

APPROVED: OFFICE OF PLANNING AND ZONING

2-7-86
CHIEF, DIVISION OF LAND DEVELOPMENT   DATE
AND ZONING ADMINISTRATION

SEDIMENT CONTROL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE U.S.D.A. SOIL CONSERVATION SERVICE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS".
2. THE DEVELOPER SHALL NOTIFY THE HOWARD COUNTY OFFICE OF INSPECTION AND SURVEYS AT LEAST 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION SHOWN HEREON 992-2437.
3. SEDIMENT CONTROL STRUCTURES TO BE CONSTRUCTED PRIOR TO ANY ON-SITE GRADING OR DISTURBANCE TO ANY EXISTING SURFACE MATERIAL, AND ARE TO BE STABILIZED AS SOON AS CONSTRUCTED.
4. ALL SEDIMENT CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY OFFICE OF INSPECTION AND SURVEYS 992-2437.
5. ALL GRADED AREAS NOT TO BE SODDED SHALL BE STABILIZED BY SEEDING AND MULCHING IN ACCORDANCE WITH THE FOLLOWING:
   1. SITE PREPARATION:
      A. HARROW OR DISC IN AREAS PROPOSED TO BE SEEDED THE FOLLOWING MATERIALS
         1) PULVERIZED LIMESTONE AT 2 TONS/ACRE.
         2) COMMERCIAL FERTILIZED 10-10-10 AT 3/4 TONS/ACRE.
         3) SUPER PHOSPHATE AT 600 LBS./ACRE.
   2. SEEDING:
      A. SOW THE FOLLOWING SEED MIXTURE AT THE RATE OF 200 LBS./ACRE WITH A MECHANICAL SPREADER.
         1) TEMPORARY: ITALIAN OR PERENNIAL RYE GRASS.
         2) PERMANENT: 40% MARION BLUE GRASS, 40% DAKOTA BLUE GRASS AND 20% PENN LAWN CREEPING FESCUE.
      B. THE SEEDED AREA SHALL THEN BE RAKED WITH A YORK RAKE (A MINIMUM OF 2 PASSES) COVERED AND COMPACTED WITH CULTIPACKER OR OTHER APPROVED METHOD.
   3. MULCHING:
      A. SEEDED AREAS SHALL BE UNIFORMLY MULCHED IMMEDIATELY AFTER SEEDING WITH UNWEATHERED SMALL GRAIN STRAW AT THE RATE OF 1 1/2 - 2 TONS/ACRE.
      B. TIE MULCH DOWN WITH LIQUID ASPHALT AT 0.1 GAL./S.Y. OR EMULSIFIED ASPHALT AT 0.04 GAL./S.Y. OR MULCH NETTING.
6. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
   1. SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
   2. FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
7. ALL SEDIMENT TRAPS SHOWN, MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOLUME 1 CHAPTER 2 OF HOWARD COUNTY DESIGN MANUAL STORM DRAINAGE.

M.C.F.	▲ Delete loose laid Rip-Rap; Add Gabion Wall	5-19-89
S.F.H.	* ADDED LOOSE LAID RIP RAP	5-1-89

No. 13204

CHARLES J. CROVO, SR.

WOODLAND PARK
STORM DRAIN CROSSING FOR
OLD STOCKBRIDGE DRIVE
AT DEEP RUN

FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

EROSION AND SEDIMENT CONTROL PLAN & DETAILS

DRAWING NO. 2 OF 2

F 86-72
1/13/86