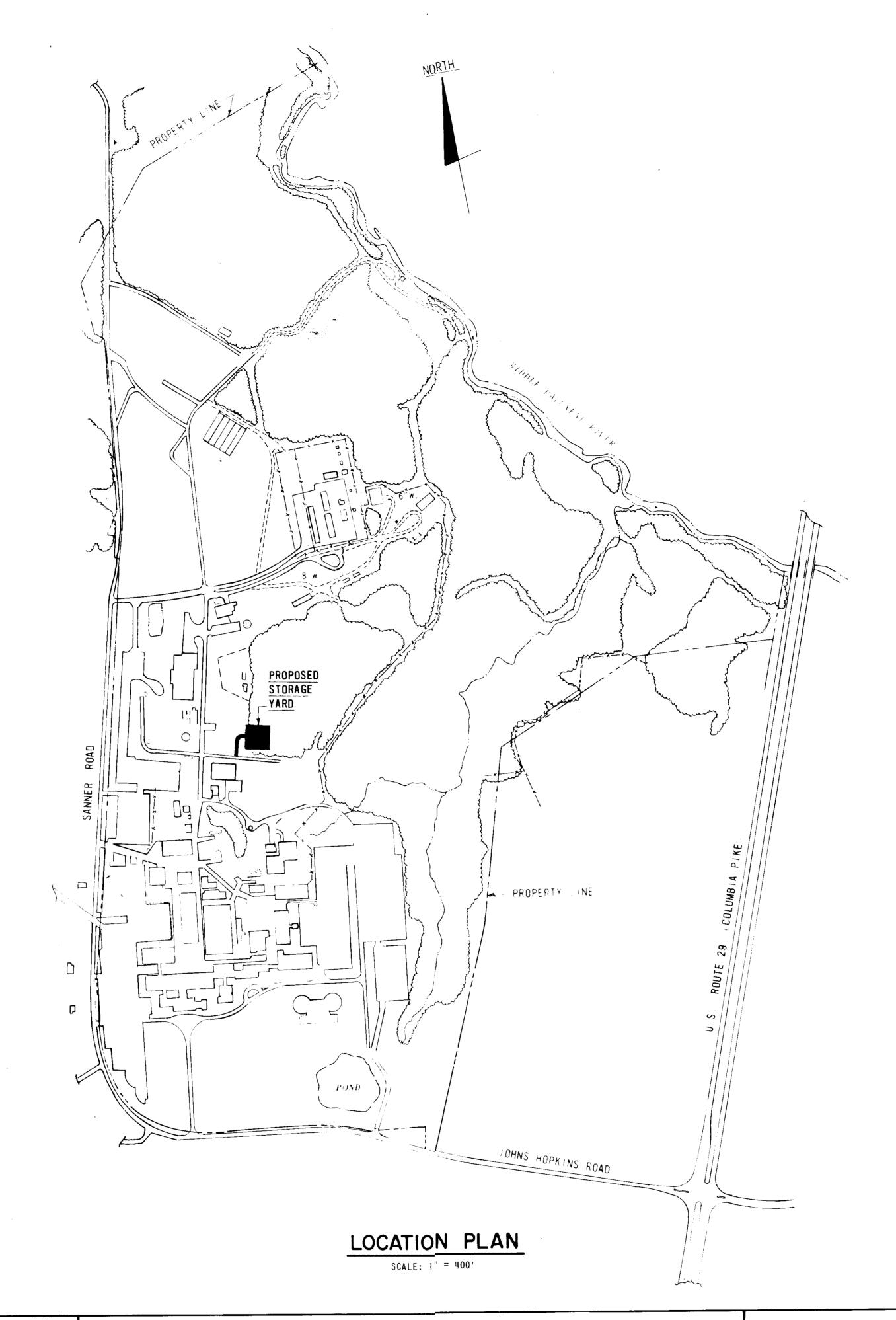
GENERAL NOTES

- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- 2. ELEVATIONS SHOWN ARE BASED ON THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS
- LABORATORY DATUM. JHU-APL-DATUM 0.94' = HOWARD COUNTY DATUM. 3. THE CONTRACTOR SHALL CALL MISS UTILITY (301) 559-0100. FIVE DAYS PRIOR TO THE START OF CONSTRUCTION.
- 4. POLY FILTER X FILTER CLOTH BLANKET OR EQUAL SHALL BE PLACED UNDER ALL STONE RIP RAP.
- 5. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN AN UNINTERRUPTED SERVICE.
- ANY DAMAGE BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- 6. ACCESS TO THE CONSTRUCTION AREA THROUGH THE SECURE AREA OF THE APPLIED PHYSICS LABORATORY (WITHIN THE FENCED ENCLOSURE) MUST BE ARRANGED IN ADVANCE BY CONTACTING THE LABORATORY SECURITY OFFICE (391) 953-7100.
- 7. LANDSCAPING SHALL BE BY JHU-APL.
- 8. THE CONTRACTOR SHALL CONTACT MR. ARTHUR STUCKI, PLANT ENGINEER, (301) 953-7100 AT LEAST 5 WORKING DAYS PRIOR TO COMMENCING ANY WORK OR SHUTTING DOWN ANY UTILITIES.
- 9. THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY
- DIVISION, 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK, AT 792-2630.

SITE DATA

PROPOSED SPACES 0



THE JOHNS HOPKINS UNIVERSTY APPLIED PHYS: CS VICINITY MAP

1. COVER SHEET
2. GRADING PLAN
3, SEDIMENT CONTROL PLAN

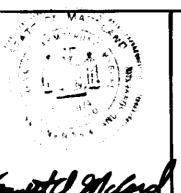
ADDRESS CHART STREET ADDRESS PARCEL NUMBER 11100 JOHNS HOPKINS ROAD PARCEL 123 SEWER CODE WATER CODE E-21 6480000 FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS , HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS DATE: 5-20-87 DATE: 5-19-87 Miecin & Lei APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT HOWARD COUNTY OFFICE OF PLANNING AND ZONING PLANNING
DIRECTOR:

CHIEF. DIVISION OF LAND
DEVELOPMENT AND ZONING
ADMINISTRATION:

CTANE

WHITMAN REQUARDT AND ASSOCIATES ENGINEERS

2315 SAINT PAUL STREET BALTIMORE, MARYLAND 21218



APPLIED PHYSICS LABORATORY THE JOHNS HOPKINS UNIVERSITY

JOHNS HOPKINS ROAD HOWARD COUNTY. MARYLAND

PROPOSED STORAGE PAD

"Storage Yard Addition to SDP-87-87"

THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY LAUREL MARYLAND 20707 11100 JOHNS HOPKINS ROAD

TAX MAP 41

COVER SHEET

HOWARD COUNTY, MARYLAND FIFTH ELECTION DISTRICT PARCEL 123 REVISIONS

APPROVE

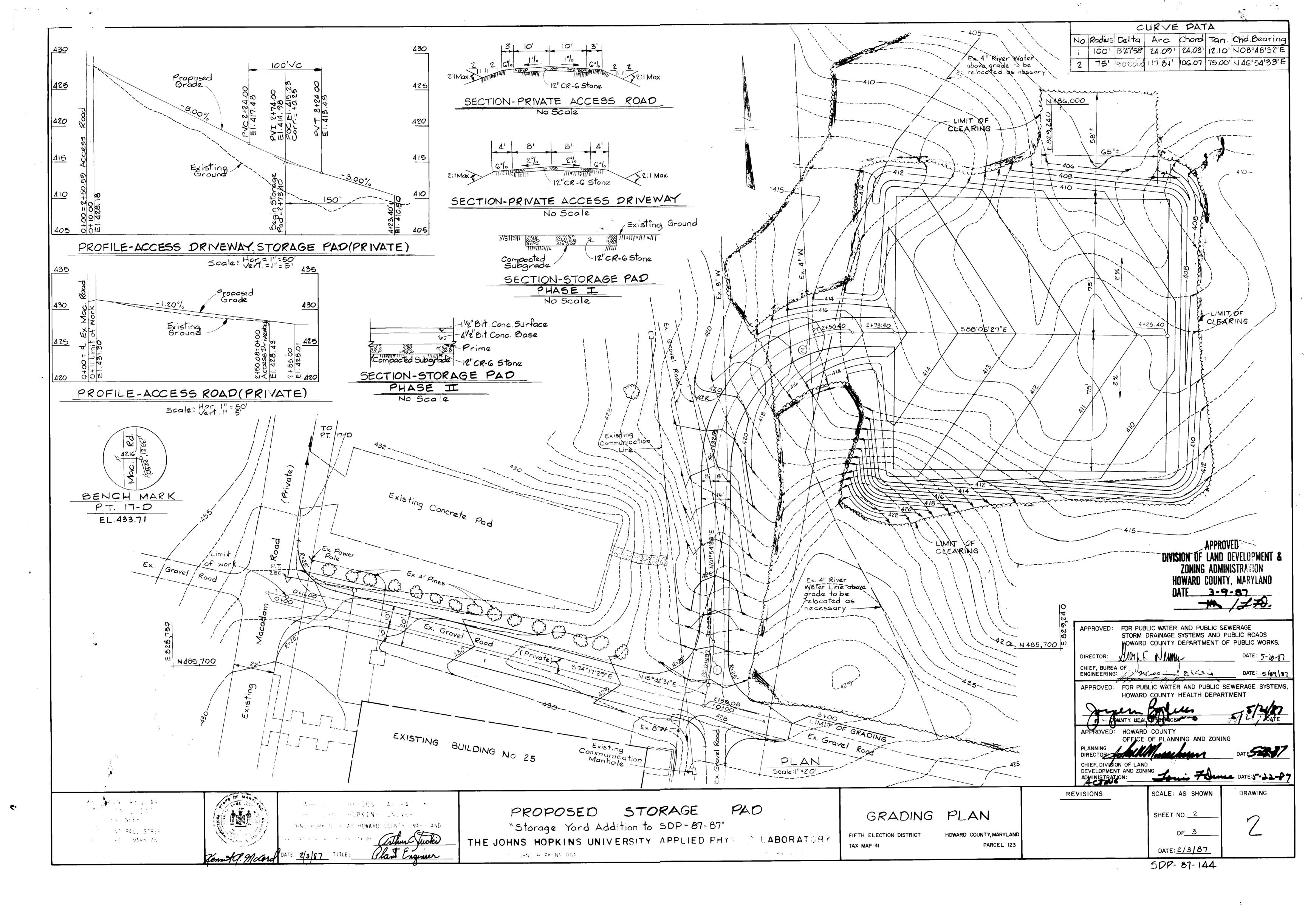
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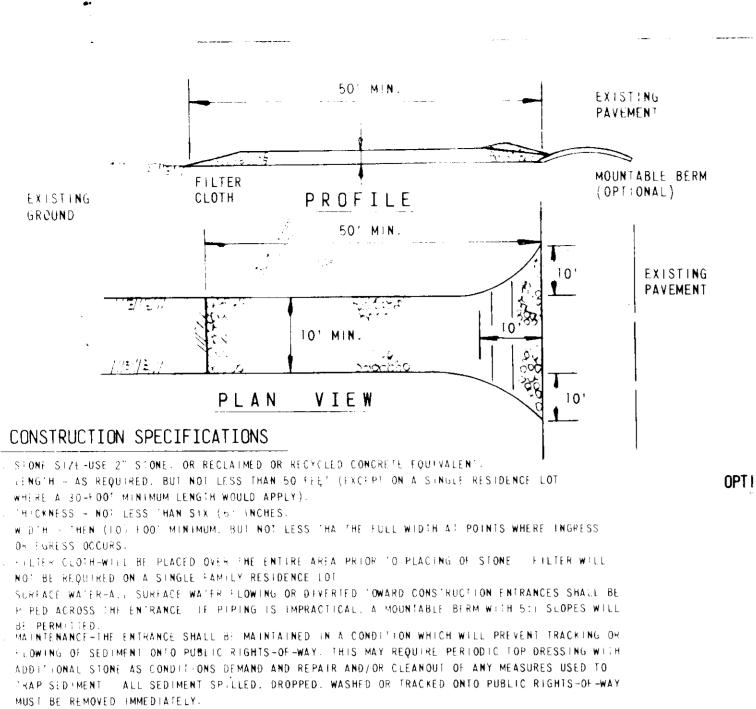
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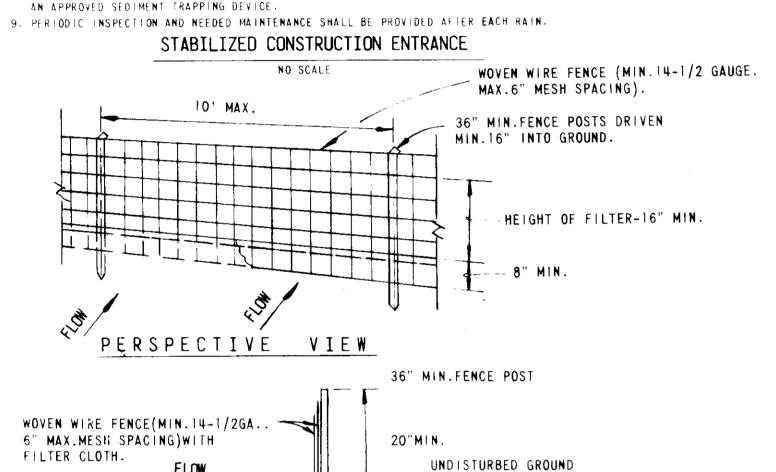
SCALE: AS SHOWN DRAWING SHEET NO. 1 OF 3 DATE: 2/3/87

DATE: J. LL 47

SDP-87-144







I. WASHING-WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-O

WHEN WASHING IS REQUIRED. IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS IN

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

EMBED FILTER CLOTH MIN.

8" INTO GROUND.

E TO BE FASTENED SECURELY WITH WIRE TIES OR STAPLES:	POS⊺S:	- STEEL EITHER I OR U TYPE OR 2" HAKDWOOD.
BE FASTENED SECURELY 10 E WITH TIES SPACED EVERY 24" SECTION.	FFNCE:	→ WOVEN WIRE, 14 GA. 6" MAX MESH OPENING.
 NS OF FILTER CLOTH ADJOIN SHALL BE OVERLAPPED BY SIX ED.	FENCE CLOTH:	- FILTER X. MIRAFT 100X. STABILINKA TI4 ON OR APPROVED EQUAL.
 LL BE PERFORMED AS NEEDED AND D WHEN "BULGES" DEVELOP IN THE	PREFABRIC UNIT:	ATED - GEOFAB. ENVIROFENCE OR APPROVED EQUAL.

SILT FENCE NO SCALE

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG LIVED - VEGETALLYE COVER IS NEEDED. SEEDED PREPARATION: LOOSEN UPPER THREE INCHES BY RAKING. DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS. USE ONE OF THE FOLLOWING SCHEDULES: PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE

TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW.

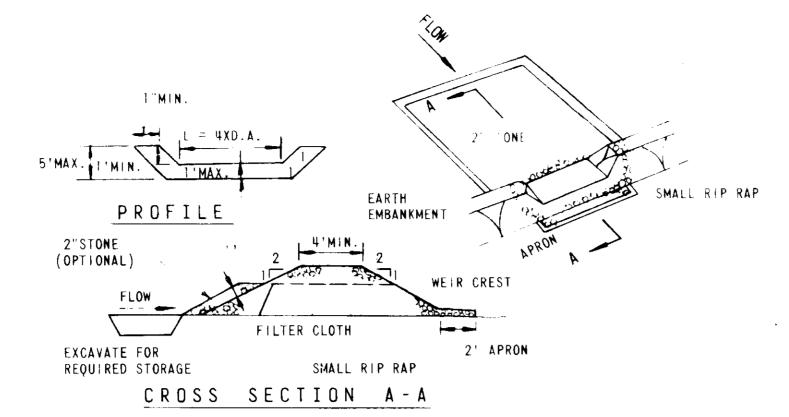
(92 LBS/1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. SEEDING: FOR THE PERIODS MARCH & THRU APRIL 30. AND AUGUS! & THRU OCTOBER 15. SEED WITH 60 LBS. PER ACRE (1.4 EBS/+000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE FOR THE PERIOD MAY I THRU JULY 31 SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LABS.PER.ACRE. (0.05 LBS/1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28. PROJECT SITE BY: OPTION (1: 2 'ONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS. PER ACRE KENTUCKY 31

MULCHING: APPLY 1-1/2 TO 2 TONS PERJACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW "MMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE TO GAL /1000 SQ.FT. DOF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 F' OR HIGHER USE 348 GALLONS PER ACRE (& GAL./1000 SQ.FT.) FOR ANCHORING.

TEMPORARY SEEDING NOTES

SMPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. TEEDED PREPARATION, LOOSEN UPPER THREE INCHES OF SOIL BY RAKING. DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.)

SEEDING: FOR PERIOD MARCH ! THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15 SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 1887/1000 SQ.FF.) FOR PERIOD FROM AMY I THRU AUGUST 14 SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.07 LBS/1000 SQ F' FOR THE DERIOD NOVEMBER 16 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 IONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOD.



OPTION: A ONE FOOT LAYER OF 2" STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP IN PLACE OF THE EMBEDDED FILTER CLOTH.

CONSTRUCTION SPECIFICATIONS FOR ST-V

AREA UNDER EMBANKMENT SHALL BE CLEARED. GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT

- MBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
- AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OF EMBEDDED FILTER CLOTH IN THE RIPRAP
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAN EROSION AND WATER POLLUTION IS MINIMIZED. 8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERTY STABILIZED.

STONE OUTLET SEDIMENT TRAP 2:1 SLOPE 0 FLATTER SLOPES EXCAVATE TO PROVIDE REQUIRED FLOW WIDTH AT FLOW DEPTH. GRADE LINE CROSS SECTION CUT OR (5 ac.or less) $(5-10 \text{ ac} \cdot)$ a-D|KE HE|GHT------18" ------ 36" b-DIKE WIDTH----- 36" c-FLOW WIDTH----- 4' ----- 6' d-FLOW DEPTH----- 8" ----- 15" FILL SLOPE -TANDARD SYMBOL

CONSTRUCTION SPECIFICATIONS

I. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT 2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET. 3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER 13 DESIRED TO

FACILITATE CROSSING BY CONSTRUCTION TRAFFIC 4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET. 5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE FITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT

ADEQUATELY STABILIZED. 6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON. (B) FLOW CHANNEL AS PER-

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL Grade	DIKE A	DIKE B
1	.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0₺	SEED AND STRAW MULCH	SEED USING JUTE. OR EXCELSIOR: SOD: 2" STONE
3	5.1-8.0#	SEED WITH JUTE. OR SOD: 2" STONE	LINED RIP-RAP 4-8"
4	8-1-20/	LINED RIP-RAP 4-8"	ENGINEERING DESIGN
A. ST o n Inch	E TO BE 2 INCH	H STONE. OR RECYCLED CONCRET SS AND BE PRESSED INTO THE S	E EQUIVALENT. IN A LAYER AT LE OIL WITH CONSTRUCTION EQUIPMEN

B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO

C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT EARTH DIKE NO SCALE

TEMPORARY SEEDING NOTES-Continued

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL /1000 SQ.F . OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER. USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. L FOR ANCHORING.

SEDIMENT CONTROL NOTES

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. (992-2437). 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPEC - CATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE. PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDARY DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES. DIKES. PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:16) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. + ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOLUME I. CHAPTER 12. OF THE HOWARD COUNTY DESIGN MANUAL. STORM DRAINAGE

5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE I ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC.51) SOD (SEC.54). TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES CAN NOT ALL 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 UTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR 1. SITE ANALYSIS:

AREA DISTURBED - - - - - - 1.4 ACRES. AREA 'O BE VEGETATIVELY STABILIZED - - - - - - - O. ACRES. TOTAL CUT . - - - - - - - - 800 CU. YDS. TOTAL FILL - - - - - - - - - - - - - 3000 CU.YDS.

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 SEDIMEN! CONTROL INSPECTOR.

TO. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES. APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUIRED 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

SEQUENCE OF CONSTRUCTION

- I. NOTIFY THE HOWARD SOIL CONSERVATION DISTRICT AND THE HOWARD COUNTY BUREAU OF LICENSES, INSPECTIONS AND PERMITS AT LEAST 48 HOURS BEFORE ANY WORK BEGINS.
- 2. CLEAR AND GRUB AREA AROUND STORAGE PAD. 3. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, SEDIMENT TRAP AND DIVERSION
- DIKES BEFORE ANY GRADING BEGINS. 4 STRIP TOPSOIL AND RELOCATE EXISTING UTILITIES AS NECESSARY.
- 6. CONSTRUCT PRIVATE ACCESS ROAD, DRIVEWAY AND STORAGE PAD TO PHASE I SPECIFICATIONS AS 5. ROUGH GRADE THE SITE.

OFFSITE WASTE/BORROW AREA LOCATION

- SHOWN ON SHEET NO.2. 7. PERMANENTLY SEED AND STABILIZE REMAINING GRASSED AREAS.
- 8. REMOVE SEDIMENT CONTROL FEATURES ONLY AFTER ALL CONTRIBUTING DRAINAGE AREAS HAVE
- 9. PAVE STORAGE PAD TO PHASE II PAVING SPECIFICATIONS AS SHOWN ON SHEET NO.2.

AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE AUTHORIZED AGENTS, AS DEEMED NECESSARY".

APPROVED DIVISION OF LAND DEVELOPMENT ZONING ADMINISTRATIO

NORTH

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL RESPONSIBLE PERSONNEL CERTIFICATION BY THE HOWARD SOIL CONSERVATION DISTRICT. HEREBY CERTIFY THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT".

CONTROL PLAN

CERTIFICATION BY THE ENGINEER 1 CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONNAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT".

10'×44'×3

TRAP SIZE

TRAP CAPACITY

CREST WIDTH -

CERTIFICATION BY THE DEVELOPER I CERTIFY THAT ALL DEVELOPMENT AND OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THIER

WATER AND PUBLIC SEMERAGE SYSTEMS

APPROVED

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

SOIL CONSERVATION SERVICE

FOR PUBLIC WATER AND PUBLIC SEMERAGE

STORM I 🗚 NAGE SYSTEMS AND PÚBLIC ROADS.

JUNTY DEPARTMENT OF PHELL WORKS

DATE. 5-10-17

321E: 5.19.87

ANNING AND ZONINE

CALE - AS SHOWN REVISIONS

DRAWING SHEET NO 3 OF 3 LATE 2/3/87

WHISMAN REQUARDI AND ASSECTATES ENGINEERS

23'5 SAINT PAUL STREET BALTIMORE MARYLAND 21.8



APPLIED PHYSICS LABORATORY THE JOHNS HOPKINS UNIVERSITY OHNS HOPKINS ROAD HOWARD COUNTY MARYLAND PROPOSED STORAGE PAD

"Storage Yard Addition to SDP-87-87"

THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY

LAUREL VARYLAND 20707 11100 JOHNS HOPKINS ROAD

SEDIMENT CONTROL PLAN

HOWARD COUNTY, MARYLAND FIFTH ELECTION DISTRICT PARCEL 123 TAX MAP 41