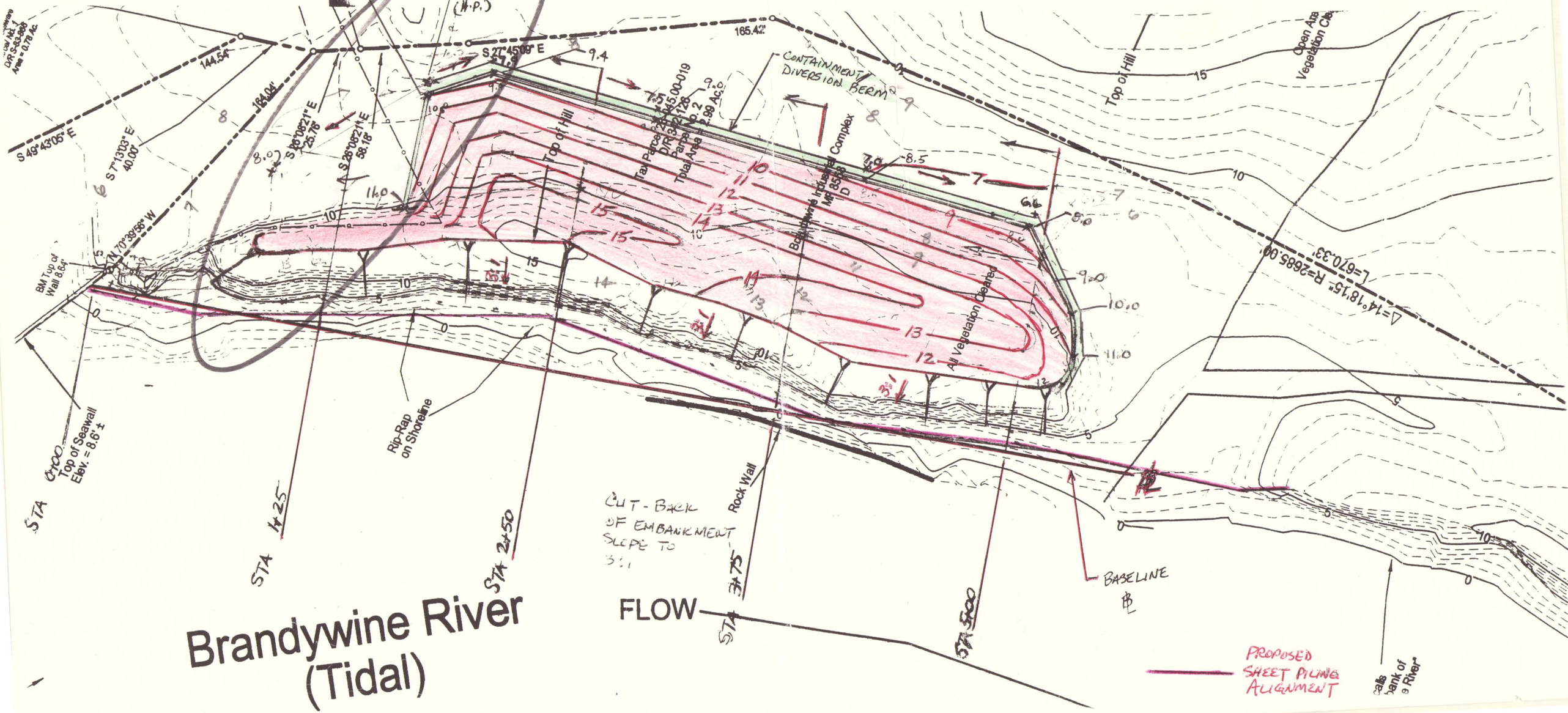
needs mod.

DRAFT TO BE REVISED

ORIGINAL



USEPA REGION III

REMOVAL RESPONSE SECTION

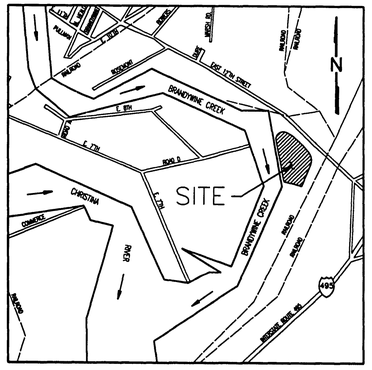
PLAN FOR REMEDIATION AND CLOSURE

12th STREET LANDFILL SITE

CITY OF WILMINGTON
NEW CASTLE COUNTY, DELAWARE

PFE ORIGINAL

DRAWING NUMBER	DRAWING TITLE
2000	EXISTING CONDITIONS
2001	PREPARATORY GRADING, EROSION AND SEDIMENTATION CONTROL PLAN
2002	EROSION & SEDIMENTATION CONTROL DETAILS AND NOTES
2003	PREPARATORY GRADING PLAN PHASE II
2004	CREEK BANK STABILIZATION/REMEDIATION CROSS SECTIONS



VICINITY MAP
N.T.S.

APPLICANT:

U.S. ENVIRONMENTAL PROTECTION AGENCY
1650 ARCH STREET
PHILADELPHIA, PA 19103-2029
CONTACT: MICHAEL TOWLE
ON-SCENE COORDINATOR

APPLICANT'S CERTIFICATION:

I, _____, CERTIFY THAT ALL
(APPLICANT)

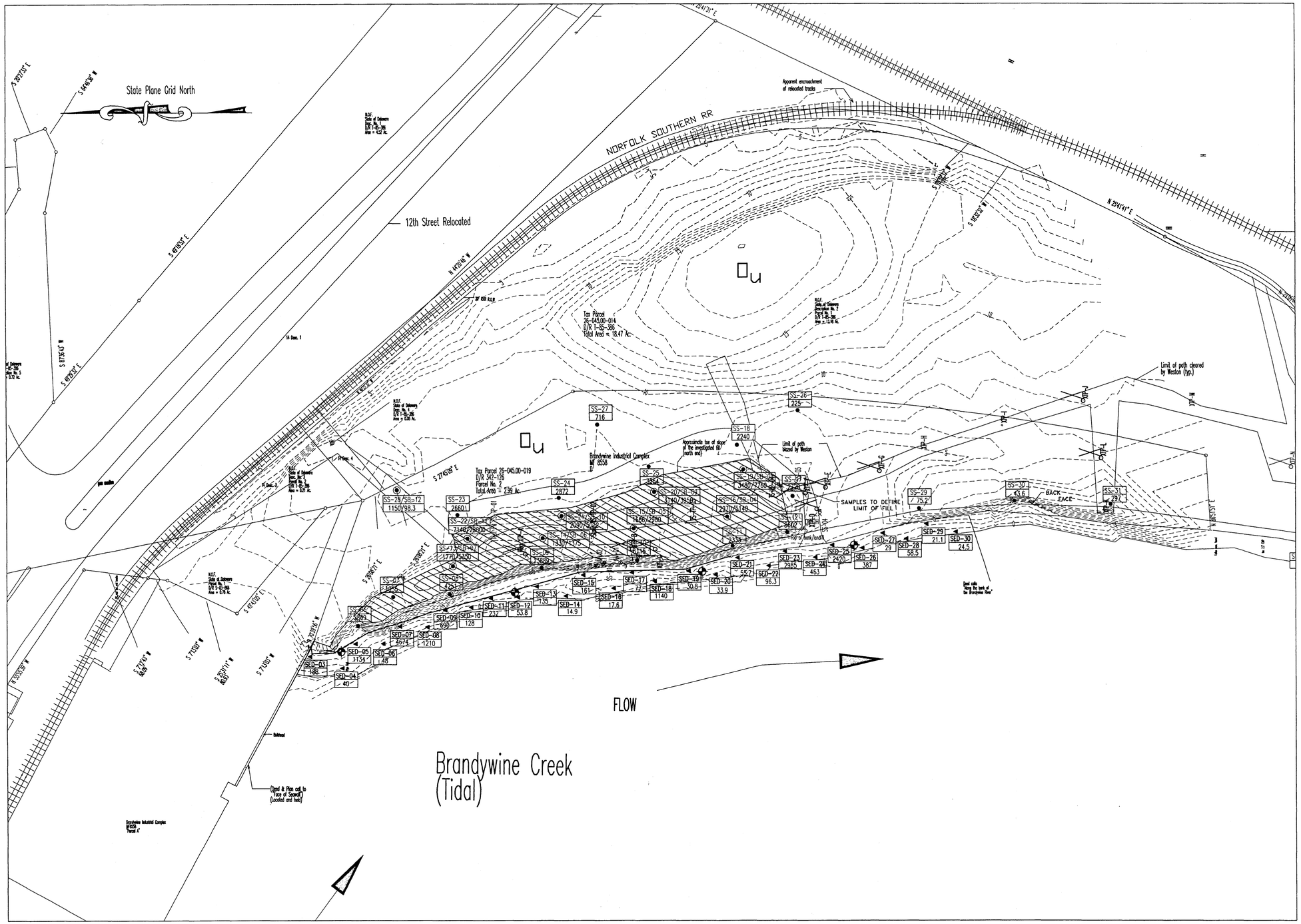
LAND CLEARING, CONSTRUCTION, AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED PLAN.

MAY 2000

WESTON
MANAGERS DESIGNERS/CONSULTANTS

FILE NO. G:\ACADPROJ\20101523\1523COVR.DWG

PFE ORIGINAL



NOTES:

1. THIS PLAN WAS DRAWN USING IN PART THE INFORMATION FROM A PAIR OF PLANS PREVIOUSLY PREPARED BY STEPHENS ENVIRONMENTAL CONSULTING, INC. (SECI) ENTITLED "PLAN OF PROPERTY FOR TAX PARCEL 26-045.00-014, 019 AND PART OF 17, CITY OF WILMINGTON NEW CASTLE COUNTY DELAWARE (SHEET 1 OF 2)" AND "ENVIRONMENTAL SAMPLE LOCATION PLAN FOR 12TH STREET LANDFILL (SHEET 2 OF 2)" DATED NOVEMBER 29, 1999.
2. DATUM : NGVD 1929.
3. COORDINATE SYSTEM : DELAWARE STATE PLANE COORDINATES.
4. MISS UTILITY WAS CONTACTED DURING THE BOUNDARY SURVEY. NO UTILITIES WERE OBSERVED OR MARKED OUT BY MISS UTILITY ON THE SITE DURING THE SURVEY WORK.
5. LOWEST WATER LEVEL OBSERVED DURING THE COURSE OF BOTH THE BOUNDARY SURVEY AND THE TOPOGRAPHIC SURVEY WAS APPROXIMATELY −1.3' ± MSL (NGVD 1929).
6. THE APPROXIMATE MEAN LOW WATER ELEVATION WAS DETERMINED TO BE APPROXIMATELY −1' MSL BASED ON REPETITIVE FIELD OBSERVATION.
7. THE APPROXIMATE MEAN HIGH WATER ELEVATION (3.7' TO 3.9' MSL, NGVD 1929) WAS ESTIMATED FROM DARK WATER MARKS ON THE SEAWALL AND THE OCCURRENCE OF MATURE VEGETATION.
8. THE APPROXIMATE HIGHEST WATER LEVEL OBSERVED DURING THE COURSE OF BOTH THE BOUNDARY SURVEY AND TOPOGRAPHIC SURVEY WAS APPROXIMATELY WAS APPROXIMATELY 5.1' ± MSL (NGVD 1929), BASED ON FIELD INDICATIONS INCLUDING MARKS ON THE SEAWALL.
9. FROM THE FLOOD INSURANCE STUDY FOR NEW CASTLE COUNTY, DELAWARE AND INCORPORATED AREAS (FEMA-AUGUST 1998), THE 100-YEAR FLOOD ELEVATION IN THE SITE AREA IS ELEV. 10.0.
10. (U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION CONSERVATION SERVICE), THE SITE SOILS ARE CHARACTERIZED AS BEING IN THE OTHELLO-FALSINGTON-URBAN (Ou) LAND COMPLEX. THESE TYPES OF SOILS ARE TYPICALLY POORLY DRAINED AND ARE USUALLY CLASSIFIED IN EITHER HYDROLOGIC SOIL GROUP C OR D.

LEGEND

- - -10- - EXISTING CONTOUR
- ▲ SEDIMENT SAMPLE LOCATION
- • SURFACE SOIL SAMPLE LOCATION
- ◉ SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION
- AREA OF CONCERN
- SED-32 35.4 | SS-32 38.5 — SAMPLE LOCATION INDICATOR DNREC XRF LEAD RESULT (PPM)

SOIL SERIES LEGEND:

Ou OTHELLO-FALSINGTON-URBAN LAND COMPLEX (NEW CASTLE, DE SOIL SURVEY)

FILE NO. G:\ACADPROJ\20101523\ 15232000.DWG

NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

U.S. ENVIRONMENTAL PROTECTION AGENCY
12th STREET LANDFILL SITE
WILMINGTON DELAWARE

WESTON MANAGERS DESIGNERS/CONSULTANTS
WEST CHESTER PENNSYLVANIA

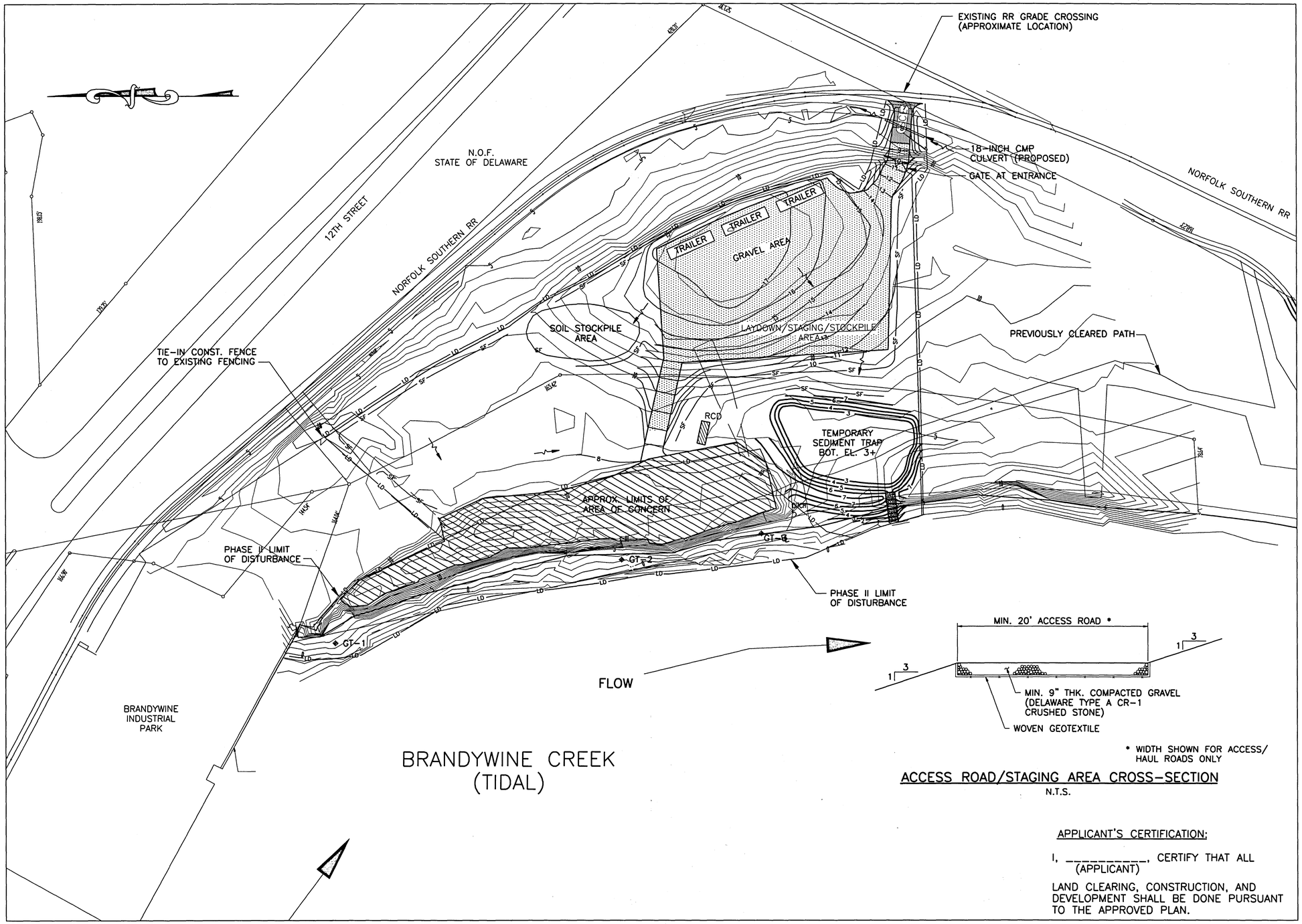
CHECKED	DATE	CLIENT APPROVALS	DATE
DES. ENG.			
PROJ. ENG.			
PROJ. MGR.			
APPROVED			
APPROVED			

WILLIAM A. ZAPPI REGISTERED 10716 DELAWARE PROFESSIONAL ENGINEER

EXISTING SITE CONDITIONS

DRAWN	DATE	DWG. NO.	REV. NO.
JCT	5/11/00	2000	
SCALE 1"=50'-0"	W.O. NO. 20101.252.003	SHT. ___ OF ___	

PFE ORIGINAL



* WIDTH SHOWN FOR ACCESS/
HAUL ROADS ONLY

ACCESS ROAD/STAGING AREA CROSS-SECTION

N.T.S.

CONSTRUCTION SEQUENCE-PHASE I

1. INSTALL FENCE AND GATE AT LOCATIONS SHOWN.
2. INSTALL SILT FENCE AT LOCATIONS INDICATED.
3. CONSTRUCT SEDIMENT TRAP, COMPLETE WITH STONE OUTLET. FERTILIZE, LIME, AND SEED SEDIMENT TRAP EMBANKMENT AND FLOOR AREAS.
4. COMPLETE CLEARING AND GRUBBING OF SITE.
5. COMMENCE AND COMPLETE PREPARATORY GRADING AND CONSTRUCTION OF GRAVEL TRAILER/LAYDOWN/ STAGING AREA AND HAUL ROADS.
6. FERTILIZE, LIME, AND SEED DISTURBED AREAS.
7. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND STONE ACCESS ROAD AT LOCATION SHOWN.

PHASE I LIMIT OF DISTURBANCE = 3.2 AC±

ESTIMATED BORROW MATERIAL-PHASE I

1350 CY COARSE AGGREGATE

LEGEND

- --10-- EXISTING CONTOUR
- — 6 — PROPOSED CONTOUR
- SF SILT FENCE
- RCD ROCK CHECK DAM
- — LD — LIMIT OF DISTURBANCE (PHASE I)
- SCE STABILIZED CONSTRUCTION ENTRANCE
- GRAVEL ROAD/STAGING AREA
- CONSTRUCTION FENCE
- SURFACE FLOW DIRECTIONAL ARROW
- GT-2 APPROXIMATE SOIL BORING LOCATION

APPLICANT'S CERTIFICATION:

I, _____, CERTIFY THAT ALL
(APPLICANT)

LAND CLEARING, CONSTRUCTION, AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED PLAN.

25 75
0 50 100

FILE NO. G:\ACADPROJ\20101523\15232001.DWG

NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

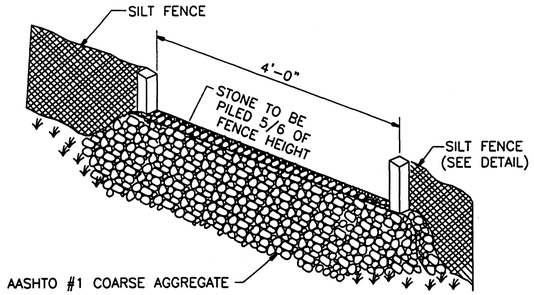
U.S. ENVIRONMENTAL PROTECTION AGENCY
12th STREET LANDFILL SITE
WILMINGTON DELAWARE

WESTON
MANAGERS DESIGNERS/CONSULTANTS
WEST CHESTER PENNSYLVANIA

CHECKED	DATE	CLIENT APPROVALS	DATE
DES. ENG.			
PROJ. ENG.			
PROJ. MGR.			
APPROVED			
APPROVED			

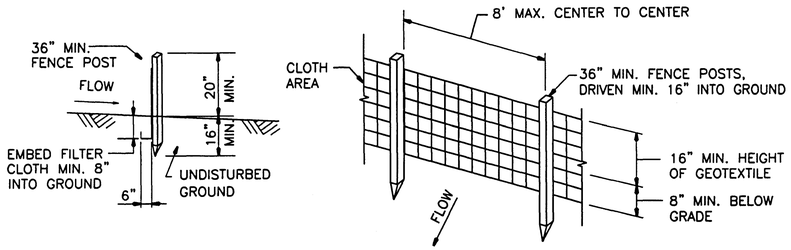
SITE GRADING, EROSION
AND SEDIMENTATION CONTROL PLAN
PHASE I

DRAWN	DATE	DWG. NO.	REV. NO.
JCT	5/11/00	2001	
SCALE 1"=50'-0"	W.O. NO. 20101.252.003	SHT. ___ OF ___	



GRAVEL OUTLET DETAIL

N.T.S.



SECTION PERSPECTIVE VIEW

TYPICAL SILT FENCE

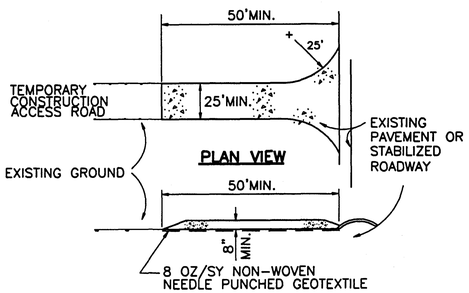
N.T.S.

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

FILTER CLOTH: AMOCO 1380 SILT STOP OR APPROVED EQUAL

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. THE TOE ANCHOR WILL BE BACKFILLED AND COMPACTED TO A DENSITY EQUAL TO SURROUNDING SOILS.
2. FILTER CLOTH TO BE FASTENED SECURELY TO UPSLOPE SIDE OF FENCE POSTS.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND STAPLED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



PROFILE

CONSTRUCTION SPECIFICATIONS–STABILIZED CONSTRUCTION ENTRANCE

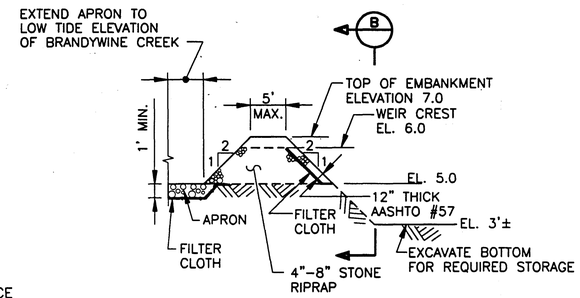
1. STONE SIZE – DELDOT NO.2 COARSE AGGREGATE.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FT.
3. THICKNESS – NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH – TWENTY–FIVE(25) FT. MIN., BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO EXISTING PAVEMENT AREAS. 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 EXISTING PAVEMENTS 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.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE

(REFER TO DWG. 2001 FOR LOCATION)

GENERAL EROSION AND SEDIMENTATION CONTROL NOTES

1. DNREC, SEDIMENT AND STORMWATER MANAGEMENT PROGRAM SECTION MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCING CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
2. REVIEW AND OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE DNREC.
4. FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER SEDIMENT CONTROLS, TOPSOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
5. CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF ALL EROSION AND SEDIMENTATION CONTROL MEASURES DURING ALL PHASES OF CONSTRUCTION.
6. CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF DUST IN AND AROUND THE CONSTRUCTION AREA. DUST CONTROL MEASURES SHALL COMPLY WITH METHODS AS SPECIFIED IN DNREC'S DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
7. PLACE EROSION CONTROL MEASURES PRIOR TO INITIATING EARTH DISTURBANCE ACTIVITIES.
8. FOR FOREIGN BORROW MATERIAL OBTAINED FROM OFFSITE SOURCES. BORROW AREAS SHALL HAVE PROPER EROSION AND SEDIMENT CONTROL MEASURES AND PERMITS IN PLACE, IF REQUIRED, PRIOR TO START OF EARTH DISTURBANCE IN THESE AREAS.
9. SOIL SHALL BE STOCKPILED IN AN AREA DESIGNATED BY THE EPA OR ENGINEER. STOCKPILES SHALL NOT EXCEED 20 FEET IN HEIGHT WITH 2H:1V MAXIMUM SIDESLOPES. STOCKPILE SHALL BE SURROUNDED BY SILT FENCE (DOWNGRADIENT SIDE).
10. CONTRACTOR SHALL DISTURB ONLY THOSE AREAS DESIGNATED ON THE DRAWINGS WITHIN THE LIMIT OF DISTURBANCE.
11. ALL NON–GRAVEL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADES.

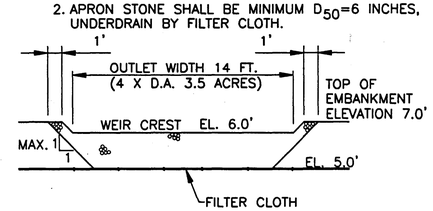


SECTION THROUGH SED. TRAP OUTLET

SECTION A
NO SCALE 2001 2002

NOTE: 1. THE OUTLET EMBANKMENT IS TO BE COMPOSED ENTIRELY OF ROCK. THE MAIN BODY SHOULD BE LARGER STONE (4" TO 8" RIPRAP) WITH AN UPSTREAM LAYER OF SMALLER STONE (AASHTO #57).

2. APRON STONE SHALL BE MINIMUM D_{50}=6 INCHES, UNDERDRAIN BY FILTER CLOTH.



SECTION B
NO SCALE

STONE OUTLET SEDIMENT TRAP

N.T.S.

VEGETATIVE STABILIZATION SPECIFICATIONS:

I. SITE PREPARATION

PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AS TO THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, GRASSED WATERWAYS, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) ON THE PROJECT SITE.

"PFE ORIGINAL"

II. SEEDBED PREPARATION AND SEEDING APPLICATION

THE TOP LAYER OF SOIL SHALL BE LOOSENED, LIMED AND FERTILIZED BY RAKING, DISCING OR HARROWING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. FLAT AREAS AND SLOPES UP TO 3 TO 1 GRADE (HORIZONTAL TO VERTICAL) SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 4 INCHES. SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE TOP 1–3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING.

III. SOIL AMENDMENTS

LIME AND FERTILIZE ACCORDING TO SOIL TESTS. TEMPORARY SEEDING DOES NOT REQUIRE LIME. IN LIEU OF SOIL TESTS, APPLY THE FOLLOWING:

DOLOMITIC LIMESTONE: 2 TONS PER ACRE OR 92 LBS./1000 SQ. FT.

FERTILIZER: 10–10–10 OR EQUIVALENT AT 1000 LBS./ACRE (PERMANENT SEEDING)

IV. TEMPORARY SEEDING:

SEED: ITALIAN OR PERENNIAL RYE GRASS AT 80 LBS./ACRE OR 1 LB./1000 SQ. FT.

DATES: 2/1 TO 10/31.

PERMANENT SEEDING MIXTURE:

SEED: –'KENTUCKY 31' TALL FESCUE AT 40 lbs/ACRE AND INTERSTATE SERICEA LESPEDEZA AT 20 lbs/ACRE.

DATES: –PERMANENT 2/1 TO 4/30 AND 8/15 TO 10/31.

V. MULCHING

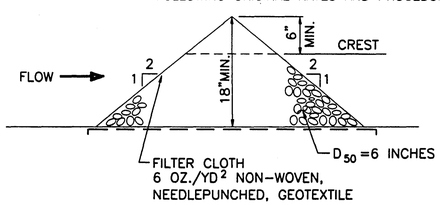
ALL SEEDINGS REQUIRE MULCHING. USE "MULCH ONLY" WHEN SEASON PROHIBITS SEEDING.

MULCH SHALL BE UNROTTED, UNCHOPPED SMALL GRAIN STRAW APPLIED AT A RATE OF 2.5 TO 3 TONS/ACRE OR 115–140 LBS./1000 SQ. FT. (2 BALES). MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDBEDS AND SHALL BE FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY MECHANICALLY OR BY HAND. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, PEG AND TWINE OR LIQUID MULCH BINDERS.

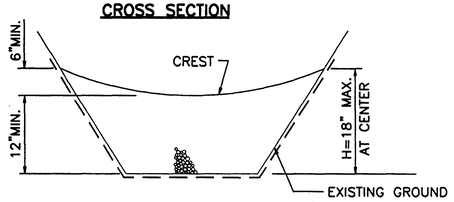
VI. MAINTENANCE

A. IRRIGATION – WHEN SOIL MOISTURE BECOMES DEFICIENT, IRRIGATE TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION.

B. REPAIRS – IF STAND IS INADEQUATE FOR EROSION CONTROL, OVER SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND IS OVER 30% DAMAGED, REESTABLISH FOLLOWING ORIGINAL RATES AND PROCEDURES.



CROSS SECTION



NOTE:
EXTEND ROCK DAM FOR FULL WIDTH OF SWALE OR CHANNEL

FRONT VIEW

ROCK CHECK DAM DETAIL

NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION
B	6/28/00	WAZ	PHASE II PLAN DEVELOPMENT; RAISE SEDIMENT TRAP ELEVATION BY 1 FOOT				
A	5/23/00	WAZ	PHASE I SUBMITTAL TO DNREC, EPA				

U.S. ENVIRONMENTAL PROTECTION AGENCY
12th STREET LANDFILL SITE
WILMINGTON DELAWARE

WESTON
MANAGERS DESIGNERS/CONSULTANTS
WEST CHESTER PENNSYLVANIA

CHECKED	DATE	CLIENT APPROVALS	DATE
DES. ENG.			
PROJ. ENG.			
PROJ. MGR.			
APPROVED			
APPROVED			

EROSION & SEDIMENTATION CONTROL DETAILS AND NOTES

DRAWN	DATE	DWG. NO.	REV. NO.
D.E.C.	5/11/00	2002	B
SCALE: AS NOTED	W.O. NO. 20101.252.003	SHT. ___ OF ___	

FILE NO. G:\ACADPROJ\20101523\ 15232002

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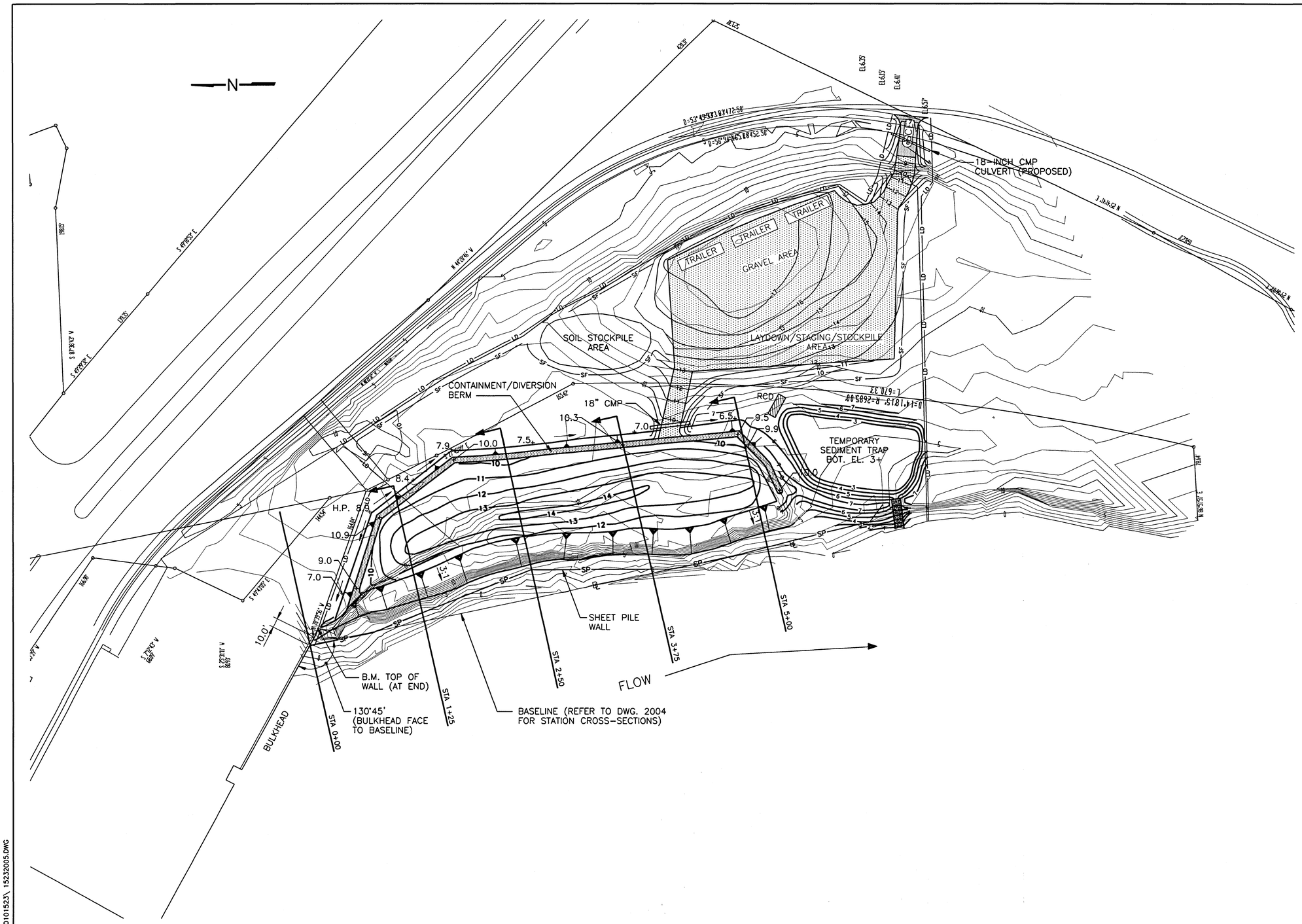


CONSTRUCTION SEQUENCE–PHASE II

1. INSTALL SHEET PILE WALL TO LOCATION AND ALIGNMENT SHOW.
2. MAINTAIN DEWATERING OPERATIONS BEHIND SHEET PILE WALL DURING CONSTRUCTION. PUMP WATER COLLECTED TO SEDIMENT TRAP OR TO BRANDYWINE CREEK.
3. CONSTRUCT CONTAINMENT/DIVERSION BERM TO GENERAL LOCATION AND ALIGNMENT SHOWN.
4. INITIATE CUT–BACK EXCAVATION OF CREEK BANK TO 3:1 (HORIZONTAL TO VERTICAL) SLOPE.
5. PLACE AND CONSOLIDATE MATERIALS EXCAVATED FROM CREEK BANK AND OTHER AREAS IN CONSOLIDATION AREA AND GRADE AS SHOWN IN PREPARATION OF CAP/COVER PLACEMENT.

PHASE II LIMIT OF DISTURBANCE –= 3.8 AC±

LEGEND

- –10– EXISTING CONTOUR
- —6— PROPOSED CONTOUR
- SF SILT FENCE
- RCD ROCK CHECK DAM
- LD LIMIT OF DISTURBANCE (PHASE I)
- SCE STABILIZED CONSTRUCTION ENTRANCE
- GRAVEL ROAD/STAGING AREA
- CONSTRUCTION FENCE
- SURFACE FLOW DIRECTIONAL ARROW

25 75
0 50 100

NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION
A	6/30/00	WAZ	ISSUED FOR CLIENT REVIEW				

U.S. ENVIRONMENTAL PROTECTION AGENCY
12th STREET LANDFILL SITE
WILMINGTON DELAWARE

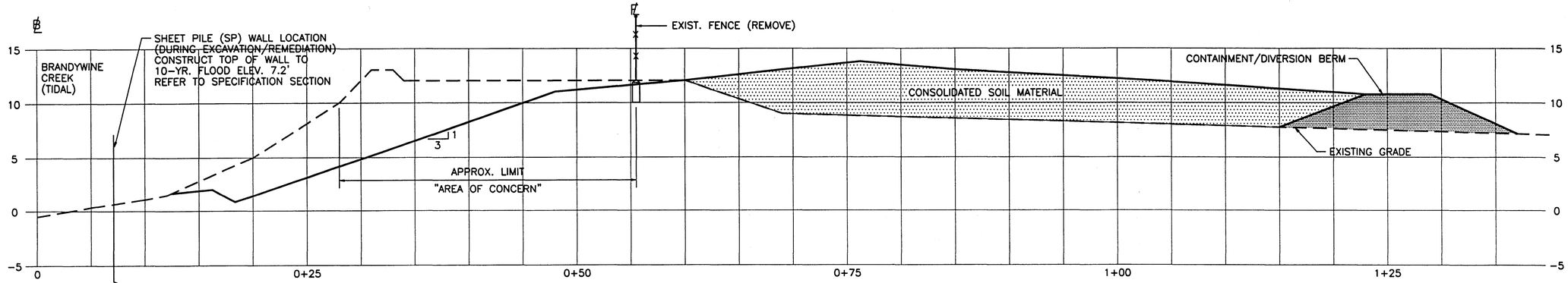
WESTON MANAGERS DESIGNERS/CONSULTANTS
WEST CHESTER PENNSYLVANIA

CHECKED	DATE	CLIENT APPROVALS	DATE
DES. ENG.			
PROJ. ENG.			
PROJ. MGR.			
APPROVED			
APPROVED			

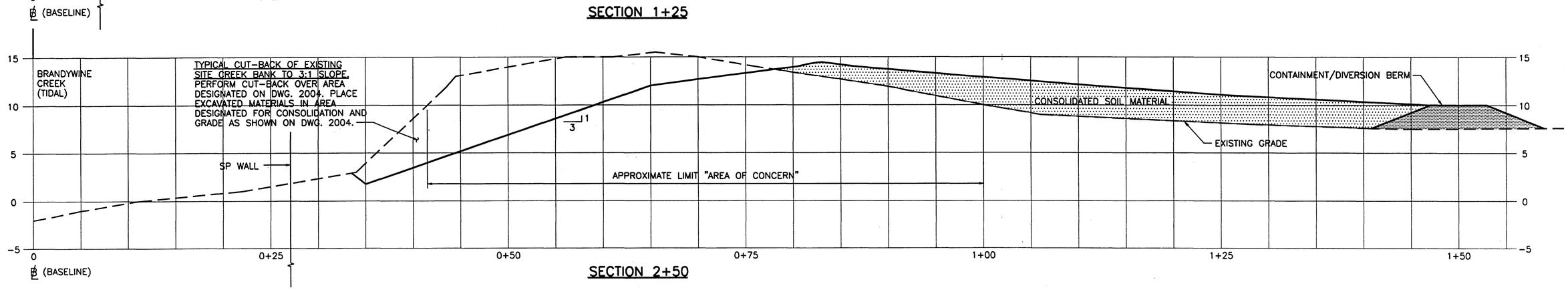
PREPARATORY GRADING PLAN
PHASE II

DRAWN	DATE	DWG. NO.	REV. NO.
JCT	6/26/00	2003	B
SCALE 1"=50'–0"	W.O. NO. 20101.252.003	SHT. ___ OF ___	

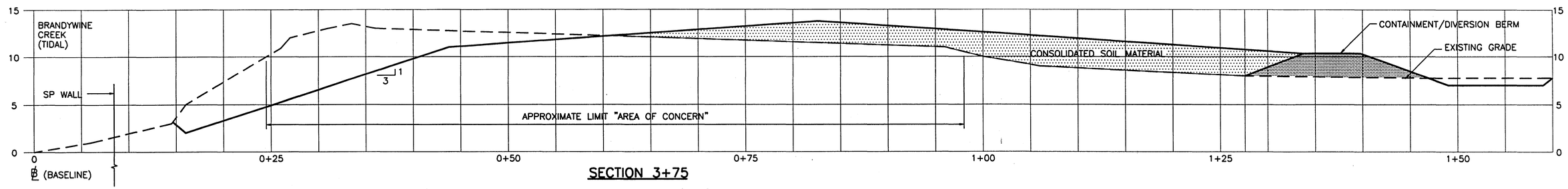
FILE NO. G:\ACADPROJ\20101523\ 15232005.DWG



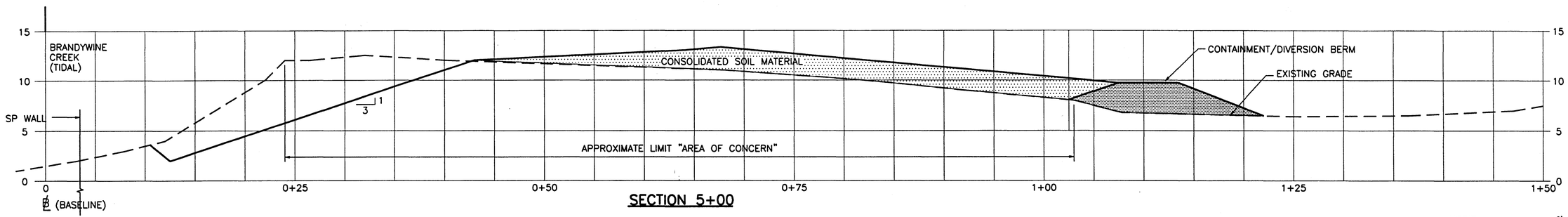
SECTION 1+25



SECTION 2+50

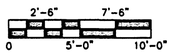


SECTION 3+75



SECTION 5+00

SCALE: HORIZ. AND VERT. 1"=5'-0"



FILE NO. G:\ACADPROJ\20101523\15232004

NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION
A	6/28/00	WAZ	ISSUED FOR CLIENT REVIEW				

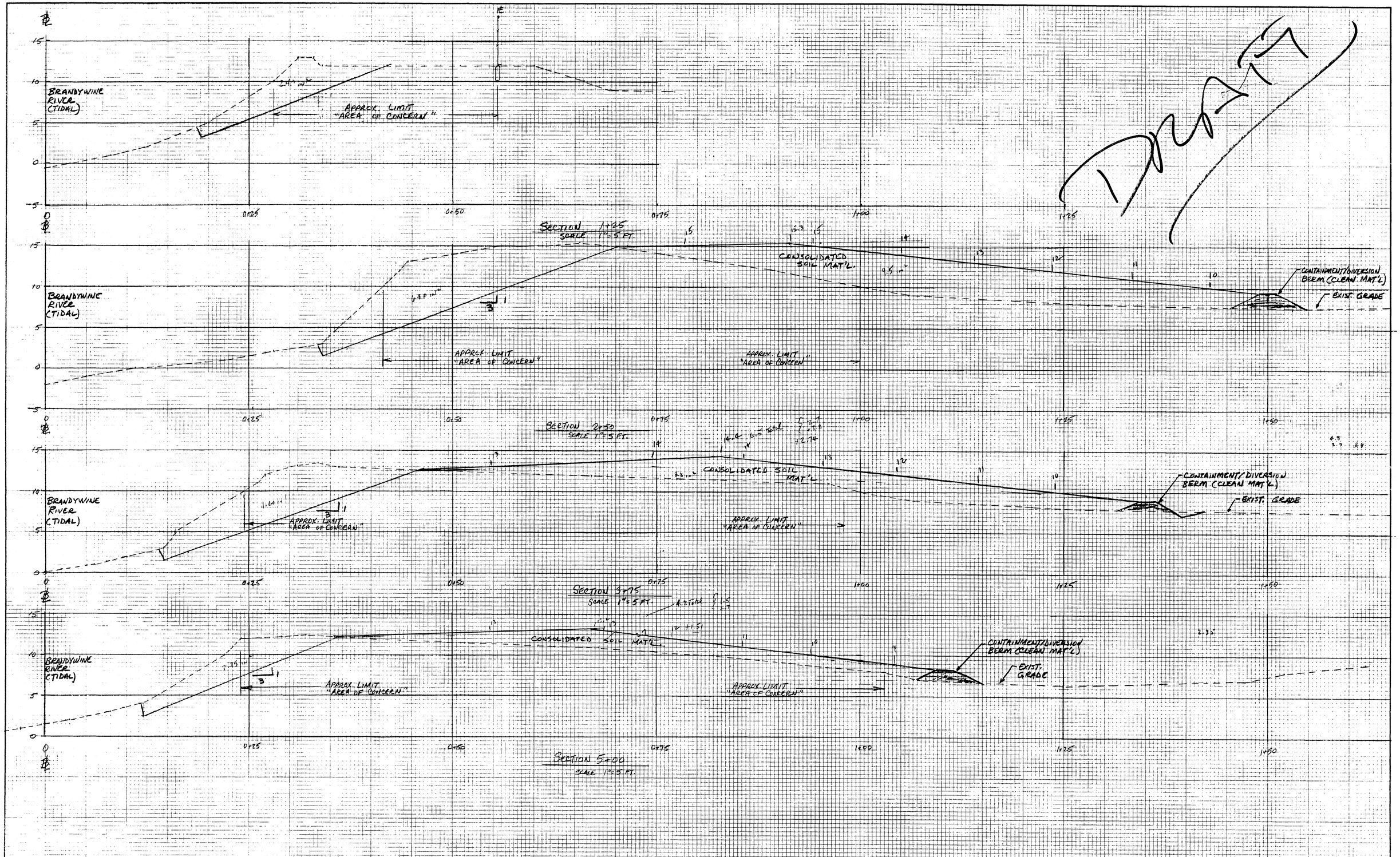
U.S. ENVIRONMENTAL PROTECTION AGENCY
12th STREET LANDFILL SITE
WILMINGTON DELAWARE

WESTON
MANAGERS DESIGNERS/CONSULTANTS
WEST CHESTER PENNSYLVANIA

CHECKED	DATE	CLIENT APPROVALS	DATE
DES. ENG.			
PROJ. ENG.			
PROJ. MGR.			
APPROVED			
APPROVED			

CREEK BANK STABILIZATION/REMEDIATION
CROSS SECTIONS

DRAWN	DATE	DWG. NO.	REV. NO.
D.E.C.	5/17/00	2004	B
SCALE 1"=5'-0"	W.O. NO. 20101.252.003	SHT. ___ OF ___	



NO	DATE	APPR	REVISION	NO	DATE	APPR	REVISION

U.S. ENVIRONMENTAL PROTECTION AGENCY
12th STREET LANDFILL SITE
WILMINGTON DELAWARE

WESTON
WEST CHESTER MANAGERS DESIGNERS/CONSULTANTS PENNSYLVANIA

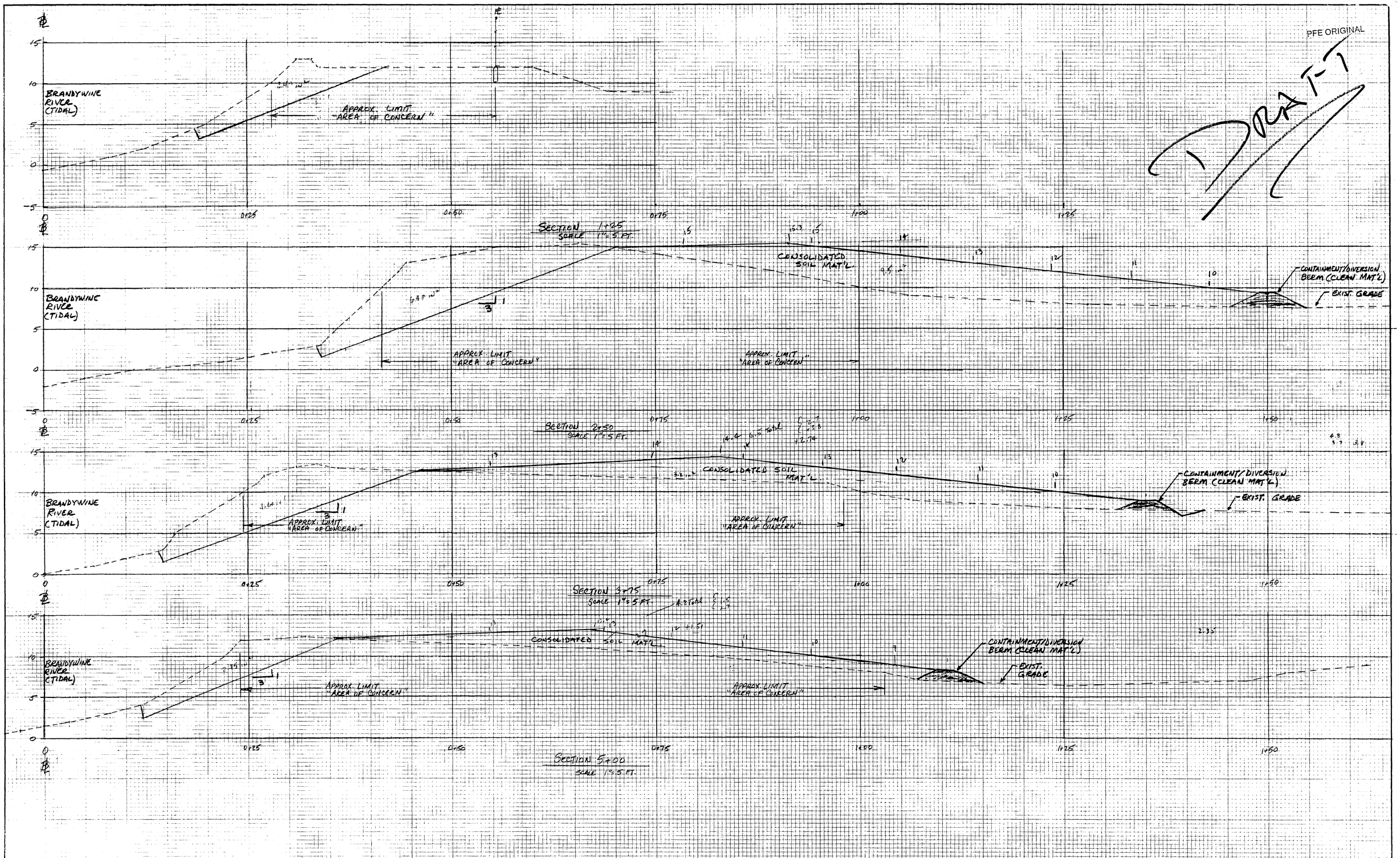
CHECKED	DATE	CLIENT APPROVALS	DATE
DES. ENG.			
PROJ. ENG.			
PROJ. MGR.			
APPROVED			
APPROVED		ISSUED FOR	DATE

SHORELINE
CROSS SECTIONS

DRAWN	DATE	DWG. NO.	REV. NO.
SCALE	W.O. NO. 20101-252 003-6263	SHT. ___ OF ___	

PFE ORIGINAL

DRAFT



NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

U.S. ENVIRONMENTAL PROTECTION AGENCY
12th STREET LANDFILL SITE
WILMINGTON DELAWARE

WESTON
WEST CHESTER MANAGERS DESIGNERS/CONSULTANTS PENNSYLVANIA

CHECKED	DATE	CLIENT APPROVALS	DATE
DES. ENG.			
PROJ. ENG.			
PROJ. MGR.			
APPROVED			
APPROVED		ISSUED FOR	DATE

SHORELINE CROSS SECTIONS

DRAWN	DATE	DWG. NO.	REV. NO.
SCALE	W.O. NO. 20101-252-003-1269	SHT ___ OF ___	